FIGURE 1

GAACCGCCATCTTCCAGTAATTCGCCAAA**ATG**ACGAACACAAAGGGAAAGAGGAGAGGCACCCGATATATGTTCT
CTAGGCCTTTTAGAAAACATGGAGTTGTTCCTTTGGCCACATATATGCGAATCTATAAGAAAGGTGATATTGTAG
ACATCAAGGGAATGGGTACTGTTCAAAAAGGAATGCCCCACAAGTGTTACCATGGCAAAACTGGAAGAGTCTACA
ATGTTACCCAGCATGCTGTTGGCATTGTTGTAAACAAACAAGTTAAGGGCAAGATTCTTGCCAAGAGAATTAATG
TGCGTATTGAGCACATTAAGCACTCTAAGAGCCGAGATAGCTTCCTGAAACGTGTGAAGGAAAATGATCAGAAAA
AGAAAGAAGCCAAAGAGAAAGGTACCTGGGTTCAACTAAAGCGCCAGCCTGCTCCACCCAGAGAAGCACACTTTG
TGAGAACCAATGGGAAGGAGCCTGAGCTGCTGGAACCTATTCCCTATGAATTCATGGCA**TAA**TAGGTGTTAAAAA
AAAAAATAAAGGACCTCTGGGCTACAAAAAAAAAAAAAAAAA

FIGURE 2

MTNTKGKRRGTRYMFSRPFRKHGVVPLATYMRIYKKGDIVDIKGMGTVQKGMPHKCYHGKTGRVYNVTQHAVGIV
VNKQVKGKILAKRINVRIEHIKHSKSRDSFLKRVKENDQKKKEAKEKGTWVQLKRQPAPPREAHFVRTNGKEPEL
LEPIPYEFMA

FIGURE 3

GGTGGGCGGGGGGAGGAGGCGGCCCTAGCGCCATTTTGTGGGAGCGAAGCGGTGGCTGGGCTGCGCTTGGGTCCG
TCGCTGCTTCGGTGTCCCTGTCGGGCTTCCCAGCAGCGGCCTAGCGGGAAAAGTAAAAGATGTCTGAATATATTC
GGGTAACCGAAGATGAGAACGATGAGCCCATTGAAATACCATCGGAAGACGATGGGACGGTGCTGCTCTCCACGG
TTACAGCCCAGTTTCCAGGGGCGTGTGGGCTTCGCTACAGGAATCCAGTGTCTCAGTGTATGAGAGGTGTCCGGC
TGGTAGAAGGAATTCTGCATGCCCCAGATGCTGGCTGGGGAAATCTGGTGTATGTTGTCAACTATCCAAAAGATA
ACAAAAGAAAAATGGATGAGACAGATGCTTCATCAGCAGTGAAAGTGAAAAGAGCAGTCCAGAAAACATCCGATT
TAATAGTGTTGGGTCTCCCATGGAAAACAACCGAACAGGACCTGAAAGAGTATTTTAGTACCTTTGGAGAAGTTC
TTATGGTGCAGGTCAAGAAAGATCTTAAGACTGGTCATTCAAAGGGGTTTGGCTTTGTTCGTTTTACGGAATATG
AAACACAAGTGAAAGTAATGTCACAGCGACATATGATAGATGGACGATGGTGTGACTGCAAACTTCCTAATTCTA
AGCAAAGCCAAGATGAGCCTTTGAGAAGCAGAAAAGTGTTTGTGGGGCGCTGTACAGAGGACATGACTGAGGATG
AGCTGCGGGAGTTCTTCTCTCAGTACGGGGATGTGATGGATGTCTTCATCCCCAAGCCATTCAGGGCCTTTGCCT
TTGTTACATTTGCAGATGATCAGATTGCGCAGTCTCTTTGTGGAGAGGACTTGATCATTAAAGGAATCAGCGTTC
ATATATCCAATGCCGAACCTAAGCACAATAGCAATAGACAGTTAGAAAGAAGTGGAAGATTTGGTGGTAATCCAG
GTGGCTTTGGGAATCAGGGTGGATTTGGTAATAGCAGAGGGGGTGGAGCTGGTTTGGGAAACAATCAAGGTAGTA
ATATGGGTGGTGGGATGAACTTTGGTGCGTTCAGCATTAATCCAGCCATGATGGCTGCCGCCCAGGCAGCACTAC
AGAGCAGTTGGGGTATGATGGGCATGTTAGCCAGCCAGCAGAACCAGTCAGGCCCATCGGGTAATAACCAAAACC
AAGGCAACATGCAGAGGGAGCCAAACCAGGCCTTCGGTTCTGGAAATAACTCTTATAGTGGCTCTAATTCTGGTG
CAGCAATTGGTTGGGGATCAGCATCCAATGCAGGGTCGGGCAGTGGTTTTAATGGAGGCTTTGGCTCAAGCATGG
ATTCTAAGTCTTCTGGCTGGGGAATGTAGACAGTGGGGTTGTGGTTGGTTGGTATAGAATGGTGGGAATTCAAAT
TTTTCTAAACTCATGGTAAGTATATTGTAAAATACATATGTACTAAGAATTTTCAAAATTGGTTTGTTCAGTGTG
GAGTATATTCAGCAGTATTTTTGACATTTTTCTTTAGAAAAAGGAAGAGCTAAAGGAATTTTATAAGTTTTGTTA
CATGAAAGGTTGAAATATTGAGTGGTTGAAAGTGAACTGCTGTTTGCCTGATTGGTAAACCAACACACTACAATT
GATATCAAAAGGTTTCTCCTGTAATATTTTATCCCTGGACTTGTCAAGTGAATTCTTTGCATGTTCAAAACGGAA
ACCATTGATTAGAACTACATTCTTTACCCCTTGTTTTAATTTGAACCCCACCATATGGATTTTTTTCCTTAAGAA
AATCTCCTTTTAGGAGATCATGGTGTCACAGTGTTTGGTTCTTTTGTTTTGTTTTTTAACACTTGTCTCCCCTCA
TACACAAAAGTACAATATGAAGCCTTCATTTAATCTCTGCAGTTCATCTCATTTCAAATGTTTATGGAAGAAGCA
CTTCATTGAAAGTAGTGCTGTAAATATTCTGCCATAGGAATACTGTCTACATGCTTTCTCATTCAAGAATTCGTC
ATCACGCATCACAGGCCGCGTCTTTGACGGTGGGTGTCCCATTTTTATCCGCTACTCTTTATTTCATGGAGTCGT
ATCAACGCTATGAACGCAAGGCTGTGATATGGAACCAGAAGGCTGTCTGAACTTTTGAAACCTTGTGTGGGATTG
ATGGTGGTGCCGAGGCATGAAAGGCTAGTATGAGCGAGAAAAGGAGAGAGCGCGTGCAGAGACTTGGTGGTGCAT
AATGGATATTTTTTAACTTGGCGAGATGTGTCTCTCAATCCTGTGGCTTTGGTGAGAGAGTGTGCAGAGAGCAAT
GATAGCAAATAATGTACGAATGTTTTTTGCATTCAAAGGACATCCACATCTGTTGGAAGACTTTTAAGTGAGTTT
TTGTTCTTAGATAACCCACATTAGATGAATGTGTTAAGTGAAATGATACTTGTACTCCCCCTACCCCTTTGTCAA
CTGCTGTGAATGCTGTATGGTGTGTGTTCTCTTCTGTTACTGATATGTAAGTGTGGCAATGTGAACTGAAGCTGA
TGGGCTGAGAACATGGACTGAGCTTGTGGTGTGCTTTGCAGGAGGACTTGAAGCAGAGTTCACCAGTGAGCTCAG
GTGTCTCAAAGAAGGGTGGAAGTTCTAATGTCTGTTAGCTACCCATAAGAATGCTGTTTGCTGCAGTTCTGTGTC
CTGTGCTTGGATGCTTTTTATAAGAGTTGTCATTGTTGGAAATTCTTAAATAAAACTGATTTAAATAATAAAAAA
AAAAAAAAAAAAAA

FIGURE 4

MSEYIRVTEDENDEPIEIPSEDDGTVLLSTVTAQFPGACGLRYRNPVSQCMRGVRLVEGILHAPDAGWGNLVYVV
NYPKDNKRKMDETDASSAVKVKRAVQKTSDLIVLGLPWKTTEQDLKEYFSTFGEVLMVQVKKDLKTGHSKGFGFV
RFTEYETQVKVMSQRHMIDGRWCDCKLPNSKQSQDEPLRSRKVFVGRCTEDMTEDELREFFSQYGDVMDVFIPKP
FRAFAFVTFADDQIAQSLCGEDLIIKGISVHISNAEPKHNSNRQLERSGRFGGNPGGFGNQGGFGNSRGGGAGLG
NNQGSNMGGGMNFGAFSINPAMMAAAQAALQSSWGMMGMLASQQNQSGPSGNNQNQGNMQREPNQAFGSGNNSYS
GSNSGAAIGWGSASNAGSGSGFNGGFGSSMDSKSSGWGM

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FIGURE 5

GGCGGCGCGTGGTCTACGCCGAGTGACAGAGACGCTCAGGCTGTGTTCTCAGGATGACCGAGTGGGAGACAGCAG
CACCAGCGGTGGCAGAGACCCCAGACATCAAGCTCTTTGGGAAGTGGAGCACCGATGATGTGCAGATCAATGACA
TTTCCCTGCAGGATTACATTGCAGTGAAGGAGAAGTATGCCAAGTACCTGCCTCACAGTGCAGGGCGGTATGCCG
CCAAACGCTTCCGCAAAGCTCAGTGTCCCATTGTGGAGCGCCTCACTAACTCCATGATGATGCACGGCCGCAACA
ACGGCAAGAAGCTCATGACTGTGCGCATCGTCAAGCATGCCTTCGAGATCATACACCTGCTCACAGGCGAGAACC
CTCTGCAGGTCCTGGTGAACGCCATCATCAACAGTGGTCCCCGGGAGGACTCCACACGCATTGGGCGCGCCGGGA
CTGTGAGACGACAGGCTGTGGATGTGTCCCCCCTGCGCCGTGTGAACCAGGCCATCTGGCTGCTGTGCACAGGCG
CTCGTGAGGCTGCCTTCCGGAACATTAAGACCATTGCTGAGTGCCTGGCAGATGAGCTCATCAATGCTGCCAAGG
GCTCCTCGAACTCCTATGCCATTAAGAAGAAGGACGAGCTGGAGCGTGTGGCCAAGTCCAACCGCTGATTTTCCC
AGCTGCTGCCCAATAAACCTGTCTGCCCTTTGGGGCAGTCCCAGCCAAAA

FIGURE 6

MTEWETAAPAVAETPDIKLFGKWSTDDVQINDISLQDYIAVKEKYAKYLPHSAGRYAAKRFRKAQCPIVERLTNS
MMMHGRNNGKKLMTVRIVKHAFEIIHLLTGENPLQVLVNAIINSGPREDSTRIGRAGTVRRQAVDVSPLRRVNQA
IWLLCTGAREAAFRNIKTIAECLADELINAAKGSSNSYAIKKKDELERVAKSNR

FIGURE 7

TCCTTCTTTCCTTTTTGCTGTAGGCCCGGGTGGTTGCTGCCGAAATGGGCAAGTTCATGAAACCTGGGAAGGTGG
TGCTTGTCCTGGCTGGACGCTACTCCGGACGCAAAGCTGTCATCGTGAAGAACATTGATGATGGCACCTCAGATC
GCCCCTACAGCCATGCTCTGGTGGCTGGAATTGACCGCTACCCCCGCAAAGTGACAGCTGCCATGGGCAAGAAGA
AGATCGCCAAGAGATCAAAGATAAAATCTTTTGTGAAAGTGTATAACTACAATCACCTAATGCCCACAAGGTACT
CTGTGGATATCCCCTTGGACAAAACTGTCGTCAATAAGGATGTCTTCAGAGATCCTGCTCTTAAACGCAAGGCCC
GACGGGAGGCCAAGGTCAAGTTTGAAGAGAGATACAAGACAGGCAAGAACAAGTGGTTCTTCCAGAAACTGCGGT
TTTAGATGCTTTGTTTTGATCATTAAAAATTATAAAGAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 8

MGKFMKPGKVVLVLAGRYSGRKAVIVKNIDDGTSDRPYSHALVAGIDRYPRKVTAAMGKKKIAKRSKIKSFVKVY
NYNHLMPTRYSVDIPLDKTVVNKDVFRDPALKRKARREAKVKFEERYKTGKNKWFFQKLRF

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FIGURE 9

CCGAGGAGCTGAGGAAGCCTAGAGCTCTCAGAAGCAGTCCTTTGAGCTGGTGTAGGGGCACTCAGAATGGTCCAG
CGTTTGACATACCGACGTAGGCTTTCCTACAATACAGCCTCTAACAAAACTAGGCTGTCCCGAACCCCTGGTAAT
AGAATTGTTTACCTTTATACCAAGAAGGTTGGGAAAGCACCAAAATCTGCATGTGGTGTGTGCCCAGGCAGACTT
CGAGGGGTTCGTGCTGTAAGACCTAAAGTTCTTATGAGATTGTCCAAAACAAAGAAACATGTCAGCAGGGCCTAT
GGTGGTTCCATGTGTGCTAAATGTGTTCGTGACAGGATCAAGCGTGCTTTCCTTATCGAGGAGCAGAAAATCGTT
GTGAAAGTGTTGAAGGCACAAGCACAGAGTCAGAAAGCTAAATAAAAAAAATGAAACTTTTTTGAGTAATAAAAAT
GAAAAGACGCTGTCCAATAGAAAAAGTTGGTGTGCTGGAGCTACCTCACCTCAGCTTGAGAGAGCCAGTTGTGTG
CATCTCTTTCCAGTTTTGCATCCAGTGACGTCTGCTTGGCATCTTGAGATTGTTATGGTGAGAGTATTTACACCT
CAGCAAATGCTGCAAAATCCTGTTTTCCCCCAGAGAGCTGGAGGTTAAATACTACCAGCACATCCCTAGATACTA
CTCAAGTTACAGTATATGATCACTAATATAGTATGCTCTTGGTACCAGGAGCTCTGATATATATCTGGTACATGT
TTGATAATGACTTGATTGTTATTATAAGTACTTATTAATACTTCGATTCTGTAAAGAGTTTAGGGTTTGATTTTA
TAAAATCCAAAATGAGCCTTTTATTGAAAAAAAAAAAAAAAAAA

FIGURE 10

MVQRLTYRRRLSYNTASNKTRLSRTPGNRIVYLYTKKVGKAPKSACGVCPGRLRGVRAVRPKVLMRLSKTKKHVS
RAYGGSMCAKCVRDRIKRAFLIEEQKIVVKVLKAQAQSQKAK

FIGURE 11

CCGACATGTTGAGTCATAAGACGCGTCGGTGTTGCAGTCTGTGTCCTTGGAGGTGACCAGGGCCACTGCAGGCATG
GTGCTAGCAGAGCTGTACGTCTCTGACCGAGAGGGAAGCGATGCCACGGGAGATGGAACCAAGGAGAAACCATT
TAAAACAGGTCTAAAGGCTTTGATGACAGTAGGGAAAGAACCATTTCCTACCATTTACGTAGATTCACAAAAAGA
AAATGAGAGGTGGAATGTTATTTCTAAATCACAGTTGAAGAACATTAAAAAGATGTGGCATAGGGAACAAATGAA
GAGTGAATCCCGGGAAAAGAAAGAGGCAGAAGATAGTTTACGAAGAGAAAAGAACCTGGAAGAAGCAAAGAAGAT
TACCATTAAAAATGATCCAAGTCTCCCAGAGCCAAAATGTGTGAAGATTGGTGCGTTAGAAGGATATAGAGGCCA
AAGAGTAAAGGTGTTTGGCTGGGTCCACAGGCTGCGCAGGCAAGGAAAGAATTTAATGTTTCTGGTGTTGCGAGA
TGGTACAGGTTATCTTCAGTGTGTCTTGGCGGATGAGTTGTGTCAGTGCTACAATGGAGTTCTCTTGTCCACGGA
GAGCAGTGTTGCAGTGTATGGAATGCTAAATCTTACCCCAAAGGGCAAGCAGGCTCCAGGTGGCCATGAGCTGAG
TTGTGACTTCTGGGAACTAATTGGGTTGGCCCCTGCTGGAGGAGCTGACAACCTGATCAATGAGGAGTCTGACGT
TGATGTCCAGCTCAACAACAGACACATGATGATCCGAGGAGAAAACATGTCCAAAATCCTAAAAGCACGATCCAT
GGTCACCAGGTGCTTTAGAGATCACTTCTTTGATAGGGGGTACTATGAAGTTACTCCTCCAACATTAGTGCAAAC
ACAAGTAGAAGGTGGTGCCACACTCTTCAAGCTTGACTATTTTGGGGAAGAGGCATTTTTGACTCAATCCTCTCA
GTTGTACTTGGAGACCTGCCTCCCAGCCCTGGGAGATGTTTTTTGTATTGCTCAGTCATACCGGGCAGAGCAGTC
CAGAACACGAAGGCACCTGGCTGAGTACACTCACGTGGAAGCTGAGTGTCCTTTCCTGACTTTTGACGACCTCCT
GAACCGGTTGGAGGACTTGGTTTGTGATGTGGTAGATCGAATATTGAAGTCACCTGCAGGGAGCATAGTGCATGA
GCTCAACCCGAACTTTCAGCCCCCCAAACGGCCTTTCAAACGGATGAACTATTCAGATGCTATCGTTTGGCTAAA
AGAACATGATGTAAAGAAAGAAGATGGAACTTTCTATGAATTTGGAGAAGATATCCCAGAAGCTCCTGAGAGACT
GATGACAGACACCATTAATGAACCAATCTTGCTGTGTCGATTTCCTGTGGAGATCAAGTCCTTCTACATGCAGCG
ATGTCCTGAGGATTCCCGTCTTACTGAATCTGTCGACGTGTTGATGCCCAATGTTGGTGAGATTGTGGGAGGCTC
AATGCGTATCTTTGATAGTGAAGAAATACTGGCAGGTTATAAAAGGGAAGGGATTGACCCCACTCCCTATTACTG
GTATACGGATCAGAGAAAATACGGTACATGTCCCCATGGAGGATATGGCTTGGGCTTGGAACGATTCTTAACGTG
GATTCTGAATAGGTATCACATCCGAGACGTGTGCTTATACCCTCGATTTGTCCAGCGTTGCACGCCATAACCATT
TTCTCCAGAAGCGTGGAGGAAAGATTATGAAAGGAACAGGCTCTTTAAAAAAGAAAACAAAAAGCCAGAATCTTC
CTTTTTTTTGTTTCATTGGGGTTTCTCTTTCTGTTTTTCTTTCTACTACCATAAAAACTATCTCAAATCACCTGA
ACATCAAGTGATATTAAGGTTGTCATCTTAAGAAAAAATATCCATTTTTTTCTTAAGTTCGGGAAACAAAGTTCG
GGGAAAATACCTGGCATGAAACTGTAGTTAGGGATACATTTCAGCATTTTACTCACTTTATCCAAGTTATTCATT
TTATTCAAGTTATATGTATGTATAATTCAACAATTTTAGATTATGGTGTAAGATACTCCAGTAACTTATCTTTCT
GTCCTTTTAAGTGTACCTGGAATTCTTTGATTTATTTTATTGCATCAATGAATTAAAACAAAAATCTTGGGGGAA
GAAATTGGCAATATCGTATAAAAATCTGCTCATATTAGAACACAGTATAATTCAGCAGTAAACACTAGAATCAAA
TGAATAGCCTTTTGTATCAGTTATTAATCTTTTCTAACTCTGCTTAGCTGCTAATAATCCTGAGGCATAGAAATT
GAAGAATTTGTAAAAATAGAATTGCCTTAAAGGATTTGAAGTAAGAACATAATTTTGGGGAGAGTTTTTTAGTGA
TTCACAGTATCCCTCTTAGCATTAATTTAAGGTAAAGAGGCAGATTGATTTTCCCTCTTTCCTGGTAATTCCTAA
GTAATTAAGAATAAATAAGTTCCAAAAGAAATTGTAGCTGGAATCTTAATAACAATTGTGAGTGGCTGTTTGAGT
TGCCCCCACCATGTCCTTAGATCTAATCTGTGCTACCTTATTAACTCACAGCAGGCTTACTGAATGGCTTCATTT
CAGATTTAGTTGATTTCTCCACCAAATGCATGTCATGTATTCTCAATAGGCTGTATTCCCAGCAGTCAATAAATG
AACACCCGTAAAAA

FIGURE 12

MVLAELYVSDREGSDATGDGTKEKPFKTGLKALMTVGKEPFPTIYVDSQKENERWNVISKSQLKNIKKMWHREQM
KSESREKKEAEDSLRREKNLEEAKKITIKNDPSLPEPKCVKIGALEGYRGQRVKVFGWVHRLRRQGKNLMFLVLR
DGTGYLQCVLADELCQCYNGVLLSTESSVAVYGMLNLTPKGKQAPGGHELSCDFWELIGLAPAGGADNLINEESD
VDVQLNNRHMMIRGENMSKILKARSMVTRCFRDHFFDRGYYEVTPPTLVQTQVEGGATLFKLDYFGEEAFLTQSS
QLYLETCLPALGDVFCIAQSYRAEQSRTRRHLAEYTHVEAECPFLTFDDLLNRLEDLVCDVVDRILKSPAGSIVH
ELNPNFQPPKRPFKRMNYSDAIVWLKEHDVKKEDGTFYEFGEDIPEAPERLMTDTINEPILLCRFPVEIKSFYMQ
RCPEDSRLTESVDVLMPNVGEIVGGSMRIFDSEEILAGYKREGIDPTPYYWYTDQRKYGTCPHGGYGLGLERFLT
WILNRYHIRDVCLYPRFVQRCTP

FIGURE 13

CTGCAGGCGTCGCGCCAATCTTCGCTCTGAGGTGCTGTCTCACCGGTGAGACCTGGAAGCGGGCGAGTCTCGTGC
TGTGTCGGACCTGCAGCCCCTGGCCTTCCGCCACC**ATG**GAGTACCTCATCGGTATCCAAGGCCCCGACTATGTTC
TTGTCGCCTCCGACCGGGTGGCCGCCAGCAATATTGTCCAGATGAAGGACGATCATGACAAGATGTTTAAGATGA
GTGAAAAGATATTACTCCTGTGTGTTGGAGAGGCTGGAGACACTGTACAGTTTGCAGAATATATTCAGAAAAACG
TGCAACTTTATAAGATGCGAAATGGATATGAATTGTCTCCCACGGCAGCAGCTAACTTCACACGCCGAAACCTGG
CTGACTGTCTTCGGAGTCGGACCCCATATCATGTGAACCTCCTCCTGGCTGGCTATGATGAGCATGAAGGGCCAG
CGCTGTATTACATGGACTACCTGGCAGCCTTGGCCAAGGCCCCTTTTGCAGCCCACGGCTATGGTGCCTTCCTGA
CTCTCAGTATCCTCGACCGATACTACACACCGACTATCTCACGTGAGAGGGCAGTGGAACTCCTTAGGAAATGTC
TGGAGGAGCTCCAGAAACGCTTCATCCTGAATCTGCCAACCTTCAGTGTTCGAATCATTGACAAAAATGGCATCC
ATGACCTGGATAACATTTCCTTCCCCAAACAGGGCTCC**TAA**CATCATGTCCTCCCTCCCACTTGCCAGGGAACTT
TTTTTTGATGGGCTCCTTTATTTTTTTCTACTCTTTTCAGGCGCACTCTTGATAAATGGTTAATTCAGAATAAAG
GTGACTATGGATATAATTGAAAAAA

FIGURE 14

MEYLIGIQGPDYVLVASDRVAASNIVQMKDDHDKMFKMSEKILLLCVGEAGDTVQFAEYIQKNVQLYKMRNGYEL
SPTAAANFTRRNLADCLRSRTPYHVNLLLAGYDEHEGPALYYMDYLAALAKAPFAAHGYGAFLTLSILDRYYTPT
ISRERAVELLRKCLEELQKRFILNLPTFSVRIIDKNGIHDLDNISFPKQGS

FIGURE 15

GCTCTGAGAAGCCGGACTACGCGGCAGCGGCTCTTCAAAGCGGAGCCGGGAGTTTTTGCTACAGTTTTCGCCACC
ATGAGTCGCAGCTATAATGATGAGCTGCAGTTCTTGGAGAAGATCAATAAAAACTGCTGGAGGATCAAGAAGGGC
TTCGTGCCCAACATGCAGGTTGAAGGTGTTTTCTATGTGAATGATGCTCTGGAGAAATTGATGTTTGAGGAATTA
AGGAATGCCTGTCGAGGTGGTGGTGTTGGTGGCTTCCTGCCAGCCATGAAACAGATTGGCAATGTGGCAGCCCTG
CCTGGAATTGTTCATCGATCTATTGGGCTTCCTGATGTCCATTCAGGATATGGGTTTGCTATTGGGAACATGGCA
GCCTTTGATATGAATGACCCTGAAGCAGTAGTATCCCCAGGTGGTGTCGGGTTTGACATCAACTGTGGTGTCCGC
TTGCTAAGAACCAATTTAGATGAAAGTGATGTCCAGCCTGTGAAGGAGCAACTTGCCCAAGCTATGTTTGACCAC
ATTCCTGTTGGGGTGGGGTCAAAAGGTGTCATCCCAATGAATGCCAAAGACTTGGAGGAGGCCTTGGAGATGGGG
GTGGACTGGTCCTTAAGAGAAGGGTATGCCTGGGCTGAAGACAAGGAGCACTGCGAGGAGTACGGAAGGATGCTG
CAGGCTGACCCCAATAAAGTTTCTGCAAGGGCGAAGAAAAGAGGCCTTCCTCAGTTGGGGACCCTGGGAGCAGGC
AACCATTATGCAGAAATCCAGGTTGTGGATGAGATTTTCAATGAGTATGCTGCTAAAAAAATGGGCATCGACCAT
AAGGGACAGGTGTGTGTGATGATCCACAGTGGAAGCAGAGGCTTGGGCCACCAAGTAGCCACAGATGCGCTGGTA
GCTATGGAGAAGGCCATGAAGAGAGACAAGATTATAGTCAATGATCGGCAGTTGGCTTGTGCTCGAATCGCTTCC
CCAGAGGGTCAAGACTATCTGAAGGGAATGGCAGCTGCTGGGAACTATGCCTGGGTCAACCGCTCTTCCATGACC
TTCTTAACCCGTCAGGCTTTCGCCAAGGTCTTCAACACAACCCCTGATGACTTGGACCTACATGTGATCTATGAT
GTTTCTCACAACATTGCCAAAGTGGAGCAGCATGTGGTGGACGGAAAGGAACGGACACTGTTAGTACACAGGAAG
GGATCCACCCGCGCTTTCCCTCCTCACCATCCCCTCATTGCTGTTGATTACCAACTCACTGGACAGCCAGTGCTC
ATTGGTGGCACCATGGGAACCTGTAGTTATGTTCTTACTGGCACTGAACAGGGCATGACTGAGACCTTTGGAACA
ACCTGTCATGGAGCGGGCCGTGCATTGTCCCGAGCAAAATCTCGACGTAATTTAGATTTCCAGGATGTCTTAGAC
AAATTGGCAGATATGGGAATTGCGATCCGTGTTGCCTCACCCAAACTGGTTATGGAAGAGGCTCCTGAGTCCTAT
AAGAATGTGACAGATGTGGTAAATACCTGCCATGATGCTGGAATCAGCAAGAAAGCCATTAAACTGAGACCAATT
GCTGTGATCAAAGGATAGAACCTTGGACAGCAGGGCTGCCTGACACCACCAACCCTCTCTGAAGTGGAAGTGGAC
TGACATGCTCTTCTGACATCAGACTCAAGGCGGGACAAGTTGCAAAGTGTGCAGCTGTAACTGCTCACGCCAAAA
TGGCTGATGGGGAGGCTGCTGCTTTCAGGGGCCCGTGCTTGTAAAATAACCTTCCAGGAAGAGGCACATTGCCCA
CCTTTGGAAAGGGAGGAATATGCCTTCTCCTTGGTTGTTCCACAGAGTTTTAGGAAAATCTGTTAGGGATGGGTA
GATGTCAAACTGCCTTACGCAGTCATACTGATCTTTAGCCATCAGATTGATCTTCTTCACACCAAGCTCTGTTTA
CATTCCGAGAGGTGTCATGAAGAAAGTTCTGTTCAATAAGGTTTTGGAATGTTTC

FIGURE 16

MSRSYNDELQFLEKINKNCWRIKKGFVPNMQVEGVFYVNDALEKLMFEELRNACRGGGVGGFLPAMKQIGNVAAL
PGIVHRSIGLPDVHSGYGFAIGNMAAFDMNDPEAVVSPGGVGFDINCGVRLLRTNLDESDVQPVKEQLAQAMFDH
IPVGVGSKGVIPMNAKDLEEALEMGVDWSLREGYAWAEDKEHCEEYGRMLQADPNKVSARAKKRGLPQLGTLGAG
NHYAEIQVVDEIFNEYAAKKMGIDHKGQVCVMIHSGSRGLGHQVATDALVAMEKAMKRDKIIVNDRQLACARIAS
PEGQDYLKGMAAAGNYAWVNRSSMTFLTRQAFAKVFNTTPDDLDLHVIYDVSHNIAKVEQHVVDGKERTLLVHRK
GSTRAFPPHHPLIAVDYQLTGQPVLIGGTMGTCSYVLTGTEQGMTETFGTTCHGAGRALSRAKSRRNLDFQDVLD
KLADMGIAIRVASPKLVMEEAPESYKNVTDVVNTCHDAGISKKAIKLRPIAVIKG

FIGURE 17

GCGCCGACTTGGAGAGCCAGCCCCATCGGGTTCCCCGCCGCCGGAAGCGGAAATAGCACCGGGCGCCGCCACAGT
AGCTGTAACTGCCACCGCGATGCCGAAGGCGCCCAAGCAGCAGCCGCCGGAGCCCGAGTGGATCGGGGACGGAGA
GAGCACGAGCCCATCAGACAAAGTGGTGAAGAAAGGGAAGAAGGACAAGAAGATCAAAAAAACGTTCTTTGAAGA
GCTGGCAGTAGAAGATAAACAGGCTGGGGAAGAAGAGAAAGTGCTCAAGGAGAAGGAGCAGCAGCAGCAGCAACA
GCAACAGCAGCAAAAAAAAAAAGCGAGATACCCGAAAAGGCAGGCGGAAGAAGGATGTGGATGATGATGGAGAAGA
GAAAGAGCTCATGGAGCGTCTTAAGAAGCTCTCAGTGCCAACCAGTGATGAGGAGGATGAAGTACCCGCCCCAAA
ACCCCGCGGAGGGAAGAAAACCAAGGGTGGTAATGTTTTTGCAGCCCTGATTCAGGATCAGAGTGAGGAAGAGGA
GGAGGAAGAAAAACATCCTCCTAAGCCTGCCAAGCCGGAGAAGAATCGGATCAATAAGGCCGTATCTGAGGAACA
GCAGCCTGCACTCAAGGGCAAAAAGGGAAAGGAAGAGAAGTCAAAAGGGAAGGCTAAGCCTCAAAATAAATTCGC
TGCTCTGGACAATGAAGAGGAGGATAAAGAAGAAGAAATTATAAAGGAAAAGGAGCCTCCCAAACAAGGGAAGGA
GAAGGCCAAGAAGGCAGAGCAGATGGAGTATGAGCGCCAAGTGGCTTCATTAAAAGCAGCCAATGCAGCTGAAAA
TGACTTCTCCGTGTCCCAGGCGGAGATGTCCTCCCGCCAAGCCATGTTAGAAAATGCATCTGACATCAAGCTGGA
GAAGTTCAGCATCTCCGCTCATGGCAAGGAGCTGTTCGTCAATGCAGACCTGTACATTGTAGCCGGCCGCCGCTA
CGGGCTGGTAGGACCCAATGGCAAGGGCAAGACCACACTCCTCAAGCACATTGCCAACCGAGCCCTGAGCATCCC
TCCCAACATTGATGTGTTGCTGTGTGAGCAGGAGGTGGTAGCAGATGAGACACCAGCAGTCCAGGCTGTTCTTCG
AGCTGACACCAAGCGATTGAAGCTGCTGGAAGAGGAGCGGCGGCTTCAGGGACAGCTGGAACAAGGGGATGACAC
AGCTGCTGAGAGGCTAGAGAAGGTGTATGAGGAATTGCGGGCCACTGGGGCGGCAGCTGCAGAGGCCAAAGCACG
GCGGATCCTGGCTGGCCTGGGCTTTGACCCTGAAATGCAGAATCGACCCACACAGAAGTTCTCAGGGGGCTGGCG
CATGCGTGTCTCCCTGGCCAGGGCACTGTTCATGGAGCCCACACTGCTGATGCTGGATGAGCCCACCAACCACCT
GGACCTCAACGCTGTCATCTGGCTTAATAACTACCTCCAGGGCTGGCGGAAGACCTTGCTGATCGTCTCCCATGA
CCAGGGCTTCTTGGATGATGTCTGCACTGATATCATCCACCTCGATGCCCAGCGGCTCCACTACTATAGGGGCAA
TTACATGACCTTCAAAAAGATGTACCAGCAGAAGCAGAAAGAACTGCTGAAACAGTATGAGAAGCAAGAGAAAAA
GCTGAAGGAGCTGAAGGCAGGCGGGAAGTCCACCAAGCAGGCGGAAAAACAAACGAAGGAAGCCCTGACTCGGAA
GCAGCAGAAATGCCGACGGAAAAACCAAGATGAGGAATCCCAGGAGGCCCCTGAGCTCCTGAAGCGCCCTAAGGA
GTACACTGTGCGCTTCACTTTTCCAGACCCCCCACCACTCAGCCCTCCAGTGCTGGGTCTGCATGGTGTGACATT
CGGCTACCAGGGACAGAAACCACTCTTTAAGAACTTGGATTTTGGCATCGACATGGATTCAAGGATTTGCATTGT
GGGCCCTAATGGTGTGGGGAAGAGTACGCTACTCCTGCTGCTGACTGGCAAGCTGACACCGACCCATGGGGAAAT
GAGAAAGAACCACCGGCTGAAAATTGGCTTCTTCAACCAGCAGTATGCAGAGCAGCTGCGCATGGAGGAGACGCC
CACTGAGTACCTGCAGCGGGGCTTCAACCTGCCCTACCAGGATGCCCGCAAGTGCCTGGGCCGCTTCGGCCTGGA
GAGTCACGCCCACACCATCCAGATCTGCAAACTCTCTGGTGGTCAGAAGGCGCGAGTTGTGTTTGCTGAGCTGGC
CTGTCGGGAACCTGATGTCCTCATCTTGGACGAGCCAACCAATAACCTGGACATAGAGTCTATTGATGCTCTAGG
GGAGGCCATCAATGAATACAAGGGTGCTGTGATCGTTGTCAGCCATGATGCCCGACTCATCACAGAAACCAATTG
CCAGCTGTGGGTGGTGGAGGAGCAGAGTGTTAGCCAAATCGATGGTGACTTTGAAGACTACAAGCGGGAGGTGTT
GGAGGCCCTGGGTGAAGTCATGGTCAGCCGGCCCCGAGAGTGAAGCTTTCCTTCCCAGAAGTCTCCCGAGAGACA
TATTTGTGTGGCCTAGAAGTCCTCTGTGGTCTCCCCTCCTCTGAAGACTGCCTCTGGCCTGCAGCTGACCTGGCA
ACCATTCAGGCACATGAAGGTGGAGTGTGACCTTGATGTGACCGGGATCCCACTCTGATTGCATCCATTTCTCTG
AAAGACTTGTTTGTTCTGCTTCTCTTCATATAACTGAGCTGGCCTTATCCTTGGCATCCCCCTAAACAAACAAGA
GGTGACCACCTTATTGTGAGGTTCCATCCAGCCAAGTTTATGTGGCCTATTGTCTCAGGACTCTCATCACTCAGA
AGCCTGCCTCTGATTTACCCTACAGCTTCAGGCCCAGCTGCCCCCCAGTCTTTGGGTGGTGCTGTTCTTTTCTGG
TGGATTTAATGCTGACTCACTGGTACAAACAGCTGTTGAAGCTCAGAGCTGGAGGTGAGCTTCTGAGGCCTTTGC
CATTATCCAGCCCAAGATTTGGTGCCTGCAGCCTCTTGTCTGGTTGAGGACTTGGGGCAGGAAAGGAATGCTGCT
GAACTTGAATTTCCCTTTACAAGGGGAAGAAATAAAGGAAAGGAGTTGCTGCCGAAAAAAAAAAAA

FIGURE 18

MPKAPKQQPPEPEWIGDGESTSPSDKVVKKGKKDKKIKKTFFEELAVEDKQAGEEEKVLKEKEQQQQQQQQQQKK
KRDTRKGRRKKDVDDDGEEKELMERLKKLSVPTSDEEDEVPAPKPRGGKKTKGGNVFAALIQDQSEEEEEEEKHP
PKPAKPEKNRINKAVSEEQQPALKGKKGKEEKSKGKAKPQNKFAALDNEEEDKEEEIIKEKEPPKQGKEKAKKAE
QMEYERQVASLKAANAAENDFSVSQAEMSSRQAMLENASDIKLEKFSISAHGKELFVNADLYIVAGRRYGLVGPN
GKGKTTLLKHIANRALSIPPNIDVLLCEQEVVADETPAVQAVLRADTKRLKLLEEERRLQGQLEQGDDTAAERLE
KVYEELRATGAAAAEAKARRILAGLGFDPEMQNRPTQKFSGGWRMRVSLARALFMEPTLLMLDEPTNHLDLNAVI
WLNNYLQGWRKTLLIVSHDQGFLDDVCTDIIHLDAQRLHYYRGNYMTFKKMYQQKQKELLKQYEKQEKKLKELKA
GGKSTKQAEKQTKEALTRKQQKCRRKNQDEESQEAPELLKRPKEYTVRFTFPDPPPLSPPVLGLHGVTFGYQGQK
PLFKNLDFGIDMDSRICIVGPNGVGKSTLLLLLTGKLTPTHGEMRKNHRLKIGFFNQQYAEQLRMEETPTEYLQR
GFNLPYQDARKCLGRFGLESHAHTIQICKLSGGQKARVVFAELACREPDVLILDEPTNNLDIESIDALGEAINEY
KGAVIVVSHDARLITETNCQLWVVEEQSVSQIDGDFEDYKREVLEALGEVMVSRPRE

FIGURE 19

CGGTTGGTGCGGCCTCCATTGTTCGTGTTTTAAGGCGCCATGAGGGGTGACAGAGGCCGTGGTCGTGGTGGGCGC
TTTGGTTCCAGAGGAGGCCCAGGAGGAGGGTTCAGGCCCTTTGTACCACATATCCCATTTGACTTCTATTTGTGT
GAAATGGCCTTTCCCCGGGTCAAGCCAGCACCTGATGAAACTTCCTTCAGTGAGGCCTTGCTGAAGAGGAATCAG
GACCTGGCTCCCAATTCTGCTGAACAGGCATCTATCCTTTCTCTGGTGACAAAAATAAACAATGTGATTGATAAT
CTGATTGTGGCTCCAGGGACATTTGAAGTGCAAATTGAAGAAGTTCGACAGGTGGGATCCTATAAAAAGGGGACA
ATGACTACAGGACACAATGTGGCTGACCTGGTGGTGATACTCAAGATTCTGCCAACGTTGGAAGCTGTTGCTGCC
CTGGGGAACAAAGTCGTGGAAAGCCTAAGAGCACAGGATCCTTCTGAAGTTTTAACCATGCTGACCAACGAAACT
GGCTTTGAAATCAGTTCTTCTGATGCTACAGTGAAGATTCTCATTACAACAGTGCCACCCAATCTTCGAAAACTG
GATCCAGAACTCCATTTGGATATCAAAGTATTGCAGAGTGCCTTAGCAGCCATCCGACATGCCCGCTGGTTCGAG
GAAAATGCTTCTCAGTCCACAGTTAAAGTTCTCATCAGACTACTGAAGGACTTGAGGATTCGTTTTCCTGGCTTT
GAGCCCCTCACACCCTGGATCCTTGACCTACTAGGCCATTATGCTGTGATGAACAACCCCACCAGACAGCCTTTG
GCCCTAAACGTTGCATACAGGCGCTGCTTGCAGATTCTGGCTGCAGGACTGTTCCTGCCAGGTTCAGTGGGTATC
ACTGACCCCTGTGAGAGTGGCAACTTTAGAGTACACACAGTCATGACCCTAGAACAGCAGGACATGGTCTGCTAT
ACAGCTCAGACTCTCGTCCGAATCCTCTCACATGGTGGCTTTAGGAAGATCCTTGGCCAGGAGGGTGATGCCAGC
TATCTTGCTTCTGAAATATCTACCTGGGATGGAGTGATAGTAACACCTTCAGAAAAGGCTTATGAGAAGCCACCA
GAGAAGAAGGAAGGAGAGGAAGAAGAGGAGAATACAGAAAGAACCACCTCAAGGAGAGGAAGAAGAAAGCATGGA
AACTCAGGAGTGACATTCCCTTCACTCCTTTTCCTACCCAAGGGAAAGACTGGAGCCTAAGCTGCCTGCTACTGG
CTTTACATGGTGACAGACATTCCGTGGATAGGAAGATAGCAGGAGAAAGTAACTCCATAGAGTGTCATTCCACTG
GTTGATATTGGCTTAGCTGCCAGTCTCCCATTTGTGACCTATGCCATCCATCTATAATGGAGGATACCAACATTT
CTTCCTAATATTCTATAATCTCCAACTCCTGAAAACCCCTCTCTCAACTAATACTTTGCTGTTGAAATGTTGTGA
AATGTTAAGTGTCTGGAAATTTTTTTTTCTAAGAAAAACTATTAAAGTACTT

FIGURE 20

MRGDRGRGRGGRFGSRGGPGGGFRPFVPHIPFDFYLCEMAFPRVKPAPDETSFSEALLKRNQDLAPNSAEQASIL
SLVTKINNVIDNLIVAPGTFEVQIEEVRQVGSYKKGTMTTGHNVADLVVILKILPTLEAVAALGNKVVESLRAQD
PSEVLTMLTNETGFEISSSDATVKILITTVPPNLRKLDPELHLDIKVLQSALAAIRHARWFEENASQSTVKVLIR
LLKDLRIRFPGFEPLTPWILDLLGHYAVMNNPTRQPLALNVAYRRCLQILAAGLFLPGSVGITDPCESGNFRVHT
VMTLEQQDMVCYTAQTLVRILSHGGFRKILGQEGDASYLASEISTWDGVIVTPSEKAYEKPPEKKEGEEEEENTE
RTTSRRGRRKHGNSGVTFPSLLFLPKGKTGA

FIGURE 21

CTCCGGCGCAGTGTTGGGACTGTCTGGGTATCGGAAAGCAAGCCTACGTTGCTCACTATTACGTATAATCCTTTT
CTTTTCAAGATGCCTGAGGAAGTGCACCATGGAGAGGAGGAGGTGGAGACTTTTGCCTTTCAGGCAGAAATTGCC
CAACTCATGTCCCTCATCATCAATACCTTCTATTCCAACAAGGAGATTTTCCTTCGGGAGTTGATCTCTAATGCT
TCTGATGCCTTGGACAAGATTCGCTATGAGAGCCTGACAGACCCTTCGAAGTTGGACAGTGGTAAAGAGCTGAAA
ATTGACATCATCCCCAACCCTCAGGAACGTACCCTGACTTTGGTAGACACAGGCATTGGCATGACCAAAGCTGAT
CTCATAAATAATTTGGGAACCATTGCCAAGTCTGGTACTAAAGCATTCATGGAGGCTCTTCAGGCTGGTGCAGAC
ATCTCCATGATTGGGCAGTTTGGTGTTGGCTTTTATTCTGCCTACTTGGTGGCAGAGAAAGTGGTTGTGATCACA
AAGCACAACGATGATGAACAGTATGCTTGGGAGTCTTCTGCTGGAGGTTCCTTCACTGTGCGTGCTGACCATGGT
GAGCCCATTGGCAGGGGTACCAAAGTGATCCTCCATCTTAAAGAAGATCAGACAGAGTACCTAGAAGAGAGGCGG
GTCAAAGAAGTAGTGAAGAAGCATTCTCAGTTCATAGGCTATCCCATCACCCTTTATTTGGAGAAGGAACGAGAG
AAGGAAATTAGTGATGATGAGGCAGAGGAAGAGAAAGGTGAGAAAGAAGAGGAAGATAAAGATGATGAAGAAAAA
CCCAAGATCGAAGATGTGGGTTCAGATGAGGAGGATGACAGCGGTAAGGATAAGAAGAAGAAAACTAAGAAGATC
AAAGAGAAATACATTGATCAGGAAGAACTAAACAAGACCAAGCCTATTTGGACCAGAAACCCTGATGACATCACC
CAAGAGGAGTATGGAGAATTCTACAAGAGCCTCACTAATGACTGGGAAGACCACTTGGCAGTCAAGCACTTTTCT
GTAGAAGGTCAGTTGGAATTCAGGGCATTGCTATTTATTCCTCGTCGGGCTCCCTTTGACCTTTTTGAGAACAAG
AAGAAAAAGAACAACATCAAACTCTATGTCCGCCGTGTGTTCATCATGGACAGCTGTGATGAGTTGATACCAGAG
TATCTCAATTTTATCCGTGGTGTGGTTGACTCTGAGGATCTGCCCCTGAACATCTCCCGAGAAATGCTCCAGCAG
AGCAAAATCTTGAAAGTCATTCGCAAAAACATTGTTAAGAAGTGCCTTGAGCTCTTCTCTGAGCTGGCAGAAGAC
AAGGAGAATTACAAGAAATTCTATGAGGCATTCTCTAAAAATCTCAAGCTTGGAATCCACGAAGACTCCACTAAC
CGCCGCCGCCTGTCTGAGCTGCTGCGCTATCATACCTCCCAGTCTGGAGATGAGATGACATCTCTGTCAGAGTAT
GTTTCTCGCATGAAGGAGACACAGAAGTCCATCTATTACATCACTGGTGAGAGCAAAGAGCAGGTGGCCAACTCA
GCTTTTGTGGAGCGAGTGCGGAAACGGGGCTTCGAGGTGGTATATATGACCGAGCCCATTGACGAGTACTGTGTG
CAGCAGCTCAAGGAATTTGATGGGAAGAGCCTGGTCTCAGTTACCAAGGAGGGTCTGGAGCTGCCTGAGGATGAG
GAGGAGAAGAAGAAGATGGAAGAGAGCAAGGCAAAGTTTGAGAACCTCTGCAAGCTCATGAAAGAAATCTTAGAT
AAGAAGGTTGAGAAGGTGACAATCTCCAATAGACTTGTGTCTTCACCTTGCTGCATTGTGACCAGCACCTACGGC
TGGACAGCCAATATGGAGCGGATCATGAAAGCCCAGGCACTTCGGGACAACTCCACCATGGGCTATATGATGGCC
AAAAAGCACCTGGAGATCAACCCTGACCACCCCATTGTGGAGACGCTGCGGCAGAAGGCTGAGGCCGACAAGAAT
GATAAGGCAGTTAAGGACCTGGTGGTGCTGCTGTTTGAAACCGCCCTGCTATCTTCTGGCTTTTCCCTTGAGGAT
CCCCAGACCCACTCCAACCGCATCTATCGCATGATCAAGCTAGGTCTAGGTATTGATGAAGATGAAGTGGCAGCA
GAGGAACCCAATGCTGCAGTTCCTGATGAGATCCCCCCTCTCGAGGGCGATGAGGATGCGTCTCGCATGGAAGAA
GTCGATTAGGTTAGGAGTTCATAGTTGGAAAACTTGTGCCCTTGTATAGTGTCCCCATGGGCTCCCACTGCAGCC
TCGAGTGCCCCTGTCCCACCTGGCTCCCCCTGCTGGTGTCTAGTGTTTTTTTCCCTCTCCTGTCCTTGTGTTGAA
GGCAGTAAACTAAGGGTGTCAAGCCCCATTCCCTCTCTACTCTTGACAGCAGGATTGGATGTTGTGTATTGTGGT
TTATTTTATTTTCTTCATTTTGTTCTGAAATTAAAGTATGCAAAATAAAGAATATGCCGTTTTAAAAAAAAAAAA
AAAAAAAAAAAAAAAAA

FIGURE 22

MPEEVHHGEEEVETFAFQAEIAQLMSLIINTFYSNKEIFLRELISNASDALDKIRYESLTDPSKLDSGKELKIDI
IPNPQERTLTLVDTGIGMTKADLINNLGTIAKSGTKAFMEALQAGADISMIGQFGVGFYSAYLVAEKVVVITKHN
DDEQYAWESSAGGSFTVRADHGEPIGRGTKVILHLKEDQTEYLEERRVKEVVKKHSQFIGYPITLYLEKEREKEI
SDDEAEEEKGEKEEEDKDDEEKPKIEDVGSDEEDDSGKDKKKKTKKIKEKYIDQEELNKTKPIWTRNPDDITQEE
YGEFYKSLTNDWEDHLAVKHFSVEGQLEFRALLFIPRRAPFDLFENKKKKNNIKLYVRRVFIMDSCDELIPEYLN
FIRGVVDSEDLPLNISREMLQQSKILKVIRKNIVKKCLELFSELAEDKENYKKFYEAFSKNLKLGIHEDSTNRRR
LSELLRYHTSQSGDEMTSLSEYVSRMKETQKSIYYITGESKEQVANSAFVERVRKRGFEVVYMTEPIDEYCVQQL
KEFDGKSLVSVTKEGLELPEDEEEKKKMEESKAKFENLCKLMKEILDKKVEKVTISNRLVSSPCCIVTSTYGWTA
NMERIMKAQALRDNSTMGYMMAKKHLEINPDHPIVETLRQKAEADKNDKAVKDLVVLLFETALLSSGFSLEDPQT
HSNRIYRMIKLGLGIDEDEVAAEEPNAAVPDEIPPLEGDEDASRMEEVD

FIGURE 23

GTACTATCCTCCTTACTTTTGGGTCGGGCCCTCCGGGAAGATGGCGGCCGTGCAGGCGGCCGAGGTGAAAGTGGA
TGGCAGCGAGCCGAAACTGAGCAAGAATGAGCTGAAGAGACGCCTGAAAGCTGAGAAGAAAGTAGCAGAGAAGGA
GGCCAAACAGAAAGAGCTCAGTGAGAAACAGCTAAGCCAAGCCACTGCTGCTGCCACCAACCACACCACTGATAA
TGGTGTGGGTCCTGAGGAAGAGAGCGTGGACCCAAATCAATACTACAAAATCCGCAGTCAAGCAATTCATCAGCT
GAAGGTCAATGGGGAAGACCCATACCCACACAAGTTCCATGTAGACATCTCACTCACTGACTTCATCCAAAAATA
TAGTCACCTGCAGCCTGGGGATCACCTGACTGACATCACCTTAAAGGTGGCAGGTAGGATCCATGCCAAAAGAGC
TTCTGGGGGAAAGCTCATCTTCTATGATCTTCGAGGAGAGGGGGTGAAGTTGCAAGTCATGGCCAATTCCAGAAA
TTATAAATCAGAAGAAGAATTTATTCATATTAATAACAAACTGCGTCGGGGAGACATAATTGGAGTTCAGGGGAA
TCCTGGTAAAACCAAGAAGGGTGAGCTGAGCATCATTCCGTATGAGATCACACTGCTGTCTCCCTGTTTGCATAT
GTTACCTCATCTTCACTTTGGGCTCAAAGACAAGGAAACAAGGTATCGCCAGAGATACTTGGACTTGATCCTGAA
TGACTTTGTGAGGCAGAAATTTATCATCCGCTCTAAGATCATCACATATATAAGAAGTTTCTTAGATGAGCTGGG
ATTCCTAGAGATTGAAACTCCCATGATGAACATCATCCCAGGGGGAGCCGTGGCCAAGCCTTTCATCACTTATCA
CAACGAGCTGGACATGAACTTATATATGAGAATTGCTCCAGAACTCTATCATAAGATGCTTGTGGTTGGTGGCAT
CGACCGGGTTTATGAAATTGGACGCCAGTTCCGGAATGAGGGGATTGATTTGACGCACAATCCTGAGTTCACCAC
CTGTGAGTTCTACATGGCCTATGCAGACTATCACGATCTCATGGAAATCACGGAGAAGATGGTTTCAGGGATGGT
GAAGCATATTACAGGCAGTTACAAGGTCACCTACCACCCAGATGGCCCAGAGGGCCAAGCCTACGATGTTGACTT
CACCCCACCCTTCCGGCGAATCAACATGGTAGAAGAGCTTGAGAAAGCCCTGGGGATGAAGCTGCCAGAAACGAA
CCTCTTTGAAACTGAAGAAACTCGCAAAATTCTTGATGATATCTGTGTGGCAAAAGCTGTTGAATGCCCTCCACC
TCGGACCACAGCCAGGCTCCTTGACAAGCTTGTTGGGGAGTTCCTGGAAGTGACTTGCATCAATCCTACATTCAT
CTGTGATCACCCACAGATAATGAGCCCTTTGGCTAAATGGCACCGCTCTAAAGAGGGTCTGACTGAGCGCTTTGA
GCTGTTTGTCATGAAGAAAGAGATATGCAATGCGTATACTGAGCTGAATGATCCCATGCGGCAGCGGCAGCTTTT
TGAAGAACAGGCCAAGGCCAAGGCTGCAGGTGATGATGAGGCCATGTTCATAGATGAAAACTTCTGTACTGCCCT
GGAATATGGGCTGCCCCCCACAGCTGGCTGGGGCATGGGCATTGATCGAGTCGCCATGTTTCTCACGGACTCCAA
CAACATCAAGGAAGTACTTCTGTTTCCTGCCATGAAACCCGAAGACAAGAAGGAGAATGTAGCAACCACTGATAC
ACTGGAAAGCACAACAGTTGGCACTTCTGTCTAGAAAATAATAATTGCAAGTTGTATAACTCAGGCGTCTTTGCA
TTTCTGCGAAAGATCAAGGTCTGCAAGGGAATTCTTGTGTGCTGCTTTCCATTTGACACCGCAGTTCTGTTCAGC
CATCAGAAGAGAGACAAGGAATTAAAAATTTCTTTTTAATCCTGTTA

FIGURE 24

MAAVQAAEVKVDGSEPKLSKNELKRRLKAEKKVAEKEAKQKELSEKQLSQATAAATNHTTDNGVGPEEESVDPNQ
YYKIRSQAIHQLKVNGEDPYPHKFHVDISLTDFIQKYSHLQPGDHLTDITLKVAGRIHAKRASGGKLIFYDLRGE
GVKLQVMANSRNYKSEEEFIHINNKLRRGDIIGVQGNPGKTKKGELSIIPYEITLLSPCLHMLPHLHFGLKDKET
RYRQRYLDLILNDFVRQKFIIRSKIITYIRSFLDELGFLEIETPMMNIIPGGAVAKPFITYHNELDMNLYMRIAP
ELYHKMLVVGGIDRVYEIGRQFRNEGIDLTHNPEFTTCEFYMAYADYHDLMEITEKMVSGMVKHITGSYKVTYHP
DGPEGQAYDVDFTPPFRRINMVEELEKALGMKLPETNLFETEETRKILDDICVAKAVECPPPRTTARLLDKLVGE
FLEVTCINPTFICDHPQIMSPLAKWHRSKEGLTERFELFVMKKEICNAYTELNDPMRQRQLFEEQAKAKAAGDDE
AMFIDENFCTALEYGLPPTAGWGMGIDRVAMFLTDSNNIKEVLLFPAMKPEDKKENVATTDTLESTTVGTSV

FIGURE 25

CAATTTGAGTTTCCATTTCTCGGATTTGGGAACTGGTATAAGCATTGTCTGTGATGTAAACAAAGTCTTCAATAT
TTGGAGAAAACATCTCCTCATACTTGAGAGCACAAGAGGAAGAGAGAGACCCTCACTGCTGGGGAGTCCCTGCCA
CACTCAGTCCCCCACCACACTGAATCGGAATTCCGAGAGGGAAGAGGAGGCGCGAGAATGGAGGTGGAGGCCGTC
TGTGGTGGCGCGGGCGAGGTGGAGGCCCAGGACTCTGACCCTGCCCCTGCCTTCAGCAAGGCCCCCGGCAGCGCC
GGCCACTACGAACTGCCGTGGGTTGAAAAATATAGGCCAGTAAAGCTGAATGAAATTGTCGGGAATGAAGACACC
GTGAGCAGGCTAGAGGTCTTTGCAAGGGAAGGAAATGTGCCCAACATCATCATTGCGGGCCCTCCAGGAACCGGC
AAGACCACAAGCATTCTGTGCTTGGCCCGGGCCCTGCTGGGCCCAGCACTCAAAGATGCCATGTTGGAACTCAAT
GCTTCAAATGACAGGGGCATTGACGTTGTGAGGAATAAAATTAAAATGTTTGCTCAACAAAAAGTCACTCTTCCC
AAAGGCCGACATAAGATCATCATTCTGGATGAAGCAGACAGCATGACCGACGGAGCCCAGCAAGCCTTGAGGAGA
ACCATGGAAATCTACTCTAAAACCACTCGCTTCGCCCTTGCTTGTAATGCTTCGGATAAGATCATCGAGCCCATT
CAGTCCCGCTGTGCAGTCCTCCGGTACACAAAGCTGACCGACGCCCAGATCCTCACCAGGCTGATGAATGTTATC
GAGAAGGAGAGGGTACCCTACACTGATGACGGCCTAGAAGCCATCATCTTCACGGCCCAGGGAGACATGAGGCAG
GCGCTGAACAACCTGCAGTCCACCTTCTCAGGATTTGGCTTCATTAACAGTGAGAACGTGTTCAAGGTCTGTGAC
GAGCCCCACCCACTGCTGGTAAAGGAGATGATCCAGCACTGTGTGAATGCCAACATTGACGAAGCCTACAAGATT
CTTGCTCACTTGTGGCATCTGGGCTACTCACCAGAAGATATCATTGGCAACATCTTTCGAGTGTGTAAAACTTTC
CAAATGGCAGAATACCTGAAACTGGAGTTTATCAAGGAAATTGGATACACTCACATGAAAATAGCGGAAGGAGTG
AACTCTCTTTTGCAGATGGCAGGCCTCCTGGCAAGGCTGTGTCAGAAGACAATGGCCCCGGTGGCCAGTTAGAGC
AGAGACTTCACTGACTGACTTACAGGTGCCCTATTCTGAGGTACAGGAGCCGCGGCTTTCTGATGGGGGAAAATG
CGCCTTAGGCTGAGCCAACATGACTGTCCCCCAAACTCCAGTGGCTGGCCAGGCGCGGTAGTCACGCCTGTAATC
CCAACACTTTGGGAGGCCGAGGCAGGTGGATCACCTGAGGTCAGAAGTTCAAGACCAGCCTGGCCAACATGGGGA
AACCCTGTCTTTACTAAAAATATAAAAATTAGCTGGGTGTGGTGGCGGGCACCTGTAATCCCAGCTACTCGGGAG
GCTGTGGCAGGCGAAATCGCTTGAACCCAGGAGGAGGAGGTGGAGGTTGCAGTGAGCCAAGATCACACCATTGCA
CTCCAGCCTGGGCGACAGAGACTCCATCTGGGGAAAAAAATTAAATAAATAAACTCCCG

FIGURE 26

MEVEAVCGGAGEVEAQDSDPAPAFSKAPGSAGHYELPWVEKYRPVKLNEIVGNEDTVSRLEVFAREGNVPNIIIA
GPPGTGKTTSILCLARALLGPALKDAMLELNASNDRGIDVVRNKIKMFAQQKVTLPKGRHKIIILDEADSMTDGA
QQALRRTMEIYSKTTRFALACNASDKIIEPIQSRCAVLRYTKLTDAQILTRLMNVIEKERVPYTDDGLEAIIFTA
QGDMRQALNNLQSTFSGFGFINSENVFKVCDEPHPLLVKEMIQHCVNANIDEAYKILAHLWHLGYSPEDIIGNIF
RVCKTFQMAEYLKLEFIKEIGYTHMKIAEGVNSLLQMAGLLARLCQKTMAPVAS

FIGURE 27

CGGTTCTCCAAGCACCCAGCATCCTGCTAGACGCGCCGCGCACCGACGGAGGGGAC**ATG**GGCAGAGCAATGGTGG
CCAGGCTGGGGCTGGGGCTGCTGCTGCTGGCACTGCTCCTACCCACGCAGATTTATTCCAGTGAAACAACAACTG
GAACTTCAAGTAACTCCTCCCAGAGTACTTCCAACTCTGGGTTGGCCCCAAATCCAACTAATGCCACCACCAAGG
CGGCTGGTGGTGCCCTGCAGTCAACAGCCAGTCTCTTCGTGGTCTCACTCTCTCTTCTGCATCTCTACTCT**TAA**G
AGACTCAGGCCAAGAAACGTCTTCTAAATTTCCCCATCTTCTAAACCCAATCCAAATGGCGTCTGGAAGTCCAAT
GTGGCAAGGAAAAACAGGTCTTCATCGAATCTACTAATTCCACACCTTTTATTGACACAGAAAATGTTGAGAATC
CCAAATTTGATTGATTTGAAGAACATGTGAGAGGTTTGACTAGATGATGAATGCCAATATTAAATCTGCTGGAGT
TTCATGTACAAGATGAAGGAGAGGCAACATCCAAAATAGTTAAGACATGATTTCCTTGAATGTGGCTTGAGAAAT
ATGGACACTTAATACTACCTTGAAAATAAGAATAGAAATAAAGGATGGGATTGTGGAATGGAGATTCAGTTTTCA
TTGGTTCATTAATTCTATAAGGCCATAAAACAGGTAATATAAAAAGCTTCCATCGATCTATTTATATGTACATGA
GAAGGAATCCCCAGGTGTTACTGTAATTCCTCAACGTATTGTTTCGACGGCACTAATTTAATGCCGATATACTCT
AGATGAATGTTTACATTGTTGAGCTATTGCTGTTCTCTTGGGAACTGAACTCACTTTCCTCCTGAGGCTTTGGAT
TTGACATTGCATTTGACCTTTTAGGTAGTAATTGACATGTGCCAGGGCAATGATGAATGAGAATCTACCCCAGAT
CCAAGCATCCTGAGCAACTCTTGATTATCCATATTGAGTCAAATGGTAGGCATTTCCTATCACCTGTTTCCATTC
AACAAGAGCACTACATTCTTTTAGCTAAACGGATTCCAAAGAGTAGAATTGCATTGACCACGACTAATTTCAAAA
TGCTTTTTATTATTATTATTTTTTAGACAGTCTCACTTTGTCGCCCAGGCCGGAGTGCAGTGGTGCGATCTCAGA
TCAGTGTACCATTTGCCTCCCGGGCTCAAGCGATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGATTACAGGCAC
CTGCCACCATGCCCGGCTAATTTTTGTAATTTTAGTAGAGACAGGGTTTCACCATGTTGCCCAGGCTGGTTTAGA
ACTCCTGACCTCAGGTGATCCACCCGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGCTTGAGCCCCCGCGCCCA
GCCATCAAAATGCTTTTTATTTCTGCATATGTTTGAATACTTTTTACAATTTAAAAAAATGATCTGTTTTGAAGG
CAAAATTGCAAATCTTGAAATTAAGAAGGCAAAATGTAAAGGAGTCAAACTATAAATCAAGTATTTGGGAAGTGA
AGACTGGAAGCTAATTTGCATAAATTCACAAACTTTTATACTCTTTCTGTATATACATTTTTTTTCTTTAAAAAA
CAACTATGGATCAGAATAGCAACATTTAGAACACTTTTTGTTATCAGTCAATATTTTTAGATAGTTAGAACCTGG
TCCTAAGCCTAAAAGTGGGCTTGATTCTGCAGTAAATCTTTTACAACTGCCTCGACACACATAAACCTTTTTAAA
AATAGACACTCCCCGAAGTCTTTTGTTTGTATGGTCACACACTGATGCTTAGATGTTCCAGTAATCTAATATGGC
CACAGTAGTCTTGATGACCAAAGTCCTTTTTTTCCATCTTTAGAAAACTACATGGGAACAAACAGATCGAACAGT
TTTGAAGCTACTGTGTGTGTGAATGAACACTCTTGCTTTATTCCAGAATGCTGTACATCTATTTTGGATTGTATA
TTGTGGTTGTGTATTTACGCTTTGATTCATAGTAACTTCTTATGGAATTGATTTGCATTGAACGACAAACTGTAA
ATAAAAAGAAACGGTG

FIGURE 28

MGRAMVARLGLGLLLLALLLPTQIYSSETTTGTSSNSSQSTSNSGLAPNPTNATTKAAGGALQSTASLFVVSLSL
LHLYS

FIGURE 29

GGCCCGGCCCGCGGCGGCGGCAAAGGGGCGGAGGGGTTCGCTGCCAGCAATTGCCAAGCTGCTGCGGTCGTGGCG
GGATGGTATAGCCGGGCCTGAGGGCGGGCGGCGGGGCGCGGGCGGGGGCGAGGCGGCCGGGAAGGGCCGACGCCG
CCTGACTGGCTTGGGAGCAGCGGCAGCAAGCTGAGGGGGCGTCGCCGCCGCCGGCCCCCGGCGCCGCCGCGGGAG
GCCGCGCCCGCC**ATG**GCGGCCCGGGCGGTGCTGGACGAGTTCACTGCGCCAGCTGAGAAGGCGGAGCTGCTGGAG
CAGAGCCGCGGCCGTATCGAGGGCCTGTTTGGCGTGAGCCTAGCCGTGCTCGGCGCGCTAGGGGCTGAGGAGCCG
CTGCCCGCGCGCATCTGGCTGCAGCTCTGCGGGGCGCAGGAGGCGGAGCACAGCGCCAAGGAATATATTAAAGGA
ATCTGTGAACCTGAACTAGAAGAAAGAGAATGTTACCCCAAGGACATGCACTGCATTTTTGTTGGGGCAGAGAGC
CTGTTTCTGAAAAGCTTGATTCAGGATACTTGTGCTGACCTCTGCATTCTGGACATTGGCCTTCTTGGCATCAGA
GGAAGTGCTGAGGCTGTGGTCATGGCTAGGAGTCACATTCAACAATTTGTAAAGCTCTTTGAAAATAAAGAGAAC
CTACCCAGTAGTCAGAAAGAATCAGAGGTGAAAAGGGAATTCAAACAATTTGTTGAAGCCCATGCAGACAATTAC
ACAATGGATTTGTTGATTTTGCCCACTTCCTTGAAAAAAGAACTTTTGACACTCACACAAGGTGAGGAGAATCTC
TTTGAAACAGGAGATGATGAGGTTATTGAAATGAGAGATTCTCAACAAACAGAGTTTACACAGAATGCTGCCACA
GGGCTGAATATTTCTAGAGATGAAACTGTTTTGCAGGAAGAGGCAAGAAATAAAGCTGGGACTCCTGTTTCTGAG
CTTACAAAACAAATGGACACAGTCCTTTCTAGCTCACCAGATGTGCTTTTTGATCCAATAAATGGTCTAACCCCA
GATGAAGAGGCACTTTCCAATGAGAGAATTTGTCAGAAAAGGAGATTTTCTGATTCTGAAGAAAGGCATACGAAG
AAGCAGTTTTCTTTGGAAAATGTTCAGGAGGGGGAGATTTTACACGATGCTAAGACATTGGCTGGAAATGTAATA
GCTGACCTATCTGATTCTTCTGCTGATTCTGAAAATTTAAGTCCAGATATAAAAGAAACTACTGAGGAAATGGAA
TACAACATCCTCGTAAACTTTTTTAAAACCATGGGCTACTCCCAAGAAATTGTTGAAAAGGTCATTAAGGTGTAT
GGACCATCTACTGAACCATTATTGCTCTTAGAGGAAATTGAAAAAGAAAATAAAAGATTCCAAGAAGACAGAGAA
TTTTCAGCTGGTACAGTGTATCCAGAGACCAACAAAACCAAAAATAAAGGTGTTTATAGCAGCACAAATGAGCTT
ACAACTGATTCCACTCCAAAGAAAACACAGGCTCACACACAGCAAAATATGGTAGAAAAATTTTCTCAGTTACCA
TTCAAAGTGGAAGCTAAACCATGTACCTCAAATTGTAGAATTAATACTTTCAGAACAGTGCCAATAGAACAGAAA
CATGAAGTCTGGGGTTCAAACCAGAACTACATTTGTAACACAGACCCTGAAACTGATGGCCTTTCACCTTCTGTT
GCCTCTCCAAGTCCCAAAGAAGTCAATTTTGTTTCAAGGGGAGCTTCAAGTCACCAGCCCAGAGTTCCACTTTTT
CCTGAAAATGGTTTACACCAGCAGCCAGAACCCTTGCTTCCAAATAATATGAAATCTGCCTGTGAAAAACGTTTA
GGATGTTGTAGTTCTCCTCATTCTAAGCCAAATTGCTCAACCCTTTCTCCACCAATGCCACTGCCCCAGCTGTTA
CCTTCGGTTACTGATGCAAGGTCGGCAGGACCTTCTGATCATATTGATTCCTCAGTTACTGGGGTTCAAAGGTTT
CGAGATACTCTAAAAATACCCTACAAGCTGGAATTAAAAAATGAACCAGGGAGAACGGATTTGAAACACATTGTT
ATAGATGGGAGCAATGTTGCAATTACCCATGGTCTGAAAAAGTTCTTTTCTTGTCGTGGAATTGCAATTGCAGTT
GAATATTTTTGGAAGCTTGGCAACAGAAACATCACTGTATTTGTCCCTCAGTGGAGAACAAGGCGTGATCCTAAT
GTCACAGAACAGCACTTCTTAACCCAGCTCCAGGAGCTCGGAATATTATCTTTAACTCCTGCCCGGATGGTCTTT
GGAGAAAGAATTGCTTCTCATGATGACAGGTTTCTACTACACTTAGCGGACAAAACTGGTGGCATAATTGTGACA
AATGATAATTTCAGAGAATTTGTGAATGAGTCAGTCTCTTGGAGAGAAATTATTACAAAAAGGCTGCTGCAGTAC
ACGTTCGTGGGGGACATATTTATGGTTCCCGATGATCCTCTGGGAAGAAGTGGACCTCGATTAGAGGAGTTTCTT
CAGAAGGAAGTCTGTCTTAGAGATATGCAGCCCCTACTCAGTGCCCTGCCAAATGTGGGCATGTTTGACCCCAGC
TTCAGAGTCCCTGGCACCCAGGCAGCCAGCACCAGCCACCAGCCTCCGACCCGGATTCAGGGAGCCCCTTCAAGC
CACTGGCTCCCTCAGCAGCCCCACTTCCCACTGCTGCCAGCCCTCCCCAGTCTCCAGCAGAACCTGCCCATGCCA
GCTCAGAGATCTTCTGCAGAAACCAACGAGCTGAGGGAAGCCCTTCTGAAGATCTTCCCTGACTCAGAGCAAAGA
CTGAAAATAGACCAGATCTTGGTGGCCCACCCATACATGAAAGATCTAAATGCGCTTTCTGCCATGGTGTTGGAT
TGAAGATTGTGCTGAGCGCTGAGCTTGCGCTCAGGGCTGGCTGATCAAACTCAAGCTCACACCTGTACCTGATGG
GAATGAACATAATGTGAAGAAACTTATTTCCCAGTGTAAACGCAGTTGTACAGAAAAAAAATGTTTTGGGTATAA
ATCTGGGTTTTCAAAACCAGCTTTTTTCTATATATAAATTATGCTGCTATTACAGATTTAACATTTTCTGTTAAA
GGAAAGTCTACATTTTCTGCCTGTTCAGAACTGTTTAATAGCAGTTACTCTTGAGTGTATTTACCTTTTTATGTT
TTTTAAACTATTTTCCTTAAAGCCGAAAATATTGACAAATGGATATGGTTAGCCTTTATAAATAAATAAAAAAAA
AAGTGTTGCTTTCTTAAGG

FIGURE 30

MAARAVLDEFTAPAEKAELLEQSRGRIEGLFGVSLAVLGALGAEEPLPARIWLQLCGAQEAEHSAKEYIKGICEP
ELEERECYPKDMHCIFVGAESLFLKSLIQDTCADLCILDIGLLGIRGSAEAVVMARSHIQQFVKLFENKENLPSS
QKESEVKREFKQFVEAHADNYTMDLLILPTSLKKELLTLTQGEENLFETGDDEVIEMRDSQQTEFTQNAATGLNI
SRDETVLQEEARNKAGTPVSELTKQMDTVLSSSPDVLFDPINGLTPDEEALSNERICQKRRFSDSEERHTKKQFS
LENVQEGEILHDAKTLAGNVIADLSDSSADSENLSPDIKETTEEMEYNILVNFFKTMGYSQEIVEKVIKVYGPST
EPLLLLEEIEKENKRFQEDREFSAGTVYPETNKTKNKGVYSSTNELTTDSTPKKTQAHTQQNMVEKFSQLPFKVE
AKPCTSNCRINTFRTVPIEQKHEVWGSNQNYICNTDPETDGLSPSVASPSPKEVNFVSRGASSHQPRVPLFPENG
LHQQPEPLLPNNMKSACEKRLGCCSSPHSKPNCSTLSPPMPLPQLLPSVTDARSAGPSDHIDSSVTGVQRFRDTL
KIPYKLELKNEPGRTDLKHIVIDGSNVAITHGLKKFFSCRGIAIAVEYFWKLGNRNITVFVPQWRTRRDPNVTEQ
HFLTQLQELGILSLTPARMVFGERIASHDDRFLLHLADKTGGIIVTNDNFREFVNESVSWREIITKRLLQYTFVG
DIFMVPDDPLGRSGPRLEEFLQKEVCLRDMQPLLSALPNVGMFDPSFRVPGTQAASTSHQPPTRIQGAPSSHWLP
QQPHFPLLPALPSLQQNLPMPAQRSSAETNELREALLKIFPDSEQRLKIDQILVAHPYMKDLNALSAMVLD

FIGURE 31A

AAACAAGAAGAATGGGATTGATATTTCCGCAGAAGTTTGGAAGTTATGTAACAGAGCAGGTTGAGATCCTACCTT
TTAGGAGCAGCCTGCCCCTTTTGAAGGGGTAAAGGGAGTGGGTGCAGTGCCCTCTCTTCTGTTGTAGTGGCTTAT
CCCTCTAAGGCATGACCCTTGGATAGGGGTTACCTGCCTCGGAAAGTCCCCACTTCCTTGTGGGAGTTTAAAATA
GATTGGCATATGTGAGAGATGGAGACAAGGTGGGAAATCGGATCCTGTCTTAGGATTTCTCATCAGGAGATGCTG
ATACTTGGTGTTTCAGCTTGATAAATTGAGAAGGTGCCATGAAACCAGGTCCTGGAACAGAATCCCTGGTTGCTC
TGTCTTTTAGCTGCTCTGACCCTCTGCCCTGCAGAGCATGCATTTTGCATGTGCCTGGCAGGAGGCCCTCCTGCT
TGAGCCCTGCTGTATTTGTCTGTGTTGACAACGTGACTGCCAGCCATTAAGCTTGGTCAGTCCACAGACACACTA
GGAAAGCAGAGGCAGCTCTTGGTTTCTCTGGAACAGAGCTGCAAGAAGTCTCTGGGCATCTGCATGGCCAGGAGC
TTATGCTTAACTGTTGAGTGACCTGCAGCCATAAGGGCATTAATTCTGCCTTCCAGAGGTGGGAATGACTTGGCT
TTAAACAGTGATTTGTGTGAGAATTCTTCAAATCCCATAAGGTAGAAGGCATGGTGGAGTGGAGGAGAAATCTTG
GCTCATATCTGCCTCTTCCATTGACCAGCTGTGTGACCTTGGGCCTGTTACTTTTAACCTACCTGACCCTCCATT
TCCTCATTTATCAGAAGTGTCTAACTGTACACAAGTTAAACTGTAAGGATTACATGAGGTAGTAGTCAATCCTGG
TGTTTCTCTGTATCTTCTCACTTCTCACTGGTGTTGGAAATATGATCTTGCGACCCTAGATGGCAGCCACTCTGG
GGCAGAAGAGACAGTGACCACCTTTTGAAGAGCTCAAAGGAGAATATTGCCCCACAGGGCTTAGTGGGTCCCCCA
GGCTGAGGCTGGGGAGGAGGGCCACCTTTGCCTACAGCAAGTGGCATATCATTGTTCTAGGGGTTCTCTTGACGG
CAGAACTTTGCCTCTAGCTCATTTTCCACAGCCTAGATTTTCCAATCTTGCCAATCCAGTTGACTTCTGTCTTCT
CATTTCCAAGCCATTGTTCTCTCTCTTTCACTATCTACATGGATTATCCTTCATTCAAACTGCTTTGTCCCGGCC
GGGTGCGGTGGCTCATGCCTGTAGTCCTAGCACTTTGGGAGGCCGAGGCGGGTGGATCACGAGGTCAGGAGATCG
AGACCATCCTGGCTAACATGGTGAAACCCCGTCTCTACTAAAATTAAAAAAAATTAGCCGGGCGTGGTGGCAGGCG
CCTGTGGTCCCGGCTACTTGGGAGGCTGAGGCGGGAGAATGGCATGAACCCGGGAGGTGGAGCTTGCAGTGGGTG
GAGATCGCGCCACTGCACTCCAGCCTGGGCGACAGAGCGAGACTCCGTCTGAAAAAAAAAACAAAAAAACTGCTT
TGTCCTGTAGGAATCCTGTGCGGGTTATGTGCACCTCCCTCAATCCTTACCTTGAAGCTGAGGTTTCCCCTCAGC
TCTCAAGTACTCAGTTTGCACTGCAGGTAGTCCCTATTTTAACGAAAGTTATACGGTCCAGCTCAGGGAATCCTG
AAAAGCTGCCCTTGCTTCCATGGTAATCAAAAGGCAGTTCTCATGGAATAAAAGCTACCTGAAGCCTGAGTTGGG
ACCTTTGGCTGGGGAAGGTGGTTGAGGACGTTCTCTGATTAGATGCTTGGCATGAGGTTTGCTACTGGAACTGCT
AGTGTAGAATGTTTCAGCCCCCTAGAGTTGTCCCTGTGATGTGGCTACCTCCTTTCTCTGGGATTTCTCTTAAAG
TCTGGGGAGCCCCTGCTTCTCATTTCCTGGAATTTATCTTCCCAGTCTCCCTTTCTGGCTGAAAATTTCTAGTAT
CTTACAGAACAGCGGTGGGATACACTGGAGCACATCATATTACCACTAAGTATGTCTAATAAATGATGTCCTCTG
ATTTGACATTTCCTAAATGTGAAGCTCCTGATTTTATACAATTTTGAAATTAGTAAGCTTGTTAGTTTTGTTTGA
AATTCTAGGCATTGGATACACTTAACATGAGGGCTACATGTGCATCAACATACTCTGGTTTCCTTCCCTCTGTAT
CTTTTTTTTTTTTGAGATGGAGTCTCACTGTCTCCTAGGCTGGAGTGCAGTGGTGTGATCATGGCTCACTGCAGC
CCCAACCTTCAGGGCTCAGGTGATCCTCCCGCCTCAGCCACCCAAGTGGCTGGGACCGCAGGTGCATGCCACCAT
GCCTGGCTAACTTATTTTTATATATTGTAGAGACGGAGTCTCCCTATGTTGCCTAGGCTGACCTTGAGCTCTTGG
GCTCAGGTGATCCTCCCGCCTTGGCCTCCCAAAGTGTTGGGATTATAGGCGTGAGCCACTGTGTCCAGCCTTTTC
CTCTGTATCTTGTATCCATTCCCCAGAGCGATACTGTGTATCCTTGAACAGACGGTTTCTTGAAGTCAGAGTCTA
TCTCCTCTGTCACTTCTCCCCCTTCATTATCTAAGACTGAGGTTGTGGTTTATATGCTTAGAGTTGAAAGCATGG
GGTCCAACGTGTTCTGTACTCTGTAGTTCCCCAGACTCTCCAGGGAAACTACTTAGCTCTCAGGTGGTTCTTTTC
TGTTTTTCTCAGAGCAAGTTATCTAATAACTGAAGAGGACTCTGCCCTTTGGCCTGTTCCTGACTTTCTAACTCC
TTTTGCTGGAGGAAGGGGAGGTTGAGGGGGGTGCCCTGTGGTGTGAAAGCCCCACTTGCCCTCTCCTCTATACTT
TCTTCCAATGCAGACGGGAGAAAGTATCATAAATGTAGTGACTGTGGGTCAGGGGAGCTCTGAGAGGCCAGCACA
GGAAACCAGAAACAAAATGAGTCAGTTCGTAGGTGGCGATCAGAGGCACCCTGCTGAGGGTGCAAGGCCACAGGT
GATGCCTCCTCAGTAGGCCCAGGAGCATCAAAACGGGAACAGTCCCTTTCAGCCTTCAGGAGCCTCCCAAATGTC
ACTTAGTGATGTCCCATTCACCTGCTTAAAGGCCCTGCATCCTGCCAGGTAGTTGGTTTGTCCATAGCATCCTGA
GCTCTGCTTGGGTGAGCCAGACAAAAAGAATGATTCCTGGCCAGAGTAGTGATACCAGGGCCCAGACAGAGGCAG
AGAGTCCGGATAGAAGATCCTGTAAGCTGGGGTAGGGAGCCGAGGAGGCCATGGAGCCAGGGGAATCATTGAAGT
GAGGGACAATTTCTGGAGGAGGGAAACTGAGTAAGGAAGGCCTGGCCAAGGACCAAGAAGGGGACAGTATCCTGA
TCTATGAAAGAAGACTCAAGTGGGGATTGACAGAGCCAGATTGGGTGGAGTCCAAGCTTTGGGCAGGTGAGTGTC
CAGGAGATGAGGGCTGAGAATGGGCCTTCAGAGCCCAGCCAGAAGGGGAAAGCACAAAGCTCCACCCTCCTTCTT

FIGURE 31B

CACATCCCTCCATGCTGCTCAAATCCCAGGTCTTCAGGCACCATGGAGGACAAACGCAACATCCAGATCATCGAG
TGGGAACACCTGGACAAGAAGAAGTTCTACGTGTTTGGTGTGGCAATGACAATGATGATCCGTGTCAGTGTCTAC
CCATTCACCCTCATCCGCACCCGGTTGCAAGTTCAGAAGGGGAAGAGCCTCTACCATGGGACCTTCGATGCCTTC
ATCAAGATCCTGCGAGCAGATGGTATCACTGGCCTCTACCGAGGGTTCCTGGTCAATACCTTCACCCTCATCTCT
GGCCAGTGTTATGTCACCACTTATGAGCTCACCCGGAAGTTTGTAGCTGACTACAGCCAGAGTAACACAGTCAAA
TCACTGGTGGCTGGTGGCTCAGCCTCCCTTGTGGCCCAGAGCATCACAGTGCCCATTGATGTAGTCTCCCAGCAC
CTGATGATGCAACGCAAGGGTGAGAAAATGGGCCGCTTTCAGGTGCGGGGGAACCCAGAGGGACAAGGGGTAGTT
GCCTTTGGCCAAACCAAGGACATCATCAGGCAGATCCTGCAGGCTGATGGACTTCGCGGCTTCTATCGAGGCTAT
GTGGCTTCACTGCTTACCTATATCCCAAACAGTGCTGTCTGGTGGCCCTTCTATCACTTCTATGCAGAGCAGCTC
TCCTACCTGTGTCCTAAGGAGTGCCCTCACATTGTCTTTCAAGCTGTCTCGGGGCCCCTGGCTGCAGCCACTGCC
TCCATCCTCACCAATCCCATGGATGTCATACGAACCCGTGTGCAGGTTGAGGGCAAGAACTCCATCATCCTGACC
TTCAGACAGCTGATGGCAGAAGAAGGGCCTTGGGGCCTCATGAAGGGCCTCTCGGCCAGAATCATCTCAGCCACA
CCTTCCACCATTGTCATTGTGGTGGGCTATGAGAGCCTCAAGAAACTCAGCCTCCGACCTGAGCTGGTGGACTCG
AGACACTGGTAACCAGTGGTGGGGAGAGAAGCCTGCTGTTTTCCACACTACCGTGGGTCAGGGGCAGAGTGGAGA
GGACAGCACCCTCTCCAGGTGCTCCCACCACACACCCAGCCCTGCCCTGGGCCAAGTGGCCTATCTGGGATAGGG
ATAGAGACTTTGAACTGCTCTTGCTGAAGAGGCTCCACGCCTGGATCCCTTGCCCCCACTATTTAAAATTCTCTT
CTGAGCCGGGCTCCCTCACTCAGTCCCTGTATTTGATACTGGCCTAAAGACCCCACCCCCCACCCTGCCAGCCCT
TCTTCTGGCTTCCCCTTCCATCTGTGTCCCTGAGACCCTGAGAAGAGCTGTACATAGAGCTTGCTTACTACCACT
GGTTCTTCCTCTTGGGCTTTCAGCCCAGACTCCAAGCAGCTGCTATCAACCCTCTCTCCCTTCATCTCTTAGCCT
TGCTTATTTTTATTTTGGGACCGAGCTGCCCACTAGATGACTCTGCTTTTCCCTGCATTTGGGGCTAAGGTGCCA
GGTACTTATTTGCACAGGGAGCAGGAGCAGCAAAAAATCTCTGGTTCTCCAGAGCACTCGTCCTCTCTTTGGAGG
GGTTATTAGGTTGGGAGAAATGTTGATACTTTTGTTTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG
TGTGTGTTTTAACATCTGTGAACCAGGCTATTAGTCCTGCTAAAGCGCCAATCCTGCTGTCAGAGCTCACCCCCT
TCCTAAGACAGGTAGAAAAATGTAATGTAGCTTTTTCCACAAGCCAGTTCCCTGTCCCTTCAGTCTCAGGAGCCC
TAGGAGAGTCTAAGCTGGGGCATCCCCTGGCCCAGAGGACTCCCGTGGTGGGCACAGTTCTAAGTGGATCAGGCT
GTCTTGGGTGCACTGGACTTGGAGCACTACCTTGAGAAGTCAGGTTGAGAAAGTAGTTGATCTAGAAGGCAACAA
GTGGGCATGTGTTCCCCAGCACATTACCCAGGCCAGCAGAGCCAAACCTAGGAGAGGGCAGTGGGTAGATTCTCT
GCCCCAGGCAGCCATGACATACACATAAATACCCCAATCACTCAGACTTACGGCAACAAGTGTTGTCTCACTATG
GTGATCTCTAAGATCCACATCACTGGATGCGTAGTCATCCCAGTCATGGTACCCTGTGGAGGAATGCTGGAAGAA
CATAAAGAGCAGTTCAGAAAGTCACCCAATACCAGGACCACTGCATTTACCAGCCTGATACTGCCAAGATTATCT
GATGCTCTCCTCAGGAGCTAGGAGAGGAGTGCTCCTTCCTCCCTACCGCTACTCTCCCCAAGCCTGTGTTGCAGG
TAGAGAGGTGCAGCAAATAGAGAAGGCATGTCAAACCCTGCATTTCTACCTGAGAGTGTGACCTGGATGATCCTC
CAAACCCTATTGGTCCCACCCCCTGGGAAAGGCCATGGTGCCAGTTTGAAAGGTGCTAGCTACCTGAAGCCTTGA
TATTTCTTCATGGCTGCCGCACATTCTTCCACCTTGGCCAGAACAGGTTCTGAAAACCGCTTCTCTACCTTCACC
ACCACCACTGCCCATCTTGATCTCTTTGAGGGTTTTCCCATTTCACTTGATCTTATTTTTGTTTATCCCTTCCTG
CACTTTGTCAAGAGAGTCCTCCAGTTTCTATCCAGGAATGTTCACATCCAAAGGGTTGGACCCACGGATCATTCT
GAATCTTCCTGCCCCTCCTCACTGCTTAACCCTGAGAACCACAAATATAATGGAAGCAGTTCCCCCCACCCTCAC
CCCATCTCTTTAAGCTCATCCTAGCAAGACCTCTAGAGACCCTAGAGACTCGACTTTAGCCTTCCCCGCCATGGC
ACAGTGGGGAAGGTGTCAATGGGGAGTGTCACGGACAGGAGGTAGGATCCTGCCGCTCGCGTCTTAGTGTTTCTC
CCTCAAGACTTTCCTTCTGTTTTGTTGTCTTGTGCAGTATTTTACAGCCCCTCTTGTGTTTTTCTTTATTTCTCG
TACACACACGCAGTTTTAAGGGTGATGTGTGTATAATTAAAAGGACCCTTGGCCCATACTTTCCTAATTCTTTAG
GGACTGGGATTGGGTTTGACTGAAATATGTTTTGGTGGGGATGGGACGGTGGACTTCCATTCTCCCTAAACTGGA
GTTTTGGTCGGTAATCAAAACTAAAAGAAACCTCTGGGAGACTGGAAACCTGATTGGAGCACTGAGGAACAAGGG
AATGAAAAGGCAGACTCTCTGAACGTTTGATGAAATGGACTCTTGTGAAAATTAACAGTGAATATTCACTGTTGC
ACTGTACGAAGTCTCTGAAATGTAATTAAAAGTTTTTATTGAGCCCCCG

FIGURE 32

QSQIGWSPSFGQVSVQEMRAENGPSEPSQKGKAQSSTLLLHIPPCCSNPRSSGTMEDKRNIQIIEWEHLDKKKFY
VFGVAMTMMIRVSVYPFTLIRTRLQVQKGKSLYHGTFDAFIKILRADGITGLYRGFLVNTFTLISGQCYVTTYEL
TRKFVADYSQSNTVKSLVAGGSASLVAQSITVPIDVVSQHLMMQRKGEKMGRFQVRGNPEGQGVVAFGQTKDIIR
QILQADGLRGFYRGYVASLLTYIPNSAVWWPFYHFYAEQLSYLCPKECPHIVFQAVSGPLAAATASILTNPMDVI
RTRVQVEGKNSIILTFRQLMAEEGPWGLMKGLSARIISATPSTIVIVVGYESLKKLSLRPELVDSRHW

FIGURE 33

GGCTGCTTTAGAAGAACAAGCTGGTTTGGCAGCTACCTCAGAGAAGCAGGACCCTGGGCAGCGTGAAAGGGCCTC
TGCCCCCAGGGTGGCTGGGCTTTGGATCCTGGATCCGTGGGTCCTGGAGGGGCAGGAGTGGTTCAGGAAACAGCT
CTCCCAGTGAAGTGATATCACTGCCTCTGTGGACAAGACACCTCCAGGAGCCCAGCTCACAGCCACCGGTACCTT
CTTCCAGGGCTGCTGTTATAGTTTCTGCATGGAAAGCACTTGGAACAATGCCTGGTTGTTCCCCTCTTTGGCCCT
CTCAGGGCCCTAGGAGCCTTTGTGTGTCCTGCTCACATTGTCTCCAGGGCCTCGGACAGGGCCTGGTACAGAACA
TATGACTGAGTTTCTGGAGTCCCACAGGCCAGCGTTGGAGTCCTGACACCTCAGTATAGCTGTGCACCTCTGGGC
AAATAGTTTCTCTGCTCTGAGCCCCAGGACAAGCTGGGGGCCTCCATGGGCGCCTGAGGGCCAGGCGCCAGGGCC
GTGGGCACGAGTATGGTGAGACACCAGCCCCTGCAGTACTACGAGCCACAGCTGTGCCTCTCCTGCCTCACGGGC
ATCTACGGCTGCCGTTGGAAGCGCTACCAGCGCTCCCATGATGATACCACACCGTGGGAGCGCCTCTGGTTCCTG
CTCCTCACCTTCACCTTTGGCCTCACGCTCACCTGGCTTTACTTCTGGTGGGAAGTCCACAATGACTATGATGAA
TTCAACTGGTACCTCTACAACCGCATGGGCTACTGGAGCGACTGGCCCGTACCCATCCTTGTGACCACAGCTGCT
GCCTTCGCATACATCGCTGGCCTCCTGGTCCTGGCACTATGTCACATTGCCGTGGGGCAGCAGATGAACCTGCAC
TGGCTGCACAAGATCGGGCTGGTGGTCATCCTGGCTTCCACGGTGGTGGCCATGTCGGCCGTGGCCCAGCTGTGG
GAGGACGAGTGGGAGGTGCTGCTGATCTCCCTGCAGGGCACAGCGCCATTCCTGCATGTGGGGGCTGTGGCAGCA
GTCACCATGCTCTCCTGGATCGTGGCAGGACAGTTCGCCCGTGCAGAGCGGACCTCCTCCCAGGTGACCATTCTC
TGTACCTTCTTCACCGTGGTGTTTGCCCTCTACCTGGCCCCTCTCACCATCTCCTCTCCCTGCATC**ATG**GAGAAG
AAAGACCTCGGCCCCAAGCCTGCTCTCATTGGCCACCGCGGGGCCCCCATGCTGGCTCCAGAGCACACGCTCATG
TCCTTCCGGAAGGCCCTCGAGCAGAAGCTGTACGGGCTCCAGGCTGACATTACCATCAGCCTGGACGGCGTGCCC
TTCCTCATGCATGACACCACCCTGCGGCGCACCACCAACGTGGAGGAGGAGTTCCCGGAGCTGGCCCGCAGGCCT
GCCTCCATGCTTAACTGGACCACCCTGCAGAGACTCAACGCTGGCCAGTGGTTCCTGAAGACTGACCCCTTCTGG
ACAGCCAGCTCCCTGTCACCCTCCGACCACAGAGAGGCCCAGAACCAGTCCATCTGCAGCCTGGCAGAGCTCCTG
GAGCTGGCCAAGGGCAATGCCACACTGCTGCTCAACCTGCGTGACCCGCCCCGGGAGCACCCCTACCGCAGCAGT
TTTATCAACGTGACTCTGGAGGCCGTGCTGCACTCCGGCTTCCCCCAGCACCAGGTCATGTGGCTGCCTAGCAGG
CAGAGGCCCCTGGTGCGGAAGGTGGCTCCCGGCTTCCAACAGACATCAGGCTCCAAGGAGGCAGTCGCCAGCCTG
CGGAGAGGCCACATCCAGCGGCTGAACCTGCGCTACACTCAGGTGTCCCGCCAGGAGCTCAGGGACTACGCGTCC
TGGAACCTGAGTGTGAACCTCTACACAGTCAACGCACCGTGGCTCTTCTCCCTGCTGTGGTGTGCGGGGGTCCCA
TCCGTCACCTCTGACAACTCCCACACCCTGTCCCAGGTGCCTTCCCCCCTCTGGATCATGCCCCCGGACGAGTAC
TGTCTCATGTGGGTCACTGCCGACCTGGTCTCCTTCACCCTCATCGTGGGCATCTTCGTGCTCCAGAAGTGGCGC
CTGGGTGGCATACGGAGCTACAACCCTGAGCAGATCATGCTGAGTGCTGCGGTGCGCCGGACCAGCCGGGACGTC
AGCATCATGAAGGAGAAGCTTATTTTCTCAGAGATCAGCGATGGTGTAGAGGTCTCCGATGTGCTCTCCGTATGT
TCAGACAACAGTTATGACACATATGCCAACAGCACCGCCACCCCTGTGGGCCCCCGAGGGGGTGGCAGCCACACC
AAGACCCTCATAGAGCGGAGTGGGCGT**TAG**CTGAAGACATGTCTGTCCCACCTGTACCTGACACAGAAGCTGGGG
AGCCTAGGAGAGCTGGTGGAAGTGTGTCTGAACTCGGAGTGCTCTGGGAGCGGGCTCCACAGCCTCCTTGTGGGC
TCCAGCCCCTTGTCAGCCGCAGCCTCTCTTGAGGGGGACTCCCTGTCTCCTGAGGCCCAGCTGGGCCAGGACTCC
ATCCTTTCAGATGCCCCTGCAGGCCTGGGGCTCCTTCTGGGAAGTATGGGGCCTAGGGCTTGGTCCCCCTCTTCT
GAGGCCCTCTCCTGTATCCCGACCTGGAAGCTTTGATGGGTCATGGGCCATGCCATACCCCCTGTGGCAATGGAG
TGTGTGGATGCTCACCTGTGCCATCTGTCCTCCTGTCTGTGCCAGGAGGCACCTGAGTTCTCTGCTGTTATCCTG
CCCCAAGGGCCTGGGCCGAGCCTCTACCTGAAGCAACTCTGCTCTTCCTGTCAGTCTCAAAGCACAAGGAGGTTC
AGCCCAGGAGGAAGCCAGCTGCAATGTGGAGACACGTCCTCCTCCCCAACCCACCTCATGCCACCGCCAACCCCC
TGCCCCAGGAGCGGGCCTGAGCCACGTCCCCTAGGAGCAGCTGGAGATGGCCAAAAGAGTGAGCTCAGGACTACT
GGATCCCATGCCCAGGTGTCCAGCAGACCTCAAGGCAGAAGGGTCACCTAACCCAGGAGTCCACAGACTGATGTG
ACCTCAGGTTCCCACATCAGTGGCCACAGGGCAGGGCCCACCTGGTAGAAGTGTTCTGGATATGGCCAGGGTGGG
TGTGTGGCTAAGTGGGCCTGAACAGAGGGAACCTAGGGCCCTTGGCCAATGTGATTAAAGCTGCCATCTTGAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 34

MEKKDLGPKPALIGHRGAPMLAPEHTLMSFRKALEQKLYGLQADITISLDGVPFLMHDTTLRRTTNVEEEFPELA
RRPASMLNWTTLQRLNAGQWFLKTDPFWTASSLSPSDHREAQNQSICSLAELLELAKGNATLLLNLRDPPREHPY
RSSFINVTLEAVLHSGFPQHQVMWLPSRQRPLVRKVAPGFQQTSGSKEAVASLRRGHIQRLNLRYTQVSRQELRD
YASWNLSVNLYTVNAPWLFSLLWCAGVPSVTSDNSHTLSQVPSPLWIMPPDEYCLMWVTADLVSFTLIVGIFVLQ
KWRLGGIRSYNPEQIMLSAAVRRTSRDVSIMKEKLIFSEISDGVEVSDVLSVCSDNSYDTYANSTATPVGPRGGG
SHTKTLIERSGR

FIGURE 35

GGCACGAGGCACGAGGGCCCGGGCCGCGAGCAGCCGCGGCTGTCCCGGTCGCCACCCTTAGCAGCGGTCGAGGTC
GGTGCCGAAGCGGTGTTCCCCGCCTTAGCCGCTGGCGCCTCCCAAGAGAGCGGCCGGTGGGCCCTCGTCCTGTCA
GTGGCGTCGGAGGCCGGCGCTGCGGTGGCCGCGCCCTTCTGGTGCTCGGACACCGCTGAGGAGCCGGGGCCGGGC
ACGGCTGGCTGACGGCTCCGGGCAGCTAAGGCTGCCCGAGGAGAAGGCGGCGGCCGCGGCGTAGGCGCACGTCCG
GCGGGCTCCTGGAGCCTGGAGGAGGCCGAGGGGACC**ATG**TCCGGGAGGCGCTTCCACCTCTCCACCACCGACCGC
GTCATCAAAGCTGTCCCCTTTCCTCCAACCCAACGGCTTACTTTCAAGGAAGTATTTGAGAATGGGAAACCTAAA
GTTGATGTTTTAAAAAACCATTTGGTAAAGGAAGGACGACTGGAAGAGGAAGTAGCCTTAAAGATAATCAATGAT
GGGGCTGCCATCCTGAGGCAAGAGAAGACTATGATAGAAGTAGATGCTCCAATCACAGTATGTGGTGATATTCAT
GGACAATTCTTTGACCTAATGAAGTTATTTGAAGTTGGAGGATCACCTAGTAACACACGCTACCTCTTTCTGGGT
GACTATGTGGACAGAGGCTATTTCAGTATAGAGTGTGTGCTGTATTTATGGAGTTTAAAGATTAATCATCCCAAA
ACATTGTTTCTGCTTCGGGGAAATCATGAATGCAGGCATCTTACAGACTATTTCACCTTCAAACAGGAATGTCGA
ATCAAATATTCGGAACAGGTGTATGATGCCTGTATGGAGACATTTGACTGTCTTCCTCTTGCTGCCCTCTTAAAC
CAGCAGTTTCTCTGTGTACATGGAGGAATGTCACCTGAAATTACTTCTTTAGATGACATTAGGAAATTAGACAGG
TTTACGGAACCTCCCGCCTTTGGACCTGTGTGTGACCTGCTTTGGTCTGATCCCTCAGAGGATTATGGCAATGAG
AAGACCTTGGAGCACTATACCCACAACACTGTCCGAGGGTGCTCTTATTTCTACAGTTACCCTGCAGTTTGTGAA
TTTTTGCAGAACAATAATTTACTATCAATTATCAGAGCCCATGAAGCCCAAGATGCTGGGTATCGAATGTACAGG
AAGAGCCAAGCCACAGGCTTTCCATCACTTATTACAATTTTCTCTGCCCCCAATTACCTAGATGTCTATAACAAT
AAAGCTGCTGTGTTGAAATATGAAAACAATGTCATGAATATCAGGCAGTTTAACTGTTCTCCACACCCCTACTGG
CTTCCAAACTTTATGGATGTTTTCACATGGTCTTTGCCTTTTGTTGGGGAAAAAGTCACAGAGATGCTGGTAAAT
GTGCTCAACATATGCTCTGATGACGAACTGATTTCTGATGATGAAGCAGAAGGAAGCACTACAGTTCGTAAGGAG
ATCATCAGGAATAAGATCAGAGCCATTGGGAAGATGGCACGGGTCTTTTCAATTCTTCGGCAAGAAAGTGAGAGT
GTGCTGACTCTCAAGGGCCTGACTCCCACAGGCACACTCCCTCTGGGCGTCCTCTCAGGAGGCAAGCAGACTATC
GAGACAGCCACAGTAGAAGCGGTAGAGGCCCGGGAAGCCATCAGAGGGTTCTCGCTTCAGCACAAGATCCGGAGT
TTTGAAGAAGCGCGAGGTCTGGACCGAATTAATGAGCGAATGCCACCCCGAAAGGATAGCATACACGCTGGTGGG
CCAATGAAATCTGTAACCTCAGCACACTCACATGCTGCGCACAGGAGCGACCAAGGGAAGAAAGCCCATTCA**TGA**

CTTAGAGTCCTGCCGTGGCTCAGGTGGATCTAAAACTCAAGAACAAATTCTATTTATTTATTATTGGAAAATGAA
AAGCAACTCAAAACAACTTCAACCTGGAGGTGCATTTATAATTCAGTCTGCATTTATTCTGTAAAAAGGTGACTG
TTTTATAAATTCTTTTAATTTATGTTCAATATATATAAAAAGTGCATCTGTTTTGTTTTTCCCTTTTTTCTCCAT
AATTTTAAGAAATGAATCTGATTGTTGTCAACACATTTGTGAAGTCTTGTGCTATAAAGGGGAACTTCCCCTAAT
AAAAGGGCCTTGGAAACCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 36

MSGRRFHLSTTDRVIKAVPFPPTQRLTFKEVFENGKPKVDVLKNHLVKEGRLEEEVALKIINDGAAILRQEKTMI
EVDAPITVCGDIHGQFFDLMKLFEVGGSPSNTRYLFLGDYVDRGYFSIECVLYLWSLKINHPKTLFLLRGNHECR
HLTDYFTFKQECRIKYSEQVYDACMETFDCLPLAALLNQQFLCVHGGMSPEITSLDDIRKLDRFTEPPAFGPVCD
LLWSDPSEDYGNEKTLEHYTHNTVRGCSYFYSYPAVCEFLQNNNLLSIIRAHEAQDAGYRMYRKSQATGFPSLIT
IFSAPNYLDVYNNKAAVLKYENNVMNIRQFNCSPHPYWLPNFMDVFTWSLPFVGEKVTEMLVNVLNICSDDELIS
DDEAEGSTTVRKEIIRNKIRAIGKMARVFSILRQESESVLTLKGLTPTGTLPLGVLSGGKQTIETATVEAVEARE
AIRGFSLQHKIRSFEEARGLDRINERMPPRKDSIHAGGPMKSVTSAHSHAAHRSDQGKKAHS

FIGURE 37

GGCACGAGGCCTGACATGGAGCCTGCCAGCTCCGTCAGCCCTGACTCGGCCCGGAGCTGAGCTCCCCACCTGCCG
GTAGCCCAGGAGATGGAGCAGCCCAGCCCACGTGCCCGGCCTTCCGCCCCTGACTTCACTTGATAACAAACTAGA
AACTGAAACAGGGTCGGGATGCCGATGCCGGCTTGGAGTTAGAGATGAGTCACCGCTGAGAGCAGCTGCAGTAGC
TGAGCAGTGGCAGCAGAGAGGCAGACGTGAGCTGAGGGCGCAGAGGCAGGCAGCATCTCTGAGGGTCCCCAAGGA
GCATGGCTGGGAGCCGTGAGGTGGTGGCCATGGACTGCGAGATGGTGGGGCTGGGGCCCCACCGGGAGAGTGGCC
TGGCTCGTTGCAGCCTCGTGAACGTCCACGGTGCTGTGCTGTACGACAAGTTCATCCGGCCTGAGGGAGAGATCA
CCGATTACAGAACCCGGGTCAGCGGGGTCACCCCTCAGCACATGGTGGGGGCCACACCATTTGCCGTGGCCAGGC
TAGAGATCCTGCAGCTCCTGAAAGGCAAGCTGGTGGTGGGTCATGACCTGAAGCACGACTTCCAGGCACTGAAAG
AGGACATGAGCGGCTACACAATCTACGACACGTCCACTGACAGGCTGTTGTGGCGTGAGGCCAAGCTGGACCACT
GCAGGCGTGTCTCCCTGCGGGTGCTGAGTGAGCGCCTCCTGCACAAGAGCATCCAGAACAGCCTGCTTGGACACA
GCTCGGTGGAAGATGCGAGGGCAACGATGGAGCTCTATCAAATCTCCCAGAGAATCCGAGCCCGCCGAGGGCTGC
CCCGCCTGGCTGTGTCAGACTGAAGCCCCATCCAGCCCGTTCCGCAGGGACTAGAGGCTTTCGGCTTTTTGGGAC
AGCAACTACCTTGCTTTTGGAAAATACATTTTTAATAGTAAAGTGGCTCTATATTTTCTCTACGCAAAAAAAAAA
AAAAAAAA

FIGURE 38

MAGSREVVAMDCEMVGLGPHRESGLARCSLVNVHGAVLYDKFIRPEGEITDYRTRVSGVTPQHMVGATPFAVARL
EILQLLKGKLVVGHDLKHDFQALKEDMSGYTIYDTSTDRLLWREAKLDHCRRVSLRVLSERLLHKSIQNSLLGHS
SVEDARATMELYQISQRIRARRGLPRLAVSD

FIGURE 39

ATTCCGCTCTTGCTTTCCGGCAGGTGATGGCGCCCCCCGCGGCCTAGAGGTCCAGCGCCCGCCGCGAGCAGCGGA
CAGTCCTCCTGTTGTGTCCGACCGAGAGTCCTGGTGACTTTGAACATGCTGGTGCCGCTAGCCAAGCTGTCCTGC
CTGGCATATCAGTGCTTTCATGCCTTAAAAATTAAGAAAAATTATCTACCTCTATGTGCTATAAGATGGTCTTCA
ACTTCTACTGTGCCTCGAATTACTACCCATTATACTATTTATCCCCGGGATAAGGACAAGAGATGGGAAGGAGTG
AACATGGAAAGGTTTGCAGAAGAAGCAGATGTTGTAATAGTTGGTGCAGGCCCTGCAGGGCTCTCTGCAGCTGTT
CGTCTAAAACAGTTGGCTGTGGCACATGAAAAGGACATCCGTGTGTGTCTAGTGGAGAAAGCTGCCCAGATAGGA
GCTCATACTCTCTCAGGGGCTTGCCTTGATCCAGGTGCTTTTAAAGAACTCTTCCCAGACTGGAAAGAGAAGGGG
GCTCCACTTAACACTCCTGTAACAGAAGACAGATTTGGAATTTTAACAGAGAAATACAGAATTCCTGTGCCAATT
CTTCCAGGGCTTCCAATGAATAATCATGGCAATTACATTGTACGCTTGGGACATTTAGTGAGCTGGATGGGCGAA
CAAGCAGAAGCCCTTGGTGTTGAAGTATACCCTGGTTATGCAGCTGCTGAGGTCCTTTTTCATGATGATGGTAGT
GTAAAAGGAATTGCCACTAACGATGTAGGGATACAAAAGGATGGTGCACCAAAGGCAACATTTGAGAGAGGACTG
GAACTACATGCTAAAGTCACAATTTTTGCAGAAGGTTGCCATGGACATCTAGCCAAGCAACTATATAAGAAGTTT
GATTTGAGAGCAAATTGTGAACCTCAAACCTACGGGATTGGACTGAAGGAGTTATGGGTTATTGATGAAAAGAAC
TGGAAACCTGGGAGAGTAGATCACACTGTTGGTTGGCCCTTGGACAGACATACCTATGGAGGATCTTTCCTCTAT
CATTTGAATGAAGGTGAACCCCTAGTAGCTCTTGGTCTTGTGGTTGGTCTAGACTATCAGAATCCATACCTGAGT
CCATTTAGAGAGTTCCAAAGGTGGAAACACCATCCTAGCATTCGGCCAACCTTGGAAGGTGGAAAAAGGATTGCA
TACGGAGCCAGAGCTCTCAATGAAGGTGGCTTTCAGTCTATACCAAAACTCACCTTTCCTGGTGGTTTACTAATT
GGTTGTAGTCCTGGTTTTATGAATGTTCCCAAGATCAAAGGTACTCACACAGCAATGAAAAGTGGAATTTTAGCA
GCAGAATCTATTTTTAATCAACTAACTAGTGAAAATCTCCAATCAAAGACAATAGGACTCCATGTAACTGAATAT
GAGGACAATTTGAAGAACTCATGGGTATGGAAAGAGCTATATTCTGTTAGAAATATAAGACCGTCCTGCCACGGA
GTACTGGGTGTATATGGAGGGATGATTTACACTGGAATCTTTTACTGGATATTGAGAGGAATGGAGCCGTGGACT
CTGAAACATAAAGGTTCTGACTTTGAACGGCTCAAGCCAGCCAAGGATTGCACACCTATTGAGTATCCAAAACCC
GATGGACAGATCAGTTTTGACCTCTTGTCATCTGTGGCTCTGAGTGGTACTAATCATGAACATGACCAGCCGGCA
CACTTAACCTTAAGGGATGACAGTATACCTGTAAATAGAAATCTGTCGATATATGATGGGCCCGAGCAGCGATTC
TGTCCTGCAGGAGTTTATGAATTTGTACCTGTGGAACAAGGTGATGGATTTCGGTTACAGATAAATGCTCAGAAC
TGTGTACATTGTAAAACATGTGATATTAAAGATCCAAGTCAGAATATTAACTGGGTGGTACCTGAAGGTGGAGGA
GGACCTGCTTACAATGGAATGTAAACTGCAGCTAGCCAGTTTCTTTCAAGTATGGCAAGCTAACGTTAAAATGTT
TAGAGATTAACAGATTTCAGAATGTCTTTCTGCATATTACTGAACAGAATAGTCACAAAATGATTATCAAATAAA
AATTTTATACTATAAAAAAAAAAA

FIGURE 40

MLVPLAKLSCLAYQCFHALKIKKNYLPLCAIRWSSTSTVPRITTHYTIYPRDKDKRWEGVNMERFAEEADVVIVG
AGPAGLSAAVRLKQLAVAHEKDIRVCLVEKAAQIGAHTLSGACLDPGAFKELFPDWKEKGAPLNTPVTEDRFGIL
TEKYRIPVPILPGLPMNNHGNYIVRLGHLVSWMGEQAEALGVEVYPGYAAAEVLFHDDGSVKGIATNDVGIQKDG
APKATFERGLELHAKVTIFAEGCHGHLAKQLYKKFDLRANCEPQTYGIGLKELWVIDEKNWKPGRVDHTVGWPLD
RHTYGGSFLYHLNEGEPLVALGLVVGLDYQNPYLSPFREFQRWKHHPSIRPTLEGGKRIAYGARALNEGGFQSIP
KLTFPGGLLIGCSPGFMNVPKIKGTHTAMKSGILAAESIFNQLTSENLQSKTIGLHVTEYEDNLKNSWVWKELYS
VRNIRPSCHGVLGVYGGMIYTGIFYWILRGMEPWTLKHKGSDFERLKPAKDCTPIEYPKPDGQISFDLLSSVALS
GTNHEHDQPAHLTLRDDSIPVNRNLSIYDGPEQRFCPAGVYEFVPVEQGDGFRLQINAQNCVHCKTCDIKDPSQN
INWVVPEGGGGPAYNGM

FIGURE 41A

ATGATGAGCTTCGGCGGCGCGGACGCGCTGCTGGGCGCCCCGTTCGCGCCGCTGCATGGCGGCGGCAGCCTCCAC
TACGCGCTAGCCCGAAAGGGTGGCGCAGGCGGGACGCGCTCCGCCGCTGGCTCCTCCAGCGGCTTCCACTCGTGG
ACACGGACGTCCGTGAGCTCCGTGTCCGCCTCGCCCAGCCGCTTCCGTGGCGCAGGCGCCGCCTCAAGCACCGAC
TCGCTGGACACGCTGAGCAACGGGCCGGAGGGCTGCATGGTGGCGGTGGCCACCTCACGCAGTGAGAAGGAGCAG
CTGCAGGCGCTGAACGACCGCTTCGCCGGGTACATCGACAAGGTGCGGCAGCTGGAGGCGCACAACCGCAGCCTG
GAGGGCGAGGCTGCGGCGCTGCGGCAGCAGCAGGCGGGCCGCTCCGCTATGGGCGAGCTGTACGAGCGCGAGGTC
CGCGAGATGCGCGGCGCGGTGCTGCGCCTGGGCGCGGCGCGCGGTCAGCTACGCCTGGAGCAGGAGCACCTGCTC
GAGGACATCGCGCACGTGCGCCAGCGCCTAGACGACGAGGCCCGGCAGCGAGAGGAGGCCGAGGCGGCGGCCCGC
GCGCTGGCGCGCTTCGCGCAGGAGGCCGAGGCGGCGCGCGTGGACCTGCAGAAGAAGGCGCAGGCGCTGCAGGAG
GAGTGCGGCTACCTGCGGCGCCACCACCAGGAAGAGGTGGGCGAGCTGCTCGGCCAGATCCAGGGCTCCGGCGCC
GCGCAGGCGCAGATGCAGGCCGAGACGCGCGACGCCCTGAAGTGCGACGTGACGTCGGCGCTGCGCGAGATTCGC
GCGCAGCTTGAAGGCCACGCGGTGCAGAGCACGCTGCAGTCCGAGGAGTGGTTCCGAGTGAGGCTGGACCGACTG
TCGGAGGCAGCCAAGGTGAACACAGACGCTATGCGCTCAGCGCAGGAGGAGATAACTGAGTACCGGCGTCAGCTG
CAGGCCAGGACCACAGAGCTGGAGGCACTGAAAAGCACCAAGGACTCACTGGAGAGGCAGCGCTCTGAGCTGGAG
GACCGTCATCAGGCCGACATTGCCTCCTACCAGGAAGCCATTCAGCAGCTGGACGCTGAGCTGAGGAACACCAAG
TGGGAGATGGCCGCCCAGCTGCGAGAATACCAGGACCTGCTCAATGTCAAGATGGCTCTGGATATAGAGATAGCC
GCTTACAGAAAACTCCTGGAAGGTGAAGAGTGTCGGATTGGCTTTGGCCCAATTCCTTTCTCGCTTCCAGAAGGA
CTCCCCAAAATTCCCTCTGTGTCCACTCACATAAAGGTGAAAAGCGAAGAGAAGATCAAAGTGGTGGAGAAGTCT
GAGAAAGAAACTGTGATTGTGGAGGAACAGACAGAGGAGACCCAAGTGACTGAAGAAGTGACTGAAGAAGAGGAG
AAAGAGGCCAAAGAGGAGGAGGGCAAGGAGGAAGAAGGGGGTGAAGAAGAGGAGGCAGAAGGGGGAGAAGAAGAA
ACAAAGTCTCCCCCAGCAGAAGAGGCTGCATCCCCAGAGAAGGAAGCCAAGTCACCAGTAAAGGAAGAGGCAAAG
TCACCGGCTGAGGCCAAGTCCCCAGAGAAGGAGGAAGCAAAATCCCCAGCCGAAGTCAAGTCCCCTGAGAAGGCC
AAGTCTCCAGCAAAGGAAGAGGCAAAGTCACCGCCTGAGGCCAAGTCCCCAGAGAAGGAGGAAGCAAAATCTCCA
GCTGAGGTCAAGTCCCCCGAGAAGGCCAAGTCCCCAGCAAAGGAAGAGGCAAAGTCACCGGCTGAGGCCAAGTCT
CCAGAGAAGGCCAAGTCCCCAGTGAAGGAAGAAGCAAAGTCACCGGCTGAGGCCAAGTCCCCAGTGAAGGAAGAA
GCAAAATCTCCAGCTGAGGTCAAGTCCCCGGAAAAGGCCAAGTCTCCAACGAAGGAGGAAGCAAAGTCCCCTGAG
AAGGCCAAGTCCCCTGAGAAGGCCAAGTCCCCAGAGAAGGAAGAGGCCAAGTCCCCTGAGAAGGCCAAGTCCCCA
GTGAAGGCAGAAGCAAAGTCCCCTGAGAAGGCCAAGTCCCCAGTGAAGGCAGAAGCAAAGTCCCCTGAGAAGGCC
AAGTCCCCAGTGAAGGAAGAAGCAAAGTCCCCTGAGAAGGCCAAGTCCCCAGTGAAGGAAGAAGCAAAGTCCCCT
GAGAAGGCCAAGTCCCCAGTGAAGGAAGAAGCAAAGACCCCCGAGAAGGCCAAGTCCCCAGTGAAGGAAGAAGCC
AAGTCCCCAGAGAAGGCCAAGTCCCCAGAGAAGGCCAAGACTCTTGATGTGAAGTCTCCAGAAGCCAAGACTCCA
GCGAAGGAGGAAGCAAGGTCCCCTGCAGACAAATTCCCTGAAAAGGCCAAAAGCCCTGTCAAGGAGGAGGTCAAG
TCCCCAGAGAAGGCGAAATCTCCCCTGAAGGAGGATGCCAAGGCCCCTGAGAAGGAGATCCCAAAAAAGGAAGAG
GTGAAGTCCCCAGTGAAGGAGGAGGAGAAGCCCCAGGAGGTGAAAGTCAAAGAGCCCCCAAAGAAGGCAGAGGAA
GAGAAAGCCCCTGCCACACCAAAAACAGAGGAGAAGAAGGACAGCAAGAAAGAGGAGGCACCCAAGAAGGAGGCT
CCAAAGCCCAAGGTGGAGGAGAAGAAGGAACCTGCTGTCGAAAAGCCCAAAGAATCCAAAGTTGAAGCCAAGAAG
GAAGAGGCTGAAGATAAGAAAAAAGTCCCCACCCCAGAGAAGGAGGCTCCTGCCAAGGTGGAGGTGAAGGAAGAC
GCTAAACCCAAAGAAAAGACAGAGGTGGCCAAGAAGGAACCAGATGATGCCAAGGCCAAGGAACCCAGCAAACCA
GCAGAGAAGAAGGAGGCAGCACCGGAGAAAAAAGACACCAAGGAGGAGAAGGCCAAGAAGCCTGAGGAGAAACCC
AAGACAGAGGCCAAAGCCAAGGAAGATGACAAGACCCTCTCAAAAGAGCCTAGCAAGCCTAAGGCAGAAAAGGCT
GAAAAATCCTCCAGCACAGACCAAAAAGACAGCAAGCCTCCAGAGAAGGCCACAGAAGACAAGGCCGCCAAGGGG
AAGTAAGGCAGGGAGAAAGGAACATCCGGAACAGCCAAAGAAACTCAGAAGAGTCCCGGAGCTCAAGGATCAGAG
TAACACAATTTTCACTTTTTCTGTCTTTATGTAAGAAGAAACTGCTTAGATGACGGGGCCTCCTTCTTCAAACAG
GAATTTCTGTTAGCAATATGTTAGCAAGAGAGGGCACTCCCAGGCCCCTGCCCCCATGCCCTCCCCAGGCGATGG
ACAATTATGATAGCTTATGTAGCTGAATGTGATACATGCCGAATGCCACACGTAAACACTTGACTATAAAAACTG
CCCCCCTCCTTTCCAAATAAGTGCATTTATTGCCTCTATGTGCAACTGACAGATGACCGCAATAATGAATGAGCA
GTTAGAAATACATTATGCTTGAGATGTCTTAACCTATTCCCAAATGCCTTCTGTTTTCCAAAGGAGTGGTCAAGC
CCTTGCCCAGAGCTCTCTATTCTGGAAGAGCGGTCCAGGTGGGGCCGGGCACTGGCCACTGAATTATGCCAGGGC

FIGURE 41B

GCACTTTCCACTGGAGTTCACTTTCAATTGCTTCTGTGCAATAAAACCAAGTGCTTATAAAATGAAAAAAAAAAA
AAAAATGCTGTTATTCTCTTTCCCTGGGAAGGCTGGGGGCAGGGCAGGGGAGGTCTGGATGTGACACCCCAGACT
GCATGGGACTGAGCAAGCATCAGT

FIGURE 42

MMSFGGADALLGAPFAPLHGGGSLHYALARKGGAGGTRSAAGSSSGFHSWTRTSVSSVSASPSRFRGAGAASSTD
SLDTLSNGPEGCMVAVATSRSEKEQLQALNDRFAGYIDKVRQLEAHNRSLEGEAAALRQQQAGRSAMGELYEREV
REMRGAVLRLGAARGQLRLEQEHLLEDIAHVRQRLDDEARQREEAEAAARALARFAQEAEAARVDLQKKAQALQE
ECGYLRRHHQEEVGELLGQIQGSGAAQAQMQAETRDALKCDVTSALREIRAQLEGHAVQSTLQSEEWFRVRLDRL
SEAAKVNTDAMRSAQEEITEYRRQLQARTTELEALKSTKDSLERQRSELEDRHQADIASYQEAIQQLDAELRNTK
WEMAAQLREYQDLLNVKMALDIEIAAYRKLLEGEECRIGFGPIPFSLPEGLPKIPSVSTHIKVKSEEKIKVVEKS
EKETVIVEEQTEETQVTEEVTEEEEKEAKEEEGKEEEGGEEEEAEGGEEETKSPPAEEAASPEKEAKSPVKEEAK
SPAEAKSPEKEEAKSPAEVKSPEKAKSPAKEEAKSPPEAKSPEKEEAKSPAEVKSPEKAKSPAKEEAKSPAEAKS
PEKAKSPVKEEAKSPAEAKSPVKEEAKSPAEVKSPEKAKSPTKEEAKSPEKAKSPEKAKSPEKEEAKSPEKAKSP
VKAEAKSPEKAKSPVKAEAKSPEKAKSPVKEEAKSPEKAKSPVKEEAKSPEKAKSPVKEEAKTPEKAKSPVKEEA
KSPEKAKSPEKAKTLDVKSPEAKTPAKEEARSPADKFPEKAKSPVKEEVKSPEKAKSPLKEDAKAPEKEIPKKEE
VKSPVKEEEKPQEVKVKEPPKKAEEEKAPATPKTEEKKDSKKEEAPKKEAPKPKVEEKKEPAVEKPKESKVEAKK
EEAEDKKKVPTPEKEAPAKVEVKEDAKPKEKTEVAKKEPDDAKAKEPSKPAEKKEAAPEKKDTKEEKAKKPEEKP
KTEAKAKEDDKTLSKEPSKPKAEKAEKSSSTDQKDSKPPEKATEDKAAKGK

FIGURE 43

GACAGCCACGAAGATCCTACCAAA**ATG**AAGCGCTTCCTCTTCCTCCTACTCACCATCAGCCTCCTGGTTATGGTA
CAGATACAAACTGGACTCTCAGGACAAAACGACACCAGCCAAACCAGCAGCCCCTCAGCATCCAGCAGCATGAGC
GGAGGCATTTTCCTTTTCTTCGTGGCCAATGCCATAATCCACCTCTTCTGCTTCAGT**TGA**GGTGACACGTCTCAG
CCTTAGCCCTGTGCCCCCTGAAACAGCTGCCACCATCACTCGCAAGAGAATCCCCTCCATCTTTGGGAGGGGTTG
ATGCCAGACATCACCAGGTTGTAGAAGTTGACAGGCAGTGCCATGGGGGCAACAGCCAAAATAGGGGGGTAATGA
TGTAGGGGCCAAGCAGTGCCCAGCTGGGGGAGAATAAAGTTACCCTTGTACTGCA

FIGURE 44

MKRFLFLLLTISLLVMVQIQTGLSGQNDTSQTSSPSASSSMSGGIFLFFVANAIIHLFCFS

FIGURE 45

TGCAGCTAGTGTGTCAACTCAGCGTTTCTCCTCTCGTCCCTGGAAGAGCTAAAGATGGCTGAATTTCTAGATGAC
CAGGAAACTCGACTGTGTGACAACTGCAAAAAAGAAATTCCTGTGTTTAACTTTACCATCCATGAGATCCACTGT
CAAAGGAACATTGGTATGTGTCCTACCTGTAAGGAACCATTTCCCAAATCTGACATGGAGACTCACATGGCTGCA
GAACACTGTCAGGTGACCTGCAAATGTAACAAGAAGTTGGAGAAGAGGCTGTTAAAGAAGCATGAGGAGACTGAG
TGCCCTTTGCGGCTTGCTGTCTGCCAGCACTGTGATTTAGAACTTTCCATTCTCAAACTGAAGGAACATGAAGAT
TATTGTGGTGCCCGGACGGAACTATGTGGCAACTGTGGTCGCAATGTCCTTGTGAAAGATCTGAAGACTCACCCT
GAAGTTTGTGGGAGAGAGGGGGAGGAAAAGAGAAATGAGGTTGCCATACCTCCTAATGCATATGATGAATCTTGG
GGTCAGGATGGAATCTGGATTGCATCCCAACTCCTCAGACAAATTGAGGCTCTGGACCCACCCATGAGGCTGCCG
CGAAGGCCCCTGAGAGCCTTTGAATCAGATGTTTTCCACAATAGAACTACCAACCAAAGGAACATTACAGCCCAG
GTTTCAATTCAGAATAATCTGTTTGAAGAACAAGAGAGGCAGGAAAGGAATAGAGGCCAACAGCCCCCCAAAGAG
GGTGGTGAAGAGAGTGCAAACTTGGACTTCATGTTGGCCCTAAGTCTGCAAAATGAAGGCCAAGCCTCCAGTGTG
GCAGAGCAGGACTTCTGGAGGGCCGTATGTGAGGCCGACCAGTCTCATGGCGGTCCCAGGTCTCTCAGTGACATA
AAGGGTGCAGCTGACGAGATCATGTTGCCTTGTGAATTTTGTGAGGAGCTCTACCCAGAGGAACTGCTGATTGAC
CATCAGACAAGCTGTAACCCTTCACGTGCCTTACCTTCACTCAATACTGGCAGCTCTTCCCCCAGAGGGGTGGAG
GAACCTGATGTCATCTTCCAGAACTTCTTGCAACAGGCTGCAAGTAACCAGTTAGACTCTTTGATGGGCCTGAGC
AATTCACACCCTGTGGAGGAGAGCATCATTATCCCATGTGAATTCTGTGGGGTACAGCTGGAAGAGGAGGTGCTG
TTCCATCACCAGGACCAGTGTGACCAACGCCCAGCCACTGCAACCAACCATGTGACAGAGGGGATTCCTAGACTG
GATTCCCAGCCTCAAGAGACCTCACCAGAGCTGCCCAGGAGGCGTGTCAGACACCAGGGAGACCTGTCTTCTGGT
TACCTGGATGATACTAAGCAGGAAACAGCTAATGGGCCCACCTCCTGTCTGCCTCCCAGCCGACCCATTAACAAT
ATGACAGCTACCTATAACCAGCTATCGAGATCAACATCAGGCCCCAGACCTGGGTGCCAGCCCAGCTCTCCTTGT
GTGCCGAAGCTCAGCAACTCAGACAGCCAGGACATCCAGGGGCGGAATCGAGACAGCCAGAATGGGGCCATAGCC
CCTGGGCACGTTTCAGTGATTCGCCCTCCTCAAAATCTCTACCCAGAAAACATTGTGCCCTCTTTCTCCCCTGGG
CCTTCAGGGAGATACGGAGCTAGTGGTAGGAGTGAAGGTGGCAGGAATTCCCGGGTCACCCCTGCAGCTGCCAAC
TACCGCAGCAGAACTGCAAAGGCAAAGCCTTCCAAGCAACAGGGAGCTGGGGATGCAGAAGAGGAAGAGGAGGAG
TAATGGTGTCTCCAGAGACTTTACATCGGTTCCTGTCTTCTGTGCACAGCAGCACTTGCCGCTGTGCAGGCCCAC
CTCTTTGGCTCTTTGGGTGGGAGAGTTTTTCCAGATTTTAGATTTTTCTAGGTTATGGCCATTTTGTGTCTTTTG
AGGTTGTGCTGTGGGGGTTTGGGTTTGAGGGAAGGGAGCAGGGTGGCGGTTGAGGAACGCTTCAGCCTTAGCTGC
TACCTTTCGGCAGCAGTGAAATACAAGCTGCAGCCTCGGCTGCCAGGGCTCCCTTTTGACTTATTGTCGCCACTG
CCCCTTGGTGCTGTGTGGTCCCAGTGGAAGGAGGGGAAGATTTTGGAAACCTGGTAGCCACCAGTAAGGTGATTC
TCTGCCCTGTTGGGGCCTAAATTTGGGGGCTTTTGGGCAACCTCTCCGTGTACTGCGTCTGTCCACACTCGATTG
GGCCCCAGGTGTGTATGAGGCGCTCTGGTAAGGTGCTCAGGCCAGTTGCAATGTCTGTCAGTAACGAGGCTTTTG
ATGTGTTGAGCTGGAGGTGAGTGGACCGGGGGCTGTGTTTTAAGCTGCTTCCTTGGCATTTGCATCACTGCCTTC
TGTTCCCGGGGGAGCATGGATCTTTTGTCCTCACTGCTTTCTAATGGGGAGGGCTGAGGGCTCCCTGTCCCCACA
GCAGGTATGTTTGCTCTGCCCCAGCCCCACACTTGCTCTGAAAACCAAGTGTCAGAGCCCCTTCCCCTTGTTTTT
ATTTTACTGTTATAATAATTATTAACTTCCTTGTAATAGAAATAAAGTTTGTACTTGGAGTTCAGCTC

FIGURE 46

MAEFLDDQETRLCDNCKKEIPVFNFTIHEIHCQRNIGMCPTCKEPFPKSDMETHMAAEHCQVTCKCNKKLEKRLL
KKHEETECPLRLAVCQHCDLELSILKLKEHEDYCGARTELCGNCGRNVLVKDLKTHPEVCGREGEEKRNEVAIPP
NAYDESWGQDGIWIASQLLRQIEALDPPMRLPRRPLRAFESDVFHNRTTNQRNITAQVSIQNNLFEEQERQERNR
GQQPPKEGGEESANLDFMLALSLQNEGQASSVAEQDFWRAVCEADQSHGGPRSLSDIKGAADEIMLPCEFCEELY
PEELLIDHQTSCNPSRALPSLNTGSSSPRGVEEPDVIFQNFLQQAASNQLDSLMGLSNSHPVEESIIIPCEFCGV
QLEEEVLFHHQDQCDQRPATATNHVTEGIPRLDSQPQETSPELPRRRVRHQGDLSSGYLDDTKQETANGPTSCLP
PSRPINNMTATYNQLSRSTSGPRPGCQPSSPCVPKLSNSDSQDIQGRNRDSQNGAIAPGHVSVIRPPQNLYPENI
VPSFSPGPSGRYGASGRSEGGRNSRVTPAAANYRSRTAKAKPSKQQGAGDAEEEEEE

FIGURE 47

GAATTCCGGGCCATGAGCTGCCCCGTGCCCGCCTGCTGCGCGCTGCTGCTAGTCCTGGGGCTCTGCCGGGCGCGT
CCCCGGAACGCACTGCTGCTCCTCGCGGATGACGGAGGCTTTGAGAGTGGCGCGTACAACAACAGCGCCATCGCC
ACCCCGCACCTGGACGCCTTGGCCCGCCGCAGCCTCCTCTTTCGCAATGCCTTCACCTCGGTCAGCAGCTGCTCT
CCCAGCCGCGCCAGCCTCCTCACTGGCCTGCCCCAGCATCAGAATGGGATGTACGGGCTGCACCAGGACGTGCAC
CACTTCAACTCCTTCGACAAGGTGCGGAGCCTGCCGCTGCTGCTCAGCCAAGCTGGTGTGCGCACAGGCATCATC
GGGAAGAAGCACGTGGGGCCGGAGACCGTGTACCCGTTTGACTTTGCGTACACGGAGGAGAATGGCTCCGTCCTC
CAGGTGGGGCGGAACATCACTAGAATTAAGCTGCTCGTCCGGAAATTCCTGCAGACTCAGGATGACCGGCCTTTC
TTCCTCTACGTCGCCTTCCACGACCCCCACCGCTGTGGGCACTCCCAGCCCCAGTACGGAACCTTCTGTGAGAAG
TTTGGCAACGGAGAGAGCGGCATGGGTCGTATCCCAGACTGGACCCCCCAGGCCTACGACCCACTGGACGTGCTG
GTGCCTTACTTCGTCCCCAACACCCCGGCAGCCCGAGCCGACCTGGCCGCTCAGTACACCACCGTCGGCCGCATG
GACCAAGGAGTTGGACTGGTGCTCCAGGAGCTGCGTGACGCCGGTGTCCTGAACGACACACTGGTGATCTTCACG
TCCGACAACGGGATCCCCTTCCCCAGCGGCAGGACCAACCTGTACTGGCCGGGCACTGCTGAACCCTTACTGGTG
TCATCCCCGGAGCACCCAAAACGCTGGGGCCAAGTCAGCGAGGCCTACGTGAGCCTCCTAGACCTCACGCCCACC
ATCTTGGATTGGTTCTCGATCCCGTACCCCAGCTACGCCATCTTTGGCTCGAAGACCATCCACCTCACTGGCCGG
TCCCTCCTGCCGGCGCTGGAGGCCGAGCCCCTCTGGGCCACCGTCTTTGGCAGCCAGAGCCACCACGAGGTCACC
ATGTCCTACCCCATGCGCTCCGTGCAGCACCGGCACTTCCGCCTCGTGCACAACCTCAACTTCAAGATGCCCTTT
CCCATCGACCAGGACTTCTACGTCTCACCCACCTTCCAGGACCTCCTGAACCGCACCACAGCTGGTCAGCCCACG
GGCTGGTACAAGGACCTCCGTCATTACTACTACCGGGCGCGCTGGGAGCTCTACGACCGGAGCCGGGACCCCCAC
GAGACCCAGAACCTGGCCACCGACCCGCGCTTTGCTCAGCTTCTGGAGATGCTTCGGGACCAGCTGGCCAAGTGG
CAGTGGGAGACCCACGACCCCTGGGTGTGCGCCCCCGACGGCGTCCTGGAGGAGAAGCTCTCTCCCCAGTGCCAG
CCCCTCCACAATGAGCTGTGACCATCCCAGGAGGCCTGTGCACACATCCCAGGCATGTCCCAGACACATCCCACA
CGTGTCCGTGTGGCCGGCCAGCCTGGGGAGTAGTGGCAACAGCCCTTCCGTCCACACTCCCATCCAAGGAGGGTT
CTTCCTTCCTGTGGGGTCACTCTTGCCATTGCCTGGAGGGGGACCAGAGCATGTGACCAGAGCATGTGCCCAGCC
CCTCCACCACCAGGGGCACTGCCGTCATGGCAGGGGACACAGTTGTCCTTGTGTCTGAACCATGTCCCAGCACGG
GAATTCTAGACATACGTGGTCTGCGGACAGGGCAGCGCCCCCAGCCCATGACAAGGGAGTCTTGTTTTCTGGCTT
GGTTTGGGGACCTGCAAATGGGAGGCCTGAGGCCCTCTTCAGGCTTTGGCAGCCACAGATACTTCTGAACCCTTC
ACAGAGAGCAGGCAGGGGCTTCGGTGCCGCGTGGGCAGTACGCAGGTCCCACCGACACTCACCTGGGAGCACGGC
GCCTGGCTCTTACCAGCGTCTGGCCTAGAGGAAGCCTTTGAGCGACCTTTGGGCAGGTTTCTGCTTCTTCTGTTT
TGCCCATGGTCAAGTCCCTGTTCCCCAGGCAGGTTTCAGCTGATTGGCAGCAGGCTCCCTGAGTGATGAGCTTGA
ACCTGTGGTGTTTCTGGGCAGAAGCTTATCTTTTTTGAGAGTGTCCGAAGATGAAGGCATGGCGATGCCCGTCCT
CTGGCTTGGGTTAATTCTTCGGTGACACTGGCATTGCTGGGTGGTGATGCCCGTCCTCTGGCTTGGGTTAATTCT
TCGGTGACACTGGCGTTGCTGGGTGGCAATGCCCGTCCTCTGGCTTGGGTTAATTCTTCGGTGACACTGGCGTTG
CTGGGTGGCGATGCCCGTCCTCTGGCTTGGGTTAATTCTTGGATGACGTCGGCGTTGCTGGGAGAATGTGCCGTT
CCTGCCCTGCCTCCACCCACCTCGGGAGCAGAAGCCCGGCCTGGACACCCCTCGGCCTGGACACCCCTCGAAGGA
GAGGGCGCTTCCTTGAGTAGGTGGGCTCCCCTTGCCCTTCCCTCCCTATCACTCCATACTGGGGTGGGCTGGAGG
AGGCCACAGGCCAGCTATTGTAAAAGCTTTTT

FIGURE 48

MSCPVPACCALLLVLGLCRARPRNALLLLADDGGFESGAYNNSAIATPHLDALARRSLLFRNAFTSVSSCSPSRA
SLLTGLPQHQNGMYGLHQDVHHFNSFDKVRSLPLLLSQAGVRTGIIGKKHVGPETVYPFDFAYTEENGSVLQVGR
NITRIKLLVRKFLQTQDDRPFFLYVAFHDPHRCGHSQPQYGTFCEKFGNGESGMGRIPDWTPQAYDPLDVLVPYF
VPNTPAARADLAAQYTTVGRMDQGVGLVLQELRDAGVLNDTLVIFTSDNGIPFPSGRTNLYWPGTAEPLLVSSPE
HPKRWGQVSEAYVSLLDLTPTILDWFSIPYPSYAIFGSKTIHLTGRSLLPALEAEPLWATVFGSQSHHEVTMSYP
MRSVQHRHFRLVHNLNFKMPFPIDQDFYVSPTFQDLLNRTTAGQPTGWYKDLRHYYYRARWELYDRSRDPHETQN
LATDPRFAQLLEMLRDQLAKWQWETHDPWVCAPDGVLEEKLSPQCQPLHNEL

FIGURE 49

TATATTGGCAGTTATTGAGGGTAAAGCAATATATTGTAACAGAATGTATAAATATTTTTGATAAAACAGTCTATA
TTTTATTAAAAAATGAATTATAACCCATTTTCAGTTTTGCCTGCATCATAAGAGTGAGCACTCCATTGCTTTCTT
TCCTGGCCACACTGCTACAATCCAGCACTAACTATCCATGTCCAGGGTAAGGATCGAGATCGAGAAGCCCACACT
GCCAGTGAAAAAGCTACGTCTTTACTGCATAAATTAGAGGAAGCAATTTCGGAACAACGGAACCTTCAAACTATA
AATACTGAATTATCGAACACTTGCCAGGCACTTCAGCAGAAGACAAGGAAACTGAAGAAGCTTTTTAGATGAGGA
ATTTCCTCACTATGATTCCCTGTCCTGCGCAGATGCAATTCAACAACCTCTTCAAGAAAAATTGAAGCAGTGTTG
CCACAAACTATATGGTGGTCAAGAAGCAAGAATACATCAGACACCCCTGACCTTGAAACATACGTGCTGGTACAC
ACCTCTGCTGG**ATG**CCTTATCTCTGGATAGTTTTACAGCAGTTCCAACCCTGGAATCAACACCTTTCTCAGGTGT
AGCCAACCAAATCCACACTCTGTGTGAAAGGCCCACATATGGAGAAGTAAAGGATGGTGCTTTGGATGTAAAAAG
ACAACACAAGTGCCCAGGCCCCACAAGTGGCCCCAGCCCAGGAACGAATCTCTCAGGCTGCATCAGGATGAATGA
TGACCCAAGTATGGAAGAGAATGGTGTTGAACGCGTGTGTCCTGAGAGCCTGCTGCAGTCCAGGGGATATTCCTC
ACTACCATTACCCAGACACACTTCATCGACAGACGGTACTATAACTTCAAGTGATCCTGGATTAGAAATTCTGAA
TATGGCTTCTTGTGACCTTGACAGAAACTCGCTCTGTAAGAAAGAGGAGGATACAAGATCAGCTTCTCCCACGAT
AGAGGCCCAAGGCACAAGTCCAGCTCATGATAATATTGCATTCCAAGACTCTACGAGTAAGGATAAAACCATATT
AAATCTGGAAGCCAAAGAGGAACCAGAAACAATAGAAGAACATAAAAAAGAACATGCTTCAGGAGACTCTGTGGT
TTCCCCTCTTCCTGTAACCACTGTGAAATCGGTTAACGTTAGACAAAGTGAGAACACTTCTGCTAATGAGAAGGA
GGTGGAGGCAGAATTTCTCAGATTATCTTTGGGATTTAAGTGTGACTGGTTTACCTTGGAGAAGAGAGTGAAGCT
TGAAGAGAGGTCCCGTGACTGGGCAGAAGAAAATTTGAAGAAAGAAATCACTAACTCTTTAAAACTATTAGAGTC
TTTAACACCTCTGTGTGAAGATGACAACCAGGCACAGGAAATCATTAAGAAGCTGGAGAAGAGTATAAAGTTTCT
TAGCCAGTGTGCAGCACGAGTGGCCAGTAGGGCTGAGATGTTGGGAGCCATCAATCAGGAAAGCCGGGTTAGTAA
AGCAGTTGAAGTGATGATTCAGCACGTAGAAAACTTGAAGAGGATGTATGCCAAAGAGCACGCTGAATTAGAAGA
ACTGAAACAGGTTCTTCTGCAGAATGAAAGGTCTTTCAATCCTCTTGAAGATGATGATGACTGCCAAATTAAAAA
ACGTTCAGCTTCTCTAAACTCCAAGCCATCTTCTCTACGAAGAGTGACTATTGCCTCTTTACCCAGAAATATTGG
AAATGCAGGAATGGTGGCTGGGATGGAAAATAATGATCGATTCAGTAGAAGGTCAAGCAGTTGGCGTATTTTGGG
GTCAAAGCAGAGTGAACACCGTCCCTCATTACCTCGATTTATTAGCACCTATTCCTGGGCAGATGCTGAAGAAGA
AAAATGTGAACTAAAAACTAAAGATGACTCAGAGCCATCTGGAGAAGAAACAGTAGAAAGGACAAGGAAGCCAAG
TCTTTCTGAAAAGAAAAATAATCCATCAAAGTGGGATGTCTCTTCAGTTTATGACACAATAGCTTCCTGGGCAAC
AAATCTCAAGTCCTCCATCAGAAAGGCTAATAAGGCCCTCTGGCTCTCTATTGCATTCATTGTACTGTTTGCAGC
TTTGATGAGCTTCCTCACAGGCCAATTATTCCAGAAGTCTGTGGATGCCGCTCCCACACAGCAAGAGGACTCATG
GACGTCTCTAGAACATATCTTGTGGCCATTTACCAGACTCCGACACAATGGGCCACCACCAGTG**TGA**CAGCAGGA
CATCCTAATATATGGATCTTGATTTTTAAGTTTCAGTATCTGAACTTCGTAAATTAGTAACTTTTAGCTGGGAAA
GTATAGCATGAAACCAGAGGTTCTCAGAATGACCGTAAGATAGCTTACATTTCCTCTTTTTGCCTTTATCTCCCC
AACTAAAATACAATGGG

FIGURE 50

MESTPFSGVANQIHTLCERPTYGEVKDGALDVKRQHKCPGPTSGPSPGTNLSGCIRMNDDPSMEENGVERVCPES
LLQSRGYSSLPLPRHTSSTDGTITSSDPGLEILNMASCDLDRNSLCKKEEDTRSASPTIEAQGTSPAHDNIAFQD
STSKDKTILNLEAKEEPETIEEHKKEHASGDSVVSPLPVTTVKSVNVRQSENTSANEKEVEAEFLRLSLGFKCDW
FTLEKRVKLEERSRDWAEENLKKEITNSLKLLESLTPLCEDDNQAQEIIKKLEKSIKFLSQCAARVASRAEMLGA
INQESRVSKAVEVMIQHVENLKRMYAKEHAELEELKQVLLQNERSFNPLEDDDDCQIKKRSASLNSKPSSLRRVT
IASLPRNIGNAGMVAGMENNDRFSRRSSSWRILGSKQSEHRPSLPRFISTYSWADAEEEKCELKTKDDSEPSGEE
TVERTRKPSLSEKKNNPSKWDVSSVYDTIASWATNLKSSIRKANKALWLSIAFIVLFAALMSFLTGQLFQKSVDA
APTQQEDSWTSLEHILWPFTRLRHNGPPPV

FIGURE 51A

GGCTGGAGCGGCGGCGGGCAGGCGTGCGGAGGACACTCCTGCGACCAGGTACTGGCTGTGATCGAACTTCTCAAC
CCTCAGAGACTTAGATCTTCCACCTCACTCCCTCAGCCAAGCCTCCAGGCCCCCTCGTGCATCCGTGGTGGCCTC
TCTGCCTTCTCTGTTCTGTTCTCCCCATGGCCCAGACATGAGTGGCCCCCTAGAAGGGGCTGATGGGGGAGGGGA
CCCCAGGCCTGGGGAATCATTTTGTCCTGGGGGCGTCCCATCCCCTGGGCCCCCACAGCACCGGCCTTGCCCAGG
CCCCAGCCTGGCCGATGACACCGATGCCAACAGCAATGGTTCAAGTGGCAATGAGTCCAACGGGCATGAGTCTAG
AGGCGCATCTCAGCGGAGCTCACACAGCTCCTCCTCAGGCAACGGCAAGGACTCAGCCCTGCTGGAGACCACTGA
GAGCAGCAAGAGCACAAACTCTCAGAGCCCATCCCCACCCAGCAGTTCCATTGCCTACAGCCTCCTGAGTGCCAG
CTCAGAGCAGGACAACCCGTCCACCAGTGGCTGCAGCAGTGAACAGTCAGCCCGGGCAAGGACTCAGAAGGAACT
CATGACAGCACTTCGAGAGCTCAAGCTTCGACTGCCGCCAGAGCGCCGGGGCAAGGGCCGCTCTGGGACCCTGGC
CACGCTGCAGTACGCACTGGCCTGTGTCAAGCAGGTGCAGGCCAACCAGGAATACTACCAGCAGTGGAGCCTGGA
GGAGGGCGAGCCTTGCTCCATGGACATGTCCACCTATACCCTGGAGGAGCTGGAGCACATCACGTCTGAGTACAC
ACTTCAGAACCAGGATACCTTCTCAGTGGCTGTCTCCTTCCTGACGGGCCGAATCGTCTACATTTCGGAGCAGGC
AGCCGTCCTGCTGCGTTGCAAGCGGGACGTGTTCCGGGGTACCCGCTTCTCTGAGCTCCTGGCTCCCCAGGATGT
GGGAGTCTTCTATGGTTCCACTGCTCCATCTCGCCTGCCCACCTGGGGCACAGGGGCCTCAGCAGGTTCAGGCCT
CAGGGACTTTACCCAGGAGAAGTCCGTCTTCTGCCGTATCAGAGGAGGTCCTGACCGGGATCCAGGGCCTCGGTA
CCAGCCATTCCGCCTAACCCCGTATGTGACCAAGATCCGGGTCTCAGATGGGGCCCCTGCACAGCCGTGCTGCCT
GCTGATTGCAGAGCGCATCCATTCGGGTTACGAAGCTCCCCGGATACCCCCTGACAAGAGGATTTTCACTACGCG
GCACACACCCAGCTGCCTCTTCCAGGATGTGGATGAAAGGGCTGCCCCCCTGCTGGGCTACCTGCCCCAGGACCT
CCTGGGGGCCCCAGTGCTCCTGTTCCTGCATCCTGAGGACCGACCCCTCATGCTGGCTATCCACAAGAAGATTCT
GCAGTTGGCGGGCCAGCCCTTTGACCACTCCCCTATCCGCTTCTGTGCCCGCAACGGGGAGTATGTCACCATGGA
CACCAGCTGGGCTGGCTTTGTGCACCCCTGGAGCCGCAAGGTAGCCTTCGTGTTGGGCCGCCACAAAGTACGCAC
GGCCCCCCTGAATGAGGACGTGTTCACTCCCCCGGCCCCCAGCCCAGCTCCCTCCCTGGACACTGATATCCAGGA
GCTGTCAGAGCAGATCCACCGGCTGCTGCTGCAGCCCGTCCACAGCCCCAGCCCCACGGGACTCTGTGGAGTCGG
CGCCGTGACATCCCCAGGCCCTCTCCACAGCCCTGGGTCCTCCAGTGATAGCAACGGGGGTGATGCAGAGGGGCC
TGGGCCTCCTGCGCCAGTGACTTTCCAACAGATCTGTAAGGATGTGCATCTGGTGAAGCACCAGGGCCAGCAGCT
TTTTATTGAGTCTCGGGCCCGGCCTCAGTCCCGGCCCCGCCTCCCTGCTACAGGCACGTTCAAGGCCAAGGCCCT
TCCCTGCCAATCCCCAGACCCAGAGCTGGAGGCGGGTTCTGCTCCCGTCCAGGCCCCACTAGCCTTGGTCCCTGA
GGAGGCCGAGAGGAAAGAAGCCTCCAGCTGCTCCTACCAGCAGATCAACTGCCTGGACAGCATCCTCAGGTACCT
GGAGAGCTGCAACCTCCCCAGCACCACTAAGCGTAAATGTGCCTCCTCCTCCTCCTATACCACCTCCTCAGCCTC
TGACGACGACAGGCAGAGGACAGGTCCAGTCTCTGTGGGGACCAAGAAAGATCCGCCGTCAGCAGCGCTGTCTGG
GGAGGGGGCCACCCCACGGAAGGAGCCAGTGGTGGGAGGCACCCTGAGCCCGCTCGCCCTGGCCAATAAGGCGGA
GAGTGTGGTGTCCGTCACCAGTCAGTGTAGCTTCAGCTCCACCATCGTCCATGTGGGAGACAAGAAGCCCCCGGA
GTCGGACATCATCATGATGGAGGACCTGCCTGGTCTAGCCCCAGGCCCAGCCCCCAGCCCAGCCCCCAGCCCCAC
AGTAGCCCCTGACCCAGCCCCAGACGCCTACCGTCCAGTGGGGCTGACCAAGGCCGTGCTGTCCCTGCACACGCA
GAAGGAAGAGCAAGCCTTCCTCAGCCGCTTCCGAGACCTGGGCAGGCTGCGTGGACTCGACAGCTCTTCCACAGC
TCCCTCAGCCCTTGGCGAGCGAGGCTGCCACCACGGCCCCGCACCCCCAAGCCGCCGACACCACTGCCGATCCAA
AGCCAAGCGCTCACGCCACCACCAGAACCCTCGGGCTGAAGCGCCCTGCTATGTCTCACACCCCTCACCCGTGCC
ACCCTCCACCCCCTGGCCCACCCCACCAGCCACTACCCCCTTCCCAGCGGTTGTCCAGCCCTACCCTCTCCCAGT
GTTCTCTCCTCGAGGAGGCCCCCAGCCTCTTCCCCCTGCTCCCACATCTGTGCCCCCAGCTGCTTTCCCCGCCCC
TTTGGTGACCCCAATGGTGGCCTTGGTGCTCCCTAACTATCTGTTCCCAACCCCATCCAGCTATCCTTATGGGGC
ACTCCAGACCCCTGCTGAAGGGCCTCCCACTCCTGCCTCGCACTCCCCTTCTCCATCCTTGCCCGCCCTCCCCCC
GAGTCCTCCTCACCGCCCGGACTCTCCACTGTTCAACTCGAGATGCAGCTCTCCACTCCAGCTCAATCTGCTGCA
GCTGGAGGAGCTCCCCCGTGCTGAGGGGGCTGCTGTTGCAGGAGGCCCTGGGAGCAGTGCCGGGCCCCCACCTCC
CAGTGCGGAGGCTGCTGAGCCAGAGGCCAGACTGGCGGAGGTCACTGAGTCCTCCAATCAGGACGCACTTTCCGG
CTCCAGTGACCTGCTCGAACTTCTGCTGCAAGAGGACTCGCGCTCCGGCACAGGCTCCGCAGCCTCGGGCTCCTT
GGGCTCTGGCTTGGGCTCTGGGTCTGGTTCAGGCTCCCATGAAGGGGGCAGCACCTCAGCCAGCATCACTCGCAG
CAGCCAGAGCAGCCACACAAGCAAATACTTTGGCAGCATCGACTCTTCCGAGGCTGAGGCTGGGGCTGCTCGGGG
CGGGGCTGAGCCTGGGGACCAGGTGATTAAGTACGTGCTCCAGGATCCCATTTGGCTGCTCATGGCCAATGCTGA

FIGURE 51B

CCAGCGCGTCATGATGACCTACCAGGTGCCCTCCAGGGACATGACCTCTGTGCTGAAGCAGGATCGGGAGCGGCT
CCGAGCCATGCAGAAGCAGCAGCCTCGGTTTTCTGAGGACCAGCGGCGGGAACTGGGTGCTGTGCACTCCTGGGT
CCGGAAGGGCCAACTGCCTCGGGCTCTTGATGTGATGGCCTGTGTGGACTGTGGGAGCAGCACCCAAGATCCTGG
TCACCCTGATGACCCACTCTTCTCAGAGCTGGATGGACTGGGGCTGGAGCCCATGGAAGAGGGTGGAGGCGAGCA
GGGCAGCAGCGGTGGCGGCAGTGGTGAGGGAGAGGGCTGCGAGGAGGCCCAAGGCGGGGCCAAGGCTTCAAGCTC
TCAGGACTTGGCTATGGAGGAGGAGGAAGAAGGCAGGAGCTCATCCAGTCCAGCCTTACCTACAGCAGGAAACTG
CACCAGC**TAG**ACTCCATTCTGGGACCATCTCCAGGAGTCCATGAGAGGCTTTCTTCTCCTATGTCCCAATTCTCA
GAACTCAGATGTGGCTAGACCAACCAGTGGGAAACTGCCCCAGCTTCTCCCACCATAGGGGGCCGGACCCCCATC
ACCAGCCTAGGATCCAGGGGCTGCCTCTGGCCTCTTAGGGAGCAGAGAGCAGAACTCCGCAGCCCAGCCCAGAGG
AGTGTCACCTCCCACCTTTGGAGAGGAATCCTTCCCTCCCCTGGACAAAGTTGCTGACAAGCTGCTGAAGTGGCC
TCTCCATATTCCAGCTGAGCCTGAATCTGACTCTTGAGGGTTGGGGCTGCACTTATTTATTGCGGGGAGACAGCT
CTCTCTCCCACCTCCTCCCCAGATGGGAGGAGAGCCTGAGGCCCAAGCAGGACCCGGGGGTTCCAGCCCCTAGCT
GCTCTGGAGTGGGGGAGGTTGGTGGACCATGGAGTCCCTGGTGCTGCCCCTCAGGTGGGACCCAGGGGTTCTCAG
CTGTACCCTCTGCCGATGGCATTTGTGTTTTTGATATTTGTGTCTGTTACTACTTTTTTAATACAAAAAGATAAA
AACGCC

FIGURE 52

MSGPLEGADGGGDPRPGESFCPGGVPSPGPPQHRPCPGPSLADDTDANSNGSSGNESNGHESRGASQRSSHSSSS
GNGKDSALLETTESSKSTNSQSPSPPSSSIAYSLLSASSEQDNPSTSGCSSEQSARARTQKELMTALRELKLRLP
PERRGKGRSGTLATLQYALACVKQVQANQEYYQQWSLEEGEPCSMDMSTYTLEELEHITSEYTLQNQDTFSVAVS
FLTGRIVYISEQAAVLLRCKRDVFRGTRFSELLAPQDVGVFYGSTAPSRLPTWGTGASAGSGLRDFTQEKSVFCR
IRGGPDRDPGPRYQPFRLTPYVTKIRVSDGAPAQPCCLLIAERIHSGYEAPRIPPDKRIFTTRHTPSCLFQDVDE
RAAPLLGYLPQDLLGAPVLLFLHPEDRPLMLAIHKKILQLAGQPFDHSPIRFCARNGEYVTMDTSWAGFVHPWSR
KVAFVLGRHKVRTAPLNEDVFTPPAPSPAPSLDTDIQELSEQIHRLLLQPVHSPSPTGLCGVGAVTSPGPLHSPG
SSSDSNGGDAEGPGPPAPVTFQQICKDVHLVKHQGQQLFIESRARPQSRPRLPATGTFKAKALPCQSPDPELEAG
SAPVQAPLALVPEEAERKEASSCSYQQINCLDSILRYLESCNLPSTTKRKCASSSSYTTSSASDDDRQRTGPVSV
GTKKDPPSAALSGEGATPRKEPVVGGTLSPLALANKAESVVSVTSQCSFSSTIVHVGDKKPPESDIIMMEDLPGL
APGPAPSPAPSPTVAPDPAPDAYRPVGLTKAVLSLHTQKEEQAFLSRFRDLGRLRGLDSSSTAPSALGERGCHHG
PAPPSRRHHCRSKAKRSRHHQNPRAEAPCYVSHPSPVPPSTPWPTPPATTPFPAVVQPYPLPVFSPRGGPQPLPP
APTSVPPAAFPAPLVTPMVALVLPNYLFPTPSSYPYGALQTPAEGPPTPASHSPSPSLPALPPSPPHRPDSPLFN
SRCSSPLQLNLLQLEELPRAEGAAVAGGPGSSAGPPPPSAEAAEPEARLAEVTESSNQDALSGSSDLLELLLQED
SRSGTGSAASGSLGSGLGSGSGSGSHEGGSTSASITRSSQSSHTSKYFGSIDSSEAEAGAARGGAEPGDQVIKYV
LQDPIWLLMANADQRVMMTYQVPSRDMTSVLKQDRERLRAMQKQQPRFSEDQRRELGAVHSWVRKGQLPRALDVM
ACVDCGSSTQDPGHPDDPLFSELDGLGLEPMEEGGGEQGSSGGGSGEGEGCEEAQGGAKASSSQDLAMEEEEEGR
SSSSPALPTAGNCTS

FIGURE 53

GCTCTTATCGGTTCCCATCCCAGTTGTTGATCTTATGCAAGACGCTGCACGACCCCGCGCCCGCTTGTCGCCACG
GCACTTGAGGCAGCCGGAGATACTCTGAGTTACTCGGAGCCCGACGCCTGAGGGTGAGATGAACGCGCTGGCCTC
CCTAACCGTCCGGACCTGTGATCGCTTCTGGCAGACCGAACCGGCGCTCCTGCCCCCGGGGTGACGCGCAGCCCC
CAGCCGCCCAGACACATGGCCCCAGGCCAAGCACCCCATCAGGCTACCCCGTGGAGGGATGCCCACCCTTTCTTC
CTCCTGTCCCCAGTGATGGGCCTCCTCAGCCGCGCCTGGAGCCGCCTGAGGGGCCTGGGACCTCTAGAGCCCTGG
CTGGTGGAAGCAGTAAAAGGAGCAGCTCTGGTAGAAGCTGGCCTGGAGGGAGAAGCTAGGACTCCTCTGGCAATC
CCCCATACCCCTTGGGGCAGACGCCCTGGAGAGGAGGCTGAAGACAGTGGAGGCCCTGGAGAGGACAGAGAAACA
CTGGGGCTGAAAACCAGCAGTTCCCTTCCTGAAGCCTGGGGACTTTTGGATGATGATGATGGCATGTATGGTGAG
CGAGAGGCAACCAGTGTCCCTAGAGGGCAGGGAAGTCAATTTGCAGATGGCCAGCGTGCTCCCCTGTCTCCCAGC
CTTCTGATAAGGACACTGCAAGGTTCTGATAAGAACCCAGGGGAGGAGAAAGCCGAGGAAGAGGGAGTTGCTGAA
GAGGAGGGAGTTAACAAGTTCTCTTATCCACCATCACACCGGGAGTGTTGTCCAGCCGTGGAGGAGGAGGACGAT
GAAGAAGCTGTAAAGAAAGAAGCTCACAGAACCTCTACTTCTGCCTTGTCTCCAGGATCCAAGCCCAGCACTTGG
GTGTCTTGCCCAGGGGAGGAAGAGAATCAAGCCACGGAGGATAAAAGAACAGAAAGAAGTAAAGGAGCCAGGAAG
ACCTCCGTGTCCCCCCGATCTTCAGGCTCCGACCCCAGGTCCTGGGAGTATCGTTCAGGAGAGGCGTCCGAGGAG
AAGGAGGAAAAGGCACACGAAGAAACTGGGAAAGGAGAAGCTGCCCCAGGGCCGCAATCCTCAGCCCCAGCCCAG
AGGCCCCAGCTCAAGTCCTGGTGGTGCCAACCCAGTGATGAAGAGGAGAGTGAGGTCAAGCCTTTGGGGGCAGCT
GAGAAGGATGGAGAAGCTGAGTGTCCTCCCTGCATCCCCCCACCAAGTGCCTTCCTGAAGGCCTGGGTGTATTGG
CCAGGAGAGGACACAGAGGAAGAGGAAGATGAGGAAGAAGATGAGGACAGTGACTCTGGATCAGATGAGGAAGAG
GGAGAAGCTGAGGCTTCCTCTTCCACTCCTGCTACAGGTGTCTTCTTGAAGTCCTGGGTCTATCAGCCAGGAGAG
GACACAGAGGAGGAGGAAGATGAGGACAGTGATACAGGATCAGCCGAGGATGAAAGAGAAGCTGAGACTTCTGCT
TCCACACCCCCTGCAAGTGCTTTCTTGAAGGCCTGGGTGTATCGGCCAGGAGAGGACACGGAGGAGGAGGAAGAT
GAGGATGTGGATAGTGAGGATAAGGAAGATGATTCAGAAGCAGCCTTAGGAGAAGCTGAGTCAGACCCACATCCC
TCCCACCCGGACCAGAGTGCCCACTTCAGGGGCTGGGGATATCGACCTGGAAAAGAGACAGAGGAAGAGGAAGCT
GCTGAGGACTGGGGAGAAGCTGAGCCCTGCCCCTTCCGAGTGGCCATCTATGTACCTGGAGAGAAGCCACCGCCT
CCCTGGGCTCCTCCTAGGCTGCCCCTCCGACTGCAAAGGCGGCTCAAGCGCCCAGAAACCCCTACTCATGATCCG
GACCCTGAGACTCCCCTAAAGGCCAGAAAGGTGCGCTTCTCCGAGAAGGTCACTGTCCATTTCCTGGCTGTCTGG
GCAGGGCCGGCCCAGGCCGCCCGCCAGGGCCCCTGGGAGCAGCTTGCTCGGGATCGCAGCCGCTTCGCACGCCGC
ATCGCCCAGGCCCAGGAGGAGCTGAGCCCCTGCCTCACCCCTGCTGCCCGGGCCAGAGCCTGGGCACGCCTCAGG
AACCCACCTTTAGCCCCCATCCCTGCCCTCACCCAGACCTTGCCTTCCTCCTCTGTCCCTTCGTCCCCAGTCCAG
ACCACGCCCTTGAGCCAAGCTGTGGCTACACCTTCCCGCTCCTCTGCTGCTGCAGCGGCTGCCCTGGACCTCAGT
GGGAGGCGTGGCTGAGACCAACTGGTTTGCCTATAATTTATTAACTATTTATTTTTTCTAAGTGTGGGTTTATAT
AAGGAATAAAGCCTTTTGATTTGT

FIGURE 54

MAPGQAPHQATPWRDAHPFFLLSPVMGLLSRAWSRLRGLGPLEPWLVEAVKGAALVEAGLEGEARTPLAIPHTPW
GRRPGEEAEDSGGPGEDRETLGLKTSSSLPEAWGLLDDDDGMYGEREATSVPRGQGSQFADGQRAPLSPSLLIRT
LQGSDKNPGEEKAEEEGVAEEEGVNKFSYPPSHRECCPAVEEEDDEEAVKKEAHRTSTSALSPGSKPSTWVSCPG
EEENQATEDKRTERSKGARKTSVSPRSSGSDPRSWEYRSGEASEEKEEKAHEETGKGEAAPGPQSSAPAQRPQLK
SWWCQPSDEEESEVKPLGAAEKDGEAECPPCIPPPSAFLKAWVYWPGEDTEEEEDEEEDEDSDSGSDEEEGEAEA
SSSTPATGVFLKSWVYQPGEDTEEEEDEDSDTGSAEDEREAETSASTPPASAFLKAWVYRPGEDTEEEEDEDVDS
EDKEDDSEAALGEAESDPHPSHPDQSAHFRGWGYRPGKETEEEEAAEDWGEAEPCPFRVAIYVPGEKPPPPWAPP
RLPLRLQRRLKRPETPTHDPDPETPLKARKVRFSEKVTVHFLAVWAGPAQAARQGPWEQLARDRSRFARRIAQAQ
EELSPCLTPAARARAWARLRNPPLAPIPALTQTLPSSSVPSSPVQTTPLSQAVATPSRSSAAAAAAALDLSGRRG

FIGURE 55

GTATCTGTGGTAAACCCAGTGACACGGGGGAGATGACATACAAAAAGGGCAGGACCTGAGAAAGATTAAGCTGCA
GGCTCCCTGCCCATAAAACAGGGTGTGAAAGGCATCTCAGCGGCTGCCCCACCATGGCTACCTGGGCCCTCCTGC
TCCTTGCAGCCATGCTCCTGGGCAACCCAGGTCTGGTCTTCTCTCGTCTGAGCCCTGAGTACTACGACCTGGCAA
GAGCCCACCTGCGTGATGAGGAGAAATCCTGCCCGTGCCTGGCCCAGGAGGGCCCCCAGGGTGACCTGTTGACCA
AAACACAGGAGCTGGGCCGTGACTACAGGACCTGTCTGACGATAGTCCAAAAACTGAAGAAGATGGTGGATAAGC
CCACCCAGAGAAGTGTTTCCAATGCTGCGACCCGGGTGTGTAGGACGGGGAGGTCACGATGGCGCGACGTCTGCA
GAAATTTCATGAGGAGGTATCAGTCTAGAGTTACCCAGGGCCTCGTGGCCGGAGAAACTGCCCAGCAGATCTGTG
AGGACCTCAGGTTGTGTATACCTTCTACAGGTCCCCTCTGAGCCCTCTCACCTTGTCCTGTGGAAGAAGCACAGG
CTCCTGTCCTCAGATCCCGGGAACCTCAGCAACCTCTGCCGGCTCCTCGCTTCCTCGATCCAGAATCCACTCTCC
AGTCTCCCTCCCCTGACTCCCTCTGCTGTCCTCCCCTCTCACGAGAATAAAGTGTCAAGCAAG

FIGURE 56

MATWALLLLAAMLLGNPGLVFSRLSPEYYDLARAHLRDEEKSCPCLAQEGPQGDLLTKTQELGRDYRTCLTIVQK
LKKMVDKPTQRSVSNAATRVCRTGRSRWRDVCRNFMRRYQSRVTQGLVAGETAQQICEDLRLCIPSTGPL

FIGURE 57

CTCTTCTTGTGGCTTTTACAACTTCATTTCTTTCTGGGGTCACCTGTGATGGGCTTTGATGTGGTGTCAATTTGG
GGCCTTGTGTTTGTGCCAGAGGGATACACATATTAAACTGCAGGCCACCTTCCTGGTCCAGACTGTACTGTGTGA
ACCCCACTGACTAAATTAGTGAGAACCATAGGCGTTGGAATTTCTCACCTTTTACAATGATAGACTTTTGCATTG
GGACCAATGAATCTGGTGTGAAAAACCCTGCTGTAGTAGTGAAAGAGCATCAGGAGATACTGACTGTACCTGAGG
GCCAAAACAGGAGCAGGTAACGAACCGTAAAAAAAGGAGCAGGTAATGAATCGTAACCAAAACTACAGTTGATCC
TCCGCAAAGGAAAGCTCTTTACCCAGAATGTCCTTCCAGAGTCATTCAGGAAGGACAAGGGAACACCCTTGGGAA
ATGGGCTAGTGGAGGGCTGTTGACTGCAGTGACACCTGGGTGCTCCGGAGGTATCTGTTCTGTTGACCTGTAAGG
AAGCAGTCGATCCTAGAGTGTCAGAACAGAGCCATTCTCTCCTCCTGAGTAGGAACGTTTCTGTTCAGTTTCCCT
CACAGCAGCCTGTGTTAGCATGCAGTTGAAAATACTGCCGTCTAGGAGAACCTGTGGTCACTGGGAACGTGCCCC
ACAGTGACTGGCCATGCAACCAGGTGATTTTTAGGAATAGATGTCTCTAGACTCTGTCTCCTTTCCTACAAGGCC
TCACACAGATGCTTGAGGCTAATGGCCCCCATTCTGAGGTCATTTTTGTGTAGAACTCCTTTCCCCAGGAGAGAG
CCTTATCTCTGCCCTCCTTTACCCTGAAGGCTTCAAACGGAAGACAGGACCTAGATCTAAACCTAGATACTAGCA
TTTTGTGGGATTGTCTAGAATTTGGGGAAGATTTGGGTTCCTAAGATGCACAAGCGTTTTACACCAGTGGTGATT
AACTCAACTAAAACCCACTGTAGGAAGTTAGCTTCCCCAGACAGCTAATGCCGAGATCTTCTACCAGCGTAGAGT
TGACAGAAGCAGGCCAGCGAGGAGGTGTGGGACATAATAGCCTGAGTGCTTGGGTTACCATGGAGACTGGAGTGT
GTGAGGCCACAGCCTGTGCTAAAGAGCCATGGAGCCCTCCCCTGGCCATGTCTGGGGACAGATAGAACCTGTTGG
GGGAAATATTCCCTCACCCCAGGGTTCTTTCTGCAGAGCAAGGGTTGCCTTTGTCCTATCCCTGAGCTTGCTCAA
CAAGAGAAACAAGGTTTCTTAAGTGTTTTGGTTAAAGTTTTCATTCTTATTTGACTATGTATATGTAATTGTAAA
GAAACGATCCTATGCATTGTCTTTCTTTTATATTCTTGTAATATTCTGAAATTAAAATTGTTTTGTTTCATAAAA
AAAAAAAAAAAAAA

FIGURE 58

MIDFCIGTNESGVKNPAVVVKEHQEILTVPEGQNRSR

FIGURE 59

ATGGCGGCGGCCGTAGCGGCTCCACTCGCCGCCGGGGGGTGAGGAGGCGGCAGCCACGACCTCCGTGCCCGGGTCT
CCAGGTCTGCCGGGGAGACGCAGTGCAGAGCGGGCCCTAGAGGACGCCGTGGCCACCGGGACCCTGAACCTGTCT
AACCGGCGCTTGAAGCACTTCCCCCGGGGCGCGGCCCGTAGCTACGACCTGTCAGACATCACCCAGGCTGACCTG
TCCCGGAACCGGTTTCCCGAGGTGCCCGAGGCGGCGTGCCAGCTGGTGTCCCTGGAGGGCCTGAGCCTCTACCAC
AATTGCCTGAGATGCCTGAACCCAGCCTTGGGGAATCTCACAGCCCTCACCTACCTCAACCTCAGCCGAAACCAG
CTGTCGCTGCTGCCACCCTACATCTGCCAGCTGCCCCTGAGGGTCCTCATCGTCAGCAACAACAAGCTGGGAGCC
CTGCCCCCTGACATCGGCACCCTGGGAAGCCTGCGACAGCTTGACGTGAGCAGCAACGAGCTCCAATCCCTGCCC
TCGGAACTGTGTGGCCTCTCTTCCCTGCGGGACCTCAATGTCCGGAGGAACCAGCTCAGTACGCTGCCCGAAGAG
CTGGGGGACCTCCCTCTGGTCCGCCTGGATTTCTCCTGTAACCGCGTCTCCCGAATCCCAGTCTCCTTCTGCCGC
CTGAGGCACCTGCAGGTCATTCTGCTGGACAGCAACCCTCTGCAGAGTCCACCTGCCCAGGTCTGCCTGAAGGGG
AAACTTCACATCTTCAAGTATTTGTCCACAGAGGCCGGGCAGCGTGGGTCGGCCCTGGGGGACCTGGCCCCTTCT
CGGCCCCCGAGTTTCAGTCCCTGCCCTGCAGAGGATCTATTTCCGGGACATCGGTACGATGGTGGGCTGGACTCA
GGCTTCCACAGCGTTGATAGTGGCAGCAAGAGGTGGTCTGGAAATGAGTCAACAGATGAATTTTCAGAGCTGTCA
TTCCGGATCTCAGAGCTGGCCCGGGAGCCCCGGGGGCCCAGAGAACGCAAGGAGGATGGCTCAGCGGACGGAGAC
CCTGTGCAGATTGACTTCATCGACAGCCATGTCCCCGGGGAGGATGAAGAGCGAGGCACTGTGGAGGAGCAGCGA
CCACCCGAATTAAGCCCTGGGGCAGGGGACAGGGAGAGGGCACCAAACAGCAGGCGGGAGGAGCCGGCAGGGGAG
GAGCGGCGGCGCCCGGACACCTTGCAGCTGTGGCAGGAGCGGGAACGGCGGCAGCAGCAGCAGAGCGGGGCGTGG
GGGGCCCCGAGGAAGGATAGCCTCTTGAAGCCAGGGCTCAGGGCTGTTGTGGGAGGGGCCGCCGCCGTGTCCACT
CAAGCCATGCACAACGGCTCGCCTAAGTCCAGTGCCTCCCAAGCAGGGGGCTGCAGCGGGGCAGGGAGCCCCGCC
CCTGCCCCTGCCTCCCAAGAGCCCCTTCCCATAGCTGGACCAGCGACAGCACCTGCTCCACGGCCACTTGGCTCC
ATTCAGAGACCAAACAGCTTCCTCTTCCGTTCCTCCTCTCAGAGTGGCTCAGGCCCTTCCTCACCAGACTCTGTC
CTGAGACCTCGGCGGTACCCCCAGGTTCCAGATGAGAAGGACTTAATGACTCAGCTGCGCCAGGTCCTTGAGTCC
CGGCTGCAGCGGCCCCTGCCTGAGGACCTGGCCGAGGCTCTGGCCAGTGGGGTCATCCTGTGCCAGCTGGCCAAC
CAGCTACGGCCGCGCTCCGTGCCCTTCATCCATGTGCCCTCCCCTGCTGTGCCAAAACTCAGTGCCCTCAAGGCT
CGGAAGAATGTGGAGAGTTTTCTAGAAGCCTGTCGAAAAATGGGGGTGCCTGAGGCTGACCTGTGCTCGCCCTCG
GATCTCCTCCAGGGCACTGCCCGGGGGCTGCGGACCGCGCTGGAGGCCGTGAAGCGGGTGGGGGGCAAGGCCCTA
CCGCCCCTCTGGCCCCCCTCTGGTCTGGGCGGCTTCGTCGTCTTCTACGTGGTCCTCATGCTGCTGCTCTATGTC
ACCTACACTCGGCTCCTGGATCCCCGTTCCCCCCAGGTGGCCTGGGAGGTGGCCCCCTCGAGGATGACTCCACTA
GCGCCCTGGGACCCCAAGTATGAAGCCAAAGCAGGACCTCGGCCGGTGTGGGTGAGTTGGGGGCAAACCTGTGGG
ACTGGCTGGGGTGCTCAGGGAGCTGTGCGGTGGCCTGAGGCTCCAGTGCTCTGTCCTCCTCACCCTAGGGGGCCA
ACTGTAGCTCAGGAGCCTCGTTCTCAGGCCGGACGCTGTGTCACCCCTCATTCTGGCCGCTGTATGAAGCAGCCT
CGGGCAGGGGTCTCAGGCCCGTGGCCCCTGCCACAGGGCACTGGAATGGACAGCAGGCGCCCCCAGATGCAGGGT
TCCCGGTGGTGTGCTGTGAAGATGTCTTCCTCTCGGACCCTCTGCTGCCCCGGGGGCAGCGTGTTCCCCTGTACC
TGTCCAAGGCCCCCCAGCAGATGATGGGCTCCCTGAAACTGCTGCCGCCGCCCCCCATCATGTCTGCCAGGGTGC
TCCCCCGCCCATCACCCTCCCGGGGCCCCTCCACTGCCTGGCTCAGCGGGCCGGAGCTGATCGCTCTCACTGGCC
TGCTGCAGATGAGCCAGGGGGAGCCTAGGCCCAGCTCCTCCGCGGTTGGCCCCCCAGACCATACCTCTGACCCAC
CCAGCCCCTGTGGTAGCCCCAGCAGTTCTCAGGGTGCTGACCTCTCTCTCCCACAGACCCCAGACACCCATTGTC
CATAGCCTTCTCAGGGCAGAGTGGGCTGGTTGTGTTGACAATAAAACAGTGTTGGTTTGCA

FIGURE 60

MAAAVAAPLAAGGEEAAATTSVPGSPGLPGRRSAERALEDAVATGTLNLSNRRLKHFPRGAARSYDLSDITQADL
SRNRFPEVPEAACQLVSLEGLSLYHNCLRCLNPALGNLTALTYLNLSRNQLSLLPPYICQLPLRVLIVSNNKLGA
LPPDIGTLGSLRQLDVSSNELQSLPSELCGLSSLRDLNVRRNQLSTLPEELGDLPLVRLDFSCNRVSRIPVSFCR
LRHLQVILLDSNPLQSPPAQVCLKGKLHIFKYLSTEAGQRGSALGDLAPSRPPSFSPCPAEDLFPGHRYDGGLDS
GFHSVDSGSKRWSGNESTDEFSELSFRISELAREPRGPRERKEDGSADGDPVQIDFIDSHVPGEDEERGTVEEQR
PPELSPGAGDRERAPNSRREEPAGEERRRPDTLQLWQERERRQQQQSGAWGAPRKDSLLKPGLRAVVGGAAAVST
QAMHNGSPKSSASQAGGCSGAGSPAPAPASQEPLPIAGPATAPAPRPLGSIQRPNSFLFRSSSQSGSGPSSPDSV
LRPRRYPQVPDEKDLMTQLRQVLESRLQRPLPEDLAEALASGVILCQLANQLRPRSVPFIHVPSPAVPKLSALKA
RKNVESFLEACRKMGVPEADLCSPSDLLQGTARGLRTALEAVKRVGGKALPPLWPPSGLGGFVVFYVVLMLLLYV
TYTRLLDPRSPQVAWEVAPSRMTPLAPWDPKYEAKAGPRPVWVSWGQTCGTGWGAQGAVRWPEAPVLCPPHPRGP
TVAQEPRSQAGRCVTPHSGRCMKQPRAGVSGPWPLPQGTGMDSRRPQMQGSRWCAVKMSSSRTLCCPGGSVFPCT
CPRPPSR

FIGURE 61

GCGCGGCCCATGTCCTCCGCGCCGCGCTCGCCCACCCCGCGGCCCCGCAGGATGAAGAAGGACGAGTCGTTCCTG
GGCAAGCTGGGCGGCACCCTGGCCAGGAAGCGGAGGGCGCGCGAGGTGAGTGACCTGCAGGAAGAAGGCAAGAAT
GCCATCAACTCACCGATGTCCCCCGCCCTGGTGGATGTTCACCCTGAAGACACCCAGCTTGAGGAGAACGAGGAG
CGCACGATGATTGACCCCACTTCCAAGGAAGACCCCAAGTTCAAGGAACTGGTCAAGGTCCTCCTCGACTGGATT
AATGACGTGCTGGTGGAGGAGAGGATCATTGTGAAGCAGCTGGAGGAAGACCTGTATGACGGCCAGGTGCTGCAG
AAGCTCTTGGAAAAACTGGCAGGGTGCAAGCTGAATGTGGCTGAGGTGACACAGTCCGAAATAGGGCAGAAACAG
AAGCTGCAGACGGTGCTGGAAGCAGTACATGACCTGCTGCGGCCCCGAGGCTGGGCGCTCCGGTGGAGCGTGGAC
TCAATTCACGGGAAGAACCTGGTGGCCATCCTCCACCTGCTGGTCTCTCTGGCCATGCACTTCAGGGCCCCCATC
CGCCTTCCTGAGCATGTAACGGTGCAGGTGGTGGTCGTGCGGAAACGGGAAGGCCTGCTGCATTCCAGCCACATC
TCGGAGGAGCTGACCACAACTACAGAGATGATGATGGGCCGGTTCGAGCGGGATGCCTTCGACACGCTGTTCGAC
CACGCCCCGGATAAGCTCAGCGTGGTGAAGAAGTCTCTCATCACTTTTGTGAACAAGCACCTGAACAAGCTGAAT
TTGGAGGTGACGGAACTGGAGACCCAGTTTGCAGATGGCGTGTACCTGGTTCTGCTCATGGGCCTTCTGGAAGAC
TACTTTGTTCCTCTCCACCACTTCTACCTGACTCCGGAAAGCTTCGATCAGAAGGTCCACAATGTGTCCTTCGCC
TTTGAGCTGATGCTGGACGGAGGCCTCAAGAAACCCAAGGCTCGTCCTGAAGACGTGGTTAACTTGGACCTCAAA
TCCACCCTGAGGGTTCTTTACAACCTGTTCACCAAGTACAAGAACGTGGAGTGACGGGGGAGCTGTGGATGGTGG
CAGGAGTGTCCCAGCAAGAAAGGCGGCATCCGTCTGTGCCCTGTGCCTTTCCAGGGAGCCAGGCGCCATGGGCTT
CTGGTCCAAGCTGTGTTGACTGTCATCCCCACCCCACCCCTACCTCACGCCTGCCCCACCCCCTGCCTCTTTTGG
TTGTTGTTCTTAATCTCCTCTCCATGTAGTTCCCAGTGGGCAAGAGCCTTTGAAAATGCAGGATTCTAAACACTC
GTGCTTGCGTTTGAAGCCTCGCGTCACTCAGTCGCGTGGGATGATGAGTCCGTTGTTGTCTGCCTTGGCCGAAAG
ATGAAAAAAAGCCTGAACCCCAACCCCCAGCTGGTTGAGAGCACCCTGCATTCTGCCTCATGGTGCAGTTAGCGA
TCACAGGCCTTCAGAAGTACAACATCAGCTCAGCAGGAACGCCGGCTCCCCGAGGACCCAGGCTTGACGATTCAC
CGGGGATCTCCTGGGCTGGGCTCTCCTTGGAAGTGAGGCCTTTTATTAAAAATAAAAGGGTTTTGCAGTTTGAAA
AAAAAAAAAAAAAAAAAAAA

FIGURE 62

MSSAPRSPTPRPRRMKKDESFLGKLGGTLARKRRAREVSDLQEEGKNAINSPMSPALVDVHPEDTQLEENEERTM
IDPTSKEDPKFKELVKVLLDWINDVLVEERIIVKQLEEDLYDGQVLQKLLEKLAGCKLNVAEVTQSEIGQKQKLQ
TVLEAVHDLLRPRGWALRWSVDSIHGKNLVAILHLLVSLAMHFRAPIRLPEHVTVQVVVVRKREGLLHSSHISEE
LTTTTEMMMGRFERDAFDTLFDHAPDKLSVVKKSLITFVNKHLNKLNLEVTELETQFADGVYLVLLMGLLEDYFV
PLHHFYLTPESFDQKVHNVSFAFELMLDGGLKKPKARPEDVVNLDLKSTLRVLYNLFTKYKNVE

FIGURE 63A

GGCGGTTAAGTCCTGTACCTAGGAAAGAGGGCGAGCTCTGGGGCGCTCTCCGGTGTCATGAGGAGCTTCAAAAGA
GTCAACTTTGGGACTCTGCTAAGCAGCCAGAAGGAGGCTGAAGAGTTGCTGCCCGACTTGAAGGTGGGGGTGCTG
CCTGGCTCGGGATACACCTGGCTTTCCAAACTGAGCTGTTTTGTGTTTGCCTTTTGAAGAGATGGATAAGAGTTC
CTGTCCAACCCTCCAGCTGGTTTTCCCAGCAGCCGATCTGATGCTGAGAGGAGACAAGCTTGTGATGCCATCCTG
AGGGCTTGCAACCAGCAGCTGACTGCTAAGCTAGCTTGCCCTAGGCATCTGGGGAGCCTGCTGGAGCTGGCAGAG
CTGGCCTGTGATGGCTACTTAGTGTCTACCCCACAGCGTCCTCCCCTCTACCTGGAACGAATTCTCTTTGTCTTA
CTGCGGAATGCTGCTGCACAAGGAAGCCCAGAGGCCACACTCCGCCTTGCTCAGCCCCTCCATGCCTGCTTGGTG
CAGTGCTCTCGCGAGGCTGCTCCCCAGGACTATGAGGCCGTGGCTCGGGGCAGCTTTTCTCTGCTTTGGAAGGGG
GCAGAAGCCCTGTTGGAACGGCGAGCTGCATTTGCAGCTCGGCTGAAGGCCTTGAGCTTCCTAGTACTCTTGGAG
GATGAAAGTACCCCTTGTGAGGTTCCTCACTTTGCTTCTCCAACAGCCTGTCGAGCGGTAGCTGCCCATCAGCTA
TTTGATGCCAGTGGCCATGGTCTAAATGAAGCAGATGCTGATTTCCTAGATGACCTGCTCTCCAGGCACGTGATC
AGAGCCTTGGTGGGTGAGAGAGGGAGCTCTTCTGGGCTTCTTTCTCCCCAGAGGGCCCTCTGCCTCTTGGAGCTC
ACCTTGGAACACTGCCGTCGCTTTTGCTGGAGCCGCCACCATGACAAAGCCATCAGCGCAGTGGAGAAGGCTCAC
AGTTACCTAAGGAACACCAATCTAGCCCCTAGCCTTCAGCTATGTCAGCTGGGGGTTAAGCTGCTGCAGGTCGGG
GAGGAAGGACCTCAGGCAGTGGCCAAGCTTCTGATCAAGGCATCAGCTGTCCTGAGCAAGAGTATGGAGGCACCA
TCACCCCCACTTCGGGCATTGTATGAGAGCTGCCAGTTCTTCCTTTCAGGCCTGGAACGAGGCACCAAGAGGCGC
TATAGACTTGATGCCATTCTGAGCCTCTTTGCTTTTCTTGGAGGGTACTGCTCTCTTCTGCAGCAGCTGCGGGAT
GATGGTGTGTATGGGGGCTCCTCCAAGCAACAGCAGTCTTTTCTTCAGATGTACTTTCAGGGACTTCACCTCTAC
ACTGTGGTGGTTTATGACTTTGCCCAAGGCTGTCAGATAGTTGATTTGGCTGACCTGACCCAACTAGTGGACAGT
TGTAAATCTACCGTTGTCTGGATGCTGGAGGCCTTAGAGGGCCTGTCGGGCCAAGAGCTGACGGACCACATGGGG
ATGACCGCTTCTTACACCAGTAATTTGGCCTACAGCTTCTATAGTCACAAGCTCTATGCCGAGGCCTGTGCCATC
TCTGAGCCGCTCTGTCAGCACCTGGGTTTGGTGAAGCCAGGCACTTATCCCGAGGTGCCTCCTGAGAAGTTGCAC
AGGTGCTTCCGGCTACAAGTAGAGAGTTTGAAGAAACTGGGTAAACAGGCCCAGGGCTGCAAGATGGTGATTTTG
TGGCTGGCAGCCCTGCAACCCTGTAGCCCTGAACACATGGCTGAGCCAGTCACTTTCTGGGTTCGGGTCAAGATG
GATGCGGCCAGGGCTGGAGACAAGGAGCTACAGCTAAAGACTCTGCGAGACAGCCTCAGTGGCTGGGACCCGGAG
ACCCTGGCCCTCCTGCTGAGGGAGGAGCTGCAGGCCTACAAGGCGGTGCGGGCCGACACTGGACAGGAACGCTTC
AACATCATCTGTGACCTCCTGGAGCTGAGCCCCGAGGAGACACCAGCCGGGGCCTGGGCACGAGCCACCCACCTG
GTAGAACTGGCTCAGGTGCTCTGCTACCACGACTTTACGCAGCAGACCAACTGCTCTGCTCTGGATGCTATCCGG
GAAGCCCTGCAGCTTCTGGACTCTGTGAGGCCTGAGGCCCAGGCCAGAGATCAGCTTCTGGACGATAAAGCACAG
GCCTTGCTGTGGCTTTACATCTGTACTCTGGAAGCCAAAATACAGGAAGGTATCGAGCGGGATCGGAGAGCCCAG
GCCCCTGGTAACTTGGAGGAATTTGAAGTCAATGACCTGAACTATGAAGATAAACTCCAGGAAGATCGTTTCCTA
TACAGTAACATTGCCTTCAACCTGGCTGCAGATGCTGCTCAGTCCAAATGCCTGGACCAAGCCCTGGCCCTGTGG
AAGGAGCTGCTTACAAAGGGGCAGGCCCCAGCTGTACGGTGTCTCCAGCAGACAGCAGCCTCACTGCAGATCCTA
GCAGCCCTCTACCAGCTGGTGGCAAAGCCCATGCAGGCTCTGGAGGTCCTCCTGCTGCTACGGATTGTCTCTGAG
AGACTGAAGGACCACTCGAAGGCAGCTGGCTCCTCCTGCCACATCACCCAGCTCCTCCTGACCCTCGGCTGTCCC
AGCTATGCCCAGTTACACCTGGAAGAGGCAGCATCGAGCCTGAAGCATCTCGATCAGACTACTGACACATACCTG
CTCCTTTCCCTGACCTGTGATCTGCTTCGAAGTCAACTCTACTGGACTCACCAGAAGGTGACCAAGGGTGTCTCT
CTGCTGCTGTCTGTGCTTCGGGATCCTGCCCTCCAGAAGTCCTCCAAGGCTTGGTACTTGCTGCGTGTCCAGGTC
CTGCAGCTGGTGGCAGCTTACCTTAGCCTCCCGTCAAACAACCTCTCACACTCCCTGTGGGAGCAGCTCTGTGCC
CAAGGCTGGCAGACACCTGAGATAGCTCTCATAGACTCCCATAAGCTCCTCCGAAGCATCATCCTCCTGCTGATG
GGCAGTGACATTCTCTCAACTCAGAAAGCAGCTGTGGAGACATCGTTTTTGGACTATGGTGAAAATCTGGTACAA
AAATGGCAGGTTCTTTCAGAGGTGCTGAGCTGCTCAGAGAAGCTGGTCTGCCACCTGGGCCGCCTGGGTAGTGTG
AGTGAAGCCAAGGCCTTTTGCTTGGAGGCCCTAAAACTTACAACAAAGCTGCAGATACCACGCCAGTGTGCCCTG
TTCCTGGTGCTGAAGGGCGAGCTGGAGCTGGCCCGCAATGACATTGATCTCTGTCAGTCGGACCTGCAGCAGGTT
CTGTTCTTGCTTGAGTCTTGCACAGAGTTTGGTGGGGTGACTCAGCACCTGGACTCTGTGAAGAAGGTCCACCTG
CAGAAGGGGAAGCAGCAGGCCCAGGTCCCCTGTCCTCCACAGCTCCCAGAGGAGGAGCTCTTCCTAAGAGGCCCT
GCTCTAGAGCTGGTGGCCACTGTGGCCAAGGAGCCTGGCCCCATAGCACCTTCTACAAACTCCTCCCCAGTCTTG
AAAACCAAGCCCCAGCCCATACCCAACTTCCTGTCCCATTCACCCACCTGTGACTGCTCGCTCTGCGCCAGCCCT

FIGURE 63B

GTCCTCACAGCAGTCTGTCTGCGCTGGGTATTGGTCACGGCAGGGGTGAGGCTGGCCATGGGCCACCAAGCCCAG
GGTCTGGATCTGCTGCAGGTCGTGCTGAAGGGCTGTCCTGAAGCCGCTGAGCGCCTCACCCAAGCTCTCCAAGCT
TCCCTGAATCATAAAACACCCCCCTCCTTGGTTCCAAGCCTCTTGGATGAGATCTTGGCTCAAGCATACACACTG
TTGGCACTGGAGGGCCTGAACCAGCCATCAAACGAGAGCCTGCAGAAGGTTCTACAGTCAGGGCTGAAGTTTGTA
GCAGCACGGATACCCCACCTAGAGCCCTGGCGAGCCAGCCTGCTCTTGATTTGGGCCCTCACAAAACTAGGTGGC
CTCAGCTGCTGTACTACCCAACTTTTTGCAAGCTCCTGGGGCTGGCAGCCACCATTAATAAAAAGTGTCCCTGGC
TCAGAGCCCTCTAAGACTCAGGGCCAAAAACGTTCTGGACGAGGGCGCCAAAAGTTAGCCTCTGCTCCCCTGAGC
CTCAATAATACCTCTCAGAAAGGTCTGGAAGGTAGAGGACTGCCCTGCACACCTAAACCCCCAGACCGGATCAGG
CAAGCTGGCCCTCATGTCCCCTTCACGGTGTTTGAGGAAGTCTGCCCTACAGAGAGCAAGCCTGAAGTACCCCAG
GCCCCCAGGGTACAACAGAGAGTCCAGACGCGCCTCAAGGTGAACTTCAGTGATGACAGTGACTTGGAAGACCCT
GTCTCAGCTGAGGCCTGGCTGGCAGAGGAGCCTAAGAGACGGGGCACTGCTTCCCGGGGCCGGGGGCGAGCAAGG
AAGGGCCTGAGCCTAAAGACGGATGCCGTGGTTGCCCCAGGTAGTGCCCCTGGGAACCCTGGCCTGAATGGCAGG
AGCCGGAGGGCCAAGAAGGTGGCATCAAGACATTGTGAGGAGCGGCGTCCCCAGAGGGCCAGTGACCAGGCCAGG
CCTGGCCCTGAGATCATGAGGACCATCCCTGAGGAAGAACTGACTGACAACTGGAGAAAAATGAGCTTTGAGATC
CTCAGGGGCTCTGACGGGGAAGACTCAGCCTCAGGTGGGAAGACTCCAGCTCCGGGCCCTGAGGCAGCTTCTGGA
GAATGGGAGCTGCTGAGGCTGGATTCCAGCAAGAAGAAGCTGCCCAGCCCATGCCCAGACAAGGAGAGTGACAAG
GACCTTGGTCCTCGGCTCCAGCTCCCCTCAGCCCCCGTAGCCACTGGTCTTTCTACCCTGGACTCCATCTGTGAC
TCCCTGAGTGTTGCTTTCCGGGGCATTAGTCACTGTCCTCCTAGTGGGCTCTATGCCCACCTCTGCCGCTTCCTG
GCCTTGTGCCTGGGCCACCGGGATCCTTATGCCACTGCTTTCCTTGTCACCGAGTCTGTCTCCATCACCTGTCGC
CACCAGCTGCTCACCCACCTCCACAGACAGCTCAGCAAGGCCCAGAAGCACCGAGGATCACTTGAAATAGCAGAC
CAGCTGCAGGGGCTGAGCCTTCAGGAGATGCCTGGAGATGTCCCCCTGGCCCGCATCCAGCGCCTCTTTTCCTTC
AGGGCTTTGGAATCTGGCCACTTCCCCCAGCCTGAAAAGGAGAGTTTCCAGGAGCGCCTGGCTCTGATCCCCAGT
GGGGTGACTGTGTGTGTGTTGGCCCTGGCCACCCTCCAGCCCGGAACCGTGGGCAACACCCTCCTGCTGACCCGG
CTGGAAAAGGACAGTCCCCCAGTCAGTGTGCAGATTCCCACTGGCCAGAACAAGCTTCATCTGCGTTCAGTCCTG
AATGAGTTTGATGCCATCCAGAAGGCACAGAAAGAGAACAGCAGCTGTACTGACAAGCGAGAATGGTGGACAGGG
CGGCTGGCACTGGACCACAGGATGGAGGTTCTCATCGCTTCCCTAGAGAAGTCTGTGCTGGGCTGCTGGAAGGGG
CTGCTGCTGCCGTCCAGTGAGGAGCCCGGCCCTGCCCAGGAGGCCTCCCGCCTACAGGAGCTGCTACAGGACTGT
GGCTGGAAATATCCTGACCGCACTCTGCTGAAAATCATGCTCAGTGGTGCCGGTGCCCTCACCCCTCAGGACATT
CAGGCCCTGGCCTACGGGCTGTGCCCAACCCAGCCAGAGCGAGCCCAGGAGCTCCTGAATGAGGCAGTAGGACGT
CTACAGGGCCTGACAGTACCAAGCAATAGCCACCTTGTCTTGGTCCTAGACAAGGACTTGCAGAAGCTGCCGTGG
GAAAGCATGCCCAGCCTCCAAGCACTGCCTGTCACCCGGCTGCCCTCCTTCCGCTTCCTACTCAGCTACTCCATC
ATCAAAGAGTATGGGGCCTCGCCAGTGCTGAGTCAAGGGGTGGATCCACGAAGTACCTTCTATGTCCTGAACCCT
CACAATAACCTGTCAAGCACAGAGGAGCAATTTCGAGCCAATTTCAGCAGTGAAGCTGGCTGGAGAGGAGTGGTT
GGGGAGGTGCCAAGACCTGAACAGGTGCAGGAAGCCCTGACAAAGCATGATTTGTATATCTATGCAGGGCATGGG
GCTGGTGCCCGCTTCCTTGATGGGCAGGCTGTCCTGCGGCTGAGCTGTCGGGCAGTGGCCCTGCTGTTTGGCTGT
AGCAGTGCGGCCCTGGCTGTGCATGGAAACCTGGAGGGGGCTGGCATCGTGCTCAAGTACATCATGGCTGGTTGC
CCCTTGTTTCTGGGTAATCTCTGGGATGTGACTGACCGCGACATTGACCGCTACACGGAAGCTCTGCTGCAAGGC
TGGCTTGGAGCAGGCCCAGGGGCCCCCCTTCTCTACTATGTAAACCAGGCCCGCCAAGCTCCCCGACTCAAGTAT
CTTATTGGGGCTGCACCTATAGCCTATGGCTTGCCTGTCTCTCTGCGG**TAA**CCCCATGGAGCTGTCTTATTGATG
CTAGAAGCCTCATAACTGTTCTACCTCCAAGGTTAGATTTAATCCTTAGGATAACTCTTTTAAAGTGATTTTCCC
CAGTGTTTTATATGAAACATTTCCTTTTGATTTAACCTCAGTATAATAAAGATACATCATTT

FIGURE 64

MEAPSPPLRALYESCQFFLSGLERGTKRRYRLDAILSLFAFLGGYCSLLQQLRDDGVYGGSSKQQQSFLQMYFQG
LHLYTVVVYDFAQGCQIVDLADLTQLVDSCKSTVVWMLEALEGLSGQELTDHMGMTASYTSNLAYSFYSHKLYAE
ACAISEPLCQHLGLVKPGTYPEVPPEKLHRCFRLQVESLKKLGKQAQGCKMVILWLAALQPCSPEHMAEPVTFWV
RVKMDAARAGDKELQLKTLRDSLSGWDPETLALLLREELQAYKAVRADTGQERFNIICDLLELSPEETPAGAWAR
ATHLVELAQVLCYHDFTQQTNCSALDAIREALQLLDSVRPEAQARDQLLDDKAQALLWLYICTLEAKIQEGIERD
RRAQAPGNLEEFEVNDLNYEDKLQEDRFLYSNIAFNLAADAAQSKCLDQALALWKELLTKGQAPAVRCLQQTAAS
LQILAALYQLVAKPMQALEVLLLLRIVSERLKDHSKAAGSSCHITQLLLTLGCPSYAQLHLEEAASSLKHLDQTT
DTYLLLSLTCDLLRSQLYWTHQKVTKGVSLLLSVLRDPALQKSSKAWYLLRVQVLQLVAAYLSLPSNNLSHSLWE
QLCAQGWQTPEIALIDSHKLLRSIILLLMGSDILSTQKAAVETSFLDYGENLVQKWQVLSEVLSCSEKLVCHLGR
LGSVSEAKAFCLEALKLTTKLQIPRQCALFLVLKGELELARNDIDLCQSDLQQVLFLLESCTEFGGVTQHLDSVK
KVHLQKGKQQAQVPCPPQLPEEELFLRGPALELVATVAKEPGPIAPSTNSSPVLKTKPQPIPNFLSHSPTCDCSL
CASPVLTAVCLRWVLVTAGVRLAMGHQAQGLDLLQVVLKGCPEAAERLTQALQASLNHKTPPSLVPSLLDEILAQ
AYTLLALEGLNQPSNESLQKVLQSGLKFVAARIPHLEPWRASLLLIWALTKLGGLSCCTTQLFASSWGWQPPLIK
SVPGSEPSKTQGQKRSGRGRQKLASAPLSLNNTSQKGLEGRGLPCTPKPPDRIRQAGPHVPFTVFEEVCPTESKP
EVPQAPRVQQRVQTRLKVNFSDDSDLEDPVSAEAWLAEEPKRRGTASRGRGRARKGLSLKTDAVVAPGSAPGNPG
LNGRSRRAKKVASRHCEERRPQRASDQARPGPEIMRTIPEEELTDNWRKMSFEILRGSDGEDSASGGKTPAPGPE
AASGEWELLRLDSSKKKLPSPCPDKESDKDLGPRLQLPSAPVATGLSTLDSICDSLSVAFRGISHCPPSGLYAHL
CRFLALCLGHRDPYATAFLVTESVSITCRHQLLTHLHRQLSKAQKHRGSLEIADQLQGLSLQEMPGDVPLARIQR
LFSFRALESGHFPQPEKESFQERLALIPSGVTVCVLALATLQPGTVGNTLLLTRLEKDSPPVSVQIPTGQNKLHL
RSVLNEFDAIQKAQKENSSCTDKREWWTGRLALDHRMEVLIASLEKSVLGCWKGLLLPSSEEPGPAQEASRLQEL
LQDCGWKYPDRTLLKIMLSGAGALTPQDIQALAYGLCPTQPERAQELLNEAVGRLQGLTVPSNSHLVLVLDKDLQ
KLPWESMPSLQALPVTRLPSFRFLLSYSIIKEYGASPVLSQGVDPRSTFYVLNPHNNLSSTEEQFRANFSSEAGW
RGVVGEVPRPEQVQEALTKHDLYIYAGHGAGARFLDGQAVLRLSCRAVALLFGCSSAALAVHGNLEGAGIVLKYI
MAGCPLFLGNLWDVTDRDIDRYTEALLQGWLGAGPGAPLLYYVNQARQAPRLKYLIGAAPIAYGLPVSLR

FIGURE 65A

ATCTCACTGAGGACCAACCTTTCGACATTCTTCAGAAATCCTTGCAAGAGGCCAATATCACTGAACAGACATTGG
CAGAAGAGGCATATTTGGATGCCAGTATAGGTTCAAGCCAACAGTTTGCACAAGCTCAGCTTCATCCTTCTTCAT
CAGCATCCTTTACTCAGGCTTCTAATGTTTCTAATTACTCAGGTCAGACGCTGCAGCCTATAGGGGTGACGCATG
TGCCTGTTGGAGCATCGTTTGCAAGCAATACAGTGGGTGTACAACATGGCTTTATGCAACATGTGGGGATCAGTG
TTCCCAGCCAGCATTTGTCTAATAGCAGTCAGATTAGTGGTTCTGGTCAAATACAGTTAATTGGGTCATTTGGTA
ATCATCCTTCCATGATGACTATTAATAACCTAGATGGATCTCAAATCATATTAAAGGGCAGCGGGCAGCAAGCCC
CATCAAATGTGAGTGGAGGGCTCCTGGTTCATAGACAGACTCCTAATGGCAACTCCTTGTTTGGGAACTCTAGTT
CCAGTCCAGTAGCACAGCCTGTTACCGTTCCATTTAACAGCACAAATTTTCAAACATCTTTACCTGTGCATAACA
TCATCATACAAAGGGGTCTTGCACCAAATTCAAATAAAGTCCCAATTAATATACAGCCAAAGCCTATCCAGATGG
GTCAGCAAAATACATACAATGTGAACAATTTGGGAATTCAGCAGCACCACGTACAACAAGGGATCTCTTTTGCTT
CTGCAAGCTCACCCCAGGGCTCAGTAGTTGGTCCACACATGTCTGTGAACATTGTAAACCAACAGAACACAAGAA
AGCCAGTCACCTCACAGGCAGTGAGCAGCACTGGGGGCAGTATTGTTATTCATTCCCCCATGGGCCAACCTCACG
CACCCCAAAGTCAGTTCCTTATACCTACAAGCCTTTCTGTCAGTTCCAACTCGGTACACCACGTCCAGACTATAA
ATGGGCAACTTCTTCAAACTCAACCCTCTCAGCTCATTTCTGGCCAAGTGGCCTCAGAGCATGTCATGTTGAACA
GAAACTCTTCCAACATGCTCAGGACCAACCAACCATATACTGGACCGATGCTTAACAACCAGAATACTGCTGTCC
ACTTAGTGTCTGGGCAGACATTTGCTGCCTCTGGAAGTCCAGTGATAGCCAATCATGCCTCTCCTCAGCTTGTGG
GTGGACAGATGCCCTTGCAGCAGGCATCCCCAACTGTATTACACCTGTCACCTGGGCAGAGCAGCGTTTCCCAAG
GAAGACCTGGCTTCGCCACCATGCCATCGGTGACAAGCATGTCAGGACCTAGTCGGTTCCCTGCTGTCAGCTCAG
CCAGCACTGCCCATCCTAGTCTTGGGTCTGCAGTTCAGTCTGGTTCATCAGGATCAAACTTTACAGGAGATCAGC
TGACCCAGCCAAACAGGACTCCAGTACCAGTCAGTGTGTCTCATCGTCTTCCAGTTTCTTCTTCCAAGTCTACCA
GCACCTTCAGTAACACACCTGGAACAGGAACCCAGCAACAATTCTTCTGCCAGGCTCAGAAAAAATGTCTGAATC
AGACTTCCCCCATTTCTGCTCCCAAGACCACAGACGGCCTGAGGCAAGCACAGATCCCTGGGCTCTTGAGCACCA
CACTGCCAGGGCAGGATTCTGGAAGCAAAGTTATATCCGCATCCTTAGGAACCGCACAACCACAGCAGGAAAAAG
TAGTTGGATCATCTCCTGGCCATCCAGCTGTGCAGGTGGAGAGTCATTCGGGAGGACAAAAAAGGCCTGCTGCGA
AACAGCTAACGAAAGGAGCTTTCATTCTCCAGCAGTTGCAGAGGGACCAAGCCCACACTGTGACACCAGACAAAA
GTCACTTCCGATCACTAAGTGATGCGGTACAGAGACTGCTCTCCTACCACGTGTGCCAGGGCTCCATGCCCACTG
AAGAAGACTTGAGAAAAGTGGACAATGAATTTGAGACAGTTGCCACTCAGCTCCTAAAAAGGACCCAAGCTATGC
TTAACAAATACAGATGCCTGCTCCTAGAAGATGCCATGCGAATCAATCCCTCTGCTGAGATGGTGATGATCGATA
GGATGTTCAACCAGGAGGAAAGAGCTTCCCTGTCCCGAGACAAGCGTTTGGCACTTGTAGACCCTGAGGGTTTTC
AGGCTGATTTCTGTTGTTCCTTCAAACTTGATAAAGCTGCTCATGAGACACAGTTTGGCCGGAGTGACCAGCATG
GCAGTAAAGCAAGCAGCTCTCTGCAACCGCCAGCCAAGGCCCAAGGCAGAGACCGAGCCAAAACCGGTGTGACGG
AACCCATGAATCATGACCAGTTTCATCTAGTGCCTAATCACATCGTGGTCTCTGCAGAAGGAAACATTTCTAAAA
AAACAGAATGCCTTGGCAGAGCACTGAAATTTGACAAAGTGGGCTTAGTGCAGTACCAGAGCACGTCTGAAGAGA
AGGCCAGCCGGAGAGAGCCTCTGAAGGCCAGTCAGTGCTCTCCCGGCCCTGAGGGGCACCGGAAAACCTCATCCA
GATCGGATCATGGTACTGAGAGCAAACTGTCAAGCATCCTAGCAGATTCGCACTTGGAGATGACGTGTAACAATT
CCTTCCAGGACAAAAGTCTGAGGAATTCTCCAAAGAATGAAGTTTTACACACAGACATCATGAAAGGGTCAGGCG
AACCCCAGCCAGATCTCCAGCTGACAAAGAGCTTGGAAACCACATTTAAGAACATCTTGGAACTCAAAAAGGCGG
GACGGCAGCCCCAGAGTGACCCCACGGTTAGCGGCTCTGTTGAGTTAGATTTCCCCAACTTTTCTCCTATGGCTT
CACAGGAAAACTGCCTGGAAAAGTTCATCCCGGACCACAGTGAAGGTGTTGTAGAAACTGACTCCATTTTAGAAG
CAGCTGTAAATAGTATCCTAGAGTGT**TAA**TAGCAGCAGTCCTCCCCCTACCCCGCCCCGAGACCCCACCCCGAGA
CCCCACCCCGGACCAGTTACATTCGTTCCTGGCAAAAGCAAATGGAAATGGTCTCCTGTCTCCAGCCTGCTTGAT
CTTTCATCACAGGTTATTCTTTCTAATCTCAATCCTGTTCTTTGTTTAAGAGCAATACTTGTCGTGATTACAGGG
AGATCCTTTAGTAAAATTAATCCTTGGCAGAAAGCAGTCTGATAGGCCCCACTCATTTCAAGTGTTATGAAAGTG
CTTATAGGCATTTTGTTTATTTGTTTTGTTTTTTAAAAACACTGTAACTCAATGAGACCACAGTATACTTGGCCC
TTGGTAAAATTTTGACAATCATAAGTCATTTGAAAAGAACAGACTTACTAAAATCAAACGAGACGGATAGAAGCT
ACTTTTTAAAGAATATCCCACTGCATCTGCAAATTTAGTTTTGGGTTTTTTTATTATTATTATTTTGAGTTTTTT
TGTGTGTGTTTTGTTGTTATTGTTGAGGGGAAGACCACATGGTTCTTCCCCCTCAGCCATCTTTGAGCAGTAAAT
TGCTGGCTGTGCTGCCAGGGACCCGCAGCCCTGGTGGAAAAGCCAGTAGCACATACGCAGGGCATTGCAGGGCTT

FIGURE 65B

CCCTATTGATGGTTCAAGTGCTTTTCTGATGCTTCCGGAGCAAAACCTCATGCTTTTAGGCATATCTATGTTGAA
TTTCACCTAGGGAATGTTCTGTTCTTAGTTACAGCAGCAAAATTTGAAATAATTTCACCAGGCTAAATAAAGGAA
AATGGAAACCAGTTAAGAGGCACAGTGTACAGAGGAGGCCGGGATAGAGCCATGAGGGTTATAATATTAATATGT
ATATATGTAAAAGCATATATATGTTAACTATTGAGAAAAAACAAGTTTTGCATTTTATAATTGGATATAGTCAAC
ATATAATGTATGTTTTTGTTTGTTGCTGGATTTTGTTTCATTTAACCTCTCTTTGCACCCTCTCCCACAACAAAT
ACCAAGCATCAAAAGCACTTTCATTTGAAAATTATTATGTTGTAATTTTTCAGTTTAAACTTTAAGGAGACTCTG
GCCTTGTTTATGCTTCTTGTCTGAGAACAGTAGTGACCCCTGGCAGCAATTCATTACCAAAACACAGACAAACCA
AAGGTAACCAGCTAGCCCACCACTGAAAGGAAAGATCTGAGACATGGGATTCCCATTTGAGAGCCAAAGGATATG
CCCTGTCATGGTTTCTGTTTGGCCTGTGTTCATATTAGTGAGCATGGCTTACTGCTTTTTTTTTTTTTTTTTTT
GTCAGGGAGTATTCTCCGTTTTCCTTTCTCGTATACCTGCCCCAGGTTATCCCATTTCTGTTGTTACCTTTATTC
TTAATGTCATTGTAACCATCACTTATCTCCTCTCATTGGGAAAGCTACATGATAGTATTTTTATGCACTCTTCTC
CCACACATACACACACGTGCATGTATCTGAGCTGCTCGGATCCAGAGGTCATTTTTGTTACAGTGTGTGCACACT
CACTCTCCTTCTTAGTGTGCATACTCTCTCATTTATTCTGTTTATCTCCCTGGCTCTGGAGGTGCAGCCACTGGT
CTTCACTTTAATGTGTTGCCAGAATCTGCTTCTGGCTGTCGCCAACATGGGGATGACCCCCATTGTCATCATGTT
GGGCATTTCTTTTCCAGATTGGCCTGTGATGGAAAGGAAGGCTTCTAATTAGAAAACACAGCAACAGAAGACCTA
TACCCCGGTGCCCCTGTGTCCCACTACACACAGAAAACCCTGTGAGATGGCCAGTCTTCATAATAGCAACGTACC
TTCACCCCAGCCACATGCCCCAGCCAATACAAATTGGAAAATCTGGCCCATTTTAGGGTTACCATTTTTTCCTTA
TTTGTGCCAATGTCCAAGTTGCAGATTTCCCCTTTTTCCTGTATTGTAACATATTAGATAAGTTGGTGTCGCCAG
TTGGTACTTTCTGTTTGGGTAGTCCTAGGGTAACACCCTGCCCTAAACTCCATGATTTCATAGGCTTTTCTTCCC
TTGGGGCTCATGCTCCCCTAATTCCTAGCAAGATGATCCTTCCTAATCAAATTCTTCTCATTGCAGAACTTTATC
CCTGGAAGCCTTCATGTGGGCTGCTAGTGAGTTACATTAATTACTGCAAATCAGTGGAATTCTCAAGAGACAAGA
TAAGCTTCATGTACATTTGTCACCTCTCTTTCTTCCCTATCCTGCCCTGCTGTCCCAATCCTAGCTTTTCTATAT
ACCATCTTAAAGGGTTTTTAAGCCCTAACACTTGTCTAGCAAATGGAGAGCCTAATTTACCAAAATGAAACTTGT
AAATTTTTGTGTCATTGTATGTAAGTTTACTTTTTATGGAGGAAGGATTCTAGATAATGACAAATGAAGATTATG
ACATGTATTTCACTCCTGTGATTAGGTTCTACGCACATGGGTCATAACTCGCATGTCGAGCCCCCTCTAGTGAAG
GGTAGGAGAGCTCAGCCTCGGATGGCCAACATTCAGTTGTTCAGGTTCATTCGTCAAAGTTAAGTTTTAGAACTA
TTTGTACTCAGTAACAAAAATCATTTTCTTTTTTTTTTTTTTTTTCTGTTGTGGAAAAGCGTGAATTTGTTATTA
AGCATTTGATTTTCTGTGTCCTTAAGTACTTCCTGAAGATGAAGCAAAATTTTAATCTGGCAATTATGAAAAAGA
AATATTTTAGCTCTGAAGGATTTAGTAGATTCTGTTAGATTAGGGAGGCCTTACAGACTGACTTTACTTAAAGAG
GACGCGTCACTCGCTGTCAGTGTGGTGTGGGCTTTATTTGCTTAAATACCTTCATTTGTATAGTACGTCTCACTT
GAAATTGCTTTGTATACATTTTGTAAAAATATTTATAAAATGTTTTGTAAAAAAAAAAAAACTATAACAAATTGC
AGTTTATTTTGTTATGTTGGATAAATACTGTTAAAAGAAACCAGTCAGTAACTATATTGTTAATCCATGGTTAGG
AAATGTTTAGTTGGAGATTACAAATTGAAACAACCATTGCAATACAGCCAAAGATTTGGG

FIGURE 66

LTEDQPFDILQKSLQEANITEQTLAEEAYLDASIGSSQQFAQAQLHPSSSASFTQASNVSNYSGQTLQPIGVTHV
PVGASFASNTVGVQHGFMQHVGISVPSQHLSNSSQISGSGQIQLIGSFGNHPSMMTINNLDGSQIILKGSGQQAP
SNVSGGLLVHRQTPNGNSLFGNSSSSPVAQPVTVPFNSTNFQTSLPVHNIIIQRGLAPNSNKVPINIQPKPIQMG
QQNTYNVNNLGIQQHHVQQGISFASASSPQGSVVGPHMSVNIVNQQNTRKPVTSQAVSSTGGSIVIHSPMGQPHA
PQSQFLIPTSLSVSSNSVHHVQTINGQLLQTQPSQLISGQVASEHVMLNRNSSNMLRTNQPYTGPMLNNQNTAVH
LVSGQTFAASGSPVIANHASPQLVGGQMPLQQASPTVLHLSPGQSSVSQGRPGFATMPSVTSMSGPSRFPAVSSA
STAHPSLGSAVQSGSSGSNFTGDQLTQPNRTPVPVSVSHRLPVSSSKSTSTFSNTPGTGTQQQFFCQAQKKCLNQ
TSPISAPKTTDGLRQAQIPGLLSTTLPGQDSGSKVISASLGTAQPQQEKVVGSSPGHPAVQVESHSGGQKRPAAK
QLTKGAFILQQLQRDQAHTVTPDKSHFRSLSDAVQRLLSYHVCQGSMPTEEDLRKVDNEFETVATQLLKRTQAML
NKYRCLLLEDAMRINPSAEMVMIDRMFNQEERASLSRDKRLALVDPEGFQADFCCSFKLDKAAHETQFGRSDQHG
SKASSSLQPPAKAQGRDRAKTGVTEPMNHDQFHLVPNHIVVSAEGNISKKTECLGRALKFDKVGLVQYQSTSEEK
ASRREPLKASQCSPGPEGHRKTSSRSDHGTESKLSSILADSHLEMTCNNSFQDKSLRNSPKNEVLHTDIMKGSGE
PQPDLQLTKSLETTFKNILELKKAGRQPQSDPTVSGSVELDFPNFSPMASQENCLEKFIPDHSEGVVETDSILEA
AVNSILEC

FIGURE 67

CCCCTGCCCGCCCGACAGCGCCGCCGCCTGCCCCGCC**ATG**GGTCGACAGAAGGAGCTGGTGTCCCGCTGCGGGGA
GATGCTCCACATCCGCTACCGGCTGCTCCGACAGGCGCTGGCCGAGTGCCTGGGGACCCTCATCCTGGTGATGTT
TGGCTGTGGCTCCGTGGCCCAGGTTGTGCTCAGCCGGGGCACCCACGGTGGTTTCCTCACCATCAACCTGGCCTT
TGGCTTTGCTGTCACTCTGGGCATCCTCATCGCTGGCCAGGTCTCTGGGGCCCACCTGAACCCTGCCGTGACCTT
TGCCATGTGCTTCCTGGCTCGTGAGCCCTGGATCAAGCTGCCCATCTACACCCTGGCACAGACGCTGGGAGCCTT
CTTGGGTGCTGGAATAGTTTTTGGGCTGTATTATGATGCAATCTGGCACTTCGCCGACAACCAGCTTTTTGTTTC
GGGCCCCAATGGCACAGCCGGCATCTTTGCTACCTACCCCTCTGGACACTTGGATATGATCAATGGCTTCTTTGA
CCAGTTCATAGGCACAGCCTCCCTTATCGTGTGTGTGCTGGCCATTGTTGACCCCTACAACAACCCCGTCCCCCG
AGGCCTGGAGGCCTTCACCGTGGGCCTGGTGGTCCTGGTCATTGGCACCTCCATGGGCTTCAACTCCGGCTATGC
CGTCAACCCTGCCCGGGACTTTGGCCCCCGCCTTTTTACAGCCCTTGCGGGCTGGGGCTCTGCAGTCTTCACGAC
CGGCCAGCATTGGTGGTGGGTGCCCATCGTGTCCCCACTCCTGGGCTCCATTGCGGGTGTCTTCGTGTACCAGCT
GATGATCGGCTGCCACCTGGAGCAGCCCCCACCCTCCAACGAGGAAGAGAATGTGAAGCTGGCCCATGTGAAGCA
CAAGGAGCAGATC**TGA**GTGGGCAGGGGCCATCTCCCCACTCCGCTGCCCTGGCCTTGAGCATCCACTGACTGTCC
AAGGGCCACTCCCAAGAAGCCCCCTTCACGATCCACCCTTTCAGGCTAAGGAGCTCCCTATCTACCCTCACCCCA
CGAGACAGCCCCTTCAGGATTTCCACTGGACCTTGCCCAAATAGCACCTTAGGCCACTGCCCCTAAGCTGGGGTG
GAACCGGAATTTGGGTCAATACATCCTTTTGTCTCCCAAGGGAAGAGAATGGGCAGCAGGTATGTGTGTGTGTGC
ATGTGTGTGCATGTGTGTGCATGTGTGTGCAGGGGTGTGTGTGTGTGGGGGGGGTTCCCAGATATTCAGGGCAAG
GGACCAGTCGGAAGGGATTCTGGCTATTGGGGGAGCCCAGAGACAGGGGAAGGCAGCCTGTCCATCTGTGCATAA
GGAGAGGAAAGTTCCAGGGTGTGTATGTTTCAGGGGCTTCACATGGAGGAGCTGCAGATAGATATGTGTTTCTGT
GTATGTGTATGTCTGCCTTTTTTTCTAAGTGGGGGCTTCTACAGGCTTTTGGGAAGTAGGGTGGATGTGGGTAGG
GCTGGGAGGAGGGGGCCACAGCTTAGGTTTGGAGCTCTGGATGTACATACATAAGTAGGAGCAGTGGGACGTGTT
TCTGTCATAATGCAGGCATGAAGGGTGGAGTGAAGTCAGGTCATAAGTTTCATGTTTGCTTTTGTTTTGTTTTGT
TTTTAATGTATGTAGCAGATGTTACAGTCTTAGGGATCCGGGATGGGAGACCCCACTTTAGAAAGGGTCGTCACT
CCTTTAATCCTCTACTCAACAATGTACTCTTTTACTTTTATATTAAAAAAAATAAAATAAATATGTGCCTAAAAA
AAAAAAAAAA

FIGURE 68

MGRQKELVSRCGEMLHIRYRLLRQALAECLGTLILVMFGCGSVAQVVLSRGTHGGFLTINLAFGFAVTLGILIAG
QVSGAHLNPAVTFAMCFLAREPWIKLPIYTLAQTLGAFLGAGIVFGLYYDAIWHFADNQLFVSGPNGTAGIFATY
PSGHLDMINGFFDQFIGTASLIVCVLAIVDPYNNPVPRGLEAFTVGLVVLVIGTSMGFNSGYAVNPARDFGPRLF
TALAGWGSAVFTTGQHWWWVPIVSPLLGSIAGVFVYQLMIGCHLEQPPPSNEEENVKLAHVKHKEQI

FIGURE 69

CTCGCTGCGCCACCGCCTCCCGCCACCCCTGCCCGCCCGACAGCGCCGCCGCCTGCCCCGCCATGGGTCGACAGA
AGGAGCTGGTGTCCCGCTGCGGGGAGATGCTCCACATCCGCTACCGGCTGCTCCGACAGGCGCTGGCCGAGTGCC
TGGGGACCCTCATCCTGGTGATGTTTGGCTGTGGCTCCGTGGCCCAGGTTGTGCTCAGCCGGGGCACCCACGGTG
GTTTCCTCACCATCAACCTGGCCTTTGGCTTTGCTGTCACTCTGGGCATCCTCATCGCTGGCCAGGTCTCTGGGG
CCCACCTGAACCCTGCCGTGACCTTTGCCATGTGCTTCCTGGCTCGTGAGCCCTGGATCAAGCTGCCCATCTACA
CCCTGGCACAGACGCTGGGAGCCTTCTTGGGTGCTGGAATAGTTTTTGGGCTGTATTATGATGCAATCTGGCACT
TCGCCGACAACCAGCTTTTTGTTTCGGGCCCCAATGGCACAGCCGGCATCTTTGCTACCTACCCCTCTGGACACT
TGGATATGATCAATGGCTTCTTTGACCAGTTCATAGGCACAGCCTCCCTTATCGTGTGTGTGCTGGCCATTGTTG
ACCCCTACAACAACCCCGTCCCCCGAGGCCTGGAGGCCTTCACCGTGGGCCTGGTGGTCCTGGTCATTGGCACCT
CCATGGGCTTCAACTCCGGCTATGCCGTCAACCCTGCCCGGGACTTTGGCCCCCGCCTTTTTACAGCCCTTGCGG
GCTGGGGCTCTGCAGTCTTCACGACCGGCCAGCATTGGTGGTGGGTGCCCATCGTGTCCCCACTCCTGGGCTCCA
TTGCGGGTGTCTTCGTGTACCAGCTGATGATCGGCTGCCACCTGGAGCAGCCCCCACCCTCCAACGAGGAAGAGA
ATGTGAAGCTGGCCCATGTGAAGCACAAGGAGCAGATCTGAGTGGGCAGGGGCCATCTCCCCACTCCGCTGCCCT
GGCCTTGAGCATCCACTGACTGTCCAAGGGCCACTCCCAAGAAGCCCCCTTCACGATCCACCCTTTCAGGCTAAG
GAGCTCCCTATCTACCCTCACCCCACGAGACAGCCCCTTCAGGATTTCCACTGGACCTTGCCCAAATAGCACCTT
AGGCCACTGCCCCTAAGCTGGGGTGGAACCGGAATTTGGGTCAATACATCCTTTTGTCTCCCAAGGGAAGAGAAT
GGGCAGCAGGTATGTGTGTGTGTGCATGTGTGTGCATGTGTGTGCATGTGTGTGCAGGGGTGTGTGTGTGTGGGG
GGGGTTCCCAGATATTCAGGGCAAGGGACCAGTCGGAAGGGATTCTGGCTATTGGGGGAGCCCAGAGACAGGGGA
AGGCAGCCTGTCCATCTGTGCATAAGGAGAGGAAAGTTCCAGGGTGTGTATGTTTCAGGGGCTTCACATGGAGGA
GCTGCAGATAGATATGTGTTTCTGTGTATGTGTATGTCTGCCTTTTTTTCTAAGTGGGGGCTTCTACAGGCTTTT
GGGAAGTAGGGTGGATGTGGGTAGGGCTGGGAGGAGGGGGCCACAGCTTAGGTTTGGAGCTCTGGATGTACATAC
ATAAGTAGGAGCAGTGGGACGTGTTTCTGTCATAATGCAGGCATGAAGGGTGGAGTGAAGTCAGGTCATAAGTTT
CATGTTTGCTTTTGTTTTGTTTTGTTTTTAATGTATGTAGCAGATGTTACAGTCTTAGGGATCCGGGATGGGAGA
CCCCACTTTAGAAAGGGTCGTCACTCCTTTAATCCTCTACTCAACAATGTACTCTTTTACTTTTATATTAAAAAA
AATAAAATAAATATGTGCCTAAAAAAAAAAAAAAA

FIGURE 70

MGRQKELVSRCGEMLHIRYRLLRQALAECLGTLILVMFGCGSVAQVVLSRGTHGGFLTINLAFGFAVTLGILIAG
QVSGAHLNPAVTFAMCFLAREPWIKLPIYTLAQTLGAFLGAGIVFGLYYDAIWHFADNQLFVSGPNGTAGIFATY
PSGHLDMINGFFDQFIGTASLIVCVLAIVDPYNNPVPRGLEAFTVGLVVLVIGTSMGFNSGYAVNPARDFGPRLF
TALAGWGSAVFTTGQHWWWVPIVSPLLGSIAGVFVYQLMIGCHLEQPPPSNEEENVKLAHVKHKEQI

FIGURE 71A

CAGCCCGAGCCCGAGCCCGAGCCCGAGCCGGCGCCACCGCGCCCCCGGCCATGGCTTTTGCCAATTTCCGCCGCA
TCCTGCGCCTGTCTACCTTCGAGAAGAGAAAGTCCCGCGAATATGAGCACGTCCGCCGCGACCTGGACCCCAACG
AGGTGTGGGAGATCGTGGGCGAGCTGGGCGACGGCGCCTTCGGCAAGGTTTACAAGGCCAAGAATAAGGAGACGG
GTGCTTTGGCTGCGGCCAAAGTCATTGAAACCAAGAGTGAGGAGGAGCTGGAGGACTACATCGTGGAGATTGAGA
TCCTGGCCACCTGCGACCACCCCTACATTGTGAAGCTCCTGGGAGCCTACTATCACGACGGGAAGCTGTGGATCA
TGATTGAGTTCTGTCCAGGGGGAGCCGTGGACGCCATCATGCTGGAGCTGGACAGAGGCCTCACGGAGCCCCAGA
TACAGGTGGTTTGCCGCCAGATGCTAGAAGCCCTCAACTTCCTGCACAGCAAGAGGATCATCCACCGAGATCTGA
AAGCTGGCAACGTGCTGATGACCCTCGAGGGAGACATCAGGCTGGCTGACTTTGGTGTGTCTGCCAAGAATCTGA
AGACTCTACAGAAACGAGATTCCTTCATCGGCACGCCTTACTGGATGGCCCCCGAGGTGGTCATGTGTGAGACCA
TGAAAGACACGCCCTACGACTACAAAGCCGACATCTGGTCCCTGGGCATCACGCTGATTGAGATGGCCCAGATCG
AGCCGCCACACCACGAGCTCAACCCCATGCGGGTCCTGCTAAAGATCGCCAAGTCAGACCCTCCCACGCTGCTCA
CGCCCTCCAAGTGGTCTGTAGAGTTCCGTGACTTCCTGAAGATAGCCCTGGATAAGAACCCAGAAACCCGACCCA
GTGCCGCGCAGCTGCTGGAGCATCCCTTCGTCAGCAGCATCACCAGTAACAAGGCTCTGCGGGAGCTGGTGGCTG
AGGCCAAGGCCGAGGTGATGGAAGAGATCGAAGACGGCCGGGATGAGGGGGAAGAGGAGGACGCCGTGGATGCCG
CCTCCACCCTGGAGAACCATACTCAGAACTCCTCTGAGGTGAGTCCGCCAAGCCTCAATGCTGACAAGCCTCTCG
AGGAGTCACCTTCCACCCCGCTGGCACCCAGCCAGTCTCAGGACAGTGTGAATGAGCCCTGCAGCCAGCCCTCTG
GGGACAGATCCCTCCAAACCACCAGTCCCCCAGTCGTGGCCCCTGGAAATGAGAACGGCCTGGCAGTGCCTGTGC
CCCTGCGGAAGTCCCGACCCGTGTCAATGGATGCCAGAATTCAGGTAGCCCAGGAGAAGCAAGTTGCTGAGCAGG
GTGGGGACCTCAGCCCAGCAGCCAACAGATCTCAAAAGGCCAGCCAGAGCCGGCCCAACAGCAGCGCCCTGGAGA
CCTTGGGTGGGGAGAAGCTGGCCAATGGCAGCCTGGAGCCACCTGCCCAGGCAGCTCCAGGGCCTTCCAAGAGGG
ACTCGGACTGCAGCAGCCTCTGCACCTCTGAGAGCATGGACTATGGTACCAATCTCTCCACTGACCTGTCGCTGA
ACAAAGAGATGGGCTCTCTGTCCATCAAGGACCCGAAACTGTACAAAAAAACCCTCAAGCGGACACGCAAATTTG
TGGTGGATGGTGTGGAGGTGAGCATCACCACCTCCAAGATCATCAGCGAAGATGAGAAGAAGGATGAGGAGATGA
GATTTCTCAGGCGCCAGGAACTCCGAGAGCTTCGGCTGCTCCAGAAAGAAGAGCATCGGAACCAGACCCAGCTGA
GTAACAAGCATGAGCTGCAGCTGGAGCAAATGCATAAACGTTTTGAACAGGAAATCAACGCCAAGAAGAAGTTCT
TTGACACGGAATTAGAGAACCTGGAGCGTCAGCAAAAGCAGCAAGTGGAGAAGATGGAGCAAGACCATGCCGTGC
GCCGCCGGGAGGAGGCCAGGCGGATCCGCCTGGAGCAGGATCGGGACTACACCAGGTTCCAAGAGCAGCTCAAAC
TGATGAAGAAAGAGGTGAAGAACGAGGTGGAGAAGCTCCCCCGACAGCAGCGGAAGGAAAGCATGAAGCAGAAGA
TGGAGGAGCACACGCAGAAAAAGCAGCTTCTTGACCGGGACTTTGTAGCCAAGCAGAAGGAGGACCTGGAGCTGG
CCATGAAGAGGCTCACCACCGACAACAGGCGGGAGATCTGTGACAAGGAGCGCGAGTGCCTCATGAAGAAGCAGG
AGCTCCTTCGAGACCGGGAAGCAGCCCTGTGGGAGATGGAAGAGCACCAGCTGCAGGAGAGGCACCAGCTGGTGA
AGCAGCAGCTCAAAGACCAGTACTTCCTCCAGCGGCACGAGCTGCTGCGCAAGCATGAGAAGGAGCGGGAGCAGA
TGCAGCGCTACAACCAGCGCATGATAGAGCAGCTGAAGGTGCGGCAGCAACAGGAAAAGGCGCGGCTGCCCAAGA
TCCAGAGGAGTGAGGGCAAGACGCGCATGGCCATGTACAAGAAGAGCCTCCACATCAACGGCGGGGGCAGCGCAG
CTGAGCAGCGTGAGAAGATCAAGCAGTTCTCCCAGCAGGAGGAGAAGAGGCAGAAGTCGGAGCGGCTGCAGCAAC
AGCAGAAACACGAGAACCAGATGCGGGACATGCTGGCGCAGTGTGAGAGCAACATGAGCGAGCTGCAGCAGCTGC
AGAATGAAAAGTGCCACCTCCTGGTAGAGCACGAAACCCAGAAACTGAAGGCCCTGGATGAGAGCCATAACCAGA
ACCTGAAGGAATGGCGGGACAAGCTTCGGCCGCGCAAGAAGGCTCTGGAAGAGGATCTGAACCAGAAGAAGCGGG
AGCAGGAGATGTTCTTCAAGCTGAGCGAGGAGGCGGAGTGCCCAAACCCCTCCACCCCAAGCAAGGCCGCCAAGT
TCTTCCCCTACAGTTCTGCGGATGCTTCTTAACAACCGCCCGGGGCTGTGGCTGGCAGCTTGGTGGGCCCCAGGG
CCTTCTCCTTCATTCTCTGTGAACATGTAACTCAGGACCCCTTTTCCCTCTTGCGTCTGTGCCAGCTCAAATCCA
GCCCCTCGCCCTGTGCCACCCCAACTGTGCCTGATAGACCTGCCCCAGCGTTCCTGACTTCTTGCTGGCCTGTGG
AGGGTGAGGTGTAATTATTTGTCACCTGAACCTAATGTATATTCTCCTTGAGCCCCAGATCCCTTCAAGCTGGAA
GGGATGGGGCTGTTGGTGGGGTCAGGGTCCAAGAGGAATGGGTGTTCTGTGGCCTCGAGTCCTCTCCTGTTTGCG
AAAATACCAGTTTTGCTCTCTGTGGGACAAAGCACTGCTGATGAAGTCCCCGTGGGCTCATCCGGGCTGGAATTC
TTGGTTTTTCAGCCATTCCCTGCAGAGTCACTCAATCATCAAGTCCCTCACAGCCATTTCTGTTCCCAGAGGAGC
CAGGCCTGCAGCTGGCTGCTCAGGAGATGGCCTCATTCCTCCTGTTCTCCCAGTTTGCTTTCCACTTAAGACAAA
GCCTTGTCTATGTGGGGGGCGGGGACCGGGGAAAGAGGGAGGCTGAAATGTTTATTCTGCTTCTCCCGTGTTTCA

FIGURE 71B

TGCCATCTCGCGTCCCCCTTCCTGCACATGGGTGTGAATGCACACACATACGCGTACACACAGGACTTGGTCTGC
TGGCCTGGCCTCTTCTGCCCAGGTGGGTTGGAACACGTTTGCTGCCTGAGCCTGTGCCACTGAGCATGTTAGGTG
GAGCAGTTGGTGTGGCACGTGCGGGGTGTTGGCACCGGAGGCATGGAAAAGCACAGGCTGTACTGCCAGGCTGCG
ATGCGTGCTGGCCCCCGCACAGGCTCCTGTGTGCAGGGACTGATTCCTCAGCACACGAGGCTTCCACAACCCAGT
CTGCTCCATAGCACTCTGGCCCACCCTGTCTGCAGGTGAAACAGGAGGGCTGTTTGCCTCTGCCCCATCCCCCCG
ACTGTGTTCAGGAGTCCCACCTTGCATTTCAGACCTGGGCTGGCAGTCTGTTGGACTTCTCTTCAGGAAGAAAAA
GCATCAGGGGGAAATGGAATGCCCCTGCCCCAGGAACATGGCAGAAGCACAGGTTCTGTACCTCAGATGGACTCC
TGCTGGGCCTTCGGGGTCTCAGTTGGCTTCCCCCAGATTCTGATTCTACAGCTGCAGAATGTATATAACACAATA
AAAGCAAATGTTTGAACCAGT

FIGURE 72

MAFANFRRILRLSTFEKRKSREYEHVRRDLDPNEVWEIVGELGDGAFGKVYKAKNKETGALAAAKVIETKSEEEL
EDYIVEIEILATCDHPYIVKLLGAYYHDGKLWIMIEFCPGGAVDAIMLELDRGLTEPQIQVVCRQMLEALNFLHS
KRIIHRDLKAGNVLMTLEGDIRLADFGVSAKNLKTLQKRDSFIGTPYWMAPEVVMCETMKDTPYDYKADIWSLGI
TLIEMAQIEPPHHELNPMRVLLKIAKSDPPTLLTPSKWSVEFRDFLKIALDKNPETRPSAAQLLEHPFVSSITSN
KALRELVAEAKAEVMEEIEDGRDEGEEEDAVDAASTLENHTQNSSEVSPPSLNADKPLEESPSTPLAPSQSQDSV
NEPCSQPSGDRSLQTTSPPVVAPGNENGLAVPVPLRKSRPVSMDARIQVAQEKQVAEQGGDLSPAANRSQKASQS
RPNSSALETLGGEKLANGSLEPPAQAAPGPSKRDSDCSSLCTSESMDYGTNLSTDLSLNKEMGSLSIKDPKLYKK
TLKRTRKFVVDGVEVSITTSKIISEDEKKDEEMRFLRRQELRELRLLQKEEHRNQTQLSNKHELQLEQMHKRFEQ
EINAKKKFFDTELENLERQQKQQVEKMEQDHAVRRREEARRIRLEQDRDYTRFQEQLKLMKKEVKNEVEKLPRQQ
RKESMKQKMEEHTQKKQLLDRDFVAKQKEDLELAMKRLTTDNRREICDKERECLMKKQELLRDREAALWEMEEHQ
LQERHQLVKQQLKDQYFLQRHELLRKHEKEREQMQRYNQRMIEQLKVRQQQEKARLPKIQRSEGKTRMAMYKKSL
HINGGGSAAEQREKIKQFSQQEEKRQKSERLQQQQKHENQMRDMLAQCESNMSELQQLQNEKCHLLVEHETQKLK
ALDESHNQNLKEWRDKLRPRKKALEEDLNQKKREQEMFFKLSEEAECPNPSTPSKAAKFFPYSSADAS

FIGURE 73

CTCCTCCTGCCGCTGCCGCTGCTTTGGCTGCTGCGTCATACGCCCCAGAGCCGCCGGGACGGAGGGGCTGGGCCT
GGGGACCCCCCGGCCTCCGCCTGCACGCCCCCCCACGCCCGGACGTGCCCTCTCCGCGCGGGGGACTCGCCTAGG
TCTCCTACGTCTGCCCCTGCCCGGCTCCCGGCGGCCCCAGCTGTCACCGGCCCCCCCAGGATGCA**ATG**GCGCAGC
CCCCCCGGCTGAGCCGCTCTGGTGCCTCCTCACTTTGGGACCCAGCTTCTCCTGCTCCCACCTCTGGCCCCAGGC
CTCGGCTTTGGGAGGGTCAAGATGTGCTGGCCAGATGGACTGATGGGCTGCTATACTTGGGTACCATCAAAAAGG
TGGACAGTGCTAGGGAGGTGTGTCTGGTCCAGTTTGAGGATGATTCGCAGTTTCTGGTTCTATGGAAAGACATTA
GCCCTGCTGCCCTCCCTGGAGAGGAACTCCTCTGTTGTGTCTGTCGCTCTGAGACTGTGGTCCCTGGGAACCGGC
TGGTCAGCTGTGAGAAGTGTCGCCATGCTTATCACCAGGACTGCCATGTTCCCAGGGCTCCAGCCCCTGGAGAGG
GAGAGGGCACATCCTGGGTATGCCGCCAGTGTGTCTTTGCGATCGCCACCAAGAGGGGAGGTGCCCTGAAGAAGG
GCCCCTATGCCCGGGCCATGCTGGGTATGAAGCTTTCTCTGCCATATGGACTGAAGGGGCTGGACTGGGATGCTG
GACATCTGAGCAACCGACAGCAGAGTTACTGTTACTGTGGTGGCCCTGGGGAGTGGAACCTGAAAATGCTGCAGT
GCCGGAGCTGCCTGCAGTGGTTCCATGAGGCCTGCACCCAGTGTCTGAGCAAGCCCCTCCTCTATGGGGACAGGT
TCTATGAATTTGAATGCTGTGTGTGTCGCGGGGGCCCTGAGAAAGTCCGGAGACTACAGCTTCGCTGGGTGGATG
TGGCCCATCTTGTCCTGTATCACCTCAGTGTTTGCTGTAAGAAGAAATACTTTGATTTTGATCGTGAGATCCTCC
CCTTCACTTCTGAGAATTGGGACAGTTTGCTCCTGGGGGAGCTTTCAGACACCCCCAAAGGAGAACGTTCTTCCA
AGCTCCTCTCTGCTCTTAACAGCCACAAGGACCGTTTCATTTCAGGGAGAGAGATTAAGAAGAGGAAATGTTTGT
TTGGTCTCCATGCTCGGATGCCTCCCCCTGTGGAGCCCCCTACTGGAGATGGAGCACTCACCAGCTTCCCTTCAG
GGCAGGGCCCTGGGGGAGGGGTCTCACGTCCCCTGGGGAAGCGCCGGAGGCCGGAGCCAGAGCCCCTGAGGAGGA
GGCAGAAGGGGAAAGTGGAGGAGCTGGGGCCACCCTCAGCAGTGCGCAATCAGCCCGAGCCCCAGGAGCAGAGGG
AGCGGGCTCATCTGCAGAGGGCACTGCAGGCCTCAGTGTCTCCACCATCCCCCAGCCCTAACCAGAGTTACCAGG
GCAGCAGCGGCTACAACTTCCGGCCCACAGATGCCCGCTGCCTGCCCAGCAGCCCCATCCGGATGTTTGCTTCCT
TCCACCCTTCTGCCAGCACCGCAGGGACCTCTGGGGACAGTGGACCCCCAGACAGGTCACCCCTGGAACTTCACA
TTGGTTTCCCCACAGACATCCCTAAAAGTGCCCCCCACTCGATGACTGCCTCATCTTCCTCAGTTTCATCCCCAT
CCCCAGGTCTTCCTAGACGCTCAGCACCCCCTTCTCCCCTGTGCCGTAGTTTGTCTCCTGGGACTGGGGGAGGAG
TCCGAGGTGGGGTTGGTTACCTGTCCCGAGGGGACCCTGTCCGGGTCCTTGCTCGGAGAGTACGGCCTGATGGCT
CTGTGCAGTACCTGGTTGAGTGGGGAGGAGGGGGCATCTTC**TGA**ACAGCCTGCCTCTGCCCAGCTCCCCATTCAC
ACACACCGGCACTTTCATACCCTGACCTCTGACCTCACCTACAGCTGGGATGTACCTGGAGAGATAGGGGGTAGT
TCTCCCTACTGCCCAGGCTGGAATCCAAGAGTGGGGAGTGGGGAAGAGGCCCTCTTCTCTACCCTCCTTCATGAT
TCCTGACCCCTCCCATCCTTCCCATTTCCTTTGATGTTATTTTGTTACAGCTTTTTAAATATTTTTTAAAATTAT
TTAACCCCTGGGGGCAGAGACTGAGGAGGGAGGATGATAAGGGATCCCGGACTCTGTATGATTGAAATAAAGAGA
AATAAACAAA

FIGURE 74

MAQPPRLSRSGASSLWDPASPAPTSGPRPRLWEGQDVLARWTDGLLYLGTIKKVDSAREVCLVQFEDDSQFLVLW
KDISPAALPGEELLCCVCRSETVVPGNRLVSCEKCRHAYHQDCHVPRAPAPGEGEGTSWVCRQCVFAIATKRGGA
LKKGPYARAMLGMKLSLPYGLKGLDWDAGHLSNRQQSYCYCGGPGEWNLKMLQCRSCLQWFHEACTQCLSKPLLY
GDRFYEFECCVCRGGPEKVRRLQLRWVDVAHLVLYHLSVCCKKKYFDFDREILPFTSENWDSLLLGELSDTPKGE
RSSKLLSALNSHKDRFISGREIKKRKCLFGLHARMPPPVEPPTGDGALTSFPSGQGPGGGVSRPLGKRRRPEPEP
LRRRQKGKVEELGPPSAVRNQPEPQEQRERAHLQRALQASVSPPSPSPNQSYQGSSGYNFRPTDARCLPSSPIRM
FASFHPSASTAGTSGDSGPPDRSPLELHIGFPTDIPKSAPHSMTASSSSVSSPSPGLPRRSAPPSPLCRSLSPGT
GGGVRGGVGYLSRGDPVRVLARRVRPDGSVQYLVEWGGGGIF

FIGURE 75

GGCACGAGGCTCTCTCCTCCCTCTTTCTTCGGGCAGCCTCCCCACCACCCCACTTCAGCCTCCCCCACTCTTGCC
GCCTCCATATCATCAAGCTCTGGTGGCGCCTGGGGGGCTTTTCGGATCGGCAGGATGTACCCCCAGGGAAGGCAC
CCGACCCCGCTCCAGTCCGGCCAGCCCTTCAAGTTCTCGATCTTGGAGATCTGCGACCGCATCAAAGAAGAATTC
CAGTTTCTTCAGGCTCAATACCACAGCCTCAAGCTAGAATGTGAGAAGCTGGCCAGCGAGAAGACGGAAATGCAG
CGACATTATGTCATGTATTATGAGATGTCGTACGGGCTCAACATTGAAATGCATAAGCAGGCGGAGATTGTGAAG
CGTCTGAGCGGTATCTGCGCTCAGATTATCCCCTTCCTGACCCAGGAGCATCAGCAGCAGGTGCTCCAGGCCGTA
GAACGCGCCAAGCAGGTCACCGTGGGGGAGCTGAACAGCCTCATCGGGCAGCAGCTCCAGCCGCTGTCCCACCAC
GCACCCCCTGTGCCCCTCACCCCCCGCCCAGCCGGGCTGGTGGGCGGCAGTGCTACGGGGCTGCTTGCTCTGTCT
GGAGCCCTGGCTGCCCAGGCTCAGCTGGCGGCGGCTGTCAAGGAGGACCGTGCGGGCGTGGAGGCCGAGGGGTCC
AGAGTGGAGAGAGCCCCGAGCAGGAGTGCATCTCCCTCGCCCCCTGAGAGTCTCGTGGAGGAGGAGCGACCGAGT
GGCCCTGGTGGTGGCGGGAAGCAGAGAGCAGATGAGAAGGAGCCATCAGGACCTTATGAAAGCGACGAAGACAAG
AGTGATTACAATCTGGTGGTGGACGAGGACCAACCCTCAGAGCCCCCCAGCCCGGCTACCACCCCCTGCGGAAAG
GTACCCATCTGCATTCCTGCCCGTCGGGACCTGGTGGACAGTCCAGCCTCCTTGGCCTCTAGCCTTGGCTCACCG
CTGCCTAGAGCCAAGGAGCTCATCCTGAATGACCTTCCCGCCAGCACTCCTGCCTCCAAATCCTGTGACTCCTCC
CCGCCCCAGGACGCTTCCACCCCCGGGCCCAGCTCGGCCAGTCACCTCTGCCAGCTTGCTGCCAAGCCAGCACCT
TCCACGGACAGCGTCGCCCTGAGGAGCCCCCTGACTCTGTCCAGTCCCTTCACCACGTCCTTCAGCCTGGGCTCC
CACAGCACTCTCAACGGAGACCTCTCCGTGCCCAGCTCCTACGTCAGCCTCCACCTGTCCCCCCAGGTCAGCAGC
TCTGTGGTGTACGGACGCTCCCCCGTGATGGCATTTGAGTCTCATCCCCATCTCCGAGGGTCATCCGTCTCTTCC
TCCCTACCCAGCATCCCTGGGGGAAAGCCGGCCTACTCCTTCCACGTGTCTGCGGACGGGCAGATGCAGCCGGTT
CCCTTCCCCTCGGATGCACTGGTAGGCGCGGGCATCCCGCGGCACGCCCGGCAGCTGCACACGCTGGCCCATGGC
GAGGTGGTCTGCGCGGTCACCATCAGCGGCTCCACACAGCATGTGTACACGGGCGGCAAGGGCTGTGTGAAGGTG
TGGGACGTGGGCCAGCCTGGGGCCAAGACGCCCGTGGCCCAGCTCGACTGCCTGAACCGAGACAACTACATTCGT
TCCTGCAAGTTGCTGCCGGATGGCCGGAGTCTGATCGTGGGCGGTGAGGCCAGCACCTTGTCCATTTGGGACCTG
GCGGCGCCCACCCCCCGTATCAAGGCCGAGCTGACTTCCTCAGCCCCAGCCTGCTACGCCCTGGCCGTCAGCCCC
GACGCCAAGGTTTGCTTCTCCTGCTGCAGCGATGGCAACATTGTGGTCTGGGACCTGCAGAATCAGACTATGGTC
AGGCAGTTCCAGGGCCACACGGACGGCGCCAGCTGCATTGATATTTCCGATTACGGCACTCGGCTCTGGACAGGG
GGCCTGGACAACACGGTGCGCTGCTGGGACCTGCGGGAGGGCCGCCAGCTGCAGCAGCATGACTTCAGCTCCCAG
ATTTTCTCCCTGGGCCACTGCCCTAACCAGGACTGGCTGGCGGTCGGAATGGAGAGTAGCAACGTGGAGATCCTG
CACGTCCGCAAGCCGGAGAAATACCAGCTGCACCTCCACGAGAGCTGCGTGCTGTCCCTGAAGTTTGCCTCCTGC
GGACGGTGGTTTGTGAGCACCGGGAAGGACAACCTGCTCAACGCCTGGAGGACGCCGTACGGGGCCAGCATTTTC
CAGTCCAAGGAGTCGTCCTCAGTCCTGAGTTGTGACATCTCCAGAAATAACAAATACATCGTGACAGGCTCGGGG
GACAAGAAGGCCACCGTGTATGAGGTGGTCTACTGAGACATGACCCCCCTTCCTGTACCCGAAGTCCAGACTCCC
AGGGGAATCAGCAGCCAGGACAGACATCCTAGCAGCCGCCTCCCAGCCCTGCCTAGGAACCGTACATCCCATCTG
CTCTCTGGCCAACGGCTTCACACCTTCCCCTGCTGCATGTGGGGGCCGATGGGCAGGGGACCTCGGTGGAAATAA
AATGTATCTATCACATCCGCAAAAAAAAAAAAAAAAAA

FIGURE 76

MYPQGRHPTPLQSGQPFKFSILEICDRIKEEFQFLQAQYHSLKLECEKLASEKTEMQRHYVMYYEMSYGLNIEMH
KQAEIVKRLSGICAQIIPFLTQEHQQQVLQAVERAKQVTVGELNSLIGQQLQPLSHHAPPVPLTPRPAGLVGGSA
TGLLALSGALAAQAQLAAAVKEDRAGVEAEGSRVERAPSRSASPSPPESLVEEERPSGPGGGGKQRADEKEPSGP
YESDEDKSDYNLVVDEDQPSEPPSPATTPCGKVPICIPARRDLVDSPASLASSLGSPLPRAKELILNDLPASTPA
SKSCDSSPPQDASTPGPSSASHLCQLAAKPAPSTDSVALRSPLTLSSPFTTSFSLGSHSTLNGDLSVPSSYVSLH
LSPQVSSSVVYGRSPVMAFESHPHLRGSSVSSSLPSIPGGKPAYSFHVSADGQMQPVPFPSDALVGAGIPRHARQ
LHTLAHGEVVCAVTISGSTQHVYTGGKGCVKVWDVGQPGAKTPVAQLDCLNRDNYIRSCKLLPDGRSLIVGGEAS
TLSIWDLAAPTPRIKAELTSSAPACYALAVSPDAKVCFSCCSDGNIVVWDLQNQTMVRQFQGHTDGASCIDISDY
GTRLWTGGLDNTVRCWDLREGRQLQQHDFSSQIFSLGHCPNQDWLAVGMESSNVEILHVRKPEKYQLHLHESCVL
SLKFASCGRWFVSTGKDNLLNAWRTPYGASIFQSKESSSVLSCDISRNNKYIVTGSGDKKATVYEVVY

FIGURE 77A

CCCTTTTTCCTCCCGTTTTGAAGAGACAATGCTACTTCAGTTTGGAGCACAAACATATGATCAGCACATGGAAAT
GTGGTAATTCGGATGCATTCGTGATTGCAACAGATTGAAGAAATTAGACCAGACAAAGAGTGTTTTTAGAGGAGA
GAGGAGGAGGAGGAGGCTGAGAGAGGGAGGGCGACGGGGGTGAGAAAGGGGAGGCCGCCTCTGAGCGGGACGCCG
GGACTCCCGCCGCTGCTAAATATATCCGTAGAATGGAGAGGGACCGGATCTCAGCCTTGAAAAGATCTTTTGAGG
TCGAGGAGGTCGAGACACCCAACTCCACCCCACCCCGGAGGGTCCAGACTCCCCTACTCCGAGCCACTGTGGCCA
GCTCCACCCAGAAATTCCAGGACCTGGGCGTGAAGAACTCAGAACCCTCGGCCCGCCATGTGGACTCCCTAAGCC
AACGCTCCCCCAAGGCGTCCCTGCGGAGGGTGGAGCTCTCGGGCCCCAAGGCGGCCGAGCCGGTGTCCCGGCGCA
CTGAGCTGTCCATTGACATCTCGTCCAAGCAGGTGGAGAACGCCGGGGCCATCGGCCCGTCCCGGTTCGGGCTCA
AGAGGGCCGAGGTGTTGGGCCACAAGACGCCAGAACCGGCCCCTCGGAGGACGGAGATCACCATCGTCAAACCCC
AGGAGTCAGCCCACCGGAGGATGGAGCCCCCTGCCTCCAAGGTCCCCGAGGTGCCCACTGCCCCTGCCACCGACG
CAGCCCCCAAGAGGGTGGAGATCCAGATGCCCAAGCCTGCTGAGGCGCCCACCGCCCCCAGCCCAGCCCAGACCT
TGGAGAATTCAGAGCCTGCCCCTGTGTCTCAGCTGCAGAGCAGGCTGGAGCCCAAGCCCCAGCCCCCTGTGGCTG
AGGCTACACCCCGGAGCCAGGAGGCCACTGAGGCGGCTCCCAGCTGCGTTGGCGACATGGCCGACACCCCCAGAG
ATGCCGGGCTCAAGCAGGCGCCTGCATCACGGAACGAGAAGGCCCCGGTGGACTTCGGCTACGTGGGGATTGACT
CCATCCTGGAGCAGATGCGCCGGAAGGCCATGAAGCAGGGCTTCGAGTTCAACATCATGGTGGTCGGGCAGAGCG
GCTTGGGTAAATCCACCTTAATCAACACCCTCTTCAAATCCAAAATCAGCCGGAAGTCGGTGCAGCCCACCTCAG
AGGAGCGCATCCCCAAGACCATCGAGATCAAGTCCATCACGCACGATATTGAGGAGAAAGGCGTCCGGATGAAGC
TGACAGTGATTGACACACCAGGGTTCGGGGACCACATCAACAACGAGAACTGCTGGCAGCCCATCATGAAGTTCA
TCAATGACCAGTACGAGAAATACCTGCAGGAGGAGGTCAACATCAACCGCAAGAAGCGCATCCCGGACACCCGCG
TCCACTGCTGCCTCTACTTCATCCCCGCCACCGGCCACTCCCTCAGGCCCCTGGACATCGAGTTTATGAAACGCC
TGAGCAAGGTGGTCAACATCGTCCCTGTCATCGCCAAGGCGGACACACTCACCCTGGAGGAGAGGGTCCACTTCA
AACAGCGGATCACCGCAGACCTGCTGTCCAACGGCATCGACGTGTACCCCCAGAAGGAATTTGATGAGGACTCGG
AGGACCGGCTGGTGAACGAGAAGTTCCGGGAGATGATCCCATTTGCTGTGGTGGGCAGTGACCACGAGTACCAGG
TCAACGGCAAGAGGATCCTTGGGAGGAAGACCAAGTGGGGTACCATCGAAGTTGAAAACACCACACACTGTGAGT
TTGCCTACCTGCGGGACCTTCTCATCAGGACGCACATGCAGAACATCAAGGACATCACCAGCAGCATCCACTTCG
AGGCGTACCGTGTGAAGCGCCTCAACGAGGGCAGCAGCGCCATGGCCAACGGCGTGGAGGAGAAGGAGCCAGAAG
CCCCGGAGATGTAGACGCCCCCTGCCCACCCCCGGGATCCTGCCCCCAAGTCATTTCCGTCCCCCCCCCAGGCCC
TCCCACCACCCCATTTTATTTTATATGATTTTCTCCATTTGTCATCGTTCCCCACCCCTTCGACATGCTGCCAGG
AAACAAGGGAAGGGGCCTCCCTCCGAGTGAGTCAGTGATGAGGCCGCGGCCTCCCCGAGGTTGTGGGGAGGCTGC
ACTGGAGCCACAGGCAGGGGTGAGAGCACCCACTGAATTGACATGACCCTCTGTCCCCAGGCCTGGCTCCCCGAG
GGCTCAGAAGAGCAGCTTCGGTGTGCAGATCATCCGTCGTGTGGGGTTCTCAGTGCCGGAGCTTGGGGTGGGGGC
CAGGCCTCGCACTTGCAGAGGAGCCCAGTGGGCTGCACGCTCCCCTCCATCCCCATCGGCCCTGTCCCCTGGAGT
GTGTCAGAGCCCAGGGGAGAATGCAGCCCACCAGGAGCACCTGGACCCCCTGCCCGCCACATGGTGTGGCCATCA
CTCAGCCCCTACCCCTGCCCTGCTCCTAAGGGTAGAAAACTCCAGGGTCCCCTGCCACCGACTGCCCAGCCACTC
CAAGCCCCCTGGCAGCTGCCCCTCCTGGAGCAGAAAGTGCCTTTATCTCAGCCATCCGCAGACTGCTGGCCAGAT
GCGGGGACAGGCTGGAATGAGGGAGGCGTCTTCATCTCCCTGCCATCCCCCTCTCACGCCACCCCCGCCCCCACC
GGGCTGCAGGTGCTGCTGATGCGCTGGGATCTGATTGAGGATAAAAAGGAAGGAGAGATGACCCCTACCCCCTCA
TCCCCCAGTTTTGAAAAGGTCTAAGCAAGTGAGTCTGGTGGAGGAGCTGAGGGAGGGAGCCATGGAAGGTGCCAG
AAGGAAGGTTGGCGGGGGCACGTGTGGGCCGTGGCTTGGGCTGGTCAGAGTGGCGTGAGCTGCCCGGCGCCTGCC
CTGCCCAAGTGACCAGGGAAGTGTGTGTGTGTCCATGTGTATGCGTGTCCGTCTGTCTGTCTAGTGTCTGGGTTT
GGCCCAAGACTGGGCTGTAGTTACATTAATGCCCAGCCAGCCACCCCTGCCACTCACCCCTCCTGGCCCAGGCCT
TGCTGACTCTCTGAGCTGGGGAGGTGGGAGGCCAGGCGAGCCTGACTCTGTTGATCTACCCGTGCCTGGGCCCCT
CCCCTCAGAGCCCATGGTAACGAACCCCTAGAAAGGAGAGAACGGGCGTCAGGGGTGCACAGTCCACAGCTGAAG
AGCAAGGTTTCGTGGCAGCACGGCCCGGCCCCTCACCCTCTGTCCCCACGAGGGGACCCATGGGGGCTGTCTTTG
CAGGGCACAGATGACCAAAGTCCCTTCCTGCTTCCTGTTACCTGTCTTGCTCCTGGGGAGAAAGAGGGGCCTGAT
GAGACTCCACTCAGGTGCACACATCACCAGGTGCATCTGCAGGCACCGGGCTGGCTGCTTGCAGCCAGGAGAAGG
TCAGCGAGAAGGAGTGTATGAGTGTGAGTGTGTGTGCATGGAAGTTGGGGCACTGGGCGTCTGACTCCCTCCCCA
CCCAAGAGAGGAAGGACCCCTCACCACCCCCACTGGCGAGACAGTTTACTTTGCCGACTTGCCATGTTTTTGCCA

FIGURE 77B

AAACCAAGATTTTGAAGGAAATGAGTGGCCAGCGCCAGGGCCCAGGCCATGTGGCCTGCCCAGCCTCAATGTCAC
TTGGCGGCGGGGTGGGGTGGGGGTGGGCAGCAGCATCCCAGCCTTGAGATGCTTCACTTTCCTTCTCTGTAACCA
GACTTTGAAAAATTGTTCGTTTCATCAGGCTCTGTTCCTCAATGGCCTTTTGCTACGTGCCTCCCGAGAAATTTG
TCTTTTTGTATAAATGACAAAGTGTTGAAAATGTATTTCCTGAAATAAATGTTTCAAATGCAGAAACCCAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 78

MERDRISALKRSFEVEEVETPNSTPPRRVQTPLLRATVASSTQKFQDLGVKNSEPSARHVDSLSQRSPKASLRRV
ELSGPKAAEPVSRRTELSIDISSKQVENAGAIGPSRFGLKRAEVLGHKTPEPAPRRTEITIVKPQESAHRRMEPP
ASKVPEVPTAPATDAAPKRVEIQMPKPAEAPTAPSPAQTLENSEPAPVSQLQSRLEPKPQPPVAEATPRSQEATE
AAPSCVGDMADTPRDAGLKQAPASRNEKAPVDFGYVGIDSILEQMRRKAMKQGFEFNIMVVGQSGLGKSTLINTL
FKSKISRKSVQPTSEERIPKTIEIKSITHDIEEKGVRMKLTVIDTPGFGDHINNENCWQPIMKFINDQYEKYLQE
EVNINRKKRIPDTRVHCCLYFIPATGHSLRPLDIEFMKRLSKVVNIVPVIAKADTLTLEERVHFKQRITADLLSN
GIDVYPQKEFDEDSEDRLVNEKFREMIPFAVVGSDHEYQVNGKRILGRKTKWGTIEVENTTHCEFAYLRDLLIRT
HMQNIKDITSSIHFEAYRVKRLNEGSSAMANGVEEKEPEAPEM

FIGURE 79A

CGGGCCGGCCTGGTGCTGCACGCCTGTCAGCCATCGCCCGAGCCGCCGGCGTCTCCTCCCGCCCAGCAGTTCCTC
CACGCAGGGGCTCCGGAATCGCCCGACCGCACACGTTGCCACCCTGAGGTCTTTCTGGAAGTGGATATCTACTCA
GACAGTAAGAATTATAAGAGCTGTAAGAGCTCATTTGGAGGAATAATGGATGAACCATCTCCCTTGGCCCAACCT
CTGGAGCTGAACCAGCACTCTCGATTCATAATAGGTTCTGTGTCTGAAGATAACTCAGAGGATGAGATCAGCAAC
CTGGTGAAGTTGGACCTACTGGAGGAGAAGGAGGGCTCCTTGTCACCTGCTTCTGTTGGCTCAGATACACTCTCT
GATTTGGGGATCTCTAGCCTACAGGATGGCTTGGCCTTGCACATAAGGTCCAGCATGTCTGGCTTGCACCTAGTA
AAGCAGGGCCGAGACAGAAAGAAAATAGATTCTCAACGAGATTTCACTGTGGCTTCTCCAGCAGAATTTGTTACT
CGCTTGGGGGAAATAAAGTGATTGAGAAGGTTCTTATTGCTAACAATGGCATTGCAGCAGTGAAATGCATGCGGT
CTATCCGTAGGTGGTCTTATGAAATGTTTCGAAATGAACGTGCAATTAGATTCGTTGTCATGGTCACACCTGAAG
ACCTTAAAGCCAATGCAGAATACATTAAGATGGCAGATCACTATGTGCCAGTGCCTGGAGGACCAAACAACAACA
ACTATGCAAATGTGGAATTAATTCTTGATATTGCTAAAAGGATCCCAGTACAAGCAGTGTGGGCTGGCTGGGGTC
ATGCTTCTGAGAATCCCAAACTACCGGAACTTCTCTTGAAAAATGGCATTGCCTTCATGGGTCCTCCAAGCCAGG
CCATGTGGGCTTTAGGGGATAAGATTGCATCTTCCATAGTGGCTCAAACTGCAGGTATCCCAACTCTTCCCTGGA
GCGGCAGTGGTCTTCGTGTGGACTGGCAGGAAAATGATTTTTCAAAACGTATCTTAAATGTTCCCCAGGAGCTAT
ATGAAAAAGGTTATGTGAAAGATGTGGATGATGGGCTACAGGCAGCTGAGGAAGTTGGATATCCAGTAATGATCA
AGGCCTCAGAGGGAGGAGGAGGGAAGGGAATTAGAAAAGTCAACAATGCAGATGACTTCCCTAATCTCTTCAGAC
AGGTTCAAGCTGAAGTTCCTGGATCTCCCATATTTGTGATGAGACTAGCCAAACAATCTCGTCATCTGGAGGTGC
AGATCTTAGCGGACCAATATGGCAATGCTATCTCTTTGTTTGGTCGTGATTGCTCTGTACAACGCAGGCATCAGA
AGATTATTGAAGAAGCACCTGCTACTATTGCTACTCCAGCAGTATTTGAACACATGGAACAGTGTGCGGTGAAAC
TTGCCAAAATGGTGGGTTATGTGAGTGCTGGGACTGTGGAATACCTGTACAGCCAGGATGGCAGCTTCTACTTTC
TGGAATTGAATCCTCGGCTGCAGGTAGAGCACCCTTGTACAGAGATGGTGGCTGATGTCAATCTCCCTGCAGCAC
AGCTCCAGATTGCCATGGGGATTCCTCTATATAGAATCAAGGATATCCGTATGATGTATGGGGTATCTCCCTGGG
GTGATTCTCCCATTGATTTTGAAGATTCTGCACACGTTCCTTGTCCAAGGGGCCATGTTATTGCTGCTCGGATCA
CTAGTGAAAATCCAGATGAGGGTTTTAAGCCCAGCTCAGGAACAGTTCAGGAGCTAAATTTCCGCAGCAATAAGA
ATGTTTGGGGATATTTCAGTGTTGCTGCTGCAGGGGGACTTCATGAATTGCTGATTCTCAGTTTGGTCACTGCTT
TTCTTGGGGAGAAAACAGAGAAGAGGCAATTTCAAACATGGTGGTGGCTTTGAAGGAGCTGTCTATTCGGGGTGA
CTTTCGAACTACAGTTGAATACCTGATCAAATTGTTAGAGACTGAAAGCTTTCAGATGAACAGAATTGATACTGG
CTGGCTGGACAGACTGATAGCAGAAAAAGTACAGGCTGAGCGACCTGACACCATGTTGGGGGTTGTGTGTGGTGC
CCTCCACGTGGCAGATGTGAGCCTGCGGAATAGCGTCTCTAACTTCCTTCACTCCTTAGAAAGGGGTCAAGTCCT
TCCTGCTCATACACTTCTGAATACAGTAGATGTTGAACTTATCTATGAGGGAGTCAAGTATGTACTTAAGGTGAC
TCGACAGTCCCCCAACTCCTATGTGGTGATCATGAATGGCTCATGTGTAGAAGTAGATGTACATCGGCTGAGTGA
CGGTGGACTGCTCTTGTCCTATGATGGCAGCAGTTATACTACGTATATGAAAGAGGAAGTGGATAGATATCGCAT
CACAATTGGCAATAAAACCTGTGTGTTTGAGAAGGAAAATGACCCATCGGTGATGCGCTCACCTTCTGCTGGGAA
GTTAATCCAGTACATTGTAGAAGATGGAGGTCATGTGTTTGCCGGCCAGTGCTATGCTGAGATTGAGGTAATGAA
GATGGTAATGACCTTAACAGCTGTGGAGTCTGGCTGTATCCATTACGTCAAGCGACCTGGAGCAGCTCTTGACCC
TGGCTGTGTACTAGCCAAAATGCAACTGGACAACCCCAGCAAGGTTCAGCAGGCTGAACTTCACACAGGTAGTCT
GCCACGGATCCAGAGCACGGCACTCAGAGGCGAGAAACTCCATCGAGTGTTCCATTATGTCCTGGATAATCTGGT
CAATGTAATGAATGGATACTGCCTTCCAGATCCTTTCTCTAGCAGCAAGGTAAAAGACTGGTAGAGCGATTGATG
AAAACCTCAGAGATCCCTCCCTGCCTCTCCTAGAATTGCAAGATATTATGACCAGTGTGTCTGGCCGCATTCCCC
CCAATGTGGAGAAGTCTATCAAGAAGGAAATGGCTCAGTATGCTAGCAACATCACATCAGTCCTCTGTCAGTTTC
CCAGCCAGCAGATTGCAAACATCCTAGATAGCCATGCAGCTACATTGAACCGGAAATCTGAACGGGAAGTCTTCT
TTATGAATACTCAGAGCATTGTTCAGCTGGTACAGAGGTACCGAAGTGGCATCCGAGGCCACATGAAGGCTGTGG
TGATGGATCTGCTCCGGCAGTACCTGCGAGTAGAGACACAATTCCAGAATGGTCACTATGACAAATGTGTATTCG
CCCTCCGAGAAGAGAATAAAAGTGACATGAACACTGTACTGAACTACATCTTCTCTCACGCTCAAGTCACCAAGA
AGAATCTTCTGGTCACAATGCTTATTGATCAGTTGTGTGGCCGGGACCCTACTCTCACTGATGAGCTGCTGAATA
TTCTCACAGAGCTAACTCAACTCAGTAAGACCACCAATGCCAAAGTAGCACTTCGAGCACGCCAGGTTCTTATTG
CCTCCCATTTGCCATCATATGAGCTTCGCCATAACCAAGTAGAGTCTATCTTCCTATCAGCTATTGACATGTATG
GACATCAATTTTGCATTGAGAACCTGCAGAAACTCATCCTATCAGAAACATCTATTTTTGATGTCCTACCAAACT

FIGURE 79B

TCTTCTATCACAGCAACCAAGTAGTGAGGATGGCAGCTCTGGAGGTGTATGTTCGAAGGGCTTATATTGCCTATG
AACTTAACAGCGTACAACACCGCCAGCTTAAGGACAACACCTGTGTGGTGGAATTCCAGTTCATGCTGCCCACAT
CTCATCCAAACAGAGGGAACATCCCTACGCTAAACAGAATGTCCTTCTCCTCCAACCTCAACCACTATGGCATGA
CCCATGTAGCTAGTGTCAGCGATGTACTGTTGGACAACTCATTCACTCCACCTTGTCAGCGGATGGGCGGAATGG
TCTCTTTTCGGACTTTTGAAGATTTTGTCAGGATCTTTGATGAAGTGATGGGCTGCTTCTCTGACTCCCCACCCC
AGAGTCCCACATTCCCTGAGGCAGGTCACACGTCTCTTTATGATGAGGATAAGGTTCCCAGGGATGAACCAATTC
ACATTCTCAATGTGGCTATCAAGACTGACTGTGATATTGAGGATGACAGGCTGGCAGCTATGTTCAGAGAATTTA
CCCAGCAAAATAAAGCTACCCTGGTTGACCATGGGATCCGGCGCCTTACTTTCCTGGTTGCACAAAGGATTTCAG
AAAGCAGGTCAACTATGAGGTGGATCGGAGATTTCATAGAGAATTCCCTAAATTTTTTACATTCCGAGCAAGGGA
TAAGTTTGAGGAGGATCGTATCTATCGTCATCTGGAGCCTGCTCTGGCTTTCCAGTTAGAGCTGAACCGGATGAG
AAATTTTGACCTCACTGCCCATTCCATGTGCTAATCACAAGATGCACCTGTATCTCGGGGCAGCCAAGGTGGAAG
TGGGCACAGAAGTGACAGACTACAGGTTCTTTGTTCGTGCAATCATCAGGCATTCTGATCTGGTCACCAAGGAAG
CTTCTTTTGAATATCTGCAAAATGAAGGGGAGCGGCTACTCCTGGAAGCCATGGATGAGTTGGAAGTTGCTTTTA
ACAATACAAATGTCCGCACTGACTGCAACCACATCTTCCTCAACTTCGTGCCCACTGTCATCATGGACCCCTCAA
AGATCGAGGAGTCCGTGCGCTACATGGTTATGCGCTACGGCAGCCGGCTGTGGAAACTCCGTGTGCTACAGGCTG
AGGTCAAGATCAACATCCGCCAGACCACCACCGGCAGTGCCGTTCCCATCCGCCTGTTCATCACCAATGAGTCGG
GCTACTACCTGGACATCAGCCTCTACAAAGAAGTGACTGACTCCAGATCTGGAAATATCATGTTTCACTCCTTCG
GCAACAAGCAAGGGCCCCAGCACGGGATGCTGATCAATACTCCCTACGTCACCAAAGGATCTTGCTCCAGGCCAA
AGCGATTCCAGGCCCAGACCCTGGGAACCACCTACATCTATGACTTCCCGGAAATGTTCAGGCAGGCTCTCTTTA
AACTGTGGGGCTCCCCAGACAAGTATCCCAAAGACATCCTGACATACACTGAATTAGTGTTGGACTCTCAGGGCC
AGCTGGTGGAGATGAACCGACTTCCTGGTGGAAATGAGGTGGGCATGGTGGCCTTCAAAATGAGGTTTAAGACCC
AGGAGTACCCGGAAGGACGGGATGTGATCGTCATCGGCAATGACATCACCTTTCGCATTGGATCCTTTGGCCCTG
GAGAGGACCTTCTGTACCTGCGGGCATCCGAGATGGCCCGGGCAGAGGGCATTCCCAAAATTTACGTGGCAGCCA
ACAGTGGCGCCCGTATTGGCATGGCAGAGGAGATCAAACACATGTTCCACGTGGCTTGGGTGGACCCAGAAGACC
CCCACAAAGGATTTAAATACCTGTACCTGACTCCCCAAGACTACACCAGAATCAGCTCCCTGAACTCCGTCCACT
GTAAACACATCGAGGAAGGAGGAGAGTCCAGATACATGATCACGGATATCATCGGGAAGGATGATGGCTTGGGCG
TGGAGAATCTGAGGGGCTCAGGCATGATTGCTGGGGAGTCCTCTCTGGCTTACGAAGAGATCGTCACCATTAGCT
TGGTGACCTGCCGAGCCATTGGGATTGGGGCCTACTTGGTGAGGCTGGGCCAGCGAGTGATCCAGGTGGAGAATT
CCCACATCATCCTCACAGGAGCAAGTGCTCTCAACAAGGTCCTGGGAAGAGAGGTCTACACATCCAACAACCAGC
TGGGTGGCGTTCAGATCATGCATTACAATGGTGTCTCCCACATCACCGTGCCAGATGACTTTGAGGGGGTTTATA
CCATCCTGGAGTGGCTGTCCTATATGCCAAAGGATAATCACAGCCCTGTCCCTATCATCACACCCACTGACCCCA
TTGACAGAGAAATTGAATTCCTCCCATCCAGAGCTCCCTACGACCCCCGGTGGATGCTTGCAGGAAGGCCTCACC
CAACTCTGAAGGGAACGTGGCAGAGCGGATTCTTTGACCACGGCAGTTTCAAGGAAATCATGGCACCCTGGGCGC
AGACCGTGGTGACAGGACGAGCAAGGCTTGGGGGGATTCCCGTGGGAGTGATTGCTGTGGAGACACGGACTGTGG
AGGTGGCAGTCCCTGCAGACCCTGCCAACCTGGATTCTGAGGCCAAGATAATTCAGCAGGCAGGACAGGTGTGGT
TCCCAGACTCAGCCTACAAAACCGCCCAGGCCATCAAGGACTTCAACCGGGAGAAGTTGCCCCTGATGATCTTTG
CCAACTGGAGGGGGTTCTCCGGTGGCATGAAAGACATGTATGACCAGGTGCTGAAGTTTGGAGCCTACATCGTGG
ACGGCCTTAGACAATACAAACAGCCCATCCTGATCTATATCCCGCCCTATGCGGAGCTCCGGGGAGGCTCCTGGG
TGGTCATAGATGCCACCATCAACCCGCTGTGCATAGAAATGTATGCAGACAAAGAGAGCAGGGGTGGTGTTCTGG
AACCAGAGGGGACAGTGGAGATTAAGTTCCGAAAGAAAGATCTGATAAAGTCCATGAGAAGGATCGATCCAGCTT
ACAAGAAGCTCATGGAACAGCTAGGGGAACCTGATCTCTCCGACAAGGACCGAAAGGACCTGGAGGGCCGGCTAA
AGGCTCGCGAGGACCTGCTGCTCCCCATCTACCACCAGGTGGCGGTGCAGTTCGCCGACTTCCATGACACACCCG
GCCGGATGCTGGAGAAGGGCGTCATATCTGACATCCTGGAGTGGAAGACCGCACGCACCTTCCTGTATTGGCGTC
TGCGCCGCCTCCTCCTGGAGGACCAGGTCAAGCAGGAGATCCTGCAGGCCAGCGGGGAGCTGAGTCACGTGCATA
TCCAGTCCATGCTGCGTCGCTGGTTCGTGGAGACGGAGGGGGCTGTCAAGGCCTACTTGTGGGACAACAACCAGG
TGGTTGTGCAGTGGCTGGAACAGCACTGGCAGGCAGGGGATGGCCCGCGCTCCACCATCCGTGAGAACATCACGT
ACCTGAAGCACGACTCTGTCCTCAAGACCATCCGAGGCCTGGTTGAAGAAAACCCCGAGGTGGCCGTGGACTGTG
TGATATACCTGAGCCAGCACATCAGCCCAGCTGAGCGGGCGCAGGTCGTTCACCTGCTGTCTACCATGGACAGCC

FIGURE 79C

CGGCCTCCACCTGACCGTGGCCCACCCAGCCACTCCCGGGACCACGGCAAAAGGAACCACCCAGACCCACCACCC
GTACACCCTCAGCAGACCCTGAAGACTTGCTTTTAAACAAAGAAAATCCTGGGCACTTCTGCAGGGCTGCTGGTT
CCGAGCTGACACCCGTCTTAATAAAAGGCCCAGGAGTGCCTCTTCCAAACAAAAACAGCCTCCTCTCCATAGCTG
GGAAGTTTATTTTGTTTTGTCTCTGAAGACAGCAGTTTTATTGCATCACTAAATCTAATCAAGCTAAAACATCCC
TGTTTCCTTTTGCAAAACAGTGCCTGGCATGTGGGATCCAGGCGTTCTTTAGGATCCTTGGATACCACATCGTGA
AATCTTTTATTTTTTTACTCTGAGACCAGCACCAGATGTAAGTAAGCATCTCATATATTTCAGCCAAATAAATGG
GCCAAGGGAAAAAAATATATATATATAGACAGGACTAGAGAAAACCTATTTTTGTAATGATGTTTCTTTGGATAC
TGTCTAGTCACCCAGAAAAATGTATGGATGAANNNNNNNNNNNNNNNNNNGAGACAAAGTCTCCCCGGTTGTCG
TGCAGGCTGGAGTTGCAGGTGGCATTGATCTCTTCACTGTGCAACCCTCCATTCCCTCCTGTGTTCTCAGGCCCT
CCTTAGATTAACGTGGAATTTACAAGCGTGCCCACCACCATGTGCCCGGCTTAATTTTGTGGTATTTTTGTGGAT
AGAGACAGAGTTTCCACCAGGTTTGGCTCAGGCGTGGTCTCTCTCAAACTTCTTTGACTTTCAGGTTAATTCCAC
CCACCTTTGGCCCTCCCAAAGGTTGCTGGAATTTACAGGCATTTACGCCACCATTCTTTCAGCCAGATGTGATTT
TTTCTTATTTGAAAACAGTTGAAAGTGCTTATTTTTTGTTCCCCAAATGGCGCTAGTGAATCACTAGGAGGGTCC
CACTGATAGGCCATGTTTAGCACTGGTTGCCAGGGATTCTCTTTTTGAGAGAGGGAAAGCAAAATGAATGGAAGT
ACCCAGCTGGAGGTTTCAGGGCTTCTGGAGGATGCTCTCGCATAGCTCGAGGTCCTCTGCCCACCTCTTCTCTCC
AAGGAAAATGAGGACTGCCCCTTCCCCCTGCAGGATTGGCCCCCAGCCTGCGCATGCACCCTCCTCTTGCCCAAG
TGGGGAGCACAGAGGCGGAGAGGAATCCCTTACCACACCCACGGCCCAGCTTGCTCACGAGTGTCACCTCTGTGA
CGGTCACCACTGCTCCCTTGGAGGGCCACTTGAGTTACTGTTGCTTCCTCGCCTGCTGGCTTGATGAGCACCGAT
GGTGGGATCTGACCCCGAGGGGCAGAGCTGTCGGTGACTGAGGACTGGACTGTGGTGACCATGCCGATTTGCTCA
GGGAGAACGTTGCAATGCACCCAGCAGCTCCTGGCTCTGCAGGCGGCACAGCCTGGGGCCCTGTGATCCTCTGGT
TTCTTCCATTGGGGCGGAGTCGGGGGTGGAGGGAGCTGGCCACAACCCACTGCTCTGATGGGTGGTTTGTCCAAG
GATGCTGAATGTAATGCCTGGTCAATGTGGAAGCCCATGAGGTTGCCCAGGGAAGCCTCCAAAAGCTGGGATGCT
TGAGGGTATCCAAGTTGAAAAAGACAAAATCTGACCATCAGCCAGTGACAGTCCTGGCAAATGAAGGTGGGGCGG
GGCAGTGAGGGGTGGGAGAAGGTGAATGATTCATTATTCCACCCCGAGGTTTGCTGGGGTGAGGGGAAGAATCGA
TGCTGCTTTGGGAACTGAAGGTTTTTCTGTTGGGAAGGCCCTCTTGGTTTTGGAGAGAAAGACAAGTTATGAGTA
GCTGCTACCCTGGAACGGTGGGCAGAGAGCCTACTAGGAAATGTGCAGAATAAACTATTTTTTGAAGGACACAAA
AAAAAAAGGGGG

FIGURE 80

MRSIRRWSYEMFRNERAIRFVVMVTPEDLKANAEYIKMADHYVPVPGGPNNNNYANVELILDIAKRIPVQAVWAG
WGHASENPKLPELLLKNGIAFMGPPSQAMWALGDKIASSIVAQTAGIPTLPWSGSGLRVDWQENDFSKRILNVPQ
ELYEKGYVKDVDDGLQAAEEVGYPVMIKASEGGGGKGIRKVNNADDFPNLFRQVQAEVPGSPIFVMRLAKQSRHL
EVQILADQYGNAISLFGRDCSVQRRHQKIIEEAPATIATPAVFEHMEQCAVKLAKMVGYVSAGTVEYLYSQDGSF
YFLELNPRLQVEHPCTEMVADVNLPAAQLQIAMGIPLYRIKDIRMMYGVSPWGDSPIDFEDSAHVPCPRGHVIAA
RITSENPDEGFKPSSGTVQELNFRSNKNVWGYFSVAAAGGLHEIADSQFGHCFSWGENREEAISNMVVALKELSI
RGDFRTTVEYLIKLLETESFQMNRIDTGWLDRLIAEKVQAERPDTMLGVVCGALHVADVSLRNSVSNFLHSLERG
QVLPAHTLLNTVDVELIYEGVKYVLKVTRQSPNSYVVIMNGSCVEVDVHRLSDGGLLLSYDGSSYTTYMKEEVDR
YRITIGNKTCVFEKENDPSVMRSPSAGKLIQYIVEDGGHVFAGQCYAEIEVMKMVMTLTAVESGCIHYVKRPGAA
LDPGCVLAKMQLDNPSKVQQAELHTGSLPRIQSTALRGEKLHRVFHYVLDNLVNVMNGYCLPDPFSSSKVKDWRA
IDENLRDPSLPLLELQDIMTSVSGRIPPNVEKSIKKEMAQYASNITSVLCQFPSQQIANILDSHAATLNRKSERE
VFFMNTQSIVQLVQRYRSGIRGHMKAVVMDLLRQYLRVETQFQNGHYDKCVFALREENKSDMNTVLNYIFSHAQV
TKKNLLVTMLIDQLCGRDPTLTDELLNILTELTQLSKTTNAKVALRARQVLIASHLPSYELRHNQVESIFLSAID
MYGHQFCIENLQKLILSETSIFDVLPNFFYHSNQVVRMAALEVYVRRAYIAYELNSVQHRQLKDNTCVVEFQFML
PTSHPNRGNIPTLNRMSFSSNLNHYGMTHVASVSDVLLDNSFTPPCQRMGGMVSFRTFEDFVRIFDEVMGCFSDS
PPQSPTFPEAGHTSLYDEDKVPRDEPIHILNVAIKTDCDIEDDRLAAMFREFTQQNKATLVDPWDPAPYFPGCTK
DFRKQVNYEVDRRFHREFPKFFTFRARDKFEEDRIYRHLEPALAFQLELNRMRNFDLTAHSMCNHKMHLYLGAAK
VEVGTEVTDYRFFVRAIIRHSDLVTKEASFEYLQNEGERLLLEAMDELEVAFNNTNVRTDCNHIFLNFVPTVIMD
PSKIEESVRYMVMRYGSRLWKLRVLQAEVKINIRQTTTGSAVPIRLFITNESGYYLDISLYKEVTDSRSGNIMFH
SFGNKQGPQHGMLINTPYVTKGSCSRPKRFQAQTLGTTYIYDFPEMFRQALFKLWGSPDKYPKDILTYTELVLDS
QGQLVEMNRLPGGNEVGMVAFKMRFKTQEYPEGRDVIVIGNDITFRIGSFGPGEDLLYLRASEMARAEGIPKIYV
AANSGARIGMAEEIKHMFHVAWVDPEDPHKGFKYLYLTPQDYTRISSLNSVHCKHIEEGGESRYMITDIIGKDDG
LGVENLRGSGMIAGESSLAYEEIVTISLVTCRAIGIGAYLVRLGQRVIQVENSHIILTGASALNKVLGREVYTSN
NQLGGVQIMHYNGVSHITVPDDFEGVYTILEWLSYMPKDNHSPVPIITPTDPIDREIEFLPSRAPYDPRWMLAGR
PHPTLKGTWQSGFFDHGSFKEIMAPWAQTVVTGRARLGGIPVGVIAVETRTVEVAVPADPANLDSEAKIIQQAGQ
VWFPDSAYKTAQAIKDFNREKLPLMIFANWRGFSGGMKDMYDQVLKFGAYIVDGLRQYKQPILIYIPPYAELRGG
SWVVIDATINPLCIEMYADKESRGGVLEPEGTVEIKFRKKDLIKSMRRIDPAYKKLMEQLGEPDLSDKDRKDLEG
RLKAREDLLLPIYHQVAVQFADFHDTPGRMLEKGVISDILEWKTARTFLYWRLRRLLLEDQVKQEILQASGELSH
VHIQSMLRRWFVETEGAVKAYLWDNNQVVVQWLEQHWQAGDGPRSTIRENITYLKHDSVLKTIRGLVEENPEVAV
DCVIYLSQHISPAERAQVVHLLSTMDSPAST

FIGURE 81

TTCCTCTGGCCACAAAAGACCTTTAATGGCCTXXTATTTATTGTTCTTTTGTTCATTTGTTAGAGTTGAATGAAC
TATAATAACTTGTCTGACATAATAAGAATGCCACAGGTATAACAGATAAACCTGGCAGGTXGGTCCAGGAATGAG
AGTXTCACAAAATAATCACTCAACACAAGGGCCACAGACCTGGAGATTCTTCCCAGCCATCCCTCACTCCTGCCC
CAGGACACAACCCATGCAGGCCCCCATTCCATAAGGAAGAAGGCAGGTCCCACAAGTGTCTGTGGCTAAGACCTT
AACACTGAGCAGAGATXGCCCGGGAAGATGGCACTTCCTAT

FIGURE 82

CTTTCTGCTGTTACCGGGAGCGCGGTGGCCACGGAACGCTGCCCGGAGCCGCGCGAGGGAGGACCCGACGCGCGG
CGTTTACCCAGCGCAGCGTTCCACCGCTCGGGTTTGGCTGGAATAGCTCTCCAGACCCCCAGCTGGCCATGTGGT
GAGTTCAGGGCCCAAATCAAGTAGTACCAGCAATCAGGGAACTCCTATCTGTTTTGAATGGATTCACACCAGCCA
CAAGCCTGGAAAGATGGTGTCACAATCTACAGTCAGGCAGGATTCTCCTGTGGAGCCCTGGGAAGGGATCAGCGA
TCACTCTGGCATTATTGATGGTTCGCCCAGACTCCTGAACACTGACCATCCTCCTTGCCAATTAGACATCAGGCT
CATGAGGCACAAAGCTGTCTGGATTAACCCCCAGGATGTGCAGCAACAGCCGCAGGACTTGCAATCTCAGGTGCC
AGCAGCAGGGAACAGTGGGACCCATTTTGTGACAGATGCTGCCTCTCCCTCAGGCCCTTCACCTTCGTGCCTCGG
GGACTCCCTGGCAGAGACAACGTTGTCTGAGGATACCACAGACTCCGTTGGCAGCGCTTCTCCCCATGGCTCGAG
TGAAAAGAGTAGCAGCTTCTCTCTGTCCTCAACAGAGGTACACATGGTCCGCCCAGGATACTCTCATCGGGTGTC
TCTGCCCACAAGCCCTAGGATTTTGGCCACCTCCCCATATCCTGAGACTGACAGTGCTTTTTTTGAGCCTTCCCA
TCTGACATCTGCTGCTGATGAAGGTGCTGTTCAAGTCAGTAGAAGAACCATTTCTTCGAATTCCTTCTCACCAGA
GGTATTTGTGCTGCCTGTTGATGTAGAAAAGGAAAATGCCCACTTTTATGTTGCAGATATGATTATATCAGCAAT
GGAGAAAATGAAGTGTAACATTCTGAGTCAACAGCAGACAGAGAGCTGGAGTAAAGAAGTCAGTGGGTTACTTGG
GAGTGATCAGCCTGACTCTGAAATGACTTTTGATACCAACATAAAGCAAGAGTCTGGGTCTTCTACTTCTTCATA
CAGTGGCTATGAAGGTTGTGCTGTGTTACAGGTCAGCCCAGTGACTGAAACACGTACTTACCATGATGTGAAAGA
GATTTGCAAATGCGATGTTGATGAATTTGTTATTTTAGAGCTTGGAGATTTTAATGATATCACAGAAACCTGTAG
CTGTTCCTGCAGCTCCTCTAAGAGTGTCACTTATGAGCCAGACTTCAATTCTGCAGAACTATTAGCCAAAGAGCT
GTACCGCGTGTTCCAGAAGTGCTGGATACTGTCAGTAGTTAATTCTCAGCTGGCAGGTTCCCTGAGTGCAGCTGG
CTCGATAGTCGTAAATGAAGAGTGTGTCCGAAAAGACTTTGAATCCAGTATGAATGTAGTACAGGAAATTAAATT
TAAGTCTAGGATCAGAGGGACTGAAGACTGGGCTCCTCCTAGATTTCAAATCATATTTAATATTCATCCACCACT
CAAGAGGGACCTTGTGGTGGCAGCCCAGAATTTTTTCTGTGCCGGCTGTGGAACTCCAGTAGAGCCTAAGTTTGT
GAAGCGGCTCCGGTACTGCGAATACCTAGGGAAGTATTTCTGTGACTGCTGCCACTCATATGCAGAGTCGTGCAT
CCCTGCCCGAATCCTGATGATGTGGGACTTCAAGAAGTACTACGTCAGCAATTTCTCCAAACAGCTGCTCGACAG
CATATGGCACCAGCCCATTTTCAATTTGCTGAGCATCGGCCAAAGCCTGTATGCGAAAGCCAAGGAGCTGGACAG
AGTGAAGGAAATTCAGGAGCAGCTCTTCCATATCAAGAAGCTGTTGAAGACCTGTAGGTTTGCTAACAGCTGTGT
CAAGGAAAGGGCTTTATTTGTGAATTTTGCCAGAATACGACTGTCATCTTCCCATTTCAGACAGCAACATGTAGA
AGATGTTCAGCGTGCAGGGCTTGCTTTCACAAACAGTGCTTCCAGTCCTCCGAGTGCCCCCGGTGTGCGAGGATC
ACAGCGAGGAGAAAACTTCTGGAAAGTGTGGCCTCTGCAGCAACATGATGCCCCTGAGTACTGTGAAAAAGACTG
TTCAACATGCCTTATGATAACACCGATTTGTGTCTATTATTGGTGACATTGTTTTAGATATTGGGTATTGTATAT
TAAGGAAAAAGATGGTCTATATTCTCTTTATTGCATATACTTAATGTTTCAAAAGAATGCAGATTCTGTGTTTAA
GCACAGGGCTGATAGTTGTGGTTTTGTTTACAAATGTTCTGTTTTGGCTGCTATTGGTTTTTTAAAGAGGTTTTT
TATACTTTTGTATTTGAATAGTTATGTTTCACTGATGCTGAGCCAGTTTGTATGTGTGTGCATATATGTGAACTG
TAACTGACAAGATGAATTACTCAGTTTCTCTTTCTCTAAAGCTTGTTTGATGAAACTGGTTGGTCCTTTCAGTGA
ACAAAAATATGACCCCAAAAAAAAAAAAAAAAA

FIGURE 83

MVSQSTVRQDSPVEPWEGISDHSGIIDGSPRLLNTDHPPCQLDIRLMRHKAVWINPQDVQQQPQDLQSQVPAAGN
SGTHFVTDAASPSGPSPSCLGDSLAETTLSEDTTDSVGSASPHGSSEKSSSFSLSSTEVHMVRPGYSHRVSLPTS
PRILATSPYPETDSAFFEPSHLTSAADEGAVQVSRRTISSNSFSPEVFVLPVDVEKENAHFYVADMIISAMEKMK
CNILSQQQTESWSKEVSGLLGSDQPDSEMTFDTNIKQESGSSTSSYSGYEGCAVLQVSPVTETRTYHDVKEICKC
DVDEFVILELGDFNDITETCSCSCSSSKSVTYEPDFNSAELLAKELYRVFQKCWILSVVNSQLAGSLSAAGSIVV
NEECVRKDFESSMNVVQEIKFKSRIRGTEDWAPPRFQIIFNIHPPLKRDLVVAAQNFFCAGCGTPVEPKFVKRLR
YCEYLGKYFCDCCHSYAESCIPARILMMWDFKKYYVSNFSKQLLDSIWHQPIFNLLSIGQSLYAKAKELDRVKEI
QEQLFHIKKLLKTCRFANSCVKERALFVNFARIRLSSSHFRQQHVEDVQRAGLAFTNSASSPPSAPGVRGSQRGE
NFWKVWPLQQHDAPEYCEKDCSTCLMITPICVYYW

FIGURE 84

CCGCTTCCCCGTCTTGTACACCCCTAACTCCTGAGGCTCCTCCGAATCACGCGAGTGGAAGCGGAGAAGCTCAAG
TGGCCGCC**ATG**TCAGAGGCTTATTTCCGAGTGGAGTCGGGTGCGCTGGGGCCTGAGGAGAACTTTCTTTCTTTGG
ACGACATCCTGATGTCCCACGAGAAGCTGCCGGTGCGCACGGAGACCGCCATGCCTCGCCTTGGCGCTTTCTTCC
TGGAGCGGAGCGCAGGCGCCGAGACTGACAACGCGGTCCCACAGGGTTCCAAGCTTGAACTACCCTTGTGGCTGG
CAAAAGGACTTTTTGACAACAAGCGACGGATCCTTTCTGTGGAACTCCCCAAGATCTACCAAGAGGGTTGGAGGA
CTGTGTTCAGTGCAGATCCCAATGTGGTGGACCTCCACAAAATGGGGCCCCATTTCTACGGGTTTGGCTCCCAGC
TCCTGCATTTTGACAGTCCCGAGAATGCAGACATTTCCCAGTCTCTGCTGCAGACTTTTATCGGACGTTTTCGCC
GCATCATGGACTCCTCACAGAATGCTTACAACGAAGACACTTCAGCCCTGGTAGCCAGGCTAGACGAGATGGAGA
GGGGCTTATTTCAAACAGGGCAGAAAGGACTGAATGACTTTCAGTGTTGGGAGAAGGGGCAGGCTTCTCAGATCA
CAGCTTCCAACCTCGTTCAGAATTACAAGAAGAGAAAATTCACTGATATGGAAGAC**TGA**AAGCCGGAAGAACACA
GAATGGCTCCTCACAGACGTATCCCTCCGTGTGTCCTTGATAGGAGCTGGTTGACCTTGTACAGAACCAGAATCC
TGTCCCATTTCATGGCTTATTTCCTGTGGCCATAGAGAATTATAGGGAACTGGACATGCTGGAGGATGTGGGTGT
CCCTGGCTCTGTGAGTCTTCCAGGACCGTCCCACCCTGCTGACCCACAGCCCAGGCCCTTTAACCCAAGAACCCA
TGGCCAAGGAGAAATCAAAGTCCTTCCTAAATAAGAATCACTGCCATATAATATATCACAGTAGAGTTGCAACTG
AGATTCCTTGTGTCTGGGAGTTTGGACAGCTTCAGATGTACAGTTTCACTAGCCACAAAGCACAGGTACAAACTG
GGTCATCGCCTGTTCACAAAATGCTCTCTTGATCTTATTTGCCTCATCTTCCTCATGGTTGTACAGAGGATAGCA
CCCCACCATGCCAGCCTGACTTGGAGATATCTCCTGCTGCCTGCCTGCAGGGAGTTACCCCAGTTTCCAAAAACA
GTCGCCCAGATAAAGGAGGAAAAGGGAAAGGCAGACGAATGGCATGGCTTTTACTAAAGAAAAGATGTTGGCCTC
ATACTCTATACTCAGGGCTTAATGAACTGGAATCTGCATAACTCAGCAGTCAACCCAGAAGGGAAATGGTTAAAC
TGAGCTTGTTATTGCCTCGGAGAGCCTAAGAGCACCCGCACACTTAATTCTACTCCCTGTCTAGAAAAGCTGTCA
GGGAGTCGTTTGGAATTGCAATGTAGTTATTAAGGGCTGTTAACCAGCCTGCATTACATCTGGAAGTCAGGACTT
GGGTGCTGACTATGAAGGGCCCTGTTTTCAAAATCTAACATTGCAAGTGTAAATGGGCAAGAAGCCTCCGTTGTG
CTTTTTTTTTCCTCTTCAGTAACTTTTGCAACATTATTGCATAGAAGATCCCTGACCATTTACTAGGAACCTGGT
TAAGCAAGCACTAATCTCTTTTCCTGGAGATCAAGGATGCAACCTCAGGTTGAGAAAGAAACAGGGTTCCCTGGG
CCCATTAGACTGTTTGCAGGGCATCACTGCTTCCCCCTGACACCTCACAACTAGCAAAAATTGTCTTTGTCTTTG
GAAATTATAGAGGGATTTGGGTATCCAGATTGTGCAGATGCAAACTTAGGCTGTCTTGATGCAAACTTAGAACCA
CAGAAATGCTTTTAAAATGCCTGTTTTAAGATGGAATTGTTGTTTTTATAATTTGATTTTAGTGCTAAATAAATG
ATTGGCTTTGTACATGAATATGTTCTGTACAAGTGCTCTTTCACTAGTACTACAGATAATCAAAGCTATCAGAAT
TGTGTCTTTGATCATATTTGACGGTAATACACAAATAAATCCATGTTTTAGCAAAAAAAAAAAAAAAAAAAAAA
A

FIGURE 85

MSEAYFRVESGALGPEENFLSLDDILMSHEKLPVRTETAMPRLGAFFLERSAGAETDNAVPQGSKLELPLWLAKG
LFDNKRRILSVELPKIYQEGWRTVFSADPNVVDLHKMGPHFYGFGSQLLHFDSPENADISQSLLQTFIGRFRRIM
DSSQNAYNEDTSALVARLDEMERGLFQTGQKGLNDFQCWEKGQASQITASNLVQNYKKRKFTDMED

FIGURE 86

CTGGGACCCGGGCTGGAAGGCAGGGCATCAGCTATGGAACAACCTGGGCAGGATCCCACCTCAGACGACGTCATG
GACTCGTTCCTGGAAAAGTTCCAGAGCCAGCCTTACCGTGGCGGCTTTCATGAGGACCAGTGGGAGAAGGAATTT
GAAAAGGTCCCCCTATTTATGTCGAGAGCGCCATCAGAAATTGATCCCAGGGAGAATCCTGACTTGGCTTGTCTC
CAGTCAATTATTTTTGATGAGGAGCGTTCTCCAGAAGAACAGGCCAAGACCTATAAAGATGAGGGCAATGATTAC
TTTAAAGAAAAAGACTACAAGAAAGCTGTAATTTCATACACTGAAGGCTTAAAGAAGAAATGTGCAGATCCTGAT
TTGAATGCTGTCCTTTATACCAACCGGGCAGCAGCACAGTACTATCTGGGCAATTTTCGTTCTGCTCTCAATGAT
GTGACAGCTGCCAGAAAGCTAAAACCCTGCCACCTCAAAGCAATAATAAGAGGTGCCTTATGCCATCTGGAACTG
ATACACTTTGCCGAGGCCGTGAACTGGTGTGATGAGGGACTGCAAATAGATGCCAAAGAGAAGAAGCTTCTGGAA
ATGAGGGCTAAAGCAGACAAGCTGAAGCGAATTGAACAGAGGGATGTGAGGAAAGCCAACTTGAAAGAAAAGAAG
GAGAGGAATCAGAATGAGGCTTTACTCCAGGCCATCAAGGCTAGGAATATCAGGCTCTCAGAAGCTGCCTGTGAG
GATGAAGATTCAGCCTCAGAAGGTCTAGGTGAGCTTTTCCTGGATGGACTCAGCACTGAGAACCCCCATGGAGCC
AGGCTGAGTCTAGATGGCCAGGGCAGGCTGAGCTGGCCTGTGCTCTTTCTGTACCCAGAGTATGCCCAGTCGGAC
TTCATCTCTGCTTTTCATGAGGACTCCAGGTTTATTGATCATCTAATGGTGATGTTTGGTGAAACACCTTCTTGG
GACCTAGAGCAAAAATATTGCCTGATAATTTGGAGGTCTACTTTGAGGATGAGGACAGGGCAGAACTATACCGGG
TGCCTGCCAAGAGCACCTTGCTACAGGTTCTACAGCACCAGAGGTACTTTGTAAAAGCCCTGACACCAGCATTTT
TGGTCTGTGTAGGATCCTCTCCTTTTTGCAAGAATTTTCTCCGGGGGAGAAAGGTGTACCAGATACGATGACTAA
GCCAGGGCCCCTGGATCTCCTCCCTTACCCTCCTCTGCTGGGAACCTAGCACACCTGAATCAGCTGGACATACTG
CTGGAGTCCAGTGCTTTCTTTCCGTCACCCTGGGGATAGTCCTTCCTGGCATCGTGGTGGGGGAGGAGCCTCTGG
CTTCCCTAAACTGCAGCTCTCTGGCTGGTCTTCACTTTCCTCAGTTGATATAAAACTCTGGTCTTGGCCATGATG
TCCTTGGATTCCATCGCTAAAGGGACCATCTGCTGCAGTTACCACAGCAACTGACTTGAGCGGCACCTGGTCTGT
GGAGATGGACTCAGGATCCAGTGACATGATTCTGAACTTTTGTGGAGTTTGACACCTTAGAGAAGCTACCCCTCA
AACTGCACATCTACACACAAACAAACAATGCATAGGATTCCAAGGCTTTAAAGCTGAGAGACCCTGGCCTCAAGT
TATTTCATGCGCACAGAGGGAAGCCATGTGGGGTTGCTGAAGATGCCTTGAGGTGAAATGGGGGCAGGAAAGCCA
CATCTTGCTCTGCATTTATAAAGACCGTACAAACTCAGATCCTTGGTACCCCTAAAAAGATTGCCAATTTTCTTC
ATCTTTGCCATATGGAGGACTGTGACAGACTTTGGACAGTGGCCTCTTGAGTTCCTCTGCAGTTTTGACATTTAG
GATTTTGTGTCTTTTAAACTGGAAAATCTTCTAGCATGTTGGGTTGTTACAGAGTATATTTTTGTCTGCAGCTGT
TTGTTGCCCCATTCCTAAGAGGAGTTTATCCATCCTGAAAAAAAAAAAAAAAAAA

FIGURE 87

MEQPGQDPTSDDVMDSFLEKFQSQPYRGGFHEDQWEKEFEKVPLFMSRAPSEIDPRENPDLACLQSIIFDEERSP
EEQAKTYKDEGNDYFKEKDYKKAVISYTEGLKKKCADPDLNAVLYTNRAAAQYYLGNFRSALNDVTAARKLKPCH
LKAIIRGALCHLELIHFAEAVNWCDEGLQIDAKEKKLLEMRAKADKLKRIEQRDVRKANLKEKKERNQNEALLQA
IKARNIRLSEAACEDEDSASEGLGELFLDGLSTENPHGARLSLDGQGRLSWPVLFLYPEYAQSDFISAFHEDSRF
IDHLMVMFGETPSWDLEQKYCLIIWRSTLRMRTGQNYTGCLPRAPCYRFYSTRGTL

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FIGURE 88

GTTTACGTCTCGCTCCGGGGCGGAAAGTGGGTCAGGGCCGGGCTGGCGGAGCGCGCAGCGGGGGCTGCAGATTCT
TTCCACCATGGCCAGACGCCCCCGGAACAGCAGGGCCTGGCACTTCGTCCTGAGTGCAGCCCGCCGAGACGCAGA
TGCCCGGGCCGTGGCTCTAGCGAGGCCTCCTTCTGTAGCAGCCTGCACTCGGCCCACCGGGGCAGGGACTGCCGC
TGCGGAGAGGAAGACGAGTGTGAGCGTGGGGCCCAGCCCCTGCTGGGACTGCACTGCGGGCGGGCCTGGGGGTGG
GCAGGGCAGAGCCCCATGGAGCTCTCAGGGCTGCCCCAGCCTGGGCCTCTCTTGCAGATTTCGACTGGGTCTGGG
ATGACTTAAATAAGTCATCAGCCACCCTGCTGAGCTGTGACAACCGTAAGGTCAGCTTCCAC**ATG**GAGTACAGCT
GCGGCACAGCGGCCATCCGGGGCACCAAGGAGCTGGGGGAGGGCCAGCACTTCTGGGAGATCAAGATGACCTCTC
CCGTCTACGGCACACTCACCTTTTTCAAGAACAGGAAGTGTATAGGTGTGGCAGCCACCAAGCTGCAGAACAAGA
GATTCTACCCGATGGTGTGCTCCACGGCGGCCCGGAGCAGCATGAAGGTCACCCGCTCCTGTGCCAGCGCCACTT
CCCTCCAGTACCTGTGCTGCCACCGCCTGCGCCAGCTGCGGCCAGACTCGGGAGACACGCTGGAGGGTCTGCCGC
TGCCGCCGGGCCTCAAGCAGGTGCTACACAACAAGCTGGGCTGGGTCCTGAGCATGAGTTGCAGCCGCCGCAAGG
CTCCAGTGTCCGATCCCCAGGCAGCGACCTCCGCCCACCCCAGCAGTCGCGAGCCTCGGCCCTGCCAGAGGAAGC
GCTGCCGCCGGACC**TGA**CTGACTTCCCAGTGGAACTGCCTTCTTGGGCTGGGGCAGCCCCTTTCCTCTGTCCCTT
CTTTCTCTGTCCCTTCCTTCCAGCCACACTCCAGGGCGGAGTTGGATGAGGCCCGTCCGGAGGGAGCCATCTCTT
GCTCCCGAGGCTGGGACAGTCCTTTCTGTGGGGGCTCTAGGGCCCCTCTGCTGCTGTGCTGGGTGGGGAAGCGGC
TGCCCTGAGCCCCAGGTCTTGTGGGAGGCTGCGAGGACGAGAGCCTGGCTGGAGCCCGCGTTGCTGTTCCTAGAT
GGTGGGCATCGGGACGTCGGATGTGGACCTGGACAAATACCGCCACACGTTCTGCAGCCTGCTGGGCAGGGATGA
GGACAGCTGGGGCCTCTCCTACACGGGTGCGTGAGGCCCAGGGTGGGGCGGGGCCGAGCCTGGAGCTCCCGGGCT
CACTGCGACCCTGGCTGCCCCCAGGCCTCCTCCACCACAAGGGCGACAAGACCAGCTTCTCGTCGCGGTTCGGCC
AGGGCTCCATCATTGGCGTGCACCTGGACACCTGGCACGGCACACTCACCTTTTTCCTAACTTGCTCTGCATGCT
GTCAGCGGCTGCCCCGCCGTCATAGACTTAAAGGACTGCAATAAATGTAGAGTTGATGTCTAACACCC

FIGURE 89

MEYSCGTAAIRGTKELGEGQHFWEIKMTSPVYGTLTFFKNRKCIGVAATKLQNKRFYPMVCSTAARSSMKVTRSC
ASATSLQYLCCHRLRQLRPDSGDTLEGLPLPPGLKQVLHNKLGWVLSMSCSRRKAPVSDPQAATSAHPSSREPRP
CQRKRCRRT

FIGURE 90

CACACCCTGCAGGACACCTCCTGGCACAACACCACCTTCTTTGGGGTTTTTCAAGCACAGTGGGGTGACATGTAC
CTGTCGGCCATCTGTGAGTACCAGTTGGAAGAGATCCAGCGGGTGTTTGAGGGCCCCTATAAGGAGTACCATGAG
GAAGCCCAGAAGTGGGACCGCTACACTGACCCTGTACCCAGCCCTCGGCCTGGCTCGTGCATTAACAACTGGCAT
CGGCGCCACGGCTACACCAGCTCCCTGGAGCTACCCGACAACATCCTCAACTTCGTCAAGAAGCACCCGCTGATG
GAGGAGCAGGTGGGGCCTCGGTGGAGCCGCCCCCTGCTCGTGAAGAAGGGCACCAACTTCACCCACCTGGTGGCC
GACCGGGTTACAGGACTTGATGGAGCCACCTATACAGTGCTGTTCATTGACACAGGAGACGGCTGGCTGCTCAAG
GCTGTGAGCCTGGGGCCCTGGGTTCACCTGATTGAGGAGCTGCAGCTGTTTGACCAGGAGCCCATGAGAAGCCTG
GTGCTATCTCAGAGCAAGAAGCTGCTCTTTGCCGGCTCCCGCTCTCAGCTGGTGCAGCTGCCCGTGGCCGACTGC
ATGAAGTATCGCTCCTGTGCAGACTGTGTCCTCGCCCGGGACCCCTATTGCGCCTGGAGCGTCAACACCAGCCGC
TGTGTGGCCGTGGGTGGCCACTCTGGATCTCTACTGATCCAGCATGTGATGACCTCGGACACTTCAGGCATCTGC
AACCTCCGTGGCAGTAAGAAAGTCAGGCCCACTCCCAAAAACATCACGGTGGTGGCGGGCACAGACCTGGTGCTG
CCCTGCCACCTCTCCTCCAACTTGGCCCATGCCCGCTGGACCTTTGGGGGCCGGGACCTGCCTGCGGAACAGCCC
GGGTCCTTCCTCTACGATGCCCGGCTCCAGGCCCTGGTTGTGATGGCTGCCCAGCCCCGCCATGCCGGGGCCTAC
CACTGCTTTTCAGAGGAGCAGGGGGCGCGGCTGGCTGCTGAAGGCTACCTTGTGGCTGTCGTGGCAGGCCCGTCG
GTGACCTTGGAGGCCCGGGCCCCCCTGGAAAACCTGGGGCTGGTGTGGCTGGCGGTGGTGGCCCTGGGGGCTGTG
TGCCTGGTGCTGCTGCTGCTGGTGCTGTCATTGCGCCGGCGGCTGCGGGAAGAGCTGGAGAAAGGGGCCAAGGCT
ACTGAGAGGACCTTGGTGTACCCCCTGGAGCTGCCCAAGGAGCCCACCAGTCCCCCCTTCCGGCCCTGTCCTGAA
CCAGATGAGAAACTTTGGGATCCTGTCGGTTACTACTATTCAGATGGCTCCCTTAAGATAGTACCTGGGCATGCC
CGGTGCCAGCCCGGTGGGGGGCCCCCTTCGCCACCTCCAGGCATCCCAGGCCAGCCTCTGCCTTCTCCAACTCGG
CTTCACCTGGGGGGTGGGCGGAACTCAAATGCCAATGGTTACGTGCGCTTACAACTAGGAGGGGAGGACCGGGGA
GGGCTCGGGCACCCCCTGCCTGAGCTCGCGGATGAACTGAGACGCAAACTGCAGCAACGCCAGCCACTGCCCGAC
TCCAACCCCGAGGAGTCATCAGTATGAGGGGAACCCCCACCGCGTCGGCGGGAAGCGTGGGAGGTGTAGCTCCTA
CTTTTGCACAGGCACCAGCTACCTCAGGGACATGGCACGGGCACCTGCTCTGTCTGGGACAGATACTGCCCAGCA
CCCACCCGGCCATGAGGACCTGCTCTGCTCAGCACGGGCACTGCCACTTGGTGTGGCTCACCAGGGCACCAGCCT
CGCAGAAGGCATCTTCCTCCTCTCTGTGAATCACAGACACGCGGGACCCCAGCCGCCAAAACTTTTCAAGGCAGA
AGTTTCAAGATGTGTGTTTGTCTGTATTTGCACATGTGTTTGTGTGTGTGTGTATGTGTGTGTGCACGCGCGTGC
GCGCTTGTGGCATAGCCTTCCTGTTTCTGTCAAGTCTTCCCTTGGCCTGGGTCCTCCTGGTGAGTCATTGGAGCT
ATGAAGGGGAAGGGGTCGTATCACTTTGTCTCTCCTACCCCCACTGCCCCGAGTGTCGGGCAGCGATGTACATAT
GGAGGTGGGGTGGACAGGGTGCTGTGCCCCTTCAGAGGGAGTGCAGGGCTTGGGGTGGGCCTAGTCCTGCTCCTA
GGGCTGTGAATGTTTTCAGGGTGGGGGGAGGGAGATGGAGCCTCCTGTGTGTTTGGGGGGAAGGGTGGGTGGGGC
CTCCCACTTGGCCCCGGGGTTCAGTGGTATTTTATACTTGCCTTCTTCCTGTACAGGGCTGGGAAAGGCTGTGTG
AGGGGAGAGAAGGGAGAGGGTGGGCCTGCTGTGGACAATGGCATACTCTCTTCCAGCCCTAGGAGGAGGGCTCCT
AACAGTGTAACTTATTGTGTCCCCGCGTATTTATTTGTTGTAAATATTTGAGTATTTTTATATTGACAATAAAAT
GGAGAAAATGAAAAAAAAAAAAAAAAAAA

FIGURE 91

MYLSAICEYQLEEIQRVFEGPYKEYHEEAQKWDRYTDPVPSPRPGSCINNWHRRHGYTSSLELPDNILNFVKKHP
LMEEQVGPRWSRPLLVKKGTNFTHLVADRVTGLDGATYTVLFIDTGDGWLLKAVSLGPWVHLIEELQLFDQEPMR
SLVLSQSKKLLFAGSRSQLVQLPVADCMKYRSCADCVLARDPYCAWSVNTSRCVAVGGHSGSLLIQHVMTSDTSG
ICNLRGSKKVRPTPKNITVVAGTDLVLPCHLSSNLAHARWTFGGRDLPAEQPGSFLYDARLQALVVMAAQPRHAG
AYHCFSEEQGARLAAEGYLVAVVAGPSVTLEARAPLENLGLVWLAVVALGAVCLVLLLLVLSLRRRLREELEKGA
KATERTLVYPLELPKEPTSPPFRPCPEPDEKLWDPVGYYYSDGSLKIVPGHARCQPGGGPPSPPPGIPGQPLPSP
TRLHLGGGRNSNANGYVRLQLGGEDRGGLGHPLPELADELRRKLQQRQPLPDSNPEESSV

FIGURE 92

GGCACGAGGGGAAGTTGCCGGCGGCCGCGCGGCCTCCCGGGCGGGCCTACAGCCATGTCCCGGGACCCGGGGTCG
GGCGGCTGGGAGGAGGCCCCGCGCGCAGCTGCCGCGCTCTGCACCCTGTACCACGAGGCCGGACAGCGGCTGCGC
CGCCTGCAGGACCAGCTCGCTGCCCGCGACGCCCTCATCGCTCGCCTCCGCGCCCGCCTGGCCGCGCTGGAGGGG
GACGCCGCGCCGTCCCTAGTGGACGCGCTGCTGGAGCAGGTTGCGCGCTTCCGGGAGCAGCTGCGAAGGCAGGAG
GGCGGCGCCGCCGAGGCCCAGATGCGCCAGGAAATTGAGAGGCTGACTGAGCGACTAGAAGAAAAAGAGAGGGAG
ATGCAGCAGCTGCTGAGCCAGCCCCAACACGAGCGAGAGAAGGAAGTCGTCCTGCTACGGAGGAGCATGGCAGAA
GGGGAGCGCGCCCGGGCCGCCAGTGACGTCCTGTGCCGCTCCTTGGCCAACGAGACCCATCAGCTGCGGAGGACG
CTGACCGCCACCGCCCACATGTGTCAGCATCTGGCCAAGTGTCTGGATGAACGACAGCATGCACAAAGGAATGTG
GGGGAGAGAAGTCCTGACCAGTCGGAACACACAGATGGGCACACCTCTGTCCAGAGTGTTATTGAGAAGTTGCAG
GAAGAAAATCGACTGTTAAAACAGAAGGTGACTCACGTTGAAGACCTCAATGCCAAGTGGCAGCGCTACAACGCC
AGCAGGGACGAATACGTGAGGGGGCTCCATGCGCAGCTCAGGGGGCTGCAGATCCCCCACGAGCCCGAGCTGATG
AGGAAGGAGATCTCCCGGCTCAACAGACAGTTGGAAGAGAAAATAAATGACTGTGCCGAAGTGAAGCAGGAGCTG
GCGGCCTCCAGGACGGCCCGGGATGCTGCGTTGGAGCGGGTGCAGATGCTGGAACAGCAGATTCTCGCTTACAAG
GATGACTTCATGTCAGAAAGGGCCGATCGGGAACGGGCTCAAAGTAGGATTCAAGAACTGGAGGAAAAGGTCGCC
TCTTTGCTGCACCAGGTGTCCTGGAGACAGGATTCTCGAGAGCCAGACGCCGGCCGGATTCACGCTGGGAGCAAA
ACTGCCAAGTATTTGGCCGCCGACGCATTAGAGCTTATGGTGCCTGGTGGCTGGAGGCCTGGGACTGGGTCCCAG
CAGCCAGAACCCCCTGCAGAGGGCGGGCATCCTGGCGCGGTCCAGAGAGGCCAGGGGGACCTTCAGTGCCCTCAC
TGCCTGCAGTGCTTCAGTGACGAGCAAGGGGAAGAGCTCCTCAGGCATGTGGCCGAGTGCTGCCAG**TGA**CCGAGA
CTCACCCGTGCCCTTGCGGCCTCCTGGCCCGGTGCAGCTGCCCTCAGGGACAGGGTGGGTGCTCTCAGATGCCAT
GGGTTGAGCTCTACTGAGAGCCAAGGCCCCTAGAATAGTTGCGGGGCACTCTGATCGTTCACTTTGGTCCCTTTG
GCTATGGAACAGGCTGGGTCACAGGGAACTGCCAGTGAGGCTGGAGGCTGGAGGTGGAGATGGGGTCAGGAACAT
CTGGCAGAGGGAGGTCCCAGTCTGTGTCTCCATCAGGCTTAAGCCAGAGCTATCTGGTGCTGGTGTGCCAGCCCC
TCCCCCAGCCTGCCTAGAAAGGGGTGGCTGCCTGAGGGAGTCACTTGTATGGTCCCCAGGGTGGGAGCCCCATCC
TGTTCTATGGAATAAAGCGTCGCCTCTCTGCCTCGAACCAGTCAAATGGAGTATTGCGGCTGCACGTCACACTAG
GGTGGCCACCCCCGCCATTGCGAGCCACATGTCTGCACTGAGAAACTGCATTTCAGTAGCATTTGTCATCCAGCC
GGAAGTTAAAGCACACTTACTTTATTCACCTATTTTTATAATAAACGTTCTTGCTGCTGTGACTGCAAAAAAAAA
AAAAAAAAAA

FIGURE 93

MQQLLSQPQHEREKEVVLLRRSMAEGERARAASDVLCRSLANETHQLRRTLTATAHMCQHLAKCLDERQHAQRNV
GERSPDQSEHTDGHTSVQSVIEKLQEENRLLKQKVTHVEDLNAKWQRYNASRDEYVRGLHAQLRGLQIPHEPELM
RKEISRLNRQLEEKINDCAEVKQELAASRTARDAALERVQMLEQQILAYKDDFMSERADRERAQSRIQELEEKVA
SLLHQVSWRQDSREPDAGRIHAGSKTAKYLAADALELMVPGGWRPGTGSQQPEPPAEGGHPGAVQRGQGDLQCPH
CLQCFSDEQGEELLRHVAECCQ

FIGURE 94

GCCTGACGCGGCGTTGCGTCCCCCGGGAGCTGCGCTAGGCGAACGGCTGCGGCGCTTTGTGCTCCAGTCGCTCCT
AACGCTCCCTGGCCCGGCCGGGGCCGCGCAGTTAGGGCATCTGAGGCGGGGAGAAGCGGCGGGGAGACGCCGGCT
GCCAGCATGTCGCTGCCTCCGGAGAAAGCCTCCGAGCTGAAGCAGCTCATCCACCAGCAGCTGAGCAAGATGGAT
GTCCATGGTAGAATAAGAGAAATCCTTGCTGAGACTATACGGGAAGAATTGGCACCTGATCAACAGCATTTATCA
ACAGAAGATTTGATCAAAGCCCTTAGACGTCGAGGAATCATTGACGATGTGATGAAAGAACTTAATTTTGTTACT
GACAGTGTTGAGCAAGAACTCCCTTCCTCTCCAAAACAACCTATTTGTTTTGATAGACAATCGACATTAAAAAAA
ACTAATATTGATCCAACACGGAGGTATCTTTACCTTCAGGTTTTGGGTGGAAAAGCTTTCTTGGAACATCTGCAA
GAACCTGAGCCTTTACCTGGACAAGTTTGTTCAACGTTTACTTTATGTTTACATTATCGAAACCAACGTTTTCGT
TCTAAACCTGTTCCATGTGCCTGTGAACCAGATTTTCATGATGGCTTTTTACTTGAAGTACACAGAGAAAGCTTG
GGTGATGGAACTAGAATGGCTGATTCAACAACAATGTTATCAATAAGTGATCCAATTCATATGGTGCTAATCAAA
ACAGACATATTTGGTGAGACGACTTTAGTAGCATCATATTTTCTGGAATGGCGATCGGTTTTGGGCTCAGAAAAT
GGAGTGACCAGTCTGACTGTGGAACTTATGGGTGTAGGCACAGAATCAAAAGTTTCTGTGGGAATTTTAAATATA
AAACTTGAAATGTATCCACCACTCAATCAAACGTTATCTCAAGAAGTAGTGAACACACAGCTTGCTTTGGAACGT
CAGAAAACTGCAGAGAAAGAGCGATTATTTCTTGTATATGCTAAGCAGTGGTGGAGAGAATATTTGCAAATTCGA
CCCTCACACAACTCACGACTGGTTAAGATTTTTGCACAGGATGAAAATGGGATAAATAGACCAGTCTGTTCCTAT
GTTAAACCACTTCGAGCTGGACGGCTTCTTGATACTCCAAGGCAAGCAGCAAGATTTGTTAATGTCCTTGGTTAT
GAACGAGCCCCTGTTATTGGAGGAGGAGGTAAACAGGAGCAGTGGTGCACTCTGCTGGCCTTTCTCTGTAGAAAC
AAGGGTGACTGTGAAGATCACGCTAACCTTCTGTGCAGCCTTCTTCTTGGATATGGATTAGAAGCCTTTGTTTGT
GTTGGGACCAAGGCAAAAGGAGTACCTCATGCATGGGTTATGACTTGTGGAACTGATGGGGCCATCACTTTTTGG
GAGAGTTTAACAGGACACAGGTACATCCATAAACCTACCAATCCTGATGAACCTCCAGTTGCTGAACAGCCCAAA
CCACTGTACCCATATCGAACAATTGGTTGTGTTTTCAACCATCAGATGTTCCTGGGAAATTGTCAACCCTCTGAT
GCAGTAGAAACCTGTGTATTTGATTTGAACGATGAATCCAAATGGAAACCCATGAGTGAGGAAGCAATTAAATCT
GTGTGTGCTCCTGGAGCTACAACATCCCTTCCTCCCTTTCCACCTCTGTGTGCATCCACAATTGACGCGTCAGTA
ACAAGTAATGAAATTGAAATGCAGCTGAGGCTCCTGGTGTCAGAACACAGGAAGGATCTTGGCCTCACTACTGTT
TGGGAAGACCAGCTCTCCTACCTTTTATCACCAGCTTTGGCTTCTTATGAATTTGAGCGTACAACAAGTATATCA
GCAGGCAATGAAGAATTTCAAGATGCCATAAGAAGGGCTGTACCTGATGGTCACACATTTAAAGGGTTCCCAATA
CATTTTGTGTATAGAAATGCAAGACGTGCATTTGCCACATGTCTTCGATCTCCTTTCTGTGAAGAAATAATCTGT
TGCCGTGGAGACCAAGTGCGACTGGCAGTTCGTGTCCGAGTATTTACTTACCCTGAATCTGCATGTGCTGTTTGG
ATCATGTTTGCTTGTAAATATCGCTCGGTATTATAGGCCAATATTTATATAAGATTTATACCTGTGTTTAATTG
GAATTTTACACATTGTACATTACTTAGCTATTTAGAGGTTTGTTATTTTAAAATCACAATCTGGCTTGAATGGCA
TACTTCAATTTTGTATATACTTGACTGGTAATGTTTAAAAAAAATCATGCATTCCTTTAAAAATTAAGGCTGAAA
AACTTGTATAAATCTCCCTGGAATTTAGTATAAATTAAGTGTATATTCTATTTTAATAAATGCTACTTTGTTTAC
AGTTATCAGTAGTTTAAATATTAATATAAAATGCATTCAGTTTTCTTTACACAAACAGGTAATCAAAGAGATGTT
TGTCTAAGGGTTTGAGCCCTAGACAAATCAGTATGATCATTACTTTTCACAGGTTAATGGAATTATTTTATACAG
ATTAGGAGAAATTAACCTCATGACAGATTTATTTATTGCATTGGTGAAAATAAATGTTAATGAATTACCACTTTT
GTGGTTTATTCGTGGTCCTTGGGATATTTGAGACTGTCCAGAAATTTATGGTTGGACCTTGAAGCAAGAGTAGGA
AAAAACTAATACCAGAAAAGCATAAATATTAATAACCTCATATGAAAGTACATGAATCATTTAGAAATATTTATC
ACTGTGATTTGTTGTAAAAATGAATTGGGTATTTTAGAAAAACTTTATTATACCTCTTTGTTATGATACTGATAA
ATTGTGATCTTGCAGTCGAAAAAAAAAAAAAAA

FIGURE 95

MSLPPEKASELKQLIHQQLSKMDVHGRIREILAETIREELAPDQQHLSTEDLIKALRRRGIIDDVMKELNFVTDS
VEQELPSSPKQPICFDRQSTLKKTNIDPTRRYLYLQVLGGKAFLEHLQEPEPLPGQVCSTFTLCLHYRNQRFRSK
PVPCACEPDFHDGFLLEVHRESLGDGTRMADSTTMLSISDPIHMVLIKTDIFGETTLVASYFLEWRSVLGSENGV
TSLTVELMGVGTESKVSVGILNIKLEMYPPLNQTLSQEVVNTQLALERQKTAEKERLFLVYAKQWWREYLQIRPS
HNSRLVKIFAQDENGINRPVCSYVKPLRAGRLLDTPRQAARFVNVLGYERAPVIGGGGKQEQWCTLLAFLCRNKG
DCEDHANLLCSLLLGYGLEAFVCVGTKAKGVPHAWVMTCGTDGAITFWESLTGHRYIHKPTNPDEPPVAEQPKPL
YPYRTIGCVFNHQMFLGNCQPSDAVETCVFDLNDESKWKPMSEEAIKSVCAPGATTSLPPFPPLCASTIDASVTS
NEIEMQLRLLVSEHRKDLGLTTVWEDQLSYLLSPALASYEFERTTSISAGNEEFQDAIRRAVPDGHTFKGFPIHF
VYRNARRAFATCLRSPFCEEIICCRGDQVRLAVRVRVFTYPESACAVWIMFACKYRSVL

FIGURE 96

GTTGCCGCTGCGCACCTGGCTCAGGTGAGCTGCCCCGCCCCCGCCCGGCGCGAGCCCCAGGTCCTGGCAGCAGCC
CCTGACCTGTCCAGGTGCCCTGTCCAGCTGACTGCAAGGACAGAGAGGAGTCCTGCCCAGCTCTTGGATCAGTCT
GCTGGCCGAGGAGCCCGGTGGAGCCAGGGGTGACCCTGGAGCCCAGCCTGCCCCGAGGAGGCCCCGGCTCAGAGC
CATGCCAGGTGTCTGTGATAGGGCCCCTGACTTCCTCTCCCCGTCTGAAGACCAGGTGCTGAGGCCTGCCTTGGG
CAGCTCAGTGGCTCTGAACTGCACGGCTTGGGTAGTCTCTGGGCCCCACTGCTCCCTGCCTTCAGTCCAGTGGCT
GAAAGACGGGCTTCCATTGGGAATTGGGGGCCACTACAGCCTCCACGAGTACTCCTGGGTCAAGGCCAACCTGTC
AGAGGTGCTTGTGTCCAGTGTCCTGGGGGTCAACGTGACCAGCACTGAAGTCTATGGGGCCTTCACCTGCTCCAT
CCAGAACATCAGCTTCTCCTCCTTCACTCTTCAGAGAGCTGGCCCTACAAGCCACGTGGCTGCGGTGCTGGCCTC
CCTCCTGGTCCTGCTGGCCCTGCTGCTGGCCGCCCTGCTCTATGTCAAGTGCCGTCTCAACGTGCTGCTCTGGTA
CCAGGACGCGTATGGGGAGGTGGAGATAAACGACGGGAAGCTCTACGACGCCTACGTCTCCTACAGCGACTGCCC
CGAGGACCGCAAGTTCGTGAACTTCATCCTAAAGCCGCAGCTGGAGCGGCGTCGGGGCTACAAGCTCTTCCTGGA
CGACCGCGACCTCCTGCCGCGCGCTGAGCCCTCCGCCGACCTCTTGGTGAACCTGAGCCGCTGCCGACGCCTCAT
CGTGGTGCTTTCGGACGCCTTCCTGAGCCGGGCCTGGTGCAGCCACAGCTTCCGGGAGGGCCTGTGCCGGCTGCT
GGAGCTCACCCGCAGACCCATCTTCATCACCTTCGAGGGCCAGAGGCGCGACCCCGCGCACCCGGCGCTCCGCCT
GCTGCGCCAGCACCGCCACCTGGTGACCTTGCTGCTCTGGAGGCCCGGCTCCGTGACTCCTTCCTCCGATTTTTG
GAAAGAAGTGCAGCTGGCGCTGCCGCGGAAGGTGCGGTACAGGCCGGTGGAAGGAGACCCCCAGACGCAGCTGCA
GGACGACAAGGACCCCATGCTGATTCTTCGAGGCCGAGTCCCTGAGGGCCGGGCCCTGGACTCAGAGGTGGACCC
GGACCCTGAGGGCGACCTGGGTGTCCGGGGGCCTGTTTTTGGAGAGCCATCAGCTCCACCGCACACCAGTGGGGT
CTCGCTGGGAGAGAGCCGGAGCAGCGAAGTGGACGTCTCGGATCTCGGCTCGCGAAACTACAGTGCCCGCACAGA
CTTCTACTGCCTGGTGTCCAAGGATGATATGTAGCTCCCACCCCAGAGTGCAGGATCATAGGGACAGCGGGGGCC
AGGGCAGCGGCGTCGCTCCTCTGCTCAACAGGACCACAACCCCTGCCAGCAGCCCTGGGACCCTGCCAGCAGCCC
TGGGAAAAGGCTGTGGCCTCAGGGCGCCTCCCAGTGCCAGAAAATAAAGTCCTTTTGGATTCTGAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 97

MPGVCDRAPDFLSPSEDQVLRPALGSSVALNCTAWVVSGPHCSLPSVQWLKDGLPLGIGGHYSLHEYSWVKANLS
EVLVSSVLGVNVTSTEVYGAFTCSIQNISFSSFTLQRAGPTSHVAAVLASLLVLLALLLAALLYVKCRLNVLLWY
QDAYGEVEINDGKLYDAYVSYSDCPEDRKFVNFILKPQLERRRGYKLFLDDRDLLPRAEPSADLLVNLSRCRRLI
VVLSDAFLSRAWCSHSFREGLCRLLELTRRPIFITFEGQRRDPAHPALRLLRQHRHLVTLLLWRPGSVTPSSDFW
KEVQLALPRKVRYRPVEGDPQTQLQDDKDPMLILRGRVPEGRALDSEVDPDPEGDLGVRGPVFGEPSAPPHTSGV
SLGESRSSEVDVSDLGSRNYSARTDFYCLVSKDDM

FIGURE 98

CGGGGCCGGGGTCCGAGCTCGGGCCCGCCTCCGCCTCCGCCAGCTCCTGTGAGCTGCCGAGTGCTAGGCACCCGG
GCTCTTCTGGGGGCTCCAGAACTAAGCCACCCAGACACCATCATCTCGAAAACCCCAGCCCTTCTCCCATGGCAG
GCTACTTGCCCCCCAAAGGCTACGCCCCTTCGCCCCCACCTCCCTACCCTGTCACCCCTGGGTACCCGGAGCCGG
CGCTACATCCTGGGCCCGGGCAGGCGCCAGTGCCCGCCCAGGTACCTGCCCCAGCTCCCGGCTTCGCCCTCTTCC
CCTCGCCTGGCCCCGTGGCCTTGGGGTCTGCTGCCCCCTTCTTGCCACTGCCAGGGGTGCCTTCTGGCCTCGAAT
TCCTGGTGCAGATTGATCAGATTTTGATTCACCAGAAGGCTGAGCGAGTGGAAACGTTCCTAGGCTGGGAGACCT
GTAATCGGTATGAACTGCGCTCTGGGGCCGGGCAGCCCCTGGGTCAGGCGGCCGAGGAGAGCAACTGCTGCGCCC
GTCTGTGCTGTGGCGCCCGCCGGCCGCTGCGTGTCCGCCTGGCCGACCCCGGGGACCGTGAGGTGCTGCGTTTGC
TCCGCCCGCTGCACTGTGGCTGCAGCTGCTGCCCCTGTGGCCTCCAGGAGATGGAAGTACAGGCTCCACCAGGCA
CCACCATTGGCCACGTGCTACAGACCTGGCATCCCTTCCTCCCCAAGTTCTCCATCCAGGATGCCGATCGCCAGA
CAGTCTTGCGAGTGGTGGGGCCCTGCTGGACCTGTGGCTGTGGCACAGACACCAACTTTGAGGTGAAGACTCGGG
ATGAATCCCGCAGTGTGGGCCGCATCAGCAAGCAGTGGGGGGGCCTGGTCCGAGAAGCCCTCACAGATGCAGATG
ACTTTGGCCTACAGTTCCCGCTGGACCTGGATGTGAGGGTGAAGGCTGTGCTGCTGGGAGCCACATTCCTCATTG
ACTACATGTTCTTTGAGAAGCGAGGAGGCGCTGGGCCCTCTGCCATCACCAGTTAGAGGCCACCATGGTGTGAGG
AGACCATCACCTCGACCAGAACTCCAGATGGTCACCTGCCCTGGCCCCTCCTCTGGGCAGCCCCTTTCCTCCATG
TACACTGCAGGGGACAGAAGGGGGGCCCCATCCCTACCCTACTCCCTGGCCGCCTGCCCCTGTGGTTCCCAAGGA
GGGGTATGTATGAGAGCCGCTCTCCTGCTACCTCCCACCACTGTCCCAGCAGTCCCTCGGCACACAGGCATATCA
GCTTTCACACTTTCCCCATGCACTCTCTCCCACCCCCTTCCAGGGCCTCTGCTCCAAAGGAGGCCTCTGGAACCC
AGGACTCTGGGGTTTTACAAGAGGGCTGGGGTGTGGAAGGGCAAGCTGCACCAAAGACGGTGGATATAGCCACCG
CCCCCCCGCCGCTGCCTAGCATCTGCTTGGCCAATTAGTTCAGCCTCAGACCATGGCACTTTGAGGGGGTCTCTA
CCTCCCCATCAACAGCTGCAGGGGGACCCCAGTGCCAACTTCCTCTCCCACTAGGGCCCTGCCTTCAGCTGGTGC
TTGCTGCGATTCCTGTGCCTTATGTAACTGCCCTTCCTTCCCTTGCCCTAGGAAAAAGGCTGCATCTTTATATGT
TACATTCATATAAACTTTGTAACTTTTTGG

FIGURE 99

MAGYLPPKGYAPSPPPPYPVTPGYPEPALHPGPGQAPVPAQVPAPAPGFALFPSPGPVALGSAAPFLPLPGVPSG
LEFLVQIDQILIHQKAERVETFLGWETCNRYELRSGAGQPLGQAAEESNCCARLCCGARRPLRVRLADPGDREVL
RLLRPLHCGCSCCPCGLQEMEVQAPPGTTIGHVLQTWHPFLPKFSIQDADRQTVLRVVGPCWTCGCGTDTNFEVK
TRDESRSVGRISKQWGGLVREALTDADDFGLQFPLDLDVRVKAVLLGATFLIDYMFFEKRGGAGPSAITS

FIGURE 100A

GGTTGGCTCTTGCACTTCCTGGCTCTCTGGACTTGGTTATGTGATTGAGCCTCCATGGCCTCCGTGTCTTTGTCT
GTCAATGGGTTTGATTAAAGCGTTGACCTCATAGGTTCTTAGGAGGATTAATGAGAACATTTTATGTAAAGCTGC
TTACATGGAGCCTTGGTATGTGCCGGAAAGCTTTAGCCCTTTATTAAAAGTGACAGCAGACCCAGCACGGTGGCT
CATGCCTGTAATCCCAGCACTTTGGGAGGCTGAGGCGGGCAGATCACTTGGGGTCAGGAGTTCGAGACCAGCTAC
TCGGGAGGCAGAGGCAGGAGAATCGCTTGAACCTGGGGTGCAGAGGTTGCAGTAAGCTGAGCTCGCACCACTGCA
CTCCAGCCTGAGTGACAGAGTGAAACTCAGTCTCAAAAAAAAAAAAAAAAAAAGAGTGGCAGTAGTGGTGGGGGA
GACCCCCATCCCCCTTGCTGGGGTTTCCTAGGAAAGAAGGCTGGTGAGAGCTGTTGCTGGTGGTGGGCCCTGAGC
CGCAGGGTCTGAGGGCCTACCCTGTGCTACCCCAGAGCTGCCTGAGAACTGGACAGACACGCGGGAGACGCTGCT
GGAGGGGATGCTGTTCAGCCTCAAGTACCTGGGCATGACGCTAGTGGAGCAGCCCAAGGGTGAGGAGCTGTCGGC
CGCCGCCATCAAGAGGATCGTGGCTACAGCTAAGGCCAGTGGGAAGAAGCTGCAGAAGGTGACTCTGAAGGTGTC
GCCACGGGGAATTATCCTGACAGACAACCTCACCAACCAGCTCATTGAGAACGTGTCCATATACAGGATCTCCTA
TTGCACAGCAGACAAGATGCACGACAAGGTGTTTGCATACATCGCCCAGAGCCAGCACAACCAGAGCCTCGAGTG
CCACGCCTTCCTCTGCACCAAGCGGAAGATGGCACAGGCTGTTACCCTCACCGTAGCCCAGGCCTTCAAAGTCGC
CTTTGAGTTTTGGCAGGTGTCCAAGGAAGAGAAAGAGAAGAGGGACAAAGCCAGCCAAGAGGGAGGGGACGTCCT
GGGGGCCCGCCAAGACTGCACCCCCCCCTTGAAGAGCTTGGTCGCCACTGGGAACCTGCTGGACTTAGAGGAGAC
GGCTAAGGCCCCGCTGTCCACGGTCAGCGCCAACACCACCAACATGGACGAGGTGCCGCGGCCACAAGCCTTGAG
TGGCAGCAGTGTTGTCTGGGTGAGTGGTTGTGTGGCCAGCAGATCGGTGATCCTCAGCCTGACCTCTGGGTGAGC
CTGGGGCTGCTCCAGGGACCAGGCTCTGGGACCCGTGACTTGTGGGCCTCTGGGAGGACCAGACCCAGCCCGGTA
GTGCCCAGGCGCAGGATAGGGGATGAACAATGTCCCTTTTGAACCTGAGGCTGCATCCCCAACAGGCTTGGCTCC
CAGCACAGCTGTCTCCTCACAATGCTTGGCCTCTTGGCCTGAGCGTCCACGGCTCTGCCCACCACAAGACCAGCC
AAAGGCGCCCTTGTTCTTGGTGTGGCAGAGCTCGCTCCTACCACCCCTCCCCCTCAGCCGCCTGAATGAGGACCC
AGAGACTTGGGCAGTCACCAGCTTGGTCCCTGACTCCCTCAGGGACTCAGGGCAAGCCCCCTGACCTCTCTGTCT
CAGCTTTTTCATCTCAGTAAGGGTGATGACCTCTGCCAACGGAATCTCCCCGAGGAACCTGAAATTTAATTTTAA
TTTTTCATTTGGAAATAATTTCAGACTGTGTTACAAAATTAGTACAGAGAATTCCTGTTCACCCGTCATCCAGAT
TCCCCAATTGTTAACATCTTGCATGACCACATTACACTGGTCAGAATCAGGAAACAAACACGATACTGTGCTGTT
ATATAATCTATAGAACTTACACATTTCTCCAGGTGCCCCTTCAGTGTCCTGTTTCTGGCCCAGGATCCATTGCAG
AATCACATGTTAACTTGTCGTCTCTTTAATTTTTAAAAATCTGGGTACTGGGGGCTCCCCTGGTGTCCCTCGAGC
CTGTTCTCTGCTGTTTGGGAACCACCCTTGCCACTTGCCCATCCTCACCAGAACGCCATGGAGGGACCTCACCTG
TCGCTTTTCTGCTGAGGCTGTGGGACTCCTGGCATCAGTTATCCCTCATGAACTTGGAATTTTGGCTTGGCTTTT
GGAAGTAAATGAAGGCAAGAAAACTCCCTTCCCCACCCTCTTCCTTTTGGAATTTGAAAGCCATAGAAGTCATCA
GGTCCAATGCCCTCCTCTTATTGAAGGAAAAGCTGAGTTTCAACGTGGAGCAGTGACTTGCCCAAGGTCTCACGG
GCAGGTAGCATGGACCAGGGCACTGAACCCACCTGGGTCTCCAGACACCCTGGGACATGGCCTTTCTCCTCTCCC
ACGTCTCCAGCTTTGGGTCCTTGGGCTGAGATGCTGGCGATGCACCCAGGCAGGAGGCCTGCCTGAGGCCGTGCC
TCCAGGCGCCCACCCTGAGCTTGTGTCCTGAGTCCCTGTAGCTTACCCAGGGCTGGGACAAGCCCCAGCTGTGAG
CATGGGCTCCCCCAAACATAGTTCTTATCTCCTGCTTTGTTTTTCCCAAGGAGCTGGATGATGGCCTGGATGAAG
CGTTTTCGAGGCTTGCCCAGTCTCGGACAAACCCTCAGGTCCTGGACACTGGCCTGACAGCCCAGGACATGCATT
ACGCCCAGTGCCTCTCGCCTGTCGACTGGGACAAGCCTGACAGCAGCGGCACAGAGCAGGATGACCTCTTCAGCT
TCTGAGGGCCCGGGGCCAGCCGGACACAAGCGGCCCTGACACGTGATGGACCAAAGCCACCTGCTGCGGGGGAGC
CAGTTCTGGGGCCCGCCTGCCACCTCTCCCAGCCCTCAGCATTGTCAGCCTGAAGATCAGAGCTGCAGCCAGTCA
GGCAGGGGAGAGATTTTTCTTTTAAGCCCTGCTCTTTCTCTGAGAACCAAAAGATGCCTTGAATATTTATTCAGT
GACTTCTGGCTTATGCTCAGAAGCCAGTCTGCGTCAGGCACGTCTCCTGCTGCGTGACATGTGCAGTGCTGTAAT
CGGCTCCCGCTTGCTCTCCTGGAGCAAGCTCTGCCCTGGCTGTGGGTATCAGGACTGTGACCAAAGCATTTCTAG
TCCCTTCTCTCTTTCTAAGGACCCAAATTTCCCTGGGGGCATCCTGCTTCCTGAAAGCTGTTGGATTTCAGTGAT
TTTTCCCCCCACCCCCCAGCACAGGAGAGCACCCACAGCCGCAGAAGGGGAATGTGTCCTCCTGCTCTGCTTCCT
CAGGGCCCAGCAGGCGGGGGTTTGAGCCCTGGACCCCAGGCTCTTAGAGACTAAGGGGCAGCTCCTGACCAAAGA
CGATACAGCTTGGCACTTTAAAGCATTAACAGCAGGTGTGACCCTGAGGGCTCCTCCATGGTGCTGCATTGAGTC
CAGCTTTCCTTCTGCCCTTCCTCCAGGAGAAGGGGCCCAAGGTCCCCGTGGATGGTCTCCACCTGTGCTTGGAAC
CAGTGTAACTGGCTGCTCCCTGCTCCCAGGGACTGACACGGGGATCATCTCTGTGACCGCCCTCCGTCGGGCCCC

FIGURE 100B

TGCCTGCCTTCTCCCCTCCACGCAAGGCTGTGCTCTTCCTCTGGTTTCTGTGTGTCCGTTTGAGTGTCTGCGCCC
CGCCTCCCCATACTTCCTGGGATGATGTGTGAAACCTGACACCTAGATTTATTTGGAAATATTCTATGACCACTT
TACAGATGAGGAAACTGAGGCCTCAAGCGTGGAGGGGTAGAGTGAAGAGTAGAACCCAGGTCTGATGCCAAAGCT
GCTTTCTTCTCTGCCTCCTCCTCACGCAACTCACACCTCCTTTTCTTCTAGCTTTGTTGTCCTCCCAGGAACCAA
AAAACCCCAGCTATTTTCTGACCAAAATGTGTTTCATAACAAACCATCTGGTGCCTTTCCACACAGAACTGGCAG
GAGCCTCGTGTCCTGCTAGCTGTCTCTCTTGTTGATTTCCGTGAAAATGCAAGTGTTTGAAGTCTGCTCATTCCG
AGGGTGAAACAAAATCCAACCCTGTCAGAATCATGCTGTTCTCTTTGCTGACACTGTGACCCTGGGTCGGGACAG
ACCAGCAGCAATCTGTCTTTAGAATCGCTTTCCTTCCTCCCCTTTTGCCCCCGTGGGGCTCCCGGCATCCTGAAA
GCCAGCAAAGCCTCCAGCATCTTTTCCATCCTGAGGTGCCTCCCAGTGGCCTGGCTTGTCGGAGCAAGTTTCATC
AGCCCTAGGGAAAACACGGCCCTCCTGGGAACCTCCTTACCTGGAGTAACCGGACACCTTAGACGGAGGTGCCTG
AGGGTGGGGTGGGATTTGCAGGGTCATTATCAGAACATGAGGATAACTTCCTTGCCCCTGCTCTGTAGCCACCTC
CTTGGCACCGGCCTCTATTTGTCATAAGGCGGCGTGGGCGAGGCCTGACACAGGCCAGCCTTGGCACGAGGGGGG
CCAGGGGTTCTGAGAAGCGCTGCCCTGTGAGAGCCACGCTGGCCTTCGTCTCCATCTCTGGTTGACGGGCTGTCC
GTTTGCCTCCTGTGTGTCTGCAGACAAGTCTTGCTGTGCTTTATTTGTGAAACTTTAATGAGGAAAAAACAAATA
ATAAATGTTCTCGTTTTGAAACTC

FIGURE 101

MLFSLKYLGMTLVEQPKGEELSAAAIKRIVATAKASGKKLQKVTLKVSPRGIILTDNLTNQLIENVSIYRISYCT
ADKMHDKVFAYIAQSQHNQSLECHAFLCTKRKMAQAVTLTVAQAFKVAFEFWQVSKEEKEKRDKASQEGGDVLGA
RQDCTPPLKSLVATGNLLDLEETAKAPLSTVSANTTNMDEVPRPQALSGSSVVWVSGCVASRSVILSLTSG

FIGURE 102A

CGATGGCCCTGCCCAGTCCCAGACAGAACCTACTACGTGCGGCGGCAGCTGGGGCGGGAAGGCGGGCGCTGGGGG
CGCTGCGGCCGCTGCAGCGCAGGGTCCACCTGGTCGGCTGCACCTGTGGAGGAGGAGGTGGATTTCAGGCTTCCC
GTAGACTGGAAGAATCGGCTCAAAACCGCTTGCCTCGCAGGGGCTGAGCTGGAGGCAGCGAGGCCGCCCGACGCA
GGCTTCCGGCGAGACATGGCAGGGCAAGGATGGCAGCCCGGCGGCAGGGCCCGGCGAGGAGCGCGAACCCGCGGC
CGCAGTTCCCAGGCGTCTGCGGGCGCGAGCACGCCGCGACCCTGCGTGCGCCGGGGCGGGGGGGCGGGGCCTCGC
CTGCACAAATAGGGACGAGGGGGCGGGGCGGCCACAATTTCGCGCCAAACTTGACCGCGCGTTCTGCTGTAACGA
GCGGGCTCGGAGGTCCTCCCGCTGCTGTC**ATG**GTTGGTTCGCTAAACTGCATCGTCGCTGTGTCCCAGAACATGG
GCATCGGCAAGAACGGGGACCTGCCCTGGCCACCGCTCAGGAATGAATTCAGATATTTCCAGAGAATGACCACAA
CCTCTTCAGTAGAAGGTAAACAGAATCTGGTGATTATGGGTAAGAAGACCTGGTTCTCCATTCCTGAGAAGAATC
GACCTTTAAAGGGTAGAATTAATTTAGTTCTCAGCAGAGAACTCAAGGAACCTCCACAAGGAGCTCATTTTCTTT
CCAGAAGTCTAGATGATGCCTTAAAACTTACTGAACAACCAGAATTAGCAAATAAAGTAGACATGGTCTGGATAG
TTGGTGGCAGTTCTGTTTATAAGGAAGCCATGAATCACCCAGGCCATCTTAAACTATTTGTGACAAGGATCATGC
AAGACTTTGAAAGTGACACGTTTTTTCCAGAAATTGATTTGGAGAAATATAAACTTCTGCCAGAATACCCAGGTG
TTCTCTCTGATGTCCAGGAGGAGAAAGGCATTAAGTACAAATTTGAAGTATATGAGAAGAATGAT**TAA**TATGAAG
GTGTTTTCTAGTTTAAGTTGTTCCCCCTCCCTCTGAAAAAAGTATGTATTTTTACATTAGAAAAGGTTTTTTGTT
GACTTTAGATCTATAATTATTTCTAAGCAACTTGTTTTTATTCCCCACTACTCTTCTCTCTATCAGATACCATTT
ATGAGACATTCTTGCTATAACTAAGTGCTTCTCCAAGACCCCAACTGAGTCCCCAGCACCTGCTACAGTGAGCTG
CCATTCCACACCCATCACATGTGGCACTCTTGCCAGTCCTTGACATTGTCGGGCTTTTCACATGTTGGTAATATT
TATTAAAGATGAAGATCCACATACCCTTCAACTGAGCAGTTTCACTAGTGGAAATACCAAAAGCTTCCTACGTGT
ATATCCAGAGGTTTGTAGATAAATGTTGCCACCTTGTTTGTAACAGTGAAAAATTGAAAACAACCTGGAAGTCCA
GTGATGGGAAAATGAGTATGTTTCTGTCTTAGATTGGGGAACCCAAAGCAGATTGCAAGACTGAAATTTCAGTGA
AAGCAGTGTATTTGCTAGGTCATACCAGAAATCATCAATTGAGGTACGGAGAAACTGAACTGAGAAGGTAAGAAA
AGCAATTTAAAGTCAGCGAGCAGGTTCTCATTGATAACAAGCTCCATACTGCTGAGATACAGGGAAATGGAGGGG
GGAAAGCTGGAGTATTGATCCCGCCCCCCTCCTTGGTTGTCAGCTCCCTGTCCTGTGTGTGGGCGGAACATAGTC
CAGCTGCTCTATAGCAAGTCTCAGGTGTTTGCAGTAAGAAGCTGCTGGCATGCACGGGAACAGTGAATGCCAAAC
ACTTAAAGCAATTCGATGTTTAAGTATGTAAGTTCTTTTTTTTTTAGACAGCGTTTCGCTCTTGTTGCCCAGGCT
AGCATGCAATGGTGTGACCTCGGCTTACTGCAACCTCCGCCTTCCCAGATTCAAGCGATTCTCCTGCCTCAGGCT
CCCAAGTAGCTAGGACCAGGTGCGCGCCACCACGCCCGGCTAATTTTTGTATTTTGTATTTTTAGTAGAGATGGG
GTTTCACCATGTTGGTCAGGCTAGTCTCGAACTCGTGACCGCAAGCGATTCACCCACCTCAGCCTCCCAAAGTGC
TGGGATTACCGGCTTGAGCCACCACACCCGGCACATCTTCATTCTTTTTATGTAGTAAAAAGTATAAGGCCACAC
ATGGTTTATTTGAAGTATTTTATAATTTAAAAAAATACAGAAGCAGGAAAACCAATTATAAGTTCAAGTGAGGGA
TGATGGTTGCTTGAACCAAAGGGTTGCATGTAGTAAGAAATTGTGATTTAAGATATATTTTAAAGTTATAAGTAG
CAGGATATTCTGATGGAGTTTGACTTTGGTTTTGGGCCCAGGGAGTTTCAGATGCCTTTGAGAAATGAATGAAGT
AGAGAGAAAATAAAAGAAAAACCAGCCAGGCACAGTGGCTCACACCTGTAATCCCAGCGCTTTGGGAGGCTAAGG
CAGGCAGATCACTTGAGACCAGCTTGGGCAACATGGCAAAGCCCCATCTCTACAAAAAACACAAAAATTAGCTGG
GCATTGTGGCGCACACCTGTATTCCCATCTAGTCAGGAAGCTGAGATGGAAGAATTAATTGAGCCCACGAGTTCA
AGGCTGCAGTGAGTCGTGATTGTGCCACTGCACTCCAGCCGGGGGTGACAGAAGAGACCTTGTCTCGAAAACGAAT
CTGAAAACAATGGAACCATGCCTTCATAATTCTAGAAAGTTATTTTCAACTGATAAATCTATATTCACCCAAATA
ATCAAGGGTGAAGGTAAAATAATACATTTTTAGACAAGCAAAGACTCAGGGGTTACCTCCATGTGCCCTTTTTAG
GGAAGCTGTTGGAGAAAATACTCCAGCAAAATGAAGGAGTACACAAACCAGAGAATGACATGAATCCAGCAAATA
GGATCCAACACAGGCAATATTCCAGCTATGGAGCTAGCTTTAAAAAGGAACAGTAAAAATATTAATCGGTTAGCT
GGGTGGAATGGCCCATGCCTGTAGTCCCAGCTACTCAGGAGGCTCAGCAGCAGGACGACTTGAGCCCAAGAGTTC
CAGACCAGCCTGGCCACCTTAGTGAGATCCCTTCTCTTAAAAATAATAACTTATTGCCAGATTTGGGGCATTTGG
AAAGAAGTTCATTGAAGATAAAGCAAAAGTAAAAAAAAAAAAAAAAAAAACAAGGGGAAAGGGTTGGTTAGGCAA
TCATTCTAGGGCAGAAAGAAGTACAGGATAGGAAGAGCATAATACACTGTTTTTCTCAACAAGGAGCAGTATGTA
CACAGTCATAATGATGTGACTGCTTAGCCCCTAAATATGGTAACTACTCTGGGACAATATGGGAGGAAAAGTGAA
GATTGTGATGGTGTAAGAGCTAATCCTCATCTGTCATATCCAGAAATCACTATATAATATATAATAATGAAATGA
CTAAGTTATGTGAGGAAAAAAACAGAAGACATTGCTAAAAGAGTTAAAAGTCATTGCTCTGGAGAATTAGGAGGG

FIGURE 102B

ATGGGGCAGGGGACTGTTAGGATGCATTATAAACTGAAAAGCCTTTTTAAAATTTTATGTATTAATATATGCATT
CACTTGAAAAACTAAAAAAAAAACAATAATTTGGAAAAACCCATGAAGGTAACTAACGGAAGGAAAAACTAAGAGA
ATGAAAAGTATTTGCCTCTGGAAAGAACAACTGGCAGGACTGTTGTTTTCATTGTAAGACTTTTGGAGCCATTTA
ATTGTACTTAACCATTTTCATCTATTTCTTTAATAAGAACAATTCCATCTTAATAAAGAGTTACACTTGTTAATA

FIGURE 103

MVGSLNCIVAVSQNMGIGKNGDLPWPPLRNEFRYFQRMTTTSSVEGKQNLVIMGKKTWFSIPEKNRPLKGRINLV
LSRELKEPPQGAHFLSRSLDDALKLTEQPELANKVDMVWIVGGSSVYKEAMNHPGHLKLFVTRIMQDFESDTFFP
EIDLEKYKLLPEYPGVLSDVQEEKGIKYKFEVYEKND

FIGURE 104

CTTTCTGCCCGACTCCCACAGCTACACCATGCAGGAATTCGCCCGGCGTTACTTCCGGAGGTCCCAGGCCTTGCT
GGGCCAGACTGATGGAGGTGCCGCAGGAAAGGACACGGACAGCCTGGTGCAGTACACCAAGGCTCCCATCCAGGA
GTCGCTCCTCAGCCTCAGTGATGATGTGAGCAAGCTGGCTGTAGCCAGCTTCCTGGCCCTGATGCGGTTTATGGG
TGACCAGTCCAAGCCCCGGGGCAAGGATGAGATGGATCTGCTCTATGAACTGCTGAAGCTGTGCCAGCAGGAGAA
GCTGAGGGATGAGATTTACTGCCAGGTTATCAAGCAGGTCACGGGACACCCCCGGCCGGAACACTGCACTCGAGG
CTGGAGCTTCCTCAGCCTTCTCACAGGCTTCTTCCCCCCGTCGACCAGGCTGATGCCCTACCTGACCAAGTTTCT
GCAGGATTCAGGCCCCAGCCAAGAGCTGGCCCGGAGCAGCCAGGAGCACCTCCAGCGCACAGTCAAATATGGGGG
GCGCCGGCGGATGCCCCCACCGGGTGAAATGAAGGCTTTCCTGAAAGGACAAGCGATTCGCCTGCTTCTTATTCA
CCTGCCGGGGGGTGTGGATTATAGGACGAATATCCAGACTTTCACAGTAGCAGCAGAAGTGCAGGAGGAGCTGTG
CCGGCAAATGGGTATCACGGAGCCTCAGGAAGTGCAGGAATTCGCCCTCTTCCTCATCAAAGAGAAGAGCCAGCT
GGTGCGGCCCCTGCAGCCCGCCGAATGCCTCAACAGCGTGGTAGTGGACCAGGACGTGAGCCTGCACAGCCGGCG
GCTCCACTGGGAGACCCCACTGCACTTCGATAACTCCACCTACATCAGCACCCACTACAGCCAGGTGCTGTGGGA
CTACCTTCAGGGGAAGCTGCCAGTCAGCGCCAAGGCAGACGCGCAGCTCGCCAGGCTGGCCGCCCTGCAGCACCT
CAGCAAGGCCAACAGGAATACCCCCTCAGGGCAGGACCTGCTAGCTTACGTGCCAAAGCAGCTGCAACGGCAGGT
GAACACGGCCTCCATCAAGAACCTGATGGGTCAGGAGCTGAGACGGCTGGAAGGACACAGCCCCCAGGAAGCACA
GATCAGCTTCATCGAGGCCATGAGCCAGCTGCCCCTCTTCGGCTACACCGTCTATGGGGTGCTGCGAGTGAGCAT
GCAGGCCCTGTCCGGACCCACTCTCCTGGGGCTCAACCGCCAGCATCTCATCCTCATGGACCCCAGCTCCCAGAG
CCTGTACTGCCGCATTGCCCTGAAGAGCCTGCAGCGGCTCCACCTGCTAAGCCCTCTGGAGGAGAAGGGGCCCCC
TGGCCTGGAAGTCAACTATGGCTCAGCTGACAACCCCCAGACCATCTGGTTTGAGCTGCCACAGGCCCAGGAGCT
GCTATACACCACTGTCTTCCTGATAGACAGCAGTGCCTCTTGCACTGAGTGGCCCAGCATCAACTGAGAGGAGTG
CAGGCCGGGGAGAGAAGAGGATGAGGCCTCCCCCGGCCCAAGTCTCACCCACATGGTCTGCCTTGGATGCTATCA
GATCACTGTTCTAGAACCTGCCTCAGCACAGCCCAGCCGGCCCACATGCAGGCCATGAGGCAGGGGCTGCTATCA
CGTCACCAGCAGGCAAAGAAAACAGCCAGACCCTCTCCAGGACGGCCTGGGGCCAAAGCGGGCTGCAGGAACTCG
GCTGGGGCACCTGAGGTTGCCCAGTCTGAGGGAGATGCCCACCCGACCCCAGGCTCCGCCCAGGCCCCACATTAG
CACAAGCCCAGGCATGGGAGAAACAGCTGCTGAGGAAATAAAACTCCCTGGAGAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAA

FIGURE 105

MQEFARRYFRRSQALLGQTDGGAAGKDTDSLVQYTKAPIQESLLSLSDDVSKLAVASFLALMRFMGDQSKPRGKD
EMDLLYELLKLCQQEKLRDEIYCQVIKQVTGHPRPEHCTRGWSFLSLLTGFFPPSTRLMPYLTKFLQDSGPSQEL
ARSSQEHLQRTVKYGGRRRMPPPGEMKAFLKGQAIRLLLIHLPGGVDYRTNIQTFTVAAEVQEELCRQMGITEPQ
EVQEFALFLIKEKSQLVRPLQPAECLNSVVVDQDVSLHSRRLHWETPLHFDNSTYISTHYSQVLWDYLQGKLPVS
AKADAQLARLAALQHLSKANRNTPSGQDLLAYVPKQLQRQVNTASIKNLMGQELRRLEGHSPQEAQISFIEAMSQ
LPLFGYTVYGVLRVSMQALSGPTLLGLNRQHLILMDPSSQSLYCRIALKSLQRLHLLSPLEEKGPPGLEVNYGSA
DNPQTIWFELPQAQELLYTTVFLIDSSASCTEWPSIN

FIGURE 106

GATCATTCTAGCTATCCCAGAAGCCTTTTGGAAAAAGCCCCACATGTCTTCTTTCTTTGGTGTTCAAGCTGACCT
TCCTACCTCTTTGCCATTGATAATTAGGGGCAGAATTAAGTATTGTAAGTTGTTATTCTAAGTTTAAATAGCTTC
CTGTGGTTTTTAGAACAAGCAGGATATCTTTGGAGATGCAAAAAGCTCTTGAATTGGATCTGTCTTTGTGAGATC
CTTATGAACAATATAACCTGATAACTTGAGAATCAGAAAAACACTGCATCTTCTGGATAAGTTAACCATTGTTAG
TTTTCTGTAGCTACTGATGTTCATTTGTACTATATGTTGCCTTTCAGAATGTGGTAATTGTAATCTTTAACATTT
TCATGTAAAACATATTTCCTGATCATCTTTCCATTGTCTTCATGGAAAATTGATAAATATTTGTGCCTTCCAACT
CTCGTCTTGGTTGAATGACTTCATCTTAATACAAGCATTTTGATTTCCTTTCTTTTTACAGCATGGACACCACGT
TGCTGAAAACATGCTNTGGGACTGCCACTGAATTTATCTTTTGCGGTTTTATGACAAAGTTATTAGTAGTTTCCC
TTTTTTGAATTAGTATTTTCGAAGTTAATATCACA**ATG**AGTTCAGGCTTATGGAGCCAAGAAAAAGTCACTTCAC
CCTACTGGGAAGAGCGGATTTTTTACTTGCTTCTTCAAGAATGCAGCGTTACAGACAAACAAACACAAAAGCTCC
TTAAAGTACCGAAGGGAAGTATAGGACAGTATATTCAAGATCGTTCTGTGGGGCATTCAAGGATTCCTTCTGCAA
AAGGCAAGAAAAATCAGATCGGATTACAACATTCTAGAGCAAGCTCATGCAGTTCTCTTGGTGATGACAAGGATG
TCGTAGAGATAAATGAAAAGTTCACAGAGTTACTTTTGGCAATTACCAATTGTGAGGAGAGGTCAGCCTGTTTAA
AAACAGAAACAGACTAAGTAAAGGCCTCCAAATAGACGTGGGCTGTCCTGTGAAAGTACAGCTGAGATCTGGGGA
AGAAAAATTTCCTGGAGTTGTACGCTTCAGAGGACCCCTGTTAGCAGAGAGGACAGTCTCCGGAATATTCTTTGG
AGTTGAATTGCTGGAAGAAGGTCGTGGTCAAGGTTTCACTGACGGGGTGTACCAAGGGAAACAGCTTTTTCAGTG
TGATGAAGATTGTGGCGTGTTTGTTGCATTGGACAAGCTAGAACTCATAGAAGATGATGACACTGCATTGGAAAG
TGATTACGCAGGTCCTGGGGACACAATGCAGGTCGAACTTCCTCCTTTGGAAATAAACTCCAGAGTTTCTTTGAA
GGTTGGAGAAACAATAGAATCTGGAACAGTTATATTCTGTGATGTTTTGCCAGGAAAAGAAAGCTTAGGATATTT
TGTTGGTGTGGACATGGATAACCCTATTGGCAACTGGGATGGAAGATTTGATGGAGTGCAGCTTTGTAGTTTTGC
GTGTGTTGAAAGTACAATTCTATTGCACATCAATGATATCATCCCAGAGAGTGTGACGCAGGAAAGGAGGCCTCC
CAAACTTGCCTTTATGTCAAGAGGTGTTGGGGACAAAGGTTCATCCAGTCATAATAAACCAAAGGCTACAGGATC
TACCTCAGACCCTGGAAATAGAAACAGATCTGAATTATTTTATACCTTAAATGGGTCTTCTGTTGACTCACAACC
ACAATCCAAATCAAAAAATACATGGTACATTGATGAAGTTGCAGAAGACCCTGCAAAATCTCTTACAGAGATATC
TACAGACTTTGACCGTTCTTCACCACCACTCCAGCCTCCTCCTGTGAACTCACTGACCACCGAGAACAGATTCCA
CTCTTTACCATTCAGTCTCACCAAGATGCCCAATACCAATGGAAGTATTGGCCACAGTCCACTTTCTCTGTCAGC
CCAGTCTGTAATGGAAGAGCTAAACACTGCACCCGTCCAAGAGAGTCCACCCTTGGCCATGCCTCCTGGGAACTC
ACATGGTCTAGAAGTGGGCTCATTGGCTGAAGTTAAGGAGAACCCTCCTTTCTATGGGGTAATCCGTTGGATCGG
TCAGCCACCAGGACTGAATGAAGTGCTCGCTGGACTGGAACTGGAAGATGAGTGTGCAGGCTGTACGGATGGAAC
CTTCAGAGGCACTCGGTATTTCACCTGTGCCCTGAAGAAGGCGCTGTTTGTGAAACTGAAGAGCTGCAGGCCTGA
CTCTAGGTTTGCATCATTGCAGCCGGTTTCCAATCAGATTGAGCGCTGTAACTCTTTAGCATTTGGAGGCTACTT
AAGTGAAGTAGTAGAAGAAAATACTCCACCAAAAATGGAAAAAGAAGGCTTGGAGATAATGATTGGGAAGAAGAA
AGGCATCCAGGGTCATTACAATTCTTGTTACTTAGACTCAACCTTATTCTGCTTATTTGCTTTTAGTTCTGTTCT
GGACACTGTGTTACTTAGACCCAAAGAAAAGAACGATGTAGAATATTATAGTGAAACCCAAGAGCTACTGAGGAC
AGAAATTGTTAATCCTCTGAGAATATATGGATATGTGTGTGCCACAAAAATTATGAAACTGAGGAAAATACTTGA
AAAGGTGGAGGCTGCATCAGGATTTACCTCTGAAGAAAAAGGTGACCATCTTAACTTATATGCGTTAAAAATAAC
TGAAGAGCATATTCACATGTCAAAGTAT**TAG**CTGAAATGTGTGTCTGTGTAGTTGGGGGGTTTTCTTTTAAATTA
GAAATTTCTTTTTATGTGATATATGGTTAGCTCCTCTTTTTGTAAATTCTTCCTCTCTTCTAAAAGTGATTGATG
ATGTGGAATAATGAACTCCTTTAAGAAGCTGGCTGGTTCTAGTATATTAAATGCTTAAATAAAAAGTCCTTTCCT
TTCCACCTAGCAATGATATTCTCAGTTGTTTCTCTCTTGTGGTGCAGAGTTGCATTGGGTTTTCTACATTTTCCC
ACTGAGTCTTCCCTGTTGTAAAAGGGAGTTAGAAAGCTGCTAACTAGGATTAAGTTTATAGTCAGGGAACAGTGT
TATAATCTCTTCCTAGCTAATGGGCTTACTCAAAGATTCACCACCTGACTTTGAATTTGTCAGCAGCATACTGTA
AACAGCTGTAATGTTCAGAGGCTTGCAGGAAAAAACAGAGCATACTTCAGATTGTACTCCATTTACCTTAACCCC
TCCAAAGGAAATAACAGCTATTTCATTATGTGCAATGTGTTACACCCTTTCAAATGTAATAAACTCACAACAAAA
TTGAAACATAATACTTGATTATAACTTATTAAATGTCTTTTATGTTTTTCCTTTGTCAGGAAAACTTGAAAACTG
TGCTTTTAATTGAAATAATATTGGATGAATGAAACTGAATTCAGTATTAAAATTTGACTGTTAGAAATGAAAAAT
AAAATGATTTAAAAATTTAAAAAA

FIGURE 107

MSSGLWSQEKVTSPYWEERIFYLLLQECSVTDKQTQKLLKVPKGSIGQYIQDRSVGHSRIPSAKGKKNQIGLQHS
RASSCSSLGDDKDVVEINEKFTELLLAITNCEGEVSLFKNRNRLSKGLQIDVGCPVKVQLRSGEEKFPGVVRFRG
PLLAERTVSGIFFGVELLEEGRGQGFTDGVYQGKQLFQCDEDCGVFVALDKLELIEDDDTALESDYAGPGDTMQV
ELPPLEINSRVSLKVGETIESGTVIFCDVLPGKESLGYFVGVDMDNPIGNWDGRFDGVQLCSFACVESTILLHIN
DIIPESVTQERRPPKLAFMSRGVGDKGSSSHNKPKATGSTSDPGNRNRSELFYTLNGSSVDSQPQSKSKNTWYID
EVAEDPAKSLTEISTDFDRSSPPLQPPPVNSLTTENRFHSLPFSLTKMPNTNGSIGHSPLSLSAQSVMEELNTAP
VQESPPLAMPPGNSHGLEVGSLAEVKENPPFYGVIRWIGQPPGLNEVLAGLELEDECAGCTDGTFRGTRYFTCAL
KKALFVKLKSCRPDSRFASLQPVSNQIERCNSLAFGGYLSEVVEENTPPKMEKEGLEIMIGKKKGIQGHYNSCYL
DSTLFCLFAFSSVLDTVLLRPKEKNDVEYYSETQELLRTEIVNPLRIYGYVCATKIMKLRKILEKVEAASGFTSE
EKGDHLNLYALKITEEHIHMSKY

FIGURE 108

CAGGTCCCCCAGACCATCCGAACCAGCCGCCCATGATGACCTGCGAGAGACTCCCATGCCCCACTGCAGGCCTGG
GCCCCCTCAGGGAGGAAGCGATGAAGCCAGGGGCAGCCTCCAGTCCCTTGCAGCAGGTCCCCGCCCCGCCACTGC
CTGCGAAGAAGAACCTTCCCACTGCCCCTCCCAGACGCCGCGTTTCCGAGAGGGTGTCCTTAGAAGACCAAAGTC
CGGGGATGGCGGCAGAGGGGGACCAGCTCAGCCTGCCTCCCCAAGGGACCTCAGACGGCCCTGAGGACACGCCCC
GGGAGAGCACGGAGCAAGGCCAGGACACAGAGGTGAAAGCCAGCGATCCTCACAGCATGCCAGAGCTGCCCAGGA
CAGCCAAACAACCCCCAGTCCCGCCCCCCAGGAAAAAACGGATCTCTCGACAACTGGCCTCGACCCTCCCAGCTC
CCTTAGAGAACGCTGAGCTCTGCACACAGGCG**ATG**GCCTTGGAGACACCCACGCCGGGTCCACCCAGAGAGGGCC
AAAGCCCTGCTTCTCAGGCTGGGACTCAGCACCCTCCTGCCCAGGCCACTGCCCATTCCCAGAGCTCTCCAGAGT
TCAAGGGCTCCCTGGCCTCCCTCTCAGACAGCTTGGGGGTGTCTGTCATGGCCACCGACCAGGACTCCTACTCCA
CCAGCAGCACGGAGGAGGAGCTGGAGCAGTTCAGCAGCCCCAGCGTGAAGAAGAAGCCCTCCATGATCCTGGGCA
AGGCTCGGCACCGGCTGAGCTTTGCCAGTTTCAGCAGCATGTTCCACGCTTTCCTCTCCAACAACCGCAAGCTGT
ACAAGAAGGTGGTGGAGCTGGCGCAGGACAAGGGCTCGTACTTTGGCAGCCTGGTGCAGGACTACAAGGTGTACA
GCCTGGAGATGATGGCGCGCCAGACCTCCAGCACGGAGATGCTGCAGGAGATTCGCACCATGATGACCCAGCTCA
AGAGCTACCTGCTGCAGAGCACCGAGCTCAAGGCCCTGGTGGACCCCGCCCTGCACTCCGAGGAGGAGCTCGAAG
CAATTGTAGAGTCTGCCTTGTACAAATGTGTCCTGAAGCCCCTGAAGGAAGCCATCAACTCATGCCTGCATCAGA
TCCACAGCAAGGATGGTTCGCTGCAGCAGCTCAAGGAGAACCAGTTAGTGATCCTGGCCACCACCACCACTGACC
TAGGTGTGACCACCAGCGTGCCGGAGGTGCCCATGATGGAGAAGTTCCTGCAGAAGTTCACCAGCATGCACAAGG
CCTACTCACCTGAGAAGAAGATCTCCATCCTGCTCAAGACCTGCAAACTCATCTACGACTCCATGGCCCTCGGCA
ACCCAGGGAAGCCCTATGGGGCGGATGACTTCCTGCCTGTGCTCATGTATGTGCTGGCCCGCAGCAACCTCACGG
AGATGCTTCTCAATGTGGAGTACATGATGGAGCTCATGGACCCCGCCCTGCAGCTGGGGGAGGGTTCCTACTATC
TGACCACCACCTACGGGGCCCTGGAGCACATCAAGAGCTACGACAAGATCACGGTGACCCGGCAGCTGAGTGTGG
AGGTGCAGGACTCCATCCACCGCTGGGAGCGCCGGCGTACTCTCAACAAGGCCCGGGCCTCCCGCTCCTCCGTAC
AGGACTTCATCTGCGTGTCGTACCTGGAGCCCGAGCAGCAGGCGCGGACGCTGGCGTCGCGGGCGGACACCCAGG
CCCAGGCGCTGTGCGCGCAGTGCGCGGAGAAGTTCGCGGTGGAGCGGCCGCAGGCGCACCGGCTGTTCGTGCTGG
TGGACGGGCGCTGCTTCCAGCTGGCGGACGACGCGCTGCCGCACTGCATCAAGGGCTACCTGCTGCGCAGCGAGC
CCAAGCGCGACTTCCACTTTGTCTACCGGCCCCTGGACGGTGGTGGCGGCGGCGGCGGGAGCCCGCCCTGCCTGG
TGGTGCGGGAGCCCAACTTCCTG**TGA**GGCCCTCCCGGGGCGCCTCCCCTCACCCCCAGGCGCACGTCTGGCCCCG
CCTCTGGCTGCGCACTCCCGACCGCGACGTCCACGCAGCAGAGGGACATGGGCCATTCCATGACGTGCCCAGGCC
AACGTCGCAGGACAGTTGTGAAAATAACATGACGCTCGTCCAAGGCCACTTCCTGAGGGCAAGTCCTAATAGCCC
TGAGACACCGAGACGGCATGTTCTTCATTAGACGGAAAGGGAAACTGAGGCTCAGGAGAGAGGCGCTCCAGGCCG
CTGCAGCCAACAAACCGGCGCCCTCTTCACACGTAGCTCCTCAGGCCATTCCCCATGAGTCCCCCACACCCACCC
CATCCTCGGTCTTTGCAAAGAAGGGCCCGAGCTTAGTTTCCCCAGGACTGGCCTAGGAAGGAGCACCGGCCACAG
CTGCTCCCCGTGCCACTCAGGGTGGACCCAGCATCTCAGGAGCACCTCAGGGTGTCGGTTAAGAGACAGGCCTCC
ACCCCTGCACCAGAGCCTGCTCTTAGCTCCCGGTGCCCCCAGACCCCGCAGCTCTGTGCCCGGCAAGAAGCAGCT
AGACACACGCCAGGGCGCCAAGCACGGCCAGCTCCGCGGACCCATGGACAAGCCCAGCCCCGCCTCAGGGAAAAC
AGGGCCTTTCCCTACAGGACACGCCCCAGAGCTGTGGCAGATTGCAGGAGCCATCGTGTGGGGAGAATTTAATAA
AAGCCCTTTTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAA

FIGURE 109

MALETPTPGPPREGQSPASQAGTQHPPAQATAHSQSSPEFKGSLASLSDSLGVSVMATDQDSYSTSSTEEELEQF
SSPSVKKKPSMILGKARHRLSFASFSSMFHAFLSNNRKLYKKVVELAQDKGSYFGSLVQDYKVYSLEMMARQTSS
TEMLQEIRTMMTQLKSYLLQSTELKALVDPALHSEEELEAIVESALYKCVLKPLKEAINSCLHQIHSKDGSLQQL
KENQLVILATTTTDLGVTTSVPEVPMMEKFLQKFTSMHKAYSPEKKISILLKTCKLIYDSMALGNPGKPYGADDF
LPVLMYVLARSNLTEMLLNVEYMMELMDPALQLGEGSYYLTTTYGALEHIKSYDKITVTRQLSVEVQDSIHRWER
RRTLNKARASRSSVQDFICVSYLEPEQQARTLASRADTQAQALCAQCAEKFAVERPQAHRLFVLVDGRCFQLADD
ALPHCIKGYLLRSEPKRDFHFVYRPLDGGGGGGGSPPCLVVREPNFL

FIGURE 110

ACGAGGGACGCAGCCATGGCGGAGGCGGCTTTGGAAGCCGTGCGGAGCGAGTTACGAGAATTCCCGGCCGCTGCA
AGGGAGCTCTGCGTGCCTCTTGCTGTGCCCTACCTGGACAAACCCCCAACTCCGCTCCACTTCTACCGGGACTGG
GTCTGCCCCAACAGGCCGTGCATTATCCGCAACGCTCTGCAGCACTGGCCGGCCCTCCAGAAGTGGTCCCTCCCC
TATTTCAGAGCCACAGTGGGCTCCACAGAGGTGAGTGTGGCCGTGACCCCAGATGGTTACGCGGATGCCGTGAGA
GGGGATCGCTTCATGATGCCAGCTGAGCGCCGCCTGCCCCTGAGCTTCGTGCTGGATGTGCTGGAGGGCCGGGCC
CAGCACCCTGGAGTCCTCTATGTGCAGAAGCAGTGCTCCAACCTGCCCAGCGAGCTGCCCCAGCTGCTGCCTGAT
CTGGAATCCCATGTGCCCTGGGCCTCCGAAGCCCTGGGAAAGATGCCCGATGCTGTGAACTTCTGGCTGGGGGAG
GCGGCTGCAGTGACTTCTTTGCACAAGGACCACTATGAGAACCTCTACTGCGTGGTCTCAGGAGAGAAGCATTTC
CTGTTCCATCCGCCCAGCGACCGGCCCTTCATCCCCTATGAGCTGTACACGCCGGCAACCTACCAGCTAACTGAA
GAGGGCACCTTTAAGGTGGTGGATGAAGAGGCCATGGAGAAGGCAGAGGTGTCCAGGACCTGCCTGCTCACGGTT
CGTGTCCTGCAGGCCCATCGCCTACCCTCTAAGGACCTAGTGACCCCCTCTGACTGCTACGTGACTCTCTGGCTG
CCCACGGCCTGCAGCCACAGGCTCCAGACACGCACGGTCAAGAACAGCAGTAGCCCTGTCTGGAACCAGAGCTTT
CACTTCAGGATCCACAGGCAGCTCAAGAATGTCATGGAACTGAAAGTCTTTGACCAGGACCTGGTGACCGGAGAT
GACCCTGTGTTGTCAGTACTGTTTGATGCGGGGACTCTGCGGGCTGGGGAGTTCCGGCGCGAGAGCTTCTCACTG
AGCCCTCAGGGTGAGGGGCGCCTGGAAGTTGAATTTCGCCTGCAGAGTCTGGCTGACCGTGGCGAGTGGCTCGTC
AGCAATGGCGTTCTGGTGGCCCGGGAGCTCTCCTGCTTGCACGTTCAACTGGAGGAGACAGGAGACCAGAAGTCC
TCAGAGCACAGAGTTCAGCTTGTGGTTCCTGGGTCCTGTGAGGGTCCGCAGGAGGCCTCTGTGGGCACTGGCACC
TTCCGCTTCCACTGCCCAGCCTGCTGGGAGCAGGAGCTGAGTATTCGCCTGCAGGATGCCCCCGAGGAGCAACTA
AAGGCGCCACTGAGTGCCCTGCCCTCTGGTCAAGTGGTGAGGCTTGTCTTCCCCACGTCCCAGGAGCCCCTGATG
AGAGTGGAGCTGAAAAAAGAAGCAGGACTGAGGGAGCTGGCCGTGCGACTGGGCTTCGGGCCCTGTGCAGAGGAG
CAGGCCTTCCTGAGCAGGAGGAAGCAGGTGGTGGCCGCGGCCTTGAGGCAGGCCCTGCAGCTGGATGGAGACCTG
CAGGAGGATGAGATCCCAGTGGTAGCTATTATGGCCACTGGTGGTGGGATCCGGGCAATGACTTCCCTGTATGGG
CAGCTGGCTGGCCTGAAGGAGCTGGGCCTCTTGGATTGCGTCTCCTACATCACCGGGGCCTCGGGCTCCACCTGG
GCCTTGGCCAACCTTTATGAGGACCCAGAGTGGTCTCAGAAGGACCTGGCAGGGCCCACTGAGTTGCTGAAGACC
CAGGTGACCAAGAACAAGCTGGGTGTGCTGGCCCCCAGCCAGCTGCAGCGGTACCGGCAGGAGCTGGCCGAGCGT
GCCCGCTTGGGCTACCCAAGCTGCTTCACCAACCTGTGGGCCCTCATCAACGAGGCGCTGCTGCATGATGAGCCC
CATGATCACAAGCTCTCAGATCAACGGGAGGCCCTGAGTCATGGCCAGAACCCTCTGCCCATCTACTGTGCCCTC
AACACCAAAGGGCAGAGCCTGACCACTTTTGAATTTGGGGAGTGGTGCGAGTTCTCTCCCTACGAGGTCGGCTTC
CCCAAGTACGGGGCCTTCATCCCCTCTGAGCTCTTTGGCTCCGAGTTCTTTATGGGGCAGCTGATGAAGAGGCTT
CCTGAGTCCCGCATCTGCTTCTTAGAAGGTATCTGGAGCAACCTGTATGCAGCCAACCTCCAGGACAGCTTATAC
TGGGCCTCAGAGCCCAGCCAGTTCTGGGACCGCTGGGTCAGGAACCAGGCCAACCTGGACAAGGAGCAGGTCCCC
CTTCTGAAGATAGAAGAACCACCCTCAACAGCCGGCAGRATAGCTGAGTTTTTCACCGATCTTCTGACGTGGCGT
CCACTGGCCCAGGCCACACATAATTTCCTGCGTGGCCTCCATTTCCACAAAGACTACTTTCAGCATCCTCACTTC
TCCACATGGAAAGCTACCACTCTGGATGGGCTCCCCAACCAGCTGACACCCTCGGAGCCCCACCTGTGCCTGCTG
GATGTTGGCTACCTCATCAATACCAGCTGCCTGCCCCTCCTGCAGCCCACTCGGGACGTGGACCTCATCCTGTCA
TTGGACTACAACCTCCACGGAGCCTTCCAGCAGTTGCAGCTCCTGGGCCGGTTCTGCCAGGAGCAGGGGATCCCG
TTCCCACCCATCTCGCCCAGCCCCGAAGAGCAGCTCCAGCCTCGGGAGTGCCACACCTTCTCCGACCCCACCTGC
CCCGGAGCCCCTGCGGTGCTGCACTTTCCTCTGGTCAGCGACTCCTTCCGGGAGTACTCGGCCCCTGGGGTCCGG
CGGACACCCGAGGAGGCGGCAGCTGGGGAGGTGAACCTGTCTTCATCGGACTCTCCCTACCACTACACGAAGGTG
ACCTACAGCCAGGAGGACGTGGACAAGCTGCTGCACCTGACACATTACAATGTCTGCAACAACCAGGAGCAGCTG
CTGGAGGCTCTGCGCCAGGCAGTGCAGCGGAGGCGGCAGCGCAGGCCCCACTGATGGCCGGGGCCCCTGCCACCC
CTAACTCTCATTCATTCCCTGGCTGCTGAGTTGCAGGTGGGAACTGTCATCACGCAGTGCTTCAGAGCCTCGGGC
TCAGGTGGCACKGTCCCAGGGTCCAGGCTGAGGGCTGGGAGCTCCCTTGCGCCTCAGCAGTTTGCAGTGGGGTAA
GGAGGCCAAGCCCATTTGTGTAATCACCCAAAACCCCCCGGCCTGTGCCTGTTTTCCCTTCTGCGCTACCTTGAG
TAGTTGGAGCACTTGATACATCACAGACTCATACAAAAAAAAAAAAAAAAAA

FIGURE 111

MAEAALEAVRSELREFPAAARELCVPLAVPYLDKPPTPLHFYRDWVCPNRPCIIRNALQHWPALQKWSLPYFRAT
VGSTEVSVAVTPDGYADAVRGDRFMMPAERRLPLSFVLDVLEGRAQHPGVLYVQKQCSNLPSELPQLLPDLESHV
PWASEALGKMPDAVNFWLGEAAAVTSLHKDHYENLYCVVSGEKHFLFHPPSDRPFIPYELYTPATYQLTEEGTFK
VVDEEAMEKAEVSRTCLLTVRVLQAHRLPSKDLVTPSDCYVTLWLPTACSHRLQTRTVKNSSSPVWNQSFHFRIH
RQLKNVMELKVFDQDLVTGDDPVLSVLFDAGTLRAGEFRRESFSLSPQGEGRLEVEFRLQSLADRGEWLVSNGVL
VARELSCLHVQLEETGDQKSSEHRVQLVVPGSCEGPQEASVGTGTFRFHCPACWEQELSIRLQDAPEEQLKAPLS
ALPSGQVVRLVFPTSQEPLMRVELKKEAGLRELAVRLGFGPCAEEQAFLSRRKQVVAAALRQALQLDGDLQEDEI
PVVAIMATGGGIRAMTSLYGQLAGLKELGLLDCVSYITGASGSTWALANLYEDPEWSQKDLAGPTELLKTQVTKN
KLGVLAPSQLQRYRQELAERARLGYPSCFTNLWALINEALLHDEPHDHKLSDQREALSHGQNPLPIYCALNTKGQ
SLTTFEFGEWCEFSPYEVGFPKYGAFIPSELFGSEFFMGQLMKRLPESRICFLEGIWSNLYAANLQDSLYWASEP
SQFWDRWVRNQANLDKEQVPLLKIEEPPSTAGRIAEFFTDLLTWRPLAQATHNFLRGLHFHKDYFQHPHFSTWKA
TTLDGLPNQLTPSEPHLCLLDVGYLINTSCLPLLQPTRDVDLILSLDYNLHGAFQQLQLLGRFCQEQGIPFPPIS
PSPEEQLQPRECHTFSDPTCPGAPAVLHFPLVSDSFREYSAPGVRRTPEEAAAGEVNLSSSDSPYHYTKVTYSQE
DVDKLLHLTHYNVCNNQEQLLEALRQAVQRRRQRRPH

FIGURE 112

CCGGGATCCGGAGCCGCCCGAAGCCGGTGCCGCAGCCCCCTGCGCCCCCGGTGCCCCCGACATGTCCTTCCGCAA
AGTGGTCCGGCAGAGCAAATTCCGGCATGTGTTCGGGCAGCCGGTCAAGAACGACCAGTGCTATGAGGACATTCG
CGTGTCCCGTGTTACCTGGGACAGCACCTTCTGCGCCGTCAACCCCAAGTTCCTGGCGGTGATTGTGGAGGCCAG
TGGAGGGGGTGCCTTTCTGGTGCTCCCCCTAAGCAAGACGGGCCGCATTGACAAGGCCTACCCGACGGTGTGTGG
GCACACGGGACCTGTCCTGGACATCGACTGGTGTCCTCACAACGACGAAGTCATAGCCAGCGGCTCGGAGGACTG
CACGGTCATGGTGTGGCAGATCCCAGAGAACGGGCTGACCTCCCCGCTGACAGAGCCGGTGGTGGTACTGGAGGG
GCACACCAAGCGAGTGGGCATCATCGCCTGGCACCCCACGGCCCGAAACGTGCTGCTCAGTGCAGGCTGCGACAA
CGTGGTACTCATCTGGAATGTGGGCACAGCGGAGGAGCTGTACCGCCTGGACAGCCTGCACCCTGACCTCATCTA
CAATGTCAGCTGGAACCACAATGGCAGCCTGTTTTGCTCAGCATGCAAGGACAAGAGCGTGCGCATCATCGACCC
CCGTCGGGGCACCCTGGTGGCAGAGCGGGAGAAGGCTCATGAGGGGGCCCGGCCCATGCGGGCCATCTTCCTGGC
AGATGGCAAGGTGTTCACCACAGGCTTCAGCCGAATGAGCGAGCGGCAGCTGGCGCTCTGGGACCCAGAAAACCT
CGAGGAACCCATGGCCCTGCAGGAACTGGACTCGAGCAACGGGGCCCTGCTGCCCTTCTACGACCCCGACACCAG
TGTGGTCTACGTCTGCGGCAAGGGTGACTCCAGCATCCGGTACTTTGAGATCACAGAGGAGCCTCCCTACATCCA
CTTCCTGAACACGTTCACCAGCAAGGAGCCGCAGCGGGGTATGGGCAGCATGCCCAAGCGGGGCCTGGAGGTCAG
CAAGTGCGAGATCGCCCGGTTCTACAAACTGCATGAGCGCAAGTGTGAGCCCATCGTCATGACTGTGCCAAGAAA
GTCGGACCTCTTCCAGGATGATCTGTACCCCGACACAGCCGGGCCCGAGGCAGCCCTGGAGGCTGAGGAGTGGGT
GAGCGGGCGGGATGCCGACCCGATCCTCATCTCACTGCGGGAGGCCTACGTGCCCAGCAAGCAGCGGGACCTGAA
GATCAGCCGGCGCAACGTGTTGTCTGACAGCCGGCCCGCCATGGCCCCGGGCTCCTCCCACCTAGGGGCCCCCGC
CTCCACCACCACTGCTGCTGATGCCACCCCCAGCGGCAGCCTGGCCAGAGCCGGGGAGGCTGGGAAGCTGGAGGA
GGTGATGCAGGAGCTGCGGGCCCTGAGGGCGCTGGTCAAGGAGCAGGGCGACCGCATCTGCCGCCTGGAGGAGCA
GCTGGGCCGCATGGAGAACGGGGATGCGTAGGCCACAGCCACACGCCACCTTCATCTCCTCCGCCGCCCCCTTC
CCACTCAGCTTCTGCCAGCGGGTCGCACCGGGCTAGCTGGCTGCCCAGAGCCTCTGAGGCAGCGCAGGGGTCAGT
TCCCACCCCCACCCGTCCCAGGCCCAGGCCGAAGCCAGCGCCCAGCTTTCCTCACTGTTCCTGTGGAGGATGTCT
ACGCCCAGGCGAGCTCCTCGACCTCTGAGGGACCATCTCCCCGACCACTGCCCAGCCCTCTGCTCCCTCCCCAGA
GGAGGCGGGAGGGTGGGCTCTATATTTTCATTCCAAATAAAATTCTCTTTCTAAAAGCCAAAAAAAAAAAAAAAA
AA

FIGURE 113

MSFRKVVRQSKFRHVFGQPVKNDQCYEDIRVSRVTWDSTFCAVNPKFLAVIVEASGGGAFLVLPLSKTGRIDKAY
PTVCGHTGPVLDIDWCPHNDEVIASGSEDCTVMVWQIPENGLTSPLTEPVVVLEGHTKRVGIIAWHPTARNVLLS
AGCDNVVLIWNVGTAEELYRLDSLHPDLIYNVSWNHNGSLFCSACKDKSVRIIDPRRGTLVAEREKAHEGARPMR
AIFLADGKVFTTGFSRMSERQLALWDPENLEEPMALQELDSSNGALLPFYDPDTSVVYVCGKGDSSIRYFEITEE
PPYIHFLNTFTSKEPQRGMGSMPKRGLEVSKCEIARFYKLHERKCEPIVMTVPRKSDLFQDDLYPDTAGPEAALE
AEEWVSGRDADPILISLREAYVPSKQRDLKISRRNVLSDSRPAMAPGSSHLGAPASTTTAADATPSGSLARAGEA
GKLEEVMQELRALRALVKEQGDRICRLEEQLGRMENGDA

FIGURE 114

TCCGAAAGTGCCCGAGCGGTGCCGGACGGACTAATCGGGCCTCGGCCGTGGCTCGGACGTCCGCTCCCGAAACGC
GGCGCGGTCGGGCCCCTTCGTCAGGAGACGCGAAAATGGCCGAAGGAGCGCGAGCGCGCGGGCCGAGAGGCTGCC
GGGATCGCGACGGACCGGCGGGCGGGGCGGGGAGAGGATCCTCCACAGTGCTCTCTTCAGTTCCCCTTCAAATGC
TGTTTTATCTCAGCGGAACGTACTACGCCCTGTATTTCCTCGCCACGCTCCTGATGATCACGTATAAAAGTCAGG
TGTTCAGCTATCCTCACCGCTACCTGGTCCTCGATCTTGCTCTGCTGTTTCTGATGGGGATTCTAGAAGCAGTTC
GGTTATACCTGGGCACCAGGGGCAACCTGACAGAGGCTGAGAGGCCGCTGGCCGCCAGCCTGGCCCTCACGGCTG
GCACCGCCCTCCTCTCTGCCCACTTCCTGCTTTGGCAGGCCCTAGTGTTGTGGGCGGACTGGGCCCTCAGCGCCA
CGCTCCTGGCCCTTCACGGCCTGGAGGCCGTCCTGCAGGTGGTTGCCATCGCGGCCTTCACCAGGTAGCTACGGA
CACCCGGGATACCCCACACTGGGGCCCTCCTCCTGGGCCTGACCAGTCCCCCAGCTGTCACCTCCCCATTCCTGG
ACAGGAAGGGCACTTTTCCTAGTGACTGGCCATAGATGGTTTTGGATGGTTCCATCTGTTCTGGCAGGAGTGGGA
GCAGGAGCCAGGGCAGAACAAACTGCTGGAGGCCCTGGTGTTGGGAACAGCTGCGGGGAGGGTAGGGACCAGACA
GAACTGCCTTCAAGATGAGTCCCAGGAGCGCACACTCAGCCCTGTCAGTGGGGTCTGGCTTTAGCAGCCAGGCCT
CCACAGACCCCCATGGGCCCCCAGGGCCGAGAGGGAGGACAGAGCCCTTCAGAACAGAGGCCTCATCTCACTGCA
TCCCCCATCACCCCCTAGTTCCCCAATGGTCCTAATTTGTGTTCTGAGATCCCAGTTTACTCTGTGGCCAGGCCC
CACCTGTGTTTCCAAGTCGGGCTGGAGACGCAGGATGGGGTAGGCCTTGTGCTCTGAGCAACCCCAGCTCTGCCT
CACAGGCAGGCAGGCCCGGTGCAAGAGTGGACTCTGGGTTCCTAAAGCAATAAATGCAAACAAGCCAACAGCTCT
GCTGCCTAGCAATTTCCATCTTAGCCACACTTCTCCCTTCAGGGGCTTCGGAGGAGAGGTCAGGGCTAAGGCCGG
GGATGAGACTGCAGGAGAGAGAGCAGCGGAGGGCCACATTCGGAGCCTCCGTCCACTCCAGTTTTATCAGCTTTT
GCCTTTTGCACGGAGTGCTAAACAAATTCTAGCTCTGTGTTTTTTTCCCATTCCCAGATTTACTATCAGTTCTCC
TTAAAAAGTATCTAAGCTGTTACAGTAGCTTTCCCTTCACTTGATTCTATTGTGTGTTTTCTATGTTTGGAATAA
TTACACCCAAATATCTAGATATTTTCTCTTCACCGCATTTTGTAAATAAAGAGATGTGTATGCCTCCCTGAAAAA
AAAAAAAAAAA

FIGURE 115

MLFYLSGTYYALYFLATLLMITYKSQVFSYPHRYLVLDLALLFLMGILEAVRLYLGTRGNLTEAERPLAASLALT
AGTALLSAHFLLWQALVLWADWALSATLLALHGLEAVLQVVAIAAFTR

FIGURE 116A

GGGAATACCCAGCTTCCTCCCCGCAACCCGGTGAAAGCCAACGCAATGTTCGGTGCGGGGGACGAGGACGACACC
GATTTCCTCTCGCCGAGCGGCGGTGCCAGATTGGCCTCACTTTTTGGACTGGATCAGGCAGCTGCTGGCCATGGA
AATGAATTTTTCCAGTACACAGCCCCAAAACAGCCTAAGAAAGGCCAGGGAACGGCAGCAACAGGAAATCAGGCA
ACACCAAAAACAGCACCAGCCACCATGAGCACTCCCACAATACTGGTCGCAACAGCAGTCCATGCATATCGATAC
ACAAATGGTCAATATGTAAAGCAGGGCAAATTTGGTGCTGCAGTTCTGGGGAACCACACAGCCAGAGAGTATAGG
ATTCTTCTTTATATCAGTCAACAACAGCCAGTTACGGTTGCTAGGATTCATGTGAACTTTGAGCTAATGGTTCGG
CCCAATAACTATAGCACCTTTTATGATGACCAGAGACAGAACTGGTCCATCATGTTTGAGTCGGAAAAGGCTGCT
GTGGAGTTCAATAAGCAGGTGTGCATTGCTAAGTGCAACAGTACCTCTTCCCTGGATGCAGTGCTCTCCCAGGAC
CTCATTGTGGCAGACGGCCCTGCTGTAGAAGTTGGAGATTCTTTGGAAGTGGCCTATACCGGCTGGCTCTTTCAG
AATCATGTGCTGGGCCAGGTTTTCGACTCCACTGCTAACAAAGATAAGTTGCTTCGCTTGAAGTTAGGATCAGGA
AAAGTCATCAAGGGCTGGGAGGATGGAATGCTGGGCATGAAAAAAGGAGGAAAGCGATTGCTTATTGTCCCTCCA
GCCTGTGCTGTTGGCTCAGAAGGGGTAATAGGCTGGACTCAAGCAACGGACTCGATCCTGGTGTTCGAGGTGGAG
GTTAGGCGGGTGAAGTTTGCCAGAGATTCTGGCTCTGATGGTCACAGTGTTAGTTCCCGCGATTCTGCAGCTCCG
TCTCCCATCCCTGGTGCTGACAACCTCTCTGCTGATCCTGTTGTGTCACCACCCACATCAATACCTTTCAAATCA
GGGGAGCCAGCTCTTCGTACCAAATCTAACTCCCTCAGTGAACAACTTGCAATAAATACAAGTCCCGATGCAGTC
AAAGCCAAGTTGATCTCTCGGATGGCTAAAATGGGCCAGCCCATGCTGCCCATCCTTCCACCACAGCTGGATTCC
AATGATTCAGAAATCGAAGATGTGAACACTCTGCAAGGAGGTGGGCAGCCTGTGGTGACTCCGTCCGTCCAGCCC
TCTCTTCAGCCGGCCCATCCAGCGTTACCACAGATGACCTCACAGGCACCTCAGCCATCTGTTACTGGGCTCCAG
GCACCTTCTGCTGCCTTAATGCAAGTGTCATCTCTCGATTCCCACTCAGCTGTATCTGGAAATGCCCAATCCTTT
CAGCCCTATGCAGGTATGCAAGCCTACGCTTATCCCCAGGCATCTGCCGTCACCTCCCAGCTGCAGCCCGTTCGG
CCTTTGTACCCAGCACCGCTCTCTCAGCCTCCCCATTTCCAAGGATCAGGTGATATGGCTTCATTTCTCATGACT
GAAGCCCGGCAACATAACACTGAAATTCGAATGGCAGTCAGCAAAGTGGCTGATAAAATGGATCATCTCATGACT
AAGGTTGAAGAGTTACAGAAACATAGTGCTGGCAATTCCATGCTTATTCCTAGCATGTCAGTTACAATGGAAACA
AGCATGATTATGAGCAACATCCAGCGAATCATTCAGGAAAATGAAAGATTGAAGCAAGAGATCCTTGAAAAGAGC
AATCGGATAGAAGAACAGAATGACAAGATTAGTGAACTAATTGAACGAAATCAGAGGTATGTTGAGCAGAGTAAC
CTGATGATGGAGAAGAGGAACAACTCACTTCAGACAGCCACAGAAAACACACAGGCAAGAGTATTGCATGCTGAA
CAAGAGAAGGCCAAGGTGACAGAGGAGTTAGCAGCGGCCACTGCGCAGGTCTCTCATCTGCAGCTGAAAATGACT
GCTCACCAAAAAAAGGAAACAGAGCTGCAGATGCAGCTGACAGAAAGCCTGAAGGAGACAGATCTTCTCAGGGGC
CAGCTCACCAAAGTGCAGGCAAAGCTCTCAGAGCTCCAAGAAACCTCTGAGCAAGCACAGTCCAAATTCAAAAGT
GAAAAGCAGAACCGGAAACAACTGGAACTCAAGGTGACATCCCTGGAGGAGGAACTGACTGACCTTCGAGTTGAG
AAGGAGTCCTTGGAAAAGAACCTCTCAGAAAGGAAAAAGAAGTCAGCTCAAGAGCGTTCTCAGGCCGAGGAGGAG
ATAGATGAAATTCGCAAGTCATACCAGGAGGAATTGGACAAACTTCGACAGCTCTTGAAAAAGACTCGAGTGTCC
ACAGACCAAGCAGCTGCAGAGCAGCTGTCTTTAGTACAGGCTGAGCTACAGACCCAGTGGGAAGCAAAATGTGAA
CATTTGTTGGCCTCCGCCAAGGATGAGCACCTGCAGCAGTACCAGGAGGTGTGCGCACAGAGAGATGCCTACCAG
CAGAAGCTGGTACAACTTCAGGAAAAGTGTTTAGCCCTCCAGGCCCAAATCACAGCTCTCACCAAGCAAAATGAA
CAGCACATCAAGGAACTAGAGAAGAACAAGTCCCAGATGTCTGGGGTTGAAGCTGCTGCATCTGACCCCTCAGAG
AAGGTCAAGAAGATCATGAACCAGGTGTTCCAGTCCTTACGGAGAGAGTTTGAGCTGGAGGAATCTTACAATGGC
AGGACCATTCTGGGAACCATCATGAATACGATCAAGATGGTGACTCTTCAGCTGTTAAACCAACAGGAGCAAGAG
AAGGAAGAGAGCAGCAGTGAAGAAGAAGAAGAAAAAGCAGAAGAGCGGCCACGAAGACCTTCCCAGGAGCAGTCA
GCCTCAGCCAGTTCTGGGCAGCCTCAAGCACCCCTGAATAGGGAGAGGCCAGAGTCCCCCATGGTGCCCTCAGAG
CAGGTGGTCGAGGAAGCTGTCCCGTTGCCTCCTCAGGCCCTCACCACTTCCCAGGATGGACACAGAAGGAAAGGG
GACTCAGAAGCTGAGGCACTCTCAGAGATAAAAGATGGTTCCCTTCCACCCGAACTGTCTTGCATCCCATCCCAC
AGAGTTCTAGGGCCCCCGACTTCAATTCCACCTGAGCCCCTAGGCCCTGTATCCATGGACTCTGAGTGTGAGGAG
TCACTTGCTGCCAGCCCAATGGCAGCTAAGCCCGACAACCCATCAGGAAAGGTCTGTGTCAGGGAAGTAGCACCA
GATGGCCCACTACAAGAAAGCTCCACAAGACTGTCCCTGACTTCAGACCCCGAGGAGGGGGACCCACTGGCCTTA
GGGCCTGAAAGCCCAGGAGAGCCTCAGCCTCCACAGCTCAAGAAAGATGATGTCACTAGCTCCACCGGTCCCCAC
AAGGAGCTGTCAAGCACAGAGGCAGGTTCCACAGTTGCAGGAGCAGCCCTCAGACCCAGCCATCATTCCCAGCGT
TCCAGTCTCTCTGGGGATGAAGAGGATGAACTGTTTAAAGGGGCAACTCTGAAAGCTCTGAGGCCCAAAGCACAG

FIGURE 116B

CCTGAGGAGGAGGATGAAGACGAGGTGAGCATGAAGGGACGCCCGCCCCCAACGCCCCTTTTTGGAGATGATGAT
GATGACGATGACATTGACTGGCTGGGATGAAGACCCAGGAAACTGGTGCAAAGGTTTCTCTGCAACCCTTCCCTA
AGCATGATTTTGCACAGCCAACCCTGGGTCTAGGCGAGCCACAGGGTGAGGTCAAGGTGAGCATTCTGGGAACAA
TATTTGGGCTCAGAGGGTGGGTTGGCCACCTTCTGAGCCCCACCCCCGCCAGACCTGGTGAAGAGGATCATAACC
CTGTCTTCAAGAACACTGGGATTTCAGCAGCAAGTTGGAAGAAGGACTGGTAGGTTCCCCTCCAAGCCAGTCACC
TGTAAGAGTCCTGTCCTCTGCCAGACTTTTTAATCTCTTCATTAACTCTCAGACTGACCTGGGAGCCCTCCTCTA
CCTGAATCCAGTGCTCAACTGTGCCCCGGCAACAAGACCTGGGCTGAGGTCTCCCTGGTAGAACTAAGGGAGATT
ACACCATCTAAATCCCAGTGCAGTCAACAGCCTGGCCTATAGTCCTGGGACATGTATCTTCTTCTTTGCCTTAAA
TCTGATACAAGAGGTCAATGACTTTGAAAATAAAACTAAAATAAATGTCTATAATGAAACTTG

FIGURE 117

GNTQLPPRNPVKANAMFGAGDEDDTDFLSPSGGARLASLFGLDQAAAGHGNEFFQYTAPKQPKKGQGTAATGNQA
TPKTAPATMSTPTILVATAVHAYRYTNGQYVKQGKFGAAVLGNHTAREYRILLYISQQQPVTVARIHVNFELMVR
PNNYSTFYDDQRQNWSIMFESEKAAVEFNKQVCIAKCNSTSSLDAVLSQDLIVADGPAVEVGDSLEVAYTGWLFQ
NHVLGQVFDSTANKDKLLRLKLGSGKVIKGWEDGMLGMKKGGKRLLIVPPACAVGSEGVIGWTQATDSILVFEVE
VRRVKFARDSGSDGHSVSSRDSAAPSPIPGADNLSADPVVSPPTSIPFKSGEPALRTKSNSLSEQLAINTSPDAV
KAKLISRMAKMGQPMLPILPPQLDSNDSEIEDVNTLQGGGQPVVTPSVQPSLQPAHPALPQMTSQAPQPSVTGLQ
APSAALMQVSSLDSHSAVSGNAQSFQPYAGMQAYAYPQASAVTSQLQPVRPLYPAPLSQPPHFQGSGDMASFLMT
EARQHNTEIRMAVSKVADKMDHLMTKVEELQKHSAGNSMLIPSMSVTMETSMIMSNIQRIIQENERLKQEILEKS
NRIEEQNDKISELIERNQRYVEQSNLMMEKRNNSLQTATENTQARVLHAEQEKAKVTEELAAATAQVSHLQLKMT
AHQKKETELQMQLTESLKETDLLRGQLTKVQAKLSELQETSEQAQSKFKSEKQNRKQLELKVTSLEEELTDLRVE
KESLEKNLSERKKKSAQERSQAEEEIDEIRKSYQEELDKLRQLLKKTRVSTDQAAAEQLSLVQAELQTQWEAKCE
HLLASAKDEHLQQYQEVCAQRDAYQQKLVQLQEKCLALQAQITALTKQNEQHIKELEKNKSQMSGVEAAASDPSE
KVKKIMNQVFQSLRREFELEESYNGRTILGTIMNTIKMVTLQLLNQQEQEKEESSSEEEEEKAEERPRRPSQEQS
ASASSGQPQAPLNRERPESPMVPSEQVVEEAVPLPPQALTTSQDGHRRKGDSEAEALSEIKDGSLPPELSCIPSH
RVLGPPTSIPPEPLGPVSMDSECEESLAASPMAAKPDNPSGKVCVREVAPDGPLQESSTRLSLTSDPEEGDPLAL
GPESPGEPQPPQLKKDDVTSSTGPHKELSSTEAGSTVAGAALRPSHHSQRSSLSGDEEDELFKGATLKALRPKAQ
PEEEDEDEVSMKGRPPPTPLFGDDDDDDIDWLG

FIGURE 118

GGCACGAGGGATGGCGGCAGCGGCGCTGGGGAGGGCGAGGCGGAGGCGGCAAAACGGGCGGTCGAGCAGAACGTG
TAGCCGCGTCCCCTCCAGTCCGCTCCGGGCAGCTGCTGATGCAAGGAATCCCCTGGGCTCCCGTCCACTCCACTG
CTGACCAGCCCATTCGCCTGTGCTGAGTCTTCCTGCAGGCCTTTCCTTGCCTCTGTGGGACCCTGTGGGGGTCCA
TCCGGCTGGAGAAGAAAAGCCTCTCATGCTAACGTTGCAGACCCCAGAGGGTCCTGTGTGGGTGTGGAGATGGCC
AATGAGAATCACGGCAGCCCCCGGGAGGAAGCGTCCCTGCTGAGTCACTCCCCAGGTACCTCCAATCAGAGCCAG
CCCTGTTCTCCAAAGCCAATCCGCCTGGTTCAGGACCTCCCAGAGGAGCTGGTGCATGCAGGCTGGGAGAAGTGC
TGGAGCCGGAGGGAGAATCGTCCCTACTACTTCAACCGATTCACCAACCAGTCCCTGTGGGAGATGCCCGTGCTG
GGGCAGCACGATGTGATTTCGGACCCTTTGGGGCTGAATGCGACCCCACTGCCCCAAGACTCAAGCTTGGTGGAA
ACTCCCCCGGCTGAGAACAAGCCCAGAAAGCGGCAGCTCTCGGAAGAGCAGCCAAGCGGCAATGGTGTGAAGAAG
CCCAAGATTGAAATCCCAGTGACACCCACAGGCCAGTCGGTGCCCAGCTCCCCCAGTATCCCAGGAACCCCAACG
CTGAAGATGTGGGGTACGTCCCCTGAAGATAAACAGCAGGCAGCTCTCCTACGACCCACTGAGGTCTACTGGGAC
CTGGACATCCAGACCAATGCTGTCATCAAGCACCGGGGGCCTTCAGAGGTGCTGCCCCCGCATCCCGAAGTGGAA
CTGCTCCGCTCTCAGCTCATCCTGAAGCTTCGGCAGCACTATCGGGAGCTGTGCCAGCAGCGAGAGGGCATTGAG
CCTCCACGGGAGTCTTTCAACCGCTGGATGCTGGAGCGCAAGGTGGTAGACAAAGGATCTGACCCCCTGTTGCCC
AGCAACTGTGAACCAGTCGTGTCACCTTCCATGTTTCGTGAAATCATGAACGACATTCCTATCAGGTTATCCCGA
ATCAAGTTCCGGGAGGAAGCCAAGCGCCTGCTCTTTAAATATGCGGAGGCCGCCAGGCGGCTCATCGAGTCCAGG
AGTGCATCCCCTGACAGTAGGAAGGTGGTCAAATGGAATGTGGAAGACACCTTTAGCTGGCTTCGGAAGGACCAC
TCAGCCTCCAAGGAGGACTACATGGATCGCCTGGAGCATCTGCGGAGGCAGTGTGGCCCCCACGTCTCGGCCGCA
GCCAAGGACTCCGTGGAAGGCATCTGCAGTAAGATCTACCACATCTCCCTGGAGTACGTCAAACGGATCCGAGAG
AAGCACCTTGCCATCCTCAAGGAAAACAACATCTCAGAGGAGGTGGAGGCCCCTGAGGTGGAGCCCCGCCTAGTG
TACTGCTACCCAGTCCGGCTGGCTGTGTCTGCACCGCCCATGCCCAGCGTGGAGATGCACATGGAGAACAACGTG
GTCTGCATCCGGTATAAGGGAGAGATGGTCAAGGTCAGCCGCAACTACTTCAGCAAGCTGTGGCTCCTTTACCGC
TACAGCTGCATTGATGACTCTGCCTTTGAGAGGTTCCTGCCCCGGGTCTGGTGTCTTCTCCGACGGTACCAGATG
ATGTTCGGCGTGGGCCTCTACGAGGGGACTGGCCTGCAGGGATCGCTGCCTGTGCATGTCTTTGAGGCCCTCCAC
CGACTCTTTGGCGTCAGCTTCGAGTGCTTCGCCTCACCCCTCAACTGCTACTTCCGCCAGTACTGTTCTGCCTTC
CCCGACACAGACGGCTACTTTGGCTCCCGCGGGCCCTGCCTAGACTTTGCTCCACTGAGTGGTTCATTTGAGGCC
AACCCTCCCTTCTGCGAGGAGCTCATGGATGCCATGGTCTCTCACTTTGAGAGACTGCTTGAGAGCTCACCGGAG
CCCCTGTCCTTCATCGTGTTCATCCCTGAGTGGCGGGAACCCCCAACACCAGCGCTCACCCGCATGGAGCAGAGC
CGCTTCAAACGCCACCAGTTGATCCTGCCTGCCTTTGAGCATGAGTACCGCAGTGGCTCCCAGCACATCTGCAAG
AAGGAGGAAATGCACTACAAGGCCGTCCACAACACGGCTGTGCTCTTCCTACAGAACGACCCTGGCTTTGCCAAG
TGGGCGCCGACGCCTGAACGGCTGCAGGAGCTGAGTGCTGCCTACCGGCAGTCAGGCCGCAGCCACAGCTCTGGT
TCTTCCTCATCGTCCTCCTCGGAGGCCAAGGACCGGGACTCGGGCCGTGAGCAGGGTCCTAGCCGCGAGCCTCAC
CCCACTTAACATATCCTGCGGGGAGGAGGAGCCCCAGGGGTGCTAGTCTGGACTGCTGGGACTCGGGCCCCTGGG
GCCTCAGAGGGACCCCGGCTGCCACTGACATATGAAGATTATGGTTCTGCCAGGGCTCCCCTCCCTGCCTGTCCC
CAAGTCCTCACCTCAAACTCCCTCCAAGTCCCATGTATATAGGTCCTGATGCCTTCCCAACCCCGCCCCTCACCC
TGTTGCCACCTTGTTTCATTTGTAAAAGGAAATACAGAAACCCCCCCAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 119

MANENHGSPREEASLLSHSPGTSNQSQPCSPKPIRLVQDLPEELVHAGWEKCWSRRENRPYYFNRFTNQSLWEMP
VLGQHDVISDPLGLNATPLPQDSSLVETPPAENKPRKRQLSEEQPSGNGVKKPKIEIPVTPTGQSVPSSPSIPGT
PTLKMWGTSPEDKQQAALLRPTEVYWDLDIQTNAVIKHRGPSEVLPPHPEVELLRSQLILKLRQHYRELCQQREG
IEPPRESFNRWMLERKVVDKGSDPLLPSNCEPVVSPSMFREIMNDIPIRLSRIKFREEAKRLLFKYAEAARRLIE
SRSASPDSRKVVKWNVEDTFSWLRKDHSASKEDYMDRLEHLRRQCGPHVSAAAKDSVEGICSKIYHISLEYVKRI
REKHLAILKENNISEEVEAPEVEPRLVYCYPVRLAVSAPPMPSVEMHMENNVVCIRYKGEMVKVSRNYFSKLWLL
YRYSCIDDSAFERFLPRVWCLLRRYQMMFGVGLYEGTGLQGSLPVHVFEALHRLFGVSFECFASPLNCYFRQYCS
AFPDTDGYFGSRGPCLDFAPLSGSFEANPPFCEELMDAMVSHFERLLESSPEPLSFIVFIPEWREPPTPALTRME
QSRFKRHQLILPAFEHEYRSGSQHICKKEEMHYKAVHNTAVLFLQNDPGFAKWAPTPERLQELSAAYRQSGRSHS
SGSSSSSSSEAKDRDSGREQGPSREPHPT

FIGURE 120

GAGATGCCTGAACCCAGCCTTGGGGAATCTCACAGCCCTCACCTACCTCAACCTCAGCCGAAACCAGCTGTCGCT
GCTGCCACCCTACATCTGCCAGCTGCCCCTGAGGGTCCTCATCGTCAGCAACAACAAGCTGGGAGCCCTGCCCCC
TGACATCGGCACCCTGGGAAGCCTGCGACAGCTTGACGTGAGCAGCAACGAGCTCCAATCCCTGCCCTCGGAACT
GTGTGGCCTCTCTTCCCTGCGGGACCTCAATGTCCGGAGGAACCAGCTCAGTACGCTGCCCGAAGAGCTGGGGGA
CCTCCCTCTGGTCCGCCTGGATTTCTCCTGTAACCGCGTCTCCCGAATCCCAGTCTCCTTCTGCCGCCTGAGGCA
CCTGCAGGTCATTCTGCTGGACAGCAACCCTCTGCAGAGTCCACCTGCCCAGGTCTGCCTGAAGGGGAAACTTCA
CATCTTCAAGTATTTGTCCACAGAGGCCGGGCAGCGTGGGTCGGCCCTGGGGGACCTGGCCCCTTCTCGGCCCCC
GAGTTTCAGTCCCTGCCCTGCAGAGGATCTATTTCCGGGACATCGGTACGATGGTGGGCTGGACTCAGGCTTCCA
CAGCGTTGATAGTGGCAGCAAGAGGTGGTCTGGAAATGAGTCAACAGATGAATTTTCAGAGCTGTCATTCCGGAT
CTCAGAGCTGGCCCGGGAGCCCCGGGGGCCCAGAGAACGCAAGGAGGATGGCTCAGCGGACGGAGACCCTGTGCA
GATTGACTTCATCGACAGCCATGTCCCCGGGGAGGATGAAGAGCGAGGCACTGTGGAGGAGCAGCGACCACCCGA
ATTAAGCCCTGGGGCAGGGGACAGGGAGAGGGCACCAAGCAGCAGGCGGGAGGAGCCGGCAGGGGAGGAGCGGCG
GCGCCCGGACACCTTGCAGCTGTGGCAGGAGCGGGAACGGCGGCAGCAGCAGCAGAGCGGGGCGTGGGGGGCCCC
GAGGAAGGATAGCCTCTTGAAGCCAGGGCTCAGGGCTGTTGTGGGAGGGGCCGCCGCCGTGTCCACTCAAGCCAT
GCACAACGGCTCGCCTAAGTCCAGTGCCTCCCAAGCAGGGGCTGCAGCGGGGCAGGGAGCCCCCGCCCCTGCCCC
TGCCTCCCAAGAGCCCCTTCCCATAGCTGGACCAGCGACAGCACCTGCTCCACGGCCACTTGGCTCCATTCAGAG
ACCAAACAGCTTCCTCTTCCGTTCCTCCTCTCAGAGTGGCTCAGGCCCTTCCTCACCAGACTCTGTCCTGAGACC
TCGGCGGTACCCCCAGGTTCCAGATGAGAAGGACTTAATGACTCAGCTGCGCCAGGTCCTTGAGTCCCGGCTGCA
GCGGCCCCTGCCTGAGGACCTGGCCGAGGCTCTGGCCAGTGGGGTCATCCTGTGCCAGCTGGCCAACCAGCTACG
GCCGCGCTCCGTGCCCTTCATCCATGTGCCCTCCCCTGCTGTGCCAAAACTCAGTGCCCTCAAGGCTCGGAAGAA
TGTGGAGAGTTTTCTAGAAGCCTGTCGAAAAATGGGGGTGCCTGAGGCTGACCTGTGCTCGCCCTCGGATCTCCT
CCAGGGCACTGCCCGGGGGCTGCGGACCGCGCTGGAGGCCATGAAGCGGGTGGGGGGCAAGGCCCTACCGCCCCT
CTGGCCCCCCTCTGGTCTGGGCGGCTTCGTCGTCTTCTACGTGGTCCTCATGCTGCTGCTCTATGTCACCTACAC
TCGGCTCCTGGGTTCCTAGGCCCCAAAATCGGCCCTCCCTCACCCCTTTCCCTTCCTCTCTATTTATAAGGTCCC
TGCTCCACCCGACCCCACCTGCGGTGCCTTCAGCCCCAACCAAAGACACTAGTGCACCCCCTTCACAGACACTGA
CCTCAGAGGCCCCACTCTGGTGCCCCCAGACCCTGGGCCCCCAGCCTCTGGCCTCCCTCCAGTAGCCCCACGAGT
CCCCACCTCTCAGTGCTGACGGTGCCTTCATGTCCCCGCCGGCCCTGCCCCTGCCCTCTGTACCCCGTGAGGGGT
GGCAGGAGCTGGAGTCTCCCCCTTCCTCCTGTGCCCTCCCCTTCCCCCCCCAACAGCTGCTATGGGGGGGCTAAA
TTATCTCTATTTTGTAGAGAGGATCTATATTTGTAGGGGTTCGGGGCCCAGGCCGGGTCCCTATCTCTGTGTATA
AACTGTACAGACCGTGGCCGCCCTGCCTGTGTGTGTGTGTGTGCGCGCGCGCGCGCGTCTGCTCCGCGTGTTGGT
GGCTGTGGCCATGGCTCTGTGCCCACCAGCATCTCCCTCCTGAGATGCCGGCCTCTCATGCTCCCGGAGCGTCCG
CCAACCCCCCGTGTCACCTCCCTTCTGTTATCGCTGACAGCTTTCTTGCGTCTCATTTGTCGCCGAGCCCCGAGC
GCACGGTGATGCTCGGGTCTGCCCCCGACCCCCTGCCACAGGCCGGAAGCCGCAGGGGGCACCGTGGGGAAGCTA
ACCCGGCCCCTTCCCCCAGGAGTCACTGTGCCAGCCCCACCACATCCTGGAAGAGGAGGGGGCCCCGGGAAGGGG
CCTCCCCTACATCGCTGCTGTCGTCCACGCCCTGCTGGACCGGCCTTAGGGGTGAAGGTGGGGGCACAGGGCCCA
CCCCGCCCGGGACCCCGGGAGCAGAAGACGCGCCTGGGCTCCGCGCTCTCAGAGAAGCACGTGGTGAGGGTGGCC
TGGGCCTGGGCACCCTTGGCCTGCCGGCCTGGCTGCCTCTGGGGTCGAGGGTCTGGGTGGAAGGACCGCGGGTGT
CGCAGGTGTCGTGTCAGCCGCAATAAACAGAAGCCAGAAGCCCTCTGGGTGGCCCTCAGAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 121

GCTGGGAGCAAAGCGCTGAGGGAGCTCGGTACGCCGCCGCCTCGCACCCGCAGCCTCGCGCCCGCCGCCGCCCGT
CCCCAGAGAACC**ATG**GAGTCTGGCAGTACCGCCGCCAGTGAGGAGGCACGCAGCCTTCGAGAATGTGAGCTCTAC
GTCCAGAAGCATAACATTCAAGCGCTGCTCAAAGATTCTATTGTGCAGTTGTGCACTGCTCGACCTGAGAGACCC
ATGGCATTCCTCAGGGAATACTTTGAGAGGTTGGAGAAGGAGGAGGCAAAACAGATTCAGAATCTGCAGAAAGCA
GGCACTCGTACAGACTCAAGGGAGGATGAGATTTCTCCTCCTCCACCCAACCCAGTGGTTAAAGGTAGGAGGCGA
CGAGGTGCTATCAGCGCTGAGGTCTACACGGAGGAAGATGCGGCATCCTATGTTAGAAAGGTTATACCAAAAGAT
TACAAGACAATGGCCGCTTTAGCCAAAGCCATTGAAAAGAATGTGCTGTTTTCACATCTTGATGATAATGAGAGA
AGTGATATTTTTGATGCCATGTTTTCGGTCTCCTTTATCGCAGGAGAGACTGTGATTCAGCAAGGTGATGAAGGG
GATAACTTCTATGTGATTGATCAAGGAGAGACGGATGTCTATGTTAACAATGAATGGGCAACCAGTGTTGGGGAA
GGAGGGAGCTTTGGAGAACTTGCTTTGATTTATGGAACACCGAGAGCAGCCACTGTCAAAGCAAAGACAAATGTG
AAATTGTGGGGCATCGACCGAGACAGCTATAGAAGAATCCTCATGGGAAGCACACTGAGAAAGCGGAAGATGTAT
GAGGAATTCCTTAGTAAAGTCTCTATTTTAGAGTCTCTGGACAAGTGGGAACGTCTTACGGTAGCTGATGCATTG
GAACCAGTGCAGTTTGAAGATGGGCAGAAGATTGTGGTGCAGGGAGAACCAGGGGATGAGTTCTTCATTATTTTA
GAGGGGTCAGCTGCTGTGCTACAACGTCGGTCAGAAAATGAAGAGTTTGTTGAAGTGGGAAGATTGGGGCCTTCT
GATTATTTTGGTGAAATTGCACTACTGATGAATCGTCCTCGTGCTGCCACAGTTGTTGCTCGTGGCCCCTTGAAG
TGCGTTAAGCTGGACCGACCTAGATTTGAACGTGTTCTTGGCCCATGCTCAGACATCCTCAAACGAAACATCCAG
CAGTACAACAGTTTTGTGTCACTGTCTGTC**TGA**AATCTGCCTCCTGTGCCTCCCTTTTCTCCTCTCCCCAATCCA
TGCTTCACTCATGCAAACTGCTTTATTTTCCCTACTTGCAGCGCCAAGTGGCCACTGGCATCGCAGCTTCCTGTC
TGTTTATATATTGAAAGTTGCTTTTATTGCACCATTTTCAATTTGGAGCATTAACTAAATGCTCATACACAGTTA
AATAAATAGAAAGAGTTCTATGGAGACTTTGCTGTTACTGCTTCTCTTTGTGCAGTGTTAGTATTCACCCTGGGC
AGTGAGTGCCATGCTTTTTGGTGAGGGCAGATCCAGCACCTATTGAATTACCATAGAGTAATGATGTAACAGTGC
AAGATTTTTTTTTTTAAGTGACATAATTGTCCAGTTATAAGCGTATTTAGACTGTGGCCATATATGCTGTATTTC
TTTGTAGAATAAATGGTTTCTCATTAAACTCTAAAGATTAGGGAAATGGATATAGAAAATCTTAGTATAGTAGAA
AGACATCTGCCTGTAATTAAACTAGTTTAAGGGTGGAAAAATGAAAATTTTTGCTAATTATCAATGGGATATGAT
TGGTTCAGTTTTTTTTTTCCAGAGTTGTTGTTTGCCAAGCTAATCTGCCTGGTTTATTTATATCTTGTTATTAAT
GTTTCTTCTCCAATTCTGAAATACTTTTGAGTATGGCTATCTATACCTGCCTTTTAAGTTTGAAACTAACTCATA
GATGCAAATATTGGTTAGTATTTAACTACATCTGCCTCGGCTCACAAATTCCGATTAGACCTTTATCCAGCTAGT
GCCAAATAATTGATCAGATGCTGAATTGAGAATAAGAATTTGAGGTCTACATTCTTGGTTGTTAATTTAGAGCGT
TTGGTTAAAGTATGTCCTTCAGCTGACTCCAGTATAATCTCCTCTGCTCATTAAACTGATTCCAGGAGATTGGAT
TTGCTGTGACTAGATACAGATGGAGCAAATGTCCTAACAGAGAAATAGAGGTGATGCTGCTAAAGGGAGAAATGC
CAGGCGGACAAAGTTCAGTGTCGGGAATTTTCCCCGTGACATTCACTGGGGCATGAGATTTTGGAAGAAGTTTTT
TACTTTGGTTTAGTCTTTTTTTCCTCCTTTTTATTCAGCTAGAATTTCTGGTGGGTTGATGGTAGGGTATAATGT
GTCTGTGTTGCTTCAAATTGGTCTGAAAGGCTATCCTGCTGAAAGTCCTGCTTTCCTATCTAGCATTTATTCCTC
TGGCAAACTTTTCTTTCTTTTCTTTTTTAAAGTAAACTTGTGTATTGAGTCTTAACTGTATTTCAGTATTTTCCA
GCCTTATGTGTTACATTATTCCAATGATACCCAACAGTTTATTTTTATTATTTTTTTAAACAAAATTTCACAGTT
CTGTAATGTAGGCACTTTTATTTTCATTGTGATTTATATATAAGGTAATGTAGGGTTATATTTGGGAGTGACTGC
AAGCATTTTTCCATCTGTGTGCAACTAACTGACTCTGTTATTGATCCCTTCTCCTGCCCTTTCCCAGGTAATTTA
AATTGGTCATGGTAGATTTTTTTCATAGATTTGAAAAACTTTTAGGTTGTTACCAAGTATGAAGTATAAATCTGG
GGAAGAGGTTTTATTTACATTTTAGGGTGGGTAAGAAAGCCACCTTGTTACAAATTTTTTAATTTCCAAAATAAT
CTATATTAAATGAGGGTTTCTGATCTGTACTTTGTGTTTAGCTACCTTTTTATATTTAAAAAATTAAAAATGAAA
ATTATGTTCTTACAAGCTTAAAGCTTGATTTGATCT

FIGURE 122

MESGSTAASEEARSLRECELYVQKHNIQALLKDSIVQLCTARPERPMAFLREYFERLEKEEAKQIQNLQKAGTRT
DSREDEISPPPPNPVVKGRRRRGAISAEVYTEEDAASYVRKVIPKDYKTMAALAKAIEKNVLFSHLDDNERSDIF
DAMFSVSFIAGETVIQQGDEGDNFYVIDQGETDVYVNNEWATSVGEGGSFGELALIYGTPRAATVKAKTNVKLWG
IDRDSYRRILMGSTLRKRKMYEEFLSKVSILESLDKWERLTVADALEPVQFEDGQKIVVQGEPGDEFFIILEGSA
AVLQRRSENEEFVEVGRLGPSDYFGEIALLMNRPRAATVVARGPLKCVKLDRPRFERVLGPCSDILKRNIQQYNS
FVSLSV

FIGURE 123A

CCGCCCCCGACCCGAGCTCTTTCGTCTGCCTGCCAGTTTCCTGCGTCCCCGGAGAGGATCCTGCTGAGCCCAGCC
TCCCCCCTCCCCTTCTCCTCCTCTCCCTTGGAGAGCCCGGGCAGCCACTGCCCCGCAGCCCCAGTGACAGGAGGA
GACCATAACCCCCGACAGCGCC**ATG**GCCCAGATTCTGCCAATTCGTTTTCAGGAGCATCTCCAGCTCCAGAACCT
GGGTATCAACCCAGCAAACATTGGCTTCAGTACCCTGACTATGGAGTCTGACAAATTCATCTGCATTAGAGAAAA
AGTAGGAGAGCAGGCCCAGGTGGTAATCATTGATATGAATGACCCAAGTAATCCAATTCGAAGACCAATTTCAGC
AGACAGCGCCATCATGAATCCAGCTAGCAAAGTAATTGCACTGAAAGCTGGGAAAACTCTTCAGATTTTTAACAT
TGAAATGAAAAGTAAAATGAAGGCTCATACCATGACTGATGATGTCACCTTTTGGAAATGGATCTCTTTGAATAC
GGTTGCTCTTGTTACGGATAATGCAGTTTATCACTGGAGTATGGAAGGAGAGTCTCAGCCAGTGAAAATGTTTGA
TCGCCATTCTAGCCTTGCAGGGTGCCAGATTATCAATTACCGTACAGATGCAAAACAAAAGTGGTTACTTCTGAC
TGGTATATCTGCACAGCAAAATCGTGTGGTGGGAGCTATGCAGCTATATTCTGTAGATAGGAAAGTGTCTCAGCC
CATTGAAGGACATGCAGCTAGCTTTGCACAGTTTAAGATGGAAGGAAATGCAGAAGAATCAACGTTATTTTGTTT
TGCAGTTCGGGGCCAAGCTGGAGGGAAGTTACATATTATTGAAGTTGGCACACCACCTACAGGGAACCAGCCCTT
TCCAAAGAAGGCAGTGGATGTCTTCTTTCCTCCAGAAGCACAAAATGATTTTCCTGTTGCAATGCAGATCAGTGA
AAAGCATCATGTGGTGTTCTTGATAACCAAGTATGGTTATATCCACCTCTATGATCTTGAGACTGGTACCTGCAT
CTACATGAATAGAATCAGTGGAGAAACAATTTTTGTTACTGCACCTCATGAAGCCACAGCTGGAATAATTGGAGT
AAACAGAAAGGGACAAGTTCTGTCAGTGTGTGTGGAAGAAGAAAACATAATTCCTTACATCACCAATGTTCTACA
AAATCCTGATTTGGCTCTGAGAATGGCTGTACGTAATAACTTAGCCGGTGCTGAAGAACTCTTTGCCCGGAAATT
TAATGCTCTTTTTGCCCAGGGAAATTACTCGGAGGCAGCAAAGGTGGCTGCTAATGCACCAAAGGGAATTCTTCG
TACTCCAGACACTATCCGTCGGTTCCAGAGTGTCCCAGCCCAGCCAGGTCAAACTTCTCCTCTACTTCAGTACTT
TGGTATCCTTTTGGACCAGGGACAGCTCAACAAATACGAATCCTTAGAGCTTTGTAGGCCTGTACTTCAGCAAGG
GCGAAAACAGCTTTTGGAGAAATGGTTAAAAGAAGATAAGCTGGAATGTTCTGAAGAACTGGGTGATCTTGTGAA
ATCTGTGGACCCTACATTGGCACTTAGTGTGTACCTAAGGGCTAACGTCCCAAATAAAGTCATTCAGTGCTTTGC
AGAAACAGGTCAAGTCCAAAAGATTGTTTTATATGCTAAAAAAGTTGGATACACTCCAGATTGGATATTTCTGCT
GAGAAATGTAATGCGAATCAGTCCAGATCAGGGACAGCAGTTTGCCCAAATGTTAGTTCAAGATGAAGAGCCTCT
TGCTGACATCACACAGATTGTAGATGTCTTTATGGAATACAATCTAATTCAGCAGTGTACTGCATTCTTGCTTGA
TGCTCTGAAGAATAATCGCCCATCTGAAGGTCCTTTACAGACGCGGTTACTTGAGATGAACCTTATGCATGCGCC
TCAAGTTGCAGATGCTATTCTAGGCAATCAGATGTTCACACATTATGACCGGGCTCATATTGCTCAACTGTGTGA
AAAGGCTGGCCTACTGCAGCGTGCATTAGAACATTTCACTGATTTATATGATATAAAACGTGCAGTGGTTCACAC
CCATCTTCTTAACCCTGAGTGGTTAGTCAACTACTTTGGTTCCTTATCAGTAGAAGACTCCCTAGAATGTCTCAG
AGCCATGCTGTCTGCCAACATCCGTCAGAATCTGCAGATTTGTGTTCAGGTGGCTTCTAAATATCATGAACAACT
GTCAACTCAGTCTCTGATTGAACTTTTTGAATCTTTCAAGAGTTTTGAAGGTCTCTTTTATTTTCTGGGATCCAT
TGTTAACTTTAGCCAGGACCCAGATGTGCACTTTAAATATATTCAGGCAGCTTGCAAGACTGGGCAAATCAAAGA
AGTAGAAAGAATCTGTAGAGAAAGCAACTGCTACGATCCTGAGCGAGTCAAGAATTTTCTTAAGGAAGCAAAACT
AACAGATCAGCTACCACTTATCATTGTGTGTGATCGATTTGACTTTGTCCATGATTTGGTGCTCTATTTATATAG
AAATAATCTTCAAAAGTATATAGAGATATATGTACAGAAGGTGAATCCAAGTCGACTTCCTGTAGTTATTGGAGG
ATTACTTGATGTTGACTGTTCTGAAGATGTCATAAAAAACTTGATTCTTGTTGTAAGAGGTCAATTCTCTACTGA
TGAGCTTGTTGCTGAGGTTGAAAAAAGAAACAGATTGAAACTGCTTCTGCCTTGGCTAGAGGCCAGAATTCATGA
GGGCTGTGAGGAGCCTGCTACTCACAATGCCTTAGCCAAAATCTACATAGACAGTAATAACAACCCGGAGAGATT
TCTTCGTGAAAATCCCTACTATGACAGTCGCGTTGTTGGAAAGTATTGTGAGAAGAGAGATCCACATCTGGCCTG
TGTTGCTTATGAACGTGGCCAATGTGATCTGGAACTTATTAATGTTTGCAATGAGAATTCCCTCTTCAAAAGTCT
TTCTCGCTACCTGGTACGTCGAAAGGATCCAGAATTGTGGGGCAGCGTGCTGCTGGAAAGCAATCCTTACAGGAG
ACCCCTAATTGACCAGGTTGTACAAACAGCTTTGTCTGAGACTCAGGACCCTGAAGAAGTGTCAGTAACTGTAAA
GGCTTTCATGACTGCAGACCTTCCTAATGAACTCATTGAACTGCTGGAGAAAATTGTCCTTGATAACTCTGTATT
CAGTGAACACAGGAATCTGCAAAACCTCCTTATCCTCACTGCAATTAAGGCTGACCGTACACGTGTTATGGAGTA
TATTAACCGCCTGGATAATTATGATGCCCCAGATATTGCCAATATCGCCATCAGCAATGAGCTGTTTGAAGAAGC
ATTTGCCATTTTCCGGAAATTTGATGTCAATACTTCAGCAGTTCAGGTCTTAATTGAGCATATTGGAAACTTGGA
TCGGGCATATGAGTTTGCTGAACGTTGCAATGAACCTGCGGTCTGGAGTCAACTTGCAAAAGCCCAGTTGCAGAA
AGGAATGGTGAAAGAAGCCATTGATTCTTATATCAAAGCAGATGATCCTTCCTCCTACATGGAAGTTGTTCAGGC

FIGURE 123B

TGCCAATACTAGTGGAAACTGGGAAGAACTGGTGAAGTACTTGCAGATGGCCCGTAAGAAGGCTCGAGAGTCCTA
TGTGGAGACAGAACTGATATTCGCACTGGCTAAAACAAACCGCCTTGCAGAGTTAGAAGAATTTATCAATGGACC
AAATAATGCTCATATCCAACAAGTTGGTGACCGTTGTTATGATGAAAAAATGTATGATGCTGCTAAGTTGTTGTA
CAATAATGTTTCCAATTTTGGACGTTTGGCATCTACCCTGGTTCACCTGGGTGAATATCAGGCAGCTGTTGATGG
GGCTAGGAAAGCTAACAGTACTCGAACATGGAAAGAGGTCTGCTTCGCCTGTGTAGATGGGAAAGAATTCCGTCT
TGCTCAGATGTGTGGACTTCATATTGTTGTACATGCAGATGAATTAGAAGAACTTATCAACTACTATCAGGATCG
TGGCTATTTTGAAGAGCTGATCACCATGTTGGAAGCAGCACTGGGACTTGAGCGAGCTCACATGGGAATGTTTAC
TGAATTAGCTATTCTATACTCTAAATTTAAGCCTCAGAAAATGAGGGAGCACCTGGAGCTGTTCTGGTCTAGAGT
GAATATTCCCAAGGTGCTAAGAGCTGCAGAACAAGCTCATCTTTGGGCAGAACTGGTGTTTTTGTATGACAAGTA
TGAAGAATATGATAATGCCATAATTACCATGATGAATCATCCAACTGATGCCTGGAAAGAAGGGCAATTCAAAGA
TATCATTACCAAGGTTGCCAATGTGGAACTATACTACAGAGCAATACAGTTCTACTTAGAATTCAAGCCTCTGTT
GTTAAATGATTTGCTGATGGTGCTGTCTCCACGGTTGGATCACACTCGTGCAGTCAATTATTTCAGCAAGGTTAA
ACAGCTACCACTGGTGAAACCGTATTTGCGTTCAGTTCAGAACCATAACAACAAATCTGTGAATGAATCATTGAA
CAATCTTTTTATTACAGAAGAAGATTATCAGGCTCTGCGAACATCAATAGATGCTTATGACAACTTTGACAATAT
CTCGCTTGCTCAGCGTTTGGAAAAACATGAACTCATTGAGTTCAGGAGAATTGCTGCTTATCTCTTCAAAGGCAA
CAATCGCTGGAAACAGAGTGTAGAGCTGTGCAAGAAAGACAGCCTTTACAAGGATGCAATGCAGTATGCTTCTGA
ATCTAAAGATACTGAATTGGCTGAAGAACTCCTGCAGTGGTTTTTGCAGGAAGAAAAAAGAGAGTGCTTTGGAGC
TTGTCTGTTTACCTGTTACGATCTTTTAAGGCCAGATGTCGTCCTAGAAACTGCATGGAGGCACAATATCATGGA
TTTTGCCATGCCCTATTTCATCCAGGTCATGAAGGAGTACTTGACAAAGGTGGATAAATTAGATGCTTCAGAATC
ACTGAGAAAAGAAGAAGAACAAGCTACAGAGACACAACCCATTGTTTATGGTCAGCCCCAGTTGATGCTGACAGC
AGGACCCAGTGTTGCCGTCCCTCCCCAGGCACCTTTTGGTTATGGTTATACCGCACCACCGTATGGACAGCCACA
GCCTGGCTTTGGGTACAGCATG**TGA**GATGAAGCGCTGATCCTGTAGTCACCTATTTTCGTACTGAAACATCGTCT
TTACCCACTTCTCAGTTTATAATGGGGGAAAACAGGCAACGTGTTCTTGTAACCTTTATTTCATGAAGGACTTCT
TTTTGTTTCTAACTATAAACTTGGATCACCTATGTTAAAACCTTATTTCACATTCCACATCATTTTAGAATTTAT
TTTCGAAGGGGAATAGTTTCAATGTTTTATTCACTTGGGCTTTTTTTCTTCCCCCTCTTTCTTTAAAGAACTGCT
CAATATTCAATCTGTTGTGAAGAACCTGATTTGCACTCTGTAGTGTTTAAAGAAACAAAGAAACTCTAATATTGA
ATCTCTTAAATTTAGTGTATGTAAACAGCTTACAAATACGTATTGTCTAAATGCATTTAAATCTGTTTTATTCAA
AGAAAAGCTAAAGCAAAAACACTGGCATATGACCATGCAAGACTGTCAGTGCCAACAAAGACAACACTAATCAGC
ACATCGTACACTGGATTGCAGTGCTTCCCAGATTATTGAAAAATGTTACAGACAACTTGCCTGATTTTTAAATGA
GCGTAAAAGGCCCTCTAACCTATGCAGGTTTCCCCATTATGCATATAGAAAATGCTAGTATGTTTTGCTCACTTC
ATATGTAACAGGTGCCCTTATGTTGTGCTGTATCCTGTGCTTTTTCTGTGGGACCATTCCATTCAGGAGCAAAGA
GCACCATGATTCCAATCTTGTGTGTGTTTACTAACCCTTCCCTGAGGCTTGTGTATGTTGGATATTGTGGTGTTT
TAGATCACTGAGTGTACAGAAGAGAGAAATTCAAACAAAATATTGCTGTTCTTCAGTTTTGTTTGTGGAATTTGA
AATTACTCAAATTTAAAATAAATTACTGGACTGTGG

FIGURE 124

MAQILPIRFQEHLQLQNLGINPANIGFSTLTMESDKFICIREKVGEQAQVVIIDMNDPSNPIRRPISADSAIMNP
ASKVIALKAGKTLQIFNIEMKSKMKAHTMTDDVTFWKWISLNTVALVTDNAVYHWSMEGESQPVKMFDRHSSLAG
CQIINYRTDAKQKWLLLTGISAQQNRVVGAMQLYSVDRKVSQPIEGHAASFAQFKMEGNAEESTLFCFAVRGQAG
GKLHIIEVGTPPTGNQPFPKKAVDVFFPPEAQNDFPVAMQISEKHDVVFLITKYGYIHLYDLETGTCIYMNRISG
ETIFVTAPHEATAGIIGVNRKGQVLSVCVEEENIIPYITNVLQNPDLALRMAVRNNLAGAEELFARKFNALFAQG
NYSEAAKVAANAPKGILRTPDTIRRFQSVPAQPGQTSPLLQYFGILLDQGQLNKYESLELCRPVLQQGRKQLLEK
WLKEDKLECSEELGDLVKSVDPTLALSVYLRANVPNKVIQCFAETGQVQKIVLYAKKVGYTPDWIFLLRNVMRIS
PDQGQQFAQMLVQDEEPLADITQIVDVFMEYNLIQQCTAFLLDALKNNRPSEGPLQTRLLEMNLMHAPQVADAIL
GNQMFTHYDRAHIAQLCEKAGLLQRALEHFTDLYDIKRAVVHTHLLNPEWLVNYFGSLSVEDSLECLRAMLSANI
RQNLQICVQVASKYHEQLSTQSLIELFESFKSFEGLFYFLGSIVNFSQDPDVHFKYIQAACKTGQIKEVERICRE
SNCYDPERVKNFLKEAKLTDQLPLIIVCDRFDFVHDLVLYLYRNNLQKYIEIYVQKVNPSRLPVVIGGLLDVDCS
EDVIKNLILVVRGQFSTDELVAEVEKRNRLKLLLPWLEARIHEGCEEPATHNALAKIYIDSNNNPERFLRENPYY
DSRVVGKYCEKRDPHLACVAYERGQCDLELINVCNENSLFKSLSRYLVRRKDPELWGSVLLESNPYRRPLIDQVV
QTALSETQDPEEVSVTVKAFMTADLPNELIELLEKIVLDNSVFSEHRNLQNLLILTAIKADRTRVMEYINRLDNY
DAPDIANIAISNELFEEAFAIFRKFDVNTSAVQVLIEHIGNLDRAYEFAERCNEPAVWSQLAKAQLQKGMVKEAI
DSYIKADDPSSYMEVVQAANTSGNWEELVKYLQMARKKARESYVETELIFALAKTNRLAELEEFINGPNNAHIQQ
VGDRCYDEKMYDAAKLLYNNVSNFGRLASTLVHLGEYQAAVDGARKANSTRTWKEVCFACVDGKEFRLAQMCGLH
IVVHADELEELINYYQDRGYFEELITMLEAALGLERAHMGMFTELAILYSKFKPQKMREHLELFWSRVNIPKVLR
AAEQAHLWAELVFLYDKYEEYDNAIITMMNHPTDAWKEGQFKDIITKVANVELYYRAIQFYLEFKPLLLNDLLMV
LSPRLDHTRAVNYFSKVKQLPLVKPYLRSVQNHNNKSVNESLNNLFITEEDYQALRTSIDAYDNFDNISLAQRLE
KHELIEFRRIAAYLFKGNNRWKQSVELCKKDSLYKDAMQYASESKDTELAEELLQWFLQEEKRECFGACLFTCYD
LLRPDVVLETAWRHNIMDFAMPYFIQVMKEYLTKVDKLDASESLRKEEEQATETQPIVYGQPQLMLTAGPSVAVP
PQAPFGYGYTAPPYGQPQPGFGYSM

FIGURE 125A

CTGAGAGCGACATGTCCCCGGCGGCTCAGGCGGAGCGGCCCGTGGCGCTGTTTTTCTGAGTCCGGGGTGGCCTGG
CAGCCGGCCGAGGACGAGGGTCGGCGGGGGCTGCCCCCGTGGTGGTGGCCGCCATGCTGGGAGCCTGGGCGGTTG
AGGGAACCGCTGTGGCGCTCCTGCGACTGCTGCTGCTGCTGCTGCCGCCGGCGATCCGGGGACCCGGGCTCGGCG
TGGCCGGCGTGGCCGGCGCGGCGGGGGCCGGGCTGCCCGAGAGCGTCATTTGGGCGGTCAACGCGGGTGGAGAGG
CGCATGTGGACGTGCACGGGATCCACTTCCGCAAGGACCCTTTGGAAGGCCGGGTGGGCCGAGCCTCAGACTATG
GCATGAAACTGCCAATCCTGCGTTCCAACCCTGAGGACCAGATCCTGTATCAAACTGAGCGGTACAATGAGGAGA
CCTTTGGCTACGAAGTGCCCATCAAAGAGGAGGGGGACTACGTGCTGGTCTTGAAATTTGCAGAGGTCTACTTTG
CACAGTCCCAGCAAAAGGTATTTGATGTACGATTGAATGGCCACGTCGTGGTGAAGGACTTGGATATCTTTGATC
GTGTTGGGCATAGCACAGCTCACGATGAAATTATACCTATGAGCATCAGAAAGGGGAAGCTGAGTGTCCAGGGGG
AGGTGTCCACCTTCACAGGGAAACTCTACATTGAGTTTGTCAAGGGGTACTATGACAATCCCAAGGTCTGTGCAC
TCTACATCATGGCTGGGACAGTGGATGATGTACCAAAGCTTCAGCCTCATCCGGGATTGGAGAAGAAAGAAGAGG
AAGAAGAAGAAGAAGAATATGATGAAGGGTCTAATCTCAAAAAACAGACCAATAAGAACCGGGTGCAGTCAGGCC
CCCGCACACCCAACCCCTATGCCTCGGACAACAGCAGCCTCATGTTTCCCATCCTGGTGGCCTTCGGAGTCTTCA
TTCCAACCCTCTTCTGCCTCTGCCGGTTGTGAGAACAAATGACTATCCTGAACAGGGTGGAGGGGTGTGGGAAAG
AAACCAGCCATATTGGTTTTGGTTTCTGTATTTTTCACAATGATTAATGAACAAAAACAAAGAGAAAAAAAACAC
ACATCAATTAAAGGAGACAAAAAGAGGCAGAGCGAGTAGAGAGCAGCCCTCATTCACCACCTGGTCCCAGACGTG
CTTCAGTCCTCGTCCTCTCTTTGTGGCTGGCTCCCAGCCTTCTCTTTCCTCTTGAGGATACTTAGGGTAAACTGG
ATCCTTCCTGCTCAAGGATCCTCATTTGTATACCTAGTGGAAAGGACTCTGAACTCAGAGGAGTCACTGTTCCTT
TTTTTAGGTTAGAAATTAACAGCAGGGAAATGCCATCTTATTACCTGAGACGACCAGCACTGGGAGTTAGGTACG
GTCTGAAGTTATGTCTAGATAAGACTTCAGACGTCCTGGGATTGAAAGAATGTGTGTGAAGGGGTAGAATTTGTG
CGGTAAAGACTTAAAAAAAAAAAGTAGGGAGATTAAAAAAAAAGAAAGAAAATGCTTCCTTATCTGGAAGCCTTTC
TGGATTAATCCAGTGATGGTCCCACCTTTAGTGTTTGAGCTTTGTCATTGCTTGTCTCCCTGGCATGTGCCAGTT
ATAGACTGTCCAGCATCCAAGACGTTTCGGTTATGTCGGGTCCTCAGATCGCCTCTGACTTGTTACCACAACAAA
TCATTTTGATTTCAGTGCCTGTTGGGGACTTGATTTCTTCTCAGGTTTTGTTTGTTTGTTTGTTTCCTTAATCTG
GCTCATTTGAAATTTCTTCTCCCTCTCAACCATCCCACTAAGTTATAGCCAAGAAGGGAAGGAGACACGGGGATT
TGGGGTTCTCTGCTTGAATGTCTTCTCCTTTACCACCTCACCTTGTTGGTACCTCCCTCCCTGGATCTCTGAGCC
AGCAGCCAGGAGGACCTGACCCAGCAGTTCTTTACTGGCCCCTTTGTAGGGCCTTGCTGCCAGGGGGCAGGGATG
CTTTCCAGCCTGCAGCAACAGAACACTTGACCTTAAAAGTCTCTTCTGGTCTTTGGATTAGAAAAGGCTTATGTT
AGCATAGCTTAAGAGCAACCTCAGAGACTTGAGCCCTACTAAGTGACTGACCACTGTTTAGAGTGTCTGGTATCT
GATGTTCATTTATTCCCATGTTCTTGTGTGTCACAGTTCAGCCAGTTTTGGTTTATGCCTAGAGCTACTTCAAGG
AACTAGACTAATTAGCTATATAGGCCCAGCGATGCTTCTTATTGATCTTAATAGTATGCCCTTCCTTCCCCTGTC
CTTTCATTTCTCTATCCAAGTAGCAGTCAGGTTCTTGGTGTGATGGGACTGAAAGAATTCCAGTCAGCCAGAGCC
TTGGCAGCTCTGAAGCTAACCTTAGCATCTAAGTGTCGATCTTGAATTCCCTGAAAAAATTTCTATAGGAAATGA
AGCTTCCCTGGTCCCCTCCTTTCTGGCCATTGTCATCCATTTCCCAGTTAGGGCAACAATGAAGGAGGACCCAGC
CAAGCTAGAAGGAATTTTGTGGATGGGAGACAGCAGGATTAGCTTCAGCTTGGGCTGGAGCAGTCAATATAGGAT
CTCAGGCCAGGCCCGCTTTTCTAGAATGTGTTTAATTTTGAGTTTGCTTTATTAGATATGTTTTTTAAGAGCTCT
GTATATTTGAACTGCTCCTTATGTGACAAAATAGGTAGCTCTTGGGCTCATGTCCTGGGTTTTGGCTCTTTAATG
ATTACTCCAGGCCAGCATTTAGTCGTTTGAGAATTGTAGCCTGTTGTTTTCGCTGTGACTTGGGTCTCAGTGCTA
GGGTATTGAGTCAGGCAGCTGGAGGGTTGTGGCCCGAGGCTGCAGTCAGAGGTATACTTCCCATAGTGCTTCACA
CAGCTCCCCTGCTTCTAAAGGATAAGGTACTGTAGCCTTGGTCCTGGGGACCACCTGCCTGGGGCAGTGGACATC
CTAACTAAACAGGCTTCTGGCAGTAGCTTTGGTTCCTATCCCATCGAAATTCCCCAAAGCCCTGGGCCACTGCCA
TTGGGTTAGTCAAGATGAAGGAGGAGGACTGGCTGCCTCCATTTTGCCTTGTTTGTTAGTTTGCCTGGGTCTGTC
TGAGGAAGGAGGGGGTCCCGCCTTCCACCTCAACACATCCCTTCAGTGACTCAGAGTCTCAGAAGGAAACCCTGA
CTCCTGGGGCCATTTCCTAATGGTACTGTAAGCCAAGCAGCTTTGCTTCTGCCTCTGTTTCCAAGCCCACCCTTT
TCCCCTGAGCTCAGGGTTAGGGATGGGCGCTTTCCTCTCTGGTTGTGAACGAAAGGAAGGAACATCTTTCTATGG
CTAACAAAAACTAAAGGGGAAGTGAGGAAACAGGAAGAAGTATGGTGGGGGCTGGGGTAGACTCCCCTGGAGCCA
AGCCTATCCAGCTAACAAGAGCTCCCTGGGGCTGGTCACAGCTGGCTCATGATGCTGAACTTGAAAGTTTTTTTG
TTTTTGTTTTTGTTTTGTGGCTCCTCCAAGATATAGGTACATGAAGTTTAGGTTAAAGGGGTGGGATTCTTTATT

FIGURE 125B

TTTATTTTTGTATTGTATGTGTCAAGAATTACTCTGTTGTTCACCTTTTGCTTTTTGCACTGTTTGTTCTCTTAT
CTGTATTTTGAGCTTAGTGCTAGGACTGAGAGGCTGCACCATAGGGAATGTATGGGAGATGGTGAGGGGTGCCAG
TGAGGGGTGCGTGGAGGAGAGGCCTGGGCTCCTCTACTGGATCTACACTCTGTCCCAGGTTTTTAGATCCCACTG
AGCCCAGCTGACTGAAAACAAGGACAGTCAGGGTGAAACTTCTTTTGCCAGAAGTGTGGCCTGAGTTGAATTTCT
GGGAGGATGACGCAGATGTCTGCTGCAGAGCTGGGCTGAGAGTTCTGCAGTCTAGCTCTGACTTAGGTCAGGGGC
CTGTTGGTCTCTCATTGGACGTTTTTGGGTCTCACTCATGCTTACTGAAACATTGTGCCAAGAAACTCTGTGGGA
TTTGTGTCCCTTAAACCAGACTCACTTTTCTGAAAAATCTCCATTGTTGAGGAGAGGCTGCTCAATCGACACCCC
GAGTTCTCATGACTGGGAAGATAGTTTTCTTCAGGTGTCAATGGCGTTAGACTCCCAGGAAGACTAGCCCTGCCC
ACAGGGCCACCTGTTGGTTTGAGAGCGTGTTCGTGTTCTCTTGCCCTCCCTGCCTAAGAGCTACTGGGATCACGT
TAGCGGGCATTTAGGCTTTGATGAGAGGGCACAGTTTGAGTTAGGTTTACCTCCCCCTTTCTGTGCCTGGGAACT
GTTTGGTCCAGCTTTAGAACTGTGGTTTTGACTTCCTTATCTCTTGGGAGAAGCTTCTGTTTTAAGGAATTTCTC
TTCCTTCTTCTCCTGCCTCTAGCCTCTCCTGGAAAGGCCTGGATATGGTTTCTAAAATCTCAGCTGAGAACTTCA
GAAAACAGCAGCAGTATTTTCCTTTTCCTAGTGCTAAAATCCCTTTCCCTAGAAATTGGCTCACCTTGGGAAACC
CAGGGAAAGAATCAGCAGGTTCTCTGCCCTCCCTAGGGGTTGGGGAAGGACCCACCCCGGTCAGCACAGTGCCTT
TTCCTCTCCTGCTCTGAGCCAGGGTGGGGCATTCCCTCTAGATTCAGGTTTGGGCAGGGGTCCTATAGTCCCTGC
CATGGGGCTGCTTCCCTGTCCCTTCCCTCCCCTTTGCTGGCCTACTCTGGCATAATTCAAGTGTCTTCTTGCCTT
GGGGATCCTTAGTGGCATCAAATGGCAACATGGAATATTGTCCTCCATGCCCCTCCAGAAGGACCTAGGAGAGTA
GGTGAGCTTTCCAAAGTGAGAGACGAATCTTTCTTTCTTTTTTTTTTTAAAGGGCAGGATGGGTATGCTTTGGGC
TTTCTCCTTCTGTGGCCCCGGAGGAAGGAGAGACTGAGGCAAGGCAAAGTGATAGTACACTGAAGCAGAACCGGA
AACACCCAGGAACTGTTCAGAAATCTCAGAAGAAATCTGCTTCTCTTCGATGGAAAGATATAATTAACGATCAAA
GAGCTCTAAGAAAATTGCAAAGAAGCCTTAATGTTCAAGCTTTAGAAAGATCAGAGCAATTTTTCTCTTTCAGTC
CAAACTAAGACTCTCTGTATTTAAATCTCTCTGGGGCAAGAGGGCTAGATTTCCTCATTTTGTTATGAGACTAGA
TTGGTACCAGTAGATCAGCTGCCTAGCGAGGGCAGGTTTCTTCTTTGCATCTGTGTGGCTTGCTTCCAGTCTGGC
CTGTCCTTTCCAGCTGCCTTTTGTCTAGCCTGCTATGGGGGGCCAGATTATCTTGATAAGAGCAGGTGATTTGGG
GACTAGCTGGGTTGGTAGGAAAAGAGCAGGATGGATCTCTTGGGACAGGTTCCCCCAGGAGTATAAACACAAGGA
GCCAGGATTGTCCTGGCAGCCAAGGAAACAGTAGTGCCTGTTTGAGTTGGCAGAGAGGGCCTTGGCACCTCTTGC
ATCCAGGCAGTCTTGTGAGATGGGGGCACATAGCACTGGGGAAAGCAGAACTCCATTCTCACCTCTATTTTGAGC
TTCAGTGCTTTATTTCAGTATGAGGAAAAACAACAACAAACTGAAGTGCGCTTTCCGTCCTTTCAAAGGACAACT
GTCGGGAAGGGAGAGCCGAGTTGCGAGGTAGGAGGGGAGCACTGGCAGGGAGAGACATTCTTGACTCCTCTCTTC
CCTGGTGTGTTGTGATCCAGGGAATGAAAAGAAATTTGACCCTGGATTGGTTCTCTCCTTGGACTTAAGGAATCT
TACCTTTTCCTTCCACAAAGTTCTCCCAGGCAAGGACCAGCTGCCCATTCTGAGCCCAGGGCAGCCTCTTCAACC
ATTATTGGTCTAACCTGGCTTGTCAGGAAACCAAGCCCACCCTTCCACATTGGGCCTGGCTGCTCTATTCTGTAC
CAAGTACTGGAGAAAAAGCATCAAGTTCTTAGCCCTTGTAGCTTCTACCCTAGTTTCCCATCCTCTCTCTGTGGA
GGCCAAACCAACTCTTTGCCAGCAGCCACAACATGCATTGACAGCGGCACAGTGAGATATAACTGATGGGCTTTG
AACCTGGTTGGCCGGGGAAGCTGTAGGGGTGGATAGAGCTGGCTTTCCTTCTGGGCTGTCTCCATCTGACCCTAC
CCCTTCCATGTCCCACCCCACTCCCACCAAAAAGTACAAAATCAGGATGTTTTTCACTGTCCATTGCTTTGTGTT
TTAATAAACAATTTGCAGTGAC

FIGURE 126

MLGAWAVEGTAVALLRLLLLLLPPAIRGPGLGVAGVAGAAGAGLPESVIWAVNAGGEAHVDVHGIHFRKDPLEGR
VGRASDYGMKLPILRSNPEDQILYQTERYNEETFGYEVPIKEEGDYVLVLKFAEVYFAQSQQKVFDVRLNGHVVV
KDLDIFDRVGHSTAHDEIIPMSIRKGKLSVQGEVSTFTGKLYIEFVKGYYDNPKVCALYIMAGTVDDVPKLQPHP
GLEKKEEEEEEEEYDEGSNLKKQTNKNRVQSGPRTPNPYASDNSSLMFPILVAFGVFIPTLFCLCRL

FIGURE 127

CGAAAAAAGAGGGGAAGAGTATTAAAGACCATTTCTGGCTGGGCAGGGCACTCTCAGCAGCTCAACTGCCCAGCG
TGACCAGTGGCCACCTCTGCAGTGTCTTCCACAACCTGGTCTTGACTCGTCTGCTGAACAAATCCTCTGACCTCA
GGCCGGCTGTGAACGTAGTTCCTGAGAGATAGCAAACATGCCCAACAGTGAGCCCGCATCTCTGCTGGAGCTGTT
CAACAGCATCGCCACACAAGGGGAGCTCGTAAGGTCCCTCAAAGCGGGAAATGCGTCAAAGGATGAAATTGATTC
TGCAGTAAAGATGTTGGTGTCATTAAAAATGAGCTACAAAGCTGCCGCGGGGGAGGATTACAAGGCTGACTGTCC
TCCAGGGAACCCAGCACCTACCAGTAATCATGGCCCAGATGCCACAGAAGCTGAAGAGGATTTTGTGGACCCATG
GACAGTACAGACAAGCAGTGCAAAAGGCATAGACTACGATAAGCTCATTGTTCGGTTTGGAAGTAGTAAAATTGA
CAAAGAGCTAATAAACCGAATAGAGAGAGCCACCGGCCAAAGACCACACCACTTCCTGCGCAGAGGCATCTTCTT
CTCACACAGAGATATGAATCAGGTTCTTGATGCCTATGAAAATAAGAAGCCATTTTATCTGTACACGGGCCGGGG
CCCCTCTTCTGAAGCAATGCATGTAGGTCACCTCATTCCATTTATTTTCACAAAGTGGCTCCAGGATGTATTTAA
CGTGCCCTTGGTCATCCAGATGACGGATGACGAGAAGTATCTGTGGAAGGACCTGACCCTGGACCAGGCCTATGG
CGATGCTGTTGAGAATGCCAAGGACATCATCGCCTGTGGCTTTGACATCAACAAGACTTTCATATTCTCTGACCT
GGACTACATGGGGATGAGCTCAGGTTTCTACAAAAATGTGGTGAAGATTCAAAAGCATGTTACCTTCAACCAAGT
GAAAGGCATTTTCGGCTTCACTGACAGCGACTGCATTGGGAAGATCAGTTTTCCTGCCATCCAGGCTGCTCCCTC
CTTCAGCAACTCATTCCCACAGATCTTCCGAGACAGGACGGATATCCAGTGCCTTATCCCATGTGCCATTGACCA
GGATCCTTACTTTAGAATGACAAGGGACGTCGCCCCCAGGATCGGCTATCCTAAACCAGCCCTGTTGCACTCCAC
CTTCTTCCCAGCCCTGCAGGGCGCCCAGACCAAAATGAGTGCCAGCGACCCAAACTCCTCCATCTTCCTCACCGA
CACGGCCAAGCAGATCAAAACCAAGGTCAATAAGCATGCGTTTTCTGGAGGGAGAGACACCATCGAGGAGCACAG
GCAGTTTGGGGGCAACTGTGATGTGGACGTGTCTTTCATGTACCTGACCTTCTTCCTCGAGGACGACGACAAGCT
CGAGCAGATCAGGAAGGATTACACCAGCGGAGCCATGCTCACCGGTGAGCTCAAGAAGGCACTCATAGAGGTTCT
GCAGCCCTTGATCGCAGAGCACCAGGCCCGGCGCAAGGAGGTCACGGATGAGATAGTGAAAGAGTTCATGACTCC
CCGGAAGCTGTCCTTCGACTTTCAGTAGCACTCGTTTTACATATGCTTATAAAAGAAGTGATGTATCAGTAATGT
ATCAATAATCCCAGCCCAGTCAAAGCACCGCCACCTGTAGGCTTCTGTCTCATGGTAATTACTGGGCCTGGCCTC
TGTAAGCCTGTGTATGTTATCAATACTGTTTCTTCCTGTGAGTTCCATTATTTCTATCTCTTATGGGCAAAGCAT
TGTGGGTAATTGGTGCTGGCTAACATTGCATGGTCGGATAGAGAAGTCCAGCTGTGAGTCTCTCCCCAAAGCAGC
CCCACAGTGGAGCCTTCGGCTGGAAGTCCATGGGCCACCCTGTTCTTGTCCATGGAGGACTTCCGAGGGTTCCAA
GTATACTCTTAAGACCCACTCTGTTTAAAAATATATATTCTATGTATGCGTATATGGAATTGAAATGTCATTATT
GTAACCTAGAAAGTGCTTTGAAATATTGATGTGGGGAGGTTTATTGAGCACAAGATGTATTTCAGCCCATGCCCC
CTCCCAAAAAGAAATTGATAAGTAAAAGCTTCGTTATACATTTGACTAAGAAATCACCCAGCTTTAAAGCTGCTT
TTAACAATGAAGATTGAACAGAGTTCAGCAATTTTGATTAAATTAAGACTTGGGGGTGAAACTTTCCAGTTTACT
GAACTCCAGACCATGCATGTAGTCCACTCCAGAAATCATGCTCGCTTCCCTTGGCACACCAGTGTTCTCCTGCCA
AATGACCCTAGACCCTCTGTCCTGCAGAGTCAGGGTGGCTTTTCCCCTGACTGTGTCCGATGCCAAGGAGTCCTG
GCCTCCGCAGATGCTTCATTTTGACCCTTGGCTGCAGTGGAAGTCAGCACAGAGCAGTGCCCTGGCTGTGTCCTG
GACGGGTGGACTTAGCTAGGGAGAAAGTCGAGGCAGCAGCCCTCGAGGCCCTCACAGATGTCTAGGCAGGCCTCA
TTTCATCACGCAGCATGTGCAGGCCTGGAAGAGCAAAGCCAAATCTCAGGGAAGTCCTTGGTTGATGTATCTGGG
TCTCCTCTGGAGCACTCTGCCCTCCTGTCACCCAGTAGAGTAAATAAACTTCCTTGGCTCCTAAAAAA

FIGURE 128

MPNSEPASLLELFNSIATQGELVRSLKAGNASKDEIDSAVKMLVSLKMSYKAAAGEDYKADCPPGNPAPTSNHGP
DATEAEEDFVDPWTVQTSSAKGIDYDKLIVRFGSSKIDKELINRIERATGQRPHHFLRRGIFFSHRDMNQVLDAY
ENKKPFYLYTGRGPSSEAMHVGHLIPFIFTKWLQDVFNVPLVIQMTDDEKYLWKDLTLDQAYGDAVENAKDIIAC
GFDINKTFIFSDLDYMGMSSGFYKNVVKIQKHVTFNQVKGIFGFTDSDCIGKISFPAIQAAPSFSNSFPQIFRDR
TDIQCLIPCAIDQDPYFRMTRDVAPRIGYPKPALLHSTFFPALQGAQTKMSASDPNSSIFLTDTAKQIKTKVNKH
AFSGGRDTIEEHRQFGGNCDVDVSFMYLTFFLEDDDKLEQIRKDYTSGAMLTGELKKALIEVLQPLIAEHQARRK
EVTDEIVKEFMTPRKLSFDFQ

FIGURE 129

CGAAAAAAGAGGGGAAGAGTATTAAAGACCATTTCTGGCTGGGCAGGGCACTCTCAGCAGCTCAACTGCCCAGCG
TGACCAGTGGCCACCTCTGCAGTGTCTTCCACAACCTGGTCTTGACTCGTCTGCTGAACAAATCCTCTGACCTCA
GGCCGGCTGTGAACGTAGTTCCTGAGAGATAGCAAACATGCCCAACAGTGAGCCCGCATCTCTGCTGGAGCTGTT
CAACAGCATCGCCACACAAGGGGAGCTCGTAAGGTCCCTCAAAGCGGGAAATGCGTCAAAGGATGAAATTGATTC
TGCAGTAAAGATGTTGGTGTCATTAAAAATGAGCTACAAAGCTGCCGCGGGGGAGGATTACAAGGCTGACTGTCC
TCCAGGGAACCCAGCACCTACCAGTAATCATGGCCCAGATGCCACAGAAGCTGAAGAGGATTTTGTGGACCCATG
GACAGTACAGACAAGCAGTGCAAAAGGCATAGACTACGATAAGCTCATTGTTCGGTTTGGAAGTAGTAAAATTGA
CAAAGAGCTAATAAACCGAATAGAGAGAGCCACCGGCCAAAGACCACACCACTTCCTGCGCAGAGGCATCTTCTT
CTCACACAGAGATATGAATCAGGTTCTTGATGCCTATGAAAATAAGAAGCCATTTTATCTGTACACGGGCCGGGG
CCCCTCTTCTGAAGCAATGCATGTAGGTCACCTCATTCCATTTATTTTCACAAAGTGGCTCCAGGATGTATTTAA
CGTGCCCTTGGTCATCCAGATGACGGATGACGAGAAGTATCTGTGGAAGGACCTGACCCTGGACCAGGCCTATGG
CGATGCTGTTGAGAATGCCAAGGACATCATCGCCTGTGGCTTTGACATCAACAAGACTTTCATATTCTCTGACCT
GGACTACATGGGGATGAGCTCAGGTTTCTACAAAAATGTGGTGAAGATTCAAAAGCATGTTACCTTCAACCAAGT
GAAAGGCATTTTCGGCTTCACTGACAGCGACTGCATTGGGAAGATCAGTTTTCCTGCCATCCAGGCTGCTCCCTC
CTTCAGCAACTCATTCCCACAGATCTTCCGAGACAGGACGGATATCCAGTGCCTTATCCCATGTGCCATTGACCA
GGATCCTTACTTTAGAATGACAAGGGACGTCGCCCCCAGGATCGGCTATCCTAAACCAGCCCTGTTGCACTCCAC
CTTCTTCCCAGCCCTGCAGGGCGCCCAGACCAAAATGAGTGCCAGCGACCCAAACTCCTCCATCTTCCTCACCGA
CACGGCCAAGCAGATCAAAACCAAGGTCAATAAGCATGCGTTTTCTGGAGGGAGAGACACCATCGAGGAGCACAG
GCAGTTTGGGGGCAACTGTGATGTGGACGTGTCTTTCATGTACCTGACCTTCTTCCTCGAGGACGACGACAAGCT
CGAGCAGATCAGGAAGGATTACACCAGCGGAGCCATGCTCACCGGTGAGCTCAAGAAGGCACTCATAGAGGTTCT
GCAGCCCTTGATCGCAGAGCACCAGGCCCGGCGCAAGGAGGTCACGGATGAGATAGTGAAAGAGTTCATGACTCC
CCGGAAGCTGTCCTTCGACTTTCAGTAGCACTCGTTTTACATATGCTTATAAAAGAAGTGATGTATCAGTAATGT
ATCAATAATCCCAGCCCAGTCAAAGCACCGCCACCTGTAGGCTTCTGTCTCATGGTAATTACTGGGCCTGGCCTC
TGTAAGCCTGTGTATGTTATCAATACTGTTTCTTCCTGTGAGTTCCATTATTTCTATCTCTTATGGGCAAAGCAT
TGTGGGTAATTGGTGCTGGCTAACATTGCATGGTCGGATAGAGAAGTCCAGCTGTGAGTCTCTCCCCAAAGCAGC
CCCACAGTGGAGCCTTCGGCTGGAAGTCCATGGGCCACCCTGTTCTTGTCCATGGAGGACTTCCGAGGGTTCCAA
GTATACTCTTAAGACCCACTCTGTTTAAAAATATATATTCTATGTATGCGTATATGGAATTGAAATGTCATTATT
GTAACCTAGAAAGTGCTTTGAAATATTGATGTGGGGAGGTTTATTGAGCACAAGATGTATTTCAGCCCATGCCCC
CTCCCAAAAAGAAATTGATAAGTAAAAGCTTCGTTATACATTTGACTAAGAAATCACCCAGCTTTAAAGCTGCTT
TTAACAATGAAGATTGAACAGAGTTCAGCAATTTTGATTAAATTAAGACTTGGGGGTGAAACTTTCCAGTTTACT
GAACTCCAGACCATGCATGTAGTCCACTCCAGAAATCATGCTCGCTTCCCTTGGCACACCAGTGTTCTCCTGCCA
AATGACCCTAGACCCTCTGTCCTGCAGAGTCAGGGTGGCTTTTCCCCTGACTGTGTCCGATGCCAAGGAGTCCTG
GCCTCCGCAGATGCTTCATTTTGACCCTTGGCTGCAGTGGAAGTCAGCACAGAGCAGTGCCCTGGCTGTGTCCTG
GACGGGTGGACTTAGCTAGGGAGAAAGTCGAGGCAGCAGCCCTCGAGGCCCTCACAGATGTCTAGGCAGGCCTCA
TTTCATCACGCAGCATGTGCAGGCCTGGAAGAGCAAAGCCAAATCTCAGGGAAGTCCTTGGTTGATGTATCTGGG
TCTCCTCTGGAGCACTCTGCCCTCCTGTCACCCAGTAGAGTAAATAAACTTCCTTGGCTCCTAAAAAA

FIGURE 130

MPNSEPASLLELFNSIATQGELVRSLKAGNASKDEIDSAVKMLVSLKMSYKAAAGEDYKADCPPGNPAPTSNHGP
DATEAEEDFVDPWTVQTSSAKGIDYDKLIVRFGSSKIDKELINRIERATGQRPHHFLRRGIFFSHRDMNQVLDAY
ENKKPFYLYTGRGPSSEAMHVGHLIPFIFTKWLQDVFNVPLVIQMTDDEKYLWKDLTLDQAYGDAVENAKDIIAC
GFDINKTFIFSDLDYMGMSSGFYKNVVKIQKHVTFNQVKGIFGFTDSDCIGKISFPAIQAAPSFSNSFPQIFRDR
TDIQCLIPCAIDQDPYFRMTRDVAPRIGYPKPALLHSTFFPALQGAQTKMSASDPNSSIFLTDTAKQIKTKVNKH
AFSGGRDTIEEHRQFGGNCDVDVSFMYLTFFLEDDDKLEQIRKDYTSGAMLTGELKKALIEVLQPLIAEHQARRK
EVTDEIVKEFMTPRKLSFDFQ

FIGURE 131

GCGGAGCGTGTGAGCAGTACTGCGGCCTCCTCTCCTCTCCTAACCTCGCTCTCGCGGCCTACCTTTACCCGCCCG
CCTGCTCGGCGACCAGCGGGGATCCTCCCCCAGCCGCAAGTCCACGAAGAAAGCAACGAATGAAAATTATGAAGA
CAACGAGAAGTCAGACTCCTCCGGGTCGCGCTCCAGCTGCTTCGGCTTCGTCGCCTACTCTGTGAACTCCGGGGA
GAGATCTCGAGTCAAGATTAAGACCTTAACCCACCAACCTGCCTGTTCGGACACCCCCCGGGCCGGCCGCTGTCT
GTCCCCTTCTCCATCGCCCTCTCCCAGAAAGCTCCGGTGCTTGGACCAGCTAGAGTCTGAGAAAGAGGAGAGGCG
CGAACGCCACTCCAAAAAGAGAAGGGTTAAAGAGGGCAACCCTAACGATACGCTTGACTTTCTGTGGCTGGGAAC
ACCTTCCACC**ATG**ACCACCTCAGCAAGTTCCCACTTAAATAAAGGCATCAAGCAGGTGTACATGTCCCTGCCTCA
GGGTGAGAAAGTCCAGGCCATGTATATCTGGATCGATGGTACTGGAGAAGGACTGCGCTGCAAGACCCGGACCCT
GGACAGTGAGCCCAAGTGTGTGGAAGAGTTGCCTGAGTGGAATTTCGATGGCTCCAGTACTTTACAGTCTGAGGG
TTCCAACAGTGACATGTATCTCGTGCCTGCTGCCATGTTTCGGGACCCCTTCCGTAAGGACCCTAACAAGCTGGT
GTTATGTGAAGTTTTCAAGTACAATCGAAGGCCTGCAGAGACCAATTTGAGGCACACCTGTAAACGGATAATGGA
CATGGTGAGCAACCAGCACCCCTGGTTTGGCATGGAGCAGGAGTATACCCTCATGGGGACAGATGGGCACCCCTT
TGGTTGGCCTTCCAACGGCTTCCCAGGGCCCCAGGGTCCATATTACTGTGGTGTGGGAGCAGACAGAGCCTATGG
CAGGGACATCGTGGAGGCCCATTACCGGGCCTGCTTGTATGCTGGAGTCAAGATTGCGGGGACTAATGCCGAGGT
CATGCCTGCCCAGTGGGAATTTCAGATTGGACCTTGTGAAGGAATCAGCATGGGAGATCATCTCTGGGTGGCCCG
TTTCATCTTGCATCGTGTGTGTGAAGACTTTGGAGTGATAGCAACCTTTGATCCTAAGCCCATTCCTGGGAACTG
GAATGGTGCAGGCTGCCATACCAACTTCAGCACCAAGGCCATGCGGGAGGAGAATGGTCTGAAGTACATCGAGGA
GGCCATTGAGAAACTAAGCAAGCGGCACCAGTACCACATCCGTGCCTATGATCCCAAGGGAGGCCTGGACAATGC
CCGACGTCTAACTGGATTCCATGAAACCTCCAACATCAACGACTTTTCTGCTGGTGTAGCCAATCGTAGCGCCAG
CATACGCATTCCCCGGACTGTTGGCCAGGAGAAGAAGGGTTACTTTGAAGATCGTCGCCCCTCTGCCAACTGCGA
CCCCTTTTCGGTGACAGAAGCCCTCATCCGCACGTGTCTTCTCAATGAAACCGGCGATGAGCCCTTCCAGTACAA
AAAT**TAA**GTGGACTAGACCTCCAGCTGTTGAGCCCCTCCTAGTTCTTCATCCCACTCCAACTCTTCCCCCTCTCC
CAGTTGTCCCGATTGTAACTCAAAGGGTGGAATATCAAGGTCGTTTTTTTCATTCCATGTGCCCAGTTAATCTTG
CTTTCTTTGTTTGGCTGGGATAGAGGGGTCAAGTTATTAATTTCTTCACACCTACCCTCCTTTTTTTCCCTATCA
CTGAAGCTTTTTAGTGCATTAGTGGGGAGGAGGGTGGGGAGACATAACCACTGCTTCCATTTAATGGGGTGCACC
TGTCCAATAGGCGTAGCTATCCGGACAGAGCACGTTTGCAGAAGGGGGACTCTTCTTCCAGGTAGCTGAAAGGGG
AAGACCTGACGTACTCTGGTTAGGTTAGGACTTGCCCTCGTGGTGGAAACTTTTCTTAAAAAGTTATAACCAACT
TTTCTATTAAAAGTGGGAATTAGGAGAGAAGGTAGGGGTTGGGAATCAGAGAGAATGGCTTTGGTCTCTTGCTTG
TGGGACTAGCCTGGCTTGGGACTAAATGCCCTGCTCTGAACACGAAGCTTAGTATAAACTGATGGATATCCCTAC
CTTGAAAGAAGAAAAGGTTCTTACTGCTTGGTCCTTGATTTATCACACAAAGCAGAATAGTATTTTTATATTTAA
ATGTAAAGACAAAAAACTATATGTATGGTTTTGTGGATTATGTGTGTTTTGCTAAAGGAAAAAACCATCCAGGTC
ACGGGGCACCAAATTTGAGACAAATAGTCGGATTAGAAATAAAGCATCTCATTTTGAGTAGAGAGCAAGGGAAGT
GGTTCTTAGATGGTGATCTGGGATTAGGCCCTCAAGACCCTTTTGGGTTTCTGCCCTGCCCACCCTCTGGAGAAG
GTGGGCACTGGATTAGTTAACAGACGACACGTTACTAGCAGTCACTTGATCTCCGTGGCTTTGGTTTAAAAGACA
CACTTGTCCACATAGGTTTAGAGATAAGAGTTGGCTGTTCAACTTGAGCATGTTACTGACAGAGGGGGTATTGGG
GTTATTTTCTGGTAGGAATAGCATGTCACTAAAGCAGGCCTTTTGATATTAAATTTTTTAAAAAGCAAAATTATA
GAAGTTTAGATTTTAATCAAATTTGTAGGGTTTCTAGGTAATTTTTACAGAATTGCTTGTTTGCTTCAACTGTCT
CCTACCTCTGCTCTTGGAGGAGATGGGGACAGGGCTGGAGTCAAAACACTTGTAATTTTGTATCTTGATGTCTTT
GTTAAGACTGCTGAAGAATTATTTTTTTTCTTTTATAATAAGGAATAAACCCCACCTTTATTCCTTCATTTCATC
TACCATTTTCTGGTTCTTGTGTTGGCTGTGGCAGGCCAGCTGTGGTTTTCTTTTGCCATGACAACTTCTAATTGC
CATGTACAGTATGTTCAAAGTCAAATAACTCCTCATTGTAAACAAACTGTGTAACTGCCCAAAGCAGCACTTATA
AATCAGCCTAACATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 132

MTTSASSHLNKGIKQVYMSLPQGEKVQAMYIWIDGTGEGLRCKTRTLDSEPKCVEELPEWNFDGSSTLQSEGSNS
DMYLVPAAMFRDPFRKDPNKLVLCEVFKYNRRPAETNLRHTCKRIMDMVSNQHPWFGMEQEYTLMGTDGHPFGWP
SNGFPGPQGPYYCGVGADRAYGRDIVEAHYRACLYAGVKIAGTNAEVMPAQWEFQIGPCEGISMGDHLWVARFIL
HRVCEDFGVIATFDPKPIPGNWNGAGCHTNFSTKAMREENGLKYIEEAIEKLSKRHQYHIRAYDPKGGLDNARRL
TGFHETSNINDFSAGVANRSASIRIPRTVGQEKKGYFEDRRPSANCDPFSVTEALIRTCLLNETGDEPFQYKN

FIGURE 133

TGCTGCAGCCGCTGCCGCCGATTCCGGATCTCATTGCCACGCGCCCCCGACGACCGCCCGACGTGCATTCCCGAT
TCCTTTTGGTTCCAAGTCCAATATGGCAACTCTAAAGGATCAGCTGATTTATAATCTTCTAAAGGAAGAACAGAC
CCCCCAGAATAAGATTACAGTTGTTGGGGTTGGTGCTGTTGGCATGGCCTGTGCCATCAGTATCTTAATGAAGGA
CTTGGCAGATGAACTTGCTCTTGTTGATGTCATCGAAGACAAATTGAAGGGAGAGATGATGGATCTCCAACATGG
CAGCCTTTTCCTTAGAACACCAAAGATTGTCTCTGGCAAAGACTATAATGTAACTGCAAACTCCAAGCTGGTCAT
TATCACGGCTGGGGCACGTCAGCAAGAGGGAGAAAGCCGTCTTAATTTGGTCCAGCGTAACGTGAACATATTTAA
ATTCATCATTCCTAATGTTGTAAAATACAGCCCGAACTGCAAGTTGCTTATTGTTTCAAATCCAGTGGATATCTT
GACCTACGTGGCTTGGAAGATAAGTGGTTTTCCCAAAAACCGTGTTATTGGAAGTGGTTGCAATCTGGATTCAGC
CCGATTCCGTTACCTGATGGGGGAAAGGCTGGGAGTTCACCCATTAAGCTGTCATGGGTGGGTCCTTGGGGAACA
TGGAGATTCCAGTGTGCCTGTATGGAGTGGAATGAATGTTGCTGGTGTCTCTCTGAAGACTCTGCACCCAGATTT
AGGGACTGATAAAGATAAGGAACAGTGGAAAGAGGTTCACAAGCAGGTGGTTGAGAGTGCTTATGAGGTGATCAA
ACTCAAAGGCTACACATCCTGGGCTATTGGACTCTCTGTAGCAGATTTGGCAGAGAGTATAATGAAGAATCTTAG
GCGGGTGCACCCAGTTTCCACCATGATTAAGGGTCTTTACGGAATAAAGGATGATGTCTTCCTTAGTGTTCCTTG
CATTTTGGGACAGAATGGAATCTCAGACCTTGTGAAGGTGACTCTGACTTCTGAGGAAGAGGCCCGTTTGAAGAA
GAGTGCAGATACACTTTGGGGGATCCAAAAGGAGCTGCAATTTTAAAGTCTTCTGATGTCATATCATTTCACTGT
CTAGGCTACAACAGGATTCTAGGTGGAGGTTGTGCATGTTGTCCTTTTTATCTGATCTGTGATTAAAGCAGTAAT
ATTTTAAGATGGACTGGGAAAAACATCAACTCCTGAAGTTAGAAATAAGAATGGTTTGTAAAATCCACAGCTATA
TCCTGATGCTGGATGGTATTAATCTTGTGTAGTCTTCAACTGGTTAGTGTGAAATAGTTCTGCCACCTCTGACGC
ACCACTGCCAATGCTGTACGTACTGCATTTGCCCCTTGAGCCAGGTGGATGTTTACCGTGTGTTATATAACTTCC
TGGCTCCTTCACTGAACATGCCTAGTCCAACATTTTTTCCCAGTGAGTCACATCCTGGGATCCAGTGTATAAATC
CAATATCATGTCTTGTGCATAATTCTTCCAAAGGATCTTATTTTGTGAACTATATCAGTAGTGTACATTACCATA
TAATGTAAAAAGATCTACATACAAACAATGCAACCAACTATCCAAGTGTTATACCAACTAAAACCCCCAATAAAC
CTTGAACAGTG

FIGURE 134

MATLKDQLIYNLLKEEQTPQNKITVVGVGAVGMACAISILMKDLADELALVDVIEDKLKGEMMDLQHGSLFLRTP
KIVSGKDYNVTANSKLVIITAGARQQEGESRLNLVQRNVNIFKFIIPNVVKYSPNCKLLIVSNPVDILTYVAWKI
SGFPKNRVIGSGCNLDSARFRYLMGERLGVHPLSCHGWVLGEHGDSSVPVWSGMNVAGVSLKTLHPDLGTDKDKE
QWKEVHKQVVESAYEVIKLKGYTSWAIGLSVADLAESIMKNLRRVHPVSTMIKGLYGIKDDVFLSVPCILGQNGI
SDLVKVTLTSEEEARLKKSADTLWGIQKELQF

FIGURE 135

GGCTCTCTTCCTGTCTTTGTGGCTCCGGAAAGGCGTTTGGGATGCCAACGATGAGGCTGCTGTCATTTGTGGTGT
TGGCTCTATTTGCTGTCACTCAAGCAGAGGAAGGAGCCAGGCTTTTGGCTTCCAAATCACTGCTGAACAGATACG
CCGTGGAGGGACGAGACCTGACCTTGCAGTACAACATCTACAATGTTGGCTCAAGTGCTGCATTAGACGTGGAAC
TATCTGATGATTCCTTCCCTCCAGAAGACTTTGGCATTGTGTCTGGAATGCTCAATGTCAAATGGGACCGGATTG
CCCCTGCTAGCAATGTCTCCCACACTGTGGTCCTGCGCCCTCTCAAGGCTGGTTATTTCAACTTCACCTCGGCAA
CAATTACTTACCTGGCCCAGGAGGATGGGCCCGTTGTGATTGGCTCTACCAGTGCACCTGGACAGGGAGGAATCC
TGGCTCAGCGGGAGTTTGACAGGCGATTCTCCCCTCATTTTCTGGACTGGGCAGCCTTTGGGGTCATGACCCTTC
CCTCCATCGGCATCCCCCTGCTATTGTGGTACTCCAGCAAGAGGAAATATGACACTCCCAAAACGAAGAAGAACT
GATTGGGGCTTCCACAGCCCTCCTCTCCCAAGAAATCCAGGCTCCTCTCCCAAGAAATCCAGGTGCTTTCCAGAC
TCCAAAGGGTATCTTAAATGCAATCTCTTCTCTCTTAGCCCTTGGCCACTTTCTCCTGGATCCTGCCCTGCTCTC
AGCCATAGTGAAGGACCAGCCCTAGGAGTCTGCGAGAGCCTCCTTGGTTCCATCGTGAAGCCATAAACAGGAATG
CCTTTGGCAATAGCCTTGAGCCTAGAGGGCCCTCTGATGCCCCACTGAGGTGCTGTTGGTTTATTGCTGGCAACG
TGAATTCTCTCAGGGGTCTAGGAGGGGCATTTTGGAGACTGCCTGACACCACCCCTATCCCCTGCCTCCCCCTCT
CAGAAGAGGGTGGAAGATGAAATGAAAGCTATGGGACTCTTGGAGGATACCCAGTGTCTATTCTGGGTTAGAGAA
GTGCTTACTAAGGGGTTTTCTAATAAAAACAAATGCCAATTGC

FIGURE 136

MRLLSFVVLALFAVTQAEEGARLLASKSLLNRYAVEGRDLTLQYNIYNVGSSAALDVELSDDSFPPEDFGIVSGM
LNVKWDRIAPASNVSHTVVLRPLKAGYFNFTSATITYLAQEDGPVVIGSTSAPGQGGILAQREFDRRFSPHFLDW
AAFGVMTLPSIGIPLLLWYSSKRKYDTPKTKKN

FIGURE 137

AGTGGTGCTGGGAGTGTCGTGGACGCCGTGCCGTTACTCGTAGTCAGGCGGCGGCGCAGGCGGCGGCGGCGGCAT
AGCGCACAGCGCGCCTTAGCAGCAGCAGCAGCAGCAGCATCGGAGGTACCCCCGCCGTCGCAGCCCCCGCGC
TGGTGCAGCCACCCTCGCTCCCTCTGCTCTTCCTCCCTTCGCTCGCACC**ATG**GCTGATCAGCTGACCGAAGAACA
GATTGCTGAATTCAAGGAAGCCTTCTCCCTATTTGATAAAGATGGCGATGGCACCATCACAACAAAGGAACTTGG
AACTGTCATGAGGTCACTGGGTCAGAACCCAACAGAAGCTGAATTGCAGGATATGATCAATGAAGTGGATGCTGA
TGGTAATGGCACCATTGACTTCCCCGAATTTTTGACTATGATGGCTAGAAAAATGAAAGATACAGATAGTGAAGA
AGAAATCCGTGAGGCATTCCGAGTCTTTGACAAGGATGGCAATGGTTATATCAGTGCAGCAGAACTACGTCACGT
CATGACAAACTTAGGAGAAAAACTAACAGATGAAGAAGTAGATGAAATGATCAGAGAAGCAGATATTGATGGAGA
CGGACAAGTCAACTATGAAGAATTCGTACAGATGATGACTGCAAAA**TGA**AGACCTACTTTCAACTCCTTTTTCCC
CCCTCTAGAAGAATCAAATTGAATCTTTTACTTACCTCTTGCAAAAAAAAGAAAAAAGAAAAAAGTTCATTTATT
CATTCTGTTTCTATATAGCAAAACTGAATGTCAAAAGTACCTTCTGTCCACACACACAAAATCTGCATGTATTGG
TTGGTGGTCCTGTCCCCTAAAGATCAAGCTACACATCAGTTTTACAATATAAATACTTGTACTACCTTAATGATA
AGGACTCCTTAAAGTTCCATTTGCTAATGATTAATACACTGTTTGGGCTGGCCAGTTTTTCATGCATGCAGCTTG
ACGATTGAGCACAGTCAGGCCTTTGTATTAAAAATGAAAAATGAAAAAACAAATTCAAAACCTATTCAAATGGGT
TCTAGTTCAATTTGTTTAGTATAAATTGTCATAGCTGGTTTACTGAAAACAAACACATTTAAAATTGGTTTACCT
CAGGATGACGTGCAGAAAAATGGGTGAAGGATAAACCGTTGAGACGTGGCCCCACTGGTAGGATGGTCCTCTTGT
ACTTCGTGTGCTCCGACCCATGGTGACGATGACACACCCTGGTGGCATGCCCGTGTATGTTGGTTTAGCGTTGTC
TGCATTGTTCTAGAGTGAAACAGGTGTCAGGCTGTCACTGTTCACACAAATTTTTAATAAGAAACATTTACCAAG
GGAGCATCTTTGGACTCTCTGTTTTTAAAACCTTCTGAACCATGACTTGGAGCCGGCAGAGTAGGCTGTGGCTGT
GGACTTCAGCACAACCATCAACATTGCTGTTCAAAGAAATTACAGTTTACGTCCATTCCAAGTTGTAAATGCTAG
TCTTTTTTTTTTTTTTTTCCAATAAA

FIGURE 138

MADQLTEEQIAEFKEAFSLFDKDGDGTITTKELGTVMRSLGQNPTEAELQDMINEVDADGNGTIDFPEFLTMMAR
KMKDTDSEEEIREAFRVFDKDGNGYISAAELRHVMTNLGEKLTDEEVDEMIREADIDGDGQVNYEEFVQMMTAK

FIGURE 139

AGTATGTGTGGTTGGGGAATTCATGTGGAGGTCAGAGTGGAAGCAGGTGTGAGAGGGTCCAGCAGAAGGAAACATG
GCTGCCAAAGTGTTTGAGTCCATTGGCAAGTTTGGCCTGGCCTTAGCTGTTGCAGGAGGCGTGGTGAACTCTGC
CTTATATAATGTGGATGCTGGGCACAGAGCTGTCATCTTTGACCGATTCCGTGGAGTGCAGGACATTGTGGTAGG
GGAAGGGACTCATTTTCTCATCCCGTGGGTACAGAAACCAATTATCTTTGACTGCCGTTCTCGACCACGTAATGT
GCCAGTCATCACTGGTAGCAAAGATTTACAGAATGTCAACATCACACTGCGCATCCTCTTCCGGCCTGTCGCCAG
CCAGCTTCCTCGCATCTTCACCAGCATCGGAGAGGACTATGATGAGCGTGTGCTGCCGTCCATCACAACTGAGAT
CCTCAAGTCAGTGGTGGCTCGCTTTGATGCTGGAGAACTAATCACCCAGAGAGAGCTGGTCTCCAGGCAGGTGAG
CGACGACCTTACAGAGCGAGCCGCCACCTTTGGGCTCATCCTGGATGACGTGTCCTTGACACATCTGACCTTCGG
GAAGGAGTTCACAGAAGCGGTGGAAGCCAAACAGGTGGCTCAGCAGGAAGCAGAGAGGGCCAGATTTGTGGTGGA
AAAGGCTGAGCAACAGAAAAAGGCGGCCATCATCTCTGCTGAGGGCGACTCCAAGGCAGCTGAGCTGATTGCCAA
CTCACTGGCCACTGCAGGGGATGGCCTGATCGAGCTGCGCAAGCTGGAAGCTGCAGAGGACATCGCGTACCAGCT
CTCACGCTCTCGGAACATCACCTACCTGCCAGCGGGGCAGTCCGTGCTCCTCCAGCTGCCCCAGTGAGGGCCCAC
CCTGCCTGCACCTCCGCGGGCTGACTGGGCCACAGCCCCGATGATTCTTAACACAGCCTTCCTTCTGCTCCCACC
CCAGAAATCACTGTGAAATTTCATGATTGGCTTAAAGTGAAGGAAATAAAGGTAAAATCACTTCAGATCTCTAAT
TAGTCTATCAAATGAAACTCTTTCATTCTTCTCACATCCATCTACTTTTTTATCCACCTCCCTACCAAAAATTGC
CAAGTGCCTATGCAAACCAGCTTTAGGTCCCAATTCGGGGCCTGCTGGAGTTCCGGCCTGGGCACCAGCATTTGG
CAGCACGCAGGCGGGGCAGTATGTGATGGACTGGGGAGCACAGGTGTCTGCCTAGATCCACGTGTGGCCTCCGTC
CTGTCACTGATGGAAGGTTTGCGGATGAGGGCATGTGCGGCTGAACTGAGAAGGCAGGCCTCCGTCTTCCCAGCG
GTTCCTGTGCAGATGCTGCTGAAGAGAGGTGCCGGGGAGGGGCAGAGAGGAAGTGGTCTGTCTGTTACCATAAGT
CTGATTCTCTTTAACTGTGTGACCAGCGGAAACAGGTGTGTGTGAACTGGGCACAGATTGAAGAATCTGCCCCTG
TTGAGGTGGGTGGGCCTGACTGTTGCCCCCCAGGGTCCTAAAACTTGGATGGACTTGTATAGTGAGAGAGGAGGC
CTGGACCGAGATGTGAGTCCTGTTGAAGACTTCCTCTCTACCCCCCACCTTGGTCCCTCTCAGATACCCAGTGGA
ATTCCAACTTGAAGGATTGCATCCTGCTGGGGCTGAACATGCCTGCCAAAGACGTGTCCGACCTACGTTCCTGGC
CCCCTCGTTCAGAGACTGCCCTTCTCACGGGCTCTATGCCTGCACTGGGAAGGAAACAAATGTGTATAAACTGCT
GTCAATAAATGACACCCAGACCTTCC

FIGURE 140

MAAKVFESIGKFGLALAVAGGVVNSALYNVDAGHRAVIFDRFRGVQDIVVGEGTHFLIPWVQKPIIFDCRSRPRN
VPVITGSKDLQNVNITLRILFRPVASQLPRIFTSIGEDYDERVLPSITTEILKSVVARFDAGELITQRELVSRQV
SDDLTERAATFGLILDDVSLTHLTFGKEFTEAVEAKQVAQQEAERARFVVEKAEQQKKAAIISAEGDSKAAELIA
NSLATAGDGLIELRKLEAAEDIAYQLSRSRNITYLPAGQSVLLQLPQ

FIGURE 141

GGGACGGCGACAGCGGGTCGGCGGGCCGCAGGAGGGGGTCATGGGTAAAGACTACTACCAGACGTTGGGCCTGGC
CCGCGGCGCGTCGGACGAGGAGATCAAGCGGGCCTACCGCCGCCAGGCGCTGCGCTACCACCCGGACAAGAACAA
GGAGCCCGGCGCCGAGGAGAAGTTCAAGGAGATCGCTGAGGCCTACGACGTGCTCAGCGACCCGCGCAAGCGCGA
GATCTTCGACCGCTACGGGGAGGAAGGCCTAAAGGGGAGTGGCCCCAGTGGCGGTAGCGGCGGTGGTGCCAATGG
TACCTCTTTCAGCTACACATTCCATGGAGACCCTCATGCCATGTTTGCTGAGTTCTTCGGTGGCAGAAATCCCTT
TGACACCTTTTTTGGGCAGCGGAACGGGGAGGAAGGCATGGACATTGATGACCCATTCTCTGGCTTCCCTATGGG
CATGGGTGGCTTCACCAACGTGAACTTTGGCCGCTCCCGCTCTGCCCAAGAGCCCGCCCGAAAGAAGCAAGATCC
CCCAGTCACCCACGACCTTCGAGTCTCCCTTGAAGAGATCTACAGCGGCTGTACCAAGAAGATGAAAATCTCCCA
CAAGCGGCTAAACCCCGACGGAAAGAGCATTCGAAACGAAGACAAAATATTGACCATCGAAGTGAAGAAGGGGTG
GAAAGAAGGAACCAAAATCACTTTCCCCAAGGAAGGAGACCAGACCTCCAACAACATTCCAGCTGATATCGTCTT
TGTTTTAAAGGACAAGCCCCACAATATCTTTAAGAGAGATGGCTCTGATGTCATTTATCCTGCCAGGATCAGCCT
CCGGGAGGCTCTGTGTGGCTGCACAGTGAACGTCCCCACTCTGGACGGCAGGACGATACCCGTCGTATTCAAAGA
TGTTATCAGGCCTGGCATGCGGCGAAAAGTTCCTGGAGAAGGCCTCCCCCTCCCCAAAACACCCGAGAAACGTGG
GGACCTCATTATTGAGTTTGAAGTGATCTTCCCCGAAAGGATTCCCCAGACATCAAGAACCGTACTTGAGCAGGT
TCTTCCAATATAGCTATCTGAGCTCCCCAAGGACTGACCAGGGACCTTTCCAGAGCTCAAGGATTTCTGGACCTT
TCTACCAGTTGTGGACCATGAGAGGGTGGGAGGGCCCAGGGAGGGCTTTCGTACTGCTGAATGTTTTCCAGAGCA
TATATTACAATCTTTCAAAGTCGCACACTAGACTTCAGTGGTTTTTCGAGCTATAGGGCATCAGGTGGTGGGAAC
AGCAGGAAAAGGCATTCCAGTCTGCCCCACTGGGTCTGGCAGCCCTCCCGGGATGGGCCCACATCCACCTCCAGT
CCCTGGCCAGGGGTGAGAGGCAGACCAGCAGATGGACTTGATCCCTCTGTGTCTTTGGGCTTCTGGCTGGTAGAT
AATGTCAACCTGCAGTCTTGATTCCCAGACCCTGTACACTCCTCCTTTTCTGTTGTGTGATCAGTTTGTGCTTTA
TTCTGTATTTGTCTCCCATGTCTTGCTCTTCTCCTGGAGAATTCTGTCTTCTCTTTGGCCATCTCAAATTGAGAA
CCTAAACTATTCCTGCAGAACTGCCTGGTTGGCGTCCACAAGCAATACCTCTCGTTCCAGCAGGACCAAGGGAGC
CAGCCTCCAGTGAGTGACTCCAGCAAGTGCAGCCACCTCTCCCTTGATGGTCTGGGAGCCTGGCCTCAGCAAGGG
GCCTTCCTGACCTCTGGCTCCAGTGAAGCTGAATGTCCTCACTTTGTGGGTCACACTCTTTACATTTCTGTAAGG
CAATCTTGGCACACGTGGGGCTTACCAGTGGCCCAGGTAATTTTTTGTTTCATGGACTATGGACTCTTTCAAAGG
GATCTGATCCTTTTGAATTTTGCACAGCCCTAGATACAATCCCTTTTGATAAAAGGGTCTTTGCTTCTGATTACA
GGAGCACTGTGGAACGTCTGTAAATATGTTTTTATAATTCCATGTATAGTTGGTGTACACTCAAAACCTGTCCCC
GGCAGCCAGTGCTCTCTGTATAGGGCCATAATGGAATTCTGAAGAAATCTTGGGGAGGGAAGGGGAGTTGGAACA
AATGTCTGTTCCCTGGAGGCCAGTCCAGTGCTCAGACCTTTAGACTCATTGTAAGTTGCCACTGCCAACATGAGA
CCAAAGTGTGTGACTAGTCAATGAAGTGCGACAGCATTAAAGACTGATGCTAAACCTC

FIGURE 142

MGKDYYQTLGLARGASDEEIKRAYRRQALRYHPDKNKEPGAEEKFKEIAEAYDVLSDPRKREIFDRYGEEGLKGS
GPSGGSGGGANGTSFSYTFHGDPHAMFAEFFGGRNPFDTFFGQRNGEEGMDIDDPFSGFPMGMGGFTNVNFGRSR
SAQEPARKKQDPPVTHDLRVSLEEIYSGCTKKMKISHKRLNPDGKSIRNEDKILTIEVKKGWKEGTKITFPKEGD
QTSNNIPADIVFVLKDKPHNIFKRDGSDVIYPARISLREALCGCTVNVPTLDGRTIPVVFKDVIRPGMRRKVPGE
GLPLPKTPEKRGDLIIEFEVIFPERIPQTSRTVLEQVLPI

FIGURE 143

GGGACGGCGACAGCGGGTCGGCGGGCCGCAGGAGGGGGTCATGGGTAAAGACTACTACCAGACGTTGGGCCTGGC
CCGCGGCGCGTCGGACGAGGAGATCAAGCGGGCCTACCGCCGCCAGGCGCTGCGCTACCACCCGGACAAGAACAA
GGAGCCCGGCGCCGAGGAGAAGTTCAAGGAGATCGCTGAGGCCTACGACGTGCTCAGCGACCCGCGCAAGCGCGA
GATCTTCGACCGCTACGGGGAGGAAGGCCTAAAGGGGAGTGGCCCCAGTGGCGGTAGCGGCGGTGGTGCCAATGG
TACCTCTTTCAGCTACACATTCCATGGAGACCCTCATGCCATGTTTGCTGAGTTCTTCGGTGGCAGAAATCCCTT
TGACACCTTTTTTGGGCAGCGGAACGGGGAGGAAGGCATGGACATTGATGACCCATTCTCTGGCTTCCCTATGGG
CATGGGTGGCTTCACCAACGTGAACTTTGGCCGCTCCCGCTCTGCCCAAGAGCCCGCCCGAAAGAAGCAAGATCC
CCCAGTCACCCACGACCTTCGAGTCTCCCTTGAAGAGATCTACAGCGGCTGTACCAAGAAGATGAAAATCTCCCA
CAAGCGGCTAAACCCCGACGGAAAGAGCATTCGAAACGAAGACAAAATATTGACCATCGAAGTGAAGAAGGGGTG
GAAAGAAGGAACCAAAATCACTTTCCCCAAGGAAGGAGACCAGACCTCCAACAACATTCCAGCTGATATCGTCTT
TGTTTTAAAGGACAAGCCCCACAATATCTTTAAGAGAGATGGCTCTGATGTCATTTATCCTGCCAGGATCAGCCT
CCGGGAGGCTCTGTGTGGCTGCACAGTGAACGTCCCCACTCTGGACGGCAGGACGATACCCGTCGTATTCAAAGA
TGTTATCAGGCCTGGCATGCGGCGAAAAGTTCCTGGAGAAGGCCTCCCCCTCCCCAAAACACCCGAGAAACGTGG
GGACCTCATTATTGAGTTTGAAGTGATCTTCCCCGAAAGGATTCCCCAGACATCAAGAACCGTACTTGAGCAGGT
TCTTCCAATATAGCTATCTGAGCTCCCCAAGGACTGACCAGGGACCTTTCCAGAGCTCAAGGATTTCTGGACCTT
TCTACCAGTTGTGGACCATGAGAGGGTGGGAGGGCCCAGGGAGGGCTTTCGTACTGCTGAATGTTTTCCAGAGCA
TATATTACAATCTTTCAAAGTCGCACACTAGACTTCAGTGGTTTTTCGAGCTATAGGGCATCAGGTGGTGGGAAC
AGCAGGAAAAGGCATTCCAGTCTGCCCCACTGGGTCTGGCAGCCCTCCCGGGATGGGCCCACATCCACCTCCAGT
CCCTGGCCAGGGGTGAGAGGCAGACCAGCAGATGGACTTGATCCCTCTGTGTCTTTGGGCTTCTGGCTGGTAGAT
AATGTCAACCTGCAGTCTTGATTCCCAGACCCTGTACACTCCTCCTTTTCTGTTGTGTGATCAGTTTGTGCTTTA
TTCTGTATTTGTCTCCCATGTCTTGCTCTTCTCCTGGAGAATTCTGTCTTCTCTTTGGCCATCTCAAATTGAGAA
CCTAAACTATTCCTGCAGAACTGCCTGGTTGGCGTCCACAAGCAATACCTCTCGTTCCAGCAGGACCAAGGGAGC
CAGCCTCCAGTGAGTGACTCCAGCAAGTGCAGCCACCTCTCCCTTGATGGTCTGGGAGCCTGGCCTCAGCAAGGG
GCCTTCCTGACCTCTGGCTCCAGTGAAGCTGAATGTCCTCACTTTGTGGGTCACACTCTTTACATTTCTGTAAGG
CAATCTTGGCACACGTGGGGCTTACCAGTGGCCCAGGTAATTTTTTGTTTCATGGACTATGGACTCTTTCAAAGG
GATCTGATCCTTTTGAATTTTGCACAGCCCTAGATACAATCCCTTTTGATAAAAGGGTCTTTGCTTCTGATTACA
GGAGCACTGTGGAACGTCTGTAAATATGTTTTTATAATTCCATGTATAGTTGGTGTACACTCAAAACCTGTCCCC
GGCAGCCAGTGCTCTCTGTATAGGGCCATAATGGAATTCTGAAGAAATCTTGGGGAGGGAAGGGGAGTTGGAACA
AATGTCTGTTCCCTGGAGGCCAGTCCAGTGCTCAGACCTTTAGACTCATTGTAAGTTGCCACTGCCAACATGAGA
CCAAAGTGTGTGACTAGTCAATGAAGTGCGACAGCATTAAAGACTGATGCTAAACCTC

FIGURE 144

MGKDYYQTLGLARGASDEEIKRAYRRQALRYHPDKNKEPGAEEKFKEIAEAYDVLSDPRKREIFDRYGEEGLKGS
GPSGGSGGGANGTSFSYTFHGDPHAMFAEFFGGRNPFDTFFGQRNGEEGMDIDDPFSGFPMGMGGFTNVNFGRSR
SAQEPARKKQDPPVTHDLRVSLEEIYSGCTKKMKISHKRLNPDGKSIRNEDKILTIEVKKGWKEGTKITFPKEGD
QTSNNIPADIVFVLKDKPHNIFKRDGSDVIYPARISLREALCGCTVNVPTLDGRTIPVVFKDVIRPGMRRKVPGE
GLPLPKTPEKRGDLIIEFEVIFPERIPQTSRTVLEQVLPI

FIGURE 145A

GCTAAGTTAGCTTTTCAACTGGCACTGTATGGCAGCATTTTTGGTATGGTTAGCGTGGCACATGGCGAAACATAA
AGCATTTTACTGTACAGGTAAGGAATGTGCCATGTGTTTTACCTATCTCTCTTTCTCTCTCACTCCCATGCACAC
ATCCTGTGTGTATTCAGAGACCTTCAGAAACATTCATATTCATTTTCATGAGTCAGCAAAAGCCCTATGCTTGAT
TCCAACAGAATATTTCCTTTACATACTTTCTTCTCTTAATTTTTACAAAATTGTATGGTAGGTGTAAAAGAAAAT
CATAGTAACTGTACCATATTATTAACCCCTAAATCAAACTTTTTTTGTCTTGTGTATCTTGATTTTTCTGTGTGC
TTTATAGTGAAGCAGCCGACACGAGTCGTTGTTCATAAAACAGCTTTTGAAAGTTGAGAGCACACCCCTGGAGAA
CCGACTGTGCTTGCTTACGTTTGGTTCATGACTTAAAAATCGAGTACAGGTGATGAAATCTTGGCAGTGTTAACA
AAAAAGTAGTGTGTATTGTGCTATTTTTTTTTTACTCTAGAAACTTAACCATTTGTAGAGAAAAAGGAAACAAAT
TTTCACACATTGAAGTTCATTCTGACATAAAATTA**ATG**ATAAATAATCATAGAAATCAAGCTTTGTATTTTAGCG
AACATAAGTACTTTCAACAAACTCAGGTGGTGTATCAGGGAGACATTTTCTGGGTGTTTTTGTGTGTTTTCTGTC
TTAGAAAAGAATGTGTTCTAATGCAAGGATGTTTCTCTGCAGGAGTTATTCCTGATGAAGCTAAAGCTTTGTCTC
TGTTGGCACCAGCTAATGCAGTGGCAGGTCTTCTGCCTGGTGGTGGACTCCTGCCTACTCCTAACCCACTTACCC
AGATTGGCGCTGTTCCACTGGCTGCTTTGGGGGCTCCTACTCTTGATCCTGCCCTTGCTGCACTTGGGCTTCCTG
GAGCAAACTTGAACTCTCAGTCTCTTGCTGCAGATCAGTTGCTGAAGCTTATGAGTACTGTTGATCCCAAGTTGA
ATCATGTAGCTGCTGGTCTCGTTTCACCAAGTCTGAAATCGGATACCTCTAGTAAAGAAATAGAGGAAGCTATGA
AAAGAGTACGAGAAGCACAGTCCCTAATTTCTGCTGCTATAGAACCAGATAAGAAAGAAGAAAAAAGAAGGCATT
CAAGATCAAGATCACGTTCTAGGAGGAGGAGGACTCCCTCATCTTCTAGACACAGGCGGTCAAGAAGCAGATCGA
GACGGCGGTCACATTCTAAGTCTAGGAGTCGGCGACGATCCAAAAGCCCAAGGCGGAGAAGATCTCATTCCAGAG
AAAGAGGTAGAAGGTCAAGGAGCACATCAAAAACAAGAGACAAAAAGAAAGAAGACAAAGAAAAGAAACGTTCTA
AAACACCACCAAAAAGTTACAGCACAGCCAGACGTTCTAGAAGTGCAAGCAGAGTATATTTGAAG**TAA**CATGGAA
TTCAAGAGAGAGAGAGACGACGACGAAGAAGCAGGAGTGGCACAAGATCTCCTAAAAAGCCTCGGTCTCCTAAAA
GAAAATTGTCCCGCTCACCATCCCCTAGGAGACATAAAAAGGAGAAGAAGAAAGATAAAGACAAAGAAAGAAGTA
GGGATGAAAGAGAACGATCAACAAGCAAGAAGAAGAAGAGTAAAGATAAGGAAAAGGACCGGGAAAGAAAATCAG
AGAGTGATAAAGATGTAAAACAGGTTACACGGGATTATGATGAAGAGGAACAGGGGTATGACAGTGAGAAAGAGA
AAAAAGAAGAGAAGAAACCAATAGAAACAGGTTCCCCTAAAACAAAGGAATGTTCTGTGGAAAAGGGAACTGGTG
ATTCACTAAGAGAATCCAAAGTGAATGGGGATGATCATCATGAAGAAGACATGGATATGAGTGACTGAATATTGC
CTCTGAGGGAGTCCAACTGTATACCTGCATCAGTGTCATTCCTTTGTGTGATTTCTTAATGCTGTATTTGTTCAT
CTCAAACCTAGATGTATACAGCTCTGAGTTATAAATGGTTATAAAGCTCCTGTTACTCATATTAGTTATTTACAT
CAAAAAGCTTTTAGAAAATGGTACGAGGTAACCAATTCTTGTCATGGTGAAATCTGATTGAGTAACCAAGCAGTT
TTACTATTCTGGTGCTGCTTCATAACAAAAATGAAAAGCTGCATGCATCTACAGCAGGCATGGATTGTTTATGTC
GTATGATATCCTTTATTAAGTAAGTTCACTTATAGTATTTCTATAATTTGATTCATTGCCGTAATAGAGCCATGT
AGGAAATGCACTGATTGCATGTTATTGTGGCAAGAATATCCTAAATGTCATTAAAATCCTCCAACATGATGGATC
TACTTATGGTCTTGTTTGTTGACATGACAAATTAACATTCTTATAGTTACATCTGGAAATGAGCATTTGAAATAG
ATAATCCTTTAAGCCTTGTGGCAAAATTTTTGTGGCTTTTGTTTAACTTTGAAAGGTTATTATGCACTAACCTTT
TTTGGTGGCTAATTAGGGTTTAAATACAGAAACAAGATTTCAAATAAAACTGTCTTTGGCAGTGAGTAAATAGCA
TATTTTGAAGTAGAGTTGTATACTTTTTCATAAGATGTTTGGGAATTTTTTTCCTGAAGTAATAATTTATTCCAC
ATCTACATCAGTGAAAGCTATCTACCTATCCTGAGTCTATCTTAAAGGAAAAAAAGAAAAAAACCTTATCTCTTG
CCCTTATTTTGAATTTTCCACTCTTTCATTAATTTGTTTTAAGCTCCGTGTTGGAAAAAAGGGGTAGTGCATTTT
AAATTGACCTTCATACGCTTTTAAAATAAGACAAATCTACTTGATAATGTACCTTTATTTGATCTCAAGTTGTAT
AAAACCAATAAATTTGTGTTACTGCAGTAGTAATCTTATGCACACGGTGATTTCATGTTATATATGCAAAGTAGG
CAACTGTTTTCTTAGTTACAGAAGTTTCAAGCTTCACTTTTGTGCAGTAGAAACAAAAGTAGGCTACAGTCTGTG
CCATGTTGATGTACAGTTTCTGAAATTGTTTTACAAGACTTTGATAATAAAACCCTTAAACTTATGTTCATGTTC
CTGTAAAACCGTATTTGTATTTATTTACGCTACTGAATGTATGACATTTACCTCATTCATTTTACAAATTCTTTC
CCTTTCTGTCCACATATTTCAGTATAGTAAAAAGAGGAAGTCTATCACTGTAGTGATAATTGCCATCAAAATTGT
CAAAAATGATTTAATTTCTATCCAAAATAGTCCTTTTCTTAGCTTAGTATCATTTTATTGCTTATTTTTTGTGTG
GGAATGGGGTTGGATAAAGCAATGAACTTTAGTATAAACAAATCCCACCTATATCTAGCAAATTTATATTTTCGG
TGAAATACAGATATTTGCCTTTCTGGAGTAGTATAGAAGCTGTCAATATGTATCTACTGTACAGTACTAAATAGT
ATTCATTTATGAAATGAGTAGTGTTTGGGTGGCTGGGGTTAAGGGAAAATGAGACTTGGAATTGTAGCTTTTATC

FIGURE 145B

CAAGTTTTGAGTATAAATAGGGTTTTGTTTTGTTTTTTTTAACCTAAAAACTGAAATGCCATATAGAAAAACAGC
ATTGTTTTTTACAGTTTGTAGTAAGTAACTTTTTAAAGATTTTATCAAAAAGAATTTTGTCTATAGTGAGTAAAAG
AAGTTCTAATAATGGTCCTAATCACTGCATTTTTAAAAAACAAAGTTCAACACAAATGACATTTGTTTTAAACTT
TAGTAGATAAAAGGTGAACCATGTGACATGGGCATTTTTGTAAGTCAAAAACAAATTTCACATATGGTAAACCTA
ATATTCACAGTGTGTTCCCTCACTTGTAATCTCTGAATACAAATATACTAGCTTTTCTAAAGGGAATCATTTTTT
TAAAAGTAGTGCCACTGACAAGATGCTACAGTGAAGATTATCCATTCTTAGGATATTTATTTTCAGTGAACATTT
TCTGCACAAAGGTAGTGTTGCACTGGGACACAAGCCTTTTAACAGATAACCAGTTGAAATCAAACACTGCCTCCA
CACCGAGTTCTGTTGTGTATTTGATAGTAAATTGATTTAAAAATAAAAGTGGTTTTTGTTAGAAA

FIGURE 146

MINNHRNQALYFSEHKYFQQTQVVYQGDIFWVFLCVFCLRKECVLMQGCFSAGVIPDEAKALSLLAPANAVAGLL
PGGGLLPTPNPLTQIGAVPLAALGAPTLDPALAALGLPGANLNSQSLAADQLLKLMSTVDPKLNHVAAGLVSPSL
KSDTSSKEIEEAMKRVREAQSLISAAIEPDKKEEKRRHSRSRSRSRRRRTPSSSRHRRSRSRSRRRSHSKSRSRR
RSKSPRRRRSHSRERGRRSRSTSKTRDKKKEDKEKKRSKTPPKSYSTARRSRSASRVYLK

FIGURE 147A

CGCCAGTATGTTGGAGTTGGTGGTGGCTTAAGTTTTGAAGGGAGGTAGCATCCGTTGGATATCCACACCATCCTT
CTCGCTGCAGGCTTTCTTGGACTCCGTACTGTTGGTGTAACCAAGGCCTGGAGGTCTGGGTGGCTCAGGTTTCCT
GCAGCC**ATG**TTTCTGTACAACTTAACCTTGCAGAGAGCCACTGGCATCAGCTTTGCCATTCATGGAAACTTTTCT
GGAACCAAACAACAAGAAATTGTTGTTTCCCGTGGGAAGATCTTGGAGCTGCTTCGCCCAGACCCCAACACTGGC
AAAGTACATACCCTACTCACTGTGGAAGTATTCGGTGTTATCCGGTCACTCATGGCCTTTAGGCTGACAGGTGGC
ACCAAAGACTACATTGTAGTTGGCAGTGACTCTGGTCGAATTGTTATTTTGGAATACCAGCCATCTAAGAATATG
TTTGAGAAGATTCACCAAGAAACCTTTGGCAAGAGTGGATGCCGTCGCATCGTTCCTGGCCAGTTCTTAGCTGTG
GATCCCAAAGGGCGAGCCGTTATGATTAGTGCCATTGAGAAACAGAAATTGGTGTATATTTTGAACAGAGATGCT
GCAGCCCGACTTACCATTTCATCTCCCCTGGAAGCCCACAAAGCAAACACTTTAGTGTATCATGTAGTTGGAGTA
GATGTCGGATTTGAAAATCCAATGTTTGCTTGTCTGGAAATGGATTATGAGGAAGCAGACAATGATCCAACAGGG
GAAGCAGCAGCTAATACCCAGCAGACACTTACTTTCTATGAGCTAGACCTTGGTTTAAATCATGTGGTCCGAAAA
TACAGTGAACCTTTGGAGGAACACGGCAACTTCCTTATTACAGTTCCTGGAGGGTCAGATGGTCCAAGTGGAGTA
CTGATCTGCTCTGAAAACTATATTACTTACAAGAACTTTGGTGACCAGCCAGATATCCGCTGTCCAATTCCCAGG
AGGCGGAATGACCTGGATGACCCTGAAAGAGGAATGATTTTTGTCTGCTCTGCAACCCATAAAACCAAATCGATG
TTCTTCTTTTTGGCTCAAACTGAGCAGGGAGATATCTTTAAGATCACTTTGGAGACAGATGAAGATATGGTTACT
GAGATCCGGCTCAAATATTTTGATACTGTACCCGTTGCTGCTGCCATGTGTGTGCTTAAAACAGGGTTCCTTTTT
GTAGCATCAGAATTTGGAAACCATTACTTATATCAAATTGCACATCTTGGAGATGATGATGAAGAACCTGAGTTT
TCATCAGCCATGCCTCTGGAAGAAGGAGACACATTCTTTTTTCAGCCAAGACCACTTAAAAACCTTGTGCTGGTT
GATGAGTTGGACAGCCTCTCTCCCATTCTGTTTTGCCAGATAGCTGATCTGGCCAATGAAGATACTCCACAGTTG
TATGTGGCCTGTGGTAGGGGACCCCGATCATCTCTGAGAGTCCTAAGACATGGACTTGAGGTGTCAGAAATGGCT
GTTCTGAGCTACCTGGTAACCCCAACGCTGTCTGGACAGTGCGTCGACACATTGAAGATGAGTTTGATGCCTAC
ATCATTGTGTCTTTCGTGAATGCCACCCTAGTGTTGTCCATTGGAGAAACTGTAGAAGAAGTGACTGACTCTGGG
TTCCTGGGGACCACCCCGACCTTGTCCTGCTCCTTATTAGGAGATGATGCCTTGGTGCAGGTCTATCCAGATGGC
ATTCGGCACATACGAGCAGACAAGAGAGTCAATGAGTGGAAGACCCCTGGAAAGAAAACAATTGTGAAGTGTGCA
GTGAACCAGCGACAAGTGGTGATTGCCCTGACAGGAGGAGAGCTGGTCTATTTCGAGATGGATCCTTCAGGACAG
CTGAATGAGTACACAGAACGGAAGGAGATGTCAGCAGATGTGGTGTGCATGAGTCTGGCCAATGTACCCCCTGGA
GAGCAGCGGTCTCGCTTCCTGGCTGTGGGGCTTGTGGACAACACTGTCAGAATCATCTCCCTGGATCCCTCAGAC
TGTTTGCAACCTCTAAGCATGCAGGCTCTCCCAGCCCAGCCTGAGTCCTTGTGTATCGTGGAAATGGGTGGGACT
GAGAAGCAGGATGAGCTGGGTGAGAGGGGCTCGATTGGCTTCCTATACCTGAATATTGGGCTACAGAACGGTGTG
CTGCTGAGGACTGTCTTGGACCCTGTCACTGGGGATTTGTCTGATACTCGCACTCGGTACCTGGGGTCCCGTCCT
GTGAAGCTCTTCCGAGTCCGAATGCAAGGCCAGGAGGCAGTATTGGCCATGTCAAGCCGCTCATGGTTGAGCTAT
TCTTACCAATCTCGCTTCCATCTCACCCCACTGTCTTACGAGACACTGGAATTTGCATCGGGTTTTGCCTCGGAA
CAGTGTCCCGAGGGCATTGTGGCCATCTCCACCAACACCCTACGGATTTTGGCATTAGAGAAGCTCGGTGCTGTC
TTCAATCAAGTAGCCTTCCCACTGCAGTACACACCCAGGAAATTTGTCATCCACCCTGAGAGTAACAACCTTATT
ATCATTGAAACGGACCACAATGCCTACACTGAGGCCACGAAAGCTCAGAGAAAGCAGCAGATGGCAGAGGAAATG
GTGGAAGCAGCAGGGGAGGATGAGCGGGAGCTGGCCGCAGAGATGGCAGCAGCATTCCTCAATGAAAACCTCCCT
GAATCCATCTTTGGAGCTCCCAAGGCTGGCAATGGGCAGTGGGCCTCTGTGATCCGAGTGATGAATCCCATTCAA
GGGAACACACTGGACCTTGTCCAGCTGGAACAGAATGAGGCAGCTTTTAGTGTGGCTGTGTGCAGGTTTTCCAAC
ACTGGTGAAGACTGGTATGTGCTGGTGGGTGTGGCCAAGGACCTGATACTAAACCCCCGATCTGTGGCAGGGGGC
TTCGTCTATACTTACAAGCTTGTGAACAATGGGGAAAAACTGGAGTTTTTGCACAAGACTCCTGTGGAAGAGGTC
CCTGCTGCTATTGCCCCATTCCAGGGGAGGGTGTTGATTGGTGTGGGGAAGCTGTTGCGTGTCTATGACCTGGGA
AAGAAGAAGTTACTCCGAAAATGTGAGAATAAGCATATTGCCAATTATATCTCTGGGATCCAGACTATTGGACAT
AGGGTAATTGTATCTGATGTCCAAGAAAGTTTCATCTGGGTTCGCTACAAGCGTAATGAAAACCAGCTTATCATC
TTTGCTGATGATACCTACCCCCGATGGGTCACTACAGCCAGCCTCCTGGACTATGACACTGTGGCTGGGGCAGAC
AAGTTTGGCAACATATGTGTGGTGAGGCTCCCACCTAACACCAATGATGAAGTAGATGAGGATCCTACAGGAAAC
AAAGCCCTGTGGGACCGTGGCTTGCTCAATGGGGCCTCCCAGAAGGCAGAGGTGATCATGAACTACCATGTCGGG
GAGACGGTGCTGTCCTTGCAGAAGACCACGCTGATCCCTGGAGGCTCAGAATCACTTGTCTATACCACCTTGTCT
GGAGGAATTGGCATCCTTGTGCCATTCACGTCCCATGAGGACCATGACTTCTTCCAGCATGTGGAAATGCACCTG

FIGURE 147B

CGGTCTGAACATCCCCCTCTCTGTGGGCGGGACCACCTCAGCTTTCGCTCCTACTACTTCCCTGTGAAGAATGTG
ATTGATGGAGACCTCTGTGAGCAGTTCAATTCCATGGAACCCAACAAACAAAAGAACGTCTCTGAAGAACTGGAC
CGAACCCCACCCGAAGTGTCCAAGAAACTCGAGGATATCCGGACCCGCTACGCCTTCTGAGCCCTCCTTTCCCGG
TGGGGCTTGCCAGAGACTGTGTGTTTTGTTTCCCCCACCACCATCACTGCCACCTGGCTTCTGCCATGTGGCAGG
AGGGTGACTGGATAATTAAGACTGCATTATGAAAGTCAACAGCTCTTTCCCCTCAGCTCTTCTCCTGGAATGACT
GGCTTCCCCTCAAATTGGCACTGAGATTTGCTACACTTCTCCCCACCTGGTACATGATACATGACCCCAGGTTCC
AGTGTAGAACCTGAGTCCCCCATTCCCCAAAGCCATCCCTGCATTGATATGTCTTGACTCTCCTGTCTACTTTTG
CACACACCCTTAATTTTTAATTGGTTTTCTTGTAAATACAGTTTTGTACAATGTTATCTCTGTGGGAGGAAGGAG
GCAGGCTGTGGTGGGACTGGGTAGGGTATAGTATCACTCCTGAGTTCCACTGCTCTAGAATCTAACCAGAAATAG
AAACCTAGTTTTTAAGGTG

FIGURE 148

MFLYNLTLQRATGISFAIHGNFSGTKQQEIVVSRGKILELLRPDPNTGKVHTLLTVEVFGVIRSLMAFRLTGGTK
DYIVVGSDSGRIVILEYQPSKNMFEKIHQETFGKSGCRRIVPGQFLAVDPKGRAVMISAIEKQKLVYILNRDAAA
RLTISSPLEAHKANTLVYHVVGVDVGFENPMFACLEMDYEEADNDPTGEAAANTQQTLTFYELDLGLNHVVRKYS
EPLEEHGNFLITVPGGSDGPSGVLICSENYITYKNFGDQPDIRCPIPRRRNDLDDPERGMIFVCSATHKTKSMFF
FLAQTEQGDIFKITLETDEDMVTEIRLKYFDTVPVAAAMCVLKTGFLFVASEFGNHYLYQIAHLGDDDEEPEFSS
AMPLEEGDTFFFQPRPLKNLVLVDELDSLSPILFCQIADLANEDTPQLYVACGRGPRSSLRVLRHGLEVSEMAVS
ELPGNPNAVWTVRRHIEDEFDAYIIVSFVNATLVLSIGETVEEVTDSGFLGTTPTLSCSLLGDDALVQVYPDGIR
HIRADKRVNEWKTPGKKTIVKCAVNQRQVVIALTGGELVYFEMDPSGQLNEYTERKEMSADVVCMSLANVPPGEQ
RSRFLAVGLVDNTVRIISLDPSDCLQPLSMQALPAQPESLCIVEMGGTEKQDELGERGSIGFLYLNIGLQNGVLL
RTVLDPVTGDLSDTRTRYLGSRPVKLFRVRMQGQEAVLAMSSRSWLSYSYQSRFHLTPLSYETLEFASGFASEQC
PEGIVAISTNTLRILALEKLGAVFNQVAFPLQYTPRKFVIHPESNNLIIIETDHNAYTEATKAQRKQQMAEEMVE
AAGEDERELAAEMAAAFLNENLPESIFGAPKAGNGQWASVIRVMNPIQGNTLDLVQLEQNEAAFSVAVCRFSNTG
EDWYVLVGVAKDLILNPRSVAGGFVYTYKLVNNGEKLEFLHKTPVEEVPAAIAPFQGRVLIGVGKLLRVYDLGKK
KLLRKCENKHIANYISGIQTIGHRVIVSDVQESFIWVRYKRNENQLIIFADDTYPRWVTTASLLDYDTVAGADKF
GNICVVRLPPNTNDEVDEDPTGNKALWDRGLLNGASQKAEVIMNYHVGETVLSLQKTTLIPGGSESLVYTTLSGG
IGILVPFTSHEDHDFFQHVEMHLRSEHPPLCGRDHLSFRSYYFPVKNVIDGDLCEQFNSMEPNKQKNVSEELDRT
PPEVSKKLEDIRTRYAF

FIGURE 149

GGCACGAGGGGAGCGCTTGTTTGCTGCCTCGTACTCCTCCATTTATCCGCCATGATAAGTGCCAGCCGAGCTGCA
GCAGCCCGTCTCGTGGGCGCCGCAGCCTCCCGGGGCCCTACGGCCGCCCGCCACCAGGATAGCTGGAATGGCCTT
AGTCATGAGGCTTTTAGACTTGTTTCAAGGCGGGATTATGCATCAGAAGCAATCAAGGGAGCAGTTGTTGGTATT
GATTTGGGTACTACCAACTCCTGCGTGGCAGTTATGGAAGGTAAACGAGCAAAGGTGCTGGAGAATGCCGAAGGT
GCCAGAACCACCCCTTCAGTTGTGGCCTTTACAGCAGATGGTGAGCGACTTGTTGGAATGCCGGCCAAGCGACAG
GCTGTCACCAACCCAAACAATACATTTTATGCTACCAAGCGTCTCATTGGCCGGCGATATGATGATCCTGAAGTA
CAGAAAGACATTAAAAATGTTCCCTTTAAAATTGTCCGTGCCTCCAATGGTGATGCCTGGGTTGAGGCTCATGGG
AAATTGTATTCTCCGAGTCAGATTGGAGCATTTGTGTTGATGAAGATGAAAGAGACTGCAGAAAATTACTTGGGG
CGCACAGCAAAAAATGCTGTGATCACAGTCCCAGCTTATTTCAATGACTCGCAGAGACAGGCCACTAAAGATGCT
GGCCAGATATCTGGACTGAATGTGCTTCGGGTGATTAATGAGCCCACAGCTGCTGCTCTTGCCTATGGTCTAGAC
AAATCAGAAGACAAAGTCATTGCTGTATATGATTTAGGTGGTGGAACTTTTGATATTTCTATCCTGGAAATTCAG
AAAGGAGTATTTGAGGTGAAATCCACAAATGGGGATACCTTCTTAGGTGGGGAAGACTTTGACCAGGCCTTGCTA
CGGCACATTGTGAAGGAGTTCAAGAGAGAGACAGGGGTTGATTTGACTAAAGACAACATGGCACTTCAGAGGGTA
CGGGAAGCTGCTGAAAAGGCTAAGTGTGAACTCTCCTCATCTGTGCAGACTGACATCAATTTGCCCTATCTTACA
ATGGATTCTTCTGGACCCAAGCATTTGAATATGAAGTTGACCCGTGCTCAATTTGAAGGGATTGTCACTGATCTA
ATCAGAAGGACTATCGCTCCATGCCAAAAAGCTATGCAAGATGCAGAAGTCAGCAAGAGTGACATAGGAGAAGTG
ATTCTTGTGGGTGGCATGACTAGGATGCCCAAGGTTCAGCAGACTGTACAGGATCTTTTTGGCAGAGCCCCAAGT
AAAGCTGTCAATCCTGATGAGGCTGTGGCCATTGGAGCTGCCATTCAGGGAGGTGTGTTGGCCGGCGATGTCACG
GATGTGCTGCTCCTTGATGTCACTCCCCTGTCTCTGGGTATTGAAACTCTAGGAGGTGTCTTTACCAAACTTATT
AATAGGAATACCACTATTCCAACCAAGAAGAGCCAGGTATTCTCTACTGCCGCTGATGGTCAAACGCAAGTGGAA
ATTAAAGTGTGTCAGGGTGAAAGAGAGATGGCTGGAGACAACAAACTCCTTGGACAGTTTACTTTGATTGGAATT
CCACCAGCCCCTCGTGGAGTTCCTCAGATTGAAGTTACATTTGACATTGATGCCAATGGGATAGTACATGTTTCT
GCTAAAGATAAAGGCACAGGACGTGAGCAGCAGATTGTAATCCAGTCTTCTGGTGGATTAAGCAAAGATGATATT
GAAAATATGGTTAAAAATGCAGAGAAATATGCTGAAGAAGACCGGCGAAAGAAGGAACGAGTTGAAGCAGTTAAT
ATGGCTGAAGGAATCATTCACGACACAGAAACCAAGATGGAAGAATTCAAGGACCAATTACCTGCTGATGAGTGC
AACAAGCTGAAAGAAGAGATTTCCAAAATGAGGGAGCTCCTGGCTAGAAAAGACAGCGAAACAGGAGAAAATATT
AGACAGGCAGCATCCTCTCTTCAGCAGGCATCATTGAAGCTGTTCGAAATGGCATACAAAAAGATGGCATCTGAG
CGAGAAGGCTCTGGAAGTTCTGGCACTGGGGAACAAAAGGAAGATCAAAAGGAGGAAAAACAGTAATAATAGCAG
AAATTTTGAAGCCAGAAGGACAACATATGAAGCTTAGGAGTGAAGAGACTTCCTGAGCAGAAATGGGCGAACTTC
AGTCTTTTTACTGTGTTTTTGCAGTATTCTATATATAATTTCCTTAATTTGTAAATTTAGTGACCATTAGCTAGT
GATCATTTAATGGACAGTGATTCTAACAGTATAAAGTTCACAATATTCTATGTCCCTAGCCTGTCATTTTTCAGC
TGCATGTAAAAGGAGGTAGGATGAATTGATCATTATAAAGATTTAACTATTTTATGCTGAAGTGACCATATTTTC
AAGGGGTGAAACCATCTCGCACACAGCAATGAAGGTAGTCATCCATAGACTTGAAATGAGACCACATATGGGGAT
GAGATCCTTCTAGTTAGCCTAGTACTGCTGTACTGGCCTGTATGTACATGGGGTCCTTCAACTGAGGCCTTGCAA
GTCAAGCTGGCTGTGCCATGTTTGTAGATGGGGCAGAGGAATCTAGAACAATGGGAAACTTAGCTATTTATATTA
GGTACAGCTATTAAAACAAGGTAGGAATGAGGCTAGACCTTTAACTTCCCTAAGGCATACTTTTCTAGCTACCTT
CTGCCCTGTGTCTGGCACCTACATCCTTGATGATTGTTCTCTTACCCATTCTGGAATTTTTTTTTTTTTAAATA
AATACAGAAAGCATCTTGAAAAAAAAAAAAAAAAA

FIGURE 150

MISASRAAAARLVGAAASRGPTAARHQDSWNGLSHEAFRLVSRRDYASEAIKGAVVGIDLGTTNSCVAVMEGKRA
KVLENAEGARTTPSVVAFTADGERLVGMPAKRQAVTNPNNTFYATKRLIGRRYDDPEVQKDIKNVPFKIVRASNG
DAWVEAHGKLYSPSQIGAFVLMKMKETAENYLGRTAKNAVITVPAYFNDSQRQATKDAGQISGLNVLRVINEPTA
AALAYGLDKSEDKVIAVYDLGGGTFDISILEIQKGVFEVKSTNGDTFLGGEDFDQALLRHIVKEFKRETGVDLTK
DNMALQRVREAAEKAKCELSSSVQTDINLPYLTMDSSGPKHLNMKLTRAQFEGIVTDLIRRTIAPCQKAMQDAEV
SKSDIGEVILVGGMTRMPKVQQTVQDLFGRAPSKAVNPDEAVAIGAAIQGGVLAGDVTDVLLLDVTPLSLGIETL
GGVFTKLINRNTTIPTKKSQVFSTAADGQTQVEIKVCQGEREMAGDNKLLGQFTLIGIPPAPRGVPQIEVTFDID
ANGIVHVSAKDKGTGREQQIVIQSSGGLSKDDIENMVKNAEKYAEEDRRKKERVEAVNMAEGIIHDTETKMEEFK
DQLPADECNKLKEEISKMRELLARKDSETGENIRQAASSLQQASLKLFEMAYKKMASEREGSGSSGTGEQKEDQK
EEKQ

FIGURE 151

GCCGCCGCCGCCATGAACATTTTCCGGCTGACTGGGGACCTGTCCCACCTGGCGGCCATCGTCATCCTGCTGCTG
AAGATCTGGAAGACGCGCTCCTGCGCCGGTATTTCTGGGAAAAGCCAGCTTCTGTTTGCACTGGTCTTCACAACT
CGTTACCTGGATCTTTTTACTTCATTTATTTCATTGTATAACACATCTATGAAGGTTATCTACCTTGCCTGCTCC
TATGCCACAGTGTACCTGATCTACCTGAAATTTAAGGCAACCTACGATGGAAATCATGATACCTTCCGAGTGGAG
TTTCTGGTGGTCCCTGTGGGAGGCCTCTCATTTTTAGTTAATCACGATTTCTCTCCTCTTGAGATCCTCTGGACC
TTCTCCATCTACCTGGAGTCCGTGGCTATCCTTCCGCAGCTGTTTATGATCAGCAAGACTGGGGAGGCCGAGACC
ATCACCACCCACTACCTGTTCTTCCTGGGCCTCTATCGTGCTTTGTATCTTGTCAACTGGATCTGGCGCTTCTAC
TTTGAGGGCTTCTTTGACCTCATTGCTGTGGTGGCCGGCGTAGTCCAGACCATCCTATACTGTGACTTCTTCTAC
TTGTACATTACAAAAGTACTCAAGGGAAAGAAGCTCAGTTTGCCAGCATAAGTGCCAAAGACCATCACCAGCATC
TGTCCTTCAGGGTGCTCGGACAGAATTCTTACCACAGCAAAGGCATAAGATGCTTGATACGGAAAATCAGAAACT
TAACTCTTTTGTTGCAGATAGTCATCAGTGGCTCTGTAAAAACGCAGAGGAAAAGAGCCAGAAGGTTTCTGTTTA
ATGCATCTTGCCTTATCTTTTTTTATTACTGTGTACAAAGATTTTTTTACACAAAGAAACTTAATGCTGTATTAA
TAAATTCAGTGTGTAGCTTCAATTGGGATAGTTCCAAAAGTGAAGATTTTGTGAGGAATAAGTGCAAATTTTTTT
TTTATTTTAAAAAATTCTTTGAAACTCTTAAGTCTTTGTGTCTGCAATGAAATTGTACTCCTTGACAGTTGATAG
ATTATGTATTCTTCCATCCCTCAAACTTGCATTCCACTATATTTATTTTTTGGCAAAAGATGAGCTGTATTTGTT
TGAAATCTGAGACACTATGTTCAATTGG

FIGURE 152

MNIFRLTGDLSHLAAIVILLLKIWKTRSCAGISGKSQLLFALVFTTRYLDLFTSFISLYNTSMKVIYLACSYATV
YLIYLKFKATYDGNHDTFRVEFLVVPVGGLSFLVNHDFSPLEILWTFSIYLESVAILPQLFMISKTGEAETITTH
YLFFLGLYRALYLVNWIWRFYFEGFFDLIAVVAGVVQTILYCDFFYLYITKVLKGKKLSLPA

FIGURE 153

GGTAGCGACGGTAGCTCTAGCCGGGCCTGAGCTGTGCTAGCACCTCCCCCAGGAGACCGTTGCAGTCGGCCAGCC
CCCTTCTCCACGGTAACCATGTGCGACCGAAAGGCCGTGATCAAAAATGCGGACATGTCGGAAGAGATGCAACAG
GACTCGGTGGAGTGCGCTACTCAGGCGCTGGAGAAATACAACATAGAGAAGGACATTGCGGCTCATATCAAGAAG
GAATTTGACAAGAAGTACAATCCCACCTGGCATTGCATCGTGGGGAGGAACTTCGGTAGTTATGTGACACATGAA
ACCAAACACTTCATCTACTTCTACCTGGGCCAAGTGGCCATTCTTCTGTTCAAATCTGGTTAAAAGCATGGACTG
TGCCACACACCCAGTGATCCATCCAGAAACAAGGACTGCAGCCTAAATTCCAAATACCAGAGACTGAAATTTTCA
GCCTTGCTAAGGGAACATCTCGATGTTTGAACCTTTGTTGTGTTTTGTACAGGGCATTCTCTGTACTAGTTTGTC
GTGGTTATAAAACAATTAGCAGAATAGCCTACATTTGTATTTATTTTCTATTCCATACTTCTGCCCACGTTGTTT
TCTCTCAAAATCCATTCCTTTAAAAAATAAATCTGATGCACCG

FIGURE 154

MCDRKAVIKNADMSEEMQQDSVECATQALEKYNIEKDIAAHIKKEFDKKYNPTWHCIVGRNFGSYVTHETKHFIY
FYLGQVAILLFKSG

FIGURE 155

GTTTCTCTCCCTGCCCCCGCGACTTCGCGCAAGATCCGGGAAGGACACCCGAGGCCCCTGGGAGACCCTGGGGAG
GTGAAAGTCAGAGAGCGAAGCGGGCCGTGGCCCCTAGGCCTGACCCCTCCCCGCGGGGTAAGGCGGGCACCCCGC
GAGCGCAGGGGTCCTCTTACTGCTGATGGCACCCAGCTCTGGGCCCAGACGCCGCTCACCGTCCACCGCCGGTGC
TGGGTAAA**ATG**TCGGTTCCAGGACCTTACCAGGCGGCCACTGGGCCTTCCTCAGCACCATCCGCACCTCCATCCT
ATGAAGAGACAGTGGCTGTTAACAGTTATTACCCCACACCTCCAGCTCCCATGCCTGGGCCAACTACGGGGCTTG
TGACGGGGCCTGATGGGAAGGGCATGAATCCTCCTTCGTATTATACCCAGCCAGCGCCCATCCCCAATAACAATC
CAATTACCGTGCAGACGGTCTACGTGCAGCACCCCATCACCTTTTTGGACCGCCCTATCCAAATGTGTTGTCCTT
CCTGCAACAAGATGATCGTGAGTCAGCTGTCCTATAACGCCGGTGCTCTGACCTGGCTGTCCTGCGGGAGCCTGT
GCCTGCTGGGGTGCATAGCGGGCTGCTGCTTCATCCCCTTCTGCGTGGATGCCCTGCAGGACGTGGACCATTACT
GTCCCAACTGCAGAGCTCTCCTGGGCACCTACAAGCGTTTG**TAG**GACTCAGCCAGACGTGGAGGGAGCCGGGTGC
CGCAGGAAGTCCTTTCCACCTCTCATCCAGCTTCACGCCTGGTGGAGGTTCTGCCCTGGTGGTCTCACCTCTCCA
GGGGGCCCACCTTCATGTCTTCTTTTGGGGGGAATACGTCGCAAAACTAACAAATCTCCAAACCCCAGAAATTGC
TGCTTGGAGTCGTGCATAGGACTTGCAAAGACATTCCCCTTGAGTGTCAGTTCCACGGTTTCCTGCCTCCCTGAG
ACCCTGAGTCCTGCCATCTAACTGTGATCATTGCCCTATCCGAATATCTTCCTGTGATCTGCCATCAGTGGCTCT
TTTTTCCTGCTTCCATGGGCCTTTCTGGTGGCAGTCTCAAACTGAGAAGCCACAGTTGCCTTATTTTTGAGGCTG
TTCTGCCCAGAGCTCGGCTGAACCAGCCTTTAGTGCCTACCATTATCTTATCCGTCTCTTCCCGTCCCTGATGAC
AAAGATCTTGCCTTACAGACTTTACAGGCTTGGCTTTGAGATTCTGTAACTGCAGACTTCATTAGCACACAGATT
CACTTTAATTTCTTAATTTTTTTTTTAAATACAAGGAGGGGGCTATTAACACCCAGTACAGACATATCCACAAGG
TCGTAAATGCATGCTAGAAAAATAGGGCTGGATCTTATCACTGCCCTGTCTCCCCTTGTTTCTCTGTGCCAGATC
TTCAGTGCCCCTTTCCATACAGGGATTTTTTTCTCATAGAGTAATTATATGAACAGTTTTTATGACCTCCTTTTG
GTCTGAAATACTTTTGAACAGAATTTCTTTTTTTTTAAAAAAAAAACAGAGATGGGGTCTTACTATGTTGCCCAGGC
TGGTGTCGAACTCCTGGGCTCAAGCGATCCTTCTGCCTTGGCCTCCCGAAGTGCTGGGATTGCAGGCATAAGCTA
CCATGCTGGGCCTGAACATAATTTCAAGAGGAGGATTTATAAAACCATTTTCTGTAATCAAATGATTGGTGTCAT
TTTCCCATTTGCCAATGTAGTCTCACTTAAAAAAAAAAAAAAGAAAAAGAAATGGATAATTTCATCTACTGCCTT
TACTTGGGGTTAATGTGATTCTTAAACACCTTCATCATGGAACTCTCAGAGTGGGGTCCGTTTTGGTTTCCTGGT
GGTGGGTTTTGAAAGATAAGGGAAAGCACATTTTGAGCATGTCTGGGTACCATGGTGCGGATGCTTGGGAACCAG
AACTGTTTCAGAGGAATCTAAAGTCTGATTTTAGTTTTCAGAGACACAGCTTGTTGTAAAACATGAGAAGACATG
ATTTCTAGGACTCAAGCAGCAAGCCAGGATTCTAGGTTGGCTGCTGTGTCATCTTTGAAGTCAAGACAAAGCTGG
GCTCGACCTTCAAGGGTCCTCGTTTTGATAATACTTCAGAATAGGGAACTCATGTGAATACTACTATGTAGAAAT
AAAACCTAGACCTTGAGCGAACATCTGTATATTGGTTGAAAACGATAGTGGTAACCATTGATCCCCCTTCATTTG
ATGTTTGGAAAATTCCAGTAATTATCATTTTTGCAACGAATATGGATACCACATAGTACTTTGGTGTTACCTGCT
TTTGAAAAATAAAGTCTTTGGTTCACCCGGTAAAAAAAAAAAA

FIGURE 156

MSVPGPYQAATGPSSAPSAPPSYEETVAVNSYYPTPPAPMPGPTTGLVTGPDGKGMNPPSYYTQPAPIPNNNPIT
VQTVYVQHPITFLDRPIQMCCPSCNKMIVSQLSYNAGALTWLSCGSLCLLGCIAGCCFIPFCVDALQDVDHYCPN
CRALLGTYKRL

FIGURE 157

GTTTCTCTCCCTGCCCCCGCGACTTCGCGCAAGATCCGGGAAGGACACCCGAGGCCCCTGGGAGACCCTGGGGAG
GTGAAAGTCAGAGAGCGAAGCGGGCCGTGGCCCCTAGGCCTGACCCCTCCCCGCGGGGTAAGGCGGGCACCCCGC
GAGCGCAGGGGTCCTCTTACTGCTGATGGCACCCAGCTCTGGGCCCAGACGCCGCTCACCGTCCACCGCCGGTGC
TGGGTAAAATGTCGGTTCCAGGACCTTACCAGGCGGCCACTGGGCCTTCCTCAGCACCATCCGCACCTCCATCCT
ATGAAGAGACAGTGGCTGTTAACAGTTATTACCCCACACCTCCAGCTCCCATGCCTGGGCCAACTACGGGGCTTG
TGACGGGGCCTGATGGGAAGGGCATGAATCCTCCTTCGTATTATACCCAGCCAGCGCCCATCCCCAATAACAATC
CAATTACCGTGCAGACGGTCTACGTGCAGCACCCCATCACCTTTTTGGACCGCCCTATCCAAATGTGTTGTCCTT
CCTGCAACAAGATGATCGTGAGTCAGCTGTCCTATAACGCCGGTGCTCTGACCTGGCTGTCCTGCGGGAGCCTGT
GCCTGCTGGGGGTGCATAGCGGGCTGCTGCTTCATCCCCTTCTGCGTGGATGCCCTGCAGGACGTGGACCATTAC
TGTCCCAACTGCAGAGCTCTCCTGGGCACCTACAAGCGTTTGTAGGACTCAGCCAGACGTGGAGGGAGCCGGGTG
CCGCAGGAAGTCCTTTCCACCTCTCATCCAGCTTCACGCCTGGTGGAGGTTCTGCCCTGGTGGTCTCACCTCTCC
AGGGGGCCCACCTTCATGTCTTCTTTTGGGGGGAATACGTCGCAAAACTAACAAATCTCCAAACCCCAGAAATTG
CTGCTTGGAGTCGTGCATAGGACTTGCAAAGACATTCCCCTTGAGTGTCAGTTCCACGGTTTCCTGCCTCCCTGA
GACCCTGAGTCCTGCCATCTAACTGTGATCATTGCCCTATCCGAATATCTTCCTGTGATCTGCCATCAGTGGCTC
TTTTTTCCTGCTTCCATGGGCCTTTCTGGTGGCAGTCTCAAACTGAGAAGCCACAGTTGCCTTATTTTTGAGGCT
GTTCTGCCCAGAGCTCGGCTGAACCAGCCTTTAGTGCCTACCATTATCTTATCCGTCTCTTCCCGTCCCTGATGA
CAAAGATCTTGCCTTACAGACTTTACAGGCTTGGCTTTGAGATTCTGTAACTGCAGACTTCATTAGCACACAGAT
TCACTTTAATTTCTTAATTTTTTTTTTAAATACAAGGAGGGGGCTATTAACACCCAGTACAGACATATCCACAAG
GTCGTAAATGCATGCTAGAAAAATAGGGCTGGATCTTATCACTGCCCTGTCTCCCCTTGTTTCTCTGTGCCAGAT
CTTCAGTGCCCCTTTCCATACAGGGATTTTTTTCTCATAGAGTAATTATATGAACAGTTTTTATGACCTCCTTTT
GGTCTGAAATACTTTTGAACAGAATTTCTTTTTTTTAAAAAAAAAACAGAGATGGGGTCTTACTATGTTGCCCAGG
CTGGTGTCGAACTCCTGGGCTCAAGCGATCCTTCTGCCTTGGCCTCCCGAAGTGCTGGGATTGCAGGCATAAGCT
ACCATGCTGGGCCTGAACATAATTTCAAGAGGAGGATTTATAAAACCATTTTCTGTAATCAAATGATTGGTGTCA
TTTTCCCATTTGCCAATGTAGTCTCACTTAAAAAAAAAAAAAAAAAAA

FIGURE 158

MSVPGPYQAATGPSSAPSAPPSYEETVAVNSYYPTPPAPMPGPTTGLVTGPDGKGMNPPSYYTQPAPIPNNNPIT
VQTVYVQHPITFLDRPIQMCCPSCNKMIVSQLSYNAGALTWLSCGSLCLLGVHSGLLLHPLLRGCPAGRGPLLSQ
LQSSPGHLQAFVGLSQTWREPGAAGSPFHLSSSFTPGGGSALVVSPLQGAHLHVFFWGEYVAKLTNLQTPEIAAW
SRA

FIGURE 159

CTTTTCCAAGCGGCTGCCGAAGATGGCGGAGGTGCAGGTCCTGGTGCTTGATGGTCGAGGCCATCTCCTGGGCCG
CCTGGCGGCCATCGTGGCTAAACAGGTACTGCTGGGCCGGAAGGTGGTGGTCGTACGCTGTGAAGGCATCAACAT
TTCTGGCAATTTCTACAGAAACAAGTTGAAGTACCTGGCTTTCCTCCGCAAGCGGATGAACACCAACCCTTCCCG
AGGCCCCTACCACTTCCGGGCCCCCAGCCGCATCTTCTGGCGGACCGTGCGAGGTATGCTGCCCCACAAAACCAA
GCGAGGCCAGGCCGCTCTGGACCGTCTCAAGGTGTTTGACGGCATCCCACCGCCCTACGACAAGAAAAAGCGGAT
GGTGGTTCCTGCTGCCCTCAAGGTCGTGCGTCTGAAGCCTACAAGAAAGTTTGCCTATCTGGGGCGCCTGGCTCA
CGAGGTTGGCTGGAAGTACCAGGCAGTGACAGCCACCCTGGAGGAGAAGAGGAAAGAGAAAGCCAAGATCCACTA
CCGGAAGAAGAAACAGCTCATGAGGCTACGGAAACAGGCCGAGAAGAACGTGGAGAAGAAAATTGACAAATACAC
AGAGGTCCTCAAGACCCACGGACTCCTGGTCTGAGCCCAATAAAGACTGTTAATTCCTCATGCGTTGCCTGCCCT
TCCTCCATTGTTGCCCTGGAATGTACGGGACCCAGGGGCAGCAGCAGTCCAGGTGCCACAGGCAGCCCTGGGACA
TAGGAAGCTGGGAGCAAGGAAAGGGTCTTAGTCACTGCCTCCCGAAGTTGCTTGAAAGCACTCGGAGAATTGTGC
AGGTGTCATTTATCTATGACCAATAGGAAGAGCAACCAGTTACTATGAGTGAAAGGGAGCCAGAAGACTGATTGG
AGGGCCCTATCTTGTGAGTGGGGCATCTGTTGGACTTTCCACCTGGTCATATACTCTGCAGCTGTTAGAATGTGC
AAGCACTTGGGGACAGCATGAGCTTGCTGTTGTACACAGGGTATTTCTAGAAGCAGAAATAGACTGGGAAGATGC
ACAACCAAGGGGTTACAGGCATCGCCCATGCTCCTCACCTGTATTTTGTAATCAGAAATAAATTGCTTTTAAAGA
AAAAAAAAAAAAAAAAA

FIGURE 160

MAEVQVLVLDGRGHLLGRLAAIVAKQVLLGRKVVVVRCEGINISGNFYRNKLKYLAFLRKRMNTNPSRGPYHFRA
PSRIFWRTVRGMLPHKTKRGQAALDRLKVFDGIPPPYDKKKRMVVPAALKVVRLKPTRKFAYLGRLAHEVGWKYQ
AVTATLEEKRKEKAKIHYRKKKQLMRLRKQAEKNVEKKIDKYTEVLKTHGLLV

FIGURE 161

GCGCCCTCTCCTATAAAGCAGACGCCGCGCCGCGCTGCGACGCTGTAGTGGCTTCGTCTTCGGTTTTTCTCTTCC
TTCGCTAACGCCTCCCGGCTCTCGTCAGCCTCCCGCCGGCCGTCTCCTTAACACCGAACACCATGCCTTCAATTA
AGTTGCAGAGTTCTGATGGAGAGATATTTGAAGTTGATGTGGAAATTGCCAAACAATCTGTGACTATTAAGACCA
TGTTGGAAGGTCATCCTTTCTGCATTGTCTGAATTAGTGAGGGTCGTTCTCTCATTAAATGGATAAAATCATAAG
ATTTGGGA**ATG**GATGATGAAGGAGATGATGACCCAGTTCCTCTACCAAATGTGAATGCAGCAATATTAAAAAAGG
TCATTCAGTGGTGCACCCACCACAAGGATGACCCTCCTCCTCCTGAAGATGATGAGAACAAAGAAAAGCGAACAG
ATGATATCCCTGTTTGGGACCAAGAATTCCTGAAAGTTGACCAAGGAACACTTTTTGAACTCATTCTGGCTGCAA
ACTACTTAGACATCAAAGGTTTGCTTGATGTTACATGCAAGACTGTTGCCAATATGATCAAGGGGAAAACTCCTG
AGGAGATTCGCAAGACCTTCAATATCAAAAATGACTTTACTGAAGAGGAGGAAGCCCAGGTACGCAAAGAGAACC
AGTGGTGTGAAGAGAAG**TGA**AATGTTGTGCCTGACACTGTAACACTGTAAGGATTGTTCCAAATACTAGTTGCAC
TGCTCTGTTTATAATTGTTAATATTAGACAAACAGTAGACAAATGCAGCAGCAAGTCAATTGTATTAGCAGAATA
TTGTCCTCATTGCATGTGTAGTTTGAGCACAGATCCCAAACCTTACGGCCAAGTTTCTTCTAGTATGATGGAAAG
TTTCTTTTTTCTTTGCTCTGAATAAAACTGAACTGTGGGTTCTCTATAAGTGGCATTTTGGGCTTTCCCTCTTTT
TTGTAAAGCAATGTCTGCCTAGTTTATTGTCCAGTTAACTTTAGTGACCTTTTAAAAGTTGGCATTGTAAATAAA
ACAACTTGCAAAAAAGTTTTCTGGAATAGAATTAACAAAATATTATCTTTATTCATGAGTTGGAAACTGGAAAAA
GGCTTCTTGAAGTAAATGTTCTGAGTGGAGCTACTAGGATGTCTTCCAGCCTCCTGCAGTCAAGGAGTACCACTG
TATTGATTAGCCTGTATGTAGCAGGGCTCCCTTCATTGCATCTGAGGACTTGTTTTCTTTTTCTTTATTTTTAAT
CCTCTTAGTTTTAAATATATTGCCTAGAGACTCAGTTACTACCCAGTTTGTGGTTTTTTGGGAGAAATGTAACTG
GACAGTTAGCTTTTCAATTAAAAAGACACTTAACCCATGTGGGATGTCATCTTTTTATAATTAGTGTTCCCATGT
GGAGAAAATTATTCACACTACTTGCATGTAAAGAATAATTTAACTTTTAACATTAAAATATGTGGTAAAACCCAG
AAAGCATCCATCATGAATGCAAGATACTTTCAATAAAAAGTAAGTTATATAGTAGGTAGTTAAGTTTGCTTTTGT
GGACTTAAATGTGTCTCTTCACTTAAATGGGTTGAATGTGTATATATTTGTTCAGCTTGAAAAGACTTAGTTTAT
ATCCTAGCTCACTGGAGGCTGCTGACATAACCATAACTTCTGTCCCTTCTAATTGTCATTTATATGCCTAACTGG
AGCTAGTACTTTAATTCTTAACACAAAATTACTCTGCCATTGTTTCCAGCTTCCCTCCTACAATAGAATGAAGTT
TTTTTGATGGCTTGAGATGGCTCACAAATTTTGATTTTTTTTTCTTCCTTGTGCTCCCTTTTTTTCTCCTTGCTT
TTCCAGTTAACATCTATATTCACATGTAATCTTGTTTTCTCTTCACATTCACTGAGTTGTTCAGGCTCAGATCAT
CCCTTGACAGTAGTTTGCCTTCATCTCACCTTTCATTTGTCCCCAAATTCACCTTATTTAATAAAGTCCCATATG
TTGTCTCACTTAA

FIGURE 162

MDDEGDDDPVPLPNVNAAILKKVIQWCTHHKDDPPPPEDDENKEKRTDDIPVWDQEFLKVDQGTLFELILAANYL
DIKGLLDVTCKTVANMIKGKTPEEIRKTFNIKNDFTEEEEAQVRKENQWCEEK

FIGURE 163

CAGAGGGCTGCTGGCTGGCTAAGTCCCTCCCGCTCCCGGCTCTCGCCTCACTAGGAGCGGCTCTCGGTGCAGCGG
GACAGGGCGAAGCGGCCTGCGCCCACGGAGCGCGCGACACTGCCCGGAAGGGACCGCCACCCTTGCCCCCTCAGC
TGCCCACTCGTGATTTCCAGCGGCCTCCGCGCGCGCACGATGCCCTCGGCCACCAGCCACAGCGGGAGCGGCAGC
AAGTCGTCCGGACCGCCACCGCCGTCGGGTTCCTCCGGGAGTGAGGCGGCCGCGGGAGCCGGGGCCGCCGCGCCG
GCTTCTCAGCACCCCGCAACCGGCACCGGCGCTGTCCAGACCGAGGCCATGAAGCAGATTCTCGGGGTGATCGAC
AAGAAACTTCGGAACCTGGAGAAGAAAAAGGGTAAGCTTGATGATTACCAGGAACGAATGAACAAAGGGGAAAGG
CTTAATCAAGATCAGCTGGATGCCGTTTCTAAGTACCAGGAAGTCACAAATAATTTGGAGTTTGCAAAAGAATTA
CAGAGGAGTTTCATGGCACTAAGTCAAGATATTCAGAAAACAATAAAGAAGACAGCACGTCGGGAGCAGCTTATG
AGAGAAGAAGCTGAACAGAAACGTTTAAAAACTGTACTTGAGCTACAGTATGTTTTGGACAAATTGGGAGATGAT
GAAGTGCGGACTGACCTGAAACAAGGTTTGAATGGAGTGCCAATATTGTCCGAAGAGGAGTTGTCATTGTTGGAT
GAATTCTATAAGCTAGTAGACCCTGAACGGGACATGAGCTTGAGGTTGAATGAACAGTATGAACATGCCTCCATT
CACCTGTGGGACCTGCTGGAAGGGAAGGAAAAACCTGTATGTGGAACCACCTATAAAGTTCTAAAGGAAATTGTT
GAGCGTGTTTTTCAGTCAAACTACTTTGACAGCACCCACAACCACCAGAATGGGCTGTGTGAGGAAGAAGAGGCA
GCCTCAGCACCTGCAGTTGAAGACCAGGTACCTGAAGCTGAACCTGAGCCAGCAGAAGAGTACACTGAGCAAAGT
GAAGTTGAATCAACAGAGTATGTAAATAGACAGTTCATGGCAGAAACACAGTTCACCAGTGGTGAAAAGGAGCAG
GTAGATGAGTGGACAGTTGAAACGGTTGAGGTGGTAAATTCACTCCAGCAGCAACCTCAGGCTGCATCCCCTTCA
GTACCAGAGCCCCACTCTTTGACTCCAGTGGCTCAGGCAGATCCCCTTGTGAGAAGACAGCGAGTACAAGACCTT
ATGGCACAAATGCAGGGTCCCTATAATTTCATACAGGATTCAATGCTGGATTTTGAAAATCAGACACTTGATCCT
GCCATTGTATCTGCACAGCCTATGAATCCAACACAAAACATGGACATGCCCCAGCTGGTTTGCCCTCCAGTTCAT
TCTGAATCTAGACTTGCTCAGCCTAATCAAGTTCCTGTACAACCAGAAGCGACACAGGTTCCTTTGGTATCATCC
ACAAGTGAGGGGTACACAGCATCTCAACCCTTGTACCAGCCTTCTCATGCTACAGAGCAACGACCACAGAAGGAA
CCAATTGATCAGATTCAGGCAACAATCTCTTTAAATACAGACCAGACTACAGCATCATCATCCCTTCCTGCTGCG
TCTCAGCCTCAAGTATTTCAGGCTGGGACAAGCAAACCTTTACATAGCAGTGGAATCAATGTAAATGCAGCTCCA
TTCCAATCCATGCAAACGGTGTTCAATATGAATGCCCCAGTTCCTCCTGTTAATGAACCAGAAACTTTAAAACAG
CAAAATCAGTACCAGGCCAGTTATAACCAGAGCTTTTCTAGTCAGCCTCACCAAGTAGAACAAACAGAGCTTCAG
CAAGAACAGCTTCAAACAGTGGTTGGCACTTACCATGGTTCCCCAGACCAGTCCCATCAAGTGACTGGTAACCAC
CAGCAGCCTCCTCAGCAGAACACTGGATTTCCACGTAGCAATCAGCCCTATTACAATAGTCGTGGTGTGTCTCGT
GGAGGCTCCCGTGGTGCTAGAGGCTTGATGAATGGATACCGGGGCCCTGCCAATGGATTCAGAGGAGGATATGAT
GGTTACCGCCCTTCATTCTCTAACACTCCAAACAGTGGTTATACACAGTCTCAGTTCAGTGCTCCCCGGGATTAC
TCTGGCTATCAACGGGATGGATATCAGCAGAATTTCAAGCGAGGCTCTGGGCAGAGTGGACCACGGGGAGCCCCA
CGAGGTCGTGGAGGGCCCCCAAGACCCAACAGAGGGATGCCGCAAATGAACACTCAGCAAGTGAATTAATCTGAT
TCACAGGATTATGTTTAATCGCCAAAAACACACTGGCCAGTGTACCATAATATGTTACCAGAAGAGTTATTATCT
ATTTGTTCTCCCTTTCAGGAAACTTATTGTAAAGGGACTGTTTTCATCCCATAAAGACAGGACTACAATTGTCAG
CTTTCTATTACCTGGATATGGAAGGAAACTATTTTTACTCTGCATGTTCTGTCCTAAGCGTCATCTTGAGCCTTG
CACATGATACTCAGATTCCTCACCCTTGCTTAGGAGTAAAACAATATACTTTACAGGGTGATAATAATCTCCATA
GTTATTTGAAGTGGCTTGAAAAAGGCAAGATTGACTTTTATGACATTGGATAAAATCTACAAATCAGCCCTCGAG
TTATTCAATGATAACTGACAAACTAAATTATTTCCCTAGAAAGGAAGATGAAAGGAGTGGAGTGTGGTTTGGCAG
AACAACTGCATTTCACAGCTTTTCCAGTTAAATTGGAGCACTGAACGTTCAGATGCATACCAAATTATGCATGGG
TCCTAATCACACATATAAGGCTGGCTACCAGCTTTGACACAGCACTGTTCATCTGGCCAAACAACTGTGGTTAAA
AACACATGTAAAATGCTTTTTAACAGCTGATACTGTATAAGACAAAGCCAAGATGCAAAATTAGGCTTTGATTGG
CACTTTTTGAAAAATATGCAACAAATATGGGATGTAATCCGGATGGCCGCTTCTGTACTTAATGTGAAATATTTA
GATACCTTTTTGAACACTTAACAGTTTCTTTGAGACAATGACTTTTGTAAGGATTGGTACTATCTATCATTCCTT
ATGACATGTACATTGTCTGTCACTAATCCTTGGATTTTGCTGTATTGTCACCTAAATTGGTACAGGTACTGATGA
AAATCTCTAGTGGATAATCATAACACTCTCGGTCACATGTTTTTCCTTCAGCTTGAAAGCTTTTTTTTAAAAGGA
AAAGATACCAAATGCCTGCTGCTACCACCCTTTTCAATTGCTATCTTTTGAAAGGCACCAGTATGTGTTTTAGAT
TGATTTCCCTGTTTCAGGGAAATCACGGACAGTAGTTTCAGTTCTGATGGTATAAGCAAAACAAATAAAACGTTT
ATAAAAGTTAAAAAAAAAAAAAAAAAA

FIGURE 164

MKQILGVIDKKLRNLEKKKGKLDDYQERMNKGERLNQDQLDAVSKYQEVTNNLEFAKELQRSFMALSQDIQKTIK
KTARREQLMREEAEQKRLKTVLELQYVLDKLGDDEVRTDLKQGLNGVPILSEEELSLLDEFYKLVDPERDMSLRL
NEQYEHASIHLWDLLEGKEKPVCGTTYKVLKEIVERVFQSNYFDSTHNHQNGLCEEEEAASAPAVEDQVPEAEPE
PAEEYTEQSEVESTEYVNRQFMAETQFTSGEKEQVDEWTVETVEVVNSLQQQPQAASPSVPEPHSLTPVAQADPL
VRRQRVQDLMAQMQGPYNFIQDSMLDFENQTLDPAIVSAQPMNPTQNMDMPQLVCPPVHSESRLAQPNQVPVQPE
ATQVPLVSSTSEGYTASQPLYQPSHATEQRPQKEPIDQIQATISLNTDQTTASSSLPAASQPQVFQAGTSKPLHS
SGINVNAAPFQSMQTVFNMNAPVPPVNEPETLKQQNQYQASYNQSFSSQPHQVEQTELQQEQLQTVVGTYHGSPD
QSHQVTGNHQQPPQQNTGFPRSNQPYYNSRGVSRGGSRGARGLMNGYRGPANGFRGGYDGYRPSFSNTPNSGYTQ
SQFSAPRDYSGYQRDGYQQNFKRGSGQSGPRGAPRGRGGPPRPNRGMPQMNTQQVN

FIGURE 165

CGGCTTCCTCCCGCTTTTTCTTCTCTCTCCTTGCGGTCTGAAGATGCCCTCGGCCACCAGCCACAGCGGGAGCGC
AGCAAGTCGTCCGGACCGCCACCGCCGTCGGGTTCCTCCGGGAGTGAGGCGGCCGCGGGAGCCGGGGCCGCCGCG
CCGGCTTCTCAGCACCCCGCAACCGGCACCGGCGCTGTCCAGACCGAGGCC**ATG**AAGCAGATTCTCGGGGTGATC
GACAAGAAACTTCGGAACCTGGAGAAGAAAAAGGGTAAGCTTGATGATTACCAGGAACGAATGAACAAAGGGGAA
AGGCTTAATCAAGATCAGCTGGATGCCGTTTCTAAGTACCAGGAAGTCACAAATAATTTGGAGTTTGCAAAAGAA
TTACAGAGGAGTTTCATGGCACTAAGTCAAGATATTCAGAAAACAATAAAGAAGACAGCACGTCGGGAGCAGCTT
ATGAGAGAAGAAGCTGAACAGAAACGTTTAAAAACTGTACTTGAGCTACAGTATGTTTTGGACAAATTGGGAGAT
GATGAAGTGCGGACTGACCTGAAACAAGGTTTGAATGGAGTGCCAATATTGTCCGAAGAGGAGTTGTCATTGTTG
GATGAATTCTATAAGCTAGTAGACCCTGAACGGGACATGAGCTTGAGGTTGAATGAACAGTATGAACATGCCTCC
ATTCACCTGTGGGACCTGCTGGAAGGGAAGGAAAAACCTGTATGTGGAACCACCTATAAAGTTCTAAAGGAAATT
GTTGAGCGTGTTTTTCAGTCAAACTACTTTGACAGCACCCACAACCACCAGAATGGGCTGTGTGAGGAAGAAGAG
GCAGACTCAGCACCTGCAGTTGAAGACCAGGTACCTGAAGCTGAACCTGAGCCAGCAGAAGAGTACACTGAGCAA
AGTGAAGTTGAATCAACAGAGTATGTAAATAGACAGTTCATGGCAGAAACACAGTTCACCAGTGGTGAAAAGGAG
CAGGTAGATGAGTGGACAGTTGAAACGGTTGAGGTGGTAAATTCACTCCAGCAGCAACCTCAGGCTGCATCCCCT
TCAGTACCAGAGCCCCACTCTTTGACTCCAGTGGCTCAGGCAGATCCCCTTGTGAGAAGACAGCGAGTACAAGAC
CTTATGGCACAAATGCAGGGTCCCGATAATTTCATACAGGATTCAATGCTGGATTTTGAAAATCAGACACTTGAT
CCTGCCATTGTATCTGCACAGCCTATGAATCCAACACAAAACATGGACATGCCCCAGCTGGTTTGCCCTCCAGTT
CATTCTGAATCTAGACTTGCTCAGCCTAATCAAGTTCCTGTACAACCAGAAGCGACACAGGTTCCTTTGGTATCA
TCCACAAGTGAGGGGTACACAGCATCTCAACCCTTGTACCAGCCTTCTCATGCTACAGAGCAACGACCACAGAAG
GAACCAATTGATCAGATTCAGGCAACAATCTCTTTAAATACAGACCAGACTACAGCATCATCATCCCTTCCTGCT
GCGTCTCAGCCTCAAGTATTTCAGGCTGGGACAAGCAAACCTTTACATAGCAGTGGAATCAATGTAAATGCAGCT
CCATTCCAATCCATGCAAACGGTGTTCAATATGAATGCCCCAGTTCCTCCTGTTAATGAACCAGAAACTTTAAAA
CAGCAAAATCAGTACCAGGCCAGTTATAACCAGAGCTTTTCTAGTCAGCCTCACCAAGTAGAACAAACAGAGCTT
CAGCAAGAACAGCTTCAAACAGTGGTTGGCACTTACCATGGTTCCCCAGACCAGTCCCATCAAGTGACTGGTAAC
CACCAGCAGCCTCCTCAGCAGAACACTGGATTTCCACGTAGCAATCAGCCCTATTACAATAGTCGTGGTGTGTCT
CGTGGAGGCTCCCGTGGTGCTAGAGGCTTGATGAATGGATACCGGGGCCCTGCAATGGATTCAGAGGAGGATATG
ATGGTTACCGCCCTTCATTCTCTAACACTCCAAACAGTGGTTATACACAGTCTCAGTTCAGTGCTCCCCGGGATT
ACTCTGGCTATCAACGGGATGGATATCAGCAGAATTTCAAGCGAGGCTCTGGGCAGAGTGGACCACGGGGAGCCC
CACGAGGTCGTGGAGGGCCCCCAAGACCCAACAGAGGGATGCCGCAAA**TGA**ACACTCAGCAAGTGAATTAATCTG
ATTCACAGGATTATGTTTAATCGCCAAAAACACACTGGCCAGTGTACCATAATATGTTACCAGAAGAGTTATTAT
CTATTTGTTCTCCCTTTCAGGAAACTTATTGTAAAGGGACTGTTTTCATCCCATAAAGACAGGACTACAATTGTC
AGCTTTCTATTACCTGGATATGGAAGGAAACTATTTTTACTCTGCATGTTCTGTCCTAAGCGTCATCTTGAGCCT
TGCACATGATACTCAGATTCCTCACCCTTGCTTAGGAGTAAAACAATATACTTTACAGGGTGATAATAATCTCCA
TAGTTATTTGAAGTGGCTTGAAAAAGGCAAGATTGACTTTTATGACATTGGATAAAATCTACAAATCAGCCCTCG
AGTTATTCAATGATAACTGACAAACTAAATTATTTCCCTAGAAAGGAAGATGAAAGGAGTGGAGTGTGGTTTGGC
CAGAACAACTGCATTTCACAGCTTTTCCAGTTAAATTGGAGCACTGAACGTTCAGATGCATACCAAATTATGCAT
GGGTCCTAATCACACATATAAGGCTGGCTACCAGCTTTGACACAGCACTGTTCATCTGGCCAAACAACTGTGGTT
AAAAACACATGTAAAATGGCTTTTTAACAGCTGATACTGTATAAGACAAAGCCAAGATGCAAAATTAGGCTTTGA
TTGGCACTTTTTGAAAAATATGCAACAAATATGGGATGTAATCCGGATGGCCGCTTCTGTACTTAATGTGAAATA
TTTAGATACCTTTTTGAACACTTAACAGTTTCTTTGAGACAATGACTTTGTAAGGATTGGTACTATCTATCATTC
CTTATGACATGTACATTGTCTGTCACTAATCCTTGGATTTTGCTGTATTGTCACCGGGATTGGTACAGGTACTGA
TGAAAATCTCTAGTGGATAATCATAACACTCTCGGTCACATGTTTTTCCTTCAGCTTGAAAGCTTTTTTTAAAAG
GAAAAGATACCAAATGCCTGCTGCTACCACCCTTTTCAATTGCTATGTTTTGAAAGGCACCAGTATGTGTTTTAG
ATTGATTTCCCTGTTTCAGGGAAATCACGGACAGTAGTTTCCG

FIGURE 166

MKQILGVIDKKLRNLEKKKGKLDDYQERMNKGERLNQDQLDAVSKYQEVTNNLEFAKELQRSFMALSQDIQKTIK
KTARREQLMREEAEQKRLKTVLELQYVLDKLGDDEVRTDLKQGLNGVPILSEEELSLLDEFYKLVDPERDMSLRL
NEQYEHASIHLWDLLEGKEKPVCGTTYKVLKEIVERVFQSNYFDSTHNHQNGLCEEEEADSAPAVEDQVPEAEPE
PAEEYTEQSEVESTEYVNRQFMAETQFTSGEKEQVDEWTVETVEVVNSLQQQPQAASPSVPEPHSLTPVAQADPL
VRRQRVQDLMAQMQGPDNFIQDSMLDFENQTLDPAIVSAQPMNPTQNMDMPQLVCPPVHSESRLAQPNQVPVQPE
ATQVPLVSSTSEGYTASQPLYQPSHATEQRPQKEPIDQIQATISLNTDQTTASSSLPAASQPQVFQAGTSKPLHS
SGINVNAAPFQSMQTVFNMNAPVPPVNEPETLKQQNQYQASYNQSFSSQPHQVEQTELQQEQLQTVVGTYHGSPD
QSHQVTGNHQQPPQQNTGFPRSNQPYYNSRGVSRGGSRGARGLMNGYRGPAMDSEEDMMVTALHSLTLQTVVIHS
LSSVLPGITLAINGMDISRISSEALGRVDHGEPHEVVEGPQDPTEGCRK

FIGURE 167

CTCTTTCCCTTCGGTGTGCCACTGAAGATCCTGGTGTCGCCATGGGCCGCCGCCCCGCCCGTTGTTACCGGTATT
GTAAGAACAAGCCGTACCCAAAGTCTCGCTTCTGCCGAGGTGTCCCTGATGCCAAGATTCGCATTTTTGACCTGG
GGCGGAAAAAGGCAAAAGTGGATGAGTTTCCGCTTTGTGGCCACATGGTGTCAGATGAATATGAGCAGCTGTCCT
CTGAAGCCCTGGAGGCTGCCCGAATTTGTGCCAATAAGTACATGGTAAAAAGTTGTGGCAAAGATGGCTTCCATA
TCCGGGTGCGGCTCCACCCCTTCCACGTCATCCGCATCAACAAGATGTTGTCCTGTGCTGGGGCTGACAGGCTCC
AAACAGGCATGCGAGGTGCCTTTGGAAAGCCCCAGGGCACTGTGGCCAGGGTTCACATTGGCCAAGTTATCATGT
CCATCCGCACCAAGCTGCAGAACAAGGAGCATGTGATTGAGGCCCTGCGCAGGGCCAAGTTCAAGTTTCCTGGCC
GCCAGAAGATCCACATCTCAAAGAAGTGGGGCTTCACCAAGTTCAATGCTGATGAATTTGAAGACATGGTGGCTG
AAAAGCGGCTCATCCCAGATGGCTGTGGGGTCAAGTACATCCCCAGTCGTGGCCCTCTGGACAAGTGGCGGGCCC
TGCACTCATGAGGGCTTCCAATGTGCTGCCCCCCTCTTAATACTCACCAATAAATTCTACTTCCTGTCCACCTAT
GTCTTTGTATCTACATTCTTGACGGGGAAGGAACTTCCTCTGGGAACCTTTGGGTCATTGCCCTTTCACTTCAGA
AACAGGTTGACAACTCAGCCCTGCTCATGAGGCAGCAAACCCTGCAAAGGGCTGGGACTGGTGGCCTTATGTCAG
TTGTCTACTCTGGAGCTTGACTTGGACCTCCCCAGGTCCTAGGCAGTAGGTTGAAAAACACTGAAGTGCTTTTCA
TGAAGCACAGCTGCAGCAAAGCCTTGCAATCCCAGGCTGGGGTCAGCCTACAGTTGTGTTGCTTATTACAACACA
TGCGGACCAAGAGGGGCTTGTGGGCTAGAGGCTGACCAGCAGCGTTTATTTAGCAAGGGTAGGTGTGCATCACAT
TGGGCTTGTTCTCACCCATCTGGTTTGGCCATTCCTCCTTGGTGGGAATCATCCAGGTACTGCTGAGGTCACCTG
CGATTTGCCCCATTTCCTATCTCTAGCAACCTCCTGGGCCCCATGCCCCCACCCCTTCTAGAACCTGCATTCCCA
GGGCCTTCACCACCTGACCAAAGGTCTAGGCTAACCTTTGGTCATTTGTAACAAGACCTCGGAACAGACACGTGT
GTGGCATGGTTTGGCCTGGGGATCTTAGATGTCTGACCTGAACTATTGTAGAACAGCGCTGGCTTTTGGGGGAGC
AGCAAAAATGAGAGGAGTGCTAGGTGGGTGGCCTGAGCATCTGTATCCAGGGACAGGACTCCAAAGGCTTTTGGT
CCCAGAGCTGGGGTATGTTGGCCCCAGCCCCCAGCCTGTGGCTCCCAAAAGGCCTCTGGTTTTTTGTAATCTCAG
TTTACAGCCATTTCTTAGGTTTTTAATTACCTTTATTTTATTTTGCCAAACATACCTGGGAATACCTTTTATTTT
TTTTTTACCTTGGGGTGATGGTTCCAAACCATAAATGTGATTATAGTTAACACATGACCCTTCTAGCGTCCCAGC
CAGTGTTTTTCCTGACCTCTCTTCTTTGGAGAGGAGGATGGAAGGGAGGGGTCCGGCATGCTGCTGGCATTTTGC
TGTGTCCTGCAGCCCCTTTCCGGGACACCTGGGTTCACACAGCTTTTTAGCTTACATAACTGGTGCAGATTTTCT
GTGTGGAGATGTTGCCTTGACCAGCCTTGGCTGGACTTTACCAGGCATGCAGAAGCCTGTACCAACACAGACTAC
AGCACCCAGGAGGTGCGAGTGTGGCTGCTCAGCGGTTATAACAGGCCTGACTGCATTGTTCACCGGATTATAATG
AGCCAAAATGTTTCCCGGTGTTTGCTGGTTTCAGGGAAGGAGTTTGATATAGCAGATTAACCACCCTCCTTGTAG
CTATTGGGGCTTAATGGTTTCCTGGTGATTCTTACCAATCCACAATAAACATGGCCCATTGGCATATCTGCAAAA
AAAAAAAAAAAAA

FIGURE 168

MGRRPARCYRYCKNKPYPKSRFCRGVPDAKIRIFDLGRKKAKVDEFPLCGHMVSDEYEQLSSEALEAARICANKY
MVKSCGKDGFHIRVRLHPFHVIRINKMLSCAGADRLQTGMRGAFGKPQGTVARVHIGQVIMSIRTKLQNKEHVIE
ALRRAKFKFPGRQKIHISKKWGFTKFNADEFEDMVAEKRLIPDGCGVKYIPSRGPLDKWRALHS

FIGURE 169A

CCGGCTCGGTACGCGCTCTGCTCCGAGCCGCTCACTGCGTGGTAGAGTCTGGTGCCCCCGCCGTCGCCTGCATCG
CCGCCACCGCCGCTCCGCCACGACCACCGCCGCCTCCTGCCCTGCAGCCACCGCCACCGCCTGTGTCGCCGCCGC
CTCGGGACCGGCTGTATGATTAGGCCACAATCTTCAATGAGTAAACATATTCCTCAATTCTGTGGTGTTCTTGGT
CACACATTTATGGAGTTTCTGAAGGGCAGTGGAGATTACTGCCAGGCACAGCACGACCTCTATGCAGACAAGTGA
ACTGTAGAAACTGATTACTGCTCCACCAAGAAGCCCCCATAAGAGTGGTTATCCTGGACACAGAAGTGTTGAATT
GAAATCCACAGAGCATTTTACAAGAGTTCTGACCTGGATGGGGTAAACCTCAGTGCACTTCTTTTCTGTTGGCCT
CAGTATTACTGGATTGAAGAATTGCTGCTTCTTGTTAGGAGGTTCATTTCACTTATCATTACTTACAACTTCATA
CTCAAAGCACTGAGAATTTCAAGTGGAGTATATTGAAGTAGACTTCAGTTTCTTTGCATCATTTCTGTATTCAAT
TTTTTTAATTATTTCATAACCCTATTGAGTGTTTTTTAACTAAATTAAC<u>ATG</u>GCTCGAATGAACCGCCCAGCTCC
TGTGGAAGTCACATACAAGAACATGAGATTTCTTATTACACACAATCCAACCAATGCGACCTTAAACAAATTTAT
AGAGGAACTTAAGAAGTATGGAGTTACCACAATAGTAAGAGTATGTGAAGCAACTTATGACACTACTCTTGTGGA
GAAAGAAGGTATCCATGTTCTTGATTGGCCTTTTGATGATGGTGCACCACCATCCAACCAGATTGTTGATGACTG
GTTAAGTCTTGTGAAAATTAAGTTTCGTGAAGAACCTGGTTGTTGTATTGCTGTTCATTGCGTTGCAGGCCTTGG
GAGAGCTCCAGTACTTGTTGCCCTAGCATTAATTGAAGGTGGAATGAAATACGAAGATGCAGTACAATTCATAAG
ACAAAAGCGGCGTGGAGCTTTTAACAGCAAGCAACTTCTGTATTTGGAGAAGTATCGTCCTAAAATGCGGCTGCG
TTTCAAAGATTCCAACGGTCATAGAAACAACTGTTGCATTCAA<u>TAA</u>AATTGGGGTGCCTAATGCTACTGGAAGTG
GAACTTGAGATAGGGCCTAATTTGTTATACATATTAGCCAACATGTTGGCTTAGTAAGTCTAATGAAGCTTCCAT
AGGAGTATTGAAAGGCAGTTTTACCAGGCCTCAAGCTAGACAGATTTGGCAACCTCTGTATTTGGGTTACAGTCA
ACCTATTTGGATACTTGGCAAAAGATTCTTGCTGTCAGCATATAAAATGTGCTTGTCATTTGTATCAATTGACCT
TTCCCCAAATCATGCAGTATTGAGTTATGACTTGTTAAATCTATTCCCATGCCAGAATCTTATCAATACATAAGA
AATTTAGGAAGATTAGGTGCCAAAATACCCAGCACAATACTTGTATATTTTTAGTACCATACAGAAGTAAAATCC
CAGGAACTATGAACACTAGACCTTATGTGGTTTATTCCTTCAATCATTTCAAACATTGAAAGTAGGGCCTACATG
GTTATTTGCCTGCTCACTTTATGTTTACATCTCCCACATTCATACCAATATACGTCAGGTTTGCTTAACCATTGA
TTTTTTTTTTTTTTTACCAAGTCTTACAGTGATTATTTTACGTGTTTCCATGTATCTCACTTTGTGCTGTATTAA
AAAAACCTCCATTTTGAAAATCTACGTTGTACAGAAGCACATGTCTTTAATGTCTTCAGACAAAAAAGCCTTACA
TTAATTTAATGTTTGCACTCTGAGGTGCAACTTAACAGGGAGGGCCTGAGAAAAGAATGGGAGGGGGCTATTAAT
TATTTTTTAGCAAAATGTTGCCTTTGTCTTGTGCAAACATGTAGAATATGCTCTTTAATTTAGTAAAATATTTTT
TTAAAAGGTAGAGATGCTTTGTTATTGTAATCATAAACTTCCTGAAATTCTTGTAATTTTTTTCCCATACTTATC
AGAAGTGTGTTTACCAACTTATTTTTGTTTGAAAGTGTGATTTTTTTTTTCCTTCCCAACCTCTCTTGCAAAAAA
AGAAATGGGTTTCTGCTAATGAATTGAGCACATCTAATATTTTATATGCCTTTTGGAGCTGTGTAAGTTAATATT
TGATACTTGACAATTTGTTTTATTATGTAATTGATAAAATGGTGATGTGTATTAATGTTAGTTCAACCATATATT
TATACTGTCTGGGGATGTGTGGTTATAGTTCTGTGGGAGAAATAATTTTGTCAGTGTTCACCAGCTTGTAAAAAC
TTAGTGCGAGAGCTGAAACATCTAAATAAATAATGACATGCATTTATCATCATTGAGATTGGTTTGCTTTAAATT
AACTTATTTTGTAGAAGACAAAATGAATTGCACTTCACTTAATGTGTGTCCTCATCTTTTTACAAATAAATGAAG
GATTATAAATGATGTCAGCATTTTAGTAAACTTTTAGACAAAATTTGTTAGGGTCATTCATGAAAACTTTAATAC
TAAAAGCACTTTCCATTATATACTTTTTAAAGGTCTAGATAATTTTGAACCAATTTATTATTGTGTACTGAGGAG
AAATAATGTATAGTAGAGGACAGCCTTGGTTTGTAAAGCTCAGTTCCACTAGTTCATGGTTTTGTGCAACTTCTG
AGCCTCAGTTTTCTCCTTTGCAAATTAATAATTACATACCTTTATAGATTTTGAAATTAATTTAAATATTAGTAT
TTGGTACATGAAGGCTTAATGTTAAGTTTCCTTTAATGATCCACAATAATCCCTTTGATCACGTTAATCTAAATC
TAGATGTCTTTGTCTAATTTTTTTTGAATAGCAGTTATAAATGTAAAGGACTCAAAGTTTAAGTAAAAAGTGATA
CTCCACCTTGTGTTTCAAAGAATTTAGTTCCACCTCTTCATACCAGTTTAACACTTAATATATTTCATTGGATTT
TAGACAGGGCAAAAGGAAGAACAGGGGCCTCTGGAGGCCCTTGGTTATTTAAATCTTGGATTATTTGTGATAGTA
ATCACAAATTTTTGGCTAATTTTTAACCTGAGGTTTTGTTTTTTTTTTTAAAGGAAATGCAGCCTAGTCTTGAGAA
CATAATTTTATATAATCAATTACTAAATGTTAAACTATTACCACACAGCCCATAAAACAGCATTTGCGTTTATTG
AGAGAGAGGATGTGCCATCATGATTAATGAAAACTATCTTTTGAGTTTGAAAAGAAATTAATTTGCAGTGTTTGG
ATTGTATATATGGTGCTAAAAATAAATTAATTTACTTTATAAACCTTATCTGTACATTATACGATGTGATGAAAT
TTGCTTTTTATCCAAATATTTTGTATCTTGTAAATATGGCTAATTATAGGAATGCCTATAATACATCTTAGATTC
CTTATATCTAATAAGAGTTCAAAGAGTTATGAGTTGAAGTCTTGAATGCAGGAAACTATCTGATAGTGTTCTAAA

FIGURE 169B

ATTTGGTTACTTGGGTTTGGATACCCTTAGTGGGATGATGTAAATAGAGGCTAGCTACCTAGGCTTGTCTATAGC
AACCATAATGTTGATGTAAGTAATGCGGTTACTGAATCATAAGAAAATGCCATCTCTTTTTAGTTGAAGGAAAAC
TCTGGAAGTAGGTGCCATTGGTCATTCTGCAGTGCACTGCAACCATTGTTTCCCCTAGTGCCCTCTTTTCCCTAG
GGCATTGCTCTCCTATTCCCACGCCTTAACACAGCTCTATACCTAGAAGCAGCCAGCCCAGGCATGCAGTCACAT
TTAATCACATCCCCCTTCTAGAGTGCTTCAAAATGATGTAGTCCCTCAACTTGGCTAAAGAATCTCAATCTCTTG
AAATTTATTTTTTAATGTCATATTCATCTGGTAAATATCTACTGTTTGCCAGGCATTTAAGAATATGGCAAAGA
ACATAAAAGATGGTGTCACCAGATTTTGGTCACCAATGAGTACCCGACCCGTTGCCATGATTAAGAGAGAATGCT
TTCTATTGGAGTTTCAGGAAATATAATTTGAGAATACTTTAAAGGGAAGTGGAAGTATAAGTGAATGATATTTTT
CTTTTACATGTAAACAATGAAGTTATTTCAAAGTTAAGTTTTAAACAAAATACATGAAGTAGTGTCTGCCATACA
TGTTAATATTCTACATTCTTGCTTCCTTAAATTAATATGTTTGTGTGTATATATGTGCCTCACACCTGAATTGAA
AATTAAAGACTGGTTTAAAAGTGGTTAAAAAAAAAAAAAAAAAA

FIGURE 170

MARMNRPAPVEVTYKNMRFLITHNPTNATLNKFIEELKKYGVTTIVRVCEATYDTTLVEKEGIHVLDWPFDDGAP
PSNQIVDDWLSLVKIKFREEPGCCIAVHCVAGLGRAPVLVALALIEGGMKYEDAVQFIRQKRRGAFNSKQLLYLE
KYRPKMRLRFKDSNGHRNNCCIQ

FIGURE 171A

CCGGCTCGGTACGCGCTCTGCTCCGAGCCGCTCACTGCGTGGTAGAGTCTGGTGCCCCCGCCGTCGCCTGCATCG
CCGCCACCGCCGCTCCGCCACGACCACCGCCGCCTCCTGCCCTGCAGCCACCGCCACCGCCTGTGTCGCCGCCGC
CTCGGGACCGGCTGTATGATTAGGCCACAATCTTCAATGAGTAAACATATTCCTCAATTCTGTGGTGTTCTTGGT
CACACATTTATGGAGTTTCTGAAGGGCAGTGGAGATTACTGCCAGGCACAGCACGACCTCTATGCAGACAAGTGA
ACTGTAGAAACTGATTACTGCTCCACCAAGAAGCCCCCATAAGAGTGGTTATCCTGGACACAGAAGTGTTGAATT
GAAATCCACAGAGCATTTTACAAGAGTTCTGACCTGGATGGGGTAAACCTCAGTGCACTTCTTTTCTGTTGGCCT
CAGTATTACTGGATTGAAGAATTGCTGCTTCTTGTTAGGAGGTTCATTTCACTTATCATTACTTACAACTTCATA
CTCAAAGCACTGAGAATTTCAAGTGGAGTATATTGAAGTAGACTTCAGTTTCTTTGCATCATTTCTGTATTCAAT
TTTTTTAATTATTTCATAACCCTATTGAGTGTTTTTTAACTAAATTAACATGGCTCGAATGAACCGCCCAGCTCC
TGTGGAAGTCACATACAAGAACATGAGATTTCTTATTACACACAATCCAACCAATGCGACCTTAAACAAATTTAT
AGAGGAACTTAAGAAGTATGGAGTTACCACAATAGTAAGAGTATGTGAAGCAACTTATGACACTACTCTTGTGGA
GAAAGAAGGTATCCATGTTCTTGATTGGCCTTTTGATGATGGTGCACCACCATCCAACCAGATTGTTGATGACTG
GTTAAGTCTTGTGAAAATTAAGTTTCGTGAAGAACCTGGTTGTTGTATTGCTGTTCATTGCGTTGCAGGCCTTGG
GAGAGCTCCAGTACTTGTTGCCCTAGCATTAATTGAAGGTGGAATGAAATACGAAGATGCAGTACAATTCATAAG
ACAAAAGCGGCGTGGAGCTTTTAACAGCAAGCAACTTCTGTATTTGGAGAAGTATCGTCCTAAAATGCGGCTGCG
TTTCAAAGATTCCAACGGTCATAGAAACAACTGTTGCATTCAATAAAATTGGGGTGCCTAATGCTACTGGAAGTG
GAACTTGAGATAGGGCCTAATTTGTTATACATATTAGCCAACATGTTGGCTTAGTAAGTCTAATGAAGCTTCCAT
AGGAGTATTGAAAGGCAGTTTTACCAGGCCTCAAGCTAGACAGATTTGGCAACCTCTGTATTTGGGTTACAGTCA
ACCTATTTGGATACTTGGCAAAAGATTCTTGCTGTCAGCATATAAAATGTGCTTGTCATTTGTATCAATTGACCT
TTCCCCAAATCATGCAGTATTGAGTTATGACTTGTTAAATCTATTCCCATGCCAGAATCTTATCAATACATAAGA
AATTTAGGAAGATTAGGTGCCAAAATACCCAGCACAATACTTGTATATTTTTAGTACCATACAGAAGTAAAATCC
CAGGAACTATGAACACTAGACCTTATGTGGTTTATTCCTTCAATCATTTCAAACATTGAAAGTAGGGCCTACATG
GTTATTTGCCTGCTCACTTTATGTTTACATCTCCCACATTCATACCAATATACGTCAGGTTTGCTTAACCATTGA
TTTTTTTTTTTTTTTACCAAGTCTTACAGTGATTATTTTACGTGTTTCCATGTATCTCACTTTGTGCTGTATTAA
AAAAACCTCCATTTTGAAAATCTACGTTGTACAGAAGCACATGTCTTTAATGTCTTCAGACAAAAAAGCCTTACA
TTAATTTAATGTTTGCACTCTGAGGTGCAACTTAACAGGGAGGGCCTGAGAAAAGAATGGGAGGGGGCTATTAAT
TATTTTTTAGCAAAATGTTGCCTTTGTCTTGTGCAAACATGTAGAATATGCTCTTTAATTTAGTAAAATATTTTT
TTAAAAGGTAGAGATGCTTTGTTATTGTAATCATAAACTTCCTGAAATTCTTGTAATTTTTTTCCCATACTTATC
AGAAGTGTGTTTACCAACTTATTTTTGTTTGAAAGTGTGATTTTTTTTTTCCTTCCCAACCTCTCTTGCAAAAAA
AGAAATGGGTTTCTGCTAATGAATTGAGCACATCTAATATTTTATATGCCTTTTGGAGCTGTGTAAGTTAATATT
TGATACTTGACAATTTGTTTTATTATGTAATTGATAAAATGGTGATGTGTATTAATGTTAGTTCAACCATATATT
TATACTGTCTGGGGATGTGTGGTTATAGTTCTGTGGGAGAAATAATTTTGTCAGTGTTCACCAGCTTGTAAAAAC
TTAGTGCGAGAGCTGAAACATCTAAATAAATAATGACATGCATTTATCATCATTGAGATTGGTTTGCTTTAAATT
AACTTATTTTGTAGAAGACAAAATGAATTGCACTTCACTTAATGTGTGTCCTCATCTTTTTACAAATAAATGAAG
GATTATAAATGATGTCAGCATTTTAGTAAACTTTTAGACAAAATTTGTTAGGGTCATTCATGAAAACTTTAATAC
TAAAAGCACTTTCCATTATATACTTTTTAAAGGTCTAGATAATTTTGAACCAATTTATTATTGTGTACTGAGGAG
AAATAATGTATAGTAGAGGACAGCCTTGGTTTGTAAAGCTCAGTTCCACTAGTTCATGGTTTTGTGCAACTTCTG
AGCCTCAGTTTTCTCCTTTGCAAATTAATAATTACATACCTTTATAGATTTTGAAATTAATTTAAATATTAGTAT
TTGGTACATGAAGGCTTAATGTTAAGTTTCCTTTAATGATCCACAATAATCCCTTTGATCACGTTAATCTAAATC
TAGATGTCTTTGTCTAATTTTTTTTGAATAGCAGTTATAAATGTAAAGGACTCAAAGTTTAAGTAAAAAGTGATA
CTCCACCTTGTGTTTCAAAGAATTTAGTTCCACCTCTTCATACCAGTTTAACACTTAATATATTTCATTGGATTT
TAGACAGGGCAAAAGGAAGAACAGGGGCCTCTGGAGGCCCTTGGTTATTTAAATCTTGGATTATTTGTGATAGTA
ATCACAAATTTTTGGCTAATTTTTAACCTGAGGTTTTGTTTTTTTTTTAAAGGAAATGCAGCCTAGTCTTGAGAA
CATAATTTTATATAATCAATTACTAAATGTTAAACTATTACCACACAGCCCATAAAACAGCATTTGCGTTTATTG
AGAGAGAGGATGTGCCATCATGATTAATGAAAACTATCTTTTGAGTTTGAAAAGAAATTAATTTGCAGTGTTTGG
ATTGTATATATGGTGCTAAAAATAAATTAATTTACTTTATAAACCTTATCTGTACATTATACGATGTGATGAAAT
TTGCTTTTTATCCAAATATTTTGTATCTTGTAAATATGGCTAATTATAGGAATGCCTATAATACATCTTAGATTC
CTTATATCTAATAAGAGTTCAAAGAGTTATGAGTTGAAGTCTTGAATGCAGGAAACTATCTGATAGTGTTCTAAA

FIGURE 171B

ATTTGGTTACTTGGGTTTGGATACCCTTAGTGGGATGATGTAAATAGAGGCTAGCTACCTAGGCTTGTCTATAGC
AACCATAATGTTGATGTAAGTAATGCGGTTACTGAATCATAAGAAAATGCCATCTCTTTTTAGTTGAAGGAAAAC
TCTGGAAGTAGGTGCCATTGGTCATTCTGCAGTGCACTGCAACCATTGTTTCCCCTAGTGCCCTCTTTTCCCTAG
GGCATTGCTCTCCTATTCCCACGCCTTAACACAGCTCTATACCTAGAAGCAGCCAGCCCAGGCATGCAGTCACAT
TTAATCACATCCCCCTTCTAGAGTGCTTCAAAATGATGTAGTCCCTCAACTTGGCTAAAGAATCTCAATCTCTTG
AAATTTATTTTTTTAATGTCATATTCATCTGGTAAATATCTACTGTTTGCCAGGCATTTAAGAATATGGCAAAGA
ACATAAAAGATGGTGTCACCAGATTTTGGTCACCAATGAGTACCCGACCCGTTGCCATGATTAAGAGAGAATGCT
TTCTATTGGAGTTTCAGGAAATATAATTTGAGAATACTTTAAAGGGAAGTGGAAGTATAAGTGAATGATATTTTT
CTTTTACATGTAAACAATGAAGTTATTTCAAAGTTAAGTTTTAAACAAAATACATGAAGTAGTGTCTGCCATACA
TGTTAATATTCTACATTCTTGCTTCCTTAAATTAATATGTTTGTGTGTATATATGTGCCTCACACCTGAATTGAA
AATTAAAGACTGGTTTAAAAGTGGTTAAAAAAAAAAAAAAAAAA

FIGURE 172

MARMNRPAPVEVTYKNMRFLITHNPTNATLNKFIEELKKYGVTTIVRVCEATYDTTLVEKEGIHVLDWPFDDGAP
PSNQIVDDWLSLVKIKFREEPGCCIAVHCVAGLGRAPVLVALALIEGGMKYEDAVQFIRQKRRGAFNSKQLLYLE
KYRPKMRLRFKDSNGHRNNCCIQ

FIGURE 173

CAGGATCTTGAGAGTTTAGCTGCTAGCAGGAAGCAGTGAAGGGGTCACTGAAGATTGAGGAGAGAACAGTTTAGC
TGGATGGCATAAATGTTAAAGAGGGGAAGGAGTTTCCTGAGAAAAGAATGGGAGGGGGCTATTAATTATTTTTAG
CAAAATGTTGCCTTTGTCTTGTGCAAACATGTAGAATATGCTCTTTAATTTAGTAAAATATTTTTTTAAAAGGTA
GAGATGCTTTGTTATTGTAATCATAAACTTCCTGAAATTCTTGTAATTTTTTTCCCATACTTATCAGAAGTGTGT
TTACCAACTTATTTTTGTTTGAAAGTGTGATTTTTTTTTTCCTTCCCAACCTCTCTTGCAAAAAAAGAAATGGGT
TTCTGCTAATGAATTGAGCAGACATCTAATATTTTATATGCCTTTTGAGCTGTGTAACTTAATATTTGGATACTT
GACAATTTGTTTTATTATGTAATTGATAAAATGGTGATGTGTATTAATGTTAGTTCAACCATATATTTATACTGT
CTGGGGATGTGTGGTTATAGTTCTGTGGGAGAAATAATTTTGTCAGTGTTCACCAGCTTGTAAAAACTTAGTGCG
AGAGCTGAAACATCTAAATAAATAATGACATGCATTTATCATCATTGAGATTGGTTTGCTTAAAATTAACTTATT
TTGTAGAAGACAAAATGAATTGCACTTCACTTAATGTGTGTCCTCATCTTTTTACAAATAAATGAAGGATTATAA
ATGATGTCAGCATTTTAGTAAACTTTTAGACAAAATTTGTTAGGGTCATTCATGAAAACTTTAATACTAAAAGCA
CTTTCCATTATATACTTTTTAAAGGTCTAGATAATTTTGAACCAATTTATTATTGTGTACTGAGGAGAAATAATG
TATAGTAGAGGACAGCCTTGGTTTGTAAAGCTCAGTTCCACTAGTTCATGGTTTTGTGCAACTTCTGAGCCTCAG
TTTTCTCCTTTGCAAATTAATAATTACATACCTTTATAGATTTTGAAATTAATTTAAATATTAGTATTTGGTACA
TGAAGGCTTAATGTTAAGTTTCCTTTAATGATCCACAATAATCCCTTTGATCACGTTAATCTAAATCTAGATGTC
TTTGTCTAATTTTTTTTGAATAGCAGTTATAAATGTAAAGGACTCAAAGTTTAAGTAAAAAGTGATACTCCACCT
TGTGTTTCAAAGAATTTAGTTCCACCTCTTCATACCAGTTTAACACTTAATATATTTCATTGGATTTTAGACAGG
GCAAAAGGAAGAACAGGGGCCTCTGGAGGCCCTTGGTTATTTAAATCTTGGATTATTTGTGATAGTAATCACAAA
TTTTTGGCTAATTTTTAACCTGAGGTTTTGTTTTTTTTTTAAAGGAAATGCAGCCTAGTCTTGAGAACATAATTT
TATATAATCAATTACTAAATGTTAAACTATTACCACACAGCCCATAAAACAGCATTTGCGTTTATTGAGAGAGAG
GATGTGCCATCATGATTAATGAAAACTATCTTTTGAGTTTGAAAAGAAATTAATTTGCAGTGTTTGGATTGTATA
TATGGTGCTAAAAATAAATTAATTTACTTTATAAACCTTATCTGTACATTATACGATGTGATGAAATTTGCTTTT
TATCCAAATATTTTGTATCTTGTAAATATGGCTAATTATAGGAATGCCTATAATACATCTTAGATTCCTTATATC
TAATAAGAGTTCAAAGAGTTATGAGTTGAAGTCTTGAATGCAGGAAACTATCTGATAGTGTTCTAAAATTTGGTT
ACTTGGGTTTGGATACCCTTAGTGGGATGATGTAAATAGAGGCTAGCTACCTAGGCTTGTCTATAGCAACCATAA
TGTTGATGTAAGTAATGCGGTTACTGAATCATAAGAAAATGCCATCTCTTTTTAGTTGAAGGAAAACTCTGGAAG
TAGGTGCCATTGGTCATTCTGCAGTGCACTGCAACCATTGTTTCCCCTAGTGCCCTCTTTTCCCTAGGGCATTGC
TCTCCTATTCCCACGCCTTAACACAGCTCTATACCTAGAAGCAGCCAGCCCAGGCATGCAGTCACATTTAATCAC
ATCCCCCTTCTAGAGTGCTTCAAAATGATGTAGTCCCTCAACTTGGCTAAAGAATCTCAATCTCTTGAAATTTAT
TTTTTTAATGTCATATTCATCTGGTAAATATCTACTGTTTGCCAGGCATTTAAGAATATGGCAAAGAACATAAAA
GATGGTGTCACCAGATTTTGGTCACCAATGAGTACCCGACCCGTTGCCATGATTAAGAGAGAATGCTTTCTATTG
GAGTTTCAGGAAATATAATTTGAGAATACTTTAAAGGGAAGTGGAAGTATAAGTGAATGATATTTTTCTTTTACA
TGTAAACAATGAAGTTATTTCAAAGTTAAGTTTTAAACAAAATACATGAAGTAGTGTCTGCCATACATGTTAATA
TTCTACATTCTTGCTTCCTTAAATTAATATGTTTGTGTGTATATATGTGCCTCACACCTGAATTGAAAATTAAAG
ACTGGTTTAAAAGTGGTTTAAAAGTGACATTTAATGTTTCTCCATTACGTTTGGGGTAACCAGCCTAAGTGGAAT
CTTGGAAGGAAAGTAAGGGAAAAACTTGTATTTGCCTTCAATGAATTAAACCAGTGATATGTGTTAACGTATGAA
TGAAAGGATTGATGGTGATTTTATAATTATATATATTGCCGCAGTAACCAGTTAATAAATTGATAGCTACCATTT
AA

FIGURE 174

QDLESLAASRKQ

FIGURE 175

AGCGCACGTCGGCAGTCGGCTCCCTCGTTGACCGAATCACCGACCTCTCTCCCCAGCTGTATTTCCAAAATGTCG
CTTTCTAACAAGCTGACGCTGGACAAGCTGGACGTTAAAGGGAAGCGGGTCGTTATGAGAGTCGACTTCAATGTT
CCTATGAAGAACAACCAGATAACAAACAACCAGAGGATTAAGGCTGCTGTCCCAAGCATCAAATTCTGCTTGGAC
AATGGAGCCAAGTCGGTAGTCCTTATGAGCCACCTAGGCCGGCCTGATGGTGTGCCCATGCCTGACAAGTACTCC
TTAGAGCCAGTTGCTGTAGAACTCAAATCTCTGCTGGGCAAGGATGTTCTGTTCTTGAAGGACTGTGTAGGCCCA
GAAGTGGAGAAAGCCTGTGCCAACCCAGCTGCTGGGTCTGTCATCCTGCTGGAGAACCTCCGCTTTCATGTGGAG
GAAGAAGGGAAGGGAAAAGATGCTTCTGGGAACAAGGTTAAAGCCGAGCCAGCCAAAATAGAAGCTTTCCGAGCT
TCACTTTCCAAGCTAGGGGATGTCTATGTCAATGATGCTTTTGGCACTGCTCACAGAGCCCACAGCTCCATGGTA
GGAGTCAATCTGCCACAGAAGGCTGGTGGGTTTTTGATGAAGAAGGAGCTGAACTACTTTGCAAAGGCCTTGGAG
AGCCCAGAGCGACCCTTCCTGGCCATCCTGGGCGGAGCTAAAGTTGCAGACAAGATCCAGCTCATCAATAATATG
CTGGACAAAGTCAATGAGATGATTATTGGTGGTGGAATGGCTTTTACCTTCCTTAAGGTGCTCAACAACATGGAG
ATTGGCACTTCTCTGTTTGATGAAGAGGGAGCCAAGATTGTCAAAGACCTAATGTCCAAAGCTGAGAAGAATGGT
GTGAAGATTACCTTGCCTGTTGACTTTGTCACTGCTGACAAGTTTGATGAGAATGCCAAGACTGGCCAAGCCACT
GTGGCTTCTGGCATACCTGCTGGCTGGATGGGCTTGGACTGTGGTCCTGAAAGCAGCAAGAAGTATGCTGAGGCT
GTCACTCGGGCTAAGCAGATTGTGTGGAATGGTCCTGTGGGGGTATTTGAATGGGAAGCTTTTGCCCGGGGAACC
AAAGCTCTCATGGATGAGGTGGTGAAAGCCACTTCTAGGGGCTGCATCACCATCATAGGTGGTGGAGACACTGCC
ACTTGCTGTGCCAAATGGAACACGGAGGATAAAGTCAGCCATGTGAGCACTGGGGGTGGTGCCAGTTTGGAGCTC
CTGGAAGGTAAAGTCCTTCCTGGGGTGGATGCTCTCAGCAATATTTAGTACTTTCCTGCCTTTTAGTTCCTGTGC
ACAGCCCCTAAGTCAACTTAGCATTTTCTGCATCTCCACTTGGCATTAGCTAAAACCTTCCATGTCAAGATTCAG
CTAGTGGCCAAGAGATGCAGTGCCAGGAACCCTTAAACAGTTGCACAGCATCTCAGCTCATCTTCACTGCACCCT
GGATTTGCATACATTCTTCAAGATCCCATTTGAATTTTTTAGTGACTAAACCATTGTGCATTCTAGAGTGCATAT
ATTTATATTTTGCCTGTTAAAAAGAAAGTGAGCAGTGTTAGCTTAGTTCTCTTTTGATGTAGGTTATTATGATTA
GCTTTGTCACTGTTTCACTACTCAGCATGGAAACAAGATGAAATTCCATTTGTAGGTAGTGAGACAAAATTGATG
ATCCATTAAGTAAACAATAAAAGTGTCCATTGAAACCGTGATTTTTTTTTTTTTCCTGTCATACTTTGTTAGGAA
GGGTGAGAATAGAATCTTGAGGAACGGATCAGATGTCTATATTGCTGAATGCAAGAAGTGGGGCAGCAGCAGTGG
AGAGATGGGACAATTAGATAAATGTCCATTCTTTATCAAGGGCCTACTTTATGGCAGACATTGTGCTAGTGCTTT
TATTCTAACTTTTATTTTTATCAGTTACACATGATCATAATTTAAAAAGTCAAGGCTTATAACAAAAAAGCCCCA
GCCCATTCCTCCCATTCAAGATTCCCACTCCCCAGAGGTGACCACTTTCAACTCTTGAGTTTTTCAGGTATATAC
CTCCATGTTTCTAAGTAATATGCTTATATTGTTCACTTCCTTTTTTTTTATTTTTTAAAGAAATCTATTTCATAC
CATGGAGGAAGGCTCTGTTCCACATATATTTCCACTTCTTCATTCTCTCGGTATAGTTTTGTCACAATTATAGAT
TAGATCAAAAGTCTACATAACTAATACAGCTGAGCTATGTAGTATGCTATGATTAAATTTACTTATGTAAAAAAA
AAAAAAAAAAAA

FIGURE 176

MSLSNKLTLDKLDVKGKRVVMRVDFNVPMKNNQITNNQRIKAAVPSIKFCLDNGAKSVVLMSHLGRPDGVPMPDK
YSLEPVAVELKSLLGKDVLFLKDCVGPEVEKACANPAAGSVILLENLRFHVEEEGKGKDASGNKVKAEPAKIEAF
RASLSKLGDVYVNDAFGTAHRAHSSMVGVNLPQKAGGFLMKKELNYFAKALESPERPFLAILGGAKVADKIQLIN
NMLDKVNEMIIGGGMAFTFLKVLNNMEIGTSLFDEEGAKIVKDLMSKAEKNGVKITLPVDFVTADKFDENAKTGQ
ATVASGIPAGWMGLDCGPESSKKYAEAVTRAKQIVWNGPVGVFEWEAFARGTKALMDEVVKATSRGCITIIGGGD
TATCCAKWNTEDKVSHVSTGGGASLELLEGKVLPGVDALSNI

FIGURE 177

AGCGCACGTCGGCAGTCGGCTCCCTCGTTGACCGAATCACCGACCTCTCTCCCCAGCTGTATTTCCAAAATGTCG
CTTTCTAACAAGCTGACGCTGGACAAGCTGGACGTTAAAGGGAAGCGGGTCGTTATGAGAGTCGACTTCAATGTT
CCTATGAAGAACAACCAGATAACAAACAACCAGAGGATTAAGGCTGCTGTCCCAAGCATCAAATTCTGCTTGGAC
AATGGAGCCAAGTCGGTAGTCCTTATGAGCCACCTAGGCCGGCCTGATGGTGTGCCCATGCCTGACAAGTACTCC
TTAGAGCCAGTTGCTGTAGAACTCAAATCTCTGCTGGGCAAGGATGTTCTGTTCTTGAAGGACTGTGTAGGCCCA
GAAGTGGAGAAAGCCTGTGCCAACCCAGCTGCTGGGTCTGTCATCCTGCTGGAGAACCTCCGCTTTCATGTGGAG
GAAGAAGGGAAGGGAAAAGATGCTTCTGGGAACAAGGTTAAAGCCGAGCCAGCCAAAATAGAAGCTTTCCGAGCT
TCACTTTCCAAGCTAGGGGATGTCTATGTCAATGATGCTTTTGGCACTGCTCACAGAGCCCACAGCTCCATGGTA
GGAGTCAATCTGCCACAGAAGGCTGGTGGGTTTTTGATGAAGAAGGAGCTGAACTACTTTGCAAAGGCCTTGGAG
AGCCCAGAGCGACCCTTCCTGGCCATCCTGGGCGGAGCTAAAGTTGCAGACAAGATCCAGCTCATCAATAATATG
CTGGACAAAGTCAATGAGATGATTATTGGTGGTGGAATGGCTTTTACCTTCCTTAAGGTGCTCAACAACATGGAG
ATTGGCACTTCTCTGTTTGATGAAGAGGGAGCCAAGATTGTCAAAGACCTAATGTCCAAAGCTGAGAAGAATGGT
GTGAAGATTACCTTGCCTGTTGACTTTGTCACTGCTGACAAGTTTGATGAGAATGCCAAGACTGGCCAAGCCACT
GTGGCTTCTGGCATACCTGCTGGCTGGATGGGCTTGGACTGTGGTCCTGAAAGCAGCAAGAAGTATGCTGAGGCT
GTCACTCGGGCTAAGCAGATTGTGTGGAATGGTCCTGTGGGGGTATTTGAATGGGAAGCTTTTGCCCGGGGAACC
AAAGCTCTCATGGATGAGGTGGTGAAAGCCACTTCTAGGGGCTGCATCACCATCATAGGTGGTGGAGACACTGCC
ACTTGCTGTGCCAAATGGAACACGGAGGATAAAGTCAGCCATGTGAGCACTGGGGGTGGTGCCAGTTTGGAGCTC
CTGGAAGGTAAAGTCCTTCCTGGGGTGGATGCTCTCAGCAATATTTAGTACTTTCCTGCCTTTTAGTTCCTGTGC
ACAGCCCCTAAGTCAACTTAGCATTTTCTGCATCTCCACTTGGCATTAGCTAAAACCTTCCATGTCAAGATTCAG
CTAGTGGCCAAGAGATGCAGTGCCAGGAACCCTTAAACAGTTGCACAGCATCTCAGCTCATCTTCACTGCACCCT
GGATTTGCATACATTCTTCAAGATCCCATTTGAATTTTTTAGTGACTAAACCATTGTGCATTCTAGAGTGCATAT
ATTTATATTTTGCCTGTTAAAAAGAAAGTGAGCAGTGTTAGCTTAGTTCTCTTTTGATGTAGGTTATTATGATTA
GCTTTGTCACTGTTTCACTACTCAGCATGGAAACAAGATGAAATTCCATTTGTAGGTAGTGAGACAAAATTGATG
ATCCATTAAGTAAACAATAAAAGTGTCCATTGAAACCGTGATTTTTTTTTTTTCCTGTCATACTTTGTTAGGAA
GGGTGAGAATAGAATCTTGAGGAACGGATCAGATGTCTATATTGCTGAATGCAAGAAGTGGGGCAGCAGCAGTGG
AGAGATGGGACAATTAGATAAATGTCCATTCTTTATCAAGGGCCTACTTTATGGCAGACATTGTGCTAGTGCTTT
TATTCTAACTTTTATTTTTATCAGTTACACATGATCATAATTTAAAAAGTCAAGGCTTATAACAAAAAAGCCCCA
GCCCATTCCTCCCATTCAAGATTCCCACTCCCCAGAGGTGACCACTTTCAACTCTTGAGTTTTTCAGGTATATAC
CTCCATGTTTCTAAGTAATATGCTTATATTGTTCACTTCCTTTTTTTTTATTTTTTAAAGAAATCTATTTCATAC
CATGGAGGAAGGCTCTGTTCCACATATATTTCCACTTCTTCATTCTCTCGGTATAGTTTTGTCACAATTATAGAT
TAGATCAAAAGTCTACATAACTAATACAGCTGAGCTATGTAGTATGCTATGATTAAATTTACTTATGTAAAAAAA
AAAAAAAAAAAAA

FIGURE 178

MSLSNKLTLDKLDVKGKRVVMRVDFNVPMKNNQITNNQRIKAAVPSIKFCLDNGAKSVVLMSHLGRPDGVPMPDK
YSLEPVAVELKSLLGKDVLFLKDCVGPEVEKACANPAAGSVILLENLRFHVEEEGKGKDASGNKVKAEPAKIEAF
RASLSKLGDVYVNDAFGTAHRAHSSMVGVNLPQKAGGFLMKKELNYFAKALESPERPFLAILGGAKVADKIQLIN
NMLDKVNEMIIGGGMAFTFLKVLNNMEIGTSLFDEEGAKIVKDLMSKAEKNGVKITLPVDFVTADKFDENAKTGQ
ATVASGIPAGWMGLDCGPESSKKYAEAVTRAKQIVWNGPVGVFEWEAFARGTKALMDEVVKATSRGCITIIGGGD
TATCCAKWNTEDKVSHVSTGGGASLELLEGKVLPGVDALSNI

FIGURE 179

CGCCCCTGCTCTCGCGCCGGCGTCGGCTGCGTCTCCGGCGTTTGAATTGCGCTTCCGCCATCTTTCCAGCCTCAG
TCGGACGGGCGCGGAGGCGCTTCTGGAAGGAACGCCGCG**ATG**GCTGCGCAGGGAGAGCCCCAGGTCCAGTTCAAA
CTTGTATTGGTTGGTGATGGTGGTACTGGAAAAACGACCTTCGTGAAACGTCATTTGACTGGTGAATTTGAGAAG
AAGTATGTAGCCACCTTGGGTGTTGAGGTTCATCCCCTAGTGTTCCACACCAACAGAGGACCTATTAAGTTCAAT
GTATGGGACACAGCCGGCCAGGAGAAATTCGGTGGACTGAGAGATGGCTATTATATCCAAGCCCAGTGTGCCATC
ATAATGTTTGATGTAACATCGAGAGTTACTTACAAGAATGTGCCTAACTGGCATAGAGATCTGGTACGAGTGTGT
GAAAACATCCCCATTGTGTTGTGTGGCAACAAAGTGGATATTAAGGACAGGAAAGTGAAGGCGAAATCCATTGTC
TTCCACCGAAAGAAGAATCTTCAGTACTACGACATTTCTGCCAAAAGTAACTACAACTTTGAAAAGCCCTTCCTC
TGGCTTGCTAGGAAGCTCATTGGAGACCCTAACTTGGAATTTGTTGCCATGCCTGCTCTCGCCCCACCAGAAGTT
GTCATGGACCCAGCTTTGGCAGCACAGTATGAGCACGACTTAGAGGTTGCTCAGACAACTGCTCTCCCGGATGAG
GATGATGACCTG**TGA**GAATGAAGCTGGAGCCCAGCGTCAGAAGTCTAGTTTTATAGGCAGCTGTCCTGTGATGTC
AGCGGTGCAGCGTGTGTGCCACCTCATTATTATCTAGCTAAGCGGAACATGTGCTTTATCTGTGGGATGCTGAAG
GAGATGAGTGGGCTTCGGAGTGAATGTGGCAGTTTAAAAAATAACTTCATTGTTTGGACCTGCATATTTAGCTGT
TTGGACGCAGTTGATTCCTTGAGTTTCATATATAAGACTGCTGCAGTCACATCACAATATTCAGTGGTGAAATCT
TGTTTGTTACTGTCATTCCCATTCCTTTTCTTTAGAATCAGAATAAAGTTGTATTTCAAATATCTAAGCAAGTGA
ACTCATCCCTTGTTTATAAATAGCATTTGGAAACCACTAAAGTAGGGAAGTTTTATGCCATGTTAATATTTGAAT
TGCCTTGCTTTTATCACTTAATTTGAAATCTATTGGGTTAATTTCTCCCTATGTTTATTTTTGTACATTTGAGCC
ATGTCACACAAACTGATGATGACAGGTCAGCAGTATTCTATTTGGTTAGAAGGGTTACATGGTGTAAATATTAGT
GCAGTTAAGCTAAAGCAGTGTTTGCTCCACCTTCATATTGGCTAGGTAGGGTCACCTAGGGAAGCACTTGCTCAA
AATCTGTGACCTGTCAGAATAAAAATGTGGTTTGTACATATCAAATAGATATTTTAAGGGTAATATTTTCTTTTA
TGGCAAAAGTAATCATGTTTTAATGTAGAACCTCAAACAGGATGGAACATCAGTGGATGGCAGGAGGTTGGGAAT
TCTTGCTGTTAAAAATAATTACAAATTTTGCACTTTTTGTTTGAATGTTAGATGCTTAGTGTGAAGTTGATACGC
AAGCCG

FIGURE 180

MAAQGEPQVQFKLVLVGDGGTGKTTFVKRHLTGEFEKKYVATLGVEVHPLVFHTNRGPIKFNVWDTAGQEKFGGL
RDGYYIQAQCAIIMFDVTSRVTYKNVPNWHRDLVRVCENIPIVLCGNKVDIKDRKVKAKSIVFHRKKNLQYYDIS
AKSNYNFEKPFLWLARKLIGDPNLEFVAMPALAPPEVVMDPALAAQYEHDLEVAQTTALPDEDDDL

FIGURE 181A

CCGGGATCCGGTTTTTTTTGTTTTTAAAAGTGTAATTTCCTTTTTATTTGCATCTGTTTATGACTGAAAAAAATG
ACTAGTTATTATGAAGACACTACTGTTGAAGATGGATATTTTAACATGGAGTTTCAACAAAATTACTTCTTGAGA
CAGAGCTGATGTGTTTTTTAAATAACGTGATTTTAAGCATATATTTGAACAAAACTAAAACATTTAGTATTATGA
ATATGAAAAAAGATCAGTAAATCAATGTACTCTTCTAGGCTGAATTAAGGTAGACTATTTAAGGTTTCAAAAAAG
TTTGGCTGGGGCAGAATAAGTTTTACAAAACCCATGCCATCCAAAATTAAGATGACATGTAGCAGCAAGAAGTAT
TCCAATGTCTCATAACCAGTTCTCGCAAGCAATGTGTATTCCTTACTTTAAGGAAGTGTCAAACAAATAGAAAAA
TCTGGAAGAATTTACTAAGTGTAATAAATTAGAGGTAAATCGTAATAAAAGAATTTATGTCTCACAAAAATATTC
ACAAGTGGGAGTTTTCTTTTACCAACTTCTCAGAGTCCTTCTAGCCCCCTCTTCACTTCTGAAAGATGGGATTTA
CCAAAATCTGGTTTACATTTAACTTTTCAGGGACACATGACCTGAAAAGAAAGATGTCAGATAATACTGACATTG
CCTCATGCACTTTCTTTGTATCAGTCCTTCTTCTGTAAGTAATCAGAATTGGGTCCAAATGGCATAGAATCAAAC
ATTATGTATCATGCCAAATACCACTTCCTGCCCAACAAAATTTCATCTTTCTCCAGTAATGAAGAGGTGGACATT
CTTGTTGGACTGTAGCATCTGTGCCGCCCGCTCCACACCAACCACGGCAGCTAACCTCTGGGCATCATATTTGGA
GTAGAGAACAGTGCAGGTCCACGTGGCCTCTTCTCCTCTGTTGGTGGCTCTCAGCATATTACAGATTTCACTGTA
AAAGTGTGGATATGTCGGCAGTTCATAGAAAATCAGGTTCCTGATGCCTTTTATTGCTGTAGTTTATTTCCACCC
CCTTCCCTCCTGTTTTCTCTCTCTCCTTCTCTCTCTCTCTCTCTCTCTCTTTTTTTTCCGCCCTAGCTGGGGCTG
TGTTGGAGGAGAGGAAGAAAGAGAGACAGAGGATTGCATTCATCCGTTACGTTCTTGAAATTTCCTAATAGCAAG
ACCAGCGAAGCGGTTGCACCCTTTTCAATCTTGCAAAGGAAAAAAACAAAACAAAACAAAAAAAACCCAAGTCCC
CTTCCCGGCAGTTTTTGCCTTAAAGCTGCCCTCTTGAAATTAATTTTTTCCCAGGAGAGAG**ATG**TCTTATCAGGG
GAAGAAAAATATTCCACGCATCACGAGCGATCGTCTTCTGATCAAAGGAGGTAAAATTGTTAATGATGACCAGTC
GTTCTATGCAGACATATACATGGAAGATGGGTTGATCAAGCAAATAGGAGAAAATCTGATTGTGCCAGGAGGAGT
GAAGACCATCGAGGCCCACTCCCGGATGGTGATCCCCGGAGGAATTGACGTCCACACTCGTTTCCAGATGCCTGA
TCAGGGAATGACGTCTGCTGATGATTTCTTCCAAGGAACCAAGGCGGCCCTGGCTGGGGGAACCACTATGATCAT
TGACCACGTTGTTCCTGAGCCTGGGACAAGCCTGCTCGCTGCCTTTGACCAGTGGAGGGAATGGGCCGACAGCAA
GTCCTGCTGTGACTACTCTCTGCATGTGGACATCAGCGAGTGGCATAAGGGCATCCAGGAGGAGATGGAAGCGCT
TGTGAAGGATCACGGGGTAAATTCCTTCCTCGTGTACATGGCTTTCAAAGATCGCTTCCAGCTAACGGATTGCCA
GATTTATGAAGTACTGAGTGTGATCCGGGATATTGGCGCCATAGCCCAAGTCCACGCAGAAAATGGCGACATCAT
TGCAGAGGAGCAGCAGAGGATCCTGGATCTGGGCATCACGGGCCCCGAGGGACATGTGCTGAGCCGACCTGAGGA
GGTCGAGGCCGAAGCCGTGAATCGTGCCATCACCATCGCCAACCAGACCAACTGCCCGCTGTATATCACCAAGGT
GATGAGCAAAAGCTCTGCTGAGGTCATCGCCCAGGCACGGAAGAAGGGAACTGTGGTGTATGGCGAGCCCATCAC
TGCCAGCTTGGGAACGGACGGCTCCCATTACTGGAGCAAGAACTGGGCCAAGGCTGCTGCCTTTGTCACCTCCCC
ACCCTTGAGCCCTGATCCAACCACTCCAGACTTTCTCAACTCCTTGCTGTCCTGTGGAGACCTCCAGGTCACGGG
CAGTGCCCATTGCACGTTTAACACTGCCCAGAAGGCTGTAGGAAAGGACAACTTCACCCTGATTCCGGAGGGCAC
CAATGGCACTGAGGAGCGGATGTCCGTCATCTGGGACAAGGCTGTGGTCACTGGGAAGATGGATGAGAACCAGTT
TGTGGCTGTGACCAGCACCAATGCAGCCAAAGTCTTCAACCTTTACCCCCGGAAAGGCCGCATTGCTGTGGGATC
CGATGCCGACCTGGTCATCTGGGACCCCGACAGCGTTAAAACCATCTCTGCCAAGACACACAACAGCTCTCTCGA
GTACAACATCTTTGAAGGCATGGAGTGCCGCGGCTCCCCACTGGTGGTCATCAGCCAGGGGAAGATTGTCCTGGA
GGACGGCACCCTGCATGTCACCGAAGGCTCTGGACGCTACATTCCCCGGAAGCCCTTCCCTGATTTTGTTTACAA
GCGTATCAAGGCAAGGAGCAGGCTGGCTGAGCTGAGAGGGGTTCCTCGTGGCCTGTATGACGGACCTGTGTGTGA
AGTGTCTGTGACGCCCAAGACAGTCACTCCAGCCTCCTCGGCCAAGACGTCTCCTGCCAAGCAGCAGGCCCCACC
TGTCCGGAACCTGCACCAGTCTGGATTCAGTTTGTCTGGTGCTCAGATTGATGACAACATTCCCCGCCGCACCAC
CCAGCGTATCGTGGCGCCCCCCGGTGGCCGTGCCAACATCACCAGCCTGGGC**TAG**AGCTCCTGGGCTGTGCGTCC
ACTGGGGACTGGGGATGGGACACCTGAGGACATTCTGAGACTTCTTTCTTCCTTCCTTTTTTTTTTTGTTTTTT
TTTTTAAGAGCCTGTGATAGTTACTGTGGAGCAGCCAGTTCATGGGGTCCCCCTTGGGCCCACACCCCGTCTCTC
ACCAAGAGTTACTGATTTTGCTCATCCACTTCCCTACACATCTATGGGTATCACACCCAAGACTACCCACCAAGC
TCATACAGGGAACCACACCCAACACTTAGACATGCGAACAAGCAGCCCCCAGCGAGGGTCTCCTTCGCCTTCAAC
CTCCTAGTGTCTGTTAGCATTCCTTTTCATGGGGGGAGGGAAGATAAAGTGAATTGCCCAGAGCTGCCTTTTTCT
TTTCTTTTTAAAAATTTTAAGAAGTTTTCCTTGTGGGGCTGGGGAGGGGCCGGGGTCAGGGAGAGTCTTTTTTTT
TTTTTTTTTAAATACTAAATTGGAACATTTAATTCCATATTAATACAAGGGGTTTGAACTGGACATCCTAATGAT

FIGURE 181B

GCAATTACGTCATCACCCAGCTGATTCCGGGTGGTTGGCAAACTCATCGTGTCTGTCCTGAGAGGCTCCACAATG
CCCACCCGCATCGCCATTCTGTAGTCTTCAGGGTCAGCTGTTGATAAAGGGGCAGGCTTGCGTTATTGGCCTAGA
TTTTGCTGCAGATTAAATCCTTTGAGGATTCTCTTCTCTTTTACCATTTTTCTGCGTGCTCTCACTCTCTCTTTC
TCTCTCTAGCTTTTTAATTCATGAATATTTTCGTGTCTGTCTCTCTCTCTCTCTGTGTTTCCTCCAGCCCTTGTC
TCGGAGACGGTGTTTTCCTCCCTTGCCCCATTATCTTTTCACCTCCCAGGTCTACATTTCATGGTGGTCGTTGGG
TCCGCCTAAAGGATTTGAGCGTTTGCCATTGCAAGCATAGTGCTGTGTCATCCTGGTCCATGTAGGACTGGTGCT
AACCACCTGCCATCATGAGGATGTGTGCTAGAGTGTGGGACCCTGGCCAAGTGCAGGAATGGGCCATGCCGTCTC
ACCCACAGTATCACACGTGGAACCGCAGACAGGGCCCAGAAGCTTTAGAGGTATGAGGCTGCAGAACCGGAGAGA
TTTTCCTCTGTGCAGTGCTCTCTGGCTAAAGTCACGGTCAAACCTAAACACCGAGCCTCATTAACCCAAGTGAAC
CAACCAAAGTCACCAGTTCAGAAGTGCTAAGCTAATAGGAGTCTGACCCGAGGGCCTGCTGCTTCCTGGTTAAGT
ATCTTTTGAGATTCTAGAACACATGGGAGCTTTTTATTTTCGGGGAAAAACCGTATTTTTTTCTTGTCCAATTAT
TTCTAAAGACACACTACATAGAAAGAGGCCCTATAAACTCAAAAAGTCATTGGGAAACTTAAAGTCTATTCTACT
TTGCCAAGAGGAGAAATGTGTTTTATGAACGATAGATCACATCAGAACTCCTGTGGGGAGGAAACCTTATAAATT
AAACACATGGCCCCCTTAGAGACCACAGGCGATGTCTGTCTCCATCCTTCCCTCTCCTTTTCTGTCACCTTTCCC
CCTAGCTGGCTCCTTTGGACCTACCCCTGTCCTTGCTGACTTGTGTTGCATTGTATTCCAAACGTGTTTACAGGT
TCTCTTAAGCAATGTTGTATTTGCAGGCTTTTCTGAATACCAAATCTGCTTTTTGTAAAGCGTAAAAACATCACA
AAGTAGGTCATTCCATCACCACCCTTGTCTCTCTACACATTTTGCCTTTGGGGATCTGGTTGGGGTTTTGGGTTT
TTTGTTGTTGTTGTTTATTTGTTATTTTAAAGGTAAATTGCACTTTTAAAAAAATAATTGGTTGACTTAATATAT
TTGCTTTTTTTCTCACCTGCACTTAGAGGAAATTTGAACAAGTTGGAAAAAAACAATTTTTGTTTCAATTCTAAG
AAACACTTGCAGCTCTAGTATTCACTTGAGTCTTCCTGTTTTTCCTGTACCGGGTCATGGTAATTTTTGGTTGTT
TTGGTTGTTTTCTTAAAAAACAAGTTAAAACCTGACGATTTCTGCAGTGACTTGATGCTCTAAAACAGTGTAGGA
TTTAAGAATAGATGGTTTTTAATCCTGGAAATTGTGATTGTGACCCATGAGTGGAGGAACTTTCAGTTCTAAAGC
TGATAAAGTGTGTAGCCAGAAGAGTACTTTTTTTTTGTAACCACTGTCTTGATGGCAAAATAATTATGGTAAAAA
ACAAGTCTCGTGTTTATTATTCCTTAAGAACTCTGTGTTATATTACCATGGAACGCCTAATAAAGCAAAATGTGG
TTGTTTCAAAAAAAAAAAAAA

FIGURE 182

MSYQGKKNIPRITSDRLLIKGGKIVNDDQSFYADIYMEDGLIKQIGENLIVPGGVKTIEAHSRMVIPGGIDVHTR
FQMPDQGMTSADDFFQGTKAALAGGTTMIIDHVVPEPGTSLLAAFDQWREWADSKSCCDYSLHVDISEWHKGIQE
EMEALVKDHGVNSFLVYMAFKDRFQLTDCQIYEVLSVIRDIGAIAQVHAENGDIIAEEQQRILDLGITGPEGHVL
SRPEEVEAEAVNRAITIANQTNCPLYITKVMSKSSAEVIAQARKKGTVVYGEPITASLGTDGSHYWSKNWAKAAA
FVTSPPLSPDPTTPDFLNSLLSCGDLQVTGSAHCTFNTAQKAVGKDNFTLIPEGTNGTEERMSVIWDKAVVTGKM
DENQFVAVTSTNAAKVFNLYPRKGRIAVGSDADLVIWDPDSVKTISAKTHNSSLEYNIFEGMECRGSPLVVISQG
KIVLEDGTLHVTEGSGRYIPRKPFPDFVYKRIKARSRLAELRGVPRGLYDGPVCEVSVTPKTVTPASSAKTSPAK
QQAPPVRNLHQSGFSLSGAQIDDNIPRRTTQRIVAPPGGRANITSLG

FIGURE 183

GGCACGAGGCGCCCGCCTGCTACGAGTAGAACGCTGTCCGCAGCTTGCGCATTTCGCAGCCGCTGCCGCCTCGCC
GCTGCTCCTTCGTAAGGCCACTTCCGCACACCGACACCAACATGAACGGACAGCTCAACGGCTTCCACGAGGCGT
TCATCGAGGAGGGCACATTCCTTTTCACCTCAGAGTCGGTCGGGGAAGGCCACCCAGATAAGATTTGTGACCAAA
TCAGTGATGCTGTCCTTGATGCCCACCTTCAGCAGGATCCTGATGCCAAAGTAGCTTGTGAAACTGTTGCTAAAA
CTGGAATGATCCTTCTTGCTGGGGAAATTACATCCAGAGCTGCTGTTGACTACCAGAAAGTGGTTCGTGAAGCTG
TTAAACACATTGGATATGATGATTCTTCCAAAGGTTTTGACTACAAGACTTGTAACGTGCTGGTAGCCTTGGAGC
AACAGTCACCAGATATTGCTCAAGGTGTTCATCTTGACAGAAATGAAGAAGACATTGGTGCTGGAGACCAGGGCT
TAATGTTTGGCTATGCCACTGATGAAACTGAGGAGTGTATGCCTTTAACCATTGTCTTGGCACACAAGCTAAATG
CCAAACTGGCAGAACTACGCCGTAATGGCACTTTGCCTTGGTTACGCCCTGATTCTAAAACTCAAGTTACTGTGC
AGTATATGCAGGATCGAGGTGCTGTGCTTCCCATCAGAGTCCACACAATTGTTATATCTGTTCAGCATGATGAAG
AGGTTTGTCTTGATGAAATGAGGGATGCCCTAAAGGAGAAAGTCATCAAAGCAGTTGTGCCTGCGAAATACCTTG
ATGAGGATACAATCTACCACCTACAGCCAAGTGGCAGATTTGTTATTGGTGGGCCTCAGGGTGATGCTGGTTTGA
CTGGACGCAAAATCATTGTGGACACTTATGGCGGTTGGGGTGCTCATGGAGGAGGTGCCTTTTCAGGAAAGGATT
ATACCAAGGTCGACCGTTCAGCTGCTTATGCTGCTCGTTGGGTGGCAAAATCCCTTGTTAAAGGAGGTCTGTGCC
GGAGGGTTCTTGTTCAGGTCTCTTATGCTATTGGAGTTTCTCATCCATTATCTATCTCCATTTTCCATTATGGTA
CCTCTCAGAAGAGTGAGAGAGAGCTATTAGAGATTGTGAAGAAGAATTTCGATCTCCGCCCTGGGGTCATTGTCA
GGGATCTGGATCTGAAGAAGCCAATTTATCAGAGGACTGCAGCCTATGGCCACTTTGGTAGGGACAGCTTCCCAT
GGGAAGTGCCCAAAAAGCTTAAATATTGAAAGTGTTAGCCTTTTTTCCCCAGACTTGTTGGCGTAGGCTACAGAG
AAGCCTTCAAGCTCTGAGGGAAAGGGCCCTCCTTCCTAAATTTTCCTGTCCTCTTTCAGCTCCTGACCAGTTGCA
GTCACTCTAGTCAATGACATGAATTTTAGCTTTTGTGGGGGACTGTAAGTTGGGCTTGCTATTCTGTCCCTAGGT
GTTTTGTTCACCATTATAATGAATTTAGTGAGCATAGGTGATCCATGTAACTGCCTAGAAACAACACTGTAGTAA
ATAATGCTTTGAAATTGAACCTTTGTGCCCTATCACCCAACGCTCCAAAGTCATAATTGCATTGACTTTCCCCAC
CAGATGCTGAAAATGTCCTTGTGATGTGCACGTAAAGTACTTGTAGTTCCACTTATAGCCTCTGTCTGGCAATGC
CACAGCCCTGTCAGCATGAATTTGTAATGTCTTGAGCTCTATTATGAATGTGAAGCCTTCCCCTTATCCTCCCTG
TAACTTGATCCATTTCTAATTATGTAGCTCTTTGTCAGGGAGTGTTCCCTATCCAATCAATCTTGCATGTAACGC
AAGTTCCCAGTTGGAGCTCCAGCCTGACATCAAAAAAGGCAGTTACCATTAAACCATCTCCCTGGTGCTTATGCT
CTTAATTGCCACCTCTAACAGCACCAAATCAAAATCTCTCCACTTTCAGCTGTCTTTTGGAGGACGTACGTAATA
AGGTTTTAATTTAGTAAACCAATCCTATGCATGGTTTCAGCACTAGCCAAACCTCACCAACTCCTAGTTCTAGAA
AAACAGGCACTTGGCAGCCTTGTGATGTCATACAGAGAAGTCACAGGGCAGTACCTGAGGGTCTGTAGGTTGCAC
ACTTTGGTACCAGATAACTTTTTTTTTTCTTTATAAGAAAGCCTGAGTACTCCACACTGCACAATAACTCCTCCC
AGGGTTTTAACTTTGTTTTATTTTCAAAACCAGGTCCAATGAGCTTTCTGAACAGCTGGTGTAGCTACAGAGAAA
CCAGCTTCCTTCAGAGAGCAGTGCTTTTGGCGGGGAGGAGGAAATCCCTTCATACTTGAACGTTTTCTAATTGCT
TATTTATTGTATTCTGGGGTATGGCGTAAGTACAGAGAAGCCATCACCTCAGATGGCAGCTTTTAAAAGATTTTT
TTTTTTTCTCTCAACACCATGATTCCTTTAACAACATGTTTCCAGCATTCCCAGGTAGGCCAAGGTGTCCTACAG
AAAAACCTTGGGTTAGACCTACAGGGGGTCTGGCTGGTGTTAACAGAAGGGAGGGCAGAGCTGGTGCGGCTGGCC
ATGGAGAAAGCTGACTTGGCTGGTGTGGTACAGAGAAGCCAGCTTGTTTACATGCTTATTCCATGACTGCTTGCC
CTAAGCAGAAAGTGCCTTTCAGGATCTATTTTTGGAGGTTTATTACGTATGTCTGGTTCTCAATTCCAACAGTTT
AATGAAGATCTAAATAAAATGCTAGGTTCTACCTTAAAAAAAAAAAAAAAAAA

FIGURE 184

MNGQLNGFHEAFIEEGTFLFTSESVGEGHPDKICDQISDAVLDAHLQQDPDAKVACETVAKTGMILLAGEITSRA
AVDYQKVVREAVKHIGYDDSSKGFDYKTCNVLVALEQQSPDIAQGVHLDRNEEDIGAGDQGLMFGYATDETEECM
PLTIVLAHKLNAKLAELRRNGTLPWLRPDSKTQVTVQYMQDRGAVLPIRVHTIVISVQHDEEVCLDEMRDALKEK
VIKAVVPAKYLDEDTIYHLQPSGRFVIGGPQGDAGLTGRKIIVDTYGGWGAHGGGAFSGKDYTKVDRSAAYAARW
VAKSLVKGGLCRRVLVQVSYAIGVSHPLSISIFHYGTSQKSERELLEIVKKNFDLRPGVIVRDLDLKKPIYQRTA
AYGHFGRDSFPWEVPKKLKY

FIGURE 185

GGCACGAGGCGCCCGCCTGCTACGAGTAGAACGCTGTCCGCAGCTTGCGCATTTCGCAGCCGCTGCCGCCTCGCC
GCTGCTCCTTCGTAAGGCCACTTCCGCACACCGACACCAACATGAACGGACAGCTCAACGGCTTCCACGAGGCGT
TCATCGAGGAGGGCACATTCCTTTTCACCTCAGAGTCGGTCGGGGAAGGCCACCCAGATAAGATTTGTGACCAAA
TCAGTGATGCTGTCCTTGATGCCCACCTTCAGCAGGATCCTGATGCCAAAGTAGCTTGTGAAACTGTTGCTAAAA
CTGGAATGATCCTTCTTGCTGGGGAAATTACATCCAGAGCTGCTGTTGACTACCAGAAAGTGGTTCGTGAAGCTG
TTAAACACATTGGATATGATGATTCTTCCAAAGGTTTTGACTACAAGACTTGTAACGTGCTGGTAGCCTTGGAGC
AACAGTCACCAGATATTGCTCAAGGTGTTCATCTTGACAGAAATGAAGAAGACATTGGTGCTGGAGACCAGGGCT
TAATGTTTGGCTATGCCACTGATGAAACTGAGGAGTGTATGCCTTTAACCATTGTCTTGGCACACAAGCTAAATG
CCAAACTGGCAGAACTACGCCGTAATGGCACTTTGCCTTGGTTACGCCCTGATTCTAAAACTCAAGTTACTGTGC
AGTATATGCAGGATCGAGGTGCTGTGCTTCCCATCAGAGTCCACACAATTGTTATATCTGTTCAGCATGATGAAG
AGGTTTGTCTTGATGAAATGAGGGATGCCCTAAAGGAGAAAGTCATCAAAGCAGTTGTGCCTGCGAAATACCTTG
ATGAGGATACAATCTACCACCTACAGCCAAGTGGCAGATTTGTTATTGGTGGGCCTCAGGGTGATGCTGGTTTGA
CTGGACGCAAAATCATTGTGGACACTTATGGCGGTTGGGGTGCTCATGGAGGAGGTGCCTTTTCAGGAAAGGATT
ATACCAAGGTCGACCGTTCAGCTGCTTATGCTGCTCGTTGGGTGGCAAAATCCCTTGTTAAAGGAGGTCTGTGCC
GGAGGGTTCTTGTTCAGGTCTCTTATGCTATTGGAGTTTCTCATCCATTATCTATCTCCATTTTCCATTATGGTA
CCTCTCAGAAGAGTGAGAGAGAGCTATTAGAGATTGTGAAGAAGAATTTCGATCTCCGCCCTGGGGTCATTGTCA
GGGATCTGGATCTGAAGAAGCCAATTTATCAGAGGACTGCAGCCTATGGCCACTTTGGTAGGGACAGCTTCCCAT
GGGAAGTGCCCAAAAAGCTTAAATATTGAAAGTGTTAGCCTTTTTTCCCCAGACTTGTTGGCGTAGGCTACAGAG
AAGCCTTCAAGCTCTGAGGGAAAGGGCCCTCCTTCCTAAATTTTCCTGTCCTCTTTCAGCTCCTGACCAGTTGCA
GTCACTCTAGTCAATGACATGAATTTTAGCTTTTGTGGGGGACTGTAAGTTGGGCTTGCTATTCTGTCCCTAGGT
GTTTTGTTCACCATTATAATGAATTTAGTGAGCATAGGTGATCCATGTAACTGCCTAGAAACAACACTGTAGTAA
ATAATGCTTTGAAATTGAACCTTTGTGCCCTATCACCCAACGCTCCAAAGTCATAATTGCATTGACTTTCCCCAC
CAGATGCTGAAAATGTCCTTGTGATGTGCACGTAAAGTACTTGTAGTTCCACTTATAGCCTCTGTCTGGCAATGC
CACAGCCCTGTCAGCATGAATTTGTAATGTCTTGAGCTCTATTATGAATGTGAAGCCTTCCCCTTATCCTCCCTG
TAACTTGATCCATTTCTAATTATGTAGCTCTTTGTCAGGGAGTGTTCCCTATCCAATCAATCTTGCATGTAACGC
AAGTTCCCAGTTGGAGCTCCAGCCTGACATCAAAAAAGGCAGTTACCATTAAACCATCTCCCTGGTGCTTATGCT
CTTAATTGCCACCTCTAACAGCACCAAATCAAAATCTCTCCACTTTCAGCTGTCTTTTGGAGGACGTACGTAATA
AGGTTTTAATTTAGTAAACCAATCCTATGCATGGTTTCAGCACTAGCCAAACCTCACCAACTCCTAGTTCTAGAA
AAACAGGCACTTGGCAGCCTTGTGATGTCATACAGAGAAGTCACAGGGCAGTACCTGAGGGTCTGTAGGTTGCAC
ACTTTGGTACCAGATAACTTTTTTTTTTCTTTATAAGAAAGCCTGAGTACTCCACACTGCACAATAACTCCTCCC
AGGGTTTTAACTTTGTTTTATTTTCAAAACCAGGTCCAATGAGCTTTCTGAACAGCTGGTGTAGCTACAGAGAAA
CCAGCTTCCTTCAGAGAGCAGTGCTTTTGGCGGGGAGGAGGAAATCCCTTCATACTTGAACGTTTTCTAATTGCT
TATTTATTGTATTCTGGGGTATGGCGTAAGTACAGAGAAGCCATCACCTCAGATGGCAGCTTTTAAAAGATTTTT
TTTTTTTCTCTCAACACCATGATTCCTTTAACAACATGTTTCCAGCATTCCCAGGTAGGCCAAGGTGTCCTACAG
AAAAACCTTGGGTTAGACCTACAGGGGGTCTGGCTGGTGTTAACAGAAGGGAGGGCAGAGCTGGTGCGGCTGGCC
ATGGAGAAAGCTGACTTGGCTGGTGTGGTACAGAGAAGCCAGCTTGTTTACATGCTTATTCCATGACTGCTTGCC
CTAAGCAGAAAGTGCCTTTCAGGATCTATTTTTGGAGGTTTATTACGTATGTCTGGTTCTCAATTCCAACAGTTT
AATGAAGATCTAAATAAAATGCTAGGTTCTACCTTAAAAAAAAAAAAAAAAAA

FIGURE 186

MNGQLNGFHEAFIEEGTFLFTSESVGEGHPDKICDQISDAVLDAHLQQDPDAKVACETVAKTGMILLAGEITSRA
AVDYQKVVREAVKHIGYDDSSKGFDYKTCNVLVALEQQSPDIAQGVHLDRNEEDIGAGDQGLMFGYATDETEECM
PLTIVLAHKLNAKLAELRRNGTLPWLRPDSKTQVTVQYMQDRGAVLPIRVHTIVISVQHDEEVCLDEMRDALKEK
VIKAVVPAKYLDEDTIYHLQPSGRFVIGGPQGDAGLTGRKIIVDTYGGWGAHGGGAFSGKDYTKVDRSAAYAARW
VAKSLVKGGLCRRVLVQVSYAIGVSHPLSISIFHYGTSQKSERELLEIVKKNFDLRPGVIVRDLDLKKPIYQRTA
AYGHFGRDSFPWEVPKKLKY

FIGURE 187

GAGAGGAGACACCGCCGCAGTTGCCGGTACATCGGGGATTTCTGGCTCTTTCCTCTTCGCCTTAAATTCGGGTGT
CTTTTATGAATAATCAAAAGCAGCAAAAGCCAACGCTATCAGGCCAGCGTTTTAAAACTAGAAAAAGAGATGAAA
AAGAGAGGTTTGACCCTACTCAGTTTCAAGACTGTATTATTCAAGGCTTAACTGAAACCGGTACTGATTTGGAAG
CAGTAGCTAAGTTTCTTGATGCTTCTGGAGCAAAACTTGATTACCGTCGATATGCAGAAACACTCTTTGACATTC
TGGTGGCTGGTGGAATGCTGGCCCCAGGTGGTACACTGGCAGATGACATGATGCGTACAGATGTCTGCGTGTTTG
CAGCCCAAGAAGATCTAGAGACCATGCAAGCATTTGCTCAGGTTTTTAACAAGTTAATCAGGCGCTACAAATACC
TGGAGAAAGGTTTTGAAGATGAAGTAAAAAAGCTGCTGCTGTTCTTGAAGGGTTTTTCAGAGTCGGAGAGGAACA
AGCTAGCTATGTTGACTGGTGTTCTTCTGGCTAATGGAACACTTAATGCATCCATTCTTAATAGCCTTTATAATG
AAAATTTGGTTAAAGAAGGAGTTTCAGCAGCTTTTGCTGTGAAGCTCTTTAAATCATGGATAAATGAAAAAGATA
TCAATGCAGTAGCTGCAAGTCTTCGGAAAGTCAGCATGGATAACAGACTGATGGAACTCTTTCCTGCCAATAAGC
AAAGTGTTGAACACTTCACAAAATATTTTACTGAGGCAGGCTTGAAAGAGCTTTCAGAATATGTTCGGAATCAGC
AAACCATCGGAGCTCGTAAGGAGCTCCAGAAAGAACTTCAAGAACAGATGTCCCGTGGTGATCCATTTAAGGATA
TAATTTTATATGTCAAGGAGGAGATGAAAAAAAACAACATCCCAGAGCCAGTTGTCATCGGAATAGTCTGGTCAA
GTGTAATGAGCACTGTGGAATGGAACAAAAAAGAGGAGCTTGTAGCAGAGCAAGCCATCAAGCACTTGAAGCAAT
ACAGCCCTCTACTTGCTGCCTTTACTACTCAAGGTCAGTCTGAGCTGACTCTGTTACTGAAGATTCAGGAGTATT
GCTATGACAACATTCATTTCATGAAAGCCTTCCAGAAAATAGTGGTGCTTTTTTATAAAGCTGAAGTCCTGAGCG
AGGAGCCCATTTTGAAGTGGTATAAAGATGCACATGTTGCAAAGGGGAAGAGTGTTTTCCTTGAGCAAATGAAAA
AGTTTGTAGAATGGCTCAAAAATGCTGAAGAAGAATCTGAATCTGAAGCTGAAGAAGGTGACTGAATTTTGAAAC
TACACCCTCAGTAAAGCAAACAGGAGTTGTAGATAAAATGTCATGTCTCATGTGTCCTGGTTCTTACATCTTCCT
ACCTCCCTGTATCAAGCATGATATAAGGGCTTTCATGGCAAATTTTATTTTAACTGTTTCTATGGTTGCTGGAAA
TGTTGGGTTTAGTTTCTAAAACCATGTTTTAAGTAGCTACAGGAGCTATAGATTTGAATCTAATGTTGCATTAGT
CTTTTCAGTTATCTTCTACCTCCTGTATTTTCTACTGTAATAATGTAATTTAAGGCCTTCCACAATGAACAGTTC
ACTTTATTCCCTGGGTTTTCTATAAACAGTTTTAAGGATATGATTTGGTTAAAAAATAATTTGTTATAAAAATTC
TGTTTGCAAATTAAACTGGAAAAGTATCCAGAGTCTCAAAAGGCAATGATTTGTGAGATAATATGGCATGCCCGG
AGCCCTGCTCATCAATGAAAAACCCATATGTAATAATCGAATTCATTTAACATGAATCTTGAGTACGTGGACCAT
TGCTTGCATGTTAACTTTTTGTTTTGTTTTGTTTTGTTTTGTTTTGCATTTTTAACTCCAGATATCCTAAAGCTC
AATTGTTTGGTCTCTGGTTTTCATCCTTAGAGAAGCCATGGAGAACAGACTTGAAAAGTTTAGGAAATCATAATG
TGGCAGAGGTGGTGGGAAGAAGAAAGTTGAGCTTTTTCCCCTTGAGAAACTTCTGCATTTAGTTTCTATCTTTCC
AGGCAAAACAAATGGGTATTCTTTTCATACAACCATTTTCAAATGAACCTTAGAAAAGTCTTAACATTTAAGGTA
TTTTATGCACAGAATACACTTAGATTGATAGGAAAGAACTCGTAATGGAGTTTGAGTAAAGAAAATGACTGATGT
ACTAAACCCAGTAAAAATTGTTGAAAATGTTAAAGGTCAGCATGTTCTAATTGGGAATCTAGATATAGCTTAGAT
TTCCTATTGGCTTAGAGTATTTGCTATAACAAATGAAGTGCAATGACAATTATATATTCCTACTCGGTCATACTG
GACTGGCTTCGTTCTCTTAATATACTCAGTAATGACTCAAGCCTCTGGCTATTAACATACCCTAGTTGCCGTTTT
TTAATTGCCATGAGCCAAATACTTCTTGGTATACAATTGATCCATTTATTTTAATGGCTGCCTTTTCATTTTCAT
CTTTTCTTGCTGCTACCCATCTATGTATGTAGTCATTGGGGGGAAAATGTAGCCACATTTTTTATGGGAAGACTT
TGTGTTAAAAGTGAACATTTTGAAGGTTTTTAACTGGTGAAACTAGCCTGGAATAATGCCACCAGAGACTGAGTG
GAAATCGCCCCTTTTGAAGGTGCCATTCTTATGAGCCAAAAGTTTGTCATTTAAAAGTTCATTTTGAGGGAATAA
CATGTAATATAATTTGAAATAAAGGTATAGTAACCTTAAAAAGAACATTATAACTGATTGTTGTGAATGGGGTGA
ATTTGTTAAAATGAGTAACTTTGATAAAGTTTTTCATGCACAGGCAAAATGTATTCACTAGATTTCTACGTAGTG
ATCTGCTTTTACTTTGTAATTTGTAGTTCTCAAAAGACTTTTTTTTAAAAAAATAAAGTCCATACTTACACTT

FIGURE 188

MNNQKQQKPTLSGQRFKTRKRDEKERFDPTQFQDCIIQGLTETGTDLEAVAKFLDASGAKLDYRRYAETLFDILV
AGGMLAPGGTLADDMMRTDVCVFAAQEDLETMQAFAQVFNKLIRRYKYLEKGFEDEVKKLLLFLKGFSESERNKL
AMLTGVLLANGTLNASILNSLYNENLVKEGVSAAFAVKLFKSWINEKDINAVAASLRKVSMDNRLMELFPANKQS
VEHFTKYFTEAGLKELSEYVRNQQTIGARKELQKELQEQMSRGDPFKDIILYVKEEMKKNNIPEPVVIGIVWSSV
MSTVEWNKKEELVAEQAIKHLKQYSPLLAAFTTQGQSELTLLLKIQEYCYDNIHFMKAFQKIVVLFYKAEVLSEE
PILKWYKDAHVAKGKSVFLEQMKKFVEWLKNAEEESESESEAEEGD

FIGURE 189

AGTGTGGTCAGGCGGCTCGGACTGAGCAGGACTTTCCTTATCCCAGTTGATTGTGCAGAATACACTGCCTATCGC
TTGTCTTCTATTCACC**ATG**GCTTCTTCTGATATCCAGGTGAAAGAACTGGAGAAGCGTGCCTCAGGCCAGGCTTT
TGAGCTGATTCTCAGCCCTCGGTCAAAAGAATCTGTTCCAGAATTCCCCCTTTCCCCTCCAAAGAAGAAGGATCT
TTCCCTGGAGGAAATTCAGAAGAAATTAGAAGCTGCAGAAGAAAGACGCAAGTCCCATGAAGCTGAGGTCTTGAA
GCAGCTGGCTGAGAAACGAGAGCACGAGAAAGAAGTGCTTCAGAAGGCAATAGAAGAGAACAACAACTTCAGTAA
AATGGCAGAAGAGAAACTGACCCACAAAATGGAAGCTAATAAAGAGAACCGAGAGGCACAAATGGCTGCCAAACT
GGAACGTTTGCGAGAGAAGGATAAGCACATTGAAGAAGTGCGGAAGAACAAAGAATCCAAAGACCCTGCTGACGA
GACTGAAGCTGAC**TAA**TTTGTTCTGAGAACTGACTTTCTCCCCATCCCCTTCCTAAATATCCAAAGACTGTACTG
GCCAGTGTCATTTTATTTTTTCCCTCCTGACAAATATTTTAGAAGCTAATGTAGGACTGTATAGGTAGATCCAGA
TCCAGACTGTAAGATGTTGTTTTAGGGGCTAAAGGGGAGAAACTGAAAGTGTTTTACTCTTTTTCTAAAGTGTTG
GTCTTTCTAATGTAGCTATTTTTCTTGTTGCATCTTTTCTACTTCAGTACACTTGGTGTACTGGGTTAATGGCTA
GTACTGTATTGGCTCTGTGAAAACATATTTGTGAAAAGAGTATGTAGTGGCTTCTTTTGAACTGTTAGATGCTGA
ATATCTGTTCACTTTTCAATCCCAATTCTGTCCCAATCTTACCAGATGCTACTGGACTTGAATGGTTAATAAAAC
TGCACAGTCCTGTTGGTGGCAGTGACTTCTTTTGAGTTAGGTTAATAAATCAAGCCATAGAGCCCCTCCTGGTTG
ATACTTGTTCCAGATGGGGCCTTTGGGGCTGGTAGAAATACCCAACGCACAAATGACCGCACGTTCTCTGCCCCG
TTTCTTGCCCCAGTGTGGTTTGCATTGTCTCCTTCCACAATGACTGCTTTGTTTGGATGCCTCAGCCCAGGTCAG
CTGTTACTTTCTTTCAGATGTTTATTTGCAAACAACCATTTTTTGTTCTGTGTCCCTTTTAAAAGGCAGATTAAA
AGCACAAGCGTGTTTCTAGAGAACAGTTGAGAGAGAATCTCAAGATTCTACTTGGTGGTTTGCTTGCTCTACGTT
ACAGGTGGGGCATGTCCTCATCCTTTCCTGCCATAAAAGCTATGACACGAGAATCAGAATATTAATAAAACTTTA
TGTACTGCTGT

FIGURE 190

MASSDIQVKELEKRASGQAFELILSPRSKESVPEFPLSPPKKKDLSLEEIQKKLEAAEERRKSHEAEVLKQLAEK
REHEKEVLQKAIEENNNFSKMAEEKLTHKMEANKENREAQMAAKLERLREKDKHIEEVRKNKESKDPADETEAD

FIGURE 191

GTCAGTCCCTCCTGTAGCCGCCGCCGCCGCCGCCCGCCGCCCCTCTGCCAGCAGCTCCGGCGCCACCTCGGGCCG
GCGTCTCCGGCGGGCGGGAGCCAGGCGCTGACGGGCGCGGCGGGGGCGGCCGAGCGCTCCTGCGGCTGCGACTCA
GGCTCCGGCGTCTGCGCTTCCCCATGGGGCTGGCCTGCGGCGCCTGGGCGCTCTGAGATTGTCACTGCTGTTCCA
AGGGCACACGCAGAGGGATTTGGAATTCCTGGAGAGTTGCCTTTGTGAGAAGCTGGAAATATTTCTTTCAATTCC
ATCTCTTAGTTTTCCATAGGAACATCAAGAAATC**ATG**AACAACTTTGGTAATGAAGAGTTTGACTGCCACTTCCT
CGATGAAGGTTTTACTGCCAAGGACATTCTGGACCAGAAAATTAATGAAGTTTCTTCTTCTGATGATAAGGATGC
CTTCTATGTGGCAGACCTGGGAGACATTCTAAAGAAACATCTGAGGTGGTTAAAAGCTCTCCCTCGTGTCACCCC
CTTTTATGCAGTCAAATGTAATGATAGCAAAGCCATCGTGAAGACCCTTGCTGCTACCGGGACAGGATTTGACTG
TGCTAGCAAGACTGAAATACAGTTGGTGCAGAGTCTGGGGGTGCCTCCAGAGAGGATTATCTATGCAAATCCTTG
TAAACAAGTATCTCAAATTAAGTATGCTGCTAATAATGGAGTCCAGATGATGACTTTTGATAGTGAAGTTGAGTT
GATGAAAGTTGCCAGAGCACATCCCAAAGCAAAGTTGGTTTTGCGGATTGCCACTGATGATTCCAAAGCAGTCTG
TCGTCTCAGTGTGAAATTCGGTGCCACGCTCAGAACCAGCAGGCTCCTTTTGGAACGGGCGAAAGAGCTAAATAT
CGATGTTGTTGGTGTCAGCTTCCATGTAGGAAGCGGCTGTACCGATCCTGAGACCTTCGTGCAGGCAATCTCTGA
TGCCCGCTGTGTTTTTGACATGGGGGCTGAGGTTGGTTTCAGCATGTATCTGCTTGATATTGGCGGTGGCTTTCC
TGGATCTGAGGATGTGAAACTTAAATTTGAAGAGATCACCGGCGTAATCAACCCAGCGTTGGACAAATACTTTCC
GTCAGACTCTGGAGTGAGAATCATAGCTGAGCCCGGCAGATACTATGTTGCATCAGCTTTCACGCTTGCAGTTAA
TATCATTGCCAAGAAAATTGTATTAAAGGAACAGACGGGCTCTGATGACGAAGATGAGTCGAGTGAGCAGACCTT
TATGTATTATGTGAATGATGGCGTCTATGGATCATTTAATTGCATACTCTATGACCACGCACATGTAAAGCCCCT
TCTGCAAAAGAGACCTAAACCAGATGAGAAGTATTATTCATCCAGCATATGGGGACCAACATGTGATGGCCTCGA
TCGGATTGTTGAGCGCTGTGACCTGCCTGAAATGCATGTGGGTGATTGGATGCTCTTTGAAAACATGGGCGCTTA
CACTGTTGCTGCTGCCTCTACGTTCAATGGCTTCCAGAGGCCGACGATCTACTATGTGATGTCAGGGCCTGCGTG
GCAACTCATGCAGCAATTCCAGAACCCCGACTTCCCACCCGAAGTAGAGGAACAGGATGCCAGCACCCTGCCTGT
GTCTTGTGCCTGGGAGAGTGGGATGAAACGCCACAGAGCAGCCTGTGCTTCGGCTAGTATTAATGTG**TAG**ATAGC
ACTCTGGTAGCTGTTAACTGCAAGTTTAGCTTGAATTAAGGGATTTGGGGGGACCATGTAACTTAATTACTGCTA
GTTTTGAAATGTCTTTGTAAGAGTAGGGTCGCCATGATGCAGCCATATGGAAGACTAGGATATGGGTCACACTTA
TCTGTGTTCCTATGGAAACTATTTGAATATTTGTTTTATATGGATTTTTATTCACTCTTCAGACACGCTACTCAA
GAGTGCCCCTCAGCTGCTGAACAAGCATTTGTAGCTTGTACAATGGCAGAATGGGCCAAAAGCTTAGTGTTGTGA
CCTGTTTTTAAAATAAAGTATCTTGAAATAATTAGGC

FIGURE 192

MNNFGNEEFDCHFLDEGFTAKDILDQKINEVSSSDDKDAFYVADLGDILKKHLRWLKALPRVTPFYAVKCNDSKA
IVKTLAATGTGFDCASKTEIQLVQSLGVPPERIIYANPCKQVSQIKYAANNGVQMMTFDSEVELMKVARAHPKAK
LVLRIATDDSKAVCRLSVKFGATLRTSRLLLERAKELNIDVVGVSFHVGSGCTDPETFVQAISDARCVFDMGAEV
GFSMYLLDIGGGFPGSEDVKLKFEEITGVINPALDKYFPSDSGVRIIAEPGRYYVASAFTLAVNIIAKKIVLKEQ
TGSDDEDESSEQTFMYYVNDGVYGSFNCILYDHAHVKPLLQKRPKPDEKYYSSSIWGPTCDGLDRIVERCDLPEM
HVGDWMLFENMGAYTVAAASTFNGFQRPTIYYVMSGPAWQLMQQFQNPDFPPEVEEQDASTLPVSCAWESGMKRH
RAACASASINV

FIGURE 193

CTCCGAACAGGAAGAGGACGAAAAAAATAACCGTCCGCGACGCCGAGACAAACCGGACCCGCAACCACCATGAAC
AGCAAAGGTCAATATCCAACACAGCCAACCTACCCTGTGCAGCCTCCTGGGAATCCAGTATACCCTCAGACCTTG
CATCTTCCTCAGGCTCCACCCTATACCGATGCTCCACCTGCCTACTCAGAGCTCTATCGTCCGAGCTTTGTGCAC
CCAGGGGCTGCCACAGTCCCCACCATGTCAGCCGCATTTCCTGGAGCCTCTCTGTATCTTCCCATGGCCCAGTCT
GTGGCTGTTGGGCCTTTAGGTTCCACAATCCCCATGGCTTATTATCCAGTCGGTCCCATCTATCCACCTGGCTCC
ACAGTGCTGGTGGAAGGAGGGTATGATGCAGGTGCCAGATTTGGAGCTGGGGCTACTGCTGGCAACATTCCTCCT
CCACCTCCTGGATGCCCTCCCAATGCTGCTCAGCTTGCAGTCATGCAGGGAGCCAACGTCCTCGTAACTCAGCGG
AAGGGGAACTTCTTCATGGGTGGTTCAGATGGTGGCTACACCATCTGGTGAGGAACCAAGGCCACCTCTGTGCCG
GGAAAGACATCACATACCTTCAGCACTTCTCACAATGTAACTGCTTTAGTCATATTAACCTGAAGTTGCAGTTTA
GACACATGTTGTTGGGGTGTCTTTCTGGTGCCCAAACTTTCAGGCACTTTTCAAATTTAATAAGGAACCATGTAA
TGGTAGCAGTACCTCCCTAAAGCATTTTGAGGTAGGGGAGGTATCCATTCATAAAATGAATGTGGGTGAAGCCGC
CCTAAGGATTTTCCTTTAATTTCTCTGGAGTAATACTGTACCATACTGGTCTTTGCTTTTAGTAATAAAACATCA
AATTAGGTTTGGAGGGAACTTTGATCTTCCTAAGAATTAAAGTTGCCAAATTATTCTGATTGGTCTTTAATCTCC
TTTAAGTCTTTGATATATATTACTTGTTATAAATGGAACGCATTAGTTGTCTGCCTTTTCCTTTCCATCCCTTGC
CCCACCCATCCCATCTCCAACCCTAGTCTTCCATTTCCTCCCGCCAGTCTCCATTGAATCAATGGTGCAGGACAG
AAAGCCAGTCAGACTAATTTCCTTCTTTCCTCGCACTTCTCCCCACTCGTCATCTTTTAACTAGTGTTTCACAAG
GATCCTCTGAAACCCTCTCTGTGCCCCAAGTACAGATGCCATTACTTCTGCTTTCGTATCTCCTCAGGCAAAAGT
GGAGGGTGCCTTATGGGCCCTCCTCATAGGTTGTCTCTGCATACACGAACCTAACCCAAATTTGCTTTGGTGCCA
GAAAAACTGAGCTATGTTTGAACAAAGATGTCGTGCAAACTGTACTGTGAACAACAGTTGGTTTAAAATATGAGG
GGCAAGGAGGAGGATGCATTTCAAAAGCTTGATTGATGTGTTCAGAGCTAAATTAAGAGGAGTTTTCAGATCAAA
AACTGGTTACCATTTTTTGTCAGAGTGTCTGATGCGGCCACTCATTCGGCTCCCCAGAATTCCTAGACTGGGTTA
ATAGGGTCATATTGTGAATGTCTCACTACAAAATGACTTGAGTCCAGTGAAATCTCATTAGGGTTTAAGAATATT
TCAGGGATCCTTAATGTTTTGATTTTTGTTTTCTGAAATTGGATTTTATTTTATTTTATCTTATAATTTCAGTTC
ATCTAAATTGTGTGTTCTGTACATGTGATGTTTGACTGTACCATTGACTGTTATGGAAGTTCAGCGTTGTATGTC
TCTCTCTACACTGTGGTGCACTTAACTTGTGGAATTTTTATACTAAAAATGTAGAATAAAGACTATTTTGAAGAT
TTGAATAAAGTGATGAAGTTGC

FIGURE 194

MNSKGQYPTQPTYPVQPPGNPVYPQTLHLPQAPPYTDAPPAYSELYRPSFVHPGAATVPTMSAAFPGASLYLPMA
QSVAVGPLGSTIPMAYYPVGPIYPPGSTVLVEGGYDAGARFGAGATAGNIPPPPPGCPPNAAQLAVMQGANVLVT
QRKGNFFMGGSDGGYTIW

FIGURE 195

GCTGCTGCGACAGTCCACTACCTTTTTCGAGAGTGACTCCCGTTGTCCCAAGGCTTCCCAGAGCGAACCTGTGCG
GCTGCAGGCACCGGCGCGTCGAGTTTCCGGCGTCCGGAAGGACCGAGCTCTTCTCGCGGATCCAGTGTTCCGTTT
CCAGCCCCCAATCTCAGAGCCGAGCCGACAGAGAGCAGGGAACCGGC**ATG**GCCAAAGCCGCGGCGATCGGCATCG
ACCTGGGCACCACCTACTCCTGCGTGGGGGTGTTCCAACACGGCAAGGTGGAGATCATCGCCAACGACCAGGGCA
ACCGCACCACCCCCAGCTACGTGGCCTTCACGGACACCGAGCGGCTCATCGGGGATGCGGCCAAGAACCAGGTGG
CGCTGAACCCGCAGAACACCGTGTTTGACGCGAAGCGGCTGATCGGCCGCAAGTTCGGCGACCCGGTGGTGCAGT
CGGACATGAAGCACTGGCCTTTCCAGGTGATCAACGACGGAGACAAGCCCAAGGTGCAGGTGAGCTACAAGGGGG
ACACCAAGGCATTCTACCCCGAGGAGATCTCGTCCATGGTGCTGACCAAGATGAAGGAGATCGCCGAGGCGTACC
TGGGCTACCCGGTGACCAACGCGGTGATCACCGTGCCGGCCTACTTCAACGACTCGCAGCGCCAGGCCACCAAGG
ATGCGGGTGTGATCGCGGGGCTCAACGTGCTGCGGATCATCAACGAGCCCACGGCCGCCGCCATCGCCTACGGCC
TGGACAGAACGGGCAAGGGGGAGCGCAACGTGCTCATCTTTGACCTGGGCGGGGGCACCTTCGACGTGTCCATCC
TGACGATCGACGACGGCATCTTCGAGGTGAAGGCCACGGCCGGGGACACCCACCTGGGTGGGGAGGACTTTGACA
ACAGGCTGGTGAACCACTTCGTGGAGGAGTTCAAGAGAAAACACAAGAAGGACATCAGCCAGAACAAGCGAGCCG
TGAGGCGGCTGCGCACCGCCTGCGAGAGGGCCAAGAGGACCCTGTCGTCCAGCACCCAGGCCAGCCTGGAGATCG
ACTCCCTGTTTGAGGGCATCGACTTCTACACGTCCATCACCAGGGCGAGGTTCGAGGAGCTGTGCTCCGACCTGT
TCCGAAGCACCCTGGAGCCCGTGGAGAAGGCTCTGCGCGACGCCAAGCTGGACAAGGCCCAGATTCACGACCTGG
TCCTGGTCGGGGGCTCCACCCGCATCCCCAAGGTGCAGAAGCTGCTGCAGGACTTCTTCAACGGGCGCGACCTGA
ACAAGAGCATCAACCCCGACGAGGCTGTGGCCTACGGGGCGGCGGTGCAGGCGGCCATCCTGATGGGGGACAAGT
CCGAGAACGTGCAGGACCTGCTGCTGCTGGACGTGGCTCCCCTGTCGCTGGGGCTGGAGACGGCCGGAGGCGTGA
TGACTGCCCTGATCAAGCGCAACTCCACCATCCCCACCAAGCAGACGCAGATCTTCACCACCTACTCCGACAACC
AACCCGGGGTGCTGATCCAGGTGTACGAGGGCGAGAGGGCCATGACGAAAGACAACAATCTGTTGGGGCGCTTCG
AGCTGAGCGGCATCCCTCCGGCCCCCAGGGGCGTGCCCCAGATCGAGGTGACCTTCGACATCGATGCCAACGGCA
TCCTGAACGTCACGGCCACGGACAAGAGCACCGGCAAGGCCAACAAGATCACCATCACCAACGACAAGGGCCGCC
TGAGCAAGGAGGAGATCGAGCGCATGGTGCAGGAGGCGGAGAAGTACAAAGCGGAGGACGAGGTGCAGCGCGAGA
GGGTGTCAGCCAAGAACGCCCTGGAGTCCTACGCCTTCAACATGAAGAGCGCCGTGGAGGATGAGGGGCTCAAGG
GCAAGATCAGCGAGGCCGACAAGAAGAAGGTGCTGGACAAGTGTCAAGAGGTCATCTCGTGGCTGGACGCCAACA
CCTTGGCCGAGAAGGACGAGTTTGAGCACAAGAGGAAGGAGCTGGAGCAGGTGTGTAACCCCATCATCAGCGGAC
TGTACCAGGGTGCCGGTGGTCCCGGGCCTGGGGGCTTCGGGGCTCAGGGTCCCAAGGGAGGGTCTGGGTCAGGCC
CCACCATTGAGGAGGTAGAT**TAG**GGGCCTTTCCAAGATTGCTGTTTTTGTTTTGGAGCTTCAAGACTTTGCATTT
CCTAGTATTTCTGTTTGTCAGTTCTCAATTTCCTGTGTTTGCAATGTTGAAATTTTTTGGTGAAGTACTGAACTT
GCTTTTTTTCCGGTTTCTACATGCAGAGATGAATTTATACTGCCATCTTACGACTATTTCTTCTTTTTAATACAC
TTAACTCAGGCCATTTTTTAAGTTGGTTACTTCAAAGTAAATAAACTTTAAAATTCAAGTGA

FIGURE 196

MAKAAAIGIDLGTTYSCVGVFQHGKVEIIANDQGNRTTPSYVAFTDTERLIGDAAKNQVALNPQNTVFDAKRLIG
RKFGDPVVQSDMKHWPFQVINDGDKPKVQVSYKGDTKAFYPEEISSMVLTKMKEIAEAYLGYPVTNAVITVPAYF
NDSQRQATKDAGVIAGLNVLRIINEPTAAAIAYGLDRTGKGERNVLIFDLGGGTFDVSILTIDDGIFEVKATAGD
THLGGEDFDNRLVNHFVEEFKRKHKKDISQNKRAVRRLRTACERAKRTLSSSTQASLEIDSLFEGIDFYTSITRA
RFEELCSDLFRSTLEPVEKALRDAKLDKAQIHDLVLVGGSTRIPKVQKLLQDFFNGRDLNKSINPDEAVAYGAAV
QAAILMGDKSENVQDLLLLDVAPLSLGLETAGGVMTALIKRNSTIPTKQTQIFTTYSDNQPGVLIQVYEGERAMT
KDNNLLGRFELSGIPPAPRGVPQIEVTFDIDANGILNVTATDKSTGKANKITITNDKGRLSKEEIERMVQEAEKY
KAEDEVQRERVSAKNALESYAFNMKSAVEDEGLKGKISEADKKKVLDKCQEVISWLDANTLAEKDEFEHKRKELE
QVCNPIISGLYQGAGGPGPGGFGAQGPKGGSGSGPTIEEVD

FIGURE 197

GGTCCCAAGGCTTTCCAGAGCGAACCTGTGCGGCTGCAGGCACCGGCGTGTTGAGTTTCCGGCGTTCCGAAGGAC
TGAGCTCTTGTCGCGGATCCCGTCCGCCGTTTCCAGCCCCCAGTCTCAGAGCGGAGCCCACAGAGCAGGGCACCG
GCATGGCCAAAGCCGCGGCGATCGGCATCGACCTGGGCACCACCTACTCCTGCGTGGGGGTGTTCCAACACGGCA
AGGTGGAGATCATCGCCAACGACCAGGGCAACCGCACCACCCCCAGCTACGTGGCCTTCACGGACACCGAGCGGC
TCATCGGGGATGCGGCCAAGAACCAGGTGGCGCTGAACCCGCAGAACACCGTGTTTGACGCGAAGCGGCTGATCG
GCCGCAAGTTCGGCGACCCGGTGGTGCAGTCGGACATGAAGCACTGGCCTTTCCAGGTGATCAACGACGGAGACA
AGCCCAAGGTGCAGGTGAGCTACAAGGGGGAGACCAAGGCATTCTACCCCGAGGAGATCTCGTCCATGGTGCTGA
CCAAGATGAAGGAGATCGCCGAGGCGTACCTGGGCTACCCGGTGACCAACGCGGTGATCACCGTGCCGGCCTACT
TCAACGACTCGCAGCGCCAGGCCACCAAGGATGCGGGTGTGATCGCGGGGCTCAACGTGCTGCGGATCATCAACG
AGCCCACGGCCGCCGCCATCGCCTACGGCCTGGACAGAACGGGCAAGGGGGAGCGCAACGTGCTCATCTTTGACC
TGGGCGGGGGCACCTTCGACGTGTCCATCCTGACGATCGACGACGGCATCTTCGAGGTGAAGGCCACGGCCGGGG
ACACCCACCTGGGTGGGGAGGACTTTGACAACAGGCTGGTGAACCACTTCGTGGAGGAGTTCAAGAGAAAACACA
AGAAGGACATCAGCCAGAACAAGCGAGCCGTGAGGCGGCTGCGCACCGCCTGCGAGAGGGCCAAGAGGACCCTGT
CGTCCAGCACCCAGGCCAGCCTGGAGATCGACTCCCTGTTTGAGGGCATCGACTTCTACACGTCCATCACCAGGG
CGAGGTTCGAGGAGCTGTGCTCCGACCTGTTCCGAAGCACCCTGGAGCCCGTGGAGAAGGCTCTGCGCGACGCCA
AGCTGGACAAGGCCCAGATTCACGACCTGGTCCTGGTCGGGGGCTCCACCCGCATCCCCAAGGTGCAGAAGCTGC
TGCAGGACTTCTTCAACGGGCGCGACCTGAACAAGAGCATCAACCCCGACGAGGCTGTGGCCTACGGGGCGGCGG
TGCAGGCGGCCATCCTGATGGGGGACAAGTCCGAGAACGTGCAGGACCTGCTGCTGCTGGACGTGGCTCCCCTGT
CGCTGGGGCTGGAGACGGCCGGAGGCGTGATGACTGCCCTGATCAAGCGCAACTCCACCATCCCCACCAAGCAGA
CGCAGATCTTCACCACCTACTCCGACAACCAACCCGGGGTGCTGATCCAGGTGTACGAGGGCGAGAGGGCCATGA
CGAAAGACAACAATCTGTTGGGGCGCTTCGAGCTGAGCGGCATCCCTCCGGCCCCCAGGGGCGTGCCCCAGATCG
AGGTGACCTTCGACATCGATGCCAACGGCATCCTGAACGTCACGGCCACGGACAAGAGCACCGGCAAGGCCAGCA
AGATCACCATCACCAACGACAAGGGCCGCCTGAGCAAGGAGGAGATCGAGCGCATGGTGCAGGAGGCGGAGAAGT
ACAAAGCGGAGGACGAGGTGCAGCGCGAGAGGGTGTCAGCCAAGAACGCCCTGGAGTCCTACGCCTTCAACATGA
AGAGCGCCGTGGAGGATGAGGGGCTCAAGGGCAAGATCAGCGAGGCGGACAAGAAGAAGGTTCTGGACAAGTGTC
AAGAGGTCATCTCGTGGCTGGACGCCAACACCTTGGCCGAGAAGGACGAGTTTGAGCACAAGAGGAAGGAGCTGG
AGCAGGTGTGTAACCCCATCATCAGCGGACTGTACCAGGGTGCCGGTGGTCCCGGGCCTGGGGGCTTCGGGGCTC
AGGGTCCCAAGGGAGGGTCTGGGTCAGGCCCTACCATTGAGGAGGTGGATTAGGGCCTTTGTTCTTTAGTATGT
TTGTCTTTGAGGTGGACTGTTGGGACTCAAGGACTTTGCTGCTGTTTTCCTATGTCATTTCTGCTTCAGCTCTTT
GCTGCTTCACTTCTTTGTAAAGTTAAGTTGTAACCTGATGGTAATTAGCTGGCTTCATTATTTTTGTAGTACAAC
CGATATGTTCATTAGAATTCTTTGCATTTAATGTTGATACTGTAAGGGTGTTTCGTTCCCTTTAAATGAATCAAC
ACTGCCACCTTCTGTACGAGTTTGTTTTTTTTTTTTTTTTTTTTTTTTTTTGCTTGGCGAAAACACTACAAAGGC
TGGGAATGTATGTTTTTATAATTTGTTTATTTAAATATGAAAAATAAAATGTTAAACTTT

FIGURE 198

MAKAAAIGIDLGTTYSCVGVFQHGKVEIIANDQGNRTTPSYVAFTDTERLIGDAAKNQVALNPQNTVFDAKRLIG
RKFGDPVVQSDMKHWPFQVINDGDKPKVQVSYKGETKAFYPEEISSMVLTKMKEIAEAYLGYPVTNAVITVPAYF
NDSQRQATKDAGVIAGLNVLRIINEPTAAAIAYGLDRTGKGERNVLIFDLGGGTFDVSILTIDDGIFEVKATAGD
THLGGEDFDNRLVNHFVEEFKRKHKKDISQNKRAVRRLRTACERAKRTLSSSTQASLEIDSLFEGIDFYTSITRA
RFEELCSDLFRSTLEPVEKALRDAKLDKAQIHDLVLVGGSTRIPKVQKLLQDFFNGRDLNKSINPDEAVAYGAAV
QAAILMGDKSENVQDLLLLDVAPLSLGLETAGGVMTALIKRNSTIPTKQTQIFTTYSDNQPGVLIQVYEGERAMT
KDNNLLGRFELSGIPPAPRGVPQIEVTFDIDANGILNVTATDKSTGKASKITITNDKGRLSKEEIERMVQEAEKY
KAEDEVQRERVSAKNALESYAFNMKSAVEDEGLKGKISEADKKKVLDKCQEVISWLDANTLAEKDEFEHKRKELE
QVCNPIISGLYQGAGGPGPGGFGAQGPKGGSGSGPTIEEVD

FIGURE 199

CACGCTTGCCGCCGCCCCGCAGAAATGCTTCGGTTACCCACAGTCTTTCGCCAGATGAGACCGGTGTCCAGGGTA
CTGGCTCCTCATCTCACTCGGGCTTATGCCAAAGATGTAAAATTTGGTGCAGATGCCCGAGCCTTAATGCTTCAA
GGTGTAGACCTTTTAGCCGATGCTGTGGCCGTTACAATGGGGCCAAAGGGAAGAACAGTGATTATTGAGCAGGGT
TGGGGAAGTCCCAAAGTAACAAAAGATGGTGTGACTGTTGCAAAGTCAATTGACTTAAAAGATAAATACAAGAAC
ATTGGAGCTAAACTTGTTCAAGATGTTGCCAATAACACAAATGAAGAAGCTGGGGATGGCACTACCACTGCTACT
GTACTGGCACGCTCTATAGCCAAGGAAGGCTTCGAGAAGATTAGCAAAGGTGCTAATCCAGTGGAAATCAGGAGA
GGTGTGATGTTAGCTGTTGATGCTGTAATTGCTGAACTTAAAAAGCAGTCTAAACCTGTGACCACCCCTGAAGAA
ATTGCACAGGTTGCTACGATTTCTGCAAACGGAGACAAAGAAATTGGCAATATCATCTCTGATGCAATGAAAAAA
GTTGGAAGAAAGGGTGTCATCACAGTAAAGGATGGAAAAACACTGAATGATGAATTAGAAATTATTGAAGGCATG
AAGTTTGATCGAGGCTATATTTCTCCATACTTTATTAATACATCAAAAGGTCAGAAATGTGAATTCCAGGATGCC
TATGTTCTGTTGAGTGAAAAGAAAATTTCTAGTATCCAGTCCATTGTACCTGCTCTTGAAATTGCCAATGCTCAC
CGTAAGCCTTTGGTCATAATCGCTGAAGATGTTGATGGAGAAGCTCTAAGTACACTCGTCTTGAATAGGCTAAAG
GTTGGTCTTCAGGTTGTGGCAGTCAAGGCTCCAGGGTTTGGTGACAATAGAAAGAACCAGCTTAAAGATATGGCT
ATTGCTACTGGTGGTGCAGTGTTTGGAGAAGAGGGATTGACCCTGAATCTTGAAGACGTTCAGCCTCATGACTTA
GGAAAAGTTGGAGAGGTCATTGTGACCAAAGACGATGCCATGCTCTTAAAAGGAAAAGGTGACAAGGCTCAAATT
GAAAAACGTATTCAAGAAATCATTGAGCAGTTAGATGTCACAACTAGTGAATATGAAAAGGAAAAACTGAATGAA
CGGCTTGCAAAACTTTCAGATGGAGTGGCTGTGCTGAAGGTTGGTGGGACAAGTGATGTTGAAGTGAATGAAAAG
AAAGACAGAGTTACAGATGCCCTTAATGCTACAAGAGCTGCTGTTGAAGAAGGCATTGTTTTGGGAGGGGGTTGT
GCCCTCCTTCGATGCATTCCAGCCTTGGACTCATTGACTCCAGCTAATGAAGATCAAAAAATTGGTATAGAAATT
ATTAAAAGAACACTCAAAATTCCAGCAATGACCATTGCTAAGAATGCAGGTGTTGAAGGATCTTTGATAGTTGAG
AAAATTATGCAAAGTTCCTCAGAAGTTGGTTATGATGCTATGGCTGGAGATTTTGTGAATATGGTGGAAAAAGGA
ATCATTGACCCAACAAAGGTTGTGAGAACTGCTTTATTGGATGCTGCTGGTGTGGCCTCTCTGTTAACTACAGCA
GAAGTTGTAGTCACAGAAATTCCTAAAGAAGAGAAGGACCCTGGAATGGGTGCAATGGGTGGAATGGGAGGTGGT
ATGGGAGGTGGCATGTTCTAACTCCTAGACTAGTGCTTTACCTTTATTAATGAACTGTGACAGGAAGCCCAAGGC
AGTGTTCCTCACCAATAACTTCAGAGAAGTCAGTTGGAGAAAATGAAGAAAAAGGCTGGCTGAAAATCACTATAA
CCATCAGTTACTGGTTTCAGTTGACAAAATATATAATGGTTTACTGCTGTCATTGTCCATGCCTACAGATAATTT
ATTTTGTATTTTTGAATAAAAAACATTTGTACATTCCTGATACTGGGTACAAGAGCCATGTACCAGTGTACTGCT
TTCAACTTAAATCACTGAGGCATTTTTACTACTATTCTGTTAAAATCAGGATTTTAGTGCTTGCCACCACCAGAT
GAGAAGTTAAGCAGCCTTTCTGTGGAGAGTGAGAATAATTGTGTACAAAGTAGAGAAGTATCCAATTATGTGACA
ACCTTTGTGTAATAAAAATTTGTTTAA

FIGURE 200

MLRLPTVFRQMRPVSRVLAPHLTRAYAKDVKFGADARALMLQGVDLLADAVAVTMGPKGRTVIIEQGWGSPKVTK
DGVTVAKSIDLKDKYKNIGAKLVQDVANNTNEEAGDGTTTATVLARSIAKEGFEKISKGANPVEIRRGVMLAVDA
VIAELKKQSKPVTTPEEIAQVATISANGDKEIGNIISDAMKKVGRKGVITVKDGKTLNDELEIIEGMKFDRGYIS
PYFINTSKGQKCEFQDAYVLLSEKKISSIQSIVPALEIANAHRKPLVIIAEDVDGEALSTLVLNRLKVGLQVVAV
KAPGFGDNRKNQLKDMAIATGGAVFGEEGLTLNLEDVQPHDLGKVGEVIVTKDDAMLLKGKGDKAQIEKRIQEII
EQLDVTTSEYEKEKLNERLAKLSDGVAVLKVGGTSDVEVNEKKDRVTDALNATRAAVEEGIVLGGGCALLRCIPA
LDSLTPANEDQKIGIEIIKRTLKIPAMTIAKNAGVEGSLIVEKIMQSSSEVGYDAMAGDFVNMVEKGIIDPTKVV
RTALLDAAGVASLLTTAEVVVTEIPKEEKDPGMGAMGGMGGGMGGGMF

FIGURE 201

CACGCTTGCCGCCGCCCCGCAGAA**ATG**CTTCGGTTACCCACAGTCTTTCGCCAGATGAGACCGGTGTCCAGGGTA
CTGGCTCCTCATCTCACTCGGGCTTATGCCAAAGATGTAAAATTTGGTGCAGATGCCCGAGCCTTAATGCTTCAA
GGTGTAGACCTTTTAGCCGATGCTGTGGCCGTTACAATGGGGCCAAAGGGAAGAACAGTGATTATTGAGCAGGGT
TGGGGAAGTCCCAAAGTAACAAAAGATGGTGTGACTGTTGCAAAGTCAATTGACTTAAAAGATAAATACAAGAAC
ATTGGAGCTAAACTTGTTCAAGATGTTGCCAATAACACAAATGAAGAAGCTGGGGATGGCACTACCACTGCTACT
GTACTGGCACGCTCTATAGCCAAGGAAGGCTTCGAGAAGATTAGCAAAGGTGCTAATCCAGTGGAAATCAGGAGA
GGTGTGATGTTAGCTGTTGATGCTGTAATTGCTGAACTTAAAAAGCAGTCTAAACCTGTGACCACCCCTGAAGAA
ATTGCACAGGTTGCTACGATTTCTGCAAACGGAGACAAAGAAATTGGCAATATCATCTCTGATGCAATGAAAAAA
GTTGGAAGAAAGGGTGTCATCACAGTAAAGGATGGAAAAACACTGAATGATGAATTAGAAATTATTGAAGGCATG
AAGTTTGATCGAGGCTATATTTCTCCATACTTTATTAATACATCAAAAGGTCAGAAATGTGAATTCCAGGATGCC
TATGTTCTGTTGAGTGAAAAGAAAATTTCTAGTATCCAGTCCATTGTACCTGCTCTTGAAATTGCCAATGCTCAC
CGTAAGCCTTTGGTCATAATCGCTGAAGATGTTGATGGAGAAGCTCTAAGTACACTCGTCTTGAATAGGCTAAAG
GTTGGTCTTCAGGTTGTGGCAGTCAAGGCTCCAGGGTTTGGTGACAATAGAAAGAACCAGCTTAAAGATATGGCT
ATTGCTACTGGTGGTGCAGTGTTTGGAGAAGAGGGATTGACCCTGAATCTTGAAGACGTTCAGCCTCATGACTTA
GGAAAAGTTGGAGAGGTCATTGTGACCAAAGACGATGCCATGCTCTTAAAAGGAAAAGGTGACAAGGCTCAAATT
GAAAAACGTATTCAAGAAATCATTGAGCAGTTAGATGTCACAACTAGTGAATATGAAAAGGAAAAACTGAATGAA
CGGCTTGCAAAACTTTCAGATGGAGTGGCTGTGCTGAAGGTTGGTGGGACAAGTGATGTTGAAGTGAATGAAAAG
AAAGACAGAGTTACAGATGCCCTTAATGCTACAAGAGCTGCTGTTGAAGAAGGCATTGTTTTGGGAGGGGGTTGT
GCCCTCCTTCGATGCATTCCAGCCTTGGACTCATTGACTCCAGCTAATGAAGATCAAAAAATTGGTATAGAAATT
ATTAAAAGAACACTCAAAATTCCAGCAATGACCATTGCTAAGAATGCAGGTGTTGAAGGATCTTTGATAGTTGAG
AAAATTATGCAAAGTTCCTCAGAAGTTGGTTATGATGCTATGGCTGGAGATTTTGTGAATATGGTGGAAAAAGGA
ATCATTGACCCAACAAAGGTTGTGAGAACTGCTTTATTGGATGCTGCTGGTGTGGCCTCTCTGTTAACTACAGCA
GAAGTTGTAGTCACAGAAATTCCTAAAGAAGAGAAGGACCCTGGAATGGGTGCAATGGGTGGAATGGGAGGTGGT
ATGGGAGGTGGCATGTTC**TAA**CTCCTAGACTAGTGCTTTACCTTTATTAATGAACTGTGACAGGAAGCCCAAGGC
AGTGTTCCTCACCAATAACTTCAGAGAAGTCAGTTGGAGAAAATGAAGAAAAAGGCTGGCTGAAAATCACTATAA
CCATCAGTTACTGGTTTCAGTTGACAAAATATATAATGGTTTACTGCTGTCATTGTCCATGCCTACAGATAATTT
ATTTTGTATTTTTGAATAAAAAACATTTGTACATTCCTGATACTGGGTACAAGAGCCATGTACCAGTGTACTGCT
TTCAACTTAAATCACTGAGGCATTTTTACTACTATTCTGTTAAAATCAGGATTTTAGTGCTTGCCACCACCAGAT
GAGAAGTTAAGCAGCCTTTCTGTGGAGAGTGAGAATAATTGTGTACAAAGTAGAGAAGTATCCAATTATGTGACA
ACCTTTGTGTAATAAAAATTTGTTTAA

FIGURE 202

MLRLPTVFRQMRPVSRVLAPHLTRAYAKDVKFGADARALMLQGVDLLADAVAVTMGPKGRTVIIEQGWGSPKVTK
DGVTVAKSIDLKDKYKNIGAKLVQDVANNTNEEAGDGTTTATVLARSIAKEGFEKISKGANPVEIRRGVMLAVDA
VIAELKKQSKPVTTPEEIAQVATISANGDKEIGNIISDAMKKVGRKGVITVKDGKTLNDELEIIEGMKFDRGYIS
PYFINTSKGQKCEFQDAYVLLSEKKISSIQSIVPALEIANAHRKPLVIIAEDVDGEALSTLVLNRLKVGLQVVAV
KAPGFGDNRKNQLKDMAIATGGAVFGEEGLTLNLEDVQPHDLGKVGEVIVTKDDAMLLKGKGDKAQIEKRIQEII
EQLDVTTSEYEKEKLNERLAKLSDGVAVLKVGGTSDVEVNEKKDRVTDALNATRAAVEEGIVLGGGCALLRCIPA
LDSLTPANEDQKIGIEIIKRTLKIPAMTIAKNAGVEGSLIVEKIMQSSSEVGYDAMAGDFVNMVEKGIIDPTKVV
RTALLDAAGVASLLTTAEVVVTEIPKEEKDPGMGAMGGMGGGMGGGMF

FIGURE 203

TAGCTTGGCACGAGGCTCGGGTCGTTGTGGTGCGCTGTCTTCCCGCTTGCGTCAGGGACCTGCCCGACTCAGTGG
CCGCCATGGCATCAGATGAAGGCAAACTTTTTGTTGGAGGGCTGAGTTTTGACACCAATGAGCAGTCGCTGGAGC
AGGTCTTCTCAAAGTACGGACAGATCTCTGAAGTGGTGGTTGTGAAAGACAGGGAGACCCAGAGATCTCGGGGAT
TTGGGTTTGTCACCTTTGAGAACATTGACGACGCTAAGGATGCCATGATGGCCATGAATGGGAAGTCTGTAGATG
GACGGCAGATCCGAGTAGACCAGGCAGGCAAGTCGTCAGACAACCGATCCCGTGGGTACCGTGGTGGCTCTGCCG
GGGGCCGGGGCTTCTTCCGTGGGGGCCGAGGACGGGGCCGTGGGTTCTCTAGAGGAGGAGGGGACCGAGGCTATG
GGGGGAACCGGTTCGAGTCCAGGAGTGGGGGCTACGGAGGCTCCAGAGACTACTATAGCAGCCGGAGTCAGAGTG
GTGGCTACAGTGACCGGAGCTCGGGCGGGTCCTACAGAGACAGTTACGACAGTTACGCTACACACAACGAGTAAA
AACCCTTCCTGCTCAAGATCGTCCTTCCAATGGCTGTGTGTTTAAAGATTGTGGGAGCTTCGCTGAACGTTAATG
TGTAGTAAATGCACCTCCTTGTATTCCCACTTTCGTAGTCATTTCGGTTCTGATCTTGTCAAACCCAGCCTGACC
GCTTCTGACGCCGGGATGGCCTCGTTACTAGACTTTTCTTTTTAAGGAAGTGCTGTTTTTTTTTGAGGGTTTTCA
AAACATTTTGAAAAGCATTTACTTTTTTGACCACGAGCCATGAGTTTTCAAAAAAATCGGGGGTTGTGTGGGTTT
TTGGTTTTTGTTTTAGTTTTTGGTTGCGTTGCCTTTTTTTTTTAGTGGGGTTGGCCCCATGAAGTGGGTGCCCCA
CTCACTTCTCTGAGATCGAACGGACTGTGAATCCGCTCTTTGTCGGAAGCTGAGCAAGCTGTGGCTTTTTTCCAA
CTCCGTGTGACGTTTCTGAGTGTAGTGTGGTAGGACCCGGCGGGTGTGCAGCAACTGCCCTGGAGCCCCAGCCCC
TGCGTCCATCTGTGCTGTGCGCCCCACAGTAGACGTGCAGACGTCCCTGAGAGGTTCTTGAAGATGTTTATTTAT
ATTGTCCTTTTTTACTGGAAGACGTACGCATACTCCATCGATGTTGTATTTGCAGTGGCTGAGGAATTCTTGTAC
GCAGTTTTCTTTGGCTTTACGAGCCGATTAAAAGACCGTGTGAAATG

FIGURE 204

MASDEGKLFVGGLSFDTNEQSLEQVFSKYGQISEVVVVKDRETQRSRGFGFVTFENIDDAKDAMMAMNGKSVDGR
QIRVDQAGKSSDNRSRGYRGGSAGGRGFFRGGRGRGRGFSRGGGDRGYGGNRFESRSGGYGGSRDYYSSRSQSGG
YSDRSSGGSYRDSYDSYATHNE

FIGURE 205

TAGCTTGGCACGAGGCTCGGGTCGTTGTGGTGCGCTGTCTTCCCGCTTGCGTCAGGGACCTGCCCGACTCAGTGG
CCGCCATGGCATCAGATGAAGGCAAACTTTTTGTTGGAGGGCTGAGTTTTGACACCAATGAGCAGTCGCTGGAGC
AGGTCTTCTCAAAGTACGGACAGATCTCTGAAGTGGTGGTTGTGAAAGACAGGGAGACCCAGAGATCTCGGGGAT
TTGGGTTTGTCACCTTTGAGAACATTGACGACGCTAAGGATGCCATGATGGCCATGAATGGGAAGTCTGTAGATG
GACGGCAGATCCGAGTAGACCAGGCAGGCAAGTCGTCAGACAACCGATCCCGTGGGTACCGTGGTGGCTCTGCCG
GGGGCCGGGGCTTCTTCCGTGGGGGCCGAGGACGGGGCCGTGGGTTCTCTAGAGGAGGAGGGGACCGAGGCTATG
GGGGGAACCGGTTCGAGTCCAGGAGTGGGGGCTACGGAGGCTCCAGAGACTACTATAGCAGCCGGAGTCAGAGTG
GTGGCTACAGTGACCGGAGCTCGGGCGGGTCCTACAGAGACAGTTACGACAGTTACGCTACACACAACGAGTAAA
AACCCTTCCTGCTCAAGATCGTCCTTCCAATGGCTGTGTGTTTAAAGATTGTGGGAGCTTCGCTGAACGTTAATG
TGTAGTAAATGCACCTCCTTGTATTCCCACTTTCGTAGTCATTTCGGTTCTGATCTTGTCAAACCCAGCCTGACC
GCTTCTGACGCCGGGATGGCCTCGTTACTAGACTTTTCTTTTTAAGGAAGTGCTGTTTTTTTTTGAGGGTTTTCA
AAACATTTTGAAAAGCATTTACTTTTTTGACCACGAGCCATGAGTTTTCAAAAAAATCGGGGGTTGTGTGGGTTT
TTGGTTTTTGTTTTAGTTTTTGGTTGCGTTGCCTTTTTTTTTTAGTGGGGTTGGCCCCATGAAGTGGGTGCCCCA
CTCACTTCTCTGAGATCGAACGGACTGTGAATCCGCTCTTTGTCGGAAGCTGAGCAAGCTGTGGCTTTTTTCCAA
CTCCGTGTGACGTTTCTGAGTGTAGTGTGGTAGGACCCGGCGGGTGTGCAGCAACTGCCCTGGAGCCCCAGCCCC
TGCGTCCATCTGTGCTGTGCGCCCCACAGTAGACGTGCAGACGTCCCTGAGAGGTTCTTGAAGATGTTTATTTAT
ATTGTCCTTTTTTACTGGAAGACGTACGCATACTCCATCGATGTTGTATTTGCAGTGGCTGAGGAATTCTTGTAC
GCAGTTTTCTTTGGCTTTACGAGCCGATTAAAAGACCGTGTGAAATG

FIGURE 206

MASDEGKLFVGGLSFDTNEQSLEQVFSKYGQISEVVVVKDRETQRSRGFGFVTFENIDDAKDAMMAMNGKSVDGR
QIRVDQAGKSSDNRSRGYRGGSAGGRGFFRGGRGRGRGFSRGGGDRGYGGNRFESRSGGYGGSRDYYSSRSQSGG
YSDRSSGGSYRDSYDSYATHNE

FIGURE 207

GTTCCAAGGTTTGCGGCCCGGTCTCGGAGAAGAGGGGAGAGTGGAGGGCCGCTGAATAAGCTTCCAAAATGATGC
CCACACCAGTTATCCTATTGAAAGAGGGGACTGATAGCTCCCAAGGCATCCCCCAGCTTGTGAGTAACATCAGTG
CCTGCCAGGTGATTGCTGAGGCTGTAAGAACTACCCTGGGTCCCCGTGGCATGGACAAGCTTATTGTAGATGGCA
GAGGCAAAGCAACAATTTCTAATGATGGGGCCACAATTCTGAAACTTCTTGATGTTGTCCATCCTGCAGCAAAGA
CTTTGGTAGACATTGCCAAATCCCAAGATGCTGAGGTGGGTGATGGCACCACCTCAGTGACCTTGCTGGCTGCAG
AGTTTCTGAAGCAGGTGAAACCCTATGTGGAGGAAGGTTTACACCCCCAGATCATCATTCGAGCTTTCCGCACAG
CCACCCAGCTGGCAGTTAACAAGATCAAAGAGATTGCTGTGACCGTGAAGAAGGCAGATAAAGTGGAGCAGAGGA
AGCTGCTGGAAAAGTGTGCCATGACCGCTCTGAGCTCCAAGCTGATCTCCCAGCAGAAAGCTTTCTTTGCTAAGA
TGGTGGTGGATGCAGTGATGATGCTCGATGATTTGCTGCAGCTTAAAATGATTGGAATCAAGAAGGTACAGGGTG
GAGCCCTCGAGGATTCTCAGCTGGTAGCTGGTGTTGCATTCAAGAAGACTTTCTCTTACGCTGGGTTTGAAATGC
AACCCAAAAAGTACCACAATCCCAAGATTGCCCTTTTGAATGTCGAGCTCGAGTTGAAAGCTGAGAAAGACAATG
CTGAGATAAGAGTCCACACAGTTGAGGATTATCAGGCAATTGTTGATGCTGAGTGGAACATTCTCTATGACAAGT
TAGAGAAGATCCATCATTCTGGAGCCAAAGTTGTCTTGTCCAAACTCCCCATTGGGGATGTGGCCACCCAGTACT
TTGCTGACAGGGACATGTTCTGTGCTGGCCGAGTACCTGAGGAGGATCTGAAGAGGACAATGATGGCCTGTGGAG
GCTCAATCCAGACCAGTGTGAATGCTCTGTCAGCAGATGTGCTGGGTCGATGCCAGGTGTTTGAAGAGACCCAGA
TTGGAGGCGAGAGGTACAATTTTTTTACTGGCTGCCCCAAGGCCAAGACATGCACCTTCATTCTCCGTGGCGGCG
CCGAGCAGTTTATGGAGGAGACAGAGCGGTCCCTGCATGATGCCATCATGATCGTCAGGAGGGCCATCAAGAATG
ATTCAGTGGTGGCTGGTGGCGGGGCCATTGAGATGGAACTCTCCAAGTACCTGCGGGATTACTCAAGGACTATTC
CAGGAAAACAGCAGCTGTTGATTGGGGCTTATGCCAAGGCCTTGGAGATTATCCCACGCCAGCTGTGTGACAATG
CTGGCTTTGATGCCACAAACATTCTCAACAAGCTGCGGGCTCGGCATGCCCAGGGGGGTACATGGTATGGAGTAG
ACATCAACAACGAGGACATTGCTGACAACTTTGAAGCTTTCGTGTGGGAGCCAGCTATGGTGCGGATCAATGCGC
TGACAGCAGCCTCTGAGGCTGCGTGCCTGATCGTGTCTGTAGATGAAACCATCAAGAACCCCCGCTCGACTGTGG
ATGCTCCCACAGCAGCAGGCCGGGGCCGTGGTCGTGGCCGCCCCCACTGAGAGGCACCCCACCCATCACATGGCT
GGCTGGCTGCTGGGTGCACTTACCCTCCTTGGCTTGGTTACTTCATTTTACAAGGAAGGGGTAGTAATTGGCCCA
CTCTCTTCTTACTGGAGGCTATTTAAATAAAATGTAAGACTTCAAAAAAAAAAAAAAAAAAAA

FIGURE 208

MMPTPVILLKEGTDSSQGIPQLVSNISACQVIAEAVRTTLGPRGMDKLIVDGRGKATISNDGATILKLLDVVHPA
AKTLVDIAKSQDAEVGDGTTSVTLLAAEFLKQVKPYVEEGLHPQIIIRAFRTATQLAVNKIKEIAVTVKKADKVE
QRKLLEKCAMTALSSKLISQQKAFFAKMVVDAVMMLDDLLQLKMIGIKKVQGGALEDSQLVAGVAFKKTFSYAGF
EMQPKKYHNPKIALLNVELELKAEKDNAEIRVHTVEDYQAIVDAEWNILYDKLEKIHHSGAKVVLSKLPIGDVAT
QYFADRDMFCAGRVPEEDLKRTMMACGGSIQTSVNALSADVLGRCQVFEETQIGGERYNFFTGCPKAKTCTFILR
GGAEQFMEETERSLHDAIMIVRRAIKNDSVVAGGGAIEMELSKYLRDYSRTIPGKQQLLIGAYAKALEIIPRQLC
DNAGFDATNILNKLRARHAQGGTWYGVDINNEDIADNFEAFVWEPAMVRINALTAASEAACLIVSVDETIKNPRS
TVDAPTAAGRGRGRGRPH

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FIGURE 209

GGCACGAGGGAGAACTAGTCTCAGTTTTTTTTTTTTTTTTTTTAGGTGAGAAAGCCAGCTGACTTTATTGCTCTG
GGGGCAGGGGGCTCAGGAGCTCTTGGTGGGGCGGGTCCGCTTCCTCTTCACCATCACAGGCTTCTGGCTGCGCAG
GATGGCGCTGGCCCTGCGGATGGCTGCCATGCGCAGGTCGGGGCGGTACTTGTTCTTGCGGATCATGTGTCTGAT
GCTGCTGAGCGTGGCGCGAGCATTCTTGTTGATGGTGGTCCGCACATAGGAGGTGGCAGGCTTCCGCTGGCCGGA
TCTCCGCTTAATGACCACCACGACACCTTTGCCGTCGGCTGCCGGCTCCACGCCCACAGTCTTGCGGTGAATCAG
TCCGTTGTAGCGGAAGGAATTGCGGGCCTTCAAGTTATTGGGCTCAGTGCTGTAGGTCTGCTTATTCCTCTTGAT
CAGGAAACTGGAGCAGTTCCGCACGACCATCCATTGCAGATGCGCAGACATGGCGGCGGCTCCCTTCGCAGCGGC
GACCTGACCTTCAGCGCCTCGGCTCCAGCGCC**ATG**GCGCCCTCCAGGAAGTTCTTCGTTGGGGGAAACTGGAAGA
TGAACGGGCGGAAGCAGAGTCTGGGGGAGCTCATCGGCACTCTGAACGCGGCCAAGGTGCCGGCCGACACCGAGG
TGGTTTGTGCTCCCCCTACTGCCTATATCGACTTCGCCCGGCAGAAGCTAGATCCCAAGATTGCTGTGGCTGCGC
AGAACTGCTACAAAGTGACTAATGGGGCTTTTACTGGGGAGATCAGCCCTGGCATGATCAAAGACTGCGGAGCCA
CGTGGGTGGTCCTGGGGCACTCAGAGAGAAGGCATGTCTTTGGGGAGTCAGATGAGCTGATTGGGCAGAAAGTGG
CCCATGCTCTGGCAGAGGGACTCGGAGTAATCGCCTGCATTGGGGAGAAGCTAGATGAAAGGGAAGCTGGCATCA
CTGAGAAGGTTGTTTTCGAGCAGACAAAGGTCATCGCAGATAACGTGAAGGACTGGAGCAAGGTCGTCCTGGCCT
ATGAGCCTGTGTGGGCCATTGGTACTGGCAAGACTGCAACACCCCAACAGGCCCAGGAAGTACACGAGAAGCTCC
GAGGATGGCTGAAGTCCAACGTCTCTGATGCGGTGGCTCAGAGCACCCGTATCATTTATGGAGGCTCTGTGACTG
GGGCAACCTGCAAGGAGCTGGCCAGCCAGCCTGATGTGGATGGCTTCCTTGTGGGTGGTGCTTCCCTCAAGCCCG
AATTCGTGGACATCATCAATGCCAAACAA**TGA**GCCCCATCCATCTTCCCTACCCTTCCTGCCAAGCCAGGGACTA
AGCAGCCCAGAAGCCCAGTAACTGCCCTTTCCCTGCATATGCTTCTGATGGTGTCATCTGCTCCTTCCTGTGGCC
TCATCCAAACTGTATCTTCCTTTACTGTTTATATCTTCACCCTGTAATGGTTGGGACCAGGCCAATCCCTTCTCC
ACTTACTATAATGGTTGGAACTAAACGTCACCAAGGTGGCTTCTCCTTGGCTGAGAGATGGAAGGCGTGGTGGGA
TTTGCTCCTGGGTTCCCTAGGCCCTAGTGAGGGCAGAAGAGAAACCATCCTCTCCCTTCTTACACCGTGAGGCCA
AGATCCCCTCAGAAGGCAGGAGTGCTGCCCTCTCCCATGGTGCCCGTGCCTCTGTGCTGTGTATGTGAACCACCC
ATGTGAGGGAATAAACCTGGCACTAGGTAAAAAAAAAAAAAAAAAAAA

FIGURE 210

MAPSRKFFVGGNWKMNGRKQSLGELIGTLNAAKVPADTEVVCAPPTAYIDFARQKLDPKIAVAAQNCYKVTNGAF
TGEISPGMIKDCGATWVVLGHSERRHVFGESDELIGQKVAHALAEGLGVIACIGEKLDEREAGITEKVVFEQTKV
IADNVKDWSKVVLAYEPVWAIGTGKTATPQQAQEVHEKLRGWLKSNVSDAVAQSTRIIYGGSVTGATCKELASQP
DVDGFLVGGASLKPEFVDIINAKQ

FIGURE 211A

ATAAAAGGGGGCTGAGGAAATACCGGACACGGTCACCCGTTGCCAGCTCTAGCCTTTAAATTCCCGGCTCGGGGA
CCTCCACGCACCGCGGCTAGCGCCGACAACCAGCTAGCGTGCAAGGCGCCGCGGCTCAGCGCGTACCGGCGGGCT
TCGAAACCGCAGTCCTCCGGCGACCCCGAACTCCGCTCCGGAGCCTCAGCCCCCTGGAAAGTGATCCCGGCATCC
GAGAGCCAAGATGCCGGCCCACTTGCTGCAGGACGATATCTCTAGCTCCTATACCACCACCACCACCATTACAGC
GCCTCCCTCCAGGGTCCTGCAGAATGGAGGAGATAAGTTGGAGACGATGCCCCTCTACTTGGAAGACGACATTCG
CCCTGATATAAAAGATGATATATATGACCCCACCTACAAGGATAAGGAAGGCCCAAGCCCCAAGGTTGAATATGT
CTGGAGAAACATCATCCTTATGTCTCTGCTACACTTGGGAGCCCTGTATGGGATCACTTTGATTCCTACCTGCAA
GTTCTACACCTGGCTTTGGGGGGTATTCTACTATTTTGTCAGTGCCCTGGGCATAACAGCAGGAGCTCATCGTCT
GTGGAGCCACCGCTCTTACAAAGCTCGGCTGCCCCTACGGCTCTTTCTGATCATTGCCAACACAATGGCATTCCA
GAATGATGTCTATGAATGGGCTCGTGACCACCGTGCCCACCACAAGTTTTCAGAAACACATGCTGATCCTCATAA
TTCCCGACGTGGCTTTTTCTTCTCTCACGTGGGTTGGCTGCTTGTGCGCAAACACCCAGCTGTCAAAGAGAAGGG
GAGTACGCTAGACTTGTCTGACCTAGAAGCTGAGAAACTGGTGATGTTCCAGAGGAGGTACTACAAACCTGGCTT
GCTGCTGATGTGCTTCATCCTGCCCACGCTTGTGCCCTGGTATTTCTGGGGTGAAACTTTTCAAAACAGTGTGTT
CGTTGCCACTTTCTTGCGATATGCTGTGGTGCTTAATGCCACCTGGCTGGTGAACAGTGCTGCCCACCTCTTCGG
ATATCGTCCTTATGACAAGAACATTAGCCCCCGGGAGAATATCCTGGTTTCACTTGGAGCTGTGGGTGAGGGCTT
CCACAACTACCACCACTCCTTTCCCTATGACTACTCTGCCAGTGAGTACCGCTGGCACATCAACTTCACCACATT
CTTCATTGATTGCATGGCCGCCCTCGGTCTGGCCTATGACCGGAAGAAAGTCTCCAAGGCCGCCATCTTGGCCAG
GATTAAAAGAACCGGAGATGGAAACTACAAGAGTGGCTGAGTTTGGGGTCCCTCAGGTTTCCTTTTTCAAAAACC
AGCCAGGCAGAGGTTTTAATGTCTGTTTATTAACTACTGAATAATGCTACCAGGATGCTAAAGATGATGATGTTA
ACCCATTCCAGTACAGTATTCTTTTAAAATTCAAAAGTATTGAAAGCCAACAACTCTGCCTTTATGATGCTAAGC
TGATATTATTTCTTCTCTTATCCTCTCTCTCTTCTAGGCCCATTGTCCTCCTTTTCACTTTATTGCTATCGCCCT
CCTTTCCCTTATTGCCTCCCAGGCAAGCAGCTGGTCAGTCTTTGCTCAGTGTCCAGCTTCCAAAGCCTAGACAAC
CTTTCTGTAGCCTAAAACGAATGGTCTTTGCTCCAGATAACTCTCTTTCCTTGAGCTGTTGTGAGCTTTGAAGTA
GGTGGCTTGAGCTAGAGATAAAACAGAATCTTCTGGGTAGTCCCCTGTTGATTATCTTCAGCCCAGGCTTTTGCT
AGATGGAATGGAAAAGCAACTTCATTTGACACAAAGCTTCTAAAGCAGGTAAATTGTCGGGGGAGAGAGTTAGCA
TGTATGAATGTAAGGATGAGGGAAGCGAAGCAAGAGGAACCTCTCGCCATGATCAGACATACAGCTGCCTACCTA
ATGAGGACTTCAAGCCCCACCACATAGCATGCTTCCTTTCTCTCCTGGCTCGGGGTAAAAAGTGGCTGCGGTGTT
TGGCAATGCTAATTCAATGCCGCAACATATAGTTGAGGCCGAGGATAAAGAAAAGACATTTTAAGTTTGTAGTAA
AAGTGGTCTCTGCTGGGGAAGGGTTTTCTTTTCTTTTTTTCTTTAATAACAAGGAGATTTCTTAGTTCATATATC
AAGAAGTCTTGAAGTTGGGTGTTTCCAGAATTGGTAAAAACAGCAGCTCATGGAATTTTGAGTATTCCATGAGCT
GCTCATTACAGTTCTTTCCTCTTTCTGCTCTGCCATCTTCAGGATATTGGTTCTTCCCCTCATAGTAATAAGATG
GCTGTGGCATTTCCAAACATCCAAAAAAAGGGAAGGATTTAAGGAGGTGAAGTCGGGTCAAAAATAAAATATATA
TACATATATACATTGCTTAGAACGTTAAACTATTAGAGTATTTCCCTTCCAAAGAGGGATGTTTGGAAAAAACTC
TGAAGGAGAGGAGGAATTAGTTGGGATGCCAATTTCCTCTCCACTGCTGGACATGAGATGGAGAGGCTGAGGGAC
AGGATCTATAGGCAGCTTCTAAGAGCGAACTTCACATAGGAAGGGATCTGAGAACACGTTGCCAGGGGCTTGAGA
AGGTTACTGAGTGAGTTATTGGGAGTCTTAATAAAATAAACTAGATATTAGGTCCATTCATTAATTAGTTCCAGT
TTCTCCTTGAAATGAGTAAAAACTAGAAGGCTTCTCTCCACAGTGTTGTGCCCCTTCACTCATTTTTTTTTGAGG
AGAAGGGGGTCTCTGTTAACATCTAGCCTAAAGTATACAACTGCCTGGGGGGCAGGGTTAGGAATCTCTTCACTA
CCCTGATTCTTGATTCCTGGCTCTACCCTGTCTGTCCCTTTTCTTTGACCAGATCTTTCTCTTCCCTGAACGTTT
TCTTCTTTCCCTGGACAGGCAGCCTCCTTTGTGTGTATTCAGAGGCAGTGATGACTTGCTGTCCAGGCAGCTCCC
TCCTGCACACAGAATGCTCAGGGTCACTGAACCACTGCTTCTCTTTTGAAAGTAGAGCTAGCTGCCACTTTCACG
TGGCCTCCGCAGTGTCTCCACCTACACCCCTGTGCTCCCCTGCCACACTGATGGCTCAAGACAAGGCTGGCAAAC
CCTCCCAGAAACATCTCTGGCCCAGAAAGCCTCTCTCTCCCTCCCTCTCTCATGAGGCACAGCCAAGCCAAGCGC
TCATGTTGAGCCAGTGGGCCAGCCACAGAGCAAAAGAGGGTTTATTTTCAGTCCCCTCTCTCTGGGTCAGAACCA
GAGGGCATGCTGAATGCCCCCTGCTTACTTGGTGAGGGTGCCCCGCCTGAGTCAGTGCTCTCAGCTGGCAGTGCA
ATGCTTGTAGAAGTAGGAGGAAACAGTTCTCACTGGGAAGAAGCAAGGGCAAGAACCCAAGTGCCTCACCTCGAA
AGGAGGCCCTGTTCCCTGGAGTCAGGGTGAACTGCAAAGCTTTGGCTGAGACCTGGGATTTGAGATACCACAAAC
CCTGCTGAACACAGTGTCTGTTCAGCAAACTAACCAGCATTCCCTACAGCCTAGGGCAGACAATAGTATAGAAGT

FIGURE 211B

CTGGAAAAAAACAAAAACAGAATTTGAGAACCTTGGACCACTCCTGTCCCTGTAGCTCAGTCATCAAAGCAGAAG
TCTGGCTTTGCTCTATTAAGATTGGAAATGTACACTACCAAACACTCAGTCCACTGTTGAGCCCCAGTGCTGGAA
GGGAGGAAGGCCTTTCTTCTGTGTTAATTGCGTAGAGGCTACAGGGGTTAGCCTGGACTAAAGGCATCCTTGTCT
TTTGAGCTATTCACCTCAGTAGAAAAGGATCTAAGGGAAGATCACTGTAGTTTAGTTCTGTTGACCTGTGCACCT
ACCCCTTGGAAATGTCTGCTGGTATTTCTAATTCCACAGGTCATCAGATGCCTGCTTGATAATATATAAACAATA
AAAACAACTTTCACTTCTTCCTATTGTAATCGTGTGCCATGGATCTGATCTGTACCATGACCCTACATAAGGCTG
GATGGCACCTCAGGCTGAGGGCCCCAATGTATGTGTGGCTGTGGGTGTGGGTGGGAGTGTGTCTGCTGAGTAAGG
AACACGATTTTCAAGATTCTAAAGCTCAATTCAAGTGACACATTAATGATAAACTCAGATCTGATCAAGAGTCCG
GATTTCTAACAGTCCCTGCTTTGGGGGGTGTGCTGACAACTTAGCTCAGGTGCCTTACATCTTTTCTAATCACAG
TGTTGCATATGAGCCTGCCCTCACTCCCTCTGCAGAATCCCTTTGCACCTGAGACCCTACTGAAGTGGCTGGTAG
AAAAAGGGGCCTGAGTGGAGGATTATCAGTATCACGATTTGCAGGATTCCCTTCTGGGCTTCATTCTGGAAACTT
TTGTTAGGGCTGCTTTTCTTAAGTGCCCACATTTGATGGAGGGTGGAAATAATTTGAATGTATTTGATTTATAAG
TTTTTTTTTTTTTTTGGGTTAAAAGATGGTTGTAGCATTTAAAATGGAAAATTTTCTCCTTGGTTTGCTAGTATC
TTGGGTGTATTCTCTGTAAGTGTAGCTCAAATAGGTCATCATGAAAGGTTAAAAAAGCGAGGTGGCCATGTTATG
CTGGTGGTTAAGGCCAGGGCCTCTCCAACCACTGTGCCACTGACTTGCTGTGTGACCCTGGGCAAGTCACTTAAC
TATAAGGTGCCTCAGTTTTCCTTCTGTTAAAATGGGGATAATAATACTGACCTACCTCAAAGGGCAGTTTTGAGG
CATGACTAATGCTTTTTAGAAAGCATTTTGGGATCCTTCAGCACAGGAATTCTCAAGACCTGAGTATTTTTTATA
ATAGGAATGTCCACCATGAACTTGATACGTCCGTGTGTCCCAGATGCTGTCATTAGTCTATATGGTTCTCCAAGA
AACTGAATGAATCCATTGGAGAAGCGGTGGATAACTAGCCAGACAAAATTTGAGAATACATAAACAACGCATTGC
CACGGAAACATACAGAGGATGCCTTTTCTGTGATTGGGTGGGATTTTTTCCCTTTTTATGTGGGATATAGTAGTT
ACTTGTGACAAAAATAATTTTGGAATAATTTCTATTAATATCAACTCTGAAGCTAATTGTACTAATCTGAGATTG
TGTTTGTTCATAATAAAAGTGAAGTGAATCTAAAAAAAAAAAAAAA

FIGURE 212

MPAHLLQDDISSSYTTTTTITAPPSRVLQNGGDKLETMPLYLEDDIRPDIKDDIYDPTYKDKEGPSPKVEYVWRN
IILMSLLHLGALYGITLIPTCKFYTWLWGVFYYFVSALGITAGAHRLWSHRSYKARLPLRLFLIIANTMAFQNDV
YEWARDHRAHHKFSETHADPHNSRRGFFFSHVGWLLVRKHPAVKEKGSTLDLSDLEAEKLVMFQRRYYKPGLLLM
CFILPTLVPWYFWGETFQNSVFVATFLRYAVVLNATWLVNSAAHLFGYRPYDKNISPRENILVSLGAVGEGFHNY
HHSFPYDYSASEYRWHINFTTFFIDCMAALGLAYDRKKVSKAAILARIKRTGDGNYKSG

FIGURE 213A

GTGGTGTCGGTGTCGGCAGCATCCCCGGCGCCCTGCTGCGGTCGCCGGAGCCCTCGGCCTCTGTTCTCCTCCCCC
TCCCGCCCTTACCTCCACGCGGGACCGCCCGCGCCAGTCAACTCCTCGCACTTTGCCCCTGCTTGGCAGCGGATA
AAAGGGGGCTGAGGAAATACCGGACACGTCCACCCGTTGCCAGCTCTAGCCTTTAAATTCCCGGCTCGGGACCTC
CACGCACCGGGCTAGCGCCGACAACCAGCTAGCGTGCAAGGCGCCGCGGCTCAGCGCGTACCGGCGGGCTTCGAA
ACCGCAGTCCTCCGGCGACCCCGAACTCCGCTCCGGAGCCTCAGCCCCCTGGAAAGTGATCCCGGCATCGGAGAG
CCAAG**ATG**CCGGCCCACTTGCTGCAGGACGATATCTCTAGCTCCTATACCACCACCACCACCATTACAGCGCCTC
CCTCCAGGGTCCTGCAGAATGGAGGAGATAAGTTGGAGACGATGCCCCTCTACTTGGAAGACGACATTCGCCCTG
ATATAAAAGATGATATATATGACCCCACCTACAAGGATAAGGAAGGCCCAAGCCCCAAGGTTGAATATGTCTGGA
GAAACATCATCCTTATGTCTCTGCTACACTTGGGAGCCCTGTATGGGATCACTTTGATTCCTACCTGCAAGTTCT
ACACCTGGCTTTGGGGGGTATTCTACTATTTTGTCAGTGCCCTGGGCATAACAGCAGGAGCTCATCGTCTGTGGA
GCCACCGCTCTTACAAAGCTCGGCTGCCCCTACGGCTCTTTCTGATCATTGCCAACACAATGGCATTCCAGAATG
ATGTCTATGAATGGGCTCGTGACCACCGTGCCCACCACAAGTTTTCAGAAACACATGCTGATCCTCATAATTCCC
GACGTGGCTTTTTCTTCTCTCACGTGGGTTGGCTGCTTGTGCGCAAACACCCAGCTGTCAAAGAGAAGGGGAGTA
CGCTAGACTTGTCTGACCTAGAAGCTGAGAAACTGGTGATGTTCCAGAGGAGGTACTACAAACCTGGCTTGCTGC
TGATGTGCTTCATCCTGCCCACGCTTGTGCCCTGGTATTTCTGGGGTGAAACTTTTCAAAACAGTGTGTTCGTTG
CCACTTTCTTGCGATATGCTGTGGTGCTTAATGCCACCTGGCTGGTGAACAGTGCTGCCCACCTCTTCGGATATC
GTCCTTATGACAAGAACATTAGCCCCCGGGAGAATATCCTGGTTTCACTTGGAGCTGTGGGTGAGGGCTTCCACA
ACTACCACCACTCCTTTCCCTATGACTACTCTGCCAGTGAGTACCGCTGGCACATCAACTTCACCACATTCTTCA
TTGATTGCATGGCCGCCCTCGGTCTGGCCTATGACCGGAAGAAAGTCTCCAAGGCCGCCATCTTGGCCAGGATTA
AAAGAACCGGAGATGGAAACTACAAGAGTGGC**TGA**GTTTGGGGTCCCTCAGGTTCCTTTTTCAAAAACCAGCCAG
GCAGAGGTTTTAATGTCTGTTTATTAACTACTGAATAATGCTACCAGGATGCTAAAGATGATGATGTTAACCCAT
TCCAGTACAGTATTCTTTTAAAATTCAAAAGTATTGAAAGCCAACAACTCTGCCTTTATGATGCTAAGCTGATAT
TATTTCTTCTCTTATCCTCTCTCTCTTCTAGGCCCATTGTCCTCCTTTTCACTTTAATCGCCCTCCTTTCCCTTA
TTGCCTCCCAGGCAAGCAGCTGGTCAGTCTTTGCTCAGTGTCCAGCTTCCAAAGCCTAGACAACCTTTCTGTAGC
CTAAAACGAATGGTCTTTGCTCCAGATAACTCTCTTTCCTTGAGCTGTTGTGAGCTTTGAAGTAGGTGGCTTGAG
CTAGAGATAAAACAGAATCTTCTGGGTAGTCCCCTGTTGATTATCTTCAGCCCAGGCTTTTGCTAGATGGAATGG
AAAAGCAACTTCATTTGACACAAAGCTTCTAAAGCXAGGTAAATTGTCGGGGGAGAGAGTTAGCATGTATGAATG
TAAGGATGAGGGAAGCGAAGGAACCTCTCGCCATGATCAGACATACAGCTGCCTACCTAATGAGGACTTCAAGCC
CCACCACATAGCATGCTTCCTTTCTCTCCTGGCTCGGGGTAAAAAGTGGCTGCGGTGTTTGGCAATGCTAATTCA
ATGCCGCAACATATAGTTGAGGCCGAGGATAAAGAAAAGACATTTTAAGTTTGTAGTAAAAGTGGTCTCTGCTGG
GGAAGGGTTTTCTTTTCTTTTTTTCTTTAATAACAAGGAGATTTCTTAGTTCATATATCAAGAAGTCTTGAAGTT
GGGTGTTTCCAGAATTGGTAAAAACAGCAGCTCATAGAATTTTGAGTATTCCATGAGCTGCTCATTACAGTTCTT
TCCTCTTTCTGCTCTGCCATCTTCAGGATATTGGTTCTTCCCCTCATAGTAATAAGATGGCTGTGGCATTTCCAA
ACATCCAAAAAAAGGGAAGGATTTAAGGAGGTGAAGTCGGGTCAAAAATAAAATATATATACATATATACATTGC
TTAGAACGTTAAACTATTAGAGTATTTCCCTTCCAAAGAGGGATGTTTGGAAAAAACTCTGAAGGAGAGGAGGAA
TTAGTTGGGATGCCAATTTCCTCTCCACTGCTGGACATGAGATGGAGAGGCTGAGGGACAGGATCTATAGGCAGC
TTCTAAGAGCGAACTTCACATAGGAAGGGATCTGAGAACACGTTCAGGGGTTGAGAAGGTTACTGAGTGAGTTAT
TGGGAGTCTTAATAAACTAGATATTAGGTCCATTCATTAATTAGTTCCAGTTTCTCCTTGAAATGAGTAAAAACT
AGAAGGCTTCTCTCCACAGTGTTGTGCCCCTTCACTCATTTTTTTTTGAGGAGAAGGGGGTCTCTGTTAACATCT
AGCCTAAAGTATACAAACTGCCTGGGGGGCAGGGTTAGGAATCTCTTCACTACCCTGATTCTTGATTCCTGGCTC
TACCCTGTCTGTCCCTTTTCTTTGACCAGATCTTTCTCTTCCCTGAACGTTTTCTTCTTTCCCTGGACAGGCAGC
CTCCTTTGTGTGTATTCAGAGGCAGTGATGACTTGCTGTCCAGGCAGCTCCCTCCTGCACACAGAATGCTCAGGG
TCACTGAACCACTGCTTCTCTTTTGAAAGTAGAGCTAGCTGCCACTTTCACGTGGCCTCCGCAGTGTCTCCACCT
ACACCCCTGTGCTCCCCTGCCACACTGATGGCTCAAGACAAGGCTGGCAAACCCTCCCAGAAACATCTCTGGCCC
AGAAAGCCTCTCTCTCCCTCCCTCTCTCATGAGAAGCCAAGCGCTCATGTTGAGCCAGTGGGCCAGCCACAGAGC
AAAAGAGGGTTTATTTTCAGTCCCCTCTCTCTGGGTCAGAACCAGAGGGCATGCTGAATGCCCCCTGCTTACTTG
GTGAGGGTGCCCCGCCTGAGTCAGTGCTCTCAGCTGGCAGTGCAATGCTTGTAGAAGTAGGAGGAAACAGTTCTC
ACTGGGAAGAAGCAAGGGCAAGAACCCAAGTGCCTCACCTCGAAAGGAGGCCCTGTTCCCTGGAGTCAGGGTGAA

FIGURE 213B

CTGCAAAGCTTTGGCTGAGACCTGGGATTTGAGATACCACAAACCCTGCTGAACACAGTGTCTGTTCAGCAAACT
AACCAGCATTCCCTACAGCCTAGGGCAGACAATAGTATAGAAGTCTGGAAAAAAACAAAAACAGAATTTGAGAAC
CTTGGACCACTCCTGTCCCTGTAGCTCAGTCATCAAAGCAGAAGTCTGGCTTTGCTCTATTAAGATTGGAAATGT
ACACTACCAAACACTCAGTCCACTGTTGAGCCCCAGTGCTGGAAGGGAGGAAGGCCTTTCTTCTGTGTTAATTGC
GTAGAGGCTACAGGGGTTAGCCTGGACTAAAGGCATCCTTGTCTTTGAGCTATTCACCTCAGTAGAAAAGGATCT
AAGGGAAGATCACTGTAGTTTAGTTCTGTTGACCTGTGCACCTACCCCTTGGAAATGTCTGCTGGTATTTCTAAT
TCCACAGGTCATCAGATGCCTGCTTGATAATATATAAACAATAAAAACAACTTTCACTTCTTCCTATTGTAATCG
TGTGCCATGGATCTGATCTGTACCATGACCCTACATAAGGCTGGATGGCACCTCAGGCTGAGGGCCCCAATGTAT
GTGTGGCTGTGGGTGTGGGTGGGAGTGTGTCTGCTGAGTAAGGAACACGATTTTCAAGATTCTAAAGCTCAATTC
AAGTGACACATTAATGATAAACTCAGATCTGATCAAGAGTCCGGATTTCTAACAGTCCTTGCTTTGGGGGGTGTG
CTGGCAACTTAGCTCAGGTGCCTTACATCTTTTCTAATCACAGTGTTGCATATGAGCCTGCCCTCACTCCCTCTG
CAGAATCCCTTTGCACCTGAGACCCTACTGAAGTGGCTGGTAGAAAAAGGGGCCTGAGTGGAGGATTATCAGTAT
CACGATTTGCAGGATTCCCTTCTGGGCTTCATTCTGGAAACTTTTGTTAGGGCTGCTTTTCTTAAGTGCCCACAT
TTGATGGAGGGTGGAAATAATTTGAATGTATTTGATTTATAAGTTTTTTTTTTTTTTGGGTTAAAAGATGGTTG
TAGCATTTAAAATGGAAAATTTTCTCCTTGGTTTGCTAGTATCTTGGGTGTATTCTCTGTAAGTGTAGCTCAAAT
AGGTCATCATGAAAGGTTAAAAAAGCGAGGTGGCCATGTTATGCTGGTGGTTGCCAGGGCCTCCAACCACTGTGC
CACTGACTTGCTGTGTGACCCTGGGCAAGTCACTTAACTATAAGGTGCCTCAGTTTTCCTTCTGTTAAAATGGGG
ATAATAATACTGACCTACCTCAAAGGGCAGTTTTGAGGCATGACTAATGCTTTTTAGAAAGCATTTTGGGATCCT
TCAGCACAGGAATTCTCAAGACCTGAGTATTTTTTATAATAGGAATGTCCACCATGAACTTGATACGTCCGTGTG
TCCCAGATGCTGTCATTAGTCTATATGGTTCTCCAAGAAACTGAATGAATCCATTGGAGAAGCGGTGGATAACTA
GCCAGACAAAATTTGAGAATACATAAACAACGCATTGCCACGGAAACATACAGAGGATGCCTTTTCTGTGATTGG
GTGGGATTTTTTCCCTTTTTATGTGGGATATAGTAGTTACTTGTGACAAGAATAATTTTGGAATAATTTCTATTA
ATATCAACTCTGAAGCTAATTGTACTAATCTGAGATTGTGTTTGTTCATAATAAAAGTGAAGTGAATCTGATTGC
ACTG

FIGURE 214

MPAHLLQDDISSSYTTTTTITAPPSRVLQNGGDKLETMPLYLEDDIRPDIKDDIYDPTYKDKEGPSPKVEYVWRN
IILMSLLHLGALYGITLIPTCKFYTWLWGVFYYFVSALGITAGAHRLWSHRSYKARLPLRLFLIIANTMAFQNDV
YEWARDHRAHHKFSETHADPHNSRRGFFFSHVGWLLVRKHPAVKEKGSTLDLSDLEAEKLVMFQRRYYKPGLLLM
CFILPTLVPWYFWGETFQNSVFVATFLRYAVVLNATWLVNSAAHLFGYRPYDKNISPRENILVSLGAVGEGFHNY
HHSFPYDYSASEYRWHINFTTFFIDCMAALGLAYDRKKVSKAAILARIKRTGDGNYKSG

FIGURE 215

GGGAGGGTACTTAGGGCCGGGGCTGGCCCAGGCTACGGCGGCTGCAGGGCTCCGGCAACCGCTCCGGCAACGCCA
ACCGCTCCGCTGCGCGCAGGCTGGGCTGCAGGCTCTCGGCTGCAGCGCTGGGTGGATCTAGGATCCGGCTTCCAA
CATGTGGCAGCTCTGGGCCTCCCTCTGCTGCCTGCTGGTGTTGGCCAATGCCCGGAGCAGGCCCTCTTTCCATCC
CCTGTCGGATGAGCTGGTCAACTATGTCAACAAACGGAATACCACGTGGCAGGCCGGGCACAACTTCTACAACGT
GGACATGAGCTACTTGAAGAGGCTATGTGGTACCTTCCTGGGTGGGCCCAAGCCACCCCAGAGAGTTATGTTTAC
CGAGGACCTGAAGCTGCCTGCAAGCTTCGATGCACGGGAACAATGGCCACAGTGTCCCACCATCAAAGAGATCAG
AGACCAGGGCTCCTGTGGCTCCTGCTGGGCCTTCGGGGCTGTGGAAGCCATCTCTGACCGGATCTGCATCCACAC
CAATGCGCACGTCAGCGTGGAGGTGTCGGCGGAGGACCTGCTCACATGCTGTGGCAGCATGTGTGGGGACGGCTG
TAATGGTGGCTATCCTGCTGAAGCTTGGAACTTCTGGACAAGAAAAGGCCTGGTTTCTGGTGGCCTCTATGAATC
CCATGTAGGGTGCAGACCGTACTCCATCCCTCCCTGTGAGCACCACGTCAACGGCTCCCGGCCCCCATGCACGGG
GGAGGGAGATACCCCCAAGTGTAGCAAGATCTGTGAGCCTGGCTACAGCCCGACCTACAAACAGGACAAGCACTA
CGGATACAATTCCTACAGCGTCTCCAATAGCGAGAAGGACATCATGGCCGAGATCTACAAAAACGGCCCCGTGGA
GGGAGCTTTCTCTGTGTATTCGGACTTCCTGCTCTACAAGTCAGGAGTGTACCAACACGTCACCGGAGAGATGAT
GGGTGGCCATGCCATCCGCATCCTGGGCTGGGGAGTGGAGAATGGCACACCCTACTGGCTGGTTGCCAACTCCTG
GAACACTGACTGGGGTGACAATGGCTTCTTTAAAATACTCAGAGGACAGGATCACTGTGGAATCGAATCAGAAGT
GGTGGCTGGAATTCCACGCACCGATCAGTACTGGGAAAAGATCTAATCTGCCGTGGGCCTGTCGTGCCAGTCCTG
GGGGCGAGATCGGGGTAGAAATGCATTTTATTCTTTAAGTTCACGTAAGATACAAGTTTCAGACAGGGTCTGAAG
GACTGGATTGGCCAAACATCAGACCTGTCTTCCAAGGAGACCAAGTCCTGGCTACATCCCAGCCTGTGGTTACAG
TGCAGACAGGCCATGTGAGCCACCGCTGCCAGCACAGAGCGTCCTTCCCCCTGTAGACTAGTGCCGTAGGGAGTA
CCTGCTGCCCCAGCTGACTGTGGCCCCCTCCGTGATCCATCCATCTCCAGGGAGCAAGACAGAGACGCAGGAATG
GAAAGCGGAGTTCCTAACAGGATGAAAGTTCCCCCATCAGTTCCCCCAGTACCTCCAAGCAAGTAGCTTTCCACA
TTTGTCACAGAAATCAGAGGAGAGATGGTGTTGGGAGCCCTTTGGAGAACGCCAGTCTCCCAGGCCCCCTGCATC
TATCGAGTTTGCAATGTCACAACCTCTCTGATCTTGTGCTCAGCATGATTCTTTAATAGAAGTTTTATTTTTTCG
TGCACTCTGCTAATCATGTGGGTGAGCCAGTGGAACAGCGGGAGACCTGTGCTAGTTTTACAGATTGCCTCCTAA
TGACGCGGCTCAAAAGGAAACCAAGTGGTCAGGAGTTGTTTCTGACCCACTGATCTCTACTACCACAAGGAAAAT
AGTTTAGGAGAAACCAGCTTTTACTGTTTTTGAAAAATTACAGCTTCACCCTGTCAAGTTAACAAGGAATGCCTG
TGCCAATAAAAGTTTTCTCCAACTTGAA

FIGURE 216

MWQLWASLCCLLVLANARSRPSFHPLSDELVNYVNKRNTTWQAGHNFYNVDMSYLKRLCGTFLGGPKPPQRVMFT
EDLKLPASFDAREQWPQCPTIKEIRDQGSCGSCWAFGAVEAISDRICIHTNAHVSVEVSAEDLLTCCGSMCGDGC
NGGYPAEAWNFWTRKGLVSGGLYESHVGCRPYSIPPCEHHVNGSRPPCTGEGDTPKCSKICEPGYSPTYKQDKHY
GYNSYSVSNSEKDIMAEIYKNGPVEGAFSVYSDFLLYKSGVYQHVTGEMMGGHAIRILGWGVENGTPYWLVANSW
NTDWGDNGFFKILRGQDHCGIESEVVAGIPRTDQYWEKI

FIGURE 217

AATTCCGCGGCAACCGCTCCGGCAACGCCAACCGCTCCGCTGCGCGCAGGCTGGGCTGCAGGCTCTCGGCTGCAG
CGCTGGGCTGGTGTGCAGTGGTGCGACCACGGCTCACGGCAGCCTCAGCCACCCAGATGTAAGCGATCTGGTTCC
CACCTCAGCCTTCCGAGTAGTGGATCTAGGATCTGGCTTCCAACATGTGGCAGCTCTGGGCCTCCCTCTGCTGCC
TGCTGGTGTTGGCCAATGCCCGGAGCAGGCCCTCTTTCCATCCCGTGTCGGATGAGCTGGTCAACTATGTCAACA
AACGGAATACCACGTGGCAGGCCGGGCACAACTTCTACAACGTGGACATGAGCTACTTGAAGAGGCTATGTGGTA
CCTTCCTGGGTGGGCCCAAGCCACCCCAGAGAGTTATGTTTACCGAGGACCTGAAGCTGCCTGCAAGCTTCGATG
CACGGGAACAATGGCCACAGTGTCCCACCATCAAAGAGATCAGAGACCAGGGCTCCTGTGGCTCCTGCTGGGCCT
TCGGGGCTGTGGAAGCCATCTCTGACCGCATCTGCATCCACACCAATGCGCACGTCAGCGTGGAGGTGTCGGCGG
AGGACCTGCTCACCTGCTGTGGCAGCATGTGTGGGGACGGCTGTAATGGTGGCTATCCTGCTGAAGCTTGGAACT
TCTGGACAAGAAAAGGCCTGGTTTCTGGTGGCCTCTATGAATCCCATGTAGGGTGCAGACCGTACTCCATCCCTC
CCTGTGAGCACCACGTCAACGGCTCCCGGCCCCCATGCACGGGGGAGGGAGATACCCCCAAGTGTAGCAAGATCT
GTGAGCCTGGCTACAGCCCGACCTACAAACAGGACAAGCACTACGGATACAATTCCTACAGCGTCTCCAATAGCG
AGAAGGACATCATGGCCGAGATCTACAAAAACGGCCCCGTGGAGGGAGCTTTCTCTGTGTATTCGGACTTCCTGC
TCTACAAGTCAGGAGTGTACCAACACGTCACCGGAGAGATGATGGGTGGCCATGCCATCCGCATCCTGGGCTGGG
GAGTGGAGAATGGCACACCCTACTGGCTGGTTGCCAACTCCTGGAACACTGACTGGGGTGACAATGGCTTCTTTA
AAATACTCAGAGGACAGGATCACTGCGGAATCGAATCAGAAGTGGTGGCTGGAATTCCACGCACCGATCAGTACT
GGGAAAAGATCTAATCTGCCGTGGGCCTGTCGTGCCAGTCCTGGGGGCGAGATCGGGGTAGAAAGTCATTTTATT
CTTTAAGTTCACGTAAGATACAAGTTTCAGGCAGGGTCTGAAGGACTGGATTGGCCAAAGTCCTCCAAGGAGACC
AAGTCCTGGCTACATCCCAGCCTGTGGTTACAGTGCAGACAGGCCATGTGAGCCACCGCTGCCAGCACAGAGCGT
CCTTCCCCCTGTAGACTAGTGCCGTGGGAGTACCTGCTGCCCAGCTGCTGTGGCCCCCTCCGTGATCCATCCATC
TCCAGGGAGCAAGACAGAGACGCAGGATGGAAAGCGGAGTTCCTAACAGGATGAAAGTTCCCCCATCAGTTCCCC
CAGTACCTCCAAGCAAGTAGCTTTCCACATTTGTCACAGAAATCAGAGGAGAGATGGTGTTGGGAGCCCTTTGGA
GAACGCCAGTCTCCAGGTCCCCCTGCATCTATCGAGTTTGCAATGTCACAACCTCTCTGATCTTGTGCTCAGCAT
GATTCTTTAATAGAAGTTTTATTTTTCGTGCACTCTGCTAATCATGTGGGTGAGCCAGTGGAACAGCGGGAGCCT
GTGCTGGTTTGCAGATTGCCTCCTAATGACGCGGCTCAAAAGGAAACCAAGTGGTCAGGAGTTGTTTCTGACCCA
CTGATCTCTACTACCACAAGGAAAATAGTTTAGGAGAAACCAGCTTTTACTGTTTTTGAAAAATTACAGCTTCAC
CCTGTCAAGTTAACAAGGAATGCCTGTGCCAATAAAAGGTTTCTCCAACTTG

FIGURE 218

MWQLWASLCCLLVLANARSRPSFHPVSDELVNYVNKRNTTWQAGHNFYNVDMSYLKRLCGTFLGGPKPPQRVMFT
EDLKLPASFDAREQWPQCPTIKEIRDQGSCGSCWAFGAVEAISDRICIHTNAHVSVEVSAEDLLTCCGSMCGDGC
NGGYPAEAWNFWTRKGLVSGGLYESHVGCRPYSIPPCEHHVNGSRPPCTGEGDTPKCSKICEPGYSPTYKQDKHY
GYNSYSVSNSEKDIMAEIYKNGPVEGAFSVYSDFLLYKSGVYQHVTGEMMGGHAIRILGWGVENGTPYWLVANSW
NTDWGDNGFFKILRGQDHCGIESEVVAGIPRTDQYWEKI

FIGURE 219

ATCTTCATCGAGCGCCATGGCCGCAGCCTGCGGGCCGGGAGCGGCCGGGTACTGCTTGCTCCTCGGCTTGCATTT
GTTTCTGCTGACCGCGGGCCCTGCCCTGGGCTGGAACGACCCTGACAGAATGTTGCTGCGGGATGTAAAAGCTCT
TACCCTCCACTATGACCGCTATACCACCTCCCGCAGCTGGGATCCCATCCCACAGTTGAAATGTGTTGGAGGCAC
AGCTGGTTGTGATTCTTATACCCCAAAAGTCATACAGTGTCAGAACAAAGGCTGGGATGGGTATGATGTACAGTG
GGAATGTAAGACGGACTTAGATATTGCATACAAATTTGGAAAAACTGTGGTGAGCTGTGAAGGCTATGAGTCCTC
TGAAGACCAGTATGTACTAAGAGGTTCTTGTGGCTTGGAGTATAATTTAGATTATACAGAACTTGGCCTGCAGAA
ACTGAAGGAGTCTGGAAAGCAGCACGGCTTTGCCTCTTTCTCTGATTATTATTATAAGTGGTCCTCGGCGGATTC
CTGTAACATGAGTGGATTGATTACCATCGTGGTACTCCTTGGGATCGCCTTTGTAGTCTATAAGCTGTTCCTGAG
TGACGGGCAGTATTCTCCTCCACCGTACTCTGAGTATCCTCCATTTTCCCACCGTTACCAGAGATTCACCAACTC
AGCAGGACCTCCTCCCCCAGGCTTTAAGTCTGAGTTCACAGGACCACAGAATACTGGCCATGGTGCAACTTCTGG
TTTTGGCAGTGCTTTTACAGGACAACAAGGATATGAAAATTCAGGACCAGGGTTCTGGACAGGCTTGGGAACTGG
TGGAATACTAGGATATTTGTTTGGCAGCAATAGAGCGGCAACACCCTTCTCAGACTCGTGGTACTACCCGTCCTA
TCCTCCCTCCTACCCTGGCACGTGGAATAGGGCTTACTCACCCCTTCATGGAGGCTCGGGCAGCTATTCGGTATG
TTCAAACTCAGACACGAAAACCAGAACTGCATCAGGATATGGTGGTACCAGGAGACGATAAAGTAGAAAGTTGGA
GTCAAACACTGGATGCAGAAATTTTGGATTTTTCATCACTTTCTCTTTAGAAAAAAAGTACTACCTGTTAACAAT
TGGGAAAAGGGGATATTCAAAAGTTCTGTGGTGTTATGTCCAGTGTAGCTTTTTGTATTCTATTATTTGAGGCTA
AAAGTTGATGTGTGACAAAATACTTATGTGTTGTATGTCAGTGTAACATGCAGATGTATATTGCAGTTTTTGAAA
GTGATCATTACTGTGGAATGCTAAAAATACATTAATTTCTAAAACCTGTGATGCCCTAAGAAGCATTAAGAATGA
AGGTGTTGTACTAATAGAAACTAAGTACAGAAATTTCAGTTTTAGGTGGTTGTAGCTGATGAGTTATTACCTCAT
AGAGACTATAATATTCTATTTGGTATTATATTATTTGATGTTTGCTGTTCTTCAAACATTTAAATCAAGCTTTGG
ACTAATTATGCTAATTTGTGAGTTCTGATCACTTTTGAGCTCTGAAGCTTTGAATCATTCAGTGGTGGAGATGGC
CTTCTGGTAACTGAATATTACCTTCTGTAGGAAAAGGTGGAAAATAAGCATCTAGAAGGTTGTTGTGAATGACTC
TGTGCTGGCAAAAATGCTTGAAACCTCTATATTTCTTTCGTTCATAAGAGGTAAAGGTCAAATTTTTCAACAAAA
GTCTTTTAATAACAAAAGCATGCAGTTCTCTGTGAAATCTCAAATATTGTTGTAATAGTCTGTTTCAATCTTAAA
AAGAATCAATAAAAACAAACAAGGGGAAAAAAAAAAAAA

FIGURE 220

MAAACGPGAAGYCLLLGLHLFLLTAGPALGWNDPDRMLLRDVKALTLHYDRYTTSRSWDPIPQLKCVGGTAGCDS
YTPKVIQCQNKGWDGYDVQWECKTDLDIAYKFGKTVVSCEGYESSEDQYVLRGSCGLEYNLDYTELGLQKLKESG
KQHGFASFSDYYYKWSSADSCNMSGLITIVVLLGIAFVVYKLFLSDGQYSPPPYSEYPPFSHRYQRFTNSAGPPP
PGFKSEFTGPQNTGHGATSGFGSAFTGQQGYENSGPGFWTGLGTGGILGYLFGSNRAATPFSDSWYYPSYPPSYP
GTWNRAYSPLHGGSGSYSVCSNSDTKTRTASGYGGTRRR

FIGURE 221

CGCAGTTTGAATCGCGGTGCGACGAAGGAGTAGGTGGTGGGATCTCACCGTGGGTCCGATTAGCCTTTTCTCTGC
CTTGCTTGCTTGAGCTTCAGCGGAATTCGAA**ATG**GCTGGCGGTAAGGCTGGAAAGGACTCCGGAAAGGCCAAGAC
AAAGGCGGTTTCCCGCTCGCAGAGAGCCGGCTTGCAGTTCCCAGTGGGCCGTATTCATCGACACCTAAAATCTAG
GACGACCAGTCATGGACGTGTGGGCGCGACTGCCGCTGTGTACAGCGCAGCCATCCTGGAGTACCTCACCGCAGA
GGTACTTGAACTGGCAGGAAATGCATCAAAAGACTTAAAGGTAAAGCGTATTACCCCTCGTCACTTGCAACTTGC
TATTCGTGGAGATGAAGAATTGGATTCTCTCATCAAGGCTACAATTGCTGGTGGTGGTGTCATTCCACACATCCA
CAAATCTCTGATTGGGAAGAAAGGACAACAGAAGACTGTC**TAA**AGGATGCCTGGATTCCTTGTTATCTCAGGACT
CTAAATACTCTAACAGCTGTCCAGTGTTGGTGATTCCAGTGGACTGTATCTCTGTGAAAAACACAATTTTGCCTT
TTTGTAATTCTATTTGAGCAAGTTGGAAGTTTAATTAGCTTTCCAACCAACCAAATTTCTGCATTCGAGTCTTAA
CCATATTTAAGTGTTACTGTGGCTTCAAAGAAGCTATTGATTCTGAAGTAGTGGGTTTTGATTGAGTTGACTGTT
TTTAAAAAACTGTTTGGATTTTAATTGTGATGCAGAAGTTATAGTAACAAACATTTGGTTTTGTACAGACATTAT
TTCCACTCTGGTGGATAAGTTCAATAAAGGTCATATCCCAAACTAAAA

FIGURE 222

MAGGKAGKDSGKAKTKAVSRSQRAGLQFPVGRIHRHLKSRTTSHGRVGATAAVYSAAILEYLTAEVLELAGNASK
DLKVKRITPRHLQLAIRGDEELDSLIKATIAGGGVIPHIHKSLIGKKGQQKTV

FIGURE 223A

GCGATCCGGGCGCCACCCCGCGGTCATCGGTCACCGGTCGCTCTCAGGAACAGCAGCGCAACCTCTGCTCCCTGC
CTCGCCTCCCGCGCGCCTAGGTGCCTGCGACTTTAATTAAAGGGCCGTCCCCTCGCCGAGGCTGCAGCACCGCCC
CCCCGGCTTCTCGCGCCTCAAAATGAGTAGCTCCCACTCTCGGGCGGGCCAGAGCGCAGCAGGCGCGGCTCCGGG
CGGCGGCGTCGACACGCGGGACGCCGAGATGCCGGCCACCGAGAAGGACCTGGCGGAGGACGCGCCGTGGAAGAA
GATCCAGCAGAACACTTTCACGCGCTGGTGCAACGAGCACCTGAAGTGCGTGAGCAAGCGCATCGCCAACCTGCA
GACGGACCTGAGCGACGGGCTGCGGCTTATCGCGCTGTTGGAGGTGCTCAGCCAGAAGAAGATGCACCGCAAGCA
CAACCAGCGGCCCACTTTCCGCCAAATGCAGCTTGAGAACGTGTCGGTGGCGCTCGAGTTCCTGGACCGCGAGAG
CATCAAACTGGTGTCCATCGACAGCAAGGCCATCGTGGACGGGAACCTGAAGCTGATCCTGGGCCTCATCTGGAC
CCTGATCCTGCACTACTCCATCTCCATGCCCATGTGGGACGAGGAGGAGGATGAGGAGGCCAAGAAGCAGACCCC
CAAGCAGAGGCTCCTGGGCTGGATCCAGAACAAGCTGCCGCAGCTGCCCATCACCAACTTCAGCCGGGACTGGCA
GAGCGGCCGGGCCCTGGGCGCCCTGGTGGACAGCTGTGCCCCGGGCCTGTGTCCTGACTGGGACTCTTGGGACGC
CAGCAAGCCCGTTACCAATGCGCGAGAGGCCATGCAGCAGGCGGATGACTGGCTGGGCATCCCCCAGGTGATCAC
CCCCGAGGAGATTGTGGACCCCAACGTGGACGAGCACTCTGTCATGACCTACCTGTCCCAGTTCCCCAAGGCCAA
GCTGAAGCCAGGGGCTCCCTTGCGCCCCAAACTGAACCCGAAGAAAGCCCGTGCCTACGGGCCAGGCATCGAGCC
CACAGGCAACATGGTGAAGAAGCGGGCAGAGTTCACTGTGGAGACCAGAAGTGCTGGCCAGGGAGAGGTGCTGGT
GTACGTGGAGGACCCGGCCGGACACCAGGAGGAGGCAAAAGTGACCGCCAATAACGACAAGAACCGCACCTTCTC
CGTCTGGTACGTCCCCGAGGTGACGGGGACTCATAAGGTTACTGTGCTCTTTGCTGGCCAGCACATCGCCAAGAG
CCCCTTCGAGGTGTACGTGGATAAGTCACAGGGTGACGCCAGCAAAGTGACAGCCCAAGGTCCCGGCCTGGAGCC
CAGTGGCAACATCGCCAACAAGACCACCTACTTTGAGATCTTTACGGCAGGAGCTGGCACGGGCGAGGTCGAGGT
TGTGATCCAGGACCCCATGGGACAGAAGGGCACGGTAGAGCCTCAGCTGGAGGCCCGGGGCGACAGCACATACCG
CTGCAGCTACCAGCCCACCATGGAGGGCGTCCACACCGTGCACGTCACGTTTGCCGGCGTGCCCATCCCTCGCAG
CCCCTACACTGTCACTGTTGGCCAAGCCTGTAACCCGAGTGCCTGCCGGGCGGTTGGCCGGGGCCTCCAGCCCAA
GGGTGTGCGGGTGAAGGAGACAGCTGACTTCAAGGTGTACACAAAGGGCGCTGGCAGTGGGGAGCTGAAGGTCAC
CGTGAAGGGCCCCAAGGGAGAGGAGCGCGTGAAGCAGAAGGACCTGGGGGATGGCGTGTATGGCTTCGAGTATTA
CCCCATGGTCCCTGGAACCTATATCGTCACCATCACGTGGGGTGGTCAGAACATCGGGCGCAGTCCCTTCGAAGT
GAAGGTGGGCACCGAGTGTGGCAATCAGAAGGTACGGGCCTGGGGCCCTGGGCTGGAGGGCGGCGTCGTTGGCAA
GTCAGCAGACTTTGTGGTGGAGGCTATCGGGGACGACGTGGGCACGCTGGGCTTCTCGGTGGAAGGGCCATCGCA
GGCTAAGATCGAATGTGACGACAAGGGCGACGGCTCCTGTGATGTGCGCTACTGGCCGCAGGAGGCTGGCGAGTA
TGCCGTTCACGTGCTGTGCAACAGCGAAGACATCCGCCTCAGCCCCTTCATGGCTGACATCCGTGACGCGCCCCA
GGACTTCCACCCAGACAGGGTGAAGGCACGTGGGCCTGGATTGGAGAAGACAGGTGTGGCCGTCAACAAGCCAGC
AGAGTTCACAGTGGATGCCAAGCACGGTGGCAAGGCCCCACTTCGGGTCCAAGTCCAGGACAATGAAGGCTGCCC
TGTGGAGGCGTTGGTCAAGGACAACGGCAATGGCACTTACAGCTGCTCCTACGTGCCCAGGAAGCCGGTGAAGCA
CACAGCCATGGTGTCCTGGGGAGGCGTCAGCATCCCCAACAGCCCCTTCAGGGTGAATGTGGGAGCTGGCAGCCA
CCCCAACAAGGTCAAAGTATACGGCCCCGGAGTAGCCAAGACAGGGCTCAAGGCCCACGAGCCCACCTACTTCAC
TGTGGACTGCGCCGAGGCTGGCCAGGGGGACGTCAGCATCGGCATCAAGTGTGCCCCTGGAGTGGTAGGCCCCGC
CGAAGCTGACATCGACTTCGACATCATCCGCAATGACAATGACACCTTCACGGTCAAGTACACGCCCCGGGGGGC
TGGCAGCTACACCATTATGGTCCTCTTTGCTGACCAGGCCACGCCCACCAGCCCCATCCGAGTCAAGGTGGAGCC
CTCTCATGACGCCAGTAAGGTGAAGGCCGAGGGCCCTGGCCTCAGTCGCACTGGTGTCGAGCTTGGCAAGCCCAC
CCACTTCACAGTAAATGCCAAAGCTGCTGGCAAAGGCAAGCTGGACGTCCAGTTCTCAGGACTCACCAAGGGGGA
TGCAGTGCGAGATGTGGACATCATCGACCACCATGACAACACCTACACAGTCAAGTACACGCCTGTCCAGCAGGG
TCCAGTAGGCGTCAATGTCACTTATGGAGGGGATCCCATCCCTAAGAGCCCTTTCTCAGTGGCAGTATCTCCAAG
CCTGGACCTCAGCAAGATCAAGGTGTCTGGCCTGGGAGAGAAGGTGGACGTTGGCAAAGACCAGGAGTTCACAGT
CAAATCAAAGGGTGCTGGTGGTCAAGGCAAAGTGGCATCCAAGATTGTGGGCCCCTCGGGTGCAGCGGTGCCCTG
CAAGGTGGAGCCAGGCCTGGGGGCTGACAACAGTGTGGTGCGCTTCCTGCCCCGTGAGGAAGGGCCCTATGAGGT
GGAGGTGACCTATGACGGCGTGCCCGTGCCTGGCAGCCCCTTTCCTCTGGAAGCTGTGGCCCCCACCAAGCCTAG
CAAGGTGAAGGCGTTTGGGCCGGGGCTGCAGGGAGGCAGTGCGGGCTCCCCCGCCCGCTTCACCATCGACACCAA
GGGCGCCGGCACAGGTGGCCTGGGCCTGACGGTGGAGGGCCCCTGTGAGGCGCAGCTCGAGTGCTTGGACAATGG
GGATGGCACATGTTCCGTGTCCTACGTGCCCACCGAGCCCGGGGACTACAACATCAACATCCTCTTCGCTGACAC

FIGURE 223B

CCACATCCCTGGCTCCCCATTCAAGGCCCACGTGGTTCCCTGCTTTGACGCATCCAAAGTCAAGTGCTCAGGCCC
CGGGCTGGAGCGGGCCACCGCTGGGGAGGTGGGCCAATTCCAAGTGGACTGCTCGAGCGCGGGCAGCGCGGAGCT
GACCATTGAGATCTGCTCGGAGGCGGGGCTTCCGGCCGAGGTGTACATCCAGGACCACGGTGATGGCACGCACAC
CATTACCTACATTCCCCTCTGCCCCGGGGCCTACACCGTCACCATCAAGTACGGCGGCCAGCCCGTGCCCAACTT
CCCCAGCAAGCTGCAGGTGGAACCTGCGGTGGACACTTCCGGTGTCCAGTGCTATGGGCCTGGTATTGAGGGCCA
GGGTGTCTTCCGTGAGGCCACCACTGAGTTCAGTGTGGACGCCCGGGCTCTGACACAGACCGGAGGGCCGCACGT
CAAGGCCCGTGTGGCCAACCCCTCAGGCAACCTGACGGAGACCTACGTTCAGGACCGTGGCGATGGCATGTACAA
AGTGGAGTACACGCCTTACGAGGAGGGACTGCACTCCGTGGACGTGACCTATGACGGCAGTCCCGTGCCCAGCAG
CCCCTTCCAGGTGCCCGTGACCGAGGGCTGCGACCCCTCCCGGGTGCGTGTCCACGGGCCAGGCATCCAAAGTGG
CACCACCAACAAGCCCAACAAGTTCACTGTGGAGACCAGGGGAGCTGGCACGGGCGGCCTGGGCCTGGCTGTAGA
GGGCCCCTCCGAGGCCAAGATGTCCTGCATGGATAACAAGGACGGCAGCTGCTCGGTCGAGTACATCCCTTATGA
GGCTGGCACCTACAGCCTCAACGTCACCTATGGTGGCCATCAAGTGCCAGGCAGTCCTTTCAAGGTCCCTGTGCA
TGATGTGACAGATGCGTCCAAGGTCAAGTGCTCTGGGCCCGGCCTGAGCCCAGGCATGGTTCGTGCCAACCTCCC
TCAGTCCTTCCAGGTGGACACAAGCAAGGCTGGTGTGGCCCCATTGCAGGTCAAAGTGCAAGGGCCCAAAGGCCT
GGTGGAGCCAGTGGACGTGGTAGACAACGCTGATGGCACCCAGACCGTCAATTATGTGCCCAGCCGAGAAGGGCC
CTACAGCATCTCAGTACTGTATGGAGATGAAGAGGTACCCCGGAGCCCCTTCAAGGTCAAGGTGCTGCCTACTCA
TGATGCCAGCAAGGTGAAGGCCAGTGGCCCCGGGCTCAACACCACTGGCGTGCCTGCCAGCCTGCCCGTGGAGTT
CACCATCGATGCAAAGGACGCCGGGGAGGGCCTGCTGGCTGTCCAGATCACGGATCCCGAAGGCAAGCCGAAGAA
GACACACATCCAAGACAACCATGACGGCACGTATACAGTGGCCTACGTGCCAGACGTGACAGGTCGCTACACCAT
CCTCATCAAGTACGGTGGTGACGAGATCCCCTTCTCCCCGTACCGCGTGCGTGCCGTGCCCACCGGGGACGCCAG
CAAGTGCACTGTCACAGTGTCAATCGGAGGTCACGGGCTAGGTGCTGGCATCGGCCCCACCATTCAGATTGGGGA
GGAGACGGTGATCACTGTGGACACTAAGGCGGCAGGCAAAGGCAAAGTGACGTGCACCGTGTGCACGCCTGATGG
CTCAGAGGTGGATGTGGACGTGGTGGAGAATGAGGACGGCACTTTCGACATCTTCTACACGGCCCCCCAGCCGGG
CAAATACGTCATCTGTGTGCGCTTTGGTGGCGAGCACGTGCCCAACAGCCCCTTCCAAGTGACGGCTCTGGCTGG
GGACCAGCCCTCGGTGCAGCCCCCTCTACGGTCTCAGCAGCTGGCCCCACAGTACACCTACGCCCAGGGCGGCCA
GCAGACTTGGGCCCCGGAGAGGCCCCTGGTGGGTGTCAATGGGCTGGATGTGACCAGCCTGAGGCCCTTTGACCT
TGTCATCCCCTTCACCATCAAGAAGGGCGAGATCACAGGGGAGGTTCGGATGCCCTCAGGCAAGGTGGCGCAGCC
CACCATCACTGACAACAAAGACGGCACCGTGACCGTGCGGTATGCACCCAGCGAGGCTGGCCTGCACGAGATGGA
CATCCGCTATGACAACATGCACATCCCAGGAAGCCCCTTGCAGTTCTATGTGGATTACGTCAACTGTGGCCATGT
CACTGCCTATGGGCCTGGCCTCACCCATGGAGTAGTGAACAAGCCTGCCACCTTCACCGTCAACACCAAGGATGC
AGGAGAGGGGGGCCTGTCTCTGGCCATTGAGGGCCCGTCCAAAGCAGAAATCAGCTGCACTGACAACCAGGATGG
GACATGCAGCGTGTCCTACCTGCCTGTGCTGCCGGGGGACTACAGCATTCTAGTCAAGTACAATGAACAGCACGT
CCCAGGCAGCCCCTTCACTGCTCGGGTCACAGGTGACGACTCCATGCGTATGTCCCACCTAAAGGTCGGCTCTGC
TGCCGACATCCCCATCAACATCTCAGAGACGGATCTCAGCCTGCTGACGGCCACTGTGGTCCCGCCCTCGGGCCG
GGAGGAGCCCTGTTTGCTGAAGCGGCTGCGTAATGGCCACGTGGGGATTTCATTCGTGCCCAAGGAGACGGGGGA
GCACCTGGTGCATGTGAAGAAAAATGGCCAGCACGTGGCCAGCAGCCCCATCCCGGTGGTGATCAGCCAGTCGGA
AATTGGGGATGCCAGTCGTGTTCGGGTCTCTGGTCAGGGCCTTCACGAAGGCCACACCTTTGAGCCTGCAGAGTT
TATCATTGATACCCGCGATGCAGGCTATGGTGGGCTCAGCCTGTCCATTGAGGGCCCCAGCAAGGTGGACATCAA
CACAGAGGACCTGGAGGACGGGACGTGCAGGGTCACCTACTGCCCCACAGAGCCAGGCAACTACATCATCAACAT
CAAGTTTGCCGACCAGCACGTGCCTGGCAGCCCCTTCTCTGTGAAGGTGACAGGCGAGGGCCGGGTGAAAGAGAG
CATCACCCGCAGGCGTCGGGCTCCTTCAGTGGCCAACGTTGGTAGTCATTGTGACCTCAGCCTGAAAATCCCTGA
AATTAGCATCCAGGATATGACAGCCCAGGTGACCAGCCCATCGGGCAAGACCCATGAGGCCGAGATCGTGGAAGG
GGAGAACCACACCTACTGCATCCGCTTTGTTCCCGCTGAGATGGGCACACACACAGTCAGCGTCAAGTACAAGGG
CCAGCACGTGCCTGGGAGCCCCTTCCAGTTCACCGTGGGGCCCCTAGGGGAAGGGGGAGCCCACAAGGTCCGAGC
TGGGGGCCCTGGCCTGGAGAGAGCTGAAGCTGGAGTGCCAGCCGAATTCAGTATCTGGACCCGGGAAGCTGGTGC
TGGAGGCCTGGCCATTGCTGTCGAGGGCCCCAGCAAGGCTGAGATCTCTTTTGAGGACCGCAAGGACGGCTCCTG
TGGTGTGGCTTATGTGGTCCAGGAGCCAGGTGACTACGAAGTCTCAGTCAAGTTCAACGAGGAACACATTCCCGA
CAGCCCCTTCGTGGTGCCTGTGGCTTCTCCGTCTGGCGACGCCCGCCGCCTCACTGTTTCTAGCCTTCAGGAGTC

FIGURE 223C

AGGGCTAAAGGTCAACCAGCCAGCCTCTTTTGCAGTCAGCCTGAACGGGGCCAAGGGGGCGATCGATGCCAAGGT
GCACAGCCCCTCAGGAGCCCTGGAGGAGTGCTATGTCACAGAAATTGACCAAGATAAGTATGCTGTGCGCTTCAT
CCCTCGGGAGAATGGCGTTTACCTGATTGACGTCAAGTTCAACGGTACCCACATCCCTGGAAGCCCCTTCAAGAT
CCGAGTTGGGGAGCCTGGGCATGGAGGGGACCCAGGCTTGGTGTCTGCTTACGGAGCAGGTCTGGAAGGCGGTGT
CACAGGGAACCCAGCTGAGTTCGTCGTGAACACGAGCAATGCGGGAGCTGGTGCCCTGTCGGTGACCATTGACGG
CCCCTCCAAGGTGAAGATGGATTGCCAGGAGTGCCCTGAGGGCTACCGCGTCACCTATACCCCCATGGCACCTGG
CAGCTACCTCATCTCCATCAAGTACGGCGGCCCCTACCACATTGGGGGCAGCCCCTTCAAGGCCAAAGTCACAGG
CCCCCGTCTCGTCAGCAACCACAGCCTCCACGAGACATCATCAGTGTTTGTAGACTCTCTGACCAAGGCCACCTG
TGCCCCCCAGCATGGGGCCCCGGGTCCTGGGCCTGCTGACGCCAGCAAGGTGGTGGCCAAGGGCCTGGGGCTGAG
CAAGGCCTACGTAGGCCAGAAGAGCAGCTTCACAGTAGACTGCAGCAAAGCAGGCAACAACATGCTGCTGGTGGG
GGTTCATGGCCCAAGGACCCCCTGCGAGGAGATCCTGGTGAAGCACGTGGGCAGCCGGCTCTACAGCGTGTCCTA
CCTGCTCAAGGACAAGGGGGAGTACACACTGGTGGTCAAATGGGGGCACGAGCACATCCCAGGCAGCCCCTACCG
CGTTGTGGTGCCCTGAGTCTGGGGCCCGTGCCAGCCGGCAGCCCCCAAGCCTGCCCCGCTACCCAAGCAGCCCCG
CCCTCTTCCCCTCAACCCCGGCCCAGGCCGCCCTGGCCGCCCGCCTGTCACTGCAGCTGCCCCTGCCCTGTGCCG
TGCTGCGCTCACCTGCCTCCCCAGCCAGCCGCTGACCTCTCGGCTTTCACTTGGGCAGAGGGAGCCATTTGGTGG
CGCTGCTTGTCTTCTTTGGTTCTGGGAGGGGTGAGGGATGGGG

FIGURE 224

MSSSHSRAGQSAAGAAPGGGVDTRDAEMPATEKDLAEDAPWKKIQQNTFTRWCNEHLKCVSKRIANLQTDLSDGL
RLIALLEVLSQKKMHRKHNQRPTFRQMQLENVSVALEFLDRESIKLVSIDSKAIVDGNLKLILGLIWTLILHYSI
SMPMWDEEEDEEAKKQTPKQRLLGWIQNKLPQLPITNFSRDWQSGRALGALVDSCAPGLCPDWDSWDASKPVTNA
REAMQQADDWLGIPQVITPEEIVDPNVDEHSVMTYLSQFPKAKLKPGAPLRPKLNPKKARAYGPGIEPTGNMVKK
RAEFTVETRSAGQGEVLVYVEDPAGHQEEAKVTANNDKNRTFSVWYVPEVTGTHKVTVLFAGQHIAKSPFEVYVD
KSQGDASKVTAQGPGLEPSGNIANKTTYFEIFTAGAGTGEVEVVIQDPMGQKGTVEPQLEARGDSTYRCSYQPTM
EGVHTVHVTFAGVPIPRSPYTVTVGQACNPSACRAVGRGLQPKGVRVKETADFKVYTKGAGSGELKVTVKGPKGE
ERVKQKDLGDGVYGFEYYPMVPGTYIVTITWGGQNIGRSPFEVKVGTECGNQKVRAWGPGLEGGVVGKSADFVVE
AIGDDVGTLGFSVEGPSQAKIECDDKGDGSCDVRYWPQEAGEYAVHVLCNSEDIRLSPFMADIRDAPQDFHPDRV
KARGPGLEKTGVAVNKPAEFTVDAKHGGKAPLRVQVQDNEGCPVEALVKDNGNGTYSCSYVPRKPVKHTAMVSWG
GVSIPNSPFRVNVGAGSHPNKVKVYGPGVAKTGLKAHEPTYFTVDCAEAGQGDVSIGIKCAPGVVGPAEADIDFD
IIRNDNDTFTVKYTPRGAGSYTIMVLFADQATPTSPIRVKVEPSHDASKVKAEGPGLSRTGVELGKPTHFTVNAK
AAGKGKLDVQFSGLTKGDAVRDVDIIDHHDNTYTVKYTPVQQGPVGVNVTYGGDPIPKSPFSVAVSPSLDLSKIK
VSGLGEKVDVGKDQEFTVKSKGAGGQGKVASKIVGPSGAAVPCKVEPGLGADNSVVRFLPREEGPYEVEVTYDGV
PVPGSPFPLEAVAPTKPSKVKAFGPGLQGGSAGSPARFTIDTKGAGTGGLGLTVEGPCEAQLECLDNGDGTCSVS
YVPTEPGDYNINILFADTHIPGSPFKAHVVPCFDASKVKCSGPGLERATAGEVGQFQVDCSSAGSAELTIEICSE
AGLPAEVYIQDHGDGTHTITYIPLCPGAYTVTIKYGGQPVPNFPSKLQVEPAVDTSGVQCYGPGIEGQGVFREAT
TEFSVDARALTQTGGPHVKARVANPSGNLTETYVQDRGDGMYKVEYTPYEEGLHSVDVTYDGSPVPSSPFQVPVT
EGCDPSRVRVHGPGIQSGTTNKPNKFTVETRGAGTGGLGLAVEGPSEAKMSCMDNKDGSCSVEYIPYEAGTYSLN
VTYGGHQVPGSPFKVPVHDVTDASKVKCSGPGLSPGMVRANLPQSFQVDTSKAGVAPLQVKVQGPKGLVEPVDVV
DNADGTQTVNYVPSREGPYSISVLYGDEEVPRSPFKVKVLPTHDASKVKASGPGLNTTGVPASLPVEFTIDAKDA
GEGLLAVQITDPEGKPKKTHIQDNHDGTYTVAYVPDVTGRYTILIKYGGDEIPFSPYRVRAVPTGDASKCTVTVS
IGGHGLGAGIGPTIQIGEETVITVDTKAAGKGKVTCTVCTPDGSEVDVDVVENEDGTFDIFYTAPQPGKYVICVR
FGGEHVPNSPFQVTALAGDQPSVQPPLRSQQLAPQYTYAQGGQQTWAPERPLVGVNGLDVTSLRPFDLVIPFTIK
KGEITGEVRMPSGKVAQPTITDNKDGTVTVRYAPSEAGLHEMDIRYDNMHIPGSPLQFYVDYVNCGHVTAYGPGL
THGVVNKPATFTVNTKDAGEGGLSLAIEGPSKAEISCTDNQDGTCSVSYLPVLPGDYSILVKYNEQHVPGSPFTA
RVTGDDSMRMSHLKVGSAADIPINISETDLSLLTATVVPPSGREEPCLLK

FIGURE 225A

CCCGGGCTGTGGGCTACAGGCGCAGAGCGGGCCAGGCGCGGAGCTGGCGGCAGTGACAGGAGGCGCGAACCCGCA
GCGCTTACCGCGCGGCGCCGCACC**ATG**GAGCCCGCCGTGTCGCTGGCCGTGTGCGCGCTGCTCTTCCTGCTGTGG
GTGCGCCTGAAGGGGCTGGAGTTCGTGCTCATCCACCAGCGCTGGGTGTTCGTGTGCCTCTTCCTCCTGCCGCTC
TCGCTTATCTTCGATATCTACTACTACGTGCGCGCCTGGGTGGTGTTCAAGCTCAGCAGCGCTCCGCGCCTGCAC
GAGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGACCTTCATGTGCACG
GGGCGCCCTGGCTGGCTCACTGTCTCACTACGTGTCGGGAAGTACAAGAAGACACACAAAAACATCATGATCAAC
CTGATGGACATTCTGGAAGTGGACACCAAGAAACAGATTGTCCGTGTGGAGCCCTTGGTGACCATGGGCCAGGTG
ACTGCCCTGCTGACCTCCATTGGCTGGACTCTCCCCGTGTTGCCTGAGCTTGATGACCTCACAGTGGGGGGCTTG
ATCATGGGCACAGGCATCGAGTCATCATCCCACAAGTACGGCCTGTTCCAACACATCTGCACTGCTTACGAGCTG
GTCCTGGCTGATGGCAGCTTTGTGCGATGCACTCCGTCCGAAAACTCAGACCTGTTCTATGCCGTACCCTGGTCC
TGTGGGACGCTGGGTTTCCTGGTGGCCGCTGAGATCCGCATCATCCCTGCCAAGAAGTACGTCAAGCTGCGTTTC
GAGCCAGTGCGGGGCCTGGAGGCTATCTGTGCCAAGTTCACCCACGAGTCCCAGCGGCAGGAGAACCACTTCGTG
GAAGGGCTGCTCTACTCCCTGGATGAGGCTGTCATTATGACAGGGGTCATGACAGATGAGGCAGAGCCCAGCAAG
CTGAATAGCATTGGCAATTACTACAAGCCGTGGTTCTTTAAGCATGTGGAGAACTATCTGAAGACAAACCGAGAG
GGCCTGGAGTACATTCCCTTGAGACACTACTACCACCGCCACACGCGCAGCATCTTCTGGGAGCTCCAGGACATC
ATCCCCTTTGGCAACAACCCCATCTTCCGCTACCTCTTTGGCTGGATGGTGCCTCCCAAGATCTCCCTCCTGAAG
CTGACCCAGGGTGAGACCCTGCGCAAGCTGTACGAGCAGCACCACGTGGTGCAGGACATGCTGGTGCCCATGAAG
TGCCTGCAGCAGGCCCTGCACACCTTCCAAAACGACATCCACGTCTACCCCATCTGGCTGTGTCCGTTCATCCTG
CCCAGCCAGCCAGGCCTAGTGCACCCCAAAGGAAATGAGGCAGAGCTCTACATCGACATTGGAGCATATGGGGAG
CCGCGTGTGAAACACTTTGAAGCCAGGTCCTGCATGAGGCAGCTGGAGAAGTTTGTCCGCAGCGTGCATGGCTTC
CAGATGCTGTATGCCGACTGCTACATGAACCGGGAGGAGTTCTGGGAGATGTTTGATGGCTCCTTGTACCACAAG
CTGCGAGAGAAGCTGGGTTGCCAGGACGCCTTCCCCGAGGTGTACGACAAGATCTGCAAGGCCGCCAGGCAC**TGA**

GCTGGAGCCCGCCTGGAGAGACAGACACGTGTGAGTGGTCAGGCATCTTCCCTTCACTCAAGCTTGGCTGCTTTC
CTAGATCCACACTTTCAAAGAGAAACCCCTCCAGAACTCCCACCCTGACAGCCCAACACCACCTTCCTCCTGGCT
TCCAGGGGGCAGCCCAGTGGAATGGAAAGAATGTGGGATTTGGAGTCAGACAAGCCTGAGTCCAGTTCCCCGTTT
AGAACTCATTAGCTGTGTGACTCTGGGTGAGTCCCTTAACCCCTCTGAGCCCGGGTCTCTTCATTAGTTGAAAGG
GATAGTAATACCTACTTGCAGGTTGTTGTCATCTGAGTTGAGCACTGGTCACATTGAAGGTGCTGGGTAAGTGGT
AGCTCTTGTTGCTTCCCGTTCAGCGTCACATCTGCAGTGGAGCCTGAAAAGGCTCCACATTAGGTCACCTGTGCA
CAGCCATGGCTGGAATGATGAAGGGGATACGCTGGAGTTGCCCTGCCATCGCCTCCATCAGCCAGACGAGGTCCT
CACAGGAGAAGGACAGCTCTTCCCCACCCTGGGATCTCAGGAGGGCAGCCACGGAGTGGGGAGGCCCCAGATGCG
CTGTGCCAAAGCCAGGTCCGAGGCCAAAGTTCTCCCTGCCATCCTTGGTGCCGTCCTGCCCCTTCCTCCTTCATG
CCTGGGCCTGCAGGCCCACCCCAGCCACCACTGAGTCCACTCGGAGTGCCCTGTGTTCCTGGAGAAGGCATTCCA
GGGTTGAATCTTGTCCCAGCCTCAGCCTGGGACACCTAGGTGGAGAGAGTGGTCTCCGCTCTGAATTGGATCCAG
GGGACCTGGGCTCATTCTTCTTGGCTCACCAACCCTGCAGGCCTCATCTTTCCCAAAACCCACTTTGTCTTGGTG
GGAGTGGGTCCGCGCTGCTCTGCAGCAGGGGCTGGGGAGTGGACAGCATCAGGTGGGAAAGTGGAGTCCACCCTC
ATGTTTCTGTAGGATTCTCACCGTGGGGCTGGAAGAAAAGAGCATCGACTTGATTTCTCCAACCACTCATCCCTC
TTTTTCTTTCTTCCACCACTCCCCACCCCAGCTGTAGTTAATTTCAGTGCCTTACAAATCCTAAGCTCAGAGAAA
GTTCCATTTCCGTTCCAGAGGGAAGGGAACCTCCCTAGGTCCTTCCCTGGCTTGTTATAACGCAAAGCTTGGTTG
TTTATGCAACTCTATCTTAAGAACTGCCCAGCCTCAGCTGAAAACCCGAATCTGAGAAGGAATTGCGTCATGTAA
GGGAAGCTGGAATTAAGGGAGCTGAGCCAGTCATGGTTGTGGCGTGTGAGTCAGGAGACCTAGGTTTCAGCCCCT
CTCTACTGTCAGCGAGCTGTGCAACGTGGGCAAGTCATTGTCCTCTGAGCTGCAGTTTCCTCATCTGTCACATCG
CTACAGACAAGACCTCCCTGGAACCCTTCTGATTGTCTTAGACACTGTGGTTGCAAAACCCACGGAAAGCCTCAT
TTGTGTGGAAAGTCAGAGGAAAAATGATCCAGTGGACACTTGGGGATTATCTGTCATTCAAGATCCTTCCTTCAA
CCCCAAGGCCAGCTCCCATCTCATTTCCAGAAAGGCTCATACCTGGCTTGCAGGGAAGCATCTGTCTTGTCATTC
CAGGTGCCAGAATCCTCTCAGAGTCATTGAAGGGTGTTCACCCATCCCACCCAAGGCTTGGCACACTGCCAGTGT
CTTAGCAGGGTCTTGTGAGGGCTGGGGGCATCCAGGCACTCAGAAGGCAAAGGAACCACCCTACCCATTTGGCCT
CTGGAGGGGGCAGAAGAAAGAAAGAAACCTCATCCTATATTTTACAAAGCATGTGAATTCTGGCATTAGCTCTCA
TAGGAGACCCATGTGCTTCCTTGCTCAGTGCAAAACTGATGATTCTACTTGCTGTAGATGAATGGTTAACACGAG

FIGURE 225B

CTAGTTAAACAGTGCCATTGTTTTGCCAGTGAAGCCTCCAACCCTAAGCCACTGGGACGGTGGCCAGAGATGCCA
GCAGCCTCTGTCGCCCTTAGTCATATAACCAAAATCCAGACCTTATCCACAACCCGGGGCTTGGAAAGGAAGGTA
TTTTGGAATCACACCCTCCGGTTATGTTGCTCCAGTAAAATCTTGCCTGGAAAGAGGCAGTCTTCTTAGCATGGT
GAGCTGAGTTCATGGCTTTTTTTTGTAGCCAGTCCTGTCCCTGGCCATCCATGTGATGGTTTTGGATGGAGTTAA
ACTTGATGCCAGTGGGCAGTGCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCTCCAGAGCCCTGAGTTTCTTGG
CTGCATGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATACTTGGATATTAC
TGAAAGGGAGGGGTGGAGATGGGTGTGGCAGTGTATGGTGTGTGATTTTTATTTTCTTCTTTGGTCATGGGGGCC
AAGGAGAAAGGCATGAATCTTCCCTGTCAGGCTCTTACAGCCACAGGCACTGTGTCTACTGTCTGGAAGACATGT
CCCCGTGGCTGTGGGGCCGCTGCTTCTGTTTAAATAAAAGTGGCCTGG

FIGURE 226

MEPAVSLAVCALLFLLWVRLKGLEFVLIHQRWVFVCLFLLPLSLIFDIYYYVRAWVVFKLSSAPRLHEQRVRDIQ
KQVREWKEQGSKTFMCTGRPGWLTVSLRVGKYKKTHKNIMINLMDILEVDTKKQIVRVEPLVTMGQVTALLTSIG
WTLPVLPELDDLTVGGLIMGTGIESSSHKYGLFQHICTAYELVLADGSFVRCTPSENSDLFYAVPWSCGTLGFLV
AAEIRIIPAKKYVKLRFEPVRGLEAICAKFTHESQRQENHFVEGLLYSLDEAVIMTGVMTDEAEPSKLNSIGNYY
KPWFFKHVENYLKTNREGLEYIPLRHYYHRHTRSIFWELQDIIPFGNNPIFRYLFGWMVPPKISLLKLTQGETLR
KLYEQHHVVQDMLVPMKCLQQALHTFQNDIHVYPIWLCPFILPSQPGLVHPKGNEAELYIDIGAYGEPRVKHFEA
RSCMRQLEKFVRSVHGFQMLYADCYMNREEFWEMFDGSLYHKLREKLGCQDAFPEVYDKICKAARH

FIGURE 227

GGGCGGGCGCATTGCAGACTGCGGAGTCAGACGGTGCTATGTACGCCCTCTTCCTCCTGGCCAGCCTCCTGGGCG
CGGCTCTAGCCGGCCCGGTCCTTGGACTGAAAGAATGCACCAGGGGCTCGGCAGTGTGGTGCCAGAATGTGAAGA
CGGCGTCCGACTGCGGGGCAGTGAAGCACTGCCTGCAGACCGTTTGGAACAAGCCAACAGTGAAATCCCTTCCCT
GCGACATATGCAAAGACGTTGTCACCGCAGCTGGTGATATGCTGAAGGACAATGCCACTGAGGAGGAGATCCTTG
TTTACTTGGAGAAGACCTGTGACTGGCTTCCGAAACCGAACATGTCTGCTTCATGCAAGGAGATAGTGGACTCCT
ACCTCCCTGTCATCCTGGACATCATTAAAGGAGAAATGAGCCGTCCTGGGGAGGTGTGCTCTGCTCTCAACCTCT
GCGAGTCTCTCCAGAAGCACCTAGCAGAGCTGAATCACCAGAAGCAGCTGGAGTCCAATAAGATCCCAGAGCTGG
ACATGACTGAGGTGGTGGCCCCCTTCATGGCCAACATCCCTCTCCTCCTCTACCCTCAGGACGGCCCCCGCAGCA
AGCCCCAGCCAAAGGATAATGGGGACGTTTGCCAGGACTGCATTCAGATGGTGACTGACATCCAGACTGCTGTAC
GGACCAACTCCACCTTTGTCCAGGCCTTGGTGGAACATGTCAAGGAGGAGTGTGACCGCCTGGGCCCTGGCATGG
CCGACATATGCAAGAACTATATCAGCCAGTATTCTGAAATTGCTATCCAGATGATGATGCACATGCAACCCAAGG
AGATCTGTGCGCTGGTTGGGTTCTGTGATGAGGTGAAAGAGATGCCCATGCAGACTCTGGTCCCCGCCAAAGTGG
CCTCCAAGAATGTCATCCCTGCCCTGGAACTGGTGGAGCCCATTAAGAAGCACGAGGTCCCAGCAAAGTCTGATG
TTTACTGTGAGGTGTGTGAATTCCTGGTGAAGGAGGTGACCAAGCTGATTGACAACAACAAGACTGAGAAAGAAA
TACTCGACGCTTTTGACAAAATGTGCTCGAAGCTGCCGAAGTCCCTGTCGGAAGAGTGCCAGGAGGTGGTGGACA
CGTACGGCAGCTCCATCCTGTCCATCCTGCTGGAGGAGGTCAGCCCTGAGCTGGTGTGCAGCATGCTGCACCTCT
GCTCTGGCACGCGGCTGCCTGCACTGACCGTTCACGTGACTCAGCCAAAGGACGGTGGCTTCTGCGAAGTGTGCA
AGAAGCTGGTGGGTTATTTGGATCGCAACCTGGAGAAAAACAGCACCAAGCAGGAGATCCTGGCTGCTCTTGAGA
AAGGCTGCAGCTTCCTGCCAGACCCTTACCAGAAGCAGTGTGATCAGTTTGTGGCAGAGTACGAGCCCGTGCTGA
TCGAGATCCTGGTGGAGGTGATGGATCCTTCCTTCGTGTGCTTGAAAATTGGAGCCTGCCCCTCGGCCCATAAGC
CCTTGTTGGGAACTGAGAAGTGTATATGGGGCCCAAGCTACTGGTGCCAGAACACAGAGACAGCAGCCCAGTGCA
ATGCTGTCGAGCATTGCAAACGCCATGTGTGGAACTAGGAGGAGGAATATTCCATCTTGGCAGAAACCACAGCAT
TGGTTTTTTTCTACTTGTGTGTCTGGGGGAATGAACGCACAGATCTGTTTGACTTTGTTATAAAAATAGGGCTCC
CCCACCTCCCCCATTTCTGTGTCCTTTATTGTAGCATTGCTGTCTGCAAGGGAGCCCCTAGCCCCTAGCCCCTGG
CAGACATAGCTGCTTCAGTGCCCCTTTTCTCTCTGCTAGATGGATGTTGATGCACTGGAGGTCTTTTAGCCTGCC
CTTGCATGGCGCCTGCTGGAGGAGGAGAGAGCTCTGCTGGCATGAGCCACAGTTTCTTGACTGGAGGCCATCAAC
CCTCTTGGTTGAGGCCTTGTTCTGAGCCCTGACATGTGCTTGGGCACTGGTGGGCCTGGGCTTCTGAGGTGGCCT
CCTGCCCTGATCAGGGACCCTCCCCGCTTTCCTGGGCCTCTCAGTTGAACAAAGCAGCAAAACAAAGGCAGTTTT
ATATGAAAGATTAGAAGCCTGGAATAATCAGGCTTTTTAAATGATGTAATTCCCACTGTAATAGCATAGGGATTT
TGGAAGCAGCTGCTGGTGGCTTGGGACATCAGTGGGGCCAAGGGTTCTCTGTCCCTGGTTCAACTGTGATTTGGC
TTTCCCGTGTCTTTCCTGGTGATGCCTTGTTTGGGGTTCTGTGGGTTTGGGTGGGAAGAGGGCCATCTGCCTGAA
TGTAACCTGCTAGCTCTCCGAAGCCCTGCGGGCCTGGCTTGTGTGAGCGTGTGGACAGTGGTGGCCGCGCTGTGC
CTGCTCGTGTTGCCTACATGTCCCTGGCTGTTGAGGCGCTGCTTCAGCCTGCACCCCTCCCTTGTCTCATAGATG
CTCCTTTTGACCTTTTCAAATAAATATGGATGGCGAGCTCCTAGGCCTCTGGCTTCCTGGTAGAGGGCGGCATGC
CGAAGGGTCTGTCTGGGTGTGGATTGGATGCTGGGGGTGTGGGGGTTGGAAGCTGTCTGTGGCCCACTTGGGCAC
CCACGCTTCTGTCCACTTCTGGTTGCCAGGAGACAGCAAGCAAAGCCAGCAGGACATGAAGTTGCTATTAAATGG
ACTTCGTGATTTTTGTTTTGCACTAAAGTTTCTGTGATTTAACAATAAAATTCTGTTAGCCCCCCCG

FIGURE 228

MYALFLLASLLGAALAGPVLGLKECTRGSAVWCQNVKTASDCGAVKHCLQTVWNKPTVKSLPCDICKDVVTAAGD
MLKDNATEEEILVYLEKTCDWLPKPNMSASCKEIVDSYLPVILDIIKGEMSRPGEVCSALNLCESLQKHLAELNH
QKQLESNKIPELDMTEVVAPFMANIPLLLYPQDGPRSKPQPKDNGDVCQDCIQMVTDIQTAVRTNSTFVQALVEH
VKEECDRLGPGMADICKNYISQYSEIAIQMMMHMQPKEICALVGFCDEVKEMPMQTLVPAKVASKNVIPALELVE
PIKKHEVPAKSDVYCEVCEFLVKEVTKLIDNNKTEKEILDAFDKMCSKLPKSLSEECQEVVDTYGSSILSILLEE
VSPELVCSMLHLCSGTRLPALTVHVTQPKDGGFCEVCKKLVGYLDRNLEKNSTKQEILAALEKGCSFLPDPYQKQ
CDQFVAEYEPVLIEILVEVMDPSFVCLKIGACPSAHKPLLGTEKCIWGPSYWCQNTETAAQCNAVEHCKRHVWN

FIGURE 229

GGGCGGGCGCATTGCAGACTGCGGAGTCAGACGGTGCTATGTACGCCCTCTTCCTCCTGGCCAGCCTCCTGGGCG
CGGCTCTAGCCGGCCCGGTCCTTGGACTGAAAGAATGCACCAGGGGCTCGGCAGTGTGGTGCCAGAATGTGAAGA
CGGCGTCCGACTGCGGGGCAGTGAAGCACTGCCTGCAGACCGTTTGGAACAAGCCAACAGTGAAATCCCTTCCCT
GCGACATATGCAAAGACGTTGTCACCGCAGCTGGTGATATGCTGAAGGACAATGCCACTGAGGAGGAGATCCTTG
TTTACTTGGAGAAGACCTGTGACTGGCTTCCGAAACCGAACATGTCTGCTTCATGCAAGGAGATAGTGGACTCCT
ACCTCCCTGTCATCCTGGACATCATTAAAGGAGAAATGAGCCGTCCTGGGGAGGTGTGCTCTGCTCTCAACCTCT
GCGAGTCTCTCCAGAAGCACCTAGCAGAGCTGAATCACCAGAAGCAGCTGGAGTCCAATAAGATCCCAGAGCTGG
ACATGACTGAGGTGGTGGCCCCCTTCATGGCCAACATCCCTCTCCTCCTCTACCCTCAGGACGGCCCCCGCAGCA
AGCCCCAGCCAAAGGATAATGGGGACGTTTGCCAGGACTGCATTCAGATGGTGACTGACATCCAGACTGCTGTAC
GGACCAACTCCACCTTTGTCCAGGCCTTGGTGGAACATGTCAAGGAGGAGTGTGACCGCCTGGGCCCTGGCATGG
CCGACATATGCAAGAACTATATCAGCCAGTATTCTGAAATTGCTATCCAGATGATGATGCACATGCAACCCAAGG
AGATCTGTGCGCTGGTTGGGTTCTGTGATGAGGTGAAAGAGATGCCCATGCAGACTCTGGTCCCCGCCAAAGTGG
CCTCCAAGAATGTCATCCCTGCCCTGGAACTGGTGGAGCCCATTAAGAAGCACGAGGTCCCAGCAAAGTCTGATG
TTTACTGTGAGGTGTGTGAATTCCTGGTGAAGGAGGTGACCAAGCTGATTGACAACAACAAGACTGAGAAAGAAA
TACTCGACGCTTTTGACAAAATGTGCTCGAAGCTGCCGAAGTCCCTGTCGGAAGAGTGCCAGGAGGTGGTGGACA
CGTACGGCAGCTCCATCCTGTCCATCCTGCTGGAGGAGGTCAGCCCTGAGCTGGTGTGCAGCATGCTGCACCTCT
GCTCTGGCACGCGGCTGCCTGCACTGACCGTTCACGTGACTCAGCCAAAGGACGGTGGCTTCTGCGAAGTGTGCA
AGAAGCTGGTGGGTTATTTGGATCGCAACCTGGAGAAAAACAGCACCAAGCAGGAGATCCTGGCTGCTCTTGAGA
AAGGCTGCAGCTTCCTGCCAGACCCTTACCAGAAGCAGTGTGATCAGTTTGTGGCAGAGTACGAGCCCGTGCTGA
TCGAGATCCTGGTGGAGGTGATGGATCCTTCCTTCGTGTGCTTGAAAATTGGAGCCTGCCCCTCGGCCCATAAGC
CCTTGTTGGGAACTGAGAAGTGTATATGGGGCCCAAGCTACTGGTGCCAGAACACAGAGACAGCAGCCCAGTGCA
ATGCTGTCGAGCATTGCAAACGCCATGTGTGGAACTAGGAGGAGGAATATTCCATCTTGGCAGAAACCACAGCAT
TGGTTTTTTTCTACTTGTGTGTCTGGGGGAATGAACGCACAGATCTGTTTGACTTTGTTATAAAAATAGGGCTCC
CCCACCTCCCCCATTTCTGTGTCCTTTATTGTAGCATTGCTGTCTGCAAGGGAGCCCCTAGCCCCTAGCCCCTGG
CAGACATAGCTGCTTCAGTGCCCCTTTTCTCTCTGCTAGATGGATGTTGATGCACTGGAGGTCTTTTAGCCTGCC
CTTGCATGGCGCCTGCTGGAGGAGGAGAGAGCTCTGCTGGCATGAGCCACAGTTTCTTGACTGGAGGCCATCAAC
CCTCTTGGTTGAGGCCTTGTTCTGAGCCCTGACATGTGCTTGGGCACTGGTGGGCCTGGGCTTCTGAGGTGGCCT
CCTGCCCTGATCAGGGACCCTCCCCGCTTTCCTGGGCCTCTCAGTTGAACAAAGCAGCAAAACAAAGGCAGTTTT
ATATGAAAGATTAGAAGCCTGGAATAATCAGGCTTTTTAAATGATGTAATTCCCACTGTAATAGCATAGGGATTT
TGGAAGCAGCTGCTGGTGGCTTGGGACATCAGTGGGGCCAAGGGTTCTCTGTCCCTGGTTCAACTGTGATTTGGC
TTTCCCGTGTCTTTCCTGGTGATGCCTTGTTTGGGGTTCTGTGGGTTTGGGTGGGAAGAGGGCCATCTGCCTGAA
TGTAACCTGCTAGCTCTCCGAAGCCCTGCGGGCCTGGCTTGTGTGAGCGTGTGGACAGTGGTGGCCGCGCTGTGC
CTGCTCGTGTTGCCTACATGTCCCTGGCTGTTGAGGCGCTGCTTCAGCCTGCACCCCTCCCTTGTCTCATAGATG
CTCCTTTTGACCTTTTCAAATAAATATGGATGGCGAGCTCCTAGGCCTCTGGCTTCCTGGTAGAGGGCGGCATGC
CGAAGGGTCTGTCTGGGTGTGGATTGGATGCTGGGGGTGTGGGGGTTGGAAGCTGTCTGTGGCCCACTTGGGCAC
CCACGCTTCTGTCCACTTCTGGTTGCCAGGAGACAGCAAGCAAAGCCAGCAGGACATGAAGTTGCTATTAAATGG
ACTTCGTGATTTTTGTTTTGCACTAAAGTTTCTGTGATTTAACAATAAAATTCTGTTAGCCCCCCCG

FIGURE 230

MYALFLLASLLGAALAGPVLGLKECTRGSAVWCQNVKTASDCGAVKHCLQTVWNKPTVKSLPCDICKDVVTAAGD
MLKDNATEEEILVYLEKTCDWLPKPNMSASCKEIVDSYLPVILDIIKGEMSRPGEVCSALNLCESLQKHLAELNH
QKQLESNKIPELDMTEVVAPFMANIPLLLYPQDGPRSKPQPKDNGDVCQDCIQMVTDIQTAVRTNSTFVQALVEH
VKEECDRLGPGMADICKNYISQYSEIAIQMMMHMQPKEICALVGFCDEVKEMPMQTLVPAKVASKNVIPALELVE
PIKKHEVPAKSDVYCEVCEFLVKEVTKLIDNNKTEKEILDAFDKMCSKLPKSLSEECQEVVDTYGSSILSILLEE
VSPELVCSMLHLCSGTRLPALTVHVTQPKDGGFCEVCKKLVGYLDRNLEKNSTKQEILAALEKGCSFLPDPYQKQ
CDQFVAEYEPVLIEILVEVMDPSFVCLKIGACPSAHKPLLGTEKCIWGPSYWCQNTETAAQCNAVEHCKRHVWN

FIGURE 231

AGAATACACTCACAAGCCACTCCGCTGCTCGCCTCTCCGCCCCGCGTCCAGCTCGCCCAGCTCGCCCAGCGTCCG
CCGCGCCTCGCCAAGGCTTCAACGGACCACACCAAAATGCCATCTCAAATGGAACACGCCATGGAAACCATGATG
TTTACATTTCACAAATTCGCTGGGGATAAAGGCTACTTAACAAAGGAGGACCTGAGAGTACTCATGGAAAAGGAG
TTCCCTGGATTTTTGGAAAATCAAAAAGACCCTCTGGCTGTGGACAAAATAATGAAGGACCTGGACCAGTGTAGA
GATGGCAAAGTGGGCTTCCAGAGCTTCTTTTCCCTAATTGCGGGCCTCACCATTGCATGCAATGACTATTTTGTA
GTACACATGAAGCAGAAGGGAAAGAAGTAGGCAGAAATGAGCAGTTCGCTCCTCCCTGATAAGAGTTGTCCAAAG
GGTCGCTTAAGGAATCTGCCCCACAGCTTCCCCCATAGAAGGATTTCATGAGCAGATCAGGACACTTAGCAAATG
TAAAAATAAAATCTAACTCTCATTTGACAAGCAGAGAAAGAAAAGTTAAATACCAGATAAGCTTTTGATTTTTGT
ATTGTTTGCATCCCCTTGCCCTCAATAAATAAAGTTCTTTTTTAGTTCC

FIGURE 232

MPSQMEHAMETMMFTFHKFAGDKGYLTKEDLRVLMEKEFPGFLENQKDPLAVDKIMKDLDQCRDGKVGFQSFFSL
IAGLTIACNDYFVVHMKQKGKK

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FIGURE 233

GGATCCGGCAACGAAGGTACCATGGCGGGACGTGGCGCCATGGTGCTGTTGCACGTGCTGTTTGAGCACGCGGTC
GGCTACGCGCTCGTGGCGCTGAAGGAAGTGGAGGAGATCAGTCTGCTGCAGCCGCAGGTGGAGGAGTCCGTGCTC
AACCTGGGCAAATTCCACAGCATCGTTCGTCTGGTGGCCTTTTGTCCCTTTGCCTCATCCCAGGTTGCCTTGGAA
AATGCCAACGCCGTGTCTGAAGGGGTTGTTCATGAGGACCTCCGCCTGCTCTTGGAGACCCACCTGCCGTCCAAA
AAGAAGAAAGTACTCTTGGGAGTTGGGGATCCCAAGATTGGTGCCGCAATACAGGAGGAGTTAGGGTACAACTGC
CAGACTGGAGGAGTCATAGCTGAGATCCTGCGAGGAGTTCGTCTGCACTTCCACAATCTGGTGAAGGGTCTGACC
GATCTGTCAGCTTGTAAAGCACAGCTGGGGCTGGGACACAGCTATTCCCGTGCCAAAGTTAAGTTTAATGTGAAC
CGGGTGGACAATATGATCATCCAGTCCATTAGCCTCCTGGACCAGCTGGATAAGGACATCAATACCTTCTCTATG
CGTGTCAGGGAGTGGTACGGGTATCACTTTCCGGAGCTGGTGAAGATCATCAACGACAATGCCACATACTGCCGT
CTTGCCCAGTTTATTGGAAACCGAAGGGAACTGAATGAGGACAAGCTGGAGAAGCTGGAGGAGCTGACAATGGAT
GGGGCCAAGGCTAAGGCTATTCTGGATGCCTCACGGTCCTCCATGGGCATGGACATATCTGCCATTGACTTGATA
AACATCGAGAGCTTCTCCAGTCGTGTGGTGTCTTTATCTGAATACCGCCAGAGCCTACACACTTACCTGCGCTCC
AAGATGAGCCAAGTAGCCCCCAGCCTGTCAGCCCTAATTGGGGAAGCGGTAGGTGCACGTCTCATCGCACATGCT
GGCAGCCTCACCAACCTGGCCAAGTATCCAGCATCCACAGTGCAGATCCTTGGGGCTGAAAAGGCCCTGTTCAGA
GCCCTGAAGACAAGGGGTAACACTCCAAAATATGGACTCATTTTCCACTCCACCTTCATTGGCCGAGCAGCTGCC
AAGAACAAAGGCCGCATCTCCCGATACCTGGCAAACAAATGCAGTATTGCCTCACGAATCGATTGCTTCTCTGAG
GTGCCCACGAGTGTATTCGGGGAGAAGCTTCGAGAACAAGTTGAAGAGCGACTGTCCTTCTATGAGACTGGAGAG
ATACCACGAAAGAATCTGGATGTCATGAAGGAAGCAATGGTTCAGGCAGAGGCAGAGGAAGCGGCTGCTGAGATT
ACTAGGAAGCTGGAGAAACAGGAGAAGAAACGCTTAAAGAAGGAAAAGAAACGGCTGGCTGCACTTGCCCTCGCG
TCTTCAGAAAACAGCAGTAGTACTCCAGAGGAGTGTGAGGAGACGAGTGAAAAACCCAAAAAGAAGAAAAAGCAA
AAGCCCCAGGAGGTTCCTCAGGAGAATGGAATGGAAGACCCATCTATCTCTTTCTCCAAACCCAAGAAAAAGAAA
TCTTTTTCCAAGGAGGAGTTGATGAGTAGCGATCTTGAAGAGACCGCTGGCAGCACCAGTATTCCCAAGAGGAAG
AAGTCTACACCCAAGGAGGAAACAGTTAATGACCCTGAGGAGGCAGGCCACAGAAGTCGGTCCAAGAAAAAGAGG
AAATTCTCCAAAGAGGAGCCGGTCAGCAGTGGGCCTGAAGAGGCGGTTGGCAAGAGCAGCTCCAAGAAGAAGAAA
AAGTTCCATAAAGCATCCCAGGAAGATTAGAATGCAAATGGACATTCTCTGGGAGGTGGGGCATACCATAGCCCA
AGGTGACATTTCCCACCCTGTGCCCGTGTTCCCAATAAAAACAAATTCACAAGAAAAAAAAAAAAAAAAAAAAA
TTCCTGAGGCCGCAAGGGAATTC

FIGURE 234

MAGRGAMVLLHVLFEHAVGYALVALKEVEEISLLQPQVEESVLNLGKFHSIVRLVAFCPFASSQVALENANAVSE
GVVHEDLRLLLETHLPSKKKKVLLGVGDPKIGAAIQEELGYNCQTGGVIAEILRGVRLHFHNLVKGLTDLSACKA
QLGLGHSYSRAKVKFNVNRVDNMIIQSISLLDQLDKDINTFSMRVREWYGYHFPELVKIINDNATYCRLAQFIGN
RRELNEDKLEKLEELTMDGAKAKAILDASRSSMGMDISAIDLINIESFSSRVVSLSEYRQSLHTYLRSKMSQVAP
SLSALIGEAVGARLIAHAGSLTNLAKYPASTVQILGAEKALFRALKTRGNTPKYGLIFHSTFIGRAAAKNKGRIS
RYLANKCSIASRIDCFSEVPTSVFGEKLREQVEERLSFYETGEIPRKNLDVMKEAMVQAEAEEAAAEITRKLEKQ
EKKRLKKEKKRLAALALASSENSSSTPEECEETSEKPKKKKKQKPQEVPQENGMEDPSISFSKPKKKKSFSKEEL
MSSDLEETAGSTSIPKRKKSTPKEETVNDPEEAGHRSRSKKKRKFSKEEPVSSGPEEAVGKSSSKKKKKFHKASQ
ED

FIGURE 235

ATGCCCGAGAATGTGGCACCCCGGAGCGGGGCGACTGCCGGGGCTGCCGGCGGCCGCGGGAAAGGCGCCTATCAG
GACCGCGACAAGCCAGCCCAGATCCGCTTCAGCAACATTTCCGCCGCCAAAGCGGTTGCTGATGCTATTAGAACA
AGCCTTGGACCAAAAGGAATGGATAAAATGATTCAAGATGGAAAAGGTGATGTAACCATTACAAATGATGGTGCT
ACCATTCTGAAACAAATGCAAGTATTACATCCAGCAGCCAGAATGCTGGTGGAGCTGTCTAAGGCTCAAGATATA
GAAGCAGGAGATGGCACCACATCAGTAGTCATCATTGCTGGCTCCCTCTTAGATTCTTGTACCAAGCTTCTTCAG
AAAGGGATTCATCCAACCATCATTTCTGAGTCATTCCAGAAGGCCCTGGAAAAGGGCATTGAAATCTTGACTGAC
ATGTCTCGACCTGTGGAACTGAGTGACAGAGAAACTTTGTTAAATAGTGCAACCACTTCACTGAACTCAAAGGTG
GTTTCTCAGTATTCAAGTCTGCTTTCTCCAATGAGTGTAAATGCAGTGATGAAAGTGATTGACCCAGCCACAGCC
ACCAGTGTAGATCTTAGAGATATTAAAATAGTTAAGAAGCTTGGTGGGACAATTGATGACTGTGAGTTGGTGGAA
GGGCTGGTTCTCACCCAAAAAGTGTCAAATTCTGGCATAACCAGAGTTGAAAAGGCCAAGATTGGGCTTATTCAG
TTTTGCTTATCTGCTCCCAAAACAGACATGGATAATCAAATAGTGGTTTCTGACTATGCCCAGATGGACCGAGTG
CTGCGAGAAGAGAGAGCCTATATTTTAAATTTAGTGAAGCAAATTAAAAAAACAGGATGTAATGTCCTTCTCATA
CAGAAATCTATTCTAAGAGATGCTCTTAGTGATCTTGCATTACACTTTCTGAATAAAATGAAGATCATGGTGATT
AAGGATATTGAAAGAGAAGACATTGAATTCATTTGTAAGACAATTGGAACCAAGCCAGTTGCTCATATTGACCAA
TTTACTGCTGACATGCTGGGTTCTGCTGAGTTAGCTGAGGAGGTCAATTTAAATGGTTCTGGCAAACTGCTCAAG
ATTACAGGCTGTGCCAGCCCTGGAAAAACAGTTACAATTGTTGTTCGTGGTTCTAACAAACTGGTGATTGAAGAA
GCTGAGCGCTCCATTCATGATGCCCTATGTGTTATTCGTTGTTTAGTGAAGAAGAGGGCTCTTATTGCAGGAGGT
GGTGCTCCAGAAATAGAGTTGGCCCTAGCATTAACTGAATATTCACGAACACTGAGTGGTATGGAATCCTACTGC
GTTCGTGCTTTTGCAGATGCTATGGAGGTCATTCCATCTACACTAGCTGAAAATGCCGGCCTGAATCCCATTTCT
ACAGTAACAGAACTAAGAAACCGGCATGCCCAGGGAGAAAAAACTGCAGGCATTAATGTCCGAAAGGGTGGTATT
TCCAACATTTTGGAGGAACTGGTTGTCCAGCCTCTGTTGGTATCAGTCAGTGCTCTGACTCTTGCAACTGAAACT
GTTCGGAGCATTCTGAAAATAGATGATGTGGTAAACACTCGATAATCTGGATAACTGACTAGCACCATTATGATC
ACCAGTATTGTGGCTGGAATGGAAGAAGATCACCTTGGTGTTCCTTGTTTGGAAGATTATTTCCTCTGAATTTCT
GGGCTTGGTCTTCCAGTTGGCATTTGCCTGAAGTTGTATTGAAACAATTTAATGAAAATATTAAATATTTGGTTT
CAAAAGGCAGATTTATCTTCTCCCAACATTCTGTTATTTCTGATACTTTTGAAAAACTAATAAAAACTAATAAAA
GAAGCGTA

FIGURE 236

MPENVAPRSGATAGAAGGRGKGAYQDRDKPAQIRFSNISAAKAVADAIRTSLGPKGMDKMIQDGKGDVTITNDGA
TILKQMQVLHPAARMLVELSKAQDIEAGDGTTSVVIIAGSLLDSCTKLLQKGIHPTIISESFQKALEKGIEILTD
MSRPVELSDRETLLNSATTSLNSKVVSQYSSLLSPMSVNAVMKVIDPATATSVDLRDIKIVKKLGGTIDDCELVE
GLVLTQKVSNSGITRVEKAKIGLIQFCLSAPKTDMDNQIVVSDYAQMDRVLREERAYILNLVKQIKKTGCNVLLI
QKSILRDALSDLALHFLNKMKIMVIKDIEREDIEFICKTIGTKPVAHIDQFTADMLGSAELAEEVNLNGSGKLLK
ITGCASPGKTVTIVVRGSNKLVIEEAERSIHDALCVIRCLVKKRALIAGGGAPEIELALALTEYSRTLSGMESYC
VRAFADAMEVIPSTLAENAGLNPISTVTELRNRHAQGEKTAGINVRKGGISNILEELVVQPLLVSVSALTLATET
VRSILKIDDVVNTR

FIGURE 237

GGGGGGGAAGTGCTCTAACTTTTCTTAAGGTTTTGTTGCTAGCCCTTCAAGTGCACTGAGCTATGTGACTCGGATGGTCTTTCACACGGCACATTTGGACATTTCCAGAACTACCATGAGATGGTTTAGACGGGAATTCATGCAAATGAGGGGTCAAAAATGGTATAGTGACCCCGTCCACGTCCTCCAAGCTCACGACCTTGGAGCCCCGTGGAGCTGGACTGAGGAGGAGGCTGCACAGCGGGAGAGCAGCTGGTCCAGACCAGCCCTGCAGCCCCCACTCAGCCGGCAGCCAGATGGCCCCGCAAGGCCTCCAGGGATGGCCCCTAGCCACAGGCCCTGGCTGAGGTCTCTGGGTCGGTCAGTGACATGTAGGTAGGAAGCACTGAAAATAGTGTTCCCAGAGCACTTTGCAACTCCCTGGGTAAGAGGGACGACACCTCTGGTTTTTCAATACCAATTACATGGAACTTTTCTGTAATGGGTACAATGAAGAAGTTTCTAAAAACACACACAAAGCACATTGGGCCAACTATTTAGTAAGCCCGGATAGACTTATTGCCAAAAACAAAAAATAGCTTTCAAAAGAAATTTAAGTTCTATGAGAAATTCCTTAGTCATGGTGTTGCGTAAATCATATTTTAGCTGCACGGCATTACCCCACACAGGGTGGCAGAACTTGAAGGGTTACTGACGTGTAAATGCTGGTATTTGATTTCCTGTGTGTGTTGCCCTGGCATTAAGGGCATTTTACCCTTGCAGTTTTACTAAAACACTGAAAAATATTCCAAGCTTCATATTAACCCTACCTGTCAACGTAACGATTTCATGAACGTTATTATATTGTCGAATTCCTACTGACAACATTATAACTGTATGGGAGCTTAACTTTATAAGGAAATGTATTTTGACACTGGTATCTTATTAAAGTATTCTGATCCTACCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 238

MVFHTAHLDISRTTMRWFRREFMQMRGQKWYSDPVHVLQAHDLGAPWSWTEEEAAQRESSWSRPALQPPLSRQPD
GPARPPGMAPSHRPWLRSLGRSVTCR

FIGURE 239

CTGCGGCGCGCCGGGCGGAACTTTCTAGAACGCTCGGTGAGAGGCGGAGGAGCGGTAACTACCCCGGCTGCGCAC
AGCTCGGCGCTCCTTCCCGCTCCCTCACACACCGGCCTCAGCCCGCACCGGCAGTAGAAG**ATG**GTGAAAGAAACA
ACTTACTACGATGTTTTGGGGGTCAAACCCAATGCTACTCAGGAAGAATTGAAAAAGGCTTATAGGAAACTGGCT
TTGAAGTACCATCCTGATAAGAACCCAAATGAAGGAGAGAAGTTTAAACAGATTTCTCAAGCTTACGAAGTTCTC
TCTGATGCAAAGAAAAGGGAATTATATGACAAAGGAGGAGAACAGGCAATTAAAGAGGGTGGAGCAGGTGGCGGT
TTTGGCTCCCCCATGGACATCTTTGATATGTTTTTTGGAGGAGGAGGAAGGATGCAGAGAGAAAGGAGAGGTAAA
AATGTTGTACATCAGCTCTCAGTAACCCTAGAAGACTTATATAATGGTGCAACAAGAAAACTGGCTCTGCAAAAG
AATGTGATTTGTGACAAATGTGAAGGTAGAGGAGGTAAGAAAGGAGCAGTAGAGTGCTGTCCCAATTGCCGAGGT
ACTGGAATGCAAATAAGAATTCATCAGATAGGACCTGGAATGGTTCAGCAAATTCAGTCTGTGTGCATGGAGTGC
CAGGGCCATGGGGAGCGGATCAGTCCTAAAGATAGATGTAAAAGCTGCAACGGAAGGAAGATAGTTCGAGAGAAG
AAAATTTTAGAAGTTCATATTGACAAAGGCATGAAAGATGGCCAGAAGATAACATTCCATGGTGAAGGAGACCAA
GAACCAGGACTGGAGCCAGGCGATATTATCATTGTGTTAGATCAGAAGGACCATGCTGTTTTTACTCGACGAGGA
GAAGACCTTTTCATGTGTATGGACATACAGCTCGTTGAAGCACTGTGTGGCTTCCAGAAGCCAATATCTACTCTT
GACAACCGAACCATCGTCATCACCTCTCATCCAGGTCAGATTGTCAAGCATGGAGATATCAAGTGTGTACTAAAT
GAAGGCATGCCAATTTATCGTAGACCATATGAAAAGGGTCGCCTAATCATCGAATTTAAGGTAAACTTTCCTGAG
AATGGCTTTCTCTCTCCTGATAAACTGTCTTTGCTGGAAAAACTCCTACCCGAGAGGAAGGAAGTGGAAGAGACT
GATGAGATGGACCAAGTAGAACTGGTGGACTTTGATCCAAATCAGGAAAGACGGCGCCACTACAATGGAGAAGCA
TATGAGGATGATGAACATCATCCCAGAGGTGGTGTTCAGTGTCAGACCTCT**TAA**TGGGCCAGTGAATAACACTCA
CTGCTGGCATTTAATGTGCAGTAGTGAATGAGTGAAGGACTGTAATCATAATATGCTCACTACTTGCTCTTGTTT
TTGTTTTAATAAACTATAGTAGTGTTTTAAAAAGTTAAATGAAGAATAAACGCAAATATAAAAGCTCTGATTTTG
CCCTGTATGTATGATGACTTCAGTGTGCAAGATGAAGTTTAATACCTGTAAAAACTACAAAGAAGTTCCCCTAGC
ATTTCTAGGCCAAACCTTGTAATTGACTTCAGCTATGTACGTGGACAAGCTTAGACTGAAATGCTAGGTATATGT
ATTGGCTTCAGTGTATGACCCTTCATTGTTAAGCTATGAAAGTAAAACTCTGTATTTAACTGGCAATGAGGAAAA
AAAAATTTTGTAGAGAAGTGTTGGTCTGTATAGTTCTTTATATTAAGTGGGATTCATTGTAATGCCTCTGCATTT
ATTCTGTTGCCTCAGCTGTTACTTGAAGATGGCGTAATATATAATTTATCCTGTGGTATCAGTGATAAAAATGAT
ACCTTTCTGTAGGAGGGGTTTATCATAATATGCTGCTTCTTGAAGGCTTGCACTTCCAGAATTGTGTTTCCTTCT
GCTGTGCCATTCATATATATATACATATATATATATAATCTTGACCAGTCCTGGTCATTTGCTCCCCTCCTTGTC
TGTGGACCATGATAAGCCCAAGTAGTGACTTCAGAGCTGGGTAACAGAAATTAAAGTGAAAAGACCTTTACGTGG
AGAATTTGCATGCGTAATATAGGAAGGTGTTCTTTAGGTATGTTACAGGATTACTTTAAACCATTTGACTTTCGC
TCCAAAGTTATGTTGGTAGTATAGCAAATTATGATGAATAGCTTTAATTGTATGTTTAAAAGTCTCATATGTTCA
CATGCTTAAATCTGGGTATCAGAATTTAAGCAATTCTTGAAATGTATTGTCTCCTTAATATACTAATTACAAAGC
ATCTCCAATGTGTGTCACTACAGGCTTTTTTTCCCAGATCATCAAATTTTGGCTTTTAACTAAGATACATAGCT
TTATTTTAGCTAGTCTGAATGAGTGATACAAAAATACTATTGAACTATAGTTAAATAATATTAAATAGGATGGAG
AGTAAAAGTGGAGGACTGGGTAATGAGCCAAGAAGAAGGGGTG

FIGURE 240

MVKETTYYDVLGVKPNATQEELKKAYRKLALKYHPDKNPNEGEKFKQISQAYEVLSDAKKRELYDKGGEQAIKEG
GAGGGFGSPMDIFDMFFGGGGRMQRERRGKNVVHQLSVTLEDLYNGATRKLALQKNVICDKCEGRGGKKGAVECC
PNCRGTGMQIRIHQIGPGMVQQIQSVCMECQGHGERISPKDRCKSCNGRKIVREKKILEVHIDKGMKDGQKITFH
GEGDQEPGLEPGDIIIVLDQKDHAVFTRRGEDLFMCMDIQLVEALCGFQKPISTLDNRTIVITSHPGQIVKHGDI
KCVLNEGMPIYRRPYEKGRLIIEFKVNFPENGFLSPDKLSLLEKLLPERKEVEETDEMDQVELVDFDPNQERRRH
YNGEAYEDDEHHPRGGVQCQTS

FIGURE 241

CGGTAACTACCCCGGCTGCGCACAGCTCGGCGCTCCTTCCCGCTCCCTCACACACCGCCTCAGCCCGCACCGGCA
GTAGAAGATGGTGAAAGAAACAACTTACTACGATGTTTTGGGGGTCAAACCCAATGCTACTCAGGAAGAATTGAA
AAAGGCTTATAGGAAACTGGCCTTGAAGTACCATCCTGATAAGAACCCAAATGAAGGAGAGAAGTTTAAACAGAT
TTCTCAAGCTTACGAAGTTCTCTCTGATGCAAAGAAAAGGGAATTATATGACAAAGGAGGAGAACAGGCAATTAA
AGAGGGTGGAGCAGGTGGCGGTTTTGGCTCCCCCATGGACATCTTTGATATGTTTTTTGGAGGAGGAGGAAGGAT
GCAGAGAGAAAGGAGAGGTAAAAATGTTGTACATCAGCTCTCAGTAACCCTAGAAGACTTATATAATGGTGCAAC
AAGAAAACTGGCTCTGCAAAAGAATGTGATTTGTGACAAATGTGAAGGTAGAGGAGGTAAGAAAGGAGCAGTAGA
GTGCTGTCCCAATTGCCGAGGTACTGGAATGCAAATAAGAATTCATCAGATAGGACCTGGAATGGTTCAGCAAAT
TCAGTCTGTGTGCATGGAGTGCCAGGGCCATGGGGAGCGGATCAGTCCTAAAGATAGATGTAAAAGCTGCAACGG
AAGGAAGATAGTTCGAGAGAAGAAAATTTTAGAAGTTCATATTGACAAAGGCATGAAAGATGGCCAGAAGATAAC
ATTCCATGGTGAAGGAGACCAAGAACCAGGACTGGAGCCAGGCGATATTATCATTGTGTTAGATCAGAAGGACCA
TGCTGTTTTTACTCGACGAGGAGAAGACCTTTTCATGTGTATGGACATACAGCTCGTTGAAGCACTGTGTGGCTT
CCAGAAGCCAATATCTACTCTTGACAACCGAACCATCGTCATCACCTCTCATCCAGGTCAGATTGTCAAGCATGG
AGATATCAAGTGTGTACTAAATGAAGGCATGCCAATTTATCGTAGACCATATGAAAAGGGTCGCCTAATCATCGA
ATTTAAGGTAAACTTTCCTGAGAATGGCTTTCTCTCTCCTGATAAACTGTCTTTGCTGGAAAAACTCCTACCCGA
GAGGAAGGAAGTGGAAGAGACTGATGAGATGGACCAAGTAGAACTGGTGGACTTTGATCCAAATCAGGAAAGACG
GCGCCACTACAATGGAGAAGCATATGAGGATGATGAACATCATCCCAGAGGTGGTGTTCAGTGTCAGACCTCTTA
ATGGCCAGTGAATAACACTCACTGCTGGCATTTAATGTGCAGTAGTGAATGAGTGAAGGACTGTAATCATAATAT
GCTCACTACTTGCTCTTGTTTTTGTTTTAATAAACTATAGTAGTGTTATAAAAAGTTAAATGAAGAATAAACGCA
AATATAAAAGCTC

FIGURE 242

MVKETTYYDVLGVKPNATQEELKKAYRKLALKYHPDKNPNEGEKFKQISQAYEVLSDAKKRELYDKGGEQAIKEG
GAGGGFGSPMDIFDMFFGGGGRMQRERRGKNVVHQLSVTLEDLYNGATRKLALQKNVICDKCEGRGGKKGAVECC
PNCRGTGMQIRIHQIGPGMVQQIQSVCMECQGHGERISPKDRCKSCNGRKIVREKKILEVHIDKGMKDGQKITFH
GEGDQEPGLEPGDIIIVLDQKDHAVFTRRGEDLFMCMDIQLVEALCGFQKPISTLDNRTIVITSHPGQIVKHGDI
KCVLNEGMPIYRRPYEKGRLIIEFKVNFPENGFLSPDKLSLLEKLLPERKEVEETDEMDQVELVDFDPNQERRRH
YNGEAYEDDEHHPRGGVQCQTS

FIGURE 243

GGGCGGGGTGCCGCATCCCCAGCCCGCCGCC**ATG**GCCGCCTACAAACTGGTGCTGATCCGGCACGGCGAGAGCGC
ATGGAACCTGGAGAACCGCTTCAGCGGCTGGTACGACGCCGACCTGAGCCCGGCGGGCCACGAGGAGGCGAAGCG
CGGCGGGCAGGCGCTACGAGATGCTGGCTATGAGTTTGACATCTGCTTCACCTCAGTGCAGAAGAGAGCGATCCG
GACCCTCTGGACAGTGCTAGATGCCATTGATCAGATGTGGCTGCCAGTGGTGAGGACTTGGCGCCTCAATGAGCG
GCACTATGGGGGTCTAACCGGTCTCAATAAAGCAGAAACTGCTGCAAAGCATGGTGAGGCCCAGGTGAAGATCTG
GAGGCGCTCCTATGATGTCCCACCACCTCCGATGGAGCCCGACCATCCTTTCTACAGCAACATCAGTAAGGATCG
CAGGTATGCAGACCTCACAGAAGATCAGCTACCCTCCTGTGAGAGTCTGAAGGATACTATTGCCAGAGCTCTGCC
CTTCTGGAATGAAGAAATAGTTCCCCAGATCAAGGAGGGGAAACGTGTACTGATTGCAGCCCATGGCAACAGCCT
CCGGGGCATTGTCAAGCATCTGGAGGGTCTCTCTGAAGAGGCTATCATGGAGCTGAACCTGCCGACTGGTATTCC
CATTGTCTATGAATTGGACAAGAACTTGAAGCCTATCAAGCCCATGCAGTTTCTGGGGGGATGAAGAGACGGTGCG
CAAAGCCATGGAAGCTGTGGCTGCCCAGGGCAAGGCCAAGAAG**TGA**AGGCCGGCGGGGAGGATACTGTCCCCAGG
AGCACCCTCCCTGCCCGTCTTGTCCCTCTGCCCCTCCCACCTGCACATGTCACACTGACCACATCTGTAGACATC
TTGAGTTGTAGCTGCAGACGGGGACCAGTGGCTCCCATTTTCATTTTAGCCATTTTGTCGCCTGCACCCACTCCC
TTCATACAATCTAGTCAGAATAGCAGTTCTAGAGCACAGGTTCTCAGTCTAAGCTATGGAAAAGCTCCCCTTATC
CAACAGAGTTTAAAAGTAGTGACTTGGGTTTTTGCGAGTGCTTTGTTTACTAAGGACTTTGGGGAGGAACCATGC
TAAGCCATGACCAGTGAGGAGAAGCAACAGAGCCTGTCTGTCCCCATGAGCGGAGTCTGTCCTCTGCTCTTCTGC
AGTCAGGTCACTGCCTACTGCCTGGGGGCTCTAGTCATTCCAGTGGAAGACGAATGTAACCTGCGTGGTGATGTG
ACAACTGTTTCCTCCCTGACCCCAGAGGATCTGGCTCTAGGTTGGGATCAATCCTGAATTTCGTTATGTGTTAAT
TTACTTTTATTAAAAAAGTATAGTATATATAATACAAAACAATAACCCTTCTGGGGTTTCTTGTGGCGGTTGAAA
TAGTCCCACATGTGGTCATCAGAAATAGCATTCCTCATACCAATATAGGATCAGCTCCTTGACCTCTGAGGGGTC
AGGAGTGCTTCCTGGTGTGTGTATTAGAATCCCTTCCTGCCTTGTTTCATGGCAGTGAAATGCCTCTTGGTCCTG
TCCAGTGTATCTTTCACTGATTTCTGAATCATGTTCTAGTTGCTTGACCCTGCCACATGGGTCCAGTGTTCATCT
GAGCATAACTGTACTAAATCCTTTTTCCATATCAGTATAATAAAGGAGTGATGTGCAAT

FIGURE 244

MAAYKLVLIRHGESAWNLENRFSGWYDADLSPAGHEEAKRGGQALRDAGYEFDICFTSVQKRAIRTLWTVLDAID
QMWLPVVRTWRLNERHYGGLTGLNKAETAAKHGEAQVKIWRRSYDVPPPPMEPDHPFYSNISKDRRYADLTEDQL
PSCESLKDTIARALPFWNEEIVPQIKEGKRVLIAAHGNSLRGIVKHLEGLSEEAIMELNLPTGIPIVYELDKNLK
PIKPMQFLGDEETVRKAMEAVAAQGKAKK

FIGURE 245A

AGCGGGGCGGGGCGCCAGCGCTGCCTTTTCTCCTGCCGGGTAGTTTCGCTTTCCTGCGCAGAGTCTGCGGAGGGG
CTCGGCTGCACCGGGGGGATCGCGCCTGGCAGACCCCAGACCGAGCAGAGGCGACCCAGCGCGCTCGGGAGAGGC
TGCACCGCCGCGCCCCCGCCTAGCCCTTCCGGATCCTGCGCGCAGAAAAGTTTCATTTGCTGTATGCCATCCTCG
AGAGCTGTCTAGGTTAACGTTCGCACTCTGTGTATATAACCTCGACAGTCTTGGCACCTAACGTGCTGTGCGTAG
CTGCTCCTTTGGTTGAATCCCCAGGCCCTTGTTGGGGCACAAGGTGGCAGGATGTCTCAGTGGTACGAACTTCAG
CAGCTTGACTCAAAATTCCTGGAGCAGGTTCACCAGCTTTATGATGACAGTTTTCCCATGGAAATCAGACAGTAC
CTGGCACAGTGGTTAGAAAAGCAAGACTGGGAGCACGCTGCCAATGATGTTTCATTTGCCACCATCCGTTTTCAT
GACCTCCTGTCACAGCTGGATGATCAATATAGTCGCTTTTCTTTGGAGAATAACTTCTTGCTACAGCATAACATA
AGGAAAAGCAAGCGTAATCTTCAGGATAATTTTCAGGAAGACCCAATCCAGATGTCTATGATCATTTACAGCTGT
CTGAAGGAAGAAAGGAAAATTCTGGAAAACGCCCAGAGATTTAATCAGGCTCAGTCGGGGAATATTCAGAGCACA
GTGATGTTAGACAAACAGAAAGAGCTTGACAGTAAAGTCAGAAATGTGAAGGACAAGGTTATGTGTATAGAGCAT
GAAATCAAGAGCCTGGAAGATTTACAAGATGAATATGACTTCAAATGCAAAACCTTGCAGAACAGAGAACACGAG
ACCAATGGTGTGGCAAAGAGTGATCAGAAACAAGAACAGCTGTTACTCAAGAAGATGTATTTAATGCTTGACAAT
AAGAGAAAGGAAGTAGTTCACAAAATAATAGAGTTGCTGAATGTCACTGAACTTACCCAGAATGCCCTGATTAAT
GATGAACTAGTGGAGTGGAAGCGGAGACAGCAGAGCGCCTGTATTGGGGGGCCGCCCAATGCTTGCTTGGATCAG
CTGCAGAACTGGTTCACTATAGTTGCGGAGAGTCTGCAGCAAGTTCGGCAGCAGCTTAAAAAGTTGGAGGAATTG
GAACAGAAATACACCTACGAACATGACCCTATCACAAAAAACAAACAAGTGTTATGGGACCGCACCTTCAGTCTT
TTCCAGCAGCTCATTCAGAGCTCGTTTGTGGTGGAAAGACAGCCCTGCATGCCAACGCACCCTCAGAGGCCGCTG
GTCTTGAAGACAGGGGTCCAGTTCACTGTGAAGTTGAGACTGTTGGTGAAATTGCAAGAGCTGAATTATAATTTG
AAAGTCAAAGTCTTATTTGATAAAGATGTGAATGAGAGAAATACAGTAAAAGGATTTAGGAAGTTCAACATTTTG
GGCACGCACACAAAAGTGATGAACATGGAGGAGTCCACCAATGGCAGTCTGGCGGCTGAATTTCGGCACCTGCAA
TTGAAAGAACAGAAAAATGCTGGCACCAGAACGAATGAGGGTCCTCTCATCGTTACTGAAGAGCTTCACTCCCTT
AGTTTTGAAACCCAATTGTGCCAGCCTGGTTTGGTAATTGACCTCGAGACGACCTCTCTGCCCGTTGTGGTGATC
TCCAACGTCAGCCAGCTCCCGAGCGGTTGGGCCTCCATCCTTTGGTACAACATGCTGGTGGCGGAACCCAGGAAT
CTGTCCTTCTTCCTGACTCCACCATGTGCACGATGGGCTCAGCTTTCAGAAGTGCTGAGTTGGCAGTTTTCTTCT
GTCACCAAAAGAGGTCTCAATGTGGACCAGCTGAACATGTTGGGAGAGAAGCTTCTTGGTCCTAACGCCAGCCCC
GATGGTCTCATTCCGTGGACGAGGTTTTGTAAGGAAAATATAAATGATAAAAATTTTCCCTTCTGGCTTTGGATT
GAAAGCATCCTAGAACTCATTAAAAAACACCTGCTCCCTCTCTGGAATGATGGGTGCATCATGGGCTTCATCAGC
AAGGAGCGAGAGCGTGCCCTGTTGAAGGACCAGCAGCCGGGGACCTTCCTGCTGCGGTTCAGTGAGAGCTCCCGG
GAAGGGGCCATCACATTCACATGGGTGGAGCGGTCCCAGAACGGAGGCGAACCTGACTTCCATGCGGTTGAACCC
TACACGAAGAAAGAACTTTCTGCTGTTACTTTCCCTGACATCATTCGCAATTACAAAGTCATGGCTGCTGAGAAT
ATTCCTGAGAATCCCCTGAAGTATCTGTATCCAAATATTGACAAAGACCATGCCTTTGGAAAGTATTACTCCAGG
CCAAAGGAAGCACCAGAGCCAATGGAACTTGATGGCCCTAAAGGAACTGGATATATCAAGACTGAGTTGATTTCT
GTGTCTGAAGTTCACCCTTCTAGACTTCAGACCACAGACAACCTGCTCCCCATGTCTCCTGAGGAGTTTGACGAG
GTGTCTCGGATAGTGGGCTCTGTAGAATTCGACAGTATGATGAACACAGTATAGAGCATGAATTTTTTTCATCTT
CTCTGGCGACAGTTTTCCTTCTCATCTGTGATTCCCTCCTGCTACTCTGTTCCTTCACATCCTGTGTTTCTAGGG
AAATGAAAGAAAGGCCAGCAAATTCGCTGCAACCTGTTGATAGCAAGTGAATTTTTCTCTAACTCAGAAACATCA
GTTACTCTGAAGGGCATCATGCATCTTACTGAAGGTAAAATTGAAAGGCATTCTCTGAAGAGTGGGTTTCACAAG
TGAAAAACATCCAGATACACCCAAAGTATCAGGACGAGAATGAGGGTCCTTTGGGAAAGGAGAAGTTAAGCAACA
TCTAGCAAATGTTATGCATAAAGTCAGTGCCCAACTGTTATAGGTTGTTGGATAAATCAGTGGTTATTTAGGGAA
CTGCTTGACGTAGGAACGGTAAATTTCTGTGGGAGAATTCTTACATGTTTTCTTTGCTTTAAGTGTAACTGGCAG
TTTTCCATTGGTTTACCTGTGAAATAGTTCAAAGCCAAGTTTATATACAATTATATCAGTCCTCTTTCAAAGGTA
GCCATCATGGATCTGGTAGGGGGAAAATGTGTATTTTATTACATCTTTCACATTGGCTATTTAAAGACAAAGACA
AATTCTGTTTCTTGAGAAGAGAATATTAGCTTTACTGTTTGTTATGGCTTAATGACACTAGCTAATATCAATAGA
AGGATGTACATTTCCAAATTCACAAGTTGTGTTTGATATCCAAAGCTGAATACATTCTGCTTTCATCTTGGTCAC
ATACAATTATTTTTACAGTTCTCCCAAGGGAGTTAGGCTATTCACAACCACTCATTCAAAAGTTGAAATTAACCA
TAGATGTAGATAAACTCAGAAATTTAATTCATGTTTCTTAAATGGGCTACTTTGTCCTTTTTGTTATTAGGGTGG
TATTTAGTCTATTAGCCACAAAATTGGGAAAGGAGTAGAAAAAGCAGTAACTGACAACTTGAATAATACACCAGA

FIGURE 245B

GATAATATGAGAATCAGATCATTTCAAAACTCATTTCCTATGTAACTGCATTGAGAACTGCATATGTTTCGCTGA
TATATGTGTTTTTCACATTTGCGAATGGTTCCATTCTCTCTCCTGTACTTTTTCCAGACACTTTTTTGAGTGGAT
GATGTTTCGTGAAGTATACTGTATTTTTACCTTTTTCCTTCCTTATCACTGACACAAAAAGTAGATTAAGAGATG
GGTTTGACAAGGTTCTTCCCTTTTACATACTGCTGTCTATGTGGCTGTATCTTGTTTTTCCACTACTGCTACCAC
AACTATATTATCATGCAAATGCTGTATTCTTCTTTGGTGGAGATAAAGATTTCTTGAGTTTTGTTTTAAAATTAA
AGCTAAAGTATCTGTATTGCATTAAATATAATATGCACACAGTGCTTTCCGTGGCACTGCATACAATCTGAGGCC
TCCTCTCTCAGTTTTTATATAGATGGCGAGAACCTAAGTTTCAGTTGATTTTACAATTGAAATGACTAAAAAACA
AAGAAGACAACATTAAAACAATATTGTTTCTA

FIGURE 246

MSQWYELQQLDSKFLEQVHQLYDDSFPMEIRQYLAQWLEKQDWEHAANDVSFATIRFHDLLSQLDDQYSRFSLEN
NFLLQHNIRKSKRNLQDNFQEDPIQMSMIIYSCLKEERKILENAQRFNQAQSGNIQSTVMLDKQKELDSKVRNVK
DKVMCIEHEIKSLEDLQDEYDFKCKTLQNREHETNGVAKSDQKQEQLLLKKMYLMLDNKRKEVVHKIIELLNVTE
LTQNALINDELVEWKRRQQSACIGGPPNACLDQLQNWFTIVAESLQQVRQQLKKLEELEQKYTYEHDPITKNKQV
LWDRTFSLFQQLIQSSFVVERQPCMPTHPQRPLVLKTGVQFTVKLRLLVKLQELNYNLKVKVLFDKDVNERNTVK
GFRKFNILGTHTKVMNMEESTNGSLAAEFRHLQLKEQKNAGTRTNEGPLIVTEELHSLSFETQLCQPGLVIDLET
TSLPVVVISNVSQLPSGWASILWYNMLVAEPRNLSFFLTPPCARWAQLSEVLSWQFSSVTKRGLNVDQLNMLGEK
LLGPNASPDGLIPWTRFCKENINDKNFPFWLWIESILELIKKHLLPLWNDGCIMGFISKERERALLKDQQPGTFL
LRFSESSREGAITFTWVERSQNGGEPDFHAVEPYTKKELSAVTFPDIIRNYKVMAAENIPENPLKYLYPNIDKDH
AFGKYYSRPKEAPEPMELDGPKGTGYIKTELISVSEVHPSRLQTTDNLLPMSPEEFDEVSRIVGSVEFDSMMNTV

FIGURE 247

CTTTTTTCTTTTTTCCGGCGTTCAAGATGTCGAAGCGAGGACGTGGTGGGTCCTCTGGTGCGAAATTCCGGATTT
CCTTGGGTCTTCCGGTAGGAGCTGTAATCAATTGTGCTGACAACACAGGAGCCAAAAACCTGTATATCATCTCCG
TGAAGGGGATCAAGGGACGGCTGAACAGACTTCCCGCTGCTGGTGTGGGTGACATGGTGATGGCCACAGTCAAGA
AAGGCAAACCAGAGCTCAGAAAAAAGGTACATCCAGCAGTGGTCATTCGACAACGAAAGTCATACCGTAGAAAAG
ATGGCGTGTTTCTTTATTTTGAAGATAATGCAGGAGTCATAGTGAACAATAAAGGCGAGATGAAAGGTTCTGCCA
TTACAGGACCAGTAGCAAAGGAGTGTGCAGACTTGTGGCCCCGGATTGCATCCAATGCTGGCAGCATTGCATGATT
TCTCCAGTATATTTGTAAAAAATAAAAAAAAACTAAACCCATT

FIGURE 248

MSKRGRGGSSGAKFRISLGLPVGAVINCADNTGAKNLYIISVKGIKGRLNRLPAAGVGDMVMATVKKGKPELRKK
VHPAVVIRQRKSYRRKDGVFLYFEDNAGVIVNNKGEMKGSAITGPVAKECADLWPRIASNAGSIA

FIGURE 249

GCCGCGTGCAGAGGTGCTCAAGCCTCCTCGCGGTCCGCAGTCAGTGCCGCCGCGCCCGGCCTCCCGCACGCCCCG
CAGGTAGCGCCCCCGCCCGCGGCCCAGAGTGCGCTCGCGCCGGCACCAGCTCCCGGATAAACGGCGCGCCGCGCG
GAGATGACAGCCGAGGAGATGAAGGCGACCGAGAGCGGGGCGCAGTCGGCGCCGCTGCCCATGGAGGGAGTGGAC
ATCAGCCCCAAACAGGACGAAGGCGTGCTGAAGGTCATCAAGAGAGAGGGCACAGGTACAGAGATGCCCATGATT
GGGGACCGAGTCTTTGTCCACTACACTGGCTGGCTATTAGATGGCACAAAGTTTGACTCCAGTCTGGATCGCAAG
GACAAATTCTCCTTTGACCTGGGAAAAGGGGAGGTCATCAAGGCTTGGGACATTGCCATAGCCACCATGAAGGTG
GGGGAGGTGTGCCACATCACCTGCAAACCAGAATATGCCTACGGTTCAGCAGGCAGTCCTCCAAAGATTCCCCCC
AATGCCACGCTTGTATTTGAGGTGGAGTTGTTTGAGTTTAAGGGAGAAGATCTGACGGAAGAGGAAGATGGCGGA
ATCATTCGCAGAATACAGACTCGCGGTGAAGGCTATGCTAAGCCCAATGAGGGTGCTATCGTGGAGGTTGCACTG
GAAGGGTACTACAAGGACAAGCTCTTTGACCAGCGGGAGCTCCGCTTTGAGATTGGCGAGGGGGAGAACCTGGAT
CTGCCTTATGGTCTGGAGAGGGCCATTCAGCGCATGGAGAAAGGAGAACATTCCATCGTGTACCTCAAGCCCAGC
TATGCTTTTGGCAGTGTTGGGAAGGAAAAGTTCCAAATCCCACCAAATGCTGAGCTGAAATATGAATTACACCTC
AAGAGTTTTGAAAAGGCCAAGGAGTCTTGGGAGATGAATTCAGAAGAGAAGCTGGAACAGAGCACCATAGTGAAA
GAGCGGGGCACTGTGTACTTCAAGGAAGGTAAATACAAGCAAGCTTTACTACAGTATAAGAAGATCGTGTCTTGG
CTGGAATATGAGTCTAGTTTTTCCAATGAGGAAGCACAGAAAGCACAGGCCCTTCGACTGGCCTCTCACCTCAAC
CTGGCCATGTGTCATCTGAAACTACAGGCCTTCTCTGCTGCCATTGAAAGCTGTAACAAGGCCCTAGAACTGGAC
AGCAACAACGAGAAGGGCCTCTTCCGCCGGGGAGAGGCCCACCTGGCCGTGAATGACTTTGAACTGGCACGGGCT
GATTTCCAGAAGGTCCTGCAGCTCTACCCCAACAACAAAGCCGCCAAGACCCAGCTGGCTGTGTGCCAGCAGCGG
ATCCGAAGGCAGCTTGCCCGGGAGAAGAAGCTCTATGCCAATATGTTTGAGAGGCTGGCTGAGGAGGAGAACAAG
GCCAAGGCAGAGGCTTCCTCAGGAGACCATCCCACTGACACAGAGATGAAGGAGGAGCAGAAGAGCAACACGGCA
GGGAGCCAGTCTCAGGTGGAGACAGAAGCATAGCCCCTCTCCACCAGCCCTACTCCTGCGGCTGCCTGCCCCCCA
GTCTCCCCACTCCACCCTGTTAGTTTTGTAAAAACTGAAGAATTTTGAGTGAATTAGACCTTTATTTTTCTATCT
GGTTGGATGGTGGCTTTAGGGGAAGGGGGAAAGGTGTAGGCTGGGGGATTGAGGTGGGGAATCATTTTAGCTGGT
GTCAGCCCCTCTTCCCTTCCTCCATTGCACATGAACATATGTCCATCCATATATATTCATCAGAATGTTAATTTA
TTTTGCTCCCTCTGTTAGGTCCATTTTCTAAGGGTAGAAGAGGCAAGTGGTAGGGATGAGGTCTGATAAGAACCC
AGGGTGGAGAGGGAGACTCCTGGGCAGCCGTTTTCCTCATCCTTTCCCTCTCCCAGTCCATTTCCAAATGTGGCC
TCCATGTGGGTGCTAGGGACATGGGAAAAACCACTGCTATGCCATTTCTTCTCTCTGTTCCCTTCCTCACCCCCG
ACGGTGTGGCTGATGATGTCTTCTGGTGTCATGGTGACCACCCCCTGTTCCCTGTTCTGGTATTTCCCCTGTCAG
TTTCCCCTCTCGGCCAGGTTGTGTCCCAAAATCCCCTCAGCCTCTTCTCTGCACGTTGCTGAAGGTCCAGGCTTG
CCTCAAGTTCCATGCTTGAGCAATAAAGTGGAAACAATAAAACCTGGGTGTCAGACAAAAAAAAAAAAAAAAAA
A

FIGURE 250

MTAEEMKATESGAQSAPLPMEGVDISPKQDEGVLKVIKREGTGTEMPMIGDRVFVHYTGWLLDGTKFDSSLDRKD
KFSFDLGKGEVIKAWDIAIATMKVGEVCHITCKPEYAYGSAGSPPKIPPNATLVFEVELFEFKGEDLTEEEDGGI
IRRIQTRGEGYAKPNEGAIVEVALEGYYKDKLFDQRELRFEIGEGENLDLPYGLERAIQRMEKGEHSIVYLKPSY
AFGSVGKEKFQIPPNAELKYELHLKSFEKAKESWEMNSEEKLEQSTIVKERGTVYFKEGKYKQALLQYKKIVSWL
EYESSFSNEEAQKAQALRLASHLNLAMCHLKLQAFSAAIESCNKALELDSNNEKGLFRRGEAHLAVNDFELARAD
FQKVLQLYPNNKAAKTQLAVCQQRIRRQLAREKKLYANMFERLAEEENKAKAEASSGDHPTDTEMKEEQKSNTAG
SQSQVETEA

FIGURE 251

GCCGCGTGCAGAGGTGCTCAAGCCTCCTCGCGGTCCGCAGTCAGTGCCGCCGCGCCCGGCCTCCCGCACGCCCCG
CAGGTAGCGCCCCCGCCCGCGGCCCAGAGTGCGCTCGCGCCGGCACCAGCTCCCGGATAAACGGCGCGCCGCGCG
GAGATGACAGCCGAGGAGATGAAGGCGACCGAGAGCGGGGCGCAGTCGGCGCCGCTGCCCATGGAGGGAGTGGAC
ATCAGCCCCAAACAGGACGAAGGCGTGCTGAAGGTCATCAAGAGAGAGGGCACAGGTACAGAGATGCCCATGATT
GGGGACCGAGTCTTTGTCCACTACACTGGCTGGCTATTAGATGGCACAAAGTTTGACTCCAGTCTGGATCGCAAG
GACAAATTCTCCTTTGACCTGGGAAAAGGGGAGGTCATCAAGGCTTGGGACATTGCCATAGCCACCATGAAGGTG
GGGGAGGTGTGCCACATCACCTGCAAACCAGAATATGCCTACGGTTCAGCAGGCAGTCCTCCAAAGATTCCCCCC
AATGCCACGCTTGTATTTGAGGTGGAGTTGTTTGAGTTTAAGGGAGAAGATCTGACGGAAGAGGAAGATGGCGGA
ATCATTCGCAGAATACAGACTCGCGGTGAAGGCTATGCTAAGCCCAATGAGGGTGCTATCGTGGAGGTTGCACTG
GAAGGGTACTACAAGGACAAGCTCTTTGACCAGCGGGAGCTCCGCTTTGAGATTGGCGAGGGGGAGAACCTGGAT
CTGCCTTATGGTCTGGAGAGGGCCATTCAGCGCATGGAGAAAGGAGAACATTCCATCGTGTACCTCAAGCCCAGC
TATGCTTTTGGCAGTGTTGGGAAGGAAAAGTTCCAAATCCCACCAAATGCTGAGCTGAAATATGAATTACACCTC
AAGAGTTTTGAAAAGGCCAAGGAGTCTTGGGAGATGAATTCAGAAGAGAAGCTGGAACAGAGCACCATAGTGAAA
GAGCGGGGCACTGTGTACTTCAAGGAAGGTAAATACAAGCAAGCTTTACTACAGTATAAGAAGATCGTGTCTTGG
CTGGAATATGAGTCTAGTTTTTCCAATGAGGAAGCACAGAAAGCACAGGCCCTTCGACTGGCCTCTCACCTCAAC
CTGGCCATGTGTCATCTGAAACTACAGGCCTTCTCTGCTGCCATTGAAAGCTGTAACAAGGCCCTAGAACTGGAC
AGCAACAACGAGAAGGGCCTCTTCCGCCGGGGAGAGGCCCACCTGGCCGTGAATGACTTTGAACTGGCACGGGCT
GATTTCCAGAAGGTCCTGCAGCTCTACCCCAACAACAAAGCCGCCAAGACCCAGCTGGCTGTGTGCCAGCAGCGG
ATCCGAAGGCAGCTTGCCCGGGAGAAGAAGCTCTATGCCAATATGTTTGAGAGGCTGGCTGAGGAGGAGAACAAG
GCCAAGGCAGAGGCTTCCTCAGGAGACCATCCCACTGACACAGAGATGAAGGAGGAGCAGAAGAGCAACACGGCA
GGGAGCCAGTCTCAGGTGGAGACAGAAGCATAGCCCCTCTCCACCAGCCCTACTCCTGCGGCTGCCTGCCCCCCA
GTCTCCCCACTCCACCCTGTTAGTTTTGTAAAAACTGAAGAATTTTGAGTGAATTAGACCTTTATTTTTCTATCT
GGTTGGATGGTGGCTTTAGGGGAAGGGGGAAAGGTGTAGGCTGGGGGATTGAGGTGGGGAATCATTTTAGCTGGT
GTCAGCCCCTCTTCCCTTCCTCCATTGCACATGAACATATGTCCATCCATATATATTCATCAGAATGTTAATTTA
TTTTGCTCCCTCTGTTAGGTCCATTTTCTAAGGGTAGAAGAGGCAAGTGGTAGGGATGAGGTCTGATAAGAACCC
AGGGTGGAGAGGGAGACTCCTGGGCAGCCGTTTTCCTCATCCTTTCCCTCTCCCAGTCCATTTCCAAATGTGGCC
TCCATGTGGGTGCTAGGGACATGGGAAAAACCACTGCTATGCCATTTCTTCTCTCTGTTCCCTTCCTCACCCCCG
ACGGTGTGGCTGATGATGTCTTCTGGTGTCATGGTGACCACCCCCTGTTCCCTGTTCTGGTATTTCCCCTGTCAG
TTTCCCCTCTCGGCCAGGTTGTGTCCCAAAATCCCCTCAGCCTCTTCTCTGCACGTTGCTGAAGGTCCAGGCTTG
CCTCAAGTTCCATGCTTGAGCAATAAAGTGGAAACAATAAAACCTGGGTGTCAGACAAAAAAAAAAAAAAAAAA
A

FIGURE 252

MTAEEMKATESGAQSAPLPMEGVDISPKQDEGVLKVIKREGTGTEMPMIGDRVFVHYTGWLLDGTKFDSSLDRKD
KFSFDLGKGEVIKAWDIAIATMKVGEVCHITCKPEYAYGSAGSPPKIPPNATLVFEVELFEFKGEDLTEEEDGGI
IRRIQTRGEGYAKPNEGAIVEVALEGYYKDKLFDQRELRFEIGEGENLDLPYGLERAIQRMEKGEHSIVYLKPSY
AFGSVGKEKFQIPPNAELKYELHLKSFEKAKESWEMNSEEKLEQSTIVKERGTVYFKEGKYKQALLQYKKIVSWL
EYESSFSNEEAQKAQALRLASHLNLAMCHLKLQAFSAAIESCNKALELDSNNEKGLFRRGEAHLAVNDFELARAD
FQKVLQLYPNNKAAKTQLAVCQQRIRRQLAREKKLYANMFERLAEEENKAKAEASSGDHPTDTEMKEEQKSNTAG
SQSQVETEA

FIGURE 253

ATACACGTGCCATGTGCAGCATGAGGGGCTACCCGAGCCCGTCACCCTGAGATGGAAGCCGGCTTCCCAGCCCAC
CATCCCCATCGTGGGCATCATTGCTGGCCTGGTTCTCCTTGGATCTGTGGTCTCTGGAGCTGTGGTTGCTGCTGT
GATATGGAGGAAGAAGAGCTCAGGTGGAAAAGGAGGGAGCTACTCTAAGGCTGAGTGGAGCGACAGTGCCCAGGG
GTCTGAGTCTCACAGCTTGTAAAGCCTGAGACAGCTGCCTTGTGTGCGACTGAGATGCACAGCTGCCTTGTGTGC
GACTGAGATGCAGGATTTCCTCACGCCTCCCCTATGTGTCTTAGGGGACTCTGGCTTCTCTTTTTGCAAGGGCCT
CTGAATCTGTCTGTGTCCCTGTTAGCACAATGTGAGGAGGTAGAGAAACAGTCCACCTCTGTGTCTACCATGACC
CCCTTCCTCACACTGACCTGTGTTCCTTCCCTGTTCTCTTTTCTATTAAAAATAAGAACCTGGGCAGAGTGCGGC
AGCTCATGCCTGTAATCCCAGCACTTAGGGAGGCCGAGGAGGGCAGATCACGAGGTCAGGAGATCGAAACCATCC
TGGCTAACACGGTGAAACCCCGTCTCTACTAAAAAATACAAAAAATTAGCTGGGCGCAGAGGCACGGGCCTGTAG
TCCCAGCTACTCAGGAGGCGGAGGCAGGAGAATGGCGTCAACCCGGGAGGCGGAGGTTGCAGTGAGCCAGGATTG
TGCGACTGCACTCCAGCCTGGGTGACAGGGTGAAACGCCATCTCAAAAAAATAAAAATTAAAAAATAAAAAAAGAA
CCTGGATCTCAATTTAATTTTTCATATTCTTGCAATGAAATGGACTTGAGGAAGCTAAGATCATAGCTAGAAATA
CAGATAATTCCACAGCACATCTCTAGCAAATTTAGCCTATTCCTATTCTCTAGCCTATTCCTTACCACCTGTAAT
CTTGACCATATACCTTGGAGTTGAATATTGTTTTCATACTGCTGTGGTTTGAATGTTCCCTCCAACACTCATGTT
GAGACTTAATCCCTAATGTGGCAATACTGAAAGGTGGGGCCTTTGAGATGTGATTGGATCGTAAGGCTGTGCCTT
CATTCATGGGTTAATGGATTAATGGGTTATCACAGGAATGGGACTGGTGGCTTTATAAGAAGAGGAAAAGAGAAC
TGAGCTAGCATGCCCAACCCACAGAGAGCCTCCACTAGAGTGATGCTAAGTGGAAATGTGAGGTGCAGCTGCCAC
AGAGGGCCCCCACCAGGGAAATGTCTAGTGTCTAGTGGATCCAGGCCACAGGAGAGAGTGCCTTGTGGAGCGCTG
GGAGCAGGACCTGACCACCACCAGGACCCCAGAACTGTGGAGTCAGTGGCAGCATGCAGCGCCCCCTTGGGAAAG
CTTTAGGCACCAGCCTGCAACCCATTCGAGCAGCCACGTAGGCTCGACCCAGCAAAGCCACAGGCACGGGGCTAC
CTGAGGCCTTGGGGGCCAATCCCTGCTCCAGTGTGTCCGTGAGGCAGCACACGAAGTCAAAAGAGATTATCTCTT
CCCACAGATACCTTTTCTCTCCCATGACCCTTTAACAGCATCTGCTTCATTCCCCTCACCTTCCCAGGCTGATCT
GAGGTAAACTTTGAAGTAAAATAAAAGCTGTGTTTGAGCATC

FIGURE 254

TTCCTTTTCCTCCCTGTCGCCACCGAGGTCGCACGCGTGAGACTTCTCCGCCGCCTCCGCCGCAGACGCCGCCGC
GATGCGCTACGTCGCCTCCTACCTGCTGGCTGCCCTAGGGGGCAACTCCTCCCCCAGCGCCAAGGACATCAAGAA
GATCTTGGACAGCGTGGGTATCGAGGCGGACGACGACCGGCTCAACAAGGTTATCAGTGAGCTGAATGGAAAAAA
CATTGAAGACGTCATTGCCCAGGGTATTGGCAAGCTTGCCAGTGTACCTGCTGGTGGGGCTGTAGCCGTCTCTGC
TGCCCCAGGCTCTGCAGCCCCTGCTGCTGGTTCTGCCCCTGCTGCAGCAGAGGAGAAGAAAGATGAGAAGAAGGA
GGAGTCTGAAGAGTCAGATGATGACATGGGATTTGGCCTTTTTGATTAAATTCCTGCTCCCCTGCAAATAAAGCC
TTTTTACACATCTCAAAAAAAAAAAAAAAAAA

FIGURE 255

MRYVASYLLAALGGNSSPSAKDIKKILDSVGIEADDDRLNKVISELNGKNIEDVIAQGIGKLASVPAGGAVAVSA
APGSAAPAAGSAPAAAEEKKDEKKEESEESDDDMGFGLFD

FIGURE 256

CCTCTCGGAGCTGGAAATGCAGCTATTGAGATCTTCGAATGCTGCGGAGCTGGAGGCGGAGGCAGCTGGGGAGGT
CCGAGCGATGTGACCAGGCCGCCATCGCTCGTCTCTTCCTCTCTCCTGCCGCCTCCTGTGTCGAAAATAACTTTT
TTAGTCTAAAGAAAGAAAGACAAAAGTAGTCGTCCGCCCCTCACGCCCTCTCTTCCTCTCAGCCTTCCGCCCGGT
GAGGAAGCCCGGGGTGGCTGCTCCGCCGTCGGGGCCGCGCCGCCGAGCCCCAGCGCCCCGGGCCGCCCCCGCACG
CCGCCCCC**ATG**CATCCCTTCTACACCCGGGCCGCCACCATGATAGGCGAGATCGCCGCCGCCGTGTCCTTCATCT
CCAAGTTTCTCCGCACCAAGGGGCTGACGAGCGAGCGACAGCTGCAGACCTTCAGCCAGAGCCTGCAGGAGCTGC
TGGCAGAACATTATAAACATCACTGGTTCCCAGAAAAGCCATGCAAGGGATCGGGTTACCGTTGTATTCGCATCA
ACCATAAAATGGATCCTCTGATTGGACAGGCAGCACAGCGGATTGGACTGAGCAGTCAGGAGCTGTTCAGGCTTC
TCCCAAGTGAACTCACACTCTGGGTTGACCCCTATGAAGTGTCCTACAGAATTGGAGAGGATGGCTCCATCTGTG
TGCTGTATGAAGCCTCACCAGCAGGAGGTAGCACTCAAAACAGCACCAACGTGCAAATGGTAGACAGCCGAATCA
GCTGTAAGGAGGAACTTCTCTTGGGCAGAACGAGCCCTTCCAAAAACTACAATATGATGACTGTATCAGGT**TAA**G
ATATAGTCTGTGGATGGATCATCTGATGATGATCCATAAATTTGATTTTTGCTTTGGGTGGGCTCCTCTTGGGGA
TGGATTATGGAATTTAAACCATGTCACAGCTGTGAAGATCTGGCACAAGATAGAATGGTAAAAAAAAAAAAAAAT
TTTAAGTGACAGTGCCATAGTTTGGACAGTACCTTTCAATGATTAATTTTAATAGCCTGTGAGTCCAAGTAAATG
ATCACTTTATTTGCTAGGGAGGGAAGTCCTAGGGTGGTTTCAGTTTCTCCCAGACATACCTAAATTTTTACATCA
ATCCTTTTAAAGAAAATCTGTATTTCAAAGAATCTTTCTCTGCAGTAAATCTCGCAGGGGAATTTGCACTATTAC
ACTTGAAAGTTGTTATTGTTAACCTTTTCGGCAGCTTTTAATAGGAAAGTTAAACGTTTTAAACATGGTAGTACT
GGAAATTTTACAAGACTTTTACCTAGCACTTAAATATGTATAAATGTACATAAAGACAAACTAGTAAGCATGACC
TGGGGAAATGGTCAGACCTTGTATTGTGTTTTTGGCCTTGAAAGTAGCAAGTGACCAGAATCTGCCATGGCAACA
GGCTTTAAAAAAGACCCTTAAAAAGACACTGTCTCAACTGTGGTGTTAGCACCAGCCAGCTCTCTGTACATTTGC
TAGCTTGTAGTTTTCTAAGACTGAGTAAACTTCTTATTTTTAGAAAGTGGAGGTCTGGTTTGTAACTTTCCTTGT
ACTTAATTGGGTAAAAGTCTTTTCCACAAACCACCATCTATTTTGTGAACTTTGTTAGTCATCTTTTATTTGGTA
AATTATGAACTGGTGTAAATTTGTACAGTTCATGTATATTGATTGTGGCAAAGTTGTACAGATTTCTATATTTTG
GATGAGAAATTTTTCTTCTCTCTATAATAAATCGTTTCTTATCTTGGCATTTTTAACC

FIGURE 257

MHPFYTRAATMIGEIAAAVSFISKFLRTKGLTSERQLQTFSQSLQELLAEHYKHHWFPEKPCKGSGYRCIRINHK
MDPLIGQAAQRIGLSSQELFRLLPSELTLWVDPYEVSYRIGEDGSICVLYEASPAGGSTQNSTNVQMVDSRISCK
EELLLGRTSPSKNYNMMTVSG

FIGURE 258

CCTCTCGGAGCTGGAAATGCAGCTATTGAGATCTTCGAATGCTGCGGAGCTGGAGGCGGAGGCAGCTGGGGAGGT
CCGAGCGATGTGACCAGGCCGCCATCGCTCGTCTCTTCCTCTCTCCTGCCGCCTCCTGTGTCGAAAATAACTTTT
TTAGTCTAAAGAAAGAAAGACAAAAGTAGTCGTCCGCCCCTCACGCCCTCTCTTCCTCTCAGCCTTCCGCCCGGT
GAGGAAGCCCGGGGTGGCTGCTCCGCCGTCGGGGCCGCGCCGCCGAGCCCCAGCGCCCCGGGCCGCCCCCGCACG
CCGCCCCC**ATG**CATCCCTTCTACACCCGGGCCGCCACCATGATAGGCGAGATCGCCGCCGCCGTGTCCTTCATCT
CCAAGTTTCTCCGCACCAAGGGGCTGACGAGCGAGCGACAGCTGCAGACCTTCAGCCAGAGCCTGCAGGAGCTGC
TGGCAGAACATTATAAACATCACTGGTTCCCAGAAAAGCCATGCAAGGGATCGGGTTACCGTTGTATTCGCATCA
ACCATAAAATGGATCCTCTGATTGGACAGGCAGCACAGCGGATTGGACTGAGCAGTCAGGAGCTGTTCAGGCTTC
TCCCAAGTGAACTCACACTCTGGGTTGACCCCTATGAAGTGTCCTACAGAATTGGAGAGGATGGCTCCATCTGTG
TGCTGTATGAAGCCTCACCAGCAGGAGGTAGCACTCAAAACAGCACCAACGTGCAAATGGTAGACAGCCGAATCA
GCTGTAAGGAGGAACTTCTCTTGGGCAGAACGAGCCCTTCCAAAAACTACAATATGATGACTGTATCAGGT**TAA**G
ATATAGTCTGTGGATGGATCATCTGATGATGATCCATAAATTTGATTTTTGCTTTGGGTGGGCTCCTCTTGGGGA
TGGATTATGGAATTTAAACCATGTCACAGCTGTGAAGATCTGGCACAAGATAGAATGGTAAAAAAAAAAAAAAAT
TTTAAGTGACAGTGCCATAGTTTGGACAGTACCTTTCAATGATTAATTTTAATAGCCTGTGAGTCCAAGTAAATG
ATCACTTTATTTGCTAGGGAGGGAAGTCCTAGGGTGGTTTCAGTTTCTCCCAGACATACCTAAATTTTTACATCA
ATCCTTTTAAAGAAAATCTGTATTTCAAAGAATCTTTCTCTGCAGTAAATCTCGCAGGGGAATTTGCACTATTAC
ACTTGAAAGTTGTTATTGTTAACCTTTTCGGCAGCTTTTAATAGGAAAGTTAAACGTTTTAAACATGGTAGTACT
GGAAATTTTACAAGACTTTTACCTAGCACTTAAATATGTATAAATGTACATAAAGACAAACTAGTAAGCATGACC
TGGGGAAATGGTCAGACCTTGTATTGTGTTTTTGGCCTTGAAAGTAGCAAGTGACCAGAATCTGCCATGGCAACA
GGCTTTAAAAAAGACCCTTAAAAAGACACTGTCTCAACTGTGGTGTTAGCACCAGCCAGCTCTCTGTACATTTGC
TAGCTTGTAGTTTTCTAAGACTGAGTAAACTTCTTATTTTTAGAAAGTGGAGGTCTGGTTTGTAACTTTCCTTGT
ACTTAATTGGGTAAAAGTCTTTTCCACAAACCACCATCTATTTTGTGAACTTTGTTAGTCATCTTTTATTTGGTA
AATTATGAACTGGTGTAAATTTGTACAGTTCATGTATATTGATTGTGGCAAAGTTGTACAGATTTCTATATTTTG
GATGAGAAATTTTTCTTCTCTCTATAATAAATCGTTTCTTATCTTGGCATTTTTAACC

FIGURE 259

MHPFYTRAATMIGEIAAAVSFISKFLRTKGLTSERQLQTFSQSLQELLAEHYKHHWFPEKPCKGSGYRCIRINHK
MDPLIGQAAQRIGLSSQELFRLLPSELTLWVDPYEVSYRIGEDGSICVLYEASPAGGSTQNSTNVQMVDSRISCK
EELLLGRTSPSKNYNMMTVSG

FIGURE 260

AATCGAAAGTAGACTCTTTTCTGAAGCATTTCCTGGGATCAGCCTGACCACGCTCCATACTGGGAGAGGCTTCTG
GGTCAAAGGACCAGTCTGCAGAGGGATCCTGTGGCTGGAAGCGAGGAGGCTCCACACGGCCGTTGCAGCTACCGC
AGCCAGGATCTGGGCATCCAGGCACGGCC**ATG**ACCCCTCCGAGGCTCTTCTGGGTGTGGCTGCTGGTTGCAGGAA
CCCAAGGCGTGAACGATGGTGACATGCGGCTGGCCGATGGGGGCGCCACCAACCAGGGCCGCGTGGAGATCTTCT
ACAGAGGCCAGTGGGGCACTGTGTGTGACAACCTGTGGGACCTGACTGATGCCAGCGTCGTCTGCCGGGCCCTGG
GCTTCGAGAACGCCACCCAGGCTCTGGGCAGAGCTGCCTTCGGGCAAGGATCAGGCCCCATCATGCTGGACGAGG
TCCAGTGCACGGGAACCGAGGCCTCACTGGCCGACTGCAAGTCCCTGGGCTGGCTGAAGAGCAACTGCAGGCACG
AGAGAGACGCTGGTGTGGTCTGCACCAATGAAACCAGGAGCACCCACACCCTGGACCTCTCCAGGGAGCTCTCGG
AGGCCCTTGGCCAGATCTTTGACAGCCAGCGGGGCTGCGACCTGTCCATCAGCGTGAATGTGCAGGGCGAGGACG
CCCTGGGCTTCTGTGGCCACACGGTCATCCTGACTGCCAACCTGGAGGCCCAGGCCCTGTGGAAGGAGCCGGGCA
GCAATGTCACCATGAGTGTGGATGCTGAGTGTGTGCCCATGGTCAGGGACCTTCTCAGGTACTTCTACTCCCGAA
GGATTGACATCACCCTGTCGTCAGTCAAGTGCTTCCACAAGCTGGCCTCTGCCTATGGGGCCAGGCAGCTGCAGG
GCTACTGCGCAAGCCTCTTTGCCATCCTCCTCCCCCAGGACCCCTCGTTCCAGATGCCCCTGGACCTGTATGCCT
ATGCAGTGGCCACAGGGGACGCCCTGCTGGAGAAGCTCTGCCTACAGTTCCTGGCCTGGAACTTCGAGGCCTTGA
CGCAGGCCGAGGCCTGGCCCAGTGTCCCCACAGACCTGCTCCAACTGCTGCTGCCCAGGAGCGACCTGGCGGTGC
CCAGCGAGCTGGCCCTACTGAAGGCCGTGGACACCTGGAGCTGGGGGGAGCGTGCCTCCCATGAGGAGGTGGAGG
GCTTGGTGGAGAAGATCCGCTTCCCCATGATGCTCCCTGAGGAGCTCTTTGAGCTGCAGTTCAACCTGTCCCTGT
ACTGGAGCCACGAGGCCCTGTTCCAGAAGAAGACTCTGCAGGCCCTGGAATTCCACACTGTGCCCTTCCAGTTGC
TGGCCCGGTACAAAGGCCTGAACCTCACCGAGGATACCTACAAGCCCCGGATTTACACCTCGCCCACCTGGAGTG
CCTTTGTGACAGACAGTTCCTGGAGTGCACGGAAGTCACAACTGGTCTATCAGTCCAGACGGGGGCCTTTGGTCA
AATATTCTTCTGATTACTTCCAAGCCCCCTCTGACTACAGATACTACCCCTACCAGTCCTTCCAGACTCCACAAC
ACCCCAGCTTCCTCTTCCAGGACAAGAGGGTGTCCTGGTCCCTGGTCTACCTCCCCACCATCCAGAGCTGCTGGA
ACTACGGCTTCTCCTGCTCCTCGGACGAGCTCCCTGTCCTGGGCCTCACCAAGTCTGGCGGCTCAGATCGCACCA
TTGCCTACGAAAACAAAGCCCTGATGCTCTGCGAAGGGCTCTTCGTGGCAGACGTCACCGATTTCGAGGGCTGGA
AGGCTGCGATTCCCAGTGCCCTGGACACCAACAGCTCGAAGAGCACCTCCTCCTTCCCCTGCCCGGCAGGGCACT
TCAACGGCTTCCGCACGGTCATCCGCCCCTTCTACCTGACCAACTCCTCAGGTGTGGAC**TAG**ACGCGTGGCCAAG
GGTGGTGAGAACCGGAGAACCCCAGGACGCCCTCACTGCAGGCTCCCCTCCTCGGCTTCCTTCCTCTCTGCAATG
ACCTTCAACAACCGGCCACCAGATGTCGCCCTACTCACCTGAGGCTCAGCTTCAAGAAATTACTGGAAGGCTTCC
ACTAGGGTCCACCAGGAGTTCTCCCACCACCTCACCAGTTTCCAGGTGGTAAGCACCAGGAGGCCCTCGAGGTTG
CTCTGGATCCCCCCACAGCCCCTGGTCAGTCTGCCCTTGTCACTGGTCTGAGGTCATTAAAATTACATTGAGGTT
CCTA

FIGURE 261

MTPPRLFWVWLLVAGTQGVNDGDMRLADGGATNQGRVEIFYRGQWGTVCDNLWDLTDASVVCRALGFENATQALG
RAAFGQGSGPIMLDEVQCTGTEASLADCKSLGWLKSNCRHERDAGVVCTNETRSTHTLDLSRELSEALGQIFDSQ
RGCDLSISVNVQGEDALGFCGHTVILTANLEAQALWKEPGSNVTMSVDAECVPMVRDLLRYFYSRRIDITLSSVK
CFHKLASAYGARQLQGYCASLFAILLPQDPSFQMPLDLYAYAVATGDALLEKLCLQFLAWNFEALTQAEAWPSVP
TDLLQLLLPRSDLAVPSELALLKAVDTWSWGERASHEEVEGLVEKIRFPMMLPEELFELQFNLSLYWSHEALFQK
KTLQALEFHTVPFQLLARYKGLNLTEDTYKPRIYTSPTWSAFVTDSSWSARKSQLVYQSRRGPLVKYSSDYFQAP
SDYRYYPYQSFQTPQHPSFLFQDKRVSWSLVYLPTIQSCWNYGFSCSSDELPVLGLTKSGGSDRTIAYENKALML
CEGLFVADVTDFEGWKAAIPSALDTNSSKSTSSFPCPAGHFNGFRTVIRPFYLTNSSGVD

FIGURE 262

GGCACGAGGACCGACCGCATTGCGGCTTGGTTTTCTCACCCAGTGCATGTGGCAGGAGCGGTGAGATCACTGCCT
CACGGCGATCCTGGACTGACGGTCACGACTGCCTACCCTCTAACCCTGTTCTGAGCTGCCCCTTGCCCACACACC
CCAAACCTGTGTGCAGGATCCGCCTCCATGGAGCTACAGCCTCCTGAAGCCTCGATCGCCGTCGTGTCGATTCCG
CGCCAGTTGCCTGGCTCACATTCGGAGGCTGGTGTCCAGGGTCTCAGCGCGGGGGACGACTCAGAGTTGGGGTCT
CACTGTGTTGCCCAGACTGGTCTCGAACTCTTGGCCTCAGGTGATCCTCTTCCCTCAGCTTCCCAGAATGCCGAG
ATGATAGAGACGGGGTCTGACTGTGTTACCCAGGCTGGTCTTCAACTCTTGGCCTCAAGTGATCCTCCTGCCTTA
GCTTCCAAGAATGCTGAGGTTACAGGCACC**ATG**AGCCAGGACACCGAGGTGGATATGAAGGAGGTGGAGCTGAAT
GAGTTAGAGCCCGAGAAGCAGCCGATGAACGCGGCGTCTGGGGCGGCCATGTCCCTGGCGGGAGCCGAGAAGAAT
GGTCTGGTGAAGATCAAGGTGGCGGAAGACGAGGCGGAGGCGGCAGCCGCGGCTAAGTTCACGGGCCTGTCCAAG
GAGGAGCTGCTGAAGGTGGCAGGCAGCCCCGGCTGGGTACGCACCCGCTGGGCACTGCTGCTGCTCTTCTGGCTC
GGCTGGCTCGGCATGCTTGCTGGTGCCGTGGTCATAATCGTGCGAGCGCCGCGTTGTCGCGAGCTACCGGCGCAG
AAGTGGTGGCACACGGGCGCCCTCTACCGCATCGGCGACCTTCAGGCCTTCCAGGGCCACGGCGCGGGCAACCTG
GCGGGTCTGAAGGGGCGTCTCGATTACCTGAGCTCTCTGAAGGTGAAGGGCCTTGTGCTGGGTCCAATTCACAAG
AACCAGAAGGATGATGTCGCTCAGACTGACTTGCTGCAGATCGACCCCAATTTTGGCTCCAAGGAAGATTTTGAC
AGTCTCTTGCAATCGGCTAAAAAAAAAGAGCATCCGTGTCATTCTGGACCTTACTCCCAACTACCGGGGTGAGAAC
TCGTGGTTCTCCACTCAGGTTGACACTGTGGCCACCAAGGTGAAGGATGCTCTGGAGTTTTGGCTGCAAGCTGGC
GTGGATGGGTTCCAGGTTCGGGACATAGAGAATCTGAAGGATGCATCCTCATTCTTGGCTGAGTGGCAAAATATC
ACCAAGGGCTTCAGTGAAGACAGGCTCTTGATTGCGGGGACTAACTCCTCCGACCTTCAGCAGATCCTGAGCCTA
CTCGAATCCAACAAAGACTTGCTGTTGACTAGCTCATACCTGTCTGATTCTGGTTCTACTGGGGAGCATACAAAA
TCCCTAGTCACACAGTATTTGAATGCCACTGGCAATCGCTGGTGCAGCTGGAGTTTGTCTCAGGCAAGGCTCCTG
ACTTCCTTCTTGCCGGCTCAACTTCTCCGACTCTACCAGCTGATGCTCTTCACCCTGCCAGGGACCCCTGTTTTC
AGCTACGGGGATGAGATTGGCCTGGATGCAGCTGCCCTTCCTGGACAGCCTATGGAGGCTCCAGTCATGCTGTGG
GATGAGTCCAGCTTCCCTGACATCCCAGGGGCTGTAAGTGCCAACATGACTGTGAAGGGCCAGAGTGAAGACCCT
GGCTCCCTCCTTTCCTTGTTCCGGCGGCTGAGTGACCAGCGGAGTAAGGAGCGCTCCCTACTGCATGGGGACTTC
CACGCGTTCTCCGCTGGGCCTGGACTCTTCTCCTATATCCGCCACTGGGACCAGAATGAGCGTTTTCTGGTAGTG
CTTAACTTTGGGGATGTGGGCCTCTCGGCTGGACTGCAGGCCTCCGACCTGCCTGCCAGCGCCAGCCTGCCAGCC
AAGGCTGACCTCCTGCTCAGCACCCAGCCAGGCCGTGAGGAGGGCTCCCCTCTTGAGCTGGAACGCCTGAAACTG
GAGCCTCACGAAGGGCTGCTGCTCCGCTTCCCCTACGCGGCC**TGA**CTTCAGCCTGACATGGACCCACTACCCTTC
TCCTTTCCTTCCCAGGCCCTTTGGCTTCTGATTTTTCTCTTTTTTAAAAACAAACAAACAAACTGTTGCAAAAAA
AAAAAAAAAAAA

FIGURE 263

MSQDTEVDMKEVELNELEPEKQPMNAASGAAMSLAGAEKNGLVKIKVAEDEAEAAAAAKFTGLSKEELLKVAGSP
GWVRTRWALLLLFWLGWLGMLAGAVVIIVRAPRCRELPAQKWWHTGALYRIGDLQAFQGHGAGNLAGLKGRLDYL
SSLKVKGLVLGPIHKNQKDDVAQTDLLQIDPNFGSKEDFDSLLQSAKKKSIRVILDLTPNYRGENSWFSTQVDTV
ATKVKDALEFWLQAGVDGFQVRDIENLKDASSFLAEWQNITKGFSEDRLLIAGTNSSDLQQILSLLESNKDLLLT
SSYLSDSGSTGEHTKSLVTQYLNATGNRWCSWSLSQARLLTSFLPAQLLRLYQLMLFTLPGTPVFSYGDEIGLDA
AALPGQPMEAPVMLWDESSFPDIPGAVSANMTVKGQSEDPGSLLSLFRRLSDQRSKERSLLHGDFHAFSAGPGLF
SYIRHWDQNERFLVVLNFGDVGLSAGLQASDLPASASLPAKADLLLSTQPGREEGSPLELERLKLEPHEGLLLRF
PYAA

FIGURE 264

GTCCGTACTGCAGAGCCGCTGCCGGAGGGTCGTTTTAAAGGGCCGCGTTGCCGCCCCCTCGGCCCGCCATGCTGC
TATCCGTGCCGCTGCTGCTCGGCCTCCTCGGCCTGGCCGTCGCCGAGCCCGCCGTCTACTTCAAGGAGCAGTTTC
TGGACGGAGACGGGTGGACTTCCCGCTGGATCGAATCCAAACACAAGTCAGATTTTGGCAAATTCGTTCTCAGTT
CCGGCAAGTTCTACGGTGACGAGGAGAAAGATAAAGGTTTGCAGACAAGCCAGGATGCACGCTTTTATGCTCTGT
CGGCCAGTTTCGAGCCTTTCAGCAACAAAGGCCAGACGCTGGTGGTGCAGTTCACGGTGAAACATGAGCAGAACA
TCGACTGTGGGGGCGGCTATGTGAAGCTGTTTCCTAATAGTTTGGACCAGACAGACATGCACGGAGACTCAGAAT
ACAACATCATGTTTGGTCCCGACATCTGTGGCCCTGGCACCAAGAAGGTTCATGTCATCTTCAACTACAAGGGCA
AGAACGTGCTGATCAACAAGGACATCCGTTGCAAGGATGATGAGTTTACACACCTGTACACACTGATTGTGCGGC
CAGACAACACCTATGAGGTGAAGATTGACAACAGCCAGGTGGAGTCCGGCTCCTTGGAAGACGATTGGGACTTCC
TGCCACCCAAGAAGATAAAGGATCCTGATGCTTCAAAACCGGAAGACTGGGATGAGCGGGCCAAGATCGATGATC
CCACAGACTCCAAGCCTGAGGACTGGGACAAGCCCGAGCATATCCCTGACCCTGATGCTAAGAAGCCCGAGGACT
GGGATGAAGAGATGGACGGAGAGTGGGAACCCCCAGTGATTCAGAACCCTGAGTACAAGGGTGAGTGGAAGCCCC
GGCAGATCGACAACCCAGATTACAAGGGCACTTGGATCCACCCAGAAATTGACAACCCCGAGTATTCTCCCGATC
CCAGTATCTATGCCTATGATAACTTTGGCGTGCTGGGCCTGGACCTCTGGCAGGTCAAGTCTGGCACCATCTTTG
ACAACTTCCTCATCACCAACGATGAGGCATACGCTGAGGAGTTTGGCAACGAGACGTGGGGCGTAACAAAGGCAG
CAGAGAAACAAATGAAGGACAAACAGGACGAGGAGCAGAGGCTTAAGGAGGAGGAAGAAGACAAGAAACGCAAAG
AGGAGGAGGAGGCAGAGGACAAGGAGGATGATGAGGACAAAGATGAGGATGAGGAGGATGAGGAGGACAAGGAGG
AAGATGAGGAGGAAGATGTCCCCGGCCAGGCCAAGGACGAGCTGTAGAGAGGCCTGCCTCCAGGGCTGGACTGAG
GCCTGAGCGCTCCTGCCGCAGAGCTTGCCGCGCCAAATAATGTCTCTGTGAGACTCGAGAACTTTCATTTTTTTC
CAGGCTGGTTCGGATTTGGGGTGGATTTTGGTTTTGTTCCCCTCCTCCACTCTCCCCCACCCCCTCCCCGCCCTT
TTTTTTTTTTTTTTTAAACTGGTATTTTATCCTTTGATTCTCCTTCAGCCCTCACCCCTGGTTCTCATCTTTCTT
GATCAACATCTTTTCTTGCCTCTGTGCCCCTTCTCTCATCTCTTAGCTCCCCTCCAACCTGGGGGGCAGTGGTGT
GGAGAAGCCACAGGCCTGAGATTTCATCTGCTCTCCTTCCTGGAGCCCAGAGGAGGGCAGCAGAAGGGGGTGGTG
TCTCCAACCCCCCAGCACTGAGGAAGAACGGGGCTCTTCTCATTTCACCCCTCCCTTTCTCCCCTGCCCCCAGGA
CTGGGCCACTTCTGGGTGGGGCAGTGGGTCCCAGATTGGCTCACACTGAGAATGTAAGAACTACAAACAAAATTT
CTATTAAATTAAATTTTGTGTCTC

FIGURE 265

MLLSVPLLLGLLGLAVAEPAVYFKEQFLDGDGWTSRWIESKHKSDFGKFVLSSGKFYGDEEKDKGLQTSQDARFY
ALSASFEPFSNKGQTLVVQFTVKHEQNIDCGGGYVKLFPNSLDQTDMHGDSEYNIMFGPDICGPGTKKVHVIFNY
KGKNVLINKDIRCKDDEFTHLYTLIVRPDNTYEVKIDNSQVESGSLEDDWDFLPPKKIKDPDASKPEDWDERAKI
DDPTDSKPEDWDKPEHIPDPDAKKPEDWDEEMDGEWEPPVIQNPEYKGEWKPRQIDNPDYKGTWIHPEIDNPEYS
PDPSIYAYDNFGVLGLDLWQVKSGTIFDNFLITNDEAYAEEFGNETWGVTKAAEKQMKDKQDEEQRLKEEEEDKK
RKEEEEAEDKEDDEDKDEDEEDEEDKEEDEEEDVPGQAKDEL

FIGURE 266

ACGGAAGTGTAGGTTACGGTCTGAGACATCACCGCCAAGCTGGGCATCGGGGAGATGGCCGAGACTGACCCCAAG
ACCGTGCAGGACCTCACCTCGGTGGTGCAGACACTCCTGCAGCAGATGCAAGATAAATTTCAGACCATGTCTGAC
CAGATCATTGGGAGAATTGATGATATGAGTAGTCGCATTGATGATCTGGAAAAGAATATCGCGGACCTCATGACA
CAGGCTGGGGTGGAAGAACTGGAAAGTGAAAACAAGATACCTGCCACGCAAAAGAGTTGAAGGTTGCTAATAATT
TATACTGGAATCTGGCATTTTTCCAAGCCAAGAGAAGATCGAATGGCTTTTTGCAGCTAACTACTATGTGTAGAC
AGGTTTTATATTATAAAGTATGCATTCTTATCACCTAGTATATAGTTAGTTTGTAGAGTGATTTCCCCCCAGTTT
CTTGAACATGGTATCTTCACATCTTGGACCTTGGTCAGTTGTGCTATTCATTATTAAACACTAAAACTTTGGCGG
TTCTTGCATAAAAAAAAAAAAA

FIGURE 267

MAETDPKTVQDLTSVVQTLLQQMQDKFQTMSDQIIGRIDDMSSRIDDLEKNIADLMTQAGVEELESENKIPATQK
S

FIGURE 268A

AGAGCGAGCAGGGGAGAGCGAGACCAGTTTTAAGGGGAGGACCGGTGCGAGTGAGGCAGCCCCGAGGCTCTGCTC
GCCCACCACCCAATCCTCGCCTCCCTTCTGCTCCACCTTCTCTCTCTGCCCTCACCTCTCCCCCGAAAACCCCCT
ATTTAGCCAAAGGAAGGAGGTCAGGGGAACGCTCTCCCCTCCCCTTCCAAAAAACAAAAACAGAAAAACCCTTTT
CCAGGCCGGGGAAAGCAGGAGGGAGAGGGGCCGCCGGGCTGGCCATGGAGCTGCTGTGCCACGAGGTGGACCCGG
TCCGCAGGGCCGTGCGGGACCGCAACCTGCTCCGAGACGACCGCGTCCTGCAGAACCTGCTCACCATCGAGGAGC
GCTACCTTCCGCAGTGCTCCTACTTCAAGTGCGTGCAGAAGGACATCCAACCCTACATGCGCAGAATGGTGGCCA
CCTGGATGCTGGAGGTCTGTGAGGAACAGAAGTGCGAAGAAGAGGTCTTCCCTCTGGCCATGAATTACCTGGACC
GTTTCTTGGCTGGGGTCCCGACTCCGAAGTCCCATCTGCAACTCCTGGGTGCTGTCTGCATGTTCCTGGCCTCCA
AACTCAAAGAGACCAGCCCGCTGACCGCGGAGAAGCTGTGCATTTACACCGACAACTCCATCAAGCCTCAGGAGC
TGCTGGAGTGGGAACTGGTGGTGCTGGGGAAGTTGAAGTGGAACCTGGCAGCTGTCACTCCTCATGACTTCATTG
AGCACATCTTGCGCAAGCTGCCCCAGCAGCGGGAGAAGCTGTCTCTGATCCGCAAGCATGCTCAGACCTTCATTG
CTCTGTGTGCCACCGACTTTAAGTTTGCCATGTACCCACCGTCGATGATCGCAACTGGAAGTGTGGGAGCAGCCA
TCTGTGGGCTCCAGCAGGATGAGGAAGTGAGCTCGCTCACTTGTGATGCCCTGACTGAGCTGCTGGCTAAGATCA
CCAACACAGACGTGGATTGTCTCAAAGCTTGCCAGGAGCAGATTGAGGCGGTGCTCCTCAATAGCCTGCAGCAGT
ACCGTCAGGACCAACGTGACGGATCCAAGTCGGAGGATGAACTGGACCAAGCCAGCACCCCTACAGACGTGCGGG
ATATCGACCTGTGAGGATGCCAGTTGGGCCGAAAGAGAGAGACGCGTCCATAATCTGGTCTCTTCTTCTTTCTGG
TTGTTTTTGTTCTTTGTGTTTTAGGGTGAAACTTAAAAAAAAAATTCTGCCCCCACCTAGATCATATTTAAAGAT
CTTTTAGAAGTGAGAGAAAAAGGTCCTACGAAAACGGAATAATAAAAAGCATTTGGTGCCTATTTGAAGTACAGC
ATAAGGGAATCCCTTGTATATGCGAACAGTTATTGTTTGATTATGTAAAAGTAATAGTAAAATGCTTACAGGAAA
ACCTGCAGAGTAGTTAGAGAATATGTATGCCTGCAATATGGGAACAAATTAGAGGAGACTTTTTTTTTTCATGTT
ATGAGCTAGCACATACACCCCCTTGTAGTATAATTTCAAGGAACTGTGTACGCCATTTATGGCATGATTAGATTG
CAAAGCAATGAACTCAAGAAGGAATTGAAATAAGGAGGGACATGATGGGGAAGGAGTACAAAACAATCTCTCAAC
ATGATTGAACCATTTGGGATGGAGAAGCACCTTTGCTCTCAGCCACCTGTTACTAAGTCAGGAGTGTAGTTGGAT
CTCTACATTAATGTCCTCTTGCTGTCTACAGTAGCTGCTACCTAAAAAAAGATGTTTTATTTTGCCAGTTGGACA
CAGGTGATTGGCTCCTGGGTTTCATGTTCTGTGACATCCTGCTTCTTCTTCCAAATGCAGTTCATTGCAGACACC
ACCATATTGCTATCTAATGGGGAAATGTAGCTATGGGCCATAACCAAAACTCACATGAAACGGAGGCAGATGGAG
ACCAAGGGTGGGATCCAGAATGGAGTCTTTTCTGTTATTGTATTTAAAAGGGTAATGTGGCCTTGGCATTTCTTC
TTAGAAAAAAACTAATTTTTGGTGCTGATTGGCATGTCTGGTTCACAGTTTAGCATTGTTATAAACCATTCCATT
CGAAAAGCACTTTGAAAAATTGTTCCCGAGCGATAGATGGGATGGTTTATGCAAGTCATGCTGAATACTCCTCCC
CTCTTCTCTTTTGCCCCCTCCCTTCCTGCCCCCAGTCTGGGTTACTCTTCGCTTCTGGTATCTGGCGTTCTTTGG
TACACAGTTCTGGTGTTCCTACCAGGACTCAAGAGACACCCCTTCCTGCTGACATTCCCATCACAACATTCCTCA
GACAAGCCTGTAAACTAAAATCTGTTACCATTCTGATGGCACAGAAGGATCTTAATTCCCATCTCTATACTTCTC
CTTTGGACATGGAAAGAAAAGTTATTGCTGGTGCAAAGATAGATGGCTGAACATCAGGGTGTGGCATTTTGTTCC
CTTTTCCGTTTTTTTTTTTTTATTGTTGTTGTTAATTTTATTGCAAAGTTGTATTCAGCGTACTTGAATTTTTC
TTCCTCTCCACTTCTTAGAGGCATTCAGTTAGCAAAGAGGTTGGAGCAACAACTTTTTTTTTTTTTTTGCACAA
TTGTAATTGACAGGTAATGAAGCTATTTGTTAAAATATTTGCCTTTTTAAGTAAAAAAGAAAAATCAGAACAGGG
CTATTTGAAGAATTATTTTATACACAGATTCTGCCTTGTTTCATAGTATGAGGGTTGAAGACGGAAAACAATCTA
AGGGTCTCTCATTTTTTTAATTTTGTTTTGTTCAGTTTGGTTTTTTTTTTTTTTTGCGCTGCTAAGAAGCTAAAG
TCATCCATCCTTATTCACGTTGACAGTACCTAGCTGTAATGTTTCACAGAGTGTGCTGCTATTTTATAAACATTT
TTATAATATATTATTTTACTGCTTAAATTCCAAGTCCTGAAGTAGATGGTTGAGATATGAGTTCTTCGTACTGGA
AAAGCCCTTCCGTAGTTTGTTTTCTTCTGGTAGCATATTCATGGTTGTTTTTTTTTTTCTTTTTTGGTTTTTTGG
TTTTTTTTTTTTCCTCTGATCACATTCTTCAAAGACGGAGTATTCTTTACCTCAGGTTTACTGGACAAAATCAAT
AACTACAAAAGGCAATGATTCACGCTTTTGTTTTCATAATACCTCACAACCGTACAGTTTCTGCTTGGGAGCCCA
TTCGCATGAGGAATACAGAAGCAGTGTGAGCAGGGCTGACTCCCTCTCAGGTGGAAGGCAGGGCGGTCTCACTCC
CAGGGACCTTTTTGGTCATGGAGGCCATCGGGCTCCCAGTTAGACCCTGGTATCCTCATCATGATGGAAAAAATA
CATTGAACCAAGGGATCCTCCCTCCCCTTCAAGGCAGACGTTCAGTACAAACATTTATGCGGTAGGCTCAGATGT
CGTAATTTGCACTTAGGTACCAGGTGTCAGGAAACAGACTAAAAAGAATTCCACCAGGCTGTTTGGAGATCCTCA
TCTTGGAGCTTTTTCAAAAGCGGGGCTTCATCTGCAAAGGGCCCTTTCATCTTGAAGTTTTTCCCCTCCGTCTTT

FIGURE 268B

CCCCTCCCCTGGCATGGACACCTTGTGTTTAGGATCATCTCTGCAGGTTTCCTAGGTCTGAATCTGCGAGTAGAT
GAACCTGCAGCAAGCAGCGTTTATGGTGCTTCCTTCTCCCTCCTCTGTCTCAAACTGCGCAGGCAAGCACTATGC
AAGCCCAGGCCCTCTGCTGAGCGGTACTAAACGGTCGGGTTTTCAATCACACTGAATTGGCAGGATAAGAAAAAT
AGGTCAGATAAGTATGGGATGATAGTTGAAGGGAGGTGAAGAGGCTGCTTCTCTACAGAGGTGAAATTCCAGATG
AGTCAGTCTCTTGGGAAGTGTGTTTAGAAGGGTTCAGGACTTTGTGAGTTAGCATGACCCTAAAATTCTAGGGGA
TTTCTGGTGGGACAATGGGTGGTGAATTTTGAAGTTTTGGAGAGGGAAGTGGAGCAGCCAGCAAGTAAGCTAGCC
AGAGTTTTCTCAAGAGCCAGCTTTGCTCAGCACACTCTCCTGGGCCCCAAGGAGTCCCACGGAATGGGGAAAGTG
GGAACCCTGGAGTTCTTGGGAATCTTGGAGCCTAAAGAGAAACCGAGGTGCAAATTCATTTCATGGTGACTGACC
CTTGAGCTTAAACAGAAGCAGCAAATGAAAGAACCGGACAAATAAGGAAGGGCACAAGCCTACCCGACTCTATTT
ACAGTCTGTAACTTTCCACTCTTCCTGTAGTCCCGAGGCCCCTGGGTCCTTCTAGCTTTTCTCTTTCCCATCCTT
GGGGCCTTGTGTGATGATGGGTGTGGGGCTGCCGATGGGAAAGTCGGGGGTTGTTAGGCTTTTCTGCCTGCTCCT
GCTTAAACACAAGAAGGAATCCTGGATTTTGCCCTCTCCTTAGCTCTTAGTCTCTTTGGTAGGAGTTTTGTTCCA
GAGGAGCTCTCCCCCTTGGATTTGAACTTGCTCTTTTTGTTGTTGTTGTTCTTTCTCTTCTTTTTCTTACCTCCC
ACTAAAGGGGTTCCAAATTATCCTGGTCTTTTTCTACCTTGTTGTGTTTCTATCTCGTCTTTACTTCCATCTGTT
TGTTTTTTTCTCCATCAGTGGGGGCCGAGTTGTTCCCCCAGCCTGCCAAATTTTGATCCTTCCCCTCTTTTGGCC
AAATCCTAGGGGGAAGAAATCCTAGTATGCCAAAAATATATGCTAAGCATAATTAAACTCCATGCGGGTCCATAA
CAGCCAAGAAGCCTGCAGGAGAAAGCCAAGGGCAGTTCCCTCCGCAGAACACCCCATGCGTGCTGAGAGGCGAGC
TCCTTGAAGAAGGGGCTGTTCTTCCAGGAGGCCTTATTTTGAACTGCCTCAGGACCCCACTGGAGAGCACAGCAT
GCCTTACTACTGGGTCATCCTTGGTCTATGTGCTCTGTACTGGAGGCTCTGTTCTGCCTCTTATCAGCCAGGTCA
GGGGCACACATGGCTTAAGTGACAAAGCCAGAGGAGAAGACAACCCTGACAGCATCACGCTGCATCCCATTGCTA
GCAGGATTGGCAACTCTTCAGACGGAGCTGCGCTTCCCTGCAGTCTAGCACCTCTAGGGCCTCTCCAGACTGTGC
CCTGGGAGCTCTGGGACTGAAAGGTTAAGAACATAAGGCAGGATCAGATGACTCTCTCCAAGAGGGCAGGGGAAT
TTTCTCTCCATGGGCCACAGGGGACAGGGCTGGGAGAAGAAATAGACTTGCACCTTATGTCATGTAAATAATTGA
TTTTCTAGTTCAAGAAGATAATATTGGTAGTGTGGGAATTGGAGGTAGGAAGGGGAGGAAGTCTGAGTAAGCCAG
TTGGCTTCTAAGCCAAAAGGATTCCTCTTTGTTTATCTCTGAGACAGTCCAACCTTGAGAATAGCTTTAAAAGGG
AAATTAATGCTGAGATGATAAAGTCCCCTTAAGCCAACAAACCCTCTGTAGCTATAGAATGAGTGCAGGTTTCTA
TTGGTGTGGACTCAGAGCAATTTACAAGAGCTGTTCATGCAGCCATCCATTTGTGCAAAATAGGGTAAGAAGATT
CAAGAGGATATTTATTACTTCCTCATACCACATGGCTTTTGATGATTCTGGATTCTAAACAACCCAGAATGGTCA
TTTCAGGCACAACGATACTACATTCGTGTGTGTCTGCTTTTAAACTTGGCTGGGCTATCAGACCCTATTCTCGGC
TCAGGTTTTGAGAAGCCATCAGCAAATGTGTACGTGCATGCTGTAGCTGCAGCCTGCATCCCTTCGCCTGCAGCC
TACTTTGGGGAAATAAAGTGCCTTACTGACTGTAGCCATTACAGTATCCAATGTCTTTTGACAGGTGCCTGTCCT
TGAAAAACAAAGTTTCTATTTTTATTTTTAATTGGTTTAGTTCTTAACTGCTGGCCAACTCTTACATCCCCAGCA
AATCATCGGGCCATTGGATTTTTTCCATTATGTTCATCACCCTTATATCATGTACCTCAGATCTCTCTCTCTCTC
CTCTCTCTCAGTTATATAGTTTCTTGTCTTGGACTTTTTTTTTCTTTTCTTTTTCTTTTTTTTTTTGCTTTAAAA
CAAGTGTGATGCCATATCAAGTCCATGTTATTCTCTCACAGTGTACTCTATAAGAGGTGTGGGTGTCTGTTTGGT
CAGGATGTTAGAAAGTGCTGATAAGTAGCATGATCAGTGTATGCGAAAAGGTTTTTAGGAAGTATGGCAAAAATG
TTGTATTGGCTATGATGGTGACATGATATAGTCAGCTGCCTTTTAAGAGGTCTTATCTGTTCAGTGTTAAGTGAT
TTAAAAAAATAATAACCTGTTTTCTGACTAGTTTAAAGATGGATTTGAAAATGGTTTTGAATGCAATTAGGTTAT
GCTATTTGGACAATAAACTCACCTTGACCT

FIGURE 269

MELLCHEVDPVRRAVRDRNLLRDDRVLQNLLTIEERYLPQCSYFKCVQKDIQPYMRRMVATWMLEVCEEQKCEEE
VFPLAMNYLDRFLAGVPTPKSHLQLLGAVCMFLASKLKETSPLTAEKLCIYTDNSIKPQELLEWELVVLGKLKWN
LAAVTPHDFIEHILRKLPQQREKLSLIRKHAQTFIALCATDFKFAMYPPSMIATGSVGAAICGLQQDEEVSSLTC
DALTELLAKITNTDVDCLKACQEQIEAVLLNSLQQYRQDQRDGSKSEDELDQASTPTDVRDIDL

FIGURE 270A

AGAGCGAGCAGGGGAGAGCGAGACCAGTTTTAAGGGGAGGACCGGTGCGAGTGAGGCAGCCCCGAGGCTCTGCTC
GCCCACCACCCAATCCTCGCCTCCCTTCTGCTCCACCTTCTCTCTCTGCCCTCACCTCTCCCCCGAAAACCCCCT
ATTTAGCCAAAGGAAGGAGGTCAGGGGAACGCTCTCCCCTCCCCTTCCAAAAAACAAAAACAGAAAAACCCTTTT
CCAGGCCGGGGAAAGCAGGAGGGAGAGGGGCCGCCGGGCTGGCCATGGAGCTGCTGTGCCACGAGGTGGACCCGG
TCCGCAGGGCCGTGCGGGACCGCAACCTGCTCCGAGACGACCGCGTCCTGCAGAACCTGCTCACCATCGAGGAGC
GCTACCTTCCGCAGTGCTCCTACTTCAAGTGCGTGCAGAAGGACATCCAACCCTACATGCGCAGAATGGTGGCCA
CCTGGATGCTGGAGGTCTGTGAGGAACAGAAGTGCGAAGAAGAGGTCTTCCCTCTGGCCATGAATTACCTGGACC
GTTTCTTGGCTGGGGTCCCGACTCCGAAGTCCCATCTGCAACTCCTGGGTGCTGTCTGCATGTTCCTGGCCTCCA
AACTCAAAGAGACCAGCCCGCTGACCGCGGAGAAGCTGTGCATTTACACCGACAACTCCATCAAGCCTCAGGAGC
TGCTGGAGTGGGAACTGGTGGTGCTGGGGAAGTTGAAGTGGAACCTGGCAGCTGTCACTCCTCATGACTTCATTG
AGCACATCTTGCGCAAGCTGCCCCAGCAGCGGGAGAAGCTGTCTCTGATCCGCAAGCATGCTCAGACCTTCATTG
CTCTGTGTGCCACCGACTTTAAGTTTGCCATGTACCCACCGTCGATGATCGCAACTGGAAGTGTGGGAGCAGCCA
TCTGTGGGCTCCAGCAGGATGAGGAAGTGAGCTCGCTCACTTGTGATGCCCTGACTGAGCTGCTGGCTAAGATCA
CCAACACAGACGTGGATTGTCTCAAAGCTTGCCAGGAGCAGATTGAGGCGGTGCTCCTCAATAGCCTGCAGCAGT
ACCGTCAGGACCAACGTGACGGATCCAAGTCGGAGGATGAACTGGACCAAGCCAGCACCCCTACAGACGTGCGGG
ATATCGACCTGTGAGGATGCCAGTTGGGCCGAAAGAGAGAGACGCGTCCATAATCTGGTCTCTTCTTCTTTCTGG
TTGTTTTTGTTCTTTGTGTTTTAGGGTGAAACTTAAAAAAAAAAATTCTGCCCCCACCTAGATCATATTTAAAGAT
CTTTTAGAAGTGAGAGAAAAAGGTCCTACGAAAACGGAATAATAAAAAGCATTTGGTGCCTATTTGAAGTACAGC
ATAAGGGAATCCCTTGTATATGCGAACAGTTATTGTTTGATTATGTAAAAGTAATAGTAAAATGCTTACAGGAAA
ACCTGCAGAGTAGTTAGAGAATATGTATGCCTGCAATATGGGAACAAATTAGAGGAGACTTTTTTTTTTCATGTT
ATGAGCTAGCACATACACCCCCTTGTAGTATAATTTCAAGGAACTGTGTACGCCATTTATGGCATGATTAGATTG
CAAAGCAATGAACTCAAGAAGGAATTGAAATAAGGAGGGACATGATGGGGAAGGAGTACAAAACAATCTCTCAAC
ATGATTGAACCATTTGGGATGGAGAAGCACCTTTGCTCTCAGCCACCTGTTACTAAGTCAGGAGTGTAGTTGGAT
CTCTACATTAATGTCCTCTTGCTGTCTACAGTAGCTGCTACCTAAAAAAAAGATGTTTTATTTTGCCAGTTGGACA
CAGGTGATTGGCTCCTGGGTTTCATGTTCTGTGACATCCTGCTTCTTCTTCCAAATGCAGTTCATTGCAGACACC
ACCATATTGCTATCTAATGGGGAAATGTAGCTATGGGCCATAACCAAAACTCACATGAAACGGAGGCAGATGGAG
ACCAAGGGTGGGATCCAGAATGGAGTCTTTTCTGTTATTGTATTTAAAAGGGTAATGTGGCCTTGGCATTTCTTC
TTAGAAAAAAACTAATTTTTGGTGCTGATTGGCATGTCTGGTTCACAGTTTAGCATTGTTATAAACCATTCCATT
CGAAAAGCACTTTGAAAAATTGTTCCCGAGCGATAGATGGGATGGTTTATGCAAGTCATGCTGAATACTCCTCCC
CTCTTCTCTTTTGCCCCCTCCCTTCCTGCCCCCAGTCTGGGTTACTCTTCGCTTCTGGTATCTGGCGTTCTTTGG
TACACAGTTCTGGTGTTCCTACCAGGACTCAAGAGACACCCCTTCCTGCTGACATTCCCATCACAACATTCCTCA
GACAAGCCTGTAAACTAAAATCTGTTACCATTCTGATGGCACAGAAGGATCTTAATTCCCATCTCTATACTTCTC
CTTTGGACATGGAAAGAAAAGTTATTGCTGGTGCAAAGATAGATGGCTGAACATCAGGGTGTGGCATTTTGTTCC
CTTTTCCGTTTTTTTTTTTTTTATTGTTGTTGTTAATTTTATTGCAAAGTTGTATTCAGCGTACTTGAATTTTTC
TTCCTCTCCACTTCTTAGAGGCATTCAGTTAGCAAAGAGGTTGGAGCAACAACTTTTTTTTTTTTTTTGCACAA
TTGTAATTGACAGGTAATGAAGCTATTTGTTAAAATATTTGCCTTTTTAAGTAAAAAAGAAAAATCAGAACAGGG
CTATTTGAAGAATTATTTTATACACAGATTCTGCCTTGTTTCATAGTATGAGGGTTGAAGACGGAAAACAATCTA
AGGGTCTCTCATTTTTTTAATTTTGTTTTGTTCAGTTTGGTTTTTTTTTTTTTTTGCGCTGCTAAGAAGCTAAAG
TCATCCATCCTTATTCACGTTGACAGTACCTAGCTGTAATGTTTCACAGAGTGTGCTGCTATTTTATAAACATTT
TTATAATATATTATTTTACTGCTTAAATTCCAAGTCCTGAAGTAGATGGTTGAGATATGAGTTCTTCGTACTGGA
AAAGCCCTTCCGTAGTTTGTTTTCTTCTGGTAGCATATTCATGGTTGTTTTTTTTTTTCTTTTTTGGTTTTTTGG
TTTTTTTTTTTTCCTCTGATCACATTCTTCAAAGACGGAGTATTCTTTACCTCAGGTTTACTGGACAAAATCAAT
AACTACAAAAGGCAATGATTCACGCTTTTGTTTTCATAATACCTCACAACCGTACAGTTTCTGCTTGGGAGCCCA
TTCGCATGAGGAATACAGAAGCAGTGTGAGCAGGGCTGACTCCCTCTCAGGTGGAAGGCAGGGCGGTCTCACTCC
CAGGGACCTTTTTGGTCATGGAGGCCATCGGGCTCCCAGTTAGACCCTGGTATCCTCATCATGATGGAAAAAATA
CATTGAACCAAGGGATCCTCCCTCCCCTTCAAGGCAGACGTTCAGTACAAACATTTATGCGGTAGGCTCAGATGT
CGTAATTTGCACTTAGGTACCAGGTGTCAGGAAACAGACTAAAAAGAATTCCACCAGGCTGTTTGGAGATCCTCA
TCTTGGAGCTTTTTCAAAAGCGGGGCTTCATCTGCAAAGGGCCCTTTCATCTTGAAGTTTTTCCCCTCCGTCTTT

FIGURE 270B

CCCCTCCCCTGGCATGGACACCTTGTGTTTAGGATCATCTCTGCAGGTTTCCTAGGTCTGAATCTGCGAGTAGAT
GAACCTGCAGCAAGCAGCGTTTATGGTGCTTCCTTCTCCCTCCTCTGTCTCAAACTGCGCAGGCAAGCACTATGC
AAGCCCAGGCCCTCTGCTGAGCGGTACTAAACGGTCGGGTTTTCAATCACACTGAATTGGCAGGATAAGAAAAAT
AGGTCAGATAAGTATGGGATGATAGTTGAAGGGAGGTGAAGAGGCTGCTTCTCTACAGAGGTGAAATTCCAGATG
AGTCAGTCTCTTGGGAAGTGTGTTTAGAAGGGTTCAGGACTTTGTGAGTTAGCATGACCCTAAAATTCTAGGGGA
TTTCTGGTGGGACAATGGGTGGTGAATTTTGAAGTTTTGGAGAGGGAAGTGGAGCAGCCAGCAAGTAAGCTAGCC
AGAGTTTTCTCAAGAGCCAGCTTTGCTCAGCACACTCTCCTGGGCCCCAAGGAGTCCCACGGAATGGGGAAAGTG
GGAACCCTGGAGTTCTTGGGAATCTTGGAGCCTAAAGAGAAACCGAGGTGCAAATTCATTTCATGGTGACTGACC
CTTGAGCTTAAACAGAAGCAGCAAATGAAAGAACCGGACAAATAAGGAAGGGCACAAGCCTACCCGACTCTATTT
ACAGTCTGTAACTTTCCACTCTTCCTGTAGTCCCGAGGCCCCTGGGTCCTTCTAGCTTTTCTCTTTCCCATCCTT
GGGGCCTTGTGTGATGATGGGTGTGGGGCTGCCGATGGGAAAGTCGGGGGTTGTTAGGCTTTTCTGCCTGCTCCT
GCTTAAACACAAGAAGGAATCCTGGATTTTGCCCTCTCCTTAGCTCTTAGTCTCTTTGGTAGGAGTTTTGTTCCA
GAGGAGCTCTCCCCCTTGGATTTGAACTTGCTCTTTTTGTTGTTGTTGTTCTTTCTCTTCTTTTTCTTACCTCCC
ACTAAAGGGGTTCCAAATTATCCTGGTCTTTTTCTACCTTGTTGTGTTTCTATCTCGTCTTTACTTCCATCTGTT
TGTTTTTTTCTCCATCAGTGGGGGCCGAGTTGTTCCCCCAGCCTGCCAAATTTTGATCCTTCCCCTCTTTTGGCC
AAATCCTAGGGGGAAGAAATCCTAGTATGCCAAAAATATATGCTAAGCATAATTAAACTCCATGCGGGTCCATAA
CAGCCAAGAAGCCTGCAGGAGAAAGCCAAGGGCAGTTCCCTCCGCAGAACACCCCATGCGTGCTGAGAGGCGAGC
TCCTTGAAGAAGGGGCTGTTCTTCCAGGAGGCCTTATTTTGAACTGCCTCAGGACCCCACTGGAGAGCACAGCAT
GCCTTACTACTGGGTCATCCTTGGTCTATGTGCTCTGTACTGGAGGCTCTGTTCTGCCTCTTATCAGCCAGGTCA
GGGGCACACATGGCTTAAGTGACAAAGCCAGAGGAGAAGACAACCCTGACAGCATCACGCTGCATCCCATTGCTA
GCAGGATTGGCAACTCTTCAGACGGAGCTGCGCTTCCCTGCAGTCTAGCACCTCTAGGGCCTCTCCAGACTGTGC
CCTGGGAGCTCTGGGACTGAAAGGTTAAGAACATAAGGCAGGATCAGATGACTCTCTCCAAGAGGGCAGGGGAAT
TTTCTCTCCATGGGCCACAGGGGACAGGGCTGGGAGAAGAAATAGACTTGCACCTTATGTCATGTAAATAATTGA
TTTTCTAGTTCAAGAAGATAATATTGGTAGTGTGGGAATTGGAGGTAGGAAGGGGAGGAAGTCTGAGTAAGCCAG
TTGGCTTCTAAGCCAAAAGGATTCCTCTTTGTTTATCTCTGAGACAGTCCAACCTTGAGAATAGCTTTAAAAGGG
AAATTAATGCTGAGATGATAAAGTCCCCTTAAGCCAACAAACCCTCTGTAGCTATAGAATGAGTGCAGGTTTCTA
TTGGTGTGGACTCAGAGCAATTTACAAGAGCTGTTCATGCAGCCATCCATTTGTGCAAAATAGGGTAAGAAGATT
CAAGAGGATATTTATTACTTCCTCATACCACATGGCTTTTGATGATTCTGGATTCTAAACAACCCAGAATGGTCA
TTTCAGGCACAACGATACTACATTCGTGTGTGTCTGCTTTTAAACTTGGCTGGGCTATCAGACCCTATTCTCGGC
TCAGGTTTTGAGAAGCCATCAGCAAATGTGTACGTGCATGCTGTAGCTGCAGCCTGCATCCCTTCGCCTGCAGCC
TACTTTGGGGAAATAAAGTGCCTTACTGACTGTAGCCATTACAGTATCCAATGTCTTTTGACAGGTGCCTGTCCT
TGAAAAACAAAGTTTCTATTTTTATTTTTAATTGGTTTAGTTCTTAACTGCTGGCCAACTCTTACATCCCCAGCA
AATCATCGGGCCATTGGATTTTTTCCATTATGTTCATCACCCTTATATCATGTACCTCAGATCTCTCTCTCTCTC
CTCTCTCTCAGTTATATAGTTTCTTGTCTTGGACTTTTTTTTTCTTTTCTTTTTCTTTTTTTTTTTGCTTTAAAA
CAAGTGTGATGCCATATCAAGTCCATGTTATTCTCTCACAGTGTACTCTATAAGAGGTGTGGGTGTCTGTTTGGT
CAGGATGTTAGAAAGTGCTGATAAGTAGCATGATCAGTGTATGCGAAAAGGTTTTTAGGAAGTATGGCAAAAATG
TTGTATTGGCTATGATGGTGACATGATATAGTCAGCTGCCTTTTAAGAGGTCTTATCTGTTCAGTGTTAAGTGAT
TTAAAAAAATAATAACCTGTTTTCTGACTAGTTTAAAGATGGATTTGAAAATGGTTTTGAATGCAATTAGGTTAT
GCTATTTGGACAATAAACTCACCTTGACCT

FIGURE 271

MELLCHEVDPVRRAVRDRNLLRDDRVLQNLLTIEERYLPQCSYFKCVQKDIQPYMRRMVATWMLEVCEEQKCEEE
VFPLAMNYLDRFLAGVPTPKSHLQLLGAVCMFLASKLKETSPLTAEKLCIYTDNSIKPQELLEWELVVLGKLKWN
LAAVTPHDFIEHILRKLPQQREKLSLIRKHAQTFIALCATDFKFAMYPPSMIATGSVGAAICGLQQDEEVSSLTC
DALTELLAKITNTDVDCLKACQEQIEAVLLNSLQQYRQDQRDGSKSEDELDQASTPTDVRDIDL

FIGURE 272

GCCACCGCTGTGGTGTCGGTGGGTCGGTTGGTTTTTGTCTCACCGTTGGTGTCCGTGCCGTTCAGTTGCCCGCCA
TGGCTGAGCTGGATCCGTTCGGCGCCCCTGCCGGCGCCCCTGGCGGTCCCGCGCTGGGGAACGGAGTGGCCGGCG
CCGGCGAAGAAGACCCGGCTGCGGCCTTCTTGGCGCAGCAAGAGAGCGAGATTGCGGGCATCGAGAACGACGAGG
CCTTCGCCATCCTGGACGGCGGCGCCCCCGGGCCCCAGCCGCACGGCGAGCCGCCGGGGGGTCCGGATGCTGTTG
ATGGAGTAATGAATGGTGAATACTACCAGGAAAGTAATGGTCCAACAGACAGTTATGCAGCTATTTCACAAGTGG
ATCGATTGCAGTCAGAGCCTGAAAGTATCCGTAAATGGAGAGAAGAACAAATGGAACGCTTGGAAGCCCTTGATG
CCAATTCTCGGAAGCAAGAAGCAGAGTGGAAAGAAAAGGCAATAAAGGAGCTAGAAGAATGGTATGCAAGACAGG
ACGAGCAGCTACAGAAAACAAAAGCAAACAACAGGGTGGCAGATGAAGCTTTCTACAAACAACCCTTCGCTGACG
TGATTGGTTATGTCACAAACATAAACCATCCTTGCTACAGCCTAGAACAGGCAGCAGAAGAAGCCTTTGTAAATG
ACATTGACGAGTCGTCCCCAGGCACTGAGTGGGAACGGGTGGCCCGGCTGTGTGACTTTAACCCCAAGTCTAGCA
AGCAGGCCAAAGATGTCTCCCGCATGCGCTCAGTCCTCATCTCCCTCAAGCAGGCCCCGCTGGTGCACTGAAGAG
CCACCCTGTGGAAACACTACATCTGCAATATCTTAATCCTACTCAGTGAAGCTCTTCACAGTCATTGGATTAATT
ATGTTGAGTTCTTTTGGACCAAACCTTTTTGTCTTTAGAGTTGTTCATTGTTTGTGATTGCATGTTTCCTTCCTT
CAACTGTGTTCTCCCTGGCATTCAGAGAGGAGGGAGAGGAGGAAGAGGAAGGGGAGGGAAGCTTCCCAAGAGTAG
CCTCAACCTGTGCTTCTGTGCATTATTCTGAGAATAAATTTCTGTTTCAAACTGT

FIGURE 273

MAELDPFGAPAGAPGGPALGNGVAGAGEEDPAAAFLAQQESEIAGIENDEAFAILDGGAPGPQPHGEPPGGPDAV
DGVMNGEYYQESNGPTDSYAAISQVDRLQSEPESIRKWREEQMERLEALDANSRKQEAEWKEKAIKELEEWYARQ
DEQLQKTKANNRVADEAFYKQPFADVIGYVTNINHPCYSLEQAAEEAFVNDIDESSPGTEWERVARLCDFNPKSS
KQAKDVSRMRSVLISLKQAPLVH

FIGURE 274

GTGCATGCCGTGGGTCTGACGGCTTGAGTAGCGCTAGGGAGAATCCCTGCAGGTAATATTTGACTTTTGCTTCAT
ATTAATCTGAGTGGAAAATAAAAGGGCCCTCTTCTCCTCTCGCTTCCCTGCCGGGCAGGCGCCATGGCGGAAGCC
TCGGCGACGGGCGCCTGCGGAGAGGCGATGGCAGCGGCGGAAGGCTCCTCGGGCCCGGCGGGCTTGACTCTGGGC
CGGAGCTTCTCGAACTACCGGCCCTTCGAGCCCCAGGCGTTGGGCCTCAGCCCGAGCTGGCGGCTGACGGGCTTC
TCCGGCATGAAGGGCTGAGGCTGCAAGGTCCCGCAGGAGGCGCTGCTCAAACTCCTGGCGGGACTGACGCGGCCG
GACGTGCGGCCCCCGCTGGGCCGGGGCCTGGTGGGTGGCCAGGAAGAGGCGTCCCAGGAAGCCGGCCTGCCGGCA
GGAGCGGGCCCCAGCCCCACCTTTCCAGCCCTGGGCATCGGGATGGACTCCTGCGTCATCCCCCTGAGGCACGGG
GGCCTGTCACTGGTGCAGACCACGGACTTCTTTTACCCCTTGGTAGAAGATCCCTACATGATGGGGCGCATAGCT
TGTGCCAACGTGCTGAGTGACCTCTACGCCATGGGGATTACTGAGTGTGACAACATGTTGATGTTACTCAGCGTC
AGCCAGAGTATGAGTGAGGAGGAACGCGAAAAGGTAACGCCACTCATGGTCAAAGGCTTTCGGGATGCGGCTGAG
GAAGGAGGGACGGCAGTGACCGGTGGGCAAACGGTGGTCAACCCTTGGATTATAATCGGTGGAGTTGCCACTGTA
GTATGCCAACCAAATGAGTTCATAATGCCGGACAGCGCCGTCGTTGGGGACGTGCTGGTGTTAACCAAACCGTTA
GGAACCCAGGTTGCTGTCAATGCCCACCAATGGCTGGATAATCCTGAAAGATGGAATAAAGTAAAGATGGTGGTC
TCCAGAGAAGAGGTGGAGCTGGCCTATCAGGAAGCCATGTTCAATATGGCTACCCTCAACAGAACTGCTGCAGGT
TTAATGCACACATTTAATGCCCATGCGGCCACAGATATCACAGGCTTTGGCATTCTAGGACACTCCCAGAACCTT
GCAAAACAACAAAGAAATGAAGTGTCCTTTGTTATTCATAATCTGCCAATAATTGCCAAGATGGCTGCCGTCAGC
AAGGCCAGTGGACGGTTTGGGCTTCTTCAAGGAACCTCAGCTGAAACCTCTGGGGGGATTACTGATTTGTCTGCCA
AGAGAACAGGCGGCTCGCTTTTGTTCTGAAATCAAATCCTCCAAGTACGGAGAGGGTCACCAAGCGTGGATCGTT
GGCATTGTGGAAAAGGGAAACCGAACGGCCCGGATCATTGACAAGCCGCGAGTTATTGAAGTCCTGCCTCGTGGG
GCCACAGCTGCTGTTCTTGCTCCTGACAGTTCAAATGCCTCCTCTGAGCCTAGCTCGTGAGATGAAAGAACAGAA
GTTGTTTGGACCTTAGAGCCATTGTCCACAATCACGGATGGTTCTCAAGAGTTGATTGTAAGAAATTTCCAAAGA
AGGCTGCCTGCATAGTGGTTCCGGCTGCCCTTTCTAGGTGATTGGAATCAGCCCATCTAAAGCAGTCTTTATATG
CATTCCGAGGCCAGAGTAACATTTTGAACTTTGGGGGGATATTTGTTCATCACTTGGGTAGAAGAGGAGCAAAAA
TACTTCTGTTTTCTCTTGCCAAAGTAAGATGAAGCTATTCCAGGTTGAGGGATTTTTCTTTGCACGGGGTTGATT
AATTTCTGCACAGGGAGTGAGATTATTAAAGTAACACACACACAAAGTAAATTGCAAAATGAAAAAAATTAGAAG
CAAATGAGTTTTGGACCAATATTGTTGATAAATCTAAATTGTTAAGAGAGATCTTATAATGCAACATCAAATTCT
TTATTCAATTTTACTGAAGTACTGGCTCTTTCCTGCTCTGGACAAGAATTGAGCAACTTGTCTGATGACTGGGAA
AGGAGGACCTGCAACCATCTGACTTGGTCTCTGTTAATGACGTCTCTCCCTCTAAACCCCATTAAGGACTGGGAG
AGGCAGAGCAAGCCTCAGAGCCCAGGCCTCAGTGGTCATTAAGATGTTAAGTCTTTTGCGGCAGATTCCTGGTGA
TTTGATCAATAAAGAGTAATTTCTTGCTAAATAAATAAAAGAAACCTTGTTGAAAAACTAAAAAAAAAAAAAAAA
AAA

FIGURE 275

MAEASATGACGEAMAAAEGSSGPAGLTLGRSFSNYRPFEPQALGLSPSWRLTGFSGMKGXGCKVPQEALLKLLAG
LTRPDVRPPLGRGLVGGQEEASQEAGLPAGAGPSPTFPALGIGMDSCVIPLRHGGLSLVQTTDFFYPLVEDPYMM
GRIACANVLSDLYAMGITECDNMLMLLSVSQSMSEEEREKVTPLMVKGFRDAAEEGGTAVTGGQTVVNPWIIIGG
VATVVCQPNEFIMPDSAVVGDVLVLTKPLGTQVAVNAHQWLDNPERWNKVKMVVSREEVELAYQEAMFNMATLNR
TAAGLMHTFNAHAATDITGFGILGHSQNLAKQQRNEVSFVIHNLPIIAKMAAVSKASGRFGLLQGTSAETSGGLL
ICLPREQAARFCSEIKSSKYGEGHQAWIVGIVEKGNRTARIIDKPRVIEVLPRGATAAVLAPDSSNASSEPSS

FIGURE 276A

GAGAGAAGCCTGATATGTAACCCAGGCGGGTGGGAGCCTCAGTCTGTCGGGCTGAGGTCTGGCATCTACAAAGCC
TCTTGGCCGTGTTCTGAACTTGAAGCCTGGAGGAGTTCTCTGCTCAGCACAGCCAAGGAACAGAATTAGAAGAAA
AGGAACCCTGGCCTGAGGCAGGTGACAAACATTACCACCCCAGCTGTGCACGATGCAGCAGATGCAACCAGATGT
TCACAGAAGGAGAGGAAATGTATCTTCAAGGCTCCACCGTTTGGCATCCCGACTGTAAGCAATCTACGAAGACCG
AGGAAAAGCTGCGGCCTACCAGGACATCCTCGGAAAGTATTTATTCTAGGCCAGGCTCCAGTATTCCTGGCTCAC
CAGGTCATACTATCTATGCAAAAGTAGACAATGAGATCCTGGATTACAAGGATTTAGCAGCCATTCCGAAGGTCA
AGGCAATTTATGACATTGAACGTCCAGATCTTATTACCTATGAGCCTTTCTACACTTCGGGCTATGATGACAAAC
AGGAGAGACAGAGCCTTGGAGAGTCTCCGAGGACTTTGTCTCCTACTCCATCAGCAGAAGGGTACCAGGATGTTC
GGGATCGGATGATCCATCGGTCCACGAGCCAGGGCTCCATCAACTCCCCTGTGTACAGCCGCCACAGCTACACTC
CAACCACGTCCCGCTCTCCCCAGCATTTCCACAGACCTGGCAATGAGCCGTCCAGCGGCCGGAACTCCCCTCTCC
CTTACCGGCCAGACAGCCGCCCTCTAACTCCAACTTACGCTCAGGCCCCTAAACATTTCCATGTTCCAGATCAAG
GAATCAACATTTACCGAAAGCCACCCATCTACAAACAGCATGCTGCCTTGGCAGCCCAGAGCAAGTCCTCAGAAG
ATATCATCAAGTTTTCCAAGTTCCCAGCAGCCCAGGCACCAGACCCCAGCGAGACACCAGAGATTGAGACGGACC
ACTGGCCTGGTCCCCCCTCATTTGCTGTCATAGGACCTGACATGAAACGCAGATCTAGTGGCAGAGAGGAAGATG
ATGAGGAACTTCTGAGACGTCGGCAGCTTCAAGAAGAGCAATTAATGAAGCTTAACTCAGGCCTGGGACAGTTGA
TCTTGAAAGAAGAGATGGAGAAAGAGAGCCGGGAAAGGTCATCTCTGTTAGCCAGTCGCTACGATTCTCCCATCA
ACTCAGCTTCACATATTCCATCATCTAAAACTGCATCTCTCCCTGGCTATGGAAGAAATGGGCTTCACCGGCCTG
TTTCTACCGACTTCGCTCAGTATAACAGCTATGGGGATGTCAGCGGGGGAGTGCGAGATTACCAGACACTCCCAG
ATGGCCACATGCCTGCAATGAGAATGGACCGAGGAGTGTCTATGCCCAACATGTTGGAACCAAAGATATTTCCAT
ATGAAATGCTCATGGTGACCAACAGAGGGCGAAACAAAATCCTCAGAGAGGTGGACAGAACCAGGCTGGAGCGCC
ACTTAGCCCCTGAAGTGTTTCGGGAAATCTTTGGAATGTCCATACAGGAGTTTGACAGGTTACCTCTTTGGAGAC
GCAACGACATGAAGAAAAAAGCAAAACTCTTCTAAGTCCCACTCGTGAATGGCAATTAGAGAAAGGACTGACAGT
GGCGGTGCCCCATAGGATGTCATATTGAGGCCCAAACTTGATTGGAGAATTTGCAAACTACCGTCGCTCAGCAAC
ACCAAAAAGAGAAAGTCTGGTTAAAACACCATGAGTCAAATGTCGGGCCAGCCAACAGTAACACTTGCCAAGAAG
CATGGCGTAGAAATTTCTATGTTCCGAAACACAGAGTAGTGTCCACATGTGACCTTTTCACATTACCTTATGTAT
ACAACAGGAGCTGCGTTGTTTTCTTCTTTTTCTTTTCCTTTATCTGTTGTCCAACAACAGTGCTGACTGTCCGGA
TAAGAGCTGGCAAGTGCCCTTAGGATGCCGCATGGGAAAAATCGGTTATCATAATTTCAAAGTATAAATATATTT
ATTATGTAGCGCTGCGGCTAAGAAGGAAGAGTGAGGGGTCTGTCCATGGGGTGGCAGTGATTTCACACCCGCCTT
TCTTGAATGGCTTCGTGTTACTCAGCCGTGCCCTGGCAGGAATGGAACTCCATCAGGGAACAGGGCAGCTCTGTT
TGAATGGGGTGAAAAACAGCAAAATTAATTCTTAGCAAGCTCCTTGTTCTCTACTGTTCACCGGGACCTGGCTGG
CAAATGACTTAGCTATTAGTATATTTAAAAACTGTTCAAAAGCAAAAGAGAAGGAACAGGAATGAAAGGAAACCT
TCCCTTAACTCTTTCTGCTTCCCATAGCAGGTCTGGTTCCTGCTCCCCGCCTAGGACAGGAGCTGTCTGGAGCTC
CACCTTTGCAAAGAAAGGAAAAACACAAATTGCCCCCAGATTGGCCCAGTGGCATGCCATTAGGTGATTTTGCGT
AGGGGCCATATCATTCATGGCCAAAAAAAACCAAAAAGCAAAAAACAAAAACAAGTCCCATGTCCTACTGACTCT
AGTTCTTCCAGTCGTTATCCTCTGCTGTCTCTCTGGCATCCTATGAATCAGATCAAGCCCATGCTGTTGTTGGTT
TTTAAGGTTTCTTTCAATAATAGGCTAAGGAAAGACATGTTTTTCTCTTTTAAATCTCTGCAACTCCAAAGTAGA
CTCCTTCGAACGTATTTAATTTGGCCTTTTCAGCTTTCTTCTTGCCCAGCTCTGTCGAATTCATGGGTGTGTGTG
CACATGTTGGTTTCACTCACCCAGAGTAATTTTGTGAGCATGCATGTGCTTTTTAATTTCTGCTTGAATGTTTGT
CCTGCTGTGTTGCAGCTTCTAAAGACATTGTCACCGAGTGTGTGTGACTCAAAGATCAAGAGTGAGGCTAAACTG
CGACCCCAACATCACTTCCTTCATGGAAAGGTGTTGGCGCTGATGTAGCTCATGGAAGGATCAGACTGGGAACCA
CAGAGGAAGGATGAGGTGGGATGTGGAGGTCAGAGCATCTCACGAGAGTCCCTCAGGCTCTGCAACACTAGATTC
GAATATGAGCCTAGGGTTTCCCCAACACGTGCGTGCATATGAAACCACATCATGATTCCCGACGTGAGTTAGATG
AGGGAGAGTTTGTGTAACTCCACACCCAGGAGGGTAAGCCACTTTATTATCATGCTTTGGGGCTGTGCTTAAGAA
TTTAAGCTCTGTTTTAAAGCCGAAGAAGAAAACATTTGAATTTACCTTCATATGCCACTAAGAACAAAAGCTCTG
AAGTTCTTCCTGCTGGCACCAAATATTAGGATTACAAGCTGTCTCTCTGACACCAGTGGTAAAAAAGCAAGTAGA
ATAGTTTCTGAGTCTGTGTTGCAGCCTCTGACACGTGGCTCACTGCTGTCATTTGGGGGGTGGAATGAACAGTCA
CTGTTCTATAGCATCCTCCTGTGCTCTTACCTAAGGAATCTAAATTGTCCTAGCCTTCCATTGCTATGCACTGAA
TGAGGACTACTCTCGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTTGGATCTACTAAC

FIGURE 276B

ATGTTTAGCAAATGGCTCTGACAGGGTGGCCATGAGCAGATGAGACCAGCTCTTGCTTGGTTGGAAGCCACACTG
CAGTTTGCAGTTTAGCCTTTGGTGTCTCAGTGGCCTCTTGCTTATTCCATGCTTTTTCTATCCCATCCTCTCTCT
GTGCCCTCCTGCAATGGCAGCCTTGGCACAATGCCTGGGTGTCCTCATCCTTGCTTTACTCTGGAAAGTGTGGGG
ATGGAGAGGATGGTGCATTTCCAGTGCTTCCTTACCTGTCAATAACAATGGTGGCCACCTGGGTCCCAGCACTTG
GCTGGTGGAGAGATTTTTTTCATTATGGAGCTAATAAAGGGTCCCTACGTTTTACATTGATTAATGAATTATCAC
CCAGACATGTGCAGATGAAATGTCAATATAAGAAAAATCAAGGTATTTGGGAAACATGGGCATAATCAGGTAGTT
TTGCTAAAATTCCTCTTCCTTGGTCTACATAAAGAAGACATGGGTCTGTCATAGAATGGGGACATTAGACTGAAA
ACTGGGACAACCCCCTTCCTTATTTTATAGAGACTAGGAGTTAAGGGGCCTGCCTAAGATTGCAGTGATAAAGAA
CTGAACCCTAAATCAGCTCCCACTAATGAAACCCTGCTTTCCTTGTATCTTTTAAACTCAGTTCTGCATCCAACT
TGAGAAGAAAAAAAGCTTCTTTCCATATCAAGTACCATATGAGTTCATTTAAACTGCACCTTGCAGAAATGCATT
GCCAGAAAGCACCAGTAGCCTCCTATCTGCAAGCAGAGTAGTGCTCTGCTCTGGGGAGGGGTCATTGGAAACCAT
AATGCAGAGTGGGCCCCCTACTCCATTTCCCAGCAAAAGGCTCCAGCTGGAGGGATGGGTTGTGGGGCAACCTGG
TTCCTGCTAACTGCCAGATTGAATGTGTGGGCTAGAATGCCTGCGCATTTAGTTAAACTGGGCTCAGCATGCTTG
TCCTCAAAATGTCCATCCTGGTCACAGCACACAAGATGGCTATTGGTCTGCTTTTACCCTACCCTGTACTATACA
TGAAAATTCCAGTTATTAACACACTCAAACTGGTGGAGCTTGTTCACCCTAGGAAGGGGATTGTATATATGGCAG
GCTTCCCTGGTGCCGATGTAAAGGGCTACATTTGGGAACATTTGACTTCCTTGGGACTCTTAAGTGCATACTGAT
GGCATGAAGTAAAAGGGGCCTCAATGATGATAGGAAAATCAGTTCTTTTAAAATTTCTTCAAGAAAATCCAGGCT
ATCACATAGTCTTTCTGTGTGACTTATTAGGAGATAGGAAGAGCATTGGGAAACTTGCACAGCTAGCTATGCATC
TACATTTTGGTTTGGGGTTAGTTATGAAATGTTCTTAATATGACGTGTTCAATAACTTCACATAAACTTCCTGTT
CTCCAAAACCTCAAAGAGATAGAGTTAATGAGTTGTTGTTTTTTTTTAAATGGGGGTAGTTTTCTATCTGTCATG
GGCTCTAGCATCTACTCCGCTACCCAATTCTGTCATCTCCAAGCTGAGTTTCCTCTTCTGAGGCAGAGGCTGGAG
CAGTTCTTTTTCAGTTCTCATCCTCTCCATCCCAATCCAGTATATCAATCAACTCTAACTCGGAGACGTCTAGCT
GGCAATGTTTCTAAAACTTTCACTGGATTTCTTTAGACATTGAAGCAAACATTTTTTTCTAAGAATTGCTTCTCA
GATGATGATATCAAATGTATATGCTTTTGCAAGTTTGAAAAGTTCAAATTAACCACTTTTGACTAGGTAAGTCTT
TCTAAAAACCATTTAAAGCTAACTGGGTCTTAGCATCCTCCTGTGTATGGAAGAGACAGGTGACCGCTCCAGGTT
GGGTGCTCACAGAACCCTTTTCCTGACTCTCATGGAAGATGGTGGAAGGAAAATAGACTGTCTCATCAACCCTCC
TGTGTCCTCTGAAGCAATCTCAGTTTTTATTAACCACCTCTTCTGTGTTTCTGGTAGCTATTTAACCTGTATTTA
ATCTGTACTTCCTATGCCAGCCTCAATTTTATTTGATTTTTAAAATTATTCTCTTCTAACCAATGAAGTGTTTGT
CAGTATGCCCCAAAGCTTGCTCTTTTGTGCTCCCTTTTGAATAACTTTCTATCCAGAAAAAGAGATTATTTGGGA
CTTGAGATTTGCAGTGATACCAACTTATAGCAATGATGTACTTTAAGGGAACTACCCAACTATGTTGTGATAGAA
GAAAGAGAAACCTTCACTTTGGCATTTTTTTTAATCACTGTTTATTTTTCTGTTTGCGGCCCAGGAAGCAGTGGG
AGGTGGTGGCAGATATGCTTTGCATATGGATTGTTATGTTTTTATTTGGGCAAGTTTAATCATGGAAAACTCAAA
AAGAAGGGGGGAAATGGTCAGTTTAAGCCAAAAGAAACTTTCTAAACAATGTATAGGTACACAGCAAAATTAAAC
AAATCCAACAATTTCTGAAGCTTAGTGTAATTGAGTGGTGGTTGTTATTCAATAAAATTATTCCCAAAAGTGTTT
CTCCTAAGAGTGCAGTTCCCATGAGTCACTTCCTGAACCCATTGACCAAAGGTGGACAGAGACAATCCTGTAGAC
CTTGACATTCAGAAAGATGTGAGCTGCTTACTGATCATATATGCATACGTTTCTTTACAGCAGAGGAAACCATTG
TCCACAAAACTGATGTTCTTTTGGGGTTTTATGTACAGACTTGTCCAATCATGTGTGTGGTTCCTGCGAGTTGCT
GATGACTCCGCATTGAAGCTCTCTGAGTTCTTTGATTTTAAGTTGGGTTTATGGAATTTTTTCAAATGTTGGAAG
GCGTGTGGTTCTTCCTGCCCTCCCTCCCCTTTTGGAAATATGAAAGCAAATGTTTAGAAGAATTCCTTTTGAAAA
GCTGTGTCGTGTTCCCTGTGAAACTGAGCAGGTGTGTGTTGGCGCGCTAAGTGCCACATGCTTGTGTGTAGAGGA
GGAGGTGGCCCTGCCGGCTCCGCGCTGCTGTGCCTGTGATCCCTACCTGCTCCCCGCTCCTGTTGCCAGCAGCAC
TCACTGCACTCCTTTGTCATATACTCTGCATCACTGTCATACTCACAACTTCGTGAATAAAGTTGTGTGCTTTAT
TCGTC

FIGURE 277

MFTEGEEMYLQGSTVWHPDCKQSTKTEEKLRPTRTSSESIYSRPGSSIPGSPGHTIYAKVDNEILDYKDLAAIPK
VKAIYDIERPDLITYEPFYTSGYDDKQERQSLGESPRTLSPTPSAEGYQDVRDRMIHRSTSQGSINSPVYSRHSY
TPTTSRSPQHFHRPGNEPSSGRNSPLPYRPDSRPLTPTYAQAPKHFHVPDQGINIYRKPPIYKQHAALAAQSKSS
EDIIKFSKFPAAQAPDPSETPEIETDHWPGPPSFAVIGPDMKRRSSGREEDDEELLRRRQLQEEQLMKLNSGLGQ
LILKEEMEKESRERSSLLASRYDSPINSASHIPSSKTASLPGYGRNGLHRPVSTDFAQYNSYGDVSGGVRDYQTL
PDGHMPAMRMDRGVSMPNMLEPKIFPYEMLMVTNRGRNKILREVDRTRLERHLAPEVFREIFGMSIQEFDRLPLW
RRNDMKKKAKLF

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FIGURE 278

AGTACCGGGTACGCAGGGGTGCCTCAACCACACTCCGTCCACGGACTCTCCGTTATTTTAGGAGGTCCCTGGCCA
AAGATTTATTTCTCTTGACAACCAAGGGCCTCCGTCTGGATTTCCAAGGAAGAATTTCCTCTGAAGCACCGGAAC
TTGCTACTACCAGCACC**ATG**CCCTACCAATATCCAGCACTGACCCCGGAGCAGAAGAAGGAGCTGTCTGACATCG
CTCACCGCATCGTGGCACCTGGCAAGGGCATCCTGGCTGCAGATGAGTCCACTGGGAGCATTGCCAAGCGGCTGC
AGTCCATTGGCACCGAGAACACCGAGGAGAACCGGCGCTTCTACCGCCAGCTGCTGCTGACAGCTGACGACCGCG
TGAACCCCTGCATTGGGGGTGTCATCCTCTTCCATGAGACACTCTACCAGAAGGCGGATGATGGGCGTCCCTTCC
CCCAAGTTATCAAATCCAAGGGCGGTGTTGTGGGCATCAAGGTAGACAAGGGCGTGGTCCCCCTGGCAGGGACAA
ATGGCGAGACTACCACCCAAGGGTTGGATGGGCTGTCTGAGCGCTGTGCCCAGTACAAGAAGGACGGAGCTGACT
TCGCCAAGTGGCGTTGTGTGCTGAAGATTGGGGAACACACCCCCTCAGCCCTCGCCATCATGGAAAATGCCAATG
TTCTGGCCCGTTATGCCAGTATCTGCCAGCAGAATGGCATTGTGCCCATCGTGGAGCCTGAGATCCTCCCTGATG
GGGACCATGACTTGAAGCGCTGCCAGTATGTGACCGAGAAGGTGCTGGCTGCTGTCTACAAGGCTCTGAGTGACC
ACCACATCTACCTGGAAGGCACCTTGCTGAAGCCCAACATGGTCACCCCAGGCCATGCTTGCACTCAGAAGTTTT
CTCATGAGGAGATTGCCATGGCGACCGTCACAGCGCTGCGCCGCACAGTGCCCCCCGCTGTCACTGGGATCACCT
TCCTGTCTGGAGGCCAGAGTGAGGAGGAGGCGTCCATCAACCTCAATGCCATTAACAAGTGCCCCCTGCTGAAGC
CCTGGGCCCTGACCTTCTCCTACGGCCGAGCCCTGCAGGCCTCTGCCCTGAAGGCCTGGGGCGGGAAGAAGGAGA
ACCTGAAGGCTGCGCAGGAGGAGTATGTCAAGCGAGCCCTGGCCAACAGCCTTGCCTGTCAAGGAAAGTACACTC
CGAGCGGTCAGGCTGGGGCTGCTGCCAGCGAGTCCCTCTTCGTCTCTAACCACGCCTAT**TAA**GCGGAGGTGTTCC
CAGGCTGCCCCCAACAACTCCAGGCCCTGCCCCCTCCCACTCTTGAAGAGGAGGCCGCCTCCTCGGGGCTCCAGG
CTGGCTTGCCCGCGCTCTTTCTTCCCTCGTGACAGTGGTGTGTGGTGTCGTCTGTGAATGCTAAGTCCATCACCC
TTTCCGGCACACTGCCAAATAAACAGCTATTTAAGGGGG

FIGURE 279

MPYQYPALTPEQKKELSDIAHRIVAPGKGILAADESTGSIAKRLQSIGTENTEENRRFYRQLLLTADDRVNPCIG
GVILFHETLYQKADDGRPFPQVIKSKGGVVGIKVDKGVVPLAGTNGETTTQGLDGLSERCAQYKKDGADFAKWRC
VLKIGEHTPSALAIMENANVLARYASICQQNGIVPIVEPEILPDGDHDLKRCQYVTEKVLAAVYKALSDHHIYLE
GTLLKPNMVTPGHACTQKFSHEEIAMATVTALRRTVPPAVTGITFLSGGQSEEEASINLNAINKCPLLKPWALTF
SYGRALQASALKAWGGKKENLKAAQEEYVKRALANSLACQGKYTPSGQAGAAASESLFVSNHAY

FIGURE 280

CTGACTCTCTGAGGCTCATTTTGCAGTTGTTGAAATTGTCCCCGCAGTTTTCAATCATGTCTGAACCAATCAGAG
TCCTTGTGACTGGAGCAGCTGGTCAAATTGCATATTCACTGCTGTACAGTATTGGAAATGGATCTGTCTTTGGTA
AAGATCAGCCTATAATTCTTGTGCTGTTGGATATCACCCCCATGATGGGTGTCCTGGACGGTGTCCTAATGGAAC
TGCAAGACTGTGCCCTTCCCCTCCTGAAAGATGTCATCGCAACAGATAAAGAAGACGTTGCCTTCAAAGACCTGG
ATGTGGCCATTCTTGTGGGCTCCATGCCAAGAAGGGAAGGCATGGAGAGAAAAGATTTACTGAAAGCAAATGTGA
AAATCTTCAAATCCCAGGGTGCAGCCTTAGATAAATACGCCAAGAAGTCAGTTAAGGTTATTGTTGTGGGTAATC
CAGCCAATACCAACTGCCTGACTGCTTCCAAGTCAGCTCCATCCATCCCCAAGGAGAACTTCAGTTGCTTGACTC
GTTTGGATCACAACCGAGCTAAAGCTCAAATTGCTCTTAAACTTGGTGTGACTGCTAATGATGTAAAGAATGTCA
TTATCTGGGGAAACCATTCCTCGACTCAGTATCCAGATGTCAACCATGCCAAGGTGAAATTGCAAGGAAAGGAAG
TTGGTGTTTATGAAGCTCTGAAAGATGACAGCTGGCTCAAGGGAGAATTTGTCACGACTGTGCAGCAGCGTGGCG
CTGCTGTCATCAAGGCTCGAAAACTATCCAGTGCCATGTCTGCTGCAAAAGCCATCTGTGACCACGTCAGGGACA
TCTGGTTTGGAACCCCAGAGGGAGAGTTTGTGTCCATGGGTGTTATCTCTGATGGCAACTCCTATGGTGTTCCTG
ATGATCTGCTCTACTCATTCCCTGTTGTAATCAAGAATAAGACCTGGAAGTTTGTTGAAGGTCTCCCTATTAATG
ATTTCTCACGTGAGAAGATGGATCTTACTGCAAAGGAACTGACAGAAGAAAAAGAAAGTGCTTTTGAATTTCTTT
CCTCTGCCTGACTAGACAATGATGTTACTAAATGCTTCAAAGCTGAAGAATCTAAATGTCGTCTTTGACTCAAGT
ACCAAATAATAATAATGCTATACTTAAATTACTTGTGAAAAACAACACATTTTAAAGATTACGTGCTTCTTGGTA
CAGGTTTGTGAATGACAGTTTATCGTCATGCTGTTAGTGTGCATTCTAAATAAATATATATTCAAATG

FIGURE 281

MSEPIRVLVTGAAGQIAYSLLYSIGNGSVFGKDQPIILVLLDITPMMGVLDGVLMELQDCALPLLKDVIATDKED
VAFKDLDVAILVGSMPRREGMERKDLLKANVKIFKSQGAALDKYAKKSVKVIVVGNPANTNCLTASKSAPSIPKE
NFSCLTRLDHNRAKAQIALKLGVTANDVKNVIIWGNHSSTQYPDVNHAKVKLQGKEVGVYEALKDDSWLKGEFVT
TVQQRGAAVIKARKLSSAMSAAKAICDHVRDIWFGTPEGEFVSMGVISDGNSYGVPDDLLYSFPVVIKNKTWKFV
EGLPINDFSREKMDLTAKELTEEKESAFEFLSSA

FIGURE 282

GCCACGTGTCCGGCTCGGAGCCCACGGCTGTCCTCCCGGTCCGCGCCGCTGCGGTTGCTGCTGGGCTAACGGGCT
CCGATCCAGCGAGCGCTGCGTCCTCGAGTCCGCCCGTGCGGGCGCAGGGACCCGAGGCCTCCGCTGCGGCTGGAT
TCTGCTGCGAACCGGAGACCATGGCCAAACCAGCACAGGGTGCCAAGTACCGGGGCTCCATCCATGACTTCCCAG
GCTTTGACCCCAACCAGGATGCCGAGGCTCTGTACACTGCCATGAAGGGCTTTGGCAGTGACAAGGAGGCCATAC
TGGACATAATCACCTCACGGAGCAACAGGCAGAGGCAGGAGGTCTGCCAGAGCTACAAGTCCCTCTACGGCAAGG
ACCTCATTGCTGATTTAAAGTATGAATTGACGGGCAAGTTTGAACGGTTGATTGTGGGCCTGATGAGGCCACCTG
CCTATTGTGATGCCAAAGAAATTAAAGATGCCATCTCGGGCATTGGCACTGATGAGAAGTGCCTCATTGAGATCT
TGGCTTCCCGGACCAATGAGCAGATGCACCAGCTGGTGGCAGCATACAAAGATGCCTACGAGCGGGACCTGGAGG
CTGACATCATCGGCGACACCTCTGGCCACTTCCAGAAGATGCTTGTGGTCCTGCTCCAGGGAACCAGGGAGGAGG
ATGACGTAGTGAGCGAGGACCTGGTACAACAGGATGTCCAGGACCTATACGAGGCAGGGGAACTGAAATGGGGAA
CAGATGAAGCCCAGTTCATTTACATCTTGGGAAATCGCAGCAAGCAGCATCTTCGGTTGGTGTTCGATGAGTATC
TGAAGACCACAGGGAAGCCGATGAAGGCCAGCATCCGAGGGGAGCTGTCTGGGGACTTTGAGAAGCTAATGCTGG
CCGTAGTGAAGTGTATCCGGAGCACCCCGGAATATTTTGCTGAAAGGCTCTTCAAGGCTATGAAGGGCCTGGGGA
CTCGGGACACACCCTGATCCGCATCATGGTCTCCCGTAGTGAGTTGGACATGCTCGACATTCGGGAGATCTTCC
GGACCAAGTATGAGAAGTCCCTCTACAGCATGATCAAGAATGACACCTCTGGCGAGTACAAGAAGACTCTGCTGA
AGCTGTCTGGGGGAGATGATGATGCTGCTGGCCAGTTCTTCCCGGAGGCAGCGCAGGTGGCCTATCAGATGTGGG
AACTTAGTGCAGTGGCCCGAGTAGAGCTGAAGGGAACTGTGCGCCCAGCCAATGACTTCAACCCTGACGCAGATG
CCAAAGCGCTGCGGAAAGCCATGAAGGGACTCGGGACTGACGAAGACACAATCATCGATATCATCACGCACCGCA
GCAATGTCCAGCGGCAGCAGATCCGGCAGACCTTCAAGTCTCACTTTGGCCGGGACTTAATGACTGACCTGAAGT
CTGAGATCTCTGGAGACCTGGCAAGGCTGATTCTGGGGCTCATGATGCCACCGGCCCATTACGATGCCAAGCAGT
TGAAGAAGGCCATGGAGGGAGCCGGCACAGATGAAAAGGCTCTTATTGAAATCCTGGCCACTCGGACCAATGCTG
AAATCCGGGCCATCAATGAGGCCTATAAGGAGGACTATCACAAGTCCCTGGAGGATGCTCTGAGCTCAGACACAT
CTGGCCACTTCAGGAGGATCCTCATTTCTCTGGCCACGGGGCATCGTGAGGAGGGAGGAGAAAACCTGGACCAGG
CACGGGAAGATGCCCAGGAAATAGCAGACACACCTAGTGGAGACAAAACTTCCTTGGAGACACGTTTCATGACGA
TCCTGTGTACCCGGACGTATCCGCACCTCCGGAGAGTCTTCCAGGAGTTCATCAAGATGACCAACTATGACGTGG
AGCACACCATCAAGAAGGAGATGTCTGGGGATGTCAGGGATGCATTTGTGGCCATTGTTCAAAGTGTCAAGAACA
AGCCTCTCTTCTTTGCCGACAAACTTTACAAATCCATGAAGGGTGCTGGCACAGATGAGAAGACTCTGACCAGGA
TCATGGTATCCCGCAGTGAGATTGACCTGCTCAACATCCGGAGGGAATTCATTGAGAAATATGACAAGTCTCTCC
ACCAAGCCATTGAGGGTGACACCTCCGGAGACTTCCTGAAGGCCTTGCTGGCTCTCTGTGGTGGTGAGGACTAGG
GCCACAGCTTTGGCGGGCACTTCTGCCAAGAAATGGTTATCAGCACCAGCCGCCATGGCCAAGCCTGATTGTTCC
AGCTCCAGAGACTAAGGAAGGGGCAGGGGTGGGGGGAGGGGTTGGGTTGGGCTCTTATCTTCATGGAGCTTAGGA
AACGCTCCCACTCCCACGGGCCATCGAGGGCCAGCACGGCTGAGCGGTGAAAAACCGTAGCCATAGATCCTGTCC
ACCTCCACTCCCCTCTGACCCTCAGGCTTTCCCAGCTTCCTCCCCTTGCTACAGCCTCTGCCCTGGTTTGGCTAT
GTCAGATCCAATAAACATCCTGAACCTCTGTCTGT

FIGURE 283

MAKPAQGAKYRGSIHDFPGFDPNQDAEALYTAMKGFGSDKEAILDIITSRSNRQRQEVCQSYKSLYGKDLIADLK
YELTGKFERLIVGLMRPPAYCDAKEIKDAISGIGTDEKCLIEILASRTNEQMHQLVAAYKDAYERDLEADIIGDT
SGHFQKMLVVLLQGTREEDDVVSEDLVQQDVQDLYEAGELKWGTDEAQFIYILGNRSKQHLRLVFDEYLKTTGKP
MKASIRGELSGDFEKLMLAVVKCIRSTPEYFAERLFKAMKGLGTRDNTLIRIMVSRSELDMLDIREIFRTKYEKS
LYSMIKNDTSGEYKKTLLKLSGGDDDAAGQFFPEAAQVAYQMWELSAVARVELKGTVRPANDFNPDADAKALRKA
MKGLGTDEDTIIDIITHRSNVQRQQIRQTFKSHFGRDLMTDLKSEISGDLARLILGLMMPPAHYDAKQLKKAMEG
AGTDEKALIEILATRTNAEIRAINEAYKEDYHKSLEDALSSDTSGHFRRILISLATGHREEGGENLDQAREDAQE
IADTPSGDKTSLETRFMTILCTRTYPHLRRVFQEFIKMTNYDVEHTIKKEMSGDVRDAFVAIVQSVKNKPLFFAD
KLYKSMKGAGTDEKTLTRIMVSRSEIDLLNIRREFIEKYDKSLHQAIEGDTSGDFLKALLALCGGED

FIGURE 284A

CACGAGGCAGCACTCTCTTCGTCGCTTCGGCCAGTGTGTCGGGCTGGGCCCTGACAAGCCACCTGAGGAGAGGCT
CGGAGCCGGGCCCGGACCCCGGCGATTGCCGCCCGCTTCTCTCTAGTCTCACGAGGGGTTTCCCGCCTCGCACCC
CCACCTCTGGACTTGCCTTTCCTTCTCTTCTCCGCGTGTGGAGGGAGCCAGCGCTTAGGCCGGAGCGAGCCTGGG
GGCCGCCCGCCGTGAAGACATCGCGGGGACCGATTCACCATGGAGGGCGCCGGCGGCGCGAACGACAAGAAAAAG
ATAAGTTCTGAACGTCGAAAAGAAAAGTCTCGAGATGCAGCCAGATCTCGGCGAAGTAAAGAATCTGAAGTTTTT
TATGAGCTTGCTCATCAGTTGCCACTTCCACATAATGTGAGTTCGCATCTTGATAAGGCCTCTGTGATGAGGCTT
ACCATCAGCTATTTGCGTGTGAGGAAACTTCTGGATGCTGGTGATTTGGATATTGAAGATGACATGAAAGCACAG
ATGAATTGCTTTTATTTGAAAGCCTTGGATGGTTTTGTTATGGTTCTCACAGATGATGGTGACATGATTTACATT
TCTGATAATGTGAACAAATACATGGGATTAACTCAGTTTGAACTAACTGGACACAGTGTGTTTGATTTTACTCAT
CCATGTGACCATGAGGAAATGAGAGAAATGCTTACACACAGAAATGGCCTTGTGAAAAAGGGTAAAGAACAAAAC
ACACAGCGAAGCTTTTTTCTCAGAATGAAGTGTACCCTAACTAGCCGAGGAAGAACTATGAACATAAAGTCTGCA
ACATGGAAGGTATTGCACTGCACAGGCCACATTCACGTATATGATACCAACAGTAACCAACCTCAGTGTGGGTAT
AAGAAACCACCTATGACCTGCTTGGTGCTGATTTGTGAACCCATTCCTCACCCATCAAATATTGAAATTCCTTTA
GATAGCAAGACTTTCCTCAGTCGACACAGCCTGGATATGAAATTTTCTTATTGTGATGAAAGAATTACCGAATTG
ATGGGATATGAGCCAGAAGAACTTTTAGGCCGCTCAATTTATGAATATTATCATGCTTTGGACTCTGATCATCTG
ACCAAAACTCATCATGATATGTTTACTAAAGGACAAGTCACCACAGGACAGTACAGGATGCTTGCCAAAAGAGGT
GGATATGTCTGGGTTGAAACTCAAGCAACTGTCATATATAACACCAAGAATTCTCAACCACAGTGCATTGTATGT
GTGAATTACGTTGTGAGTGGTATTATTCAGCACGACTTGATTTTCTCCCTTCAACAAACAGAATGTGTCCTTAAA
CCGGTTGAATCTTCAGATATGAAAATGACTCAGCTATTCACCAAAGTTGAATCAGAAGATACAAGTAGCCTCTTT
GACAAACTTAAGAAGGAACCTGATGCTTTAACTTTGCTGGCCCCAGCCGCTGGAGACACAATCATATCTTTAGAT
TTTGGCAGCAACGACACAGAAACTGATGACCAGCAACTTGAGGAAGTACCATTATATAATGATGTAATGCTCCCC
TCACCCAACGAAAAATTACAGAATATAAATTTGGCAATGTCTCCATTACCCACCGCTGAAACGCCAAAGCCACTT
CGAAGTAGTGCTGACCCTGCACTCAATCAAGAAGTTGCATTAAAATTAGAACCAAATCCAGAGTCACTGGAACTT
TCTTTTACCATGCCCCAGATTCAGGATCAGACACCTAGTCCTTCCGATGGAAGCACTAGACAAAGTTCACCTGAG
CCTAATAGTCCCAGTGAATATTGTTTTTATGTGGATAGTGATATGGTCAATGAATTCAAGTTGGAATTGGTAGAA
AAACTTTTTGCTGAAGACACAGAAGCAAAGAACCCATTTTCTACTCAGGACACAGATTTAGACTTGGAGATGTTA
GCTCCCTATATCCCAATGGATGATGACTTCCAGTTACGTTCCTTCGATCAGTTGTCACCATTAGAAAGCAGTTCC
GCAAGCCCTGAAAGCGCAAGTCCTCAAAGCACAGTTACAGTATTCCAGCAGACTCAAATACAAGAACCTACTGCT
AATGCCACCACTACCACTGCCACCACTGATGAATTAAAAACAGTGACAAAAGACCGTATGGAAGACATTAAAATA
TTGATTGCATCTCCATCTCCTACCCACATACATAAAGAAACTACTAGTGCCACATCATCACCATATAGAGATACT
CAAAGTCGGACAGCCTCACCAAACAGAGCAGGAAAAGGAGTCATAGAACAGACAGAAAAATCTCATCCAAGAAGC
CCTAACGTGTTATCTGTCGCTTTGAGTCAAAGAACTACAGTTCCTGAGGAAGAACTAAATCCAAAGATACTAGCT
TTGCAGAATGCTCAGAGAAAGCGAAAAATGGAACATGATGGTTCACTTTTTCAAGCAGTAGGAATTGGAACATTA
TTACAGCAGCCAGACGATCATGCAGCTACTACATCACTTTCTTGGAAACGTGTAAAAGGATGCAAATCTAGTGAA
CAGAATGGAATGGAGCAAAAGACAATTATTTTAATACCCTCTGATTTAGCATGTAGACTGCTGGGGCAATCAATG
GATGAAAGTGGATTACCACAGCTGACCAGTTATGATTGTGAAGTTAATGCTCCTATACAAGGCAGCAGAAACCTA
CTGCAGGGTGAAGAATTACTCAGAGCTTTGGATCAAGTTAACTGAGCTTTTTCTTAATTTCATTCCTTTTTTTGG
ACACTGGTGGCTCACTACCTAAAGCAGTCTATTTATATTTTCTACATCTAATTTTAGAAGCCTGGCTACAATACT
GCACAAACTTGGTTAGTTCAATTTTTGATCCCCTTTCTACTTAATTTACATTAATGCTCTTTTTTAGTATGTTCT
TTAATGCTGGATCACAGACAGCTCATTTTCTCAGTTTTTTGGTATTTAAACCATTGCATTGCAGTAGCATCATTT
TAAAAAATGCACCTTTTTATTTATTTATTTTTGGCTAGGGAGTTTATCCCTTTTTCGAATTATTTTTAAGAAGAT
GCCAATATAATTTTTGTAAGAAGGCAGTAACCTTTCATCATGATCATAGGCAGTTGAAAAATTTTTACACCTTTT
TTTTCACATTTTACATAAATAATAATGCTTTGCCAGCAGTACGTGGTAGCCACAATTGCACAATATATTTTCTTA
AAAAATACCAGCAGTTACTCATGGAATATATTCTGCGTTTATAAAACTAGTTTTTAAGAAGAAATTTTTTTTGGC
CTATGAAATTGTTAAACCTGGAACATGACATTGTTAATCATATAATAATGATTCTTAAATGCTGTATGGTTTATT
ATTTAAATGGGTAAAGCCATTTACATAATATAGAAAGATATGCATATATCTAGAAGGTATGTGGCATTTATTTGG
ATAAAATTCTCAATTCAGAGAAATCATCTGATGTTTCTATAGTCACTTTGCCAGCTCAAAAGAAAACAATACCCT
ATGTAGTTGTGGAAGTTTATGCTAATATTGTGTAACTGATATTAAACCTAAATGTTCTGCCTACCCTGTTGGTAT

FIGURE 284B

AAAGATATTTTGAGCAGACTGTAAACAAGAAAAAAAAAATCATGCATTCTTAGCAAAATTGCCTAGTATGTTAAT
TTGCTCAAAATACAATGTTTGATTTTATGCACTTTGTCGCTATTAACATCCTTTTTTTCATGTAGATTTCAATAA
TTGAGTAATTTTAGAAGCATTATTTTAGGAATATATAGTTGTCACAGTAAATATCTTGTTTTTTCTATGTACATT
GTACAAATTTTTCATTCCTTTTGCTCTTTGTGGTTGGATCTAACACTAACTGTATTGTTTTGTTACATCAAATAA
ACATCTTCTGTGGAAAAAAAAAAAAAAAAAAA

FIGURE 285

MEGAGGANDKKKISSERRKEKSRDAARSRRSKESEVFYELAHQLPLPHNVSSHLDKASVMRLTISYLRVRKLLDA
GDLDIEDDMKAQMNCFYLKALDGFVMVLTDDGDMIYISDNVNKYMGLTQFELTGHSVFDFTHPCDHEEMREMLTH
RNGLVKKGKEQNTQRSFFLRMKCTLTSRGRTMNIKSATWKVLHCTGHIHVYDTNSNQPQCGYKKPPMTCLVLICE
PIPHPSNIEIPLDSKTFLSRHSLDMKFSYCDERITELMGYEPEELLGRSIYEYYHALDSDHLTKTHHDMFTKGQV
TTGQYRMLAKRGGYVWVETQATVIYNTKNSQPQCIVCVNYVVSGIIQHDLIFSLQQTECVLKPVESSDMKMTQLF
TKVESEDTSSLFDKLKKEPDALTLLAPAAGDTIISLDFGSNDTETDDQQLEEVPLYNDVMLPSPNEKLQNINLAM
SPLPTAETPKPLRSSADPALNQEVALKLEPNPESLELSFTMPQIQDQTPSPSDGSTRQSSPEPNSPSEYCFYVDS
DMVNEFKLELVEKLFAEDTEAKNPFSTQDTDLDLEMLAPYIPMDDDFQLRSFDQLSPLESSSASPESASPQSTVT
VFQQTQIQEPTANATTTTATTDELKTVTKDRMEDIKILIASPSPTHIHKETTSATSSPYRDTQSRTASPNRAGKG
VIEQTEKSHPRSPNVLSVALSQRTTVPEEELNPKILALQNAQRKRKMEHDGSLFQAVGIGTLLQQPDDHAATTSL
SWKRVKGCKSSEQNGMEQKTIILIPSDLACRLLGQSMDESGLPQLTSYDCEVNAPIQGSRNLLQGEELLRALDQV
N

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FIGURE 286

TGTAAATAAGATAAGGTCATCTGATAGCCTTATTCAGTCTTCATCATTTTCATCATTGTTCCTATGTAGATTATT
GGACATTTATTGTAGCACTACATAACTGATTATAAAAATCTGTAAATGAATTAGCACTTTCATATTGAAACAAGC
CTGCTAGCCTATTTTATACATAGGCTAGCAGGCTTGTTTCAATATGAAAGTGCTAATTCATTTACAGATTGAAAC
AAGCCTGCTAGCCTATGTATAAAATAGCAAATGTTTGCTGTTATAAAAAGATGTAATGGGGTGGGGGGCAGGGGT
AATTTCAAGTTATTAATTTAAAAATGAACTAGCAATTTTGTACCTGGTGACTTTGTGGTGCACTCACCTCTGATA
GTGACTTGAATTCGGTATGTAAAAAGGGGTTAGTGGTATTTCATTGCTGCTAAAAATGACAACTCCCTCTGTGTC
CTGTTTTTCTTAAAGCTGTCAGTGTACAAGTGGGTATTTGAATACCAGACCTTACTGTAAAAAATAAAAAAGGTG
GTATCTAGAGCATGTAAATTGGATATAAAGTTCTGCTCTTAAAGAGTTGATCTAAGAGTATGGCTAAACATCTAT
ATATGCAATCTATTAAAAGAACTTAATTCGGCTATTATGTCTTGATTTGATTGCAGTTTTTTCCTAATTATAACA
AATTTTTCCTCATTGGCCTGTTTTTAATCCTGTGCCTAGAAGGAGTACAAAATGCACACTTTACAAAATTGATAT
TTAACACTTACCCACTCCCCTTTCCCCATCTCTTCTACCGCTCTTGTTGATCGTGGTATCTGATCTTGACTAGAT
AGGCTGAAGGCACATGGTTCCCTCCAAAAACCACTATTGATACCACTACAAAAACAAGCCAGCAAAAAGATACTG
TAGAGAGGTTGGCTTGCTTCCCTCTCTTCCTAACTGCATGTTGAAAAATAAGCCGTTATTGATCTTAAACATCGG
TCAGATGAGTCATACATTGGGTTATTTTTTATATACATGTATACACAAAATATTTCAAATTGAAAGCAACATCTT
AATGGATTCAAAACTATTACAAGCTGTTGTCTAAAACAGGTGAGAAAAAAATTTATAACTGTAAAAACAAATGCA
CATATTGATATTTAAAATGCGTAATTAAGAAAACCCATTGTTGTTGTGTTTTTCTTGTATACCAATAATTAAGCC
ACTACTGTTGGCACTGTTTGGTTTTCTATTTTAACACTGAAGGAGTGAAAGTATTTCCTATATTTATGAATTTAC
TACTAAAATCTTGGCAAAAAAAGAAAAAAATTGTCTAACGTGTGTGGGTGAAAACTGTTAATCAAGTGTTTCTAC
TCCCCCCCGAAAATCCCCTGAAAGTTGGACACCAACTGTATACCCTAGGTTGCTTAAAGGGATTTCACTATTATA
TAAAGTCAATAAAAATGAAGTAGTTGTATATATGCAACATTGTGTACAGAGGGGAAATAATGAATAGTATTAAAG
AAACATTCTCGTCTTCCTTTACCTTTAATCCCCTAATACCTAGTCTACTTTTTAAATTTTCAGACTTCACTGCTT
TTTGAATTCATAATTCTAATTTTCACATTATTGTTAATGGAAAATCATATCTAATAAAGGTTTTAGTTATTCCCA
TGCACAGT

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FIGURE 287

VNKIRSSDSLIQSSSFSSLFLCRLLDIYCSTT

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FIGURE 288

GGGGGAGCCCCTGCAAGTTTCCCGGGCCGCGCGCCGCGCTCGCTCGCCTCCCAGCCCGCGGCCCGAGCCGCCGCC
GCGCCCGCCATGCCCTCGGCCAAACAAAGGGGCTCCAAGGGCGGCCACGGCGCCGCGAGCCCCTCGGAGAAGGGT
GCCCACCCGTCGGGCGGCGCGGATGACGTGGCGAAGAAGCCGCCGCCGGCGCCGCAGCAGCCGCCGCCGCCGCCC
GCGCCGCACCCGCAGCAGCACCCGCAGCAGCACCCGCAGAACCAGGCGCACGGCAAGGGCGGCCACCGCGGCGGC
GGCGGCGGCGGCGGCAAGTCCTCCTCCTCCTCCTCCGCCTCCGCCGCCGCTGCCGCCGCCGCCGCCTCGTCCTCG
GCGTCCTGCTCGCGCAGGCTCGGCAGGGCGCTCAACTTTCTCTTCTACCTCGCCCTGGTGGCGGCGGCCGCTTTC
TCGGGCTGGTGCGTCCACCACGTCCTGGAGGAGGTCCAGCAGGTCCGGCGCAGCCACCAGGACTTCTCCCGGCAG
AGGGAGGAGCTGGGCCAGGGCTTGCAGGGCGTCGAGCAGAAGGTGCAGTCTTTGCAAGCCACATTTGGAACTTTT
GAGTCCATCTTGAGAAGCTCCCAACATAAACAAGACCTCACAGAGAAAGCTGTGAAGCAAGGGGAGAGTGAGGTC
AGCCGGATCAGCGAAGTGCTGCAGAAACTCCAGAATGAGATTCTCAAAGACCTCTCGGATGGGATCCATGTGGTG
AAGGACGCCCGGGAGCGGGACTTCACGTCCCTGGAGAACACGGTGGAGGAGCGGCTGACGGAGCTCACCAAATCC
ATCAACGACAACATCGCCATCTTCACAGAAGTCCAGAAGAGGAGCCAGAAGGAGATCAATGACATGAAGGCAAAG
GTTGCCTCCCTGGAAGAATCTGAGGGGAACAAGCAGGATTTGAAAGCCTTAAAGGAAGCTGTGAAGGAGATACAG
ACCTCAGCCAAGTCCAGAGAGTGGGACATGGAGGCCCTGAGAAGTACCCTTCAGACTATGGAGTCTGACATCTAC
ACCGAGGTTCGCGAGCTGGTGAGCCTCAAGCAGGAGCAGCAGGCTTTCAAGGAGGCGGCCGACACGGAGCGGCTC
GCCCTGCAGGCCCTCACGGAGAAGCTTCTCAGGTCTGAGGAGTCCGTCTCCCGCCTCCCGGAGGAGATCCGGAGA
CTGGAGGAAGAGCTCCGCCAGCTGAAGTCCGATTCCCACGGGCCGAAGGAGGACGGAGGCTTCAGACACTCGGAA
GCCTTTGAGGCACTCCAGCAAAAGAGTCAGGGACTGGACTCCAGGCTCCAGCACGTGGAGGATGGGGTGCTCTCC
ATGCAGGTGGCTTCTGCGCGCCAGACCGAGAGCCTGGAGTCCCTCCTGTCCAAGAGCCAGGAGCACGAGCAGCGC
CTGGCCGCCCTGCAGGGGCGCCTGGAAGGCCTCGGGTCCTCAGAGGCAGACCAGGATGGCCTGGCCAGCACGGTG
AGGAGCCTGGGCGAGACCCAGCTGGTGCTCTACGGTGACGTGGAGGAGCTGAAGAGGAGTGTGGGCGAGCTCCCC
AGCACCGTGGAATCACTCCAGAAGGTGCAGGAGCAGGTGCACACGCTGCTCAGTCAGGACCAAGCCCAGGCCGCC
CGTCTGCCTCCTCAGGACTTCCTGGACAGACTTTCTTCTCTAGACAACCTGAAAGCCTCAGTCAGCCAAGTGGAG
GCGGACTTGAAAATGCTCAGGACTGCTGTGGACAGTTTGGTTGCATACTCGGTCAAAATAGAAACCAACGAGAAC
AATCTGGAATCAGCCAAGGGTTTACTAGATGACCTGAGGAATGATCTGGATAGGTTGTTTGTGAAAGTGGAGAAG
ATTCACGAAAAGGTCTAAAATGAATTGCGTGTGCAGGGCGCGGATTTAAAGTCCAATTTCTCATGACCAAAAAATG
TGTGGTTTTTTCCCATGTGTCCCCTACCCCCCAATTTCTTGTCCCCTCTTAAAGAGCAGTTGTCACCACCTGAAC
ACCAAGGCATTGTATTTTCATGCCCAGTTAACTTATTTACAATATTTAAGTTCTCTGCTTCTGCATTTGGTTGGT
TTCCTGAAGCGCAGCCCCTGTGAATAACAGGTGGCTTTTCATGGATGTCTCTAGTCAGAGAAAAATGATAAAGGC
TTAAATTGAGGATTAACAGAAGCAGATTAACCTCAGAAATCCTGTCTGGCTGGCAGATTTCAAGTAAAAAAAAAA
AAAAGGTGGGTTGGGGGGACCCTTTTCTTTCTAGTTGTCTTTAAGGAAAATTAATTTTACTTTTTTTTTTGTTCT
GGCCGAAATTTTTATGAGATATCTCTCACTTGTCTTCCACTTTGAACCGGTTAAAGCTCATAGCTGTCAGCTCTG
AATGAGGAGGGGAGAAGCCCCTGGGTCTTTCTTTGAAAGGAATCCGCTGCTTGAGGGCTGCCTCCCTCATGGTGT
GCGTGTCGTTCTCTTCCTGACGCATCTGTGATATCAGAGGTAACTATGCAAAGCATCCAGGCGGTTCTGAATGTG
AAGCACTACACCCAGCAGAGTCCCGGTGCCCTCTGTCCCCACTGCCGGCCCATGTCCTCTCTCCGGAGGTCACCA
AGGAATGCACAGGTTTCGACTACCAGAAAGGGGAGTCCTTGGGTTCTTTCAAAAAATTCGTGAGGAGAGCTGTCT
ACAGTGGAATAGGGGGTCTCCCTGGGGAATGCAGGCCAAGTCCTTTTATTTTAACATGATGTCCATGAAGAGGTT
TGCCGTCTGGGCAGCCCTGTCGGCAAGGAGCGTGCATACTGCGTTTGTGTAATTGTTTGCTGTATCTCCCTTCCC
TCTGAGCTGTATTGTTCTTTAATGGCTGTCTTGCCCTTCCAAAAAAAATTGAAAAAAAAAAAA

FIGURE 289

MPSAKQRGSKGGHGAASPSEKGAHPSGGADDVAKKPPPAPQQPPPPPAPHPQQHPQQHPQNQAHGKGGHRGGGGG
GGKSSSSSSASAAAAAAAASSSASCSRRLGRALNFLFYLALVAAAAFSGWCVHHVLEEVQQVRRSHQDFSRQREE
LGQGLQGVEQKVQSLQATFGTFESILRSSQHKQDLTEKAVKQGESEVSRISEVLQKLQNEILKDLSDGIHVVKDA
RERDFTSLENTVEERLTELTKSINDNIAIFTEVQKRSQKEINDMKAKVASLEESEGNKQDLKALKEAVKEIQTSA
KSREWDMEALRSTLQTMESDIYTEVRELVSLKQEQQAFKEAADTERLALQALTEKLLRSEESVSRLPEEIRRLEE
ELRQLKSDSHGPKEDGGFRHSEAFEALQQKSQGLDSRLQHVEDGVLSMQVASARQTESLESLLSKSQEHEQRLAA
LQGRLEGLGSSEADQDGLASTVRSLGETQLVLYGDVEELKRSVGELPSTVESLQKVQEQVHTLLSQDQAQAARLP
PQDFLDRLSSLDNLKASVSQVEADLKMLRTAVDSLVAYSVKIETNENNLESAKGLLDDLRNDLDRLFVKVEKIHE
KV

FIGURE 290

CCCACGCGTCCGATTCACGAAAAGGTCTAAATGAATTGCGTGTGCAGGGCGCGGATTTAAAGTCCAATTTCTCAT
GACCAAAAAATGTGTGGTTTTTTCCCATGTGTCCCCTACCCCCCAATTTCTTGTCCCCTCTTAAAGAGCAGTTGT
CACCACCTGAACACCAAGGCATTGTATTTTCATGCCCAGTTAACTTATTTACAATATTTAAGTTCTCTGCTTCTG
CATTTGGTTGGTTTCCTGAAGCGCAGCCCCTGTGAATAACAGGTGGCTTTTCATGGATGTCTCTAGTCAGAGAAA
AATGATAAAGGCTTAAATTGAGGATTAACAGAAGCAGATTAACCTCAGAAATCCTGTCTGGCTGGCAGATTTCAA
GTAAAAAAAAAAAAAAAGGTGGGTTGGGGGGACCCTTTTCTTTCTAGTTGTCTTTAAGGAAAATTAATTTTACTTT
TTTTTTTGTTCTGGCCGAAATTTTTATGAGATATCTCTCACTTGTCTTCCACTTTGAACCGGTTAAAGCTCATAG
CTGTCAGCTCTGAATGAGGAGGGGAGAAGCCCCTGGGTCTTTCTTTGAAAGGAATCCGCTGCTTGAGGGCTGCCT
CCCTCATGGTGTGCGTGTCGTTTCTCTTCCTGACGCATCTTGTGATATCAGAGGTAACTATGCAAAGCATCCAGG
CGGTTCTGAATGTGAAGCACTACACCCAGCAGAGTCCCGGTGCCCTCTGTCCCCACTGCCGGCCCATGTTCTCTC
TCCGGAGGTCACCAAGGAATGCACAGGTTTCGACTACCAGAAAGGGGAGTCCTTGGGTTCTTTCAAAAAATTCGT
GAGGAGAGCTGTCTACAGTGGAATAGGGGGTCTCCCTGGGGAATGCAGGCCAAGTCCTTTTATTTTAACATGATG
TCCATGAAGAGGTTTGCCGTCTGGGCAGCCCTGTCGGCAAGGAGCGTGCATACTGCGTTTGTGTAATTGTTTGCT
GTATCTCCCTTCCCTCTGAGCTGTATTGTTCTTTAATGGCTGTCTTGCCCTTCCAAAAAAAATTGAAAAAAAAAA
AAAAAAAAAA

FIGURE 291

GGTACAGCTGCGCGTCTGCGGGAATAGGTGCAGCGGGCCCTTGGCGGGGGACTCTGAGGGAGGAGCTGGGGACGG
CGACCCTAGGAGAGTTCTTTGGGGTGACTTTCAAGATGGACTCTACTCTAACAGCAAGTGAAATCCGGCAGCGAT
TTATAGATTTCTTCAAGAGGAACGAGCATACGTATGTTCACTCGTCTGCCACCATCCCATTGGATGACCCCACTT
TGCTCTTTGCCAATGCAGGCATGAACCAGTTTAAACCCATTTTCCTGAACACAATTGACCCATCTCACCCCATGG
CAAAGCTGAGCAGAGCTGCCAATACCCAGAAGTGCATCCGGGCTGGGGGCAAACAAAATGACCTGGACGATGTGG
GCAAGGATGTCTATCATCACACCTTCTTCGAGATGCTGGGCTCTTGGTCTTTTGGAGATTACTTTAAGGAATTGG
CATGTAAGATGGCTCTGGAACTCCTCACCCAAGAGTTTGGCATTCCCATTGAAAGACTTTATGTTACTTACTTTG
GCGGGGATGAAGCAGCTGGCTTAGAAGCAGATCTGGAATGCAAACAGATCTGGCAAAATTTGGGGCTGGATGACA
CCAAAATCCTCCCAGGCAACATGAAGGATAACTTCTGGGAGATGGGTGACACGGGCCCCTGTGGTCCTTGCAGTG
AGATCCACTACGACCGGATTGGTGGTCGGGACGCCGCACATCTTGTCAACCAGGACGACCCTAATGTGCTGGAGA
TCTGGAACCTTGTGTTCATCCAGTATAACAGGGAAGCTGATGGCATTCTGAAACCTCTTCCCAAGAAAAGCATTG
ACACAGGGATGGGCCTGGAACGACTGGTATCTGTGCTGCAGAATAAGATGTCCAACTATGACACTGACCTTTTTG
TCCCTTACTTTGAAGCCATTCAGAAGGGCACAGGTGCCCGACCATACACTGGGAAAGTTGGTGCTGAGGATGCCG
ATGGGATTGACATGGCCTACCGGGTGCTGGCTGACCATGCTCGGACCATCACTGTGGCACTGGCTGATGGTGGCC
GGCCTGACAACACAGGGCGTGGATATGTGTTGAGACGGATTCTCCGCCGAGCTGTCCGATACGCCCATGAAAAGC
TCAATGCCAGCAGGGGCTTCTTTGCTACGTTAGTGGATGTTGTCGTCCAGTCCCTGGGAGATGCATTTCCTGAGC
TGAAGAAGGACCCAGACATGGTGAAGGACATCATTAATGAAGAAGAGGTGCAGTTTCTCAAGACTCTCAGCAGAG
GGCGTCGCATCCTGGACAGGAAAATTCAGAGCCTGGGAGACAGCAAGACCATTCCCGGAGACACTGCTTGGCTCC
TCTATGACACCTATGGGTTTCCAGTGGATCTGACTGGACTGATTGCTGAAGAGAAGGGCCTGGTGGTAGACATGG
ATGGCTTTGAAGAGGAGAGGAAACTGGCCCAGCTGAAATCACAGGGCAAGGGAGCTGGTGGGGAAGACCTCATTA
TGCTGGACATTTACGCTATCGAAGAGCTCCGGGCACGGGGTCTGGAGGTCACAGATGATTCCCCAAAGTACAATT
ACCATTTGGACTCCAGTGGTAGCTATGTATTTGAGAACACAGTGGCTACGGTGATGGCTCTGCGCAGGGAGAAGA
TGTTCGTGGAAGAGGTGTCCACAGGCCAGGAGTGTGGAGTGGTGCTGGACAAGACCTGTTTCTATGCTGAGCAAG
GAGGCCAGATCTATGACGAAGGCTACCTGGTGAAGGTGGATGACAGCAGTGAAGATAAAACAGAGTTTACAGTGA
AGAATGCTCAGGTCCGAGGAGGGTATGTGCTACACATTGGAACCATCTACGGTGACCTGAAAGTGGGGGATCAGG
TCTGGCTGTTTATTGATGAGCCCCGACGAAGACCCATCATGAGCAACCACACAGCTACGCACATTCTGAACTTCG
CCCTGCGCTCAGTGCTTGGGGAAGCTGACCAGAAAGGCTCATTGGTTGCTCCTGACCGCCTCAGATTTGACTTTA
CTGCCAAGGGAGCCATGTCCACCCAACAGATCAAGAAGGCTGAAGAGATTGCTAATGAGATGATTGAGGCAGCCA
AGGCCGTCTATACCCAGGATTGCCCCCTGGCAGCAGCGAAAGCCATCCAGGGCCTACGGGCTGTGTTTGATGAGA
CCTATCCTGACCCTGTGCGAGTCGTCTCCATTGGGGTCCCGGTGTCCGAGTTGCTGGATGACCCCTCTGGGCCTG
CTGGCTCCCTGACTTCTGTTGAGTTCTGTGGGGGAACGCACCTGCGGAACTCGAGTCATGCAGGAGCTTTTGTGA
TCGTGACGGAAGAAGCCATTGCCAAGGGTATCCGGAGGATTGTGGCTGTCACAGGTGCCGAGGCCCAGAAGGCCC
TCAGGAAAGCAGAGAGCTTGAAGAAATGTCTCTCTGTCATGGAAGCCAAAGTGAAGGCTCAGACTGCTCCAAACA
AGGATGTGCAGAGGGAGATCGCTGACCTTGGAGAGGCCCTGGCCACTGCAGTCATCCCCCAGTGGCAGAAGGATG
AATTGCGGGAGACTCTCAAATCCCTAAAGAAGGTCATGGATGACTTGGACCGAGCCAGCAAAGCCGATGTCCAGA
AACGAGTGTTAGAGAAGACGAAGCAGTTCATCGACAGCAACCCCAACCAGCCTCTTGTCATCCTGGAGATGGAGA
GCGGCGCCTCAGCCAAGGCCCTGAATGAAGCCTTGAAGCTCTTCAAGATGCACTCCCCTCAGACTTCTGCCATGC
TCTTCACGGTGGACAATGAGGCTGGCAAGATCACGTGCCTGTGTCAAGTCCCCCAGAATGCAGCCAATCGGGGCT
TAAAAGCCAGCGAGTGGGTGCAGCAGGTGTCAGGCTTGATGGACGGTAAAGGTGGTGGCAAGGATGTGTCTGCAC
AGGCCACAGGCAAGAACGTTGGCTGCCTGCAGGAGGCGCTGCAGCTGGCCACTTCCTTCGCCCAGCTGCGCCTCG
GGGATGTAAAGAACTGAGTGGGGAAGGAGGAGGCTCCCACTGGATCCATCCGTCCAGCCAAGAGCTCTTCATCTG
CTACAAGAACATTTGAATCTTGGGACCTTTAAAGAGCCCCTCCTAACCCAGCAGTAACTGGAACACACTTGGGAG
CAGTCCTATGTCTCAGTGCCCCTTAAATTTCTGCCCTGAGCCCTCCACGTCAGTGCCATCGGTCTAGAACCACTA
ACCCCGCATTGCTGTTGATCGTCACGCTCGCATCTATAGATAACGGCTCTCCAGACCTGAGCTTTCCGCGTCAGC
AAGTAGGAATCGTTTTTGCTGCAGAGAATAAAAGGACCACGTGC

FIGURE 292

MDSTLTASEIRQRFIDFFKRNEHTYVHSSATIPLDDPTLLFANAGMNQFKPIFLNTIDPSHPMAKLSRAANTQKC
IRAGGKQNDLDDVGKDVYHHTFFEMLGSWSFGDYFKELACKMALELLTQEFGIPIERLYVTYFGGDEAAGLEADL
ECKQIWQNLGLDDTKILPGNMKDNFWEMGDTGPCGPCSEIHYDRIGGRDAAHLVNQDDPNVLEIWNLVFIQYNRE
ADGILKPLPKKSIDTGMGLERLVSVLQNKMSNYDTDLFVPYFEAIQKGTGARPYTGKVGAEDADGIDMAYRVLAD
HARTITVALADGGRPDNTGRGYVLRRILRRAVRYAHEKLNASRGFFATLVDVVVQSLGDAFPELKKDPDMVKDII
NEEEVQFLKTLSRGRRILDRKIQSLGDSKTIPGDTAWLLYDTYGFPVDLTGLIAEEKGLVVDMDGFEEERKLAQL
KSQGKGAGGEDLIMLDIYAIEELRARGLEVTDDSPKYNYHLDSSGSYVFENTVATVMALRREKMFVEEVSTGQEC
GVVLDKTCFYAEQGGQIYDEGYLVKVDDSSEDKTEFTVKNAQVRGGYVLHIGTIYGDLKVGDQVWLFIDEPRRRP
IMSNHTATHILNFALRSVLGEADQKGSLVAPDRLRFDFTAKGAMSTQQIKKAEEIANEMIEAAKAVYTQDCPLAA
AKAIQGLRAVFDETYPDPVRVVSIGVPVSELLDDPSGPAGSLTSVEFCGGTHLRNSSHAGAFVIVTEEAIAKGIR
RIVAVTGAEAQKALRKAESLKKCLSVMEAKVKAQTAPNKDVQREIADLGEALATAVIPQWQKDELRETLKSLKKV
MDDLDRASKADVQKRVLEKTKQFIDSNPNQPLVILEMESGASAKALNEALKLFKMHSPQTSAMLFTVDNEAGKIT
CLCQVPQNAANRGLKASEWVQQVSGLMDGKGGGKDVSAQATGKNVGCLQEALQLATSFAQLRLGDVKN

FIGURE 293

GCTTAGTGTAACCAGCGGCGTATATTTTTTAGGCGCCTTTTCGAAAACCTAGTAGTTAATATTCATTTGTTTAAA
TCTTATTTTATTTTTAAGCTCAAACTGCTTAAGAATACCTTAATTCCTTAAAGTGAAATAATTTTTTGCAAAGGG
GTTTCCTCGATTTGGAGCTTTTTTTTTCTTCCACCGTCATTTCTAACTCTTAAAACCAACTCAGTTCCATCATGG
TGATGTTCAAGAAGATCAAGTCTTTTGAGGTGGTCTTTAACGACCCTGAAAAGGTGTACGGCAGTGGCGAGAGGG
TGGCTGGCCGGGTGATAGTGGAGGTGTGTGAAGTTACTCGTGTCAAAGCCGTTAGGATCCTGGCTTGCGGAGTGG
CTAAAGTGCTTTGGATGCAGGGATCCCAGCAGTGCAAACAGACTTCGGAGTACCTGCGCTATGAAGACACGCTTC
TTCTGGAAGACCAGCCAACAGGTGAGAATGAGATGGTGATCATGAGACCTGGAAACAAATATGAGTACAAGTTCG
GCTTTGAGCTTCCTCAGGGGCCTCTGGGAACATCCTTCAAAGGAAAATATGGGTGTGTAGACTACTGGGTGAAGG
CTTTTCTTGACCGCCCGAGCCAGCCAACTCAAGAGACAAAGAAAAACTTTGAAGTAGTGGATCTGGTGGATGTCA
ATACCCCTGATTTAATGGCACCTGTGTCTGCTAAAAAAGAAAAGAAAGTTTCCTGCATGTTCATTCCTGATGGGC
GGGTGTCTGTCTCTGCTCGAATTGACAGAAAAGGATTCTGTGAAGGTGATGAGATTTCCATCCATGCTGACTTTG
AGAATACATGTTCCCGAATTGTGGTCCCCAAAGCTGCCATTGTGGCCCGCCACACTTACCTTGCCAATGGCCAGA
CCAAGGTGCTGACTCAGAAGTTGTCATCAGTCAGAGGCAATCATATTATCTCAGGGACATGCGCATCATGGCGTG
GCAAGAGCCTTCGGGTTCAGAAGATCAGGCCTTCTATCCTGGGCTGCAACATCCTTCGAGTTGAATATTCCTTAC
TGATCTATGTTAGCGTTCCTGGATCCAAGAAGGTCATCCTTGACCTGCCCCTGGTAATTGGCAGCAGATCAGGTC
TAAGCAGCAGAACATCCAGCATGGCCAGCCGAACCAGCTCTGAGATGAGTTGGGTAGATCTGAACATCCCTGATA
CCCCAGAAGCTCCTCCCTGCTATATGGATGTCATTCCTGAAGATCACCGATTGGAGAGCCCAACAACTCCTCTGC
TAGATGACATGGATGGCTCTCAAGACAGCCCTATCTTTATGTATGCCCCTGAGTTCAAGTTCATGCCACCACCGA
CTTATACTGAGGTGGATCCCTGCATCCTCAACAACAATGTGCAGTGAGCATGTGGAAGAAAAGAAGCAGCTTTAC
CTACTTGTTTCTTTTTGTCTCTCTTCCTGGACACTCACTTTTTCAGAGACTCAACAGTCTCGTCAATGGAGTGTG
GGTCCACCTTAGCCTCTGACTTCCTAATGTAGGAGGTGGTCAGCAGGCAATCTCCTGGGCCTTAAAGGATGCGGA
CTCATCCTCAGCCAGCGCCCATGTTGTGATACAGGGGTGTTTGTTGGATGGGTTTAAAAATAACTAGAAAAACTC
AGGCCCATCCATTTTCTCAGATCTCCTTGAAAATTGAGGCCTTTTCGATAGTTTCGGGTCAGGTAAAAATGGCCT
CCTGGCGTAAGCTTTTCAAGGTTTTTTGGAGGCTTTTTGTAAATTGTGATAGGAACTTTGGACCTTGAACTTACG
TATCATGTGGAGAAGAGCCAATTTAACAAACTAGGAAGATGAAAAGGGAAATTGTGGCCAAAACTTTGGGAAAAG
GAGGTTCTTAAAATCAGTGTTTCCCCTTTGTGCACTTGTAGAAAAAAAAGAAAAACCTTCTAGAGCTGATTTGAT
GGACAATGGAGAGAGCTTTCCCTGTGATTATAAAAAAGGAAGCTAGCTGCTCTACGGTCATCTTTGCTTAGAGTA
TACTTTAACCTGGCTTTTAAAGCAGTAGTAACTGCCCCACCAAAGGTCTTAAAAGCCATTTTTGGAGCCTATTGC
ACTGTGTTCTCCTACTGCAAATATTTTCATATGGGAGGATGGTTTTCTCTTCATGTAAGTCCTTGGAATTGATTC
TAAGGTGATGTTCTTAGCACTTTAATTCCTGTCAAATTTTTTGTTCTCCCCTTCTGCCATCTTAAATGTAAGCTG
AAACTGGTCTACTGTGTCTCTAGGGTTAAGCCAAAAGACAAAAAAAATTTTACTACTTTTGAGATTGCCCCAATG
TACAGAATTATATAATTCTAACGCTTAAATCATGTGAAAGGGTTGCTGCTGTCAGCCTTGCCCACTGTGACTTCA
AACCCAAGGAGGAACTCTTGATCAAGATGCCCAACCCTGTGATCAGAACCTCCAAATACTGCCATGAGAAACTAG
AGGGCAGGTGTTCATAAAAGCCCTTTGAACCCCCTTCCTGCCCTGTGTTAGGAGATAGGGATATTGGCCCCTCAC
TGCAGCTGCCAGCACTTGGTCAGTCACTCTCAGCCATAGCACTTTGTTCACTGTCCTGTGTCAGAGCACTGAGCT
CCACCCTTTTCTGAGAGTTATTACAGCCAGAAAGTGTGGGCTGAAGATGGTTGGTTTCATGTGGGGGTATTATGT
ACCC

FIGURE 294

MVMFKKIKSFEVVFNDPEKVYGSGERVAGRVIVEVCEVTRVKAVRILACGVAKVLWMQGSQQCKQTSEYLRYEDT
LLLEDQPTGENEMVIMRPGNKYEYKFGFELPQGPLGTSFKGKYGCVDYWVKAFLDRPSQPTQETKKNFEVVDLVD
VNTPDLMAPVSAKKEKKVSCMFIPDGRVSVSARIDRKGFCEGDEISIHADFENTCSRIVVPKAAIVARHTYLANG
QTKVLTQKLSSVRGNHIISGTCASWRGKSLRVQKIRPSILGCNILRVEYSLLIYVSVPGSKKVILDLPLVIGSRS
GLSSRTSSMASRTSSEMSWVDLNIPDTPEAPPCYMDVIPEDHRLESPTTPLLDDMDGSQDSPIFMYAPEFKFMPP
PTYTEVDPCILNNNVQ

FIGURE 295

GCTTAGTGTAACCAGCGGCGTATATTTTTTAGGCGCCTTTTCGAAAACCTAGTAGTTAATATTCATTTGTTTAAA
TCTTATTTTATTTTTAAGCTCAAACTGCTTAAGAATACCTTAATTCCTTAAAGTGAAATAATTTTTTGCAAAGGG
GTTTCCTCGATTTGGAGCTTTTTTTTTCTTCCACCGTCATTTCTAACTCTTAAAACCAACTCAGTTCCATCATGG
TGATGTTCAAGAAGATCAAGTCTTTTGAGGTGGTCTTTAACGACCCTGAAAAGGTGTACGGCAGTGGCGAGAGGG
TGGCTGGCCGGGTGATAGTGGAGGTGTGTGAAGTTACTCGTGTCAAAGCCGTTAGGATCCTGGCTTGCGGAGTGG
CTAAAGTGCTTTGGATGCAGGGATCCCAGCAGTGCAAACAGACTTCGGAGTACCTGCGCTATGAAGACACGCTTC
TTCTGGAAGACCAGCCAACAGGTGAGAATGAGATGGTGATCATGAGACCTGGAAACAAATATGAGTACAAGTTCG
GCTTTGAGCTTCCTCAGGGGCCTCTGGGAACATCCTTCAAAGGAAAATATGGGTGTGTAGACTACTGGGTGAAGG
CTTTTCTTGACCGCCCGAGCCAGCCAACTCAAGAGACAAAGAAAAACTTTGAAGTAGTGGATCTGGTGGATGTCA
ATACCCCTGATTTAATGGCACCTGTGTCTGCTAAAAAAGAAAAGAAAGTTTCCTGCATGTTCATTCCTGATGGGC
GGGTGTCTGTCTCTGCTCGAATTGACAGAAAAGGATTCTGTGAAGGTGATGAGATTTCCATCCATGCTGACTTTG
AGAATACATGTTCCCGAATTGTGGTCCCCAAAGCTGCCATTGTGGCCCGCCACACTTACCTTGCCAATGGCCAGA
CCAAGGTGCTGACTCAGAAGTTGTCATCAGTCAGAGGCAATCATATTATCTCAGGGACATGCGCATCATGGCGTG
GCAAGAGCCTTCGGGTTCAGAAGATCAGGCCTTCTATCCTGGGCTGCAACATCCTTCGAGTTGAATATTCCTTAC
TGATCTATGTTAGCGTTCCTGGATCCAAGAAGGTCATCCTTGACCTGCCCCTGGTAATTGGCAGCAGATCAGGTC
TAAGCAGCAGAACATCCAGCATGGCCAGCCGAACCAGCTCTGAGATGAGTTGGGTAGATCTGAACATCCCTGATA
CCCCAGAAGCTCCTCCCTGCTATATGGATGTCATTCCTGAAGATCACCGATTGGAGAGCCCAACAACTCCTCTGC
TAGATGACATGGATGGCTCTCAAGACAGCCCTATCTTTATGTATGCCCCTGAGTTCAAGTTCATGCCACCACCGA
CTTATACTGAGGTGGATCCCTGCATCCTCAACAACAATGTGCAGTGAGCATGTGGAAGAAAAGAAGCAGCTTTAC
CTACTTGTTTCTTTTTGTCTCTCTTCCTGGACACTCACTTTTTCAGAGACTCAACAGTCTCGTCAATGGAGTGTG
GGTCCACCTTAGCCTCTGACTTCCTAATGTAGGAGGTGGTCAGCAGGCAATCTCCTGGGCCTTAAAGGATGCGGA
CTCATCCTCAGCCAGCGCCCATGTTGTGATACAGGGGTGTTTGTTGGATGGGTTTAAAAATAACTAGAAAAACTC
AGGCCCATCCATTTTCTCAGATCTCCTTGAAAATTGAGGCCTTTTCGATAGTTTCGGGTCAGGTAAAAATGGCCT
CCTGGCGTAAGCTTTTCAAGGTTTTTTGGAGGCTTTTTGTAAATTGTGATAGGAACTTTGGACCTTGAACTTACG
TATCATGTGGAGAAGAGCCAATTTAACAAACTAGGAAGATGAAAAGGGAAATTGTGGCCAAAACTTTGGGAAAAG
GAGGTTCTTAAAATCAGTGTTTCCCCTTTGTGCACTTGTAGAAAAAAAAGAAAAACCTTCTAGAGCTGATTTGAT
GGACAATGGAGAGAGCTTTCCCTGTGATTATAAAAAAGGAAGCTAGCTGCTCTACGGTCATCTTTGCTTAGAGTA
TACTTTAACCTGGCTTTTAAAGCAGTAGTAACTGCCCCACCAAAGGTCTTAAAAGCCATTTTTGGAGCCTATTGC
ACTGTGTTCTCCTACTGCAAATATTTTCATATGGGAGGATGGTTTTCTCTTCATGTAAGTCCTTGGAATTGATTC
TAAGGTGATGTTCTTAGCACTTTAATTCCTGTCAAATTTTTTGTTCTCCCCTTCTGCCATCTTAAATGTAAGCTG
AAACTGGTCTACTGTGTCTCTAGGGTTAAGCCAAAAGACAAAAAAAAATTTTACTACTTTTGAGATTGCCCCAATG
TACAGAATTATATAATTCTAACGCTTAAATCATGTGAAAGGGTTGCTGCTGTCAGCCTTGCCCACTGTGACTTCA
AACCCAAGGAGGAACTCTTGATCAAGATGCCCAACCCTGTGATCAGAACCTCCAAATACTGCCATGAGAAACTAG
AGGGCAGGTGTTCATAAAAGCCCTTTGAACCCCCTTCCTGCCCTGTGTTAGGAGATAGGGATATTGGCCCCTCAC
TGCAGCTGCCAGCACTTGGTCAGTCACTCTCAGCCATAGCACTTTGTTCACTGTCCTGTGTCAGAGCACTGAGCT
CCACCCTTTTCTGAGAGTTATTACAGCCAGAAAGTGTGGGCTGAAGATGGTTGGTTTCATGTGGGGGTATTATGT
ACCC

FIGURE 296

MVMFKKIKSFEVVFNDPEKVYGSGERVAGRVIVEVCEVTRVKAVRILACGVAKVLWMQGSQQCKQTSEYLRYEDT
LLLEDQPTGENEMVIMRPGNKYEYKFGFELPQGPLGTSFKGKYGCVDYWVKAFLDRPSQPTQETKKNFEVVDLVD
VNTPDLMAPVSAKKEKKVSCMFIPDGRVSVSARIDRKGFCEGDEISIHADFENTCSRIVVPKAAIVARHTYLANG
QTKVLTQKLSSVRGNHIISGTCASWRGKSLRVQKIRPSILGCNILRVEYSLLIYVSVPGSKKVILDLPLVIGSRS
GLSSRTSSMASRTSSEMSWVDLNIPDTPEAPPCYMDVIPEDHRLESPTTPLLDDMDGSQDSPIFMYAPEFKFMPP
PTYTEVDPCILNNNVQ

FIGURE 297

GCTTAGTGTAACCAGCGGCGTATATTTTTTAGGCGCCTTTTCGAAAACCTAGTAGTTAATATTCATTTGTTTAAA
TCTTATTTTATTTTTAAGCTCAAACTGCTTAAGAATACCTTAATTCCTTAAAGTGAAATAATTTTTTGCAAAGGG
GTTTCCTCGATTTGGAGCTTTTTTTTTCTTCCACCGTCATTTCTAACTCTTAAAACCAACTCAGTTCCATCATGG
TGATGTTCAAGAAGATCAAGTCTTTTGAGGTGGTCTTTAACGACCCTGAAAAGGTGTACGGCAGTGGCGAGAGGG
TGGCTGGCCGGGTGATAGTGGAGGTGTGTGAAGTTACTCGTGTCAAAGCCGTTAGGATCCTGGCTTGCGGAGTGG
CTAAAGTGCTTTGGATGCAGGGATCCCAGCAGTGCAAACAGACTTCGGAGTACCTGCGCTATGAAGACACGCTTC
TTCTGGAAGACCAGCCAACAGGTGAGAATGAGATGGTGATCATGAGACCTGGAAACAAATATGAGTACAAGTTCG
GCTTTGAGCTTCCTCAGGGGCCTCTGGGAACATCCTTCAAAGGAAAATATGGGTGTGTAGACTACTGGGTGAAGG
CTTTTCTTGACCGCCCGAGCCAGCCAACTCAAGAGACAAAGAAAAACTTTGAAGTAGTGGATCTGGTGGATGTCA
ATACCCCTGATTTAATGGCACCTGTGTCTGCTAAAAAAGAAAAGAAAGTTTCCTGCATGTTCATTCCTGATGGGC
GGGTGTCTGTCTCTGCTCGAATTGACAGAAAAGGATTCTGTGAAGGTGATGAGATTTCCATCCATGCTGACTTTG
AGAATACATGTTCCCGAATTGTGGTCCCCAAAGCTGCCATTGTGGCCCGCCACACTTACCTTGCCAATGGCCAGA
CCAAGGTGCTGACTCAGAAGTTGTCATCAGTCAGAGGCAATCATATTATCTCAGGGACATGCGCATCATGGCGTG
GCAAGAGCCTTCGGGTTCAGAAGATCAGGCCTTCTATCCTGGGCTGCAACATCCTTCGAGTTGAATATTCCTTAC
TGATCTATGTTAGCGTTCCTGGATCCAAGAAGGTCATCCTTGACCTGCCCCTGGTAATTGGCAGCAGATCAGGTC
TAAGCAGCAGAACATCCAGCATGGCCAGCCGAACCAGCTCTGAGATGAGTTGGGTAGATCTGAACATCCCTGATA
CCCCAGAAGCTCCTCCCTGCTATATGGATGTCATTCCTGAAGATCACCGATTGGAGAGCCCAACAACTCCTCTGC
TAGATGACATGGATGGCTCTCAAGACAGCCCTATCTTTATGTATGCCCCTGAGTTCAAGTTCATGCCACCACCGA
CTTATACTGAGGTGGATCCCTGCATCCTCAACAACAATGTGCAGTGAGCATGTGGAAGAAAAGAAGCAGCTTTAC
CTACTTGTTTCTTTTTGTCTCTCTTCCTGGACACTCACTTTTTCAGAGACTCAACAGTCTCGTCAATGGAGTGTG
GGTCCACCTTAGCCTCTGACTTCCTAATGTAGGAGGTGGTCAGCAGGCAATCTCCTGGGCCTTAAAGGATGCGGA
CTCATCCTCAGCCAGCGCCCATGTTGTGATACAGGGGTGTTTGTTGGATGGGTTTAAAAATAACTAGAAAAACTC
AGGCCCATCCATTTTCTCAGATCTCCTTGAAAATTGAGGCCTTTTCGATAGTTTCGGGTCAGGTAAAAATGGCCT
CCTGGCGTAAGCTTTTCAAGGTTTTTTGGAGGCTTTTTGTAAATTGTGATAGGAACTTTGGACCTTGAACTTACG
TATCATGTGGAGAAGAGCCAATTTAACAAACTAGGAAGATGAAAAGGGAAATTGTGGCCAAAACTTTGGGAAAAG
GAGGTTCTTAAAATCAGTGTTTCCCCTTTGTGCACTTGTAGAAAAAAAAGAAAAACCTTCTAGAGCTGATTTGAT
GGACAATGGAGAGAGCTTTCCCTGTGATTATAAAAAAGGAAGCTAGCTGCTCTACGGTCATCTTTGCTTAGAGTA
TACTTTAACCTGGCTTTTAAAGCAGTAGTAACTGCCCCACCAAAGGTCTTAAAAGCCATTTTTGGAGCCTATTGC
ACTGTGTTCTCCTACTGCAAATATTTTCATATGGGAGGATGGTTTTCTCTTCATGTAAGTCCTTGGAATTGATTC
TAAGGTGATGTTCTTAGCACTTTAATTCCTGTCAAATTTTTTGTTCTCCCCTTCTGCCATCTTAAATGTAAGCTG
AAACTGGTCTACTGTGTCTCTAGGGTTAAGCCAAAAGACAAAAAAAATTTTACTACTTTTGAGATTGCCCCAATG
TACAGAATTATATAATTCTAACGCTTAAATCATGTGAAAGGGTTGCTGCTGTCAGCCTTGCCCACTGTGACTTCA
AACCCAAGGAGGAACTCTTGATCAAGATGCCCAACCCTGTGATCAGAACCTCCAAATACTGCCATGAGAAACTAG
AGGGCAGGTGTTCATAAAAGCCCTTTGAACCCCCTTCCTGCCCTGTGTTAGGAGATAGGGATATTGGCCCCTCAC
TGCAGCTGCCAGCACTTGGTCAGTCACTCTCAGCCATAGCACTTTGTTCACTGTCCTGTGTCAGAGCACTGAGCT
CCACCCTTTTCTGAGAGTTATTACAGCCAGAAAGTGTGGGCTGAAGATGGTTGGTTTCATGTGGGGGTATTATGT
ACCC

FIGURE 298

MVMFKKIKSFEVVFNDPEKVYGSGERVAGRVIVEVCEVTRVKAVRILACGVAKVLWMQGSQQCKQTSEYLRYEDT
LLLEDQPTGENEMVIMRPGNKYEYKFGFELPQGPLGTSFKGKYGCVDYWVKAFLDRPSQPTQETKKNFEVVDLVD
VNTPDLMAPVSAKKEKKVSCMFIPDGRVSVSARIDRKGFCEGDEISIHADFENTCSRIVVPKAAIVARHTYLANG
QTKVLTQKLSSVRGNHIISGTCASWRGKSLRVQKIRPSILGCNILRVEYSLLIYVSVPGSKKVILDLPLVIGSRS
GLSSRTSSMASRTSSEMSWVDLNIPDTPEAPPCYMDVIPEDHRLESPTTPLLDDMDGSQDSPIFMYAPEFKFMPP
PTYTEVDPCILNNNVQ

FIGURE 299

AGTGTGAAATCTTCAGAGAAGAATTTCTCTTTAGTTCTTTGCAAGAAGGTAGAGATAAAGACACTTTTTCAAAAA
TGGCAATGGTATCAGAATTCCTCAAGCAGGCCTGGTTTATTGAAAATGAAGAGCAGGAATATGTTCAAACTGTGA
AGTCATCCAAAGGTGGTCCCGGATCAGCGGTGAGCCCCTATCCTACCTTCAATCCATCCTCGGATGTCGCTGCCT
TGCATAAGGCCATAATGGTTAAAGGTGTGGATGAAGCAACCATCATTGACATTCTAACTAAGCGAAACAATGCAC
AGCGTCAACAGATCAAAGCAGCATATCTCCAGGAAACAGGAAAGCCCCTGGATGAAACACTTAAGAAAGCCCTTA
CAGGTCACCTTGAGGAGGTTGTTTTAGCTCTGCTAAAAACTCCAGCGCAATTTGATGCTGATGAACTTCGTGCTG
CCATGAAGGGCCTTGGAACTGATGAAGATACTCTAATTGAGATTTTGGCATCAAGAACTAACAAAGAAATCAGAG
ACATTAACAGGGTCTACAGAGAGGAACTGAAGAGAGATCTGGCCAAAGACATAACCTCAGACACATCTGGAGATT
TTCGGAACGCTTTGCTTTCTCTTGCTAAGGGTGACCGATCTGAGGACTTTGGTGTGAATGAAGACTTGGCTGATT
CAGATGCCAGGGCCTTGTATGAAGCAGGAGAAAGGAGAAAGGGGACAGACGTAAACGTGTTCAATACCATCCTTA
CCACCAGAAGCTATCCACAACTTCGCAGAGTGTTTCAGAAATACACCAAGTACAGTAAGCATGACATGAACAAAG
TTCTGGACCTGGAGTTGAAAGGTGACATTGAGAAATGCCTCACAGCTATCGTGAAGTGCGCCACAAGCAAACCAG
CTTTCTTTGCAGAGAAGCTTCATCAAGCCATGAAAGGTGTTGGAACTCGCCATAAGGCATTGATCAGGATTATGG
TTTCCCGTTCTGAAATTGACATGAATGATATCAAAGCATTCTATCAGAAGATGTATGGTATCTCCCTTTGCCAAG
CCATCCTGGATGAAACCAAAGGAGATTATGAGAAAATCCTGGTGGCTCTTTGTGGAGGAAACTAAACATTCCCTT
GATGGTCTCAAGCTATGATCAGAAGACTTTAATTATATATTTTCATCCTATAAGCTTAAATAGGAAAGTTTCTTC
AACAGGATTACAGTGTAGCTACCTACATGCTGAAAAATATAGCCTTTAAATCATTTTTATATTATAACTCTGTAT
AATAGAGATAAGTCCATTTTTTAAAAATGTTTTCCCCAAACCATAAAACCCTATACAAGTTGTTCTAGTAACAAT
ACATGAGAAAGATGTCTATGTAGCTGAAAATAAAATGACGTCACAAGAC

FIGURE 300

MAMVSEFLKQAWFIENEEQEYVQTVKSSKGGPGSAVSPYPTFNPSSDVAALHKAIMVKGVDEATIIDILTKRNNA
QRQQIKAAYLQETGKPLDETLKKALTGHLEEVVLALLKTPAQFDADELRAAMKGLGTDEDTLIEILASRTNKEIR
DINRVYREELKRDLAKDITSDTSGDFRNALLSLAKGDRSEDFGVNEDLADSDARALYEAGERRKGTDVNVFNTIL
TTRSYPQLRRVFQKYTKYSKHDMNKVLDLELKGDIEKCLTAIVKCATSKPAFFAEKLHQAMKGVGTRHKALIRIM
VSRSEIDMNDIKAFYQKMYGISLCQAILDETKGDYEKILVALCGGN

FIGURE 301

GAAAGCTGTATTTGCTGCACGTGGAAATCTCCGTTATTTTCCAGCACCCAACAGTAGCGTAATGGGAGTAACGGA
CTTAACCTCATTTCTCTTTCAGAGCATTTAGCCTTCATATGCCCTTCCCTGCATGCTTCCCCCAGGCCGTCAAGA
CTTGAGTTCTGCCTCGCTTCCCGGCGCGGTCGCAGCCCTCAGCCCACTTAGGATAATGGCGACAGCTGAGGTACT
GAACATTGGTAAAAAATTATATGAGGGTAAAACAAAAGAAGTCTACGAATTGTTAGACAGTCCAGGAAAAGTCCT
CCTGCAGTCCAAGGACCAGATTACAGCAGGAAATGCAGCTAGAAAAAACCACCTGGAAGGAAAAGCTGCAATCTC
AAATAAAATCACCAGTTGTATTTTTCAGTTATTACAGGAAGCAGGTATTAAAACTGCCTTCACCAGAAAATGTGG
GGAGACAGCTTTCATTGCACCGCAGTGTGAAATGATTCCAATTGAATGGGTTTGCAGAAGAATAGCAACTGGTTC
TTTTCTCAAAAGAAATCCTGGTGTCAAGGAAGGATATAAGTTTTACCCACCTAAAGTGGAGTTGTTTTTCAAGGA
TGATGCCAATAATGACCCACAGTGGTCTGAGGAACAGCTGATTGCTGCAAAATTTTGCTTTGCTGGACTTCTTAT
AGGCCAGACTGAAGTGGATATCATGAGTCATGCTACACAGGCTATATTTGAAATACTGGAGAAATCCTGGTTGCC
CCAGAATTGTACACTGGTTGATATGAAGATTGAATTTGGTGTTGATGTAACCACCAAAGAAATTGTTCTTGCTGA
TGTTATTGACAATGATTCCTGGAGACTCTGGCCATCAGGAGATCGAAGCCAACAGAAAGACAAACAGTCTTATCG
GGACCTCAAAGAAGTAACTCCTGAAGGGCTCCAAATGGTAAAGAAAAACTTTGAGTGGGTTGCAGAGAGAGTAGA
GTTGCTTTTGAAATCAGAAAGTCAGTGCAGGGTTGTAGTGTTGATGGGCTCTACTTCTGATCTTGGTCACTGTGA
AAAAATCAAGAAGGCCTGTGGAAATTTTGGCATTCCATGTGAACTTCGAGTAACATCTGCGCATAAAGGACCAGA
TGAAACTCTGAGGATTAAAGCTGAGTATGAAGGGGATGGCATTCCTACTGTATTTGTGGCAGTGGCAGGCAGAAG
TAATGGTTTGGGACCAGTGATGTCTGGGAACACTGCATATCCAGTTATCAGCTGTCCTCCCCTCACACCAGACTG
GGGAGTTCAGGATGTGTGGTCTTCTCTTCGACTACCCAGTGGTCTTGGCTGTTCAACCGTACTTTCTCCAGAAGG
ATCAGCTCAATTTGCTGCTCAGATATTTGGGTTAAGCAACCATTTGGTATGGAGCAAACTGCGAGCAAGCATTTT
GAACACATGGATTTCCTTGAAGCAGGCTGACAAGAAAATCAGAGAATGTAATTTATTAAGAAAGAATGCCATTGAA
TTTTTTAGGGGAAAAACTACAAATTTCTAATTTAGCTGAAGGAAAATCAAGCAAGATGAAAAGGTAATTTTAAAT
TAGAGAACACAAATAAAATGTATTAGTGAATAAATGCTTCTCTAGATCCATATTAATAAACATGAGCATCTAACC
CCTCCTTTCTTAGGCTAGACACCAAGATATTTCAGCCAGCCTTTATCATTCCTCTTACTTTATCCTTTTTCCTTA
AGTATTGGTGGTCACTACTATTGAGTTTCTTCCTTAACACTGATTAAATGATCTTAACTCCCTCAGCTAAAACTG
GCATTACTGACTCCCAGCTATATTTCTCCAGACTTGCATTTTTTTTTTTTTTTTTGAGACAGGGTCTCACTGTCG
CCCAGGCTGGAGTGCAGTGGCGTGATCTCAGTTCACTGCTGCTTTCCCTCCTGGGCTCAAGCAGTTCTCCCACCT
CAGCCTCTCGACTAACAGGGACTATAATCTTGCAGCACCATGCCGAGCTAATTTTATTTTTTGTAGAGATGAGCT
CTCACTATGTCACCCAGGTTCGTCTCAAACTCCTGAACCCTAGTAATTCTCCTATCTCAGCCTCCCAAAGTGCTA
GGGTTACAGACATGAGCCACTGTGCCTGTCTAGACTTGTACTTTCAACTGTCCATTTCTCCCTGTCTGTCCCATG
GGCACTCATGAAAAAACAGAATGCTCCCAACTTTATTCATCTTCCAAGCCTGTAGCTCTTGGTATACTCACTGTT
GCAAGTCAGAAGCTTGATTTCATCATTGATGTTTTTCTCACGTTTCACATCTCACTCATCACCAAGTCATGTTGG
TGTTAATTTCTGATTAACCCTTGAATTTACCGTCTTCTCATCCTCTGTACAAAAGCCTCAAGTGAGGGTCAAATT
CAACATTATCCTGATCTAGACAGCCCCCATTCTCAATCCACCCTTTTCCAAGTTGATTGCCCAAGGACTTCTAAC
AATAAACTCTCTTTTGCACCACAGACTTCTTTGAAAATATACATGCTGTTGACCCTCTCTGTAGAAAACCGCACA
CATAAAACTTACCAACAGATTTCATTGGTTCTTGGGTTCTCCCGAAGCCTATCCATGGTTTATAGATTAAGAATT
GATGAGGTAGCTGGGCACAGTGGCTCACACCTACGATCACAGCACTTCGGGAGGCTGAAGCAAGCAGATCACTTG
AGGTCAGGAGTTTGAGACCAGCCTGGCCAACATGGTGAAACCCTGTCTCTACTAAAAATACAAAAAGTAGCCAGC
CGTGATGACAGGCACCTGTAATCCCAGCTACTCGGGAGGCTGAGGCATGAGAATTGCTTGAACCCGGGAGGCGGA
GGTTGCAGTGAGCCTGGATCATGCCACTGCACTCCAACCTGGGCAGCAGAGCAAGACTCTGTCTCAAAAGGGGAA
AAAAAAAATTGCTGATGTGACCCATGAAGGGAACTCATTTTCCTCGTAATTTTGGACTGCCACACATTGGTACCT
TTAGTTCTCTGAAGGCCCACGTTTTTATCATTAAGACCTATTTGTTAGCTAGTAGAGCTTTATGTTCGCTGTCCA
TGAAACCTTCTGTAACCACAGTGACTACAAGTAGTTCTTTCTCTATTGAATTATTAGGTCCAGAATAGAAGATGT
CATTGTACACTTTATTTCCCTCACACTGTGTTATGCTCTGATGTGCTATGCTTAGCTATCTGTCAGAGATTAGTA
AATTATAAAACTCATGTGTACTACTTAAGTTTATATCTTATGCTAGTTTATAAGAACAATTAAAAGGACTTAGAA
GATTAAAAAAAAAAAAAAAAAA

FIGURE 302

MATAEVLNIGKKLYEGKTKEVYELLDSPGKVLLQSKDQITAGNAARKNHLEGKAAISNKITSCIFQLLQEAGIKT
AFTRKCGETAFIAPQCEMIPIEWVCRRIATGSFLKRNPGVKEGYKFYPPKVELFFKDDANNDPQWSEEQLIAAKF
CFAGLLIGQTEVDIMSHATQAIFEILEKSWLPQNCTLVDMKIEFGVDVTTKEIVLADVIDNDSWRLWPSGDRSQQ
KDKQSYRDLKEVTPEGLQMVKKNFEWVAERVELLLKSESQCRVVVLMGSTSDLGHCEKIKKACGNFGIPCELRVT
SAHKGPDETLRIKAEYEGDGIPTVFVAVAGRSNGLGPVMSGNTAYPVISCPPLTPDWGVQDVWSSLRLPSGLGCS
TVLSPEGSAQFAAQIFGLSNHLVWSKLRASILNTWISLKQADKKIRECNL

FIGURE 303

GAAAGCTGTATTTGCTGCACGTGGAAATCTCCGTTATTTTCCAGCACCCAACAGTAGCGTAATGGGAGTAACGGA
CTTAACCTCATTTCTCTTTCAGAGCATTTAGCCTTCATATGCCCTTCCCTGCATGCTTCCCCCAGGCCGTCAAGA
CTTGAGTTCTGCCTCGCTTCCCGGCGCGGTCGCAGCCCTCAGCCCACTTAGGATAATGGCGACAGCTGAGGTACT
GAACATTGGTAAAAAATTATATGAGGGTAAAACAAAAGAAGTCTACGAATTGTTAGACAGTCCAGGAAAAGTCCT
CCTGCAGTCCAAGGACCAGATTACAGCAGGAAATGCAGCTAGAAAAAACCACCTGGAAGGAAAAGCTGCAATCTC
AAATAAAATCACCAGTTGTATTTTTCAGTTATTACAGGAAGCAGGTATTAAAACTGCCTTCACCAGAAAATGTGG
GGAGACAGCTTTCATTGCACCGCAGTGTGAAATGATTCCAATTGAATGGGTTTGCAGAAGAATAGCAACTGGTTC
TTTTCTCAAAAGAAATCCTGGTGTCAAGGAAGGATATAAGTTTTACCCACCTAAAGTGGAGTTGTTTTTCAAGGA
TGATGCCAATAATGACCCACAGTGGTCTGAGGAACAGCTGATTGCTGCAAAATTTTGCTTTGCTGGACTTCTTAT
AGGCCAGACTGAAGTGGATATCATGAGTCATGCTACACAGGCTATATTTGAAATACTGGAGAAATCCTGGTTGCC
CCAGAATTGTACACTGGTTGATATGAAGATTGAATTTGGTGTTGATGTAACCACCAAAGAAATTGTTCTTGCTGA
TGTTATTGACAATGATTCCTGGAGACTCTGGCCATCAGGAGATCGAAGCCAACAGAAAGACAAACAGTCTTATCG
GGACCTCAAAGAAGTAACTCCTGAAGGGCTCCAAATGGTAAAGAAAAACTTTGAGTGGGTTGCAGAGAGAGTAGA
GTTGCTTTTGAAATCAGAAAGTCAGTGCAGGGTTGTAGTGTTGATGGGCTCTACTTCTGATCTTGGTCACTGTGA
AAAAATCAAGAAGGCCTGTGGAAATTTTGGCATTCCATGTGAACTTCGAGTAACATCTGCGCATAAAGGACCAGA
TGAAACTCTGAGGATTAAAGCTGAGTATGAAGGGGATGGCATTCCTACTGTATTTGTGGCAGTGGCAGGCAGAAG
TAATGGTTTGGGACCAGTGATGTCTGGGAACACTGCATATCCAGTTATCAGCTGTCCTCCCCTCACACCAGACTG
GGGAGTTCAGGATGTGTGGTCTTCTCTTCGACTACCCAGTGGTCTTGGCTGTTCAACCGTACTTTCTCCAGAAGG
ATCAGCTCAATTTGCTGCTCAGATATTTGGGTTAAGCAACCATTTGGTATGGAGCAAACTGCGAGCAAGCATTTT
GAACACATGGATTTCCTTGAAGCAGGCTGACAAGAAAATCAGAGAATGTAATTTATAAGAAAGAATGCCATTGAA
TTTTTTAGGGGAAAAACTACAAATTTCTAATTTAGCTGAAGGAAAATCAAGCAAGATGAAAAGGTAATTTTAAAT
TAGAGAACACAAATAAAATGTATTAGTGAATAAATGCTTCTCTAGATCCATATTAATAAACATGAGCATCTAACC
CCTCCTTTCTTAGGCTAGACACCAAGATATTTCAGCCAGCCTTTATCATTCCTCTTACTTTATCCTTTTTCCTTA
AGTATTGGTGGTCACTACTATTGAGTTTCTTCCTTAACACTGATTAAATGATCTTAACTCCCTCAGCTAAAACTG
GCATTACTGACTCCCAGCTATATTTCTCCAGACTTGCATTTTTTTTTTTTTTTTGAGACAGGGTCTCACTGTCG
CCCAGGCTGGAGTGCAGTGGCGTGATCTCAGTTCACTGCTGCTTTCCCTCCTGGGCTCAAGCAGTTCTCCCACCT
CAGCCTCTCGACTAACAGGGACTATAATCTTGCAGCACCATGCCGAGCTAATTTTATTTTTTGTAGAGATGAGCT
CTCACTATGTCACCCAGGTTCGTCTCAAACTCCTGAACCCTAGTAATTCTCCTATCTCAGCCTCCCAAAGTGCTA
GGGTTACAGACATGAGCCACTGTGCCTGTCTAGACTTGTACTTTCAACTGTCCATTTCTCCCTGTCTGTCCCATG
GGCACTCATGAAAAAACAGAATGCTCCCAACTTTATTCATCTTCCAAGCCTGTAGCTCTTGGTATACTCACTGTT
GCAAGTCAGAAGCTTGATTTCATCATTGATGTTTTTCTCACGTTTCACATCTCACTCATCACCAAGTCATGTTGG
TGTTAATTTCTGATTAACCCTTGAATTTACCGTCTTCTCATCCTCTGTACAAAAGCCTCAAGTGAGGGTCAAATT
CAACATTATCCTGATCTAGACAGCCCCCATTCTCAATCCACCCTTTTCCAAGTTGATTGCCCAAGGACTTCTAAC
AATAAACTCTCTTTTGCACCACAGACTTCTTTGAAAATATACATGCTGTTGACCCTCTCTGTAGAAAACCGCACA
CATAAAACTTACCAACAGATTTCATTGGTTCTTGGGTTCTCCCGAAGCCTATCCATGGTTTATAGATTAAGAATT
GATGAGGTAGCTGGGCACAGTGGCTCACACCTACGATCACAGCACTTCGGGAGGCTGAAGCAAGCAGATCACTTG
AGGTCAGGAGTTTGAGACCAGCCTGGCCAACATGGTGAAACCCTGTCTCTACTAAAAATACAAAAAGTAGCCAGC
CGTGATGACAGGCACCTGTAATCCCAGCTACTCGGGAGGCTGAGGCATGAGAATTGCTTGAACCCGGGAGGCGGA
GGTTGCAGTGAGCCTGGATCATGCCACTGCACTCCAACCTGGGCAGCAGAGCAAGACTCTGTCTCAAAAGGGGAA
AAAAAAAATTGCTGATGTGACCCATGAAGGGAACTCATTTTCCTCGTAATTTTGGACTGCCACACATTGGTACCT
TTAGTTCTCTGAAGGCCCACGTTTTTATCATTAAGACCTATTTGTTAGCTAGTAGAGCTTTATGTTCGCTGTCCA
TGAAACCTTCTGTAACCACAGTGACTACAAGTAGTTCTTTCTCTATTGAATTATTAGGTCCAGAATAGAAGATGT
CATTGTACACTTTATTTCCCTCACACTGTGTTATGCTCTGATGTGCTATGCTTAGCTATCTGTCAGAGATTAGTA
AATTATAAAACTCATGTGTACTACTTAAGTTTATATCTTATGCTAGTTTATAAGAACAATTAAAAGGACTTAGAA
GATTAAAAAAAAAAAAAAAAAA

FIGURE 304

MATAEVLNIGKKLYEGKTKEVYELLDSPGKVLLQSKDQITAGNAARKNHLEGKAAISNKITSCIFQLLQEAGIKT
AFTRKCGETAFIAPQCEMIPIEWVCRRIATGSFLKRNPGVKEGYKFYPPKVELFFKDDANNDPQWSEEQLIAAKF
CFAGLLIGQTEVDIMSHATQAIFEILEKSWLPQNCTLVDMKIEFGVDVTTKEIVLADVIDNDSWRLWPSGDRSQQ
KDKQSYRDLKEVTPEGLQMVKKNFEWVAERVELLLKSESQCRVVVLMGSTSDLGHCEKIKKACGNFGIPCELRVT
SAHKGPDETLRIKAEYEGDGIPTVFVAVAGRSNGLGPVMSGNTAYPVISCPPLTPDWGVQDVWSSLRLPSGLGCS
TVLSPEGSAQFAAQIFGLSNHLVWSKLRASILNTWISLKQADKKIRECNL

FIGURE 305

AAGAAAAAAATAGGCCTGGTTGCCAXATTAAGGTCCCCTGGGCTATTTTAAACCGGATTTGGATACCXAGGTCTT
TCCAXAGGCCGTATTTTGCCCCCCGTAACCCXTAAAAAAAAAAAAAAGATTTCCAAAATGCCGTTTTCAGAACCTG
GGTTTTAATAGCAGTATTGAATTTGTAAGCTTAGTAGTTGCAGAAATTGAACACTAGGTGGCACTCAGTTATCTT
AACAGGGGAAGTACTGATACAATTGTTGACTTTTCTTTTACTATGTGTAAGAAATACCCCAAACATGAAAAGATT
GTTTTGATCATATGCATGTATGTAGAATATTTTTGCAGAGCAGAAAGATTATGTTAGAAGTGTGATTTTTATTTT
CAGAAGTCATATACATGTAAGCTACAATTTTGAGTGCTTTATAAACACTTAAGATATATATATAAATTTTAATTT
CATAGCAACTTGTAAAAAATAAAATACTTGTTGAAAAGCCTTTTTCAACATATCCCTAAGCTAAGGGAAGAGGAA
GGAATAACAACTCAGTGAAAAGATGGTCTCCAGTTTCTGAATGAAAAAGCTACAGCTGAGAAATAAAATAAAATG
TCATGCTGCAGAATATGTTATACCCTTATTTTGTGTTAAGGATATATTTTATTATGTGAATGGTTTTGTTTTTGT
TTTTTGTTTTTGTTTTTTGCTTGTATTGGGAATTAGCTTTACTGGTAACTTCCTTATTTAGTTTTTAGTGGTCAA
CTCTAATAAAATGAAACTAGGGCTGAGCTAGTTAGCCCTCACTAGCCAAACTGAAACTCTATGCAACATTAAAAG
AAGAGATCCATCATGTAGCTTGTGACACTTTTATTTTATTAGTCACCGGGGAACTTTTCAGTGATGAAAATACAC
AGGGTAATAAACCTTCACATGGCTTCAAAAGGAAAACAAGCAAATCTTCTCTAATCTACTCTTACTATAATTTCC
TAAGTGTACACCAAACTCTGGATTTAAAAATCTGAAGTACTATAGAACATTAAGTTGAAGAATGGAAATTAAGAG
TACGTATTCATGGTTTATATTTCTTATTCTATGGAGTTCGTGAACACATCTAGGTGGAATGCATCTGAGACTAAG
GGCTGGTTTTTAATCCTCATAAGAAACCAGCCTTGAAGAATTAACAATTCTCTTCATTGGTATTCTAAACCTCCT
AAGATATTTAGGCTTCTGTACATAAAAGTGTTTTTGCTAAATTTACAGTATATATAGATCCTTTCATATTATTTT
ACTAAGAATGTTTGAACTTTGCATATTTGATATAGTTCCTGGTAGGAATAGCACAGCTCAAACATTAGTTTTTCT
ACTTACCTCCTCTAACACGTGGTTTGTCTGGAGAGTTTCTAAAAATTCAGCTATAACCCCAGTTCATGTATTTAC
TGGTGATTGTTCTTGCTGAGGTAGTAACAGCCCAATCTTGGGCTGTTAAATCCTAGGAAATCTCGAATCATAGTG
ATTAAAATAGTTGGGGTAAAGTTGTAGCTTATATGCAATACTACTTGGAGGAATTCTTCTACTAATTTGTATTTA
ATGTGGAAATTGTATAGTTTCATTGATTTAATCATAAATAATGGAAATGGTCTCCAAGAAGTTTTATTTTTCATT
TTTTTGCTTATACACTCTGATTCCTATAATACAGTGCTATAAGCTATGCACAGAAAATAAAATGTTTGAAATCCA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAXGGGGG

FIGURE 306

MVLFLFFVFVFCLYWELALLVTSLFSF

FIGURE 307A

CGCGGGTCTGTGGAGAGCCGGGTGCGAGCGGCGGCAGCACGAGGGGAAAAGAGCTGAGCGGAGACCAAAGTCAGC
CGGGAGACAGTGGGTCTGTGAGAGACCGAATAGAGGGGCTGGGGCCACGAGCGCCATTGACAAGCAATGGGGAAG
AAACAGAAAAACAAGAGCGAAGACAGCACCAAGGATGACATTGATCTTGATGCCTTGGCTGCAGAAATAGAAGGA
GCTGGTGCTGCCAAAGAACAGGAGCCTCAAAAGTCAAAAGGGAAAAAGAAAAAAGAGAAAAAAAAAGCAGGACTTT
GATGAAGATGATATCCTGAAAGAACTGGAAGAATTGTCTTTGGAAGCTCAAGGCATCAAAGCTGACAGAGAAACT
GTTGCAGTGAAGCCAACAGAAAACAATGAAGAGGAATTCACCTCAAAAGATAAAAAAAAGAAAGGACAGAAGGGC
AAAAAACAGAGTTTTGATGATAATGATAGCGAAGAATTGGAAGATAAAGATTCAAAATCAAAAAAGACTGCAAAA
CCGAAAGTGGAAATGTACTCTGGGAGTGATGATGATGATGATTTTAACAAACTTCCTAAAAAAGCTAAAGGGAAA
GCTCAAAAATCAAATAAGAAGTGGGATGGGTCAGAGGAGGATGAGGATAACAGTAAAAAAATTAAAGAGCGTTCA
AGAATAAATTCTTCTGGTGAAAGTGGTGATGAATCAGATGAATTTTTGCAATCTAGAAAAGGACAGAAAAAAAAT
CAGAAAAACAAGCCAGGTCCTAACATAGAAAGTGGGAATGAAGATGATGACGCCTCCTTCAAAATTAAGACAGTG
GCCCAAAAGAAGGCAGAAAAGAAGGAGCGCGAGAGAAAAAAGCGAGATGAAGAAAAAGCGAAACTGCGGAAGCTG
AAAGAAAAAGAAGAGTTAGAAACAGGTAAAAAGGATCAGAGTAAACAAAAGGAATCTCAAAGGAAATTTGAAGAA
GAAACTGTAAAATCCAAAGTGACTGTTGATACTGGAGTAATTCCTGCCTCTGAAGAGAAAGCAGAGACTCCCACA
GCTGCAGAAGATGACAATGAAGGAGACAAAAAGAAGAAAGATAAGAAGAAAAAGAAAGGAGAAAAGGAAGAAAAA
GAGAAAGAGAAGAAAAAAGGACCTAGCAAAGCCACTGTTAAAGCTATGCAAGAAGCTCTGGCTAAGCTTAAAGAG
GAAGAAGAAAGACAGAAGAGAGAAGAGGAAGAACGTATAAAACGGCTTGAAGAATTAGAAGCCAAGCGTAAAGAA
GAGGAACGATTGGAACAAGAAAAAAGAGAAAGGAAAAAGCAAAAAGAAAAAGAAAGAAAAGAACGCTTGAAAAAA
GAAGGGAAACTTTTAACTAAATCCCAGAGAGAAGCCAGAGCCAGAGCCGAAGCTACTCTTAAACTGCTACAAGCT
CAGGGTGTTGAAGTGCCATCAAAAGACTCTTTGCCAAAGAAGAGGCCAATTTATGAAGATAAAAAGAGGAAAAAA
ATACCACAGCAGCTAGAAAGTAAAGAAGTGTCTGAATCAATGGAATTATGTGCTGCTGTAGAAGTTATGGAACAA
GGAGTACCAGAAAAGGAAGAGACACCACCTCCTGTTGAACCAGAAGAAGAAGAAGATACTGAGGATGCTGGATTG
GATGATTGGGAAGCTATGGCCAGTGATGAGGAGACAGAAAAAGTAGAAGGAAACACAGTTCATATAGAAGTAAAA
GAAAACCCTGAAGAGGAGGAGGAGGAGGAAGAAGAGGAAGAAGAAGATGAAGAAAGTGAAGAAGAGGAGGAAGAG
GAGGGAGAAAGTGAAGGCAGTGAAGGTGATGAGGAAGATGAAAAGGTGTCAGATGAGAAGGATTCAGGGAAGACA
TTAGATAAAAAGCCAAGTAAAGAAATGAGCTCAGATTCTGAATATGACTCTGATGATGATCGGACTAAAGAAGAA
AGGGCTTATGACAAAGCAAAACGGAGGATTGAGAAACGGCGACTTGAACATAGTAAAAATGTAAACACCGAAAAG
CTAAGAGCCCCTATTATCTGCGTACTTGGGCATGTGGACACAGGGAAGACAAAAATTCTAGATAAGCTCCGTCAC
ACACATGTACAAGACGGTGAAGCAGGTGGTATCACACAACAAATTTGGGCCACCAATGTTCCTCTTGAAGCTATT
AATGAACAGACTAAGATGATTAAAAATTTTGATAGAGAGAATGTACGGATTCCAGGAATGCTAATTATTGATACT
CCTGGGCATGAATCTTTCAGTAATCTGAGAAATAGAGGAAGCTCTCTTTGTGACATTGCCATTTTAGTTGTTGAT
ATTATGCATGGTTTGGAGCCCCAGACAATTGAGTCTATCAACCTTCTCAAATCTAAAAAATGTCCCTTCATTGTT
GCACTCAATAAGATTGATAGGTTATATGATTGGAAAAAGAGTCCTGACTCTGATGTGGCTGCTACTTTAAAGAAG
CAGAAAAAGAATACAAAAGATGAATTTGAGGAGCGAGCAAAGGCTATTATTGTAGAATTTGCACAGCAGGGTTTG
AATGCTGCTTTGTTTTATGAGAATAAAGATCCCCGCACTTTTGTGTCTTTGGTACCTACCTCTGCACATACTGGT
GATGGCATGGGAAGTCTGATCTACCTTCTTGTAGAGTTAACTCAGACCATGTTGAGCAAGAGACTTGCACACTGT
GAAGAGCTGAGAGCACAGGTGATGGAGGTTAAAGCTCTCCCGGGGATGGGCACCACTATAGATGTCATTTTGATC
AATGGGCGTTTGAAGGAAGGAGATACAATCATTGTTCCTGGAGTAGAAGGGCCCATTGTAACTCAGATTCGAGGC
CTCCTGTTACCTCCTCCTATGAAGGAATTACGAGTGAAGAACCAGTATGAAAAGCATAAAGAAGTAGAAGCAGCT
CAGGGGGTAAAGATTCTTGGAAAAGACCTGGAGAAAACATTGGCTGGTTTACCCCTCCTTGTGGCTTATAAAGAA
GATGAAATCCCTGTTCTTAAAGATGAATTGATCCATGAGTTAAAGCAGACACTAAATGCTATCAAATTAGAAGAA
AAAGGAGTCTATGTCCAGGCATCTACACTGGGTTCTTTGGAAGCTCTACTGGAATTTCTGAAAACATCAGAAGTG
CCCTATGCAGGAATTAACATTGGCCCAGTGCATAAAAAAGATGTTATGAAGGCTTCAGTGATGTTGGAACATGAC
CCTCAGTATGCAGTAATTTTGGCCTTCGATGTGAGAATTGAACGAGATGCACAAGAAATGGCTGATAGTTTAGGA
GTTAGAATTTTTAGTGCAGAAATTATTTATCATTTATTTGATGCCTTTACAAAATATAGACAAGACTACAAGAAA
CAGAAACAAGAAGAATTTAAGCACATAGCAGTATTTCCCTGCAAGATAAAAATCCTCCCTCAGTACATTTTTAAT
TCTCGAGATCCGATAGTGATGGGGGTGACGGTGGAAGCAGGTCAGGTGAAACAGGGGACACCCATGTGTGTCCCA
AGCAAAAATTTTGTTGACATCGGAATAGTAACAAGTATTGAAATAAACCATAAACAAGTGGATGTTGCAAAAAAA

FIGURE 307B

GGACAAGAAGTTTGTGTAAAAATAGAACCTATCCCTGGTGAGTCACCCAAAATGTTTGGAAGACATTTTGAAGCT
ACAGATATTCTTGTTAGTAAGATCAGCCGGCAGTCCATTGATGCACTCAAAGACTGGTTCAGAGATGAAATGCAG
AAGAGTGACTGGCAGCTTATTGTGGAGCTGAAGAAAGTATTTGAAATCATC**TAA**TTTTTTCACATGGAGCAGGAA
CTGGAGTAAATGCAATACTGTGTTGTAATATCCCAACAAAAATCAGACAAAAAATGGAACAGACGTATTTGGACA
CTGATGGACTTAAGTATGGAAGGAAGAAAAATAGGTGTATAAAATGTTTTCCATGAGAAACCAAGAAACTTACAC
TGGTTTGACAGTGGTCAGTTACATGTCCCCACAGTTCCAATGTGCCTGTTCACTCACCTCTCCCTTCCCCAACCC
TTCTCTACTTGGCTGCTGTTTTAAAGTTTGCCCTTCCCCAAATTTGGATTTTTATTACAGAGTCTAAAGCTCTTT
CGATTTTATACTGATTAAATCAGTACTGCAGTATTTGATTAACCA

FIGURE 308

MGKKQKNKSEDSTKDDIDLDALAAEIEGAGAAKEQEPQKSKGKKKKEKKKQDFDEDDILKELEELSLEAQGIKAD
RETVAVKPTENNEEEFTSKDKKKKGQKGKKQSFDDNDSEELEDKDSKSKKTAKPKVEMYSGSDDDDDFNKLPKKA
KGKAQKSNKKWDGSEEDEDNSKKIKERSRINSSGESGDESDEFLQSRKGQKKNQKNKPGPNIESGNEDDDASFKI
KTVAQKKAEKKERERKKRDEEKAKLRKLKEKEELETGKKDQSKQKESQRKFEEETVKSKVTVDTGVIPASEEKAE
TPTAAEDDNEGDKKKKDKKKKKGEKEEKEKEKKKGPSKATVKAMQEALAKLKEEEERQKREEEERIKRLEELEAK
RKEEERLEQEKRERKKQKEKERKERLKKEGKLLTKSQREARARAEATLKLLQAQGVEVPSKDSLPKKRPIYEDKK
RKKIPQQLESKEVSESMELCAAVEVMEQGVPEKEETPPPVEPEEEEDTEDAGLDDWEAMASDEETEKVEGNTVHI
EVKENPEEEEEEEEEEEEDEESEEEEEEEGESEGSEGDEEDEKVSDEKDSGKTLDKKPSKEMSSDSEYDSDDDRT
KEERAYDKAKRRIEKRRLEHSKNVNTEKLRAPIICVLGHVDTGKTKILDKLRHTHVQDGEAGGITQQIWATNVPL
EAINEQTKMIKNFDRENVRIPGMLIIDTPGHESFSNLRNRGSSLCDIAILVVDIMHGLEPQTIESINLLKSKKCP
FIVALNKIDRLYDWKKSPDSDVAATLKKQKKNTKDEFEERAKAIIVEFAQQGLNAALFYENKDPRTFVSLVPTSA
HTGDGMGSLIYLLVELTQTMLSKRLAHCEELRAQVMEVKALPGMGTTIDVILINGRLKEGDTIIVPGVEGPIVTQ
IRGLLLPPPMKELRVKNQYEKHKEVEAAQGVKILGKDLEKTLAGLPLLVAYKEDEIPVLKDELIHELKQTLNAIK
LEEKGVYVQASTLGSLEALLEFLKTSEVPYAGINIGPVHKKDVMKASVMLEHDPQYAVILAFDVRIERDAQEMAD
SLGVRIFSAEIIYHLFDAFTKYRQDYKKQKQEEFKHIAVFPCKIKILPQYIFNSRDPIVMGVTVEAGQVKQGTPM
CVPSKNFVDIGIVTSIEINHKQVDVAKKGQEVCVKIEPIPGESPKMFGRHFEATDILVSKISRQSIDALKDWFRD
EMQKSDWQLIVELKKVFEII

FIGURE 309A

CGCGGGTCTGTGGAGAGCCGGGTGCGAGCGGCGGCAGCACGAGGGGAAAAGAGCTGAGCGGAGACCAAAGTCAGC
CGGGAGACAGTGGGTCTGTGAGAGACCGAATAGAGGGGCTGGGGCCACGAGCGCCATTGACAAGCAATGGGGAAG
AAACAGAAAAACAAGAGCGAAGACAGCACCAAGGATGACATTGATCTTGATGCCTTGGCTGCAGAAATAGAAGGA
GCTGGTGCTGCCAAAGAACAGGAGCCTCAAAAGTCAAAAGGGAAAAAGAAAAAAGAGAAAAAAAAAGCAGGACTTT
GATGAAGATGATATCCTGAAAGAACTGGAAGAATTGTCTTTGGAAGCTCAAGGCATCAAAGCTGACAGAGAAACT
GTTGCAGTGAAGCCAACAGAAAACAATGAAGAGGAATTCACCTCAAAAGATAAAAAAAAGAAAGGACAGAAGGGC
AAAAAACAGAGTTTTGATGATAATGATAGCGAAGAATTGGAAGATAAAGATTCAAAATCAAAAAAGACTGCAAAA
CCGAAAGTGGAAATGTACTCTGGGAGTGATGATGATGATGATTTTAACAAACTTCCTAAAAAAGCTAAAGGGAAA
GCTCAAAAATCAAATAAGAAGTGGGATGGGTCAGAGGAGGATGAGGATAACAGTAAAAAAATTAAAGAGCGTTCA
AGAATAAATTCTTCTGGTGAAAGTGGTGATGAATCAGATGAATTTTTGCAATCTAGAAAAGGACAGAAAAAAAAT
CAGAAAAACAAGCCAGGTCCTAACATAGAAAGTGGGAATGAAGATGATGACGCCTCCTTCAAAATTAAGACAGTG
GCCCAAAAGAAGGCAGAAAAGAAGGAGCGCGAGAGAAAAAAGCGAGATGAAGAAAAAGCGAAACTGCGGAAGCTG
AAAGAAAAAGAAGAGTTAGAAACAGGTAAAAAGGATCAGAGTAAACAAAAGGAATCTCAAAGGAAATTTGAAGAA
GAAACTGTAAAATCCAAAGTGACTGTTGATACTGGAGTAATTCCTGCCTCTGAAGAGAAAGCAGAGACTCCCACA
GCTGCAGAAGATGACAATGAAGGAGACAAAAAGAAGAAAGATAAGAAGAAAAAGAAAGGAGAAAAGGAAGAAAAA
GAGAAAGAGAAGAAAAAAGGACCTAGCAAAGCCACTGTTAAAGCTATGCAAGAAGCTCTGGCTAAGCTTAAAGAG
GAAGAAGAAAGACAGAAGAGAGAAGAGGAAGAACGTATAAAACGGCTTGAAGAATTAGAAGCCAAGCGTAAAGAA
GAGGAACGATTGGAACAAGAAAAAAGAGAAAGGAAAAAGCAAAAAGAAAAAGAAAGAAAAGAACGCTTGAAAAAA
GAAGGGAAACTTTTAACTAAATCCCAGAGAGAAGCCAGAGCCAGAGCCGAAGCTACTCTTAAACTGCTACAAGCT
CAGGGTGTTGAAGTGCCATCAAAAGACTCTTTGCCAAAGAAGAGGCCAATTTATGAAGATAAAAAGAGGAAAAAA
ATACCACAGCAGCTAGAAAGTAAAGAAGTGTCTGAATCAATGGAATTATGTGCTGCTGTAGAAGTTATGGAACAA
GGAGTACCAGAAAAGGAAGAGACACCACCTCCTGTTGAACCAGAAGAAGAAGAAGATACTGAGGATGCTGGATTG
GATGATTGGGAAGCTATGGCCAGTGATGAGGAGACAGAAAAAGTAGAAGGAAACACAGTTCATATAGAAGTAAAA
GAAAACCCTGAAGAGGAGGAGGAGGAGGAAGAAGAGGAAGAAGAAGATGAAGAAAGTGAAGAAGAGGAGGAAGAG
GAGGGAGAAAGTGAAGGCAGTGAAGGTGATGAGGAAGATGAAAAGGTGTCAGATGAGAAGGATTCAGGGAAGACA
TTAGATAAAAAGCCAAGTAAAGAAATGAGCTCAGATTCTGAATATGACTCTGATGATGATCGGACTAAAGAAGAA
AGGGCTTATGACAAAGCAAAACGGAGGATTGAGAAACGGCGACTTGAACATAGTAAAAATGTAAACACCGAAAAG
CTAAGAGCCCCTATTATCTGCGTACTTGGGCATGTGGACACAGGGAAGACAAAAATTCTAGATAAGCTCCGTCAC
ACACATGTACAAGACGGTGAAGCAGGTGGTATCACACAACAAATTTGGGCCACCAATGTTCCTCTTGAAGCTATT
AATGAACAGACTAAGATGATTAAAAATTTTGATAGAGAGAATGTACGGATTCCAGGAATGCTAATTATTGATACT
CCTGGGCATGAATCTTTCAGTAATCTGAGAAATAGAGGAAGCTCTCTTTGTGACATTGCCATTTTAGTTGTTGAT
ATTATGCATGGTTTGGAGCCCCAGACAATTGAGTCTATCAACCTTCTCAAATCTAAAAAATGTCCCTTCATTGTT
GCACTCAATAAGATTGATAGGTTATATGATTGGAAAAAGAGTCCTGACTCTGATGTGGCTGCTACTTTAAAGAAG
CAGAAAAAGAATACAAAAGATGAATTTGAGGAGCGAGCAAAGGCTATTATTGTAGAATTTGCACAGCAGGGTTTG
AATGCTGCTTTGTTTTATGAGAATAAAGATCCCCGCACTTTTGTGTCTTTGGTACCTACCTCTGCACATACTGGT
GATGGCATGGGAAGTCTGATCTACCTTCTTGTAGAGTTAACTCAGACCATGTTGAGCAAGAGACTTGCACACTGT
GAAGAGCTGAGAGCACAGGTGATGGAGGTTAAAGCTCTCCCGGGGATGGGCACCACTATAGATGTCATTTTGATC
AATGGGCGTTTGAAGGAAGGAGATACAATCATTGTTCCTGGAGTAGAAGGGCCCATTGTAACTCAGATTCGAGGC
CTCCTGTTACCTCCTCCTATGAAGGAATTACGAGTGAAGAACCAGTATGAAAAGCATAAAGAAGTAGAAGCAGCT
CAGGGGGTAAAGATTCTTGGAAAAGACCTGGAGAAAACATTGGCTGGTTTACCCCTCCTTGTGGCTTATAAAGAA
GATGAAATCCCTGTTCTTAAAGATGAATTGATCCATGAGTTAAAGCAGACACTAAATGCTATCAAATTAGAAGAA
AAAGGAGTCTATGTCCAGGCATCTACACTGGGTTCTTTGGAAGCTCTACTGGAATTTCTGAAAACATCAGAAGTG
CCCTATGCAGGAATTAACATTGGCCCAGTGCATAAAAAAGATGTTATGAAGGCTTCAGTGATGTTGGAACATGAC
CCTCAGTATGCAGTAATTTTGGCCTTCGATGTGAGAATTGAACGAGATGCACAAGAAATGGCTGATAGTTTAGGA
GTTAGAATTTTTAGTGCAGAAATTATTTATCATTTATTTGATGCCTTTACAAAATATAGACAAGACTACAAGAAA
CAGAAACAAGAAGAATTTAAGCACATAGCAGTATTTCCCTGCAAGATAAAAATCCTCCCTCAGTACATTTTTAAT
TCTCGAGATCCGATAGTGATGGGGGTGACGGTGGAAGCAGGTCAGGTGAAACAGGGGACACCCATGTGTGTCCCA
AGCAAAAATTTTGTTGACATCGGAATAGTAACAAGTATTGAAATAAACCATAAACAAGTGGATGTTGCAAAAAAA

FIGURE 309B

GGACAAGAAGTTTGTGTAAAAATAGAACCTATCCCTGGTGAGTCACCCAAAATGTTTGGAAGACATTTTGAAGCT
ACAGATATTCTTGTTAGTAAGATCAGCCGGCAGTCCATTGATGCACTCAAAGACTGGTTCAGAGATGAAATGCAG
AAGAGTGACTGGCAGCTTATTGTGGAGCTGAAGAAAGTATTTGAAATCATCTAATTTTTTCACATGGAGCAGGAA
CTGGAGTAAATGCAATACTGTGTTGTAATATCCCAACAAAAATCAGACAAAAAATGGAACAGACGTATTTGGACA
CTGATGGACTTAAGTATGGAAGGAAGAAAAATAGGTGTATAAAATGTTTTCCATGAGAAACCAAGAAACTTACAC
TGGTTTGACAGTGGTCAGTTACATGTCCCCACAGTTCCAATGTGCCTGTTCACTCACCTCTCCCTTCCCCAACCC
TTCTCTACTTGGCTGCTGTTTTAAAGTTTGCCCTTCCCCAAATTTGGATTTTTATTACAGAGTCTAAAGCTCTTT
CGATTTTATACTGATTAAATCAGTACTGCAGTATTTGATTAACCA

FIGURE 310

MGKKQKNKSEDSTKDDIDLDALAAEIEGAGAAKEQEPQKSKGKKKKEKKKQDFDEDDILKELEELSLEAQGIKAD
RETVAVKPTENNEEEFTSKDKKKKGQKGKKQSFDDNDSEELEDKDSKSKKTAKPKVEMYSGSDDDDDFNKLPKKA
KGKAQKSNKKWDGSEEDEDNSKKIKERSRINSSGESGDESDEFLQSRKGQKKNQKNKPGPNIESGNEDDDASFKI
KTVAQKKAEKKERERKKRDEEKAKLRKLKEKEELETGKKDQSKQKESQRKFEEETVKSKVTVDTGVIPASEEKAE
TPTAAEDDNEGDKKKKDKKKKKGEKEEKEKEKKKGPSKATVKAMQEALAKLKEEEERQKREEEERIKRLEELEAK
RKEEERLEQEKRERKKQKEKERKERLKKEGKLLTKSQREARARAEATLKLLQAQGVEVPSKDSLPKKRPIYEDKK
RKKIPQQLESKEVSESMELCAAVEVMEQGVPEKEETPPPVEPEEEEDTEDAGLDDWEAMASDEETEKVEGNTVHI
EVKENPEEEEEEEEEEEEDEESEEEEEEEGESEGSEGDEEDEKVSDEKDSGKTLDKKPSKEMSSDSEYDSDDDRT
KEERAYDKAKRRIEKRRLEHSKNVNTEKLRAPIICVLGHVDTGKTKILDKLRHTHVQDGEAGGITQQIWATNVPL
EAINEQTKMIKNFDRENVRIPGMLIIDTPGHESFSNLRNRGSSLCDIAILVVDIMHGLEPQTIESINLLKSKKCP
FIVALNKIDRLYDWKKSPDSDVAATLKKQKKNTKDEFEERAKAIIVEFAQQGLNAALFYENKDPRTFVSLVPTSA
HTGDGMGSLIYLLVELTQTMLSKRLAHCEELRAQVMEVKALPGMGTTIDVILINGRLKEGDTIIVPGVEGPIVTQ
IRGLLLPPPMKELRVKNQYEKHKEVEAAQGVKILGKDLEKTLAGLPLLVAYKEDEIPVLKDELIHELKQTLNAIK
LEEKGVYVQASTLGSLEALLEFLKTSEVPYAGINIGPVHKKDVMKASVMLEHDPQYAVILAFDVRIERDAQEMAD
SLGVRIFSAEIIYHLFDAFTKYRQDYKKQKQEEFKHIAVFPCKIKILPQYIFNSRDPIVMGVTVEAGQVKQGTPM
CVPSKNFVDIGIVTSIEINHKQVDVAKKGQEVCVKIEPIPGESPKMFGRHFEATDILVSKISRQSIDALKDWFRD
EMQKSDWQLIVELKKVFEII

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FIGURE 311

CCCGGACGTGCGGCTCCCCTCGGCCTCCTCGCCATGGACGCGGACGACTCCCGGGCCCCCAAGGGCTCCTTGCGG
AAGTTCCTGGAGCACCTCTCCGGGGCCGGCAAGGCCATCGGCGTGCTGACCAGCGGCGGGGATGCTCAAGGTATG
AACGCTGCCGTCCGTGCCGTGGTGCGCATGGGTATCTACGTGGGGGCCAAGGTGTACTTCATCTACGAGGGCTAC
CAGGGCATGGTGGACGGAGGCTCAAACATCGCAGAGGCCGACTGGGAGAGTGTCTCCAGCATCCTGCAAGTGGGC
GGGACGATCATTGGCAGTGCGCGGTGCCAGGCCTTCCGCACGCGGGAAGGCCGCCTGAAGGCTGCTTGCAACCTG
CTGCAGCGCGGCATCACCAACCTGTGTGTGATCGGCGGGGACGGGAGCCTCACCGGGGCCAACCTCTTCCGGAAG
GAGTGGAGTGGGCTGCTGGAGGAGCTGGCCAGGAACGGCCAGATCGATAAGGAGGCCGTGCAGAAGTACGCCTAC
CTCAACGTGGTGGGCATGGTGGGCTCCATCGACAATGATTTCTGCGGCACCGACATGACCATCGGCACGGACTCC
GCCCTGCACAGGATCATCGAGGTCGTCGACGCCATCATGACCACGGCCCAGAGCCACCAGAGGACCTTCGTTCTG
GAGGTGATGGGACGACACTGTGGGTACCTGGCCCTGGTGAGTGCCTTGGCCTGCGGTGCGGACTGGGTGTTCCTT
CCAGAATCTCCACCAGAGGAAGGCTGGGAGGAGCAGATGTGTGTCAAACTCTCGGAGAACCGTGCCCGGAAAAAA
AGGCTGAATATTATTATTGTGGCTGAAGGAGCAATTGATACCCAAAATAAACCCATCACCTCTGAGAAAATCAAA
GAGCTTGTCGTCACGCAGCTGGGCTATGACACACGTGTGACCATCCTCGGGCACGTGCAGAGAGGAGGGACCCCT
TCGGCATTCGACAGGATCTTGGCCAGCCGCATGGGAGTGGAGGCAGTCATCGCCTTGCTAGAGGCCACCCCGGAC
ACCCCAGCTTGCGTCGTGTCACTGAACGGGAACCACGCCGTGCGCCTGCCGCTGATGGAGTGCGTGCAGATGACT
CAGGATGTGCAGAAGGCGATGGACGAGAGGAGATTTCAAGATGCGGTTCGACTCCGAGGGAGGAGCTTTGCGGGC
AACCTGAACACCTACAAGCGACTTGCCATCAAGCTGCCGGATGATCAGATCCCAAAGACCAATTGCAACGTAGCT
GTCATCAACGTGGGGGCACCCGCGGCTGGGATGAACGCGGCCGTACGCTCAGCTGTGCGCGTGGGCATTGCCGAC
GGCCACAGGATGCTCGCCATCTATGATGGCTTTGACGGCTTCGCCAAGGGCCAGATCAAAGAAATCGGCTGGACA
GATGTCGGGGGCTGGACCGGCCAAGGAGGCTCCATTCTTGGGACAAAACGCGTTCTCCCGGGGAAGTACTTGGAA
GAGATCGCCACACAGATGCGCACGCACAGCATCAACGCGCTGCTGATCATCGGTGGATTCGAGGCCTACCTGGGA
CTCCTGGAGCTGTCAGCCGCCCGGGAGAAGCACGAGGAGTTCTGTGTCCCCATGGTCATGGTTCCCGCTACTGTG
TCCAACAATGTGCCGGGTTCCGATTTCAGCATCGGGGCAGACACCGCCCTGAACACTATCACCGACACCTGCGAC
CGCATCAAGCAGTCCGCCAGCGGAACCAAGCGGCGCGTGTTCATCATCGAGACCATGGGCGGCTACTGTGGCTAC
CTGGCCAACATGGGGGGGCTCGCGGCCGGAGCTGATGCCGCATACATTTTCGAAGAGCCCTTCGACATCAGGGAT
CTGCAGTCCAACGTGGAGCACCTGACGGAGAAAATGAAGACCACCATCCAGAGAGGCCTTGTGCTCAGAAATGAG
AGCTGCAGTGAAAACTACACCACCGACTTCATTTACCAGCTGTATTCAGAAGAGGGCAAAGGCGTGTTTGACTGC
AGGAAGAACGTGCTGGGTCACATGCAGCAGGGTGGGGCACCCTCTCCATTTGATAGAAACTTTGGAACCAAAATC
TCTGCCAGAGCTATGGAGTGGATCACTGCAAAACTCAAGGAGGCCCGGGGCAGAGGAAAAAAATTTACCACCGAT
GATTCCATTTGTGTGCTGGGAATAAGCAAAAGAAACGTTATTTTTCAACCTGTGGCAGAGCTGAAGAAGCAAACG
GATTTTGAGCACAGGATTCCCAAAGAACAGTGGTGGCTCAAGCTACGGCCCCTCATGAAAATCCTGGCCAAGTAC
AAGGCCAGCTATGACGTGTCGGACTCAGGCCAGCTGGAACATGTGCAGCCCTGGAGTGTCTGACCCAGTCCCGCC
TGCATGTGCCTGCAGCCACCGTGGACTGTCTGTTTTTGTAACACTTAAGTTATTTTATCAGCACTTTATGCACGT
ATTATTGACATTAATACCTAATCGGCGAGTGCCCATCTGCCCCACCAGCTCCAGTGCGTGCTGTCTGTGGAGTGT
GTCTCATGCTTTCAGATGTGCATATGAGCAGAATTAATTAA

FIGURE 312

MDADDSRAPKGSLRKFLEHLSGAGKAIGVLTSGGDAQGMNAAVRAVVRMGIYVGAKVYFIYEGYQGMVDGGSNIA
EADWESVSSILQVGGTIIGSARCQAFRTREGRLKAACNLLQRGITNLCVIGGDGSLTGANLFRKEWSGLLEELAR
NGQIDKEAVQKYAYLNVVGMVGSIDNDFCGTDMTIGTDSALHRIIEVVDAIMTTAQSHQRTFVLEVMGRHCGYLA
LVSALACGADWVFLPESPPEEGWEEQMCVKLSENRARKKRLNIIIVAEGAIDTQNKPITSEKIKELVVTQLGYDT
RVTILGHVQRGGTPSAFDRILASRMGVEAVIALLEATPDTPACVVSLNGNHAVRLPLMECVQMTQDVQKAMDERR
FQDAVRLRGRSFAGNLNTYKRLAIKLPDDQIPKTNCNVAVINVGAPAAGMNAAVRSAVRVGIADGHRMLAIYDGF
DGFAKGQIKEIGWTDVGGWTGQGGSILGTKRVLPGKYLEEIATQMRTHSINALLIIGGFEAYLGLLELSAAREKH
EEFCVPMVMVPATVSNNVPGSDFSIGADTALNTITDTCDRIKQSASGTKRRVFIIETMGGYCGYLANMGGLAAGA
DAAYIFEEPFDIRDLQSNVEHLTEKMKTTIQRGLVLRNESCSENYTTDFIYQLYSEEGKGVFDCRKNVLGHMQQG
GAPSPFDRNFGTKISARAMEWITAKLKEARGRGKKFTTDDSICVLGISKRNVIFQPVAELKKQTDFEHRIPKEQW
WLKLRPLMKILAKYKASYDVSDSGQLEHVQPWSV

FIGURE 313

TCGCTGCGAAGGACATTTGGGCTGTGTGTGCGACGCGGGTCGGAGGGGCAGTCGGGGGAACCGCGAAGAAGCCGA
GGAGCCCGGAGCCCCGCGTGACGCTCCTCTCTCAGTCCAAAAGCGGCTTTTGGTTCGGCGCAGAGAGACCCGGGG
GTCTAGCTTTTCCTCGAAAAGCGCCGCCCTGCCCTTGGCCCCGAGAACAGACAAAGAGCACCGCAGGGCCGATCA
CGCTGGGGGCGCTGAGGCCGGCC**ATG**GTCATGGAAGTGGGCACCCTGGACGCTGGAGGCCTGCGGGCGCTGCTGG
GGGAGCGAGCGGCGCAATGCCTGCTGCTGGACTGCCGCTCCTTCTTCGCTTTCAACGCCGGCCACATCGCCGGCT
CTGTCAACGTGCGCTTCAGCACCATCGTGCGGCGCCGGGCCAAGGGCGCCATGGGCCTGGAGCACATCGTGCCCA
ACGCCGAGCTCCGCGGCCGCCTGCTGGCCGGCGCCTACCACGCCGTGGTGTTGCTGGACGAGCGCAGCGCCGCCC
TGGACGGCGCCAAGCGCGACGGCACCCTGGCCCTGGCGGCCGGCGCGCTCTGCCGCGAGGCGCGCGCCGCGCAAG
TCTTCTTCCTCAAAGGAGGATACGAAGCGTTTTCGGCTTCCTGCCCGGAGCTGTGCAGCAAACAGTCGACCCCCA
TGGGGCTCAGCCTTCCCCTGAGTACTAGCGTCCCTGACAGCGCGGAATCTGGGTGCAGTTCCTGCAGTACCCCAC
TCTACGATCAGGGTGGCCCGGTGGAAATCCTGCCCTTTCTGTACCTGGGCAGTGCGTATCACGCTTCCCGCAAGG
ACATGCTGGATGCCTTGGGCATAACTGCCTTGATCAACGTCTCAGCCAATTGTCCCAACCATTTTGAGGGTCACT
ACCAGTACAAGAGCATCCCTGTGGAGGACAACCACAAGGCAGACATCAGCTCCTGGTTCAACGAGGCCATTGACT
TCATAGACTCCATCAAGAATGCTGGAGGAAGGGTGTTTGTCCACTGCCAGGCAGGCATTTCCCGGTCAGCCACCA
TCTGCCTTGCTTACCTTATGAGGACTAATCGAGTCAAGCTGGACGAGGCCTTTGAGTTTGTGAAGCAGAGGCGAA
GCATCATCTCTCCCAACTTCAGCTTCATGGGCCAGCTGCTGCAGTTTGAGTCCCAGGTGCTGGCTCCGCACTGTT
CGGCAGAGGCTGGGAGCCCCGCCATGGCTGTGCTCGACCGAGGCACCTCCACCACCACCGTGTTCAACTTCCCCG
TCTCCATCCCTGTCCACTCCACGAACAGTGCGCTGAGCTACCTTCAGAGCCCCATTACGACCTCTCCCAGCTGC**T**
GAAAGGCCACGGGAGGTGAGGCTCTTCACATCCCATTGGGACTCCATGCTCCTTGAGAGGAGAAATGCAATAACT
CTGGGAGGGGCTCGAGAGGGCTGGTCCTTATTTATTTAACTTCACCCGAGTTCCTCTGGGTTTCTAAGCAGTTAT
GGTGATGACTTAGCGTCAAGACATTTGCTGAACTCAGCACATTCGGGACCAATATATAGTGGGTACATCAAGTCC
ATCTGACAAAATGGGGCAGAAGAGAAAGGACTCAGTGTGTGATCCGGTTTCTTTTTGCTCGCCCCTGTTTTTTGT
AGAATCTCTTCATGCTTGACATACCTACCAGTATTATTCCCGACGACACATATACATATGAGAATATACCTTATT
TATTTTTGTGTAGGTGTCTGCCTTCACAAATGTCATTGTCTACTCCTAGAAGAACCAAATACCTCAATTTTTGTT
TTTGAGTACTGTACTATCCTGTAAATATATCTTAAGCAGGTTTGTTTTCAGCACTGATGGAAAATACCAGTGTTG
GGTTTTTTTTTAGTTGCCAACAGTTGTATGTTTGCTGATTATTTATGACCTGAAATAATATATTTCTTCTTCTAA
GAAGACATTTTGTTACATAAGGATGACTTTTTTATACAATGGAATAAATTATGGCATTTCTATTG

FIGURE 314

MVMEVGTLDAGGLRALLGERAAQCLLLDCRSFFAFNAGHIAGSVNVRFSTIVRRRAKGAMGLEHIVPNAELRGRL
LAGAYHAVVLLDERSAALDGAKRDGTLALAAGALCREARAAQVFFLKGGYEAFSASCPELCSKQSTPMGLSLPLS
TSVPDSAESGCSSCSTPLYDQGGPVEILPFLYLGSAYHASRKDMLDALGITALINVSANCPNHFEGHYQYKSIPV
EDNHKADISSWFNEAIDFIDSIKNAGGRVFVHCQAGISRSATICLAYLMRTNRVKLDEAFEFVKQRRSIISPNFS
FMGQLLQFESQVLAPHCSAEAGSPAMAVLDRGTSTTTVFNFPVSIPVHSTNSALSYLQSPITTSPSC

FIGURE 315

TCGCTGCGAAGGACATTTGGGCTGTGTGTGCGACGCGGGTCGGAGGGGCAGTCGGGGGAACCGCGAAGAAGCCGA
GGAGCCCGGAGCCCCGCGTGACGCTCCTCTCTCAGTCCAAAAGCGGCTTTTGGTTCGGCGCAGAGAGACCCGGGG
GTCTAGCTTTTCCTCGAAAAGCGCCGCCCTGCCCTTGGCCCCGAGAACAGACAAAGAGCACCGCAGGGCCGATCA
CGCTGGGGGCGCTGAGGCCGGCC**ATG**GTCATGGAAGTGGGCACCCTGGACGCTGGAGGCCTGCGGGCGCTGCTGG
GGGAGCGAGCGGCGCAATGCCTGCTGCTGGACTGCCGCTCCTTCTTCGCTTTCAACGCCGGCCACATCGCCGGCT
CTGTCAACGTGCGCTTCAGCACCATCGTGCGGCGCCGGGCCAAGGGCGCCATGGGCCTGGAGCACATCGTGCCCA
ACGCCGAGCTCCGCGGCCGCCTGCTGGCCGGCGCCTACCACGCCGTGGTGTTGCTGGACGAGCGCAGCGCCGCCC
TGGACGGCGCCAAGCGCGACGGCACCCTGGCCCTGGCGGCCGGCGCGCTCTGCCGCGAGGCGCGCGCCGCGCAAG
TCTTCTTCCTCAAAGGAGGATACGAAGCGTTTTCGGCTTCCTGCCCGGAGCTGTGCAGCAAACAGTCGACCCCCA
TGGGGCTCAGCCTTCCCCTGAGTACTAGCGTCCCTGACAGCGCGGAATCTGGGTGCAGTTCCTGCAGTACCCCAC
TCTACGATCAGGGTGGCCCGGTGGAAATCCTGCCCTTTCTGTACCTGGGCAGTGCGTATCACGCTTCCCGCAAGG
ACATGCTGGATGCCTTGGGCATAACTGCCTTGATCAACGTCTCAGCCAATTGTCCCAACCATTTTGAGGGTCACT
ACCAGTACAAGAGCATCCCTGTGGAGGACAACCACAAGGCAGACATCAGCTCCTGGTTCAACGAGGCCATTGACT
TCATAGACTCCATCAAGAATGCTGGAGGAAGGGTGTTTGTCCACTGCCAGGCAGGCATTTCCCGGTCAGCCACCA
TCTGCCTTGCTTACCTTATGAGGACTAATCGAGTCAAGCTGGACGAGGCCTTTGAGTTTGTGAAGCAGAGGCGAA
GCATCATCTCTCCCAACTTCAGCTTCATGGGCCAGCTGCTGCAGTTTGAGTCCCAGGTGCTGGCTCCGCACTGTT
CGGCAGAGGCTGGGAGCCCCGCCATGGCTGTGCTCGACCGAGGCACCTCCACCACCACCGTGTTCAACTTCCCCG
TCTCCATCCCTGTCCACTCCACGAACAGTGCGCTGAGCTACCTTCAGAGCCCCATTACGACCTCTCCCAGCTGC**T**
GAAAGGCCACGGGAGGTGAGGCTCTTCACATCCCATTGGGACTCCATGCTCCTTGAGAGGAGAAATGCAATAACT
CTGGGAGGGGCTCGAGAGGGCTGGTCCTTATTTATTTAACTTCACCCGAGTTCCTCTGGGTTTCTAAGCAGTTAT
GGTGATGACTTAGCGTCAAGACATTTGCTGAACTCAGCACATTCGGGACCAATATATAGTGGGTACATCAAGTCC
ATCTGACAAAATGGGGCAGAAGAGAAAGGACTCAGTGTGTGATCCGGTTTCTTTTTGCTCGCCCCTGTTTTTTGT
AGAATCTCTTCATGCTTGACATACCTACCAGTATTATTCCCGACGACACATATACATATGAGAATATACCTTATT
TATTTTTGTGTAGGTGTCTGCCTTCACAAATGTCATTGTCTACTCCTAGAAGAACCAAATACCTCAATTTTTGTT
TTTGAGTACTGTACTATCCTGTAAATATATCTTAAGCAGGTTTGTTTTCAGCACTGATGGAAAATACCAGTGTTG
GGTTTTTTTTTAGTTGCCAACAGTTGTATGTTTGCTGATTATTTATGACCTGAAATAATATATTTCTTCTTCTAA
GAAGACATTTTGTTACATAAGGATGACTTTTTTATACAATGGAATAAATTATGGCATTTCTATTG

FIGURE 316

MVMEVGTLDAGGLRALLGERAAQCLLLDCRSFFAFNAGHIAGSVNVRFSTIVRRRAKGAMGLEHIVPNAELRGRL
LAGAYHAVVLLDERSAALDGAKRDGTLALAAGALCREARAAQVFFLKGGYEAFSASCPELCSKQSTPMGLSLPLS
TSVPDSAESGCSSCSTPLYDQGGPVEILPFLYLGSAYHASRKDMLDALGITALINVSANCPNHFEGHYQYKSIPV
EDNHKADISSWFNEAIDFIDSIKNAGGRVFVHCQAGISRSATICLAYLMRTNRVKLDEAFEFVKQRRSIISPNFS
FMGQLLQFESQVLAPHCSAEAGSPAMAVLDRGTSTTTVFNFPVSIPVHSTNSALSYLQSPITTSPSC

FIGURE 317

AAAAGTTGCGGGGCATAGACGAGCGCCCCGGGACGCAGCTAGCGCGACCCTGAGCCGGCGCCCGTGGTCCGGCCA
TGGACGACCTCGACGCCCTGCTGGCGGACTTGGAGTCTACCACCTCCCACATCTCCAAACGGCCTGTGTTCTTGT
CGGAGGAGACCCCCTACTCATACCCAACTGGAAACCACACATACCAGGAGATTGCCGTGCCACCCCCCGTCCCCC
CACCCCCGTCCAGCGAGGCCCTCAATGGCACAATCCTTGACCCCTTAGACCAGTGGCAGCCCAGCGGCTCCCGAT
TCATCCACCAGCAGCCTCAGTCCTCATCACCTGTGTACGGCTCCAGTGCCAAAACTTCCAGTGTCTCCAACCCTC
AGGACAGTGTTGGCTCTCCGTGCTCCCGAGTGGGTGAGGAGGAGCACGTCTACAGCTTCCCCAACAAGCAGAAAT
CAGCTGAGCCTTCACCCACCGTAATGAGCACGTCCCTGGGCAGCAACCTTTCTGAACTCGACCGCCTGCTGCTGG
AACTGAACGCTGTACAGCATAACCCGCCAGGCTTCCCTGCAGATGAGGCCAACTCAAGCCCCCCGCTTCCTGGGG
CCCTGAGCCCCCTCTATGGTGTCCCAGAGACTAACAGCCCCTTGGGAGGCAAAGCTGGGCCCCTGACGAAAGAGA
AGCCTAAGCGGAATGGGGGCCGGGGCCTGGAGGACGTGCGGCCCAGTGTGGAGAGTCTCTTGGATGAACTGGAGA
GCTCCGTGCCCAGCCCCGTCCCTGCCATCACTGTGAACCAGGGCGAGATGAGCAGCCCGCAGCGCGTCACCTCCA
CCCAACAGCAGACACGCATCTCGGCCTCCTCTGCCACCAGGGAGCTGGACGAGCTGATGGCTTCGCTGTCGGATT
TCAAGTTCATGGCCCAGGGGAAGACAGGGAGCAGCTCACCCCCTGGGGGGCCCCCGAAGCCCGGGAGCCAGCTGG
ACAGCATGCTGGGGAGCCTGCAGTCTGACCTGAACAAGCTGGGGGTCGCCACAGTCGCCAAAGGAGTCTGCGGGG
CCTGCAAGAAGCCCATCGCCGGGCAGGTTGTGACCGCCATGGGGAAGACGTGGCACCCCGAGCACTTCGTCTGCA
CCCACTGCCAGGAGGAGATCGGATCCCGGAACTTCTTCGAGCGGGATGGACAGCCCTACTGTGAAAAGGACTACC
ACAACCTCTTCTCCCCGCGCTGCTACTACTGCAACGGCCCCATCCTGGATAAAGTGGTGACAGCCCTTGACCGGA
CGTGGCACCCTGAACACTTCTTCTGTGCACAGTGTGGAGCCTTCTTTGGTCCCGAAGGGTTCCACGAGAAGGACG
GCAAGGCCTACTGTCGCAAGGACTACTTCGACATGTTCGCACCCAAGTGTGGCGGCTGCGCCCGGGCCATCCTGG
AGAACTATATCTCAGCCCTCAACACGCTGTGGCATCCTGAGTGCTTTGTGTGCCGGGAATGCTTCACGCCATTCG
TGAACGGCAGCTTCTTCGAGCACGACGGGCAGCCCTACTGTGAGGTGCACTACCACGAGCGGCGCGGCTCGCTGT
GTTCTGGCTGCCAGAAGCCCATCACCGGCCGCTGCATCACCGCCATGGCCAAGAAGTTCCACCCCGAGCACTTCG
TCTGTGCCTTCTGCCTCAAGCAGCTCAACAAGGGCACCTTCAAGGAGCAGAACGACAAGCCTTACTGTCAGAACT
GCTTCCTCAAGCTCTTCTGCTAGGTGCCCTGCCCCTGTCTCTGCCCCCCTTCCCCAGCCAGCATCCCCAACTGCG
ACTGTGACCTAGAGACTTCACCCGGGGGTGAAGGGGTAAACCCGACTGAAACTGGAACCCTTGTCCTCCGCTGGT
GCGGGATGGACAGAGGGCCGTGAGGGGTCCCCCTGCTTGTCTTCACCCCTGCCAGAGCCTCTGGGCCCCCTCCTC
CCTCCTGTAGCTCTCCCTAGGCTGCCCACTCTCCATCCTCCCCAGGGGTAGAGGCTGGGGGCTCCACCCCAGCCC
ATGTACGTCCCCACGAACTGGCCTGGCCAGCACCCCACACTGGAGCCATCTCTTCCTCATATTTCAGCAGTGCAG
CCGGGGGGCAGGGAAGGGCAGGCAGGGTCTGTTGGGGTCTCTTTTTATCCTTATTCCTCCCCCGACCTAATTGTC
TTTGTTCTGTGATTATTGGGGGACACCCGGCTCCCTCCAGACAATGCCAGCATAAATCCATCCATCCAAAGGCAG
AGAACCAAAGGGGCCATGGAAGGTTCTCTGTGCTCCTCCTACCCTTCCAGTGCCCTAGGCCTGGCGACTGCCCCT
GCCTTTTAGACCCGCACTCCCCTTTTATACCTGCTCTTGTTCTACTGAGAAAAGCCTCTCCAGCAATAATGTTTT
CTAGTCACTTCCTCCGTCTCCGGGACGGCGTGCCTGGACACTGTCCGACTTTGATAGATTTCTACACTGAGGTTG
AATTCATATCGCCTGAGATGTTTTACTTCTCTATACACCATGATTTTGTAGAGATATTAAAGACGTTCCCTTTTG
TATCTCTTCTTCATCACCGCCACTGGGCCTTCACTGATGGTGTCTGGTGTGTAGATTGCTTTGTCTGTGGGGTGG
GGTGGGGAAGCAATATGTATTTTATTGTTTCTTAGCACAAGCAGGTGTGCTGGGAGCAGCTCTGTGACTCCCCCT
CTTTCACTTCATAGCTCCCAGGACTGTTTTATAAACTGCTGCTATTTGGAAACCCCTTCTTTACTTCCCAGGCCA
GCAAGCCTTCACTGAAACTGGTTGAAGAGTGTTGCACCCTTTTGGGCCTAGAATTCTGAACTTTATCTGTTCTGT
TTCTGTGGGAGGAGAAGGGGAAGTATGTTTTGGGGGGCTGCTTCCTGTCTGAGTAAGCCCTCAGGAGCCTCTTGC
TCCCCTGTGAACCCCTGAACCTTCTGAGCCCCCCTGCTTCTATGGGGCTCTCTCTTCTGCCTTCTCAGGAAAGCT
GTGTCTGATTTTGGCCATCAGGACTCTGACGTCTCTTTGGTCTTGTTGATTTACCTCTGGGCATATCCCTTCCCC
AGATCTGCTCCTCCCCTTTCACAGGTGGGATCGGCACTCAGGGGGTCTGGAAAGAAGGTCATAAGGGAGCATGAT
AGGATTTGGGGCAGAGGGACAGGCTCCTCTGGGGAAACCCCCCAGAGCTCTTTACCAAGGATGAAAGAGGAGCCA
GGCCTTGGGCTCCTGATGACCAGAAAGGGGCCACCGGGGTCTAATGGTGACAGTCCAAACCACTCCACTGGCCTC
CTGGCAGAAGCCGAGTGTGCTGGGGTCTCCGAAGAGGGTCCCTCCTTTTTGGGGGAAGGTCAGCCCAGCCCCTCC
AAAGGTCTGATGTCTCCACTTTCACCCGCAGGCCTTACCGCTCTGTTTATAGTGACCCACCCTAGATCTTCCCCA
AGAGGGACTGGGGTTTCTGGGGTCCATTCTCTGAGTCAGTGGTTATTTGAAAATTTGATTTTGATTTTATTTTTT
CTCTGTAAACTTCCAAGCTGGCTTTTCCCATTTCAATTCCTGTGATTTATGCCAATAAAGTTTGCCCATG

FIGURE 318

MDDLDALLADLESTTSHISKRPVFLSEETPYSYPTGNHTYQEIAVPPPVPPPPSSEALNGTILDPLDQWQPSGSR
FIHQQPQSSSPVYGSSAKTSSVSNPQDSVGSPCSRVGEEEHVYSFPNKQKSAEPSPTVMSTSLGSNLSELDRLLL
ELNAVQHNPPGFPADEANSSPPLPGALSPLYGVPETNSPLGGKAGPLTKEKPKRNGGRGLEDVRPSVESLLDELE
SSVPSPVPAITVNQGEMSSPQRVTSTQQQTRISASSATRELDELMASLSDFKFMAQGKTGSSSPPGGPPKPGSQL
DSMLGSLQSDLNKLGVATVAKGVCGACKKPIAGQVVTAMGKTWHPEHFVCTHCQEEIGSRNFFERDGQPYCEKDY
HNLFSPRCYYCNGPILDKVVTALDRTWHPEHFFCAQCGAFFGPEGFHEKDGKAYCRKDYFDMFAPKCGGCARAIL
ENYISALNTLWHPECFVCRECFTPFVNGSFFEHDGQPYCEVHYHERRGSLCSGCQKPITGRCITAMAKKFHPEHF
VCAFCLKQLNKGTFKEQNDKPYCQNCFLKLFC

FIGURE 319

GCCACACGGTCTTTGAGCTGAGTCGAGGTGGACCCTTTGAACGCAGTCGCCCTACAGCCGCTGATTCCCCCCGCA
TCGCCTCCCGTGGAAGCCCAGGCCCGCTTCGCAGCTTTCTCCCTTTGTCTCATAACC**ATG**TCCACCAACGAGAAT
GCTAATACACCAGCTGCCCGTCTTCACAGATTCAAGAACAAGGGAAAAGACAGTACAGAAATGAGGCGTCGCAGA
ATAGAGGTCAATGTGGAGCTGAGGAAAGCTAAGAAGGATGACCAGATGCTGAAGAGGAGAAATGTAAGCTCATTT
CCTGATGATGCTACTTCTCCGCTGCAGGAAAACCGCAACAACCAGGGCACTGTAAATTGGTCTGTTGATGACATT
GTCAAAGGCATAAATAGCAGCAATGTGGAAAATCAGCTCCAAGCTACTCAAGCTGCCAGGAAACTACTTTCCAGA
GAAAAACAGCCCCCCATAGACAACATAATCCGGGCTGGTTTGATTCCGAAATTTGTGTCCTTCTTGGGCAGAACT
GATTGTAGTCCCATTCAGTTTGAATCTGCTTGGGCACTCACTAACATTGCTTCTGGGACATCAGAACAAACCAAG
GCTGTGGTAGATGGAGGTGCCATCCCAGCATTCATTTCTCTGTTGGCATCTCCCCATGCTCACATCAGTGAACAA
GCTGTCTGGGCTCTAGGAAACATTGCAGGTGATGGCTCAGTGTTCCGAGACTTGGTTATTAAGTACGGTGCAGTT
GACCCACTGTTGGCTCTCCTTGCAGTTCCTGATATGTCATCTTTAGCATGTGGCTACTTACGTAATCTTACCTGG
ACACTTTCTAATCTTTGCCGCAACAAGAATCCTGCACCCCCGATAGATGCTGTTGAGCAGATTCTTCCTACCTTA
GTTCGGCTCCTGCATCATGATGATCCAGAAGTGTTAGCAGATACCTGCTGGGCTATTTCCTACCTTACTGATGGT
CCAAATGAACGAATTGGCATGGTGGTGAAAACAGGAGTTGTGCCCCAACTTGTGAAGCTTCTAGGAGCTTCTGAA
TTGCCAATTGTGACTCCTGCCCTAAGAGCCATAGGGAATATTGTCACTGGTACAGATGAACAGACTCAGGTTGTG
ATTGATGCAGGAGCACTCGCCGTCTTTCCCAGCCTGCTCACCAACCCCAAAACTAACATTCAGAAGGAAGCTACG
TGGACAATGTCAAACATCACAGCCGGCCGCCAGGACCAGATACAGCAAGTTGTGAATCATGGATTAGTCCCATTC
CTTGTCAGTGTTCTCTCTAAGGCAGATTTTAAGACACAAAAGGAAGCTGTGTGGGCCGTGACCAACTATACCAGT
GGTGGAACAGTTGAACAGATTGTGTACCTTGTTCACTGTGGCATAATAGAACCGTTGATGAACCTCTTAACTGCA
AAAGATACCAAGATTATTCTGGTTATCCTGGATGCCATTTCAAATATCTTTCAGGCTGCTGAGAAACTAGGTGAA
ACTGAGAAACTTAGTATAATGATTGAAGAATGTGGAGGCTTAGACAAAATTGAAGCTCTACAAAACCATGAAAAT
GAGTCTGTGTATAAGGCTTCGTTAAGCTTAATTGAGAAGTATTTCTCTGTAGAGGAAGAGGAAGATCAAAACGTT
GTACCAGAAACTACCTCTGAAGGCTACACTTTCCAAGTTCAGGATGGGGCTCCTGGGACCTTTAACTTT**TAG**ATC
ATGTAGCTGAGACATAAATTTGTTGTGTACTACGTTTGGTATTTTGTCTTATTGTTTCTCTACTAAGAACTCTTT
CTTAAATGTGGTTTGTTACTGTAGCACTTTTTACACTGAAACTATACTTGAACAGTTCCAACTGTACATACATAC
TGTATGAAGCTTGTCCTCTGACTAGGTTTCTAATTTCTATGTGGAATTTCCTATCTTGCAGCATCCTGTAAATAA
ACATTCAAGTCCACCCTTAAAAAAAA

FIGURE 320

MSTNENANTPAARLHRFKNKGKDSTEMRRRRIEVNVELRKAKKDDQMLKRRNVSSFPDDATSPLQENRNNQGTVN
WSVDDIVKGINSSNVENQLQATQAARKLLSREKQPPIDNIIRAGLIPKFVSFLGRTDCSPIQFESAWALTNIASG
TSEQTKAVVDGGAIPAFISLLASPHAHISEQAVWALGNIAGDGSVFRDLVIKYGAVDPLLALLAVPDMSSLACGY
LRNLTWTLSNLCRNKNPAPPIDAVEQILPTLVRLLHHDDPEVLADTCWAISYLTDGPNERIGMVVKTGVVPQLVK
LLGASELPIVTPALRAIGNIVTGTDEQTQVVIDAGALAVFPSLLTNPKTNIQKEATWTMSNITAGRQDQIQQVVN
HGLVPFLVSVLSKADFKTQKEAVWAVTNYTSGGTVEQIVYLVHCGIIEPLMNLLTAKDTKIILVILDAISNIFQA
AEKLGETEKLSIMIEECGGLDKIEALQNHENESVYKASLSLIEKYFSVEEEEDQNVVPETTSEGYTFQVQDGAPG
TFNF

FIGURE 321

GCCTCCCAGCACGCTGGTCAGCTCCTCTTGCTCGCAAGCAGGTCTGGCCCCAGCGGCGCGAAGTCACGAGGCTGG
GGGCGGCCGGCGGCGAAGGGGGCGGGGCGAGGCCGGGCGCCGCAGCGCGCATAGGCGGAGCCTCGGCCGCGGGCC
GCCTTGGTATATCTGCGTGCGCGCGTCTGCTGGGCCAGTCGGGACAGAGGAGACAAGATGGCGCTGCGGGCGATG
CGGGGGATTGTCAACGGGGCCGCACCCGAGCTACCCGTGCCCACCGGTGGGCCGGCGGTGGGAGCTCGGGAGCAG
GCGCTGGCAGTCAGTCGGAACTACCTCTCCCAGCCTCGCCTCACATACAAGACAGTATCTGGAGTCAATGGTCCA
CTAGTGATCTTAGATCATGTTAAGTTTCCCAGGTATGCTGAAATTGTCCATTTGACCTTACCGGATGGCACAAAG
AGAAGTGGGCAAGTTCTGGAAGTTAGTGGTTCCAAGGCAGTAGTTCAGGTATTTGAAGGGACTTCAGGTATAGAT
GCTAAGAAAACGTCCTGTGAGTTTACTGGGGATATTCTCCGAACACCGGTGTCTGAGGATATGCTTGGTCGGGTA
TTCAATGGATCGGGAAAACCCATTGACAGAGGTCCTGTTGTACTGGCCGAAGACTTCCTTGATATCATGGGTCAG
CCAATCAACCCTCAATGTCGAATCTACCCAGAGGAAATGATTCAGACTGGCATTTCGGCCATCGATGGGATGAAC
AGTATTGCTAGGGGGCAGAAAATTCCTATCTTCTCTGCTGCTGGGCTACCACACAATGAGATTGCAGCTCAGATC
TGTCGCCAGGCTGGTTTGGTAAAGAAATCCAAAGATGTAGTAGACTACAGTGAGGAAAATTTTGCAATTGTATTT
GCTGCTATGGGTGTAAACATGGAAACTGCCCGGTTCTTCAAATCTGACTTTGAAGAAAATGGCTCAATGGACAAT
GTCTGCCTCTTTTTGAACTTGGCTAATGACCCAACCATTGAGCGAATTATCACTCCTCGCCTGGCTCTAACCACA
GCTGAATTTCTGGCGTACCAATGTGAGAAACATGTATTGGTTATTCTAACAGACATGAGTTCTTATGCTGAAGCA
CTTCGAGAGGTTTCAGCAGCCAGGGAAGAGGTACCTGGTCGACGAGGTTTTCCAGGTTACATGTATACAGATTTA
GCCACGATATATGAACGCGCTGGGCGAGTGGAAGGGAGAAACGGCTCGATTACTCAAATCCCTATTCTAACCATG
CCTAATGATGATATCACTCACCCCATCCCAGACTTGACTGGCTACATTACAGAGGGGCAGATCTATGTGGACAGA
CAGCTGCACAACAGACAGATTTATCCACCTATCAATGTGCTGCCCTCACTATCACGGTTAATGAAGTCTGCTATT
GGAGAAGGGATGACCAGGAAGGATCATGCCGATGTATCTAACCAGCTATATGCGTGCTATGCTATTGGAAAGGAT
GTGCAAGCCATGAAAGCTGTCGTTGGAGAAGAAGCCCTTACCTCAGATGATCTTCTCTACTTGGAATTTCTGCAG
AAGTTTGAGAGGAACTTCATTGCTCAGGGTCCTTACGAAAATCGCACTGTCTTTGAGACTTTGGACATTGGCTGG
CAGCTACTCCGAATCTTCCCCAAAGAAATGCTGAAGAGAATCCCTCAGAGCACCCTCAGCGAATTTTACCCTCGA
GACTCTGCAAAGCATTAGCTGCTGCTTCTGCATTGCTCCGCGCTCTTGTGAAATACTGGTTCTGTTTTCTTTATT
CCTTTTGCACTCTCGGTTCCCACCTTTGTGTTGGAGTTTACCATGTTACCCTGTAATTAAAAACAAAGAATAGGT
AACATATTGTGCCAGTGTTGCAACGTTTTAAACTGCTAACAGACCTTAAAATATCCCCCTACCTGGGTCCTCAGT
GCTATGTTTAAAGTGCTGCAGGGATGGAGTGGCGTTTTCTTATTGCTGTATGTATTGTACATAGTGGAGTAGTTA
GTTACCTGATAACAGTCTTGTTATTTGGGTCTCTTAGACCTTACCTCTCAACTCCCTCAAGAGTACCAGTCTCTG
AAGTTATAATGCTTTGGTCTCTACATTAGGGGCAAGATCCAGTCTGAGAGAAGTCTCCTTTGAGAAGGGCCAAGA
GGCTCTTTCCTGAGTGTTTGCTTTCGGTTTGTTGGTATGCCTGTATTGCTGGGCTGTGCTGCTGCTCGAAGCAGA
TGGTTTTGACTGTCTTTTTGCTCTTTCCTATATAATGAATAGATGAGTGAAAGGAGTTTTCTTTTTCTCTTTAGT
ACTTACGTATTGGGATTCCTGTGTCTTACAGCTCTCCCTCTCCAAATAATACACAGAATCCTGCAACTTTTTGCA
CAGCTGGTATCTGTCTGGTAGCAGTGAGACCCCTTGTCTTGGTGATCCTTACTGGGTTTCCAAGCAGAGGAGTCA
CATGATTACAATTGCCAGTAGAGTTGTTGTTTGGGGTACAAGATGAGAAGAAAGAAAAACCTACAGCCTTTCTAC
ATTCTGACATGCTAACAGTGGTTTAAGTTTCTAAAGTGTTTACCAGATGCTGAAGGCAAGGGGAGGGAGCAGAAG
CACTTATGTTTACGGATATTTTAAACTCTGTTAGAGAGCAGCCTTTGAAAATCCCCAATTTGGTTCTGCTTTTTG
ACCTCTCTCTACCTTTTCAGGGTAATCTTTGTGGCACAAACGATAGCATTTCCAAGCTTTAGAGTTTTCTGAATT
CCTGCGCCTTCCTGACGTGAGCCCTGAGCGATCTTCTATGCAGTTCTGCCATGCGTCCTGTTGGTCTCTCTGTGT
TCTTTGTTACTTGGGTGCAATAGCAACTTCCCTACCCCGTGCATTCCATCTTTCATGTTGTGTAAAGTTCTTCAC
TTTTTTCTCTGAGGGCTGGGGGTTGGGGGAGTCAGCATGATTATATTTTAATGTAGAAAATGTGACATCTGGATA
TAAAATGAAAATAAATGTTAAATTAAATGGACCTTAAAAAAAAAAAAAAAAAAA

FIGURE 322

MALRAMRGIVNGAAPELPVPTGGPAVGAREQALAVSRNYLSQPRLTYKTVSGVNGPLVILDHVKFPRYAEIVHLT
LPDGTKRSGQVLEVSGSKAVVQVFEGTSGIDAKKTSCEFTGDILRTPVSEDMLGRVFNGSGKPIDRGPVVLAEDF
LDIMGQPINPQCRIYPEEMIQTGISAIDGMNSIARGQKIPIFSAAGLPHNEIAAQICRQAGLVKKSKDVVDYSEE
NFAIVFAAMGVNMETARFFKSDFEENGSMDNVCLFLNLANDPTIERIITPRLALTTAEFLAYQCEKHVLVILTDM
SSYAEALREVSAAREEVPGRRGFPGYMYTDLATIYERAGRVEGRNGSITQIPILTMPNDDITHPIPDLTGYITEG
QIYVDRQLHNRQIYPPINVLPSLSRLMKSAIGEGMTRKDHADVSNQLYACYAIGKDVQAMKAVVGEEALTSDDLL
YLEFLQKFERNFIAQGPYENRTVFETLDIGWQLLRIFPKEMLKRIPQSTLSEFYPRDSAKH

FIGURE 323

TGTCGGGGACGGTAACCGGGACCCGTGCTCTGCTCCTGTCGCCTTCGCCTCCTGAATCCCTAGCCATATGCGTGA
GTGCATCTCCATCCACGTTGGCCAGGCTGGTGTCCAGATTGGCAATGCCTGCTGGGAGCTCTACTGCCTGGAACA
CGGCATCCAGCCCGATGGCCAGATGCCAAGTGACAAGACCATTGGGGGAGGAGATGACTCCTTCAACACCTTCTT
CAGTGAGACGGGCGCTGGCAAGCACGTGCCCCGGGCTGTGTTTGTAGACTTGGAACCCACAGTCATTGATGAAGT
TCGCACTGGCACCTACCGCCAGCTCTTCCACCCTGAGCAGCTCATCACAGGCAAGGAAGATGCTGCCAATAACTA
TGCCCGAGGGCACTACACCATTGGCAAGGAGATCATTGACCTTGTGTTGGACCGAATTCGCAAGCTGGCTGACCA
GTGCACCCGTCTTCAGGGCTTCTTGGTTTTCCACAGCTTTGGTGGGGGAACTGGTTCTGGGTTCACCTCCCTGCT
CATGGAACGCCTGTCAGTTGATTATGGCAAGAAATCCAAGCTGGAGTTCTCCATTTACCCGGCACCCCAGGTTTC
CACAGCTGTAGTTGAGCCCTACAACTCCATCCTCACCACCCACACCACCCTGGAGCACTCTGATTGTGCCTTCAT
GGTAGACAATGAGGCCATCTATGACATCTGTCGTAGAAACCTCGATATCGAGCGCCCAACCTACACTAACCTTAA
CCGCCTTATTAGCCAGATTGTGTCCTCCATCACTGCTTCCCTGAGATTTGATGGAGCCCTGAATGTTGACCTGAC
AGAATTCCAGACCAACCTGGTCCCCTACCCCCGCATCCACTTCCCTCTGGCCACATATGCCCCTGTCATCTCTGC
TGAGAAAGCCTACCATGAACAGCTTTCTGTAGCAGACATCACCAATGCTTGCTTTGAGCCAGCCAACCAGATGGT
GAAATGTGACCCTGGCCATGGTAAATACATGGCTTGCTGCCTGTTGTACCGTGGTGACGTGGTTCCCAAAGATGT
CAATGCTGCCATTGCCACCATCAAAACCAAGCGCACGATCCAGTTTGTGGATTGGTGCCCCACTGGCTTCAAGGT
TGGCATCAACTACCAGCCTCCCACTGTGGTGCCTGGTGGAGACCTGGCCAAGGTACAGAGAGCTGTGTGCATGCT
GAGCAACACCACAGCCATTGCTGAGGCCTGGGCTCGCCTGGACCACAAGTTTGACCTGATGTATGCCAAGCGTGC
CTTTGTTCACTGGTACGTGGGTGAGGGGATGGAGGAAGGCGAGTTTTCAGAGGCCCGTGAAGATATGGCTGCCCT
TGAGAAGGATTATGAGGAGGTTGGTGTGGATTCTGTTGAAGGAGAGGGTGAGGAAGAAGGAGAGGAATACTAATT
ATCCATTCCTTTTGGCCCTGCAGCATGTCATGCTCCCAGAATTTCAGCTTCAGCTTAACTGACAGATGTTAAAGC
TTTCTGGTTAGATTGTTTTCACTTGGTGATCATGTCTTTTCCATGTGTACCTGTAATATTTTTCCATCATATCTC
AAAGTAAAGTCATTAACATCA

FIGURE 324

MRECISIHVGQAGVQIGNACWELYCLEHGIQPDGQMPSDKTIGGGDDSFNTFFSETGAGKHVPRAVFVDLEPTVI
DEVRTGTYRQLFHPEQLITGKEDAANNYARGHYTIGKEIIDLVLDRIRKLADQCTRLQGFLVFHSFGGGTGSGFT
SLLMERLSVDYGKKSKLEFSIYPAPQVSTAVVEPYNSILTTHTTLEHSDCAFMVDNEAIYDICRRNLDIERPTYT
NLNRLISQIVSSITASLRFDGALNVDLTEFQTNLVPYPRIHFPLATYAPVISAEKAYHEQLSVADITNACFEPAN
QMVKCDPGHGKYMACCLLYRGDVVPKDVNAAIATIKTKRTIQFVDWCPTGFKVGINYQPPTVVPGGDLAKVQRAV
CMLSNTTAIAEAWARLDHKFDLMYAKRAFVHWYVGEGMEEGEFSEAREDMAALEKDYEEVGVDSVEGEGEEEGEE
Y

FIGURE 325A

AAGATCTCATAAAATCTATGCTGAGGAATGAGCGACAGTTCAAGGAGGAGAAGCTTGCAGAGCAGCTCAAGCAAG
CTGAGGAGCTCAGGCAATATAAAGTCCTGGTTCACGCTCAGGAACGAGAGCTGACCCAGTTAAGGGAGAAGTTGC
GGGAAGGGAGAGATGCCTCCCGCTCATTGAATGAGCATCTCCAGGCCCTCCTCACTCCGGATGAGCCGGACAAGT
CCCAGGGGCAGGACCTCCAAGAACAGCTGGCTGAGGGGTGTAGACTGGCACAGCACCTTGTCCAAAAGCTCAGCC
CAGAAAATGACAACGATGACGATGAAGATGTTCAAGTTGAGGTGGCTGAGAAAGTGCAGAAATCGTCTGCCCCCA
GGGAGATGCAGAAGGCTGAAGAAAAGGAAGTCCCTGAGGACTCACTGGAGGAATGTGCCATCACTTGTTCAAATA
GCCATGGCCCTTATGACTCCAACCAGCCACATAGGAAAACCAAAATCACATTTGAGGAAGACAAAGTCGACTCAA
CTCTCATTGGCTCATCCTCTCATGTTGAATGGGAGGATGCTGTACACATTATTCCAGAAAATGAAAGTGATGATG
AGGAAGAGGAAGAAAAAGGACCAGTGTCTCCCAGGAATCTGCAGGAGTCTGAAGAGGAGGAAGTCCCCCAGGAGT
CCTGGGATGAAGGTTATTCGACTCTCTCAATTCCTCCTGAAATGTTGGCCTCGTACAAGTCTTACAGCAGCACAT
TTCACTCATTAGAGGAACAGCAAGTCTGCATGGCTGTTGACATAGGCAGACATCGGTGGGATCAAGTGAAAAAGG
AGGACCACGAGGCAACAGGTCCCAGGCTCAGCAGAGAGCTGCTGGATGAGAAAGGGCCTGAAGTCTTGCAGGACT
CACTGGATAGATGTTATTCAACTCCTTCAGGTTGTCTTGAACTGACTGACTCATGCCAGCCCTACAGAAGTGCCT
TTTACGTATTGGAGCAACAGCGTGTTGGCTTGGCTGTTAACATGGATGAAATTGAAAAGTACCAAGAAGTGGAAG
AAGACCAAGACCCATCATGCCCCAGGCTCAGCAGGGAGCTGCTGGATGAGAAAGAGCCTGAAGTCTTGCAGGACT
CACTGGGTAGATGTTATTCGACTCCTTCAGGTTATCTTGAACTGCCTGACTTAGGCCAGCCCTACAGCAGTGCTG
TTTACTCATTGGAGGAACAGTACCTTGGCTTGGCTCTTGACGTGGACAGAATTAAAAAGGACCAAGAAGAGGAAG
AAGACCAAGGCCCACCATGCCCCAGGCTCAGCAGGGAGCTGCTGGAGGTAGTAGAGCCTGAAGTCTTGCAGGACT
CACTGGATAGATGTTATTCAACTCCTTCCAGTTGTCTTGAACAGCCTGACTCCTGCCAGCCCTATGGAAGTTCCT
TTTATGCATTGGAGGAAAAGCATGTTGGCTTTTCTCTTGACGTGGGAGAAATTGAAAAGAAGGGGAAGGGGAAGA
AAAGAAGGGGAAGAAGATCAAAGAAGGAAAGAAGAAGGGGAAGAAAAGAAGGGGAAGAAGATCAAAACCCACCAT
GCCCCAGGCTCAGCAGGGAGCTGCTGGATGAGAAAGGGCCTGAAGTCTTGCAGGACTCACTGGATAGATGTTATT
CAACTCCTTCAGGTTGTCTTGAACTGACTGACTCATGCCAGCCCTACAGAAGTGCCTTTTACATATTGGAGCAAC
AGCGTGTTGGCTTGGCTGTTGACATGGATGAAATTGAAAAGTACCAAGAAGTGGAAGAAGACCAAGACCCATCAT
GCCCCAGGCTCAGCGGGGAGCTGTTGGATGAGAAAGAGCCTGAAGTCTTGCAGGAGTCACTGGATAGATGCTATT
CAACTCCTTCAGGTTGTCTTGAACTGACTGACTCATGCCAGCCCTACAGAAGTGCCTTTTACATATTGGAGCAAC
AGCGTGTTGGCTTGGCTGTTGACATGGATGAAATTGAAAAGTACCAAGAAGTGGAAGAAGACCAAGACCCATCAT
GCCCCAGGCTCAGCAGGGAGCTGCTGGATGAGAAAGAGCCTGAAGTCTTGCAGGACTCACTGGGTAGATGTTATT
CGACTCCTTCAGGTTATCTTGAACTGCCTGACTTAGGCCAGCCCTACAGCAGTGCTGTTTACTCATTGGAGGAAC
AGTACCTTGGCTTGGCTCTTGACGTGGACAGAATTAAAAAGGACCAAGAAGAGGAAGAAGACCAAGGCCCACCAT
GCCCCAGGCTCAGCAGGGAGCTGCTGGAGGTAGTAGAGCCTGAAGTCTTGCAGGACTCACTGGATAGATGTTATT
CAACTCCTTCCAGTTGTCTTGAACAGCCTGACTCCTGCCAGCCCTATGGAAGTTCCTTTTATGCATTGGAGGAAA
AACATGTTGGCTTTTCTCTTGACGTGGGAGAAATTGAAAAGAAGGGGAAGGGGAAGAAAAGAAGGGGAAGAAGAT
CAAAGAAGGAAAGAAGAAGGGGAAGAAAAGAAGGGGAAGAAGATCAAAACCCACCATGCCCCAGGCTCAACAGCA
TGCTGATGGAAGTGGAAGAGCCTGAAGTCTTGCAGGACTCACTGGATATATGTTATTCGACTCCGTCAATGTACT
TTGAACTACCTGACTCATTCCAGCACTACAGAAGTGTGTTTTACTCATTTGAGGAAGAGCATATCAGCTTCGCCC
TTTACGTGGACAATAGGTTTTTTACTTTGACGGTGACAAGTCTCCACCTGGTGTTCCAGATGGGAGTCATATTCC
CACAATAAGCAGCCCTTACTAAGCCGAGAGGTGTCATTCCTGCAGGCAGGACCTATAGGCACGTGAAGATTTGAA
TGAAAGTACAGTTCCATTTGGAAGCCCAGACATAGGATGGGTCAGTGGGCATGGCTCTATTCCTATTCTCAAACC
ATGCCAGTGGCAACCTGTGCTCAGTCTGAAGACAATGGACCCACGTTAGGTGTGACACGTTCACATAACTGTGCA
GCACATGCCGGGAGTGATCAGTCAGACATTTTAATTTGAACCACGTATCTCTGGGTAGCTACAAAATTCCTCAGG
GATGTCATTTTGCAGGCATGTCTCTGAGCTTCTATACCTGCTCAAGGTCATTGTCATCTTTGTGTTTAGCTCATC
CAAAGGTGTTACCCTGGTTTCAATGAACCTAACCTCATTCTTTGTGTCTTCAGTGTTGGCTTGTTTTAGCTGATC
CATCTGTAACACAGGAGGGATCCTTGGCTGAGGATTGTATTTCAGAACCACCAACTGCTCTTGACAATTGTTAAC
CCGCTAGGCTCCTTTGGTTAGAGAAGCCACAGTCCTTCAGCCTCCAATTGGTGTCAGTACTTAGGAAGACCACAG
CTAGATGGACAAACAGCATTGGGAGGCCTTAGCCCTGCTCCTCTCAATTCCATCCTGTAGAGAACAGGAGTCAGG
AGCCGCTGGCAGGAGACAGCATGTCACCCAGGACTCTGCCGGTGCAGAATATGAGCAATGCCATGTTCTTGCAGA
AAACGCTTAACCTGAGTTTCATAGGAGGTAATCACCAGACAACTGCAGAATGTAGAACACTGAGCAGGACAACTG

FIGURE 325B

ACCTGTCTCCTTCACATAGTCCATATCACCACAAATCACACAACAAAAAGGAGAAGAGATATTTTCGGTTGAAAA
AAAGTAAAAAGATA

FIGURE 326

MLRNERQFKEEKLAEQLKQAEELRQYKVLVHAQERELTQLREKLREGRDASRSLNEHLQALLTPDEPDKSQGQDL
QEQLAEGCRLAQHLVQKLSPENDNDDDEDVQVEVAEKVQKSSAPREMQKAEEKEVPEDSLEECAITCSNSHGPYD
SNQPHRKTKITFEEDKVDSTLIGSSSHVEWEDAVHIIPENESDDEEEEEKGPVSPRNLQESEEEEVPQESWDEGY
STLSIPPEMLASYKSYSSTFHSLEEQQVCMAVDIGRHRWDQVKKEDHEATGPRLSRELLDEKGPEVLQDSLDRCY
STPSGCLELTDSCQPYRSAFYVLEQQRVGLAVNMDEIEKYQEVEEDQDPSCPRLSRELLDEKEPEVLQDSLGRCY
STPSGYLELPDLGQPYSSAVYSLEEQYLGLALDVDRIKKDQEEEEDQGPPCPRLSRELLEVVEPEVLQDSLDRCY
STPSSCLEQPDSCQPYGSSFYALEEKHVGFSLDVGEIEKKGKGKKRRGRRSKKERRRGRKEGEEDQNPPCPRLSR
ELLDEKGPEVLQDSLDRCYSTPSGCLELTDSCQPYRSAFYILEQQRVGLAVDMDEIEKYQEVEEDQDPSCPRLSG
ELLDEKEPEVLQESLDRCYSTPSGCLELTDSCQPYRSAFYILEQQRVGLAVDMDEIEKYQEVEEDQDPSCPRLSR
ELLDEKEPEVLQDSLGRCYSTPSGYLELPDLGQPYSSAVYSLEEQYLGLALDVDRIKKDQEEEEDQGPPCPRLSR
ELLEVVEPEVLQDSLDRCYSTPSSCLEQPDSCQPYGSSFYALEEKHVGFSLDVGEIEKKGKGKKRRGRRSKKERR
RGRKEGEEDQNPPCPRLNSMLMEVEEPEVLQDSLDICYSTPSMYFELPDSFQHYRSVFYSFEEEHISFALYVDNR
FFTLTVTSLHLVFQMGVIFPQ

FIGURE 327

ATCTCTCTCGGGTGGAGTCCTTCTGACAGCTGGTGCGCCTGCCCGGGAACATCCTCCTGGACTCAATC**ATG**GCTT
GTGGTCTGGTCGCCAGCAACCTGAATCTCAAACCTGGAGAGTGCCTTCGAGTGCGAGGCGAGGTGGCTCCTGACG
CTAAGAGCTTCGTGCTGAACCTGGGCAAAGACAGCAACAACCTGTGCCTGCACTTCAACCCTCGCTTCAACGCCC
ACGGCGACGCCAACACCATCGTGTGCAACAGCAAGGACGGCGGGGCCTGGGGGACCGAGCAGCGGGAGGCTGTCT
TTCCCTTCCAGCCTGGAAGTGTTGCAGAGGTGTGCATCACCTTCGACCAGGCCAACCTGACCGTCAAGCTGCCAG
ATGGATACGAATTCAAGTTCCCCAACCGCCTCAACCTGGAGGCCATCAACTACATGGCAGCTGACGGTGACTTCA
AGATCAAATGTGTGGCCTTTGAC**TGA**AATCAGCCAGCCCATGGCCCCCAATAAAGGCAGCTGCCTCTGCTCCCCT
G

FIGURE 328

MACGLVASNLNLKPGECLRVRGEVAPDAKSFVLNLGKDSNNLCLHFNPRFNAHGDANTIVCNSKDGGAWGTEQRE
AVFPFQPGSVAEVCITFDQANLTVKLPDGYEFKFPNRLNLEAINYMAADGDFKIKCVAFD

FIGURE 329

TCAGAAGCTGATTGCATCCAAAGCAAATGACCACCAAGGTTTTTATCTTCTAAACAGTATAATAGAGCACATGCC
TCCTGAATCAGTTGACCAATATAGGAAACAAATCTTCATTCTGCTATTCCAGAGACTTCAGAATTCCAAAACAAC
CAAGTTTATCAAGAGTTTTTTAGTCTTTATTAATTTGTATTGCATAAAATATGGGGCACTAGCACTACAAGAAAT
ATTTGATGGTATACAACCAAAAATGTTTGGAATGGTTTTGGAAAAAATTATTATTCCTGAAATTCAGAAGGTATC
TGGAAATGTAGAGAAAAAGATCTGTGCGGTTGGCATAACCAAATTACTAACAGAATGTCCCCCAATGATGGACAC
TGAGTATACCAAACTGTGGACTCCATTATTACAGTCTTTGATTGGTCTTTTTGAGTTACCCGAAGATGATACCAT
TCCTGATGAGGAACATTTTATTGACATAGAAGATACACCAGGATATCAGACTGCCTTCTCACAGTTGGCATTTGC
TGGGAAAAAAAGAGCATGATCCTGTAGGTCAAATGGTGAATAACCCCAAAATTCACCTGGCACAGTCACTTCACAA
GTTGTCTACCGCCTGTCCAGGAAGGACCTATTTTTGAAGGCATAAAAGCAGTTGAGTTTCTGGAGAATTTTTGGA
TGGTGATTAATGACTTGACTGGCTGCTCTTCCCAGAGCTGTGGCAGCTCTCCCGTAGAAGATGGGGTTTGTATTG
GCGCACCAAGATCTCCAACAGCCAGTGTGTGTTTCCCATCTCTTGTAGGTTCCATCAATGGTGAGCACCAGCCTG
AATGCAGAAGCGCTCCAGTATCTCCAAGGGTACCTTCAGGCAGCCAGTGTGACACTGCTTTAAACTGCATTTTTC
TAATGGGCTAAACCCAGATGGTTTCCTAGGAAATCACAGGCTTCTGAGCACAGCTGCATTAAAACAAAGGAAGTT
CTCCTTTTGAACTTGTCACGAATTCCATCTTGTAAAGGATATTAAATGTTGCTTTAACCTGAACCTTGAGCAAAT
TAGTTGGTTTGTGTGATCATACAGTTATGTGGGTGGCTTCTAGTTTGCAACTTCAAGGGACAAGTATTAATAGTT
CAGTGTATGGCGTTGGTTTGTGTTGAGCGTTTGCACGGTTTGGATAATCTTAAATTTTGACGGACACTGTGGAGA
CTTTXCTGTTACTAAATCCTTTTGTTTTGAAGCTGTTGCTATTTGTATTTCTCTTGTCCTTTATATTTTTTGTCT
GTTTATTTACGCTTTTATTGGAAATGTGAATAAGTAAAGAATTACTTGTGTTACTTGCCAAGCAGTGCACATTTC
ATAGTTTCAAATCTGTAATCAGCAATAAAAATCCTAAAATATGTACCTAAAAAAAAAAAAAAAAAAAA

FIGURE 330

CGGCGCCGAGGGTGGGGCGCGGGCGTAGTGGCGCCGGGAGTCGCGGGTGCGCGCGGGCCGTGAGTGTGCGCTTTT
GAGAGTCGCGGCGGAAGGAGCCCGGCCGCCGCCCGCCGGCATGAGCTACGACCGCGCCATCACCGTCTTCTCGCC
CGACGGCCACCTCTTCCAAGTGGAGTACGCGCAGGAGGCCGTCAAGAAGGGCTCGACCGCGGTTGGTGTTCGAGG
AAGAGACATTGTTGTTCTTGGTGTGGAGAAGAAGTCAGTGGCCAAACTGCAGGATGAAAGAACAGTGCGGAAGAT
CTGTGCTTTGGATGACAACGTCTGCATGGCCTTTGCAGGCCTCACCGCCGATGCAAGGATAGTCATCAACAGGGC
CCGGGTGGAGTGCCAGAGCCACCGGCTGACTGTGGAGGACCCGGTCACTGTGGAGTACATCACCCGCTACATCGC
CAGTCTGAAGCAGCGTTATACGCAGAGCAATGGGCGCAGGCCGTTTGGCATCTCTGCCCTCATCGTGGGTTTCGA
CTTTGATGGCACTCCTAGGCTCTATCAGACTGACCCCTCGGGCACATACCATGCCTGGAAGGCCAATGCCATAGG
TCGGGGTGCCAAGTCAGTGCGCGAGTTCCTGGAGAAGAACTATACTGACGAAGCCATTGAAACAGATGATCTGAC
CATTAAGCTGGTGATCAAGGCACTCCTGGAAGTGGTTCAGTCAGGTGGCAAAAACATTGAACTTGCTGTCATGAG
GCGAGATCAATCCCTCAAGATTTTAAATCCTGAAGAAATTGAGAAGTATGTTGCTGAAATTGAAAAAGAAAAAGA
AGAAAACGAAAAGAAGAAACAAAAGAAAGCATCATGATGAATAAAATGTCTTTGCTTGTAATTTTTAAATTCATA
TCAATCATGGATGAGTCTCGATGTGTAGGCCTTTCCATTCCATTTATTCACACTGAGTGTCCTACAATAAACTTC
CGTATTTTT

FIGURE 331

MSYDRAITVFSPDGHLFQVEYAQEAVKKGSTAVGVRGRDIVVLGVEKKSVAKLQDERTVRKICALDDNVCMAFAG
LTADARIVINRARVECQSHRLTVEDPVTVEYITRYIASLKQRYTQSNGRRPFGISALIVGFDFDGTPRLYQTDPS
GTYHAWKANAIGRGAKSVREFLEKNYTDEAIETDDLTIKLVIKALLEVVQSGGKNIELAVMRRDQSLKILNPEEI
EKYVAEIEKEKEENEKKKQKKAS

FIGURE 332

CGGGATGCGGCGCGCCGCGCGTTGAACCTCCTTGGCCTGGGCGAAGCTGTGTGGACCAAGCAAGTCAGGAGTGTG
GCCATGTTTTCTGAGCAGGCTGCCCAGAGGGCCCACACTCTACTGTCCCCACCATCAGCCAACAATGCCACCTTT
GCCCGGGTGCCAGTGGCAACCTACACCAACTCCTCACAACCCTTCCGGCTAGGAGAGCGCAGCTTTAGCCGGCAG
TATGCCCACATTTATGCCACCCGCCTCATCCAAATGAGACCCTTCCTGGAGAACCGGGCCCAGCAGCACTGGGGC
AGTGGAGTGGGAGTGAAGAAGCTGTGTGAACTGCAGCCTGAGGAGAAGTGCTGTGTGGTGGGCACTCTGTTCAAG
GCCATGCCGCTGCAGCCCTCCATCCTGCGGGAGGTCAGCGAGGAGCACAACCTGCTCCCCCAGCCTCCTCGGAGT
AAATACATACACCCAGATGACGAGCTGGTCTTGGAAGATGAACTGCAGCGTATCAAACTAAAAGGCACCATTGAC
GTGTCAAAGCTGGTTACGGGGACTGTCCTGGCTGTGTTTGGCTCCGTGAGAGACGACGGGAAGTTTCTGGTGGAG
GACTATTGCTTTGCTGACCTTGCTCCCCAGAAGCCCGCACCCCCACTTGACACAGATAGGTTTGTGCTACTGGTG
TCCGGCCTGGGCCTGGGTGGCGGTGGAGGCGAGAGCCTGCTGGGCACCCAGCTGCTGGTGGATGTGGTGACGGGG
CAGCTTGGGGACGAAGGGGAGCAGTGCAGCGCCGCCCACGTCTCCCGGGTTATCCTCGCTGGCAACCTCCTCAGC
CACAGCACCCAGAGCAGGGATTCTATCAATAAGGCCAAATACCTCACCAAGAAAACCCAGGCAGCCAGCGTGGAG
GCTGTTAAGATGCTGGATGAGATCCTCCTGCAGCTGAGCGCCTCAGTGCCCGTGGACGTGATGCCAGGCGAGTTT
GATCCCACCAATTACACGCTCCCCCAGCAGCCCCTCCACCCCTGCATGTTCCCGCTGGCCACTGCCTACTCCACG
CTCCAGCTGGTCACCAACCCCTACCAGGCCACCATTGATGGAGTCAGATTTTTGGGGACATCAGGACAGAACGTG
AGTGACATTTTCCGATACAGCAGCATGGAGGATCACTTGGAGATCCTGGAGTGGACCCTGCGGGTCCGTCACATC
AGCCCCACAGCCCCGGACACTCTAGGTTGTTACCCCTTCTACAAAACTGACCCGTTCATCTTCCCAGAGTGCCCG
CATGTCTACTTTTGTGGCAACACCCCCAGCTTTGGCTCCAAAATCATCCGAGGTCCTGAGGACCAGACAGTGCTG
TTGGTGACTGTCCCTGACTTCAGTGCCACGCAGACCGCCTGCCTTGTGAACCTGCGCAGCCTGGCCTGCCAGCCC
ATCAGCTTCTCGGGCTTCGGGGCAGAGGACGATGACCTGGGAGGCCTGGGGCTGGGCCCCTGACTCAAAAAAGTG
GTTTTGACCAGAGAGGCCCAGATGGAGGCTGTTCATTCCCTGCAGTGTCGGCATTGTAAATAAAGCCTGGCACTT
GCTGATGCG

FIGURE 333

MFSEQAAQRAHTLLSPPSANNATFARVPVATYTNSSQPFRLGERSFSRQYAHIYATRLIQMRPFLENRAQQHWGS
GVGVKKLCELQPEEKCCVVGTLFKAMPLQPSILREVSEEHNLLPQPPRSKYIHPDDELVLEDELQRIKLKGTIDV
SKLVTGTVLAVFGSVRDDGKFLVEDYCFADLAPQKPAPPLDTDRFVLLVSGLGLGGGGGESLLGTQLLVDVVTGQ
LGDEGEQCSAAHVSRVILAGNLLSHSTQSRDSINKAKYLTKKTQAASVEAVKMLDEILLQLSASVPVDVMPGEFD
PTNYTLPQQPLHPCMFPLATAYSTLQLVTNPYQATIDGVRFLGTSGQNVSDIFRYSSMEDHLEILEWTLRVRHIS
PTAPDTLGCYPFYKTDPFIFPECPHVYFCGNTPSFGSKIIRGPEDQTVLLVTVPDFSATQTACLVNLRSLACQPI
SFSGFGAEDDDLGGLGLGP

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FIGURE 334

GGCACGAGGGCGGCGGCGGCGGTAGAGGCGGCGGCGGCGGCGGCAGCGGGCTCGGAGGCAGCGGTTGGGCTCGCG
GCGAGCGGACGGGGTCGAGTCAGTGCGTTCGCGCGAGTTGGAATCGAAGCCTCTTAAAATGGCAGATGACTTGGA
CTTCGAGACAGGAGATGCAGGGGCCTCAGCCACCTTCCCAATGCAGTGCTCAGCATTACGTAAGAATGGCTTTGT
GGTGCTCAAAGGCCGGCCATGTAAGATCGTCGAGATGTCTACTTCGAAGACTGGCAAGCACGGCCACGCCAAGGT
CCATCTGGTTGGTATTGACATCTTTACTGGGAAGAAATATGAAGATATCTGCCCGTCAACTCATAATATGGATGT
CCCCAACATCAAAAGGAATGACTTCCAGCTGATTGGCATCCAGGATGGGTACCTATCACTGCTCCAGGACAGCGG
GGAGGTACGAGAGGACCTTCGTCTCCCTGAGGGAGACCTTGGCAAGGAGATTGAGCAGAAGTACGACTGTGGAGA
AGAGATCCTGATCACGGTGCTGTCTGCCATGACAGAGGAGGCAGCTGTTGCAATCAAGGCCATGGCAAAATAACT
GGCTCCCAGGATGGCGGTGGTGGCAGCAGTGATCCTCTGAACCTGCAGAGGCCCCCTCCCCGAGCCTGGCCTGGC
TCTGGCCCGGTCCTAAGCTGGACTCCTCCTACACAATTTATTTGACGTTTTATTTTGGTTTTCCCCACCCCCTCA
ATCTGTCGGGGAGCCCCTGCCCTTCACCTAGCTCCCTTGGCCAGGAGCGAGCGAAGCTGTGGCCTTGGTGAAGCT
GCCCTCCTCTTCTCCCCTCACACTACAGCCCTGGTGGGGGAGAAGGGGGTGGGTGCTGCTTGTGGTTTAGTCTTT
TTTTTTTTTTTTTTTTTTTTTTTAAATTCAATCTGGAATCAGAAAGCGGTGGATTCTGGCAAATGGTCCTTGTGC
CCTCCCCACTCATCCCTGGTCTGGTCCCCTGTTGCCCATAGCCCTTTACCCTGAGCACCACCCCAACAGACTGGG
GACCAGCCCCCTCGCCTGCCTGTGTCTCTCCCCAAACCCCTTTAGATGGGGAGGGAAGAGGAGGAGAGGGGAGGG
GACCTGCCCCCTCCTCAGGCATCTGGGAGGGCCCTGCCCCCATGGGCTTTACCCTTCCCTGCGGGCTCTCTCCCC
GACACATTTGTTAAAATCAAACCTGAATAAAACTACAAGTTTAATATGAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAA

FIGURE 335

MADDLDFETGDAGASATFPMQCSALRKNGFVVLKGRPCKIVEMSTSKTGKHGHAKVHLVGIDIFTGKKYEDICPS
THNMDVPNIKRNDFQLIGIQDGYLSLLQDSGEVREDLRLPEGDLGKEIEQKYDCGEEILITVLSAMTEEAAVAIK
AMAK

FIGURE 336

GTAGTGCCGCCGGGACTCTTGGCGGGTGAAGGTGTGTGTCAGCTTTTGCGTCACTCGAGCCCTGGGCGCTGCTTG
CTAAAGAGCCGAGCACGCGGGTCTGTCATCATGTCGCGTTACGGGCGGTACGGAGGAGAAACCAAGGTGTATGTT
GGTAACCTGGGAACTGGCGCTGGCAAAGGAGAGTTAGAAAGGGCTTTCAGTTATTATGGTCCTTTAAGAACTGTA
TGGATTGCGAGAAATCCTCCAGGATTTGCCTTTGTGGAATTCGAAGATCCTAGAGATGCAGAAGATGCAGTACGA
GGACTGGATGGAAAGGTGATTTGTGGCTCCCGAGTGAGGGTTGAACTATCGACAGGCATGCCTCGGAGATCACGT
TTTGATAGACCACCTGCCCGACGTCCCTTTGATCCAAATGATAGATGCTATGAGTGTGGCGAAAAGGGACATTAT
GCTTATGATTGTCATCGTTACAGCCGGCGAAGAAGAAGCAGGTCACGGTCTAGATCACATTCTCGATCCAGAGGA
AGGCGATACTCTCGCTCACGCAGCAGGAGCAGGGGACGAAGGTCAAGGTCAGCATCTCCTCGACGATCAAGATCT
ATCTCTCTTCGTAGATCAAGATCAGCTTCACTCAGAAGATCTAGGTCTGGTTCTATAAAAGGATCGAGGTATTTC
CAATCCCCGTCGAGGTCAAGATCAAGATCCAGGTCTATTTCACGACCAAGAAGCAGCCGATCAAAGTCCAGATCT
CCATCTCCAAAAAGAAGTCGTTCCCCATCAGGAAGTCCTCGCAGAAGTGCAAGTCCTGAAAGAATGGACTGAAGC
TCTCAAGTTCACCCTTTAGGGAAAAGTTATTTTGTTTACATTATTATAAGGGATTTGTGATGTCTGTAAAGTGTA
ACCTAGGAAAGATAATTCAACCATCTAATCAAAATGGATCTGGATTACTATGTAAATTCACAGCAGTAAGGATAA
TATAAATTTTGTTGAATGTATGAACATCATATGGTCTGAAAATGTGGGTTTTTATTTGGCACATTTAAATAACAT
GTTTCTAACTAGATTTTTGATTTGTGTTCAATATTAACACTTCTTAATTTGATATATTTGAGAGTCAGACATTAT
AATTGTTAATCCTTATTCATACATACCTACATTCAGAATTGAAAGGTGTTGGTTAAGTCTTGAACATCACTATTC
TATGCATAAAACTTGGCCAGGATCTTAAGGGACTTTGAAAATTCCATCTTACCCTTGTAGCTCTGGGTAAGATGA
CCTGAGTCCCTTATGATACAGCCTGAATGCATCATGACAGATCCTTAGTTAGCTAATCCGTTTGAAGTTGGTGTT
AGTAGGTATTGTATGATCAGTGGTGAAGCAAGTAGGACCACTGATGTGTCTAAATGAGCATGACAGGAACTAAAC
GAAACTGATTAAATGTATGAGAAATAGAAACTGATTTCTGGATGATCTTTATACTAATTGCAGCTTTCAGGCTAC
TAGGTGGCATAGTGTTAATTAGGACTCCCCAAGATATGGGGAGTTCTACTCTCAATGGTCTTGTTTCTTTGCTTT
CTACATTAGTTAACCAGTTTTATACCAAAAAATGCATGTTTGAGGAATTGTCTGAAATTGGGACAAAACACCTTC
ATGTAAACCAGCTTTGCAAAATTTTCCAGCCCAGATACTCTTCATCTATTCAAATGGATTGTCTTATTCTGAGCA
AAGACCTGTTGTTAATCTTCAAGCTAGGTTTTGCAGTTCCCAACCACAACATTCTTCTATTTTGCCAGGCTGGTG
CAAAGTAATTAAAGATGTCAATCAGAAATGTCAATGAGACTAAAGTGGTTTTGTAAATCTCAGCTATATTTAGCA
ACACTCCATGTAGCTAATATTTTTTGGTAGCATCTGGTAGACCTTAGAATGTTACATAGCCAGTAGGTTCTTTAT
TCAAATTTTAAGTATCTTAAGAATAGTAGGGCAGTAACAGTTACTTTTGAGAGTTTTCTGGTCAAGCTTTTACCA
GGCATTCTCTAGCCTTGGTACAAAAAAAAAAAAAACCTGCTGGTTGCGCAGATACCTAGGCTTGTCCATTTTATG
CATTTCAGCAAAGTCATTGGAGACTATTGCAACTTGGGAATACTGGTCTGCATCAAGTTTAATTCGGTAGTTTGA
CCGCTAGTATGTTGGAAGTTATTTGGATTGTTTTTGGAATTTTGACTGGCTGAATTATGGTTGGTATAAAGTTAT
GTGTATAACTGGCAGGCTTATTTATCTGTTGCACTTGGTTAGCTTTAATTGTTCTGTATTATTTAAAGATAAGTT
TACTCAACAATAA

FIGURE 337

MSRYGRYGGETKVYVGNLGTGAGKGELERAFSYYGPLRTVWIARNPPGFAFVEFEDPRDAEDAVRGLDGKVICGS
RVRVELSTGMPRRSRFDRPPARRPFDPNDRCYECGEKGHYAYDCHRYSRRRRSRSRSRSHSRSRGRRYSRSRSRS
RGRRSRSASPRRSRSISLRRSRSASLRRSRSGSIKGSRYFQSPSRSRSRSRSISRPRSSRSKSRSPSPKRSRSPS
GSPRRSASPERMD

FIGURE 338

AGCGAGTCCTTCTTTTCCTGACTGCAGCTCTTTTCATTTTGCCATCCTTCTCCAGCTCCATGATGGTTCTGCAGG
TTTCTGCGGCCCCCCGGACAGTGGCTCTGACGGCGTTACTGATGGTGCTGCTCACATCTGTGGTCCAGGGCAGGG
CCACTCCAGAGAATTACGTGTACCAGGGACGGCAGGAATGCTACGCGTTTAATGGGACACAGCGCTTCCTGGAGA
GATACATCTACAACCGGGAGGAGTACGCGCGCTTCGACAGCGACGTGGGGGAGTTCCGGGCGGTGACGGAGCTGG
GGCGGCCTGCTGCGGAGTACTGGAACAGCCAGAAGGACATCCTGGAGGAGAAGCGGGCAGTGCCGGACAGGGTAT
GCAGACACAACTACGAGCTGGACGAGGCCGTGACCCTGCAGCGCCGAGTCCAGCCTAAGGTGAACGTTTCCCCCT
CCAAGAAGGGGCCCCTGCAGCACCACAACCTGCTTGTCTGCCACGTGACAGATTTCTACCCAGGCAGCATTCAAG
TCCGATGGTTCCTGAATGGACAGGAGGAAACAGCTGGGGTCGTGTCCACCAACCTGATCCGTAATGGAGACTGGA
CCTTCCAGATCCTGGTGATGCTGGAAATGACCCCCCAGCAGGGAGACGTCTACATCTGCCAAGTGGAGCACACCA
GCCTGGACAGTCCTGTCACCGTGGAGTGGAAGGCACAGTCTGATTCTGCCCAGAGTAAGACATTGACGGGAGCTG
GGGGCTTCGTGCTGGGGCTCATCATCTGTGGAGTGGGCATCTTCATGCACAGGAGGAGCAAGAAAGTTCAACGAG
GATCTGCATAAACAGGGTTCCTGACCTCACCGAAAAGACTAATGTGCCTTAGAACAAGCATTTGCTGTGTTTTGT
TAACACCTGGTTCCAGGACAGACCCTCAGCTTCCCAAGAGGATACTGCTGCCAAGAAGTTGCTCTGAAGTCAGTT
TCTATCGTTCTGCTCTTTGATTCAAAGCACTGTTTCTCTCACTGGGCCTCCAACCATGTTCCCTTCTTCTTAGCA
CCACAAATAATCAAAACCCAACATAAGTGTTTGCTTTCCTTTAAAAATATGCATCAAATCGTCTCTCATTACTTT
TCTCTGAGGGTTTTAGTAAACAGTAGGAGTTAATAAAGAAGTTCATTTTGGTTTACACGTAGGAAAGAAGAGAAG
CATCAAAGTGGAGATATGTTAACTATTGTATAATGTGGCCTGTTATACATGACACTCTTCTGAATTGACTGTATT
TCAGTGAGCTGCCCCCAAATCAAGTTTAGTGCCCTCATCCATTTATGTCTCAGACCGCTATTCTTAACTATTCAA
TGGTGAGCAGACTGCAAATCTGCCTGATAGGACCCATATTCCCACAGCACTAATTCAACATATATCTTACTGAGA
GCATGTTTTATCATTACCATTAAGAAGTTAAATGAACATCAGAATTTAAAATCATAAATATAATCTAATACACTT
T

FIGURE 339

MMVLQVSAAPRTVALTALLMVLLTSVVQGRATPENYVYQGRQECYAFNGTQRFLERYIYNREEYARFDSDVGEFR
AVTELGRPAAEYWNSQKDILEEKRAVPDRVCRHNYELDEAVTLQRRVQPKVNVSPSKKGPLQHHNLLVCHVTDFY
PGSIQVRWFLNGQEETAGVVSTNLIRNGDWTFQILVMLEMTPQQGDVYICQVEHTSLDSPVTVEWKAQSDSAQSK
TLTGAGGFVLGLIICGVGIFMHRRSKKVQRGSA

FIGURE 340

GGCACGAGGGGCGGCCGGTGAGGGGGAAGCAAGTCTGGTCTCTGTGATTGAAGAAGTCGGCTCTGGGCTCCAGTG
CGGGAATCACACACATACCTCAGAATGCCGGGTCTAAGTTGTAGATTTTATCAACACAAATTTCCTGAGGTGGAA
GATGTAGTGATGGTGAATGTCAGATCCATTGCTGAAATGGGGGCTTATGTCAGCTTGCTGGAATACAACAACATT
GAAGGCATGATTCTTCTTAGTGAATTATCCAGAAGGCGTATCCGTTCTATCAACAAACTCATCCGAATTGGCAGG
AATGAGTGTGTGGTTGTCATTAGGGTGGACAAAGAAAAAGGATATATTGATTTGTCAAAAAGAAGAGTTTCTCCA
GAGGAAGCAATCAAATGTGAAGACAAATTCACAAAATCCAAAACTGTTTATAGCATTCTTCGTCATGTTGCTGAG
GTGTTAGAATACACCAAGGATGAGCAGCTGGAAAGCCTATTCCAGAGGACTGCCTGGGTCTTTGATGACAAGTAC
AAGAGACCTGGATATGGTGCCTATGATGCATTTAAGCATGCAGTCTCAGACCCATCTATTTTGGATAGTTTAGAT
TTGAATGAAGATGAACGGGAAGTACTCATTAATAATATTAATAGGCGCTTGACCCCACAGGCTGTCAAAATTCGA
GCAGATATTGAAGTGGCTTGTTATGGTTATGAAGGCATTGATGCTGTAAAAGAAGCCCTAAGAGCAGGTTTGAAT
TGTTCTACAGAAAACATGCCCATTAAGATTAATCTAATAGCTCCTCCTCGGTATGTAATGACTACGACAACCCTG
GAGAGAACAGAAGGCCTTTCTGTCCTCAGTCAAGCTATGGCTGTTATCAAAGAGAAGATTGAGGAAAAGAGGGGT
GTGTTCAATGTTCAAATGGAGCCCAAAGTGGTCACAGATACAGATGAGACTGAACTTGCGAGGCAGATGGAGAGG
CTTGAAAGAGAAAATGCCGAAGTGGATGGAGATGATGATGCAGAAGAAATGGAAGCCAAAGCTGAAGATTAACTT
TGTGGGAAACAGAGTCCAATTTAAGGAACACAGAGCAGCGCTTCCTGGCTGTAAATCCTAGACTTGAAAGTTTTC
CAGTATTGAAAACTTCAAAGCTGAATATTTTTTATTTCTAAGTATTTAAATGTTCTAACAGATCAGAACATGAAA
TGCCCTCCTAAATGTCAGCTGTTGTCACACAGTAGCTCCAACACTTTGAGCATTTTTAAGGGAGTGGCCTCATTT
CACTAGAGACAAATCTTTAAGAATAGTTCTAAAATTGGGCTTGTGATTTCCATTTCTGATGTCTCCAGATTGGCA
CCCCTTTCTAGTTCAATGCCTCACGAGATTTGCCAGGGGCATCCAAGGCAAACAATCCCAATCTTTCTATATAAA
ATGTATTCAAGCAAACATCAAATAAATTTCTGGGATATTTAACTATAGGCTTCTTCCTTCTTGTCACCAGTTAAA
AGCATTTTAATACTAAGACCCTAATTCTTTTATCTTTATTTTAGTCTTGATGTGGAACTGTAGGAGCAGGTGAAT
AAAGGATCTCTATAACAGATCCTTTCAAAAGAAGAGTTTTAGAGAAAATAAATTTAACTTTAACCACAGTGAAAG
TTGACCCTTAGCGGGACAAAGCCTTAAAATGCATTGAAAGAATTAGATCGGTTCTGTGCCTTTTATCTATTTGAG
ATTGATGACAACCTGTGTGAGAGAATTTATCACACCACGTCCTTATTGGAATAATAAGCTACTTGCCTTGAGTTT
ATAATTCAGGGTGGTAAAGTATGTTTTTAAATTTTAAAAAGCAGCTGCATTTTTTATTTAGTTGGAATATCACCC
AATTTTTTATTTTTATTGCTATTAAAATATCCACTAGATGCCACCTAGAGCTCCAGTTCTTTATAACAAAACAGG
GATCTGTTTGAACACTTACTGTTGTTTTTTTTTTTTTACATGTTTCCATCATTTCTGTCTTTAAGAACTAATTCG
TACATAATAAGTTTCATAGGTAACACATTATATTCTCTTATGATACTTGAGGTACCAGTTGTATTTAATTTTATT
CATTATCCCTAGATAGCTATTAAGATACTTAGATTAGACCTAACCCACCATAGTCAATCCAAGACTAGACTACTC
AATATTAAAGGGTCTGGAAAATAGAAGAGTGTGTTGGGCAGGTAGTTTGTACCATTTATGAAGGTTTGTTCCTTT
GTTAAATTTAGCAGCCTGTACTAGCTTTTGAAATCCAGAAGTTTTAACTTCCAGTGGCTGGTTTCTGAGAGAGTG
CCATGATTGCTAGCCAGCATTCCATATTGGGAATATGTAGAGGAGAACCTGGATGTACTTAAGAGTGGCATATAA
TTTTCACTTCTGTCTGTTGAGGCAAAAAAAAAACAAGTTTAGAAAGCTGGCAACATGAAGAATGCATTCAAAATA
TAACAGGTGCTTCTTTGTTGTACGCAGAGGAATTTTTTCTTTTGATTTTGTTTACTGAAATTTGTTATACTTCAA
AAGCCATAACTTGAAAAATACTGGTGGCGTCGATGGTGAGTGATTTTTATCCCACGTGGGCCTTTTGCTCAGTTC
CATGGCAATTTTGTAAATTGACCCTAGCCAGAGAATAGATCAGTATTTCACTGATACCACGAGGAAAAGAACAAA
CAAAACTTAAAAGTATTCATACACCTTGCTAACCTAAAAGACAGCAGGGACAAGATACATATGAGGACAAGGTAT
ACACCCAGTTCTGAATAACTTGAAGAACAGGCTTGGCAAAGAAGTAAGTTTATCCAAATCTTGAATTTCTGCCAG
GCATGGTAGCTCATGCCTGTAACCCTGGCACTTAAGGGGCCAAGGCAGGAGGATCACTTGAGGCCAGTGAGCTGT
GATCACTCCAGTGCACTCGAGCCTGGGTGACAGGGCAAGACCCTGTCTCAAAAAAAAAAAAAAAAAA

FIGURE 341

MPGLSCRFYQHKFPEVEDVVMVNVRSIAEMGAYVSLLEYNNIEGMILLSELSRRRIRSINKLIRIGRNECVVVIR
VDKEKGYIDLSKRRVSPEEAIKCEDKFTKSKTVYSILRHVAEVLEYTKDEQLESLFQRTAWVFDDKYKRPGYGAY
DAFKHAVSDPSILDSLDLNEDEREVLINNINRRLTPQAVKIRADIEVACYGYEGIDAVKEALRAGLNCSTENMPI
KINLIAPPRYVMTTTTLERTEGLSVLSQAMAVIKEKIEEKRGVFNVQMEPKVVTDTDETELARQMERLERENAEV
DGDDDAEEMEAKAED

FIGURE 342

AGGTCCGGCTTACCGTCGTTTACGACAGTGTCAGGATCGCGGGCTTGCTTTCCGGTAGCGTGGGCTGACGCCTCG
CTCAATTTCTCACAGGGCTGCGCAGGTTTCCCCCGTCTGCGAATGGACCACTGGAGGGGTTCAAAGGTTCGCGTC
CCAGTACGGGA**ATG**AGCCTCTTTGATCTCTTCCGGGGCTTTTTCGGCTTTCCTGGACCTCGGAGCCACAGAGATC
CCTTTTTTGGAGGGATGACTCGAGATGAAGATGATGATGAGGAAGAAGAAGAAGAAGGGGGCTCATGGGGCCGTG
GGAACCCAAGGTTCCATAGTCCTCAGCACCCCCCTGAGGAATTTGGCTTCGGCTTCAGCTTCAGCCCAGGAGGAG
GGATACGTTTCCACGATAACTTCGGCTTTGATGACCTAGTACGAGATTTCAATAGCATCTTCAGCGATATGGGGG
CCTGGACCTTGCCTTCCCATCCTCCTGAACTTCCAGGTCCTGAGTCAGAGACACCTGGTGAGAGACTACGGGAGG
GACAGACACTTCGGGACTCAATGCTTAAGTATCCAGATAGTCACCAGCCCAGGATCTTTGGGGGGGTCTTGGAGA
GTGATGCAAGAAGTGAATCCCCCCAACCAGCACCAGACTGGGGCTCCCAGAGGCCATTTCATAGGTTTGATGATG
TATGGCCTATGGACCCCCATCCTAGAACCAGAGAGGACAATGATCTTGATTCCCAGGTTTCCCAGGAGGGTCTTG
GCCCGGTTCTACAGCCCCAGCCCAAATCCTATTTCAAGAGCATCTCTGTGACCAAGATCACTAAACCAGATGGGA
TAGTGGAGGAGCGCCGGACTGTGGTGGACAGTGAGGGCCGGACAGAGACTACAGTAACCCGACACGAAGCAGATA
GCAGTCCTAGGGGTGATCCAGAATCACCAAGACCTCCAGCCCTGGATGATGCCTTTTCCATCCTGGACTTATTCC
TGGGACGTTGGTTCCGGTCCCGG**TAG**CCTTGTTAACCCTCAGAGGCCTTCAAGTCCTTTCCACCTCTCACCCATT
GCCCACCATTAATAAGCTTAGCTTCTCTTGCCACCTCAGGGGCTTGGATATGTGGAATAGTGAACTGGGGCCATG
TCAGTTTGTCACTCACCCAAACTGACCAATAAAACCTTTATTTATGCTAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 343

MSLFDLFRGFFGFPGPRSHRDPFFGGMTRDEDDDEEEEEEGGSWGRGNPRFHSPQHPPEEFGFGFSFSPGGGIRF
HDNFGFDDLVRDFNSIFSDMGAWTLPSHPPELPGPESETPGERLREGQTLRDSMLKYPDSHQPRIFGGVLESDAR
SESPQPAPDWGSQRPFHRFDDVWPMDPHPRTREDNDLDSQVSQEGLGPVLQPQPKSYFKSISVTKITKPDGIVEE
RRTVVDSEGRTETTVTRHEADSSPRGDPESPRPPALDDAFSILDLFLGRWFRSR

FIGURE 344

GCAGCCGCCACCGCCGCCGCCGCCGCCACCAGAGCCGCCCTGTCCGCGCCGCGCCTCGGCAGCCGGAACAGGGCC
GCCGTCGGGGAGCCCCAACACACGGTCCACAGCTCATCATGATGGACTTGGAGCTGCCGCCGCCGGGACTCCCGT
CCCAGCAGGACATGGATTTGATTGACATACTTTGGAGGCAAGATATAGATCTTGGAGTAAGTCGAGAAGTATTTG
ACTTCAGTCAGCGACGGAAAGAGTATGAGCTGGAAAAACAGAAAAAACTTGAAAAGGAAAGACAAGAACAACTCC
AAAAGGAGCAAGAGAAAGCCTTTTTCGCTCAGTTACAACTAGATGAAGAGACAGGTGAATTTCTCCCAATTCAGC
CAGCCCAGCACATCCAGTCAGAAACCAGTGGATCTGCCAACTACTCCCAGGTTGCCCACATTCCCAAATCAGATG
CTTTGTACTTTGATGACTGCATGCAGCTTTTGGCGCAGACATTCCCGTTTGTAGATGACAATGAGGTTTCTTCGG
CTACGTTTCAGTCACTTGTTCCTGATATTCCCGGTCACATCGAGAGCCCAGTCTTCATTGCTACTAATCAGGCTC
AGTCACCTGAAACTTCTGTTGCTCAGGTAGCCCCTGTTGATTTAGACGGTATGCAACAGGACATTGAGCAAGTTT
GGGAGGAGCTATTATCCATTCCTGAGTTACAGTGTCTTAATATTGAAAATGACAAGCTGGTTGAGACTACCATGG
TTCCAAGTCCAGAAGCCAAACTGACAGAAGTTGACAATTATCATTTTTACTCATCTATACCCTCAATGGAAAAAG
AAGTAGGTAACTGTAGTCCACATTTTCTTAATGCTTTTGAGGATTCCTTCAGCAGCATCCTCTCCACAGAAGACC
CCAACCAGTTGACAGTGAACTCATTAAATTCAGATGCCACAGTCAACACAGATTTTGGTGATGAATTTTATTCTG
CTTTCATAGCTGAGCCCAGTATCAGCAACAGCATGCCCTCACCTGCTACTTTAAGCCATTCACTCTCTGAACTTC
TAAATGGGCCCATTGATGTTTCTGATCTATCACTTTGCAAAGCTTTCAACCAAAACCACCCTGAAAGCACAGCAG
AATTCAATGATTCTGACTCCGGCATTTCACTAAACACAAGTCCCAGTGTGGCATCACCAGAACACTCAGTGGAAT
CTTCCAGCTATGGAGACACACTACTTGGCCTCAGTGATTCTGAAGTGGAAGAGCTAGATAGTGCCCCTGGAAGTG
TCAAACAGAATGGTCCTAAAACACCAGTACATTCTTCTGGGGATATGGTACAACCCTTGTCACCATCTCAGGGGC
AGAGCACTCACGTGCATGATGCCCAATGTGAGAACACACCAGAGAAAGAATTGCCTGTAAGTCCTGGTCATCGGA
AAACCCCATTCACAAAAGACAAACATTCAAGCCGCTTGGAGGCTCATCTCACAAGAGATGAACTTAGGGCAAAAG
CTCTCCATATCCCATTCCCTGTAGAAAAAATCATTAACCTCCCTGTTGTTGACTTCAACGAAATGATGTCCAAAG
AGCAGTTCAATGAAGCTCAACTTGCATTAATTCGGGATATACGTAGGAGGGGTAAGAATAAAGTGGCTGCTCAGA
ATTGCAGAAAAAGAAAACTGGAAAATATAGTAGAACTAGAGCAAGATTTAGATCATTTGAAAGATGAAAAAGAAA
AATTGCTCAAAGAAAAAGGAGAAAATGACAAAAGCCTTCACCTACTGAAAAAACAACTCAGCACCTTATATCTCG
AAGTTTTCAGCATGCTACGTGATGAAGATGGAAAACCTTATTCTCCTAGTGAATACTCCCTGCAGCAAACAAGAG
ATGGCAATGTTTTCCTTGTTCCCAAAAGTAAGAAGCCAGATGTTAAGAAAAACTAGATTTAGGAGGATTTGACCT
TTTCTGAGCTAGTTTTTTTGTACTATTATACTAAAAGCTCCTACTGTGATGTGAAATGCTCATACTTTATAAGTA
ATTCTATGCAAAATCATAGCCAAAACTAGTATAGAAAATAATACGAAACTTTAAAAAGCATTGGAGTGTCAGTAT
GTTGAATCAGTAGTTTCACTTTAACTGTAAACAATTTCTTAGGACACCATTTGGGCTAGTTTCTGTGTAAGTGTA
AATACTACAAAAACTTATTTATACTGTTCTTATGTCATTTGTTATATTCATAGATTTATATGATGATATGACATC
TGGCTAAAAAGAAATTATTGCAAAACTAACCACTATGTACTTTTTTATAAATACTGTATGGACAAAAAATGGCAT
TTTTTATATTAAATTGTTTAGCTCTGGCAAAAAAAAAAAATTTTAAGAGCTGGTACTAATAAAGGATTATTATGA
CTGTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 345

MMDLELPPPGLPSQQDMDLIDILWRQDIDLGVSREVFDFSQRRKEYELEKQKKLEKERQEQLQKEQEKAFFAQLQ
LDEETGEFLPIQPAQHIQSETSGSANYSQVAHIPKSDALYFDDCMQLLAQTFPFVDDNEVSSATFQSLVPDIPGH
IESPVFIATNQAQSPETSVAQVAPVDLDGMQQDIEQVWEELLSIPELQCLNIENDKLVETTMVPSPEAKLTEVDN
YHFYSSIPSMEKEVGNCSPHFLNAFEDSFSSILSTEDPNQLTVNSLNSDATVNTDFGDEFYSAFIAEPSISNSMP
SPATLSHSLSELLNGPIDVSDLSLCKAFNQNHPESTAEFNDSDSGISLNTSPSVASPEHSVESSSYGDTLLGLSD
SEVEELDSAPGSVKQNGPKTPVHSSGDMVQPLSPSQGQSTHVHDAQCENTPEKELPVSPGHRKTPFTKDKHSSRL
EAHLTRDELRAKALHIPFPVEKIINLPVVDFNEMMSKEQFNEAQLALIRDIRRRGKNKVAAQNCRKRKLENIVEL
EQDLDHLKDEKEKLLKEKGENDKSLHLLKKQLSTLYLEVFSMLRDEDGKPYSPSEYSLQQTRDGNVFLVPKSKKP
DVKKN

FIGURE 346

GGCACGAGGGCGAGGAGCCCAAGAGCGAGCGCGCAGCACGAAGCTCGAGCCGCCTCCGCCGCGCGACCCCACCTC
GGCCGCCGCCGCCTGCGCCGCGAGATCCGCCCCGGCCTCCCCGAGAGCGAGCCCCGGCCGCCGCGACCACCAGCC
GCGCTAACCGCCGACCAACCGCCACCGAGGCGCCTGAGCGAGAGCAGAGGAGGAGGAGGC**ATG**AGTGAGGCGGGC
GAGGCCACCACCACCACCACCACCACCCTCCCGCAGGCTCCGACGGAGGCGGCCGCCGCGGCTCCCCAGGACCCC
GCGCCCAAGAGCCCGGTGGGCAGCGGTGCGCCCCAGGCCGCGGCCCCGGCGCCCGCCGCCCACGTCGCAGGAAAC
CCCGGTGGGGACGCGGCCCCCGCAGCCACGGGCACCGCGGCCGCCGCCTCTTTAGCCGCCGCCGCCGGCAGCGAA
GACGCGGAGAAAAAAGTTCTCGCCACCAAAGTCCTTGGCACTGTCAAATGGTTCAACGTCAGAAATGGATATGGA
TTTATAAATCGAAATGACACCAAAGAAGATGTATTTGTACATCAGACTGCCATCAAGAAGAATAACCCACGGAAA
TATCTGCGCAGTGTAGGAGATGGAGAAACTGTAGAGTTTGATGTGGTTGAAGGAGAGAAGGGTGCAGAAGCTGCC
AATGTGACTGGCCCGGATGGAGTTCCTGTGGAAGGGAGTCGTTACGCTGCAGATCGGCGCCGTTACAGACGTGGC
TACTATGGAAGGCGCCGTGGCCCTCCCCGGAATTACGCTGGGGAGGAGGAGGAGGAAGGGAGCGGCAGCAGTGAA
GGATTTGACCCCCCTGCCACTGATAGGCAGTTCTCTGGGGCCCGGAATCAGCTGCGCCGCCCCCAGTATCGCCCT
CAGTACCGGCAGCGGCGGTTCCCGCCTTACCACGTGGGACAGACCTTTGACCGTCGCTCACGGGTCTTACCCCAT
CCCAACAGAATACAGGCTGGTGAGATTGGAGAGATGAAGGATGGAGTCCCAGAGGGAGCACAACTTCAGGGACCG
GTTCATCGAAATCCAACTTACCGCCCAAGGTACCGTAGCAGGGGACCTCCTCGCCCACGACCTGCCCCAGCAGTT
GGAGAGGCTGAAGATAAAGAAAATCAGCAAGCCACCAGTGGTCCAAACCAGCCGTCTGTTCGCCGTGGATATCGG
CGTCCCTACAATTACCGGCGTCGCCCGCGTCCTCCTAACGCTCCTTCACAAGATGGCAAAGAGGCCAAGGCAGGT
GAAGCACCAACTGAGAACCCTGCTCCACCCACCCAGCAGAGCAGTGCTGAG**TAA**CACCAGGCTCCTCAGGCACCT
TCACCATCGGCAGGTGACCTAAAGAATTAATGACCATTCAGAAATAAAGCAAAAAGCAGGCCACAACCTTAACCA
ACACCAAAGAAACATCCAAGCAATAAAGTGGAAGACTAACCAAGATTTGGACATTGGAATGTTTACTGTTATTCT
TTAAGAAACATCTACAAAAAGAAAATGTCAACAAATTTTTCCAGCAAGCTGAGAACCTGGGAATTCCTGCACGGA
AGACAAGAGAGTAGCCTCTCCAGTTTCAGCAACCGCTAGGTTTCTATTTTTTTTCCTGGTTTTTACTGTTTTGGT
AATATATATATTGAAACAAGAAATATTAATACCACATGGGGAGAACCCCAACCAAAGAAATCTGAAATATATAGT
AAATGCTTTTTTTTCCGTTTTTGTTCATTTTGGATGCTGGTGCTAAACCTCCAAGTGTCATGATTTAAAAAAAAA
AAAAAAAAA

FIGURE 347

MSEAGEATTTTTTTLPQAPTEAAAAAPQDPAPKSPVGSGAPQAAAPAPAAHVAGNPGGDAAPAATGTAAAASLAA
AAGSEDAEKKVLATKVLGTVKWFNVRNGYGFINRNDTKEDVFVHQTAIKKNNPRKYLRSVGDGETVEFDVVEGEK
GAEAANVTGPDGVPVEGSRYAADRRRYRRGYYGRRRGPPRNYAGEEEEEGSGSSEGFDPPATDRQFSGARNQLRR
PQYRPQYRQRRFPPYHVGQTFDRRSRVLPHPNRIQAGEIGEMKDGVPEGAQLQGPVHRNPTYRPRYRSRGPPRPR
PAPAVGEAEDKENQQATSGPNQPSVRRGYRRPYNYRRRPRPPNAPSQDGKEAKAGEAPTENPAPPTQQSSAE

FIGURE 348

GGACACCGGGCCATGCACGCCCCCAACTGAAGCTGCATCTCAAAGCCGAAGATTCCAGCAGCCCAGGGGATTTCA
AAGAGCTCAGACTCAGAGGAACATCTGCGGAGAGACCCCCGAAGCCCTCTCCAGGGCAGTCCTCATCCAGACGCT
CCGCTAGTGCAGACAGGAGCGCGCAGTGGCCCCGGCTCGCCGCGCCATGGAGCGGATCCCCAGCGCGCAACCACC
CCCCGCCTGCCTGCCCAAAGCACCGGGACTGGAGCACGGAGACCTACCAGGGATGTACCCTGCCCACATGTACCA
AGTGTACAAGTCAAGACGGGGAATAAAGCGGAGCGAGGACAGCAAGGAGACCTACAAATTGCCGCACCGGCTCAT
CGAGAAAAAGAGACGTGACCGGATTAACGAGTGCATCGCCCAGCTGAAGGATCTCCTACCCGAACATCTCAAACT
TACAACTTTGGGTCACTTGGAAAAAGCAGTGGTTCTTGAACTTACCTTGAAGCATGTGAAAGCACTAACAAACCT
AATTGATCAGCAGCAGCAGAAAATCATTGCCCTGCAGAGTGGTTTACAAGCTGGTGAGCTGTCAGGGAGAAATGT
CGAAACAGGTCAAGAGATGTTCTGCTCAGGTTTCCAGACATGTGCCCGGGAGGTGCTTCAGTATCTGGCCAAGCA
CGAGAACACTCGGGACCTGAAGTCTTCGCAGCTTGTCACCCACCTCCACCGGGTGGTCTCGGAGCTGCTGCAGGG
TGGTACCTCCAGGAAGCCATCAGACCCAGCTCCCAAAGTGATGGACTTCAAGGAAAAACCCAGCTCTCCGGCCAA
AGGTTCGGAAGGTCCTGGGAAAAACTGCGTGCCAGTCATCCAGCGGACTTTCGCTCACTCGAGTGGGGAGCAGAG
CGGCAGCGACACGGACACAGACAGTGGCTATGGAGGAGAATCGGAGAAGGGCGACTTGCGCAGTGAGCAGCCGTG
CTTCAAAAGTGACCACGGACGCAGGTTCACGATGGGAGAAAGGATCGGCGCAATTAAGCAAGAGTCCGAAGAACC
CCCCACAAAAAAGAACCGGATGCAGCTTTCGGATGATGAAGGCCATTTCACTAGCAGTGACCTGATCAGCTCCCC
GTTCCTGGGCCCACACCCACACCAGCCTCCTTTCTGCCTGCCCTTCTACCTGATCCCACCTTCAGCGACTGCCTA
CCTGCCCATGCTGGAGAAGTGCTGGTATCCCACCTCAGTGCCAGTGCTATACCCAGGCCTCAACGCCTCTGCCGC
AGCCCTCTCTAGCTTCATGAACCCAGACAAGATCTCGGCTCCCTTGCTCATGCCCCAGAGACTCCCTTCTCCCTT
GCCAGCTCATCCGTCCGTCGACTCTTCTGTCTTGCTCCAAGCTCTGAAGCCAATCCCCCCTTTAAACTTAGAAAC
CAAAGACTAAACTCTCTAGGGGATCCTGCTGCTTTGCTTTCCTTCCTCGCTACTTCCTAAAAAGCAACAAAAAAG
TTTTTGTGAATGCTGCAAGATTGTTGCATTGTGTATACTGAGATAATCTGAGGCATGGAGAGCAGATTCAGGGTG
TGTGTGTGTGTGTGTGTGTGTGTGTATGTGCGTGTGCGTGCACATGTGTGCCTGCGTGTTGGTATAGGACTTT
AAAGCTCCTTTTGGCATAGGGAAGTCACGAAGGATTGCTTGACATCAGGAGACTTGGGGGGGATTGTAGCAGACG
TCTGGGCTTTTCCCCACCCAGAGAATAGCCCCCTTCGATACACATCAGCTGGATTTTCAAAAGCTTCAAAGTCTT
GGTCTGTGAGTCACTCTTCAGTTTGGGAGCTGGGTCTGTGGCTTTGATCAGAAGGTACTTTCAAAAGAGGGCTTT
CCAGGGCTCAGCTCCCAACCAGCTGTTAGGACCCCACCCTTTTGCCTTTATTGTCGACGTGACTCACCAGACGTC
GGGGAGAGAGAGCAGTCAGACCGAGCTTTCTGCTAACATGGGGAGGTAGCAGGCACTGGCATAGCACGGTAGTGG
TTTGGGGAGGTTTCCGCAGGTCTGCTCCCCACCCCTGCCTCGGAAGAATAAAGAGAATGTAGTTCCCTACTCAGG
CTTTCGTAGTGATTAGCTTACTAAGGAACTGAAAATGGGCCCCTTGTACAAGCTGAGCTGCCCCGGAGGGAGGGA
GGAGTTCCCTGGGCTTCTGGCACCTGTTTCTAGGCCTAACCATTAGTACTTACTGTGCAGGGAACCAAACCAAGG
TCTGAGAAATGCGGACACCCCGAGCGAGCACCCCAAAGTGCACAAAGCTGAGTAAAAAGCTGCCCCCTTCAAACA
GAACTAGACTCAGTTTTCAATTCCATCCTAAAACTCCTTTTAACCAAGCTTAGCTTCTCAAAGGCCTAACCAAGC
CTTGGCACCGCCAGATCCTTTCTGTAGGCTAATTCCTCTTGCCCAACGGCATATGGAGTGTCCTTATTGCTAAAA
AGGATTCCGTCTCCTTCAAAGAAGTTTTATTTTTGGTCCAGAGTACTTGTTTTCCCGATGTGTCCAGCCAGCTCC
GCAGCAGCTTTTCAAGATGCACTATGCCTGATTGCTGATCGTGTTTTAACTTTTTCTTTTCCTGTTTTTATTTTG
GTATTAAGTCGTTGCCTTTATTTGTAAAGCTGTTATAAATATATATTATATAAATATATTAAAAAGGAAAATGTT
TCAGATGTTTATTTGTATAATTACTTGATTCACACAGTGAGAAAAAATGAATGTATTCCTGTTTTTGAAGAGAAG
AATAATTTTTTTTTCTCTAGGGAGAGGTACAGTGTTTATATTTTGGAGCCTTCCTGAAGGTGTAAAATTGTAAAT
ATTTTTATCTATGAGTAAATGTTAAGTAGTTGTTTTAAAATACTTAATAAAATAATTCTTTTCCTGTGGAAG

FIGURE 349

MERIPSAQPPPACLPKAPGLEHGDLPGMYPAHMYQVYKSRRGIKRSEDSKETYKLPHRLIEKKRRDRINECIAQL
KDLLPEHLKLTTLGHLEKAVVLELTLKHVKALTNLIDQQQQKIIALQSGLQAGELSGRNVETGQEMFCSGFQTCA
REVLQYLAKHENTRDLKSSQLVTHLHRVVSELLQGGTSRKPSDPAPKVMDFKEKPSSPAKGSEGPGKNCVPVIQR
TFAHSSGEQSGSDTDTDSGYGGESEKGDLRSEQPCFKSDHGRRFTMGERIGAIKQESEEPPTKKNRMQLSDDEGH
FTSSDLISSPFLGPHPHQPPFCLPFYLIPPSATAYLPMLEKCWYPTSVPVLYPGLNASAAALSSFMNPDKISAPL
LMPQRLPSPLPAHPSVDSSVLLQALKPIPPLNLETKD

FIGURE 350

GGACACCGGGCCATGCACGCCCCCAACTGAAGCTGCATCTCAAAGCCGAAGATTCCAGCAGCCCAGGGGATTTCA
AAGAGCTCAGACTCAGAGGAACATCTGCGGAGAGACCCCCGAAGCCCTCTCCAGGGCAGTCCTCATCCAGACGCT
CCGCTAGTGCAGACAGGAGCGCGCAGTGGCCCCGGCTCGCCGCGCCATGGAGCGGATCCCCAGCGCGCAACCACC
CCCCGCCTGCCTGCCCAAAGCACCGGGACTGGAGCACGGAGACCTACCAGGGATGTACCCTGCCCACATGTACCA
AGTGTACAAGTCAAGACGGGGAATAAAGCGGAGCGAGGACAGCAAGGAGACCTACAAATTGCCGCACCGGCTCAT
CGAGAAAAAGAGACGTGACCGGATTAACGAGTGCATCGCCCAGCTGAAGGATCTCCTACCCGAACATCTCAAACT
TACAACTTTGGGTCACTTGGAAAAAGCAGTGGTTCTTGAACTTACCTTGAAGCATGTGAAAGCACTAACAAACCT
AATTGATCAGCAGCAGCAGAAAATCATTGCCCTGCAGAGTGGTTTACAAGCTGGTGAGCTGTCAGGGAGAAATGT
CGAAACAGGTCAAGAGATGTTCTGCTCAGGTTTCCAGACATGTGCCCGGGAGGTGCTTCAGTATCTGGCCAAGCA
CGAGAACACTCGGGACCTGAAGTCTTCGCAGCTTGTCACCCACCTCCACCGGGTGGTCTCGGAGCTGCTGCAGGG
TGGTACCTCCAGGAAGCCATCAGACCCAGCTCCCAAAGTGATGGACTTCAAGGAAAAACCCAGCTCTCCGGCCAA
AGGTTCGGAAGGTCCTGGGAAAAACTGCGTGCCAGTCATCCAGCGGACTTTCGCTCACTCGAGTGGGGAGCAGAG
CGGCAGCGACACGGACACAGACAGTGGCTATGGAGGAGAATCGGAGAAGGGCGACTTGCGCAGTGAGCAGCCGTG
CTTCAAAAGTGCCACGGACGCAGGTTCACGATGGGAGAAAGGATCGGCGCAATTAAGCAAGAGTCCGAAGAACC
CCCCACAAAAAAGAACCGGATGCAGCTTTCGGATGATGAAGGCCATTTCACTAGCAGTGACCTGATCAGCTCCCC
GTTCCTGGGCCCACACCCACACCAGCCTCCTTTCTGCCTGCCCTTCTACCTGATCCCACCTTCAGCGACTGCCTA
CCTGCCCATGCTGGAGAAGTGCTGGTATCCCACCTCAGTGCCAGTGCTATACCCAGGCCTCAACGCCTCTGCCGC
AGCCCTCTCTAGCTTCATGAACCCAGACAAGATCTCGGCTCCCTTGCTCATGCCCCAGAGACTCCCTTCTCCCTT
GCCAGCTCATCCGTCCGTCGACTCTTCTGTCTTGCTCCAAGCTCTGAAGCCAATCCCCCCTTTAAACTTAGAAAC
CAAAGACTAAACTCTCTAGGGGATCCTGCTGCTTTGCTTTCCTTCCTCGCTACTTCCTAAAAAGCAACAAAAAAG
TTTTTGTGAATGCTGCAAGATTGTTGCATTGTGTATACTGAGATAATCTGAGGCATGGAGAGCAGATTCAGGGTG
TGTGTGTGTGTGTGTGTGTGTGTGTATGTGCGTGTGCGTGCACATGTGTGCCTGCGTGTTGGTATAGGACTTT
AAAGCTCCTTTTGGCATAGGGAAGTCACGAAGGATTGCTTGACATCAGGAGACTTGGGGGGGATTGTAGCAGACG
TCTGGGCTTTTCCCCACCCAGAGAATAGCCCCCTTCGATACACATCAGCTGGATTTTCAAAAGCTTCAAAGTCTT
GGTCTGTGAGTCACTCTTCAGTTTGGGAGCTGGGTCTGTGGCTTTGATCAGAAGGTACTTTCAAAAGAGGGCTTT
CCAGGGCTCAGCTCCCAACCAGCTGTTAGGACCCCACCCTTTTGCCTTTATTGTCGACGTGACTCACCAGACGTC
GGGGAGAGAGAGCAGTCAGACCGAGCTTTCTGCTAACATGGGGAGGTAGCAGGCACTGGCATAGCACGGTAGTGG
TTTGGGGAGGTTTCCGCAGGTCTGCTCCCCACCCCTGCCTCGGAAGAATAAAGAGAATGTAGTTCCCTACTCAGG
CTTTCGTAGTGATTAGCTTACTAAGGAACTGAAAATGGGCCCCTTGTACAAGCTGAGCTGCCCCGGAGGGAGGGA
GGAGTTCCCTGGGCTTCTGGCACCTGTTTCTAGGCCTAACCATTAGTACTTACTGTGCAGGGAACCAAACCAAGG
TCTGAGAAATGCGGACACCCCGAGCGAGCACCCCAAAGTGCACAAAGCTGAGTAAAAAGCTGCCCCCTTCAAACA
GAACTAGACTCAGTTTTCAATTCCATCCTAAAACTCCTTTTAACCAAGCTTAGCTTCTCAAAGGCCTAACCAAGC
CTTGGCACCGCCAGATCCTTTCTGTAGGCTAATTCCTCTTGCCCAACGGCATATGGAGTGTCCTTATTGCTAAAA
AGGATTCCGTCTCCTTCAAAGAAGTTTTATTTTTGGTCCAGAGTACTTGTTTTCCCGATGTGTCCAGCCAGCTCC
GCAGCAGCTTTTCAAGATGCACTATGCCTGATTGCTGATCGTGTTTTAACTTTTTCTTTTCCTGTTTTTATTTTG
GTATTAAGTCGTTGCCTTTATTTGTAAAGCTGTTATAAATATATATTATATAAATATATTAAAAAGGAAAATGTT
TCAGATGTTTATTTGTATAATTACTTGATTCACACAGTGAGAAAAAATGAATGTATTCCTGTTTTTGAAGAGAAG
AATAATTTTTTTTTCTCTAGGGAGAGGTACAGTGTTTATATTTTGGAGCCTTCCTGAAGGTGTAAAATTGTAAAT
ATTTTTATCTATGAGTAAATGTTAAGTAGTTGTTTTAAAATACTTAATAAAATAATTCTTTTCCTGTGGAAG

FIGURE 351

MERIPSAQPPPACLPKAPGLEHGDLPGMYPAHMYQVYKSRRGIKRSEDSKETYKLPHRLIEKKRRDRINECIAQL
KDLLPEHLKLTTLGHLEKAVVLELTLKHVKALTNLIDQQQQKIIALQSGLQAGELSGRNVETGQEMFCSGFQTCA
REVLQYLAKHENTRDLKSSQLVTHLHRVVSELLQGGTSRKPSDPAPKVMDFKEKPSSPAKGSEGPGKNCVPVIQR
TFAHSSGEQSGSDTDTDSGYGGESEKGDLRSEQPCFKSDHGRRFTMGERIGAIKQESEEPPTKKNRMQLSDDEGH
FTSSDLISSPFLGPHPHQPPFCLPFYLIPPSATAYLPMLEKCWYPTSVPVLYPGLNASAAALSSFMNPDKISAPL
LMPQRLPSPLPAHPSVDSSVLLQALKPIPPLNLETKD

FIGURE 352

CGCGGCCGCGTCGGACCTGTGGTCCCGGGTTTCTGCAGAGTCTACTTCAGAAGCGGAGGCACTGGGAGTCCGGTT
TGGGATTGCCAGGCTGTGGTTGTGAGTCTGAGCTTGTGAGCGGCTGTGGCGCCCCAACTCTTCGCCAGCATATCA
TCCCGGCAGGCGATAAACTACATTCAGTTGAGTCTGCAAGACTGGGAGGAACTGGGGTGATAAGAAATCTATTCA
CTGTCAAGGTTTATTGAAGTCAAAATGTCCAAAAAAATCAGTGGCGGTTCTGTGGTAGAGATGCAAGGAGATGAA
ATGACACGAATCATTTGGGAATTGATTAAAGAGAAACTCATTTTTCCCTACGTGGAATTGGATCTACATAGCTAT
GATTTAGGCATAGAGAATCGTGATGCCACCAACGACCAAGTCACCAAGGATGCTGCAGAAGCTATAAAGAAGCAT
AATGTTGGCGTCAAATGTGCCACTATCACTCCTGATGAGAAGAGGGTTGAGGAGTTCAAGTTGAAACAAATGTGG
AAATCACCAAATGGCACCATACGAAATATTCTGGGTGGCACGGTCTTCAGAGAAGCCATTATCTGCAAAAATATC
CCCCGGCTTGTGAGTGGATGGGTAAAACCTATCATCATAGGTCGTCATGCTTATGGGGATCAATACAGAGCAACT
GATTTTGTTGTTCCTGGGCCTGGAAAAGTAGAGATAACCTACACACCAAGTGACGGAACCCAAAAGGTGACATAC
CTGGTACATAACTTTGAAGAAGGTGGTGGTGTTGCCATGGGGATGTATAATCAAGATAAGTCAATTGAAGATTTT
GCACACAGTTCCTTCCAGATGGCTCTGTCTAAGGGTTGGCCTTTGTATCTGAGCACCAAAAACACTATTCTGAAG
ATATATGATGGGCGTTTTAAAGACATCTTTCAGGAGATATATGACAAGCAGTACAAGTCCCAGTTTGAAGCTCAA
AAGATCTGGTATGAGCATAGGCTCATCGACGACATGGTGGCCCAAGCTATGAAATCAGAGGGAGGCTTCATCTGG
GCCTGTAAAAACTATGATGGTGACGTGCAGTCGGACTCTGTGGCCCAAGGGTATGGCTCTCTCGGCATGATGACC
AGCGTGCTGGTTTGTCCAGATGGCAAGACAGTAGAAGCAGAGGCTGCCCACGGGACTGTAACCCGTCACTACCGC
ATGTACCAGAAAGGACAGGAGACGTCCACCAACCTCATTGCTTCCATTTTTGCCTGGACCAGAGGGTTAGCCCAC
AGAGCAAAGCTTGATAACAATAAAGAGCTTGCCTTCTTTGCAAATGCTTTGGAAGAAGTCTCTATTGAGACAATT
GAGGCTGGCTTCATGACCAAGGACTTGGCTGCTTGCATTAGAGGTTTACCCAATGTGCAACGTTCTGACTACTTG
AATACATTTGAGTTCATGGATAAACTTGGAGAAAACTTGAAGATCAAACTAGCTCAGGCCAAACTTTAAGTTCAT
ACCTGAGCTAAGAAGGATAATTGTCTTTTGGTAACTAGGTCTACAGGTTTACATTTTTCTGTGTTACACTCAAGG
ATAAAGGCAAAATCAATTTTGTAATTTGTTTAGAAGCCAGAGTTTATCTTTTCTATAAGTTTACAGCCTTTTTCT
TATATATACAGTTATTGCCACCTTTGTGAACATGGCAAGGGACTTTTTTACAATTTTTATTTTATTTTCTAGTAC
CAGCCTAGGAATTCGGTTAGTACTCATTTGTATTCACTGTCACTTTTTCTCATGTTCTAATTATAAATGACCAAA
ATCAAGATTGCTCAAAAGGGTAAATGATAGCCACAGTATTGCTCCCTAAAATATGCATAAAGTAGAAATTCACTG
CCTTCCCCTCCTGTCCATGACCTTGGGCACAGGGAAGTTCTGGTGTCATAGATATCCCGTTTTGTGAGGTAGAGC
TGTGCATTAAACTTGCACATGACTGGAACGAAGTATGAGTGCAACTCAAATGTGTTGAAGATACTGCAGTCATTT
TTGTAAAGACCTTGCTGAATGTTTCCAATAGACTAAATACTGTTTAGGCCGCAGGAGAGTTTGGAATCCGGAATA
AATACTACCTGGAGTCTTGTCCTCTCCATTTTTCTCTTTCTCCTCCTGGCCTGGCCTGAATATTATACTACTCTA
AATAGCATATTTCATCCAAGTGCAATAATGTAAGCTGAATCTTTTTTGGACTTCTGCTGGCCTGTTTTATTTCTT
TTATATAAATGTGATTTCTCAGAAATTGATATTAAACACTATCTTATCTTCTCCTGAACTGTTGATTTTAATTAA
AATTAAGTGCTAATTACCAAAAAAAAAAA

FIGURE 353

MSKKISGGSVVEMQGDEMTRIIWELIKEKLIFPYVELDLHSYDLGIENRDATNDQVTKDAAEAIKKHNVGVKCAT
ITPDEKRVEEFKLKQMWKSPNGTIRNILGGTVFREAIICKNIPRLVSGWVKPIIIGRHAYGDQYRATDFVVPGPG
KVEITYTPSDGTQKVTYLVHNFEEGGGVAMGMYNQDKSIEDFAHSSFQMALSKGWPLYLSTKNTILKIYDGRFKD
IFQEIYDKQYKSQFEAQKIWYEHRLIDDMVAQAMKSEGGFIWACKNYDGDVQSDSVAQGYGSLGMMTSVLVCPDG
KTVEAEAAHGTVTRHYRMYQKGQETSTNLIASIFAWTRGLAHRAKLDNNKELAFFANALEEVSIETIEAGFMTKD
LAACIRGLPNVQRSDYLNTFEFMDKLGENLKIKLAQAKL

FIGURE 354

CAGGTGGGAGGTTAGTGTGGCCCGGGCGTCCGCTCCTCAGCGGATGTGGCAGCCCCGAGCCATGGCTCTCGCCGT
CCGAGTCGTTTATTGTGGCGCTTGAGGCTACAAGTCCAAGTATCTTCAGCTCAAGAAGAAGTTAGAAGATGAGTT
CCCCGGCCGCCTGGACATCTGCGGCGAGGGAACTCCCCAGGCCACCGGGTTCTTTGAAGTGATGGTAGCCGGGAA
GTTGATTCACTCTAAGAAGAAAGGCGATGGCTACGTGGACACAGAAAGCAAGTTTCTGAAGTTGGTGGCCGCCAT
CAAAGCCGCCTTGGCTCAGGGCTAATGCGCCCTGAAGGCAGAGTCCAGGGACCTTGACCCAGCCCCTCTCAGCAG
ACGCTTCATGATAGGAAGGACTGAAAAGTCTTGTGGACACCTGGTCTTTCCCTGATGTTCTCGTGGCTGCTGTTG
GGGGCAGAGATTGACGCCCCCGGTCTTTGCCTCTGAGCGGGAGAGTCTGTGTGTATGTGTCTTCCCCGGAATCCA
CACCACCCCACCCTCCTCCTGTCCCGTGGTTTCATCATATCTCTTTGCATACCCCATGTCTTCCCCAGTTGTCCC
CTGGAGTTTGGGGGGACATCCCGCCTCAGGCATCCTTCTCAAGGGGAAGCCAAGAGAGGCATCAGGATGGGTGGG
TTTCTGATTGTGGCAACGTTTGCAACCGTTCACGATTCAATAAATATTGGATGAAATTAACCGGAAAAAAAAAAA
AAAAAAAA

FIGURE 355

MALAVRVVYCGAXGYKSKYLQLKKKLEDEFPGRLDICGEGTPQATGFFEVMVAGKLIHSKKKGDGYVDTESKFLK
LVAAIKAALAQG

FIGURE 356A

GTCCTTTCACGCGTGTCTTCGTGTTGGTGCGCTTTTCACTGGTCATAAAGTGCTGCTCACGGCCGTGAACTGCTA
CAGCGTGAAGGCCGCCACCCGGGTCCAGGATGCTTTTGCCGCCGCCAAGCTCCTGGCCCTGGCCCTGATCATCCT
GCTGGGCTTCGTCCAGATCGGGAAGGGTGATGTGTCCAATCTAGATCCCAAGTTCTCATTTGAAGGCACCAAACT
GGATGTGGGGAACATTGTGCTGGCATTATACAGCGGCCTCTTTGCCTATGGAGGATGGAATTACTTGAATTTCGT
CACAGAGGAAATGATCAACCCCTACAGAAACCTGCCCCTGGCCATCATCATCTCCCTGCCCATCGTGACGCTGGT
GTACGTGCTGACCAACCTGGCCTACTTCACCACCCTGTCCACCGAGCAGATGCTGTCGTCCGAGGCCGTGGCCGT
GGACTTCGGGAACTATCACCTGGGCGTCATGTCCTGGATCATCCCCGTCTTCGTGGGCCTGTCCTGCTTTGGCTC
CGTCAATGGGTCCCTGTTCACATCCTCCAGGCTCTTCTTCGTGGGGTCCCGGGAAGGCCACCTGCCCTCCATCCT
CTCCATGATCCACCCACAGCTCCTCACCCCCGTGCCGTCCCTCGTGTTCACGTGTGTGATGACGCTGCTCTACGC
CTTCTCCAAGGACATCTTCTCCGTCATCAACTTCTTCAGCTTCTTCAACTGGCTCTGCGTGGCCCTGGCCATCAT
CGGCATGATCTGGCTGCGCCACAGAAAGCCTGAGCTTGAGCGGCCCATCAAGGTGAACCTGGCCCTGCCTGTGTT
CTTCATCCTGGCCTGCCTCTTCCTGATCGCCGTCTCCTTCTGGAAGACACCCGTGGAGTGTGGCATCGGCTTCAC
CATCATCCTCAGCGGGCTGCCCGTCTACTTCTTCGGGGTCTGGTGGAAAAACAAGCCCAAGTGGCTCCTCCAGGG
CATCTTCTCCACGACCGTCCTGTGTCAGAAGCTCATGCAGGTGGTCCCCCAGGAGACATAGCCAGGAGGCCGAGT
GGCTGCCGGAGGAGCATGCGCAGAGGCCAGTTAAAGTAGATCACCTCCTCGAACCCACTCCGGTTCCCCGCAACC
CACAGCTCAGCTGCCCATCCCAGTCCTCGCCGTCCCTCCCAGGTCGGGCAGTGGAGGCTGCTGTGAAAACTCTGG
TACGAATCTCATCCCTCAACTGAGGGCCAGGGACCCAGGTGTGCCTGTGCTCCTGCCCAGGAGCAGCTTTTGGTC
TCCTTGGGCCCTTTTTCCCTTCCCTCCTTTGTTTACTTATATATATATTTTTTTTAAACTTAAATTTTGGGTCAA
CTTGACACCACTAAGATGATTTTTTAAGGAGCTGGGGGAAGGCAGGAGCCTTCCTTTCTCCTGCCCCAAGGGCCC
AGACCCTGGGCAAACAGAGCTACTGAGACTTGGAACCTCATTGCTACCACAGACTTGCACTGAAGCCAGACAGCT
GCCCAGACACATGGGCTTGTGACATTCGTGAAAACCAACCCTGTGGGCTTATGTCTCTGCCTTAGGGTTTGCAGA
GTGGAAACTCAGCCGTAGGGTGGCACTGGGAGGGGGTGGGGGGATCTGGGCAAGGTGGGTGATTCCTCCCAGGAGG
TGCTTGAGGCCCCGATGGACTCCTGACCATAATCCTAGCCCCGAGACACCATCCTGAGCCAGGGAACAGCCCCAG
GGTTGGGGGGTGCCGGCATCTCCCCTAGCTCACCAGGCCTGGCCTCTGGGCAGTGTGGCCTCTTGGCTATTTCTG
TTCCAGTTTTGGAGGCTGAGTTCTGGTTCATGCAGACAAAGCCCTGTCCTTCAGTCTTCTAGAAACAGAGACAAG
AAAGGCAGACACACCGCGGCCAGGCACCCATGTGGGCGCCCACCCTGGGCTCCACACAGCAGTGTCCCCTGCCCC
AGAGGTCGCAGCTACCCTCAGCCTCCAATGCATTGGCCTCTGTACCGCCCGGCAGCCCCTTCTGGCCGGTGCTGG
GTTCCCACTCCCGGCCTAGGCACCTCCCCGCTCTCCCTGTCACGCTCATGTCCTGTCCTGGTCCTGATGCCCGTT
GTCTAGGAGACAGAGCCAAGCACTGCTCACGTCTCTGCCGCCTGCGTTTGGAGGCCCCTGGGCTCTCACCCAGTC
CCCACCCGCCTGCAGAGAGGGAACTAGGGCACCCCTTGTTTCTGTTGTTCCCGTGAATTTTTTTCGCTATGGGAG
GCAGCCGAGGCCTGGCCAATGCGGCCCACTTTCCTGAGCTGTCGCTGCCTCCATGGCAGCAGCCAAGGACCCCCA
GAACAAGAAGACCCCCCCGCAGGATCCCTCCTGAGCTCGGGGGGCTCTGCCTTCTCAGGCCCCGGGCTTCCCTTC
TCCCCAGCCAGAGGTGGAGCCAAGTGGTCCAGCGTCACTCCAGTGCTCAGCTGTGGCTGGAGGAGCTGGCCTGTG
GCACAGCCCTGAGTGTCCCAAGCCGGGAGCCAACGAAGCCGGACACGGCTTCACTGACCAGCGGCTGCTCAAGCC
GCAAGCTCTCAGCAAGTGCCCAGTGGAGCCTGCCGCCCCCACCTGGGCACCGGGACCCCCTCACCATCCAGTGGG
CCCGGAGAAACCTGATGAACAGTTTGGGGACTCAGGACCAGATGTCCGTCTCTCTTGCTTGAGGAATGAAGACCT
TTATTCACCCCTGCCCCGTTGCTTCCCGCTGCACATGGACAGACTTCACAGCGTCTGCTCATAGGACCTGCATCC
TTCCTGGGGACGAATTCCACTCGTCCAAGGGACAGCCCACGGTCTGGAGGCCGAGGACCACCAGCAGGCAGGTGG
ACTGACTGTGTTGGGCAAGACCTCTTCCCTCTGGGCCTGTTCTCTTGGCTGCAAATAAGGACAGCAGCTGGTGCC
CCACCTGCCTGGTGCATTGCTGTGTGAATCCAGGAGGCAGTGGACATCGTAGGCAGCCACGGCCCCAGGTCCAGG
AGAAGTGCTCCCTGGAGGCACGGACCACTGCTTCCCACTGGGGCCGGCGGGGCCCACGCACGACGTCAGCCTCTT
ACCTTCCCGCCTCGGCTAGGGGTCCTCGGGATGCCGTTCTGTTCCAACCTCCTGTTCTGGGAGGTGGACATGCCT
CAAGGATACAGGGAGCCGGCGGCCTCTCGACGGCACGCACTTCCTGTTGGCTGCTGCGGCTGTGGGCGAGCATGG
GGGCTGCCAGCGTCTGTTGTGGAAAGTAGCTGCTAGTGAAATGGCTGGGGCCGCTGGGGTCCGTCTTCACACTGC
GCAGGTCTCTTCTGGGCGTCTGAGCTGGGGTGGGAGCTCCTCCGCAGAAGGTTGGTGGGGGGTCCAGTCTGTGAT
CCTTGGTGCTGTGTGCCCCACTCCAGCCTGGGGACCCCACTTCAGAAGGTAGGGGCCGTGTCCCGCGGTGCTGAC
TGAGGCCTGCTTCCCCCTCCCCCTCCTGCTGTGCTGGAATTCCACAGGGACCAGGGCCACCGCAGGGGACTGTCT
CAGAAGACTTGATTTTTCCGTCCCTTTTTCTCCACACTCCACTGACAAACGTCCCCAGCGGTTTCCACTTGTGGG

FIGURE 356B

CTTCAGGTGTTTTCAAGCACAACCCACCACAACAAGCAAGTGCATTTTCAGTCGTTGTGCTTTTTTGTTTTGTGC
TAACGTCTTACTAATTTAAAGATGCTGTCGGCACCATGTTTATTTATTTCCAGTGGTCATGCTCAGCCTTGCTGC
TCTGCGTGGCGCAGGTGCCATGCCTGCTCCCTGTCTGTGTCCCAGCCACGCAGGGCCATCCACTGTGACGTCGGC
CGACCAGGCTGGACACCCTCTGCCGAGTAATGACGTGTGTGGCTGGGACCTTCTTTATTCTGTGTTAATGGCTAA
CCTGTTACACTGGGCTGGGTTGGGTAGGGTGTTCTGGCTTTTTTGTGGGGTTTTTATTTTTAAAGAAACACTCAA
TCATCCTAG

FIGURE 357

MINPYRNLPLAIIISLPIVTLVYVLTNLAYFTTLSTEQMLSSEAVAVDFGNYHLGVMSWIIPVFVGLSCFGSVNG
SLFTSSRLFFVGSREGHLPSILSMIHPQLLTPVPSLVFTCVMTLLYAFSKDIFSVINFFSFFNWLCVALAIIGMI
WLRHRKPELERPIKVNLALPVFFILACLFLIAVSFWKTPVECGIGFTIILSGLPVYFFGVWWKNKPKWLLQGIFS
TTVLCQKLMQVVPQET

FIGURE 358

TGAACTGAGCGGCCCCTGAGCTGACAGATACACTGCGCAGTGGAACGGCGAGCGAGCCGACGGGCGAGTGAGGGG
CGCACATGATCACCTCGGCCGCTGGAATTATTTCTCTTCTGGATGAAGATGAACCACAGCTTAAGGAATTTGCAC
TACACAAATTGAATGCAGTTGTTAATGACTTCTGGGCAGAAATTTCCGAGTCCGTAGACAAAATAGAGGTTTTAT
ACGAAGATGAAGGTTTCCGGAGTCGGCAGTTTGCAGCCTTAGTGGCATCTAAAGTATTTTATCACCTGGGGGCTT
TTGAGGAGTCTCTGAATTATGCTCTTGGAGCAAGGGACCTCTTCAATGTCAATGATAACTCTGAATATGTGGAAA
CTATTATAGCAAAATGCATTGATCACTACACCAAACAATGTGTGGAAAATGCAGATTTGCCTGAAGGAGAAAAAA
AACCAATTGACCAGAGATTGGAAGGCATCGTAAATAAAATGTTCCAGCGATGTCTAGATGATCACAAGTATAAAC
AGGCTATTGGCATTGCTCTGGAGACACGAAGACTGGACGTCTTTGAAAAGACCATACTGGAGTCGAATGATGTCC
CAGGAATGTTAGCTTATAGCCTTAAGCTCTGCATGTCTTTAATGCAGAATAAACAGTTTCGGAATAAAGTACTAA
GAGTTCTAGTTAAAATCTACATGAACTTGGAGAAACCTGATTTCATCAATGTTTGTCAGTGCTTAATTTTCTTAG
ATGATCCTCAGGCTGTGAGTGATATCTTAGAGAAACTGGTAAAGGAAGACAACCTCCTGATGGCATATCAGATTT
GTTTTGATTTGTATGAAAGTGCTAGCCAGCAGTTTTTGTCATCTGTAATCCAGAATCTTCGAACTGTTGGCACCC
CTATTGCTTCTGTGCCTGGATCCACTAATACGGGTACTGTTCCGGGATCAGAGAAAGACAGTGACTCGATGGAAA
CAGAAGAAAAGACAAGCAGTGCATTTGTAGGAAAGACACCAGAAGCCAGTCCAGAGCCTAAGGACCAGACTTTGA
AAATGATTAAAATTTTAAGTGGTGAAATGGCTATTGAGTTACATCTGCAGTTCTTAATACGAAACAATAATAÇAG
ACCTCATGATTCTAAAAAACACAAAGGATGCAGTACGGAATTCTGTATGTCATACTGCAACCGTTATAGCAAACT
CTTTTATGCACTGTGGGACAACCAGTGACCAGTTTCTTAGAGATAATTTGGAATGGTTAGCCAGAGCCACTAACT
GGGCAAAATTTACTGCTACAGCCAGTTTGGGTGTAATTCATAAGGGTCATGAAAAAGAAGCATTACAGTTAATGG
CAACATACCTTCCCAAGGATACTTCTCCAGGATCAGCCTATCAGGAAGGTGGAGGTCTCTATGCACTAGGTCTTA
TTCATGCCAATCATGGTGGTGATATAATTGACTATCTGCTTAATCAGCTTAAGAACGCCAGCAATGATATCGTTA
GACACGGTGGCAGTCTGGGCCTTGGTTTGGCAGCCATGGGAACTGCACGTCAAGATGTTTATGATTTGCTAAAAA
CAAACCTTTATCAGGATGATGCAGTAACAGGGGAAGCAGCTGGCCTGGCCCTAGGTTTGGTTATGTTGGGCTCTA
AAAATGCTCAGGCTATTGAGGACATGGTTGGTTATGCACAAGAAACTCAACATGAGAAGATTCTGCGTGGTCTTG
CAGTTGGCATAGCTTTAGTAATGTATGGGAGGATGGAAGAGGCTGATGCTCTCATTGAATCTCTCTGTCGTGACA
AGGACCCAATTCTTCGAAGGTCTGGAATGTATACTGTAGCCATGGCTTATTGTGGCTCTGGTAACAACAAAGCAA
TTCGACGCCTGCTACATGTGGCTGTAAGTGATGTGAATGATGATGTCAGGAGTGCAGCAGTAGAATCACTTGGGT
TCATTCTATTCAGAACCCCTGAACAGTGCCCAAGTGTTGTCTCTTTGTTGTCAGAGAGTTACAACCCTCATGTGC
GCTACGGAGCTGCAATGGCCTTGGGGATATGCTGTGCTGGTACAGGAAACAAGGAAGCCATTAATTTGCTAGAAC
CAATGACAAACGACCCCGTGAACTACGTGAGGCAAGGGGCACTCATAGCTTCAGCTCTCATCATGATCCAGCAGA
CTGAAATCACTTGTCCAAAGGTGAATCAGTTCAGACAGCTGTATTCCAAAGTCATCAATGATAAGCATGATGATG
TCATGGCCAAGTTTGGCGCTATTCTGGCCCAGGGCATACTGGATGCAGGTGGTCATAATGTCACAATCTCCTTGC
AGTCCAGGACTGGGCATACTCATATGCCTTCTGTGGTTGGCGTCCTTGTATTTACCCAGTTTTGGTTCTGGTTTC
CTCTTTCACACTTCCTGTCATTGGCTTATACCCCTACCTGTGTCATTGGCCTTAACAAGGACTTAAAGATGCCGA
AAGTTCAGTATAAATCGAACTGTAAACCATCCACATTTGCATATCCTGCCCCTCTGGAAGTACCAAAAGAAAAAG
AAAAGGAAAAGGTTTCTACTGCTGTATTATCTATAACTGCCAAGGCTAAAAAGAAGGAAAAAGAAAAGGAAAAAA
AGGAGGAGGAGAAAATGGAAGTGGATGAGGCAGAGAAAAAGGAGGAAAAAGAGAAGAAAAAAGAACCTGAGCCAA
ACTTCCAGTTATTGGATAACCCAGCCCGAGTTATGCCTGCCCAGCTTAAGGTCCTAACCATGCCGGAGACCTGTA
GATACCAGCCTTTCAAACCACTCTCTATTGGAGGCATCATCATTCTGAAGGATACCAGTGAAGACATTGAGGAGC
TGGTGGAACCTGTGGCAGCACATGGCCCAAAAATCGAGGAGGAGGAACAAGAGCCAGAACCCCCAGAACCATTTG
AGTATATTGATGATTAAGGACCAGAGGATCTCACTTGCTTATCTGAAGAAGATTGTCCAGGCTCATATTGGGAAT
GCTTATGAGGAAATTCATGCCGAGACCTGCTATTCAATGCATGTATCGTTGCCTCTGCACTGACCTGAAGAACCC
TGTCTCCAAGTCTTTGGTTGAAGAGAAGATATATGACTGTTGAGTGTGCTCTTTCACAGAACTTGGTTTTCAAAT
AAATATAAGATCTCCAGATGGACAAG

FIGURE 359

MITSAAGIISLLDEDEPQLKEFALHKLNAVVNDFWAEISESVDKIEVLYEDEGFRSRQFAALVASKVFYHLGAFE
ESLNYALGARDLFNVNDNSEYVETIIAKCIDHYTKQCVENADLPEGEKKPIDQRLEGIVNKMFQRCLDDHKYKQA
IGIALETRRLDVFEKTILESNDVPGMLAYSLKLCMSLMQNKQFRNKVLRVLVKIYMNLEKPDFINVCQCLIFLDD
PQAVSDILEKLVKEDNLLMAYQICFDLYESASQQFLSSVIQNLRTVGTPIASVPGSTNTGTVPGSEKDSDSMETE
EKTSSAFVGKTPEASPEPKDQTLKMIKILSGEMAIELHLQFLIRNNNTDLMILKNTKDAVRNSVCHTATVIANSF
MHCGTTSDQFLRDNLEWLARATNWAKFTATASLGVIHKGHEKEALQLMATYLPKDTSPGSAYQEGGGLYALGLIH
ANHGGDIIDYLLNQLKNASNDIVRHGGSLGLGLAAMGTARQDVYDLLKTNLYQDDAVTGEAAGLALGLVMLGSKN
AQAIEDMVGYAQETQHEKILRGLAVGIALVMYGRMEEADALIESLCRDKDPILRRSGMYTVAMAYCGSGNNKAIR
RLLHVAVSDVNDDVRSAAVESLGFILFRTPEQCPSVVSLLSESYNPHVRYGAAMALGICCAGTGNKEAINLLEPM
TNDPVNYVRQGALIASALIMIQQTEITCPKVNQFRQLYSKVINDKHDDVMAKFGAILAQGILDAGGHNVTISLQS
RTGHTHMPSVVGVLVFTQFWFWFPLSHFLSLAYTPTCVIGLNKDLKMPKVQYKSNCKPSTFAYPAPLEVPKEKEK
EKVSTAVLSITAKAKKKEKEKEKKEEEKMEVDEAEKKEEKEKKKEPEPNFQLLDNPARVMPAQLKVLTMPETCRY
QPFKPLSIGGIIILKDTSEDIEELVEPVAAHGPKIEEEEQEPEPPEPFEYIDD

FIGURE 360

AGGTCTCAGCCGGTCGTCGCGACGTTCGCCCGCTCGCTCTGAGGCTCCTGAAGCCGAAACTAGCTAGACTTTCCT
CCTTCCCGCCTGCCTGTAGCGGCGTTGTTGCCACTCCGCCACCATGTTCGAGGCGCGCCTGGTCCAGGGCTCCAT
CCTCAAGAAGGTGTTGGAGGCACTCAAGGACCTCATCAACGAGGCCTGCTGGGATATTAGCTCCAGCGGTGTAAA
CCTGCAGAGCATGGACTCGTCCCACGTCTCTTTGGTGCAGCTCACCCTGCGGTCTGAGGGCTTCGACACCTACCG
CTGCGACCGCAACCTGGCCATGGGCGTGAACCTCACCAGTATGTCCAAAATACTAAAATGCGCCGGCAATGAAGA
TATCATTACACTAAGGGCCGAAGATAACGCGGATACCTTGGCGCTAGTATTTGAAGCACCAAACCAGGAGAAAGT
TTCAGACTATGAAATGAAGTTGATGGATTTAGATGTTGAACAACTTGGAATTCCAGAACAGGAGTACAGCTGTGT
AGTAAAGATGCCTTCTGGTGAATTTGCACGTATATGCCGAGATCTCAGCCATATTGGAGATGCTGTTGTAATTTC
CTGTGCAAAAGACGGAGTGAAATTTTCTGCAAGTGGAGAACTTGGAAATGGAAACATTAAATTGTCACAGACAAG
TAATGTCGATAAAGAGGAGGAAGCTGTTACCATAGAGATGAATGAACCAGTTCAACTAACTTTTGCACTGAGGTA
CCTGAACTTCTTTACAAAAGCCACTCCACTCTCTTCAACGGTGACACTCAGTATGTCTGCAGATGTACCCCTTGT
TGTAGAGTATAAAATTGCGGATATGGGACACTTAAAATACTACTTGGCTCCCAAGATCGAGGATGAAGAAGGATC
TTAGGCATTCTTAAAATTCAAGAAAATAAAACTAAGCTCTTTGAGAACTGCTTCTAAGATGCCAGCATATACTGA
AGTCTTTTCTGTCACCAAATTTGTACCTCTAAGTACATATGTAGATATTGTTTTCTGTAAATAACCTATTTTTTT
TCTCTATTCTCTCCAATTTGTTTAAAGAATAAAGTCCAAAGTCTGATCTGGTCTAGTTAACCTAGAAGTATTTTT
GTCTCTTAGAAATACTTGTGATTTTTATAATACAAAAGGGTCTTGACTCTAAATGCAGTTTTAAGAAGTGTTTTT
GAATTTAAATAAAGTTACTTGAATTTCAAAC

FIGURE 361

MFEARLVQGSILKKVLEALKDLINEACWDISSSGVNLQSMDSSHVSLVQLTLRSEGFDTYRCDRNLAMGVNLTSM
SKILKCAGNEDIITLRAEDNADTLALVFEAPNQEKVSDYEMKLMDLDVEQLGIPEQEYSCVVKMPSGEFARICRD
LSHIGDAVVISCAKDGVKFSASGELGNGNIKLSQTSNVDKEEEAVTIEMNEPVQLTFALRYLNFFTKATPLSSTV
TLSMSADVPLVVEYKIADMGHLKYYLAPKIEDEEGS

FIGURE 362

GAGTCACGATGATGGCGGCCACCATCCTGTGGTGAGCTAGCGGATTCCCTGCTTGTCTCGCCGACCCCCTCGCGC
CTTCTGCAGACTCCGTGGCTGGCGCTCGGCGCGTGAGGAAGCACGGCGGCCCGAGTTCGCGGGGAAGGCCGCAGT
CGCGGAGGCAGCGGCGCGGTCCGGGGCACGGGCTGGGGGAGAGGCCGCTCCGCTGGGCGAATGTGACAAGCCCCC
ACCCCCACCGCCTTCCTCCCCAGAGCGCGAGGAGCGCGGGCGACCCCGGGGCCCCGCCAGGCCACAGACCCCGCC
CAGCGGCCAGCACCCGGCGCAGGCCCGGCAGCCGAGCTGCGCGGCGGCACC**ATG**CAGGTCACCCTGAAGACCCTC
CAGCAGCAGACCTTCAAGATAGACATTGACCCCGAGGAGACGGTGAAAGCACTGAAAGAGAAGATTGAATCTGAA
AAGGGGAAAGATGCCTTTCCAGTAGCAGGTCAAAAATTAATTTATGCAGGCAAAATCCTCAATGATGATACTGCT
CTCAAAGAATATAAAATTGATGAGAAAAACTTTGTGGTGGTTATGGTGACCAAACCCAAAGCAGTGTCCACACCA
GCACCAGCTACAACTCAGCAGTCAGCTCCTGCCAGCACTACAGCAGTTACTTCCTCCACCACCACAACTGTGGCT
CAGGCTCCAACCCCTGTCCCTGCCTTGGCCCCCACTTCCACACCTGCATCCATCACTCCAGCATCAGCGACAGCA
TCTTCTGAACCTGCACCTGCTAGTGCAGCTAAACAAGAGAAGCCTGCAGAAAAGCCAGCAGAGACACCAGTGGCT
ACTAGCCCAACAGCAACTGACAGTACATCGGGTGATTCTTCTCGGTCAAACCTTTTTGAAGATGCAACGAGTGCA
CTTGTGACGGGTCAGTCTTACGAGAATATGGTAACTGAGATCATGTCAATGGGCTATGAACGAGAGCAAGTAATT
GCAGCCCTGAGAGCCAGTTTCAACAACCCTGACAGAGCAGTGGAGTATCTTTTAATGGGAATCCCTGGAGATAGA
GAAAGTCAGGCTGTGGTTGACCCCCCTCAAGCAGCTAGTACTGGGGCTCCTCAGTCTTCAGCAGTGGCTGCAGCT
GCAGCAACTACGACAGCAACAACTACAACAACAAGTTCTGGAGGACATCCCCTTGAATTTTTACGGAATCAGCCT
CAGTTTCAACAGATGAGACAAATTATTCAGCAGAATCCTTCCTTGCTTCCAGCGTTACTACAGCAGATAGGTCGA
GAGAATCCTCAATTACTTCAGCAAATTAGCCAACACCAGGAGCATTTTATTCAGATGTTAAATGAACCAGTTCAA
GAAGCTGGTGGTCAAGGAGGAGGAGGTGGAGGTGGCAGTGGAGGAATTGCAGAAGCTGGAAGTGGTCATATGAAC
TACATTCAAGTAACACCTCAGGAAAAAGAAGCTATAGAAAGGTTAAAGGCATTAGGATTTCCTGAAGGACTTGTG
ATACAAGCGTATTTTGCTTGTGAGAAGAATGAGAATTTGGCTGCCAATTTTCTTCTACAGCAGAACTTTGATGAA
GAT**TGA**AAGGGACTTTTTTATATCTCACACTTCACACCAGTGCATTACACTAACTTGTTCACTGGATTGTCTGGG
ATGACTTGGGCTCATATCCACAATACTTGGTATAAGGTAGTAGATTGTTGGGGGTGGGGAGGGAGGGATCTAGGA
TACAGGGCAGGGATAAATACAGTGCATGTCTGCTTCAATTAGCAGATGCCGCAACTCCACACAGTGTGTAAAATA
TATACAACCAAAAATCAGCTTTTGCAGGTCTTTATTTCTTCTGTAAAACAGTAGGTAACTTTTCCTAGGTTTCAC
TCTTTTTAGTGTACTAGATCCAGAAACTTAGTGTAATGCCCTGCTTTATATTTCTTTGACTTAACATTGGTTTCA
GAAAGAATCTTAGCTACCTAGAATTTACAGTCTCTGTTTCATGGCAACACTGGATAATGGCTTTGTGAAATTTAA
AAAATTTTTGTAGCGACTGTAAACAGAAATGCCAAATTGATGGTTAATTGTTGCTGCTTCAAAAATAAGTATAAA
ATTAATATGTAAGGAAGCCCATTCTTTCATGTTAAATACTTGGGGTGGGAGGGGAGAAAGGGAACCTTTTCTTAA
AATGAAAATAATTACTGCTATTTTAAAATTTCTTGATCATTGAATGTGAGACCCTTCTAACATGATTTGAGAAGC
TGTACAAGTATAGGCAGAGTTATTTTCCTGTTTACATTTTTTTTTTGTTTTGGGGAAAAAATTGGTAGGTGTCTA
ATTACTGTTTACTTCATTGTTATATTGCAGTAAAAGTTTTAAAACAACCATTGCATGTTTGCTTTTGATGTATCC
CTTTGTGAAATTAGCACTTTTGGGGCCAATGGAGAAATGCAGCATTCACTCTCCCTGTCTTTTCCCCTTCCCTCA
GCAGAAACGTGTTTATCAGCAAGTCGTGAGTCAAACTGCTGCCTTTTAAAAAACCCACAAAATGCTGATTCAGTT
CAAAATTAATGCAAATGTTTCAAAACTGGGTTTCTGATATTTGTAAATGTGTTTCTTTATTAGATAAGAGTGTAT
TACCATTAAAGTCATTAGTATAATATTGCTTTCAAAAAGAAATGGTAGACAAAACTATAATCCAGCATCTTTTAT
TGCATTGGAAAGACTGGCAAAGTCTTTTGGATGGGTTGGGAGATGTGGCTGGAAAGTACTTTGGAAAATATACAA
TCAAGATATCTCATGGCATATTAAAAGAAAAATCTTAATAGCAGTGTTGGCTTTTATTTGGATTTTTTCATCTCA
GTTTTTTCTGTGGAATCTCCTTCATTGGCATTGTTATTTAATCATAAACGGGGCAGATGTCTACTTGTTCAGTTT
TTCAAATCTGTTTTCCTG

FIGURE 363

MQVTLKTLQQQTFKIDIDPEETVKALKEKIESEKGKDAFPVAGQKLIYAGKILNDDTALKEYKIDEKNFVVVMVT
KPKAVSTPAPATTQQSAPASTTAVTSSTTTTVAQAPTPVPALAPTSTPASITPASATASSEPAPASAAKQEKPAE
KPAETPVATSPTATDSTSGDSSRSNLFEDATSALVTGQSYENMVTEIMSMGYEREQVIAALRASFNNPDRAVEYL
LMGIPGDRESQAVVDPPQAASTGAPQSSAVAAAAATTTATTTTTSSGGHPLEFLRNQPQFQQMRQIIQQNPSLLP
ALLQQIGRENPQLLQQISQHQEHFIQMLNEPVQEAGGQGGGGGGGSGGIAEAGSGHMNYIQVTPQEKEAIERLKA
LGFPEGLVIQAYFACEKNENLAANFLLQQNFDED

FIGURE 364

TAGCTAGGCAGGAAGTCGGCGCGGGCGGCGCGGACAGTATCTGTGGGTACCCGGAGCACGGAGATCTCGCCGGCT
TTACGTTCACCTCGGTGTCTGCAGCACCCTCCGCTTCCTCTCCTAGGCGACGAGACCCAGTGGCTAGAAGTTCAC
CATGTCTATTCTCAAGATCCATGCCAGGGAGATCTTTGACTCTCGCGGGAATCCCACTGTTGAGGTTGATCTCTT
CACCTCAAAAGGTCTCTTCAGAGCTGCTGTGCCCAGTGGTGCTTCAACTGGTATCTATGAGGCCCTAGAGCTCCG
GGACAATGATAAGACTCGCTATATGGGGAAGGGTGTCTCAAAGGCTGTTGAGCACATCAATAAAACTATTGCGCC
TGCCCTGGTTAGCAAGAAACTGAACGTCACAGAACAAGAGAAGATTGACAAACTGATGATCGAGATGGATGGAAC
AGAAAATAAATCTAAGTTTGGTGCGAACGCCATTCTGGGGGGTGTCCCTTGCCGTCTGCAAAGCTGGTGCCGTTGA
GAAGGGGGTCCCCCTGTACCGCCACATCGCTGACTTGGCTGGCAACTCTGAAGTCATCCTGCCAGTCCCGGCGTT
CAATGTCATCAATGGCGGTTCTCATGCTGGCAACAAGCTGGCCATGCAGGAGTTCATGATCCTCCCAGTCGGTGC
AGCAAACTTCAGGGAAGCCATGCGCATTGGAGCAGAGGTTTACCACAACCTGAAGAATGTCATCAAGGAGAAATA
TGGGAAAGATGCCACCAATGTGGGGGATGAAGGCGGGTTTGCTCCCAACATCCTGGAGAATAAAGAAGGCCTGGA
GCTGCTGAAGACTGCTATTGGGAAAGCTGGCTACACTGATAAGGTGGTCATCGGCATGGACGTAGCGGCCTCCGA
GTTCTTCAGGTCTGGGAAGTATGACCTGGACTTCAAGTCTCCCGATGACCCCAGCAGGTACATCTCGCCTGACCA
GCTGGCTGACCTGTACAAGTCCTTCATCAAGGACTACCCAGTGGTGTCTATCGAAGATCCCTTTGACCAGGATGA
CTGGGGAGCTTGGCAGAAGTTCACAGCCAGTGCAGGAATCCAGGTAGTGGGGGATGATCTCACAGTGACCAACCC
AAAGAGGATCGCCAAGGCCGTGAACGAGAAGTCCTGCAACTGCCTCCTGCTCAAAGTCAACCAGATTGGCTCCGT
GACCGAGTCTCTTCAGGCGTGCAAGCTGGCCCAGGCCAATGGTTGGGGCGTCATGGTGTCTCATCGTTCGGGGGA
GACTGAAGATACCTTCATCGCTGACCTGGTTGTGGGGCTGTGCACTGGGCAGATCAAGACTGGTGCCCCTTGCCG
ATCTGAGCGCTTGGCCAAGTACAACCAGCTCCTCAGAATTGAAGAGGAGCTGGGCAGCAAGGCTAAGTTTGCCGG
CAGGAACTTCAGAAACCCCTTGGCCAAGTAAGCTGTGGGCAGGCAAGCCCTTCGGTCACCTGTTGGCTACACAGA
CCCCTCCCCTCGTGTCAGCTCAGGCAGCTCGAGGCCCCCGACCAACACTTGCAGGGGTCCCTGCTAGTTAGCGCC
CCACCGCCGTGGAGTTCGTACCGCTTCCTTAGAACTTCTACAGAAGCCAAGCTCCCTGGAGCCCTGTTGGCAGCT
CTAGCTTTGCAGTCGTGTAATTGGCCCAAGTCATTGTTTTTCTCGCCTCACTTTCCACCAAGTGTCTAGAGTCAT
GTGAGCCTCGTGTCATCTCCGGGGTGGCCACAGGCTAGATCCCCGGTGGTTTTGTGCTCAAAATAAAAAGCCTCA
GTGACCCATGAG

FIGURE 365

MSILKIHAREIFDSRGNPTVEVDLFTSKGLFRAAVPSGASTGIYEALELRDNDKTRYMGKGVSKAVEHINKTIAP
ALVSKKLNVTEQEKIDKLMIEMDGTENKSKFGANAILGVSLAVCKAGAVEKGVPLYRHIADLAGNSEVILPVPAF
NVINGGSHAGNKLAMQEFMILPVGAANFREAMRIGAEVYHNLKNVIKEKYGKDATNVGDEGGFAPNILENKEGLE
LLKTAIGKAGYTDKVVIGMDVAASEFFRSGKYDLDFKSPDDPSRYISPDQLADLYKSFIKDYPVVSIEDPFDQDD
WGAWQKFTASAGIQVVGDDLTVTNPKRIAKAVNEKSCNCLLLKVNQIGSVTESLQACKLAQANGWGVMVSHRSGE
TEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLLRIEEELGSKAKFAGRNFRNPLAK

FIGURE 366

GGCTGAGGCAGTGGCTCCTTGCACAGCAGCTGCACGCGCCGTGGCTCCGGATCTTCTTCGTCTTTGCAGCGTAGC
CCGAGTCGGTCAGCGCCAGAGGACCTCAGCAGCCATGTCGAAGCCCCATAGTGAAGCCGGGACTGCCTTCATTCA
GACCCAGCAGCTGCACGCAGCCATGGCTGACACATTCCTGGAGCACATGTGCCGCCTGGACATTGATTCACCACC
CATCACAGCCCGGAACACTGGCATCATCTGTACCATTGGCCCAGCTTCCCGATCAGTGGAGACGTTGAAGGAGAT
GATTAAGTCTGGAATGAATGTGGCTCGTCTGAACTTCTCTCATGGAACTCATGAGTACCATGCGGAGACCATCAA
GAATGTGCGCACAGCCACGGAAAGCTTTGCTTCTGACCCCATCCTCTACCGGCCCGTTGCTGTGGCTCTAGACAC
TAAAGGACCTGAGATCCGAACTGGGCTCATCAAGGGCAGCGGCACTGCAGAGGTGGAGCTGAAGAAGGGAGCCAC
TCTCAAAATCACGCTGGATAACGCCTACATGGAAAAGTGTGACGAGAACATCCTGTGGCTGGACTACAAGAACAT
CTGCAAGGTGGTGGAAGTGGGCAGCAAGATCTACGTGGATGATGGGCTTATTTCTCTCCAGGTGAAGCAGAAAGG
TGCCGACTTCCTGGTGACGGAGGTGGAAAATGGTGGCTCCTTGGGCAGCAAGAAGGGTGTGAACCTTCCTGGGGC
TGCTGTGGACTTGCCTGCTGTGTCGGAGAAGGACATCCAGGATCTGAAGTTTGGGGTCGAGCAGGATGTTGATAT
GGTGTTTGCGTCATTCATCCGCAAGGCATCTGATGTCCATGAAGTTAGGAAGGTCCTGGGAGAGAAGGGAAAGAA
CATCAAGATTATCAGCAAAATCGAGAATCATGAGGGGGTTCGGAGGTTTGATGAAATCCTGGAGGCCAGTGATGG
GATCATGGTGGCTCGTGGTGATCTAGGCATTGAGATTCCTGCAGAGAAGGTCTTCCTTGCTCAGAAGATGATGAT
TGGACGGTGCAACCGAGCTGGGAAGCCTGTCATCTGTGCTACTCAGATGCTGGAGAGCATGATCAAGAAGCCCCG
CCCCACTCGGGCTGAAGGCAGTGATGTGGCCAATGCAGTCCTGGATGGAGCCGACTGCATCATGCTGTCTGGAGA
AACAGCCAAAGGGGACTATCCTCTGGAGGCTGTGCGCATGCAGAACCTGATTGCCCGTGAGGCAGAGGCTGCCAT
CTACCACTTGCAATTATTTGAGGAACTCCGCCGCCTGGCGCCCATTACCAGCGACCCCACAGAAGCCACCGCCGT
GGGTGCCGTGGAGGCCTCCTTCAAGTGCTGCAGTGGGGCCATAATCGTCCTCACCAAGTCTGGCAGGTCTGCTCA
CCAGGTGGCCAGATACCGCCCACGTGCCCCCATCATTGCTGTGACCCGGAATCCCCAGACAGCTCGTCAGGCCCA
CCTGTACCGTGGCATCTTCCCTGTGCTGTGCAAGGACCCAGTCCAGGAGGCCTGGGCTGAGGACGTGGACCTCCG
GGTGAACTTTGCCATGAATGTTGGCAAGGCCCGAGGCTTCTTCAAGAAGGGAGATGTGGTCATTGTGCTGACCGG
ATGGCGCCCTGGCTCCGGCTTCACCAACACCATGCGTGTTGTTCCTGTGCCGTGATGGACCCCAGAGCCCCTCCT
CCAGCCCCTGTCCCACCCCCTTCCCCCAGCCCATCCATTAGGCCAGCAACGCTTGTAGAACTCACTCTGGGCTGT
AACGTGGCACTGGTAGGTTGGGACACCAGGGAAGAAGATCAACGCCTCACTGAAACATGGCTGTGTTTGCAGCCT
GCTCTAGTGGGACAGCCCAGAGCCTGGCTGCCCCATCATGTGGCCCCACCCAATCAAGGGAAGAAGGAGGAATGC
TGGACTGGAGGCCCCTGGAGCCAGATGGCAAGAGGGTGACAGCTTCCTTTCCTGTGTGTACTCTGTCCAGTTCCT
TTAGAAAAAATGGATGCCCAGAGGACTCCCAACCCTGGCTTGGGGTCAAGAAACAGCCAGCAAGAGTTAGGGGCC
TTAGGGCACTGGGCTGTTGTTCCATTGAAGCCGACTCTGGCCCTGGCCCTTACTTGCTTCTCTAGCTCTCTAGGC
CTCTCCAGTTTGCACCTGTCCCCACCCTCCACTCAGCTGTCCTGCAGCAAACACTCCACCCTCCACCTTCCATTT
TCCCCCACTACTGCAGCACCTCCAGGCCTGTTGCCGC

FIGURE 367

MSKPHSEAGTAFIQTQQLHAAMADTFLEHMCRLDIDSPPITARNTGIICTIGPASRSVETLKEMIKSGMNVARLN
FSHGTHEYHAETIKNVRTATESFASDPILYRPVAVALDTKGPEIRTGLIKGSGTAEVELKKGATLKITLDNAYME
KCDENILWLDYKNICKVVEVGSKIYVDDGLISLQVKQKGADFLVTEVENGGSLGSKKGVNLPGAAVDLPAVSEKD
IQDLKFGVEQDVDMVFASFIRKASDVHEVRKVLGEKGKNIKIISKIENHEGVRRFDEILEASDGIMVARGDLGIE
IPAEKVFLAQKMMIGRCNRAGKPVICATQMLESMIKKPRPTRAEGSDVANAVLDGADCIMLSGETAKGDYPLEAV
RMQNLIAREAEAAIYHLQLFEELRRLAPITSDPTEATAVGAVEASFKCCSGAIIVLTKSGRSAHQVARYRPRAPI
IAVTRNPQTARQAHLYRGIFPVLCKDPVQEAWAEDVDLRVNFAMNVGKARGFFKKGDVVIVLTGWRPGSGFTNTM
RVVPVP

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FIGURE 368

GGCTTGGTCACTATGGAGGAGATAGGCATCTTGGTGGAGAAGGCTCAGGATGAGATCCCAGCACTGTCCGTGTCC
CGGCCCCAGACCGGCCTGTCCTTCCTGGGCCCTGAGCCTGAGGACCTGGAGGACCTGTACAGCCGCTACAAGAAG
CTGCAGCAAGAGCTGGAGTTCCTGGAGGTGCAGGAGGAATACATCAAAGATGAGCAAAAGAACCTGAAAAAGGAA
TTTCTCCATGCCCAGGAGGAGGTGAAGCGAATCCAAAGCATCCCGCTGGTCATCGGACAATTTCTGGAGGCTGTG
GATCAGAATACAGCCATCGTGGGCTCTACCACAGGCTCCAACTATTATGTGCGCATCCTGAGCACCATCGATCGG
GAGCTGCTCAAGCCCAACGCCTCAGTGGCCCTCCACAAGCACAGCAATGCACTGGTGGACGTGCTGCCCCCCGAA
GCCGACAGCAGCATCATGATGCTCACCTCAGACCAGAAGCCAGATGTGATGTACGCGGACATCGGAGGCATGGAC
ATCCAGAAGCAGGAGGTGCGGGAGGCCGTGGAGCTCCCGCTCACGCATTTCGAGCTCTACAAGCAGATCGGCATC
GATCCCCCCCCGAGGCGTCCTCATGTATGGCCCACCTGGCTGTGGGAAGACCATGTTGGCAAAGGCGGTGGCACAT
CACACAACAGCTGCATTCATCCGGGTCGTGGGCTCGGAGTTTGTACAGAAGTATCTGGGTGAGGGCCCCCGCATG
GTCCGGGATGTGTTCCGCCTGGCCAAGGAGAATGCACCTGCCATCATCTTCATAGACGAGATTGATGCCATCGCC
ACCAAGAGATTCGATGCTCAGACAGGGGCCGACAGGGAGGTTCAGAGGATCCTGCTGGAGCTGCTGAATCAGATG
GATGGATTTGATCAGAATGTCAATGTCAAGGTAATCATGGCCACAAACAGAGCAGACACCCTGGATCCGGCCCTG
CTACGGCCAGGACGGCTGGACCGTAAAATTGAATTTCCACTTCCTGACCGCCGCCAGAAGAGATTGATTTTCTCC
ACTATCACTAGCAAGATGAACCTCTCTGAGGAGGTTGACTTGGAAGACTATGTGGCCCGGCCAGATAAGATTTCA
GGAGCTGATATCAACTCCATCTGTCAGGAGAGTGGAATGTTGGCTGTCCGTGAAAACCGCTACATTGTCCTGGCC
AAGGACTTCGAGAAAGCATACAAGACTGTCATCAAGAAGGACGAGCAGGAGCATGAGTTTTACAAGTGACCCTTC
CCTTCCCTCCACCACACCACTCAGGGGCTGGGGCTTCTCTCGCACCCCCAGCACCTCTGTCCCAAAACCTCATTC
CCTTTTTTCTTTACCCAGGATTGGTTTCTTCAATAAATAGATAAGATCGAATCCAAAAAAAAAAAAAAAAAAAAA

FIGURE 369

MEEIGILVEKAQDEIPALSVSRPQTGLSFLGPEPEDLEDLYSRYKKLQQELEFLEVQEEYIKDEQKNLKKEFLHA
QEEVKRIQSIPLVIGQFLEAVDQNTAIVGSTTGSNYYVRILSTIDRELLKPNASVALHKHSNALVDVLPPEADSS
IMMLTSDQKPDVMYADIGGMDIQKQEVREAVELPLTHFELYKQIGIDPPRGVLMYGPPGCGKTMLAKAVAHHTTA
AFIRVVGSEFVQKYLGEGPRMVRDVFRLAKENAPAIIFIDEIDAIATKRFDAQTGADREVQRILLELLNQMDGFD
QNVNVKVIMATNRADTLDPALLRPGRLDRKIEFPLPDRRQKRLIFSTITSKMNLSEEVDLEDYVARPDKISGADI
NSICQESGMLAVRENRYIVLAKDFEKAYKTVIKKDEQEHEFYK

FIGURE 370

CCGAGGCCAAGTCCCGGGCGCTAGCCCACCTCCCACCCGCCTCTTGGCTCCTCTCCTCTAGGCCGTCGCTTTCGG
GTTCTCTCATCGCTTCGTCGTTCGCCAATGTTTGAGGAGAAGGCCAGCAGTCCTTCAGGGAAGATGGAGGCGAG
GAGAAGCCGATTGGTGCTGGTGAAGAGAAGCAAAAGGAAGGAGGCAAAAAGAAGAACAAAGAAGGATCTGGAGAT
GGAGGTCGAGCTGAGTTGAATCCTTGGCCTGAATATATTTACACACGTCTTGAGATGTATAATATACTAAAAGCA
GAACATGATTCCATTCTGGCAGAAAAGGCAGAAAAAGATAGCAAGCCAATTAAAGTCACTTTGCCTGATGGTAAA
CAGGTTGATGCGGAATCTTGGAAAACTACACCATATCAAATTGCCTGTGGAATTAGTCAAGGCCTGGCCGACAAC
ACCGTTATTGCTAAAGTAAATAATGTTGTGTGGGACCTGGACCGCCCTCTGGAAGAAGATTGTACCTTGGAGCTT
CTCAAGTTTGAGGATGAGGAAGCTCAGGCAGTGTATTGGCACTCTAGTGCTCACATAATGGGTGAAGGCATGGAA
AGAGTCTATGGTGGATGTTTATGCTACGGTCCGCCAATAGAAAATGGATTCTATTATGACATGTACCTCGAAGAA
GGGGGTGTGTCTAGCAATGATTTCTCTTCTCTGGAGGCTTTGTGTAAGAAAATCATTAAAGAAAAACAAGCTTTT
GAAAGACTGGAAGTTAAGAAAGAAACTTTACTGGCAATGTTTAAGTACAACAAGTTCAAATGCCGGATATTGAAT
GAAAAGGTGAATACTCCAACTACCACAGTCTATAGATGTGGCCCTTTGATAGATCTCTGCCGGGGTCCTCATGTT
AGACACACGGGCAAAATTAAGGCTTTAAAAATACACAAAAATTCCTCCACGTACTGGGAAGGCAAAGCAGATATG
GAGACTCTCCAGAGAATTTATGGCATTTCATTCCCAGATCCTAAAATGTTGAAAGAGTGGGAGAAGTTCCAAGAG
GAAGCTAAAAACCGAGATCATAGGAAAATTGGCAGGGACCAAGAACTATATTTCTTTCATGAACTCAGCCCTGGA
AGTTGCTTTTTTCTGCCAAAAGGAGTCTATATTTATAATGCACTTATTGAATTCATTAGGAGCGAATATAGGAAA
AGAGGATTCCAGGAGGTAGTCACCCCAAACATCTTCAACAGCCGACTCTGGATGACCTCGGGCCACTGGCAGCAC
TACAGCGAGAACATGTTCTCCTTTGAGGTGGAGAAGGAGCTGTTTGCCCTGAAACCCATGAACTGCCCAGGACAC
TCCCTTATGTTTGATCATCGGCCAAGGTCCTGGCGAGAACTGCCTCTGCGGCTAGCTGATTTTGGGGGTCTTCAT
AGGAACGAGCTGTCTGGAGCACTCACAGGACTCACCCGGGTACGAAGATTCCAACAGGATGATGCTCACATATTC
TGTGCCATGGAGCAGATTGAAGATGAAATAAAAGGTTGTTTGGATTTTCTACGTACGGTATATAGCGTATTTGGA
TTTTCTTTTAAACTAAACCTTTCTACTCGCCCGGAAAAATTCCTTGGAGATATCGAAGTATGGGATCAAGCTGAG
AAACAACTTGAAAACAGTCTGAATGAATTTGGTGAAAAGTGGGAGTTAAACTCTGGAGATGGAGCTTTCTATGGC
CCAAAGATTGACATACAGATTAAAGATGCGATTGGGCGGTACCACCAGTGTGCAACCATCCAGCTGGATTTCCAG
TTGCCCATCAGATTTAATCTTACTTATGTAAGCCATGATGGTGAGGATAAGAAAAGGCCAGTGATTGTTCATCGA
GCCATCTTGGGATCAGTGGAAAGAATGATTGCTATCCTCACAGAAAACTATGGGGGCAAATTGGCCCCCTTTTGG
CTGTCCCCTCGCCAGGTAATGGTAGTTCCAGTGGGACCAACCTGTGATGAATATGCCCAAAACGTACGACAACAA
TTCCACGATGCCAAATTCATGGCAGACATTGATCTGGATCCAGGCTGTACATTGAATAAAAAGATTCGAAATGCA
CAGTTAGCACAGTATAACTTCATTTTAGTTGTTGGTGAAAAAGAGAAAATCACTGGCACTGTTAATATCCGCACA
AGAGACAATAAGGTCCACGGGGAACGCACCATTTCTGAAACTATCGAGCGGCTACAGCAGCTCAAAGAGTTCCGC
AGCAAACAGGCAGAAGAAGAATTTTAATGAAAAAATTACCCAGATTGGCTCCATGGAAAAGGAGGAACAGCGTTT
CCGTAAAATTGACTTTGTACTCGAAAACGTCAATTTATATTGAACTTGGAGGAGGAGTTTGGCAAAGTCTGAAAT
AGGTCAACCTGCAGGCGTAACTATTTTTGACCTAGTCAGTTTTTAAACAATGTGCATTTGAAGGAGTTAATTAAA
AGAGAGCCAATAAAATGATTTTACTCATTCAGTATCTGAGTACTGGAAGTGAAACATGAGGAATGCTTTAGTGTA
ATGTGGGAGAACTTTTTTGTAAATTTAATGCAATTGAAAAAGTTTTCAAATTCAATTAAGATAACTAGAATTGGT
TATGGTGTAACCCGAATTC

FIGURE 371

MGGEEKPIGAGEEKQKEGGKKKNKEGSGDGGRAELNPWPEYIYTRLEMYNILKAEHDSILAEKAEKDSKPIKVTL
PDGKQVDAESWKTTPYQIACGISQGLADNTVIAKVNNVVWDLDRPLEEDCTLELLKFEDEEAQAVYWHSSAHIMG
EGMERVYGGCLCYGPPIENGFYYDMYLEEGGVSSNDFSSLEALCKKIIKEKQAFERLEVKKETLLAMFKYNKFKC
RILNEKVNTPTTTVYRCGPLIDLCRGPHVRHTGKIKALKIHKNSSTYWEGKADMETLQRIYGISFPDPKMLKEWE
KFQEEAKNRDHRKIGRDQELYFFHELSPGSCFFLPKGVYIYNALIEFIRSEYRKRGFQEVVTPNIFNSRLWMTSG
HWQHYSENMFSFEVEKELFALKPMNCPGHSLMFDHRPRSWRELPLRLADFGGLHRNELSGALTGLTRVRRFQQDD
AHIFCAMEQIEDEIKGCLDFLRTVYSVFGFSFKLNLSTRPEKFLGDIEVWDQAEKQLENSLNEFGEKWELNSGDG
AFYGPKIDIQIKDAIGRYHQCATIQLDFQLPIRFNLTYVSHDGEDKKRPVIVHRAILGSVERMIAILTENYGGKL
APFWLSPRQVMVVPVGPTCDEYAQNVRQQFHDAKFMADIDLDPGCTLNKKIRNAQLAQYNFILVVGEKEKITGTV
NIRTRDNKVHGERTISETIERLQQLKEFRSKQAEEEF

FIGURE 372A

GAATTCGGGTGGAGTCCTGAAGGAGGGCCTGATGTCTTCATCATTCTCAAATTCTTGTAAGCTCTGCGTCGGGTG
AAACCAGACAAAGCCGCGAGCCCAGGGATGGGAGCACGCGGGGGACGGCCTGCCGGCGGGGACGACAGCATTGCG
CCTGGGTGCAGCAGTGTGCGTCTCGGGGAAGGGAAGATATTTTAAGGCGTGTCTGAGCAGACGGGGAGGCTTTTC
CAAACCCAGGCAGCTTCGTGGCGTGTGCGGTTTCGACCCGGTCACACAAAGCTTCAGCATGTCATGTGAGGACGG
TCGGGCCCTGAAAGGAACGCTCTCGGAATTGGCCGCGGAAACCGATCTGCCCGTTGTGTTTGTGAAACAGAGAAA
GATAGGCGGCCATGGTCCAACCTTGAAGGCTTATCAGGAGGGCAGACTTCAAAAGCTACTAAAA**ATG**AACGGCCC
TGAAGATCTTCCCAAGTCCTATGACTATGACCTTATCATCATTGGAGGTGGCTCAGGAGGTCTGGCAGCTGCTAA
GGAGGCAGCCCAATATGGCAAGAAGGTGATGGTCCTGGACTTTGTCACTCCCACCCCTCTTGGAACTAGATGGGG
TCTTGGAGGAACATGTGTGAATGTGGGTTGCATACCTAAAAAACTGATGCATCAAGCAGCTTTGTTAGGACAAGC
CCTGCAAGACTCTCGAAATTATGGATGGAAAGTCGAGGAGACAGTTAAGCATGATTGGGACAGAATGATAGAAGC
TGTACAGAATCACATTGGCTCTTTGAATTGGGGCTACCGAGTAGCTCTGCGGGAGAAAAAAGTCGTCTATGAGAA
TGCTTATGGGCAATTTATTGGTCCTCACAGGATTAAGGCAACAAATAATAAAGGCAAAGAAAAAATTTATTCAGC
AGAGAGTTTTCTCATTGCCACTGGTGAAAGACCACGTTACTTGGGCATCCCTGGTGACAAAGAATACTGCATCAG
CAGTGATGATCTTTTCTCCTTGCCTTACTGCCCGGGTAAGACCCTGGTTGTTGGAGCATCCTATGTCGCTTTGGA
GTGCGCTGGATTTCTTGCTGGTATTGGTTTAGGCGTCACTGTTATGGTTAGGTCCATTCTTCTTAGAGGATTTGA
CCAGGACATGGCCAACAAAATTGGTGAACACATGGAAGAACATGGCATCAAGTTTATAAGACAGTTCGTACCAAT
TAAAGTTGAACAAATTGAAGCAGGGACACCAGGCCGACTCAGAGTAGTAGCTCAGTCCACCAATAGTGAGGAAAT
CATTGAAGGAGAATATAATACGGTGATGCTGGCAATAGGAAGAGATGCTTGCACAAGAAAAATTGGCTTAGAAAC
CGTAGGGGTGAAGATAAATGAAAAGACTGGAAAAATACCTGTCACAGATGAAGAACAGACCAATGTGCCTTACAT
CTATGCCATTGGCGATATATTGGAGGATAAGGTGGAGCTCACCCCAGTTGCAATCCAGGCAGGAAGATTGCTGGC
TCAGAGGCTCTATGCAGGTTCCACTGTCAAGTGTGACTATGAAAATGTTCCAACCACTGTATTTACTCCTTTGGA
ATATGGTGCTTGTGGCCTTTCTGAGGAGAAAGCTGTGGAGAAGTTTGGGGAAGAAAATATTGAGGTTTACCATAG
TTACTTTTGGCCATTGGAATGGACGATTCCGTCAAGAGATAACAACAAATGTTATGCAAAAATAATCTGTAATAC
TAAAGACAATGAACGTGTTGTGGGCTTTCACGTACTGGGTCCAAATGCTGGAGAAGTTACACAAGGCTTTGCAGC
TGCGCTCAAATGTGGACTGACCAAAAAGCAGCTGGACAGCACAATTGGAATCCACCCTGTCTGTGCAGAGGTATT
CACAACATTGTCTGTGACCAAGCGCTCTGGGGCAAGCATCCTCCAGGCTGGCTGC**TGA**GGTTAAGCCCCAGTGTG
GATGCTGTTGCCAAGACTGCAAACCACTGGCTCGTTTCCGTGCCCAAATCCAAGGCGAAGTTTTCTAGAGGGTTC
TTGGGCTCTTGGCACCTGCGTGTCCTGTGCTTACCACCGCCCAAGGCCCCCTTGGATCTCTTGGATAGGAGTTGG
TGAATAGAAGGCAGGCAGCATCACACTGGGGTCACTGACAGACTTGAAGCTGACATTTGGCAGGGCATCGAAGGG
ATGCATCCATGAAGTCACCAGTCTCAAGCCCATGTGGTAGGCGGTGATGGAACAACTGTCAAATCAGTTTTAGCA
TGACCTTTCCTTGTGGATTTTCTTATTCTCGTTGTCAAGTTTTCTAGGGTTGAATTTTTTTCTTTTTTCTCCATG
GTGTTAATGATATTAGAGATGAAAAACGTTAGCAGTTGATTTTTGTCCAAAAGCAAGTCATGGCTAGAGTATCCA
TGCAAGGTGTCTTGTTGCATGGAAGGGATAGTTTGGCTCCCTTGGAGGCTATGTAGGCTTGTCCCGGGAAAGAGA
ACTGTCCTGCAGCTGAAATGGACTGTTCTTTACTGACCTGCTCAGCAGTTTCTTCTCTCATATATTCCCAAAACA
AGTACATCTGCGATCAACTCTAGCCAAATTTGCCCCTGTGTGCTACATGATGGATGATTATTATTTTAAGGTCTG
TTTAGGAAGGGAAATGGCTACTTGGCCAGCCATTGCCTGGCATTTGGTAGTATAGTATGATTCTCACCATTATTT
GTCATGGAGGCAGACATACACCAGAAATGGGGGAGAAACAGTACATATCTTTCTGTCTTTAGTTTATTGTGTGCT
GGTCTAAGCAAGCTGAGATCATTTGCAATGGAAAACACGTAACTTGTTTAAAAGTTTTTCTGGTAGCTTTAGCTT
TATGCTAAAAAAAATAATGACATTGGGTATCTATTTCTTTCTAAGACATACATTAGTAGGAAAATAAGTCTTTTC
ATGCTTATGATTTAGCTGTTTTGTGGTAATTGCTTTTTAAAGGAAGTTATTAATATCATAAGTTATTATTAATAT
TTTGAACACAGGTGGATGTGAAGGATTTTCATTTAAAAACCAAGTGGTTTTGACTTTTTCTGTTGAATGAACAAC
TGTGCCTTGTGGAATTTTTGCAGAAGTGTTTATGCTTTGTTAGCATTTCAACTTGCATTATTATAAAGAGGTATT
AATGCCTCAGTTATGTGTTTGTCAATGTACTGGCTGAGGATTCTATCTCAGCTGTCTTTTCTAACTGTGTAGGTT
GAGTTTTGAACACGTGCTTGTGGACATCAGCCTCCTGCCAGCAGTTCTTGAAGCTTCTTTTTCATTCCTGCTACT
CTACCTGTATTTCTCAGTTGCAGCACTGAGTGGTCAAAATACATTTCTGGGCCACCTCAGGGAACCCATGCATCT
GCCTGGCATTTAGGCAGCAGAGCCCCTGACCGTCCCCCACAGGCTCTGCCTCACGTCCTCATCTCATTTGGCTGT
GTAAAGAAATGGGAAAAGGGAAAAGGAGAGAGCAATTGAGGCAGTTGACCATATTCAGTTTTATTTATTTATTTT
TAATTTGTTTTTTTCTCCAAGTCCACCAGTCTCTGAAATTAGAACAGTAGGCGGTATGAGATAATCAGGCCTAAT

FIGURE 372B

CATGTTGTGATTCTCTTTTCTTAGTGGAGTGGAATGTTCTATCCCCACAAGAAGGATTATATCTTATAGACTTGT
CTTGTTCAGATTCTGTATTTACCCATTTTATTGAAACATATACTAAGTTCCATGTATTTTTGTTACAAATCTTCT
GAAAAAAAACAAAACAATGTGAAACATTAAAATTAAAAGGCATTAATAATAAAAAAAAAAAAAAAAACCCGAATT
C

FIGURE 373

MNGPEDLPKSYDYDLIIIGGGSGGLAAAKEAAQYGKKVMVLDFVTPTPLGTRWGLGGTCVNVGCIPKKLMHQAAL
LGQALQDSRNYGWKVEETVKHDWDRMIEAVQNHIGSLNWGYRVALREKKVVYENAYGQFIGPHRIKATNNKGKEK
IYSAESFLIATGERPRYLGIPGDKEYCISSDDLFSLPYCPGKTLVVGASYVALECAGFLAGIGLGVTVMVRSILL
RGFDQDMANKIGEHMEEHGIKFIRQFVPIKVEQIEAGTPGRLRVVAQSTNSEEIIEGEYNTVMLAIGRDACTRKI
GLETVGVKINEKTGKIPVTDEEQTNVPYIYAIGDILEDKVELTPVAIQAGRLLAQRLYAGSTVKCDYENVPTTVF
TPLEYGACGLSEEKAVEKFGEENIEVYHSYFWPLEWTIPSRDNNKCYAKIICNTKDNERVVGFHVLGPNAGEVTQ
GFAAALKCGLTKKQLDSTIGIHPVCAEVFTTLSVTKRSGASILQAGC

FIGURE 374

GTTGGCTGCCGGTGAGTTGGGTGCCGGTGGAGTCGTGTTGGTCCTCAGAATCCCCGCGTAGCCGCTGCCTCCTCC
TACCCTCGCCATGTTTCTTACCCGGTCTGAGTACGACAGGGGCGTGAATACTTTTTCTCCCGAAGGAAGATTATT
TCAAGTGGAATATGCCATTGAGGCTATCAAGCTTGGTTCTACAGCCATTGGGATCCAGACATCAGAGGGTGTGTG
CCTAGCTGTGGAGAAGAGAATTACTTCCCCACTGATGGAGCCCAGCAGCATTGAGAAAATTGTAGAGATTGATGC
TCACATAGGTTGTGCCATGAGTGGGCTAATTGCTGATGCTAAGACTTTAATTGATAAAGCCAGAGTGGAGACACA
GAACCACTGGTTCACCTACAATGAGACAATGACAGTGGAGAGTGTGACCCAAGCTGTGTCCAATCTGGCTTTGCA
GTTTGGAGAAGAAGATGCAGATCCAGGTGCCATGTCTCGTCCCTTTGGAGTAGCATTATTATTTGGAGGAGTTGA
TGAGAAAGGACCCCAGCTGTTTCATATGGACCCATCTGGGACCTTTGTACAGTGTGATGCTCGAGCAATTGGCTC
TGCTTCAGAGGGTGCCCAGAGCTCCTTGCAAGAAGTTTACCACAAGTCTATGACTTTGAAAGAAGCCATCAAGTC
TTCACTCATCATCCTCAAACAAGTAATGGAGGAGAAGCTGAATGCAACAAACATTGAGCTAGCCACAGTGCAGCC
TGGCCAGAATTTCCACATGTTCACAAAGGAAGAACTTGAAGAGGTTATCAAGGACATTTAAGGAATCCTGATCCT
CAGAACTTCTCTGGGACAATTTCAGTTCTAATAATGTCCTTAAATTTTATTTCCAGCTCCTGTTCCTTGGAAAAT
CTCCATTGTATGTGCATTTTTTAAATGATGTCTGTACATAAAGGCAGTTCTGAAATAAAGAAAATTTTAAAATAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 375

MFLTRSEYDRGVNTFSPEGRLFQVEYDIEAIKLGSTAIGIQTSEGVCLAVEKRITSPLMEPSSIEKIVEIDAHIG
CAMSGLIADAKTLIDKARVETQNHWFTYNETMTVESVTQAVSNLALQFGEEDADPGAMSRPFGVALLFGGVDEKG
PQLFHMDPSGTFVQCDARAIGSASEGAQSSLQELYHKSMTLKEAIKSSLIILKQVMEEKLNATNIELATVQPGQN
FHMFTKEELEEVIKDI

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FIGURE 376

AGGTGAGAGAGGATGTGTGCTGGGCCTTGGAGGAAGGGGGCCGAGACCGGGCCTTACTTCTGTAACGATACTGTG
AGGCATCGGAAGGCCAGCCTGTTGTGTCCGTTTTGAAGGATGCCCCTGTCCCGCTGGTTGAGATCTGTGGGGGTC
TTCCTGCTGCCAGCCCCCTACTGGGCACCCCGGGAGAGGTGGCTGGGTTCCCTACGGCGGCCCTCCCTGGTGCAC
GGGTACCCAGTCCTGGCCTGGCACAGTGCCCGCTGCTGGTGCCAAGCGTGGACAGAGGAACCTCGAGCCCTTTGC
TCCTCCCTCAGAATGAACGGAGACCAGAATTCAGATGTTTATGCCCAAGAAAAGCAGGATTTCGTTCAGCACTTC
TCCCAGATCGTTAGGGTGCTGACTGAGGATGAGATGGGGCACCCAGAGATAGGAGATGCTATTGCCCGGCTCAAG
GAGGTCCTGGAGTACAATGCCATTGGAGGCAAGTATAACCGGGGTTTGACGGTGGTAGTAGCATTCCGGGAGCTG
GTGGAGCCAAGGAAACAGGATGCTGATAGTCTCCAGCGGGCCTGGACTGTGGGCTGGTGTGTGGAACTGCTGCAA
GCTTTCTTCCTGGTGGCAGATGACATCATGGATTCATCCCTTACCCGCCGGGGACAGATCTGCTGGTATCAGAAG
CCGGGCGTGGGTTTGGATGCCATCAATGATGCTAACCTCCTGGAAGCATGTATCTACCGCCTGCTGAAGCTCTAT
TGCCGGGAGCAGCCCTATTACCTGAACCTGATCGAGCTCTTCCTGCAGAGTTCCTATCAGACTGAGATTGGGCAG
ACCCTGGACCTCCTCACAGCCCCCCAGGGCAATGTGGATCTTGTCAGATTCACTGAAAAGAGGTACAAATCTATT
GTCAAGTACAAGACAGCTTTCTACTCCTTCTACCTTCCTATAGCTGCAGCCATGTACATGGCAGGAATTGATGGC
GAGAAGGAGCACGCCAATGCCAAGAAGATCCTGCTGGAGATGGGGGAGTTCTTTCAGATTCAGGATGATTACCTT
GACCTCTTTGGGGACCCCAGTGTCACCGGCAAAATTGGCACTGACATCCAGGACAACAAATGCAGCTGGCTGGTG
GTTCAGTGTCTGCAACGGGCCACTCCAGAACAGTACCAGATCCTGAAGGAAAATTACGGGCAGAAGGAGGCTGAG
AAAGTGGCCCGGGTGAAGGCGCTATATGAGGAGCTGGATCTGCCAGCAGTGTTCTTGCAATATGAGGAAGACAGT
TACAGCCACATTATGGCTCTCATTGAACAGTACGCAGCACCCCTGCCCCCAGCCGTCTTTCTGGGGCTTGCGCGC
AAAATCTACAAGCGGAGAAAGTGACCTAGAGATTGCAAGGGCGGGGAGAGGAGGCTCTCAATAAATAATCGTGTA
ACCTT

FIGURE 377

MPLSRWLRSVGVFLLPAPYWAPRERWLGSLRRPSLVHGYPVLAWHSARCWCQAWTEEPRALCSSLRMNGDQNSDV
YAQEKQDFVQHFSQIVRVLTEDEMGHPEIGDAIARLKEVLEYNAIGGKYNRGLTVVVAFRELVEPRKQDADSLQR
AWTVGWCVELLQAFFLVADDIMDSSLTRRGQICWYQKPGVGLDAINDANLLEACIYRLLKLYCREQPYYLNLIEL
FLQSSYQTEIGQTLDLLTAPQGNVDLVRFTEKRYKSIVKYKTAFYSFYLPIAAAMYMAGIDGEKEHANAKKILLE
MGEFFQIQDDYLDLFGDPSVTGKIGTDIQDNKCSWLVVQCLQRATPEQYQILKENYGQKEAEKVARVKALYEELD
LPAVFLQYEEDSYSHIMALIEQYAAPLPPAVFLGLARKIYKRRK

FIGURE 378

GGCACCGCGCGGGACGGAGCTTGGCTGTTGGTCGGTGGGTTCCCGTGCGGCGGCGGCCAAGGAGGAGGAGACACA
GTTGGAGCAGCTCCGTGGGCTGACTGGGGCGAGGCCTCAGCAGCGCGAGCTTGAGTGCGGCCGAGCCTGCGGCGC
CTTCCCCTGCGGGTGGGGACGAGCGGGCCCCGCGGCGTCATCGGCGGCGAGGAGCCGCCGCGCCTCGGCCTAGCA
TGTCGGAAGCGGGCGAGGAGCAGCCCATGGAGACGACGGGCGCCACCGAGAACGGACATGAGGCCGTCCCCGAAG
CGAGTCGCGGCCGGGGCTGGACGGGCGCCGCGGCGGGGCTGGAGGCGCGACCGCCGCGCCCCCGAGCGGGAATCA
GAACGGCGCCGAGGGACCAGATCAACGCCAGCAAGAACGAGGAGGACGCGGGAAAAATGTTCGTTGGTGGCCTGA
GCTGGGATACTAGCAAAAAAGATTTAAAAGACTATTTTACTAAATTTGGAGAGGTCGTTGACTGTACAATAAAAA
TGGATCCCAACACTGGACGGTCAAGAGGGTTTGGGTTTATCCTGTTCAAAGATGCAGCCAGTGTGGAGAAGGTCC
TAGACCAGAAGGAGCACAGGCTGGATGGCCGTGTCATTGACCCTAAAAAGGCCATGGCTATGAAGAAGGACCCGG
TCAAGAAAATCTTCGTTGGGGGTCTGAATCCTGAAAGTCCCACTGAGGAAAAGATCAGGGAGTACTTTGGCGAGT
TTGGGGAGATTGAGGCCATTGAATTGCCAATGGATCCAAAGTTGAACAAAAGACGAGGTTTTGTGTTTATCACCT
TTAAAGAAGAAGAACCCGTGAAGAAGGTTCTGGAGAAAAAGTTCCATACTGTCAGTGGAAGCAAGTGTGAGATCA
AGGTGGCCCAGCCCAAAGAAGTCTATCAGCAGCAGCAGTATGGCTCTGGGGGCCGTGGAAACCGCAACCGAGGGA
ACCGAGGCAGCGGAGGTGGTGGTGGAGGTGGAGGTCAGAGTCAGAGTTGGAATCAGGGCTACGGCAACTACTGGA
ACCAGGGCTACGGCTACCAGCAGGGCTACGGGCCTGGCTATGGCGGCTACGACTACTCGCCCTATGGCTATTACG
GCTACGGCCCCGGCTACGACTACAGTCAGGGTAGTACAAACTACGGCAAGAGCCAGCGACGTGGTGGCCATCAGA
ATAACTACAAGCCATACTGAGGCGGCCAAGGGAGCGACCAACTGATCGCACACATGCTTTGTTTGGATATGGAGT
GAACACAATTATGTACCAAATTTAACTTGGCAAACTTTCTATTGCCTGTCCCATGTGCATCTTATTTAAAATTTC
CCCCATGGAAATCACTCTCCTGTTGACTATTTCCAGAGCTCTAGGTGTTTAGGCAGCGTGTGGTGTCTGAGAGGC
CATAGCGCCATCATGGGCTGATTTTTATTACCAGGTCCCCCAGAAGCAGGTGAGAGGCTCTGCTTCCTGCTGCCG
CTCTGCAGCCTGGACCTGTGGACCCTGGTTGTAAAGAGTAAATTGTATCTTAGGAAACCAGTGTCACCTTTTTTT
CACCTTTTAATTTTATATTATTTGCGTCATACATTTCCTGTAACGGAAGTGTTAATTTTACTGTACTTTTTGGTA
CCCCTTTTGGGAATCTAATGTATTGTAAGGTATTTTACACGTGTCCTGATTTTGCCACAACCTGGATATTGAAGC
TATCCAAGCTTTTGAAATAAAATTTAAAAACCCCAAGCCTGGGTGAGTGTGGGAAAAAAAAAAAAAAA

FIGURE 379

MSEAGEEQPMETTGATENGHEAVPEASRGRGWTGAAAGLEARPPRPRAGIRTAPRDQINASKNEEDAGKMFVGGL
SWDTSKKDLKDYFTKFGEVVDCTIKMDPNTGRSRGFGFILFKDAASVEKVLDQKEHRLDGRVIDPKKAMAMKKDP
VKKIFVGGLNPESPTEEKIREYFGEFGEIEAIELPMDPKLNKRRGFVFITFKEEEPVKKVLEKKFHTVSGSKCEI
KVAQPKEVYQQQQYGSGGRGNRNRGNRGSGGGGGGGQSQSWNQGYGNYWNQGYGYQQGYGPGYGGYDYSPYGYY
GYGPGYDYSQGSTNYGKSQRRGGHQNNYKPY

FIGURE 380

GGCACGAGCCAGGGTTTCCTCTTCAAGTAGGTCTAAAACATTTTTTTTCTCATTGACTTCCTTCCTGTTCTAACT
GCCAGTACTCAGAAGTCAGAGTTGAGAGACAGAGGCACCCCGGACAGAGACGTGAAGCACTGAATAAATAGATCA
GAATGACTGAAAAAGCCCCAGAGCCACATGTGGAGGAGGATGACGATGATGAGCTGGACAGCAAGCTCAATTATA
AGCCTCCACCACAGAAGTCCCTGAAAGAGCTGCAGGAAATGGACAAAGATGATGAGAGTCTAATTAAGTACAAGA
AAACGCTGCTGGGAGATGGTCCTGTGGTGACAGATCCGAAAGCCCCCAATGTCGTTGTCACCCGGCTCACCCTGG
TTTGTGAGAGTGCCCCGGGACCAATCACCATGGACCTTACTGGAGATCTGGAAGCCCTCAAAAAGGAAACCATTG
TGTTAAAGGAAGGTTCTGAATATAGAGTCAAAATTCACTTCAAAGTGAACAGGGATATTGTGTCAGGCCTGAAAT
ACGTTCAGCACACCTACAGGACTGGGGTGAAAGTGGATAAAGCAACATTTATGGTTGGCAGCTATGGACCTCGGC
CTGAGGAGTATGAGTTCCTCACTCCAGTTGAGGAGGCTCCCAAGGGCATGCTGGCCCGAGGCACGTACCACAACA
AGTCCTTCTTCACCGACGATGACAAGCAAGACCACCTCAGCTGGGAGTGGAACCTGTCGATTAAGAAGGAGTGGA
CAGAATGAATGCATCCACCCCGTTCCCCACCCTTGCCACCTGGAAGAATTCTCTCAGGCGTGTTCAGCACCCTGT
CCCTCCTCCCTGTCCACAGCTGGGTCCCTCTTCAACACTGCCACATTTCCTTATTGATCGATCTTTTCCCACCCT
GTCACTCAACGTGGTCCCTAGAACAAGAGGCTTAAAACCGGGCTTTCACCCAACCTGCTCCCTCTGATCCTCCAT
CAGGGCCAGATCTTCCACGTCTCCATCTCAGTACACAATCATTTAATATTTCCCTGTCTTACCCCTATTCAAGCA
ACTAGAGGCCAGAAAATGGGCAAATTATCACTAACAGGTCTTTGACTCAGGTTCCAGTAGTTCATTCTAATGCCT
AGATTCTTTTGTGGTTGTTGCTGGCCCAATGAGTCCCTAGTCACATCCCCTGCCAGAGGGAGTTCTTCTTTTGTG
AGAGACACTGTAAACGACACAAGAGAACAAGAATAAAACAATAACTGTG

FIGURE 381

MTEKAPEPHVEEDDDDELDSKLNYKPPPQKSLKELQEMDKDDESLIKYKKTLLGDGPVVTDPKAPNVVVTRLTLV
CESAPGPITMDLTGDLEALKKETIVLKEGSEYRVKIHFKVNRDIVSGLKYVQHTYRTGVKVDKATFMVGSYGPRP
EEYEFLTPVEEAPKGMLARGTYHNKSFFTDDDKQDHLSWEWNLSIKKEWTE

FIGURE 382A

AGGTTCAAGTGGAGCTCTCCTAACCGACGCGCGTCTGTGGAGAAGCGGCTTGGTCGGGGGTGGTCTCGTGGGGTC
CTGCCTGTTTAGTCGCTTTCAGGGTTCTTGAGCCCCTTCACGACCGTCACCATGGAAGTGTCACCATTGCAGCCT
GTAAATGAAAATATGCAAGTCAACAAAATAAAGAAAAATGAAGATGCTAAGAAAAGACTGTCTGTTGAAAGAATC
TATCAAAAGAAAACACAATTGGAACATATTTTGCTCCGCCCAGACACCTACATTGGTTCTGTGGAATTAGTGACC
CAGCAAATGTGGGTTTACGATGAAGATGTTGGCATTAACTATAGGGAAGTCACTTTTGTTCCTGGTTTGTACAAA
ATCTTTGATGAGATTCTAGTTAATGCTGCGGACAACAAACAAAGGGACCCAAAAATGTCTTGTATTAGAGTCACA
ATTGATCCGGAAAACAATTTAATTAGTATATGGAATAATGGAAAAGGTATTCCTGTTGTTGAACACAAAGTTGAA
AAGATGTATGTCCCAGCTCTCATATTTGGACAGCTCCTAACTTCTAGTAACTATGATGATGATGAAAAGAAAGTG
ACAGGTGGTCGAAATGGCTATGGAGCCAAATTGTGTAACATATTCAGTACCAAATTTACTGTGGAAACAGCCAGT
AGAGAATACAAGAAAATGTTCAAACAGACATGGATGGATAATATGGGAAGAGCTGGTGAGATGGAACTCAAGCCC
TTCAATGGAGAAGATTATACATGTATCACCTTTCAGCCTGATTTGTCTAAGTTTAAAATGCAAAGCCTGGACAAA
GATATTGTTGCACTAATGGTCAGAAGAGCATATGATATTGCTGGATCCACCAAAGATGTCAAAGTCTTTCTTAAT
GGAAATAAACTGCCAGTAAAAGGATTTCGTAGTTATGTGGACATGTATTTGAAGGACAAGTTGGATGAAACTGGT
AACTCCTTGAAAGTAATACATGAACAAGTAAACCACAGGTGGGAAGTGTGTTTAACTATGAGTGAAAAAGGCTTT
CAGCAAATTAGCTTTGTCAACAGCATTGCTACATCCAAGGGTGGCAGACATGTTGATTATGTAGCTGATCAGATT
GTGACTAAACTTGTTGATGTTGTGAAGAAGAAGAACAAGGGTGGTGTTGCAGTAAAAGCACATCAGGTGAAAAAT
CACATGTGGATTTTTGTAAATGCCTTAATTGAAAACCCAACCTTTGACTCTCAGACAAAAGAAAACATGACTTTA
CAACCCAAGAGCTTTGGATCAACATGCCAATTGAGTGAAAAATTTATCAAAGCTGCCATTGGCTGTGGTATTGTA
GAAAGCATACTAAACTGGGTGAAGTTTAAGGCCCAAGTCCAGTTAAACAAGAAGTGTTCAGCTGTAAAACATAAT
AGAATCAAGGGAATTCCCAAACTCGATGATGCCAATGATGCAGGGGGCCGAAACTCCACTGAGTGTACGCTTATC
CTGACTGAGGGAGATTCAGCCAAAACTTTGGCTGTTTCAGGCCTTGGTGTGGTTGGGAGAGACAAATATGGGGTT
TTCCCTCTTAGAGGAAAAATACTCAATGTTCGAGAAGCTTCTCATAAGCAGATCATGGAAAATGCTGAGATTAAC
AATATCATCAAGATTGTGGGTCTTCAGTACAAGAAAAACTATGAAGATGAAGATTCATTGAAGACGCTTCGTTAT
GGGAAGATAATGATTATGACAGATCAGGACCAAGATGGTTCCCACATCAAAGGCTTGCTGATTAATTTTATCCAT
CACAACTGGCCCTCTCTTCTGCGACATCGTTTTCTGGAGGAATTTATCACTCCCATTGTAAAGGTATCTAAAAAC
AAGCAAGAAATGGCATTTTACAGCCTTCCTGAATTTGAAGAGTGGAAGAGTTCTACTCCAAATCATAAAAAATGG
AAAGTCAAATATTACAAAGGTTTGGGCACCAGCACATCAAAGGAAGCTAAAGAATACTTTGCAGATATGAAAAGA
CATCGTATCCAGTTCAAATATTCTGGTCCTGAAGATGATGCTGCTATCAGCCTGGCCTTTAGCAAAAAACAGATA
GATGATCGAAAGGAATGGTTAACTAATTTCATGGAGGATAGAAGACAACGAAAGTTACTTGGGCTTCCTGAGGAT
TACTTGTATGGACAAACTACCACATATCTGACATATAATGACTTCATCAACAAGGAACTTATCTTGTTCTCAAAT
TCTGATAACGAGAGATCTATCCCTTCTATGGTGGATGGTTTGAAACCAGGTCAGAGAAAGGTTTTGTTTACTTGC
TTCAAACGGAATGACAAGCGAGAAGTAAAGGTTGCCCAATTAGCTGGATCAGTGGCTGAAATGTCTTCTTATCAT
CATGGTGAGATGTCACTAATGATGACCATTATCAATTTGGCTCAGAATTTTGTGGGTAGCAATAATCTAAACCTC
TTGCAGCCCATTGGTCAGTTTGGTACCAGGCTACATGGTGGCAAGGATTCTGCTAGTCCACGATACATCTTTACA
ATGCTCAGCTCTTTGGCTCGATTGTTATTTCCACCAAAAGATGATCACACGTTGAAGTTTTTATATGATGACAAC
CAGCGTGTTGAGCCTGAATGGTACATTCCTATTATTCCCATGGTGCTGATAAATGGTGCTGAAGGAATCGGTACT
GGGTGGTCCTGCAAAATCCCCAACTTTGATGTGCGTGAAATTGTAAATAACATCAGGCGTTTGATGGATGGAGAA
GAACCTTTGCCAATGCTTCCAAGTTACAAGAACTTCAAGGGTACTATTGAAGAACTGGCTCCAAATCAATATGTG
ATTAGTGGTGAAGTAGCTATTCTTAATTCTACAACCATTGAAATCTCAGAGCTTCCCGTCAGAACATGGACCCAG
ACATACAAAGAACAAGTTCTAGAACCCATGTTGAATGGCACCGAGAAGACACCTCCTCTCATAACAGACTATAGG
GAATACCATACAGATACCACTGTGAAATTTGTTGTGAAGATGACTGAAGAAAAACTGGCAGAGGCAGAGAGAGTT
GGACTACACAAAGTCTTCAAACTCCAAACTAGTCTCACATGCAACTCTATGGTGCTTTTTGACCACGTAGGCTGT
TTAAAGAAATATGACACGGTGTTGGATATTCTAAGAGACTTTTTTGAACTCAGACTTAAATATTATGGATTAAGA
AAAGAATGGCTCCTAGGAATGCTTGGTGCTGAATCTGCTAAACTGAATAATCAGGCTCGCTTTATCTTAGAGAAA
ATAGATGGCAAAATAATCATTGAAAATAAGCCTAAGAAAGAATTAATTAAAGTTCTGATTCAGAGGGGATATGAT
TCGGATCCTGTGAAGGCCTGGAAAGAAGCCCAGCAAAAGGTTCCAGATGAAGAAGAAAATGAAGAGAGTGACAAC
GAAAAGGAAACTGAAAAGAGTGACTCCGTAACAGATTCTGGACCAACCTTCAACTATCTTCTTGATATGCCCCTT
TGGTATTTAACCAAGGAAAAGAAAGATGAACTCTGCAGGCTAAGAAATGAAAAAGAACAAGAGCTGGACACATTA

FIGURE 382B

AAAAGAAAGAGTCCATCAGATTTGTGGAAAGAAGACTTGGCTACATTTATTGAAGAATTGGAGGCTGTTGAAGCC
AAGGAAAAACAAGATGAACAAGTCGGACTTCCTGGGAAAGGGGGGAAGGCCAAGGGGAAAAAAACACAAATGGCT
GAAGTTTTGCCTTCTCCGCGTGGTCAAAGAGTCATTCCACGAATAACCATAGAAATGAAAGCAGAGGCAGAAAAG
AAAAATAAAAAGAAAATTAAGAATGAAAATACTGAAGGAAGCCCTCAAGAAGATGGTGTGGAACTAGAAGGCCTA
AAACAAAGATTAGAAAAGAAACAGAAAAGAGAACCAGGTACAAAGACAAAGAAACAAACTACATTGGCATTTAAG
CCAATCAAAAAAGGAAAGAAGAGAAATCCCTGGTCTGATTCAGAATCAGATAGGAGCAGTGACGAAAGTAATTTT
GATGTCCCTCCACGAGAAACAGAGCCACGGAGAGCAGCAACAAAAACAAAATTCACAATGGATTTGGATTCAGAT
GAAGATTTCTCAGATTTTGATGAAAAAACTGATGATGAAGATTTTGTCCCATCAGATGCTAGTCCACCTAAGACC
AAAACTTCCCCAAAACTTAGTAACAAAGAACTGAAACCACAGAAAAGTGTCGTGTCAGACCTTGAAGCTGATGAT
GTTAAGGGCAGTGTACCACTGTCTTCAAGCCCTCCTGCTACACATTTCCCAGATGAAACTGAAATTACAAACCCA
GTTCCTAAAAAGAATGTGACAGTGAAGAAGACAGCAGCAAAAAGTCAGTCTTCCACCTCCACTACCGGTGCCAAA
AAAAGGGCTGCCCCAAAAGGAACTAAAAGGGATCCAGCTTTGAATTCTGGTGTCTCTCAAAAGCCTGATCCTGCC
AAAACCAAGAATCGCCGCAAAAGGAAGCCATCCACTTCTGATGATTCTGACTCTAATTTTGAGAAAATTGTTTCG
AAAGCAGTCACAAGCAAGAAATCCAAGGGGGAGAGTGATGACTTCCATATGGACTTTGACTCAGCTGTGGCTCCT
CGGGCAAAATCTGTACGGGCAAAGAAACCTATAAAGTACCTGGAAGAGTCAGATGAAGATGATCTGTTT**TAA**AAT
GTGAGGCGATTATTTTAAGTAATTATCTTACCAAGCCCAAGACTGGTTTTAAAGTTACCTGAAGCTCTTAACTTC
CTCCCCTCTGAATTTAGTTTGGGGAAGGTGTTTTTAGTACAAGACATCAAAGTGAAGTAAAGCCCAAGTGTTCTT
TAGCTTTTTATAATACTGTCTAAATAGTGACCATCTCATGGGCATTGTTTTCTTCTCTGCTTTGTCTGTGTTTTG
AGTCTGCTTTCTTTTGTCTTTAAAACCTGATTTTTAAGTTCTTCTGAACTGTAGAAATAGCTATCTGATCACTTC
AGCGTAAAGCAGTGTGTTTATTAACCATCCACTAAGCTAAAACTAGAGCAGTTTGATTTAAAAGTGTCACTCTTC
CTCCTTTTCTACTTTCAGTAGATATGAGATAGAGCATAATTATCTGTTTTATCTTAGTTTTATACATAATTTACC
ATCAGATAGAACTTTATGGTTCTAGTACAGATACTCTACTACACTCAGCCTCTTATGTGCCAAGTTTTTCTTTAA
GCAATGAGAAATTGCTCATGTTCTTCATCTTCTCAAATCATCAGAGGCCAAAGAAAAACACTTTGGCTGTGTCTA
TAACTTGACACAGTCAATAGAATGAAGAAAATTAGAGTAGTTATGTGATTATTTCAGCTCTTGACCTGTCCCCTC
TGGCTGCCTCTGAGTCTGAATCTCCCAAAGAGAGAAACCAATTTCTAAGAGGACTGGATTGCAGAAGACTCGGGG
ACAACATTTGATCCAAGATCTTAAATGTTATATTGATAACCATGCTCAGCAATGAGCTATTAGATTCATTTTGGG
AAATCTCCATAATTTCAATTTGTAAACTTTGTTAAGACCTGTCTACATTGTTATATGTGTGTGACTTGAGTAATG
TTATCAACGTTTTTGTAAATATTTACTATGTTTTTCTATTAGCTAAATTCCAACAATTTTGTACTTTAATAAA

FIGURE 383

MEVSPLQPVNENMQVNKIKKNEDAKKRLSVERIYQKKTQLEHILLRPDTYIGSVELVTQQMWVYDEDVGINYREV
TFVPGLYKIFDEILVNAADNKQRDPKMSCIRVTIDPENNLISIWNNGKGIPVVEHKVEKMYVPALIFGQLLTSSN
YDDDEKKVTGGRNGYGAKLCNIFSTKFTVETASREYKKMFKQTWMDNMGRAGEMELKPFNGEDYTCITFQPDLSK
FKMQSLDKDIVALMVRRAYDIAGSTKDVKVFLNGNKLPVKGFRSYVDMYLKDKLDETGNSLKVIHEQVNHRWEVC
LTMSEKGFQQISFVNSIATSKGGRHVDYVADQIVTKLVDVVKKKNKGGVAVKAHQVKNHMWIFVNALIENPTFDS
QTKENMTLQPKSFGSTCQLSEKFIKAAIGCGIVESILNWVKFKAQVQLNKKCSAVKHNRIKGIPKLDDANDAGGR
NSTECTLILTEGDSAKTLAVSGLGVVGRDKYGVFPLRGKILNVREASHKQIMENAEINNIIKIVGLQYKKNYEDE
DSLKTLRYGKIMIMTDQDQDGSHIKGLLINFIHHNWPSLLRHRFLEEFITPIVKVSKNKQEMAFYSLPEFEEWKS
STPNHKKWKVKYYKGLGTSTSKEAKEYFADMKRHRIQFKYSGPEDDAAISLAFSKKQIDDRKEWLTNFMEDRRQR
KLLGLPEDYLYGQTTTYLTYNDFINKELILFSNSDNERSIPSMVDGLKPGQRKVLFTCFKRNDKREVKVAQLAGS
VAEMSSYHHGEMSLMMTIINLAQNFVGSNNLNLLQPIGQFGTRLHGGKDSASPRYIFTMLSSLARLLFPPKDDHT
LKFLYDDNQRVEPEWYIPIIPMVLINGAEGIGTGWSCKIPNFDVREIVNNIRRLMDGEEPLPMLPSYKNFKGTIE
ELAPNQYVISGEVAILNSTTIEISELPVRTWTQTYKEQVLEPMLNGTEKTPPLITDYREYHTDTTVKFVVKMTEE
KLAEAERVGLHKVFKLQTSLTCNSMVLFDHVGCLKKYDTVLDILRDFFELRLKYYGLRKEWLLGMLGAESAKLNN
QARFILEKIDGKIIIENKPKKELIKVLIQRGYDSDPVKAWKEAQQKVPDEEENEESDNEKETEKSDSVTDSGPTF
NYLLDMPLWYLTKEKKDELCRLRNEKEQELDTLKRKSPSDLWKEDLATFIEELEAVEAKEKQDEQVGLPGKGGKA
KGKKTQMAEVLPSPRGQRVIPRITIEMKAEAEKKNKKKIKNENTEGSPQEDGVELEGLKQRLEKKQKREPGTKTK
KQTTLAFKPIKKGKKRNPWSDSESDRSSDESNFDVPPRETEPRRAATKTKFTMDLDSDEDFSDFDEKTDDEDFVP
SDASPPKTKTSPKLSNKELKPQKSVVSDLEADDVKGSVPLSSSPPATHFPDETEITNPVPKKNVTVKKTAAKSQS
STSTTGAKKRAAPKGTKRDPALNSGVSQKPDPAKTKNRRKRKPSTSDDSDSNFEKIVSKAVTSKKSKGESDDFHM
DFDSAVAPRAKSVRAKKPIKYLEESDEDDLF

FIGURE 384

AGATGTTTAAAAATACTTTGATXCTCXGTTTCCACCTCTCTTAAATTGTCTTTCCCTATGTTAAATATACAGTCA
TCACXTTGCTGAAAAAAGTTCGCAATGAGAACAATCATCTAAAAXTGGCTGTAACTAGGTCAGGCGCGGTTGCTC
ATGCCTGTAATCCCACCACTTTGGGAGGCCGAGGCAATTGGATCACCTGAGGTCAGGATTTTGAGACCAGCTTGA
CCAACATGGTGGAATCCCATCTCTACTAAAAATACAAAAAATTAGCCGGGTGTGGTGGCACACCCCTGTAATCCC
ACCTACTCAGGAGGCTGAGGCAGGAAAATCCCTTGAACCCAGGAGGCAAAGGTTGCATTGAGCCGAAATAACACC
ACTGCACTCCAGCCTGGACGATAGAGTGAGACCCCATCTCAAAAAAAAGAGCAGCTGTGACAAATGCCTGTATTGA
ATTGCAGGTCAGTCTTCCACCTCCACTACCGGTGCCAAAAAAAGGGCTGCCCCAAAAGGAACTAAAAGGGATCCA
GCTTTGAATTCTGGTGTCTCTCAAAAGCCTGATCCTGCCAAAACCAAGAATCGCCGCAAAAGGAAGCCATCCACT
TCTGATGATTCTGACTCTAATTTTGAGAAAATTGTTTCGAAAGCAGTCACAAGCAAGGTGAGTGTTGATCCTAGT
CAGTCCTTTTGCTGTAGATGTTCTGAAACACGTAACTAAGCCATTGTTCTTAAAAATTTGGCATATCTTTAAGAA
AATTAACTCTCATATTCTGTTAGCTTTTACTGTACATATTTAGTTTTAACAAAGTTAAATATGCCACTTATTTGG
CCAATGGAAGAGTTGGCCTTAGATCTGCTTCTTATTACTTGGTAGAAAATAGAAAACTCCTTGAATATAGTGTCT
TGATACATTTTTTTACATTACAATTATGTTGTCAGATTTACAATGTGCAAGTTACCTGGGCTTTTCTCTTTTAGA
AATCCAAGGGGGAGAGTGATGACTTCCATATGGACTTTGACTCAGCTGTGGCTCCTCGGGCAAAATCTGTACGGG
CAAAGAAACCTATAAAGTACCTGGAAGAGTCAGATGAAGATGATCTGTTTTAAAATGTGAGGCGATTATTTTAAG
TAATTATCTTACCAAGCCCAAGACTGGTTTTAAAGTTACCTGAAGCTCTTAACTTCCTCCCCTCTGAATTTAGTT
TGGGGAAGGTGTTTTTAGTACAAGACATCAAAGTGAAGTAAAGCCCAAGTGTTCTTTAGCTTTTTATAATACTGT
ATAAATAGTGACCATCTCATGGGCATTGTTTTCTTCTCTGCTTTGTCTGTGTTTTGAGTCTGCTTCTTTTGTCTT
TAAAACCTGATTTTTAAGTTCTTCTGAACTGTAGAAATAGCTATCTGATCACTTCAGCGTAAAGCAGTGTGTTTA
TTAACCATCCACTAAGCTAAAACTAGAGCAGTTTGATTTAAAAGTGTCACTCTTCCTCCTTTTCTACTTTCAGTA
GATATGAGATAGAGCATAATTATCTGTTTTATCTTAGTTTTATACATAATTTACCATCAGATAGAACTTTATGGT
TCTAGTACAGATACTCTACTACACTCAGCCTCTTATGTGCCAAGTTTTTCTTTAAGCAATGAGAAATTGCTCATG
TTCTTCATCTTCTCAAATCATCAGAGGCCGAAGAAAAACACTTTGGCTGTGTCTATAACTTGACACAGTCAATAG
AATGAAGAAAATTAGAGTAGTTATGTGATTATTTCAGCTCTTGACCTGTCCCCTCTGGCTGCCTCTGAGTCTGAA
TCTCCCAAAGAGAGAAACCAATTTCTAAGAGGACTGGATTGCAGAAGACTCGGGGACAACATTTGATCCAAGATC
TTAAATGTTATATTGATAACCATGCTCAGCAATGAGCTATTAGATTCATTTTGGGAAATCTCCATAATTTCAATT
TGTAAACTTTGTTAAGACCTGTCTACATTGTTATATGTGTGTGACTTGAGTAATGTTATCAACGTTTTTGTAAAT
ATTTACTATGTTTTTCTATTAGCTAAATTCCAACAATTTTGTACTTTAATAAAATGTTCTAAACATTGAAA

FIGURE 385

AGATATCTCCGGCGCCGCCCGCCATTTTGACTCCAGTGTCTCGTTTGCAGTCGGCGCTTTAGGGGAACTGTCTTC
CTCCGCAGGCGCGAGGCTGGGTACAGGGTCTATTGTCTGTGGTTGACTCCGTACTTTGGTCTGAGGCCTTCGGGA
GCTTTCCCGAGGCAGTTAGCAGAAGCCGCAGCGGCCGCCCCCGCCCGTCTCCTCTGTCCCTGGGCCCGGGAGGGA
CCAACTTGGCGTCACGCCCCTCAGCGGTCGCCACTCTCTTCTCTGTTGTTGGGTCCGCATCGTATTCCCGGAATC
AGACGGTGCCCCATAG**ATG**GCCAGCTTTCCCCCGAGGGTCAACGAGAAAGAGATCGTGAGATTACGTACTATAGG
TGAACTTTTAGCTCCTGCAGCTCCTTTTGACAAGAAATGTGGTCGTGAAAATTGGACTGTTGCTTTTGCTCCAGA
TGGTTCATACTTTGCTTGGTCACAAGGACATCGCACAGTAAAGCTTGTTCCGTGGTCCCAGTGCCTTCAGAACTT
TCTCTTGCATGGCACCAAGAATGTTACCAATTCAAGCAGTTTAAGATTGCCAAGACAAAATAGTGATGGTGGTCA
GAAAAATAAGCCTCGTGAACATATTATAGACTGTGGAGATATAGTCTGGAGTCTTGCTTTTGGGTCATCAGTTCC
AGAAAAACAGAGTCGCTGTGTAAATATAGAATGGCATCGCTTCAGATTTGGACAAGATCAGCTACTTCTTGCTAC
AGGGTTGAACAATGGGCGTATCAAAATATGGGATGTATATACAGGAAAACTCCTCCTTAACTTGGTAGATCATAC
TGAAGTGGTCAGAGATTTAACTTTTGCTCCAGATGGAAGCTTGATCCTGGTGTCAGCTTCAAGAGACAAAACTCT
CAGAGTATGGGACCTGAAAGATGATGGAAACATGATGAAAGTATTGAGGGGGCATCAGAATTGGGTGTACAGCTG
TGCATTCTCTCCTGACTCTTCTATGCTGTGTTCAGTCGGAGCCAGTAAAGCAGTTTTCCTTTGGAATATGGATAA
ATACACCATGATACGGAAACTAGAAGGACATCACCATGATGTGGTAGCTTGTGACTTTTCTCCTGATGGAGCATT
ACTGGCTACTGCATCTTATGATACTCGAGTATATATCTGGGATCCACATAATGGAGACATTCTGATGGAATTTGG
GCACCTGTTTCCCCCACCTACTCCAATATTTGCTGGAGGAGCAAATGACCGGTGGGTACGATCTGTATCTTTTAG
CCATGATGGACTGCATGTTGCAAGCCTTGCTGATGATAAAATGGTGAGGTTCTGGAGAATTGATGAGGATTATCC
AGTGCAAGTTGCACCTTTGAGCAATGGTCTTTGCTGTGCCTTCTCTACTGATGGCAGTGTTTTAGCTGCTGGGAC
ACATGACGGAAGTGTGTATTTTTGGGCCACTCCACGGCAGGTCCCTAGCCTGCAACATTTATGTCGCATGTCAAT
CCGAAGAGTGATGCCCACCCAAGAAGTTCAGGAGCTGCCGATTCCTTCCAAGCTTTTGGAGTTTCTCTCGTATCG
TATT**TAG**AAGATTCTGCCTTCCCTAGTAGTAGGGACTGACAGAATACACTTAACACAAACCTCAAGCTTTACTGA
CTTCAATTATCTGTTTTTAAAGACGTAGAAGATTTATTTAATTTGATATGTTCTTGTACTGCATTTTGATCAGTT
GAGCTTTTAAAATATTATTTATAGACAATAGAAGTATTTCTGAACATATCAAATATAAATTTTTTTAAAGATCTA
ACTGTGAAAACATACATACCTGTACATATTTAGATATAAGCTGCTATATGTTGAATGGACCCTTTTGCTTTTCTG
ATTTTTAGTTCTGACATGTATATATTGCTTCAGTAGAGCCACAATATGTATCTTTGCTGTAAAGTGCAAGGAAAT
TTTAAATTCTGGGACACTGAGTTAGATGGTAAATACTGACTTACGAAAGTTGAATTGGGTGAGGCGGGCAAATCA
CCTGAGGTCAGCAGTTTGAGACTAGCCTGGCAAACATGATGAAACCCTGTCTCTACTAAAAATACAAAAAAAAAA
AAAATTAGCCAGGCGTGGTGGTGCACACCTGTAGTCCTAGCTACTTGGGAGGCTGAGGCAGGAGAATTGCTTGAA
CCCAGGAGGTGGAGGTTGCAGTAAGCCAAGATCACACCACTGCACTCCAACCTGGACAACAGAGCGAGACTCCAT
CTCAAAAAAAAAAAAAAAATTGTGTTGCCTCATACGAAATGTATTTGGTTTTGTTGGAGAGTGTCAGACTGATCTG
GAAGTGAAACACAGTTTATGTACAGGGAAAAGGATTTTATTATCCTTAGGAATGTCATCCAAGACGTAGAGCTTG
AATGTGACGTTATTTAAAAACAACAACAAAGAAGGCAGAGCCAGGATATAACTAGAAAAAGGATGTCTTTTTTTT
TTTTTTTACTCCCCCTCTAAACACTGCTGCTGCCTTAATTTTAGAAAGCAGCTTACTAGTTTACCCTTGTGGTAT
AAAGTATTATAAATTGTTGTGAATTTGAAGAATCCGTCTACTGTATTATTGCTAAATATTTTGTTTATACTAAGG
GACAATTATTTTAAGACCATGGATTTAAAAAAAAAAAAAAAAACTCTGTTTCTGCAGGGGATGATATTGGTGAGT
TGCCAAAGAAGCAATACAGCATATCTGCTTTTGCCTTCTGTTGTTTATCTTACCTGCAGATATTAAGAATGTATG
CATTATGTAAAATGCTCAATTATATATTTTTGTTGAGTTTTTTAATTAAAGACTTGTAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 386

MASFPPRVNEKEIVRLRTIGELLAPAAPFDKKCGRENWTVAFAPDGSYFAWSQGHRTVKLVPWSQCLQNFLLHGT
KNVTNSSSLRLPRQNSDGGQKNKPREHIIDCGDIVWSLAFGSSVPEKQSRCVNIEWHRFRFGQDQLLLATGLNNG
RIKIWDVYTGKLLLNLVDHTEVVRDLTFAPDGSLILVSASRDKTLRVWDLKDDGNMMKVLRGHQNWVYSCAFSPD
SSMLCSVGASKAVFLWNMDKYTMIRKLEGHHHDVVACDFSPDGALLATASYDTRVYIWDPHNGDILMEFGHLFPP
PTPIFAGGANDRWVRSVSFSHDGLHVASLADDKMVRFWRIDEDYPVQVAPLSNGLCCAFSTDGSVLAAGTHDGSV
YFWATPRQVPSLQHLCRMSIRRVMPTQEVQELPIPSKLLEFLSYRI

FIGURE 387A

GGGCAGTGTCTCGTTTGCAGTCGGCGCTTTAGGGGAACTGTCTTCCTCCGCAGGCGCGAGGCTGGGTACAGGGTC
TATTGTCTGTGGTTGACTCCGTACTTTGGTCTGAGGCCTTCGGGAGCTTTCCCGAGGCAGTTAGCAGAAGCCGCA
GCGGCCGCCCCCGCCCGTCTCCTCTGTCCCTGGGCCCGGGAGGGACCAACTTGGCGTCACGCCCCTCAGCGGTCG
CCACTCTCTTCTCTGTTGTTGGGTCCGCATCGTATTCCCGGAATCAGACGGTGCCCCATAGATGGCCAGCTTTCC
CCCGAGGGTCAACGAGAAAGAGATCGTGAGATTACGTACTATAGGTGAACTTTTAGCTCCTGCAGCTCCTTTTGA
CAAGAAATGTGGTCGTGAAAATTGGACTGTTGCTTTTGCTCCAGATGGTTCATACTTTGCTTGGTCACAAGGACA
TCGCACAGTAAAGCTTGTTCCGTGGTCCCAGTGCCTTCAGAACTTTCTCTTGCATGGCACCAAGAATGTTACCAA
TTCAAGCAGTTTAAGATTGCCAAGACAAAATAGTGATGGTGGTCAGAAAAATAAGCCTCGTGAACATATTATAGA
CTGTGGAGATATAGTCTGGAGTCTTGCTTTTGGGTCATCAGTTCCAGAAAAACAGAGTCGCTGTGTAAATATAGA
ATGGCATCGCTTCAGATTTGGACAAGATCAGCTACTTCTTGCTACAGGGTTGAACAGTGGGCGTATCAAAATATG
GGATGTATATACAGGAAAACTCCTCCTTAACTTGGTAGATCATACTGGAGTGGTCAGAGATTTAACTTTTGCTCC
AGATGGAAGCTTGATCCTGGTGTCAGCTTCAAGAGACAAAACTCTCAGAGTATGGGACCTGAGAGATGATGGAAA
CATGATGAAAGTATTGAGGGGGCATCAGAATTGGGTGTACAGCTGTGCATTCTCTCCTGACTCTTCTATGCTGTG
TTCAGTCGGAGCCAGTAAAGCAGTGGTGGCAGCAATATTGGTGTGATTGAGGTTATGCTGGCACCACTCGCACAC
AGGCGCACAATGGTGTTAGCTGGGCAGAAAGAGTGGCATCTCTGGCTACCGGGCTGGGGGCGACCTTTACCATAG
GATGAAGTAACCTTGCATTCGGCTGCAAGGTGTACTGTACGTACACAGGTGCTGGTCGATGTCCACTTTCTGCTT
TTCTTTCTTTCTTTTTTTCTTTTTTAAAGTAATTTCCCCCACAGTAAAATACACTGACTCCTGAGTAAATTGATT
TTCCAGTTTTATGGAATTGGGAGTCTGACAAGTGAAACCAATTTAATGTAAAGTATTTGGCTTTCAAATGGTTTC
TCTGTGCTATTTTTTGGAATTCTTTCAGATTCCAGAGATATCTTACGTCTTTGATTCAATTTAAAATTTGTACTT
ATTTTCTTTTAGAAATAATGTATTGTGTCTGTGCAGAAAAAAAAAAAACCAAAAAGGATTGCTTTACTCCAAGAG
GAGAGATTGTCTTAGGATAAACCTCCAAGCTCACATTTAATATAACAGACTGAAGTAAACATTAGAATCCTGTTT
AGAGCTATTCTGCACAGTTAACTACTGATCTTTAGAATCTAAAATTGTATATGAACTTATTCTTAAATAATTGAA
CTGTTTTATATTCAAATGACTTATGATCGTGGTTAGTTTGGGAAAAATAAGATGGTTAAATTTTGATTTATTGAA
ATGTAATTGTATTATTTTCATAAAATAGCATTTTCATTTTGTAATGTGGTTTAACATCCTTGTTGTTTGCCAAAG
AAATTTCATTTGGCTGTGAATATTCTATTTGCTTGCAGTATCTGTTTCTCTTCCTAGGCTCAAGTTGGTGACCCA
AGCCTATTGTAAACAAGTGATTATCTCAAAGGGAGATGCCAATGGAGTAACAATTTGTTAACCTTACGTTTTCTG
TCTGTATATTTTTTAAAAATCTGGTAGTTTCTGGAAAAAAAAAGAGAAGGGGGTTTGTAGTACTTAACCCTATTT
ATTTCCGTATATTTTAGTTAATTAGTTTTTGGAATAAATGGATTTCAGTATAGCTTTGTGGTTAAATTGCATTGC
CTTTATTTTATGTTTAGGCTTATTTTTAAATTAACATTTAACAGAAACATTTGAAATAGAATTTGCATGTCTGCC
TTAATTAACTTAAAGACTGATTTTAATCTGACTATGACACTGAGCATATTCTTTAAATTACTCATAATTTATAAT
GCTTAATATAATCTTAATTAAATTTAGCAGTTTTAGTATAAGATGTGCCATTTTGTCCTCTGTATGTCTGAATGA
AGCTATAACATTCGCCTTTTTATTGCAGGTTTTCCTTTGGAATATGGATAAATACACCATGATGCGGAAACTAGA
AGGACATCACCATGATGTGGTAGCTTGTGACTTTTCTCCTGATGGAGCATTACTGGCTACTGCATCTTATGATAC
TTGAGTATATATCTGGGATCCACATAATGGAGACATTCTGATGGAATTTGGGCACCTGTTTCCCCCACCTACTCC
AATATTTGCTGGAGGAGCAA**ATG**ACCGGTGGGTACGATCTGTATCTTTTAGCCATGATGGACTGCATGTTGCAAG
CCTTGCTGATGATAAAATGGGTGAGGTTCTGGAGAATTGATGAGGATTATCCAGTGCAAGTTGCACCTGTGAGCA
ATGGTCTTTGCTGTGCCTTCTCTACTGATGGCAGTGTTTTAGCTGCTGGGACACATGACGGAAGTGTGTATTTTT
GGGCCACTCCACGGCAGGTCCCTAGCCTGCAACATTTATGTCGCATGTCAATCCGAAGAGTGATGCCCACCCAAG
AAGTTCAGGAGCTGCCGATTCCTTCCAAGCTTTTGGAGTTTCTCTCGTATCGTATT**TAG**AAGATTCTGCCTTCCC
TAGTAGTAGGGACTGACAGAATACACTTAACACAAACCTCAAGCTTTACTGACTTCAATTATCTGTTTTTAAAGA
CGTAGAAGATTTATTTAATTTGATATGTTCTTGTACTGCATTTTGATCAGTTGAGCTTTTAAAATATTATTTATA
GACAATAGAAGTATTTCTGAACATATCAAATATAAATTTTTTTAAAGATCTAACTGTGAAAACATACATACCTGT
ACATATTTAGATATAAGCTGCTATATGTTGAATGGACCCTTTTGCTTTTCTGATTTTTAGTTCTGACATGTATAT
ATTGCTTCAGTAGAGCCACAATATGTATCTTTGCTGTAAAGTGCAAGGAAATTTTAAATTCTGGGACACTGAGTT
AGATGGTAAATACTGACTTACGAAAGTTGAATTGGGTGAGGCGGGCAAATCACCTGAGGTCAGCAGTTTGAGACT
AGCCTGGCAAACATGATGAAACCCTGTCTCTACTAAAAATACAAAAAAAAAAAAAATTAGCCAGGCGTGGTGGTGC
ACACCTGTAGTCCTAGCTACTTGGGAGGCTGAGGCAGGAGAATTGCTTGAACCCAGGAGGTGGAGGTTGCAGTAA
GCCAAGATCACACCACTGCACTCCAACCTGGACAACAGAGCGAGACTCCATCTCAAAAAAAAAAAAAAAATTGTGT

FIGURE 387B

TGCCTCATACGAAATGTATTTGGTTTTGTTGGAGAGTGTCAGACTGATCTGGAAGTGAAACACAGTTTATGTACA
GGGAAAAGGATTTTATTATCCTTAGGAATGTCATCCAAGACGTAGAGCTTGAATGTGACGTTATTTAAAAACAAC
AACAAAGAAGGCAGAGCCAGGATATAACTAGAAAAAGGATGTCTTTTTTTTTTTTTACTCCCCCTCTAAACACT
GCTGCTGCCTTAATTTTAGAAAGCAGCTTACTAGTTTACCCTTGTGGTATAAAGTATTATAAATTGTTGTGAATT
TGAAGAATCCGTCTACTGTATTATTGCTAAATATTTTGTTTATACTAAGGGACAATTATTTTAAGACCATGGATT
TAAAGAAAAAAAAAAAAAACTCTGTTTCTGCAGGGGATGATATTGGTGAGTTGCCAAAGAAGCAATACAGCATATC
TGCTTTTGCCTTCTGTTGTTTATCTTACCTGCAGATATTAAGAATGTATGCATTATGTAAAATGCTCAATTATAT
ATTTTTGTTGAGTTTTTTAATTAAAGACTTGTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAGAAAAA

FIGURE 388

MTGGYDLYLLAMMDCMLQALLMIKWVRFWRIDEDYPVQVAPVSNGLCCAFSTDGSVLAAGTHDGSVYFWATPRQV
PSLQHLCRMSIRRVMPTQEVQELPIPSKLLEFLSYRI

FIGURE 389

GAGGCGGGCAAGGCGGGCGCCGAGGTTTGCAAAGGCTCGCAGCGGCCAGAAACCCGGCTCCGAGCGGCGGCGGCC
CGGCTTCCGCTGCCCGTGAGCTAAGGACGGTCCGCTCCCTCTAGCCAGCTCCGAATCCTGATCCAGGCGGGGGCC
AGGGGCCCCTCGCCTCCCCTCTGAGGACCGAAGATGAGCTTCCTCTTCAGCAGCCGCTCTTCTAAAACATTCAAA
CCAAAGAAGAATATCCCTGAAGGATCTCATCAGTATGAACTCTTAAAACATGCAGAAGCAACTCTAGGAAGTGGG
AATCTGAGACAAGCTGTTATGTTGCCTGAGGGAGAGGATCTCAATGAATGGATTGCTGTGAACACTGTGGATTTC
TTTAACCAGATCAACATGTTATATGGAACTATTACAGAATTCTGCACTGAAGCAAGCTGTCCAGTCATGTCTGCA
GGTCCGAGATATGAATATCACTGGGCAGATGGTACTAATATTAAAAAGCCAATCAAATGTTCTGCACCAAAATAC
ATTGACTATTTGATGACTTGGGTTCAAGATCAGCTTGATGATGAAACTCTTTTTCCTTCTAAGATTGGTGTCCCA
TTTCCCAAAAACTTTATGTCTGTGGCAAAGACTATTCTAAAGCGTCTGTTCAGGGTTTATGCCCATATTTATCAC
CAGCACTTTGATTCTGTGATGCAGCTGCAAGAGGGGGCCCACCTCAACACCTCCTTTAAGCACTTTATTTTCTTT
GTTCAGGAGTTTAATCTGATTGATAGGCGTGAGCTGGCACCTCTTCAAGAATTAATAGAGAAACTTGGATCAAAA
GACAGATAAATGTTTCTTCTAGAACACAGTTACCCCCTTGCTTCATCTATTGCTAGAACTATCTCATTGCTATCT
GTTATAGACTAGTGATACAAACTTTAAGAAAACAGGATAAAAAGATACCCATTGCCTGTGTCTACTGATAAAATT
ATCCCAAAGGTAGGTTGGTGTGATAGTTTCCGAGTAAGACCTTAAGGACACAGCCAAATCTTAAGTACTGTGTGA
CCACTCTTGTTGTTATCACATAGTCATACTTGGTTGTAATATGTGATGGTTAACCTGTAGCTTATAAATTTACTT
ATTATTCTTTTACTCATTTACTCAGTCATTTCTTTACAAGAAAATGATTGAATCTGTTTTAGGTGACAGCACAAT
GGACATTAAGAATTTCCATCAATAATTTATGAATAAGTTTCCAGAACAAATTTCCTAATAACACAATCAGATTGG
TTTTATTCTTTTATTTTACGAATAAAAAATGTATTTTTCAGTATCCTTGAGATTTAGAACATCTGTGTCACTTCA
GATAACATTTTAGTTTCAAGTTTGTATGGTAGTGTTTTTATAGATAAGATACGTCTATTTTTTCAAAATTCATGA
TTGCAGTTTAAATCATCATATGACGTGTGGGTGGGAGCAACCAAAGTTATTTTTACAGGGACTTTATTTTTTGAT
CTTTATTTGAGATTGTTTTCATATCTATCTAAATTATTAGGAGTGTGTGTATCAGAAGTAATTTTTTAATGTCTT
CTAAGGATGGTCTTCCAGGCTTTTAAACTGAAAAGCTTAATTCAGATAGTAGCTTTTGGCTGAGAAAAGGAATCC
AAAATATTAATAAATTTAGATCTCAAAACCACTATTTTTATTATTTCATTATTTTTCAGAGGCCTTAAAATTCTG
GATAAGAGAATGGAGGAAAATACTCAGAGTACTTGATTATTTTATTTCCTTTTATTAAAAAATTACTTCTATGTT
TTTATTGTCTCTTGAGCCTTAGTTAAGAGTAGTGTAGAAATGCATGAACTTCATCCTAATAAGGATAAAACTTAA
GGAAAACCACAATAAACCATGAAGGTGTACACATCCTATAACACAGATAAAGTTTTGGTGTGCTACCTATTCTTG
AGAGAGTGAGTGAGTGTATGTGTTTAAAGGAAACAAAATGGGAGAAATAAGTTTTAAAAAAATCCTCATTTTGTT
AATATTCAAAAGATGGACTGAGCTTCCACTTGGGTTTTATCTTGTTTTAATTGTTTTTGTATCAAAACTTGAAAT
TCCTCTATTTCTATTGGGATATAAAAGCCTTCCCCTTCAGTGAAGAAAACATTTATTTTTTATTTGATTCCTAGG
ATTTAGTAAACTCTAGCTGTCTATTTAAAATGTACTGAGGCACAACAAGTATTATACTGGAAGACTTGCCAAACT
GGCAAAGCTTTAAGTTCATCAGCATTCTATGTGGTTCAGAGCTGTGATTTTTGCAAAGTATTTTACCAACCTCCT
CGATGGCTTTGATAAAGGTTAGATTTGATGTTTTTTTTTTAGATTTATTTTTCTTACTCCACTAAACTATAAAGA
AAATAATTACTTAGAAACTCCATTTTAAATAATCATTTCCTAGAAATTCTTAAATATATACAGAATTTTAAAGAA
AACATTTCATCTGATTTAGTTAGCATCCACATATCATTGAGGAATTAAAGTGTGGGACAGTCATTATT

FIGURE 390

MSFLFSSRSSKTFKPKKNIPEGSHQYELLKHAEATLGSGNLRQAVMLPEGEDLNEWIAVNTVDFFNQINMLYGTI
TEFCTEASCPVMSAGPRYEYHWADGTNIKKPIKCSAPKYIDYLMTWVQDQLDDETLFPSKIGVPFPKNFMSVAKT
ILKRLFRVYAHIYHQHFDSVMQLQEGAHLNTSFKHFIFFVQEFNLIDRRELAPLQELIEKLGSKDR

FIGURE 391

CAGCGGCACAGCGAGGTCGGCAGCGGCACAGCGAGGTCGGCAGCGGCACAGCGAGGTCGGCAGCGGCACAGCGAG
GTCGGCAGCGGCACAGCGAGGTCGGCAGCGGCACAGCGAGGTCGGCAGCGGCAGCGAGGTCGGCAGCGGCACAGC
GAGGTCGGCAGCGGCAGCGAGGTCGGCAGCGGCGCGCGCTGTGCTCTTCCGCGGACTCTGAATC**ATG**GCGACCAC
GGCCACGATGGCGACCTCGGGCTCGGCGCGAAAGCGGCTGCTCAAAGAGGAAGACATGACTAAAGTGGAATTCGA
GACCAGCGAGGAGGTGGATGTGACCCCCACGTTCGACACCATGGGCCTGCGGGAGGACCTGCTGCGGGGCATCTA
CGCTTACGGTTTTGAAAAACCATCAGCAATCCAGCAACGAGCAATCAAGCAGATCATCAAAGGGAGAGATGTCAT
CGCACAGTCTCAGTCCGGCACAGGAAAAACAGCCACCTTCAGTATCTCAGTCCTCCAGTGTTTGGATATTCAGGT
TCGTGAAACTCAAGCTTTGATCTTGGCTCCCACAAGAGAGTTGGCTGTGCAGATCCAGAAGGGGCTGCTTGCTCT
CGGTGACTACATGAATGTCCAGTGCCATGCCTGCATTGGAGGCACCAATGTTGGCGAGGACATCAGGAAGCTGGA
TTACGGACAGCATGTTGTCGCGGGCACTCCAGGGCGTGTTTTTGATATGATTCGTCGCAGAAGCCTAAGGACACG
TGCTATCAAAATGTTGGTTTTGGATGAAGCTGATGAAATGTTGAATAAAGGTTTCAAAGAGCAGATTTACGATGT
ATACAGGTACCTGCCTCCAGCCACACAGGTGGTTCTCATCAGTGCCACGCTGCCACACGAGATTCTGGAGATGAC
CAACAAGTTCATGACCGACCCAATCCGCATCTTGGTGAAACGTGATGAATTGACTCTGGAAGGCATCAAGCAATT
TTTCGTGGCAGTGGAGAGGGAAGAGTGGAAATTTGACACTCTGTGTGACCTCTACGACACACTGACCATCACTCA
GGCGGTCATCTTCTGCAACACCAAAAGAAAGGTGGACTGGCTGACGGAGAAAATGAGGGAAGCCAACTTCACTGT
ATCCTCAATGCATGGAGACATGCCCCAGAAAGAGCGGGAGTCCATCATGAAGGAGTTCCGGTCGGGCGCCAGCCG
AGTGCTTATTTCTACAGATGTCTGGGCCAGGGGGTTGGATGTCCCTCAGGTGTCCCTCATCATTAACTATGATCT
CCCTAATAACAGAGAATTGTACATACACAGAATTGGGAGATCAGGTCGATACGGCCGGAAGGGTGTGGCCATTAA
CTTTGTAAAGAATGACGACATCCGCATCCTCAGAGATATCGAGCAGTACTATTCCACTCAGATTGATGAGATGCC
GATGAACGTTGCTGATCTTATC**TGA**AGCAGCAGATCAGTGGGATGAGGGAGACTGTTCACCTGCTGTGTACTCCT
GTTTGGAAGTATTTAGATCCAGATTCTACTTAATGGGGTTTATATGGACTTTCTTCTCATAAATGGCCTGCCGTC
TCCCTTCCTTTGAAGAGGATATGGGGATTCTGCTCTCTTTTCTTATTTACATGTAAATAATACATTGTTCTAAGT
CTTTTTCATTAAAAATTTAAAACTTTTCCCAT

FIGURE 392

MATTATMATSGSARKRLLKEEDMTKVEFETSEEVDVTPTFDTMGLREDLLRGIYAYGFEKPSAIQQRAIKQIIKG
RDVIAQSQSGTGKTATFSISVLQCLDIQVRETQALILAPTRELAVQIQKGLLALGDYMNVQCHACIGGTNVGEDI
RKLDYGQHVVAGTPGRVFDMIRRRSLRTRAIKMLVLDEADEMLNKGFKEQIYDVYRYLPPATQVVLISATLPHEI
LEMTNKFMTDPIRILVKRDELTLEGIKQFFVAVEREEWKFDTLCDLYDTLTITQAVIFCNTKRKVDWLTEKMREA
NFTVSSMHGDMPQKERESIMKEFRSGASRVLISTDVWARGLDVPQVSLIINYDLPNNRELYIHRIGRSGRYGRKG
VAINFVKNDDIRILRDIEQYYSTQIDEMPMNVADLI

FIGURE 393

TTTCCTCTTTCTCTAAGAGTCTCTCTCTCCCTTTCCCTCTCTCTCCCCCCAATCTGTCTTTCTAGCATGTTGCCC
TTTTTCAACCACATTTGTGTTTCAGGTGTAGAGAGGAGAGAGAGTGAACAGGGAGCGGGGCTTTTGTCTGTTGGT
CTCCCTGGACTGAAGAGAGGGAGAATAGAAGCCCAAGACTAAGATTCTCAAA**ATG**GTTTATTACCCAGAACTCTT
TGTCTGGGTCAGTCAAGAACCATTTCCAAACAAGGACATGGAGGGAAGGCTTCCTAAGGGAAGACTTCCTGTCCC
AAAGGAAGTGAACCGCAAGAAGAACGATGAGACAAACGCTGCCTCCCTGACTCCACTGGGCAGCAGTGAACTCCG
CTCCCCAAGAATCAGTTACCTCCACTTTTTT**TAA**TCGTAACACCTCCATTTGTATTACATATGGTGTATGGGTAT
TGATGAGGTCATGGTATCATATATGGGATTTTTTTCTGTGTAAATCATCAAGTATAAGAAGAAACTATGGGACTC
TGAGCCTTGCTTTAGAGAATTTACAGTGGACAAATAGGTGTCATCAAACCAGTTTTTAATCATTCTGACTCAAGT
GAAAACGCTCAGAATTTCACACTGTGAATCCACGTTTACAACCCTTACAGGTGGGCCTTCAGGCCTGGTTCGCTA
CAACAATGTCTTCCACAACTCAAACTCCCACCGCGCTCACACAACCGGTCCACTCCTGCCTTTTCACTCACACAG
CTCCCGACTGCTTCTTGCAGAGGCTGAGAGTCCCCCCCCCCCACCTTTTTTTTTCATTTAGATGTAACAAACCTAG
TAGTTTATGTTCATCAATTGTCTGTATATCTCTATATTTTATCCATGTACTCTTTTGATGTATAGAAGTAGTTTG
AAACTCATTGTTTCCTTGTGGTAAGTGACCGAGATGCTGCCACAGGACCTGAGACACTGATGAATGGTGCTATTT
TGGACTTTCAACATGCTCCTTGGCGAGGTAGCTCTGATGGAGTTATTTTTTATTTCCATGTTCTAAGAAGGTGTT
GGTACTCTGTTTCCCTGAATGTTGTTCTCTAGACTGGATTGACTTGTTTTCCTTGTGTCTTCAGTGTGGCTTTCT
TCCTCAGTGTTGTAGGTTGAGCGAATGCTACCAGAGTGTGAGAGACCATTGTCTCGTTGGCTGGCGCTCACGGAC
ATGCAGTCACGGTAGCGGGAGCAATCACAAAACTGTAATTTACTTACCAAATCTCTTCCTTTCCGTAGCCTCGCC
TGCCTGACTTAGAGAAAGAAAAGCAATAATTTTACAGGCATTTTGAGGTGTCTCTTTGGGTTCTTTCTGTTTGAA
AGGATATTTGTCGAAAAAAAGAGCAAAACCGTTTTAAATAAACTCCCCCTGGAAAAAAACCCAAAACACTGGCAT
CTGAGTAGGAATATGAAAATGACACCTTTTCCAAATATTAAATTGGAAAACAAGGTCTACAAAATCATGATACTT
TTTTAAAAGGCAGAGCATTCTTTTTTCGGCAATTTTGATAAGCAAGGTGTAGATTTACATTTTTGTCCTTGCTCC
CAACGAAATGGATAAACAAAAATAAATTACCATCTACTCATGGAATGTTGTTGTGTTAGCCAGTCTGAAAGCCCA
CCTTAATTTTTATATAACTGTCTTTAGCTCTTCTTTTGACAGGGCAGGCCTTGTTCTGAACTGTTTCGCTTCTGA
CTGTTAAACACCGATGACGCATGCACTGCACTTCTTCGTTTTCTTCTTGCTCCCCCATTGGCCTGAGTTTCTTGT
GCATTACTCCTCTCCCTCCTTCGTTAGAATAGGTATATCAGCTGTGTAAATAGAGCAAGAAAACAGTATTCTGCA
TCTGTGGCATTTATGTAGAGTTGCAGTTGTGTACTGCTGAAAATGCAGGCTTTTGTAACAGTGTGATCTTTACTG
ATGCACTCATGACAAGTACCCAATGTATTTTAGCTATTTTAGTAGTATTTGTTCAATAAATACGCAAGCTGTAAG
GTAACTGTCTG

FIGURE 394

MVYYPELFVWVSQEPFPNKDMEGRLPKGRLPVPKEVNRKKNDETNAASLTPLGSSELRSPRISYLHFF

FIGURE 395

ACCCGCGCTCGTACGTGCGCCTCCGCCGGCAGCTCCTGACTCATCGGGGGCTCCGGGTCACATGCGCCCGCGCGG
CCCTATAGGCGCCTCCTCCGCCCGCCGCCCGGGAGCCGCAGCCGCCGCCGCCACTGCCACTCCCGCTCTCTCAGC
GCCGCCGTCGCCACCGCCACCGCCACCGCCACTACCACCGTCTGAGTCTGCAGTCCCGAGATCCCAGCCATC**ATG**

TCCATAGAGAAGATCTGGGCCCGGGAGATCCTGGACTCCCGCGGGAACCCCACAGTGGAGGTGGATCTCTATACT
GCCAAAGGTCTTTTCCGGGCTGCAGTGCCCAGTGGAGCCTCTACGGGCATCTATGAGGCCCTGGAGCTGAGGGAT
GGAGACAAACAGCGTTACTTAGGCAAAGGTGTCCTGAAGGCAGTGGACCACATCAACTCCACCATCGCGCCAGCC
CTCATCAGCTCAGGTCTCTCTGTGGTGGAGCAAGAGAAACTGGACAACCTGATGCTGGAGTTGGATGGGACTGAG
AACAAATCCAAGTTTGGGGCCAATGCCATCCTGGGTGTGTCTCTGGCCGTGTGTAAGGCAGGGGCAGCTGAGCGG
GAACTGCCCCTGTATCGCCACATTGCTCAGCTGGCCGGGAACTCAGACCTCATCCTGCCTGTGCCGGCCTTCAAC
GTGATCAATGGTGGCTCTCATGCTGGCAACAAGCTGGCCATGCAGGAGTTCATGATCCTCCCAGTGGGAGCTGAG
AGCTTTCGGGATGCCATGCGACTAGGTGCAGAGGTCTACCATACACTCAAGGGAGTCATCAAGGACAAATACGGC
AAGGATGCCACCAATGTGGGGGATGAAGGTGGCTTTGCCCCCAATATCCTGGAGAACAGTGAAGCCTTGGAGCTG
GTGAAGGAAGCCATCGACAAGGCTGGCTACACGGAAAAGATCGTTATTGGCATGGATGTTGCTGCCTCAGAGTTT
TATCGTGATGGCAAATATGACTTGGACTTCAAGTCTCCCACTGATCCTTCCCGATACATCACTGGGGACCAGCTG
GGGGCACTCTACCAGGACTTTGTCAGGGACTATCCTGTGGTCTCCATTGAGGACCCATTTGACCAGGATGATTGG
GCTGCCTGGTCCAAGTTCACAGCCAATGTAGGGATCCAGATTGTGGGTGATGACCTGACAGTGACCAACCCAAAA
CGTATTGAGCGGGCAGTGGAAGAAAAGGCCTGCAACTGTCTGCTGCTCAAGGTCAACCAGATCGGCTCGGTCACT
GAAGCCATCCAAGCGTGCAAGCTGGCCCAGGAGAATGGCTGGGGGGTCATGGTGAGTCATCGCTCAGGAGAGACT
GAGGACACATTCATTGCTGACCTGGTGGTGGGGCTGTGCACAGGCCAGATCAAGACTGGTGCCCCGTGCCGTTCT
GAACGTCTGGCTAAATACAACCAGCTCATGAGAATTGAGGAAGAGCTGGGGGATGAAGCTCGCTTTGCCGGACAT
AACTTCCGTAATCCCAGTGTGCTG**TGA**TTCCTCTGCTTGCCTGGAGACGTGGAACCTCTGTCTCATCCTCCTGGA
ACCTTGCTGTCCTGATCTGTGATAGTTCACCCCCTGAGATCCCCTGAGCCCCAGGGTGCCCAGAACTTCCCTGAT
TGACCTGCTCCGCTGCTCCTTGGCTTACCTGACCTCTTGCTGTCTCTGCTCGCCCTCCTTTCTGTGCCCTACTCA
TTGGGGTTCCGCACTTTCCACTTCTTCCTTTCTCTTTCTCTCTTCCCTCAGAAACTAGAAATGTGAATGAGGATT
ATTATAAAAGGGGGTCCGTGGAAGAATGATCAGCATCTGTGATGGGAGCGTCAGGGTTGGTGTGCTGAGGTGTTA
GAGAGGGACCATGTGTCACTTGTGCTTTGCTCTTGTCCCACGTGTCTTCCACTTTGCATATGAGCCGTGAACTGT
GCATAGTGCTGGGATGGAGGGGAGTGTTGGGCATGTGATCACGCCTGGCTAATAAGGCTTTAGTGTATTTATTTA
TTTATTTATTTTATTTGTTTTTCATTCATCCCATTAATCATTTCCCCATAACTCAATGGCCTAAAACTGGCCTGA
CTTGGGGGAACGATGTGTCTGTATTTCATGTGGCTGTAGATCCCAAGATGACTGGGGTGGGAGGTCTTGCTAGAA
TGGGAAGGGTCATAGAAAGGGCCTTGACATCAGTTCCTTTGTGTGTACTCACTGAAGCCTGCGTTGGTCCAGAGC
GGAGGCTGTGTGCCTGGGGGAGTTTTCCTCTATACATCTCTCCCCAACCCTAGGTTCCCTGTTCTTCCTCCAGCT
GCACCAGAGCAACCTCTCACTCCCCATGCCACGTTCCACAGTTGCCACCACCTCTGTGGCATTGAAATGAGCACC
TCCATTAAAGTCTGAATCAGTGC

FIGURE 396

MSIEKIWAREILDSRGNPTVEVDLYTAKGLFRAAVPSGASTGIYEALELRDGDKQRYLGKGVLKAVDHINSTIAP
ALISSGLSVVEQEKLDNLMLELDGTENKSKFGANAILGVSLAVCKAGAAERELPLYRHIAQLAGNSDLILPVPAF
NVINGGSHAGNKLAMQEFMILPVGAESFRDAMRLGAEVYHTLKGVIKDKYGKDATNVGDEGGFAPNILENSEALE
LVKEAIDKAGYTEKIVIGMDVAASEFYRDGKYDLDFKSPTDPSRYITGDQLGALYQDFVRDYPVVSIEDPFDQDD
WAAWSKFTANVGIQIVGDDLTVTNPKRIERAVEEKACNCLLLKVNQIGSVTEAIQACKLAQENGWGVMVSHRSGE
TEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEELGDEARFAGHNFRNPSVL

FIGURE 397

TTTGGCTCTTCGGGTAAAGATGGCGGAGCGCGGGTACAGCTTTTCGCTGACTACATTCAGCCCGTCTGGTAAACT
TGTCCAGATTGAATATGCTTTGGCTGCTGTAGCTGGAGGAGCCCCGTCCGTGGGAATTAAAGCTGCAAATGGTGT
GGTATTAGCAACTGAGAAAAAACAGAAATCCATTCTGTATGATGAGCGAAGTGTACACAAAGTAGAACCAATTAC
CAAGCATATAGGTTTGGTGTACAGTGGCATGGGCCCCGATTACAGAGTGCTTGTGCACAGAGCTCGAAAACTAGC
TCAACAATACTATCTTGTGTACCAAGAACCCATTCCTACAGCTCAGCTGGTACAGAGAGTAGCTTCTGTGATGCA
AGAATATACTCAGTCAGGTGGTGTTCGTCCATTTGGAGTTTCTTTACTTATTTGTGGTTGGAATGAGGGACGACC
ATATTTATTTCAGTCAGATCCATCTGGAGCTTACTTTGCCTGGAAAGCTACAGCAATGGGAAAGAACTATGTGAA
TGGGAAGACTTTCCTTGAGAAAAGATATAATGAAGATCTGGAACTTGAAGATGCCATTCATACAGCCATCTTAAC
CCTAAAGGAAAGCTTTGAAGGGCAAATGACAGAGGATAACATAGAAGTTGGAATCTGCAATGAAGCTGGATTTAG
GAGGCTTACTCCAACTGAAGTTAAGGATTACTTGGCTGCCATAGCATAACAATGAAGTGACTGAAAAATCCAGAA
TTTCAGATAATCTATCTACTTAAACATGTTTAAAGTATGTTTTGTTTTGCAGACTTTTTGCATACTTATTTCTAC
ATGGTTTAAATCGACTGTTTTTAAAATGACACTTATAAATCCTAATAAACTGTTAAACCC

FIGURE 398

MAERGYSFSLTTFSPSGKLVQIEYALAAVAGGAPSVGIKAANGVVLATEKKQKSILYDERSVHKVEPITKHIGLV
YSGMGPDYRVLVHRARKLAQQYYLVYQEPIPTAQLVQRVASVMQEYTQSGGVRPFGVSLLICGWNEGRPYLFQSD
PSGAYFAWKATAMGKNYVNGKTFLEKRYNEDLELEDAIHTAILTLKESFEGQMTEDNIEVGICNEAGFRRLTPTE
VKDYLAAIA

FIGURE 399

GCGATTCGGTGGCACGTGGAGCCACGGCGTGGGAGTAGGGGGCTGAAGGCAGGCAGCAGCGGCCAGGGCCGCCCT
CTGCTAGCCGCTTGGGTCTCGGGATACCCCGTTTCTTCCTGTAGGTGTGGGACGTGCGTGCGGCGAGATGGACAC
TCCCCCGCTCTCGGATTCGGAGTCGGAATCCGATGAATCCCTTGTCACAGACAGAGAGTTGCAGGATGCGTTTTC
CCGAGGGCTTCTGAAGCCAGGCCTCAATGTCGTGCTAGAGGGGCCGAAGAAGGCCGTGAACGACGTGAATGGCCT
GAAGCAATGTTTGGCAGAATTCAAGCGGGATCTGGAATGGGTTGAAAGGCTCGATGTGACACTGGGTCCGGTACC
GGAGATCGGTGGATCTGAGGCGCCAGCACCTCAGAACAAGGACCAGAAAGCTGTTGATCCAGAAGACGACTTCCA
GCGAGAGATGAGTTTCTATCGCCAAGCCCAGGCCGCAGTGCTTGCAGTCTTACCCCGCCTCCATCAGCTCAAAGT
CCCTACGAAGCGACCCACTGATTATTTTGCGGAAATGGCCAAATCTGATCTGCAGGTGCAGAAGATTCGACAGAA
GCTGCAGACTAAACAGGCTGCCATGGAGAGGTCTGAAAAAGCTAAGCAACTGCGAGCACTTAGGAAATACGGGAA
GAAGGTGCAAACGGAGGTTCTTCAGAAGAGGCAGCAGGAGAAAGCCCATATGATGAATGCTATTAAGAAATATCA
GAAAGGCTTCTCTGATAAACTGGATTTCCTTGAGGGAGATCAGAAACCTCTGGCACAGCGCAAGAAGGCAGGAGC
CAAAGGCCAGCAGATGAGGAAGGGGCCCAGTGCTAAACGACGGTATAAAAACCAGAAGTTTGGTTTTGGTGGAAA
GAAGAAAGGCTCAAAGTGGAACACTCGGGAGAGCTATGATGATGTATCTAGCTTCCGGGCCAAGACAGCTCATGG
CAGAGGCCTCAAGAGGCCTGGCAAGAAAGGGTCAAATAAGAGACCTGGAAAACGAACAAGAGAGAAGATGAAGAA
CAGAACACACTAAATAGCATCTTTGAATACAAAGAACCAAGAAAAAGGAATGAAGACTCGCAATTTCACGACACA
CTTTGATCCCTTCTGTTGGTGTCATGTTGTAAACATTTCTTTCAATAAACTAAAGAAAAATTATTAAAGGAACAC
ATACCTTTGGTTAAATAGTCTAGACTAAAAGATTGAGAAGTTACTTTCCATTGCTATCTATTGATAATTTAGACA
TTGAGTTCAAATTGCCTTCATTTTATGATAAATAATGATTTAACTGAAAA

FIGURE 400

MDTPPLSDSESESDESLVTDRELQDAFSRGLLKPGLNVVLEGPKKAVNDVNGLKQCLAEFKRDLEWVERLDVTLG
PVPEIGGSEAPAPQNKDQKAVDPEDDFQREMSFYRQAQAAVLAVLPRLHQLKVPTKRPTDYFAEMAKSDLQVQKI
RQKLQTKQAAMERSEKAKQLRALRKYGKKVQTEVLQKRQQEKAHMMNAIKKYQKGFSDKLDFLEGDQKPLAQRKK
AGAKGQQMRKGPSAKRRYKNQKFGFGGKKKGSKWNTRESYDDVSSFRAKTAHGRGLKRPGKKGSNKRPGKRTREK
MKNRTH

FIGURE 401

AGCACTCTCCAGCCTCTCACCGCAAAATTACACACCCCAGTACACCAGCAGAGGAAACTTATAACCTCGGGAGGC
GGGTCCTTCCCCTCAGTGCGGTCACATACTTCCAGAAGAGCGGACCAGGGCTGCTGCCAGCACCTGCCACTCAGA
GCGCCTCTGTCGCTGGGACCCTTCAGAACTCTCTTTGCTCACAAGTTACCAAAAAAAAAAGAGCCAACATGTTGG
TATTGCTGGCTGGTATCTTTGTGGTCCACATCGCTACTGTTATTATGCTATTTGTTAGCACCATTGCCAATGTCT
GGTTGGTTTCCAATACGGTAGATGCATCAGTAGGTCTTTGGAAAAACTGTACCAACATTAGCTGCAGTGACAGCC
TGTCATATGCCAGTGAAGATGCCCTCAAGACAGTGCAGGCCTTCATGATTCTCTCTATCATCTTCTGTGTCATTG
CCCTCCTGGTCTTCGTGTTCCAGCTCTTCACCATGGAGAAGGGAAACCGGTTCTTCCTCTCAGGGGCCACCACAC
TGGTGTGCTGGCTGTGCATTCTTGTGGGGGTGTCCATCTACACTAGTCATTATGCGAATCGTGATGGAACGCAGT
ATCACCACGGCTATTCCTACATCCTGGGCTGGATCTGCTTCTGCTTCAGCTTCATCATCGGCGTTCTCTATCTGG
TCCTGAGAAAGAAATAAGGCCGGACGAGTTCATGGGGATCTGGGGGGTGGGGAGGAGGAAGCCGTTGAATCTGGG
AGGGAAGTGGAGGTTGCTGTACAGGAAAAACCGAGATAGGGGAGGGGGGAGGGGGAAGCAAAGGGGGGAGGTCAA
ATCCCAAACCATTACTGAGGGGATTCTCTACTGCCAAGCCCCTGCCCTGGGGAGAAAGTAGTTGGCTAGTACTTT
GATGCTCCCTTGATGGGGTCCAGAGAGCCTCCCTGCAGCCACCAGACTTGGCCTCCAGCTGTTCTTAGTGACACA
CACTGTCTGGGGCCCCATCAGCTGCCACAACACCAGCCCCACTTCTGGGTCATGCACTGAGGTCCACAGACCTAC
TGCACTGAGTTAAAATAGCGGTACAAGTTCTGGCAAGAGCAGATACTGTCTTTGTGCTGAATACGCTAAGCCTGG
AAGCCATCCTGCCCTTCTGACCCAAAGCAAAACATCACATTCCAGTCTGAAGTGCCTACTGGGGGGCTTTGGCCT
GTGAGCCATTGTCCCTCTTTGGAACAGATATTTAGCTCTGTGGAATTCAGTGACAAAATGGGAGGAGGAAAGAGA
GTTTGTAAGGTCATGCTGGTGGGTTAGCTAAACCAAGAAGGAGACCTTTTCACAATGGAAAACCTGGGGGATGGT
CAGAGCCCAGTCGAGACCTCACACACGGCTGTCCCTCATGGAGACCTCATGCCATGGTCTTTGCTAGGCCTCTTG
CTGAAAGCCAAGGCAGCTCTTCTGGAGTTTCTCTAAAGTCACTAGTGAACAATTCGGTGGTAAAAGTACCACACA
AACTATGGGATCCAAGGGGCAGTCTTGCAACAGTGCCATGTTAGGGTTATGTTTTTAGGATTCCCCTCAATGCAG
TCAGTGTTTCTTTTAAGTATACAACAGGAGAGAGATGGACATGGCTCATTGTAGCACAATCCTATTACTCTTCCT
CTAACATTTTTGAGGAAGTTTTGTCTAATTATCAATATTGAGGATCAGGGCTCCTAGGCTCAGTGGTAGCTCTGG
CTTAGACACCACCTGGAGTGATCACCTCTTGGGGACCCTGCCTATCCCACTTCACAGGTGAGGCATGGCAATTCT
GGAAGCTGATTAAAACACACATAAACCAAAACCAAACAACAGGCCCTTGGGTGAAAGGTGCTATATAATTGTGAA
GTATTAAGCCTACCGTATTTCAGCCATGATAAGAACAGAGTGCCTGCATTCCCAGGAAAATACGAAAATCCCATG
AGATAAATAAAAATATAGGTGATGGGCAGATCTTTTCTTTAAAATAAAAAAGCAAAAACTCTTGTGGTACCTAGT
CAGATGGTAGACGAGCTGTCTGCTGCCGCAGGAGCACCTCTATACAGGACTTAGAAGTAGTATGTTATTCCTGGT
TAAGCAGGCATTGCTTTGCCCTGGAGCAGCTATTTTAAGCCATCTCAGATTCTGTCTAAAGGGGTTTTTTGGGAA
GACGTTTTCTTTATCGCCCTGAGAAGATCTACCCCAGGGAGAATCTGAGACATCTTGCCTACTTTTCTTTATTAG
CTTTCTCCTCATCCATTTCTTTTATACCTTTCCTTTTTGGGGAGTTGTTATGCCATGATTTTTGGTATTTATGTA
AAAGGATTATTACTAATTCTATTTCTCTATGTTTATTCTAGTTAAGGAAATGTTGAGGGCAAGCCACCAAATTAC
CTAGGCTGAGGTTAGAGAGATTGGCCAGCAAAAACTGTGGGAAGATGAACTTTGTCATTATGATTTCATTATCAC
ATGATTATAGAAGGCTGTCTTAGTGCAAAAAACATACTTACATTTCAGACATATCCAAAGGGAATACTCACATTT
TGTTAAGAAGTTGAACTATGACTGGAGTAAACCATGTATTCCCTTATCTTTTACTTTTTTTCTGTGACATTTATG
TCTCATGTAATTTGCATTACTCTGGTGGATTGTTCTAGTACTGTATTGGGCTTCTTCGTTAATAGATTATTTCAT
ATACTATAATTGTAAATATTTTGATACAAATGTTTATAACTCTAGGGATATAAAAACAGATTCTGATTCCCTTCA
AAAAAAAAAAA

FIGURE 402

MLVLLAGIFVVHIATVIMLFVSTIANVWLVSNTVDASVGLWKNCTNISCSDSLSYASEDALKTVQAFMILSIIFC
VIALLVFVFQLFTMEKGNRFFLSGATTLVCWLCILVGVSIYTSHYANRDGTQYHHGYSYILGWICFCFSFIIGVL
YLVLRKK

FIGURE 403

GCCGCGCCGGCTCTGGGCACTCAGCATCGTTTCCTTTTCCTCCGCTGGAGCAGCTATGGCGGCGGTGAAGACCCT
GAACCCCAAGGCCGAGGTGGCCCGAGCGCAGGCGGCGCTGGCGGTCAACATCAGCGCAGCGCGGGGTCTGCAGGA
CGTGCTAAGGACCAACCTGGGGCCCAAGGGCACCATGAAGATGCTCGTTTCTGGCGCTGGAGACATCAAACTTAC
TAAAGACGGCAATGTGCTGCTTCACGAAATGCAAATTCAACACCCAACAGCTTCCTTAATAGCAAAGGTAGCAAC
AGCCCAGGATGATATAACTGGTGATGGTACGACTTCTAATGTCCTAATCATTGGAGAGCTGCTGAAACAGGCGGA
TCTCTACATTTCTGAAGGCCTTCATCCTAGAATAATCACTGAAGGATTTGAAGCTGCAAAGGAAAAGGCCCTTCA
GTTTTTGGAAGAAGTCAAAGTAAGCAGAGAGATGGACAGGGAAACACTTATAGATGTGGCCAGAACATCTCTTCG
TACTAAAGTTCATGCTGAACTTGCAGATGTCTTAACAGAGGCTGTAGTGGACTCCATTTTGGCCATTAAAAAGCA
AGATGAACCTATTGATCTCTTCATGATTGAGATCATGGAGATGAAACATAAATCTGAAACTGATACAAGCTTAAT
CAGAGGGCTTGTTTTGGACCACGGAGCACGGCATCCTGATATGAAGAAAAGGGTGGAGGATGCATACATCCTCAC
TTGTAACGTGTCATTAGAGTATGAGAAAACAGAAGTGAATTCTGGCTTTTTTTACAAGAGTGCAGAAGAGAGAGA
AAAACTCGTGAAAGCTGAAAGAAAATTCATTGAAGATAGGGTTAAAAAAATAATAGAACTGAAAAGGAAAGTCTG
TGGCGATTCAGATAAAGGATTTGTTGTTATTAATCAAAAGGGAATTGACCCCTTTTCCTTAGATGCTCTTTCAAA
AGAAGGCATAGTCGCTCTGCGCAGAGCTAAAAGGAGAAATATGGAGAGGCTGACTCTTGCTTGTGGTGGGGTAGC
CCTGAATTCTTTTGACGACCTAAGTCCTGACTGCTTGGGACATGCAGGACTTGTATATGAGTATACATTGGGAGA
AGAGAAGTTTACCTTTATTGAGAAATGTAACAACCCTCGTTCTGTCACATTATTGATCAAAGGACCAAATAAGCA
CACACTCACTCAGATCAAAGATGCAGTGAGGGACGGCTTGAGGGCTGTCAAAAATGCTATTGATGATGGCTGTGT
GGTTCCAGGTGCTGGTGCCGTGGAAGTGGCAATGGCAGAAGCCCTGATTAAACATAAGCCCAGTGTAAAGGGCAG
GGCACAGCTTGGAGTCCAAGCATTTGCTGATGCATTGCTCATTATTCCCAAGGTTCTTGCTCAGAACTCTGGTTT
TGACCTTCAGGAAACATTAGTTAAAATTCAAGCAGAACATTCAGAATCAGGTCAGCTTGTGGGTGTGGACCTGAA
CACAGGTGAGCCAATGGTGGCAGCAGAAGTAGGCGTATGGGATAACTATTGTGTAAAGAAACAGCTTCTTCACTC
CTGCACTGTGATTGCCACCAACATTCTCTTGGTTGATGAGATCATGCGAGCTGGAATGTCTTCTCTGAAAGGTTG
AATTGAAGCTTCCTCTGTATCTGAATCTTGAAGACTGCAAAGTGATCCTGAGGATTACAGCTGTGGAATTTTTGT
CCAAGCTTCAAATAATTTTGAAAGAAATTTTCCCATATGAAAAAAGGAGAGAACACTGGCATCTGTTGAAATTTG
GAAGTTCTGAAATTATAGTATTTTTAAAAATTGCACTGAAGTGTATACACATAAAGCAGGTCTTTTATCCAGTGA
ACAGGATGTTTTGCTTTAGCAGCAGTGACATAAAATTCCATGTTAGATAAGCATATGTTACTTACCTTGTTATTA
AATATTTCTTGAAAAGCAAATTTTAATGGTTAATTTTATGTGGACGTATGTTAAATTATCCAAACTACCCTATTG
TTAAGCATTTGGTTTTAAAATTTTTATGCTAATATAAATGCTCAAGTAATTTAAAATATTGAAAGCATCCCTGTT
GGTATAAATTTCTGAGTAAATGCATTGGATCAGTTGGACTTTGAACGCCCTTTGAAATGGCTTTGCTAAAATGCT
CCCGCCACAAAGTTGTAGGAAATGGGAAGAGGAGTCAACTAGAGGCAAGGGAGTTGAGAGAGCTGCAACTGTAAA
GGGCAAGAACAGGCAGAGGTAAAAAGATGATGGAAGGTGTGGTGACTAAGGGCCACGGTTATTGGGTGAAATTTG
AGATGTAGGCCAACTGTATTTTCAAGCTTCTGAACTTAAGGCAAAATATTCATCGCAAAGTCTCTAGCGTCATAT
TTTTCTCACCCAAATTACGTTTCCACGAGTTATTATATATAGTTGGTCTATCTCTGCAGTCCTTGAAGGTGAAGT
TGTGTGTTACTAGGCTGTGTTTTGGGATGTCAGCAGTGGCCTGAAGTGAGTTGTGCAATAAATGTTAAGTTGAAA
CCTCAAAAAAAA

FIGURE 404

MAAVKTLNPKAEVARAQAALAVNISAARGLQDVLRTNLGPKGTMKMLVSGAGDIKLTKDGNVLLHEMQIQHPTAS
LIAKVATAQDDITGDGTTSNVLIIGELLKQADLYISEGLHPRIITEGFEAAKEKALQFLEEVKVSREMDRETLID
VARTSLRTKVHAELADVLTEAVVDSILAIKKQDEPIDLFMIEIMEMKHKSETDTSLIRGLVLDHGARHPDMKKRV
EDAYILTCNVSLEYEKTEVNSGFFYKSAEEREKLVKAERKFIEDRVKKIIELKRKVCGDSDKGFVVINQKGIDPF
SLDALSKEGIVALRRAKRRNMERLTLACGGVALNSFDDLSPDCLGHAGLVYEYTLGEEKFTFIEKCNNPRSVTLL
IKGPNKHTLTQIKDAVRDGLRAVKNAIDDGCVVPGAGAVEVAMAEALIKHKPSVKGRAQLGVQAFADALLIIPKV
LAQNSGFDLQETLVKIQAEHSESGQLVGVDLNTGEPMVAAEVGVWDNYCVKKQLLHSCTVIATNILLVDEIMRAG
MSSLKG

FIGURE 405

GCCGCGCCGGCTCTGGGCACTCAGCATCGTTTCCTTTTCCTCCGCTGGAGCAGCTATGGCGGCGGTGAAGACCCT
GAACCCCAAGGCCGAGGTGGCCCGAGCGCAGGCGGCGCTGGCGGTCAACATCAGCGCAGCGCGGGGTCTGCAGGA
CGTGCTAAGGACCAACCTGGGGCCCAAGGGCACCATGAAGATGCTCGTTTCTGGCGCTGGAGACATCAAACTTAC
TAAAGACGGCAATGTGCTGCTTCACGAAATGCAAATTCAACACCCAACAGCTTCCTTAATAGCAAAGGTAGCAAC
AGCCCAGGATGATATAACTGGTGATGGTACGACTTCTAATGTCCTAATCATTGGAGAGCTGCTGAAACAGGCGGA
TCTCTACATTTCTGAAGGCCTTCATCCTAGAATAATCACTGAAGGATTTGAAGCTGCAAAGGAAAAGGCCCTTCA
GTTTTTGGAAGAAGTCAAAGTAAGCAGAGAGATGGACAGGGAAACACTTATAGATGTGGCCAGAACATCTCTTCG
TACTAAAGTTCATGCTGAACTTGCAGATGTCTTAACAGAGGCTGTAGTGGACTCCATTTTGGCCATTAAAAAGCA
AGATGAACCTATTGATCTCTTCATGATTGAGATCATGGAGATGAAACATAAATCTGAAACTGATACAAGCTTAAT
CAGAGGGCTTGTTTTGGACCACGGAGCACGGCATCCTGATATGAAGAAAAGGGTGGAGGATGCATACATCCTCAC
TTGTAACGTGTCATTAGAGTATGAGAAAACAGAAGTGAATTCTGGCTTTTTTTACAAGAGTGCAGAAGAGAGAGA
AAAACTCGTGAAAGCTGAAAGAAAATTCATTGAAGATAGGGTTAAAAAAATAATAGAACTGAAAAGGAAAGTCTG
TGGCGATTCAGATAAAGGATTTGTTGTTATTAATCAAAAGGGAATTGACCCCTTTTCCTTAGATGCTCTTTCAAA
AGAAGGCATAGTCGCTCTGCGCAGAGCTAAAAGGAGAAATATGGAGAGGCTGACTCTTGCTTGTGGTGGGGTAGC
CCTGAATTCTTTTGACGACCTAAGTCCTGACTGCTTGGGACATGCAGGACTTGTATATGAGTATACATTGGGAGA
AGAGAAGTTTACCTTTATTGAGAAATGTAACAACCCTCGTTCTGTCACATTATTGATCAAAGGACCAAATAAGCA
CACACTCACTCAGATCAAAGATGCAGTGAGGGACGGCTTGAGGGCTGTCAAAAATGCTATTGATGATGGCTGTGT
GGTTCCAGGTGCTGGTGCCGTGGAAGTGGCAATGGCAGAAGCCCTGATTAAACATAAGCCCAGTGTAAAGGGCAG
GGCACAGCTTGGAGTCCAAGCATTTGCTGATGCATTGCTCATTATTCCCAAGGTTCTTGCTCAGAACTCTGGTTT
TGACCTTCAGGAAACATTAGTTAAAATTCAAGCAGAACATTCAGAATCAGGTCAGCTTGTGGGTGTGGACCTGAA
CACAGGTGAGCCAATGGTGGCAGCAGAAGTAGGCGTATGGGATAACTATTGTGTAAAGAAACAGCTTCTTCACTC
CTGCACTGTGATTGCCACCAACATTCTCTTGGTTGATGAGATCATGCGAGCTGGAATGTCTTCTCTGAAAGGTTG
AATTGAAGCTTCCTCTGTATCTGAATCTTGAAGACTGCAAAGTGATCCTGAGGATTACAGCTGTGGAATTTTTGT
CCAAGCTTCAAATAATTTTGAAAGAAATTTTCCCATATGAAAAAAGGAGAGAACACTGGCATCTGTTGAAATTTG
GAAGTTCTGAAATTATAGTATTTTTAAAAATTGCACTGAAGTGTATACACATAAAGCAGGTCTTTTATCCAGTGA
ACAGGATGTTTTGCTTTAGCAGCAGTGACATAAAATTCCATGTTAGATAAGCATATGTTACTTACCTTGTTATTA
AATATTTCTTGAAAAGCAAATTTTAATGGTTAATTTTATGTGGACGTATGTTAAATTATCCAAACTACCCTATTG
TTAAGCATTTGGTTTTAAAATTTTTATGCTAATATAAATGCTCAAGTAATTTAAAATATTGAAAGCATCCCTGTT
GGTATAAATTTCTGAGTAAATGCATTGGATCAGTTGGACTTTGAACGCCCTTTGAAATGGCTTTGCTAAAATGCT
CCCGCCACAAAGTTGTAGGAAATGGGAAGAGGAGTCAACTAGAGGCAAGGGAGTTGAGAGAGCTGCAACTGTAAA
GGGCAAGAACAGGCAGAGGTAAAAAGATGATGGAAGGTGTGGTGACTAAGGGCCACGGTTATTGGGTGAAATTTG
AGATGTAGGCCAACTGTATTTTCAAGCTTCTGAACTTAAGGCAAAATATTCATCGCAAAGTCTCTAGCGTCATAT
TTTTCTCACCCAAATTACGTTTCCACGAGTTATTATATATAGTTGGTCTATCTCTGCAGTCCTTGAAGGTGAAGT
TGTGTGTTACTAGGCTGTGTTTTGGGATGTCAGCAGTGGCCTGAAGTGAGTTGTGCAATAAATGTTAAGTTGAAA
CCTCAAAAAAAA

FIGURE 406

MAAVKTLNPKAEVARAQAALAVNISAARGLQDVLRTNLGPKGTMKMLVSGAGDIKLTKDGNVLLHEMQIQHPTAS
LIAKVATAQDDITGDGTTSNVLIIGELLKQADLYISEGLHPRIITEGFEAAKEKALQFLEEVKVSREMDRETLID
VARTSLRTKVHAELADVLTEAVVDSILAIKKQDEPIDLFMIEIMEMKHKSETDTSLIRGLVLDHGARHPDMKKRV
EDAYILTCNVSLEYEKTEVNSGFFYKSAEEREKLVKAERKFIEDRVKKIIELKRKVCGDSDKGFVVINQKGIDPF
SLDALSKEGIVALRRAKRRNMERLTLACGGVALNSFDDLSPDCLGHAGLVYEYTLGEEKFTFIEKCNNPRSVTLL
IKGPNKHTLTQIKDAVRDGLRAVKNAIDDGCVVPGAGAVEVAMAEALIKHKPSVKGRAQLGVQAFADALLIIPKV
LAQNSGFDLQETLVKIQAEHSESGQLVGVDLNTGEPMVAAEVGVWDNYCVKKQLLHSCTVIATNILLVDEIMRAG
MSSLKG

FIGURE 407

GGATCCGCGGCCGCCGCTGATGGGAGGATGGACGTACTGGTGTCTGAGTGCTCCGCGCGGCTGCTGCAGCAGGAA
GAAGAGATTAAATCTCTGACTGCTGAAATTGACCGGTTGAAAAACTGTGGCTGTTTAGGAGCTTCTTCAAATTTG
GAGCAGTTACAAGAAGAAAATTTAAAATTAAAGTATCGACTGAATATTCTTCGAAAGAGTCTTCAGGCAGAAAGG
AACAAACCAACTAAAAATATGATTAACATTATTAGCCGCCTACAAGAGGTCTTTGGTCATGCAATTAAGGCTGCA
TATCCAGATTTGGAAAATCCTCCTCTGCTAGTGACACCAAGTCAGCAGGCCAAGTTTGGGGACTATCAGTGTAAT
AGTGCTATGGGTATTTCTCAGATGCTTAAAACCAAGGAACCGGAAGTTAATCCAGGGGAATTTGCTGAAAACATT
ACCAAACACCTCCCGGCCATGGATGTTTTGAAAAGAGTTGAATTTGCTGGCCCTGGCTTTATTAATGGCCACTTA
AGAAAGGATTTTGTATCAGAACAATTGACCAGTCTTCTAGTGAATGGAGTTCAACTACCTGCTCTGGGAGAGAAT
AAAAAGGTTATAGTTGACTTTTCCTCCCCTAATATAGCTAAAGAGATGCATGTAGGCCACCTGAGGTCAACTATC
ATAGGAGAGAGTATAAGCCGCCTCTTTGAATTTGCAGGGTATGACGTGCTCAGGTTAAATCATGTAGGAGACTGG
GGGACCCAGTTTGGCATGCTCATCGCTCACCTGCAAGACAAATTTCCAGATTATCTAACAGTTTCACCTCCTATT
GGGGATCTTCAGGTCTTTTATAAGGAATCTAAGAAGAGGTTTGATACTGAGGAGGAATTTAAGAAGCGAGCATAT
CAGTGTGTAGTTCTGCTCCAGGGTAAAAACCCAGATATTACAAAAGCTTATCTGCTGATGTCTGATGTCTCCCGC
CAAGAGTTAAATAAAATCTATGATGCATTGGACGTCTCTTTAATAGAGAGAGGGGAATCCTTCTATCAAGATAGG
ATGAATGATATTGTAAAGGAATTTGAAGATAGAGGATTTGTGCAGGTGGATGATGGCAGAAAGATTGTATTTGTC
CCAGGGTGTTCCATACCATTAACCATAGTAAAATCAGATGGAGGTTATACCTATGATACATCTGACCTGGCTGCT
ATTAAACAAAGACTATTTGAGGAAAAAGCAGATATGATTATCTATGTTGTGGACAATGGACAATCTGTGCACTTC
CAGACAATATTTGCTGCTGCTCAAATGATTGGTTGGTATGACCCTAAAGTAACTCGAGTCTTCCATGCTGGATTT
GGTGTGGTGCTAGGGGAAGACAAGAAAAAGTTTAAAACACGTTCGGGTGAAACAGTGCGCCTCATGGATCTTCTG
GGAGAAGGACTAAAACGATCCATGGACAAGTTGAAGGAAAAAGAAAGAGACAAGGTCTTAACTGCAGAGGAATTG
AATGCTGCTCAGACATCCGTTGCATATGGCTGCATCAAATATGCTGACCTTTCCCATAACCGGTTGAATGACTAC
ATCTTCTCCTTTGACAAAATGCTAGATGACAGAGGAAATACAGCTGCTTACTTGTTGTATGCCTTCACTAGAATC
AGGTCTATTGCACGTCTGGCCAATATTGATGAAGAAATGCTCCAAAAAGCTGCTCGAGAAACCAAGATTCTTTTG
GTTCATGAGAAGGAATGGAAACTAGGCCGGTGCATTTTACGGTTCCCTGAGATTCTGCAAAAGATTTTAGATGAC
TTATTTCTCCACACTCTCTGTGATTATATATATGAGCTGGCAACTGCTTTCACAGAGTTCTATGATAGCTGCTAC
TGTGTGGAGAAAGATAGACAGACTGGGAAAATATTGAAGGTGAACATGTGGCGTATCTTGTGTGAAACAGTAGCT
GCTGTCATGGCCAAGGGGTTTGATACCCTGGGGATAAAACCTGGCCCAAGGGTGTAATCCCTCACAGGTTTGAAC
CCTGTGTGTTTTTTCCCAAGTGGCCATTGGCCCTGTTTGCTTTTTTTCAATCTTGTGGGCACAAGCATAAGTTAA
GGAAATTTTTCACCCAGGCA

FIGURE 408

MDVLVSECSARLLQQEEEIKSLTAEIDRLKNCGCLGASSNLEQLQEENLKLKYRLNILRKSLQAERNKPTKNMIN
IISRLQEVFGHAIKAAYPDLENPPLLVTPSQQAKFGDYQCNSAMGISQMLKTKEPEVNPGEFAENITKHLPAMDV
LKRVEFAGPGFINGHLRKDFVSEQLTSLLVNGVQLPALGENKKVIVDFSSPNIAKEMHVGHLRSTIIGESISRLF
EFAGYDVLRLNHVGDWGTQFGMLIAHLQDKFPDYLTVSPPIGDLQVFYKESKKRFDTEEEFKKRAYQCVVLLQGK
NPDITKAYLLMSDVSRQELNKIYDALDVSLIERGESFYQDRMNDIVKEFEDRGFVQVDDGRKIVFVPGCSIPLTI
VKSDGGYTYDTSDLAAIKQRLFEEKADMIIYVVDNGQSVHFQTIFAAAQMIGWYDPKVTRVFHAGFGVVLGEDKK
KFKTRSGETVRLMDLLGEGLKRSMDKLKEKERDKVLTAEELNAAQTSVAYGCIKYADLSHNRLNDYIFSFDKMLD
DRGNTAAYLLYAFTRIRSIARLANIDEEMLQKAARETKILLVHEKEWKLGRCILRFPEILQKILDDLFLHTLCDY
IYELATAFTEFYDSCYCVEKDRQTGKILKVNMWRILCETVAAVMAKGFDTLGIKPGPRV

FIGURE 409

CTTGGCACGAGGGATTGGTCTGTGCTCCTCTCTCGGCTCCTCGCGGCTCGCGGCGGCCGACGGTTCCTGGGACAC
CTGCTTGCTTGGCCCGTCCGGCGGCTCAGGGCTTCTCTGCTGCGCTCCCGGTTCGCTGGACGGGAAGAAGGGCTG
GGCCGTCCCGTCCCGTCCCCATCGGAACCCCAAGTCGCGCCGCTGACCCGTCGCAGGGCGAGATGAGCGCGGACG
CAGCGGCCGGGGCGCCCCTGCCCCGGCTCTGCTGCCTGGAGAAGGGTCCGAACGGCTACGGCTTCCACCTGCACG
GGGAGAAGGGCAAGTTGGGCCAGTACATCCGGCTGGTGGAGCCCGGCTCGCCGGCCGAGAAGGCGGGGCTGCTGG
CGGGGGACCGGCTGGTGGAGGTGAACGGCGAAAACGTGGAGAAGGAGACCCACCAGCAGGTGGTGAGCCGCATCC
GCGCCGCACTCAACGCCGTGCGCCTGCTGGTGGTCGACCCCGAGACGGACGAGCAGCTGCAGAAGCTCGGCGTCC
AGGTCCGAGAGGAGCTGCTGCGCGCCCAGGAAGCGCCGGGGCAGGCCGAGCCGCCGGCCGCCGCCGAGGTGCAGG
GGGCTGGCAACGAAAATGAGCCTCGCGAGGCCGACAAGAGCCACCCGGAGCAGCGCGAGCTTCGGCCTCGGCTCT
GTACCATGAAGAAGGGCCCCAGTGGCTATGGCTTCAACCTGCACAGCGACAAGTCCAAGCCAGGCCAGTTCATCC
GGTCAGTGGACCCAGACTCCCCGGCTGAGGCTTCAGGGCTCCGGGCCCAGGATCGCATTGTGGAGGTGAACGGGG
TCTGCATGGAGGGGAAGCAGCATGGGGACGTGGTGTCCGCCATCAGGGCTGGCGGGGACGAGACCAAGCTGCTGG
TGGTGGACAGGGAAACTGACGAGTTCTTCAAGAAATGCAGAGTGATCCCATCTCAGGAGCACCTGAATGGTCCCC
TGCCTGTGCCCTTCACCAATGGGGAGATACAGAAGGAGAACAGTCGTGAAGCCCTGGCAGAGGCAGCCTTGGAGA
GCCCCAGGCCAGCCCTGGTGAGATCCGCCTCCAGTGACACCAGCGAGGAGCTGAATTCCCAAGACAGCCCCCCAA
AACAGGACTCCACAGCGCCCTCGTCTACCTCCTCCTCCGACCCCATCCTAGACTTCAACATCTCCCTGGCCATGG
CCAAAGAGAGGGCCCACCAGAAACGCAGCAGCAAACGGGCCCCGCAGATGGACTGGAGCAAGAAAAACGAACTCT
TCAGCAACCTCTGAGCGCCCTGCTGCCACCCAGTGACTGGCAGGGCCGAGCCAGCATTCCACCCCACCTTTTTCC
TTCTCCCCAATTACTCCCCTGAATCAATGTACAAATCAGCACCCACATCCCCTTTCTTGACAAATGATTTTTCTA
GAGAACTATGTTCTTCCCTGACTTTAGGGAAGGTGAATGTGTTCCCGTCCTCCCGCAGTCAGAAAGGAGACTCTG
CCTCCCTCCTCCTCACTGAGTGCCTCATCCTACCGGGTGTCCCTTTGCCACCCTGCCTGGGACATCGCTGGAACC
TGCACCATGCCAGGATCATGGGACCAGGCGAGAGGGCACCCTCCCTTCCTCCCCCATGTGATAAATGGGTCCAGG
GCTGATCAAAGAACTCTGACTGCAGAACTGCCGCTCTCAGTGGACAGGGCATCTGTTATCCTGAACCTTGGCAGA
CACGTCTTGTTTTCATTTGATTTTGTTAAGAGTGCAGTATTGCAGAGTCTAGAGGAATTTTTGTTTCCTTGATTA
ACATGATTTTCCTGGTTGTTAATCCAGGGCATGGCAGTGGCCTCAGCCTTAAACTTTTGTTCCTACTCCCACCCT
CAGCGAACTGGGCAGCACGGGGAGGGTTTGGCTACCCCTGCCCATCCCTGAGCCAGGTACCACCATTGTAAGGAA
ACACTTTCAGAAATTCAGCTGGTTCCTCCAAACCAAAAAAAAAAAAAAA

FIGURE 410

MSADAAAGAPLPRLCCLEKGPNGYGFHLHGEKGKLGQYIRLVEPGSPAEKAGLLAGDRLVEVNGENVEKETHQQV
VSRIRAALNAVRLLVVDPETDEQLQKLGVQVREELLRAQEAPGQAEPPAAAEVQGAGNENEPREADKSHPEQREL
RPRLCTMKKGPSGYGFNLHSDKSKPGQFIRSVDPDSPAEASGLRAQDRIVEVNGVCMEGKQHGDVVSAIRAGGDE
TKLLVVDRETDEFFKKCRVIPSQEHLNGPLPVPFTNGEIQKENSREALAEAALESPRPALVRSASSDTSEELNSQ
DSPPKQDSTAPSSTSSSDPILDFNISLAMAKERAHQKRSSKRAPQMDWSKKNELFSNL

FIGURE 411

CGGCCCAACGAGGCGCTGGTGGTTTCAGGGGGCTGTTGTGGTTCCGACTATAAACAGTACGTGTTTGGCGGCTGG
GCCTGGGCCTGGTGGTGTATCTCCGACACTCAGAGGATTTCCCTAGAGATTATGACGTTGCAGCCCCGCTGCGAG
GACGTAGAGACGGCCGAGGGGGTAGCTTTAACTGTGACGGGTGTCGCCCAGGTGAAGATCATGACGGAGAAGGAA
CTCCTGGCCGTGGCTTGTGAGCAGTTTCTGGGTAAGAATGTGCAGGACATCAAAAACGTCGTCCTGCAGACCCTG
GAGGGACATCTGCGCTCCATCCTCGGGACCCTGACAGTGGAGCAGATTTATCAGGACCGGGACCAGTTTGCCAAG
CTGGTGCGGGAGGTGGCAGCCCCTGATGTTGGCCGCATGGGCATTGAGATCCTCAGCTTCACCATCAAGGACGTG
TATGACAAAGTGGACTATCTGAGCTCCCTGGGCAAGACGCAGACTGCCGTGGTGCAGAGAGATGCTGACATTGGC
GTGGCCGAGGCTGAACGGGACGCAGGCATCCGGGAAGCTGAGTGCAAGAAGGAGATGCTGGATGTGAAGTTCATG
GCAGACACCAAGATTGCTGACTCTAAGCGAGCCTTCGAGCTGCAAAAGTCAGCCTTCAGTGAGGAGGTTAACATC
AAGACAGCTGAGGCCCAGTTGGCCTATGAGCTGCAGGGGGCCCGTGAACAGCAGAAGATCCGGCAGGAAGAGATT
GAGATTGAGGTTGTGCAGCGCAAGAAACAGATTGCCGTGGAGGCACAGGAGATCCTGCGTACGGACAAGGAGCTC
ATCGCTACAGTGCGCCGGCCTGCCGAGGCCGAGGCCCACCGCATCCAGCAGATTGCCGAGGGTGAAAAGGTGAAG
CAGGTCCTCTTGGCACAGGCAGAGGCTGAGAAGATCCGCAAAATCGGGGAGGCGGAAGCGGCAGTCATCGAGGCG
ATGGGCAAGGCAGAGGCTGAGCGGATGAAGCTCAAGGCAGAAGCCTACCAGAAATACGGGGATGCAGCCAAGATG
GCCTTGGTGCTAGAGGCCCTGCCCCAGATTGCTGCCAAAATCGCTGCCCCACTTACCAAGGTCGATGAGATTGTG
GTCCTCAGTGGAGACAACAGTAAGGTCACATCAGAAGTGAACCGACTGCTGGCCGAGCTGCCTGCCTCTGTGCAT
GCCCTCACAGGCGTGGACCTGTCTAAGATACCCCTGATCAAGAAGGCCACTGGTGTGCAGGTGTGAGGCTCCTAC
AGGCCCACTCTCTTCAGCAGCCACCCGGCCCTCCCTCCAGCACCCGTTTTAATCCCACAGAACAACGGGAACGTT
ACTGACTCTGGTGCCTTATCTCGAAGGGACCAGAAGTGCTGCGTGTTCAGGCCATCTCTGGCTGTCTTCCTGTCT
CTCCTGTCTGTCCACCTCCTCCTCTTCCTCTCCTTTACCCCACTTTCACTGCCACTTTCATCAGGTTTGTGTCTC
ATCTCCCTGCGTGTCTTTTCCTTTGTCTGTCTTTTTCTTTCCCCCATGCACATCATGTAGATTAAGCTGAAGATG
TTTATTACAATCACTCTCTGTGGGGGGTGGCCCTGCTGCTCCTCAGAATCCTGGTGCCTTGAAGTTCTCTGTGCA
TCTGTCCATCCTCCCTATGGCCCTGGCCAGAGCTCAGCATGGGCAGGGGTTCTGGGTAGGACGGTCACTGTCCTC
TCTCCTGGACTGGTCTTCCCAGCCCTAAACCCTGCCCCAGGAAGCCCACAGCCTCACCTGCTGCTGCCCCTCTAG
GTCTGGGCAGCCATGACCTGCAGGGCCCAGAGACACTGTCCTTCCCCTCATCCACCCAAGGCCCCAGCCAGCGCT
CATACCCTGTCCTTTCTCCCTGACCCCAAGGGCACAGAGGCAAGGCCTCCTGTCTACAGCAGCTTCCTCAGTTTC
CTACTGCCTTAGGAGGCCCCTGCTTGTGCTCAGGGAAGGCCTCTTCATGGGCATGTTCCTGCTGGGGCGGTGCGG
TTTGGTCCCAACTCTGCTAAGTTTTCTGAGATGAGGGTCTAGCCCTGTTGGGGACAGAAAAGTGTGTAGACCTTC
TTCCTGCTAGGGCTGCACTGTCCTGGGTGTTGGGCCCTTCTGGTGGACAAGGCTGTGCCAACCCTGTACAGAATC
GAGTGCTGTAGCCTGGCCAGACCCCAGAGCCCTTGTGCCATCTTTCTTCCTGGCCAGAGTGATGGGGTTCCAGCC
ATGGGGAAGCAACCCAATCCTCTGTCTCCTTGCTCCAATGGAGGCAGAAGAGCCCAGGACCCAAGCGTCTTGGCA
GGGGTGCTGTGAATGTCCAGTGGTCCCAGCTCCCCACCCTGGCCCTGCCCCAGCCTGTGTAGCTCTTCCTGCATG
TGGATGCTGCATGTCTGGTCTGGGGCTTGGATGTTGCACTGCCCCACTGCCTGTCCCTTCTGGTAAAATAAAGAA
CTCTTAATGCCCG

FIGURE 412

MTLQPRCEDVETAEGVALTVTGVAQVKIMTEKELLAVACEQFLGKNVQDIKNVVLQTLEGHLRSILGTLTVEQIY
QDRDQFAKLVREVAAPDVGRMGIEILSFTIKDVYDKVDYLSSLGKTQTAVVQRDADIGVAEAERDAGIREAECKK
EMLDVKFMADTKIADSKRAFELQKSAFSEEVNIKTAEAQLAYELQGAREQQKIRQEEIEIEVVQRKKQIAVEAQE
ILRTDKELIATVRRPAEAEAHRIQQIAEGEKVKQVLLAQAEAEKIRKIGEAEAAVIEAMGKAEAERMKLKAEAYQ
KYGDAAKMALVLEALPQIAAKIAAPLTKVDEIVVLSGDNSKVTSEVNRLLAELPASVHALTGVDLSKIPLIKKAT
GVQV

FIGURE 413

CGCAGCGGGTCCTCTCTATCTAGCTCCAGCCTCTCGCCTGCGCCCCACTCCCCGCGTCCCGCGTCCTAGCCGACC
ATGGCCGGGCCCCTGCGCGCCCCGCTGCTCCTGCTGGCCATCCTGGCCGTGGCCCTGGCCGTGAGCCCCGCGGCC
GGCTCCAGTCCCGGCAAGCCGCCGCGCCTGGTGGGAGGCCCCATGGACGCCAGCGTGGAGGAGGAGGGTGTGCGG
CGTGCACTGGACTTTGCCGTCGGCGAGTACAACAAAGCCAGCAACGACATGTACCACAGCCGCGCGCTGCAGGTG
GTGCGCGCCCGCAAGCAGATCGTAGCTGGGGTGAACTACTTCTTGGACGTGGAGCTGGGCCGAACCACGTGTACC
AAGACCCAGCCCAACTTGGACAACTGCCCCTTCCATGACCAGCCACATCTGAAAAGGAAAGCATTCTGCTCTTTC
CAGATCTACGCTGTGCCTTGGCAGGGCACAATGACCTTGTCGAAATCCACCTGTCAGGACGCCTAGGGTCTGTA
CCGGGCTGGCCTGTGCCTATCACCTCTTATGCACACCTCCCACCCCCTGTATTCCCACCCCTGGACTGGTGGCCC
CTGCCTTGGGGAAGGTCTCCCCATGTGCCTGCACCAGGAGACAGACAGAGAAGGCAGCAGGCGGCCTTTGTTGCT
CAGCAAGGGGCTCTGCCCTCCCTCCTTCCTTCTTGCTTCTCATAGCCCCGGTGTGCGGTGCATACACCCCCACCT
CCTGCAATAAAATAGTAGCATCGGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 414

MAGPLRAPLLLLAILAVALAVSPAAGSSPGKPPRLVGGPMDASVEEEGVRRALDFAVGEYNKASNDMYHSRALQV
VRARKQIVAGVNYFLDVELGRTTCTKTQPNLDNCPFHDQPHLKRKAFCSFQIYAVPWQGTMTLSKSTCQDA

FIGURE 415

GAGTTCCAGCAGTCCGCGAGCTGCCGTCGGCTCCGCGGGGGGGGCGGGCCGGGCACCCCGGGGCGCGGAGGAGCG
CTCCTCGCTTCTCTCCTTCCCCCCTGCCGCACTCCGCCGGACCCTCCCGCCGGCCCGCGCCGCTGCACTCGCCCT
CTCCTCTCGCCCCCCGGCAAACTTTCGGCCCCTCCCCGCCCCTCGCCCGTTATTCGTCGTGGCTCAAGCCCGGCC
ACGCCGCCCCAAGGGCTCCTCCCGACCTCCCGGCCTGCCGCTCCGGCCACTGCGGGATCCAGAAACATGTCGACC
ACACTTCTGTCCGCCTTCTACGATGTCGACTTCTTGTGCAAGACAGAGAAATCCCTGGCCAACCTCAACCTGAAC
AACATGCTGGACAAGAAGGCGGTGGGGACGCCTGTGGCCGCCGCCCCCAGCTCGGGCTTCGCGCCGGGATTCCTC
CGACGGCACTCGGCCAGCAACCTGCATGCACTCGCCCACCCCGCGCCCAGCCCCGGCAGCTGCTCGCCCAAGTTC
CCGGGCGCCGCTAACGGCAGCAGCTGCGGCAGCGCGGCGGCCGGCGGTCCGACCTCCTACGGCACCCTTAAGGAG
CCGTCGGGGGGCGGCGGCACAGCCCTGCTCAACAAGGAGAACAAATTCCGGGACCGCTCGTTTAGCGAGAACGGC
GATCGCAGCCAGCACCTCCTGCACCTGCAGCAGCAGCAGAAGGGGGGCGGCGGCTCCCAGATCAACTCCACGCGC
TACAAGACCGAGCTGTGCCGGCCCTTCGAGGAGAGCGGCACGTGCAAGTACGGCGAAAAGTGCCAGTTCGCGCAT
GGCTTCCACGAGCTGCGCAGCCTGACTCGCCATCCGAAGTACAAGACCGAGCTGTGCCGCACCTTTCATACCATC
GGCTTCTGCCCCTATGGGCCGCGCTGCCACTTCATCCACAACGCGGACGAGCGGCGGCCCGCGCCGTCGGGGGGC
GCCTCCGGGGACCTGCGTGCCTTTGGCACGCGCGATGCGTTGCACCTGGGCTTCCCGCGGGAGCCGCGGCCCAAG
TTGCACCACAGCCTCAGCTTCTCGGGCTTCCCGTCGGGCCACCATCAGCCCCCGGGCGGCCTCGAGTCGCCGCTG
CTGCTCGACAGCCCCACGTCGCGCACGCCGCCGCCGCCCTCCTGCTCTTCGGCCTCGTCCTGCTCCTCCTCCGCC
TCCTCCTGTTCCTCGGCCTCCGCGGCCTCCACGCCCTCGGGCGCCCCGACATGCTGCGCCTCCGCGGCGGCCGCG
GCTGCGGCCGCTCTGCTGTACGGCACCGGGGGCGCCGAGGACCTGCTGGCGCCGGGGGCCCCGTGCGCGGCCTGC
TCGTCGGCCTCGTGCGCCAACAACGCCTTCGCCTTCGGTCCGGAGCTCAGCAGCCTCATCACGCCGCTCGCCATC
CAGACCCACAACTTTGCCGCCGTGGCCGCCGCCGCCTACTACCGCAGTCAGCAGCAGCAGCAGCAGCAGGGCCTG
GCGCCCCCCGCGCAGCCGCCGGCGCCGCCCAGCGCGACCCTCCCCGCCGGGGCCGCCGCACCTCCCTCGCCGCCC
TTCAGCTTCCAGCTGCCGCGCCGCCTGTCCGACTCGCCCGTGTTCGACGCGCCCCCCAGCCCCCCGGACTCGCTG
TCGGACCGCGACAGCTACCTAAGCGGCTCCCTGAGCTCCGGCAGCCTCAGCGGCTCTGAGTCTCCCAGCCTCGAC
CCTGGCCGCCGCCTGCCAATCTTCAGCCGCCTCTCCATCTCCGACGACTGAGGCAAGAGGGCGCCAGTGAGGAGG
AAGGGAAGGCGGTTCAGAGATGTTGGAGGACACCCCTCGCCATCTCGCCCTTGCTGGGGGCACGGGAGTGGGGGG
GGTGACATGGGCCCTAGGCAGACTGCAAGCCCGACCGAGCACTTGGACTCGAACTCTGTGCCGGGAGGGGCCCCC
ACCCCTCCTTTTTCGGTTTCCTCTTGTCTTTTTTTTTTTATTTTTATTACGAAGTTTCATTCTTTTTGAGCAAAA
AAGTCGAACTTTTTCTGTTGAACAAAATATTCACAACAGGGCAGTTGTGATACGAATAGAACAAAAAAAAAAAAA
AAACACTTAAACTTTGTTAGGACTCCGATGAGTTTGGGACTTCAGGAAAAATCAACCCAGCACCAGCAGCTACCA
ACCACCATTCCATCTCTTCACTTGAACAGCATTAGTTAAGTCCAGATGTGGGAACCCTTCTCTTGGAAGAAGTTC
CTAATTGTGTCTCAGACCGGTGTAAACAAACCAGCCAGCCGCCACCTTGCTAAACCTATAAGCTTTTTAAAATCC
AATATATTCTGCCAAGAATATGCCTTGATAGTTAGCCCTCAGCCCATAGGTGTTTTTTGTTTTTTAACAGAATTA
TATATGTCTGGGGGTGAAAAAACCCTTGCATTCCAAAGGTCCATACTGGTTACTTGGTTTCATTGCCACCACTTA
GTGGATGTTCAGTTTAGAACCATTTTGTCTGCTCCCTCTGGAAGCCTTGCGCA

FIGURE 416

MSTTLLSAFYDVDFLCKTEKSLANLNLNNMLDKKAVGTPVAAAPSSGFAPGFLRRHSASNLHALAHPAPSPGSCS
PKFPGAANGSSCGSAAAGGPTSYGTLKEPSGGGGTALLNKENKFRDRSFSENGDRSQHLLHLQQQQKGGGGSQIN
STRYKTELCRPFEESGTCKYGEKCQFAHGFHELRSLTRHPKYKTELCRTFHTIGFCPYGPRCHFIHNADERRPAP
SGGASGDLRAFGTRDALHLGFPREPRPKLHHSLSFSGFPSGHHQPPGGLESPLLLDSPTSRTPPPPSCSSASSCS
SSASSCSSASAASTPSGAPTCCASAAAAAAAAALLYGTGGAEDLLAPGAPCAACSSASCANNAFAFGPELSSLITP
LAIQTHNFAAVAAAAYYRSQQQQQQQGLAPPAQPPAPPSATLPAGAAAPPSPPFSFQLPRRLSDSPVFDAPPSPP
DSLSDRDSYLSGSLSSGSLSGSESPSLDPGRRLPIFSRLSISDD

FIGURE 417A

CAGATTTACGAGGTTCTGTTCTAGTGCCAAAGGCTCTTGGTAGTAAATAGTGAGCAAAATAGATACCTGTCTCCT
GATGGATCTTGCCAGCCCCNTCCNTATTTTTTNTTAAGTTATTTATTAAAACCACACACACCTTGCAAAGAAAAA
GGGAAACTGGCAGTCTCTGTAGAGGAAGCCGGTGGCATCGCTCAGAGCCACAAACTGTATTTCTAAACAGCCCTT
TCCCTGGTTCCCTCTCTCCTGCCCCACTTTTTTTAAAATCCAGACTGTAAAAAACACATCTACTGACACTCACTT
TACTTTAAAAAAAGAAGAGAAAAAGTAAAGCGTTACAAGACTTTCCTCCTGGAAACTATAAACTGAAAAAAAAAT
CCATAAAAGATTAAATCCTGGCGGGTTGTGGGGTGGCGGGGGCCGGCGGGGAGGGGGCGCGGAGTGGAGATTGGC
TCTCTGAGGTGGTCAGGGGCCCTGTGACAGCTTGGGACTTTCAGCACCTGGTTTGGGGTCATTTATCTGCTCAAC
TGTCAGGACCCCCCACCCCCAAACCCCAGCCACCAACACAACCATCGTAGAAGGGAACACAACACAGAGGGTCTT
TTTTCATTTTTTTAAAAAATCGGTTTGGTTGTGTTTTTGTTTTCCATGGGGGAGCTTTAAAACTCATTATTGCAA
CACTAGTTCCATTTTTCGCCAGGGTTCCAATAACACGGCATCATAAAGGCAACGCAACCCACAGTTCTCAAGACA
TTTACCACGGTCACTACATCCGGCAGCGGGGTGGCCCCTAGCTCCTGCTGCCCCCCCGCCCTTTCTCCCCGCCCG
CCCCCGGAGCTCAGCCGATTTCTGAGGCTCCAACTCTACCCACTCCCTCCCCGGGCCGCCGCCGCCGCGCCTTCC
CCCATTCTTACTCCCTCGAGGAGAGCCACAGGTTGCAAATCCAACCAACCTCGCAATCTATTTTTGCAAAATCAC
TCACAAAGATCTCCCTTTCGCGCCCGCGCCCGCTCCTCCCGCGCCGGGTCCCCTCAGCCACGGCCACAAAGTGCC
CTTCTCTCCTCCTGAGTCTTGCACATAAGGAACGCGGGCTGGGGCTCTGTTCGTCTTTCTCCTCGCCCAAGGTAA
GGACCTCGGGAATCTGAAGCCTGGCGTCCACTACGCTCAGGCCCGCAGTTCCCTTTTTACAGAGCTTGCACCATG
GGAAAAAATAAAATAAAATTTAGGAAAGGGAGGCAACAGCCATTGGGAGCCAACACAGAGTCACGCAGCGCCCAA
AATACAAACACCGCAGCGGCCAGAAATCCCGCCACCTTTCTCGTTCTCCCAGGCTGTCCTGTCGAGGTTCCCTGA
GTCCCCCCGCACACTGAAAGGCATCGCAGGTGCAGTGCGCACCCCTTTCCCACCCACCCCAAGAAGCCCTGTCCC
GCCATCAGTCTCTCTCCTCGGGATGAGCAGGGAGAGCGCGCGGAGGTTCCCGACTCCCTCGACTACAACCAAGAA
AGAATAATTTTCAAAGTGTTCAACATCCCCGCCCCCAAGCTCCCCAAAACACAGGGGCAGGGAACACCAAAACAC
TCGGCTCTCGTTAGGAAGATCACGGCTCTGAAAGGAAATAGTAGACACGATACTTCATCTCATCTGGATTTATGA
CCAAAAAAACAAAAACAAAAACCCAAAGAGTTCGCTTGCATTTTTTCCTTCCAAATCTCGGTTCGGCTCGAAGGC
AGGGAATCTAAAAGACCGAGGCCG**ATG**GAAGAGAGCCAGCGGGGCGAGCGAGCGGGCAGCCTCCCTTTTTGCCTC
CCGGAGTCACCCGTTATTCGTCGTGGCTCAAGCCCGGCCACGCCGCCCCAAGGGCTCCTCCCGACCTCCCGGCCT
GCCGCTCCGGCCACTGCGGGATCCAGAAACATGTCGACCACACTTCTGTCCGCCTTCTACGATGTCGACTTCTTG
TGCAAGACAGAGAAATCCCTGGCCAACCTCAACCTGAACAACATGCTGGACAAGAAGGCGGTGGGGACGCCTGTG
GCCGCCGCCCCCAGCTCGGGCTTCGCGCCGGGATTCCTCCGACGGCACTCGGCCAGCAACCTGCATGCACTCGCC
CACCCCGCGCCCAGCCCCGGCAGCTGCTCGCCCAAGTTCCCGGGCGCCGCTAACGGCAGCAGCTGCGGCAGCGCG
GCGGCCGGCGGTCCGACCTCCTACGGCACCCTTAAGGAGCCGTCGGGGGGCGGCGGCACAGCCCTGCTCAACAAG
GAGAACAAATTCCGGGACCGCTCGTTTAGCGAGAACGGCGATCGCAGCCAGCACCTCCTGCACCTGCAGCAGCAG
CAGAAGGGGGGCGGCGGCTCCCAGATCAACTCCACGCGCTACAAGACCGAGCTGTGCCGGCCCTTCGAGGAGAGC
GGCACGTGCAAGTACGGCGAAAAGTGCCAGTTCGCGCATGGCTTCCACGAGCTGCGCAGCCTGACTCGCCATCCG
AAGTACAAGACCGAGCTGTGCCGCACCTTTCATACCATCGGCTTCTGCCCCTATGGGCCGCGCTGCCACTTCATC
CACAACGCGGACGAGCGGCGGCCCGCGCCGTCGGGGGGCGCCTCCGGGGACCTGCGTGCCTTTGGCACGCGCGAT
GCGTTGCACCTGGGCTTCCCGCGGGAGCCGCGGCCCAAGTTGCACCACAGCCTCAGCTTCTCGGGCTTCCCGTCG
GGCCACCATCAGCCCCCGGGCGGCCTCGAGTCGCCGCTGCTGCTCGACAGCCCCACGTCGCGCACGCCGCCGCCG
CCCTCCTGCTCTTCGGCCTCGTCCTGCTCCTCCTCCGCCTCCTCCTGTTCCTCGGCCTCCGCGGCCTCCACGCCC
TCGGGCGCCCCGACATGCTGCGCCTCCGCGGCGGCCGCGGCTGCGGCCGCTCTGCTGTACGGCACCGGGGGCGCC
GAGGACCTGCTGGCGCCGGGGGCCCCGTGCGCGGCCTGCTCGTCGGCCTCGTGCGCCAACAACGCCTTCGCCTTC
GGTCCGGAGCTCAGCAGCCTCATCACGCCGCTCGCCATCCAGACCCACAACTTTGCCGCCGTGGCCGCCGCCGCC
TACTACCGCAGTCAGCAGCAGCAGCAGCAGCAGGGCCTGGCGCCCCCCGCGCAGCCGCCGGCGCCGCCCAGCGCG
ACCCTCCCCGCCGGGGCCGCCGCACCTCCCTCGCCGCCCTTCAGCTTCCAGCTGCCGCGCCGCCTGTCCGACTCG
CCCGTGTTCGACGCGCCCCCCAGCCCCCCGGACTCGCTGTCGGACCGCGACAGCTACCTAAGCGGCTCCCTGAGC
TCCGGCAGCCTCAGCGGCTCTGAGTCTCCCAGCCTCGACCCTGGCCGCCGCCTGCCAATCTTCAGCCGCCTCTCC
ATCTCCGACGAC**TGA**GGCAAGAGGGCGCCAGTGAGGAGGAAGGGAAGGCGGTTCAGAGATGTTGGAGGACACCCC
TCGCCATCTCGCCCTTGCTGGGGGCACGGGAGTGGGGGGGGTGACATGGGCCCTAGGCAGACTGCAAGCCCGACC
GAGCACTTGGACTCGAACTCTGTGCCGGGAGGGGCCCCCACCCCTCCTTTTTCGGTTTCCTCTTGTCTCTTTTTT

FIGURE 417B

TTTATTTTTATTACGAAGTTTCATTCTTTTTGAGCAAAAAAGTCGAACTTTTTCTGTTGAACAAAATATTCACAA
CAGGGCAGTTGTGATACGAATAGAACAAAAAAGAAAAAAAAAACACTTAAACTTTGTTAGGACTCCGATGAGTTT
GGGACTTCAGGAAAAATCAACCCAGCACCAGCAGCTACCAACCACCATTCCATCTCTTCACTTGAACAGCATTAG
TTAAGTCCAGATGTGGGAACCCTTCTCTTGGAAGAAGTTCCTAATTGTGTCTCAGACCGGTGTAAACAAACCAGC
CAGCCGCCACCTTGCTAAACCTATAAGCTTTTTAAAATCCAATATATTCTGCCAAGAATATGCCTTGATAGTTAG
CCCTCAGCCCATAGGTGTTTTTTGTTTTTTAACAGAATTATATATGTCTGGGGGGTGAAAAAACCCTTGCATTCCA
AAGGTCCATACTGGTTACTTGGTTTCATTGCCACCACTTAGTGGATGTTCAGTTTAGAACCATTTTGTCTGCTCC
CTCTGGAAGCCTTGCGCAGAGCTTACTTTGTAATTGTTGGAGAATAACTGCTGAATTTTTAGCTGTTTTGAGTTG
ATTCGCACCACTGCACCACAACTCAATATGAAAACTATTTAACTTATTTATTATCTTGTGAAAAGTATACAATGA
AAATTTTGTTCATACTGTATTTATCAAGTATGATGAAAAGCAATAGATATATATTCTTTTATTATGTTAAATTAT
GATTGCCATTATTAATCGGCAAAATGTGGAGTGTATGTTCTTTTCACAGTAATATATGCCTTTTGTAACTTCACT
TGGTTATTTTATTGTAAATGAGTACAAAATTCTTAATTTAAGAGATTGTATGTAATATTTATTTCATTAATTTCT
TTCCTTGTTTACGTAAATTTTGAAAGATTGCATGATTTCTTGACAGAAATCGATCTTGATGCTGTGGAAGTAGTT
TGAGGAACATCCTATGAGTTTTCTTAGAATGTATAAAGGTTGTAGCCCATCCAACTTCAAAGAAAAAAATGACCA
CATACTTTGCAATCAGGCTGAAATGTGGCATGCTTTTCTAATTCCAACTTTATAAACTAGCAAAAAAGTGTTTGC
TTATTCCACCAGTTCTACTGTGACATACTCGAGTATAAAGACATGTAGCAATAACGGGGAGTGGGGGGGGAGTCT
CACAGTGCCTTTGGAAGGGCCCGAACTTGCCTTAAATCTTCCTCAACCAAATAAGTATTTTATTAGTGCTTGAGA
GAATCTGAATGTAGGATGGGTTCAACTGCACAAAAGGAAAAGATTTTTACCACTTTTTTTATATAGATATAAAGT
GAAGCAACCGCCTTAGTGCTGAAATATGTAGTACATGAATATGCCTTGTTTAATTACAGAAAATTCCAAAACTTG
TACTATTTTTTTTTTCCATGTAGAAAGGCAGGAATGTCTCCTAAGCTTTCCTGGACAGCAGATGAATGAGCGGTA
GCTTTAGTTTGTACGTAGGTACAGTTGGAGCACTATATGTACTCTCTGGACTACTTTGGACAGAAGTAGGTTTTT
GAATGTAACAAGATAAGTCAACTTGAGTTGTAATATATTTTGGGGAATCAGCTCACTACAAATTGTGACTGTAAA
CATTGTACTGTAAATGTTTTGTAGTTTTCCCCCAATAAAATTTTTGGGAAAAAAAGGTATTAACATGTAAGAGCT
TTCTTTTTAAACAGGAATGTCTTAGCTTTCTAGCTTCCCAGCTAACCATGTCTGCCATTCCCCAGGTCTTGGCAT
GGTGGGGGAGGACTTGGAGAGCTGGCAGAGCCAGAGTTCAGAAGAGCCTGCGTCCTCTCAGCCCGTATATATTTT
ATAAGCAAGTTCTTCTAATGAAAGAAAGTAATTATTTGGACTGTCAAGGGCATTAGTT

FIGURE 418

MEESQRGERAGSLPFCLPESPVIRRGSSPATPPQGLLPTSRPAAPATAGSRNMSTTLLSAFYDVDFLCKTEKSLA
NLNLNNMLDKKAVGTPVAAAPSSGFAPGFLRRHSASNLHALAHPAPSPGSCSPKFPGAANGSSCGSAAAGGPTSY
GTLKEPSGGGGTALLNKENKFRDRSFSENGDRSQHLLHLQQQQKGGGGSQINSTRYKTELCRPFEESGTCKYGEK
CQFAHGFHELRSLTRHPKYKTELCRTFHTIGFCPYGPRCHFIHNADERRPAPSGGASGDLRAFGTRDALHLGFPR
EPRPKLHHSLSFSGFPSGHHQPPGGLESPLLLDSPTSRTPPPPSCSSASSCSSSASSCSSASAASTPSGAPTCCA
SAAAAAAAALLYGTGGAEDLLAPGAPCAACSSASCANNAFAFGPELSSLITPLAIQTHNFAAVAAAAYYRSQQQQ
QQQGLAPPAQPPAPPSATLPAGAAAPPSPPFSFQLPRRLSDSPVFDAPPSPPDSLSDRDSYLSGSLSSGSLSGSE
SPSLDPGRRLPIFSRLSISDD

FIGURE 419

GAGTTCCAGCAGTCCGCGAGCTGCCGTCGGCTCCGCGGGGGGGGCGGGCCGGGCACCCCGGGGCGCGGAGGAGCG
CTCCTCGCTTCTCTCCTTCCCCCCTGCCGCACTCCGCCGGACCCTCCCGCCGGCCCGCGCCGCTGCACTCGCCCT
CTCCTCTCGCCCCCCGGCAAACTTTCGGCCCCTCCCCGCCCCTCGCCCGTTATTCGTCGTGGCTCAAGCCCGGCC
ACGCCGCCCCAAGGGCTCCTCCCGACCTCCCGGCCTGCCGCTCCGGCCACTGCGGGATCCAGAAACATGTCGACC
ACACTTCTGTCCGCCTTCTACGATGTCGACTTCTTGTGCAAGACAGAGAAATCCCTGGCCAACCTCAACCTGAAC
AACATGCTGGACAAGAAGGCGGTGGGGACGCCTGTGGCCGCCGCCCCCAGCTCGGGCTTCGCGCCGGGATTCCTC
CGACGGCACTCGGCCAGCAACCTGCATGCACTCGCCCACCCCGCGCCCAGCCCCGGCAGCTGCTCGCCCAAGTTC
CCGGGCGCCGCTAACGGCAGCAGCTGCGGCAGCGCGGCGGCCGGCGGTCCGACCTCCTACGGCACCCTTAAGGAG
CCGTCGGGGGGCGGCGGCACAGCCCTGCTCAACAAGGAGAACAAATTCCGGGACCGCTCGTTTAGCGAGAACGGC
GATCGCAGCCAGCACCTCCTGCACCTGCAGCAGCAGCAGAAGGGGGGCGGCGGCTCCCAGATCAACTCCACGCGC
TACAAGACCGAGCTGTGCCGGCCCTTCGAGGAGAGCGGCACGTGCAAGTACGGCGAAAAGTGCCAGTTCGCGCAT
GGCTTCCACGAGCTGCGCAGCCTGACTCGCCATCCGAAGTACAAGACCGAGCTGTGCCGCACCTTTCATACCATC
GGCTTCTGCCCCTATGGGCCGCGCTGCCACTTCATCCACAACGCGGACGAGCGGCGGCCCGCGCCGTCGGGGGGC
GCCTCCGGGGACCTGCGTGCCTTTGGCACGCGCGATGCGTTGCACCTGGGCTTCCCGCGGGAGCCGCGGCCCAAG
TTGCACCACAGCCTCAGCTTCTCGGGCTTCCCGTCGGGCCACCATCAGCCCCCGGGCGGCCTCGAGTCGCCGCTG
CTGCTCGACAGCCCCACGTCGCGCACGCCGCCGCCGCCCTCCTGCTCTTCGGCCTCGTCCTGCTCCTCCTCCGCC
TCCTCCTGTTCCTCGGCCTCCGCGGCCTCCACGCCCTCGGGCGCCCCGACATGCTGCGCCTCCGCGGCGGCCGCG
GCTGCGGCCGCTCTGCTGTACGGCACCGGGGGCGCCGAGGACCTGCTGGCGCCGGGGGCCCCGTGCGCGGCCTGC
TCGTCGGCCTCGTGCGCCAACAACGCCTTCGCCTTCGGTCCGGAGCTCAGCAGCCTCATCACGCCGCTCGCCATC
CAGACCCACAACTTTGCCGCCGTGGCCGCCGCCGCCTACTACCGCAGTCAGCAGCAGCAGCAGCAGCAGGGCCTG
GCGCCCCCCGCGCAGCCGCCGGCGCCGCCCAGCGCGACCCTCCCCGCCGGGGCCGCCGCACCTCCCTCGCCGCCC
TTCAGCTTCCAGCTGCCGCGCCGCCTGTCCGACTCGCCCGTGTTCGACGCGCCCCCCAGCCCCCCGGACTCGCTG
TCGGACCGCGACAGCTACCTAAGCGGCTCCCTGAGCTCCGGCAGCCTCAGCGGCTCTGAGTCTCCCAGCCTCGAC
CCTGGCCGCCGCCTGCCAATCTTCAGCCGCCTCTCCATCTCCGACGACTGAGGCAAGAGGGCGCCAGTGAGGAGG
AAGGGAAGGCGGTTCAGAGATGTTGGAGGACACCCCTCGCCATCTCGCCCTTGCTGGGGGCACGGGAGTGGGGGG
GGTGACATGGGCCCTAGGCAGACTGCAAGCCCGACCGAGCACTTGGACTCGAACTCTGTGCCGGGAGGGGCCCCC
ACCCCTCCTTTTTCGGTTTCCTCTTGTCTTTTTTTTTTTATTTTTATTACGAAGTTTCATTCTTTTTGAGCAAAA
AAGTCGAACTTTTTCTGTTGAACAAAATATTCACAACAGGGCAGTTGTGATACGAATAGAACAAAAAAAAAAAAA
AAACACTTAAACTTTGTTAGGACTCCGATGAGTTTGGGACTTCAGGAAAAATCAACCCAGCACCAGCAGCTACCA
ACCACCATTCCATCTCTTCACTTGAACAGCATTAGTTAAGTCCAGATGTGGGAACCCTTCTCTTGGAAGAAGTTC
CTAATTGTGTCTCAGACCGGTGTAAACAAACCAGCCAGCCGCCACCTTGCTAAACCTATAAGCTTTTTAAAATCC
AATATATTCTGCCAAGAATATGCCTTGATAGTTAGCCCTCAGCCCATAGGTGTTTTTTGTTTTTTAACAGAATTA
TATATGTCTGGGGGTGAAAAAACCCTTGCATTCCAAAGGTCCATACTGGTTACTTGGTTTCATTGCCACCACTTA
GTGGATGTTCAGTTTAGAACCATTTTGTCTGCTCCCTCTGGAAGCCTTGCGCA

FIGURE 420

MSTTLLSAFYDVDFLCKTEKSLANLNLNNMLDKKAVGTPVAAAPSSGFAPGFLRRHSASNLHALAHPAPSPGSCS
PKFPGAANGSSCGSAAAGGPTSYGTLKEPSGGGGTALLNKENKFRDRSFSENGDRSQHLLHLQQQQKGGGGSQIN
STRYKTELCRPFEESGTCKYGEKCQFAHGFHELRSLTRHPKYKTELCRTFHTIGFCPYGPRCHFIHNADERRPAP
SGGASGDLRAFGTRDALHLGFPREPRPKLHHSLSFSGFPSGHHQPPGGLESPLLLDSPTSRTPPPPSCSSASSCS
SSASSCSSASAASTPSGAPTCCASAAAAAAAAALLYGTGGAEDLLAPGAPCAACSSASCANNAFAFGPELSSLITP
LAIQTHNFAAVAAAAYYRSQQQQQQQGLAPPAQPPAPPSATLPAGAAAPPSPPFSFQLPRRLSDSPVFDAPPSPP
DSLSDRDSYLSGSLSSGSLSGSESPSLDPGRRLPIFSRLSISDD

FIGURE 421A

CGCCCGGGCAGGTGGCGGCAGAGCTGAAGTGAGCGGAGCCACCAGGAGGCCATGTCGGGTGAGGACGCTGAGGTC
CGGGCAGTCTCTGAAGATGTCTCCAATGGAAGCAGTGGCTCGCCCAGCCCTGGGGACACACTGCCCTGGAACCTT
GGGAAAACGCAGCGGAGCCGGCGCAGCGGGGGTGGCGCTGGGAGCAACGGGAGTGTCCTGGACCCAGCTGAGCGG
GCGGTCATTCGCATCGCAGATGAGCGGGATCGTGTGCAGAAGAAAACCTTCACCAAGTGGGTCAACAAGCACCTC
ATCAAGGCCCAGAGGCACATCAGTGACCTGTATGAAGACCTCCGCGATGGCCACAACCTCATCTCCCTGCTGGAG
GTCCTCTCGGGGGACAGCCTGCCCCGGGAGAAGGGGAGGATGCGTTTCCACAAGCTGCAGAATGTCCAGATTGCC
CTGGACTACCTCCGGCACCGCCAGGTGAAGCTGGTGAACATCAGGGATGATGACATCGCTGACGGCAACCCCAAG
CTGACCCTTGGCCTCATCTGGACAATCATTCTGCACTTCCAGATCTCAGATATCCAGGTGAGTGGGCAGTCGGAG
GACATGACGGCCAAGGAGAAGCTGCTGCTGTGGTCGCAGCGAATGGTGGAGGGGTACCAGGGCCTGCGATGCGAC
AACTTCACCTCCAGCTGGAGAGACGGCCGCCTCTTCAATGCCATCATCCACCGGCACAAGCCCCTGCTCATCGAC
ATGAACAAGGTGTACCGGCAGACCAACCTGGAGAACCTGGACCAGGCCTTCTCTGTGGCGGAGCGGGACCTGGGA
GTGACGCGGCTCCTGGACCCTGAGGACGTGGATGTCCCTCAGCCCGACGAGAAGTCCATCATCACCTACGTCTCG
TCGCTGTATGACGCCATGCCCCGCGTGCCGGACGTGCAGGATGGGGTGAGGGCCAACGAGCTGCAGCTGCGCTGG
CAGGAGTACCGGCAGCTGGTGCTGCTGCTGCTTCAGTGGATGCGACACCACACGGCCGCCTTTGAGGAACGCAGG
TTCCCCTCCAGCTTCGAGGAGATTGAGATCCTGTGGTCTCAGTTCCTGAAGTTTAAGGAGATGGAGCTACCAGCC
AAGGAGGCCGACAAGAACAGGTCCAAGGGCATCTACCAATCCCTGGAGGGAGCGGTGCAAGCAGGCCAGCTCAAG
GTGCCCCCTGGCTACCACCCGCTGGATGTGGAGAAGGAGTGGGGCAAGCTGCACGTGGCCATCCTGGAGCGGGAG
AAGCAGCTCCGCAGCGAGTTTGAGAGGCTGGAGTGTCTTCAGCGCATCGTGACCAAGCTGCAGATGGAGGCGGGG
CTGTGTGAGGAGCAGCTGAACCAGGCCGACGCCCTGCTGCAGTCGGATGTCCGGCTGCTGGCTGCAGGCAAAGTG
CCACAGCGGGCGGGGGAGGTGGAACGGGACTTGGACAAGGCGGATAGCATGATCCGGCTGCTCTTCAACGACGTG
CAGACCCTCAAGGATGGACGGCACCCGCAGGGCGAGCAGATGTACCGCAGGGTGTACCGTCTGCACGAGCGCCTG
GTAGCCATCCGCACCGAGTACAACCTACGGCTGAAGGCAGGCGTGGCGGCCCCTGCAACCCAGGTGGCCCAGGTG
ACTCTGCAGAGTGTGCAGAGGCGCCCCGAGCTGGAGGACTCCACTCTGCGCTACCTGCAGGACCTGCTGGCCTGG
GTGGAGGAGAACCAGCACCGTGTGGATGGCGCTGAGTGGGGTGTGGACCTGCCCAGCGTGGAGGCGCAGCTGGGC
AGCCACCGAGGCCTGCACCAGTCCATCGAAGAATTCCGGGCCAAGATCGAGCGGGCACGGAGTGACGAGGGCCAG
CTCTCCCCCGCCACCCGGGGTGCCTACCGTGACTGCCTGGGTCGGCTGGACCTGCAGTACGCCAAGCTGCTGAAC
TCCTCCAAGGCCCGCCTCAGGTCCCTGGAGAGCTTGCACAGCTTTGTGGCAGCCGCCACTAAGGAGCTAATGTGG
CTGAATGAGAAGGAGGAGGAGGAGGTGGGCTTCGACTGGAGCGACCGCAACACCAACATGACCGCCAAGAAGGAG
AGCTACTCGGCGCTGATGCGGGAGCTGGAGCTGAAGGAGAAGAAGATCAAGGAGCTCCAAAATGCTGGGGACCGG
CTGCTGCGGGAGGACCACCCGGCCCGGCCCACGGTGGAGTCCTTCCAGGCGGCCCTGCAGACGCAGTGGAGCTGG
ATGCTACAGCTGTGCTGCTGTATCGAGGCACACCTGAAGGAGAACGCTGCCTACTTTCAGTTCTTCTCAGATGTG
CGGGAGGCCGAGGGGCAGTTGCAGAAGCTGCAGGAGGCACTGCGTAGGAAATACAGTTGTGATCGCTCCGCCACC
GTCACCCGGCTGGAGGACCTGCTGCAGGATGCCCAGGACGAGAAGGAACAGCTGAACGAGTACAAGGGCCACCTC
TCAGGCCTGGCCAAGCGGGCCAAGGCCGTCGTGCAGCTGAAGCCCCGCCACCCAGCCCACCCCATGCGGGGCCGC
CTGCCCCTGCTGGCCGTGTGCGACTATAAGCAGGTGGAGGTGACTGTGCACAAGGGTGACGAGTGCCAGCTGGTG
GGCCCTGCACAGCCGTCCCACTGGAAGGTGCTCAGCAGCTCCGGCAGCGAGGCCGCCGTGCCCTCCGTGTGCTTC
CTGGTGCCCCCGCCCAACCAGGAGGCCCAGGAGGCCGTCACCAGGCTGGAGGCCCAGCACCAGGCCCTGGTCACG
CTGTGGCACCAGTTGCACGTGGACATGAAGAGCCTTCTGGCCTGGCAGAGCCTTCGCCGCGACGTGCAGCTCATC
CGCTCGTGGTCCCTGGCCACGTTCCGCACCCTGAAGCCAGAGGAGCAGCGCCAAGCCCTGCACAGCCTGGAGCTG
CACTACCAGGCCTTCCTGCGGGACAGCCAGGACGCGGGCGGCTTCGGACCCGAGGACCGGCTGATGGCTGAGCGC
GAGTACGGCTCCTGCAGCCACCACTACCAGCAGCTGCTGCAGAGCCTGGAACAGGGTGCACAGGAAGAGTCTCGC
TGCCAGCGCTGCATCTCCGAGCTCAAAGACATCCGGCTGCAGCTGGAGGCCTGTGAGACGCGCACCGTGCACCGC
CTGCGGCTGCCGCTGGACAAAGAGCCGGCACGGGAGTGTGCCCAGCGCATCGCCGAGCAGCAGAAGGCACAGGCA
GAGGTGGAGGGGCTGGGCAAGGGGGTCGCCCGGCTCTCTGCCGAGGCCGAGAAGGTCTTGGCCCTACCAGAGCCA
TCGCCTGCGGCCCCCACGCTGCGCTCGGAGCTGGAGCTGACGCTGGGCAAGCTGGAGCAGGTCCGCAGCCTGTCT
GCCATCTACCTGGAGAAGCTCAAGACCATCAGCCTGGTGATCCGCGGCACGCAGGGGGCCGAGGAGGTGCTCAGG
GCCCACGAGGAGCAGCTCAAGGAGGCCCAGGCCGTGCCGGCCACCCTCCCGGAGCTCGAGGCCACCAAGGCCTCT
CTGAAGAAGCTGCGGGCCCAGGCCGAGGCACAGCAGCCCACGTTCGACGCCCTGCGGGATGAGCTGCGGGGGGCA

FIGURE 421B

CAGGAGGTGGGGGAGCGACTGCAGCAGCGGCACGGGGAGCGGGACTTGGAGGTGGAGCGCTGGCGGGAGCGGGTC
GCCCAGGTGCTTGAGCGCTGGCAGGCTGTGCTGGCCCAGACCGACTTGCGGCAGCGCGAGCTCGAGCAACTGGGC
CGCCAGCTGCGTTACTACCGCGAGAGTGCAGACCCCTTGGGCGCCTGGCTGCAGGACGCCAGGCGGCGGCAGGAG
CAGATCCAGGCCATGCCGCTGGCCGACAGCCAGGCTGTGCGGGAGCAGCTGCGGCAGGAGCAGGCCCTGCTGGAG
GAGATCGAGCGCCACGGCGAGAAGGTCGAGGAGTGCCAGAGGTTTGCGAAACAGTACATCAACGCCATCAAGGAC
TATGAACTCCAGCTGGTGACGTACAAGGCGCAGCTTGAGCCGGTGGCCTCCCCGGCCAAGAAGCCCAAGGTCCAG
TCGGGATCAGAGAGTGTCATCCAGGAGTACGTGGACCTGCGTACGCACTACAGCGAGCTGACCACACTGACGAGC
CAGTACATCAAGTTCATCAGCGAGACTCTGCGGCGCATGGAGGAGGAGGAGAGGCTGGCTGAGCAGCAGCGGGCA
GAGGAGCGCGAGCGGCTGGCCGAGGTGGAGGCCGCGCTGGAGAAGCAGCGGCAGCTGGCCGAGGCGCACGCCCAG
GCAAAGGCACAGGCGGAGCGGGAGGCGAAGGAGCTGCAGCAGCGCATGCAGGAGGAGGTGGTGCGGCGGGAGGAG
GCGGCGGTGGACGCGCAGCAGCAGAAGCGCAGCATTCAGGAGGAGCTGCAGCAGCTGCGGCAGAGCTCGGAGGCG
GAGATCCAGGCCAAGGCCCGGCAGGCAGAGGCGGCTGAGCGCAGCCGGCTGCGCATCGAGGAGGAGATCCGCGTG
GTGCGCCTGCAGTTGGAGGCCACCGAGCGCCAGCGTGGCGGGGCTGAGGGGGAGCTGCAGGCACTGCGTGCACGG
GCGGAGGAGGCTGAGGCACAAAAGCGACAGGCGCAGGAGGAGGCCGAGCGCTTGCGGAGGCAGGTGCAGGACGAG
AGCCAGCGTAAGCGGCAGGCGGAGGTGGAGCTGGCCTCGCGCGTGAAGGCCGAGACCGAGGCGGCGCGCGAGAAG
CAGCGGGCCCTGCAGGCCCTGGAGGAGCTGCGGCTGCAGGCGGAGGAGGCGGAGCGGCGCCTGCGGCAGGCCGAG
GTGGAGCGAGCGCGGCAGGTACAGGTGGCCCTGGAGACGGCGCAGCGCAGTGCAGAGGCGGAGCTGCAGAGCAAA
CGCGCCTCCTTCGCCGAGAAGACGGCACAGCTGGAGCGCTCCCTGCAGGAGGAACACGTGGCTGTGGCACAGCTG
CGGGAGGAGGCTGAGCGGCGGGCACAGCAGCAGGCCGAGGCCGAGCGGGCGCGCGAGGAGGCAGAGCGGGAGCTG
GAGCGCTGGCAGCTCAAGGCCAACGAGGCGCTACGGCTGCGGCTGCAGGCGGAGGAGGTGGCGCAGCAGAAGAGC
CTGGCGCAGGCCGAGGCTGAGAAGCAGAAGGAGGAGGCGGAGCGCGAGGCGCGGCGGCGCGGCAAGGCGGAGGAG
CAGGCCGTCCGGCAGCGGGAGCTGGCTGAACAAGAGCTGGAGAAGCAGCGGCAGCTGGCGGAAGGCACCGCGCAG
CAGCGCCTGGCCGCGGAGCAGGAGTTGATCCGGCTGCGGGCCGAGACGGAGCAGGGGGAGCAGCAGCGGCAGCTG
CTGGAGGAGGAGCTGGCCCGGCTGCAGCGTGAGGCGGCTGCAGCCACGCAGAAACGGCAGGAGCTGGAAGCCGAG
CTGGCCAAGGTGCGGGCCGAGATGGAGGTGCTGCTGGCCAGCAAGGCGAGGGCTGAGGAGGAGTCGCGCTCCACC
AGCGAGAAGTCCAAGCAGAGGCTGGAGGCCGAGGCCGGCCGGTTCCGCGAGCTGGCCGAGGAGGCCGCCCGCCTG
CGTGCCCTGGCGGAAGAGGCCAAGCGGCAGCGGCAGCTGGCCGAGGAAGACGCGGCGCGGCAGCGGGCCGAGGCG
GAGCGGGTGCTTGCGGAGAAGCTGGCCGCCATCGGCGAGGCCACGCGGCTCAAGACGGAGGCGGAGATCGCGCTC
AAGGAGAAGGAGGCGGAGAACGAGCGCCTGCGGCGGCTGGCGGAGGACGAGGCCTTCCAGCGGCGGCGGCTGGAG
GAGCAGGCCGCGCAACACAAGGCTGACATCGAGGAGCGCCTGGCCCAGCTGCGCAAGGCATCGGACAGCGAGCTG
GAGCGGCAGAAGGGGCTGGTGGAGGACACGCTGAGGCAGCGGCGGCAGGTGGAGGAAGAGATCCTGGCGCTGAAG
GCGAGCTTCGAGAAGGCGGCCGCTGGCAAGGCGGAGCTGGAGCTGGAGCTGGGACGCATCCGCAGCAACGCGGAG
GACACGCTGCGCAGCAAGGAGCAGGCCGAGCTGGAGGCCGCGAGGCAGCGGCAGCTGGCGGCGGAGGAGGAGCGG
CGGCGCCGTGAGGCTGAGGAGCGCGTGCAGAAGAGCCTGGCGGCCGAGGAGGAGGCCGCACGGCAGCGGAAGGCG
GCGCTGGAGGAAGTCGAGCGGCTGAAAGCCAACGTGGAGGAGGCGCGGCGCCTGCGGGAGCGAGCGGAGCAGGAG
TCGGCGCGGCAGCTGCAGCTGGCCCAGGAGGCCGCCCAGAAGCGGCTGCAGGCGGAAGAGAAGGCACACGCCTTC
GCGGTGCAGCAGAAGGAGCAGGAGCTACAGCAGACGCTGCAGCAGGAGCAGAGCGTGCTGGACCAGCTGCGCGGC
GAGGCGGAGGCGGCCCGGCGGGCGGCTGAGGAGGCGGAGGAGGCCCGGGTGCAGGCGGAGCGTGAGGCGGCGCAG
GCCCGGCGGCAGGTGGAAGAGGCCGAGCGGCTGAAGCAGTCGGCAGAGGAGCAGGCACAGGCCCGGGCTCAGGCA
CAGGCGGCTGCAGAGAAGCTGCGCAAGGAGGCCGAGCAAGAGGCGGCGCGGCGGGCACAGGCGGAGCAGGCGGCC
CTGCGGCAGAAGCAGGCAGCTGACGCGGAGATGGAGAAGCATAAGAAATTCGCCGAGCAGACGCTGCGGCAGAAG
GCGCAGGTGGAGCAGGAGCTGACAACACTGCGGCTGCAGCTGGAGGAGACCGACCACCAGAAGAACCTGCTGGAC
GAGGAGCTGCAGCGGCTGAAGGCGGAGGCCACGGAGGCCGCACGCCAGCGCAGCCAGGTGGAGGAGGAGCTCTTC
TCGGTGCGCGTGCAGATGGAGGAGCTGAGCAAGCTCAAGGCACGCATCGAGGCTGAGAACCGCGCACTCATCTTG
CGTGACAAGGACAATACGCAGCGCTTCCTGCAGGAGGAGGCTGAGAAGATGAAGCAGGTGGCGGAGGAGGCCGCG
CGGCTGAGTGTGGCGGCCCAAGAGGCTGCGCGACTGCGGCAGCTGGCAGAGGAGGACCTGGCACAGCAGCGGGCC
TTGGCAGAGAAGATGCTCAAGGAGAAGATGCAGGCGGTGCAGGAGGCCACGCGACTCAAGGCTGAGGCGGAACTG
CTGCAGCAGCAGAAGGAGCTTGCGCAGGAGCAGGCGCGGCGGCTGCAGGAGGACAAGGAGCAGATGGCGCAGCAG

FIGURE 421C

CTGGCGGAGGAGACGCAGGGCTTCCAGCGGACGCTGGAGGCCGAGCGGCAGCGGCAGCTGGAGATGAGCGCTGAG
GCTGAGCGCCTCAAGCTGCGTGTGGCCGAGATGAGCCGAGCCCAGGCCCGCGCTGAGGAGGACGCCCAGCGCTTC
CGGAAGCAGGCGGAGGAGATCGGTGAGAAGCTGCACCGCACGGAGCTCGCCACCCAGGAGAAGGTGACCCTGGTG
CAGACACTGGAGATCCAGCGACAGCAGAGTGACCATGATGCCGAGCGCCTGCGGGAGGCCATCGCTGAGCTGGAG
CGTGAGAAGGAGAAGCTCCAACAGGAGGCCAAACTGCTGCAGCTCAAGTCTGAGGAGATGCAGACGGTGCAGCAG
GAGCAGCTGCTGCAGGAGACGCAGGCCCTGCAGCAAAGCTTCCTCTCTGAAAAGGACAGCCTGCTACAGCGGGAG
CGCTTCATCGAGCAGGAGAAGGCCAAGCTGGAGCAGCTCTTCCAGGACGAGGTGGCCAAGGCACAGCAGCTGCGT
GAGGAGCAGCAGCGGCAGCAGCAGCAGATGGAGCAGGAACGGCAGCGGCTGGTGGCCAGCATGGAGGAGGCGCGG
CGGCGGCAGCATGAGGCCGAGGAGGGCGTGCGGCGCAAGCAGGAGGAGCTGCAGCAGCTGGAGCAGCAGCGGCGG
CAGCAGGAGGAGCTGCTGGCTGAGGAGAACCAGAGGCTGCGTGAGCAGCTGCAGCTCCTGGAGGAGCAGCACCGG
GCCGCGCTGGCGCACTCAGAGGAGGTCACTGCCTCGCAGGTGGCTGCCACAAAGACCCTGCCCAATGGCCGGGAT
GCACTTGATGGCCCCGCGGCAGAGGCAGAGCCGGAGCACAGCTTCGATGGCCTGCGGCGGAAGGTGTCAGCTCAG
AGGCTGCAGGAGGCCGGCATCCTGAGTGCGGAGGAGCTGCAGCGGTTGGCGCAGGGCCACACCACGGTGGACGAG
CTCGCACGGCGGGAAGACGTGCGCCACTACCTGCAGGGCCGCAGCAGTATCGCAGGGCTGTTGCTGAAGGCCACC
AATGAGAAGCTGAGTGTTTACGCCGCCCTGCAGAGGCAGCTGCTGAGTCCCGGCACGGCCCTCATCCTGCTGGAG
GCGCAGGCGGCCTCAGGCTTCCTGCTGGACCCTGTGCGGAACCGGCGGCTGACCGTCAACGAGGCTGTGAAGGAG
GGTGTGGTGGGCCCCGAGCTGCACCACAAGCTGCTGTCGGCCGAGCGCGCCGTCACTGGCTACAAGGACCCCTAC
ACTGGCCAGCAGATCTCTCTCTTCCAAGCCATGCAGAAGGGCCTCATCGTCCGGGAGCACGGCATCCGCCTGCTG
GAGGCCCAGATCGCCACGGGCGGCGTTATCGACCCCGTGCACAGCCACCGCGTGCCCGTGGACGTGGCCTACCGG
CGCGGCTACTTCGACGAGGAGATGAACCGCGTCCTGGCGGACCCCAGCGACGACACCAAGGGCTTCTTTGACCCC
AACACGCACGAGAACCTCACGTACCTGCAGCTACTGGAGCGCTGCGTGGAGGACCCCGAGACGGGCCTGTGCCTT
CTGCCACTCACGGATAAGGCTGCCGAGGGCGGGGAGCTGGTCTACACTGACTCCGAGGCCCGGGACGTCTTTGAG
AAGGCCACCGTGTCTGCGCCGTTCGGCAAGTTCCAGGGCAAGACGGTGACCATTTGGGAGATCATCAACTCGGAA
TACTTCACGGCAGAGCAGCGGCGGGACCTGCTGCGGCAGTTCCGCACGGGCCGGATCACAGTGGAGAAGATCATC
AAGATCATCATCACGGTGGTGGAGGAGCAGGAGCAGAAGGGCCGGCTTTGCTTTGAGGGCCTGCGCAGCCTGGTG
CCAGCCGCCGAGCTGCTGGAGAGCAGGGTCATCGACCGCGAGCTCTACCAGCAGCTGCAGCGAGGTGAGCGCTCT
GTGCGAGACGTAGCCGAGGTGGACACTGTGCGGCGGGCTCTCCGGGGTGCCAACGTCATCGCGGGTGTATGGCTG
GAGGAGGCGGGGCAGAAGCTGAGTATCTACAATGCCCTGAAGAAAGACCTGCTGCCATCCGACATGGCCGTGGCC
CTGTTGGAAGCCCAGGCCGGCACCGGGCACATCATCGACCCCGCCACCAGCGCCCGGCTGACCGTGGACGAGGCA
GTGCGTGCTGGCCTGGTGGGCCCCGAGTTTCATGAGAAGCTGCTATCAGCCGAGAAGGCTGTGACAGGGTACAGG
GACCCCTACACAGGGCAGAGCGTCTCCCTGTTCCAGGCCCTGAAGAAGGGCCTCATTCCCCGGGAGCAGGGCCTG
CGCCTGTTGGACGCCCAGCTGTCCACGGGCGGCATCGTGGACCCCAGCAAGAGCCACCGCGTGCCCCTGGATGTC
GCCTGCGCCCGAGGCTGCCTGGATGAGGAGACCAGCAGGGCCCTGTCGGCACCAAGGGCCGACGCCAAGGCCTAC
AGTGACCCCAGCACAGGGGAGCCGGCCACCTACGGCGAGCTCCAGCAGCGGTGCCGGCCCGACCAGCTGACCGGG
CTGAGCCTGCTGCCGCTCTCAGAAAAGGCTGCTCGGGCCCGGCAGGAGGAGCTCTACTCAGAGCTGCAGGCCCGT
GAGACCTTTGAAAAGACCCCGGTTGAGGTCCCCGTGGGTGGCTTCAAGGGCAGGACGGTGACGGTGTGGGAGCTC
ATCAGCTCTGAGTACTTCACTGCGGAGCAGCGGCAGGAGCTGTTGCGTCAGTTCCGCACGGGCAAGGTCACCGTG
GAGAAGGTCATCAAGATTCTCATTACCATCGTGGAGGAGGTGGAGACCCTGCGGCAGGAGAGGCTGTCCTTCAGC
GGCCTCCGTGCCCCTGTGCCAGCCAGCGAGCTCCTGGCTTCCGGGGTCCTCAGCAGAGCCCAGTTTGAGCAGCTC
AAGGACGGCAAGACGACGGTCAAGGACCTTTCGGAGCTGGGCTCCGTGCGGACGCTGCTGCAGGGCAGTGGCTGC
CTCGCCGGCATCTACCTGGAGGACACCAAGGAGAAGGTGTCCATCTACGAGGCCATGCGCCGGGGCCTGCTGAGA
GCCACAACGGCTGCGCTCCTGCTGGAGGCGCAGGCGGCCACTGGCTTCCTGGTGGACCCCGTGCGGAACCAGCGC
CTGTATGTCCACGAGGCCGTGAAGGCGGGCGTGGTGGGCCCCGAGCTTCACGAGCAGCTGCTGTCTGCCGAGAAG
GCCGTCACCGGCTACAGAGACCCCTACTCGGGCAGCACCATCTCCCTCTTCCAGGCCATGCAGAAGGGCCTGGTT
CTCCGGCAGCACGGCATCCGCCTGCTGGAGGCCCAGATCGCCACGGGCGGCATCATCGACCCCGTGCACAGCCAC
CGCGTGCCTGTGGACGTGGCCTACCAGCGCGGCTACTTCAGTGAGGAGATGAACCGCGTCCTGGCGGACCCCAGC
GACGACACCAAGGGCTTCTTTGACCCCAACACGCATGAGAACCTCACGTACAGGCAGCTGCTGGAGCGGTGCGTG
GAGGACCCCGAGACGGGCTTGCGCCTTCTGCCACTGAAAGGGGCGGAGAAGGCTGAGGTGGTGGAGACCACGCAG

FIGURE 421D

GTGTACACTGAGGAGGAGACAAGAAGGGCATTTGAAGAGACACAGATCGACATTCCCGGCGGCGGCAGCCACGGC
GGCTCCACCATGTCCCTGTGGGAGGTGATGCAGTCGGACCTGATCCCCGAGGAGCAGCGGGCCCAGCTGATGGCT
GACTTCCAGGCCGGCCGGGTGACCAAGGAACGCATGATCATCATCATCATCGAGATCATTGAGAAGACAGAGATC
ATCCGCCAGCAGGGTCTGGCCTCCTATGACTACGTGCGCCGCCGCCTCACGGCTGAGGACCTGTTCGAGGCTCGG
ATCATCTCTCTCGAGACCTACAACCTGCTCCGGGAGGGCACCAGGAGCCTCCGTGAGGCTCTCGAGGCGGAGTCC
GCCTGGTGCTACCTCTATGGCACGGGCTCCGTGGCTGGTGTCTACCTGCCCGGTTCCAGGCAGACACTGAGCATC
TACCAGGCTCTCAAGAAAGGGCTGCTGAGTGCCGAGGTGGCCCGCCTGCTGCTGGAGGCACAGGCAGCCACAGGC
TTCCTGCTGGACCCGGTGAAGGGGGAGCGGCTGACTGTGGATGAGGCTGTGCGGAAGGGCCTCGTGGGGCCCGAG
CTGCACGACCGCCTGCTCTCGGCTGAGCGGGCGGTCACCGGCTACCGTGACCCCTACACCGAGCAGACCATCTCG
CTCTTCCAGGCCATGAAGAAGGAGCTGATCCCTACTGAGGAGGCCCTGCGGCTGCTGGATGCCCAGCTGGCCACC
GGCGGCATCGTGGACCCCCGCCTGGGCTTCCACCTTCCCCTGGAGGTGGCTTACCAGCGTGGCTACCTCAACAAG
GACACGCACGACCAGCTGTCAGAGCCCAGCGAGGTGCGCAGCTACGTGGACCCGTCCACCGACGAGCGCCTCAGC
TACACGCAGCTGCTCAGGCGGTGCCGTCGTGACGACGGCACCGGCCAGCTGCTCCTGCCACTGTCGGACGCCCGC
AAGCTGACCTTCCGTGGCCTGCGGAAGCAGATCACCATGGAGGAGCTGGTGCGCTCGCAGGTCATGGACGAGGCC
ACGGCGCTGCAGCTGCGGGAGGGCCTGACCTCCATCGAGGAGGTCACCAAGAACTTGCAGAAGTTCCTGGAAGGC
ACCAGCTGCATCGCTGGTGTCTTCGTGGACGCCACCAAGGAACGGCTCTCGGTGTACCAGGCCATGAAGAAAGGC
ATCATCCGCCCCGGCACAGCCTTTGAGCTCCTGGAGGCGCAGGCGGCCACCGGTTACGTCATCGACCCCATCAAG
GGACTGAAGCTGACGGTGGAGGAGGCTGTGCGTATGGGCATTGTGGGCCCCGAGTTCAAGGACAAGCTGCTGTCG
GCCGAGCGCGCCGTCACTGGGTACAAGGACCCCTACTCTGGGAAGCTCATCTCCCTCTTCCAGGCCATGAAGAAG
GGCCTGATCCTGAAGGACCATGGCATCCGCCTGCTGGAGGCCCAGATCGCCACGGGCGGCATCATCGACCCTGAG
GAGAGCCACCGGCTGCCCGTGGAGGTGGCCTACAAGCGCGGCCTCTTCGATGAGGAGATGAACGAGATCCTGACC
GACCCCTCGGACGACACCAAGGGCTTCTTTGACCCTAACACGGAGGAGAACCTCACCTACCTGCAGCTGATGGAG
CGTTGTATCACTGACCCCCAGACGGGCCTGTGTCTCTTGCCGCTGAAGGAGAAGAAGCGGGAGCGGAAGACGTCC
TCCAAGTCCTCCGTGCGCAAGCGCCGAGTGGTCATCGTGGACCCCGAGACGGGCAAGGAGATGTCAGTGTACGAG
GCCTACCGCAAGGGCCTGATTGACCACCAGACGTACCTGGAGCTGTCCGAGCAGGAGTGCGAGTGGGAGGAGATC
ACCATCTCCTCCTCGGACGGCGTGGTCAAGTCCATGATCATCGACCGCCGCTCCGGGCGCCAGTACGACATCGAT
GATGCCATCGCCAAGAACCTCATCGACCGCTCGGCACTGGACCAGTACCGCGCCGGCACGCTCTCCATCACCGAG
TTCGCCGACATGCTCTCGGGCAACGCCGGTGGTTTCCGCTCCCGTTCCTCCTCGGTGGGATCCTCCTCCTCCTAC
CCCATCAGCCCCGCCGTCTCCAGGACCCAGCTGGCCTCCTGGTCAGACCCCACTGAGGAGACGGGCCCCGTGGCT
GGCATCCTGGACACGGAGACGCTGGAGAAGGTGTCCATCACCGAGGCCATGCACCGGAACCTGGTGGATAACATC
ACGGGGCAGCGGCTGCTGGAGGCGCAGGCCTGCACCGGGGGCATCATCGACCCCAGCACCGGTGAGCGCTTCCCT
GTCACCGACGCCGTCAACAAGGGCCTGGTGGACAAGATCATGGTGGACCGCATCAACCTGGCCCAGAAGGCCTTT
TGCGGCTTCGAGGACCCACGCACCAAGACCAAGATGTCGGCCGCCCAGGCCCTGAAGAAGGGCTGGCTCTACTAC
GAGGCCGGCCAGCGCTTCCTGGAGGTGCAGTACCTGACCGGCGGCTTGATCGAGCCCGACACGCCGGGCCGCGTG
CCCCTGGACGAGGCCCTGCAGCGCGGCACGGTGGACGCCCGCACCGCACAGAAGCTGCGTGACGTGGGCGCCTAC
TCCAAGTACCTCACCTGCCCTAAGACCAAGCTCAAGATCTCCTATAAGGACGCGCTGGACCGCAGCATGGTGGAG
GAGGGCACGGGGCTGCGGCTGCTGGAGGCTGCCGCGCAGTCCACCAAGGGCTACTACAGCCCCTACAGCGTCAGC
GGCTCCGGCTCTACCGCTGGCTCCCGCACCGGCTCGCGCACCGGCTCCCGGGCCGGCTCCCGCCGCGGCAGCTTT
GACGCCACCGGCTCCGGCTTCTCCATGACCTTCTCTTCATCCTCCTACTCCTCCTCGGGCTACGGCCGCCGCTAC
GCCTCGGGGTCCTCGGCCTCCCTGGGGGGCCCTGAGTCTGCCGTGGCCTGAGGCTGCCTGCGCCCACCCCGCTCT
GCATGCGGCCCAGCCCGGCTCCCACCGAGGCGCGGGGGCCGTTTTCAACGCTTAAAGGTGTCTTCCTCCCAAGTG
GTGCCTAAAGTTTAACCAAAAAGACCAGACTAATATATTAATATATATCTGCTGTCCAGACAGCCTGTATCTTGG
GGGACAGGGCTGGCCCAGCCCTGCTGGCCGCCTCACCCCCTCGGGTCTCCTCACTCCCTTCTACCTGCCACTCAC
ACAGCCAGGTGCCTTGGAGGGTCCCAAGCTGGGCCCCAGCCCACCCTCCTGTCTTCCCAGGGTAGCCCGCCTGCC
AGTCCTAGCTGCACAGGGCAGCTGGGCCCAACCCTGTCTGTAGAGGGCCCTGGTGTTTCTAGCACTGGCCTGCAC
GGTGGGCCTTGCTGGGGACGGGGGGCCCCAGTCAGCCTCTCTCCCAGTCTACCCAGAGAAGCCCCTTCCCCATGG
GAAGACGAGGCCCTCGGGCCCAGCCCCCACAGTGCTGTCTGATCTGTGCTTTCCAGCTCACCCCCCACACTCACT
CCTGAGACCCCTGGCCTCCGGCGTCAGCCTCCAGCCTCTGTTCCCCTAGTAAGTGCCTTCCATGTCGGCCTCTAA

FIGURE 421E

CCCCAGGCCCCGAGGACCCAGACCCAGTGGGGAGGCGGACGTTCCAGCCGGCATGGCTGGGAACTGCAGACCTGT
CCTCCTGGTGGGTCCAGGGGCCCCTCCAGCTTGTGGAGCCCCACACTGGGGTGCCGCCTGCCCGTCTCTCTCCCA
TGGAGCCCCAGCCCCCTTTGGGCCCAGGGACACCAGCCAGGCTCTGTGCTGACCCTCCTGTTGCGCCCAGCCCTG
GTCTCAGCAGCGACCACCCCTGCCTCCACCCTCTGAGCTTTGCATGTTCCACTAACCCCGGGCGGGTGGCAGGTG
GAGGTGTCAGGCTGCTGGCGCCTCTGCAAGGGCAGAACACTAACCTGACCGTGGGCGGGGCCTTGCGGTATCCGC
CCCCAATAAAAGCAATTCCAACCTT

FIGURE 422

MSGEDAEVRAVSEDVSNGSSGSPSPGDTLPWNLGKTQRSRRSGGGAGSNGSVLDPAERAVIRIADERDRVQKKTF
TKWVNKHLIKAQRHISDLYEDLRDGHNLISLLEVLSGDSLPREKGRMRFHKLQNVQIALDYLRHRQVKLVNIRDD
DIADGNPKLTLGLIWTIILHFQISDIQVSGQSEDMTAKEKLLLWSQRMVEGYQGLRCDNFTSSWRDGRLFNAIIH
RHKPLLIDMNKVYRQTNLENLDQAFSVAERDLGVTRLLDPEDVDVPQPDEKSIITYVSSLYDAMPRVPDVQDGVR
ANELQLRWQEYRELVLLLLQWMRHHTAAFEERRFPSSFEEIEILWSQFLKFKEMELPAKEADKNRSKGIYQSLEG
AVQAGQLKVPPGYHPLDVEKEWGKLHVAILEREKQLRSEFERLECLQRIVTKLQMEAGLCEEQLNQADALLQSDV
RLLAAGKVPQRAGEVERDLDKADSMIRLLFNDVQTLKDGRHPQGEQMYRRVYRLHERLVAIRTEYNLRLKAGVAA
PATQVAQVTLQSVQRRPELEDSTLRYLQDLLAWVEENQHRVDGAEWGVDLPSVEAQLGSHRGLHQSIEEFRAKIE
RARSDEGQLSPATRGAYRDCLGRLDLQYAKLLNSSKARLRSLESLHSFVAAATKELMWLNEKEEEEVGFDWSDRN
TNMTAKKESYSALMRELELKEKKIKELQNAGDRLLREDHPARPTVESFQAALQTQWSWMLQLCCCIEAHLKENAA
YFQFFSDVREAEGQLQKLQEALRRKYSCDRSATVTRLEDLLQDAQDEKEQLNEYKGHLSGLAKRAKAVVQLKPRH
PAHPMRGRLPLLAVCDYKQVEVTVHKGDECQLVGPAQPSHWKVLSSSGSEAAVPSVCFLVPPPNQEAQEAVTRLE
AQHQALVTLWHQLHVDMKSLLAWQSLRRDVQLIRSWSLATFRTLKPEEQRQALHSLELHYQAFLRDSQDAGGFGP
EDRLMAEREYGSCSHHYQQLLQSLEQGAQEESRCQRCISELKDIRLQLEACETRTVHRLRLPLDKEPARECAQRI
AEQQKAQAEVEGLGKGVARLSAEAEKVLALPEPSPAAPTLRSELELTLGKLEQVRSLSAIYLEKLKTISLVIRGT
QGAEEVLRAHEEQLKEAQAVPATLPELEATKASLKKLRAQAEAQQPTFDALRDELRGAQEVGERLQQRHGERDLE
VERWRERVAQVLERWQAVLAQTDLRQRELEQLGRQLRYYRESADPLGAWLQDARRRQEQIQAMPLADSQAVREQL
RQEQALLEEIERHGEKVEECQRFAKQYINAIKDYELQLVTYKAQLEPVASPAKKPKVQSGSESVIQEYVDLRTHY
SELTTLTSQYIKFISETLRRMEEEERLAEQQRAEERERLAEVEAALEKQRQLAEAHAQAKAQAEREAKELQQRMQ
EEVVRREEAAVDAQQQKRSIQEELQQLRQSSEAEIQAKARQAEAAERSRLRIEEEIRVVRLQLEATERQRGGAEG
ELQALRARAEEAEAQKRQAQEEAERLRRQVQDESQRKRQAEVELASRVKAETEAAREKQRALQALEELRLQAEEA
ERRLRQAEVERARQVQVALETAQRSAEAELQSKRASFAEKTAQLERSLQEEHVAVAQLREEAERRAQQQAEAERA
REEAERELERWQLKANEALRLRLQAEEVAQQKSLAQAEAEKQKEEAEREARRRGKAEEQAVRQRELAEQELEKQR
QLAEGTAQQRLAAEQELIRLRAETEQGEQQRQLLEEELARLQREAAAATQKRQELEAELAKVRAEMEVLLASKAR
AEEESRSTSEKSKQRLEAEAGRFRELAEEAARLRALAEEAKRQRQLAEEDAARQRAEAERVLAEKLAAIGEATRL
KTEAEIALKEKEAENERLRRLAEDEAFQRRRLEEQAAQHKADIEERLAQLRKASDSELERQKGLVEDTLRQRRQV
EEEILALKASFEKAAAGKAELELELGRIRSNAEDTLRSKEQAELEAARQR

FIGURE 423

GTCGTGGAAGCAGGACTGCGCCGCGTCTTCCTCAAGGTGGGGTTCGGGGGGCCACCGAATCGCTGTCACGCCGGC
AGGTTGAGAACAAAAACATGCACCTGGAGTTTCCCCGGAGCCCTCTGCGTGGTTGAGCTTCGGTGGAATTTCGGG
GCTCTTGGCTGCCAGCCGCGCTTGCCTGGTAGCAACAGAAACCAGTCCTGCTCTCCTCCGTGGACATTTCATTAC
CATCCAGAAGTGTCTCCCACTGAAGGCATCCGTGGTTGTTTTTAAGCCACAAAAAAGCCACACCCAAGATCACCT
GACACCCACCCTGACAAGTGTCC**ATG**ATGCTGGGCCCTGAGGGAGGTGAAGGCTTTGTGGTCAAGCTCCGTGGCC
TGCCCTGGTCCTGCTCTGTTGAGGACGTGCAGAACTTCCTCTCTGACTGCACGATTCATGATGGGGCCGCAGGTG
TCCATTTCATCTACACTAGAGAGGGCAGGCAGAGTGGTGAGGCTTTTGTTGAACTTGGATCAGAAGATGATGTAA
AAATGGCCCTGAAAAAAGACAGGGAAAGCATGGGACACCGGTACATTGAGGTGTTCAAGTCCCACAGAACCGAGA
TGGATTGGGTGTTGAAGCACAGTGGTCCCAACAGTGCCGACAGCGCCAACGATGGCTTCGTGCGGCTTCGAGGAC
TCCCATTTGGATGCACAAAGGAAGAAATTGTTCAGTTCTTCTCAGGGTTGGAAATTGTGCCAAACGGGATCACAT
TGCCTGTGGACCCCGAAGGCAAGATTACAGGGGAAGCGTTCGTGCAGTTTGCCTCGCAGGAGTTAGCTGAGAAGG
CTCTAGGGAAACACAAGGAGAGGATAGGGCACAGGTACATTGAGGTGTTTAAGAGCAGCCAGGAGGAAGTTAGGT
CATACTCAGATCCCCCTCTGAAGTTCATGTCCGTGCAGCGGCCAGGGCCCTATGACCGGCCCGGGACTGCCAGGA
GGTACATTGGCATCGTGAAGCAGGCAGGCCTGGAAAGGATGAGGCCTGGTGCCTACAGCACAGGCTACGGGGGCT
ACGAGGAGTACAGTGGCCTCAGTGATGGCTACGGCTTCACCACCGACCTGTTCGGGAGAGACCTCAGCTACTGTC
TCTCCGGGATGTATGACCACAGATACGGCGACAGTGAGTTCACAGTGCAGAGCACCACAGGCCACTGTGTCCACA
TGAGGGGCCTGCCGTACAAAGCGACCGAGAACGACATTTACAACTTCTTCTCTCCTCTCAACCCTGTGAGAGTCC
ATATTGAGATTGGCCCAGATGGAAGAGTGACGGGTGAAGCAGATGTTGAGTTTGCTACTCATGAAGAAGCTGTGG
CAGCTATGTCCAAAGACAGGGCCAATATGCAGCACAGATATATAGAACTCTTCTTGAATTCAACAACAGGGGCCA
GCAATGGGGCGTATAGCAGCCAGGTGATGCAAGGCATGGGGGTGTCTGCTGCCCAGGCCACTTACAGTGGCCTGG
AGAGCCAGTCAGTGAGTGGCTGTTACGGGGCCGGCTACAGTGGGCAGAACAGCATGGGTGGCTATGAC**TAG**TTTT
GTTAGGAACATTTGAGTTACTTCAATCATTTTCACAGGCAGCCAACAAGCAATTAAGAGCAGTTATAATAGAGGA
AGCTGGGGGACCCATTTTGCACCATGAGTTTGTGAAAAATCTGGATTAAAAAATTACCTCTTCAGTGTTTTCTCA
TGCAAAATTTTCTTCTAGCATGTGATAATGAGTAAACTAAAACTATTTTCAGCTTTTCTCAATTAACATTTTGGT
AGTATACTTCAGAGTGATGTTATCTAAGTTTAAGTAGTTTAAGTATGTTAAATGTGGATCTTTTACACCACATCA
CAGTGAACACACTGGGGAGACGTGCTTTTTTGGAAAACTCAAAGGTGCTAGCTCCCTGATTCAAAGAAATATTTC
TCATGTTTGTTCATTCTAGTTTATATTTTCATTTAAAATCCTTTAGGTTAAGTTTAAGCTTTTTAAAAGTTAGTT
TTGAGAATTGAGACACAATACTAATACTGTAGGAATTGGTGAGGCCTTGACTTAAAACTTTCTTTGTACTGTGAT
TTCCTTTTGGGTGTATTTTGCTAAGTGAAACTTGTTAAATTTTTTGTTAACTAAATTTTTTTCTTAAAATAAAGA
CTTTTTCACAATGACTGGCACAGATTACTCAGCAAAAGATAGCAAAACGGGTGGTTGAAGATAATTCATTTTAAT
CGTAATGTATTTTAGTGTGAATTTAAAAATTTCATACATCAAATCTATGATCTCCCTTATATTCTTATGATGAGG
CTAAATAAAAGTCTAATAAAAATGTTAAATATGTGAATGGTGGAAATGGTGACTAGCAGCACACATTCTGGGAAG
CATCAAATAGACACACGGCCCCAGCCACCTGCAACTTATGTGCACTGTTGTAAACCATTCAGAATTTTCCTGCTA
GGCCCTTGATGCTGGAGTCACATCTGTTGATAGCTGGAGAACTTTAGTTTCAAGTACTACATTGTGAAAGCAATT
ATTTTGTTTCTCGTTTTTATAAAATGCTGACTTAAACTTTT

FIGURE 424

MMLGPEGGEGFVVKLRGLPWSCSVEDVQNFLSDCTIHDGAAGVHFIYTREGRQSGEAFVELGSEDDVKMALKKDR
ESMGHRYIEVFKSHRTEMDWVLKHSGPNSADSANDGFVRLRGLPFGCTKEEIVQFFSGLEIVPNGITLPVDPEGK
ITGEAFVQFASQELAEKALGKHKERIGHRYIEVFKSSQEEVRSYSDPPLKFMSVQRPGPYDRPGTARRYIGIVKQ
AGLERMRPGAYSTGYGGYEEYSGLSDGYGFTTDLFGRDLSYCLSGMYDHRYGDSEFTVQSTTGHCVHMRGLPYKA
TENDIYNFFSPLNPVRVHIEIGPDGRVTGEADVEFATHEEAVAAMSKDRANMQHRYIELFLNSTTGASNGAYSSQ
VMQGMGVSAAQATYSGLESQSVSGCYGAGYSGQNSMGGYD

FIGURE 425

CTCGTCGCCGCCGCCATTTTAGCTGTTGGTTCCGGCCGCACCGTGTGGGCTGTAGTAGCGGGAGGGGTGGGGGTC
CTCCAGAGTTAAGTGGCTGTCCTCGACTGTGCCCATACAGCAGCCAGCTTTCTTCCTTAATAACTGCCCGTTCGA
AGAGTGCGAGGATGTCCAAGCGGCACCGGTTGGACCTAGGGGAGGATTACCCCTCTGGCAAGAAGCGTGCGGGGA
CCGATGGGAAGGATCGAGATCGAGACCGGGATCGTGAAGATCGGTCTAAAGATCGAGACCGAGAACGTGATAGAG
GAGATAGAGAGCGAGAGAGGGAGAAAGAAAAGGAGAAGGAGTTGCGAGCTTCAACAAATGCTATGCTTATCAGTG
CTGGATTACCACCCCTGAAAGCTTCCCATTCAGCTCACTCAACCCACTCAGCACATTCAACGCATTCTACACATT
CTGCTCATTCAACGCATGCCGGACATGCAGGTCACACGTCACTTCCACAGTGCATTAATCCGTTCACCAACTTAC
CCCATACTCCTCGATACTATGATATTCTAAAGAAACGTCTTCAGCTCCCTGTTTGGGAATACAAGGATAGGTTTA
CAGATATTCTGGGTAGACATCAGTCCTTTGTACTGGTTGGTGAGACTGGGTCTGGTAAAACAACACAAATTCCAC
ACCGGTGTGTGGAGTACATGCGATCATTACCAGGACCCAAGAGAGGAGTTGCCTGTACCCAACCCAGGAGAGTGG
CTGCAATGAGTGTGGCTCAGAGAGTTGCTGATGAGATGGATGTGATGTTGGGCCAGGAAGTTGGTTACTCCATTC
GATTTGAAGACTGCAGTAGTGCAAAAACATTTTTTATGTATATGACTGATGGGATGTTACTTCGTGAAGCTATGA
ATGATCCCCTCCTGGAGCGTTATGGTGTAATAATTCTTGATGAGGCTCATGAGAGGACACTGGCTACAGATATTC
TAATGGGTGTTCTGAAGGAAGTTGTAAGACAGAGATCAGATTTAAAGGTTATAGTTATGAGCGCTACTCTAGATG
CAGGAAAATTCCAGATTTACTTTGATAACTGTCCTCTCCTAACTATTCCTGGGCGTACACATCCTGTTGAGATCT
TCTATACTCCAGAACCAGAGAGAGATTATCTTGAAGCAGCAATTCGAACAGTTATCCAGATTCATATGTGTGAAG
AGGAAGAGGGAGATCTTCTTCTTTTCTTAACTGGTCAAGAGGAAATTGATGAAGCCTGTAAGAGAATAAAGCGTG
AAGTTGATGATTTGGGCCCTGAAGTTGGTGACATTAAAATCATTCCATTGTATTCTACACTTCCACCTCAGCAGC
AGCAACGCATTTTTGAGCCTCCACCTCCCAAAAAACAGAATGGAGCAATTGGAAGAAAGGTAGTTGTGTCAACTA
ACATAGCAGAGACGTCTTTGACAATAGATGGTGTGGTGTTTGTGATTGATCCTGGATTTGCGAAACAGAAGGTCT
ACAATCCTCGAATCAGAGTTGAGTCCCTTTTGGTGACAGCTATTAGTAAAGCTTCAGCTCAGCAAAGGGCTGGTC
GAGCTGGACGTACCAGACCTGGAAAATGCTTCAGACTTTACACAGAGAAAGCTTATAAAACAGAAATGCAGGATA
ACACCTATCCTGAGATTTTGCGTTCTAATTTAGGATCAGTTGTGTTACAATTGAAGAAACTTGGTATTGATGACT
TGGTACATTTTGATTTTATGGATCCACCAGCTCCTGAAACTCTGATGAGAGCCCTGGAACTTTTGAATTACCTGG
CTGCTTTAAATGATGATGGAGATCTGACTGAATTGGGATCCATGATGGCAGAGTTTCCTCTAGATCCACAGCTCG
CAAAAATGGTTATTGCAAGTTGTGACTACAACTGTTCTAATGAGGTCCTATCTATTACTGCTATGTTGTCAGTCC
CACAGTGTTTTGTTCGCCCCACGGAGGCCAAGAAAGCCGCAGATGAGGCCAAGATGAGATTTGCCCACATAGATG
GAGATCATCTGACACTGCTGAACGTCTACCATGCTTTTAAACAAAATCATGAATCGGTTCAGTGGTGTTATGACA
ACTTCATTAACTACAGGTCCCTGATGTCCGCGGACAATGTACGCCAGCAGCTATCTCGAATTATGGACAGATTTA
ATTTGCCTCGTCGAAGTACTGACTTTACAAGCAGGGACTATTATATTAATATAAGAAAAGCTTTGGTTACTGGGT
ATTTTATGCAGGTGGCACATTTAGAACGAACAGGGCATTACTTAACTGTGAAAGATAACCAGGTGGTTCAGTTGC
ATCCCTCTACTGTTCTTGACCACAAACCTGAATGGGTGCTTTATAATGAGTTTGTTCTAACAACAAAGAATTACA
TCCGGACATGTACAGACATCAAGCCAGAATGGTTGGTGAAAATTGCCCCTCAATATTATGACATGAGCAATTTCC
CACAGTGTGAAGCAAAGAGACAGTTGGACCGCATCATTGCCCAAACTTCAATCCAAGGAATATTCACAGTACTGA
ATTCAGTGCTTAGAACTGAAGTTATTGAGAGGACAGCTTTAAAAGATGAATGAACTCAAAAGTTCGAGTTGTGCT
CTTCACGTTGGTTCGATAATGGCCTTTATTTGAAAGCTTTTTAATTTTTCTTTACAGTAAATATTCCATTCTGAT
TTCATAAATTAAACATTTATGCCTCCCTTTTGTGTTGACACTGTAGCTCATACTGGAAAAGTCGATCAATGTTTT
GCAGTTTATTGAAAGTAGTTCTATATATAACAATGTTATAAGCATTTCTTTAGAAATGGTTGAAAATGCTTCTAA
AATGTGATTATCGACCATGGTATGCATGATCGTTGTAATTGTTGACATTCCTTTTAGAAGTTGTGAAATGTTACA
ACTTGTGCTTATGTAGACACAATTTTTTGTTTCAGTACCAGAGGCACTGACTTCAATAAAGTTTATTTATACGGA
AAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 426

MSKRHRLDLGEDYPSGKKRAGTDGKDRDRDRDREDRSKDRDRERDRGDRERERERKEKEKELRASTNAMLISAGLP
PLKASHSAHSTHSAHSTHSTHSAHSTHAGHAGHTSLPQCINPFTNLPHTPRYYDILKKRLQLPVWEYKDRFTDIL
GRHQSFVLVGETGSGKTTQIPHRCVEYMRSLPGPKRGVACTQPRRVAAMSVAQRVADEMDVMLGQEVGYSIRFED
CSSAKTFFMYMTDGMLLREAMNDPLLERYGVIILDEAHERTLATDILMGVLKEVVRQRSDLKVIVMSATLDAGKF
QIYFDNCPLLTIPGRTHPVEIFYTPEPERDYLEAAIRTVIQIHMCEEEEGDLLLFLTGQEEIDEACKRIKREVDD
LGPEVGDIKIIPLYSTLPPQQQQRIFEPPPPKKQNGAIGRKVVVSTNIAETSLTIDGVVFVIDPGFAKQKVYNPR
IRVESLLVTAISKASAQQRAGRAGRTRPGKCFRLYTEKAYKTEMQDNTYPEILRSNLGSVVLQLKKLGIDDLVHF
DFMDPPAPETLMRALELLNYLAALNDDGDLTELGSMMAEFPLDPQLAKMVIASCDYNCSNEVLSITAMLSVPQCF
VRPTEAKKAADEAKMRFAHIDGDHLTLLNVYHAFKQNHESVQWCYDNFINYRSLMSADNVRQQLSRIMDRFNLPR
RSTDFTSRDYYINIRKALVTGYFMQVAHLERTGHYLTVKDNQVVQLHPSTVLDHKPEWVLYNEFVLTTKNYIRTC
TDIKPEWLVKIAPQYYDMSNFPQCEAKRQLDRIIAQTSIQGIFTVLNSVLRTEVIERTALKDE

FIGURE 427

GAATTCGCGGCCGCTGGTTTGCAGCTGCTCCGTCATCGTGCGGCCCGACGCTATCTCGCGCTCGTGTGCAGGCCC
GGCTCGGCTCCTGGTCCCCGGTGCGAGGGTTAACGCGAGGCCCCGGCCTCGGTCCCCGGACTAGGCCGTGACCCC
GGGTGCCATGAAGCAGGAGGGCTCGGCGCGGCGCCGCGGCGCGGACAAGGCGAAACCGCCGCCCGGCGGAGGAGA
ACAAGAACCCCCACCGCCGCCGGCCCCCCAGGATGTGGAGATGAAAGAGGAGGCAGCGACGGGTGGCGGGTCAAC
GGGGGAGGCAGACGGCAAGACGGCGGCGGCAGCGGTTGAGCACTCCCAGCGAGAGCTGGACACAGTCACCTTGGA
GGACATCAAGGAGCACGTGAAACAGCTAGAGAAAGCGGTTTCAGGCAAGGAGCCGAGATTCGTGCTGCGGGCCCT
GCGGATGCTGCCTTCCACATCACGCCGCCTCAACCACTATGTTCTGTATAAGGCTGTGCAGGGCTTCTTCACTTC
AAATAATGCCACTCGAGACTTTTTGCTCCCCTTCCTGGAAGAGCCCATGGACACAGAGGCTGATTTACAGTTCCG
TCCCCGCACGGGAAAAGCTGCGTCGACACCCCTCCTGCCTGAAGTGGAAGCCTATCTCCAACTCCTCGTGGTCAT
CTTCATGATGAACAGCAAGCGCTACAAAGAGGCACAGAAGATCTCTGATGATCTGATGCAGAAGATCAGTACTCA
GAACCGCCGGGCCCTAGACCTTGTAGCCGCAAAGTGTTACTATTATCACGCCCGGGTCTATGAGTTCCTGGACAA
GCTGGATGTGGTGCGCAGCTTCTTGCATGCTCGGCTCCGGACAGCTACGCTTCGGCATGACGCAGACGGGCAGGC
CACCCTGTTGAACCTCCTGCTGCGGAATTACCTACACTACAGCTTGTACGACCAGGCTGAGAAGCTGGTGTCCAA
GTCTGTGTTCCCAGAGCAGGCCAACAACAATGAGTGGGCCAGGTACCTCTACTACACAGGGCGAATCAAAGCCAT
CCAGCTCGAGTACTCAGAGGCCCGGAGAACGATGACCAACGCCCTTCGCAAGGCCCCTCAGCACACAGCTGTCGG
CTTCAAACAGACGGTGCACAAGCTTCTCATCGTGGTGGAGCTGTTGCTGGGGGAGATCCCTGACCGGCTGCAGTT
CCGCCAGCCCTCCCTCAAGCGCTCACTCATGCCCTATTTCCTTCTGACTCAAGCTGTCAGGACAGGAAACCTAGC
CAAGTTCAACCAGGTCCTGGATCAGTTTGGGGAGAAGTTTCAAGCAGATGGGACCTACACCCTAATTATCCGGCT
GCGGCACAACGTGATTAAGACAGGTGTACGCATGATCAGCCTCTCCTATTCCCGAATCTCCTTGGCTGACATCGC
CCAGAAGCTGCAGTTGGATAGCCCCGAAGATGCAGAGTTCATTGTTGCCAAGGCCATCCGGGATGGTGTCATTGA
GGCCAGCATCAACCACGAGAAGGGCTATGTCCAATCCAAGGAGATGATTGACATCTATTCCACCCGAGAGCCCCA
GCTAGCCTTCCACCAGCGCATCTCCTTCTGCCTAGATATCCACAACATGTCTGTCAAGGCCATGAGGTTTCCTCC
CAAATCGTACAACAAGGACTTGGAGTCTGCAGAGGAACGGCGTGAGCGAGAACAGCAGGACTTGGAGTTTGCCAA
GGAGATGGCAGAAGATGATGATGACAGCTTCCCTTGAGCTGGGGGGGCTGGGGAGGGGTAGGGGGAATGGGGACAG
GCTCTTTCCCCCTTGGGGGTCCCCTGCCCAGGGCACTGTCCCCATTTTCCCACACACAGCTCATATGCTGCATTC
GTGCAGGGGGTGGGGGTGCTGGGAGCCAGCCACCCTGACCTCCCCCAGGGCTCCTCCCCAGCCGGTGACTTACTG
TACAGCAGGCAGGAGGGTGGGCAGGCAACCTCCCCGGGCAGGGTCCTGGCCAGCAGTGTGGGAGCAGGAGGGGAA
GGATAGTTCTGTGTACTCCTTTAGGGAGTGGGGGACTAGAACTGGGATGTCTTGGCTTGTATGTTTTTTGAAGCT
TCGATTATGATTTTTAAACAATAAAAAGTTCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAGCGGCCGCGAAT
TC

FIGURE 428

MKQEGSARRRGADKAKPPPGGGEQEPPPPPAPQDVEMKEEAATGGGSTGEADGKTAAAAVEHSQRELDTVTLEDI
KEHVKQLEKAVSGKEPRFVLRALRMLPSTSRRLNHYVLYKAVQGFFTSNNATRDFLLPFLEEPMDTEADLQFRPR
TGKAASTPLLPEVEAYLQLLVVIFMMNSKRYKEAQKISDDLMQKISTQNRRALDLVAAKCYYYHARVYEFLDKLD
VVRSFLHARLRTATLRHDADGQATLLNLLLRNYLHYSLYDQAEKLVSKSVFPEQANNNEWARYLYYTGRIKAIQL
EYSEARRTMTNALRKAPQHTAVGFKQTVHKLLIVVELLLGEIPDRLQFRQPSLKRSLMPYFLLTQAVRTGNLAKF
NQVLDQFGEKFQADGTYTLIIRLRHNVIKTGVRMISLSYSRISLADIAQKLQLDSPEDAEFIVAKAIRDGVIEAS
INHEKGYVQSKEMIDIYSTREPQLAFHQRISFCLDIHNMSVKAMRFPPKSYNKDLESAEERREREQQDLEFAKEM
AEDDDDSFP

FIGURE 429

GAGGAGGAGGAGGAGATGACTGGGGAGCGGGAGCTCGAGAATACTGCCCAGTTACTCTAGCGCGCCAGGCCGAAC
CGCAGCTTCTTGGCTTAGGTACTTCTACTCACAGCGGCCGATTCCGAGGCCAACTCCAGCAATGGCTTTTGCAAA
TCTGCGGAAAGTGCTCATCAGTGACAGCCTGGACCCTTGCTGCCGGAAGATCTTGCAAGATGGAGGGCTGCAGGT
GGTGGAAAAGCAGAACCTTAGCAAAGAGGAGCTGATAGCGGAGCTGCAGGACTGTGAAGGCCTTATTGTTCGCTC
TGCCACCAAGGTGACCGCTGATGTCATCAACGCAGCTGAGAAACTCCAGGTGGTGGGCAGGGCTGGCACAGGTGT
GGACAATGTGGATCTGGAGGCCGCAACAAGGAAGGGCATCTTGGTTATGAACACCCCCAATGGGAACAGCCTCAG
TGCCGCAGAACTCACTTGTGGAATGATCATGTGCCTGGCCAGGCAGATTCCCCAGGCGACGGCTTCGATGAAGGA
CGGCAAATGGGAGCGGAAGAAGTTCATGGGAACAGAGCTGAATGGAAAGACCCTGGGAATTCTTGGCCTGGGCAG
GATTGGGAGAGAGGTAGCTACCCGGATGCAGTCCTTTGGGATGAAGACTATAGGGTATGACCCCATCATTTCCCC
AGAGGTCTCGGCCTCCTTTGGTGTTCAGCAGCTGCCCCTGGAGGAGATCTGGCCTCTCTGTGATTTCATCACTGT
GCACACTCCTCTCCTGCCCTCCACGACAGGCTTGCTGAATGACAACACCTTTGCCCAGTGCAAGAAGGGGGTGCG
TGTGGTGAACTGTGCCCGTGGAGGGATCGTGGACGAAGGCGCCCTGCTCCGGGCCCTGCAGTCTGGCCAGTGTGC
CGGGGCTGCACTGGACGTGTTTACGGAAGAGCCGCCACGGGACCGGGCCTTGGTGGACCATGAGAATGTCATCAG
CTGTCCCCACCTGGGTGCCAGCACCAAGGAGGCTCAGAGCCGCTGTGGGGAGGAAATTGCTGTTCAGTTCGTGGA
CATGGTGAAGGGGAAATCTCTCACGGGGGTTGTGAATGCCCAGGCCCTTACCAGTGCCTTCTCTCCACACACCAA
GCCTTGGATTGGTCTGGCAGAAGCTCTGGGGACACTGATGCGAGCCTGGGCTGGGTCCCCCAAAGGGACCATCCA
GGTGATAACACAGGGAACATCCCTGAAGAATGCTGGGAACTGCCTAAGCCCCGCAGTCATTGTCGGCCTCCTGAA
AGAGGCTTCCAAGCAGGCGGATGTGAACTTGGTGAACGCTAAGCTGCTGGTGAAAGAGGCTGGCCTCAATGTCAC
CACCTCCCACAGCCCTGCTGCACCAGGGGAGCAAGGCTTCGGGGAATGCCTCCTGGCCGTGGCCCTGGCAGGCGC
CCCTTACCAGGCTGTGGGCTTGGTCCAAGGCACTACACCTGTACTGCAGGGGCTCAATGGAGCTGTCTTCAGGCC
AGAAGTGCCTCTCCGCAGGGACCTGCCCCTGCTCCTATTCCGGACTCAGACCTCTGACCCTGCAATGCTGCCTAC
CATGATTGGCCTCCTGGCAGAGGCAGGCGTGCGGCTGCTGTCCTACCAGACTTCACTGGTGTCAGATGGGGAGAC
CTGGCACGTCATGGGCATCTCCTCCTTGCTGCCCAGCCTGGAAGCGTGGAAGCAGCATGTGACTGAAGCCTTCCA
GTTCCACTTCTAACCTTGGAGCTCACTGGTCCCTGCCTCTGGGGCTTTTCTGAAGAAACCCACCCACTGTGATCA
ATAGGGAGAGAAAATCCACATTCTTGGGCTGAACGCGGGCCTCTGACACTGCTTACACTGCACTCTGACCCTGTA
GTACAGCAATAACCGTCTAATAAAGAGCCTACCCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAA

FIGURE 430

MAFANLRKVLISDSLDPCCRKILQEGGLQVVEKQNLSKEELIAELQDCEGLIVRSATKVTADVINAAEKLQVVGR
AGTGVDNVDLEAATRKGILVMNTPNGNSLSAAELTCGMIMCLARQIPQATASMKDGKWERKKFMGTELNGKTLGI
LGLGRIGREVATRMQSFGMKTIGYDPIISPEVSASFGVQQLPLEEIWPLCDFITVHTPLLPSTTGLLNDNTFAQC
KKGVRVVNCARGGIVDEGALLRALQSGQCAGAALDVFTEEPPRDRALVDHENVISCPHLGASTKEAQSRCGEEIA
VQFVDMVKGKSLTGVVNAQALTSAFSPHTKPWIGLAEALGTLMRAWAGSPKGTIQVITQGTSLKNAGNCLSPAVI
VGLLKEASKQADVNLVNAKLLVKEAGLNVTTSHSPAAPGEQGFGECLLAVALAGAPYQAVGLVQGTTPVLQGLNG
AVFRPEVPLRRDLPLLLFRTQTSDPAMLPTMIGLLAEAGVRLLSYQTSLVSDGETWHVMGISSLLPSLEAWKQHV
TEAFQFHF

FIGURE 431

GAGCGGTTGCGCAGTGAAGGCTAGACCCGGTTTACTGGAATTGCTCTGGCGATCGAGGGGTCCTAGTACACCGCA
ATCATGTCTATTATGTCCTATAACGGAGGGGCCGTCATGGCCATGAAGGGGAAGAACTGTGTGGCCATCGCTGCA
GACAGGCGCTTCGGGATCCAGGCCCAGATGGTGACCACGGACTTCCAGAAGATCTTTCCCATGGGTGACCGGCTG
TACATCGGTCTGGCCGGGCTCGCCACTGACGTCCAGACAGTTGCCCAGCGCCTCAAGTTCCGGCTGAACCTGTAT
GAGTTGAAGGAAGGTCGGCAGATCAAACCTTATACCCTCATGAGCATGGTGGCCAACCTCTTGTATGAGAAACGG
TTTGGCCCTTACTACACTGAGCCAGTCATTGCCGGGTTGGACCCGAAGACCTTTAAGCCCTTCATTTGCTCTCTA
GACCTCATCGGCTGCCCCATGGTGACTGATGACTTTGTGGTCAGTGGCACCTGCGCCGAACAAATGTACGGAATG
TGTGAGTCCCTCTGGGAGCCCAACATGGATCCGGATCACCTGTTTGAAACCATCTCCCAAGCCATGCTGAATGCT
GTGGACCGGGATGCAGTGTCAGGCATGGGAGTCATTGTCCACATCATCGAGAAGGACAAAATCACCACCAGGACA
CTGAAGGCCCGAATGGACTAACCCTGTTCCCAGAGCCCACTTTTTTTTCTTTTTTTGAAATAAAATAGCCTGTCT
TTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 432

MSIMSYNGGAVMAMKGKNCVAIAADRRFGIQAQMVTTDFQKIFPMGDRLYIGLAGLATDVQTVAQRLKFRLNLYE
LKEGRQIKPYTLMSMVANLLYEKRFGPYYTEPVIAGLDPKTFKPFICSLDLIGCPMVTDDFVVSGTCAEQMYGMC
ESLWEPNMDPDHLFETISQAMLNAVDRDAVSGMGVIVHIIEKDKITTRTLKARMD

FIGURE 434

MAFVKSGWLLRQSTILKRWKKNWFDLWSDGHLIYYDDQTRQNIEDKVHMPMDCINIRTGQECRDTQPPDGKSKDC
MLQIVCRDGKTISLCAESTDDCLAWKFTLQDSRTNTAYVGSAVMTDETSVVSSPPPYTAYAAPAPEAYGYGPYGG
AYPPGTQVVYAANGQAYAVPHQYPYAGLYGQQPANQVIIRERYRDNDSDLALGMLAGAATGMALGSLFWVF

FIGURE 435

AAGAGGCGCGAGGCGGAATTGGGGTCTGCTCTAAGCTGCAGCAAGAGAAACTGTGTGTGAGGGGAAGAGGCCTGT
TTCGCTGTCGGGTCTCTAGTTCTTGCACGCTCTTTAAGAGTCTGCACTGGAGGAACTCCTGCCATTACCAGCTCC
CTTCTTGCAGAAGGGAGGGGGAAACATACATTTATTCATGCCAGTCTGTTGCATGCAGGCTTTTTGGCTTCCTAC
CTTGCAACAAAATAATTGCACCAACTCCTTAGTGCCGATTCCGCCCACAGAGAGTCCTGGAGCCACAGTCTTTTT
TGCTTTGCATTGTAGGAGAGGGACTAAGTGCTAGAGACTATGTCGCTTTCCTGAGCTACCGAGAGCGCTCGTGAA
CTGGAATCAACTGCTTCAGGGAAAAAGAAAAAAAAAAAAAAAAAGACTTGCCTGGGAGGCCGCGAGAAACTTGCA
TTGGAAGCTTCAGCAACCAGCATTCGAGAAACTCCTCTCTACTTTAGCACGGTCTCCAGACTCAGCCGAGAGACA
GCAAACTGCAGCGCGGTGAGAGAGCGAGAGAGAGGGAGAGAGAGACTCTCCAGCCTGGGAACTATAACTCCTCTG
CGAGAGGCGGAGAACTCCTTCCCCAAATCTTTTGGGGACTTTTCTCTCTTTACCCACCTCCGCCCCTGCGAGGAG
TTGAGGGGCCAGTTCGGCCGCCGCGCGCGTCTTCCCGTTCGGCGTGTGCTTGGCCCGGGGAACCGGGAGGGCCCG
GCGATCGCGCGGCGGCCGCCGCGAGGGTGTGAGCGCGCGTGGGCGCCCGCCGAGCCGAGGCC**ATG**GTGCAGCAAA
CCAACAATGCCGAGAACACGGAAGCGCTGCTGGCCGGCGAGAGCTCGGACTCGGGCGCCGGCCTCGAGCTGGGAA
TCGCCTCCTCCCCCACGCCCGGCTCCACCGCCTCCACGGGCGGCAAGGCCGACGACCCGAGCTGGTGCAAGACCC
CGAGTGGGCACATCAAGCGACCCATGAACGCCTTCATGGTGTGGTCGCAGATCGAGCGGCGCAAGATCATGGAGC
AGTCGCCCGACATGCACAACGCCGAGATCTCCAAGCGGCTGGGCAAACGCTGGAAGCTGCTCAAAGACAGCGACA
AGATCCCTTTCATTCGAGAGGCGGAGCGGCTGCGCCTCAAGCACATGGCTGACTACCCCGACTACAAGTACCGGC
CCAGGAAGAAGGTGAAGTCCGGCAACGCCAACTCCAGCTCCTCGGCCGCCGCCTCCTCCAAGCCGGGGGAGAAGG
GAGACAAGGTCGGTGGCAGTGGCGGGGGCGGCCATGGGGGCGGCGGCGGCGGCGGGAGCAGCAACGCGGGGGGAG
GAGGCGGCGGTGCGAGTGGCGGCGGCGCCAACTCCAAACCGGCGCAGAAAAAGAGCTGCGGCTCCAAAGTGGCGG
GCGGCGCGGGCGGTGGGGTTAGCAAACCGCACGCCAAGCTCATCCTGGCAGGCGGCGGCGGCGGCGGGAAAGCAG
CGGCTGCCGCCGCCGCCTCCTTCGCCGCCGAACAGGCGGGGGCCGCCGCCCTGCTGCCCCTGGGCGCCGCCGCCG
ACCACCACTCGCTGTACAAGGCGCGGACTCCCAGCGCCTCGGCCTCCGCCTCCTCGGCAGCCTCGGCCTCCGCAG
CGCTCGCGGCCCCGGGCAAGCACCTGGCGGAGAAGAAGGTGAAGCGCGTCTACCTGTTCGGCGGCCTGGGCACGT
CGTCGTCGCCCGTGGGCGGCGTGGGCGCGGGAGCCGACCCCAGCGACCCCCTGGGCCTGTACGAGGAGGAGGGCG
CGGGCTGCTCGCCCGACGCGCCCAGCCTGAGCGGCCGCAGCAGCGCCGCCTCGTCCCCCGCCGCCGGCCGCTCGC
CCGCCGACCACCGCGGCTACGCCAGCCTGCGCGCCGCCTCGCCCGCCCCGTCCAGCGCGCCCTCGCACGCGTCCT
CCTCGGCCTCGTCCCACTCCTCCTCTTCCTCCTCCTCGGGCTCCTCGTCCTCCGACGACGAGTTCGAAGACGACC
TGCTCGACCTGAACCCCAGCTCAAACTTTGAGAGCATGTCCCTGGGCAGCTTCAGTTCGTCGTCGGCGCTCGACC
GGGACCTGGATTTTAACTTCGAGCCCGGCTCCGGCTCGCACTTCGAGTTCCCGGACTACTGCACGCCCGAGGTGA
GCGAGATGATCTCGGGAGACTGGCTCGAGTCCAGCATCTCCAACCTGGTTTTCACCTAC**TGA**AGGGCGCGCAGGC
AGGGAGAAGGGCCGGGGGGGGTAGGAGAGGAGAAAAAAAAAGTGAAAAAAAGAAACGAAAAGGACAGACGAAGAG
TTTAAAGAGAAAAGGGAAAAAAGAAAGAAAAAGTAAGCAGGGCTGGCTTCGCCCGCGTTCTCGTCGTCGGATCAA
GGAGCGCGGCGGCGTTTTGGACCCGCGCTCCCATCCCCCACCTTCCCGGGCCGGGGACCCACTCTGCCCAGCCGG
AGGGACGCGGAGGAGGAAGAGGGTAGACAGGGGCGACCTGTGATTGTTGTTATTGATGTTGTTGTTGATGGCAAA
AAAAAAAAAGCGACTTCGAGTTTGCTCCCCTTTGCTTGAAGAGACCCCCTCCCCCTTCCAACGAGCTTCCGGACT
TGTCTGCACCCCCAGCAAGAAGGCGAGTTAGTTTTCTAGAGACTTGAAGGAGTCTCCCCCTTCCTGCATCACCAC
CTTGGTTTTGTTTTATTTTGCTTCTTGGTCAAGAAAGGAGGGGAGAACCCAGCGCACCCCTCCCCCCCTTTTTTT
AAACGCGTGATGAAGACAGAAGGCTCCGGGGTGACGAATTTGGCCGATGGCAGATGTTTTGGGGGAACGCCGGGA
CTGAGAGACTCCACGCAGGCGAATTCCCGTTTGGGGCTTTTTTTTCCTCCCTCTTTTCCCCTTGCCCCCTCTGCA
GCCGGAGGAGGAGATGTTGAGGGGAGGAGGCCAGCCAGTGTGACCGGCGCTAGGAAATGACCCGAGAACCCCGTT
GGAAGCGCAGCAGCGGGAGCTAGGGGCGGGGGCGGAGGAGGACACGAACTGGAAGGGGGTTCACGGTCAAACTGA
AATGGATTTGCACGTTGGGGAGCTGGCGGCGGCGGCTGCTGGGCCTCCGCCTTCTTTTCTACGTGAAATCAGTGA
GGTGAGACTTCCCAGACCCCGGAGGCGTGGAGGAGAGGAGACTGTTTGATGTGGTACAGGGGCAGTCAGTGGAGG
GCGAGTGGTTTCGGAAAAAAAAACAAGAAAACAAGACAAAAAACAGAACACAAAAGCGATTTTTTTCTTCTCTTA
ATCGGAATCGTGAGGGCGTGGGATATTCCAAGGGGGGGATCGCGG

FIGURE 436

MVQQTNNAENTEALLAGESSDSGAGLELGIASSPTPGSTASTGGKADDPSWCKTPSGHIKRPMNAFMVWSQIERR
KIMEQSPDMHNAEISKRLGKRWKLLKDSDKIPFIREAERLRLKHMADYPDYKYRPRKKVKSGNANSSSSAAASSK
PGEKGDKVGGSGGGGHGGGGGGGSSNAGGGGGGASGGGANSKPAQKKSCGSKVAGGAGGGVSKPHAKLILAGGGG
GGKAAAAAAAASFAAEQAGAAALLPLGAAADHHSLYKARTPSASASASSAASASAALAAPGKHLAEKKVKRVYLFG
GLGTSSSPVGGVGAGADPSDPLGLYEEEGAGCSPDAPSLSGRSSAASSPAAGRSPADHRGYASLRAASPAPSSAP
SHASSSASSHSSSSSSSGSSSSDDEFEDDLLDLNPSSNFESMSLGSFSSSSALDRDLDFNFEPGSGSHFEFPDYC
TPEVSEMISGDWLESSISNLVFTY

FIGURE 437

AAAAGAAAAAAAAAAGATTTTTTTCTTCTCTTAATCGGAATCGTGATGGTGTTGGATTATTTCAATGGTGGGGTT
AATATAGCATGTTATCCTGTCTATCTTTTAAAGATTTCTGTATAAGACTGTTGAGCAGTTTTTAAAATAGTGTAG
GATAATATAAAAAGCAGATAGATGGCGCTATGTTTGATTCCTACAACGAAATTATCACCAGCTTTTTTTCATTCT
TAACTCTTTAAAGGATTCAAACGCAACTCAAATCTGTGCTGGACTTTAAAAAAACAATTCAGGACCAAATTTTTT
CTCAGTGTGTGTGTTTATTCCTTATAGGTGTAAATGAGAAGACGTGTTTTTTTCCTTCACCGATGCTCCATCCTC
GTATTTCTTTTTCCTTGTAAATGTAATCAGATGCCATTTTATATGTGGACGTATTTATACTGGCCAAACATATTT
TTTCTTTTGTCCCTTTTTTTCTTTCCTTTCTTTTTACTTCCTTTATTTCTTATTCCTCCTTTCCNTTTTTNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNGGTAGTTGTTGTTACCCACGCCATTTTACGTCTCCTTCACTGAAGGG
CTAGAGTTTTAACTTTTAATTTTTTATATTTAAATGTAGACTTTTGACACTTTTAAAAAACAAAAAAAGACAAGA
GAGATGAAAACGTTTGATTATTTTCTCAGTGTATTTTTGTAAAAAATATATAAAGGGGGTGTTAATCGGTGTAAA
TCGCTGTTTGGATTTCCTGATTTTATAACAGGGCGGCTGGTTAATATCTCACACAGTTTAAAAAATCAGCCCCTA
ATTTCTCCATGTTTACACTTCAATCTGCAGGCTTCTTAAAGTGACAGTATCCCTTAACCTGCCACCAGTGTCCAC
CCTCCGGCCCCCGTCTTGTAAAAAGGGGAGGAGAATTAGCCAAACACTGTAAGCTTTTAAGAAAAACAAAGTTTT
AAACGAAATACTGCTCTGTCCAGAGGCTTTAAAACTGGTGCAATTACAGCAAAAAGGGATTCTGTAGCTTTAACT
TGTAAACCACATCTTTTTTGCACTTTTTTTATAAGCAAAAACGTGCCGTTTAAACCACTGGATCTATCTAAATGC
CGATTTGAGTTCGCGACACTATGTACTGCGTTTTTCATTCTTGTATTTGACTATTTAATCCTTTCTACTTGTCGC
TAAATATAATTGTTTTAGTCTTATGGCATGATGATAGCATATGTGTTCAGGTTTATAGCTGTTGTGTTTAAAAAT
TGAAAAAAGTGGAAAACATCTTTGTACATTTAAGTCTGTATTATAATAAGCAAAAAGATTGTGTGTATGTATGTT
TAATATAACATGACAGGCACTAGGACGTCTGCCTTTTTAAGGCAGTTCCGTTAAGGGTTTTTGTTTTTAAACTTT
TTTTTGCCATCCATCCTGTGCAATATGCCGTGTAGAATATTTGTCTTAAAATTCAAGGCCACAAAAACAATGTTT
GGGGGAAAAAAAAGAAAAAATCATGCCAGCTAATCATGTCAAGTTCACTGCCTGTCAGATTGTTGATATATACCT
TCTGTAAATAACTTTTTTTGAGAAGGAAATAAAATCAGCTGGAACTGAACCCTAAAAAAAATCTATGTCGGGTGC
GGAGAAAGAGGTAATGAAATGGCA

FIGURE 433

AGTTGCAGGCGAGCAGGCGAGGAATCGCCGTGGCGTCTTGGTGTTCTCCACGCTGGTTCGCAGGTGAAGAGATGG
CGTTTGTGAAGAGTGGCTGGTTGCTGCGACAGAGTACTATTTTGAAGCGCTGGAAGAAGAACTGGTTTGATCTGT
GGTCGGATGGTCACCTGATCTATTATGATGACCAGACTCGGCAGAATATCGAGGATAAGGTCCACATGCCAATGG
ACTGCATCAACATCCGCACGGGGCAGGAATGTCGGGATACTCAGCCCCCGGATGGAAAGTCAAAAGACTGCATGC
TCCAGATTGTTTGTCGAGATGGGAAAACAATTAGTCTTTGTGCAGAAAGCACAGATGATTGCTTGGCCTGGAAAT
TTACACTCCAAGATTCTAGGACAAACACAGCGTATGTGGGCTCTGCAGTCATGACCGATGAGACATCCGTGGTTT
CCTCACCTCCACCATACACGGCCTATGCTGCACCGGCCCCTGAGGCTTATGGCTATGGGCCATACGGTGGTGCGT
ACCCGCCAGGAACTCAAGTTGTCTACGCTGCGAATGGGCAGGCGTATGCCGTGCCCCACCAGTACCCATATGCAG
GACTTTATGGACAGCAGCCTGCTAACCAAGTCATCATTCGAGAGCGCTATCGAGACAACGACAGCGACCTGGCAC
TGGGCATGCTGGCAGGAGCAGCCACGGGCATGGCCTTAGGGTCTCTATTTTGGGTCTTCTAGGGGCCTCAAGGTC
TTGATGTGCATAGCTTCTGATAACCCTGTGTGCAATAATATGATTTGCAGGGCATTTCTGTTTGTGACAAAAGTT
TTTAATAATAGTTTTAATCATTCCTTTGAAAGTAGTGATGTCATAATTGTACTAATCCACATAAGTACCACAGAG
AAGGGTTTGAACTGTGCTATTTTGTTCAAATGTTGACTCTCCGGGGGCACTGGCTCATTCCAAGACTGTTCTTGT
GCAACTCTCAGAATACCTTATTTGAGCATACCTGTTTTGAAAGGCATTTTCTTTTTAGAGTTAGGTGTAGTGCTT
AAGGGTTAATTTATTTTCATGTTATGCCAGTAATATAGTGTTGTATGCCTATTGAGTGATTGTGGCAAGAAAAGC
TACAGCTTCTTTGCGTTTAACTTTTTCAAACCACAGACCAGAACTGGTTGCATGTTACTTTAGGAGTTGTGGGTT
GGTAAGCTCCCAGGTACTTCCCGAGGCTATGGTGTGAGAGCCCCCGTCCTGCCCTCTGGGGCTCCACAGGCCCCT
GGCAAGGCCGATGGCTCAGGATGATGGGGCACAGCCCGCCTTTGAACAATCATGCTTCAGAAATCTGCCTGACCC
TAGCTGCTGCTGCTGCTCACTTTATTCTTGTATGGCTTTGGTAGGCATACTTGGAGAACATATCCCACATTAGGA
ATTGATTTAAGCCTGAGAGTTTGAGGGCTTTAATCCTTTAAAACTTGGAGAAGCTGGCTGGGCGCGGTGGCTCAC
GCCTGTAATCCCAGCACTTTGAGAGACCGAGGCGGGCGGATCACGAGGTCAGGAGATCGAGACCATCCTGGCTAA
CACGGTGAAACCCCATCTCTACTAAAAATACAAAAAATTAGCTGGGCGTGGTGGCAGGCGCCTGTGGTCCCAGCT
ACTCGGGAGGCTGAGGCAGGAGAATAGTGTGAACCCAGGAGGCGGAGCTTGCAGTGAGCCAAGATAGTGCCACTG
CACTTCAGCCTGGGTGACAGAGTGAGACTCTGTCTCAAAAAAAAAAAAAAAAA

FIGURE 438

MRRRVFFLHRCSILVFLFPCKCNQMPFYMWTYLYWPNIFFLLSLFFFPFFLLPLFLIPPFXFXXXXXXXXXXXX

FIGURE 439

GGAGGGTGGGCAGCACTCGCTTTATTGTCCAGCATTCCAC**ATG**GATAGTCGCCACACCTTTGCCCCTGCTGCGAT
GACCCTGTCGCCACTTCTGCTGTTCCTGCCACCGCTGCTGCTGCTGCTGGACGTCCCCACGGCGGCGGTGCAGGC
GTCCCCTCTGCAAGCGTTAGACTTCTTTGGGAATGGGCCACCAGTTAACTACAAGACAGGCAATCTATACCTGCG
GGGGCCCCTGAAGAAGTCCAATGCACCGCTTGTCAATGTGACCCTCTACTATGAAGCACTGTGCGGTGGCTGCCG
AGCCTTCCTGATCCGGGAGCTCTTCCCAACATGGCTGTTGGTCATGGAGATCCTCAATGTCACGTCGGTGCCCTA
CGGAAACGCACAGGAACAAAATGTCAGTGGCAGGTGGGAGTTCAAGTGCCAGCTTGGAGAAGAGGAGTGCAAATT
CAACAAGGTGGAGGCCTGCGTGTTGGATGAACTTGACATGGAGCTAGCCTTCCTGACCATGTCTGGCATGGCATG
GAAGAGTTTGAGGACATGGAGAGAAGTCTGCCACTATGCCTGCAGCTCTACGCCCCAGGGCTGTCGCCAGAACTA
TCATGGAGTGTGCAATGGGGGACCGCGGCATGCAGCTCATGCACGCCAACGCCCAGCGGACAGATGCTCTCCAGC
CACCGCACGAGTATGTGCCCTGGGTCACCGTCAATGGGAAACCCTTGGAAGATCAGACCCAGCTCCTTACCCTTG
TCTGCCAGTTGTACCAGGGCAAGAAGCCGGATGTCTGCCCTTCCTCAACCAGCTCCCTCCGGAGTGTTTGCTTCG
AGTGTTGGCCGGTGGGCTGCGGAGAGCTCATGGAAGGCGAGTGGGAACTCGGCTGCCTGCCTTTTTTTCTGATCC
AGACCCTCGGCACCTGCTACTTACCAACTGGAAAATTTTATGCATCCCA**TGA**AGCCCAGATACACAAAATTCCAC
CCCTAGATCAAGAATCCTGCTCCACTAAGAATGGTGCTAAAGTAAAACTAGTTTAAT

FIGURE 440

MDSRHTFAPAAMTLSPLLLFLPPLLLLLDVPTAAVQASPLQALDFFGNGPPVNYKTGNLYLRGPLKKSNAPLVNV
TLYYEALCGGCRAFLIRELFPTWLLVMEILNVTSVPYGNAQEQNVSGRWEFKCQLGEEECKFNKVEACVLDELDM
ELAFLTMSGMAWKSLRTWREVCHYACSSTPQGCRQNYHGVCNGGPRHAAHARQRPADRCSPATARVCALGHRQWE
TLGRSDPAPYPCLPVVPGQEAGCLPFLNQLPPECLLRVLAGGLRRAHGRRVGTRLPAFFSDPDPRHLLLTNWKIL
CIP

FIGURE 441

GGGCGCGCCAGAGACGCAGCCGCGCTCCCACCACCCACACCCACCGCGCCCTCGTTCGCCTCTTCTCCGGGAGCC
AGTCCGCGCCACCGCCGCCGCCCAGGCCATCGCCACCCTCCGCAGCCATGTCCACCAGGTCCGTGTCCTCGTCCT
CCTACCGCAGGATGTTCGGCGGCCCGGGCACCGCGAGCCGGCCGAGCTCCAGCCGGAGCTACGTGACTACGTCCA
CCCGCACCTACAGCCTGGGCAGCGCGCTGCGCCCCAGCACCAGCCGCAGCCTCTACGCCTCGTCCCCGGGCGGCG
TGTATGCCACGCGCTCCTCTGCCGTGCGCCTGCGGAGCAGCGTGCCCGGGGTGCGGCTCCTGCAGGACTCGGTGG
ACTTCTCGCTGGCCGACGCCATCAACACCGAGTTCAAGAACACCCGCACCAACGAGAAGGTGGAGCTGCAGGAGC
TGAATGACCGCTTCGCCAACTACATCGACAAGGTGCGCTTCCTGGAGCAGCAGAATAAGATCCTGCTGGCCGAGC
TCGAGCAGCTCAAGGGCCAAGGCAAGTCGCGCCTAGGGGACCTCTACGAGGAGGAGATGCGGGAGCTGCGCCGGC
AGGTGGACCAGCTAACCAACGACAAAGCCCGCGTCGAGGTGGAGCGCGACAACCTGGCCGAGGACATCATGCGCC
TCCGGGAGAAATTGCAGGAGGAGATGCTTCAGAGAGAGGAAGCCGAAAACACCCTGCAATCTTTCAGACAGGATG
TTGACAATGCGTCTCTGGCACGTCTTGACCTTGAACGCAAAGTGGAATCTTTGCAAGAAGAGATTGCCTTTTTGA
AGAAACTCCACGAAGAGGAAATCCAGGAGCTGCAGGCTCAGATTCAGGAACAGCATGTCCAAATCGATGTGGATG
TTTCCAAGCCTGACCTCACGGCTGCCCTGCGTGACGTACGTCAGCAATATGAAAGTGTGGCTGCCAAGAACCTGC
AGGAGGCAGAAGAATGGTACAAATCCAAGTTTGCTGACCTCTCTGAGGCTGCCAACCGGAACAATGACGCCCTGC
GCCAGGCAAAGCAGGAGTCCACTGAGTACCGGAGACAGGTGCAGTCCCTCACCTGTGAAGTGGATGCCCTTAAAG
GAACCAATGAGTCCCTGGAACGCCAGATGCGTGAAATGGAAGAGAACTTTGCCGTTGAAGCTGCTAACTACCAAG
ACACTATTGGCCGCCTGCAGGATGAGATTCAGAATATGAAGGAGGAAATGGCTCGTCACCTTCGTGAATACCAAG
ACCTGCTCAATGTTAAGATGGCCCTTGACATTGAGATTGCCACCTACAGGAAGCTGCTGGAAGGCGAGGAGAGCA
GGATTTCTCTGCCTCTTCCAAACTTTTCCTCCCTGAACCTGAGGGAAACTAATCTGGATTCACTCCCTCTGGTTG
ATACCCACTCAAAAAGGACATTCCTGATTAAGACGGTTGAAACTAGAGATGGACAGGTTATCAACGAAACTTCTC
AGCATCACGATGACCTTGAATAAAAATTGCACACACTCAGTGGCAGGCGATATATTACCCAGGCAAGAATAAAAA
AGAAATCCCATATCTTAAAGAAACAGCTTTCAAGTGCCTTTCTGCAGTTTTTCAGGAGCGCAAGATAGATTTGGA
ATAGGAATAAGCTCTAGTTCTTAACAACCGACACTCCTACAAGATTTAGAAAAAAGTTTACAACATAATCTAGTT
TACAGAAAAATCTTGTGCTAGAATACTTTTTAAAAGGTATTTTGAATACCATTAAAACTGCTTTTTTTTTTCCAG
CAAGTATCCAACCAACTTGGTTCTGCTTCAATAAATCTTTGGAAAACTCCA

FIGURE 442

MSTRSVSSSSYRRMFGGPGTASRPSSSRSYVTTSTRTYSLGSALRPSTSRSLYASSPGGVYATRSSAVRLRSSVP
GVRLLQDSVDFSLADAINTEFKNTRTNEKVELQELNDRFANYIDKVRFLEQQNKILLAELEQLKGQGKSRLGDLY
EEEMRELRRQVDQLTNDKARVEVERDNLAEDIMRLREKLQEEMLQREEAENTLQSFRQDVDNASLARLDLERKVE
SLQEEIAFLKKLHEEEIQELQAQIQEQHVQIDVDVSKPDLTAALRDVRQQYESVAAKNLQEAEEWYKSKFADLSE
AANRNNDALRQAKQESTEYRRQVQSLTCEVDALKGTNESLERQMREMEENFAVEAANYQDTIGRLQDEIQNMKEE
MARHLREYQDLLNVKMALDIEIATYRKLLEGEESRISLPLPNFSSLNLRETNLDSLPLVDTHSKRTFLIKTVETR
DGQVINETSQHHDDLE

FIGURE 443

TGCCTGCTGAGGGTGGAGACCCACGAGCCGAGGCCTCCTGCAGTGTTCTGCACAGCAAACCGCACGCTATGGCTG
ACAGCCGGGATCCCGCCAGCGACCAGATGCAGCACTGGAAGGAGCAGCGGGCCGCGCAGAAAGCTGATGTCCTGA
CCACTGGAGCTGGTAACCCAGTAGGAGACAAACTTAATGTTATTACAGTAGGGCCCCGTGGGCCCCTTCTTGTTC
AGGATGTGGTTTTCACTGATGAAATGGCTCATTTTGACCGAGAGAGAATTCCTGAGAGAGTTGTGCATGCTAAAG
GAGCAGGGGCCTTTGGCTACTTTGAGGTCACACATGACATTACCAAATACTCCAAGGCAAAGGTATTTGAGCATA
TTGGAAAGAAGACTCCCATCGCAGTTCGGTTCTCCACTGTTGCTGGAGAATCGGGTTCAGCTGACACAGTTCGGG
ACCCTCGTGGGTTTGCAGTGAAATTTTACACAGAAGATGGTAACTGGGATCTCGTTGGAAATAACACCCCCATTT
TCTTCATCAGGGATCCCATATTGTTTCCATCTTTTATCCACAGCCAAAAGAGAAATCCTCAGACACATCTGAAGG
ATCCGGACATGGTCTGGGACTTCTGGAGCCTACGTCCTGAGTCTCTGCATCAGGTTTCTTTCTTGTTCAGTGATC
GGGGGATTCCAGATGGACATCGCCACATGAATGGATATGGATCACATACTTTCAAGCTGGTTAATGCAAATGGGG
AGGCAGTTTATTGCAAATTCCATTATAAGACTGACCAGGGCATCAAAAACCTTTCTGTTGAAGATGCGGCGAGAC
TTTCCCAGGAAGATCCTGACTATGGCATCCGGGATCTTTTTAACGCCATTGCCACAGGAAAGTACCCCTCCTGGA
CTTTTTACATCCAGGTCATGACATTTAATCAGGCAGAAACTTTTCCATTTAATCCATTCGATCTCACCAAGGTTT
GGCCTCACAAGGACTACCCTCTCATCCCAGTTGGTAAACTGGTCTTAAACCGGAATCCAGTTAATTACTTTGCTG
AGGTTGAACAGATAGCCTTCGACCCAAGCAACATGCCACCTGGCATTGAGGCCAGTCCTGACAAAATGCTTCAGG
GCCGCCTTTTTGCCTATCCTGACACTCACCGCCATCGCCTGGGACCCAATTATCTTCATATACCTGTGAACTGTC
CCTACCGTGCTCGAGTGGCCAACTACCAGCGTGATGGCCCGATGTGCATGCAGGACAATCAGGGTGGTGCTCCAA
ATTACTACCCCAACAGCTTTGGTGCTCCGGAACAACAGCCTTCTGCCCTGGAGCACAGCATCCAATATTCTGGAG
AAGTGCGGAGATTCAACACTGCCAATGATGATAACGTTACTCAGGTGCGGGCATTCTATGTGAACGTGCTGAATG
AGGAACAGAGGAAACGTCTGTGTGAGAACATTGCCGGCCACCTGAAGGATGCACAAATTTTCATCCAGAAGAAAG
CGGTCAAGAACTTCACTGAGGTCCACCCTGACTACGGGAGCCACATCCAGGCTCTTCTGGACAAGTACAATGCTG
AGAAGCCTAAGAATGCGATTCACACCTTTGTGCAGTCCGGATCTCACTTGGCGGCAAGGGAGAAGGCAAATCTGTGA
GGCCGGGGCCCTGCACCTGTGCAGCGAAGCTTAGCGTTCATCCGTGTAACCCGCTCATCACTGGATGAAGATT
CTCCTGTGCTAGATGTGCAAATGCAAGCTAGTGGCTTCAAAATAGAGAATCCCACTTTCTATAGCAGATTGTGTA
ACAATTTTAATGCTATTTCCCCAGGGGAAAATGAAGGTTAGGATTTAACAGTCATTTAAAAAAAAAATTTGTTTT
GACGGATGATTGGATTATTCATTTAAAATGATTAGAAGGCAAGTTTCTAGCTAGAAATATGATTTTATTTGACAA
AATTTGTTGAAATTATGTATGTTTACATATCACCTCATGGCCTATTATATTAAAATATGGCTATAAATATATAAA
AAGAAAAGATAAAGATGATCTACTCAGAAATTTTTATTTTTCTAAGGTTCTCATAGGAAAAGTACATTTAATACA
GCAGTGTCATCAGAAGATAACTTGAGCACCGTCATGGCTTAATGTTTATTCCTGATAATAATTGATCAAATTCAT
TTTTTTCACTGGAGTTACATTAATGTTAATTCAGCACTGATTTCACAACAGATCAATTTGTAATTGCTTACATTT
TTACAATAAATAATCTGTACGTAAGAACA

FIGURE 444

MADSRDPASDQMQHWKEQRAAQKADVLTTGAGNPVGDKLNVITVGPRGPLLVQDVVFTDEMAHFDRERIPERVVH
AKGAGAFGYFEVTHDITKYSKAKVFEHIGKKTPIAVRFSTVAGESGSADTVRDPRGFAVKFYTEDGNWDLVGNNT
PIFFIRDPILFPSFIHSQKRNPQTHLKDPDMVWDFWSLRPESLHQVSFLFSDRGIPDGHRHMNGYGSHTFKLVNA
NGEAVYCKFHYKTDQGIKNLSVEDAARLSQEDPDYGIRDLFNAIATGKYPSWTFYIQVMTFNQAETFPFNPFDLT
KVWPHKDYPLIPVGKLVLNRNPVNYFAEVEQIAFDPSNMPPGIEASPDKMLQGRLFAYPDTHRHRLGPNYLHIPV
NCPYRARVANYQRDGPMCMQDNQGGAPNYYPNSFGAPEQQPSALEHSIQYSGEVRRFNTANDDNVTQVRAFYVNV
LNEEQRKRLCENIAGHLKDAQIFIQKKAVKNFTEVHPDYGSHIQALLDKYNAEKPKNAIHTFVQSGSHLAAREKA
NL

FIGURE 445

CGATCAGATCGATCTAAGATGGCGACTGTCGAACCGGAAACCACCCCTACTCCTAATCCCCCGACTACAGAAGAG
GAGAAAACGGAATCTAATCAGGAGGTTGCTAACCCAGAACACTATATTAAACATCCCCTACAGAACAGATGGGCA
CTCTGGTTTTTTAAAAATGATAAAAGCAAAACTTGGCAAGCAAACCTGCGGCTGATCTCCAAGTTTGATACTGTT
GAAGACTTTTGGGCTCTGTACAACCATATCCAGTTGTCTAGTAATTTAATGCCTGGCTGTGACTACTCACTTTTT
AAGGATGGTATTGAGCCTATGTGGGAAGATGAGAAAAACAAACGGGGAGGACGATGGCTAATTACATTGAACAAA
CAGCAGAGACGAAGTGACCTCGATCGCTTTTGGCTAGAGACACTTCTGTGCCTTATTGGAGAATCTTTTGATGAC
TACAGTGATGATGTATGTGGCGCTGTTGTTAATGTTAGAGCTAAAGGTGATAAGATAGCAATATGGACTACTGAA
TGTGAAAACAGAGAAGCTGTTACACATATAGGGAGGGTATACAAGGAAAGGTTAGGACTTCCTCCAAAGATAGTG
ATTGGTTATCAGTCCCACGCAGACACAGCTACTAAGAGCGGCTCCACCACTAAAAATAGGTTTGTTGTTTAAGAA
GACACCTTCTGAGTATTCTCATAGGAGACTGCGTCAAGCAATCGAGATTTGGGAGCTGAACCAAAGCCTCTTCAA
AAAGCAGAGTGGACTGCATTTAAATTTGATTTCCATCTTAATGTTACTCAGATATAAGAGAAGTCTCATTCGCCT
TTGTCTTGTACTTCTGTGTTCATTTTTTTTTTTTTTTTGGCTAGAGTTTCCACTATCCCAATCAAAGAATTAC
AGTACACATCCCCAGAATCCATAAATGTGTTCCTGGCCCACTCTGTAATAGTTCAGTAGAATTACCATTAATTAC
ATACAGATTTTACCTATCCACAATAGTCAGAAAACAACTTGGCATTTCTATACTTTACAGGAAAAAAAATTCTGT
TGTTCCATTTTATGCAGAAGCATATTTTGCTGGTTTGAAAGATTATGATGCATACAGTTTTCTAGCAATTTTCTT
TGTTTCTTTTTACAGCATTGTCTTTGCTGTACTCTTGCTGATGGCTGCTAGATTTTAATTTATTTGTTTCCCTAC
TTGATAATATTAGTGATTCTGATTTCAGTTTTTCATTTGTTTTGCTTAAATTTTTTTTTTTTTTTCCTCATGTA
ACATTGGTGAAGGATCCAGGAATATGACACAAAGGTGGAATAAACATTAATTTTGTGCATTCTTTGGTAATTTTT
TTTGTTTTTTGTAACTACAAAGCTTTGCTACAAATTTATGCATTTCATTCAAATCAGTGATCTATGTTTGTGTGA
TTTCCTAAACATAATTGTGGATTATAAAAAATGTAACATCATAATTACATTCCTAACTAGAATTAGTATGTCTGT
TTTTGTATCTTTATGCTGTATTTTAACACTTTGTATTACTTAGGTTATTTTGCTTTGGTTAAAAATGGCTCAAGT
AGAAAAGCAGTCCCATTCATATTAAGACAGTGTACAAAACTGTAAATAAAATGTGTACAGTGAATTGTCTTTTAG
ACAACTAGATTTGTCCTTTTATTTCTCCATCTTTATAGAAGGAATTTGTACTTCTTATTGCAGGCAAGTCTCTAT
ATTATGTCCTCTTTTGTGGTGTCTTCCATGTGAACAGCATAAGTTTGGAGCACTAGTTTGATTATTATGTTTATT
ACAATTTTTAATAAATTGAATAGGTAGTATCATATATATGGA

FIGURE 446

MATVEPETTPTPNPPTTEEEKTESNQEVANPEHYIKHPLQNRWALWFFKNDKSKTWQANLRLISKFDTVEDFWAL
YNHIQLSSNLMPGCDYSLFKDGIEPMWEDEKNKRGGRWLITLNKQQRRSDLDRFWLETLLCLIGESFDDYSDDVC
GAVVNVRAKGDKIAIWTTECENREAVTHIGRVYKERLGLPPKIVIGYQSHADTATKSGSTTKNRFVV

FIGURE 447A

CAGTTTGGAGCTCAGTCTTCCACCAAAGGCCGTTCAGTTCTCCTGGGCTCCAGCCTCCTGCAAGGACTGCAAGAG
TTTTCCTCCGCAGCTCTGAGTCTCCACTTTTTTGGTGGAGAAAGGCTGCAAAAAGAAAAAGAGACGCAGTGAGTG
GGAAAAGTATGCATCCTATTCAAACCTAATTGAATCGAGGAGCCCAGGGACACACGCCTTCAGGTTTGCTCAGGG
GTTCATATTTGGTGCTTAGACAAATTCAAAATGAGGAAACATCGGCACTTGCCCTTAGTGGCCGTCTTTTGCCTC
TTTCTCTCAGGCTTTCCTACAACTCATGCCCAGCAGCAGCAAGCAGATGTCAAAAATGGTGCGGCTGCTGATATA
ATATTTCTAGTGGATTCCTCTTGGACCATTGGAGAGGAACATTTCCAACTTGTTCGAGAGTTTCTATATGATGTT
GTAAAATCCTTAGCTGTGGGAGAAAATGATTTCCATTTTGCTCTGGTCCAGTTCAACGGAAACCCACATACCGAG
TTCCTGTTAAATACGTATCGTACTAAACAAGAAGTCCTTTCTCATATTTCCAACATGTCTTATATTGGGGGAACC
AATCAGACTGGAAAAGGATTAGAATACATAATGCAAAGCCACCTCACCAAGGCTGCTGGAAGCCGGGCCGGTGAC
GGAGTCCCTCAGGTTATCGTAGTGTTAACTGATGGACACTCGAAGGATGGCCTTGCTCTGCCCTCAGCGGAACTT
AAGTCTGCTGATGTTAACGTGTTTGCAATTGGAGTTGAGGATGCAGATGAAGGAGCGTTAAAAGAAATAGCAAGT
GAACCGCTCAATATGCATATGTTCAACCTAGAGAATTTTACCTCACTTCATGACATAGTAGGAAACTTAGTGTCC
TGTGTGCATTCATCCGTGAGTCCAGAAAGGGCTGGGGACACGGAAACCCTTAAAGACATCACAGCACAAGACTCT
GCTGACATTATTTTCCTTATTGATGGATCAAACAACACCGGAAGTGTCAATTTCGCAGTCATTCTCGACTTCCTT
GTAAATCTCCTTGAGAAACTCCCAATTGGAACTCAGCAGATCCGAGTGGGGGTGGTCCAGTTTAGCGATGAGCCC
AGAACCATGTTTTCCTTGGACACCTACTCCACCAAGGCCCAGGTTCTGGGTGCAGTGAAAGCCCTCGGGTTTGCT
GGTGGGGAGTTGGCCAATATCGGCCTCGCCCTTGATTTCGTGGTGGAGAACCACTTCACCCGGGCAGGGGGCAGC
CGCGTGGAGGAAGGGGTTCCCCAGGTGCTGGTCCTCATAAGTGCCGGGCCTTCTAGTGACGAGATTCGCTACGGG
GTGGTAGCACTGAAGCAGGCTAGCGTGTTCTCATTCGGCCTTGGAGCCCAGGCCGCCTCCAGGGCAGAGCTTCAG
CACATAGCTACCGATGACAACTTGGTGTTTACTGTCCCGGAATTCCGTAGCTTTGGGGACCTCCAGGAGAAATTA
CTGCCGTACATTGTTGGCGTGGCCCAAAGGCACATTGTCTTGAAACCGCCAACCATTGTCACACAAGTCATTGAA
GTCAACAAGAGAGACATAGTCTTCCTGGTGGATGGCTCATCTGCACTGGGACTGGCCAACTTCAATGCCATCCGA
GACTTCATTGCTAAAGTCATCCAGAGGCTGGAAATCGGACAGGATCTTATCCAGGTGGCAGTGGCCCAGTATGCA
GACACTGTGAGGCCTGAATTTTATTTCAATACCCATCCAACAAAAAGGGAAGTCATAACCGCTGTGCGGAAAATG
AAGCCCCTGGACGGCTCGGCCCTGTACACGGGCTCTGCTCTAGACTTTGTTCGTAACAACCTATTCACGAGTTCA
GCCGGCTACCGGGCTGCCGAGGGGATTCCTAAGCTTTTGGTGCTGATCACAGGTGGTAAGTCCCTAGATGAAATC
AGCCAGCCTGCCCAGGAGCTGAAGAGAAGCAGCATAATGGCCTTTGCCATTGGGAACAAGGGTGCCGATCAGGCT
GAGCTGGAAGAGATCGCTTTCGACTCCTCCCTGGTGTTCATCCCAGCTGAGTTCCGAGCCGCCCCATTGCAAGGC
ATGCTGCCTGGCTTGCTGGCACCTCTCAGGACCCTCTCTGGAACCCCTGAAGTTCACTCAAACAAAAGAGATATC
ATCTTTCTTTTGGATGGATCAGCCAACGTTGGAAAAACCAATTTCCCTTATGTGCGCGACTTTGTAATGAACCTA
GTTAACAGCCTTGATATTGGAAATGACAATATTCGTGTTGGTTTAGTGCAATTTAGTGACACTCCTGTAACGGAG
TTCTCTTTAAACACATACCAGACCAAGTCAGATATCCTTGGTCATCTGAGGCAGCTGCAGCTCCAGGGAGGTTCG
GGCCTGAACACAGGCTCAGCCCTAAGCTATGTCTATGCCAACCACTTCACGGAAGCTGGCGGCAGCAGGATCCGT
GAACACGTGCCGCAGCTCCTGCTTCTGCTCACAGCTGGGCAGTCTGAGGACTCCTATTTGCAAGCTGCCAACGCC
TTGACACGCGCGGGCATCCTGACTTTTTGTGTGGGAGCTAGCCAGGCGAATAAGGCAGAGCTTGAGCAGATTGCT
TTTAACCCAAGCCTGGTGTATCTCATGGATGATTTCAGCTCCCTGCCAGCTTTGCCTCAGCAGCTGATTCAGCCC
CTAACCACATATGTTAGTGGAGGTGTGGAGGAAGTACCACTCGCTCAGCCAGAGAGCAAGCGAGACATTCTGTTC
CTCTTTGACGGCTCAGCCAATCTTGTGGGCCAGTTCCCTGTTGTCCGTGACTTTCTCTACAAGATTATCGATGAG
CTCAATGTGAAGCCAGAGGGGACCCGAATTGCGGTGGCTCAGTACAGCGATGATGTCAAGGTGGAGTCCCGTTTT
GATGAGCACCAGAGTAAGCCTGAGATCCTGAATCTTGTGAAGAGAATGAAGATCAAGACGGGCAAAGCCCTCAAC
CTGGGCTACGCGCTGGACTATGCACAGAGGTACATTTTTGTGAAGTCTGCTGGCAGCCGGATCGAGGATGGAGTG
CTTCAGTTCCTGGTGCTGCTGGTCGCAGGAAGGTCATCTGACCGTGTGGATGGGCCAGCAAGTAACCTGAAGCAG
AGTGGGGTTGTGCCTTTCATCTTCCAAGCCAAGAACGCAGACCCTGCTGAGTTAGAGCAGATCGTGCTGTCTCCA
GCGTTTATCCTGGCTGCAGAGTCGCTTCCCAAGATTGGAGATCTTCATCCACAGATAGTGAATCTCTTAAAATCA
GTGCACAACGGAGCACCAGCACCAGTTTCAGGTGAAAAGGACGTGGTGTTTCTGCTTGATGGCTCTGAGGGCGTC
AGGAGCGGCTTCCCTCTGTTGAAAGAGTTTGTCCAGAGAGTGGTGGAAAGCCTGGATGTGGGCCAGGACCGGGTC
CGCGTGGCCGTGGTGCAGTACAGCGACCGGACCAGGCCCGAGTTCTACCTGAATTCATACATGAACAAGCAGGAC
GTCGTCAACGCTGTCCGCCAGCTGACCCTGCTGGGAGGGCCGACCCCCAACACCGGGGCCGCCCTGGAGTTTGTC

FIGURE 447B

CTGAGGAACATCCTGGTCAGCTCTGCGGGAAGCAGGATAACAGAAGGTGTGCCCCAGCTGCTGATCGTCCTCACG
GCCGACAGGTCTGGGGATGATGTGCGGAACCCCTCCGTGGTCGTGAAGAGGGGTGGGGCTGTGCCCATTGGCATT
GGCATCGGGAACGCTGACATCACAGAGATGCAGACCATCTCCTTCATCCCGGACTTTGCCGTGGCCATTCCCACC
TTTCGCCAGCTGGGGACCGTCCAACAGGTCATCTCTGAGAGGGTGACCCAGCTCACCCGCGAGGAGCTGAGCAGG
CTGCAGCCGGTGTTGCAGCCTCTACCGAGCCCAGGTGTTGGTGGCAAGAGGGACGTGGTCTTTCTCATCGATGGG
TCCCAAAGTGCCGGGCCTGAGTTCCAGTACGTTCGCACCCTCATAGAGAGGCTGGTTGACTACCTGGACGTGGGC
TTTGACACCACCCGGGTGGCTGTCATCCAGTTCAGCGATGACCCCAAGGCGGAGTTCCTGCTGAACGCCCATTCC
AGCAAGGATGAAGTGCAGAACGCGGTGCAGCGGCTGAGGCCCAAGGGAGGGCGGCAGATCAACGTGGGCAATGCC
CTGGAGTACGTGTCCAGGAACATCTTCAAGAGGCCCCTGGGGAGCCGCATTGAAGAGGGCGTCCCACAGTTCCTG
GTCCTCATCTCGTCTGGAAAGTCTGACGATGAGGTGGTCGTCCCGGCGGTGGAGCTCAAGCAGTTTGGCGTGGCC
CCTTTCACGATCGCCAGGAACGCAGACCAGGAGGAGCTGGTGAAGATCTCGCTGAGCCCCGAATATGTGTTCTCG
GTGAGCACCTTCCGGGAGCTGCCCAGCCTGGAGCAGAAACTGCTGACGCCCATCACGACCCTGACCTCAGAGCAG
ATCCAGAAGCTCTTAGCCAGCACTCGCTATCCACCTCCAGCAGTTGAGAGTGATGCTGCAGACATTGTCTTTCTG
ATCGACAGCTCTGAGGGAGTTAGGCCAGATGGCTTTGCACATATTCGAGATTTTGTTAGCAGGATTGTTCGAAGA
CTCAACATCGGCCCCAGTAAAGTGAGAGTTGGGGTCGTGCAGTTCAGCAATGATGTCTTCCCAGAATTCTATCTG
AAAACCTACAGATCCCAGGCCCCGGTGCTGGACGCCATACGGCGCCTGAGGCTCAGAGGGGGGTCCCCACTGAAC
ACTGGCAAGGCTCTCGAATTTGTGGCAAGAAACCTCTTTGTTAAGTCTGCGGGGAGTCGCATAGAAGACGGGGTG
CCCCAACACCTGGTCCTGGTCCTGGGTGGAAAATCCCAGGACGATGTGTCCAGGTTCGCCCAGGTGATCCGTTCC
TCGGGCATTGTGAGTTTAGGGGTAGGAGACCGGAACATCGACAGAACAGAGCTGCAGACCATCACCAATGACCCC
AGACTGGTCTTCACAGTGCGAGAGTTCAGAGAGCTTCCCAACATAGAAGAAAGAATCATGAACTCGTTTGGACCC
TCCGCAGCCACTCCTGCACCTCCAGGGGTGGACACCCCTCCTCCTTCACGGCCAGAGAAGAAGAAAGCAGACATT
GTGTTCCTGTTGGATGGTTCCATCAACTTCAGGAGGGACAGTTTCCAGGAAGTGCTTCGTTTTGTGTCTGAAATA
GTGGACACAGTTTATGAAGATGGCGACTCCATCCAAGTGGGGCTTGTCCAGTACAACTCTGACCCCACTGACGAA
TTCTTCCTGAAGGACTTCTCTACCAAGAGGCAGATTATTGACGCCATCAACAAAGTGGTCTACAAAGGGGGAAGA
CACGCCAACACTAAGGTGGGCCTTGAGCACCTGCGGGTAAACCACTTTGTGCCTGAGGCAGGCAGCCGCCTGGAC
CAGCGGGTCCCTCAGATTGCCTTTGTGATCACGGGAGGAAAGTCGGTGGAAGATGCACAGGATGTGAGCCTGGCC
CTCACCCAGAGGGGGGTCAAAGTGTTTGCTGTTGGAGTGAGGAATATCGACTCGGAGGAGGTTGGAAAGATAGCG
TCCAACAGCGCCACAGCGTTCCGCGTGGGCAACGTCCAGGAGCTGTCCGAACTGAGCGAGCAAGTTTTGGAAACT
TTGCATGATGCGATGCATGAAACCCTTTGCCCTGGTGTAACTGATGCTGCCAAAGCTTGTAATCTGGATGTGATT
CTGGGGTTTGATGGTTCTAGAGACCAGAATGTTTTTGTGGCCCAGAAGGGCTTCGAGTCCAAGGTGGACGCCATC
TTGAACAGAATCAGCCAGATGCACAGGGTCAGCTGCAGCGGTGGCCGCTCGCCCACCGTGCGTGTGTCAGTGGTG
GCCAACACGCCCTCGGGCCCGGTGGAGGCCTTTGACTTTGACGAGTACCAGCCAGAGATGCTCGAGAAGTTCCGG
AACATGCGCAGCCAGCACCCCTACGTCCTCACGGAGGACACCCTGAAGGTCTACCTGAACAAGTTCAGACAGTCC
TCGCCGGACAGCGTGAAGGTGGTCATTCATTTTACTGATGGAGCAGACGGAGATCTGGCTGATTTACACAGAGCA
TCTGAGAACCTCCGCCAAGAAGGAGTCCGTGCCTTGATCCTGGTGGGCCTTGAACGAGTGGTCAACTTGGAGCGG
CTAATGCATCTGGAGTTTGGGCGAGGGTTTATGTATGACAGGCCCCTGAGGCTTAACTTGCTGGACTTGGATTAT
GAACTAGCGGAGCAGCTTGACAACATTGCCGAGAAAGCTTGCTGTGGGGTTCCCTGCAAGTGCTCTGGGCAGAGG
GGAGACCGCGGGCCCATCGGCAGCATCGGGCCAAAGGGTATTCCTGGAGAAGACGGCTACCGAGGCTATCCTGGT
GATGAGGGTGGACCCGGTGAGCGTGGTCCGCCTGGTGTGAACGGCACTCAAGGTTTCCAGGGCTGCCCGGGCCAG
AGAGGAGTAAAGGGCTCTCGGGGATTCCCAGGAGAGAAGGGCGAAGTAGGAGAAATTGGACTGGATGGTCTGGAT
GGTGAAGATGGAGACAAAGGATTGCCTGGTTCTTCTGGAGAGAAAGGGAATCCTGGAAGAAGGGGTGATAAAGGA
CCTCGAGGAGAGAAAGGAGAAAGAGGAGATGTTGGGATTCGAGGGGACCCGGGTAACCCAGGACAAGACAGCCAG
GAGAGAGGACCCAAAGGAGAAACCGGTGACCTCGGCCCCATGGGTGTCCCAGGGAGAGATGGAGTACCTGGAGGA
CCTGGAGAAACTGGGAAGAATGGTGGCTTTGGCCGAAGGGGACCCCCCGGAGCTAAGGGCAACAAGGGCGGTCCT
GGCCAGCCGGGCTTTGAGGGAGAGCAGGGGACCAGAGGTGCACAGGGCCCAGCTGGTCCTGCTGGTCCTCCAGGG
CTGATAGGAGAACAAGGCATTTCTGGACCTAGGGGAAGCGGAGGTGCCCGTGGCGCTCCTGGAGAACGAGGCAGA
ACCGGTCCACTGGGAAGAAAGGGTGAGCCCGGAGAGCCAGGACCAAAAGGAGGAATCGGGAACCCGGGCCCTCGT
GGGGAGACGGGAGATGACGGGAGAGACGGAGTTGGCAGTGAAGGACGCAGAGGCAAAAAAGGAGAAAGAGGATTT

FIGURE 447C

CCTGGATACCCAGGACCAAAGGGTAACCCAGGTGAACCTGGGCTAAATGGAACAACAGGACCCAAAGGCATCAGA
GGCCGAAGGGGAAATTCGGGACCTCCAGGGATAGTTGGACAGAAGGGGAGACCTGGCTACCCAGGACCAGCTGGT
CCAAGGGGCAACAGGGGCGACTCCATCGATCAATGTGCCCTCATCCAAAGCATCAAAGATAAATGCCCTTGCTGT
TACGGGCCCCTGGAGTGCCCCGTCTTCCCAACAGAACTAGCCTTTGCTTTAGACACCTCTGAGGGAGTCAACCAA
GACACTTTCGGCCGGATGCGAGATGTGGTCTTGAGTATTGTGAATGTCCTGACCATTGCTGAGAGCAACTGCCCG
ACGGGGGCCCGGGTGGCTGTGGTCACCTACAACAACGAGGTGACCACGGAGATCCGGTTTGCTGACTCCAAGAGG
AAGTCGGTCCTCCTGGACAAGATTAAGAACCTTCAGGTGGCTCTGACATCCAAACAGCAGAGTCTGGAGACTGCC
ATGTCGTTTGTGGCCAGGAACACATTTAAGCGTGTGAGGAACGGATTCCTAATGAGGAAAGTGGCTGTTTTCTTC
AGCAACACACCCACAAGAGCATCCCCACAGCTCAGAGAGGCTGTGCTCAAACTCTCAGATGCGGGGATCACCCCC
TTGTTCCTTACAAGGCAGGAAGACCGGCAGCTCATCAACGCTTTGCAGATCAATAACACAGCAGTGGGGCATGCG
CTTGTCCTGCCTGCAGGGAGAGACCTCACAGACTTCCTGGAGAATGTCCTCACGTGTCATGTTTGCTTGGACATC
TGCAACATCGACCCATCCTGTGGATTTGGCAGTTGGAGGCCTTCCTTCAGGGACAGGAGAGCGGCAGGGAGTGAT
GTGGACATCGACATGGCTTTCATCTTAGACAGCGCTGAGACCACCACCCTGTTCCAGTTCAATGAGATGAAGAAG
TACATAGCGTACCTGGTCAGACAACTGGACATGAGCCCAGATCCCAAGGCCTCCCAGCACTTCGCCAGAGTGGCA
GTTGTGCAGCACGCGCCCTCTGAGTCCGTGGACAATGCCAGCATGCCACCTGTGAAGGTGGAATTCTCCCTGACT
GACTATGGCTCCAAGGAGAAGCTGGTGGACTTCCTCAGCAGGGGAATGACACAGTTGCAGGGAACCAGGGCCTTA
GGCAGTGCCATTGAATACACCATAGAGAATGTCTTTGAAAGTGCCCCAAACCCACGGGACCTGAAAATTGTGGTC
CTGATGCTGACGGGCGAGGTGCCGGAGCAGCAGCTGGAGGAGGCCCAGAGAGTCATCCTGCAGGCCAAATGCAAG
GGCTACTTCTTCGTGGTCCTGGGCATTGGCAGGAAGGTGAACATCAAGGAGGTATACACCTTCGCCAGTGAGCCA
AACGACGTCTTCTTCAAATTAGTGGACAAGTCCACCGAGCTCAACGAGGAGCCTTTGATGCGCTTCGGGAGGCTG
TTGCCGTCCTTCGTCAGCAGTGAAAATGCTTTTTACTTGTCCCCAGATATCAGGAAACAGTGTGATTGGTTCCAA
GGGGACCAACCCACAAAGAACCTTGTGAAGTTTGGTCACAAACAAGTAAATGTTCCGAATAACGTTACTTCAAGT
CCTACATCCAACCCAGTGACGACAACGAAGCCGGTGACTACGACGAAGCCGGTGACCACCACAACAAAGCCTGTA
ACCACCACAACAAAGCCTGTGACTATTATAAATCAGCCATCTGTGAAGCCAGCCGCTGCAAAGCCGGCCCCTGCG
AAACCTGTGGCTGCCAAGCCTGTGGCCACAAAGACGGCCACTGTTAGACCCCCAGTGGCGGTGAAGCCAGCAACA
GCAGCGAAGCCTGTAGCAGCAAAGCCAGCAGCTGTAAGACCCCCCGCTGCTGCTGCAAAACCAGTGGCGACCAAG
CCTGAGGTCCCTAGGCCACAGGCAGCCAAACCAGCTGCCACCAAGCCAGCCACCACTAAGCCCGTGGTTAAGATG
CTCCGTGAAGTCCAGGTGTTTGAGATAACAGAGAACAGCGCCAAACTCCACTGGGAGAGGCCTGAGCCCCCCGGT
CCTTATTTTTATGACCTCACCGTCACCTCAGCCCATGATCAGTCCCTGGTTCTGAAGCAGAACCTCACGGTCACG
GACCGCGTCATTGGAGGCCTGCTCGCTGGGCAGACATACCATGTGGCTGTGGTCTGCTACCTGAGGTCTCAGGTC
AGAGCCACCTACCACGGAAGTTTCAGTACAAAGAAATCTCAGCCCCCACCTCCACAGCCAGCAAGGTCAGCTTCT
AGTTCAACCATCAATCTAATGGTGAGCACAGAACCATTGGCTCTCACTGAAACAGATATATGCAAGTTGCCGAAA
GACGAAGGAACTTGCAGGGATTTCATATTAAAATGGTACTATGATCCAAACACCAAAAGCTGTGCAAGATTCTGG
TATGGAGGTTGTGGTGGAAACGAAAACAAATTTGGATCACAGAAAGAATGTGAAAAGGTTTGCGCTCCTGTGCTC
GCCAAACCCGGAGTCATCAGTGTGATGGGAACCTAAGCGTGGGTGGCCAACATCATATACCTCTTGAAGAAGAAG
GAGTCAGCCATCGCCAACTTGTCTCTGTAGAAGCTCCGGGTGTAGATTCCCTTGCACTGTATCATTTCATGCTTT
GATTTACACTCGAACTCGGGAGGGAACATCCTGCTGCATGACCTATCAGTATGGTGCTAATGTGTCTGTGGACCC
TCGCTCTCTGTCTCCAGCAGTTCTCTCGAATACTTTGAATGTTGTGTAACAGTTAGCCACTGCTGGTGTTTATGT
GAACATTCCTATCAATCCAAATTCCCTCTGGAGTTTCATGTTATGCCTGTTGCAGGCAAATGTAAAGTCTAGAAA
ATAATGCAAATGTCACGGCTACTCTATATACTTTTGCTTGGTTCATTTTTTTTCCCTTTTAGTTAAGCATGACTT
TAGATGGGAAGCCTGTGTATCGTGGAGAAACAAGAGACCAACTTTTTCATTCCCTGCCCCCAATTTCCCAGACTA
GATTTCAAGCTAATTTTCTTTTTCTGAAGCCTCTAACAAATGATCTAGTTCAGAAGGAAGCAAAATCCCTTAATC
TATGTGCACCGTTGGGACCAATGCCTTAATTAAAGAATTTAAAAAAGTTGTAATAGAGAATATTTTTGGCATTCC
TCTCAATGTTGTGTGTTTTTTTTTTTTGTGTGCTGGAGGGAGGGGATTTAATTTTAATTTTAAAATGTTTAGGAA
ATTTATACAAAGAAACTTTTTAATAAAGTATATTGAAAGTTTAAAAAAAAAAAAAAAA

FIGURE 448

MRKHRHLPLVAVFCLFLSGFPTTHAQQQQADVKNGAAADIIFLVDSSWTIGEEHFQLVREFLYDVVKSLAVGEND
FHFALVQFNGNPHTEFLLNTYRTKQEVLSHISNMSYIGGTNQTGKGLEYIMQSHLTKAAGSRAGDGVPQVIVVLT
DGHSKDGLALPSAELKSADVNVFAIGVEDADEGALKEIASEPLNMHMFNLENFTSLHDIVGNLVSCVHSSVSPER
AGDTETLKDITAQDSADIIFLIDGSNNTGSVNFAVILDFLVNLLEKLPIGTQQIRVGVVQFSDEPRTMFSLDTYS
TKAQVLGAVKALGFAGGELANIGLALDFVVENHFTRAGGSRVEEGVPQVLVLISAGPSSDEIRYGVVALKQASVF
SFGLGAQAASRAELQHIATDDNLVFTVPEFRSFGDLQEKLLPYIVGVAQRHIVLKPPTIVTQVIEVNKRDIVFLV
DGSSALGLANFNAIRDFIAKVIQRLEIGQDLIQVAVAQYADTVRPEFYFNTHPTKREVITAVRKMKPLDGSALYT
GSALDFVRNNLFTSSAGYRAAEGIPKLLVLITGGKSLDEISQPAQELKRSSIMAFAIGNKGADQAELEEIAFDSS
LVFIPAEFRAAPLQGMLPGLLAPLRTLSGTPEVHSNKRDIIFLLDGSANVGKTNFPYVRDFVMNLVNSLDIGNDN
IRVGLVQFSDTPVTEFSLNTYQTKSDILGHLRQLQLQGGSGLNTGSALSYVYANHFTEAGGSRIREHVPQLLLLL
TAGQSEDSYLQAANALTRAGILTFCVGASQANKAELEQIAFNPSLVYLMDDFSSLPALPQQLIQPLTTYVSGGVE
EVPLAQPESKRDILFLFDGSANLVGQFPVVRDFLYKIIDELNVKPEGTRIAVAQYSDDVKVESRFDEHQSKPEIL
NLVKRMKIKTGKALNLGYALDYAQRYIFVKSAGSRIEDGVLQFLVLLVAGRSSDRVDGPASNLKQSGVVPFIFQA
KNADPAELEQIVLSPAFILAAESLPKIGDLHPQIVNLLKSVHNGAPAPVSGEKDVVFLLDGSEGVRSGFPLLKEF
VQRVVESLDVGQDRVRVAVVQYSDRTRPEFYLNSYMNKQDVVNAVRQLTLLGGPTPNTGAALEFVLRNILVSSAG
SRITEGVPQLLIVLTADRSGDDVRNPSVVVKRGGAVPIGIGIGNADITEMQTISFIPDFAVAIPTFRQLGTVQQV
ISERVTQLTREELSRLQPVLQPLPSPGVGGKRDVVFLIDGSQSAGPEFQYVRTLIERLVDYLDVGFDTTRVAVIQ
FSDDPKAEFLLNAHSSKDEVQNAVQRLRPKGGRQINVGNALEYVSRNIFKRPLGSRIEEGVPQFLVLISSGKSDD
EVVVPAVELKQFGVAPFTIARNADQEELVKISLSPEYVFSVSTFRELPSLEQKLLTPITTLTSEQIQKLLASTRY
PPPAVESDAADIVFLIDSSEGVRPDGFAHIRDFVSRIVRRLNIGPSKVRVGVVQFSNDVFPEFYLKTYRSQAPVL
DAIRRLRLRGGSPLNTGKALEFVARNLFVKSAGSRIEDGVPQHLVLVLGGKSQDDVSRFAQVIRSSGIVSLGVGD
RNIDRTELQTITNDPRLVFTVREFRELPNIEERIMNSFGPSAATPAPPGVDTPPPSRPEKKKADIVFLLDGSINF
RRDSFQEVLRFVSEIVDTVYEDGDSIQVGLVQYNSDPTDEFFLKDFSTKRQIIDAINKVVYKGGRHANTKVGLEH
LRVNHFVPEAGSRLDQRVPQIAFVITGGKSVEDAQDVSLALTQRGVKVFAVGVRNIDSEEVGKIASNSATAFRVG
NVQELSELSEQVLETLHDAMHETLCPGVTDAAKACNLDVILGFDGSRDQNVFVAQKGFESKVDAILNRISQMHRV
SCSGGRSPTVRVSVVANTPSGPVEAFDFDEYQPEMLEKFRNMRSQHPYVLTEDTLKVYLNKFRQSSPDSVKVVIH
FTDGADGDLADLHRASENLRQEGVRALILVGLERVVNLERLMHLEFGRGFMYDRPLRLNLLDLDYELAEQLDNIA
EKACCGVPCKCSGQRGDRGPIGSIGPKGIPGEDGYRGYPGDEGGPGERGPPGVNGTQGFQGCPGQRGVKGSRGFP
GEKGEVGEIGLDGLDGEDGDKGLPGSSGEKGNPGRRGDKGPRGEKGERGDVGIRGDPGNPGQDSQERGPKGETGD
LGPMGVPGRDGVPGGPGETGKNGGFGRRGPPGAKGNKGGPGQPGFEGEQGTRGAQGPAGPAGPPGLIGEQGISGP
RGSGGARGAPGERGRTGPLGRKGEPGEPGPKGGIGNPGPRGETGDDGRDGVGSEGRRGKKGERGFPGYPGPKGNP
GEPGLNGTTGPKGIRGRRGNSGPPGIVGQKGRPGYPGPAGPRGNRGDSIDQCALIQSIKDKCPCCYGPLECPVFP
TELAFALDTSEGVNQDTFGRMRDVVLSIVNVLTIAESNCPTGARVAVVTYNNEVTTEIRFADSKRKSVLLDKIKN
LQVALTSKQQSLETAMSFVARNTFKRVRNGFLMRKVAVFFSNTPTRASPQLREAVLKLSDAGITPLFLTRQEDRQ
LINALQINNTAVGHALVLPAGRDLTDFLENVLTCHVCLDICNIDPSCGFGSWRPSFRDRRAAGSDVDIDMAFILD
SAETTTLFQFNEMKKYIAYLVRQLDMSPDPKASQHFARVAVVQHAPSESVDNASMPPVKVEFSLTDYGSKEKLVD
FLSRGMTQLQGTRALGSAIEYTIENVFESAPNPRDLKIVVLMLTGEVPEQQLEEAQRVILQAKCKGYFFVVLGIG
RKVNIKEVYTFASEPNDVFFKLVDKSTELNEEPLMRFGRLLPSFVSSENAFYLSPDIRKQCDWFQGDQPTKNLVK
FGHKQVNVPNNVTSSPTSNPVTTTKPVTTTKPVTTTTKPVTTTTKPVTIINQPSVKPAAAKPAPAKPVAAKPVAT
KTATVRPPVAVKPATAAKPVAAKPAAVRPPAAAAKPVATKPEVPRPQAAKPAATKPATTKPVVKMLREVQVFEIT
ENSAKLHWERPEPPGPYFYDLTVTSAHDQSLVLKQNLTVTDRVIGGLLAGQTYHVAVVCYLRSQVRATYHGSFST
KKSQPPPPQPARSASSSTINLMVSTEPLALTETDICKLPKDEGTCRDFILKWYYDPNTKSCARFWYGGCGGNENK
FGSQKECEKVCAPVLAKPGVISVMGT

FIGURE 449

CGACGTTGAGGCCGCGTTGGGCGGTTCAGACTCAGGGTGATGGCAGGAGAGCTGGCTGACAAAAAGGACCGTGAT
GCATCACCTTCCAAGGAGGAAAGGAAGCGATCACGGACTCCTGACAGAGAGCGGGATAGAGACCGGGACCGGAAG
TCTTCCCCATCTAAAGATAGAAAGCGGCATCGTTCAAGGGATAGACGTCGAGGAGGCAGCCGTTCTCGCTCTCGT
TCCCGTTCCAAATCTGCAGAAAGAGAACGACGGCACAAAGAACGAGAACGAGATAAGGAGCGGGATCGGAATAAG
AAGGACCGAGATCGAGACAAGGATGGGCACAGACGGGACAAGGACCGTAAACGATCCAGCTTATCTCCTGGTCGA
GGAAAAGACTTTAAATCTCGGAAGGACAGAGACTCTAAGAAGGATGAAGAGGATGAACATGGTGATAAGAAGCTT
AAGGCCCAGCCATTATCCCTGGAGGAGCTTCTGGCCAAGAAAAAGGCTGAGGAAGAAGCTGAGGCTAAGCCCAAG
TTCCTCTCTAAAGCAGAACGAGAGGCTGAAGCTCTAAAGCGACGGCAGCAGGAGGTGGAAGAGCGGCAGAGGATG
CTTGAAGAAGAGAGGAAGAAAAGGAAACAGTTCCAAGACTTGGGCAGGAAGATGTTGGAAGATCCTCAGGAACGG
GAACGTCGGGAACGCAGGGAGAGGATGGAACGGGAGACCAATGGAAATGAGGATGAGGAAGGGCGGCAGAAGATC
CGGGAAGAGAAGGATAAGAGCAAGGAACTGCATGCCATTAAGGAGCGTTACCTGGGTGGCATCAAAAAGCGGCGC
CGAACGAGACATCTCAATGACCGGAAATTTGTTTTTGAGTGGGATGCATCTGAGGAGACATCCATTGACTACAAC
CCCCTGTACAAAGAACGGCACCAGGTGCAGTTGTTAGGGCGAGGCTTCATTGCAGGCATTGACTTCAAGCAGCAG
AAGCGAGAGCAGTCACGTTTCTATGGAGACCTAATGGAGAAGAGGCGAACCCTGGAAGAAAAGGAGCAGGAGGAG
GCAAGACTCCGCAAACTTCGTAAGAAGGAAGCCAAGCAGCGCTGGGATGATCGTCATTGGTCTCAGAAAAAGTTA
GATGAGATGACGGACAGGGACTGGCGGATCTTCCGTGAGGACTACAGCATCACCACCAAAGGTGGCAAGATCCCC
AATCCCATCCGATCCTGGAAAGACTCTTCTCTGCCCCCACACATCTTGGAGGTCATTGATAAGTGTGGCTACAAG
GAACCAACACCTATCCAGCGTCAGGCAATTCCCATTGGGCTACAGAATCGTGACATCATTGGTGTGGCTGAGACT
GGCAGTGGCAAGACAGCAGCCTTCCTCATCCCTCTGCTGGTCTGGATCACCACACTTCCCAAAATTGACAGGATC
GAAGAGTCAGACCAAGGCCCTTATGCCATCATCCTGGCTCCCACCCGTGAGTTGGCTCAACAGATTGAGGAAGAG
ACCATCAAGTTTGGGAAACCGCTAGGTATCCGCACTGTGGCTGTCATTGGTGGCATCTCCAGAGAAGACCAGGGC
TTCAGGCTGCGCATGGGTTGTGAGATTGTGATTGCTACCCCTGGGCGTTTGATTGATGTGCTGGAGAACCGCTAC
CTGGTGCTGAGCCGCTGTACCTATGTGGTTCTGGATGAGGCAGATAGGATGATTGACATGGGCTTTGAGCCAGAT
GTCCAGAAGATCCTGGAGCACATGCCTGTCAGCAACCAGAAGCCAGACACGGATGAGGCTGAGGACCCTGAGAAG
ATGCTGGCCAACTTTGAGTCGGGAAAACATAAGTACCGCCAAACAGTCATGTTCACGGCCACCATGCCCCCAGCG
GTGGAGCGTCTGGCCAGGAGCTATCTTCGGCGACCTGCTGTGGTGTACATTGGCTCCGCAGGCAAGCCCCATGAG
CGTGTGGAACAGAAGGTCTTCCTCATGTCAGAGTCAGAAAAGAGGAAAAAGCTGCTGGCAATCTTGGAGCAAGGC
TTTGACCCACCCATCATTATTTTTGTCAACCAGAAGAAGGGCTGCGACGTGTTGGCCAAATCCCTGGAGAAGATG
GGGTACAATGCTTGCACACTGCACGGTGGAAAAGGCCAGGAGCAGCGAGAGTTTGCGTTGTCCAACCTCAAGGCT
GGGGCCAAGGATATTTTGGTGGCTACAGATGTGGCTGGTCGTGGTATTGACATCCAAGATGTGTCTATGGTTGTC
AACTATGATATGGCCAAAAATATTGAAGATTACATCCACCGCATTGGCCGCACGGGACGAGCAGGCAAGAGTGGG
GTGGCCATCACCTTCCTCACAAAAGAGGACTCTGCTGTGTTCTACGAGCTGAAGCAAGCTATCCTGGAAAGCCCA
GTGTCTTCCTGTCCCCCCGAACTAGCCAACCACCCAGATGCCCAGCATAAGCCAGGCACCATCCTCACCAAGAAG
CGCCGGGAAGAGACCATCTTTGCCTGACACAGCACTCTTCCTGTGGGCTGAGGGCATCTCCAAAGCTGGCCTGAT
GCCTGTTTTTCAGAACCCTCACATCCCTCTTTCCAGGTCCTCACTCTTGGGATATGGGGGCTTAGGAAAACAATC
CAACTCCCTAGCCCAGACCCTCAGGTCAGGAGGCCTGCGTGTGGGGCTGCAAAAGGAGAGGACGACGCTGTCGGA
GGCAGGGAGAGCAAATTACCACAGCTTCTTGGCCCAGTTCTGCCCTTCTTTGCTTTGGGATTGCACTGGGCCATC
AGCTCATGCCAGGCTATGGGGGCAGCCAGTTGGCATTGCTCCCCAGACTGAACAGAAACCTGGCCGCCGGATGGG
ACCTCCTTTGGCACAGACTTGACTGTGTAACTGCATAAACTGCAGTAGCATCATTGCCCTAGATGCCCCAGGAGA
CCTGGCACCATGAGGATTACAGACAGTGGAATCTTACTGTCATCTGGACAGCTGTTTTCCTGTTTGGATGGTAAA
GGAAGTTGAGAGTCTTTAGACCTGTGCACAGCCCCGCACCAAGGGGTGCTGTATGCTCTAGGCATCCCCTCCCCC
AGGGGATTTTTTAAGTAGATGGGGGGACACGGTGAACTGGCTGTGTCCATCTTTGTCACTGAGTGAAATCTCTGT
TTTCTATTTTCTGAGAAGATAAGTTTGTATGTTCTGAGAATAAATACATGAATATTAAGACTGTTAAAAAAAAAA
AAAAAAAAAAAA

FIGURE 450

MAGELADKKDRDASPSKEERKRSRTPDRERDRDRDRKSSPSKDRKRHRSRDRRRGGSRSRSRSRSKSAERERRHK
ERERDKERDRNKKDRDRDKDGHRRDKDRKRSSLSPGRGKDFKSRKDRDSKKDEEDEHGDKKLKAQPLSLEELLAK
KKAEEEAEAKPKFLSKAEREAEALKRRQQEVEERQRMLEEERKKRKQFQDLGRKMLEDPQERERRERRERMERET
NGNEDEEGRQKIREEKDKSKELHAIKERYLGGIKKRRRTRHLNDRKFVFEWDASEETSIDYNPLYKERHQVQLLG
RGFIAGIDFKQQKREQSRFYGDLMEKRRTLEEKEQEEARLRKLRKKEAKQRWDDRHWSQKKLDEMTDRDWRIFRE
DYSITTKGGKIPNPIRSWKDSSLPPHILEVIDKCGYKEPTPIQRQAIPIGLQNRDIIGVAETGSGKTAAFLIPLL
VWITTLPKIDRIEESDQGPYAIILAPTRELAQQIEEETIKFGKPLGIRTVAVIGGISREDQGFRLRMGCEIVIAT
PGRLIDVLENRYLVLSRCTYVVLDEADRMIDMGFEPDVQKILEHMPVSNQKPDTDEAEDPEKMLANFESGKHKYR
QTVMFTATMPPAVERLARSYLRRPAVVYIGSAGKPHERVEQKVFLMSESEKRKKLLAILEQGFDPPIIIFVNQKK
GCDVLAKSLEKMGYNACTLHGGKGQEQREFALSNLKAGAKDILVATDVAGRGIDIQDVSMVVNYDMAKNIEDYIH
RIGRTGRAGKSGVAITFLTKEDSAVFYELKQAILESPVSSCPPELANHPDAQHKPGTILTKKRREETIFA

FIGURE 451

GCGTAATTAAAAGGCGGCGGAAGAAGGTGGGAGGGTCATGACGCAGCGAGTTTCAGTCGTGACTTTTCTGGGGGC
ATCGCGGCGTCCCCTTTTTTTTGCCTTTAAAGTAAAACGTCGCCCCGACGCACCCCCCGCGTATTTCGGGGGGCG
GAGGCGGCGGGCCACGGCGCGAAGAGGGGCGGTGCTGACGCCGGCCGGTCACGTGGGCGTGTTGTGGGGGGGAGG
GGCGCCGCCGCGCGGTCGGTTCCGGGCGGTTGGGAGCGCGCGAGCTAGCGAGCGAGAGGCAGCCGCGCCCGCCGC
CGCCCCTGCTCTGTATGCCGCTCTCTCCCGGCGCGGCCGCCGCCGATCACAGCAGCAGGAGCCACCGCCGCCGCG
GTTGATGTGGTTGGGCCGGGGCTGAGGAGGCCGCCAAGATGCCGCAGTCCAAGTCCCGGAAGATCGCGATCCTGG
GCTACCGGTCTGTGGGGAAATCCTCATTGACGATTCAATTTGTTGAAGGCCAATTTGTGGACTCCTACGATCCAA
CCATAGAAAACACTTTTACAAAGTTGATCACAGTAAATGGACAAGAATATCATCTTCAACTTGTAGACACAGCCG
GGCAAGATGAATATTCTATCTTTCCTCAGACATACTCCATAGATATTAATGGCTATATTCTTGTGTATTCTGTTA
CATCAATCAAAAGTTTTGAAGTGATTAAAGTTATCCATGGCAAATTGTTGGATATGGTGGGGAAAGTACAAATAC
CTATTATGTTGGTTGGGAATAAGAAAGACCTGCATATGGAAAGGGTGATCAGTTATGAAGAAGGGAAAGCTTTGG
CAGAATCTTGGAATGCAGCTTTTTTGGAATCTTCTGCTAAAGAAAATCAGACTGCTGTGGATGTTTTTCGAAGGA
TAATTTTGGAGGCAGAAAAAATGGACGGGGCAGCTTCACAAGGCAAGTCTTCATGCTCGGTGATGTGATTCTGCT
GCAAAGCCTGAGGACACTGGGAATATATTCTACCTGAAGAAGCAAACTGCCCGTTCTCCTTGAAGATAAACTATG
CTTCTTTTTTCTTCTGTTAACCTGAAAGATATCATTTGGGTCAGAGCTCCCCTCCCTTCAGATTATGTTAACTCT
GAGTCTGTCCAAATGAGTTCACTTCCATTTTCAAATTTTAAGCAATCATATTTTCAATTTATATATTGTATTTCT
TAATATTATGACCAAGAATTTTATCGGCATTAATTTTTCAGTGTAGTTTGTTGTTTAAAATAATGTAATCATCAA
AATGATGCATATTGTTACACTACTATTAACTAGGCTTCAGTATATCAGTGTTTATTTCATTGTGTTAAATGTATA
CTTGTAAATAAAATAGCTGCAAACCTCAAAAAAAAAAAAAAAAAAA

FIGURE 452

MPQSKSRKIAILGYRSVGKSSLTIQFVEGQFVDSYDPTIENTFTKLITVNGQEYHLQLVDTAGQDEYSIFPQTYS
IDINGYILVYSVTSIKSFEVIKVIHGKLLDMVGKVQIPIMLVGNKKDLHMERVISYEEGKALAESWNAAFLESSA
KENQTAVDVFRRIILEAEKMDGAASQGKSSCSVM

FIGURE 453

GTTGGTGAGCATCATGGCAACCGTTACAGCCACAACCAAAGTCCCGGAGATCCGTGATGTAACAAGGATTGAGCG
AATCGGTGCCCACTCCCACATCCGGGGACTGGGGCTGGACGATGCCTTGGAGCCTCGGCAGGCTTCGCAAGGCAT
GGTGGGTCAGCTGGCGGCACGGCGGGCGGCTGGCGTGGTGCTGGAGATGATCCGGGAAGGGAAGATTGCCGGTCG
GGCAGTCCTTATTGCTGGCCAGCCGGGCACGGGGAAGACGGCCATCGCCATGGGCATGGCGCAGGCCCTGGGCCC
TGACACGCCATTCACAGCCATCGCCGGCAGTGAAATCTTCTCCCTGGAGATGAGCAAGACCGAGGCGCTGACGCA
GGCCTTCCGGCGGTCCATCGGCGTTCGCATCAAGGAGGAGACGGAGATCATCGAAGGGGAGGTGGTGGAGATCCA
GATTGATCGACCAGCAACAGGGACGGGCTCCAAGGTGGGCAAACTGACCCTCAAGACCACAGAGATGGAGACCAT
CTACGACCTGGGCACCAAGATGATTGAGTCCCTGACCAAGGACAAGGTCCAGGCCGGGGACGTGATCACCATCGA
CAAGGCGACGGGCAAGATCTCCAAGCTGGGCCGCTCCTTCACACGCGCCCGCGACTACGACGCTATGGGCTCCCA
GACCAAGTTCGTGCAGTGCCCAGATGGGGAGCTCCAGAAACGCAAGGAGGTGGTGCACACCGTGTCCCTGCACGA
GATCGACGTCATCAACTCTCGCACCCAGGGCTTCCTGGCGCTCTTCTCAGGTGACACAGGGGAGATCAAGTCAGA
AGTCCGTGAGCAGATCAATGCCAAGGTGGCTGAGTGGCGCGAGGAGGGCAAGGCGGAGATCATCCCTGGAGTGCT
GTTCATCGACGAGGTCCACATGCTGGACATCGAGAGCTTCTCCTTCCTCAACCGGGCCCTGGAGAGTGACATGGC
GCCTGTCCTGATCATGGCCACCAACCGTGGCATCACGCGAATCCGGGGCACCAGCTACCAGAGCCCTCACGGCAT
CCCCATAGACCTGCTGGACCGGCTGCTTATCGTCTCCACCACCCCCTACAGCGAGAAAGACACGAAGCAGATCCT
CCGCATCCGGTGCGAGGAAGAAGATGTGGAGATGAGTGAGGACGCCTACACGGTGCTGACCCGCATCGGGCTGGA
GACGTCACTGCGCTACGCCATCCAGCTCATCACAGCTGCCAGCTTGGTGTGCCGGAAACGCAAGGGTACAGAAGT
GCAGGTGGATGACATCAAGCGGGTCTACTCACTCTTCCTGGACGAGTCCCGCTCCACGCAGTACATGAAGGAGTA
CCAGGACGCCTTCCTCTTCAACGAACTCAAAGGCGAGACCATGGACACCTCCTGAGTTGGATGTCATCCCCCGAC
CCCACCCTGTTTTCCACCAGAGTTCTGACACTGTGACTCTGTATAAAATGGTTGGGAAGCTGC

FIGURE 454

MATVTATTKVPEIRDVTRIERIGAHSHIRGLGLDDALEPRQASQGMVGQLAARRAAGVVLEMIREGKIAGRAVLI
AGQPGTGKTAIAMGMAQALGPDTPFTAIAGSEIFSLEMSKTEALTQAFRRSIGVRIKEETEIIEGEVVEIQIDRP
ATGTGSKVGKLTLKTTEMETIYDLGTKMIESLTKDKVQAGDVITIDKATGKISKLGRSFTRARDYDAMGSQTKFV
QCPDGELQKRKEVVHTVSLHEIDVINSRTQGFLALFSGDTGEIKSEVREQINAKVAEWREEGKAEIIPGVLFIDE
VHMLDIESFSFLNRALESDMAPVLIMATNRGITRIRGTSYQSPHGIPIDLLDRLLIVSTTPYSEKDTKQILRIRC
EEEDVEMSEDAYTVLTRIGLETSLRYAIQLITAASLVCRKRKGTEVQVDDIKRVYSLFLDESRSTQYMKEYQDAF
LFNELKGETMDTS

FIGURE 455

AGAGTTGCACTGAGTGTGGCTGAAGCAGCGAGGCGGGAGTGGAGGTGCGCGGAGTCAGGCAGACAGACAGACACA
GCCAGCCAGCCAGGTCGGCAGTATAGTCCGAACTGCAAATCTTATTTTCTTTTCACCTTCTCTCTAACTGCCCAG
AGCTAGCGCCTGTGGCTCCCGGGCTGGTGGTTCGGGAGTGTCCAGAGAGCCTTGTCTCCAGCCGGCCCCGGGAGG
AGAGCCCTGCTGCCCAGGCGCTGTTGACAGCGGCGGAAAGCAGCGGTACCCCACGCGCCCGCCGGGGGACGTCGG
CGAGCGGCTGCAGCAGCAAAGAACTTTCCCGGCGGGGAGGACCGGAGACAAGTGGCAGAGTCCCGGAGCGAACTT
TTGCAAGCCTTTCCTGCGTCTTAGGCTTCTCCACGGCGGTAAAGACCAGAAGGCGGCGGAGAGCCACGCAAGAGA
AGAAGGACGTGCGCTCAGCTTCGCTCGCACCGGTTGTTGAACTTGGGCGAGCGCGAGCCGCGGCTGCCGGGCGCC
CCCTCCCCCTAGCAGCGGAGGAGGGGACAAGTCGTCGGAGTCCGGGCGGCCAAGACCCGCCGCCGGCCGGCCACT
GCAGGGTCCGCACTGATCCGCTCCGCGGGGAGAGCCGCTGCTCTGGGAAGTGAGTTCGCCTGCGGACTCCGAGGA
ACCGCTGCGCCCGAAGAGCGCTCAGTGAGTGACCGCGACTTTTCAAAGCCGGGTAGCGCGCGCGAGTCGACAAGT
AAGAGTGCGGGAGGCATCTTAATTAACCCTGCGCTCCCTGGAGCGAGCTGGTGAGGAGGGCGCAGCGGGGACGAC
AGCCAGCGGGTGCGTGCGCTCTTAGAGAAACTTTCCCTGTCAAAGGCTCCGGGGGGCGCGGGTGTCCCCCGCTTG
CCAGAGCCCTGTTGCGGCCCCGAAACTTGTGCGCGCACGCCAAACTAACCTCACGTGAAGTGACGGACTGTTCTA
TGACTGCAAAGATGGAAACGACCTTCTATGACGATGCCCTCAACGCCTCGTTCCTCCCGTCCGAGAGCGGACCTT
ATGGCTACAGTAACCCCAAGATCCTGAAACAGAGCATGACCCTGAACCTGGCCGACCCAGTGGGGAGCCTGAAGC
CGCACCTCCGCGCCAAGAACTCGGACCTCCTCACCTCGCCCGACGTGGGGCTGCTCAAGCTGGCGTCGCCCGAGC
TGGAGCGCCTGATAATCCAGTCCAGCAACGGGCACATCACCACCACGCCGACCCCCACCCAGTTCCTGTGCCCCA
AGAACGTGACAGATGAGCAGGAGGGGTTCGCCGAGGGCTTCGTGCGCGCCCTGGCCGAACTGCACAGCCAGAACA
CGCTGCCCAGCGTCACGTCGGCGGCGCAGCCGGTCAACGGGGCAGGCATGGTGGCTCCCGCGGTAGCCTCGGTGG
CAGGGGGCAGCGGCAGCGGCGGCTTCAGCGCCAGCCTGCACAGCGAGCCGCCGGTCTACGCAAACCTCAGCAACT
TCAACCCAGGCGCGCTGAGCAGCGGCGGCGGGGCGCCCTCCTACGGCGCGGCCGGCCTGGCCTTTCCCGCGCAAC
CCCAGCAGCAGCAGCAGCCGCCGCACCACCTGCCCCAGCAGATGCCCGTGCAGCACCCGCGGCTGCAGGCCCTGA
AGGAGGAGCCTCAGACAGTGCCCGAGATGCCCGGCGAGACACCGCCCCTGTCCCCCATCGACATGGAGTCCCAGG
AGCGGATCAAGGCGGAGAGGAAGCGCATGAGGAACCGCATCGCTGCCTCCAAGTGCCGAAAAAGGAAGCTGGAGA
GAATCGCCCGGCTGGAGGAAAAAGTGAAAACCTTGAAAGCTCAGAACTCGGAGCTGGCGTCCACGGCCAACATGC
TCAGGGAACAGGTGGCACAGCTTAAACAGAAAGTCATGAACCACGTTAACAGTGGGTGCCAACTCATGCTAACGC
AGCAGTTGCAAACATTTTGAAGAGAGACCGTCGGGGGCTGAGGGGCAACGAAGAAAAAAAATAACACAGAGAGAC
AGACTTGAGAACTTGACAAGTTGCGACGGAGAGAAAAAAGAAGTGTCCGAGAACTAAAGCCAAGGGTATCCAAGT
TGGACTGGGTTCGGTCTGACGGCGCCCCCAGTGTGCACGAGTGGGAAGGACTTGGTCGCGCCCTCCCTTGGCGTG
GAGCCAGGGAGCGGCCGCCTGCGGGCTGCCCCGCTTTGCGGACGGGCTGTCCCCGCGCGAACGGAACGTTGGACT
TTCGTTAACATTGACCAAGAACTGCATGGACCTAACATTCGATCTCATTCAGTATTAAAGGGGGGAGGGGGAGGG
GGTTACAAACTGCAATAGAGACTGTAGATTGCTTCTGTAGTACTCCTTAAGAACACAAAGCGGGGGGAGGGTTGG
GGAGGGGCGGCAGGAGGGAGGTTTGTGAGAGCGAGGCTGAGCCTACAGATGAACTCTTTCTGGCCTGCTTTCGTT
AACTGTGTATGTACATATATATATTTTTTAATTTGATTAAAGCTGATTACTGTCAATAAACAGCTTCATGCCTTT
GTAAGTTATTTCTTGTTTGTTTGTTTGGGTATCCTGCCCAGTGTTGTTTGTAAATAAGAGATTTGGAGCACTCTG
AGTTTACCATTTGTAATAAAGTATATAATTTTTTTATGTTTTGTTTCTGAAAATTCCAGAAAGGATATTTAAGAA
AATACAATAAACTATTGGAAAGTACTCCCCTAACCTCTTTTCTGCATCATCTGTAGATCCTAGTCTATCTAGGTG
GAGTTGAAAGAGTTAAGAATGCTCGATAAAATCACTCTCAGTGCTTCTTACTATTAAGCAGTAAAAACTGTTCTC
TATTAGACTTAGAAATAAATGTACCTGATGTACCTGATGCTATGTCAGGCTTCATACTCCACGCTCCCCCAGCGT
ATCTATATGGAATTGCTTACCAAAGGCTAGTGCGATGTTTCAGGAGGCTGGAGGAAGGGGGGTTGCAGTGGAGAG
GGACAGCCCACTGAGAAGTCAAACATTTCAAAGTTTGGATTGCATCAAGTGGCATGTGCTGTGACCATTTATAAT
GTTAGAAATTTTACAATAGGTGCTTATTCTCAAAGCAGGAATTGGTGGCAGATTTTACAAAAGATGTATCCTTCC
AATTTGGAATCTTCTCTTTGACAATTCCTAGATAAAAAGATGGCCTTTGTCTTATGAATATTTATAACAGCATTC
TGTCACAATAAATGTATTCAAATACCAAT

FIGURE 456

MTAKMETTFYDDALNASFLPSESGPYGYSNPKILKQSMTLNLADPVGSLKPHLRAKNSDLLTSPDVGLLKLASPE
LERLIIQSSNGHITTTPTPTQFLCPKNVTDEQEGFAEGFVRALAELHSQNTLPSVTSAAQPVNGAGMVAPAVASV
AGGSGSGGFSASLHSEPPVYANLSNFNPGALSSGGGAPSYGAAGLAFPAQPQQQQQPPHHLPQQMPVQHPRLQAL
KEEPQTVPEMPGETPPLSPIDMESQERIKAERKRMRNRIAASKCRKRKLERIARLEEKVKTLKAQNSELASTANM
LREQVAQLKQKVMNHVNSGCQLMLTQQLQTF

FIGURE 457

AGAGTTGCACTGAGTGTGGCTGAAGCAGCGAGGCGGGAGTGGAGGTGCGCGGAGTCAGGCAGACAGACAGACACA
GCCAGCCAGCCAGGTCGGCAGTATAGTCCGAACTGCAAATCTTATTTTCTTTTCACCTTCTCTCTAACTGCCCAG
AGCTAGCGCCTGTGGCTCCCGGGCTGGTGGTTCGGGAGTGTCCAGAGAGCCTTGTCTCCAGCCGGCCCCGGGAGG
AGAGCCCTGCTGCCCAGGCGCTGTTGACAGCGGCGGAAAGCAGCGGTACCCCACGCGCCCGCCGGGGGACGTCGG
CGAGCGGCTGCAGCAGCAAAGAACTTTCCCGGCGGGGAGGACCGGAGACAAGTGGCAGAGTCCCGGAGCGAACTT
TTGCAAGCCTTTCCTGCGTCTTAGGCTTCTCCACGGCGGTAAAGACCAGAAGGCGGCGGAGAGCCACGCAAGAGA
AGAAGGACGTGCGCTCAGCTTCGCTCGCACCGGTTGTTGAACTTGGGCGAGCGCGAGCCGCGGCTGCCGGGCGCC
CCCTCCCCCTAGCAGCGGAGGAGGGGACAAGTCGTCGGAGTCCGGGCGGCCAAGACCCGCCGCCGGCCGGCCACT
GCAGGGTCCGCACTGATCCGCTCCGCGGGGAGAGCCGCTGCTCTGGGAAGTGAGTTCGCCTGCGGACTCCGAGGA
ACCGCTGCGCCCGAAGAGCGCTCAGTGAGTGACCGCGACTTTTCAAAGCCGGGTAGCGCGCGCGAGTCGACAAGT
AAGAGTGCGGGAGGCATCTTAATTAACCCTGCGCTCCCTGGAGCGAGCTGGTGAGGAGGGCGCAGCGGGGACGAC
AGCCAGCGGGTGCGTGCGCTCTTAGAGAAACTTTCCCTGTCAAAGGCTCCGGGGGGCGCGGGTGTCCCCCGCTTG
CCAGAGCCCTGTTGCGGCCCCGAAACTTGTGCGCGCACGCCAAACTAACCTCACGTGAAGTGACGGACTGTTCTA
TGACTGCAAAGATGGAAACGACCTTCTATGACGATGCCCTCAACGCCTCGTTCCTCCCGTCCGAGAGCGGACCTT
ATGGCTACAGTAACCCCAAGATCCTGAAACAGAGCATGACCCTGAACCTGGCCGACCCAGTGGGGAGCCTGAAGC
CGCACCTCCGCGCCAAGAACTCGGACCTCCTCACCTCGCCCGACGTGGGGCTGCTCAAGCTGGCGTCGCCCGAGC
TGGAGCGCCTGATAATCCAGTCCAGCAACGGGCACATCACCACCACGCCGACCCCCACCCAGTTCCTGTGCCCCA
AGAACGTGACAGATGAGCAGGAGGGGTTCGCCGAGGGCTTCGTGCGCGCCCTGGCCGAACTGCACAGCCAGAACA
CGCTGCCCAGCGTCACGTCGGCGGCGCAGCCGGTCAACGGGGCAGGCATGGTGGCTCCCGCGGTAGCCTCGGTGG
CAGGGGGCAGCGGCAGCGGCGGCTTCAGCGCCAGCCTGCACAGCGAGCCGCCGGTCTACGCAAACCTCAGCAACT
TCAACCCAGGCGCGCTGAGCAGCGGCGGCGGGGCGCCCTCCTACGGCGCGGCCGGCCTGGCCTTTCCCGCGCAAC
CCCAGCAGCAGCAGCAGCCGCCGCACCACCTGCCCCAGCAGATGCCCGTGCAGCACCCGCGGCTGCAGGCCCTGA
AGGAGGAGCCTCAGACAGTGCCCGAGATGCCCGGCGAGACACCGCCCCTGTCCCCCATCGACATGGAGTCCCAGG
AGCGGATCAAGGCGGAGAGGAAGCGCATGAGGAACCGCATCGCTGCCTCCAAGTGCCGAAAAAGGAAGCTGGAGA
GAATCGCCCGGCTGGAGGAAAAAGTGAAAACCTTGAAAGCTCAGAACTCGGAGCTGGCGTCCACGGCCAACATGC
TCAGGGAACAGGTGGCACAGCTTAAACAGAAAGTCATGAACCACGTTAACAGTGGGTGCCAACTCATGCTAACGC
AGCAGTTGCAAACATTTTGAAGAGAGACCGTCGGGGGCTGAGGGGCAACGAAGAAAAAAAATAACACAGAGAGAC
AGACTTGAGAACTTGACAAGTTGCGACGGAGAGAAAAAAGAAGTGTCCGAGAACTAAAGCCAAGGGTATCCAAGT
TGGACTGGGTTCGGTCTGACGGCGCCCCCAGTGTGCACGAGTGGGAAGGACTTGGTCGCGCCCTCCCTTGGCGTG
GAGCCAGGGAGCGGCCGCCTGCGGGCTGCCCCGCTTTGCGGACGGGCTGTCCCCGCGCGAACGGAACGTTGGACT
TTCGTTAACATTGACCAAGAACTGCATGGACCTAACATTCGATCTCATTCAGTATTAAAGGGGGGAGGGGGAGGG
GGTTACAAACTGCAATAGAGACTGTAGATTGCTTCTGTAGTACTCCTTAAGAACACAAAGCGGGGGGAGGGTTGG
GGAGGGGCGGCAGGAGGGAGGTTTGTGAGAGCGAGGCTGAGCCTACAGATGAACTCTTTCTGGCCTGCTTTCGTT
AACTGTGTATGTACATATATATATTTTTTAATTTGATTAAAGCTGATTACTGTCAATAAACAGCTTCATGCCTTT
GTAAGTTATTTCTTGTTTGTTTGTTTGGGTATCCTGCCCAGTGTTGTTTGTAAATAAGAGATTTGGAGCACTCTG
AGTTTACCATTTGTAATAAAGTATATAATTTTTTTATGTTTTGTTTCTGAAAATTCCAGAAAGGATATTTAAGAA
AATACAATAAACTATTGGAAAGTACTCCCCTAACCTCTTTTCTGCATCATCTGTAGATCCTAGTCTATCTAGGTG
GAGTTGAAAGAGTTAAGAATGCTCGATAAAATCACTCTCAGTGCTTCTTACTATTAAGCAGTAAAAACTGTTCTC
TATTAGACTTAGAAATAAATGTACCTGATGTACCTGATGCTATGTCAGGCTTCATACTCCACGCTCCCCCAGCGT
ATCTATATGGAATTGCTTACCAAAGGCTAGTGCGATGTTTCAGGAGGCTGGAGGAAGGGGGGTTGCAGTGGAGAG
GGACAGCCCACTGAGAAGTCAAACATTTCAAAGTTTGGATTGCATCAAGTGGCATGTGCTGTGACCATTTATAAT
GTTAGAAATTTTACAATAGGTGCTTATTCTCAAAGCAGGAATTGGTGGCAGATTTTACAAAAGATGTATCCTTCC
AATTTGGAATCTTCTCTTTGACAATTCCTAGATAAAAAGATGGCCTTTGTCTTATGAATATTTATAACAGCATTC
TGTCACAATAAATGTATTCAAATACCAAT

FIGURE 458

MTAKMETTFYDDALNASFLPSESGPYGYSNPKILKQSMTLNLADPVGSLKPHLRAKNSDLLTSPDVGLLKLASPE
LERLIIQSSNGHITTTPTPTQFLCPKNVTDEQEGFAEGFVRALAELHSQNTLPSVTSAAQPVNGAGMVAPAVASV
AGGSGSGGFSASLHSEPPVYANLSNFNPGALSSGGGAPSYGAAGLAFPAQPQQQQQPPHHLPQQMPVQHPRLQAL
KEEPQTVPEMPGETPPLSPIDMESQERIKAERKRMRNRIAASKCRKRKLERIARLEEKVKTLKAQNSELASTANM
LREQVAQLKQKVMNHVNSGCQLMLTQQLQTF

FIGURE 459

AGAGTTGCACTGAGTGTGGCTGAAGCAGCGAGGCGGGAGTGGAGGTGCGCGGAGTCAGGCAGACAGACAGACACA
GCCAGCCAGCCAGGTCGGCAGTATAGTCCGAACTGCAAATCTTATTTTCTTTTCACCTTCTCTCTAACTGCCCAG
AGCTAGCGCCTGTGGCTCCCGGGCTGGTGGTTCGGGAGTGTCCAGAGAGCCTTGTCTCCAGCCGGCCCCGGGAGG
AGAGCCCTGCTGCCCAGGCGCTGTTGACAGCGGCGGAAAGCAGCGGTACCCCACGCGCCCGCCGGGGGACGTCGG
CGAGCGGCTGCAGCAGCAAAGAACTTTCCCGGCGGGGAGGACCGGAGACAAGTGGCAGAGTCCCGGAGCGAACTT
TTGCAAGCCTTTCCTGCGTCTTAGGCTTCTCCACGGCGGTAAAGACCAGAAGGCGGCGGAGAGCCACGCAAGAGA
AGAAGGACGTGCGCTCAGCTTCGCTCGCACCGGTTGTTGAACTTGGGCGAGCGCGAGCCGCGGCTGCCGGGCGCC
CCCTCCCCCTAGCAGCGGAGGAGGGGACAAGTCGTCGGAGTCCGGGCGGCCAAGACCCGCCGCCGGCCGGCCACT
GCAGGGTCCGCACTGATCCGCTCCGCGGGGAGAGCCGCTGCTCTGGGAAGTGAGTTCGCCTGCGGACTCCGAGGA
ACCGCTGCGCCCGAAGAGCGCTCAGTGAGTGACCGCGACTTTTCAAAGCCGGGTAGCGCGCGCGAGTCGACAAGT
AAGAGTGCGGGAGGCATCTTAATTAACCCTGCGCTCCCTGGAGCGAGCTGGTGAGGAGGGCGCAGCGGGGACGAC
AGCCAGCGGGTGCGTGCGCTCTTAGAGAAACTTTCCCTGTCAAAGGCTCCGGGGGGGCGCGGGTGTCCCCCGCTTG
CCAGAGCCCTGTTGCGGCCCCGAAACTTGTGCGCGCACGCCAAACTAACCTCACGTGAAGTGACGGACTGTTCTA
TGACTGCAAAGATGGAAACGACCTTCTATGACGATGCCCTCAACGCCTCGTTCCTCCCGTCCGAGAGCGGACCTT
ATGGCTACAGTAACCCCAAGATCCTGAAACAGAGCATGACCCTGAACCTGGCCGACCCAGTGGGGAGCCTGAAGC
CGCACCTCCGCGCCAAGAACTCGGACCTCCTCACCTCGCCCGACGTGGGGCTGCTCAAGCTGGCGTCGCCCGAGC
TGGAGCGCCTGATAATCCAGTCCAGCAACGGGCACATCACCACCACGCCGACCCCCACCCAGTTCCTGTGCCCCA
AGAACGTGACAGATGAGCAGGAGGGGTTCGCCGAGGGCTTCGTGCGCGCCCTGGCCGAACTGCACAGCCAGAACA
CGCTGCCCAGCGTCACGTCGGCGGCGCAGCCGGTCAACGGGGCAGGCATGGTGGCTCCCGCGGTAGCCTCGGTGG
CAGGGGGCAGCGGCAGCGGCGGCTTCAGCGCCAGCCTGCACAGCGAGCCGCCGGTCTACGCAAACCTCAGCAACT
TCAACCCAGGCGCGCTGAGCAGCGGCGGCGGGGCGCCCTCCTACGGCGCGGCCGGCCTGGCCTTTCCCGCGCAAC
CCCAGCAGCAGCAGCAGCCGCCGCACCACCTGCCCCAGCAGATGCCCGTGCAGCACCCGCGGCTGCAGGCCCTGA
AGGAGGAGCCTCAGACAGTGCCCGAGATGCCCGGCGAGACACCGCCCCTGTCCCCCATCGACATGGAGTCCCAGG
AGCGGATCAAGGCGGAGAGGAAGCGCATGAGGAACCGCATCGCTGCCTCCAAGTGCCGAAAAAGGAAGCTGGAGA
GAATCGCCCGGCTGGAGGAAAAAGTGAAAACCTTGAAAGCTCAGAACTCGGAGCTGGCGTCCACGGCCAACATGC
TCAGGGAACAGGTGGCACAGCTTAAACAGAAAGTCATGAACCACGTTAACAGTGGGTGCCAACTCATGCTAACGC
AGCAGTTGCAAACATTTTGAAGAGAGACCGTCGGGGGCTGAGGGGCAACGAAGAAAAAAAATAACACAGAGAGAC
AGACTTGAGAACTTGACAAGTTGCGACGGAGAGAAAAAAGAAGTGTCCGAGAACTAAAGCCAAGGGTATCCAAGT
TGGACTGGGTTCGGTCTGACGGCGCCCCCAGTGTGCACGAGTGGGAAGGACTTGGTCGCGCCCTCCCTTGGCGTG
GAGCCAGGGAGCGGCCGCCTGCGGGCTGCCCCGCTTTGCGGACGGGCTGTCCCCGCGCGAACGGAACGTTGGACT
TTCGTTAACATTGACCAAGAACTGCATGGACCTAACATTCGATCTCATTCAGTATTAAAGGGGGGAGGGGGAGGG
GGTTACAAACTGCAATAGAGACTGTAGATTGCTTCTGTAGTACTCCTTAAGAACACAAAGCGGGGGGAGGGTTGG
GGAGGGGCGGCAGGAGGGAGGTTTGTGAGAGCGAGGCTGAGCCTACAGATGAACTCTTTCTGGCCTGCTTTCGTT
AACTGTGTATGTACATATATATATTTTTTAATTTGATTAAAGCTGATTACTGTCAATAAACAGCTTCATGCCTTT
GTAAGTTATTTCTTGTTTGTTTGTTTGGGTATCCTGCCCAGTGTTGTTTGTAAATAAGAGATTTGGAGCACTCTG
AGTTTACCATTTGTAATAAAGTATATAATTTTTTTATGTTTTGTTTCTGAAAATTCCAGAAAGGATATTTAAGAA
AATACAATAAACTATTGGAAAGTACTCCCCTAACCTCTTTTCTGCATCATCTGTAGATCCTAGTCTATCTAGGTG
GAGTTGAAAGAGTTAAGAATGCTCGATAAAATCACTCTCAGTGCTTCTTACTATTAAGCAGTAAAAACTGTTCTC
TATTAGACTTAGAAATAAATGTACCTGATGTACCTGATGCTATGTCAGGCTTCATACTCCACGCTCCCCCAGCGT
ATCTATATGGAATTGCTTACCAAAGGCTAGTGCGATGTTTCAGGAGGCTGGAGGAAGGGGGGTTGCAGTGGAGAG
GGACAGCCCACTGAGAAGTCAAACATTTCAAAGTTTGGATTGCATCAAGTGGCATGTGCTGTGACCATTTATAAT
GTTAGAAATTTTACAATAGGTGCTTATTCTCAAAGCAGGAATTGGTGGCAGATTTTACAAAAGATGTATCCTTCC
AATTTGGAATCTTCTCTTTGACAATTCCTAGATAAAAAGATGGCCTTTGTCTTATGAATATTTATAACAGCATTC
TGTCACAATAAATGTATTCAAATACCAAT

FIGURE 460

MTAKMETTFYDDALNASFLPSESGPYGYSNPKILKQSMTLNLADPVGSLKPHLRAKNSDLLTSPDVGLLKLASPE
LERLIIQSSNGHITTTPTPTQFLCPKNVTDEQEGFAEGFVRALAELHSQNTLPSVTSAAQPVNGAGMVAPAVASV
AGGSGSGGFSASLHSEPPVYANLSNFNPGALSSGGGAPSYGAAGLAFPAQPQQQQQPPHHLPQQMPVQHPRLQAL
KEEPQTVPEMPGETPPLSPIDMESQERIKAERKRMRNRIAASKCRKRKLERIARLEEKVKTLKAQNSELASTANM
LREQVAQLKQKVMNHVNSGCQLMLTQQLQTF

FIGURE 461

TGCGCCACG**ATG**TCCGGGGAGTCAGCCAGGAGCTTGGGGAAGGGAAGCGCGCCCCCGGGGCCGGTCCCGGAGGGC
TCGATCCGCATCTACAGCATGAGGTTCTGCCCGTTTGCTGAGAGGACGCGTCTAGTCCTGAAGGCCAAGGGAATC
AGGCATGAAGTCATCAATATCAACCTGAAAAATAAGCCTGAGTGGTTCTTTAAGAAAAATCCCTTTGGTCTGGTG
CCAGTTCTGGAAAACAGTCAGGGTCAGCTGATCTACGAGTCTGCCATCACCTGTGAGTACCTGGATGAAGCATAC
CCAGGGAAGAAGCTGTTGCCGGATGACCCCTATGAGAAAGCTTGCCAGAAGATGATCTTAGAGTTGTTTTCTAAG
GTGCCATCCTTGGTAGGAAGCTTTATTAGAAGCCAAAATAAAGAAGACTATGCTGGCCTAAAAGAAGAATTTCGT
AAAGAATTTACCAAGCTAGAGGAGGTTCTGACTAATAAGAAGACGACCTTCTTTGGTGGCAATTCTATCTCTATG
ATTGATTACCTCATCTGGCCCTGGTTTGAACGGCTGGAAGCAATGAAGTTAAATGAGTGTGTAGACCACACTCCA
AAACTGAAACTGTGGATGGCAGCCATGAAGGAAGATCCCACAGTCTCAGCCCTGCTTACTAGTGAGAAAGACTGG
CAAGGTTTCCTAGAGCTCTACTTACAGAACAGCCCTGAGGCCTGTGACTATGGGCTC**TGA**AGGGGGCAGGAGTCA
GCAATAAAGCTATGTCTGATATTTTCCTTCAGTAAAAAAAAAA

FIGURE 462

MSGESARSLGKGSAPPGPVPEGSIRIYSMRFCPFAERTRLVLKAKGIRHEVININLKNKPEWFFKKNPFGLVPVL
ENSQGQLIYESAITCEYLDEAYPGKKLLPDDPYEKACQKMILELFSKVPSLVGSFIRSQNKEDYAGLKEEFRKEF
TKLEEVLTNKKTTFFGGNSISMIDYLIWPWFERLEAMKLNECVDHTPKLKLWMAAMKEDPTVSALLTSEKDWQGF
LELYLQNSPEACDYGL

FIGURE 463

CCAGCAGGGAGCTGGGAGCTGGGGGAAACGACGCCAGGAAAGCTATCGCGCCAGAGAGGGCGACGGGGGCTCGGG
AAGCCTGACAGGGCTTTTGCGCACAGCTGCCGGCTGGCTGCTACCCGCCCGCGCCAGCCCCCGAGAACGCGCGAC
CAGGCACCCAGTCCGGTCACCGCAGCGGAGAGCTCGCCGCTCGCTGCAGCGAGGCCCGGAGCGGCCCCGCAGGGA
CCCTCCCCAGACCGCCTGGGCCGCCCGG**ATG**TGCACTAAAATGGAACAGCCCTTCTACCACGACGACTCATACAC
AGCTACGGGATACGGCCGGGCCCCTGGTGGCCTCTCTCTACACGACTACAAACTCCTGAAACCGAGCCTGGCGGT
CAACCTGGCCGACCCCTACCGGAGTCTCAAAGCGCCTGGGGCTCGCGGACCCGGCCCAGAGGGCGGCGGTGGCGG
CAGCTACTTTTCTGGTCAGGGCTCGGACACCGGCGCGTCTCTCAAGCTCGCCTCTTCGGAGCTGGAACGCCTGAT
TGTCCCCAACAGCAACGGCGTGATCACGACGACGCCTACACCCCCGGGACAGTACTTTTACCCCCGCGGGGGTGG
CAGCGGTGGAGGTGCAGGGGGCGCAGGGGGCGGCGTCACCGAGGAGCAGGAGGGCTTCGCCGACGGCTTTGTCAA
AGCCCTGGACGATCTGCACAAGATGAACCACGTGACACCCCCCAACGTGTCCCTGGGCGCTACCGGGGGGCCCCC
GGCTGGGCCCGGGGGCGTCTACGCCGGCCCGGAGCCACCTCCCGTTTACACCAACCTCAGCAGCTACTCCCCAGC
CTCTGCGTCCTCGGGAGGCGCCGGGGCTGCCGTCGGGACCGGGAGCTCGTACCCGACGACCACCATCAGCTACCT
CCCACACGCGCCGCCCTTCGCCGGTGGCCACCCGGCGCAGCTGGGCTTGGGCCGCGGCGCCTCCACCTTCAAGGA
GGAACCGCAGACCGTGCCGGAGGCGCGCAGCCGGGACGCCACGCCGCCGGTGTCCCCCATCAACATGGAAGACCA
AGAGCGCATCAAAGTGGAGCGCAAGCGGCTGCGGAACCGGCTGGCGGCCACCAAGTGCCGGAAGCGGAAGCTGGA
GCGCATCGCGCGCCTGGAGGACAAGGTGAAGACGCTCAAGGCCGAGAACGCGGGGCTGTCGAGTACCGCCGGCCT
CCTCCGGGAGCAGGTGGCCCAGCTCAAACAGAAGGTCATGACCCACGTCAGCAACGGCTGTCAGCTGCTGCTTGG
GGTCAAGGGACACGCCTTC**TGA**ACGTCCCCTGCCCCTTTACGGACACCCCCTCGCTTGGACGGCTGGGCACACGC
CTCCCACTGGGGTCCAGGGAGCAGGCGGTGGGCACCCACCCTGGGACCTAGGGGCGCCGCAAACCACACTGGACT
CCGGCCCCCCTACCCTGCGCCCAGTCCTTCCACCTCGACGTTTACAAGCCCCCCCTTCCACTTTTTTTTGTATGT
TTTTTTTCTGCTGGAAACAGACTCGATTCATATTGAATATAATATATTTGTGTATTTAACAGGGAGGGGAAGAGG
GGGCGATCGCGGCGGAGCTGGCCCCGCCGCCTGGTACTCAAGCCCGCGGGGACATTGGGAAGGGGACCCCCGCCC
CCTGCCCTCCCCTCTCTGCACCGTACTGTGGAAAAGAAACACGCACTTAGTCTCTAAAGAGTTTATTTTAAGACG
TGTTTGTGTTTGTGTGTGTTTGTTCTTTTTATTGAATCTATTTAAGTAAAAAAAAAATTGGTTCTTTATTAA

FIGURE 464

MCTKMEQPFYHDDSYTATGYGRAPGGLSLHDYKLLKPSLAVNLADPYRSLKAPGARGPGPEGGGGGSYFSGQGSD
TGASLKLASSELERLIVPNSNGVITTTPTPPGQYFYPRGGGSGGGAGGAGGGVTEEQEGFADGFVKALDDLHKMN
HVTPPNVSLGATGGPPAGPGGVYAGPEPPPVYTNLSSYSPASASSGGAGAAVGTGSSYPTTTISYLPHAPPFAGG
HPAQLGLGRGASTFKEEPQTVPEARSRDATPPVSPINMEDQERIKVERKRLRNRLAATKCRKRKLERIARLEDKV
KTLKAENAGLSSTAGLLREQVAQLKQKVMTHVSNGCQLLLGVKGHAF

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FIGURE 465

ATCAGCGAGGGATTCACGGCGAAATGAGACTGTTCGTGAGTGATGGCGTCCCGGGTTGCTTGCCGGTGCTGGCCG
CCGCCGGGAGAGCCCGGGGCAGAGCAGAGGTGCTCATCAGCACTGTAGGCCCGGAAGATTGTGTGGTCCCGTTCC
TGACCCGGCCTAAGGTCCCTGTCTTGCAGCTGGATAGCGGCAACTACCTCTTCTCCACTAGTGCAATCTGCCGAT
ATTTTTTTTTGTTATCTGGCTGGGAGCAAGATGACCTCACTAACCAGTGGCTGGAATGGGAAGCGACAGAGCTGC
AGCCAGCTTTGTCTGCTGCCCTGTACTATTTAGTGGTCCAAGGCAAGAAGGGGGAAGATGTTCTTGGTTCAGTGC
GGAGAGCCCTGACTCACATTGACCACAGCTTGAGTCGTCAGAACTGTCCTTTCCTGGCTGGGGAGACAGAATCTC
TAGCCGACATTGTTTTGTGGGGAGCCCTATACCCATTACTGCAAGATCCCGCCTACCTCCCTGAGGAGCTGAGTG
CCCTGCACAGCTGGTTCCAGACACTGAGTACCCAGGAACCATGTCAGCGAGCTGCAGAGACTGTACTGAAACAGC
AAGGTGTCCTGGCTCTCCGGCCTTACCTCCAAAAGCAGCCCCAGCCCAGCCCCGCTGAGGGAAGGGCTGTCACCA
ATGAGCCTGAGGAGGAGGAGCTGGCTACCCTATCTGAGGAGGAGATTGCTATGGCTGTTACTGCTTGGGAGAAGG
GCCTAGAAAGTTTGCCCCCGCTGCGGCCCCAGCAGAATCCAGTGTTGCCTGTGGCTGGAGAAAGGAATGTGCTCA
TCACCAGTGCCCTCCCTTACGTCAACAATGTCCCCCACCTTGGGAACATCATTGGTTGTGTGCTCAGTGCCGATG
TCTTTGCCAGGTACTCTCGCCTCCGCCAGTGGAACACCCTCTATCTGTGTGGGACAGATGAGTATGGTACAGCAA
CAGAGACCAAGGCTCTGGAGGAGGGACTAACCCCCCAGGAGATCTGCGACAAGTACCACATCATCCATGCTGACA
TCTACCGCTGGTTTAACATTTCGTTTGATATTTTTGGTCGCACCACCACTCCACAGCAGACCAAAATCACCCAGG
ACATTTTCCAGCAGTTGCTGAAACGAGGTTTTGTGCTGCAAGATACTGTGGAGCAACTGCGATGTGAGCACTGTG
CTCGCTTCCTGGCTGACCGCTTCGTGGAGGGCGTGTGTCCCTTCTGTGGCTATGAGGAGGCTCGGGGTGACCAGT
GTGACAAGTGTGGCAAGCTCATCAATGCTGTCGAGCTTAAGAAGCCTCAGTGTAAAGTCTGCCGATCATGCCCTG
TGGTGCAGTCGAGCCAGCACCTGTTTCTGGACCTGCCTAAGCTGGAGAAGCGACTGGAGGAGTGGTTGGGGAGGA
CATTGCCTGGCAGTGACTGGACACCCAATGCCCAGTTTATCACCCGTTCTTGGCTTCGGGATGGCCTCAAGCCAC
GCTGCATAACCCGAGACCTCAAATGGGGAACCCCTGTACCCTTAGAAGGTTTTGAAGACAAGGTATTCTATGTCT
GGTTTGATGCCACTATTGGCTATCTGTCCATCACAGCCAACTACACAGACCAGTGGGAGAGATGGTGGAAGAACC
CAGAGCAAGTGGACCTGTATCAGTTCATGGCCAAAGACAATGTTCCTTTCCATAGCTTAGTCTTTCCTTGCTCAG
CCCTAGGAGCTGAGGATAACTATACCTTGGTCAGCCACCTCATTGCTACAGAGTACCTGAACTATGAGGATGGGA
AATTCTCTAAGAGCCGCGGTGTGGGAGTGTTTGGGGACATGGCCCAGGACACGGGGATCCCTGCTGACATCTGGC
GCTTCTATCTGCTGTACATTCGGCCTGAGGGCCAGGACAGTGCTTTCTCCTGGACGGACCTGCTGCTGAAGAATA
ATTCTGAGCTGCTTAACAACCTGGGCAACTTCATCAACAGAGCTGGGATGTTTGTGTCTAAGTTCTTTGGGGGCT
ATGTGCCTGAGATGGTGCTCACCCCTGATGATCAGCGCCTGCTGGCCCATGTCACCCTGGAGCTCCAGCACTATC
ACCAGCTACTTGAGAAGGTTCGGATCCGGGATGCCTTGCGCAGTATCCTCACCATATCTCGACATGGCAACCAAT
ATATTCAGGTGAATGAGCCCTGGAAGCGGATTAAAGGCAGTGAGGCTGACAGGCAACGGGCAGGAACAGTGACTG
GCTTGGCAGTGAATATAGCTGCCTTGCTCTCTGTCATGCTTCAGCCTTACATGCCCACGGTTAGTGCCACAATCC
AGGCCCAGCTGCAGCTCCCACCTCCAGCCTGCAGTATCCTGCTGACAAACTTCCTGTGTACCTTACCAGCAGGAC
ACCAGATTGGCACAGTCAGTCCCTTGTTCCAAAAATTGGAAAATGACCAGATTGAAAGTTTAAGGCAGCGCTTTG
GAGGGGGCCAGGCAAAAACGTCCCCGAAGCCAGCAGTTGTAGAGACTGTTACAACAGCCAAGCCACAGCAGATAC
AAGCGCTGATGGATGAAGTGACAAAACAAGGAAACATTGTCCGAGAACTGAAAGCACAAAAGGCAGACAAGAACG
AGGTTGCTGCGGAGGTGGCGAAACTCTTGGATCTAAAGAAACAGTTGGCTGTAGCTGAGGGGAAACCCCCTGAAG
CCCCTAAAGGCAAGAAGAAAAAGTAAAAGACCTTGGCTCATAGAAAGTCACTTTAATAGATAGGGACAGTAATAA
ATAAATGTACAATCTCTATA

FIGURE 466

MRLFVSDGVPGCLPVLAAAGRARGRAEVLISTVGPEDCVVPFLTRPKVPVLQLDSGNYLFSTSAICRYFFLLSGW
EQDDLTNQWLEWEATELQPALSAALYYLVVQGKKGEDVLGSVRRALTHIDHSLSRQNCPFLAGETESLADIVLWG
ALYPLLQDPAYLPEELSALHSWFQTLSTQEPCQRAAETVLKQQGVLALRPYLQKQPQPSPAEGRAVTNEPEEEEL
ATLSEEEIAMAVTAWEKGLESLPPLRPQQNPVLPVAGERNVLITSALPYVNNVPHLGNIIGCVLSADVFARYSRL
RQWNTLYLCGTDEYGTATETKALEEGLTPQEICDKYHIIHADIYRWFNISFDIFGRTTTPQQTKITQDIFQQLLK
RGFVLQDTVEQLRCEHCARFLADRFVEGVCPFCGYEEARGDQCDKCGKLINAVELKKPQCKVCRSCPVVQSSQHL
FLDLPKLEKRLEEWLGRTLPGSDWTPNAQFITRSWLRDGLKPRCITRDLKWGTPVPLEGFEDKVFYVWFDATIGY
LSITANYTDQWERWWKNPEQVDLYQFMAKDNVPFHSLVFPCSALGAEDNYTLVSHLIATEYLNYEDGKFSKSRGV
GVFGDMAQDTGIPADIWRFYLLYIRPEGQDSAFSWTDLLLKNNSELLNNLGNFINRAGMFVSKFFGGYVPEMVLT
PDDQRLLAHVTLELQHYHQLLEKVRIRDALRSILTISRHGNQYIQVNEPWKRIKGSEADRQRAGTVTGLAVNIAA
LLSVMLQPYMPTVSATIQAQLQLPPPACSILLTNFLCTLPAGHQIGTVSPLFQKLENDQIESLRQRFGGGQAKTS
PKPAVVETVTTAKPQQIQALMDEVTKQGNIVRELKAQKADKNEVAAEVAKLLDLKKQLAVAEGKPPEAPKGKKKK

FIGURE 467

ATTCGAACCCCGTCGCGCCCCTTTGTGCGTCACGGGTGGCGGGCGCGGGAAGGGGATTTGGATTGTTGCGCCTCT
GCTCTGAAGAAAGTGCTGTCTGGCTCCAACTCCAGTTCTTTCCCCTGAGCAGCGCCTGGAACCTAACCCTTCCCA
CTCTGTCACCTTCTCGATCCCGCCGGCGCTTTAGAGCCGCAGTCCAGTCTTGGATCCTTCAGAGCCTCAGCCACT
AGCTGCGATGCATGTGATCAAGCGAGATGGCCGCCAAGAACGAGTCATGTTTGACAAAATTACATCTCGAATCCA
GAAGCTTTGTTATGGACTCAATATGGATTTTGTTGATCCTGCTCAGATCACCATGAAAGTAATCCAAGGCTTGTA
CAGTGGGGTCACCACAGTGGAACTAGATACTTTGGCTGCTGAAACAGCTGCAACCTTGACTACTAAGCACCCTGA
CTATGCTATCCTGGCAGCCAGGATCGCTGTCTCTAACTTGCACAAAGAAACAAAGAAAGTGTTCAGTGATGTGAT
GGAAGACCTCTATAACTACATAAATCCACATAATGGCAAACACTCTCCCATGGTGGCCAAGTCAACATTGGATAT
TGTTCTGGCCAATAAAGATCGCCTGAATTCTGCTATTATCTATGACCGAGATTTCTCTTACAATTACTTCGGCTT
TAAGACGCTAGAGCGGTCTTATTTGTTGAAGATCAATGGAAAAGTGGCTGAAAGACCACAACATATGTTGATGAG
AGTATCTGTTGGGATCCACAAAGAAGACATTGATGCAGCAATTGAAACATATAATCTTCTTTCTGAGAGGTGGTT
TACTCATGCTTCGCCCACTCTCTTCAATGCTGGTACCAACCGCCCACAACTTTCTAGCTGTTTTCTTCTGAGTAT
GAAAGATGACAGCATTGAAGGCATTTATGACACTCTAAAGCAATGTGCATTGATTTCTAAGTCTGCTGGAGGAAT
TGGTGTTGCTGTGAGTTGTATTCGGGCTACTGGCAGCTACATTGCTGGGACTAATGGCAATTCCAATGGCCTTGT
ACCGATGCTGAGAGTATATAACAACACAGCTAGATATGTGGATCAAGGTGGGAACAAGCGTCCTGGGGCATTTGC
TATTTACCTGGAGCCTTGGCATTTAGACATCTTTGAATTCCTTGATTTAAAGAAGAACACAGGAAAGGAAGAGCA
GCGTGCCAGAGATCTTTTCTTTGCTCTTTGGATTCCGGATCTCTTCATGAAACGAGTGGAGACTAATCAGGACTG
GTCTTTGATGTGTCCAAATGAGTGTCCTGGTCTGGATGAGGTTTGGGGAGAGGAATTTGAGAAACTATATGCAAG
TTATGAGAAACAAGGTCGTGTCCGCAAAGTTGTAAAAGCTCAGCAGCTTTGGTATGCCATCATTGAGTCTCAGAC
GGAAACAGGCACCCCGTATATGCTCTACAAAGATTCCTGTAATCGAAAGAGCAACCAGCAGAACCTGGGAACCAT
CAAATGCAGCAACCTGTGCACAGAAATAGTGGAGTACACCAGCAAAGATGAGGTTGCTGTTTGTAATTTGGCTTC
CCTGGCCCTGAATATGTATGTCACATCAGAACACACATACGACTTTAAGAAGTTGGCTGAAGTCACTAAAGTCGT
TGTCCGAAACTTGAATAAAATTATTGATATAAACTACTATCCTGTACCAGAGGCATGCCTATCAAATAAACGCCA
TCGCCCCATTGGAATTGGGGTACAAGGTCTGGCAGATGCTTTTATCCTGATGAGATACCCTTTTGAGAGTGCAGA
AGCCCAGTTACTGAATAAGCAGATCTTTGAAACTATTTATTATGGTGCTCTGGAAGCCAGCTGTGACCTTGCCAA
GGAGCAGGGCCCATACGAAACCTATGAGGGCTCTCCAGTTAGCAAAGGAATTCTTCAGTATGATATGTGGAATGT
TACTCCTACAGACCTATGGGACTGGAAGGTTCTCAAGGAGAAGATTGCAAAGTATGGTATAAGAAACAGTTTACT
TATTGCCCCGATGCCTACAGCTTCCACTGCTCAGATCCTGGGGAATAATGAGTCCATTGAACCTTACACCAGCAA
CATCTATACTCGCAGAGTCTTGTCAGGAGAATTTCAGATTGTAAATCCTCACTTATTGAAAGATCTTACCGAGCG
GGGCCTATGGCATGAAGAGATGAAAAACCAGATTATTGCATGCAATGGCTCTATTCAGAGCATACCAGAAATTCC
TGATGACCTGAAGCAACTTTATAAAACTGTGTGGGAAATCTCTCAGAAAACTGTTCTCAAGATGGCAGCTGAGAG
AGGTGCTTTCATTGATCAAAGCCAATCTTTGAACATCCACATTGCTGAGCCTAACTATGGCAAACTCACTAGTAT
GCACTTCTACGGCTGGAAGCAGGGTTTGAAGACTGGGATGTATTATTTAAGGACAAGACCAGCAGCTAATCCAAT
CCAGTTCACTCTAAATAAGGAGAAGCTAAAAGATAAAGAAAAGGTATCAAAAGAGGAAGAAGAGAAGGAGAGGAA
CACAGCAGCCATGGTGTGCTCTTTGGAGAATAGAGATGAATGTCTGATGTGTGGATCCTGAGGAAAGACTTGGAA
GAGACCAGCATGTCTTCAGTAGCCAAACTACTTCTTGAGCATAGATAGGTATAGTGGGTTTGCTTGAGGTGGTAA
GGCTTTGCTGGACCCTGTTGCAGGCAAAAGGAGTAATTGATTTAAAGTACTGTTAATGATGTTAATGATTTTTTT
TTAAACTCATATATTGGGATTTTCACCAAAATAATGCTTTTGAAAAAAAGAAAAAAAAAACGGATATATTGAGAA
TCAAAGTAGAAGTTTTAGGAATGCAAAATAAGTCATCTTGCATACAGGGAGTGGTTAAGTAAGGTTTCATCACCC
ATTTAGCATGCTTTTCTGAAGACTTCAGTTTTGTTAAGGAGATTTAGTTTTACTGCTTTGACTGGTGGGTCTCTA
GAAGCAAAACTGAGTGATAACTCATGAGAAGTACTGATAGGACCTTTATCTGGATATGGTCCTATAGGTTATTCT
GAAATAAAGATAAACATTTCTAAGTGAAAAAAAAAAAAAAA

FIGURE 468

MHVIKRDGRQERVMFDKITSRIQKLCYGLNMDFVDPAQITMKVIQGLYSGVTTVELDTLAAETAATLTTKHPDYA
ILAARIAVSNLHKETKKVFSDVMEDLYNYINPHNGKHSPMVAKSTLDIVLANKDRLNSAIIYDRDFSYNYFGFKT
LERSYLLKINGKVAERPQHMLMRVSVGIHKEDIDAAIETYNLLSERWFTHASPTLFNAGTNRPQLSSCFLLSMKD
DSIEGIYDTLKQCALISKSAGGIGVAVSCIRATGSYIAGTNGNSNGLVPMLRVYNNTARYVDQGGNKRPGAFAIY
LEPWHLDIFEFLDLKKNTGKEEQRARDLFFALWIPDLFMKRVETNQDWSLMCPNECPGLDEVWGEEFEKLYASYE
KQGRVRKVVKAQQLWYAIIESQTETGTPYMLYKDSCNRKSNQQNLGTIKCSNLCTEIVEYTSKDEVAVCNLASLA
LNMYVTSEHTYDFKKLAEVTKVVVRNLNKIIDINYYPVPEACLSNKRHRPIGIGVQGLADAFILMRYPFESAEAQ
LLNKQIFETIYYGALEASCDLAKEQGPYETYEGSPVSKGILQYDMWNVTPTDLWDWKVLKEKIAKYGIRNSLLIA
PMPTASTAQILGNNESIEPYTSNIYTRRVLSGEFQIVNPHLLKDLTERGLWHEEMKNQIIACNGSIQSIPEIPDD
LKQLYKTVWEISQKTVLKMAAERGAFIDQSQSLNIHIAEPNYGKLTSMHFYGWKQGLKTGMYYLRTRPAANPIQF
TLNKEKLKDKEKVSKEEEEKERNTAAMVCSLENRDECLMCGS

FIGURE 469

ATTCGAACCCCGTCGCGCCCCTTTGTGCGTCACGGGTGGCGGGCGCGGGAAGGGGATTTGGATTGTTGCGCCTCT
GCTCTGAAGAAAGTGCTGTCTGGCTCCAACTCCAGTTCTTTCCCCTGAGCAGCGCCTGGAACCTAACCCTTCCCA
CTCTGTCACCTTCTCGATCCCGCCGGCGCTTTAGAGCCGCAGTCCAGTCTTGGATCCTTCAGAGCCTCAGCCACT
AGCTGCGATGCATGTGATCAAGCGAGATGGCCGCCAAGAACGAGTCATGTTTGACAAAATTACATCTCGAATCCA
GAAGCTTTGTTATGGACTCAATATGGATTTTGTTGATCCTGCTCAGATCACCATGAAAGTAATCCAAGGCTTGTA
CAGTGGGGTCACCACAGTGGAACTAGATACTTTGGCTGCTGAAACAGCTGCAACCTTGACTACTAAGCACCCTGA
CTATGCTATCCTGGCAGCCAGGATCGCTGTCTCTAACTTGCACAAAGAAACAAAGAAAGTGTTCAGTGATGTGAT
GGAAGACCTCTATAACTACATAAATCCACATAATGGCAAACACTCTCCCATGGTGGCCAAGTCAACATTGGATAT
TGTTCTGGCCAATAAAGATCGCCTGAATTCTGCTATTATCTATGACCGAGATTTCTCTTACAATTACTTCGGCTT
TAAGACGCTAGAGCGGTCTTATTTGTTGAAGATCAATGGAAAAGTGGCTGAAAGACCACAACATATGTTGATGAG
AGTATCTGTTGGGATCCACAAAGAAGACATTGATGCAGCAATTGAAACATATAATCTTCTTTCTGAGAGGTGGTT
TACTCATGCTTCGCCCACTCTCTTCAATGCTGGTACCAACCGCCCACAACTTTCTAGCTGTTTTCTTCTGAGTAT
GAAAGATGACAGCATTGAAGGCATTTATGACACTCTAAAGCAATGTGCATTGATTTCTAAGTCTGCTGGAGGAAT
TGGTGTTGCTGTGAGTTGTATTCGGGCTACTGGCAGCTACATTGCTGGGACTAATGGCAATTCCAATGGCCTTGT
ACCGATGCTGAGAGTATATAACAACACAGCTAGATATGTGGATCAAGGTGGGAACAAGCGTCCTGGGGCATTTGC
TATTTACCTGGAGCCTTGGCATTTAGACATCTTTGAATTCCTTGATTTAAAGAAGAACACAGGAAAGGAAGAGCA
GCGTGCCAGAGATCTTTTCTTTGCTCTTTGGATTCCGGATCTCTTCATGAAACGAGTGGAGACTAATCAGGACTG
GTCTTTGATGTGTCCAAATGAGTGTCCTGGTCTGGATGAGGTTTGGGGAGAGGAATTTGAGAAACTATATGCAAG
TTATGAGAAACAAGGTCGTGTCCGCAAAGTTGTAAAAGCTCAGCAGCTTTGGTATGCCATCATTGAGTCTCAGAC
GGAAACAGGCACCCCGTATATGCTCTACAAAGATTCCTGTAATCGAAAGAGCAACCAGCAGAACCTGGGAACCAT
CAAATGCAGCAACCTGTGCACAGAAATAGTGGAGTACACCAGCAAAGATGAGGTTGCTGTTTGTAATTTGGCTTC
CCTGGCCCTGAATATGTATGTCACATCAGAACACACATACGACTTTAAGAAGTTGGCTGAAGTCACTAAAGTCGT
TGTCCGAAACTTGAATAAAATTATTGATATAAACTACTATCCTGTACCAGAGGCATGCCTATCAAATAAACGCCA
TCGCCCCATTGGAATTGGGGTACAAGGTCTGGCAGATGCTTTTATCCTGATGAGATACCCTTTTGAGAGTGCAGA
AGCCCAGTTACTGAATAAGCAGATCTTTGAAACTATTTATTATGGTGCTCTGGAAGCCAGCTGTGACCTTGCCAA
GGAGCAGGGCCCATACGAAACCTATGAGGGCTCTCCAGTTAGCAAAGGAATTCTTCAGTATGATATGTGGAATGT
TACTCCTACAGACCTATGGGACTGGAAGGTTCTCAAGGAGAAGATTGCAAAGTATGGTATAAGAAACAGTTTACT
TATTGCCCCGATGCCTACAGCTTCCACTGCTCAGATCCTGGGGAATAATGAGTCCATTGAACCTTACACCAGCAA
CATCTATACTCGCAGAGTCTTGTCAGGAGAATTTCAGATTGTAAATCCTCACTTATTGAAAGATCTTACCGAGCG
GGGCCTATGGCATGAAGAGATGAAAAACCAGATTATTGCATGCAATGGCTCTATTCAGAGCATACCAGAAATTCC
TGATGACCTGAAGCAACTTTATAAAACTGTGTGGGAAATCTCTCAGAAAACTGTTCTCAAGATGGCAGCTGAGAG
AGGTGCTTTCATTGATCAAAGCCAATCTTTGAACATCCACATTGCTGAGCCTAACTATGGCAAACTCACTAGTAT
GCACTTCTACGGCTGGAAGCAGGGTTTGAAGACTGGGATGTATTATTTAAGGACAAGACCAGCAGCTAATCCAAT
CCAGTTCACTCTAAATAAGGAGAAGCTAAAAGATAAAGAAAAGGTATCAAAAGAGGAAGAAGAGAAGGAGAGGAA
CACAGCAGCCATGGTGTGCTCTTTGGAGAATAGAGATGAATGTCTGATGTGTGGATCCTGAGGAAAGACTTGGAA
GAGACCAGCATGTCTTCAGTAGCCAAACTACTTCTTGAGCATAGATAGGTATAGTGGGTTTGCTTGAGGTGGTAA
GGCTTTGCTGGACCCTGTTGCAGGCAAAAGGAGTAATTGATTTAAAGTACTGTTAATGATGTTAATGATTTTTTT
TTAAACTCATATATTGGGATTTTCACCAAAATAATGCTTTTGAAAAAAAGAAAAAAAAAACGGATATATTGAGAA
TCAAAGTAGAAGTTTTAGGAATGCAAAATAAGTCATCTTGCATACAGGGAGTGGTTAAGTAAGGTTTCATCACCC
ATTTAGCATGCTTTTCTGAAGACTTCAGTTTTGTTAAGGAGATTTAGTTTTACTGCTTTGACTGGTGGGTCTCTA
GAAGCAAAACTGAGTGATAACTCATGAGAAGTACTGATAGGACCTTTATCTGGATATGGTCCTATAGGTTATTCT
GAAATAAAGATAAACATTTCTAAGTGAAAAAAAAAAAAAAA

FIGURE 470

MHVIKRDGRQERVMFDKITSRIQKLCYGLNMDFVDPAQITMKVIQGLYSGVTTVELDTLAAETAATLTTKHPDYA
ILAARIAVSNLHKETKKVFSDVMEDLYNYINPHNGKHSPMVAKSTLDIVLANKDRLNSAIIYDRDFSYNYFGFKT
LERSYLLKINGKVAERPQHMLMRVSVGIHKEDIDAAIETYNLLSERWFTHASPTLFNAGTNRPQLSSCFLLSMKD
DSIEGIYDTLKQCALISKSAGGIGVAVSCIRATGSYIAGTNGNSNGLVPMLRVYNNTARYVDQGGNKRPGAFAIY
LEPWHLDIFEFLDLKKNTGKEEQRARDLFFALWIPDLFMKRVETNQDWSLMCPNECPGLDEVWGEEFEKLYASYE
KQGRVRKVVKAQQLWYAIIESQTETGTPYMLYKDSCNRKSNQQNLGTIKCSNLCTEIVEYTSKDEVAVCNLASLA
LNMYVTSEHTYDFKKLAEVTKVVVRNLNKIIDINYYPVPEACLSNKRHRPIGIGVQGLADAFILMRYPFESAEAQ
LLNKQIFETIYYGALEASCDLAKEQGPYETYEGSPVSKGILQYDMWNVTPTDLWDWKVLKEKIAKYGIRNSLLIA
PMPTASTAQILGNNESIEPYTSNIYTRRVLSGEFQIVNPHLLKDLTERGLWHEEMKNQIIACNGSIQSIPEIPDD
LKQLYKTVWEISQKTVLKMAAERGAFIDQSQSLNIHIAEPNYGKLTSMHFYGWKQGLKTGMYYLRTRPAANPIQF
TLNKEKLKDKEKVSKEEEEKERNTAAMVCSLENRDECLMCGS

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FIGURE 471

GAGCAGCGCGGCCTGACGGGACCAAGGCGGCGGGAGTCTGCGGTCGTTCCCTCGGCTGTGGACCGGGCGGCACGC
ACGCGGTGCAGGGTAACATGGCGGATGCGGAAGTAATTATTTTGCCAAAGAAACATAAGAAGAAAAAGGAGCGGA
AGTCATTGCCAGAAGAAGATGTAGCCGAAATACAACACGCTGAAGAATTTCTTATCAAACCTGAATCCAAAGTTG
CTAAGTTGGACACGTCTCAGTGGCCCCTTTTGCTAAAGAATTTTGATAAGCTGAATGTAAGGACAACACACTATA
CACCTCTTGCATGTGGTTCAAATCCTCTGAAGAGAGAGATTGGGGACTATATCAGGACAGGTTTCATTAATCTTG
ACAAGCCCTCTAACCCCTCTTCCCATGAGGTGGTAGCCTGGATTCGACGGATACTTCGGGTGGAGAAGACAGGGC
ACAGTGGTACTCTGGATCCCAAGGTGACTGGTTGTTTAATCGTGTGCATAGAACGAGCCACTCGCTTGGTGAAGT
CACAACAGAGTGCAGGCAAAGAGTATGTGGGGATTGTCCGGCTGCACAATGCTATTGAAGGGGGGACCCAGCTTT
CTAGGGCCCTAGAAACTCTGACAGGTGCCTTATTCCAGCGACCCCCACTTATTGCTGCAGTAAAGAGGCAGCTCC
GAGTGAGGACCATCTACGAGAGCAAAATGATTGAATACGATCCTGAAAGAAGATTAGGAATCTTTTGGGTGAGTT
GTGAGGCTGGCACCTACATTCGGACATTATGTGTGCACCTTGGTTTGTTATTGGGAGTTGGTGGTCAGATGCAGG
AGCTTCGGAGGGTTCGTTCTGGAGTCATGAGTGAAAAGGACCACATGGTGACAATGCATGATGTGCTTGATGCTC
AGTGGCTGTATGATAACCACAAGGATGAGAGTTACCTGCGGCGAGTTGTTTACCCTTTGGAAAAGCTGTTGACAT
CTCATAAACGGCTGGTTATGAAAGACAGTGCAGTAAATGCCATCTGCTATGGGGCCAAGATTATGCTTCCAGGTG
TTCTTCGATATGAGGACGGCATTGAGGTCAATCAGGAGATTGTGGTTATCACCACCAAAGGAGAAGCAATCTGCA
TGGCTATTGCATTAATGACCACAGCGGTCATCTCTACCTGCGACCATGGTATAGTAGCCAAGATCAAGAGAGTGA
TCATGGAGAGAGACACTTACCCTCGGAAGTGGGGTTTAGGTCCAAAGGCAAGTCAGAAGAAGCTGATGATCAAGC
AGGGCCTTCTGGACAAGCATGGGAAGCCCACAGACAGCACACCTGCCACCTGGAAGCAGGAGTATGTTGACTACA
GTGAGTCTGCCAAAAAAGAGGTGGTTGCTGAAGTGGTAAAAGCCCCGCAGGTAGTTGCCGAAGCAGCAAAAACTG
CGAAGCGGAAGCGAGAGAGTGAGAGTGAAAGTGACGAGACTCCTCCAGCAGCTCCTCAGTTGATCAAGAAGGAAA
AGAAGAAGAGTAAGAAGGACAAGAAGGCCAAAGCTGGTCTGGAGAGCGGGGCCGAGCCTGGAGATGGGGACAGTG
ATACCACCAAGAAGAAGAAGAAGAAGAAGAAAGCAAAAGAGGTAGAATTGGTTTCTGAGTAGTGAAGGCCACTTG
AAGCTGGAGGAGAAACTAAAGCCTTATTGAGAAAACATGTTATAGATCCTTTTGTTGCTGAGAGAGTGGAACATA
GGTCCTAGACAGGGTGAAGAGTTCTGGCACATTTTAGCTGCTACTTTGAGACCTCGGTGATGTTACCTGGTGTGG
TCATCCCATCTTGTCCTGTTTTAAGGATATGGGTGGTGAAAGATGAAAGAGGCAGAGTTTATCCCAATGACTTCT
CTGTTTGAGTTGGGAAGCCTCACCTTCAGACCCAGTAACTGTCCGCAGCTGTCTGCTAGTGGTTGTCTTAACATC
GTAGTCCTAGTTTGCATTTTTTAAATCCCCTCTGTTTAAAAGGTTTGTAAAACAAAAACAAAAAACTAAGTCTGC
TCAGTGAAATGCTGTAGAACCCTAAATAAGTGGTAGAAGAGTGTCACTGAATTTTGTCTCTGAATTCAGTATAAC
TGAGTTTTGTCCATGCTGGTGTCTGGGTTATAGGCCTGATGGGCCTGGTAGTTTTCCATCTTGTTCTGGCCTAGA
GGTCAGTCCTTTGCACTTCCTCAAAGCTTGTGTACAGTGCTCACCTAAATCCATCTGACTACTTGTTCCTGTGCC
CTCTTGTTTTAGGCCTCGTTTACTTTTAAAAAATGAAATTGTTCATTGCTGGGAGAAGAATGTTGTAATTTTTAC
TTATTAAAGTCAACTTGTTAAGTTTTTTATGTATTCCTGTTGGGTTTTCTTGTTGATCTCATGCTAGCAGAGCAA
AAATTGTAAAATATTTTGATTAAAAATCTAGGGACCTTTATGTCCTATTTGGAATTCGATATCAA

FIGURE 472

MADAEVIILPKKHKKKKERKSLPEEDVAEIQHAEEFLIKPESKVAKLDTSQWPLLLKNFDKLNVRTTHYTPLACG
SNPLKREIGDYIRTGFINLDKPSNPSSHEVVAWIRRILRVEKTGHSGTLDPKVTGCLIVCIERATRLVKSQQSAG
KEYVGIVRLHNAIEGGTQLSRALETLTGALFQRPPLIAAVKRQLRVRTIYESKMIEYDPERRLGIFWVSCEAGTY
IRTLCVHLGLLLGVGGQMQELRRVRSGVMSEKDHMVTMHDVLDAQWLYDNHKDESYLRRVVYPLEKLLTSHKRLV
MKDSAVNAICYGAKIMLPGVLRYEDGIEVNQEIVVITTKGEAICMAIALMTTAVISTCDHGIVAKIKRVIMERDT
YPRKWGLGPKASQKKLMIKQGLLDKHGKPTDSTPATWKQEYVDYSESAKKEVVAEVVKAPQVVAEAAKTAKRKRE
SESESDETPPAAPQLIKKEKKKSKKDKKAKAGLESGAEPGDGDSDTTKKKKKKKKAKEVELVSE

FIGURE 473

AGCTATTTCAAGGCGCGCGCCTCGTGGTGGACTCACCGCTAGCCCGCAGCGCTCGGCTTCCTGGTAATTCTTCAC
CTCTTTTCTCAGCTCCCTGCAGC**ATG**GGTGCTGGGCCCTCCTTGCTGCTCGCCGCCCTCCTGCTGCTTCTCTCCG
GCGACGGCGCCGTGCGCTGCGACACACCTGCCAACTGCACCTATCTTGACCTGCTGGGCACCTGGGTCTTCCAGG
TGGGCTCCAGCGGTTCCCAGCGCGATGTCAACTGCTCGGTTATGGGACCACAAGAAAAAAAAAGTAGTGGTGTACC
TTCAGAAGCTGGATACAGCATATGATGACCTTGGCAATTCTGGCCATTTCACCATCATTTACAACCAAGGCTTTG
AGATTGTGTTGAATGACTACAAGTGGTTTGCCTTTTTTAAGTATAAAGAAGAGGGCAGCAAGGTGACCACTTACT
GCAACGAGACAATGACTGGGTGGGTGCATGATGTGTTGGGCCGGAACTGGGCTTGTTTCACCGGAAAGAAGGTGG
GAACTGCCTCTGAGAATGTGTATGTCAACACAGCACACCTTAAGAATTCTCAGGAAAAGTATTCTAATAGGCTCT
ACAAGTATGATCACAACTTTGTGAAAGCTATCAATGCCATTCAGAAGTCTTGGACTGCAACTACATACATGGAAT
ATGAGACTCTTACCCTGGGAGATATGATTAGGAGAAGTGGTGGCCACAGTCGAAAAATCCCAAGGCCCAAACCTG
CACCACTGACTGCTGAAATACAGCAAAAGATTTTGCATTTGCCAACATCTTGGGACTGGAGAAATGTTCATGGTA
TCAATTTTGTCAGTCCTGTTCGAAACCAAGCATCCTGTGGCAGCTGCTACTCATTTGCTTCTATGGGTATGCTAG
AAGCGAGAATCCGTATACTAACCAACAATTCTCAGACCCCAATCCTAAGCCCTCAGGAGGTTGTGTCTTGTAGCC
AGTATGCTCAAGGCTGTGAAGGCGGCTTCCCATACCTTATTGCAGGAAAGTACGCCCAAGATTTTGGGCTGGTGG
AAGAAGCTTGCTTCCCCTACACAGGCACTGATTCTCCATGCAAAATGAAGGAAGACTGCTTTCGTTATTACTCCT
CTGAGTACCACTATGTAGGAGGTTTCTATGGAGGCTGCAATGAAGCCCTGATGAAGCTTGAGTTGGTCCATCATG
GGCCCATGGCAGTTGCTTTTGAAGTATATGATGACTTCCTCCACTACAAAAAGGGGATCTACCACCACACTGGTC
TAAGAGACCCTTTCAACCCCTTTGAGCTGACTAATCATGCTGTTCTGCTTGTGGGCTATGGCACTGACTCAGCCT
CTGGGATGGATTACTGGATTGTTAAAAACAGCTGGGGCACCGGCTGGGGTGAGAATGGCTACTTCCGGATCCGCA
GAGGAACTGATGAGTGTGCAATTGAGAGCATAGCAGTGGCAGCCACACCAATTCCTAAATTG**TAG**GGTATGCCTT
CCAGTATTTCATAATGATCTGCATCAGTTGTAAAGGGGAATTGGTATATTCACAGACTGTAGACTTTCAGCAGCA
ATCTCAGAAGCTTACAAATAGATTTCCATGAAGATATTTGTCTTCAGAATTAAAACTGCCCTTAATTTTAATATA
CCTTTCAATCGGCCACTGGCCATTTTTTTCTAAGTATTCAATTAAGTGGGAATTTTCTGGAAGATGGTCAGCTAT
GAAGTAATAGAGTTTGCTTAATCATTTGTAATTCAAACATGCTATATTTTTTAAAATCAATGTGAAAACATAGAC
TTATTTTTAAATTGTACCAATCACAAGAAAATAATGGCAATAATTATCAAAACTTTTAAAATAGATGCTCATATT
TTTAAAATAAAGTTTTAAAAATAACTGCA

FIGURE 474

MGAGPSLLLAALLLLLSGDGAVRCDTPANCTYLDLLGTWVFQVGSSGSQRDVNCSVMGPQEKKVVVYLQKLDTAY
DDLGNSGHFTIIYNQGFEIVLNDYKWFAFFKYKEEGSKVTTYCNETMTGWVHDVLGRNWACFTGKKVGTASENVY
VNTAHLKNSQEKYSNRLYKYDHNFVKAINAIQKSWTATTYMEYETLTLGDMIRRSGGHSRKIPRPKPAPLTAEIQ
QKILHLPTSWDWRNVHGINFVSPVRNQASCGSCYSFASMGMLEARIRILTNNSQTPILSPQEVVSCSQYAQGCEG
GFPYLIAGKYAQDFGLVEEACFPYTGTDSPCKMKEDCFRYYSSEYHYVGGFYGGCNEALMKLELVHHGPMAVAFE
VYDDFLHYKKGIYHHTGLRDPFNPFELTNHAVLLVGYGTDSASGMDYWIVKNSWGTGWGENGYFRIRRGTDECAI
ESIAVAATPIPKL

FIGURE 475

TCTGGGCGCGCGCGACGTCAGTTTGAGTTCTGTGTTCTCCCCGCCCGTGTCCCGCCCGACCCGCGCCCGCGATGC
TGGCGCTGCGCTGCGGCTCCCGCTGGCTCGGCCTGCTCTCCGTCCCGCGCTCCGTGCCGCTGCGCCTCCCCGCGG
CCCGCGCCTGCAGCAAGGGCTCCGGCGACCCGTCCTCTTCCTCCTCCTCCGGGAACCCGCTCGTGTACCTGGACG
TGGACGCCAACGGGAAGCCGCTCGGCCGCGTGGTGCTGGAGCTGAAGGCAGATGTCGTCCCAAAGACAGCTGAGA
ACTTCAGAGCCCTGTGCACTGGTGAGAAGGGCTTCGGCTACAAAGGCTCCACCTTCCACAGGGTGATCCCTTCCT
TCATGTGCCAGGCGGGCGACTTCACCAACCACAATGGCACAGGCGGGAAGTCCATCTACGGAAGCCGCTTTCCTG
ACGAGAACTTTACACTGAAGCACGTGGGGCCAGGTGTCCTGTCCATGGCTAATGCTGGTCCTAACACCAACGGCT
CCCAGTTCTTCATCTGCACCATAAAGACAGACTGGTTGGATGGCAAGCATGTTGTGTTCGGTCACGTCAAAGAGG
GCATGGACGTCGTGAAGAAAATAGAATCTTTCGGCTCTAAGAGTGGGAGGACATCCAAGAAGATTGTCATCACAG
ACTGTGGCCAGTTGAGCTAATCTGTGGCCAGGGTGCTGGCATGGTGGCAGCTGCAAATGTCCATGCACCCAGGTG
GCCGCGTTGGGCTGTCAGCCAAGGTGCCTGAAACGATACGTGTGCCCACTCCACTGTCACAGTGTGCCTGAGGAA
GGCTGCTAGGGATGTTAGACCTCGGCCAGGACCCACCACATTGCTTCCTAATACCCACCCTTCCTCACGACCTCA
TTTCTGGGCATCTTTGTGGACATGATGTCACCCACCCCTTGTCAAGCATTGCCTGTGATTGCCCAGCCCAGATTC
ATCTGTGCCTTGGACATGGTGATGGTGATGGGTTGCCATCCAAGTGAAAGTCTTTTCCTTGACCAAGGGGGACAG
TCAGTTTTGCAAAAGGACTCTAATACCTGTTTAATATTGTCTTCCTAATTGGGATAATTTAATTAACAAGATTGA
CTAGAAGTGAAACTGCAACACTAACTTCCCCGTGCTGTGGTGTGACCTGAGTTGGTGACACAGGCCACAGACCCC
AGAGCTTGGCTTTTGAAACACAACTCAGGGCTTTTGTGAAGGTTCCCCCGCTGAGATCTTTCCTCCTGGTTACTG
TGAAGCCTGTTGGTTTGCTGCTGTCGTTTTTGAGGAGGGCCCATGGGGGTAGGAGCAGTTGAACCTGGGAACAAA
CCTCACTTGAGCTGTGCCTAGACAATGTGAATTCCTGTGTTGCTAACAGAAGTGGCCTGTAAGCTCCTGTGCTCC
GGAGGGAAGCATTTCCTGGTAGGCTTTGATTTTTCTGTGTGTTAAAGAAATTCAATCTACTCATGATGTGTTATG
CATAAAACATTTCTGGAACATGGATTTGTGTTCACCTTAAATGTGAAAATAAATCCTATTTTCTATGGAAAAAAA
AAAAAAAAAAAAAAAA

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FIGURE 476

MLALRCGSRWLGLLSVPRSVPLRLPAARACSKGSGDPSSSSSSGNPLVYLDVDANGKPLGRVVLELKADVVPKTA
ENFRALCTGEKGFGYKGSTFHRVIPSFMCQAGDFTNHNGTGGKSIYGSRFPDENFTLKHVGPGVLSMANAGPNTN
GSQFFICTIKTDWLDGKHVVFGHVKEGMDVVKKIESFGSKSGRTSKKIVITDCGQLS

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FIGURE 477

TCTGGGCGCGCGCGACGTCAGTTTGAGTTCTGTGTTCTCCCCGCCCGTGTCCCGCCCGACCCGCGCCCGCGATGC
TGGCGCTGCGCTGCGGCTCCCGCTGGCTCGGCCTGCTCTCCGTCCCGCGCTCCGTGCCGCTGCGCCTCCCCGCGG
CCCGCGCCTGCAGCAAGGGCTCCGGCGACCCGTCCTCTTCCTCCTCCTCCGGGAACCCGCTCGTGTACCTGGACG
TGGACGCCAACGGGAAGCCGCTCGGCCGCGTGGTGCTGGAGCTGAAGGCAGATGTCGTCCCAAAGACAGCTGAGA
ACTTCAGAGCCCTGTGCACTGGTGAGAAGGGCTTCGGCTACAAAGGCTCCACCTTCCACAGGGTGATCCCTTCCT
TCATGTGCCAGGCGGGCGACTTCACCAACCACAATGGCACAGGCGGGAAGTCCATCTACGGAAGCCGCTTTCCTG
ACGAGAACTTTACACTGAAGCACGTGGGGCCAGGTGTCCTGTCCATGGCTAATGCTGGTCCTAACACCAACGGCT
CCCAGTTCTTCATCTGCACCATAAAGACAGACTGGTTGGATGGCAAGCATGTTGTGTTCGGTCACGTCAAAGAGG
GCATGGACGTCGTGAAGAAAATAGAATCTTTCGGCTCTAAGAGTGGGAGGACATCCAAGAAGATTGTCATCACAG
ACTGTGGCCAGTTGAGCTAATCTGTGGCCAGGGTGCTGGCATGGTGGCAGCTGCAAATGTCCATGCACCCAGGTG
GCCGCGTTGGGCTGTCAGCCAAGGTGCCTGAAACGATACGTGTGCCCACTCCACTGTCACAGTGTGCCTGAGGAA
GGCTGCTAGGGATGTTAGACCTCGGCCAGGACCCACCACATTGCTTCCTAATACCCACCCTTCCTCACGACCTCA
TTTCTGGGCATCTTTGTGGACATGATGTCACCCACCCCTTGTCAAGCATTGCCTGTGATTGCCCAGCCCAGATTC
ATCTGTGCCTTGGACATGGTGATGGTGATGGGTTGCCATCCAAGTGAAAGTCTTTTCCTTGACCAAGGGGGACAG
TCAGTTTTGCAAAAGGACTCTAATACCTGTTTAATATTGTCTTCCTAATTGGGATAATTTAATTAACAAGATTGA
CTAGAAGTGAAACTGCAACACTAACTTCCCCGTGCTGTGGTGTGACCTGAGTTGGTGACACAGGCCACAGACCCC
AGAGCTTGGCTTTTGAAACACAACTCAGGGCTTTTGTGAAGGTTCCCCCGCTGAGATCTTTCCTCCTGGTTACTG
TGAAGCCTGTTGGTTTGCTGCTGTCGTTTTTGAGGAGGGCCCATGGGGGTAGGAGCAGTTGAACCTGGGAACAAA
CCTCACTTGAGCTGTGCCTAGACAATGTGAATTCCTGTGTTGCTAACAGAAGTGGCCTGTAAGCTCCTGTGCTCC
GGAGGGAAGCATTTCCTGGTAGGCTTTGATTTTTCTGTGTGTTAAAGAAATTCAATCTACTCATGATGTGTTATG
CATAAAACATTTCTGGAACATGGATTTGTGTTCACCTTAAATGTGAAAATAAATCCTATTTTCTATGGAAAAAAA
AAAAAAAAAAAAAAA

FIGURE 478

MLALRCGSRWLGLLSVPRSVPLRLPAARACSKGSGDPSSSSSSGNPLVYLDVDANGKPLGRVVLELKADVVPKTA
ENFRALCTGEKGFGYKGSTFHRVIPSFMCQAGDFTNHNGTGGKSIYGSRFPDENFTLKHVGPGVLSMANAGPNTN
GSQFFICTIKTDWLDGKHVVFGHVKEGMDVVKKIESFGSKSGRTSKKIVITDCGQLS

FIGURE 479

AAAAGCAAGCCAGGAGGTGCTTGCGGCCGCTTCTAGTAGTTTCCAGGCGCTGCCGGGCGGCTGGCACTAAGCGGT
CCTGAGGCTGTGGCTACGGCTGCTCCGGAGCTGGTGGCGCCGCGATAGGAGAGCCGATGGCCAAGTGGGGTGAGG
GAGACCCACGCTGGATCGTGGAGGAGCGGGCGGACGCCACCAACGTCAACAACTGGCACTGGACGGAGAGAGATG
CTTCAAATTGGTCCACGGATAAGCTGAAAACACTGTTCTTGGCAGTGCAGGTTCAAAATGAAGAAGGCAAGTGTG
AGGTGACGGAAGTGAGTAAGCTTGATGGAGAGGCATCCATTAACAATCGCAAAGGGAAACTTATCTTCTTTTATG
AATGGAGCGTCAAACTAAACTGGACAGGTACTTCTAAGTCAGGAGTACAGTACAAAGGACATGTGGAGATCCCCA
ATTTGTCTGATGAAAACAGCGTGGATGAAGTGGAGATTAGTGTGAGCCTTGCCAAAGATGAGCCTGACACAAATC
TCGTGGCCTTAATGAAGGAAGAAGGGGTGAAACTTCTAAGAGAAGCAATGGGAATTTACATCAGCACCCTCAAAA
CAGAGTTCACCCAGGGCATGATCTTACCTACAATGAATGGAGAGTCAGTAGACCCAGTGGGGCAGCCAGCACTGA
AAACTGAGGAGCGCAAGGCTAAGCCTGCTCCTTCAAAAACCCAGGCCAGACCTGTTGGAGTCAAAATCCCCACTT
GTAAGATCACTCTTAAGGAAACCTTCCTGACGTCACCAGAGGAGCTCTATAGAGTGTTTACCACCCAAGAGCTGG
TGCAGGCCTTTACCCATGCTCCTGCAACATTAGAAGCAGACAGAGGTGGAAAGTTCCACATGGTAGATGGCAACG
TCTCTGGGGAATTTACTGATCTGGTCCCTGAGAAACATATTGTGATGAAGTGGAGGTTTAAATCTTGGCCAGAGG
GACACTTTGCCACCATCACCTTGACCTTCATCGACAAGAACGGAGAGACTGAGCTGTGCATGGAAGGTCGAGGCA
TCCCTGCTCCTGAGGAAGAGCGGACACGACAGGGCTGGCAGCGGTACTACTTTGAGGGCATTAAACAGACCTTTG
GCTATGGCGCACGCTTATTTTAGGCCAGCGGCAGGGGACTCCAGCCTGCTGGACACTTCAGTCCAGCTCTCTCC
TGACTGGGGCTTGCGACTCACAGGATTGCATCGTCCCAGCTGCTAACTTGGGGCCGGGGCCCCTCCCTTCCACAT
ATACCTTGGGTTTGTGCATGTTTTCTGCTGGGTGGGTTCAGAGGGCAATTTCTCTTTTATGTGTACATATGCTAA
ATAAACATAATTTAAAAAACAAAAA

FIGURE 480

MAKWGEGDPRWIVEERADATNVNNWHWTERDASNWSTDKLKTLFLAVQVQNEEGKCEVTEVSKLDGEASINNRKG
KLIFFYEWSVKLNWTGTSKSGVQYKGHVEIPNLSDENSVDEVEISVSLAKDEPDTNLVALMKEEGVKLLREAMGI
YISTLKTEFTQGMILPTMNGESVDPVGQPALKTEERKAKPAPSKTQARPVGVKIPTCKITLKETFLTSPEELYRV
FTTQELVQAFTHAPATLEADRGGKFHMVDGNVSGEFTDLVPEKHIVMKWRFKSWPEGHFATITLTFIDKNGETEL
CMEGRGIPAPEEERTRQGWQRYYFEGIKQTFGYGARLF

FIGURE 481

GTGTGCGGACGCAGTTGCGTGAGGGGTTTGTGCTATCCTCGGTGCTGTGGTGCAGAGCTAGTTCCTCTCCAGCTC
AGCCGCGTAGGTTTGGACATATTTGACTCTTTTCCCCCCAGGTTGAATTGACCAAAGCAATGGTGATGGAGAAGC
CTAGTCCCCTGCTGGTCGGGCGGGAATTTGTGAGACAGTATTACACACTGCTGAACCAGGCCCCAGACATGCTGC
ATAGATTTTATGGAAAGAACTCTTCTTATGTCCATGGGGGGATTGGATTCAAATGGAAAGCCAGCAGATGCAGTCT
ACGGACAGAAAGAAATCCACAGGAAAGTGATGTCACAAAACTTCACCAACTGCCACACCAAGATTCGCCATGTTG
ATGCTCATGCCACGCTAAATGATGGTGTGGTAGTCCAGGTGATGGGGCTTCTCTCTAACAACAACCAGGCTTTGA
GGAGATTCATGCAAACGTTTGTCCTTGCTCCTGAGGGGTCTGTTGCAAATAAATTCTATGTTCACAATGATATCT
TCAGATACCAAGATGAGGTCTTTGGTGGGTTTGTCACTGAGCCTCAGGAGGAGTCTGAAGAAGAAGTAGAGGAAC
CTGAAGAAAGACAGCAAACACCTGAGGTGGTACCTGATGATTCTGGAACTTTCTATGATCAGGCAGTTGTCAGTA
ATGACATGGAAGAACATTTAGAGGAGCCTGTTGCTGAACCAGAGCCTGATCCTGAACCAGAACCAGAACAAGAAC
CTGTATCTGAAATCCAAGAGGAAAAGCCTGAGCCAGTATTAGAAGAAACTGCCCCTGAGGATGCTCAGAAGAGTT
CTTCTCCAGCACCTGCAGACATAGCTCAGACAGTACAGGAAGACTTGAGGACATTTTCTTGGGCATCTGTGACCA
GTAAGAATCTTCCACCCAGTGGAGCTGTTCCAGTTACTGGGATACCACCTCATGTTGTTAAAGTACCAGCTTCAC
AGCCCCGTCCAGAGTCTAAGCCTGAATCTCAGATTCCACCACAAAGACCTCAGCGGGATCAAAGAGTGCGAGAAC
AACGAATAAATATTCCTCCCCAAAGGGGACCCAGACCAATCCGTGAGGCTGGTGAGCAAGGTGACATTGAACCCC
GAAGAATGGTGAGACACCCTGACAGTCACCAACTCTTCATTGGCAACCTGCCTCATGAAGTGGACAAATCAGAGC
TTAAAGATTTCTTTCAAAGTTATGGAAACGTGGTGGAGTTGCGCATTAACAGTGGTGGGAAATTACCCAATTTTG
GTTTTGTTGTGTTTGATGATTCTGAGCCTGTTCAGAAAGTCCTTAGCAACAGGCCCATCATGTTCAGAGGTGAGG
TCCGTCTGAATGTCGAAGAGAAGAAGACTCGAGCTGCCAGGGAAGGCGACCGACGAGATAATCGCCTTCGGGGAC
CTGGAGGCCCTCGAGGTGGGCTGGGTGGTGGAATGAGAGGCCCTCCCCGTGGAGGCATGGTGCAGAAACCAGGAT
TTGGAGTGGGAAGGGGGCTTGCGCCACGGCAGTGAATCTTCATGGATCTTCATGCAGCCATACAAACCCTGGTTC
CAACAGAATGGTGAATTTTCGACAGCCTTTGGTATCTTGGAGTATGACCCCAGTCTGTTATAAACTGCTTAAGTT
TGTATAATTTTACTTTTTTTGTGTGTTAATGGTGTGTGCTCCCTCTCCCTCTCTTCCCTTTCCTGACCTTTAGTC
TTTCACTTCCAATTTTGTGGAATGATATTTTAGGAATAACGGACTTTTAAAGAAGCAAAAAAAAAAAGACTGAATT
TCCTTGCTTACTTTGCATATACAGACTGGATTTTTTTTTTTTTTTACAGCCATTTCCCCAAAGGAATGTCTTGC
ATATTACTGACATTTGGTATGTTTCATTCATTGGAATATTTCTTATTTTCTACGTGTTTGAAAAGCCTGTAAGAA
ATACAGGATTTGATAATATTTTGAAGGCAGGAAAAACCCAAATTGTTTCTTCTTTGAGAGTCATGACTACCTTCT
GGTGTGGAGAAATTGCCATTGGAAAATTTGACAATTTTGATTCTCACTGGTATGTTTAAAAACTGAATAAAAGGA
ATAGAATTTTTTTTTGATAAAGGATCACAAAACAATTCTAAAACCTAACTGTTTTTACCATTGAAATTTAAATTG
TGATAATAGGTTTTAAATGTCTAGAATGCAACTGATAGGCTTTTCTTGAACTGTTAGTTTTTTTGAAGTAGTTTT
TTCATGTTTAATTTGTATTTGTAAAAAAACAAAAAGCAAAAAAATTCCCAAAACCCAGATAACAACCAGAGCAAA
ACTGTTGTGCCTTCTATTTATCTTTGATTTCAGTCTTGGCAATTGTTTAAAAAAAAAATCTAGATTTGTTTTATT
AGGTTCAGAGTATGTGGGGAATTATAGAATCCCTCTTTCATCACTTTGTGTATGTCTTTTGTTAACATATTTGTT
ATGCCTTATTCTAAAATTGAGTCTCAAACTGGAATGCCTTTGAAGACAGATGCTTCTATAGAGGTTCTTTGACCT
AAATAGTTCAGCATTTGTATTTTTATTCTGGTATCTAATCAGATTCCTAATCATAGCCCGTAAGAAGGAATGTTA
CTTTAATATTGGACTTTGCTCATGTGCTCGTGTCCGCATTTTTTTTTTCTTAAAATCATAGCCATATGGTAAAT
TTTCTATTTTGTTATGGTTCTCTTTTATTGATGGGCATGCAGTGGGTGTTACTTGGAAATGGCCAATTTTTATTA
AAATATTTCTGGAAGAAAATCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 482

MVMEKPSPLLVGREFVRQYYTLLNQAPDMLHRFYGKNSSYVHGGLDSNGKPADAVYGQKEIHRKVMSQNFTNCHT
KIRHVDAHATLNDGVVVQVMGLLSNNNQALRRFMQTFVLAPEGSVANKFYVHNDIFRYQDEVFGGFVTEPQEESE
EEVEEPEERQQTPEVVPDDSGTFYDQAVVSNDMEEHLEEPVAEPEPDPEPEPEQEPVSEIQEEKPEPVLEETAPE
DAQKSSSPAPADIAQTVQEDLRTFSWASVTSKNLPPSGAVPVTGIPPHVVKVPASQPRPESKPESQIPPQRPQRD
QRVREQRINIPPQRGPRPIREAGEQGDIEPRRMVRHPDSHQLFIGNLPHEVDKSELKDFFQSYGNVVELRINSGG
KLPNFGFVVFDDSEPVQKVLSNRPIMFRGEVRLNVEEKKTRAAREGDRRDNRLRGPGGPRGGLGGGMRGPPRGGM
VQKPGFGVGRGLAPRQ

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FIGURE 483

AGCCCCCTGCCCCTCGCCGCCCCCCGCCGCCTGCCTGGGCCGGGCCGAGGATGCGGCGCAGCGCCTCGGCGGCCA
GGCTTGCTCCCCTCCGGCACGCCTGCTAACTTCCCCCGCTACGTCCCCGTTCGCCCGCCGGGCCGCCCCGTCTCC
CCGCGGCCTCCGGGTCCGGGTCCTCCAGGACGGCCAGGCCGTGCCGCCGTGTGCCCTCCGCCGCTCGCCCGCGCG
CCGCGCGCTCCCCGCCTGCGCCCAGCGCCCCGCGCCCGCGCCCCAGTCCTCGGGCGGTCCATGCTGCCCCTCTGC
CTCGTGGCCGCCCTGCTGCTGGCCGCCGGGCCCGGGCCGAGCCTGGGCGACGAAGCCATCCACTGCCCGCCCTGC
TCCGAGGAGAAGCTGGCGCGCTGCCGCCCCCCCGTGGGCTGCGAGGAGCTGGTGCGAGAGGCGGGCTGCGGCTGT
TGCGCCACTTGCGCCCTGGGCTTGGGGATGCCCTGCGGGGTGTACACCCCCCGTTGCGGCTCGGGCCTGCGCTGC
TACCCGCCCCGAGGGGTGGAGAAGCCCCTGCACACACTGATGCACGGGCAAGGCGTGTGCATGGAGCTGGCGGAG
ATCGAGGCCATCCAGGAAAGCCTGCAGCCCTCTGACAAGGACGAGGGTGACCACCCCAACAACAGCTTCAGCCCC
TGTAGCGCCCATGACCGCAGGTGCCTGCAGAAGCACTTCGCCAAAATTCGAGACCGGAGCACCAGTGGGGGCAAG
ATGAAGGTCAATGGGGCGCCCCGGGAGGATGCCCGGCCTGTGCCCCAGGGCTCCTGCCAGAGCGAGCTGCACCGG
GCGCTGGAGCGGCTGGCCGCTTCACAGAGCCGCACCCACGAGGACCTCTACTTCATCCCCATCCCCAACTGCGAC
CGCAACGGCAACTTCCACCCCAAGCAGTGTCACCCAGCTCTGGATGGGCAGCGTGGCAAGTGCTGGTGTGTGGAC
CGGAAGACGGGGGTGAAGCTTCCGGGGGGCCTGGAGCCAAAGGGGGAGCTGGACTGCCACCAGCTGGCTGACAGC
TTTCGAGAGTGAGGCCTGCCAGCAGGCCAGGGACTCAGCGTCCCCTGCTACTCCTGTGCTCTGGAGGCTGCAGAG
CTGACCCAGAGTGGAGTCTGAGTCTGAGTCCTGTCTCTGCCTGCGGCCCAGAAGTTTCCCTCAAATGCGCGTGTG
CACGTGTGCGTGTGCGTGCGTGTGTGTGTGTTTGTGAGCATGGGTGTGCCCTTGGGGTAAGCCAGAGCCTGGGGT
GTTCTCTTTGGTGTTACACAGCCCAAGAGGACTGAGACTGGCACTTAGCCCAAGAGGTCTGAGCCCTGGTGTGTT
TCCAGATCGATCCTGGATTCACTCACTCACTCATTCCTTCACTCATCCAGCCACCTAAAAACATTTACTGACCAT
GTACTACGTGCCAGCTCTAGTTTTCAGCCTTGGGAGGTTTTATTCTGACTTCCTCTGATTTTGGCATGTGGAGAC
ACTCCTATAAGGAGAGTTCAAGCCTGTGGGAGTAGAAAAATCTCATTCCCAGAGTCAGAGGAGAAGAGACATGTA
CCTTGACCATCGTCCTTCCTCTCAAGCTAGCCCAGAGGGTGGGAGCCTAAGGAAGCGTGGGGTAGCAGATGGAGT
AATGGTCACGAGGTCCAGACCCACTCCCAAAGCTCAGACTTGCCAGGCTCCCTTTCTCTTCTTCCCCAGGTCCTT
CCTTTAGGTCTGGTTGTTGCACCATCTGCTTGGTTGGCTGGCAGCTGAGAGCCCTGCTGTGGGAGAGCGAAGGGG
GTCAAAGGAAGACTTGAAGCACAGAGGGCTAGGGAGGTGGGGTACATTTCTCTGAGCAGTCAGGGTGGGAAGAAA
GAATGCAAGAGTGGACTGAATGTGCCTAATGGAGAAGACCCACGTGCTAGGGGATGAGGGGCTTCCTGGGTCCTG
TTCCCCTACCCCATTTGTGGTCACAGCCATGAAGTCACCGGGATGAACCTATCCTTCCAGTGGCTCGCTCCCTGT
AGCTCTGCCTCCCTCTCCATATCTCCTTCCCCTACACCTCCCTCCCCACACCTCCCTACTCCCCTGGGCATCTTC
TGGCTTGACTGGATGGAAGGAGACTTAGGAACCTACCAGTTGGCCATGATGTCTTTTCTT

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FIGURE 484

MLPLCLVAALLLAAGPGPSLGDEAIHCPPCSEEKLARCRPPVGCEELVREAGCGCCATCALGLGMPCGVYTPRCG
SGLRCYPPRGVEKPLHTLMHGQGVCMELAEIEAIQESLQPSDKDEGDHPNNSFSPCSAHDRRCLQKHFAKIRDRS
TSGGKMKVNGAPREDARPVPQGSCQSELHRALERLAASQSRTHEDLYFIPIPNCDRNGNFHPKQCHPALDGQRGK
CWCVDRKTGVKLPGGLEPKGELDCHQLADSFRE

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FIGURE 485

CGGCGGAGCTGGTCCCGTTGTGCTGCGGCGCCGCGCGGCCTGCAGTCCCGGGCCCGCGCCCCGCGCCGCCCGCCC
GCCCGCC**ATG**GAGCCCGGCCCCGACGGCCCCGCCGCCTCCGGCCCCGCCGCCATCCGCGAGGGCTGGTTCCGCGA
GACCTGCAGCCTGTGGCCCGGCCAGGCCCTGTCGCTGCAGGTGGAGCAGCTGCTCCACCACCGGCGCTCGCGCTA
CCAGGACATCCTCGTCTTCCGCAGTAAGACCTATGGCAACGTGCTGGTGTTGGACGGTGTCATCCAGTGCACGGA
GAGAGACGAGTTCTCCTACCAGGAGATGATCGCCAACCTGCCTCTCTGCAGCCACCCCAACCCGCGAAAGGTGCT
GATCATCGGGGGCGGAGATGGAGGTGTCCTGCGGGAGGTGGTGAAGCACCCCTCCGTGGAGTCCGTGGTCCAGTG
TGAGATCGACGAGGATGTCATCCAAGTCTCCAAGAAGTTCCTGCCAGGCATGGCCATTGGCTACTCTAGCTCGAA
GGTGACCCTACATGTGGGTGACGGTTTTGAGTTCATGAAACAGAATCAGGATGCCTTCGACGTGATCATCACTGA
CTCCTCAGACCCCATGGGCCCCGCCGAAAGTCTCTTCAAGGAGTCCTATTACCAGCTCATGAAGACAGCCCTCAA
GGAAGATGGTGTCCTCTGCTGCCAGGGCGAGTGCGAGTGGCTGCACCTGGACCTCATCAAGGAGATGCGGCAGTT
CTGCCAGTCCCTGTTCCCCGTGGTGGCCTATGCCTACTGCACCATCCCCACCTACCCCAGCGGCCAGATCGGCTT
CATGCTGTGCAGCAAGAACCCGAGCACGAACTTCCAGGAGCCGGTGCAGCCGCTGACACAGCAGCAGGTGGCGCA
GATGCAGCTGAAGTACTACAACTCCGACGTGCACCGCGCCGCCTTTGTGCTGCCCGAGTTTGCCCGCAAGGCCCT
GAATGATGTGAGC**TGA**GCCCAGGCGCCACCACTGATGCCACCCAGGACCTCGGACCTTGGAGCCTGCGGGGTGCC
TCGGCCCCTCCAGCCCCGGGCCGGACCTCCTGCTGGCTCTCGCCCACCAACCAAGTGTTACAAGCCCCAGAATGC
TGCCCGGCCTGCCCTGCTGGGCGGACTGTCTGTGTGTCTGTCTCTCTGGCGTTCCACCTCCAAGCCTATACCAGC
TGTGTACAGCGCCATCTCTCTGCCTTCTGTTGCCCCCG

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FIGURE 486

MEPGPDGPAASGPAAIREGWFRETCSLWPGQALSLQVEQLLHHRRSRYQDILVFRSKTYGNVLVLDGVIQCTERD
EFSYQEMIANLPLCSHPNPRKVLIIGGGDGGVLREVVKHPSVESVVQCEIDEDVIQVSKKFLPGMAIGYSSSKVT
LHVGDGFEFMKQNQDAFDVIITDSSDPMGPAESLFKESYYQLMKTALKEDGVLCCQGECEWLHLDLIKEMRQFCQ
SLFPVVAYAYCTIPTYPSGQIGFMLCSKNPSTNFQEPVQPLTQQQVAQMQLKYYNSDVHRAAFVLPEFARKALND
VS

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FIGURE 487

CGCATTGTGGTCCGCTTCTCTGCACTATGTCGGGTGGCCTCCTGAAGGCGCTGCGCAGCGACTCCTACGTGGAGC
TGAGCCAGTACCGGGACCAGCACTTCCGGGGTGACAATGAAGAACAAGAAAAATTACTGAAGAAAAGCTGTACGT
TATATGTTGGAAATCTTTCTTTTTACACAACTGAAGAACAAATCTATGAACTCTTCAGCAAAAGTGGTGACATAA
AGAAAATCATTATGGGTCTGGATAAAATGAAGAAAACAGCATGTGGATTCTGTTTTGTGGAATATTACTCACGCG
CAGATGCGGAAAACGCCATGCGGTACATAAATGGGACGCGTCTGGATGACCGAATCATTCGCACAGACTGGGACG
CAGGCTTTAAGGAGGGCAGGCAATACGGCCGTGGGCGATCTGGGGGCCAGGTTCGGGATGAGTATCGGCAGGACT
ACGATGCTGGGAGAGGAGGCTATGGAAAACTGGCACAGAACCAGTGAGTGGTGAGAGCTCTGTCAGTGACAAACA
CTCCTTTGGCCTGTTGAATTTGCTGAAGAACATCACCTAAAGTCTGCACACGAGCCCATTTTTACCAAGATTTGA
TCAGTGTCTTTACTGAGCTGGAAGCCTCTGAAAGTTATTAAAGGACAGAATCCAAAAGAATGCCTTTAATTCTTG
TCTGAGAATCTTGGCCATGTGTCAGATTATCAGAACAATTTTGTTACCAGGTCAGAAATTGTGTTCTTTGACAAC
AGATTGGATCTGTAATGTTGATTAGTCTTTAGCCATAACCACTACACTTTTAGAAAGACAGAAAAATGTAAGAAT
TTGTTTTTACCATAATGAGTCTTAAGTAGGTTCATGATCTACATTGGGGCCTGGGATTATTTTTTTAATTTTAAG
TTTGCATGAGATAGCCTAATAAATGGAGGTGGGGCCAGGCATGGTGGCTCACACGTGTAATCCCAACACTTTGGG
AGGCTGAGGAGGAAGGATAGCTTGAGGCCAGGAGTTTGAGACTAGACTGGGCAACATAGCAAGACCCCGTCTCTA
CAAAGCACAACGAAAAACAACAAATGGAGTTGTGCTATGTTGTATTGCTTTGCACAAAATTAGGAACAGGTGTTT
GACAATTGAATTTGTTTTCTGTGAATTCTAACCTCTAAAGGCATGCTTAGAGGTCAAGGACCTTCCTGTGTAGTT
GGTGCAAAAGCAATCTCCACAGGACAGCACTGCTTCCATGCTTCATACATCAGGAAATGAGGCCAGAACTTGAGT
ATTTACTAACACGTTTTTCAAAAGATGTCAGTGTTATACCTAAAGCTAAAAAAAAAGCAAGGGTTTGTCATAGAGG
GAACCTCTAAATAATTTCAGGGGTAGGGGAGATGTTGTCAATAGGAAATGGGATAAAATATCAAGAGACAATGAA
AACACTGCCTTGACATGAGGACCAGCAAGTTTATTCTTTTCATTTTCAGTGATGTTGGGAATGGACTGGGTTTTA
AAAGGGAGCTTGAAGAGGGAATGTTTGACAGTCACAGAAGGTTCCTGCAGCAGATGCCTCTTTTAGCCATTTCTC
ATTTTTTTCCTCAAATTTTACCTACTGAGGCTCAAGCCTTCACAGTGAGCTGATGGTCTCTACAGGGAGGGGAGT
CTAGGGAATTTATTTGGTATTTGTAAGGCAAGAGGTGATTTCTCTCTAATATATCTGAGTTATTGCTCATTTAAA
ACTGTTAAGTCCAGTATAATTTTCCCTGATATGAAAAAATGTGCATTTTTTTCACTTAGCAACAAAGTACCTTCT
AATTTCCAATAGTCCGTGAAAGTTGGGGCTGAAGTACCTAAGTGTGAATGTCTCTCCCGTTAAACTGAGTGTAGA
AATCTGAATTTTTAAAAGAGCTGTAACTAGTTGTAAGTGCTTAGGAAGAAACTTTGCAAACATTTAATGAGGATA
CACTGTTCATTTTTAAAATTCCTTCACACTGTAATTTAATGTGTTTTATATTCTTTTGTAGTAAAACAACATAAC
TCAGATTTCTACAGGAGACAGTGGTTTTATTTGGATTGTCTTCTGTAATAGGTTTCAATAAAGCTGGATGAACTT
AAAAAAAAAAAAAAAAAAAA

FIGURE 488

MSGGLLKALRSDSYVELSQYRDQHFRGDNEEQEKLLKKSCTLYVGNLSFYTTEEQIYELFSKSGDIKKIIMGLDK
MKKTACGFCFVEYYSRADAENAMRYINGTRLDDRIIRTDWDAGFKEGRQYGRGRSGGQVRDEYRQDYDAGRGGYG
KLAQNQ

FIGURE 489

GAGCCTGACTTCAGCGCTCCCACTCTCGGCCGACACCCCTCATGGCCAACCGTTACACCATGGATCTGACTGCCA
TCTACGAGAGCCTCCTGTCGCTGAGCCCTGACGTGCCCGTGCCATCCGACCATGGAGGGACTGAGTCCAGCCCAG
GCTGGGGCTCCTCGGGACCCTGGAGCCTGAGCCCCTCCGACTCCAGCCCGTCTGGGGTCACCTCCCGCCTGCCTG
GCCGCTCCACCAGCCTAGTGGAGGGCCGCAGCTGTGGCTGGGTGCCCCCACCCCCTGGCTTCGCACCGCTGGCTC
CCCGCCTGGGCCCTGAGCTGTCACCCTCACCCACTTCGCCCACTGCAACCTCCACCACCCCCTCGCGCTACAAGA
CTGAGCTATGTCGGACCTTCTCAGAGAGTGGGCGCTGCCGCTACGGGGCCAAGTGCCAGTTTGCCCATGGCCTGG
GCGAGCTGCGCCAGGCCAATCGCCACCCCAAATACAAGACGGAACTCTGTCACAAGTTCTACCTCCAGGGCCGCT
GCCCCTACGGCTCTCGCTGCCACTTCATCCACAACCCTAGCGAAGACCTGGCGGCCCCGGGCCACCCTCCTGTGC
TTCGCCAGAGCATCAGCTTCTCCGGCCTGCCCTCTGGCCGCCGGACCTCACCACCACCACCAGGCCTGGCCGGCC
CTTCCCTGTCCTCCAGCTCCTTCTCGCCCTCCAGCTCCCCACCACCACCTGGGGACCTTCCACTGTCACCCTCTG
CCTTCTCTGCTGCCCCTGGCACCCCCCTGGCTCGAAGAGACCCCACCCCAGTCTGTTGCCCCTCCTGCCGAAGGG
CCACTCCTATCAGCGTCTGGGGGCCCTTGGGTGGCCTGGTTCGGACCCCCTCTGTACAGTCCCTGGGATCCGACC
CTGATGAATATGCCAGCAGCGGCAGCAGCCTGGGGGGGCTCTGACTCTCCCGTCTTCGAGGCGGGAGTTTTTGCAC
CACCCCAGCCCGTGGCAGCCCCCCGGCGACTCCCCATCTTCAATCGCATCTCTGTTTCTGAGTGACAAAGTGACT
GCCCGGTCAGATCAGCTGGATCTCAGCGGGGAGCCACGTCTCTTGCACTGTGGTCTCTGCATGGACCCCAGGGCT
GTGGGGACTTGGGGGACAGTAATCAAGTAATCCCCTTTTCCAGAATGCATTAACCCACTCCCCTGACCTCACGCT
GGGGCAGGTCCCCAAGTGTGCAAGCTCAGTATTCATGATGGTGGGGGATGGAGTGTCTTCCGAGGTTCTTGGGGG
AAAAAAAATTGTAGCATATTTAAGGGAGGCAATGAACCCTCTCCCCCACCTCTTCCCTGCCCAAATCTGTCTCCT
AGAATCTTATGTGCTGTGAATAATAGGCCTTCACTGCCCCTCCAGTTTTTATAGACCTGAGGTTCCAGTGTCTCC
TGGTAACTGGAACCTCTCCTGAGGGGGAATCCTGGTGCTCAAATTACCCTCCAAAAGCAAGTAGCCAAAGCCGTT
GCCAAACCCCACCCATAAATCAATGGGCCCTTTATTTATGACGACTTTATTTATTCTAATATGATTTTATAGTAT
TTATATATATTGGGTCGTCTGCTTCCCTTGTATTTTTCTTCCTTTTTTTTGTAATATTGAAAACGACGATATAATT
ATTATAAGTAGACTATAATATATTTAGTAATATATATTATTACCTTAAAAGTCTATTTTTGTGTTTTGGGCATTT
TTAAATAAACAATCTGAGTGT

FIGURE 490

MDLTAIYESLLSLSPDVPVPSDHGGTESSPGWGSSGPWSLSPSDSSPSGVTSRLPGRSTSLVEGRSCGWVPPPPG
FAPLAPRLGPELSPSPTSPTATSTTPSRYKTELCRTFSESGRCRYGAKCQFAHGLGELRQANRHPKYKTELCHKF
YLQGRCPYGSRCHFIHNPSEDLAAPGHPPVLRQSISFSGLPSGRRTSPPPPGLAGPSLSSSSFSPSSSPPPPGDL
PLSPSAFSAAPGTPLARRDPTPVCCPSCRRATPISVWGPLGGLVRTPSVQSLGSDPDEYASSGSSLGGSDSPVFE
AGVFAPPQPVAAPRRLPIFNRISVSE

FIGURE 490

MDLTAIYESLLSLSPDVPVPSDHGGTESSPGWGSSGPWSLSPSDSSPSGVTSRLPGRSTSLVEGRSCGWVPPPPG
FAPLAPRLGPELSPSPTSPTATSTTPSRYKTELCRTFSESGRCRYGAKCQFAHGLGELRQANRHPKYKTELCHKF
YLQGRCPYGSRCHFIHNPSEDLAAPGHPPVLRQSISFSGLPSGRRTSPPPPGLAGPSLSSSSFSPSSSPPPPGDL
PLSPSAFSAAPGTPLARRDPTPVCCPSCRRATPISVWGPLGGLVRTPSVQSLGSDPDEYASSGSSLGGSDSPVFE
AGVFAPPQPVAAPRRLPIFNRISVSE

FIGURE 492

MSSIGTGYDLSASTFSPDGRVFQVEYAMKAVENSSTAIGIRCKDGVVFGVEKLVLSKLYEEGSNKRLFNVDRHVG
MAVAGLLADARSLADIAREEASNFRSNFGYNIPLKHLADRVAMYVHAYTLYSAVRPFGCSFMLGSYSVNDGAQLY
MIDPSGVSYGYWGCAIGKARQAAKTEIEKLQMKEMTCRDIVKEVAKIIYIVHDEVKDKAFELELSWVGELTNGRH
EIVPKDIREEAEKYAKESLKEEDESDDDNM

FIGURE 493

GATCACGAACCAGTCAAAATCGTGGTTTATTTCTGTAACGTGAAGACTTCTGCTCTTTTTTCTTTGTTTGTTTTT
TTCGTAAACATCTGGGTGTATATCAAACGGCAAGATGTCCAGTAATGTCCCGGCGGATATGATAAATTTGCGCCT
CATTTTGGTAAGCGGAAAAACAAAAGAGTTCCTGTTTTCTCCTAACGATTCTGCTTCTGACATTGCAAAGCATGT
ATATGACAATTGGCCAATGGACTGGGAAGAAGAGCAGGTCAGCAGTCCAAATATTCTACGACTTATTTATCAAGG
ACGATTTCTACATGGAAATGTCACATTAGGAGCATTAAAACTTCCTTTTGGCAAAACAACAGTGATGCATTTGGT
GGCCAGAGAGACATTACCAGAGCCAAACTCTCAAGGTCAGAGGAATCGTGAGAAGACTGGAGAGAGTAATTGTTG
TGTAATCCTGTAAACACTGTCTGCCTAGTGTGATGTGATATAGTCTTTGTCTTTCATGCTGCTGGGACAGAAAAG
ACCCGACATTGCTTCAGAAACCGTTCAGAACAGTCTGCCTGTAAACACATGGAACTGAATTACCACATGAACACT
GTCATCTTTTCTCATGAAAGTAAAAAGAACCAAGAACATTTTTCACTCTGATTTTTTATTTCTTGTATTTTTTGT
TGAGCTGTTTTAACACATATTGGTTTTTGAATGCAGTCAATCTCCAGGGGAAAAGTTAACAAGTTATCTTTCGTA
GCAGAAACCATTTTGCTGCCACAAAATTTTCATCATCAGAACTAATAAATCAAGTGTTCCAAATACAATTTGCAC
TAAAAAGATTGGCATTATTTTCCTCATCAGCAGAATTTATAACAGTGTGTGGTATCTAGAAATACTTATATATAC
AATTCCACACTGGAAGACACTCAGCAATTAATGAAGTTAATTACTGGGCCAACTTGAGAGGAAAAAATGGAAAAG
AAACTAAAATGTTGGGTGAATTCTACCAAAGTCAGCCGTGGTGGCTGCACTGGCACAGAATACTAAACTGAGTGT
GACTATTTTCACTGCAACAAATGAAAAAACAAAATGTGCCTGTTTAAAGCACTCAGTAGAGGGCTGATGAAACTA
ATTTTTTTTCCTTTAAGACATGCACTCTTGAGTCCTACAGTAACTGAGTGTTTGTTTAGACAGCACAAGAAGGGG
TGAGAGTGCGTCTCCTAGCCTTAATGTGGGAGGGTAGTTTCAGTCACTCATCGGCTTTCATTATTGTGCAGAAAT
ATTAGAAAACCTCATTGATCAATTTTATGTATTTGAATATCAGCAAATTGAAATTTTCCATAATTATCATTAATT
TGTAACCACATCCAGTGTCATGCTTACTCCTTAGAGTTCAGATGAATTCTTAAAATTAAAAAAAAACTCCATAGT
ACTAATTTTGTTTCTTTATATAGTTTGCGTTTGATATTAGTGCTTGCAATTGTATTAAAGTCAAAAGCTGATTTT
TATGGCATACACAAGAATGCCACTTTTTCTTTTATTTCATACCAATAATTTAAAGATTGATATGCTAAAAACAAT
TTGCACAGCACTAAAGCATGAGCTACTTTCATCTAAACCTGTAAAAATATGAAAGATTTTTATATTTTTTCACTG
GGAAGAAATTCTTCCTGGATGAAATTACAAATATGTGTAGAATATATTTAATAAAAGACTTATAAAATACCTAAC
TACAGGACTTAAAATATAGATTGGCGCGTAGTATATAGAACAATATTCCATATAAATAAGTTTAGCCTTTATAAA
AATGAAGTTGCAGGCTGACATTACATTCTGTACTTACTAAGTGTCAACAGCCCTTACAAACATTAAATGTAAATG
GTTTCAAATGGTCAGCGTTGTTTAAATGTAATCATGTTATTTTATTCATTGTTAATGCTTTGATGAAAAGGCTTT
ATATGCAGTAGATCTACGAAAATATTGTTCATACTGATCAGAATTAAATTTGTATAGAGCAGAGTTTTAAAATGA
ATGTAAATAGCACTAAACGTTTTCTTTCTGCAACCTGTACTTACAGATTCTTCCTGTAAACTAAATAAAAAAAAA
ATGATAGTGCATTTTGGTGGTAATTTTAAAGGTCTTGATTAGGTCAATAATTGTTTAAGCACCGTCTCATTCATG
TTTTCTACTTTCATTTCTTAAGCTTTTAAAATTCATTTAATTAATATTCTGTTGTTGTTTTGGGGAGTATTCCCA
ATGTATCTTTGATATTTAACCTGGTTAATTTGTGGACAGTCACAACAATGGATAGAATTATGTAGTCTCCGTTAT
CACTAAAATGTTATCTTCAAGAGATGTTAAATATTTATATGCTTTGTTGACTAGCTGAAATGTGAATTCTGTTAG
TGTTGACTAAAGAATCTGGTAGTTGCTTAATTGGGCAATTAAACAATTTATGGCTCTATTTTGTAAAACAAACTA
CTGGTAATTATTTTTAATACCTATTTTCATTCTGATTACTCTTTTTTTAAGTTAAAGACTATCAGTTAATTAAGA
TTGAGTTTTTATGATGGTTAAAAATAATTCTCTATTGGTTTTTCAATATATTTTTCTGTGTGTTCTCAGATTATA
TATTTCCCTCAATTTAGAGTTTGCTAAGTGAAATAAACTGGTTCACTAGTAGAGAAAGAATTACGTCGCTTAATA
CCTAATATCATAGTTGTACAATATGAAAAAAAAGAATAAAAAGTAGCAGTAAAATTATATACTGAAAACACCAAA
AATTTAGATGCCTTAATAGTATATACGTGAAATACTCAGCTGTCCCTTTAAAAATAATTCCTTGGACTGCCTGGT
GGTTAAAATACGATTCCTCATATCCAAGGCTACTTTTGAAGATCCCTCTGCCAAAAATATAGCTCACTTATCTAA
AGGTGAGAGCTGCATAGATCCAGTAATGTACATAAAGCCTGAATGATGAGCCTATGTCCCTGCCTAACGCTGGTG
TCTCACTCATCTCTTTTACCTAAATTGTCCTGAACTTTGTTAAGTGTTCTGGACAAGGCCAAGCTTTTCTTTATT
AAAACCTCAGCATGTCTCCCTGATCTGAACTATTTGCTTTCTCTTCAAGATAAGTTGTATTTTACCATGGAAAAA
TACAGTATCTAACATTACCATTCACGTTAAATGAAGTTTCCTCATAACATTTATCTTTAGTTTTATGAAGTCATC
GTGACCAATGTTACAGTAATTTCTGTTAGCTGATTGTGGTAAACAATGTTTAATGTGAAAAGAAATTAAAACTTT
CTTCATCTGTTGTAAAAAAAAAA

FIGURE 494

MSSNVPADMINLRLILVSGKTKEFLFSPNDSASDIAKHVYDNWPMDWEEEQVSSPNILRLIYQGRFLHGNVTLGA
LKLPFGKTTVMHLVARETLPEPNSQGQRNREKTGESNCCVIL

FIGURE 495

GATCACGAACCAGTCAAAATCGTGGTTTATTTCTGTAACGTGAAGACTTCTGCTCTTTTTTCTTTGTTTGTTTTT
TTCGTAAACATCTGGGTGTATATCAAACGGCAAGATGTCCAGTAATGTCCCGGCGGATATGATAAATTTGCGCCT
CATTTTGGTAAGCGGAAAAACAAAAGAGTTCCTGTTTTCTCCTAACGATTCTGCTTCTGACATTGCAAAGCATGT
ATATGACAATTGGCCAATGGACTGGGAAGAAGAGCAGGTCAGCAGTCCAAATATTCTACGACTTATTTATCAAGG
ACGATTTCTACATGGAAATGTCACATTAGGAGCATTAAAACTTCCTTTTGGCAAAACAACAGTGATGCATTTGGT
GGCCAGAGAGACATTACCAGAGCCAAACTCTCAAGGTCAGAGGAATCGTGAGAAGACTGGAGAGAGTAATTGTTG
TGTAATCCTGTAAACACTGTCTGCCTAGTGTGATGTGATATAGTCTTTGTCTTTCATGCTGCTGGGACAGAAAAG
ACCCGACATTGCTTCAGAAACCGTTCAGAACAGTCTGCCTGTAAACACATGGAACTGAATTACCACATGAACACT
GTCATCTTTTCTCATGAAAGTAAAAAGAACCAAGAACATTTTTCACTCTGATTTTTTATTTCTTGTATTTTTTGT
TGAGCTGTTTTAACACATATTGGTTTTTGAATGCAGTCAATCTCCAGGGGAAAAGTTAACAAGTTATCTTTCGTA
GCAGAAACCATTTTGCTGCCACAAAATTTTCATCATCAGAACTAATAAATCAAGTGTTCCAAATACAATTTGCAC
TAAAAAGATTGGCATTATTTTCCTCATCAGCAGAATTTATAACAGTGTGTGGTATCTAGAAATACTTATATATAC
AATTCCACACTGGAAGACACTCAGCAATTAATGAAGTTAATTACTGGGCCAACTTGAGAGGAAAAAATGGAAAAG
AAACTAAAATGTTGGGTGAATTCTACCAAAGTCAGCCGTGGTGGCTGCACTGGCACAGAATACTAAACTGAGTGT
GACTATTTTCACTGCAACAAATGAAAAAACAAAATGTGCCTGTTTAAAGCACTCAGTAGAGGGCTGATGAAACTA
ATTTTTTTTCCTTTAAGACATGCACTCTTGAGTCCTACAGTAACTGAGTGTTTGTTTAGACAGCACAAGAAGGGG
TGAGAGTGCGTCTCCTAGCCTTAATGTGGGAGGGTAGTTTCAGTCACTCATCGGCTTTCATTATTGTGCAGAAAT
ATTAGAAAACCTCATTGATCAATTTTATGTATTTGAATATCAGCAAATTGAAATTTTCCATAATTATCATTAATT
TGTAACCACATCCAGTGTCATGCTTACTCCTTAGAGTTCAGATGAATTCTTAAAATTAAAAAAAAACTCCATAGT
ACTAATTTTGTTTCTTTATATAGTTTGCGTTTGATATTAGTGCTTGCAATTGTATTAAAGTCAAAAGCTGATTTT
TATGGCATACACAAGAATGCCACTTTTTCTTTTATTTCATACCAATAATTTAAAGATTGATATGCTAAAAACAAT
TTGCACAGCACTAAAGCATGAGCTACTTTCATCTAAACCTGTAAAAATATGAAAGATTTTTATATTTTTTCACTG
GGAAGAAATTCTTCCTGGATGAAATTACAAATATGTGTAGAATATATTTAATAAAAGACTTATAAAATACCTAAC
TACAGGACTTAAAATATAGATTGGCGCGTAGTATATAGAACAATATTCCATATAAATAAGTTTAGCCTTTATAAA
AATGAAGTTGCAGGCTGACATTACATTCTGTACTTACTAAGTGTCAACAGCCCTTACAAACATTAAATGTAAATG
GTTTCAAATGGTCAGCGTTGTTTAAATGTAATCATGTTATTTTATTCATTGTTAATGCTTTGATGAAAAGGCTTT
ATATGCAGTAGATCTACGAAAATATTGTTCATACTGATCAGAATTAAATTTGTATAGAGCAGAGTTTTAAAATGA
ATGTAAATAGCACTAAACGTTTTCTTTCTGCAACCTGTACTTACAGATTCTTCCTGTAAACTAAATAAAAAAAAA
ATGATAGTGCATTTTGGTGGTAATTTTAAAGGTCTTGATTAGGTCAATAATTGTTTAAGCACCGTCTCATTCATG
TTTTCTACTTTCATTTCTTAAGCTTTTAAAATTCATTTAATTAATATTCTGTTGTTGTTTTGGGGAGTATTCCCA
ATGTATCTTTGATATTTAACCTGGTTAATTTGTGGACAGTCACAACAATGGATAGAATTATGTAGTCTCCGTTAT
CACTAAAATGTTATCTTCAAGAGATGTTAAATATTTATATGCTTTGTTGACTAGCTGAAATGTGAATTCTGTTAG
TGTTGACTAAAGAATCTGGTAGTTGCTTAATTGGGCAATTAAACAATTTATGGCTCTATTTTGTAAAACAAACTA
CTGGTAATTATTTTTAATACCTATTTTCATTCTGATTACTCTTTTTTTAAGTTAAAGACTATCAGTTAATTAAGA
TTGAGTTTTTATGATGGTTAAAAATAATTCTCTATTGGTTTTTCAATATATTTTTCTGTGTGTTCTCAGATTATA
TATTTCCCTCAATTTAGAGTTTGCTAAGTGAAATAAACTGGTTCACTAGTAGAGAAAGAATTACGTCGCTTAATA
CCTAATATCATAGTTGTACAATATGAAAAAAAAGAATAAAAAGTAGCAGTAAAATTATATACTGAAAACACCAAA
AATTTAGATGCCTTAATAGTATATACGTGAAATACTCAGCTGTCCCTTTAAAAATAATTCCTTGGACTGCCTGGT
GGTTAAAATACGATTCCTCATATCCAAGGCTACTTTTGAAGATCCCTCTGCCAAAAATATAGCTCACTTATCTAA
AGGTGAGAGCTGCATAGATCCAGTAATGTACATAAAGCCTGAATGATGAGCCTATGTCCCTGCCTAACGCTGGTG
TCTCACTCATCTCTTTTACCTAAATTGTCCTGAACTTTGTTAAGTGTTCTGGACAAGGCCAAGCTTTTCTTTATT
AAAACCTCAGCATGTCTCCCTGATCTGAACTATTTGCTTTCTCTTCAAGATAAGTTGTATTTTACCATGGAAAAA
TACAGTATCTAACATTACCATTCACGTTAAATGAAGTTTCCTCATAACATTTATCTTTAGTTTTATGAAGTCATC
GTGACCAATGTTACAGTAATTTCTGTTAGCTGATTGTGGTAAACAATGTTTAATGTGAAAAGAAATTAAAACTTT
CTTCATCTGTTGTAAAAAAAAAA

FIGURE 496

MSVTSSIEKPTTTASAIQQQYQHQQQQQQQKPQQQQQQDKSSTIAIAAAAGQQQKRKSLSSKRSYSLSSSSASSS
GSFGAIRSATSPLVTTAEREKDKEKSSSSASNTHHQHHQLHQHQHHHQQQQSQQQQQSFLPYSYCTDTIAAVHHQ
RQSYALVQKPPSLRYQGKPHHQLSNFSPTMTSSEPSSPLAADGCGSGILSPSEVATHCCANVKANITTPLATTTQ
KMHRTIPSDKINLRLILVSGKTKEFIFSPSDSAGDIAQTVFDNWPEDWTHETVSKAEILRLIYQGRFLHCNVTLG
ALGLPLGKTTVMHLVPRDNLPEPNSQDQRQNSKGGSGRCCSTNCSIL

FIGURE 497

CGGCACGAGGCGACTTTGGTGGAGGTAGTTCTTTGGCAGCGGGCATGGCGGGTACCGTGGTGCTGGACGATGTGG
AGCTGCGGGAGGCTCAGAGAGATTACCTGGACTTCCTGGACGACGAGGAAGACCAGGGAATTTATCAGAGCAAAG
TTCGGGAGCTGATCAGTGACAACCAATACCGGCTGATTGTCAATGTGAATGACCTGCGCAGGAAAAACGAGAAGA
GGGCTAACCGGCTTCTGAACAATGCCTTTGAGGAGCTGGTTGCCTTCCAGCGGGCCTTAAAGGATTTTGTGGCCT
CCATTGATGCTACCTATGCCAAGCAGTATGAGGAGTTCTACGTAGGACTGGAAGGCAGCTTTGGCTCCAAGCACG
TCTCCCCGCGGACTCTTACCTCCTGCTTCCTCAGCTGTGTGGTCTGTGTGGAGGGCATTGTCACTAAATGTTCTC
TAGTTCGTCCCAAAGTCGTCCGCAGTGTCCACTACTGTCCTGCTACTAAGAAGACCATAGAGCGACGTTATTCTG
ATCTCACCACCCTGGTGGCCTTTCCCTCCAGCTCTGTCTATCCTACCAAGGATGAGGAGAACAATCCCCTTGAGA
CAGAATATGGCCTTTCTGTCTACAAGGATCACCAGACCATCACCATCCAGGAGATGCCGGAGAAGGCCCCAGCCG
GCCAGCTCCCCCGCTCTGTGGACGTCATTCTGGATGATGACTTGGTGGATAAAGCGAAGCCTGGTGACCGGGTTC
AGGTGGTGGGAACCTACCGTTGCCTTCCTGGAAAGAAGGGAGGCTACACCTCTGGGACCTTCAGGACTGTCCTGA
TTGCCTGTAATGTTAAGCAGATGAGCAAGGATGCTCAGCCCTCTTTCTCTGCTGAGGATATAGCCAAGATCAAGA
AGTTCAGTAAAACCCGATCCAAGGATATCTTTGACCAGCTGGCCAAGTCATTGGCCCCAAGTATCCATGGGCATG
ACTATGTCAAGAAAGCAATCCTCTGCTTGCTCTTGGGAGGGGTGGAACGAGACCTAGAAAATGGCAGCCACATCC
GTGGGGACATCAATATTCTTCTAATAGGAGACCCATCCGTTGCCAAGTCTCAGCTTCTGCGGTATGTGCTTTGCA
CTGCACCCCGAGCTATCCCCACCACTGGCCGGGGCTCCTCTGGAGTGGGTCTGACGGCTGCTGTCACCACAGACC
AGGAAACAGGAGAGCGCCGTCTGGAAGCAGGGGCCATGGTCCTGGCTGACCGAGGCGTGGTTTGCATTGATGAAT
TTGACAAAATGTCTGACATGGATCGCACAGCCATCCATGAAGTGATGGAGCAGGGTCGAGTGACCATTGCCAAGG
CTGGCATCCATGCTCGGCTGAATGCCCGCTGCAGTGTTTTGGCAGCTGCCAACCCTGTCTACGGCAGGTATGACC
AGTATAAGACTCCAATGGAGAACATTGGGCTACAGGACTCACTGCTGTCACGATTTGACTTGCTCTTCATCATGC
TGGATCAGATGGATCCTGAGCAGGATCGGGAGATCTCAGACCATGTCCTTCGGATGCACCGTTACAGAGCACCTG
GGGAGCAGGATGGCGATGCTATGCCCTTGGGTAGTGCTGTGGATATCCTGGCCACAGATGATCCCAACTTTAGCC
AGGAAGATCAGCAGGACACCCAGATTTATGAGAAGCATGACAACCTTCTACATGGGACCAAGAAGAAAAAGGAGA
AGATGGTGAGTGCAGCATTCATGAAGAAGTACATCCATGTGGCCAAAATCATCAAGCCTGTCCTGACACAGGAGT
CGGCCACCTACATTGCAGAAGAGTATTCACGCCTGCGCAGCCAGGATAGCATGAGCTCAGACACCGCCAGGACAT
CTCCAGTTACAGCCCGAACACTGGAAACTCTGATTCGACTGGCCACAGCCCATGCGAAGGCCCGCATGAGCAAGA
CTGTGGACCTGCAGGATGCAGAGGAAGCTGTGGAGTTGGTCCAGTATGCTTACTTTAAGAAGGTTCTGGAGAAGG
AGAAGAAACGTAAGAAGCGAAGTGAGGATGAATCAGAGACAGAAGATGAAGAGGAGAAAAGCCAAGAGGACCAGG
AGCAGAAGAGGAAGAGAAGGAAGACTCGCCAGCCAGATGCCAAAGATGGGGATTCATACGACCCCTATGACTTCA
GTGACACAGAGGAGGAAATGCCTCAAGTACACACTCCAAAGACGGCAGACTCACAGGAGACCAAGGAATCCCAGA
AAGTGGAGTTGAGTGAATCCAGGTTGAAGGCATTCAAGGTGGCCCTCTTGGATGTGTTCCGGGAAGCTCATGCGC
AGTCAATCGGCATGAATCGCCTCACAGAATCCATCAACCGGGACAGCGAAGAGCCCTTCTCTTCAGTTGAGATCC
AGGCTGCTCTGAGCAAGATGCAGGATGACAATCAGGTCATGGTGTCTGAGGGCATCATCTTCCTCATCTGAGGAG
GCCTCGTCTCTGAACTTGGGTTGTGCCGAGAGAGTTTGTTCTGTGTTTCCCACCCTCTCCCTGACCCAAGTCTTT
GCCTCTACTCCCTTAACAGTGTTGAATTCAACTGAAGGCGAGGAATGTTGGTGATGAAGCTGAGTTCAGGACTCG
GTGGACCCTTTGGGAATGGGTCATGAAAGCTGCCATGGGGTGAGGAAAGAGGAGACAGTGGGAGAGGACAATGAC
TATTGCATCTTCATTGCAAAAGCACTGGCTCATCCGCCCTACTTCCCATCCCACACAAACCCAATTGTAAATAAC
ATATGACTTCTGAGTACTTTTGGGGGCACAACTGTTTTCTGTTTGCTGTTTTTTTGTTTTGTTTTTTTTCTCCAG
AGCACTTTGGTCTAGACTAGGCTTTGGGTGGTTCCAATTGGTGGAGAGAAGCTCTGAGGCACGTCATGCAGGTCA
AGAAAGCTTTCTTTGCAGTAGCACCAGTTAAGGTGAATATGTATTGTATCACAAAACAAACCCAATATCCAGATG
AATATCCGAGATGTTGAATAAACTTAGCCATTTCGTACAAAAAAAGGGGGGCCCGGTAAAC

FIGURE 498

MAGTVVLDDVELREAQRDYLDFLDDEEDQGIYQSKVRELISDNQYRLIVNVNDLRRKNEKRANRLLNNAFEELVA
FQRALKDFVASIDATYAKQYEEFYVGLEGSFGSKHVSPRTLTSCFLSCVVCVEGIVTKCSLVRPKVVRSVHYCPA
TKKTIERRYSDLTTLVAFPSSSVYPTKDEENNPLETEYGLSVYKDHQTITIQEMPEKAPAGQLPRSVDVILDDDL
VDKAKPGDRVQVVGTYRCLPGKKGGYTSGTFRTVLIACNVKQMSKDAQPSFSAEDIAKIKKFSKTRSKDIFDQLA
KSLAPSIHGHDYVKKAILCLLLGGVERDLENGSHIRGDINILLIGDPSVAKSQLLRYVLCTAPRAIPTTGRGSSG
VGLTAAVTTDQETGERRLEAGAMVLADRGVVCIDEFDKMSDMDRTAIHEVMEQGRVTIAKAGIHARLNARCSVLA
AANPVYGRYDQYKTPMENIGLQDSLLSRFDLLFIMLDQMDPEQDREISDHVLRMHRYRAPGEQDGDAMPLGSAVD
ILATDDPNFSQEDQQDTQIYEKHDNLLHGTKKKKEKMVSAAFMKKYIHVAKIIKPVLTQESATYIAEEYSRLRSQ
DSMSSDTARTSPVTARTLETLIRLATAHAKARMSKTVDLQDAEEAVELVQYAYFKKVLEKEKKRKKRSEDESETE
DEEEKSQEDQEQKRKRRKTRQPDAKDGDSYDPYDFSDTEEEMPQVHTPKTADSQETKESQKVELSESRLKAFKVA
LLDVFREAHAQSIGMNRLTESINRDSEEPFSSVEIQAALSKMQDDNQVMVSEGIIFLI

FIGURE 499

TCTTTCCGTCCCGGGCAGCCAGCGCCAGTCGGAGCCAGCGCGAGCGCCGCCGCCATCACTGCCGCTGCCAAGTCC
TCCACCCGCTGCCCCCGCC**ATG**TCTGCTACCGCTGCCACGGCCCCCCCTGCTGCCCCGGCTGGGGAGGGTGGTCC
CCCTGCACCCCCTCCAAACCTCACCAGTAACAGGAGACTGCAGCAGACCCAGGCCCAGGTGGATGAGGTGGTGGA
CATCATGAGGGTGAACGTGGACAAGGTCCTGGAGCGAGACCAGAAGCTGTCGGAGCTGGACGACCGTGCAGATGC
ACTCCAGGCGGGGGCCTCCCAGTTTGAAACAAGCGCAGCCAAGCTCAAGCGCAAATACTGGTGGAAAAACCTCAA
GATGATGATCATCTTGGGAGTGATTTGCGCCATCATCCTCATCATCATCATAGTTTACTTCAGCTCT**TAA**ATCCC
CGAGGAGTCTGCCCTGCCTAGAGAAGGGCCTCTCCCCCAACCCTCAGCCGTTCCTCCACCTCTCAGCCATATCTT
TCAGCCCCCCCTCCCCTGGATCCGTGTGTGTGTGTGTCCGTGTGTGTGTCCCCCTGTAAATAGCCAGCTGTTATT
TATACATATATAATATTATATATATTTGGTCTGTTTGTAGTTTTATTACTAGATGATTTTTCCGGTTGTCCTTAA
CACCCCTTCCTGAGGTTCCCTTCACCCCTCTCTCTTGCCTTCCTTCCCTTTCCCTTTCTTCCTGACTAGCCCCAA
GTCCCTTCATTTGCATCTGCTATGCAATAGTCCCTCTCCTTTCCTTCTTCTTCCCTCAGATTTAGCTGATCCTTC
CTCCCACCCTGGCCTTCCTTTCCTCTTTCCTCCTCACTCTCCCCGTCATGCTCCCTCTGCCCCGCCCTCAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAACCACCAGCACCTGTCCAGGCTTCCTTAGGTACATCTTCTTTGTATCCAT
TGGGAGGCTCTGAGACTGGCCCCACTTGGTCCTAAAAATCCCAAGGTCTTTGGGAGCGTCCAGCATGTTAATTAG
CGTATCATTACATACTGCTATCCCTTTCCATTTCTTTTTGTTCCATCACTCTTCTCTCAACCTGTGTTTCTTTTT
TTACTGAGGAGTTAGTCCCCATTAGTTCTTGTATCACATTTTCATTTGCACGACATTACTCGCAGGTGGTGGGGA
GCCTGGGCTTTTGGGGAACCAGGCTGCTCTGGTCCCCAGCATTGCCTCCTCCTAGCCCCTCTAGTCCAGTTTGCC
TCCCTTACCCTCATTTTCCAAACCTCTTGTACCCTCCTCTCCCTCCCCCAGTGGTATGTAAGTGTCTTGAAGTTC
AGTATGTTATGATGGACCAATAATTCTGCCCTTCGGGTTTCTCCCTACATTCCTGCTCCCCAGTTTTCATGTGGG
GTACTCAACTGACATTCCCATGGGGTTTCCCTCCCATCTGCCTGATCCACCTCCTCCTCCCACCACAAGATCAAT
TGTTGGCCACAATTGATCTCTTGTAGAGGGGTGGCTACCAGTGTGTGTGTGGGGGTCATCACTGCCTTGGGGAGG
AGTGGGGCAGGGCAGAGAATCCCCCCAATTCCTGCCTGAAATCTCTGGCCTCACCCCTGCTGGGGGTTGGACTGA
AAACCCTCCTCCCCAATTTGGGGGGTGTTGCCCCATCACTGCCCAGCTCCTCTGACTGCCCCCCCTGAATTTAGG
GTGGGGGTACTAGTCACTGCCAATGTGTGTATGGGACTTGCTGGAAAACGGGGATGCTTGCCCCTCTCCAGGACT
ATTGAGCCCAGAGAGAGCTGTCCTCTCATTGGGTGAACTGATTGAGGAAGGGTCTATTGTCTTTTTAAATGGCAC
AATTTTAAGGGTTTGAGGGTACAGTCCCTTAACCTGCCACGGGAGGGGGCCCCCAAACTTTCTTCCCCCCCACAC
TTCTGGTTTTCTGTGTGGAGGGGGAGCAGGGATATCTAAGCTGTGGTGTGAAAGGGTAGGAGAGATGCTGGAGGT
GGGGGTGCTGTGTTCTAGACCCCCCATATTATCCCAGTGTCCCCTGCCCCCCTCTTCCCCCACCCCATGCCCCCA
ATTCTGTGGCGCATCCAGATTGTGAAAATGTACAATAAATGTGTAATGAGTAACCAGGT

FIGURE 500

MSATAATAPPAAPAGEGGPPAPPPNLTSNRRLQQTQAQVDEVVDIMRVNVDKVLERDQKLSELDDRADALQAGAS
QFETSAAKLKRKYWWKNLKMMIILGVICAIILIIIIVYFSS

FIGURE 501

TCTTTCCGTCCCGGGCAGCCAGCGCCAGTCGGAGCCAGCGCGAGCGCCGCCGCCATCACTGCCGCTGCCAAGTCC
TCCACCCGCTGCCCCCGCC**ATG**TCTGCTACCGCTGCCACGGCCCCCCCTGCTGCCCCGGCTGGGGAGGGTGGTCC
CCCTGCACCCCCTCCAAACCTCACCAGTAACAGGAGACTGCAGCAGACCCAGGCCCAGGTGGATGAGGTGGTGGA
CATCATGAGGGTGAACGTGGACAAGGTCCTGGAGCGAGACCAGAAGCTGTCGGAGCTGGACGACCGTGCAGATGC
ACTCCAGGCGGGGGCCTCCCAGTTTGAAACAAGCGCAGCCAAGCTCAAGCGCAAATACTGGTGGAAAAACCTCAA
GATGATGATCATCTTGGGAGTGATTTGCGCCATCATCCTCATCATCATCATAGTTTACTTCAGCTCT**TAA**ATCCC
CGAGGAGTCTGCCCTGCCTAGAGAAGGGCCTCTCCCCCAACCCTCAGCCGTTCCTCCACCTCTCAGCCATATCTT
TCAGCCCCCCCTCCCCTGGATCCGTGTGTGTGTGTGTCCGTGTGTGTGTCCCCCTGTAAATAGCCAGCTGTTATT
TATACATATATAATATTATATATATTTGGTCTGTTTGTAGTTTTATTACTAGATGATTTTTCCGGTTGTCCTTAA
CACCCCTTCCTGAGGTTCCCTTCACCCCTCTCTCTTGCCTTCCTTCCCTTTCCCTTTCTTCCTGACTAGCCCCAA
GTCCCTTCATTTGCATCTGCTATGCAATAGTCCCTCTCCTTTCCTTCTTCTTCCCTCAGATTTAGCTGATCCTTC
CTCCCACCCTGGCCTTCCTTTCCTCTTTCCTCCTCACTCTCCCCGTCATGCTCCCTCTGCCCCGCCCTCAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAACCACCAGCACCTGTCCAGGCTTCCTTAGGTACATCTTCTTTGTATCCAT
TGGGAGGCTCTGAGACTGGCCCCACTTGGTCCTAAAAATCCCAAGGTCTTTGGGAGCGTCCAGCATGTTAATTAG
CGTATCATTACATACTGCTATCCCTTTCCATTTCTTTTTGTTCCATCACTCTTCTCTCAACCTGTGTTTCTTTTT
TTACTGAGGAGTTAGTCCCCATTAGTTCTTGTATCACATTTTCATTTGCACGACATTACTCGCAGGTGGTGGGGA
GCCTGGGCTTTTGGGGAACCAGGCTGCTCTGGTCCCCAGCATTGCCTCCTCCTAGCCCCTCTAGTCCAGTTTGCC
TCCCTTACCCTCATTTTCCAAACCTCTTGTACCCTCCTCTCCCTCCCCCAGTGGTATGTAAGTGTCTTGAAGTTC
AGTATGTTATGATGGACCAATAATTCTGCCCTTCGGGTTTCTCCCTACATTCCTGCTCCCCAGTTTTCATGTGGG
GTACTCAACTGACATTCCCATGGGGTTTCCCTCCCATCTGCCTGATCCACCTCCTCCTCCCACCACAAGATCAAT
TGTTGGCCACAATTGATCTCTTGTAGAGGGGTGGCTACCAGTGTGTGTGTGGGGGTCATCACTGCCTTGGGGAGG
AGTGGGGCAGGGCAGAGAATCCCCCCAATTCCTGCCTGAAATCTCTGGCCTCACCCCTGCTGGGGGTTGGACTGA
AAACCCTCCTCCCCAATTTGGGGGGTGTTGCCCCATCACTGCCCAGCTCCTCTGACTGCCCCCCCTGAATTTAGG
GTGGGGGTACTAGTCACTGCCAATGTGTGTATGGGACTTGCTGGAAAACGGGGATGCTTGCCCCTCTCCAGGACT
ATTGAGCCCAGAGAGAGCTGTCCTCTCATTGGGTGAACTGATTGAGGAAGGGTCTATTGTCTTTTTAAATGGCAC
AATTTTAAGGGTTTGAGGGTACAGTCCCTTAACCTGCCACGGGAGGGGGCCCCCAAACTTTCTTCCCCCCCACAC
TTCTGGTTTTCTGTGTGGAGGGGGAGCAGGGATATCTAAGCTGTGGTGTGAAAGGGTAGGAGAGATGCTGGAGGT
GGGGGTGCTGTGTTCTAGACCCCCCATATTATCCCAGTGTCCCCTGCCCCCCTCTTCCCCCACCCCATGCCCCCA
ATTCTGTGGCGCATCCAGATTGTGAAAATGTACAATAAATGTGTAATGAGTAACCAGGT

FIGURE 502

MSATAATAPPAAPAGEGGPPAPPPNLTSNRRLQQTQAQVDEVVDIMRVNVDKVLERDQKLSELDDRADALQAGAS
QFETSAAKLKRKYWWKNLKMMIILGVICAIILIIIIVYFSS

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FIGURE 503A

ATTGCAACACATGCAGCTGCCTGGAGAGAGGGAGCCGGTGTCCTACGTCAGAGCCGCCGCCGCCGCGAGCCGCCG
CCGGGGAGGAGCAGCCGCTGCCGCCCAGGACTGGGCCCTTAGGGAGGAGGAGGCGAGAAGATGGCGGACGACCCC
AGTGCTGCCGACAGGAACGTGGAGATCTGGAAGATCAAGAAGCTCATTAAGAGCTTGGAGGCGGCCCGCGGCAAT
GGCACCAGCATGATATCATTGATCATTCCTCCCAAAGACCAGATTTCACGAGTGGCAAAAATGTTAGCGGATGAG
TTTGGAACTGCATCTAACATTAAGTCACGAGTAAACCGCCTTTCAGTCCTGGGAGCCATTACATCTGTACAACAA
AGACTCAAACTTTATAACAAAGTACCTCCAAATGGTCTGGTTGTATACTGTGGAACAATTGTAACAGAAGAAGGA
AAGGAAAAGAAAGTCAACATTGACTTTGAACCTTTCAAACCAATTAATACGTCATTGTATTTGTGTGACAACAAA
TTCCATACAGAGGCTCTTACAGCACTACTTTCAGATGATAGCAAGTTTGGATTCATTGTAATAGATGGTAGTGGT
GCACTTTTTGGCACACTCCAAGGAAACACAAGAGAAGTCCTGCACAAATTCACTGTGGATCTCCCAAAGAAACAC
GGTAGAGGAGGTCAGTCAGCCTTGCGTTTTGCCCGTTTAAGAATGGAAAAGCGACATAACTATGTTCGGAAAGTA
GCAGAGACTGCTGTGCAGCTGTTTATTTCTGGGGACAAAGTGAATGTGGCTGGTCTAGTTTTAGCTGGATCCGCT
GACTTTAAAACTGAACTAAGTCAATCTGATATGTTTGATCAGAGGTTACAATCAAAAGTTTTAAAATTAGTTGAT
ATATCCTATGGTGGTGAAAATGGATTCAACCAAGCTATTGAGTTATCTACTGAAGTCCTCTCCAACGTGAAATTC
ATTCAAGAGAAGAAATTAATAGGACGATACTTTGATGAAATCAGCCAGGACACGGGCAAGTACTGTTTTGGCGTT
GAAGATACACTAAAGGCTTTGGAAATGGGAGCTGTAGAAATTCTAATAGTCTATGAAAATCTGGATATAATGAGA
TATGTTCTTCATTGCCAAGGCACAGAAGAGGAGAAAATTCTCTATCTAACTCCAGAGCAAGAAAAGGATAAATCT
CATTTCACAGACAAAGAGACCGGACAGGAACATGAGCTTATCGAGAGCATGCCCCTGTTGGAATGGTTTGCTAAC
AACTATAAAAAATTTGGAGCTACGTTGGAAATTGTCACAGATAAATCACAAGAAGGGTCTCAGTTTGTGAAAGGA
TTTGGTGGAATTGGAGGTATCTTGCGGTACCGAGTAGATTTCCAGGGAATGGAATACCAAGGAGGAGACGATGAA
TTTTTTGACCTTGATGACTACTAGGTAGTCGACATGGGTCCGGCAAAACGTGCCTCACCCTCCAGCATCCAACCC
AAGGAGCATACCCATGGTGGAATCCAAACAGATCCCTGCCTTACAATTGGAACATTTCCAGAACTTAATCCATGA
GCATTGGATATTGAAAAGAAAACCGAAACAAAACCAGACCCAGCCCTACACTTTGGTTTGTCATGGTGTCAGCGC
AGCAGCCTACAACTAAGTTCCTAAACGCCACTTTGGACTAATTTAAAAAAGAATCCCAGTTTTTACTTTTACTGG
ATGGTGAAATTGGTTGCTCTTGTATTTTATGAAAAAAAATGATTTTTTTAACCTTCATACATAGAAGCAAAAATA
CTTTAACTGCTGTAAACCTTCAAAAGTTAATAGAAGTGAGATCATACTGGTTTGTTTCTTATTTTGATTGGAGAA
AAATTAAATTGCTGCATTTCGCAGTGACCCATTTACATGGCATTCTCAGCTTAGACTGCGTAAGAAGAAATATAT
GTGGTGAAATGTTGGAACCATTTCTCTCTTGGTCTCTGTTTAATGTTGAAAGGGTGAGCTAATAGGAGGCACTTT
CAACTTCACTCCCTCACGCTACCCCGTCCCCCTCCAGACTGGCAGTTTCAAGGATGCAAATTGCATTGCAAAATC
AAACTGACTCATGAAGCATTTGGGCCAGTGCACTGTTTACTTCCATCTGTTTGCAGACACATTTGTGCCCGGCGT
TTGGGAGCCCTTTGTATCAATGTTCTGACAAGGGTCCCTATAACCTTAACCTACTCGAAACCGGTTTGGGATGGA
TATGATGGGGCTTCTGTGCTATTGCTGGGATTGGGAGAAATAAAACATGCAATTTAAGTGGAAGCGAAGAAATTT
AAAGAGGATTTTATTTTGCTTGGGTCAATCCTTGTTAAAAGGGAGGTGGATGTGTTTCCTTGTGTTGGATGGCAT
GAGATTATGTGAATGTTTTGATTTATTAAAATGAACTGCAAGGTTTTTCACAGGAACGACAGACATGTATGACTG
CATGTAATTATAAACTCCTGACCTCCTGGTGGGGTTGGAGCATCTGTTTCAAATGTGGGACTTACAAGCACTTCT
CACATGAGAAATTAGGGGCGGGTGGGAAGGGATGGGACACAGCTTCTGGCACCATGGATTTAAGACCATGTTGGA
TCCAAAAGTTGGCCTGAAACCCTGAAGCTGATGCTTCACAGCTGGGCTGTAAGTCAGACTTGAACCCAGCTGATA
TGCAAGGTCATGGCGTGCCAGGGTGGTGACAGTTGAACAAAGTGTATAGTACGTGCCCAGTGGTAGCGATGGAAA
AAAGTATACCAAATGGACTTTGAAGGACCAAAGGTTTTAAAAGTCAATTGGTATCACCTCCACACTGACTAGGGT
AGTGGGGTGCATTTGGTTTTCAAATTGGGTACTTTTAACACTTTAGTGCCTGACTGCTGTTCTTTACTGACTTGA
TTCAGTCACTCGTAGCTTTATTGGTCTGAACCAGCTCCTTGTTCCCAGGTTACAGACCTGCCTATCGTTCCAATA
ATCCTGTTTCACTTGAATGAAGGGAGTATGTCTTAAATGTAAAGTTTCTGGTTCTCACACTGTACTCTGAGGTCC
AAATACTGTCTGTCAATGTGTAACCTGATGTCTCAACCCCCTGTGAGAAGAGTCCATTATTTGGTGTTCACCAAC
GTGGGAGACTTCACCGGAACAGGCTTTTTTGCTTTGGGCTCTGCTATTTGTTTGCAGAACACCCAAGAGCGAGCA
AACACGCTCTCTTCACAGCAGTACCTTAGGGTTTTGCCATTGTAAATGGGTCTGATGTGATATGACAAGACCAGA
GAAATTGGATGTAAATTTACATTTTTGAATATGCTTGTTGTTTCACATGATACATTTAGGGTATGCAGCTCCTTT
TGTAGTTTTTATTTTTACTATTTAAGTTTGGAAATGATGCCAAATTTTTGTATTTCTTTAATCAATGTGTTCTCT
TCGGTGATATATATTGCATTATATATTGATGTGTGTATCAATATATATTGATATGTATTACACTTACACATACAA
ACACATATAAGAGGGGGTGAAAACCGTAGCCTTTGCATTCTCTATAGCCTCTGCAGAGAGATACTAAGCAGCAAA

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FIGURE 503B

ATCTTGGTGTTGTGATGTACAGAAATGGAGAAGAGTATTAAACCATATTTAAG

FIGURE 504

MADDPSAADRNVEIWKIKKLIKSLEAARGNGTSMISLIIPPKDQISRVAKMLADEFGTASNIKSRVNRLSVLGAI
TSVQQRLKLYNKVPPNGLVVYCGTIVTEEGKEKKVNIDFEPFKPINTSLYLCDNKFHTEALTALLSDDSKFGFIV
IDGSGALFGTLQGNTREVLHKFTVDLPKKHGRGGQSALRFARLRMEKRHNYVRKVAETAVQLFISGDKVNVAGLV
LAGSADFKTELSQSDMFDQRLQSKVLKLVDISYGGENGFNQAIELSTEVLSNVKFIQEKKLIGRYFDEISQDTGK
YCFGVEDTLKALEMGAVEILIVYENLDIMRYVLHCQGTEEEKILYLTPEQEKDKSHFTDKETGQEHELIESMPLL
EWFANNYKKFGATLEIVTDKSQEGSQFVKGFGGIGGILRYRVDFQGMEYQGGDDEFFDLDDY

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FIGURE 505

TGCTGCGAACCACGTGGGTCCCGGGCGCGTTTCGGGTGCTGGCGGCTGCAGCCGGAGTTCAAACCTAAGCAGCTG
GAAGGAACC**ATG**GCCAACTGTGAGCGTACCTTCATTGCGATCAAACCAGATGGGGTCCAGCGGGGTCTTGTGGGA
GAGATTATCAAGCGTTTTGAGCAGAAAGGATTCCGCCTTGTTGGTCTGAAATTCATGCAAGCTTCCGAAGATCTT
CTCAAGGAACACTACGTTGACCTGAAGGACCGTCCATTCTTTGCCGGCCTGGTGAAATACATGCACTCAGGGCCG
GTAGTTGCCATGGTCTGGGAGGGGCTGAATGTGGTGAAGACGGGCCGAGTCATGCTCGGGGAGACCAACCCTGCA
GACTCCAAGCCTGGGACCATCCGTGGAGACTTCTGCATACAAGTTGGCAGGAACATTATACATGGCAGTGATTCT
GTGGAGAGTGCAGAGAAGGAGATCGGCTTGTGGTTTCACCCTGAGGAACTGGTAGATTACACGAGCTGTGCTCAG
AACTGGATCTATGAA**TGA**CAGGAGGGCAGACCACATTGCTTTTCACATCCATTTCCCCTCCTTCCCATGGGCAGA
GGACCAGGCTGTAGGAAATCTAGTTATTTACAGGAACTTCATCATAATTTGGAGGGAAGCTCTTGGAGCTGTGAG
TTCTCCCTGTACAGTGTTACCATCCCCGACCATCTGATTAAAATGCTTCCTCCCAGC

FIGURE 506

MANCERTFIAIKPDGVQRGLVGEIIKRFEQKGFRLVGLKFMQASEDLLKEHYVDLKDRPFFAGLVKYMHSGPVVA
MVWEGLNVVKTGRVMLGETNPADSKPGTIRGDFCIQVGRNIIHGSDSVESAEKEIGLWFHPEELVDYTSCAQNWI
YE

FIGURE 507

GTGTGGGGAAGGTAGATGTCATTCAAGAACCAGGTTTGAGTGGCCGCTTCTTTGTCACCACTCTCCCAGCATTTT
TTCATGCAAAGGATGGGATATTCCGCCGTTATCGTGGCCCAGGAATCTTCGAAGACCTGCAGAATTATATCTTAG
AGAAGAAATGGCAATCAGTCGAGCCTCTGACTGGCTGGAAATCCCCGGCTTCTCTAACGATGTCTGGAATGGCTG
GTCTTTTTAGCATCTCTGGCAAGATATGGCATCTTCACAACTATTTCACAGTGACTCTTGGAATTCCTGCTTGGT
GTTCTTATGTCTTTTTCGTCATAGCCACCTTGGTTTTTGGCCTTTTTATGGGTCTGGTCTTGGTGGTAATATCAG
AATGTTTCTATGTGCCACTTCCAAGGCATTTATCTGAGCGTTCTGAGCAGAATCGGAGATCAGAGGAGGCTCATA
GAGCTGAACAGTTGCAGGATGCGGAGGAGGAAAAAGATGATTCAAATGAAGAAGAAAACAAAGACAGCCTTGTAG
ATGATGAAGAAGAGAAAGAAGATCTTGGCGATGAGGATGAAGCAGAGGAAGAAGAGGAGGAGGACAACTTGGCTG
CTGGTGTGGATGAGGAGAGAAGTGAGGCCAATGATCAGGGGCCCCCAGGAGAGGACGGTGTGACCCGGGAGGAAG
TAGAGCCTGAGGAGGCTGAAGAAGGCATCTCTGAGCAACCCTGCCCAGCTGACACAGAGGTGGTGGAAGACTCCT
TGAGGCAGCGTAAAAGTCAGCATGCTGACAAGGGACTGTAGATTTAATGATGCGTTTTCAAGAATACACACCAAA
ACAATATGTCAGCTTCCCTTTGGCCTGCAGTTTGTACCAAATCCTTAATTTTTCCTGAATGAGCAAGCTTCTCTT
AAAAGATGCTCTCTAGTCATTTGGTCTCATGGCAGTAAGCCTCATGTATACTAAGGAGAGTCTTCCAGGTGTGAC
AATCAGGATATAGAAAAACAAACGTAGTGTTGGGATCTGTTTGGAGACTGGGATGGGAACAAGTTCATTTACTTA
GGGGTCAGAGAGTCTCGACCAGAGGAGGCCATTCCCAGTCCTAATCAGCACCTTCCAGAGACAAGGCTGCAGGCC
CTGTGAAATGAAAGCCAAGCAGGAGCCTTGGCTCCTGAGCATCCCCAAAGTGTAACGTAGAAGCCTTGCATCCTT
TTCTTGTGTAAAGTATTTATTTTTGTCAAATTGCAGGAAACATCAGGCACCACAGTGCATGAAAAATCTTTCACA
GCTAGAAATTGAAAGGGCCTTGGGTATAGAGAGCAGCTCAGAAGTCATCCCAGCCCTCTGAATCTCCTGTGCTAT
GTTTTATTTCTTACCTTTAATTTTTCCAGCATTTCCACCATGGGCATTCAGGCTCTCCACACTCTTCACTATTAT
CTCTTGGTCAGAGGACTCCAATAACAGCCAGGTTTACATGAACTGTGTTTGTTCATTCTGACCTAAGGGGTTTAG
ATAATCAGTAACCATAACCCCTGAAGCTGTGACTGCCAAACATCTCAAATGAAATGTTGTGGCCATCAGAGACTC
AAAAGGAAGTAAGGATTTTACAAGACAGATTAAAAAAAAATTGTTTTGTCCAAAATATAGTTGTTGTTGATTTTT
TTTTAAGTTTTCTAAGCAATATTTTTCAAGCCAGAAGTCCTCTAAGTCTTGCCAGTACAAGGTAGTCTTGTGAAG
AAAAGTTGAATACTGTTTTGTTTTCATCTCAAGGGGTTCCCTGGGTCTTGAACTACTTTAATAATAACTAAAAAA
CCACTTCTGATTTTCCTTCAGTGATGTGCTTTTGGTGAAAGAATTAATGAACTCCAGTACCTGAAAGTGAAAGAT
TTGATTTTGTTTCCATCTTCTGTAATCTTCCAAAGAATTATATCTTTGTAAATCTCTCAATACTCAATCTACTGT
AAGTACCCAGGGAGGCTAATTTCCTTAAAAAAAAAAAAATCTATCCATCTACTTCTCTCTTACCTGATTTATGTGT
TAGAATAAATTCATGAAATTCGATTCCAAGCATA

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FIGURE 508

MSGMAGLFSISGKIWHLHNYFTVTLGIPAWCSYVFFVIATLVFGLFMGLVLVVISECFYVPLPRHLSERSEQNRR
SEEAHRAEQLQDAEEEKDDSNEEENKDSLVDDEEEKEDLGDEDEAEEEEEEDNLAAGVDEERSEANDQGPPGEDG
VTREEVEPEEAEEGISEQPCPADTEVVEDSLRQRKSQHADKGL

FIGURE 509A

GGCTCATAGAGCTGAACAGTTGCAGGATGCGGAGGAGGAAAAAGATGATTCAAATGAAGAAGAAAACAAAGACAG
CCTTGTAGATGATGAAGAAGAGAAAGAAGATCTTGGCGATGAGGATGAAGCAGAGGAAGAAGAGGAGGAGGACAA
CTTGGCTGCTGGTGTGGATGAGGAGAGAAGTGAGGCCAATGATCAGGGGCCCCCAGGAGAGGACGGTGTGACCCG
GGAGGAAGTAGAGCCTGAGGAGGCTGAAGAAGGCATCTCTGAGCAACCCTGCCCAGCTGACACAGAGGTGGTGGA
AGACTCCTTGAGGCAGCGTAAAAGTCAGCATGCTGACAAGGGACTGTAGATTTAATGATGCGTTTTCAAGAATAC
ACACCAAAACAATATGTCAGCTTCCCTTTGGCCTGCAGTTTGTACCAAATCCTTAATTTTTCCTGAATGAGCAAG
CTTCTCTTAAAAGATGCTCTCTAGTCATTTGGTCTCATGGCAGTAAGCCTCATGTATACTAAGGAGAGTCTTCCA
GGTGTGACAATCAGGATATAGAAAAACAAACGTAGTGTTGGGATCTGTTTGGAGACTGGGATGGGAACAAGTTCA
TTTACTTAGGGGTCAGAGAGTCTCGACCAGAGGAGGCCATTCCCAGTCCTAATCAGCACCTTCCAGAGACAAGGC
TGCAGGCCCTGTGAAATGAAAGCCAAGCAGGAGCCTTGGCTCCTGAGCATCCCCAAAGTGTAACGTAGAAGCCTT
GCATCCTTTTCTTGTGTAAAGTATTTATTTTTGTCAAATTGCAGGAAACATCAGGCACCACAGTGCATGAAAAAT
CTTTCACAGCTAGAAATTGAAAGGGCCTTGGGTATAGAGAGCAGCTCAGAAGTCATCCCAGCCCTCTGAATCTCC
TGTGCTATGTTTTATTTCTTACCTTTAATTTTTCCAGCATTTCCACCATGGGCATTCAGGCTCTCCACACTCTTC
ACTATTATCTCTTGGTCAGAGGACTCCAATAACAGCCAGGTTTACATGAACTGTGTTTGTTCATTCTGACCTAAG
GGGTTTAGATAATCAGTAACCATAACCCCTGAAGCTGTGACTGCCAAACATCTCAAATGAAATGTTGTGGCCATC
AGAGACTCAAAAGGAAGTAAGGATTTTACAAGACAGATTAAAAAAAAAATGGTTTTGTCCAAAATATAGTTGTTGT
TGATTTTTTTTTAAGTTTTCTAAGCAATATTTTTCAAGCCAGAAGTCCTCTAAGTCTTGCCAGTACAAGGTAGTC
TTGTGAAGAAAAGTTGAATACTGTTTTGTTTTCATCTCAAGGGGTTCCCTGGGTCTTGAACTACTTTAATAATAA
CTAAAAAACCACTTCTGATTTTCCTTCAGTGATGTGCTTTTGGTGAAAGAATTAATGAACTCCAGTACCTGAAAG
TGAAAGATTTGATTTTGTTTCCATCTTCTGTAATCTTCCAAAGAATTATATCTTTGTAAATCTCTCAATACTCAA
CCTACTGTAAGTACCCAGGGAGGCTAATTTCCTTAAAAAAAAAAAATCTATCCATCTACTTCTCTCTTACCTGAT
TTATGTGTTAGAATAAATTCATGAAATTCGATTCCAAGCATACGAAAGATGCCTAAAGTTGATTCTATGCTCCTT
AGATCCAGACAGAATAATGAGTACAGGTTTATGAAATTCTAAAAGTTTCTGTCGTCTTTAAAAAGGAACGTGCAG
TATATTTCTATCTGGCTGTTTAGATAACCCTTTCCTTGTATTAATTGTGAGCACGGAGCTCACTGGTGGGGGAGG
TTCTGAAACTCTCTGCCCTCCTGTGGTTGAATGAAGATGTTGCAAGACTTGCACAAAGGAGGTTATTCTTCTGAC
AGCATCAACTTTTAGAGATGGTTCTTTTTCATCTTTCCAATTCAGTTACTTGACAGTCTCCTTCCCCAGTATGCT
GAAGTTTGTTAAGAGTCACCAGTAATTGTGCTTTTCAGACAGTAGTGCAGCTTCAAAATCGAGGCCATCACTGGG
CTGATGGGCTGGGAGAACCTTGCCATGTGCCTGCCTGTTTCCTGCCCCCTTAGTCACTGCCCATTTCCTGCCCCC
TTGGTCGCTGACACACCTTCACCCAAAGTGCCATGGTTCTGATGGTGGCAGTTCCATCTCCCTGACATCAGGAAG
CTTTTCTCGATCAGAGCAGAGCGGGGCCTGCCTGCCCTCGTGTCACTGGATTTCTTTCTCTTATAATCAGCTGAA
ACAGAGTTCTCAAAGAACAGTAAACTCAGGTTCAGAGGTATTATGGAATAAGAATGGTTTCATAGTTTGGCTTTT
CTATATAATTCCTCCCTCTCAAACTGAAATATTCATTTTTTTAGTGGAGTATTTGACTAGAGAGAAGGTAAGGCA
GAAATACAGTCTACACTGGCTTTTAAAAATGTAAAGCCAATTTCCAACCGGACCCCAAATAGTACAGGTTGAACA
TTCCGTTCCAACAATCCAAAACCCCAAATGCTCCAAAATCTTAAACTTTGAGTTCCAGCATTCCGTCAGAAGTGG
AAAATTTTACACCTGACCTCATTTGACAGGTGGCAGTTACAGTGCAATCAAAACTTTGTTCCATGCCCAAGATTA
TTAAAAATATTGGATAAAATTACCTTCAAGCTATGTTGTATAAGGTGTATATAAAACAAATGAATTTTGTGTTTA
GACTTGGGTCTACTCCCAAGATACCTCATTATATATATACAAAAATCCCCAAATCCAAAAACATTTGAAACACTT
CTGGTCCCACACATTTTGGATAAGGGATATTTGACCTATATCTAATTATATAATAAGAAAAATGTATTTTCTTTT
TTTTTTTTTTTTTGAGATGGAGTTTCACTCTTGTTGTCGCCCAGGCTGCAATGGCACAATCTTGGCTTACTACAA
CCTCCGCCTCCCTAGTTCAAGGGATTCTCCTGCCTCAGCCTCCCAGGTAGCTGGGATTACAGGCATGTGCCACCA
TGCCTGGCTAATTTTGTATTTTTAGTAGAGACGGGGTTTCGCCATGTTGGTCAGACTGGTCTTGAACTCCTGACC
TCAGGTGATCCGCCCGCCTCAGCCTCCCAACGTGCTGGGATTACAGGTGTGAGCCACCGTACCTGGCAGAAAATG
TACTTTCTTTCTCAGAAATACTTTTAAAAAAAATTGAAGGGTGAGGAGAAAAACATCTTGGAGAAGAGGACCCAT
TAAAACTTTAAATATCTGTGGGAACCATTTTTCCTGATTTTCCCTTTTTTAACATCATGGCAAAGATGGGTTTTT
TTCCAACAAAATTTAATTTAATATCTTTCCACTTGAAGATTTTAGGTTTGTTTTCAATACTTAATGAATATAAAA
CTAAAGGAGAAAAGCCAACCTGAAATAATTTAAACTTTATATGAACATTTCGATAAGAGTTTGTGGATTTTTTCT
GTAGATAATATATTTGATCCAGAACTCAAGTGCATGGAAACATGATTTTGATTTTTAAAATCTAAAAAAAAAAAA
AATTAAAATCATGCTTCCCTCTATTGCAGTATCAGTTATTTAGTCACAGAATGGTATTTTATGTAAATTAAAATT

FIGURE 509B

AGGTGAATGCAATGCAGGTAACTGGTTTTGGAATGGGAATGTGCAGTGCTTTATGTTTGGGGAGTTGGAGCAGGG
TATCTTTTCATCAATTAGAAGGAAAGTTTGAAACTTCTGATTACCTTTATGTTGGTTTCTCTTATTATTTGTCTC
TTGCTAGATCTGCTAAACCAACCCAGCTTGCTCAGAGATCTCATATTGAAGCAACATACAGGCAATCCACATCTT
TCTTTCCCTTTGAAGTATAGTCATTGGATGGGATGAGGGACAGGGCCTGTTGGGTTCACAGGGCCTTGCACTGCA
TGGGCACATACTTAAAAGCTCTTGTGCATGGAATCCCTGTCTGTTAGCCACAGGCCTCTTTAGCTCTATACATTC
AAAATAACTACTGTAGTAGAAAATAGATAAGCTTCAGCTGAGTTGGCTTTTGATAGTGGAAAAAAAACAAAATTT
GACTTTTTATGGCCAAAATTCCTTGTTGACAGCTGTGATGTTCTAATATGATTTGGGAATATGTCAGTCTACAGA
ACCTGCATCCTGTAAAAACACCTTTGGGGTAGACGATAAAAGTCATTTTTAAGGCAAATACTTACCATGTGACTT
TTTATTACCAAATGCATCAGTAGTGGAGCTGGTATGTTGTTTCATAGGATGGAAACATTAGAAGTCCAGAGAAAA
ATAAATTTTAAAAAAAGGTGGAAAAGTTACGGCAAACCTGAGATTTCAGCATAAAATCTTTAGTATGAAGTGAGA
GAAAGAAGAGGGAGGCTGGTTCTGTTGCTCGTATCAATAGGTTATCTGTGTCCCTCATCTTGGTGTTACAGTGTT
ATTTCTGTCAGTATTATGAATATGTGGTTGACCCATCCTGTCAAATGTACCAACATTTTCGAAAGAATTCATTCA
AATCTCTTATGCCAACAGAAAAGTTCCTTCTTGTTTAATATCTCTTTACCTCAGTCCTACATTTTGATTCTCTGG
AGGAGATTTTAGCTTGTCTTAAAAAGCCAAATTTGGAGTCATCAAGCCTGCTGAACCTGATGGGGCAGCTTTTTG
AACAGCTTTCTGGAAGTAAGAACTTCAGTTGAAAAGCCCTTTGATCGCTTCAGCCCGGGACATGCCCTTCAGATG
GCTTATTCTCAGTAAAGCTTTATGTAGACTGTGACACTGTATATGTGTGACTCGTACAACTTTGACGTGTTTCTG
AAGTGGTTTAATCGTATTTGTTATTAGCTTCTTTGTGGAAATGCAATTTTTATACTAAAAACATTGCTTATTTGC
AATGCAATATGTTATAAATTTGTTGTTTATATTACTGGTATTAGTCTTAGCCTAATGAACCTAATTATTTTTCTT
TCTGTATTCTTTGCTTCCTCAAATAGCATCTGCAGCAATTGGAATGAGAAATCCAGATATGTGTTTCAAGTAGTA
CATTGCCTGAATCACAAATCACTTGATCACAGTATTGTATATAATCCCTGATCCTATTTGTTTCATTTTATTGTA
AATTCCCATTTGCATCAAAACCTAATGATAGTGATTGGTAAGTAAAAACAAATGGTGTATTGCTTTTCATACAAG
TGTTTTCACAAAAGCCATTTGCCTAGGCAGCAAAAAATATTAATTTGTT

FIGURE 510

CGCTGGCCAATCGGTTGAGAGCTGAGCTGGACTTGGCGGTGGGAGCCGGAGCCTGCTTGTTGCAGCTGTGGGTGA
GGACGGCTCTAGCTAGTTCCCTTTTAGACTATGGCGACATACCTGGAGTTCATCCAGCAGAATGAAGAACGGGAT
GGTGTGCGTTTTAGTTGGAACGTGTGGCCTTCCAGCCGGCTGGAGGCTACAAGAATGGTTGTACCCCTGGCTTGT
CTCCTTACTCCTTTGAAAGAACGTCCAGACCTACCTCCTGTACAATATGAACCTGTGCTTTGCAGCAGGCCAACT
TGTAAAGCTGTTCTCAACCCACTTTGTCAGGTTGATTATCGAGCAAAACTTTGGGCCTGTAATTTCTGTTTTCAA
AGAAATCAGTTTCCTCCAGCTTATGGAGGCATATCTGAGGTGAATCAACCTGCCGAATTGATGCCCCAGTTTTCT
ACAATTGAGTACGTGATACAGCGAGGTGCTCAGTCCCCTCTGATCTTTCTCTATGTGGTTGACACATGCCTGGAG
GAAGATGACCTTCAAGCACTCAAAGAGTCCCTGCAGATGTCCCTGAGTCTTCTTCCTCCAGATGCTCTGGTGGGT
CTGATCACATTTGGAAGGATGGTGCAGGTTCATGAGCTAAGCTGTGAAGGAATCTCCAAAAGTTATGTCTTCCGA
GGGACCAAGGATTTAACTGCAAAGCAAATACAGGATATGTTGGGCCTGACCAAGCCAGCCATGCCCATGCAGCAA
GCACGACCTGCACAACCACAGGAGCACCCTTTTGCTTCAAGCAGATTTCTGCAGCCTGTTCACAAGATTGATATG
AACCTCACTGATCTTCTTGGGGAGCTACAGAGGGACCCATGGCCAGTAACTCAGGGGAAGAGACCTTTGCGATCC
ACTGGTGTGGCTTTGTCCATTGCTGTTGGCTTGCTGGAGGGCACTTTTCCAAACACAGGAGCCAGGATCATGCTG
TTTACTGGAGGTCCCCCTACCCAAGGGCCTGGCATGGTGGTTGGAGATGAATTAAAGATTCCTATTCGTTCTTGG
CATGATATTGAGAAAGATAATGCACGATTCATGAAAAAGGCAACCAAGCACTATGAGATGCTTGCTAATCGAACA
GCTGCAAATGGTCACTGCATTGATATTTATGCTTGTGCCCTTGATCAAACTGGACTTTTGGAGATGAAGTGTTGT
GCAAATCTTACTGGAGGCTACATGGTAATGGGAGATTCTTTCAACACTTCTCTCTTCAAGCAGACATTCCAAAGA
ATCTTTACTAAAGATTTTAATGGAGATTTCCGAATGGCATTTGGTGCTACTTTGGACGTAAAGACCTCTCGGGAA
CTGAAGATTGCAGGAGCCATTGGTCCATGCGTATCTCTGAATGTGAAAGGACCGTGTGTGTCAGAAAATGAGCTT
GGTGTTGGTGGCACGAGTCAGTGGAAAATCTGTGGCCTAGATCCTACATCTACACTTGGCATCTATTTTGAAGTT
GTCAATCAGCACAACACCCCGATCCCCCAAGGAGGCAGAGGAGCCATCCAGTTTGTCACGCATTATCAGCACTCC
AGCACCCAGAGACGCATCCGCGTGACCACCATCGCCCGAAATTGGGCAGATGTACAGAGTCAGCTCAGGCACATA
GAAGCAGCATTTGACCAGGAGGCTGCGGCAGTGTTGATGGCACGGCTTGGGGTGTTCCGAGCGGAGTCAGAGGAG
GGGCCCGATGTGCTCCGGTGGCTGGACCGACAACTCATCCGACTGTGTCAAAAGTTTGGACAGTATAACAAAGAA
GACCCCACTTCTTTTAGGTTATCAGATTCCTTTTCTCTATATCCTCAGTTTATGTTCCATCTGAGAAGATCTCCA
TTTCTTCAAGTGTTTAACAACAGTCCTGATGAGTCGTCATATTACAGACATCATTTTGCCCGGCAGGACCTGACC
CAGTCCCTCATCATGATCCAGCCCATTCTCTACTCTTACTCCTTTCATGGGCCACCAGAGCCAGTACTCTTGGAT
AGCAGCAGCATTCTAGCTGACAGAATTTTGCTGATGGATACTTTCTTTCAAATTGTCATTTATCTTGGTGAGACC
ATAGCCCAGTGGCGTAAAGCTGGCTACCAGGACATGCCCGAGTATGAAAACTTCAAGCACCTTCTGCAGGCACCA
CTGGATGATGCTCAAGAAATTCTGCAAGCACGCTTCCCGATGCCACGTTACATCAACACGGAGCATGGAGGCAGT
CAGGCTCGATTCCTTTTGTCCAAAGTGAACCCATCTCAGACACACAATAACCTGTATGCTTGGGGACAGGAAACT
GGAGCACCCATCCTAACTGATGATGTTAGCCTGCAGGTGTTCATGGACCATTTGAAGAAGCTGGCTGTCTCCAGT
GCCTGTTAAGCTGAGGATACAACCAGGAAATGCAACGGTGTCAGATTGTGTTCAAAATGTCTAGAAAGGCTTGAT
AACATTCCTGTTACTTTTCTAGCAGATTTTAACAAATAATCAAGGACATTTTATATGTAACTCTTTAGATTATAA
TTTATTTGTATTCCTGTCTTTGTCCTTTTTCTTGCACTATAAAATTATAAGGTCATAAATGTTTTGGTACTTGTA
GATGTTTATGTGCTTTTTGTATCCTAACTTTTAGAATCTAAATAAAATCAGAGGTAATGTATTTTGGCAGCTTGT
TTAGGTGAGAATCTTAATGATCATAAAAGGAAATAAATCTAGATGCAGAAAGTACTGGCTAAAATATTGCTAATA
CAAATGTGATTTCCTGAAAAAAAAAAAAAAAA

FIGURE 511

MATYLEFIQQNEERDGVRFSWNVWPSSRLEATRMVVPLACLLTPLKERPDLPPVQYEPVLCSRPTCKAVLNPLCQ
VDYRAKLWACNFCFQRNQFPPAYGGISEVNQPAELMPQFSTIEYVIQRGAQSPLIFLYVVDTCLEEDDLQALKES
LQMSLSLLPPDALVGLITFGRMVQVHELSCEGISKSYVFRGTKDLTAKQIQDMLGLTKPAMPMQQARPAQPQEHP
FASSRFLQPVHKIDMNLTDLLGELQRDPWPVTQGKRPLRSTGVALSIAVGLLEGTFPNTGARIMLFTGGPPTQGP
GMVVGDELKIPIRSWHDIEKDNARFMKKATKHYEMLANRTAANGHCIDIYACALDQTGLLEMKCCANLTGGYMVM
GDSFNTSLFKQTFQRIFTKDFNGDFRMAFGATLDVKTSRELKIAGAIGPCVSLNVKGPCVSENELGVGGTSQWKI
CGLDPTSTLGIYFEVVNQHNTPIPQGGRGAIQFVTHYQHSSTQRRIRVTTIARNWADVQSQLRHIEAAFDQEAAA
VLMARLGVFRAESEEGPDVLRWLDRQLIRLCQKFGQYNKEDPTSFRLSDSFSLYPQFMFHLRRSPFLQVFNNSPD
ESSYYRHHFARQDLTQSLIMIQPILYSYSFHGPPEPVLLDSSSILADRILLMDTFFQIVIYLGETIAQWRKAGYQ
DMPEYENFKHLLQAPLDDAQEILQARFPMPRYINTEHGGSQARFLLSKVNPSQTHNNLYAWGQETGAPILTDDVS
LQVFMDHLKKLAVSSAC

FIGURE 512A

ATGGGGTTCCTGAAACTGATTGAGATTGAGAACTTTAAGTCGTACAAGGGTCGACAGATTATCGGACCATTTCAG
AGGTTCACCGCCATCATTGGACCCAATGGCTCTGGTAAGTCAAATCTCATGGATGCCATCAGCTTTGTGCTAGGT
GAAAAAACCAGCAACCTGCGGGTAAAGACCCTGCGGGACCTGATCCATGGAGCTCCTGTGGGCAAGCCAGCTGCC
AACCGGGCCTTTGTCAGCATGGTCTACTCTGAGGAGGGTGCTGAGGACCGTACCTTTGCCCGTGTCATTGTAGGA
GGTTCTTCTGAGTACAAGATCAACAACAAAGTGGTCCAACTACATGAGTACAGTGAGGAATTAGAGAAGTTGGGC
ATTCTCATCAAAGCTCGTAACTTCCTCGTTTTCCAGGGTGCTGTGGAATCTATTGCCATGAAGAACCCCAAAGAG
AGGACAGCTCTATTTGAAGAGATTAGTCGTTCTGGGGAGCTGGCGCAGGAGTATGACAAGCGAAAGAAGGAAATG
GTGAAGGCTGAAGAGGACACACAGTTTAATTACCATCGCAAGAAAAATATTGCGGCTGAACGCAAGGAAGCAAAG
CAGGAGAAAGAAGAGGCTGACCGGTACCAGCGCCTGAAGGATGAGGTAGTACGGGCTCAGGTACAGCTGCAGCTC
TTTAAGCTTTACCATAATGAAGTGGAAATTGAGAAGCTCAACAAGGAACTGGCCTCAAAGAACAAGGAGATCGAG
AAGGACAAGAAGCGTATGGACAAGGTGGAGGATGAACTGAAGGAGAAGAAGAAGGAGCTGGGCAAAATGATGCGG
GAGCAGCAGCAGATTGAGAAGGAGATCAAGGAGAAGGACTCAGAATTGAACCAGAAGCGGCCTCAGTACATCAAA
GCCAAGGAGAACACCTCCCACAAAATCAAGAAGCTGGAAGCAGCCAAGAAGTCTCTGCAGAATGCTCAGAAGCAC
TACAAGAAGCGTAAAGGTGACATGGATGAGCTGGAGAAGGAGATGCTGTCAGTGGAGAAGGCTCGGCAGGAGTTT
GAAGAACGGATGGAAGAAGAGAGTCAGAGTCAGGGCAGAGATTTGACGTTGGAGGAGAATCAGGTGAAGAAATAC
CACCGGTTGAAAGAAGAAGCCAGCAAGAGAGCAGCTACCCTGGCCCAGGAGCTGGAGAAATTCAATCGAGACCAG
AAAGCTGACCAGGACCGTCTGGATCTGGAAGAACGGAAGAAAGTAGAGACAGAGGCCAAGATCAAGCAAAAGCTG
CGGGAAATTGAAGAGAATCAGAAGCGGATTGAGAAACTGGAGGAATACATCACCACTAGCAAGCAGTCCCTAGAA
GAGCAGAAGAAGCTAGAGGGGGAGCTGACAGAGGAGGTGGAGATGGCCAAGCGGCGTATTGATGAAATCAATAAG
GAGCTGAACCAGGTGATGGAGCAGCTAGGGGATGCCCGCATCGACCGCCAGGAGAGCAGCCGCCAGCAGCGAAAG
GCAGAGATAATGGAAAGCATCAAGCGCCTTTACCCTGGCTCTGTGTACGGCCGCCTCATTGACCTATGCCAGCCC
ACACAAAAGAAGTATCAGATTGCTGTAACCAAGGTTTTGGGCAAGAACATGGATGCCATTATTGTGGACTCGGAG
AAGACAGGCCGGGACTGTATTCAGTATATCAAGGAGCAGCGTGGGGAGCCTGAGACCTTCTTGCCTCTTGACTAC
CTGGAGGTGAAGCCTACAGATGAGAAACTCCGGGAGCTGAAGGGGGCCAAGCTAGTGATTGATGTGATTCGCTAT
GAGCCACCTCATATCAAAAAGGCCCTGCAGTATGCTTGTGGCAATGCCCTTGTCTGTGACAACGTGGAAGATGCC
CGCCGCATTGCCTTTGGAGGCCACCAGCGCCACAAGACAGTGGCACTGGATGGAACCCTATTCCAGAAGTCAGGA
GTGATCTCTGGTGGGGCCAGTGACCTGAAGGCCAAGGCACGGCGCTGGGATGAGAAAGCAGTAGACAAGTTGAAA
GAGAAGAAGGAGCGCTTGACAGAGGAGCTGAAAGAGCAGATGAAGGCAAAACGGAAAGAGGCAGAGCTGCGTCAG
GTGCAGTCTCAGGCCCATGGACTGCAGATGCGGCTCAAGTACTCCCAGAGTGACCTAGAACAGACCAAGACACGA
CATCTAGCCCTGAATCTGCAGGAAAAATCCAAGCTGGAGAGTGAGCTAGCCAACTTTGGGCCTCGCATTAATGAT
ATCAAGAGGATCATTCAGAGCCGAGAGAGGGAAATGAAAGACTTGAAGGAGAAGATGAACCAGGTAGAGGATGAG
GTGTTTGAAGAGTTTTGTCGGGAGATTGGTGTGCGCAACATCCGGGAGTTTGAGGAAGAAAAGGTGAAACGGCAG
AATGAAATCGCCAAGAAGCGTTTGGAGTTTGAGAATCAGAAGACTCGCTTGGGCATTCAGTTGGATTTTGAAAAG
AACCAACTGAAGGAGGACCAAGATAAAGTACACATGTGGGAGCAGACAGTGAAAAAAGATGAAAATGAGATAGAA
AAGCTCAAAAAGGAGGAACAAAGACACATGAAGATCATAGATGAGACCATGGCTCAGCTACAAGACCTGAAGAAT
CAGCATCTGGCCAAGAAGTCGGAAGTGAATGACAAGAATCATGAGATGGAGGAGATTCGTAAGAAACTCGGGGGC
GCCAACAAGGAAATGACCCATTTACAGAAGGAGGTGACAGCCATTGAGACCAAGCTTGAACAGAAGCGCAGTGAC
CGTCACAACTTGCTACAGGCCTGTAAGATGCAGGACATTAAGTTGCCACTGTCAAAAGGCACCATGGATGATATT
AGTCAGGAAGAGGGTAGCTCCCAGGGGGAGGACTCAGTGAGTGGTTCACAGAGAATTTCCAGTATCTATGCACGA
GAGGCCCTCATTGAGATTGACTACGGTGATCTGTGTGAGGATCTGAAGGATGCCCAGGCTGAGGAAGAGATCAAG
CAAGAGATGAACACACTGCAGCAGAAGCTGAATGAGCAGCAGAGTGTGCTTCAGCGTATTGCCGCCCCCAACATG
AAGGCCATGGAAAAGCTGGAAAGTGTCCGAGACAAGTTCCAGGAGACCTCAGATGAGTTTGAAGCAGCCCGAAAG
CGAGCAAAGAAGGCCAAGCAGGCATTCGAACAGATCAAGAAGGAGCGCTTTGACCGCTTCAATGCTTGTTTTGAA
TCTGTGGCTACCAACATTGATGAGATCTATAAGGCCCTGTCCCGCAATAGCAGTGCCCAGGCATTCCTGGGCCCT
GAGAACCCTGAAGAGCCCTACTTGGATGGCATCAACTACAACTGTGTGGCTCCTGGGAAACGCTTCCGGCCTATG
GACAACTTGTCAGGCGGGGAGAAGACAGTGGCAGCTCTGGCCCTGCTCTTTGCCATCCACAGCTACAAGCCAGCC
CCCTTCTTCGTCCTGGATGAGATTGATGCTGCCTTGGATAACACCAACATTGGCAAGGTGGCAAATTACATCAAG
GAGCAGTCGACTTGCAACTTCCAGGCCATCGTCATCTCTCTCAAGGAGGAGTTCTACACCAAGGCCGAGAGCCTC

FIGURE 512B

ATTGGAGTCTATCCTGAGCAAGGGGACTGTGTGATCAGCAAAGTCCTGACCTTCGACCTCACCAAGTACCCAGAT
GCCAACCCCAACCCCAATGAGCAGTAGCAGTATTTTTGCCCTCCCGCCCTGTCTGGATCCCTAAGCTGTCCCTCT
CCCAATCTCTGGATATTTGACTCCCAACCTTCCCCCTACCTCCTGGCCCTTTTTGGTGTAGTCATGGGATTTAGG
CACTGCTAATCAAGCATGAAGAGGAACAGAGGTGATGTTAGGTCTGGAGCAAAAATTCCTGAACGACAGGGAGTA
TTCTGGCCTCTGAAAGGAGGTGCTGAGCTGAACAGGGCCATCTGTTCATCACACACACCCCCTTCCTCCCCCTCA
TCACCCATAATCGTGGGCCCCTTGGGCCTCTTGCCCACTGTGTGTGTGGGTATGTATGTGTGTATGTATGTATCC
GCATGTGTGCATGTGAGTATGTTTGCAAAATAATAAAGGATATTGGAGACCTGTTTTAGAAGGAGCCTAGGCTGA
ATTTGATTCCAAGAGAGCTTAGGATGACAGCACCCCTGAGCTGGGCAAAGGTACTCAGGACCTCATAGGAGTCTT
AGGCAGTTACCTGAAACTGCCTTCATTCACTCATTTGTGTATTCATTCATTTATGTATTCATCAGACACATACCG
AACACCCTCTATTTGTCAGGCTCTGTGCTTGGAATACAGAGTTGAATCAGACATGATCTCTACCCTCCTAGTAAG
GAGATACAGTGGGTTCATGAATGACTATAGTTAGCTGAATGTCATATGTACTTTGAATTTGAGAAGTGGGTGATC
CCCTCTAGGCTTCCTGGAGGTCACATTTAAGCTAGACCTTGACAAATTGGTAGGATTTGGTCAGGCACTAGGAGT
GGAGCATGAGCTCTGGGGACAGACAGTTATGGGTTCTGGTCCCACTTTTTATCACTTACTAGTTGTTTGACCTTG
GGCAAGTCATTTGACCTTCTGTGCCTCAGTTTCCTCATCTGTAAAATGGGGCTAACAATATTACCTACCTCATAG
GATTTAATGATGTCAAGCTCCTCACTGGAGGCCTTATCCCTTCGTGGAGCCCACTAGGTGCCGACCCCTCAGAAT
ATAACCCTCATGCCTGGACCCCTGAGAGCTTCTGATCCCAGCTATTAGGGACAGAAGAAGCCTCCAAATCTGGAA
GGTGCTGAATGCCCTGCTGACTGGGAAAGTTTCAGGGCACTGATGGGGTCTACCTGGTAAGCGGAGGGCCTGAGG
AAACCTGTAGCTTCAATCATGTCTGGTAACCGGGTGCCTGAGCCCCAATCTGGGTTGTGAGGAAATAGGGGAGAG
GTATCCTGGGCCACATCCCAGCCTAACACCTGTGAGGTTCATTTTAGGAACTAACCTCATTAGCTATAAGGATCA
TGCAGAGGCAGCAAAGCCGGGTGCGATGAGCTCAGCCTTTACTCATTCACATACACCATCACACTTTAATTCCAA
TCTGTATATTGCTTTTTAAAAGTTAAGTCCATTCTAATTACCCAAATATGCATGAATTCATTCTCCTTTTGAGAA
GTTAGATTGTTAAAGATAGTCTCATTCAGCTACCAACCACTCCTTGATCCTTCCCTTCTTAGTGGCTGTTGTTTG
TTGTACTTCCGTTTAGACTTTGTTTTAATGCTTGTACGTACATATGTGAACTCATTGGAAATATTGTGTGTTTAA
TGCAAATGATATATTGAATTGTTTAGCAATTTGTTTTCTTTGCTTAACGATGTTTTTGAGATCTGTGCATGTTAC
TTAATGTAGCTCAATCCATCTTCTGTAATTGCTGTATAGATTGTCATCATATGATTACCACATTTTACTTACGCA
TTTCTTTTGTGATGGACATTAAGACTGTTTTTAGGTTTTGCTATTACAAAATACTACACAGGAGCATCACTATGC
CTGTGTGAAAGTATATGTATGAAAGTTTACCTAGGGTTGATTCCTAGAAGTGGAATTGCAAAGTCATAGGATATT
TATATATTGGTTTTTAATAATACTTCCAAATTGCCCTCCTGTACTATTTACTCAGTATTTTTCTTGAGGTTGATC
TGAGGTCTAACATTGTTATCCTATATCATTTTCATCCCAAGTAGTGATATCTGTGAAATCACAGGTTTGATGTGT
GCTAATTATGTATTCTTCTAATACATATTAAAAGACATAACTATCAAAAC

FIGURE 513

GCCCGTCCCGCCGCCCGCCCGCCAGCCATGAGCTCCACGCAGTTCAACAAGGGCCCCTCGTACGGGCTGTCGGCC
GAGGTCAAGAACCGGCTCCTGTCCAAATATGACCCCCAGAAGGAGGCAGAGCTCCGCACCTGGATCGAGGGACTC
ACCGGCCTCTCCATCGGCCCCGACTTCCAGAAGGGCCTGAAGGATGGAACTATCTTATGCACACTCATGAACAAG
CTACAGCCGGGCTCCGTCCCCAAGATCAACCGCTCCATGCAGAACTGGCACCAGCTAGAAAACCTGTCCAACTTC
ATCAAGGCCATGGTCAGCTACGGCATGAACCCTGTGGACCTGTTCGAGGCCAACGACCTGTTTGAGAGTGGGAAC
ATGACGCAGGTGCAGGTGTCTCTTCTCGCCCTGGCGGGGAAGGCCAAGACTAAGGGGCTGCAGAGCGGGGTGGAC
ATTGGCGTCAAGTACTCGGAGAAGCAGGAGCGGAATTTCGACGATGCCACCATGAAGGCTGGCCAGTGCGTCATC
GGGCTGCAGATGGGCACCAACAAATGCGCCAGCCAGTCGGGCATGACTGCCTACGGCACGAGAAGGCATCTCTAT
GACCCCAAGAACCATATCCTGCCCCCCATGGACCACTCGACCATCAGCCTCCAGATGGGCACGAACAAGTGCGCC
AGCCAGGTGGGCATGACGGCTCCCGGGACCCGGCGGCACATCTATGATACCAAGCTGGGAACCGACAAGTGTGAC
AACTCCTCCATGTCCCTGCAGATGGGCTACACGCAGGGCGCCAACCAGAGCGGCCAGGTCTTCGGCCTGGGCCGG
CAGATATATGACCCCAAGTACTGCCCGCAAGGCACAGTGGCCGATGGGGCTCCCTCGGGCACCGGCGACTGCCCG
GACCCGGGGGAGGTCCCTGAATATCCCCCTTACTACCAGGAGGAGGCCGGCTACTGAGGCTCCCAGCACGCTCTC
TCCCCACATCGTCTTCCCATCTGGGTTTTTGGGTTTTTCTGTGTTTTCATCTTTTTTTTTTTTTTCTTGACCCG
TTCAGTGCTGCCAGTCAACCAAGGGTCTGTGAGTGTCAGCGTGGGATCAGGCAGCAGAGCTTTTTTCCCCTTTGC
CTTGATCCTTCGCAAGGCTGAGCCACTGGGCTGTGGGGGAAGGGGTCAAGGCCATATCCCAATACGTGTAGGGCG
AGGGTCCCTGCTGGCACATTCAGGCTGTGCTGGGAAGAAGAGACCTGGGCTTGGAAGGAACCGGTCCCCGACGGT
TTCTGGTTGCCTCGCCTCTTCCCCCTTTTGTCAGCTGAGCAGTTTGTGGTTTCTATGCCCGCAAGTTTCAGGAAG
TATTCACAAAAGAAAAATACATTTTTTCCCCCAGGGGTGGGGCAAGGACAGTGGAGAGAGTGCTAGGAAATGAGT
CCCCTGGGAAAGGGGACCGGGCCGTGATGTTAAATATCTCCGGCTCCCAAGTGACTGGATTTGCCTAGGACCTTC
AGATCAACAGACTTCAGACCCTCAGACCTGCCCCGGGGCCAGGTGGAGAAAGTGAGGGCCGTACAAGGAAGTGAA
ATTCTGAGTTGTTGGGGCTAAGCCTGACCCCCTCTCCATGCTCCCCGCCCCAACTCACTCTGGCCTCAGTAGATT
TTTTTTTCAGTTGTGGTTGTTGCCCAGGCTGGAGTGCAGTGGCGCCATCTTGGCTCACTGCACCTCCACCTTCCG
GGCTCAAGCGATTCTCCAGCCTCAGCCTCCTGAGTAGCTAGGACTGCAGGTGCTCCACCACGCCCGGCTAATTTT
TGTATTTTTAGTAGAGATGGGGTTTCCCCATGTTGGCCAGGCTGGTCTCGAACTCCTGGCCTCAGGTGTGATCCG
CCCGCCTCCGCCTCCCCAAGCGCTGAGATTACAGGTGTGAGCCACCGTGCCCAGGCCCTCAGTAGGTTTTAAGGA
GTCCCCAGCCCTCCTCCCTTCTGGGCCCGACCAGCTTATACTGCTCCATCTTCCCCGGCCACATGCCCCGCCAAG
TACTGCACAGGGACCCCCCACCCAGGGGCCCTGCTCCGTGAGATAATGTGAAATACGACTGTGGACCAAACGCAA
TAAAACCTTTGTTTGTAGGAAG

FIGURE 514

MSSTQFNKGPSYGLSAEVKNRLLSKYDPQKEAELRTWIEGLTGLSIGPDFQKGLKDGTILCTLMNKLQPGSVPKI
NRSMQNWHQLENLSNFIKAMVSYGMNPVDLFEANDLFESGNMTQVQVSLLALAGKAKTKGLQSGVDIGVKYSEKQ
ERNFDDATMKAGQCVIGLQMGTNKCASQSGMTAYGTRRHLYDPKNHILPPMDHSTISLQMGTNKCASQVGMTAPG
TRRHIYDTKLGTDKCDNSSMSLQMGYTQGANQSGQVFGLGRQIYDPKYCPQGTVADGAPSGTGDCPDPGEVPEYP
PYYQEEAGY

FIGURE 515

AAAAAAAATATATTAATAAAAAAGTTCAAAAAAGGGGGGGGATTGTCATCTCCTTTGGGGTGCGATGGCTTCAAA
TCCAAACTGAGGCTCTCCGGGTGGTAAGGATGTGCGAGGAGGCCTCTTGAAGAACTCCAGGCCTATCATGCTGTC
TCTCCGCTAAAGCCTGAGGCCCGAGGTCAGAGGATTCAGGAAGGCTCTGCAGTCGGCCCAGGAGGGCGGGGTCCC
GTGGTGGAGGCGGGGAGAGGGAAGGACCGCACGGAGCACCAACCCCTGCTCGGCCCCGTACCAGGAAGCGCTGGG
GGGCAGAGGAGCGGAGTTGAGGCAGAAGCCAGGTGAGGCTGGAGTCCTGGGGTAGGCAGGCTGTCGCTGCCGCTG
CCGCTGCCTGAGATGGAAATCGGGGGAGGAAGCTCGCGGAAGAAACAGCGGAGGGTTCGTGGAAAAAAAAGCAAT
GGCTGAGCTAAGGGATGGGGTACCAGGTTAGGGGGAGGAAACGGTAGAGAGAAATAGGTGGGGCTCCCGCGCATG
CTCAATAGGGAAGGGGCGCCCGTGGGGTGCGGACGCATGCGTAGTGGGCTTCTCGGGCGGTGGGGTGGGCGCGGA
ATTTGGAGACCCACTTCGGGAAAGGTAAAATGCGGGCGCAATTTTAGGGTACCTGTGGGACCCGGGCTCTTAGGG
TCTTGACACAGGACGGGCCTGGGCCGAAAGCCCAGGCACGCCCGACCAGAGAGTGTTTCTCCACTCCCGGACTCT
GCCAGTCAGG**ATG**GTGGTGCCTTCGCTGAAGCTTCAGGACCTCATCGAAGAGATTCGCGGGGCCAAGACTCAGGC
CCAGGAGCGGGAGGTGATCCAAAAGGAGTGTGCCCACATCCGGGCCTCCTTCCGCGACGGGGACCCAGTGCACAG
GCACCGGCAGCTGGCCAAACTGCTCTACGTCCACATGTTGGGCTACCCCGCCCACTTTGGACAGATGGAGTGCCT
GAAACTGATCGCCTCCTCCAGATTCACAGACAAGAGGGTGGGCTACCTGGGGGCCATGCTTCTATTGGATGAGAG
GCACGATGCCCACCTGCTCATTACCAACAGCATCAAGAATGACCTGAGCCAGGGGATTCAGCCAGTACAAGGCCT
GGCCTTGTGCACTTTGAGCACCATGGGCTCTGCTGAGATGTGCCGAGACCTGGCCCCAGAGGTGGAGAAACTGCT
CCTGCAGCCCAGTCCCTACGTGCGCAAGAAGGCTATTCTGACTGCAGTGCACATGATCCGGAAGGTCCCTGAACT
CTCCAGTGTCTTCCTCCCACCCTGTGCCCAACTGCTTCATGAGCGTCACCATGGCATCCTGCTGGGCACCATCAC
GCTGATCACGGAGCTCTGCGAACGAAGCCCTGCAGCCCTCAGGCACTTCCGAAAGGTGGTACCCCAGCTGGTACA
CATCCTCCGGACTCTGGTGACAATGGGATACTCCACAGAACACAGCATATCTGGAGTCAGCGACCCCTTCCTGCA
GGTCCAGATACTTCGTCTGCTTCGGATCCTGGGCCGGAACCACGAGGAGAGCAGTGAGACCATGAATGACTTGCT
GGCCCAGGTGGCCACTAACACGGACACCAGCCGAAATGCCGGAAATGCGGTCCTGTTTGAGACAGTACTCACCAT
CATGGATATCCGCTCTGCAGCTGGCCTACGGGTTCTAGCTGTCAACATTCTTGGTCGCTTCCTACTCAACAGTGA
CAGGAACATTAGGTATGTGGCCCTGACATCACTGCTTCGACTGGTGCAGTCTGATCACAGTGCTGTGCAGCGGCA
TCGGCCCACTGTGGTGGAATGTCTACGGGAAACTGATGCCTCCCTCAGCCGGAGAGCCCTGGAACTAAGCCTGGC
TCTGGTAAATAGCTCCAATGTGCGAGCCATGATGCAAGAGCTGCAGGCCTTTCTGGAGTCCTGCCCTCCTGACCT
ACGGGCTGACTGTGCCTCAGGCATCCTGCTGGCTGCAGAGAGGTTTGCTCCAACCAAACGCTGGCACATAGACAC
CATCCTGCATGTGCTGACAACGGCGGGCACCCATGTGCGGGATGATGCAGTGGCCAACCTGACCCAGCTGATTGG
GGGGGCCCAGGAGCTACATGCCTACTCTGTGCGCCGCCTCTACAATGCCCTGGCAGAAGACATTTCCCAGCAACC
ACTGGTGCAGGTGGCAGCCTGGTGCATTGGGGAGTATGGGGACCTCCTGCTGGCAGGGAACTGCGAGGAGATTGA
GCCCCTTCAGGTGGACGAAGAGGAAGTGCTGGCATTGCTGGAAAAGGTGCTGCAGTCCCACATGTCCCTGCCAGC
CACTCGAGGATATGCCCTCACAGCCCTCATGAAGCTCAGCACTCGCCTCTGTGGGGACAACAACCGCATCCGCCA
GGTGGTGTCCATCTACGGGAGCTGCTTGGACGTGGAGCTGCAGCAGCGGGCTGTGGAGTATGACACACTCTTCCG
GAAATACGACCACATGAGGGCTGCCATCCTGGAAAAAATGCCTCTTGTGGAGCGAGATGGCCCTCAGGCTGATGA
GGAAGCAAAGGAAAGCAAAGAAGCAGCCCAGCTTTCAGAAGCAGCCCCAGTGCCCACAGAGCCCCAGGCCTCACA
GCTCCTGGATCTGCTAGATCTCCTGGATGGGGCTTCTGGGGATGTCCAGCATCCTCCCCATCTGGACCCCTCCCC
AGGAGGTGCCCTGGTACACCTGCTTGACCTTCCCTGTGTACCTCCACCCCCAGCTCCCATCCCAGATCTCAAAGT
GTTTGAGCGTGAGGGAGTACAGCTGAATCTGTCTTTCATTCGACCCCCTGAAAACCCTGCTTTGCTGTTAATCAC
CATCACTGCCACCAACTTCTCAGAGGGTGATGTCACCCATTTCATCTGCCAGGCTGCTGTGCCCAAGAGTCTCCA
GCTGCAGCTGCAGGCCCCCAGTGGGAACACAGTTCCAGCTCGGGGTGGCCTTCCTATCACCCAGCTCTTCAGAAT
CCTCAATCCTAACAAGGCCCCCCTGCGGCTAAAGCTGCGCCTCACCTACGACCACTTTCACCAGTCGGTGCAGGA
GATCTTTGAGGTGAACAACTTGCCTGTGGAATCGTGGCAG**TAA**CTGTCTCCACTCACAGCCTGAAATTCTCCTGT
GTCCCAAACCCCAGGGGGCCCCAGCAGCTTCGAACCTACACCTGAGGGCTACCAGCAGGTGGCGCTCTGGCTTTG
CACTGCAAAAACTGGGGACCAGCCCCCTTCTCCCACAAATAAAGCCCAATAAAGCCTGAGAAGTGAGGAAAGCCA
AAAAA

FIGURE 516

MVVPSLKLQDLIEEIRGAKTQAQEREVIQKECAHIRASFRDGDPVHRHRQLAKLLYVHMLGYPAHFGQMECLKLI
ASSRFTDKRVGYLGAMLLLDERHDAHLLITNSIKNDLSQGIQPVQGLALCTLSTMGSAEMCRDLAPEVEKLLLQP
SPYVRKKAILTAVHMIRKVPELSSVFLPPCAQLLHERHHGILLGTITLITELCERSPAALRHFRKVVPQLVHILR
TLVTMGYSTEHSISGVSDPFLQVQILRLLRILGRNHEESSETMNDLLAQVATNTDTSRNAGNAVLFETVLTIMDI
RSAAGLRVLAVNILGRFLLNSDRNIRYVALTSLLRLVQSDHSAVQRHRPTVVECLRETDASLSRRALELSLALVN
SSNVRAMMQELQAFLESCPPDLRADCASGILLAAERFAPTKRWHIDTILHVLTTAGTHVRDDAVANLTQLIGGAQ
ELHAYSVRRLYNALAEDISQQPLVQVAAWCIGEYGDLLLAGNCEEIEPLQVDEEEVLALLEKVLQSHMSLPATRG
YALTALMKLSTRLCGDNNRIRQVVSIYGSCLDVELQQRAVEYDTLFRKYDHMRAAILEKMPLVERDGPQADEEAK
ESKEAAQLSEAAPVPTEPQASQLLDLLDLLDGASGDVQHPPHLDPSPGGALVHLLDLPCVPPPPAPIPDLKVFER
EGVQLNLSFIRPPENPALLLITITATNFSEGDVTHFICQAAVPKSLQLQLQAPSGNTVPARGGLPITQLFRILNP
NKAPLRLKLRLTYDHFHQSVQEIFEVNNLPVESWQ

FIGURE 517

CTGAAGATGGCGGCTGCTGTAGGACGGTTGCTCCGAGCGTCGGTTGCCCGACATGTGAGTGCCATTCCTTGGGGC
ATTTCTGCCACTGCAGCCCTCAGGCCTGCTGCATGTGGAAGAACGAGCTTGACAAATTTATTGTGTTCTGGTTCC
AGTCAAGCAAAATTATTCAGCACCAGTTCCTCATGCCATGCACCTGCTGTCACCCAGCATGCACCCTATTTTAAG
GGTACAGCCGTTGTCAATGGAGAGTTCAAAGACCTAAGCCTTGATGACTTTAAGGGGAAATATTTGGTGCTTTTC
TTCTATCCTTTGGATTTCACCTTTGTGTGTCCTACAGAAATTGTTGCTTTTAGTGACAAAGCTAACGAATTTCAC
GATGTGAACTGTGAAGTTGTCGCAGTCTCAGTGGATTCCCACTTTAGCCATCTTGCCTGGATAAATACACCAAGA
AAGAATGGTGGTTTGGGCCACATGAACATCGCACTCTTGTCAGACTTAACTAAGCAGATTTCCCGAGACTACGGT
GTGCTGTTAGAAGGTTCTGGTCTTGCACTAAGAGGTCTCTTCATAATTGACCCCAATGGAGTCATCAAGCATTTG
AGCGTCAACGATCTCCCAGTGGGCCGAAGCGTGGAAGAAACCCTCCGCTTGGTGAAGGCGTTCCAGTATGTAGAA
ACACATGGAGAAGTCTGCCCAGCGAACTGGACACCGGATTCTCCTACGATCAAGCCAAGTCCAGCTGCTTCCAAA
GAGTACTTTCAGAAGGTAAATCAGTAGATCACCCATGTGTATCTGCACCTTCTCAACTGAGAGAAGAACCACAGT
TGAAACCTGCTTTTATCATTTTCAAGATGGTTATTTGTAGAAGGCAAGGAACCAATTATGCTTGTATTCATAAGT
ATTACTCTAAATGTTTTGTTTTTGTAATTCTGGCTAGGACCTTTTAAACATGGTTAGTTGCTAGTACAGGAATCG
TTTATTGGTAACATCTTGGTGGCTGGCTAGCTAGTTTCTACAGAACATAATTTGCCTCTATAGAAGGCTATTCTT
AGATCATGTCTCAATGGAAACACTCTTCTTTCTTAGCCTTACTTGAATCTTGCCTATAATAAAGTAGAGCAACAC
ACATTGAAAGCTTCTGATCAACGGTCCTGAAATTTTCATCTTGAATGTCTTTGTATTAAACTGAATTTTCTTTTA
AGCTAACAAAGATCATAATTTTCAATGATTAGCCGTGTAACTCCTGCAATGAATGTTTATGTGATTGAAGCAAAT
GTGAATCGTATTATTTTAAAAAGTGGCAGAGTGACTTAACTGATCATGCATGATCCCTCATCCCTGAAATTGAGT
TTATGTAGTCATTTTACTTATTTTATTCATTAGCTAACTTTGTCTATGTATATTTCTAGATATTGATTAGTGTAA
TCGATTATAAAGGATATTTATCAAATCCAGGGATTGCATTTTGAAATTATAATTATTTTCTTTGCTGAAGTATTC
ATTGTAAAACATACAAATAACATATTTAAACAAAAAAAAAAA

FIGURE 518

MAAAVGRLLRASVARHVSAIPWGISATAALRPAACGRTSLTNLLCSGSSQAKLFSTSSSCHAPAVTQHAPYFKGT
AVVNGEFKDLSLDDFKGKYLVLFFYPLDFTFVCPTEIVAFSDKANEFHDVNCEVVAVSVDSHFSHLAWINTPRKN
GGLGHMNIALLSDLTKQISRDYGVLLEGSGLALRGLFIIDPNGVIKHLSVNDLPVGRSVEETLRLVKAFQYVETH
GEVCPANWTPDSPTIKPSPAASKEYFQKVNQ

FIGURE 519

AGGCGCTGCGGCCGTCCCGGGCCGTGACTCCTCCTTTCCCCCGCCCCGCCTCCGTTCGGAGAGCCGGCGGGCGGG
CGCCTCTCGGCCAGGTACGCGGCCGGCTGGGATAGGGGTCGCGGGCGGGCTTTGGTCGCGCAGCAGCCGGTCCTC
CCCGGAGGTAGGCGGGCGCGGGCCCTGTTGGGTCTTTGGGACGCGGGTCCCGCTGGGGCCGGGGATGCTCCTCTC
TGTGAGCGCGGTCCCGTCCCCCCCTGTCCCCGGGCGGGCGCACGGGGGTCTAACCTTGGGGGGCGGCGCTCCCGC
CTGTCCCGGGTGCCGGGGTTCGCGTCCCGCGGGGCCTTCCTCGCTCTTTGTCTCTTCTGAGTGAACTTGATGACC
CCCTTCTTCCAGGAAGCGCCTCTTGGACGCGTGTGACCG**ATG**CCCAGATTGCACGACCACTTCTGGAGCTGCTCC
TGTGCGCACAGCGCGAGGCGCCGAGGCCCCCCGCGAGCCAGCACCGCGGGGCTGCCGCCCAAGGTTGGGGAGATG
ATCAACGTTTCCGTGTCCGGGCCCTCCCTGCTGGCGGCCCACGGTGCCCCGGACGCTGACCCCGCGCCCAGGGGC
CGCAGTGCTGCGATGAGCGGCCCCGAGCCCGGCAGCCCCTACCCCAACACCTGGCATCATCGCCTGTTGCAGAGG
AGCCTCGTGCTCTTCTCGGTTGGGGTGGTCCTAACCCTGGTGCTCAACCTGCTGCAGATCCAGAGGAATGTCACT
CTCTTCCCCGAGGAGGTGATCGCCACCATCTTTTCCTCCGCCTGGTGGGTCCCTCCCTGCTGCGGGACAGCAGCT
GCTGTTGTTGGCCTACTGTACCCCTGTATCGACAGTCACCTCGGAGAACCCCACAAATTTAAGAGAGAATGGGCC
AGTGTCATGCGCTGCATAGCAGGTTTTGGTGGCATTAACCACGCCAGTGCTAAATTGGATTTTGCCAATAATGTC
CAGCTGTCCTTGACTTTAGCAGCCCTATCTTTGGGCCTTTGGTGGACATTTGATCGTTCCAGAAGTGGCCTTGGG
CTGGGGATCACCATAGCTTTTCTAGCTACGCTGATCACGCAGTTTCTCGTGTATAATGGTGTCTATCAGTATACG
TCCCCAGATTTCCTCTATATTCGTTCTTGGCTCCCTTGTATATTTTTCTCAGGAGGCGTCACGGTGGGGAACATA
GGACGACAGTTAGCTATGGGTGTTCCTGAAAAGCCCCATAGTGAT**TGA**GTCTTCAAAACCACCGATTCTGAGAGC
AAGGAAGATTTTGGAAGAAAATCTGACTGTGGATTATGACAAAGATTATCTTTTTTCTTAAGTAATCTATTTAGA
TCGGGCTGACTGTACAAATGACTCCTGGAAAAAACTCGTCACCTATCTAGAAAAGTCAAGAATAGGGAGGTGGAG
AATGATGACTTACCCTGAAGTCTTCCCTTGCTACCCACACTGGCGCCTGTCTGTGCCCTGGAGCATTCTGCCCAG
CCTACGTGGGTTCAGTCAGGTGCCACCTTCCCAAGTATTCGATTTCATTCATGTGATTAAAACAAGTTGCCATAT
TTCAAAGCCTTGAGCTAAGACTCAATTACCAACCCGCAGTTTTGTGTCAGTGCCCAAAGGAGGGAGGTTGATGGT
GCTTAACAAACATGAAGTATGGTGTAATAGGAATAATATTTATCCAAAAGATTTTTAAAAATAGGGCTGTGTTTA
AAGAAGGAATCAAAACAAGAAAAGCAGCAGTGATTATAGAGAGGTCACACTCTAAGTGGGGTCGCGGCGTGGCCA
CGCTTCACGGTCACGCTCGTCCGTCCTGCAGTGGCGTGTTTACATGGTCACACGTGTGTGTATCACCAGTGGGTC
AACTGCTTGTCATTCCTCCCGCGGCAGTGTTGTGTAGACAATCTTACTGAGCAAAAGGCAATGAAAAGTCTTGGG
CTCCCACACTGCGATATATTGGAATTCCCACCTCAGTTTATGAAGTTTATTTCGAAATCCATAGTCATCTAAGAA
TGAATACCTGTCTGCCATGTATTTCAATCTTAGTGAGCCAAAATTGTTTGTTTGTTACTACAGAATAGAGATGAC
TGTTTTTTGGCACAGCCCTATGGAATTTGCAATCTGTGATTGCCTTGTAAAAAGGAGAGTGCATATGGCACTGCA
TTAAACGTGTGGTGTTTCTAGTCAATGATATTGGTGAGCACAATGTATTCATTTAATGGCATAGACCATACCAGA
CCTAATTTGCAAGTATTGGGTCTTCAAACTTCAAGTGCAATGTATTATGAAAACCAATCTGAGCCTTGTATCTCT
TAAATATTTATTCCTTCTAACGTGTGAGATGTCCCGAGAGAAGGGTTCTCCATTCATTTCAGTGCTGCCTGGAGG
AAACTCGGCAATGATTTCTTCAGTTGTGAAGTTCCTTTCGGGTTACAACCTCCACTGGAACCCTCAACCTTCGAA
ATACTCCAGTTTTGGGGGTTGGGGCCATTTACTTATAAATTTACCGCCGGGTTTTTGGAATCTACATGTCTTGGG
GGCGGGCTCAAATTCTTCGAAAGTGGTTGGATTAAAA

FIGURE 520

MPRLHDHFWSCSCAHSARRRGPPRASTAGLPPKVGEMINVSVSGPSLLAAHGAPDADPAPRGRSAAMSGPEPGSP
YPNTWHHRLLQRSLVLFSVGVVLTLVLNLLQIQRNVTLFPEEVIATIFSSAWWVPPCCGTAAAVVGLLYPCIDSH
LGEPHKFKREWASVMRCIAGFGGINHASAKLDFANNVQLSLTLAALSLGLWWTFDRSRSGLGLGITIAFLATLIT
QFLVYNGVYQYTSPDFLYIRSWLPCIFFSGGVTVGNIGRQLAMGVPEKPHSD

FIGURE 521

AGGCGCTGCGGCCGTCCCGGGCCGTGACTCCTCCTTTCCCCCGCCCCGCCTCCGTTCGGAGAGCCGGCGGGCGGG
CGCCTCTCGGCCAGGTACGCGGCCGGCTGGGATAGGGGTCGCGGGCGGGCTTTGGTCGCGCAGCAGCCGGTCCTC
CCCGGAGGTAGGCGGGCGCGGGCCCTGTTGGGTCTTTGGGACGCGGGTCCCGCTGGGGCCGGGGATGCTCCTCTC
TGTGAGCGCGGTCCCGTCCCCCCCTGTCCCCGGGCGGGCGCACGGGGGTCTAACCTTGGGGGGCGGCGCTCCCGC
CTGTCCCGGGTGCCGGGGTTCGCGTCCCGCGGGGCCTTCCTCGCTCTTTGTCTCTTCTGAGTGAACTTGATGACC
CCCTTCTTCCAGGAAGCGCCTCTTGGACGCGTGTGACCG**ATG**CCCAGATTGCACGACCACTTCTGGAGCTGCTCC
TGTGCGCACAGCGCGAGGCGCCGAGGCCCCCCGCGAGCCAGCACCGCGGGGCTGCCGCCCAAGGTTGGGGAGATG
ATCAACGTTTCCGTGTCCGGGCCCTCCCTGCTGGCGGCCCACGGTGCCCCGGACGCTGACCCCGCGCCCAGGGGC
CGCAGTGCTGCGATGAGCGGCCCCGAGCCCGGCAGCCCCTACCCCAACACCTGGCATCATCGCCTGTTGCAGAGG
AGCCTCGTGCTCTTCTCGGTTGGGGTGGTCCTAACCCTGGTGCTCAACCTGCTGCAGATCCAGAGGAATGTCACT
CTCTTCCCCGAGGAGGTGATCGCCACCATCTTTTCCTCCGCCTGGTGGGTCCCTCCCTGCTGCGGGACAGCAGCT
GCTGTTGTTGGCCTACTGTACCCCTGTATCGACAGTCACCTCGGAGAACCCCACAAATTTAAGAGAGAATGGGCC
AGTGTCATGCGCTGCATAGCAGGTTTTGGTGGCATTAACCACGCCAGTGCTAAATTGGATTTTGCCAATAATGTC
CAGCTGTCCTTGACTTTAGCAGCCCTATCTTTGGGCCTTTGGTGGACATTTGATCGTTCCAGAAGTGGCCTTGGG
CTGGGGATCACCATAGCTTTTCTAGCTACGCTGATCACGCAGTTTCTCGTGTATAATGGTGTCTATCAGTATACG
TCCCCAGATTTCCTCTATATTCGTTCTTGGCTCCCTTGTATATTTTTCTCAGGAGGCGTCACGGTGGGGAACATA
GGACGACAGTTAGCTATGGGTGTTCCTGAAAAGCCCCATAGTGAT**TGA**GTCTTCAAAACCACCGATTCTGAGAGC
AAGGAAGATTTTGGAAGAAAATCTGACTGTGGATTATGACAAAGATTATCTTTTTTCTTAAGTAATCTATTTAGA
TCGGGCTGACTGTACAAATGACTCCTGGAAAAAACTCGTCACCTATCTAGAAAAGTCAAGAATAGGGAGGTGGAG
AATGATGACTTACCCTGAAGTCTTCCCTTGCTACCCACACTGGCGCCTGTCTGTGCCCTGGAGCATTCTGCCCAG
CCTACGTGGGTTCAGTCAGGTGCCACCTTCCCAAGTATTCGATTTCATTCATGTGATTAAAACAAGTTGCCATAT
TTCAAAGCCTTGAGCTAAGACTCAATTACCAACCCGCAGTTTTGTGTCAGTGCCCAAAGGAGGGAGGTTGATGGT
GCTTAACAAACATGAAGTATGGTGTAATAGGAATAATATTTATCCAAAAGATTTTTAAAAATAGGGCTGTGTTTA
AAGAAGGAATCAAAACAAGAAAAGCAGCAGTGATTATAGAGAGGTCACACTCTAAGTGGGGTCGCGGCGTGGCCA
CGCTTCACGGTCACGCTCGTCCGTCCTGCAGTGGCGTGTTTACATGGTCACACGTGTGTGTATCACCAGTGGGTC
AACTGCTTGTCATTCCTCCCGCGGCAGTGTTGTGTAGACAATCTTACTGAGCAAAAGGCAATGAAAAGTCTTGGG
CTCCCACACTGCGATATATTGGAATTCCCACCTCAGTTTATGAAGTTTATTTCGAAATCCATAGTCATCTAAGAA
TGAATACCTGTCTGCCATGTATTTCAATCTTAGTGAGCCAAAATTGTTTGTTTGTTACTACAGAATAGAGATGAC
TGTTTTTTGGCACAGCCCTATGGAATTTGCAATCTGTGATTGCCTTGTAAAAAGGAGAGTGCATATGGCACTGCA
TTAAACGTGTGGTGTTTCTAGTCAATGATATTGGTGAGCACAATGTATTCATTTAATGGCATAGACCATACCAGA
CCTAATTTGCAAGTATTGGGTCTTCAAACTTCAAGTGCAATGTATTATGAAAACCAATCTGAGCCTTGTATCTCT
TAAATATTTATTCCTTCTAACGTGTGAGATGTCCCGAGAGAAGGGTTCTCCATTCATTTCAGTGCTGCCTGGAGG
AAACTCGGCAATGATTTCTTCAGTTGTGAAGTTCCTTTCGGGTTACAACCTCCACTGGAACCCTCAACCTTCGAA
ATACTCCAGTTTTGGGGGTTGGGGCCATTTACTTATAAATTTACCGCCGGGTTTTTGGAATCTACATGTCTTGGG
GGCGGGCTCAAATTCTTCGAAAGTGGTTGGATTAAAA

FIGURE 522

MPRLHDHFWSCSCAHSARRRGPPRASTAGLPPKVGEMINVSVSGPSLLAAHGAPDADPAPRGRSAAMSGPEPGSP
YPNIWHHRLLQRSLVLFSVGVVLTLVLNLLQIQRNVTLFPEEVIATIFSSAWWVPPCCGTAAAVVGLLYPCIDSH
LGEPHKFKREWASVMRCIAGFGGINHASAKLDFANNVQLSLTLAALSLGLWWTFDRSRSGLGLGITIAFLATLIT
QFLVYNGVYQYTSPDFLYIRSWLPCIFFSGGVTVGNIGRQLAMGVPEKPHSD

FIGURE 523

ACTTGGCCTTACACTCCGCTCGGCTCACCATGTGTCACTCTCGCAGCTGCCACCCGACCATGACCATCCTGCAGG
CCCCGACCCCGGCCCCCTCCACCATCCCGGGACCCCGGCGGGGCTCCGGTCCTGAGATCTTCACCTTCGACCCTC
TCCCGGAGCCCGCAGCGGCCCCTGCCGGGCGCCCCAGCGCCTCTCGCGGGCACCGAAAGCGCAGCCGCAGGGTCT
CTCTACCCTCGAGTGGTGAGTATCGCCGAAGTGGGCATTCGCGGTGTGCGCTGCCCTGGAGTCACTGGGGAACGA
CCCGACTCCAGAGCCTCGACCTGACCTGTCTCCTGTTTTGTCTCCCCTTAGTCCGGCGCCAGCTGCCAGTCGAGG
AACCGAACCCAGCCAAAAGGCTTCTCTTTCTGCTGCTCACCATCGTCTTCTGCCAGATCCTGATGGCTGAAGAGG
GTGTGCCGGCGCCCCTGCCTCCAGAGGACGCCCCTAACGCCGCATCCCTGGCGCCCACCCCTGTGTCCCCCGTCC
TCGAGCCCTTTAATCTGACTTCGGAGCCCTCGGACTACGCTCTGGACCTCAGCACTTTCCTCCAGCAACACCCGG
CCGCCTTCTAACTGTGACTCCCCGCACTCCCCAAAAAGAATCCGAAAAACCACAAAGAAACACCAGGCGTACCTG
GTGCGCGAGAGCGTATCCCCAACTGGGACTTCCGAGGCAACTTGAACTCAGAACACTACAGCGGAGACGCCACCC
GGTGCTTGAGGCGGGACCGAGGCGCACAGAGACCGAGGCGCATAGAGACCGAGGCACAGCCCAGCTGGGCTAGGC
CGGTGGGAAGGAGAGCGTCGTTAATTTATTTCTTATTGCTCCTAATTAATATTTATATGTATTTATGTACGTCCT
CCTAGGTGATGGAGATGTGTACGTAATATTTATTTTAACTTATGCAAGGGTGTGAGATGTTCCCTCTGCTGTAAA
TGCAGGTCTCTTGGTATTTATTGAGCTTTGTGGGACTGGTGGAAGCAGGACACCTGGAACTGCGGCAAAGTAGGA
GAAGAAATGGGGAGGACTCGGGTGGGGGAGGACGTCCCGGCTGGGATGAAGTCTGGTGGTGGGTCGTAAGTTTAG
GAGGTGACTGCATCCTCCAGCATCTCAACTCCGTCTGTCTACTGTGTGAGACTTCGGCGGACCATTAGGAATGAG
ATCCGTGAGATCCTTCCATCTTCTTGAAGTCGCCTTTAGGGTGGCTGCGAGGTAGAGGGTTGGGGGTTGGTGGGC
TGTCACGGAGCGACTGTCGAGATCGCCTAGTATGTTCTGTGAACACAAATAAAATTGATTTACTGTCTGC

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FIGURE 524

MCHSRSCHPTMTILQAPTPAPSTIPGPRRGSGPEIFTFDPLPEPAAAPAGRPSASRGHRKRSRRVSLPSSGEYRR
SGHSRCALPWSHWGTTRLQSLDLTCLLFCLPLVRRQLPVEEPNPAKRLLFLLLTIVFCQILMAEEGVPAPLPPED
APNAASLAPTPVSPVLEPFNLTSEPSDYALDLSTFLQQHPAAF

FIGURE 525

GTGGAATTCATGGCATCTACTTCGTATGACTATTGCAGAGTGCCCATGGAAGACGGGGATAAGCGCTGTAAGCTT
CTGCTGGGGATAGGAATTCTGGTGCTCCTGATCATCGTGATTCTGGGGGTGCCCTTGATTATCTTCACCATCAAG
GCCAACAGCGAGGCCTGCCGGGACGGCCTTCGGGCAGTGATGGAGTGTCGCAATGTCACCCATCTCCTGCAACAA
GAGCTGACCGAGGCCCAGAAGGGCTTTCAGGATGTGGAGGCCCAGGCCGCCACCTGCAACCACACTGTGATGGCC
CTAATGGCTTCCCTGGATGCAGAGAAGGCCCAAGGACAAAAGAAAGTGGAGGAGCTTGAGGGAGAGATCACTACA
TTAAACCATAAGCTTCAGGACGCGTCTGCAGAGGTGGAGCGACTGAGAAGAGAAAACCAGGTCTTAAGCGTGAGA
ATCGCGGACAAGAAGTACTACCCCAGCTCCCAGGACTCCAGCTCCGCTGCGGCGCCCCAGCTGCTGATTGTGCTG
CTGGGCCTCAGCGCTCTGCTGCAGTGAGATCCCAGGAAGCTGGCACATCTTGGAAGGTCCGTCCTGCTCGGCTTT
TCGCTTGAACATTCCCTTGATCTCATCAGTTCTGAGCGGGTCATGGGGCAACACGGTTAGCGGGGAGAGCACGGG
GTAGCCGGAGAAGGGCCTCTGGAGCAGGTCTGGAGGGGCCATGGGGCAGTCCTGGGTGTGGGGACACAGTCGGGT
TGACCCAGGGCTGTCTCCCTCCAGAGCCTCCCTCCGGACAATGAGTCCCCCCTCTTGTCTCCCACCCTGAGATTG
GGCATGGGGTGCGGTGTGGGGGGCATGTGCTGCCTGTTGTTATGGGTTTTTTTTGCGGGGGGGGTTGCTTTTTTC
TGGGGTCTTTGAGCTCCAAAAAATAAACACTTCCTTTGAGGGAGAGCAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAA

FIGURE 526

MASTSYDYCRVPMEDGDKRCKLLLGIGILVLLIIVILGVPLIIFTIKANSEACRDGLRAVMECRNVTHLLQQELT
EAQKGFQDVEAQAATCNHTVMALMASLDAEKAQGQKKVEELEGEITTLNHKLQDASAEVERLRRENQVLSVRIAD
KKYYPSSQDSSSAAAPQLLIVLLGLSALLQ

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FIGURE 527

AGCTCGGTCCTGCTGGAGGCCACGGGTGCCACACACTCGGTCCCGACATGATGGCGAGCATGCGAGTGGTGAAGG
AGCTGGAGGATCTTCAGAAGAAGCCTCCCCCATACCTGCGGAACCTGTCCAGCGATGATGCCAATGTCCTGGTGT
GGCACGCTCTCCTCCTACCCGACCAACCTCCCTACCACCTGAAAGCCTTCAACCTGCGCATCAGCTTCCCGCCGG
AGTATCCGTTCAAGCCTCCCATGATCAAATTCACAACCAAGATCTACCACCCCAACGTGGACGAGAACGGACAGA
TTTGCCTGCCCATCATCAGCAGTGAGAACTGGAAGCCTTGCACCAAGACTTGCCAAGTCCTGGAGGCCCTCAATG
TGCTGGTGAATAGACCGAATATCAGGGAGCCCCTGCGGATGGACCTCGCTGACCTGCTGACACAGAATCCGGAGC
TGTTCAGAAAGAATGCCGAAGAGTTCACCCTCCGATTCGGAGTGGACCGGCCCTCCTAACTCATGTTCTGACCCT
CTGTGCACTGGATCCTCGGCATAGCGGACGGACACACCTCATGGACTGAGGCCAGAGCCCCCTGTGGCCCATTCC
CCATTCATTTTTCCCTTCTTAGGTTGTTAGTCATTAGTTTGTGTGTGTGTGTGGTGGAGGGAAGGGAGCTATGAG
TGTGTGTGTTGTGTATGGACTCACTCCCAGGTTCACCTGGCCACAGGTGCACCCTTCCCACACCCTTTACATTCC
CCAGAGCCAAGGGAGTTTAAGTTTGCAGTTACAGGCCAGTTCTCCAGCTCTCCATCTTAGAGAGACAGGTCACCT
TGCAGGCCTGCTTGCAGGAAATGAATCCAGCAGCCAACTCGAATCCCCCTAGGGCTCAGGCACTGAGGGCCTGGG
GACAGTGGAGCATATGGGTGGGAGACAGATGGAGGGTACCCTATTTACAACTGAGTCAGCCAAGCCACTGATGGG
AATATACAGATTTAGGTGCTAAACCGTTTATTTTCCACGGATGAGTCACAATCTGAAGAATCAAACTTCCATCCT
GAAAATCTATATGTTTCAAAACCACTTGCCATCCTGTTAGATTGCCAGTTCCTGGGACCAGGCCTCAGACTGTGA
AGTATATATCCTCCAGCATTCAGTCCAGGGGGAGCCACGGAAACCATGTTCTTGCTTAAGCCATTAAAGTCAGAG
ATGAAAAAAAAAAAAAAAAAAA

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FIGURE 528

MMASMRVVKELEDLQKKPPPYLRNLSSDDANVLVWHALLLPDQPPYHLKAFNLRISFPPEYPFKPPMIKFTTKIY
HPNVDENGQICLPIISSENWKPCTKTCQVLEALNVLVNRPNIREPLRMDLADLLTQNPELFRKNAEEFTLRFGVD
RPS

FIGURE 529A

GCGCGACCGTCCCGGGGGTGGGGCCGGGCGCAGCGGCGAGAGGAGGCGAAGGTGGCTGCGGTAGCAGCAGCGCGG
CAGCCTCGGACCCAGCCCGGAGCGCAGGGCGGCCGCTGCAGGTCCCCGCTCCCCTCCCCGTGCGTCCGCCCATGG
CCGCCGCCGGGCAGCTGTGCTTGCTCTACCTGTCGGCGGGGCTCCTGTCCCGGCTCGGCGCAGCCTTCAACTTGG
ACACTCGGGAGGACAACGTGATCCGGAAATATGGAGACCCCGGGAGCCTCTTCGGCTTCTCGCTGGCCATGCACT
GGCAACTGCAGCCCGAGGACAAGCGGCTGTTGCTCGTGGGGGCCCCGCGCGGAGAAGCGCTTCCACTGCAGAGAG
CCAACAGAACGGGAGGGCTGTACAGCTGCGACATCACCGCCCGGGGGCCATGCACGCGGATCGAGTTTGATAACG
ATGCTGACCCCACGTCAGAAAGCAAGGAAGATCAGTGGATGGGGGTCACCGTCCAGAGCCAAGGTCCAGGGGGCA
AGGTCGTGACATGTGCTCACCGATATGAAAAAAGGCAGCATGTTAATACGAAGCAGGAATCCCGAGACATCTTTG
GGCGGTGTTATGTCCTGAGTCAGAATCTCAGGATTGAAGACGATATGGATGGGGGAGATTGGAGCTTTTGTGATG
GGCGATTGAGAGGCCATGAGAAATTTGGCTCTTGCCAGCAAGGTGTAGCAGCTACTTTTACTAAAGACTTTCATT
ACATTGTATTTGGAGCCCCGGGTACTTATAACTGGAAAGGGATTGTTCGTGTAGAGCAAAAGAATAACACTTTTT
TTGACATGAACATCTTTGAAGATGGGCCTTATGAAGTTGGTGGAGAGACTGAGCATGATGAAAGTCTCGTTCCTG
TTCCTGCTAACAGTTACTTAGGTTTTTCTTTGGACTCAGGGAAAGGTATTGTTTCTAAAGATGAGATCACTTTTG
TATCTGGTGCTCCCAGAGCCAATCACAGTGGAGCCGTGGTTTTGCTGAAGAGAGACATGAAGTCTGCACATCTCC
TCCCTGAGCACATATTCGATGGAGAAGGTCTGGCCTCTTCATTTGGCTATGATGTGGCGGTGGTGGACCTCAACA
AGGATGGGTGGCAAGATATAGTTATTGGAGCCCCACAGTATTTTGATAGAGATGGAGAAGTTGGAGGTGCAGTGT
ATGTCTACATGAACCAGCAAGGCAGATGGAATAATGTGAAGCCAATTCGTCTTAATGGAACCAAAGATTCTATGT
TTGGCATTGCAGTAAAAAATATTGGAGATATTAATCAAGATGGCTACCCAGATATTGCAGTTGGAGCTCCGTATG
ATGACTTGGGAAAGGTTTTTATCTATCATGGATCTGCAAATGGAATAAATACCAAACCAACACAGGTTCTCAAGG
GTATATCACCTTATTTTGGATATTCAATTGCTGGAAACATGGACCTTGATCGAAATTCCTACCCTGATGTTGCTG
TTGGTTCCCTCTCAGATTCAGTAACTATTTTCAGATCCCGGCCTGTGATTAATATTCAGAAAACCATCACAGTAA
CTCCTAACAGAATTGACCTCCGCCAGAAAACAGCGTGTGGGGCGCCTAGTGGGATATGCCTCCAGGTTAAATCCT
GTTTTGAATATACTGCTAACCCCGCTGGTTATAATCCTTCAATATCAATTGTGGGCACACTTGAAGCTGAAAAAG
AAAGAAGAAAATCTGGGCTATCCTCAAGAGTTCAGTTTCGAAACCAAGGTTCTGAGCCCAAATATACTCAAGAAC
TAACTCTGAAGAGGCAGAAACAGAAAGTGTGCATGGAGGAAACCCTGTGGCTACAGGATAATATCAGAGATAAAC
TGCGTCCCATTCCCATAACTGCCTCAGTGGAGATCCAAGAGCCAAGCTCTCGTAGGCGAGTGAATTCACTTCCAG
AAGTTCTTCCAATTCTGAATTCAGATGAACCCAAGACAGCTCATATTGATGTTCACTTCTTAAAAGAGGGATGTG
GAGACGACAATGTATGTAACAGCAACCTTAAACTAGAATATAAATTTTGCACCCGAGAAGGAAATCAAGACAAAT
TTTCTTATTTACCAATTCAAAAAGGTGTACCAGAACTAGTTCTAAAAGATCAGAAGGATATTGCTTTAGAAATAA
CAGTGACAAACAGCCCTTCCAACCCAAGGAATCCCACAAAAGATGGCGATGACGCCCATGAGGCTAAACTGATTG
CAACGTTTCCAGACACTTTAACCTATTCTGCATATAGAGAACTGAGGGCTTTCCCTGAGAAACAGTTGAGTTGTG
TTGCCAACCAGAATGGCTCGCAAGCTGACTGTGAGCTCGGAAATCCTTTTAAAAGAAATTCAAATGTCACTTTTT
ATTTGGTTTTAAGTACAACTGAAGTCACCTTTGACACCCCATATCTGGATATTAATCTGAAGTTAGAAACAACAA
GCAATCAAGATAATTTGGCTCCAATTACAGCTAAAGCAAAAGTGGTTATTGAACTGCTTTTATCGGTCTCGGGAG
TTGCTAAACCTTCCCAGGTGTATTTTGGAGGTACAGTTGTTGGCGAGCAAGCTATGAAATCTGAAGATGAAGTGG
GAAGTTTAATAGAGTATGAATTCAGGGTAATAAACTTAGGTAAACCTCTTACAAACCTCGGCACAGCAACCTTGA
ACATTCAGTGGCCAAAAGAAATTAGCAATGGGAAATGGTTGCTTTATTTGGTGAAAGTAGAATCCAAAGGATTGG
AAAAGGTAACTTGTGAGCCACAAAAGGAGATAAACTCCCTGAACCTAACGGAGTCTCACAACTCAAGAAAGAAAC
GGGAAATTACTGAAAAACAGATAGATGATAACAGAAAATTTTCTTTATTTGCTGAAAGAAAATACCAGACTCTTA
ACTGTAGCGTGAACGTGAACTGTGTGAACATCAGATGCCCGCTGCGGGGGCTGGACAGCAAGGCGTCTCTTATTT
TGCGCTCGAGGTTATGGAACAGCACATTTCTAGAGGAATATTCCAAACTGAACTACTTGGACATTCTCATGCGAG
CCTTCATTGATGTGACTGCTGCTGCCGAAAATATCAGGCTGCCAAATGCAGGCACTCAGGTTCGAGTGACTGTGT
TTCCCTCAAAGACTGTAGCTCAGTATTCGGGAGTACCTTGGTGGATCATCCTAGTGGCTATTCTCGCTGGGATCT
TGATGCTTGCTTTATTAGTGTTTATACTATGGAAGTGTGGTTTCTTCAAGAGAAATAAGAAAGATCATTATGATG
CCACATATCACAAGGCTGAGATCCATGCTCAGCCATCTGATAAAGAGAGGCTTACTTCTGATGCATAGTATTGAT
CTACTTCTGTAATTGTGTGGATTCTTTAAACGCTCTAGGTACGATGACAGTGTTCCCCGATACCATGCTGTAAGG
ATCCGGAAAGAAGAGCGAGAGATCAAAGATGAAAAGTATATTGATAACCTTGAAAAAAAACAGTGGATCACAAAG
TGGAACAGAAATGAAAGCTACTCATAGCGGGGGCCTAAAAAAAAAAAAGCTTCACAGTACCCAAACTGCTTTTTC

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FIGURE 529B

CAACTCAGAAATTCAATTTGGATTTAAAAGCCTGCTCAATCCCTGAGGACTGATTTCAGAGTGACTACACACAGT
ACGAACCTACAGTTTTAACTGTGGATATTGTTACGTAGCCTAAGGCTCCTGTTTTGCACAGCCAAATTTAAAACT
GTTGGAATGGATTTTTCTTTAACTGCCGTAATTTAACTTTCTGGGTTGCCTTTGTTTTTGGCGTGGCTGACTTAC
ATCATGTGTTGGGGAAGGGCCTGCCCAGTTGCACTCAGGTGACATCCTCCAGATAGTGTAGCTGAGGAGGCACCT
ACACTCACCTGCACTAACAGAGTGGCCGTCCTAACCTCGGGCCTGCTGCGCAGACGTCCATCACGTTAGCTGTCC
CACATCACAAGACTATGCCATTGGGGTAGTTGTGTTTCAACGGAAAGTGCTGTCTTAAACTAAATGTGCAATAGA
AGGTGATGTTGCCATCCTACCGTCTTTTCCTGTTTCCTAGCTGTGTGAATACCTGCTCACGTCAAATGCATACAA
GTTTCATTCTCCCTTTCACTAAAAACACACAGGTGCAACAGACTTGAATGCTAGTTATACTTATTTGTATATGGT
ATTTATTTTTTCTTTTCTTTACAAACCATTTTGTTATTGACTAACAGGCCAAAGAGTCTCCAGTTTACCCTTCAG
GTTGGTTTAATCAATCAGAATTAGAATTAGAGCATGGGAGGGTCATCACTATGACCTAAATTATTTACTGCAAAA
AGAAAATCTTTATAAATGTACCAGAGAGAGTTGTTTTAATAACTTATCTATAAACTATAACCTCTCCTTCATGAC
AGCCTCCACCCCACAACCCAAAAGGTTTAAGAAATAGAATTATAACTGTAAAGATGTTTATTTCAGGCATTGGAT
ATTTTTTACTTTAGAAGCCTGCATAATGTTTCTGGATTTACATACTGTAACATTCAGGAATTCTTGGAGAAGATG
GGTTTATTCACTGAACTCTAGTGCGGTTTACTCACTGCTGCAAATACTGTATATTCAGGACTTGAAAGAAATGGT
GAATGCCTATGGAACTAGTGGATCCAAACTGATCCAGTATAAGACTACTGAATCTGCTACCAAAACAGTTAATCA
GTGAGTCGAGTGTTCTATTTTTTGTTTTGTTTCCTCCCCTATCTGTATTCCCAAAAATTACTTTGGGGCTAATTT
AACAAGAACTTTAAATTGTGTTTTAATTGTAAAAATGGCAGGGGGTGGAATTATTACTCTATACATTCAACAGAG
ACTGAATAGATATGAAAGCTGATTTTTTTTAATTACCATGCTTCACAATGTTAAGTTATATGGGGAGCAACAGCA
AACAGGTGCTAATTTGTTTTGGATATAGTATAAGCAGTGTCTGTGTTTTGAAAGAATAGAACACAGTTTGTAGTG
CCACTGTTGTTTTGGGGGGGGCTTTTTTTCTTTTTCCGGAAAATCCTTAAACCTTAAGATACTAAGGACGTTGTT
TTGGTTGTACTTGGAATTCTTAGTCACAAAATATATTTTGTTTACAAAAATTTCTGTAAAACAGGTTATAACAGT
GTTTAAAGTCTCAGTTTCTTGCTTGGGGAACTTGTGTCCCTAATGTGTTAGATTGCTAGATTGCTAAGGAGCTGA
TACTTGACAGTTTTTTAGACCTGTGTTACTAAAAAAAAAGATGAATGTCGGAAAAGGGTGTTGGGAGGGTGGTCAA
CAAAGAAACAAAGATGTTATGGTGTTTAGACTTATGGTTGTTAAAAATGTCATCTCAAGTCAAGTCACTGGTCTG
TTTGCATTTGATACATTTTTGTACTAACTAGCATTGTAAAATTATTTCATGATTAGAAATTACCTGTGGATATTT
GTATAAAAGTGTGAAATAAATTTTTTATAAAAGTGTTCATTGTTTCGTAACACAGCATTGTATATGTGAAGCAAA
CTCTAAAATTATAAATGACAACCTGAATTATCTATTTCATCAAAAAAAAAAAAAAAAAAAA

FIGURE 530

MAAAGQLCLLYLSAGLLSRLGAAFNLDTREDNVIRKYGDPGSLFGFSLAMHWQLQPEDKRLLLVGAPRGEALPLQ
RANRTGGLYSCDITARGPCTRIEFDNDADPTSESKEDQWMGVTVQSQGPGGKVVTCAHRYEKRQHVNTKQESRDI
FGRCYVLSQNLRIEDDMDGGDWSFCDGRLRGHEKFGSCQQGVAATFTKDFHYIVFGAPGTYNWKGIVRVEQKNNT
FFDMNIFEDGPYEVGGETEHDESLVPVPANSYLGFSLDSGKGIVSKDEITFVSGAPRANHSGAVVLLKRDMKSAH
LLPEHIFDGEGLASSFGYDVAVVDLNKDGWQDIVIGAPQYFDRDGEVGGAVYVYMNQQGRWNNVKPIRLNGTKDS
MFGIAVKNIGDINQDGYPDIAVGAPYDDLGKVFIYHGSANGINTKPTQVLKGISPYFGYSIAGNMDLDRNSYPDV
AVGSLSDSVTIFRSRPVINIQKTITVTPNRIDLRQKTACGAPSGICLQVKSCFEYTANPAGYNPSISIVGTLEAE
KERRKSGLSSRVQFRNQGSEPKYTQELTLKRQKQKVCMEETLWLQDNIRDKLRPIPITASVEIQEPSSRRRVNSL
PEVLPILNSDEPKTAHIDVHFLKEGCGDDNVCNSNLKLEYKFCTREGNQDKFSYLPIQKGVPELVLKDQKDIALE
ITVTNSPSNPRNPTKDGDDAHEAKLIATFPDTLTYSAYRELRAFPEKQLSCVANQNGSQADCELGNPFKRNSNVT
FYLVLSTTEVTFDTPYLDINLKLETTSNQDNLAPITAKAKVVIELLLSVSGVAKPSQVYFGGTVVGEQAMKSEDE
VGSLIEYEFRVINLGKPLTNLGTATLNIQWPKEISNGKWLLYLVKVESKGLEKVTCEPQKEINSLNLTESHNSRK
KREITEKQIDDNRKFSLFAERKYQTLNCSVNVNCVNIRCPLRGLDSKASLILRSRLWNSTFLEEYSKLNYLDILM
RAFIDVTAAAENIRLPNAGTQVRVTVFPSKTVAQYSGVPWWIILVAILAGILMLALLVFILWKCGFFKRNKKDHY
DATYHKAEIHAQPSDKERLTSDA

FIGURE 531A

GAATTCGTTGTTGGGAAGGACTGGGGAAACAGCTGTAACATTTGCCACCCTCAGAAGCTGCTGGTCCTGTGTCAC
ACCACCTTAGCCTCTTGATCGAGGAAGATTCTCGCTGAAGTCTGTTAATTCTACTTTTTGAGTACTTATGAATAA
CCACGTGTCTTCAAAACCATCTACCATGAAGCTAAAACATACCATCAACCCTATTCTTTTATATTTTATACATTT
TCTAATATCACTTTATACTATTTTAACATACATTCCGTTTTATTTTTTCTCCGAGTCAAGACAAGAAAAATCAAA
CCGAATTAAAGCAAAGCCTGTAAATTCAAAACCTGATTCTGCATACAGATCTGTTAATAGTTTGGATGGTTTGGC
TTCAGTATTATACCCTGGATGTGATACTTTAGATAAAGTTTTTACATATGCAAAAAACAAATTTAAGAACAAAAG
ACTCTTGGGAACACGTGAAGTTTTAAATGAGGAAGATGAAGTACAACCAAATGGAAAAATTTTTAAAAAGGTTAT
TCTTGGACAGTATAATTGGCTTTCCTATGAAGATGTCTTTGTTCGAGCCTTTAATTTTGGAAATGGATTACAGAT
GTTGGGTCAGAAACCAAAGACCAACATCGCCATCTTCTGTGAGACCAGGGCCGAGTGGATGATAGCTGCACAGGC
GTGTTTTATGTATAATTTTCAGCTTGTTACATTATATGCCACTCTAGGAGGTCCAGCCATTGTTCATGCATTAAA
TGAAACAGAGGTGACCAACATCATTACTAGTAAAGAACTCTTACAAACAAAGTTGAAGGATATAGTTTCTTTGGT
CCCACGCCTGCGGCACATCATCACTGTTGATGGAAAGCCACCGACCTGGTCCGACTTCCCCAAGGGCATCATTGT
GCATACCATGGCTGCAGTGGAGGCCCTGGGAGCCAAGGCCAGCATGGAAAACCAACCTCATAGCAAACCATTGCC
CTCAGATATTGCAGTAATCATGTACACAAGTGGATCCACAGGACTTCCAAAGGGAGTCATGATCTCACATAGTAA
CATTATTGCTGGTATAACTGGGATGGCAGAAAGGATTCCAGAACTAGGAGAGGAAGATGTCTACATTGGATATTT
GCCTCTGGCCCATGTTCTAGAATTAAGTGCTGAGCTTGTCTGTCTTTCTCACGGATGCCGCATTGGTTACTCTTC
ACCACAGACTTTAGCAGATCAGTCTTCAAAAATTAAAAAAGGAAGCAAAGGGGATACATCCATGTTGAAACCAAC
ACTGATGGCAGCAGTTCCGGAAATCATGGATCGGATCTACAAAAATGTCATGAATAAAGTCAGTGAAATGAGTAG
TTTTCAACGTAATCTGTTTATTCTGGCCTATAATTACAAAATGGAACAGATTTCAAAAGGACGTAATACTCCACT
GTGCGACAGCTTTGTTTTCCGGAAAGTTCGAAGCTTGCTAGGGGGAAATATTCGTCTCCTGTTGTGTGGTGGCGC
TCCACTTTCTGCAACCACGCAGCGATTCATGAACATCTGTTTCTGCTGTCCTGTTGGTCAGGGATACGGGCTCAC
TGAATCTGCTGGGGCTGGAACAATTTCCGAAGTGTGGGACTACAATACTGGCAGAGTGGGAGCACCATTAGTTTG
CTGTGAAATCAAATTAAAAAACTGGGAGGAAGGTGGATACTTTAATACTGATAAGCCACACCCCAGGGGTGAAAT
TCTTATTGGGGGCCAAAGTGTGACAATGGGGTACTACAAAAATGAAGCAAAAACAAAAGCTGATTTCTCTGAAGA
TGAAAATGGACAAAGGTGGCTCTGTACTGGGGATATTGGAGAGTTTGAACCCGATGGATGCTTAAAGATTATTGA
TCGTAAAAAGGACCTTGTAAAACTACAGGCAGGGGAATATGTTTCTCTTGGGAAAGTAGAGGCAGCTTTGAAGAA
TCTTCCACTAGTAGATAACATTTGTGCATATGCAAACAGTTATCATTCTTATGTCATTGGATTTGTTGTGCCAAA
TCAAAAGGAACTAACTGAACTAGCTCGAAAGAAAGGACTTAAAGGGACTTGGGAGGAGCTGTGTAACAGTTGTGA
AATGGAAAATGAGGTACTTAAAGTGCTTTCCGAAGCTGCTATTTCAGCAAGTCTGGAAAAGTTTGAAATTCCAGT
AAAAATTCGTTTGAGTCCTGAACCGTGGACCCCTGAAACTGGTCTGGTGACAGATGCCTTCAAGCTGAAACGCAA
AGAGCTTAAAACACATTACCAGGCGGACATTGAGCGAATGTATGGAAGAAAATAATTATTCTCTTCTGGCATCAG
TTTGCTACAGTGAGCTCACATCAAATAGGAAAATACTTGAAATGCATGTCTCAAGCTGCAAGGCAAACTCCATTC
CTCATATTAAACTATTACTTCTCATGACGTCACCATTTTTAACTGACAGGATTAGTAAAACATTAAGACAGCAAA
CTTGTGTCTGTCTCTTCTTTCATTTTCCCCGCCACCAACTTACTTTACCACCTATGACTGTACTTGTCAGTATGA
GAATTTTTCTGAATCATATTGGGGAAGCAGTGATTTTAAAACCTCAAGTTTTTAAACATGATTTATATGTTCTGT
ATAATGTTCAGTTTGTAACTTTTTAAAAGTTTGGATGTATAGAGGGATAAATAGGAAATATAAGAATTGGTTATT
TGGGGGCTTTTTTACTTACTGTATTTAAAAATACAAGGGTATTGATATGAAATTATGTAAATTTCAAATGCTTAT
GAATCAAATCATTGTTGAACAAAAGATTTGTTGCTGTGTAATTATTGTCTTGTATGCATTTGAGAGAAATAAATA
TACCCATACTTATGTTTTAAGAAGTTGAGATCTTGTGAATATATGCCTGTCAGTGTCTTCTTTATATATTTATTT
TTTATTAGAAAAAATGAAGTTTGGTTGGTGATGCATGAAACAAAATAGCAAGAGAGGGTTATAGTTTAATAGTAA
GGGAGATAACACAGCATGTGTAGCACCAGTTGATAATTGGTCTCTAGTAGCTTACTGTCAAAATGTTCAATGAAG
TCTTCTGTTCATCTGTTGAAACTAGGAAAATACCCAAACTTAAATGGAAGAATTCTGAAAGAGAGGATAGAATTT
AAAGAACAAGAGTATATAAAGTTATTCTTTGAATATTTCGTTGACTATATGTACATTGAGTTATCTATATTTGTA
AACAAATTAGTCATGGAAAATTATTCTATTCCAAAGTCTCCTTTTAGTCTAGATAATCATTATTTCATTTTAAAA
TTAGTGTTTTTCATAGTTTGCACTGATGCGTGTATGGATGTGTGTGAGTCAGTGGTAGCTTATTTAAAAAGCACC
TTATCCTTTCTCCCATAACCTTTGTACACTAAAAAATGAAAGAATTTAGAATGTATTTGATGATAGCATTCTCAC
TAAGACACATGAGAATTTAACTTTATAACCGCGTGAGTTAAGATTTAATTCATAGGTTTTGATGTCATTGTTGAA
GTTATTTGTAATTCAGAAACCTTGCTTGTGTGATACATAGTAAGTCTCTTCATTTATTACTGCTTGCCTGTTGTT

FIGURE 531B

ATATCTGGATTATCAAAAGCAATAGTGCACCAATTAAGATGTGCTCAAATCAGGACTTAAATCATAGGCACCACA
TTTTTCATGTCAGACTAGTTACTTTGTTGATTCTCAGTTACTGTAGGCATCAAAAGGCAAAAATCA

FIGURE 532

MNNHVSSKPSTMKLKHTINPILLYFIHFLISLYTILTYIPFYFFSESRQEKSNRIKAKPVNSKPDSAYRSVNSLD
GLASVLYPGCDTLDKVFTYAKNKFKNKRLLGTREVLNEEDEVQPNGKIFKKVILGQYNWLSYEDVFVRAFNFGNG
LQMLGQKPKTNIAIFCETRAEWMIAAQACFMYNFQLVTLYATLGGPAIVHALNETEVTNIITSKELLQTKLKDIV
SLVPRLRHIITVDGKPPTWSDFPKGIIVHTMAAVEALGAKASMENQPHSKPLPSDIAVIMYTSGSTGLPKGVMIS
HSNIIAGITGMAERIPELGEEDVYIGYLPLAHVLELSAELVCLSHGCRIGYSSPQTLADQSSKIKKGSKGDTSML
KPTLMAAVPEIMDRIYKNVMNKVSEMSSFQRNLFILAYNYKMEQISKGRNTPLCDSFVFRKVRSLLGGNIRLLLC
GGAPLSATTQRFMNICFCCPVGQGYGLTESAGAGTISEVWDYNTGRVGAPLVCCEIKLKNWEEGGYFNTDKPHPR
GEILIGGQSVTMGYYKNEAKTKADFSEDENGQRWLCTGDIGEFEPDGCLKIIDRKKDLVKLQAGEYVSLGKVEAA
LKNLPLVDNICAYANSYHSYVIGFVVPNQKELTELARKKGLKGTWEELCNSCEMENEVLKVLSEAAISASLEKFE
IPVKIRLSPEPWTPETGLVTDAFKLKRKELKTHYQADIERMYGRK

FIGURE 533A

CTCAGGCACGTCTAGATTTTCCCACTTACATAGGTCTTGTTAAGAAACCAGTCCTGCCTTCTTGCCACTCGTGTC
TTTCGATGGCTCCCTTCCCGAAGTCCCGCTGCCTCTAAGCGGAGTGTTAAGCGGGGCTCTCGGAAGCCGGTGGAC
CGAGATTTCCCCGGGTGGGGCGGGCGCGGTGTAGCGGCCCGCGGGCTGACTTGCTCCCGGCTGTCCCCCGGCCCC
AGCGACC**ATG**CCCCGTAAAGGCACCCAGCCCTCCACTGCCCGGCGCAGAGAGGAAGGGCCGCCGCCGCCGTCCCC
TGACGGCGCCAGCAGCGACGCGGAGCCTGAGCCGCCGTCCGGCCGCACGGAGAGCCCAGCCACCGCCGCAGAGAC
TGCAAGTGAGGAACTTGATAATAGAAGTTTAGAAGAGATTTTGAACAGCATTCCTCCTCCCCCGCCTCCAGCAAT
GACCAATGAAGCTGGAGCTCCTCGGCTTATGATAACTCATATTGTAAACCAGAACTTCAAATCCTATGCTGGGGA
GAAAATTCTGGGACCTTTCCATAAGCGCTTTTCCTGTATTATCGGGCCAAATGGCAGTGGCAAATCCAATGTTAT
TGATTCTATGCTTTTTGTGTTTGGCTATCGAGCACAAAAAATAAGATCTAAAAAACTCTCAGTATTAATACATAA
TTCTGATGAACACAAGGACATTCAGAGTTGTACAGTAGAAGTTCATTTTCAAAAGATAATTGATAAGGAAGGGGA
TGATTATGAAGTCATTCCTAACAGTAATTTCTATGTATCCAGAACGGCCTGCAGAGATAATACTTCTGTCTATCA
CATAAGTGGAAAGAAAAAGACATTTAAGGATGTTGGAAATCTTCTTCGAAGCCATGGAATTGACTTGGACCATAA
TAGATTTTTAATTTTACAGGGTGAAGTTGAACAAATTGCTATGATGAAACCAAAAGGCCAGACTGAACACGATGA
GGGTATGCTTGAATATTTAGAAGATATAATTGGTTGTGGACGGCTAAATGAACCTATTAAAGTCTTGTGTCGGAG
AGTTGAAATATTAAATGAACACAGAGGAGATAAGTTAAACAGGGTAAAGATGGTGGAAAAGGAAAAGGATGCCTT
AGAAGGAGAGAAAAACATAGCTATCGAATTTCTTACCTTGGAAAATGAAATATTTAGAAAAAAGAATCATGTTTG
TCAATATTATATTTATGAGTTGCAGAAACGAATTGCTGAAATGGAAACTCAAAAGGAAAAAATTCATGAAGATAC
CAAAGAAATTAATGAGAAGAGCAATATACTATCAAATGAAATGAAAGCTAAGAATAAAGATGTAAAAGATACAGA
AAAGAAACTGAATAAAATTACAAAATTTATTGAGGAGAATAAAGAAAAATTTACACAGCTAGATTTGGAAGATGT
TCAAGTTAGAGAAAAGTTAAAACATGCCACGAGTAAAGCCAAAAAACTGGAGAAACAACTTCAAAAAGATAAAGA
AAAGGTTGAAGAATTTAAAAGTATACCTGCCAAGAGTAACAATATCATTAATGAAACAACAACCAGAAACAATGC
CCTCGAGAAGGAAAAAGAGAAAGAAGAAAAAAAATTAAAGGAAGTTATGGATAGCCTTAAACAGGAAACACAAGG
GCTTCAGAAAGAAAAAGAAAGTCGAGAGAAAGAACTTATGGGTTTCAGCAAATCGGTAAATGAAGCACGTTCAAA
GATGGATGTAGCCCAGTCAGAACTTGATATCTATCTCAGTCGTCATAATACTGCAGTGTCTCAATTAACTAAGGC
TAAGGAAGCTCTAATTGCAGCTTCTGAGACTCTCAAAGAAAGGAAAGCTGCAATCAGAGATATAGAAGGAAAACT
CCCTCAAACTGAACAAGAATTAAAGGAGAAAGAAAAAGAACTTCAAAAACTTACACAAGAAGAAACAAACTTTAA
AAGTTTGGTTCATGATCTCTTTCAAAAAGTTGAAGAAGCAAAGAGCTCATTAGCAATGAATCGAAGTAGGGGGAA
AGTCCTTGATGCAATAATTCAAGAAAAAAAAATCTGGCAGGATTCCAGGAATATATGGAAGATTGGGGGACTTAGG
AGCCATTGATGAAAAATACGACGTGGCTATATCATCCTGTTGTCATGCACTGGACTACATTGTTGTTGATTCTAT
TGATATAGCCCAAGAATGTGTAAACTTCCTTAAAAGACAAAATATTGGAGTTGCAACCTTTATAGGTTTAGATAA
GATGGCTGTATGGGCGAAAAAGATGACCGAAATTCAAACTCCTGAAAATACTCCTCGTTTATTTGATTTAGTAAA
AGTAAAAGATGAGAAAATTCGCCAAGCTTTTTATTTTGCTTTACGAGATACCTTAGTAGCTGACAACTTGGATCA
AGCCACAAGAGTAGCATATCAAAAAGATAGAAGATGGAGAGTGGTAACTTTACAGGGACAAATCATAGAACAGTC
AGGTACAATGACTGGTGGTGGAAGCAAAGTAATGAAAGGAAGAATGGGTTCCTCACTTGTTATTGAAATCTCTGA
AGAAGAGGTAAACAAAATGGAATCACAGTTGCAAAACGACTCTAAAAAAGCAATGCAAATCCAAGAACAGAAAGT
ACAACTTGAAGAAAGAGTAGTTAAGTTACGGCATAGTGAACGAGAAATGAGGAACACACTAGAAAAATTTACTGC
AAGCATCCAGCGTTTAATAGAGCAAGAAGAATATTTGAATGTCCAAGTTAAGGAACTTGAAGCTAATGTACTTGC
TACAGCCCCTGACAAAAAAAAGCAGAAATTGCTAGAAGAAAACGTTAGTGCTTTCAAAACAGAATATGATGCTGT
GGCTGAGAAAGCTGGTAAAGTAGAAGCTGAGGTTAAACGCTTACACAATACCATCGTAGAAATCAATAATCATAA
ACTCAAGGCCCAACAAGACAAACTTGATAAAATAAATAAGCAATTAGATGAATGTGCTTCTGCTATTACTAAAGC
CCAAGTAGCAATCAAGACTGCTGACAGAAACCTTCAAAAGGCACAAGACTCTGTCTTGCGTACAGAGAAAGAAAT
AAAAGATACTGAGAAAGAGGTGGATGACCTAACAGCAGAGCTGAAAAGTCTTGAGGACAAAGCAGCAGAGGTCGT
AAAGAATACAAATGCTGCAGAGGAATCCTTACCAGAGATCCAGAAAGAACATCGCAATCTGCTTCAAGAATTAAA
AGTTATTCAAGAAAATGAACATGCTCTTCAAAAAGATGCACTTAGTATTAAGTTGAAACTTGAACAAATAGATGG
TCACATTGCTGAACATAATTCTAAAATAAAATATTGGCACAAAGAGATTTCAAAAATATCACTGCATCCTATAGA
AGATAATCCTATTGAAGAGATTTCGGTTCTAAGCCCAGAGGATCTTGAAGCGATCAAGAATCCAGATTCTATAAC
AAATCAAATTGCACTTTTGGAAGCCCGGTGTCATGAAATGAAACCAAACCTCGGTGCCATCGCAGAGTATAAAAA
GAAGGAAGAATTGTATTTGCAACGGGTAGCAGAATTGGACAAAATTACTTATGAAAGAGACAGTTTTAGACAGGC

FIGURE 533B

ATATGAAGATCTTCGGAAACAAAGGCTTAATGAATTTATGGCAGGTTTTTATATAATAACAAATAAATTAAAGGA
AAATTACCAAATGCTTACTTTGGGAGGGGACGCCGAACTCGAGCTTGTAGACAGCTTGGATCCTTTCTCTGAAGG
AATCATGTTCAGTGTTCGACCACCTAAGAAAAGTTGGAAAAAGATCTTCAACCTTTCGGGAGGAGAGAAAACACT
TAGTTCATTGGCTTTAGTATTTGCTCTTCACCACTACAAGCCCACTCCCCTTTACTTCATGGATGAGATTGATGC
AGCCCTTGATTTTAAAAATGTGTCCATTGTTGCATTTTATATATATGAACAAACAAAAAATGCACAGTTCATAAT
AATTTCTCTTCGAAATAATATGTTTGAGATTTCGGATAGACTTATTGGAATTTACAAGACATACAACATAACAAA
AAGTGTTGCTGTAAATCCAAAAGAAATTGCATCTAAGGGACTTTGTTGAACTTTATGCTGAAGATTCTTCAAGTT
GATTCAGTGTATTACTGATTTTTTTCTATTTGTAAAGGATTATGAGTTGTATAAAATACATACTCCCTAAACTAG
ATCATGAAACTGGTTTCTGTTTTATGCAGTTGTCATTTGTAAAGTCTAATAAAATATTCTCTATAATTGCTTCTA
GATTACAAAAATATGACAATCTTGTAAGTAGCAGACTATGGAGAAAAATGAGTTACCTGGAGGGTCAGGTAACTT
GCCAAACTAAAAAGTATGTTAGTTGAGGCAAAGTCCTAAGCAAGGTTGTGCTATCAAGGCTCAGCATACCTTCGT
GGGCCTTTGATTTACCAACACTGGAAATGCCTGCCAACTAATCTTGGATAGATTCTTTAAGGCATTCCACTTAGC
TTGCCAGTTGAGACAATCACCACAGTTATTACCCAAATACTATGAACATATTTTTGTAAACCAGTCATTCTGAAT
TATAGTGATGAGAATTTAAATATATGCTTTTCTAGAATTTGATGTTTGACCATTTATGACTTAATTACCAGAGAG
CCAGTAAATTAGGACAGTGTTTCAACAAGCCTAGGCTATCTCGTAAGTTGAAAAATATCCCACTATAGTTGCTTC
ATGAGTATGAAGTAAGATGGCCTCTGATTTACACTGGTTCAATTTACAAATTTTCAACTTTATGATAGGTTTATC
CGGGTACTAAATGCATTTCAACTTGATAGTTTCAACTTATGATAGGTTTACCAGGATGTAGTCCCACTGTTGAGG
AGCATCTATTTAGGGGTTAATTACTTTAGTAATAAGTGGAAAGTAAGATACCTTGAGTAATGTTTGCCTATAAAA
TTGTCAGCGTATTTTTACACTATTGGCTCAAGAATGTTATAATGCTAAGGGACATAAGTTGGCAACCACTTGGTT
TTTGGAAGGACTTTCGGTATTGTATTAGAAGTCTGCCCTAGCTGTTAAATTTCTGGGTATTTATCCTAAGGAATT
AATTAAAGAGTTAATTGTTCCTTTCTTCAGTGGGCCATTGTTTTAGATATTTAAAAAATCCAACAGTTTCTATCA
TAATGTAACTGTAAAAATGTAAACACATTATTAGCATGGACTTTTAAATAAAGATTTAAAGAAAGCAAAAAAAAA
AAAAAAAAAAA

FIGURE 534

MPRKGTQPSTARRREEGPPPPSPDGASSDAEPEPPSGRTESPATAAETASEELDNRSLEEILNSIPPPPPPAMTN
EAGAPRLMITHIVNQNFKSYAGEKILGPFHKRFSCIIGPNGSGKSNVIDSMLFVFGYRAQKIRSKKLSVLIHNSD
EHKDIQSCTVEVHFQKIIDKEGDDYEVIPNSNFYVSRTACRDNTSVYHISGKKKTFKDVGNLLRSHGIDLDHNRF
LILQGEVEQIAMMKPKGQTEHDEGMLEYLEDIIGCGRLNEPIKVLCRRVEILNEHRGDKLNRVKMVEKEKDALEG
EKNIAIEFLTLENEIFRKKNHVCQYYIYELQKRIAEMETQKEKIHEDTKEINEKSNILSNEMKAKNKDVKDTEKK
LNKITKFIEENKEKFTQLDLEDVQVREKLKHATSKAKKLEKQLQKDKEKVEEFKSIPAKSNNIINETTTRNNALE
KEKEKEEKKLKEVMDSLKQETQGLQKEKESREKELMGFSKSVNEARSKMDVAQSELDIYLSRHNTAVSQLTKAKE
ALIAASETLKERKAAIRDIEGKLPQTEQELKEKEKELQKLTQEETNFKSLVHDLFQKVEEAKSSLAMNRSRGKVL
DAIIQEKKSGRIPGIYGRLGDLGAIDEKYDVAISSCCHALDYIVVDSIDIAQECVNFLKRQNIGVATFIGLDKMA
VWAKKMTEIQTPENTPRLFDLVKVKDEKIRQAFYFALRDTLVADNLDQATRVAYQKDRRWRVVTLQGQIIEQSGT
MTGGGSKVMKGRMGSSLVIEISEEEVNKMESQLQNDSKKAMQIQEQKVQLEERVVKLRHSEREMRNTLEKFTASI
QRLIEQEEYLNVQVKELEANVLATAPDKKKQKLLEENVSAFKTEYDAVAEKAGKVEAEVKRLHNTIVEINNHKLK
AQQDKLDKINKQLDECASAITKAQVAIKTADRNLQKAQDSVLRTEKEIKDTEKEVDDLTAELKSLEDKAAEVVKN
TNAAEESLPEIQKEHRNLLQELKVIQENEHALQKDALSIKLKLEQIDGHIAEHNSKIKYWHKEISKISLHPIEDN
PIEEISVLSPEDLEAIKNPDSITNQIALLEARCHEMKPNLGAIAEYKKKEELYLQRVAELDKITYERDSFRQAYE
DLRKQRLNEFMAGFYIITNKLKENYQMLTLGGDAELELVDSLDPFSEGIMFSVRPPKKSWKKIFNLSGGEKTLSS
LALVFALHHYKPTPLYFMDEIDAALDFKNVSIVAFYIYEQTKNAQFIIISLRNNMFEISDRLIGIYKTYNITKSV
AVNPKEIASKGLC

FIGURE 535A

CTCAGGCACGTCTAGATTTTCCCACTTACATAGGTCTTGTTAAGAAACCAGTCCTGCCTTCTTGCCACTCGTGTC
TTTCGATGGCTCCCTTCCCGAAGTCCCGCTGCCTCTAAGCGGAGTGTTAAGCGGGGCTCTCGGAAGCCGGTGGAC
CGAGATTTCCCCGGGTGGGGCGGGCGCGGTGTAGCGGCCCGCGGGCTGACTTGCTCCCGGCTGTCCCCCGGCCCC
AGCGACCATGCCCCGTAAAGGCACCCAGCCCTCCACTGCCCGGCGCAGAGAGGAAGGGCCGCCGCCGCCGTCCCC
TGACGGCGCCAGCAGCGACGCGGAGCCTGAGCCGCCGTCCGGCCGCACGGAGAGCCCAGCCACCGCCGCAGAGAC
TGCAAGTGAGGAACTTGATAATAGAAGTTTAGAAGAGATTTTGAACAGCATTCCTCCTCCCCCGCCTCCAGCAAT
GACCAATGAAGCTGGAGCTCCTCGGCTTATGATAACTCATATTGTAAACCAGAACTTCAAATCCTATGCTGGGGA
GAAAATTCTGGGACCTTTCCATAAGCGCTTTTCCTGTATTATCGGGCCAAATGGCAGTGGCAAATCCAATGTTAT
TGATTCTATGCTTTTTGTGTTTGGCTATCGAGCACAAAAAATAAGATCTAAAAAACTCTCAGTATTAATACATAA
TTCTGATGAACACAAGGACATTCAGAGTTGTACAGTAGAAGTTCATTTTCAAAAGATAATTGATAAGGAAGGGGA
TGATTATGAAGTCATTCCTAACAGTAATTTCTATGTATCCAGAACGGCCTGCAGAGATAATACTTCTGTCTATCA
CATAAGTGGAAAGAAAAAGACATTTAAGGATGTTGGAAATCTTCTTCGAAGCCATGGAATTGACTTGGACCATAA
TAGATTTTTAATTTTACAGGGTGAAGTTGAACAAATTGCTATGATGAAACCAAAAGGCCAGACTGAACACGATGA
GGGTATGCTTGAATATTTAGAAGATATAATTGGTTGTGGACGGCTAAATGAACCTATTAAAGTCTTGTGTCGGAG
AGTTGAAATATTAAATGAACACAGAGGAGATAAGTTAAACAGGGTAAAGATGGTGGAAAAGGAAAAGGATGCCTT
AGAAGGAGAGAAAAACATAGCTATCGAATTTCTTACCTTGGAAAATGAAATATTTAGAAAAAAGAATCATGTTTG
TCAATATTATATTTATGAGTTGCAGAAACGAATTGCTGAAATGGAAACTCAAAAGGAAAAAATTCATGAAGATAC
CAAAGAAATTAATGAGAAGAGCAATATACTATCAAATGAAATGAAAGCTAAGAATAAAGATGTAAAAGATACAGA
AAAGAAACTGAATAAAATTACAAAATTTATTGAGGAGAATAAAGAAAAATTTACACAGCTAGATTTGGAAGATGT
TCAAGTTAGAGAAAAGTTAAAACATGCCACGAGTAAAGCCAAAAAACTGGAGAAACAACTTCAAAAAGATAAAGA
AAAGGTTGAAGAATTTAAAAGTATACCTGCCAAGAGTAACAATATCATTAATGAAACAACAACCAGAAACAATGC
CCTCGAGAAGGAAAAAGAGAAAGAAGAAAAAAAATTAAAGGAAGTTATGGATAGCCTTAAACAGGAAACACAAGG
GCTTCAGAAAGAAAAAGAAAGTCGAGAGAAAGAACTTATGGGTTTCAGCAAATCGGTAAATGAAGCACGTTCAAA
GATGGATGTAGCCCAGTCAGAACTTGATATCTATCTCAGTCGTCATAATACTGCAGTGTCTCAATTAACTAAGGC
TAAGGAAGCTCTAATTGCAGCTTCTGAGACTCTCAAAGAAAGGAAAGCTGCAATCAGAGATATAGAAGGAAAACT
CCCTCAAACTGAACAAGAATTAAAGGAGAAAGAAAAAGAACTTCAAAAACTTACACAAGAAGAAACAAACTTTAA
AAGTTTGGTTCATGATCTCTTTCAAAAAGTTGAAGAAGCAAAGAGCTCATTAGCAATGAATCGAAGTAGGGGGAA
AGTCCTTGATGCAATAATTCAAGAAAAAAAATCTGGCAGGATTCCAGGAATATATGGAAGATTGGGGGACTTAGG
AGCCATTGATGAAAAATACGACGTGGCTATATCATCCTGTTGTCATGCACTGGACTACATTGTTGTTGATTCTAT
TGATATAGCCCAAGAATGTGTAAACTTCCTTAAAAGACAAAATATTGGAGTTGCAACCTTTATAGGTTTAGATAA
GATGGCTGTATGGGCGAAAAAGATGACCGAAATTCAAACTCCTGAAAATACTCCTCGTTTATTTGATTTAGTAAA
AGTAAAAGATGAGAAAATTCGCCAAGCTTTTTATTTTGCTTTACGAGATACCTTAGTAGCTGACAACTTGGATCA
AGCCACAAGAGTAGCATATCAAAAAGATAGAAGATGGAGAGTGGTAACTTTACAGGGACAAATCATAGAACAGTC
AGGTACAATGACTGGTGGTGGAAGCAAAGTAATGAAAGGAAGAATGGGTTCCTCACTTGTTATTGAAATCTCTGA
AGAAGAGGTAAACAAAATGGAATCACAGTTGCAAAACGACTCTAAAAAAGCAATGCAAATCCAAGAACAGAAAGT
ACAACTTGAAGAAAGAGTAGTTAAGTTACGGCATAGTGAACGAGAAATGAGGAACACACTAGAAAAATTTACTGC
AAGCATCCAGCGTTTAATAGAGCAAGAAGAATATTTGAATGTCCAAGTTAAGGAACTTGAAGCTAATGTACTTGC
TACAGCCCCTGACAAAAAAAAGCAGAAATTGCTAGAAGAAAACGTTAGTGCTTTCAAAACAGAATATGATGCTGT
GGCTGAGAAAGCTGGTAAAGTAGAAGCTGAGGTTAAACGCTTACACAATACCATCGTAGAAATCAATAATCATAA
ACTCAAGGCCCAACAAGACAAACTTGATAAAATAAATAAGCAATTAGATGAATGTGCTTCTGCTATTACTAAAGC
CCAAGTAGCAATCAAGACTGCTGACAGAAACCTTCAAAAGGCACAAGACTCTGTCTTGCGTACAGAGAAAGAAAT
AAAAGATACTGAGAAAGAGGTGGATGACCTAACAGCAGAGCTGAAAAGTCTTGAGGACAAAGCAGCAGAGGTCGT
AAAGAATACAAATGCTGCAGAGGAATCCTTACCAGAGATCCAGAAAGAACATCGCAATCTGCTTCAAGAATTAAA
AGTTATTCAAGAAAATGAACATGCTCTTCAAAAAGATGCACTTAGTATTAAGTTGAAACTTGAACAAATAGATGG
TCACATTGCTGAACATAATTCTAAAATAAAATATTGGCACAAAGAGATTTCAAAAATATCACTGCATCCTATAGA
AGATAATCCTATTGAAGAGATTTCGGTTCTAAGCCCAGAGGATCTTGAAGCGATCAAGAATCCAGATTCTATAAC
AAATCAAATTGCACTTTTGGAAGCCCGGTGTCATGAAATGAAACCAAACCTCGGTGCCATCGCAGAGTATAAAAA
GAAGGAAGAATTGTATTTGCAACGGGTAGCAGAATTGGACAAAATTACTTATGAAAGAGACAGTTTTAGACAGGC

FIGURE 535B

ATATGAAGATCTTCGGAAACAAAGGCTTAATGAATTTATGGCAGGTTTTTATATAATAACAAATAAATTAAAGGA
AAATTACCAAATGCTTACTTTGGGAGGGGACGCCGAACTCGAGCTTGTAGACAGCTTGGATCCTTTCTCTGAAGG
AATCATGTTCAGTGTTCGACCACCTAAGAAAAGTTGGAAAAAGATCTTCAACCTTTCGGGAGGAGAGAAAACACT
TAGTTCATTGGCTTTAGTATTTGCTCTTCACCACTACAAGCCCACTCCCCTTTACTTCATGGATGAGATTGATGC
AGCCCTTGATTTTAAAAATGTGTCCATTGTTGCATTTTATATATATGAACAAACAAAAAATGCACAGTTCATAAT
AATTTCTCTTCGAAATAATATGTTTGAGATTTCGGATAGACTTATTGGAATTTACAAGACATACAACATAACAAA
AAGTGTTGCTGTAAATCCAAAAGAAATTGCATCTAAGGGACTTTGTTGAACTTTATGCTGAAGATTCTTCAAGTT
GATTCAGTGTATTACTGATTTTTTTCTATTTGTAAAGGATTATGAGTTGTATAAAATACATACTCCCTAAACTAG
ATCATGAAACTGGTTTCTGTTTTATGCAGTTGTCATTTGTAAAGTCTAATAAAATATTCTCTATAATTGCTTCTA
GATTACAAAAATATGACAATCTTGTAAGTAGCAGACTATGGAGAAAAATGAGTTACCTGGAGGGTCAGGTAACTT
GCCAAACTAAAAAGTATGTTAGTTGAGGCAAAGTCCTAAGCAAGGTTGTGCTATCAAGGCTCAGCATACCTTCGT
GGGCCTTTGATTTACCAACACTGGAAATGCCTGCCAACTAATCTTGGATAGATTCTTTAAGGCATTCCACTTAGC
TTGCCAGTTGAGACAATCACCACAGTTATTACCCAAATACTATGAACATATTTTTGTAAACCAGTCATTCTGAAT
TATAGTGATGAGAATTTAAATATATGCTTTTCTAGAATTTGATGTTTGACCATTTATGACTTAATTACCAGAGAG
CCAGTAAATTAGGACAGTGTTTCAACAAGCCTAGGCTATCTCGTAAGTTGAAAAATATCCCACTATAGTTGCTTC
ATGAGTATGAAGTAAGATGGCCTCTGATTTACACTGGTTCAATTTACAAATTTTCAACTTTATGATAGGTTTATC
CGGGTACTAAATGCATTTCAACTTGATAGTTTCAACTTATGATAGGTTTACCAGGATGTAGTCCCACTGTTGAGG
AGCATCTATTTAGGGGTTAATTACTTTAGTAATAAGTGGAAAGTAAGATACCTTGAGTAATGTTTGCCTATAAAA
TTGTCAGCGTATTTTTACACTATTGGCTCAAGAATGTTATAATGCTAAGGGACATAAGTTGGCAACCACTTGGTT
TTTGGAAGGACTTTCGGTATTGTATTAGAAGTCTGCCCTAGCTGTTAAATTTCTGGGTATTTATCCTAAGGAATT
AATTAAAGAGTTAATTGTTCCTTTCTTCAGTGGGCCATTGTTTTAGATATTTAAAAAATCCAACAGTTTCTATCA
TAATGTAACTGTAAAAATGTAAACACATTATTAGCATGGACTTTTAAATAAAGATTTAAAGAAAGCAAAAAAAAA
AAAAAAAAAAA

FIGURE 536

MPRKGTQPSTARRREEGPPPPSPDGASSDAEPEPPSGRTESPATAAETASEELDNRSLEEILNSIPPPPPPAMTN
EAGAPRLMITHIVNQNFKSYAGEKILGPFHKRFSCIIGPNGSGKSNVIDSMLFVFGYRAQKIRSKKLSVLIHNSD
EHKDIQSCTVEVHFQKIIDKEGDDYEVIPNSNFYVSRTACRDNTSVYHISGKKKTFKDVGNLLRSHGIDLDHNRF
LILQGEVEQIAMMKPKGQTEHDEGMLEYLEDIIGCGRLNEPIKVLCRRVEILNEHRGDKLNRVKMVEKEKDALEG
EKNIAIEFLTLENEIFRKKNHVCQYYIYELQKRIAEMETQKEKIHEDTKEINEKSNILSNEMKAKNKDVKDTEKK
LNKITKFIEENKEKFTQLDLEDVQVREKLKHATSKAKKLEKQLQKDKEKVEEFKSIPAKSNNIINETTTRNNALE
KEKEKEEKKLKEVMDSLKQETQGLQKEKESREKELMGFSKSVNEARSKMDVAQSELDIYLSRHNTAVSQLTKAKE
ALIAASETLKERKAAIRDIEGKLPQTEQELKEKEKELQKLTQEETNFKSLVHDLFQKVEEAKSSLAMNRSRGKVL
DAIIQEKKSGRIPGIYGRLGDLGAIDEKYDVAISSCCHALDYIVVDSIDIAQECVNFLKRQNIGVATFIGLDKMA
VWAKKMTEIQTPENTPRLFDLVKVKDEKIRQAFYFALRDTLVADNLDQATRVAYQKDRRWRVVTLQGQIIEQSGT
MTGGGSKVMKGRMGSSLVIEISEEEVNKMESQLQNDSKKAMQIQEQKVQLEERVVKLRHSEREMRNTLEKFTASI
QRLIEQEEYLNVQVKELEANVLATAPDKKKQKLLEENVSAFKTEYDAVAEKAGKVEAEVKRLHNTIVEINNHKLK
AQQDKLDKINKQLDECASAITKAQVAIKTADRNLQKAQDSVLRTEKEIKDTEKEVDDLTAELKSLEDKAAEVVKN
TNAAEESLPEIQKEHRNLLQELKVIQENEHALQKDALSIKLKLEQIDGHIAEHNSKIKYWHKEISKISLHPIEDN
PIEEISVLSPEDLEAIKNPDSITNQIALLEARCHEMKPNLGAIAEYKKKEELYLQRVAELDKITYERDSFRQAYE
DLRKQRLNEFMAGFYIITNKLKENYQMLTLGGDAELELVDSLDPFSEGIMFSVRPPKKSWKKIFNLSGGEKTLSS
LALVFALHHYKPTPLYFMDEIDAALDFKNVSIVAFYIYEQTKNAQFIIISLRNNMFEISDRLIGIYKTYNITKSV
AVNPKEIASKGLC

FIGURE 537

CAACCAGGGAGATTTCTCCATTTTCCTCTTGTCTACAGTGCGGCTACAAATCTGGGATTTTTTTATTACTTCTTT
TTTTTTCGAACTACACTTGGGCTCCTTTTTTTGTGCTCGACTTTTCCACCCTTTTTCCCTCCCTCCTGTGCTGCT
GCTTTTTGATCTCTTCGACTAAAATTTTTTTATCCGGAGTGTATTTAATCGGTTCTGTTCTGTCCTCTCCACCAC
CCCCACCCCCCTCCCTCCGGTGTGTGTGCCGCTGCCGCTGTTGCCGCCGCCGCTGCTGCTGCTGCTCGCCCCGTC
GTTACACCAACCCGAGGCTCTTTGTTTCCCCTCTTGGATCTGTTGAGTTTCTTTGTTGAAGAAGCCAGC**ATG**GGT
GCCCAGTTCTCCAAGACCGCAGCGAAGGGAGAAGCCGCCGCGGAGAGGCCTGGGGAGGCGGCTGTGGCCTCGTCG
CCTTCCAAAGCGAACGGACAGGAGAATGGCCACGTGAAGGTAAACGGCGACGCTTCGCCCGCGGCCGCCGAGTCG
GGCGCCAAGGAGGAGCTGCAGGCCAACGGCAGCGCCCCGGCCGCCGACAAGGAGGAGCCCGCGGCCGCCGGGAGC
GGGGCGGCGTCGCCCTCCTCGGCCGAGAAAGGTGAGCCGGCCGCCGCCGCTGCCCCCGAGGCCGGGGCCAGCCCG
GTAGAGAAGGAGGCCCCCGCGGAAGGCGAGGCTGCCGAGCCCGGCTCGGCCACGGCCGCGGAGGGAGAGGCCGCG
TCGGCCGCCTCCTCGACTTCTTCGCCCAAGGCCGAGGACGGGGCCACGCCCTCGCCCAGCAACGAGACCCCGAAA
AAAAAAAAGAAGCGCTTTTCCTTCAAGAAGTCTTTCAAGCTGAGCGGCTTCTCCTTCAAGAAGAACAAGAAGGAG
GCTGGAGAAGGCGGTGAGGCTGAGGCGCCCGCTGCCGAAGGCGGCAAGGACGAGGCCGCCGGGGGCGCAGCTGCG
GCCGCCGCCGAGGCGGGCGCGGCCTCCGGGGAGCAGGCAGCGGCGCCGGGCGAGGAGGCGGCAGCGGGCGAGGAG
GGGGCGGCGGGTGGCGACCCGCAGGAGGCCAAGCCCCAGGAGGCCGCTGTCGCGCCAGAGAAGCCGCCCGCCAGC
GACGAGACCAAGGCCGCCGAGGAGCCCAGCAAGGTGGAGGAGAAAAAGGCCGAGGAGGCCGGGGCCAGCGCCGCC
GCCTGCGAGGCCCCCTCCGCCGCCGGGCCCGGCGCGCCCCCGGAGCAGGAGGCAGCCCCCGCGGAGGAGCCCGCG
GCCGCCGCAGCCTCGTCAGCCTGCGCAGCCCCCTCACAGGAGGCCCAGCCCGAGTGCAGTCCAGAAGCCCCCCCA
GCGGAGGCGGCAGAG**TAA**AAGAGCAAGCTTTTGTGAGATAATCGAAGAACTTTTCTCCCCCGTTTGTTTGTTGGA
GTGGTGCCAGGTACTGTTTTGGAGAACTTGTCTACAACCAGGGATTGATTTTAAAGATGTCTTTTTTTATTTTAC
TTTTTTTTAAGCACCAAATTTTGTTGTTTTTTTTTTTCTCCCCTCCCCACAGATCCCATCTCAAATCATTCTGTT
AACCACCATTCCAACAGGTCGAGGAGAGCTTAAACACCTTCTTCCTCTGCCTTGTTTCTCTTTTATTTTTTATTT
TTTCGCATCAGTATTAATGTTTTTGCATACTTTGCATCTTTATTCAAAAGTGTAAACTTTCTTTGTCAATCTATG
GACATGCCCATATATGAAGGAGATGGGTGGGTCAAAAAGGGATATCAAATGAAGTGATAGGGGTCACAATGGGGA
AATTGAAGTGGTGCATAACATTGCCAAAATAGTGTGCCACTAGAAATGGTGTAAAGGCTGTCTTTTTTTTTTTTT
TTAAAGAAAAGTTATTACCATGTATTTTGTGAGGCAGGTTTACAACACTACAAGTCTTGAGTTAAGAAGGAAAGA
GGAAAAAAGAAAAAACACCAATACCCAGATTTAAAAAAAAAAAAACGATCATAGTCTTAGGAGTTCATTTAAACC
ATAGGAACTTTTCACTTATCTCATGTTAGCTGTACCAGTCAGTGATTAAGTAGAACTACAAGTTGTATAGGCTTT
ATTGTTTATTGCTGGTTTATGACCTTAATAAAGTGTAATTATGTATTACCAGCAGGGTGTTTTTAACTGTGACTA
TTGTATAAAAACAAATCTTGATATCCAGAAGCACATGAAGTTTGCAACTTTCCACCCTGCCCATTTTTGTAAAAC
TGCAGTCATCTTGGACCTTTTAAAACACAAATTTTAAACTCAACCAAGCTGTGATAAGTGGAATGGTTACTGTTT
ATACTGTGGTATGTTTTTGATTACAGCAGATAATGCTTTCTTTTCCAGTCGTCTTTGAGAATAAAGGAAAAAAAA
TCTTCAGATGCAATGGTTTTGTGTAGCATCTTGTCTATCATGTTTTGTAAATACTGGAGAAGCTTTGACCAATTT
GACTTAGAGATGGAATGTAACTTTGCTTACAAAAATTGCTATTAAACTCCTGCTTAAGGTGTTCTAATTTTCTGT
GAGCACACTAAAAGCGAAAAATAAATGTGAATAAAATGT

FIGURE 538

MGAQFSKTAAKGEAAAERPGEAAVASSPSKANGQENGHVKVNGDASPAAAESGAKEELQANGSAPAADKEEPAAA
GSGAASPSSAEKGEPAAAAAPEAGASPVEKEAPAEGEAAEPGSATAAEGEAASAASSTSSPKAEDGATPSPSNET
PKKKKKRFSFKKSFKLSGFSFKKNKKEAGEGGEAEAPAAEGGKDEAAGGAAAAAAEAGAASGEQAAAPGEEAAAG
EEGAAGGDPQEAKPQEAAVAPEKPPASDETKAAEEPSKVEEKKAEEAGASAAACEAPSAAGPGAPPEQEAAPAEE
PAAAAASSACAAPSQEAQPECSPEAPPAEAAE

FIGURE 539

CAACCAGGGAGATTTCTCCATTTTCCTCTTGTCTACAGTGCGGCTACAAATCTGGGATTTTTTTATTACTTCTTT
TTTTTTCGAACTACACTTGGGCTCCTTTTTTTGTGCTCGACTTTTCCACCCTTTTTCCCTCCCTCCTGTGCTGCT
GCTTTTTGATCTCTTCGACTAAAATTTTTTTATCCGGAGTGTATTTAATCGGTTCTGTTCTGTCCTCTCCACCAC
CCCCACCCCCCTCCCTCCGGTGTGTGTGCCGCTGCCGCTGTTGCCGCCGCCGCTGCTGCTGCTGCTCGCCCCGTC
GTTACACCAACCCGAGGCTCTTTGTTTCCCCTCTTGGATCTGTTGAGTTTCTTTGTTGAAGAAGCCAGC**ATG**GGT
GCCCAGTTCTCCAAGACCGCAGCGAAGGGAGAAGCCGCCGCGGAGAGGCCTGGGGAGGCGGCTGTGGCCTCGTCG
CCTTCCAAAGCGAACGGACAGGAGAATGGCCACGTGAAGGTAAACGGCGACGCTTCGCCCGCGGCCGCCGAGTCG
GGCGCCAAGGAGGAGCTGCAGGCCAACGGCAGCGCCCCGGCCGCCGACAAGGAGGAGCCCGCGGCCGCCGGGAGC
GGGGCGGCGTCGCCCTCCTCGGCCGAGAAAGGTGAGCCGGCCGCCGCCGCTGCCCCCGAGGCCGGGGCCAGCCCG
GTAGAGAAGGAGGCCCCCGCGGAAGGCGAGGCTGCCGAGCCCGGCTCGGCCACGGCCGCGGAGGGAGAGGCCGCG
TCGGCCGCCTCCTCGACTTCTTCGCCCAAGGCCGAGGACGGGGCCACGCCCTCGCCCAGCAACGAGACCCCGAAA
AAAAAAAAGAAGCGCTTTTCCTTCAAGAAGTCTTTCAAGCTGAGCGGCTTCTCCTTCAAGAAGAACAAGAAGGAG
GCTGGAGAAGGCGGTGAGGCTGAGGCGCCCGCTGCCGAAGGCGGCAAGGACGAGGCCGCCGGGGGCGCAGCTGCG
GCCGCCGCCGAGGCGGGCGCGGCCTCCGGGGAGCAGGCAGCGGCGCCGGGCGAGGAGGCGGCAGCGGGCGAGGAG
GGGGCGGCGGGTGGCGACCCGCAGGAGGCCAAGCCCCAGGAGGCCGCTGTCGCGCCAGAGAAGCCGCCCGCCAGC
GACGAGACCAAGGCCGCCGAGGAGCCCAGCAAGGTGGAGGAGAAAAAGGCCGAGGAGGCCGGGGCCAGCGCCGCC
GCCTGCGAGGCCCCCTCCGCCGCCGGGCCCGGCGCGCCCCCGGAGCAGGAGGCAGCCCCCGCGGAGGAGCCCGCG
GCCGCCGCAGCCTCGTCAGCCTGCGCAGCCCCCTCACAGGAGGCCCAGCCCGAGTGCAGTCCAGAAGCCCCCCCA
GCGGAGGCGGCAGAG**TAA**AAGAGCAAGCTTTTGTGAGATAATCGAAGAACTTTTCTCCCCCGTTTGTTTGTTGGA
GTGGTGCCAGGTACTGTTTTGGAGAACTTGTCTACAACCAGGGATTGATTTTAAAGATGTCTTTTTTTATTTTAC
TTTTTTTTAAGCACCAAATTTTGTTGTTTTTTTTTTTCTCCCCTCCCCACAGATCCCATCTCAAATCATTCTGTT
AACCACCATTCCAACAGGTCGAGGAGAGCTTAAACACCTTCTTCCTCTGCCTTGTTTCTCTTTTATTTTTTATTT
TTTCGCATCAGTATTAATGTTTTTGCATACTTTGCATCTTTATTCAAAAGTGTAAACTTTCTTTGTCAATCTATG
GACATGCCCATATATGAAGGAGATGGGTGGGTCAAAAAGGGATATCAAATGAAGTGATAGGGGTCACAATGGGGA
AATTGAAGTGGTGCATAACATTGCCAAAATAGTGTGCCACTAGAAATGGTGTAAAGGCTGTCTTTTTTTTTTTTT
TTAAAGAAAAGTTATTACCATGTATTTTGTGAGGCAGGTTTACAACACTACAAGTCTTGAGTTAAGAAGGAAAGA
GGAAAAAAGAAAAAACACCAATACCCAGATTTAAAAAAAAAAAAACGATCATAGTCTTAGGAGTTCATTTAAACC
ATAGGAACTTTTCACTTATCTCATGTTAGCTGTACCAGTCAGTGATTAAGTAGAACTACAAGTTGTATAGGCTTT
ATTGTTTATTGCTGGTTTATGACCTTAATAAAGTGTAATTATGTATTACCAGCAGGGTGTTTTTAACTGTGACTA
TTGTATAAAAACAAATCTTGATATCCAGAAGCACATGAAGTTTGCAACTTTCCACCCTGCCCATTTTTGTAAAAC
TGCAGTCATCTTGGACCTTTTAAAACACAAATTTTAAACTCAACCAAGCTGTGATAAGTGGAATGGTTACTGTTT
ATACTGTGGTATGTTTTTGATTACAGCAGATAATGCTTTCTTTTCCAGTCGTCTTTGAGAATAAAGGAAAAAAAA
TCTTCAGATGCAATGGTTTTGTGTAGCATCTTGTCTATCATGTTTTGTAAATACTGGAGAAGCTTTGACCAATTT
GACTTAGAGATGGAATGTAACTTTGCTTACAAAAATTGCTATTAAACTCCTGCTTAAGGTGTTCTAATTTTCTGT
GAGCACACTAAAAGCGAAAAATAAATGTGAATAAAATGT

FIGURE 540

MGAQFSKTAAKGEAAAERPGEAAVASSPSKANGQENGHVKVNGDASPAAAESGAKEELQANGSAPAADKEEPAAA
GSGAASPSSAEKGEPAAAAAPEAGASPVEKEAPAEGEAAEPGSATAAEGEAASAASSTSSPKAEDGATPSPSNET
PKKKKKRFSFKKSFKLSGFSFKKNKKEAGEGGEAEAPAAEGGKDEAAGGAAAAAAEAGAASGEQAAAPGEEAAAG
EEGAAGGDPQEAKPQEAAVAPEKPPASDETKAAEEPSKVEEKKAEEAGASAAACEAPSAAGPGAPPEQEAAPAEE
PAAAAASSACAAPSQEAQPECSPEAPPAEAAE

FIGURE 541

AACTGTGCGAACCAGACCCGGCAGCCTTGCTCAGTTCAGCATAGCGGAGCGGATCCGATCGGATCGGAGCACACC
GGAGCAGGCTCATCGAGAAGGCGTCTGCGAGACC**ATG**GAGAACGGATACACCTATGAAGATTATAAGAACACTGC
AGAATGGCTTCTGTCTCATACTAAGCACCGACCTCAAGTTGCAATAATCTGTGGTTCTGGATTAGGAGGTCTGAC
TGATAAATTAACTCAGGCCCAGATCTTTGACTACAGTGAAATCCCCAACTTTCCTCGAAGTACAGTGCCAGGTCA
TGCTGGCCGACTGGTGTTTGGGTTCCTGAATGGCAGGGCCTGTGTGATGATGCAGGGCAGGTTCCACATGTATGA
AGGGTACCCACTCTGGAAGGTGACATTCCCAGTGAGGGTTTTCCACCTTCTGGGTGTGGACACCCTGGTAGTCAC
CAATGCAGCAGGAGGGCTGAACCCCAAGTTTGAGGTTGGAGATATCATGCTGATCCGTGACCATATCAACCTACC
TGGTTTCAGTGGTCAGAACCCTCTCAGAGGGCCCAATGATGAAAGGTTTGGAGATCGTTTCCCTGCCATGTCTGA
TGCCTACGACCGGACTATGAGGCAGAGGGCTCTCAGTACCTGGAAACAAATGGGGGAGCAACGTGAGCTACAGGA
AGGCACCTATGTGATGGTGGCAGGCCCCAGCTTTGAGACTGTGGCAGAATGTCGTGTGCTGCAGAAGCTGGGAGC
AGACGCTGTTGGCATGAGTACAGTACCAGAAGTTATCGTTGCACGGCACTGTGGACTTCGAGTCTTTGGCTTCTC
ACTCATCACTAACAAGGTCATCATGGATTATGAAAGCCTGGAGAAGGCCAACCATGAAGAAGTCTTAGCAGCTGG
CAAACAAGCTGCACAGAAATTGGAACAGTTTGTCTCCATTCTTATGGCCAGCATTCCACTCCCTGACAAAGCCAG
T**TGA**CCTGCCTTGGAGTCGTCTGGCATCTCCCACACAAGACCCAAGTAGCTGCTACCTTCTTTGGCCCCTTGCTG
GAGTCATGTGCCTCTGTCCTTAGGTTGTAGCAGAAAGGAAAAGATTCCTGTCCTTCACCTTTCCCACTTTCTTCT
ACCAGACCCTTCTGGTGCCAGATCCTCTTCTCAAAGCTGGGATTACAGGTGTGAGCATAGTGAGACCTTGGCGCT
ACAAAATAAAGCTGTTCTCATTCCTGTTCTTTCTTACACAAGAGCTGGAGCCCGTGCCCTACCACACATCTGTGG
AGATGCCCAGGATTTGACTCGGGCCTTAGAACTTTGCATAGCAGCTGCTACTAGCTCTTTGAGATAATACATTCC
GAGGGGCTCAGTTCTGCCTTATCTAAATCACCAGAGACCAAACAAGGACTAATCCAATACCTCTTGGA

FIGURE 542

MENGYTYEDYKNTAEWLLSHTKHRPQVAIICGSGLGGLTDKLTQAQIFDYSEIPNFPRSTVPGHAGRLVFGFLNG
RACVMMQGRFHMYEGYPLWKVTFPVRVFHLLGVDTLVVTNAAGGLNPKFEVGDIMLIRDHINLPGFSGQNPLRGP
NDERFGDRFPAMSDAYDRTMRQRALSTWKQMGEQRELQEGTYVMVAGPSFETVAECRVLQKLGADAVGMSTVPEV
IVARHCGLRVFGFSLITNKVIMDYESLEKANHEEVLAAGKQAAQKLEQFVSILMASIPLPDKAS

FIGURE 543

GAGACGGCTTCTCATCATGGCGGACCCTAGAGATAAGGCGCTTCAGGACTACCGCAAGAAGTTGCTTGAACACAA
GGAGATCGACGGCCGTCTTAAGGAGTTAAGGGAACAATTAAAAGAACTTACCAAGCAGTATGAAAAGTCTGAAAA
TGATCTGAAGGCCCTACAGAGTGTTGGGCAGATCGTGGGTGAAGTGCTTAAACAGTTAACTGAAGAAAAATTCAT
TGTTAAAGCTACCAATGGACCAAGATATGTTGTGGGTTGTCGTCGACAGCTTGACAAAAGTAAGCTGAAGCCAGG
AACAAGAGTTGCTTTGGATATGACTACACTAACTATCATGAGATATTTGCCGAGAGAGGTGGATCCACTGGTTTA
TAACATGTCTCATGAGGACCCTGGGAATGTTTCTTATTCTGAGATTGGAGGGCTATCAGAACAGATCCGGGAATT
AAGAGAGGTGATAGAATTACCTCTTACAAACCCAGAGTTATTTCAGCGTGTAGGAATAATACCTCCAAAAGGCTG
TTTGTTATATGGACCACCAGGTACGGGAAAAACACTCTTGGCACGAGCCGTTGCTAGCCAGCTGGACTGCAATTT
CTTAAAGGTTGTATCTAGTTCTATTGTAGACAAGTACATTGGTGAAAGTGCTCGTTTGATCAGAGAAATGTTTAA
TTATGCTAGAGATCATCAACCATGCATCATTTTTATGGATGAAATAGATGCTATTGGTGGTCGTCGGTTTTCTGA
GGGTACTTCAGCTGACAGAGAGATTCAGAGAACGTTAATGGAGTTACTGAATCAAATGGATGGATTTGATACTCT
GCATAGAGTTAAAATGACCATGGCTACAAACAGACCAGATACACTGGATCCTGCTTTGCTGCGTCCAGGAAGATT
AGATAGAAAAATACATATTGATTTGCCAAATGAACAAGCAAGATTAGACATACTGAAAATCCATGCAGGTCCCAT
TACAAAGCATGGTGAAATAGATTATGAAGCAATTGTGAAGCTTTCGGATGGCTTTAATGGAGCAGATCTGAGAAA
TGTTTGTACTGAAGCAGGTATGTTCGCAATTCGTGCTGATCATGATTTTGTAGTACAGGAAGACTTCATGAAAGC
AGTCAGAAAAGTGGCTGATTCTAAGAAGCTGGAGTCTAAATTGGACTACAAACCTGTGTAATTTACTGTAAGATT
TTTGATGGCTGCATGACAGATGTTGGCTTATTGTAAAAATAAAGTTAAAGAAAATAATGTATGTATTGGCAATGA
TGTCATTAAAAGTATATGAATAAAAATATGAGTAACATCATAAAAATTAGTAATTCAACTTTTAAGATACAGAAG
AAATTTGTATGTTTGTTAAAGTTGCATTTATTGCAGCAAGTTACAAAGGGAAAGTGTTGAAGCTTTTCATATTTG
CTGCGTGAGCATTTTGTAAAATATTGAAAGTGGTTTGAGATAGTGGTATAAGAAAGCATTTCTTATGACTTATTT
TGTATCATTTGTTTTCCTCATCTAAAAAGTTGAATAAAATCTGTTTGATTCAGTTCTCCT

FIGURE 544

MADPRDKALQDYRKKLLEHKEIDGRLKELREQLKELTKQYEKSENDLKALQSVGQIVGEVLKQLTEEKFIVKATN
GPRYVVGCRRQLDKSKLKPGTRVALDMTTLTIMRYLPREVDPLVYNMSHEDPGNVSYSEIGGLSEQIRELREVIE
LPLTNPELFQRVGIIPPKGCLLYGPPGTGKTLLARAVASQLDCNFLKVVSSSIVDKYIGESARLIREMFNYARDH
QPCIIFMDEIDAIGGRRFSEGTSADREIQRTLMELLNQMDGFDTLHRVKMIMATNRPDTLDPALLRPGRLDRKIH
IDLPNEQARLDILKIHAGPITKHGEIDYEAIVKLSDGFNGADLRNVCTEAGMFAIRADHDFVVQEDFMKAVRKVA
DSKKLESKLDYKPV

595/8433

FIGURE 545

GCGCCTGTCAGGGAAGCGGCGCGCGCGCGCGGGCGGCGGGCGGGCTGGGGATCCGCCGCGCAGTGCCAGCGCCAG
CGCCAGACCCGCGCCCCGCGCTCTCCGGCCCGTCGCCTGCCTTGGGACTCGCGAGCCCGCACTCCCGCCCTGCCT
GTTCGCTGCCCGAGTATGGAGCTGCTGTGTTGCGAAGGCACCCGGCACGCGCCCCGGGCCGGGCCGGACCCGCGG
CTGCTGGGGGACCAGCGTGTCCTGCAGAGCCTGCTCCGCCTGGAGGAGCGCTACGTACCCCGCGCCTCCTACTTC
CAGTGCGTGCAGCGGGAGATCAAGCCGCACATGCGGAAGATGCTGGCTTACTGGATGCTGGAGGTATGTGAGGAG
CAGCGCTGTGAGGAGGAAGTCTTCCCCCTGGCCATGAACTACCTGGATCGCTACCTGTCTTGCGTCCCCACCCGA
AAGGCGCAGTTGCAGCTCCTGGGTGCGGTCTGCATGCTGCTGGCCTCCAAGCTGCGCGAGACCACGCCCCTGACC
ATCGAAAAACTGTGCATCTACACCGACCACGCTGTCTCTCCCCGCCAGTTGCGGGACTGGGAGGTGCTGGTCCTA
GGGAAGCTCAAGTGGGACCTGGCTGCTGTGATTGCACATGATTTCCTGGCCTTCATTCTGCACCGGCTCTCTCTG
CCCCGTGACCGACAGGCCTTGGTCAAAAAGCATGCCCAGACCTTTTTGGCCCTCTGTGCTACAGATTATACCTTT
GCCATGTACCCGCCATCCATGATCGCCACGGGCAGCATTGGGGCTGCAGTGCAAGGCCTGGGTGCCTGCTCCATG
TCCGGGGATGAGCTCACAGAGCTGCTGGCAGGGATCACTGGCACTGAAGTGGACTGCCTGCGGGCCTGTCAGGAG
CAGATCGAAGCTGCACTCAGGGAGAGCCTCAGGGAAGCCTCTCAGACCAGCTCCAGCCCAGCGCCCAAAGCCCCC
CGGGGCTCCAGCAGCCAAGGGCCCAGCCAGACCAGCACTCCTACAGATGTCACAGCCATACACCTGTAGCCCTGG
AGAGGCCCTCTGGAGTGGCCACTAAGCAGAGGAGGGGCCGCTGCCACCCACCTCCCTGCCTCCAGGAACCACACC
ACATCTAAGCCTGAAGGGGCGTCTGTTCCCCCTTCACAAAGCCCAAGGGATCTGGTCCTACCCATCCCCGCAGTG
TGCACTAAGGGGCCCGGCCAGCCATGTCTGCATTTCGGTGGCTAGTCAAGCTCCTCCTCCCTGCATCTGACCAGC
AGCGCCTTTCCCAACTCTAGCTGGGGGTGGGCCAGGCTGATGGGACAGAATTGGATACATACACCAGCATTCCTT
TTGAACGCCCCCCCCCACCCCTGGGGGCTCTCATGTTTTCAACTGCCAAAATGCTCTAGTGCCTTCTAAAGGTGT
TGTCCCTTCTAGGGTTATTGCATTTGGATTGGGGTCCCTCTAAAATTTAATGCATGATAGACACATATGAGGGGG
AATAGTCTAGATGGCTCCTCTCAGTACTTTGGAGGCCCCTATGTAGTCCGTGCTGACAGCTGCTCCTAGAGGGAG
GGGCCTAGGCCTCAGCCAGAGAAGCTATAAATTCCTCTTTGCTTTGCTTTCTGCTCAGCTTCTCCTGTGTGATTG
ACAGCTTTGCTGCTGAAGGCTCATTTTAATTTATTAATTGCTTTGAGCACAACTTTAAGAGGACATAATGGGGGC
CTGGCCATCCCACAAGTGGTGGTAACCCTGGTGGTTGCTGTTTTCCTCCCTTCTGCTACTGGCAAAAGGATCTTT
GTGGCCAAGGAGCTGCTATAGCCTGGGGTGGGGTCATGCCCTCCTCTCCCATTGTCCCTCTGCCCCATCCTCCAG
CAGGGAAAATGCAGCAGGGATGCCCTGGAGGTGGCTGAGCCCCTGTCTAGAGAGGGAGGCAAGCCCTGTTGACAC
AGGTCTTTCCTAAGGCTGCAAGGTTTAGGCTGGTGGCCCAGGACCATCATCCTACTGTAATAAAGATGATTGTGA
AATAAAACTGGCTTTGGCTTCTTGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 546

MELLCCEGTRHAPRAGPDPRLLGDQRVLQSLLRLEERYVPRASYFQCVQREIKPHMRKMLAYWMLEVCEEQRCEE
EVFPLAMNYLDRYLSCVPTRKAQLQLLGAVCMLLASKLRETTPLTIEKLCIYTDHAVSPRQLRDWEVLVLGKLKW
DLAAVIAHDFLAFILHRLSLPRDRQALVKKHAQTFLALCATDYTFAMYPPSMIATGSIGAAVQGLGACSMSGDEL
TELLAGITGTEVDCLRACQEQIEAALRESLREASQTSSSPAPKAPRGSSSQGPSQTSTPTDVTAIHL

FIGURE 547

CGCAACGCCGGTGCCTGAGGAGCGATGCCGAGGGAAATCATCACCCTACAGTTGGGCCAGTGCGGCAATCAGATT
GGGTTCGAGTTCTGGAAACAGCTGTGCGCCGAGCATGGTATCAGCCCCGAGGCGATCGTGGAGGAGTTCGCCACC
GAGGGCACTGACCGCAAGGACGTCTTTTTCTACCAGGCAGACGATGAGCACTACATCCCCCGGGCCGTGCTGCTG
GACTTGGAACCCCGGGTGATCCACTCCATCCTCAACTCCCCCTATGCCAAGCTCTACAACCCAGAGAACATCTAC
CTGTCGGAACATGGAGGAGGAGCTGGCAACAACTGGGCCAGCGGATTCTCCCAGGGAGAAAAGATCCATGAGGAC
ATTTTTGACATCATAGACCGGGAGGCAGATGGTAGTGACAGTCTAGAGGGCTTTGTGCTGTGTCACTCCATTGCT
GGGGGGACAGGCTCTGGACTGGGTTCCTACCTCTTAGAACGGCTGAATGACAGGTATCCTAAGAAGCTGGTGCAG
ACATACTCAGTGTTTCCCAACCAGGACGAGATGAGCGATGTGGTGGTCCAGCCTTACAATTCACTCCTCACACTC
AAGAGGCTGACGCAGAATGCAGACTGTCTGGTGGTGCTGGACAACACAGCCCTGAACCGGATTGCCACAGACCGC
CTGCACATCCAGAACCCATCCTTCTCCCAGATCAACCAGCTGGTGTCTACCATCATGTCAGCCAGCACCACCACC
CTGCGCTACCCTGGCTACATGAACAATGACCTCATCGGCCTCATCGCCTCGCTCATTCCCACCCCACGGCTCCAC
TTCCTCATGACCGGCTACACCCCTCTCACTACGGACCAGTCAGTGGCCAGCGTGAGGAAGACCACGGTCCTGGAT
GTCATGAGGCGGCTGCTGCAGCCCAAGAACGTGATGGTGTCCACAGGCCGAGACCGCCAGACCAACCACTGCTAC
ATCGCCATCCTCAACATCATCCAGGGAGAGGTGGACCCCACCCAGGTCCACAAGAGCTTGCAGAGGATCCGGGAA
CGCAAGTTGGCCAACTTCATCCCGTGGGGCCCCGCCAGCATCCAGGTGGCCCTGTCGAGGAAGTCTCCCTACCTG
CCCTCGGCCCACCGGGTCAGCGGGCTCATGATGGCCAACCACACCAGCATCTCCTCGCTCTTCGAGAGAACCTGT
CGCCAGTATGACAAGCTGCGTAAGCGGGAGGCCTTCCTGGAGCAGTTCCGCAAGGAGGACATGTTCAAGGACAAC
TTTGATGAGATGGACACATCCAGGGAGATTGTGCAGCAGCTCATCGATGAGTACCATGCGGCCACACGGCCAGAC
TACATCTCCTGGGGCACCCAGGAGCAGTGAGTCCCCCAGGACAGGGGACCCTCATCTGCCTTACTGGTTGGCCCA
AGCCCTGCCTGACTGACCACCCCCTCAGAGCACAGATCAGGGACCTCACGCATCTCTTTCTCATATACATGGACT
CTCTGTTGGCCTGCAAACACATTTACTTCTCCTCTTATGAGACTATTTATCTTTAATAAAGCACTGGG

FIGURE 548

MPREIITLQLGQCGNQIGFEFWKQLCAEHGISPEAIVEEFATEGTDRKDVFFYQADDEHYIPRAVLLDLEPRVIH
SILNSPYAKLYNPENIYLSEHGGGAGNNWASGFSQGEKIHEDIFDIIDREADGSDSLEGFVLCHSIAGGTGSGLG
SYLLERLNDRYPKKLVQTYSVFPNQDEMSDVVVQPYNSLLTLKRLTQNADCLVVLDNTALNRIATDRLHIQNPSF
SQINQLVSTIMSASTTTLRYPGYMNNDLIGLIASLIPTPRLHFLMTGYTPLTTDQSVASVRKTTVLDVMRRLLQP
KNVMVSTGRDRQTNHCYIAILNIIQGEVDPTQVHKSLQRIRERKLANFIPWGPASIQVALSRKSPYLPSAHRVSG
LMMANHTSISSLFERTCRQYDKLRKREAFLEQFRKEDMFKDNFDEMDTSREIVQQLIDEYHAATRPDYISWGTQE
Q

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FIGURE 549A

GGCGGGTCCCGCGGCGAGGCAGCTCCTGGGCATAAGCTGTGGCCATGACTACTGAAGTAGGCTCTGTGTCTGAAG
TGAAGAAGGACTCTAGCCAGTTAGGAACAGATGCAACCAAGGAAAAACCTAAAGAAGTAGCAGAAAATCAGCAGA
ATCAGTCTTCCGATCCAGAGGAGGAAAAAGGTTCCCAGCCACCTCCTGCAGCTGAAAGCCAAAGTAGTCTACGCC
GCCAGAAGAGAGAGAAGGAAACATCGGAGAGCAGGGGTATTTCTCGGTTCATACCGCCATGGCTTAAGAAGCAAA
AGTCATATACCTTAGTAGTGGCCAAAGATGGAGGAGATAAAAAAGAGCCTACCCAAGCTGTTGTTGAAGAACAGG
TCTTAGATAAAGAGGAACCCCTTCCAGAAGAACAGAGACAGGCTAAGGGTGATGCTGAAGAAATGGCTCAGAAGA
AACAAGAGATTAAAGTTGAAGTCAAGGAAGAAAAACCCTCAGTGAGCAAGGAAGAAAAACCCTCAGTGAGCAAAG
TGGAGATGCAGCCTACTGAATTAGTAAGTAAGGAGAGAGAAGAGAAGGTAAAAGAAACACAGGAAGACAAATTAG
AAGGAGGAGCAGCAAAAAGGGAGACCAAGGAAGTGCAGACCAATGAGCTGAAAGCAGAGAAGGCATCTCAAAAAG
TCACCAAGAAGACCAAAACTGTCCAGTGTAAAGTGACCCTCTTAGATGGCACCGAATACAGCTGTGACCTGGAGA
AACATGCCAAGGGACAAGTGTTATTTGACAAAGTGTGTGAACACCTCAATCTCTTGGAGAAAGACTACTTTGGAC
TTTTGTTTCAGGAAAGCCCTGAGCAGAAAAACTGGTTAGATCCTGCTAAAGAAATAAAGAGACAACTGAGAAACC
TTCCATGGCTATTCACTTTTAATGTGAAGTTTTATCCTCCTGATCCTTCTCAATTGACTGAAGATATCACCAGAT
ACTTCTTGTGCCTTCAGCTCCGGCAGGACATTGCCTCTGGCCGCCTGCCCTGCTCTTTTGTGACTCATGCTCTCC
TGGGATCCTACACCCTGCAGGCTGAACTTGGTGACTATGACCCAGAAGAACATGGCAGCATCGACCTCAGTGAAT
TCCAGTTTGCCCCTACTCAGACTAAGGAGCTGGAAGAGAAGGTGGCAGAGCTGCACAAAACCCACAGGGGCTTAT
CGCCAGCACAAGCTGATTCCCAGTTCTTAGAAAATGCAAAGAGGCTTTCCATGTATGGTGTTGACCTACATCATG
CCAAGGACTCAGAAGGTGTGGACATCAAGCTGGGCGTGTGTGCTAATGGACTTCTCATTTACAAAGACAGACTGC
GAATCAATCGTTTTGCTTGGCCGAAAATCTTAAAAATTTCCTATAAACGCAGTAACTTCTACATTAAAGTCAGAC
CGGCAGAGCTGGAACAGTTTGAGAGTACCATTGGATTCAAACTGCCAAACCACCGGGCAGCGAAAAGACTATGGA
AAGTGTGCGTGGAGCATCATACTTTCTACAGGCTTGTTTCTCCAGAGCAGCCACCAAAAGCCAAGTTCCTGACCT
TGGGGTCCAAATTTCGCTATAGTGGCCGCACCCAAGCACAGACCCGCCAGGCCAGCACCCTCATAGATAGGCCAG
CACCACACTTTGAGCGCACTTCTAGTAAACGGGTCTCCAGGAGTCTAGATGGAGCTCCGATTGGTGTCATGGACC
AAAGTCTTATGAAGGATTTTCCTGGCGCTGCTGGGGAGATTTCAGCCTATGGACCTGGACTTGTCAGCATTGCCG
TGGTACAAGATGGGGACGGCAGGAGGGAAGTGAGAAGCCCAACTAAAGCCCCACATTTGCAGCTCATTGAAGGAA
AGAAAAATTCCTTGAGAGTAGAAGGGGATAATATTTATGTCAGACATAGCAATTTAATGTTGGAGGAACTGGATA
AGGCCCAGGAGGACATACTGAAACATCAGGCTAGCATTAGTGAACTCAAGCGCAATTTTATGGAATCCACACCTG
AGCCGCGCCCTAATGAATGGGAAAAACGACGTATCACACCTCTGTCCCTACAGACACAAGGGAGTTCACATGAGA
CTCTGAATATAGTGGAGGAGAAGAAGCGGGCAGAGGTTGGGAAAGACGAAAGAGTAATCACAGAAGAAATGAATG
GTAAAGAGATATCACCTGGGAGTGGTCCTGGGGAGATTCGTAAGGTGGAGCCTGTGACACAAAAAGACTCCACCT
CCCTGTCTTCTGAGAGCAGCAGCAGCAGCAGTGAGAGTGAGGAGGAAGACGTGGGAGAGTACCGTCCCCACCACC
GAGTGACCGAGGGCACCATCAGGGAGGAACAGGAGTATGAAGAAGAGGTGGAGGAAGAACCCCGCCCGGCAGCCA
AGGTAGTAGAGAGGGAGGAAGCAGTGCCCGAAGCCAGCCCAGTCACACAAGCAGGTGCCAGTGTAATCACAGTAG
AAACAGTGATCCAGGAAAATGTAGGTGCCCAAAAGATACCCGGAGAGAAGAGTGTACACGAAGGCGCTCTTAAGC
AAGACATGGGAGAAGAAGCAGAGGAAGAGCCACAGAAAGTTAACGGAGAGGTGTCCCATGTTGACATTGATGTTT
TGCCACAAATTATTTGTTGTTCAGAGCCACCAGTGGTAAAAACAGAGATGGTAACAATTTCTGATGCCTCACAAA
GGACAGAAATCTCCACCAAGGAAGTCCCCATTGTCCAAACTGAGACCAAAACCATCACATATGAGTCTCCACAGA
TTGATGGCGGGGCTGGTGGTGATTCGGGCACGTTACTGACCGCACAAACCATCACATCTGAGTCCGTGTCAACAA
CGACAACCACACACATCACCAAGACTGTAAAAGGTGGAATTTCTGAAACAAGAATTGAGAAACGCATTGTGATCA
CAGGAGATGGAGATATTGATCATGACCAGGCACTGGCTCAGGCGATCAGGGAAGCCAGAGAGCAGCACCCTGACA
TGTCGGTCACAAGAGTGGTGGTACACAAAGAAACAGAGTTGGCTGAGGAAGGGGAAGATTAAGTAAGAAAGTCAT
TTTTTAAACAACACTCAACTTTGTGAACCCCTGAAGATTTTTTGACCGTTCCAAGTCTTAATGCCACACCACTAT
TCCAGCGAATTTATGCTACAACTGGTAACAATGACCAGAAGCCTGAAGAATTAAAATGCCAACACCAAACCTTTC
CTTACCAGCTCTGGTCTATATTGCTCCCATGCATTTAATATATTATTTTGTTTTATAACCACTTCTAAATATTCT
CAGTTCTTTCTTTTTGTTGTTGTTAATTAAGGGGTTTTGGTTTTGTTTTCTGTTTACTTTGTGTGCAACTACCTG
CTTTTAATGACTCACTTTGATCAAATGACAGTGAACAAAGCCAGCCCAAGCTGGTAAGGTGCTGTTCACTTGAAC
AGGTGCTGTTGCGCAGAAAGGAAACTCTGTGACTAATTTAGATAGTGGCTTTCCTTCTTCTGGATTCTTTTCATT
GAATTCTCACAGTAAATATTTACGGAGTTTTCAAATTGCAGCAAATATACTGTATGAGAAAATATTAATACAGAT

FIGURE 549B

TAAAAGCCTTTCTTACATCTTGAAAATTTTCTAATATTTGAGAATTTCACAGGGATGTTTTTTATATTGGGACCC
TTTTGACTTTCCAGTCCTGTGACTTTCTACTTTTAGTAGAGAGTCAGAATCTCTGGACTGGAGAATAATGAAGAA
GTTCACTGACTGTGCACTGTGCTTAGAGACCCTGCCGCACCACAGTGCCAATGCTTGTCAGACACATGCCCTTCG
GCAGCATTCCAGAACAGGAGGGAAGAGAAAGAGAAAACTTTCTTCCCTCTACTAAAAGATTCAGGCAGCTTAAAA
CCTTAGTGCTTTCTTTCTTAACATACCCAAATTTCAATTCTTTCCATTATTTGAACACTTGGGTAGAACTCTTGC
TTTGTATTAAACCTCTTTGTCTACACATGTAAAACTTACCTTTTGTTATTGAGCAGGCCTATCTCTTTCAGATAG
TTTTATGATTCACACAGGTTTGAGGATGCTGGGGAGAGGGGGAGGGGGCTGTGGTGGTGTTCTGTTGGTTACAAG
AAAGTTATACCATTTAAAGCTGGCACCAGAGACCCGATAGGGACTTATTAACTATATTGAACATTTTTTCCTTTG
CCTTTGACCCTATGTATAGTTACGATGCCAGATTAGATTTATAGCAGCCTCAAGTTGTATTAAATGATATTTTGC
TTCCTGTAATACTATTATAAAATAAAGTTTGTTTATTCTCTAAAAAAAAAAAAAAAAAAAA

FIGURE 550

MTTEVGSVSEVKKDSSQLGTDATKEKPKEVAENQQNQSSDPEEEKGSQPPPAAESQSSLRRQKREKETSESRGIS
RFIPPWLKKQKSYTLVVAKDGGDKKEPTQAVVEEQVLDKEEPLPEEQRQAKGDAEEMAQKKQEIKVEVKEEKPSV
SKEEKPSVSKVEMQPTELVSKEREEKVKETQEDKLEGGAAKRETKEVQTNELKAEKASQKVTKKTKTVQCKVTLL
DGTEYSCDLEKHAKGQVLFDKVCEHLNLLEKDYFGLLFQESPEQKNWLDPAKEIKRQLRNLPWLFTFNVKFYPPD
PSQLTEDITRYFLCLQLRQDIASGRLPCSFVTHALLGSYTLQAELGDYDPEEHGSIDLSEFQFAPTQTKELEEKV
AELHKTHRGLSPAQADSQFLENAKRLSMYGVDLHHAKDSEGVDIKLGVCANGLLIYKDRLRINRFAWPKILKISY
KRSNFYIKVRPAELEQFESTIGFKLPNHRAAKRLWKVCVEHHTFYRLVSPEQPPKAKFLTLGSKFRYSGRTQAQT
RQASTLIDRPAPHFERTSSKRVSRSLDGAPIGVMDQSLMKDFPGAAGEISAYGPGLVSIAVVQDGDGRREVRSPT
KAPHLQLIEGKKNSLRVEGDNIYVRHSNLMLEELDKAQEDILKHQASISELKRNFMESTPEPRPNEWEKRRITPL
SLQTQGSSHETLNIVEEKKRAEVGKDERVITEEMNGKEISPGSGPGEIRKVEPVTQKDSTSLSSESSSSSSESEE
EDVGEYRPHHRVTEGTIREEQEYEEEVEEEPRPAAKVVEREEAVPEASPVTQAGASVITVETVIQENVGAQKIPG
EKSVHEGALKQDMGEEAEEEPQKVNGEVSHVDIDVLPQIICCSEPPVVKTEMVTISDASQRTEISTKEVPIVQTE
TKTITYESPQIDGGAGGDSGTLLTAQTITSESVSTTTTTHITKTVKGGISETRIEKRIVITGDGDIDHDQALAQA
IREAREQHPDMSVTRVVVHKETELAEEGED

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FIGURE 551

CTTCCCCTTCTCTGCCCTGCTCCAGGCACCAGGCTCTTTCCCCTTCAGTGTCTCAGAGGAGGGGACGGCAGCACC
ATGGACCCCCGCTTGTCCACTGTCCGCCAGACCTGCTGCTGCTTCAATGTCCGCATCGCAACCACCGCCCTGGCC
ATCTACCATGTGATCATGAGCGTCTTGTTGTTCATCGAGCACTCAGTAGAGGTGGCCCATGGCAAGGCGTCCTGC
AAGCTCTCCCAGATGGGCTACCTCAGGATCGCTGACCTGATCTCCAGCTTCCTGCTCATCACCATGCTCTTCATC
ATCAGCCTGAGCCTACTGATCGGCGTAGTCAAGAACCGGGAGAAGTACCTGCTGCCCTTCCTGTCCCTGCAAATC
ATGGACTATCTCCTGTGCCTGCTCACCCTGCTGGGCTCCTACATTGAGCTGCCCGCCTACCTCAAGTTGGCCTCC
CGGAGCCGTGCTAGCTCCTCCAAGTTCCCCCTGATGACGCTGCAGCTGCTGGACTTCTGCCTGAGCATCCTGACC
CTCTGCAGCTCCTACATGGAAGTGCCCACCTATCTCAACTTCAAGTCCATGAACCACATGAATTACCTCCCCAGC
CAGGAGGATATGCCTCATAACCAGTTCATCAAGATGATGATCATCTTTTCCATCGCCTTCATCACTGTCCTTATC
TTCAAGGTCTACATGTTCAAGTGCGTGTGGCGGTGCTACAGATTGATCAAGTGCATGAACTCGGTGGAGGAGAAG
AGAAACTCCAAGATGCTCCAGAAGGTGGTCCTGCCGTCCTACGAGGAAGCCCTGTCTTTGCCATCGAAGACCCCA
GAGGGGGGCCCAGCACCACCCCCATACTCAGAGGTGTGACCCTCGCCAGGCCCCAGCCCCAGTGCTGGGAGGGGT
GGAGCTGCCTCATAATCTGCTTTTTTGCTTTGGTGGCCCCTGTGGCCTGGGTGGGCCCTCCCGCCCCTCCCTGGC
AGGACAATCTGCTTGTGTCTCCCTCGCTGGCCTGCTCCTCCTGCAGGGCCTGTGAGCTGCTCACAACTGGGTCAA
CGCTTTAGGCTGAGTCACTCCTCGGGTCTCTCCATAATTCAGCCCAACAATGCTTGGTTTATTTCAATCAGCTCT
GACACTTGTTTAGACGATTGGCCATTCTAAAGTTGGTGAGTTTGTCAAGCAACTATCGACTTGATCAGTTCAGCC
AAGCAACTGACAAATCAAAAACCCACTTGTCAGTTCAGTAAAATAATTTGGTCAAACAACAGTCTATTGCATTGA
TTTATAAATAGTTGTCAGTTCACATAGCAATTTAATCAAGTAATCATTAATTAGTTACCCCCTATATATAAATAT
ATGTAATCAATTTCTTCAAATAGCTTGCTTACATGATAATCAATTAGCCAACCATGAGTCATTTAGAATAGTGAT
AAATAGAATACACAGAATAGTGATGAAATTCAATTTAAAAAATCACGTTAGCCTCCAAACCATTTAATTCAAATG
AACCCATCAACTGGATGCCAACTCTGGCGAATGTAGGACCTCTGAGTGGCTGTATAATTGTTAATTCAAATGAAA
TTCATTTAAACAGTTGACAAACTGTCATTCAACAATTAGCTCCAGGAAATAACAGTTATTTCATCATAAAACAGT
CCCTTCAAACACACAATTGTTCTGCTGAAGAGTTGTCATCAACAATCCAATGCTCACCTATTCAGTTGCTCTGTG
GTCAGTGTGGCTGCATAGCAGTGGATTCCATGAAAGGAGTCATTTTAGTGATGAGCTGCCAGTCCATTCCCAGGC
CAGGCTGTCGCTGGCCATCCATTCAGTCGATTCAGTCATAGGCGAATCTGTTCTGCCCGAGGCTTGTGGTCAAGC
AAAAATTCAGCCCTGAAATCAGGCACATCTGTTCGTTGGACTAAACCCACAGGTTAGTTCAGTCAAAGCAGGCAA
CCCCCTTGTGGGCACTGACCCTGCCACTGGGGTCATGGCGGTTGTGGCAGCTGGGGAGGTTTGGCCCCAACAGCC
CTCCTGTGCCTGCTTCCCTGTGTGTCGGGGTCCTCCAGGGAGCTGACCCAGAGGTGGAGGCCACGGAGGCAGGGT
CTCTGGGGACTGTCGGGGGGTACAGAGGGAGAAGGCTCTGCAAGAGCTCCCTGGCAATACCCCCTTGTGTAATTG
CTTTGTGTGCGACAGGGAGGAAGTTTCAATAAAGCAACAACAAGCTTCAAGGAATTC

FIGURE 552

MDPRLSTVRQTCCCFNVRIATTALAIYHVIMSVLLFIEHSVEVAHGKASCKLSQMGYLRIADLISSFLLITMLFI
ISLSLLIGVVKNREKYLLPFLSLQIMDYLLCLLTLLGSYIELPAYLKLASRSRASSSKFPLMTLQLLDFCLSILT
LCSSYMEVPTYLNFKSMNHMNYLPSQEDMPHNQFIKMMIIFSIAFITVLIFKVYMFKCVWRCYRLIKCMNSVEEK
RNSKMLQKVVLPSYEEALSLPSKTPEGGPAPPPYSEV

FIGURE 553

CTTCCCCTTCTCTGCCCTGCTCCAGGCACCAGGCTCTTTCCCCTTCAGTGTCTCAGAGGAGGGGACGGCAGCACC
ATGGACCCCCGCTTGTCCACTGTCCGCCAGACCTGCTGCTGCTTCAATGTCCGCATCGCAACCACCGCCCTGGCC
ATCTACCATGTGATCATGAGCGTCTTGTTGTTCATCGAGCACTCAGTAGAGGTGGCCCATGGCAAGGCGTCCTGC
AAGCTCTCCCAGATGGGCTACCTCAGGATCGCTGACCTGATCTCCAGCTTCCTGCTCATCACCATGCTCTTCATC
ATCAGCCTGAGCCTACTGATCGGCGTAGTCAAGAACCGGGAGAAGTACCTGCTGCCCTTCCTGTCCCTGCAAATC
ATGGACTATCTCCTGTGCCTGCTCACCCTGCTGGGCTCCTACATTGAGCTGCCCGCCTACCTCAAGTTGGCCTCC
CGGAGCCGTGCTAGCTCCTCCAAGTTCCCCCTGATGACGCTGCAGCTGCTGGACTTCTGCCTGAGCATCCTGACC
CTCTGCAGCTCCTACATGGAAGTGCCCACCTATCTCAACTTCAAGTCCATGAACCACATGAATTACCTCCCCAGC
CAGGAGGATATGCCTCATAACCAGTTCATCAAGATGATGATCATCTTTTCCATCGCCTTCATCACTGTCCTTATC
TTCAAGGTCTACATGTTCAAGTGCGTGTGGCGGTGCTACAGATTGATCAAGTGCATGAACTCGGTGGAGGAGAAG
AGAAACTCCAAGATGCTCCAGAAGGTGGTCCTGCCGTCCTACGAGGAAGCCCTGTCTTTGCCATCGAAGACCCCA
GAGGGGGGCCCAGCACCACCCCCATACTCAGAGGTGTGACCCTCGCCAGGCCCCAGCCCCAGTGCTGGGAGGGGT
GGAGCTGCCTCATAATCTGCTTTTTTGCTTTGGTGGCCCCTGTGGCCTGGGTGGGCCCTCCCGCCCCTCCCTGGC
AGGACAATCTGCTTGTGTCTCCCTCGCTGGCCTGCTCCTCCTGCAGGGCCTGTGAGCTGCTCACAACTGGGTCAA
CGCTTTAGGCTGAGTCACTCCTCGGGTCTCTCCATAATTCAGCCCAACAATGCTTGGTTTATTTCAATCAGCTCT
GACACTTGTTTAGACGATTGGCCATTCTAAAGTTGGTGAGTTTGTCAAGCAACTATCGACTTGATCAGTTCAGCC
AAGCAACTGACAAATCAAAAACCCACTTGTCAGTTCAGTAAAATAATTTGGTCAAACAACAGTCTATTGCATTGA
TTTATAAATAGTTGTCAGTTCACATAGCAATTTAATCAAGTAATCATTAATTAGTTACCCCCTATATATAAATAT
ATGTAATCAATTTCTTCAAATAGCTTGCTTACATGATAATCAATTAGCCAACCATGAGTCATTTAGAATAGTGAT
AAATAGAATACACAGAATAGTGATGAAATTCAATTTAAAAAATCACGTTAGCCTCCAAACCATTTAATTCAAATG
AACCCATCAACTGGATGCCAACTCTGGCGAATGTAGGACCTCTGAGTGGCTGTATAATTGTTAATTCAAATGAAA
TTCATTTAAACAGTTGACAAACTGTCATTCAACAATTAGCTCCAGGAAATAACAGTTATTTCATCATAAAACAGT
CCCTTCAAACACACAATTGTTCTGCTGAAGAGTTGTCATCAACAATCCAATGCTCACCTATTCAGTTGCTCTGTG
GTCAGTGTGGCTGCATAGCAGTGGATTCCATGAAAGGAGTCATTTTAGTGATGAGCTGCCAGTCCATTCCCAGGC
CAGGCTGTCGCTGGCCATCCATTCAGTCGATTCAGTCATAGGCGAATCTGTTCTGCCCGAGGCTTGTGGTCAAGC
AAAAATTCAGCCCTGAAATCAGGCACATCTGTTCGTTGGACTAAACCCACAGGTTAGTTCAGTCAAAGCAGGCAA
CCCCCTTGTGGGCACTGACCCTGCCACTGGGGTCATGGCGGTTGTGGCAGCTGGGGAGGTTTGGCCCCAACAGCC
CTCCTGTGCCTGCTTCCCTGTGTGTCGGGGTCCTCCAGGGAGCTGACCCAGAGGTGGAGGCCACGGAGGCAGGGT
CTCTGGGGACTGTCGGGGGGTACAGAGGGAGAAGGCTCTGCAAGAGCTCCCTGGCAATACCCCCTTGTGTAATTG
CTTTGTGTGCGACAGGGAGGAAGTTTCAATAAAGCAACAACAAGCTTCAAGGAATTC

FIGURE 554

MDPRLSTVRQTCCCFNVRIATTALAIYHVIMSVLLFIEHSVEVAHGKASCKLSQMGYLRIADLISSFLLITMLFI
ISLSLLIGVVKNREKYLLPFLSLQIMDYLLCLLTLLGSYIELPAYLKLASRSRASSSKFPLMTLQLLDFCLSILT
LCSSYMEVPTYLNFKSMNHMNYLPSQEDMPHNQFIKMMIIFSIAFITVLIFKVYMFKCVWRCYRLIKCMNSVEEK
RNSKMLQKVVLPSYEEALSLPSKTPEGGPAPPPYSEV

FIGURE 555

CGGACGCGTGGGCCGTCGCCGCCACCGCCGCCACCGCTACCGAGGCCGAGCGGAGCCGTTAGCGCCGCGCCGCCG
CCGCCTCCCGCCCGCCCCGGAGCAGCCCCGGGCCCGCCCGCCCGCATCCAGATTTTTGAAAAATACAATGTCTAA
TGGTTATGAAGACCACATGGCCGAAGACTGCAGGGGTGACATCGGGAGAACGAATTTGATCGTCAACTACCTCCC
TCAGAACATGACCCAGGATGAGTTACGAAGCCTGTTCAGCAGCATTGGTGAAGTTGAATCTGCAAAACTTATTCG
GGATAAAGTAGCAGGACACAGCTTGGGCTATGGCTTTGTGAACTACGTGACCGCGAAGGATGCAGAGAGAGCGAT
CAACACGCTGAACGGCTTGAGGCTCCAGTCAAAAACCATTAAGGTGTCGTATGCTCGCCCGAGCTCAGAGGTGAT
CAAAGACGCCAACTTGTACATCAGCGGGCTCCCGCGGACCATGACCCAGAAGGACGTAGAAGACATGTTCTCTCG
GTTTGGGCGGATCATCAACTCGCGGGTCCTCGTGGATCAGACTACAGGTTTGTCCAGAGGGGTTGCGTTTATCCG
GTTTGACAAACGGTCGGAGGCAGAAGAGGCAATTACCAGTTTCAATGGTCATAAACCCCCAGGTTCCTCTGAGCC
CATCACAGTGAAGTTTGCAGCCAACCCCAACCAGAACAAAAACGTGGCACTCCTCTCGCAGCTGTACCACTCGCC
AGCGCGACGGTTCGGAGGCCCCGTTCACCACCAGGCGCAGAGATTCAGGTTCTCCCCCATGGGCGTCGATCACAT
GAGCGGGCTCTCTGGCGTCAACGTGCCAGGAAACGCCTCCTCCGGCTGGTGCATTTTCATCTACAACCTGGGGCA
GGATGCCGACGAGGGGATCCTCTGGCAGATGTTTGGGCCGTTTGGTGCCGTCACCAATGTGAAAGTGATCCGCGA
CTTCAACACCAACAAGTGCAAAGGGTTTGGCTTTGTGACCATGACAAACTATGAAGAAGCCGCGATGGCCATAGC
CAGCCTGAACGGCTACCGCCTGGGGGACAAAATCTTACAGGTTTCCTTCAAAACCAACAAGTCCCACAAATAACT
CGCTCATGCTTTTTTTTGTACGGAATAGATAATTAAGAGTGAAGGAGTTGAAACTTTTCTTGTTAGTGTACAACT
CATTTTGCGCCAATTTTCACAAGTGTTTGTCTTTGTCTGAATGAGAAGTGAGAAGGTTTTTATACTCTGGGATGC
AACCGACATGTTCAAATGTTTGAAATCCCACAATGTTAGACCAATCTTAAGTTTCGTAAGTTATTTCCTTTAAGA
TATATATTAAACAGAAATCTAAGTAGAACTGCATTGACTAACCAGTCCCTCTGGATGGTGGTGAACCTGAAGCAT
GCTTTAACCTCTAAGACTGTCTAACACGCGTTTCATTCAATGTCTCCACAGACTGGGTAGCAAAAAAATCACCTT
TTAGTTTTAGTTTTTAATCTAAAGATGTTAGACAGATGCTGAGTGTGCGTTTTCTCAACCGCTTCAACATTGTAA
GCGATGTATGCTTTGGTTGACAGGAAGTTCCTTTTCCAGGCAGGTCCCGTTGCCACCTCCTGCTCACTCAGTCCC
GGGCTCTGCCGAGTGGTCCTGGGAATGGCGGCGGGCCCGTCCAGCGTGGGCCACCACTGGGGCCGGGGGCCACGG
GCTGCATGCTGGGCGGGCCCTCCAGAGAAGGACACAAACGTGTTTCGTAAGCCCAGGCACCAATGGGAATGGACC
AAAGAGTTTCAGGGAAACTCCAGTATATTCCAGAGTCAGATCTAAGCTCCAGGCACGCCTGAAGATGTGTTGCTA
CTCTGACATCCCGAGTTTCTGTCCACACATTGCATGCACAGCGCCCCACACATTGGATACTGTTGTTCACGATAA
TTTCTCCCGTTTTCCAGAGCATTTAACATAGCTTGGAGGCGTAAAATGGCTCTGTATTTTAATAACACAGAAACA
TTTGAGCATTGTATTTCTCGCATCCCTTCTCGTGAGCGCTTAGACCTTTTTCTATTTTAGTCGGATTTTGTTTTG
GAATTTTGCTTTTGTATGAACACTCAGCAGAAAAGTACTTACTTCTTGCCAGTTATCTATTAACCAAAACCTTTG
ATTTGTAGTTTTAAAGATTAACCCTCAAAGTTCTCTTCATAACTGCCTTGACATTTTGGGTTGTTCTGTTCTGTT
AATTTTCTTTTGCTTTTTTGTGTTTTTTGTTTGTTTTTACTTTTGCATTTAAGACCATTAAATTTGATTTTGTTT
TGCTCGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 556

MSNGYEDHMAEDCRGDIGRTNLIVNYLPQNMTQDELRSLFSSIGEVESAKLIRDKVAGHSLGYGFVNYVTAKDAE
RAINTLNGLRLQSKTIKVSYARPSSEVIKDANLYISGLPRTMTQKDVEDMFSRFGRIINSRVLVDQTTGLSRGVA
FIRFDKRSEAEEAITSFNGHKPPGSSEPITVKFAANPNQNKNVALLSQLYHSPARRFGGPVHHQAQRFRFSPMGV
DHMSGLSGVNVPGNASSGWCIFIYNLGQDADEGILWQMFGPFGAVTNVKVIRDFNTNKCKGFGFVTMTNYEEAAM
AIASLNGYRLGDKILQVSFKTNKSHK

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FIGURE 557

CACGAGGGAGCGCTAACGTCTTTCTGTCTCCCCGCGGTGGTGATGACGGTGAAAACTGAGGCTGCTAAGGGCACC
CTCACTTACTCCAGGATGAGGGGCATGGTGGCAATTCTCATCGCTTTCATGAAGCAGAGGAGGATGGGTCTGAAC
GACTTTATTCAGAAGATTGCCAATAACTCCTATGCATGCAAACACCCTGAAGTTCAGTCCATCTTGAAGATCTCC
CAACCTCAGGAGCCTGAGCTTATGAATGCCAACCCTTCTCCTCCACCAAGTCCTTCTCAGCAAATCAACCTTGGC
CCGTCGTCCAATCCTCATGCTAAACCATCTGACTTTCACTTCTTGAAAGTGATCGGAAAGGGCAGTTTTGGAAAG
GTTCTTCTAGCAAGACACAAGGCAGAAGAAGTGTTCTATGCAGTCAAAGTTTTACAGAAGAAAGCAATCCTGAAA
AAGAAAGAGGAGAAGCATATTATGTCGGAGCGGAATGTTCTGTTGAAGAATGTGAAGCACCCTTTCCTGGTGGGC
CTTCACTTCTCTTTCCAGACTGCTGACAAATTGTACTTTGTCCTAGACTACATTAATGGTGGAGAGTTGTTCTAC
CATCTCCAGAGGGAACGCTGCTTCCTGGAACCACGGGCTCGTTTCTATGCTGCTGAAATAGCCAGTGCCTTGGGC
TACCTGCATTCACTGAACATCGTTTATAGAGACTTAAAACCAGAGAATATTTTGCTAGATTCACAGGGACACATT
GTCCTTACTGATTTCGGACTCTGCAAGGAGAACATTGAACACAACAGCACAACATCCACCTTCTGTGGCACGCCG
GAGTATCTCGCACCTGAGGTGCTTCATAAGCAGCCTTATGACAGGACTGTGGACTGGTGGTGCCTGGGAGCTGTC
TTGTATGAGATGCTGTATGGCCTGCCGCCTTTTTATAGCCGAAACACAGCTGAAATGTACGACAACATTCTGAAC
AAGCCTCTCCAGCTGAAACCAAATATTACAAATTCCGCAAGACACCTCCTGGAGGGCCTCCTGCAGAAGGACAGG
ACAAAGCGGCTCGGGGCCAAGGATGACTTCATGGAGATTAAGAGTCATGTCTTCTTCTCCTTAATTAACTGGGAT
GATCTCATTAATAAGAAGATTACTCCCCCTTTTAACCCAAATGTGAGTGGGCCCAACGAGCTACGGCACTTTGAC
CCCGAGTTTACCGAAGAGCCTGTCCCCAACTCCATTGGCAAGTCCCCTGACAGCGTCCTCGTCACAGCCAGCGTC
AAGGAAGCTGCCGAGGCTTTCCTAGGCTTTTCCTATGCGCCTCCCACGGACTCTTTCCTCTGAACCCTGTTAGGG
CTTGGTTTTAAAGGATTTTATGTGTGTTTCCGAATGTTTTAGTTAGCCTTTTGGTGGAGCCGCCAGCTGACAGGA
CATCTTACAAGAGAATTTGCACATCTCTGGAAGCTTAGCAATCTTATTGCACACTGTTCGCTGGAATTTTTTGAA
GAGCACATTCTCCTCAGTGAGCTCATGAGGTTTTCATTTTTATTCTTCCTTCCAACGTGGTGCTATCTCTGAAAC
GAGCG1TAGAGTGCCGCCTTAGACGGAGGCAGGAGTTTCGTTAGAAAGCGGACCTGTTCTAAAAAAGGTCTCCTG
CAGATCTGTCTGGGCTGTGATGACGAATATTATGAAATGTGCCTTTTCTGAAGAGATTGTGTTAGCTCCAAAGCT
TTTCCTATCGCAGTGTTTCAGTTCTTTATTTTCCCTTGTGGATATGCTGTGTGAACCGTCGTGTGAGTGTGGTAT
GCCTGATCACAGATGGATTTTGTTATAAGCATCAATGTGACACTTGCAGGACACTACAACGTGGGACATTGTTTG
TTTCTTCCATATTTGGAAGATAAATTTATGTGTAGACTTTTTTGTAAGATACGGTTAATAACTAAAATTTATTGA
AATGGTCTTGCAATGACTCGTATTCAGATGCCTAAAGAAAGCATTGCTGCTACAAATATTTCTATTTTTAGAAAG
GGTTTTTATGGACCAATGCCCCAGTTGTCAGTCAGAGCCGTTGGTGTTTTTCATTGTTTAAAATGTCACCTGTAA
AATGGGCATTATTTATGTTTTTTTTTTTGCATTCCTGATAATTGTATGTATTGTATAAAGAACGTCTGTACATTG
GGTTATAACACTAGTATATTTAAACTTACAGGCTTATTTGTAATGTAAACCACCATTTTAATGTACTGTAATTAA
CATGGTTATAATACGTACAATCCTTCCCTCATCCCATCACACAACTTTTTTTGTGTGTGATAAACTGATTTTGGT
TTGCAATAAAACCTTGAAAAATAAAAAAAAAAAAAAAAAAAAAA

FIGURE 558

MTVKTEAAKGTLTYSRMRGMVAILIAFMKQRRMGLNDFIQKIANNSYACKHPEVQSILKISQPQEPELMNANPSP
PPSPSQQINLGPSSNPHAKPSDFHFLKVIGKGSFGKVLLARHKAEEVFYAVKVLQKKAILKKKEEKHIMSERNVL
LKNVKHPFLVGLHFSFQTADKLYFVLDYINGGELFYHLQRERCFLEPRARFYAAEIASALGYLHSLNIVYRDLKP
ENILLDSQGHIVLTDFGLCKENIEHNSTTSTFCGTPEYLAPEVLHKQPYDRTVDWWCLGAVLYEMLYGLPPFYSR
NTAEMYDNILNKPLQLKPNITNSARHLLEGLLQKDRTKRLGAKDDFMEIKSHVFFSLINWDDLINKKITPPFNPN
VSGPNELRHFDPEFTEEPVPNSIGKSPDSVLVTASVKEAAEAFLGFSYAPPTDSFL

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FIGURE 559

GGCCTGTTCTCGAGTCCGCGCTTTTCGTCACCGCCATGTCGGGAGGTGGTGTGATTCGTGGCCCCGCAGGGAACA
ACGATTGCCGCATCTACGTGGGTAACTTACCTCCAGACATCCGAACCAAGGACATTGAGGACGTGTTCTACAAAT
ACGGCGCTATCCGCGACATCGACCTCAAGAATCGCCGCGGGGGGACCGCCCTTCGCCTTCGTTGAGTTCGAGGACC
CGCGAGACGCGGAAGACGCGGTGTATGGTCGCGACGGCTATGATTACGATGGGTACCGTCTGCGGGTGGAGTTTC
CTCGAAGCGGCCGTGGAACAGGCCGAGGCGGCGGCGGGGGTGGAGGTGGCGGAGCTCCCCGAGGTCGCTATGGCC
CCCCATCCAGGCGGTCTGAAAACAGAGTGGTTGTCTCTGGACTGCCTCCAAGTGGAAGTTGGCAGGATTTAAAGG
ATCACATGCGTGAAGCAGGTGATGTATGTTATGCTGATGTTTACCGAGATGGCACTGGTGTCGTGGAGTTTGTAC
GGAAAGAAGATATGACCTATGCAGTTCGAAAACTGGATAACACTAAGTTTAGATCTCATGAGGGAGAAACTGCCT
ACATCCGGGTTAAAGTTGATGGGCCCAGAAGTCCAAGTTATGGAAGATCTCGATCTCGAAGCCGTAGTCGTAGCA
GAAGCCGTAGCAGAAGCAACAGCAGGAGTCGCAGTTACTCCCCAAGGAGAAGCAGAGGATCACCACGCTATTCTC
CCCGTCATAGCAGATCTCGCTCTCGTACATAAGATGATTGGTGACACTTTTTGTAGAACCCATGTTGTATACAGT
TTTCCTTTATTCAGTACAATCTTTTCATTTTTTAATTCAAACTGTTTTGTTCAGAATGGGCTAAAGTGTTGAATT
GCATTCTTGTAATATCCCCTTGCTCCTAACATCTACATTCCCTTCGTGTCTTTGATAAATTGTATTTTAAGTGAT
GTCATAGACAGGATTGTTTAAATTTAGTTAACTCCATACTCTTCAGACTGTGATATTGTGTAAATGTCTATCTGC
CCTGGTTTGTGTGAACTGGGATGTTGGGGGTGTTTGTGGTTATCTTACCTGGGGAAGTTCTTATGTTTATCTTGC
TTTTCATGTGTCTTTCTGTAGACATATCTGAAGAGATGGATTAAGAATGCTTTGGATTAAGGATTGTGGAGCACA
TTTCAATCATTTTAGGATTGTCAAAAGGAGGATTGAGGAGGATCAGATCAATAATGGAGGCAATGGTATGACTCC
AAGTGCTATTGTCACAGATGAAATTGGCAGTATTGACCTTATACTAAAAGGCAGGGGTTAAAAATGATTATATAC
ATTTTCCTTAAAACACTTGCAAACATTTTATTCAGTTGTCTTTAGCTACAATTGCTTTGCTTTTTAAACCTTGGC
AATTGTGGCAAAATTATATTGCCCATTTTGTAGCAACTTATTTTGCTCCCTTCCCCCCATTTTTGTTTTAATAGG
GACTAATGTGGGAAGAACTGGCTAATTTGTCACAGTGCTTAGTTACAACTGTTAATGTGTGACCTGCTGTTGGTG
TACATGTGGGTACAGGGTGTTTTTAAATCCAACAAGATAGAGTATAATATCAATACTGCTAAATCTGCATGTCCT
CTGTGTGACTGATAGAGCGTTGCTATTTCATTTTTTTAAGACAAAATGAAAGCAAAATATAGAGTTCCAATGTAT
TGGTGTAGATAATCTAGTTGGGAATACTTTTAAGTCTCACCTTCCCCTTTAAACTAATATTCATAATTGGTTCAT
ATGTTTAAAAGACTTTAATTTACAAATTAAATTGCAAATGGGAGCATTAGATTTAGTTTTAGACTTAGGTGGGTA
GCAATGCCAGTAAACTTAAATTACGTAACTTCTTGCAACCACGAAACCTGTAATACGCTGTACAGTAACAAGTGT
TGGCATTATCAGTTGAACTGTAAATACAAAATGCTTCTTCCAATTAGTCTCTATGATGATTAAGTTTCTAAAATT
TATCTGAACACCATTCAGAAACTTGTTTTGGGGAATTTGATAGTTATTGATGTGCATCTGTTAAACTGATGACAG
ACATAACTCATCATTCCCCAGAAACCTTTTTTGATTACAGTATCTAACATTTTGCCTCCTCTTTTTTGGTTTTGC
TGGTTATAAAGGTTTGGATTGGAGAGGGCTCACTGGATCCCAATCCTTGGAGCTGGATCATTGGATTCAAATCAT
AATGTGGATAGGATAGGGAGGATGAATTACCAGGATTCATGGAGCGGGATCAGATTACCAGGAACATAGGAGTGG
ATTCCTGCCCCAACCAAACCGCATTCGTGTGGATTTTTTTATTCAACTTAATTGGCTATTCCAAAGATTTTTTTT
TTCCTATTTTTGACGATTGGAGCCCTTAAGATGCACGATGGAATTGTGTTTTGCGTTTTTTGGTAAAAGGAGCAA
AGCGAGGACCTGGAGATAAACGCTGGAGCAATCTCCTTGGAAGGATTCAGCACGAGTAGATGGTAAACATTTAAA
GGGGAAAGGGGGGGTTTGTTTAAAATAGTAAATCAGTAAGTCACTTCTAAATTTAAAGAAAACAAAATTGGAGTT
GAAGAATAAGTAGGTTTCCAATTGGCTATTGCCGTTTTCTTTGAAAAAATAAACATTTTTTAAAAAACAAAAAAA
AAAAAAAA

FIGURE 560

MSGGGVIRGPAGNNDCRIYVGNLPPDIRTKDIEDVFYKYGAIRDIDLKNRRGGPPFAFVEFEDPRDAEDAVYGRD
GYDYDGYRLRVEFPRSGRGTGRGGGGGGGGGAPRGRYGPPSRRSENRVVVSGLPPSGSWQDLKDHMREAGDVCYA
DVYRDGTGVVEFVRKEDMTYAVRKLDNTKFRSHEGETAYIRVKVDGPRSPSYGRSRSRSRSRSRSRSRSNSRSRS
YSPRRSRGSPRYSPRHSRSRSRT

FIGURE 561

AGATAACAAGAGTAATCCACAGACTTAAAACATGAGCTCAGATGCCAGCCAAGGCGTGATTACCACTCCTCCTCC
TCCCAGCATGCCTCACAAAGAGAGATATTTTGACCGCATCAATGAAAATGACCCAGAATACATTAGGGAGAGGAA
CATGTCTCCTGATCTACGACAAGACTTCAACATGATGGAGCAGAGGAAACGAGTTACTCAGATCCTGCAAAGTCC
TGCCTTTCGGGAAGACTTGGAATGCCTTATTCAAGAACAGATGAAGAAAGGCCACAACCCAACTGGATTACTAGC
ATTACAGCAGATTGCAGATTACATCATGGCCAATTCTTTCTCGGGTTTTTCTTCACCTCCTCTCAGTCTTGGCAT
GGTCACACCTATCAATGACCTTCCTGGTGCAGATACATCCTCATATGTGAAGGGAGAAAAACTTACTCGCTGTAA
ACTTGCCAGCCTGTACAGACTTGTAGACTTGTTTGGATGGGCACACCTGGCAAATACCTATATCTCAGTAAGAAT
AAGTAAGGAGCAAGACCACATTATAATAATTCCCAGAGGCCTATCTTTTTCTGAAGCTACAGCCTCCAATTTGGT
GAAAGTCAATATAATAGGAGAAGTGGTTGACCAGGGAAGTACCAATTTGAAAATTGACCATACAGGATTCAGTCC
CCATGCTGCAATCTATTCAACACGTCCTGATGTTAAGTGTGTCATACACATCCATACCCTTGCAACAGCAGCTGT
ATCCTCCATGAAATGTGGGATCCTTCCAATTTCTCAAGAGTCTCTTCTTCTGGGAGATGTTGCCTATTATGACTA
CCAAGGGTCACTTGAAGAACAGGAGGAGAGAATTCAACTGCAGAAGGTTCTGGGACCAAGTTGTAAGGTGCTGGT
ACTCAGGAATCATGGTGTGGTTGCACTTGGAGAAACATTAGAGGAGGCTTTTCATTATATTTTTAATGTGCAACT
AGCCTGTGAGATTCAGGTGCAGGCCCTAGCAGGTGCAGGTGGAGTAGACAATCTCCATGTACTGGACTTTCAGAA
GTATAAAGCTTTCACTTACACTGTAGCAGCGTCTGGTGGAGGAGGTGTGAATATGGGTTCCCATCAAAAATGGAA
GGTTGGCGAAATTGAGTTTGAAGGGCTTATGAGGACTCTGGACAACTTGGGGTATAGAACAGGCTATGCTTACAG
GCATCCTCTCATTCGAGAGAAGCCTAGGCACAAGAGTGATGTGGAAATCCCAGCAACTGTGACTGCTTTTTCCTT
TGAAGACGATACAGTGCCACTCTCTCCTCTCAAATACATGGCACAGAGGCAACAGCGTGAAAAAACAAGATGGCT
GAACTCACCAAATACTTACATGAAAGTGAATGTGCCTGAGGAGTCTCGGAACGGAGAAACCAGTCCCCGAACCAA
AATCACGTGGATGAAAGCAGAAGACTCATCTAAAGTTAGTGGTGGAACACCTATCAAAATTGAAGATCCAAATCA
GTTTGTTCCTTTAAACACAAACCCGAATGAGGTACTAGAAAAGAGAAATAAGATTCGGGAACAAAATCGATATGA
CTTGAAAACAGCAGGACCACAATCTCAGTTGCTTGCTGGAATTGTTGTGGATAAGCCACCTTCTACTATGCAATT
TGAAGATGATGATCATGGCCCACCAGCTCCTCCTAACCCATTTAGTCATCTCACAGAAGGAGAACTTGAAGAGTA
TAAGAGGACAATCGAACGTAAACAACAAGGCCTAGAAGATGCTGAGCAGGAATTACTCTCAGATGACGCTTCATC
TGTTTCACAAATTCAGTCTCAAACTCAGTCACCGCAAAATGTCCCTGAAAAATTAGAAGAAAACCATGAGCTGTT
TTCCAAGAGCTTCATCTCCATGGAAGTGCCTGTCATGGTAGTAAATGGCAAGGATGATATGCATGATGTTGAAGA
TGAGCTTGCTAAGCGAGTGAGTAGGTTAAGCACAAGTACAACCATAGAAAACATCGAGATTACTATTAAGTCTCC
AGAGAAAATCGAAGAAGTCCTGTCACCTGAAGGCTCCCCTTCAAAATCGCCATCCAAGAAAAAGAAGAAATTCCG
CACTCCTTCTTTTCTGAAAAAGAACAAAAAAAAGGAGAAAGTTGAGGCCTAAATAAAGTCTTTTTATAATTATTA
TTATAACAATGTGACATTGCACATCTAAATACCACATTTAAGTTGATCATTAATATGCAATGGTAGATCAGATTG
GGGGATGTAGCAAACTGGACTTTAAGAACTGGAAAGAGGTTTTACAAAAGAAAAACTTTCAGATTCATCTCTCAT
TTTATATGTCCAGAAATGGCTTTGAATTTTAAGCAATTACTAGTTTTAATTAGCTCTGCCCTCATGAAGTATTAT
TATAATTCACCATAAACAGCTATCTGTCTGAATTACTTCAGGCCTTCTCCATAATATCTGTTAGAAAGAAATTGC
CAGTGAGCAAGTGAGAATTTTTATTTCTCAATACCTGCTTCACTTGATAATCATATTATAATTTTTTATCATGAT
TATTGACTATATTTTTGGAGTCCCATTGTTTCAGTGGGCATTAACAGAATGCTTTAAAAACTTCTAAGACAAGAA
TCTATAGCATTAGTATACACTGGCACATAATTTTTTAAAAAGTTTTAAGAAAAGATTCATTTGGAATTTTATTCA
CAGTATAAAATTTCCTCACCTGAAGTAACTTTGTTTGCCAAAAAAGTTGTTTTAATAAACTATAATTTTTGAAAA
CTTCCTTTTTTATTAGTTTAGAAAGCCCCTTATTTTTCAACAAAGGGGATTTTGTACACATAACATGGGTTATTT
AGTTTAACTCTGGC

FIGURE 562

MSSDASQGVITTPPPPSMPHKERYFDRINENDPEYIRERNMSPDLRQDFNMMEQRKRVTQILQSPAFREDLECLI
QEQMKKGHNPTGLLALQQIADYIMANSFSGFSSPPLSLGMVTPINDLPGADTSSYVKGEKLTRCKLASLYRLVDL
FGWAHLANTYISVRISKEQDHIIIIPRGLSFSEATASNLVKVNIIGEVVDQGSTNLKIDHTGFSPHAAIYSTRPD
VKCVIHIHTLATAAVSSMKCGILPISQESLLLGDVAYYDYQGSLEEQEERIQLQKVLGPSCKVLVLRNHGVVALG
ETLEEAFHYIFNVQLACEIQVQALAGAGGVDNLHVLDFQKYKAFTYTVAASGGGGVNMGSHQKWKVGEIEFEGLM
RTLDNLGYRTGYAYRHPLIREKPRHKSDVEIPATVTAFSFEDDTVPLSPLKYMAQRQQREKTRWLNSPNTYMKVN
VPEESRNGETSPRTKITWMKAEDSSKVSGGTPIKIEDPNQFVPLNTNPNEVLEKRNKIREQNRYDLKTAGPQSQL
LAGIVVDKPPSTMQFEDDDHGPPAPPNPFSHLTEGELEEYKRTIERKQQGLEDAEQELLSDDASSVSQIQSQTQS
PQNVPEKLEENHELFSKSFISMEVPVMVVNGKDDMHDVEDELAKRVSRLSTSTTIENIEITIKSPEKIEEVLSPE
GSPSKSPSKKKKKFRTPSFLKKNKKKEKVEA

FIGURE 563

AGATAACAAGAGTAATCCACAGACTTAAAACATGAGCTCAGATGCCAGCCAAGGCGTGATTACCACTCCTCCTCC
TCCCAGCATGCCTCACAAAGAGAGATATTTTGACCGCATCAATGAAAATGACCCAGAATACATTAGGGAGAGGAA
CATGTCTCCTGATCTACGACAAGACTTCAACATGATGGAGCAGAGGAAACGAGTTACTCAGATCCTGCAAAGTCC
TGCCTTTCGGGAAGACTTGGAATGCCTTATTCAAGAACAGATGAAGAAAGGCCACAACCCAACTGGATTACTAGC
ATTACAGCAGATTGCAGATTACATCATGGCCAATTCTTTCTCGGGTTTTTCTTCACCTCCTCTCAGTCTTGGCAT
GGTCACACCTATCAATGACCTTCCTGGTGCAGATACATCCTCATATGTGAAGGGAGAAAAACTTACTCGCTGTAA
ACTTGCCAGCCTGTACAGACTTGTAGACTTGTTTGGATGGGCACACCTGGCAAATACCTATATCTCAGTAAGAAT
AAGTAAGGAGCAAGACCACATTATAATAATTCCCAGAGGCCTATCTTTTTCTGAAGCTACAGCCTCCAATTTGGT
GAAAGTCAATATAATAGGAGAAGTGGTTGACCAGGGAAGTACCAATTTGAAAATTGACCATACAGGATTCAGTCC
CCATGCTGCAATCTATTCAACACGTCCTGATGTTAAGTGTGTCATACACATCCATACCCTTGCAACAGCAGCTGT
ATCCTCCATGAAATGTGGGATCCTTCCAATTTCTCAAGAGTCTCTTCTTCTGGGAGATGTTGCCTATTATGACTA
CCAAGGGTCACTTGAAGAACAGGAGGAGAGAATTCAACTGCAGAAGGTTCTGGGACCAAGTTGTAAGGTGCTGGT
ACTCAGGAATCATGGTGTGGTTGCACTTGGAGAAACATTAGAGGAGGCTTTTCATTATATTTTTAATGTGCAACT
AGCCTGTGAGATTCAGGTGCAGGCCCTAGCAGGTGCAGGTGGAGTAGACAATCTCCATGTACTGGACTTTCAGAA
GTATAAAGCTTTCACTTACACTGTAGCAGCGTCTGGTGGAGGAGGTGTGAATATGGGTTCCCATCAAAAATGGAA
GGTTGGCGAAATTGAGTTTGAAGGGCTTATGAGGACTCTGGACAACTTGGGGTATAGAACAGGCTATGCTTACAG
GCATCCTCTCATTCGAGAGAAGCCTAGGCACAAGAGTGATGTGGAAATCCCAGCAACTGTGACTGCTTTTTCCTT
TGAAGACGATACAGTGCCACTCTCTCCTCTCAAATACATGGCACAGAGGCAACAGCGTGAAAAAACAAGATGGCT
GAACTCACCAAATACTTACATGAAAGTGAATGTGCCTGAGGAGTCTCGGAACGGAGAAACCAGTCCCCGAACCAA
AATCACGTGGATGAAAGCAGAAGACTCATCTAAAGTTAGTGGTGGAACACCTATCAAAATTGAAGATCCAAATCA
GTTTGTTCCTTTAAACACAAACCCGAATGAGGTACTAGAAAAGAGAAATAAGATTCGGGAACAAAATCGATATGA
CTTGAAAACAGCAGGACCACAATCTCAGTTGCTTGCTGGAATTGTTGTGGATAAGCCACCTTCTACTATGCAATT
TGAAGATGATGATCATGGCCCACCAGCTCCTCCTAACCCATTTAGTCATCTCACAGAAGGAGAACTTGAAGAGTA
TAAGAGGACAATCGAACGTAAACAACAAGGCCTAGAAGAAAACCATGAGCTGTTTTCCAAGAGCTTCATCTCCAT
GGAAGTGCCTGTCATGGTAGTAAATGGCAAGGATGATATGCATGATGTTGAAGATGAGCTTGCTAAGCGAGTGAG
TAGGTTAAGCACAAGTACAACCATAGAAAACATCGAGATTACTATTAAGTCTCCAGAGAAAATCGAAGAAGTCCT
GTCACCTGAAGGCTCCCCTTCAAAATCGCCATCCAAGAAAAAGAAGAAATTCCGCACTCCTTCTTTTCTGAAAAA
GAACAAAAAAAAAGGAGAAAGTTGAGGCCTAAATAAAGTCTTTTTATAATTATTATTATAACAATGTGACATTGCA
CATCTAAATACCACATTTAAGTTGATCATTAATATGCAATGGTAGATCAGATTGGGGGATGTAGCAAACTGGACT
TTAAGAACTGGAAAGAGGTTTTACAAAAGAAAAACTTTCAGATTCATCTCTCATTTTATATGTCCAGAAATGGCT
TTGAATTTTAAGCAATTACTAGTTTTAATTAGCTCTGCCCTCATGAAGTATTATTATAATTCACCATAAACAGCT
ATCTGTCTGAATTACTTCAGGCCTTCTCCATAATATCTGTTAGAAAGAAATTGCCAGTGAGCAAGTGAGAATTTT
TATTTCTCAATACCTGCTTCACTTGATAATCATATTATAATTTTTTATCATGATTATTGACTATATTTTTGGAGT
CCCATTGTTTCAGTGGGCATTAACAGAATGCTTTAAAAACTTCTAAGACAAGAATCTATAGCATTAGTATACACT
GGCACATAATTTTTTAAAAAGTTTTAAGAAAAGATTCATTTGGAATTTTATTCACAGTATAAAATTTCCTCACCT
GAAGTAACTTTGTTTGCCAAAAAAGTTGTTTTAATAAACTATAATTTTTGAAAACTTCCTTTTTTTATTAGTTTAG
AAAGCCCCTTATTTTTCAACAAAGGGGATTTTGTACACATAACATGGGTTATTTAGTTTAACTCTGGC

FIGURE 564

MSSDASQGVITTPPPPSMPHKERYFDRINENDPEYIRERNMSPDLRQDFNMMEQRKRVTQILQSPAFREDLECLI
QEQMKKGHNPTGLLALQQIADYIMANSFSGFSSPPLSLGMVTPINDLPGADTSSYVKGEKLTRCKLASLYRLVDL
FGWAHLANTYISVRISKEQDHIIIIPRGLSFSEATASNLVKVNIIGEVVDQGSTNLKIDHTGFSPHAAIYSTRPD
VKCVIHIHTLATAAVSSMKCGILPISQESLLLGDVAYYDYQGSLEEQEERIQLQKVLGPSCKVLVLRNHGVVALG
ETLEEAFHYIFNVQLACEIQVQALAGAGGVDNLHVLDFQKYKAFTYTVAASGGGGVNMGSHQKWKVGEIEFEGLM
RTLDNLGYRTGYAYRHPLIREKPRHKSDVEIPATVTAFSFEDDTVPLSPLKYMAQRQQREKTRWLNSPNTYMKVN
VPEESRNGETSPRTKITWMKAEDSSKVSGGTPIKIEDPNQFVPLNTNPNEVLEKRNKIREQNRYDLKTAGPQSQL
LAGIVVDKPPSTMQFEDDDHGPPAPPNPFSHLTEGELEEYKRTIERKQQGLEENHELFSKSFISMEVPVMVVNGK
DDMHDVEDELAKRVSRLSTSTTIENIEITIKSPEKIEEVLSPEGSPSKSPSKKKKKFRTPSFLKKNKKKEKVEA

FIGURE 565

TTTTCCCGCGAAACTCGGCGGCTGAGCGTGGAGGTTCTTGTCTCCCCTGGTTTGTGAAGTGCGGAAAACCAGAGG
CGCAGTCATGTCGGGATTCGACGATCCTGGCATTTTCTACAGCGACAGCTTCGGGGGCGACGCCCAGGCCGACGA
GGGGCAGGCCCGCAAATCGCAGCTGCAGAGGCGCTTCAAGGAGTTCCTGCGGCAGTACCGAGTGGGCACCGACCG
CACGGGCTTCACCTTCAAATACAGGGATGAACTCAAGCGGCATTACAACCTGGGGGAGTACTGGATTGAGGTGGA
GATGGAGGATCTGGCCAGCTTTGATGAGGACCTGGCCGACTACTTGTACAAGCAGCCAGCCGAGCACCTGCAGCT
GCTGGAGGAAGCTGCCAAGGAGGTAGCTGATGAGGTGACCCGGCCCCGGCCTTCTGGGGAGGAGGTGCTCCAGGA
CATCCAGGTCATGCTCAAGTCGGACGCCAGCCCTTCCAGCATTCGTAGCCTGAAGTCGGACATGATGTCACACCT
GGTGAAGATCCCTGGCATCATCATCGCGGCCTCTGCGGTCCGTGCCAAGGCCACCCGCATCTCTATCCAGTGCCG
CAGCTGCCGCAACACCCTCACCAACATTGCCATGCGCCCTGGCCTCGAGGGCTATGCCCTGCCCAGGAAGTGCAA
CACAGATCAGGCTGGACGCCCCAAATGCCCATTGGACCCGTACTTCATCATGCCCGACAAATGCAAATGCGTGGA
CTTCCAGACCCTGAAGCTGCAGGAGCTGCCTGATGCAGTCCCCCACGGGGAGATGCCCAGACACATGCAGCTCTA
CTGCGACAGGTACCTGTGTGACAAGGTCGTCCCTGGGAACAGGGTTACCATCATGGGCATCTACTCCATCAAGAA
GTTTGGCCTGACTACCAGCAGGGGCCGTGACAGGGTGGGCGTGGGCATCCGAAGCTCCTACATCCGTGTCCTGGG
CATCCAGGTGGACACAGATGGCTCTGGCCGCAGCTTTGCTGGGGCCGTGAGCCCCCAGGAGGAGGAGGAGTTCCG
TCGCCTGGCTGCCCTCCCAAATGTCTATGAGGTCATCTCCAAGAGCATCGCCCCCTCCATCTTTGGGGGCACAGA
CATGAAGAAGGCCATTGCCTGCCTGCTCTTTGGGGGCTCCCGAAAGAGGCTCCCTGATGGACTTACTCGCCGAGG
AGACATCAACCTGCTGATGCTAGGGGACCCTGGGACAGCCAAGTCCCAGCTTCTGAAGTTTGTGGAGAAGTGTTC
TCCCATTGGGGTATACACGTCTGGGAAAGGCAGCAGCGCAGCTGGACTGACAGCCTCGGTGATGAGGGACCCTTC
GTCCCGGAATTTCATCATGGAGGGCGGAGCCATGGTCCTGGCCGATGGTGGGGTCGTCTGTATTGACGAGTTTGA
CAAGATGCGAGAAGATGACCGTGTGGCAATCCACGAAGCCATGGAGCAGCAGACCATCTCTATCGCCAAGGCTGG
GATCACCACCACCCTGAACTCCCGCTGCTCCGTCCTGGCTGCTGCCAACTCAGTGTTCGGCCGCTGGGATGAGAC
GAAGGGGGAGGACAACATTGACTTCATGCCCACCATCTTGTCGCGCTTCGACATGATCTTCATCGTCAAGGATGA
GCACAATGAGGTGAGGGATGTGATGCTGGCCAAGCATGTCATCACTCTGCACGTGAGTGCACTGACACAGACACA
GGCTGTGGAGGGCGAGATTGACCTGGCCAAGCTGAAGAAGTTTATTGCCTACTGCCGAGTGAAGTGTGGCCCCCG
GCTGTCAGCAGAGGCTGCAGAGAAACTGAAGAACCGCTACATCATCATGCGGACGGGGCCCGTCAGCACGAGAGG
GACAGTGACCGCGTCCAGCATCCCCATCACTGTGCGGCAGTTGGAGGCCATTGTGCGCATCGCGGAAGCCCTCAG
CAAGATGAAGCTGCAGCCCTTCGCCACAGAGGCAGATGTGGAGGAGGCCCTGCGGCTCTTCCAAGTGTCCACGTT
GGATGCTGCCTTGTCCGGTACCCTGTCAGGGGTGGAGGGCTTCACCAGCCAGGAGGACCAGGAGATGCTGAGCCG
CATCGAGAAGCAGCTCAAGCGCCGCTTTGCCATTGGCTCCCAGGTGTCTGAGCACAGCATCATCAAGGACTTCAC
CAAGCAGAAATACCCGGAGCACGCCATCCACAAGGTGCTGCAGCTCATGCTGCGGCGCGGCGAGATCCAGCATCG
CATGCAGCGCAAGGTTCTCTACCGCCTCAAGTGAGTCGCGCCGCTCACTGGACTCATGGACTCGCCACGCTCGCC
CTCCTTGCCGCTGCCTGCCATTGACAATGTTGCTGGGACCTCTGCCTCCCCACTGCAGCCCTCGAACTTCCCAGG
CACCCTCCTTTCTGCCCCAGAGGAAGGAGCTGTAGTGTCCTGCTGCCTCTGGGCGCCCGCTCTAGCGGGTTCTGG
GAAGTGTGCTTTTGGCATCCGTTAATAATAAAGCCACGGTGTGTTCAGGT

FIGURE 566

MSGFDDPGIFYSDSFGGDAQADEGQARKSQLQRRFKEFLRQYRVGTDRTGFTFKYRDELKRHYNLGEYWIEVEME
DLASFDEDLADYLYKQPAEHLQLLEEAAKEVADEVTRPRPSGEEVLQDIQVMLKSDASPSSIRSLKSDMMSHLVK
IPGIIIAASAVRAKATRISIQCRSCRNTLTNIAMRPGLEGYALPRKCNTDQAGRPKCPLDPYFIMPDKCKCVDFQ
TLKLQELPDAVPHGEMPRHMQLYCDRYLCDKVVPGNRVTIMGIYSIKKFGLTTSRGRDRVGVGIRSSYIRVLGIQ
VDTDGSGRSFAGAVSPQEEEEFRRLAALPNVYEVISKSIAPSIFGGTDMKKAIACLLFGGSRKRLPDGLTRRGDI
NLLMLGDPGTAKSQLLKFVEKCSPIGVYTSGKGSSAAGLTASVMRDPSSRNFIMEGGAMVLADGGVVCIDEFDKM
REDDRVAIHEAMEQQTISIAKAGITTTLNSRCSVLAAANSVFGRWDETKGEDNIDFMPTILSRFDMIFIVKDEHN
EVRDVMLAKHVITLHVSALTQTQAVEGEIDLAKLKKFIAYCRVKCGPRLSAEAAEKLKNRYIIMRTGPVSTRGTV
TASSIPITVRQLEAIVRIAEALSKMKLQPFATEADVEEALRLFQVSTLDAALSGTLSGVEGFTSQEDQEMLSRIE
KQLKRRFAIGSQVSEHSIIKDFTKQKYPEHAIHKVLQLMLRRGEIQHRMQRKVLYRLK

FIGURE 567

GTAGTGGTGCCGACTTCCTGTTGTTTGAGGCCGGGTTGGGGGTGTGCGATTGTGTGGGACGGTCTGGGGCAGCCC
AGCAGCGGCTGACCCTCTGCCTGCGGGGAAGGGAGTCGCCAGGCGGCCGTCATGGCGGTGTCGGAGAGCCAGCTC
AAGAAAATGGTGTCCAAGTACAAATACAGAGACCTAACTGTACGTGAAACTGTCAATGTTATTACTCTATACAAA
GATCTCAAACCTGTTTTGGATTCATATGTTTTTAACGATGGCAGTTCCAGGGAACTAATGAACCTCACTGGAACA
ATCCCTGTGCCTTATAGAGGTAATACATACAATATTCCAATATGCCTATGGCTACTGGACACATACCCATATAAT
CCCCCTATCTGTTTTGTTAAGCCTACTAGTTCAATGACTATTAAAACAGGAAAGCATGTTGATGCAAATGGGAAG
ATATATCTTCCTTATCTACATGAATGGAAACACCCACAGTCAGACTTGTTGGGGCTTATTCAGGTCATGATTGTG
GTATTTGGAGATGAACCTCCAGTCTTCTCTCGTCCTATTTCGGCATCCTATCCGCCATACCAGGCAACGGGGCCA
CCAAATACTTCCTACATGCCAGGCATGCCAGGTGGAATCTCTCCATACCCATCCGGATACCCTCCCAATCCCAGT
GGTTACCCAGGCTGTCCTTACCCACCTGGTGGTCCATATCCTGCCACAACAAGTTCTCAGTACCCTTCTCAGCCT
CCTGTGACCACTGTTGGTCCCAGTAGGGATGGCACAATCAGCGAGGACACCATCCGAGCCTCTCTCATCTCTGCG
GTCAGTGACAAACTGAGATGGCGGATGAAGGAGGAAATGGATCGTGCCCAGGCAGAGCTCAATGCCTTGAAACGA
ACAGAAGAAGACCTGAAAAAGGGTCACCAGAAACTGGAAGAGATGGTTACCCGTTTAGATCAAGAAGTAGCCGAG
GTTGATAAAAACATAGAACTTTTGAAAAAGAAGGATGAAGAACTCAGTTCTGCTCTGGAAAAAATGGAAAATCAG
TCTGAAAACAATGATATCGATGAAGTTATCATTCCCACAGCTCCCTTATACAAACAGATCCTGAATCTGTATGCA
GAAGAAAACGCTATTGAAGACACTATCTTTTACTTGGGAGAAGCCTTGAGAAGGGGCGTGATAGACCTGGATGTC
TTCCTGAAGCATGTACGTCTTCTGTCCCGTAAACAGTTCCAGCTGAGGGCACTAATGCAAAAAGCAAGAAAGACT
GCCGGTCTCAGTGACCTCTACTGACTTCTCTGATACCAGCTGGAGGTTGAGCTCTTCTTAAAGTATTCTTCTCTT
CCTTTTATCAGTAGGTGCCCAGAATAAGTTATTGCAGTTTATCATTCAAGTGTAAAATATTTTGAATCAATAATA
TATTTTCTGTTTTCTTTTGGTAAAGACTGGCTTTTATTAATGCACTTTCTATCCTCTGTAAACTTTTTGTGCTGA
ATGTTGGGACTGCTAAATAAAATTTGTTGCATAAAAAAAAAAAAAAAAA

FIGURE 568

MAVSESQLKKMVSKYKYRDLTVRETVNVITLYKDLKPVLDSYVFNDGSSRELMNLTGTIPVPYRGNTYNIPICLW
LLDTYPYNPPICFVKPTSSMTIKTGKHVDANGKIYLPYLHEWKHPQSDLLGLIQVMIVVFGDEPPVFSRPISASY
PPYQATGPPNTSYMPGMPGGISPYPSGYPPNPSGYPGCPYPPGGPYPATTSSQYPSQPPVTTVGPSRDGTISEDT
IRASLISAVSDKLRWRMKEEMDRAQAELNALKRTEEDLKKGHQKLEEMVTRLDQEVAEVDKNIELLKKKDEELSS
ALEKMENQSENNDIDEVIIPTAPLYKQILNLYAEENAIEDTIFYLGEALRRGVIDLDVFLKHVRLLSRKQFQLRA
LMQKARKTAGLSDLY

FIGURE 569

CGGACGCGTGGGGCCCGGGGGGCTGAGGCGCCCGCCGCCTGCCGCGGGGGCCGCTCGCGTCCTCCATGGAGGCCG
GAGAGGAACCGCTGCTGCTGGCCGAACTCAAGCCCGGGCGCCCCCACCAGTTTGATTGGAAGTCCAGCTGTGAAA
CCTGGAGCGTCGCCTTCTCCCCAGATGGCTCCTGGTTTGCTTGGTCTCAAGGACACTGCATCGTCAAACTGATCC
CCTGGCCGTTGGAGGAGCAGTTCATCCCTAAAGGGTTTGAAGCCAAAAGCCGAAGTAGCAAAAATGAGACGAAAG
GGCGGGGCAGCCCAAAAGAGAAGACGCTGGACTGTGGTCAGATTGTCTGGGGGCTGGCCTTCAGCCCGTGGCCTT
CCCCACCCAGCAGGAAGCTCTGGGCACGCCACCACCCCCAAGTGCCCGATGTCTCTTGCCTGGTTCTTGCTACGG
GACTCAACGATGGGCAGATCAAGATCTGGGAGGTGCAGACAGGGCTCCTGCTTTTGAATCTTTCCGGCCACCAAG
ATGTCGTGAGAGATCTGAGCTTCACACCCAGTGGCAGTTTGATTTTGGTCTCCGCGTCACGGGATAAGACTCTTC
GCATCTGGGACCTGAATAAACACGGTAAACAGATTCAAGTGTTATCGGGCCACCTGCAGTGGGTTTACTGCTGTT
CCATCTCCCCAGACTGCAGCATGCTGTGCTCTGCAGCTGGAGAGAAGTCGGTCTTTCTATGGAGCATGAGGTCCT
ACACGTTAATTCGGAAGCTAGAGGGCCATCAAAGCAGTGTTGTCTCTTGTGACTTCTCCCCCGACTCTGCCCTGC
TTGTCACGGCTTCTTACGATACCAATGTGATTATGTGGGACCCCTACACCGGCGAAAGGCTGAGGTCACTCCACC
ACACCCAGGTTGACCCCGCCATGGATGACAGTGACGTCCACATTAGCTCACTGAGATCTGTGTGCTTCTCTCCAG
AAGGCTTGTACCTTGCCACGGTGGCAGATGACAGACTCCTCAGGATCTGGGCCCTGGAACTGAAAACTCCCATTG
CATTTGCTCCTATGACCAATGGGCTTTGCTGCACATTTTTTCCACCATGGTGGAGTCATTGCCACAGGGACAAGAG
ATGGCCACGTCCAGTTCTGGACAGCTCCTAGGGTCCTGTCCTCACTGAAGCACTTATGCCGGAAAGCCCTTCGAA
GTTTCCTAACAACTTACCAAGTCCTAGCACTGCCAATCCCCAAGAAAATGAAAGAGTTCCTCACATACAGGACTT
TTTAAGCAACACCACATCTTGTGCTTCTTTGTAGCAGGGTAAATCGTCCTGTCAAAGGGAGTTGCTGGAATAATG
GGCCAAACATCTGGTCTTGCATTGAAATAGCATTTCTTTGGGATTGTGAATAGAATGTAGCAAAACCAGATTCCA
GTGTACTAGTCATGGATCTTTCTCTCCCTGGCATGTGAAAGTCAGTCTTAGAGGAAGAGATTCCACTTGCACGGC
AACAGAGCCTTACGTTAAATTTTCAGTCCAGTTATGAACAGCAAGTGTTGAACTCTTTCTGCTTGTTTTGATTCA
AAGTGCAGTTACTGATGTTGTTTTGATTATGCAACTAAGTAGGCCTCCAGAGCCTCTCTAGTGGCAGAGCAGCTC
ACACTCCCTCCGCTGGGAACGATGGCTTCTGCCTAGTACCTATCCTTGTGTTTCTGATGCAGTGGTAGCATTGGT
TCAAGTTCTCTCCTGCTGTGGTCAGAGTTGCTTCGATGTTGGCCAAGTGCTTTTCTTCTTGGGCTCCCTTCTGAC
CTGCAGGACAGTTTTCCTGGAGCCATTTGGTATGAGGTATTAATTTAGCTTAACTAAATTACAGGGGACTCAGAG
GCCGTGCTCCTGACCGATCCAGACACTATTACTGGCTTTTTTTTTTTTTTAACAATGGTGTGCATGTGCAGGAAA
TGACAAATTTGTATGTCAGATTATACAAGGATGTATTCTTAAACCGCATGACTATTCAGATGGCTACTGAGTTAT
CAGTGGCCATTTATTAGCATCATATTTATTTGTATTTTCTCAACAGATGTTAAGGTACAACTGTGTTTTTCTCGA
TTATCTAAAAACCATAGTACTTAAATTGAACAGTTGCAAAGATGTCTTAATTGTGTAAAGAATTGGTGTAGTCAT
GACTTTAGCTGATACTCTTATGTACGAGATCTGTCTCTGCTGTTTAACTTCATTGGATTAATCAGCTGGTTTCAA
CTCTACTGCGAAACAAAAATAGCTCCTTAAAAGTACTGTTCTCCTTCAGTGGCATGTAGTTATCTAATCAAGACA
CCTCATTCAAACAAAACCTGCCTTAGGAAAATTTAATATATTTTAAATTATTTTAAAAGAAATACAACATCTTAT
TCTTTAGCTTTCTTAATCGGTGCTTTATGGAGGCCAGTGTAACGTTACATGACTCGTTGAGAAAGTTGAGGAATT
TCCTCTACCACCTTTGTTGCTTGAAGAAAAACATGTCTTTTCAAAATGAGAGGCTTTCATTGAAGAAAAGAAAAA
AACAACAGTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 570

MEAGEEPLLLAELKPGRPHQFDWKSSCETWSVAFSPDGSWFAWSQGHCIVKLIPWPLEEQFIPKGFEAKSRSSKN
ETKGRGSPKEKTLDCGQIVWGLAFSPWPSPPSRKLWARHHPQVPDVSCLVLATGLNDGQIKIWEVQTGLLLLNLS
GHQDVVRDLSFTPSGSLILVSASRDKTLRIWDLNKHGKQIQVLSGHLQWVYCCSISPDCSMLCSAAGEKSVFLWS
MRSYTLIRKLEGHQSSVVSCDFSPDSALLVTASYDTNVIMWDPYTGERLRSLHHTQVDPAMDDSDVHISSLRSVC
FSPEGLYLATVADDRLLRIWALELKTPIAFAPMTNGLCCTFFPHGGVIATGTRDGHVQFWTAPRVLSSLKHLCRK
ALRSFLTTYQVLALPIPKKMKEFLTYRTF

FIGURE 571

ATATAACCGCGTGGCCCGCGCGCGCGCTTCCCTCCCGGCGCAGTCACCGGCGCGGTCTATGGCTGCGACTTCTCT
AATGTCTGCTTTGGCTGCCCGGCTGCTGCAGCCCGCGCACAGCTGCTCCCTTCGCCTTCGCCCTTTCCACCTCGC
GGCAGTTCGAAATGAAGCTGTTGTCATTTCTGGAAGGAAACTGGCCCAGCAGATCAAGCAGGAAGTGCGGCAGGA
GGTAGAAGAGTGGGTGGCCTCAGGCAACAAACGGCCACACCTGAGTGTGATCCTGGTTGGCGAGAATCCTGCAAG
TCACTCCTATGTCCTCAACAAAACCAGGGCAGCTGCAGTTGTGGGAATCAACAGTGAGACAATTATGAAACCAGC
TTCAATTTCAGAGGAAGAATTGTTGAATTTAATCAATAAACTGAATAATGATGATAATGTAGATGGCCTCCTTGT
TCAGTTGCCTCTTCCAGAGCATATTGATGAGAGAAGGATCTGCAATGCTGTTTCTCCAGACAAGGATGTTGATGG
CTTTCATGTAATTAATGTAGGACGAATGTGTTTGGATCAGTATTCCATGTTACCGGCTACTCCATGGGGTGTGTG
GGAAATAATCAAGCGAACTGGCATTCCAACCCTAGGGAAGAATGTGGTTGTGGCTGGAAGGTCAAAAAACGTTGG
AATGCCCATTGCAATGTTACTGCACACAGATGGGGCGCATGAACGTCCCGGAGGTGATGCCACTGTTACAATATC
TCATCGATATACTCCCAAAGAGCAGTTGAAGAAACATACAATTCTTGCAGATATTGTAATATCTGCTGCAGGTAT
TCCAAATCTGATCACAGCAGATATGATCAAGGAAGGAGCAGCAGTCATTGATGTGGGAATAAATAGAGTTCACGA
TCCTGTAACTGCCAAACCCAAGTTGGTTGGAGATGTGGATTTTGAAGGAGTCAGACAAAAAGCTGGGTATATCAC
TCCAGTTCCTGGAGGTGTTGGCCCCATGACAGTGGCAATGCTAATGAAGAATACCATTATTGCTGCAAAAAAGGT
GCTGAGGCTTGAAGAGCGAGAAGTGCTGAAGTCTAAAGAGCTTGGGGTAGCCACTAATTAACTACTGTGTCTTCT
GTGTCACAAACAGCACTCCAGGCCAGCTCAAGAAGCAAAGCAGGCCAATAGAAATGCAATATTTTTAATTTATTC
TACTGAAATGGTTTAAAATGATGCCTTGTATTTATTGAAAGCTTAAATGGGTGGGTGTTTCTGCACATACCTCTG
CAGTACCTCACCAGGGAGCATTCCAGTATCATGCAGGGTCCTGTGATCTAGCCAGGAGCAGCCATTAACCTAGTG
ATTAATATGGGAGACATTACCATATGGAGGATGGATGCTTCACTTTGTCAAGCACCTCAGTTACACATTCGCCTT
TTCTAGGATTGCATTTCCCAAGTGCTATTGCAATAACAGTTGATACTCATTTTAGGTACCAGACCTTTTGAGTTC
AACTGATCAAACCAAAGGAAAAGTGTTGCTAGAGAAAATTGGGGAAAAGGTGAAAAAGAAAAAATGGTAGTAATT
GAGCAGAAAAAAATTAATTTATATATGTATTGATTGGCAACCAGATTTATCTAAGTAGAACTGAATTGGCTAGGA
AAAAAGAAAAACTGCATGTTAATCATTTTCCTAAGCTGTCCTTTTGAGGCTTAGTCAGTTTATTGGGAAAATGTT
TAGGATTATTCCTTGCTATTAGTACTCATTTTATGTATGTTACCCTTCAGTAAGTTCTCCCCATTTTAGTTTTCT
AGGACTGAAAGGATTCTTTTCTACATTATACATGTGTGTTGTCATATTTGGCTTTTGCTATATACTTTAACTTCA
TTGTTAAATTTTTGTATTGTATAGTTTCTTTGGTGTATCTTAAAACCTATTTTTGAAAAACAAACTTGGCTTGAT
AATCATTTGGGCAGCTTGGGTAAGTACGCAACTTACTTTTCCACCAAAGAACTGTCAGCAGCTGCCTGCTTTTCT
GTGATGTATGTATCCTGTTGACTTTTCCAGAAATTTTTTAAGAGTTTGAGTTACTATTGAATTTAATCAGACTTT
CTGATTAAAGGGTTTTCTTTCTTTTTTAATAAAACACATCTGTCTGGTATGGTA

FIGURE 572

MSALAARLLQPAHSCSLRLRPFHLAAVRNEAVVISGRKLAQQIKQEVRQEVEEWVASGNKRPHLSVILVGENPAS
HSYVLNKTRAAAVVGINSETIMKPASISEEELLNLINKLNNDDNVDGLLVQLPLPEHIDERRICNAVSPDKDVDG
FHVINVGRMCLDQYSMLPATPWGVWEIIKRTGIPTLGKNVVVAGRSKNVGMPIAMLLHTDGAHERPGGDATVTIS
HRYTPKEQLKKHTILADIVISAAGIPNLITADMIKEGAAVIDVGINRVHDPVTAKPKLVGDVDFEGVRQKAGYIT
PVPGGVGPMTVAMLMKNTIIAAKKVLRLEEREVLKSKELGVATN

FIGURE 573

GGGGGAGTGAAAGCGAAAGCCCGGGCGACTAGCCGGGAGACCAGAGATCTAGCGACTGAAGCAGCATGGCCAAGC
CGTGTGGGGTGCGCCTGAGCGGGGAAGCCCGCAAACAGGTGGAGGTCTTCAGGCAGAATCTTTTCCAGGAGGCTG
AGGAATTCCTCTACAGATTCTTGCCACAGAAAATCATATACCTGAATCAGCTCTTGCAAGAGGACTCCCTCAATG
TGGCTGACTTGACTTCCCTCCGGGCCCCACTGGACATCCCCATCCCAGACCCTCCACCCAAGGATGATGAGATGG
AAACAGATAAGCAGGAGAAGAAAGAAGTCCCTAAGTGTGGATTTCTCCCTGGGAATGAGAAAGTCCTGTCCCTGC
TTGCCCTGGTTAAGCCAGAAGTCTGGACTCTCAAAGAGAAATGCATTCTGGTGATTACATGGATCCAACACCTGA
TCCCCAAGATTGAAGATGGAAATGATTTTGGGGTAGCAATCCAGGAGAAGGTGCTGGAGAGGGTGAATGCCGTCA
AGACCAAAGTGGAAGCTTTCCAGACAACCATTTCCAAGTACTTCTCAGAACGTGGGGATGCTGTGGCCAAGGCCT
CCAAGGAGACTCATGTAATGGATTACCGGGCCTTGGTGCATGAGCGAGATGAGGCAGCCTATGGGGAGCTCAGGG
CCATGGTGCTGGACCTGAGGGCCTTCTATGCTGAGCTTTATCATATCATCAGCAGCAACCTGGAGAAAATTGTCA
CCCCAAAGGGTGAAGAAAAGCCATCTATGTACTGAACCCGGGACTAGAAGGAAAATAAATGATCTATATGTTGTG
TGG

FIGURE 574

MAKPCGVRLSGEARKQVEVFRQNLFQEAEEFLYRFLPQKIIYLNQLLQEDSLNVADLTSLRAPLDIPIPDPPPKD
DEMETDKQEKKEVPKCGFLPGNEKVLSLLALVKPEVWTLKEKCILVITWIQHLIPKIEDGNDFGVAIQEKVLERV
NAVKTKVEAFQTTISKYFSERGDAVAKASKETHVMDYRALVHERDEAAYGELRAMVLDLRAFYAELYHIISSNLE
KIVTPKGEEKPSMY

FIGURE 575

CGCTCCGCCGACCGAAGAGGCTGGACATGACACCAGTGGCATATCACGGCCATGGGTCTCAGCATTCCGCTGCT
GCTCGCCCCTCCTCCTGCAGGCGAAAGCAAGAAGATGACAGGGACGGTTTGCTGGCTGAACGAGAGCAGGAAGAA
GCCATTGCTCAGTTCCCATATGTGGAATTCACCGGGAGAGATAGCATCACCTGTCTCACGTGCCAGGGGACAGGC
TACATTCCAACAGAGCAAGTAAATGAGTTGGTGGCTTTGATCCCACACAGTGATCAGAGATTGCGCCCTCAGCGA
ACTAAGCAATATGTCCTCCTGTCCATCCTGCTTTGTCTCCTGGCATCTGGTTTGGTGGTTTTCTTCCTGTTTCCG
CATTCAGTCCTTGTGGATGATGACGGCATCAAAGTGGTGAAAGTCACATTTAATAAGCAAGACTCCCTTGTAATT
CTCACCATCATGGCCACCCTGAAAATCAGGAACTCCAACTTCTACACGGTGGCAGTGACCAGCCTGTCCAGCCAG
ATTCAGTACATGAACACAGTGGTCAGTACATATGTGACTACTAACGTCTCCCTTATTCCACCTCGGAGTGAGCAA
CTGGTGAATTTTACCGGGAAGGCCGAGATGGGAGGACCGTTTTCCTATGTGTACTTCTTCTGCACGGTACCTGAG
ATCCTGGTGCACAACATAGTGATCTTCATGCGAACTTCAGTGAAGATTTCATACATTGGCCTCATGACCCAGAGC
TCCTTGGAGACACATCACTATGTGGATTGTGGAGGAAATTCCACAGCTATTTAACAACTGCTATTGGTTCTTCCA
CACAGCGCCTGTAGAAGAGAGCACAGCATATGTTCCCAAGGCCTGAGTTCTGGACCTACCCCCACGTGGTGTAAG
CAGAGGAGGAATTGGTTCACTTAACTCCCAGCAAACATCCTCCTGCCACTTAGGAGGAAACACCTCCCTATGGTA
CCATTTATGTTTCTCAGAACCAGCAGAATCAGTGCCTAGCCTGTGCCCAGCAAATAGTTGGCACTCAATAAAGAT
TTGCAGAATTTAATACAGATCTTTTCAGCTGTTCTTAGGGCATTATAAATGGAAATCATAACGTGGTCTAGGTT
ATCAAACCATGGAGTGATGTGGAGCTAGGATTGTGAGTGACCTGCAGGCCATTATCAGTGCCTCATCTGTGCAGA
AGTGGCAGCAGAGAGGGACCATCCAAATACCTAAGAGAAAACAGACCTAGTCAGGATATGAATTTGTTTCAGCTG
TTCCCAAAGGCCTGGGAGCTTTTTGAAAAGAAAGAAAAAAGTGTGTTGGCTTTTTTTTTTTTTTAGAAAGTTAGA
ATTGTTTTTACCAAGAGTCTATGTGGGGCTTGATTCACCCTTCATCCATTGGCTGGAACATGGATTGGGGATTTG
ATAGAAAAATAAACCCTGCTTTTGATTCAAAAAAAAAAAAAAAAAAA

FIGURE 576

MGSQHSAAARPSSCRRKQEDDRDGLLAEREQEEAIAQFPYVEFTGRDSITCLTCQGTGYIPTEQVNELVALIPHS
DQRLRPQRTKQYVLLSILLCLLASGLVVFFLFPHSVLVDDDGIKVVKVTFNKQDSLVILTIMATLKIRNSNFYTV
AVTSLSSQIQYMNTVVSTYVTTNVSLIPPRSEQLVNFTGKAEMGGPFSYVYFFCTVPEILVHNIVIFMRTSVKIS
YIGLMTQSSLETHHYVDCGGNSTAI

FIGURE 577A

AAGTTTTGGAGCGCCGGACAAGCTGAGGTCCGCGACTCGTCGCTAAGATTCCCCAAAACTGAGATTTCAAGAAAA
TTCACCCTTTCCGCTTTCTTTGGCGCCCTTCAACCGTGAAGGAAATGAAGGTTGAGAACCTGGAACCCGCTTCCA
AAGACCAAGCCCTTTCTCTGTGCCTCACAACAGTCTTGCGCTGTAGCTGTTTTTATTACCCCTATTTTACTACTG
GGGAGGAGATTTGAGGTCCTGAAAGTGAAGTGACTTGCTGGACGTCACTTAGCAGAGGAGATGGCGAAACCTGGA
TTAGAGGCGATGCCTTCTAACTCCCAGCGTGGACTTGCCTCCTTTCCTGGGGGTGACTGAATGCCCAGCCAGGGA
CGCGACGTCTCTGGCCAGCAGAAATACGGCCTCCTCCCCGCCGACTGGGCAAAGGGGGACCTTGCGGCCAAGGAG
GGATTCGCAGGCGGGCCGGGGGTGGGAGCGGGGGCCGGAGCCGGAGCCTTGGCCCGCCCCCGGGCGGCGCTGTGA
TTGGCCGGCCGCTCCGGCGGGCGTCGCGATTGGCCGTCCTGCAGCCGTTGAGATTTGAACTCGGTATTTGTGGCT
TTGCCCGCGCGTTGCCAGACTCAGAGGCGGCCCTTTGCCTCTGCCTGCCGGGGATTGGCCGGATTCTCCGCCGAC
TTGAAAACTGCCTTGCTAATTGGTGCGTGTTGTGCACGCGTGTTTTTTCCTTTTCATTTCAGCCTGACTGCCGGA
ATCAGAGCCGCGGGTGAGATCCCCAGCCCTGTGAGCCTGTAGGAGTAGA**ATG**GCTCCCCAAATGTATGAGTTCCA
TCTGCCATTATCCCCAGAGGAGTTGTTGAAAAGTGGAGGGGTGAATCAGTATGTTGTGCAAGAGGTACTGTCCAT
CAAACATCTTCCACCACAGCTTAGAGCTTTTCAGGCTGCCTTTCGAGCTCAGGGGCCCCTGGCTATGCTGCAGCA
CTTTGATACTATCTACAGCATTTTGCATCACTTTCGAAGTATAGATCCTGGCCTCAAAGAAGATACTCTGGAATT
CCTGATAAAAGTGGTATCCCGCCACTCCCAGGAGCTTCCAGCTATCCTGGATGATACAACTTTGAGTGGATCAGA
TAGAAACGCCCATCTAAATGCCCTCAAAATGAACTGTTATGCTCTGATACGTCTCCTGGAATCCTTTGAGACCAT
GGCCAGCCAGACAAACCTTGTGGACCTGGACCTTGGTGGGAAGGGTAAGAAAGCTCGGACCAAGGCAGCCCATGG
CTTTGACTGGGAAGAAGAGAGGCAACCAATTCTTCAGCTTTTAACACAGCTACTTCAGTTGGACATCCGTCACCT
GTGGAACCACTCAATAATTGAAGAAGAATTTGTCAGTTTGGTTACTGGCTGTTGCTACCGCCTTCTGGAGAATCC
CACCATTAATCACCAGAAGAACCGCCCCACTCGGGAAGCCATAACACACCTGCTTGGTGTAGCCTTGACCCGTTA
TAACCATATGCTCAGTGCTACAGTGAAGATCATCCAGATGCTGCAGCACTTTGAACACCTGGCACCTGTACTGGT
TGCAGCCGTGAGTCTATGGGCAACTGACTATGGAATGAAGAGCATAGTGGGAGAGATTGTAAGAGAGATTGGACA
AAAGTGTCCCCAAGAGCTGAGTCGAGACCCTTCAGGGACAAAGGGCTTTGCAGCATTCCTGACAGAACTAGCAGA
ACGTGTCCCAGCTATCCTGATGTCCAGCATGTGCATTTTGCTAGATCACCTGGATGGAGAAAATTACATGATGCG
TAATGCTGTGCTGGCAGCCATGGCGGAGATGGTGCTGCAGGTTCTCAGTGGCGATCAACTGGAAGCAGCAGCCCG
AGACACCAGAGACCAGTTCTTGGATACTTTACAAGCCCATGGCCATGATGTCAACTCCTTTGTGCGGAGCCGTGT
TTTGCAGCTCTTCACCCGAATTGTCCAGCAGAAGGCTCTCCCCCTGACACGTTTCCAGGCAGTGGTGGCTTTAGC
TGTGGGACGTCTGGCAGACAAGTCAGTGCTAGTATGTAAAAATGCCATCCAGCTGCTGGCCAGTTTTCTAGCCAA
TAATCCTTTCTCCTGCAAGCTTAGTGATGCTGACCTTGCCGGACCACTGCAGAAGGAGACCCAGAAATTACAAGA
GATGAGGGCCCAGAGGCGAACTGCAGCAGCTTCTGCAGTGCTGGACCCAGAGGAGGAGTGGGAAGCCATGCTGCC
AGAGTTGAAGTCTACCCTGCAGCAGCTTCTACAGCTTCCCCAGGGAGAGGAGGAGATTCCTGAGCAAATTGCCAA
TACAGAGACAACTGAAGATGTGAAAGGACGCATCTATCAACTGCTTGCCAAAGCTAGTTACAAAAAGGCCATCAT
TCTCACTCGAGAAGCCACAGGCCACTTCCAGGAGTCCGAACCCTTCAGTCATATAGACCCAGAGGAGTCAGAGGA
GACCAGGCTCTTGAATATATTAGGACTTATCTTCAAAGGCCCAGCAGCTTCCACACAAGAAAAGAATCCCCGGGA
GTCTACAGGAAACATGGTCACAGGACAGACTGTCTGTAAAAATAAACCCAATATGTCGGATCCTGAGGAATCCAG
GGGAAATGATGAACTAGTGAAGCAGGAGATGCTGGTACAGTATCTGCAGGATGCCTACAGCTTCTCCCGGAAGAT
TACAGAGGCCATTGGCATCATCAGCAAGATGATGTATGAAAACACAACTACAGTGGTGCAGGAGGTGATTGAATT
CTTTGTGATGGTCTTCCAATTTGGGGTACCCCAGGCCCTGTTTGGGGTGCGCCGTATGCTGCCTCTCATCTGGTC
TAAGGAGCCTGGTGTCCGGGAAGCCGTGCTTAATGCCTACCGCCAACTCTACCTCAACCCCAAAGGGGACTCTGC
CAGAGCCAAGGCCCAGGCTTTGATTCAGAATCTCTCTCTGCTGCTAGTGGATGCCTCGGTTGGGACCATTCAGTG
TCTTGAGGAAATTCTCTGTGAGTTTGTGCAGAAGGATGAGTTGAAACCAGCAGTGACCCAGCTGCTGTGGGAGCG
GGCCACCGAGAAGGTCGCCTGCTGTCCTCTGGAGCGCTGTTCCTCTGTCATGCTTCTTGGCATGATGGCACGAGG
AAAGCCAGAAATTGTGGGAAGCAATTTAGACACACTGGTGAGCATAGGGCTGGATGAGAAGTTTCCACAGGACTA
CAGGCTGGCCCAGCAGGTGTGCCATGCCATTGCCAACATCTCGGACAGGAGAAAGCCTTCTCTGGGCAAACGTCA
CCCCCCCTTCCGGCTGCCTCAGGAACACAGGTTGTTTGAGCGACTGCGGGAGACAGTCACAAAAGGCTTTGTCCA
CCCAGACCCACTCTGGATCCCATTCAAAGAGGTGGCAGTGACCCTCATTTACCAACTGGCAGAGGGCCCCGAAGT
GATCTGTGCCCAGATATTGCAGGGCTGTGCAAAACAGGCCCTGGAGAAGCTAGAAGAGAAGAGAACCAGTCAGGA
GGACCCGAAGGAGTCCCCCGCAATGCTCCCCACTTTCCTGTTGATGAACCTGCTGTCCCTGGCTGGGGATGTGGC

FIGURE 577B

TCTGCAGCAGCTGGTCCACTTGGAGCAGGCAGTGAGTGGAGAGCTCTGCCGGCGCCGAGTTCTCCGGGAAGAACA
GGAGCACAAGACCAAAGATCCCAAGGAGAAGAATACGAGCTCTGAGACCACCATGGAGGAGGAGCTGGGGCTGGT
TGGGGCAACAGCAGATGACACAGAGGCAGAACTAATCCGTGGCATCTGCGAGATGGAACTGTTGGATGGCAAACA
GACACTGGCTGCCTTTGTTCCACTCTTGCTTAAAGTCTGTAACAACCCAGGCCTCTATAGCAACCCAGACCTCTC
TGCAGCTGCTTCACTTGCCCTTGGCAAGTTCTGCATGATCAGTGCCACTTTCTGCGACTCCCAGCTTCGTCTTCT
GTTCACCATCCTGGAAAAGTCTCCACTTCCCATTGTCCGGTCTAACCTCATGGTTGCCACTGGGGATCTGGCCAT
CCGCTTTCCCAATCTGGTGGACCCCTGGACTCCTCATCTGTATGCTCGCCTCCGGGACCCTGCTCAGCAAGTGCG
GAAAACAGCGGGGCTGGTGATGACCCACCTGATCCTCAAGGACATGGTGAAGGTGAAGGGGCAGGTCAGCGAGAT
GGCGGTGCTGCTCATCGACCCCGAGCCTCAGATTGCTGCCCTGGCCAAGAACTTCTTCAATGAGCTCTCCCACAA
GGGCAACGCAATCTATAATCTCCTTCCAGATATCATCAGCCGCCTGTCAGACCCCGAGCTGGGGGTGGAGGAAGA
GCCTTTCCACACCATCATGAAACAGCTCCTCTCCTACATCACCAAGGACAAGCAGACAGAGAGCCTGGTGGAAAA
GCTGTGTCAGCGGTTCCGCACATCCCTAACTGAGCGGCAGCAGCGAGACCTGGCCTACTGTGTGTCACAGCTGCC
CCTCACAGAGCGAGGCCTCCGTAAGATGCTTGACAATTTTGACTGTTTTGGAGACAAACTGTCAGATGAGTCCAT
CTTCAGTGCTTTTTTGTCAGTTGTAGGCAAGCTGCGACGTGGGGCCAAGCCTGAGGGCAAGGCTATAATAGATGA
ATTTGAGCAGAAGCTTCGGGCCTGTCATACCAGAGGTTTGGATGGAATCAAGGAGCTTGAGATTGGCCAAGCAGG
TAGCCAGAGAGCGCCATCAGCCAAGAAACCATCCACTGGTTCTAGGTACCAGCCTCTGGCTTCTACAGCCTCAGA
CAATGACTTTGTCACACCAGAGCCCCGCCGTACTACCCGTCGGCATCCAAACACCCAGCAGCGAGCTTCCAAAAA
GAAACCCAAAGTTGTCTTCTCAAGTGATGAGTCCAGTGAGGAAGATCTTTCAGCAGAGATGACAGAAGACGAGAC
ACCCAAGAAAACAACTCCCATTCTCAGAGCATCGGCTCGCAGGCACAGATCCTAGGAAGTCTGTTCCTGTCCTCC
CTGTGCAGGGTATCCTGTAGGGTGACCTGGAATTCGAATTCTGTTTCCCTTGTAAAATATTTGTCTGTCTCTTTT
TTTTAAAAAAAAAAAAAGGCCGGGCACTGTGGCTCACGCCTGTAATCCCAGCACTTTGCGATACCAAGGCGGGTGG
ATAACCTGAGGTAGGGAGTTCGAGACCAGCCTGACCAACATGGAGAAACCCCATCTCTACTAAAAATAAAAAATT
AGCCGGGCGTATTGGCGTGCGCCTGTAATCCCAGCTACTCAAGAGGCTGAGGCAGGAGAATCGCCTGAACCCAGA
GGCGGAGGTTGTAGTGAGCCGAAATCACACCATTGCACTCCAGCTTGGGCAACAATAGCGAACCTCCATCTCAAA
TTAAAAAAAAAATGCCTACACGCTCTTTAAAATGCAAGGCTTTCTCTTAAATTAGCCTAACTGAACTGCGTTGAG
CTGCTTCAACTTTGGAATATATGTTTGCCAATCTCCTTGTTTTCTAATGAATAAATGTTTTTATATACTTTT

FIGURE 578

MAPQMYEFHLPLSPEELLKSGGVNQYVVQEVLSIKHLPPQLRAFQAAFRAQGPLAMLQHFDTIYSILHHFRSIDP
GLKEDTLEFLIKVVSRHSQELPAILDDTTLSGSDRNAHLNALKMNCYALIRLLESFETMASQTNLVDLDLGGKGK
KARTKAAHGFDWEEERQPILQLLTQLLQLDIRHLWNHSIIEEEFVSLVTGCCYRLLENPTINHQKNRPTREAITH
LLGVALTRYNHMLSATVKIIQMLQHFEHLAPVLVAAVSLWATDYGMKSIVGEIVREIGQKCPQELSRDPSGTKGF
AAFLTELAERVPAILMSSMCILLDHLDGENYMMRNAVLAAMAEMVLQVLSGDQLEAAARDTRDQFLDTLQAHGHD
VNSFVRSRVLQLFTRIVQQKALPLTRFQAVVALAVGRLADKSVLVCKNAIQLLASFLANNPFSCKLSDADLAGPL
QKETQKLQEMRAQRRTAAASAVLDPEEEWEAMLPELKSTLQQLLQLPQGEEEIPEQIANTETTEDVKGRIYQLLA
KASYKKAIILTREATGHFQESEPFSHIDPEESEETRLLNILGLIFKGPAASTQEKNPRESTGNMVTGQTVCKNKP
NMSDPEESRGNDELVKQEMLVQYLQDAYSFSRKITEAIGIISKMMYENTTTVVQEVIEFFVMVFQFGVPQALFGV
RRMLPLIWSKEPGVREAVLNAYRQLYLNPKGDSARAKAQALIQNLSLLLVDASVGTIQCLEEILCEFVQKDELKP
AVTQLLWERATEKVACCPLERCSSVMLLGMMARGKPEIVGSNLDTLVSIGLDEKFPQDYRLAQQVCHAIANISDR
RKPSLGKRHPPFRLPQEHRLFERLRETVTKGFVHPDPLWIPFKEVAVTLIYQLAEGPEVICAQILQGCAKQALEK
LEEKRTSQEDPKESPAMLPTFLLMNLLSLAGDVALQQLVHLEQAVSGELCRRRVLREEQEHKTKDPKEKNTSSET
TMEEELGLVGATADDTEAELIRGICEMELLDGKQTLAAFVPLLLKVCNNPGLYSNPDLSAAASLALGKFCMISAT
FCDSQLRLLFTILEKSPLPIVRSNLMVATGDLAIRFPNLVDPWTPHLYARLRDPAQQVRKTAGLVMTHLILKDMV
KVKGQVSEMAVLLIDPEPQIAALAKNFFNELSHKGNAIYNLLPDIISRLSDPELGVEEEPFHTIMKQLLSYITKD
KQTESLVEKLCQRFRTSLTERQQRDLAYCVSQLPLTERGLRKMLDNFDCFGDKLSDESIFSAFLSVVGKLRRGAK
PEGKAIIDEFEQKLRACHTRGLDGIKELEIGQAGSQRAPSAKKPSTGSRYQPLASTASDNDFVTPEPRRTTRRHP
NTQQRASKKKPKVVFSSDESSEEDLSAEMTEDETPKKTTPILRASARRHRS

FIGURE 579

TCGGAGGAGCCAGCCGAAATCCTGCCGCCTGCCCGGGACGAGGAGGAGGAGGAGGAAGAGGGGATGGAGCAGGGG
CTGGAGGAGGAAGAAGAGGTGGATCCCCGGATCCAGGGAGAACTGGAGAAGTTAAATCAGTCCACGGATGATATC
AACAGACGGGAGACTGAACTTGAGGATGCTCGTCAGAAGTTCCGCTCTGTTCTGGTTGAAGCAACGGTGAAACTG
GATGAACTGGTGAAGAAAATTGGCAAAGCTGTGGAAGACTCCAAGCCCTACTGGGAGGCACGGAGGGTGGCGAGG
CAGGCTCAGCTGGAAGCTCAGAAAGCCACGCAGGACTTCCAGAGGGCCACAGAGGTGCTCCGTGCCGCCAAGGAG
ACCATCTCCCTGGCCGAGCAGCGGCTGCTGGAGGATGACAAGCGGCAGTTCGACTCCGCCTGGCAGGAGATGCTG
AATCACGCCACTCAGAGGGTCATGGAGGCGGAGCAGACCAAGACCAGGAGCGAGCTGGTGCATAAGGAGACGGCA
GCCAGGTACAATGCCGCCATGGGCCGCATGCGACAGCTGGAGAAGAAACTCAAGAGAGCCATCAACAAGTCCAAG
CCTTATTTTGAACTCAAGGCAAAGTACTATGTGCAGCTCGAGCAACTGAAAAAGACTGTGGATGACCTGCAGGCC
AAACTGACCCTGGCAAAAGGCGAGTACAAGATGGCCCTGAAGAACCTGGAGATGATCTCAGATGAGATCCACGAG
CGGCGGCGCTCCAGTGCCATGGGGCCTCGGGGATGCGGTGTTGGTGCTGAGGGCAGCAGCACATCTGTGGAGGAT
CTGCCAGGGAGCAAACCTGAGCCTGATGCCATTTCTGTGGCCTCGGAGGCCTTTGAAGATGACAGCTGTAGCAAC
TTTGTGTCTGAAGATGACTCGGAAACCCAGTCCGTGTCCAGCTTTAGTTCAGGACCAACAAGCCCGTCTGAGATG
CCTGACCAGTTCCCTGCGGTTGTGAGGCCTGGCAGCCTGGATCTGCCCAGCCCTGTGTCCCTGTCAGAGTTTGGG
ATGATGTTCCCAGTGTTGGGCCCTCGAAGTGAATGCAGCGGGGCCTCCTCCCCTGAATGTGAAGTAGAACGAGGA
GACAGGGCAGAAGGGGCAGAGAATAAAACAAGTGACAAAGCCAACAACAACCGGGGCCTCAGCAGTAGCAGTGGC
AGTGGTGGCAGCAGTAAGAGCCAAAGCAGCACCTCCCCTGAGGGCCAGGCCTTGGAGAACCGGATGAAGCAGCTC
TCCCTACAGTGCTCAAAGGGAAGAGATGGAATTATTGCTGACATAAAAATGGTGCAGATTGGCTGATTCATCCTG
GGCCCTGGCCGATGTGCATATCAACATTTATACATGGAACTGGAGAACATTGTGCCAATAATCATTTAATATATG
CCAAATCTTACACGTCTACTCTAAACTGCTCTAATGAAGTTTCAGTGACCTTGAGGGCTAAAGATTGTTCTTCTG
GGTAAGAGCTCTTGGGCTGGTTTTTCAGAGCAGAGTTCTTGTTGTGGGTAGACTGTGACTAGGTTCACAGCCTTT
GTGGAACATTCCGTATAACGGCATTGTGGAAGCAATAACTAGTTCCTATGAAAGAACCAGAGCTGGGAAGATGGC
TGGGAAGCCAGGCCAAAGTGGGGGCAACAGCTTGCTTCTCTTTCTCTTCTCACCCTCAGTTTGTATGGGAAAATG
GAGATGTCCTCTCCACTTTATCCCACGATATCTAAATGAAAAAGAAAGAAAACCCACACACAAAGCAAAAACTCA
AGTATTAAGAGCACATATTTTTGACCCAGTGGAGGCTTAAAAAAAAAAAAATCCAAGAACACAATTCATTTTCAC
CACCTCTGGTGTTCAGAGGGGGCTTTTAAAAAAGCGTGTATGCTGGGATACCCATTAAAACCATTTTCTAGAAGG
CTACCATGAGCTGCACTTTTTGGGGTGGGAAAGGTGAATGCCAGTGGGGATGCGGGGGGATGAGGGTAGGAGGGA
CTTATAGAAGGGGATTTGTGGCTGTGGGGGAGAAGGTTCTACAGCATAAGCCTTATCCTGCCAGCCAAGGGGATT
TATTCTAAGAGAAGTGCATGTGAAGAATGGTTGCCACTGTTATTAGATTGACAAGATGTTAATTTCTCTGTAGGT
TGTAACTTTAAAAATAAATGAAATTATTTAAGGGTTATGCTGCACTAGTATTCCTTAGAGGAAACAGTTCTTTAA
AGTTAGGAAAGGGAGTAGGCAGGCATGTGTTGGCAAAGGCTGTTAATAGTAGTTAAGTGTTAAGACTGCTTTTCT
TTAACGTTTTCATGGTAATGCATATTTAGAGCACTGTATTTTTGTCTTGTTAAGAAAATTTAGCATTTCTAAAAG
AAAAAAGCAACCCTCTTTCAAACTGTTAATTCTGTCACAGCCTGTATATTTTAGTCATTTGTAAATCTCTTCATA
CAATAGTGACTTCTTTTTTGACTGATACAGTATCTTAATTACAAGGTTATTTTGTACTTGTCTTAATACACTAAG
TGTAATAAAAACGGCTTGAG

FIGURE 580

MEQGLEEEEEVDPRIQGELEKLNQSTDDINRRETELEDARQKFRSVLVEATVKLDELVKKIGKAVEDSKPYWEAR
RVARQAQLEAQKATQDFQRATEVLRAAKETISLAEQRLLEDDKRQFDSAWQEMLNHATQRVMEAEQTKTRSELVH
KETAARYNAAMGRMRQLEKKLKRAINKSKPYFELKAKYYVQLEQLKKTVDDLQAKLTLAKGEYKMALKNLEMISD
EIHERRRSSAMGPRGCGVGAEGSSTSVEDLPGSKPEPDAISVASEAFEDDSCSNFVSEDDSETQSVSSFSSGPTS
PSEMPDQFPAVVRPGSLDLPSPVSLSEFGMMFPVLGPRSECSGASSPECEVERGDRAEGAENKTSDKANNNRGLS
SSSGSGGSSKSQSSTSPEGQALENRMKQLSLQCSKGRDGIIADIKMVQIG

FIGURE 581

TCGGAGGAGCCAGCCGAAATCCTGCCGCCTGCCCGGGACGAGGAGGAGGAGGAGGAAGAGGGGATGGAGCAGGGG
CTGGAGGAGGAAGAAGAGGTGGATCCCCGGATCCAGGGAGAACTGGAGAAGTTAAATCAGTCCACGGATGATATC
AACAGACGGGAGACTGAACTTGAGGATGCTCGTCAGAAGTTCCGCTCTGTTCTGGTTGAAGCAACGGTGAAACTG
GATGAACTGGTGAAGAAAATTGGCAAAGCTGTGGAAGACTCCAAGCCCTACTGGGAGGCACGGAGGGTGGCGAGG
CAGGCTCAGCTGGAAGCTCAGAAAGCCACGCAGGACTTCCAGAGGGCCACAGAGGTGCTCCGTGCCGCCAAGGAG
ACCATCTCCCTGGCCGAGCAGCGGCTGCTGGAGGATGACAAGCGGCAGTTCGACTCCGCCTGGCAGGAGATGCTG
AATCACGCCACTCAGAGGGTCATGGAGGCGGAGCAGACCAAGACCAGGAGCGAGCTGGTGCATAAGGAGACGGCA
GCCAGGTACAATGCCGCCATGGGCCGCATGCGACAGCTGGAGAAGAAACTCAAGAGAGCCATCAACAAGTCCAAG
CCTTATTTTGAACTCAAGGCAAAGTACTATGTGCAGCTCGAGCAACTGAAAAAGACTGTGGATGACCTGCAGGCC
AAACTGACCCTGGCAAAAGGCGAGTACAAGATGGCCCTGAAGAACCTGGAGATGATCTCAGATGAGATCCACGAG
CGGCGGCGCTCCAGTGCCATGGGGCCTCGGGGATGCGGTGTTGGTGCTGAGGGCAGCAGCACATCTGTGGAGGAT
CTGCCAGGGAGCAAACCTGAGCCTGATGCCATTTCTGTGGCCTCGGAGGCCTTTGAAGATGACAGCTGTAGCAAC
TTTGTGTCTGAAGATGACTCGGAAACCCAGTCCGTGTCCAGCTTTAGTTCAGGACCAACAAGCCCGTCTGAGATG
CCTGACCAGTTCCCTGCGGTTGTGAGGCCTGGCAGCCTGGATCTGCCCAGCCCTGTGTCCCTGTCAGAGTTTGGG
ATGATGTTCCCAGTGTTGGGCCCTCGAAGTGAATGCAGCGGGGCCTCCTCCCCTGAATGTGAAGTAGAACGAGGA
GACAGGGCAGAAGGGGCAGAGAATAAAACAAGTGACAAAGCCAACAACAACCGGGGCCTCAGCAGTAGCAGTGGC
AGTGGTGGCAGCAGTAAGAGCCAAAGCAGCACCTCCCCTGAGGGCCAGGCCTTGGAGAACCGGATGAAGCAGCTC
TCCCTACAGTGCTCAAAGGGAAGAGATGGAATTATTGCTGACATAAAAATGGTGCAGATTGGCTGATTCATCCTG
GGCCCTGGCCGATGTGCATATCAACATTTATACATGGAACTGGAGAACATTGTGCCAATAATCATTTAATATATG
CCAAATCTTACACGTCTACTCTAAACTGCTCTAATGAAGTTTCAGTGACCTTGAGGGCTAAAGATTGTTCTTCTG
GGTAAGAGCTCTTGGGCTGGTTTTTCAGAGCAGAGTTCTTGTTGTGGGTAGACTGTGACTAGGTTCACAGCCTTT
GTGGAACATTCCGTATAACGGCATTGTGGAAGCAATAACTAGTTCCTATGAAAGAACCAGAGCTGGGAAGATGGC
TGGGAAGCCAGGCCAAAGTGGGGGCAACAGCTTGCTTCTCTTTCTCTTCTCACCCTCAGTTTGTATGGGAAAATG
GAGATGTCCTCTCCACTTTATCCCACGATATCTAAATGAAAAAGAAAGAAAACCCACACACAAAGCAAAAACTCA
AGTATTAAGAGCACATATTTTTGACCCAGTGGAGGCTTAAAAAAAAAAAAAATCCAAGAACACAATTCATTTTCAC
CACCTCTGGTGTTCAGAGGGGGCTTTTAAAAAAGCGTGTATGCTGGGATACCCATTAAAACCATTTTCTAGAAGG
CTACCATGAGCTGCACTTTTTGGGGTGGGAAAGGTGAATGCCAGTGGGGATGCGGGGGGATGAGGGTAGGAGGGA
CTTATAGAAGGGGATTTGTGGCTGTGGGGGAGAAGGTTCTACAGCATAAGCCTTATCCTGCCAGCCAAGGGGATT
TATTCTAAGAGAAGTGCATGTGAAGAATGGTTGCCACTGTTATTAGATTGACAAGATGTTAATTTCTCTGTAGGT
TGTAACTTTAAAAATAAATGAAATTATTTAAGGGTTATGCTGCACTAGTATTCCTTAGAGGAAACAGTTCTTTAA
AGTTAGGAAAGGGAGTAGGCAGGCATGTGTTGGCAAAGGCTGTTAATAGTAGTTAAGTGTTAAGACTGCTTTTCT
TTAACGTTTTCATGGTAATGCATATTTAGAGCACTGTATTTTTGTCTTGTTAAGAAAATTTAGCATTTCTAAAAG
AAAAAAGCAACCCTCTTTCAAACTGTTAATTCTGTCACAGCCTGTATATTTTAGTCATTTGTAAATCTCTTCATA
CAATAGTGACTTCTTTTTTGACTGATACAGTATCTTAATTACAAGGTTATTTTGTACTTGTCTTAATACACTAAG
TGTAATAAAAACGGCTTGAG

FIGURE 582

MEQGLEEEEEVDPRIQGELEKLNQSTDDINRRETELEDARQKFRSVLVEATVKLDELVKKIGKAVEDSKPYWEAR
RVARQAQLEAQKATQDFQRATEVLRAAKETISLAEQRLLEDDKRQFDSAWQEMLNHATQRVMEAEQTKTRSELVH
KETAARYNAAMGRMRQLEKKLKRAINKSKPYFELKAKYYVQLEQLKKTVDDLQAKLTLAKGEYKMALKNLEMISD
EIHERRRSSAMGPRGCGVGAEGSSTSVEDLPGSKPEPDAISVASEAFEDDSCSNFVSEDDSETQSVSSFSSGPTS
PSEMPDQFPAVVRPGSLDLPSPVSLSEFGMMFPVLGPRSECSGASSPECEVERGDRAEGAENKTSDKANNNRGLS
SSSGSGGSSKSQSSTSPEGQALENRMKQLSLQCSKGRDGIIADIKMVQIG

FIGURE 583

CCGTGATGTGGCGCCTGCACAXTCCTTTCCCTTTCGGATTCCCGACGCTGTGGTTGCTGTAAGGGGTCCTCCCTG
CGCCACACGGCCGTCGCC**ATG**GTGAAGCTGAGCAAAGAGGCCAAGCAGAGACTACAGCAGCTCTTCAAGGGGAGC
CAGTTTGCCATTCGCTGGGGCTTTATCCCTCTTGTGATTTACCTGGGATTTAAGAGGGGTGCAGATCCCGGAATG
CCTGAACCAACTGTTTTGAGCCTACTTTGGGGA**TAA**AGGATTATTTGGTCTTCTGGATTTGGAGGCAATCAGCGG
ACAGCATGGAAGATGTGTGCTCTGGCTCGGATAAGAGATGGGACATCATTCAGTCACTAGTTGGATGGCACAAGG
CTCTTCACAGACGCATCTGTAGCAGAGTGGAACTTGTACTAACTTATGATAGAATGTATCAGAATAAATGTTTTT
AACAGTGTAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 584

MVKLSKEAKQRLQQLFKGSQFAIRWGFIPLVIYLGFKRGADPGMPEPTVLSLLWG

FIGURE 585

AGTCAAGATGGAGGAGTACGCGCGAGAGCCTTGCCCATGGCGAATTGTGGATGACTGTGGTGGGGCCTTTACGAT
GGGTACCATTGGTGGTGGTATCTTTCAAGCAATCAAAGGTTTTCGCAATTCTCCAGTGGGAGTAAACCACAGACT
ACGAGGGAGTTTGACAGCTATTAAAACCAGGGCTCCACAGTTAGGAGGTAGCTTTGCAGTTTGGGGAGGGCTGTT
TTCCATGATTGACTGTAGTATGGTTCAAGTCAGAGGAAAGGAAGATCCCTGGAACTCCATCACAAGTGGTGCCTT
AACGGGAGCCATACTGGCAGCAAGAAATGGACCAGTGGCCATGGTTGGGTCAGCCGCAATGGGTGGCATTCTCCT
AGCTTTAATTGAAGGAGCTGGTATCTTGTTGACAAGATTTGCCTCTGCACAGTTTCCCAATGGTCCTCAGTTTGC
AGAAGACCCCTCCCAGTTGCCTTCAACTCAGTTACCTTCCTCACCTTTTGGAGACTATCGACAATATCAGTAGGA
CTTCTTTCCTAGGATTTCTTTAACAGAACGAGTTGTGGTTCGAGAAGGATTTCAGAAGATCAAGTTACAGTCTGT
TTTTAAAACCATAGGTGGGACAGCTATGGCCAATAGGCTATAAAGAGACATTTAGCACTTTTTTCTATTTAAAGG
AACAAGCGGGGAAGGGTGCTAAAAGATAATACGTTTATTTATTCACACTTGAATTGCATTTGTGATCAAAATAAA
TGTTTAAATCGCTAAAGGAAAATACAGTAAGTGCTTGAAAGATGAAGGACCAAAAGGCCAAAAAACAGTGAAATA
TGATCATCATCTCTTGCGGACTTCTCTGCCTGGTTTTGTGTGTTCTGTTATTCAAACAATAAAAAGCTGGTGGAA
CTTACTCTTTCTTTTAAGATAAGTTGTAGACTTCGATGTTTCATGCTCATGTACTTCAAATAATGCATGTTTTAT
AGTTAGTCCCTCATCACTTGAAGTGACTTCTGAGAATTATGCAGAGTCAACATGGATCATTTCACAGTGAGATGC
TTTATGGATTGAAGGATATGGTAAAATGTTTATAGTTTACTTTGAAAGTAAAATATACTATGTCTTGGTTTTGAG
GATATTGGATACAAAACTCTCTTCCTTTAGGGCTACTGAGTCTTGATTCCTGATCATCAGAAATTTCACCAGAAA
CAACTTGCTTCCAATATACCCAATTCTATATGAAGAATTCATGGAGAGTGTACTGGCACTGGAAGAGTTTAGTGT
TTCTTGTATGCTTGAAAATAAAGTATGTACTGTTTTGAATGTGTTCCAAGTCCTCTGCATAAACGATGTATTTTG
GGGTCTGGTTGGGCCTGGAAAATGGATGAGCACTTCAGAACAGGTCATTTTCCTGATATTGGAAGTGACATGTGG
CCCTATAGGAGGCATGATGTTAGTTAATTACACATTTGCCTACATCTGTGGGAAATGGAGAACAAAGCCATGTGG
GTACTGTAAACACACGTTTATCTTTTGGCCCAATGCCATACATATGGTAGGCATTTAATTACTGATTGTGTTTGG
ATAATTTGGGAATTTTCGACTGTGGTAAAATATACATAAAATAATACTTATTAAAAAAAAAAAAAAAAAA

FIGURE 586

MEEYAREPCPWRIVDDCGGAFTMGTIGGGIFQAIKGFRNSPVGVNHRLRGSLTAIKTRAPQLGGSFAVWGGLFSM
IDCSMVQVRGKEDPWNSITSGALTGAILAARNGPVAMVGSAAMGGILLLALIEGAGILLTRFASAQFPNGPQFAED
PSQLPSTQLPSSPFGDYRQYQ

FIGURE 587

CTCCACCGCGGCGAGAGGCATGGGCACGTGGCTGCCGAGGGTGGCCGAGCTCTGGGAAGAAAAGCCCGTGTGCCT
CTGCATAGCGTCGCTACAGCGCTGACTCGGTGTGGATTGATTGGAAAGGTTTGAGGGAGTACTTGGGAAGCATGG
TGGCACATGATGAGACTGGAGGTCTCCTACCTATTAAAAGGACCATACGAGTCCTAGATGTCAATAACCAGTCCT
TCAGAGAACAAGAGGAGCCAAGCAATAAAAGAGTTCGACCTCTGGCTCGTGTCACGTCCTTGGCAAATTTAATCT
CTCCTGTAAGAAATGGAGCTGTCAGACGTTTTGGTCAAACAATACAGTCATTTACCCTTCGTGGTGACCACAGAT
CCCCAGCCTCTGCCCAGAAGTTTTCTAGCAGGTCAACAGTCCCAACACCCGCCAAGAGAAGGAGCAGTGCACTGT
GGTCAGAGATGCTGGACATCACCATGAAGGAGTCTCTCACCACCAGGGAGATCAGACGGCAGGAGGCAATATATG
AAATGTCCCGAGGTGAACAGGATTTAATTGAGGATCTCAAACTTGCAAGAAAGGCCTACCATGACCCCATGTTAA
AGTTGTCCATCATGTCAGAAGAGGAACTCACACATATATTTGGTGATCTGGACTCTTACATACCTCTGCATGAAG
ATTTGTTGACAAGAATAGGAGAAGCAACCAAGCCTGATGGAACAGTGGAGCAGATTGGTCACATTCTCGTGAGCT
GGTTACCGCGCTTGAATGCCTACAGAGGTTACTGTAGTAACCAGCTGGCAGCCAAAGCTCTTCTTGATCAAAAGA
AACAGGATCCAAGAGTCCAAGACTTCCTCCAGCGATGTCTCGAGTCTCCCTTCAGTCGAAAACTAGATCTTTGGA
GTTTCCTAGATATCCCTCGAAGTCGCCTAGTCAAATACCCTTTACTGTTAAAAGAAATTCTTAAACACACTCCAA
AAGAGCACCCTGATGTTCAGCTTCTGGAGGATGCTATATTGATAATACAGGGAGTCCTCTCTGATATCAACTTGA
AGAAAGGTGAATCCGAGTGCCAGTATTACATCGACAAGCTGGAGTACCTGGATGAAAAGCAGAGGGACCCCAGAA
TCGAAGCGAGCAAAGTGCTGCTGTGCCATGGGGAGCTGCGGAGCAAGAGTGGACATAAACTTTACATTTTCCTGT
TTCAAGACATCTTGGTTCTGACTCGGCCCGTCACACGGAACGAACGGCACTCTTACCAGGTTTACCGGCAGCCAA
TCCCAGTCCAAGAGCTAGTCCTAGAAGACCTGCAGGATGGAGATGTGAGAATGGGAGGCTCCTTTCGAGGAGCTT
TCAGTAACTCAGAGAAAGCTAAAAATATCTTTAGAATTCGCTTCCATGACCCCTCTCCAGCCCAGTCTCACACTC
TGCAAGCCAATGACGTGTTCCACAAGCAGCAGTGGTTCAACTGTATTCGAGCGGCCATTGCCCCCTTCCAGTCGG
CAGGCAGTCCACCTGAGCTGCAGGGCCTGCCGGAGCTGCACGAAGAGTGTGAGGGGAACCACCCCTCTGCGAGGA
AACTCACAGCCCAGAGGAGGGCATCCACAGTTTCCAGTGTTACTCAGGTAGAAGTTGATGAAAACGCTTACAGAT
GTGGCTCTGGCATGCAGATGGCAGAGGACAGCAAGAGCTTAAAGACACACCAGACACAGCCCGGCATCCGAAGAG
CGAGGGACAAAGCCCTTTCTGGTGGCAAACGGAAAGAGACTTTGGTGTAGAGAAGGCTCTGTGTGTTAACTGATG
GGAGAGACTGTTTGTTTATAAATGTGTACAGTTTTGTTTTCTCGTAAGGGGAGCATCATAGGGTTACTTTATACC
AGTTGTAACATTTTCATTGTTTTTGGTTGTTCTTTTTTCTTTTTTTAATGGCAGCTAAAGATATACAGATTACTG
TTAAATTGCAGTCCTTTTTTTTTTTAAAGATATTTTCTTGAATTATTTAGAACATGGTAAGCCTGGTATTTTTTA
ATCAAACAAAATATTTATGAAATGGGTTTTCTCTTAATTCTGGATTCATCATGGCTTTCTAATACCAATTGTAAT
ATTTACAATATTCACCAAAACTTAGAATTTTGCAAATGCTGGAATTCTGCCAGTGTTTCTTTGCTAAGCCTTGCA
TGCAAAATTTGAAATTTTAACATTGGCACCCAAAACCTACATGGAATGTATGTCTGGAGTATTTCAAACTTTACA
TTGAAACATAATTTCCTTGGAAAACAAACCATAAGCCTGAGGAGGTTTTTATCAACTGGAATGCTTTATATTAGT
TTGTTTTTCACTGTACATTCCTCATTTTACATTCATTTAACCTGCCGATTATTTAATTTTTTTATTGTAAAGTAG
TTTTTAGCATTTGCTTTTATTTTTTTACTTTGATGCCTTTTCAAATTGGCATGTCTTTAAAGTATTTTTCTTCCT
GATTAAAAATGTGTGTGTATGTGTGTGTGTGTGTATATATATATATTTTTTTAAATCACATTAATTTTACCAA
GTGAAACCAAGCCATACTGTTTTTGAGCCAATTAAGAAAATTGCCATTTTTAAAGTGTAGCATTTCAGGGTAAAG
ACCCATGAAATGGCTTGATGTATTCTAGACTACTGAAAGAAAACCACTTCAAAGATTTTGTTGAAAGTTTTAGTG
TTGTCTGAAATGCAAGAGGGAAGGTGATTGGTAGTGAGTTAAAAGAAAAAGAGAGGAAAAGAGAGTAGTTTTGTC
TTCAAGTAAAATGTCTGGTTGTGCCAGACATTTCACAAGTGTGAAAGGAGATAGGAGAAGCTCAACTTGAGGGCG
TGTAGTAAGTTGTAGAAGGCTCGAGGGGACGTGGACTTATTTGCCTTGGTTTGCAATACCTGCAAATAATGAGTT
TGAAAAGAAACAATGAAATGTGTTAAAAATTTGACCATATTAGATAAATTTTGGTGGATTTAGTCATAAGATGGA
AAAAGACTGGTGAATCTTTTATTACAAAATGTTTCTGTTAAAATGGGATCATCATCTTTGAAAGGGGGGAGGAGG
AGTAAAAGCCCGATTATAATGGTGATCAATTCAAGTCAGTGTTGACTATTCTGTGAAATATATTTGGCCAGTGGA
AATGATAATCAGAAAAGACTGTAAATAGATCCATCCAAATGATTTCTCTGTACAAATGAATGATACTATTAAAAA
AAAAAAAAAAA

FIGURE 588

MVAHDETGGLLPIKRTIRVLDVNNQSFREQEEPSNKRVRPLARVTSLANLISPVRNGAVRRFGQTIQSFTLRGDH
RSPASAQKFSSRSTVPTPAKRRSSALWSEMLDITMKESLTTREIRRQEAIYEMSRGEQDLIEDLKLARKAYHDPM
LKLSIMSEEELTHIFGDLDSYIPLHEDLLTRIGEATKPDGTVEQIGHILVSWLPRLNAYRGYCSNQLAAKALLDQ
KKQDPRVQDFLQRCLESPFSRKLDLWSFLDIPRSRLVKYPLLLKEILKHTPKEHPDVQLLEDAILIIQGVLSDIN
LKKGESECQYYIDKLEYLDEKQRDPRIEASKVLLCHGELRSKSGHKLYIFLFQDILVLTRPVTRNERHSYQVYRQ
PIPVQELVLEDLQDGDVRMGGSFRGAFSNSEKAKNIFRIRFHDPSPAQSHTLQANDVFHKQQWFNCIRAAIAPFQ
SAGSPPELQGLPELHEECEGNHPSARKLTAQRRASTVSSVTQVEVDENAYRCGSGMQMAEDSKSLKTHQTQPGIR
RARDKALSGGKRKETLV

FIGURE 589

CTCCACCGCGGCGAGAGGCATGGGCACGTGGCTGCCGAGGGTGGCCGAGCTCTGGGAAGAAAAGCCCGTGTGCCT
CTGCATAGCGTCGCTACAGCGCTGACTCGGTGTGGATTGATTGGAAAGGTTTGAGGGAGTACTTGGGAAGCATGG
TGGCACATGATGAGACTGGAGGTCTCCTACCTATTAAAAGGACCATACGAGTCCTAGATGTCAATAACCAGTCCT
TCAGAGAACAAGAGGAGCCAAGCAATAAAAGAGTTCGACCTCTGGCTCGTGTCACGTCCTTGGCAAATTTAATCT
CTCCTGTAAGAAATGGAGCTGTCAGACGTTTTGGTCAAACAATACAGTCATTTACCCTTCGTGGTGACCACAGAT
CCCCAGCCTCTGCCCAGAAGTTTTCTAGCAGGTCAACAGTCCCAACACCCGCCAAGAGAAGGAGCAGTGCACTGT
GGTCAGAGATGCTGGACATCACCATGAAGGAGTCTCTCACCACCAGGGAGATCAGACGGCAGGAGGCAATATATG
AAATGTCCCGAGGTGAACAGGATTTAATTGAGGATCTCAAACTTGCAAGAAAGGCCTACCATGACCCCATGTTAA
AGTTGTCCATCATGTCAGAAGAGGAACTCACACATATATTTGGTGATCTGGACTCTTACATACCTCTGCATGAAG
ATTTGTTGACAAGAATAGGAGAAGCAACCAAGCCTGATGGAACAGTGGAGCAGATTGGTCACATTCTCGTGAGCT
GGTTACCGCGCTTGAATGCCTACAGAGGTTACTGTAGTAACCAGCTGGCAGCCAAAGCTCTTCTTGATCAAAAGA
AACAGGATCCAAGAGTCCAAGACTTCCTCCAGCGATGTCTCGAGTCTCCCTTCAGTCGAAAACTAGATCTTTGGA
GTTTCCTAGATATCCCTCGAAGTCGCCTAGTCAAATACCCTTTACTGTTAAAAGAAATTCTTAAACACACTCCAA
AAGAGCACCCTGATGTTCAGCTTCTGGAGGATGCTATATTGATAATACAGGGAGTCCTCTCTGATATCAACTTGA
AGAAAGGTGAATCCGAGTGCCAGTATTACATCGACAAGCTGGAGTACCTGGATGAAAAGCAGAGGGACCCCAGAA
TCGAAGCGAGCAAAGTGCTGCTGTGCCATGGGGAGCTGCGGAGCAAGAGTGGACATAAACTTTACATTTTCCTGT
TTCAAGACATCTTGGTTCTGACTCGGCCCGTCACACGGAACGAACGGCACTCTTACCAGGTTTACCGGCAGCCAA
TCCCAGTCCAAGAGCTAGTCCTAGAAGACCTGCAGGATGGAGATGTGAGAATGGGAGGCTCCTTTCGAGGAGCTT
TCAGTAACTCAGAGAAAGCTAAAAATATCTTTAGAATTCGCTTCCATGACCCCTCTCCAGCCCAGTCTCACACTC
TGCAAGCCAATGACGTGTTCCACAAGCAGCAGTGGTTCAACTGTATTCGAGCGGCCATTGCCCCCTTCCAGTCGG
CAGGCAGTCCACCTGAGCTGCAGGGCCTGCCGGAGCTGCACGAAGAGTGTGAGGGGAACCACCCCTCTGCGAGGA
AACTCACAGCCCAGAGGAGGGCATCCACAGTTTCCAGTGTTACTCAGGTAGAAGTTGATGAAAACGCTTACAGAT
GTGGCTCTGGCATGCAGATGGCAGAGGACAGCAAGAGCTTAAAGACACACCAGACACAGCCCGGCATCCGAAGAG
CGAGGGACAAAGCCCTTTCTGGTGGCAAACGGAAAGAGACTTTGGTGTAGAGAAGGCTCTGTGTGTTAACTGATG
GGAGAGACTGTTTGTTTATAAATGTGTACAGTTTTGTTTTCTCGTAAGGGGAGCATCATAGGGTTACTTTATACC
AGTTGTAACATTTTCATTGTTTTTGGTTGTTCTTTTTTCTTTTTTTAATGGCAGCTAAAGATATACAGATTACTG
TTAAATTGCAGTCCTTTTTTTTTTTAAAGATATTTTCTTGAATTATTTAGAACATGGTAAGCCTGGTATTTTTTA
ATCAAACAAAATATTTATGAAATGGGTTTTCTCTTAATTCTGGATTCATCATGGCTTTCTAATACCAATTGTAAT
ATTTACAATATTCACCAAAACTTAGAATTTTGCAAATGCTGGAATTCTGCCAGTGTTTCTTTGCTAAGCCTTGCA
TGCAAAATTTGAAATTTTAACATTGGCACCCAAAACCTACATGGAATGTATGTCTGGAGTATTTCAAACTTTACA
TTGAAACATAATTTCCTTGGAAAACAAACCATAAGCCTGAGGAGGTTTTTATCAACTGGAATGCTTTATATTAGT
TTGTTTTTCACTGTACATTCCTCATTTTACATTCATTTAACCTGCCGATTATTTAATTTTTTTATTGTAAAGTAG
TTTTTAGCATTTGCTTTTATTTTTTTACTTTGATGCCTTTTCAAATTGGCATGTCTTTAAAGTATTTTTCTTCCT
GATTAAAAATGTGTGTGTATGTGTGTGTGTGTGTATATATATATATTTTTTTAAATCACATTAATTTTACCAA
GTGAAACCAAGCCATACTGTTTTTGAGCCAATTAAGAAAATTGCCATTTTTAAAGTGTAGCATTTCAGGGTAAAG
ACCCATGAAATGGCTTGATGTATTCTAGACTACTGAAAGAAAACCACTTCAAAGATTTTGTTGAAAGTTTTAGTG
TTGTCTGAAATGCAAGAGGGAAGGTGATTGGTAGTGAGTTAAAAGAAAAAGAGAGGAAAAGAGAGTAGTTTTGTC
TTCAAGTAAAATGTCTGGTTGTGCCAGACATTTCACAAGTGTGAAAGGAGATAGGAGAAGCTCAACTTGAGGGCG
TGTAGTAAGTTGTAGAAGGCTCGAGGGGACGTGGACTTATTTGCCTTGGTTTGCAATACCTGCAAATAATGAGTT
TGAAAAGAAACAATGAAATGTGTTAAAAATTTGACCATATTAGATAAATTTTGGTGGATTTAGTCATAAGATGGA
AAAAGACTGGTGAATCTTTTATTACAAAATGTTTCTGTTAAAATGGGATCATCATCTTTGAAAGGGGGGAGGAGG
AGTAAAAGCCCGATTATAATGGTGATCAATTCAAGTCAGTGTTGACTATTCTGTGAAATATATTTGGCCAGTGGA
AATGATAATCAGAAAAGACTGTAAATAGATCCATCCAAATGATTTCTCTGTACAAATGAATGATACTATTAAAAA
AAAAAAAAAAA

FIGURE 590

MVAHDETGGLLPIKRTIRVLDVNNQSFREQEEPSNKRVRPLARVTSLANLISPVRNGAVRRFGQTIQSFTLRGDH
RSPASAQKFSSRSTVPTPAKRRSSALWSEMLDITMKESLTTREIRRQEAIYEMSRGEQDLIEDLKLARKAYHDPM
LKLSIMSEEELTHIFGDLDSYIPLHEDLLTRIGEATKPDGTVEQIGHILVSWLPRLNAYRGYCSNQLAAKALLDQ
KKQDPRVQDFLQRCLESPFSRKLDLWSFLDIPRSRLVKYPLLLKEILKHTPKEHPDVQLLEDAILIIQGVLSDIN
LKKGESECQYYIDKLEYLDEKQRDPRIEASKVLLCHGELRSKSGHKLYIFLFQDILVLTRPVTRNERHSYQVYRQ
PIPVQELVLEDLQDGDVRMGGSFRGAFSNSEKAKNIFRIRFHDPSPAQSHTLQANDVFHKQQWFNCIRAAIAPFQ
SAGSPPELQGLPELHEECEGNHPSARKLTAQRRASTVSSVTQVEVDENAYRCGSGMQMAEDSKSLKTHQTQPGIR
RARDKALSGGKRKETLV

FIGURE 591

CGCCGAGCTTTCGGCACCTCTGCCGGGTGGTACCGAGCCTTCCCGGCGCCCCCTCCTCTCCTCCCACCGGCCTGC
CCTTCCCCGCGGGACTATCGCCCCCACGTTTCCCTCAGCCCTTTTCTCTCCCGGCCGAGCCGCGGCGGCAGCAGC
AGCAGCAGCAGCAGCAGGAGGAGGAGCCCGGTGGCGGCGGTGGCCGGGGAGCCCATGGCGTACAGTCAAGGAGGC
GGCAAAAAAAAAGTCTGCTACTACTACGACGGTGATATTGGAAATTATTATTATGGACAGGGTCATCCCATGAAG
CCTCATAGAATCCGCATGACCCATAACTTGCTGTTAAATTATGGCTTATACAGAAAAATGGAAATATATAGGCCC
CATAAAGCCACTGCCGAAGAAATGACAAAATATCACAGTGATGAGTATATCAAATTTCTACGGTCAATAAGACCA
GATAACATGTCTGAGTATAGTAAGCAGATGCATATATTTAATGTTGGAGAAGATTGTCCAGCGTTTGATGGACTC
TTTGAGTTTTGTCAGCTCTCAACTGGCGGTTCAGTTGCTGGAGCTGTGAAGTTAAACCGACAACAGACTGATATG
GCTGTTAATTGGGCTGGAGGATTACATCATGCTAAGAAATACGAAGCATCAGGATTCTGTTACGTTAATGATATT
GTGCTTGCCATCCTTGAATTACTAAAGTATCATCAGAGAGTCTTATATATTGATATAGATATTCATCATGGTGAT
GGTGTTGAAGAAGCTTTTTATACAACAGATCGTGTAATGACGGTATCATTCCATAAATATGGGGAATACTTTCCT
GGCACAGGAGACTTGAGGGATATTGGTGCTGGAAAAGGCAAATACTATGCTGTCAATTTTCCAATGTGTGATGGT
ATAGATGATGAGTCATATGGGCAGATATTTAAGCCTATTATCTCAAAGGTGATGGAGATGTATCAACCTAGTGCT
GTGGTATTACAGTGTGGTGCAGACTCATTATCTGGTGATAGACTGGGTTGTTTCAATCTAACAGTCAAAGGTCAT
GCTAAATGTGTAGAAGTTGTAAAAACTTTTAACTTACCATTACTGATGCTTGGAGGAGGTGGCTACACAATCCGT
AATGTTGCTCGATGTTGGACATATGAGACTGCAGTTGCCCTTGATTGTGAGATTCCCAATGAGTTGCCATATAAT
GATTACTTTGAGTATTTTGGACCAGACTTCAAACTGCATATTAGTCCTTCAAACATGACAAACCAGAACACTCCA
GAATATATGGAAAAGATAAAACAGCGTTTGTTTGAAAATTTGCGCATGTTACCTCATGCACCTGGTGTCCAGATG
CAAGCTATTCCAGAAGATGCTGTTCATGAAGACAGTGGAGATGAAGATGGAGAAGATCCAGACAAGAGAATTTCT
ATTCGAGCATCAGACAAGCGGATAGCTTGTGATGAAGAATTCTCAGATTCTGAGGATGAAGGAGAAGGAGGTCGA
AGAAATGTGGCTGATCATAAGAAAGGAGCAAAGAAAGCTAGAATTGAAGAAGATAAGAAAGAAACAGAGGACAAA
AAAACAGACGTTAAGGAAGAAGATAAATCCAAGGACAACAGTGGTGAAAAAACAGATACCAAAGGAACCAAATCA
GAACAGCTCAGCAACCCCTGAATTTGACAGTCTCACCAATTTCAGAAAATCATTAAAAAGAAAATATTGAAAGGA
AAATGTTTTCTTTTTGAAGACTTCTGGCTTCATTTTATACTACTTTGGCATGGACTGTATTTATTTTCAAATGGG
ACTTTTTCGTTTTTGTTTTTCTGGGCAAGTTTTATTGTGAGATTTTCTAATTATGAAGCAAAATTTCTTTTCTCC
ACCATGCTTTATGTGATAGTATTTAAAATTGATGTGAGTTATTATGTCAAAAAAACTGATCTATTAAAGAAGTAA
TTGGCCTTTCTGAGCTGAAAAAAAAAAAAAAAAAG

FIGURE 592

MAYSQGGGKKKVCYYYDGDIGNYYYGQGHPMKPHRIRMTHNLLLNYGLYRKMEIYRPHKATAEEMTKYHSDEYIK
FLRSIRPDNMSEYSKQMHIFNVGEDCPAFDGLFEFCQLSTGGSVAGAVKLNRQQTDMAVNWAGGLHHAKKYEASG
FCYVNDIVLAILELLKYHQRVLYIDIDIHHGDGVEEAFYTTDRVMTVSFHKYGEYFPGTGDLRDIGAGKGKYYAV
NFPMCDGIDDESYGQIFKPIISKVMEMYQPSAVVLQCGADSLSGDRLGCFNLTVKGHAKCVEVVKTFNLPLLMLG
GGGYTIRNVARCWTYETAVALDCEIPNELPYNDYFEYFGPDFKLHISPSNMTNQNTPEYMEKIKQRLFENLRMLP
HAPGVQMQAIPEDAVHEDSGDEDGEDPDKRISIRASDKRIACDEEFSDSEDEGEGGRRNVADHKKGAKKARIEED
KKETEDKKTDVKEEDKSKDNSGEKTDTKGTKSEQLSNP

FIGURE 593A

GCGGGGACTAGTCTCGTCCGGAGACTGGCGGCGGCGGCGGCGGCGGCCGGAGCTCGAGCCCCAGCGGCTGAG
GGCGGGCGGGCGGGCGCGGGGGAGGGAGGGGGGCCGGTCCGCGACGACTCCCCGGACGGCGTTTCTCCTCCGAGC
GGCGCCGGTTTCGGCTTGGGGGGGGCGGGGTACAGCCCATCCATGACC**ATG**GGCGACAAGAAGAGCCCGACCAGG
CCAAAAAGACAAGCGAAACCTGCCGCAGACGAAGGGTTTTGGGATTGTAGCGTCTGCACCTTCAGAAACAGTGCT
GAAGCCTTTAAATGCAGCATCTGCGATGTGAGGAAAGGCACCTCCACCAGAAAACCTCGGATCAATTCTCAGCTG
GTGGCACAACAAGTGGCACAACAGTATGCCACCCCACCACCCCCTAAAAAGGAGAAGAAGGAGAAAGTTGAAAAG
CAGGACAAAGAGAAACCTGAGAAAGACAAGGAAATTAGTCCTAGTGTTACCAAGAAAAATACCAACAAGAAAACC
AAACCAAAGTCTGACATTCTGAAAGATCCTCCTAGTGAAGCAAACAGCATACAGTCTGCAAATGCTACAACAAAG
ACCAGCGAAACAAATCACACCTCAAGGCCCCGGCTGAAAAACGTGGACAGGAGCACTGCACAGCAGTTGGCAGTA
ACTGTGGGCAACGTCACCGTCATTATCACAGACTTTAAGGAAAAGACTCGCTCCTCATCGACATCCTCATCCACA
GTGACCTCCAGTGCAGGGTCCGAACAGCAGAACCAGAGCAGCTCGGGGTCTGAGAGCACAGACAAGGGCTCCTCC
CGTTCCTCCACGCCAAAGGGCGACATGTCAGCAGTCAATGATGAATCTTTC**TGA**AATTGCACATGGAATTGTGAA
AACTATGAATCAGGGTATGAAATTCAAAACCTCCACCTGCCCATGCTGCTTGCATCCCTGGAGAATCTTCTGTGG
ACATCGACCTCTTAGTGATGCTGCCAGGATAATTTCTGCTTGCCATGGGCATCTGGCCACCAAGGAATTTCGCAC
CCTGACGATTACTCTTGACACTTTTATGTATTCCATTGTTTTATATGATTTTCCTAACAATCATTTATAATTGGA
TGTGCTCCTGAATCTACTTTTTATAAAAAAAAAAAAATCTGCTGTGCACAATTTTCCATGTACATTACAACTGGT
TTTTTGTTTTTGTTTTGTTGCCGGTGGGGAGGGCTGGGAGGGGGAGGGAACTTTTATTTATTGTGAACACAAACT
CCATCCTTTCAGCATATCCTTTTAAGTTTAGTTCTTTCTTCCAGTTATACTATGTACTATCAGTTTTGATATAAC
TATATATATATAAATATAAAATTATATATAAAGGGTTATTTGAAACCAATCCATGGCAAACGCTGGTGCTTGATA
CACTGTGAAGTGAATACAACATTGAACAGTTACAGATCTGGGACAGTCCCTTCTATGAAAGTGCTGAAATTTAAT
TAAAATCAGTCTTACATGAAGTATGTTCCAATCCATGTGGGAACTTGACTCTCTCATCTGTCTAAAGAGTACTGG
ACGATATAAAAATATATATTTTTTAAACAATGTGATCTCAAATTTAAAGACTGCTCCAGATAGCCTGCATTTGCA
ATGGAATAACTGACAAATCACAAGTGGTTTAGTTGGGCAGGGCTTTGATCATTCAAAAGTAACTAAAGTAGCTCC
AGAATGCCAAGTATTCGTGTAAATTACGGTTACATGTTATCATTTGCTGTTCTTACATAAGCACTCATGAAAATA
TGGTATTCTGTAACTTGAATTCCATCCATTTTCCAGACGTCTACTCATGTCTGAGGTAAATCTAGAAATTGTCTT
AGTTTTAGGATTGAAACAGTCTATAAACTGTATTTTTGGTCCATCCAGGAAGCTAGTCCCTGGTTTCTCCTTTCT
ACATGACATTGCAGTGGTGGTTTCTGTAATTAAAATTTGTTTGCCTCATGTCCCTTTGTCTGATAAACCTTCACT
CTACCGATTCAGTTGTGAGCATTCTTTTTTTCCTTCTCAAAACCTACTATGATTTGTTTTACTGAACAAAGGTTA
TCAACCACACATCCAGTCCTGACATGGAGCTTTTCAGTGTTGGAGACATTTCTCAATCCCCTGCTGTGGTAGGAA
CTCCAGTGGTGAACGGCTTGCGCGCCTGCAGCCAGAGTTGCAGGGGAAAGCTCGTACTTACTGCGAGCAGCATGT
AATCTTTTTTCTTCCTGGACATAAAGATAGCTTGAGTAAACTGTTCTATTTCATTCTCTTCACTCTTTTTACTGT
CTTGCAAAAAAAAAAAAAAATAATAATAATAATCAAAGACCACTAATAAGATTCCACCTCTCCTTATTAAAATAAT
TTTTTAAAATTTTGGTTTTGCTTTTGTTTTGGATTGGGTCTCTCTTCTATTTGACTTTTACATTTAGATACAGAG
TTTGTAGTACTTCAGAGACATTTCAAGCATGAGAATTTGAGGTTACCTCTCTTTATTTGACCTTTAGGGACTCAC
GGGAGGGCAGCCTGATTTGTAATGAAGCACCACATTTTGGTGTTAAGAACCTGGTTTGCTTAATAATAGCAGTAA
TTTCTGTGTGTGGAGGCAACAAATAAAAAAATTAACAGCTTGAATTGAGTAGCCAACAGGAAAGGTTCCTTTCAC
ATTTACATTAAAACTATTCTGTAGTCACTAATGTACCATAATTTAAATTCTTTTCTCAAAGGTATAGATTATAAA
GCAGTGCCATTTGTTGCTGTGGTCCTATTCTCAAATGCATGGACAATGTTCCCCCCTTTTTAAAATAATGCTTGT
GTCTGGGATGCAAGCTTTGCTTATCTTTTTAAATACATTTTTAAAGTATTTATTAATGAACCAAAGGAAATCAGA
TGCTTTCTATAAGCATCAGAATATATAATACATAGTGATTTGACTATGAATTTTAAATCCACATTTTAATATTGG
TGGGATATTGCAAAGACATTCCTTCTAAAGTTTTAATATTCCTTTTATTAAGGGTCTCAGGGAGGGTAAATTAGT
CAGCCATATTTATTTTCCAGAGGTTTAAGAAATTGCTGTTTTTAACTTTTTGAAAAAACTTAAATGCCACCAAAC
TCATGTAGGTTGCACTGCTTATTGAACCAATAACTGTTGGTATGCACTTTGTTCAGACACACTGTGTACTTTTTC
AAAAACTAGTTTCATGTAAAGTGATTGGACCCCATAGATTAGTGGAAAAAGCTGATTAACCAGCTACTCATAGGC
TGCTAATTCATTCATGCCAATGTTTTGGTTTTTCAGTTTTGCCTCCGTGATAAATTAAAGAATGGGGAGGGGTGA
AGGAAGGGGAAGAAGATTGCTTTAGAACAAGTGGCATGAAATTACCATCTTTGTAGAAACCGCAGCTAACAGTGG
GAGTTATCTAAGCAATCAGATGTTACAGGGCCAGCCCCTTTAGCTGCTGTGGTGTATTCTGTTGGGTAGTGAGGT
AGTAGGTACTTTATAGACTTTTAATTTTGGAAATTGATGACATCCCTCAGGCATGTATTCTGGAAATGGAATTCC

FIGURE 593B

TGTAACTTCCTGTGTCTGCAGTATGCCCTACAATTAGTAGGCAGCGTGTAAAAACACTAGTGTAGATTATAAAGA
TATACATTAAAAGAGGACCAGAAATACTTGGTATTCAGTGGCACAGAAAGCAGGTTAAACAAACAAAAAGCACAG
TGTTACGCTTGCAAGTTTCCATTTGTTTTAATACCACGCAATCTTTCACACTCGTGCGTGTGCGCGCACACAGAG
CTTACCTGACTTGCTCTGCTTGAGTCATGCAGTTACAAAAAAAAAAGACATCTTGACACCCACACAATATTCTAAT
CAAAACCTTTCAGTTTCAATCTGGATATTTAAAAACATTGGCAGAAGCCTCTGTGAGTTTAGTTCCACTAAGATG
TTTCACCTGCCTTATCAAGACCATTCTCAGTCTACTTTTTTAAGCTACCGTATCTTAAATTATTGAAAATTTATT
AATTGCTGAATATATAATAACCTTTGCTTGTATGTAACCGAAAATGGTTTAAGAGCCAACATTTAGAGTATGACA
ATGGAGCTGAACAGTTTTTAATGCGCAAGCAGTTCTGTTCTTGTGTATGACTTGTAACCTTAATTTACTGTGTAA
AGATGGTTACATTATTTCCTTAGCTTTGTTTGTTGGAGACAAATAGAGAATGCTTGTTAAGTATGTCAAAACAAT
CTTATCTTGTGAATTTTTGTTAATGTATTATACGAGCTATATTTTTCATTTGCCCAGAAAGACAGCTTGTATAAC
GCTTTXGGAAGTTTCTGCTCXGTAATGTCTTTAGAGCTGACAGTCTGTTAGGTTXGTTTTTTTCTTCATGCTAAA
GTGTCAGTTGGTGGTTTTGTGAACTGGTCAAAAATTCACAGGTCTTAAATGTTTTGGGGGGAAATTTATATTGGAC
ACTGCTCTTTGTCTAGCAAATAAAAGATGTTAATATATTCCTGTTACTGGCATGTGCACGACTATGTTATTAGAA
GCCACTTTATCATTTTCCTGCTTTAAATAGAAATGTCTATTTATGAATTCTGCTTGTAGTTTTTTCACAAATAAA
ATAGTAAAATTTAAAAAAAAAAAAAAACAAAAAAAAAAAAAAAAAAAAAA

FIGURE 594

MGDKKSPTRPKRQAKPAADEGFWDCSVCTFRNSAEAFKCSICDVRKGTSTRKPRINSQLVAQQVAQQYATPPPPK
KEKKEKVEKQDKEKPEKDKEISPSVTKKNTNKKTKPKSDILKDPPSEANSIQSANATTKTSETNHTSRPRLKNVD
RSTAQQLAVTVGNVTVIITDFKEKTRSSSTSSSTVTSSAGSEQQNQSSSGSESTDKGSSRSSTPKGDMSAVNDES
F

FIGURE 595

CCTCCGCTCAGTCCGGGAGCGCACGTGGGCCGCGGCGCTCCGACCTCCGCTTTCCCACCGCCCGCAGCTGAAGCA
CATCCCGCAGCCCGGCGCGGACTCCGATCGCCGCAGTTGCCCTCTGGCGCCATGTCGCAGAACGGAGCGCCCGGG
ATGCAGGAGGAGAGCCTGCAGGGCTCCTGGGTAGAACTGCACTTCAGCAATAATGGGAACGGGGGCAGCGTTCCA
GCCTCGGTTTCTATTTATAATGGAGACATGGAAAAAATACTGCTGGACGCACAGCATGAGTCTGGACGGAGTAGC
TCCAAGAGCTCTCACTGTGACAGCCCACCTCGCTCGCAGACACCACAAGATACCAACAGGGCTTCTGAAACAGAT
ACCCATAGCATTGGAGAGAAAAACAGCTCACAGTCTGAGGAAGATGATATTGAAAGAAGGAAAGAAGTTGAAAGC
ATCTTGAAGAAAAACTCAGATTGGATATGGGATTGGTCAAGTCGGCCGGAAAATATTCCCCCCAAGGAGTTCCTC
TTTAAACACCCGAAGCGCACGGCCACCCTCAGCATGAGGAACACGAGCGTCATGAAGAAAGGGGGCATATTCTCT
GCAGAATTTCTGAAAGTTTTCCTTCCATCTCTGCTGCTCTCTCATTTGCTGGCCATCGGATTGGGGATCTATATT
GGAAGGCGTCTGACAACCTCCACCAGCACCTTTTGATGAAGAACTGGAGTCTGACTTGGTTCGTTAGTGGATTAC
TTCTGAGCTTGCAACATAGCTCACTGAAGAGCTGTTAGATCCTGGGGTGGCCACGTCACTTGTGTTTATTTGTTC
TGTAAATGCTGCGTTCCTAATTTAGTAAAATAAAAGAATAGACACTAAAATCATGTTGATCTATAATTACACCTA
TGGGATCAATAAGCATGTCAGACTGATTAATGTCTACTGTGAAAATTTGGTAGTAAATTTTCATTTGATATTAGA
TATAAATATCTGAATATAAATAATTTTAATATACTAGTCATGATGTGTGTTGTATTTTAAAAATTATCTGCAACC
TTAATTCAGCTGAAGTACTTTATATTTCAAAAGAATGAATAACATTGATAATAAAATCGCTACTTTAAGGGGTTT
GTCCAAAATAAATATTGTGGCCTTATATATCACACTATTGTAGAAAGTATTATTTAATTTAAATGGATGCAGGTT
GTCTACTAAAGAAAGATTATATATAACTATGCTAATTGTTCATAATCAACAGAAACCAAGATAGAGCTACAAACT
CAGCTGTACAGTTCGTACACTAAACTCTTCTTGCTTTTGCATTATAAGGAATTAAGTCTCCGATTATTAGGTGAT
CACCCTGGATGATCAGTTTTCTGCTGAAGGCACCTACTCAGTATCTTTTCCTCTTTATCACTCTGCATTGGTGAA
TTTAATCCTCTCCTTTGTGTTCAACTTTTGTGTGCTTTTAAAATCAGCTTTATTCTAAGCAAATCTGTGTCTACT
TTAAAAAACTGGAAATGGAAAAAAAAATAAATCTT

FIGURE 596

MSQNGAPGMQEESLQGSWVELHFSNNGNGGSVPASVSIYNGDMEKILLDAQHESGRSSSKSSHCDSPPRSQTPQD
TNRASETDTHSIGEKNSSQSEEDDIERRKEVESILKKNSDWIWDWSSRPENIPPKEFLFKHPKRTATLSMRNTSV
MKKGGIFSAEFLKVFLPSLLLSHLLAIGLGIYIGRRLTTSTSTF

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FIGURE 597

CCTCCGCTCAGTCCGGGAGCGCACGTGGGCCGCGGCGCTCCGACCTCCGCTTTCCCACCGCCCGCAGCTGAAGCA
CATCCCGCAGCCCGGCGCGGACTCCGATCGCCGCAGTTGCCCTCTGGCGCCATGTCGCAGAACGGAGCGCCCGGG
ATGCAGGAGGAGAGCCTGCAGGGCTCCTGGGTAGAACTGCACTTCAGCAATAATGGGAACGGGGGCAGCGTTCCA
GCCTCGGTTTCTATTTATAATGGAGACATGGAAAAAATACTGCTGGACGCACAGCATGAGTCTGGACGGAGTAGC
TCCAAGAGCTCTCACTGTGACAGCCCACCTCGCTCGCAGACACCACAAGATACCAACAGGGCTTCTGAAACAGAT
ACCCATAGCATTGGAGAGAAAAACAGCTCACAGTCTGAGGAAGATGATATTGAAAGAAGGAAAGAAGTTGAAAGC
ATCTTGAAGAAAAACTCAGATTGGATATGGGATTGGTCAAGTCGGCCGGAAAATATTCCCCCCAAGGAGTTCCTC
TTTAAACACCCGAAGCGCACGGCCACCCTCAGCATGAGGAACACGAGCGTCATGAAGAAAGGGGGCATATTCTCT
GCAGAATTTCTGAAAGTTTTCCTTCCATCTCTGCTGCTCTCTCATTTGCTGGCCATCGGATTGGGGATCTATATT
GGAAGGCGTCTGACAACCTCCACCAGCACCTTTTGATGAAGAACTGGAGTCTGACTTGGTTCGTTAGTGGATTAC
TTCTGAGCTTGCAACATAGCTCACTGAAGAGCTGTTAGATCCTGGGGTGGCCACGTCACTTGTGTTTATTTGTTC
TGTAAATGCTGCGTTCCTAATTTAGTAAAATAAAAGAATAGACACTAAAATCATGTTGATCTATAATTACACCTA
TGGGATCAATAAGCATGTCAGACTGATTAATGTCTACTGTGAAAATTTGGTAGTAAATTTTCATTTGATATTAGA
TATAAATATCTGAATATAAATAATTTTAATATACTAGTCATGATGTGTGTTGTATTTTAAAAATTATCTGCAACC
TTAATTCAGCTGAAGTACTTTATATTTCAAAAGAATGAATAACATTGATAATAAAATCGCTACTTTAAGGGGTTT
GTCCAAAATAAATATTGTGGCCTTATATATCACACTATTGTAGAAAGTATTATTTAATTTAAATGGATGCAGGTT
GTCTACTAAAGAAAGATTATATATAACTATGCTAATTGTTCATAATCAACAGAAACCAAGATAGAGCTACAAACT
CAGCTGTACAGTTCGTACACTAAACTCTTCTTGCTTTTGCATTATAAGGAATTAAGTCTCCGATTATTAGGTGAT
CACCCTGGATGATCAGTTTTCTGCTGAAGGCACCTACTCAGTATCTTTTCCTCTTTATCACTCTGCATTGGTGAA
TTTAATCCTCTCCTTTGTGTTCAACTTTTGTGTGCTTTTAAAATCAGCTTTATTCTAAGCAAATCTGTGTCTACT
TTAAAAAACTGGAAATGGAAAAAAAAATAAATCTT

FIGURE 598

MSQNGAPGMQEESLQGSWVELHFSNNGNGGSVPASVSIYNGDMEKILLDAQHESGRSSSKSSHCDSPPRSQTPQD
TNRASETDTHSIGEKNSSQSEEDDIERRKEVESILKKNSDWIWDWSSRPENIPPKEFLFKHPKRTATLSMRNTSV
MKKGGIFSAEFLKVFLPSLLLSHLLAIGLGIYIGRRLTTSTSTF

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FIGURE 599

AGAGGCTTCCCTGGCTGGTGCCTGAGCCCGGCGTCCCTCGCCCCCCGCCCTCCCCGCATCCCTCTCCTCCCTCGC
GCCTGGCCCTGTGGCTCTTCCTCCCTCCCTCCTTCCCCCCCCCCCCACCCCTCGCCCGCTGCCTCCCTCGGCCCA
GCCAGCTGTGCCGGCGTTTGTTGGCTGCCCTGCGCCCGGCCCTCCAGCCAGCCTTCTGCCGGCCCCGCCGCG**ATG**

GAGGTGCCCCAGCCGGAGCCCGCGCCAGGCTCGGCTCTCAGTCCAGCAGGCGTGTGCGGTGGCGCCCAGCGTCCG
GGCCACCTCCCGGGCCTCCTGCTGGGATCTCATGGCCTCCTGGGGTCCCCGGTGCGGGCGGCCGCTTCCTCGCCG
GTCACCACCCTCACCCAGACCATGCACGACCTCGCCGGGCTCGGCAGCCGCAGCCGCCTGACGCACCTATCCCTG
TCTCGACGGGCATCCGAATCCTCCCTGTCGTCTGAATCCTCCGAATCTTCTGATGCAGGTCTCTGCATGGATTCC
CCCAGCCCTATGGACCCCCACATGGCGGAGCAGACGTTTGAACAGGCCATCCAGGCAGCCAGCCGGATCATTCGA
AACGAGCAGTTTGCCATCAGACGCTTCCAGTCTATGCCGGTGAGGCTGCTGGGCCACAGCCCCGTGCTTCGGAAC
ATCACCAACTCCCAGGCGCCCGACGGCCGGAGGAAGAGCGAGGCGGGCAGTGGAGCTGCCAGCAGCTCTGGGGAA
GACAAGGAGAATGTGCGCTTCTGGAAGGCCGGGGTGGGAGCTCTCCGGGAAGAGGAGGGGGCATGCTGGGGTGGT
TCCCTGGCATGTGAGGACCCTCCTCTCCCATCTTGGCTGCAGGATGGATTTGTCTTCAAGATGCCATGGAAGCCC
ACACATCCCAGCTCCACCCATGCTCTGGCAGAGTGGGCCAGCCGCAGGGAAGCCTTTGCCCAGAGACCCAGCTCG
GCCCCCGACCTGATGTGTCTCAGTCCTGACCGGAAGATGGAAGTGGAGGAGCTCAGCCCCCTGGCCCTAGGTCGC
TTCTCTCTGACCCCTGCAGAGGGGGATACTGAGGAAGATGATGGATTTGTGGACATCCTAGAGAGTGACTTAAAG
GATGATGATGCAGTTCCCCCAGGCATGGAGAGTCTCATTAGTGCCCCACTGGTCAAGACCTTGGAAAAGGAAGAG
GAAAAGGACCTCGTCATGTACAGCAAGTGCCAGCGGCTCTTCCGCTCTCCGTCCATGCCCTGCAGCGTGATCCGG
CCCATCCTCAAGAGGCTGGAGCGGCCCCAGGACAGGGACACGCCCGTGCAGAATAAGCGGAGGCGGAGCGTGACC
CCTCCTGAGGAGCAGCAGGAGGCTGAGGAACCTAAAGCCCGCGTCCTCCGCTCAAAATCACTGTGTCACGATGAG
ATCGAGAACCTCCTGGACAGTGACCACCGAGAGCTGATTGGAGATTACTCTAAGGCCTTCCTCCTACAGACAGTA
GACGGAAAGCACCAAGACCTCAAGTACATCTCACCAGAAACGATGGTGGCCCTATTGACGGGCAAGTTCAGCAAC
ATCGTGGATAAGTTTGTGATTGTAGACTGCAGATACCCCTATGAATATGAAGGCGGGCACATCAAGACTGCGGTG
AACTTGCCCCTGGAACGCGACGCCGAGAGCTTCCTACTGAAGAGCCCCATCGCGCCCTGTAGCCTGGACAAGAGA
GTCATCCTCATTTTCCACTGTGAATTCTCATCTGAGCGTGGGCCCCGCATGTGCCGTTTCATCAGGGAACGAGAC
CGTGCTGTCAACGACTACCCCAGCCTCTACTACCCTGAGATGTATATCCTGAAAGGCGGCTACAAGGAGTTCTTC
CCTCAGCACCCGAACTTCTGTGAACCCCAGGACTACCGGCCCATGAACCACGAGGCCTTCAAGGATGAGCTAAAG
ACCTTCCGCCTCAAGACTCGCAGCTGGGCTGGGGAGCGGAGCCGGCGGGAGCTCTGTAGCCGGCTGCAGGACCAG
TGAGGGGCCTGCGCCAGTCCTGCTACCTCCCTTGCCTTTCGAGGCCTGAAGCCAGCTGCCCTATGGGCCTGCCGG
GCTGAGGGCCTGCTGGAGGCCTCAGGTGCTGTCCATGGGAAAGATGGTGTGGTGTCCTGCCTGTCTGCCCCAGCC
CAGATTCCCCTGTGTCATCCCATCATTTTCCATATCCTGGTGCCCCCCACCCCTGGAAGAGCCCAGTCTGTTGAG
TTAGTTAAGTTGGGTTAATACCAGCTTAAAGGCAGTATTTTGTGTCCTCCAGGAGCTTCTTGTTTCCTTGTTAGG
GTTAACCCTTCATCTTCCTGTGTCCTGAAACGCTCCTTTGTGTGTGTGTCAGCTGAGGCTGGGGAGAGCCGTGGT
CCCTGAGGATGGGTCAGAGCTAAACTCCTTCCTGGCCTGAGAGTCAGCTCTCTGCCCTGTGTACTTCCCGGGCCA
GGGCTGCCCCTAATCTCTGTAGGAACCGTGGTATGTCTGCCATGTTGCCCCTTTCTCTTTTCCCCTTTCCTGTCC
CACCATACGAGCACCTCCAGCCTGAACAGAAGCTCTTACTCTTTCCTATTTCAGTGTTACCTGTGTGCTTGGTCT
GTTTGACTTTACGCCCATCTCAGGACACTTCCGTAGACTGTTTAGGTTCCCCTGTCAAATATCAGTTACCCACTC
GGTCCCAGTTTTGTTGCCCCAGAAAGGGATGTTATTATCCTTGGGGGCTCCCAGGGCAAGGGTTAAGGCCTGAAT
CATGAGCCTGCTGGAAGCCCAGCCCCTACTGCTGTGAACCCTGGGGCCTGACTGCTCAGAACTTGCTGCTGTCTT
GTTGCGGATGGATGGAAGGTTGGATGGATGGGTGGATGGCCGTGGATGGCCGTGGATGCGCAGTGCCTTGCATAC
CCAAACCAGGTGGGAGCGTTTTGTTGAGCATGACACCTGCAGCAGGAATATATGTGTGCCTATTTGTGTGGACAA
AAATATTTACACTTAGGGTTTGGAGCTATTCAAGAGGAAATGTCACAGAAGCAGCTAAACCAAGGACTGAGCACC
CTCTGGATTCTGAATCTCAAGATGGGGGCAGGGCTGTGCTTGAAGGCCCTGCTGAGTCATCTGTTAGGGCCTTGG
TTCAATAAAGCACTGAGCAAGTTGAGAAAAAAAAAAAAAAAAAA

FIGURE 600

MEVPQPEPAPGSALSPAGVCGGAQRPGHLPGLLLGSHGLLGSPVRAAASSPVTTLTQTMHDLAGLGSRSRLTHLS
LSRRASESSLSSESSESSDAGLCMDSPSPMDPHMAEQTFEQAIQAASRIIRNEQFAIRRFQSMPVRLLGHSPVLR
NITNSQAPDGRRKSEAGSGAASSSGEDKENVRFWKAGVGALREEEGACWGGSLACEDPPLPSWLQDGFVFKMPWK
PTHPSSTHALAEWASRREAFAQRPSSAPDLMCLSPDRKMEVEELSPLALGRFSLTPAEGDTEEDDGFVDILESDL
KDDDAVPPGMESLISAPLVKTLEKEEEKDLVMYSKCQRLFRSPSMPCSVIRPILKRLERPQDRDTPVQNKRRRSV
TPPEEQQEAEEPKARVLRSKSLCHDEIENLLDSDHRELIGDYSKAFLLQTVDGKHQDLKYISPETMVALLTGKFS
NIVDKFVIVDCRYPYEYEGGHIKTAVNLPLERDAESFLLKSPIAPCSLDKRVILIFHCEFSSERGPRMCRFIRER
DRAVNDYPSLYYPEMYILKGGYKEFFPQHPNFCEPQDYRPMNHEAFKDELKTFRLKTRSWAGERSRRELCSRLQD
Q

FIGURE 601

CCGGTCCTGAGACACGCTGTGTGGCTGAAAAGTGAAGGCAAGAGCTCATTTGGCCTCTGTGCTCCCCTCCGCAAG
GGATCGTTTCTCCAGAAGAGCTGGATATTCTTTCGCCCAGTTATGGCAGACAAGTTAACGAGAATTGCTATTGTC
AACCATGACAAATGTAAACCTAAGAAATGTCGACAGGAATGCAAAAAGAGTTGTCCTGTAGTTCGAATGGGAAAA
TTATGCATAGAGGTTACACCCCAGAGCAAAATAGCATGGATTTCCGAAACTCTTTGTATTGGTTGTGGTATCTGT
ATTAAGAAATGCCCCTTTGGCGCCTTATCAATTGTCAATCTACCAAGCAACTTGGAAAAAGAAACCACACATCGA
TATTGTGCCAATGCCTTCAAACTTCACAGGTTGCCTATCCCTCGTCCAGGTGAAGTTTTGGGATTAGTTGGAACT
AATGGTATTGGAAAGTCAGCTGCTTTAAAAATTTTAGCAGGAAAACAAAAGCCAAACCTTGGAAAGTACGATGAT
CCTCCTGACTGGCAGGAGATTTTGACTTATTTCCGTGGATCTGAATTACAAAATTACTTTACAAAGATTCTAGAA
GATGACCTAAAAGCCATCATCAAACCTCAATATGTAGCCAGATTCCTAAGGCTGGCAAAGGGGACAGTGGGATCT
ATTTTGGACCGAAAAGATGAAACAAAGACACAGGCAATTGTATGTCAGCAGCTTGATTTAACCCACCTAAAAGAA
CGAAATGTTGAAGATCTTTCAGGAGGAGAGTTGCAGAGATTTGCTTGTGCTGTCGTTTGCATACAGAAAGCTGAT
ATTTTCATGTTTGATGAGCCTTCTAGTTACCTAGATGTCAAGCAGCGTTTAAAGGCTGCTATTACTATACGATCT
CTAATAAATCCAGATAGATATATCATTGTGGTGGAACATGATCTAAGTGTATTAGACTATCTCTCCGACTTCATC
TGCTGTTTATATGGTGTACCAAGCGCCTATGGAGTTGTCACTATGCCTTTTAGTGTAAGAGAAGGCATAAACATT
TTTTTGGATGGCTATGTTCCAACAGAAAACTTGAGATTCAGAGATGCATCACTTGTTTTTAAAGTGGCTGAGACA
GCAAATGAAGAAGAAGTTAAAAAGATGTGTATGTATAAATATCCAGGAATGAAGAAAAAAATGGGAGAATTTGAG
CTAGCAATTGTAGCTGGAGAGTTTACAGATTCTGAAATTATGGTGATGCTGGGGGAAAATGGAACGGGTAAAACG
ACATTTATCAGAATGCTTGCTGGAAGACTTAAACCTGATGAAGGAGGAGAAGTACCAGTTCTAAATGTCAGTTAT
AAGCCACAGAAAATTAGTCCCAAATCAACTGGAAGTGTTCGCCAGTTACTACATGAAAAGATAAGAGATGCTTAT
ACTCACCCACAATTTGTGACCGATGTAATGAAGCCTCTGCAAATTGAAAACATCATTGATCAAGAGGTGCAGACA
TTATCTGGTGGTGAACTACAGCGAGTACGTTTACGCCTTTGCTTGGGCAAACCTGCTGATGTCTATTTAATTGAT
GAACCATCTGCATATTTGGATTCTGAGCAAAGACTGATGGCAGCTCGAGTTGTCAAACGTTTCATACTCCATGCA
AAAAAGACAGCCTTTGTTGTGGAACATGACTTCATCATGGCCACCTATCTAGCGGATCGCGTCATCGTTTTTGAT
GGTGTTCCATCTAAGAACACAGTTGCAAACAGTCCTCAAACCCTTTTGGCTGGCATGAATAAATTTTTGTCTCAG
CTTGAAATTACATTCAGAAGAGATCCAAACAACTATAGGCCACGAATAAACAAACTTAATTCAATTAAGGATGTA
GAACAAAAGAAGAGTGGAAACTACTTTTTCTTGGATGATTAGACTGACTCTGAGAATATTGATAAGCCATTTATT
AAAAGGAGTATTTACTAGAATTTTTTGTCATATAAAACTTGAATCAGGATTTTATGCCCCACATACTCTGGAACT
TGAAGTATAATATACTTAATATAACATAAAAAGCCAGTTGGGTTCTAAATTGTAGTTGAAACACAGAAAATGCCA
CTTTTCTGTTCCTGAAGAGGCTCTTTTGTGCATAATATTCTAAAATGAAGACATTTCAAGCTATACAAATTACTT
CCAAGTTTTCATGATGTATGGGAAGATTTTCAGTAGGTGTATTATATTCACGGTACCAAATGCTGACCAGTGTTG
CTCCATTTTTTAAATCTTGAAAAGGGTTTCTGTACTTACCTGGTTTGCCAAGTATGCCAGTGTAATGAAACTGCC
CTTATTTTAAAAGCCAGTCAAAGATTCCACTGATTGACATTTGATAAATAAACATCAGGATTATGTTTATTGTTT
GTTTTCAGTCTTTGCACTATATTACCAGTATATGGTTTCCGAGGAAGATTATCTACTGCAAAACACCACTGTTGG
AAAAATAGGTATTTTTAAATTGTTTTTAATCCTTTTTTGGTGCTTTTAAACATGTTTAAGCAAAAACCAATTCAG
TCCATTCCCCGCAAAAAACCCCTAACTTTACTCTGAACTTTTTTTGTTTTTGCATTCCATGAGGTTCTGTATTCA
GTCATTCTCTAGGTAATGTCATTTTTGTACACATATATTTATATAATCACTGATTGAGATTTAGGAAAAAGCATT
TCTAAAGAATATTTGCTTCCCTTAGAACTACAGACTCGAAATCTTTAAAGATGGTGCCTAAGCATCTATGTATTT
TTTTTAAGTTCCACAGATTTTTCTGTTGGGCAGGCCAAGGATTATAAACCACTTCCCTAAAGGCAACATTAATGC
AAAAGTCCCCAGATGGCAATACAAAGTATCCCCTGGTACCACATATATTCATTTGTGAGTTTGGATATAGAGCAC
ATTATCTAAACCATTTTGTAGTTCCAAAAACCCATCTAAATTTCTTGAGTTCCTGAATTTTGAACAGGATTACCT
GGAGCCTGGAGCCACTTTAAGTTGTACTTCTGACTAAACTGGAATTATGAGTGAGGAAGAGTGTTTACTAAATAA
ATGACTGGGGCAAGCAAAATTGAGGAGGAAATTAGAAACTGTTTGACAAACTTTAAGAGCTACTTGAAATAACAG
AAGTCTTGATTAATATGCAAATAATGGCTAGAAAGTATGGTTTAACTGGACCCTATTATGCCTTTTAAAAATAAT
TTCAGTAACCCATAAATACATGTTGTAAAAAATTCAAATATACAGAATGGAATAAAAAAATGATCTCCCTTTATT
ACCCTCCCAAAGGTTACCAGCGTTTGAATTTAATAATGTATATTCTTTCATGCTTTTTTCTGTGCACTTACCTAA
GTGTGAATATGTAAAGGGTTTGTTTTGTATACAAATGGGATTATACTAAAATAAGTAATGCCTATTTTTAAGGAT
AGGTTAAATTTGTGAATGATCATTTCAAATATATTGAATAAAATAAGCAAAAGCTATTGTTATTTACTGATCCTG
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 602

MADKLTRIAIVNHDKCKPKKCRQECKKSCPVVRMGKLCIEVTPQSKIAWISETLCIGCGICIKKCPFGALSIVNL
PSNLEKETTHRYCANAFKLHRLPIPRPGEVLGLVGTNGIGKSAALKILAGKQKPNLGKYDDPPDWQEILTYFRGS
ELQNYFTKILEDDLKAIIKPQYVARFLRLAKGTVGSILDRKDETKTQAIVCQQLDLTHLKERNVEDLSGGELQRF
ACAVVCIQKADIFMFDEPSSYLDVKQRLKAAITIRSLINPDRYIIVVEHDLSVLDYLSDFICCLYGVPSAYGVVT
MPFSVREGINIFLDGYVPTENLRFRDASLVFKVAETANEEEVKKMCMYKYPGMKKKMGEFELAIVAGEFTDSEIM
VMLGENGTGKTTFIRMLAGRLKPDEGGEVPVLNVSYKPQKISPKSTGSVRQLLHEKIRDAYTHPQFVTDVMKPLQ
IENIIDQEVQTLSGGELQRVRLRLCLGKPADVYLIDEPSAYLDSEQRLMAARVVKRFILHAKKTAFVVEHDFIMA
TYLADRVIVFDGVPSKNTVANSPQTLLAGMNKFLSQLEITFRRDPNNYRPRINKLNSIKDVEQKKSGNYFFLDD

FIGURE 603

CCGGAGGAGTCCGAGAGGAAGCGGAGGCGCGAGCTGGAGGCGGCGGCTCCCGTCGGCCTCCGGCAGGACTGAGCG
CTGGGAGGCCGGAAGGCGGGCGCGCACGGCGGAGAGGCGGGCGGGAGGCCGGAGCATATTAATGAAAAGTGCCAT
AAACTGAAAAACCAAACATGAGGGTAGCAGGTGCTGCAAAGTTGGTGGTAGCTGTGGCAGTGTTTTTACTGACAT
TTTATGTTATTTCTCAAGTATTTGAAATAAAAATGGATGCAAGTTTAGGAAATCTATTTGCAAGATCAGCATTGG
ACACAGCTGCACGTTCTACAAAGCCTCCCAGATATAAGTGTGGGATCTCAAAAGCTTGCCCTGAGAAGCATTTTG
CTTTTAAAATGGCAAGTGGAGCAGCCAACGTGGTGGGACCCAAAATCTGCCTGGAAGATAATGTTTTAATGAGTG
GTGTTAAGAATAATGTTGGAAGAGGGATCAATGTTGCCTTGGCAAATGGAAAAACAGGAGAAGTATTAGACACTA
AATATTTTGACATGTGGGGAGGAGATGTGGCACCATTTATTGAGTTTCTGAAGGCCATACAAGATGGAACAATAG
TTTTAATGGGAACATACGATGATGGAGCAACCAAACTCAATGATGAGGCACGGCGGCTCATTGCTGATTTGGGGA
GCACATCTATTACTAATCTTGGTTTTAGAGACAACTGGGTCTTCTGTGGTGGGAAGGGCATTAAGACAAAAAGCC
CTTTTGAACAGCACATAAAGAACAATAAGGATACAAACAAATATGAAGGATGGCCTGAAGTTGTAGAAATGGAAG
GATGCATCCCCCAGAAGCAAGACTAATGGAAATGTGGAGAGAATTGAAGAAAGCGCACTTTCACTCTTAATGGGA
GAGCTATAAATGGCAGAGCTATGTGTAAATATTTTAAGAGCATGCAGCCATCTTGGTGTGTGCATGAGTATTGTC
TCTTTTGATATCAGGATTATTTATTGCTAACGTAAATAGATAGCATTGTAAATAATCATCACAATGATCAAATCA
CTGAACCATGTCTCCGCACATTTCCCTAAAAGTACAATGTTTAGACTGCTATGGTAATACATATTTTAAATTCTA
AAAGCATACACAATGTGTAACTGAATGGTTTGTGAAAAATATATTGATATATATACTAGTTGCTATGAAAATATC
ATGGAATAATAGGGATTTTAGGGTGGATACTTTATTTTCTTTTATGTTTCTATATGTTGCGTTGTGATGACATTA
TCTTTTAAATTAAAAAGAGATTTGGCTAGTTGTGTGTGTAATGTTACTTTACAGTCCGACTCTCCTGATGTACCT
CTTTTCATGATCTTTTTCTTTCCTTCCCAAGAAACTGAGGAATGTTTAATATGAAAACATACATCGGATATGTGA
AAAGCACAACAAAATTCTTAATGTACACAGTAAAAAAGTAAATATATAAATGTAGATGGCATTTAGGACCACAGC
TTGCTGGATTTGTGTTAGCTATGGGAATAACTTGATTTTGTATAAGCTATTTAGAGTGAGGCTGGAGGTGGCAGC
TTCACAGAACTGGAGAACCAGGCCAAGTCCCCTCCCCAACCTAATTAGGTCATTCAGGACAGCTAAGTCAGTATA
TTTAGAGCAATACTAGCATACGTTTTTCTTAATTGTTATCAGCATTGACCAAGTGGTTTGGAAGGAGGCATGCTT
TAATATCACAATAATTTTGATTTGTAAACCAAGAAATTAATCCTGTGTTTATCTAACTTCATAATAGCAATTATT
GCCCGAAGCTATAGTGGCATATTTACAAAAGTTCTTATTACTGGGCGGACTGATAACATTTAAAAAATAATTGTG
TTTGACCCCAAATGACTTTATACCCAATTCTACATAAAAATATAGAAGATCTATCTTTTTTTGTTACCTTCAGAT
GTTCACTAAATAACTCAGTTTTTAAGCAGAAGTTTTCAGGGCATTAAATATATGTTGTGTATGAAGTATCTCAAA
CTGGAACATAAATTTAGTGATCAAACTGCCATTCACAGTGTAAGGCAGCACTTAAATTTCGAACCTAAAGTTTAG
ATGCATTGTATAAAAAAACCTAAAAGCAGTATCTGTTATTTAGCTGTAAACCAAGTTGGAAGCTATTCGGATAAT
TTCTTAAATATTGATGAACTTTGGAGTACTGTTTCTTCCTTCAAACTGAATGTAATTAATTCATGAATAAATGCA
CCTTATATGTTTAAACAATCTTTGTATACTTTTGGGATTTTTGGTGCTTATATGCTAAATCACATTCAGCATGTG
TATTTTGACATTTAAAATACTTCCCTCAATTCTGTAAATTAAAAGAATAGTTATTTTACAGTTCCAGGGATTGTG
AAATAAATGTTGCAGTTTTTTAAAATAATGAAAATAAATACTCTTGGTTTTGCTTTGTGAAAAAAAAAAAAAAAA

FIGURE 604

MRVAGAAKLVVAVAVFLLTFYVISQVFEIKMDASLGNLFARSALDTAARSTKPPRYKCGISKACPEKHFAFKMAS
GAANVVGPKICLEDNVLMSGVKNNVGRGINVALANGKTGEVLDTKYFDMWGGDVAPFIEFLKAIQDGTIVLMGTY
DDGATKLNDEARRLIADLGSTSITNLGFRDNWVFCGGKGIKTKSPFEQHIKNNKDTNKYEGWPEVVEMEGCIPQK
QD

FIGURE 605

CCCAGGCGCAGCCAATGGGAAGGGTCGGAGGCATGGCACAGCCAATGGGAAGGGCCGGGGCACCAAAGCCAATGG
GAAGGGCCGGGAGCGCGCGGCGCGGGAGATTTAAAGGCTGCTGGAGTGAGGGGTCGCCCGTGCACCCTGTCCCAG
CCGTCCTGTCCTGGCTGCTCGCTCTGCTTCGCTGCGCCTCCACTATGCTCTCCCTCCGTGTCCCGCTCGCGCCCA
TCACGGACCCGCAGCAGCTGCAGCTCTCGCCGCTGAAGGGGCTCAGCTTGGTCGACAAGGAGAACACGCCGCCGG
CCCTGAGCGGGACCCGCGTCCTGGCCAGCAAGACCGCGAGGAGGATCTTCCAGGAGCCCACGGAGCCGAAAACTA
AAGCAGCTGCCCCCGGCGTGGAGGATGAGCCGCTGCTGAGAGAAAACCCCCGCCGCTTTGTCATCTTCCCCATCG
AGTACCATGATATCTGGCAGATGTATAAGAAGGCAGAGGCTTCCTTTTGGACCGCCGAGGAGGTTGACCTCTCCA
AGGACATTCAGCACTGGGAATCCCTGAAACCCGAGGAGAGATATTTTATATCCCATGTTCTGGCTTTCTTTGCAG
CAAGCGATGGCATAGTAAATGAAAACTTGGTGGAGCGATTTAGCCAAGAAGTTCAGATTACAGAAGCCCGCTGTT
TCTATGGCTTCCAAATTGCCATGGAAAACATACATTCTGAAATGTATAGTCTTCTTATTGACACTTACATAAAAG
ATCCCAAAGAAAGGGAATTTCTCTTCAATGCCATTGAAACGATGCCTTGTGTCAAGAAGAAGGCAGACTGGGCCT
TGCGCTGGATTGGGGACAAAGAGGCTACCTATGGTGAACGTGTTGTAGCCTTTGCTGCAGTGGAAGGCATTTTCT
TTTCCGGTTCTTTTGCGTCGATATTCTGGCTCAAGAAACGAGGACTGATGCCTGGCCTCACATTTTCTAATGAAC
TTATTAGCAGAGATGAGGGTTTACACTGTGATTTTGCTTGCCTGATGTTCAAACACCTGGTACACAAACCATCGG
AGGAGAGAGTAAGAGAAATAATTATCAATGCTGTTCGGATAGAACAGGAGTTCCTCACTGAGGCCTTGCCTGTGA
AGCTCATTGGGATGAATTGCACTCTAATGAAGCAATACATTGAGTTTGTGGCAGACAGACTTATGCTGGAACTGG
GTTTTAGCAAGGTTTTCAGAGTAGAGAACCCATTTGACTTTATGGAGAATATTTCACTGGAAGGAAAGACTAACT
TCTTTGAGAAGAGAGTAGGCGAGTATCAGAGGATGGGAGTGATGTCAAGTCCAACAGAGAATTCTTTTACCTTGG
ATGCTGACTTCTAAATGAACTGAAGATGTGCCCTTACTTGGCTGATTTTTTTTTTCCATCTCATAAGAAAAATCA
GCTGAAGTGTTACCAACTAGCCACACCATGAATTGTCCGTAATGTTCATTAACAGCATCTTTAAAACTGTGTAGC
TACCTCACAACCAGTCCTGTCTGTTTATAGTGCTGGTAGTATCACCTTTTGCCAGAAGGCCTGGCTGGCTGTGAC
TTACCATAGCAGTGACAATGGCAGTCTTGGCTTTAAAGTGAGGGGTGACCCTTTAGTGAGCTTAGCACAGCGGGA
TTAAACAGTCCTTTAACCAGCACAGCCAGTTAAAAGATGCAGCCTCACTGCTTCAACGCAGATTTTAATGTTTAC
TTAAATATAAACCTGGCACTTTACAAACAAATAAACATTGTTTTGTACTCACGGCGGCGATAATAGCTTGATTTA
TTTGGTTTCTACACCAAATACATTCTCCTGACCACTAATGGGAGCCAATTCACAATTCACTAAGTGACTAAAGTA
AGTTAAACTTGTGTAGACTAAGCATGTAATTTTTAAGTTTTATTTTAATGAATTAAAATATTTGTTAACCAACTT
TAAAGTCAGTCCTGTGTATACCTAGATATTAGTCAGTTGGTGCCAGATAGAAGACAGGTTGTGTTTTTATCCTGT
GGCTTGTGTAGTGTCCTGGGATTCTCTGCCCCCTCTGAGTAGAGTGTTGTGGGATAAAGGAATCTCTCAGGGCAA
GGAGCTTCTTAAGTTAAATCACTAGAAATTTAGGGGTGATCTGGGCCTTCATATGTGTGAGAAGCCGTTTCATTT
TATTTCTCACTGTATTTTCCTCAACGTCTGGTTGATGAGAAAAAATTCTTGAAGAGTTTTCATATGTGGGAGCTA
AGGTAGTATTGTAAAATTTCAAGTCATCCTTAAACAAAATGATCCACCTAAGATCTTGCCCCTGTTAAGTGGTGA
AATCAACTAGAGGTGGTTCCTACAAGTTGTTCATTCTAGTTTTGTTTGGTGTAAGTAGGTTGTGTGAGTTAATTC
ATTTATATTTACTATGTCTGTTAAATCAGAAATTTTTTATTATCTATGTTCTTCTAGATTTTACCTGTAGTTCAT
ACTTCAGTCACCCAGTGTCTTATTCTGGCATTGTCTAAATCTGAGCATTGTCTAGGGGGATCTTAAACTTTAGTA
GGAAACCATGAGCTGTTAATACAGTTTCCATTCAAATATTAATTTCAGAATGAAACATAATTTTTTTTTTTTTTT
TGAGATGGAGTCTCGCTCTGTTGCCCAGGCTGGAGTGCAGTGGCGCGATTTTGGCTCACTGTAACCTCCATCTCC
TGGGTTCAAGCAATTCTCCTGTCTCAGCCTCCCTAGTAGCTGGGACTGCAGGTATGTGCTACCACACCTGGCTAA
TTTTTGTATTTTTAGTAGAGATGGAGTTTCACCATATTGGTCAGGCTGGTCTTGAACTCCTGACCTCAGGTGATC
CACCCACCTCGGCCTCCCAAAGTGCTGGGGATTGCAGGCGTGATAAACAAATATTCTTAATAGGGCTACTTTGAA
TTAATCTGCCTTTATGTTTGGGAGAAGAAAGCTGAGACATTGCATGAAAGATGATGAGAGATAAATGTTGATCTT
TTGGCCCCATTTGTTAATTGTATTCAGTATTTGAACGTCGTCCTGTTTATTGTTAGTTTTCTTCATCATTTATTG
TATAGACAATTTTTAAATCTCTGTAATATGATACATTTTCCTATCTTTTAAGTTATTGTTACCTAAAGTTAATCC
AGATTATATGGTCCTTATATGTGTACAACATTAAAATGAAAGGCTTTGTCTTGCATTGTGAGGTACAGGCGGAAG
TTGGAATCAGGTTTTAGGATTCTGTCTCTCATTAGCTGAATAATGTGAGGATTAACTTCTGCCAGCTCAGACCAT
TTCCTAATCAGTTGAAAGGGAAACAAGTATTTCAGTCTCAAAATTGAATAATGCACAAGTCTTAAGTGATTAAAA
TAAAACTGTTCTTATGTC

FIGURE 606

MLSLRVPLAPITDPQQLQLSPLKGLSLVDKENTPPALSGTRVLASKTARRIFQEPTEPKTKAAAPGVEDEPLLRE
NPRRFVIFPIEYHDIWQMYKKAEASFWTAEEVDLSKDIQHWESLKPEERYFISHVLAFFAASDGIVNENLVERFS
QEVQITEARCFYGFQIAMENIHSEMYSLLIDTYIKDPKEREFLFNAIETMPCVKKKADWALRWIGDKEATYGERV
VAFAAVEGIFFSGSFASIFWLKKRGLMPGLTFSNELISRDEGLHCDFACLMFKHLVHKPSEERVREIIINAVRIE
QEFLTEALPVKLIGMNCTLMKQYIEFVADRLMLELGFSKVFRVENPFDFMENISLEGKTNFFEKRVGEYQRMGVM
SSPTENSFTLDADF

FIGURE 607

GAATTCGGGCGGTCCTCGGAGACACGCGGCGGTGTCCTGTGTTGGCCATGGCCGACTACCTGATTAGTGGGGGCA
CGTCCTACGTGCCAGACGACGGACTCACAGCACAGCAGCTCTTCAACTGCGGAGACGGCCTCACCTACAATGACT
TTCTCATTCTCCCTGGGTACATCGACTTCACTGCAGACCAGGTGGACCTGACTTCTGCTCTGACCAAGAAAATCA
CTCTTAAGACCCCACTGGTTTCCTCTCCCATGGACACAGTCACAGAGGCTGGGATGGCCATAGCAATGGCGCTTA
CAGGCGGTATTGGCTTCATCCACCACAACTGTACACCTGAATTCCAGGCCAATGAAGTTCGGAAAGTGAAGAAAT
ATGAACAGGGATTCATCACAGACCCTGTGGTCCTCAGCCCCAAGGATCGCGTGCGGGATGTTTTTGAGGCCAAGG
CCCGGCATGGTTTCTGCGGTATCCCAATCACAGACACAGGCCGGATGGGGAGCCGCTTGGTGGGCATCATCTCCT
CCAGGGACATTGATTTTCTCAAAGAGGAGGAACATGACTGTTTCTTGGAAGAGATAATGACAAAGAGGGAAGACT
TGGTGGTAGCCCCCCGCAGCATCACACTGAAGGAGGCAAATGAAATTCTGCAGCGCAGCAAGAAGGGAAAGTTGC
CCATTGTAAATGAAGATGATGAGCTTGTGGCCATCATTGCCCGGACAGACCTGAAGAAGAATCGGGACTACCCAC
TAGCCTCCAAAGATGCCAAGAAACAGCTGCTGTGTGGGGCAGCCATTGGCACTCATGAGGATGACAAGTATAGGC
TGGACTTGCTCGCCCAGGCTGGTGTGGATGTAGTGGTTTTGGACTCTTCCCAGGGAAATTCCATCTTCCAGATCA
ATATGATCAAGTACATCAAAGACAAATACCCTAATCTCCAAGTCATTGGAGGCAATGTGGTCACTGCTGCCCAGG
CCAAGAACCTCATTGATGCAGGTGTGGATGCCCTGCGGGTGGGCATGGGAAGTGGCTCCATCTGCATTACGCAGG
AAGTGCTGGCCTGTGGGCGGCCCCAAGCAACAGCAGTGTACAAGGTGTCAGAGTATGCACGGCGCTTTGGTGTTC
CGGTCATTGCTGATGGAGGAATCCAAAATGTGGGTCATATTGCGAAAGCCTTGGCCCTTGGGGCCTCCACAGTCA
TGATGGGCTCTCTCCTGGCTGCCACCACTGAGGCCCCTGGTGAATACTTCTTTTCCGATGGGATCCGGCTAAAGA
AATATCGCGGTATGGGTTCTCTCGATGCCATGGACAAGCACCTCAGCAGCCAGAACAGATATTTCAGTGAAGCTG
ACAAAATCAAAGTGGCCCAGGGAGTGTCTGGTGCTGTGCAGGACAAAGGGTCAATCCACAAATTTGTCCCTTACC
TGATTGCTGGCATCCAACACTCATGCCAGGACATTGGTGCCAAGAGCTTGACCCAAGTCCGAGCCATGATGTACT
CTGGGGAGCTTAAGTTTGAGAAGAGAACGTCCTCAGCCCAGGTGGAAGGTGGCGTCCATAGCCTCCATTCGTATG
AGAAGCGGCTTTTCTGAAAAGGGATCCAGCACACCTCCTCGGTTTTTTTTTCAATAAAAGTTTAGAAAGACCCGA
ATTC

FIGURE 608

MADYLISGGTSYVPDDGLTAQQLFNCGDGLTYNDFLILPGYIDFTADQVDLTSALTKKITLKTPLVSSPMDTVTE
AGMAIAMALTGGIGFIHHNCTPEFQANEVRKVKKYEQGFITDPVVLSPKDRVRDVFEAKARHGFCGIPITDTGRM
GSRLVGIISSRDIDFLKEEEHDCFLEEIMTKREDLVVAPRSITLKEANEILQRSKKGKLPIVNEDDELVAIIART
DLKKNRDYPLASKDAKKQLLCGAAIGTHEDDKYRLDLLAQAGVDVVVLDSSQGNSIFQINMIKYIKDKYPNLQVI
GGNVVTAAQAKNLIDAGVDALRVGMGSGSICITQEVLACGRPQATAVYKVSEYARRFGVPVIADGGIQNVGHIAK
ALALGASTVMMGSLLAATTEAPGEYFFSDGIRLKKYRGMGSLDAMDKHLSSQNRYFSEADKIKVAQGVSGAVQDK
GSIHKFVPYLIAGIQHSCQDIGAKSLTQVRAMMYSGELKFEKRTSSAQVEGGVHSLHSYEKRLF

FIGURE 609

AGAGCGATCATGTCGCACAAACAAATTTACTATTCGGACAAATACGACGACGAGGAGTTTGAGTATCGACATGTC
ATGCTGCCCAAGGACATAGCCAAGCTGGTCCCTAAAACCCATCTGATGTCTGAATCTGAATGGAGGAATCTTGGC
GTTCAGCAGAGTCAGGGATGGGTCCATTATATGATCCATGAACCAGAACCTCACATCTTGCTGTTCCGGCGCCCA
CTACCCAAGAAACCAAAGAAATGAAGCTGGCAAGCTACTTTTCAGCCTCAAGCTTTACACAGCTGTCCTTACTTC
CTAACATCTTTCTGATAACATTATTATGTTGCCTTCTTGTTTCTCACTTTGATATTTAAAAGATGTTCAATACAC
TGTTTGAATGTGCTGGTAACTGCTTTGCTTCTTGAGTAGAGCCACCACCACCATAGCCCAGCCAGATGAGTGCTC
TGTGGACCCACAGCCTAAGCTGAGTGTGACCCCAGAAGCCACGATGTGCTCTGTATCCAGAACACACTTGGCAGA
TGGAGGAAGCATCTGAGTTTGAGACCATGGCTGTTACAGGGATCATGTAAACTTGCTGTTTTTGTTTTTTCTGCC
GGGTGTTGTATGTGTGGTGACTTGCGGATTTATGTTTCAGTGTACTGGAAACTTTCCATTTTATTCAAGAAATCT
GTTCATGTTAAAAGCCTTGATTAAAGAGGAAGTTTTTATAAT

FIGURE 610

MSHKQIYYSDKYDDEEFEYRHVMLPKDIAKLVPKTHLMSESEWRNLGVQQSQGWVHYMIHEPEPHILLFRRPLPK
KPKK

FIGURE 611

GAAGGGCGGCGCGCTTAGGCAGGCGGTGGCGCGGCTGGAGTGCCGCGGGGAGGGCTGTGCCGGTTGCTTTCTGCA
GCCGCATCTCGGCCAGCTCTCCTCGCCGTCCCCGGGGCGCTGTGCGTCTCCAGTCCGGGACCGAAGCCGCCTGCC
GTAGCGGGCGGCCAGATCCGCGTCCCGCCTCAGCGGCCGGAGGACATGCGGGAGAGAGAATGAGCCAGAGGGACA
CGCTGGTGCATCTGTTTGCCGGAGGATGTGGTGGTACAGTGGGAGCTATTCTGACATGTCCACTGGAAGTTGTAA
AAACACGACTGCAGTCATCTTCTGTGACGCTTTATATTTCTGAAGTTCAGCTGAACACCATGGCTGGAGCCAGTG
TCAACCGAGTAGTGTCTCCCGGACCTCTTCATTGCCTAAAGGTGATCTTGGAAAAAGAAGGGCCTCGTTCCTTGT
TTAGAGGACTAGGCCCCAATTTAGTGGGGGTAGCCCCTTCCAGAGCAATATACTTTGCTGCTTATTCAAACTGCA
AGGAAAAGTTGAATGATGTATTTGATCCTGATTCTACCCAAGTACATATGATTTCAGCTGCAATGGCAGGTTTTA
CTGCAATCACAGCAACCAACCCCATTTGGCTTATAAAGACTCGGTTACAGCTTGATGCAAGGAACCGCGGGGAAA
GGCGAATGGGTGCTTTTGAATGTGTTCGTAAAGTGTATCAGACAGATGGACTAAAAGGATTTTATAGGGGCATGT
CTGCTTCATATGCTGGTATATCAGAGACTGTTATCCATTTTGTTATTTATGAAAGTATAAAACAAAAACTACTGG
AATATAAGACTGCTTCTACAATGGAAAATGGTGAAGAGTCTGTGAAAGAAGCATCAGATTTTGTGGGAATGATGC
TAGCTGCTGCCACCTCAAAAACTTGTGCCACAACTATAGCATATCCACATGTTGTAAGAACAAGACTACGTGAAG
AGGGAACAAAATACAGATCTTTTTTTCAGACTCTATCTTTGCTTGTTCAAGAAGAAGGTTATGGGTCTCTTTATC
GTGGTCTGACAACTCATCTAGTGAGACAGATTCCAAACACAGCCATTATGATGGCCACCTATGAATTGGTGGTTT
ACCTACTCAATGGATAGCAGCACGAGGACTGCTGTACTGCAAAAAAAGAAGACCAAAAGATTACAGTGGACCATG
GGATACAGAAGCCAGCATGGCAGACAGAAGAAAAATAGTTTGGGAACATGTAACTATTCTAAGTGGAAGTTTTGT
TGTAGGAATTATAGTAATCACACCACATTACTTGGCCTTTCGGTAATGTGAAAAAAAAAAAAAAACCTCAGAGCC
TCCAAGGAAATGCCTTTAGAAGCACTCCTCTCTCAAAATTGCCATTTTCTCTACCATGTCCCCCAGACACAGTTG
GGTTTTGTTGATTTATGGCAGTCTTCTAAACAAAGCCATCCTTAATTTTACATACTGTATTGTAACTATCCAAAG
ATAGTATTGGCAGTCATAAATTTATAACTTCTGGCCTTTGTTTAATTCCAGTAAAATAACAGCAATGACAATGAG
ATCGTCAGTATTATTTTCACATTTCCCTGAGAGGACCTGGCACAATATTTTAAATTTAATTATTTGGCAGTAGTC
ACTGTTTTTGACAACCAATGAAATAGCGTCTAAATATCTTGTATATTTTTTAGCATCAAAATGTTTTGGTTTCCA
CTGCTGACAGGTGCTTGTTGTTTAGCCTAATGTGGATATTTAAATTGTTAACATACCAAACACACATGGTAATAG
TTTGGGACAAAATAACTAGTAAAATGTTGATTTCTCGGCTATTTCACTGACTGCGGCATGTCCTCGTGTCTTCTC
TGATTTTGTGGTACATGAATGAATGCATTTATCTTTTTAGTGACTTACTAGTTACGAACTTGAATTATCACCTCT
TTGTCATACTTAAGTATCATTTACATAAAGTGTAAAAGATTTTTTCACTTT

FIGURE 612

MSQRDTLVHLFAGGCGGTVGAILTCPLEVVKTRLQSSSVTLYISEVQLNTMAGASVNRVVSPGPLHCLKVILEKE
GPRSLFRGLGPNLVGVAPSRAIYFAAYSNCKEKLNDVFDPDSTQVHMISAAMAGFTAITATNPIWLIKTRLQLDA
RNRGERRMGAFECVRKVYQTDGLKGFYRGMSASYAGISETVIHFVIYESIKQKLLEYKTASTMENGEESVKEASD
FVGMMLAAATSKTCATTIAYPHVVRTRLREEGTKYRSFFQTLSLLVQEEGYGSLYRGLTTHLVRQIPNTAIMMAT
YELVVYLLNG

FIGURE 613

AGAGCCGCCAGCGAGGCTGGGGATGGGGGCGCCGCTGCTCTCTCCCGGCTGGGGAGCCGGGGCTGCCGGCCGGCG
CTGGTGGATGCTGCTGGCGCCCCTGCTGCCGGCGCTGCTGCTGGTGCGGCCCGCGGGGGCCCTGGTGGAGGGGCT
CTACTGCGGCACGCGGGACTGCTACGAGGTGCTGGGCGTGAGCCGCTCGGCGGGCAAGGCGGAGATCGCGCGGGC
CTACCGCCAGCTGGCCCGGCGCTACCACCCTGACCGCTACCGGCCCCAGCCCGGAGACGAGGGCCCCGGGCGGAC
GCCGCAGAGCGCCGAGGAGGCTTTCCTGCTGGTGGCAACCGCCTACGAGACACTCAAGGTCTCTCAGGCAGCTGC
AGAGCTTCAACAGTACTGTATGCAGAATGCCTGCAAGGATGCCCTGCTGGTGGGTGTTCCAGCTGGAAGTAACCC
CTTCCGGGAGCCTAGATCCTGTGCTTTACTCTGAAGACTCGAGAGAAGTTTGCTGAGGAATGCCTTCAAGCACAA
AGTGATGAATGACTGCCTTCAAGTCTCAAGAAAACACTTTTCCCTAACTTTTAGAGATATTTCAGCCCTTTCCTG
TGGCCTGGTCCTATAGCCAAAATCACAGATATTCATGAGTTTCTACTTGAGTGAGAAAACTGGGTGAAGGAATAG
AATTTTAAATAGTAATAACTGCTTGTTTTTTTTGTGCAAGTACTTTTATACATAAGATAAACAAAAACCTTACCA
CCAAACATACCAAAATGCACCTCTTTCATAAGTGAGTTACTAAGATTTCTATACCTGGAATATCATGTATGTTTC
ATTTACTGGATGTTTACATTTTAGGAAGGAAAATAGTTTTGTTTATTTAAACAACTGAATACTTATAAACTGTTG
TTCCTGGAAGTTATTTATTCCATAAAAAATTTGTTCTTTTGTCATGAATTTATAATTCCTAAATGAAGACCAGAA
AGTACAAATTGCTGGGAGGAAGAATAGGCTTTATTAATCAACTGATGTCTTGATTTTTCTAAATGGGAAGATTGC
TTTATTTTTAACACTAATTATGGGAGCAGATTCTTAGCAAACTTCTTTGGAAAAGTTAATGTTATGATGTGCATT
AGGCTGCCCCATCGTGTATATAAATGAAGCAGATTTGATTTTTGTATTCTTACGTTTCTCTGCTTTGTAGTTGTG
GCTGTACTTAAAGAAATACAGAATTTCATATATTTAAAAATGTTTAAAATGTGACCCACAGAACATTGTAAATGA
TTAAAAACTAACATGAAAATATTACAACCTAAAAGAATTCTTAACTTCACAAGTGTTTTACTTCGACGATGTGCC
TTTGATTTAATTTGGGACACTTTTTTAGAAGGATACATTATTCGTGTTTGCAACGGTCTTTGAAGAGCTTGGAAA
TAAAATTTCTGCTTAATTAATCAAAAAAAAAAAAAAAAAAAAAA

FIGURE 614

MGAPLLSPGWGAGAAGRRWWMLLAPLLPALLLVRPAGALVEGLYCGTRDCYEVLGVSRSAGKAEIARAYRQLARR
YHPDRYRPQPGDEGPGRTPQSAEEAFLLVATAYETLKVSQAAAELQQYCMQNACKDALLVGVPAGSNPFREPRSC
ALL

FIGURE 615

GCGGCGCTCGCGCCAAGGGACGTGTTTCTGCGCTCGCGTGGTCATGGAGGCGCTGCCGCTGCTAGCCGCGACAAC
TCCGGACCACGGCCGCCACCGAAGGCTGCTTCTGCTGCCGCTACTGCTGTTCCTGCTGCCGGCTGGAGCTGTGCA
GGGCTGGGAGACAGAGGAGAGGCCCCGGACTCGCGAAGAGGAGTGCCACTTCTACGCGGGTGGACAAGTGTACCC
GGGAGAGGCATCCCGGGTATCGGTCGCCGACCACTCCCTGCACCTAAGCAAAGCGAAGATTTCCAAGCCAGCGCC
CTACTGGGAAGGAACAGCTGTGATCGATGGAGAATTTAAGGAGCTGAAGTTAACTGATTATCGTGGGAAATACTT
GGTTTTCTTCTTCTACCCACTTGATTTCACATTTGTGTGTCCAACTGAAATTATCGCTTTTGGCGACAGACTTGA
AGAATTCAGATCTATAAATACTGAAGTGGTAGCATGCTCTGTTGATTCACAGTTTACCCATTTGGCCTGGATTAA
TACCCCTCGAAGACAAGGAGGACTTGGGCCAATAAGGATTCCACTTCTTTCAGATTTGACCCATCAGATCTCAAA
GGACTATGGTGTATACCTAGAGGACTCAGGCCACACTCTTAGAGGTCTCTTCATTATTGATGACAAAGGAATCCT
AAGACAAATTACTCTGAATGATCTTCCTGTGGGTAGATCAGTGGATGAGACACTACGTTTGGTTCAAGCATTCCA
GTACACTGACAAACACGGAGAAGTCTGCCCTGCTGGCTGGAAACCTGGTAGTGAAACAATAATCCCAGATCCAGC
TGGAAAGCTGAAGTATTTCGATAAACTGAATTGAGAAATACTTCTTCAAGTTATGATGCTTGAAAGTTCTCAATA
AAGTTCACGGTTTCATTACCA

FIGURE 616

MEALPLLAATTPDHGRHRRLLLLPLLLFLLPAGAVQGWETEERPRTREEECHFYAGGQVYPGEASRVSVADHSLH
LSKAKISKPAPYWEGTAVIDGEFKELKLTDYRGKYLVFFFYPLDFTFVCPTEIIAFGDRLEEFRSINTEVVACSV
DSQFTHLAWINTPRRQGGLGPIRIPLLSDLTHQISKDYGVYLEDSGHTLRGLFIIDDKGILRQITLNDLPVGRSV
DETLRLVQAFQYTDKHGEVCPAGWKPGSETIIPDPAGKLKYFDKLN

FIGURE 617

GGAAAAAAGCGACTTGTGGCGGTCGAGCGTGGCGCAGGCGAATCCTCGGCACTAAGCAAATATGGACCTCGCGGC
GGCAGCGGAGCCGGGCGCCGGCAGCCAGCACCTGGAGGTCCGCGACGAGGTGGCCGAGAAGTGCCAGAAACTGTT
CCTGGACTTCTTGGAGGAGTTTCAGAGCAGCGATGGAGAAATTAAATACTTGCAATTAGCAGAGGAACTGATTCG
TCCTGAGAGAAACACATTGGTTGTGAGTTTTGTGGACCTGGAACAATTTAACCAGCAACTTTCCACCACCATTCA
AGAGGAGTTCTATAGAGTTTACCCTTACCTGTGTCGGGCCTTGAAAACATTCGTCAAAGACCGTAAAGAGATCCC
TCTTGCCAAGGATTTTTATGTTGCATTCCAAGACCTGCCTACCAGACACAAGATTCGAGAGCTCACCTCATCCAG
AATTGGTTTGCTCACTCGCATCAGTGGGCAGGTGGTGCGGACTCACCCAGTTCACCCAGAGCTTGTGAGCGGAAC
TTTTCTGTGCTTGGACTGTCAGACAGTGATCAGGGATGTAGAACAGCAGTTCAAATACACACAGCCAAACATCTG
CCGAAATCCAGTTTGTGCCAACAGGAGGAGATTCTTACTGGATACAAATAAATCAAGATTTGTTGATTTTCAAAA
GGTTCGTATTCAAGAGACCCAAGCTGAGCTTCCTCGAGGGAGTATCCCCCGCAGTTTAGAAGTAATTTTAAGGGC
TGAAGCTGTGGAATCAGCTCAAGCTGGTGACAAGTGTGACTTTACAGGGACACTGATTGTTGTGCCTGACGTCTC
CAAGCTTAGCACACCAGGAGCACGTGCAGAAACTAATTCCCGTGTCAGTGGTGTTGATGGATATGAGACAGAAGG
CATTCGAGGACTCCGGGCCCTTGGTGTTAGGGACCTTTCTTATAGGCTGGTCTTTCTTGCCTGCTGTGTTGCGCC
AACCAACCCAAGGTTTGGGGGGAAAGAGCTCAGAGATGAGGAACAGACAGCTGAGAGCATTAAGAACCAAATGAC
TGTGAAAGAATGGGAGAAAGTGTTTGAGATGAGTCAAGATAAAAATCTATACCACAATCTTTGTACCAGCCTGTT
CCCTACTATACATGGCAATGATGAAGTAAAACGGGGTGTCCTGCTGATGCTCTTTGGTGGCGTTCCAAAGACAAC
AGGAGAAGGGACCTCTCTTCGAGGGGACATAAATGTTTGCATTGTTGGTGACCCAAGTACAGCTAAGAGCCAATT
TCTCAAGCACGTGGAGGAGTTCAGCCCCAGAGCTGTCTACACCAGTGGTAAAGCGTCCAGTGCTGCTGGCTTAAC
AGCAGCTGTTGTGAGAGATGAAGAATCTCATGAGTTTGTCATTGAGGCTGGAGCTTTGATGTTGGCTGATAATGG
TGTGTGTTGTATTGATGAATTTGATAAGATGGACGTGCGGGATCAAGTTGCTATTCATGAAGCTATGGAACAGCA
GACCATATCCATCACTAAAGCAGGAGTGAAGGCTACTCTGAACGCCCGGACGTCCATTTTGGCAGCAGCAAACCC
AATCAGTGGACACTATGACAGATCAAAATCATTGAAACAGAATATAAATTTGTCAGCTCCCATCATGTCCCGATT
CGATCTCTTCTTTATCCTTGTGGATGAATGTAATGAGGTTACAGATTATGCCATTGCCAGGCGCATAGTAGATTT
GCATTCAAGAATTGAGGAATCAATTGATCGTGTCTATTCCCTCGATGATATCAGAAGATATCTTCTCTTTGCAAG
ACAGTTTAAACCCAAGATTTCCAAAGAGTCAGAGGACTTCATTGTGGAGCAATATAAACATCTCCGCCAGAGAGA
TGGTTCTGGAGTGACCAAGTCTTCATGGAGGATTACAGTGCGACAGCTTGAGAGCATGATTCGTCTCTCTGAAGC
TATGGCTCGGATGCACTGCTGTGATGAGGTCCAACCTAAACATGTGAAGGAAGCTTTCCGGTTACTGAATAAATC
AATCATCCGTGTGGAAACACCTGATGTCAATCTAGATCAAGAGGAAGAGATCCAGATGGAGGTAGATGAGGGTGC
TGGTGGCATCAATGGTCATGCTGACAGCCCTGCTCCTGTGAACGGGATCAATGGCTACAATGAAGACATAAATCA
AGAGTCTGCTCCCAAAGCCTCCTTAAGGCTGGGCTTCTCTGAGTACTGCCGAATCTCTAACCTTATTGTGCTTCA
CCTCAGAAAGGTGGAAGAAGAAGAGGACGAGTCAGCATTAAAGAGGAGCGAGCTTGTTAACTGGTACTTGAAGGA
AATCGAATCAGAGATAGACTCTGAAGAAGAACTTATAAATAAAAAAAGAATCATAGAGAAAGTTATTCATCGACT
CACACACTATGATCATGTTCTAATTGAGCTCACCCAGGCTGGATTGAAAGGCTCCACAGAGGGAAGTGAGAGCTA
TGAAGAAGATCCCTACTTGGTAGTTAACCCTAACTACTTGCTCGAAGATTGAGATAGTGAAAGTAACTGACCAGA
GCTGAGGAACTGTGGCACAGCACCTCGTGGCCTGGAGCCTGGCTGGAGCTCTGCTAGGGACAGAAGTGTTTCTGG
AAGTGATGCTTCCAGGATTTGTTTTCAGAAACAAGAATTGAGTTGATGGTCCTATGTGTCACATTCATCACAGGT
TTCATACCAACACAGGCTTCAGCACTTCCTTTGGTGTGTTTCCTGTCCCAGTGAAGTTGGAACCAAATAATGTGT
AGTCTCTATAACCAATACCTTTGTTTTCATGTGTAAGAAAAGGCCCATTACTTTTAAGGTATGTGCTGTCCTATT
GAGCAAATAACTTTTTTTCAATTGCCAGCTACTGCTTTTATTCATCAAAATAAAATAACTTGTTCTG

FIGURE 618

MDLAAAAEPGAGSQHLEVRDEVAEKCQKLFLDFLEEFQSSDGEIKYLQLAEELIRPERNTLVVSFVDLEQFNQQL
STTIQEEFYRVYPYLCRALKTFVKDRKEIPLAKDFYVAFQDLPTRHKIRELTSSRIGLLTRISGQVVRTHPVHPE
LVSGTFLCLDCQTVIRDVEQQFKYTQPNICRNPVCANRRRFLLDTNKSRFVDFQKVRIQETQAELPRGSIPRSLE
VILRAEAVESAQAGDKCDFTGTLIVVPDVSKLSTPGARAETNSRVSGVDGYETEGIRGLRALGVRDLSYRLVFLA
CCVAPTNPRFGGKELRDEEQTAESIKNQMTVKEWEKVFEMSQDKNLYHNLCTSLFPTIHGNDEVKRGVLLMLFGG
VPKTTGEGTSLRGDINVCIVGDPSTAKSQFLKHVEEFSPRAVYTSGKASSAAGLTAAVVRDEESHEFVIEAGALM
LADNGVCCIDEFDKMDVRDQVAIHEAMEQQTISITKAGVKATLNARTSILAAANPISGHYDRSKSLKQNINLSAP
IMSRFDLFFILVDECNEVTDYAIARRIVDLHSRIEESIDRVYSLDDIRRYLLFARQFKPKISKESEDFIVEQYKH
LRQRDGSGVTKSSWRITVRQLESMIRLSEAMARMHCCDEVQPKHVKEAFRLLNKSIIRVETPDVNLDQEEEIQME
VDEGAGGINGHADSPAPVNGINGYNEDINQESAPKASLRLGFSEYCRISNLIVLHLRKVEEEEDESALKRSELVN
WYLKEIESEIDSEEELINKKRIIEKVIHRLTHYDHVLIELTQAGLKGSTEGSESYEEDPYLVVNPNYLLED

FIGURE 619

ATGTTCCGAGCGGCGGCTCCGGGGCAGCTCCGGCGGGCGGCCTCATTGCTACGATTTCAGAGTACCCTGGTAATA
GCTGAGCATGCAAATGATTCCCTAGCACCCATTACTTTAAATACCATTACTGCAGCCACACGCCTTGGAGGTGAA
GTGTCCTGCTTAGTAGCTGGAACCAAATGTGACAAGGTGGCACAAGATCTCTGTAAAGTAGCAGGCATAGCAAAA
GTTCTGGTGGCTCAGCATGATGTGTACAAAGGCCTACTTCCAGAGGAACTGACACCATTGATTTTGGCAACTCAG
AAGCAGTTCAATTACACACACATCTGTGCTGGAGCATCTGCCTTCGGAAAGAACCTTTTGCCCAGAGTAGCAGCC
AAACTTGAGGTTGCCCCGATTTCTGACATCATTGCAATCAAGTCACCTGACACATTTGTGAGAACTATTTATGCA
GGAAATGCTCTATGTACAGTGAAGTGTGATGAGAAAGTGAAAGTGTTTTCTGTCCGTGGAACATCCTTTGATGCT
GCAGCAACAAGTGGCGGTAGTGCCAGTTCAGAAAAGGCATCAAGTACTTCACCAGTGGAAATATCAGAGTGGCTT
GACCAGAAATTAACAAAAAGTGATCGACCAGAGCTAACAGGTGCCAAAGTGGTGGTATCTGGTGGTCGAGGCTTG
AAGAGTGGAGAGAACTTTAAGTTGTTATATGACTTGGCAGATCAACTACATGCTGCAGTTGGTGCTTCCCGTGCT
GCTGTTGATGCTGGCTTTGTTCCCAATGACATGCAAGTTGGACAGACGGGAAAAATAGTAGCACCAGAACTTTAT
ATTGCTGTTGGAATATCTGGAGCCATCCAACATTTAGCTGGGATGAAAGACAGCAAGACAATTGTGGCAATTAAT
AAAGACCCAGAAGCTCCAATTTTCCAAGTGGCAGATTATGGAATAGTTGCAGATTTATTTAAGGTAGTTCCTGAA
ATGACTGAGATATTGAAGAAAAAATGAATCAGGATCATGCCTTAAAAAGAAAACTTTTGTTAAAGTATTCCACTG
AAATCACAGATATTTGTGGGTATTATAACAATCATTGGAAAGCATGGAGAGCTACATTTCATAATTTGAGGGAAA
ATTTCTAACAGATGCCAGAATGCTTGTTTATGGGATTGCTGTGTTTCCTTTTAATTATTTGTGGTTCCAAACAAT
TATTGTTTGAACTTTTTTAATTCTGTACTAAAATCTATAATAAAGCTTTTCCACAGCTTTAAAACT

FIGURE 620

MFRAAAPGQLRRAASLLRFQSTLVIAEHANDSLAPITLNTITAATRLGGEVSCLVAGTKCDKVAQDLCKVAGIAK
VLVAQHDVYKGLLPEELTPLILATQKQFNYTHICAGASAFGKNLLPRVAAKLEVAPISDIIAIKSPDTFVRTIYA
GNALCTVKCDEKVKVFSVRGTSFDAAATSGGSASSEKASSTSPVEISEWLDQKLTKSDRPELTGAKVVVSGGRGL
KSGENFKLLYDLADQLHAAVGASRAAVDAGFVPNDMQVGQTGKIVAPELYIAVGISGAIQHLAGMKDSKTIVAIN
KDPEAPIFQVADYGIVADLFKVVPEMTEILKKK

FIGURE 621A

GCGGGGAAGCAGCAGCGGCCAGGATGAATCCCAGGTGCTCTGGAGCTGGATGGTGAAGGTCGGCACTCTTCACCC
TCCCGAGCCCTGCCCGTCTCGGCCCCATGCCCCCACCAGTCAGCCCCGGGCCACAGGCAGTGAGCAGGCACCTGG
GAGCCGAGGCCCTGTGACCAGGCCAAGGAGACGGGCGCTCCAGGGTCCCAGCCACCTGTCCCCCCCATGGAGCTG
AGGCCCTGGTTGCTATGGGTGGTAGCAGCAACAGGAACCTTGGTCCTGCTAGCAGCTGATGCTCAGGGCCAGAAG
GTCTTCACCAACACGTGGGCTGTGCGCATCCCTGGAGGCCCAGCGGTGGCCAACAGTGTGGCACGGAAGCATGGG
TTCCTCAACCTGGGCCAGATCTTCGGGGACTATTACCACTTCTGGCATCGAGGAGTGACGAAGCGGTCCCTGTCG
CCTCACCGCCCGCGGCACAGCCGGCTGCAGAGGGAGCCTCAAGTACAGTGGCTGGAACAGCAGGTGGCAAAGCGA
CGGACTAAACGGGACGTGTACCAGGAGCCCACAGACCCCAAGTTTCCTCAGCAGTGGTACCTGTCTGGTGTCACT
CAGCGGGACCTGAATGTGAAGGCGGCCTGGGCGCAGGGCTACACAGGGCACGGCATTGTGGTCTCCATTCTGGAC
GATGGCATCGAGAAGAACCACCCGGACTTGGCAGGCAATTATGATCCTGGGGCCAGTTTTGATGTCAATGACCAG
GACCCTGACCCCCAGCCTCGGTACACACAGATGAATGACAACAGGCACGGCACACGGTGTGCGGGGGAAGTGGCT
GCGGTGGCCAACAACGGTGTCTGTGGTGTAGGTGTGGCCTACAACGCCCGCATTGGAGGGGTGCGCATGCTGGAT
GGCGAGGTGACAGATGCAGTGGAGGCACGCTCGCTGGGCCTGAACCCCAACCACATCCACATCTACAGTGCCAGC
TGGGGCCCCGAGGATGACGGCAAGACAGTGGATGGGCCAGCCCGCCTCGCCGAGGAGGCCTTCTTCCGTGGGGTT
AGCCAGGGCCGAGGGGGGCTGGGCTCCATCTTTGTCTGGGCCTCGGGGAACGGGGGCCGGGAACATGACAGCTGC
AACTGCGACGGCTACACCAACAGTATCTACACGCTGTCCATCAGCAGCGCCACGCAGTTTGGCAACGTGCCGTGG
TACAGCGAGGCCTGCTCGTCCACACTGGCCACGACCTACAGCAGTGGCAACCAGAATGAGAAGCAGATCGTGACG
ACTGACTTGCGGCAGAAGTGCACGGAGTCTCACACGGGCACCTCAGCCTCTGCCCCCTTAGCAGCCGGCATCATT
GCTCTCACCCTGGAGGCCAATAAGAACCTCACATGGCGGGACATGCAACACCTGGTGGTACAGACCTCGAAGCCA
GCCCACCTCAATGCCAACGACTGGGCCACCAATGGTGTGGGCCGGAAAGTGAGCCACTCATATGGCTACGGGCTT
TTGGACGCAGGCGCCATGGTGGCCCTGGCCCAGAATTGGACCACAGTGGCCCCCCAGCGGAAGTGCATCATCGAC
ATCCTCACCGAGCCCAAAGACATCGGGAAACGGCTCGAGGTGCGGAAGACCGTGACCGCGTGCCTGGGCGAGCCC
AACCACATCACTCGGCTGGAGCACGCTCAGGCGCGGCTCACCCTGTCCTATAATCGCCGTGGCGACCTGGCCATC
CACCTGGTCAGCCCCATGGGCACCCGCTCCACCCTGCTGGCAGCCAGGCCACATGACTACTCCGCAGATGGGTTT
AATGACTGGGCCTTCATGACAACTCATTCCTGGGATGAGGATCCCTCTGGCGAGTGGGTCCTAGAGATTGAAAAC
ACCAGCGAAGCCAACAACTATGGGACGCTGACCAAGTTCACCCTCGTACTCTATGGCACCGCCCCTGAGGGGCTG
CCCGTACCTCCAGAAAGCAGTGGCTGCAAGACCCTCACGTCCAGTCAGGCCTGTGTGGTGTGCGAGGAAGGCTTC
TCCCTGCACCAGAAGAGCTGTGTCCAGCACTGCCCTCCAGGGTTCGCCCCCCAAGTCCTCGATACGCACTATAGC
ACCGAGAATGACGTGGAGACCATCCGGGCCAGCGTCTGCGCCCCCTGCCACGCCTCATGTGCCACATGCCAGGGG
CCGGCCCTGACAGACTGCCTCAGCTGCCCCAGCCACGCCTCCTTGGACCCTGTGGAGCAGACTTGCTCCCGGCAA
AGCCAGAGCAGCCGAGAGTCCCCGCCACAGCAGCAGCCACCTCGGCTGCCCCCGGAGGTGGAGGCGGGGCAACGG
CTGCGGGCAGGGCTGCTGCCCTCACACCTGCCTGAGGTGGTGGCCGGCCTCAGCTGCGCCTTCATCGTGCTGGTC
TTCGTCACTGTCTTCCTGGTCCTGCAGCTGCGCTCTGGCTTTAGTTTTCGGGGGGTGAAGGTGTACACCATGGAC
CGTGGCCTCATCTCCTACAAGGGGCTGCCCCCTGAAGCCTGGCAGGAGGAGTGCCCGTCTGACTCAGAAGAGGAC
GAGGGCCGGGGCGAGAGGACCGCCTTTATCAAAGACCAGAGCGCCCTCTGATGAGCCCACTGCCCACCCCCTCAA
GCCAATCCCCTCCTTGGGCACTTTTTAATTCACCAAAGTATTTTTTTATCTTGGGACTGGGTTTGGACCCCAGCT
GGGAGGCAAGAGGGGTGGAGACTGCTTCCCATCCTACCCTCGGGCCCACCTGGCCACCTGAGGTGGGCCCAGGAC
CAGCTGGGGCGTGGGGAGGGCCGTACCCCACCCTCAGCACCCCTTCCATGTGGAGAAAGGAGTGAAACCTTTAGG
GCAGCTTGCCCCGGCCCCGGCCCCAGCCAGAGTTCCTGCGGAGTGAAGAGGGGCAGCCCTTGCTTGTTGGGATTC
CTGACCCAGGCCGCAGCTCTTGCCCTTCCCTGTCCCTCTAAAGCAATAATGGTCCCATCCAGGCAGTCGGGGGCT
GGCCTAGGAGATATCTGAGGGAGGAGGCCACCTCTCCAAGGGCTTCTGCACCCTCCACCCTGTCCCCCAGCTCTG
GTGAGTCTTGGCGGCAGCAGCCATCATAGGAAGGGACCAAGGCAAGGCAGGTGCCTCCAGGTGTGCACGTGGCAT
GTGGCCTGTGGCCTGTGTCCCATGACCCACCCCTGTGCTCCGTGCCTCCACCACCACTGGCCACCAGGCTGGCGC
AGCCAAGGCCGAAGCTCTGGCTGAACCCTGTGCTGGTGTCCTGACCACCCTCCCCTCTCTTGCACCCGCCTCTCC
CGTCAGGGCCCAAGTCCCTGTTTTCTGAGCCCGGGCTGCCTGGGCTGTTGGCACTCACAGACCTGGAGCCCCTGG
GTGGGTGGTGGGGAGGGGCGCTGGCCCAGCCGGCCTCTCTGGCCTCCCACCCGATGCTGCTTTCCCCTGTGGGGA
TCTCAGGGGCTGTTTGAGGATATATTTTCACTTTGTGATTATTTCACTTTAGATGCTGATGATTTGTTTTTGTAT
TTTTAATGGGGGTAGCAGCTGGACTACCCACGTTCTCACACCCACCGTCCGCCCTGCTCCTCCCTGGCTGCCCTG

FIGURE 621B

GCCCTGAGGTGTGGGGGCTGCAGCATGTTGCTGAGGAGTGAGGAATAGTTGAGCCCCAAGTCCTGAAGAGGCGGG
CCAGCCAGGCGGGCTCAAGGAAAGGGGGTCCCAGTGGGAGGGGCAGGCTGACATCTGTGTTTCAAGTGGGGCTCG
CCATGCCGGGGGTTCATAGGTCACTGGCTCTCCAAGTGCCAGAGGTGGGCAGGTGGTGGCACTGAGCCCCCCCAA
CACTGTGCCCTGGTGGAGAAAGCACTGACCTGTCATGCCCCCCTCAAACCTCCTCTTCTGACGTGCCTTTTGCAC
CCCTCCCATTAGGACAATCAGTCCCCTCCCATCTGGGAGTCCCCTTTTCTTTTCTACCCTAGCCATTCCTGGTAC
CCAGCCATCTGCCCAGGGGTGCCCCCTCCTCTCCCATCCCCCTGCCCTCGTGGCCAGCCCGGCTGGTTTTGTAAG
ATGCTGGGTTGGTGCACAGTGATTTTTTTCTTGTAATTTAAACAGGCCCAGCATTGCTGGTTCTATTTAATGGAC
ATGAGATAATGTTAGAGGTTTTAAAGTGATTAAACGTGCAGACTATGCAAACCAG

FIGURE 622

MELRPWLLWVVAATGTLVLLAADAQGQKVFTNTWAVRIPGGPAVANSVARKHGFLNLGQIFGDYYHFWHRGVTKR
SLSPHRPRHSRLQREPQVQWLEQQVAKRRTKRDVYQEPTDPKFPQQWYLSGVTQRDLNVKAAWAQGYTGHGIVVS
ILDDGIEKNHPDLAGNYDPGASFDVNDQDPDPQPRYTQMNDNRHGTRCAGEVAAVANNGVCGVGVAYNARIGGVR
MLDGEVTDAVEARSLGLNPNHIHIYSASWGPEDDGKTVDGPARLAEEAFFRGVSQGRGGLGSIFVWASGNGGREH
DSCNCDGYTNSIYTLSISSATQFGNVPWYSEACSSTLATTYSSGNQNEKQIVTTDLRQKCTESHTGTSASAPLAA
GIIALTLEANKNLTWRDMQHLVVQTSKPAHLNANDWATNGVGRKVSHSYGYGLLDAGAMVALAQNWTTVAPQRKC
IIDILTEPKDIGKRLEVRKTVTACLGEPNHITRLEHAQARLTLSYNRRGDLAIHLVSPMGTRSTLLAARPHDYSA
DGFNDWAFMTTHSWDEDPSGEWVLEIENTSEANNYGTLTKFTLVLYGTAPEGLPVPPESSGCKTLTSSQACVVCE
EGFSLHQKSCVQHCPPGFAPQVLDTHYSTENDVETIRASVCAPCHASCATCQGPALTDCLSCPSHASLDPVEQTC
SRQSQSSRESPPQQQPPRLPPEVEAGQRLRAGLLPSHLPEVVAGLSCAFIVLVFVTVFLVLQLRSGFSFRGVKVY
TMDRGLISYKGLPPEAWQEECPSDSEEDEGRGERTAFIKDQSAL

FIGURE 623

CTGGTCCCGAGCACGAGCTGTGAGGGGATTCACTTGTGTGCGGAACTCCTCGGAACC**ATG**GCGTCCCTTTCCCTT
GCACCTGTTAACATCTTTAAGGCAGGAGCTGATGAAGAGAGAGCAGAGACAGCTCGTCTGACTTCTTTTATTGGT
GCCATCGCCATTGGAGACTTGGTAAAGAGCACCTTGGGACCCAAAGGCATGGACAAAATTCTTCTAAGCAGTGGA
CGAGATGCCTCTCTTATGGTAACCAATGATGGTGCCACTATTCTAAAAAACATTGGTGTTGACAATCCAGCAGCT
AAAGTTTTAGTTGATATGTCAAGGGTTCAAGATGATGAAGTTGGTGATGGCACTACCTCTGTTACCGTTTTAGCA
GCAGAATTATTAAGGGAAGCAGAATCTTTAATTGCAAAAAAGATTCATCCACAGACCATCATAGCGGGTTGGAGA
GAAGCCACGAAGGCTGCAAGAGAGGCGCTGTTGAGTTCTGCAGTTGATCATGGTTCCGATGAAGTTAAATTCCGT
CAAGATTTAATGAATATTGCGGGCACAACATTATCCTCAAAACTTCTTACTCATCACAAAGACCACTTTACAAAG
TTAGCTGTAGAAGCAGTTCTCAGACTGAAAGGCTCTGGCAACCTGGAGGCAATTCATATTATCAAGAAGCTAGGA
GGAAGTTTGGCAGATTCCTATTTAGATGAAGGCTTCCTGTTGGATAAAAAAATTGGAGTAAATCAACCAAAACGA
ATTGAAAATGCTAAAATTCTTATTGCAAATACTGGTATGGATACAGACAAAATAAAGATATTTGGTTCCCGGGTA
AGAGTTGACTCTACAGCAAAGGTTGCAGAAATAGAACATGCGGAAAAGGAAAAAATGAAGGAGAAAGTTGAACGT
ATTCTTAAGCATGGAATAAATTGCTTTATTAACAGGCAATTAATTTATAATTATCCTGAACAGCTCTTTGGTGCT
GCTGGTGTCATGGCTATTGAGCATGCAGATTTTGCAGGTGTGGAACGCCTAGCTCTTGTCACAGGTGGTGAAATT
GCCTCTACCTTTGATCACCCAGAACTGGTGAAGCTTGGAAGTTGCAAACTTATCGAGGAAGTCATGATTGGAGAA
GACAAACTCATTCACTTTTCTGGGGTTGCCCTTGGTGAGGCTTGTACCATTGTTTTGCGTGGTGCCACTCAACAA
ATTTTAGATGAAGCAGAAAGATCATTGCATGATGCTCTTTGTGTTCTTGCGCAAACTGTAAAGGACTCTAGAACA
GTTTATGGAGGAGGCTGTTCTGAGATGTTGATGGCTCATGCTGTGACACAGCTTGCCAATAGAACACCAGGCAAA
GAAGCTGTTGCAATGGAGTCTTATGCTAAAGCACTGAGAATGTTGCCAACCATCATAGCTGACAATGCAGGCTAT
GACAGTGCAGACCTGGTGGCACAGCTCAGGGCTGCTCACAGTGAAGGCAATACCACTGCTGGATTGGATATGAGG
GAAGGCACCATTGGAGATATGGCTATCCTGGGTATAACAGAAAGTTTTCAAGTGAAGCGACAGGTTCTTCTGAGT
GCAGCTGAAGCAGCAGAGGTGATTCTGCGTGTGGACAACATCATCAAAGCGGCACCCAGGAAACGTGTCCCTGAT
CACCACCCCTGT**TAA**GCATTCCCACGTGCTGTCGATCTTTGGACCAGTTTCTAGCAAAGTTGTGTTTGAAAGATA
CTCTATTAAAGAAGACTGTGGAATCTGTTTATCGGTGCCCATTATATCCTTAAGTTTGGATATTTAGCTGACCTT
CGCTTTAACATAGGTCTAATTTATTTGCCGTGTCATTTTCCATACAAATCAGTTGATTTAAAGGAGTTCATTTCG
CATACTGGGCATTAAAATAAAAATTTGAACAATGAAAGGAAAAAAAGGAGAAAAAAAAAA

FIGURE 624

MASLSLAPVNIFKAGADEERAETARLTSFIGAIAIGDLVKSTLGPKGMDKILLSSGRDASLMVTNDGATILKNIG
VDNPAAKVLVDMSRVQDDEVGDGTTSVTVLAAELLREAESLIAKKIHPQTIIAGWREATKAAREALLSSAVDHGS
DEVKFRQDLMNIAGTTLSSKLLTHHKDHFTKLAVEAVLRLKGSGNLEAIHIIKKLGGSLADSYLDEGFLLDKKIG
VNQPKRIENAKILIANTGMDTDKIKIFGSRVRVDSTAKVAEIEHAEKEKMKEKVERILKHGINCFINRQLIYNYP
EQLFGAAGVMAIEHADFAGVERLALVTGGEIASTFDHPELVKLGSCKLIEEVMIGEDKLIHFSGVALGEACTIVL
RGATQQILDEAERSLHDALCVLAQTVKDSRTVYGGGCSEMLMAHAVTQLANRTPGKEAVAMESYAKALRMLPTII
ADNAGYDSADLVAQLRAAHSEGNTTAGLDMREGTIGDMAILGITESFQVKRQVLLSAAEAAEVILRVDNIIKAAP
RKRVPDHHPC

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FIGURE 625

CTGGTCCCGAGCACGAGCTGTGAGGGGATTCACTTGTGTGCGGAACTCCTCGGAACCATGGCGTCCCTTTCCCTT
GCACCTGTTAACATCTTTAAGGCAGGAGCTGATGAAGAGAGAGCAGAGACAGCTCGTCTGACTTCTTTTATTGGT
GCCATCGCCATTGGAGACTTGGTAAAGAGCACCTTGGGACCCAAAGGCATGGACAAAATTCTTCTAAGCAGTGGA
CGAGATGCCTCTCTTATGGTAACCAATGATGGTGCCACTATTCTAAAAAACATTGGTGTTGACAATCCAGCAGCT
AAAGTTTTAGTTGATATGTCAAGGGTTCAAGATGATGAAGTTGGTGATGGCACTACCTCTGTTACCGTTTTAGCA
GCAGAATTATTAAGGGAAGCAGAATCTTTAATTGCAAAAAAGATTCATCCACAGACCATCATAGCGGGTTGGAGA
GAAGCCACGAAGGCTGCAAGAGAGGCGCTGTTGAGTTCTGCAGTTGATCATGGTTCCGATGAAGTTAAATTCCGT
CAAGATTTAATGAATATTGCGGGCACAACATTATCCTCAAAACTTCTTACTCATCACAAAGACCACTTTACAAAG
TTAGCTGTAGAAGCAGTTCTCAGACTGAAAGGCTCTGGCAACCTGGAGGCAATTCATATTATCAAGAAGCTAGGA
GGAAGTTTGGCAGATTCCTATTTAGATGAAGGCTTCCTGTTGGATAAAAAAATTGGAGTAAATCAACCAAAACGA
ATTGAAAATGCTAAAATTCTTATTGCAAATACTGGTATGGATACAGACAAAATAAAGATATTTGGTTCCCGGGTA
AGAGTTGACTCTACAGCAAAGGTTGCAGAAATAGAACATGCGGAAAAGGAAAAAATGAAGGAGAAAGTTGAACGT
ATTCTTAAGCATGGAATAAATTGCTTTATTAACAGGCAATTAATTTATAATTATCCTGAACAGCTCTTTGGTGCT
GCTGGTGTCATGGCTATTGAGCATGCAGATTTTGCAGGTGTGGAACGCCTAGCTCTTGTCACAGGTGGTGAAATT
GCCTCTACCTTTGATCACCCAGAACTGGTGAAGCTTGGAAGTTGCAAACTTATCGAGGAAGTCATGATTGGAGAA
GACAAACTCATTCACTTTTCTGGGGTTGCCCTTGGTGAGGCTTGTACCATTGTTTTGCGTGGTGCCACTCAACAA
ATTTTAGATGAAGCAGAAAGATCATTGCATGATGCTCTTTGTGTTCTTGCGCAAACTGTAAAGGACTCTAGAACA
GTTTATGGAGGAGGCTGTTCTGAGATGTTGATGGCTCATGCTGTGACACAGCTTGCCAATAGAACACCAGGCAAA
GAAGCTGTTGCAATGGAGTCTTATGCTAAAGCACTGAGAATGTTGCCAACCATCATAGCTGACAATGCAGGCTAT
GACAGTGCAGACCTGGTGGCACAGCTCAGGGCTGCTCACAGTGAAGGCAATACCACTGCTGGATTGGATATGAGG
GAAGGCACCATTGGAGATATGGCTATCCTGGGTATAACAGAAAGTTTTCAAGTGAAGCGACAGGTTCTTCTGAGT
GCAGCTGAAGCAGCAGAGGTGATTCTGCGTGTGGACAACATCATCAAAGCGGCACCCAGGAAACGTGTCCCTGAT
CACCACCCCTGTTAAGCATTCCCACGTGCTGTCGATCTTTGGACCAGTTTCTAGCAAAGTTGTGTTTGAAAGATA
CTCTATTAAAGAAGACTGTGGAATCTGTTTATCGGTGCCCATTATATCCTTAAGTTTGGATATTTAGCTGACCTT
CGCTTTAACATAGGTCTAATTTATTTGCCGTGTCATTTTCCATACAAATCAGTTGATTTAAAGGAGTTCATTTCG
CATACTGGGCATTAAAATAAAAATTTGAACAATGAAAGGAAAAAAAGGAGAAAAAAAAAA

FIGURE 626

MASLSLAPVNIFKAGADEERAETARLTSFIGAIAIGDLVKSTLGPKGMDKILLSSGRDASLMVTNDGATILKNIG
VDNPAAKVLVDMSRVQDDEVGDGTTSVTVLAAELLREAESLIAKKIHPQTIIAGWREATKAAREALLSSAVDHGS
DEVKFRQDLMNIAGTTLSSKLLTHHKDHFTKLAVEAVLRLKGSGNLEAIHIIKKLGGSLADSYLDEGFLLDKKIG
VNQPKRIENAKILIANTGMDTDKIKIFGSRVRVDSTAKVAEIEHAEKEKMKEKVERILKHGINCFINRQLIYNYP
EQLFGAAGVMAIEHADFAGVERLALVTGGEIASTFDHPELVKLGSCKLIEEVMIGEDKLIHFSGVALGEACTIVL
RGATQQILDEAERSLHDALCVLAQTVKDSRTVYGGGCSEMLMAHAVTQLANRTPGKEAVAMESYAKALRMLPTII
ADNAGYDSADLVAQLRAAHSEGNTTAGLDMREGTIGDMAILGITESFQVKRQVLLSAAEAAEVILRVDNIIKAAP
RKRVPDHHPC

FIGURE 627

CTTCGCGGCTTGGTAACATAAAAGTTTGTTTCACCACGTAAGCCGGACCTCGCACTCCGGTCCCGGTCTCGTCGC
CAAGATGGTGAAGCCCAAGTACAAAGGACGGAGCACCATCAACCCGTCCAAGGCCAGCACAAACCCAGATCGAGT
GCAGGGAGCAGGAGGCCAAAACATGAGGGACCGGGCCACCATCCGGCGCCTGAATATGTATAGGCAAAAGGAGCG
CAGGAACAGTCGTGGTAAAATAATTAAACCCCTGCAATATCAATCAACGGTGGCTTCTGGCACAGTGGCAAGAGT
AGAGCCAAATATTAAATGGTTTGGAAACACACGTGTGATTAAGCAGTCATCATTACAAAAATTTCAAGAGGAAAT
GGATACAGTTATGAAGGATCCATACAAAGTTGTCATGAAGCAAAGCAAGTTACCAATGTCTCTTCTCCATGATCG
AATCCGGCCTCATAACTTGAAGGTGCACATTCTTGATACTGAAAGTTTTGAAACTACATTTGGCCCTAAGTCACA
GAGGAAACGACCAAACTTATTTGCAAGTGATATGCAGTCTCTTATCGAAAATGCTGAAATGTCCACTGAGAGCTA
TGACCAGGGCAAGGATCGTGATTTGGTAACTGAAGACACTGGTGTGAGAAATGAAGCTCAAGAAGAGATCTATAA
AAAGGGACAGTCCAAAAGAATATGGGGTGAGCTCTACAAGGTGATAGATTCATCAGATGTTGTAGTTCAAGTTCT
TGATGCTAGAGATCCAATGGGTACTCGTTCCCCTCACATTGAAACTTACCTGAAGAAGGAAAAACCTTGGAAACA
CCTCATTTTTGTACTTAACAAATGTGACCTTGTTCCAACCTGGGCAACAAAACGGTGGGTTGCTGTCCTCTCCCA
GGATTATCCAACACTTGCTTTCCATGCAAGCCTTACTAACCCGTTTGGCAAGGGAGCATTCATTCAGCTTCTGCG
GCAGTTTGGAAAGTTGCACACTGACAAGAAACAGATCAGTGTTGGGTTCATTGGCTATCCAAATGTTGGCAAGAG
CTCTGTGATAAATACATTGCGTTCTAAGAAAGTTTGCAACGTGGCTCCCATTGCAGGTGAAACAAAGGTCTGGCA
GTATATTACTTTGATGCGTCGGATATTCCTGATTGACTGTCCAGGTGTGGTTTACCCCTCTGAGGACTCCGAGAC
AGACATTGTGCTAAAAGGAGTTGTTCAAGTAGAAAAAATTAAGAGTCCTGAAGACCACATTGGTGCTGTACTTGA
ACGAGCAAAGCCAGAATATATCAGCAAAACATACAAGATTGATTCTTGGGAGAATGCTGAGGACTTTCTTGAGAA
GCTCGCTTTCCGGACTGGGAAGTTACTAAAGGGTGGAGAGCCCGACTTGCAGACTGTGGGTAAGATGGTCCTCAA
TGACTGGCAGAGGGGCCGGATTCCTTTCTTTGTCAAGCCACCCAATGCAGAGCCACTTGTGGCCCCCCAGCTTCT
ACCCTCCTCATCTTTGGAAGTTGTCCCAGAAGCAGCCCAGAACAATCCAGGGGAGGAAGTCACAGAAACTGCAGG
TGAAGGGTCAGAATCCATCATTAAGGAAGAAACAGAAGAGAACAGTCACTGTGATGCTAACACAGAGATGCAGCA
GATTCTCACACGAGTTCGGCAGAACTTTGGTAAAATCAACGTGGTGCCTCAGTTTTCTGGGGATGACCTGGTTCC
TGTGGAGGTGTCAGATCTTGAGGAAGAGCTTGAGAGCTTTTCTGATGAAGAGGAGGAGGAACAGGAGCAACAAAG
AGATGATGCGGAAGAGTCTTCCTCGGAGCCTGAGGAGGAAAATGTGGGAAACGACACCAAAGCCGTTATTAAAGC
ACTGGATGAGAAGATTGCCAAATATCAGAAGTTTCTAGACAAAGCCAAAGCCAAAAAGTTTTCAGCAGTCAGAAT
ATCCAAGGGACTGAGTGAAAAGATATTTGCAAAACCTGAAGAACAAAGAAAAACACTGGAAGAAGATGTAGATGA
CAGAGCACCTTCCAAAAAGGGAAAGAAGCGGAAGGCACAAAGGGAAGAGGAACAGGAACATTCAAATAAAGCTCC
CAGGGCGCTTACATCAAAAGAACGGAGGCGAGCAGTACGACAGCAACGGCCGAAAAAAGTTGGTGTGCGCTACTA
TGAAACACACAACGTGAAAAATAGGAACAGGAACAAAAAGAAGACCAATGACTCAGAGGGACAGAAACACAAACG
CAAAAAATTCAGACAAAAGCAGTAATGTTTAAAAGGTTTTTATTAAATTATACAAAAACAGGCAAAAAAAAAAAA
AAAAAA

FIGURE 628

MVKPKYKGRSTINPSKASTNPDRVQGAGGQNMRDRATIRRLNMYRQKERRNSRGKIIKPLQYQSTVASGTVARVE
PNIKWFGNTRVIKQSSLQKFQEEMDTVMKDPYKVVMKQSKLPMSLLHDRIRPHNLKVHILDTESFETTFGPKSQR
KRPNLFASDMQSLIENAEMSTESYDQGKDRDLVTEDTGVRNEAQEEIYKKGQSKRIWGELYKVIDSSDVVVQVLD
ARDPMGTRSPHIETYLKKEKPWKHLIFVLNKCDLVPTWATKRWVAVLSQDYPTLAFHASLTNPFGKGAFIQLLRQ
FGKLHTDKKQISVGFIGYPNVGKSSVINTLRSKKVCNVAPIAGETKVWQYITLMRRIFLIDCPGVVYPSEDSETD
IVLKGVVQVEKIKSPEDHIGAVLERAKPEYISKTYKIDSWENAEDFLEKLAFRTGKLLKGGEPDLQTVGKMVLND
WQRGRIPFFVKPPNAEPLVAPQLLPSSSLEVVPEAAQNNPGEEVTETAGEGSESIIKEETEENSHCDANTEMQQI
LTRVRQNFGKINVVPQFSGDDLVPVEVSDLEEELESFSDEEEEEQEQQRDDAEESSSEPEEENVGNDTKAVIKAL
DEKIAKYQKFLDKAKAKKFSAVRISKGLSEKIFAKPEEQRKTLEEDVDDRAPSKKGKKRKAQREEEQEHSNKAPR
ALTSKERRRAVRQQRPKKVGVRYYETHNVKNRNRNKKKTNDSEGQKHKRKKFRQKQ

FIGURE 629A

TCAACACAGGACAATGCAAGCCCATGAGCTGTTCCGGTATTTTCGAATGCCAGAGCTGGTTGACTTCCGACAGTA
CGTGCGTACTCTTCCGACCAACACGCTTATGGGCTTCGGAGCTTTTGCAGCACTCACCACCTTCTGGTACGCCAC
GAGACCCAAACCCCTGAAGCCGCCATGCGACCTCTCCATGCAGTCAGTGGAAGTGGCGGGTAGTGGTGGTGCACG
AAGATCCGCACTACTTGACAGCGACGAGCCCTTGGTGTATTTCTATGATGATGTCACAACATTATACGAAGGTTT
CCAGAGGGGAATACAGGTGTCAAATAATGGCCCTTGTTTAGGCTCTCGGAAACCAGACCAACCCTATGAATGGCT
TTCATATAAACAGGTTGCAGAATTGTCGGAGTGCATAGGCTCAGCACTGATCCAGAAGGGCTTCAAGACTGCCCC
AGATCAGTTCATTGGCATCTTTGCTCAAAATAGACCTGAGTGGGTGATTATTGAACAAGGATGCTTTGCTTATTC
GATGGTGATCGTTCCACTTTATGATACCCTTGGAAATGAAGCCATCACGTACATAGTCAACAAAGCTGAACTCTC
TCTGGTTTTTGTTGACAAGCCAGAGAAGGCCAAACTCTTATTAGAGGGTGTAGAAAATAAGTTAATACCAGGCCT
TAAAATCATAGTTGTCATGGATGCCTACGGCAGTGAACTGGTGGAACGAGGCCAGAGGTGTGGGGTGGAAGTCAC
CAGCATGAAGGCGATGGAGGACCTGGGAAGAGCCAACAGACGGAAGCCCAAGCCTCCAGCACCTGAAGATCTTGC
AGTAATTTGTTTCACAAGTGGAACTACAGGCAACCCCAAAGGAGCAATGGTCACTCACCGAAACATAGTGAGCGA
TTGTTCAGCTTTTGTGAAAGCAACAGAGAATACAGTCAATCCTTGCCCAGATGATACTTTGATATCTTTCTTGCC
TCTCGCCCATATGTTTGAGAGAGTTGTAGAGTGTGTAATGCTGTGTCATGGAGCTAAAATCGGATTTTTCCAAGG
AGATATCAGGCTGCTCATGGATGACCTCAAGGTGCTTCAACCCACTGTCTTCCCCGTGGTTCCAAGACTGCTGAA
CCGGATGTTTGACCGAATTTTCGGACAAGCAAACACCACGCTGAAGCGATGGCTCTTGGACTTTGCCTCCAAGAG
GAAAGAAGCAGAGCTTCGCAGCGGCATCATCAGAAACAACAGCCTGTGGGACCGGCTGATCTTCCACAAAGTACA
GTCGAGCCTGGGCGGAAGAGTCCGGCTGATGGTGACAGGAGCCGCCCCGGTGTCTGCCACTGTGCTGACGTTCCT
CAGAGCAGCCCTGGGCTGTCAGTTTTATGAAGGATACGGACAGACAGAGTGCACTGCCGGGTGCTGCCTAACCAT
GCCTGGAGACTGGACCGCAGGCCATGTTGGGGCCCCGATGCCGTGCAATTTGATAAAACTTGTTGATGTGGAAGA
AATGAATTACATGGCTGCCGAGGGCGAGGGCGAGGTGTGTGTGAAAGGGCCAAATGTATTTCAGGGCTACTTGAA
GGACCCAGCGAAAACAGCAGAAGCTTTGGACAAAGACGGCTGGTTACACACAGGGGACATTGGAAAATGGTTACC
AAATGGCACCTTGAAAATTATCGACCGGAAAAAGCACATATTTAAGCTGGCACAAGGAGAATACATAGCCCCTGA
AAAGATTGAAAATATCTACATGCGAAGTGAGCCTGTTGCTCAGGTGTTTGTCCACGGAGAAAGCCTGCAGGCATT
TCTCATTGCAATTGTGGTACCAGATGTTGAGACATTATGTTCCTGGGCCCAAAAGAGAGGATTTGAAGGGTCGTT
TGAGGAACTGTGCAGAAATAAGGATGTCAAAAAAGCTATCCTCGAAGATATGGTGAGACTTGGGAAGGATTCTGG
TCTGAAACCATTTGAACAGGTCAAAGGCATCACATTGCACCCTGAATTATTTTCTATCGACAATGGCCTTCTGAC
TCCAACAATGAAGGCGAAAAGGCCAGAGCTGCGGAACTATTTCAGGTCGCAGATAGATGACCTCTATTCCACTAT
CAAGGTTTAGTGTGAAGAAGAAAGCTCAGAGGAAATGGCACAGTTCCACAATCTCTTCTCCTGCTGATGGCCTTC
ATGTTGTTAATTTTGAATACAGCAAGTGTAGGGAAGGAAGCGTTCGTGTTTGACTTGTCCATTCGGGGTTCTTCT
CATAGGAATGCTAGAGGAAACAGAACACCGCCTTACAGTCACCTCATGTTGCAGACCATGTTTATGGTAATACAC
ACTTTCCAAAATGAGCCTTAAAAATTGTAAAGGGGATACTATAAATGTGCTAAGTTATTTGAGACTTCCTCAGTT
TAAAAAGTGGGTTTTAAATCTTCTGTCTCCCTGCTTTTCTAATCAAGGGGTTAGGACTTTGCTATCTCTGAGATG
TCTGCTACTTGCTGCAAATTCTGCAGCTGTCTGCTGCTCTAAAGAGTACAGTGCACTAGAGGGAAGTGTTCCCTT
TAAAAATAAGAACAACTGTCCTGGCTGGAGAATCTCACAAGCGGACCAGAGATCTTTTTAAATCCCTGCTACTGT
CCCTTCTCACAGGCATTCACAGAACCCTTCTGATTCGTAAGGGTTACGAAACTCATGTTCTTCTCCAGTCCCCTG
TGGTTTCTGTTGGAGCATAAGGTTTCCAGTAAGCGGGAGGGCAGATCCAACTCAGAACCATGCAGATAAGGAGCC
TCTGGCAAATGGGTGCTCATCAGAACGCGTGGATTCTCTTTCATGGCAGAATGCTCTTGGACTCGGTTCTCCAGG
CCTGATTCCCCGACTCCATCCTTTTTCAGGGGTTATTTAAAAATCTGCCTTAGATTCTATAGTGAAGACAAGCAT
TTCAAGAAAGAGTTACCTGGATCAGCCATGCTCAGCTGTGACGCCTGAATAACTGTCTACTTTATCTTCACTGAA
CCACTCACTCTGTGTAAAGGCCAACAGATTTTTAATGTGGTTTTCATATCAAAAGATCATGTTGGGATTAACTTG
CCTTTTTCCCCAAAAAATAAACTCTCAGGCAAGCATTTCTTTAAAGCTATTAAGGGAGTATATACTTGAGTACTT
ATTGAAATGGACAGTAATAAGCAAATGTTCTTATAATGCTACCTGATTTCTATGAAATGTGTTTGACAAGCCAAA
ATTCTAGGATGTAGAAATCTGGAAAGTTCATTTCCTGGGATTCACTTCTCCAGGGATTTTTTAAAGTTAATTTGG
GAAATTAACAGCAGTTCACTTTATTGTGAGTCTTTGCCACATTTGACTGAATTGAGCTGTCATTTGTACATTTAA
AGCAGCTGTTTTGGGGTCTGTGAGAGTACATGTATTATATACAAGCACAACAGGGCTTGCACTAAAGAATTGTCA
TTGTAATAACACTACTTGGTAGCCTAACTTCATATATGTATTCTTAATTGCACAAAAAGTCAATAATTTGTCACC
TTGGGGTTTTGAATGTTTGCTTTAAGTGTTGGCTATTTCTATGTTTTATAAACCAAAACAAAATTTCCAAAAACA

FIGURE 629B

ATGAAGGAAACCAAAATAAATATTTCTGCATTTCG

FIGURE 630

MQAHELFRYFRMPELVDFRQYVRTLPTNTLMGFGAFAALTTFWYATRPKPLKPPCDLSMQSVEVAGSGGARRSAL
LDSDEPLVYFYDDVTTLYEGFQRGIQVSNNGPCLGSRKPDQPYEWLSYKQVAELSECIGSALIQKGFKTAPDQFI
GIFAQNRPEWVIIEQGCFAYSMVIVPLYDTLGNEAITYIVNKAELSLVFVDKPEKAKLLLEGVENKLIPGLKIIV
VMDAYGSELVERGQRCGVEVTSMKAMEDLGRANRRKPKPPAPEDLAVICFTSGTTGNPKGAMVTHRNIVSDCSAF
VKATENTVNPCPDDTLISFLPLAHMFERVVECVMLCHGAKIGFFQGDIRLLMDDLKVLQPTVFPVVPRLLNRMFD
RIFGQANTTLKRWLLDFASKRKEAELRSGIIRNNSLWDRLIFHKVQSSLGGRVRLMVTGAAPVSATVLTFLRAAL
GCQFYEGYGQTECTAGCCLTMPGDWTAGHVGAPMPCNLIKLVDVEEMNYMAAEGEGEVCVKGPNVFQGYLKDPAK
TAEALDKDGWLHTGDIGKWLPNGTLKIIDRKKHIFKLAQGEYIAPEKIENIYMRSEPVAQVFVHGESLQAFLIAI
VVPDVETLCSWAQKRGFEGSFEELCRNKDVKKAILEDMVRLGKDSGLKPFEQVKGITLHPELFSIDNGLLTPTMK
AKRPELRNYFRSQIDDLYSTIKV

FIGURE 631

GCCTGAGTGAGTCTCTGGCGTCCCAAATTGCCTGTTTTTCTCGCAGGCTCTATTCCGTTCGCTGGTTCGCCACCT
CAGGGGAACGATGGCCATGGAGTCCACAGCCACTGCCGCCGTCGCCGCGGACGTGGTTTCTGCCGACAAAATTGA
AGATGTCCCTGCTCCTTCTACATCTGCAGATAAAGTGGAGAGTCTGGATGTGGATAGTGAAGCTAAGAAACTATT
GGGTTTAGGACAGAAACATCTGGTGATGGGGGATATTCCAGCAGCTGTCAATGCATTCCAGGAAGCAGCTAGTCT
TTTAGGTAAGAAGTATGGAGAGACAGCTAATGAGTGTGGAGAAGCCTTCTTTTTCTATGGGAAATCACTTCTGGA
GTTGGCAAGAATGGAGAATGGTGTGTTGGGAAACGCCTTGGAAGGTGTGCATGTGGAAGAGGAAGAAGGAGAAAA
AACAGAAGATGAATCTCTGGTAGAAAATAATGATAACATAGATGAGGAAGCAAGGGAAGAGTTGAGAGAACAGGT
TTATGACGCCATGGGAGAAAAAGAAGAAGCCAAAAAAACAGAAGACAAGTCTTTGGCAAAGCCTGAAACTGATAA
AGAACAGGACAGTGAAATGGAGAAGGGTGGAAGAGAAGATATGGATATAAGTAAATCTGCAGAGGAGCCACAGGA
AAAAGTTGACTTGACTCTAGATTGGTTAACTGAAACCTCTGAAGAGGCAAAAGGAGGAGCAGCACCAGAAGGACC
GAATGAAGCTGAGGTCACTTCTGGGAAGCCAGAACAGGAAGTACCAGATGCTGAGGAAGAAAAATCAGTTTCTGG
AACTGATGTCCAAGAAGAGTGCAGAGAAAAAGGAGGTCAGGAGAAGCAGGGAGAGGTAATTGTGAGCATAGAGGA
GAAGCCAAAAGAAGTTTCAGAAGAGCAGCCTGTGGTGACTCTAGAAAAGCAGGGCACTGCAGTGGAGGTAGAAGC
AGAGTCTTTAGACCCGACAGTCAAGCCAGTGGATGTGGGTGGGGACGAGCCAGAGGAGAAGGTAGTTACCTCTGA
AAACGAGGCAGGAAAGGCGGTTCTTGAACAACTGGTAGGTCAAGAAGTACCACCTGCTGAAGAGTCACCAGAGGT
GCAAACAGAGGCTGCAGAGGCCTCAGCTGTAGAGGCTGGATCAGAAGTCTCTGAAAAGCCTGGGCAGGAGGCTCC
AGTTCTCCCTAAGGATGGTGCAGTCAATGGACCGTCAGTTGTAGGAGATCAGACTCCTATTGAACCACAGACTTC
TATAGAAAGACTGACAGAAACAAAAGATGGCTCAGGACTAGAGGAGAAGGTCAGGGCAAAGCTGGTTCCTAGTCA
GGAGGAGACTAAGCTGTCTGTAGAAGAGTCTGAGGCAGCTGGAGATGGGGTTGATACCAAGGTAGCCCAGGGAGC
TACTGAGAAATCACCTGAAGACAAAGTTCAGATAGCTGCTAATGAAGAGACACAAGAGAGAGAAGAACAGATGAA
AGAGGGTGAAGAAACTGAAGGCTCGGAAGAGGATGATAAAGAAAATGATAAGACTGAAGAAATGCCAAATGATTC
AGTCCTTGAAAACAAGTCTCTTCAAGAAAATGAGGAGGAGGAGATTGGGAACCTAGAGCTTGCCTGGGATATGCT
GGATTTAGCAAAGATCATTTTTAAAAGGCAAGAAACAAAAGAAGCACAGCTTTATGCTGCCCAGGCACATCTTAA
ACTCGGAGAAGTTAGTGTTGAATCTGAAAACTATGTGCAAGCTGTGGAGGAGTTCCAGTCCTGCCTTAACCTGCA
GGAACAGTACCTGGAAGCCCACGACCGTCTGCTTGCAGAGACCCACTACCAGCTGGGCTTGGCTTATGGGTACAA
CTCTCAGTATGATGAGGCAGTGGCACAGTTCAGCAAATCTATTGAAGTCATTGAGAACAGAATGGCTGTACTAAA
CGAGCAGGTGAAGGAGGCTGAAGGATCGTCTGAATACAAGAAAGAAATTGAGGAACTAAAGGAACTGCTACCCGA
AATTAGAGAGAAGATAGAAGATGCAAAGGAGTCTCAGCGTAGTGGGAATGTAGCTGAACTGGCTCTGAAAGCTAC
TCTGGTGGAGAGTTCTACTTCAGGTTTCACTCCTGGTGGAGGAGGCTCTTCAGTCTCCATGATTGCCAGTAGAAA
GCCAACAGACGGTGCTTCCTCATCAAATTGTGTGACTGATATTTCCCACCTTGTCAGAAAGAAGAGGAAACCAGA
GGAAGAGAGTCCCCGGAAAGATGATGCAAAGAAAGCCAAACAAGAGCCGGAGGTGAACGGAGGCAGTGGGGATGC
TGTCCCGAGTGGAAATGAAGTTTCGGAAAACATGGAGGAGGAGGCTGAGAATCAGCTGAAACGCGGAGCAGCAGT
GGAGGGGACACTGGAGGCTGGAGCTACAGTTGAAAGCACTGCATGTTAAGAGGGGGCACAGCCTCCTCCCAAGGG
AAAGTGTTTTTGTATATAATGTATTTTTTCACTTTTGGAGGATTCTTTTTGTATAACTTCAATAAAGATTGTAAG
CAAAAAAAAAA

FIGURE 632

MAMESTATAAVAADVVSADKIEDVPAPSTSADKVESLDVDSEAKKLLGLGQKHLVMGDIPAAVNAFQEAASLLGK
KYGETANECGEAFFFYGKSLLELARMENGVLGNALEGVHVEEEEGEKTEDESLVENNDNIDEEAREELREQVYDA
MGEKEEAKKTEDKSLAKPETDKEQDSEMEKGGREDMDISKSAEEPQEKVDLTLDWLTETSEEAKGGAAPEGPNEA
EVTSGKPEQEVPDAEEEKSVSGTDVQEECREKGGQEKQGEVIVSIEEKPKEVSEEQPVVTLEKQGTAVEVEAESL
DPTVKPVDVGGDEPEEKVVTSENEAGKAVLEQLVGQEVPPAEESPEVQTEAAEASAVEAGSEVSEKPGQEAPVLP
KDGAVNGPSVVGDQTPIEPQTSIERLTETKDGSGLEEKVRAKLVPSQEETKLSVEESEAAGDGVDTKVAQGATEK
SPEDKVQIAANEETQEREEQMKEGEETEGSEEDDKENDKTEEMPNDSVLENKSLQENEEEEIGNLELAWDMLDLA
KIIFKRQETKEAQLYAAQAHLKLGEVSVESENYVQAVEEFQSCLNLQEQYLEAHDRLLAETHYQLGLAYGYNSQY
DEAVAQFSKSIEVIENRMAVLNEQVKEAEGSSEYKKEIEELKELLPEIREKIEDAKESQRSGNVAELALKATLVE
SSTSGFTPGGGGSSVSMIASRKPTDGASSSNCVTDISHLVRKKRKPEEESPRKDDAKKAKQEPEVNGGSGDAVPS
GNEVSENMEEEAENQLKRGAAVEGTLEAGATVESTAC

FIGURE 633A

GACAGCCTCTGGGTCCTCGGTCGGTACAGTCTCTGCACCTCGCGCCCCAGCAGGTAAACTAACATTATGGATTTT
TCCAAGCTACCCAAAATACTCGATGAAGATAAAGAAAGCACATTTGGTTATGTGCATGGGGTCTCAGGACCTGTG
GTTACAGCCTGTGACATGGCGGGTGCAGCCATGTATGAGCTGGTGAGAGTGGGCCACAGCGAATTGGTTGGAGAG
ATTATTCGATTGGAGGGTGACATGGCTACTATTCAGGTGTATGAAGAAACTTCTGGTGTGTCTGTTGGAGATCCT
GTACTTCGCACTGGTAAACCCCTCTCTGTAGAGCTTGGTCCTGGCATTATGGGAGCCATTTTTGATGGTATTCAA
AGACCTTTGTCGGATATCAGCAGTCAGACCCAAAGCATCTACATCCCCAGAGGAGTAAACGTGTCTGCTCTTAGC
AGAGATATCAAATGGGACTTTACACCTTGCAAAAACCTACGGGTTGGTAGTCATATCACTGGCGGAGACATTTAT
GGAATTGTCAGTGAGAACTCGCTTATCAAACACAAAATCATGTTACCCCCACGAAACAGAGGAACTGTAACTTAC
ATTGCTCCACCTGGGAATTATGATACCTCTGATGTTGTCTTGGAGCTTGAATTTGAAGGTGTAAAGGAGAAGTTC
ACCATGGTGCAAGTATGGCCTGTACGTCAAGTTCGACCTGTCACTGAGAAGCTGCCAGCCAATCATCCTCTGTTG
ACTGGCCAGAGAGTCCTTGATGCCCTTTTTCCGTGTGTCCAGGGAGGAACTACTGCTATCCCTGGAGCCTTTGGC
TGTGGAAAGACAGTGATATCACAGTCTCTATCCAAGTATTCTAACAGTGATGTAATCATCTATGTAGGATGTGGT
GAAAGAGGAAATGAGATGTCTGAAGTCCTCCGGGACTTCCCAGAGCTCACAATGGAGGTTGATGGTAAGGTAGAG
TCAATTATGAAGAGGACAGCTTTGGTAGCCAATACCTCCAATATGCCTGTTGCTGCTAGAGAAGCCTCTATTTAT
ACTGGAATCACACTGTCAGAGTACTTCCGTGACATGGGCTATCATGTCAGTATGATGGCTGACTCTACCTCTAGA
TGGGCTGAGGCCCTTAGAGAAATCTCTGGTCGTTTAGCTGAAATGCCTGCAGATAGTGGATATCCAGCCTATCTT
GGTGCCCGTCTGGCCTCGTTTTATGAACGAGCAGGCAGGGTGAAATGTCTTGGAAATCCTGAAAGAGAAGGGAGT
GTCAGCATTGTAGGAGCAGTTTCTCCACCTGGTGGTGATTTTTCTGATCCAGTTACATCTGCCACTCTTGGTATC
GTTCAGGTGTTCTGGGGCTTAGATAAGAAACTAGCTCAACGTAAGCATTTCCCCTCTGTCAATTGGCTCATCAGC
TACAGCAAGTATATGCGTGCCTTGGATGAATACTATGACAAACACTTCACAGAGTTCGTTCCTCTGAGGACGAAA
GCTAAGGAAATTCTGCAGGAAGAAGAAGACCTGGCAGAAATTGTACAGCTTGTGGGAAAGGCTTCTTTGGCAGAA
ACAGATAAAATCACTCTGGAGGTAGCAAAACTTATCAAAGATGATTTCCTACAACAAAATGGATATACTCCTTAT
GACAGGTTCTGCCCATTCTACAAGACAGTAGGGATGCTGTCCAACATGATTGCATTTTATGATATGGCTCGTAGA
GCTGTTGAAACCACTGCCCAGAGTGACAATAAAATCACATGGTCCATTATTCGTGAGCACATGGGAGACATCCTC
TATAAACTTTCCTCCATGAAATTCAAGGATCCACTGAAAGATGGTGAGGCAAAGATCAAAAGCGACTATGCACAA
CTTCTTGAAGACATGCAGAATGCATTCCGTAGCCTTGAAGATTAGAAGCCTTGAAGATTACAACTGTGATTTCCT
TTTCCTCAGCAAGCTCCTATGTGTATATTTTCCTGAATTTCTCATCTCAAACCCTTTGCTTCTTTATTGTGCAGC
TTTGAGACTAGTGCCTATGTGTGTTATTTGTTTCCCTGTTTTTTTGGTAGGTCTTATATAAAACAAACATTCCTT
TGTTCTAGTGTTGTGAAGGGCCTCCCTCTTCCTTTATCTGAAGTGGTGAATATAGTAAATATACATTCTGGTTAC
ACTACTGTAAACTTGTATGTAGGGTGATGACCCTCTTTGTCCTAGGTGTACCCTTTCCTCATCTCTATTAAATTG
TAAACAGGACTACTGCATGTACTCTCTTTGCAGTGAATTTGGAATGGAAGGCCAGGTTTCTATAACTTTTGAACA
GGTACTTTGTGAAATGACTCAATTTCTATTGTGGTAAGCTCATTGGCAGCTTAGCATTTTGCAAAGGAATTGCTT
TGCAGGAAATATTTAATTTTCAAAAACATAATGATTAATGTTCCAATTATGCATCACTTCCCCCAGTATAAATCA
GGAATGTTTGTGAGAAACCATTGGGAACTATACTCTTTTTATTTTTATTTTTTATTTTTTTTTATTATTTTTTTTT
TGGGGACGGAGTGTCCCTCTTGTTGCCCAGGCTGGAGTGCAATGGCGTGATCTTGGCTCACTGCAGCCTTCGCCT
CCCGGGTTCAAGTGATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGATTACAGGCATGCTCCACCATGCCCAGCT
AATTTTGTATTTTTAGTAGAAACGGGGTTTCACCATATTGGTCAGGCTGGTCTCGAACTCCAGACCTCAGGTGAT
CCGCCCACCTCGGCCTCCCAAACTGCTGGGATTACAGGCGTGAGCCACCGCGCCTGGCCAGGGACTATACTCTTT
TTAAAATAGACATTTGTGGGGCTCACACAATATATGAAATAGTACCCTCTAAAAAAGAGAAAAAAAAAATCAGGC
GGTCAAACTTAGAGCAACATTGTCTTATTAAAGCATAGTTTATTTCACTAGAAAAAATTTAATATCAAGGACTAT
TACATACTTCATTACTAGGAAGTTCTTTTTAAAATGACACTTAAAACAATCACTGAAAACTTGATCCACATCACA
CCCTGTTTATTTTCCTTAAACATCTTGGAAGCCTAAGCTTCTGAGAATCATGTGGCAAGTGTGATGGGCAGTAAA
ATACCAGAGAAGATGTTTAGTAGCAATTAAAGGCTGTTTGCACCTTTAAGGACCAGCTGGGCTGTAGTGATTCCT
GGGGCCAGAGTGGCATTATGTTTTTACAAAATAATGACATATGTCACATGTTTGCATGTTTGTTTGCTTGTTGAA
TTTTTGAACAGCCAGTTGACCAATCATAGAAAGTATTACTTTCTTTCATATGGTTTTTGGTTCACTGGCTTAAGA
GGTTTCTCAGAATATCTATGGCCACAGCAGCATACCAGTTTCCATCCTAATAGGAATGAAATTAATTTTGTATCT
ACTGATAACAGAATCTGGGTCACATGAAAAAAAATCATTTTATCCGTCTTTTAAGTATATGTTTAAAATAATAAT
TTATGTGTCTGCATATTGCAGAACAGCTCTGAGAGCAACAGTTTCCCATTAACTCTTTCTGACCAATAGTGCTGG

FIGURE 633B

CACCGTTGCTTCCTCTTTGGGAAGAGGAAAGGGTGTGTGAACATGGCTAACAATCTTCAAATACCCAAATTGTGA
TAGCATAAATAAAGTATTTATTTTATGCCTCAGTATATTATTATTTAATTTTTTAGGTAATGCCTATCTCTTGGT
CTATTAAGGAAAGAAGCAATCAGTAGAGAATTCAGGATAGTTTTGTTTAAATTCTTGCAGATTACATGTTTTTAC
AGTGGCCTGCTATTGAGGAAAGGTATTCTTCTATACAACTTGTTTTAACCTTTGAGAACATTGACAGAAATTATG
CAATGGTTTGTTGAGATACGGACTTGATGGTGCTGTTTAATCAGTTTGCTTCCAAAGTGGCCTACTCAAGAGGCC
CTAAGACTGGTAGAAATTAAAAGGATTTCAAAAACTTTCTATTCCTTTCTTAAACCTACCAGCAAACTAGGATTG
TGATAGCAATGAATGGTATGATGAAGAAAGTTTGACCAAATTTGTTTTTTTGTTGTTGTTGTTGTTTTGAATTTG
AAATCATTCTTATTCCCTTTAAGAATGTTTATGTATGAGTGTGAAGATGCTAGCGAACCTATGCTCAGATATTCA
TCGTAAGTCTCCCTTCACCTGTTACAGAGTTTCAGATCGGTCACTGATAGTATGTATTTCTTTAGTAAGAATGTG
TTAAAATTACAATGATCTTTTAAAAAGATGATGCAGTTCTGTATTTATTGTGCTGTGTCTGGTCCTAAGTGGAGC
CAATTAAACAAGTTTCATATGTATTTTTCCAGTGTTGAATCTCACACACTGTACTTTGAAAATTTCCTTCCATCC
TGAATAACGAATAGAAGAGGCCATATATATTGCCTCCTTATCCTTGAGATTTCACTACCTTTATGTTAAAAGTTG
TGTATAATTGTTAAAATCTGTGAAAGAATAAAAAGTGGATTTAAATTAAAAAAAAAAAAAAAAAAAA

FIGURE 634

MDFSKLPKILDEDKESTFGYVHGVSGPVVTACDMAGAAMYELVRVGHSELVGEIIRLEGDMATIQVYEETSGVSV
GDPVLRTGKPLSVELGPGIMGAIFDGIQRPLSDISSQTQSIYIPRGVNVSALSRDIKWDFTPCKNLRVGSHITGG
DIYGIVSENSLIKHKIMLPPRNRGTVTYIAPPGNYDTSDVVLELEFEGVKEKFTMVQVWPVRQVRPVTEKLPANH
PLLTGQRVLDALFPCVQGGTTAIPGAFGCGKTVISQSLSKYSNSDVIIYVGCGERGNEMSEVLRDFPELTMEVDG
KVESIMKRTALVANTSNMPVAAREASIYTGITLSEYFRDMGYHVSMMADSTSRWAEALREISGRLAEMPADSGYP
AYLGARLASFYERAGRVKCLGNPEREGSVSIVGAVSPPGGDFSDPVTSATLGIVQVFWGLDKKLAQRKHFPSVNW
LISYSKYMRALDEYYDKHFTEFVPLRTKAKEILQEEEDLAEIVQLVGKASLAETDKITLEVAKLIKDDFLQQNGY
TPYDRFCPFYKTVGMLSNMIAFYDMARRAVETTAQSDNKITWSIIREHMGDILYKLSSMKFKDPLKDGEAKIKSD
YAQLLEDMQNAFRSLED

FIGURE 635A

CGGCGCAGGCGGCGGCGTCCGAGGAGATTTAATCCAGAGACTGACTTCACTATAGAACCCACAGTTGTATCAATG
GTTGGGGAAAGATAGTGGCAACAGGCAAAGGAGAAACAGCTCTGACATACAAAGAAAATGAGTATGCTAAAGCCA
AGTGGGCTTAAGGCCCCCACCAAGATCCTGAAGCCTGGAAGCACAGCTCTGAAGACACCTACGGCTGTTGTAGCT
CCAGTAGAAAAAACCATATCCAGTGAAAAAGCATCAAGCACTCCATCATCTGAGACTCAGGAGGAATTTGTGGAT
GACTTTCGAGTTGGGGAGCGAGTTTGGGTGAATGGAAATAAGCCTGGATTTATCCAGTTTCTTGGAGAAACCCAG
TTTGCACCAGGCCAGTGGGCTGGAATTGTTTTAGATGAACCCATAGGCAAGAACGATGGTTCGGTGGCAGGAGTT
CGGTATTTCCAGTGTGAACCTTTAAAGGGCATATTTACCCGACCTTCAAAGTTAACAAGGAAGGTGCAAGCAGAA
GATGAAGCTAATGGCCTGCAGACAACGCCCGCCTCCCGAGCTACTTCACCGCTGTGCACTTCTACGGCCAGCATG
GTGTCTTCCTCCCCCTCCACCCCTTCAAACATCCCTCAGAAACCATCACAGCCAGCAGCAAAGGAACCTTCAGCT
ACGCCTCCGATCAGCAACCTTACAAAAACTGCCAGTGAATCTATCTCCAACCTTTCAGAGGCTGGCTCAATCAAG
AAAGGAGAAAGAGAGCTCAAAATCGGAGACAGAGTATTGGTTGGTGGCACTAAGGCTGGTGTAGTCCGGTTTCTT
GGGGAGACCGACTTTGCCAAGGGGGAGTGGTGTGGCGTGGAGTTAGATGAGCCACTTGGGAAGAATGATGGCGCT
GTTGCTGGAACAAGGTATTTTCAGTGTCAACCCAAATATGGCTTGTTCGCTCCTGTCCACAAAGTTACCAAGATT
GGCTTCCCTTCCACTACACCAGCCAAAGCCAAGGCCAACGCAGTGAGGCGAGTGATGGCGACCACGTCCGCCAGC
CTGAAGCGCAGCCCTTCTGCCTCTTCCCTCAGCTCCATGAGCTCAGTGGCCTCCTCTGTGAGCAGCAGGCCCAGT
CGGACAGGACTATTGACTGAAACCTCCTCCCGTTACGCCAGGAAGATCTCCGGTACCACTGCCCTCCAGGAGGCC
CTGAAGGAGAAGCAGCAGCACATTGAGCAGCTGCTGGCGGAACGGGATCTGGAGAGGGCGGAGGTGGCCAAGGCC
ACGAGCCACGTGGGGGAGATAGAGCAGGAGCTAGCTCTGGCCCGGGACGGACATGACCAGCATGTCCTGGAATTG
GAAGCCAAAATGGACCAGCTGCGAACAATGGTGGAAGCTGCTGACAGGGAGAAGGTGGAGCTTCTCAACCAGCTT
GAAGAGGAGAAAAGGAAGGTTGAGGACCTTCAGTTCCGGGTTGAAGAAGAATCAATTACCAAAGGTGATCTTGAG
ACGCAGACCAAACTGGAGCATGCCCGCATTAAGGAGCTTGAACAGAGCCTGCTCTTTGAAAAGACCAAAGCTGAC
AAACTCCAGAGGGAGTTAGAAGACACTAGGGTGGCTACAGTTTCAGAAAAGTCACGTATAATGGAACTGGAGAAA
GACCTAGCATTGAGAGTACAGGAAGTAGCTGAGCTCCGAAGAAGGCTAGAGTCCAATAAGCCTGCTGGGGATGTG
GACATGTCACTTTCCCTTTTGCAAGAGATAAGCTCTTTGCAAGAAAAGTTAGAAGTCACCCGTACTGACCACCAG
AGAGAAATAACTTCTCTGAAGGAGCATTTTGGAGCCCGGGAAGAAACTCATCAGAAGGAGATAAAGGCTCTGTAT
ACCGCCACGGAAAAGCTTTCCAAAGAGAACGAGTCATTGAAAAGCAAGCTGGAGCATGCCAACAAAGAGAACTCA
GATGTGATAGCTCTATGGAAGTCCAAACTGGAGACTGCCATCGCATCCCACCAGCAGGCGATGGAAGAACTGAAG
GTATCTTTCAGCAAAGGGCTTGGAACAGAGACGGCAGAATTTGCTGAACTAAAAACACAAATAGAGAAAATGAGA
CTAGATTACCAACACGAAATAGAAAATTTGCAGAATCAACAAGACTCTGAACGGGCTGCCCATGCTAAAGAGATG
GAAGCCTTGAGGGCTAAACTGATGAAAGTTATTAAAGAAAAGGAAAACAGTCTGGAAGCCATCAGGTCGAAACTG
GACAAAGCAGAAGACCAGCATCTCGTAGAAATGGAAGACACGTTAAACAAATTACAGGAAGCTGAAATAAAGGTA
AAGGAGCTAGAGGTACTGCAAGCCAAATGCAATGAACAAACCAAGGTTATTGATAATTTTACATCACAGCTCAAG
GCTACTGAAGAAAAGCTCTTGGATCTTGATGCACTTCGGAAAGCCAGTTCCGAAGGTAAATCGGAAATGAAGAAA
CTTAGACAGCAGCTTGAGGCAGCTGAGAAACAGATTAAACATTTAGAGATTGAAAAGAATGCTGAAAGTAGCAAG
GCTAGTAGCATTACCAGAGAGCTCCAGGGGAGAGAGCTAAAGCTTACTAACCTTCAGGAAAATTTGAGTGAAGTC
AGTCAAGTGAAAGAGACTTTGGAAAAAGAACTTCAGATTTTGAAAGAAAAGTTTGCTGAAGCTTCAGAGGAGGCA
GTCTCTGTTCAGAGAAGTATGCAAGAAACTGTAAATAAGTTACACCAAAAGGAGGAACAGTTTAACATGCTGTCT
TCTGACTTGGAGAAGCTGAGAGAAAACTTAGCAGATATGGAGGCAAAATTTAGAGAGAAAGATGAGAGAGAAGAG
CAGCTGATAAAGGCAAAGGAAAAACTGGAAAATGACATTGCAGAAATAATGAAGATGTCAGGAGATAACTCTTCT
CAGCTGACAAAAATGAACGATGAATTACGTCTGAAAGAAAGAGATGTAGAAGAATTACAGCTAAAACTTACAAAG
GCTAATGAAAATGCAAGTTTTCTGCAAAAAAGTATTGAGGACATGACTGTCAAAGCTGAACAGAGCCAGCAAGAA
GCAGCTAAAAAGCATGAGGAAGAAAAGAAAGAATTGGAGAGGAAATTGTCGGACCTGGAAAAGAAAATGGAAACA
AGCCACAACCAGTGTCAGGAGCTGAAAGCCAGGTATGAGAGAGCCACTTCTGAGACAAAAACCAAGCATGAAGAA
ATCCTACAGAACCTCCAGAAGACGCTGCTGGACACAGAGGACAAGCTGAAGGGCGCACGGGAGGAGAACAGTGGC
TTGCTGCAGGAGCTGGAGGAGCTGAGAAAGCAAGCCGACAAAGCCAAAGCTGCTCAAACAGCGGAAGATGCCATG
CAGATAATGGAACAGATGACCAAAGAGAAGACTGAGACTCTGGCCTCCTTGGAGGACACCAAGCAAACAAATGCA
AAACTACAGAATGAATTGGACACACTTAAAGAAAACAACTTGAAAAATGTGGAAGAGCTGAACAAATCAAAAGAA
CTCCTGACTGTAGAGAATCAAAAAATGGAAGAATTTAGGAAAGAAATAGAAACCCTAAAGCAGGCAGCAGCTCAG

FIGURE 635B

AAGTCCCAGCAGCTTTCAGCGTTGCAAGAAGAGAACGTTAAACTTGCTGAGGAGCTGGGGAGAAGCAGGGACGAA
GTCACAAGTCATCAAAAGCTGGAAGAAGAAAGATCTGTGCTCAATAATCAGTTGTTAGAAATGAAAAAAAGAGAA
TCCAAGTTCATAAAAGACGCAGATGAAGAGAAAGCTTCCTTGCAGAAATCCATCAGTATAACTAGTGCCTTACTC
ACAGAAAAGGATGCCGAGCTGGAGAAACTGAGAAATGAGGTCACAGTGCTCAGGGGAGAAAACGCCTCTGCCAAG
TCCTTGCATTCAGTTGTTCAGACTCTAGAGTCTGATAAGGTGAAGCTCGAGCTCAAGGTAAAGAACTTGGAGCTT
CAACTCAAAGAAAACAAGAGGCAGCTCAGCAGCTCCTCAGGTAATACAGACACTCAGGCAGACGAGGATGAAAGA
GCCCAGGAGAGTCAGATTGATTTCCTAAATTCAGTAATAGTGGACCTTCAAAGGAAGAATCAAGACCTCAAGATG
AAGGTGGAGATGATGTCAGAAGCAGCCCTGAATGGGAACGGGGATGACCTAAACAATTATGACAGTGATGATCAG
GAGAAACAGTCCAAGAAGAAACCTCGCCTCTTCTGTGACATTTGTGACTGCTTTGATCTCCACGACACAGAGGAT
TGTCCTACCCAGGCACAGATGTCAGAGGACCCTCCCCATTCCACACACCATGGCAGTCGGGGTGAGGAACGCCCA
TACTGTGAAATCTGTGAGATGTTTGGACACTGGGCCACCAACTGCAATGACGACGAAACCTTC**TGA**TGAAGCCTC
CAGTGGAGAACTGGGCTTGCTCAGACGCACTCGCATTGACACAACGTAACACCAGCATTGTGTGTGCAGACTTCA
GGAGAACTCATGTTATTTTTTAACCCCGTCAACAAATCTAGGAAAATATTTTGATCTTCAACAAATTGCCCTTTA
GTCTCCCCGTATGAGTTAGAATAATAAATATTTAGTAGGTGAGTTTTCACCTCGAATTTTGTTTTCTTGATTTTT
ACGTTTGAAGACATTGCACCAGATGCCATTACATTTATTGGCCCCCCGACCTTGTAGAAAAACCCCTACCCTCAC
AATACCTTATTTAAGTAACTTTAAATTATGCCGTTACTTTTCATATTTGCACCTAAGATATTTCCAGGCTGCATT
TGTATATTTAGATTTTTTGGTTAAGCTTTGACACTGGAATGAGTTGAAAAAATGTGCCATTTTGCATTTTCATCT
ACTCATTTAAAGTATTTTATTCTTATTCAAAGAAATATCTGAGCTCTTTGCACTACCTGTTATCAGTAGTGCCTT
TACTTCAGGCTTGATAATACTTAGGTGTGATTATAAAATCATGAAGCAGGTAAAGGGAGGGGCAAGCCCCAAACT
GCTGTGGGGACATTTTATAATCTATATGCTGCACCCACTTAATCTACTGTGGTGTTTTGTTTATTAGTTTTGCAT
AATTTCAGCTTCTATATATTGTATGTATATATTTTTTAAAAATCTATATTTTGGGAAAAAAACATACACAATGTG
TCTTTCTTTTTGGACATTTACCTTTTTGAAAAAGAAAACACTTAAAATGATCATTAGGACATAACAGACTAGGCC
AGACATAGCATCTTGTGGCTTTGCAACCATTTTCATTTGTTTGTTTTCCTTTTATTTCTTCACCAGATTTAAATA
AAAGGAGGAATTTTCTCCAATTTTTTTTTCCTTCTCTGGCAGGTATCCCCAGCAGTCAATTAACAATAAGCCAGT
ATAAAACACCTAAATAACCAATCTACAATCTCCCTTCACAAGTTTTTTTACTGTTTTTAGATGAATGTACGATGA
GAAATTCAACGTTAATAATTCTGGATTTTCTTATCACAAAAAAGAAAATGAAGGACCTCAAAGCACCTGAACAGT
TTATCGACCAGTTTGAATCTATTTATCTTCATTTGAATGTCTTCTAGATATGTAAAAAGTCATAAAATGTATCTT
CCATGCTACATGTACAATAAGAACTTCTATAATTGTATATATGCCTTTGATGTATTTTCCCCTCAAGATTATCAA
CTGTGTGTTCGACAGTGAATATTCAATCTGGTACCAGTTGAAATTTTTGGTTATAAATGTAATACGAATTGTTTC
ACAAACAGAAAACATGTAAAGCAGTATTAAAATTTGGCCAAACAAGTGTTCTGTATCTACTTTTAATAAATGGTT
ATTCTTT

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FIGURE 636

MSMLKPSGLKAPTKILKPGSTALKTPTAVVAPVEKTISSEKASSTPSSETQEEFVDDFRVGERVWVNGNKPGFIQ
FLGETQFAPGQWAGIVLDEPIGKNDGSVAGVRYFQCEPLKGIFTRPSKLTRKVQAEDEANGLQTTPASRATSPLC
TSTASMVSSSPSTPSNIPQKPSQPAAKEPSATPPISNLTKTASESISNLSEAGSIKKGERELKIGDRVLVGGTKA
GVVRFLGETDFAKGEWCGVELDEPLGKNDGAVAGTRYFQCQPKYGLFAPVHKVTKIGFPSTTPAKAKANAVRRVM
ATTSASLKRSPSASSLSSMSSVASSVSSRPSRTGLLTETSSRYARKISGTTALQEALKEKQQHIEQLLAERDLER
AEVAKATSHVGEIEQELALARDGHDQHVLELEAKMDQLRTMVEAADREKVELLNQLEEEKRKVEDLQFRVEEESI
TKGDLETQTKLEHARIKELEQSLLFEKTKADKLQRELEDTRVATVSEKSRIMELEKDLALRVQEVAELRRRLESN
KPAGDVDMSLSLLQEISSLQEKLEVTRTDHQREITSLKEHFGAREETHQKEIKALYTATEKLSKENESLKSKLEH
ANKENSDVIALWKSKLETAIASHQQAMEELKVSFSKGLGTETAEFAELKTQIEKMRLDYQHEIENLQNQQDSERA
AHAKEMEALRAKLMKVIKEKENSLEAIRSKLDKAEDQHLVEMEDTLNKLQEAEIKVKELEVLQAKCNEQTKVIDN
FTSQLKATEEKLLDLDALRKASSEGKSEMKKLRQQLEAAEKQIKHLEIEKNAESSKASSITRELQGRELKLTNLQ
ENLSEVSQVKETLEKELQILKEKFAEASEEAVSVQRSMQETVNKLHQKEEQFNMLSSDLEKLRENLADMEAKFRE
KDEREEQLIKAKEKLENDIAEIMKMSGDNSSQLTKMNDELRLKERDVEELQLKLTKANENASFLQKSIEDMTVKA
EQSQQEAAKKHEEEKKELERKLSDLEKKMETSHNQCQELKARYERATSETKTKHEEILQNLQKTLLDTEDKLKGA
REENSGLLQELEELRKQADKAKAAQTAEDAMQIMEQMTKEKTETLASLEDTKQTNAKLQNELDTLKENNLKNVEE
LNKSKELLTVENQKMEEFRKEIETLKQAAAQKSQQLSALQEENVKLAEELGRSRDEVTSHQKLEEERSVLNNQLL
EMKKRESKFIKDADEEKASLQKSISITSALLTEKDAELEKLRNEVTVLRGENASAKSLHSVVQTLESDKVKLELK
VKNLELQLKENKRQLSSSSGNTDTQADEDERAQESQIDFLNSVIVDLQRKNQDLKMKVEMMSEAALNGNGDDLNN
YDSDDQEKQSKKKPRLFCDICDCFDLHDTEDCPTQAQMSEDPPHSTHHGSRGEERPYCEICEMFGHWATNCNDDE
TF

FIGURE 637

AGCGACCGCAGCCGGGGGGACGCGGGAGGATGGAGCAAGTGGAGATCCTGAGGAAATTCATCCAGAGGGTCCAGG
CCATGAAGAGTCCTGACCACAATGGGGAGGACAACTTCGCCCGGGACTTCATGCGGTTAAGAAGATTGTCTACCA
AATATAGAACAGAAAAGATATATCCCACAGCCACTGGAGAAAAAGAAGAAAATGTTAAAAAGAACAGATACAAGG
ACATACTGCCATTTGATCACAGCCGAGTTAAATTGACATTAAAGACTCCTTCACAAGATTCAGACTATATCAATG
CAAATTTTATAAAGGGCGTCTATGGGCCAAAAGCATATGTAGCAACTCAAGGACCTTTAGCAAATACAGTAATAG
ATTTTTGGAGGATGATATGGGAGTATAATGTTGTGATCATTGTAATGGCCTGCCGAGAATTTGAGATGGGAAGGA
AAAAATGTGAGCGCTATTGGCCTTTGTATGGAGAAGACCCCATAACGTTTGCACCATTTAAAATTTCTTGTGAGG
ATGAACAAGCAAGAACAGACTACTTCATCAGGACACTCTTACTTGAATTTCAAAATGAATCTCGTAGGCTGTATC
AGTTTCATTATGTGAACTGGCCAGACCATGATGTTCCTTCATCATTTGATTCTATTCTGGACATGATAAGCTTAA
TGAGGAAATATCAAGAACATGAAGATGTTCCTATTTGTATTCATTGCAGTGCAGGCTGTGGAAGAACAGGTGCCA
TTTGTGCCATAGATTATACGTGGAATTTACTAAAAGCTGGGAAAATACCAGAGGAATTTAATGTATTTAATTTAA
TACAAGAAATGAGAACACAAAGGCATTCTGCAGTACAAACAAAGGAGCAATATGAACTTGTTCATAGAGCTATTG
CCCAACTGTTTGAAAAACAGCTACAACTATATGAAATTCATGGAGCTCAGAAAATTGCTGATGGAGTGAATGAAA
TTAACACTGAAAACATGATCAGCTCCATAGAGCCTGAAAAACAAGATTCTCCTCCTCCAAAACCACCAAGGACCC
GCAGTTGCCTTGTTGAAGGGGATGCTAAAGAAGAAATACTGCAGCCACCGGAACCTCATCCAGTGCCACCCATCT
TGACACCTTCTCCCCCTTCAGCTTTTCCAACAGTCACTACTGTGTGGCAGGACAATGATAGATACCATCCAAAGC
CAGTGTTGCATATGGTTTCATCAGAACAACATTCAGCAGACCTCAACAGAAACTATAGTAAATCAACAGAACTTC
CAGGGAAAAATGAATCAACAATTGAACAGATAGATAAAAAATTGGAACGAAATTTAAGTTTTGAGATTAAGAAGG
TCCCTCTCCAAGAGGGACCAAAAAGTTTTGATGGGAACACACTTTTGAATAGGGGACATGCAATTAAAATTAAAT
CTGCTTCACCTTGTATAGCTGATAAAATCTCTAAGCCACAGGAATTAAGTTCAGATCTAAATGTCGGTGATACTT
CCCAGAATTCTTGTGTGGACTGCAGTGTAACACAATCAAACAAAGTTTCAGTTACTCCACCAGAAGAATCCCAGA
ATTCAGACACACCTCCAAGGCCAGACCGCTTGCCTCTTGATGAGAAAGGACATGTAACGTGGTCATTTCATGGAC
CTGAAAATGCCATACCCATACCTGATTTATCTGAAGGCAATTCCTCAGATATCAACTATCAAACTAGGAAAACTG
TGAGTTTAACACCAAGTCCTACAACACAAGTTGAAACACCTGATCTTGTGGATCATGATAACACTTCACCACTCT
TCAGAACACCCCTCAGTTTTACTAATCCACTTCACTCTGATGACTCAGACTCAGATGAAAGAAACTCTGATGGTG
CTGTGACCCAGAATAAAACTAATATTTCAACAGCAAGTGCCACAGTTTCTGCTGCCACTAGTACTGAAAGCATTT
CTACTAGGAAAGTATTGCCAATGTCCATTGCTAGACATAATATAGCAGGAACAACACATTCAGGTGCTGAAAAAG
ATGTTGATGTTAGTGAAGATTCACCTCCTCCCCTACCTGAAAGAACTCCTGAATCGTTTGTGTTAGCAAGTGAAC
ATAATACACCTGTAAGATCGGAATGGAGTGAACTTCAAAGTCAGGAACGATCTGAACAAAAAAAGTCTGAAGGCT
TGATAACCTCTGAAAATGAGAAATGTGATCATCCAGCGGGAGGTATTCACTATGAAATGTGCATAGAATGTCCAC
CTACTTTCAGTGACAAGAGAGAACAAATATCAGAAAATCCAACAGAAGCCACAGATATTGGTTTTGGTAATCGAT
GTGGAAAACCCAAAGGACCAAGAGATCCACCTTCAGAATGGACATGATTCAGGGAGCTAGAAGACACTTTAAGTT
ATACTGGAAAATTCAGGTGCCACTGAAAGCCAGATTTATAGTATTCCATCTTTAATATGTGGGACTAACAGCAGT
GTAGATTGTTACCTTAATATTTTTTGCTGGGACCATCTACCTGCCTTATACTACACTTAGGAAAAAGTATTACAT
ATGGTTTATTTTGAAACTTCAAGTATTATTGCCTTAATGTCTCTTAACCCTGTTACACGCTGCTTGTAGACATGT
TAATATAGTAATACCTTTATGATATATTGAGTTTAAGGACTACTCTTTTTCTGTTTTATCATGTATGCATTATTT
TGTATATGTACAGGGCAAGTAGGTATATAATTTGATAAAGTTGCAATTGAAATATTATTAACAGAAGATGTAAGA
AATTTCTGCATGGTCTAAATCTTTGTGTACTTTATTTGTAAATTATTTGCCCTGGAGTTTTAGAAAATAGTTTCT
GAATTTTAAACTTGCTGGATTCATGCAGCCAGCTTTGCAGGTTATCAGAGATCAAAGATTGTAATAATAATTTTG
TAAATTGTAAGCAAAAAGTTATTTTTATATTATATACAGTCTAATTGTTCATCCTAATTGTTCCTGTTTTCATCT
AGTCAGAGATTCAGTAAGTGCCTTGGAACAATATTGAATTCTCTTAGCTTGTGTGTGTTTCTTTAATATTTGAAC
TCAAGTGGGATTAGAAGACTATCAAAATACATGTATGTTTCAGGATATTTGACCTGTCATTAAAAAAAACAAACA
GTTTTACAGTG

FIGURE 638

MEQVEILRKFIQRVQAMKSPDHNGEDNFARDFMRLRRLSTKYRTEKIYPTATGEKEENVKKNRYKDILPFDHSRV
KLTLKTPSQDSDYINANFIKGVYGPKAYVATQGPLANTVIDFWRMIWEYNVVIIVMACREFEMGRKKCERYWPLY
GEDPITFAPFKISCEDEQARTDYFIRTLLLEFQNESRRLYQFHYVNWPDHDVPSSFDSILDMISLMRKYQEHEDV
PICIHCSAGCGRTGAICAIDYTWNLLKAGKIPEEFNVFNLIQEMRTQRHSAVQTKEQYELVHRAIAQLFEKQLQL
YEIHGAQKIADGVNEINTENMISSIEPEKQDSPPPKPPRTRSCLVEGDAKEEILQPPEPHPVPPILTPSPPSAFP
TVTTVWQDNDRYHPKPVLHMVSSEQHSADLNRNYSKSTELPGKNESTIEQIDKKLERNLSFEIKKVPLQEGPKSF
DGNTLLNRGHAIKIKSASPCIADKISKPQELSSDLNVGDTSQNSCVDCSVTQSNKVSVTPPEESQNSDTPPRPDR
LPLDEKGHVTWSFHGPENAIPIPDLSEGNSSDINYQTRKTVSLTPSPTTQVETPDLVDHDNTSPLFRTPLSFTNP
LHSDDSDSDERNSDGAVTQNKTNISTASATVSAATSTESISTRKVLPMSIARHNIAGTTHSGAEKDVDVSEDSPP
PLPERTPESFVLASEHNTPVRSEWSELQSQERSEQKKSEGLITSENEKCDHPAGGIHYEMCIECPPTFSDKREQI
SENPTEATDIGFGNRCGKPKGPRDPPSEWT

FIGURE 639

CGGCACGAGCGCCGCCGAGGATTCAGCAGCCTCCCCCTTGAGCCCCCTCGCTTCCCGACGTTCCGTTCCCCCCTG
CCCGCCTTCTCCCGCCACCGCCGCCGCCGCCTTCCGCAGGCCGTTTCCACCGAGGAAAAGGAATCGTATCGT**ATG**

TCCGCTATCCAGAACCTCCACTCTTTCGACCCCTTTGCTGATGCAAGTAAGGGTGATGACCTGCTTCCTGCTGGC
ACTGAGGATTATATCCATATAAGAATTCAACAGAGAAACGGCAGGAAGACCCTTACTACTGTCCAAGGGATCGCT
GATGATTACGATAAAAAGAAACTAGTGAAGGCGTTTAAGAAAAAGTTTGCCTGCAATGGTACTGTAATTGAGCAT
CCGGAATATGGAGAAGTAATTCAGCTACAGGGTGACCAACGCAAGAACATATGCCAGTTCCTCGTAGAGATTGGA
CTGGCTAAGGACGATCAGCTGAAGGTTCATGGGTTT**TAA**GTGCTTGTGGCTCACTGAAGCTTAAGTGAGGATTTC
CTTGCAATGAGTAGAATTTCCCTTCTCTCCCTTGTCACAGGTTTAAAAACCTCACAGCTTGTATAATGTAACCAT
TTGGGGTCCGCTTTTAACTTGGACTAGTGTAACTCCTTCATGCAATAAACTGAAAAGAGCCATGCTGTCTAGTCT
TGAAGTCCCTCATTTAAACAGAGGTCAAGCAATAGGCGCCTGGCAGTGTCAAGCCTGAAACCAAGCAATACCGTC
ATGTTTCAGCCAAGCCCAGAGCCCTAAGATTACAAACAACTATGGCCGGAACCTCCTCAGCTCTCCCTCTGCAGA
GTTCCCTACCCTAAGAGAATGTTACCACCTGAACAGTCCTCGGTGAATCTGAGAGGAGAGGATGGGGTAAGGCAG
AAGCACCAGCTGTACTACTAGAAGGGAGCTTTTGGTGGTAGATCCCCTGGTGTCTCCAACCTGACTAGGTGGACA
GAGCTCAAAGAGGCCCTCTTACCGCAAGCGAGGTGATAGGACATCTGGCTTGCCACAAAGGTCTGTTCGACCAGA
CATATCCTAGCTAAGGGATGTCCAAACATCAGAATGTGAGGCCAACCTTCTATCAGAGTTAAACTTTTGACAAGG
GAACAAATCTCAAACTGATCCATCAGTCATGTAGCTAGCTGTAGAGCTTGCAACTTAATAGCAGCAGCTGCCCAA
TGCCATGTGAAGTAACAAACTGGTTTTTGGTTTTTTTTTCCCCTTCAGTTTTAATGTTATGTGTAATGTATTTAA
ACCCTTATTTAAATAAAACTTGTTTTCAGAAAAAAAAAAAAAAAAAAAA

FIGURE 640

MSAIQNLHSFDPFADASKGDDLLPAGTEDYIHIRIQQRNGRKTLTTVQGIADDYDKKKLVKAFKKKFACNGTVIE
HPEYGEVIQLQGDQRKNICQFLVEIGLAKDDQLKVHGF

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FIGURE 641

CCGAGCTGTGCTTGTGGCTGCGGCTGCTAACTGGCTGCGCACAGGGAGCTGTCACC**ATG**CCTCACTCGTACCCAG
CCCTTTCTGCTGAGCAGAAGAAGGAGTTGTCTGACATTGCCCTGCGGATTGTAGCCCCGGGCAAAGGCATTCTGG
CTGCGGATGAGTCTGTAGGCAGCATGGCCAAGCGGCTGAGCCAAATTGGGGTGGAAAACACAGAGGAGAACCGCC
GGCTGTACCGCCAGGTCCTGTTCAGTGCTGATGACCGTGTGAAAAAGTGCATTGGAGGCGTCATTTTCTTCCATG
AGACCCTCTACCAGAAAGATGATAATGGTGTTCCCTTCGTCCGAACCATCCAGGATAAGGGCATCGTCGTGGGCA
TCAAGGTTGACAAGGGTGTGGTGCCTCTAGCTGGGACTGATGGAGAAACCACCACTCAAGGGCTGGATGGGCTCT
CAGAACGCTGTGCCCAATACAAGAAGGATGGTGCTGACTTTGCCAAGTGGCGCTGTGTGCTGAAAATCAGTGAGC
GTACACCCTCTGCACTTGCCATTCTGGAGAACGCCAACGTGCTGGCCCGTTATGCCAGTATCTGCCAGCAGAATG
GCATTGTGCCTATTGTGGAACCTGAAATATTGCCTGATGGAGACCACGACCTCAAACGTTGTCAGTATGTTACAG
AGAAGGTCTTGGCTGCTGTGTACAAGGCCCTGAGTGACCATCATGTATACCTGGAGGGGACCCTGCTCAAGCCCA
ACATGGTGACCCCGGGCCATGCCTGTCCCATCAAGTATACCCCAGAGGAGATTGCCATGGCAACTGTCACTGCCC
TGCGTCGCACTGTGCCCCCAGCTGTCCCAGGAGTGACCTTCCTGTCTGGGGGTCAGAGCGAAGAAGAGGCATCAT
TCAACCTCAATGCCATCAACCGCTGCCCCCTTCCCCGACCCTGGGCGCTTACCTTCTCCTATGGGCGTGCCCTGC
AAGCCTCTGCACTCAATGCCTGGCGAGGGCAACGGGACAATGCTGGGGCTGCCACTGAGGAGTTCATCAAGCGGG
CTGAGGTGAATGGGCTTGCAGCCCAGGGCAAGTATGAAGGCAGTGGAGAAGATGGTGGAGCAGCAGCACAGTCAC
TCTACATTGCCAACCATGCCTAC**TGA**GTATCCACTCCATACCACAGCCCTTGGCCCAGCCATCTGCACCCACTTT
TGCTTGTAGTCATGGCCAGGGCCAAATAGCTATGCAGAGCAGAGATGCCTTCACCTGGCACCAACTTGTCTTCCT
TTCTCTCTTCCCTTCCCCTCTCTCATTGCTGCACCTGGGACCATAGGATGGGAGGATAGGGAGCCCCTCATGACT
GAGGGCAGAAGAAATTGCTAGAAGTCAGAACAGGATGGCTGGGTCTCCCCCTACCTCTTCCAGCTCCCACAATTT
TCCCATGATGAGGTAGCTTCTCCCTGGGCTCTCCTTCTTGCCTGCCCTGTCTCCTGGGATCAGAGGGTAGTACAG
AAGCCCTGACTCATGCCTTGAGTACATACCATACAGCAAATAAATGGTAGCAAAACAAAAAAAAAAAAAAAAAAA
AAAAAAA

FIGURE 642

MPHSYPALSAEQKKELSDIALRIVAPGKGILAADESVGSMAKRLSQIGVENTEENRRLYRQVLFSADDRVKKCIG
GVIFFHETLYQKDDNGVPFVRTIQDKGIVVGIKVDKGVVPLAGTDGETTTQGLDGLSERCAQYKKDGADFAKWRC
VLKISERTPSALAILENANVLARYASICQQNGIVPIVEPEILPDGDHDLKRCQYVTEKVLAAVYKALSDHHVYLE
GTLLKPNMVTPGHACPIKYTPEEIAMATVTALRRTVPPAVPGVTFLSGGQSEEEASFNLNAINRCPLPRPWALTF
SYGRALQASALNAWRGQRDNAGAATEEFIKRAEVNGLAAQGKYEGSGEDGGAAAQSLYIANHAY

FIGURE 643A

AGTCTCCTTGCTCTGGGCTGCTCCAGGCCAGGCCATGCGGAAAGTGTGTTGTTATGAGGATTCAATGAGGAGACC
TGTATGAAGTGCCTTCCCCTGTGCCTGGCTCATAGCGAAAACAGAAGAACAGATTGCAGCAGAAGAGGCCTGGAA
TGAGACGGAGAAGGTGTGGCTGGTCCATAGGGACGGCTTCTCACTGGCCAGTCAACTCAAATCTGAGGAGCTCAA
CTTGCCTGAGGGGAAGGTGCGTGTGAAGCTGGACCACGATGGGGCCATCCTGGATGTGGATGAGGATGACGTTGA
GAAGGCTAATGCTCCCTCCTGCGACCGTCTGGAGGATCTGGCCTCACTGGTGTACCTCAATGAGTCCAGCGTCCT
GCACACCTTGCGCCAGCGCTATGGCGCTAGCCTGCTGCACACGTATGCTGGCCCCAGCCTGCTGGTTCTTGGCCC
CCGTGGGGCCCCTGCTGTGTACTCTGAGAAGGTG**ATG**CACATGTTCAAGGGTTGTCGGCGGGAGGACATGGCACC
CCACATCTATGCAGTGGCCCAGACCGCATACAGGGCGATGCTGATGAGCCGTCAGGATCAGTCAATCATCCTCCT
GGGCAGTAGTGGCAGTGGCAAGACCACCAGCTGCCAGCATCTGGTGCAGTACCTGGCCACCATCGCGGGCATCAG
CGGGAACAAGGTGTTTTCTGTGGAGAAGTGGCAGGCTCTGTACACCCTCCTGGAAGCCTTTGGGAACAGCCCCAC
CATCATTAATGGCAATGCCACCCGCTTCTCCCAGATCCTCTCCCTGGACTTTGACCAAGCTGGCCAGGTGGCCTC
AGCCTCCATTCAGACAATGCTTCTGGAGAAGCTGCGTGTGGCTCGGCGCCCAGCCAGTGAAGCCACATTCAACGT
CTTCTACTACCTGCTGGCCTGTGGGGATGGCACCCTCAGGACAGAGCTCCACCTCAACCACTTGGCAGAGAACAA
TGTGTTTGGGATTGTGCCACTGGCCAAGCCTGAGGAAAAGCAGAAGGCAGCTCAGCAGTTTAGTAAGCTGCAGGC
GGCCATGAAGGTGCTGGGCATCTCCCCCGATGAACAGAAGGCCTGCTGGTTCATTCTGGCTGCCATCTACCACCT
GGGGGCTGCGGGAGCCACCAAAGAAGCTGCTGAAGCTGGGCGCAAGCAGTTTGCCCGCCATGAGTGGGCCCAGAA
GGCTGCGTACCTACTGGGCTGCAGCCTGGAGGAGCTGTCCTCAGCCATCTTCAAGCACCAGCACAAGGGTGGCAC
CCTGCAGCGCTCCACCTCCTTCCGCCAGGGCCCCGAGGAGAGTGGCCTGGGAGATGGGACAGGCCCGAAACTGAG
TGCACTGGAGTGCCTTGAGGGCATGGCGGCCGGCCTCTACAGCGAGCTCTTCACCCTTCTCGTCTCCCTGGTGAA
TAGGGCTCTCAAGTCCAGCCAGCACTCACTCTGCTCCATGATGATTGTCGACACCCCGGGCTTCCAGAACCCTGA
GCAGGGTGGGTCAGCCCGCGGAGCCTCCTTTGAGGAGCTGTGCCACAACTACACCCAAGACCGGCTGCAGAGGCT
CTTCCACGAGCGCACCTTCGTGCAGGAGTTGGAAAGATACAAGGAGGAGAACATCGAGCTGGCGTTTGACGACTT
GGAACCCCCCACGGATGACTCTGTGGCTGCTGTGGACCAGGCCTCCCATCAGTCCCTGGTCCGCTCGCTGGCCCG
CACAGACGAGGCGAGGGGCCTGCTCTGGCTATTGGAAGAGGAGGCTCTGGTGCCAGGGGCCAGTGAGGACACCCT
CCTGGAGCGCCTTTTCTCCTATTATGGCCCCCAGGAAGGTGACAAAAAAGGCCAAAGCCCCCTTCTGCACAGCAG
CAAACCACACCACTTTCTCCTGGGCCACAGCCATGGCACCAACTGGGTAGAGTACAATGTGACTGGCTGGCTGAA
CTACACCAAGCAGAACCCAGCCACCCAGAATGTCCCCCGGCTCCTGCAGGACTCCCAGAAAAAAATCATCAGCAA
CCTGTTTCTGGGCCGCGCAGGCAGTGCCACGGTGCTCTCTGGCTCCATCGCGGGCCTGGAGGGCGGCTCGCAGCT
GGCACTGCGCCGGGCCACCAGCATGCGGAAAACCTTTACCACAGGCATGGTGGCTGTCAAAAAGAAGTCACTGTG
CATCCAGATGAAGCTACAGGTGGACGCCCTCATCGACACCATCAAGAAGTCAAAGCTGCATTTTGTGCACTGCTT
CCTGCCTGTAGCTGAGGGCTGGGCTGGGGAGCCCCGTTCCGCCTCCTCCCGCCGAGTCAGCAGCAGCAGTGAGCT
GGACCTGCCCTCGGGAGACCACTGCGAGGCTGGGCTCCTGCAGCTCGACGTGCCCCTGCTCCGCACCCAGCTCCG
CGGCTCCCGCCTGCTCGATGCCATGCGCATGTACCGCCAAGGTTACCCTGACCACATGGTGTTTTCCGAGTTCCG
CCGCCGCTTTGATGTCCTGGCCCCGCACCTGACCAAGAAACACGGGCGTAACTACATCGTGGTGGATGAAAGGCG
GGCAGTGGAGGAGCTGCTGGAGTGCTTGGATCTGGAGAAGAGCAGCTGCTGCATGGGCCTGAGCCGGGTGTTCTT
CCGGGCGGGCACCTTGGCACGGCTGGAGGAGCAGCGGGATGAACAAACCAGCAGGAACCTAACCCTGTTCCAAGC
AGCCTGCAGGGGCTACCTGGCCCGCCAGCACTTCAAGAAGAGAAAGATCCAGGACCTGGCCATTCGCTGTGTACA
GAAGAACATCAAGAAGAACAAAGGGGTGAAGGACTGGCCCTGGTGGAAGCTTTTTACCACAGTGAGGCCCCTCAT
CGAAGTACAGCTGTCAGAGGAGCAGATCCGGAACAAAGACGAGGAGATCCAGCAGCTGCGGAGCAAGCTCGAGAA
GGCGGAGAAGGAGAGGAACGAGCTGCGGCTCAACAGTGACCGGCTGGAGAGCCGGATCTCAGAGCTGACATCGGA
GCTGACAGATGAGCGTAACACAGGAGAGTCCGCCTCCCAGCTGCTGGACGCGGAGACAGCAGAGAGGCTCCGGGC
TGAGAAGGAGATGAAGGAACTGCAGACCCAGTACGATGCACTGAAGAAGCAGATGGAGGTTATGGAAATGGAGGT
GATGGAGGCCCGTCTCATCCGGGCAGCGGAGATCAACGGGGAAGTGGATGATGATGATGCAGGTGGCGAGTGGCG
GCTGAAGTATGAGCGGGCTGTGCGGGAGGTGGACTTCACCAAGAAACGGCTCCAGCAGGAGTTTGAGGACAAGCT
GGAGGTGGAGCAGCAGAACAAGAGGCAGCTGGAACGGCGGCTCGGGGACCTGCAGGCAGATAGTGAGGAGAGTCA
GCGGGCTCTGCAGCAGCTCAAGAAGAAGTGCCAGCGACTGACGGCTGAGCTGCAAGACACCAAGCTGCACCTGGA
GGGCCAGCAGGTCCGCAACCACGAACTGGAGAAGAAGCAGAGGAGGTTTGACAGTGAGCTCTCGCAGGCACATGA
GGAGGCCCAGCGGGAGAAGCTGCAGCGGGAGAAGCTGCAGCGGGAGAAGGACATGCTCCTCGCTGAGGCTTTCAG

FIGURE 643B

CCTGAAGCAGCAACTAGAGGAAAAAGACATGGACATTGCAGGGTTCACCCAGAAGGTTGTGTCTCTAGAGGCAGA
GCTCCAGGACATTTCTTCCCAAGAGTCCAAGGATGAGGCTTCTCTGGCCAAGGTCAAGAAACAGCTCCGGGACCT
GGAGGCCAAAGTCAAGGATCAGGAAGAAGAGCTGGATGAGCAGGCAGGGACCATCCAGATGCTGGAACAGGCCAA
GCTGCGTCTGGAGATGGAGATGGAGCGGATGAGACAGACCCATTCTAAGGAGATGGAGAGTCGGGATGAGGAGGT
GGAGGAGGCCCGGCAGTCGTGTCAGAAGAAGTTAAAACAGATGGAGGTGCAGCTAGAGGAAGAGTATGAGGACAA
GCAGAAGGTTCTGCGAGAGAAGCGGGAGCTGGAGGGCAAGCTCGCCACCCTCAGCGACCAGGTGAACCGGCGGGA
CTTTGAGTCAGAGAAGCGGCTGCGGAAGGACCTGAAGCGCACCAAGGCCCTGCTGGCAGATGCCCAGCTCATGCT
GGACCACCTGAAGAACAGTGCTCCCAGCAAGCGAGAGATTGCCCAGCTCAAGAACCAGCTGGAGGAGTCAGAGTT
CACCTGTGCGGCAGCCGTGAAAGCACGGAAAGCAATGGAGGTGGAGATCGAAGACCTGCACCTGCAGATTGATGA
CATCGCCAAAGCCAAGACAGCGCTGGAGGAGCAGCTGAGCCGCCTTCAGCGTGAGAAGAATGAGATCCAGAACCG
GCTGGAGGAAGATCAGGAAGACATGAACGAATTGATGAAGAAGCACAAGGCTGCCGTGGCTCAGGCTTCCCGGGA
CCTGGCTCAGATAAATGATCTCCAAGCTCAGCTAGAAGAAGCCAACAAAGAGAAGCAGGAGCTGCAGGAGAAGCT
ACAAGCCCTCCAGAGCCAGGTGGAGTTCCTGGAGCAGTCCATGGTGGACAAGTCCCTGGTGAGCAGGCAGGAAGC
TAAGATACGGGAGCTGGAGACACGCCTGGAGTTTGAAAGGACGCAAGTGAAACGGCTGGAGAGCCTGGCTAGCCG
TCTCAAGGAAAACATGGAGAAGCTGACTGAGGAGCGGGATCAGCGCATTGCAGCCGAGAACCGGGAGAAGGAACA
GAACAAGCGGCTACAGAGGCAGCTCCGGGACACCAAGGAGGAGATGGGCGAGCTTGCCAGGAAGGAGGCCGAGGC
GAGCCGCAAGAAGCACGAACTGGAGATGGATCTAGAAAGCCTGGAGGCTGCTAACCAGAGCCTGCAGGCTGACCT
AAAGTTGGCATTCAAGCGCATCGGGGACCTGCAGGCTGCCATTGAGGATGAGATGGAGAGTGATGAGAATGAGGA
CCTCATCAACAGTGAGGGAGACTCTGATGTGGACTCGGAGCTGGAGGACCGTGTTGACGGGGTCAAGTCCTGGTT
GTCAAAAAACAAGGGACCTTCCAAGGCAGCTTCTGATGATGGCAGCTTAAAGAGTTCCAGCCCCACCAGCTACTG
GAAGTCCCTTGCCCCTGATCGGTCAGATGATGAGCACGACCCTCTCGACAACACCTCCAGACCGCGATACTCCCA
CAGTTATCTGAGTGACAGCGACACAGAGGCCAAGCTGACGGAGACTAACGCATAGCCCAGGGGAGTGGTTGGCAG
CCCTCTCACCCCAGGGCCTGTGGCTGCCTGGGCACCTCTCCCAGGAAGTGGTGGGGCACCGGTCTCCCCCACCCG
ACTGCTGATCTGCATGGGAAACACCCTGACCTTCTTCTGTCAGGGGCACTTTCCAGGCTATGGGTGTCTGATGTC
TCCACGTGGAAGAGGTGGGGGAAAGAGGAGTTTCTGAAGAGAACTTTTTGCTCCTCTGTCTCAAAATGCCAGACT
CTTGGCTTCTACCCTGTGTCACCGTGGGCAGTGGCAGGTGGCCTGGCACTGCATGGAGCCAGCACGTTGACCTCC
CTCTCAGCTCCCTGCTCAGGGACGGTGGACAGGTTGCCTACTGGGACACTCTAGGTTGCTGGGTCCATGGGGAGG
ATTGGGGGAGGAGAAGCAGTGCCTTCCCTCTCGTGTGGGGTGGGGGCTCTCTCTTCTTGGTGCCTGCTGTCTTTC
TACTTTTTAATTTAAATACCCAACCTCTCCATCACAGCTGCATCCCTGAGAGTGGGAGGGGGCTGTAGTGGTAGC
TGGGGCTCCCAAGAACGACTCGGGAATGTCATCTCCATCTTCACCCTTCAGAGAGCAGTCCTTTCTCTGTGCAGC
TGGAGACGCTGGTGAGGAGAGCCGGGTCCAGGTTCTTAAGAATGAGGTGCGGAGGGGCTCTCCGGTGCTGCTGGG
CTGGGTTGAGCAAGCCTACGCAGACAAGTGTGTGTGTGGACCATCCGCACCTCCAGCCCCCACCCCACCCTCTTT
GTCTCAGCGTGTTATGTGCAATGACCTATTTAAGGTAAACCCATTCCAACTACAGCAGTTCAGGGCTGATCCAAG
CACTGCCTCCCTCCTGCTCTGTCCAGGTGGTCTGGACCATAAACTCAACTTGAGAGGGAAGGCTTGGGGTTGAGG
ACTTGTGATCAGAAAAACTGAAGATGGAAGTTTTGGCCGGTGCTCATTAGACATGAGTCCTCACTCTGTGTCCTG
AGCCCGTGTCATTCTTCCAACCTCCCTGCCCCCACACACTTATCCCAGACACAACACCATGTGGTCTGGAGGTCC
CAGCCCCCACCCTAAAAAGGTTATCCCTGAGAACTCCACCAGACTTGGGAGCCCAAGTGCAGTGCCTGGTGCTGC
TCCCATCTGCCGCCCCCCTTCTCTCCTGCAATTGGTTTGTACTCACTGGGCTGTGCTCTCCCCTGTTTACCCGAT
GTATGGAAATAAAGGCCCTTTTCCTCCTG

FIGURE 644

MHMFKGCRREDMAPHIYAVAQTAYRAMLMSRQDQSIILLGSSGSGKTTSCQHLVQYLATIAGISGNKVFSVEKWQ
ALYTLLEAFGNSPTIINGNATRFSQILSLDFDQAGQVASASIQTMLLEKLRVARRPASEATFNVFYYLLACGDGT
LRTELHLNHLAENNVFGIVPLAKPEEKQKAAQQFSKLQAAMKVLGISPDEQKACWFILAAIYHLGAAGATKEAAE
AGRKQFARHEWAQKAAYLLGCSLEELSSAIFKHQHKGGTLQRSTSFRQGPEESGLGDGTGPKLSALECLEGMAAG
LYSELFTLLVSLVNRALKSSQHSLCSMMIVDTPGFQNPEQGGSARGASFEELCHNYTQDRLQRLFHERTFVQELE
RYKEENIELAFDDLEPPTDDSVAAVDQASHQSLVRSLARTDEARGLLWLLEEEALVPGASEDTLLERLFSYYGPQ
EGDKKGQSPLLHSSKPHHFLLGHSHGTNWVEYNVTGWLNYTKQNPATQNVPRLLQDSQKKIISNLFLGRAGSATV
LSGSIAGLEGGSQLALRRATSMRKTFTTGMVAVKKKSLCIQMKLQVDALIDTIKKSKLHFVHCFLPVAEGWAGEP
RSASSRRVSSSSELDLPSGDHCEAGLLQLDVPLLRTQLRGSRLLDAMRMYRQGYPDHMVFSEFRRRFDVLAPHLT
KKHGRNYIVVDERRAVEELLECLDLEKSSCCMGLSRVFFRAGTLARLEEQRDEQTSRNLTLFQAACRGYLARQHF
KKRKIQDLAIRCVQKNIKKNKGVKDWPWWKLFTTVRPLIEVQLSEEQIRNKDEEIQQLRSKLEKAEKERNELRLN
SDRLESRISELTSELTDERNTGESASQLLDAETAERLRAEKEMKELQTQYDALKKQMEVMEMEVMEARLIRAAEI
NGEVDDDDAGGEWRLKYERAVREVDFTKKRLQQEFEDKLEVEQQNKRQLERRLGDLQADSEESQRALQQLKKKCQ
RLTAELQDTKLHLEGQQVRNHELEKKQRRFDSELSQAHEEAQREKLQREKLQREKDMLLAEAFSLKQQLEEKDMD
IAGFTQKVVSLEAELQDISSQESKDEASLAKVKKQLRDLEAKVKDQEEELDEQAGTIQMLEQAKLRLEMEMERMR
QTHSKEMESRDEEVEEARQSCQKKLKQMEVQLEEEYEDKQKVLREKRELEGKLATLSDQVNRRDFESEKRLRKDL
KRTKALLADAQLMLDHLKNSAPSKREIAQLKNQLEESEFTCAAAVKARKAMEVEIEDLHLQIDDIAKAKTALEEQ
LSRLQREKNEIQNRLEEDQEDMNELMKKHKAAVAQASRDLAQINDLQAQLEEANKEKQELQEKLQALQSQVEFLE
QSMVDKSLVSRQEAKIRELETRLEFERTQVKRLESLASRLKENMEKLTEERDQRIAAENREKEQNKRLQRQLRDT
KEEMGELARKEAEASRKKHELEMDLESLEAANQSLQADLKLAFKRIGDLQAAIEDEMESDENEDLINSEGDSDVD
SELEDRVDGVKSWLSKNKGPSKAASDDGSLKSSSPTSYWKSLAPDRSDDEHDPLDNTSRPRYSHSYLSDSDTEAK
LTETNA

FIGURE 645

GGGCGCAGCACACTCCCAGCCGGCCGCAGCCTGACACGCCGCGCGGCCCCCCAGTCTCCCGCGGCTGCTCCCCCA
GGCATGGCACAGGGCCTCGCCTCACTATGGCAGCAGCACGGCACAGCACGCTCGACTTCATGCTCGGCGCCAAAG
CTGATGGTGAGACCATTCTAAAAGGCCTCCAGTCCATTTTCCAGGAGCAGGGGATGGCGGAGTCGGTGCACACCT
GGCAGGACCATGGCTATTTAGCAACCTACACAAACAAGAACGGCAGCTTTGCCAATTTGAGAATTTACCCACATG
GATTGGTGTTGCTGGACCTTCAGAGTTATGATGGTGATGCGCAAGGCAAAGAAGAGATCGACAGTATTTTGAACA
AAGTAGAGGAAAGAATGAAAGAATTGAGTCAGGACAGTACTGGGCGGGTGAAACGATTACCACCCATAGTGCGAG
GAGGAGCCATCGACAGATACTGGCCCACCGCCGACGGGCGCCTGGTTGAATATGACATAGATGAAGTGGTATATG
ACGAAGATTCACCTTATCAAAATATAAAAATTCTACACTCGAAGCAGTTTGGAAATATTCTCATCCTTAGTGGGG
ATGTTAATTTGGCAGAGAGTGATTTGGCATATACCCGGGCCATCATGGGCAGTGGCAAAGAAGATTACACTGGCA
AAGATGTACTCATTCTGGGAGGTGGAGACGGAGGCATATTGTGTGAAATAGTCAAACTAAAACCAAAGATGGTCA
CTATGGTAGAGATTGACCAAATGGTGATTGATGGGTGTAAGAAATACATGCGAAAAACGTGTGGCGATGTCTTAG
ACAATCTTAAAGGAGACTGCTATCAGGTTCTAATAGAAGACTGTATCCCGGTACTGAAGAGGTACGCCAAAGAAG
GGAGAGAATTTGATTATGTGATTAATGATTTGACAGCTGTTCCAATCTCCACGTCTCCAGAAGAAGATTCCACAT
GGGAGTTTCTCAGACTGATTCTTGACCTCTCAATGAAAGTGTTGAAACAGGATGGGAAATATTTTACACAGGGGA
ACTGTGTCAATCTGACAGAAGCACTGTCGCTCTATGAAGAACAGCTGGGGCGCCTGTATTGTCCTGTGGAATTTT
CAAAGGAGATCGTCTGTGTCCCTTCATACTTGGAATTGTGGGTATTTTACACTGTTTGGAAGAAAGCTAAACCCT
GAAGATCAGTAGCCCCTAATCACATGTGCTGCAAATAGCCTTCCTGACCTCCATATGCTGTACATGACATCAAAA
TGAGTCAGGCAATTGATTGTGAATTCCTTAAAGTTTTCCTTTTTTTAATAATTATTTTTAATTTAAAAAAGCAAA
TGGAAAATGTATATTTTGATGAGCTTAGGGTGTTTTTTTTTTGAAAGTCAGCTGAAGGATGGTTAGACAGCACAG
CGAAGACTGCTAAATGCACTGACCCCCCCCATTAGAATGTGATTTTTGTTCCTTTTTATTTCTCTGTGGGCTTTT
GTTTTTGTTTTTGTTTTGGTAGATCTTCAATTTGGATATTTGGAGGAGTGAACATCGTTGTTTTGCTGGAGGGAA
GATCTTGATGGTGTTTCTTTCCCCAAAAATTGACTTAGATATTAAAATTTGGTGCTTATAAGAGAGAGTTAAAAA
AAAATAGGATTGCTTCAATTAAAATTACAAAAGAGACAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 646

MAAARHSTLDFMLGAKADGETILKGLQSIFQEQGMAESVHTWQDHGYLATYTNKNGSFANLRIYPHGLVLLDLQS
YDGDAQGKEEIDSILNKVEERMKELSQDSTGRVKRLPPIVRGGAIDRYWPTADGRLVEYDIDEVVYDEDSPYQNI
KILHSKQFGNILILSGDVNLAESDLAYTRAIMGSGKEDYTGKDVLILGGGDGGILCEIVKLKPKMVTMVEIDQMV
IDGCKKYMRKTCGDVLDNLKGDCYQVLIEDCIPVLKRYAKEGREFDYVINDLTAVPISTSPEEDSTWEFLRLILD
LSMKVLKQDGKYFTQGNCVNLTEALSLYEEQLGRLYCPVEFSKEIVCVPSYLELWVFYTVWKKAKP

FIGURE 647A

ATTATGGGCTGTGGGTGCCGCTGAGCAAGATGGAGCTGTCTGCAGTGGGCGAGCGGGTCTTCGCGGCCGAATCCA
TCATCAAACGGCGGATCCGAAAGGGACGCATCGAGTACCTGGTGAAATGGAAGGGGTGGGCGATCAAGTACAGCA
CTTGGGAGCCCGAGGAGAACATCCTGGACTCGCGGCTCATTGCAGCCTTCGAACAAAAGGAGAGGGAGCGTGAGC
TGTATGGGCCCAAGAAGAGGGGACCCAAACCCAAAACTTTCCTCCTGAAGGCGCGGGCCCAGGCCGAGGCCCTCC
GCATCAGTGATGTGCATTTCTCTGTCAAGCCGAGCGCCAGTGCCTCCTCGCCCAAGCTGCACTCCAGCGCAGCCG
TGCACCGGCTCAAGAAGGACATCCGCCGCTGCCACCGTATGTCCCGCCGTCCCCTGCCCCGCCCGGACCCGCAGG
GGGGCAGCCCCGGACTGCGCCCGCCCATTTCGCCCTTCTCGGAGACGGTGCGCATCATCAACCGCAAGGTGAAGC
CGCGGGAGCCCAAGCGGAACCGCATCATCCTGAACCTGAAGGTGATCGACAAGGGCGCTGGCGGCGGGGGCGCCG
GGCAGGGGGCCGGGGCGCTGGCCCGCCCCAAAGTCCCCTCGCGGAACCGCGTTATAGGCAAGAGCAAGAAGTTCA
GCGAGAGCGTCCTGCGTACACAGATCCGCCACATGAAGTTCGGCGCCTTTGCGCTGTACAAGCCTCCGCCCGCCC
CCCTGGTAGCCCCGTCCCCCGGCAAGGCTGAGGCCTCAGCCCCGGGCCCTGGGCTACTTCTGGCCGCCCCCGCCG
CCCCCTACGACGCCCGCAGCTCTGGCTCCTCCGGCTGCCCCTCGCCTACACCACAGTCCTCTGACCCCGACGACA
CGCCCCCCAAGCTCCTCCCCGAGACCGTGAGCCCATCCGCCCCCAGCTGGCGCGAGCCGGAGGTGCTCGACCTGT
CCCTCCCTCCCGAGTCGGCAGCCACCAGCAAGCGGGCACCGCCTGAGGTCACAGCTGCTGCCGGCCCGGCACCTC
CCACGGCCCCTGAGCCCGCCGGTGCCTCCTCCGAGCCCGAGGCTGGGGACTGGCGCCCCGAGATGTCACCCTGCT
CCAATGTGGTCGTCACCGATGTCACCAGCAACCTCCTGACGGTCACAATCAAGGAATTCTGCAACCCTGAGGATT
TCGAGAAGGTGGCTGCTGGGGTAGCAGGCGCCGCTGGGGGCGGTGGCAGCATTGGGGCGAGCAAGTGAGGGGGCT
CCACCAAGGAGGGGGGCTTGGGGGGGCCCTCCTGCCCGAAGTCATACTCTTGCTCCCACCCCACCCTTGCCCCCA
GCCCTCTCTCCCTGTGCTTTGCTTGTCTCAAATGGCTCGGTGTTGACCCAGGGATGGGGCTGGGTAGTTGGGGTC
CCAGAAAGCCGGGGGTAGGGGCCACCCTGGAATGGGGCAGGGGAAGGGCACACCCCCTGCCCATGCATGGTAGCC
CACTGGGTGGTTTCTGGAAAGCCCTAGAAACTAGGGTTCCTCTGCCCCTTCCACATCCCACCTGTCTCTCTAGCT
TGCTTCCTGCTCTCCTGTGCGGCGTCTGATTTCTCGGTGCTAACCTGGCAGCTGTGGGGCCCTTAGGAGCCCCCC
ACCGAGGGTGGACACAGTCCCTTTCCTTCCTGCAGATGCCTAGGCAGGAGGAGGGCTTCCTGCCTGTTTGGCAAA
GTCCCAGGCAGAGGCCAAGGATGAGGCCTGACTCGGCTCCTCCCTCCACATCAGCCAGGGCATCAGAAGTTGGGC
CAGGGCGGGGTCTTCCCTGCTCGATTTTGGACGAGGCCTAAGTAGACCCCCTATGCCCTGCCCCAGCCCTGGCTC
TTTCCTAACCCCCTCAACGGTGGGAGGAACTGGCAGAGGGTGCGCCTGGCCACAGCCTCCCCGCATCTAAAGGCC
CCTTCAGTTCTTGACCAAAGGTGCTACGAGAACCTGCCGTGGAAACTTCCAGTTGTGCGTCTGCCCCACTCGCTG
TGTTTGTCCGTGGGTTCATACATGCATTGGGTGCTAGGCCCCAGGCTGCCGGGTGGCACCCTTTACAGTTCCTTT
GAACAGGGGCATTGAAGGCCTGGACTGCCTCTCGCCTCAGTAGGCCTGGGGACCAGGCTTGGGTCTGGAGGTTTG
CTGTGGAAGTCACCAGGCCTCCCCTCCTGGCCCAGGTGTGCTGGGGGCACCGTGCCCCCCACCCCCCTGCCCTCC
TCAGGGTGGTCAGCCCAACCTGTCGGACCTTCACTTCACATCATGGTGGGGACCGAGATAGAGAGGGAGACCCCA
TTCCAAGCTCCCTCTTCCTCCGGGTGTTTGGGGAGGATGCTGAAGAATCCATTCCCGAGGGCCTCCCGGCTTGTC
CCAGCCCCTCTTTTGCTTCTGACCACGGAGGCTTTCTCACAGCCCAGCCTGCCTGAAGCAAAGGAGGCTCCCGTG
TCCTGGGCAGCTTCTGTTTCCCTCTGCTGCCTGGGAGCTGAGGCACCCGTGCCAGTGGCAGAGGCCACAGCCCCA
GCCTTAGGCCAGGCCCTGGGAGGGCAGGCAGGCAAAGGGGAGACCAGAGGGTCTGTGTTCTCCAGGAGAATGAGG
GTGTTGGTCCCAGAATTGGGACCGGGGCCCCGCTGGCCAGCCCTGGGCCACTTCCCGGGTCTCCATTGTGCGTGG
GTGGCGTGTTCCAGGCGTGGCTGGAGCTGGCTTCCTGGCTGTGCTGCCATGGGCCCCTCCCTCAGAAGCACGTTG
GCAGGAGGCCGATCAGAACCCTAGCGCCTTTGGTCCTAAGAATGGGAGGCTGCCTTCCTTCCCAATCTCCCTGCC
AGGGCCCACAGCGTGGCCCTAGCCCTCCCCTCCCCGGGATGTAGAACGGGGACCCTCGCAGGGTTGGGGCGGGGG
CTGATACTCCTCGGCCCCTCCCTACCCTGCCCTGTGTGTTGGCTTTGTGGCCGTCCAAGTGCCAATTGGCTTTTC
GCCCAAATAAGGGCTGGTATTTCTCCTCTGTCCTTGGAGGTGATTTCCCCCTGACCCCCTCCCCCAGGTGAGTGA
CCACCTGGGTGCCAGTTACAGGTGTTTCCAGAGACCATAGAAATGTGTTTTCCTGAGAGTTCGTGTCATTCGTGA
CTTTTTTGTAAAGAAGTTGTGTTTTCAGAGGTGATTTTATGACAGGAAAGTGAAAGAATTAGTTTTGCAAAAAAA
CAAAAACAAAAAAAGAGGAAAAAAAAAAGAAATAGAAAAAAATATTGTGGGATTCCTATGGGGGGGTGGCGGGGG
AGAAAGAGCTATTTAAGAAAAAATAGTAACGCAGTGATTGCACAGGTGAGGTGGCAATGTCAGGATGGGGCGGAG
GCCTGGGCCCAGCTGGCAGGTCCCCTGGCATCGCAGGCACTGTGGAGAGGGCCTGGACCCAGATCTCCACACCCG
TGCTTGCTCAAAGGGAAGGACAACAGCGGGCCCCCGGGAGCTAACCCAAGCTGCAGGTCCCGGCAAGCTGAGGTT
TGGGAGGGTGGGGGTTGTCACTGGTGATTTTCTCCAGGGGGCTGGTGAGTGGGCAGTTTGGTTTCTTGCCCCCTT

FIGURE 647B

CTGTTCCTTTCCCAGTTGTTGGGCCATCTGGTCCCCACCACCGCCACCCTATGGGGGAGACCTCCCTCCCCACGG
GTCACCCTAAAGCCCACAACCTCTCTGAGCCTCCCTGGCCTGAAAGGGGATGCAGGCTTCAGGAGGCAAGAAGCT
GGGCCCCTGGGGGTGGCTGGGGAGAGGGAATGCATTTCCCTTGCCACAGGTGGTCTGCTTCTGCTGGCCTGAGCT
CCAAGTGGAGCAGCCCGGGCCAGCCTTGGTGCATGAAGAGGCACCAGGCACACCGCCTTGAGGTGGGCAGTGCCC
ATGGGGGCCCGAGTGGATGGGACCGAGGGTGAGTGGAGCCTCCTTCCTCCCCTCTCTAGTACCCCCGCCTCCCAC
ACACTTGCACGGATCGGCCTCCCTTGGGAGATCAGCCTCCATGGGCCCCTCGTCCACCCTTGCTGCTTTCCATTT
GCCTAATTACCAAGCAGAAGTTGCAATCTGGTTTGCTTTATTTTTGTATGTGAAATAACCCCCAAAGCCCAATCT
CCTCCTACGTTCAATATTGGTTGGGGCATCCGTCATCTCCCCTTAAGTGCGCCCCCTCCCCACCCAAGTATCATA
GGAAACCGGTGAGGTCTGGTGTCTCTGGTTTGAGACGGTAAGTTGGGACCCATCCCTGTCTGGGTGCCCACTCTG
ACCTTTAGTTTGCCCTTCTGTGAAATGGGTGTATTGGGTAGCAAGCCCTCTTCAGAAAGCGCTGCTGGTGTCAGA
GCAGCTGCCCAGTACCAGGTGGGGGGTCAAGGTTGCTGGTACTGGGGCCCCCAGCTGCCCACAACCCCTCTTTGT
TCTCACCCTGCAAAGGGGTCAAGGTCAAAATGAGCCTCATCCTTCCTATGATCTGGGAAGAGGTGATGATCAAGT
CCCCAACTTCAGTGTGAGGTGGACAGAGTTGGGGGGATGGCCCCTTTTTGAAGAGGTGAAAATGGTTTTGGAGAA
GCGCAGCTGCTTCACTGGGGGAATGCGGCAGGGACTGGGGCCCAGGATGCTTTGGCCTATGGGGAAAAGCCCTTT
AAAAGGCAGGGCCCAGGCCCTGGAGCCAGCACAAGACTGGCCTCGAGCCCCTGAGCCAGGAGGTCCTGGAGGAGA
GCCAGGCCGGTGGGCCCGCCCAAGGCTGGAGGGTCAGCCCCAACAGGGAGCTGGGTTGGCCAGGGGGCTGGACTG
CTACCAGCCTCTCTGGCCTATGGGGACCCAAGAGGACACATCCCCCTTTTGCCCACTCTTCTGTGTCATTTTGTT
GTTTTGGTTTGTGGTGGTTTTTCTTTTTTCTTTTGTTTTTCTTTTTTCTTTCTTTCTTTTTTTTTTTTTTTTTT
TTTTTTTTGCACTTCGCCCACACAGGACAGTGGAGCCCCACCTGGTCAGTTCCACTTCCGGGCTCCCATGCACTT
GCCCAAGGCGGCCTCTTTGGGACGGGGATGGTTTGAGGAAACACTTTTAAAGAAAAAAGGAAGACATTGAAAGGT
TTTAGTTTCTTCCCTATCTGCATGTCCTCTCATATAGAAAGCCCAGAATTAGGGGCTAGAACTCCAGGAGAGGGT
CTCCCCGACTCATCTCTTGCTGACGGTCACCAGGATGCAGAAATAGGGAGATGGTTAGTGGGGGCCAAAGATGCC
CCCTCCCAGGCCTTCGTGGTTCCCTCCTCCGCCCCCTGCAATCTTTGGAGGAGTCAGTGCCTCACTCCAGCAGTG
AGTGCCTACTGTATGCAGGTAGTCAGCCAGGCAAAGAGAGACTAACGGTCTCATGGGGGAACCCTCTTGCGGGAG
GCCGGGTAGCTGGAGCGAAGCGTTCCGGCTGCCCTTGCTGCTGGGTGGAGTGGAGAGGGAGACTTCTTTTTGTTG
GTTTTAATTTAAAAACACAAAGGCCTAAAGAAATACGTATCTTATAATTTTTTTAATTTTTGAGACGTTCATTTA
ATGAATTGTGCACGAATGAATTCTATATATATAAAATATACATATATAGCTCTATATTTGGGGAGGGGCACTGTC
TCTTTTTTCTCTCATTTTTAAAATGAAGTGTTGTTGCCTTTGTATGTGGTTCAACCATCCAGCTCCCAGCTGGCT
AAACTTTGCCTCCAGTGGTCAAAGATGGGAAAAGAGTGGGGTTGGCAGGAGATGGAAAACGGAGGTGCCGCCCCA
GCATGGGGGGCAGGTCCCCCAGTCCACCCTGCCCCTCCCCCTGTGGAGAAGACGCTTAGTTGGGGGTGTGGGTTT
GGGCTCCATTCTGGATTCGGCGGTTCCGGGGGAGGGGTGGGTCTGTGCCGATTACTCTGTCTTGTACGTTTGTTC
TGCTGCTCTTCAATATTGTATCAACGCCAGGAAAGGGGGGTGAAAAGCCTCTTTTACCCCCCAAATAAATTGTCA
CATTCCGAAGCTGA

FIGURE 648

MELSAVGERVFAAESIIKRRIRKGRIEYLVKWKGWAIKYSTWEPEENILDSRLIAAFEQKERERELYGPKKRGPK
PKTFLLKARAQAEALRISDVHFSVKPSASASSPKLHSSAAVHRLKKDIRRCHRMSRRPLPRPDPQGGSPGLRPPI
SPFSETVRIINRKVKPREPKRNRIILNLKVIDKGAGGGGAGQGAGALARPKVPSRNRVIGKSKKFSESVLRTQIR
HMKFGAFALYKPPPAPLVAPSPGKAEASAPGPGLLLAAPAAPYDARSSGSSGCPSPTPQSSDPDDTPPKLLPETV
SPSAPSWREPEVLDLSLPPESAATSKRAPPEVTAAAGPAPPTAPEPAGASSEPEAGDWRPEMSPCSNVVVTDVTS
NLLTVTIKEFCNPEDFEKVAAGVAGAAGGGGSIGASK

FIGURE 649A

GCCCCGAGTGCAATCGCGGGAAGCCAGGGTTTCCAGCTAGGACACAGCAGGTCGTGATCCGGGTCGGGACACTGC
CTGGCAGAGGCTGCGAGCATGGGGCCCTGGGGCTGGAAATTGCGCTGGACCGTCGCCTTGCTCCTCGCCGCGGCG
GGGACTGCAGTGGGCGACAGATGTGAAAGAAACGAGTTCCAGTGCCAAGACGGGAAATGCATCTCCTACAAGTGG
GTCTGCGATGGCAGCGCTGAGTGCCAGGATGGCTCTGATGAGTCCCAGGAGACGTGCTTGTCTGTCACCTGCAAA
TCCGGGGACTTCAGCTGTGGGGGCCGTGTCAACCGCTGCATTCCTCAGTTCTGGAGGTGCGATGGCCAAGTGGAC
TGCGACAACGGCTCAGACGAGCAAGGCTGTCCCCCCAAGACGTGCTCCCAGGACGAGTTTCGCTGCCACGATGGG
AAGTGCATCTCTCGGCAGTTCGTCTGTGACTCAGACCGGGACTGCTTGGACGGCTCAGACGAGGCCTCCTGCCCG
GTGCTCACCTGTGGTCCCGCCAGCTTCCAGTGCAACAGCTCCACCTGCATCCCCCAGCTGTGGGCCTGCGACAAC
GACCCCGACTGCGAAGATGGCTCGGATGAGTGGCCGCAGCGCTGTAGGGGTCTTTACGTGTTCCAAGGGGACAGT
AGCCCCTGCTCGGCCTTCGAGTTCCACTGCCTAAGTGGCGAGTGCATCCACTCCAGCTGGCGCTGTGATGGTGGC
CCCGACTGCAAGGACAAATCTGACGAGGAAAACTGCGCTGTGGCCACCTGTCGCCCTGACGAATTCCAGTGCTCT
GATGGAAACTGCATCCATGGCAGCCGGCAGTGTGACCGGGAATATGACTGCAAGGACATGAGCGATGAAGTTGGC
TGCGTTAATGTGACACTCTGCGAGGGACCCAACAAGTTCAAGTGTCACAGCGGCGAATGCATCACCCTGGACAAA
GTCTGCAACATGGCTAGAGACTGCCGGGACTGGTCAGATGAACCCATCAAAGAGTGCGGGACCAACGAATGCTTG
GACAACAACGGCGGCTGTTCCCACGTCTGCAATGACCTTAAGATCGGCTACGAGTGCCTGTGCCCCGACGGCTTC
CAGCTGGTGGCCCAGCGAAGATGCGAAGATATCGATGAGTGTCAGGATCCCGACACCTGCAGCCAGCTCTGCGTG
AACCTGGAGGGTGGCTACAAGTGCCAGTGTGAGGAAGGCTTCCAGCTGGACCCCCACACGAAGGCCTGCAAGGCT
GTGGGCTCCATCGCCTACCTCTTCTTCACCAACCGGCACGAGGTCAGGAAGATGACGCTGGACCGGAGCGAGTAC
ACCAGCCTCATCCCCAACCTGAGGAACGTGGTCGCTCTGGACACGGAGGTGGCCAGCAATAGAATCTACTGGTCT
GACCTGTCCCAGAGAATGATCTGCAGCACCCAGCTTGACAGAGCCCACGGCGTCTCTTCCTATGACACCGTCATC
AGCAGGGACATCCAGGCCCCCGACGGGCTGGCTGTGGACTGGATCCACAGCAACATCTACTGGACCGACTCTGTC
CTGGGCACTGTCTCTGTTGCGGATACCAAGGGCGTGAAGAGGAAAACGTTATTCAGGGAGAACGGCTCCAAGCCA
AGGGCCATCGTGGTGGATCCTGTTCATGGCTTCATGTACTGGACTGACTGGGGAACTCCCGCCAAGATCAAGAAA
GGGGGCCTGAATGGTGTGGACATCTACTCGCTGGTGACTGAAAACATTCAGTGGCCCAATGGCATCACCCTAGAT
CTCCTCAGTGGCCGCCTCTACTGGGTTGACTCCAAACTTCACTCCATCTCAAGCATCGATGTCAATGGGGGCAAC
CGGAAGACCATCTTGGAGGATGAAAAGAGGCTGGCCCACCCCTTCTCCTTGGCCGTCTTTGAGGACAAAGTATTT
TGGACAGATATCATCAACGAAGCCATTTTCAGTGCCAACCGCCTCACAGGTTCCGATGTCAACTTGTTGGCTGAA
AACCTACTGTCCCCAGAGGATATGGTCCTCTTCCACAACCTCACCCAGCCAAGAGGAGTGAACTGGTGTGAGAGG
ACCACCCTGAGCAATGGCGGCTGCCAGTATCTGTGCCTCCCTGCCCCGCAGATCAACCCCCACTCGCCCAAGTTT
ACCTGCGCCTGCCCGGACGGCATGCTGCTGGCCAGGGACATGAGGAGCTGCCTCACAGAGGCTGAGGCTGCAGTG
GCCACCCAGGAGACATCCACCGTCAGGCTAAAGGTCAGCTCCACAGCCGTAAGGACACAGCACACAACCACCCGG
CCTGTTCCCGACACCTCCCGGCTGCCTGGGGCCACCCCTGGGCTCACCACGGTGGAGATAGTGACAATGTCTCAC
CAAGCTCTGGGCGACGTTGCTGGCAGAGGAAATGAGAAGAAGCCCAGTAGCGTGAGGGCTCTGTCCATTGTCCTC
CCCATCGTGCTCCTCGTCTTCCTTTGCCTGGGGGTCTTCCTTCTATGGAAGAACTGGCGGCTTAAGAACATCAAC
AGCATCAACTTTGACAACCCCGTCTATCAGAAGACCACAGAGGATGAGGTCCACATTTGCCACAACCAGGACGGC
TACAGCTACCCCTCGAGACAGATGGTCAGTCTGGAGGATGACGTGGCGTGAACATCTGCCTGGAGTCCCGCCCCT
GCCCAGAACCCTTCCTGAGACCTCGCCGGCCTTGTTTTATTCAAAGACAGAGAAGACCAAAGCATTGCCTGCCAG
AGCTTTGTTTTATATATTTATTCATCTGGGAGGCAGAACAGGCTTCGGACAGTGCCCATGCAATGGCTTGGGTTG
GGATTTTGGTTTCTTCCTTTCCTGTGAAGGATAAGAGAAACAGGCCCGGGGGGGACCAGGATGACACCTCCATTTC
TCTCCAGGAAGTTTTGAGTTTCTCTCCACCGTGACACAATCCTCAAACATGGAAGATGAAAGGGCAGGGGATGTC
AGGCCCAGAGAAGCAAGTGGCTTTCAACACACAACAGCAGATGGCACCAACGGGACCCCCTGGCCCTGCCTCATC
CACCAATCTCTAAGCCAAACCCCTAAACTCAGGAGTCAACGTGTTTACCTCTTCTATGCAAGCCTTGCTAGACAG
CCAGGTTAGCCTTTGCCCTGTCACCCCCGAATCATGACCCACCCAGTGTCTTTCGAGGTGGGTTTGTACCTTCCT
TAAGCCAGGAAAGGGATTCATGGCGTCGGAAATGATCTGGCTGAATCCGTGGTGGCACCGAGACCAAACTCATTC
ACCAAATGATGCCACTTCCCAGAGGCAGAGCCTGAGTCACCGGTCACCCTTAATATTTATTAAGTGCCTGAGACA
CCCGGTTACCTTGGCCGTGAGGACACGTGGCCTGCACCCAGGTGTGGCTGTCAGGACACCAGCCTGGTGCCCATC
CTCCCGACCCCTACCCACTTCCATTCCCGTGGTCTCCTTGCACTTTCTCAGTTCAGAGTTGTACACTGTGTACAT
TTGGCATTTGTGTTATTATTTTGCACTGTTTTCTGTCGTGTGTGTTGGGATGGGATCCCAGGCCAGGGAAAGCCC

FIGURE 649B

GTGTCAATGAATGCCGGGGACAGAGAGGGGCAGGTTGACCGGGACTTCAAAGCCGTGATCGTGAATATCGAGAAC
TGCCATTGTCGTCTTTATGTCCGCCCACCTAGTGCTTCCACTTCTATGCAAATGCCTCCAAGCCATTCACTTCCC
CAATCTTGTCGTTGATGGGTATGTGTTTAAAACATGCACGGTGAGGCCGGGCGCAGTGGCCTCACGCCTGTAATC
CCAGCACTTTGGGAGGCCGAGGCGGGTGGATCATGAGGTCAGGAGATCGAGACCATCCTGGCTAACAAGGTGAAA
CCCCGTCTCTACTAAAAATACAAAAAATTAGCCGGGCGCGGTGGTGGGCACCTGTAGTCCCAGCTACTCGGGAGG
CTGAGGCAGGAGAATGGTGTGAACCCGGGAAGCGGAGCTTGCAGTGAGCCGAGATTGCGCCACTGCAGTCCGCAG
TCTGGCCTGGGCGACAGAGCGAGACTCCGTCTCAAAAAAAACAAAACAAAAAAAAACCATGCATGGTGCATCAGC
AGCCCATGGCCTCTGGCCAGGCATGGCGAGGCTGAGGTGGGAGGATGGTTTGAGCTCAGGCATTTGAGGCTGTCG
TGAGCTATGATTATGCCACTGCTTTCCAGCCTGGGCAACATAGTAAGACCCCATCTCTTAAAAAATGAATTTGGC
CAGACACAGGTGCCTCACGCCTGTAATCCCAGCACTTTGGGAGGCTGAGCTGGATCACTTGAGTTCAGGAGTTGG
AGACCAGGCCTGAGCAACAAAGCGAGATCCCATCTCTACAAAAACCAAAAAGTTAAAAATCAGCTGGGTATGGTG
GCACGTGCCTGTGATCCCAGCTACTTGGGAGGCTGAGGCAGGAGGATCGCCTGAGCCCAGGAGGTGGAGGTTGCA
GTGAGCCATGATCGAGCCACTGCACTCCAGCCTGGGCAACAGATGAAGACCCTATTTCAGAAATACAACTATAAA
AAAAATAAATAAATCCTCCAGTCTGGATCGTTTGACGGGACTTCAGGTTCTTTCTGAAATCGCCGTGTTACTGTT
GCACTGATGTCCGGAGAGACAGTGACAGCCTCCGTCAGACTCCCGCGTGAAGATGTCACAAGGGATTGGCAATTG
TCCCCAGGGACAAAACACTGTGTCCCCCCCCAGTGCAGGGAACCGTGATAAGCCTTTCTGGTTTCGGAGCACGTAA
ATGCGTCCCTGTACAGATAGTGGGGATTTTTTGTTATGTTTGCACTTTGTATATTGGTTGAAACTGTTATCACTT
ATATATATATATACACACATATATATAAAATCTATTTATTTTTGCAAACCCTGGTTGCTGTATTTGTTCAGTGAC
TATTCTCGGGGCCCTGTGTAGGGGGTTATTGCCTCTGAAATGCCTCTTCTTTATGTACAAAGATTATTTGCACGA
ACTGGACTGTGTGCAACGCTTTTTGGGAGAATGATGTCCCCGTTGTATGTATGAGTGGCTTCTGGGAGATGGGTG
TCACTTTTTAAACCACTGTATAGAAGGTTTTTGTAGCCTGAATGTCTTACTGTGATCAATTAAATTTCTTAAATG

FIGURE 650

MGPWGWKLRWTVALLLAAAGTAVGDRCERNEFQCQDGKCISYKWVCDGSAECQDGSDESQETCLSVTCKSGDFSC
GGRVNRCIPQFWRCDGQVDCDNGSDEQGCPPKTCSQDEFRCHDGKCISRQFVCDSDRDCLDGSDEASCPVLTCGP
ASFQCNSSTCIPQLWACDNDPDCEDGSDEWPQRCRGLYVFQGDSSPCSAFEFHCLSGECIHSSWRCDGGPDCKDK
SDEENCAVATCRPDEFQCSDGNCIHGSRQCDREYDCKDMSDEVGCVNVTLCEGPNKFKCHSGECITLDKVCNMAR
DCRDWSDEPIKECGTNECLDNNGGCSHVCNDLKIGYECLCPDGFQLVAQRRCEDIDECQDPDTCSQLCVNLEGGY
KCQCEEGFQLDPHTKACKAVGSIAYLFFTNRHEVRKMTLDRSEYTSLIPNLRNVVALDTEVASNRIYWSDLSQRM
ICSTQLDRAHGVSSYDTVISRDIQAPDGLAVDWIHSNIYWTDSVLGTVSVADTKGVKRKTLFRENGSKPRAIVVD
PVHGFMYWTDWGTPAKIKKGGLNGVDIYSLVTENIQWPNGITLDLLSGRLYWVDSKLHSISSIDVNGGNRKTILE
DEKRLAHPFSLAVFEDKVFWTDIINEAIFSANRLTGSDVNLLAENLLSPEDMVLFHNLTQPRGVNWCERTTLSNG
GCQYLCLPAPQINPHSPKFTCACPDGMLLARDMRSCLTEAEAAVATQETSTVRLKVSSTAVRTQHTTTRPVPDTS
RLPGATPGLTTVEIVTMSHQALGDVAGRGNEKKPSSVRALSIVLPIVLLVFLCLGVFLLWKNWRLKNINSINFDN
PVYQKTTEDEVHICHNQDGYSYPSRQMVSLEDDVA

FIGURE 651A

GCCCCGAGTGCAATCGCGGGAAGCCAGGGTTTCCAGCTAGGACACAGCAGGTCGTGATCCGGGTCGGGACACTGC
CTGGCAGAGGCTGCGAGCATGGGGCCCTGGGGCTGGAAATTGCGCTGGACCGTCGCCTTGCTCCTCGCCGCGGCG
GGGACTGCAGTGGGCGACAGATGTGAAAGAAACGAGTTCCAGTGCCAAGACGGGAAATGCATCTCCTACAAGTGG
GTCTGCGATGGCAGCGCTGAGTGCCAGGATGGCTCTGATGAGTCCCAGGAGACGTGCTTGTCTGTCACCTGCAAA
TCCGGGGACTTCAGCTGTGGGGGCCGTGTCAACCGCTGCATTCCTCAGTTCTGGAGGTGCGATGGCCAAGTGGAC
TGCGACAACGGCTCAGACGAGCAAGGCTGTCCCCCCAAGACGTGCTCCCAGGACGAGTTTCGCTGCCACGATGGG
AAGTGCATCTCTCGGCAGTTCGTCTGTGACTCAGACCGGGACTGCTTGGACGGCTCAGACGAGGCCTCCTGCCCG
GTGCTCACCTGTGGTCCCGCCAGCTTCCAGTGCAACAGCTCCACCTGCATCCCCCAGCTGTGGGCCTGCGACAAC
GACCCCGACTGCGAAGATGGCTCGGATGAGTGGCCGCAGCGCTGTAGGGGTCTTTACGTGTTCCAAGGGGACAGT
AGCCCCTGCTCGGCCTTCGAGTTCCACTGCCTAAGTGGCGAGTGCATCCACTCCAGCTGGCGCTGTGATGGTGGC
CCCGACTGCAAGGACAAATCTGACGAGGAAAACTGCGCTGTGGCCACCTGTCGCCCTGACGAATTCCAGTGCTCT
GATGGAAACTGCATCCATGGCAGCCGGCAGTGTGACCGGGAATATGACTGCAAGGACATGAGCGATGAAGTTGGC
TGCGTTAATGTGACACTCTGCGAGGGACCCAACAAGTTCAAGTGTCACAGCGGCGAATGCATCACCCTGGACAAA
GTCTGCAACATGGCTAGAGACTGCCGGGACTGGTCAGATGAACCCATCAAAGAGTGCGGGACCAACGAATGCTTG
GACAACAACGGCGGCTGTTCCCACGTCTGCAATGACCTTAAGATCGGCTACGAGTGCCTGTGCCCCGACGGCTTC
CAGCTGGTGGCCCAGCGAAGATGCGAAGATATCGATGAGTGTCAGGATCCCGACACCTGCAGCCAGCTCTGCGTG
AACCTGGAGGGTGGCTACAAGTGCCAGTGTGAGGAAGGCTTCCAGCTGGACCCCCACACGAAGGCCTGCAAGGCT
GTGGGCTCCATCGCCTACCTCTTCTTCACCAACCGGCACGAGGTCAGGAAGATGACGCTGGACCGGAGCGAGTAC
ACCAGCCTCATCCCCAACCTGAGGAACGTGGTCGCTCTGGACACGGAGGTGGCCAGCAATAGAATCTACTGGTCT
GACCTGTCCCAGAGAATGATCTGCAGCACCCAGCTTGACAGAGCCCACGGCGTCTCTTCCTATGACACCGTCATC
AGCAGGGACATCCAGGCCCCCGACGGGCTGGCTGTGGACTGGATCCACAGCAACATCTACTGGACCGACTCTGTC
CTGGGCACTGTCTCTGTTGCGGATACCAAGGGCGTGAAGAGGAAAACGTTATTCAGGGAGAACGGCTCCAAGCCA
AGGGCCATCGTGGTGGATCCTGTTCATGGCTTCATGTACTGGACTGACTGGGGAACTCCCGCCAAGATCAAGAAA
GGGGGCCTGAATGGTGTGGACATCTACTCGCTGGTGACTGAAAACATTCAGTGGCCCAATGGCATCACCCTAGAT
CTCCTCAGTGGCCGCCTCTACTGGGTTGACTCCAAACTTCACTCCATCTCAAGCATCGATGTCAATGGGGGCAAC
CGGAAGACCATCTTGGAGGATGAAAAGAGGCTGGCCCACCCCTTCTCCTTGGCCGTCTTTGAGGACAAAGTATTT
TGGACAGATATCATCAACGAAGCCATTTTCAGTGCCAACCGCCTCACAGGTTCCGATGTCAACTTGTTGGCTGAA
AACCTACTGTCCCCAGAGGATATGGTCCTCTTCCACAACCTCACCCAGCCAAGAGGAGTGAACTGGTGTGAGAGG
ACCACCCTGAGCAATGGCGGCTGCCAGTATCTGTGCCTCCCTGCCCCGCAGATCAACCCCCACTCGCCCAAGTTT
ACCTGCGCCTGCCCGGACGGCATGCTGCTGGCCAGGGACATGAGGAGCTGCCTCACAGAGGCTGAGGCTGCAGTG
GCCACCCAGGAGACATCCACCGTCAGGCTAAAGGTCAGCTCCACAGCCGTAAGGACACAGCACACAACCACCCGG
CCTGTTCCCGACACCTCCCGGCTGCCTGGGGCCACCCCTGGGCTCACCACGGTGGAGATAGTGACAATGTCTCAC
CAAGCTCTGGGCGACGTTGCTGGCAGAGGAAATGAGAAGAAGCCCAGTAGCGTGAGGGCTCTGTCCATTGTCCTC
CCCATCGTGCTCCTCGTCTTCCTTTGCCTGGGGGTCTTCCTTCTATGGAAGAACTGGCGGCTTAAGAACATCAAC
AGCATCAACTTTGACAACCCCGTCTATCAGAAGACCACAGAGGATGAGGTCCACATTTGCCACAACCAGGACGGC
TACAGCTACCCCTCGAGACAGATGGTCAGTCTGGAGGATGACGTGGCGTGAACATCTGCCTGGAGTCCCGCCCCT
GCCCAGAACCCTTCCTGAGACCTCGCCGGCCTTGTTTTATTCAAAGACAGAGAAGACCAAAGCATTGCCTGCCAG
AGCTTTGTTTTATATATTTATTCATCTGGGAGGCAGAACAGGCTTCGGACAGTGCCCATGCAATGGCTTGGGTTG
GGATTTTGGTTTCTTCCTTTCCTGTGAAGGATAAGAGAAACAGGCCCGGGGGGGACCAGGATGACACCTCCATTTC
TCTCCAGGAAGTTTTGAGTTTCTCTCCACCGTGACACAATCCTCAAACATGGAAGATGAAAGGGCAGGGGATGTC
AGGCCCAGAGAAGCAAGTGGCTTTCAACACACAACAGCAGATGGCACCAACGGGACCCCCTGGCCCTGCCTCATC
CACCAATCTCTAAGCCAAACCCCTAAACTCAGGAGTCAACGTGTTTACCTCTTCTATGCAAGCCTTGCTAGACAG
CCAGGTTAGCCTTTGCCCTGTCACCCCCGAATCATGACCCACCCAGTGTCTTTCGAGGTGGGTTTGTACCTTCCT
TAAGCCAGGAAAGGGATTCATGGCGTCGGAAATGATCTGGCTGAATCCGTGGTGGCACCGAGACCAAACTCATTC
ACCAAATGATGCCACTTCCCAGAGGCAGAGCCTGAGTCACCGGTCACCCTTAATATTTATTAAGTGCCTGAGACA
CCCGGTTACCTTGGCCGTGAGGACACGTGGCCTGCACCCAGGTGTGGCTGTCAGGACACCAGCCTGGTGCCCATC
CTCCCGACCCCTACCCACTTCCATTCCCGTGGTCTCCTTGCACTTTCTCAGTTCAGAGTTGTACACTGTGTACAT
TTGGCATTTGTGTTATTATTTTGCACTGTTTTCTGTCGTGTGTGTTGGGATGGGATCCCAGGCCAGGGAAAGCCC

FIGURE 651B

GTGTCAATGAATGCCGGGGACAGAGAGGGGCAGGTTGACCGGGACTTCAAAGCCGTGATCGTGAATATCGAGAAC
TGCCATTGTCGTCTTTATGTCCGCCCACCTAGTGCTTCCACTTCTATGCAAATGCCTCCAAGCCATTCACTTCCC
CAATCTTGTCGTTGATGGGTATGTGTTTAAAACATGCACGGTGAGGCCGGGCGCAGTGGCCTCACGCCTGTAATC
CCAGCACTTTGGGAGGCCGAGGCGGGTGGATCATGAGGTCAGGAGATCGAGACCATCCTGGCTAACAAGGTGAAA
CCCCGTCTCTACTAAAAATACAAAAAATTAGCCGGGCGCGGTGGTGGGCACCTGTAGTCCCAGCTACTCGGGAGG
CTGAGGCAGGAGAATGGTGTGAACCCGGGAAGCGGAGCTTGCAGTGAGCCGAGATTGCGCCACTGCAGTCCGCAG
TCTGGCCTGGGCGACAGAGCGAGACTCCGTCTCAAAAAAAAACAAAACAAAAAAAAACCATGCATGGTGCATCAGC
AGCCCATGGCCTCTGGCCAGGCATGGCGAGGCTGAGGTGGGAGGATGGTTTGAGCTCAGGCATTTGAGGCTGTCG
TGAGCTATGATTATGCCACTGCTTTCCAGCCTGGGCAACATAGTAAGACCCCATCTCTTAAAAAATGAATTTGGC
CAGACACAGGTGCCTCACGCCTGTAATCCCAGCACTTTGGGAGGCTGAGCTGGATCACTTGAGTTCAGGAGTTGG
AGACCAGGCCTGAGCAACAAAGCGAGATCCCATCTCTACAAAAACCAAAAAGTTAAAAATCAGCTGGGTATGGTG
GCACGTGCCTGTGATCCCAGCTACTTGGGAGGCTGAGGCAGGAGGATCGCCTGAGCCCAGGAGGTGGAGGTTGCA
GTGAGCCATGATCGAGCCACTGCACTCCAGCCTGGGCAACAGATGAAGACCCTATTTCAGAAATACAACTATAAA
AAAAATAAATAAATCCTCCAGTCTGGATCGTTTGACGGGACTTCAGGTTCTTTCTGAAATCGCCGTGTTACTGTT
GCACTGATGTCCGGAGAGACAGTGACAGCCTCCGTCAGACTCCCGCGTGAAGATGTCACAAGGGATTGGCAATTG
TCCCCAGGGACAAAACACTGTGTCCCCCCCCAGTGCAGGGAACCGTGATAAGCCTTTCTGGTTTCGGAGCACGTAA
ATGCGTCCCTGTACAGATAGTGGGGATTTTTTGTTATGTTTGCACTTTGTATATTGGTTGAAACTGTTATCACTT
ATATATATATATACACACATATATATAAAATCTATTTATTTTTGCAAACCCTGGTTGCTGTATTTGTTCAGTGAC
TATTCTCGGGGCCCTGTGTAGGGGGTTATTGCCTCTGAAATGCCTCTTCTTTATGTACAAAGATTATTTGCACGA
ACTGGACTGTGTGCAACGCTTTTTGGGAGAATGATGTCCCCGTTGTATGTATGAGTGGCTTCTGGGAGATGGGTG
TCACTTTTTAAACCACTGTATAGAAGGTTTTTGTAGCCTGAATGTCTTACTGTGATCAATTAAATTTCTTAAATG

FIGURE 652

MGPWGWKLRWTVALLLAAAGTAVGDRCERNEFQCQDGKCISYKWVCDGSAECQDGSDESQETCLSVTCKSGDFSC
GGRVNRCIPQFWRCDGQVDCDNGSDEQGCPPKTCSQDEFRCHDGKCISRQFVCDSDRDCLDGSDEASCPVLTCGP
ASFQCNSSTCIPQLWACDNDPDCEDGSDEWPQRCRGLYVFQGDSSPCSAFEFHCLSGECIHSSWRCDGGPDCKDK
SDEENCAVATCRPDEFQCSDGNCIHGSRQCDREYDCKDMSDEVGCVNVTLCEGPNKFKCHSGECITLDKVCNMAR
DCRDWSDEPIKECGTNECLDNNGGCSHVCNDLKIGYECLCPDGFQLVAQRRCEDIDECQDPDTCSQLCVNLEGGY
KCQCEEGFQLDPHTKACKAVGSIAYLFFTNRHEVRKMTLDRSEYTSLIPNLRNVVALDTEVASNRIYWSDLSQRM
ICSTQLDRAHGVSSYDTVISRDIQAPDGLAVDWIHSNIYWTDSVLGTVSVADTKGVKRKTLFRENGSKPRAIVVD
PVHGFMYWTDWGTPAKIKKGGLNGVDIYSLVTENIQWPNGITLDLLSGRLYWVDSKLHSISSIDVNGGNRKTILE
DEKRLAHPFSLAVFEDKVFWTDIINEAIFSANRLTGSDVNLLAENLLSPEDMVLFHNLTQPRGVNWCERTTLSNG
GCQYLCLPAPQINPHSPKFTCACPDGMLLARDMRSCLTEAEAAVATQETSTVRLKVSSTAVRTQHTTTRPVPDTS
RLPGATPGLTTVEIVTMSHQALGDVAGRGNEKKPSSVRALSIVLPIVLLVFLCLGVFLLWKNWRLKNINSINFDN
PVYQKTTEDEVHICHNQDGYSYPSRQMVSLEDDVA

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FIGURE 653

AAGCGATGGCTGGGCCCGCGTGGATCTCCAAGGTCTCTCGGCTGCTGGGGGCATTCCACAACCCAAAACAGGTGA
CCAGAGGTTTTACTGGTGGTGTTCAGACAGTAACTTTAATTCCAGGAGATGGTATTGGCCCAGAAATTTCAGCTG
CAGTTATGAAGATTTTTGATGCTGCCAAAGCACCTATTCAGTGGGAGGAGCGGAACGTCACTGCCATTCAAGGAC
CTGGAGGAAAGTGGATGATCCCTTCAGAGGCTAAAGAGTCCATGGATAAGAACAAGATGGGCTTGAAAGGCCCTT
TGAAGACCCCAATAGCAGCCGGTCACCCATCTATGAATTTACTGCTGCGCAAAACATTTGACCTTTACGCGAATG
TCCGACCATGTGTCTCTATCGAAGGCTATAAAACCCCTTACACCGATGTAAATATTGTGACCATTCGAGAGAACA
CAGAAGGAGAATACAGTGGAATTGAGCATGTGATTGTTGATGGAGTCGTGCAGAGTATCAAGCTCATCACCGAGG
GGGCGAGCAAGCGCATTGCTGAGTTTGCCTTTGAGTATGCCCGGAACAACCACCGGAGCAACGTCACGGCGGTGC
ACAAAGCCAACATCATGCGGATGTCAGATGGGCTTTTTCTACAAAAATGCAGGGAAGTTGCAGAAAGCTGTAAAG
ATATTAAATTTAATGAGATGTACCTTGATACAGTATGTTTGAATATGGTACAAGATCCTTCCCAATTTGATGTTC
TTGTTATGCCAAATTTGTATGGAGACATCCTTAGTGACTTGTGTGCAGGATTGATCGGAGGTCTCGGTGTGACAC
CAAGTGGCAACATTGGAGCCAATGGGGTTGCAATTTTTGAGTCGGTTCATGGGACGGCTCCAGACATTGCAGGCA
AGGACATGGCGAATCCCACAGCCCTCCTGCTCAGTGCCGTGATGATGCTGCGCCACATGGGACTTTTTGACCATG
CTGCAAGAATTGAGGCTGCGTGTTTTGCTACAATTAAGGACGGAAAGAGCTTGACAAAAGATTTGGGAGGCAATG
CAAAATGCTCAGACTTCACAGAGGAAATCTGTCGCCGAGTAAAAGATTTAGATTAACACTTCTACAACTGGCATT
TACATCAGTCACTCTAAATGGACACCACATGAACCTCTGTTTAGAATACCTACGTATGTATGCATTGGTTTGCTT
GTTTCTTGACAGTACATTTTTAGATCTGGCCTTTTCTTAACAAAATCTGTGCAAAAGATGCAGGTGGATGTCCCT
AGGTCTGTTTTCAAAGAACTTTTTCCAAGTGCTTGTTTTATTTATTAAGTGTCTACCTGGTAAATGTTTTTTTTG
TAAACTCTGAGTGGACTGTATCATTTGCTATTCTAAACCATTTTACACTTAAGTTAAAATAGTTTCTCTTCAGCT
GTAAATAACAGGATACAGAATTAACAAGAGAAAATGTCTAACTTTTTAAGAAAAACCTTATTTTCTTCGGTTTTT
GAAAAACATAATGGAAATAAAACAGGATATTGACATAATAGCACAAAATGACACTCTTCTAAAACTAAATGGGCA
CAAGAGAATTTTCCTGGGAAAGTTCACATCAAAAAGAGTGAATGTGGTATATTTCTAAATGATATGGAAAATAGA
GACAGATTTGTCCTTTACAGAAATTACTGAGTGTGAATAAAAACTTCAGATCCAAGAAATATATAATGAGAGATA
TAATTTTTGTTAATAAGACAAAGGTAATATATTGGATACAAAGACACAAATGTATTGTGTGTTCAATTATTTTGT
TGTCTTGAGATTTAATATTCTTTCCAAGAGCTTTTAATGAAGCAGAGAGCTAGTACTTCATTTTCACTGGATACA
TTTTCAGCATCATGAGTTGTCACAGCCTCTGAGCCCCTGATCTGAAGCCAGAAGGGCTGAGTGTATTGTAAACTT
ATTCTTGCATGTTGCTGTCTGGGAATGGACCACACTACAGCAGGTAGTTCTGGGGGCGATACTGCCGAAAGGCCC
GAACACATGTATTTTGGCTGCAATTGAGGAACTTGGGATGCTATTAATTTTGTATTTCAGCAACTGCCCCTTCTC
CTATCCCAAAGCACCAATTACTGCCCTCTGCCTCAGCAGTACCAGTATAAGATGACATTCCAAAGACTGGAGGCA
ACTCAGCCTGAGTTAATTCACAAAATTATGCCATGCTGGGGCTTGAGCTTGAGCTTGGGCTTAGGCTTGGGCTCA
GCTTTTGACCCTCAGGCATCTCCTTTTCCTTCCTGTCTTCCTCTCCCTTCTCCTCTGCTGCAGCATGATTTTCTT
AATCTTCAGACACTCACTATTTTCATGAACAGTTACCCTCTGTCCCCACAACCAAAGACAACTCATGGCCTCCTT
TGGCCCTTGTGTAACATTGCAAACCTGTGGCTTTGCAAAATGTACCCAGGTCACAAGGGGATTTTTTTTTTTTA
GCAATGATATCCCTGTCTGGGTCACTTTTTAAGCTTGTAACCGCCCCCCCAGACTTATAATCTTAAATGTATTTT
CCTTTGTTTAAGCTGCTGCTTCCTCTGTTTCATTGGATTGTGCCAGTTATCAGTGGCTCTTGGGTTCAAAGTAAT
AAA

FIGURE 654

MAGPAWISKVSRLLGAFHNPKQVTRGFTGGVQTVTLIPGDGIGPEISAAVMKIFDAAKAPIQWEERNVTAIQGPG
GKWMIPSEAKESMDKNKMGLKGPLKTPIAAGHPSMNLLLRKTFDLYANVRPCVSIEGYKTPYTDVNIVTIRENTE
GEYSGIEHVIVDGVVQSIKLITEGASKRIAEFAFEYARNNHRSNVTAVHKANIMRMSDGLFLQKCREVAESCKDI
KFNEMYLDTVCLNMVQDPSQFDVLVMPNLYGDILSDLCAGLIGGLGVTPSGNIGANGVAIFESVHGTAPDIAGKD
MANPTALLLSAVMMLRHMGLFDHAARIEAACFATIKDGKSLTKDLGGNAKCSDFTEEICRRVKDLD

FIGURE 655

GCGCGCCTTCTCCAGTCCGCGGTGCCATGGCCCCCGCCCGTCTGTTCGCGCTGCTGCTGCTCTTCGTAGGCGGAG
TCGCCGAGTCGATCCGAGAGACTGAGGTCATCGACCCCCAGGACCTCCTAGAAGGCCGATACTTCTCCGGAGCCC
TACCAGACGATGAGGATGTAGTGGGGCCCGGGCAGGAATCTGATGACTTTGAGCTGTCTGGCTCTGGAGATCTGG
ATGACTTGGAAGACTCCATGATCGGCCCTGAAGTTGTCCATCCCTTGGTGCCTCTAGATAACCATATCCCTGAGA
GGGCAGGGTCTGGGAGCCAAGTCCCCACCGAACCCAAGAAACTAGAGGAGAATGAGGTTATCCCCAAGAGAATCT
CACCCGTTGAAGAGAGTGAGGATGTGTCCAACAAGGTGTCAATGTCCAGCACTGTGCAGGGCAGCAACATCTTTG
AGAGAACGGAGGTCCTGGCAGCTCTGATTGTGGGTGGCATCGTGGGCATCCTCTTTGCCGTCTTCCTGATCCTAC
TGCTCATGTACCGTATGAAGAAGAAGGATGAAGGCAGCTATGACCTGGGCAAGAAACCCATCTACAAGAAAGCCC
CCACCAATGAGTTCTACGCGTGAAGCTTGCTTGTGGGCACTGGCTTGGACTTTAGCGGGGAGGGAAGCCAGGGGA
TTTTGAAGGGTGGACATTAGGGTAGGGTGAGGTCAACCTAATACTGACTTGTCAGTATCTCCAGCTCTGATTACC
TTTGAAGTGTTCAGAAGAGACATTGTCTTCTACTGTTCTGCCAGGTTCTTCTTGAGCTTTGGGCCTCAGTTGCCC
TGGCAGAAAAATGGATTCAACTTGGCCTTTCTGAAGGCAAGACTGGGATTGGATCACTTCTTAAACTTCCAGTTA
AGAATCTAGGTCCGCCCTCAAGCCCATACTGACCATGCCTCATCCAGAGCTCCTCTGAAGCCAGGGGGCTAACGG
ATGTTGTGTGGAGTCCTGGCTGGAGGTCCTCCCCCAGTGGCCTTCCTCCCTTCCTTTCACAGCCGGTCTCTCTGC
CAGGAAATGGGGGAAGGAACTAGAACCACCTGCACCTTGAGATGTTTCTGTAAATGGGTACTTGTGATCACACTA
CGGGAATCTCTGTGGTATATACCTGGGGCCATTCTAGGCTCTTTCAAGTGACTTTTGGAAATCAACCTTTTTTAT
TTGGGGGGGAGGATGGGGAAAAGAGCTGAGAGTTTATGCTGAAATGGATTTATAGAATATTTGTAAATCTATTTT
TAGTGTTTGTTCGTTTTTTTAACTGTTCATTCCTTTGTGCAGAGTGTATATCTCTGCCTGGGCAAGAGTGTGGAG
GTGCCGAGGTGTCTTCATTCTCTCGCACATTTCCACAGCACCTGCTAAGTTTGTATTTAATGGTTTTTGTTTTTG
TTTTTGTTTGTTTCTTGAAAATGAGAGAAGAGCCGGAGAGATGATTTTTATTAATTTTTTTTTTTTTTTTTTTT
TACTATTTATAGCTTTAGATAGGGCCTCCCTTCCCCTCTTCTTTCTTTGTTCTCTTTCATTAAACCCCTTCCCCA
GTTTTTTTTTTATACTTTAAACCCCGCTCCTCATGGCCTTGGCCCTTTCTGAAGCTGCTTCCTCTTATAAAATAG
CTTTTGCCGAAACATAGTTTTTTTTTAGCAGATCCCAAAATATAATGAAGGGGATGGTGGGATATTTGTGTCTGT
GTTCTTATAATATATTATTATTCTTCCTTGGTTCTAGAAAAATAGATAAATATATTTTTTTCAGGAAATAGTGTG
GTGTTTCCAGTTTGATGTTGCTGGGTGGTTGAGTGAGTGAATTTTCATGTGGCTGGGTGGGTTTTTGCCTTTTTC
TCTTGCCCTGTTCCTGGTGCCTTCTGATGGGGCTGGAATAGTTGAGGTGGATGGTTCTACCCTTTCTGCCTTCTG
TTTGGGACCCAGCTGGTGTTCTTTGGTTTGCTTTCTTCAGGCTCTAGGGCTGTGCTATCCAATACAGTAACCACA
TGCGGCTGTTTAAAGTTAAGCCAATTAAAATCACATAAGATTAAAAATTCCTTCCTCAGTTGCACTAACCACGTT
TCTAGAGGCGTCACTGTATGTAGTTCATGGCTACTGTACTGACAGCGAGAGCATGTCCATCTGTTGGACAGCACT
ATTCTAGAGAACTAAACTGGCTTAACGAGTCACAGCCTCAGCTGTGCTGGGACGACCCTTGTCTCCCTGGGTAGG
GGGGGGGGAATGGGGGAGGGCTGATGAGGCCCCAGCTGGGGCCTGTTGTCTGGGACCCTCCCTCTCCTGAGAGGG
GAGGCCTGGTGGCTTAGCCTGGGCAGGTCGTGTCTCCTCCTGACCCCAGTGGCTGCGGTGAGGGGAACCACCCTC
CCTTGCTGCACCAGTGGCCATTAGCTCCCGTCACCACTGCAACCCAGGGTCCCAGCTGGCTGGGTCCTCTTCTGC
CCCCAGTGCCCTTCCCCTTGGGCTGTGTTGGAGTGAGCACCTCCTCTGTAGGCACCTCTCACACTGTTGTCTGTT
ACTGATTTTTTTTGATAAAAAGATAATAAAACCTGGTACTTTCTAAAAAAAAAAAAAAAAAAA

FIGURE 656

MAPARLFALLLLFVGGVAESIRETEVIDPQDLLEGRYFSGALPDDEDVVGPGQESDDFELSGSGDLDDLEDSMIG
PEVVHPLVPLDNHIPERAGSGSQVPTEPKKLEENEVIPKRISPVEESEDVSNKVSMSSTVQGSNIFERTEVLAAL
IVGGIVGILFAVFLILLLMYRMKKKDEGSYDLGKKPIYKKAPTNEFYA

FIGURE 657

AGTGCATCCTGGGTTGGCGTAGCCATGGCGTCTCGTGTCCTTTCAGCCTATGTCAGCCGCCTGCCCGCGGCCTTT
GCGCCGCTGCCCCGGGTCCGGATGCTGGCCGTGGCCCGGCCTCTCAGCACTGCTCTCTGCTCCGCGGGGACCCAG
ACGAGGCTCGGGACTTTGCAGCCGGCCTTAGTGCTCGCGCAGGTTCCTGGTAGAGTTACACAGTTGTGCCGCCAG
TATAGCGACATGCCTCCTTTGACGTTAGAGGGCATCCAGGACCGTGTTCTTTACGTATTGAAACTCTATGACAAG
ATTGACCCAGAGAAGCTTTCAGTAAATTCTCATTTTATGAAAGACCTGGGCTTAGACAGTTTGGACCAAGTGGAG
ATTATCATGGCCATGGAAGACGAATTTGGGTTTGAAATTCCTGATATAGATGCTGAAAAGTTAATGTGTCCACAA
GAAATTGTAGATTACATTGCAGATAAGAAAGATGTATATGAATAAAGTATCAGACCCTTTGGCTTTGCTGAGAGA
GGACTCAGATGATAGTGACGAATGTCTGGCAGTGAGGACACATTTTGGCATTCTTGCTGACTCTGACAGAGTGAT
TCTGATGGACTTGTATTTAAATTGTATGTGTTTTACTCTTTGAAAATAAATCTATAAAACCAA

FIGURE 658

MASRVLSAYVSRLPAAFAPLPRVRMLAVARPLSTALCSAGTQTRLGTLQPALVLAQVPGRVTQLCRQYSDMPPLT
LEGIQDRVLYVLKLYDKIDPEKLSVNSHFMKDLGLDSLDQVEIIMAMEDEFGFEIPDIDAEKLMCPQEIVDYIAD
KKDVYE

FIGURE 659

AGAGCGGAGGCCGCACTCCAGCACTGCGCAGGGACCGCCTTGGACCGCAGTTGCCGGCCAGGAATCCCAGTGTCA
CGGTGGACACGCCTCCCTCGCGCCCTTGCCGCCCACCTGCTCACCCAGCTCAGGGGCTTTGGAATTCTGTGGCCA
CACTGCGAGGAGATCGGTTCTGGGTCGGAGGCTACAGGAAGACTCCCACTCCCTGAAATCTGGAGTGAAGAACGC
CGCCATCCAGCCACCATTCCAAGGAGGTGCAGGAGAACAGCTCTGTGATACCATTTAACTTGTTGACATTACTTT
TATTTGAAGGAACGTATATTAGAGCTTACTTTGCAAAGAAGGAAG**ATG**GTTGTTTCCGAAGTGGACATCGCAAAA
GCTGATCCAGCTGCTGCATCCCACCCTCTATTACTGAATGGAGATGCTACTGTGGCCCAGAAAAATCCAGGCTCG
GTGGCTGAGAACAACCTGTGCAGCCAGTATGAGGAGAAGGTGCGCCCCTGCATCGACCTCATTGACTCCCTGCGG
GCTCTAGGTGTGGAGCAGGACCTGGCCCTGCCAGCCATCGCCGTCATCGGGGACCAGAGCTCGGGCAAGAGCTCC
GTGTTGGAGGCACTGTCAGGAGTTGCCCTTCCCAGAGGCAGCGGGATCGTGACCAGATGCCCGCTGGTGCTGAAA
CTGAAGAAACTTGTGAACGAAGATAAGTGGAGAGGCAAGGTCAGTTACCAGGACTACGAGATTGAGATTTCGGAT
GCTTCAGAGGTAGAAAAGGAAATTAATAAAGCCCAGAATGCCATCGCCGGGGAAGGAATGGGAATCAGTCATGAG
CTAATCACCCTGGAGATCAGCTCCCGAGATGTCCCGGATCTGACTCTAATAGACCTTCCTGGCATAACCAGAGTG
GCTGTGGGCAATCAGCCTGCTGACATTGGGTATAAGATCAAGACACTCATCAAGAAGTACATCCAGAGGCAGGAG
ACAATCAGCCTGGTGGTGGTCCCCAGTAATGTGGACATCGCCACCACAGAGGCTCTCAGCATGGCCCAGGAGGTG
GACCCCGAGGGAGACAGGACCATCGGAATCTTGACGAAGCCTGATCTGGTGGACAAAGGAACTGAAGACAAGGTT
GTGGACGTGGTGCGGAACCTCGTGTTCCACCTGAAGAAGGGTTACATGATTGTCAAGTGCCGGGGCCAGCAGGAG
ATCCAGGACCAGCTGAGCCTGTCCGAAGCCCTGCAGAGAGAGAAGATCTTCTTTGAGAACCACCCATATTTCAGG
GATCTGCTGGAGGAAGGAAAGGCCACGGTTCCCTGCCTGGCAGAAAAACTTACCAGCGAGCTCATCACACATATC
TGTAAATCTCTGCCCCTGTTAGAAAATCAAATCAAGGAGACTCACCAGAGAATAACAGAGGAGCTACAAAAGTAT
GGTGTCGACATACCGGAAGACGAAAATGAAAAAATGTTCTTCCTGATAGATAAAATTAATGCCTTTAATCAGGAC
ATCACTGCTCTCATGCAAGGAGAGGAAACTGTAGGGGAGGAAGACATTCGGCTGTTTACCAGACTCCGACACGAG
TTCCACAAATGGAGTACAATAATTGAAAACAATTTTCAAGAAGGCCATAAAATTTTGAGTAGAAAAATCCAGAAA
TTTGAAAATCAGTATCGTGGTAGAGAGCTGCCAGGCTTTGTGAATTACAGGACATTTGAGACAATCGTGAAACAG
CAAATCAAGGCACTGGAAGAGCCGGCTGTGGATATGCTACACACCGTGACGGATATGGTCCGGCTTGCTTTCACA
GATGTTTCGATAAAAAATTTTGAAGAGTTTTTTAACCTCCACAGAACCGCCAAGTCCAAAATTGAAGACATTAGA
GCAGAACAAGAGAGAGAAGGTGAGAAGCTGATCCGCCTCCACTTCCAGATGGAACAGATTGTCTACTGCCAGGAC
CAGGTATACAGGGGTGCATTGCAGAAGGTCAGAGAGAAGGAGCTGGAAGAAGAAAAGAAGAAGAAATCCTGGGAT
TTTGGGGCTTTCCAGTCCAGCTCGGCAACAGACTCTTCCATGGAGGAGATCTTTCAGCACCTGATGGCCTATCAC
CAGGAGGCCAGCAAGCGCATCTCCAGCCACATCCCTTTGATCATCCAGTTCTTCATGCTCCAGACGTACGGCCAG
CAGCTTCAGAAGGCCATGCTGCAGCTCCTGCAGGACAAGGACACCTACAGCTGGCTCCTGAAGGAGCGGAGCGAC
ACCAGCGACAAGCGGAAGTTCCTGAAGGAGCGGCTTGCACGGCTGACGCAGGCTCGGCGCCGGCTTGCCCAGTTC
CCCGGT**TAA**CCACACTCTGTCCAGCCCCGTAGACGTGCACGCACACTGTCTGCCCCCGTTCCCGGGTAGCCACTG
GACTGACGACTTGAGTGCTCAGTAGTCAGACTGGATAGTCCGTCTCTGCTTATCCGTTAGCCGTGGTGATTTAGC
AGGAAGCTGTGAGAGCAGTTTGGTTTCTAGCATGAAGACAGAGCCCCACCCTCAGATGCACATGAGCTGGCGGGA
TTGAAGGATGCTGTCTTCGTACTGGGAAAGGGATTTTCAGCCCTCAGAATCGCTCCACCTTGCAGCTCTCCCCTT
CTCTGTATTCCTAGAAACTGACACATGCTGAACATCACAGCTTATTTCCTCATTTTTATAATGTCCCTTCACAAA
CCCAGTGTTTTAGGAGCATGAGTGCCGTGTGTGTGCGTCCTGTCGGAGCCCTGTCTCCTCTCTCTGTAATAAACT
CATTTCTAGCAG

FIGURE 660

MVVSEVDIAKADPAAASHPLLLNGDATVAQKNPGSVAENNLCSQYEEKVRPCIDLIDSLRALGVEQDLALPAIAV
IGDQSSGKSSVLEALSGVALPRGSGIVTRCPLVLKLKKLVNEDKWRGKVSYQDYEIEISDASEVEKEINKAQNAI
AGEGMGISHELITLEISSRDVPDLTLIDLPGITRVAVGNQPADIGYKIKTLIKKYIQRQETISLVVVPSNVDIAT
TEALSMAQEVDPEGDRTIGILTKPDLVDKGTEDKVVDVVRNLVFHLKKGYMIVKCRGQQEIQDQLSLSEALQREK
IFFENHPYFRDLLEEGKATVPCLAEKLTSELITHICKSLPLLENQIKETHQRITEELQKYGVDIPEDENEKMFFL
IDKINAFNQDITALMQGEETVGEEDIRLFTRLRHEFHKWSTIIENNFQEGHKILSRKIQKFENQYRGRELPGFVN
YRTFETIVKQQIKALEEPAVDMLHTVTDMVRLAFTDVSIKNFEEFFNLHRTAKSKIEDIRAEQEREGEKLIRLHF
QMEQIVYCQDQVYRGALQKVREKELEEEKKKKSWDFGAFQSSSATDSSMEEIFQHLMAYHQEASKRISSHIPLII
QFFMLQTYGQQLQKAMLQLLQDKDTYSWLLKERSDTSDKRKFLKERLARLTQARRRLAQFPG

FIGURE 661

GCCGGCCGAACCCAGACCCGAGGTTTTAGAAGCAGAGTCAGGCGAAGCTGGGCCAGAACCGCGACCTCCGCAACC
TTGAGCGGCATCCGTGGAGTGCGCCTGCGCAGCTACGACCGCAGCAGGAAAGCGCCGCCGGCCAGGCCCAGCTGT
GGCCGGACAGGGACTGGAAGAGAGGACGCGGTCGAGTAGGTGTGCACCAGCCCTGGCAACGAGAGCGTCTACCCC
GAACTCTGCTGGCCTTGAGGTGGGGAAGCCGGGGAGGGCAGTTGAGGACCCCGCGGAGGCGCGTGACTGGTTGAG
CGGGCAGGCCAGCCTCCGAGCCGGGTGGACACAGGTTTTAAAACATGAATCCTACACTCATCCTTGCTGCCTTTT
GCCTGGGAATTGCCTCAGCTACTCTAACATTTGATCACAGTTTAGAGGCACAGTGGACCAAGTGGAAGGCGATGC
ACAACAGATTATACGGCATGAATGAAGAAGGATGGAGGAGAGCAGTGTGGGAGAAGAACATGAAGATGATTGAAC
TGCACAATCAGGAATACAGGGAAGGGAAACACAGCTTCACAATGGCCATGAACGCCTTTGGAGACATGACCAGTG
AAGAATTCAGGCAGGTGATGAATGGCTTTCAAAACCGTAAGCCCAGGAAGGGGAAAGTGTTCCAGGAACCTCTGT
TTTATGAGGCCCCCAGATCTGTGGATTGGAGAGAGAAAGGCTACGTGACTCCTGTGAAGAATCAGGGTCAGTGTG
GTTCTTGTTGGGCTTTTAGTGCTACTGGTGCTCTTGAAGGACAGATGTTCCGGAAAACTGGGAGGCTTATCTCAC
TGAGTGAGCAGAATCTGGTAGACTGCTCTGGGCCTCAAGGCAATGAAGGCTGCAATGGTGGCCTAATGGATTATG
CTTTCCAGTATGTTCAGGATAATGGAGGCCTGGACTCTGAGGAATCCTATCCATATGAGGCAACAGAAGAATCCT
GTAAGTACAATCCCAAGTATTCTGTTGCTAATGACACCGGCTTTGTGGACATCCCTAAGCAGGAGAAGGCCCTGA
TGAAGGCAGTTGCAACTGTGGGGCCCATTTCTGTTGCTATTGATGCAGGTCATGAGTCCTTCCTGTTCTATAAAG
AAGGCATTTATTTTGAGCCAGACTGTAGCAGTGAAGACATGGATCATGGTGTGCTGGTGGTTGGCTACGGATT**TG**
AAAGCACAGAATCAGATAACAATAAATATTGGCTGGTGAAGAACAGCTGGGGTGAAGAATGGGGCATGGGTGGCT
ACGTAAAGATGGCCAAAGACCGGAGAAACCATTGTGGAATTGCCTCAGCAGCCAGCTACCCCACTGTGTGAGCTG
GTGGACGGTGATGAGGAAGGACTTGACTGGGGATGGCGCATGCATGGGAGGAATTCATCTTCAGTCTACCAGCCC
CCGCTGTGTCGGATACACACTCGAATCATTGAAGATCCGAGTGTGATTTGAATTCTGTGATATTTTCACACTGGT
AAATGTTACCTCTATTTTAATTACTGCTATAAATAGGTTTATATTATTGATTCACTTACTGACTTTGCATTTTCG
TTTTTAAAAGGATGTATAAATTTTTACCTGTTTAAATAAAATTTAATTTCAAATGTA

FIGURE 662

MNPTLILAAFCLGIASATLTFDHSLEAQWTKWKAMHNRLYGMNEEGWRRAVWEKNMKMIELHNQEYREGKHSFTM
AMNAFGDMTSEEFRQVMNGFQNRKPRKGKVFQEPLFYEAPRSVDWREKGYVTPVKNQGQCGSCWAFSATGALEGQ
MFRKTGRLISLSEQNLVDCSGPQGNEGCNGGLMDYAFQYVQDNGGLDSEESYPYEATEESCKYNPKYSVANDTGF
VDIPKQEKALMKAVATVGPISVAIDAGHESFLFYKEGIYFEPDCSSEDMDHGVLVVGYGFESTESDNNKYWLVKN
SWGEEWGMGGYVKMAKDRRNHCGIASAASYPTV

FIGURE 663

AAAACAGCTCTCCACATGTTCTGCTCCAGATTTTTAGTATTCTGTGATGCTTGGGCTTAAAATGAACTGTAATGT
TTAAATTTTTCTCTATTATTGTCTGCCGTGGTCTTTCTTACTTGCTTAGAACTGATCTATTTGAAATGCATGTCA
ATCTAATCTGAGTCTGAAATGTGCTTCAAAGAAAAATTTCAGTTATATTGAGCTAAATGTCTGTCTCTGCTCAGC
ATCAAATTAGATTCACTGCTATATGAGCATTAACCGCCAGATTTGAATCGCCGGACCCGTTGGCAGAGGTGGCGG
CGGCGGCATGGGTGCCCCGACGTTGCCCCCTGCCTGGCAGCCCTTTCTCAAGGACCACCGCATCTCTACATTCAA
GAACTGGCCCTTCTTGGAGGGCTGCGCCTGCACCCCGGAGCGGATGGCCGAGGCTGGCTTCATCCACTGCCCCAC
TGAGAACGAGCCAGACTTGGCCCAGTGTTTCTTCTGCTTCAAGGAGCTGGAAGGCTGGGAGCCAGATGACGACCC
CATAGAGGAACATAAAAAGCATTCGTCCGGTTGCGCTTTCCTTTCTGTCAAGAAGCAGTTTGAAGAATTAACCCT
TGGTGAATTTTTGAAACTGGACAGAGAAAGAGCCAAGAACAAAATTGAGAGAGCTCTGTTAGCAGAATGAAAAAA
TTGGAAGCCAGATTCAGGGAGGGACTGGAAGCAAAAGAATTTCTGTTCGAGGAAGAGCCTGATGTTTGCCAGGGT
CTGTTTAACTGGACATGAAGAGGAAGGCTCTGGACTTTCCTCCAGGAGTTTCAGGAGAAAGGCAAAGGAGATCAA
CAATAAGAAGAAAGAATTTGAGGAAACTGCGAAGAAAGTGCGCCGTGCCATCGAGCAGCTGGCTGCCATGGATTG
AGGCCTCTGGCCGGAGCTGCCTGGTCCCAGAGTGGCTGCACCACTTCCAGGGTTTATTCCCTGGTGCCACCAGCC
TTCCTGTGGGCCCCTTAGCAATGTCTTAGGAAAGGAGATCAACATTTTCAAATTAGATGTTTCAACTGTGCTCTT
GTTTTGTCTTGAAAGTGGCACCAGAGGTGCTTCTGCCTGTGCAGCGGGTGCTGCTGGTAACAGTGGCTGCTCTCT
CTCCTCTCTCTCTTTTGGGGGGCTCATTTTTGCTGTTTTGATTCCCGGGCTTACCAGGTGAGAAGTGAGGGAGGA
AGAAGGCAGTGTCCCTTTTGCTAGAGCTGACAGTTTTGTTCGCGTGGGCAGAGCCTTCCACAGTGAATGTGTCTG
GACCTCATGTTGTTGAGGCTGTCACAGTCCTGAGTGTGGACTTGGCAGGTGCCTGTTGAATCTGAGCTGCAGGTT
CCTTATCTGTCACACCTGTGCCTCCTCAGAGGACAGTTTGTGTCGTGTTTATGTTTTAACTTCAGGGTGGATGCA
TGACTTGTGTGTGATGAGAGAATGGAGACAGAGTCCCCGGCTCCTCTACTGTTTAACAACATGGCTTTCTTATTT
TGTTTGAATTGTTAATTCACAGAATAGCACAAACTACAATTAAAACTAAGCACAAAGCCATTCTAAGTCATTGGG
GAAACGGGGTGAACTTCAGGTGGATGAGGAGACAGAATAGAGTGATAGGAAGCGTCTGGCAGATACTCCTTTTGC
CACTGCTGTGTGATTAGACAGGCCCAGTGAGCCGCGGGGCACATGCTGGCCGCTCCTCCCTCAGAAAAAGGCAGT
GGCCTAAATCCTTTTTAAATGACTTGGCTCGATGCTGTGGGGGACTGGCTGGGCTGCTGCAGGCCGTGTGTCTGT
CAGCCCAACCTTCACATCTGTCACGTTCTCCACACGGGGGAGAGACGCAGTCCGCCCAGGTCCCCGCTTTCTTTG
GAGGCAGCAGCTCCCGCAGGGCTGAAGTCTGGCGTAAGATGATGGATTTGATTCGCCCTCCTCCCTGTCATAGAG
CTGCAGGGTGGATTGTTACAGCTTCGCTGGAAACCTCTGGAGGTCATCTCGGCTGTTCCTGAGAAATAAAAAGCC
TGTCATTTCAAACACTGCTGTGGACCCTACTGGGTTTTTAAAATATTGTCAGTTTTTCATCGTCGTCCCTAGCCT
GCCAACAGCCATCTGCCCAGACAGCCGCAGTGAGGATGAGCGTCCTGGCAGAGACGCAGTTGTCTCTGGGCGCTT
GCCAGAGCCACGAACCCCAGACCTGTTTGTATCATCCGGGCTCCTTCCGGGCAGAAACAACTGAAAATGCACTTC
AGACCCACTTATTTATGCCACATCTGAGTCGGCCTGAGATAGACTTTTCCCTCTAAACTGGGAGAATATCACAGT
GGTTTTTGTTAGCAGAAAATGCACTCCAGCCTCTGTACTCATCTAAGCTGCTTATTTTTGATATTTGTGTCAGTC
TGTAAATGGATACTTCACTTTAATAACTGTTGCTTAGTAATTGGCTTTGTAGAGAAGCTGGAAAAAAATGGTTTT
GTCTTCAACTCCTTTGCATGCCAGGCGGTGATGTGGATCTCGGCTTCTGTGAGCCTGTGCTGTGGGCAGGGCTGA
GCTGGAGCCGCCCCTCTCAGCCCGCCTGCCACGGCCTTTCCTTAAAGGCCATCCTTAAAACCAGACCCTCATGGC
TGCCAGCACCTGAAAGCTTCCTCGACATCTGTTAATAAAGCCGTAGGCCCTTGTCTAAGCGCAACCGCCTAGACT
TTCTTTCAGATACATGTCTACATGTCCATTTTTCAGGTTCTCTAAGTTGGAGTGGAGTCTGGGAAGGGTTGTGAA
TGAGGCTTCTGGGCTATGGGTGAGGTTCCAATGGCAGGTTAGAGCCCCTCGGGCCAACTGCCATCCTGGAAAGTA
GAGACAGCAGTGCCCGCTGCCCAGAAGAGACCAGCAAGCCAAACTGGAGCCCCCATTGCAGGCTGTCGCCATGTG
GAAAGAGTAACTCACAATTGCCAATAAAGTCTCATGTGGTTTTATCT

FIGURE 664

KTALHMFCSRFLVFCDAWA

FIGURE 665

CCGCCAGATTTGAATCGCGGGACCCGTTGGCAGAGGTGGCGGCGGCGGCATGGGTGCCCCGACGTTGCCCCCTGC
CTGGCAGCCCTTTCTCAAGGACCACCGCATCTCTACATTCAAGAACTGGCCCTTCTTGGAGGGCTGCGCCTGCAC
CCCGGAGCGGATGGCCGAGGCTGGCTTCATCCACTGCCCCACTGAGAACGAGCCAGACTTGGCCCAGTGTTTCTT
CTGCTTCAAGGAGCTGGAAGGCTGGGAGCCAGATGACGACCCCATAGAGGAACATAAAAAGCATTCGTCCGGTTG
CGCTTTCCTTTCTGTCAAGAAGCAGTTTGAAGAATTAACCCTTGGTGAATTTTTGAAACTGGACAGAGAAAGAGC
CAAGAACAAAATTGCAAAGGAAACCAACAATAAGAAGAAAGAATTTGAGGAAACTGCGAAGAAAGTGCGCCGTGC
CATCGAGCAGCTGGCTGCCATGGATTGAGGCCTCTGGCCGGAGCTGCCTGGTCCCAGAGTGGCTGCACCACTTCC
AGGGTTTATTCCCTGGTGCCACCAGCCTTCCTGTGGGCCCCTTAGCAATGTCTTAGGAAAGGAGATCAACATTTT
CAAATTAGATGTTTCAACTGTGCTCCTGTTTTGTCTTGAAAGTGGCACCAGAGGTGCTTCTGCCTGTGCAGCGGG
TGCTGCTGGTAACAGTGGCTGCTTCTCTCTCTCTCTCTCTTTTTTGGGGGCTCATTTTTGCTGTTTTGATTCCCG
GGCTTACCAGGTGAGAAGTGAGGGAGGAAGAAGGCAGTGTCCCTTTTGCTAGAGCTGACAGCTTTGTTCGCGTGG
GCAGAGCCTTCCACAGTGAATGTGTCTGGACCTCATGTTGTTGAGGCTGTCACAGTCCTGAGTGTGGACTTGGCA
GGTGCCTGTTGAATCTGAGCTGCAGGTTCCTTATCTGTCACACCTGTGCCTCCTCAGAGGACAGTTTTTTTGTTG
TTGTGTTTTTTTGTTTTTTTTTTTTGGTAGATGCATGACTTGTGTGTGATGAGAGAATGGAGACAGAGTCCCTGG
CTCCTCTACTGTTTAACAACATGGCTTTCTTATTTTGTTTGAATTGTTAATTCACAGAATAGCACAAACTACAAT
TAAAACTAAGCACAAAGCCATTCTAAGTCATTGGGGAAACGGGGTGAACTTCAGGTGGATGAGGAGACAGAATAG
AGTGATAGGAAGCGTCTGGCAGATACTCCTTTTGCCACTGCTGTGTGATTAGACAGGCCCAGTGAGCCGCGGGGC
ACATGCTGGCCGCTCCTCCCTCAGAAAAAGGCAGTGGCCTAAATCCTTTTTAAATGACTTGGCTCGATGCTGTGG
GGGACTGGCTGGGCTGCTGCAGGCCGTGTGTCTGTCAGCCCAACCTTCACATCTGTCACGTTCTCCACACGGGGG
AGAGACGCAGTCCGCCCAGGTCCCCGCTTTCTTTGGAGGCAGCAGCTCCCGCAGGGCTGAAGTCTGGCGTAAGAT
GATGGATTTGATTCGCCCTCCTCCCTGTCATAGAGCTGCAGGGTGGATTGTTACAGCTTCGCTGGAAACCTCTGG
AGGTCATCTCGGCTGTTCCTGAGAAATAAAAAGCCTGTCATTTC

FIGURE 666

MGAPTLPPAWQPFLKDHRISTFKNWPFLEGCACTPERMAEAGFIHCPTENEPDLAQCFFCFKELEGWEPDDDPIE
EHKKHSSGCAFLSVKKQFEELTLGEFLKLDRERAKNKIAKETNNKKKEFEETAKKVRRAIEQLAAMD

FIGURE 667

AATTCCGCGGAATCATCGGAATCCTTCACCATGGCATCCAGCCCGGCCCAGCGTCGGCGAGGCAATGATCCTCTC
ACCTCCAGCCCTGGCCGAAGCTCCCGGCGTACTGATGCCCTCACCTCCAGCCCTGGCCGTGACCTTCCACCATTT
GAGGATGAGTCCGAGGGGCTCCTAGGCACAGAGGGGCCCCTGGAGGAAGAAGAGGATGGAGAGGAGCTCATTGGA
GATGGCATGGAAAGGGACTACCGCGCCATCCCAGAGCTGGACGCCTATGAGGCCGAGGGACTGGCTCTGGATGAT
GAGGACGTAGAGGAGCTGACGGCCAGTCGAAGGGAGGCAGCAGACGGGCCATGCGGCACGGTGACCGGGAGCTGG
CCGGGGCTGGGCGCATGCGCCGTGGGCTCCTGTATGACAGCGATGAGGAGGACGAGGAGCGCCCTGCCCGCAAGC
GCCGCCAGTGGAGCCGGCACGGAGGACGGCGAGGAGGACGAGCAGATGATTGAGAGCATCGAGAACCTGGAGGAT
CTCAAAGGCCACTCTGTGCGCGAGTGGGTGAGCATGGCGGGCCCCCGGCTGGAGATCCACCACCGCTTCAAGAAC
TTCCTGCGCACTCACGTCGACAGCCACGGCCACAACGTCTTCAAGGAGCGCATCAGCGACATGTGCAAAGAGAAC
CGTGAGAGCCTGGTGGTGAACTATGAGGACTTGGCAGCCAGGGAGCACGTGCTGGCCTACTTCCTGCCTGAGGCA
CCGGCGGAGCTGCTGCAGATCTTTGATGAGGCTGCCCTGGAGGTGGTACTGGCCATGTACCCCAAGTACGACCGC
ATCACCAACCACATCCATGTCCGCATCTCCCACCTGCCTCTGGTGGAGGAGCTGCGCTCGCTGAGGCAGCTGCAT
CTGAACCAGCTGATCCGCACCAGTGGGGTGGTGACCAGCTGCACTGGCGTCCTGCCCCAGCTCAGCATGGTCAAG
TACAACTGCAACAAGTGCAATTTCGTCCTGGGTCCTTTCTGCCAGTCCCAGAACCAGGAGGTGAAACCAGGCTCC
TGTCCTGAGTGCCAGTCGGCCGGCCCCTTTGAGGTCAACATGGAGGAGACCATCTATCAGAACTACCAGCGTATC
CGAATCCAGGAGAGTCCAGGCAAAGTGGCGGCTCGGCGGCTGCCCCGCTCCAAGGACGCCATTCTCCTCGCAGAT
CTGGTGGACAGCTGCAACGCAGGAGACGAGATAGAGCTGACTGGCATCTATCACAACAACTATGATGGCTCCCTC
AACACTGCCAATGGCTTCCCTGTCTTTGCCACTGTCATCCTAGCCAACCACGTGGCCAAGAAGGACAACAAGGTT
GCTGTAGGGGAACTGACCGATGAAGATGTGAAGATGATCACTAGCCTCTCCAAGGATCAGCAGATCGGAGAGAAG
ATCTTTGCCAGCATTGCTCCTTCCATCTATGGTCATGAAGACATCAAGAGAGGCCCTGCTCTGGCCCTGTTCGGA
GGGGAGCCCAAAAACCCAGGTGGCAAGCACAAGGTACGTGGTGATATCAACGTGCTCTTGTGCGGAGACCCTGGC
ACAGCGAAGTCGCAGTTTCTCAAGTATATTGAGAAAGTGTCCAGCCGAGCCATCTTCACCACTGGCCAGGGGGCG
TCGGCTGTGGCCGTCACGGCGTATGTCCAGCGGCACCCTGTCAGCAGGGAGTGGACCTTGGAGGCTGGGGCCCTG
GTTCTGGCTGACCGAGGAGTGTGTCTCATTGATGAATTTGACAAGATGAATGACCAGGACAGAACCAGCATCCAT
GAGGCCATGGAGCAACAGAGCATCTCCATCTCGAAGGCTGGCATCGTCACCTCCCTGCAGGCTCGCTGCACGGTC
ATTGCTGCCGCCAACCCCATAGGAGGGCGCTACGACCCCTCGCTGACTTTCTCTGAGAACGTGGACCTCACAGAG
CCCATCATCTCACGCTTTGACATCCTGTGTGTGGTGAGGGACACCGTGGACCCAGTCCAGGACGAGATGCTGGCC
CGCTTCGTGGTGGGCAGCCACGTCAGACACCACCCCAGCAACAAGGAGGAGGAGGGGCTGGCCAATGGCAGCGCT
GCTGAGCCCGCCATGCCCAACACGTATGGCGTGGAGCCCCTGCCCCAGGAGGTCCTGAAGAAGTACATCATCTAC
GCCAAGGAGAGGGTCCACCCGAAGCTCAACCAGATGGACCAGGACAAGGTGGCCAAGATGTACAGTGACCTGAGG
AAAGAATCTATGGCGACAGGCAGCATCCCCATTACGGTGCGGCACATCGAGTCCATGAGTCATGGCGGAGGCCCA
CGCGCGCATCCATCTGCGGGACTATGTGATCGAAGACGACGTCAACATGGCCATCCGCGTGATGCTGGAGAGCTT
CATAGACACACAGAAGTTCAGCGTCATCGCAGCATGCGCAAGACTTTTGCCCGCTACCTTTCATTCCGGCGTGAC
AACAATGAGCTGTTGCTCTTCATACTGAAGCAGTTAGTGGCAGAGCAGGTGACATATCAGCGCAACCGCTTTGGG
GCCCAGCAGGACACTATTGAGGTCCCTGAGAAGGACTTGGTGGATAAGGCTCGTCAGATCAACATCCACAACCTC
TCTGCATTTTATGACAGTGAGCTCTTCAGGATGAACAAGTTCAGCCACGACCTGAAAAGGAAAATGATCCTGCAG
CAGTTCTGAGGCCCTATGCCATCCATAAGGATTCCTTGGGATTCTGGTTTGGGGTGGTCAGTGCCCTCTGTGCTT
TATGGACACAAAACCAGAGCACTTGATGAACTCGGGGTACTAGGGTCAGGGCTTATAGCAGGATGTCTGGCTGCA
CCTGGCATGACTGTTTGTTTCTCCAAGCCTGCTTTGTGCTTCTCACCTTTGGGTGGGATGCCTTGCCAGTGTGTC
TTACTTGGTTGCTGAACATCTTGCCACCTCCGAGTGCTTTGTCTCCACTCAGTACCTTGGATCAGAGCTGCTGAG
TTCAGGATGCCTGCGTGTGGTTTAGGTGTTAGCCTTCTTACATGGATGTCAGGAGAGCTGCTGCCCTCTTGGCGT
GAGTTGCGTATTCAGGCTGCTTTTGCTCGCTTTGGCCAGAGAGCTGGTTGAAGATGTTTGTAATCGTTTTCAGTC
TCCTGCAGGTTTCTGTGCCCCTGTGGTGGAAGAGGCACGACAGTGCCAGCGCAGCGTTCTGGGCTCCTCAGTCGC
AGGGGTGGGATGTGAGTCATGCGGATTATCCACTCGCCACAGTTATCAGCTGCCATTGCTCCCTGTCTGTTTCCC
CACTCTCTTATTTGTGCATTCGGTTTGGTTTCTGTAGTTTTAATTTTTAATAAAGTTGAATAAAATATAAAAAAA
AAAA

FIGURE 668

MASSPAQRRRGNDPLTSSPGRSSRRTDALTSSPGRDLPPFEDESEGLLGTEGPLEEEEDGEELIGDGMERDYRAI
PELDAYEAEGLALDDEDVEELTASRREAADGPCGTVTGSWPGLGACAVGSCMTAMRRTRSALPASAASGAGTEDG
EEDEQMIESIENLEDLKGHSVREWVSMAGPRLEIHHRFKNFLRTHVDSHGHNVFKERISDMCKENRESLVVNYED
LAAREHVLAYFLPEAPAELLQIFDEAALEVVLAMYPKYDRITNHIHVRISHLPLVEELRSLRQLHLNQLIRTSGV
VTSCTGVLPQLSMVKYNCNKCNFVLGPFCQSQNQEVKPGSCPECQSAGPFEVNMEETIYQNYQRIRIQESPGKVA
ARRLPRSKDAILLADLVDSCNAGDEIELTGIYHNNYDGSLNTANGFPVFATVILANHVAKKDNKVAVGELTDEDV
KMITSLSKDQQIGEKIFASIAPSIYGHEDIKRGPALALFGGEPKNPGGKHKVRGDINVLLCGDPGTAKSQFLKYI
EKVSSRAIFTTGQGASAVAVTAYVQRHPVSREWTLEAGALVLADRGVCLIDEFDKMNDQDRTSIHEAMEQQSISI
SKAGIVTSLQARCTVIAAANPIGGRYDPSLTFSENVDLTEPIISRFDILCVVRDTVDPVQDEMLARFVVGSHVRH
HPSNKEEEGLANGSAAEPAMPNTYGVEPLPQEVLKKYIIYAKERVHPKLNQMDQDKVAKMYSDLRKESMATGSIP
ITVRHIESMSHGGGPRAHPSAGLCDRRRRQHGHPRDAGELHRHTEVQRHRSMRKTFARYLSFRRDNNELLLFILK
QLVAEQVTYQRNRFGAQQDTIEVPEKDLVDKARQINIHNLSAFYDSELFRMNKFSHDLKRKMILQQF

FIGURE 669

ATGAGAGCAAGTAATTGTGGAAATATTTTTGGTGTAAAATCATTCCAGAGTATGTAATATTTAACTGATAGCTGC
ATGAAAGTGAGATTCGTGTTACTTTGGCTTTTCTGTCTCTGTTGACACGGTTGCACATTTCCAAGTTACTACAGC
GTGAAAACTGTGTGTTTANNNNNNNNNNNNNNNNNNNNNNNNGATTGTGGCCTGGTTTTGTAAAAGTTTTAGGTA
AAATTACAATTGATTGTTTTAGGAATCATTATTAAAAATTTTCTGCAAATCATAAAGCTATATCGAGGTGTTGAG
CTTAGCCACTATGCACATTGTAATTATTCATTGTGGCTGTCC

FIGURE 670

MRASNCGNIFGVKSFQSM

FIGURE 671

CCGAACGCCCGCAGCAGGGTCAGAAGGGAGGTGGCCGGTCTCCGTCGTGACCTCTGACGGTTTCTGAGCGTTGGC
CTTTGGCACGCGCTACACCCTTTTGCTTTGGTTCTGCCATGCCGATGTACCAGGTAAAGCCCTATCACGGGGGCG
GCGCGCCTCTCCGTGTGGAGCTTCCCACCTGCATGTACCGGCTCCCCAACGTGCACGGCAGGAGCTACGGCCCAG
CGCCGGGCGCTGGCCACGTGCAGGAAGAGTCTAACCTGTCTCTGCAAGCTCTTGAGTCCCGCCAAGATGATATTT
TAAAACGTCTGTATGAGTTGAAAGCTGCAGTTGATGGCCTCTCCAAGATGATTCAAACACCAGATGCAGACTTGG
ATGTAACCAACATAATCCAAGCGGATGAGCCCACGACTTTAACCACCAATGCGCTGGACTTGAATTCAGTGCTTG
GGAAGGATTACGGGGCGCTGAAAGACATCGTGATCAACGCAAACCCGGCCTCCCCTCCCCTCTCCCTGCTTGTGC
TGCACAGGCTGCTCTGTGAGCACTTCAGGGTCCTGTCCACGGTGCACACGCACTCCTCGGTCAAGAGCGTGCCTG
AAAACCTTCTCAAGTGCTTTGGAGAACAGAATAAAAAACAGCCCCGCCAAGACTATCAGCTGGGATTCACTTTAA
TTTGGAAGAATGTGCCGAAGACGCAGATGAAATTCAGCATCCAGACGATGTGCCCCATCGAAGGCGAAGGGAACA
TTGCACGTTTCTTGTTCTCTCTGTTTGGCCAGAAGCATAATGCTGTCAACGCAACCCTTATAGATAGCTGGGTAG
ATATTGCGATTTTTCAGTTAAAAGAGGGAAGCAGTAAAGAAAAAGCCGCTGTTTTCCGCTCCATGAACTCTGCTC
TTGGGAAGAGCCCTTGGCTCGCTGGGAATGAACTCACCGTAGCAGACGTGGTGCTGTGGTCTGTACTCCAGCAGA
TCGGAGGCTGCAGTGTGACAGTGCCAGCCAATGTGCAGAGGTGGATGAGGTCTTGTGAAAACCTGGCTCCTTTTA
ACACGGCCCTCAAGCTCCTTAAGTGAATTGCCGTAACTGATTTTAAAGGGTTTAGATTTTAAGAATGGTGCTCTT
TCATGCCTATTATCAGTAAGGGGACTTGTATTAGAGTCAGAGTCTTTTTATTTAGGCCAGTTGTCAAGTGTCAAT
AAAAGCGCATCATGTAATTTA

FIGURE 672

MPMYQVKPYHGGGAPLRVELPTCMYRLPNVHGRSYGPAPGAGHVQEESNLSLQALESRQDDILKRLYELKAAVDG
LSKMIQTPDADLDVTNIIQADEPTTLTTNALDLNSVLGKDYGALKDIVINANPASPPLSLLVLHRLLCEHFRVLS
TVHTHSSVKSVPENLLKCFGEQNKKQPRQDYQLGFTLIWKNVPKTQMKFSIQTMCPIEGEGNIARFLFSLFGQKH
NAVNATLIDSWVDIAIFQLKEGSSKEKAAVFRSMNSALGKSPWLAGNELTVADVVLWSVLQQIGGCSVTVPANVQ
RWMRSCENLAPFNTALKLLK

FIGURE 673

GCTCCGGCCAGCCGCGGTCCAGAGCGCGCGAGGTTCGGGGAGCTCCGCCAGGCTGCTGGTACCTGCGTCCGCCCG
GCGAGCAGGACAGGCTGCTTTGGTTTGTGACCTCCAGGCAGGACGGCCATCCTCTCCAGAATGAAGATCTTCTTG
CCAGTGCTGCTGGCTGCCCTTCTGGGTGTGGAGCGAGCCAGCTCGCTGATGTGCTTCTCCTGCTTGAACCAGAAG
AGCAATCTGTACTGCCTGAAGCCGACCATCTGCTCCGACCAGGACAACTACTGCGTGACTGTGTCTGCTAGTGCC
GGCATTGGGAATCTCGTGACATTTGGCCACAGCCTGAGCAAGACCTGTTCCCCGGCCTGCCCCATCCCAGAAGGC
GTCAATGTTGGTGTGGCTTCCATGGGCATCAGCTGCTGCCAGAGCTTTCTGTGCAATTTCAGTGCGGCCGATGGC
GGGCTGCGGGCAAGCGTCACCCTGCTGGGTGCCGGGCTGCTGCTGAGCCTGCTGCCGGCCCTGCTGCGGTTTGGC
CCCTGACCGCCCAGACCCTGTCCCCCGATCCCCCAGCTCAGGAAGGAAAGCCCAGCCCTTTCTGGATCCCACAGT
GTATGGGAGCCCCTGACTCCTCACGTGCCTGATCTGTGCCCTTGGTCCCAGGTCAGGCCCACCCCCTGCACCTCC
ACCTGCCCCAGCCCCTGCCTCTGCCCAAGTGGGCCAGCTGCCCTCACTTCTGGGGTGGATGATGTGACCTTCCTT
GGGGGACTGCGGAAGGGACGAGGGTTCCCTGGAGTCTTACGGTCCAACATCAGACCAAGTCCCATGGACATGCTG
ACAGGGTCCCCAGGGAGACCGTGTCAGTAGGGATGTGTGCCTGGCTGTGTACGTGGGTGTGCAGTGCACGTGAGA
GCACGTGGCGGCTTCTGGGGGCCATGTTTGGGGAGGGAGGTGTGCCAGCAGCCTGGAGAGCCTCAGTCCCTGTAG
CCCCCTGCCCTGGCACAGCTGCATGCACTTCAAGGGCAGCCTTTGGGGGTTGGGGTTTCTGCCACTTCCGGGTCT
AGGCCCTGCCCAAATCCAGCCAGTCCTGCCCCAGCCCACCCCCACATTGGAGCCCTCCTGCTGCTTTGGTGCCTC
AAATAAATACAGATGTCCCC

FIGURE 674

MKIFLPVLLAALLGVERASSLMCFSCLNQKSNLYCLKPTICSDQDNYCVTVSASAGIGNLVTFGHSLSKTCSPAC
PIPEGVNVGVASMGISCCQSFLCNFSAADGGLRASVTLLGAGLLLSLLPALLRFGP

FIGURE 675

GAGCTGCGAAAGGGCGGGAAAGGCAGTTGGAGAAGAGGTAAGCGGTTACTCACTCCATGGCTGCAGCAAGGAGAG
GCGGCGGCGGCCTCGGCTGAAGAAAGAAGGTGGGAGCGGAGAGCGCAGGCGTGAAATCTTCCCAAGGCTGCAGAC
ACCGACGGATTTGCTTTGGGAGCCAGAGTAGCTGCCGCCACCAGAGTCCGGAGCCATGAGCGGGTTTAATTTTGG
AGGCACTGGGGCCCCTACAGGCGGGTTCACGTTTGGCACTGCAAAGACGGCAACAACCACACCTGCTACAGGGTT
TTCTTTCTCCACCTCTGGCACTGGAGGGTTTAATTTTGGGGCTCCCTTCCAACCAGCCACAAGTACCCCTTCCAC
CGGCCTGTTCTCACTTGCCACCCAGACTCCGGCCACACAGACGACAGGCTTCACTTTTGGAACAGCGACTCTTGC
TTCGGGGGGAACTGGATTTTCTTTGGGGATCGGTGCTTCAAAGCTCAACTTGAGCAACACAGCTGCCACCCCAGC
CATGGCAAACCCCAGCGGCTTTGGGCTGGGCAGCAGCAACCTCACTAATGCCATATCGAGCACCGTCACCTCCAG
CCAGGGCACAGCACCCACCGGCTTTGTGTTTGGCCCCTCCACCACCTCTGTGGCTCCAGCTACCACATCTGGAGG
CTTCTCATTCACTGGTGGAAGCACGGCCCAACCCTCCGGTTTCAACATTGGCTCAGCAGGGAATTCAGCCCAGCC
CACGGCACCTGCCACGTTGCCCTTCACTCCGGCCACGCCAGCAGCCACCACAGCAGGTGCCACACAGCCAGCTGC
TCCCACACCCACAGCCACCATCACCAGTACTGGGCCCAGCCTCTTTGCGTCAATAGCAACTGCTCCAACCTCATC
TGCCACCACTGGACTCTCCCTCTGTACCCCTGTGACCACAGCGGGCGCCCCCACTGCTGGGACACAGGGCTTCAG
CTTAAAGGCACCTGGAGCAGCTTCCGGCACCTCCACAACAACATCCACCGCTGCCACCGCCACCGCCACCACCAC
CACCAGCAGCAGCACCACCGGCTTTGCCTTGAATTTAAAACCACTGGCGCCAGCCGGGATCCCCAGCAATACAGC
AGCTGCCGTGACCGCTCCACCTGGCCCTGGCGCAGCTGCAGGGGCGGCTGCCAGCTCCGCCATGACCTACGCGCA
GCTGGAGAGCCTGATCAACAAATGGAGCCTGGAGCTAGAGGACCAGGAGCGGCACTTCCTCCAGCAGGCCACCCA
GGTCAACGCCTGGGACCGCACGCTGATCGAGAATGGAGAAAAGATCACCAGCCTGCACCGCGAGGTGGAGAAGGT
GAAGCTGGACCAGAAGAGGCTGGACCAGGAGCTCGACTTCATCCTGTCCCAGCAGAAGGAGCTGGAAGACCTGCT
GAGCCCACTGGAGGAGTTGGTCAAGGAGCAGAGCGGGACCATCTACCTGCAGCACGCGGATGAGGAGCGTGAGAA
AACCTACAAGCTGGCTGAGAACATCGACGCACAGCTCAAGCGCATGGCCCAGGATCTCAAGGACATCATCGAGCA
CCTGAACACGTCCGGGGCCCCCGCCGACACCAGTGACCCACTGCAGCAGATCTGCAAGATCCTCAATGCGCACAT
GGACTCACTGCAGTGGATCGACCAGAACTCGGCCCTGCTGCAGAGGAAGGTGGAGGAGGTGACCAAGGTGTGCGA
GGGCCGGCGCAAGGAGCAGGAGCGCAGCTTCCGGATCACCTTTGACTGAGCGACAGCAGCCCTGGGGCCCGCAGG
TCCCTAGGGAGTTCATGAGGGGAATGCGCCCTGTTGTCTGTAGTTTGGGGTTGTGGCAAGATACTTGTTTGTTTG
TTTCTTTCTTTCACATGACTGCCCTTGACATGATCGCTGTGTGCTTTGCGTTTTTCCATTTAGGAGGGTATTCTG
GGCCTTCTGCCCAGGCAGCAGCCTCATGGGTGTGGCTTCTGTGGCTTTCATTTGAGTATCTTTGGCCCCTTTTCA
CCTACTGCGACCACCCACCTCATCCTGGCTCAGCCTGGTGATGGAGAAGTGCTGATGGTCTTGGTCCCAGCCAGG
GTCGTGGGGGCAGCCACTCTCTCCAAAGCATAGTCATGGGTGTCATGAAAAAATACCAAATGTAAGAGAACCTCC
AAGTCAGGGCGCAGTGGCTCACCCCTGTAATCTCAGCACTTTGGGTGGCCAAGGCGGGCAGATGACTTGAGGTCA
GGAGTTCGAGACCAGCCTGGCCAACATGGTGAAACCCCGTCTCTACTAAAAATACAAAAATTAGTCAGGTGTGGT
GGACGCCTGTGATCTCAATCTCAGCTACTCGGGAGGCTGAGGCAGGAGAATCACTTGAACCCAGGAGGTGTTGCA
GTGAACCAAGATCACACCACTGCACTCCAGCCTAGGCAACAGAGACTCTGTCTCAAAAAAAAAAAAAAAAAAAAG
AAACTCCCAGGAGACAGCAGCCTAGTTTTCGAGTGTGAGCTTGTGCTTGTGAAAGCTAACCATGCTAACCACCAA
GGCAAAGCAGCACAGTGTGAATAGAACAGAGCGGGATCAAGAATTTCACAGAAGACAGGTCAGCTGAGGGGCCTG
CACACACAGGGTGTTGAGGAACCACAGATGGGCGCCGAGAGGCCTGCCTTTTGCCTGGCCCAGGCTCACCCCCAC
CTTGGGCCTCACCTCCTCTAGGAAGCCTTCCCAGCTACCCGAAGCTCAGGTGGCCTTCTTGCAGGTCCCCGTAGC
ACCCTGAGCCTGTACCTTGGGTGGCACTTGTTATGCTATCCTGTGCTAGCCGTTTGTGCCTCGTCTCGCTGTTAG
ATTGTGAGTTCCCATGGGCAGAGACCCACTGTCGTTCCCCGTGTGTCCCCAGCCCGGTCCCTGTCACATTTGTTA
AATGAAAGAACAATGAAGCCCAGTGTAACGTCAGTCCACAGAAATAGCCACAGCTTCCAGTGGTGGCCGTAGACT
TGGCTCGGAACTTAGTGGCACCAGAGTAACTCTAGTCAGTTACAGTAAAATCCACTGTGTGTGGAAGGCAGAAGC
TAGCGGTTGTATCCCAAGCATCTTTTGTATTTGTCTTTATACTTTGCTGAATTCTCTGAAATACCTATTACTGTA
TGTGGCTTTTCTAAATAAATGTATTGTGAAACTAAAAAAAAAAAAAAAAA

FIGURE 676

MSGFNFGGTGAPTGGFTFGTAKTATTTPATGFSFSTSGTGGFNFGAPFQPATSTPSTGLFSLATQTPATQTTGFT
FGTATLASGGTGFSLGIGASKLNLSNTAATPAMANPSGFGLGSSNLTNAISSTVTSSQGTAPTGFVFGPSTTSVA
PATTSGGFSFTGGSTAQPSGFNIGSAGNSAQPTAPATLPFTPATPAATTAGATQPAAPTPTATITSTGPSLFASI
ATAPTSSATTGLSLCTPVTTAGAPTAGTQGFSLKAPGAASGTSTTTSTAATATATTTTSSSTTGFALNLKPLAPA
GIPSNTAAAVTAPPGPGAAAGAAASSAMTYAQLESLINKWSLELEDQERHFLQQATQVNAWDRTLIENGEKITSL
HREVEKVKLDQKRLDQELDFILSQQKELEDLLSPLEELVKEQSGTIYLQHADEEREKTYKLAENIDAQLKRMAQD
LKDIIEHLNTSGAPADTSDPLQQICKILNAHMDSLQWIDQNSALLQRKVEEVTKVCEGRRKEQERSFRITFD

FIGURE 677

CGCAGGGACCGTGCTCCGCCGTCTCCGCCGCATCTTCCACCCTCGCCGCCGCCGCAGCTCCCCGCGCTCGTGCCA
CCGCCGCCGCGTCCACCCTCAGCGCCACCGCC**ATG**CGGGAGATCGTGCACCTGCAGGCCGGCCAGTGCGGCAACC
AGATCGGGGCCAAGTTTTGGGAGGTTATCAGTGACGAACATGGCATCGACCCCACAGGCACATACCATGGGGACA
GTGACCTGCAACTGGAGAGGATCAACGTGTACTACAACGAGGCCACAGGAGGAAATTATGTCCCCAGAGCGGTGC
TGGTGGACCTGGAACCCGGCACCATGGACTCTGTCCGTTCTGGCCCCTTCGGTCAGATCTTTCGGCCGGACAACT
TCGTGTTTGGCCAATCCGGAGCCGGCAACAACTGGGCAAAGGGGCACTACACGGAGGGCGCAGAGCTGGTGGACG
CTGTCCTGGACGTAGTCCGGAAGGAGGCCGAGAGCTGCGACTGCCTTCAGGGCTTCCAGCTGACCCACTCGCTGG
GGGGTGGCACGGGGTCCGGAATGGGCACGCTGCTCATCAGTAAGATCCGCGAGGAGTTCCCAGACCGCATCATGA
ACACCTTCAGCGTGGTGCCCTCGCCCAAAGTGTCAGACACGGTGGTGGAGCCCTACAACGCCACGCTGTCTGTGC
ACCAGCTGGTGGAGAATACGGATGAGACCTACTGCATCGACAACGAGGCACTCTACGACATCTGTTTCCGCACCC
TCAAGCTGACCACCCCCACCTACGGGGACCTCAACCACCTGGTGTCGGCCACCATGAGCGGGGTCACCACCTGCC
TGCGCTTCCCGGGCCAGCTGAACGCCGACCTGCGCAAGCTGGCCGTCAACATGGTTCCCTTTCCTCGCCTGCACT
TCTTCATGCCCGGCTTCGCACCCCTGACCAGCCGGGGCAGCCAGCAGTACCGGGCCCTGACGGTGCCCGAGCTCA
CCCAGCAGATGTTCGATGCCAAGAACATGATGGCGGCGTGCGACCCGCGCCACGGCCGCTACCTGACCGTGGCCG
CCGTGTTCCGGGGCCGCATGTCCATGAAGGAGGTGGACGAGCAGATGCTGAGCGTGCAGAGCAAGAACAGCAGCT
ACTTCGTGGAGTGGATCCCCAACAACGTGAAGACGGCCGTGTGCGACATCCCGCCCCGCGGCCTGAAGATGGCCG
CGACCTTCATCGGCAACAGCACGGCCATCCAGGAGCTGTTCAAGCGCATCTCCGAGCAGTTCACGGCCATGTTCC
GGCGCAAGGCCTTCTTGCACTGGTACACGGGCGAGGGCATGGACGAGATGGAGTTCACCGAGGCCGAGAGCAACA
TGAATGACCTGGTATCTGAGTACCAGCAGTACCAGGACGCCACGGCCGAGGAGGGCGAGTTCGAGGAGGAGGCGG
AGGAGGAGGTGGCC**TAG**GCTGCTCCCATCGCTTCCCACCTGTCCCCTCGAGGCTTCTGACCTTTGATCCGCTAGG
CCCCCCATCTCTGAACCCTAGAGCCCCGCTTTCCCTCCAAGGCTGACTCCCCGCTGACCCTAACAATACCTTTGG
AGCTCGCTTTACCTCTGGCTACTTCATCTCCGACCCTGGCTCCCCTTTGAGCCCTAATTTATCTTTAACCCCCTT
GAGCTCTTCCAACCTTGACATTCCCAGGAGGAGCCCCGCTTCACCCCTTCTGACTCTGGAAACCGCACCTTTAAC
TTTGCAGACCTTCCTTCACCCCTGACTTCTGCTTCACCTTTGACCTCTGCCCCCCATGAATCCCATTTTACCTCT
AGACCTATAAGTTCTGGTTTATGTTTGACCCCTCCCTCTGAGCTGCACTTCACCGCTGACCTTGCCTCACCTTTA
ACCCCCCACCTGAGCCCCAGCTCCTACCTCTGACCCCAACTTCTCTTTGATCTCTGAATCCCCTCTGACTCCAAC
TTCTCTTTCACCCTCTATGAGTCCCATTTTACTTCTACACCTGCAAGTCCTGGTTTATATTGGACCCCTCCCTCC
GAGCTGCAGTTCACCTTTGACCTTGCCTCACCTTTCACCCCCCACCCCCCACAGCGTCAGCTCCTACCTCTGACC
CCAGCTTCTCTCTGATTCCCACAGGCCCCATGCATCCTCCCTGCCTCACTCCCCTCAGCCCCTGCCGACCTTAGC
TTATCTGGGAGAGAAACAAGGCCTGGTGCCTGTGAGGAAGAGAGGTCACCCCTACCCTCCCTCCCCGCTTCCCTG
CCTCACCCTCAATAAATAAATTAATTGTTGTCATGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 678

MREIVHLQAGQCGNQIGAKFWEVISDEHGIDPTGTYHGDSDLQLERINVYYNEATGGNYVPRAVLVDLEPGTMDS
VRSGPFGQIFRPDNFVFGQSGAGNNWAKGHYTEGAELVDAVLDVVRKEAESCDCLQGFQLTHSLGGGTGSGMGTL
LISKIREEFPDRIMNTFSVVPSPKVSDTVVEPYNATLSVHQLVENTDETYCIDNEALYDICFRTLKLTTPTYGDL
NHLVSATMSGVTTCLRFPGQLNADLRKLAVNMVPFPRLHFFMPGFAPLTSRGSQQYRALTVPELTQQMFDAKNMM
AACDPRHGRYLTVAAVFRGRMSMKEVDEQMLSVQSKNSSYFVEWIPNNVKTAVCDIPPRGLKMAATFIGNSTAIQ
ELFKRISEQFTAMFRRKAFLHWYTGEGMDEMEFTEAESNMNDLVSEYQQYQDATAEEGEFEEEAEEEVA

FIGURE 679A

TGAGGAATCAACAGCCGCCATCTTGTCGCGGACCCGACCGGGGCTTCGAGCGCGATCTACTCGGCCCCGCCGGTC
CCGGGCCCCACAACCGCCCGCGCTCGCTCCTCTCCCTCGCAGCCGGCAGGGCCCCCGACCCCCGTCCGGGCCCTC
GCCGGCCCGGCCGCCCGTGCCCGGGGCTGTTTTCGCGAGCAGGTGAAA**ATG**GCTGAGAACTTGCTGGACGGACCG
CCCAACCCCAAAAGAGCCAAACTCAGCTCGCCCGGTTTCTCGGCGAATGACAGCACAGATTTTGGATCATTGTTT
GACTTGGAAAATGATCTTCCTGATGAGCTGATACCCAATGGAGGAGAATTAGGCCTTTTAAACAGTGGGAACCTT
GTTCCAGATGCTGCTTCCAAACATAAACAACTGTCGGAGCTTCTACGAGGAGGCAGCGGCTCTAGTATCAACCCA
GGAATAGGAAATGTGAGCGCCAGCAGCCCCGTGCAGCAGGGCCTGGGTGGCCAGGCTCAAGGGCAGCCGAACAGT
GCTAACATGGCCAGCCTCAGTGCCATGGGCAAGAGCCCTCTGAGCCAGGGAGATTCTTCAGCCCCCAGCCTGCCT
AAACAGGCAGCCAGCACCTCTGGGCCCACCCCCGCTGCCTCCCAAGCACTGAATCCGCAAGCACAAAAGCAAGTG
GGGCTGGCGACTAGCAGCCCTGCCACGTCACAGACTGGACCTGGTATCTGCATGAATGCTAACTTTAACCAGACC
CACCCAGGCCTCCTCAATAGTAACTCTGGCCATAGCTTAATTAATCAGGCTTCACAAGGGCAGGCGCAAGTCATG
AATGGATCTCTTGGGGCTGCTGGCAGAGGAAGGGGAGCTGGAATGCCGTACCCTACTCCAGCCATGCAGGGCGCC
TCGAGCAGCGTGCTGGCTGAGACCCTAACGCAGGTTTCCCCGCAAATGACTGGTCACGCGGGACTGAACACCGCA
CAGGCAGGAGGCATGGCCAAGATGGGAATAACTGGGAACACAAGTCCATTTGGACAGCCCTTTAGTCAAGCTGGA
GGGCAGCCAATGGGAGCCACTGGAGTGAACCCCCAGTTAGCCAGCAAACAGAGCATGGTCAACAGTTTGCCCACC
TTCCCTACAGATATCAAGAATACTTCAGTCACCAACGTGCCAAATATGTCTCAGATGCAAACATCAGTGGGAATT
GTACCCACACAAGCAATTGCAACAGGCCCCACTGCAGATCCTGAAAAACGCAAACTGATACAGCAGCAGCTGGTT
CTACTGCTTCATGCTCATAAGTGTCAGAGACGAGAGCAAGCAAACGGAGAGGTTCGGGCCTGCTCGCTCCCGCAT
TGTCGAACCATGAAAAACGTTTTGAATCACATGACGCATTGTCAGGCTGGGAAAGCCTGCCAAGTTGCCCATTGT
GCATCTTCACGACAAATCATCTCTCATTGGAAGAACTGCACACGACATGACTGTCCTGTTTGCCTCCCTTTGAAA
AATGCCAGTGACAAGCGAAACCAACAAACCATCCTGGGGTCTCCAGCTAGTGGAATTCAAAACACAATTGGTTCT
GTTGGCACAGGGCAACAGAATGCCACTTCTTTAAGTAACCCAAATCCCATAGACCCCAGCTCCATGCAGCGAGCC
TATGCTGCTCTCGGACTCCCCTACATGAACCAGCCCCAGACGCAGCTGCAGCCTCAGGTTCCTGGCCAGCAACCA
GCACAGCCTCAAACCCACCAGCAGATGAGGACTCTCAACCCCCTGGGAAATAATCCAATGAACATTCCAGCAGGA
GGAATAACAACAGATCAGCAGCCCCCAAACTTGATTTCAGAATCAGCTCTTCCGACTTCCCTGGGGGCCACAAAC
CCACTGATGAACGATGGCTCCAACTCTGGTAACATTGGAACCCTCAGCACTATACCAACAGCAGCTCCTCCTTCT
AGCACCGGTGTAAGGAAAGGCTGGCACGAACATGTCACTCAGGACCTGCGGAGCCATCTAGTGCATAAACTCGTC
CAAGCCATCTTCCCAACACCTGATCCCGCAGCTCTAAAGGATCGCCGCATGGAAAACCTGGTAGCCTATGCTAAG
AAAGTGGAAGGGGACATGTACGAGTCTGCCAACAGCAGGGATGAATATTATCACTTATTAGCAGAGAAAATCTAC
AAGATACAAAAAGAACTAGAAGAAAAACGGAGGTCGCGTTTACATAAACAAGGCATCTTGGGGAACCAGCCAGCC
TTACCAGCCCCGGGGGCTCAGCCCCCTGTGATTCCACAGGCACAACCTGTGAGACCTCCAAATGGACCCCTGTCC
CTGCCAGTGAATCGCATGCAAGTTTCTCAAGGGATGAATTCATTTAACCCCATGTCCTTGGGGAACGTCCAGTTG
CCACAAGCACCCATGGGACCTCGTGCAGCCTCCCCAATGAACCACTCTGTCCAGATGAACAGCATGGGCTCAGTG
CCAGGGATGGCCATTTCTCCTTCCCGAATGCCTCAGCCTCCGAACATGATGGGTGCACACACCAACAACATGATG
GCCCAGGCGCCCGCTCAGAGCCAGTTTCTGCCACAGAACCAGTTCCCGTCATCCAGCGGGGCGATGAGTGTGGGC
ATGGGGCAGCCGCCAGCCCAAACAGGCGTGTCACAGGGACAGGTGCCTGGTGCTGCTCTTCCTAACCCTCTCAAC
ATGCTGGGGCCTCAGGCCAGCCAGCTACCTTGCCCTCCAGTGACACAGTCACCACTGCACCCAACACCGCCTCCT
GCTTCCACGGCTGCTGGCATGCCATCTCTCCAGCACACGACACCACCTGGGATGACTCCTCCCCAGCCAGCAGCT
CCCACTCAGCCATCAACTCCTGTGTCGTCTTCCGGGCAGACTCCCACCCCGACTCCTGGCTCAGTGCCCAGTGCT
ACCCAAACCCAGAGCACCCCTACAGTCCAGGCAGCAGCCCAGGCCCAGGTGACCCCGCAGCCTCAAACCCCAGTT
CAGCCCCCGTCTGTGGCTACCCCTCAGTCATCGCAGCAACAGCCGACGCCTGTGCACGCCCAGCCTCCTGGCACA
CCGCTTTCCCAGGCAGCAGCCAGCATTGATAACAGAGTCCCTACCCCCTCCTCGGTGGCCAGCGCAGAAACCAAT
TCCCAGCAGCCAGGACCTGACGTACCTGTGCTGGAAATGAAGACGGAGACCCAAGCAGAGGACACTGAGCCCGAT
CCTGGTGAATCCAAAGGGGAGCCCAGGTCTGAGATGATGGAGGAGGATTTGCAAGGAGCTTCCCAAGTTAAAGAA
GAAACAGACATAGCAGAGCAGAAATCAGAACCAATGGAAGTGGATGAAAAGAAACCTGAAGTGAAAGTAGAAGTT
AAAGAGGAAGAAGAGAGTAGCAGTAACGGCACAGCCTCTCAGTCAACATCTCCTTCGCAGCCGCGCAAAAAAATC
TTTAAACCAGAGGAGTTACGCCAGGCCCTCATGCCAACCCTAGAAGCACTGTATCGACAGGACCCAGAGTCATTA
CCTTTCCGGCAGCCTGTAGATCCCCAGCTCCTCGGAATTCCAGACTATTTTGACATCGTAAAGAATCCCATGGAC

FIGURE 679B

CTCTCCACCATCAAGCGGAAGCTGGACACAGGGCAATACCAAGAGCCCTGGCAGTACGTGGACGACGTCTGGCTC
ATGTTCAACAATGCCTGGCTCTATAATCGCAAGACATCCCGAGTCTATAAGTTTTGCAGTAAGCTTGCAGAGGTC
TTTGAGCAGGAAATTGACCCTGTCATGCAGTCCCTTGGATATTGCTGTGGACGCAAGTATGAGTTTTCCCCACAG
ACTTTGTGCTGCTATGGGAAGCAGCTGTGTACCATTCCTCGCGATGCTGCCTACTACAGCTATCAGAATAGGTAT
CATTTCTGTGAGAAGTGTTTCACAGAGATCCAGGGCGAGAATGTGACCCTGGGTGACGACCCTTCACAGCCCCAG
ACGACAATTTCAAAGGATCAGTTTGAAAAGAAGAAAAATGATACCTTAGACCCCGAACCTTTCGTTGATTGCAAG
GAGTGTGGCCGGAAGATGCATCAGATTTGCGTTCTGCACTATGACATCATTTGGCCTTCAGGTTTTGTGTGCGAC
AACTGCTTGAAGAAAACTGGCAGACCTCGAAAAGAAAACAAATTCAGTGCTAAGAGGCTGCAGACCACAAGACTG
GGAAACCACTTGGAAGACCGAGTGAACAAATTTTTGCGGCGCCAGAATCACCCTGAAGCCGGGGAGGTTTTTGTC
CGAGTGGTGGCCAGCTCAGACAAGACGGTGGAGGTCAAGCCCGGGATGAAGTCACGGTTTGTGGATTCTGGGGAA
ATGTCTGAATCTTTCCCATATCGAACCAAAGCTCTGTTTGCTTTTGAGGAAATTGACGGCGTGGATGTCTGCTTT
TTTGGAATGCACGTCCAAGAATACGGCTCTGATTGCCCCCCTCCAAACACGAGGCGTGTGTACATTTCTTATCTG
GATAGTATTCATTTCTTCCGGCCACGTTGCCTCCGCACAGCCGTTTACCATGAGATCCTTATTGGATATTTAGAG
TATGTGAAGAAATTAGGGTATGTGACAGGGCACATCTGGGCCTGTCCTCCAAGTGAAGGAGATGATTACATCTTC
CATTGCCACCCACCTGATCAAAAAATACCCAAGCCAAAACGACTGCAGGAGTGGTACAAAAAGATGCTGGACAAG
GCGTTTGCAGAGCGGATCATCCATGACTACAAGGATATTTTCAAACAAGCAACTGAAGACAGGCTCACCAGTGCC
AAGGAACTGCCCTATTTTGAAGGTGATTTCTGGCCCAATGTGTTAGAAGAGAGCATTAAGGAACTAGAACAAGAA
GAAGAGGAGAGGAAAAAGGAAGAGAGCACTGCAGCCAGTGAAACCACTGAGGGCAGTCAGGGCGACAGCAAGAAT
GCCAAGAAGAAGAACAACAAGAAAACCAACAAGAACAAAAGCAGCATCAGCCGCGCCAACAAGAAGAAGCCCAGC
ATGCCCAACGTGTCCAATGACCTGTCCCAGAAGCTGTATGCCACCATGGAGAAGCACAAGGAGGTCTTCTTCGTG
ATCCACCTGCACGCTGGGCCTGTCATCAACACCCTGCCCCCCATCGTCGACCCCGACCCCCTGCTCAGCTGTGAC
CTCATGGATGGGCGCGACGCCTTCCTCACCCTCGCCAGAGACAAGCACTGGGAGTTCTCCTCCTTGCGCCGCTCC
AAGTGGTCCACGCTCTGCATGCTGGTGGAGCTGCACACCCAGGGCCAGGACCGCTTTGTCTACACCTGCAACGAG
TGCAAGCACCACGTGGAGACGCGCTGGCACTGCACTGTGTGCGAGGACTACGACCTCTGCATCAACTGCTATAAC
ACGAAGAGCCATGCCCATAAGATGGTGAAGTGGGGGCTGGGCCTGGATGACGAGGGCAGCAGCCAGGGCGAGCCA
CAGTCAAAGAGCCCCCAGGAGTCACGCCGGGTGAGCATCCAGCGCTGCATCCAGTCGCTGGTGCACGCGTGCCAG
TGCCGCAACGCCAACTGCTCGCTGCCATCCTGCCAGAAGATGAAGCGGGTGGTGCAGCACACCAAGGGCTGCAAA
CGCAAGACCAACGGGGGCTGCCCGGTGTGCAAGCAGCTCATCGCCCTCTGCTGCTACCACGCCAAGCACTGCCAA
GAAAACAAATGCCCCGTGCCCTTCTGCCTCAACATCAAACACAAGCTCCGCCAGCAGCAGATCCAGCACCGCCTG
CAGCAGGCCCAGCTCATGCGCCGGCGGATGGCCACCATGAACACCCGCAACGTGCCTCAGCAGAGTCTGCCTTCT
CCTACCTCAGCACCGCCCGGGACCCCCACACAGCAGCCCAGCACACCCCAGACGCCGCAGCCCCCTGCCCAGCCC
CAACCCTCACCCGTGAGCATGTCACCAGCTGGCTTCCCCAGCGTGGCCCGGACTCAGCCCCCCACCACGGTGTCC
ACAGGGAAGCCTACCAGCCAGGTGCCGGCCCCCCCACCCCCGGCCCAGCCCCCTCCTGCAGCGGTGGAAGCGGCT
CGGCAGATCGAGCGTGAGGCCCAGCAGCAGCAGCACCTGTACCGGGTGAACATCAACAACAGCATGCCCCCAGGA
CGCACGGGCATGGGGACCCCGGGGAGCCAGATGGCCCCCGTGAGCCTGAATGTGCCCCGACCCAACCAGGTGAGC
GGGCCCGTCATGCCCAGCATGCCTCCCGGGCAGTGGCAGCAGGCGCCCCTTCCCCAGCAGCAGCCCATGCCAGGC
TTGCCCAGGCCTGTGATATCCATGCAGGCCCAGGCGGCCGTGGCTGGGCCCCGGATGCCCAGCGTGCAGCCACCC
AGGAGCATCTCACCCAGCGCTCTGCAAGACCTGCTGCGGACCCTGAAGTCGCCCAGCTCCCCTCAGCAGCAACAG
CAGGTGCTGAACATTCTCAAATCAAACCCGCAGCTAATGGCAGCTTTCATCAAACAGCGCACAGCCAAGTACGTG
GCCAATCAGCCCGGCATGCAGCCCCAGCCTGGCCTCCAGTCCCAGCCCGGCATGCAACCCCAGCCTGGCATGCAC
CAGCAGCCCAGCCTGCAGAACCTGAATGCCATGCAGGCTGGCGTGCCGCGGCCCGGTGTGCCTCCACAGCAGCAG
GCGATGGGAGGCCTGAACCCCCAGGGCCAGGCCTTGAACATCATGAACCCAGGACACAACCCCAACATGGCGAGT
ATGAATCCACAGTACCGAGAAATGTTACGGAGGCAGCTGCTGCAGCAGCAGCAGCAACAGCAGCAGCAACAACAG
CAGCAACAGCAGCAGCAGCAAGGGAGTGCCGGCATGGCTGGGGGCATGGCGGGGCACGGCCAGTTCCAGCAGCCT
CAAGGACCCGGAGGCTACCCACCGGCCATGCAGCAGCAGCAGCGCATGCAGCAGCATCTCCCCCTCCAGGGCAGC
TCCATGGGCCAGATGGCGGCTCAGATGGGACAGCTTGGCCAGATGGGGCAGCCGGGGCTGGGGGCAGACAGCACC
CCCAACATCCAGCAAGCCCTGCAGCAGCGGATTCTGCAGCAACAGCAGATGAAGCAGCAGATTGGGTCCCCAGGC
CAGCCGAACCCCATGAGCCCCCAGCAACACATGCTCTCAGGACAGCCACAGGCCTCGCATCTCCCTGGCCAGCAG

FIGURE 679C

ATCGCCACGTCCCTTAGTAACCAGGTGCGGTCTCCAGCCCCTGTCCAGTCTCCACGGCCCCAGTCCCAGCCTCCA
CATTCCAGCCCGTCACCACGGATACAGCCCCAGCCTTCGCCACACCACGTCTCACCCCAGACTGGTTCCCCCCAC
CCCGGACTCGCAGTCACCATGGCCAGCTCCATAGATCAGGGACACTTGGGGAACCCCGAACAGAGTGCAATGCTC
CCCCAGCTGAACACCCCCAGCAGGAGTGCGCTGTCCAGCGAACTGTCCCTGGTCGGGGACACCACGGGGGACACG
CTAGAGAAGTTTGTGGAGGGCTTGTAGCATTGTGAGAGCATCACCTTTTCCCTTTCATGTTCTTGGACCTTTTGT
ACTGAAAATCCAGGCATCTAGGTTCTTTTTATTCCTAGATGGAACTGCGACTTCCGAGCCATGGAAGGGTGGATT
GATGTTTAAAGAAACAATACAAAGAATATATTTTTTGTTAAAAACCAGTTGATTTAAATATCTGGTCTCTCTCT
TTGGTTTTTTTTTGGCGGGGGGGTGGGGGGGGTTCTTTTTTTTCCGTTTTGTTTTTGTTTGGGGGGAGGGGGGTT
TTGTTTGGATTCTTTTTGTCGTCATTGCTGGTGACTCATGCCTTTTTTTAACGGGAAAAACAAGTTCATTATATT
CATATTTTTTATTTGTATTTTCAAGACTTTAAACATTTATGTTTAAAAGTAAGAAGAAAAATAATATTCAGAACT
GATTCCTGAAATAATGCAAGCTTATAATGTATCCCGATAACTTTGTGATGTTTCGGGAAGATTTTTTTCTATAGT
GAACTCTGTGGGCGTCTCCCAGTATTACCCTGGATGATAGGAATTGACTCCGGCGTGCACACACGTACACACCCA
CACACATCTATCTATACATAATGGCTGAAGCCAAACTTGTCTTGCAGATGTAGAAATTGTTGCTTTGTTTCTCTG
ATAAAACTGGTTTTAGACAAAAAATAGGGATGATCACTCTTAGACCATGCTAATGTTACTAGAGAAGAAGCCTTC
TTTTCTTTCTTCTATGTGAAACTTGAAATGAGGAAAAGCAATTCTAGTGTAAATCATGCAAGCGCTCTAATTCCT
ATAAATACGAAACTCGAGAAGATTCAATCACTGTATAGAATGGTAAAATACCAACTCATTTCTTATATCATATTG
TTAAATAAACTGTGTGCAACAGACAAAAAGGGTGGTCCTTCTTGAATTCATGTACATGGTATTAACACTTAGTGT
TCGGGGTTTTTTGTTATGAAAATGCTGTTTTCAACATTGTATTTGGACTATGCATGTGTTTTTTCCCCATTGTAT
ATAAAGTACCGCTTAAAATTGATATAAATTACTGAGGTTTTTAACATGTATTCTGTTCTTTAAGATCCCCTGTAA
GAATGTTTAAGGTTTTTATTTATTTATATATATTTTTTGGTCTGTTCTTTGTAAAAAAAAAAAAAAAAA

FIGURE 680

MAENLLDGPPNPKRAKLSSPGFSANDSTDFGSLFDLENDLPDELIPNGGELGLLNSGNLVPDAASKHKQLSELLR
GGSGSSINPGIGNVSASSPVQQGLGGQAQGQPNSANMASLSAMGKSPLSQGDSSAPSLPKQAASTSGPTPAASQA
LNPQAQKQVGLATSSPATSQTGPGICMNANFNQTHPGLLNSNSGHSLINQASQGQAQVMNGSLGAAGRGRGAGMP
YPTPAMQGASSSVLAETLTQVSPQMTGHAGLNTAQAGGMAKMGITGNTSPFGQPFSQAGGQPMGATGVNPQLASK
QSMVNSLPTFPTDIKNTSVTNVPNMSQMQTSVGIVPTQAIATGPTADPEKRKLIQQQLVLLLHAHKCQRREQANG
EVRACSLPHCRTMKNVLNHMTHCQAGKACQVAHCASSRQIISHWKNCTRHDCPVCLPLKNASDKRNQQTILGSPA
SGIQNTIGSVGTGQQNATSLSNPNPIDPSSMQRAYAALGLPYMNQPQTQLQPQVPGQQPAQPQTHQQMRTLNPLG
NNPMNIPAGGITTDQQPPNLISESALPTSLGATNPLMNDGSNSGNIGTLSTIPTAAPPSSTGVRKGWHEHVTQDL
RSHLVHKLVQAIFPTPDPAALKDRRMENLVAYAKKVEGDMYESANSRDEYYHLLAEKIYKIQKELEEKRRSRLHK
QGILGNQPALPAPGAQPPVIPQAQPVRPPNGPLSLPVNRMQVSQGMNSFNPMSLGNVQLPQAPMGPRAASPMNHS
VQMNSMGSVPGMAISPSRMPQPPNMMGAHTNNMMAQAPAQSQFLPQNQFPSSSGAMSVGMGQPPAQTGVSQGQVP
GAALPNPLNMLGPQASQLPCPPVTQSPLHPTPPPASTAAGMPSLQHTTPPGMTPPQPAAPTQPSTPVSSSGQTPT
PTPGSVPSATQTQSTPTVQAAAQAQVTPQPQTPVQPPSVATPQSSQQQPTPVHAQPPGTPLSQAAASIDNRVPTP
SSVASAETNSQQPGPDVPVLEMKTETQAEDTEPDPGESKGEPRSEMMEEDLQGASQVKEETDIAEQKSEPMEVDE
KKPEVKVEVKEEEESSSNGTASQSTSPSQPRKKIFKPEELRQALMPTLEALYRQDPESLPFRQPVDPQLLGIPDY
FDIVKNPMDLSTIKRKLDTGQYQEPWQYVDDVWLMFNNAWLYNRKTSRVYKFCSKLAEVFEQEIDPVMQSLGYCC
GRKYEFSPQTLCCYGKQLCTIPRDAAYYSYQNRYHFCEKCFTEIQGENVTLGDDPSQPQTTISKDQFEKKKNDTL
DPEPFVDCKECGRKMHQICVLHYDIIWPSGFVCDNCLKKTGRPRKENKFSAKRLQTTRLGNHLEDRVNKFLRRQN
HPEAGEVFVRVVASSDKTVEVKPGMKSRFVDSGEMSESFPYRTKALFAFEEIDGVDVCFFGMHVQEYGSDCPPPN
TRRVYISYLDSIHFFRPRCLRTAVYHEILIGYLEYVKKLGYVTGHIWACPPSEGDDYIFHCHPPDQKIPKPKRLQ
EWYKKMLDKAFAERIIHDYKDIFKQATEDRLTSAKELPYFEGDFWPNVLEESIKELEQEEEERKKEESTAASETT
EGSQGDSKNAKKKNNKKTNKNKSSISRANKKKPSMPNVSNDLSQKLYATMEKHKEVFFVIHLHAGPVINTLPPIV
DPDPLLSCDLMDGRDAFLTLARDKHWEFSSLRRSKWSTLCMLVELHTQGQDRFVYTCNECKHHVETRWHCTVCED
YDLCINCYNTKSHAHKMVKWGLGLDDEGSSQGEPQSKSPQESRRVSIQRCIQSLVHACQCRNANCSLPSCQKMKR
VVQHTKGCKRKTNGGCPVCKQLIALCCYHAKHCQENKCPVPFCLNIKHKLRQQQIQHRLQQAQLMRRRMATMNTR
NVPQQSLPSPTSAPPGTPTQQPSTPQTPQPPAQPQPSPVSMSPAGFPSVARTQPPTTVSTGKPTSQVPAPPPPAQ
PPPAAVEAARQIEREAQQQQHLYRVNINNSMPPGRTGMGTPGSQMAPVSL

FIGURE 681

GGCACGAGGGGCTAAGGGTGCGCGAGTAGCCGCCACCCGTTCGGCGTTGGCTCTGGCGTCGGGGTCGTTGTGTCG
TGACAACCGCTGCGGTAGCCGTTTCCGAGGCAGCAGTTGCGGCCGCTTTAGCCCTGAGCGGGATCTGCGGCTGCC
TGCGAGTCTCTGCTGTGCCGACCCTTCTCTTCGCGGACCCCACGCCAAGCAGCGACCCTGAGCCGACAGCCGGAG
CGCCCGGCA**ATG**GCGGCCTCGACGGCCTCGCACCGGCCCATCAAGGGGATCTTGAAGAACAAGACCTCTACGACT
TCCTCTATGGTGGCGTCGGCCGAACAGCCCCGCGGGAATGTCGACGAGGAGCTGAGCAAAAAATCCCAGAAGTGG
GATGAAATGAACATCTTGGCGACGTATCATCCAGCAGACAAAGACTATGGTTTAATGAAAATAGATGAACCAAGC
ACTCCTTACCATAGTATGATGGGGGATGATGAAGATGCCTGTAGTGACACCGAGGCCACTGAAGCCATGGCGCCA
GACATCTTAGCCAGGAAATTAGCTGCAGCTGAAGGCTTGGAGCCAAAGTATCGGATTCAGGAACAAGAAAGCAGT
GGAGAGGAGGATAGTGACCTCTCACCTGAAGAACGAGAAAAAAAGCGACAATTTGAAATGAAAAGGAAGCTTCAC
TACAATGAAGGACTCAATATCAAACTAGCCAGACAATTAATTTCAAAAGACCTACATGATGATGATGAAGATGAA
GAAATGTTAGAGACTGCAGATGGAGAAAGCATGAATACGGAAGAATCAAATCAAGGATCTACTCCAAGTGACCAA
CAGCAAAACAAATTACGAAGTTCA**TAG**ACGAGATTTGTTCAACACTGCAATTGTTTGTTAGATGTAAACCCTGTG
ACTATAGTACGTTGCTTCTTGTTCTTCACAATTCATGACTTAAGTACCAAAATGCATACCAGTTATTATATATTG
CCAAGAATTAAATGATAAACTTAGAGACTGATTAGACTGAAAATGCCTAATCGATATATATATTCTTGTGCCTAG
TACTTTACCACAAATACAGTGTAATATCATCAGTCCAAAACTGCATTACTTTTGTAAAAACACTGGTTAATTTGT
ATAAGATATTATAGAGCTTTTTATGCTTTAGAAGTTAAACAATATCTTTGGGGGGGGAACTAATTTATTTTCATCA
CTTGAAATGTGGTAGCTCTTACAAAGTTTATTGATTTGATTTTTTTAAAAATCAAAAGCCAATTGAACAACAGGA
TATATAGACTGATAAATATTTAGGCTGAATAGTATTTTAACACTTGTCTTCAACTTGATTTGTCTGTTTAATTGA
AAAGAATTATAAGAGTTACTGTTGCATTTTCTGACCTACTATTTTTAAAATTCCTGTTGAGTTTCTTTGTGTTTA
CAAGGAAAGGACTGAACTTTTTCTCATCAAAACTAGCTTTTTTCCCCACAAATAAATTATCAGGTTAAACTTTCA
CCAATGTCTGCTCTGTTTTTTGTTTTTGGGGGGTTTTTGTTTGTTTTTGTTTTTTAATGTTTTTGGTACACTGGG
CAGACTTCAGAGCAGTTTTTTAAAAAAATAAATATTCTAATGTAGCTATCTCGCCATTCCCTTTAAATACCTGTC
TTAACCTCCTGCTTTTCTTTCCTACTCCTTTCCACACATACGCACACAATCTTCTACCTTTTAAAGGATCATTAA
GACTGTCACCACATTAGGAGCTCTTTCTCTCACTCTTCTGTCATTTGCTGCTATGTTGAAATTCTTATTTTGACC
ATCAATGCCTATGAATTCTTCTAATACGTGAAGAAAATAGTTTGAGTAGCAGCAGTGCTATAGGTGGGAAATACA
GTTTAGCTGCTGAATTTCTATACCTCTCTGATTTACAGATTGCTAATTAAATGGCTATTATTAGTTTGGATTAAT
TAGACTTAAGAAAACAACTAACTGAGGGTTTTTTTTGTTTGTTTTTTGAGGGTTTTCTTTGCATGAGAGTTGTAT
GTAACCAGTGATATGATTATTCCTGAATGTACAGACAGAAGTAAGCCTGGACATTGTTAAATAGTCCCTGCTTTA
AGGGACTACGATAATGTGTACTATGACAAACGTGCTTTATTCTTCTAACGCAGTAAGAATTAGGTGGAATTTTTT
CCTTCAACCAAGTGCAGGAAAGCCCTGTGTGTCTTGGTTTAGTTATGGTTTCATTTCTAGCCATACAATTGATGA
ATTGTGTACAACTTTTGTTAGTACCAAAATAATCTGTTATATGAACAGACTTCTAAAATAACGTCTGTATATTTT
ATATATAGATACATATATGAAAGAAGGCTTTTATTGAACAGCTTATCTTCCACTTGCAGGTTTATGGAAACAGCA
GTATTTGAAAATAAATAAAAAGTGGGAGAATTCCTTGCTGTTAGAAGAATGTGGCCATTATTTTGATTTTTTGAA
TGAGATATATAATCAAAGTACTGCTGAACTGTGAGTGCAGTATTCTAAACATTTCAGCTAGGAATACCACTGATT
TAGAAACAAAACTGTTTGTCTCTGGTTTCTGAATTTAAAATGTTGGGATTACCTGTTTAAATCTGTCTTGGGGGA
TGTAGAGATTAAGTCTGTACATGTGCGTGCACATATATTCATGCACCCTCTGATTTTGGTTTTCTTGTTTCTGAG
TTCTTAGAAAGTACCCACATACTCTTTTTTTTTTTTTGTAGAAGTAGCTGTCATAGAGTGAAGAAAAGGATAAG
ACTTTAAACAGTTGATTCTTTTTGTGTTTTCTACAAACTATTTTTTGAAATTTAAATCACAAACTCATTTTCTGG
TTTTTAGAAAGTAGATGATGATTTCAGAGGAGTAAGGCATGCCAAGCAGCATGCTCAGTGGGGTTTTAGGCTGTC
ACATGCAGCTGAGAAAAGGTATGTTCAAGTCATAAGTAGGTAATTGATAGGGTATGAACTAGTCAAAATATGAAC
CATTATGATTCAAGTTAGATTTTCCTCTGGAGAGACAGATCTGAATGTTCAGTTCTAGCCAAGGTAGATTTTACT
TTCAACTTTTTAATCAGTATCACTTTCTGTGCTTAACTATTTGGTGTTACCTTGTCTGTTTTCATTTGTCTAAAA
TTCTGCAGAGATGACTAAAATTTGACATAATGGTGTAAATGGATTGTTAAGGTAACTTTCAGTTGAAGATTAAAG
CAAGATGCCATTTTCCCCATGACTTTGGTTTTGTTTACATTTTTCCCTTTCAGTTAGTATACACTACACGTACTG
TAATAAAATACAATAATATGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 682

MAASTASHRPIKGILKNKTSTTSSMVASAEQPRGNVDEELSKKSQKWDEMNILATYHPADKDYGLMKIDEPSTPY
HSMMGDDEDACSDTEATEAMAPDILARKLAAAEGLEPKYRIQEQESSGEEDSDLSPEEREKKRQFEMKRKLHYNE
GLNIKLARQLISKDLHDDDEDEEMLETADGESMNTEESNQGSTPSDQQQNKLRSS

FIGURE 683

GGGGGCGGGCTGGGAGGGCTGTCGGTGGGCCAGTCTGCGTAGCGACGGCCCGTCCCCTGCGCACGGACGCCGGGA
AGAAGGGGGTGGGGCCACGTTTGCGTCCGCGCCATCAGGCCCGAGATAGCGGCGAGGTCCGCTTTCAGTGTATGG
TTTTCCCTGCCAAACGGTTCTGCTTGGTGCCATCCATGGAGGGCGTGCGCTGGGCCTTTTCCTGCGGCACTTGGC
TGCCGAGCCGAGCCGAATGGCTGCTGGCAGTGCGATCGATTCAGCCCGAGGAGAAGGAGCGCATTGGCCAGTTCG
TCTTTGCCCGGGACGCTAAGGCAGCCATGGCTGGTCGTCTGATGATAAGGAAATTAGTTGCAGAGAAATTGAATA
TCCCTTGGAATCATATTCGTTTGCAAAGAACTGCAAAAGGAAAACCAGTTCTTGCAAAGGACTCATCGAATCCTT
ACCCGAATTTCAACTTTAACATCTCTCATCAAGGAGACTATGCAGTGCTTGCTGCTGAACCTGAGCTGCAAGTTG
GAATTGATATAATGAAGACTAGTTTTCCAGGTCGTGGTTCAATTCCAGAATTCTTTCATATTATGAAAAGAAAGT
TTACCAACAAAGAATGGGAAACAATCAGAAGCTTTAAGGATGAGTGGACTCAGCTGGATATGTTTTATAGGAATT
GGGCACTTAAGGAAAGCTTCATAAAAGCCATTGGTGTTGGACTAGGATTTGAATTGCAGCGGCTTGAATTTGATC
TATCTCCATTAAACTTGGATATAGGCCAAGTTTATAAAGAAACACGTTTATTCCTGGATGGAGAGGAAGAAAAAG
AATGGGCATTTGAGGAAAGCAAAATAGATGAGCACCATTTTGTTGCAGTTGCTCTTAGGAAACCCGATGGATCTA
GACATCAGGATGTTCCATCTCAGGATGATTCCAAACCAACCCAGAGGCAATTTACTATTCTCAACTTTAATGATT
TAATGTCATCTGCCGTTCCCATGACACCTGAAGATCCTTCATTTTGGGACTGTTTTTGCTTCACAGAAGAAATTC
CAATACGAAATGGTACAAAGTCATGATGATTCCCTGAGTAACAAAGGGAAATGAAAACTGTTTGTGATCTTCCGT
ATTCACTGAAAAATAAATGCTTGTTTAGTATCAAATTTTATTTCACGAAAGTTTTTTTAAAGAACAGAAACTTTT
CCAATTAAAAAAAAAAAGCAGACTTCTGGTTCAAGATAGCTCACTGGAATACATGTTTACCTCTTTCTTTCCTAA
ATTGCATTGAATTGATAGGAAGGATGGCGGAATCTTAAAGTGATACATGCTAACTGTAGAAAAAAATAGAAAATG
CACATAAGCAAAAGGAAACATTTAAATGCTATCTTTCAAAGATAACTACTCTTAAAACCTTGAGTATCTTTTCAG
ACCTTTTTCTTGGCAAATGAATCCATATTGACATATTTGATTTTTTTAAAAACATGGAAACGTACTGTTTTGTAA
ATTCTTTTTAACTGCACATCTACTGTTCATAAATATACCTCTGTAACATAACTTTTTGTGGTTCTAATGTACTCT
GTTGTATAGCTAATACAAGTTAGGATGCTTTTGGCCAGAGGTAACAGTGTCCAAATATAATTGGCCTAAGTAACC
TAGGAAATTGTTTGACATAACACAGGGTTCAGGGGTGTCATTAAAGACACACTTTTTTTGCCTTGACCTCAGTTG
GTTTGTTTTGCCTTAGGCTATTCCACCTCTCGATCACAAGAGCTGCTGCTATAACTTCCAGTTTTACATCTTTGT
AAAATTGTATCTCAAAGGCAGAAAAGGCCATTTCGTCTCTCATTTGTTTTATCCATGAGGAAGATTTTTAACAAA
AGCCTCCAGAAGATTTCCCCTCAGTTTCCATTGACTTAGATCAGGTTACAGAGAAAGGCAATGTCTGACATTTTT
GGTCTCTGTTAGAAGTAGACTCTGTTGAAAAGAAAGAAGCTAAGCTAGGTGTGAAGAATGGAATTGGAAGCCCAC
TGCCTTCCCATAAGAAAGGTTTACCATAATTTACTCACTTTTTTCTGTGTTAGACATTTTGATTATCTGCAGTTT
ATTACTACAAGCAGTGGCAGAGTGAATGTCCTTGTACATTTTGAGTTACATGCTTAATTATGTCCTTGAGAAAGT
TTCTAAAAGTGGAATGATTGGTTTGACTGGTTCATAGGGCTTTAATTATACAATTTACCCCTCTAATTAGTACTA
TATGTATGTGACTTCCCTCCCCCTGCCAGAATACTCCTTGGTCAATTGTAGGTATTCTTTTTGGTTTAATTTTTG
CCAATGTAATTAAAAAATGGTATGTCATTTTTAAAATTTGTATTTCTTTCATTACAAATAAGATTGTTATGTCAG
TATTGTTATTGGCTTTTCGTATTCCTCTTAACGTGAACCGTCTGTTCATTGTTTTTACCTGTTTTCGTTTTAGCA
AGTAGTACTTAATTTAAAGTGTGAACTTAATATATAAGATGCCAGGACCATCATATTGATGACAAAAATCTATTA
TGTGGTTGTAGTGCATGTCTTGGAGTTAAACTCTTAAGTATCAAGAAGTAAAATAATTTCATTGTTTCTGTTACT
AACATTAAAAGTGTGCAAATTGTATAAAATTAGGTACTTCGATTAGTAAAAGAAAAAAATTTGAATGTTTTTTTT
TTTTATTTTATTAAGCATGCCCAGTTATGCCAAGCATAGTAAATAAAGGTCAAGTAGCATTTATAATAGAGGAAG
TATTGTTATCCCTAGCATGAGTGTAATGGTGATATGAAAAACTTTGTCTTGTCATTATAATAATAAAAAAATGAA
CATTTATTATGAAAAAAAAAAAAAAAAAA

FIGURE 684

MVFPAKRFCLVPSMEGVRWAFSCGTWLPSRAEWLLAVRSIQPEEKERIGQFVFARDAKAAMAGRLMIRKLVAEKL
NIPWNHIRLQRTAKGKPVLAKDSSNPYPNFNFNISHQGDYAVLAAEPELQVGIDIMKTSFPGRGSIPEFFHIMKR
KFTNKEWETIRSFKDEWTQLDMFYRNWALKESFIKAIGVGLGFELQRLEFDLSPLNLDIGQVYKETRLFLDGEEE
KEWAFEESKIDEHHFVAVALRKPDGSRHQDVPSQDDSKPTQRQFTILNFNDLMSSAVPMTPEDPSFWDCFCFTEE
IPIRNGTKS

FIGURE 685A

CTCTTCCCTTAGGTGTTTAAGTTCCGCGCGCAGGCCAGGCTGCAACCTGACGGCCAGATCCCTCGCTGTCCTAGT
CGCTGCTCCTTGGAGTCATGTTCCCAGCCGCCCCTTCTCCGCGGACCCCGGGTACCGGGTCCCGAAGGGGCCCGC
TGGCCGGACTCGGGCCCGGCTCCACGCCCCGGACGGCTAGCAGGAAGGGTCTGCCCCTGGGGTCTGCAGTCAGCT
CCCCAGTGCTCTTCTCGCCGGTCGGCCGGCGTAGCTCGCTAAGCTCGGGGGGAACACCAACACGAATGTTCCCAC
ACCACTCCATAACTGAGTCTGTGAACTATGATGTGAAAACGTTTGGATCTTCTCTTCCTGTTAAAGTCATGGAAG
CCCTAACATTGGCTGAAGTCGATGACCAGCTGACCATTAACATAGATGAAGGTGGATGGGCTTGTCTGGTGTGCA
AAGAGAAGCTCATTATTTGGAAGATTGCTCTGTCACCTATTACTAAGTTATCCGTTTGCAAAGAACTTCAGCTGC
CATCTAGTGATTTCCACTGGAGTGCCGACTTAGTGGCTCTTTCTTACTCTTCTCCCTCAGGTGAAGCACATTCTA
CTCAGGCTGTTGCTGTCATGGTTGCCACCAGAGAAGGATCTATCCGCTATTGGCCAAGCCTTGCTGGTGAAGATA
CCTACACAGAGGCTTTTGTAGATTCGGGAGGTGATAAGACTTACAGTTTCCTAACAGCAGTGCAGGGAGGAAGTT
TTATTTTGTCTTCATCAGGAAGCCAACTAATTCGGTTGATACCTGAGAGCTCAGGAAAGATTCATCAGCATATCC
TGCCTCAGGGGCAAGGCATGCTTTCAGGAATTGGTCGAAAAGTTTCTTCTCTTTTTGGAATTTTATCTCCTAGTA
GTGATCTCACACTTTCAAGTGTTCTCTGGGATAGAGAGAGATCAAGCTTTTATAGCCTGACGAGTTCAAACATCA
GTAAATGGGAATTAGATGATTCTTCAGAAAAGCATGCATACAGTTGGGATATAAATAGAGCCCTGAAGGAAAACA
TTACCGATGCTATTTGGGGATCTGAAAGTAACTATGAAGCTATTAAAGAAGGAGTCAACATTCGATATTTGGACT
TGAAGCAAAACTGTGATGGGCTGGTGATTTTGGCAGCAGCATGGCACTCAGCAGACAATCCATGTCTCATCTATT
ACTCTCTGATAACAATAGAAGATAATGGTTGCCAAATGTCAGATGCAGTTACTGTAGAAGTCACTCAATATAATC
CACCTTTTCAGTCTGAAGACCTGATTTTGTGTCAGTTGACGGTCCCAAACTTTTCAAACCAGACTGCCTATCTGT
ATAACGAAAGTGCTGTCTATGTGTGCTCCACAGGAACTGGGAAATTTTCTCTTCCCCAGGAGAAAATTGTCTTTA
ATGCACAAGGAGATAGTGTTTTAGGTGCTGGTGCCTGTGGTGGTGTTCCTATCATTTTTTCTAGAAACAGTGGAC
TGGTGTCTATTACTTCAAGGGAAAATGTGTCTATATTGGCAGAAGACTTGGAAGGGTCTTTAGCATCTTCAGTTG
CTGGACCAAACAGTGAGAGTATGATTTTTGAGACCACTACAAAGAATGAAACTATAGCCCAGGAAGATAAAATCA
AGTTGCTGAAAGCTGCCTTTCTGCAATACTGCAGAAAAGATTTAGGTCATGCTCAAATGGTGGTTGATGAGCTCT
TTTCCTCTCACTCTGATTTGGATTCTGATTCTGAACTAGACAGGGCAGTTACCCAAATCAGTGTAGACCTGATGG
ATGACTACCCAGCATCTGACCCACGGTGGGCTGAGTCTGTCCCTGAGGAAGCACCTGGGTTCAGCAATACGTCAC
TGATTATCCTTCACCAGCTAGAAGACAAGATGAAAGCTCACTCTTTTCTTATGGACTTTATTCATCAAGTTGGCT
TATTTGGACGTCTAGGCAATTTTCCAGTTAGAGGGACACCGATGGCCACTCGACTGTTGCTCTGTGAGCATGCCG
AAAAGCTGTCAGCCGCCATAGTTCTCAAGAACCACCACTCCCGGCTTTCTGACCTTGTCAACACAGCCATATTGA
TTGCTTTGAACAAGAGGGAGTATGAAATCCCATCCAACCTGACTCCTGCAGATGTCTTTTTCAGGGAGGTATCCC
AAGTAGATACCATCTGTGAGTGCTTACTGGAGCATGAGGAGCAAGTCTTGAGGGATGCACCTATGGATTCCATTG
AATGGGCTGAAGTGGTGATCAATGTGAACAATATTCTCAAGGATATGCTGCAGGCTGCTAGTCATTATCGCCAAA
ATAGAAACTCTTTGTATAGAAGAGAAGAATCACTAGAAAAAGAACCTGAATATGTTCCATGGACGGCAACAAGTG
GTCCTGGTGGCATCCGAACGGTAATAATACGCCAGCATGAGATTGTCCTGAAGGTGGCTTATCCACAGGCAGACA
GCAACCTCCGAAACATCGTGACCGAGCAGCTGGTAGCCCTGATCGATTGCTTCCTGGATGGTTATGTTTCTCAGC
TTAAGTCTGTGGATAAATCCAGTAATCGGGAAAGATATGACAATCTGGAGATGGAATACCTACAGAAAAGATCAG
ATCTCTTATCTCCTCTTCTTTCACTAGGCCAGTACCTGTGGGCTGCTTCTCTAGCAGAGAAATACTGTGACTTTG
ATATATTGGTACAAATGTGTGAGCAGACTGACAACCAGAGCCGACTCCAGCGCTACATGACCCAGTTTGCTGATC
AGAATTTTTCAGACTTTCTCTTCCGTTGGTATCTGGAGAAAGGAAAGCGAGGCAAATTATTATCTCAGCCCATTT
CTCAGCATGGACAGTTGGCAAATTTTTTGCAAGCTCATGAACATCTCAGCTGGTTACATGAAATTAATAGCCAAG
AATTAGAAAAGGCTCATGCAACACTTCTGGGTTTGGCAAATATGGAAACTCGTTACTTTGCAAAGAAGAAAACCC
TTCTTGGCTTGAGTAAATTGGCTGCATTAGCTTCAGACTTTTCAGAGGATATGCTACAAGAAAAAATTGAAGAAA
TGGCTGAGCAGGAGCGCTTTCTACTGCATCAGGAGACCCTACCTGAACAGCTGCTGGCGGAGAAACAGCTAAATC
TCAGTGCGATGCCAGTATTGACTGCACCACAACTCATTGGTCTATATATCTGTGAAGAAAATAGAAGAGCTAATG
AATATGATTTCAAGAAAGCTTTGGACTTGTTGGAATATATTGATGAGGAAGAAGATATAAATATAAATGATCTAA
AACTGGAAATCCTTTGCAAAGCTCTTCAGAGAGATAACTGGTCCAGTTCTGATGGCAAAGATGATCCAATTGAAG
TATCTAAAGACAGTATATTTGTGAAGATCTTACAGAAACTTTTAAAAGATGGCATTCAGCTCAGTGAGTACTTAC
CGGAGGTGAAAGACCTGCTACAAGCGGATCAGCTTGGAAGCTTAAAGTCCAATCCTTACTTCGAGTTTGTTTTGA
AAGCAAATTATGAATATTATGTTCAGGGACAAATATAACTTTTTCTAAAAATGGCCATTGTTTATGAAATCTGTA

FIGURE 685B

TAAGTGTGTCCTTATACAAATTTTAGGCTATAAACAAGTGTAAGTTTGTACAATTTCATAACATGTATAGCTGAG
TTTTTATACTTTATATGTAGGAAGCTAATATAAAATAGTTATGTAACTGTGATTTTGGTTTTCAGTTATGTGACT
TGTTTTTTCCACCTGAAATGTGTCAGTTGTTGTTCCTGTACTCGGTGCCCTTTCTTTTTACTCTCACGTGGTCCC
AGGTTCTGGAGTTCTTGTCCTGGTTCTAGCTGCTCACATGTACAAATCACTTCTAGGCCTCAGTTTTCTGCGACT
ATGAAAATTACTAGATTGCACTAGCTTGTCTCTAAAATTGCTGTGACTCCAGATACTTTGCACTGAAGAGAATCT
AGGGTGTTTGATATCTGTTTCAGTTAGGGCTAATGGGAAATGTCTAGTAAGATAAATGTCAACTTTTGCTGACTT
ATTATGAGATGAAAAACCAAAGGAGAGTGGGCCTAACTCATGTGAGCTTGATAACTGATGAACTCATTGGGAGCA
TTTTAAACTTTTCTACATAAATAATAAATGAGCACTAATGAAAGT

FIGURE 686

MFPAAPSPRTPGTGSRRGPLAGLGPGSTPRTASRKGLPLGSAVSSPVLFSPVGRRSSLSSGGTPTRMFPHHSITE
SVNYDVKTFGSSLPVKVMEALTLAEVDDQLTINIDEGGWACLVCKEKLIIWKIALSPITKLSVCKELQLPSSDFH
WSADLVALSYSSPSGEAHSTQAVAVMVATREGSIRYWPSLAGEDTYTEAFVDSGGDKTYSFLTAVQGGSFILSSS
GSQLIRLIPESSGKIHQHILPQGQGMLSGIGRKVSSLFGILSPSSDLTLSSVLWDRERSSFYSLTSSNISKWELD
DSSEKHAYSWDINRALKENITDAIWGSESNYEAIKEGVNIRYLDLKQNCDGLVILAAAWHSADNPCLIYYSLITI
EDNGCQMSDAVTVEVTQYNPPFQSEDLILCQLTVPNFSNQTAYLYNESAVYVCSTGTGKFSLPQEKIVFNAQGDS
VLGAGACGGVPIIFSRNSGLVSITSRENVSILAEDLEGSLASSVAGPNSESMIFETTTKNETIAQEDKIKLLKAA
FLQYCRKDLGHAQMVVDELFSSHSDLDSDSELDRAVTQISVDLMDDYPASDPRWAESVPEEAPGFSNTSLIILHQ
LEDKMKAHSFLMDFIHQVGLFGRLGNFPVRGTPMATRLLLCEHAEKLSAAIVLKNHHSRLSDLVNTAILIALNKR
EYEIPSNLTPADVFFREVSQVDTICECLLEHEEQVLRDAPMDSIEWAEVVINVNNILKDMLQAASHYRQNRNSLY
RREESLEKEPEYVPWTATSGPGGIRTVIIRQHEIVLKVAYPQADSNLRNIVTEQLVALIDCFLDGYVSQLKSVDK
SSNRERYDNLEMEYLQKRSDLLSPLLSLGQYLWAASLAEKYCDFDILVQMCEQTDNQSRLQRYMTQFADQNFSDF
LFRWYLEKGKRGKLLSQPISQHGQLANFLQAHEHLSWLHEINSQELEKAHATLLGLANMETRYFAKKKTLLGLSK
LAALASDFSEDMLQEKIEEMAEQERFLLHQETLPEQLLAEKQLNLSAMPVLTAPQLIGLYICEENRRANEYDFKK
ALDLLEYIDEEEDININDLKLEILCKALQRDNWSSSDGKDDPIEVSKDSIFVKILQKLLKDGIQLSEYLPEVKDL
LQADQLGSLKSNPYFEFVLKANYEYYVQGQI

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FIGURE 687

CGGCCGCGTCCTCAAGCCGGCACCTGAGCGGCGGAGACGGCTGTAGCACAAGGATCTGCATCTCCAATGGATACT
GAGGGGTTTGGTGAGCTCCTTCAGCAAGCTGAACAGCTTGCTGCTGAGACTGAGGGCATCTCAGAGCTTCCCCAT
GTGGAACGGAACTTACAGGAGATCCAGCAGGCGGGAGAGCGCCTGCGTTCCCGTACCCTAACACGCACGTCCCAG
GAGACGGCAGATGTCAAGGCGTCAGTTCTCCTCGGGTCTCGGGGACTTGACATATCCCACATCTCCCAGCGATTG
GAGAGTCTGAGTGCAGCCACCACCTTTGAGCCTCTTGAGCCTGTGAAGGACACTGACATTCAGGGCTTCCTGAAG
AATGAGAAGGACAATGCCCTGCTGTCTGCCATCGAAGAGTCCCGGAAGAGGACCTTCGGCATGGCTGAGGAGTAC
CATCGGGAGTCAATGTTGGTTGAGTGGGAGCAAGTGAAACAGCGAATTCTGCACACACTGCTGGCATCAGGAGAA
GACGCCCTTGACTTTACTCAAGAAAGCGAGCCAAGCTACATCAGTGATGTGGGACCCCCTGGTCGAAGCTCTCTG
GATAACATCGAGATGGCCTATGCGCGGCAAATTTATATCTATAATGAGAAAATTGTAAATGGACACCTGCAGCCT
AACCTGGTGGACCTTTGTGCTTCCGTCGCAGAGCTGGATGATAAGAGCATTTCCGACATGTGGACCATGGTAAAA
CAAATGACAGACGTGTTGTTGACACCGGCAACGGATGCCCTGAAGAACCGCAGCAGCGTGGAAGTGCGCATGGAG
TTTGTCAGGCAGGCCTTGGCGTACCTTGAGCAGAGTTATAAGAATTACACCCTTGTGACTGTCTTTGGAAATTTG
CATCAGGCCCAGCTGGGCGGGGTGCCTGGGACTTACCAATTGGTTCGAAGTTTCCTGAACATTAAACTGCCAGCT
CCCTTGCCTGGACTACAGGATGGAGAGGTGGAAGGCCATCCTGTGTGGGCGCTAATTTACTACTGCATGCGCTGT
GGAGACCTGCTTGCCGCTTCACAGGTAGTTAATCGAGCCCAGCACCAGCTGGGAGAGTTTAAAACCTGGTTCCAG
GAGTACATGAACAGCAAGGACAGAAGATTGTCCCCAGCTACGGAAAACAAGCTCCGGCTGCATTACCGTAGGGCC
CTCAGGAACAATACAGATCCCTACAAGCGGGCCGTGTACTGTATCATTGGCAGATGTGACGTCACCGACAACCAG
AGTGAAGTGGCGGACAAAACTGAGGATTACCTGTGGCTGAAGTTGAACCAAGTGTGTTTTGACGACGATGGCACC
AGCTCCCCACAAGACAGGCTCACTCTCTCACAGTTCCAGAAGCAGTTGTTGGAAGACTATGGCGAGTCCCACTTT
ACGGTGAACCAGCAACCCTTCCTCTACTTCCAAGTCCTGTTCCTGACAGCGCAGTTTGAAGCAGCAGTTGCCTTT
CTTTTCCGCATGGAGCGGCTGCGCTGCCATGCTGTCCATGTAGCACTGGTGCTGTTTGAGCTGAAGCTGCTTTTA
AAGTCCTCTGGACAGAGTGCTCAGCTCCTCAGCCACGAGCCTGGTGACCCTCCTTGCTTGCGGCGGCTGAACTTC
GTGCGGCTCCTCATGCTGTACACCCGGAAGTTTGAGTCCACGGACCCAAGGGAGGCCCTCCAGTACTTCTATTTC
CTCAGGGATGAGAAAGATAGTCAAGGAGAAAACATGTTTCTGCGCTGTGTGAGTGAGCTTGTGATTGAAAGCCGA
GAGTTCGATATGATTCTTGGGAAACTAGAGAATGACGGAAGTAGAAAGCCTGGAGTCATAGATAAGTTTACTAGT
GACACAAAGCCTATTATCAACAAAGTTGCTTCTGTGGCAGAAAATAAAGGACTGTTTGAAGAGGCAGCAAAGCTG
TATGACCTTGCCAAGAATGCTGACAAGGTACTGGAGCTGATGAACAAACTGCTGAGCCCTGTCGTCCCCCAGATC
AGTGCCCCGCAATCCAACAAGGAGAGGCTGAAGAACATGGCACTCTCCATTGCCGAACGGTATAGGGCTCAAGGA
ATAAGCGCAAATAAATTTGTGGACTCCACGTTCTATCTTCTTTTGGACTTGATCACCTTTTTTGACGAGTATCAT
AGTGGTCATATTGATAGAGCTTTTGATATCATTGAGCGCTTGAAGCTGGTGCCCCTGAATCAGGAAAGTGTGGAA
GAGAGAGTGGCTGCTTTCAGAAATTTCAGTGATGAAATCAGGCACAACCTCTCAGAAGTGCTTCTTGCCACCATG
AACATCTTGTTCACACAGTTTAAGAGGCTCAAGGGGACAAGTCCATCCTCGTCATCCAGGCCCCAGCGAGTCATC
GAGGACCGCGACTCTCAACTCCGAAGTCAAGCCCGCACTCTGATTACCTTTGCTGGAATGATACCATACCGAACG
TCTGGGGACACCAATGCGAGGCTGGTGCAGATGGAGGTCCTCATGAATTAAGTGCCATGCTTTGTGGGAGTCTGG
GTCGGCACACTGTCAGTACATCAGGCACATGGGCCCACTAGGCTGGGGTTTCTGGTTTTGTTTCTGTTGTGTTTT
GTTTTGGTTTCTGTATTATGTATTTTTGTCAACGCCAATAAATTTCTTTGATTTGT

FIGURE 688

MDTEGFGELLQQAEQLAAETEGISELPHVERNLQEIQQAGERLRSRTLTRTSQETADVKASVLLGSRGLDISHIS
QRLESLSAATTFEPLEPVKDTDIQGFLKNEKDNALLSAIEESRKRTFGMAEEYHRESMLVEWEQVKQRILHTLLA
SGEDALDFTQESEPSYISDVGPPGRSSLDNIEMAYARQIYIYNEKIVNGHLQPNLVDLCASVAELDDKSISDMWT
MVKQMTDVLLTPATDALKNRSSVEVRMEFVRQALAYLEQSYKNYTLVTVFGNLHQAQLGGVPGTYQLVRSFLNIK
LPAPLPGLQDGEVEGHPVWALIYYCMRCGDLLAASQVVNRAQHQLGEFKTWFQEYMNSKDRRLSPATENKLRLHY
RRALRNNTDPYKRAVYCIIGRCDVTDNQSEVADKTEDYLWLKLNQVCFDDDGTSSPQDRLTLSQFQKQLLEDYGE
SHFTVNQQPFLYFQVLFLTAQFEAAVAFLFRMERLRCHAVHVALVLFELKLLLKSSGQSAQLLSHEPGDPPCLRR
LNFVRLLMLYTRKFESTDPREALQYFYFLRDEKDSQGENMFLRCVSELVIESREFDMILGKLENDGSRKPGVIDK
FTSDTKPIINKVASVAENKGLFEEAAKLYDLAKNADKVLELMNKLLSPVVPQISAPQSNKERLKNMALSIAERYR
AQGISANKFVDSTFYLLLDLITFFDEYHSGHIDRAFDIIERLKLVPLNQESVEERVAAFRNFSDEIRHNLSEVLL
ATMNILFTQFKRLKGTSPSSSSRPQRVIEDRDSQLRSQARTLITFAGMIPYRTSGDTNARLVQMEVLMN

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FIGURE 689A

GTTTCTTCAGACTCCAGATTTCCCTGTCAACCACGAGGAGTCCAGAGAGGAAACGCGGAGCGGAGACAACAGTAC
CTGACGCCTCTTTCAGCCCGGGATCGCCCCAGCAGGGATGGGCGACAAGATCTGGCTGCCCTTCCCCGTGCTCCT
TCTGGCCGCTCTGCCTCCGGTGCTGCTGCCTGGGGCGGCCGGCTTCACACCTTCCCTCGATAGCGACTTCACCTT
TACCCTTCCCGCCGGCCAGAAGGAGTGCTTCTACCAGCCCATGCCCCTGAAGGCCTCGCTGGAGATCGAGTACCA
AGTTTTAGATGGAGCAGGATTAGATATTGATTTCCATCTTGCCTCTCCAGAAGGCAAAACCTTAGTTTTTGAACA
AAGAAAATCAGATGGAGTTCACACTGTAGAGACTGAAGTTGGTGATTACATGTTCTGCTTTGACAATACATTCAG
CACCATTTCTGAGAAGGTGATTTTCTTTGAATTAATCCTGGATAATATGGGAGAACAGGCACAAGAACAAGAAGA
TTGGAAGAAATATATTACTGGCACAGATATATTGGATATGAAACTGGAAGACATCCTGGAATCCATCAACAGCAT
CAAGTCCAGACTAAGCAAAAGTGGGCACATACAAATTCTGCTTAGAGCATTTGAAGCTCGTGATCGAAACATACA
AGAAAGCAACTTTGATAGAGTCAATTTCTGGTCTATGGTTAATTTAGTGGTCATGGTGGTGGTGTCAGCCATTCA
AGTTTATATGCTGAAGAGTCTGTTTGAAGATAAGAGGAAAAGTAGAACTTAAAACTCCAAACTAGAGTACGTAAC
ATTGAAAAATGAGGCATAAAAATGCAATAAACTGTTACAGTCAAGACCATTAATGGTCTTCTCCAAAATATTTTG
AGATATAAAAGTAGGAAACAGGTATAATTTTAATGTGAAAATTAAGTCTTCACTTTCTGTGCAAGTAATCCTGCT
GATCCAGTTGTACTTAAGTGTGTAACAGGAATATTTTGCAGAATATAGGTTTAACTGAATGAAGCCATATTAATA
ACTGCATTTTCCTAACTTTGAAAAATTTTGCAAATGTCTTAGGTGATTTAAATAAATGAGTATTGGGCCTAATTG
CAACACCAGTCTGTTTTTAACAGGTTCTATTACCCAGAACTTTTTTGTAAATGCGGCAGTTACAAATTAACTGTG
GAAGTTTTCAGTTTTAAGTTATAAATCACCTGAGAATTACCTAATGATGGATTGAATAAATCTTTAGACTACAAA
AGCCCAACTTTTCTCTATTTACATATGCATCTCTCCTATAATGTAAATAGAATAATAGCTTTGAAATACAATTAG
GTTTTTGAGATTTTTATAACCAAATACATTTCAGTGTAACATATTAGCAGAAAGCATTAGTCTTTGTACTTTGCT
TACATTCCCAAAAGCTGACATTTTCACGATTCTTAAAAACACAAAGTTACACTTACTAAAATTAGGACATGTTTT
CTCTTTGAAATGAAGAATATAGTTTAAAAGCTTCCTCCTCCATAGGGACACATTTTCTCTAACCCTTAACTAAAG
TGTAGGATTTTAAAATTAAATGTGAGGTAAAATAAGTTTATTTTTAATAGTATCTGTCAAGTTAATATCTGTCAA
CAGTTAATAATCATGTTATGTTAATTTTAACATGATTGCTGACTTGGATAATTCATTATTACCAGCAGTTATGAA
GGAAATATTGCTAAAATGATCTGGGCCTACCATAAATAAATATCTCCTTTTCTGAGCTCTAAGAATTATCAGAAA
CAGGAAAGAATTTAGAAAAACTTGAGAAAACCTAATCCAAAATAAAATTCACTTAAGTAGAACTATAAATAAATA
TCTAGAATCTGACTGGCTCATCATGACATCCTACTCATAACATAAATCAAAGGAGATGATTAATTTCCAGTTAGC
TGGAAGAAACTTTGGCTGTAGGTTTTTATTTTCTACAAGAATTCTGGTTTGAATTATTTTTGTAAGCAGGTACAT
TTTATAAAATGTAAGCCCTACTGTAAGGTTTAGCACTGGGTGTACATATTTATTAAAAATTTTTATTATAACAAC
TTTTATTAAAATGGCCTTTCTGAACACTTTATTTATTGATGTTGAAGTAAGGATTAGAAACATAGACTCCCAAGT
TTTAAACACCTAAATGTGAATAACCCATATATACAACAAAGTTTCTGCCATCTAGCTTTTTGAAGTCTATGGGGG
TCTTACTCAAGTACTAGTAATTTAACTTCATCATGAATGAACTATAATTTTTAAGTTATGCCCATTTATAACGTT
GTTTATGACTACATTGTGAGTTAGAAACAAACTTAAAATTTGGGGTATAGAACCCCTCAACAGGTTAGTAATGCT
GGAATTCTTGATGAGCAATAATGATAACCAGAGAGTGATTTCATTTACACTCATAGTAGTATAAAAAGAGATACA
TTTCCCTCTTAGGCCCCTGGGAGAAGAGCAGCTTAGATTTCCCTACTGGCAAGGTTTTTAAAAATGAGGTAAATG
CCGTATATGATCAATTACCTTAATTGGCCAAGAAAATGCTTCAGGTGTCTAGGGGTATCCTCTGCAACACTTGCA
GAACAAAGGTCAATAAGATCCTTGCCTATGAATACCCCTCCCTTTTGCGCTGTTAAATTTGCAATGAGAAGCAAA
TTTACAGTACCATAACTAATAAAGCAGGGTACAGATATAAACTACTGCATCTTTTCTATAAAACTGTGATTAAGA
ATTCTACCTCTCCTGTATGGCTGTTACTGTACTGTACTCTCTGACTCCTTACCTAACAATGAATTTGTTACATAA
TCTTCTACATGTATGATTTGTGCCACTGATCTTAAACCTATGATTCAGTAACTTCTTACCATATAAAAACGATAA
TTGCTTTATTTGGAAAAGAATTTAGGAATACTAAGGACAATTATTTTTATAGACAAAGTAAAAAGACAGATATTT
AAGAGGCATAACCAAAAAAGCAAAACTTGTAAACAGAGTAAAAATCTTTAATATTTCTAAAGACATACTGTTTAT
CTGCTTCATATGCTTTTTTTAATTTCACTATTCCATTTCTAAATTAAAGTTATGCTAAATTGAGTAAGCTGTTTA
TCACTTAACAGCTCATTTTGTCTTTTTCAATATACAAATTTTAAAAATACTACAATATTTAACTAAGGCCCAACC
GATTTCCATAATGTAGCAGTTACCGTGTTCACCTCACACTAAGGCCTAGAGTTTGCTCTGATATGCATTTGGATG
ATTAATGTTATGCTGTTCTTTCATGTGAATGTCAAGACATGGAGGGTGTTTGTAATTTTATGGTAAAATTAATCC
TTCTTACACATAATGGTGTCTTAAAATTGACAAAAAATGAGCACTTACAATTGTATGTCTCCTCAAATGAAAATT
CTTTATCTGAAATTTTAAAAGACATTGATTCCGCATGTAAGGATTTTTCATCTGAAGTACAATAATGCACAATCA
GTGTTGCTCAAACTGCTTTATACTTATAAACAGCCATCTTAAATAAGCAACGTATTGTGAGTACTGATATGTATA

FIGURE 689B

TAATAAAAATTATCAAAGAAAAAAAAAAAAAAAA

FIGURE 690

MGDKIWLPFPVLLLAALPPVLLPGAAGFTPSLDSDFTFTLPAGQKECFYQPMPLKASLEIEYQVLDGAGLDIDFH
LASPEGKTLVFEQRKSDGVHTVETEVGDYMFCFDNTFSTISEKVIFFELILDNMGEQAQEQEDWKKYITGTDILD
MKLEDILESINSIKSRLSKSGHIQILLRAFEARDRNIQESNFDRVNFWSMVNLVVMVVVSAIQVYMLKSLFEDKR
KSRT

FIGURE 691A

GGTCTCACCATGGAGCGGAAAGTGCTTGCGCTCCAGGCCCGAAAGAAAAGGACCAAGGCCAAGAAGGACAAAGCC
CAAAGGAAATCTGAAACTCAGCACCGAGGCTCTGCTCCCCACTCTGAGAGTGATCTACCAGAGCAGGAAGAGGAG
ATTCTGGGATCTGATGATGATGAGCAAGAAGATCCTAATGATTATTGTAAAGGAGGTTATCATCTTGTGAAAATT
GGAGATCTATTCAATGGGAGATACCATGTGATCCGAAAGTTAGGCTGGGGACACTTTTCAACAGTATGGTTATCA
TGGGATATTCAGGGGAAGAAATTTGTGGCAATGAAAGTAGTTAAAAGTGCTGAACATTACACTGAAACAGCACTA
GATGAAATCCGGTTGCTGAAGTCAGTTCGCAATTCAGACCCTAATGATCCAAATAGAGAAATGGTTGTTCAACTA
CTAGATGACTTTAAAATATCAGGAGTTAATGGAACACATATCTGCATGGTATTTGAAGTTTTGGGGCATCATCTG
CTCAAGTGGATCATCAAATCCAATTATCAGGGGCTTCCACTGCCTTGTGTCAAAAAAATTATTCAGCAAGTGTTA
CAGGGTCTTGATTATTTACATACCAAGTGCCGTATCATCCACACTGACATTAAACCAGAGAACATCTTATTGTCA
GTGAATGAGCAGTACATTCGGAGGCTGGCTGCAGAAGCAACAGAATGGCAGCGATCTGGAGCTCCTCCGCCTTCC
GGATCTGCAGTCAGTACTGCTCCCCAGCCTAAACCAGCTGACAAAATGTCAAAGAATAAGAAGAAGAAATTGAAG
AAGAAGCAGAAGCGCCAGGCAGAATTACTAGAGAAGCGAATGCAGGAAATTGAGGAAATGGAGAAAGAGTCGGGC
CCTGGGCAAAAAAGACCAAACAAGCAAGAAGAATCAGAGAGTCCTGTTGAAAGACCCTTGAAAGAGAACCCACCT
AATAAAATGACCCAAGAAAAACTTGAAGAGTCAAGTACCATTGGCCAGGATCAAACGCTTATGGAACGTGATACA
GAGGGTGGTGCAGCAGAAATTAATTGCAATGGAGTGATTGAAGTCATTAATTATACTCAGAACAGTAATAATGAA
ACATTGAGACATAAAGAGGATCTACATAATGCTAATGACTGTGATGTCCAAAATTTGAATCAGGAATCTAGTTTC
CTAAGCTCCCAAAATGGAGACAGCAGCACATCTCAAGAAACAGACTCTTGTACACCTATAACATCTGAGGTGTCA
GACACCATGGTGTGCCAGTCTTCCTCAACTGTAGGTCAGTCATTCAGTGAACAACACATTAGCCAACTTCAAGAA
AGCATTCGGGCAGAGATACCCTGTGAAGATGAACAAGAGCAAGAACATAACGGACCACTGGACAACAAAGGAAAA
TCCACGGCTGGAAATTTTCTTGTTAATCCCCTTGAGCCAAAAAATGCAGAAAAGCTCAAGGTGAAGATTGCTGAC
CTTGGAAATGCTTGTTGGCACAAACATTTCACTGAAGATATTCAAACAAGGCAATATCGTTCCTTGGAAGTTCTA
ATCGGATCTGGCTATAATACCCCTGCTGACATTTGGAGCACGGCATGCATGGCCTTTGAACTGGCCACAGGTGAC
TATTTGTTTGAACCTCATTCAGGGGAAGAGTACACTCGAGATGAAGATCACATTGCATTGATCATAGAACTTCTG
GGGAAGGTGCCTCGCAAGCTCATTGTGGCAGGAAAATATTCCAAGGAATTTTTCACCAAAAAAGGTGACCTGAAA
CATATCACGAAGCTGAAACCTTGGGGCCTTTTTGAGGTTCTAGTGGAGAAGTATGAGTGGTCGCAGGAAGAGGCA
GCTGGCTTCACAGATTTCTTACTGCCCATGTTGGAGCTGATCCCTGAGAAGAGAGCCACTGCCGCCGAGTGTCTC
CGGCACCCTTGGCTTAACTCCTAAGCCCCTGCCCAGCACCACAGCAGAGATCACACACTGACCCTCCGCCCTTCC
CCTTCAAGCATTTTCCTCTTCCCTTTTCAGGGTGAAGCTCTTCCTTCAAGAGTTTCTAGATCTTGTTTTTTTTTT
AATCCAACATGTTCATTTGGGTTTGCTTACTTGACCCTGTGGAGATCCCCACAGCCATTGGGCATCCTAGGTGAA
TTTGGCCTTGGTTGGGCTCTGCCAAAGACTAATGGACTAAAATGTGAAACAGCCTCTTGCCCTGTACCTTTCCTT
CCCATTAGGACATCCTTTAAATTATAAGCATCCTTTTTGAAAAGAGCTATGAAGGTGTATGAGCCCATCCTTTTA
TTCATTGACTCTAAGAGTCAAATTTTCTAGTGCATATCCTATTGCCAGCATAAGGATGAGGAGGGGGAAAGGGTC
TTAATTCTATGTACAGCAGAGACATTAAACTTGCTGTGTCCGGGCTGCATCATCTTCCTGGACTGTTTCTGTTGT
TCTCTGTGTTCACATTTTTTCCTGCAACTTTTAAGCTACTGTCTTTTTTAAATAGCTATATGAACACCAAATTTG
GGTACCATTTTATCACTGTTCAAAGCACTGTCAAATTCCTTTCATCCTTTAATAGTTAAGATCTTTGAATCTTCA
GTCTGATTTTTAATGTAAGCAAAAACAGAACCATTGAATAGTAATTTCTTGAGAACCTCAGGTGTTCTATAAACA
GTCCTTTCCTGTATGTCTTCTATTACCCTAAGACCAGAGTTATTTTGGTTGGTTGTTTTGTTTTATTTTTTGTTT
TTGTATCCATGGCTGGCACTTTACTCATTGCACTTGAGTTTATTGCCCCATAACTAAAGGATCAGGATGATGGTA
GAACGGAGATCTGGGTTTCAGAGCTTTCCCATTTAAGAAAAATAGATCTTGAGATTCTGATTCTTTTCCAAACAG
TCCCCTGCTTTCATGTACAGCTTTTTCTTTACCTTACCCAAAATTCTGGCCTTGAAGCAGTTTTCCTCTATGGCT
TTGCCTTTCTGATTTTCTCAGAGGCTCGAGTCTTTAATATAACCCCAAATGAAAGAACCAAGGGGAGGGGTGGGA
TGGCACTTTTTTTTGTTGGTCTTGTTTTGTTTTGTTTTTTGGTTGGTTGGTTCGTTATTTTTTAAGATTAGCCAT
TCTCTGCTGCTATTTCCCTACATAATGTCAATTTTTAACCATAATTTTGACATGATTGAGATGTACTTGAGGCTT
TTTTGTTTTAATTGAGAAAAGACTTTGCAATTTTTTTTTTAGGATGAGCCTCTCCTAGACTTGACCTAGAATATT
ACATATTCCTCCAGTAAGTAATACTGAAGAGCAAAAGAGAGGCAGGATTGGGGTCACAGCCGCTTCTTCAGCATG
GACCAAGTGGGCCTTGGGGATTGCAGCGTTCTCGAAGTGGCTGTAGGACTCGAATTTACAGAAAGCCACAGAGGT
GCAACTTGAGGCTCTGCTAGCAAGCCACCAGTGAGGCTATTGGGTAACCACCTTTCTATACAGGAGATTGGAATC
TACTTTGTCATTTATCCACCACAGTGACAAAGGAAAAGTGGTGCCGTTATGCAATCCATTTAACTCATAAACATA

FIGURE 691B

TTACTCTGAGTAACTGGCCAGCCATTCATCGGATCCTTCATTGGGTACTCCTGAAATCAGACATGTTCCTGTAGA
AAGAATTTTAAGTTAGGCTTTCTATGCACCTATCAAGAATCAAGAGAATAGATTGTATCAAACAACGGCAGGGAA
ATCCTTCAGCAATTCTAATCCACTTTGGGTTTTCAGCTGTTTTTACATCTAAAGCAATAGACTAGAACTGAATTA
TCTTCTACATAGTAAAATCACAATTGTGGAATTACAGGAATTCTGGTGATATTAAGGTGAAATAACAAAACACAA
AAGGCCCTATTTTAACAGTTGATGTGACAGTAAGTTTTAATAGAACCTGTAACTTCATTTTGGAAATGCTTCTCC
ACCAAATAAGGGCTTTTTCCCCTATTTAAGGAGCCAGATGGATTGAAAGATGTGGAAATAGGCAGCTGTAGATCT
TGATCTTCCAGGTACCCCATGTACCTTTATTGAGCTTAATTATAATACTGTCAAATTGCCACGATCTCACTAAAG
GATTTCTATTTGCTGTCAGTTAAAAATAAAGCCCTAAATACATTTTTATTCTTTCTACTGAGGGCATTGTCTGTT
TTCTTTGTAAATGCCGTACAATAAACAAATTATTTAATAACCTA

FIGURE 692

MERKVLALQARKKRTKAKKDKAQRKSETQHRGSAPHSESDLPEQEEEILGSDDDEQEDPNDYCKGGYHLVKIGDL
FNGRYHVIRKLGWGHFSTVWLSWDIQGKKFVAMKVVKSAEHYTETALDEIRLLKSVRNSDPNDPNREMVVQLLDD
FKISGVNGTHICMVFEVLGHHLLKWIIKSNYQGLPLPCVKKIIQQVLQGLDYLHTKCRIIHTDIKPENILLSVNE
QYIRRLAAEATEWQRSGAPPPSGSAVSTAPQPKPADKMSKNKKKKLKKKQKRQAELLEKRMQEIEEMEKESGPGQ
KRPNKQEESESPVERPLKENPPNKMTQEKLEESSTIGQDQTLMERDTEGGAAEINCNGVIEVINYTQNSNNETLR
HKEDLHNANDCDVQNLNQESSFLSSQNGDSSTSQETDSCTPITSEVSDTMVCQSSSTVGQSFSEQHISQLQESIR
AEIPCEDEQEQEHNGPLDNKGKSTAGNFLVNPLEPKNAEKLKVKIADLGNACWHKHFTEDIQTRQYRSLEVLIGS
GYNTPADIWSTACMAFELATGDYLFEPHSGEEYTRDEDHIALIIELLGKVPRKLIVAGKYSKEFFTKKGDLKHIT
KLKPWGLFEVLVEKYEWSQEEAAGFTDFLLPMLELIPEKRATAAECLRHPWLNS

FIGURE 693A

CGCGGGAGACAAAGCCGCGCGTAGAGACGCGATGCCCGCCGATCGCGAGCCCGGCCGGCGAGGGCGCGGGGACTG
CGGCGTCTGAGCGCGCCAAGCCGTGCGCCCGCGGGGACGCCGAGCCCCGGGGCCGGTGCGGGCGGCGGCGGGGCG
GGGCCCAGGTGCGCCCGGCCGCGTCGGGCCCGTGACTGCTCGGGGGGCGGCGCCCCTCCCGCCGCAGCCGCAGTG
GCTGGCGCCGCAGCCAGGAGCCATGGGCAACATCTCCTCTAACATCTCGGCCTTCCAGTCCCTGCATATCGTCAT
GTTGGGCTTGGACTCGGCCGGCAAGACCACGGTGCTCTACCGGCTCAAGTTCAACGAGTTCGTGAACACGGTGCC
CACCATCGGCTTCAACACCGAGAAGATCAAGCTGAGCAACGGCACGGCCAAGGGCATCAGCTGCCACTTCTGGGA
CGTGGGCGGCCAGGAGAAGCTGCGGCCGCTGTGGAAGTCCTACAGCCGCTGCACGGACGGCATCATCTACGTGGT
GGACTCGGTGGACGTGGACCGGCTGGAGGAGGCCAAGACGGAGCTGCACAAGGTGACCAAGTTCGCCGAGAACCA
GGGCACGCCGCTGCTGGTCATCGCCAACAAGCAGGACCTGCCCAAGTCGCTGCCGGTGGCAGAGATTGAGAAGCA
GCTGGCGCTGCACGAGCTTATCCCGGCCACCACCTATCACGTCCAGCCGGCGTGCGCCATCATCGGCGAGGGCCT
CACCGAGGGCATGGACAAGCTCTATGAGATGATCCTGAAACGCAGGAAGTCCCTCAAGCAGAAGAAGAAGCGGTA
ATGCGCCCGGAGCGACCGGGGAGCGAGCGAGTGCGTCAAGAAAGAATGAATGGATGGATGGATGGTTGGATGGAT
GGATGGATGGATGAGCGAGAACCCGCGCCCGCGAACAAAGAGCGAACCAAAGCGATGCTTCGAATTTTTAAAACG
GAATCTCTGCACCCAAATGCAGGACTGGTGACTTAAGGAGCTGCGAAGTCTGATTTACCGGCCTACTCTCGACCT
GCCCCCCACCCCCAGCTCAGGGGACCTTTTGTCTGAACGCCAGAGCTACTGACCAGGTCGGGGGGCCGCGGTGGG
GAGTGGAAGAGCCGGTCCTGCTGTCCGCCCTCCCAGCCCCAGGTGGAAGGCTCAGTTGTCGGAAAGACAAAAGCG
ATTTCTTCCCACTCCTGCAGGGCCAGAAGTTCAGGCTGCCCCGCCTCCACTGGGGGATCGCACCTGTGAATTACC
TGAGGTATGCATTTCCCAGAACCGTGGGCGTACCCACCTTGGGGGGCATGTTGGTTCTGGGGGGACCACCTCTCC
TTGCATTCAGGGGCTGTGAAGCTGAGTAATTTTCGGTCACAGGGCAGGCCCCTGTTGAAATTTCATTTGTCCTGC
TCTGGGCCCAAAGGTGGTGGTGGTTTGGGTCATCAGAGGACTGCCTGGGACGGTTCAGCGGGCACGGAGCGCTGT
GCTGGCCTGGCTGGGGATGGCCGCGGAGGTGCCCTTTTCCTGGTGCTTTGTGGTGGCTGCAGAAGACCAGTTTTG
TTGAGAACTGCTTTTCAGCCTGGAATCAGACATCTTCCAGATGGTTTGGACCCTGTCCATGTGTAGGTCATTATC
ACACAAAGAGACCAATAAAAATAAAAATAATAAGAAAAAAAAAAGACGAACTATTGGAGGTGGTGGCCAATGATG
CATTTACTGTTTGCAGGATAGTTAAAGGTGTTTAAAGGGTAAGGCTTTTGGTGTAAATGCTGGATGGGGTGTGTG
TGTGTGTGGATATAGGGACCTCCCTCTGTACTGTGTACTGTGTAATCGGCATTAATACCTAGACTCATATGTATG
GAATTTTAAATTCTCTTAGCCTACTGATTGGTTTGGATGAGCACACCAGCTGCAGGTGTGTGCTGAATTGCAAGA
TGGTATTTTTTTTTTTTAACCAAGGGATGTCTCTTGTAATACTAACCGCGTGATAATGGGTTTTCAGACATGATG
AAAAAAAAAAACTTTTACAAATGAATACTTACCTTAGAAATATTCACCTTAGGAAAAAAGACTTTGCTCTGCCCT
TTTATATTCCTTTATGCTGCAAGTGGTGACATGTTCAGATTTCTAATTTGGTTCATTGTGGCCTATCTGGTTTAA
GTCTTTCATTAAAAATGTCTCGTTAGAGTATTTGATGTCATGCACCAAAAAAATAAAACCCCACCTTGTTGCAAA
AGCTGACCTCGTTGCATGGAATTAAAAGAGAAGGAAAAACACAAGGATGAAGTCTTTCCGAATTCATTCTTGTGG
GAACTGGCCTTCGGAGCCAGCCAGCACTTTGGGCAAATGCAAACAACAATGAGTGCTTGAGATAAAAGAAAGTGT
GACGTCATGGTCACTGGTACTCAGGCACTTCACAGTTTACTTGAAAGAGGCTTTGGAAAATAGATAAAGTGAAAG
AAGAATAAATACATATTTTTAATAATGTAATTTTAAAAATCCTTTATAATCAGGACTGAGTCTTGGTTTGCAGAA
GCTGTCACTTACCCTGAAACACAGTATCAAAAGGGAAACTTAAAACATACTGTTTGATTTTTTTATTTCCTCTTA
CAATCCATGTTTTCAGGTAGAATTATGACTTTCCCCCCATTGTTACACATTTCTTTACAAAGGAGGCCTGTAGAA
ATTGGACACGATCATGCTTGAGCATGTGAGTTAGTCAAATTATGAGTCCCTGCCTATTGTCCATTACACACCGAA
TGTTAATTTAAGAACCAGAGGCAGAAGTTCTGGCTTCCTGCTTGAAACCCAATTCTTATATGAAATTTTTTAAAA
GCAGAAACCTAGCAGCCCATCTGCTTTTTCTCTTTTGTCGGTGTATTTGGTACCCCTCCAATGCTGGTCTTTTTG
TAGAAACTCAGTAGAGAAAGTCTAGCTAAGCAGTGTTGAAAAGCCTGCAAGATTTCAGTTTACATATCGACAGCA
TATCCACTGATTTCTAAATGGGCTGGTCCCATCATCTGAAGATTCTGTATAGAATTATTAAAAAAAAAATCCATC
TTTCTTTATTTTCTTCACATGCGACAATTTCTTAAGCACTTTGACATTTTGGTAGTTCCACACTATTGAGAGAAT
AATATATTTATTTTGTGACATTGCAGATGCCAAATACTGTAACCTTCTCGTGATAACAATACTTAGGTTCAAGAT
CACTGTTCAAACCCTGTCATGCTTTAAAACTGATGCGAGATGATTTTGTTTTTTGCATAATCAATACTTAAGGGT
GCAATCAACTGTTAGTAATTGTGCAGTAAAGTAAAGCCCTGTGGTGTATCAACTACTAGTTAAGAGTCTCAGTTG
ATTTCTGTAATGTTTGACCTAATAATAGCCCGTTTCGTCTCTGACCCAACAGAGGAAGCACAGATCAAATCACCT
TGGAGTGGTCACCAGGGGGACAGGGAGCCCCCCACCAATGTATCAATGGGTGATTTATGATGCCTTCTGCCCTTT
GGCGAGTGAATGGGTTTCCCATAGGGGAAGTTGGCCTCCCTCCGTGAGCTTTGGAAATGTTTTCTAATAGACACA

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FIGURE 693B

GGGAGGCCAGTTCTGTTTCAGAGCAATTATCTTCCCAAATTCTCTGTTCTGGTGTTGGAACTGTGTGCCCTGGTT
TCTGTTTTCCTTTCTACTGCTGTAATTCTCTGTCTCATCATCCTTCTCTTTTGTTTCCATAGCCTTTTATAATGC
ATATATGATGCTGTGAACAGAAATAAATTATTTATACAATCAAATGACAAA

FIGURE 694

MGNISSNISAFQSLHIVMLGLDSAGKTTVLYRLKFNEFVNTVPTIGFNTEKIKLSNGTAKGISCHFWDVGGQEKL
RPLWKSYSRCTDGIIYVVDSVDVDRLEEAKTELHKVTKFAENQGTPLLVIANKQDLPKSLPVAEIEKQLALHELI
PATTYHVQPACAIIGEGLTEGMDKLYEMILKRRKSLKQKKKR

FIGURE 695

GGCACGAGGGCCTTCCAGTCCCTGCATATCGTC**ATG**TTGGGCTTGGACTCGGCCGGCAAGACCACGGTGCTCTAC
CGGCTCAAGTTCAACGAGTTCGTGAACACGGTGCCCACCATCGGCTTCAACACCGAGAAGATCAAGCTGAGCAAC
GGCACGGCCAAGGGCATCAGCTGCCACTTCTGGGACGTGGGCGGCCAGGAGAAGCTGCGGCCGCTGTGGAAGTCC
TACAGCCGCTGCACGGACGGCATCATCTACGTGGTGGACTCGGTGGACGTGGACCGGCTGGAGGAGGCCAAGACG
GAGCTGCACAAGGTGACCAAGTTCGCCGAGAACCAGGGCACGCCGCTGCTGGTCATCGCCAACAAGCAGGACCTG
CCCAAGTCGCTGCCGGTGGCAGAGATTGAGAAGCAGCTGGCGCTGCACGAGCTTATCCCGGCCACCACCTATCAC
GTCCAGCCGGCGTGCGCCATCATCGGCGAGGGCCTCACCGAGGGCATGGACAAGCTCTATGAGATGATCCTGAAA
CGCAGGAAGTCCCTCAAGCAGAAGAAGAAGCGG**TAA**TGCGCCCGGAGCGACCGGGGAGCGAGCGAGTGCGTCAAG
AAAGAATGAATGGATGGATGGATGGTTGGATGGATGGATGGATGGATGAGCGAGAACCCGCGCCCGCGAACAAAG
AGCGAACCAAAGCGATGCTTCGAATTTTTAAAACGGAATCTCTGCACCCAAATGCAGGACTGGTGACTTAAGGAG
CTGCGAAGTCTGATTTACCGGCCTACTCTCGACCTGCCCCCCACCCCCAGCTCAGGGGACCTTTTGTCTGAACGC
CAGAGCTACTGACCAGGTCGGGGGGCCGCGGTGGGGAGTGGAAGAGCCGGTCCTGCTGTCCGCCCTCCCAGCCCC
AGGTGGAAGGCTCAGTTGTCGGAAAGACAAAAGCGATTTCTTCCCACTCCTGCAGGGCCAGAAGTTCAGGCTGCC
CCGCCTCCACTGGGGGATCGCACCTGTGAATTACCTGAGGTATGCATTTCCCAGAACCGTGGGCGTACCCACCTT
GGGGGGCATGTTGGTTCTGGGGGGACCACCTCTCCTTGCATTCAGGGGCTGTGAAGCTGAGTAATTTTCGGTCAC
AGGGCAGGCCCCTGTTGAAATTTCATTTGTCCTGCTCTGGGCCCAAAGGTGGTGGTGGTTTGGGTCATCAGAGGA
CTGCCTGGGACGGTTCAGCGGGCACGGAGCGCTGTGCTGGCCTGGCTGGGGATGGCCGCGGAGGTGCCCTTTTCC
TGGTGCTTTGTGGTGGCTGCAGAAGACCAGTTTTGTTGAGAACTGCTTTTCAGCCTGGAATCAGACATCTTCCAG
ATGGTTTGGACCCTGTCCATGTGTAGGTCATTATCACACAAAGAGACCAATAAAAATAAAAAAAAAAAAAAAAAA
A

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FIGURE 696

MLGLDSAGKTTVLYRLKFNEFVNTVPTIGFNTEKIKLSNGTAKGISCHFWDVGGQEKLRPLWKSYSRCTDGIIYV
VDSVDVDRLEEAKTELHKVTKFAENQGTPLLVIANKQDLPKSLPVAEIEKQLALHELIPATTYHVQPACAIIGEG
LTEGMDKLYEMILKRRKSLKQKKKR

FIGURE 697

AGGGGGCGCGGTGGGAGGAGTAGGAGAAGACAAAAGCCGAAAGCGAAGAGGGCCCGGGCTGCACACACCGGCTGG
GAGGCAGCCGTCTGTGCAGCGAGCAGCCGGCGCGGGGAGGCCGCAGTGCACGGGGCGTCACAGTCGGCAGGCAGC
ATGGGGAAGGGAGGGAACCAGGGCGAGGGGGCCGCCGAGCGCGAGGTGTCGGTGCCCACCTTCAGCTGGGAGGAG
ATTCAGAAGCATAACCTGCGCACCGACAGGTGGCTGGTCATTGACCGCAAGGTTTACAACATCACCAAATGGTCC
ATCCAGCACCCGGGGGGCCAGCGGGTCATCGGGCACTACGCTGGAGAAGATGCAACGGATGCCTTCCGCGCCTTC
CACCCTGACCTGGAATTCGTGGGCAAGTTCTTGAAACCCCTGCTGATTGGTGAACTGGCCCCGGAGGAGCCCAGC
CAGGACCACGGCAAGAACTCAAAGATCACTGAGGACTTCCGGGCCCTGAGGAAGACGGCTGAGGACATGAACCTG
TTCAAGACCAACCACGTGTTCTTCCTCCTCCTCCTGGCCCACATCATCGCCCTGGAGAGCATTGCATGGTTCACT
GTCTTTTACTTTGGCAATGGCTGGATTCCTACCCTCATCACGGCCTTTGTCCTTGCTACCTCTCAGGCCCAAGCT
GGATGGCTGCAACATGATTATGGCCACCTGTCTGTCTACAGAAAACCCAAGTGGAACCACCTTGTCCACAAATTC
GTCATTGGCCACTTAAAGGGTGCCTCTGCCAACTGGTGGAATCATCGCCACTTCCAGCACCACGCCAAGCCTAAC
ATCTTCCACAAGGATCCCGATGTGAACATGCTGCACGTGTTTGTTCTGGGCGAATGGCAGCCCATCGAGTACGGC
AAGAAGAAGCTGAAATACCTGCCCTACAATCACCAGCACGAATACTTCTTCCTGATTGGGCCGCCGCTGCTCATC
CCCATGTATTTCCAGTACCAGATCATCATGACCATGATCGTCCATAAGAACTGGGTGGACCTGGCCTGGGCCGTC
AGCTACTACATCCGGTTCTTCATCACCTACATCCCTTTCTACGGCATCCTGGGAGCCCTCCTTTTCCTCAACTTC
ATCAGGTTCCTGGAGAGCCACTGGTTTGTGTGGGTCACACAGATGAATCACATCGTCATGGAGATTGACCAGGAG
GCCTACCGTGACTGGTTCAGTAGCCAGCTGACAGCCACCTGCAACGTGGAGCAGTCCTTCTTCAACGACTGGTTC
AGTGGACACCTTAACTTCCAGATTGAGCACCACCTCTTCCCCACCATGCCCCGGCACAACTTACACAAGATCGCC
CCGCTGGTGAAGTCTCTATGTGCCAAGCATGGCATTGAATACCAGGAGAAGCCGCTACTGAGGGCCCTGCTGGAC
ATCATCAGGTCCCTGAAGAAGTCTGGGAAGCTGTGGCTGGACGCCTACCTTCACAAATGAAGCCACAGCCCCCGG
GACACCGTGGGGAAGGGGTGCAGGTGGGGTGATGGCCAGAGGAATGATGGGCTTTTGTTCTGAGGGGTGTCCGAG
AGGCTGGTGTATGCACTGCTCACGGACCCCATGTTGGATCTTTCTCCCTTTCTCCTCTCCTTTTTCTCTTCACAT
CTCCCCCATAGCACCCTGCCCTCATGGGACCTGCCCTCCCTCAGCCGTCAGCCATCAGCCATGGCCCTCCCAGTG
CCTCCTAGCCCCTTCTTCCAAGGAGCAGAGAGGTGGCCACCGGGGGTGGCTCTGTCCTACCTCCACTCTCTGCCC
CTAAAGATGGGAGGAGACCAGCGGTCCATGGGTCTGGCCTGTGAGTCTCCCCTTGCAGCCTGGTCACTAGGCATC
ACCCCCGCTTTGGTTCTTCAGATGCTCTTGGGGTTCATAGGGGCAGGTCCTAGTCGGGCAGGGCCCCTGACCCTC
CCGGCCTGGCTTCACTCTCCCTGACGGCTGCCATTGGTCCACCCTTTCATAGAGAGGCCTGCTTTGTTACAAAGC
TCGGGTCTCCCTCCTGCAGCTCGGTTAAGTACCCGAGGCCTCTCTTAAGATGTCCAGGGCCCCAGGCCCGCGGGC
ACAGCCAGCCCAAACCTTGGGCCCTGGAAGAGTCCTCCACCCCATCACTAGAGTGCTCTGACCCTGGGCTTTCAC
GGGCCCCATTCCACCGCCTCCCCAACTTGAGCCTGTGACCTTGGGACCAAAGGGGGAGTCCCTCGTCTCTTGTGA
CTCAGCAGAGGCAGTGGCCACGTTCAGGGAGGGGCCGGCTGGCCTGGAGGCTCAGCCCACCCTCCAGCTTTTCCT
CAGGGTGTCCTGAGGTCCAAGATTCTGGAGCAATCTGACCCTTCTCCAAAGGCTCTGTTATCAGCTGGGCAGTGC
CAGCCAATCCCTGGCCATTTGGCCCCAGGGGACGTGGGCCCTGCAGGCTGCAGGAGGGCACTGGAGCTGGGAGGT
CTCGTCCCAGCCCTCCCCATCTCGGGGCTGCTGTGTGGACGGCGCTGCCTCAGGCACTCTCCTGTCTGAACCTGC
CCTTACTGTGTTTAACCTGTTGCTCCAGGATGCATTCTGATAGGAGGGGGCGGCAGGGCTGGGCCTTGTGACAAT
CTGCCTTTCACCACATGGCCTTGCCTCGGTGGCCCTGACTGTCAGGGAGGGCCAGGGAGGCAGAGCGGGAGGGAG
TCTCAGGAGGAGGCTGCCCTGAGGGGCTGGGGAGGGGGTACCTCATGAGGACCAGGGTGGAGCTGAGAAGAGGAG
GAGGTGGGGGCTGGAGGTGCTGGTAGCTGAGGGGACGGGCAAGTGAGAGGGGAGGGAGGGAAGTCCTGGGAGGAT
CCTGAGCTGCTGTTGCAGTCTAACCCACTAATCAGTTCTTAGATTCAGGGGAAGGGCAGGCACCAACAACTCAGA
ATGGGGGCTTTCGGGGAGGGCGCCTAGTCCCCCCAGCTCTAAGCAGCCAGGAGGGACCTGCATCTAAGCATCTGG
GTTGCCATGGCAATGGCATGCCCCCCAGCTACTGTATGCCCCCGACCCCCGCAGAGGCAGAATGAACCCATAGGG
AGCTGATCGTAATGTTTATCATGTTACTTCCCCACCCCTACATTTTTTGAAATAAAATAAGGAATTTTATTCTC

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FIGURE 698

MGKGGNQGEGAAEREVSVPTFSWEEIQKHNLRTDRWLVIDRKVYNITKWSIQHPGGQRVIGHYAGEDATDAFRAF
HPDLEFVGKFLKPLLIGELAPEEPSQDHGKNSKITEDFRALRKTAEDMNLFKTNHVFFLLLLAHIIALESIAWFT
VFYFGNGWIPTLITAFVLATSQAQAGWLQHDYGHLSVYRKPKWNHLVHKFVIGHLKGASANWWNHRHFQHHAKPN
IFHKDPDVNMLHVFVLGEWQPIEYGKKKLKYLPYNHQHEYFFLIGPPLLIPMYFQYQIIMTMIVHKNWVDLAWAV
SYYIRFFITYIPFYGILGALLFLNFIRFLESHWFVWVTQMNHIVMEIDQEAYRDWFSSQLTATCNVEQSFFNDWF
SGHLNFQIEHHLFPTMPRHNLHKIAPLVKSLCAKHGIEYQEKPLLRALLDIIRSLKKSGKLWLDAYLHK

FIGURE 699

TGCGACGTGACTGGCTAGCTGCGTGGGTACTGGAACAAGCAAACGAGGCAGCGAGCGAAGGACGGGAGCCGGACC
CTGGGCCCCGTGGAACTCCAGCCTGCGCCACCACGTCACGCACACGCTCGGCGCTGCGATCCGCGCATATAACGA
TATTTGGATTTGACCTGCATTTTGGAATTTATCTACACTTAAA**ATG**CCACCAGCAGTTGGAGGTCCAGTTGGATA
CACCCCCCCAGATGGAGGCTGGGGCTGGGCAGTGGTAATTGGAGCTTTCATTTCCATCGGCTTCTCTTATGCATT
TCCCAAATCAATTACTGTCTTCTTCAAAGAGATTGAAGGTATATTCCATGCCACCACCAGCGAAGTGTCATGGAT
ATCCTCCATAATGTTGGCTGTCATGTATGGTGGAGGTCCTATCAGCAGTATCCTGGTGAATAAATATGGAAGTCG
TATAGTCATGATTGTTGGTGGCTGCTTGTCAGGCTGTGGCTTGATTGCAGCTTCTTTCTGTAACACCGTACAGCA
ACTATACGTCTGTATTGGAGTCATTGGAGGTCTTGGGCTTGCCTTCAACTTGAATCCAGCTCTGACCATGATTGG
CAAGTATTTCTACAAGAGGCGACCATTGGCCAACGGACTGGCCATGGCAGGCAGCCCTGTGTTCCTCTGTACTCT
GGCCCCCCTCAATCAGGTTTTCTTCGGTATCTTTGGATGGAGAGGAAGCTTTCTAATTCTTGGGGGCTTGCTACT
AAACTGCTGTGTTGCTGGAGCCCTCATGCGACCAATCGGGCCCAAGCCAACCAAGGCAGGGAAAGATAAGTCTAA
AGCATCCCTTGAGAAAGCTGGAAAATCTGGTGTGAAAAAAGATCTGCATGATGCAAATACAGATCTTATTGGAAG
ACACCCTAAACAAGAGAAACGATCAGTCTTCCAAACAATTAATCAGTTCCTGGACTTAACCCTATTCACCCACAG
AGGCTTTTTGCTATACCTCTCTGGAAATGTGATCATGTTTTTTGGACTCTTTGCACCTTTGGTGTTTCTTAGTAG
TTATGGGAAGAGTCAGCATTATTCTAGTGAGAAGTCTGCCTTCCTTCTTTCCATTCTGGCTTTTGTTGACATGGT
AGCCCGACCATCTATGGGACTTGTAGCCAACACAAAGCCAATAAGACCTCGAATTCAGTATTTCTTTGCGGCTTC
CGTTGTTGCAAATGGAGTGTGTCATATGCTAGCACCTTTATCCACTACCTATGTTGGATTCTGTGTCTATGCGGG
ATTCTTTGGATTTGCCTTCGGGTGGCTCAGCTCCGTATTGTTTGAAACATTGATGGACCTTGTTGGACCCCAGAG
GTTCTCCAGCGCTGTGGGATTGGTGACCATTGTGGAATGCTGTCCTGTCCTCCTGGGGCCACCACTTTTAGGTCG
GCTCAATGACATGTATGGAGACTACAAATACACATACTGGGCATGTGGCGTCGTCCTAATTATTTCAGGTATCTA
TCTCTTCATTGGCATGGGCATCAATTATCGACTTTTGGCAAAAGAACAGAAAGCAAACGAGCAGAAAAAGGAAAG
TAAAGAGGAAGAGACCAGTATAGATGTTGCTGGGAAGCCAAATGAAGTTACCAAAGCAGCAGAATCTCCGGACCA
GAAAGACACAGAAGGAGGGCCCAAGGAGGAGGAAAGTCCAGTC**TGA**ATCCATGGGGCTGAAGGGTAAATTGAGCA
GTTCATGACCCAGGATATCTGAAAATATTCTACTGGCCTGTAATCTACCAGTGGTGCTCAATGCAAATAGTAGAC
ATTTGTGTGGAAATCATACCAGTTGTTCATTGATGGGATTTTTGTTTGACTCCTTACCAATAGCCTGAATTTGAG
GAGGGAATGATTGGTAGCAAAGGATGGGGGAAAGAAGTAGGTTCTGTTTTGTTTTGTTTTAATCTTAGCTTTTAA
TAGTGTCATAAAGATTATAATATGTGCCTTAAGTTTTAGTCTTTAGAACTCTAGAGAGCCTTAACTTCTTAAACC
ATTTTTGCTGAATTCATCTATTTCGAGTGTTGTGTTAAAAGGAAAAATAACAACTAACTTGTTTGAGGCAAATCT
AAAATTTAAAATTAATCTTGCTTCATTGTTACATGTAATATATTTCAGACATTTTCACTGGAAGATTTATGAACA
GAAATATTGGTTGAAAGTTAGAGATTTTACAAAATGCTGACAAAAATATTTTCCTAGCATCAGTAGATTTCTGGC
ATATGTTTCTGCTAGCTATATATTTAGGAAATTCAAAGCATAAAACTTTGGCAACATCTTGGCTGTTCTAGACAC
AGTGTACTTGTCAACCCCTCTCAGGTACCTTTTCTTGGGATGCTTATTAGAAGCCAAGTAAAGTGCTTAAGGTTT
GTTTTCATTAAATTAGCTATTTCTGCTCCCCTGTTCAAAGATGCATTTTGAGTGTTTATAGATCACTGCCCTTTT
TGAAATCACCTGGTATTATTTTTCTTACTGGAAAAGTTAGTATTAAAATCTACAGAACTACATATTTGTGCCTCC
TTGGTAAATACAACACATCTAATTAAATGTAGACAGATATTTCAAACATCAGCTGAATTCACTTAAGTTTTTCCA
AAACCTCAGTTAAACTGTGAAGCTATTGGAATTTTTTTTTCCTGGAATTTTTCCCCTTTGATTCACAGTGGTCCC
ATTTATATCTGCTTCTAGCTTAGTGCTATGTGTGAGATATGTGTGTGTTTGGTGTTTTTGTTTTTTTGTTTTTTT
TTTTTTAAGGTTTGCAAATTAAAAAGGGCCAGAAAAATTTGGCACCAGGCAAACGAATAAAGATAGGATTGGGAA
AGAAGTTGCTAAGTGTGCTTAGTTTTAATAAGTAATTCCTTCTCTTTTTTCAGAGAAGGCCTTACAGAAAATTGT
TGTGCTTAGAATTGCTGGATGCATTTTTACCCTCCACACAAACCTAAAAATTTTGTGACCCCTTTCACTTACCTG
AAAAGTAGAGAAATGGATTCAGTATAAGGATAAGGAGGGAAGGTGGACCAGAATGAAAACTGTAAATATTTTTTT
AACCTAATATCACTTAAATCGAGGCAGAAAGATATAGACATTCAATGAATTATATTCAATGCATTTAAAATACCA
CTGTAATTGACAGAGTAAAAGTATAGATACAAAACCTTGTGTAAGAGGCTGACTTTTCCAAATAAACATTTTTTA
AGAAAACATTTCTTCTCCCAAATGTCTATTTTCTTGAGGAAAATATTGCTGTGTCTTCATTTTCATTACCAGGTT
TCATTTTGGGCCTTGCTAAATTGATTGAATTAAATCCTCCAGCTTTTGAACCTTGAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAGAAAAAAAAAAAAAAAAG

FIGURE 700

MPPAVGGPVGYTPPDGGWGWAVVIGAFISIGFSYAFPKSITVFFKEIEGIFHATTSEVSWISSIMLAVMYGGGPI
SSILVNKYGSRIVMIVGGCLSGCGLIAASFCNTVQQLYVCIGVIGGLGLAFNLNPALTMIGKYFYKRRPLANGLA
MAGSPVFLCTLAPLNQVFFGIFGWRGSFLILGGLLLNCCVAGALMRPIGPKPTKAGKDKSKASLEKAGKSGVKKD
LHDANTDLIGRHPKQEKRSVFQTINQFLDLTLFTHRGFLLYLSGNVIMFFGLFAPLVFLSSYGKSQHYSSEKSAF
LLSILAFVDMVARPSMGLVANTKPIRPRIQYFFAASVVANGVCHMLAPLSTTYVGFCVYAGFFGFAFGWLSSVLF
ETLMDLVGPQRFSSAVGLVTIVECCPVLLGPPLLGRLNDMYGDYKYTYWACGVVLIISGIYLFIGMGINYRLLAK
EQKANEQKKESKEEETSIDVAGKPNEVTKAAESPDQKDTEGGPKEEESPV

FIGURE 701

GGCACGAGGGAGCGGTGCGGAGGCTCTGCTCGGATCGAGGTCTGCAGCGCAGCTTCGGGAGC**ATG**AGTGCTGCAG
TGACTGCAGGGAAGCTGGCACGGGCACCGGCCGACCCTGGGAAAGCCGGGGTCCCCGGAGTTGCAGCTCCCGGAG
CTCCGGCGGCGGCTCCACCGGCGAAAGAGATCCCGGAGGTCCTAGTGGACCCACGCAGCCGGCGGCGCTATGTGC
GGGGCCGCTTTTTGGGCAAGGGCGGCTTTGCCAAGTGCTTCGAGATCTCGGACGCGGACACCAAGGAGGTGTTCG
CGGGCAAGATTGTGCCTAAGTCTCTGCTGCTCAAGCCGCACCAGAGGGAGAAGATGTCCATGGAAATATCCATTC
ACCGCAGCCTCGCCCACCAGCACGTCGTAGGATTCCACGGCTTTTTCGAGGACAACGACTTCGTGTTCGTGGTGT
TGGAGCTCTGCCGCCGGAGGTCTCTCCTGGAGCTGCACAAGAGGAGGAAAGCCCTGACTGAGCCTGAGGCCCGAT
ACTACCTACGGCAAATTGTGCTTGGCTGCCAGTACCTGCACCGAAACCGAGTTATTCATCGAGACCTCAAGCTGG
GCAACCTTTTCCTGAATGAAGATCTGGAGGTGAAAATAGGGGATTTTGGACTGGCAACCAAAGTCGAATATGACG
GGGAGAGGAAGAAGACCCTGTGTGGGACTCCTAATTACATAGCTCCCGAGGTGCTGAGCAAGAAAGGGCACAGTT
TCGAGGTGGATGTGTGGTCCATTGGGTGTATCATGTATACCTTGTTAGTGGGCAAACCACCTTTTGAGACTTCTT
GCCTAAAAGAGACCTACCTCCGGATCAAGAAGAATGAATACAGTATTCCCAAGCACATCAACCCCGTGGCCGCCT
CCCTCATCCAGAAGATGCTTCAGACAGATCCCACTGCCCGCCCAACCATTAACGAGCTGCTTAATGACGAGTTCT
TTACTTCTGGCTATATCCCTGCCCGTCTCCCCATCACCTGCCTGACCATTCCACCAAGGTTTTCGATTGCTCCCA
GCAGCCTGGACCCCAGCAACCGGAAGCCCCTCACAGTCCTCAATAAAGGCTTGGAGAACCCCCTGCCTGAGCGTC
CCCGGGAAAAAGAAGAACCAGTGGTTCGAGAGACAGGTGAGGTGGTCGACTGCCACCTCAGTGACATGCTGCAGC
AGCTGCACAGTGTCAATGCCTCCAAGCCCTCGGAGCGTGGGCTGGTCAGGCAAGAGGAGGCTGAGGATCCTGCCT
GCATCCCCATCTTCTGGGTCAGCAAGTGGGTGGACTATTCGGACAAGTACGGCCTTGGGTATCAGCTCTGTGATA
ACAGCGTGGGGGTGCTCTTCAATGACTCAACACGCCTCATCCTCTACAATGATGGTGACAGCCTGCAGTACATAG
AGCGTGACGGCACTGAGTCCTACCTCACCGTGAGTTCCCATCCCAACTCCTTGATGAAGAAGATCACCCTCCTTA
AATATTTCCGCAATTACATGAGCGAGCACTTGCTGAAGGCAGGTGCCAACATCACGCCGCGCGAAGGTGATGAGC
TCGCCCGGCTGCCCTACCTACGGACCTGGTTCCGCACCCGCAGCGCCATCATCCTGCACCTCAGCAACGGCAGCG
TGCAGATCAACTTCTTCCAGGATCACACCAAGCTCATCTTGTGCCCACTGATGGCAGCCGTGACCTACATCGACG
AGAAGCGGGACTTCCGCACATACCGCCTGAGTCTCCTGGAGGAGTACGGCTGCTGCAAGGAGCTGGCCAGCCGGC
TCCGCTACGCCCGCACTATGGTGGACAAGCTGCTGAGCTCACGCTCGGCCAGCAACCGTCTCAAGGCCTCC**TAA**T
AGCTGCCCTCCCCTCCGGACTGGTGCCCTCCTCACTCCCACCTGCATCTGGGGCCCATACTGGTTGGCTCCCGCG
GTGCCATGTCTGCAGTGTGCCCCCCAGCCCCGGTGGCTGGGCAGAGCTGCATCATCCTTGCAGGTGGGGGTTGCT
GTGTAAGTTATTTTTGTACATGTTCGGGTGTGGGTTCTACAGCCTTGTCCCCCTCCCCCTCAACCCCACCATATG
AATTGTACAGAATATTTCTATTGAATTCGGAACTGTCCTTTCCTTGGCTTTATGCACATTAAACAGATGTGAATA
TTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 702

MSAAVTAGKLARAPADPGKAGVPGVAAPGAPAAAPPAKEIPEVLVDPRSRRRYVRGRFLGKGGFAKCFEISDADT
KEVFAGKIVPKSLLLKPHQREKMSMEISIHRSLAHQHVVGFHGFFEDNDFVFVVLELCRRRSLLELHKRRKALTE
PEARYYLRQIVLGCQYLHRNRVIHRDLKLGNLFLNEDLEVKIGDFGLATKVEYDGERKKTLCGTPNYIAPEVLSK
KGHSFEVDVWSIGCIMYTLLVGKPPFETSCLKETYLRIKKNEYSIPKHINPVAASLIQKMLQTDPTARPTINELL
NDEFFTSGYIPARLPITCLTIPPRFSIAPSSLDPSNRKPLTVLNKGLENPLPERPREKEEPVVRETGEVVDCHLS
DMLQQLHSVNASKPSERGLVRQEEAEDPACIPIFWVSKWVDYSDKYGLGYQLCDNSVGVLFNDSTRLILYNDGDS
LQYIERDGTESYLTVSSHPNSLMKKITLLKYFRNYMSEHLLKAGANITPREGDELARLPYLRTWFRTRSAIILHL
SNGSVQINFFQDHTKLILCPLMAAVTYIDEKRDFRTYRLSLLEEYGCCKELASRLRYARTMVDKLLSSRSASNRL
KAS

FIGURE 703

GGCACGAGGGAGAACTAGTCTCGATTTTTTTTTTTTTTTTTTCTTTGTTTTGTTTTTCCTGTATAAAAAAGGAC
CCCAAATATAAAGGTAGGGAAAGGGACAAGAGGGAACATACCCCTTAGTGTAGAGAAATGGGAAGGAGAAGGAGA
AGCCTCAAAAGGAGAGGTGGGAGGGGAATGTCATTAAGGCAGCAAAGTAATCTCTGTAGAAAGATGGAGGAGGAC
CCTCCATAGCCTCAGAGATAAAGGCAAAGATTGCCCTCTCAGTGTCCAGAAGGGAAATGGCAGCTTTTCTTCCTT
CCATGGCAGCCACTCCATTGCTCACTCCGGATTACCTTCATCCTTATGTAGATAAGAGTGCTGCAGAGCTCGAAA
GGCAGAGATTCGCTTGTGTGGGTTAAAAGTCAGCATTTCCAGCAGCAGCTGTGCTCCCGACTCCTCCATCTCAGG
TACCACCGACTGCACTGGGCGGGGCCCTCTGGGGGGAAAGGCTCCACGGGGCAGGGATACATCTCGAGGCCAGTC
ATCCTCTGGAGGCAGCCCAATCAGGTCAAAGATTTTGCCCAACTGGTCGGCTTCAGAGTTTCCACAGAAGAGAGG
CTTTCGACGAAACATCTCTGCAAAGATACAGCCAACACTCCAC**ATG**TCCACAGGTGTTGCATATGTGGACTGCAG
AAGAACTTCGGGAGCTCGGTACCAGAGTGTAACAACCACGGGTGTAAGTGCCATCTGG**TAG**CTGTAGATTCTGGC
CAGGCCAAAGTCAGCCAGCTTGACTGTTCCACCACTTGTCACCAGAATGTTCTCTGGCTTCAGATCTCGGTGAAC
GATGCAATTGGCATGAAGGAAATCTAGGCCTCTTAGAAACTGGCGCATCAGATCCTTGATCGTTTCGGCTGGCAA
GCCTGGTGGGGGTGCCTTGTCCAGATATGTCCTTAGGTCCTGGTCTACATGCTCAAACACCAGGGTTACCTTGAT
CTCCCGGTCAGTTCGGGATGTGGCACAGACGTCCATCAGCCGGACAACATTGGGATGCTCAAAAGCCTCCAGTCG
CCTCAGTAAAGCCACCTCACGAACTGTGCTGATGGGAAGGCCTCCTCCACCTCCTCCTCCATTGGGGACTCTCAC
ACTCTTGAGGGCCACAAAGTGGCCACTGTGGGGATCACGGGCCTTGTACACTGTCCCATAGGCACCGACACCAAT
TTCAGCCACTGGCTCATATCGAGAGGTAGCCATTCTCAGATCAAGGGAGACCCTCACGCCAGCCCGGGGTGCTGT
GGGGGCGGCCCGTTATCGGGGCCCCGGAGCCGGTTCCTACGGCCCCATACACCCGAGCTCGGTCCGGAGCAG

FIGURE 704

MSTGVAYVDCRRTSGARYQSVTTTGVSAIW

FIGURE 705A

GGTGTGGACGTTGTCTAAATTTCGGTAGCCATGGCACAAGAATATAAGAAAGCATGGGATTATGGCAACCACAGA
ATCTCAGTAGTACAAGTTCCATTCAGTTTTTTCTGAAAGAAAGCCCTCTGTTAAAGTGAAGCAAAGAAACTGTTG
TGGATTATAACGTTTAGAAGTTCCAATTTTTCAGTGCTTTACAAATAAAGCATCATTTAACCTTTTAAATGAAAA
AGATTAAGATCTCATGCAACTGTTGTATTTTCTGGAAGCCATTCTCCAAAAGGGAAGTGCACATTTAAAACACAG
ATATGATGGTCCTTGCTGCAGGGATTTAAGTCTACTTGCTTTTACATCATGACCAGCTTGAAACGGTCACAGACA
GAAAGGCCTCTTGCCACTGACAGGGCCTCTGTTGTTGGCACAGACGGCACCCCCAAAGTCCACACTGATGATTTC
TACATGCGGCGCTTCCGGTCCCAAAATGGCAGCTTAGGATCATCAGTTATGGCTCCTGTAGGACCCCCCCGAAGT
GAAGGTTCTCACCATATAACCTCAACCCCCGGAGTCCCAAAAATGGGGGTAAGGGCAAGGATTGCAGATTGGCCC
CCAAGAAAGGAAAACATAAAAGAATCTAGCCGTTCAAGCCAGGAAATAGAAACCTCAAGTTGCCTTGATAGCCTG
TCCTCCAAAAGCAGTCCTGTGAGTCAGGGAAGTTCTGTTAGCCTCAATTCCAATGACTCAGCCATGCTGAAAAGC
ATACAGAACACGCTGAAAAACAAGACAAGACCGTCGGAGAACATGGACTCCAGATTTCTCATGCCTGAAGCCTAC
CCCAGCTCCCCCAGAAAAGCTCTTCGCAGAATACGCCAGCGAAGCAACAGTGATATCACCATAAGTGAACTTGAT
GTGGATAGCTTTGATGAATGTATCTCACCTACATACAAGACTGGACCATCACTGCACAGGGAATATGGTAGCACA
TCTTCAATTGATAAACAGGGAACATCTGGAGAAAGCTTTTTTGATTTGTTAAAGGGCTACAAAGATGACAAATCT
GATCGAGGTCCAACTCCAACCAAGCTCAGTGACTTTCTCATTACTGGTGGTGGCAAGGGTTCTGGTTTCTCTTTG
GATGTAATAGACGGGCCTATCTCACAGAGAGAGAACCTCAGGCTTTTTAAGGAAAGGGAAAAACCACTCAAGCGA
CGTTCAAAATCTGAAACTGGAGACTCCTCTATTTTTCGTAAATTGCGCAATGCCAAAGGTGAAGAACTTGGGAAG
TCATCAGATCTTGAAGATAACCGATCAGAAGACTCTGTCAGGCCCTGGACATGTCCAAAGTGCTTTGCCCACTAT
GATGTCCAGAGTATATTATTTGATTTGAATGAGGCAATTATGAACAGGCACAATGTTATTAAGAGGAGAAACACC
ACCACTGGAGCTTCCGCAGCTGCCGTGGCATCCTTGGTCTCTGGACCTCTGTCTCATTCAGCCAGTTTTAGCTCC
CCAATGGGCAGCACAGAGGACCTGAATTCCAAAGGAAGCCTCAGCATGGACCAGGGAGATGATAAAAGCAATGAG
CTTGTAATGAGCTGTCCATATTTTCGGAATGAGATAGGTGGAGAAGGGGAGAGGAAAATCAGCCTTTCAAAATCA
AATTCTGGCTCCTTTAGTGGATGTGAAAGTGCCTCCTTTGAGTCTACCCTTAGTTCCCATTGCACAAATGCAGGA
GTGGCAGTACTTGAAGTGCCCAAGGAGAACTTGGTGTTGCACCTAGATAGAGTGAAAAGATACATCGTGGAACAC
GTAGATCTGGGTGCATACTATTATAGAAAATTTTTCTACCAGAAGGAACACTGGAACTATTTTGGGGCTGATGAG
AATCTTGGTCCAGTGGCTGTGAGCATTCGAAGGGAAAAACCAGATGAAATGAAAGAAAATGGATCTCCGTACAAC
TACCGAATAATTTTTAGAACTAGTGAGCTCATGACACTGAGAGGTTCGGTCCTGGAGGACGCCATTCCGTCGACA
GCCAAGCACTCGACAGCCAGAGGCCTGCCTCTCAAAGAAGTGCTGGAGCACGTGGTTCCTGAGCTCAATGTCCAG
TGCCTGCGGTTGGCCTTCAACACACCCAAGGTCACAGAGCAGCTCATGAAACTGGATGAACAAGGGCTGAACTAC
CAGCAGAAAGTAGGCATCATGTACTGCAAAGCTGGACAGAGCACTGAAGAAGAGATGTACAACAATGAGTCAGCT
GGCCCAGCCTTTGAAGAATTCCTTCAACTATTGGGAGAGCGAGTTCGGCTCAAAGGATTTGAGAAGTATCGAGCA
CAGCTTGATACCAAAACTGACTCCACTGGAACCCATTCTCTGTACACAACATACAAAGATTATGAAATTATGTTC
CATGTTTCTACCATGCTGCCATACACACCCAACAACAAACAACAGCTCCTGAGGAAGCGGCACATTGGAAATGAT
ATCGTAACAATTGTTTTCCAAGAGCCTGGAGCACAGCCATTCAGCCCAAAAAACATCCGATCCCACTTCCAGCAC
GTTTTCGTCATCGTCAGGGTGCACAATCCGTGCTCTGACAGTGTCTGTTATAGTGTGGCTGTTACCAGGTCCAGA
GATGTGCCTTCCTTTGGGCCTCCCATTCCTAAAGGGGTCACTTTCCCTAAGTCAAATGTGTTCAGGGACTTCCTT
TTGGCGAAAGTGATTAATGCAGAAAATGCTGCTCATAAATCGGAGAAGTTTCGGGCCATGGCAACTCGGACCCGC
CAGGAATACCTGAAAGATCTGGCAGAAAAGAATGTCACCAACACCCCTATCGACCCTTCTGGCAAGTTTCCGTTC
ATCTCTCTGGCTTCCAAGAAGAAGGAAAAGTCTAAGCCATATCCAGGAGCCGAGCTCAGCAGCATGGGGGCCATT
GTATGGGCAGTCCGGGCTGAAGACTACAACAAGGCCATGGAACTAGACTGCCTTTTAGGGATCTCCAATGAGTTC
ATTGTGCTCATTGAACAGGAAACAAAGAGCGTGGTCTTCAATTGTTCCTGTAGAGATGTGATAGGGTGGACTTCA
ACTGACACCAGCCTCAAAATCTTCTATGAACGAGGAGAATGTGTTTCAGTGGGTAGTTTTATTAACATTGAGGAG
ATCAAAGAGATTGTCAAAAGGTTGCAGTTTGTTTCAAAAGGCTGTGAATCGGTGGAGATGACTCTGCGAAGAAAT
GGGCTAGGACAGCTTGGCTTCCATGTCAACTATGAGGGCATTGTGGCGGATGTGGAGCCCTACGGTTATGCCTGG
CAGGCAGGGCTGAGGCAGGGCAGTCGCCTGGTGGAGATCTGCAAGGTGGCGGTAGCCACTCTGAGCCATGAGCAG
ATGATCGACCTCCTGAGAACATCTGTCACGGTGAAGGTTGTCATCATTCCCCCGCATGATGACTGCACCCCGCGG
AGGAGTTGCTCTGAAACCTACCGCATGCCAGTGATGGAGTACAAAATGAATGAAGGTGTTTCATACGAATTCAAG
TTTCCCTTCCGAAATAATAACAAGTGGCAGAGGAACGCCAGCAAGGGGCCTCATTCACCTCAAGTCCCGTCCCAG

FIGURE 705B

GTGCAGAGTCCCATGACCTCGCGGCTGAATGCTGGAAAAGGAGATGGGAAGATGCCTCCTCCAGAAAGAGCCGCC
AACATCCCTCGAAGCATCTCCAGTGACGGGCGCCCACTAGAGAGGCGGCTGTCTCCTGGTTCGGACATCTATGTG
ACGGTCTCATCCATGGCTTTAGCAAGATCCCAGTGTCGGAACTCTCCTAGCAACTTGTCTTCATCCAGTGATACT
GGTTCTGTGGGGGGCACTTACAGGCAGAAGTCCATGCCCGAAGGGTTTGGAGTGAGCCGTAGATCCCCAGCCTCC
ATTGACAGGCAGAACACCCAGTCAGATATTGGTGGCAGCGGAAAATCCACGCCTAGCTGGCAAAGAAGTGAGGAT
AGCATTGCTGACCAGATGGCTTACAGTTATAGAGGACCTCAGGATTTCAATTCTTTTGTCCTCGAGCAGCATGAA
TATACAGAGCCAACATGCCATCTCCCAGCAGTATCAAAGGTACTGCCAGCTTTCCGAGAGAGCCCCAGTGGGAGA
TTAATGCGGCAGGATCCAGTGGTTCATTTGTCTCCAAACAAACAAGGGCATTCTGATAGCCACTACTCGAGCCAC
TCCAGTAGCAATACTCTCTCCAGCAATGCGTCAAGTGCCCATAGTGATGAGAAGTGGTACGATGGGGACCGCACA
GAATCCGAACTCAACAGCTATAACTATCTGCAAGGCACCTCTGCTGACAGTGGCATTGACACCACCTCTTATGGC
CCCAGCCACGGCAGCACAGCCTCGCTGGGGGCTGCCACATCGTCACCTCGCTCAGGGCCAGGCAAGGAGAAAGTG
GCACCCCTATGGCACAGCTCCAGTGAAGTAATCTCCATGGCAGATCGGACTTTGGAGACAGAGAGCCACGGCCTG
GACCGGAAAACAGAGTCTTCCCTGAGCTTAGACATACACAGCAAGAGCCAAGCCGGCTCGACCCCTCTGACAAGG
GAGAACAGCACCTTCAGTATAAACGATGCTGCTTCCCACACAAGTACCATGAGCTCCCGACACTCTGCCAGCCCA
GTGGTTTTCACCAGTGCCCGGAGTTCACCTAAAGAAGAGCTTCATCCAGCTGCCCCCTCACAGCTCGCACCATCC
TTCTCCTCCTCTTCCTCCTCCTCCTCTGGTCCTAGGAGTTTTTACCCTCGCCAGGGCGCTACTAGCAAGTACCTG
ATTGGATGGAAAAAACCCGAAGGAACCATAAACTCCGTGGGATTTATGGACACGAGAAAGCGTCATCAGAGCGAT
GGCAATGAAATAGCCCACACCAGGCTGCGTGCCTCAACCAGAGACCTCCGGGCATCTCCTAAGCCAACCTCCAAG
TCCACCATTGAAGAAGATCTAAAGAAACTAATTGATCTTGAAAGCCCAACTCCTGAATCACAGAAGAGTTTTAAG
TTCCACGCACTCTCCTCTCCTCAGTCTCCTTTCCCCAGCACCCCCACCTCACGGCGGGCCTTGCACAGAACACTG
TCGGACGAGAGCATTTACAATAGCCAGAGGGAGCACTTTTTCACCTCCAGGGCGTCACTTCTGGACCAAGCCCTG
CCCAACGACGTCCTCTTCAGTAGCACGTACCCTTCTCTCCCCAAGTCGCTCCCGTTGAGGAGGCCTTCTTACACC
TTAGGAATGAAATCGCTGCATGGAGAGTTCTCAGCCTCGGACAGCTCCCTCACTGACATCCAGGAGACCCGCAGG
CAGCCTATGCCCGACCCTGGCCTGATGCCCCTGCCTGACACTGCTGCAGACTTGGATTGGTCCAACCTGGTAGAT
GCTGCCAAAGCCTATGAGGTCCAGAGAGCCTCATTTTTTGCTGCTAGTGATGAAAACCATCGCCCCTTGAGTGCT
GCATCCAACAGTGATCAGCTGGAGGACCAGGCTCTGGCCCAGATGAAGCCTTACAGCAGCAGTAAAGACTCCTCT
CCCACTCTGGCTTCTAAAGTGGACCAGCTGGAAGGTATGCTGAAGATGCTTCGGGAAGATTTGAAGAAGGAAAAA
GAAGACAAAGCTCACCTTCAGGCGGAGGTGCAGCACCTGCGAGAGGACAACCTGAGGCTACAGGAGGAGTCCCAG
AACGCCTCGGACAAGCTGAAGAAGTTCACAGAATGGGTCTTCAACACCATAGACATGAGC**TAG**GGAAGGCTGAGG
AGGACAGGAGAAGGGCCCAGACACTCCCTCCAGTGAGTGTCCTGCAGCCCTTATTCCCTCCATAGAAAGCATCCT
CAGAGCACCTTCCCTGGCTTCCTACTCTGCCCCCTTTCGGGGAGTGCACAACACAATAGTTGCAGATCAACAATC
ATCACCTGCCTTTTGTAGAAAAGAAAAACAAAAAAAGTAAATAAAAATTTTAAACAGTAAAATAAAAGTTTAACT
GCTAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 706

MTSLKRSQTERPLATDRASVVGTDGTPKVHTDDFYMRRFRSQNGSLGSSVMAPVGPPRSEGSHHITSTPGVPKMG
VRARIADWPPRKENIKESSRSSQEIETSSCLDSLSSKSSPVSQGSSVSLNSNDSAMLKSIQNTLKNKTRPSENMD
SRFLMPEAYPSSPRKALRRIRQRSNSDITISELDVDSFDECISPTYKTGPSLHREYGSTSSIDKQGTSGESFFDL
LKGYKDDKSDRGPTPTKLSDFLITGGGKGSGFSLDVIDGPISQRENLRLFKEREKPLKRRSKSETGDSSIFRKLR
NAKGEELGKSSDLEDNRSEDSVRPWTCPKCFAHYDVQSILFDLNEAIMNRHNVIKRRNTTTGASAAAVASLVSGP
LSHSASFSSPMGSTEDLNSKGSLSMDQGDDKSNELVMSCPYFRNEIGGEGERKISLSKSNSGSFSGCESASFEST
LSSHCTNAGVAVLEVPKENLVLHLDRVKRYIVEHVDLGAYYYRKFFYQKEHWNYFGADENLGPVAVSIRREKPDE
MKENGSPYNYRIIFRTSELMTLRGSVLEDAIPSTAKHSTARGLPLKEVLEHVVPELNVQCLRLAFNTPKVTEQLM
KLDEQGLNYQQKVGIMYCKAGQSTEEEMYNNESAGPAFEEFLQLLGERVRLKGFEKYRAQLDTKTDSTGTHSLYT
TYKDYEIMFHVSTMLPYTPNNKQQLLRKRHIGNDIVTIVFQEPGAQPFSPKNIRSHFQHVFVIVRVHNPCSDSVC
YSVAVTRSRDVPSFGPPIPKGVTFPKSNVFRDFLLAKVINAENAAHKSEKFRAMATRTRQEYLKDLAEKNVTNTP
IDPSGKFPFISLASKKKEKSKPYPGAELSSMGAIVWAVRAEDYNKAMELDCLLGISNEFIVLIEQETKSVVFNCS
CRDVIGWTSTDTSLKIFYERGECVSVGSFINIEEIKEIVKRLQFVSKGCESVEMTLRRNGLGQLGFHVNYEGIVA
DVEPYGYAWQAGLRQGSRLVEICKVAVATLSHEQMIDLLRTSVTVKVVIIPPHDDCTPRRSCSETYRMPVMEYKM
NEGVSYEFKFPFRNNNKWQRNASKGPHSPQVPSQVQSPMTSRLNAGKGDGKMPPPERAANIPRSISSDGRPLERR
LSPGSDIYVTVSSMALARSQCRNSPSNLSSSSDTGSVGGTYRQKSMPEGFGVSRRSPASIDRQNTQSDIGGSGKS
TPSWQRSEDSIADQMAYSYRGPQDFNSFVLEQHEYTEPTCHLPAVSKVLPAFRESPSGRLMRQDPVVHLSPNKQG
HSDSHYSSHSSSNTLSSNASSAHSDEKWYDGDRTESELNSYNYLQGTSADSGIDTTSYGPSHGSTASLGAATSSP
RSGPGKEKVAPLWHSSSEVISMADRTLETESHGLDRKTESSLSLDIHSKSQAGSTPLTRENSTFSINDAASHTST
MSSRHSASPVVFTSARSSPKEELHPAAPSQLAPSFSSSSSSSSGPRSFYPRQGATSKYLIGWKKPEGTINSVGFM
DTRKRHQSDGNEIAHTRLRASTRDLRASPKPTSKSTIEEDLKKLIDLESPTPESQKSFKFHALSSPQSPFPSTPT
SRRALHRTLSDESIYNSQREHFFTSRASLLDQALPNDVLFSSTYPSLPKSLPLRRPSYTLGMKSLHGEFSASDSS
LTDIQETRRQPMPDPGLMPLPDTAADLDWSNLVDAAKAYEVQRASFFAASDENHRPLSAASNSDQLEDQALAQMK
PYSSSKDSSPTLASKVDQLEGMLKMLREDLKKEKEDKAHLQAEVQHLREDNLRLQEESQNASDKLKKFTEWVFNT
IDMS

FIGURE 707

AGTCCTCTTCCGGGTGATGGCGGCGGGTGCCCCGGATGTAGCCCTGGCGCAAGCATCTCTTCTTTTTTCCACCTC
GCCTTCCGCGGATTCCCAGCTTGAGAAACACCTCTTTGCCCCGTCATGCCAAAGAGGAAAGTGACCTTCCAAGGC
GTGGGAGATGAGGAGGATGAGGATGAAATCATTGTCCCCAAGAAGAAGCTGGTGGACCCTGTGGCTGGGTCAGGG
GGTCCTGGGAGCCGCTTTAAAGGCAAACACTCTTTGGATAGCGATGAGGAGGAGGATGATGATGATGGGGGGTCC
AGCAAATATGACATCTTGGCCTCAGAGGATGTAGAAGGTCAGGAGGCAGCCACACTCCCCAGCGAGGGGGGTGTT
CGGATCACACCCTTTAACCTGCAGGAGGAGATGGAGGAAGGCCACTTTGATGCCGATGGCAACTACTTCCTGAAC
CGGGATGCTCAGATCCGAGACAGCTGGCTGGACAACATTGACTGGGTGAAGATCCGGGAGCGGCCACCTGGCCAG
CGCCAGGCCTCAGACTCGGAGGAGGAGGACAGCTTGGGCCAGACCTCAATGAGTGCCCAAGCCCTCTTGGAGGGA
CTTTTGGAGCTCCTATTGCCTAGAGAGACAGTGGCTGGGGCACTGAGGCGTCTGGGGGCCCGAGGAGGAGGCAAA
GGGAGAAAGGGGCCTGGGCAACCCAGTTCCCCTCAGCGCCTGGACCGGCTCTCCGGGTTGGCCGACCAGATGGTG
GCCCGGGGCAACCTTGGTGTGTACCAGGAAACAAGGGAACGGTTGGCTATGCGTCTGAAGGGTTTGGGGTGTCAG
ACCCTAGGACCCCACAATCCCACACCCCCACCCTCCCTGGACATGTTCGCTGAGGAGTTGGCGGAGGAGGAACTG
GAGACCCCAACCCCTACCCAGAGAGGAGAAGCAGAGTCGCGGGGAGATGGTCTGGTGGATGTGATGTGGGAATAT
AAGTGGGAGAACACGGGGGATGCCGAGCTGTATGGGCCCTTCACCAGCGCCCAGATGCAGACCTGGGTGAGTGAA
GGCTACTTCCCGGACGGTGTTTATTGCCGGAAGCTGGACCCCCCTGGTGGTCAGTTCTACAACTCCAAACGCATT
GACTTTGACCTCTACACCTGAGCCTGCTGGGGGCCCAGTTTGGTGGGCCCTTCTTTCCTGGACTTTGTGGAGGAG
GCACCAAGTGTCTCAGGCAGCGAGGAAATTGGAGGCCATTTTTCAGTCAATTTCCCTTTCCCAATAAAAGCCTTT
AGTTGTGTAAAAAAAAAAAAAAA

FIGURE 708

MPKRKVTFQGVGDEEDEDEIIVPKKKLVDPVAGSGGPGSRFKGKHSLDSDEEEDDDDGGSSKYDILASEDVEGQE
AATLPSEGGVRITPFNLQEEMEEGHFDADGNYFLNRDAQIRDSWLDNIDWVKIRERPPGQRQASDSEEEDSLGQT
SMSAQALLEGLLELLLPRETVAGALRRLGARGGGKGRKGPGQPSSPQRLDRLSGLADQMVARGNLGVYQETRERL
AMRLKGLGCQTLGPHNPTPPPSLDMFAEELAEEELETPTPTQRGEAESRGDGLVDVMWEYKWENTGDAELYGPFT
SAQMQTWVSEGYFPDGVYCRKLDPPGGQFYNSKRIDFDLYT

FIGURE 709

ACAGAAGTGCTAGAAGCCAGTGCTCGTGAACTAAGGAGAAAAAGAACAGACAAGGGAACAGCCTGGACATGGCAT
CAGAGATCCACATGACAGGCCCAATGTGCCTCATTGAGAACACTAATGGGCGACTGATGGCGAATCCAGAAGCTC
TGAAGATCCTTTCTGCCATTACACAGCCTATGGTGGTGGTGGCAATTGTGGGCCTCTACCGCACAGGCAAATCCT
ACCTGATGAACAAGCTGGCTGGAAAGAAAAAGGGCTTCTCTCTGGGCTCCACGGTGCAGTCTCACACTAAAGGAA
TCTGGATGTGGTGTGTGCCCCACCCCAAGAAGCCAGGCCACATCCTAGTTCTGCTGGACACCGAGGGTCTGGGAG
ATGTAGAGAAGGGTGACAACCAGAATGACTCCTGGATCTTCGCCCTGGCCGTCCTCCTGAGCAGCACCTTCGTGT
ACAATAGCATAGGAACCATCAACCAGCAGGCTATGGACCAACTGTACTATGTGACAGAGCTGACACATAGAATCC
GATCAAAATCCTCACCTGATGAGAATGAGAATGAGGTTGAGGATTCAGCTGACTTTGTGAGCTTCTTCCCAGACT
TTGTGTGGACACTGAGAGATTTCTCCCTGGACTTGGAAGCAGATGGACAACCCCTCACACCAGATGAGTACCTGA
CATACTCCCTGAAGCTGAAGAAAGGTACCAGTCAAAAAGATGAAACTTTTAACCTGCCCAGACTCTGTATCCGGA
AATTCTTCCCAAAGAAAAAATGCTTTGTCTTTGATCGGCCCGTTCACCGCAGGAAGCTTGCCCAGCTCGAGAAAC
TACAAGATGAAGAGCTGGACCCCGAATTTGTGCAACAAGTAGCAGACTTCTGTTCCTACATCTTTAGTAATTCCA
AAACTAAAACTCTTTCAGGAGGCATCCAGGTCAACGGGCCTCGTCTAGAGAGCCTGGTGCTGACCTACGTCAATG
CCATCAGCAGTGGGGATCTGCCGTGCATGGAGAACGCAGTCCTGGCCTTGGCCCAGATAGAGAACTCAGCTGCAG
TGCAAAAGGCTATTGCCCACTATGAACAGCAGATGGGCCAGAAGGTGCAGCTGCCCACAGAAAGCCTCCAGGAGC
TGCTGGACCTGCACAGGGACAGTGAGAGAGAGGCCATTGAAGTCTTCATCAGGAGTTCCTTCAAAGATGTGGACC
ATCTATTTCAAAAGGAGTTAGCGGCCCAGCTAGAAAAAAAGCGGGATGACTTTTGTAAACAGAATCAGGAAGCAT
CATCAGATCGTTGCTCAGGTTTACTTCAGGTCATTTTCAGTCCTCTAGAAGAAGAAGTGAAGGCGGGAATTTATT
CGAAACCAGGGGGCTATCGTCTCTTTGTTCAGAAGCTACAAGACCTGAAGAAAAAGTACTATGAGGAACCGAGGA
AGGGGATACAGGCTGAAGAGATTCTGCAGACATACTTGAAATCCAAGGAGTCTATGACTGATGCAATTCTCCAGA
CAGACCAGACTCTCACAGAAAAAGAAAAGGAGATTGAAGTGGAACGTGTGAAAGCTGAGTCTGCACAGGCTTCAG
CAAAAATGTTGCAGGAAATGCAAAGAAAGAATGAGCAGATGATGGAACAGAAGGAGAGGAGTTATCAGGAACACT
TGAAACAACTGACTGAGAAGATGGAGAACGACAGGGTCCAGTTGCTGAAAGAGCAAGAGAGGACCCTCGCTCTTA
AACTTCAGGAACAGGAGCAACTACTAAAAGAGGGATTTCAAAAAGAAAGCAGAATAATGAAAAATGAGATACAGG
ATCTCCAGACGAAAATGAGACGACGAAAGGCATGTACCATAAGCTAAAGACCAGAGCCTTCCTGTCACCCCTAAC
CAAGGCATAATTGAAACAATTTTAGAATTTGGAACAAGCGTCACTACATTTGATAATAATTAGATCTTGCATCAT
AACACCAAAAGTTTATAAAGGCATGTGGTACAATGATCAAAATCATGTTTTTTCTTAAAAAAAAAAAAAAGACTG
TAAATTGTGCAACAAAGATGCATTTACCTCTGTATCAACTCAGGAAATCTCATAAGCTGGTACCACTCAGGAGAA
GTTTATTCTTCCAGATGACCAGCAGTAGACAAATGGATACTGAGCAGAGTCTTAGGTAAAAGTCTTGGGAAATAT
TTGGGCATTGGTCTGGCCAAGTCTACAATGTCCCAATATCAAGGACAACCACCCTAGCTTCTTAGTGAAGACAAT
GTACAGTTATCCATTAGATCAAGACTACACGGTCTATGAGCAATAATGTGATTTCTGGACATTGCCCATGTATAA
TCCTCACTGATGATTTCAAGCTAAAGCAAACCACCTTATACAGAGATCTAGAATCTCTTTATGTTCTCCAGAGGA
AGGTGGAAGAAACCATGGGCAGGAGTAGGAATTGAGTGATAAACAATTGGGCTAATGAAGAAAACTTCTCTTATT
GTTCAGTTCATCCAGATTATAACTTCAATGGGACACTTTAGACCATTAGACAATTGACACTGGATTAAACAAATT
CACATAATGCCAAATACACAATGTATTTATAGCAACGTATAATTTGCAAAGATGGACTTTAAAAGATGCTGTGTA
ACTAAACTGAAATAATTCAATTACTTATTATTTAGAATGTTAAAGCTTATGATAGTCTTTTCTAATTCTTAACAC
TCATACTTGAAATCTTTCCGAGTTTCCCCAGAAGAGAATATGGGATTTTTTTTGACATTTTTGACCCATTTAATA
ATGCTCTTGTGTTTACCTAGTATATGTAGACTTTGTCTTATGTGTCAAAAGTCCTAGGAAAGTGGTTGATGTTTC
TTATAGCAATTAAAAATTATTTTTGAACTGA

FIGURE 710

MASEIHMTGPMCLIENTNGRLMANPEALKILSAITQPMVVVAIVGLYRTGKSYLMNKLAGKKKGFSLGSTVQSHT
KGIWMWCVPHPKKPGHILVLLDTEGLGDVEKGDNQNDSWIFALAVLLSSTFVYNSIGTINQQAMDQLYYVTELTH
RIRSKSSPDENENEVEDSADFVSFFPDFVWTLRDFSLDLEADGQPLTPDEYLTYSLKLKKGTSQKDETFNLPRLC
IRKFFPKKKCFVFDRPVHRRKLAQLEKLQDEELDPEFVQQVADFCSYIFSNSKTKTLSGGIQVNGPRLESLVLTY
VNAISSGDLPCMENAVLALAQIENSAAVQKAIAHYEQQMGQKVQLPTESLQELLDLHRDSEREAIEVFIRSSFKD
VDHLFQKELAAQLEKKRDDFCKQNQEASSDRCSGLLQVIFSPLEEEVKAGIYSKPGGYRLFVQKLQDLKKKYYEE
PRKGIQAEEILQTYLKSKESMTDAILQTDQTLTEKEKEIEVERVKAESAQASAKMLQEMQRKNEQMMEQKERSYQ
EHLKQLTEKMENDRVQLLKEQERTLALKLQEQEQLLKEGFQKESRIMKNEIQDLQTKMRRRKACTIS

FIGURE 711

ACAGAAGTGCTAGAAGCCAGTGCTCGTGAACTAAGGAGAAAAAGAACAGACAAGGGAACAGCCTGGACATGGCAT
CAGAGATCCACATGACAGGCCCAATGTGCCTCATTGAGAACACTAATGGGCGACTGATGGCGAATCCAGAAGCTC
TGAAGATCCTTTCTGCCATTACACAGCCTATGGTGGTGGTGGCAATTGTGGGCCTCTACCGCACAGGCAAATCCT
ACCTGATGAACAAGCTGGCTGGAAAGAAAAAGGGCTTCTCTCTGGGCTCCACGGTGCAGTCTCACACTAAAGGAA
TCTGGATGTGGTGTGTGCCCCACCCCAAGAAGCCAGGCCACATCCTAGTTCTGCTGGACACCGAGGGTCTGGGAG
ATGTAGAGAAGGGTGACAACCAGAATGACTCCTGGATCTTCGCCCTGGCCGTCCTCCTGAGCAGCACCTTCGTGT
ACAATAGCATAGGAACCATCAACCAGCAGGCTATGGACCAACTGTACTATGTGACAGAGCTGACACATAGAATCC
GATCAAAATCCTCACCTGATGAGAATGAGAATGAGGTTGAGGATTCAGCTGACTTTGTGAGCTTCTTCCCAGACT
TTGTGTGGACACTGAGAGATTTCTCCCTGGACTTGGAAGCAGATGGACAACCCCTCACACCAGATGAGTACCTGA
CATACTCCCTGAAGCTGAAGAAAGGTACCAGTCAAAAAGATGAAACTTTTAACCTGCCCAGACTCTGTATCCGGA
AATTCTTCCCAAAGAAAAAATGCTTTGTCTTTGATCGGCCCGTTCACCGCAGGAAGCTTGCCCAGCTCGAGAAAC
TACAAGATGAAGAGCTGGACCCCGAATTTGTGCAACAAGTAGCAGACTTCTGTTCCTACATCTTTAGTAATTCCA
AAACTAAAACTCTTTCAGGAGGCATCCAGGTCAACGGGCCTCGTCTAGAGAGCCTGGTGCTGACCTACGTCAATG
CCATCAGCAGTGGGGATCTGCCGTGCATGGAGAACGCAGTCCTGGCCTTGGCCCAGATAGAGAACTCAGCTGCAG
TGCAAAAGGCTATTGCCCACTATGAACAGCAGATGGGCCAGAAGGTGCAGCTGCCCACAGAAAGCCTCCAGGAGC
TGCTGGACCTGCACAGGGACAGTGAGAGAGAGGCCATTGAAGTCTTCATCAGGAGTTCCTTCAAAGATGTGGACC
ATCTATTTCAAAAGGAGTTAGCGGCCCAGCTAGAAAAAAAGCGGGATGACTTTTGTAAACAGAATCAGGAAGCAT
CATCAGATCGTTGCTCAGGTTTACTTCAGGTCATTTTCAGTCCTCTAGAAGAAGAAGTGAAGGCGGGAATTTATT
CGAAACCAGGGGGCTATCGTCTCTTTGTTCAGAAGCTACAAGACCTGAAGAAAAAGTACTATGAGGAACCGAGGA
AGGGGATACAGGCTGAAGAGATTCTGCAGACATACTTGAAATCCAAGGAGTCTATGACTGATGCAATTCTCCAGA
CAGACCAGACTCTCACAGAAAAAGAAAAGGAGATTGAAGTGGAACGTGTGAAAGCTGAGTCTGCACAGGCTTCAG
CAAAAATGTTGCAGGAAATGCAAAGAAAGAATGAGCAGATGATGGAACAGAAGGAGAGGAGTTATCAGGAACACT
TGAAACAACTGACTGAGAAGATGGAGAACGACAGGGTCCAGTTGCTGAAAGAGCAAGAGAGGACCCTCGCTCTTA
AACTTCAGGAACAGGAGCAACTACTAAAAGAGGGATTTCAAAAAGAAAGCAGAATAATGAAAAATGAGATACAGG
ATCTCCAGACGAAAATGAGACGACGAAAGGCATGTACCATAAGCTAAAGACCAGAGCCTTCCTGTCACCCCTAAC
CAAGGCATAATTGAAACAATTTTAGAATTTGGAACAAGCGTCACTACATTTGATAATAATTAGATCTTGCATCAT
AACACCAAAAGTTTATAAAGGCATGTGGTACAATGATCAAAATCATGTTTTTTCTTAAAAAAAAAAAAAAAGACTG
TAAATTGTGCAACAAAGATGCATTTACCTCTGTATCAACTCAGGAAATCTCATAAGCTGGTACCACTCAGGAGAA
GTTTATTCTTCCAGATGACCAGCAGTAGACAAATGGATACTGAGCAGAGTCTTAGGTAAAAGTCTTGGGAAATAT
TTGGGCATTGGTCTGGCCAAGTCTACAATGTCCCAATATCAAGGACAACCACCCTAGCTTCTTAGTGAAGACAAT
GTACAGTTATCCATTAGATCAAGACTACACGGTCTATGAGCAATAATGTGATTTCTGGACATTGCCCATGTATAA
TCCTCACTGATGATTTCAAGCTAAAGCAAACCACCTTATACAGAGATCTAGAATCTCTTTATGTTCTCCAGAGGA
AGGTGGAAGAAACCATGGGCAGGAGTAGGAATTGAGTGATAAACAATTGGGCTAATGAAGAAAACTTCTCTTATT
GTTCAGTTCATCCAGATTATAACTTCAATGGGACACTTTAGACCATTAGACAATTGACACTGGATTAAACAAATT
CACATAATGCCAAATACACAATGTATTTATAGCAACGTATAATTTGCAAAGATGGACTTTAAAAGATGCTGTGTA
ACTAAACTGAAATAATTCAATTACTTATTATTTAGAATGTTAAAGCTTATGATAGTCTTTTCTAATTCTTAACAC
TCATACTTGAAATCTTTCCGAGTTTCCCCAGAAGAGAATATGGGATTTTTTTTGACATTTTTGACCCATTTAATA
ATGCTCTTGTGTTTACCTAGTATATGTAGACTTTGTCTTATGTGTCAAAAGTCCTAGGAAAGTGGTTGATGTTTC
TTATAGCAATTAAAAATTATTTTTGAACTGA

FIGURE 712

MASEIHMTGPMCLIENTNGRLMANPEALKILSAITQPMVVVAIVGLYRTGKSYLMNKLAGKKKGFSLGSTVQSHT
KGIWMWCVPHPKKPGHILVLLDTEGLGDVEKGDNQNDSWIFALAVLLSSTFVYNSIGTINQQAMDQLYYVTELTH
RIRSKSSPDENENEVEDSADFVSFFPDFVWTLRDFSLDLEADGQPLTPDEYLTYSLKLKKGTSQKDETFNLPRLC
IRKFFPKKKCFVFDRPVHRRKLAQLEKLQDEELDPEFVQQVADFCSYIFSNSKTKTLSGGIQVNGPRLESLVLTY
VNAISSGDLPCMENAVLALAQIENSAAVQKAIAHYEQQMGQKVQLPTESLQELLDLHRDSEREAIEVFIRSSFKD
VDHLFQKELAAQLEKKRDDFCKQNQEASSDRCSGLLQVIFSPLEEEVKAGIYSKPGGYRLFVQKLQDLKKKYYEE
PRKGIQAEEILQTYLKSKESMTDAILQTDQTLTEKEKEIEVERVKAESAQASAKMLQEMQRKNEQMMEQKERSYQ
EHLKQLTEKMENDRVQLLKEQERTLALKLQEQEQLLKEGFQKESRIMKNEIQDLQTKMRRRKACTIS

FIGURE 713

ATTCTTTCCCCAAGTCTCTATGGTAGCGTCAGCGTCGGAGGCGGTAGTGACGGTGGCGTTTCCTTGAGGAAGAGT
GAGGGTTCCAACTTTTCTGCTTATCTGGGAGGTGTTGGGCGCGGACAGTCGAGATGTCAGAGAAAAAGCAGCCGG
TAGACTTAGGTCTGTTAGAGGAAGACGACGAGTTTGAAGAGTTCCCTGCCGAAGACTGGGCTGGCTTAGATGAAG
ATGAAGATGCACATGTCTGGGAGGATAATTGGGATGATGACAATGTAGAGGATGACTTCTCTAATCAGTTACGAG
CTGAACTAGAGAAACATGGTTATAAGATGGAGACTTCATAGCATCCAGAAGAAGTGTTGAAGTAACCTAAACTTG
ACCTGCTTAATACATTCTAGGGCAGAGAACCCAGGATGGGACACTAAAAAAATGTGTTTATTTCATTATCTGCTT
GGATTTATTTGTGTTTTTGTAACACAAAAAATAAATGTTTTGATATAAAAAAAAAAAA

FIGURE 714

MSEKKQPVDLGLLEEDDEFEEFPAEDWAGLDEDEDAHVWEDNWDDDNVEDDFSNQLRAELEKHGYKMETS

FIGURE 715

AGCTGAGGTGTGAGCAGCTGCCGAAGTCAGTTCCTTGTGGAGCCGGAGCTGGGCGCGGATTCGCCGAGGCACCGA
GGCACTCAGAGGAGGTGAGAGAGCGGCGGCAGACAACAGGGGACCCCGGGCCGGCGGCCCAGAGCCGAGCCAAGC
GTGCCCGCGTGTGTCCCTGCGTGTCCGCGAGGATGCGTGTTCGCGGGTGTGTGCTGCGTTCACAGGTGTTTCTGC
GGCAGGCGCC**ATG**TCAGAACCGGCTGGGGATGTCCGTCAGAACCCATGCGGCAGCAAGGCCTGCCGCCGCCTCTT
CGGCCCAGTGGACAGCGAGCAGCTGAGCCGCGACTGTGATGCGCTAATGGCGGGCTGCATCCAGGAGGCCCGTGA
GCGATGGAACTTCGACTTTGTCACCGAGACACCACTGGAGGGTGACTTCGCCTGGGAGCGTGTGCGGGGCCTTGG
CCTGCCCAAGCTCTACCTTCCCACGGGGCCCCGGCGAGGCCGGGATGAGTTGGGAGGAGGCAGGCGGCCTGGCAC
CTCACCTGCTCTGCTGCAGGGGACAGCAGAGGAAGACCATGTGGACCTGTCACTGTCTTGTACCCTTGTGCCTCG
CTCAGGGGAGCAGGCTGAAGGGTCCCCAGGTGGACCTGGAGACTCTCAGGGTCGAAAACGGCGGCAGACCAGCAT
GACAGATTTCTACCACTCCAAACGCCGGCTGATCTTCTCCAAGAGGAAGCCC**TAA**TCCGCCCACAGGAAGCCTGC
AGTCCTGGAAGCGCGAGGGCCTCAAAGGCCCGCTCTACATCTTCTGCCTTAGTCTCAGTTTGTGTGTCTTAATTA
TTATTTGTGTTTTAATTTAAACACCTCCTCATGTACATACCCTGGCCGCCCCCTGCCCCCCAGCCTCTGGCATTA
GAATTATTTAAACAAAAACTAGGCGGTTGAATGAGAGGTTCCTAAGAGTGCTGGGCATTTTTATTTTATGAAATA
CTATTTAAAGCCTCCTCATCCCGTGTTCTCCTTTTCCTCTCTCCCGGAGGTTGGGTGGGCCGGCTTCATGCCAGC
TACTTCCTCCTCCCCACTTGTCCGCTGGGTGGTACCCTCTGGAGGGGTGTGGCTCCTTCCCATCGCTGTCACAGG
CGGTTATGAAATTCACCCCCTTTCCTGGACACTCAGACCTGAATTCTTTTTCATTTGAGAAGTAAACAGATGGCA
CTTTGAAGGGGCCTCACCGAGTGGGGGCATCATCAAAAACTTTGGAGTCCCCTCACCTCCTCTAAGGTTGGGCAG
GGTGACCCTGAAGTGAGCACAGCCTAGGGCTGAGCTGGGGACCTGGTACCCTCCTGGCTCTTGATACCCCCCTCT
GTCTTGTGAAGGCAGGGGGAAGGTGGGGTCCTGGAGCAGACCACCCCGCCTGCCCTCATGGCCCCTCTGACCTGC
ACTGGGGAGCCCGTCTCAGTGTTGAGCCTTTTCCCTCTTTGGCTCCCCTGTACCTTTTGAGGAGCCCCAGCTACC
CTTCTTCTCCAGCTGGGCTCTGCAATTCCCCTCTGCTGCTGTCCCTCCCCCTTGTCCTTTCCCTTCAGTACCCTC
TCAGCTCCAGGTGGCTCTGAGGTGCCTGTCCCACCCCCACCCCCAGCTCAATGGACTGGAAGGGGAAGGGACACA
CAAGAAGAAGGGCACCCTAGTTCTACCTCAGGCAGCTCAAGCAGCGACCGCCCCCTCCTCTAGCTGTGGGGGTGA
GGGTCCCATGTGGTGGCACAGGCCCCCTTGAGTGGGGTTATCTCTGTGTTAGGGGTATATGATGGGGGAGTAGAT
CTTTCTAGGAGGGAGACACTGGCCCCTCAAATCGTCCAGCGACCTTCCTCATCCACCCCATCCCTCCCCAGTTCA
TTGCACTTTGATTAGCAGCGGAACAAGGAGTCAGACATTTTAAGATGGTGGCAGTAGAGGCTATGGACAGGGCAT
GCCACGTGGGCTCATATGGGGCTGGGAGTAGTTGTCTTTCCTGGCACTAACGTTGAGCCCCTGGAGGCACTGAAG
TGCTTAGTGTACTTGGAGTATTGGGGTCTGACCCCAAACACCTTCCAGCTCCTGTAACATACTGGCCTGGACTGT
TTTCTCTCGGCTCCCCATGTGTCCTGGTTCCCGTTTCTCCACCTAGACTGTAAACCTCTCGAGGGCAGGGACCAC
ACCCTGTACTGTTCTGTGTCTTTCACAGCTCCTCCCACAATGCTGAATATACAGCAGGTGCTCAATAAATGATTC
TTAGTGACTTTAAAAAAAAAAAAAAAAAAA

FIGURE 716

MSEPAGDVRQNPCGSKACRRLFGPVDSEQLSRDCDALMAGCIQEARERWNFDFVTETPLEGDFAWERVRGLGLPK
LYLPTGPRRGRDELGGGRRPGTSPALLQGTAEEDHVDLSLSCTLVPRSGEQAEGSPGGPGDSQGRKRRQTSMTDF
YHSKRRLIFSKRKP

FIGURE 717

CCACGCTCGTGCCGCCCCCCCCGCGCTCCCAGTTGACGCTCTGGGCCGCCACCTCCGCGGACCCTGAGCGCAAGA
GCCAAGCCGCCAGCGCTGCG**ATG**TGGGCCACGCTGCCGCTGCTCTGCGCCGGGGCCTGGCTCCTGGGAGTCCCCG
TCTGCGGTGCCGCCGAACTGTGCGTGAACTCCTTAGAGAAGTTTCACTTCAAGTCATGGATGTCTAAGCACCGTA
AGACCTACAGTACGGAGGAGTACCACCACAGGCTGCAGACGTTTGCCAGCAACTGGAGGAAGATAAACGCCCACA
ACAATGGGAACCACACATTTAAAATGGCACTGAACCAATTTTCAGACATGAGCTTTGCTGAAATAAAACACAAGT
ATCTCTGGTCAGAGCCTCAGAATTGCTCAGCCACCAAAAGTAACTACCTTCGAGGTACTGGTCCCTACCCACCTT
CCGTGGACTGGCGGAAAAAAGGAAATTTTGTCTCACCTGTGAAAAATCAGGGTGCCTGCGGCAGTTGCTGGACTT
TCTCCACCACTGGGGCCCTGGAGTCTGCGATCGCCATCGCAACCGGAAAGATGCTGTCCTTGGCGGAACAGCAGC
TGGTGGACTGCGCCCAGGACTTCAATAATCACGGCTGCCAAGGGGGTCTCCCCAGCCAGGCTTTCGAGTATATCC
TGTACAACAAGGGGATCATGGGTGAAGACACCTACCCCTACCAGGGCAAGGATGGTTATTGCAAGTTCCAACCTG
GAAAGGCCATCGGCTTTGTCAAGGATGTAGCCAACATCACAATCTATGACGAGGAAGCGATGGTGGAGGCTGTGG
CCCTCTACAACCCTGTGAGCTTTGCCTTTGAGGTGACTCAGGACTTCATGATGTATAGAACGGGCATCTACTCCA
GTACTTCCTGCCATAAAACTCCAGATAAAGTAAACCATGCAGTACTGGCTGTTGGGTATGGAGAAAAAAATGGGA
TCCCTTACTGGATCGTGAAAAACTCTTGGGGTCCCCAGTGGGGAATGAACGGGTACTTCCTCATCGAGCGCGGAA
AGAACATGTGTGGCCTGGCTGCCTGGCCTCCTACCCCATCCCTCTGGTG**TGA**GCCGTGGCAGCCGCAGCGCAGA
CTGGCGGAGAAGGAGAGGAACGGGCAGCCTGGGCCTGGGTGGAAATCCTGCCCTGGAGGAAGTTGTGGGGAGATC
CACTGGGACCCCCAACATTCTGCCCTCACCTCTGTGCCCAGCCTGGAAACCTACAGACAAGGAGGAGTTCCACCA
TGAGCTCACCCGTGTCTATGACGCAAAGATCACCAGCCATGTGCCTTAGTGTCCTTCTTAACAGACTCAAACCAC
ATGGACCACGAATATTCTTTCTGTCCAGAAGGGCTACTTTCCACATATAGAGCTCCAGGGACTGTCTTTTCTGTA
TTCGCTGTTCAATAAACATTGAGTGAGCACCTCCCCAGATGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAA

FIGURE 718

MWATLPLLCAGAWLLGVPVCGAAELSVNSLEKFHFKSWMSKHRKTYSTEEYHHRLQTFASNWRKINAHNNGNHTF
KMALNQFSDMSFAEIKHKYLWSEPQNCSATKSNYLRGTGPYPPSVDWRKKGNFVSPVKNQGACGSCWTFSTTGAL
ESAIAIATGKMLSLAEQQLVDCAQDFNNYGCQGGLPSQAFEYILYNKGIMGEDTYPYQGKDGYCKFQPGKAIGFV
KDVANITIYDEEAMVEAVALYNPVSFAFEVTQDFMMYRTGIYSSTSCHKTPDKVNHAVLAVGYGEKNGIPYWIVK
NSWGPQWGMNGYFLIERGKNMCGLAACASYPIPLV

FIGURE 719A

GCGAGTGTTGAAAGTCGGTGGCGTAGGTCGTCGTCCTGGATGCTGGCGAGATAGATGTTATCTTCCAGAGGAAGA
GGAGGAGGCGGCGAAGCGTTTTCCCAGCCTCAGTCTCTCTTTCGTTTTCCTTTTCCCTTCCCCCAACCCTCCGCC
CTTCTCTAAATCAGCCGGCCTTCCTTGACCTCAGTGACCCGTCTGGCCCCGCCCACCCTCGTCGACGTGATTCCC
GCCGTGAGGTAAGCGCCGGTGGAACCTAGAGCCCCGCGGAAGAGCAGAACGTTTGGGAGTGTGCAGCTCCTGGGC
CCGGCTCAGGCCCGTCGCGGAGGCGCGGCGCAGGGGAGCGCTCGGGTGGGAGTCTCGCTCCTCCACCAGTTTATT
GCGACGTAGCATCCAGGCCTAGGCCTCCCCGTCCATCCCCGCCGGACTCGGGCCTCTGGCAGCAGCGGGTGACGC
AGACGGAACATC**ATG**TCGTCCGCGGCCGAGCCTCCGCCACCCCCGCCTCCCGAGAGCGCGCCTTCCAAGCCCGCA
GCCTCGATCGCCAGCGGCGGGAGCAACAGCAGCAACAAAGGCGGCCCCGAAGGCGTCGCGGCGCAGGCGGTTGCG
TCTGCGGTCAGCGCTGGTCCCGCAGACGCCGAGATGGAGGAAATATTTGATGATGCGTCACCTGGAAAGCAAAAG
GAAATCCAAGAACCAGATCCTACCTATGAAGAAAAAATGCAAACTGACCGGGCAAATAGATTCGAGTATTTATTA
AAGCAGACAGAACTTTTTGCACATTTCATTCAACCTGCTGCTCAGAAGACTCCAACTTCACCTTTGAAGATGAAA
CCAGGGCGCCCACGAATAAAAAAAGATGAGAAGCAGAACTTACTATCCGTTGGCGATTACCGACACCGTAGAACA
GAGCAAGAGGAGGATGAAGAGCTATTAACAGAAAGCTCCAAAGCAACCAATGTTTGCACTCGATTTGAAGACTCT
CCATCGTATGTAAAATGGGGTAAACTGAGAGATTATCAGGTCCGAGGATTAAACTGGCTCATTTCTTTGTATGAG
AATGGCATCAATGGTATCCTTGCAGATGAAATGGGCCTAGGAAAGACTCTTCAAACAATTTCTCTTCTTGGGTAC
ATGAAACATTATAGAAACATTCCTGGGCCTCATATGGTTTTGGTTCCTAAGTCTACATTACACAACTGGATGAGT
GAATTCAAGAGATGGGTACCAACACTTAGATCTGTTTGTTTGATAGGAGATAAAGAACAAAGAGCTGCTTTTGTC
AGAGACGTTTTATTACCGGGAGAATGGGATGTATGTGTAACATCTTATGAAATGCTTATTAAAGAGAAGTCTGTG
TTCAAAAAATTTAATTGGAGATACTTAGTAATAGATGAAGCTCACAGGATCAAAAATGAAAAATCTAAGTTGTCA
GAAATAGTGAGGGAATTCAAGACTACAAATAGACTATTATTAACTGGAACACCTCTTCAGAACAACTTGCATGAG
CTGTGGTCACTTCTTAACTTTCTGTTGCCAGATGTGTTTAATTCAGCAGATGACTTTGATTCCTGGTTTGATACA
AACAACTGCCTTGGGGATCAAAAACTAGTTGAGAGGCTTCATATGGTTTTGCGTCCATTCCTCCTTCGTCGAATT
AAGGCTGATGTTGAAAAGAGTTTGCCTCCAAAGAAGGAAGTAAAAATCTATGTGGGCCTCAGCAAAATGCAAAGG
GAATGGTATACTCGGATATTAATGAAGGATATAGATATACTCAACTCAGCAGGCAAGATGGACAAAATGAGGTTA
TTGAACATCCTAATGCAGTTGAGAAAATGTTGTAATCATCCATATCTCTTTGATGGAGCAGAACCTGGTCCACCT
TATACAACAGATATGCATCTAGTAACCAACAGTGGCAAAATGGTGGTTTTAGACAAGCTGCTCCCTAAGTTAAAA
GAACAAGGTTCACGAGTACTAATCTTCAGTCAAATGACAAGGGTATTGGACATTTTGGAAGATTATTGCATGTGG
AGAAATTATGAGTACTGCAGGTTGGATGGTCAGACACCCCATGATGAGAGACAAGACTCCATCAATGCATACAAT
GAACCAAACAGCACAAAGTTTGTTTTCATGTTAAGCACGCGTGCTGGTGGTCTTGGCATCAATCTTGCGACTGCT
GATGTAGTAATTTTGTATGATTCTGATTGGAATCCCCAAGTAGATCTTCAGGCTATGGACCGAGCACATAGAATT
GGGCAGACTAAGACAGTCAGAGTGTTCCGCTTTATAACTGATAACACTGTAGAAGAAAGAATAGTAGAACGTGCT
GAGATGAAACTCAGACTGGATTCAATAGTCATTCAACAAGGGAGGCTTGTGGATCAGAATCTGAACAAAATTGGG
AAAGATGAAATGCTTCAAATGATTAGACATGGAGCAACACATGTGTTTGCTTCAAAGGAAAGTGAGATCACTGAT
GAAGATATCGATGGTATTTTGGAAAGAGGTGCAAAGAAGACTGCAGAGATGAATGAAAAGCTCTCCAAGATGGGC
GAAAGTTCACTTAGAAACTTTACAATGGATACAGAGTCAAGTGTTTATAACTTCGAAGGAGAAGACTATAGAGAA
AAACAAAAGATTGCATTCACAGAGTGGATTGAACCACCTAAACGAGAAAGAAAAGCCAACTATGCCGTTGATGCA
TATTTCAGGGAAGCTCTTCGTGTTAGTGAACCTAAAGCACCCAAGGCTCCTCGACCTCCAAAACAACCCAATGTT
CAGGATTTCCAGTTCTTTCCTCCACGTTTATTTGAATTACTGGAAAAAGAAATTCTGTTTTACAGAAAAACTATT
GGGTACAAGGTACCTCGAAATCCTGAGCTGCCTAACGCAGCACAGGCACAAAAAGAAGAACAGCTTAAAATTGAT
GAAGCTGAATCCCTTAATGATGAAGAGTTAGAGGAAAAAGAGAAGCTTCTAACACAGGGATTTACCAATTGGAAT
AAGAGAGATTTTAACCAGTTTATCAAAGCTAATGAGAAGTGGGGTCGTGATGATATTGAAAATATAGCAAGAGAA
GTAGAAGGCAAAACTCCAGAAGAAGTCATTGAATATTCAGCTGTGTTTTGGGAAAGGTGCAACGAGCTCCAGGAC
ATAGAGAAGATTATGGCTCAGATTGAAAGGGGAGAGGCGAGAATTCAAAGAAGAATAAGCATCAAGAAAGCACTT
GACACAAAGATTGGACGGTACAAAGCACCTTTTCATCAGCTGAGAATATCATATGGTACTAACAAAGGAAAAAAC
TATACTGAAGAAGAAGATCGTTTTCTGATTTGTATGCTTCACAAACTTGGATTTGACAAAGAAAATGTTTATGAT
GAATTGCGACAGTGTATTCGCAACTCTCCTCAGTTCAGATTTGACTGGTTTCTTAAGTCCAGAACTGCAATGGAG
CTCCAGAGGAGATGTAATACCTTAATTACTTTGATTGAAAGAGAAAACATGGAACTAGAAGAAAAGGAGAAGGCA
GAGAAAAAGAAACGAGGACCAAAGCCTTCAACACAGAAACGTAAAATGGATGGCGCACCTGATGGTCGAGGAAGA

FIGURE 719B

AAAAAGAAGCTGAAACTATGAATATGTTTTTGTTTCATAATCACTAACTTTAAACCAGTAGTTCTTTAATTTACG
GGTCTTCATAAGATGTACTGTACAATGCTCAATTGTTATGTCATTTAAAGACATCAGGTTCATCTGTTTACTGAG
CTAGAAACATAGTATGTAGTTTCACTTTTTTAAATGCAACAGCTGTGCTGAAATTTTTTTATCATTAACACTTGA
AGTAATAAAATAGGCTTCATTTATTAAAAAAAAAAAAAAAA

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FIGURE 720

MSSAAEPPPPPPPESAPSKPAASIASGGSNSSNKGGPEGVAAQAVASAVSAGPADAEMEEIFDDASPGKQKEIQE
PDPTYEEKMQTDRANRFEYLLKQTELFAHFIQPAAQKTPTSPLKMKPGRPRIKKDEKQNLLSVGDYRHRRTEQEE
DEELLTESSKATNVCTRFEDSPSYVKWGKLRDYQVRGLNWLISLYENGINGILADEMGLGKTLQTISLLGYMKHY
RNIPGPHMVLVPKSTLHNWMSEFKRWVPTLRSVCLIGDKEQRAAFVRDVLLPGEWDVCVTSYEMLIKEKSVFKKF
NWRYLVIDEAHRIKNEKSKLSEIVREFKTTNRLLLTGTPLQNNLHELWSLLNFLLPDVFNSADDFDSWFDTNNCL
GDQKLVERLHMVLRPFLLRRIKADVEKSLPPKKEVKIYVGLSKMQREWYTRILMKDIDILNSAGKMDKMRLLNIL
MQLRKCCNHPYLFDGAEPGPPYTTDMHLVTNSGKMVVLDKLLPKLKEQGSRVLIFSQMTRVLDILEDYCMWRNYE
YCRLDGQTPHDERQDSINAYNEPNSTKFVFMLSTRAGGLGINLATADVVILYDSDWNPQVDLQAMDRAHRIGQTK
TVRVFRFITDNTVEERIVERAEMKLRLDSIVIQQGRLVDQNLNKIGKDEMLQMIRHGATHVFASKESEITDEDID
GILERGAKKTAEMNEKLSKMGESSLRNFTMDTESSVYNFEGEDYREKQKIAFTEWIEPPKRERKANYAVDAYFRE
ALRVSEPKAPKAPRPPKQPNVQDFQFFPPRLFELLEKEILFYRKTIGYKVPRNPELPNAAQAQKEEQLKIDEAES
LNDEELEEKEKLLTQGFTNWNKRDFNQFIKANEKWGRDDIENIAREVEGKTPEEVIEYSAVFWERCNELQDIEKI
MAQIERGEARIQRRISIKKALDTKIGRYKAPFHQLRISYGTNKGKNYTEEEDRFLICMLHKLGFDKENVYDELRQ
CIRNSPQFRFDWFLKSRTAMELQRRCNTLITLIERENMELEEKEKAEKKKRGPKPSTQKRKMDGAPDGRGRKKKL
KL

FIGURE 721

GGCACGAGGGTGTGCGTGATGGAGAAAATTGGGCACCAGGGCTGCTCCCGAGATTCTCAGATCTGATTTCCACGC
TTGCTACCAAAATAGTCTGGGCAGGCCACTTTTGGAAGTAGGCGTTATCTAGTGAGCAGGCGGCCGCTTTCGATT
TCGCTTTCCCCTAAATGGCTGAGCTTCTCGCCAGCGCAGGATCAGCCTGTTCCTGGGACTTTCCGAGAGCCCCGC
CCTCGTTCCCTCCCCCAGCCGCCAGTAGGGGAGGACTCGGCGGTACCCGGAGCTTCAGGCCCCACCGGGGCGCGG
AGAGTCCCAGACCCGGCCGGGACCGGGACGGCGTCCGAGTGCCAATGGCTAGCTCTAGGTGTCCCGCTCCCCGCG
GGTGCCGCTGCCTCCCCGGAGCTTCTCTCGCATGGCTGGGGACAGTACTGCTACTTCTCGCCGACTGGGTGCTGC
TCCGGACCGCGCTGCCCCGCATATTCTCCCTGCTGGTGCCCACCGCGCTGCCACTGCTCCGGGTCTGGGCGGTGG
GCCTGAGCCGCTGGGCCGTGCTCTGGCTGGGGGCCTGCGGGGTCCTCAGGGCAACGGTTGGCTCCAAGAGCGAAA
ACGCAGGTGCCCAGGGCTGGCTGGCTGCTTTGAAGCCATTAGCTGCGGCACTGGGCTTGGCCCTGCCGGGACTTG
CCTTGTTCCGAGAGCTGATCTCATGGGGAGCCCCCGGGTCCGCGGATAGCACCAGGCTACTGCACTGGGGAAGTC
ACCCTACCGCCTTCGTTGTCAGTTATGCAGCGGCACTGCCCGCAGCAGCCCTGTGGCACAAACTCGGGAGCCTCT
GGGTGCCCGGCGGTCAGGGCGGCTCTGGAAACCCTGTGCGTCGGCTTCTAGGCTGCCTGGGCTCGGAGACGCGCC
GCCTCTCGCTGTTCCTGGTCCTGGTGGTCCTCTCCTCTCTTGGGGAGATGGCCATTCCATTCTTTACGGGCCGCC
TCACTGACTGGATTCTACAAGATGGCTCAGCCGATACCTTCACTCGAAACTTAACTCTCATGTCCATTCTCACCA
TAGCCAGTGCAGTGCTGGAGTTCGTGGGTGACGGGATCTATAACAACACCATGGGCCACGTGCACAGCCACTTGC
AGGGAGAGGTGTTTGGGGCTGTCCTGCGCCAGGAGACGGAGTTTTTCCAACAGAACCAGACAGGTAACATCATGT
CTCGGGTAACAGAGGACACGTCCACCCTGAGTGATTCTCTGAGTGAGAATCTGAGCTTATTTCTGTGGTACCTGG
TGCGAGGCCTATGTCTCTTGGGGATCATGCTCTGGGGATCAGTGTCCCTCACCATGGTCACCCTGATCACCCTGC
CTCTGCTTTTCCTTCTGCCCAAGAAGGTGGGAAAATGGTACCAGTTGCTGGAAGTGCAGGTGCGGGAATCTCTGG
CAAAGTCCAGCCAGGTGGCCATTGAGGCTCTGTCGGCCATGCCTACAGTTCGAAGCTTTGCCAACGAGGAGGGCG
AAGCCCAGAAGTTTAGGGAAAAGCTGCAAGAAATAAAGACACTCAACCAGAAGGAGGCTGTGGCCTATGCAGTCA
ACTCCTGGACCACTAGTATTTCAGGTATGCTGCTGAAAGTGGGAATCCTCTACATTGGTGGGCAGCTGGTGACCA
GTGGGGCTGTAAGCAGTGGGAACCTTGTCACATTTGTTCTCTACCAGATGCAGTTCACCCAGGCTGTGGAGGTAC
TGCTCTCCATCTACCCCAGAGTACAGAAGGCTGTGGGCTCCTCAGAGAAAATATTTGAGTACCTGGACCGCACCC
CTCGCTGCCCACCCAGTGGTCTGTTGACTCCCTTACACTTGGAGGGCCTTGTCCAGTTCCAAGATGTCTCCTTTG
CCTACCCAAACCGCCCAGATGTCTTAGTGCTACAGGGGCTGACATTCACCCTACGCCCTGGCGAGGTGACGGCGC
TGGTGGGACCCAATGGGTCTGGGAAGAGCACAGTGGCTGCCCTGCTGCAGAATCTGTACCAGCCCACCGGGGGAC
AGCTGCTGTTGGATGGGAAGCCCCTTCCCCAATATGAGCACCGCTACCTGCACAGGCAGGTGGCTGCAGTGGGAC
AAGAGCCACAGGTATTTGGAAGAAGTCTTCAAGAAAATATTGCCTATGGCCTGACCCAGAAGCCAACTATGGAGG
AAATCACAGCTGCTGCAGTAAAGTCTGGGGCCCATAGTTTCATCTCTGGACTCCCTCAGGGCTATGACACAGAGG
TAGACGAGGCTGGGAGCCAGCTGTCAGGGGGTCAGCGACAGGCAGTGGCGTTGGCCCGAGCATTGATCCGGAAAC
CGTGTGTACTTATCCTGGATGATGCCACCAGTGCCCTGGATGCAAACAGCCAGTTACAGGTGGAGCAGCTCCTGT
ACGAAAGCCCTGAGCGGTACTCCCGCTCAGTGCTTCTCATCACCCAGCACCTCAGCCTGGTGGAGCAGGCTGACC
ACATCCTCTTTCTGGAAGGAGGCGCTATCCGGGAGGGGGGAACCCACCAGCAGCTCATGGAGAAAAAGGGGTGCT
ACTGGGCCATGGTGCAGGCTCCTGCAGATGCTCCAGAATGAAAGCCTTCTCAGACCTGCGCACTCCATCTCCCTC
CCTTTTCTTCTCTCTGTGGTGGAGAACCACAGCTGCAGAGTAGCAGCTGCCTCCAGGATGAGTTACTTGAAATTT
GCCTTGAGTGTGTTACCTCCTTTCCAAGCTCCTCGTGATAATGCAGACTTCCTGGAGTACAAACACAGGATTTGT
AATTCCTACTGTAACGGAGTTTAGAGCCAGGGCTGATGCTTTGGTGTGGCCAGCACTCTGAAACTGAGAAATGTT
CAGAATGTACGGAAAGATGATCAGCTATTTTCAACATAACTGAAGGCATATGCTGGCCCATAAACACCCTGTAGG
TTCTTGATATTTATAATAAAATTGGTGTTTTGT

FIGURE 722

MAELLASAGSACSWDFPRAPPSFPPPAASRGGLGGTRSFRPHRGAESPRPGRDRDGVRVPMASSRCPAPRGCRCL
PGASLAWLGTVLLLLADWVLLRTALPRIFSLLVPTALPLLRVWAVGLSRWAVLWLGACGVLRATVGSKSENAGAQ
GWLAALKPLAAALGLALPGLALFRELISWGAPGSADSTRLLHWGSHPTAFVVSYAAALPAAALWHKLGSLWVPGG
QGGSGNPVRRLLGCLGSETRRLSLFLVLVVLSSLGEMAIPFFTGRLTDWILQDGSADTFTRNLTLMSILTIASAV
LEFVGDGIYNNTMGHVHSHLQGEVFGAVLRQETEFFQQNQTGNIMSRVTEDTSTLSDSLSENLSLFLWYLVRGLC
LLGIMLWGSVSLTMVTLITLPLLFLLPKKVGKWYQLLEVQVRESLAKSSQVAIEALSAMPTVRSFANEEGEAQKF
REKLQEIKTLNQKEAVAYAVNSWTTSISGMLLKVGILYIGGQLVTSGAVSSGNLVTFVLYQMQFTQAVEVLLSIY
PRVQKAVGSSEKIFEYLDRTPRCPPSGLLTPLHLEGLVQFQDVSFAYPNRPDVLVLQGLTFTLRPGEVTALVGPN
GSGKSTVAALLQNLYQPTGGQLLLDGKPLPQYEHRYLHRQVAAVGQEPQVFGRSLQENIAYGLTQKPTMEEITAA
AVKSGAHSFISGLPQGYDTEVDEAGSQLSGGQRQAVALARALIRKPCVLILDDATSALDANSQLQVEQLLYESPE
RYSRSVLLITQHLSLVEQADHILFLEGGAIREGGTHQQLMEKKGCYWAMVQAPADAPE

FIGURE 723A

TAACGAGGAACTTTTCGCCGGCGCCGGGCCGCCTCTGAGGCCAGGGCAGGACACGAACGCGCGGAGCGGCGGCGG
CGACTGAGAGCCGGGGCCGCGGCGGCGCTCCCTAGGAAGGGCCGTACGAGGCGGCGGGCCCGGCGGGCCTCCCGG
AGGAGGCGGCTGCGCCATGGACGAGCCACCCTTCAGCGAGGCGGCTTTGGAGCAGGCGCTGGGCGAGCCGTGCGA
TCTGGACGCGGCGCTGCTGACCGACATCGAAGACATGCTTCAGCTTATCAACAACCAAGACAGTGACTTCCCTGG
CCTATTTGACCCACCCTATGCTGGGAGTGGGGCAGGGGGCACAGACCCTGCCAGCCCCGATACCAGCTCCCCAGG
CAGCTTGTCTCCACCTCCTGCCACATTGAGCTCCTCTCTTGAAGCCTTCCTGAGCGGGCCGCAGGCAGCGCCCTC
ACCCCTGTCCCCTCCCCAGCCTGCACCCACTCCATTGAAGATGTACCCGTCCATGCCCGCTTTCTCCCCTGGGCC
TGGTATCAAGGAAGAGTCAGTGCCACTGAGCATCCTGCAGACCCCCACCCCACAGCCCCTGCCAGGGGCCCTCCT
GCCACAGAGCTTCCCAGCCCCAGCCCCACCGCAGTTCAGCTCCACCCCTGTGTTAGGCTACCCCAGCCCTCCGGG
AGGCTTCTCTACAGGAAGCCCTCCCGGGAACACCCAGCAGCCGCTGCCTGGCCTGCCACTGGCTTCCCCGCCAGG
GGTCCCGCCCGTCTCCTTGCACACCCAGGTCCAGAGTGTGGTCCCCCAGCAGCTACTGACAGTCACAGCTGCCCC
CACGGCAGCCCCTGTAACGACCACTGTGACCTCGCAGATCCAGCAGGTCCCGGTCCTGCTGCAGCCCCACTTCAT
CAAGGCAGACTCGCTGCTTCTGACAGCCATGAAGACAGACGGAGCCACTGTGAAGGCGGCAGGTCTCAGTCCCCT
GGTCTCTGGCACCACTGTGCAGACAGGGCCTTTGCCGACCCTGGTGAGTGGCGGAACCATCTTGGCAACAGTCCC
ACTGGTCGTAGATGCGGAGAAGCTGCCTATCAACCGGCTCGCAGCTGGCAGCAAGGCCCCGGCCTCTGCCCAGAG
CCGTGGAGAGAAGCGCACAGCCCACAACGCCATTGAGAAGCGCTACCGCTCCTCCATCAATGACAAAATCATTGA
GCTCAAGGATCTGGTGGTGGGCACTGAGGCAAAGCTGAATAAATCTGCTGTCTTGCGCAAGGCCATCGACTACAT
TCGCTTTCTGCAACACAGCAACCAGAAACTCAAGCAGGAGAACCTAAGTCTGCGCACTGCTGTCCACAAAAGCAA
ATCTCTGAAGGATCTGGTGTCGGCCTGTGGCAGTGGAGGGAACACAGACGTGCTCATGGAGGGCGTGAAGACTGA
GGTGGAGGACACACTGACCCCACCCCCCTCGGATGCTGGCTCACCTTTCCAGAGCAGCCCCTTGTCCCTTGGCAG
CAGGGGCAGTGGCAGCGGTGGCAGTGGCAGTGACTCGGAGCCTGACAGCCCAGTCTTTGAGGACAGCAAGGCAAA
GCCAGAGCAGCGGCCGTCTCTGCACAGCCGGGGCATGCTGGACCGCTCCCGCCTGGCCCTGTGCACGCTCGTCTT
CCTCTGCCTGTCCTGCAACCCCTTGGCCTCCTTGCTGGGGGCCCGGGGGCTTCCCAGCCCCTCAGATACCACCAG
CGTCTACCATAGCCCTGGGCGCAACGTGCTGGGCACCGAGAGCAGAGATGGCCCTGGCTGGGCCCAGTGGCTGCT
GCCCCCAGTGGTCTGGCTGCTCAATGGGCTGTTGGTGCTCGTCTCCTTGGTGCTTCTCTTTGTCTACGGTGAGCC
AGTCACACGGCCCCACTCAGGCCCCGCCGTGTACTTCTGGAGGCATCGCAAGCAGGCTGACCTGGACCTGGCCCG
GGGAGACTTTGCCCAGGCTGCCCAGCAGCTGTGGCTGGCCCTGCGGGCACTGGGCCGGCCCCTGCCCACCTCCCA
CCTGGACCTGGCTTGTAGCCTCCTCTGGAACCTCATCCGTCACCTGCTGCAGCGTCTCTGGGTGGGCCGCTGGCT
GGCAGGCCGGGCAGGGGGCCTGCAGCAGGACTGTGCTCTGCGAGTGGATGCTAGCGCCAGCGCCCGAGACGCAGC
CCTGGTCTACCATAAGCTGCACCAGCTGCACACCATGGGGAAGCACACAGGCGGGCACCTCACTGCCACCAACCT
GGCGCTGAGTGCCCTGAACCTGGCAGAGTGTGCAGGGGATGCCGTGTCTGTGGCGACGCTGGCCGAGATCTATGT
GGCGGCTGCATTGAGAGTGAAGACCAGTCTCCCACGGGCCTTGCATTTTCTGACACGCTTCTTCCTGAGCAGTGC
CCGCCAGGCCTGCCTGGCACAGAGTGGCTCAGTGCCTCCTGCCATGCAGTGGCTCTGCCACCCCGTGGGCCACCG
TTTCTTCGTGGATGGGGACTGGTCCGTGCTCAGTACCCCATGGGAGAGCCTGTACAGCTTGGCCGGGAACCCAGT
GGACCCCCTGGCCCAGGTGACTCAGCTATTCCGGGAACATCTCTTAGAGCGAGCACTGAACTGTGTGACCCAGCC
CAACCCCAGCCCTGGGTCAGCTGATGGGGACAAGGAATTCTCGGATGCCCTCGGGTACCTGCAGCTGCTGAACAG
CTGTTCTGATGCTGCGGGGGCTCCTGCCTACAGCTTCTCCATCAGTTCCAGCATGGCCACCACCACCGGCGTAGA
CCCGGTGGCCAAGTGGTGGGCCTCTCTGACAGCTGTGGTGATCCACTGGCTGCGGCGGGATGAGGAGGCGGCTGA
GCGGCTGTGCCCGCTGGTGGAGCACCTGCCCCGGGTGCTGCAGGAGTCTGAGAGACCCCTGCCCAGGGCAGCTCT
GCACTCCTTCAAGGCTGCCCGGGCCCTGCTGGGCTGTGCCAAGGCAGAGTCTGGTCCAGCCAGCCTGACCATCTG
TGAGAAGGCCAGTGGGTACCTGCAGGACAGCCTGGCTACCACACCAGCCAGCAGCTCCATTGACAAGGCCGTGCA
GCTGTTCCTGTGTGACCTGCTTCTTGTGGTGCGCACCAGCCTGTGGCGGCAGCAGCAGCCCCCGGCCCCGGCCCC
AGCAGCCCAGGGCACCAGCAGCAGGCCCCAGGCTTCCGCCCTTGAGCTGCGTGGCTTCCAACGGGACCTGAGCAG
CCTGAGGCGGCTGGCACAGAGCTTCCGGCCCGCCATGCGGAGGGTGTTCCTACATGAGGCCACGGCCCGGCTGAT
GGCGGGGGCCAGCCCCACACGGACACACCAGCTCCTCGACCGCAGTCTGAGGCGGCGGGCAGGCCCCGGTGGCAA
AGGAGGCGCGGTGGCGGAGCTGGAGCCGCGGCCCACGCGGCGGGAGCACGCGGAGGCCTTGCTGCTGGCCTCCTG
CTACCTGCCCCCCGGCTTCCTGTCGGCGCCCGGGCAGCGCGTGGGCATGCTGGCTGAGGCGGCGCGCACACTCGA
GAAGCTTGGCGATCGCCGGCTGCTGCACGACTGTCAGCAGATGCTCATGCGCCTGGGCGGTGGGACCACTGTCAC

FIGURE 723B

TTCCAGCTAGACCCCGTGTCCCCGGCCTCAGCACCCCTGTCTCTAGCCACTTTGGTCCCGTGCAGCTTCTGTCCT
GCGTCGAAGCTTTGAAGGCCGAAGGCAGTGCAAGAGACTCTGGCCTCCACAGTTCGACCTGCGGCTGCTGTGTGC
CTTCGCGGTGGAAGGCCCGAGGGGCGCGATCTTGACCCTAAGACCGGCGGCCATGATGGTGCTGACCTCTGGTGG
CCGATCGGGGCACTGCAGGGGCCGAGCCATTTTGGGGGGCCCCCCTCCTTGCTCTGCAGGCACCTTAGTGGCTTT
TTTCCTCCTGTGTACAGGGAAGAGAGGGGTACATTTCCCTGTGCTGACGGAAGCCAACTTGGCTTTCCCGGACTG
CAAGCAGGGCTCTGCCCCAGAGGCCTCTCTCTCCGTCGTGGGAGAGAGACGTGTACATAGTGTAGGTCAGCGTGC
TTAGCCTCCTGACCTGAGGCTCCTGTGCTACTTTGCCTTTTGCAAACTTTATTTTCATAGATTGAGAAGTTTTGT
ACAGAGAATTAAAAATGAAATTATTTATA

FIGURE 724

MDEPPFSEAALEQALGEPCDLDAALLTDIEDMLQLINNQDSDFPGLFDPPYAGSGAGGTDPASPDTSSPGSLSPP
PATLSSSLEAFLSGPQAAPSPLSPPQPAPTPLKMYPSMPAFSPGPGIKEESVPLSILQTPTPQPLPGALLPQSFP
APAPPQFSSTPVLGYPSPPGGFSTGSPPGNTQQPLPGLPLASPPGVPPVSLHTQVQSVVPQQLLTVTAAPTAAPV
TTTVTSQIQQVPVLLQPHFIKADSLLLTAMKTDGATVKAAGLSPLVSGTTVQTGPLPTLVSGGTILATVPLVVDA
EKLPINRLAAGSKAPASAQSRGEKRTAHNAIEKRYRSSINDKIIELKDLVVGTEAKLNKSAVLRKAIDYIRFLQH
SNQKLKQENLSLRTAVHKSKSLKDLVSACGSGGNTDVLMEGVKTEVEDTLTPPPSDAGSPFQSSPLSLGSRGSGS
GGSGSDSEPDSPVFEDSKAKPEQRPSLHSRGMLDRSRLALCTLVFLCLSCNPLASLLGARGLPSPSDTTSVYHSP
GRNVLGTESRDGPGWAQWLLPPVVWLLNGLLVLVSLVLLFVYGEPVTRPHSGPAVYFWRHRKQADLDLARGDFAQ
AAQQLWLALRALGRPLPTSHLDLACSLLWNLIRHLLQRLWVGRWLAGRAGGLQQDCALRVDASASARDAALVYHK
LHQLHTMGKHTGGHLTATNLALSALNLAECAGDAVSVATLAEIYVAAALRVKTSLPRALHFLTRFFLSSARQACL
AQSGSVPPAMQWLCHPVGHRFFVDGDWSVLSTPWESLYSLAGNPVDPLAQVTQLFREHLLERALNCVTQPNPSPG
SADGDKEFSDALGYLQLLNSCSDAAGAPAYSFSISSSMATTTGVDPVAKWWASLTAVVIHWLRRDEEAAERLCPL
VEHLPRVLQESERPLPRAALHSFKAARALLGCAKAESGPASLTICEKASGYLQDSLATTPASSSIDKAVQLFLCD
LLLVVRTSLWRQQQPPAPAPAAQGTSSRPQASALELRGFQRDLSSLRRLAQSFRPAMRRVFLHEATARLMAGASP
TRTHQLLDRSLRRRAGPGGKGGAVAELEPRPTRREHAEALLLASCYLPPGFLSAPGQRVGMLAEAARTLEKLGDR
RLLHDCQQMLMRLGGGTTVTSS

FIGURE 725

GTGGAACCTCGATATTGGTGGTGTCCATCGTGGGCAGCGGACTAATAAAGGCCATGGCGCCAGCAGAAATCCTGA
ACGGGAAGGAGATCTCCGCGCAAATAAGGGCGAGACTGAAAAATCAAGTCACTCAGTTGAAGGAGCAAGTACCTG
GTTTCACACCACGCCTGGCAATATTACAGGTTGGCAACAGAGATGATTCCAATCTTTATATAAATGTGAAGCTGA
AGGCTGCTGAAGAGATTGGGATCAAAGCCACTCACATTAAGTTACCAAGAACAACCACAGAATCTGAGGTGATGA
AGTACATTACATCTTTGAATGAAGACTCTACTGTACATGGGTTCTTAGTGCAGCTACCTTTAGATTCAGAGAATT
CCATTAACACTGAAGAAGTGATCAATGCTATTGCACCCGAGAAGGATGTGGATGGATTGACTAGCATCAATGCTG
GGAGACTTGCTAGAGGTGACCTCAATGACTGTTTCATTCCTTGTACGCCTAAGGGATGCTTGGAACTCATCAAAG
AGACAGGGGTGCCGATTGCCGGAAGGCATGCTGTGGTGGTTGGGCGCAGTAAAATAGTTGGGGCCCCGATGCATG
ACTTGCTTCTGTGGAACAATGCCACAGTGACCACCTGCCACTCCAAGACTGCCCATCTGGATGAGGAGGTAAATA
AAGGTGACATCCTGGTGGTTGCAACTGGTCAGCCTGAAATGGTTAAAGGGGAGTGGATCAAACCTGGGGCAATAG
TCATCGACTGTGGAATCAATTATGTCCCAGATGATAAAAAACCAAATGGGAGAAAAGTTGTGGGTGATGTGGCAT
ACGACGAGGCCAAAGAGAGGGCGAGCTTCATCACTCCTGTTCCTGGCGGCGTAGGGCCCATGACAGTTGCAATGC
TCATGCAGAGCACAGTAGAGAGTGCCAAGCGTTTCCTGGAGAAATTTAAGCCAGGAAAGTGGATGATTCAGTATA
ACAACCTTAACCTCAAGACACCTGTTCCAAGTGACATTGATATATCACGATCTTGTAAACCGAAGCCCATTGGTA
AGCTGGCTCGAGAAATTGGTCTGCTGTCTGAAGAGGTAGAATTATATGGTGAAACAAAGGCCAAAGTTCTGCTGT
CAGCACTAGAACGCCTGAAGCACCGGCCTGATGGGAAATACGTGGTGGTGACTGGAATAACTCCAACACCCCTGG
GAGAAGGGAAAAGCACAACTACAATCGGGCTAGTGCAAGCCCTTGGTGCCCATCTCTACCAGAATGTCTTTGCGT
GTGTGCGACAGCCTTCTCAGGGCCCCACCTTTGGAATAAAAGGTGGCGCTGCAGGAGGCGGCTACTCCCAGGTCA
TTCCTATGGAAGAGTTTAATCTCCACCTCACAGGTGACATCCATGCCATCACTGCAGCTAATAACCTCGTTGCTG
CGGCCATTGATGCTCGGATATTTCATGAACTGACCCAGACAGACAAGGCTCTCTTTAATCGTTTGGTGCCATCAG
TAAATGGAGTGAGAAGGTTCTCTGACATCCAAATCCGAAGGTTAAAGAGACTAGGCATTGAAAAGACTGACCCTA
CCACACTGACAGATGAAGAGATAAACAGATTTGCAAGATTGGACATTGATCCAGAAACCATAACTTGGCAAAGAG
TGTTGGATACCAATGATAGATTCCTGAGGAAGATCACGATTGGACAGGCTCCAACGGAGAAGGGTCACACACGGA
CGGCCCAGTTTGATATCTCTGTGGCCAGTGAAATTATGGCTGTCCTGGCTCTCACCACTTCTCTAGAAGACATGA
GAGAGAGACTGGGCAAAATGGTGGTGGCATCCAGTAAGAAAGGAGAGCCCGTCAGTGCCGAAGATCTGGGGGTGA
GTGGTGCACTGACAGTGCTTATGAAGGACGCAATCAAGCCCAATCTCATGCAGACACTGGAGGGCACTCCAGTGT
TTGTCCATGCTGGCCCGTTTGCCAACATCGCACATGGCAATTCCTCCATCATTGCAGACCAGATCGCACTCAAGC
TTGTTGGCCCAGAAGGGTTTGTAGTGACGGAAGCAGGATTTGGAGCAGACATTGGAATGGAAAAGTTTTTTAACA
TCAAATGCCGGTATTCCGGCCTCTGCCCCCACGTGGTGGTGCTTGTTGCCACTGTCAGGGCTCTCAAGATGCACG
GGGGCGGCCCCACGGTCACTGCTGGACTGCCTCTTCCCAAGGCTTACATACAGGAGAACCTGGAGCTGGTTGAAA
AAGGCTTCAGTAACTTGAAGAAACAAATTGAAAATGCCAGAATGTTTGGAATTCCAGTAGTAGTGGCCGTGAATG
CATTCAAGACGGATACAGAGTCTGAGCTGGACCTCATCAGCCGCCTTTCCAGAGAACATGGGGCTTTTGATGCCG
TGAAGTGCACTCACTGGGCAGAAGGGGGCAAGGGTGCCTTAGCCCTGGCTCAGGCCGTCCAGAGAGCAGCACAAG
CACCCAGCAGCTTCCAGCTCCTTTATGACCTCAAGCTCCCAGTTGAGGATAAAATCAGGATCATTGCACAGAAGA
TCTATGGAGCAGATGACATTGAATTACTTCCCGAAGCTCAACACAAAGCTGAAGTCTACACGAAGCAGGGCTTTG
GGAATCTCCCCATCTGCATGGCTAAAACACACTTGTCTTTGTCTCACAACCCAGAGCAAAAAGGTGTCCCTACAG
GCTTCATTCTGCCCATTCGCGACATCCGCGCCAGCGTTGGGGCTGGTTTTCTGTACCCCTTAGTAGGAACGATGA
GCACAATGCCTGGACTCCCCACCCGGCCCTGTTTTTATGATATTGATTTGGACCCTGAAACAGAACAGGTGAATG
GATTATTCTAAACAGATCACCATCCATCTTCAAGAAGCTACTTTGAAAGTCTGGCCAGTGTCTATTCAGGCCCAC
TGGGAGTTAGGAAGTATAAGTAAGCCAAGAGAAGTCAGCCCCTGCCCAGAAGATCTGAAACTAATAGTAGGAGTT
TCCCCAGAAGTCATTTTCAGCCTTAATTCTCATCATGTATAAATTAACATAAATCATGCATGTCTGTTTACTTTA
GTGACGTTCCACAGAATAAAAGGAAACAAGTTTGC

FIGURE 726

MAPAEILNGKEISAQIRARLKNQVTQLKEQVPGFTPRLAILQVGNRDDSNLYINVKLKAAEEIGIKATHIKLPRT
TTESEVMKYITSLNEDSTVHGFLVQLPLDSENSINTEEVINAIAPEKDVDGLTSINAGRLARGDLNDCFIPCTPK
GCLELIKETGVPIAGRHAVVVGRSKIVGAPMHDLLLWNNATVTTCHSKTAHLDEEVNKGDILVVATGQPEMVKGE
WIKPGAIVIDCGINYVPDDKKPNGRKVVGDVAYDEAKERASFITPVPGGVGPMTVAMLMQSTVESAKRFLEKFKP
GKWMIQYNNLNLKTPVPSDIDISRSCKPKPIGKLAREIGLLSEEVELYGETKAKVLLSALERLKHRPDGKYVVVT
GITPTPLGEGKSTTTIGLVQALGAHLYQNVFACVRQPSQGPTFGIKGGAAGGGYSQVIPMEEFNLHLTGDIHAIT
AANNLVAAAIDARIFHELTQTDKALFNRLVPSVNGVRRFSDIQIRRLKRLGIEKTDPTTLTDEEINRFARLDIDP
ETITWQRVLDTNDRFLRKITIGQAPTEKGHTRTAQFDISVASEIMAVLALTTSLEDMRERLGKMVVASSKKGEPV
SAEDLGVSGALTVLMKDAIKPNLMQTLEGTPVFVHAGPFANIAHGNSSIIADQIALKLVGPEGFVVTEAGFGADI
GMEKFFNIKCRYSGLCPHVVVLVATVRALKMHGGGPTVTAGLPLPKAYIQENLELVEKGFSNLKKQIENARMFGI
PVVVAVNAFKTDTESELDLISRLSREHGAFDAVKCTHWAEGGKGALALAQAVQRAAQAPSSFQLLYDLKLPVEDK
IRIIAQKIYGADDIELLPEAQHKAEVYTKQGFGNLPICMAKTHLSLSHNPEQKGVPTGFILPIRDIRASVGAGFL
YPLVGTMSTMPGLPTRPCFYDIDLDPETEQVNGLF

FIGURE 727

CCGCCGCCATCCGCCCTCTCTACCCCCCCATCCCCAGGTGAGGGGGGTGAGTTCAGGAAGCGGAGACCCCGAGGA
ACCCAGCAGGGTCACCATTTGCAGCGCAACATGGCAGGAGCTGGAGGAGGGAATGATATTCAGTGGTGTTTTTCT
CAGGTGAAAGGAGCAGTAGATGATGATGTAGCAGAAGCAGATATAATTTCTACAGTAGAATTTAATCATTCTGGA
GAATTACTAGCAACAGGAGATAAAGGTGGTAGAGTTGTCATCTTTCAACAGGAGCAGGAGAACAAAATCCAGTCT
CATAGCAGAGGAGAATATAATGTTTACAGCACCTTCCAGAGCCATGAACCAGAGTTTGACTACTTGAAAAGTTTA
GAAATAGAAGAAAAGATCAATAAAATTAGGTGGTTACCCCAGAAAAATGCTGCTCAGTTTTTATTGTCTACCAAT
GATAAAACAATAAAATTATGGAAAATCAGTGAAAGGGACAAAAGACCAGAAGGGTATAACTTGAAAGAGGAGGAT
GGAAGGTATAGAGATCCTACTACAGTTACTACACTACGAGTGCCAGTCTTTAGGCCTATGGATCTAATGGTTGAG
GCCAGTCCACGAAGAATATTTGCCAATGCTCATACATATCACATCAACTCAATTTCTATTAATAGTGATTATGAA
ACATATTTATCTGCAGATGATTTGCGGATTAATCTTTGGCATCTGGAAATTACAGACAGGAGTTTTAACATTGTG
GATATCAAGCCTGCCAATATGGAAGAGCTAACAGAGGTGATTACAGCAGCAGAATTTCATCCAAACAGCTGTAAC
ACATTTGTATACAGCAGCAGTAAAGGAACTATTCGGCTATGTGACATGAGGGCATCTGCCCTCTGTGATAGACAT
TCTAAATTGTTTGAAGAACCTGAAGATCCCAGTAACAGGTCATTTTTTTCCGAAATCATCTCCTCTATTTCGGAT
GTAAAATTCAGCCATAGTGGTCGATATATGATGACTAGAGACTATTTGTCAGTCAAAATTTGGGACTTAAATATG
GAAAACAGGCCTGTGGAAACATACCAGGTGCATGAATACCTCAGAAGTAAACTCTGTTCACTGTATGAAAATGAC
TGCATATTTGACAAATTTGAATGTTGTTGGAATGGATCTGACAGTGTTGTCATGACTGGATCTTACAATAATTTC
TTCAGAATGTTTGACAGAAACACAAAGCGAGACATAACCCTAGAAGCATCGCGGGAAAACAATAAGCCTCGCACA
GTTCTGAAGCCTCGCAAAGTCTGTGCAAGTGGCAAGCGAAAGAAAGATGAAATAAGTGTTGACAGCCTAGACTTC
AATAAGAAAATCCTTCACACAGCCTGGCACCCCAAGGAAAATATCATTGCCGTAGCTACTACAAACAATCTGTAT
ATATTTCAAGACAAAGTGAATTAGGGTTGGCATTCCTAGCAGAAGAACCCACTTCCTGCTTAGTTGAGATAGTTG
AATCTAGCATTCGTTCCTATAAAAGAGAGAGGTCCATTGTGGCGCCCCTTTCCAGTGTTTGACAGTGTGCCATTC
GACAACACATTGTTATAGCTACATGGAGAAAGCTCTGTGGATTCATCACTGTGGTGTTCTCCATGTCTGCTAGCC
ATTTAGGTAAGGGTAGGGCACTTTTAATTTAAATGACTTCTTGCACCATCTTGCCTAATGGACTAGATTGGACTG
TATCAACATTGATTTACTCCACTTTTTATGCCTTCCATTGTGATGACGTCAAACACAGTGAAAGCCTTCAGTCAT
GCTATGGGATTTAATTGTGTATCCTCATTACTGTATCATTTGTGGGGTACACCCCTTCCCCCTTTTTTTAAATTA
AATACAGCTCATTCTTACTGTGGCTTGTAGCATTCCTCCTCTTCTGGCCTCCTGGACTGCTCCCCTTCATCTCTT
ACCCTTGCCCCCTCCACCCGGTCTTGGTGGTGGTATATTAAAAAAAGAAAGAATGAAAGCACACAAAATGAGTCA
GTTTGGGGTCAGTGGTATAAAGGGGGTATATGTTGCAAACAAATGTTTTAGTAACAGTTGGCTGTAATCACTCCT
CGCCGTGTCTGGCACTGAAAATAAGGAAAAG

FIGURE 728

MAGAGGGNDIQWCFSQVKGAVDDDVAEADIISTVEFNHSGELLATGDKGGRVVIFQQEQENKIQSHSRGEYNVYS
TFQSHEPEFDYLKSLEIEEKINKIRWLPQKNAAQFLLSTNDKTIKLWKISERDKRPEGYNLKEEDGRYRDPTTVT
TLRVPVFRPMDLMVEASPRRIFANAHTYHINSISINSDYETYLSADDLRINLWHLEITDRSFNIVDIKPANMEEL
TEVITAAEFHPNSCNTFVYSSSKGTIRLCDMRASALCDRHSKLFEEPEDPSNRSFFSEIISSISDVKFSHSGRYM
MTRDYLSVKIWDLNMENRPVETYQVHEYLRSKLCSLYENDCIFDKFECCWNGSDSVVMTGSYNNFFRMFDRNTKR
DITLEASRENNKPRTVLKPRKVCASGKRKKDEISVDSLDFNKKILHTAWHPKENIIAVATTNNLYIFQDKVN

FIGURE 729

CGCGATTCTCAGGGATTGATCCGCCTCTTCAGGTAAGTTATCTTCCGGCCCCGTACCACTGTGCCACAGGCGCAG
CCCGCTTCCTCAGGTGCCCTATCCCGCGCAGAAGACCACGGCTTCACAGAGTGTTATTTAAGGGCGTGGCCAGCG
GAACATCCCGCCCCATTCTGTGACGCACGGGGTGGCGCGCGTGGGACCCGAGGGGTGGGGCTGGGTTTAGTAGGA
GACCTGGGGCAAGGCCCCCTGTGGACGACCATCTGCCAGCTTCTCTCGTTCCGTCGATTGGGAGGAGCGGTGGCG
ACCTCGGCCTTCAGTGTTTCCGACGGAGTGAATGGCGGCGGCGGCTGGGATGCTGCTGCTGGGCTTGCTGCAGGC
GGGTGGGTCGGTGCTGGGCCAGGCGATGGAGAAGGTGACAGGCGGCAACCTCTTGTCCATGCTGCTGATCGCCTG
CGCCTTCACCCTCAGCCTGGTCTACCTGATCCGTCTGGCCGCCGGCCACCTGGTCCAGCTGCCCGCAGGGGTGAA
AAGTCCTCCATACATTTTCTCCCCAATTCCATTCCTTGGGCATGCCATAGCATTTGGGAAAAGTCCAATTGAATT
TCTAGAAAATGCATATGAGAAGTATGGACCTGTATTTAGTTTTACCATGGTAGGCAAGACATTTACTTACCTTCT
GGGGAGTGATGCTGCTGCACTGCTTTTTAATAGTAAAAATGAAGACCTGAATGCAGAAGATGTCTACAGTCGCCT
GACAACACCTGTGTTTGGGAAGGGAGTTGCATACGATGTGCCTAATCCAGTTTTCTTGGAGCAGAAGAAAATGTT
AAAAAGTGGCCTTAACATAGCCCACTTTAAACAGCATGTTTCTATAATTGAAAAAGAAACAAAGGAATACTTTGA
GAGTTGGGGAGAAAGTGGAGAAAAAAATGTGTTTGAAGCTCTTTCTGAGCTCATAATTTTAACAGCTAGCCATTG
TTTGCATGGAAAGGAAATCAGAAGTCAACTCAATGAAAAGGTAGCACAGCTGTATGCAGATTTGGATGGAGGTTT
CAGCCATGCAGCCTGGCTCTTACCAGGTTGGCTGCCTTTGCCTAGTTTCAGACGCAGGGACAGAGCTCATCGGGA
AATCAAGGATATTTTCTATAAGGCAATCCAGAAACGCAGACAGTCTCAAGAAAAAATTGATGACATTCTCCAAAC
TTTACTAGATGCTACATACAAGGATGGGCGTCCTTTGACTGATGATGAAGTAGCAGGGATGCTTATTGGATTACT
CTTGGCAGGGCAGCATACATCCTCAACTACTAGTGCTTGGATGGGCTTCTTTTTGGCCAGAGACAAAACACTTCA
AAAAAAATGTTATTTAGAACAGAAAACAGTCTGTGGAGAGAATCTGCCTCCTTTAACTTATGACCAGCTCAAGGA
TCTAAATTTACTTGATCGCTGTATAAAAGAAACATTAAGACTTAGACCTCCTATAATGATCATGATGAGAATGGC
CAGAACTCCTCAGACTGTGGCAGGGTATACCATTCCTCCAGGACATCAGGTGTGTGTTTCTCCCACTGTCAATCA
AAGACTTAAAGACTCATGGGTAGAACGCCTGGACTTTAATCCTGATCGCTACTTACAGGATAACCCAGCATCAGG
GGAAAAGTTTGCCTATGTGCCATTTGGAGCTGGGCGTCATCGTTGTATTGGGGAAAATTTTGCCTATGTTCAAAT
TAAGACAATTTGGTCCACTATGCTTCGTTTATATGAATTTGATCTCATTGATGGATACTTTCCCACTGTGAATTA
TACAACTATGATTCACACCCCTGAGAACCCAGTTATCCGTTACAAACGAAGATCAAAATGAAAAAGGTTGCAAGG
AACGAATATATGTGATTATCACTGTAAGCCACAAAGGCATTCGAAGAGAATGAAGTGTACAAAACAACTCTTGTA
GTTTACTGTTTTTTTAAGTGTGTAATTCTAAAAGCCAGTTTATGATTTAGGATTTTGTTAACTGAATGGTTCTAT
CAAATATAATAGCATTTGACACATTTTCTAATAGTTATGATACTTATACATGTGCTTTCAGGAAGTTCCTTGGTG
AAACAATTGTTGAGGGGGGATCTAGGTAATTGGCAGATTCTAAATAATATAATTTCCAGATAGTAATTTTAAGAG
TACTCATCGCTCTTGCCAAATAAGTTCAGGGTATTCAAATCTTGGACTAGTCCTGCAAGGTATAAAGAATAAAAA
TCCCAGTGAGATACTTGGAAACCACAGTTTATTATTATTTATCTGGGCAATTATTGTGTGTGTGAGGATGGAAGG
GTAGGGAATAATCGAACATCTAAAGCCTTGAATAAGAGAATACTAATTGTTTTGGTATGATGATACTCAGAAATG
GAGATATTATAGGAAAAAGAAATCCTTTGGAATTTTAACTAAAATCACTGCATATGGGAAATTAAGAGATCCAGG
ACCATATTTGATAAGAGTTCCTAAAAATAATGTAATTATTAATGCTAAAGACTGCTCATGTATCTTGATCTAATT
ACTAAATAAATTACATATTTATTTACCTGATAAATATGTATCTAGTTCTACAAGGTCACATTTATGTGGAAGTCC
AAAGTCAAGTCCTTAGGGGATAATTTTGTTTTGGGCTCAGTTGTTCCCTGCTTCCTTTTTTTTTTTTTTTTTTT
TTGAGATGGAGTCTCGCTCTGTTGCCCAGGCTGGAGTGCAGTGGTGCGATCTCAGCTCACTGCATCCTCTGCCTC
CCGGGTTCAAGCAATTCTCTGCCTCAGCCTCCCAAGTAGTTGGGATTACAGGCACCTGCCACCATGCCTGGCTAA
TTTTTTGTATTTTTAGTAGAGACGGGGGTTTCACTATGTTGGCTAGGCTGGTCTTGAACTCCTGAGCCTCGTGAG
TCCACCCGCCTTGGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACCGCACCTGGCCTTCCCTGCTTCCTCT
CTAGAATCCAATTAGGGATGTTTGTTACTACTCATATTGATTAAAACAGTTAACAAACTTTTTTCTTTTTAAAAT
GTGAGATCAGTGAACTCTGGTTTTAAGATAATCTGAAACAAGGTCCTTGGGAGTAATAAAATTGGTCACATTCTG
TAAAGCACATTCTGTTTAGGAATCAACTTATCTCAAATTGTAACTCGGGGCCTAACTATATGAGATGGCTGAAAA
AATACCACATCGTCTGTTTTCACTAGGTGATGCCAAAATATTTTGCTTTATGTATATTACAGTTCTTTTTAAAAC
ACTGGAAGACTCATGTTAAACTCTAATTGTGAAGGCAGAATCTCTGCTAATTTTTCAGATTAAAATTCTCTTTGA
AAAAAT

FIGURE 730

MAAAAGMLLLGLLQAGGSVLGQAMEKVTGGNLLSMLLIACAFTLSLVYLIRLAAGHLVQLPAGVKSPPYIFSPIP
FLGHAIAFGKSPIEFLENAYEKYGPVFSFTMVGKTFTYLLGSDAAALLFNSKNEDLNAEDVYSRLTTPVFGKGVA
YDVPNPVFLEQKKMLKSGLNIAHFKQHVSIIEKETKEYFESWGESGEKNVFEALSELIILTASHCLHGKEIRSQL
NEKVAQLYADLDGGFSHAAWLLPGWLPLPSFRRRDRAHREIKDIFYKAIQKRRQSQEKIDDILQTLLDATYKDGR
PLTDDEVAGMLIGLLLAGQHTSSTTSAWMGFFLARDKTLQKKCYLEQKTVCGENLPPLTYDQLKDLNLLDRCIKE
TLRLRPPIMIMMRMARTPQTVAGYTIPPGHQVCVSPTVNQRLKDSWVERLDFNPDRYLQDNPASGEKFAYVPFGA
GRHRCIGENFAYVQIKTIWSTMLRLYEFDLIDGYFPTVNYTTMIHTPENPVIRYKRRSK

FIGURE 731

TCGGGAAGCCATAGGGCGCCTCCCAGCCCGTCTCCCCGCTCCAGTTTAGAACCTAATTCCCAATTCCCGGACCGG
GCCCAGCCCTGGGCTCTTACTGTCCGCTTTTGCTGGGACCTGTTCCACAAATGGGCGTCTTCTGCCTTGGGCCGT
GGGGGTTGGGCCGGAAGCTGCGGACGCCTGGGAAGGGGCCGCTGCAGCTCTTGAGCCGCCTCTGCGGGGACCACT
TGCAGGCCATCCCAGCCAAGAAGGCCCCGGCTGGGCAGGAGGAGCCTGGGACGCCGCCCTCCTCGCCGCTGAGTG
CCGAGCAGTTGGACCGGATCCAGAGGAACAAGGCCGCGGCCCTGCTCAGACTCGCGGCCCGCAACGTGCCCGTGG
GCTTTGGAGAGAGCTGGAAGAAGCACCTCAGCGGGGAGTTCGGGAAACCGTATTTTATCAAGCTAATGGGATTTG
TTGCAGAAGAAAGAAAGCATTACACTGTTTATCCACCCCCACACCAAGTCTTCACCTGGACCCAGATGTGTGACA
TAAAAGATGTGAAGGTTGTCATCCTGGGACAGGATCCATATCATGGACCTAATCAAGCTCACGGGCTCTGCTTTA
GTGTTCAAAGGCCTGTTCCGCCTCCGCCCAGTTTGGAGAACATTTATAAAGAGTTGTCTACAGACATAGAGGATT
TTGTTCATCCTGGCCATGGAGATTTATCTGGGTGGGCCAAGCAAGGTGTTCTCCTTCTCAACGCTGTCCTCACGG
TTCGTGCCCATCAAGCCAACTCTCATAAGGAGCGAGGCTGGGAGCAGTTCACTGATGCAGTTGTGTCCTGGCTAA
ATCAGAACTCGAATGGCCTTGTTTTCTTGCTCTGGGGCTCTTATGCTCAGAAGAAGGGCAGTGCCATTGATAGGA
AGCGGCACCATGTACTACAGACGGCTCATCCCTCCCCTTTGTCAGTGTATAGAGGGTTCTTTGGATGTAGACACT
TTTCAAAGACCAATGAGCTGCTGCAGAAGTCTGGCAAGAAGCCCATTGACTGGAAGGAGCTGTGATCATCAGCTG
AGGGGTGGCCTTTGAGAAGCTGCTGTTAACGTATTTGCCAGTTACGAAGTTCCACTGAAAATTTTCCTATTAATT
CTTAAGTACTCTGCATAAGGGGGAAAAGCTTCCAGAAAGCAGCCATGAACCAGGCTGTCCAGGAATGGCAGCTGT
ATCCAACCACAAACAACAAAGGCTACCCTTTGACCAAATGTCTTTCTCTGCAACATGGCTTCGGCCTAAAATATG
CAGAAGACAGATGAGGTCAAATACTCAGTTGGCTCTCTTTATCTCCCTTGCCTTTATGGTGAAACAGGGGAGATG
TGCACCTTTCAGGCACAGCCCTAGTTTGGCGCCTGCTGCTCCTTGGTTTTGCCTGGTTAGACTTTCAGTGACAGA
TGTTGGGGTGTTTTTGCTTAGAAAGGTCCCCTTGTCTCAGCCTTGCAGGGCAGGCATGCCAGTCTCTGCCAGTTC
CACTGCCCCCTTGATCTTTGAAGGAGTCCTCAGGCCCCTCGCAGCATAAGGATGTTTTGCAACTTTCCAGAATCT
GGCCCAGAAATTAGGGCTCAATTTCCTGATTGTAGTAGAGGTTAAGATTGCTGTGAGCTTTATCAGATAAGAGAC
CGAGAGAAGTAAGCTGGGTCTTGTTATTCCTTGGGTGTTGGTGGAATAAGCAGTGGAATTTGAACAAGGAAGAGG
AGAAAAGGGAATTTTGTCTTTATGGGGTGGGGTGATTTTCTCCTAGGGTTATGTCCAGTTGGGGTTTTTAAGGCA
GCACAGACTGCCAAGTACTGTTTTTTTTAACCGACTGAAATCACTTTGGGATATTTTTTCCTGCAACACTGGAAA
GTTTTAGTTTTTTAAGAAGTACTCATGCAGATATATATATATATATTTTTCCCAGTCCTTTTTTTAAGAGACGGT
CTTTATTGGGTCTGCACCTCCATCCTTGATCTTGTTAGCAATGCTGTTTTTGCTGTTAGTCGGGTTAGAGTTGGC
TCTACGCGAGGTTTGTTAATAAAAGTTTGTTAAAAGTTTAAAAAAAAAAAAAAAAA

FIGURE 732

MIGQKTLYSFFSPSPARKRHAPSPEPAVQGTGVAGVPEESGDAAAIPAKKAPAGQEEPGTPPSSPLSAEQLDRIQ
RNKAAALLRLAARNVPVGFGESWKKHLSGEFGKPYFIKLMGFVAEERKHYTVYPPPHQVFTWTQMCDIKDVKVVI
LGQDPYHGPNQAHGLCFSVQRPVPPPPSLENIYKELSTDIEDFVHPGHGDLSGWAKQGVLLLNAVLTVRAHQANS
HKERGWEQFTDAVVSWLNQNSNGLVFLLWGSYAQKKGSAIDRKRHHVLQTAHPSPLSVYRGFFGCRHFSKTNELL
QKSGKKPIDWKEL

FIGURE 733A

GTTCTGAATGATGACTGACGCGGGTTTGGGTGATACCCCTCACAGCCCCTGTCATTCCGGAGTCATAAGGCACCC
GCGCGTCTAGCCCCAGCGCCAGGGCACGCGAGCGGCGCTGGAGGGAGGAAAGCTTCCGCCTGCGGGCCGGACAAA
AGTCCCGCCTGCCCACGGCTTTTTGCCCGCCGCTCGTGACCGAGACGCCTCGCCGCGGCCAGCTCGCTGCTCTCG
CTGGCGGATGGTGTGTGGCCGCCGCAGGACGCCCGCCGTGCCCGGGCCATGAAGTAGCGGCTGCTGGCGGCGCCG
CTGCCCAACCGCCAGCCCCAGCCCCGCGCTGCGCTGCCCGGTCCTCTCCCGGCGGGGTCGTATCGGCGTGGACATG
GGCTGGCCGCGTCCCTAGCCTGCTAGTTCTCCTTGTTTTTCCAAGCAGCTGTTTGGCTTTCCGAAGCCCACTTTC
TGTCTTTAAGAGGTTTAAAGAAACTACCAGACCATTTTCCAATGAATGTCTTGGTACCACCAGACCCGTAGTTCC
TATTGATTCATCAGATTTTGCATTGGATATTCGCATGCCTGGGGTTACACCTAAACAGTCCGATACATACTTCTG
CATGTCTATGCGAATACCAGTGGATGAGGAAGCCTTCGTGATTGACTTCAAGCCTCGAGCCAGCATGGATACTGT
CCATCACATGTTACTTTTTGGATGCAATATGCCTTCATCCACTGGAAGTTACTGGTTTTGTGATGAAGGAACCTG
TACAGATAAAGCCAATATTCTGTATGCCTGGGCGAGAAATGCTCCCCCTACCCGGCTCCCCAAAGGTGTTGGATT
CAGAGTTGGAGGAGAGACTGGAAGTAAATACTTTGTACTACAGGTACACTATGGGGATATTAGTGCTTTTAGAGA
TAATAACAAGGACTGTTCTGGTGTGTCCTTACACCTCACACGTCTGCCACAGCCTTTAATTGCTGGCATGTACCT
TATGATGTCTGTTGACACTGTTATCCCAGCAGGAGAAAAAGTGGTGAATTCTGACATTTCATGCCATTATAAAAA
TTATCCAATGCATGTCTTTGCCTATAGAGTTCACACTCACCATTTAGGTAAGGTAGTAAGTGGATACAGAGTAAG
AAATGGACAGTGGACACTGATTGGACGGCAGAGCCCTCAGCTGCCACAGGCTTTCTACCCTGTGGGGCATCCAGT
TGATGTAAGTTTTGGTGACCTACTGGCTGCAAGATGTGTATTCACTGGTGAAGGAAGGACAGAAGCCACACACAT
TGGTGGCACGTCTAGTGATGAAATGTGCAACTTATACATTATGTATTACATGGAAGCCAAGCATGCAGTTTCTTT
CATGACCTGTACCCAGAATGTAGCTCCAGATATGTTCAGAACCATACCACCAGAGGCCAACATTCCAATTCCCGT
GAAGTCTGATATGGTTATGATGCATGAACATCATAAAGAAACAGAATATAAAGATAAGATTCCTTTACTACAGCA
GCCAAAACGAGAAGAAGAAGAAGTGTTAGACCAGGGTGATTTCTATTCACTACTTTCCAAGCTGCTAGGAGAAAG
GGAAGATGTTGTTCATGTGCACAAATATAATCCTACAGAAAAGGCAGAATCAGAGTCAGACCTGGTAGCTGAGAT
TGCAAATGTAGTCCAAAAAAAGGATCTTGGTCGATCTGATGCCAGAGAGGGTGCAGAACATGAGAGGGGTAATGC
TATTCTTGTCAGAGACAGAATTCACAAATTCCACAGACTAGTATCTACCTTGAGGCCACCAGAGAGCAGAGTTTT
CTCATTACAGCAGCCCCCACCTGGTGAAGGCACCTGGGAACCAGAACACACAGGAGATTTCCACATGGAAGAGGC
ACTGGATTGGCCTGGAGTATACTTGTTACCAGGCCAGGTTTCTGGGGTGGCTCTAGACCCTAAGAATAACCTGGT
GATTTTCCACAGAGGTGACCATGTCTGGGATGGAAACTCGTTTGACAGCAAGTTTGTTTACCAGCAAATAGGACT
CGGACCAATTGAAGAAGACACTATTCTTGTCATAGATCCAAATAATGCTGCAGTACTCCAGTCCAGTGGAAAAAA
TCTGTTTTACTTGCCACATGGCTTGAGTATAGATAAAGATGGGAATTATTGGGTCACAGACGTGGCTCTCCATCA
GGTGTTCAAACTGGATCCAAACAATAAAGAAGGCCCTGTATTAATCCTGGGAAGGAGCATGCAACCAGGCAGTGA
CCAGAATCACTTCTGTCAACCCACTGATGTGGCTGTGGATCCAGGCACTGGAGCCATTTATGTATCAGATGGTTA
CTGCAACAGCAGGATTGTGCAGTTTTCACCAAGTGGAAAGTTCATCACACAGTGGGGAGAAGAGTCTTCAGGGAG
CAGTCCTCTGCCAGGCCAGTTCACTGTTCCTCACAGCTTGGCTCTTGTGCCTCTTTTGGGCCAATTATGTGTGGC
AGACCGGGAAAATGGTCGGATCCAGTGTTTTAAAACTGACACCAAAGAATTTGTGAGAGAGATTAAGCATTCATC
ATTTGGAAGAAATGTATTTGCAATTTCATATATACCAGGCTTGCTCTTTGCAGTGAATGGGAAGCCTCATTTTGG
GGACCAAGAACCTGTACAAGGATTTGTGATGAACTTTTCCAATGGGGAAATTATAGACATCTTCAAGCCAGTGCG
CAAGCACTTTGATATGCCTCATGATATTGTTGCATCTGAAGATGGGACTGTGTACATTGGAGATGCTCATACCAA
CACCGTGTGGAAGTTCACCTTGACTGAGAAATTGGAACATCGATCAGTTAAAAAGGCTGGCATTGAGGTCCAGGA
AATCAAAGAAGCCGAGGCAGTTGTTGAAACCAAAATGGAGAACAAACCCACCTCCTCAGAATTGCAGAAGATGCA
AGAGAAACAGAAACTGATCAAAGAGCCAGGCTCGGGAGTGCCTGTTGTTCTCATTACAACCCTTCTGGTTATTCC
GGTGGTTGTCCTGCTGGCCATTGCCATATTTATTCGGTGGAAAAAATCAAGGGCCTTTGGAGCAGATTCTGAACA
CAAACTCGAGACGAGTTCAGGAAGAGTACTGGGAAGATTTAGAGGAAAGGGAAGTGGAGGCTTAAACCTTGGTAA
TTTCTTTGCAAGCCGTAAGGGCTACAGTCGAAAAGGGTTTGACCGGCTTAGCACTGAGGGCAGTGACCAAGAGAA
AGAGGATGATGGAAGTGAATCAGAAGAGGAGTATTCAGCACCTCTGCCTGCGCTCGCACCTTCCTCCTCCTGAAA
ACCAAGCTTTGATTTAGATTGAGTAAGATTTACCCAGAATGTCAGATTCCTTTCCCTTTAGCACGTTTAAAGTTC
TGTGTATTTAATTGTAAACTGTACTAGTCTGTGTGGGACTGTACACACTTTATTTACTTCGTTTTGGTTAAGTTG
GCTTCTGTTTCTAGTTGAGGAGTTTCCTAAAAGTTCATAACAGTGCCATTGTCTTTATATGAACATAGACTAGAG
AAACCGTCCTCTTTTTCCATCATAATTCTAATCTAACAATGGAAGATTTGCCCATTTACACTTTTGAGACTTTTT

FIGURE 733B

GGTGGATGTAAATAACCCCATTCTTTGCTTGAACACAGTATTTTCCCAATAGCACTTTCATTGCCAGTGTCTTTC
TTTGGTGCCTTTCCTGTTCAGCATTCTTAGCCTGTGGCAGTAAAGAGAAACTTTGTGCTACATGACGACAAAGCT
GCTAAATCTCCTATTTTTTTAAAATCACTAACATTATATTGCAATGAAGGAAATAAAAAAGTCTCTATTTAAATT
CTTTTTTAAATTTTCTTCAGTTGGTGTGTTTTTGGGATGTCTTATTTTTAGATGGTTACACTGTTAGAACACTAT
TTTCAGAATCTGAATGTAATTTGTGTAATAAAGTGTTTTCAGAGCAAAAAAAAAAAAAAA

FIGURE 734

MAGRVPSLLVLLVFPSSCLAFRSPLSVFKRFKETTRPFSNECLGTTRPVVPIDSSDFALDIRMPGVTPKQSDTYF
CMSMRIPVDEEAFVIDFKPRASMDTVHHMLLFGCNMPSSTGSYWFCDEGTCTDKANILYAWARNAPPTRLPKGVG
FRVGGETGSKYFVLQVHYGDISAFRDNNKDCSGVSLHLTRLPQPLIAGMYLMMSVDTVIPAGEKVVNSDISCHYK
NYPMHVFAYRVHTHHLGKVVSGYRVRNGQWTLIGRQSPQLPQAFYPVGHPVDVSFGDLLAARCVFTGEGRTEATH
IGGTSSDEMCNLYIMYYMEAKHAVSFMTCTQNVAPDMFRTIPPEANIPIPVKSDMVMMHEHHKETEYKDKIPLLQ
QPKREEEEVLDQGDFYSLLSKLLGEREDVVHVHKYNPTEKAESESDLVAEIANVVQKKDLGRSDAREGAEHERGN
AILVRDRIHKFHRLVSTLRPPESRVFSLQQPPPGEGTWEPEHTGDFHMEEALDWPGVYLLPGQVSGVALDPKNNL
VIFHRGDHVWDGNSFDSKFVYQQIGLGPIEEDTILVIDPNNAAVLQSSGKNLFYLPHGLSIDKDGNYWVTDVALH
QVFKLDPNNKEGPVLILGRSMQPGSDQNHFCQPTDVAVDPGTGAIYVSDGYCNSRIVQFSPSGKFITQWGEESSG
SSPLPGQFTVPHSLALVPLLGQLCVADRENGRIQCFKTDTKEFVREIKHSSFGRNVFAISYIPGLLFAVNGKPHF
GDQEPVQGFVMNFSNGEIIDIFKPVRKHFDMPHDIVASEDGTVYIGDAHTNTVWKFTLTEKLEHRSVKKAGIEVQ
EIKEAEAVVETKMENKPTSSELQKMQEKQKLIKEPGSGVPVVLITTLLVIPVVVLLAIAIFIRWKKSRAFGADSE
HKLETSSGRVLGRFRGKGSGGLNLGNFFASRKGYSRKGFDRLSTEGSDQEKEDDGSESEEEYSAPLPALAPSSS

FIGURE 735

ACTTACTGCGGGACGGCCTTGGAGAGTACTCGGGTTCGTGAACTTCCCGGAGGCGCAATGAGCTGCATTAACCTG
CCCACTGTGCTGCCCGGCTCCCCCAGCAAGACCCGGGGGCAGATCCAGGTGATTCTCGGGCCGATGTTCTCAGGA
AAAAGCACAGAGTTGATGAGACGCGTCCGTCGCTTCCAGATTGCTCAGTACAAGTGCCTGGTGATCAAGTATGCC
AAAGACACTCGCTACAGCAGCAGCTTCTGCACACATGACCGGAACACCATGGAGGCGCTGCCCGCCTGCCTGCTC
CGAGACGTGGCCCAGGAGGCCCTGGGCGTGGCTGTCATAGGCATCGACGAGGGGCAGTTTTTCCCTGACATCATG
GAGTTCTGCGAGGCCATGGCCAACGCCGGGAAGACCGTAATTGTGGCTGCACTGGATGGGACCTTCCAGAGGAAG
CCATTTGGGGCCATCCTGAACCTGGTGCCGCTGGCCGAGAGCGTGGTGAAGCTGACGGCGGTGTGCATGGAGTGC
TTCCGGGAAGCCGCCTATACCAAGAGGCTCGGCACAGAGAAGGAGGTCGAGGTGATTGGGGGAGCAGACAAGTAC
CACTCCGTGTGTCGGCTCTGCTACTTCAAGAAGGCCTCAGGCCAGCCTGCCGGGCCGGACAACAAAGAGAACTGC
CCAGTGCCAGGAAAGCCAGGGGAAGCCGTGGCTGCCAGGAAGCTCTTTGCCCCACAGCAGATTCTGCAATGCAGC
CCTGCCAACTGAGGGACCTGCAAGGGCCGCCCGCTCCCTTCCTGCCACTGCCGCCTACTGGACGCTGCCCTGCAT
GCTGCCCAGCCACTCCAGGAGGAAGTCGGGAGGCGTGGAGGGTGACCACACCTTGGCCTTCTGGGAACTCTCCTT
TGTGTGGCTGCCCCACCTGCCGCATGCTCCCTCCTCTCCTACCCACTGGTCTGCTTAAAGCTTCCCTCTCAGCTG
CTGGGACGATCGCCCAGGCTGGAGCTGGCCCCGCTTGGTGGCCTGGGATCTGGCACACTCCCTCTCCTTGGGGTG
AGGGACAGAGCCCCACGCTGTTGACATCAGCCTGCTTCTTCCCCTCTGCGGCTTTCACTGCTGAGTTTCTGTTCT
CCCTGGGAAGCCTGTGCCAGCACCTTTGAGCCTTGGCCCACACTGAGGCTTAGGCCTCTCTGCCTGGGATGGGCT
CCCACCCTCCCCTGAGGATGGCCTGGATTCACGCCCTCTTGTTTCCTTTTGGGCTCAAAGCCCTTCCTACCTCTG
GTGATGGTTTCCACAGGAACAACAGCATCTTTCACCAAGATGGGTGGCACCAACCTTGCTGGGACTTGGATCCCA
GGGGCTTATCTCTTCAAGTGTGGAGAGGGCAGGGTCCACGCCTCTGCTGTAGCTTATGAAATTAACTAATT

FIGURE 736

MSCINLPTVLPGSPSKTRGQIQVILGPMFSGKSTELMRRVRRFQIAQYKCLVIKYAKDTRYSSSFCTHDRNTMEA
LPACLLRDVAQEALGVAVIGIDEGQFFPDIMEFCEAMANAGKTVIVAALDGTFQRKPFGAILNLVPLAESVVKLT
AVCMECFREAAYTKRLGTEKEVEVIGGADKYHSVCRLCYFKKASGQPAGPDNKENCPVPGKPGEAVAARKLFAPQ
QILQCSPAN

FIGURE 737

ACCGCCGACGCAGACCCCTCTCTGCACGCCAGCCCGCCCGCACCCACC**ATG**GCCACAGTTCAGCAGCTGGAAGGA
AGATGGCGCCTGGTGGACAGCAAAGGCTTTGATGAATACATGAAGGAGCTAGGAGTGGGAATAGCTTTGCGAAAA
ATGGGCGCAATGGCCAAGCCAGATTGTATCATCACTTGTGATGGTAAAAACCTCACCATAAAAACTGAGAGCACT
TTGAAAACAACACAGTTTTCTTGTACCCTGGGAGAGAAGTTTGAAGAAACCACAGCTGATGGCAGAAAAACTCAG
ACTGTCTGCAACTTTACAGATGGTGCATTGGTTCAGCATCAGGAGTGGGATGGGAAGGAAAGCACAATAACAAGA
AAATTGAAAGATGGGAAATTAGTGGTGGAGTGTGTCATGAACAATGTCACCTGTACTCGGATCTATGAAAAAGTA
GAA**TAA**AAATTCCATCATCACTTTGGACAGGAGTTAATTAAGAGAATGACCAAGCTCAGTTCAATGAGCAAATCT
CCATACTGTTTCTTTCTTTTTTTTTCATTACTGTGTTCAATTATCTTTATCATAAACATTTTACATGCAGCTAT
TTCAAAGTGTGTTGGATTAATTAGGATCATCCCTTTGGTTAATAAATAAATGTGTTTGTGCT

FIGURE 738

MATVQQLEGRWRLVDSKGFDEYMKELGVGIALRKMGAMAKPDCIITCDGKNLTIKTESTLKTTQFSCTLGEKFEE
TTADGRKTQTVCNFTDGALVQHQEWDGKESTITRKLKDGKLVVECVMNNVTCTRIYEKVE

FIGURE 739

TGGCCGAAGCAGGGGGACAGCAAGGGACGCTCAGGCGGGGACCATGGCGGACGGCGGCTCGGAGCGGGCTGACGG
GCGCATCGTCAAGATGGAGGTGGACTACAGCGCCACGGTGGATCAGCGCCTACCCGAGTGTGCGAAGCTAGCCAA
GGAAGGAAGACTTCAAGAAGTCATTGAAACCCTTCTCTCTCTGGAAAAGCAGACTCGTACTGCTTCCGATATGGT
ATCGACATCCCGTATCTTAGTTGCAGTAGTGAAGATGTGCTATGAGGCTAAAGAATGGGATTTACTTAATGAAAA
TATTATGCTTTTGTCCAAAAGGCGGAGTCAGTTAAAACAAGCTGTTGCCAAAATGGTTCAACAGTGCTGTACTTA
TGTTGAGGAAATCACAGACCTTCCTATCAAACTTCGATTAATTGATACTCTACGAATGGTTACCGAAGGCAAGAT
TTATGTTGAAATTGAGCGTGCGCGACTGACTAAAACATTAGCAACTATAAAAGAACAAAATGGTGATGTGAAAGA
GGCAGCCTCCATTTTACAGGAGTTACAGGTGGAAACCTACGGGTCAATGGAAAAGAAAGAGCGAGTGGAATTTAT
TTTGGAGCAAATGAGGCTCTGCCTAGCTGTGAAGGATTACATTCGAACACAAATCATCAGCAAGAAAATTAACAC
CAAATTTTTCCAGGAAGAAAATACAGAGAAATTAAAGTTGAAGTACTATAATTTAATGATTCAGCTGGATCAACA
TGAGGGATCCTATTTGTCTATTTGTAAGCACTACAGAGCAATATATGATACTCCCTGTATACAGGCAGAAAGTGA
AAAATGGCAGCAGGCTCTGAAGAGTGTTGTACTCTATGTTATCCTGGCTCCTTTTGACAATGAACAGTCAGATTT
GGTTCACCGAATAAGTGGTGACAAGAAGTTAGAAGAAATTCCCAAATACAAGGATCTTTTAAAGCTTTTTACCAC
AATGGAGTTGATGCGTTGGTCCACACTTGTTGAGGACTATGGAATGGAATTAAGAAAAGGTTCCCTTGAGAGTCC
TGCAACGGATGTTTTTGGTTCTACAGAGGAAGGTGAAAAAAGGTGGAAAGACTTGAAGAACAGAGTTGTTGAACA
TAATATTAGAATAATGGCCAAGTATTATACTCGGATAACAATGAAAAGGATGGCACAGCTTCTGGATCTATCTGT
TGATGAGTCCGAAGCCTTTCTCTCAAATCTAGTAGTTAACAAGACCATCTTTGCTAAAGTAGACAGATTAGCAGG
AATTATCAACTTCCAGAGACCCAAGGATCCAAATAATTTATTAAATGACTGGTCTCAGAAACTGAACTCATTAAT
GTCTCTGGTTAACAAAACTACGCATCTCATAGCCAAAGAGGAGATGATACATAATCTACAATAAGGGTCTTAGTG
CTTTAGAAAAAAGTTAAAATTGGAAGTCATTAAAAAAAGACTGTTATAATGGTGTATATGTTGGGGTTTTTTTTC
TAAGCTTCTTTGTCTTAAATTTTAAAATAGTGAATATGTTTGAGACTCCCTTTGACCTTTCAGTTCCCCAAGTTC
ATTGTTAACTTTGCATTTGCAATTGGTGCAAAAATACAGATTTCTGTCGTCTGAATACACAAAAAGTTGTGTCAT
AACTTACCCAGATATGTTTTTCTATCATTTGAAACCTTTTTAGCTACTGTTTGTTTTCATTCAACTAACAAACAT
ATTCCAATAATAAAAGCAGTATATACATATTTCCTTTCTACAGTTACCTCTGATTCTCAACATTTTGTGGGGTAG
TGATTTGGCAAGTGTTTTTTAAATAAAACAAATCTCATTGTAAAGTTATCAGTCATTTAGTAGAATAGAAAAGCA
ACATAGAGCATACAAGAACATTTGGGATAGAGTTGTGATTTGTGAAGAATTTGTACTTTGATATTGTGGCGGAAA
GTCTAGACTGAGTGTGTATGCTGGTAAACTGTAGACTTTTTTTTTTTTTTTTGAGTCCGGCTGGTTCCAATCACA
GTAGCTTGATTGCTTTCAGCCCTCATCCTCTCACTTGATCAGTTGTTCAACAGAATCAGCTGACATAATTGACAC
AGTTTATTGGGTGTTAAGTCCGCTCTATAGGGATAGTGACTACTTTTTTTTTTTTTTTTTTTGCTCTTCTTC
CTCTCCCCTTTCTTTATATGGGTTTAAATTTAACATAAAGTTGTTTTTATAAGGCTTATTTGTGGCTTTAACTTG
TAAGTCTGATTACATCATTATTGTTCCAAATTCATTATCTCTGTAGGAACTTTTAGTTCCATTATATGAACACTG
GATAACCTAATTTTTTTTAATGCTTTAAAAAAATGGCAAAAAGACGTCAGGCCACCCTCATAGTAAGTGGTGTAG
TATTAAAATATTTTCACGGAATTAAAAGTAGCTTGCTGTCAAAGAAACACCTGAGATGAATTGGTGTGAACGAAT
TTTGCAAGTTTAATTTGATTTATTTCAGAGAAAATAGAAAAAACAATGTTAGAAGGTTATTTAAAATGATACTTA
AATAAAGAAAGTGTGAGGTCTACTTTAAAAAAATTCAAATGAAGAGAAAAAGAAAAACAGCATTCTAGAAATGGC
ATTTCTCCTAATTAATTTTCCACTTAATGGAAGATTATCAATTGTCCTATTTTATGATCCCAGGACTGAAGACAG
TTGTGGGATATCTGTCATATTTATCCTGTGAGTCATTGTGAATAATGACATACAGTACTGAAGTAATCTGATTTT
ATTCTTTGGAAATTCAATGCATTGGTCACACTAATAACATCAACATCTGCTATCACTTATCTTTTTAAAACTAAC
CAAAAAAGGCTGGGATTACAGGCATGAGCCACTGCACCCAACTCCTCTTTCGTCTTTCTTTAACACACACTAGGC
TCTTTGTGTATTATGATTCAGTGCTATTTGTAACTGTGTCCCAGTGACCAAATTGCACTCGACTCGATCAGCTGT
TCATCCATTTCGTGTTTTTTCCTGTCAAACATTAATCCAGCAAATATATGAGGTATTTACCAATTTATTTTCTTA
GTATTACAAAATAATTCATTAGCATAAAGTACAATAGTGAAATATTTGAGTTGTTCGGAACCTCAATTAATCCTG
TTTTACATTTCAGACCTAAAGCTGGCAATCAGGAGAAGAAGCACTTTGTTTTAAATGTGGAGAAGATAACACTTG
ATTCCATTTCATTGTCATTAGTGTATTAACCAGCAGGAGAGGTGATGAGCCATTTTTCAAATGAAATACCTTTTA
TTTCCATATAATTTTTTTATTTTAGAGTTCAATAGCTGTTTCTATGATTATCCTCAATTTCCATATGTTACTGAA
TCTGAAAAACATCTTTAAAATTCAAACAGTTCCATTTTCTCTCTTGTAAGTGTTAAATGTGATAAAAGTACATAT
TTTAAATTGTTTTCAGCTCTTGGATATAGCAGCAATAAAAACACTAATTTGTGGGTATTTAAGAAAACCTGGAGA
ATAAACTCATACTTTAAAAGATC

FIGURE 740

MADGGSERADGRIVKMEVDYSATVDQRLPECAKLAKEGRLQEVIETLLSLEKQTRTASDMVSTSRILVAVVKMCY
EAKEWDLLNENIMLLSKRRSQLKQAVAKMVQQCCTYVEEITDLPIKLRLIDTLRMVTEGKIYVEIERARLTKTLA
TIKEQNGDVKEAASILQELQVETYGSMEKKERVEFILEQMRLCLAVKDYIRTQIISKKINTKFFQEENTEKLKLK
YYNLMIQLDQHEGSYLSICKHYRAIYDTPCIQAESEKWQQALKSVVLYVILAPFDNEQSDLVHRISGDKKLEEIP
KYKDLLKLFTTMELMRWSTLVEDYGMELRKGSLESPATDVFGSTEEGEKRWKDLKNRVVEHNIRIMAKYYTRITM
KRMAQLLDLSVDESEAFLSNLVVNKTIFAKVDRLAGIINFQRPKDPNNLLNDWSQKLNSLMSLVNKTTHLIAKEE
MIHNLQ

FIGURE 741A

TGCAACTCCGAGCGTGAGTCCAGGCTAAGGGGACGCCGGCCGGGGAAGAGGCGCGGCGGGAGAAGCGACCGCAGC
GGGAGCCCGGCCACCGAGGGCTGCCGGCACTAGGCGCAGAGCCGCCAGCGCTCGGAAGCCCGCGGGGTGCGGGAG
CGGGAACAGACTTCTTTTGTAGAATTATCCTATGGAATGATATTTTCATA**ATG**AGTCAACAAGGTTACGTGGCTA
CACCTCCGTATTCTCAGCCTCAGCCTGGAATAGGCCTTTCTCCACCTCATTATGGGCACTATGGGGATCCGTCGC
ACACAGCATCTCCAACAGGTATGATGAAGCCAGCAGGGCCTTTGGGGGCCACCGCCACTAGGGGAATGTTGCCTC
CGGGTCCCCCACCTCCTGGACCCCATCAGTTTGGTCAGAATGGAGCTCATGCCACTGGTCACCCTCCCCAAAGAT
TTCCAGGCCCTCCACCTGTCAACAATGTGGCATCCTCACATGCACCATACCAACCCTCTGCACAATCTTCTTATC
CAGGTCCTATATCCACTTCATCTGTCACCCAGCTGGGCAGCCAGCTCAGTGCTATGCAAATCAACAGCTATGGTT
CAGGCATGGCTCCTCCAAGCCAGGGACCCCCTGGCCCTCTGTCAGCCACATCATTGCAGACTCCTCCACGACCTC
CACAGCCTTCCATTTTGCAGCCTGGATCTCAAGTTCTTCCACCACCACCCACCACACTCAATGGTCCTGGTGCCT
CACCTTTGCCTCTACCAATGTACAGACCAGATGGGCTCTCTGGGCCTCCTCCTCCAAATGCCCAGTACCAGCCCC
CACCTCTTCCAGGCCAGACCTTGGGTGCTGGATATCCTCCGCAGCAGGCCAACTCTGGTCCCCAGATGGCAGGCG
CACAACTGTCTTACCCAGGAGGCTTCCCTGGAGGTCCTGCACAGATGGCTGGTCCGCCACAGCCCCAGAAGAAGC
TGGATCCTGACTCTATCCCTAGCCCAATCCAGGTGATTGAGAATGATAGAGCCAGCAGAGGAGGACAAGTTTATG
CCACCAACACCAGAGGCCAGATCCCTCCCCTGGTCACTACAGATTGCATGATACAAGACCAAGGAAATGCCAGTC
CTCGATTCATCCGTTGTACAACATACTGTTTTCCATGCACGTCAGATATGGCTAAGCAAGCTCAGATTCCATTAG
CTGCTGTCATCAAGCCCTTTGCCACCATTCCTTCAAATGAGAGTCCCCTTTACTTGGTAAATCACGGCGAGAGTG
GACCAGTCAGATGCAACAGGTGCAAGGCCTACATGTGCCCATTTATGCAGTTCATCGAAGGAGGAAGGAGATATC
AGTGTGGATTTTGCAACTGTGTGAATGATGTTCCACCATTCTATTTCCAACATCTGGACCACATTGGAAGAAGAC
TGGACCACTATGAGAAACCAGAGTTATCTCTAGGATCTTATGAATATGTTGCCACTTTGGATTATTGCAGAAAGA
GTAAGCCTCCCAACCCACCAGCCTTTATCTTCATGATTGATGTTTCATATAGTAACATAAAGAATGGACTTGTCA
AGCTCATATGTGAAGAACTGAAGACCATGCTGGAAAAAATTCCAAAGGAAGAGCAAGAAGAGACGTCTGCAATTC
GAGTGGGTTTTATCACATATAACAAAGTTCTCCATTTCTTTAATGTGAAGAGTAATCTGGCCCAGCCTCAGATGA
TGGTGGTGACTGATGTTGGAGAAGTCTTTGTTCCTTTGTTGGATGGTTTCCTTGTCAACTATCAAGAATCCCAAT
CTGTGATTCATAATTTGTTGGACCAGATTCCAGACATGTTTGCAGACTCTAATGAAAATGAGACTGTCTTTGCTT
CTGTCATCCAGGCTGGCATGGAAGCACTAAAGGCAGCAGACTGTCCTGGGAAGCTGTTCATCTTCCATTCTTCCT
TGCCAACTGCTGAAGCACCAGGGAAGCTCAAAAACAGAGATGACAAAAAACTGGTTAATACAGACAAAGAGAAGA
TACTTTTCCAGCCCCAAACAAATGTCTATGACTCATTGGCCAAGGACTGCGTGGCTCACGGCTGCTCTGTGACAC
TCTTCCTCTTTCCTAGTCAGTATGTGGACGTGGCCTCGCTGGGGCTGGTTCCTCAGCTCACTGGAGGAACCCTTT
ACAAATACAACAATTTCCAGATGCACTTGGATAGACAACAATTTTTGAACGACCTCAGAAATGATATTGAAAAGA
AAATAGGCTTTGATGCTATTATGAGGGTTCGTACCAGCACAGGTTTCAGAGCCACTGATTTCTTTGGTGGAATCT
TGATGAACAACACCACCGATGTAGAAATGGCTGCCATCGATTGTGACAAGGCAGTGACCGTGGAGTTCAAGCACG
ATGACAAACTCAGTGAAGACAGTGGAGCCTTAATCCAGTGTGCTGTGCTTTACACGACAATCAGTGGTCAAAGAA
GACTTCGGATTCACAATCTTGGCTTAAACTGCAGCTCTCAGCTAGCTGATCTTTATAAGAGCTGTGAGACAGATG
CTCTTATCAACTTCTTTGCCAAGTCAGCTTTTAAAGCAGTTCTCCACCAGCCTTTGAAGGTCATCCGGGAAATTC
TAGTTAATCAGACTGCCCATATGTTGGCATGTTACCGGAAGAATTGTGCAAGTCCTTCTGCAGCAAGCCAGCTTA
TTCTACCAGATTCCATGAAAGTATTGCCAGTGTACATGAATTGCTTGTTGAAAAACTGTGTACTACTCAGCAGAC
CAGAGATCTCAACTGATGAACGAGCATACCAGAGACAGCTGGTCATGACCATGGGTGTGGCTGACTCTCAGCTTT
TCTTCTACCCACAACTTCTGCCCATACACACGTTAGATGTCAAGAGTACAATGTTACCTGCTGCCGTTCGTTGCT
CTGAGTCCCGTCTTTCAGAAGAAGGAATATTCTTACTGGCTAATGGTCTACACATGTTCCTGTGGTTGGGAGTAA
GCAGCCCACCAGAACTGATCCAAGGAATATTTAATGTGCCATCTTTTGCACATATCAACACAGATATGACATTGC
TGCCTGAAGTGGGAAACCCATACTCTCAACAACTCAGAATGATAATGGGTATTATCCAACAAAAGAGGCCATATT
CAATGAAGCTCACAATTGTAAAGCAGCGAGAACAACCAGAAATGGTTTTCCGACAGTTCCTGGTAGAAGACAAAG
GACTTTACGGAGGCTCTTCTTATGTGGATTTCCTTTGTTGTGTTCACAAGGAGATCTGTCAGCTGCTTAAT**TAA**T
TGAAACTTCTCTGTCATTGATGTTGCATTTCCAAGGAGATAATCTCCTTCTTGGTGCCTAATTTTCTAGATGATA
ATAGGCTAGTTTTGATTTCTTGCTCATTTTCAGAATAACTTTCCAGGAAGAGATGGCATTTAGAACTTCAGCTTT
GGTGCTCAGGTATAAAGCCAATTAAGGTACAATTGTACCATAAAGGGAACAATCTGTTTCTGATTGCACAGTTTC
TAATTTTTAAAACTGATGTGGTTTGCATTTCATAAAAGGCAAAGTTTACAGAACCATAAACATTCTCAATTTTCT

FIGURE 741B

TTATGCTAGACATATAAATTATTTTTCAAACTGTATAGATTTGGGGTAAAAAGTTGTCTCAGTTCCTCTCCCAAT
TGCAATGAGAAAAAAAAGCTTAATTTTTACATTATACTTAATTTTCTAAAACCATGTAACTCCATTGAACATTTT
TCAACTTAAGGTCTGCATAGCAGACTTTTAATAACCTTGGGATTTATCTGGTAGAACAATATGTGTTCTACATTT
TTTTCATAATTATATATTGTGTATGTTAAAACTATTTTCCAGTTGTTTTGTCTGTAAAACTGTCTTTATCAATAT
GCTTAATGGTTCTTTGTACAATTTTGAAAGTTTCTACCTGTATATAATGGATGTTAACCAGTATCAATAAATCAC
TTCGTATAATCTT

FIGURE 742

MSQQGYVATPPYSQPQPGIGLSPPHYGHYGDPSHTASPTGMMKPAGPLGATATRGMLPPGPPPPGPHQFGQNGAH
ATGHPPQRFPGPPPVNNVASSHAPYQPSAQSSYPGPISTSSVTQLGSQLSAMQINSYGSGMAPPSQGPPGPLSAT
SLQTPPRPPQPSILQPGSQVLPPPPTTLNGPGASPLPLPMYRPDGLSGPPPPNAQYQPPPLPGQTLGAGYPPQQA
NSGPQMAGAQLSYPGGFPGGPAQMAGPPQPQKKLDPDSIPSPIQVIENDRASRGGQVYATNTRGQIPPLVTTDCM
IQDQGNASPRFIRCTTYCFPCTSDMAKQAQIPLAAVIKPFATIPSNESPLYLVNHGESGPVRCNRCKAYMCPFMQ
FIEGGRRYQCGFCNCVNDVPPFYFQHLDHIGRRLDHYEKPELSLGSYEYVATLDYCRKSKPPNPPAFIFMIDVSY
SNIKNGLVKLICEELKTMLEKIPKEEQEETSAIRVGFITYNKVLHFFNVKSNLAQPQMMVVTDVGEVFVPLLDGF
LVNYQESQSVIHNLLDQIPDMFADSNENETVFASVIQAGMEALKAADCPGKLFIFHSSLPTAEAPGKLKNRDDKK
LVNTDKEKILFQPQTNVYDSLAKDCVAHGCSVTLFLFPSQYVDVASLGLVPQLTGGTLYKYNNFQMHLDRQQFLN
DLRNDIEKKIGFDAIMRVRTSTGFRATDFFGGILMNNTTDVEMAAIDCDKAVTVEFKHDDKLSEDSGALIQCAVL
YTTISGQRRLRIHNLGLNCSSQLADLYKSCETDALINFFAKSAFKAVLHQPLKVIREILVNQTAHMLACYRKNCA
SPSAASQLILPDSMKVLPVYMNCLLKNCVLLSRPEISTDERAYQRQLVMTMGVADSQLFFYPQLLPIHTLDVKST
MLPAAVRCSESRLSEEGIFLLANGLHMFLWLGVSSPPELIQGIFNVPSFAHINTDMTLLPEVGNPYSQQLRMIMG
IIQQKRPYSMKLTIVKQREQPEMVFRQFLVEDKGLYGGSSYVDFLCCVHKEICQLLN

FIGURE 743

CGTCCGTGACAAGATGAAGCTCATCATCCTGGAGCACTATTCTCAGGCGAGCGAGTGGGCGGCTAAATACATCAG
GAACCGTATCATCCAGTTTAACCCAGGGCCAGAGAAGTACTTCACCCTGGGGCTCCCCACTGGGAGTACCCCACT
TGGCTGCTACAAGAAGCTGATTGAATACTATAAGAATGGGGACCTGTCCTTTAAATATGTGAAGACCTTCAACAT
GGATGAGTACGTGGGCCTTCCTCGAGACCACCCGGAGAGTTACCACTCCTTCATGTGGAACAACTTCTTCAAGCA
CATTGACATCCACCCAGAAAACACCCACATTCTGGATGGGAATGCAGTCGACCTACAGGCAGAATGTGATGCCTT
TGAAGAGAAGATCAAGGCTGCAGGTGGGATCGAGCTATTTGTTGGAGGCATCGGCCCTGATGGACACATTGCCTT
CAACGAGCCAGGCTCCAGTCTGGTGTCCAGGACCCGTGTGAAGACGCTGGCCATGGATACCATCCTGGCCAATGC
TAGGTTCTTCGATGGAGAACTCACCAAGGTGCCCACCATGGCCTTGACGGTGGGGGTGGGCACTGTCATGGATGC
TAGAGAGGTGATGATCCTTATCACAGGTGCTCACAAGGCATTTGCTCTGTACAAGGCCATCGAGGAGGGAGTGAA
CCACATGTGGACCGTGTCTGCCTTCCAGCAGCATCCCCGCACCGTGTTTGTGTGTGACGAGGATGCCACCTTGGA
GCTGAAAGTGAAGACTGTCAAGTATTTCAAAGGTTTAATGCTTGTTCATAACAAGTTGGTGGACCCCTTGTACAG
TATCAAAGAGAAAGAAACTGAGAAAAGCCAATCTTCGAAGAAACCATACAGCGATTAGCCTGTGCTGGGACCTAG
TGTCAAGTACCCATAGGGAAAGGCAGGTCTTTCTGGAAATTGTCTTTAGAAGAAAGAATTGTATTTCTTTAATCT
AGTATGGTTACTCCAGATAAGTGGGTGAACTTATTGTTCTTGGCCATGAGGCTGGGAGCCTAGTCACGGAGTTTA
GCTATAGGGAGAATGTTTGTAACTTAATCAGAAAAAAAATATCTGCAAAATGTACTCCATCATTTTGATGTCTGC
CAAACCCAGGTTGGGAGTTTTAAACTTTTTGTTCTGCTTCAGCCATGGTTCACACATATGACACACTCCCGTCAG
GAATTTCTCTCCTTACACGCACTGATTTTCAAGTGGGAGGGAATTAGGGGCTTATGTATATTGGATACCACCTCT
TGAGAGTCCTTCTTGCACAGGCCTGCCCCTTGGTTGAGAACCATTGTTCCAAGTGAAGGCACAAACTCTCAATAT
CTAAAATAAGTGCAAGGAAGCAGTCTCTTTGGTCAGTAACAAGTGCAATGGAAAGAAAACGATCCCTTCCTTCTT
CCACTTTCACAGCTTTTCTCTGAACTAGGAGAACCTGGGGGTGGATTTGGGTGGGTGGGGCCAAAGAGGAGGCTT
CTATTGATAAATCCAGAGCCTCAAGGGGCCCAGCCACGTCAAACTTCTCTCCCTCAGGGACTCTCCAGCACCAAA
AGGCAGAAGGTGGAAGCCGTTTTTCCCCCAGAGCCCTGTGTTTTTGTGAAAGGCCTCACTGTGGCTCCTCTGTTT
TACATACTCATTAGTAAGTGGGAGGTCCACTGGGGCAACAGACACTGCCACAATTTCAGTGTTGTGTTCAGCCAA
GGGGACGGTCTGGACAGGCAGCTTAAGTGTGAGTTTAGTCACAACTCCTGAGTGTCCCGCTCTCCTGCTTACCTA
GGAGGTGAGTGCCAGGAAAATACACCAAATGCTTCTAGTATTGTTTCCCCACTTAAAATAGTCCTGCTTAAATTC
ACATGGTGTGGTCTGATGTTCTGAGAGCATCAGGAAATACAACCCTTTTGCCCATTTACCCTTCTCCCCGGATCC
CAAGGTGGTCTGTTGCTCTGGCTTCCTTTCATTGTCTTAGGCCTTCATGGAGTGGATGCTGCCTCCTCCTGGCTG
TTTTTGTGCCTGTTTGAAGCTACTGCTGCCTCCATTTCTGGGAAAGACCTTTGAGAGCCTAGCCCAGGCCTAAGG
GCTATGTTTGGTACCAGTGTTTTGTCTTTAGCTTTTCTATGTGATTGTGCCGTCATTCTGTTTTAAGCTCATGGA
TCAATGGATTTGTTTACAATGTGATATTTTCTATTAAATCCAGTATTTTCAAAAAAAAAAAAAA

FIGURE 744

MKLIILEHYSQASEWAAKYIRNRIIQFNPGPEKYFTLGLPTGSTPLGCYKKLIEYYKNGDLSFKYVKTFNMDEYV
GLPRDHPESYHSFMWNNFFKHIDIHPENTHILDGNAVDLQAECDAFEEKIKAAGGIELFVGGIGPDGHIAFNEPG
SSLVSRTRVKTLAMDTILANARFFDGELTKVPTMALTVGVGTVMDAREVMILITGAHKAFALYKAIEEGVNHMWT
VSAFQQHPRTVFVCDEDATLELKVKTVKYFKGLMLVHNKLVDPLYSIKEKETEKSQSSKKPYSD

FIGURE 745

AAAACAGCCGGGGCTCCAGCGGGAGAACGATAATGCAAAGTGCTATGTTCTTGGCTGTTCAACACGACTGCAGAC
CCATGGACAAGAGCGCAGGCAGTGGCCACAAGAGCGAGGAGAAGCGAGAAAAGATGAAACGGACCCTTTTAAAAG
ATTGGAAGACCCGTTTGAGCTACTTCTTACAAAATTCCTCTACTCCTGGGAAGCCCAAAACCGGCAAAAAAAGCA
AACAGCAAGCTTTCATCAAGCCTTCTCCTGAGGAAGCACAGCTGTGGTCAGAAGCATTTGACGAGCTGCTAGCCA
GCAAATATGGTCTTGCTGCATTCAGGGCTTTTTTAAAGTCGGAATTCTGTGAAGAAAATATTGAATTCTGGCTGG
CCTGTGAAGACTTCAAAAAAACCAAATCACCCCAAAAGCTGTCCTCAAAAGCAAGGAAAATATATACTGACTTCA
TAGAAAAGGAAGCTCCAAAAGAGATAAACATAGATTTTCAAACCAAAACTCTGATTGCCCAGAATATACAAGAAG
CTACAAGTGGCTGCTTTACAACTGCCCAGAAAAGGGTATACAGCTTGATGGAGAACAACTCTTATCCTCGTTTCT
TGGAGTCAGAATTCTACCAGGACTTGTGTAAAAAGCCACAAATCACCACAGAGCCTCATGCTACATGAAATGTAA
AAGGGAGCCCAGAAATGGAGGACATTTCATTCTTTTTCCTGAGGGGAAGGACTGTGACCTGCCATAAAGACTGAC
CTTGAATTCAGCCTGGGTGTTCAGGAAACATCACTCAGAACTATTGATTCAAAGTTGGGTAGTGAATCAGGAAGC
CAGTAACTGACTAGGAGAAGCTGGTATCAGAACAGCTTCCCTCACTGTGTACAGAACGCAAGAAGGGAATAGGTG
GTCTGAACGTGGTGTCTCACTCTGAAAAGCAGGAATGTAAGATGATGAAAGAGACAATGTAATACTGTTGGTCCA
AAAGCATTTAAAATCAATAGATCTGGGATTATGTGGCCTTAGGTAGCTGGTTGTACATCTTTCCCTAAATCGATC
CATGTTACCACATAGTAGTTTTAGTTTAGGATTCAGTAACAGTGAAGTGTTTACTATGTGCAAGGGTATTGAAGT
TCTTATGACCACAGATCATCAGTACTGTTGTCTCATGTAATGCTAAAACTGAAATGGTCCGTGTTTGCATTGTTA
AAAATGATGTGTGAAATAGAATGAGTGCTATGGTGTTGAAAACTGCAGTGTCCGTTATGAGTGCCAAAAATCTGT
CTTGAAGGCAGCTACACTTTGAAGTGGTCTTTGAATACTTTTAATAAATTTATTTTGATAAATAATATTG

FIGURE 746

MQSAMFLAVQHDCRPMDKSAGSGHKSEEKREKMKRTLLKDWKTRLSYFLQNSSTPGKPKTGKKSKQQAFIKPSPE
EAQLWSEAFDELLASKYGLAAFRAFLKSEFCEENIEFWLACEDFKKTKSPQKLSSKARKIYTDFIEKEAPKEINI
DFQTKTLIAQNIQEATSGCFTTAQKRVYSLMENNSYPRFLESEFYQDLCKKPQITTEPHAT

FIGURE 747

CCGGGGCGGCGGTTGCATCAGATTCTAGGAAGTGTCTGTAGCCGCAGCTGCGGGTCCGGGATTCCCAGCCATGGC
AGATTCCTCCGGGCAGCAGGGCAAAGGCCGGCGTGTGCAGCCCCAGTGGTCCCCTCCTGCTGGGACCCAGCCATG
CAGACTCCACCTTTACAACAGCCTCACCAGGAACAAGGAAGTGTTCATACCTCAAGATGGGAAAAAGGTGACGTG
GTATTGCTGTGGGCCAACCGTCTATGACGCATCTCACATGGGGCACGCCAGGTCCTACATCTCTTTTGATATCTT
GAGAAGAGTGTTGAAGGATTACTTCAAATTTGATGTCTTTTATTGCATGAACATTACGGATATTGATGACAAGAT
CATCAAGAGGGCCCGGCAGAACCACCTGTTCGAGCAGTATCGGGAGAAGAGGCCTGAAGCGGCACAGCTCTTGGA
GGATGTTCAGGCCGCCCTGAAGCCATTTTCAGTAAAATTAAATGAGACCACGGATCCCGATAAAAAGCAGATGCT
CGAACGGATTCAGCACGCAGTGCAGCTTGCCACAGAGCCACTTGAGAAAGCTGTGCAGTCCAGACTCACGGGAGA
GGAAGTCAACAGCTGTGTGGAGGTGTTGCTGGAAGAAGCCAAGGATTTGCTCTCTGACTGGCTGGATTCTACACT
TGGCTGTGATGTCACTGACAATTCCATCTTCTCCAAGCTGCCCAAGTTCTGGGAGGGGGACTTCCACAGAGACAT
GGAAGCTCTGAATGTTCTCCCTCCAGATGTCTTAACCCGGGTTAGTGAGTATGTGCCAGAAATTGTGAACTTTGT
CCAGAAGATTGTGGACAACGGTTACGGCTATGTCTCCAATGGGTCTGTCTACTTTGATACAGCGAAGTTTGCTTC
TAGCGAGAAGCACTCCTATGGGAAGCTGGTGCCTGAGGCCGTTGGAGATCAGAAAGCCCTTCAAGAAGGGGAAGG
TGACCTGAGCATCTCTGCAGACCGCCTGAGTGAGAAGCGCTCTCCCAACGACTTTGCCTTATGGAAGGCCTCTAA
GCCCGGAGAACCGTCCTGGCCGTGCCCTTGGGGAAAGGGTCGTCCGGGCTGGCATATCGAGTGCTCGGCCATGGC
AGGCACCCTCCTAGGGGCTTCGATGGACATTCACGGAGGTGGGTTCGACCTCCGGTTCCCCCACCATGACAATGA
GCTGGCACAGTCGGAGGCCTACTTTGAAAACGACTGCTGGGTCAGGTACTTCCTGCACACAGGCCACCTGACCAT
TGCAGGCTGCAAAATGTCAAAGTCACTAAAAAACTTCATCACCATTAAAGATGCCTTGAAAAAGCACTCAGCACG
GCAGTTGCGGCTGGCCTTCCTCATGCACTCGTGGAAGGACACCCTGGACTACTCCAGCAACACCATGGAGTCAGC
GCTTCAATATGAGAAGTTCTTGAATGAGTTTTTCTTAAATGTGAAAGATATCCTTCGCGCTCCTGTTGACATCAC
TGGTCAGTTTGAGAAGTGGGGAGAAGAAGAAGCAGAACTGAATAAGAACTTTTATGACAAGAAGACAGCAATTCA
CAAAGCCCTCTGTGACAATGTTGACACCCGCACCGTCATGGAAGAGATGCGGGCCTTGGTCAGTCAGTGCAACCT
CTATATGGCAGCCCGGAAAGCCGTGAGGAAGAGGCCCAACCAGGCTCTGCTGGAGAACATCGCCCTGTACCTCAC
CCATATGCTGAAGATCTTTGGGGCCGTAGAAGAGGACAGCTCCCTGGGATTCCCGGTCGGAGGGCCTGGAACCAG
CCTCAGTCTCGAGGCCACAGTCATGCCCTACCTTCAGGTGTTATCAGAATTCCGAGAAGGAGTGCGGAAGATTGC
CCGAGAGCAAAAAGTCCCTGAGATTCTGCAGCTCAGCGATGCCCTGCGGGACAACATCCTGCCTGAGCTTGGGGT
GCGGTTTGAAGACCACGAAGGACTGCCCACAGTGGTGAAACTGGTAGACAGAAACACCTTATTAAAAGAGAGAGA
AGAAAAGAGACGGGTTGAAGAGGAGAAGAGGAAGAAGAAAGAGGAGGCGGCCCGGAGGAAACAGGAACAAGAAGC
AGCAAAGCTGGCCAAGATGAAGATTCCCCCCAGTGAGATGTTCTTGTCAGAAACCGACAAATACTCCAAGTTTGA
TGAAAATGGTCTGCCCACACATGACATGGAGGGCAAAGAGCTCAGCAAAGGGCAAGCCAAGAAGCTGAAGAAGCT
CTTCGAGGCTCAGGAGAAGCTCTACAAGGAATATCTGCAGATGGCCCAGAATGGAAGCTTCCAGTGAGGGGGCAC
AGGACTGACTTTTTAAACCATTGTGGACTAGTGGCTGCTGTCTGCCTCAGTGACAATGTCCCAGCGCTCCTATCA
TGTTTACAGTCACCCTTGGGTCCTAAATTAAGAGTTGTGTTCATGTAGGTTCGTGTCGTCGTTGGCTCTGAGACA
TTGATAATAAATTTTTCTCAACAGTGAAAAAAAAAAAAAAAAAAAAAA

FIGURE 748

MADSSGQQGKGRRVQPQWSPPAGTQPCRLHLYNSLTRNKEVFIPQDGKKVTWYCCGPTVYDASHMGHARSYISFD
ILRRVLKDYFKFDVFYCMNITDIDDKIIKRARQNHLFEQYREKRPEAAQLLEDVQAALKPFSVKLNETTDPDKKQ
MLERIQHAVQLATEPLEKAVQSRLTGEEVNSCVEVLLEEAKDLLSDWLDSTLGCDVTDNSIFSKLPKFWEGDFHR
DMEALNVLPPDVLTRVSEYVPEIVNFVQKIVDNGYGYVSNGSVYFDTAKFASSEKHSYGKLVPEAVGDQKALQEG
EGDLSISADRLSEKRSPNDFALWKASKPGEPSWPCPWGKGRPGWHIECSAMAGTLLGASMDIHGGGFDLRFPHHD
NELAQSEAYFENDCWVRYFLHTGHLYIAGCKMSKSLKNFITIKDALKKHSARQLRLAFLMHSWKDTLDYSSNTME
SALQYEKFLNEFFLNVKDILRAPVDITGQFEKWGEEEAELNKNFYDKKTAIHKALCDNVDTRTVMEEMRALVSQC
NLYMAARKAVRKRPNQALLENIALYLTHMLKIFGAVEEDSSLGFPVGGPGTSLSLEATVMPYLQVLSEFREGVRK
IAREQKVPEILQLSDALRDNILPELGVRFEDHEGLPTVVKLVDRNTLLKEREEKRRVEEEKRKKKEEAARRKQEQ
EAAKLAKMKIPPSEMFLSETDKYSKFDENGLPTHDMEGKELSKGQAKKLKKLFEAQEKLYKEYLQMAQNGSFQ

FIGURE 749

AGCTGAAGTTGAGGATCTCTTACTCTCTAAGCCACGGAATTAACCCGAGCAGGCATGGAGGCCTCTGCTCTCACC
TCATCAGCAGTGACCAGTGTGGCCAAAGTGGTCAGGGTGGCCTCTGGCTCTGCCGTAGTTTTGCCCCTGGCCAGG
ATTGCTACAGTTGTGATTGGAGGAGTTGTGGCCATGGCGGCTGTGCCCATGGTGCTCAGTGCCATGGGCTTCACT
GCGGCGGGAATCGCCTCGTCCTCCATAGCAGCCAAGATGATGTCCGCGGCGGCCATTGCCAATGGGGGTGGAGTT
GCCTCGGGCAGCCTTGTGGGTACTCTGCAGTCACTGGGAGCAACTGGACTCTCCGGATTGACCAAGTTCATCCTG
GGCTCCATTGGGTCTGCCATTGCGGCTGTCATTGCGAGGTTCTACTAGCTCCCTGCCCCTCGCCCTGCAGAGAAG
AGAACCATGCCAGGGGAGAAGGCACCCAGCCATCCTGACCCAGCGAGGAGCCAACTATCCCAAATATACCTGGGT
GAAATATACCAAATTCTGCATCTCCAGAGGAAAATAAGAAATAAAGATGAATTGTTGCAACTCTTAAAAAAA

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FIGURE 750

MEASALTSSAVTSVAKVVRVASGSAVVLPLARIATVVIGGVVAMAAVPMVLSAMGFTAAGIASSSIAAKMMSAAA
IANGGGVASGSLVGTLQSLGATGLSGLTKFILGSIGSAIAAVIARFY

FIGURE 751

CGCGCAGCGATGGAGGCGCCGGGGCTCGGGCGGTGGAGGCGGAGCCGGAGCGCGGCCATGGCGGGGTCCCTGAGT
GCCAGAGGTGGTGGTGTTGCTTATCTTCTGGAACCCCATGCAGCCAGATCCCAGGCCTAGCGGGGCTGGGGCCTG
CTGCCGATTCCTGCCCCTGCAGTCACAGTGCCCTGAGGGGGCAGGGGACGCGGTGATGTACGCCTCCACTGAGTG
CAAGGCGGAGGTGACGCCCTCCCAGCATGGCAACCGCACCTTCAGCTACACCCTGGAGGATCATACCAAGCAGGC
CTTTGGCATCATGAACGAGCTGCGGCTCAGCCAGCAGCTGTGTGACGTCACACTGCAGGTCAAGTACCAGGATGC
ACCGGCCGCCCAGTTCATGGCCCACAAGGTGGTGCTGGCCTCATCCAGCCCTGTCTTCAAGGCCATGTTCACCAA
CGGGCTGCGGGAGCAGGGCATGGAGGTGGTGTCCATTGAGGGTATCCACCCCAAGGTCATGGAGCGCCTCATTGA
ATTCGCCTACACGGCCTCCATCTCCATGGGCGAGAAGTGTGTCCTCCACGTCATGAACGGTGCTGTCATGTACCA
GATCGACAGCGTTGTCCGTGCCTGCAGTGACTTCCTGGTGCAGCAGCTGGACCCCAGCAATGCCATCGGCATCGC
CAACTTCGCTGAGCAGATTGGCTGTGTGGAGTTGCACCAGCGTGCCCGGGAGTACATCTACATGCATTTTGGGGA
GGTGGCCAAGCAAGAGGAGTTCTTCAACCTGTCCCACTGCCAACTGGTGACCCTCATCAGCCGGGACGACCTGAA
CGTGCGCTGCGAGTCCGAGGTCTTCCACGCCTGCATCAACTGGGTCAAGTACGACTGCGAACAGCGACGGTTCTA
CGTCCAGGCGCTGCTGCGGGCCGTGCGCTGCCACTCGTTGACGCCGAACTTCCTGCAGATGCAGCTGCAGAAGTG
CGAGATCCTGCAGTCCGACTCCCGCTGCAAGGACTACCTGGTCAAGATCTTCGAGGAGCTCACCCTGCACAAGCC
CACGCAGGTGATGCCCTGCCGGGCGCCCAAGGTGGGCCGCCTGATCTACACCGCGGGCGGCTACTTCCGACAGTC
GCTCAGCTACCTGGAGGCTTACAACCCCAGTGACGGCACCTGGCTCCGGTTGGCGGACCTGCAGGTGCCGCGGAG
CGGCCTGGCCGGCTGCGTGGTGGGCGGGCTGTTGTACGCCGTGGGCGGCAGGAACAACTCGCCCGACGGCAACAC
CGACTCCAGCGCCCTGGACTGTTACAACCCCATGACCAATCAGTGGTCGCCCTGCGCCCCCATGAGCGTGCCCCG
TAACCGCATCGGGGTGGGGGTCATCGATGGCCACATCTATGCCGTCGGCGGCTCCCACGGCTGCATCCACCACAA
CAGTGTGGAGAGGTATGAGCCAGAGCGGGATGAGTGGCACTTGGTGGCCCCAATGCTGACACGAAGGATCGGGGT
GGGCGTGGCTGTCCTCAATCGTCTCCTTTATGCCGTGGGGGGCTTTGACGGGACAAACCGCCTTAATTCAGCTGA
GTGTTACTACCCAGAGAGGAACGAGTGGCGAATGATCACAGCAATGAACACCATCCGAAGCGGGGCAGGCGTCTG
CGTCCTGCACAACTGTATCTATGCTGCTGGGGGCTATGATGGTCAGGACCAGCTGAACAGCGTGGAGCGCTACGA
TGTGGAAACAGAGACGTGGACTTTCGTAGCCCCCATGAAGCACCGGCGAAGTGCCCTGGGGATCACTGTCCACCA
GGGGAGAATCTACGTCCTTGGAGGCTATGATGGTCACACGTTCCTGGACAGTGTGGAGTGTTACGACCCAGATAC
AGACACCTGGAGCGAGGTGACCCGAATGACATCGGGCCGGAGTGGGGTGGGCGTGGCTGTCACCATGGAGCCCTG
CCGGAAGCAGATTGACCAGCAGAACTGTACCTGTTGAGGCACTTTTGTTTCTTGGGCAAAAATACAGTCCAATGG
GGAGTATCATTGTTTTTGTACAAAAACCGGGACTAAAAGAAAAGACAGCACTGCAAATAACCCATCTTCCGGGAA
GGGAGGCCAGGATGCCTCAGTGTTAAAATGACATCTCAAAAGAAGTCCAAAGCGGGAATCATGTGCCCCTCAGCG
GAGCCCCGGGAGTGTCCAAGACAGCCTGGCTGGGAAAGGGGGTGTGGAAAGAGCAGGCTTCCAGGAGAGAGGCCC
CCAAACCCTCTGGCCGGGTAATAGGCCTGGGTCCCACTCACCCATGCCGGCAGCTGTCACCATGTGATTTATTCT
TGGATACCTGGGAGGGGGCCAATGGGGGCCTCAGGGGGAGGCCCCCTCTGGAAATGTGGTTCCCAGGGATGGGCC
TGTACATAGAAGCCACCGGATGGCACTTCCCCACCGGATGGACAGTTATTTTGTTGATAAGTAACCCTGTAATTT
TCCAAGGAAAATAAAGAACAGACTAACTAGTGTCTTTC

FIGURE 752

MQPDPRPSGAGACCRFLPLQSQCPEGAGDAVMYASTECKAEVTPSQHGNRTFSYTLEDHTKQAFGIMNELRLSQQ
LCDVTLQVKYQDAPAAQFMAHKVVLASSSPVFKAMFTNGLREQGMEVVSIEGIHPKVMERLIEFAYTASISMGEK
CVLHVMNGAVMYQIDSVVRACSDFLVQQLDPSNAIGIANFAEQIGCVELHQRAREYIYMHFGEVAKQEEFFNLSH
CQLVTLISRDDLNVRCESEVFHACINWVKYDCEQRRFYVQALLRAVRCHSLTPNFLQMQLQKCEILQSDSRCKDY
LVKIFEELTLHKPTQVMPCRAPKVGRLIYTAGGYFRQSLSYLEAYNPSDGTWLRLADLQVPRSGLAGCVVGGLLY
AVGGRNNSPDGNTDSSALDCYNPMTNQWSPCAPMSVPRNRIGVGVIDGHIYAVGGSHGCIHHNSVERYEPERDEW
HLVAPMLTRRIGVGVAVLNRLLYAVGGFDGTNRLNSAECYYPERNEWRMITAMNTIRSGAGVCVLHNCIYAAGGY
DGQDQLNSVERYDVETETWTFVAPMKHRRSALGITVHQGRIYVLGGYDGHTFLDSVECYDPDTDTWSEVTRMTSG
RSGVGVAVTMEPCRKQIDQQNCTC

FIGURE 753

GTGTCGCGCGGCGCGGTGGCCTCGGTCGGTACCCTGGGCGCGGACGAGCTGCCTCATTAGTATTCGTACCCACGA
GGCGGCGCACGGGGCCCTCGGGGACAGCGAGCGTCGCGCC**ATG**GCTTATCACTCGGGCTACGGAGCCCACGGCTC
CAAGCACAGGGCCCGGGCAGCCCCGGATCCCCCTCCCCTCTTCGATGACACAAGCGGTGGTTATTCCAGCCAGCC
CGGGGGATACCCAGCCACAGGAGCAGACGTGGCCTTCAGTGTCAACCACTTGCTTGGGGACCCAATGGCCAATGT
GGCTATGGCCTATGGCAGCTCCATCGCATCCCATGGGAAGGACATGGTGCACAAGGAGCTGCACCGTTTTGTGTC
TGTGAGCAAACTCAAGTATTTTTTTGCTGTGGACACAGCCTACGTGGCCAAGAAGCTAGGGCTGCTGGTCTTCCC
CTACACACACCAGAACTGGGAAGTGCAGTACAGTCGTGATGCTCCTCTGCCCCCCCGGCAAGACCTCAACGCCCC
TGACCTCTATATCCCCACGAAGGCCTTCATTACTTACGTGCTCCTGGCTGGGATGGCACTGGGCATTCAGAAAAG
GTTCTCCCCGGAGGTGCTGGGCCTGTGTGCAAGCACAGCGCTGGTGTGGGTGGTGATGGAGGTGCTGGCCCTGCT
CCTGGGCCTCTACCTGGCCACCGTGCGCAGTGACCTGAGCACCTTTCACCTGCTGGCCTACAGTGGCTACAAATA
CGTGGGAATGATCCTCAGTGTGCTCACGGGGCTGCTGTTCGGCAGCGATGGCTACTACGTGGCGCTGGCCTGGAC
CTCATCGGCGCTCATGTACTTCATTGTGCGCTCTTTGCGGACAGCAGCCCTGGGCCCCGACAGCATGGGGGGCCC
CGTCCCCCGGCAGCGTCTCCAGCTCTACCTGACTCTGGGAGCTGCAGCCTTCCAGCCCCTCATCATATACTGGCT
GACTTTCCACCTGGTCCGG**TGA**CCCCCTGGCCCCAGATGGCACTGAGTTTTTCATTCATTGAAGATTTGATTTCC
TTGAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 754

MAYHSGYGAHGSKHRARAAPDPPPLFDDTSGGYSSQPGGYPATGADVAFSVNHLLGDPMANVAMAYGSSIASHGK
DMVHKELHRFVSVSKLKYFFAVDTAYVAKKLGLLVFPYTHQNWEVQYSRDAPLPPRQDLNAPDLYIPTKAFITYV
LLAGMALGIQKRFSPEVLGLCASTALVWVVMEVLALLLGLYLATVRSDLSTFHLLAYSGYKYVGMILSVLTGLLF
GSDGYYVALAWTSSALMYFIVRSLRTAALGPDSMGGPVPRQRLQLYLTLGAAAFQPLIIYWLTFHLVR

FIGURE 755

AGGCGCCCGCCCGCCGCGCGTGATTCTCGCCTCGCCGCAGCCCAGCCCTGCGCGCCTTGCCCGGCGGCCCCCGCC
CGGCCGCTCCGGGCCCCTGGCCCCGCGGAGCGATGCTGCTGCTGGCTGCCGCCTTCCTCGTGGCCTTCGTGCTGC
TGCTGTACATGGTGTCTCCGCTCATCAGCCCCAAGCCCCTCGCCCTGCCCGGGGCGCATGTGGTGGTTACAGGAG
GTTCCAGTGGCATCGGGAAGTGCATTGCTATCGAGTGCTATAAACAAGGAGCTTTTATAACTCTGGTTGCACGAA
ATGAGGATAAGCTGCTGCAGGCAAAGAAAGAAATTGAAATGCACTCTATTAATGACAAACAGGTGGTGCTTTGCA
TATCAGTTGATGTATCTCAAGACTATAACCAAGTAGAGAATGTCATAAAACAAGCACAGGAGAAACTGGGTCCAG
TGGACATGCTGGTAAATTGTGCAGGAATGGCAGTGTCAGGAAAATTTGAAGATCTTGAAGTTAGTACCTTTGAAA
GGTTAATGAGCATCAATTACCTGGGCAGCGTGTACCCCAGCCGGGCCGTGATCACCACCATGAAGGAGCGCCGGG
TGGGCAGGATCGTGTTTGTGTCCTCCCAGGCAGGACAGTTGGGATTATTCGGTTTCACAGCCTACTCTGCATCCA
AGTTTGCCATAAGGGGATTGGCAGAAGCTTTGCAGATGGAGGTGAAGCCATATAATGTCTACATCACAGTTGCTT
ACCCACCAGACACAGACACACCTGGCTTTGCCGAAGAAAACAGAACAAAGCCTTTGGAGACTCGACTTATTTCAG
AGACCACATCTGTGTGCAAACCAGAACAGGTGGCCAAACAAATTGTTAAAGATGCCATACAAGGAAATTTCAACA
GTTCCCTTGGCTCAGATGGGTACATGCTCTCGGCCCTGACCTGTGGGATGGCTCCAGTAACTTCTATTACTGAGG
GGCTCCAGCAGGTGGTCACCATGGGCCTTTTCCGCACTATTGCTTTGTTTTACCTTGGAAGTTTTGACAGCATAG
TTCGTCGCTGCATGATGCAGAGAGAAAAATCTGAAAATGCAGACAAAACTGCCTAATCTTCTTACCCCTTGGAAG
AAGACTGTTTCCAAATAATTTGAACAGCTTGCTGCTAAATGGGACCCAATTTTTGGCCTATAGACACTTATGTAT
TGTTTTCGAATACGTCAGATTGGACCAGTGCTCTTCAGGAATGTGGCTGCAAGCAAGGGGCTAGAAGTTCACCTC
CTGACAGTATTATTAATACTATGCAAATATGGAATAGGAGACCATTTGATTTTCTAGGCTTTGTGGTAGAGAGGT
GAAGGTATGAGAATTAATAGCGTGTGAACAAAGTAAAGAACAGGATTCCAGAATGATCATTAAATTTGTTTCTAT
TTATTCTTTTTTGCCCCCCTAGAGATTAAGTCCAGAAATGTACTTTCTGGCACATAAAGAAATCTTGAGGACTTT
GTTTAAACCTTCCATAAAAAAACAATTTTCGGTTTCTCGGGTTCTCTCTCTCTGTCTCTCTGTCTCTCTGTCTCT
CTGTCTCTCTGTCTCTCTCTCTCTCTCTCTTTCTTTCTTTGTGTATTTTATTCAAGATGAGTTGGACCCATTGCC
AGTGAGTCTGAATGTCACTGACAGCCCTGTGTTGTGCTCAGGACTCACTCTGCTGCTGGTGGAAACTCATGGCTT
CTCTCTCTCTTTGATCCCATAAAGCTACGAGGGGGACGGGAGAGGGCAGTGCAATGGGAAGTAAAGAGATATTTT
CCAGTAGGAAAAGCAATGCTTTCTTGTCTTTAGACTCAAATGCTTAGGGAACGTTTCATTTCTCATTCATGGGGA
AAGGCAGCCTCCTTAAATGTTTTCTGAAGAGCGGTAAAATCTAGAAGCTTAAGAATTTACAGTTCCTTCAATAAC
CATGATGACCTGAAGTTCACCTATCCCATTTTAGCATCTACTTGTTTTTCCCATCTCTTCCTTTCCAATTTTGCT
TATACTGCTGTAATATTTTTGTAAAAAAAAAAAAAAAGGAAAAAAAAGACCAGCTAAAATTTTCGACTTGACTTT
TTAACTTAACTCATGAATTAATTAAAGCAAATGAAAAAATTAAAAAGTGTGACTTTTTCTCGGAGCATATATGTA
GCTTTTAGGAAAGGCTGATGATGGTATAAAGTTTGCTCATTAAGAAAAAAAGACAAGGCTGATTTTGAAGAGAGT
TGCTTTTGAAATAAAATGATCA

FIGURE 756

MLLLAAAFLVAFVLLLYMVSPLISPKPLALPGAHVVVTGGSSGIGKCIAIECYKQGAFITLVARNEDKLLQAKKE
IEMHSINDKQVVLCISVDVSQDYNQVENVIKQAQEKLGPVDMLVNCAGMAVSGKFEDLEVSTFERLMSINYLGSV
YPSRAVITTMKERRVGRIVFVSSQAGQLGLFGFTAYSASKFAIRGLAEALQMEVKPYNVYITVAYPPDTDTPGFA
EENRTKPLETRLISETTSVCKPEQVAKQIVKDAIQGNFNSSLGSDGYMLSALTCGMAPVTSITEGLQQVVTMGLF
RTIALFYLGSFDSIVRRCMMQREKSENADKTA

FIGURE 757A

CGGGATTCGGCTGGCTCTGCCACACCACCGCGCGCCCCCGCTCCGCCCGCCCCTCCGGGCGCGTCTTTTCCGGGC
TCGCGCTGAGTCCCGCCTCCGCCGGCTGTCCGGGTGCGCGCGCGCCGCTGCGGCTTTTTCTCTGGCCTCCGCCGC
GCGCTCCTCCTCGTCCCAGCGCTAGCGGGCACGCGGTTCCTTTTTGCGAGCTTTCCGAGTGCCAGGCGCCGGCCG
GCTGCGAAGACGCGGTGGGCCGCCCCTCCGATTGAAATCACAGAAGATATTCGTGTTCTTCTTAAGAGAAAAAGA
GGACATTTTAGCTTTCTCAGTTGAAGGCGTACTTTATTGTCGGCTTCCAAAGATTACTAACTTTTATCTGTATCA
CTAAGATTGAACTGCCTTGGCTGTACTGCTATTCTTACTGCTGCTTCTATTATTGCCTTCTTCAGCACAATAAGG
CTTTCAAAAGCCAAAGAATAACAAGAAATAAGCACCATTTTAGAAGCCTTTCCACT**ATG**AAACTTAAGCTAAATG
TGCTCACCATTATTTTGCTGCCTGTCCACTTGTTAATAACAATATACAGTGCCCTTATATTTATTCCATGGTATT
TTCTTACCAATGCCAAGAAGAAAAACGCTATGGCAAAGAGAATAAAAGCTAAGCCCACTTCAGACAAACCTGGAA
GTCCATATCGCTCTGTCACACACTTCGACTCACTAGCTGTAATAGACATCCCTGGAGCAGATACTCTGGATAAAT
TATTTGACCATGCTGTATCCAAGTTTGGGAAGAAGGACAGCCTTGGGACCAGGGAAATCCTAAGTGAAGAAAATG
AAATGCAGCCAAATGGAAAAGTTTTTAAGAAGTTAATTCTTGGGAATTATAAATGGATGAACTATCTTGAAGTGA
ATCGCAGAGTGAATAACTTTGGTAGTGGACTCACTGCACTGGGACTAAAACCAAAGAACACCATTGCCATCTTCT
GTGAGACCAGGGCCGAATGGATGATTGCAGCACAGACCTGCTTTAAGTACAACTTTCCTCTTGTGACTTTATATG
CCACACTTGGCAAAGAAGCAGTAGTTCATGGGCTAAATGAATCTGAGGCTTCCTATCTGATTACCAGTGTTGAAC
TTCTGGAAAGTAAACTTAAGACTGCATTGTTAGATATCAGTTGTGTTAAACATATCATTTATGTGGACAATAAGG
CTATCAATAAAGCAGAGTACCCTGAAGGATTTGAGATTCACAGCATGCAATCAGTAGAAGAGTTGGGATCTAACC
CAGAAAACTTGGGCATTCCTCCAAGTAGACCAACGCCTTCAGACATGGCCATTGTTATGTATACTAGTGGTTCTA
CTGGCCGACCTAAGGGAGTGATGATGCATCATAGCAATTTGATAGCTGGAATGACAGGCCAGTGTGAAAGAATAC
CTGGACTGGGACCGAAGGACACATATATTGGCTACTTGCCTTTGGCTCATGTGCTAGAACTGACAGCAGAGATAT
CTTGCTTTACCTATGGCTGCAGGATTGGATATTCTTCTCCGCTTACACTCTCTGACCAGTCCAGCAAAATTAAAA
AAGGAAGCAAAGGAGACTGTACTGTACTGAAGCCCACACTTATGGCTGCTGTTCCGGAAATCATGGATAGAATTT
ATAAGAATGTTATGAGCAAAGTCCAAGAGATGAATTATATTCAGAAAACTCTGTTCAAGATAGGGTATGATTACA
AATTGGAACAGATCAAAAAGGGATATGATGCACCTCTTTGCAATCTGTTACTGTTTAAAAAGGTCAAGGCCCTGC
TGGGAGGGAATGTCCGCATGATGCTGTCTGGAGGGGCCCCGCTATCTCCTCAGACACACCGATTCATGAATGTCT
GCTTCTGCTGCCCAATTGGCCAGGGTTATGGACTGACAGAATCATGTGGTGCTGGGACAGTTACTGAAGTAACTG
ACTATACTACTGGCAGAGTTGGAGCACCTCTTATTTGCTGTGAAATTAAGCTAAAAGACTGGCAAGAAGGCGGTT
ATACAATTAATGACAAGCCAAACCCCAGAGGTGAAATCGTAATTGGTGGACAGAACATCTCCATGGGATATTTTA
AAAATGAAGAGAAAACAGCAGAAGATTATTCTGTGGATGAAAATGGACAAAGGTGGTTTTGCACTGGTGATATTG
GAGAATTCCATCCCGATGGATGTTTACAGATTATAGATCGTAAGAAAGATCTAGTGAAGTTACAAGCAGGAGAGT
ATGTATCTCTTGGGAAAGTAGAAGCTGCACTGAAGAATTGTCCACTTATTGACAACATCTGTGCTTTTGCCAAAA
GTGATCAGTCCTATGTGATCAGTTTTGTGGTTCCTAACCAGAAAAGGTTGACACTTTTGGCACAACAGAAAGGGG
TAGAAGGAACTTGGGTTGATATCTGCAATAATCCTGCTATGGAAGCTGAAATACTGAAAGAAATTCGAGAAGCTG
CAAATGCCATGAAATTGGAGCGATTTGAAATTCCAATCAAGGTTCGATTAAGCCCAGAGCCATGGACCCCTGAAA
CTGGTTTGGTAACTGATGCTTTCAAACTGAAAAGGAAGGAGCTGAGGAACCATTACCTCAAAGACATTGAACGAA
TGTATGGGGGCAAA**TAA**AATGTTGTTGTCTTATTGACAGTTGTGCAGGAGGTAGCCTGGTGGTTTTCAACCTCTA
GAATTTTAAGCCTTTGTTGAACTGTTAGAATGTAAGGTATATCATTCTAAAGATAGAGTAAAAAGAAAACAAAAC
CAAAAGTTATTAAAATTGTTGTCCGGTTTACTTTAACTTAGTTTTGCATAGTTCTAGTGCAGCTGAAATTGAAAA
GTTATTTCCCTTTAGCTGTGTTATTATAGAGCAGAAATTCTGTTTTTAAAAATTAGCCTAAGATATACTTGTTTT
TGTAAAGAAAAATATTTAATGTTGAACAAAATAAATTGGAGTTGGAGTAGAATGTAGTTTGAGGAAATTTGCAGC
TTCCAATGCCTCTTGTCTTCCTATTTCAGAAGTTTAAATATTAAGCATGACAGAAAATATGTATTAACACTACTC
AAAGCAAAAGTGCTGCAGGGCTTTAAAATTCTCTTCCAACCATTTATCTTGAAGGAAAAATTCAATAGTAATATA
ATACACAAAATCAAATAATACCTTAGAAGGTATTAAGATTATAATTGTTGCATAGGTTAGATATAGAGTCATTGT
AATGTTGTGAATAATTACAGTGCCTAAAATAAGAATAGAACAACATATACAACACCAAAAAATATCTAGTAATAT
ATTTAAAGGGAAATTGAGCTGCTTTTTTTGAAACTTTGAGATCTAAAAATAACTGTAATTATTTGAATGACTAAG
AGGAAAGTACATTTTTTGAAATGCTGAAAATTGCCTTTCTGTGTTTATTCAAACTGAAAAGCTGAGACCAAGAGC
AAGGAAGGTAAAAAGTTAACAGGCAAACATTTTCTCTTAGAAAAGGTGATAAAATCATAAGTATTTGGAATTAGA
ACCCTTGCACAGCACTGAACCTGGGAAAGAGATTTAAACTCTGAATTTATCTTTGATAACAGGGATTGATTTTAA

FIGURE 757B

AATGTACATGTATTAAATTACATTTGTAATTTAAGGTCTGTTTGCTGTTGCTGATTTTATTCTTGATCAGTAGTT
TGCATTTCAGAAAGCCTTTCATTTTGCTTTAAGTTTAGCAAAGCGGGGTTATAATGAATGACTTCCCCAATATCT
TGCTTGAACTTACAGTGATTAACTTGGATGAGTTTTGGGAAGTTAAAGGGAAGAAAACACTGTTATCATTTTTTC
CTGTTTGGGAAGAGCTTAGAAACTGGAAATACTAGATTTGGGAGAAGGGCAGAGTTACTTGATAAGGGACTTGAT
GTTTGTGCAGTAACTTGGGAGTGTGGTTTCTTTTTGAATCTTTAATTAAAACCTGGGATTATATATCCCTGATAA
ATATTCACACTTGAACCATAGTTACTGTAAAATGCAAAAAATCTTAATACTGTTATTCTTTGCACTTTTTCTTAA
TCATTTTTTATATATATGCATATATATATGTGTGTGTGTGTGTTGCTTATGTTGTTTTGTACAGATGTGGGCCAC
CATTGCAACAAAATACATTCTTTTTGCTCTAAAATATTTATGAAGAAAATACTTAAATGTTATGTATATGGTGGT
AATAAGGGAAAAATCAAGTATTATAAACAAGAATGAAGGTTTTTGTAAAGATTTCTGTTCAGCGTTTTGCAAGGT
AAAATTTTAGGCAAGTTTTCCCTGAAGTTATGTGTATGTGAGTATTCTCATTCTTCCCAACTTGCCTTTGAAGAG
TGAAATACCATTATTATCAAGTAGACTACTGTTCAGCTTTTATTCCTTCCCTGGTTGTTTATCCCTTAGGAATGA
GTTTCTTAGACTTTCCCAATATGTGATTTTTTTTCCCATTTAGAATGGTGATTTTAAATGTGTGAGTGCATGTAC
TATCTTATCTCAGATATTTGCACCCCCAATCTGCCCCCAACTCCCAAAAGCTAGAACACTGCCAACTGATCTGTT
ATAGGTCCTTTAGAAACACATAATTAACACTTAAGGTTGGGTGCTGCTAATTCTTTGCAAAAATCCAAATATTGT
TAAGGGACCAGGGAGATGCCACTACCCCTTGATTTTCCATCTAAAAATATACATGTTTATGTAAACAAATCTTTC
CATATCCATAGTGACTTTTCAAGTATTTAAGCCTAAAGATTTTGATCTCACATTTTTATACCTGTTTAAATTGCT
CACAGTTATTACATACACATCAGCCATCAACTAAAGTTGTACTTTAAAAATTTACTACAATATGTACATTTCTAA
GTCAAACACTTGTGACTTTTGCTTTAATTCCATGAATGTTCCTGCCTCCTTGATATTTGTATTTATTCTTTTTTT
CTCTAGAGTAGAGGTATAATTGTGTGATATTTCAGAAATACAGATAAATGATTCAAAAAGTCACAGTTAAGGAGA
ATCATGTTTCTTTGATCATGAATAACTGATTAGTAAGTCTTGCCTATATTTTCCTGATAGCATATGACAAATGTT
TCTAAGGTAACAAGATGAGAACAGATAAAGATTGTGTGGTGTTTTGGATTTGGAGAGAAATATTTTAATTTTTAA
ATGCAGTTACAAATTATAATGTATTCATATTTGTACTTTCTGTTAAAATGCATGATTGCAGAATTGTTTAGATTT
TGTGTTTATTCTTGATGAAAAGCTTTGTTTGTTCTTGTTTTTAAGTTTGCACTCAAATCTTAAGAAATAAATCCA
CCCATGTTATCAAAAAAAAAAAAAAAAAAA

FIGURE 758

MKLKLNVLTIILLPVHLLITIYSALIFIPWYFLTNAKKKNAMAKRIKAKPTSDKPGSPYRSVTHFDSLAVIDIPG
ADTLDKLFDHAVSKFGKKDSLGTREILSEENEMQPNGKVFKKLILGNYKWMNYLEVNRRVNNFGSGLTALGLKPK
NTIAIFCETRAEWMIAAQTCFKYNFPLVTLYATLGKEAVVHGLNESEASYLITSVELLESKLKTALLDISCVKHI
IYVDNKAINKAEYPEGFEIHSMQSVEELGSNPENLGIPPSRPTPSDMAIVMYTSGSTGRPKGVMMHHSNLIAGMT
GQCERIPGLGPKDTYIGYLPLAHVLELTAEISCFTYGCRIGYSSPLTLSDQSSKIKKGSKGDCTVLKPTLMAAVP
EIMDRIYKNVMSKVQEMNYIQKTLFKIGYDYKLEQIKKGYDAPLCNLLLFKKVKALLGGNVRMMLSGGAPLSPQT
HRFMNVCFCCPIGQGYGLTESCGAGTVTEVTDYTTGRVGAPLICCEIKLKDWQEGGYTINDKPNPRGEIVIGGQN
ISMGYFKNEEKTAEDYSVDENGQRWFCTGDIGEFHPDGCLQIIDRKKDLVKLQAGEYVSLGKVEAALKNCPLIDN
ICAFAKSDQSYVISFVVPNQKRLTLLAQQKGVEGTWVDICNNPAMEAEILKEIREAANAMKLERFEIPIKVRLSP
EPWTPETGLVTDAFKLKRKELRNHYLKDIERMYGGK

FIGURE 759

CCGAGCGCCAGCGCGGGGAACCGGGAAAAGGAAACCGTGTTGTGTACGTAAGATTCAGGAAACGAAACCAGGAGC
CGCGGGTGTTGGCGCAAAGGTTACTCCCAGACCCTTTTCCGGCTGACTTCTGAGAAGGTTGCGCACAGCTGTGCC
CGGCAGTCTAGAGGCGCAGAAGAGGAAGCCATCGCCTGGCCCCGGCTCTCTGGACCTTGTCTCGCTCGGGAGCGG
AAACAGCGGCAGCCAGAGAACTGTTTTAATC**ATG**GACAAACAAAACTCACAGATGAATGCTTCTCACCCGGAAAC
AAACTTGCCAGTTGGGTATCCTCCTCAGTATCCACCGACAGCATTCCAAGGACCTCCAGGATATAGTGGCTACCC
TGGGCCCCAGGTCAGCTACCCACCCCCACCAGCCGGCCATTCAGGTCCTGGCCCAGCTGGCTTTCCTGTCCCAAA
TCAGCCAGTGTATAATCAGCCAGTATATAATCAGCCAGTTGGAGCTGCAGGGGTACCATGGATGCCAGCGCCACA
GCCTCCATTAAACTGTCCACCTGGATTAGAATATTTAAGTCAGATAGATCAGATACTGATTCATCAGCAAATTGA
ACTTCTGGAAGTTTTAACAGGTTTTGAAACTAATAACAAATATGAAATTAAGAACAGCTTTGGACAGAGGGTTTA
CTTTGCAGCGGAAGATACTGATTGCTGTACCCGAAATTGCTGTGGGCCATCTAGACCTTTTACCTTGAGGATTAT
TGATAATATGGGTCAAGAAGTCATAACTCTGGAGAGACCACTAAGATGTAGCAGCTGTTGTTGTCCCTGCTGCCT
TCAGGAGATAGAAATCCAAGCTCCTCCTGGTGTACCAATAGGTTATGTTATTCAGACTTGGCACCCATGTCTACC
AAAGTTTACAATTCAAAATGAGAAAAGAGAGGATGTACTAAAAATAAGTGGTCCATGTGTTGTGTGCAGCTGTTG
TGGAGATGTTGATTTTGAGATTAAATCTCTTGATGAACAGTGTGTGGTTGGCAAAATTTCCAAGCACTGGACTGG
AATTTTGAGAGAGGCATTTACAGACGCTGATAACTTTGGAATCCAGTTCCCTTTAGACCTTGATGTTAAAATGAA
AGCTGTAATGATTGGTGCCTGTTTCCTCATTGACTTCATGTTTTTTGAAAGCACTGGCAGCCAGGAACAAAAATC
AGGAGTGTGG**TAG**TGGATTAGTGAAAGTCTCCTCAGGAAATCTGAAGTCTGTATATTGATTGAGACTATCTAAAC
TCATACCTGTATGAATTAAGCTGTAAGGCCTGTAGCTCTGGTTGTATACTTTTGCTTTTCAAATTATAGTTTATC
TTCTGTATAACTGATTTATAAAGGTTTTTGTACATTTTTTAATACTCATTGTCAATTTGAGAAAAAGGACATATG
AGTTTTTGCATTTATTAATGAAACTTCCTTTGAAAAACTGCTTTGAATTATGATCTCTGATTCATTGTCCATTTT
ACTACCAAATATTAACTAAGGCCTTATTAATTTTTATATAAATTATATCTTGTCCTATTAAATCTAGTTACAATT
TATTTCATGCATAAGAGCTAATGTTATTTTGCAAATGCCATATATTCAAAAAAGCTCAAAGATAATTTTCTTTAC
TATTATGTTCAAATAATATTCAATATGCATATTATCTTTAAAAAGTTAAATGTTTTTTTAATCTTCAAGAAATCA
TGCTACACTTAACTTCTCCTAGAAGCTAATCTATACCATAATATTTTCATATTCACAAGATATTAAATTACCAAT
TTTCAAATTATTGTTAGTAAAGAACAAAATGATTCTCTCCCAAAGAAAGACACATTTTAAATACTCCTTCACTCT
AAAACTCTGGTATTATAACTTTTGAAAGTTAATATTTCTACATGAAATGTTTAGCTCTTACACTCTATCCTTCCT
AGAAAATGGTAATTGAGATTACTCAGATATTAATTAAATACAATATCATATATATATTCACAGAGTATAAACCTA
AATAATGATCTATTAGATTCAAATATTTGAAATAAAAACTTGATTTTTTTGT

FIGURE 760

MDKQNSQMNASHPETNLPVGYPPQYPPTAFQGPPGYSGYPGPQVSYPPPPAGHSGPGPAGFPVPNQPVYNQPVYN
QPVGAAGVPWMPAPQPPLNCPPGLEYLSQIDQILIHQQIELLEVLTGFETNNKYEIKNSFGQRVYFAAEDTDCCT
RNCCGPSRPFTLRIIDNMGQEVITLERPLRCSSCCCPCCLQEIEIQAPPGVPIGYVIQTWHPCLPKFTIQNEKRE
DVLKISGPCVVCSCCGDVDFEIKSLDEQCVVGKISKHWTGILREAFTDADNFGIQFPLDLDVKMKAVMIGACFLI
DFMFFESTGSQEQKSGVW

FIGURE 761

CTGCTCGCGGCCGCCACCGCCGGGCCCCGGCCGTCCCTGGCTCCCCTCCTGCCTCGAGAAGGGCAGGGCTTCTCA
GAGGCTTGGCGGGAAAAAAGAACGGAGGGAGGGATCGCGCTGAGTATAAAAGCCGGTTTTCGGGGCTTTATCTAA
CTCGCTGTAGTAATTCCAGCGAGAGGCAGAGGGAGCGAGCGGGCGGCCGGCTAGGGTGGAAGAGCCGGGCGAGCA
GAGCTGCGCTGCGGGCGTCCTGGGAAGGGAGATCCGGAGCGAATAGGGGGCTTCGCCTCTGGCCCAGCCCTCCCG
CTTGATCCCCCAGGCCAGCGGTCCGCAACCCTTGCCGCATCCACGAAACTTTGCCCATAGCAGCGGGCGGGCACT
TTGCACTGGAACTTACAACACCCGAGCAAGGACGCGACTCTCCCGACGCGGGGAGGCTATTCTGCCCATTTGGGG
ACACTTCCCCGCCGCTGCCAGGACCCGCTTCTCTGAAAGGCTCTCCTTGCAGCTGCTTAGACGCTGGATTTTTTT
CGGGTAGTGGAAAACCAGCAGCCTCCCGCGACG**ATG**CCCCTCAACGTTAGCTTCACCAACAGGAACTATGACCTC
GACTACGACTCGGTGCAGCCGTATTTCTACTGCGACGAGGAGGAGAACTTCTACCAGCAGCAGCAGCAGAGCGAG
CTGCAGCCCCCGGCGCCCAGCGAGGATATCTGGAAGAAATTCGAGCTGCTGCCCACCCCGCCCCTGTCCCCTAGC
CGCCGCTCCGGGCTCTGCTCGCCCTCCTACGTTGCGGTCACACCCTTCTCCCTTCGGGGAGACAACGACGGCGGT
GGCGGGAGCTTCTCCACGGCCGACCAGCTGGAGATGGTGACCGAGCTGCTGGGAGGAGACATGGTGAACCAGAGT
TTCATCTGCGACCCGGACGACGAGACCTTCATCAAAAACATCATCATCCAGGACTGTATGTGGAGCGGCTTCTCG
GCCGCCGCCAAGCTCGTCTCAGAGAAGCTGGCCTCCTACCAGGCTGCGCGCAAAGACAGCGGCAGCCCGAACCCC
GCCCGCGGCCACAGCGTCTGCTCCACCTCCAGCTTGTACCTGCAGGATCTGAGCGCCGCCGCCTCAGAGTGCATC
GACCCCTCGGTGGTCTTCCCCTACCCTCTCAACGACAGCAGCTCGCCCAAGTCCTGCGCCTCGCAAGACTCCAGC
GCCTTCTCTCCGTCCTCGGATTCTCTGCTCTCCTCGACGGAGTCCTCCCCGCAGGGCAGCCCCGAGCCCCTGGTG
CTCCATGAGGAGACACCGCCCACCACCAGCAGCGACTCTGAGGAGGAACAAGAAGATGAGGAAGAAATCGATGTT
GTTTCTGTGGAAAAGAGGCAGGCTCCTGGCAAAAGGTCAGAGTCTGGATCACCTTCTGCTGGAGGCCACAGCAAA
CCTCCTCACAGCCCACTGGTCCTCAAGAGGTGCCACGTCTCCACACATCAGCACAACTACGCAGCGCCTCCCTCC
ACTCGGAAGGACTATCCTGCTGCCAAGAGGGTCAAGTTGGACAGTGTCAGAGTCCTGAGACAGATCAGCAACAAC
CGAAAATGCACCAGCCCCAGGTCCTCGGACACCGAGGAGAATGTCAAGAGGCGAACACACAACGTCTTGGAGCGC
CAGAGGAGGAACGAGCTAAAACGGAGCTTTTTTGCCCTGCGTGACCAGATCCCGGAGTTGGAAAACAATGAAAAG
GCCCCCAAGGTAGTTATCCTTAAAAAAGCCACAGCATACATCCTGTCCGTCCAAGCAGAGGAGCAAAAGCTCATT
TCTGAAGAGGACTTGTTGCGGAAACGACGAGAACAGTTGAAACACAAACTTGAACAGCTACGGAACTCTTGTGCG
TAAGGAAAAGTAAGGAAAACGATTCCTTCTAACAGAAATGTCCTGAGCAATCACCTATGAACTTGTTTCAAATGC
ATGATCAAATGCAACCTCACAACCTTGGCTGAGTCTTGAGACTGAAAGATTTAGCCATAATGTAAACTGCCTCAA
ATTGGACTTTGGGCATAAAAGAACTTTTTTATGCTTACCATCTTTTTTTTTTCTTTAACAGATTTGTATTTAAGA
ATTGTTTTTAAAAAATTTTAA

FIGURE 762

MPLNVSFTNRNYDLDYDSVQPYFYCDEEENFYQQQQQSELQPPAPSEDIWKKFELLPTPPLSPSRRSGLCSPSYV
AVTPFSLRGDNDGGGGSFSTADQLEMVTELLGGDMVNQSFICDPDDETFIKNIIIQDCMWSGFSAAAKLVSEKLA
SYQAARKDSGSPNPARGHSVCSTSSLYLQDLSAAASECIDPSVVFPYPLNDSSSPKSCASQDSSAFSPSSDSLLS
STESSPQGSPEPLVLHEETPPTTSSDSEEEQEDEEEIDVVSVEKRQAPGKRSESGSPSAGGHSKPPHSPLVLKRC
HVSTHQHNYAAPPSTRKDYPAAKRVKLDSVRVLRQISNNRKCTSPRSSDTEENVKRRTHNVLERQRRNELKRSFF
ALRDQIPELENNEKAPKVVILKKATAYILSVQAEEQKLISEEDLLRKRREQLKHKLEQLRNSCA

FIGURE 763

GATGTCCGGCTGGAGCTGTCGCCTCCGCCGCCGCTGCTGCCGGTGCCGGTTGTGAGCGGGTCTCCAGTCGGCTCC
TCTGGGCGTCTCATGGCCTCTAGCAGCTCCCTGGTGCCCGACCGGCTGCGCCTGCCGCTCTGCTTCCTGGGTGTC
TTTGTCTGCTATTTTTACTATGGGATCCTGCAGGAAAAGATAACAAGAGGAAAGTATGGGGAAGGAGCCAAGCAG
GAGACGTTCACCTTTGCCTTAACTTTGGTCTTCATTCAATGTGTGATCAATGCTGTGTTTGCCAAGATCTTGATC
CAGTTTTTTGACACTGCCAGGGTGGATCGTACCCGGAGCTGGCTCTATGCTGCCTGTTCTATCTCCTATCTGGGT
GCCATGGTCTCCAGCAATTCAGCACTACAGTTTGTCAACTACCCAACTCAGGTCCTTGGTAAATCCTGCAAGCCA
ATCCCAGTCATGCTCCTTGGGGTGACCCTCTTGAAGAAGAAGTACCCGTTGGCCAAGTACCTGTGTGTGCTGTTA
ATTGTGGCTGGAGTGGCCCTTTTCATGTACAAACCCAAGAAAGTTGTTGGGATAGAAGAACACACAGTCGGCTAT
GGAGAGCTACTCTTGCTATTATCGCTGACCCTGGATGGACTGACTGGTGTTTCCCAGGACCACATGCGGGCTCAT
TACCAAACAGGCTCCAACCACATGATGCTGAACATCAACCTTTGGTCGACATTGCTGCTGGGAATGGGAATCCTG
TTCACTGGGGAGCTCTGGGAGTTCTTGAGCTTTGCTGAAAGGTACCCTGCCATCATCTATAACATCCTGCTCTTT
GGGCTGACCAGTGCCCTGGGTCAGAGCTTCATCTTTATGACGGTTGTGTATTTTGGTCCCCTGACCTGCTCCATC
ATCACTACAACTCGAAAGTTCTTCACAATTTTGGCCTCTGTGATCCTCTTCGCCAATCCCATCAGCCCCATGCAG
TGGGTGGGCACTGTGCTTGTGTTCCTGGGTCTTGGTCTTGATGCCAAGTTTGGGAAAGGAGCTAAGAAGACATCC
CACTAGGAAGAGAGAGACTACCTCCACATCAAGAATATTTAAGTTATTATCTCAAACAGTGACATCTCTTGGGAA
AATGGACTTAATAGGAATATGGGACTGAGTTCCAGTCTTTTTTAATAAAATAAAATCAAGC

FIGURE 764

MASSSSLVPDRLRLPLCFLGVFVCYFYYGILQEKITRGKYGEGAKQETFTFALTLVFIQCVINAVFAKILIQFFD
TARVDRTRSWLYAACSISYLGAMVSSNSALQFVNYPTQVLGKSCKPIPVMLLGVTLLKKKYPLAKYLCVLLIVAG
VALFMYKPKKVVGIEEHTVGYGELLLLLSLTLDGLTGVSQDHMRAHYQTGSNHMMLNINLWSTLLLGMGILFTGE
LWEFLSFAERYPAIIYNILLFGLTSALGQSFIFMTVVYFGPLTCSIITTTRKFFTILASVILFANPISPMQWVGT
VLVFLGLGLDAKFGKGAKKTSH

FIGURE 765

GCGGTTGGCTCGGCGCGGGAGTCGGCTGCACGTGCGGGCGGGGGCGATGCGTCACTGATCGGTGAGGCGCGGCCG
AGGGGTCGGCTTTCCTCGCGAGCCTGCGGCTGGGCTTCTTCTCAGAGGAACGAGAATGAATATGACTCAAGCCCG
GGTTCTGGTGGCTGCAGTGGTGGGGTTGGTGGCTGTCCTGCTCTACGCCTCCATCCACAAGATTGAGGAGGGCCA
TCTGGCTGTGTACTACAGGGGAGGAGCTTTACTAACTAGCCCCAGTGGACCAGGCTATCATATCATGTTGCCTTT
CATTACTACGTTCAGATCTGTGCAGACAACACTACAAACTGATGAAGTTAAAAATGTGCCTTGTGGAACAAGTGG
TGGGGTCATGATCTATATTGACCGAATAGAAGTGGTTAATATGTTGGCTCCTTATGCAGTGTTTGATATCGTGAG
GAACTATACTGCAGATTATGACAAGACCTTAATCTTCAATAAAATCCACCATGAGCTGAACCAGTTCTGCAGTGC
CCACACACTTCAGGAAGTTTACATTGAATTGTTTGATCAAATAGATGAAAACCTGAAGCAAGCTCTGCAGAAAGA
CTTAAACCTCATGGCCCCAGGTCTCACTATACAGGCTGTGCGTGTTACAAAACCCAAAATCCCAGAAGCCATAAG
AAGAAATTTTGAGTTAATGGAGGCTGAGAAGACAAAACTCCTTATAGCTGCACAGAAACAAAAGGTTGTGGAAAA
AGAAGCTGAGACAGAGAGGAAAAAGGCAGTTATAGAAGCAGAGAAGATTGCACAAGTGGCAAAAATTCGGTTTCA
GCAGAAAGTGATGGAAAAAGAAACTGAAAAGCGCATTTCTGAAATCGAAGATGCTGCATTCCTGGCCCGAGAGAA
AGCGAAAGCAGATGCTGAATATTATGCTGCACACAAATATGCCACCTCAAACAAGCACAAGTTGACCCCGGAATA
TCTGGAGCTCAAAAAGTACCAGGCCGTTGCTTCTAACAGTAAGATCTATTTTGGCAGCAACATCCCTAACATGTT
CGTGGACTCCTCATGTGCTTTGAAATATTCAGATATTAGGACTGGAAGAGAAAGCTCACTCCCCTCTAAGGAGGC
TCTTGAACCCTCTGGAGAGAACGTCATCCAAAACAAAGAGAGCACAGGTTGATGCAAGAGGTGGAAATGTTCTCC
ATATCAAGATGTGGCCCAAGGGGTTAAGTGGGAACAATCATTATACGGACTCTTCAGATTTACAGAGAACTTACA
CTTCATCTGTTCCACCTCTCCTGCGATAGTCCTGGGTGCTCCACTGATTGGAGGATAGAGCCAGCTGTCTGACAC
ACAAATGGTCTTTTCAGCCACAGTCTTATCAAGTATCCTATATGTATTCCTTTCTAAACTGCTACTCATGAATGA
GGAAAGTCTGATGCTAAGATACTGCCTGCACTGGAATGTTAAACACTAAATATATAACAAGCTGTGTTTTCCTAA
GCTGAGATCTGTTGAATAATGTTTACATTCGTCCCCCGGGGAAATGTATGCTCAGCCACCATTCAAGAGATGACT
GAGAAGGAGATGGTAAGTTCAAGAAGACTGATTGCACCTGGGACCCAGGCCCTTTCTTTGGGATCCAGTCCCAGC
CTTCATCCATGTGATTAAGATCCAGGCCGCTGAAGTTCCCCAGGAAATGATCTTCCACTTGAGCAACCTTTTACT
TGATACGATTTGCACCTTTCTGTTTTCCTGCAGTCAGGGTGGTGGCCTGCAGGGACCTGAGCTTTGCTACCCAAC
CAGATTCCTCATAGAGATTCCTAATCACTAGTTTCTTGTATTCATAAACTCAGAGATACAGAGGGCTTGGTTTGA
AGTTGGGGTGAGATGAAACCTTTGCTCTGAGCCAAAGCTCTGGGGCCTTGCATTCCCTGCATTGGGTTGATGACT
GTCAGCATCACTGCCGCAGGCCATGCTTGACTAAGGTACCTGGTTTTAGCCACAGCCACCTCCTTGTATGTTACC
TTTCAGCTCTGGCCAAGAGTGGGACAGGGTTTTAACCACAAATAGGAGCAGCATGCAATTCCTAGTGACTTGCTG
CACAGTATTGTATCATAATTACAGGAAGTTTTTATTTTTAAAACTGGATCTGGGTATATTCATTTGCCCCATCAC
CTCTGTCTAAAGGCCCAAGTCCTAGGGCTGCCATGGTCACAAGCACACTGATGCTCCTTAAGATTGTTTATCTGG
AGCCCACATAGTGTGGAACAAAAAGTCACCTAGAAAGCATCCTTGGTCATCATTGTCTCCTTCCCACCTGGCCCA
GAGATGCTTAAATCCAAGTTGTTTCTCCAGCTGTCACCTCCCNCAGGAGATCAGGATTCCACTGACGTCCTGGGC
AGCCAGTGAATTTAATTTTCCATGAGAAACAACAGAGTTAACCTGTGGCATTAGGAGACCTACTTCATGTGGACC
CTTTTTTTTCCTTCAGTTTAACTTTTCTGGAGCAGTGTGCTGCGTAGTTCGGCCTGAGTTTGTGCAGCTTGTTAA
GACAACTCTTGTGTACGCTATGTTGAAGCTCAACAAAAAAGTCATGGGACCACTTCTAGAAATCTTTCAGCTGTC
AGGCCTGTCAGTCTCATGACAGTTTGTTGGTTGTGCCAAACACTTTATTTGGGAAAGGAAAGCCCAGATTTGAAT
GGGTCTTTCCCCTGGGCCTTATCCTATAGAGGCATTTGTAATATGGAGAAAATAATTTTTCATTTTTGCTCATTT
AATTCTATAAATTCTCTTTATAAATGAATTTTGTGTTCTTTAGTTCTCCTTAAAAGAACTTTTGAATTATAAAAA
TAAAATCTTTACCTGTCGAATTGTTGCTGCAGATGATTGTTGTGGAAAATCTGGATCATTGACCTCTGTGCTTTC
ATTCCTAGAGATGTTTTATAGTTACATGAGCAAAAGCTGTTGCCCCAAAGTGATGGCCCTGGAGGCGGGGCTGAG
GAACAGGGAAATGCCGCTGTGAAGTCTTAAAGCACTTCTGCTTAAACTCCATGTGTGAGGAGTGTGCCTCCCTGT
GCCCTCTCAGCTCTGAGGCTGGCCGTCTTTCGGGGTGTTCCTTTTGGCAAATATACACTGTAATCTTGAGTCTAA
ATTTATATGTTGAAATGCTACCTTTTTTAAAATAAGAAACTAAATAAAATTATTTTACTATCA

FIGURE 766

MNMTQARVLVAAVVGLVAVLLYASIHKIEEGHLAVYYRGGALLTSPSGPGYHIMLPFITTFRSVQTTLQTDEVKN
VPCGTSGGVMIYIDRIEVVNMLAPYAVFDIVRNYTADYDKTLIFNKIHHELNQFCSAHTLQEVYIELFDQIDENL
KQALQKDLNLMAPGLTIQAVRVTKPKIPEAIRRNFELMEAEKTKLLIAAQKQKVVEKEAETERKKAVIEAEKIAQ
VAKIRFQQKVMEKETEKRISEIEDAAFLAREKAKADAEYYAAHKYATSNKHKLTPEYLELKKYQAVASNSKIYFG
SNIPNMFVDSSCALKYSDIRTGRESSLPSKEALEPSGENVIQNKESTG

FIGURE 767

CCGAGCGCCAGCGCGGGGAACCGGGAAAAGGAAACCGTGTTGTGTACGTAAGATTCAGGAAACGAAACCAGGAGC
CGCGGGTGTTGGCGCAAAGGTTACTCCCAGACCCTTTTCCGGCTGACTTCTGAGAAGGTTGCGCACAGCTGTGCC
CGGCAGTCTAGAGGCGCAGAAGAGGAAGCCATCGCCTGGCCCCGGCTCTCTGGACCTTGTCTCGCTCGGGAGCGG
AAACAGCGGCAGCCAGAGAACTGTTTTAATC**ATG**GACAAACAAAACTCACAGATGAATGCTTCTCACCCGGAAAC
AAACTTGCCAGTTGGGTATCCTCCTCAGTATCCACCGACAGCATTCCAAGGACCTCCAGGATATAGTGGCTACCC
TGGGCCCCAGGTCAGCTACCCACCCCCACCAGCCGGCCATTCAGGTCCTGGCCCAGCTGGCTTTCCTGTCCCAAA
TCAGCCAGTGTATAATCAGCCAGTATATAATCAGCCAGTTGGAGCTGCAGGGGTACCATGGATGCCAGCGCCACA
GCCTCCATTAAACTGTCCACCTGGATTAGAATATTTAAGTCAGATAGATCAGATACTGATTCATCAGCAAATTGA
ACTTCTGGAAGTTTTAACAGGTTTTGAAACTAATAACAAATATGAAATTAAGAACAGCTTTGGACAGAGGGTTTA
CTTTGCAGCGGAAGATACTGATTGCTGTACCCGAAATTGCTGTGGGCCATCTAGACCTTTTACCTTGAGGATTAT
TGATAATATGGGTCAAGAAGTCATAACTCTGGAGAGACCACTAAGATGTAGCAGCTGTTGTTGTCCCTGCTGCCT
TCAGGAGATAGAAATCCAAGCTCCTCCTGGTGTACCAATAGGTTATGTTATTCAGACTTGGCACCCATGTCTACC
AAAGTTTACAATTCAAAATGAGAAAAGAGAGGATGTACTAAAAATAAGTGGTCCATGTGTTGTGTGCAGCTGTTG
TGGAGATGTTGATTTTGAGATTAAATCTCTTGATGAACAGTGTGTGGTTGGCAAAATTTCCAAGCACTGGACTGG
AATTTTGAGAGAGGCATTTACAGACGCTGATAACTTTGGAATCCAGTTCCCTTTAGACCTTGATGTTAAAATGAA
AGCTGTAATGATTGGTGCCTGTTTCCTCATTGACTTCATGTTTTTTGAAAGCACTGGCAGCCAGGAACAAAAATC
AGGAGTGTGG**TAG**TGGATTAGTGAAAGTCTCCTCAGGAAATCTGAAGTCTGTATATTGATTGAGACTATCTAAAC
TCATACCTGTATGAATTAAGCTGTAAGGCCTGTAGCTCTGGTTGTATACTTTTGCTTTTCAAATTATAGTTTATC
TTCTGTATAACTGATTTATAAAGGTTTTTGTACATTTTTTAATACTCATTGTCAATTTGAGAAAAAGGACATATG
AGTTTTTGCATTTATTAATGAAACTTCCTTTGAAAAACTGCTTTGAATTATGATCTCTGATTCATTGTCCATTTT
ACTACCAAATATTAACTAAGGCCTTATTAATTTTTATATAAATTATATCTTGTCCTATTAAATCTAGTTACAATT
TATTTCATGCATAAGAGCTAATGTTATTTTGCAAATGCCATATATTCAAAAAAGCTCAAAGATAATTTTCTTTAC
TATTATGTTCAAATAATATTCAATATGCATATTATCTTTAAAAAGTTAAATGTTTTTTTAATCTTCAAGAAATCA
TGCTACACTTAACTTCTCCTAGAAGCTAATCTATACCATAATATTTTCATATTCACAAGATATTAAATTACCAAT
TTTCAAATTATTGTTAGTAAAGAACAAAATGATTCTCTCCCAAAGAAAGACACATTTTAAATACTCCTTCACTCT
AAAACTCTGGTATTATAACTTTTGAAAGTTAATATTTCTACATGAAATGTTTAGCTCTTACACTCTATCCTTCCT
AGAAAATGGTAATTGAGATTACTCAGATATTAATTAAATACAATATCATATATATATTCACAGAGTATAAACCTA
AATAATGATCTATTAGATTCAAATATTTGAAATAAAAACTTGATTTTTTTGT

FIGURE 768

MDKQNSQMNASHPETNLPVGYPPQYPPTAFQGPPGYSGYPGPQVSYPPPPAGHSGPGPAGFPVPNQPVYNQPVYN
QPVGAAGVPWMPAPQPPLNCPPGLEYLSQIDQILIHQQIELLEVLTGFETNNKYEIKNSFGQRVYFAAEDTDCCT
RNCCGPSRPFTLRIIDNMGQEVITLERPLRCSSCCCPCCLQEIEIQAPPGVPIGYVIQTWHPCLPKFTIQNEKRE
DVLKISGPCVVCSCCGDVDFEIKSLDEQCVVGKISKHWTGILREAFTDADNFGIQFPLDLDVKMKAVMIGACFLI
DFMFFESTGSQEQKSGVW

FIGURE 769

GACCCCCTAGTAACAGAGGCGGTGGCTACTGCTGCGGCCACTGGGTTTCGGCCTCTTCCCAGCAGCGGCTCTAAG
AAGCGCAGCGGAACTCGACCGGATCCAACCCAGTTAGTTACTTCCTGTCTAGAGTTGTAGCTTCCACCTGCACCT
TCTAGCCACCATGGCAACCTCATCTGAAGAAGTTTTGCTGATTGTAAAGAAAGTGCGTCAAAAGAAGCAGGATGG
AGCTCTGTACCTCATGGCAGAAAGAATTGCTTGGGCACCTGAAGGCAAAGATAGATTTACAATCAGCCATATGTA
TGCAGATATTAAATGCCAGAAAATTAGTCCAGAAGGAAAAGCTAAAATTCAGCTTCAGCTGGTCCTACATGCAGG
GGACACAACTAACTTCCATTTTTCCAATGAAAGCACAGCAGTGAAAGAGCGAGATGCAGTAAAAGACCTTCTTCA
GCAGCTGCTGCCCAAATTCAAGAGGAAAGCAAATAAAGAACTGGAAGAGAAGAACAGAATGCTGCAAGAAGATCC
TGTTTTGTTTCAGCTTTATAAAGACCTTGTTGTGAGTCAAGTGATCAGTGCTGAGGAATTCTGGGCCAATCGTTT
AAATGTGAATGCAACAGATAGTTCTTCCACATCCAATCATAAGCAGGATGTTGGCATTTCTGCTGCATTTCTGGC
TGATGTCCGGCCCCAAACTGATGGCTGTAACGGTCTAAGATATAATTTAACTTCTGATATCATTGAGTCCATATT
TAGGACCTATCCAGCAGTAAAAATGAAATATGCAGAAAATGTTCCCCACAACATGACAGAGAAGGAATTCTGGAC
ACGTTTTTTCCAGTCCCATTATTTTCACAGGGATCGGCTGAATACAGGGTCAAAGGATCTCTTTGCAGAATGTGC
CAAAATAGATGAAAAAGGCCTAAAAACAATGGTTTCATTAGGAGTGAAAAACCCACTACTAGATTTAACAGCTTT
GGAAGATAAACCATTAGATGAGGGCTATGGCATTTCCTCTGTGCCATCTGCTTCCAATTCTAAATCCATAAAAGA
GAATAGTAATGCTGCCATCATCAAGAGATTTAACCATCACAGTGCCATGGTCCTGGCAGCTGGACTCAGAAAACA
AGAAGCACAAAATGAACAAACTAGTGAGCCCAGCAACATGGATGGAAATTCCGGAGATGCAGACTGCTTTCAGCC
AGCAGTCAAAAGGGCGAAATTACAAGAGTCCATTGAATATGAAGACTTGGGGAAAAATAATTCTGTAAAAACGAT
TGCACTAAACCTCAAGAAGTCAGATAGGTATTATCATGGTCCAACTCCAATCCAGTCACTACAGTATGCAACAAG
TCAGGACATTATTAATTCTTTTCAAAGTATTAGACAAGAAATGGAAGCTTATACACCCAAGTTAACTCAGGTTCT
CTCAAGTAGTGCTGCCAGTAGTACCATCACAGCACTGTCACCTGGAGGGGCACTTATGCAGGGAGGAACACAGCA
AGCCATAAACCAGATGGTGCCAAATGATATTCAATCTGAATTGAAACACTTATATGTAGCTGTTGGAGAACTTCT
ACGACATTTCTGGTCCTGCTTTCCTGTTAATACGCCATTCCTAGAAGAAAAGGTAGTGAAAATGAAAAGTAATTT
GGAACGATTCCAAGTTACGAAGCTCTGTCCATTCCAAGAAAAGATTCGGAGACAGTATTTAAGCACAAATTTGGT
AAGTCACATAGAAGAGATGCTCCAGACAGCCTACAACAAGCTCCACACATGGCAGTCACGGCGTCTGATGAAGAA
AACGTGAGGTGGCCATGATGCTTACAGGTTTTGTGAGATTGAGAGAACTATGACCTGCAGCAACTCTGGAAACCT
GGCCTGACAGACAAGCAGATGACCTCACAGGAGTGATAAGAAACATCTGCTCCACGCCAACTCCCAGAGCTGATG
CTATTGTACTTGCACATTGGAGACTGAAAGGAAAGAAGGGACTAAATGCTGGGGAGGTAAATTAAGACAGAACCA
AATGAGCTAAGTTGCAAATATATATATATACACACACACACATATATGTACATGTGTATGTACATATATATTTTA
AAAGACTGTTTACTGCAGTTGCTCAGGAACTGCTTTTGATTCACATTAAGCTGCTTTCAGAAATTAAAAAAACAC
TTTTTAAAGGGTGCATTGATAAAATCTGAGGTTTTTTGGTTGTCGTTTTTTTCTGTGTACATTTTTTTCCTAAGT
TTATGGCACAGGGTAGACCTTAAGTATTCCTCCTCCATCCTTCATTCTTCACCCTCCATTGGATCCTCAAGTTTT
AATGAATTCCAATTATACCTTACATCAGCAAGTTAAAAAAAGTACTTTAAAATAAAGCAAAGGGAGACTGTTGCT
CAACCATCAGGAAACAGTTGTCAGAAGACATCATTGGTTCTGTGTTTCCTACGGAAATAAGAAACGATAAATATT
GCACTGAATGTTTGTGGTTTGGAGTCCCTGAATAATAAAGAGGGAATATATTTGCAGAAAGTCGCATAGGGTTTT
TTAATGCAGAATTTTGTCAGAAGACAATGGCGCTGCATGTTTTTCTTTGAGTGCAAATGTACATTGCTAAGATTT
TTTTAAGATGGCATGTGCTTTGAAAAGAAGATATTGCATTTTTAAGAGTTTAAAAATCTTATGAGTGAGAAATAT
TAAAAAAATCTTATTTTCACCTCTTTAGAAGAAATAAAAGATGTTTCTCCTATCTCCTTTTCTCTAGTATTTGAC
TGTTACTGTCCTTGGCGAATCGATAATCATTGCATAGTGACTGAAAAGCCTAAGTGCAAAAAAAAAAAAAAAAAG
ATGTTCTTGTTTCTGAACTTCGTGCCATATTTTGTTCCTGATGGGATCAACTTAATGTTTAAGACTTTAGATGTC
TTGTATTAAAAATTACACAAAAAAAGTAAAACTTTTTATACTTAAAAAAAAAAAAAAAAAAAA

FIGURE 770

MATSSEEVLLIVKKVRQKKQDGALYLMAERIAWAPEGKDRFTISHMYADIKCQKISPEGKAKIQLQLVLHAGDTT
NFHFSNESTAVKERDAVKDLLQQLLPKFKRKANKELEEKNRMLQEDPVLFQLYKDLVVSQVISAEEFWANRLNVN
ATDSSSTSNHKQDVGISAAFLADVRPQTDGCNGLRYNLTSDIIESIFRTYPAVKMKYAENVPHNMTEKEFWTRFF
QSHYFHRDRLNTGSKDLFAECAKIDEKGLKTMVSLGVKNPLLDLTALEDKPLDEGYGISSVPSASNSKSIKENSN
AAIIKRFNHHSAMVLAAGLRKQEAQNEQTSEPSNMDGNSGDADCFQPAVKRAKLQESIEYEDLGKNNSVKTIALN
LKKSDRYYHGPTPIQSLQYATSQDIINSFQSIRQEMEAYTPKLTQVLSSSAASSTITALSPGGALMQGGTQQAIN
QMVPNDIQSELKHLYVAVGELLRHFWSCFPVNTPFLEEKVVKMKSNLERFQVTKLCPFQEKIRRQYLSTNLVSHI
EEMLQTAYNKLHTWQSRRLMKKT

FIGURE 771A

GAGAAGAAGTGGCAGGTGATGCTGAAGCGGGGGAGAAGCGGCAGAGCCGGCCACACAGTGCAGGGGATGGAGACA
GGTGCTGGGCTGGTCCTCCTGCAGCATCCTCAGTTGTTGGAGGGCAGTCATCCTCAGGCCGTACCCAGCCAGAGA
AGAAAAAGAACAGTGTGAAGCCACGTGTGATAGCCGTCCAACATCGGCTCTTCCCTCCAATTACATTGTAGTTGA
TTGTGTCTCAAACC**ATG**AATTATGTGGGACAGCTGGCTGGGCAGGTGATTGTCACTGTGAAGGAACTCTACAAGG
GCATTAACCAGGCCACCCTCTCTGGGTGCATTGATGTCATCGTGGTACAGCAGCAGGATGGCAGCTATCAGTGTT
CACCTTTTCACGTTCGGTTTGGAAAGCTGGGAGTCCTGAGATCCAAAGAGAAAGTGATTGATATAGAAATCAACG
GCAGTGCAGTGGATCTTCACATGAAGTTGGGTGATAACGGAGAAGCTTTCTTTGTTGAGGAGACTGAAGAAGAAT
ATGAAAAGCTTCCTGCTTACCTTGCCACCTCACCAATTCCTACTGAAGATCAGTTCTTTAAAGATATTGACACCC
CTTTGGTGAAATCGGGTGGAGATGAAACACCATCTCAGAGTTCAGACATCTCACACGTCTTGGAAACAGAGACAA
TTTTTACTCCAAGTTCTGTGAAAAAGAAAAAACGAAGGAGAAAGAAATACAAACAGGACAGTAAGAAGGAAGAGC
AGGCCGCATCTGCTGCTGCAGAAGACACATGTGATGTAGGCGTGAGCTCCGATGATGACAAGGGGGCCCAGGCAG
CACGAGGATCTTCAAATGCTTCCTTGAAAGAAGAAGAATGTAAAGAGCCTTTGCTCTTCCATTCTGGGGATCATT
ACCCCTTATCTGATGGAGATTGGTCCCCTTTAGAGACCACCTATCCCCAGACAGCGTGTCCTAAGAGTGATTCAG
AGCTGGAGGTGAAACCTGCGGAGAGCCTGCTCAGATCAGAGTCTCACATGGAGTGGACGTGGGGCGGATTCCCAG
AGTCCACCAAGGTCAGCAAAAGAGAACGATCTGACCATCATCCTAGGACAGCTACAATTACACCATCAGAAAATA
CTCATTTTCGGGTAATTCCCAGTGAGGACAACCTCATCAGTGAAGTTGAGAAGGATGCTTCCATGGAAGACACTG
TCTGTACCATAGTGAAGCCCAAACCCAGAGCCCTGGGTACACAGATGAGCGACCCAACATCTGTGGCAGAGCTTC
TCGAACCTCCTCTTGAGAGTACTCAGATTTCATCTATGTTAGATGCTGACCACCTTCCCAACGCAGCCTTAGCGG
AGGCGCCCTCAGAATCCAAACCGGCAGCTAAAGTAGACTCGCCGTCAAAGAAGAAAGGTGTTCACAAAAGAAGCC
AACACCAGGGACCTGATGATATTTACCTTGATGACTTAAAGGGTCTAGAACCTGAAGTTGCAGCTCTTTATTTCC
CTAAAAGTGAATCGGAGCCCGGTTCCAGGCAGTGGCCCGAGTCTGACACACTCTCTGGCTCCCAGTCCCCACAGT
CCGTGGGAAGCGCAGCTGCAGATAGCGGCACCGAGTGCCTCTCAGATTCTGCCATGGACTTGCCTGACGTTACCC
TCTCCCTTTGCGGGGGCCTCAGTGAAAATGGAGAAATTTCAAAAGAAAAATTCATGGAGCATATCATTACTTATC
ACGAATTTGCAGAAAACCCTGGACTTATAGACAATCCTAACCTTGTAATAAGGATATATAATCGTTACTATAACT
GGGCTTTGGCAGCTCCCATGATCCTTAGCTTGCAAGTATTCCAGAAGAGCTTGCCTAAGGCCACAGTTGAGTCCT
GGGTGAAAGACAAGATGCCAAAGAAATCTGGTCGCTGGTGGTTTTGGCGAAAGAGAGAAAGCATGACCAAACAGC
TGCCAGAATCCAAGGAGGGAAAATCTGAGGCACCGCCAGCCAGTGACCTGCCATCCAGCTCCAAGGAGCCGGCCG
GTGCCAGGCCGGCCGAGAATGACTCCTCGAGTGACGAGGGATCACAGGAGCTCGAAGAATCCATCACAGTGGACC
CCATCCCCACAGAGCCCCTGAGCCACGGCAGCACAACTTCATATAAGAAGTCTCTCCGCCTCTCCTCAGACCAGA
TCGCAAAACTGAAGCTCCACGATGGCCCAAATGATGTTGTGTTTAGTATTACAACCCAGTATCAAGGCACCTGTC
GCTGTGCAGGGACCATTTACCTGTGGAACTGGAATGACAAGATCATCATTTCTGATATTGATGGGACAATAACCA
AGTCGGATGCTTTGGGACAGATTCTCCCACAGCTGGGCAAAGACTGGACCCACCAGGGTATAGCAAAGCTCTACC
ATTCCATCAATGAGAATGGCTACAAGTTTCTGTACTGCTCGGCTCGTGCCATCGGCATGGCCGACATGACCCGTG
GCTACCTGCACTGGGTCAATGACAAGGGCACAATCTTGCCCCGGGGCCCCCTGATGCTGTCCCCCAGCAGCTTGT
TCTCCGCCTTCCACAGAGAAGTGATAGAAAAGAAACCAGAGAAGTTCAAAATTGAGTGTCTAAATGATATCAAGA
ATCTGTTTGCCCCGTCTAAGCAGCCCTTCTATGCTGCCTTTGGAAACCGTCCAAATGATGTCTATGCCTACACAC
AAGTTGGAGTTCCAGACTGTAGAATATTCACCGTGAACCCCAAGGGTGAATTAATACAAGAAAGAACCAAAGGAA
ACAAGTCATCGTATCACAGGCTGAGTGAGCTCGTGGAGCATGTGTTCCCCCTTCTCAGTAAGGAGCAGAATTCCG
CTTTTCCCTGCCCGGAGTTCAGCTCCTTCTGCTACTGGCGAGACCCGATCCCTGAAGTGGACCTGGATGACCTGT
CT**TGA**GGCGGCACCTCAGTGGGTGGGCAGGGCTTGGTCCCCCTCCCCACAGCAAGGGAAGGCAGCTGGCTCTTCT
GCTGACCTCAGATACCAGCCTTCCCCAGCGGGGACGGGTGCTTCTGGAGCTGGTCCCGCCATCCTCCTTTGCCTT
CCCAGGCCAGCTGCTCAGGCTCGGCAGGTCTGCAGCTCAGCTCCTGGAAGGAGAAGGGAGGAACTGGGCCTGGGG
CTGGAGGCCTGGGATCCCTCCTTTGTGGGTCGCACACATGTTTCCTGCTGTGAGCTGGGGCCTCCTTCCATTGCA
TCATTTTAAAGGAAGAAAAAAGCAGCTAAAAAAGAGTGGACCAAAACACTGCACACAGTGAAGTGTTCCAGTTTC
CACTGGGCAGTTGAGGTGGCTTCTGTAACCAGGGCTGTCTTCAGATGTCAGGGTCCCTGAACTGCTGCGGGCCCA
GTCAGTGATGCTGGCTGAAGCTGCCTGTGCACGTTTCTTCTCTGGTCGCCTCATTTCCTGCTACACTGAAGGGGT
CAGCTGCTCCAGTGGGCCAAGTTGGGCAGGACCCCCGCCCCTGCAGGGCCCATGCACCAGAGCCACTGAGCCCAG
TCCCATAAACCTGGCCCTCTTTGGGGAAAGATCCCCACAGAGCATCCTCCTCTCATCTGTGACAACTCCACGAGC

FIGURE 771B

CCTTAATTTCTTAGTCCTCACCAGAAGAACAGGTCTCACAAGTATATATTTGATGTCTGTAATAAAAGTGGGAAG
GTGGGTCTTAAAACAGACCAAACCCCGCCCCGCCCCCAACAACTCTGCTTTTAGGGAGGCCTCCGAAATGCAGAT
AGGCGGTTGAGTGGGGTCCTGGGAAGAGCGCTGAATCCCTCTGCTTGCTGCCTGGTGTGGGCCTTTGGAAAGCAT
CTTGCCTTGGGACAGGATTTCTAAAATTCTGTGATTCAGATTTGTCAGGGAAGCACAGTGAAGCTTGCTTAAAGG
CACTGGCCAGCAGTGTGTGACTTTGGCTTTTGGGATCACACCCTGTAATCGGGCCCGTGGAAGCAGCGTCAAAGA
GGGGTCTTGGAGCTCCTATGGAGCAGACTGCCCCCCGAGCAGTGTCCCCAGCCTAGCCCTGTGAGACCCCATGGG
GACACGGGTGCCTATGTATTTTCACTAAAATATACATGGTAGCTCCATTTACTGATGCGGTTGTAATGAGCTCAC
ATCGTGTCTGAAGAGATGGCACCAGGGAAAGGTGTGCCATAAGCTGCTCCAGAGCTTTTGGTATGCTGAGTGTTG
ACAGAGCTGCACTCTTAACATCAAGAGAACTGTCAGGAGCCCAGAACCAACCCCAGGTCTTGGTCTCCATTGGCG
AGAACACAGGACGTGGTGGTTCCTGAGCAGAGAGGGATCTGCAGATACAGGCTTGGCGCTCGGGGTGGTCTCGTG
GCCAACTCTTCATGCCCCTGCCGTTGTAGTGGAACCTCTACATGTTTTAGTTTGCTTCACCTAAAATAATGCTGA
TCTAGAGATAGAGAAATAGGGGTGGTTATTTTTCCAGATTGGAGAGTTGAAAGTCCCTGACTGATTTCAGCCATT
TTCCTAGTGCTTGTCGGATGCAGAGACAATGTTGAAATCCCCTAAACACAGTTCTCAGTGGCAAAACCTAGGAAG
GCTCATGTTCCCAGAGAAGGGACCACATGAGCCTTCTCCCATGCAAAGCTTCCCCCAGCTTAAATAGTTGATAAG
GACTAATTGTTTAATGAGTTTATTTATCTACAGTAGGTTAGGGATCCTGGGTTCTGTTTATATGAAGTTCTTCCC
AGTTTGTGAATTCTAGTACAGCAGCCATGCAGCCACCTTATTTCATAGATGCCATCTGTGTGTCCTCTTGACTAC
CTTCTATTTAGAGGAAGAATGAGAGCTTTGTGTGTTTAACTGAGCTTATAGTAGGACTTCTTTGCATATGTATGG
TACTGAAAAATCTTAATATACATCTTTAATCCTTTTTAGGTTGTCCTTTAAAGAGTTTTTGACTAGTTTCTTTTT
CTTGACAGCTCTTCTCTTTGGACACATGGGCCTTCTTAGAGGGTTCAGTCTAGGACCCGGCTCTCCTGGCCCTGT
GTTGAGGGTAGCTGGTCCCTCTGTCCCTGTGTCTGCTAGCACTAGACTTTGTTGCTGCAGATTGATCCAGTGGGT
ACATAGGCTAATTAATGTGAGTCTTTTTCCTTGTTTAAAGGAGTCCCTCTTGCTGAAAGTAGATGATTACTATTG
CTGTAGTGTTAGGAAAGTATTAAGTTTGTGCTGAAAATCCATTGCCATTTGGTACAAATGACATTTGTTCTTTCT
GTGAAAGAGATGCCCTCGAGTGTGTTTGTACACAAACCCTTAGGATGGTGAGTTGAAGCATCACCCTCGCGCTAT
CTTCAGTGACGGGTGACGGCTCAGGGAGATGGCAGGCAGATTGGGCTCTAAGTCATTATTCTCTCAGTTACTCCA
TTGGTGAAATGGCCCTTTCCCTCTTTGCAGTTCAGTCTAAGTCTCGTATTTGCTTTGCTGTCTGTGTGCTGAAGC
TCGTCCCGTGTGAGTTGCTGTCTGCCCCTTGTCAGGCTGTGAGGTGCTCGTGTAGACCTGGAGCATGCAGGCTGC
CTCCGTTTTTGGGTACTGTGTTGTGTTTTGCTCTGTCTAAAAACATCTGCATAGTTTTCAACTGGAAAAAGAAAA
AACTTAAAAATGGGATGTCCTAAAATGAAAGCTGCTCAAAGTCACAGAACAACCGAGGGACAAAGGAGATTGGAT
GACTGGGAAGCGCTGGCCCGGAACAGCCCCTGCAACTGTGGGGCCTGCACACAGCCCTTCCACAGTTGGCACTGC
AGGTGCAGGCCAACCCTTTAAAGAATAAACAAGGAAGTCAGCTCTTTCACTTTTTACAAGTTGGCAAAAACAGAC
TTCCGGGGAATTTCGATGTTTTCCCGTGTTGTAGAGCTTCCAGGGTTTAATAAAACTGGTTAAAAATTGAGTCTT
TCCCTGAAGTAAGTGCTCTTTCCAGATGAAAACTACTCTTTTGGTTTTGTTTGAAAGTAAGAAAGGGAGGGGAAA
CTTTGCTCTTTTAATAATTATGTTCAGCCTATGATGAAGTATTTGATTATTAGACAGCAATGTCACTAATAAGTT
TTAAGTTGTCCAAAGTTAATTGTAAACATCATCAGTACAGTACTCTTAGTTACAGTAAAGCAATTGTTGCAAGAT
GAATGGCTAATATTTTGGTGCAGTGTTTGATGTTCAAAACAAAATGTTACAACAATAAACGAACATAACATAAAC
TGAAAAAAAAAAAAAAAAAA

FIGURE 772

MNYVGQLAGQVIVTVKELYKGINQATLSGCIDVIVVQQQDGSYQCSPFHVRFGKLGVLRSKEKVIDIEINGSAVD
LHMKLGDNGEAFFVEETEEEYEKLPAYLATSPIPTEDQFFKDIDTPLVKSGGDETPSQSSDISHVLETETIFTPS
SVKKKKRRRKKYKQDSKKEEQAASAAAEDTCDVGVSSDDDKGAQAARGSSNASLKEEECKEPLLFHSGDHYPLSD
GDWSPLETTYPQTACPKSDSELEVKPAESLLRSESHMEWTWGGFPESTKVSKRERSDHHPRTATITPSENTHFRV
IPSEDNLISEVEKDASMEDTVCTIVKPKPRALGTQMSDPTSVAELLEPPLESTQISSMLDADHLPNAALAEAPSE
SKPAAKVDSPSKKKGVHKRSQHQGPDDIYLDDLKGLEPEVAALYFPKSESEPGSRQWPESDTLSGSQSPQSVGSA
AADSGTECLSDSAMDLPDVTLSLCGGLSENGEISKEKFMEHIITYHEFAENPGLIDNPNLVIRIYNRYYNWALAA
PMILSLQVFQKSLPKATVESWVKDKMPKKSGRWWFWRKRESMTKQLPESKEGKSEAPPASDLPSSSKEPAGARPA
ENDSSSDEGSQELEESITVDPIPTEPLSHGSTTSYKKSLRLSSDQIAKLKLHDGPNDVVFSITTQYQGTCRCAGT
IYLWNWNDKIIISDIDGTITKSDALGQILPQLGKDWTHQGIAKLYHSINENGYKFLYCSARAIGMADMTRGYLHW
VNDKGTILPRGPLMLSPSSLFSAFHREVIEKKPEKFKIECLNDIKNLFAPSKQPFYAAFGNRPNDVYAYTQVGVP
DCRIFTVNPKGELIQERTKGNKSSYHRLSELVEHVFPLLSKEQNSAFPCPEFSSFCYWRDPIPEVDLDDLS

FIGURE 773A

GGGACCGACGACACGCCCCCCTCTCCTCCTTTGTTCCGGGGGTCGGCGGCCGCTCTCCTGCCAGAGCTCGGGATC
TCGGCCCCGGGAGGCGGGCGCTCGGGCGCAGCCGCGAAGATGCCGTTGGAACTGACGCAGAGCCGAGTGCAGAAG
ATCTGGGTGCCCGTGGACCACAGGCCCTCGTTGCCCAGATCCTGTGGGCCAAAGCTGACCAACTCCCCCACCGTC
ATCGTCATGGTGGGCCTCCCCGCCCGGGGCAAGACCTACATCTCCAAGAAGCTGACTCGCTACCTCAACTGGATT
GGCGTCCCCACAAAAGTGTTCAACGTCGGGGAGTATCGCCGGGAGGCTGTGAAGCAGTACAGCTCCTACAACTTC
TTCCGCCCCGACAATGAGGAAGCCATGAAAGTCCGGAAGCAATGTGCCTTAGCTGCCTTGAGAGATGTCAAAAGC
TACCTGGCGAAAGAAGGGGGACAAATTGCGGTTTTCGATGCCACCAATACTACTAGAGAGAGGAGACACATGATC
CTTCATTTTGCCAAAGAAAATGACTTTAAAGCGTTTTTCATCGAGTCGGTGTGCGACGACCCTACAGTTGTGGCC
TCCAATATCATGGAAGTTAAAATCTCCAGCCCGGATTACAAAGACTGCAACTCGGCAGAAGCCATGGACGACTTC
ATGAAGAGGATCAGTTGCTATGAAGCCAGCTACCAGCCCCTCGACCCCGACAAATGCGACAGGGACTTGTCGCTG
ATCAAGGTGATTGACGTGGGCCGGAGGTTCCTGGTGAACCGGGTGCAGGACCACATCCAGAGCCGCATCGTGTAC
TACCTGATGAACATCCACGTGCAGCCGCGTACCATCTACCTGTGCCGGCACGGCGAGAACGAGCACAACCTCCAG
GGCCGCATCGGGGGCGACTCAGGCCTGTCCAGCCGGGGCAAGAAGTTTGCCAGTGCTCTGAGCAAGTTCGTGGAG
GAGCAGAACCTGAAGGACCTGCGCGTGTGGACCAGCCAGCTGAAGAGCACCATCCAGACGGCCGAGGCGCTGCGG
CTGCCCTACGAGCAGTGGAAGGCGCTCAATGAGATCGACGCGGGCGTCTGTGAGGAGCTGACCTACGAGGAGATC
AGGGACACCTACCCTGAGGAGTATGCGCTGCGGGAGCAGGACAAGTACTATTACCGCTACCCCACCGGGGAGTCC
TACCAGGACCTGGTCCAGCGCTTGGAGCCAGTGATCATGGAGCTGGAGCGGCAGGAGAATGTGCTGGTCATCTGC
CACCAGGCCGTCCTGCGCTGCCTGCTTGCCTACTTCCTGGATAAGAGTGCAGAGGAGATGCCCTACCTGAAATGC
CCTCTTCACACCGTCCTGAAACTGACGCCTGTCGCTTATGGCTGCCGTGTGGAATCCATCTACCTGAACGTGGAG
TCCGTCTGCACACACCGGGAGAGGTCAGAGGATGCAAAGAAGGGACCTAACCCGCTCATGAGACGCAATAGTGTC
ACCCCGCTAGCCAGCCCCGAACCCACCAAAAAGCCTCGCATCAACAGCTTTGAGGAGCATGTGGCCTCCACCTCG
GCCGCCCTGCCCAGCTGCCTGCCCCCGGAGGTGCCCACGCAGCTGCCTGGACAAAACATGAAAGGCTCCCGGAGC
AGCGCTGACTCCTCCAGGAAACACTGAGGCAGACGTGTCGGTTCCATTCCATTTCCATTTCTGCAGCTTAGCTTG
TGTCCTGCCCTCCGCCCGAGGCAAAACGTATCCTGAGGACTTCTTCCGGAGAGGGTGGGGTGGAGCAGCGGGGGA
GCCTTGGCCGAAGAGAACCATGCTTGGCACCGTCTGTGTCCCCTCGGCCGCTGGACACCAGAAAGCCACGTGGGT
CCCTGGCGCCTGCCTTTAGCCTGGGGGCCCCCACCTCCACTCTCTGGGTTCCTAGGAATGTCCAGCCTCGGAGAC
CTTCACAAAGCCTTGGGAGGGTGATGAGTGCTGGTCCTGACAAGAGGCCGCTGGGGACACTGTCCGTTTTGTTTC
GTTTCTGTGATCTCCCGGCACGTTTGGAGCTGGGAAGACCACACTGGTGGCAGAATCCTAAAATTAAAGGAGGCA
GCCTCCTAGTTGCTGAAAGTTAAGGAATGTGTAAAACCTCCACGTGACTGTTTGGTGCATCTTGACCTGGGAAGA
CGCCTCATGGGAACGAACTTGGACAGGTGTTGGGTTGACCCCTCTTCTGCAGGAAGTCCCTGAGCTGAGACGCAA
AGTTGGCTGGGTGGTGGTCGGCACCCTGGCTCCTGCAGGTCCACACACCTTCCAGGCCTGTGGCCTGCCTCCAAA
GATGTGCAAGGGCAGGCTGGCTGCACGGGGAGAGGGAAGTATTTTGCCGAAATATGAGAACTGGGGCCTCCTGCT
CCCAGGGAGCTCCAGGGCCCCTCTCTCCTCCCACCTGGACTTGGGGGGAACTGAGAAACACTTTCCTGGAGCTGC
TGGCTTTTGCACTTTTTTGATGGCAGAAGTGTGACCTGAGAGTCCCACCTTCTCTTCAGGAACGTAGATGTCGGG
GTGTCTTGCCCTGGGGGGCTTGGAACCTCTGAAGGTGGGGAGCGGAACACCTGGCATCCTTCCCCAGCACTTGCA
TTACGGTCCCTGCTCTTCCAAGGTGGGGACAGTGGCCCAAGCAAGGCCTCACACGCAGCCACTTCTTCAAGAGCT
GCCTGCACACTGTCTTGGAGCATCTGCCTTGTGCCTGGCACTCTGCCGGTGCCTTGGGAAGGTCGGTAAGAGTGG
ACTTTGTCCTGGGCTTCCCTTCATGGCGTCTAGACACTTTTGTGGTGATGGAAAGCATGGGACCTGTCGTCTCAG
CCTGTTGGTTTCTCCTCATTGCCTCAAACCCTGGGGTAGGTGGAACGGGGGGTCTCGTGCCCAGATGAAACCATT
TGGAAACTCGGCAGCAGAGTTTGTCCAAATGACCCTTTTCAGGATGTCTCAAAGCTTGTGCCAAAGGTCACTTTT
CTTTCCTGCCTTCTGCTGTGAGCCCTGAGATCCTCCTCCCAGCTCAAGGGACAGGTCCTGGGTGAGGGTGGGAGA
TTTAGACACCTGAAACTGGGCGTGGAGAGAAGAGCCGTTGCTGTTTGTTTTTTGGGAAGAGCTTTTAAAGAATGC
ATATTTTTTTACCTGGTTGGAATTGAGTAGGAACTGAGGCTGTGCTTCAGGTATGGTACAATCAAGTGGGGGATT
TTCATGCTGAACCCATTCAAAGCCCTCCCCGTCCCCGCATTTCCAGGCCACCCTTTGGCTGGCGTCTGCTGGAGA
GGATGTCTCTGTCGCATTCCCGTGCAGCTCAGCTCGCGCAGGTTTTCTCTCTCTCCCTGGATGTTGAGCTCTCAT
CAGAATATGTGGGTGGGGGGTGGACGTGCACGGGTGCATGATTGTGCTTAACTTGGTTGTATTTTTCGATTTGAC
ATGGAAGCCTGTTGCTTTGCTCTAGAGAATAGTTTCTCGTGTCCCCTTCGCACGCCTCATTCTTTGAACCTCATC
TCTGATGTTTGATACAGATGGGGGCTTGATAGCTGTGGTCCCCTTTCCCTTCTGACTACGTGAAAATCAATACCT

FIGURE 773B

AAATACAGAAGCCTTGGTCTAAACACCGAGACTTTTAGTTTGCGAAGGGGCTTAGATAGGGAGAGAGGTAACATG
AATCTGGACAGGGGAGGGAGATACTATAGAAAGGAGAACACTGCATACTTTGCAAAGCCAGTGACCTCCTTTTGA
AGGGGACATTGGACGGGGGCCGGGGGCGGGGGTTCGGTTTGACTACCGTCATGAACTTTTGGCGTATACTGATTC
CTCCAACTCTCCACCCCACAAAATAACGGGGACCAATATTTTTAACTTTGCCTATTTGTTTTTGGGTGAGTTTCC
CCCCTCCATTATTCTGTCCTGAGACCACGGGCAAAGCTCTTCCATTTTGAGAGAGAAGAAAAACTGTTTGGAACC
ACACCAATGATATTTTTCTTTGTAATACTTGAAATTTATTTTTTTATTATTTTGATAGCAGATGTGCTATTTATT
TATTTAATATATGTATAAGGAGTCCTAAACAATAGAAAGCTGTAGAAGCTGTAGAGATAGGCTTCAGTTGTTAAT
TGGTTTGGAGCCTCCTATGTGTGACTTATGACTCTCTGTGTTCTGTGTATTTGTCTGAATTAATGACCTGGGATA
TAAAGCTATGCTAGCTTTCAAACAGGAGATGCCTTCAGAAAGCTTTGTATATTTTGCAGTTGCCAGACCAATAAA
ATACCTGGTTGAAATACATGGACGAAAAAAAAAAAAAAAAAAAAAA

FIGURE 774

MPLELTQSRVQKIWVPVDHRPSLPRSCGPKLTNSPTVIVMVGLPARGKTYISKKLTRYLNWIGVPTKVFNVGEYR
REAVKQYSSYNFFRPDNEEAMKVRKQCALAALRDVKSYLAKEGGQIAVFDATNTTRERRHMILHFAKENDFKAFF
IESVCDDPTVVASNIMEVKISSPDYKDCNSAEAMDDFMKRISCYEASYQPLDPDKCDRDLSLIKVIDVGRRFLVN
RVQDHIQSRIVYYLMNIHVQPRTIYLCRHGENEHNLQGRIGGDSGLSSRGKKFASALSKFVEEQNLKDLRVWTSQ
LKSTIQTAEALRLPYEQWKALNEIDAGVCEELTYEEIRDTYPEEYALREQDKYYYRYPTGESYQDLVQRLEPVIM
ELERQENVLVICHQAVLRCLLAYFLDKSAEEMPYLKCPLHTVLKLTPVAYGCRVESIYLNVESVCTHRERSEDAK
KGPNPLMRRNSVTPLASPEPTKKPRINSFEEHVASTSAALPSCLPPEVPTQLPGQNMKGSRSSADSSRKH

FIGURE 775

GCGCCGCGGCGCGGAGTCCCGGCTGCGGGATAGACCGAGGGCCATGGCCGCCTCTCCCGGACCCGCCGGCGTTGG
CGGCGCCGGAGCAGTCTACGGCTCCGGCTCTTCGGGCTTCGCCCTCGACTCGGGACTGGAGATCAAAACTCGCTC
GGTGGAGCAGACGCTACTCCCGCTGGTTTCTCAGATCACCACGCTTATTAATCATAAAGATAATACCAAAAAGTC
TGATAAAACTCTGCAAGCAATTCAGCGTGTAGGACAAGCTGTCAACTTGGCAGTTGGAAGATTTGTTAAAGTAGG
AGAAGCTATAGCCAATGAAAACTGGGATTTGAAAGAAGAAATAAATATTGCTTGTATTGAAGCTAAACAAGCAGG
AGAAACAATTGCAGCACTTACAGACATAACCAACTTGAACCATCTGGAATCTGATGGGCAGATCACAATTTTTAC
AGACAAAACAGGAGTGATAAAGGCTGCAAGATTACTTCTTTCTTCAGTGACAAAAGTGTTGTTGCTGGCAGACCG
AGTAGTCATTAAACAGATAATAACATCAAGAAATAAGGTTCTCGCAACTATGGAAAGACTAGAGAAAGTGAATAG
CTTTCAAGAGTTTGTCCAAATATTCAGTCAATTTGGAAATGAAATGGTGGAGTTTGCACATCTGAGTGGAGATAG
ACAAAATGATTTGAAAGATGAAAAGAAAAAGGCAAAAATGGCAGCAGCTAGGGCAGTTCTTGAAAAGTGTACAAT
GATGCTTCTCACAGCTTCAAAGACATGTCTGAGGCATCCTAACTGCGAATCAGCCCATAAAAACAAAGAAGGAGT
ATTTGACCGTATGAAAGTGGCATTGGATAAGGTCATTGAAATTGTGACTGACTGTAAACCGAATGGAGAGACTGA
CATTTCATCTATCAGTATTTTTACTGGAATTAAGGAATTCAAGATGAATATTGAAGCTCTTCGGGAGAATCTTTA
TTTTCAGTCCAAAGAGAACCTTTCTGTGACATTGGAAGTCATCTTGGAGCGTATGGAGGACTTTACTGATTCTGC
CTACACCAGCCATGAGCACAGAGAACGCATCTTGGAACTGTCAACTCAGGCGAGAATGGAACTGCAGCAGTTAAT
TTCTGTGTGGATTCAAGCTCAAAGCAAGAAAACAAAAAGCATCGCTGAAGAACTGGAACTCAGTATTTTGAAAAT
CAGTCACAGTCTTAATGAACTTAAGAAAGAACTTCATAGTACAGCGACACAGCTGGCAGCAGATCTATTAAAATA
CCATGCTGATCATGTGGTTCTAAAAGCATTAAAACTTACTGGAGTAGAAGGAAATTTAGAAGCTTTGGCTGAATA
TGCCTGTAAACTCTCTGAACAGAAAGAGCAGCTTGTTGAGACCTGTCGATTGTTACGACACATATCTGGGACAGA
ACCTCTGGAAATAACCTGTATACATGCAGAGGAGACATTTCAGGTGACTGGCCAACAGATAATTTCTGCTGCTGA
AACATTGACATTGCATCCATCTAGTAAAATTGCTAAAGAAAACCTAGATGTATTTTGTGAAGCTTGGGAATCCCA
AATTAGTGACATGTCAACACTGCTGAGAGAAATCAATGACGTGTTTGAAGGAAGACGAGGAGAGAAGTATGGCTA
CCTTTCACTTCCAAAGCCAATGAAGAATAATGCAAACCTGAAATCATTAAAGCCAGACAAGCCTGACTCTGAGGA
GCAAGCCAAGATAGCAAAGCTTGGACTTAAGCTGGGTTTGCTCACCTCTGACGCTGACTGCGAAATTGAGAAGTG
GGAAGATCAGGAGAATGAGATTGTTCAATATGGACGGAACATGTCCAGTATGGCCTATTCTCTGTATTTATTTAC
TAGAGGAGAGGGGCCACTGAAAACTTCCCAGGATTTAATTCATCAACTAGAGGTTTTTGCTGCAGAGGGTTTAAA
GCTTACTTCCAGTGTTCAAGCTTTTTCAAAACAGCTGAAAGACGATGACAAGCTTATGCTTCTCCTGGAAATAAA
CAAGCTAATTCCTCTATGCCACCAGCTCCAGACAGTAACTAAGACTTCTTTGCAGAATAAAGTATTTCTAAAGGT
TGACAAGTGTATTACGAAGACAAGATCCATGATGGCTCTCTTAGTCCAACTTCTTTCACTTTGTTATAAACTGCT
GAAGAAGCTTCAGATGGAAAATAACGGATGGGTCTCAGTTACAAATAAGGACACTATGGATAGTAAAACTTGAGA
AGCTTTTGGGGTCAGATCTCTGGAACATCATGTGATGAAGCTGACATTTTTAAAAATCAAATGATCCTTTATCTT
TTCAGAAATTCATCAATTTTATAAAGAAAACAATATTGAAATTTTGCTCTATTTTCTGATCATGAAACTGATTGT
AAAGCTTTTTGACAACTAATAAATGTCTTGGTAATTGCTAGATTCT

FIGURE 776

MAASPGPAGVGGAGAVYGSGSSGFALDSGLEIKTRSVEQTLLPLVSQITTLINHKDNTKKSDKTLQAIQRVGQAV
NLAVGRFVKVGEAIANENWDLKEEINIACIEAKQAGETIAALTDITNLNHLESDGQITIFTDKTGVIKAARLLLS
SVTKVLLLADRVVIKQIITSRNKVLATMERLEKVNSFQEFVQIFSQFGNEMVEFAHLSGDRQNDLKDEKKKAKMA
AARAVLEKCTMMLLTASKTCLRHPNCESAHKNKEGVFDRMKVALDKVIEIVTDCKPNGETDISSISIFTGIKEFK
MNIEALRENLYFQSKENLSVTLEVILERMEDFTDSAYTSHEHRERILELSTQARMELQQLISVWIQAQSKKTKSI
AEELELSILKISHSLNELKKELHSTATQLAADLLKYHADHVVLKALKLTGVEGNLEALAEYACKLSEQKEQLVET
CRLLRHISGTEPLEITCIHAEETFQVTGQQIISAAETLTLHPSSKIAKENLDVFCEAWESQISDMSTLLREINDV
FEGRRGEKYGYLSLPKPMKNNANLKSLKPDKPDSEEQAKIAKLGLKLGLLTSDADCEIEKWEDQENEIVQYGRNM
SSMAYSLYLFTRGEGPLKTSQDLIHQLEVFAAEGLKLTSSVQAFSKQLKDDDKLMLLLEINKLIPLCHQLQTVTK
TSLQNKVFLKVDKCITKTRSMMALLVQLLSLCYKLLKKLQMENNGWVSVTNKDTMDSKT

FIGURE 777A

GTCGGCCGTCCCCTTTAATTTTTAAATACACGGTCCCCTCTTTTCTCTGGGGGGGGCAAGCAAGAAATCAAAGAA
GGAGGAGACAAGCCGTCAATTTTCTCCAAAACAAACCCCACCGGGCAATTTGGTCTCGGGGTAGGGGGAGACGGG
GTGATTGCAAATTATTCCAGGACGAGATCCAGTTCTCCAGCGGGAAAGGGGCAAAGGAACGCCGCGCGTTGGAAG
GGCCAGGGTACGCAGCTCCCCTTGCAGCGCCCGCAGGACCCCCGCAAGCTCGTGCCGGCGAAATCGGAGACCGCC
GATCTGTCCTCGTTCTCTCCTGCACGTCTGGCTGCATTCGGAGGAAGACCTGGGGCGCGAGCGAGCGGCGACAGC
ATGAGCCTGTGCTGACCTCCGCGCGGCGGGCCGAGCCCAGGGCTTTGTCGCGGTACCTGCGCCCAGCCCGCGCCG
CAACTCTGTGCCCAGCTTTTGCAATCTTTTGTTGCAGCGCTGACCGCACCAAGTTAAATGCTCCCTTGCAATTTT
TCTTTTTTTTGTTTGTTTGTTTAATTTTTGGAGAGCTCGCGATCTTGGAAAAGCCTCAGACGCCATCTACAGTTA
AAACGTAGGTAACTGCCCTCTCCCGCACCCCCCCCTTACACGCCCCCCACCCTTTCCACCAAAAAAAGGGGGTGC
AGCGCGGATTCTGGCTGCCGTGCGTCGCCAGCCGGTAGACCCGTGCTTGTTTCCTTTCTCTTTTTGTTTGGCTTC
TAACGCGTTGGGACTGAGTCGCCGCCGTGAGCTCCCCGAAGACTGCACAAACTACCGCGGGCTCCTCCGCCCCGT
CTGCGATTCGGAAGCCGGCCTGGGGGTCGCGTCGGGAGCCCTGCGCTGCAGCTCCGCACCTTAGCAGCCCGGGTA
CTCATCCAGATCCACGCCGGGGACACACACACAGAGTAACTAAAAGTGCGGCGATTCTGCACATCGCCGACTGCT
TTGGGGTAACAAAAAGACCCGAGTTGCCTGCCGACCGAGGACCCCCGGGAGCCGGGCTCGGAGCAGACGAGGTAT
CCGGCGGCGCCCATTTGGGGGCTTCTAACTCTTTCTCCACGCAGCCCCTCTTCTGTCCCCTCCCCTCTCGCTCCC
TTTTAAAATCAGTGGCACCGAGGCGCCTGCAGCCGCACTCGCCAGCGACTCATCTCTCCAGCGGGTTTTTTTTTG
TTTGTCGTGTGCGATCCTCACACTC**ATG**AACATACACAGGTCTACCCCCATCACAATAGCGAGATATGGGAGATC
GCGGAACAAAACCCAGGATTTCGAAGAGTTGTCGTCTATAAGGTCCGCGGAGCCCAGCCAGAGTTTCAGCCCGAA
CCTCGGCTCCCCGAGCCCGCCCGAGACTCCGAACTTGTCGCATTGCGTTTCTTGTATCGGGAAATACTTATTGTT
GGAACCTCTGGAGGGAGACCACGTTTTTCGTGCCGTGCATCTGCACAGCGGAGAGGAGCTGGTGTGCAAGGTGTT
TGATATCAGCTGCTACCAGGAATCCCTGGCACCGTGCTTTTGCCTGTCTGCTCATAGTAACATCAACCAAATCAC
TGAAATTATCCTGGGTGAGACCAAAGCCTATGTGTTCTTTGAGCGAAGCTATGGGGACATGCATTCCTTCGTCCG
CACCTGCAAGAAGCTGAGAGAGGAGGAGGCAGCCAGACTGTTCTACCAGATTGCCTCGGCAGTGGCCCACTGCCA
TGACGGGGGGCTGGTGCTGCGGGACCTCAAGCTGCGGAAATTCATCTTTAAGGACGAAGAGAGGACTCGGGTCAA
GCTGGAAAGCCTGGAAGACGCCTACATTCTGCGGGGAGATGATGATTCCCTCTCCGACAAGCATGGCTGCCCGGC
TTACGTAAGCCCAGAGATCTTGAACACCAGTGGCAGCTACTCGGGCAAAGCAGCCGACGTGTGGAGCCTGGGGGT
GATGCTGTACACCATGTTGGTGGGGCGGTACCCTTTCCATGACATTGAACCCAGCTCCCTCTTCAGCAAGATCCG
GCGTGGCCAGTTCAACATTCCAGAGACTCTGTCGCCCAAGGCCAAGTGCCTCATCCGAAGCATTCTGCGTCGGGA
GCCCTCAGAGCGGCTGACCTCGCAGGAAATTCTGGACCATCCTTGGTTTTCTACAGATTTTAGCGTCTCGAATTC
AGCATATGGTGCTAAGGAAGTGTCTGACCAGCTGGTGCCGGACGTCAACATGGAAGAGAACTTGGACCCTTTCTT
TAAC**TGA**GCTCATGCCCCACGGAGACTTAGCAGGTTCCAGGAGTGAGCGAGGGCAGCGGAAAGGAGTTCTTCCGG
GGGACACGAATTGCCTGGCTGAGTAGCAAGAAAGACACACTCTTAAGTTTCTTGGTTCAGAGCAGGAAAACCTTC
AAGGAGCTGACTGACCACGTAGCATGGGGGCAAGAGGCGTGGGATGGGGATTGGGGTGAGATGGATGGGAGCCCG
CTGGAGCTTGTCTTCCCTAACATAGCCTGGGAGACCACCCCTTGCCACTTGGGCCACTTCCGCCTACCCCACTTT
TCATTTTGTTCCAAAATAGTTGCAGATCCTGACAGAATCAAAACTCTCTGCCTCAAACACACATCCTGGCATCGC
ACTGTTAGCATTTAACTTCTTGTTAGGATTCAGGGAAGGAACAGTTGGCCAAGAATTTTTTTTCTTTTAAACAAG
CCAACCACCTAGCTGGTAATTAATGAGGTTCACTTAAAAAAAAAATTCGGTGCACACAGACTGACATGAAACCTG
GGTGCTACAGTAAAAGAAAACAAAAGTCCAGTTTGTGTCTCTTAATCGCTCACTTCAACTCATTTCTTCTAAATA
AACTATTTAATATCCTGGTCAGGAAATGACATGTTAATGCTTTGCTCCCTGAAGGGGGAAAAAATCTGTCCTTTA
ACAAGCTATTCTGTTTTGTGTCAATTGGGTCCGTGGCAAGGAAGCTATTAGGAAGTCAAACGGTCCAGGATGCAT
TACCTGCTAATCCTTAGGTTTAAAGGGGGAAAGAAAAGGGAAGAAGAAAGGAAAAGAGAAATCCAACTCCTTTTT
CATGTTTTGCTTTTGAACAATGAGGGTTTGTGTGACAGGCATTCCTCTTTGCTGAGATGATAGCAATGGCCTGAG
ATTTTAGCAAGCTCCTGGAGTCTGATGCTTTTGCAGTACTCTGATCGCAACTAAACATTTGTCTTTGTTTTATTA
GAAACTAGTGAAACAAAGCAGGTTGTCCCACATGTATAAAATACAGGGCAGCTATTTAGTTTTCTTTACAGAGAA
TGATCCTTTTAAGGCTTGTAAGGCCCTCTGGTTTGGACAAAAACCCTCAGTAGAGACAAGCGGGAAGGATAATTA
GCTGAAAGCTATGATGATATAAATAAAAACAGCTCTCTATCCCAATACGCACCTTTGTATTTTCAAGAACTCTTC
TATTTATTAAGGAAAATGTCACATTGTGATGTATTAAGCCAGTACTTCAATTACGGGTTGACTTGGGATGACATA
TTACATGCTGTAGTTAACATTTATAATTCTTTTTCCTTGTTTGAGTATTTCTGTCTCTGAAATAACCTTTTACTT

FIGURE 777B

GGCTTTTCTAGATAGCTTTATTTGATTTCGAGTGGCAAAATGTTTTTTATTACGGCTTTTCTATTGCTGTATGAT
ACAGAACTCTTTTGGCATAAATATTTGTGTTCCCAGTACCTCACTTGTTCGGATTTGACTGCCTGTATATGTTTT
GTGAAATGGTCCTGTTTTTGGGTAGGTGACACGTGGACTCTAGTATGTAAATGTTACTTGAATCTGTGCTTCATA
ATAGTGTGTGGCATGTATGTGCAGACTCTTGGATGCTTTATGCCTGCGCACCAGGAGCCCTGTCCTCACGTTCCC
AGGAGGGCGGCTTCACCCTTCGTAACCAGGAGACAAGGCGGCCATGGATTTGCCCTTGATTCTATTTTGCTAATG
GAAGATAGAAAGGAGAGAAGGTTTTTTTTTTTTTTTAACATTCTGAAGATGGTGCTGTGTCAAGAAGGACCTTTT
TTTTCCCCTCTCCCCTATTTTTTAAGTACCTTGGAGGAGGAGAGGTTGGTGACATGCATGGTGGGGATCTATGGC
CTCTGGTGCTTTGTCCTGTATTTGGTTTAATGTTTTTGTCCTAATCTCTTCAATCAATAAAATTGTGCGTATTTA
ACTAAAAAAAAAAAAAAAAAA

FIGURE 778

MNIHRSTPITIARYGRSRNKTQDFEELSSIRSAEPSQSFSPNLGSPSPPETPNLSHCVSCIGKYLLLEPLEGDHV
FRAVHLHSGEELVCKVFDISCYQESLAPCFCLSAHSNINQITEIILGETKAYVFFERSYGDMHSFVRTCKKLREE
EAARLFYQIASAVAHCHDGGLVLRDLKLRKFIFKDEERTRVKLESLEDAYILRGDDDSLSDKHGCPAYVSPEILN
TSGSYSGKAADVWSLGVMLYTMLVGRYPFHDIEPSSLFSKIRRGQFNIPETLSPKAKCLIRSILRREPSERLTSQ
EILDHPWFSTDFSVSNSAYGAKEVSDQLVPDVNMEENLDPFFN

FIGURE 779

CGAGGTTCGGGTCGTGGGGCGGAGGGAAGAGCGGGCGGGCGGGAGGCGCCGGCGCCAGACGCGGAGGGAAGGAGC
TACGAGTAGCCGCCGAGAGGCCGCGGAGCCAGCGACGACCGACCCAGCCGAGCCGCCGCCGCCGCGCCCCCA
TGGCGGCCGCCAAGGACACTCATGAGGACCATGATACTTCCACTGAGAATACAGACGAGTCCAACCATGACCCTC
AGTTTGAGCCAATAGTTTCTCTTCCTGAGCAAGAAATTAAAACACTGGAAGAAGATGAAGAGGAACTTTTTAAAA
TGCGGGCAAAACTGTTCCGATTTGCCTCTGAGAACGATCTCCCAGAATGGAAGGAGCGAGGCACTGGTGACGTCA
AGCTCCTGAAGCACAAGGAGAAAGGGGCCATCCGCCTCCTCATGCGGAGGGACAAGACCCTGAAGATCTGTGCCA
ACCACTACATCACGCCGATGATGGAGCTGAAGCCCAACGCAGGTAGCGACCGTGCCTGGGTCTGGAACACCCACG
CTGACTTCGCCGACGAGTGCCCCAAGCCAGAGCTGCTGGCCATCCGCTTCCTGAATGCTGAGAATGCACAGAAAT
TCAAAACAAAGTTTGAAGAATGCAGGAAAGAGATCGAAGAGAGAGAAAAGAAAGCAGGATCAGGCAAAAATGATC
ATGCCGAAAAAGTGGCGGAAAAGCTAGAAGCTCTCTCGGTGAAGGAGGAGACCAAGGAGGATGCTGAGGAGAAGC
AATAAATCGTCTTATTTTATTTTCTTTTCCTCTCTTTCCTTTCCTTTTTTTAAAAAATTTTACCCTGCCCCTCTT
TTTCGGTTTGTTTTTATTCTTTCATTTTTACAAGGGACGTTATATAAAGAACTGAACTC

FIGURE 780

MAAAKDTHEDHDTSTENTDESNHDPQFEPIVSLPEQEIKTLEEDEEELFKMRAKLFRFASENDLPEWKERGTGDV
KLLKHKEKGAIRLLMRRDKTLKICANHYITPMMELKPNAGSDRAWVWNTHADFADECPKPELLAIRFLNAENAQK
FKTKFEECRKEIEEREKKAGSGKNDHAEKVAEKLEALSVKEETKEDAEEKQ

FIGURE 781A

GTGGGGTGGGGTGGGGCTGGGGGCTTGTCGCCCTTTCAGGCTCCACCCTTTGCGGAGATTATAAATAGTCATGAT
CCCAGCGAGACCCAGAGATGCCTGTAATGGTGAGACTTTGGATCCTTCCTGAGGACGTGGAGAAAACTTTCTGCT
GAGAAGGACATTTTGAAGGTTTTGTTGGCTGAAAAAGCTGTTTCTGGAATCACCCCTAGATCTTTCTTGAAGACT
TGAATTAGATTACAGCG**ATG**GGGACACAGAAGGTCACCCCAGCTCTGATATTTGCCATCACAGTTGCTACAATCG
GCTCTTTCCAATTTGGCTACAACACTGGGGTCATCAATGCTCCTGAGAAGATCATAAAGGAATTTATCAATAAAA
CTTTGACGGACAAGGGAAATGCCCCACCCTCTGAGGTGCTGCTCACGTCTCTCTGGTCCTTGTCTGTGGCCATAT
TTTCCGTCGGGGGTATGATCGGCTCCTTTTCCGTCGGACTCTTCGTCAACCGCTTTGGCAGGCGCAATTCAATGC
TGATTGTCAACCTGTTGGCTGTCACTGGTGGCTGCTTTATGGGACTGTGTAAAGTAGCTAAGTCGGTTGAAATGC
TGATCCTGGGTCGCTTGGTTATTGGCCTCTTCTGCGGACTCTGCACAGGTTTTGTGCCCATGTACATTGGAGAGA
TCTCGCCTACTGCCCTGCGGGGTGCCTTTGGCACTCTCAACCAGCTGGGCATCGTTGTTGGAATTCTGGTGGCCC
AGATCTTTGGTCTGGAATTCATCCTTGGGTCTGAAGAGCTATGGCCGCTGCTACTGGGTTTTACCATCCTTCCTG
CTATCCTACAAAGTGCAGCCCTTCCATTTTGCCCTGAAAGTCCCAGATTTTTGCTCATTAACAGAAAAGAAGAGG
AGAATGCTAAGCAGATCCTCCAGCGGTTGTGGGGCACCCAGGATGTATCCCAAGACATCCAGGAGATGAAAGATG
AGAGTGCAAGGATGTCACAAGAAAAGCAAGTCACCGTGCTAGAGCTCTTTAGAGTGTCCAGCTACCGACAGCCCA
TCATCATTTCCATTGTGCTCCAGCTCTCTCAGCAGCTCTCTGGGATCAATGCTGTGTTCTATTACTCAACAGGAA
TCTTCAAGGATGCAGGTGTTCAAGAGCCCATCTATGCCACCATCGGCGCGGGTGTGGTTAATACTATCTTCACTG
TAGTTTCTCTATTTCTGGTGGAAAGGGCAGGAAGAAGGACTCTGCATATGATAGGCCTTGGAGGGATGGCTTTTT
GTTCCACGCTCATGACTGTTTCTTTGTTATTAAAGGATAACTATAATGGGATGAGCTTTGTCTGTATTGGGGCTA
TCTTGGTCTTTGTAGCCTTCTTTGAAATTGGACCAGGCCCCATTCCCTGGTTTATTGTGGCCGAACTCTTCAGCC
AGGGCCCCCGCCCAGCTGCGATGGCAGTGGCCGGCTGCTCCAACTGGACCTCCAACTTCCTAGTCGGATTGCTCT
TCCCCTCCGCTGCTCACTATTTAGGAGCCTACGTTTTTATTATCTTCACCGGCTTCCTCATTACCTTCTTGGCTT
TTACCTTCTTCAAAGTCCCTGAGACCCGTGGCAGGACTTTTGAGGATATCACACGGGCCTTTGAAGGGCAGGCAC
ACGGTGCAGATAGATCTGGAAAGGACGGCGTCATGGAGATGAACAGCATCGAGCCTGCTAAGGAGACCACCACCA
ATGTC**TAA**GTCGTGCCTCCTTCCACCTCCCTCCCGGCATGGGAAAGCCACCTCTCCCTCAACAAGGGAGAGACCT
CATCAGGATGAACCCAGGACGCTTCTGAATGCTGCTACTTAATTCCTTTCTCATCCCACGCACTCCATGAGCACC
CCAAGGCTGCGGTTTGTTGGATCTTCAATGGCTTTTTAAATTTTATTTCCTGGACATCCTCTTCTGCTTAGGAGA
GACCGAGTGAACCTACCTTCATTTCAGGAGGGATTGGCCGCTTGGCACATGACAACTTTGCCAGCTTTTCCTCCC
TTGGGTTCTGATATTGCCGCACTAGGGGATATAGGAGAGGAAAAGTAAGGTGCAGTTCCCCCAACCTCAGACTTA
CCAGGAAGCAGATACATATGAGTGTGGAAGCCGGAGGGTGTTTATGTAAGAGCACCTTCCTCACTTCCATACAGC
TCTACGTGGCAAATTAACTTGAGTTTTATTTATTTTATCCTCTGGTTTAATTACATAATTTTTTTTTTTTACTT
TAAGTTTCAGGATACATGTGCCGAATGTGCAGGTTTGTTACATAGGTATATATATGCCATGATGGAAATATTTAT
TTTTTTAAGCGTAATTTTGCCAAATAATAAAAACAGAAGGAAATTGAGATTAGAGGGAGGTGTTTAAAGAGAGGT
TATAGAGTAGAAGATTTGATGCTGGAGAGGTTAAGGTGCAATAAGAATTTAGGGAGAAATGTTGTTCATTATTGG
AGGGTAAATGATGTGGTGCCTGAGGTCTGTACGTTACCTCTTAACAATTTCTGTCCTTCAGATGGAAACTCTTTA
ACTTCTCGTAAAAGTCATATACCTATATAATAAAGCTACTGATTTCCTTGGAGCTTTTTTCTTTAAGATAATAGT
TTACATGTAGTAGTACTTGAAATCTAGGATTATTAACTAATATGGGCATTGTAGTTAATGATGGTTGATGGGTTC
TAATTTTGGATGGAGTCCAGGGAAGAGAAAGTGATTTCTAGAAAGCCTGTTCCCCTCACTGGATGAAATAACTCC
TTCTTGTAGTAGTCTCATTACTTTTGAAGTAATCCCGCCACCTATCTCGTGGGAGAGCCATCCAAATAAGAAACC
TAAAATAATTGGTTCTTGGTAGAGATTCATTATTTTTCCACTTTGTTCTTTAGGAGATTTTAGGTGTTGATTTTC
TGTTGTATTTTAACTCATACCTTTAAAGGAATTCCCCAAAGAATGTTTATAGCAAACTTGGAATTTGTAACCTCA
GCTCTGGGAGAGGATTTTTTTCTGAGCGATTATTATCTAAAGTGTGTTGTTGCTTTAGGCTCACGGCACGCTTGC
GTATGTCTGTTACCATGTCACTGTGGTCCTATGCCGAATGCCCTCAGGGGACTTGAATCTTTCCAATAAACCAGG
TTTAGACAGTATGAGTCAATGTGCAGTGTAGCCCACACTTGAGAGGATGAATGTATGTGCACTGTCACTTTGCTC
TGGGTGGAAGTACGTTATTGTTGACTTATTTTCTCTGTGTTTGTTCCTACAGCCCCTTTTTCATATGTTGCTCAG
TCTCCCTTTCCCTTCTTGGTGCTTACACATCTCAGACCCTTTAGCCAAACCCTTGTCAGTGACAGTATTTTGGTT
CTTAGTTCTCACTGTTCCCTCTGCTCCTGGAGCCTTTGAATAAAAATGCACGTAGCTGAGGCCGGATGCGGTGGC
TCACGCCTGTAATCCCAGCACTTTGGGAGGCCTAGGCGGGCGGTCAGGGGTTCGAGACCAGTCTGGCCAACATCG
TGAAACCCTGTCTCTACTAAAAATGCAAAAATTAGCCGGGCGTGGTGGCGGGCGCCTGTAATCCCAGCTACTTGG

FIGURE 781B

GAAGCTGAGGCGGGAGAATCATGTGAACCCGGGACGCAGGGGTTGCAGTGAGCGGAGATCGCATCATTGCACTCT
AGCCTGGGCCACAGGGCGAGACTCCGTCTCAAAAAAAAAAAAAATGCACATAGCTATCGAGTGTGCTTTAGCTTGA
AAAGGTGACCTTGCAACTTCATGTCAACTTTCTGGCTCCTCAAACAGTAGGTTGGCAGTAAGGCAGGGTCCCATT
TCTCACTGAGAAGATTGTGAATATTTCCATATGGATTTTCTATTGTTACTCTGGTTCTTTGTTTTAAAATAAAAA
TTCTGAATGTACACG

FIGURE 782

MGTQKVTPALIFAITVATIGSFQFGYNTGVINAPEKIIKEFINKTLTDKGNAPPSEVLLTSLWSLSVAIFSVGGM
IGSFSVGLFVNRFGRRNSMLIVNLLAVTGGCFMGLCKVAKSVEMLILGRLVIGLFCGLCTGFVPMYIGEISPTAL
RGAFGTLNQLGIVVGILVAQIFGLEFILGSEELWPLLLGFTILPAILQSAALPFCPESPRFLLINRKEEENAKQI
LQRLWGTQDVSQDIQEMKDESARMSQEKQVTVLELFRVSSYRQPIIISIVLQLSQQLSGINAVFYYSTGIFKDAG
VQEPIYATIGAGVVNTIFTVVSLFLVERAGRRTLHMIGLGGMAFCSTLMTVSLLLKDNYNGMSFVCIGAILVFVA
FFEIGPGPIPWFIVAELFSQGPRPAAMAVAGCSNWTSNFLVGLLFPSAAHYLGAYVFIIFTGFLITFLAFTFFKV
PETRGRTFEDITRAFEGQAHGADRSGKDGVMEMNSIEPAKETTTNV

FIGURE 783

CGAGCAGGCGGCAGGCACGGTCCGTGCGGAGAGGCGAGCGAGCGGGAAGACGCAGCCACCTTCCTCACCAGCCAG
CCCACAGCGGTTTGTTCCCCTTCTCGGGAGTGCGCCA**ATG**CCTGGGCCGACCCAAACCCTGTCCCCAAATGGCGA
GAACAACAACGACATCATCCAGGATAATAACGGGACCATCATTCCTTTCCGGAAGCACACAGTGCGCGGGGAGCG
TTCCTACAGTTGGGGAATGGCGGTCAATGTGTATTCTACCTCGATAACCCAAGAGACTATGAGCAGACATGACAT
CATTGCATGGGTTAATGACATAGTATCTTTAAACTACACAAAAGTGGAACAGCTTTGTTCAGGAGCGGCCTATTG
CCAATTCATGGACATGCTCTTCCCTGGCTGCATTAGTTTGAAGAAAGTAAAATTTCAAGCAAAGCTGGAACATGA
ATATATTCACAATTTTAAACTTCTGCAAGCATCATTTAAGCGAATGAACGTTGATAAGGTAATTCCAGTGGAGAA
GCTAGTGAAAGGACGTTTCCAGGACAACCTGGATTTTATTCAATGGTTTAAGAAATTCTATGATGCTAACTACGA
TGGGAAGGAGTATGATCCTGTAGAGGCACGACAAGGGCAAGATGCAATTCCTCCTCCTGACCCTGGTGAACAGAT
CTTCAACCTGCCAAAAAAGTCTCACCATGCAAACTCCCCCACAGCAGGTGCAGCTAAATCAAGTCCAGCAGCTAA
ACCAGGATCCACACCTTCTCGACCCTCATCAGCCAAAAGGGCTTCTTCCAGTGGCTCAGCATCCAAATCCGATAA
AGATTTAGAAACGCAGGTCATACAGCTTAATGAACAGGTACATTCATTAAAACTTGCCCTTGAAGGCGTGGAAAA
GGAAAGGGATTTCTACTTTGGGAAGTTGAGAGAGATCGAGCTACTCTGCCAAGAACACGGGCAGGAAAATGATGA
CCTCGTGCAGAGACTAATGGACATCCTGTATGCTTCAGAAGAACACGAGGGCCACACAGAAGAGCCGGAAGCAGA
GGAGCAAGCCCACGAACAGCAGCCCCCGCAGCAGGAAGAGTAC**TGA**CCCACCCCGGCTGCTCTTGACACTTCCAT
TGTGTGTGGGAACGTTTCTTCTGGAGAATTGGAACATGTGTGGCCCCAAGCTCAACAGAAACCAGTTGTTCCCAA
TCTGCCGTTACCATCAACGCACTGTTGCATATGCCAGCCACTGCGCTTGGTTCCCATTTTCTTTGCTAAGGTGTA
TTAGCGGACGGCCCTCTGGCCACCTACCCGAGAGATCGTAGGGTCACATTCATCCAACTTCACCACTTGGCTGCT
TGAGATTGGTTCTGCTCTTTTCTTCATTCCTTTCCAGAACAACTCTTTCCCACCCCAACACCACTGCCACCACCC
CTCTTTTTATCCTGGTGTGAAACAATGGTAATTTGATATATGGTATTTATATTGGCATTTTTCAACCCAGTGTCA
CTAGATGTCACACACATTTGTGGTGCTTTGATGTTTGCAAGTCTAACCTCTGAACATAAATTTGGTCAAATAATT
GGAACAAAGGGAAACAGATACTTGATATGAAAGCCATAATGACGGTGACTTGTGTCGTGGGGGAAAACATAAGGT
CATTTTCTCCCTCTACTCACAATACTAAAGGGAAAAAATGGATTCAAAGCTAGGATTTCAGGGCCCAGCAGTGTT
CCTCCATCAGCATGTTAGACAACTACACAGTATGTTGTTAGTTTTGAAAGACATTCACTCAAGGAAAACACCATC
TCAACTTTGCCCGCTCACCATGTCCCTTGCCCCCATGTAGCCCATTTCCCAGGTTATGCTCTTTTCTTTCTCAGG
GTCCTCTTTGGTGGGCAGCCACTCCCCGAGATGTTGCCATCAGTTTTCTGCAGTCCAAAGAGGGTATGGTTAGGT
ACGGGTCTTCCTGCCTCATTCCTCTTCCTCTTTGTGTAGGTTTCAGCCACAAAACTGTCATTCACTCTAGGGGAC
CCCTACTAAAGGGTAACTTCAGGTGTGCAGCCCTGAGCTCCAAGGCTCTGCACCATGCCACACACTTGCTGTAAG
GCTAGAAGTGAAGACCTTATTAATAGGAGCATAATTGCGAGGGAGAATCATGGTTCTGCAGTCTGGTGTAGACAC
TGGAATAACAGCACAGAAAAATCTATGACTCCCAATATCTTCTAGAATAAAGAATTTTCCCTCTTTAACACAAGG
GCCCTCCTTGTCATTGACCTTAGCTAAACCATGGCAATTCATAAATAGAGGAAACATTAATGAATTAAAAGCATT
CCTTATTTTTTAACTAATATTTGTACATTTTCTTAGTCTCTTTCCAAGTCTTTGCCTCTTTTTTTTCTTTATTTT
TATTTTTTCCTTTGACAGATGGTATCCCTTCCTGGATCATTCATTTCACCTTGGTTTCTAACTTTAGGTTTACTT
TCACTTGTTATTTGACTTAGCAGGTGCAACAAAAACAAGAAACAAATGTGCCCACCCCACTTTCCGCTTAACTGA
AAAGCTTAAAATAAATTTCCGAATTATG

FIGURE 784

MPGPTQTLSPNGENNNDIIQDNNGTIIPFRKHTVRGERSYSWGMAVNVYSTSITQETMSRHDIIAWVNDIVSLNY
TKVEQLCSGAAYCQFMDMLFPGCISLKKVKFQAKLEHEYIHNFKLLQASFKRMNVDKVIPVEKLVKGRFQDNLDF
IQWFKKFYDANYDGKEYDPVEARQGQDAIPPPDPGEQIFNLPKKSHHANSPTAGAAKSSPAAKPGSTPSRPSSAK
RASSSGSASKSDKDLETQVIQLNEQVHSLKLALEGVEKERDFYFGKLREIELLCQEHGQENDDLVQRLMDILYAS
EEHEGHTEEPEAEEQAHEQQPPQQEEY

FIGURE 785

GTGAAACACCCTCGGCTGGGAAGTCAGTTCGTTCTCTCCTCTCCTCTCTTCTTGTTTGAACATGGTGCGGACTAA
AGCAGACAGTGTTCCAGGCACTTACAGAAAAGTGGTGGCTGCTCGAGCCCCCAGAAAGGTGCTTGGTTCTTCCAC
CTCTGCCACTAATTCGACATCAGTTTCATCGAGGAAAGCTGAAAATAAATATGCAGGAGGGAACCCCGTTTGCGT
GCGCCCAACTCCCAAGTGGCAAAAAGGAATTGGAGAATTCTTTAGGTTGTCCCCTAAAGATTCTGAAAAAGAGAA
TCAGATTCCTGAAGAGGCAGGAAGCAGTGGCTTAGGAAAAGCAAAGAGAAAAGCATGTCCTTTGCAACCTGATCA
CACAAATGATGAAAAAGAATAGAACTTTCTCATTCATCTTTGAATAACGTCTCCTTGTTTACCCTGGTATTCTAG
AATGTAAATTTACATAAATGTGTTTGTTCCAATTAGCTTTGTTGAACAGGCATTTAATTAAAAAATTTAGGTTTA
AATTTAGATGTTCAAAAGTAGTTGTGAAATTTGAGAATTTGTAAGACTAATTATGGTAACTTAGCTTAGTATTCA
ATATAATGCATTGTTTGGTTTCTTTTACCAAATTAAGTGTCTAGTTCTTGCTAAAATCAAGTCATTGCATTGTGT
TCTAATTACAAGTATGTTGTATTTGAGATTTGCTTAGATTGTTGTACTGCTGCCATTTTTATTGGTGTTTGATTA
TTGGAATGGTGCCATATTGTCACTCCTTCTACTTGCTTTAAAAAGCAGAGTTAGATTTTTGCACATTAAAAAATT
CAGTATTAATT

FIGURE 786

MVRTKADSVPGTYRKVVAARAPRKVLGSSTSATNSTSVSSRKAENKYAGGNPVCVRPTPKWQKGIGEFFRLSPKD
SEKENQIPEEAGSSGLGKAKRKACPLQPDHTNDEKE

FIGURE 787A

TGCAGCGCTAGAAAGGAATTGTCTGACCCCAGCATTGCTTCCTGGCTCCTTTCTTCCTTTTTCAGGAGAGCATCC
TGCCGACCACAGCCCTCCCCACTGTGAGCCTTCCTGACAGCCTCATCGCGCCCCCTACCGCCCCATCCCTGGCTC
ACATGGATGAGCAGGGCTGTGAACACACCTCCCGGACTGAGGACCCGTTTATCCAGCCCACGGACTTCGGTCCCT
CAGAGCCGCCACTGAGTGTCCCGCAGCCCTTCCTCCCTGTCTTCACCATGCCCCTGCTGTCTCCCAGCCCCGCCC
CACCGCCCATCTCCCCCGTGTTACCATTAGTTCCTCCTCCTGCCACTGCCCTGAACCCCCCGGCTCCACCCACCT
TCCATCAGCCACAGAAGTTTGCTGGAGTCAACAAAGCGCCGTCTGTCATCACCCACACGGCCTCTGCCACCCTCA
CCCACGATGCCCCCGCCACCACCTTTAGCCAGAGTCAGGGCCTTGTGATCACCACCCATCACCCTGCCCCGTCAG
CGGCCCCTTGTGGGCTGGCACTGTCTCCTGTCACCCGGCCTCCCCAGCCACGGTTAACTTTTGTGCACCCCAAAC
CTGTATCCTTGACTGGGGGCAGGCCTAAGCAGCCCCACAAAATAGTGCCTGCTCCCAAACCAGAGCCCGTGTCCT
TGGTGTTGAAGAATGCCCGTATCGCCCCAGCTGCCTTTTCAGGCCAACCACAAGCGGTGATCATGACGTCAGGGC
CTCTGAAGAGAGAAGGGATGTTGGCCTCCACCGTGTCCCAGTCCAACGTGGTCATTGCGCCTGCTGCCATCGCCA
GGGCTCCTGGGGTCCCGGAGTTCCACAGCAGCATCCTGGTGACAGATCTCGGCCATGGCACGAGCAGCCCGCCTG
CCCCCGTCTCCCGGCTCTTCCCAAGCACAGCGCAAGACCCCCTGGGGAAGGGCGAGCAGGTCCCGCTGCATGGGG
GCAGCCCCCAGGTCACTGTCACAGGGCCCAGTCGGGACTGCCCAAACTCAGGGCAGGCCTCTCCGTGTGCATCGG
AGCAGAGCCCCAGTCCTCAATCTCCCCAGAACAACTGCTCAGGGAAATCCGACCCCAAAAATGTGGCTGCACTAA
AGAACCGGCAGATGAAGCACATCTCAGCTGAGCAGAAAAGGCGCTTCAACATCAAGATGTGCTTCGACATGCTCA
ACAGCCTCATCTCCAACAATTCCAAGCTGACCAGTCACGCCATCACACTGCAGAAGACTGTGGAGTACATCACCA
AGCTGCAGCAGGAGAGAGGCCAGATGCAGGAGGAGGCCCGGCGGCTGCGGGAGGAGATCGAGGAGCTCAATGCCA
CCATCATCTCCTGCCAGCAGCTGCTCCCTGCCACGGGAGTCCCCGTTACCCGGCGCCAGTTTGATCACATGAAAG
ACATGTTTGACGAATACGTGAAAACCCGGACCTTGCAGAATTGGAAGTTCTGGATTTTCAGCATCATCATCAAGC
CGCTGTTTGAGTCGTTCAAGGGCATGGTGTCCACCAGCAGCCTGGAGGAGCTGCACCGGACGGCGCTCTCCTGGC
TGGACCAGCACTGCTCCCTGCCCATCCTCAGGCCGATGGTATTGAGCACGCTGCGGCAGCTGAGCACCTCCACCT
CCATCCTCACAGACCCGGCACAGCTGCCAGAGCAGGCGTCCAAGGCTGTCACCAGGATTGGCAAGAGATTGGGAG
AGTCCTAGCTGCTTAGCTGGCATGTGGCCGCATGAGATGCCAGGAGACCCTTCCCTGCCCATGGAGAGTAGGCTG
CGCCCCCCAGCCCTTCCTGACGCTCAGCCTCGGGGCCTCTCTCCAACTCTGCCGGCCCACCGTGGCATCGGGAGG
CCATGCTCAGGTCTGAAGCAGGTTTGGGGCCTGCTGACAGCAATAGCCCGCCTTTGGGAACCCCTTGCTGTGAAC
TCTCTCACTCAGTGACCTCAGTCACCAACCTCCTCTGCCCTCGGGGCAGCCCACACAAAAGGGAAGTGCTGGCCG
TGCTGGTCCTGCCCTGCTGGTGGCCTGCCGGGCCTGGCGCCGGTGAGCGGAATCGATGGGATGAGGGTGACAGGG
CCTGCTCCTGTCCTGAGGCCCAGCCTTGTCCCTCCTGCCACGTCCTGTCCACATGCATGCCTCTGCCTGATGCCC
TGCTCCACTCTCTGGTCTGCCCGTGGGGCAGTTGGAAGGCGTCTTTCTTTCTCCCCTCAACTCTGACAGCACCCA
GCCCTTGTGGATGGACTTGGGCTTCTATTCAGGCTTATGCATGGCAGGCTGCCAGGGGGAAGTGCCTTCTTCAGA
GGTCCTCCAGGACACATGTGTGCAGAAACGGTGGATGTGGAACACACAGGACCAGAATGGAAGCGTGTGATGCAC
GGTGGCTGCTCTGGCTGAGAGGCCCTGCTGGGCATGTTTCATCTGTCCCCTTTTAGCTCCACCTGACATTGCAGG
ATCCATGGGGACTCAGCCCAGGGCCTTCTCGGATGTCACCTCACCGCTGTGGCCCTTCTGCCGTTCTTCTCCACT
TGGCTCCAGCTGCAGCTGTTGACAGATCAAGCATGTCCTGTGGGAGCTTAGAACCCTGAAGTTCTAGTGTCTGAA
AGATCAGACTCCACGTCCTGCTGTCAGCCTTGTCATCTTGTCTGATGTCTTTCAGCTGGGAGCCCCAAACCAGGA
CAGTTCTCGGACCAAAGATGCCCCCACACTCAAAAGTCTGTCCCGTCTTGTGTTTGGAGAAGGAAACAATGTTGG
CAGGCAGCACTCTGTGGTGGTCAGCCCTCAGAGCTGTTTCTAGGCATCTCTCAGATCAGACAGCAAAGAATCTAC
CCAGATCTGGGCTGGGTGGAGGTGTGGCTGGGCTGGGGGCCATTCTGAGCCTGCAGTGAGAGTTTGGCCCAGCCT
CAGTCCTTGCTCTTCTCTGGCTACCTCTGCAGGGAGCTGCAGGGGCAAGCACTCTCTCCAGCACTCAGGAAGCCC
GGCCGAGGGTACCTCCTCGTGGAAAGAATGCACTTTAAAGCTCTGCTGAGGAGTTCGGAGCCCAGGCTTTCAGGC
GACCTCTGCCCTCCCTGCCTCTCCTCACCCTCCCTCTCTTCCTGCAGGGCCTGGGAAGGGCTTTGAGGGAGCCTG
GGAGCCATGTGAAGAGGGGCACGCCTGGGCTGTCCCACAGTTTAGATCCAGTTGGAGGTTCTCCCTGGCTCCTGC
AGGCCTGCGGGGATCTCTCCCCACTTCAGGCCTCCGGCCAGCTGCCTGCCCTCTTGTCTGTGCTTCAGCCCTGCA
CAAAAGCAGCTTGGTGACACCACTCAGCCACCCAGAGTACGTGTTTACAGGCTTTCCAGATCACCTTCCTGTGGG
GTGAACGTAATGAGGCGGGGCTGGTCCTTGGAATTTCCCCTGGAAAATGGTAACAGACTCCATCCTTGACCCGGG
GATGAGCATGAAGGCATTGTCCCAAAGGCAGAGGCCACCGTGGTAGGAATTCCACCAAGGCCAGAAGGGAAAAAG
GAAGAACCCACCGTGTCTGGCTGTGCGGGCCCTGGGGAGGGTCGTGAGTGCAGCCCCTCTCTACTTCTGTGCCTT

FIGURE 787B

TGTAAAACGTGTAGATAACCGCAGTGGTTGGCTGAGCCAAGAACTCTCCTAAATCAGTGGCTTTCTCCCCACCCC
TTGCTGGGGAGTCATTTTTAAAAAAATCTGTGGGATATAAAATTGGCCTCCTGCTGCTTCAGCCTACCTCTCCCT
CTGCTGACTTAATGTCGTGATTCTGTTTCTTCAGATATTTAAGGCTGTTAGGTTGTGTGAGCCTTGAAGTGTGTG
TGTGTGTCCCAGCGACTGTCCACTGTCCAGGAGATGCATGTCTTTGTATTGGAGATATTTCTGTAACTCATTCTC
TTGGTGCTCACGATTGCCATGGCCATAGGGCCACAGTGCCGTATCTGCTGCAGACATGATTGTTTCTTGTTCTAG
AGGTTTTCTTGTTTTCGAATCTTGCCTGATGAATCCAGCCAGACCAAGGGGCCTAGATTTGACCTCTGTCCTGGG
CTCCTGGGCCAGGTGCAGGAACATCTGAGGCCACTCTGCTGGCCACCTCCAGTGGGTGCTGACCACAGGATGGGC
TTTGTTTACACTCATTTTCACCCTGATTCTTGCCCCCACTTTCATAAAAGAAACTTCAAAATGCTGACGCTTTGG
AGAGTAAGAAAATCAATCTTGGCTGGGCACGGTGGCTCCTGCCTGTGATCCTAGCACTTTGGGAGGCTGAAGCTG
AAGGATCACTTGAGCTCAGGAGTTGGAGACCAACCCTGGCAACATAACAAGACCCTGTCTCTAC

FIGURE 788

MDEQGCEHTSRTEDPFIQPTDFGPSEPPLSVPQPFLPVFTMPLLSPSPAPPPISPVLPLVPPPATALNPPAPPTF
HQPQKFAGVNKAPSVITHTASATLTHDAPATTFSQSQGLVITTHHPAPSAAPCGLALSPVTRPPQPRLTFVHPKP
VSLTGGRPKQPHKIVPAPKPEPVSLVLKNARIAPAAFSGQPQAVIMTSGPLKREGMLASTVSQSNVVIAPAAIAR
APGVPEFHSSILVTDLGHGTSSPPAPVSRLFPSTAQDPLGKGEQVPLHGGSPQVTVTGPSRDCPNSGQASPCASE
QSPSPQSPQNNCSGKSDPKNVAALKNRQMKHISAEQKRRFNIKMCFDMLNSLISNNSKLTSHAITLQKTVEYITK
LQQERGQMQEEARRLREEIEELNATIISCQQLLPATGVPVTRRQFDHMKDMFDEYVKTRTLQNWKFWIFSIIIKP
LFESFKGMVSTSSLEELHRTALSWLDQHCSLPILRPMVLSTLRQLSTSTSILTDPAQLPEQASKAVTRIGKRLGE
S

FIGURE 789A

CGGACGCGTGGGAACGAAGCCACCCATTACGGTATGATGATGTCAAACGTGATGCTGATGCTACAGTTACAGCCC
CTGCTGGCGCAGCCTCTCTGATTCTCTCTCCCTCTCCGCGTCCAGTGCTGGGCTTTTTCAGACAAGTGCATCTCC
TAACCAGGTCACATTTCAGCCGCGACCCACTCTCCGCCAGTCACCGGAGGCAGACCGCGGGAGGAGAGCTGAGGA
CAGCCGCGTGCGCTTCGCCAGCAGCGGGGTGGGAGGAAGGACATTAAAATACTGCAGAAGTCAAGACCCCCCAGG
TCGAACCCAGACCACG**ATG**CGCGCCCCGGGCTGCGGGCGGCTGGTGCTGCCGCTGCTGCTCCTGGCCGCGGCAGC
CCTGGCCGAAGGCGACGCCAAGGGGCTCAAGGAGGGCGAGACCCCCGGCAATTTCATGGAGGACGAGCAATGGCT
GTCGTCCATCTCGCAGTACAGCGGCAAGATCAAGCACTGGAACCGCTTCCGAGACGAAGTGGAGGATGACTATAT
CAAGAGCTGGGAGGACAATCAGCAAGGAGATGAAGCCCTGGATACCACCAAGGACCCCTGCCAGAAGGTGAAGTG
CAGCCGCCACAAGGTGTGCATTGCCCAGGGCTACCAGCGGGCCATGTGCATCAGTCGCAAGAAGCTGGAGCACAG
GATCAAGCAGCCGACCGTGAAACTCCATGGAAACAAAGACTCCATCTGCAAGCCCTGCCACATGGCCCAGCTTGC
CTCTGTCTGCGGCTCAGATGGCCACACTTACAGCTCTGTGTGTAAGCTGGAGCAACAGGCGTGCCTGAGCAGCAA
GCAGCTGGCGGTGCGATGCGAGGGCCCCTGCCCCTGCCCCACGGAGCAGGCTGCCACCTCCACCGCCGATGGCAA
ACCAGAGACTTGCACCGGTCAGGACCTGGCTGACCTGGGAGATCGGCTGCGGGACTGGTTCCAGCTCCTTCATGA
GAACTCCAAGCAGAATGGCTCAGCCAGCAGTGTAGCCGGCCCGGCCAGCGGGCTGGACAAGAGCCTGGGGGCCAG
CTGCAAGGACTCCATTGGCTGGATGTTCTCCAAGCTGGACACCAGTGCTGACCTCTTCCTGGACCAGACGGAGCT
GGCCGCCATCAACCTGGACAAGTACGAGGTCTGCATCCGTCCCTTCTTCAACTCCTGTGACACCTACAAGGATGG
CCGGGTCTCTACTGCTGAGTGGTGCTTCTGCTTCTGGAGGGAGAAGCCCCCCTGCCTGGCAGAGCTGGAGCGCAT
CCAGATCCAGGAGGCCGCCAAGAAGAAGCCAGGCATCTTCATCCCGAGCTGCGACGAGGATGGCTACTACCGGAA
GATGCAGTGTGACCAGAGCAGCGGTGACTGCTGGTGTGTGGACCAGCTGGGCCTGGAGCTGACTGGCACGCGCAC
GCATGGGAGCCCCGACTGCGATGACATCGTGGGCTTCTCGGGGGACTTTGGAAGCGGTGTCGGCTGGGAGGATGA
GGAGGAGAAGGAGACGGAGGAAGCAGGCGAGGAGGCCGAGGAGGAGGAGGGCGAGGCAGGCGAGGCTGACGACGG
GGGCTACATCTGG**TAG**ACGCCCTCAGAAGCCGGCTGCCGGGGGGGACTCAACAGCAGAGCTCTGAGCAGCAGCAG
GCAACTTCGAGAACGGATCCAGAAATGCAGTCAGAAGGACCCTGCTCCACCTGGGGGGACTGGGAGTGTGAGTGT
GCATGGCATGTGTGTGGCACAGATGGCTGGGACGGGTGACAGTGTGAGTGCATGTGTGCATGCATGTGTGTATGT
GTGTGTGTGTGTGGCATGCGCTGACAAATGTGTCCTTGATCCACACTGCTCCTGGCAGAGTGAGTAACCCAAAGG
CCCCTTCGGCCTCCTTGTAGCTGTTTTCTTTCCTTTTGTTGTTGGTTTTAAAATACATTCACACACAAATACAAA
TTGACAGGTCAAAATCCATGAAATGAGATCCCCCAGCCGTGTCCTCCAGCCCAGCCCTGACCCCTTGGTTTCTAC
CCTGGCTCCCCTTGGTTTCTACCCTGGCTCAACCGACCCCTGTCTGCCCTTCTCCCTCCTGCTTCTGAGGTCAAG
CTCTGGCCTGCGAGCCTGTCCCCATTGCAAAGGGGAGGGAGGGGCAGGGAGCTGTCTACCAGCTGAGGTCCTCCC
AAAACTGGGCCGATGTGGTGTGACATCCCCACCAGCCTCAGATGAGACGGGCCAGGACGCCCAGCCACAGCAAGC
CCTGTCCCTTTGCCGGATCCCCAAACACTAGAGAAGCTCTCCTAACCCAAGGCGGAGAATGAAGGTGGTGGCGGC
AGAGGAGGAGGGCAGCAGCTGAGAGGCCAGGGACAGGGTGCCTCGCCAAGCTGTCTGAGGTCTGTCCCAGGTGGC
CCAGGTGGTGCAGGTAGAACAGGGTGAGGAGAGGGGGTCGGCTCAACAGGAGGAGGCTGTGGCTGCAGAGCCTGG
AGGAGCTTTTAGGTGTTGAGATGGGGCAGCTCTGAATCCTAGACCCTGGAATAGCCTGTCCCTTTTCTCTGGGTC
TCGTGGTGGAGCCATGATCTGGGCTGCTCTCTTGGGGACACTGGGTGGTGGTTACACAGTTGACCTCTGCCTGGC
TCCCCCTTGGTGCAACTCCTGCCTCCATCCCCCTTGCTGGGGTCCCCTCATCCACTTGAGGGCGCCTGAGGGCCA
GGAGCAGCAGGCAAGGAGCCTGGGTCTAGGCTAAGGGGGTGTGTGCCCACCTCCTCCCTGACCCTTAACACTCCT
GTCCTGCCCAGACCAACAGAGAGAGCTGTCCCTGAGACCCCGGAGAGAAGCAGCTGCCGAAAGCTGCAGCCTTTC
CGCACTCTGAGACCATGATCTTCCTCCTGCCAGGGGAGAGCCACCCACAGGCCATGTCCAGCCCCACTTCCCTCA
GCCCCCAGGGCTTCCTTCTGGCCCCTCTGAGGATTCCCTAGGGCTGCCCCGCAGAGGGGCTTCCCCAAGCTCTGT
TTTGAAGCCTGCAATGTGGAAAAGTGAGAAGTCAGAGGGAACAGGACAGGTGCAGCCGGGCTCTGAGGCCACACC
TCACACCTCGCTGTTCCCCAACATCCCCTGAGCAGTGTGAGCTCATCTCACCAGATGAGAAGAGGCCCTGTGCAT
TTCTTTTGTTTGTTTGTTGCTGTTTTCCCCCACCCATCCAGTTCTCCTCAGCAAAGCAAATTCCTTAACACCTTT
GGTGGAGAATTTCTTACCCAGACTTGGGGCTGTGATGCCCTTCAGTGCGTGGTGAGTGCAGCGTGTGTGCGTGTG
CCTGTGTGTGAACCTGGGGGCCATCCTGGTGGCCTGGGAGCGTGAGGAGAGGCCCCCTGTGTGCTGGGTGAGTGG
TGGGTGTGGGGTCAATGCAGTGAGGCTCTCTGGGTGAGGCTCCCAACCTGGCAGTCCCCAGCCTCCCAGCATCTG
TGAGCGTCTGTTGGACTTTACAGAAGAGCCTCATCCCGTCTGCCCCTCACTCTGCCCTGGAATCAACATCTTCCG
AGTCCTTCTTGGGGGAAATAGCAGAGCCCCACTTAACTCCATAAACTGCTTCCCATTCCGCAGCCCAGTTCTGAT

FIGURE 789B

TGTTGAGGTGTCGCGTCGTTCCAGGTCCCCCAGTCCCCTCTTTCTCCTGTCCTCTCTCTGTCCTTCACCTCCCCA
CTCCAGCCCCGGCTCAGTTCAGGGAAATGCTGTTCCATATCAGCCCTCTGCTCTCTGAGGCAGCCGCGCCTCTGA
CTCGGAGCTACTTGAAACTTCTGCTCTTGCTAGGATTGGAGTCTACCTATCTCTTCCATTTGTCCCAGCTGGAGT
TCTGGAACTTTCCTCCTCGGGGTGGGGGTGGGGGTTGTTAAGGATGCTGGGGGGCCTGGGGAAGGAAGGAGTTCA
GAGGAAGGGTGTCCCCTGTCCTCTTGATGTCACCCTCCGCTCCTGGGACACGTGCTCTCTCTGTCTCTGGGTCTT
CTGGCTGTGCACGTTTGTGTGTCCTTGTAAATATGTTTTAGGAAGAAAGCAAAAGGGACTGAACTAGCCTCTGGT
AGGATTGCAGGGGTCCAGCCTTGCCTGTTTCCGAAGCCCCCACACTGCCTTTCGCCCCACTGAGACTGGTCCCCT
CAAAAGGTAGACAAAACAGCAGCTCCCTGTGGAGCTGAAGGGCGGCCTCAAAGTGGCTTTTTGTTAGACAAGGTT
AAGGTTTCCTCATGAGCAAGGTTGCAGATCGGTCCTTCCTCAGCTCCTTGATTTGTGACCTTGACCAAGGGGCCT
GCCACCCAGCCCCTCCAGTGCCCTCTCCTCGATGCCTCGCTCCTTCCTGCCCCCACTCCCCTGGCTTAGGCAGGT
AGGGGAATTAGGGCCATGCTGGAAGAAGCTTAACCATGTGTTCAAAGAACGGTTTCTTGCTTGCTTGGTCCTGGA
ACTCCCCTTGGCTGCCCCAGGCCTCCTTGGCCCATGGGTGCTGGGGGAGGTGGATGTCAGATCTGGTAGGTTGCA
GCAGAGAAAATAAATGTGCCTTGAGAGACCACTCAGAGAGGGTCCAAGGGTGATGGAGAAGGAAGCATGGCCTGG
GAGCTTGGAAGGGAGGGGTGGTGGGTGGCGGCATCTTGACTGCCCCCTGTTGTCCCACACGTGGGGGGTGGTCAC
CCCCCTTCACTCCAGCCCGCCTGCCTTCAGCCTTCCATGAGCTTCACCTGCTTCCAACTTCACTTTGGAGGGGGT
GGGGTCCGTTGGCATCAACACGGGGACCCTCTGCTTCACCAAAGCCCGAGCCCTCAGCCCCTGGGGAGAACAAAT
GGCTGAGCTTTGATACCTGGGGTCGTCGAGAGGCTGCGGGCTGGCGGCAGTCCCAGGGGAGAGACACCACAGAAG
GAGACCCAGACATCCCGAGGAAGTTCCCAGCAGAGCAAACTGCTTTCCAGCCTGAAGCCTGCTTAAACTGTGTGA
TGTGCAATAACTGAGCTTAGAGTTAGGAATTGTGTTCAAGTGCTTGGATTTCCGTCTGTAGATTTAACTGCTGAA
ATTGTATCTCTCAGTAATTTTAGATGTCTTTTAAAAAATTGAAAAACAAAGTGTTAGACTGTGTGCGTGTGCGTT
GATGGGCACTCAAGAGTCCCGTGAGTCATCCAGCCCTGCCTTTCCCCTGCGCCCCCATCCTCTCACGTCCCGCCC
TGCCTCCACTTGGGGACCCTGCCTCGTGTCGTCTTTATCTGCCTATTACTCAGCCTAAGGAAACAAGTACACTCC
ACACATGCATAAAGGAAATCAAATGTTATTTTTAAGAAAATGGAAAATAAAAACTTTATAAACACC

FIGURE 790

MRAPGCGRLVLPLLLLAAAALAEGDAKGLKEGETPGNFMEDEQWLSSISQYSGKIKHWNRFRDEVEDDYIKSWED
NQQGDEALDTTKDPCQKVKCSRHKVCIAQGYQRAMCISRKKLEHRIKQPTVKLHGNKDSICKPCHMAQLASVCGS
DGHTYSSVCKLEQQACLSSKQLAVRCEGPCPCPTEQAATSTADGKPETCTGQDLADLGDRLRDWFQLLHENSKQN
GSASSVAGPASGLDKSLGASCKDSIGWMFSKLDTSADLFLDQTELAAINLDKYEVCIRPFFNSCDTYKDGRVSTA
EWCFCFWREKPPCLAELERIQIQEAAKKKPGIFIPSCDEDGYYRKMQCDQSSGDCWCVDQLGLELTGTRTHGSPD
CDDIVGFSGDFGSGVGWEDEEEKETEEAGEEAEEEEGEAGEADDGGYIW

FIGURE 791

GACTCTCCAGTCCTCAGTCACCTTGGACAAAGAAGTGTGGATCCTCAGATTCCATCTTTTCCAACTCCAAGGTGC
CATGGCAGAGAAGGTGCTGGTAACAGGTGGGGCTGGCTACATTGGCAGCCACACGGTGCTGGAGCTGCTGGAGGC
TGGCTACTTGCCTGTGGTCATCGATAACTTCCATAATGCCTTCCGTGGAGGGGGCTCCCTGCCTGAGAGCCTGCG
GCGGGTCCAGGAGCTGACAGGCCGCTCTGTGGAGTTTGAGGAGATGGACATTTTGGACCAGGGAGCCCTACAGCG
TCTCTTCAAAAAGTACAGCTTTATGGCGGTCATCCACTTTGCGGGGCTCAAGGCCGTGGGCGAGTCGGTGCAGAA
GCCTCTGGATTATTACAGAGTTAACCTGACCGGGACCATCCAGCTTCTGGAGATCATGAAGGCCCACGGGGTGAA
GAACCTGGTGTTCAGCAGCTCAGCCACTGTGTACGGGAACCCCCAGTACCTGCCCCTTGATGAGGCCCACCCCAC
GGGTGGTTGTACCAACCCTTACGGCAAGTCCAAGTTCTTCATCGAGGAAATGATCCGGGACCTGTGCCAGGCAGA
CAAGACTTGGAACGTAGTGCTGCTGCGCTATTTCAACCCCACAGGTGCCCATGCCTCTGGCTGCATTGGTGAGGA
TCCCCAGGGCATACCCAACAACCTCATGCCTTATGTCTCCCAGGTGGCGATCGGGCGACGGGAGGCCCTGAATGT
CTTTGGCAATGACTATGACACAGAGGATGGCACAGGTGTCCGGGATTACATCCATGTCGTGGATCTGGCCAAGGG
CCACATTGCAGCCTTAAGGAAGCTGAAAGAACAGTGTGGCTGCCGGATCTACAACCTGGGCACGGGCACAGGCTA
TTCAGTGCTGCAGATGGTCCAGGCTATGGAGAAGGCCTCTGGGAAGAAGATCCCGTACAAGGTGGTGGCACGGCG
GGAAGGTGATGTGGCAGCCTGTTACGCCAACCCCAGCCTGGCCCAAGAGGAGCTGGGGTGGACAGCAGCCTTAGG
GCTGGACAGGATGTGTGAGGATCTCTGGCGCTGGCAGAAGCAGAATCCTTCAGGCTTTGGCACGCAAGCCTGAGG
ACCCTCCCCTACCAAGGACCAGGAAAAGCAGCAGCTGCCTGCTCTCCAGCCTCTGGAGGAACTCAGGGCCCTGGA
GCTGCTGGGGCCAAGCCAAGGGCCTCCCCTACCTCAAACCCCAGCTGGGCCCGCTTAGCCCACCAGGCATGAGGC
CAAGGCTCCACTGACCAGGAGGCCGAGGTCTCTAACTCTTATCTTCCACAGGGTCCAAGAGTTCATCAGGACCCC
CAAGAGTGAGTGAGGGGGCAAGGCTCTGGCACAAAACCTCCTCCTCCCAGGCACTCATTTATATTGCTCTGAAAG
AGCTTTCCAAAGTATTTAAAAATAAAAACAAGTTTTCTTACACTGG

FIGURE 792

MAEKVLVTGGAGYIGSHTVLELLEAGYLPVVIDNFHNAFRGGGSLPESLRRVQELTGRSVEFEEMDILDQGALQR
LFKKYSFMAVIHFAGLKAVGESVQKPLDYYRVNLTGTIQLLEIMKAHGVKNLVFSSSATVYGNPQYLPLDEAHPT
GGCTNPYGKSKFFIEEMIRDLCQADKTWNVVLLRYFNPTGAHASGCIGEDPQGIPNNLMPYVSQVAIGRREALNV
FGNDYDTEDGTGVRDYIHVVDLAKGHIAALRKLKEQCGCRIYNLGTGTGYSVLQMVQAMEKASGKKIPYKVVARR
EGDVAACYANPSLAQEELGWTAALGLDRMCEDLWRWQKQNPSGFGTQA

FIGURE 793A

CGATGGCCCTGCCCAGTCCCAGACAGAACCTACTACGTGCGGCGGCAGCTGGGGCGGGAAGGCGGGCGCTGGGGG
CGCTGCGGCCGCTGCAGCGCAGGGTCCACCTGGTCGGCTGCACCTGTGGAGGAGGAGGTGGATTTCAGGCTTCCC
GTAGACTGGAAGAATCGGCTCAAAACCGCTTGCCTCGCAGGGGCTGAGCTGGAGGCAGCGAGGCCGCCCGACGCA
GGCTTCCGGCGAGACATGGCAGGGCAAGGATGGCAGCCCGGCGGCAGGGCCCGGCGAGGAGCGCGAACCCGCGGC
CGCAGTTCCCAGGCGTCTGCGGGCGCGAGCACGCCGCGACCCTGCGTGCGCCGGGGCGGGGGGGCGGGGCCTCGC
CTGCACAAATAGGGACGAGGGGGCGGGGCGGCCACAATTTCGCGCCAAACTTGACCGCGCGTTCTGCTGTAACGA
GCGGGCTCGGAGGTCCTCCCGCTGCTGTC**ATG**GTTGGTTCGCTAAACTGCATCGTCGCTGTGTCCCAGAACATGG
GCATCGGCAAGAACGGGGACCTGCCCTGGCCACCGCTCAGGAATGAATTCAGATATTTCCAGAGAATGACCACAA
CCTCTTCAGTAGAAGGTAAACAGAATCTGGTGATTATGGGTAAGAAGACCTGGTTCTCCATTCCTGAGAAGAATC
GACCTTTAAAGGGTAGAATTAATTTAGTTCTCAGCAGAGAACTCAAGGAACCTCCACAAGGAGCTCATTTTCTTT
CCAGAAGTCTAGATGATGCCTTAAAACTTACTGAACAACCAGAATTAGCAAATAAAGTAGACATGGTCTGGATAG
TTGGTGGCAGTTCTGTTTATAAGGAAGCCATGAATCACCCAGGCCATCTTAAACTATTTGTGACAAGGATCATGC
AAGACTTTGAAAGTGACACGTTTTTTCCAGAAATTGATTTGGAGAAATATAAACTTCTGCCAGAATACCCAGGTG
TTCTCTCTGATGTCCAGGAGGAGAAAGGCATTAAGTACAAATTTGAAGTATATGAGAAGAATGAT**TAA**TATGAAG
GTGTTTTCTAGTTTAAGTTGTTCCCCCTCCCTCTGAAAAAAGTATGTATTTTTACATTAGAAAAGGTTTTTTGTT
GACTTTAGATCTATAATTATTTCTAAGCAACTTGTTTTTATTCCCCACTACTCTTCTCTCTATCAGATACCATTT
ATGAGACATTCTTGCTATAACTAAGTGCTTCTCCAAGACCCCAACTGAGTCCCCAGCACCTGCTACAGTGAGCTG
CCATTCCACACCCATCACATGTGGCACTCTTGCCAGTCCTTGACATTGTCGGGCTTTTCACATGTTGGTAATATT
TATTAAAGATGAAGATCCACATACCCTTCAACTGAGCAGTTTCACTAGTGGAAATACCAAAAGCTTCCTACGTGT
ATATCCAGAGGTTTGTAGATAAATGTTGCCACCTTGTTTGTAACAGTGAAAAATTGAAAACAACCTGGAAGTCCA
GTGATGGGAAAATGAGTATGTTTCTGTCTTAGATTGGGGAACCCAAAGCAGATTGCAAGACTGAAATTTCAGTGA
AAGCAGTGTATTTGCTAGGTCATACCAGAAATCATCAATTGAGGTACGGAGAAACTGAACTGAGAAGGTAAGAAA
AGCAATTTAAAGTCAGCGAGCAGGTTCTCATTGATAACAAGCTCCATACTGCTGAGATACAGGGAAATGGAGGGG
GGAAAGCTGGAGTATTGATCCCGCCCCCCTCCTTGGTTGTCAGCTCCCTGTCCTGTGTGTGGGCGGAACATAGTC
CAGCTGCTCTATAGCAAGTCTCAGGTGTTTGCAGTAAGAAGCTGCTGGCATGCACGGGAACAGTGAATGCCAAAC
ACTTAAAGCAATTCGATGTTTAAGTATGTAAGTTCTTTTTTTTTTAGACAGCGTTTCGCTCTTGTTGCCCAGGCT
AGCATGCAATGGTGTGACCTCGGCTTACTGCAACCTCCGCCTTCCCAGATTCAAGCGATTCTCCTGCCTCAGGCT
CCCAAGTAGCTAGGACCAGGTGCGCGCCACCACGCCCGGCTAATTTTTGTATTTTGTATTTTTAGTAGAGATGGG
GTTTCACCATGTTGGTCAGGCTAGTCTCGAACTCGTGACCGCAAGCGATTCACCCACCTCAGCCTCCCAAAGTGC
TGGGATTACCGGCTTGAGCCACCACACCCGGCACATCTTCATTCTTTTTATGTAGTAAAAAGTATAAGGCCACAC
ATGGTTTATTTGAAGTATTTTATAATTTAAAAAAATACAGAAGCAGGAAAACCAATTATAAGTTCAAGTGAGGGA
TGATGGTTGCTTGAACCAAAGGGTTGCATGTAGTAAGAAATTGTGATTTAAGATATATTTTAAAGTTATAAGTAG
CAGGATATTCTGATGGAGTTTGACTTTGGTTTTGGGCCCAGGGAGTTTCAGATGCCTTTGAGAAATGAATGAAGT
AGAGAGAAAATAAAAGAAAAACCAGCCAGGCACAGTGGCTCACACCTGTAATCCCAGCGCTTTGGGAGGCTAAGG
CAGGCAGATCACTTGAGACCAGCTTGGGCAACATGGCAAAGCCCCATCTCTACAAAAAACACAAAAATTAGCTGG
GCATTGTGGCGCACACCTGTATTCCCATCTAGTCAGGAAGCTGAGATGGAAGAATTAATTGAGCCCACGAGTTCA
AGGCTGCAGTGAGTCGTGATTGTGCCACTGCACTCCAGCCGGGGTGACAGAAGAGACCTTGTCTCGAAAACGAAT
CTGAAAACAATGGAACCATGCCTTCATAATTCTAGAAAGTTATTTTCAACTGATAAATCTATATTCACCCAAATA
ATCAAGGGTGAAGGTAAAATAATACATTTTTAGACAAGCAAAGACTCAGGGGTTACCTCCATGTGCCCTTTTTAG
GGAAGCTGTTGGAGAAAATACTCCAGCAAAATGAAGGAGTACACAAACCAGAGAATGACATGAATCCAGCAAATA
GGATCCAACACAGGCAATATTCCAGCTATGGAGCTAGCTTTAAAAAGGAACAGTAAAAATATTAATCGGTTAGCT
GGGTGGAATGGCCCATGCCTGTAGTCCCAGCTACTCAGGAGGCTCAGCAGCAGGACGACTTGAGCCCAAGAGTTC
CAGACCAGCCTGGCCACCTTAGTGAGATCCCTTCTCTTAAAAATAATAACTTATTGCCAGATTTGGGGCATTTGG
AAAGAAGTTCATTGAAGATAAAGCAAAAGTAAAAAAAAAAAAAAAAAAAACAAGGGGAAAGGGTTGGTTAGGCAA
TCATTCTAGGGCAGAAAGAAGTACAGGATAGGAAGAGCATAATACACTGTTTTTCTCAACAAGGAGCAGTATGTA
CACAGTCATAATGATGTGACTGCTTAGCCCCTAAATATGGTAACTACTCTGGGACAATATGGGAGGAAAAGTGAA
GATTGTGATGGTGTAAGAGCTAATCCTCATCTGTCATATCCAGAAATCACTATATAATATATAATAATGAAATGA
CTAAGTTATGTGAGGAAAAAAACAGAAGACATTGCTAAAAGAGTTAAAAGTCATTGCTCTGGAGAATTAGGAGGG

FIGURE 793B

ATGGGGCAGGGGACTGTTAGGATGCATTATAAACTGAAAAGCCTTTTTAAAATTTTATGTATTAATATATGCATT
CACTTGAAAAACTAAAAAAAAAACAATAATTTGGAAAAACCCATGAAGGTAACTAACGGAAGGAAAAACTAAGAGA
ATGAAAAGTATTTGCCTCTGGAAAGAACAACTGGCAGGACTGTTGTTTTCATTGTAAGACTTTTGGAGCCATTTA
ATTGTACTTAACCATTTTCATCTATTTCTTTAATAAGAACAATTCCATCTTAATAAAGAGTTACACTTGTTAATA

FIGURE 794

MVGSLNCIVAVSQNMGIGKNGDLPWPPLRNEFRYFQRMTTTSSVEGKQNLVIMGKKTWFSIPEKNRPLKGRINLV
LSRELKEPPQGAHFLSRSLDDALKLTEQPELANKVDMVWIVGGSSVYKEAMNHPGHLKLFVTRIMQDFESDTFFP
EIDLEKYKLLPEYPGVLSDVQEEKGIKYKFEVYEKND

FIGURE 795

AACCTACTACGTGCGGCGGCAGCTGGGGCGGGAAGGCGGGCGCTGGGGGCGCTGCGGCCGCTGCAGCGCCAGGGT
CCACCTGGTCGGCTGCACCTGTGGAGGAGGAGGTGGATTTCAGGCTTCCCGTAGACTGGAAGAATCGGCTCAAAA
CCGCTTGCCTCGCAGGGGCTGAGCTGGAGGCAGCGAGGCCGCCCGACGCAGGCTTCCGGCGAGACATGGCAGGGC
AAGGATGGCAGCCCGGCGGCAGGGCCCGGCGAGGAGCGCGAACCCGCGGCCGCAGTTCCCAGGCGTCTGCGGGCG
CGAGCACGCCGCGACCCTGCGTGCGCCGGGGCGGGGGGGCGGGGCCTCGCCTGCACAAATAGGGACGAGGGGGCG
GGGCGGCCACAATTTCGCGCCAAACTTGACCGCGCGTTCTGCTGTAACGAGCGGGCTCGGAGGTCCTCCCGCTGC
TGTCATGGTTGGTTCGCTAAACTGCATCGTCGCTGTGTCCCAGAACATGGGCATCGGCAAGAACGGGGACCTGCC
CTGGCCACCGCTCAGGAATGAATTCAGATATTTCCAGAGAATGACCACAACCTCTTCAGTAGAAGGTAAACAGAA
TCTGGTGATTATGGGTAAGAAGACCTGGTTCTCCATTCCTGAGAAGAATCGACCTTTAAAGGGTAGAATTAATTT
AGTTCTCAGCAGAGAACTCAAGGAACCTCCACAAGGAGCTCATTTTCTTTCCAGAAGTCTAGATGATGCCTTAAA
ACTTACTGAACAACCAGAATTAGCAAATAAAGTAGACATGGTCTGGATAGTTGGTGGCAGTTCTGTTTATAAGGA
AGCCATGAATCACCCAGGCCATCTTAAACTATTTGTGACAAGGATCATGCAAGACTTTGAAAGTGACACGTTTTT
TCCAGAAATTGATTTGGAGAAATATAAACTTCTGCCAGAATACCCAGGTGTTCTCTCTGATGTCCAGGAGGAGAA
AGGCATTAAGTACAAATTTGAAGTATATGAGAAGAATGATTAATATGAAGGTGTTTTCTAGTTTAAGTTGTTCCC
CCTCCCTCTGAAAAAAGTATGTATTTTTACATTAGAAAAGGTTTTTTGTTGACTTTAGATCTATAAAAAAAAAAA
AAAAAAAA

FIGURE 796

MAARRQGPARSANPRPQFPGVCGREHAATLRAPGRGGGASPAQIGTRGRGGHNFAPNLTARSAVTSGLGGPPAAV
MVGSLNCIVAVSQNMGIGKNGDLPWPPLRNEFRYFQRMTTTSSVEGKQNLVIMGKKTWFSIPEKNRPLKGRINLV
LSRELKEPPQGAHFLSRSLDDALKLTEQPELANKVDMVWIVGGSSVYKEAMNHPGHLKLFVTRIMQDFESDTFFP
EIDLEKYKLLPEYPGVLSDVQEEKGIKYKFEVYEKND

FIGURE 797

CGCTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTATTAACAAGTGTAACTCTTTATTAAGATGGAATTGTTC
TTATTAAAGAAATAGATGAAAATGGTTAAGTACAATTAAATGGCTCCAAAAGTCTTACAATGAAAACAACAGTCC
TGCCAGTTGTTCTTTCCAGAGGCAAATACTTTTCATTCTCTTAGTTTTTCCTTCCGTTAGTTACCTTCATGGGTT
TTTCCAAATTATTGTTTTTACTATTCACCCATCTGCCTCAGTCTGGGCCAAATCTATTGCCCAATCTTCAATTGG
TTGCGACTTTTTTGTCTCTTCCCGATTCTGGCATTCCAGAGGGTCAATAGGTTCCTTCTCCACGTGCTTTTGAGG
GAAATGCCCCCCCCCCCAAAAAACTTTTCACACCACCTTGAACAGACTCTAAACTTAGGCACTACAGTTACTAAGC
AGCCTTTGGATTCTTTGTTTTTGAAGTTAGATCTTTTCAGCTATTAGTGGAAAATGTGCCTCACTCTACTCCAGG
ATTACCAATAGAAATGAAAGGACAGAAATGGCATTAGTGTTTAGAGAAGATTATGTATATATGGCTGTGTGAACA
CTGAAAATTATGAGGGTCAACATAAAATCAGCATTACAGGTACTAAAACATAAATCCTGATGGCTTTCACCGTTT
TCTTAAGAGCAAAATTGCAAAAAGTGATATTAACAGTCATCCTAGACGAATATGAGCAAATGATTTGTTTTTCCT
TAAAAGAGCCTCCAAGTGTATTGTGATCATTTTCACACTGATCAAAGAGAGCACCCTTCTGTCAACAGGTATCTG
CAGTTTTCAGGACCTGGCAGAAATTCTTCTATGTTCTGCCTTTAAAGGTCAGGTACAAAAGCAGAGACAGCTGCC
AGGCCCCTCTGCCCAGAGCTAAGTGTCTGGGACCATGAGTGGGAAGGACAGGCTTGAGCCTCCTTGGTCCTCCAG
ACAGCATGGGGCGCTACTTGCCCCTTCTGCAGCTGCGCGCGGCAAAGCTGTGGCCTGGCCGTGGCCTCCTGCCCC
ATGCAACAGTTGGTGGACAGACCGTACCTGGCACACGGCGCCTTGTGCACTTTCCAACATTTTGATGCCAACCGT
CGCTAGTCACTGAGCCCTGACATTTGATCTCTGGCCTTGACCGCAGATTTCGGAAACTTCTGGCAGCCCAGTGTC
TACTGGAAGGCCCAAGCCGCTTGCCAGAAAGCTGCGCCCCGCCCAAAAGCACTGGGTTCTGCAGTCCAGGCCCTT
CCTCAGCTCCCAGGTCCAGGAGAACTGCAAGGTCACCTACTTCCACAGGAAGCACTGGGTCCGCATCCGGCCCCT
CCGCACCACTCCTCCCAGCTGGGACTACACCCGCATCTGCATCCAGAGAGAGATGGTCCCCGCCCGCATCCGCGT
CCTGAGAGAGATGGTCCCCGAGGCCTGGAGGTGCTTTCCCAACAGGCTGCCGCTGCTGAGCAACATCAGGCCTGA
TTTCTCCAAGGCTCCCCTGGCCTACGTGAAGCGGTGGCTTTGGACCGCCCGCCACCCCCACAGCCTGTCCGCAGC
CTGGTGACCGTGAAAATCGCCCCGCCAGAGAGCAGAGGAAGCCCGACGCCCAGGCCATCTGCCTTCAGGTCTGTG
ATGAGAAACGGAGTGGCCTGCTCCGTTGTGCCCAGGTCTAGGCCGCTGAGCAGAGCCCTCACTCCCAGGCAGAGT
TGTCTGAATCCTTCCTG

FIGURE 798

MAWASGFLCSLAGRFSRSPGCGQAVGVAGGPKPPLHVGQGSLGEIRPDVAQQRQPVGKAPPGLGDHLSQDADAGG
DHLSLDADAGVVPAGRSGAEGPDADPVLPVEVGDLAVLLDLGAEEGPGLQNPVLLGGAQLSGKRLGPSSRHWAAR
SFRNLRSRPEIKCQGSVTSDGWHQNVGKCTRRRVPGTVCPPTVAWGRRPRPGHSFAARSCRRGK

FIGURE 799

GACGATACGCCGGGCGCAGGCGCAGAAGCCGCGCCCGTCCGCGGCGCCGCCAGCCAGGGCGGAAACGGCTGCGGC
TTCGCTAGGGACGCATGCGCGGGTCCCTTAGTTTTCGCGAGATAACGGTCGAAAACGCGCTCTTGTCGATTTCCT
GTAGTGAATCAGGCACCGGAGTGCAGGTTCGGGGGTGGAATCCTTGGGCCGCTGGGCAAGCGGCGAGACCTGGCC
AGGGCCAGCGAGCCGAGGACAGAGGGCGCACGGAGGGCCGGGCCGCAGCCCCGGCCGCTTGCAGACCCCGCC**ATG**

GACCCGTTCCTGGTGCTGCTGCACTCGGTGTCGTCCAGCCTGTCGAGCAGCGAGCTGACCGAGCTCAAGTTCCTA
TGCCTCGGGCGCGTGGGCAAGCGCAAGCTGGAGCGCGTGCAGAGCGGCCTAGACCTCTTCTCCATGCTGCTGGAG
CAGAACGACCTGGAGCCCGGGCACACCGAGCTCCTGCGCGAGCTGCTCGCCTCCCTGCGGCGCCACGACCTGCTG
CGGCGCGTCGACGACTTCGAGGCGGGGGCGGCGGCCGGGGCCGCGCCTGGGGAAGAAGACCTGTGTGCAGCATTT
AACGTCATATGTGATAATGTGGGGAAAGATTGGAGAAGGCTGGCTCGTCAGCTCAAAGTCTCAGACACCAAGATC
GACAGCATCGAGGACAGATACCCCCGCAACCTGACAGAGCGTGTGCGGGAGTCACTGAGAATCTGGAAGAACACA
GAGAAGGAGAACGCAACAGTGGCCCACCTGGTGGGGGCTCTCAGGTCCTGCCAGATGAACCTGGTGGCTGACCTG
GTACAAGAGGTTCAGCAGGCCCGTGACCTCCAGAACAGGAGTGGGGCCATGTCCCCGATGTCATGGAACTCAGAC
GCATCTACCTCCGAAGCGTCC**TGA**TGGGCCGCTGCTTTGCGCTGGTGGACCACAGGCATCTACACAGCCTGGACT
TTGGTTCTCTCCAGGAAGGTAGCCCAGCACTGTGAAGACCCAGCAGGAAGCCAGGCTGAGTGAGCCACAGACCAC
CTGCTTCTGAACTCAAGCTGCGTTTATTAATGCCTCTCCCGCACCAGGCCGGGCTTGGGCCCTGCACAGATATTT
CCATTTCTTCCTCACTATGACACTGAGCAAGATCTTGTCTCCACTAAATGAGCTCCTGCGGGAGTAGTTGGAAAG
TTGGAACCGTGTCCAGCACAGAAGGAATCTGTGCAGATGAGCAGTCACACTGTTACTCCACAGCGGAGGAGACCA
GCTCAGAGGCCCAGGAATCGGAGCGAAGCAGAGAGGTGGAGAACTGGGATTTGAACCCCCGCCATCCTTCACCAG
AGCCCATGCTCAACCACTGTGGCGTTCTGCTGCCCCTGCAGTTGGCAGAAAGGATGTTTTGTCCCATTTCCTTGG
AGGCCACCGGGACAGACCTGGACACTAGGGTCAGGCGGGGTGCGTGGTGGGGAGAGGCATGGCTGGGGTGGGGGT
GGGGAGACCTGGTTGGCCGTGGTCCAGCTCTTGGCCCCTGTGTGAGTTGAGTCTCCTCTCTGAGACTGCTAAGTA
GGGGCAGTGATGGTTGCCAGGACGAATTGAGATAATATCTGTGAGGTGCTGATGAGTGATTGACACACAGCACTC
TCTAAATCTTCCTTGTGAGGATTATGGGTCCTGCAATTCTACAGTTTCTTACTGTTTTGTATCAAAATCACTATC
TTTCTGATAACAGAATTGCCAAGGCAGCGGGATCTCGTATCTTTAAAAAGCAGTCCTCTTATTCCTAAGGTAATC
CTATTAAAACACAGCTTTACAACTTCCATATCACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 800

MDPFLVLLHSVSSSLSSSELTELKFLCLGRVGKRKLERVQSGLDLFSMLLEQNDLEPGHTELLRELLASLRRHDL
LRRVDDFEAGAAAGAAPGEEDLCAAFNVICDNVGKDWRRLARQLKVSDTKIDSIEDRYPRNLTERVRESLRIWKN
TEKENATVAHLVGALRSCQMNLVADLVQEVQQARDLQNRSGAMSPMSWNSDASTSEAS

FIGURE 801

GTCCTTTTCCTCCTGTCCTTTGCCAGCGTTGGGCCGGACCGGGCCGAGCCGGGCCGCCCGGGCGCAGTCTTTAAC
CATGGCGTCCCTCTTCAAGAAGAAAACCGTGGATGATGTAATAAAGGAACAGAATCGAGAGTTACGAGGTACACA
GAGGGCTATAATCAGAGATCGAGCAGCTTTAGAGAAACAAGAAAAACAGCTGGAATTAGAAATTAAGAAAATGGC
CAAGATTGGTAATAAGGAAGCTTGCAAAGTTTTAGCCAAACAACTTGTGCATCTACGGAAACAGAAGACGAGAAC
TTTTGCTGTAAGTTCAAAAGTTACTTCTATGTCTACACAAACAAAAGTGATGAATTCCCAAATGAAGATGGCTGG
AGCAATGTCTACCACAGCAAAAACAATGCAGGCAGTTAACAAGAAGATGGATCCACAAAAGACATTACAAACAAT
GCAGAATTTCCAGAAGGAAAACATGAAAATGGAAATGACTGAAGAAATGATCAATGATACACTTGATGACATCTT
TGACGGTTCTGATGACGAAGAAGAAAGCCAGGATATTGTGAATCAAGTTCTTGATGAAATTGGAATTGAAATTTC
TGGAAAGATGGCCAAAGCTCCATCAGCTGCTCGAAGCTTACCATCTGCCTCTACTTCAAAGGCTACAATCTCAGA
TGAAGAGATTGAACGGCAACTCAAGGCTTTAGGAGTAGATTAGTCAAAAGAAGTCATACTATTTTGCTTACTTAT
AATTATGTAGTATAAACCAAGCACAGTGCAGATTTCTTTTACAAAACACATGTATTTTGCAAAAAAAAAAAAAAT
GAAGACCATGAGTGAACAGTTGTTTCCTAACCCATGGCTATTTAGAATCTTTTGCCAAAGAATGACAATGATGCA
AAAATGGGAACAGTTTGGATTTTAATTAGAACTGTTTAGGAGTGATGATGTGTAAAAAGTTGACTTCTCTTTTGC
ATGGCACAGAGAAATTATATTCCTTACTTCATGTCAGTTTATGTTCTAAATCTTTTTCACTGAATATAAAAATCT
TGTTAAATGCCATTAGGCACCAACTTAAAGAGGGTTGTAAAAATATTAAAAGTATATCGTTAATTCTGTATCTGT
TGCTTGTCTTTTGTAAGTGATTATGTGTTATGACCATAGGTGGTTACAGCTGCCAAATTATTTTTAAATGGTCAA
AAAGAAGAGTGCTATTTAAACATCTGTCTTAAACAAAAACTGTCATAACTTTTCTTTTTTCTTTTTCCATTAGGA
GAACATTCTAGTTGGTAAATTTCAAAATGTGCTTGACACCTGCCTTAAATAGCACAGACCTATTGTGCACATCTT
TAAATTATTTCAGCTGGCAGAAAAGAATTACATTTAAAACTGAAATCAAGGCCTCAATACAAAGATTATCCTGGC
TCTTTTCTATCTCTGTGGGCCTAATTGAAATATGTACTCTTATTTTAGACACGCCTCTGTTAAAACAGACCAGGT
TTTCCTGGTCTCAGACCTATGATGACTTGTCCCTTTGATGTCACTACTGTGAATTGAATATAATTAGTAAAAATA
GACGATGAATAAATAACACTTTATAGTAAGAAAACAATATATTTTGGCCATCTAAAAATGAGAATTATAATTATA
TGAATTATAATTTAAACTGTTTAATTTTGTTTAATGTGTATATTGAATCTTCCAAATTGAAGCCATTATTCTCAA
TTAAGTACTACAACTATGACAATGCTTGACCTACATTTCTAAAATAAAAATTCACATTTTTTGATAAATAAACTA
CAGTTTTACCAGAAATTACTATCTAAATGTGTATTAGCAGTATTTTTTAAGGTGAAATTGCCTTGGTATCTAATG
AATGTGTAGACAGGGAGATAAAATGAAGGATTGCCAGACTAGTTAGAATAGAATTTAGGATTAGGTTAGTTTTGA
AAAATGATGTTGTAATATATGGGTTCTAACACATCCTACCATAAAAACTGGAGGAGATATGTGTAACCTGGTTAA
TTTGGGATGGTGGACATTTTGGGCTAATACTGACAAAATACATCTTAGGACTAGTATACATGTGACACGGATTGC
TAGGAGGAATGAAAAACTAAACTGTATAGTTTATATTCCGTAAACCATTTTATAATGTTCAAAGATTAGGTTTTG
TTATTGATAGTATTAAATACACAGTTTCTCTTAACAGTGATGGGTGAAAACATTTTACCGGATTATGGAATGTTT
ACCAGAACATGTTTTGATTCTTGAATGTACATAATAATGCCATCTAACTTATTTACATTCTTGTTTACATGTGGG
AGCTTTTGTTTTCAAAAATTATTTTGTTAAAAAATCTCAATAAAGATTTATTATTGTTGTTCTTTTCTTAAAAAA
AAAAAAAAAA

FIGURE 802

MASLFKKKTVDDVIKEQNRELRGTQRAIIRDRAALEKQEKQLELEIKKMAKIGNKEACKVLAKQLVHLRKQKTRT
FAVSSKVTSMSTQTKVMNSQMKMAGAMSTTAKTMQAVNKKMDPQKTLQTMQNFQKENMKMEMTEEMINDTLDDIF
DGSDDEEESQDIVNQVLDEIGIEISGKMAKAPSAARSLPSASTSKATISDEEIERQLKALGVD

FIGURE 803A

TTCGGTGGCCTCTAGTGAGATCTGGAGGATCCAAGGATTCTGTAGCTACAATGTTGTCAAGACTTTTTCGAATGC
ATGGCCTCTTTGTGGCCTCCCATCCCTGGGAAGTCATAGTGGGGACAGTGACACTGACCATCTGCATGATGTCCA
TGAACATGTTTACTGGTAACAATAAGATCTGTGGTTGGAATTATGAATGTCCAAAGTTTGAAGAGGATGTTTTGA
GCAGTGACATTATAATTCTGACAATAACACGATGCATAGCCATCCTGTATATTTACTTCCAGTTCCAGAATTTAC
GTCAACTTGGATCAAAATATATTTTGGGTATTGCTGGCCTTTTCACAATTTTCTCAAGTTTTGTATTCAGTACAG
TTGTCATTCACTTCTTAGACAAAGAATTGACAGGCTTGAATGAAGCTTTGCCCTTTTTCCTACTTTTGATTGACC
TTTCCAGAGCAAGCACATTAGCAAAGTTTGCCCTCAGTTCCAACTCACAGGATGAAGTAAGGGAAAATATTGCTC
GTGGAATGGCAATTTTAGGTCCTACGTTTACCCTCGATGCTCTTGTTGAATGTCTTGTGATTGGAGTTGGTACCA
TGTCAGGGGTACGTCAGCTTGAAATTATGTGCTGCTTTGGCTGCATGTCAGTTCTTGCCAACTACTTCGTGTTCA
TGACTTTCTTCCCAGCTTGTGTGTCCTTGGTATTAGAGCTTTCTCGGGAAAGCCGCGAGGGTCGTCCAATTTGGC
AGCTCAGCCATTTTGCCCGAGTTTTAGAAGAAGAAGAAAATAAGCCGAATCCTGTAACTCAGAGGGTCAAGATGA
TTATGTCTCTAGGCTTGGTTCTTGTTCATGCTCACAGTCGCTGGATAGCTGATCCTTCTCCTCAAAACAGTACAG
CAGATACTTCTAAGGTTTCATTAGGACTGGATGAAAATGTGTCCAAGAGAATTGAACCAAGTGTTTCCCTCTGGC
AGTTTTATCTCTCTAAAATGATCAGCATGGATATTGAACAAGTTATTACCCTAAGTTTAGCTCTCCTTCTGGCTG
TCAAGTACATCTTCTTTGAACAAACAGAGACAGAATCTACACTCTCATTAAAAAACCCTATCACATCTCCTGTAG
TGACACAAAAGAAAGTCCCAGACAATTGTTGTAGACGTGAACCTATGCTGGTCAGAAATAACCAGAAATGTGATT
CAGTAGAGGAAGAGACAGGGATAAACCGAGAAAGAAAAGTTGAGGTTATAAAACCCTTAGTGGCTGAAACAGATA
CCCCAAACAGAGCTACATTTGTGGTTGGTAACTCCTCCTTACTCGATACTTCATCAGTACTGGTGACACAGGAAC
CTGAAATTGAACTTCCCAGGGAACCTCGGCCTAATGAAGAATGTCTACAGATACTTGGGAATGCAGAGAAAGGTG
CAAAATTCCTTAGTGATGCTGAGATCATCCAGTTAGTCAATGCTAAGCATATCCCAGCCTACAAGTTGGAAACTC
TGATGGAAACTCATGAGCGTGGTGTATCTATTCGCCGACAGTTACTTTCCAAGAAGCTTTCAGAACCTTCTTCTC
TCCAGTACCTACCTTACAGGGATTATAATTACTCCTTGGTGATGGGAGCTTGTTGTGAGAATGTTATTGGATATA
TGCCCATCCCTGTTGGAGTGGCAGGACCCCTTTGCTTAGATGAAAAAGAATTTCAGGTTCCAATGGCAACAACAG
AAGGTTGTCTTGTGGCCAGCACCAATAGAGGCTGCAGAGCAATAGGTCTTGGTGGAGGTGCCAGCAGCCGAGTCC
TTGCAGATGGGATGACTCGTGGCCCAGTTGTGCGTCTTCCACGTGCTTGTGACTCTGCAGAAGTGAAAGCCTGGC
TCGAAACATCTGAAGGGTTCGCAGTGATAAAGGAGGCATTTGACAGCACTAGCAGATTTGCACGTCTACAGAAAC
TTCATACAAGTATAGCTGGACGCAACCTTTATATCCGTTTCCAGTCCAGGTCAGGGGATGCCATGGGGATGAACA
TGATTTCAAAGGGTACAGAGAAAGCACTTTCAAAACTTCACGAGTATTTCCCTGAAATGCAGATTCTAGCCGTTA
GTGGTAACTATTGTACTGACAAGAAACCTGCTGCTATAAATTGGATAGAGGGAAGAGGAAAATCTGTTGTTTGTG
AAGCTGTCATTCCAGCCAAGGTTGTCAGAGAAGTATTAAAGACTACCACAGAGGCTATGATTGAGGTCAACATTA
ACAAGAATTTAGTGGGCTCTGCCATGGCTGGGAGCATAGGAGGCTACAACGCCCATGCAGCAAACATTGTCACCG
CCATCTACATTGCCTGTGGACAGGATGCAGCACAGAATGTTGGTAGTTCAAACTGTATTACTTTAATGGAAGCAA
GTGGTCCCACAAATGAAGATTTATATATCAGCTGCACCATGCCATCTATAGAGATAGGAACGGTGGGTGGTGGGA
CCAACCTACTACCTCAGCAAGCCTGTTTGCAGATGCTAGGTGTTCAAGGAGCATGCAAAGATAATCCTGGGGAAA
ATGCCCGGCAGCTTGCCCGAATTGTGTGTGGGACCGTAATGGCTGGGGAATTGTCACTTATGGCAGCATTGGCAG
CAGGACATCTTGTCAAAAGTCACATGATTCACAACAGGTCGAAGATCAATTTACAAGACCTCCAAGGAGCTTGCA
CCAAGAAGACAGCCTGAATAGCCCGACAGTTCTGAACTGGAACATGGGCATTGGGTTCTAAAGGACTAACATAAA
ATCTGTGAATTAAAAAAGCTCAATGCATTGTCTTGTGGAGGATGAATAAATGTGATCACTGAGACAGCCACTTGG
TTTTTGGCTCTTTCAGAGAGGTCTCAGGTTCTTTCCATGCAGACTCCTCAGATCTGAACACAGTTTAGTGCTTTA
CATGCTGTGCTCTTTGAAGAGATTTCAACAAGAATATTGTATGTTAAAGCATCAGAGATGGTAATCTACAGCTCA
CCTCTGAAAGCAAATATAAGCTGGGAAAAAAGTTTTGATGAAATTCTTGAAGTTCATGGTGATCAGTGCAATTGA
CCTTCTCCCTCACTCCTGCCAGTTGAAAATGGATTTTTAAATTATACTGTAGCTGATGAAACTCCTGATTTTGTA
GTTAATTTATTAAGTCTGGGATGTAGAACTTCAAGAAGTAAGAGCTAAGTTCTAAGTTCATGTTTGTAAATTAAT
ACTTCATTTGGTGCTGGTCTATTTTGATTTTGGGGGGTAATCAGCATTATTCTTCAGAAGGGGACCTGTTTTCTT
CAAGGGAAGAAACACTCTTATTCCCAAACTACAGAATAATGTGTTAAACATGCTAAATAGTTCTATCAGGAAAAC
AAATCACTGTATTTATCTCCGCAGGCTATTTGTTCAGAGAGGCCTTTTGTTTAAATATAAATGTTTAAATATAAA
TGTTTGTCTGGATTGGCTATAACATGTCTTTCAGCATTAGGCTTTTAAGAAACACAGGGTTTTGTATTCTTTACT
AAAGATATCAGAGCTCTTAATGTTGCTTAGATGAGGGTGACTGTCAAGTACAAGCAAGACTGGGACCTTAGAAAT

FIGURE 803B

CATTGTAGAAACACAGTTTTGAAAGATTTTTACCATGTCTCTAAGCCAACTTTAATTGCTTAAAAGACATTTTTA
TTTAGTTGAAAAATCTAGTTTTTTTTTGTAAACTGTACCAAATCTGTATATGTTGTAATAAAACTTATGCTAGTTT
ATTGGAAGTGTTCAAGAAATAAAAATCAACTTGTGTACTGATAAAATACTCTAGCCTGGGCCAGAGAAGATAATG
TTCTTTAATGTTGTCAGGAAACCCTGGCTTGCTTGCCGAGCCTAATGAAAGGGAAAGTCAGCTTTCAGAGCCAGT
GAAGGAGCCACGTGAATGGCCCTAGAACTGTGCCTAGTTCCTGTGGCCAGGAGGTTGGTGACTGAAACATTCACA
CAGGGCTCTTGGATGGACCCACGAACGCTCTTAGCTTTCTCAGGGGGTCAGCAGAGTTATTGAATCTTAATTTTT
TTTAATGTACAAGTTTTGTATAAATAATAAAGAACTCCTTATTTTGTATTACATCTAATGCTTAAGTGTTGCTCT
TGGAAAGCTGATGATGTCTCTTGTAGAGATGACTCTGAAAAACATTCCAGGAAACCATGGCAGCATGGAGAGCCT
CTTAGTGATTGTGTCTGCATTGTTATTGTGGAAGATTTACCTTTTCTGTTGTACGTAAAGCTTAAATTACTTTTG
TTGTGACTTTTTAGCCAGTGACTTTTTCTGAGCTTTTCATGGAAGTGGCAGTGAAAAATATGTTGAGTGTTCAAA
AAAGTGACTGTAATTAATATCTTGCTGGATTAATGTTTTGTACAATTACTAAATTGTATACATTTTGTTATAGAA
TACTTTTTTCTAGTTTCAGTAAATAATGAAAAGGAAGTTAATACCA

FIGURE 804

MLSRLFRMHGLFVASHPWEVIVGTVTLTICMMSMNMFTGNNKICGWNYECPKFEEDVLSSDIIILTITRCIAILY
IYFQFQNLRQLGSKYILGIAGLFTIFSSFVFSTVVIHFLDKELTGLNEALPFFLLLIDLSRASTLAKFALSSNSQ
DEVRENIARGMAILGPTFTLDALVECLVIGVGTMSGVRQLEIMCCFGCMSVLANYFVFMTFFPACVSLVLELSRE
SREGRPIWQLSHFARVLEEEENKPNPVTQRVKMIMSLGLVLVHAHSRWIADPSPQNSTADTSKVSLGLDENVSKR
IEPSVSLWQFYLSKMISMDIEQVITLSLALLLAVKYIFFEQTETESTLSLKNPITSPVVTQKKVPDNCCRREPML
VRNNQKCDSVEEETGINRERKVEVIKPLVAETDTPNRATFVVGNSSLLDTSSVLVTQEPEIELPREPRPNEECLQ
ILGNAEKGAKFLSDAEIIQLVNAKHIPAYKLETLMETHERGVSIRRQLLSKKLSEPSSLQYLPYRDYNYSLVMGA
CCENVIGYMPIPVGVAGPLCLDEKEFQVPMATTEGCLVASTNRGCRAIGLGGGASSRVLADGMTRGPVVRLPRAC
DSAEVKAWLETSEGFAVIKEAFDSTSRFARLQKLHTSIAGRNLYIRFQSRSGDAMGMNMISKGTEKALSKLHEYF
PEMQILAVSGNYCTDKKPAAINWIEGRGKSVVCEAVIPAKVVREVLKTTTEAMIEVNINKNLVGSAMAGSIGGYN
AHAANIVTAIYIACGQDAAQNVGSSNCITLMEASGPTNEDLYISCTMPSIEIGTVGGGTNLLPQQACLQMLGVQG
ACKDNPGENARQLARIVCGTVMAGELSLMAALAAGHLVKSHMIHNRSKINLQDLQGACTKKTA

FIGURE 805A

TTCGGTGGCCTCTAGTGAGATCTGGAGGATCCAAGGATTCTGTAGCTACAATGTTGTCAAGACTTTTTCGAATGC
ATGGCCTCTTTGTGGCCTCCCATCCCTGGGAAGTCATAGTGGGGACAGTGACACTGACCATCTGCATGATGTCCA
TGAACATGTTTACTGGTAACAATAAGATCTGTGGTTGGAATTATGAATGTCCAAAGTTTGAAGAGGATGTTTTGA
GCAGTGACATTATAATTCTGACAATAACACGATGCATAGCCATCCTGTATATTTACTTCCAGTTCCAGAATTTAC
GTCAACTTGGATCAAAATATATTTTGGGTATTGCTGGCCTTTTCACAATTTTCTCAAGTTTTGTATTCAGTACAG
TTGTCATTCACTTCTTAGACAAAGAATTGACAGGCTTGAATGAAGCTTTGCCCTTTTTCCTACTTTTGATTGACC
TTTCCAGAGCAAGCACATTAGCAAAGTTTGCCCTCAGTTCCAACTCACAGGATGAAGTAAGGGAAAATATTGCTC
GTGGAATGGCAATTTTAGGTCCTACGTTTACCCTCGATGCTCTTGTTGAATGTCTTGTGATTGGAGTTGGTACCA
TGTCAGGGGTACGTCAGCTTGAAATTATGTGCTGCTTTGGCTGCATGTCAGTTCTTGCCAACTACTTCGTGTTCA
TGACTTTCTTCCCAGCTTGTGTGTCCTTGGTATTAGAGCTTTCTCGGGAAAGCCGCGAGGGTCGTCCAATTTGGC
AGCTCAGCCATTTTGCCCGAGTTTTAGAAGAAGAAGAAAATAAGCCGAATCCTGTAACTCAGAGGGTCAAGATGA
TTATGTCTCTAGGCTTGGTTCTTGTTCATGCTCACAGTCGCTGGATAGCTGATCCTTCTCCTCAAAACAGTACAG
CAGATACTTCTAAGGTTTCATTAGGACTGGATGAAAATGTGTCCAAGAGAATTGAACCAAGTGTTTCCCTCTGGC
AGTTTTATCTCTCTAAAATGATCAGCATGGATATTGAACAAGTTATTACCCTAAGTTTAGCTCTCCTTCTGGCTG
TCAAGTACATCTTCTTTGAACAAACAGAGACAGAATCTACACTCTCATTAAAAAACCCTATCACATCTCCTGTAG
TGACACAAAAGAAAGTCCCAGACAATTGTTGTAGACGTGAACCTATGCTGGTCAGAAATAACCAGAAATGTGATT
CAGTAGAGGAAGAGACAGGGATAAACCGAGAAAGAAAAGTTGAGGTTATAAAACCCTTAGTGGCTGAAACAGATA
CCCCAAACAGAGCTACATTTGTGGTTGGTAACTCCTCCTTACTCGATACTTCATCAGTACTGGTGACACAGGAAC
CTGAAATTGAACTTCCCAGGGAACCTCGGCCTAATGAAGAATGTCTACAGATACTTGGGAATGCAGAGAAAGGTG
CAAAATTCCTTAGTGATGCTGAGATCATCCAGTTAGTCAATGCTAAGCATATCCCAGCCTACAAGTTGGAAACTC
TGATGGAAACTCATGAGCGTGGTGTATCTATTCGCCGACAGTTACTTTCCAAGAAGCTTTCAGAACCTTCTTCTC
TCCAGTACCTACCTTACAGGGATTATAATTACTCCTTGGTGATGGGAGCTTGTTGTGAGAATGTTATTGGATATA
TGCCCATCCCTGTTGGAGTGGCAGGACCCCTTTGCTTAGATGAAAAAGAATTTCAGGTTCCAATGGCAACAACAG
AAGGTTGTCTTGTGGCCAGCACCAATAGAGGCTGCAGAGCAATAGGTCTTGGTGGAGGTGCCAGCAGCCGAGTCC
TTGCAGATGGGATGACTCGTGGCCCAGTTGTGCGTCTTCCACGTGCTTGTGACTCTGCAGAAGTGAAAGCCTGGC
TCGAAACATCTGAAGGGTTCGCAGTGATAAAGGAGGCATTTGACAGCACTAGCAGATTTGCACGTCTACAGAAAC
TTCATACAAGTATAGCTGGACGCAACCTTTATATCCGTTTCCAGTCCAGGTCAGGGGATGCCATGGGGATGAACA
TGATTTCAAAGGGTACAGAGAAAGCACTTTCAAAACTTCACGAGTATTTCCCTGAAATGCAGATTCTAGCCGTTA
GTGGTAACTATTGTACTGACAAGAAACCTGCTGCTATAAATTGGATAGAGGGAAGAGGAAAATCTGTTGTTTGTG
AAGCTGTCATTCCAGCCAAGGTTGTCAGAGAAGTATTAAAGACTACCACAGAGGCTATGATTGAGGTCAACATTA
ACAAGAATTTAGTGGGCTCTGCCATGGCTGGGAGCATAGGAGGCTACAACGCCCATGCAGCAAACATTGTCACCG
CCATCTACATTGCCTGTGGACAGGATGCAGCACAGAATGTTGGTAGTTCAAACTGTATTACTTTAATGGAAGCAA
GTGGTCCCACAAATGAAGATTTATATATCAGCTGCACCATGCCATCTATAGAGATAGGAACGGTGGGTGGTGGGA
CCAACCTACTACCTCAGCAAGCCTGTTTGCAGATGCTAGGTGTTCAAGGAGCATGCAAAGATAATCCTGGGGAAA
ATGCCCGGCAGCTTGCCCGAATTGTGTGTGGGACCGTAATGGCTGGGGAATTGTCACTTATGGCAGCATTGGCAG
CAGGACATCTTGTCAAAAGTCACATGATTCACAACAGGTCGAAGATCAATTTACAAGACCTCCAAGGAGCTTGCA
CCAAGAAGACAGCCTGAATAGCCCGACAGTTCTGAACTGGAACATGGGCATTGGGTTCTAAAGGACTAACATAAA
ATCTGTGAATTAAAAAAGCTCAATGCATTGTCTTGTGGAGGATGAATAAATGTGATCACTGAGACAGCCACTTGG
TTTTTGGCTCTTTCAGAGAGGTCTCAGGTTCTTTCCATGCAGACTCCTCAGATCTGAACACAGTTTAGTGCTTTA
CATGCTGTGCTCTTTGAAGAGATTTCAACAAGAATATTGTATGTTAAAGCATCAGAGATGGTAATCTACAGCTCA
CCTCTGAAAGCAAATATAAGCTGGGAAAAAAGTTTTGATGAAATTCTTGAAGTTCATGGTGATCAGTGCAATTGA
CCTTCTCCCTCACTCCTGCCAGTTGAAAATGGATTTTTAAATTATACTGTAGCTGATGAAACTCCTGATTTTGTA
GTTAATTTATTAAGTCTGGGATGTAGAACTTCAAGAAGTAAGAGCTAAGTTCTAAGTTCATGTTTGTAAATTAAT
ACTTCATTTGGTGCTGGTCTATTTTGATTTTGGGGGGTAATCAGCATTATTCTTCAGAAGGGGACCTGTTTTCTT
CAAGGGAAGAAACACTCTTATTCCCAAACTACAGAATAATGTGTTAAACATGCTAAATAGTTCTATCAGGAAAAC
AAATCACTGTATTTATCTCCGCAGGCTATTTGTTCAGAGAGGCCTTTTGTTTAAATATAAATGTTTAAATATAAA
TGTTTGTCTGGATTGGCTATAACATGTCTTTCAGCATTAGGCTTTTAAGAAACACAGGGTTTTGTATTCTTTACT
AAAGATATCAGAGCTCTTAATGTTGCTTAGATGAGGGTGACTGTCAAGTACAAGCAAGACTGGGACCTTAGAAAT

FIGURE 805B

CATTGTAGAAACACAGTTTTGAAAGATTTTTACCATGTCTCTAAGCCAACTTTAATTGCTTAAAAGACATTTTTA
TTTAGTTGAAAAATCTAGTTTTTTTTTGTAAACTGTACCAAATCTGTATATGTTGTAATAAAACTTATGCTAGTTT
ATTGGAAGTGTTCAAGAAATAAAAATCAACTTGTGTACTGATAAAATACTCTAGCCTGGGCCAGAGAAGATAATG
TTCTTTAATGTTGTCAGGAAACCCTGGCTTGCTTGCCGAGCCTAATGAAAGGGAAAGTCAGCTTTCAGAGCCAGT
GAAGGAGCCACGTGAATGGCCCTAGAACTGTGCCTAGTTCCTGTGGCCAGGAGGTTGGTGACTGAAACATTCACA
CAGGGCTCTTGGATGGACCCACGAACGCTCTTAGCTTTCTCAGGGGGTCAGCAGAGTTATTGAATCTTAATTTTT
TTTAATGTACAAGTTTTGTATAAATAATAAAGAACTCCTTATTTTGTATTACATCTAATGCTTAAGTGTTGCTCT
TGGAAAGCTGATGATGTCTCTTGTAGAGATGACTCTGAAAAACATTCCAGGAAACCATGGCAGCATGGAGAGCCT
CTTAGTGATTGTGTCTGCATTGTTATTGTGGAAGATTTACCTTTTCTGTTGTACGTAAAGCTTAAATTACTTTTG
TTGTGACTTTTTAGCCAGTGACTTTTTCTGAGCTTTTCATGGAAGTGGCAGTGAAAAATATGTTGAGTGTTCAAA
AAAGTGACTGTAATTAATATCTTGCTGGATTAATGTTTTGTACAATTACTAAATTGTATACATTTTGTTATAGAA
TACTTTTTTCTAGTTTCAGTAAATAATGAAAAGGAAGTTAATACCA

FIGURE 806

MLSRLFRMHGLFVASHPWEVIVGTVTLTICMMSMNMFTGNNKICGWNYECPKFEEDVLSSDIIILTITRCIAILY
IYFQFQNLRQLGSKYILGIAGLFTIFSSFVFSTVVIHFLDKELTGLNEALPFFLLLIDLSRASTLAKFALSSNSQ
DEVRENIARGMAILGPTFTLDALVECLVIGVGTMSGVRQLEIMCCFGCMSVLANYFVFMTFFPACVSLVLELSRE
SREGRPIWQLSHFARVLEEEENKPNPVTQRVKMIMSLGLVLVHAHSRWIADPSPQNSTADTSKVSLGLDENVSKR
IEPSVSLWQFYLSKMISMDIEQVITLSLALLLAVKYIFFEQTETESTLSLKNPITSPVVTQKKVPDNCCRREPML
VRNNQKCDSVEEETGINRERKVEVIKPLVAETDTPNRATFVVGNSSLLDTSSVLVTQEPEIELPREPRPNEECLQ
ILGNAEKGAKFLSDAEIIQLVNAKHIPAYKLETLMETHERGVSIRRQLLSKKLSEPSSLQYLPYRDYNYSLVMGA
CCENVIGYMPIPVGVAGPLCLDEKEFQVPMATTEGCLVASTNRGCRAIGLGGGASSRVLADGMTRGPVVRLPRAC
DSAEVKAWLETSEGFAVIKEAFDSTSRFARLQKLHTSIAGRNLYIRFQSRSGDAMGMNMISKGTEKALSKLHEYF
PEMQILAVSGNYCTDKKPAAINWIEGRGKSVVCEAVIPAKVVREVLKTTTEAMIEVNINKNLVGSAMAGSIGGYN
AHAANIVTAIYIACGQDAAQNVGSSNCITLMEASGPTNEDLYISCTMPSIEIGTVGGGTNLLPQQACLQMLGVQG
ACKDNPGENARQLARIVCGTVMAGELSLMAALAAGHLVKSHMIHNRSKINLQDLQGACTKKTA

FIGURE 807A

CTGGGCCAGGCGCCGGGGCAGGAAGGGAGGCGGCCGCCGTGGCCATTCTTAAAGGCGCCCGAGTGTAGGCGACAG
GCCGCTGACGGCGGGAAGGAAAATGAGTGAGTCTTTGGTTGTTTGTGATGTTGCCGAAGATTTAGTGGAAAAGCT
GAGAAAGTTTCGTTTTCGCAAAGAAACGAACAACGCTGCTATTATAATGAAGATTGACAAGGATAAACGCCTGGT
GGTACTGGATGAGGAGCTTGAGGGCATTTCACCAGATGAACTTAAAGATGAACTACCTGAACGACAACCTCGCTT
CATTGTGTATAGTTATAAATATCAACATGATGATGGAAGAGTTTCATATCCTCTGTGCTTTATTTTCTCCAGTCC
TGTTGGATGTAAGCCTGAACAACAGATGATGTATGCTGGAAGTAAGAATAAGCTAGTCCAGACAGCTGAACTAAC
CAAGGTATTTGAAATAAGAAATACCGAAGACCTAACTGAAGAATGGTTACGTGAGAAACTTGGATTTTTTCACTA
ATGTGAACTTCTGTGTTTCTAAAGTATTTATGTATTAACCTGACCATACTGGAATCAGACATAAATACTTATTTA
TGCCTAAAAATGCACTGTTACTTACAGTTTGTTTCCTGCAGTAAAGAAAAATTCTTCATTTGTGCAAAATTTGAA
CAAAGAGGAAATCATCTTCATAGTAATGAAACTTTGTAAAGTGTTTCCTTATATTGGTAATTGTTAGGTGGACTA
CTTTTCTCCAGGGACTTTTTGCACTCTTGTGACTAATTTCTATAACTTATGGTTCGGAATTTGTTACTATTTACA
GACACCATTGGAAAGTGGATATATTAGATTGTGAGAGACAACAGTTGCCTCCTTTTGACAAATACTGGATATTAG
CAGTTTATTTATGAAAATAGCGTATTATCACTTGTCAAATCATTGAAATTCATTTGGGGTCAAAGACTTGAGTGA
CCCAGTATTGAGCCATGAATAATTTAGTGTAACCTGTATTACAAGTACATTGATGAATTCTGTATCTTCTTTGGT
TTCCTGTATCTTTTTAATCAAGTCTAGAAACTATGTTCATCAGTCACTCATTTTTAAGGTCGGGAGTTAGATTTT
ATGATAGAATTATGACTGTTAGCTTTTCTCCTTATAGCATCTTAGTCTTAGAAATTGGTGGGTTGTAATAATCAA
GGGCTTCATTCCTTTTATGTCATTTCTAGACAGTTTTGAATCTAGGTTAATAACACTTTATTTATAAAGCACCTC
AATGTCCTGTGAACACTAATTATTTTAAATGTGTTAATACTGTGCCTTTGATTTGTTAGCTTTAAAGTTAGTTTA
AGACTTTTACACTGCCAGTATTCCACATTTGGTGAAATTAATACTTTTTTAAAGGGTCCAAATAAAATAATTTTC
TAATGTGTATATCTGAAATTTGTAATAAAATCAACTTCATATTTTAAAAATTCCAACTATCTGCTTGCATTGGTG
TAATATATGGCAGTCGAGAGTTATAATTTTGGGTATACTTGTGGTTAGTTTTGTGCCATAGGAAAAAATTATCTT
AAAACTTTGGCCATAGTTAATAACATTAACACTTCAATAGCAATCACATCTTATATCCTAAATGTCAGAAGATAT
TCTGAACTGGATGCCTGAATAGTTAACTAAACCAGTCTTGGTTAGATGATGGTACTCTTGGCATAAAGCGTAGGA
TTCTGATATTTGGCATACTTGTAAAAACAAATACATAAGTAACCATTGAACATTAATTTGATAATAGGTCTAGAG
ACTCTAAAAACTAACCAAACTTGGTGAGTGTATTCTTATATTAAGAATATCTTAGTCATCTCAAAACTAGCAAAA
TTTAAATTTTGGCATGTTTTCCATTCATATGTTCTTTGCATTTTATTTTTGAGGTTTCTGTGAGAAGTAAAGATA
GTTGGAATTTTTGCGATATTGAATAGAACATCTTCTGTTCCCAACACTGTTTGGCTTCACTAATTTAGAAGTCAG
GAAGCAATAGAAAGTTGGAGATGAGGAAGTGCTAGAGTAGGTGTTTGTTTTGGTTCTTGGAGGGAAAAGATTCTT
TATTCCAATTTCCAGAGAGAAGAGAAAACTCACCCAGGAAGTTTAAAAATTCTTTAAACAGGTATTTTGATATTG
GAGAATAACATGCATATAATTCTGTAGGAATGCACATGTAATCCAAGTGAGTGGAGAGTGTTTTTAATGTTTTTG
AATGAAGGAAATGAGGTTTTGTTTCACCTGTTTTGCAGCAGTAAGAGAAACTAGTGCTGCAAGAATGTATTTTTT
AATGAAGTTCCTTATTTTGTCTTGCATGTTTTAGTTTTGCTTATTTTTAAATTTGGAGGTCCTCCATAATGTCAG
ATAATATTGACCTGCCATACGTTAGCACTCTTAGTTCCGCTACTGTCTTTAACAGGAGCAAAGAGCTGTGATAAA
CCATGCTTTTTTGAGCTTGTCTGACTCCTAATTAATAACATGTTTTTGGCAAGACAACAGATTGAGGTTAGAGGA
TCAGTAGGACATTTTTATTCCATCTGTCCTATGGGGAAATTTACAAATCCCGTGCTCTAAAATGTTCTCAAACAT
TTATATAGATTTCCCTTTCATCTTACTAAATTTTGCATTGTTCTTTTCAAGTATGTTTCGTATTTACTGTCTTTT
TTTCTGCCATTTCCCAAATAATAACTCCAGATTTCATAATTCCAGTTTTTACATTCCGTTATCTTTCTGGTACAA
CCATTCCCATTCAGCCTTAAATCTGAGTCCTTTTTAGCAGCAACTTTTTTCCTGGGATCCTCCTTCGTGGTCTTC
TAAGTCAGTGTTAGTTTTGAAATTTTTGGCCCTGCATAAGTTCTGCATAGCATCTAATGTCAAAATAGAACCAAC
TGGTAATCACAGTATTATTTAGTGTGGTTTCCATGACAACAAAAATACATACGAAGAAAACTTCTCAGGTTACTA
TGCTGAAATTCCAAAATGTCTGAGTTTTGAATAGTGATCACTTTGTTCTGGTATTGACGCAATTATATTAGGAAA
AAAGTTGGTTGACTGTTTTTGTTTAATTGACTTCTAAAATGTTCAAATTGTCTAGTTCTAAAAGTTTACTAAATG
CCTAGTGCAGTTAAACATACTCTTGTTTAAGTGTGTGTTGCTAAATTTTTTACTGTCATTACTAAATAATCTGTG
TGGCAAAATGTGTGTCAGCACTTTTCCCTCCTTTTTTATCTCCTATTTTCAGGAGTCAAATGTAGCCATAAACTG
TATCCTTGTCTGACACTTTAGCTAAAAATTTCCAGTTAGGGGAGTTTATTGCCAAATTAAATTTGGCTGTTCCCC
CCAACCCATATAGATATTAAGGAAGGTGTACTTAAAAAATGTTTGGACTGCTTTTAAAACCTGAGCAATGTCATT
AATCCATATGTGGACTAGTGATGAATAGATATTTTCATAAGAGTTTAAATGACTGATATTTGGTGGAAGTAGAGA
GTAACTCAATATTCTATCAATTCAAGTATTCTTACTATGGTTGCCTTTCCCTATTTGTTCAATAGACTGATAATA

FIGURE 807B

CTGGTATTTATAGAGTTTGAGCCATTACAACTTTTGTGAGGATGTGTTTCAAACATTTCTGGACAAATCTTATTT
TGTATTTCTGGAAGAATGTAGTAATCTTCTAGACCGCTTAAAACCAATGCTCCCAAGCTGAATATTCTTGAGCAA
ATTTGTTTTTTATTATGCCATTTGACATTTCAAATCAGTGCTCATATACAGTAAACTTGTGATAGAAATTGTATT
TTATTGCTTTTTGGATTATAATTCATATAAATATAATTACTTGAATATTGTTTGAGATCATTAACATGCCAGGGC
AGTTCCCACTGATTTAGATGGTCCAAGATAATCTCATTCAGGAGGCTTGAAACATTAATGGTTTAGTCTTGTGAA
TTTTAACAGTTCTCTGTCATCGTTTAACAAAACCAACAACTGACACAACTCCTTAAGCTGTGGTTTCAGTCTCTG
CTAGTTCATATTGCATGTTTATTTTGGACAGTCTTTTGTTAAGCATGGTGCTTGTACTGGTTTAAATAAAATGTT
AACATT

FIGURE 808

MSESLVVCDVAEDLVEKLRKFRFRKETNNAAIIMKIDKDKRLVVLDEELEGISPDELKDELPERQPRFIVYSYKY
QHDDGRVSYPLCFIFSSPVGCKPEQQMMYAGSKNKLVQTAELTKVFEIRNTEDLTEEWLREKLGFFH

FIGURE 809

GGCACGAGGAAGATATATGGATACAGATTATATATATATATACATATTTTCCTTAATAGAGGAATGCTTCATATT
ATTCAAAAATTATATCCTGATCACCTTTTTTTGTTTTTTATTGTAAAGTATCTCTGCTTTATCCATTGCTGAATT
CGATAGGATGTTGAAATGCTGGTCACCAAAAAAGGAAACTGAGCAAATTCATTTCAACAACATCAAAACTTCAGC
TTCTCATAGTAAAAAGCTGAATGTTACTAATATTTTTCATATCTAAAAAAAAAATTCTTAGCAATGAAATTGCTGT
TAAAACACAAATTTCAATCAAATACTTTTGTGTATAGAAAATATGTATAGTAGGTAGATAGAAAAGTATAAAATG
TTTGTTGAAGTATCTTATTTTAGAATGAATGGAGAAATGCCAAAGATGAATCCTTCACTGCATTATGAAAATATT
TCACATGTTCTCTTGGACTTTATATAAATCTGTAATAGATTTTAGAATTGAAAAATTCTTTGTGAAGGTCTTCTA
AAAGTGTTCCAATTTATCTCAAAATCTCCATATATAGGATCAGCTTAAAACATAAAGAAAACCTTGAATTTCTCA
AATGTTTGAGATGTTCAAGACAGTCTCTTAATCCGTTAATGCTTTTGGAAACAATTGACAAAATAGGGCAGGCAG
CTCATCTCATGTCCTGAAGTTGGAATTTAAATAATTCCTATTTGCAAATTAGAATGACAGTGTTGGAATTTGGAG
GCAGTAGTTGAGCATATTCTCTAGTATATAGCTACACCTTTAATAAAATGAAGGAATGTCTTCAATCATATTTTA
GTGGGCTATTTATAAATAGTCTTGAAGTCAATTTAGTTTATTTATTTAAAAGATAATGCATCCTGAAAGGGATCA
TTTATGAATAACAATCTGAAGTCTTTTCATAAAAAAAAATTAATAAACTTTAGTTGTACATTTAGCCAGTGTTATT
TGAAGTATGTAACTTTTAAAATATTAAGTGTCTTGTATGATTAGAATATGTGAATGAGTAACTTATTTTGTATCA
GGAATGTTTTGGTACTGTGTTTTCACTCAAACCACTGACTTAACAGATACTGCTGTGTATAACATGTACTAAATA
TTACAGTTATTGTGCATAACAGATTGTTCCTCTTATATTTGTGTGTATACAGGCAATTCATGTTTTAATGTAAAT
AAATACCATTTTGCAGTTAAAAAAAAAAAAAAAAAAA

FIGURE 810A

CACTGCTCTGACTGCGTCCTCCCCAGGCTGAAGTGTCCTCAGGTTTCATGTGGATTTGCCCAGTAATGGATGGCT
CCACCGAGGCCAGGTTGGGGAAGTTCAGCCTCGAGGACACTAGGGGACGAAAAACTTCAAAAAGAAGACTCTTTT
TATTAATATTTTGGCGTTCTTTTTGGAGAGGAACTTTTGGGATGTAGCCTTTACCTGTTTCCTGAATTTGACATC
CAAAAAGCCTTTTGGAAAACACCATTCTAAATTTATCCTGTTCTGAATCATCATCGCTTCTGATAGATGCAGTTG
CTTGCTGACATCGTGATCTTTGATTTTGTACAACGCTATTTGGGCTAACTTTTGGGATTTTACTTTGTGCTTAGA
ATTTGAAAGTAGTATTCATTGGAAAGAGACTCCAAGAAAATACTCGAAGACATCAAAAGCTGGATTCGAGGGTAT
AACGTGTTTTGTTTTGTTTTTTAAATTAGAAAAATAAGGAATTGCAGTGTGATTTTCTTTCCCCCTTTAACTTAG
AGGAACGAGGATTATACAGAAATTTGAAATTTCAACAAGAAAAACTTAAGCTTCCTTGGATTCCCACGTCAAAGG
AAAGTTTCAAGCTTTCAGAAGGAGTTCTCACTCGAAGATAAAGAACAGCTCGCTAACCACGAAAGAGGAATCGAT
GCTCAGCTTTTAGTTGCACTTCCTAAAGTTGCAGAATTAAGACAAATCTTTGAACCAAAGAAGAAAGAATTCTTA
GAA**ATG**AAAAGAAAAGAAAGAATTGCCAGGCGCCTGGAAGGAATTGAAAATGACACTCAGCCCATCCTCTTGCAG
AGCTGCACAGGATTGGTGACTCACCGCCTGCTGGAGGAAGACACCCCTCGATACATGAGAGCCAGCGACCCTGCC
AGCCCCCACATCGGCCGATCAAATGAAGAGGAGGAAACTTCCGATTCTTCTCTAGAAAAGCAAACTCGATCCAAA
TACTGCACAGAAACCTCCGGTGTCCACGGTGACTCACCCTATGGTTCGGGTACCATGGACACCCACAGTCTGGAG
TCCAAAGCCGAAAGAATTGCAAGGTACAAAGCAGAAAGAAGGCGACAGCTGGCAGAGAAGTATGGGCTGACTCTG
GATCCCGAGGCCGACTCCGAGTATTTATCCCGCTATACCAAGTCCAGGAAGGAGCCTGATGCTGTCGAGAAGCGG
GGAGGAAAAAGTGACAAACAGGAAGAGTCAAGCAGAGATGCGAGTTCTCTGTACCCCGGGACCGAGACGATGGGG
CTCAGGACCTGTGCCGGTGAATCCAAGGACTATGCCCTCCATGCGGGTGACGGCTCTTCCGACCCGGAGGTGCTG
CTGAACATAGAAAACCAAAGACGAGGTCAAGAGCTGAGTGCCACCCGGCAGGCCCATGACCTGTCCCCAGCAGCC
GAGAGTTCCTCGACCTTCTCTTTCTCTGGGCGAGACTCCTCCTTCACTGAAGTGCCACGGTCCCCCAAGCACGCC
CACAGCTCCTCCCTGCAGCAGGCAGCCTCCCGGAGCCCCTCCTTTGGTGACCCACAGCTATCCCCTGAGGCCCGA
CCCAGTACAGGGAAACCCAAACATGAGTGGTTTCTCCAGAAAGATTCCGAAGGGGACACACCTTCACTTATCAAC
TGGCCTTCCAGAGTTAAAGTTAGAGAAAAATTGGTGAAAGAGGAAAGTGCTCGAAACAGCCCTGAACTCGCCTCA
GAGTCCGTAACTCAGAGGAGACACCAGCCAGCGCCAGTCCATTACGTGTCATTTCAGTCTGAGCACTCAGCCTTT
GATAGGGTCCCCAGCAAGGCAGCAGGCTCTACACGACAGCCAATCCGTGGCTATGTCCAACCCGCAGATACCGGT
CACACCGCCAAGCTGGTGACGCCAGAAACCCCAGAAAATGCATCTGAGTGTAGCTGGGTAGCATCAGCCACCCAG
AATGTCCCCAAACCTCCCAGCTTGACGGTTCTAGAAGGTGACGGAAGGGATAGCCCAGTTCTCCATATCTGCGAG
TCAAAAGCAGAAGAAGAAGAAGGGGAAGGAGAAGGAGAAGAAAAAGAAGAAGATGTGTGCTTCACTGAAGCTCTC
GAGCAAAGCAAGAAAACCCTACTGGCTTTGGAGGGTGATGGGCTAGTGAGAAGCCCAGAAGATCCCTCTAGAAAT
GAGGACTTTGGTAAGCCTGCTGTGAGCACAGTCACCTTAGAGCATCAGAAGGAACTGGAAAACGTGGCACAACCC
CCTCAAGCTCCGCACCAGCCCACTGAGAGGACAGGCAGGAGCGAGATGGTTCTCTACATTCAAAGTGAGCCTGTG
TCCCAAGACGCCAAACCAACTGGTCACAACAGGGAAGCCTCGAAAAAGCGCAAGGTCCGTACCCGCTCTCTGTCA
GATTTCACAGGCCCCCCTCAGCTCCAGGCCTTGAAGTATAAGGACCCAGCTTCCAGGAGAGAGCTGGAGCTGCCC
AGCTCCAAGACCGAAGGGCCTTATGGGGAGATCAGCATGCTGGACACAAAGGTCTCTGTCGCCCAGCTCCGAAGT
GCGTTCCTGGCATCTGCCAACGCCTGCAGGAGACCTGAACTCAAATCACGGGTAGAGAGGTCGGCTGAAGGACCT
GGCTTGCCCACCGGTGTGGAACGGGAGAGAGGGTCCCGGAAACCAAGACGCTATTTTTCTCCTGGTGAAAGTAGA
AAAACTTCCGAGAGATTTAGAACCCAACCTATAACTTCAGCAGAACGAAAGGAATCGGATAGGTGCACTTCACAT
TCAGAAACGCCAACTGTCGATGATGAAGAAAAGGTGGATGAACGAGCCAAGCTGAGCGTCGCCGCCAAGAGGTTG
CTTTTCAGGGAGATGGAAAAATCTTTTGATGAACAAAATGTTCCAAAGCGACGCTCAAGAAACACAGCTGTGGAG
CAGAGGCTACGCCGTCTGCAGGACAGGTCCCTCACCCAGCCCATCACCACTGAAGAGGTGGTCATCGCAGCCACT
GAACCTATCCCCGCTTCGTGTTCTGGGGGCACCCACCCTGTAATGGCGAGACTTCCTAGCCCCACTGTAGCTAGG
AGCGCTGTGCAGCCTGCCAGATTGCAGGCCTCTGCTCACCAAAAGGCCTTAGCCAAGGACCAGACAAATGAGGGC
AAAGAGCTTGCTGAGCAAGGAGAACCTGATTCCTCCACTCTAAGCTTGGCCGAAAAGTTGGCCTTGTTTAACAAA
TTGTCCCAGCCAGTCTCAAAAGCGATTTCTACCCGGAACAGAATAGACACGAGACAGAGGAGAATGAACGCTCGC
TATCAAACTCAGCCAGTCACACTGGGAGAGGTGGAGCAGGTGCAGAGTGGAAAGCTCATTCCTTTCTCACCTGCC
GTGAACACATCAGTGTCTACCGTAGCATCCACGGTTGCTCCAATGTATGCCGGAGATCTTCGCACAAAGCCACCT
CTTGACCACAATGCAAGTGCCACTGACTATAAGTTTTCTTCTTCAATAGAAAATTCGGACTCTCCAGTTAGAAGC
ATTCTGAAATCGCAAGCTTGGCAGCCTTTGGTAGAGGGTAGCGAGAACAAGGGAATGTTGAGAGAATATGGAGAG

FIGURE 810B

ACAGAAAGCAAGAGAGCTTTGACAGGTCGAGACAGTGGGATGGAGAAGTATGGGTCCTTTGAGGAAGCAGAAGCA
TCCTACCCCATCCTGAACCGAGCCAGGGAAGGAGACAGCCATAAGGAATCTAAATATGCTGTTCCCAGAAGAGGA
AGCCTGGAACGGGCGAACCCTCCCATCACCCACCTCGGGGATGAACCGAAGGAATTTTCCATGGCTAAAATGAAT
GCACAAGGAAACTTGGACTTGAGGGACAGGCTGCCCTTTGAAGAGAAGGTGGAGGTGGAGAATGTTATGAAAAGG
AAGTTTTCACTAAGAGCGGCAGAGTTCGGGGAGCCCACTTCCGAGCAGACGGGGACAGCTGCTGGGAAAACTATT
GCTCAAACCACAGCCCCCGTGTCCTGGAAGCCCCAGGATTCTTCGGAACAGCCACAGGAGAAGCTCTGCAAGAAT
CCATGTGCGATGTTTGCTGCTGGAGAGATCAAAACGCCGACAGGGGAGGGCCTTCTTGACTCACCCAGCAAAACC
ATGTCTATTAAAGAAAGATTGGCACTGTTGAAGAAAAGCGGGGAGGAAGATTGGAGAAACAGACTCAGCAGGAGG
CAGGAGGGCGGCAAGGCGCCGGCCAGCAGCCTGCACACCCAGGAAGCAGGGCGGTCCCTCATCAAGAAGCGGGTC
ACAGAAAGTCGAGAGAGCCAAATGACGATTGAGGAGAGGAAGCAGCTCATCACTGTGAGAGAGGAGGCCTGGAAG
ACGAGAGGCAGAGGAGCGGCCAACGACTCGACCCAGTTCACTGTGGCTGGCAGGATGGTGAAGAAAGGTTTGGCG
TCACCTACTGCCATAACCCCAGTAGCCTCAGCCATTTGCGGTAAAACAAGAGGCACCACACCCGTTTCCAAACCC
CTGGAAGATATCGAAGCCAGACCAGATATGCAGTTAGAATCGGACCTGAAGTTGGACAGGCTGGAAACCTTTCTA
AGAAGGCTGAATAACAAAGTTGGCGGGATGCACGAAACGGTGCTCACTGTCACCGGCAAATCTGTGAAGGAGGTG
ATGAAGCCAGATGATGATGAAACCTTTGCCAAATTTTACCGCAGCGTGGATTATAATATGCCAAGAAGTCCTGTG
GAGATGGATGAGGACTTCGATGTCATTTTCGATCCTTATGCACCCAAATTGACGTCTTCCGTGGCCGAGCACAAG
CGGGCAGTTAGGCCCAAGCGCCGGGTTCAGGCCTCCAAAAACCCCCTGAAAATGCTGGCGGCAAGAGAAGATCTC
CTTCAGGAATACACTGAGCAGAGATTAAACGTTGCCTTCATGGAGTCAAAGCGGATGAAAGTAGAAAAGATGTCT
TCCAACTCCAACTTCTCAGAAGTCACCCTGGCGGGTTTAGCCAGTAAAGAAAACTTCAGCAACGTCAGCCTGCGG
AGCGTCAACCTGACGGAACAGAACTCTAACAACAGCGCCGTGCCCTACAAGAGGCTGATGCTGTTGCAGATTAAA
GGAAGAAGACATGTGCAGACCAGGCTGGTGGAACCTCGAGCTTCGGCGCTCAACAGTGGGGACTGCTTCCTCCTG
CTCTCTCCCCACTGCTGCTTCCTGTGGGTAGGAGAGTTTGCAAACGTCATAGAAAAGGCGAAGGCCTCAGAACTT
GCAACTTTAATTCAGACAAAGAGGGAACTTGGTTGTAGAGCTACTTATATCCAAACCATTGAAGAAGGAATTAAT
ACACACACTCATGCAGCCAAAGACTTC1GGAAGCTTCTGGGTGGCCAAACCAGTTACCAATCTGCTGGAGACCCA
AAAGAAGATGAACTCTATGAAGCAGCCATAATAGAAACTAACTGCATTTACCGTCTCATGGATGACAAACTTGTT
CCTGATGACGACTACTGGGGGAAAATTCCGAAGTGCTCCCTTCTGCAACCCAAAGAGGTACTGGTGTTTGATTTT
GGTAGTGAAGTTTACGTATGGCATGGGAAAGAAGTCACATTAGCACAACGAAAAATAGCATTTCAGCTGGCAAAG
CACTTATGGAATGGAACCTTTGACTATGAGAACTGTGACATCAATCCCCTGGATCCTGGAGAATGCAATCCGCTT
ATCCCCAGAAAAGGACAGGGGCGGCCCGACTGGGCGATATTTGGGAGACTTACTGAACACAATGAGACGATTTTG
TTCAAAGAGAAGTTTCTGGATTGGACGGAACTGAAGAGATCGAATGAGAAGAACCCCGGGGAACTTGCCCAGCAC
AAGGAAGACCCCAGGACTGATGTCAAGGCATACGATGTGACACGGATGGTGTCCATGCCCCAGACGACAGCAGGC
ACCATCCTGGACGGAGTGAACGTCGGCCGTGGCTATGGCCTGGTGGAAGGACACGACAGGAGGCAGTTTGAGATC
ACCAGCGTTTCCGTGGATGTCTGGCACATCCTGGAATTCGACTATAGCAGGCTCCCCAAACAAAGCATCGGGCAG
TTCCATGAGGGGGATGCCTATGTGGTCAAGTGGAAGTTCATGGTGAGCACGGCAGTGGGAAGTCGCCAGAAGGGA
GAGCACTCGGTGAGGGCAGCCGGCAAAGAGAAGTGCGTCTACTTCTTCTGGCAAGGCCGGCACTCCACCGTGAGT
GAGAAGGGCACGTCGGCGCTGATGACGGTGGAGCTGGACGAGGAAAGGGGGGCCCAGGTCCAGGTTCTCCAGGGA
AAGGAGCCCCCCTGTTTCCTGCAGTGTTTCCAGGGGGGGATGGTGGTGCACTCGGGGAGGCGGGAAGAGGAAGAA
GAAAATGTGCAAAGTGAGTGGCGGCTGTACTGCGTGCGTGGAGAGGTGCCCGTGGAAGGGAATTTGCTGGAAGTG
GCCTGTCACTGTAGCAGCCTGAGGTCCAGAACTTCCATGGTGGTGCTTAACGTCAACAAGGCCCTCATCTACCTG
TGGCACGGATGCAAAGCCCAGGCCCACACGAAGGAGGTCGGAAGGACCGCTGCGAACAAGATCAAGGAACAATGT
CCCCTGGAAGCAGGACTGCATAGTAGCAGCAAAGTCACAATACACGAGTGTGATGAAGGCTCCGAGCCACTCGGA
TTCTGGGATGCCTTAGGAAGGAGAGACAGGAAAGCCTACGATTGCATGCTTCAAGATCCTGGAAGTTTTAACTTC
GCGCCCCGCCTGTTCATCCTCAGCAGCTCCTCTGGGGATTTTGCAGCCACAGAGTTTGTGTACCCTGCCCGAGCC
CCCTCTGTGGTCAGTTCCATGCCCTTCCTGCAGGAAGATCTGTACAGCGCGCCCCAGCCAGCACTTTTCCTTGTT
GACAATCACCACGAGGTGTACCTCTGGCAAGGCTGGTGGCCCATCGAGAACAAGATCACTGGTTCCGCCCGCATC
CGCTGGGCCTCCGACCGGAAGAGTGCGATGGAGACTGTGCTCCAGTACTGCAAAGGAAAAAATCTCAAGAAACCA
GCCCCCAAGTCTTACCTTATCCACGCTGGTCTGGAGCCCCTGACATTCACCAATATGTTTCCCAGCTGGGAGCAC
AGAGAGGACATCGCTGAGATCACAGAGATGGACACGGAAGTTTCCAATCAGATCACCCTCGTGGAAGACGTCTTA

FIGURE 810C

GCCAAGCTCTGTAAAACCATTTACCCGCTGGCCGACCTCCTGGCCAGGCCACTCCCGGAGGGGGTCGATCCTCTG
AAGCTTGAGATCTATCTCACCGACGAAGACTTCGAGTTTGCACTAGACATGACGAGGGATGAATACAACGCCCTG
CCCGCCTGGAAGCAGGTGAACCTGAAGAAAGCAAAAGGCCTGTTCTGAGTGGGGAGACGCCAGAGGAGCCTCACG
GTCACGTCCAACAACACCACTGCACCAGGGAAATGGATATATATTTTTGGACTGGTGTTTTTCACAAAGTATTTT
TCAATCAGAGTTTTCAGAACCTGACATTGTTAAAGATACTGCTTGTCCCGGAGTTGTGTATTTTGTAAATGTTCA
AGGGAACTGTTTGGAAACTTCTTTCCACCATTCAGGAGGTTATCAGAATTAATAAAAGTATCTGTTATGTGCACT
TAAGCCGCAGCTGCTATAGATAGCACTGCCTTCTTGTTCCAGCTAGGCAATGCCTTTTTTTTTTTTTTGAAGCA
GTTCTCTTTATAAAGTGTTATTTTGATAGTTTGTGGATTCTAAAATATATATATATTTATATAAACACCATATAA
GTCAAATATGTATTTAACAAAGCAATATGTATTCATTCACTTTCAAGATTTGTTTTGGTGTCAAAATAACATGAA
AAGGTAGATGGAGTTGCTTCTGTTGAATTAGCTCTGCCACCAATATGTATCTTCATACACGTTTGGAAATGTTTC
CTGCAGCATTAGGTATGACTTGTTCTGAGTACTGCTTCCGGTGCTAAAATGAACAAAGAATTTGTACTTAATGGC
ATGGACTCTGGAGAATCTATGCGAATCAACCTTTCTACCTTAATATCTCCCCAAAAATGTATAGTGCCTTGTTTT
TATGTACAGTTTATATACAGAAAAGTTTGCTCTGCATTTTTGATGATGGTTTGGAACATTATCTACAATTTTACT
CTCAAATAGTCAAAATAAAAACATCTCAATTTCTAATACCGGTTGTAAACAAACAGTACACATGTCATTTTGTGA
TATAGGACTCCCAAATAAAAGTATCAGAATAAACACAACAATTAACTGGT

FIGURE 811

MKRKERIARRLEGIENDTQPILLQSCTGLVTHRLLEEDTPRYMRASDPASPHIGRSNEEEETSDSSLEKQTRSKY
CTETSGVHGDSPYGSGTMDTHSLESKAERIARYKAERRRQLAEKYGLTLDPEADSEYLSRYTKSRKEPDAVEKRG
GKSDKQEESSRDASSLYPGTETMGLRTCAGESKDYALHAGDGSSDPEVLLNIENQRRGQELSATRQAHDLSPAAE
SSSTFSFSGRDSSFTEVPRSPKHAHSSSLQQAASRSPSFGDPQLSPEARPSTGKPKHEWFLQKDSEGDTPSLINW
PSRVKVREKLVKEESARNSPELASESVTQRRHQPAPVHYVSFQSEHSAFDRVPSKAAGSTRQPIRGYVQPADTGH
TAKLVTPETPENASECSWVASATQNVPKPPSLTVLEGDGRDSPVLHICESKAEEEEGEGEGEEKEEDVCFTEALE
QSKKTLLALEGDGLVRSPEDPSRNEDFGKPAVSTVTLEHQKELENVAQPPQAPHQPTERTGRSEMVLYIQSEPVS
QDAKPTGHNREASKKRKVRTRSLSDFTGPPQLQALKYKDPASRRELELPSSKTEGPYGEISMLDTKVSVAQLRSA
FLASANACRRPELKSRVERSAEGPGLPTGVERERGSRKPRRYFSPGESRKTSERFRTQPITSAERKESDRCTSHS
ETPTVDDEEKVDERAKLSVAAKRLLFREMEKSFDEQNVPKRRSRNTAVEQRLRRLQDRSLTQPITTEEVVIAATE
PIPASCSGGTHPVMARLPSPTVARSAVQPARLQASAHQKALAKDQTNEGKELAEQGEPDSSTLSLAEKLALFNKL
SQPVSKAISTRNRIDTRQRRMNARYQTQPVTLGEVEQVQSGKLIPFSPAVNTSVSTVASTVAPMYAGDLRTKPPL
DHNASATDYKFSSSIENSDSPVRSILKSQAWQPLVEGSENKGMLREYGETESKRALTGRDSGMEKYGSFEEAEAS
YPILNRAREGDSHKESKYAVPRRGSLERANPPITHLGDEPKEFSMAKMNAQGNLDLRDRLPFEEKVEVENVMKRK
FSLRAAEFGEPTSEQTGTAAGKTIAQTTAPVSWKPQDSSEQPQEKLCKNPCAMFAAGEIKTPTGEGLLDSPSKTM
SIKERLALLKKSGEEDWRNRLSRRQEGGKAPASSLHTQEAGRSLIKKRVTESRESQMTIEERKQLITVREEAWKT
RGRGAANDSTQFTVAGRMVKKGLASPTAITPVASAICGKTRGTTPVSKPLEDIEARPDMQLESDLKLDRLETFLR
RLNNKVGGMHETVLTVTGKSVKEVMKPDDDETFAKFYRSVDYNMPRSPVEMDEDFDVIFDPYAPKLTSSVAEHKR
AVRPKRRVQASKNPLKMLAAREDLLQEYTEQRLNVAFMESKRMKVEKMSSNSNFSEVTLAGLASKENFSNVSLRS
VNLTEQNSNNSAVPYKRLMLLQIKGRRHVQTRLVEPRASALNSGDCFLLLSPHCCFLWVGEFANVIEKAKASELA
TLIQTKRELGCRATYIQTIEEGINTHTHAAKDFWKLLGGQTSYQSAGDPKEDELYEAAIIETNCIYRLMDDKLVP
DDDYWGKIPKCSLLQPKEVLVFDFGSEVYVWHGKEVTLAQRKIAFQLAKHLWNGTFDYENCDINPLDPGECNPLI
PRKGQGRPDWAIFGRLTEHNETILFKEKFLDWTELKRSNEKNPGELAQHKEDPRTDVKAYDVTRMVSMPQTTAGT
ILDGVNVGRGYGLVEGHDRRQFEITSVSVDVWHILEFDYSRLPKQSIGQFHEGDAYVVKWKFMVSTAVGSRQKGE
HSVRAAGKEKCVYFFWQGRHSTVSEKGTSALMTVELDEERGAQVQVLQGKEPPCFLQCFQGGMVVHSGRREEEEE
NVQSEWRLYCVRGEVPVEGNLLEVACHCSSLRSRTSMVVLNVNKALIYLWHGCKAQAHTKEVGRTAANKIKEQCP
LEAGLHSSSKVTIHECDEGSEPLGFWDALGRRDRKAYDCMLQDPGSFNFA

FIGURE 812A

CACTGCTCTGACTGCGTCCTCCCCAGGCTGAAGTGTCCTCAGGTTTCATGTGGATTTGCCCAGTAATGGATGGCT
CCACCGAGGCCAGGTTGGGGAAGTTCAGCCTCGAGGACACTAGGGGACGAAAAACTTCAAAAAGAAGACTCTTTT
TATTAATATTTTGGCGTTCTTTTTGGAGAGGAACTTTTGGGATGTAGCCTTTACCTGTTTCCTGAATTTGACATC
CAAAAAGCCTTTTGGAAAACACCATTCTAAATTTATCCTGTTCTGAATCATCATCGCTTCTGATAGATGCAGTTG
CTTGCTGACATCGTGATCTTTGATTTTGTACAACGCTATTTGGGCTAACTTTTGGGATTTTACTTTGTGCTTAGA
ATTTGAAAGTAGTATTCATTGGAAAGAGACTCCAAGAAAATACTCGAAGACATCAAAAGCTGGATTCGAGGGTAT
AACGTGTTTTGTTTTGTTTTTTAAATTAGAAAAATAAGGAATTGCAGTGTGATTTTCTTTCCCCCTTTAACTTAG
AGGAACGAGGATTATACAGAAATTTGAAATTTCAACAAGAAAAACTTAAGCTTCCTTGGATTCCCACGTCAAAGG
AAAGTTTCAAGCTTTCAGAAGGAGTTCTCACTCGAAGATAAAGAACAGCTCGCTAACCACGAAAGAGGAATCGAT
GCTCAGCTTTTAGTTGCACTTCCTAAAGTTGCAGAATTAAGACAAATCTTTGAACCAAAGAAGAAAGAATTCTTA
GAA**ATG**AAAAGAAAAGAAAGAATTGCCAGGCGCCTGGAAGGAATTGAAAATGACACTCAGCCCATCCTCTTGCAG
AGCTGCACAGGATTGGTGACTCACCGCCTGCTGGAGGAAGACACCCCTCGATACATGAGAGCCAGCGACCCTGCC
AGCCCCCACATCGGCCGATCAAATGAAGAGGAGGAAACTTCCGATTCTTCTCTAGAAAAGCAAACTCGATCCAAA
TACTGCACAGAAACCTCCGGTGTCCACGGTGACTCACCCTATGGTTCGGGTACCATGGACACCCACAGTCTGGAG
TCCAAAGCCGAAAGAATTGCAAGGTACAAAGCAGAAAGAAGGCGACAGCTGGCAGAGAAGTATGGGCTGACTCTG
GATCCCGAGGCCGACTCCGAGTATTTATCCCGCTATACCAAGTCCAGGAAGGAGCCTGATGCTGTCGAGAAGCGG
GGAGGAAAAAGTGACAAACAGGAAGAGTCAAGCAGAGATGCGAGTTCTCTGTACCCCGGGACCGAGACGATGGGG
CTCAGGACCTGTGCCGGTGAATCCAAGGACTATGCCCTCCATGCGGGTGACGGCTCTTCCGACCCGGAGGTGCTG
CTGAACATAGAAAACCAAAGACGAGGTCAAGAGCTGAGTGCCACCCGGCAGGCCCATGACCTGTCCCCAGCAGCC
GAGAGTTCCTCGACCTTCTCTTTCTCTGGGCGAGACTCCTCCTTCACTGAAGTGCCACGGTCCCCCAAGCACGCC
CACAGCTCCTCCCTGCAGCAGGCAGCCTCCCGGAGCCCCTCCTTTGGTGACCCACAGCTATCCCCTGAGGCCCGA
CCCAGTACAGGGAAACCCAAACATGAGTGGTTTCTCCAGAAAGATTCCGAAGGGGACACACCTTCACTTATCAAC
TGGCCTTCCAGAGTTAAAGTTAGAGAAAAATTGGTGAAAGAGGAAAGTGCTCGAAACAGCCCTGAACTCGCCTCA
GAGTCCGTAACTCAGAGGAGACACCAGCCAGCGCCAGTCCATTACGTGTCATTTCAGTCTGAGCACTCAGCCTTT
GATAGGGTCCCCAGCAAGGCAGCAGGCTCTACACGACAGCCAATCCGTGGCTATGTCCAACCCGCAGATACCGGT
CACACCGCCAAGCTGGTGACGCCAGAAACCCCAGAAAATGCATCTGAGTGTAGCTGGGTAGCATCAGCCACCCAG
AATGTCCCCAAACCTCCCAGCTTGACGGTTCTAGAAGGTGACGGAAGGGATAGCCCAGTTCTCCATATCTGCGAG
TCAAAAGCAGAAGAAGAAGAAGGGGAAGGAGAAGGAGAAGAAAAAGAAGAAGATGTGTGCTTCACTGAAGCTCTC
GAGCAAAGCAAGAAAACCCTACTGGCTTTGGAGGGTGATGGGCTAGTGAGAAGCCCAGAAGATCCCTCTAGAAAT
GAGGACTTTGGTAAGCCTGCTGTGAGCACAGTCACCTTAGAGCATCAGAAGGAACTGGAAAACGTGGCACAACCC
CCTCAAGCTCCGCACCAGCCCACTGAGAGGACAGGCAGGAGCGAGATGGTTCTCTACATTCAAAGTGAGCCTGTG
TCCCAAGACGCCAAACCAACTGGTCACAACAGGGAAGCCTCGAAAAAGCGCAAGGTCCGTACCCGCTCTCTGTCA
GATTTCACAGGCCCCCCTCAGCTCCAGGCCTTGAAGTATAAGGACCCAGCTTCCAGGAGAGAGCTGGAGCTGCCC
AGCTCCAAGACCGAAGGGCCTTATGGGGAGATCAGCATGCTGGACACAAAGGTCTCTGTCGCCCAGCTCCGAAGT
GCGTTCCTGGCATCTGCCAACGCCTGCAGGAGACCTGAACTCAAATCACGGGTAGAGAGGTCGGCTGAAGGACCT
GGCTTGCCCACCGGTGTGGAACGGGAGAGAGGGTCCCGGAAACCAAGACGCTATTTTTCTCCTGGTGAAAGTAGA
AAAACTTCCGAGAGATTTAGAACCCAACCTATAACTTCAGCAGAACGAAAGGAATCGGATAGGTGCACTTCACAT
TCAGAAACGCCAACTGTCGATGATGAAGAAAAGGTGGATGAACGAGCCAAGCTGAGCGTCGCCGCCAAGAGGTTG
CTTTTCAGGGAGATGGAAAAATCTTTTGATGAACAAAATGTTCCAAAGCGACGCTCAAGAAACACAGCTGTGGAG
CAGAGGCTACGCCGTCTGCAGGACAGGTCCCTCACCCAGCCCATCACCACTGAAGAGGTGGTCATCGCAGCCACT
GAACCTATCCCCGCTTCGTGTTCTGGGGGCACCCACCCTGTAATGGCGAGACTTCCTAGCCCCACTGTAGCTAGG
AGCGCTGTGCAGCCTGCCAGATTGCAGGCCTCTGCTCACCAAAAGGCCTTAGCCAAGGACCAGACAAATGAGGGC
AAAGAGCTTGCTGAGCAAGGAGAACCTGATTCCTCCACTCTAAGCTTGGCCGAAAAGTTGGCCTTGTTTAACAAA
TTGTCCCAGCCAGTCTCAAAAGCGATTTCTACCCGGAACAGAATAGACACGAGACAGAGGAGAATGAACGCTCGC
TATCAAACTCAGCCAGTCACACTGGGAGAGGTGGAGCAGGTGCAGAGTGGAAAGCTCATTCCTTTCTCACCTGCC
GTGAACACATCAGTGTCTACCGTAGCATCCACGGTTGCTCCAATGTATGCCGGAGATCTTCGCACAAAGCCACCT
CTTGACCACAATGCAAGTGCCACTGACTATAAGTTTTCTTCTTCAATAGAAAATTCGGACTCTCCAGTTAGAAGC
ATTCTGAAATCGCAAGCTTGGCAGCCTTTGGTAGAGGGTAGCGAGAACAAGGGAATGTTGAGAGAATATGGAGAG

FIGURE 812B

ACAGAAAGCAAGAGAGCTTTGACAGGTCGAGACAGTGGGATGGAGAAGTATGGGTCCTTTGAGGAAGCAGAAGCA
TCCTACCCCATCCTGAACCGAGCCAGGGAAGGAGACAGCCATAAGGAATCTAAATATGCTGTTCCCAGAAGAGGA
AGCCTGGAACGGGCGAACCCTCCCATCACCCACCTCGGGGATGAACCGAAGGAATTTTCCATGGCTAAAATGAAT
GCACAAGGAAACTTGGACTTGAGGGACAGGCTGCCCTTTGAAGAGAAGGTGGAGGTGGAGAATGTTATGAAAAGG
AAGTTTTCACTAAGAGCGGCAGAGTTCGGGGAGCCCACTTCCGAGCAGACGGGGACAGCTGCTGGGAAAACTATT
GCTCAAACCACAGCCCCCGTGTCCTGGAAGCCCCAGGATTCTTCGGAACAGCCACAGGAGAAGCTCTGCAAGAAT
CCATGTGCGATGTTTGCTGCTGGAGAGATCAAAACGCCGACAGGGGAGGGCCTTCTTGACTCACCCAGCAAAACC
ATGTCTATTAAAGAAAGATTGGCACTGTTGAAGAAAAGCGGGGAGGAAGATTGGAGAAACAGACTCAGCAGGAGG
CAGGAGGGCGGCAAGGCGCCGGCCAGCAGCCTGCACACCCAGGAAGCAGGGCGGTCCCTCATCAAGAAGCGGGTC
ACAGAAAGTCGAGAGAGCCAAATGACGATTGAGGAGAGGAAGCAGCTCATCACTGTGAGAGAGGAGGCCTGGAAG
ACGAGAGGCAGAGGAGCGGCCAACGACTCGACCCAGTTCACTGTGGCTGGCAGGATGGTGAAGAAAGGTTTGGCG
TCACCTACTGCCATAACCCCAGTAGCCTCAGCCATTTGCGGTAAAACAAGAGGCACCACACCCGTTTCCAAACCC
CTGGAAGATATCGAAGCCAGACCAGATATGCAGTTAGAATCGGACCTGAAGTTGGACAGGCTGGAAACCTTTCTA
AGAAGGCTGAATAACAAAGTTGGCGGGATGCACGAAACGGTGCTCACTGTCACCGGCAAATCTGTGAAGGAGGTG
ATGAAGCCAGATGATGATGAAACCTTTGCCAAATTTTACCGCAGCGTGGATTATAATATGCCAAGAAGTCCTGTG
GAGATGGATGAGGACTTCGATGTCATTTTCGATCCTTATGCACCCAAATTGACGTCTTCCGTGGCCGAGCACAAG
CGGGCAGTTAGGCCCAAGCGCCGGGTTCAGGCCTCCAAAAACCCCCTGAAAATGCTGGCGGCAAGAGAAGATCTC
CTTCAGGAATACACTGAGCAGAGATTAAACGTTGCCTTCATGGAGTCAAAGCGGATGAAAGTAGAAAAGATGTCT
TCCAACTCCAACTTCTCAGAAGTCACCCTGGCGGGTTTAGCCAGTAAAGAAAACTTCAGCAACGTCAGCCTGCGG
AGCGTCAACCTGACGGAACAGAACTCTAACAACAGCGCCGTGCCCTACAAGAGGCTGATGCTGTTGCAGATTAAA
GGAAGAAGACATGTGCAGACCAGGCTGGTGGAACCTCGAGCTTCGGCGCTCAACAGTGGGGACTGCTTCCTCCTG
CTCTCTCCCCACTGCTGCTTCCTGTGGGTAGGAGAGTTTGCAAACGTCATAGAAAAGGCGAAGGCCTCAGAACTT
GCAACTTTAATTCAGACAAAGAGGGAACTTGGTTGTAGAGCTACTTATATCCAAACCATTGAAGAAGGAATTAAT
ACACACACTCATGCAGCCAAAGACTTCTGGAAGCTTCTGGGTGGCCAAACCAGTTACCAATCTGCTGGAGACCCA
AAAGAAGATGAACTCTATGAAGCAGCCATAATAGAAACTAACTGCATTTACCGTCTCATGGATGACAAACTTGTT
CCTGATGACGACTACTGGGGGAAAATTCCGAAGTGCTCCCTTCTGCAACCCAAAGAGGTACTGGTGTTTGATTTT
GGTAGTGAAGTTTACGTATGGCATGGGAAAGAAGTCACATTAGCACAACGAAAAATAGCATTTCAGCTGGCAAAG
CACTTATGGAATGGAACCTTTGACTATGAGAACTGTGACATCAATCCCCTGGATCCTGGAGAATGCAATCCGCTT
ATCCCCAGAAAAGGACAGGGGCGGCCCGACTGGGCGATATTTGGGAGACTTACTGAACACAATGAGACGATTTTG
TTCAAAGAGAAGTTTCTGGATTGGACGGAACTGAAGAGATCGAATGAGAAGAACCCCGGGGAACTTGCCCAGCAC
AAGGAAGACCCCAGGACTGATGTCAAGGCATACGATGTGACACGGATGGTGTCCATGCCCCAGACGACAGCAGGC
ACCATCCTGGACGGAGTGAACGTCGGCCGTGGCTATGGCCTGGTGGAAGGACACGACAGGAGGCAGTTTGAGATC
ACCAGCGTTTCCGTGGATGTCTGGCACATCCTGGAATTCGACTATAGCAGGCTCCCCAAACAAAGCATCGGGCAG
TTCCATGAGGGGGATGCCTATGTGGTCAAGTGGAAGTTCATGGTGAGCACGGCAGTGGGAAGTCGCCAGAAGGGA
GAGCACTCGGTGAGGGCAGCCGGCAAAGAGAAGTGCGTCTACTTCTTCTGGCAAGGCCGGCACTCCACCGTGAGT
GAGAAGGGCACGTCGGCGCTGATGACGGTGGAGCTGGACGAGGAAAGGGGGGCCCAGGTCCAGGTTCTCCAGGGA
AAGGAGCCCCCCTGTTTCCTGCAGTGTTTCCAGGGGGGGATGGTGGTGCACTCGGGGAGGCGGGAAGAGGAAGAA
GAAAATGTGCAAAGTGAGTGGCGGCTGTACTGCGTGCGTGGAGAGGTGCCCGTGGAAGGGAATTTGCTGGAAGTG
GCCTGTCACTGTAGCAGCCTGAGGTCCAGAACTTCCATGGTGGTGCTTAACGTCAACAAGGCCCTCATCTACCTG
TGGCACGGATGCAAAGCCCAGGCCCACACGAAGGAGGTCGGAAGGACCGCTGCGAACAAGATCAAGGAACAATGT
CCCCTGGAAGCAGGACTGCATAGTAGCAGCAAAGTCACAATACACGAGTGTGATGAAGGCTCCGAGCCACTCGGA
TTCTGGGATGCCTTAGGAAGGAGAGACAGGAAAGCCTACGATTGCATGCTTCAAGATCCTGGAAGTTTTAACTTC
GCGCCCCGCCTGTTCATCCTCAGCAGCTCCTCTGGGGATTTTGCAGCCACAGAGTTTGTGTACCCTGCCCGAGCC
CCCTCTGTGGTCAGTTCCATGCCCTTCCTGCAGGAAGATCTGTACAGCGCGCCCCAGCCAGCACTTTTCCTTGTT
GACAATCACCACGAGGTGTACCTCTGGCAAGGCTGGTGGCCCATCGAGAACAAGATCACTGGTTCCGCCCGCATC
CGCTGGGCCTCCGACCGGAAGAGTGCGATGGAGACTGTGCTCCAGTACTGCAAAGGAAAAAATCTCAAGAAACCA
GCCCCCAAGTCTTACCTTATCCACGCTGGTCTGGAGCCCCTGACATTCACCAATATGTTTCCCAGCTGGGAGCAC
AGAGAGGACATCGCTGAGATCACAGAGATGGACACGGAAGTTTCCAATCAGATCACCCTCGTGGAAGACGTCTTA

FIGURE 812C

GCCAAGCTCTGTAAAACCATTTACCCGCTGGCCGACCTCCTGGCCAGGCCACTCCCGGAGGGGGTCGATCCTCTG
AAGCTTGAGATCTATCTCACCGACGAAGACTTCGAGTTTGCACTAGACATGACGAGGGATGAATACAACGCCCTG
CCCGCCTGGAAGCAGGTGAACCTGAAGAAAGCAAAAGGCCTGTTCTGAGTGGGGAGACGCCAGAGGAGCCTCACG
GTCACGTCCAACAACACCACTGCACCAGGGAAATGGATATATATTTTTGGACTGGTGTTTTTCACAAAGTATTTT
TCAATCAGAGTTTTCAGAACCTGACATTGTTAAAGATACTGCTTGTCCCGGAGTTGTGTATTTTGTAAATGTTCA
AGGGAACTGTTTGGAAACTTCTTTCCACCATTCAGGAGGTTATCAGAATTAATAAAAGTATCTGTTATGTGCACT
TAAGCCGCAGCTGCTATAGATAGCACTGCCTTCTTGTTCCAGCTAGGCAATGCCTTTTTTTTTTTTTTTGAAGCA
GTTCTCTTTATAAAGTGTTATTTTGATAGTTTGTGGATTCTAAAATATATATATATTTATATAAACACCATATAA
GTCAAATATGTATTTAACAAAGCAATATGTATTCATTCACTTTCAAGATTTGTTTTGGTGTCAAAATAACATGAA
AAGGTAGATGGAGTTGCTTCTGTTGAATTAGCTCTGCCACCAATATGTATCTTCATACACGTTTGGAAATGTTTC
CTGCAGCATTAGGTATGACTTGTTCTGAGTACTGCTTCCGGTGCTAAAATGAACAAAGAATTTGTACTTAATGGC
ATGGACTCTGGAGAATCTATGCGAATCAACCTTTCTACCTTAATATCTCCCCAAAAATGTATAGTGCCTTGTTTT
TATGTACAGTTTATATACAGAAAAGTTTGCTCTGCATTTTTGATGATGGTTTGGAACATTATCTACAATTTTACT
CTCAAATAGTCAAAATAAAAACATCTCAATTTCTAATACCGGTTGTAAACAAACAGTACACATGTCATTTTGTGA
TATAGGACTCCCAAATAAAAGTATCAGAATAAACACAACAATTAACTGGT

FIGURE 813

MKRKERIARRLEGIENDTQPILLQSCTGLVTHRLLEEDTPRYMRASDPASPHIGRSNEEEETSDSSLEKQTRSKY
CTETSGVHGDSPYGSGTMDTHSLESKAERIARYKAERRRQLAEKYGLTLDPEADSEYLSRYTKSRKEPDAVEKRG
GKSDKQEESSRDASSLYPGTETMGLRTCAGESKDYALHAGDGSSDPEVLLNIENQRRGQELSATRQAHDLSPAAE
SSSTFSFSGRDSSFTEVPRSPKHAHSSSLQQAASRSPSFGDPQLSPEARPSTGKPKHEWFLQKDSEGDTPSLINW
PSRVKVREKLVKEESARNSPELASESVTQRRHQPAPVHYVSFQSEHSAFDRVPSKAAGSTRQPIRGYVQPADTGH
TAKLVTPETPENASECSWVASATQNVPKPPSLTVLEGDGRDSPVLHICESKAEEEEGEGEGEEKEEDVCFTEALE
QSKKTLLALEGDGLVRSPEDPSRNEDFGKPAVSTVTLEHQKELENVAQPPQAPHQPTERTGRSEMVLYIQSEPVS
QDAKPTGHNREASKKRKVRTRSLSDFTGPPQLQALKYKDPASRRELELPSSKTEGPYGEISMLDTKVSVAQLRSA
FLASANACRRPELKSRVERSAEGPGLPTGVERERGSRKPRRYFSPGESRKTSERFRTQPITSAERKESDRCTSHS
ETPTVDDEEKVDERAKLSVAAKRLLFREMEKSFDEQNVPKRRSRNTAVEQRLRRLQDRSLTQPITTEEVVIAATE
PIPASCSGGTHPVMARLPSPTVARSAVQPARLQASAHQKALAKDQTNEGKELAEQGEPDSSTLSLAEKLALFNKL
SQPVSKAISTRNRIDTRQRRMNARYQTQPVTLGEVEQVQSGKLIPFSPAVNTSVSTVASTVAPMYAGDLRTKPPL
DHNASATDYKFSSSIENSDSPVRSILKSQAWQPLVEGSENKGMLREYGETESKRALTGRDSGMEKYGSFEEAEAS
YPILNRAREGDSHKESKYAVPRRGSLERANPPITHLGDEPKEFSMAKMNAQGNLDLRDRLPFEEKVEVENVMKRK
FSLRAAEFGEPTSEQTGTAAGKTIAQTTAPVSWKPQDSSEQPQEKLCKNPCAMFAAGEIKTPTGEGLLDSPSKTM
SIKERLALLKKSGEEDWRNRLSRRQEGGKAPASSLHTQEAGRSLIKKRVTESRESQMTIEERKQLITVREEAWKT
RGRGAANDSTQFTVAGRMVKKGLASPTAITPVASAICGKTRGTTPVSKPLEDIEARPDMQLESDLKLDRLETFLR
RLNNKVGGMHETVLTVTGKSVKEVMKPDDDETFAKFYRSVDYNMPRSPVEMDEDFDVIFDPYAPKLTSSVAEHKR
AVRPKRRVQASKNPLKMLAAREDLLQEYTEQRLNVAFMESKRMKVEKMSSNSNFSEVTLAGLASKENFSNVSLRS
VNLTEQNSNNSAVPYKRLMLLQIKGRRHVQTRLVEPRASALNSGDCFLLLSPHCCFLWVGEFANVIEKAKASELA
TLIQTKRELGCRATYIQTIEEGINTHTHAAKDFWKLLGGQTSYQSAGDPKEDELYEAAIIETNCIYRLMDDKLVP
DDDYWGKIPKCSLLQPKEVLVFDFGSEVYVWHGKEVTLAQRKIAFQLAKHLWNGTFDYENCDINPLDPGECNPLI
PRKGQGRPDWAIFGRLTEHNETILFKEKFLDWTELKRSNEKNPGELAQHKEDPRTDVKAYDVTRMVSMPQTTAGT
ILDGVNVGRGYGLVEGHDRRQFEITSVSVDVWHILEFDYSRLPKQSIGQFHEGDAYVVKWKFMVSTAVGSRQKGE
HSVRAAGKEKCVYFFWQGRHSTVSEKGTSALMTVELDEERGAQVQVLQGKEPPCFLQCFQGGMVVHSGRREEEEE
NVQSEWRLYCVRGEVPVEGNLLEVACHCSSLRSRTSMVVLNVNKALIYLWHGCKAQAHTKEVGRTAANKIKEQCP
LEAGLHSSSKVTIHECDEGSEPLGFWDALGRRDRKAYDCMLQDPGSFNFAPRLFILSSSSGDFAATEFVYPARAP
SVVSSMPFLQEDLYSAPQPALFLVDNHHEVYLWQGWWPIENKITGSARIRWASDRKSAMETVLQYCKGKNLKKPA
PKSYLIHAGLEPLTFTNMFPSWEHREDIAEITEMDTEVSNQITLVEDVLAKLCKTIYPLADLLARPLPEGVDPLK
LEIYLTDEDFEFALDMTRDEYNALPAWKQVNLKKAKGLF

FIGURE 814

TCTTGACTCACGCCTTCGCCGTAGCATCTTTCGCAGCGGACCGAAGAGAAGAAAAGTAGGCCAGAGCCGAACTCT
CTTCCTGCCAAGATGTCTATTGGTGTGCCGATTAAAGTACTGCATGAGGCCGAGGGCCACATTGTGACATGTGAG
ACGAACACCGGTGAGGTATATCGGGGGAAGCTCATTGAAGCAGAGGACAACATGAACTGCCAGATGTCCAACATC
ACAGTCACATACAGAGATGGCCGAGTGGCACAGCTGGAGCAGGTATACATCCGTGGCAGCAAAATCCGCTTTCTG
ATTTTGCCTGACATGCTGAAGAACGCACCCATGTTAAAGAGCATGAAAAATAAAAACCAAGGCTCAGGGGCTGGC
CGAGGAAAAGCTGCCATTCTCAAGGCCCAAGTGGCCGCAAGAGGAAGAGGACGTGGAATGGGACGTGGAAACATC
TTTCAAAAGCGAAGATAATTTTCTAAGTTGAACAGAACTTTGTCCTTTTTTCTTTCAGGTTATCTGAGTTCATTG
GAGTGGGTGCTTGTGCATATATCTAGGTATCTTTTGCCATCTTTCTCTTTAGATCAGGGGAAATGTTTAAGCTAA
ATAAATCTGGGGGGTTTTTTGTTCTG

FIGURE 815

MSIGVPIKVLHEAEGHIVTCETNTGEVYRGKLIEAEDNMNCQMSNITVTYRDGRVAQLEQVYIRGSKIRFLILPD
MLKNAPMLKSMKNKNQGSGAGRGKAAILKAQVAARGRGRGMGRGNIFQKRR

FIGURE 816

CGGCGGCGACTGCAGTCTGGAGGGTCCACACTTGTGATTCTCAATGGAGAGTGAAAACGCAGATTCATAATGAAA
GCTAGCCCCCGTCGGCCACTGATTCTCAAAAGACGGAGGCTGCCCCTTCCTGTTCAAAATGCCCCAAGTGAAACA
TCAGAGGAGGAACCTAAGAGATCCCCTGCCCAACAGGAGTCTAATCAAGCAGAGGCCTCCAAGGAAGTGGCGGAG
TCCAACTCTTGCAAGTTTCCAGCTGGGATCAAGATTATTAACCACCCCACCATGCCCAACACGCAAGTAGTGGCC
ATCCCCAACAATGCTAATATTCACAGCATCATCACAGCACTGACTGCCAAGGGAAAAGAGAGTGGCAGTAGTGGG
CCCAACAAATTCATCCTCATCAGCTGTGGGGGAGCCCCAACTCAGCCTCCAGGACTCCGGCCTCAAACCCAAACC
AGCTATGATGCCAAAAGGACAGAAGTGACCCTGGAGACCTTGGGACCAAAACCTGCAGCTAGGGATGTGAATCTT
CCTAGACCACCTGGAGCCCTTTGCGAGCAGAAACGGGAGACCTGTGCAGATGGTGAGGCAGCAGGCTGCACTATC
AACAATAGCCTATCCAACATCCAGTGGCTTCGAAAGATGAGTTCTGATGGACTGGGCTCCCGCAGCATCAAGCAA
GAGATGGAGGAAAAGGAGAATTGTCACCTGGAGCAGCGACAGGTTAAGGTTGAGGAGCCTTCGAGACCATCAGCG
TCCTGGCAGAACTCTGTGTCTGAGCGGCCACCCTACTCTTACATGGCCATGATACAATTCGCCATCAACAGCACT
GAGAGGAAGCGCATGACTTTGAAAGACATCTATACGTGGATTGAGGACCACTTTCCCTACTTTAAGCACATTGCC
AAGCCAGGCTGGAAGAACTCCATCCGCCACAACCTTTCCCTGCACGACATGTTTGTCCGGGAGACGTCTGCCAAT
GGCAAGGTCTCCTTCTGGACCATTCACCCCAGTGCCAACCGCTACTTGACATTGGACCAGGTGTTTAAGCCACTG
GACCCAGGGTCTCCACAATTGCCCGAGCACTTGGAATCACAGCAGAAACGACCGAATCCAGAGCTCCGCCGGAAC
ATGACCATCAAAACCGAACTCCCCCTGGGCGCACGGCGGAAGATGAAGCCACTGCTACCACGGGTCAGCTCATAC
CTGGTACCTATCCAGTTCCCGGTGAACCAGTCACTGGTGTTGCAGCCCTCGGTGAAGGTGCCATTGCCCCTGGCG
GCTTCCCTCATGAGCTCAGAGCTTGCCCGCCATAGCAAGCGAGTCCGCATTGCCCCCAAGGTGCTGCTAGCTGAG
GAGGGGATAGCTCCTCTTTCTTCTGCAGGACCAGGGAAAGAGGAGAAACTCCTGTTTGGAGAAGGGTTTTCTCCT
TTGCTTCCAGTTCAGACTATCAAGGAGGAAGAAATCCAGCCTGGGGAGGAAATGCCACACTTAGCGAGACCCATC
AAAGTGGAGAGCCCTCCCTTGGAAGAGTGGCCCTCCCCGGCCCCATCTTTCAAAGAGGAATCATCTCACTCCTGG
GAGGATTCGTCCCAATCTCCCACCCCAAGACCCAAGAAGTCCTACAGTGGGCTTAGGTCCCCAACCCGGTGTGTC
TCGGAAATGCTTGTGATTCAACACAGGGAGAGGAGGGAGAGGAGCCGGTCTCGGAGGAAACAGCATCTACTGCCT
CCCTGTGTGGATGAGCCGGAGCTGCTCTTCTCAGAGGGGCCCAGTACTTCCCGCTGGGCCGCAGAGCTCCCGTTC
CCAGCAGACTCCTCTGACCCTGCCTCCCAGCTCAGCTACTCCCAGGAAGTGGGAGGACCTTTTAAGACACCCATT
AAGGAAACGCTGCCCATCTCCTCCACCCCGAGCAAATCTGTCCTCCCCAGAACCCCTGAATCCTGGAGGCTCACG
CCCCCAGCCAAAGTAGGGGGACTGGATTTCAGCCCAGTACAAACCTCCCAGGGTGCCTCTGACCCCTTGCCTGAC
CCCCTGGGGCTGATGGATCTCAGCACCACTCCCTTGCAAAGTGCTCCCCCCCTTGAATCACCGCAAAGGCTCCTC
AGTTCAGAACCCTTAGACCTCATCTCCGTCCCCTTTGGCAACTCTTCTCCCTCAGATATAGACGTCCCCAAGCCA
GGCTCCCCGGAGCCACAGGTTTCTGGCCTTGCAGCCAATCGTTCTCTGACAGAAGGCCTGGTCCTGGACACAATG
AATGACAGCCTCAGCAAGATCCTGCTGGACATCAGCTTTCCTGGCCTGGACGAGGACCCACTGGGCCCTGACAAC
ATCAACTGGTCCCAGTTTATTCCTGAGCTACAGTAGAGCCCTGCCCTTGCCCCTGTGCTCAAGCTGTCCACCATC
CCGGGCACTCCAAGGCTCAGTGCACCCCAAGCCTCTGAGTGAGGACAGCAGGCAGGGACTGTTCTGCTCCTCATA
GCTCCCTGCTGCCTGATTATGCAAAAGTAGCAGTCACACCCTAGCCACTGCTGGGACCTTGTGTTCCCCAAGAGT
ATCTGATTCCTCTGCTGTCCCTGCCAGGAGCTGAAGGGTGGGAACAACAAAGGCAATGGTGAAAAGAGATTAGGA
ACCCCCCAGCCTGTTTCCATTCTCTGCCCAGCAGTCTCTTACCTTCCCTGATCTTTGCAGGGTGGTCCGTGTAAA
TAGTATAAATTCTCCAAATTATCCTCTAATTATAAATGTAAGCTTATTTCCTTAGATCATTATCCAGAGACTGCC
AGAAGGTGGGTAGGATGACCTGGGGTTTCAATTGACTTCTGTTCCTTGCTTTTAGTTTTGATAGAAGGGAAGACC
TGCAGTGCACGGTTTCTTCCAGGCTGAGGTACCTGGATCTTGGGTTCTTCACTGCAGGGACCCAGACAAGTGGAT
CTGCTTGCCAGAGTCCTTTTTGCCCCTCCCTGCCACCTCCCCGTGTTTCCAAGTCAGCTTTCCTGCAAGAAGAAA
TCCTGGTTAAAAAAGTCTTTTGTATTGGGTCAGGAGTTGAATTTGGGGTGGGAGGATGGATGCAACTGAAGCAGA
GTGTGGGTGCCCAGATGTGCGCTATTAGATGTTTCTCTGATAATGTCCCCAATCATACCAGGGAGACTGGCATTG
ACGAGAACTCAGGTGGAGGCTTGAGAAGGCCGAAAGGGCCCCTGACCTGCCTGGCTTCCTTAGCTTGCCCCTCAG
CTTTGCAAAGAGCCACCCTAGGCCCCAGCTGACCGCATGGGTGTGAGCCAGCTTGAGAACACTAACTACTCAATA
AAAGCGAAGGTGGACCXAAAAAAAAAAAAAAAAAAA

FIGURE 817

MKASPRRPLILKRRRLPLPVQNAPSETSEEEPKRSPAQQESNQAEASKEVAESNSCKFPAGIKIINHPTMPNTQV
VAIPNNANIHSIITALTAKGKESGSSGPNKFILISCGGAPTQPPGLRPQTQTSYDAKRTEVTLETLGPKPAARDV
NLPRPPGALCEQKRETCADGEAAGCTINNSLSNIQWLRKMSSDGLGSRSIKQEMEEKENCHLEQRQVKVEEPSRP
SASWQNSVSERPPYSYMAMIQFAINSTERKRMTLKDIYTWIEDHFPYFKHIAKPGWKNSIRHNLSLHDMFVRETS
ANGKVSFWTIHPSANRYLTLDQVFKPLDPGSPQLPEHLESQQKRPNPELRRNMTIKTELPLGARRKMKPLLPRVS
SYLVPIQFPVNQSLVLQPSVKVPLPLAASLMSSELARHSKRVRIAPKVLLAEEGIAPLSSAGPGKEEKLLFGEGF
SPLLPVQTIKEEEIQPGEEMPHLARPIKVESPPLEEWPSPAPSFKEESSHSWEDSSQSPTPRPKKSYSGLRSPTR
CVSEMLVIQHRERRERSRSRRKQHLLPPCVDEPELLFSEGPSTSRWAAELPFPADSSDPASQLSYSQEVGGPFKT
PIKETLPISSTPSKSVLPRTPESWRLTPPAKVGGLDFSPVQTSQGASDPLPDPLGLMDLSTTPLQSAPPLESPQR
LLSSEPLDLISVPFGNSSPSDIDVPKPGSPEPQVSGLAANRSLTEGLVLDTMNDSLSKILLDISFPGLDEDPLGP
DNINWSQFIPELQ

FIGURE 818

GGTCCCAAGGCTTTCCAGAGCGAACCTGTGCGGCTGCAGGCACCGGCGTGTTGAGTTTCCGGCGTTCCGAAGGAC
TGAGCTCTTGTCGCGGATCCCGTCCGCCGTTTCCAGCCCCCAGTCTCAGAGCGGAGCCCACAGAGCAGGGCACCG
GCATGGCCAAAGCCGCGGCGATCGGCATCGACCTGGGCACCACCTACTCCTGCGTGGGGGTGTTCCAACACGGCA
AGGTGGAGATCATCGCCAACGACCAGGGCAACCGCACCACCCCCAGCTACGTGGCCTTCACGGACACCGAGCGGC
TCATCGGGGATGCGGCCAAGAACCAGGTGGCGCTGAACCCGCAGAACACCGTGTTTGACGCGAAGCGGCTGATCG
GCCGCAAGTTCGGCGACCCGGTGGTGCAGTCGGACATGAAGCACTGGCCTTTCCAGGTGATCAACGACGGAGACA
AGCCCAAGGTGCAGGTGAGCTACAAGGGGGAGACCAAGGCATTCTACCCCGAGGAGATCTCGTCCATGGTGCTGA
CCAAGATGAAGGAGATCGCCGAGGCGTACCTGGGCTACCCGGTGACCAACGCGGTGATCACCGTGCCGGCCTACT
TCAACGACTCGCAGCGCCAGGCCACCAAGGATGCGGGTGTGATCGCGGGGCTCAACGTGCTGCGGATCATCAACG
AGCCCACGGCCGCCGCCATCGCCTACGGCCTGGACAGAACGGGCAAGGGGGAGCGCAACGTGCTCATCTTTGACC
TGGGCGGGGGCACCTTCGACGTGTCCATCCTGACGATCGACGACGGCATCTTCGAGGTGAAGGCCACGGCCGGGG
ACACCCACCTGGGTGGGGAGGACTTTGACAACAGGCTGGTGAACCACTTCGTGGAGGAGTTCAAGAGAAAACACA
AGAAGGACATCAGCCAGAACAAGCGAGCCGTGAGGCGGCTGCGCACCGCCTGCGAGAGGGCCAAGAGGACCCTGT
CGTCCAGCACCCAGGCCAGCCTGGAGATCGACTCCCTGTTTGAGGGCATCGACTTCTACACGTCCATCACCAGGG
CGAGGTTCGAGGAGCTGTGCTCCGACCTGTTCCGAAGCACCCTGGAGCCCGTGGAGAAGGCTCTGCGCGACGCCA
AGCTGGACAAGGCCCAGATTCACGACCTGGTCCTGGTCGGGGGCTCCACCCGCATCCCCAAGGTGCAGAAGCTGC
TGCAGGACTTCTTCAACGGGCGCGACCTGAACAAGAGCATCAACCCCGACGAGGCTGTGGCCTACGGGGCGGCGG
TGCAGGCGGCCATCCTGATGGGGGACAAGTCCGAGAACGTGCAGGACCTGCTGCTGCTGGACGTGGCTCCCCTGT
CGCTGGGGCTGGAGACGGCCGGAGGCGTGATGACTGCCCTGATCAAGCGCAACTCCACCATCCCCACCAAGCAGA
CGCAGATCTTCACCACCTACTCCGACAACCAACCCGGGGTGCTGATCCAGGTGTACGAGGGCGAGAGGGCCATGA
CGAAAGACAACAATCTGTTGGGGCGCTTCGAGCTGAGCGGCATCCCTCCGGCCCCCAGGGGCGTGCCCCAGATCG
AGGTGACCTTCGACATCGATGCCAACGGCATCCTGAACGTCACGGCCACGGACAAGAGCACCGGCAAGGCCAGCA
AGATCACCATCACCAACGACAAGGGCCGCCTGAGCAAGGAGGAGATCGAGCGCATGGTGCAGGAGGCGGAGAAGT
ACAAAGCGGAGGACGAGGTGCAGCGCGAGAGGGTGTCAGCCAAGAACGCCCTGGAGTCCTACGCCTTCAACATGA
AGAGCGCCGTGGAGGATGAGGGGCTCAAGGGCAAGATCAGCGAGGCGGACAAGAAGAAGGTTCTGGACAAGTGTC
AAGAGGTCATCTCGTGGCTGGACGCCAACACCTTGGCCGAGAAGGACGAGTTTGAGCACAAGAGGAAGGAGCTGG
AGCAGGTGTGTAACCCCATCATCAGCGGACTGTACCAGGGTGCCGGTGGTCCCGGGCCTGGGGGCTTCGGGGCTC
AGGGTCCCAAGGGAGGGTCTGGGTCAGGCCCTACCATTGAGGAGGTGGATTAGGGGCCTTTGTTCTTTAGTATGT
TTGTCTTTGAGGTGGACTGTTGGGACTCAAGGACTTTGCTGCTGTTTTCCTATGTCATTTCTGCTTCAGCTCTTT
GCTGCTTCACTTCTTTGTAAAGTTAAGTTGTAACCTGATGGTAATTAGCTGGCTTCATTATTTTTGTAGTACAAC
CGATATGTTCATTAGAATTCTTTGCATTTAATGTTGATACTGTAAGGGTGTTTCGTTCCCTTTAAATGAATCAAC
ACTGCCACCTTCTGTACGAGTTTGTTTTTTTTTTTTTTTTTTTTTTTTTTTGCTTGGCGAAAACACTACAAAGGC
TGGGAATGTATGTTTTTATAATTTGTTTATTTAAATATGAAAAATAAAATGTTAAACTTT

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FIGURE 819

MAKAAAIGIDLGTTYSCVGVFQHGKVEIIANDQGNRTTPSYVAFTDTERLIGDAAKNQVALNPQNTVFDAKRLIG
RKFGDPVVQSDMKHWPFQVINDGDKPKVQVSYKGETKAFYPEEISSMVLTKMKEIAEAYLGYPVTNAVITVPAYF
NDSQRQATKDAGVIAGLNVLRIINEPTAAAIAYGLDRTGKGERNVLIFDLGGGTFDVSILTIDDGIFEVKATAGD
THLGGEDFDNRLVNHFVEEFKRKHKKDISQNKRAVRRLRTACERAKRTLSSSTQASLEIDSLFEGIDFYTSITRA
RFEELCSDLFRSTLEPVEKALRDAKLDKAQIHDLVLVGGSTRIPKVQKLLQDFFNGRDLNKSINPDEAVAYGAAV
QAAILMGDKSENVQDLLLLDVAPLSLGLETAGGVMTALIKRNSTIPTKQTQIFTTYSDNQPGVLIQVYEGERAMT
KDNNLLGRFELSGIPPAPRGVPQIEVTFDIDANGILNVTATDKSTGKASKITITNDKGRLSKEEIERMVQEAEKY
KAEDEVQRERVSAKNALESYAFNMKSAVEDEGLKGKISEADKKKVLDKCQEVISWLDANTLAEKDEFEHKRKELE
QVCNPIISGLYQGAGGPGPGGFGAQGPKGGSGSGPTIEEVD

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FIGURE 820

GCACGCACTGGCCCCGGCGCCCACCCGCACCCCTCCCCAGAGAGCACTGACACGGCTCCCGGGACCTCGGCAGGA
TGGAAGAGAAGCTGAAGAAAACCAAGATCATCTTTGTGGTGGGTGGGCCTGGCTCAGGGAAGGGCACCCAGTGTG
AGAAGATCGTGCAGAAGTATGGCTACACCCACCTCTCCACCGGGGACCTCCTGCGGTCCGAGGTCAGCTCAGGCT
CGGCCAGGGGCAAGAAGCTGTCGGAAATCATGGAGAAGGGGCAGCTGGTTCCACTGGAGACAGTGTTGGACATGC
TCCGGGATGCCATGGTGGCCAAAGTCAATACTTCCAAAGGCTTCCTGATTGATGGCTACCCGCGGGAGGTGCAGC
AAGGAGAAGAGTTTGAGCGACGGATTGGACAGCCCACACTGCTGCTGTATGTGGACGCAGGCCCTGAGACCATGA
CCCAGCGGCTCTTGAAACGTGGAGAGACCAGCGGGCGTGTGGACGACAATGAGGAGACCATCAAAAAGCGGCTGG
AGACCTATTACAAGGCCACAGAACCCGTCATCGCCTTCTATGAGAAACGTGGCATTGTGCGCAAGGTCAACGCTG
AGGGCTCCGTGGACAGTGTCTTCTCCCAGGTCTGCACCCACCTGGACGCCCTAAAGTAGCAACGCTGGAGCCGCT
TCCCCAGCTCAGAGCCCCGCCCCACCCCGTCCTGATTAGAGGTCCTCCTGGCCTGAGCGCAGCGCCTCCACCCTG
CCCTGCTGAGCACAGACGGAGGAAGCCGCTTATCCTGTTTTCATGGACAGCTGAGCACTAAAGGAATTTCTAAGG
ACATTTGGTTTTACTGCTTTTTCTCTGCTTCCAGTTGGAGTTGATTCATGTGCTTGTGCCTACCTGGCCGCAAGT
CCCCAGCCCCTCAACCCTCCGTTCCTCCTCAGCCTCCCTTTGCCAGCCACCCCTCCTCTAGCTCTGGTGGGAGGC
CCGGGGCCCTTCCTCGCACAGGGCATGCCTGGCCTGAGGACCCGGCGCTGAGTGGCGGGGCCCCTGCTCCGAGGG
GCTCATGTTCAGGCAGAACCGGTCCCAGCCTGGGCTCCTCTGCATCTTGCTCTGTGCCTTGGCCCTGACCCCCAT
CGCTCTGAGCATATGTTCCATGCCTGCCTTGCCGGGGCCTGGACTGCACAGGCAGCAAGGTCATGGTCTGAGTGG
GGCTTCCTGGGCAGTTGGGGCGGCCCACGCCAGCTGGCCCAGTGGGTAGTGAATTGGCTTCCTTGACGCGAGAGG
CTCTGAGGGTCTGAAAAGGGCATCTCAATGGCATGGGTGGGTGGGGAGTCAGTCATGTCACTGAAATTGAATGGG
GGAGGCCCAATGAGGTGGCTCATGCCTGTAATCCCAGCACTTTGGGAAGCTGAGGCAGGAGGATCACCTGAGGTC
AGGAGTTCGAGAGCAGCCTGGCCAACATGGCAAAACCCCTTATTTACTAAAAATACAAAAACTTAGCCGGGCATG
GTGGCATGTGCCTGTATTCCCAGCTACTCATGAGGCTGAGGCAGGAGAATGGCGTGAACCCGGGAGTGGAGCTTG
CAATGAGCCAAGATTGCGCCACTGCACTCCAGCCTGGGTGACAGAGCAAGACTCCGTCTCAAAAAAAAAAAAAAA
AAAAAAGAAATTAATTGGGGGAGTCATGGTCAGGGGTGAGACCTGAAGGACCTCCCCCTGTGTGGCCCTGGACAC
AGCCCACCCTCTGTGAGCCGTTTCCAATTCTAAAACAGACTCAATGTCCCCCTCACCCCCACCTCAAGGTCAGGA
TGCGAACACACTGAGTGAGGAGTGGACGCTGTCCATTGCCACGGCCATGAGGGCTGGAGACCAGAACAGCATGGC
CCGAAGCGTGCGGGGCCCCGGATGACTTGGGGACACCCCAGAATCCCCTGGGGAGAACCCTTCCTGCGCGCTTTC
ATTTTTTGACCTCATCACTGAGAAAGGCTCAATTTGGTGCTCACGTGTCCTTAACACCTGATCTGGCCCAAGCTG
CGTGCCCTTTAAGCCAAGAGAGCCTCTTGTGGACCCCGCCTGCCCGAATGAAATCCGAACAGTTGGGGCTGTTAT
GGCAAGTGGGGCTGGTTTTTCATTTCCATTGGTTATTTAAAGTTTCCTTTAAAATAAACGATTTTAAGTTATAAA
AGGTGAATCTATTGAAAGAAGAACATCAAAGAAATAAACAGGAGTTCAGCGGAGTAGCAGAAGACAAGGCATGTA
GGGGGAGCCATTCTGTCCCAG

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FIGURE 821

MEEKLKKTKIIFVVGGPGSGKGTQCEKIVQKYGYTHLSTGDLLRSEVSSGSARGKKLSEIMEKGQLVPLETVLDM
LRDAMVAKVNTSKGFLIDGYPREVQQGEEFERRIGQPTLLLYVDAGPETMTQRLLKRGETSGRVDDNEETIKKRL
ETYYKATEPVIAFYEKRGIVRKVNAEGSVDSVFSQVCTHLDALK

FIGURE 822

GGGGGGGGGGGGACCACTTGGCCTGCCTCCGTCCCGCCGCGCCACTTGGCCTGCCTCCGTCCCGCCGCGCCACTT
CGCCTGCCTCCGTCCCCCGCCCGCCGCGCCATGCCTGTGGCCGGCTCGGAGCTGCCGCGCCGGCCCTTGCCCCCC
GCCGCACAGGAGCGGGACGCCGAGCCGCGTCCGCCGCACGGGGAGCTGCAGTACCTGGGGCAGATCCAACACATC
CTCCGCTGCGGCGTCAGGAAGGACGACCGCACGGGCACCGGCACCCTGTCGGTATTCGGCATGCAGGCGCGCTAC
AGCCTGAGAGATGAATTCCCTCTGCTGACAACCAAACGTGTGTTCTGGAAGGGTGTTTTGGAGGAGTTGCTGTGG
TTTATCAAGGGATCCACAAATGCTAAAGAGCTGTCTTCCAAGGGAGTGAAAATCTGGGATGCCAATGGATCCCGA
GACTTTTTGGACAGCCTGGGATTCTCCACCAGAGAAGAAGGGGACTTGGGCCCAGTTTATGGCTTCCAGTGGAGG
CATTTTGGGGCAGAATACAGAGATATGGAATCAGATTATTCAGGACAGGGAGTTGACCAACTGCAAAGAGTGATT
GACACCATCAAAACCAACCCTGACGACAGAAGAATCATCATGTGCGCTTGGAATCCAAGAGATCTTCCTCTGATG
GCGCTGCCTCCATGCCATGCCCTCTGCCAGTTCTATGTGGTGAACAGTGAGCTGTCCTGCCAGCTGTACCAGAGA
TCGGGAGACATGGGCCTCGGTGTGCCTTTCAACATCGCCAGCTACGCCCTGCTCACGTACATGATTGCGCACATC
ACGGGCCTGAAGCCAGGTGACTTTATACACACTTTGGGAGATGCACATATTTACCTGAATCACATCGAGCCACTG
AAAATTCAGCTTCAGCGAGAACCCAGACCTTTCCCAAAGCTCAGGATTCTTCGAAAAGTTGAGAAAATTGATGAC
TTCAAAGCTGAAGACTTTCAGATTGAAGGGTACAATCCGCATCCAACTATTAAAATGGAAATGGCTGTTTAGGGT
GCTTTCAAAGGAGCTTGAAGGATATTGTCAGTCTTTAGGGGTTGGGCTGGATGCCGAGGTAAAAGTTCTTTTTGC
TCTAAAAGAAAAAGGAACTAGGTCAAAAATCTGTCCGTGACCTATCAGTTATTAATTTTTAAGGATGTTGCCACT
GGCAAATGTAACTGTGCCAGTTCTTTCCATAATAAAAGGCTTTGAGTTAACTCACTGAGGGTATCTGACAATGCT
GAGGTTATGAACAAAGTGAGGAGAATGAAATGTATGTGCTCTTAGCAAAAACATGTATGTGCATTTCAATCCCAC
GTACTTATAAAGAAGGTTGGTGAATTTCACAAGCTATTTTTGGAATATTTTTAGAATATTTTAAGAATTTCACAA
GCTATTCCCTCAAATCTGAGGGAGCTGAGTAACACCATCGATCATGATGTAGAGTGTGGTTATGAACTTTATAGT
TGTTTTATATGTTGCTATAATAAAGAAGTGTTCTGC

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FIGURE 823

MPVAGSELPRRPLPPAAQERDAEPRPPHGELQYLGQIQHILRCGVRKDDRTGTGTLSVFGMQARYSLRDEFPLLT
TKRVFWKGVLEELLWFIKGSTNAKELSSKGVKIWDANGSRDFLDSLGFSTREEGDLGPVYGFQWRHFGAEYRDME
SDYSGQGVDQLQRVIDTIKTNPDDRRIIMCAWNPRDLPLMALPPCHALCQFYVVNSELSCQLYQRSGDMGLGVPF
NIASYALLTYMIAHITGLKPGDFIHTLGDAHIYLNHIEPLKIQLQREPRPFPKLRILRKVEKIDDFKAEDFQIEG
YNPHPTIKMEMAV

FIGURE 824

CCGCCGTAGCGCGTCTTGGGTCTCCCGGCTGCCGCTGCTGCCGCCGCCGCCTCGGGTCGTGGAGCCAGGAGCGAC
GTCACCGCC**ATG**GCAGGCATCAAAGCTTTGATTAGTTTGTCCTTTGGAGGAGCAATCGGACTGATGTTTTTGATG
CTTGGATGTGCCCTTCCAATATACAACAAATACTGGCCCCTCTTTGTTCTATTTTTTTACATCCTTTCACCTATT
CCATACTGCATAGCAAGAAGATTAGTGGATGATACAGATGCTATGAGTAACGCTTGTAAGGAACTTGCCATCTTT
CTTACAACGGGCATTGTCGTGTCAGCTTTTGGACTCCCTATTGTATTTGCCAGAGCACATCTGATTGAGTGGGGA
GCTTGTGCACTTGTTCTCACAGGAAACACAGTCATCTTTGCAACTATACTAGGCTTTTTCTTGGTCTTTGGAAGC
AAGGACGACTTCAGCTGGCAGCAGTGG**TGA**AAAGAAATTACTGAACTATTGTCAAATGGACTTCCTGTCATTTGT
TGGCCATTCACGCACACAGGAGATGGGGCAGTTAATGCTGAATGGTATAGCAAGCCTCTTGGGGGTATTTTAGGT
GCTCCCTTCTCACTTTTATTGTAAGCATACTATTTTCACAGAGACTTGCTGAAGGATTAAAAGGATTTTCTCTTT
TGGAAAAGCTTGACTGATTTCACACTTATCTATAGTATGCTTTTTGTGGTGTCCTGCTGAATTTAAATATTTATG
TGTTTTTCCTGTTAGGTTGATTTTTTTTGGAATCAATATGCAATGTTAAACACTTTTTTAATGTAATCATTTGCA
TTGGTTAGGAATTCAGAATTCCGCCGGCTCTATTACTGGTCAAGTACATCTTTTCTCTTAAAATTATTTAGCCTC
CATTATTACAAAAAATTATAAAAATAAGTTTTCAGTCAGTCAGGATGACATCACTCCCAATGTTATGCAGACATA
CAGACGGTTGGCATACGTTATAGACTGTATACTCAGTGCAAATATAGCTGCATTTATACCTCAGAGGGGCCAAGT
GTTAATGCCCATGCCCTCCGTTAAGGGTTGTTGGTTTTACTGGTAGACAGATGTTTTGTGGATTGAAAATTATTT
TATGGAATTGCTACAGAGGAGTGCTTTTCTTCTCAATTGTTAGAAGAATTTATGTTAAACTTTAAGGTAAGGGTG
TAAAAACATTTTTGAGATAAGGTTTTTATTTATGTTTATTATTGTTAGAGTGAGTTGCAATGTGGGAAGAAATGA
CATTGAAATTCCAGTTTTTGAATCCTGTTTCTATTTATAAGTGAAATTTGTGATCTCCTATCAACCTTTCATGTT
TTACCCTGTTAAAATGGACATACATGGAACCACTACTGATGAGGGACAGTTGTATGTTTGCATCATATATGCCAG
AAAACCTTCCTCTGCTTCCTCCTTTTGACTTATTTGGTATGTTGTATATATTACATAAAATAACTTTTCAAATAT
AGTTTAATAACACTTAGAAGTGTTTACTTACCTGGAAAATAATTGCTATGCCGTACATTCAGAGTGCCCCCTCCC
CTGCAAGGCCTTGCCATGATTAACAAGTAACTTGTTAGTCTTACAGATAATTCATGCATTAACAGTTTAAGATTT
AGACCATGGTAATAGTAGTTCTTATTCTCTAAGGTTATATCATATGTAATTTAAAAGTATTTTTAAGCCAAGTTT
CCTGTATACCTCTGAACTGTTTTGATTTTGAGTTCATCATGATAGATCTGCTGTTTCCTTATAAAAGGCATTTGT
TGTGTGAGTTAATGCAAAGTAGCCAAGTCCAGCTATATAGCAGCTTCAGAAACATACCTGACCAAAAAATTCCCA
GTAACCAGGCATGATCAATTTATAGTGGTCGTTTACATCTAATAATTATCAGGACTTTTTTCAGGAGTGGGTTAT
AAAAACATTCAAGTTGGTCTGACAGTATTTTGTTAAGGATATTTGTTTGTATGTTTATTCAGTATACTTACATAA
AAATTATTTCGCCATCAGCCAAAACTCAGTAATCATGACAGCTGTCTGTTGTTTTATGAAGTTTATTTCTCAAGA
AAATGGGAATAAATTTGGGATTTGTTCAGCTTTTTTACTAAAGATGCCTAAAGCCACAGGTTTTATTGCCTAACT
TAAGCCATGACTTTTAGATATGAGATGACGGGAAGCAGGACGAAATATCGGCGTGTGGCTGGAGCCTTCCCACTG
GAGGCTGAAAGTGGCTTGTGGTATTATAATGTTCAGATTTCAAGAGGAAGGTGCAGGTACACATGAGTTAGAGAG
CTGGTGAGACAGTTGGGAACTCTTTGTGCTTGTGATCTACTGGACTTTTTTTTTGCAGGAAGTGCATTCTCTGGT
CCTTCCCTATTTTCTGTTCTGGATGTCAGTGCAGTGCACTGCTACTGTTTTATCCACTTGGCCACAGACTTTTTC
TAACAGCTGCGTATTATTTCTATATACTAATTGCATTGGCAGCATTGTGTCTTTGACCTTGTATACTAGCTTGAC
ATAGTGCTGTCTCTGATTTCTAGGCTAGTTACTTGAGATATGAATTTTCCATAGAATATGCACTGATACAACATT
ACCATTCTTCTATGGAAAGAAAACTTTTGATGATGAAACAATAAAGATTTTAAATATCAAAAAAAAAAAAAAAAA
A

FIGURE 825

MAGIKALISLSFGGAIGLMFLMLGCALPIYNKYWPLFVLFFYILSPIPYCIARRLVDDTDAMSNACKELAIFLTT
GIVVSAFGLPIVFARAHLIEWGACALVLTGNTVIFATILGFFLVFGSKDDFSWQQW

FIGURE 826A

GGGAATATATTCACTAAGGATTCTATCTGCTTACTGCTACAGACCTATGTGTTAAGGAATTCTTCTCCTCCTCCT
TGCGTAGAAGTTGATCAGCACTGTGGTCAGACTGCATTTATCTTGTCATTGCCAGAAGAAATCTTGGACAGAATG
TAACAGTACGTCTCTCTCTGATTGCGATGGAAGGTGATAAACTGATACTCCTTTATTAAAGTTACATCGCACTCA
CCACAGAAAACCATTCTTTAAAGTGAATAGAAACCAAGCCCTTGTGAACACTTCTATTGAACATGACTCATGGAG
AAGAGCTTGGCTCTGATGTGCACCAGGATTCTATTGTTTTAACTTACCTAGAAGGATTACTAATGCATCAGGCAG
CAGGGGGATCAGGTACTGCCGTTGACAAAAAGTCTGCTGGGCATAATGAAGAGGATCAGAACTTTAACATTTCTG
GCAGTGCATTTCCCACCTGTCAAAGTAATGGTCCAGTTCTCAATACACATACATATCAGGGATCTGGCATGCTGC
ACCTCAAAAAAGCCAGACTGTTGCAGTCTTCTGAGGACTGGAATGCAGCAAAGCGGAAGAGGCTGTCTGATTCTA
TCATGAATTTAAACGTAAAGAAGGAAGCTTTGCTAGCTGGCATGGTTGACAGTGTCCGTAAAGGCAAACAGGATA
GCACATTACTGGCCTCTTTGCTTCAGTCATTCAGCTCTAGGCTGCAGACTGTTGCTCTGTCACAACAAATCAGGC
AGAGCCTCAAGGAGCAAGGATATGCCCTCAGTCATGATTCTTTAAAAGTGGAGAAGGATTTAAGGTGCTATGGTG
TTGCATCAAGTCACTTAAAAACTTTGTTGAAGAAAAGTAAAGTTAAAGATCAAAAGCCTGATACGAATCTTCCTG
ATGTGACTAAAAACCTCATCAGAGATAGGTTTGCAGAGTCTCCTCATCATGTTGGACAAAGTGGAACAAAGGTCA
TGAGTGAACCGTTGTCATGTGCTGCAAGATTACAGGCTGTTGCAAGCATGGTGGAAAAAAGGGCTAGTCCTGCCA
CCTCACCTAAACCTAGTGTTGCTTGTAGCCAGTTAGCATTACTTCTGTCAAGCGAAGCCCATTTGCAGCAGTATT
CTCGAGAACACGCTTTAAAAACGCAAAATGCAAATCAAGCAGCAAGTGAAAGACTTGCTGCTATGGCCAGATTGC
AAGAAAATGGCCAGAAGGATGTTGGCAGTTACCAGCTCCCAAAAGGAATGTCAAGCCATCTTAATGGTCAGGCAA
GAACATCATCAAGCAAACTGATGGCTAGCAAAAGTAGTGCTACAGTGTTTCAAAATCCAATGGGTATCATTCCTT
CTTCCCCTAAAAATGCAGGTTATAAGAACTCACTGGAAAGAAACAATATAAAACAAGCTGCTAACAATAGTTTGC
TTTTACATCTTCTTAAAAGCCAGACTATACCTAAGCCAATGAATGGACACAGTCACAGTGAGAGAGGAAGCATTT
TTGAGGAAAGTAGTACACCTACAACTATTGATGAATATTCAGATAACAATCCTAGTTTTACAGATGACAGCAGTG
GTGATGAAAGTTCTTATTCCAACTGTGTTCCCATAGACTTGTCTTGCAAACACGGAACTGAAAAATCAGAATCTG
ACCAACCTGTTTCCCTGGATAACTTCACTCAATCCTTGCTAAACACTTGGGATCCAAAAGTCCCAGATGTAGATA
TCAAAGAAGATCAAGATACCTCAAAGAATTCTAAGCTAAACTCACACCAGAAAGTAACACTTCTTCAATTGCTAC
TTGGCCATAAGAATGAAGAAAATGTAGAAAAAAACACCAGCCCTCAGGGAGTACACAATGATGTGAGCAAGTTCA
ATACACAAAATTATGCAAGGACTTCTGTGATAGAAAGCCCCAGTACAAATCGGACTACTCCAGTGAGCACTCCAC
CTTTACTTACATCAAGCAAAGCAGGGTCTCCCATCAATCTCTCTCAACACTCTCTGGTCATCAAATGGAATTCCC
CACCATATGTCTGCAGTACTCAGTCTGAAAAGCTAACAAATACTGCATCTAACCACTCAATGGACCTTACAAAAA
GCAAAGACCCACCAGGAGAGAAACCAGCCCAAAATGAAGGTGCACAGAACTCTGCAACGTTTAGTGCCAGTAAGC
TGTTACAAAATTTAGCACAATGTGGAATGCAGTCATCCATGTCAGTGGAAGAGCAGAGACCCAGCAAACAGCTGT
TAACTGGAAACACAGATAAACCGATAGGTATGATTGATAGATTAAATAGCCCTTTGCTCTCAAATAAAACAAATG
CAGTTGAAGAAAATAAAGCATTTAGTAGTCAACCAACAGGTCCTGAACCAGGGCTTTCTGGTTCTGAAATAGAAA
ATCTGCTTGAAAGACGTACTGTCCTCCAGTTGCTCCTGGGGAACCCAACAAAGGGAAGAGTGAAAAAAAAAGAGA
AAACTCCCTTAAGAGATGAAAGTACTCAGGAACACTCAGAGAGAGCTTTAAGTGAACAAATACTGATGGTGAAAA
TAAAATCTGAGCCTTGTGATGACTTACAAATTCCTAACACAAATGTGCACTTGAGCCATGATGCTAAGAGTGCCC
CATTCTTGGGTATGGCTCCTGCTGTGCAGAGAAGCGCACCTGCCTTACCAGTGTCCGAAGACTTTAAATCGGAGC
CTGTTTCACCTCAGGATTTTTCTTTCTCCAAGAATGGTCTGCTAAGTCGATTGCTAAGACAAAATCAAGATAGTT
ACCTGGCAGATGATTCAGACAGGAGTCACAGAAATAATGAAATGGCACTTCTAGAATCAAAGAATCTTTGCATGG
TCCCTAAGAAAAGGAAGCTTTATACTGAGCCATTAGAAAATCCATTTAAAAAGATGAAAAACAACATTGTTGATG
CTGCAAACAATCACAGTGCCCCAGAAGTACTGTATGGGTCCTTGCTTAACCAGGAAGAGCTGAAATTTAGCAGAA
ATGATCTTGAATTTAAATATCCTGCTGGTCATGGCTCAGCCAGCGAAAGTGAACACAGGAGTTGGGCCAGAGAGA
GCAAAAGCTTTAATGTTCTGAAACAGCTGCTTCTCTCAGAAAACTGTGTGCGAGATTTGTCCCCGCACAGAAGTA
ACTCTGTGGCTGACAGTAAAAAGAAAGGACACAAAAATAATGTGACCAACAGCAAACCTGAATTTAGCATTTCTT
CTTTAAATGGACTGATGTACAGTTCCACTCAGCCCAGCAGTTGCATGGATAACAGGACATTTTCATACCCAGGTG
TAGTAAAAACTCCTGTGAGTCCTACTTTCCCTGAGCACTTGGGCTGTGCAGGGTCTAGACCAGAATCTGGGCTTT
TGAATGGGTGTTCCATGCCCAGTGAGAAAGGACCCATTAAGTGGGTTATCACTGATGCGGAGAAGAATGAGTATG
AAAAAGACTCTCCAAGATTGACCAAAACCAACCCAATACTATATTACATGCTTCAAAAAGGAGGCAATTCTGTTG
CCAGTCGAGAAACACAAGACAAGGACATTTGGAGGGAGGCTTCATCTGCTGAAAGTGTCTCACAGGTCACAGCCA

FIGURE 826B

AAGAAGAGTTACTTCCTACTGCAGAAACGAAAGCTTCTTTCTTTAATTTAAGAAGCCCTTACAATAGCCATATGG
GAAATAATGCTTCTCGCCCACACAGCGCAAATGGAGAAGTTTATGGACTTCTGGGAAGCGTGCTAACGATAAAGA
AAGAATCAGAA**TAA**AATGTACCTGCCATCCAGTTTTGGATCTTTTTAAAACTAATGAGTATGAACTTGAGATCTG
TATAAATAAGAGCATGATTTGAAAAAAGCATGGTATAATTGAAACTTTTTTCATTTTGAAAAGTATTGGTTACTG
GTGATGTTGAAATATGCATACTAATTTTTGCTTAACATTAGATGTCATGAGGAAACTACTGAACTAGCAATTGGT
TGTTTAACACTTCTGTATGCGTCAGATAACAACTGTGAGTAGCCTATGAATGAAATTCTTTTATAAATATTAGGC
ATAAATTAAAATGTAAAACTCCATTCATAGTGGATTAATGCATTTTGCTGCCTTTATTAGGGTACTTTATTTTGC
TTTTCAGAAGTCAGCCTACATAACACATTTTTAAAGTCTAAACTGTTAAACAACTCTTTAAAGGATAATTATCCA
ATAAAAAAAAAACCTAGTGCTGATTCACAGCTTATTATCCAATTCAAAAATAAATTAGAAAAATATATGCTTACAT
TTTTCACTTTTGCTAAAAAGAAAAAAAAAGGTGTTTATTTTTAACTCTTGGAAGAGGTTTTGTGGTTCCCAATGT
GTCTGTCCCACCCTGAGCCTTTTCAATATATATTTCTTTAAACCTTGTGCTACTTAGTAAAAATTGATTACAATT
GAGGGAAGTTTGATAGATCCTTTAAAAAAAAGGCAGATTTCCATTTTTTGTATTTTAACTACTTTACTAAATTAA
TACTCCTCCTTTTACAAATTAGAAAAGTTAACATTTATCTTTAGGTGGTTTCCTGAAAAGTTGAATATTTAAGAA
ATTGTTTTTAACAGAAGCAAAATGGCTTTTCTTTGGACAGTTTTCACCATCTCTTGTAAAAGTTAATTCTCACCA
TTCCTGTGGTACCTGCGAGTGTTATGACCAGGATTCCTTAAACCTGAACTCAGACCACTTGCATTAGAACCATCT
GGAGCACTTGTTTTAAAATGCAGATTCATAGGCAGCATCTCAGATCTACAGAACAAGAATCTCTGCTAAGTGGAC
CTGGAATCTTCCATCTGCATCTTAACATGCTCTCTAGGTGTTTCTTGTGTTTGAGAACCATGACTTATGACTTTC
CTCAGAACATGAGACTGTAAAACAAAAACAAAAAACTATGTGATGCCTCTATTTTCCCCAATACAGTCACACATC
AGCTCAAAATTTGCAATATTGTAGTTATATATTACCGTTATATCTTTGGAAATCCGGGTTCAGAACACTTTTTAT
GACAAAAATTGGGTGGAGGGGATAACTTTCATATCTGGCTCAACATCTCAGGAAAATCTGTGATTATTTGTGTGT
TCTAATGAGTAACATCTACTTAGTTAGCCTTAGGGATGGAAAAACAGGGCCACTTACCAAACTCAGGTGATTCCA
GGATGGTTTGGAAACTTCTCCTGAATGCATCCTTAACCTTTATTAAAACCATTGTCCTAAGAACAATGCCAACAA
AGCTTACAACATTTAGTTTAAACCCAAGAAGGACACTAAACTAGATTGACTAATAAAAGTACAAGGCACATATAC
GTGACAGAATTGGTACTCAATCACTCCATTGGATCTTTTACTTTAAAGTAGTGATGAAAAGTACATGTTGATACT
GTCTTAGAAGAAATTAATATATTAGTGAAGCCACATGGGGTTTCAGTTGCGAAACAGGTCTGTTTTTATGTTCAG
TTTGTACAATCCACAATTCATTCACCAGATATTTTGTTCTTAATTGTGTTCCAGGTTAGCAAATGACCTATCAAA
AATTATTCTATAATCACTACTAGTTAGGATATTGATTTAAAATTGTTCTACTTGAAGTGGTTTCTAAGATTTTTA
TATTTAAAAATAGGTGTGATTTCCTAATATGATCTAAAACCCTAAATGGTTATTTTTCCTCAGAATGATTTGTAA
ATAGCTACTGGAAATATTATACAGTAATAGGAGTGGGTATTATGCAACATCATGGAGAGTGAAGGCATAGGCTTA
TTCTGACATAAAATTCCACTGGCCAGTTGAATATATTCTATTCCATGTCCATACTCTGACAATCTTATTGTCAAC
ACTATATAAATAAGCTTTTAAACAAGTCATTTTTCTTGATCGTTGTGGAAGGTTTGGAGCCTTAGAGGTATGTCA
GAAAAAATATGTTGGTATTCTCCCTTGGGTAGGGGGAAATGACCTTTTTACAAGAGAGATGAAATTTAGGTCAGG
GAAAAGACCAAGGGCCAGCATGCTACTTTTGTGTGTGTGTGTGTGGGTTTTGTTTTGTTTTTTTTGGTTGGCTGG
TTGTTTTCATTATTATTAACAAAGGAATGAGAATATGTAATACTTAAATAAACATGACCACGAAGAATGCTGTTC
TGATTTACTAGAGAATGTTCCCAATTTGAATTTAGGGTGATTTTAAAGAACAGTGAGAAAGGGCATACATCCACA
GATTCACTTTGTTTATGCATATGTAGATACAAGGATGCACATATACACATTTTCAAGGACTATTTTAGATATCTA
GACAATTTCTTCTAATAAAGTCATTTGTGAAAGGGTACTACAGCTTATTGACATCAGTAAGGTAGCATTCATTAC
CTGTTTATTCTCTGCTGCATCTTACAGAAGAGTAAACTGGTGAGAGTATATATTTTATATATATATATATATATA
ATATGTATATATATATATATTGACTTGTTACATGAAGATGTTAAAATCGGTTTTTAAAGGTGATGTAAATAGTGA
TTTCCTTAATGAAAAATACATATTTTGTATTGTTCTAATGCAACAGAAAAGCCTTTTAATCTCTTTGGTTCCTGT
ATATTCCATGTATAAGTGTAAATATAATCAGACAGGTTTAAAAGTTGTGCATGTATGTATACAGTTGCAAGTCTG
GACAAATGTATAGAATAAACCTTTTATTTAAGTTGTGATTACCTGCTGCATGAAAAGTGGCATGGGGGACCCTGT
GCATCTGTGCATTTGGCAAAATGTCTTAACAAATCAGATCAGATGTTCATCCTAACATGACAGTATTCCATTTCT
GGACATGACGTCTGTGGTTTAAGCTTTGTGAAAGAATGTGCTTTGATTCGAAGGGTCTTAAAGAATTTTTTTAAT
CGTCAACCACTTTTAAACATAAAGAATTCACACAACTACTTTCATGAATTTTTTAATCCCATTGCAAACATTATT
CCAAGAGTATCCCAGTATTAGCAATACTGGAATATAGGCACATTACCATTCATAGTAAGAATTCTGGTGTTTACA
CAACCAAATTTGATGCGATCTGCTCAGTAATATAATTTGCCATTTTTATTAGAAATTTAATTTCTTCATGTGATG
TCATGAAACTGTACATACTGCAGTGTGAATTTTTTTGTTTTGTTTTTTAATCTTTTAGTGTTTACTTCCTGCAGT

FIGURE 826C

GAATTTGAATAAATGAGAAAAAATGCAAAAAAAAAAAAAAAAAAAA

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FIGURE 827

MTHGEELGSDVHQDSIVLTYLEGLLMHQAAGGSGTAVDKKSAGHNEEDQNFNISGSAFPTCQSNGPVLNTHTYQG
SGMLHLKKARLLQSSEDWNAAKRKRLSDSIMNLNVKKEALLAGMVDSVRKGKQDSTLLASLLQSFSSRLQTVALS
QQIRQSLKEQGYALSHDSLKVEKDLRCYGVASSHLKTLLKKSKVKDQKPDTNLPDVTKNLIRDRFAESPHHVGQS
GTKVMSEPLSCAARLQAVASMVEKRASPATSPKPSVACSQLALLLSSEAHLQQYSREHALKTQNANQAASERLAA
MARLQENGQKDVGSYQLPKGMSSHLNGQARTSSSKLMASKSSATVFQNPMGIIPSSPKNAGYKNSLERNNIKQAA
NNSLLLHLLKSQTIPKPMNGHSHSERGSIFEESSTPTTIDEYSDNNPSFTDDSSGDESSYSNCVPIDLSCKHGTE
KSESDQPVSLDNFTQSLLNTWDPKVPDVDIKEDQDTSKNSKLNSHQKVTLLQLLLGHKNEENVEKNTSPQGVHND
VSKFNTQNYARTSVIESPSTNRTTPVSTPPLLTSSKAGSPINLSQHSLVIKWNSPPYVCSTQSEKLTNTASNHSM
DLTKSKDPPGEKPAQNEGAQNSATFSASKLLQNLAQCGMQSSMSVEEQRPSKQLLTGNTDKPIGMIDRLNSPLLS
NKTNAVEENKAFSSQPTGPEPGLSGSEIENLLERRTVLQLLLGNPTKGRVKKKEKTPLRDESTQEHSERALSEQI
LMVKIKSEPCDDLQIPNTNVHLSHDAKSAPFLGMAPAVQRSAPALPVSEDFKSEPVSPQDFSFSKNGLLSRLLRQ
NQDSYLADDSDRSHRNNEMALLESKNLCMVPKKRKLYTEPLENPFKKMKNNIVDAANNHSAPEVLYGSLLNQEEL
KFSRNDLEFKYPAGHGSASESEHRSWARESKSFNVLKQLLLSENCVRDLSPHRSNSVADSKKKGHKNNVTNSKPE
FSISSLNGLMYSSTQPSSCMDNRTFSYPGVVKTPVSPTFPEHLGCAGSRPESGLLNGCSMPSEKGPIKWVITDAE
KNEYEKDSPRLTKTNPILYYMLQKGGNSVASRETQDKDIWREASSAESVSQVTAKEELLPTAETKASFFNLRSPY
NSHMGNNASRPHSANGEVYGLLGSVLTIKKESE

FIGURE 828A

GGGAATATATTCACTAAGGATTCTATCTGCTTACTGCTACAGACCTATGTGTTAAGGAATTCTTCTCCTCCTCCT
TGCGTAGAAGTTGATCAGCACTGTGGTCAGACTGCATTTATCTTGTCATTGCCAGAAGAAATCTTGGACAGAATG
TAACAGTACGTCTCTCTCTGATTGCGATGGAAGGTGATAAACTGATACTCCTTTATTAAAGTTACATCGCACTCA
CCACAGAAAACCATTCTTTAAAGTGAATAGAAACCAAGCCCTTGTGAACACTTCTATTGAACATGACTCATGGAG
AAGAGCTTGGCTCTGATGTGCACCAGGATTCTATTGTTTTAACTTACCTAGAAGGATTACTAATGCATCAGGCAG
CAGGGGGATCAGGTACTGCCGTTGACAAAAAGTCTGCTGGGCATAATGAAGAGGATCAGAACTTTAACATTTCTG
GCAGTGCATTTCCCACCTGTCAAAGTAATGGTCCAGTTCTCAATACACATACATATCAGGGATCTGGCATGCTGC
ACCTCAAAAAAGCCAGACTGTTGCAGTCTTCTGAGGACTGGAATGCAGCAAAGCGGAAGAGGCTGTCTGATTCTA
TCATGAATTTAAACGTAAAGAAGGAAGCTTTGCTAGCTGGCATGGTTGACAGTGTCCGTAAAGGCAAACAGGATA
GCACATTACTGGCCTCTTTGCTTCAGTCATTCAGCTCTAGGCTGCAGACTGTTGCTCTGTCACAACAAATCAGGC
AGAGCCTCAAGGAGCAAGGATATGCCCTCAGTCATGATTCTTTAAAAGTGGAGAAGGATTTAAGGTGCTATGGTG
TTGCATCAAGTCACTTAAAAACTTTGTTGAAGAAAAGTAAAGTTAAAGATCAAAAGCCTGATACGAATCTTCCTG
ATGTGACTAAAAACCTCATCAGAGATAGGTTTGCAGAGTCTCCTCATCATGTTGGACAAAGTGGAACAAAGGTCA
TGAGTGAACCGTTGTCATGTGCTGCAAGATTACAGGCTGTTGCAAGCATGGTGGAAAAAAGGGCTAGTCCTGCCA
CCTCACCTAAACCTAGTGTTGCTTGTAGCCAGTTAGCATTACTTCTGTCAAGCGAAGCCCATTTGCAGCAGTATT
CTCGAGAACACGCTTTAAAAACGCAAAATGCAAATCAAGCAGCAAGTGAAAGACTTGCTGCTATGGCCAGATTGC
AAGAAAATGGCCAGAAGGATGTTGGCAGTTACCAGCTCCCAAAAGGAATGTCAAGCCATCTTAATGGTCAGGCAA
GAACATCATCAAGCAAACTGATGGCTAGCAAAAGTAGTGCTACAGTGTTTCAAAATCCAATGGGTATCATTCCTT
CTTCCCCTAAAAATGCAGGTTATAAGAACTCACTGGAAAGAAACAATATAAAACAAGCTGCTAACAATAGTTTGC
TTTTACATCTTCTTAAAAGCCAGACTATACCTAAGCCAATGAATGGACACAGTCACAGTGAGAGAGGAAGCATTT
TTGAGGAAAGTAGTACACCTACAACTATTGATGAATATTCAGATAACAATCCTAGTTTTACAGATGACAGCAGTG
GTGATGAAAGTTCTTATTCCAACTGTGTTCCCATAGACTTGTCTTGCAAACACGGAACTGAAAAATCAGAATCTG
ACCAACCTGTTTCCCTGGATAACTTCACTCAATCCTTGCTAAACACTTGGGATCCAAAAGTCCCAGATGTAGATA
TCAAAGAAGATCAAGATACCTCAAAGAATTCTAAGCTAAACTCACACCAGAAAGTAACACTTCTTCAATTGCTAC
TTGGCCATAAGAATGAAGAAAATGTAGAAAAAAACACCAGCCCTCAGGGAGTACACAATGATGTGAGCAAGTTCA
ATACACAAAATTATGCAAGGACTTCTGTGATAGAAAGCCCCAGTACAAATCGGACTACTCCAGTGAGCACTCCAC
CTTTACTTACATCAAGCAAAGCAGGGTCTCCCATCAATCTCTCTCAACACTCTCTGGTCATCAAATGGAATTCCC
CACCATATGTCTGCAGTACTCAGTCTGAAAAGCTAACAAATACTGCATCTAACCACTCAATGGACCTTACAAAAA
GCAAAGACCCACCAGGAGAGAAACCAGCCCAAAATGAAGGTGCACAGAACTCTGCAACGTTTAGTGCCAGTAAGC
TGTTACAAAATTTAGCACAATGTGGAATGCAGTCATCCATGTCAGTGGAAGAGCAGAGACCCAGCAAACAGCTGT
TAACTGGAAACACAGATAAACCGATAGGTATGATTGATAGATTAAATAGCCCTTTGCTCTCAAATAAAACAAATG
CAGTTGAAGAAAATAAAGCATTTAGTAGTCAACCAACAGGTCCTGAACCAGGGCTTTCTGGTTCTGAAATAGAAA
ATCTGCTTGAAAGACGTACTGTCCTCCAGTTGCTCCTGGGGAACCCAACAAAGGGAAGAGTGAAAAAAAAAGAGA
AAACTCCCTTAAGAGATGAAAGTACTCAGGAACACTCAGAGAGAGCTTTAAGTGAACAAATACTGATGGTGAAAA
TAAAATCTGAGCCTTGTGATGACTTACAAATTCCTAACACAAATGTGCACTTGAGCCATGATGCTAAGAGTGCCC
CATTCTTGGGTATGGCTCCTGCTGTGCAGAGAAGCGCACCTGCCTTACCAGTGTCCGAAGACTTTAAATCGGAGC
CTGTTTCACCTCAGGATTTTTCTTTCTCCAAGAATGGTCTGCTAAGTCGATTGCTAAGACAAAATCAAGATAGTT
ACCTGGCAGATGATTCAGACAGGAGTCACAGAAATAATGAAATGGCACTTCTAGAATCAAAGAATCTTTGCATGG
TCCCTAAGAAAAGGAAGCTTTATACTGAGCCATTAGAAAATCCATTTAAAAAGATGAAAAACAACATTGTTGATG
CTGCAAACAATCACAGTGCCCCAGAAGTACTGTATGGGTCCTTGCTTAACCAGGAAGAGCTGAAATTTAGCAGAA
ATGATCTTGAATTTAAATATCCTGCTGGTCATGGCTCAGCCAGCGAAAGTGAACACAGGAGTTGGGCCAGAGAGA
GCAAAAGCTTTAATGTTCTGAAACAGCTGCTTCTCTCAGAAAACTGTGTGCGAGATTTGTCCCCGCACAGAAGTA
ACTCTGTGGCTGACAGTAAAAAGAAAGGACACAAAAATAATGTGACCAACAGCAAACCTGAATTTAGCATTTCTT
CTTTAAATGGACTGATGTACAGTTCCACTCAGCCCAGCAGTTGCATGGATAACAGGACATTTTCATACCCAGGTG
TAGTAAAAACTCCTGTGAGTCCTACTTTCCCTGAGCACTTGGGCTGTGCAGGGTCTAGACCAGAATCTGGGCTTT
TGAATGGGTGTTCCATGCCCAGTGAGAAAGGACCCATTAAGTGGGTTATCACTGATGCGGAGAAGAATGAGTATG
AAAAAGACTCTCCAAGATTGACCAAAACCAACCCAATACTATATTACATGCTTCAAAAAGGAGGCAATTCTGTTG
CCAGTCGAGAAACACAAGACAAGGACATTTGGAGGGAGGCTTCATCTGCTGAAAGTGTCTCACAGGTCACAGCCA

FIGURE 828B

AAGAAGAGTTACTTCCTACTGCAGAAACGAAAGCTTCTTTCTTTAATTTAAGAAGCCCTTACAATAGCCATATGG
GAAATAATGCTTCTCGCCCACACAGCGCAAATGGAGAAGTTTATGGACTTCTGGGAAGCGTGCTAACGATAAAGA
AAGAATCAGAA**TAA**AATGTACCTGCCATCCAGTTTTGGATCTTTTTAAAACTAATGAGTATGAACTTGAGATCTG
TATAAATAAGAGCATGATTTGAAAAAAGCATGGTATAATTGAAACTTTTTTCATTTTGAAAAGTATTGGTTACTG
GTGATGTTGAAATATGCATACTAATTTTTGCTTAACATTAGATGTCATGAGGAAACTACTGAACTAGCAATTGGT
TGTTTAACACTTCTGTATGCGTCAGATAACAACTGTGAGTAGCCTATGAATGAAATTCTTTTATAAATATTAGGC
ATAAATTAAAATGTAAAACTCCATTCATAGTGGATTAATGCATTTTGCTGCCTTTATTAGGGTACTTTATTTTGC
TTTTCAGAAGTCAGCCTACATAACACATTTTTAAAGTCTAAACTGTTAAACAACTCTTTAAAGGATAATTATCCA
ATAAAAAAAAACCTAGTGCTGATTCACAGCTTATTATCCAATTCAAAAATAAATTAGAAAAATATATGCTTACAT
TTTTCACTTTTGCTAAAAAGAAAAAAAAAGGTGTTTATTTTTAACTCTTGGAAGAGGTTTTGTGGTTCCCAATGT
GTCTGTCCCACCCTGAGCCTTTTCAATATATATTTCTTTAAACCTTGTGCTACTTAGTAAAAATTGATTACAATT
GAGGGAAGTTTGATAGATCCTTTAAAAAAAAGGCAGATTTCCATTTTTTGTATTTTAACTACTTTACTAAATTAA
TACTCCTCCTTTTACAAATTAGAAAAGTTAACATTTATCTTTAGGTGGTTTCCTGAAAAGTTGAATATTTAAGAA
ATTGTTTTTAACAGAAGCAAAATGGCTTTTCTTTGGACAGTTTTCACCATCTCTTGTAAAAGTTAATTCTCACCA
TTCCTGTGGTACCTGCGAGTGTTATGACCAGGATTCCTTAAACCTGAACTCAGACCACTTGCATTAGAACCATCT
GGAGCACTTGTTTTAAAATGCAGATTCATAGGCAGCATCTCAGATCTACAGAACAAGAATCTCTGCTAAGTGGAC
CTGGAATCTTCCATCTGCATCTTAACATGCTCTCTAGGTGTTTCTTGTGTTTGAGAACCATGACTTATGACTTTC
CTCAGAACATGAGACTGTAAAACAAAAACAAAAAACTATGTGATGCCTCTATTTTCCCCAATACAGTCACACATC
AGCTCAAAATTTGCAATATTGTAGTTATATATTACCGTTATATCTTTGGAAATCCGGGTTCAGAACACTTTTTAT
GACAAAAATTGGGTGGAGGGGATAACTTTCATATCTGGCTCAACATCTCAGGAAAATCTGTGATTATTTGTGTGT
TCTAATGAGTAACATCTACTTAGTTAGCCTTAGGGATGGAAAAACAGGGCCACTTACCAAACTCAGGTGATTCCA
GGATGGTTTGGAAACTTCTCCTGAATGCATCCTTAACCTTTATTAAAACCATTGTCCTAAGAACAATGCCAACAA
AGCTTACAACATTTAGTTTAAACCCAAGAAGGACACTAAACTAGATTGACTAATAAAAGTACAAGGCACATATAC
GTGACAGAATTGGTACTCAATCACTCCATTGGATCTTTTACTTTAAAGTAGTGATGAAAAGTACATGTTGATACT
GTCTTAGAAGAAATTAATATATTAGTGAAGCCACATGGGGTTTCAGTTGCGAAACAGGTCTGTTTTTATGTTCAG
TTTGTACAATCCACAATTCATTCACCAGATATTTTGTTCTTAATTGTGTTCCAGGTTAGCAAATGACCTATCAAA
AATTATTCTATAATCACTACTAGTTAGGATATTGATTTAAAATTGTTCTACTTGAAGTGGTTTCTAAGATTTTTA
TATTTAAAAATAGGTGTGATTTCCTAATATGATCTAAAACCCTAAATGGTTATTTTTCCTCAGAATGATTTGTAA
ATAGCTACTGGAAATATTATACAGTAATAGGAGTGGGTATTATGCAACATCATGGAGAGTGAAGGCATAGGCTTA
TTCTGACATAAAATTCCACTGGCCAGTTGAATATATTCTATTCCATGTCCATACTCTGACAATCTTATTGTCAAC
ACTATATAAATAAGCTTTTAAACAAGTCATTTTTCTTGATCGTTGTGGAAGGTTTGGAGCCTTAGAGGTATGTCA
GAAAAAATATGTTGGTATTCTCCCTTGGGTAGGGGGAAATGACCTTTTTACAAGAGAGATGAAATTTAGGTCAGG
GAAAAGACCAAGGGCCAGCATGCTACTTTTGTGTGTGTGTGTGTGTGGGTTTTGTTTTGTTTTTTTTGGTTGGCTGG
TTGTTTTCATTATTATTAACAAAGGAATGAGAATATGTAATACTTAAATAAACATGACCACGAAGAATGCTGTTC
TGATTTACTAGAGAATGTTCCCAATTTGAATTTAGGGTGATTTTAAAGAACAGTGAGAAAGGGCATACATCCACA
GATTCACTTTGTTTATGCATATGTAGATACAAGGATGCACATATACACATTTTCAAGGACTATTTTAGATATCTA
GACAATTTCTTCTAATAAAGTCATTTGTGAAAGGGTACTACAGCTTATTGACATCAGTAAGGTAGCATTCATTAC
CTGTTTATTCTCTGCTGCATCTTACAGAAGAGTAAACTGGTGAGAGTATATATTTTATATATATATATATATATA
ATATGTATATATATATATATTGACTTGTTACATGAAGATGTTAAAATCGGTTTTTAAAGGTGATGTAAATAGTGA
TTTCCTTAATGAAAAATACATATTTTGTATTGTTCTAATGCAACAGAAAAGCCTTTTAATCTCTTTGGTTCCTGT
ATATTCCATGTATAAGTGTAAATATAATCAGACAGGTTTAAAAGTTGTGCATGTATGTATACAGTTGCAAGTCTG
GACAAATGTATAGAATAAACCTTTTATTTAAGTTGTGATTACCTGCTGCATGAAAAGTGGCATGGGGGACCCTGT
GCATCTGTGCATTTGGCAAAATGTCTTAACAAATCAGATCAGATGTTCATCCTAACATGACAGTATTCCATTTCT
GGACATGACGTCTGTGGTTTAAGCTTTGTGAAAGAATGTGCTTTGATTCGAAGGGTCTTAAAGAATTTTTTTAAT
CGTCAACCACTTTTAAACATAAAGAATTCACACAACTACTTTCATGAATTTTTTAATCCCATTGCAAACATTATT
CCAAGAGTATCCCAGTATTAGCAATACTGGAATATAGGCACATTACCATTCATAGTAAGAATTCTGGTGTTTACA
CAACCAAATTTGATGCGATCTGCTCAGTAATATAATTTGCCATTTTTATTAGAAATTTAATTTCTTCATGTGATG
TCATGAAACTGTACATACTGCAGTGTGAATTTTTTTGTTTTGTTTTTTAATCTTTTAGTGTTTACTTCCTGCAGT

FIGURE 828C

GAATTTGAATAAATGAGAAAAAATGCAAAAAAAAAAAAAAAAAAAA

FIGURE 829

MTHGEELGSDVHQDSIVLTYLEGLLMHQAAGGSGTAVDKKSAGHNEEDQNFNISGSAFPTCQSNGPVLNTHTYQG
SGMLHLKKARLLQSSEDWNAAKRKRLSDSIMNLNVKKEALLAGMVDSVRKGKQDSTLLASLLQSFSSRLQTVALS
QQIRQSLKEQGYALSHDSLKVEKDLRCYGVASSHLKTLLKKSKVKDQKPDTNLPDVTKNLIRDRFAESPHHVGQS
GTKVMSEPLSCAARLQAVASMVEKRASPATSPKPSVACSQLALLLSSEAHLQQYSREHALKTQNANQAASERLAA
MARLQENGQKDVGSYQLPKGMSSHLNGQARTSSSKLMASKSSATVFQNPMGIIPSSPKNAGYKNSLERNNIKQAA
NNSLLLHLLKSQTIPKPMNGHSHSERGSIFEESSTPTTIDEYSDNNPSFTDDSSGDESSYSNCVPIDLSCKHGTE
KSESDQPVSLDNFTQSLLNTWDPKVPDVDIKEDQDTSKNSKLNSHQKVTLLQLLLGHKNEENVEKNTSPQGVHND
VSKFNTQNYARTSVIESPSTNRTTPVSTPPLLTSSKAGSPINLSQHSLVIKWNSPPYVCSTQSEKLTNTASNHSM
DLTKSKDPPGEKPAQNEGAQNSATFSASKLLQNLAQCGMQSSMSVEEQRPSKQLLTGNTDKPIGMIDRLNSPLLS
NKTNAVEENKAFSSQPTGPEPGLSGSEIENLLERRTVLQLLLGNPTKGRVKKKEKTPLRDESTQEHSERALSEQI
LMVKIKSEPCDDLQIPNTNVHLSHDAKSAPFLGMAPAVQRSAPALPVSEDFKSEPVSPQDFSFSKNGLLSRLLRQ
NQDSYLADDSDRSHRNNEMALLESKNLCMVPKKRKLYTEPLENPFKKMKNNIVDAANNHSAPEVLYGSLLNQEEL
KFSRNDLEFKYPAGHGSASESEHRSWARESKSFNVLKQLLLSENCVRDLSPHRSNSVADSKKKGHKNNVTNSKPE
FSISSLNGLMYSSTQPSSCMDNRTFSYPGVVKTPVSPTFPEHLGCAGSRPESGLLNGCSMPSEKGPIKWVITDAE
KNEYEKDSPRLTKTNPILYYMLQKGGNSVASRETQDKDIWREASSAESVSQVTAKEELLPTAETKASFFNLRSPY
NSHMGNNASRPHSANGEVYGLLGSVLTIKKESE

FIGURE 830A

CGGCCCGGCGGTAGGCGGTGGCGACTCTGCCCGCTCCCGTTTCGGCGCGGTGACCGAGCGCCCGGGAGGCTCGAG
GACCGCATCGTGTGCCGTTGCGCCAAGCCCGGTCCTGCGCCGCC**ATG**GCCCCAGTGCAGCTGGAGAACCACCAGC
TGGTCCCGCCCGGAGGCGGCGGCGGGGGCAGCGGCGGACCCCCGTCAGCCCCAGCCCCTCCTCCCCCGGGAGCCG
CCGTGGCGGCGGCCGCTGCAGCTGCGGCTAGCCCGGGCTACCGGCTGAGCACCCTCATTGAATTTCTGCTGCACC
GGGCCTACTCGGAGCTTATGGTGTTGACGGACCTACTGCCAAGGAAATCTGATGTGGAAAGGAAAATAGAAATAG
TGCAGTTTGCTAGCCGGACACGCCAACTCTTCGTTCGATTATTAGCTTTAGTGAAATGGGCTAATAATGCTGGCA
AAGTGGAAAAATGTGCGATGATTTCAAGCTTTTTAGATCAGCAAGCCATCCTGTTTGTGGACACTGCTGATCGCC
TGGCCTCGTTAGCTAGAGATGCTCTGGTCCATGCACGCCTGCCTAGTTTTGCCATCCCATATGCCATTGATGTAC
TAACTACTGGATCTTACCCACGGCTGCCAACCTGCATTAGGGATAAAATTATTCCTCCAGACCCAATTACCAAAA
TTGAAAAACAAGCCACACTCCATCAGCTGAATCAGATTCTTAGACATCGGCTTGTAACCACAGATCTTCCTCCTC
AGTTAGCAAATCTTACAGTTGCAAATGGCCGGGTGAAGTTTCGTGTTGAAGGAGAATTTGAAGCCACCTTGACTG
TGATGGGAGATGACCCTGATGTTCCATGGCGTCTTCTCAAGCTAGAAATTCTAGTTGAGGATAAGGAAACAGGAG
ATGGGCGAGCTTTGGTTCATAGCATGCAAATCAGCTTCATCCATCAACTGGTGCAGTCTAGGCTCTTTGCTGATG
AGAAACCTCTTCAGGATATGTACAACTGCCTACATTCTTTCTGTTTATCACTTCAGTTAGAAGTGTTACATTCCC
AAACTCTAATGTTAATCCGAGAACGGTGGGGAGACCTTGTGCAGGTGGAAAGGTATCATGCTGGAAAGTGCCTCT
CCCTTTCAGTTTGGAATCAACAGGTTCTTGGGAGAAAAACTGGAACAGCATCTGTTCACAAAGTTACAATTAAAA
TTGATGAGAATGATGTCTCCAAGCCTTTACAGATTTTTCACGATCCTCCTTTGCCAGCTTCTGATTCCAAATTAG
TAGAAAGAGCCATGAAGATCGACCACTTATCAATAGAAAAACTCCTGATTGACAGTGTCCATGCAAGAGCTCATC
AGAAGCTCCAAGAACTGAAGGCCATTCTTAGAGGCTTCAATGCCAATGAAAACTCTTCCATAGAGACTGCACTCC
CAGCTCTTGTTGTTCCCATCTTGGAGCCCTGTGGTAATTCAGAGTGTCTGCACATTTTTGTAGATTTACATTCTG
GAATGTTTCAATTGATGCTTTATGGACTTGACCAGGCCACTCTGGATGACATGGAGAAGTCTGTGAATGATGATA
TGAAACGAATCATACCCTGGATTCAGCAACTTAAGTTTTGGCTTGGACAACAGCGTTGCAAGCAGTCTATAAAAC
ATCTGCCTACGATAAGCAGTGAAACATTGCAGCTTTCCAATTACTCAACTCATCCTATTGGAAACCTTTCTAAGA
ATAAACTGTTCATTAAACTTACCCGCCTTCCACAATACTACATTGTTGTGGAGATGTTGGAGGTTCCCAATAAAC
CCACACAACTGTCGTACAAGTACTACTTTATGTCTGTGAATGCTGCAGATCGTGAAGACAGCCCTGCAATGGCAT
TGCTGCTGCAGCAGTTCAAGGAAAACATTCAGGACTTGGTTTTTCGTACAAAAACCGGGAAACAGACCAGAACCA
ATGCCAAGCGCAAGTTGTCTGATGATCCATGTCCAGTAGAATCCAAGAAAACAAAACGAGCAGGAGAAATGTGTG
CCTTCAATAAAGTTTTAGCCCACTTCGTCGCTATGTGTGATACAAATATGCCATTTGTAGGACTTCGGTTGGAGT
TGTCCAATCTGGAGATTCCACATCAAGGAGTGCAAGTGGAAGGTGATGGCTTCAGCCATGCAATTCGCTTATTAA
AAATTCCTCCCTGTAAGGGTATAACTGAGGAAACCCAAAAGGCTCTGGACCGCTCTCTTCTTGATTGCACTTTCC
GATTACAAGGTAGAAATAACCGCACTTGGGTAGCAGAGTTAGTGTTTGCAAATTGTCCACTTAATGGCACTTCTA
CTAGGGAGCAAGGACCATCCCGGCACGTTTACCTGACATATGAAAATCTGTTGTCTGAGCCTGTTGGTGGTAGAA
AGGTGGTTGAAATGTTTCTTAATGACTGGAATAGCATTGCACGATTATATGAGTGTGTGTTGGAATTTGCACGTT
CTCTACCAGACATACCTGCTCATCTAAATATTTTCTCAGAAGTTCGTGTTTATAATTACCGAAAACTTATCTTGT
GTTATGGAACCACCAAGGGAAGCTCAATTAGTATCCAATGGAATTCGATCCATCAAAAATTCCACATTTCTTTGG
GAACTGTTGGCCCAAACTCAGGTTGCAGTAACTGTCACAATACCATTCTCCATCAGCTTCAAGAAATGTTCAACA
AAACACCAAATGTGGTTCAGTTATTACAGGTACTGTTTGATACTCAGGCTCCATTAAATGCCATCAACAAACTCC
CCACTGTGCCGATGTTGGGCTTGACCCAGAGAACCAATACTGCCTACCAGTGCTTCTCCATTCTGCCACAGTCGT
CCACCCACATCAGACTGGCCTTCAGGAACATGTATTGCATTGATATATACTGCCGGAGTCGAGGTGTTGTGGCAA
TACGGGATGGTGCCTATAGTCTTTTTGATAACAGCAAACTAGTTGAAGGTTTCTATCCTGCACCAGGACTAAAGA
CGTTCCTGAATATGTTTGTTGACAGCAATCAGGATGCTCGAAGAAGGTCTGTAAATGAGGACGATAATCCCCCTT
CTCCTATAGGAGGAGATATGATGGATTCTTTAATATCGCAGCTCCAGCCACCACCCCAGCAACAGCCATTTCCAA
AGCAGCCAGGAACATCAGGTGCTTATCCTCTTACTTCACCCCCTACATCTTATCATAGCACAGTCAATCAGTCTC
CCTCAATGATGCACACACAGTCTCCAGGAAATCTGCATGCTGCCAGCTCCCCCAGTGGGGCTTTGAGAGCCCCAT
CACCAGCGTCATTTGTTCCAACTCCTCCCCCATCCTCGCATGGAATCTCAATAGGACCAGGGGCCAGTTTTGCTA
GTCCACATGGAACTCTTGACCCTAGTTCCCCATACACTATGGTGTCACCAAGTGGACGAGCAGGGAACTGGCCAG
GATCTCCTCAAGTGTCTGGCCCCTCACCAGCAGCACGCATGCCTGGAATGTCACCAGCCAACCCCTCACTACATT
CTCCGGTTCCAGATGCTTCTCATTCCCCTCGAGCTGGAACAAGTTCTCAAACAATGCCAACAAACATGCCTCCAC

FIGURE 830B

CTCGTAAACTACCTCAGCGCTCTTGGGCGGCATCCATACCTACCATCCTCACTCACAGTGCCTTGAACATTTTAC
TGCTGCCCTCTCCAACTCCAGGCCTTGTGCCCGGCCTGGCAGGTAGTTACCTTTGTTCTCCACTTGAGAGATTCC
TTGGATCAGTCATCATGAGACGACATCTTCAAAGAATTATTCAACAAGAAACGCTGCAGCTGATAAATTCTAATG
AACCCGGAGTGATCATGTTTAAGACTGATGCACTGAAATGCAGAGTAGCTCTTAGTCCCAAAACCAACCAAACGC
TTCAGCTAAAATTGACACCTGAAAATGCAGGACAGTGGAAACCTGATGAACTTCAAGTTTTGGAGAAATTCTTTG
AAACAAGAGTTGCAGGACCACCATTTAAAGCTAATACGTTAATAGCCTTCACCAAGCTATTAGGAGCTCCTACAC
ACATCCTCAGGGATTGTGTGCACATTATGAAGCTGGAGCTGTTCCCTGACCAAGCAACACAGCTAAAATGGAATG
TTCAGTTTTGCCTGACGATCCCTCCCAGCGCGCCGCCGATTGCACCTCCTGGGACGCCTGCTGTGGTGCTGAAAT
CCAAAATGCTATTTTTTCTTCAACTAACTCAGAAAACATCGGTCCCTCCCCAAGAACCTGTTAGTATTATAGTTC
CAATCATTTATGACATGGCTTCAGGTACAACCCAGCAGGCAGACATTCCCAGACAGCAGAACTCTTCTGTTGCTG
CTCCCATGATGGTCAGCAACATTCTGAAGAGGTTTGCAGAGATGAATCCACCACGACAAGGTGAATGCACAATAT
TTGCAGCTGTTCGTGATTTAATGGCTAATCTTACACTGCCCCCTGTTGGGCGTCCATAGACACTATTGTTTTTAA
ACCAGGAAGGCTGACAGATGAGACAACAAAAAAAATCTGAATTCAGCCTTCAGTTTAAAAAAGGAAAAGGACTTT
TTTTTTAAACTTTAAGAGCTAAATATTCTAAACTGGCAAAAATTTTCAGGGTGCACTTCTTTCATCAAAATGATC
ATCCATCTTTTGTATAATGAACTTGTATAGTGTGTTTAAATGGGACACATTTCAAAGGAAATAAATCAGTGTCCG
TTTGCCAGTAATAAATTTAATATTCTGTTTTATACTATAAAGTTATGAAAATGCCAAACTTGTTTATTTAATTGT
TTTCTTATGTTTTGGGTGTAATAGTCCTTTTTTGGTTTTTGTTTTGTTTTTTAAGGCAGGTCTGTCATTTTTGAA
TACTGTAAAACTGTGATAAACTTTATATTGAAGCTGTATTTTAATATGACCGCTTTGAATCCTTACATGAAATGT
TCTGGGAGTTGTTATAAACACACCCCAAGGAAGCAATATTTAATAAAACTAGGTCAAAAACAAAACAAAACAGTG
ACACTCACTTGTGTGTATATAAACTCTAGAGACATCTTAGGCCCTCCCTTCATCTTTAACCTGGTGGATGGAGCC
AGTTATTAATTTATAATAATACATGTCTGAAATTTGACCAAAAACATCTTCTTTATGTCAAGGTTAATATATTTT
CTTCAGACATTCCTAACTTGACTAGTGGTTAACATTTAGCACCTTGGTTGTCTTTCAATATATAGGATTTGGGTG
AAAAATAAGGAACTTAGTCTTTGAGAAGGGACAGTATGTGGTTCGTATTGATCAAGGATCCCAAATAATGCAATC
ATTCTCATCTGTTGAGGATGTGGGAACTTTTCTGTCAGGAAAATTTAGTTTACAGAATACTTCTGCATACAACAT
TAATTAGGAAACAAAGAACTTTAATGCTGTACCTCTGCATGAAGTTTCTGTGAGCTTTCTTTATCTTGCTTAACT
TATCCTCCTTTCCTTCCCCACCAAAATTGGGATTGTTCTAAACAATTTCAATTTAATTCATTGTCAACAAAACGA
TAGAATGTTTTGCTTGGAAGAAACCTGGTCCATTCCCCTCATTGTGAAGAATCCCGAATCCTGGGCCTGTCCAGG
GTCAAATGGAGTTTTTGGTATTAATACATCTCTGCAGGGTTTCTTTTTGGAGCACTGTGCTGTCTTTCCTAGTCA
GTCAGGGACTTTTTTAAGCTTCAAAGAACATGGTCTGATGCAAAGGTCTTCTACCGACTTCATGGTATTTAGGAA
AAATTTTTAAGTGATAATACCATGCCGAGTTACCTGGTCACTGTAATACTGGTTCTCCATTAAAATGTAGATGCT
TTGTCTAATTCCACTTCAAGATGATTTAATTGAGCTTCTATAACTATCAACTATCAAATTCTAGTTTCAAGTATC
TCACTGTACCTATATCATATCTGTTCTCAACTTTGTTTGATTCTCCACTCATTTTCAATCAGAGTTGAAGCCTTC
TTTGCCTTTCTTCTTTGTCTTATTTCTGCCTTCATCTCCCACTTCTCACCCAACTCTGCCACTGTTCAGGAGCAG
TTGACTAAACTTTTATCCTTCCTTTAACTTAATCTTTTTATCCTTCTGTTTTTAGTTCTTACAGTGGTAATCACA
TCAGTTTGGCAATCTAAGATGTCTTTATCAAGGGTCAGCCCTTTTCTATTTGGAGCTGAATCTTTTCTTTCATGT
AGAAATCTACATGTATATACAAGAAATGTATTTTTATCTGCAGGATAATATTGTTTCAAATAATTTTATTAAGAG
TTAACTTTTTAGGTATTTTCCCTTTTAATGTGGTTTTGAAATGTTAATTGCATTTTTACACATGATGCATTCAGT
GGACACTCTTTTTTCCTAATTATAACTCATCTCTGAATGCATTGTGCCAATCAAGAGTAAGATAGGATTCAGTGC
GCAAAATTTGCTTTTGATGCTTATTAAGAGTAAACCCATGAATTTGAATTTTTATATTATGCTTGGTACTTGGAA
TTGATATATACCTTATTAAAGCTTGAAAACATTTAGCATTTGAATAGTAAGTTTCATCACAAATCATGTCTTTTG
CCTCTTTTGTTACCCAGGTTCGATCAAGGGGACTGGATGCCCAAGTGATTTTCTCTAATAATCGGGTTGGGACTT
AACTTTAAGGTGTTTTCAATGTGATTTTAGTATTTACAGTAATAAATAAAATTTATACAAAGTTTCAGAGAACTA
CCAACTCTCTAGTTAATTTTGATGAAGATGTTTTCATTAATAGTCTGGTTTAGTATTAATTTAACCTTGAAATAA
GAAATTGGTCCTGATTTGCCACCTTCATTTTTCCATCTGCTGAAATGCCATTTCAGAATGTATAAAAGTACTTTC
AGAATTAGAAGAAAAGTGAGAGCTTCAGCAGAACGTGTCAAGTCGCTAATAACAGGAGTCGAACCTTATGTTTGA
AAATTAACTGAGTGAGTTAAGTGCAAGCATAAACTAAAATTTATATGACTTTGAATTTAAGAACCACTAATAACT
GTGTTCTAATTAACACAGTAATCTGTTCAGCCAAAGGATACTAACAGCCATTCTTTGGACTGTGGTTAATTTGAT
AACTTCAAGAAGTTATAACTTTGCTACCCTGGATTCTGATGCAATTTCAATATAAAAAGTTGTTCCTTTCATAGT

FIGURE 830C

TTTTCCCCCCAAAAGAAGTGCCTATTACATTTTACCTTAATGTTTATTTATCATCCAAGTGTTCTTGATATAAAA
TCAGTATACAGAAAATTTTAAGAGAACTTACATTCAAGGGACATAGAGGGAAAATGTTAATGTGTATTTCATTGT
TTCTTGTGGAATTTTTTTTTCATTCGGTTTGAGAATGGACAGTGTGTCTAAGGATGTGATTTAAATTTACTTAGG
ATGGATTTAGCATTGAGGTTATTAAGACAAAGTTAGCAGAGGCCAGCCAGCACTGTGCTGCACAACTCCAGGAAC
TCCATGGTATGCTCACAATTTTCTGCAAGTTGCCTCCACTTCCAAGTGGCCAGTGATTTGTTAAAATACCTTGCC
CAAGAATATAACTGATTGATGAAAGGGCATATTTAGGTCAATATAAAATAATAGCAAGTATTTACTGAGAGCTTA
CTGTGTGCTAGGCATTTTCTTAATATTTCAATGTGTATTTAATCCTCACAACAACCCAATGTGGTAGGTTATTGA
TATCCTCTTCTTAAAAATGAGTAAATGGAGGCCCAGAGAAATGTAATTTGCCTGAGATCAAATTAAGGTTGCTTA
AGATCAAACTGCTAAGAAGGGGCAGTTTGAGTCTGAGCTAGTGCTCCTAAACACTGGACATTTTTGCTGTGAACC
ACAGTCGGGAAGGTTTAATGTTTAGACTCTTTCCTCAGAGGCTTTTAACTACACACAATTTTGACATGTTTTCCA
AGCTCAGAAAGCTCATTAAAAACAACTAAAACTG

FIGURE 831

MAPVQLENHQLVPPGGGGGGSGGPPSAPAPPPPGAAVAAAAAAAASPGYRLSTLIEFLLHRAYSELMVLTDLLPR
KSDVERKIEIVQFASRTRQLFVRLLALVKWANNAGKVEKCAMISSFLDQQAILFVDTADRLASLARDALVHARLP
SFAIPYAIDVLTTGSYPRLPTCIRDKIIPPDPITKIEKQATLHQLNQILRHRLVTTDLPPQLANLTVANGRVKFR
VEGEFEATLTVMGDDPDVPWRLLKLEILVEDKETGDGRALVHSMQISFIHQLVQSRLFADEKPLQDMYNCLHSFC
LSLQLEVLHSQTLMLIRERWGDLVQVERYHAGKCLSLSVWNQQVLGRKTGTASVHKVTIKIDENDVSKPLQIFHD
PPLPASDSKLVERAMKIDHLSIEKLLIDSVHARAHQKLQELKAILRGFNANENSSIETALPALVVPILEPCGNSE
CLHIFVDLHSGMFQLMLYGLDQATLDDMEKSVNDDMKRIIPWIQQLKFWLGQQRCKQSIKHLPTISSETLQLSNY
STHPIGNLSKNKLFIKLTRLPQYYIVVEMLEVPNKPTQLSYKYYFMSVNAADREDSPAMALLLQQFKENIQDLVF
RTKTGKQTRTNAKRKLSDDPCPVESKKTKRAGEMCAFNKVLAHFVAMCDTNMPFVGLRLELSNLEIPHQGVQVEG
DGFSHAIRLLKIPPCKGITEETQKALDRSLLDCTFRLQGRNNRTWVAELVFANCPLNGTSTREQGPSRHVYLTYE
NLLSEPVGGRKVVEMFLNDWNSIARLYECVLEFARSLPDIPAHLNIFSEVRVYNYRKLILCYGTTKGSSISIQWN
SIHQKFHISLGTVGPNSGCSNCHNTILHQLQEMFNKTPNVVQLLQVLFDTQAPLNAINKLPTVPMLGLTQRTNTA
YQCFSILPQSSTHIRLAFRNMYCIDIYCRSRGVVAIRDGAYSLFDNSKLVEGFYPAPGLKTFLNMFVDSNQDARR
RSVNEDDNPPSPIGGDMMDSLISQLQPPPQQQPFPKQPGTSGAYPLTSPPTSYHSTVNQSPSMMHTQSPGNLHAA
SSPSGALRAPSPASFVPTPPPSSHGISIGPGASFASPHGTLDPSSPYTMVSPSGRAGNWPGSPQVSGPSPAARMP
GMSPANPSLHSPVPDASHSPRAGTSSQTMPTNMPPPRKLPQRSWAASIPTILTHSALNILLLPSPTPGLVPGLAG
SYLCSPLERFLGSVIMRRHLQRIIQQETLQLINSNEPGVIMFKTDALKCRVALSPKTNQTLQLKLTPENAGQWKP
DELQVLEKFFETRVAGPPFKANTLIAFTKLLGAPTHILRDCVHIMKLELFPDQATQLKWNVQFCLTIPPSAPPIA
PPGTPAVVLKSKMLFFLQLTQKTSVPPQEPVSIIVPIIYDMASGTTQQADIPRQQNSSVAAPMMVSNILKRFAEM
NPPRQGECTIFAAVRDLMANLTLPPVGRP

FIGURE 832

CTATCCGCGCGCGTCGCCGGCCCAGTCCTGTCGCTGACGGGAGGATCTGAAGCCGGCCGCAGGTCAAAGAGTAAA
ATGAAGTACATTCTGGTTACTGGTGGTGTTATATCAGGAATTGGAAAAGGAATCATTGCCAGCAGTGTGGGCACA
ATACTCAAGTCATGTGGTTTACATGTAACTTCAATCAAAATTGACCCCTACATTAACATTGATGCAGGAACATTC
TCTCCTTATGAGCATGGTGAGGTTTTTGTGCTGGATGATGGTGGGGAAGTAGACCTTGACCTGGGTAACTATGAG
CGGTTCCTTGACATCCGCCTCACCAAGGACAATAATCTGACCACTGGAAAGATATACCAGTATGTCATTAACAAG
GAACGGAAAGGAGATTACTTGGGGAAAACTGTCCAAGTTGTCCCTCATATCACAGATGCAATCCAGGAGTGGGTG
ATGAGACAGGCGTTAATACCTGTAGATGAAGATGGCCTGGAACCTCAAGTGTGTGTTATTGAGCTTGGTGGAACC
GTGGGGGACATAGAAAGCATGCCCTTTATTGAGGCCTTCCGTCAGTTCCAATTCAAGGTCAAAAGAGAGAACTTT
TGTAACATCCACGTCAGTCTAGTTCCCCAGCCAAGTTCAACAGGGGAACAGAAGACTAAACCTACCCAGAATAGT
GTTCGGGAACTTAGAGGACTTGGGCTTTCCCCAGATCTGGTTGTATGCAGGTGCTCAAATCCACTTGACACATCA
GTGAAGGAGAAAATATCAATGTTCTGCCATGTTGAGCCTGAACAAGTGATCTGTGTCCACGATGTCTCATCCATC
TACCGAGTCCCCTTGTTGTTAGAGGAGCAAGGGGTTGTAGATTATTTTCTTCGAAGACTTGACCTTCCTATTGAG
AGGCAGCCAAGAAAAATGCTGATGAAATGGAAAGAGATGGCTGACAGATATGATCGCTTGCTGGAGACCTGCTCT
ATTGCCCTTGTGGCGAAATACACCGAGTTCTCAGACTCCTATGCCTCTGTCATTAAGGCTCTGGAGCATTCTGCA
CTGGCCATCAACCACAAATTGGAAATCAAGTACATAGATTCTGCGGACTTGGAGCCCATCACCTCGCAAGAAGAG
CCCGTGCGCTACCACGAAGCTTGGCAGAAGCTCTGTAGTGCTCATGGAGTGCTGGTTCCAGGAGGATTTGGTGTT
CGAGGAACAGAAGGAAAAATCCAAGCAATTGCCTGGGCTCGGAATCAGAAAAAGCCTTTTTTGGGCGTGTGCTTA
GGGATGCAGTTGGCAGTGGTTGAATTCTCAAGAAACGTGCTGGGATGGCAAGATGCCAATTCTACAGAGTTTGAC
CCTACGACCAGTCATCCCGTGGTCGTAGACATGCCAGAACACAACCCAGGGCAGATGGGCGGAACCATGAGGCTG
GGCAAGAGGAGAACCCTGTTCCAGACCAAGAACTCAGTCATGAGGAAACTCTATGGAGACGCAGACTACTTGGAA
GAGAGGCACCGCCACCGATTTGAGGTGAATCCAGTCTGGAAAAAGTGTTTGGAAGAACAAGGCTTGAAGTTTGTT
GGCCAAGATGTTGAAGGAGAGAGAATGGAAATTGTGGAGTTAGAAGATCATCCCTTTTTTGTTGGGGTTCAGTAC
CACCCTGAGTTCCTGTCCAGGCCTATCAAGCCCTCCCCACCATACTTTGGCCTCCTCCTGGCCTCTGTGGGGCGG
CTCTCACATTACCTCCAGAAAGGCTGCAGGCTCTCACCCAGGGACACCTATAGTGACAGGAGTGGAAGCAGCTCC
CCTGACTCTGAAATCACCGAACTGAAGTTTCCATCAATAAATCATGACTGATCTTGTAGCGGATGATTCTTCAAG
AGACCCTTCAAACTTGGGTAGAGTTTACAGCTCTGACTTTACACTCGGCTTTGGAGACTTTCTTTAAATTATGTT
TTTATTAAGATTATTTTATTATGCGGAAAGGTATTTGGGAAACTTGTCACTTGCATGTCCCATCACGTGTACTGG
CTCCTCTGTGGTGTCTGCCTGTTGCGTGACACTCTCCTTGCAGTTCTTGAGTTGCGGCAGAACATCGCGATGGGA
ACCGATGGTGGGTGGGGCTGCAGATGTCCCCATCGGTCACCTTGTTTCTCAACTACCTCGCATCATTGCAGATCG
TAGCGCGTTGCCTGTCGCTTTCCCTTGGATACCTAGACCGTTATAAAGTGTGCCACATGGACTTACCGAGCATGG
AGAGAGGATTTTAGCTAGGATTTGAACACTTGGTGCTGGGAACCTCAGGGTATTGCTTGCCACTAAGCCATGAAA
CCAGAGACAAAATCTCTATACTGCCCTGAGTTGGGGGGAATTCTCAGTGCCAACTGTGGCTGGTCCTCATTCAAA
GGGACGGTCAGTTTGGTGTCAACATGAAACACCAAGATGTCTGTCTCTGAAGCGTGATTTTAAAATCCCCATGCC
TGTGCGTGCGCTTCCTATTTCTAGGGCTGGGAAACACTCCTTGCATCAAGGGGTCACTTACAGAACAAAGAATCT
TTTGGGGGAAACTTCCTCTAAAACCCTCTCATATATAGACAGCTTTGACTGGAGGGTCCATTTTTCTTCCAGGAT
GGTGTTACTGCAGTTGAAGGGCAATATGAAGTTACTTTCTTAATGTGACCTAGCAATAGGCATAGCTACGTGGCA
CTATATTCTGGCCAGACTCGATGTGTACTCTAACTTAAGAAATAAATCAGTAAGGCAG

FIGURE 833

MKYILVTGGVISGIGKGIIASSVGTILKSCGLHVTSIKIDPYINIDAGTFSPYEHGEVFVLDDGGEVDLDLGNYE
RFLDIRLTKDNNLTTGKIYQYVINKERKGDYLGKTVQVVPHITDAIQEWVMRQALIPVDEDGLEPQVCVIELGGT
VGDIESMPFIEAFRQFQFKVKRENFCNIHVSLVPQPSSTGEQKTKPTQNSVRELRGLGLSPDLVVCRCSNPLDTS
VKEKISMFCHVEPEQVICVHDVSSIYRVPLLLEEQGVVDYFLRRLDLPIERQPRKMLMKWKEMADRYDRLLETCS
IALVAKYTEFSDSYASVIKALEHSALAINHKLEIKYIDSADLEPITSQEEPVRYHEAWQKLCSAHGVLVPGGFGV
RGTEGKIQAIAWARNQKKPFLGVCLGMQLAVVEFSRNVLGWQDANSTEFDPTTSHPVVVDMPEHNPGQMGGTMRL
GKRRTLFQTKNSVMRKLYGDADYLEERHRHRFEVNPVWKKCLEEQGLKFVGQDVEGERMEIVELEDHPFFVGVQY
HPEFLSRPIKPSPPYFGLLLASVGRLSHYLQKGCRLSPRDTYSDRSGSSSPDSEITELKFPSINHD

FIGURE 834A

CGGAGGAGCGCGCGGTTGCCGGGCGGGACGGGAACCGGGTCTGCGCGCGAGCCGGGCGGTGGGCGCGGACAGGGC
CGAGGGCGCCCGGGAGCCGTGTCAGGCGGCGGCGAGGAGCGGGCGCGCCGGGCGCGGGGAGCCGTCGGCGGCCGC
TCGCTGCGGGGACACCCCGGTGAATGAGCTCTCGCCGCCAGGCGCACGGCGTAGGGGAGCCTCGCAGTGCGGCGG
CGTGCGGCGGCGGCTCGGGGGGCGAGGCGGGCCGCCTGTTCCCGGGGAAGGAGGCGCGGGCGTCTGAGCGAGGCC
GGGCGCGGCGGCCTTCTCTCACGCGCCCCCCGAGCCAGCGCCCGCCTCCCGCGCCCGCCTCTCTTCTCCCGTCGG
CCCAGACTATCCGCTCCCACCGCGCCCCCCGGCCCACCTGGTGGCCCCGGCCCTGGCCGCCGCCCCCGCGGCGGT
TCCCGGAGCTCGTCCCGGACGCGCGCCCGGGCGGCGGGGGCTCGGCGGCCACCGCTGCCTCGGGGGAGCGAGGGC
GGGAGGGTGTGTGTGCGCGCTGTGAGCAGGGGGTGCCGGCGGGGCTGCAGCGGAGGCACTTTGGAAGAATGACTC
TGGAGTCCATCATGGCGTGCTGCCTGAGCGAGGAGGCCAAGGAAGCCCGGCGGATCAACGACGAGATCGAGCGGC
AGCTCCGCAGGGACAAGCGGGACGCCCGCCGGGAGCTCAAGCTGCTGCTGCTCGGGACAGGAGAGAGTGGCAAGA
GTACGTTTATCAAGCAGATGAGAATCATCCATGGGTCAGGATACTCTGATGAAGATAAAAGGGGCTTCACCAAGC
TGGTGTATCAGAACATCTTCACGGCCATGCAGGCCATGATCAGAGCCATGGACACACTCAAGATCCCATACAAGT
ATGAGCACAATAAGGCTCATGCACAATTAGTTCGAGAAGTTGATGTGGAGAAGGTGTCTGCTTTTGAGAATCCAT
ATGTAGATGCAATAAAGAGTTTATGGAATGATCCTGGAATCCAGGAATGCTATGATAGACGACGAGAATATCAAT
TATCTGACTCTACCAAATACTATCTTAATGACTTGGACCGCGTAGCTGACCCTGCCTACCTGCCTACGCAACAAG
ATGTGCTTAGAGTTCGAGTCCCCACCACAGGGATCATCGAATACCCCTTTGACTTACAAAGTGTCATTTTCAGAA
TGGTCGATGTAGGGGGCCAAAGGTCAGAGAGAAGAAAATGGATACACTGCTTTGAAAATGTCACCTCTATCATGT
TTCTAGTAGCGCTTAGTGAATATGATCAAGTTCTCGTGGAGTCAGACAATGAGAACCGAATGGAGGAAAGCAAGG
CTCTCTTTAGAACAATTATCACATACCCCTGGTTCCAGAACTCCTCGGTTATTCTGTTCTTAAACAAGAAAGATC
TTCTAGAGGAGAAAATCATGTATTCCCATCTAGTCGACTACTTCCCAGAATATGATGGACCCCAGAGAGATGCCC
AGGCAGCCCGAGAATTCATTCTGAAGATGTTCGTGGACCTGAACCCAGACAGTGACAAAATTATCTACTCCCACT
TCACGTGCGCCACAGACACCGAGAATATCCGCTTTGTCTTTGCTGCCGTCAAGGACACCATCCTCCAGTTGAACC
TGAAGGAGTACAATCTGGTCTAATTGTGCCTCCTAGACACCCGCCCTGCCCTTCCCTGGTGGGCTATTGAAGATA
CACAAGAGGGACTGTATTTCTGTGGAAAACAATTTGCATAATACTAATTTATTGCCGTCCTGGACTCTGTGTGAG
CGTGTCCACAGAGTTTGTAGTAAATATTATGATTTTATTTAAACTATTCAGAGGAAAAACAGAGGATGCTGAAGT
ACAGTCCCAGCACATTTCCTCTCTATCTTTTTTTTAGGCAAAACCTTGTGACTCAGTGTATTTTAAATTCTCAGT
CATGCACTCACAAAGATAAGACTTGTTTCTTTCTGTCTCTCTCTCTTTTTCTTTTCTATGGAGCAAAACAAAGCT
GATTTCCCTTTTTTCTTCCCCCGCTAATTCATACCTCCCTCCTGATGTTTTTCCCAGGTTACAATGGCCTTTATC
CTAGTTCCATTCTTGGTCAAGTTTTTCTCTCAAATGATACAGTCAGGACACACCGTTCGATTTAAGCCATCATCA
GCTTAATTTAAGTTTGTAGTTTTTGCTGAAGGATTATATGTATTAATACTTACGGTTTTAAATGTGTTGCTTTGG
ATACACACATAGTTTCTTTTTTAATAGAATATACTGTCTTGTCTCACTTTGGACTGGGACAGTGGATGCCCATCT
AAAAGTTAAGTGTCATTTCTTTTAGATGTTTACCTTCAGCCATAGCTTGATTGCTCAGAGAAATATGCAGAAGGC
AGGATCAAAGACACACAGGAGTCCTTTCTTTTGAAATGCCACGTGCCATTGTCTTTCCTCCCTTCTTTGCTTCTT
TTTCTTACCCTCTCTTTCAATTGCAGATGCCAAAAAAGATGCCAACAGACACTACATTACCCTAATGGCTGCTAC
CCAGAACCTTTTTATAGGTTGTTCTTAATTTTTTTGTTGTTGTTGTTCAAGCTTTTCCTTTCTTTTTTTTCTTAG
TGTTTGGGCCACGATTTTAAAATGACTTTTATTATGGGTATGTGTTGCCAAAGCTGGCTTTTTGTCAAATAAAAT
GAATACGAACTTAAAAAATAAAAGCTGGTATCTTAAAATGTAAGAGAGTAAGACTGTGAAGCCTAAAATGACTGG
CTGAGAATGAACCAGAAATGCCATTTGCCAAACAGTTGTAACTAGAAATTTGATTCTCACAGTCCATTCTTTTCT
TTGTCCTTAAGATGACATTGTTAGTGTTCACGTCCCATGTTCAGTGTCCAAACCGGCAATGTAAAAAGTATCCTG
TGTGGCTTAACAGGAAATCTGTTTATGTCTCTTTATTTGAAACCAGTTTTACTCTCAGTGGTTCTTTAAGTTCAA
TGAAGTCTGCCAGGAACATTGGTTGGTAGTATTATTCCGACACCTTTAATTTCCAAAATCTGAAGTTCCTGCTAG
TTTACCACCTTCATGATCTTCTTGAACTGGTAACTGATTAGGTTGAACTTATGGAAGATTTGTGGACTTAACTCA
AAAGTAACCTCTCAGTGTTCTATAGAACATGTATTTGTGTAACTGAACCTACCAGGAGAAATGTTTGGAATTCTA
TATGTGCAATTTTTCAACAAATGCAAAAAAAAATACAGCACATGTATTGACAAGCTTCTGTCAAGCAGCTTGAGTT
GAAATTTGATTTAAGAAAATAAATCATGATTGTTCAAAGCTGCTGGGACGTTAGAATTAGGCCATGATACTGGTC
TCATTTTAACTACAGTGGTATTTGGCACTAGTGTAAACTTCCATATAAATCACTCTTTTGGAACAACAAAGGGGG
AGGGAGAAAAATCACGGCCTGTTAAATGAGTACCAAAGCCGCCCAACAGTAATGAGATGTTCTCATCCTTGATTC
TCCCAGCCTCAAACAACACAGCTTACTTTTTTTTTCCCTTGCTCAGAAAGTACCTGTAATTTAACAAACAGACTG

FIGURE 834B

CCTGTAGGTATAGTGCAATTACAAATGCTCTAATCATTGTACATACATCTCTCTTGATATTGCAGCATCCATACT
GGCTTTGTAATCATTAATTTTTTGGCAGATTGAATGTGCTGTATTGATATGTATCTATGTAATTGTATTGTATGT
CTATAGCTAATTCACGTTTTGAATAATGTTATTTTATTTACTTTTTTAAGAGAGGAGAATGTAAATTTGTCAGTT
TATTTCTGACTAGGGATATTTTCTTTCCATTTAGAAAAGAAGGAAAAAAAAAAAAACCTTACTGTCATACAGAGCG
GTACTAGCGTCGTGCTGTATAAAATCATTTGCACATTCCTGAGTAGAGGTATACTGATTATAAGACCCAAAGGTA
ATTTCATAGCAAAATACATAAAATCAGTCGGAGCTTTTATACAAACATGGAAACCAACTTTGTAGAACTTTTGCC
ATTTGATCTAGGATTGGAATATGAGCTTTTATACAATTCATATTCTTATTTGGCAAATGCACAGTTTAGTATTAC
CTCTCTGATGGCCTTTACTAGAAAGGCAGTTTTAGAAGCTATTGTGATCCACTAAGGAAATGTTTTAACAGCTAG
AGACCACTGCTTGCCTGAAAGGGCGTTCTTAAATTTGGTGCAGCNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNCAACATTTGAAGGCCTACAGTGTGTATAGAGAAAACCTCATCACAAGATCATAAGTGTTACAGTTTTAGGG
AATCAAGATATTCTATTTAATAGAGCTATAGTAAATGTAGTCAATTAAACCTGATCTCAAAGCTTGAAGAAGCTG
AGCAAAACAGGGAAAGATTGTTATATTTGTCTTTATGAAATTGGGATGGAATTTGCTATGCAGAATTGAGGTTTG
TGGCTTTGCTGTTCCTGTAGGGTGCATGACAAGATCCCTTCTCTTGAGAAAGGAAAAAATTGATCACCCTAGCAG
CAGTGATGCATAGAAACCTAATTTTAGCCACACCAGTCAATCGAAGCTAAAGGATTTTCTTTTTTGTTTCTTCGG
GGTTTTATTGAAGGGGCTAGGGGCGGGACGGGATTCTTTTCAGTTTTGTATAAAAACAAAGTTTACTCATGCTTT
ATATTATATTGTGATTGCAAGCGTTATAAGCGTGTGCCACTGGCCTCCTATTGTTGATGCTTAGGTAATGGAGGC
CTGTGGTGAGTTTTATGGTGACTTGGGCATGTCTTATTCAAAAACAAAAACATAAAACACAGAAACCTTTCTTCA
GCATACCAAGGCAAGCAGCCATTTCATGACTCACTTAACACATTGCAGTGTACCAGTTTACAGATGATTTTTCCC
TTTTTGCGTGACATGGCAGTTCTAACCCCCAGAGAATTCCTTATTTGTAAATTGGAAGTTTCTACTATGCCTTAC
AGAGCTTAAATTCAGAAGTTTGTGCCTCATATCTGAAACAAAGGGAAATAACACACCCATTCAAAAGTAAATAAA
TCTCCTAGAAGTTTTTGTTTTTAACATTTCCATATAAAGAGCTCTGTTGAATGTCATGAATAGACTGGAAAAAAA
AATTTTAAGAACCTGCATATGTTGTTTACTAGCAGATGACAACTACAAAAGGAATCTGAAGAACACGTAAAACTT
GTATTTTTTTTTTTTTGGTAGATTAACTAGCAGGCCTATTTTAAAAAGGTAATTCAGCTAAAGGGCAATTTACTT
TTTTGTACTTCAGACTATCTTGATTGTCAAAGTGTACGAACTGTAATTTTAAAATTTATACTGCCACATGATTGT
AAATTTTAGTTGTCTTAAGTTAGGAATTGGTGAAAAGCTATTTATGCTGGATTTGGGTCAAAATGACTTATTTGC
AAAAAAATAAATAATGGGAAGAAAGGGCTGTATAATGAAATACTGCAAGACTCACATATTGGTTGGAAATTTCCC
TCAAATCACCTACCGATTACCCTTGATTTCCCTTTGTTTTCAGTTTCTCAAAACGAATGAAATGAAATATAGCAG
AATGTTAACCCATATAAAAATAAAGTGTACCCAAATATTGTAATGTATATTGCTGCTCTTCTTCAAATTAAATAA
GGGTTTAAAACCACTTAATTGGTAATCAACATCTCAATTGATACAAATAAGGTGTGCTTGGTATACATTAATATT
TTCTTCCAAAGATATATCTTTGGTTAGAAACACAAAAAAATAAAACTAGTAATATTGTATGTTTATCTATCTCTA
CATATTTCCAGCATATGTAGCGTTAATAGATCTGTCCTGGTAACTGTGTCTTTGGGATTTCATTTTGGTTCCATC
AAATTAGGAAAAGAAATGGCTTAGTTGTATATGATTAGCTAGAGATTTTTGGAGCCAGACACCTGCTGTTTAGTA
GATAACTTAGTACAGACCCTAAACTTGTCATTTGTTTTTCTCACAGAATAGCCATTTCCTGCTGTCTTCCCAATG
ATCACTGCCCTTTCAATAACACTCTTGCCTCTAGAATCATATGTTCAAAGTATGAATACACACCTAGCACATAGT
AGGTGCTCAAATATTAATTTCCTCCTTGCCTTCCTTATCTACCCTGTGTCCTCCATTTCCCCGTATGATTCCAAC
CCAATATAGCAAATGACATTTACATGTTATGAAAACATCTATTGGGTAAAATCAGATCTTGGATAAAGAAATTCT
GACTTTTATATAAGCTTTTGGTAGACAGAAAAAACAGAAAGGTATTCGTTGGTAGAACATTTTTAAGTTCAGGAA
AGAAAGCTGGAATAATACTACGTAACTTTGTCCAGGTTACTTTGACTGAAACACGTTTTTGGTGGATTTCTTTTC
CTCAAAGAACTCTCTAAATGCAACTCCTTGCTGGATTCCTCACCCATCATCCTGTTGGAAACCCTTACTAGACCT
ATGTATTTAGGGAGTTTTGTCAGAAAACATTTTTAACTTGCAGTATTTAAAAGAATATTTACTGTTCCTAAAATG
TCATTCAAATGCATGTACTGTCTATTGTTTGGGGATGGGAACTAGTTTTGCAAAAAACACCTAATGTTGTATAAT
AATGCCCCAATGATCTTGCTGGTTAAAAATACAGTATTTTTGGCCATAATTTTGTACTATAGTATTCTTCATTGT
TGAGTTTTGCTTCCATTAAAGTTGCCCGAGCCCCTCTCAGAATGTTTTGTATTAGTAGGAGTACTGAAATACATC
TTTCCTTCCTTAACACACCTTGTGCATATTGCATTTTCCAAAATAAACAAGTTTAATGGTTTC

FIGURE 835

MSSRRQAHGVGEPRSAAACGGGSGGEAGRLFPGKEARASERGRARRPSLTRPPSQRPPPAPASLLPSAQTIRSHR
APRPTWWPRPWPPPPRRFPELVPDARPGGGGSAATAASGERGREGVCARCEQGVPAGLQRRHFGRMTLESIMACC
LSEEAKEARRINDEIERQLRRDKRDARRELKLLLLGTGESGKSTFIKQMRIIHGSGYSDEDKRGFTKLVYQNIFT
AMQAMIRAMDTLKIPYKYEHNKAHAQLVREVDVEKVSAFENPYVDAIKSLWNDPGIQECYDRRREYQLSDSTKYY
LNDLDRVADPAYLPTQQDVLRVRVPTTGIIEYPFDLQSVIFRMVDVGGQRSERRKWIHCFENVTSIMFLVALSEY
DQVLVESDNENRMEESKALFRTIITYPWFQNSSVILFLNKKDLLEEKIMYSHLVDYFPEYDGPQRDAQAAREFIL
KMFVDLNPDSDKIIYSHFTCATDTENIRFVFAAVKDTILQLNLKEYNLV

FIGURE 836

CCTGGACTAGCCGGGTTGTATTTGGAAACGCGGAGTGAGTTTTTCCGTGCTGTGTAGGGGCTAACAATGGACACC
CAGAAGGACGTTCAACCTCCAAAGCAGCAACCAATGATATATATCTGTGGAGAGTGTCACACAGAAAATGAAATA
AAATCTAGGGATCCAATCAGATGCAGAGAATGTGGATACAGAATAATGTACAAGAAAAGGACTAAAAGATTGGTC
GTTTTTGATGCTCGATGAATGCTGGGAATTCAGAGGAATGTCTTCACTTATACTTGGATTTGCTCTCTTCCCATT
TCTGATTGTTGTATAGCTTTCGATTTTGCTTACAGTAGTTCCCCCTTATCTTCGGGAGATACATTCCAAGGCCCC
CAGTGAACTCCTGAAACCTCAAACAGTACCAAACCTTTATACACTGTTTTTTCCATATATATATACCTATGATAA
AGTATAATGTATAAATTAAGCATAGCAAGAGATTAATAATAATGTAATAGAACAATGATAACATACTATAATAAA
AGTTATGTGAATGTG

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FIGURE 837

MDTQKDVQPPKQQPMIYICGECHTENEIKSRDPIRCRECGYRIMYKKRTKRLVVFDAR

FIGURE 838

GCGCCCCAGTCGACGCTGAGCTCCTCTGCTACTCAGAGTTGCAACCTCAGCCTCGCTATGGCTCCCAGCAGCCCC
CGGCCCGCGCTGCCCGCACTCCTGGTCCTGCTCGGGGCTCTGTTCCCAGGACCTGGCAATGCCCAGACATCTGTG
TCCCCCTCAAAAGTCATCCTGCCCCGGGGAGGCTCCGTGCTGGTGACATGCAGCACCTCCTGTGACCAGCCCAAG
TTGTTGGGCATAGAGACCCCGTTGCCTAAAAAGGAGTTGCTCCTGCCTGGGAACAACCGGAAGGTGTATGAACTG
AGCAATGTGCAAGAAGATAGCCAACCAATGTGCTATTCAAACTGCCCTGATGGGCAGTCAACAGCTAAAACCTTC
CTCACCGTGTACTGGACTCCAGAACGGGTGGAACTGGCACCCCTCCCCTCTTGGCAGCCAGTGGGCAAGAACCTT
ACCCTACGCTGCCAGGTGGAGGGTGGGGCACCCCGGGCCAACCTCACCGTGGTGCTGCTCCGTGGGGAGAAGGAG
CTGAAACGGGAGCCAGCTGTGGGGGAGCCCGCTGAGGTCACGACCACGGTGCTGGTGAGGAGAGATCACCATGGA
GCCAATTTCTCGTGCCGCACTGAACTGGACCTGCGGCCCCAAGGGCTGGAGCTGTTTGAGAACACCTCGGCCCCC
TACCAGCTCCAGACCTTTGTCCTGCCAGCGACTCCCCCACAACTTGTCAGCCCCCGGGTCCTAGAGGTGGACACG
CAGGGGACCGTGGTCTGTTCCCTGGACGGGCTGTTCCCAGTCTCGGAGGCCCAGGTCCACCTGGCACTGGGGGAC
CAGAGGTTGAACCCCACAGTCACCTATGGCAACGACTCCTTCTCGGCCAAGGCCTCAGTCAGTGTGACCGCAGAG
GACGAGGGCACCCAGCGGCTGACGTGTGCAGTAATACTGGGGAACCAGAGCCAGGAGACACTGCAGACAGTGACC
ATCTACAGCTTTCCGGCGCCCAACGTGATTCTGACGAAGCCAGAGGTCTCAGAAGGGACCGAGGTGACAGTGAAG
TGTGAGGCCCACCCTAGAGCCAAGGTGACGCTGAATGGGGTTCCAGCCCAGCCACTGGGCCCGAGGGCCCAGCTC
CTGCTGAAGGCCACCCCAGAGGACAACGGGCGCAGCTTCTCCTGCTCTGCAACCCTGGAGGTGGCCGGCCAGCTT
ATACACAAGAACCAGACCCGGGAGCTTCGTGTCCTGTATGGCCCCCGACTGGACGAGAGGGATTGTCCGGGAAAC
TGGACGTGGCCAGAAAATTCCCAGCAGACTCCAATGTGCCAGGCTTGGGGGAACCCATTGCCCGAGCTCAAGTGT
CTAAAGGATGGCACTTTCCCACTGCCCATCGGGGAATCAGTGACTGTCACTCGAGATCTTGAGGGCACCTACCTC
TGTCGGGCCAGGAGCACTCAAGGGGAGGTCACCCGCGAGGTGACCGTGAATGTGCTCTCCCCCCGGTATGAGATT
GTCATCATCACTGTGGTAGCAGCCGCAGTCATAATGGGCACTGCAGGCCTCAGCACGTACCTCTATAACCGCCAG
CGGAAGATCAAGAAATACAGACTACAACAGGCCCAAAAAGGGACCCCCATGAAACCGAACACACAAGCCACGCCT
CCCTGAACCTATCCCGGGACAGGGCCTCTTCCTCGGCCTTCCCATATTGGTGGCAGTGGTGCCACACTGAACAGA
GTGGAAGACATATGCCATGCAGCTACACCTACCGGCCCTGGGACGCCGGAGGACAGGGCATTGTCCTCAGTCAGA
TACAACAGCATTTGGGGCCATGGTACCTGCACACCTAAAACACTAGGCCACGCATCTGATCTGTAGTCACATGAC
TAAGCCAAGAGGAAGGAGCAAGACTCAAGACATGATTGATGGATGTTAAAGTCTAGCCTGATGAGAGGGGAAGTG
GTGGGGGAGACATAGCCCCACCATGAGGACATACAACTGGGAAATACTGAAACTTGCTGCCTATTGGGTATGCTG
AGGCCCACAGACTTACAGAAGAAGTGGCCCTCCATAGACATGTGTAGCATCAAAACACAAAGGCCCACACTTCCT
GACGGATGCCAGCTTGGGCACTGCTGTCTACTGACCCCAACCCTTGATGATATGTATTTATTCATTTGTTATTTT
ACCAGCTATTTATTGAGTGTCTTTTATGTAGGCTAAATGAACATAGGTCTCTGGCCTCACGGAGCTCCCAGTCCA
TGTCACATTCAAGGTCACCAGGTACAGTTGTACAGGTTGTACACTGCAGGAGAGTGCCTGGCAAAAAGATCAAAT
GGGGCTGGGACTTCTCATTGGCCAACCTGCCTTTCCCCAGAAGGAGTGATTTTTCTATCGGCACAAAAGCACTAT
ATGGACTGGTAATGGTTCACAGGTTCAGAGATTACCCAGTGAGGCCTTATTCCTCCCTTCCCCCCAAAACTGACA
CCTTTGTTAGCCACCTCCCCACCCACATACATTTCTGCCAGTGTTCACAATGACACTCAGCGGTCATGTCTGGAC
ATGAGTGCCCAGGGAATATGCCCAAGCTATGCCTTGTCCTCTTGTCCTGTTTGCATTTCACTGGGAGCTTGCACT
ATTGCAGCTCCAGTTTCCTGCAGTGATCAGGGTCCTGCAAGCAGTGGGGAAGGGGGCCAAGGTATTGGAGGACTC
CCTCCCAGCTTTGGAAGGGTCATCCGCGTGTGTGTGTGTGTGTATGTGTAGACAAGCTCTCGCTCTGTCACCCAG
GCTGGAGTGCAGTGGTGCAATCATGGTTCACTGCAGTCTTGACCTTTTGGGCTCAAGTGATCCTCCCACCTCAGC
CTCCTGAGTAGCTGGGACCATAGGCTCACAACACCACACCTGGCAAATTTGATTTTTTTTTTTTTTTTCAGAGAC
GGGGTCTCGCAACATTGCCCAGACTTCCTTTGTGTTAGTTAATAAAGCTTTCTCAACTGCC

FIGURE 839

MAPSSPRPALPALLVLLGALFPGPGNAQTSVSPSKVILPRGGSVLVTCSTSCDQPKLLGIETPLPKKELLLPGNN
RKVYELSNVQEDSQPMCYSNCPDGQSTAKTFLTVYWTPERVELAPLPSWQPVGKNLTLRCQVEGGAPRANLTVVL
LRGEKELKREPAVGEPAEVTTTVLVRRDHHGANFSCRTELDLRPQGLELFENTSAPYQLQTFVLPATPPQLVSPR
VLEVDTQGTVVCSLDGLFPVSEAQVHLALGDQRLNPTVTYGNDSFSAKASVSVTAEDEGTQRLTCAVILGNQSQE
TLQTVTIYSFPAPNVILTKPEVSEGTEVTVKCEAHPRAKVTLNGVPAQPLGPRAQLLLKATPEDNGRSFSCSATL
EVAGQLIHKNQTRELRVLYGPRLDERDCPGNWTWPENSQQTPMCQAWGNPLPELKCLKDGTFPLPIGESVTVTRD
LEGTYLCRARSTQGEVTREVTVNVLSPRYEIVIITVVAAAVIMGTAGLSTYLYNRQRKIKKYRLQQAQKGTPMKP
NTQATPP

FIGURE 840

GCGCCCCAGTCGACGCTGAGCTCCTCTGCTACTCAGAGTTGCAACCTCAGCCTCGCTATGGCTCCCAGCAGCCCC
CGGCCCGCGCTGCCCGCACTCCTGGTCCTGCTCGGGGCTCTGTTCCCAGGACCTGGCAATGCCCAGACATCTGTG
TCCCCCTCAAAAGTCATCCTGCCCCGGGGAGGCTCCGTGCTGGTGACATGCAGCACCTCCTGTGACCAGCCCAAG
TTGTTGGGCATAGAGACCCCGTTGCCTAAAAAGGAGTTGCTCCTGCCTGGGAACAACCGGAAGGTGTATGAACTG
AGCAATGTGCAAGAAGATAGCCAACCAATGTGCTATTCAAACTGCCCTGATGGGCAGTCAACAGCTAAAACCTTC
CTCACCGTGTACTGGACTCCAGAACGGGTGGAACTGGCACCCCTCCCCTCTTGGCAGCCAGTGGGCAAGAACCTT
ACCCTACGCTGCCAGGTGGAGGGTGGGGCACCCCGGGCCAACCTCACCGTGGTGCTGCTCCGTGGGGAGAAGGAG
CTGAAACGGGAGCCAGCTGTGGGGGAGCCCGCTGAGGTCACGACCACGGTGCTGGTGAGGAGAGATCACCATGGA
GCCAATTTCTCGTGCCGCACTGAACTGGACCTGCGGCCCCAAGGGCTGGAGCTGTTTGAGAACACCTCGGCCCCC
TACCAGCTCCAGACCTTTGTCCTGCCAGCGACTCCCCCACAACTTGTCAGCCCCCGGGTCCTAGAGGTGGACACG
CAGGGGACCGTGGTCTGTTCCCTGGACGGGCTGTTCCCAGTCTCGGAGGCCCAGGTCCACCTGGCACTGGGGGAC
CAGAGGTTGAACCCCACAGTCACCTATGGCAACGACTCCTTCTCGGCCAAGGCCTCAGTCAGTGTGACCGCAGAG
GACGAGGGCACCCAGCGGCTGACGTGTGCAGTAATACTGGGGAACCAGAGCCAGGAGACACTGCAGACAGTGACC
ATCTACAGCTTTCCGGCGCCCAACGTGATTCTGACGAAGCCAGAGGTCTCAGAAGGGACCGAGGTGACAGTGAAG
TGTGAGGCCCACCCTAGAGCCAAGGTGACGCTGAATGGGGTTCCAGCCCAGCCACTGGGCCCGAGGGCCCAGCTC
CTGCTGAAGGCCACCCCAGAGGACAACGGGCGCAGCTTCTCCTGCTCTGCAACCCTGGAGGTGGCCGGCCAGCTT
ATACACAAGAACCAGACCCGGGAGCTTCGTGTCCTGTATGGCCCCCGACTGGACGAGAGGGATTGTCCGGGAAAC
TGGACGTGGCCAGAAAATTCCCAGCAGACTCCAATGTGCCAGGCTTGGGGGAACCCATTGCCCGAGCTCAAGTGT
CTAAAGGATGGCACTTTCCCACTGCCCATCGGGGAATCAGTGACTGTCACTCGAGATCTTGAGGGCACCTACCTC
TGTCGGGCCAGGAGCACTCAAGGGGAGGTCACCCGCGAGGTGACCGTGAATGTGCTCTCCCCCCGGTATGAGATT
GTCATCATCACTGTGGTAGCAGCCGCAGTCATAATGGGCACTGCAGGCCTCAGCACGTACCTCTATAACCGCCAG
CGGAAGATCAAGAAATACAGACTACAACAGGCCCAAAAAGGGACCCCCATGAAACCGAACACACAAGCCACGCCT
CCCTGAACCTATCCCGGGACAGGGCCTCTTCCTCGGCCTTCCCATATTGGTGGCAGTGGTGCCACACTGAACAGA
GTGGAAGACATATGCCATGCAGCTACACCTACCGGCCCTGGGACGCCGGAGGACAGGGCATTGTCCTCAGTCAGA
TACAACAGCATTTGGGGCCATGGTACCTGCACACCTAAAACACTAGGCCACGCATCTGATCTGTAGTCACATGAC
TAAGCCAAGAGGAAGGAGCAAGACTCAAGACATGATTGATGGATGTTAAAGTCTAGCCTGATGAGAGGGGAAGTG
GTGGGGGAGACATAGCCCCACCATGAGGACATACAACTGGGAAATACTGAAACTTGCTGCCTATTGGGTATGCTG
AGGCCCACAGACTTACAGAAGAAGTGGCCCTCCATAGACATGTGTAGCATCAAAACACAAAGGCCCACACTTCCT
GACGGATGCCAGCTTGGGCACTGCTGTCTACTGACCCCAACCCTTGATGATATGTATTTATTCATTTGTTATTTT
ACCAGCTATTTATTGAGTGTCTTTTATGTAGGCTAAATGAACATAGGTCTCTGGCCTCACGGAGCTCCCAGTCCA
TGTCACATTCAAGGTCACCAGGTACAGTTGTACAGGTTGTACACTGCAGGAGAGTGCCTGGCAAAAAGATCAAAT
GGGGCTGGGACTTCTCATTGGCCAACCTGCCTTTCCCCAGAAGGAGTGATTTTTCTATCGGCACAAAAGCACTAT
ATGGACTGGTAATGGTTCACAGGTTCAGAGATTACCCAGTGAGGCCTTATTCCTCCCTTCCCCCCAAAACTGACA
CCTTTGTTAGCCACCTCCCCACCCACATACATTTCTGCCAGTGTTCACAATGACACTCAGCGGTCATGTCTGGAC
ATGAGTGCCCAGGGAATATGCCCAAGCTATGCCTTGTCCTCTTGTCCTGTTTGCATTTCACTGGGAGCTTGCACT
ATTGCAGCTCCAGTTTCCTGCAGTGATCAGGGTCCTGCAAGCAGTGGGGAAGGGGGCCAAGGTATTGGAGGACTC
CCTCCCAGCTTTGGAAGGGTCATCCGCGTGTGTGTGTGTGTGTATGTGTAGACAAGCTCTCGCTCTGTCACCCAG
GCTGGAGTGCAGTGGTGCAATCATGGTTCACTGCAGTCTTGACCTTTTGGGCTCAAGTGATCCTCCCACCTCAGC
CTCCTGAGTAGCTGGGACCATAGGCTCACAACACCACACCTGGCAAATTTGATTTTTTTTTTTTTTTTCAGAGAC
GGGGTCTCGCAACATTGCCCAGACTTCCTTTGTGTTAGTTAATAAAGCTTTCTCAACTGCC

FIGURE 841

MAPSSPRPALPALLVLLGALFPGPGNAQTSVSPSKVILPRGGSVLVTCSTSCDQPKLLGIETPLPKKELLLPGNN
RKVYELSNVQEDSQPMCYSNCPDGQSTAKTFLTVYWTPERVELAPLPSWQPVGKNLTLRCQVEGGAPRANLTVVL
LRGEKELKREPAVGEPAEVTTTVLVRRDHHGANFSCRTELDLRPQGLELFENTSAPYQLQTFVLPATPPQLVSPR
VLEVDTQGTVVCSLDGLFPVSEAQVHLALGDQRLNPTVTYGNDSFSAKASVSVTAEDEGTQRLTCAVILGNQSQE
TLQTVTIYSFPAPNVILTKPEVSEGTEVTVKCEAHPRAKVTLNGVPAQPLGPRAQLLLKATPEDNGRSFSCSATL
EVAGQLIHKNQTRELRVLYGPRLDERDCPGNWTWPENSQQTPMCQAWGNPLPELKCLKDGTFPLPIGESVTVTRD
LEGTYLCRARSTQGEVTREVTVNVLSPRYEIVIITVVAAAVIMGTAGLSTYLYNRQRKIKKYRLQQAQKGTPMKP
NTQATPP

FIGURE 842

GGGACTCGGCGGAGGATGGCTTGCTCTCAATTTTGCGCAAGTTGAAAAGTGCACCAGACCAGGAGGTGAGAATA
CTTCTCCTGGGCTTGGATAATGCTGGCAAGACCACTCTTCTGAAGCAGCTTGCATCTGAAGACATCAGCCACATC
ACACCTACACAGGGTTTCAACATCAAAAGTGTACAATCACAAGGTTTTAAACTGAATGTATGGGACATTGGTGGA
CAGAGGAAAATCAGACCATACTGGAAGAATTATTTTGAAAATACCGATATTCTTATATATGTAATCGACAGTGCA
GACAGAAAAAGATTTGAAGAGACGGGTCAGGAACTAGCGGAATTACTGGAGGAAGAAAAACTAAGTTGTGTGCCA
GTGCTCATCTTTGCTAATAAGCAGGATTTGCTCACAGCAGCCCCTGCCTCTGAAATTGCAGAAGGACTGAACCTG
CATACCATCCGCGACCGAGTCTGGCAGATCCAGTCTTGCTCAGCTCTCACAGGAGAGGGCGTTCAGGATGGCATG
AACTGGGTCTGCAAAAATGTCAATGCAAAGAAGAAATAAAATCTAGACGAATGGAGATGCAGGAGCTGCGGGAGC
CGAATTCGGGCCTTAAAAACACTAATTTGCTGCTTTCTGACCAAATGTTTTTCATCTGTGTACACTCCAGCTGTT
TGAAGAGAGGGAACAACACGGTTTAGAAAGAATCCCCATTCCAGCAGTAGATTTAACTGATCTCTGAGGTTCAGT
ATCATTTTTCAAATAAAGGAATTATATTATTTCCTCTGCATAATTGAAATAGTATTAAATGTCTAAAGCACATGA
TTAGAAAATGAGATCTTTTAAATGAGCAAGAGATTGCATTGCAGTTTAGACAATTCCAGTGGGCTTTTTTTTTCG

FIGURE 843

MGLLSILRKLKSAPDQEVRILLLGLDNAGKTTLLKQLASEDISHITPTQGFNIKSVQSQGFKLNVWDIGGQRKIR
PYWKNYFENTDILIYVIDSADRKRFEETGQELAELLEEEKLSCVPVLIFANKQDLLTAAPASEIAEGLNLHTIRD
RVWQIQSCSALTGEGVQDGMNWVCKNVNAKKK

FIGURE 844A

TGCCTTGACCAGGACTTGGGACTTTGCGAAAGGATCGCGGGGCCCGGAGAGGTGTTGGAGAGCACAATGGCTGAA
CAAGTCCTTCCTCAGGCTTTGTATTTGAGCAATATGCGGAAAGCTGTGAAGATACGGGAGAGAACTCCAGAAGAC
ATTTTTAAACCTACTAATGGGATCATTCATCATTTTAAAACCATGCACCGATACACACTGGAAATGTTCAGAACT
TGCCAGTTTTGTCCTCAGTTTCGGGAGATCATCCACAAAGCCCTCATCGACAGAAACATCCAGGCCACCCTGGAA
AGCCAGAAGAAACTCAACTGGTGTCGAGAAGTCCGGAAGCTTGTGGCGCTGAAAACGAACGGTGACGGCAATTGC
CTCATGCATGCCACTTCTCAGTACATGTGGGGCGTTCAGGACACAGACTTGGTACTGAGGAAGGCGCTGTTCAGC
ACGCTCAAGGAAACAGACACACGCAACTTTAAATTCCGCTGGCAACTGGAGTCTCTCAAATCTCAGGAATTTGTT
GAAACGGGGCTTTGCTATGATACTCGGAACTGGAATGATGAATGGGACAATCTTATCAAAATGGCTTCCACAGAC
ACACCCATGGCCCGAAGTGGACTTCAGTACAACTCACTGGAAGAAATACACATATTTGTCCTTTGCAACATCCTC
AGAAGGCCAATCATTGTCATTTCAGACAAAATGCTAAGAAGTTTGGAATCAGGTTCCAATTTCGCCCCTTTGAAA
GTGGGTGGAATTTACTTGCCTCTCCACTGGCCTGCCCAGGAATGCTACAGATACCCCATTGTTCTCGGCTATGAC
AGCCATCATTTTGTACCCTTGGTGACCCTGAAGGACAGTGGGCCTGAAATCCGAGCTGTTCCACTTGTTAACAGA
GACCGGGGAAGATTTGAAGACTTAAAAGTTCACTTTTTGACAGATCCTGAAAATGAGATGAAGGAGAAGCTCTTA
AAAGAGTACTTAATGGTGATAGAAATCCCCGTCCAAGGCTGGGACCATGGCACAACTCATCTCATCAATGCCGCA
AAGTTGGATGAAGCTAACTTACCAAAAGAAATCAATCTGGTAGATGATTACTTTGAACTTGTTCAGCATGAGTAC
AAGAAATGGCAGGAAAACAGCGAGCAGGGGAGGAGAGAGGGGCACGCCCAGAATCCCATGGAACCTTCCGTGCCC
CAGCTTTCTCTCATGGATGTAAAATGTGAAACGCCCAACTGCCCCTTCTTCATGTCTGTGAACACCCAGCCTTTA
TGCCATGAGTGCTCAGAGAGGCGGCAAAAGAATCAAAACAAACTCCCAAAGCTGAACTCCAAGCCGGGCCCTGAG
GGGCTCCCTGGCATGGCGCTCGGGGCCTCTCGGGGAGAAGCCTATGAGCCCTTGGCGTGGAACCCTGAGGAGTCC
ACTGGGGGGCCTCATTCGGCCCCACCGACAGCACCCAGCCCTTTTCTGTTCAGTGAGACCACTGCCATGAAGTGC
AGGAGCCCCGGCTGCCCCTTCACACTGAATGTGCAGCACAACGGATTTTGTGAACGTTGCCACAACGCCCGGCAA
CTTCACGCCAGCCACGCCCCAGACCACACAAGGCACTTGGATCCCGGGAAGTGCCAAGCCTGCCTCCAGGATGTT
ACCAGGACATTTAATGGGATCTGCAGTACTTGCTTCAAAAGGACTACAGCAGAGGCCTCCTCCAGCCTCAGCACC
AGCCTCCCTCCTTCCTGTCACCAGCGTTCCAAGTCAGATCCCTCGCGGCTCGTCCGGAGCCCCTCCCCGCATTCT
TGCCACAGAGCTGGAAACGACGCCCCTGCTGGCTGCCTGTCTCAAGCTGCACGGACTCCTGGGGACAGGACGGGG
ACGAGCAAGTGCAGAAAAGCCGGCTGCGTGTATTTTGGGACTCCAGAAAACAAGGGCTTTTGCACACTGTGTTTC
ATCGAGTACAGAGAAAACAAACATTTTGCTGCTGCCTCAGGGAAAGTCAGTCCCACAGCGTCCAGGTTCCAGAAC
ACCATTCCGTGCCTGGGGAGGGAATGCGGCACCCTTGGAAGCACCATGTTTGAAGGATACTGCCAGAAGTGTTTC
ATTGAAGCTCAGAATCAGAGATTTCATGAGGCCAAAAGGACAGAAGAGCAACTGAGATCGAGCCAGCGCAGAGAT
GTGCCTCGAACCACACAAAGCACCTCAAGGCCCAAGTGCGCCCGGGCCTCCTGCAAGAACATCCTGGCCTGCCGC
AGCGAGGAGCTCTGCATGGAGTGTCAGCATCCCAACCAGAGGATGGGCCCTGGGGCCCACCGGGGTGAGCCTGCC
CCCGAAGACCCCCCCAAGCAGCGTTGCCGGGCCCCCGCCTGTGATCATTTTGGCAATGCCAAGTGCAACGGCTAC
TGCAACGAATGCTTTCAGTTCAAGCAGATGTATGGCTAACCGGAAACAGGTGGGTCACCTCCTGCAAGAAGTGGG
GCCTCGAGCTGTCAGTCATCATGGTGCTATCCTCTGAACCCCTCAGCTGCCACTGCAACAGTGGGCTTAAGGGTG
TCTGAGCAGGAGAGGAAAGATAAGCTCTTCGTGGTGCCCACGATGCTCAGGTTTGGTAACCCGGGAGTGTTCCCA
GGTGGCCTTAGAAAGCAAAGCTTGTAACTGGCAAGGGATGATGTCAGATTCAGCCCAAGGTTCCTCCTCTCCTAC
CAAGCAGGAGGCCAGGAACTTCTTTGGACTTGGAAGGTGTGCGGGGACTGGCCGAGGCCCCTGCACCCTGCGCAT
CAGGACTGCTTCATCGTCTTGGCTGAGAAAGGGAAAAGACACACAAGTCGCGTGGGTTGGAGAAGCCAGAGCCAT
TCCACCTCCCCTCCCCCAGCATCTCTCAGAGATGTGAAGCCAGATCCTCATGGCAGCGAGGCCCTCTGCAAGAAG
CTCAAGGAAGCTCAGGGAAAATGGACGTATTCAGAGAGTGTTTGTAGTTCATGGTTTTTCCCTACCTGCCCGGTT
CCTTTCCTGAGGACCCGGCAGAAATGCAGAACCATCCATGGACTGTGATTCTGAGGCTGCTGAGACTGAACATGT
TCACATTGACAGAAAAACAAGCTGCTCTTTATAATATGCACCTTTTAAAAAATTAGAATATTTTACTGGGAAGAC
GTGTAACTCTTTGGGTTATTACTGTCTTTACTTCTAAAGAAGTTAGCTTGAACTGAGGAGTAAAAGTGTGTACAT
ATATAATATACCCTTACATTATGTATGAGGGATTTTTTTAAATTATATTGAAATGCTGCCCTAGAAGTACAATAG
GAAGGCTAAATAATAATAACCTGTTTTCTGGTTGTTGTTGGGGCATGAGCTTGTGTATACACTGCTTGCATAAAC
TCAACCAGCTGCCTTTTTAAAGGGAGCTCTAGTCCTTTTTGTGTAATTCACTTTATTTATTTTATTACAAACTTC
AAGATTATTTAAGTGAAGATATTTCTTCAGCTCTGGGGAAAATGCCACAGTGTTCTCCTGAGAGAACATCCTTGC
TTTGAGTCAGGCTGTGGGCAAGTTCCTGACCACAGGGAGTAAATTGGCCTCTTTGATACACTTTTGCTTGCCTCC

FIGURE 844B

CCAGGAAAGAAGGAATTGCATCCAAGGTATACATACATATTCATCGATGTTTCGTGCTTCTCCTTATGAAACTCC
AGCTATGTAATAAAAAACTATACTCTGTGTTCTGTTAATGCCTCTGAGTGTCCTACCTCCTTGGAGATGAGATAG
GGAAGGAGCAGGGATGAGACTGGCAATGGTCACAGGGAAAGATGTGGCCTTTTGTGATGGTTTTATTTTCTGTTA
ACACTGTGTCCTGGGGGGGCTGGGAAGTCCCCTGCATCCCATGGTACCCTGGTATTGGGACAGCAAAAGCCAGTA
ACCATGAGTATGAGGAAATCTCTTTCTGTTGCTGGCTTACAGTTTCTCTGTGTGCTTTGTGGTTGCTGTCATATT
TGCTCTAGAAGAAAAAAAAAAAAGGAGGGGAAATGCATTTTCCCCAGAGATAAAGGCTGCCATTTTGGGGGTCTG
TACTTATGGCCTGAAAATATTTGTGATCCATAACTCTACACAGCCTTTACTCATACTATTAGGCACACTTTCCCC
TTAGAGCCCCCTAAGTTTTTCCCAGACGAATCTTTATAATTTCCTTTCCAAAGATACCAAATAAACTTCAGTGTT
TTCATCTAATTCTCTTAAAGTTGATATCTTAATATTTTGTGTTGATCATTATTTCCATTCTTAATGTGAAAAAAA
GTAATTATTTATACTTATTATAAAAAGTATTTGAAATTTGCACATTTAATTGTCCCTAATAGAAAGCCACCTATT
CTTTGTTGGATTTCTTCAAGTTTTTCTAAATAAATGTAACTTTTCACAAGAGTCAACATTAAAAAATAAATTATT
T

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FIGURE 845

MAEQVLPQALYLSNMRKAVKIRERTPEDIFKPTNGIIHHFKTMHRYTLEMFRTCQFCPQFREIIHKALIDRNIQA
TLESQKKLNWCREVRKLVALKTNGDGNCLMHATSQYMWGVQDTDLVLRKALFSTLKETDTRNFKFRWQLESLKSQ
EFVETGLCYDTRNWNDEWDNLIKMASTDTPMARSGLQYNSLEEIHIFVLCNILRRPIIVISDKMLRSLESGSNFA
PLKVGGIYLPLHWPAQECYRYPIVLGYDSHHFVPLVTLKDSGPEIRAVPLVNRDRGRFEDLKVHFLTDPENEMKE
KLLKEYLMVIEIPVQGWDHGTTHLINAAKLDEANLPKEINLVDDYFELVQHEYKKWQENSEQGRREGHAQNPMEP
SVPQLSLMDVKCETPNCPFFMSVNTQPLCHECSERRQKNQNKLPKLNSKPGPEGLPGMALGASRGEAYEPLAWNP
EESTGGPHSAPPTAPSPFLFSETTAMKCRSPGCPFTLNVQHNGFCERCHNARQLHASHAPDHTRHLDPGKCQACL
QDVTRTFNGICSTCFKRTTAEASSSLSTSLPPSCHQRSKSDPSRLVRSPSPHSCHRAGNDAPAGCLSQAARTPGD
RTGTSKCRKAGCVYFGTPENKGFCTLCFIEYRENKHFAAASGKVSPTASRFQNTIPCLGRECGTLGSTMFEGYCQ
KCFIEAQNQRFHEAKRTEEQLRSSQRRDVPRTTQSTSRPKCARASCKNILACRSEELCMECQHPNQRMGPGAHRG
EPAPEDPPKQRCRAPACDHFGNAKCNGYCNECFQFKQMYG

FIGURE 846A

TGCCTTGACCAGGACTTGGGACTTTGCGAAAGGATCGCGGGGCCCGGAGAGGTGTTGGAGAGCACA**ATG**GCTGAA
CAAGTCCTTCCTCAGGCTTTGTATTTGAGCAATATGCGGAAAGCTGTGAAGATACGGGAGAGAACTCCAGAAGAC
ATTTTTAAACCTACTAATGGGATCATTCATCATTTTAAAACCATGCACCGATACACACTGGAAATGTTCAGAACT
TGCCAGTTTTGTCCTCAGTTTCGGGAGATCATCCACAAAGCCCTCATCGACAGAAACATCCAGGCCACCCTGGAA
AGCCAGAAGAAACTCAACTGGTGTCGAGAAGTCCGGAAGCTTGTGGCGCTGAAAACGAACGGTGACGGCAATTGC
CTCATGCATGCCACTTCTCAGTACATGTGGGGCGTTCAGGACACAGACTTGGTACTGAGGAAGGCGCTGTTCAGC
ACGCTCAAGGAAACAGACACACGCAACTTTAAATTCCGCTGGCAACTGGAGTCTCTCAAATCTCAGGAATTTGTT
GAAACGGGGCTTTGCTATGATACTCGGAACTGGAATGATGAATGGGACAATCTTATCAAAATGGCTTCCACAGAC
ACACCCATGGCCCGAAGTGGACTTCAGTACAACTCACTGGAAGAAATACACATATTTGTCCTTTGCAACATCCTC
AGAAGGCCAATCATTGTCATTTCAGACAAAATGCTAAGAAGTTTGGAATCAGGTTCCAATTTCGCCCCTTTGAAA
GTGGGTGGAATTTACTTGCCTCTCCACTGGCCTGCCCAGGAATGCTACAGATACCCCATTGTTCTCGGCTATGAC
AGCCATCATTTTGTACCCTTGGTGACCCTGAAGGACAGTGGGCCTGAAATCCGAGCTGTTCCACTTGTTAACAGA
GACCGGGGAAGATTTGAAGACTTAAAAGTTCACTTTTTGACAGATCCTGAAAATGAGATGAAGGAGAAGCTCTTA
AAAGAGTACTTAATGGTGATAGAAATCCCCGTCCAAGGCTGGGACCATGGCACAACTCATCTCATCAATGCCGCA
AAGTTGGATGAAGCTAACTTACCAAAAGAAATCAATCTGGTAGATGATTACTTTGAACTTGTTCAGCATGAGTAC
AAGAAATGGCAGGAAAACAGCGAGCAGGGGAGGAGAGAGGGGCACGCCCAGAATCCCATGGAACCTTCCGTGCCC
CAGCTTTCTCTCATGGATGTAAAATGTGAAACGCCCAACTGCCCCTTCTTCATGTCTGTGAACACCCAGCCTTTA
TGCCATGAGTGCTCAGAGAGGCGGCAAAAGAATCAAAACAAACTCCCAAAGCTGAACTCCAAGCCGGGCCCTGAG
GGGCTCCCTGGCATGGCGCTCGGGGCCTCTCGGGGAGAAGCCTATGAGCCCTTGGCGTGGAACCCTGAGGAGTCC
ACTGGGGGGCCTCATTCGGCCCCACCGACAGCACCCAGCCCTTTTCTGTTCAGTGAGACCACTGCCATGAAGTGC
AGGAGCCCCGGCTGCCCCTTCACACTGAATGTGCAGCACAACGGATTTTGTGAACGTTGCCACAACGCCCGGCAA
CTTCACGCCAGCCACGCCCCAGACCACACAAGGCACTTGGATCCCGGGAAGTGCCAAGCCTGCCTCCAGGATGTT
ACCAGGACATTTAATGGGATCTGCAGTACTTGCTTCAAAAGGACTACAGCAGAGGCCTCCTCCAGCCTCAGCACC
AGCCTCCCTCCTTCCTGTCACCAGCGTTCCAAGTCAGATCCCTCGCGGCTCGTCCGGAGCCCCTCCCCGCATTCT
TGCCACAGAGCTGGAAACGACGCCCCTGCTGGCTGCCTGTCTCAAGCTGCACGGACTCCTGGGGACAGGACGGGG
ACGAGCAAGTGCAGAAAAGCCGGCTGCGTGTATTTTGGGACTCCAGAAAACAAGGGCTTTTGCACACTGTGTTTC
ATCGAGTACAGAGAAAACAAACATTTTGCTGCTGCCTCAGGGAAAGTCAGTCCCACAGCGTCCAGGTTCCAGAAC
ACCATTCCGTGCCTGGGGAGGGAATGCGGCACCCTTGGAAGCACCATGTTTGAAGGATACTGCCAGAAGTGTTTC
ATTGAAGCTCAGAATCAGAGATTTCATGAGGCCAAAAGGACAGAAGAGCAACTGAGATCGAGCCAGCGCAGAGAT
GTGCCTCGAACCACACAAAGCACCTCAAGGCCCAAGTGCGCCCGGGCCTCCTGCAAGAACATCCTGGCCTGCCGC
AGCGAGGAGCTCTGCATGGAGTGTCAGCATCCCAACCAGAGGATGGGCCCTGGGGCCCACCGGGGTGAGCCTGCC
CCCGAAGACCCCCCCAAGCAGCGTTGCCGGGCCCCCGCCTGTGATCATTTTGGCAATGCCAAGTGCAACGGCTAC
TGCAACGAATGCTTTCAGTTCAAGCAGATGTATGGC**TAA**CCGGAAACAGGTGGGTCACCTCCTGCAAGAAGTGGG
GCCTCGAGCTGTCAGTCATCATGGTGCTATCCTCTGAACCCCTCAGCTGCCACTGCAACAGTGGGCTTAAGGGTG
TCTGAGCAGGAGAGGAAAGATAAGCTCTTCGTGGTGCCCACGATGCTCAGGTTTGGTAACCCGGGAGTGTTCCCA
GGTGGCCTTAGAAAGCAAAGCTTGTAACTGGCAAGGGATGATGTCAGATTCAGCCCAAGGTTCCTCCTCTCCTAC
CAAGCAGGAGGCCAGGAACTTCTTTGGACTTGGAAGGTGTGCGGGGACTGGCCGAGGCCCCTGCACCCTGCGCAT
CAGGACTGCTTCATCGTCTTGGCTGAGAAAGGGAAAAGACACACAAGTCGCGTGGGTTGGAGAAGCCAGAGCCAT
TCCACCTCCCCTCCCCCAGCATCTCTCAGAGATGTGAAGCCAGATCCTCATGGCAGCGAGGCCCTCTGCAAGAAG
CTCAAGGAAGCTCAGGGAAAATGGACGTATTCAGAGAGTGTTTGTAGTTCATGGTTTTTCCCTACCTGCCCGGTT
CCTTTCCTGAGGACCCGGCAGAAATGCAGAACCATCCATGGACTGTGATTCTGAGGCTGCTGAGACTGAACATGT
TCACATTGACAGAAAAACAAGCTGCTCTTTATAATATGCACCTTTTAAAAAATTAGAATATTTTACTGGGAAGAC
GTGTAACTCTTTGGGTTATTACTGTCTTTACTTCTAAAGAAGTTAGCTTGAACTGAGGAGTAAAAGTGTGTACAT
ATATAATATACCCTTACATTATGTATGAGGGATTTTTTTAAATTATATTGAAATGCTGCCCTAGAAGTACAATAG
GAAGGCTAAATAATAATAACCTGTTTTCTGGTTGTTGTTGGGGCATGAGCTTGTGTATACACTGCTTGCATAAAC
TCAACCAGCTGCCTTTTTAAAGGGAGCTCTAGTCCTTTTTGTGTAATTCACTTTATTTATTTTATTACAAACTTC
AAGATTATTTAAGTGAAGATATTTCTTCAGCTCTGGGGAAAATGCCACAGTGTTCTCCTGAGAGAACATCCTTGC
TTTGAGTCAGGCTGTGGGCAAGTTCCTGACCACAGGGAGTAAATTGGCCTCTTTGATACACTTTTGCTTGCCTCC

FIGURE 846B

CCAGGAAAGAAGGAATTGCATCCAAGGTATACATACATATTCATCGATGTTTCGTGCTTCTCCTTATGAAACTCC
AGCTATGTAATAAAAAACTATACTCTGTGTTCTGTTAATGCCTCTGAGTGTCCTACCTCCTTGGAGATGAGATAG
GGAAGGAGCAGGGATGAGACTGGCAATGGTCACAGGGAAAGATGTGGCCTTTTGTGATGGTTTTATTTTCTGTTA
ACACTGTGTCCTGGGGGGGCTGGGAAGTCCCCTGCATCCCATGGTACCCTGGTATTGGGACAGCAAAAGCCAGTA
ACCATGAGTATGAGGAAATCTCTTTCTGTTGCTGGCTTACAGTTTCTCTGTGTGCTTTGTGGTTGCTGTCATATT
TGCTCTAGAAGAAAAAAAAAAAAAGGAGGGGAAATGCATTTTCCCCAGAGATAAAGGCTGCCATTTTGGGGGTCTG
TACTTATGGCCTGAAAATATTTGTGATCCATAACTCTACACAGCCTTTACTCATACTATTAGGCACACTTTCCCC
TTAGAGCCCCCTAAGTTTTTCCCAGACGAATCTTTATAATTTCCTTTCCAAAGATACCAAATAAACTTCAGTGTT
TTCATCTAATTCTCTTAAAGTTGATATCTTAATATTTTGTGTTGATCATTATTTCCATTCTTAATGTGAAAAAAA
GTAATTATTTATACTTATTATAAAAAGTATTTGAAATTTGCACATTTAATTGTCCCTAATAGAAAGCCACCTATT
CTTTGTTGGATTTCTTCAAGTTTTTCTAAATAAATGTAACTTTTCACAAGAGTCAACATTAAAAAATAAATTATT
T

FIGURE 847

MAEQVLPQALYLSNMRKAVKIRERTPEDIFKPTNGIIHHFKTMHRYTLEMFRTCQFCPQFREIIHKALIDRNIQA
TLESQKKLNWCREVRKLVALKTNGDGNCLMHATSQYMWGVQDTDLVLRKALFSTLKETDTRNFKFRWQLESLKSQ
EFVETGLCYDTRNWNDEWDNLIKMASTDTPMARSGLQYNSLEEIHIFVLCNILRRPIIVISDKMLRSLESGSNFA
PLKVGGIYLPLHWPAQECYRYPIVLGYDSHHFVPLVTLKDSGPEIRAVPLVNRDRGRFEDLKVHFLTDPENEMKE
KLLKEYLMVIEIPVQGWDHGTTHLINAAKLDEANLPKEINLVDDYFELVQHEYKKWQENSEQGRREGHAQNPMEP
SVPQLSLMDVKCETPNCPFFMSVNTQPLCHECSERRQKNQNKLPKLNSKPGPEGLPGMALGASRGEAYEPLAWNP
EESTGGPHSAPPTAPSPFLFSETTAMKCRSPGCPFTLNVQHNGFCERCHNARQLHASHAPDHTRHLDPGKCQACL
QDVTRTFNGICSTCFKRTTAEASSSLSTSLPPSCHQRSKSDPSRLVRSPSPHSCHRAGNDAPAGCLSQAARTPGD
RTGTSKCRKAGCVYFGTPENKGFCTLCFIEYRENKHFAAASGKVSPTASRFQNTIPCLGRECGTLGSTMFEGYCQ
KCFIEAQNQRFHEAKRTEEQLRSSQRRDVPRTTQSTSRPKCARASCKNILACRSEELCMECQHPNQRMGPGAHRG
EPAPEDPPKQRCRAPACDHFGNAKCNGYCNECFQFKQMYG

FIGURE 848

ATGTTGTGATGGAGAAGCCGCGGCGGAGCCCGAACCCCGCAGCCTGAGCCACCTCCGTCATCTGGGCCCGGGGCC
TCACCGCGCAGGAGCTGCCAAGGCCATGTCTGTTCCATCATCACTGAGCCAGTCGGCCATTAATGCCAACAGCCA
CGGAGGCCCCGCACTGAGCCTACCCCTGCCTCTGCACGCTGCCCACAACCAGCTGCTCAACGCCAAGCTGCAGGC
CACAGCTGTGGGACCCAAGGACCTGCGCAGCGCCATGGGGGAGGGTGGTGGGCCTGAGCCAGGCCCTGCCAATGC
CAAGTGGCTAAAAGAGGGCCAGAACCAGCTCCGGCGGGCCGCCACGGCCCACCGTGACCAGAATCGCAATGTGAC
CTTGACCTTGGCGGAGGAGGCCAGCCAGGAGCCTGAGATGGCACCCTTGGGCCCCAAAGGCCTGATACACCTGTA
CTCTGAGCTGGAGCTCTCAGCTCACAACGCAGCCAACCGAGGCCTACGAGGACCTGGCCTGATCATCAGCACTCA
AGAGCAGGGGCCAGATGAGGGAGAGGAGAAGGCGGCCGGGGAGGCCGAGGAGGAGGAGGAGGATGATGATGATGA
AGAGGAGGAGGAGGACTTATCTTCTCCCCCAGGGCTGCCTGAGCCCCTGGAGAGTGTGGAGGCCCCTCCCAGGCC
CCAAGCCCTTACAGATGGCCCCCGGGAACACAGCAAGAGTGCCAGCCTCCTGTTTGGCATGCGGAACAGTGCAGC
CAGTGATGAGGACTCAAGCTGGGCTACCTTATCCCAGGGCAGCCCCTCCTATGGCTCCCCAGAGGACACAGATTC
CTTCTGGAACCCCAACGCCTTCGAGACGGATTCCGACCTGCCGGCTGGATGGATGAGGGTCCAGGACACCTCAGG
GACCTATTACTGGCACATCCCAACAGGGACCACCCAGTGGGAACCCCCCGGCCGGGCCTCCCCCTCACAGGGGAG
CAGCCCCCAAGAGGAGTCCCAGCTCACCTGGACAGGTTTTGCTCATGGAGAAGGCTTTGAGGATGGAGAATTTTG
GAAGGATGAACCCAGTGATGAGGCCCCAATGGAGCTGGGACTGAAGGAACCTGAGGAGGGGACGTTGACCTTCCC
AGCTCAGAGCCTCAGCCCAGAGCCGTTGCCCCAAGAGGAGGAGAAGCTTCCCCCACGGAATACCAACCCAGGGAT
CAAGTGTTTCGCCGTGCGCTCCCTAGGCTGGGTAGAGATGACCGAGGAGGAGCTGGCCCCTGGACGCAGCAGTGT
GGCAGTCAACAATTGCATCCGTCAGCTCTCTTACCACAAAAACAACCTGCATGACCCCATGTCTGGGGGCTGGGG
GGAAGGAAAGGATCTGCTACTGCAGCTGGAGGATGAGACACTAAAGCTAGTGGAGCCACAGAGCCAGGCACTGCT
GCACGCCCAACCCATCATCAGCATCCGCGTGTGGGGCGTCGGGCGGGACAGTGGAAGAGAGAGGGACTTTGCCTA
CGTAGCTCGTGATAAGCTGACCCAGATGCTCAAGTGCCACGTGTTTCGCTGTGAGGCACCTGCCAAGAACATCGC
CACCAGCCTGCATGAGATCTGCTCTAAGATCATGGCCGAACGGCGTAATGCCCGCTGCTTGGTAAATGGACTCTC
CCTGGACCACTCTAAACTTGTGGATGTCCCTTTCCAAGTGGAATTCCCAGCGCCTAAGAATGAGTTGGTCCAGAA
GTTCCAAGTCTATTACCTGGGGAATGTACCTGTTGCTAAACCTGTTGGGGTAGATGTGATTAATGGGGCCCTCGA
GTCAGTCCTGTCCTCCAGCAGCCGTGAACAATGGACCCCAAGTCATGTCAGTGTGGCCCCTGCTACCCTCACCAT
CTTGCACCAGCAGACAGAGGCAGTGCTGGGAGAGTGTCGGGTGCGTTTCCTCTCCTTCCTGGCCGTGGGCAGAGA
TGTCCACACGTTTGCATTCATCATGGCTGCCGGCCCAGCCTCCTTCTGCTGCCACATGTTCTGGTGCGAGCCCAA
TGCTGCCAGCCTCTCAGAGGCTGTGCAGGCTGCGTGCATGCTTCGCTACCAGAAGTGTCTGGATGCCCGTTCCCA
GGCCTCCACCTCCTGCCTCCCAGCACCCCCTGCTGAGTCTGTGGCACGGCGTGTAGGGTGGACTGTCCGCAGGGG
TGTTCAGTCGCTGTGGGGCTCCCTGAAGCCCAAACGGCTGGGGGCCCATACCCCATGAAGAAGCCCCCACCTTCC
CTCCACCTGCTTGTGTTGGGCCCCAGGGAACTAAAGGGTGTGGGTCAGGGAGGGGTCTAGAGGCTATTCCTAGGC
CTCAGGCCTCCCAAATATGCCCCTCCCCAGTAGCTACGGTTCCCTGCCTAGGAGCTGGGGAGGGAGAGATCTAAT
CCCTTCAAGGAAGTGATAACACTGGAGTGGTAACAAGAGGAGCAGGAAGCAAGGCCAGCCCTGGTTCTCCATCCC
CATGTGTTTCAGGTGGAACAGGAGGAACTGGTCCAGGCCAGGCCTCATCCTCCTGGACCCAGCAGGGGCAGAAGG
AGGAAGGGACTGGTCCAGGCATGGGTCCCTTCCCCCTGCTCCATGGGCACCTCTGCTGTATTGATATCACTAATA
AAGTCTGTCTGCACTGCAAAAAAAAAAA

FIGURE 849

MSVPSSLSQSAINANSHGGPALSLPLPLHAAHNQLLNAKLQATAVGPKDLRSAMGEGGGPEPGPANAKWLKEGQN
QLRRAATAHRDQNRNVTLTLAEEASQEPEMAPLGPKGLIHLYSELELSAHNAANRGLRGPGLIISTQEQGPDEGE
EKAAGEAEEEEEDDDDEEEEEDLSSPPGLPEPLESVEAPPRPQALTDGPREHSKSASLLFGMRNSAASDEDSSWA
TLSQGSPSYGSPEDTDSFWNPNAFETDSDLPAGWMRVQDTSGTYYWHIPTGTTQWEPPGRASPSQGSSPQEESQL
TWTGFAHGEGFEDGEFWKDEPSDEAPMELGLKEPEEGTLTFPAQSLSPEPLPQEEEKLPPRNTNPGIKCFAVRSL
GWVEMTEEELAPGRSSVAVNNCIRQLSYHKNNLHDPMSGGWGEGKDLLLQLEDETLKLVEPQSQALLHAQPIISI
RVWGVGRDSGRERDFAYVARDKLTQMLKCHVFRCEAPAKNIATSLHEICSKIMAERRNARCLVNGLSLDHSKLVD
VPFQVEFPAPKNELVQKFQVYYLGNVPVAKPVGVDVINGALESVLSSSSREQWTPSHVSVAPATLTILHQQTEAV
LGECRVRFLSFLAVGRDVHTFAFIMAAGPASFCCHMFWCEPNAASLSEAVQAACMLRYQKCLDARSQASTSCLPA
PPAESVARRVGWTVRRGVQSLWGSLKPKRLGAHTP

FIGURE 850

CTTCGGTCCTGCTGTAGTGCCTTCTGCGCCAGGCCCGGTTCAATCAGCGGCCACAACTGTCTAGGGCTCAGACAC
CACCAGCCAATGAGGGAGGGCACGTGGAGCCGCGTCTGGGCTCGCGGCTCCTGACCAATGGGGAAGTGGCATGTG
GGAGGGCGCCGGGGTTCCCCCCGCCAATGGGGAGCTACGGCGCGCGGCCGGGACTTGGAGGCGGTGCGGCGCGGC
GGGTGCGGTTCAGTCGGTCGGCGGCGGCAGCGGAGGAGGAGGAGGAGGAGGAGGATGAGGAGGATGAGGAGGATG
TGGGCCACGCAGGGGCTGGCGGTGCGCGTGGCTCTGAGCGTGCTGCCGGGCAGCCGGGCGCTGCGGCCGGGCGAC
TGCGAAGTTTGTATTTCTTATCTGGGAAGATTTTACCAGGACCTCAAAGACAGAGATGTCACATTCTCACCAGCC
ACTATTGAAAACGAACTTATAAAGTTCTGCCGGGAAGCAAGAGGCAAAGAGAATCGGTTGTGCTACTATATCGGG
GCCACAGATGATGCAGCCACCAAAATCATCAATGAGGTATCAAAGCCTCTGGCCCACCACATCCCTGTGGAGAAG
ATCTGTGAGAAGCTTAAGAAGAAGGACAGCCAGATATGTGAGCTTAAGTATGACAAGCAGATCGACCTGAGCACA
GTGGACCTGAAGAAGCTCCGAGTTAAAGAGCTGAAGAAGATTCTGGATGACTGGGGGGAGACATGCAAAGGCTGT
GCAGAAAAGTCTGACTACATCCGGAAGATAAATGAACTGATGCCTAAATATGCCCCCAAGGCAGCCAGTGCACCG
ACCGATTTGTAGTCTGCTCAATCTCTGTTGCACCTGAGGGGGAAAAAACAGTTCAACTGCTTACTCCCAAAACAG
CCTTTTTGTAATTTATTTTTTAAGTGGGCTCCTGACAATACTGTATCAGATGTGAAGCCTGGAGCTTTCCTGATG
ATGCTGGCCCTACAGTACCCCCATGAGGGGATTCCCTTCCTTCTGTTGCTGGTGTACTCTAGGACTTCAAAGTGT
GTCTGGGATTTTTTTATTAAAGAAAAAAAATTTCTAGCTGTCAAAAAAAAAAA

FIGURE 851

MGKWHVGGRRGSPRQWGATARGRDLEAVRRGGCGSVGRRRQRRRRRRRRMRRMRRMWATQGLAVRVALSVLPGSR
ALRPGDCEVCISYLGRFYQDLKDRDVTFSPATIENELIKFCREARGKENRLCYYIGATDDAATKIINEVSKPLAH
HIPVEKICEKLKKKDSQICELKYDKQIDLSTVDLKKLRVKELKKILDDWGETCKGCAEKSDYIRKINELMPKYAP
KAASAPTDL

FIGURE 852

AGACGTGAAGCCTAGCAGAGGACTTTTTAGCTGCTCACTGGCCCCGCTTGTCTGGCCGACTCATCCGCCCGCGAC
CCCTAATCCCCTCTGCCTGCCCCAAGATGCTGAAGCCAGCCCTGGAGCCCCGAGGGGGCTTCTCCTTCGAGAACT
GCCAAAGAAATGCATCATTGGAACGCGTCCTCCCGGGGCTCAAGGTCCCTCACGCACGCAAGACCGGGACCACCA
TCGCGGGCCTGGTGTTCCAAGACGGGGTCATTCTGGGCGCCGATACGCGAGCCACTAACGATTCGGTCGTGGCGG
ACAAGAGCTGCGAGAAGATCCACTTCATCGCCCCCAAAATCTACTGCTGTGGGGCTGGAGTAGCCGCGGACGCCG
AGATGACCACACGGATGGTGGCGTCCAAGATGGAGCTACACGCGTTATCTACGGGCCGCGAGCCCCGCGTGGCCA
CGGTCACTCGCATCCTGCGCCAGACGCTCTTCAGGTACCAGGGCCACGTGGGTGCATCGCTGATCGTGGGCGGCG
TAGACCTGACTGGACCGCAGCTCTACGGCGTGCATCCCCATGGCTCCTACAGCCGTCTGCCCTTCACAGCCCTGG
GCTCTGGTCAGGACGCGGCCCTGGCGGTGCTAGAAGACCGGTTCCAGCCGAACATGACGCTGGAGGCTGCTCAGG
GGCTGCTGGTGGAAGCCGTCACCGCCGGGATCTTGGGTGACCTGGGCTCCGGGGGCAATGTGGACGCATGTGTGA
TCACAAAGACTGGCGCCAAGCTGCTGCGGACACTGAGCTCACCCACAGAGCCCGTGAAGAGGTCTGGCCGCTACC
ACTTTGTGCCTGGAACCACAGCTGTCCTGACCCAGACAGTGAAGCCACTAACCCTGGAGCTAGTGGAGGAAACTG
TGCAGGCTATGGAGGTGGAGTAAGCTGAGGCTTAGAGCTTGGAACAAGGGGGAATAAACCCAGAAAATACAGTTA
AACAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 853

MLKPALEPRGGFSFENCQRNASLERVLPGLKVPHARKTGTTIAGLVFQDGVILGADTRATNDSVVADKSCEKIHF
IAPKIYCCGAGVAADAEMTTRMVASKMELHALSTGREPRVATVTRILRQTLFRYQGHVGASLIVGGVDLTGPQLY
GVHPHGSYSRLPFTALGSGQDAALAVLEDRFQPNMTLEAAQGLLVEAVTAGILGDLGSGGNVDACVITKTGAKLL
RTLSSPTEPVKRSGRYHFVPGTTAVLTQTVKPLTLELVEETVQAMEVE

FIGURE 854

CCGCTTTGTTGCCTGAGGTGGGTGGCGGTGGAAGTTAAGGGAGTCAGGGGCTATCGCTCCTCGAGACTCGCAGTC
GCGGCCACTGCAGTCACTTCGCCAGTTAGCCCTTAGGGTAGGAGTCGCGCCGGCAGCAGCCATGAGCGGCGGCGT
GTACGGGGGAGATGAAGTTGGAGCCCTTGTTTTTGACATTGGATCCTATACTGTGAGAGCTGGTTATGCTGGTGA
GGACTGCCCCAAGGTGGATTTTCCTACAGCTATTGGTATGGTGGTAGAAAGAGATGACGGAAGCACATTAATGGA
AATAGATGGCGATAAAGGCAAACAAGGCGGTCCCACCTACTACATAGATACTAATGCTCTGCGTGTTCCGAGGGA
GAATATGGAGGCCATTTCACCTCTAAAAAATGGGATGGTTGAAGACTGGGATAGTTTCCAAGCTATTTTGGATCA
TACCTACAAAATGCATGTCAAATCAGAAGCCAGTCTCCATCCTGTTCTCATGTCAGAGGCACCGTGGAATACTAG
AGCAAAGAGAGAGAAACTGACAGAGTTAATGTTTGAACACTACAACATCCCTGCCTTCTTCCTTTGCAAAACTGC
AGTTTTGACAGCATTTGCTAATGGTCGTTCTACTGGGCTGATTTTGGACAGTGGAGCCACTCATACCACTGCAAT
TCCAGTCCACGATGGCTATGTCCTTCAACAAGGCATTGTGAAATCCCCTCTTGCTGGAGACTTTATTACTATGCA
GTGCAGAGAACTCTTCCAAGAAATGAATATTGAATTGGTTCCTCCATATATGATTGCATCAAAAGAAGCTGTTCG
TGAAGGATCTCCAGCAAACTGGAAAAGAAAAGAGAAGTTGCCTCAGGTTACGAGGTCTTGGCACAATTATATGTG
TAATTGTGTTATCCAGGATTTTCAAGCTTCGGTACTTCAAGTGTCAGATTCAACTTATGATGAACAAGTGGCTGC
ACAGATGCCAACTGTTCATTATGAATTCCCCAATGGCTACAATTGTGATTTTGGTGCAGAGCGGCTAAAGATTCC
AGAAGGATTATTTGACCCTTCCAATGTAAAGGGGTTATCAGGAAACACAATGTTAGGAGTCAGTCATGTTGTCAC
CACAAGTGTTGGGATGTGTGATATTGATATCAGACCAGGTCTCTATGGCAGTGTAATAGTGGCAGGAGGAAACAC
ACTAATACAGAGTTTTACTGACAGGTTGAATAGAGAGCTGTCTCAGAAAACTCCTCCAAGTATGCGGTTGAAATT
GATTGCAAATAATACAACAGTGGAACGGAGGTTTAGCTCATGGATTGGCGGCTCCATTCTAGCCTCTTTGGGTAC
CTTTCAACAGATGTGGATTTCCAAGCAAGAATATGAAGAAGGAGGGAAGCAGTGTGTAGAAAGAAAATGCCCTTG
AGAAAGAGTTCCCAAGCTTCTACCTTCCTTTTGTCACCTTACGTTTCATAGCTTTAGTATACTCAGGAAAAGAAT
GACCATCTTTTGTAGAATGTTTATACATTTATGCATATTTCAATTTCCACTTAAATTTATTTAAAGCTTTAACTG
GCTCTATAAATTAAGTTTGTGCTTTCCTTGAAATGCACTTATTCTTATTACAAGCATTTTATAATTTTGTATAAA
TGTCTATTTTCTCTAAATATTTTGCTTTCAGTAAAATGCTTTCCAACTCTGTTTAGTGTATTAATTACCAGTGGA
TTGGTAGAACTGCTTTTATTGACTAGTAAAAGTTACTGCCTAGTCTTTTTACCTTAGGCTTACAGAATTAAATAA
AAATTAGCCATTCCAGAAATATAAAAAAAAAAAAAAAAAAA

FIGURE 855

MSGGVYGGDEVGALVFDIGSYTVRAGYAGEDCPKVDFPTAIGMVVERDDGSTLMEIDGDKGKQGGPTYYIDTNAL
RVPRENMEAISPLKNGMVEDWDSFQAILDHTYKMHVKSEASLHPVLMSEAPWNTRAKREKLTELMFEHYNIPAFF
LCKTAVLTAFANGRSTGLILDSGATHTTAIPVHDGYVLQQGIVKSPLAGDFITMQCRELFQEMNIELVPPYMIAS
KEAVREGSPANWKRKEKLPQVTRSWHNYMCNCVIQDFQASVLQVSDSTYDEQVAAQMPTVHYEFPNGYNCDFGAE
RLKIPEGLFDPSNVKGLSGNTMLGVSHVVTTSVGMCDIDIRPGLYGSVIVAGGNTLIQSFTDRLNRELSQKTPPS
MRLKLIANNTTVERRFSSWIGGSILASLGTFQQMWISKQEYEEGGKQCVERKCP

FIGURE 856

CGGAGCCGCCCGCTGAGGTCAGAAGGAGGCGTCTGCGCTGATCGGGTCCGCCGCGCGCCAGAGCCAGAGTCGCAG
CCGAGGGGAGCCGGGGCCGGAGCCCGAGCCCGAGCCGAGCCGGAGCCCGAGCGAGCGGCGGAGACCGTGCCCCCG
CCTCGGCCCCGCGCCGCCGCGGCCAGGCCCGGC**ATG**GAGGAGGAGTGCCGGGTGCTCTCCATACAGAGCCACGTC
ATCCGCGGCTACGTGGGCAACCGGGCGGCCACGTTCCCGCTGCAGGTTTTGGGATTTGAGATTGACGCGGTGAAC
TCTGTCCAGTTTTCAAACCACACAGGCTATGCCCACTGGAAGGGCCAAGTGCTGAATTCAGATGAGCTCCAGGAG
TTGTACGAAGGCCTGAGGCTGAACAACATGAATAAATATGACTACGTGCTCACAGGTTATACGAGGGACAAGTCG
TTCCTGGCCATGGTGGTGGACATTGTGCAGGAGCTGAAGCAGCAGAACCCCAGGCTGGTGTACGTGTGTGATCCA
GTCTTGGGTGACAAGTGGGACGGCGAAGGCTCGATGTACGTCCCGGAGGACCTCCTTCCCGTCTACAAAGAAAAA
GTGGTGCCGCTTGCAGACATTATCACGCCCAACCAGTTTGAGGCCGAGTTACTGAGTGGCCGGAAGATCCACAGC
CAGGAGGAAGCCTTGCGGGTGATGGACATGCTGCACTCTATGGGCCCCGACACCGTGGTCATCACCAGCTCCGAC
CTGCCCTCCCCGCAGGGCAGCAACTACCTGATTGTGCTGGGGAGTCAGAGGAGGAGGAATCCCGCTGGCTCCGTG
GTGATGGAACGCATCCGGATGGACATTCGCAAAGTGGACGCCGTCTTTGTGGGCACTGGGGACCTGTTTGCTGCC
ATGCTCCTGGCGTGGACACACAAGCACCCCAATAACCTCAAGGTGGCCTGTGAGAAGACCGTGTCTACCTTGCAC
CACGTTCTGCAGAGGACCATCCAGTGTGCAAAAGCCCAGGCCGGGGAAGGAGTGAGGCCCAGCCCCATGCAGCTG
GAGCTGCGGATGGTGCAGAGCAAAAGGGACATCGAGGACCCAGAGATCGTCGTCCAGGCCACGGTGCTG**TGA**GGG
CCCCGCCGCTTGCCCGTGACACGCAGCGCGTTGGTGTCTCCGTGTTTGTCCCTGTGAAAACATGTAACGTCTGCC
TTAGAGCCATGACCGAAACTTGATATTTTTTTCTTTCATGAGTGTCCGGCATCTGCTGGTCTTCATTGTGAAACG
TGCCAGTCGTGCTTTGTGAAAAATAACAAAGTGGTCACAAAAAAAAAAAAAAAAAA

FIGURE 857

MEEECRVLSIQSHVIRGYVGNRAATFPLQVLGFEIDAVNSVQFSNHTGYAHWKGQVLNSDELQELYEGLRLNNMN
KYDYVLTGYTRDKSFLAMVVDIVQELKQQNPRLVYVCDPVLGDKWDGEGSMYVPEDLLPVYKEKVVPLADIITPN
QFEAELLSGRKIHSQEEALRVMDMLHSMGPDTVVITSSDLPSPQGSNYLIVLGSQRRRNPAGSVVMERIRMDIRK
VDAVFVGTGDLFAAMLLAWTHKHPNNLKVACEKTVSTLHHVLQRTIQCAKAQAGEGVRPSPMQLELRMVQSKRDI
EDPEIVVQATVL

954/8433

FIGURE 858

GCAGCCAGGCGCGCACTGCACAGCTCTCTTCTCTCGCCGCCGCCCGAGCGCACCCTTCAGCCCGCGCGCCGGCCG
TGAGTCCTCGGTGCTCGCCCGCCGGCCAGACAAACAGCCCGCCCGACCCCGTCCCGACCCTGGCCGCCCCGAGCG
GAGCCTGGAGCAAAATGATGCTTCAACACCCAGGCCAGGTCTCTGCCTCGGAAGTGAGTGCTTCTGCCATCGTCC
CCTGCCTGTCCCCTCCTGGGTCACTGGTGTTTGAGGATTTTGCTAACCTGACGCCCTTTGTCAAGGAAGAGCTGA
GGTTTGCCATCCAGAACAAGCACCTCTGCCACCGGATGTCCTCTGCGCTGGAATCAGTCACTGTCAGCGACAGAC
CCCTCGGGGTGTCCATCACAAAAGCCGAGGTAGCCCCTGAAGAAGATGAAAGGAAAAAGAGGCGACGAGAAAGAA
ATAAGATTGCAGCTGCAAAGTGCCGAAACAAGAAGAAGGAGAAGACGGAGTGCCTGCAGCTTCAGTATTAGCAGA
GCCACAGGCCGCCTCTGTGGCATCACCAGGGTTTCTCTGAAGAAGAGGGTCTGCATTTTCCTAAACCCAGTGCTG
CTCTCCCATCTCCCATCTTCCTCTCGCAGCTTGATGAGCCCCGGTGTGTCCCAGGAGTCGGAGAAGCTGGAAAGT
GTGAATGCTGAACTGAAGGCTCAGATTGAGGAGCTCAAGAACGAGAAGCAGCATTTGATATACATGCTCAACCTT
CATCGGCCCACGTGTATTGTCCGGGCTCAGAATGGGAGGACTCCAGAAGATGAGAGAAACCTCTTTATCCAACAG
ATAAAAGAAGGAACATTGCAGAGCTAAGCAGTCGTGGTATGGGGGCGACTGGGGAGTCCTCATTGAATCCTCATT
TTATACCCAAAACCCTGAAGCCATTGGAGAGCTGTCTTCCTGTGTACCTCTAGAATCCCAGCAGCAGAGAACCAT
CAAGGCGGGAGGGCCTGCAGTGATTCAGCAGGCCCTTCCCATTCTGCCCCAGAGTGGGTCTTGGACCAGGGCAAG
TGCATCTTTGCCTCAACTCCAGGATTTAGGCCTTAACACACTGGCCATTCTTATGTTCCAGATGGCCCCCAGCTG
GTGTCCTGCCCGCCTTTCATCTGGATTCTACAAAAAACCAGGATGCCCACCGTTAGATTCAGGCAGCAGTGTCTG
TACCTCGGGTGGGAGGGATGGGGCCATCTCCTTCACCGTGGCTACCATTGTCACTCGTAGGGGATGTGGAGTGAG
AACAGCATTTAGTGAAGTTGTGCAACGGCCAGGGTTGTGCTTTCTAGCAAATATGCTGTTATGTCCAGAAATTGT
GTGTGCAAGAAAACTAGGCAATGTACTCTTCCGATGTTTGTGTCACACAACACTGATGTGACTTTTATATGCTTT
TTCTCAGATCTGGTTTCTAAGAGTTTTGGGGGGGCGGGGCTGTCACCACGTGCAGTATCTCAAGATATTCAGGTGG
CCAGAAGAGCTTGTCAGCAAGAGGAGGAACAGAATTCTCCCAGCGTTAACACAAAATCCATGGGCAGCATGATGG
CAGGTCCTCTGTTGCAAACTCAGTTCCAAAGTCACAGGAAGAAAGCAGAAAGTTCAACTTCCAAAGGGTTAGGAC
TCTCCACTCAATGTCTTAGGTCAGGAGTTGTGTCTAGGCTGGAAGAGCCAAAGAAATATTCCATTTTCCTTTCCT
TGTGGTTGAAACCACAGTCAGTGGAGAGATGTTTGGAACACAGTCAGTGGAGCTGGTGGTACCAGGTTTAGCATT
ATTGGATGTCAAAAGCATTTTTTTTGTCATGTAGCTGTTTTAAGAAATCTGGCCCAGGGTGTTTGCAGCTGTGAG
AAGTCACTCACACTGGCCACAAGGACGCTGGCTACTGTCTATTAAAATTCTGATGTTTCTGTGAAATTCTCAGAG
TGTTTAATTGTACTCAATGGTATCATTACAATTTTCTGTAAGAGAAAATATTACTTATTTATCCTAGTATTCCTA
ACCTGTCAGAATAATAAATATTGTGGTAAAA

FIGURE 859

MMLQHPGQVSASEVSASAIVPCLSPPGSLVFEDFANLTPFVKEELRFAIQNKHLCHRMSSALESVTVSDRPLGVS
ITKAEVAPEEDERKKRRRERNKIAAAKCRNKKKEKTECLQLQY

FIGURE 860

CCTCACTGACTATAAAAGAATAGAGAAGGAAGGGCTTCAGTGACCGGCTGCCTGGCTGACTTACAGCAGTCAGAC
TCTGACAGGATCATGGCTATGATGGAGGTCCAGGGGGGACCCAGCCTGGGACAGACCTGCGTGCTGATCGTGATC
TTCACAGTGCTCCTGCAGTCTCTCTGTGTGGCTGTAACTTACGTGTACTTTACCAACGAGCTGAAGCAGATGCAG
GACAAGTACTCCAAAAGTGGCATTGCTTGTTTCTTAAAAGAAGATGACAGTTATTGGGACCCCAATGACGAAGAG
AGTATGAACAGCCCCTGCTGGCAAGTCAAGTGGCAACTCCGTCAGCTCGTTAGAAAGATGATTTTGAGAACCTCT
GAGGAAACCATTTCTACAGTTCAAGAAAAGCAACAAAATATTTCTCCCCTAGTGAGAGAAAGAGGTCCTCAGAGA
GTAGCAGCTCACATAACTGGGACCAGAGGAAGAAGCAACACATTGTCTTCTCCAAACTCCAAGAATGAAAAGGCT
CTGGGCCGCAAAATAAACTCCTGGGAATCATCAAGGAGTGGGCATTCATTCCTGAGCAACTTGCACTTGAGGAAT
GGTGAACTGGTCATCCATGAAAAAGGGTTTTACTACATCTATTCCCAAACATACTTTCGATTTCAGGAGGAAATA
AAAGAAAACACAAAGAACGACAAACAAATGGTCCAATATATTTACAAATACACAAGTTATCCTGACCCTATATTG
TTGATGAAAAGTGCTAGAAATAGTTGTTGGTCTAAAGATGCAGAATATGGACTCTATTCCATCTATCAAGGGGGA
ATATTTGAGCTTAAGGAAAATGACAGAATTTTTGTTTCTGTAACAAATGAGCACTTGATAGACATGGACCATGAA
GCCAGTTTTTTCGGGGCCTTTTTAGTTGGCTAACTGACCTGGAAAGAAAAAGCAATAACCTCAAAGTGACTATTC
AGTTTTCAGGATGATACACTATGAAGATGTTTCAAAAAATCTGACCAAAACAAACAAACAGAAAACAGAAAACAA
AAAAACCTCTATGCAATCTGAGTAGAGCAGCCACAACCAAAAAATTCTACAACACACACTGTTCTGAAAGTGACT
CACTTATCCCAAGAAAATGAAATTGCTGAAAGATCTTTCAGGACTCTACCTCATATCAGTTTGCTAGCAGAAATC
TAGAAGACTGTCAGCTTCCAAACATTAATGCAATGGTTAACATCTTCTGTCTTTATAATCTACTCCTTGTAAAGA
CTGTAGAAGAAAGCGCAACAATCCATCTCTCAAGTAGTGTATCACAGTAGTAGCCTCCAGGTTTCCTTAAGGGAC
AACATCCTTAAGTCAAAAGAGAGAAGAGGCACCACTAAAAGATCGCAGTTTGCCTGGTGCAGTGGCTCACACCTG
TAATCCCAACATTTTGGGAACCCAAGGTGGGTAGATCACGAGATCAAGAGATCAAGACCATAGTGACCAACATAG
TGAAACCCCATCTCTACTGAAAGTGCAAAAATTAGCTGGGTGTGTTGGCACATGCCTGTAGTCCCAGCTACTTGA
GAGGCTGAGGCAGGAGAATCGTTTGAACCCGGGAGGCAGAGGTTGCAGTGTGGTGAGATCATGCCACTACACTCC
AGCCTGGCGACAGAGCGAGACTTGGTTTCAAAAAAAAAAAAAAAAAAAAACTTCAGTAAGTACGTGTTATTTTTT
TCAATAAAATTCTATTACAGTATGTCAAAAAAAAAAAAAAAAA

FIGURE 861

MAMMEVQGGPSLGQTCVLIVIFTVLLQSLCVAVTYVYFTNELKQMQDKYSKSGIACFLKEDDSYWDPNDEESMNS
PCWQVKWQLRQLVRKMILRTSEETISTVQEKQQNISPLVRERGPQRVAAHITGTRGRSNTLSSPNSKNEKALGRK
INSWESSRSGHSFLSNLHLRNGELVIHEKGFYYIYSQTYFRFQEEIKENTKNDKQMVQYIYKYTSYPDPILLMKS
ARNSCWSKDAEYGLYSIYQGGIFELKENDRIFVSVTNEHLIDMDHEASFFGAFLVG

FIGURE 862

CCTCACTGACTATAAAAGAATAGAGAAGGAAGGGCTTCAGTGACCGGCTGCCTGGCTGACTTACAGCAGTCAGAC
TCTGACAGGATC**ATG**GCTATGATGGAGGTCCAGGGGGGACCCAGCCTGGGACAGACCTGCGTGCTGATCGTGATC
TTCACAGTGCTCCTGCAGTCTCTCTGTGTGGCTGTAACTTACGTGTACTTTACCAACGAGCTGAAGCAGATGCAG
GACAAGTACTCCAAAAGTGGCATTGCTTGTTTCTTAAAAGAAGATGACAGTTATTGGGACCCCAATGACGAAGAG
AGTATGAACAGCCCCTGCTGGCAAGTCAAGTGGCAACTCCGTCAGCTCGTTAGAAAGATGATTTTGAGAACCTCT
GAGGAAACCATTTCTACAGTTCAAGAAAAGCAACAAAATATTTCTCCCCTAGTGAGAGAAAGAGGTCCTCAGAGA
GTAGCAGCTCACATAACTGGGACCAGAGGAAGAAGCAACACATTGTCTTCTCCAAACTCCAAGAATGAAAAGGCT
CTGGGCCGCAAAATAAACTCCTGGGAATCATCAAGGAGTGGGCATTCATTCCTGAGCAACTTGCACTTGAGGAAT
GGTGAACTGGTCATCCATGAAAAAGGGTTTTACTACATCTATTCCCAAACATACTTTCGATTTCAGGAGGAAATA
AAAGAAAACACAAAGAACGACAAACAAATGGTCCAATATATTTACAAATACACAAGTTATCCTGACCCTATATTG
TTGATGAAAAGTGCTAGAAATAGTTGTTGGTCTAAAGATGCAGAATATGGACTCTATTCCATCTATCAAGGGGGA
ATATTTGAGCTTAAGGAAAATGACAGAATTTTTGTTTCTGTAACAAATGAGCACTTGATAGACATGGACCATGAA
GCCAGTTTTTTCGGGGCCTTTTTAGTTGGC**TAA**CTGACCTGGAAAGAAAAAGCAATAACCTCAAAGTGACTATTC
AGTTTTCAGGATGATACACTATGAAGATGTTTCAAAAAATCTGACCAAAACAAACAAACAGAAAACAGAAAACAA
AAAAACCTCTATGCAATCTGAGTAGAGCAGCCACAACCAAAAAATTCTACAACACACACTGTTCTGAAAGTGACT
CACTTATCCCAAGAAAATGAAATTGCTGAAAGATCTTTCAGGACTCTACCTCATATCAGTTTGCTAGCAGAAATC
TAGAAGACTGTCAGCTTCCAAACATTAATGCAATGGTTAACATCTTCTGTCTTTATAATCTACTCCTTGTAAAGA
CTGTAGAAGAAAGCGCAACAATCCATCTCTCAAGTAGTGTATCACAGTAGTAGCCTCCAGGTTTCCTTAAGGGAC
AACATCCTTAAGTCAAAAGAGAGAAGAGGCACCACTAAAAGATCGCAGTTTGCCTGGTGCAGTGGCTCACACCTG
TAATCCCAACATTTTGGGAACCCAAGGTGGGTAGATCACGAGATCAAGAGATCAAGACCATAGTGACCAACATAG
TGAAACCCCATCTCTACTGAAAGTGCAAAAATTAGCTGGGTGTGTTGGCACATGCCTGTAGTCCCAGCTACTTGA
GAGGCTGAGGCAGGAGAATCGTTTGAACCCGGGAGGCAGAGGTTGCAGTGTGGTGAGATCATGCCACTACACTCC
AGCCTGGCGACAGAGCGAGACTTGGTTTCAAAAAAAAAAAAAAAAAAAAACTTCAGTAAGTACGTGTTATTTTTT
TCAATAAAATTCTATTACAGTATGTCAAAAAAAAAAAAAAAAA

FIGURE 863

MAMMEVQGGPSLGQTCVLIVIFTVLLQSLCVAVTYVYFTNELKQMQDKYSKSGIACFLKEDDSYWDPNDEESMNS
PCWQVKWQLRQLVRKMILRTSEETISTVQEKQQNISPLVRERGPQRVAAHITGTRGRSNTLSSPNSKNEKALGRK
INSWESSRSGHSFLSNLHLRNGELVIHEKGFYYIYSQTYFRFQEEIKENTKNDKQMVQYIYKYTSYPDPILLMKS
ARNSCWSKDAEYGLYSIYQGGIFELKENDRIFVSVTNEHLIDMDHEASFFGAFLVG

FIGURE 864

ATGTCTGTGGTACCGCCCAATCGCTCGCAGACCGGCTGGCCCCGGGGGGGTCACTCAGTTCGGCAACAAGTACATC
CAGCAGACGAAGCCCCTCACCCTGGAGCGCACCATCAACCTGTACCCTCTTACCAATTATACTTTTGGTACAAAA
GAGCCCCTCTACGAGAAGGACAGCTCTGTTGCAGCCAGATTTCAGCGCATGAGGGAAGAATTTGATAAAATTGGA
ATGAGGAGGACTGTAGAAGGGGTTCTGATTGTACATGAGCACCGGCTACCCCATGTGTTACTGCTGCAGCTGGGA
ACAACTTTCTTCAAACTACCTGGTGGTGAACTTAACCCAGGAGAAGATGAAGTTGAAGGACTAAAACGCTTAATG
ACAGAGATACTGGGTCGTCAGGATGGAGTTTTGCAAGACTGGGTCATTGACGATTGCATTGGTAACTGGTGGAGA
CCAAATTTTGAACCTCCTCAGTATCCATATATTCCTGCACATATTACAAAGCCTAAGGAACATAAGAAGTTGTTT
CTGGTTCAGCTTCAAGAAAAAGCCTTGTTTGCAGTCCCTAAAAATTACAAGCTGGTAGCTGCACCATTGTTTGAA
TTGTATGACAATGCACCAGGATATGGACCCATCATTTCTAGTCTCCCTCAGCTGTTGAGCAGGTTCAATTTTATT
TACAACTGAATTCCTGCGCAGTGGAGAAGTAAAAGAAGCCGCTTGTCTCTGTGAGCACAGCTATATACAGTGTAG
AATAAATGTGGTAG

FIGURE 865

MSVVPPNRSQTGWPRGVTQFGNKYIQQTKPLTLERTINLYPLTNYTFGTKEPLYEKDSSVAARFQRMREEFDKIG
MRRTVEGVLIVHEHRLPHVLLLQLGTTFFKLPGGELNPGEDEVEGLKRLMTEILGRQDGVLQDWVIDDCIGNWWR
PNFEPPQYPYIPAHITKPKEHKKLFLVQLQEKALFAVPKNYKLVAAPLFELYDNAPGYGPIISSLPQLLSRFNFI
YN

FIGURE 866A

CACGCCCCGCGCTGCTGGGTCCCGCCAGACACGCCGCCGCCGCAGGAAAGTCTACAGTTTGGTACCCCAGGACTC
GCTGGTCAGGAAAGCCCTGCAGGACATGAGTGTTAGGCCCGACGCCTGGCCCTTGGCAGCTTGGGAGGTGGCTGG
GGCTGCTTTTGCCTTTGCCAGAGACAGCTCCAACTGAGGACCTCTCCAACGGGCCCATCCACAGTCCTTCCTTCC
CCTAGTGTCTGGGAAGACAGGCGCG**ATG**ATGGACTCCCCGTTCCTGGAGCTGTGGCAGTCCAAGGCAGTGTCCAT
CAGGGAGCAGCTGGGACTCGGGGACCGGCCCAACGACTCCTATTGCTACAACTCGGCCAAAAACAGCACCGTGCT
CCAGGGGGTCACCTTTGGTGGCATCCCCACTGTCCTGCTCATAGACGTCAGCTGCTTCCTGTTCTTAATCTTGGT
GTTTTCTATTATAAGAAGAAGATTCTGGGACTATGGCCGCATTGCCCTGGTGTCAGAAGCAGACAGCGAGTCCAG
ATTTCAGAGATTGTCATCGACTTCCTCCTCAGGTCAACAAGACTTTGAAAATGAGCTGGGATGCTGTCCCTGGCT
GACTGCCATCTTCCGTCTGCATGATGACCAGATCCTGGAATGGTGTGGGGAGGACGCCATCCACTACCTGTCCTT
CCAGAGGCACATCATCTTCCTGTTGGTGGTGGTCAGCTTTTTGTCCCTGTGTGTCATCCTGCCTGTCAACCTCTC
AGGGGATTTGCTGGACAAAGACCCGTATAGTTTTGGGAGGACAACAATAGCAAACCTACAGACTGACAATGACCT
CCTTTGGCTGCACACCATCTTTGCTGTCATTTACCTCTTCTTCACTGTGGGTTTCATGCGGCACCACACTCAGTC
CATTAAGTACAAAGAGGAGAACCTGGTGAGGCGGACCCTGTTCATCACAGGACTCCCCAGAGATGCCAGGAAGGA
GACTGTGGAGAGCCACTTCCGGGACGCGTATCCCACGTGTGAGGTGGTTGATGTGCAGCTGTGCTACAACGTGGC
CAAACTGATCTACCTGTGCAAGGAGAAAAAGAAGACTGAGAAGAGCCTGACCTATTACACAAACCTGCAGGTGAA
GACAGGCCAGCGGACCCTCATCAACCCCAAGCCCTGTGGCCAGTTTTGCTGCTGTGAAGTGCTGGGCTGTGAGTG
GGAAGACGCCATCTCTTACTACACACGGATGAAGGACAGGCTGCTGGAGAGGATCACAGAGGAAGAACGCCACGT
CCAGGACCAGCCCCTGGGAATGGCCTTCGTCACCTTCCAGGAGAAGTCCATGGCCACCTACATCCTGAAAGATTT
CAATGCCTGCAAGTGTCAGAGCCTTCAGTGCAAAGGTGAGCCCCAGCCGTCCTCCCATAGCAGGGAGCTCTATAC
CTCCAAGTGGACAGTCACCTTTGCTGCTGACCCTGAGGACATCTGCTGGAAGAACCTCTCTATCCAGGGCCTCCG
CTGGTGGCTACAGTGGCTGGGCATCAACTTCACCCTCTTCCTGGGGCTATTTTTCCTGACCACACCCTCCATCAT
CCTGTCCACCATGGACAAGTTTAATGTCACCAAACCCATCCATGCGCTGAATAACCCGATCATCAGCCAGTTCTT
CCCCACCCTCCTGCTCTGGTCCTTCTCGGCCCTGCTCCCCTCCATTGTCTACTACTCTACACTGCTGGAGTCTCA
CTGGACCAAGTCGGGGGAAAACCAGATCATGATGACCAAAGTCTACATATTCTTGATCTTCATGGTGCTGATCCT
GCCCTCCCTGGGTCTCACCAGTCTAGATTTTTTCTTCCGGTGGCTCTTTGACAAAACTTCCTCGGAGGCCTCCAT
CAGGTTGGAGTGCGTCTTCCTGCCTGACCAGGGTGCCTTCTTTGTGAACTATGTCATCGCCTCGGCCTTCATCGG
CAATGGCATGGAGCTGCTGCGGCTGCCAGGTCTCATCCTCTATACCTTCCGCATGATCATGGCCAAGACGGCTGC
TGACCGCAGGAATGTCAAGCAGAACCAGGCCTTCCAGTACGAGTTTGGAGCCATGTATGCATGGATGCTGTGTGT
CTTCACTGTCATCGTGGCCTACAGCATCACTTGTCCCATCATCGCGCCATTTGGCCTCATCTACATCCTGCTCAA
GCACATGGTGGACCGGCACAACCTCTACTTCGTCTACCTCCCAGCCAAGCTGGAGAAGGGGATCCACTTTGCCGC
TGTGAACCAGGCCTTGGCAGCCCCCATCCTGTGCCTCTTCTGGCTCTACTTCTTTTCCTTCCTGCGCCTGGGTAT
GAAGGCCCCCGCCACTCTGTTCACCTTCCTGGTGCTGCTGCTCACCATCCTGGTCTGCCTGGCTCACACCTGCTT
TGGATGCTTCAAGCACCTCAGCCCTCTGAACTACAAAACAGAAGAGCCTGCAAGTGACAAAGGAAGTGAGGCAGA
GGCCCACATGCCCCCACCGTTCACACCCTACGTGCCTCGGATTCTGAACGGCTTGGCCTCGGAGAGGACAGCACT
GTCTCCGCAGCAGCAGCAGCAGCAGACCTATGGTGCCATCCACAACATCAGCGGGACTATCCCTGGACAGTGCTT
GGCGCAGAGCGCCACGGGCAGTGTGGCTGCTGCCCCCCAGGAGGCC**TGA**GGCTGGGTCTCACTGCTCTGAAAAGA
CACAACCAGAATGGCCTGGGGCTCAGGCCCTTGGCTGAGTGGGAATGCGTTGGGACTGCCCAGCTGAGCTATCAG
GTGCCCATCTTTTCTGGTCCCAGCAGTGGTGAGGAGAGCACAGGCAGGCCTCGCCCCTCCCTTGCTCACCCAGTT
TCCCCTCCGGCACAAGCTTCCAGCTCTGCAGCTGGGGTGACATCCCCAGTGGTTTGTCGCCAAGACCATGTGGTG
GACTTTTCGCCCCCCAAACTGATGAGTCCGGGAGAATATATGGAGAGAGAGATGTAACAAGGGGAAGGCCTCCTC
CCTTCTGAGCACACACACAACCGATAACCAAAGAGATGCTGCAGTCCAGGTCTGAGGTCCCGCTGGCATCCAGCT
CCCTGCTCCATGGCCAGTCCCTCCCCAGCCCAGCAGTCCCTCCAGGCTACATCCAGGAGTAAGCTATGGGGAACA
GGTTGGGAGGTGGCCAGTGCTCCTGCCAGCTGTGCACACATCTCTGTATCCCGCTAGAGTTCTGTGTTTTTGTAT
CATGTTGTCAGGGACGCTAGCTGGGTCAGGGTTACCCCATAGCAGGCAGGGACAAGGACCACTCATAATATGCCC
ATTGGACCACAGTTAAGATCCAGCCTCTCTCACCTCTTCAGGGCTGAGTGCATGAGTCTGCACCTCCAGGCAGGC
TCTGTGCAGTACTCACCCCCTCCGTCTGCTCCCTCCAAGGTGTGGGGGTGGGCAGTGCTCAGGGCCTCCTCGGAG
CCAAAGGACAGCATGGTCGGCACAGAGGAAGGGGTACCTGGGCTGGGTGCAGGGCCATCCCACTGCCCTTGAGCT
GTGGCTCTGGCAGGAAGGAGGGGCAGCCCATCCCTCTTCTCCCTCCTGGGGATTCTGGGGAATGGGATGCAACTT

FIGURE 866B

AAGACTTCTGCCTGAGAAGCCTCCTCCCTGCTGCCTCCAGGGGGCACCAAGGCACAAGCCTGTGCAGTAGGGGCG
GGATGGGGGTGTGGAAGAGCAGGTCCAGGCTCCTAGCACAACTGGCCTGGGGCCTTGGCACCTCTGTAGGCCCTG
CCTGTGCCTGTCCGCTGGCCTGGGGGGCCTGGGCTTATCTGGGCCTTCTCACTCAGGGACTCTCTTGACGCTGAC
TTGCCCCCGCAGCGGTGGCCAGTGCTGCCTCTGCTCCAAGCTGCCCCTGCGCTGGGAGGGGTGGGGGCGGTGCCA
TTGGTCTGGTGCAGCATAGCCCTGGCCAGTGGCCTCATCCCCAGCAGGCCTCCCGTGCCTCTGCCAGCAAGGAGG
GGCCGGCCAGCTCTGCTTGCACAGGGGGCCCCATGTGGGGTCAGCGCACGCTCATGTCACTGAGTTCCAGCCGCT
TTTAGAGTAAAGTCGTTTATCATC

FIGURE 867

MMDSPFLELWQSKAVSIREQLGLGDRPNDSYCYNSAKNSTVLQGVTFGGIPTVLLIDVSCFLFLILVFSIIRRRF
WDYGRIALVSEADSESRFQRLSSTSSSGQQDFENELGCCPWLTAIFRLHDDQILEWCGEDAIHYLSFQRHIIFLL
VVVSFLSLCVILPVNLSGDLLDKDPYSFGRTTIANLQTDNDLLWLHTIFAVIYLFFTVGFMRHHTQSIKYKEENL
VRRTLFITGLPRDARKETVESHFRDAYPTCEVVDVQLCYNVAKLIYLCKEKKKTEKSLTYYTNLQVKTGQRTLIN
PKPCGQFCCCEVLGCEWEDAISYYTRMKDRLLERITEEERHVQDQPLGMAFVTFQEKSMATYILKDFNACKCQSL
QCKGEPQPSSHSRELYTSKWTVTFAADPEDICWKNLSIQGLRWWLQWLGINFTLFLGLFFLTTPSIILSTMDKFN
VTKPIHALNNPIISQFFPTLLLWSFSALLPSIVYYSTLLESHWTKSGENQIMMTKVYIFLIFMVLILPSLGLTSL
DFFFRWLFDKTSSEASIRLECVFLPDQGAFFVNYVIASAFIGNGMELLRLPGLILYTFRMIMAKTAADRRNVKQN
QAFQYEFGAMYAWMLCVFTVIVAYSITCPIIAPFGLIYILLKHMVDRHNLYFVYLPAKLEKGIHFAAVNQALAAP
ILCLFWLYFFSFLRLGMKAPATLFTFLVLLLTILVCLAHTCFGCFKHLSPLNYKTEEPASDKGSEAEAHMPPPFT
PYVPRILNGLASERTALSPQQQQQQTYGAIHNISGTIPGQCLAQSATGSVAAAPQEA

FIGURE 868A

CACGCCCCGCGCTGCTGGGTCCCGCCAGACACGCCGCCGCCGCAGGAAAGTCTACAGTTTGGTACCCCAGGACTC
GCTGGTCAGGAAAGCCCTGCAGGACATGAGTGTTAGGCCCGACGCCTGGCCCTTGGCAGCTTGGGAGGTGGCTGG
GGCTGCTTTTGCCTTTGCCAGAGACAGCTCCAACTGAGGACCTCTCCAACGGGCCCATCCACAGTCCTTCCTTCC
CCTAGTGTCTGGGAAGACAGGCGCGATGATGGACTCCCCGTTCCTGGAGCTGTGGCAGTCCAAGGCAGTGTCCAT
CAGGGAGCAGCTGGGACTCGGGGACCGGCCCAACGACTCCTATTGCTACAACTCGGCCAAAAACAGCACCGTGCT
CCAGGGGGTCACCTTTGGTGGCATCCCCACTGTCCTGCTCATAGACGTCAGCTGCTTCCTGTTCTTAATCTTGGT
GTTTTCTATTATAAGAAGAAGATTCTGGGACTATGGCCGCATTGCCCTGGTGTCAGAAGCAGACAGCGAGTCCAG
ATTTCAGAGATTGTCATCGACTTCCTCCTCAGGTCAACAAGACTTTGAAAATGAGCTGGGATGCTGTCCCTGGCT
GACTGCCATCTTCCGTCTGCATGATGACCAGATCCTGGAATGGTGTGGGGAGGACGCCATCCACTACCTGTCCTT
CCAGAGGCACATCATCTTCCTGTTGGTGGTGGTCAGCTTTTTGTCCCTGTGTGTCATCCTGCCTGTCAACCTCTC
AGGGGATTTGCTGGACAAAGACCCGTATAGTTTTGGGAGGACAACAATAGCAAACCTACAGACTGACAATGACCT
CCTTTGGCTGCACACCATCTTTGCTGTCATTTACCTCTTCTTCACTGTGGGTTTCATGCGGCACCACACTCAGTC
CATTAAGTACAAAGAGGAGAACCTGGTGAGGCGGACCCTGTTCATCACAGGACTCCCCAGAGATGCCAGGAAGGA
GACTGTGGAGAGCCACTTCCGGGACGCGTATCCCACGTGTGAGGTGGTTGATGTGCAGCTGTGCTACAACGTGGC
CAAACTGATCTACCTGTGCAAGGAGAAAAAGAAGACTGAGAAGAGCCTGACCTATTACACAAACCTGCAGGTGAA
GACAGGCCAGCGGACCCTCATCAACCCCAAGCCCTGTGGCCAGTTTTGCTGCTGTGAAGTGCTGGGCTGTGAGTG
GGAAGACGCCATCTCTTACTACACACGGATGAAGGACAGGCTGCTGGAGAGGATCACAGAGGAAGAACGCCACGT
CCAGGACCAGCCCCTGGGAATGGCCTTCGTCACCTTCCAGGAGAAGTCCATGGCCACCTACATCCTGAAAGATTT
CAATGCCTGCAAGTGTCAGAGCCTTCAGTGCAAAGGTGAGCCCCAGCCGTCCTCCCATAGCAGGGAGCTCTATAC
CTCCAAGTGGACAGTCACCTTTGCTGCTGACCCTGAGGACATCTGCTGGAAGAACCTCTCTATCCAGGGCCTCCG
CTGGTGGCTACAGTGGCTGGGCATCAACTTCACCCTCTTCCTGGGGCTATTTTTCCTGACCACACCCTCCATCAT
CCTGTCCACCATGGACAAGTTTAATGTCACCAAACCCATCCATGCGCTGAATAACCCGATCATCAGCCAGTTCTT
CCCCACCCTCCTGCTCTGGTCCTTCTCGGCCCTGCTCCCCTCCATTGTCTACTACTCTACACTGCTGGAGTCTCA
CTGGACCAAGTCGGGGGAAAACCAGATCATGATGACCAAAGTCTACATATTCTTGATCTTCATGGTGCTGATCCT
GCCCTCCCTGGGTCTCACCAGTCTAGATTTTTTCTTCCGGTGGCTCTTTGACAAAACTTCCTCGGAGGCCTCCAT
CAGGTTGGAGTGCGTCTTCCTGCCTGACCAGGGTGCCTTCTTTGTGAACTATGTCATCGCCTCGGCCTTCATCGG
CAATGGCATGGAGCTGCTGCGGCTGCCAGGTCTCATCCTCTATACCTTCCGCATGATCATGGCCAAGACGGCTGC
TGACCGCAGGAATGTCAAGCAGAACCAGGCCTTCCAGTACGAGTTTGGAGCCATGTATGCATGGATGCTGTGTGT
CTTCACTGTCATCGTGGCCTACAGCATCACTTGTCCCATCATCGCGCCATTTGGCCTCATCTACATCCTGCTCAA
GCACATGGTGGACCGGCACAACCTCTACTTCGTCTACCTCCCAGCCAAGCTGGAGAAGGGGATCCACTTTGCCGC
TGTGAACCAGGCCTTGGCAGCCCCCATCCTGTGCCTCTTCTGGCTCTACTTCTTTTCCTTCCTGCGCCTGGGTAT
GAAGGCCCCCGCCACTCTGTTCACCTTCCTGGTGCTGCTGCTCACCATCCTGGTCTGCCTGGCTCACACCTGCTT
TGGATGCTTCAAGCACCTCAGCCCTCTGAACTACAAAACAGAAGAGCCTGCAAGTGACAAAGGAAGTGAGGCAGA
GGCCCACATGCCCCCACCGTTCACACCCTACGTGCCTCGGATTCTGAACGGCTTGGCCTCGGAGAGGACAGCACT
GTCTCCGCAGCAGCAGCAGCAGCAGACCTATGGTGCCATCCACAACATCAGCGGGACTATCCCTGGACAGTGCTT
GGCGCAGAGCGCCACGGGCAGTGTGGCTGCTGCCCCCCAGGAGGCCTGAGGCTGGGTCTCACTGCTCTGAAAAGA
CACAACCAGAATGGCCTGGGGCTCAGGCCCTTGGCTGAGTGGGAATGCGTTGGGACTGCCCAGCTGAGCTATCAG
GTGCCCATCTTTTCTGGTCCCAGCAGTGGTGAGGAGAGCACAGGCAGGCCTCGCCCCTCCCTTGCTCACCCAGTT
TCCCCTCCGGCACAAGCTTCCAGCTCTGCAGCTGGGGTGACATCCCCAGTGGTTTGTCGCCAAGACCATGTGGTG
GACTTTTCGCCCCCCAAACTGATGAGTCCGGGAGAATATATGGAGAGAGAGATGTAACAAGGGGAAGGCCTCCTC
CCTTCTGAGCACACACACAACCGATAACCAAAGAGATGCTGCAGTCCAGGTCTGAGGTCCCGCTGGCATCCAGCT
CCCTGCTCCATGGCCAGTCCCTCCCCAGCCCAGCAGTCCCTCCAGGCTACATCCAGGAGTAAGCTATGGGGAACA
GGTTGGGAGGTGGCCAGTGCTCCTGCCAGCTGTGCACACATCTCTGTATCCCGCTAGAGTTCTGTGTTTTTGTAT
CATGTTGTCAGGGACGCTAGCTGGGTCAGGGTTACCCCATAGCAGGCAGGGACAAGGACCACTCATAATATGCCC
ATTGGACCACAGTTAAGATCCAGCCTCTCTCACCTCTTCAGGGCTGAGTGCATGAGTCTGCACCTCCAGGCAGGC
TCTGTGCAGTACTCACCCCCTCCGTCTGCTCCCTCCAAGGTGTGGGGGTGGGCAGTGCTCAGGGCCTCCTCGGAG
CCAAAGGACAGCATGGTCGGCACAGAGGAAGGGGTACCTGGGCTGGGTGCAGGGCCATCCCACTGCCCTTGAGCT
GTGGCTCTGGCAGGAAGGAGGGGCAGCCCATCCCTCTTCTCCCTCCTGGGGATTCTGGGGAATGGGATGCAACTT

FIGURE 868B

AAGACTTCTGCCTGAGAAGCCTCCTCCCTGCTGCCTCCAGGGGGCACCAAGGCACAAGCCTGTGCAGTAGGGGCG
GGATGGGGGTGTGGAAGAGCAGGTCCAGGCTCCTAGCACAACTGGCCTGGGGCCTTGGCACCTCTGTAGGCCCTG
CCTGTGCCTGTCCGCTGGCCTGGGGGGCCTGGGCTTATCTGGGCCTTCTCACTCAGGGACTCTCTTGACGCTGAC
TTGCCCCCGCAGCGGTGGCCAGTGCTGCCTCTGCTCCAAGCTGCCCCTGCGCTGGGAGGGGTGGGGGCGGTGCCA
TTGGTCTGGTGCAGCATAGCCCTGGCCAGTGGCCTCATCCCCAGCAGGCCTCCCGTGCCTCTGCCAGCAAGGAGG
GGCCGGCCAGCTCTGCTTGCACAGGGGGCCCCATGTGGGGTCAGCGCACGCTCATGTCACTGAGTTCCAGCCGCT
TTTAGAGTAAAGTCGTTTATCATC

FIGURE 869

MMDSPFLELWQSKAVSIREQLGLGDRPNDSYCYNSAKNSTVLQGVTFGGIPTVLLIDVSCFLFLILVFSIIRRRF
WDYGRIALVSEADSESRFQRLSSTSSSGQQDFENELGCCPWLTAIFRLHDDQILEWCGEDAIHYLSFQRHIIFLL
VVVSFLSLCVILPVNLSGDLLDKDPYSFGRTTIANLQTDNDLLWLHTIFAVIYLFFTVGFMRHHTQSIKYKEENL
VRRTLFITGLPRDARKETVESHFRDAYPTCEVVDVQLCYNVAKLIYLCKEKKKTEKSLTYYTNLQVKTGQRTLIN
PKPCGQFCCCEVLGCEWEDAISYYTRMKDRLLERITEEERHVQDQPLGMAFVTFQEKSMATYILKDFNACKCQSL
QCKGEPQPSSHSRELYTSKWTVTFAADPEDICWKNLSIQGLRWWLQWLGINFTLFLGLFFLTTPSIILSTMDKFN
VTKPIHALNNPIISQFFPTLLLWSFSALLPSIVYYSTLLESHWTKSGENQIMMTKVYIFLIFMVLILPSLGLTSL
DFFFRWLFDKTSSEASIRLECVFLPDQGAFFVNYVIASAFIGNGMELLRLPGLILYTFRMIMAKTAADRRNVKQN
QAFQYEFGAMYAWMLCVFTVIVAYSITCPIIAPFGLIYILLKHMVDRHNLYFVYLPAKLEKGIHFAAVNQALAAP
ILCLFWLYFFSFLRLGMKAPATLFTFLVLLLTILVCLAHTCFGCFKHLSPLNYKTEEPASDKGSEAEAHMPPPFT
PYVPRILNGLASERTALSPQQQQQQTYGAIHNISGTIPGQCLAQSATGSVAAAPQEA

FIGURE 870

AATCCTGGAACAAGGCTACAGCGTCGAAGATCCCCAGCGCTGCGGGCTCGGAGAGCAGTCCTAACGGCGCCTCGT
ACGCTAGTGTCCTCCCTTTTCAGTCCGCGTCCCTCCCTGGGCCGGGCTGGCACTCTTGCCTTCCCCGTCCCTCATG
GCGCTGCTCCGACGCCCGACGGTGTCCAGTGATTTGGAGAATATTGACACAGGAGTTAATTCTAAAGTTAAGAG
TCATGTGACTATTAGGCGAACTGTTTTAGAAGAAATTGGAAATAGAGTTACAACCAGAGCAGCACAAGTAGCTAA
GAAAGCTCAGAACACCAAAGTTCCAGTTCAACCCACCAAAACAACAAATGTCAACAAACAACTGAAACCTACTGC
TTCTGTCAAACCAGTACAGATGGAAAAGTTGGCTCCAAAGGGTCCTTCTCCCACACCTGAGGATGTCTCCATGAA
GGAAGAGAATCTCTGCCAAGCTTTTTCTGATGCCTTGCTCTGCAAAATCGAGGACATTGATAACGAAGATTGGGA
GAACCCTCAGCTCTGCAGTGACTACGTTAAGGATATCTATCAGTATCTCAGGCAGCTGGAGGTTTTGCAGTCCAT
AAACCCACATTTCTTAGATGGAAGAGATATAAATGGACGCATGCGTGCCATCCTAGTGGATTGGCTGGTACAAGT
CCACTCCAAGTTTAGGCTTCTGCAGGAGACTCTGTACATGTGCGTTGGCATTATGGATCGATTTTTACAGGTTCA
GCCAGTTTCCCGGAAGAAGCTTCAATTAGTTGGGATTACTGCTCTGCTCTTGGCTTCCAAGTATGAGGAGATGTT
TTCTCCAAATATTGAAGACTTTGTTTACATCACAGACAATGCTTATACCAGTTCCCAAATCCGAGAAATGGAAAC
TCTAATTTTGAAAGAATTGAAATTTGAGTTGGGTCGACCCTTGCCACTACACTTCTTAAGGCGAGCATCAAAAGC
CGGGGAGGTTGATGTTGAACAGCACACTTTAGCCAAGTATTTGATGGAGCTGACTCTCATCGACTATGATATGGT
GCATTATCATCCTTCTAAGGTAGCAGCAGCTGCTTCCTGCTTGTCTCAGAAGGTTCTAGGACAAGGAAAATGGAA
CTTAAAGCAGCAGTATTACACAGGATACACAGAGAATGAAGTATTGGAAGTCATGCAGCACATGGCCAAGAATGT
GGTGAAAGTAAATGAAAACTTAACTAAATTCATCGCCATCAAGAATAAGTATGCAAGCAGCAAACTCCTGAAGAT
CAGCATGATCCCTCAGCTGAACTCAAAAGCCGTCAAAGACCTTGCCTCCCCACTGATAGGAAGGTCCTAGGCTGC
CGTGGGCCCTGGGGATGTGTGCTTCATTGTGCCCTTTTTCTTATTGGTTTAGAACTCTTGATTTTGTACATAGTC
CTCTGGTCTATCTCATGAAACCTCTTCTCAGACCAGTTTTCTAAACATATATTGAGGAAAAATAAAGCGATTGGT
TTTTCTTAAGGTAAAAAAAAAAAAAAAAAA

FIGURE 871

MALLRRPTVSSDLENIDTGVNSKVKSHVTIRRTVLEEIGNRVTTRAAQVAKKAQNTKVPVQPTKTTNVNKQLKPT
ASVKPVQMEKLAPKGPSPTPEDVSMKEENLCQAFSDALLCKIEDIDNEDWENPQLCSDYVKDIYQYLRQLEVLQS
INPHFLDGRDINGRMRAILVDWLVQVHSKFRLLQETLYMCVGIMDRFLQVQPVSRKKLQLVGITALLLASKYEEM
FSPNIEDFVYITDNAYTSSQIREMETLILKELKFELGRPLPLHFLRRASKAGEVDVEQHTLAKYLMELTLIDYDM
VHYHPSKVAAAASCLSQKVLGQGKWNLKQQYYTGYTENEVLEVMQHMAKNVVKVNENLTKFIAIKNKYASSKLLK
ISMIPQLNSKAVKDLASPLIGRS

FIGURE 872

CTGCAGACGAGGCAGGGAGAGGCGGGACTTCGCGGGCGAGACGTCATCGGGGCGCCGGACGCCGGGGCGCCTGGG
AGTTTGAAGCAAACAGGCAGCGCGCGACAATGGCGGTCGCTCGTGCAGCTTTGGGGCCATTGGTGACGGGTCTGT
ACGACGTGCAGGCTTTCAAGTTTGGGGACTTCGTGCTGAAGAGCGGGCTTTCCTCCCCCATCTACATCGATCTGC
GGGGCATCGTGTCTCGACCGCGTCTTCTGAGTCAGGTTGCAGATATTTTATTCCAAACTGCCCAAAATGCAGGCA
TCAGTTTTGACACCGTGTGTGGAGTGCCTTATACAGCTTTGCCATTGGCTACAGTTATCTGTTCAACCAATCAAA
TTCCAATGCTTATTAGAAGGAAAGAAACAAAGGATTATGGAACTAAGCGTCTTGTAGAAGGAACTATTAATCCAG
GAGAAACCTGTTTAATCATTGAAGATGTTGTCACCAGTGGATCTAGTGTTTTGGAAACTGTTGAGGTTCTTCAGA
AGGAGGGCTTGAAGGTCACTGATGCCATAGTGCTGTTGGACAGAGAGCAGGGAGGCAAGGACAAGTTGCAGGCGC
ACGGGATCCGCCTCCACTCAGTGTGTACATTGTCCAAAATGCTGGAGATTCTCGAGCAGCAGAAAAAAGTTGATG
CTGAGACAGTTGGGAGAGTGAAGAGGTTTATTCAGGAGAATGTCTTTGTGGCAGCGAATCATAATGGTTCTCCCC
TTTCTATAAAGGAAGCACCCAAAGAACTCAGCTTCGGTGCACGTGCAGAGCTGCCCAGGATCCACCCAGTTGCAT
CGAAGCTTCTCAGGCTTATGCAAAAGAAGGAGACCAATCTGTGTCTATCTGCTGATGTTTCACTGGCCAGAGAGC
TGTTGCAGCTAGCAGATGCTTTAGGACCTAGTATCTGCATGCTGAAGACTCATGTAGATATTTTGAATGATTTTA
CTCTGGATGTGATGAAGGAGTTGATAACTCTGGCAAAATGCCATGAGTTCTTGATATTTGAAGACCGGAAGTTTG
CAGATATAGGAAACACAGTGAAAAAGCAGTATGAAGGAGGTATCTTTAAAATAGCTTCCTGGGCAGATCTAGTAA
ATGCTCACGTGGTGCCAGGCTCAGGAGTTGTGAAAGGCCTGCAAGAAGTGGGCCTGCCTTTGCATCGGGGGTGCC
TCCTTATTGCGGAAATGAGCTCCACCGGCTCCCTGGCCACTGGGGACTACACTAGAGCAGCGGTTAGAATGGCTG
AGGAGCACTCTGAATTTGTTGTTGGTTTTATTTCTGGCTCCCGAGTAAGCATGAAACCAGAATTTCTTCACTTGA
CTCCAGGAGTTCAGTTGGAAGCAGGAGGAGATAATCTTGGCCAACAGTACAATAGCCCACAAGAAGTTATTGGCA
AACGAGGTTCCGATATCATCATTGTAGGTCGTGGCATAATCTCAGCAGCTGATCGTCTGGAAGCAGCAGAGATGT
ACAGAAAAGCTGCTTGGGAAGCGTATTTGAGTAGACTTGGTGTTTGAGTGCTTCAGATACATTTTTCAGATACAA
TGTGAAGACATTGAAGATATGTGGTCCTCCTGAAAGTCACTGGCTGGAAATAATCCAATTATTCCTGCTTGGATT
CTTCCACAGGGCCTGTGTAAGAATGGGTTCTGGAGTTCTCATGGTCTTTAGGAAATATTGAGTAATTTGTAATCA
CCGCATTGATACTATAATAAGTTCATTCTTAAGCTTGCTTTTTTTGAGACTGGTGTTTGTTAGACAGCCACAGTC
CTGTCTGGGTTAGGGTCTTCCACATTTGAGGATCCTTCCTATCTCTCCATGGGACTAGACTGCTTTGTTATTCTA
TTTATTTTTTAATTTTTTTCGAGACAGGATCTCACTCTGTTGCCCAGGATGGAGTGCAGTGGTGAGATCACGGCT
CATTGCAGCCTCGACCTCCCAGGTGATCCTCCCACCTCAGCTTCCAGATTAGCTGGTGCTATAGGCATGCACCAC
CACGTCCATCTAAATTTCTTTATTATTTGTAGAGATGAGGTCTTGCCATGTTACCCAGGCTGGTCTCAACTCCTG
GGCTCAAGCGATCCTCCTGCCTCAGTCTCTCAAAGTGCTGGGATTACAGGTGTGAGCCACTGTGCCCAGCCTAAT
TGCAGTAAGACAAAAATTCTAGGGCACCAAGAGGCTAAAGTCAGCACAGCTTTTCTTGTGTCCTGTATT

FIGURE 873

MAVARAALGPLVTGLYDVQAFKFGDFVLKSGLSSPIYIDLRGIVSRPRLLSQVADILFQTAQNAGISFDTVCGVP
YTALPLATVICSTNQIPMLIRRKETKDYGTKRLVEGTINPGETCLIIEDVVTSGSSVLETVEVLQKEGLKVTDAI
VLLDREQGGKDKLQAHGIRLHSVCTLSKMLEILEQQKKVDAETVGRVKRFIQENVFVAANHNGSPLSIKEAPKEL
SFGARAELPRIHPVASKLLRLMQKKETNLCLSADVSLARELLQLADALGPSICMLKTHVDILNDFTLDVMKELIT
LAKCHEFLIFEDRKFADIGNTVKKQYEGGIFKIASWADLVNAHVVPGSGVVKGLQEVGLPLHRGCLLIAEMSSTG
SLATGDYTRAAVRMAEEHSEFVVGFISGSRVSMKPEFLHLTPGVQLEAGGDNLGQQYNSPQEVIGKRGSDIIIVG
RGIISAADRLEAAEMYRKAAWEAYLSRLGV

FIGURE 874

GGGGGACTCCACTGATGTCGTGGCGCTTTAGGGGAAGAAGTTGGTGTTTCGCTGGGCCCTGGTACTGAAGACGCG
GTCCGGGTCGCCCCTAGCTGTTTCCTACTCACCCAAAGCCCCGCACCCGCCTTTTCTCTCTCTCCTCTGGCAGGA
TGAGGCGTGCAGGCCTGGGTGAAGGAGTACCTCCTGGCAACTATGGGAACTATGGCTATGCTAATAGTGGGTATA
GTGCCTGTGAAGAAGAAAATGAGAGGCTCACTGAAAGTCTGAGAAGCAAAGTAACTGCTATAAAATCTCTTTCCA
TTGAAATAGGCCATGAAGTTAAAACCCAGAATAAATTATTAGCTGAAATGGATTCACAATTTGATTCCACAACTG
GATTTCTAGGTTTATGTCCCATGTAAGGAAACTTAGTGGGAGAGTAACAGAATGCCTGGAGAGCCTGACTCTGAG
CTCTTGAAGTAGTCAGCCAGTTTGTGGTAAAATGGTAATTGAATTTTCCTAACTGCATCAACTGTAATGATATAC
TCCCTTCTCCTCCTTTATTTAGTTAAAATTGTAGGCTGATTTCTTTTTACCTACAATCTTCCTAATAATTTTTGA
TGATAATGACCCCTCATTTCTTTCTGCCCAAAGACCTCATTCTTTAAATAAAACTTGTTATTTTGGCATATTTCT
GGTAGGGCCCATTGCACATGTGTATCAGTATAGTTATTATTTCATATTAACTTTATGAATTCTCTTGACTTGGCT
TATAATAGTTTTATGATTTTTACTACATAGGTAGCACATTTATCATTTGTGACAGAATAATGTGAAGTTAAGTAA
TTACTGAACTTTAAATGGAAATAGTATGCAAGAAACTCAGGCATTGAACTTGAAGATAAGAGTATTATTGCTTTA
ATCCAGTGTATTTGTTTATGGAAAGAAAAACACAAAGGCAGACTGTTGAGTAAAAAATATTAAATATTGTTAAAT
ATTCTGTATTTTGGAATTTATCCATTTATAGGCTTCAAAAGTAAATTTTTAAATAAAATAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAATAAAAAAAAAAAAAAAAAAAAAAAAACAAAA

FIGURE 875

MRRAGLGEGVPPGNYGNYGYANSGYSACEEENERLTESLRSKVTAIKSLSIEIGHEVKTQNKLLAEMDSQFDSTT
GFLGLCPM

974/8433

FIGURE 876

ATTCGGGGCGAGGGAGGAGGAAGAAGCGGAGGAGGCGGCTCCCGCTCGCAGGGCCGTGCACCTGCCCGCCCGCCC
GCTCGCTCGCTCGCCCGCCGCGCCGCGCTGCCGACCGCCAGCATGCTGCCGAGAGTGGGCTGCCCCGCGCTGCCG
CTGCCGCCGCCGCCGCTGCTGCCGCTGCTGCCGCTGCTGCTGCTGCTACTGGGCGCGAGTGGCGGCGGCGGCGGG
GCGCGCGCGGAGGTGCTGTTCCGCTGCCCGCCCTGCACACCCGAGCGCCTGGCCGCCTGCGGGCCCCCGCCGGTT
GCGCCGCCCGCCGCGGTGGCCGCAGTGGCCGGAGGCGCCCGCATGCCATGCGCGGAGCTCGTCCGGGAGCCGGGC
TGCGGCTGCTGCTCGGTGTGCGCCCGGCTGGAGGGCGAGGCGTGCGGCGTCTACACCCCGCGCTGCGGCCAGGGG
CTGCGCTGCTATCCCCACCCGGGCTCCGAGCTGCCCCTGCAGGCGCTGGTCATGGGCGAGGGCACTTGTGAGAAG
CGCCGGGACGCCGAGTATGGCGCCAGCCCGGAGCAGGTTGCAGACAATGGCGATGACCACTCAGAAGGAGGCCTG
GTGGAGAACCACGTGGACAGCACCATGAACATGTTGGGCGGGGGAGGCAGTGCTGGCCGGAAGCCCCTCAAGTCG
GGTATGAAGGAGCTGGCCGTGTTCCGGGAGAAGGTCACTGAGCAGCACCGGCAGATGGGCAAGGGTGGCAAGCAT
CACCTTGGCCTGGAGGAGCCCAAGAAGCTGCGACCACCCCCTGCCAGGACTCCCTGCCAACAGGAACTGGACCAG
GTCCTGGAGCGGATCTCCACCATGCGCCTTCCGGATGAGCGGGGCCCTCTGGAGCACCTCTACTCCCTGCACATC
CCCAACTGTGACAAGCATGGCCTGTACAACCTCAAACAGTGCAAGATGTCTCTGAACGGGCAGCGTGGGGAGTGC
TGGTGTGTGAACCCCAACACCGGGAAGCTGATCCAGGGAGCCCCCACCATCCGGGGGGACCCCGAGTGTCATCTC
TTCTACAATGAGCAGCAGGAGGCTTGCGGGGTGCACACCCAGCGGATGCAGTAGACCGCAGCCAGCCGGTGCCTG
GCGCCCCTGCCCCCCGCCCCTCTCCAAACACCGGCAGAAAACGGAGAGTGCTTGGGTGGTGGGTGCTGGAGGATT
TTCCAGTTCTGACACACGTATTTATATTTGGAAAGAGACCAGCACCGAGCTCGGCACCTCCCCGGCCTCTCTCTT
CCCAGCTGCAGATGCCACACCTGCTCCTTCTTGCTTTCCCCGGGGGAGGAAGGGGGTTGTGGTCGGGGAGCTGGG
GTACAGGTTTGGGGAGGGGGAAGAGAAATTTTTATTTTTGAACCCCTGTGTCCCTTTTGCATAAGATTAAAGGAA
GGAAAAGT

FIGURE 877

MLPRVGCPALPLPPPPLLPLLPLLLLLLGASGGGGGARAEVLFRCPPCTPERLAACGPPPVAPPAAVAAVAGGAR
MPCAELVREPGCGCCSVCARLEGEACGVYTPRCGQGLRCYPHPGSELPLQALVMGEGTCEKRRDAEYGASPEQVA
DNGDDHSEGGLVENHVDSTMNMLGGGGSAGRKPLKSGMKELAVFREKVTEQHRQMGKGGKHHLGLEEPKKLRPPP
ARTPCQQELDQVLERISTMRLPDERGPLEHLYSLHIPNCDKHGLYNLKQCKMSLNGQRGECWCVNPNTGKLIQGA
PTIRGDPECHLFYNEQQEACGVHTQRMQ

FIGURE 878A

GCAGCCGCCACATTCAACAGGCAGCAGCGCAGCGGGCGCGCCGCTGGGGAGAGCAAGCGGCCCGCGGCGTCCGTC
CGTCCTTCCGTCCGCGGCCCTGTCAGCTGGAGCGCGGCGCAGGCTCTGCCCCGGCCCGGCGGCTCTGGCCGGCCG
TCCAGTCCGTGCGGCGGACCCCGAGGAGCCTCGATGTGGATGGCCCCGCGAAGTTAAGTTCTGGGCTCGCGCTTC
CACTCCGCCGCGCCTTCCTCCCAGTTTCCGTCCGCTCGCCGCACCGGCTTCGTTCCCCCAAATCTCGGACCGTCC
CTTCGCGCCCCCTCCCCGTCCGCCCCCAGTGCTGCGTTCTCCCCCTCTTGGCTCTCCTGCGGCTGGGGGAGGGGC
GGGGGTCACC**ATG**GCCGAGGCGCCTCAGGTGGTGGAGATCGACCCGGACTTCGAGCCGCTGCCCCGGCCGCGCTC
GTGCACCTGGCCGCTGCCCAGGCCGGAGTTTAGCCAGTCCAACTCGGCCACCTCCAGCCCGGCGCCGTCGGGCAG
CGCGGCTGCCAACCCCGACGCCGCGGCGGGCCTGCCCTCGGCCTCGGCTGCCGCTGTCAGCGCCGACTTCATGAG
CAACCTGAGCTTGCTGGAGGAGAGCGAGGACTTCCCGCAGGCGCCCGGCTCCGTGGCGGCGGCGGTGGCGGCGGC
GGCCGCCGCGGCCGCCACCGGGGGGCTGTGCGGGGACTTCCAGGGCCCGGAGGCGGGCTGCCTGCACCCAGCGCC
ACCGCAGCCCCCGCCGCCCGGGCCGCTGTCGCAGCACCCGCCGGTGCCCCCCGCCGCCGCTGGGCCGCTCGCGGG
GCAGCCGCGCAAGAGCAGCTCGTCCCGCCGCAACGCGTGGGGCAACCTGTCCTACGCCGACCTCATCACCAAGGC
CATCGAGAGCTCGGCGGAGAAGCGGCTCACGCTGTCGCAGATCTACGAGTGGATGGTCAAGAGCGTGCCCTACTT
CAAGGATAAGGGTGACAGCAACAGCTCGGCGGGCTGGAAGAATTCAATTCGTCATAATCTGTCCCTACACAGCAA
GTTCATTCGTGTGCAGAATGAAGGAACTGGAAAAAGTTCTTGGTGGATGCTCAATCCAGAGGGTGGCAAGAGCGG
GAAATCTCCTAGGAGAAGAGCTGCATCCATGGACAACAACAGTAAATTTGCTAAGAGCCGAAGCCGAGCTGCCAA
GAAGAAAGCATCTCTCCAGTCTGGCCAGGAGGGTGCTGGGGACAGCCCTGGATCACAGTTTTCCAAATGGCCTGC
AAGCCCTGGCTCTCACAGCAATGATGACTTTGATAACTGGAGTACATTTCGCCCTCGAACTAGCTCAAATGCTAG
TACTATTAGTGGGAGACTCTCACCCATTATGACCGAACAGGATGATCTTGGAGAAGGGGATGTGCATTCTATGGT
GTACCCGCCATCTGCCGCAAAGATGGCCTCTACTTTACCCAGTCTGTCTGAGATAAGCAATCCCGAAAACATGGA
AAATCTTTTGGATAATCTCAACCTTCTCTCATCACCAACATCATTAACTGTTTCGACCCAGTCCTCACCTGGCAC
CATGATGCAGCAGACGCCGTGCTACTCGTTTGCGCCACCAAACACCAGTTTGAATTCACCCAGCCCAAACTACCA
AAAATATACATATGGCCAATCCAGCATGAGCCCTTTGCCCCAGATGCCTATACAAACACTTCAGGACAATAAGTC
GAGTTATGGAGGTATGAGTCAGTATAACTGTGCGCCTGGACTCTTGAAGGAGTTGCTGACTTCTGACTCTCCTCC
CCATAATGACATTATGACACCAGTTGATCCTGGGGTAGCCCAGCCCAACAGCCGGGTTCTGGGCCAGAACGTCAT
GATGGGCCCTAATTCGGTCATGTCAACCTATGGCAGCCAGGCATCTCATAACAAAATGATGAATCCCAGCTCCCA
TACCCACCCTGGACATGCTCAGCAGACATCTGCAGTTAACGGGCGTCCCCTGCCCCACACGGTAAGCACCATGCC
CCACACCTCGGGTATGAACCGCCTGACCCAAGTGAAGACACCTGTACAAGTGCCTCTGCCCCACCCCATGCAGAT
GAGTGCCCTGGGGGGCTACTCCTCCGTGAGCAGCTGCAATGGCTATGGCAGAATGGGCCTTCTCCACCAGGAGAA
GCTCCCAAGTGACTTGGATGGCATGTTCATTGAGCGCTTAGACTGTGACATGGAATCCATCATTCGGAATGACCT
CATGGATGGAGATACATTGGATTTTAACTTTGACAATGTGTTGCCCAACCAAAGCTTCCCACACAGTGTCAAGAC
AACGACACATAGCTGGGTGTCAGGC**TGA**GGGTTAGTGAGCAGGTTACACTTAAAAGTACTTCAGATTGTCTGACA
GCAGGAACTGAGAGAAGCAGTCCAAAGATGTCTTTCACCAACTCCCTTTTAGTTTTCTTGGTTAAAAAAAAAAAC
AAAAAAAAAAACCCTCCTTTTTTTCCTTTCGTCAGACTTGGCAGCAAAGACATTTTTCCTGTACAGGATGTTTGC
CCAATGTGTGCAGGTTATGTGCTGCTGTAGATAAGGACTGTGCCATTGGAAATTTCATTACAATGAAGTGCCAAA
CTCACTACACCATATAATTGCAGAAAAGATTTTCAGATCCTGGTGTGCTTTCAAGTTTTGTATATAAGCAGTAGA
TACAGATTGTATTTGTGTGTGTTTTTGGTTTTTCTAAATATCCAATTGGTCCAAGGAAAGTTTATACTCTTTTTG
TAATACTGTGATGGGCCTCATGTCTTGATAAGTTAAACTTTTGTTTGTACTACCTGTTTTCTGCGGAACTGACGG
ATCACAAAGAACTGAATCTCCATTCTGCATCTCCATTGAACAGCCTTGGACCTGTTCACGTTGCCACAGAATTCA
CATGAGAACCAAGTAGCCTGTTATCAATCTGCTAAATTAATGGACTTGTTAAACTTTTGGAAAAAAAAAAGATTAA
ATGCCAGCTTTGTACAGGTCTTTTCTATTTTTTTTTGTTTATTTTGTTATTTGCAAATTTGTACAAACATTTAAA
TGGTTCTAATTTCCAGATAAATGATTTTTGATGTTATTGTTGGGACTTAAGAACATTTTTGGAATAGATATTGAA
CTGTAATAATGTTTTCTTAAAACTAGAGTCTACTTTGTTACATAGTCAGCTTGTAAATTTTGTGGAACCACAGGT
ATTTGGGGCAGCATTCATAATTTTCATTTTGTATTCTAACTGGATTAGTACTAATTTTATACATGCTTAACTGGT
TTGTACACTTTGGGATGCTACTTAGTGATGTTTCTGACTAATCTTAAATCATTGTAATTAGTACTTGCATATTCA
ACGTTTCAGGCCCTGGTTGGGCAGGAAAGTGATGTATAGTTATGGACACTTTGCGTTTCTTATTTAGGATAACTT
AATATGTTTTTATGTATGTATTTTAAAGAAATTTCATCTGCTTCTACTGAACTATGCGTACTGCATAGCATCAAG
TCTTCTCTAGAGACCTCTGTAGTCCTGGGAGGCCTCATAATGTTTGTAGATCAGAAAAGGGAGATCTGCATCTAA

FIGURE 878B

AGCAATGGTCCTTTGTCAAACGAGGGATTTTGATCCACTTCACCATTTTGAGTTGAGCTTTAGCAAAAGTTTCCC
CTCATAATTCTTTGCTCTTGTTTCAGTCCAGGTGGAGGTTGGTTTTGTAGTTCTGCCTTGAGGAATTATGTCAAC
ACTCATACTTCATCTCATTCTCCCTTCTGCCCTGCAGATTAGATTACTTAGCACACTGTGGAAGTTTAAGTGGAA
GGAGGGAATTTAAAAATGGGACTTGAGTGGTTTGTAGAATTTGTGTTCATAAGTTCAGATGGGTAGCAAATGGAA
TAGAACTTACTTAAAAATTGGGGAGATTTATTTGAAAACCAGCTGTAAGTTGTGCATTGAGATTATGTTAAAAGC
CTTGGCTTAAGAATTTGAAAATTTCTTTAGCCTGTAGCAACCTAAACTGTAATTCCTATCATTATGTTTTATTAC
TTTCCAATTACCTGTAACTGACAGACCAAATTAATTGGCTTTGTGTCCTATTTAGTCCATCAGTATTTTCAAGTC
ATGTGGAAAGCCCAAAGTCATCACAATGAAGAGAACAGGTGCACAGCACTGTTCCTCTTGTGTTCTTGAGAAGGA
TCTAATTTTTCTGTATATAGCCCACATCACACTTGCTTTGTCTTGTATGTTAATTGCATCTTCATTGGCTTGGTA
TTTCCTAAATGTTTAACAAGAACACAAGTGTTCCTGATAAGATTTCCTACAGTAAGCCAGCTGTATTGTAAGCTT
CCCACCGTGATGATCATTTTTTTGAAGATTCATTGAACAGCCACCACTCTATCATCCTCATTTTGGGGCAGTCCA
AGACATAGCTGGTTTTAGAAACCCAAGTTCCTCTAAGCACAGCCTCCCGGGTATGTAACTGAACTTGGTGCCAAA
GTACTTGTGTACTAATTTCTATTACTACGTACTGTCACTTTCCTCCCGTGCCATTACTGCATCATAATACAAGGA
ACCTCAGAGCCCCCATTTGTTCATTAAAGAGGCAACTACAGCCAAAATCACTGTTAAAATCTTACTACTTCATGG
AGTAGCTCTTAGGAAAATATATCTTCCTCCTGAGTCTGGGTAATTATACCTCTCCCAAGCCCCCATTGTGTGTTG
AAATCCTGTCATGAATCCTTGGTAGCTCTCTGAGAACAGTGAAGTCCAGGGAAAGGCATCTGGTCTGTCTGGAAA
GCAAACATTATGTGGCCTCTGGTAGTTTTTTTCCTGTAAGAATACTGACTTTCTGGAGTAATGAGTATATATCAG
TTATTGTACATGATTGCTTTGTGAAATGTGCAAATGATATCACCTATGCAGCCTTGTTTGATTTATTTTCTCTGG
TTTGTACTGTTATTAAAAGCATATTGTATTATAGAGCTATTCAGATATTTTAAATATAAAGATGTATTGTTTCCG
TAATATAGACGTATGGAATATATTTAGGTAATAGATGTATTACTTGGAAAGTTCTGCTTTGACAAACTGACAAAG
TCTAAATGAGCACATGTATCCCAGTGAGCAGTAAATCAATGGAACATCCCAAGAAGAGGATAAGGATGCTTAAAA
TGGAAATCATTCTCCAACGATATACAAATTGGACTTGTTCAACTGCTGGATATATGCTACCAATAACCCCAGCCC
CAACTTAAAATTCTTACATTCAAGCTCCTAAGAGTTCTTAATTTATAACTAATTTTAAAAGAGAAGTTTCTTTTC
TGGTTTTAGTTTGGGAATAATCATTCATTAAAAAAAATGTATTGTGGTTTATGCGAACAGACCAACCTGGCATTA
CAGTTGGCCTCTCCTTGAGGTGGGCACAGCCTGGCAGTGTGGCCAGGGGTGGCCATGTAAGTCCCATCAGGACGT
AGTCATGCCTCCTGCATTTCGCTACCCGAGTTTAGTAACAGTGCAGATTCCACGTTCTTGTTCCGATACTCTGAG
AAGTGCCTGATGTTGATGTACTTACAGACACAAGAACAATCTTTGCTATAATTGTATAAAGCCATAAATGTACAT
AAATTATGTTTAAATGGCTTGGTGTCTTTCTTTTCTAATTATGCAGAATAAGCTCTTTATTAGGAATTTTTTGTG
AAGCTATTAAATACTTGAGTTAA

FIGURE 879

MAEAPQVVEIDPDFEPLPRPRSCTWPLPRPEFSQSNSATSSPAPSGSAAANPDAAAGLPSASAAAVSADFMSNLS
LLEESEDFPQAPGSVAAAVAAAAAAAATGGLCGDFQGPEAGCLHPAPPQPPPPGPLSQHPPVPPAAAGPLAGQPR
KSSSSRRNAWGNLSYADLITKAIESSAEKRLTLSQIYEWMVKSVPYFKDKGDSNSSAGWKNSIRHNLSLHSKFIR
VQNEGTGKSSWWMLNPEGGKSGKSPRRRAASMDNNSKFAKSRSRAAKKKASLQSGQEGAGDSPGSQFSKWPASPG
SHSNDDFDNWSTFRPRTSSNASTISGRLSPIMTEQDDLGEGDVHSMVYPPSAAKMASTLPSLSEISNPENMENLL
DNLNLLSSPTSLTVSTQSSPGTMMQQTPCYSFAPPNTSLNSPSPNYQKYTYGQSSMSPLPQMPIQTLQDNKSSYG
GMSQYNCAPGLLKELLTSDSPPHNDIMTPVDPGVAQPNSRVLGQNVMMGPNSVMSTYGSQASHNKMMNPSSHTHP
GHAQQTSAVNGRPLPHTVSTMPHTSGMNRLTQVKTPVQVPLPHPMQMSALGGYSSVSSCNGYGRMGLLHQEKLPS
DLDGMFIERLDCDMESIIRNDLMDGDTLDFNFDNVLPNQSFPHSVKTTTHSWVSG

FIGURE 880

CGGAGCCAGCGTGGGAGGCCGCTGCCGTCGCGCGCCTTGGTTTTTCTGTTCCTTTTTTTTTTTTTTTTTAACTT
CCTGCCTATCACACGCAGCCATCAGCCCACAAAGACATGACTACCAACGCGGGCCCCTTGCACCCATACTGGCCT
CAGCACCTAAGACTGGACAACTTTGTACCTAATGACCGCCCCACCTGGCATATACTGGCTGGCCTCTTCTCTGTC
ACAGGGGTCTTAGTCGTGACCACATGGCTGTTGTCAGGTCGTGCTGCGGTTGTCCCATTGGGGACTTGGCGGCGA
CTGTCCCTGTGCTGGTTTGCAGTGTGTGGGTTCATTCACCTGGTGATCGAGGGCTGGTTCGTTCTCTACTACGAA
GACCTGCTTGGAGACCAAGCCTTCTTATCTCAACTCTGGAAAGAGTATGCCAAGGGAGACAGCCGATACATCCTG
GGTGACAACTTCACAGTGTGCATGGAAACCATCACAGCTTGCCTGTGGGGACCACTCAGCCTGTGGGTGGTGATC
GCCTTTCTCCGCCAGCATCCCCTCCGCTTCATTCTACAGCTTGTGGTCTCTGTGGGCCAGATCTATGGGGATGTG
CTCTACTTCCTGACAGAGCACCGCGACGGATTCCAGCACGGAGAGCTGGGCCACCCTCTCTACTTCTGGTTTTAC
TTTGTCTTCATGAATGCCCTGTGGCTGGTGCTGCCTGGAGTCCTTGTGCTTGATGCTGTGAAGCACCTCACTCAT
GCCCAGAGCACGCTGGATGCCAAGGCCACAAAAGCCAAGAGCAAGAAGAACTGAGGAGTGGTGGACCAGGCTCGA
ACACTGGCCGAGGAGGAGCTCTCTGCCTGCCAGAAGAGTCTAGTCCTGCTCCCACAGTTTGGAGGGACAAAGCTA
ATTGATCTGTCACACTCAGGCTCATGGGCAGGCACAAGAAGGGGAATAAAGGGGCTGTGTGAAGGCACTGCTGGG
AGCCATTAGAACACAGATACAAGAGAAGCCAGGAGGTCTATGATGGTGACGATTTTTAAAATCAGGAAATAAAAG
ATCTTGACTCTAAAAAAAAAAAA

FIGURE 881

MTTNAGPLHPYWPQHLRLDNFVPNDRPTWHILAGLFSVTGVLVVTTWLLSGRAAVVPLGTWRRLSLCWFAVCGFI
HLVIEGWFVLYYEDLLGDQAFLSQLWKEYAKGDSRYILGDNFTVCMETITACLWGPLSLWVVIAFLRQHPLRFIL
QLVVSVGQIYGDVLYFLTEHRDGFQHGELGHPLYFWFYFVFMNALWLVLPGVLVLDAVKHLTHAQSTLDAKATKA
KSKKN

FIGURE 882

AACAGGATCTCCTCTTGCAGTCTGCAGCCCAGGACGCTGATTCCAGCAGCGCCTTACCGCGCAGCCCGAAGATTC
ACTATGGTGAAAATCGCCTTCAATACCCCTACCGCCGTGCAAAAGGAGGAGGCGCGGCAAGACGTGGAGGCCCTC
CTGAGCCGCACGGTCAGAACTCAGATACTGACCGGCAAGGAGCTCCGAGTTGCCACCCAGGAAAAAGAGGGCTCC
TCTGGGAGATGTATGCTTACTCTCTTAGGCCTTTCATTCATCTTGGCAGGACTTATTGTTGGTGGAGCCTGCATT
TACAAGTACTTCATGCCCAAGAGCACCATTTACCGTGGAGAGATGTGCTTTTTTGATTCTGAGGATCCTGCAAAT
TCCCTTCGTGGAGGAGAGCCTAACTTCCTGCCTGTGACTGAGGAGGCTGACATTCGTGAGGATGACAACATTGCA
ATCATTGATGTGCCTGTCCCCAGTTTCTCTGATAGTGACCCTGCAGCAATTATTCATGACTTTGAAAAGGGAATG
ACTGCTTACCTGGACTTGTTGCTGGGGAACTGCTATCTGATGCCCCTCAATACTTCTATTGTTATGCCTCCAAAA
AATCTGGTAGAGCTCTTTGGCAAACTGGCGAGTGGCAGATATCTGCCTCAAACTTATGTGGTTCGAGAAGACCTA
GTTGCTGTGGAGGAAATTCGTGATGTTAGTAACCTTGGCATCTTTATTTACCAACTTTGCAATAACAGAAAGTCC
TTCCGCCTTCGTCGCAGAGACCTCTTGCTGGGTTTCAACAAACGTGCCATTGATAAATGCTGGAAGATTAGACAC
TTCCCCAACGAATTTATTGTTGAGACCAAGATCTGTCAAGAGTAAGAGGCAACAGATAGAGTGTCCTTGGTAATA
AGAAGTCAGAGATTTACAATATGACTTTAACATTAAGGTTTATGGGATACTCAAGATATTTACTCATGCATTTAC
TCTATTGCTTATGCTTTAAAAAAAGGAAAAAAAAAAAAACTACTAACCACTGCAAGCTCTTGTCAAATTTTAGTT
TAATTGGCATTGCTTGTTTTTTGAAACTGAAATTACATGAGTTTCATTTTTTCTTTGCATTTATAGGGTTTAGAT
TTCTGAAAGCAGCATGAATATATCACCTAACATCCTGACAATAAATTCCATCCGTTGTTTTTTTTGTTTGTTTGT
TTTTTCTTTTCCTTTAAGTAAGCTCTTTATTCATCTTATGGTGGAGCAATTTTAAAATTTGAAATATTTTAAATT
GTTTTTGAACTTTTTGTGTAAAATATATCAGATCTCAACATTGTTGGTTTCTTTTGTTTTTCATTTTGTACAACT
TTCTTGAATTTAGAAATTACATCTTTGCAGTTCTGTTAGGTGCTCTGTAATTAACCTGACTTATATGTGAACAAT
TTTCATGAGACAGTCATTTTTAACTAATGCAGTGATTCTTTCTCACTACTATCTGTATTGTGGAATGCACAAAAT
TGTGTAGGTGCTGAATGCTGTAAGGAGTTTAGGTTGTATGAATTCTACAACCCTATAATAAATTTTACTCTATAC
AAAAAAAAAAAAAAAAAAA

FIGURE 883

MVKIAFNTPTAVQKEEARQDVEALLSRTVRTQILTGKELRVATQEKEGSSGRCMLTLLGLSFILAGLIVGGACIY
KYFMPKSTIYRGEMCFFDSEDPANSLRGGEPNFLPVTEEADIREDDNIAIIDVPVPSFSDSDPAAIIHDFEKGMT
AYLDLLLGNCYLMPLNTSIVMPPKNLVELFGKLASGRYLPQTYVVREDLVAVEEIRDVSNLGIFIYQLCNNRKSF
RLRRRDLLLGFNKRAIDKCWKIRHFPNEFIVETKICQE

FIGURE 884

GATCCCAGACCTCGGCTTGCAGTAGTGTTAGACTGAAGATAAAGTAAGTGCTGTTTGGGCTAACAGGATCTCCTC
TTGCAGTCTGCAGCCCAGGACGCTGATTCCAGCAGCGCCTTACCGCGCAGCCCGAAGATTCACTATGGTGAAAAT
CGCCTTCAATACCCCTACCGCCGTGCAAAAGGAGGAGGCGCGGCAAGACGTGGAGGCCCTCCTGAGCCGCACGGT
CAGAACTCAGATACTGACCGGCAAGGAGCTCCGAGTTGCCACCCAGGAAAAAGAGGGCTCCTCTGGGAGATGTAT
GCTTACTCTCTTAGGCCTTTCATTCATCTTGGCAGGACTTATTGTTGGTGGAGCCTGCATTTACAAGTACTTCAT
GCCCAAGAGCACCATTTACCGTGGAGAGATGTGCTTTTTTGATTCTGAGGATCCTGCAAATTCCCTTCGTGGAGG
AGAGCCTAACTTCCTGCCTGTGACTGAGGAGGCTGACATTCGTGAGGATGACAACATTGCAATCATTGATGTGCC
TGTCCCCAGTTTCTCTGATAGTGACCCTGCAGCAATTATTCATGACTTTGAAAAGGGAATGACTGCTTACCTGGA
CTTGTTGCTGGGGAACTGCTATCTGATGCCCCTCAATACTTCTATTGTTATGCCTCCAAAAAATCTGGTAGAGCT
CTTTGGCAAACTGGCGAGTGGCAGATATCTGCCTCAAACTTATGTGGTTCGAGAAGACCTAGTTGCTGTGGAGGA
AATTCGTGATGTTAGTAACCTTGGCATCTTTATTTACCAACTTTGCAATAACAGAAAGTCCTTCCGCCTTCGTCG
CAGAGACCTCTTGCTGGGTTTCAACAAACGTGCCATTGATAAATGCTGGAAGATTAGACACTTCCCCAACGAATT
TATTGTTGAGACCAAGATCTGTCAAGAGTAAGAGGCAACAGATAGAGTGTCCTTGGTAATAAGAAGTCAGAGATT
TACAATATGACTTTAACATTAAGGTTTATGGGATACTCAAGATATTTACTCATGCATTTACTCTATTGCTTATGC
CGTAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 885

MVKIAFNTPTAVQKEEARQDVEALLSRTVRTQILTGKELRVATQEKEGSSGRCMLTLLGLSFILAGLIVGGACIY
KYFMPKSTIYRGEMCFFDSEDPANSLRGGEPNFLPVTEEADIREDDNIAIIDVPVPSFSDSDPAAIIHDFEKGMT
AYLDLLLGNCYLMPLNTSIVMPPKNLVELFGKLASGRYLPQTYVVREDLVAVEEIRDVSNLGIFIYQLCNNRKSF
RLRRRDLLLGFNKRAIDKCWKIRHFPNEFIVETKICQE

FIGURE 886

AGTAAAAGTCCACAGTTACCGTGAGAGAAAAAAAGAGGAGAAAGCAGTGCAGCCAAACTCGGAAGAAAAGAGAGG
AGGAAAAGGACTCGACTTTCACATTGGAACAACCTTCTTTCCAGTGCTAAGGCTCTCTGATCTGGGGAACAACAC
CTGGACATGGCTCCAGAGATCAACTTGCCGGGCCCAATGAGCCTCATTGATAACACTAAAGGGCAGCTGGTGGTG
AATCCAGAAGCTCTGAAGATCCTATCTGCAATTACGCAGCCTGTGGTGGTGGTGGCGATTGTGGGCCTCTATCGC
ACAGGCAAATCCTACCTGATGAACAAGCTGGCTGGGAAGAAAAACGGCTTCTCTCTAGGCTCCACAGTGAAGTCT
CACACCAAGGGAATCTGGATGTGGTGTGTGCCTCATCCCAAGAAGCCAGAACACACCCTAGTTCTGCTCGACACT
GAGGGCCTGGGAGATATAGAGAAGGGTGACAATGAGAATGACTCCTGGATCTTTGCCTTGGCCATCCTCCTGAGC
AGCACCTTCGTGTACAATAGCATGGGAACCATCAACCAGCAGGCCATGGACCAACTTCACTATGTGACAGAGCTG
ACAGATCGAATCAAGGCAAACTCCTCACCTGGTAACAATTCTGTAGACGACTCAGCTGACTTTGTGAGCTTTTTT
CCAGCATTTGTGTGGACTCTCAGAGATTTCACCCTGGAACTGGAAGTAGATGGAGAACCCATCACTGCTGATGAC
TACTTGGAGCTTTCGCTAAAGCTAAGAAAAGGTACTGATAAGAAAAGTAAAAGCTTTAATGATCCTCGGTTGTGC
ATCCGAAAGTTCTTCCCCAAGAGGAAGTGCTTCGTCTTCGATTGGCCCGCTCCTAAGAAGTACCTTGCTCACCTA
GAGCAGCTAAAGGAGGAAGAGCTGAACCCTGATTTCATAGAACAAGTTGCAGAATTTTGTTCCTACATCCTCAGC
CATTCCAATGTCAAGACTCTTTCAGGTGGCATTGCAGTCAATGGGCCTCGTCTAGAGAGCCTGGTGCTGACCTAC
GTCAATGCCATCAGCAGTGGGGATCTACCCTGCATGGAGAACGCAGTCCTGGCCTTGGCCCAGATAGAGAACTCA
GCCGCAGTGGAAAAGGCTATTGCCCACTATGAACAGCAGATGGGCCAGAAGGTGCAGCTGCCCACGGAAACCCTC
CAGGAGCTGCTGGACCTGCACAGGGACAGTGAGAGAGAGGCCATTGAAGTCTTCATGAAGAACTCTTTCAAGGAT
GTGGACCAAATGTTCCAGAGGAAATTAGGGGCCCAGTTGGAAGCAAGGCGAGATGACTTTTGTAAGCAGAATTCC
AAAGCATCATCAGATTGTTGCATGGCTTTACTTCAGGATATATTTGGCCCTTTAGAAGAAGATGTCAAGCAGGGA
ACATTTTCTAAACCAGGAGGTTACCGTCTCTTTACTCAGAAGCTGCAGGAGCTGAAGAATAAGTACTACCAGGTG
CCAAGGAAGGGGATACAGGCCAAAGAGGTGCTGAAAAAATATTTGGAGTCCAAGGAGGATGTGGCTGATGCACTT
CTACAGACTGATCAGTCACTCTCAGAAAAGGAAAAAGCGATTGAAGTGGAACGTATAAAGGCTGAATCTGCAGAA
GCTGCAAAGAAAATGTTGGAGGAAATACAAAAGAAGAATGAGGAGATGATGGAACAGAAAGAGAAGAGTTATCAG
GAACATGTGAAACAATTGACTGAGAAGATGGAGAGGGACAGGGCCCAGTTAATGGCAGAGCAAGAGAAGACCCTC
GCTCTTAAACTTCAGGAACAGGAACGCCTTCTCAAGGAGGGATTCGAGAATGAGAGCAAGAGACTTCAAAAAGAC
ATATGGGATATCCAGATGAGAAGCAAATCATTGGAGCCAATATGTAACATACTCTAAAAGTCCAAGGAGCAAAAT
TTGCCTGTCCAGCTCCCTCTCCCCAAGAAACAACATGAATGAGCAACTTCAGAGTGTCAAACAACTGCCATTAAA
CTTAACTCAAAATCATGATGCATGCATTTTTGTTGAACCATAAAGTTTGCAAAGTAAAGGTTAAGTATGAGGTCA
ATGTTTT

FIGURE 887

MAPEINLPGPMSLIDNTKGQLVVNPEALKILSAITQPVVVVAIVGLYRTGKSYLMNKLAGKKNGFSLGSTVKSHT
KGIWMWCVPHPKKPEHTLVLLDTEGLGDIEKGDNENDSWIFALAILLSSTFVYNSMGTINQQAMDQLHYVTELTD
RIKANSSPGNNSVDDSADFVSFFPAFVWTLRDFTLELEVDGEPITADDYLELSLKLRKGTDKKSKSFNDPRLCIR
KFFPKRKCFVFDWPAPKKYLAHLEQLKEEELNPDFIEQVAEFCSYILSHSNVKTLSGGIAVNGPRLESLVLTYVN
AISSGDLPCMENAVLALAQIENSAAVEKAIAHYEQQMGQKVQLPTETLQELLDLHRDSEREAIEVFMKNSFKDVD
QMFQRKLGAQLEARRDDFCKQNSKASSDCCMALLQDIFGPLEEDVKQGTFSKPGGYRLFTQKLQELKNKYYQVPR
KGIQAKEVLKKYLESKEDVADALLQTDQSLSEKEKAIEVERIKAESAEAAKKMLEEIQKKNEEMMEQKEKSYQEH
VKQLTEKMERDRAQLMAEQEKTLALKLQEQERLLKEGFENESKRLQKDIWDIQMRSKSLEPICNIL

FIGURE 888

GAGCTGCCGTAGCGGACCCAGCACAGCCAGGAGCGTCCGGGATGAGCTCAGCCGCGGCCGACCACTGGGCGTGGT
TGCTGGTGCTCAGCTTCGTGTTTGGATGCAATGTTCTTAGGATCCTCCTCCCGTCCTTCTCATCCTTCATGTCCA
GGGTGCTGCAGAAGGACGCGGAGCAGGAGTCACAGATGAGAGCGGAGATCCAGGACATGAAGCAGGAGCTCTCCA
CAGTCAACATGATGGACGAGTTTGCCAGATATGCCAGGCTGGAAAGAAAGATCAACAAGATGACGGATAAGCTCA
AAACCCATGTGAAAGCTCGGACAGCTCAATTAGCCAAGATAAAATGGGTGATAAGTGTCGCTTTCTACGTATTGC
AGGCTGCCCTGATGATCTCACTCATTTGGAAGTATTATTCTGTCCCTGTGGCTGTCGTGCCGAGTAAATGGATAA
CCCCTCTAGACCGCCTGGTAGCCTTTCCTACTAGAGTAGCAGGTGGTGTTGGAATTACCTGTTGGATTTTAGTCT
GTAACAAAGTTGTCGCTATTGTGCTTCATCCGTTCAGCTGAACAGGAGGATGGATACAGCCGCGAGGCTAAAAAA
CGGATTTCCTCTTCCTAGCTTAAAATCTGATTTACACTGTTTTGTTTTTTAAGAAACAAAAGTGCATAGTTTAGA
TTTTTTTTTTGTTGAATATGTTTGTTCTTGGACTTTATGAGATAGTCTTATAAGAATCACGATTTTCTACACCTG
TCATTGAGCCAAGAAAGTCCAGTTTATGACACGTATGTACTAGTGAACACCGTCCTCGATCTGTACGAAATGTGA
AATGTTTAGGGACATCTCCATGCTGTCACTTGTGATTTGCCCTCTTATGTATTTTGGTCATATTGCCAACTGGAA
AGTCAAAATTTTCTAACAACTTTAAGTAAGTTCTTTGAAGACTTAGTGCTGTTTTTAATCCAGTTTAGAAAGTAA
CTTAATTTTAATACCGCTACTAAAAATTCGAAAATTTCTTCTTTAATCACATTCAATATGGTTAAAAGAACAACA
CTAATTGACAATGCGTGGGCTTTTTCTCCCTTTGTTTAAAATGTCATTTGTTGAGCAAGAGTTGTATAGTATTAT
CTACTTACTTGAGGCTGTTAATTTTTCATTACAGTGTTTTGTAAATGTATCCACGAGACCATGATGCATTGTTTT
GTGCTCAACTTGTGTTTTGTATTTAAAGCATTTTGAATGAAGTGTATTTTATAAGCATTTAATATTTATGCTCTT
TAGAATGGAACACAGAAAACAAACCTTATAAGTCCTGATTAAATTAATCTGAACCAAAAAAAAAAAAAAAAAAA
AAAAAAAAAA

FIGURE 889

MSSAAADHWAWLLVLSFVFGCNVLRILLPSFSSFMSRVLQKDAEQESQMRAEIQDMKQELSTVNMMDEFARYARL
ERKINKMTDKLKTHVKARTAQLAKIKWVISVAFYVLQAALMISLIWKYYSVPVAVVPSKWITPLDRLVAFPTRVA
GGVGITCWILVCNKVVAIVLHPFS

FIGURE 890A

CCCGGGCGAGCCCGCCGTGCGCACAGCTCTGCCCGCCGCCCCTGGAGCGGATCCCCAGCCGTCCCTGGGCGTTCT
CCCGGGTTCTAGCAAAGCCCCCCGGGGTGCCCATCAGTTTCCTTGGGTGACTACAGCGTGTGTTTTTTCTTTCCT
CTTTCCCCTGCCTGTGTGCCCTTCTCCAGGATGGCAGAGGCGGAATTGCACAAGGAAAGGCTGCAAGCCATAGCA
GAAAAAAGAAAGAGGCAGACTGAAATAGAAGGCAAGCGACAACAGCTTGACGAGCAGATACTTCTGCTGCAGCAT
TCCAAGTCCAAAGTGCTTCGGGAGAAATGGCTGCTGCAGGGCATACCCGCTGGAACTGCCGAAGAGGAGGAAGCC
AGGAGGCGGCAGTCTGAAGAGGATGAGTTCAGAGTCAAGCAACTTGAAGATAACATTCAGAGGCTGGAGCAAGAA
ATACAAACGCTAGAAAGTGAAGAGTCCCAGATATCTGCCAAAGAGCAAATCATCCTAGAGAAACTGAAGGAAACA
GAAAAATCCTTCAAGGACTTTCAGAAGGGTTTCTCCAGTACGGATGGAGATGCAGTAAATTACATTTCCTCCCAG
CTTCCCGACCTGCCAATCCTCTGTTCACGAACAGCAGAACCATCACCTGGGCAGGACGGGACCAGCAGAGCGGCT
GGAGTCGGGTGGGAGAATGTGCTGCTAAAGGAAGGTGAGTCAGCCTCGAACGCCACAGAAACATCCGGCCCAGAC
ATGACTATCAAGAAGCCTCCCCAGCTTTCTGAGGATGATATCTGGCTAAAAAGCGAGGGAGACAACTATAGTGCC
ACCCTCCTGGAGCCTGCTGCCAGCTCTCTTTCCCCAGATCACAAAAACATGGAAATTGAGGTGTCTGTTGCAGAA
TGTAAAAGTGTTCCTGGAATCACCTCTACCCCACATCCCATGGACCATCCCTCCGCTTTCTATTCACCCCCGCAT
AATGGCCTCCTTACTGATCACCACGAATCCCTGGATAATGATGTTGCCAGAGAGATCCGCTATCTAGATGAGGTG
CTAGAGGCCAACTGCTGTGATTCTGCTGTGGATGGAACGTACAATGGAACATCCTCCCCAGAGCCTGGTGCAGTG
GTTCTGGTGGGCGGCCTAAGCCCCCCTGTCCACGAGGCGACCCAGCCAGAACCCACTGAAAGAACAGCTAGCCGG
CAGGCACCTCCTCACATCGAGCTCAGTAATAGCAGCCCTGACCCCATGGCAGAGGCAGAAAGAACAAATGGCCAT
TCCCCCAGCCAGCCTAGAGATGCGCTGGGGGACAGCCTGCAGGTGCCTGTCAGCCCCAGCTCCACAACCAGCTCA
CGGTGTTCTTCCCGAGATGGAGAGTTCACTCTCACCACACTGAAAAAGGAGGCCAAGTTTGAGCTGCGTGCCTTC
CATGAGGACAAGAAGCCCTCCAAGCTCTTTGAGGATGACGAGCATGAGAAAGAACAATACTGCATTAGAAAAGTG
AGGCCTTCAGAGGAGATGCTGGAGCTGGAAAAGGAGAGGAGAGAGCTCATCCGCAGCCAGGCCGTCAAGAAGAAT
CCTGGCATTGCAGCAAAATGGTGGAATCCCCCGCAGGAAAAAACCATCGAGGAGCAGCTGGACGAGGAACATCTG
GAGTCGCACAAAAAGTACAAGGAGCGCAAAGAGAGAAGGGCACAGCAGGAACAGTTGCTGCTGCAGAAGCAGTTA
CAGCAGCAGCAGCAGCAGCCCCCATCGCAGCTCTGCACAGCCCCTGCCTCTTCTCATGAACGCGCAAGCATGATT
GACAAAGCAAAGGAGGACATTGTCACAGAGCAGATAGATTTCTCTGCTGCTCGCAAACAATTTCAGCTGATGGAG
AATTCCAGGCAAGCGGTGGCCAAGGGCCAGAGTACACCCAGGCTGTTCTCCATCAAGCCTTTCTACAGGCCTCTG
GGGTCAGTCAACTCAGACAAGCCACTGACTAATCCGAGACCACCTTCTGTCGGGGGACCTCCAGAAGACAGTGGT
GCCTCAGCCGCCAAGGGACAGAAATCCCCCGGTGCCCTGGAGACCCCATCGGCAGCAGGAAGCCAGGGCAACACA
GCCTCTCAGGGGAAGGAAGGGCCCTACAGCGAGCCTTCTAAACGTGGGCCCTTATCTAAACTGTGGGCTGAGGAT
GGAGAATTTACGAGCGCCCGGGCTGTCCTCACTGTGGTCAAGGATGATGACCATGGGATTTTGGATCAGTTCTCA
AGATCTGTCAATGTCTCCTTGACCCAAGAGGAGCTTGACTCTGGTCTGGACGAATTGTCGGTGAGGTCTCAGGAT
ACCACAGTCCTGGAGACCCTATCCAATGATTTCAGCATGGACAACATCAGTGACAGCGGGGCATCCAATGAGACA
ACCAATGCCCTCCAGGAAAATTCACTGGCTGATTTTTCTCTGCCCCAGACACCACAAACTGACAACCCCTCAGAG
GGCCGAGGAGAAGGCGTCTCCAAGTCATTTAGTGATCATGGTTTCTATTCCCCTTCCTCCACGCTGGGGGACTCT
CCGTTGGTTGATGACCCCTTGGAGTATCAGGCTGGCCTCCTGGTGCAGAATGCCATTCAACAAGCCATAGCCGAG
CAGGTGGATAAAGCTGTGTCCAAAACCAGCAGGGATGGAGCAGAGCAACAGGGACCTGAAGCGACTGTAGAGGAA
GCTGAAGCTGCGGCTTTCGGCTCAGAAAAGCCTCAGAGCATGTTTGAGCCACCTCAGGTGTCTTCTCCTGTTCAA
GAGAAAAGGGATGTATTACCAAAGATTCTGCCTGCTGAAGACAGGGCGCTCAGGGAAAGGGGGCCCCCCCAGCCA
CTGCCAGCTGTGCAGCCCAGTGGCCCGATTAACATGGAGGAGACCAGGCCCGAAGGAAGCTATTTCAGCAAGTAC
TCGGAGGCAGCTGAGCTGAGAAGCACAGCCTCCCTCCTGGCCACTCAAGAATCTGACGTGATGGTTGGGCCTTTC
AAGCTGAGGTCCAGGAAACAGCGGACTTTGTCCATGATTGAGGAAGAGATCCGAGCAGCTCAGGAAAGGGAAGAG
GAGCTGAAGAGGCAGAGACAAGTCTTGCAGAGTACGCAGAGCCCCAGGACAAAGAATGCCCCATCACTGCCCTCC
AGAACATGCTACAAAACTGCTCCAGGGAAAATAGAGAAAGTCAAACCTCCTCCATCCCCCACCACTGAAGGCCCC
AGCTTGCAGCCTGACTTAGCCCCTGAAGAGGCTGCCGGAACCCAGCGGCCCAAGAATCTGATGCAGACCCTCATG
GAAGACTATGAGACACACAAATCTAAAAGGCGCGAGAGAATGGATGATAGTAGTTACACTTCTAAGTTACTGTCT
TGCAAGGTGACTTCCGAGGTCCTCGAGGCCACACGGGTTAATCGAAGAAAGAGCGCACTGGCTTTGCGCTGGGAA
GCAGGGATCTATGCCAACCAGGAGGAAGAAGACAACGAATAAACTTCCTTCAACCCAGGAAGCGTCTTTGGTGCT
TGGGAGACCAAGAAACCAAGAAATTAACAACTGAAAGCATTTTAATGGACTATTTATTAAAGTGCAAACAAACTC

FIGURE 890B

AGCAATCCTTATGTAGACCAGAAGCTGCAATATACAATGATGAAAATGAAACGAAAAGGAAGTCCCCCCATCAGA
CTCTGGACACCCAGGAATCAAAAGAGAAAGGACTTTTTTGGTGACTCAATCCCAGTGTCTGGTTTGGGGCCAATC
TACAATGGATCCAAAAGGACAAAACATGTTACAAGCAAATCAACATAGTTGCTGCAGGCGGAACTGAGACCAGCC
TCTCTGGGCGATGAAGGACAATGGTGGTAGGGCCACTTAGAGAGCAGTAGGGCCCAGGCTGGTGCAGCCTACATG
GCACAGGATATTTCCCTGCACCAGTTTCCCACCTGTCACTTGCAGCATCAGAGGGTGTTGCATTAACTCCATTTT
CTCCAGCAGCCATAAAATGAATGGCGTTTCTCTCCATATTTGCCCAGAAGAGGCAGTTATGATTCCACTTCTCCT
ACATTTAATTATTTTTAATTGAGAACAACTCATGATCACAATTCATAAAATCCATATTTTAAGACAATAGTTCTT
CATGTCACAAACACAATCTATTCTACATGAGGAGGCTGAGAAAGGGGAAGAGAAAAACAAACCAAATGGATGATG
TTAGCTTTAGGATCGTGTCTGCTTATAATATTCACTGATCTGCAGTTTATGAGAACACATTTTCACAGTTATGTT
TCTTCATAGGAAAACTATATTTAGTGGGCAACAACTATTTTTATGATGGGATGGGGGAGTATATACACGTATAGA
ATCTGTACGCGTTGAACAACTTGGTTCAAGATGGTGGGGGCATTTTTAGAGCGGCAATAATTGAAAAAAAAGGCG
AACTCTGCCTTGGAGAGGTAGATGATAAGAAATAAAAAGGTGTTTATAACTATTTTGTATTATAAAGTGGGCCTT
AGAGATAGGAAGAAGAATGATGGATTCCTTTTGGATCAATCAGAAAGGAAACACGAAAGAAAAGTCAGGAAGGTA
GAGAGAGAAAAAGGGAGGGAAGGAGAAAGAATGGGAATAAAATAAGGAGGTAAGAGATACTATTTTTGCTGAGCA
ACCAGTGTGTTTCAGGATGATACAAAGAAAAATATAGAATAGAAATAACTGCAGGCTTGGAATCAGCTACAAATC
CTAAAGATGGGGTGTGTGTGGATGTGTGTGTGTGTGTGTGTACACCATTGTGTGTTTGTAAAATGTGTATGTTCA
TGAGTAAGGGTGTGTGTGTGTGTGTATTAAAATTCCAGAGTGACCGTGGCACTTGGGTGTACAGGTAATTCCTCC
AGAGCTGTTTGCTGGCTTCAGGAGTGGAGTGAGAATTTCTTTTTTATGAAAAGGGATATAAAGGCACCGAGCTGA
TGCAGTATTTGTAATATTAAGTTGACCTAACAAGGTATTTGCATGAGTCACAATTACAAAGTTTTGAGCGGTTTT
GTAATTTGACATTTAGGAGAGTCTCCTATTTATTCTCATACTTTACATTCATGCTTAGTATACTATAGAGGATGC
CAGCTTTAATCTTTCTGTCATTTAAAGCAATATGATAAGGGTATTCAATAATTGGGTGCCCTAAATTTCTGGATG
AGAAAATTTTCAATTCTGGCCATGAGAAAGAAAAAAAAATAAACAGCCTTCTTTTTTTTTCCTTTGTTTTAAAAC
TGTGGTTTTTTAAAAAAGCAATAATTAACTCAGACCTCACTAAAAATCATTTTTGTTTTTATATTGTTATGTCAT
AAGCTCTATTATGTTATTCTAACAAGTAGCAATTTCACAAAATTTGTATGTAGATGTTAACGCACATTTCCTTTG
CTTCTTTTATTAGACTAGTGTTGACTTTGGGGGGGGACATTTATTCACAAATGAGAAGTAGGCACAAAGTAAAAA
ATGGAACCATCTACTAACAAGGATCCTTTAAAACTGCCAAGGGAGCTCTAACTTGAAGCCACATCCTACAGATGG
CAGCCCAAATAGCACATGGGCAATTGGCACCATCTTTATATGGTTGAGTCTCCTGAATATTTTGAATGAATTCTC
AACAAAATGTGCTAGCCACTGGGGACGCAAAACAAGTAAGATCCCTGTTGCAAGAAATTCATTTTATAGTGAGGG
AGGTTGGCATGGAGACTAAAATTCTCAGGAAAATGAGATCCGTGTTAGATTAGAAGTCCTGATGTGAAATGGGAG
GACTCAGGAAGGAGGATCGTCTTTACCTGAGGATTTCTAGCCAGAGGTCCCAGATGCCTGGGCTGAGAACCCAGC
GATAAGGGGGCGTTCCCAAAGCAGACACAGGGATAAGAACAGAGGAGGCAGCAGCATTGCACAGCCCCAGGCACA
GTGGCAGTTAGGATGGCTGGAGAGTAGGATAGTTCTATGGGTTGCCCAAAAAATGTGATGCGCTTCATGTTTTCT
CTGACTCATGGATCTGGTAGAGACCATAGACATGATATAGACTAACTTCCCCATTTTTCACAAGAGGAAACCATC
CTTATGACTTACCTTAAAGTTTTTTGTTCTGTTTTGAAGGAAACCATGTGCTTCATGAAACCTACAGTTGACAAG
AGAATGTACAGCTAAGAGAAAAGCTTAAGAGGCCACACTATTCGCGGAATGGCTTTAGAGGCAGATGAAGTGGTC
TTTGACCACAGTTGATTGAACCAGAGCACTTATTGCTTAAAGAATAACAGAGTTCTAGAGCTGGGGGTTCTTGGG
CCATGCTCCGTGTGTGGATAAGGAAAGAAATACTGTTTCTGGGACTCTCCCACAGTCACAAAGCTGTTTTCACTG
TGGCCCCTACATCTCTTAACTTTTGCTATTACTCCTATGCTGCCTTCCGGATTACTGCTGTCTATCTTCTTGCTC
CACTCACTGAAGATCCTATTATAATCCCATGAAAATGTAAATTACAGTTTACTTGGGAGAGCCAGATTTTCTCTG
TGCTCTTGAGTTTTTTATTCATTCAAGAAACCTTGGGCCACCGCTTTGTACATAGCACCGTGCTAGGCTCTGGGA
TCCCAAATGGACCCTTTTAACTTTCTGAAGATGGGACCGTCCCCTGGAGGAAAGTCATTCCTGCCTAATCCATCG
AGAGAAAGAGGCTTACGAAAAACTTTGCCTCTGATGCTCAGCCCCACCCCCAAATAGCACACAAGCTTGTTAACC
CCACCTCTTACAAAATGTTTAGATTCTGTAGGTGTTAAAAGCCTTTCTGGAAGTATTGCATTCTGCCGTGTTTAT
AGGTGTTCACTTTCCTCCAGAGCTGATTAACTACTGACATGACTTGGCTTTCTCATCCAGAAATTATGGAAACAG
GGTCTGTCAGTGGCAGGAGGCCGTGCTGTGTTTTACTTGGATGACACAATGCAGTTTACTTGCCTCTTCATACCC
ATGCATGCTGCTCACCCTAGACAATGACATATAAGCCGTATATAGATCAATGTCCACATATATATACACACACAC
ATATATATATATATAAAGTGTAACAAGGAACACTAAAACAGTGTTGATTCTTGTCTCTGAAGACAAATAATTAAACC
TTTTTTTTCCCAACTAAAGAATGGATTTAATTAAACTATGTATTGAAAAAAAAGTAGCCTAAGTGTTAGAGATGG

FIGURE 890C

TGAATATATTCCATTTTAGTTAAAGAACAAATTTCCTGAATTTTAAGCATTCAGTGAGCTGCCAATTTTGATTTT
GTGTTGCTCTTTACCCAAATTATTTTTTCTTTGTTTTTCTTTTTTTGGGGGAGGAGGGGAAAAAAGCAGCAATAC
TGTGTTTGGAAATTATACTCTGTATCTGGTTTTCCTGTGTATGTTAACCACTTAAATGTTATTATCCTGCTTTGG
TTTTAGAGTGATTGTGAGGCATTCAATGCAAGTATACAGTTATTTTCTCATTAAAATCCAATGTGTGTTGAGTTT
TTATAAAAAAAAAAAAAAAAAA

FIGURE 891

MAEAELHKERLQAIAEKRKRQTEIEGKRQQLDEQILLLQHSKSKVLREKWLLQGIPAGTAEEEEARRRQSEEDEF
RVKQLEDNIQRLEQEIQTLESEESQISAKEQIILEKLKETEKSFKDFQKGFSSTDGDAVNYISSQLPDLPILCSR
TAEPSPGQDGTSRAAGVGWENVLLKEGESASNATETSGPDMTIKKPPQLSEDDIWLKSEGDNYSATLLEPAASSL
SPDHKNMEIEVSVAECKSVPGITSTPHPMDHPSAFYSPPHNGLLTDHHESLDNDVAREIRYLDEVLEANCCDSAV
DGTYNGTSSPEPGAVVLVGGLSPPVHEATQPEPTERTASRQAPPHIELSNSSPDPMAEAERTNGHSPSQPRDALG
DSLQVPVSPSSTTSSRCSSRDGEFTLTTLKKEAKFELRAFHEDKKPSKLFEDDEHEKEQYCIRKVRPSEEMLELE
KERRELIRSQAVKKNPGIAAKWWNPPQEKTIEEQLDEEHLESHKKYKERKERRAQQEQLLLQKQLQQQQQQPPSQ
LCTAPASSHERASMIDKAKEDIVTEQIDFSAARKQFQLMENSRQAVAKGQSTPRLFSIKPFYRPLGSVNSDKPLT
NPRPPSVGGPPEDSGASAAKGQKSPGALETPSAAGSQGNTASQGKEGPYSEPSKRGPLSKLWAEDGEFTSARAVL
TVVKDDDHGILDQFSRSVNVSLTQEELDSGLDELSVRSQDTTVLETLSNDFSMDNISDSGASNETTNALQENSLA
DFSLPQTPQTDNPSEGRGEGVSKSFSDHGFYSPSSTLGDSPLVDDPLEYQAGLLVQNAIQQAIAEQVDKAVSKTS
RDGAEQQGPEATVEEAEAAAFGSEKPQSMFEPPQVSSPVQEKRDVLPKILPAEDRALRERGPPQPLPAVQPSGPI
NMEETRPEGSYFSKYSEAAELRSTASLLATQESDVMVGPFKLRSRKQRTLSMIEEEIRAAQEREEELKRQRQVLQ
STQSPRTKNAPSLPSRTCYKTAPGKIEKVKPPPSPTTEGPSLQPDLAPEEAAGTQRPKNLMQTLMEDYETHKSKR
RERMDDSSYTSKLLSCKVTSEVLEATRVNRRKSALALRWEAGIYANQEEEDNE

FIGURE 892

AGTGCAGACGCGGCTCCTAGCGGATGGGTGCTATTGTGAGGCGGTTGTAGAAGAGTTTCGTGAGTGCTCGCAGCT
CATACCTGTGGCTGTGTATCCGTGGCCACAGCTGGTTGGCGTCGCCTTGAAATCCCAGGCCGTGAGGAGTTAGCG
AGCCCTGCTCACACTCGGCGCTCTGGTTTTCGGTGGGTGTGCCCTGCACCTGCCTCTTCCCCCATTCTCATTAAT
AAAGGTATCC**ATG**GAGAACACTGAAAACTCAGTGGATTCAAAATCCATTAAAAATTTGGAACCAAAGATCATACA
TGGAAGCGAATCAATGGACTCTGGAATATCCCTGGACAACAGTTATAAAATGGATTATCCTGAGATGGGTTTATG
TATAATAATTAATAATAAGAATTTTCATAAAAGCACTGGAATGACATCTCGGTCTGGTACAGATGTCGATGCAGC
AAACCTCAGGGAAACATTCAGAAACTTGAAATATGAAGTCAGGAATAAAAATGATCTTACACGTGAAGAAATTGT
GGAATTGATGCGTGATGTTTCTAAAGAAGATCACAGCAAAAGGAGCAGTTTTGTTTGTGTGCTTCTGAGCCATGG
TGAAGAAGGAATAATTTTTGGAACAAATGGACCTGTTGACCTGAAAAAAATAACAAACTTTTTCAGAGGGGATCG
TTGTAGAAGTCTAACTGGAAAACCCAAACTTTTCATTATTCAGGCCTGCCGTGGTACAGAACTGGACTGTGGCAT
TGAGACAGACAGTGGTGTTGATGATGACATGGCGTGTCATAAAATACCAGTGGAGGCCGACTTCTTGTATGCATA
CTCCACAGCACCTGGTTATTATTCTTGGCGAAATTCAAAGGATGGCTCCTGGTTCATCCAGTCGCTTTGTGCCAT
GCTGAAACAGTATGCCGACAAGCTTGAATTTATGCACATTCTTACCCGGGTTAACCGAAAGGTGGCAACAGAATT
TGAGTCCTTTTCCTTTGACGCTACTTTTCATGCAAAGAAACAGATTCCATGTATTGTTTCCATGCTCACAAAAGA
ACTCTATTTTTATCAC**TAA**AGAAATGGTTGGTTGGTGGTTTTTTTTAGTTTGTATGCCAAGTGAGAAGATGGTAT
ATTTGGTACTGTATTTCCCTCTCATTTTGACCTACTCTCATGCTGCAGAGGGTACTTTAAGACATACTCCTTCCA
TCAAATAGAACCACTATGAAGCTACCTCAAACTTCCAGTCAGGTAGTTGCAATTGAATTAAATTAGGAATAAATA
AAAATGGATACTGGTGCAGTCATTATGAGAGGCAATGATTGTTAATTTACAGCTTTCATGATTAGCAAGTTACAG
TGATGCTGTGCTATGAATTTTCAAGTAATTGTGAAAAAGTTAAACATTGAAGTAATGAATTTTTATGATATTCCC
CCCACTTAAGACTGTGTATTCTAGTTTTGTCAAACTGTAGAAATGATGATGTGGAAGAACTTAGGCATCTGTGGG
CATGGTCAAAGGCTCAAACCTTTATTTTAGAATTGATATACACGGATGACTTAACTGCATTTTAGACCATTTATC
TGGGATTATGGTTTTGTGATGTTTGTCCTGAACACTTTTGTTGTAAAAAAATAATAATAATAATGTTTAATATTG
AGAAAGAAACTAATATTTTATGTGAGAGAAAGTGTGAGCAAACTAACTTGACTTTTAAGGCTAAAACTTAACATT
CATAGAGGGGTGGAGTTTTAACTGTAAGGTGCTACAATGCCCCTGGATCTACCAGCATAAATATCTTCTGATTTG
TCCCTATGCATATCAGTTGAGCTTCATATACCAGCAATATATCTGAAGAGCTATTATATAAAAACCCCAAACTGT
TGATTATTAGCCAGGTAATGTGAATAAATTCTATAGGAACATATGAAAATACAACTTAAATAATAAACAGTGGAA
TATAAGGAAAGCAATAAATGAATGGGCTGAGCTGCCTGTAACTTGAGAGTAGATGGTTTGAGCCTGAGCAGAGAC
ATGACTCAGCCTGTTCCATGAAGGCAGAGCCATGGACCACGCAGGAAGGGCCTACAGCCCATTTCTCCATACGCA
CTGGTATGTGTGGATGATGCTGCCAGGGCGCCATCGCCAAGTAAGAAAGTGAAGCAAATCAGAAACTTGTGAAGT
GGAAATGTTCTAAAGGTGGTGAGGCAATAAAAATCATAGTACTCTTTGTAGCAAAATTCTTAAGTATGTTATTTT
CTGTTGAAGTTTACAATCAAAGGAAAATAGTAATGTTTTATACTGTTTACTGAAAGAAAAAGACCTATGAGCACA
TAGGACTCTAGACGGCATCCAGCCGGAGGCCAGAGCTGAGCACTCAGCCCGGGAGGCAGGCTCCAGGCCTCAGCA
GGTGCGGAGCCGTCACTGCACCAAGTCTCACTGGCTGTCAGTATGACATTTCACGGGAGATTTCTTGTTGCTCAA
AAAATGAGCTCGCATTTGTCAATGACAGTTTCTTTTTTCTTACTAGACCTGTAACTTTTGTAAATACACACAGCA
TGTAATGGTATCTTAAAGTGTGTTTCTATGTGACAATTTTGTACAAATTTGTTATTTTCCATTTTTATTTCAAAA
TATACATTCAAACTTAAAATT

FIGURE 893

MENTENSVDSKSIKNLEPKIIHGSESMDSGISLDNSYKMDYPEMGLCIIINNKNFHKSTGMTSRSGTDVDAANLR
ETFRNLKYEVRNKNDLTREEIVELMRDVSKEDHSKRSSFVCVLLSHGEEGIIFGTNGPVDLKKITNFFRGDRCRS
LTGKPKLFIIQACRGTELDCGIETDSGVDDDMACHKIPVEADFLYAYSTAPGYYSWRNSKDGSWFIQSLCAMLKQ
YADKLEFMHILTRVNRKVATEFESFSFDATFHAKKQIPCIVSMLTKELYFYH

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FIGURE 894A

CGTGCGGCGGTGGGCTGGTCTTCCGCGGCCGGCGTTGCGCCGCGGCGGAGGGTGGGCGCGCGGGGAGCGGGATGG
AGCTGGGGCGACCCTTGCTGGAGGTACTGGCCTCAGCCCTTTCTCCCGCTTCCCCACCCCTCTTACCCCCAGATT
ACATTCTCTGTGTGGTGTCTTTACTGCAGATGAAGGATTTGGGGGCAGAGCACTTGGCAGGTCATGAAGGGGTCC
AACTTCTCGGGTTGTTGAACGTCTACCTGGAACAAGAAGAGAGATTCCAACCTCGAGAAAAAGGGCTGAGTTTGA
TTGAGGCTACCCCGGAGAATGATAACACTTTGTGTCCAGGATTGAGAAATGCCAAAGTTGAAGATTTAAGGAGTT
TAGCCAACTTTTTTGGATCTTGCACTGAAACTTTTGTCCTGGCTGTCAATATTTTGGACAGGTTCTTGGCTCTTA
TGAAGGTGAAACCTAAACATTTGTCTTGCATTGGAGTCTGTTCTTTTTTGCTGGCTGCTAGAATAGTTGAAGAAG
ACTGCAATATTCCATCCACTCATGATGTGATCCGGATTAGTCAGTGTAAATGTACTGCTTCTGACATAAAACGGA
TGGAAAAAATAATTTCAGAAAAATTGCACTATGAATTGGAAGCTACTACTGCCTTAAACTTTTTGCACTTATACC
ATACTATTATACTTTGTCATACTTCAGAAAGGAAAGAAATACTGAGCCTTGATAAACTAGAAGCTCAGCTGAAAG
CTTGCAACTGCCGACTCATCTTTTCAAAAGCAAAACCATCTGTATTAGCCTTGTGCCTTCTCAATTTGGAAGTGG
AAACTTTGAAATCTGTTGAATTACTGGAAATTCTCTTGCTAGTTAAAAAACATTCCAAGATTAATGACACTGAGT
TCTTCTACTGGAGAGAGTTGGTTTCTAAATGCCTAGCCGAGTATTCTTCTCCTGAATGTTGCAAACCAGATCTTA
AGAAGTTGGTTTGGATCGTTTCAAGGCGCACAGCCCAGAACCTCCACAACAGCTACTATAGTGTTCCTGAGCTGC
CAACGATACCTGAGGGGGGTTGTTTTGATGAAAGTGAAAGTGAGGACTCTTGTGAAGATATGAGTTGTGGAGAGG
AGAGTCTCAGCAGCTCTCCTCCCAGTGATCAAGAGTGCACCTTCTTTTTCAACTTCAAAGTGGCACAAACACTGT
GCTTTCCATCT**TAG**AAATCTGATTGTTCTGTCAGAATTTATATTTACAGGTTTCAAAGCAATAAATGGGGGAATA
GGTAGTTTCCTGGTTTAGCCCCCATCTAGTCAGGAATTAATATACTGGAATACCTACCTTCTATTTGTTATTCAG
ATCAGATCTGGCCTATTTTCATATTTATCCTAAGCCATCAAATGGGGTAGTGCCTCTTAAACCATTAACAGTACT
TTAGACATTGGCACTTTATTTTTCTCGTAGATCTTTAGCTACTTTGGGGAGGAGGGAAGGTGCTGATACCTTCAA
TTTGTTACTTTTCAAGATTTTTAAAAATAACTAGTGTAGCTTATCTTAAACATTTTATAAAACCTTCAGATGTCT
TTAAGCAGATTGGAAGTATGCAAGTGCTTCCTTAGCAGGGACAGTGGATAATCCTTAATGGTTTATCATAGATTT
CACCCTCCCCCCTTCTCAGAAGAGTGAGTATGCTCTTAAATGTCAAACACATTTTTGTTGTTTTGTTTTTTAAAT
GATCAGTGTCTATTTGATGTGATGCAGATCTTATAAATTTGGGAATTATAATATTGACATTTCTGTGATTTTTAT
ATATGTAATGTCTTAATTGAGATTTCTGTTAAGGCAGAAATAATTAGGCTAGGGCTCTTAGTTTTCATTCCTATT
GCCCAAGTATTGTCAAACTATGGTATTATTTTAATGTTACTTTAAAAATCCATAATCTGCTAGTTTTGCATGTAC
TTATATGAAAACAGTGCAGTAAGTTGAAAACTCAGTATCTATGGAATTGATAAATGTTGATCTGGTGTAGTATAT
TTTATCGCATTTTCTTATATTAAAAAATGTCTGCATGATTACATTTTATTTCCTTTGTAATTTACATTTCAGAAT
AGTGTATTGCTATATGGGTGCCAAGATTGAATATGAAGAACCCGAGTGTTTGTAGTATTATAGTTTTAAGCAAAT
CTGTGTGGTGATACAGCCATAAGAATGGGGCTTATATAAACTCTGTACATGTAAGATTTTGTACAGAGAATTTTT
AACTTTATAAATTGTATATGAACATGTAAATCTTTTAAAATGTACATAAAATACTGTATTTTTTTACCTTGTGTG
TGATAGTCTAGTCATTGCATGTAAATATAATTTATTATGTATTCTGTAGTATAAATCATACATTGATGACTTACA
TTTTTACTGGTAAGTCAACATCCGTTGGATGTTTTCTGAAGTGGCTCTTTTTGAAGTGATAATAGATTGTAATTC
AAAATAAAATTATTAATGAATTCTCCTTGTTTGGGATCACATCTTAATTTTTAATCTGTTAAAAGTTCTTGATGT
ATTTTAATGAGAAGACTTTAGGTGAGGCTACAGTGATTCCAGAGTGAGCCTTCTAACTGGCTAGCAGAAGTTCTC
TAGGTTTGGCATCTGTGCCTTGGAGATACTGAAAGAGAATCTGTCATTTGACAATTGACCTCTTTGTGGGATGGA
CTCATTAAGTATGCTCTCAGAGACTGGTATATTACCAGAATGCCTATTAATTTTCAGTGAGAGGCAACAGGTATT
AAGTAGAACAGAATGCTCAGGTTGGCAGATTAGAACGATCTTTCAGGAGACAAAGCAAGTTTTAATCAGTTGTTT
GGTTAATAAGTATGGGGTGTTCGCTGTGATAGGGCCCCGCCAGCTTCTGGCTCTTGTGGACCTCAAAAGTATCAG
GTGGTTTTGCAAGTGGTGGTCCTTTCCCCTGCCCCACCCCAATAGGTTCCCCATCTGTCTAGTTTGATTTTTGTA
GACCTTTGTTTTCTCTAGTTAGAAAATCAGGTACACTGAATATGGTTTTCATGTAACACCTCTTCTCTGGAGATA
GGGGTATGTTTTCCTACCCTTCTAGTGGAGAATCCTACTTGAGGATGACCTTTCCTCTCTTACTAAATAATATTA
GTAAATAGTGGGCAATATATTCTGCTTTCAGATTTTGATTTGTTGAGATGTAAAAGTTGTTTGGGGCTTACCAAA
TCTCAAGACTCTCTTTAGCTCCTGCAGGATTGTATTGCTTTTCTTACTGGATATTTTTCCTGGGTAAGCATCTTT
GTGGCTTCATCTCTTCCCCCTGTGGTTTTCAGTGTATTTAGTCGAGACCTCTCTGCTGAGCTTGCAACCTGTTTA
TTCACATGGCCTGCCATGCCACTTGGAGGTTTCTGATTACTCCCAAACCTGCTGGTTCTTTATGTCTTTCTCAGC
GAATAATTCCATCTGTTCATGTTGGAAACTTAGGTGATATGCTCATCTCCTTTTGCCTGTTTATGGAGGTCACCA
GCCTCTATCATTTGTATGATTTCGTTTACACTGTTTATATCTCTCTGTCCCCCCTTTTTCTGCCATTGGCATGGT

FIGURE 894B

TTAGACCTGTACTCTTTATCAGCAGAGGTACTGTAATATATTTGTGATCCCTCAGCTTCCAGGCTTACTCCTGGT
CTCTGCCTTCCTATCTACATATCCTTTTAAAATAAAATTTTAACTATCTCCTGAAAAATTGTTGAGTAGGTCACG
CACAATCAGGAGAAAAATCTATTCATGACATACAAGTCTCTGTCTAATCTGAACACTGCACCTGTCTCTGGCCTT
TTTTTCTTGTCATTTCCTAGACCTTAAAAAATGTGTATTGAGAAAGAACTCTGTTAGCTATACAGAAGATGAACT
GGGCAATATAGAGTAGCAGCATGGAGACCAGTCTGACTGAACTAAGGCAGTGGAAGTGTGGATGAGGAAGAGAGG
TGAAAATTGAGAAGCGCTATCCTTTCTCTTTGGGCATTATTAGGAGGCTCACAGACAAGTCCAGGAGTCTGGTTA
TACCCTCCTGTGCCATTCAACCAGGTGGCTTTCCCATGACTGTGATGAATAAAATTGAGAAGCCCCTGCCCTTTT
CAGAGCAGAGGGTGAGGAGAAAGCTACCATTTTGTCCTCATCCTTACCCCCGTTGACTTGGCGAGAGATTTGACC
TTTCAGGTTTTGATCCTGTCATTTTCTAGGATGTGGTGCACGCACTTTGCTGTTGCGCATGGTGAAGTATTGTGC
CTAGGTCCTGGGTCTTCATCTGTTTGGCTCTGCTACTGTTTCCTCCTCCCAGGAAGTGTGGTTAGACAAATAATG
TGTTTTAATTACCTGTCACACTCAGGATTAATACATACTCAGGTTAACTGTAGAGAGGCATTGGCTTCAGAACAC
TCCTCGTGACAATTTTAACCATTTTCTTTGTCTAGAGTCTGCCTTTTTCTTTTTTACAATTTCTTTTATTTCAAC
ACTAGGTTTCAATATGGTGTTCCTGCTACCTCCCACCTCCCTCCTCCCTCATCACACATGCAAATTGTCAGCTTA
TTGAGACAACCCACTTAGATTCATATATGGACAAGGACAAGGTATTTTGCATTTGTTACTGGAATTCAGTTTTCC
TAACTATTTACTACCAGAAATGGTCAATAACTTACTTTGTGGTTAGCAAATCAAATTGTGTGATAGATAGTTTCC
CAGTATGATGGCCAGTCAGTCTTTCCATCCCTGTGCCTACATGCTGCTCTTCCCGTCCACAAGTGGAGTCTGTTT
CTCTTGAGTTTTGGCTGGCCTTATGAATGGCTTTGCTTACTGAAGTGCAGCAGAAGAAATTTAGTATATGTCCAA
GCCTAGGCTTTAAGAGACTGGCAGCTTTCCTTTTATCCTTTTTGGAAGCTAGCCACCATGCTGCAAAGAAGCTCA
GCTGGATTACTGAAAGATGAGAGGCCATGTGGAGAGAGACTCTTGAGGATGAGAGATTATCTTGGATGTTCCAGC
CTTAAGCTCCCAGCTGAATGTGGGTGTATCCTCAGCTACACCACAGAAAACAGAGGAACTACTCAGTCGATCCCA
ATCAACCCACAGACTCACTAGAAATAACAAATTATTGTTTTAAGCCACGAGGTTTTGGGGGAGGGTTGTTAAACA
GTAATAGATAAGTGAGACAGATTGCTTGTTATTTATGGTCAAATGGTGATTATCTCTGGTGAGATTACAGGTGAT
GTTTTTTTTAAGTTATGCCTATCTGTAGTTTCCTTTTTTTCCTAAAATTGATTTGAATTATTAGTGTATTAACAG
AATAAAGAATGAACTTTAAAACACACACGCTGGTTATATGCTTCCTCTAATTAAAATTCATGGCTCTCACCAC

FIGURE 895

CGGGLVFRGRRCAAAEGGRAGSGMELGRPLLEVLASALSPASPPLLPPDYILCVVSLLQMKDLGAEHLAGHEGVQ
LLGLLNVYLEQEERFQPREKGLSLIEATPENDNTLCPGLRNAKVEDLRSLANFFGSCTETFVLAVNILDRFLALM
KVKPKHLSCIGVCSFLLAARIVEEDCNIPSTHDVIRISQCKCTASDIKRMEKIISEKLHYELEATTALNFLHLYH
TIILCHTSERKEILSLDKLEAQLKACNCRLIFSKAKPSVLALCLLNLEVETLKSVELLEILLLVKKHSKINDTEF
FYWRELVSKCLAEYSSPECCKPDLKKLVWIVSRRTAQNLHNSYYSVPELPTIPEGGCFDESESEDSCEDMSCGEE
SLSSSPPSDQECTFFFNFKVAQTLCFPS

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FIGURE 896

CCGGTCGGATGCCGGACCGGGGGCACCGCTGAGGCGGTGGGTCCCCGACCTGCGAGACAGGTTTGGAAGCCCCCG
CTGCGCCCAGTCCGTGCGGACCGCGAGGCCGCGGGCGGGTGGAGGCGCGTCTCCGGCACGATGAAGGATTTGGGG
GCAGAGCACTTGGCAGGTCATGAAGGGGTCCAACTTCTCGGGTTGTTGAACGTCTACCTGGAACAAGAAGAGAGA
TTCCAACCTCGAGAAAAAGGGCTGAGTTTGATTGAGGCTACCCCGGAGAATGATAACACTTTGTGTCCAGGATTG
AGAAATGCCAAAGTTGAAGATTTAAGGAGTTTAGCCAACTTTTTTGGATCTTGCACTGAAACTTTTGTCCTGGCT
GTCAATATTTTGGACAGGTTCTTGGCTCTTATGAAGGTGAAACCTAAACATTTGTCTTGCATTGGAGTCTGTTCT
TTTTTGCTGGCTGCTAGAATAGTTGAAGAAGACTGCAATATTCCATCCACTCATGATGTGATCCGGATTAGTCAG
TGTAAATGTACTGCTTCTGACATAAAACGGATGGAAAAAATAATTTCAGAAAAATTGCACTATGAATTGGAAGCT
ACTACTGCCTTAAACTTTTTGCACTTATACCATACTATTATACTTTGTCATACTTCAGAAAGGAAAGAAATACTG
AGCCTTGATAAACTAGAAGCTCAGCTGAAAGCTTGCAACTGCCGACTCATCTTTTCAAAAGCAAAACCATCTGTA
TTAGCCTTGTGCCTTCTCAATTTGGAAGTGGAAACTTTGAAATCTGTTGAATTACTGGAAATTCTCTTGCTAGTT
AAAAAACATTCCAAGATTAATGACACTGAGTTCTTCTACTGGAGAGAGTTGGTTTCTAAATGCCTAGCCGAGTAT
TCTTCTCCTGAATGTTGCAAACCAGATCTTAAGAAGTTGGTTTGGATCGTTTCAAGGCGCACAGCCCAGAACCTC
CACAACAGCTACTATAGTGTTCCTGAGCTGCCAACGATACCTGAGGGGGGTTGTTTTGATGAAAGTGAAAGTGAG
GACTCTTGTGAAGATATGAGTTGTGGAGAGGAGAGTCTCAGCAGCTCTCCTCCCAGTGATCAAGAGTGCACCTTC
TTTTTCAACTTCAAAGTGGCACAAACACTGTGCTTTCCATCTTAGAAATCTGATTGTTCTGTCAGAATTTATATT
TACAGGGTTTCAAAGCAATAAATGGGGGAATAGGTAGTTTCCTGGTTTAGCCCCCATCTAGTCAGGAATTAATAT
ACTGGAATACCTACCTTCTATTTGTTATTCAGATCAGATCTGGCCTATTTTCATATTTATCCTAAGCCATCAAAT
GGGGTAGTGCCTCTTAAACCATTAACAGTACTTTAGACATTGGCACTTTATTTTTCTCGTAGATCTTTAGCTACT
TTGGGGAGGAGGGAAGGTGCTGATACCTTCAATTTGTTACTTTTCAAGATTTTTAAAAATAACTAGTGTAGCTTA
TCTTAAACATTTTATAAAACCTTCAGATGTCTTTAAGCAGATTGGAAGTATGCAAGTGCTTCCTTAGCAGGGACA
GTGGATAATCCTTAATGGTTTATCATAGATTTCACCCTCCCCCCTTCTCAGAAGAGTGAGTATGCTCTTAAATGT
CAAACACATTTTTGTTGTTTTGTTTTTTAAATGATCAGTGTCTATTTGATGTGATGCAGATCTTATAAATTTGGG
AATTATAATATTGACATTTCTGTGATTTTTATATATGTAATGTCTTAATTGAGATTTGTGTTAAGGCAGAAATAA
TTAGGCTAGGGCTCTTAGTTTTCATTCCTATTGCCCCAAGTATTGTCAAACTATGGTATTATTTTAATGTTACTT
TAAAAATCCATAATCTGCTAGTTTTGCATGTACTTATATGAAAACAGTGCAGTAAGTTGAAAACTCAGTATCTAT
GGAATTGATAAATGTTGATCTGGTGTAGTATATTTTATCCGCATTTTCTTATATTAAAAAATGTTCTGCATGATT
ACATTTTATTTGCCTTTGT

FIGURE 897

MKDLGAEHLAGHEGVQLLGLLNVYLEQEERFQPREKGLSLIEATPENDNTLCPGLRNAKVEDLRSLANFFGSCTE
TFVLAVNILDRFLALMKVKPKHLSCIGVCSFLLAARIVEEDCNIPSTHDVIRISQCKCTASDIKRMEKIISEKLH
YELEATTALNFLHLYHTIILCHTSERKEILSLDKLEAQLKACNCRLIFSKAKPSVLALCLLNLEVETLKSVELLE
ILLLVKKHSKINDTEFFYWRELVSKCLAEYSSPECCKPDLKKLVWIVSRRTAQNLHNSYYSVPELPTIPEGGCFD
ESESEDSCEDMSCGEESLSSSPPSDQECTFFFNFKVAQTLCFPS

FIGURE 898

GGCGGACCGAAGAACGCAGGAAGGGGGCCGGGGGGACCCGCCCCCGGCCGGCCGCAGCCATGAACTCCAACGTGG
AGAACCTACCCCCGCACATCATCCGCCTGGTGTACAAGGAGGTGACGACACTGACCGCAGACCCACCCGATGGCA
TCAAGGTCTTTCCCAACGAGGAGGACCTCACCGACCTCCAGGTCACCATCGAGGGCCCTGAGGGGACCCCATATG
CTGGAGGTCTGTTCCGCATGAAACTCCTGCTGGGGAAGGACTTCCCTGCCTCCCCACCCAAGGGCTACTTCCTGA
CCAAGATCTTCCACCCGAACGTGGGCGCCAATGGCGAGATCTGCGTCAACGTGCTCAAGAGGGACTGGACGGCTG
AGCTGGGCATCCGACACGTACTGCTGACCATCAAGTGCCTGCTGATCCACCCTAACCCCGAGTCTGCACTCAACG
AGGAGGCGGGCCGCCTGCTCTTGGAGAACTACGAGGAGTATGCGGCTCGGGCCCGTCTGCTCACAGAGATCCACG
GGGGCGCCGGCGGGCCCAGCGGCAGGGCCGAAGCCGGTCGGGCCCTGGCCAGTGGCACTGAAGCTTCCTCCACCG
ACCCTGGGGCCCCAGGGGGCCCGGGAGGGGCTGAGGGTCCCATGGCCAAGAAGCATGCTGGCGAGCGCGATAAGA
AGCTGGCGGCCAAGAAAAAGACGGACAAGAAGCGGGCGCTGCGGGCGCTGCGGCGGCTGTAGTGGGCTCTCTTCC
TCCTTCCACCGTGACCCCAACCTCTCCTGTCCCCTCCCTCCAACTCTGTCTCTAAGTTATTTAAATTATGGCTGG
GGTCGGGGAGGGTACAGGGGGCACTGGGACCTGGATTTGTTTTTCTAAATAAAGTTGGAAAAGCA

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FIGURE 899

MNSNVENLPPHIIRLVYKEVTTLTADPPDGIKVFPNEEDLTDLQVTIEGPEGTPYAGGLFRMKLLLGKDFPASPP
KGYFLTKIFHPNVGANGEICVNVLKRDWTAELGIRHVLLTIKCLLIHPNPESALNEEAGRLLLENYEEYAARARL
LTEIHGGAGGPSGRAEAGRALASGTEASSTDPGAPGGPGGAEGPMAKKHAGERDKKLAAKKKTDKKRALRALRRL

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FIGURE 900

CCTGCTGAGGCCAAGCTCGGATCCGGTGCCGAGCCAAGCGGGGCCGTGCGTCGCCGGCCTTCGCTCGCGTGACCT
CCGCCGTCCTCCCCAACCCTCGTCCTCTGCGCCTGCGGCCGCAGCCCCAGCGCCCCTCGCCTAACCTCCCGCCGG
GCCGCGCCTCCTCCTCCTCCTGCTCCCCGCCGCTTCCGTTTCTCGAGGGAAAGGCTGCTGCCTCCTGCTCTGTCC
TCATCCCCGGCTTAGCTGACGGCCCAGAGGTGGGTGCCAATTCCACCAGCAGCTGCAACTGAAAAGCAAGGTTCA
GAAATGTCAGATATCCTCCGGGAGCTGCTCTGTGTCTCTGAGAAGGCTGCTAACATTGCCCGGGCGTGCAGACAG
CAGGAAGCCCTCTTCCAGCTGCTGATCGAAGAAAAGAAAGAGGGAGAAAAGAACAAGAAGTTTGCAGTTGACTTC
AAGACTCTGGCTGATGTACTGGTACAGGAAGTTATAAAACAGAATATGGAGAACAAGTTTCCAGGCTTGGAAAAA
AATATTTTTGGAGAAGAATCCAATGAGTTTACTAATGACTGGGGGGAAAAGATTACCTTGAGGTTGTGTTCAACA
GAGGAAGAAACAGCAGAGCTTCTTAGCAAAGTCCTCAATGGTAACAAGGTAGCATCTGAAGCATTAGCCAGGGTT
GTTCATCAGGATGTTGCCTTTACTGACCCAACTCTGGATTCCACAGAGATCAATGTTCCACAGGACATTTTGGGA
ATTTGGGTGGACCCCATAGATTCAACTTATCAGTATATAAAAGGTTCTGCTGACATTAAATCCAACCAGGGAATC
TTCCCCTGTGGACTTCAGTGTGTCACCATTTTAATTGGTGTCTATGACATACAGACAGGGGTTCCCCTGATGGGA
GTCATCAATCAACCTTTTGTGTCACGAGATCCAAACACCCTCAGGTGGAAAGGACAGTGCTATTGGGGCCTTTCT
TACATGGGGACCAACATGCATTCACTACAGCTCACCATCTCTAGAAGAAACGGCAGTGAAACACACACTGGAAAC
ACCGGCTCTGAGGCAGCATTCTCCCCCAGTTTTTCAGCCGTAATTAGTACAAGTGAAAAGGAGACTATCAAAGCT
GCATTGTCACGTGTGTGTGGAGATCGCATATTTGGGGCAGCTGGGGCTGGTTATAAGAGCCTATGTGTTGTCCAA
GGCCTCGTTGACATTTACATCTTTTCAGAAGATACCACATTCAAATGGGACTCTTGTGCTGCTCATGCCATACTG
CGGGCCATGGGTGGGGGAATAGTAGACTTGAAAGAATGCTTAGAAAGAAATCCAGAAACAGGGCTTGATTTGCCA
CAGTTGGTGTACCACGTGGAAAATGAGGGTGCTGCTGGGGTGGATCGGTGGGCCAACAAGGGAGGACTCATTGCA
TACAGATCCAGGAAGCGGCTGGAGACATTCCTGAGCCTCCTGGTCCAAAACCTGGCACCTGCAGAGACGCATACC
TAGAGGAACTCTAACCCCGGTGTACCTGTATAAACTGAACTGTGAAACTGTTTCGGTTATCTCTGTCTTTTGAGG
ATGGCTTTGTCCTGTTGCTGGTTAACATTCACCTTCCTCTTTTGAGGAGTATTTTTCCATTATGTATTCATAATA
ATGTTAATTTCAATAAATGACATTCATGCAGC

FIGURE 901

MSDILRELLCVSEKAANIARACRQQEALFQLLIEEKKEGEKNKKFAVDFKTLADVLVQEVIKQNMENKFPGLEKN
IFGEESNEFTNDWGEKITLRLCSTEEETAELLSKVLNGNKVASEALARVVHQDVAFTDPTLDSTEINVPQDILGI
WVDPIDSTYQYIKGSADIKSNQGIFPCGLQCVTILIGVYDIQTGVPLMGVINQPFVSRDPNTLRWKGQCYWGLSY
MGTNMHSLQLTISRRNGSETHTGNTGSEAAFSPSFSAVISTSEKETIKAALSRVCGDRIFGAAGAGYKSLCVVQG
LVDIYIFSEDTTFKWDSCAAHAILRAMGGGIVDLKECLERNPETGLDLPQLVYHVENEGAAGVDRWANKGGLIAY
RSRKRLETFLSLLVQNLAPAETHT

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FIGURE 902

CAGGGCAGACTGGTAGCAAAGCCCCCACGCCCAGCCAGGAGCACCGCCGCGGACTCCAGCACACCGAGGGACATG

CTGGGCCTGCGCCCCCCACTGCTCGCCCTGGTGGGGCTGCTCTCCCTCGGGTGCGTCCTCTCTCAGGAGTGCACG
AAGTTCAAGGTCAGCAGCTGCCGGGAATGCATCGAGTCGGGGCCCGGCTGCACCTGGTGCCAGAAGCTGAACTTC
ACAGGGCCGGGGGATCCTGACTCCATTCGCTGCGACACCCGGCCACAGCTGCTCATGAGGGGCTGTGCGGCTGAC
GACATCATGGACCCCACAAGCCTCGCTGAAACCCAGGAAGACCACAATGGGGGCCAGAAGCAGCTGTCCCCACAA
AAAGTGACGCTTTACCTGCGACCAGGCCAGGCAGCAGCGTTCAACGTGACCTTCCGGCGGGCCAAGGGCTACCCC
ATCGACCTGTACTATCTGATGGACCTCTCCTACTCCATGCTTGATGACCTCAGGAATGTCAAGAAGCTAGGTGGC
GACCTGCTCCGGGCCCTCAACGAGATCACCGAGTCCGGCCGCATTGGCTTCGGGTCCTTCGTGGACAAGACCGTG
CTGCCGTTCGTGAACACGCACCCTGATAAGCTGCGAAACCCATGCCCCAACAAGGAGAAAGAGTGCCAGCCCCCG
TTTGCCTTCAGGCACGTGCTGAAGCTGACCAACAACTCCAACCAGTTTCAGACCGAGGTCGGGAAGCAGCTGATT
TCCGGAAACCTGGATGCACCCGAGGGTGGGCTGGACGCCATGATGCAGGTCGCCGCCTGCCCGGAGGAAATCGGC
TGGCGCAACGTCACGCGGCTGCTGGTGTTTGCCACTGATGACGGCTTCCATTTCGCGGGCGACGGAAAGCTGGGC
GCCATCCTGACCCCCAACGACGGCCGCTGTCACCTGGAGGACAACTTGTACAAGAGGAGCAACGAATTCGACTAC
CCATCGGTCGGCCAGCTGGCGCACAAGCTGGCTGAAAACAACATCCAGCCCATCTTCGCGCTGACCAGTAGGATG
GTGAAGACCTACGAGAAACTCACCGAGATCATCCCCAAGTCAGCCGTGGGGGAGCTGTCTGAGGACTCCAGCAAT
GTGGTCCATCTCATTAAGAATGCTTACAATAAACTCTCCTCCAGGGTCTTCCTGGATCACAACGCCCTCCCCGAC
ACCCTGAAAGTCACCTACGACTCCTTCTGCAGCAATGGAGTGACGCACAGGAACCAGCCCAGAGGTGACTGTGAT
GGCGTGCAGATCAATGTCCCGATCACCTTCCAGGTGAAGGTCACGGCCACAGAGTGCATCCAGGAGCAGTCGTTT
GTCATCCGGGCGCTGGGCTTCACGGACATAGTGACCGTGCAGGTTCTTCCCCAGTGTGAGTGCCGGTGCCGGGAC
CAGAGCAGAGACCGCAGCCTCTGCCATGGCAAGGGCTTCTTGGAGTGCGGCATCTGCAGGTGTGACACTGGCTAC
ATTGGGAAAAACTGTGAGTGCCAGACACAGGGCCGGAGCAGCCAGGAGCTGGAAGGAAGCTGCCGGAAGGACAAC
AACTCCATCATCTGCTCAGGGCTGGGGGACTGTGTCTGCGGGCAGTGCCTGTGCCACACCAGCGACGTCCCCGGC
AAGCTGATATACGGGCAGTACTGCGAGTGTGACACCATCAACTGTGAGCGCTACAACGGCCAGGTCTGCGGCGGC
CCGGGGAGGGGGCTCTGCTTCTGCGGGAAGTGCCGCTGCCACCCGGGCTTTGAGGGCTCAGCGTGCCAGTGCGAG
AGGACCACTGAGGGCTGCCTGAACCCGCGGCGTGTTGAGTGTAGTGGTCGTGGCCGGTGCCGCTGCAACGTATGC
GAGTGCCATTCAGGCTACCAGCTGCCTCTGTGCCAGGAGTGCCCCGGCTGCCCCTCACCCTGTGGCAAGTACATC
TCCTGCGCCGAGTGCCTGAAGTTCGAAAAGGGCCCCTTTGGGAAGAACTGCAGCGCGGCGTGTCCGGGCCTGCAG
CTGTCGAACAACCCCGTGAAGGGCAGGACCTGCAAGGAGAGGGACTCAGAGGGCTGCTGGGTGGCCTACACGCTG
GAGCAGCAGGACGGGATGGACCGCTACCTCATCTATGTGGATGAGAGCCGAGAGTGTGTGGCAGGCCCCAACATC
GCCGCCATCGTCGGGGGCACCGTGGCAGGCATCGTGCTGATCGGCATTCTCCTGCTGGTCATCTGGAAGGCTCTG
ATCCACCTGAGCGACCTCCGGGAGTACAGGCGCTTTGAGAAGGAGAAGCTCAAGTCCCAGTGGAACAATGATAAT
CCCCTTTTCAAGAGCGCCACCACGACGGTCATGAACCCCAAGTTTGCTGAGAGTTAGGAGCACTTGGTGAAGACA
AGGCCGTCAGGACCCACCATGTCTGCCCCATCACGCGGCCGAGACATGGCTTGGCCACAGCTCTTGAGGATGTCA
CCAATTAACCAGAAATCCAGTTATTTTCCGCCCTCAAAATGACAGCCATGGCCGGCCGGTGCTTCTGGGGGCTCG
TCGGGGGGACAGCTCCACTCTGACTGGCACAGTCTTTGCATGGAGACTTGAGGAGGGCTTGAGGTTGGTGAGGTT
AGGTGCGTGTTTCCTGTGCAAGTCAGGACATCAGTCTGATTAAAGGTGGTGCCAATTTATTTACATTTAAACTTG
TCAGGGTATAAAATGACATCCCATTAATTATATTGTTAATCAATCACGTGTATAGAAAAAAAAATAAAACTTCAA
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FIGURE 903

MLGLRPPLLALVGLLSLGCVLSQECTKFKVSSCRECIESGPGCTWCQKLNFTGPGDPDSIRCDTRPQLLMRGCAA
DDIMDPTSLAETQEDHNGGQKQLSPQKVTLYLRPGQAAAFNVTFRRAKGYPIDLYYLMDLSYSMLDDLRNVKKLG
GDLLRALNEITESGRIGFGSFVDKTVLPFVNTHPDKLRNPCPNKEKECQPPFAFRHVLKLTNNSNQFQTEVGKQL
ISGNLDAPEGGLDAMMQVAACPEEIGWRNVTRLLVFATDDGFHFAGDGKLGAILTPNDGRCHLEDNLYKRSNEFD
YPSVGQLAHKLAENNIQPIFAVTSRMVKTYEKLTEIIPKSAVGELSEDSSNVVHLIKNAYNKLSSRVFLDHNALP
DTLKVTYDSFCSNGVTHRNQPRGDCDGVQINVPITFQVKVTATECIQEQSFVIRALGFTDIVTVQVLPQCECRCR
DQSRDRSLCHGKGFLECGICRCDTGYIGKNCECQTQGRSSQELEGSCRKDNNSIICSGLGDCVCGQCLCHTSDVP
GKLIYGQYCECDTINCERYNGQVCGGPGRGLCFCGKCRCHPGFEGSACQCERTTEGCLNPRRVECSGRGRCRCNV
CECHSGYQLPLCQECPGCPSPCGKYISCAECLKFEKGPFGKNCSAACPGLQLSNNPVKGRTCKERDSEGCWVAYT
LEQQDGMDRYLIYVDESRECVAGPNIAAIVGGTVAGIVLIGILLLVIWKALIHLSDLREYRRFEKEKLKSQWNND
NPLFKSATTTVMNPKFAES

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FIGURE 904

GGAAGGGTCCCGGGAACGTGGTGGGGCAGGGCCTCCGAGCGTGGTTGGACTTTGAAGGGGATCGGCGCCATGCTG
CATCCCCTTTTTGGAATTGCTCAACCAGGTGGTAACCGGCGCCGCTTCCTGGCCTTGGGAGGTGGTTCCTTTCTT
AACCCACAAGAACCTCTCCCAAGAGAACTTGGTCCTGATGTCTGACCATGGAGATGTGAGCCTCCCGCCCGAAGA
CCGGGTGAGGGCTCTCTCCCAGCTGGGTAGTGCGGTAGAGGTGAATGAAGACATTCCACCCCGTCGGTACTTCCG
CTCTGGAGTTGAGATTATCCGAATGGCATCCATTTACTCTGAGGAAGGCAACATTGAACATGCCTTCATCCTCTA
TAACAAGTATATCACGCTCTTTATTGAGAAACTACCAAAACATCGAGATTACAAATCTGCTGTCATTCCTGAAAA
GAAAGACACAGTAAAGAAATTAAAGGAGATTGCATTTCCCAAAGCAGAAGAGCTGAAGGCAGAGCTGTTAAAACG
ATATACCAAAGAATATACAGAATATAATGAAGAAAAGAAGAAGGAAGCAGAGGAATTGGCCCGGAACATGGCCAT
CCAGCAAGAGCTGGAAAAGGAAAAACAGAGGGTAGCACAACAGAAGCAGCAGCAATTGGAACAGGAACAGTTCCA
TGCCTTCGAGGAGATGATCCGGAACCAGGAGCTAGAAAAAGAGCGACTGAAAATTGTACAGGAGTTTGGGAAGGT
AGACCCTGGCCTAGGTGGCCCGCTAGTGCCTGACTTGGAGAAGCCCTCCTTAGATGTGTTCCCCACCTTAACAGT
CTCATCCATACAGCCTTCAGACTGTCACACAACTGTAAGGCCAGCTAAGCCACCTGTGGTGGACAGGTCCTTGAA
ACCTGGAGCACTGAGCAACTCAGAAAGTATTCCCACAATCGATGGATTGCGCCATGTGGTGGTGCCTGGGCGGCT
GTGCCCACAGTTTCTCCAGTTAGCCAGTGCCAACACTGCCCGGGGAGTGGAGACATGTGGAATTCTCTGTGGAAA
ACTGATGAGGAATGAATTTACCATTACCCATGTTCTCATCCCCAAGCAAAGTGCTGGGTCTGATTACTGCAACAC
AGAGAACGAAGAAGAACTTTTCCTCATACAGGATCAGCAGGGCCTCATCACACTGGGCTGGATTCATACTCACCC
CACACAGACCGCGTTTCTCTCCAGTGTCGACCTACACACTCACTGCTCTTACCAGATGATGTTGCCAGAGTCAGT
AGCCATTGTTTGCTCCCCCAAGTTCCAGGAAACTGGATTCTTTAAACTAACTGACCATGGACTAGAGGAGATTTC
TTCCTGTCGCCAGAAAGGATTTCATCCACACAGCAAGGATCCACCTCTGTTCTGTAGCTGCAGCCACGTGACTGT
TGTGGACAGAGCAGTGACCATCACAGACCTTCGATGAGCGTTTGAGTCCAACACCTTCCAAGAACAACAAAACCA
TATCAGTGTACTGTAGCCCCTTAATTTAAGCTTTCTAGAAAGCTTTGGAAGTTTTTGTAGATAGTAGAAAGGGGG
GCATCACCTGAGAAAGAGCTGATTTTGTATTTCAGGTTTGAAAAGAAATAACTGAACATATTTTTTAGGCAAGTC
AGAAAGAGAACATGGTCACCCAAAAGCAACTGTAACTCAGAAATTAAGTTACTCAGAAATTAAGTAGCTCAGAAA
TTAAGAAAGAATGGTATAATGAACCCCCATATACCCTTCCTTCTGGATTCACCAATTGTTAACATTTTTTTCCTC
TCAGCTATCCTTCTAATTTCTCTCTAATTTCAATTTGTTTATATTTACCTCTGGGCTCAATAAGGGCATCTGTGC
AGAAATTTGGAAGCCATTTAGAAAATCTTTTGGATTTTCCTGTGGTTTATGGCAATATGAATGGAGCTTATTACT
GGGGTGAGGGACAGCTTACTCCATTTGACCAGATTGTTTGGCTAACACATCCCGAAGAATGATTTTGTCAGGAAT
TATTGTTATTTAATAAATATTTCAGGATATTTTTCCTCTACAATAAAGTAACAATTAACTTAAAAAAAAAAAAAA
AAAAAAA

FIGURE 905

MSDHGDVSLPPEDRVRALSQLGSAVEVNEDIPPRRYFRSGVEIIRMASIYSEEGNIEHAFILYNKYITLFIEKLP
KHRDYKSAVIPEKKDTVKKLKEIAFPKAEELKAELLKRYTKEYTEYNEEKKKEAEELARNMAIQQELEKEKQRVA
QQKQQQLEQEQFHAFEEMIRNQELEKERLKIVQEFGKVDPGLGGPLVPDLEKPSLDVFPTLTVSSIQPSDCHTTV
RPAKPPVVDRSLKPGALSNSESIPTIDGLRHVVVPGRLCPQFLQLASANTARGVETCGILCGKLMRNEFTITHVL
IPKQSAGSDYCNTENEEELFLIQDQQGLITLGWIHTHPTQTAFLSSVDLHTHCSYQMMLPESVAIVCSPKFQETG
FFKLTDHGLEEISSCRQKGFHPHSKDPPLFCSCSHVTVVDRAVTITDLR

FIGURE 906A

ATTCAGCCGGTGCGCGCGGCGGCGGGAGGCAGTGGCTGGGGAGTCCCGTCGACGCTCTGTTCCGAGAGCGTGCCC
CGGACCGCCAGCTCAGAACAGGGGCAGCCGTGTAGCCGAACGGAAGCTGGGAGCAGCCGGGACTGGTGGCCCGCG
CCCGAGCTCCGCAGGCGGGAAGCACCCTGGATTTGGGAAGTCCCGGGAGCAGCGCGGCGGCACCTCCCTCACCCA
AGGGGCCGCGGCGACGGTCACGGGGCGCGGCGCCACCGTGAGCGACCCAGGCCAGGATTCTAAATAGACGGCCCA
GGCTCCTCCTCCGCCCGGGCCGCCTCACCTGCGGGCATTGCCGCGCCGCCTCCGCCGGTGTAGACGGCACCTGCG
CCGCCTTGCTCGCGGGTCTCCGCCCCTCGCCCACCCTCACTGCGCCAGGCCCAGGCAGCTCACCTGTACTGGCGC
GGGCTGCGGAAGCCTGCGTGAGCCGAGGCGTTGAGGCGCGGCGCCCACGCCACTGTCCCGAGAGGACGCAGGTGG
AGCGGGCGCGGCTTCGCGGAACCCGGCGCCGGCCGCCGCAGTGGTCCCAGCCTACACCGGGTTGCGGGGACCCGG
CCGCCAGTGCCCGGGGAGTAGCCGCCGCCGTCGGCTGGGCACC**ATG**AACAGCAGCAGCGCCAACATCACCTACGC
CAGTCGCAAGCGGCGGAAGCCGGTGCAGAAAACAGTAAAGCCAATCCCAGCTGAAGGAATCAAGTCAAATCCTTC
CAAGCGGCATAGAGACCGACTTAATACAGAGTTGGACCGTTTGGCTAGCCTGCTGCCTTTCCCACAAGATGTTAT
TAATAAGTTGGACAAACTTTCAGTTCTTAGGCTCAGCGTCAGTTACCTGAGAGCCAAGAGCTTCTTTGATGTTGC
ATTAAAATCCTCCCCTACTGAAAGAAACGGAGGCCAGGATAACTGTAGAGCAGCAAATTTCAGAGAAGGCCTGAA
CTTACAAGAAGGAGAATTCTTATTACAGGCTCTGAATGGCTTTGTATTAGTTGTCACTACAGATGCTTTGGTCTT
TTATGCTTCTTCTACTATACAAGATTATCTAGGGTTTCAGCAGTCTGATGTCATACATCAGAGTGTATATGAACT
TATCCATACCGAAGACCGAGCTGAATTTCAGCGTCAGCTACACTGGGCATTAAATCCTTCTCAGTGTACAGAGTC
TGGACAAGGAATTGAAGAAGCCACTGGTCTCCCCCAGACAGTAGTCTGTTATAACCCAGACCAGATTCCTCCAGA
AAACTCTCCTTTAATGGAGAGGTGCTTCATATGTCGTCTAAGGTGTCTGCTGGATAATTCATCTGGTTTTCTGGC
AATGAATTTCCAAGGGAAGTTAAAGTATCTTCATGGACAGAAAAAGAAAGGGAAAGATGGATCAATACTTCCACC
TCAGTTGGCTTTGTTTGCGATAGCTACTCCACTTCAGCCACCATCCATACTTGAAATCCGGACCAAAAATTTTAT
CTTTAGAACCAAACACAAACTAGACTTCACACCTATTGGTTGTGATGCCAAAGGAAGAATTGTTTTAGGATATAC
TGAAGCAGAGCTGTGCACGAGAGGCTCAGGTTATCAGTTTATTCATGCAGCTGATATGCTTTATTGTGCCGAGTC
CCATATCCGAATGATTAAGACTGGAGAAAGTGGCATGATAGTTTTCCGGCTTCTTACAAAAAACAACCGATGGAC
TTGGGTCCAGTCTAATGCACGCCTGCTTTATAAAAATGGAAGACCAGATTATATCATTGTAACTCAGAGACCACT
AACAGATGAGGAAGGAACAGAGCATTTACGAAAACGAAATACGAAGTTGCCTTTTATGTTTACCACTGGAGAAGC
TGTGTTGTATGAGGCAACCAACCCTTTTCCTGCCATAATGGATCCCTTACCACTAAGGACTAAAAATGGCACTAG
TGGAAAAGACTCTGCTACCACATCCACTCTAAGCAAGGACTCTCTCAATCCTAGTTCCCTCCTGGCTGCCATGAT
GCAACAAGATGAGTCTATTTATCTCTATCCTGCTTCAAGTACTTCAAGTACTGCACCTTTTGAAAACAACTTTTT
CAACGAATCTATGAATGAATGCAGAAATTGGCAAGATAATACTGCACCGATGGGAAATGATACTATCCTGAAACA
TGAGCAAATTGACCAGCCTCAGGATGTGAACTCATTTGCTGGAGGTCACCCAGGGCTCTTTCAAGATAGTAAAAA
CAGTGACTTGTACAGCATAATGAAAAACCTAGGCATTGATTTTGAAGACATCAGACACATGCAGAATGAAAAATT
TTTCAGAAATGATTTTTCTGGTGAGGTTGACTTCAGAGACATTGACTTAACGGATGAAATCCTGACGTATGTCCA
AGATTCTTTAAGTAAGTCTCCCTTCATACCTTCAGATTATCAACAGCAACAGTCCTTGGCTCTGAACTCAAGCTG
TATGGTACAGGAACACCTACATCTAGAACAGCAACAGCAACATCACCAAAAGCAAGTAGTAGTGGAGCCACAGCA
ACAGCTGTGTCAGAAGATGAAGCACATGCAAGTTAATGGCATGTTTGAAAATTGGAACTCTAACCAATTCGTGCC
TTTCAATTGTCCACAGCAAGACCCACAACAATATAATGTCTTTACAGACTTACATGGGATCAGTCAAGAGTTCCC
CTACAAATCTGAAATGGATTCTATGCCTTATACACAGAACTTTATTTCCTGTAATCAGCCTGTATTACCACAACA
TTCCAAATGTACAGAGCTGGACTACCCTATGGGGAGTTTTGAACCATCCCCATACCCCACTACTTCTAGTTTAGA
AGATTTTGTCACTTGTTTACAACTTCCTGAAAACCAAAAGCATGGATTAAATCCACAGTCAGCCATAATAACTCC
TCAGACATGTTATGCTGGGGCCGTGTCGATGTATCAGTGCCAGCCAGAACCTCAGCACACCCACGTGGGTCAGAT
GCAGTACAATCCAGTACTGCCAGGCCAACAGGCATTTTTAAACAAGTTTCAGAATGGAGTTTTAAATGAAACATA
TCCAGCTGAATTAAATAACATAAATAACACTCAGACTACCACACATCTTCAGCCACTTCATCATCCGTCAGAAGC
CAGACCTTTTCCTGATTTGACATCCAGTGGATTCCTG**TAA**TTCCAAGCCCAATTTTGACCCTGGTTTTTGGATTA
AATTAGTTTGTGAAGGATTATGGAAAAATAAAACTGTCACTGTTGGACGTCAGCAAGTTCACATGGAGGCATTGA
TGCATGCTATTCACAATTATTCCAAACCAAATTTTAATTTTTGCTTTTAGAAAAGGGAGTTTAAAAATGGTATCA
AAATTACATATACTACAGTCAAGATAGAAAGGGTGCTGCCACGGAGTGGTGAGGTACCGTCTACATTTCACATTA
TTCTGGGCACCACAAAATATACAAAACTTTATCAGGGAAACTAAGATTCTTTTAAATTAGAAAATATTCTCTATT
TGAATTATTTCTGTCACAGTAAAAATAAAATACTTTGAGTTTTGAGCTACTGGATTCTTATTAGTTCCCCAAATA

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FIGURE 906B

CAAAGTTAGAGAACTAAACTAGTTTTTCCTATCATGTTAACCTCTGCTTTTATCTCAGATGTTAAAATAAATGGT
TTGGTGCTTTTTATAAAAAGATAATCTCAGTGCTTTCCTCCTTCACTGTTTCATCTAAGTGCCTCACATTTTTTT
CTACCTATAACACTCTAGGATGTATATTTTATATAAAGTATTCTTTTTCTTTTTTAAATTAATATCTTTCTGCAC
ACAAATATTATTTGTGTTTCCTAAATCCAACCAATTTTCATTAATTCAGGCATATTTTAACTCCACTGCTTACCT
ACTTTCTTCAGGTAAAAGGGCAAATAATGATCGAAAAAATAATTATTTATTACATAATTTAGTTGTTTCTAGACT
ATAAATGTTGCTATGTGCCTTATGTTGAAAAAATTTAAAAGTAAAATGTCTTTCCAAATTATTTCTTAATTATTA
TAAAAATATTAAGACAATAGCACTTAAATTCCTCAACAGTGTTTTCAGAAGAAATAAATATACCACTCTTTACCT
TTATTGATATCTCCATGATGATAGTTGAATGTTGCAATGTGAAAAATCTGCTGTTAACTGCAACCTTGTTTATTA
AATTGCAAGAAGCTTTATTTCTAGCTTTTTAATTAAGCAAAGCACCCATTTCAATGTGTATAAATTGTCTTTAAA
AACTGTTTTAGACCTATAATCCTTGATAATATATTGTGTTGACTTTATAAATTTCGCTTCTTAGAACAGTGGAAA
CTATGTGTTTTTCTCATATTTGAGGAGTGTTAAGATTGCAGATAGCAAGGTTTGGTGCAAAGTATTGTAATGAGT
GAATTGAATGGTGCATTGTATAGATATAATGAACAAAATTATTTGTAAGATATTTGCAGTTTTTCATTTTAAAAA
GTCCATACCTTATATATGCACTTAATTTGTTGGGGCTTTACATACTTTATCAATGTGTCTTTCTAAGAAATCAAG
TAATGAATCCAACTGCTTAAAGTTGGTATTAATAAAAAGACAACCACATAGTTCGTTTACCTTCAAACTTTAGGT
TTTTTTAATGATATACTGATCTTCATTACCAATAGGCAAATTAATCACCCTACCAACTTTACTGTCCTAACATGG
ACTTTCAAAAAGAAAAAATGACACCATCTTTTATTCTTTTTTTTTTTTTTTTTTGAGAGAGAGTCTTACTCTGC
CGCCCAAACTGGAGTGCAGTGGCACAATCTTGGCTCACTGCAACCTCTACCTCCTGGGTTCAAGTGATTCTCTTG
CCTCAGCCTCCCGAGTTGCTGGGATTGCGGGCATGGTGGCGTGAGCCTGTAGTCCTAGCTACTCGGGAGGCTGAG
GCAGGAGAATAGCCTGAACCTGGGAATCGGAGGTTGCAGGGCCAAGATCGCCCCACTGCACTCCAGCCTGGCAAT
AGACCGAGCTCCGTCTCCAAAAAAAAAAATACAATTTTTATTTCTTTTACTTTTTTTAGTAAGTTAATGTATATA
AAAATGGCTTCGGACAAAATATCTCTGAGTTCTGTGTATTTTCAGTCAAAACTTTAAACCTGTAGAATCAATTTA
AGTGTTGAAAAAAATTTGTCTGAAACATTTCATAATTTGTTTCCAGCATGAGGTATCTAAGGATTTAGACCAGAG
GTCTAGATTAATACTCTATTTTTACATTTAAACCTTTTATTATAAGTCTTACATAAACCATTTTTGTTACTCTCT
TCCACATGTTACTGGATAAATTGTTTAGTGGAAAATAGGCTTTTTAATCATGAATATGATGACAATCAGTTATAC
AGTTATAAAATTAAAAGTTTGAAAAGCAATATTGTATATTTTTATCTATATAAAATAACTAAAATGTATCTAAGA
ATAATAAAATCACGTTAAACC

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FIGURE 907

MNSSSANITYASRKRRKPVQKTVKPIPAEGIKSNPSKRHRDRLNTELDRLASLLPFPQDVINKLDKLSVLRLSVS
YLRAKSFFDVALKSSPTERNGGQDNCRAANFREGLNLQEGEFLLQALNGFVLVVTTDALVFYASSTIQDYLGFQQ
SDVIHQSVYELIHTEDRAEFQRQLHWALNPSQCTESGQGIEEATGLPQTVVCYNPDQIPPENSPLMERCFICRLR
CLLDNSSGFLAMNFQGKLKYLHGQKKKGKDGSILPPQLALFAIATPLQPPSILEIRTKNFIFRTKHKLDFTPIGC
DAKGRIVLGYTEAELCTRGSGYQFIHAADMLYCAESHIRMIKTGESGMIVFRLLTKNNRWTWVQSNARLLYKNGR
PDYIIVTQRPLTDEEGTEHLRKRNTKLPFMFTTGEAVLYEATNPFPAIMDPLPLRTKNGTSGKDSATTSTLSKDS
LNPSSLLAAMMQQDESIYLYPASSTSSTAPFENNFFNESMNECRNWQDNTAPMGNDTILKHEQIDQPQDVNSFAG
GHPGLFQDSKNSDLYSIMKNLGIDFEDIRHMQNEKFFRNDFSGEVDFRDIDLTDEILTYVQDSLSKSPFIPSDYQ
QQQSLALNSSCMVQEHLHLEQQQQHHQKQVVVEPQQQLCQKMKHMQVNGMFENWNSNQFVPFNCPQQDPQQYNVF
TDLHGISQEFPYKSEMDSMPYTQNFISCNQPVLPQHSKCTELDYPMGSFEPSPYPTTSSLEDFVTCLQLPENQKH
GLNPQSAIITPQTCYAGAVSMYQCQPEPQHTHVGQMQYNPVLPGQQAFLNKFQNGVLNETYPAELNNINNTQTTT
HLQPLHHPSEARPFPDLTSSGFL

FIGURE 908

CGGGGACCCGGCTGCGGTGGCTGCGGGACTGACGAGAAACTACTAAAGTTCCTGGGGAAGCAAAGTAGAATTTCA
TAAGAACAAA**ATG**GATGGAGAGGAGAAAACCTATGGTGGCTGTGAAGGACCTGATGCCATGTATGTCAAATTGAT
ATCATCTGATGGCCATGAATTTATTGTAAAAAGAGAACATGCATTAACATCAGGCACGATAAAAGCCATGTTGAG
TGGCCCAGGTCAGTTTGCTGAGAACGAAACCAATGAGGTCAATTTTAGAGAGATACCTTCACATGTGCTATCGAA
AGTATGCATGTATTTTACGTACAAGGTTCGCTACACTAACAGCTCCACCGAGATTCCTGAATTCCCAATTGCACC
TGAAATTGCACTGGAACTGCTGATGGCTGCGAACTTCTTAGATTGT**TAA**ATAAAATAAATTATAATAAACTGTTA
ACTCTTTTCAGTATTTAATACCTGTAGTTCAGTTAGTAACTTTTTCATATATAGCATGTTGCCTGTATGCAGTTG
AACTATATAAAGTTCATTGCAAAGCAGATTATCTTGTTTTTTTGCATAGCAATCAAAGTTGAAATTTGTTTGCTA
CATCAACAAATTAAGGACATTTTCACAAACTGAGAAATAAACAAATATGCCAATTAAAAAAAAAAAAA

FIGURE 909

MDGEEKTYGGCEGPDAMYVKLISSDGHEFIVKREHALTSGTIKAMLSGPGQFAENETNEVNFREIPSHVLSKVCM
YFTYKVRYTNSSTEIPEFPIAPEIALELLMAANFLDC

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FIGURE 910

AAGCTGTACACTGCCCAGGCAAAGCGTCCGGGCAGCGTAGGCGGGCGACTCAGATCCCAGCCAGTGGACTTAGCC
CCTGTTTGCTCCTCCGATAACTGGGGTGACCTTGGTTAATATTCACCAGCAGCCTCCCCCGTTGCCCCTCTGGAT
CCACTGCTTAAATACGGACGAGGACAGGGCCCTGTCTCCTCAGCTTCAGGCACCACCACTGACCTGGGACAGTGA
ATCGACA**ATG**CCGTCTTCTGTCTCGTGGGGCATCCTCCTGCTGGCAGGCCTGTGCTGCCTGGTCCCTGTCTCCCT
GGCTGAGGATCCCCAGGGAGATGCTGCCCAGAAGACAGATACATCCCACCATGATCAGGATCACCCAACCTTCAA
CAAGATCACCCCCAACCTGGCTGAGTTCGCCTTCAGCCTATACCGCCAGCTGGCACACCAGTCCAACAGCACCAA
TATCTTCTTCTCCCCAGTGAGCATCGCTACAGCCTTTGCAATGCTCTCCCTGGGGACCAAGGCTGACACTCACGA
TGAAATCCTGGAGGGCCTGAATTTCAACCTCACGGAGATTCCGGAGGCTCAGATCCATGAAGGCTTCCAGGAACT
CCTCCGTACCCTCAACCAGCCAGACAGCCAGCTCCAGCTGACCACCGGCAATGGCTTGTTCCTCAGCGAGGGCCT
GAAGCTAGTGGATAAGTTTTTGGAGGATGTTAAAAAGTTGTACCACTCAGAAGCCTTCACTGTCAACTTCGGGGA
CACCGAAGAGGCCAAGAAACAGATCAACGATTACGTGGAGAAGGGTACTCAAGGGAAAATTGTGGATTTGGTCAA
GGAGCTTGACAGAGACACAGTTTTTGCTCTGGTGAATTACATCTTCTTTAAAGGCAAATGGGAGAGACCCTTTGA
AGTCAAGGACACCGAGGAAGAGGACTTCCACGTGGACCAGGTGACCACCGTGAAGGTGCCTATGATGAAGCGTTT
AGGCATGTTTAACATCCAGCACTGTAAGAAGCTGTCCAGCTGGGTGCTGCTGATGAAATACCTGGGCAATGCCAC
CGCCATCTTCTTCCTGCCTGATGAGGGGAAACTACAGCACCTGGAAAATGAACTCACCCACGATATCATCACCAA
GTTCCTGGAAAATGAAGACAGAAGGTCTGCCAGCTTACATTTACCCAAACTGTCCATTACTGGAACCTATGATCT
GAAGAGCGTCCTGGGTCAACTGGGCATCACTAAGGTCTTCAGCAATGGGGCTGACCTCTCCGGGGTCACAGAGGA
GGCACCCCTGAAGCTCTCCAAGGCCGTGCATAAGGCTGTGCTGACCATCGACGAGAAAGGGACTGAAGCTGCTGG
GGCCATGTTTTTAGAGGCCATACCCATGTCTATCCCCCCCGAGGTCAAGTTCAACAAACCCTTTGTCTTCTTAAT
GATTGACCAAAATACCAAGTCTCCCCTCTTCATGGGAAAAGTGGTGAATCCCACCCAAAAA**TAA**CTGCCTCTCGC
TCCTCAACCCCTCCCCTCCATCCCTGGCCCCCTCCCTGGATGACATTAAAGAAGGGTTGAGCTGGAAAAAAAAAA
AAAAAAAAA

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FIGURE 911

MPSSVSWGILLLAGLCCLVPVSLAEDPQGDAAQKTDTSHHDQDHPTFNKITPNLAEFAFSLYRQLAHQSNSTNIF
FSPVSIATAFAMLSLGTKADTHDEILEGLNFNLTEIPEAQIHEGFQELLRTLNQPDSQLQLTTGNGLFLSEGLKL
VDKFLEDVKKLYHSEAFTVNFGDTEEAKKQINDYVEKGTQGKIVDLVKELDRDTVFALVNYIFFKGKWERPFEVK
DTEEEDFHVDQVTTVKVPMMKRLGMFNIQHCKKLSSWVLLMKYLGNATAIFFLPDEGKLQHLENELTHDIITKFL
ENEDRRSASLHLPKLSITGTYDLKSVLGQLGITKVFSNGADLSGVTEEAPLKLSKAVHKAVLTIDEKGTEAAGAM
FLEAIPMSIPPEVKFNKPFVFLMIDQNTKSPLFMGKVVNPTQK

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FIGURE 912

TGCAGCTAGTGTGTCAACTCAGCGTTTCTCCTCTCGTCCCTGGAAGAGCTAAAGATGGCTGAATTTCTAGATGAC
CAGGAAACTCGACTGTGTGACAACTGCAAAAAAGAAATTCCTGTGTTTAACTTTACCATCCATGAGATCCACTGT
CAAAGGAACATTGGTATGTGTCCTACCTGTAAGGAACCATTTCCCAAATCTGACATGGAGACTCACATGGCTGCA
GAACACTGTCAGGTGACCTGCAAATGTAACAAGAAGTTGGAGAAGAGGCTGTTAAAGAAGCATGAGGAGACTGAG
TGCCCTTTGCGGCTTGCTGTCTGCCAGCACTGTGATTTAGAACTTTCCATTCTCAAACTGAAGGAACATGAAGAT
TATTGTGGTGCCCGGACGGAACTATGTGGCAACTGTGGTCGCAATGTCCTTGTGAAAGATCTGAAGACTCACCCT
GAAGTTTGTGGGAGAGAGGGGGAGGAAAAGAGAAATGAGGTTGCCATACCTCCTAATGCATATGATGAATCTTGG
GGTCAGGATGGAATCTGGATTGCATCCCAACTCCTCAGACAAATTGAGGCTCTGGACCCACCCATGAGGCTGCCG
CGAAGGCCCCTGAGAGCCTTTGAATCAGATGTTTTCCACAATAGAACTACCAACCAAAGGAACATTACAGCCCAG
GTTTCAATTCAGAATAATCTGTTTGAAGAACAAGAGAGGCAGGAAAGGAATAGAGGCCAACAGCCCCCCAAAGAG
GGTGGTGAAGAGAGTGCAAACTTGGACTTCATGTTGGCCCTAAGTCTGCAAAATGAAGGCCAAGCCTCCAGTGTG
GCAGAGCAGGACTTCTGGAGGGCCGTATGTGAGGCCGACCAGTCTCATGGCGGTCCCAGGTCTCTCAGTGACATA
AAGGGTGCAGCTGACGAGATCATGTTGCCTTGTGAATTTTGTGAGGAGCTCTACCCAGAGGAACTGCTGATTGAC
CATCAGACAAGCTGTAACCCTTCACGTGCCTTACCTTCACTCAATACTGGCAGCTCTTCCCCCAGAGGGGTGGAG
GAACCTGATGTCATCTTCCAGAACTTCTTGCAACAGGCTGCAAGTAACCAGTTAGACTCTTTGATGGGCCTGAGC
AATTCACACCCTGTGGAGGAGAGCATCATTATCCCATGTGAATTCTGTGGGGTACAGCTGGAAGAGGAGGTGCTG
TTCCATCACCAGGACCAGTGTGACCAACGCCCAGCCACTGCAACCAACCATGTGACAGAGGGGATTCCTAGACTG
GATTCCCAGCCTCAAGAGACCTCACCAGAGCTGCCCAGGAGGCGTGTCAGACACCAGGGAGACCTGTCTTCTGGT
TACCTGGATGATACTAAGCAGGAAACAGCTAATGGGCCCACCTCCTGTCTGCCTCCCAGCCGACCCATTAACAAT
ATGACAGCTACCTATAACCAGCTATCGAGATCAACATCAGGCCCCAGACCTGGGTGCCAGCCCAGCTCTCCTTGT
GTGCCGAAGCTCAGCAACTCAGACAGCCAGGACATCCAGGGGCGGAATCGAGACAGCCAGAATGGGGCCATAGCC
CCTGGGCACGTTTCAGTGATTCGCCCTCCTCAAAATCTCTACCCAGAAAACATTGTGCCCTCTTTCTCCCCTGGG
CCTTCAGGGAGATACGGAGCTAGTGGTAGGAGTGAAGGTGGCAGGAATTCCCGGGTCACCCCTGCAGCTGCCAAC
TACCGCAGCAGAACTGCAAAGGCAAAGCCTTCCAAGCAACAGGGAGCTGGGGATGCAGAAGAGGAAGAGGAGGAG
TAATGGTGTCTCCAGAGACTTTACATCGGTTCCTGTCTTCTGTGCACAGCAGCACTTGCCGCTGTGCAGGCCCAC
CTCTTTGGCTCTTTGGGTGGGAGAGTTTTTCCAGATTTTAGATTTTTCTAGGTTATGGCCATTTTGTGTCTTTTG
AGGTTGTGCTGTGGGGGTTTGGGTTTGAGGGAAGGGAGCAGGGTGGCGGTTGAGGAACGCTTCAGCCTTAGCTGC
TACCTTTCGGCAGCAGTGAAATACAAGCTGCAGCCTCGGCTGCCAGGGCTCCCTTTTGACTTATTGTCGCCACTG
CCCCTTGGTGCTGTGTGGTCCCAGTGGAAGGAGGGGAAGATTTTGGAAACCTGGTAGCCACCAGTAAGGTGATTC
TCTGCCCTGTTGGGGCCTAAATTTGGGGGCTTTTGGGCAACCTCTCCGTGTACTGCGTCTGTCCACACTCGATTG
GGCCCCAGGTGTGTATGAGGCGCTCTGGTAAGGTGCTCAGGCCAGTTGCAATGTCTGTCAGTAACGAGGCTTTTG
ATGTGTTGAGCTGGAGGTGAGTGGACCGGGGGCTGTGTTTTAAGCTGCTTCCTTGGCATTTGCATCACTGCCTTC
TGTTCCCGGGGGAGCATGGATCTTTTGTCCTCACTGCTTTCTAATGGGGAGGGCTGAGGGCTCCCTGTCCCCACA
GCAGGTATGTTTGCTCTGCCCCAGCCCCACACTTGCTCTGAAAACCAAGTGTCAGAGCCCCTTCCCCTTGTTTTT
ATTTTACTGTTATAATAATTATTAACTTCCTTGTAATAGAAATAAAGTTTGTACTTGGAGTTCAGCTC

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FIGURE 913

MAEFLDDQETRLCDNCKKEIPVFNFTIHEIHCQRNIGMCPTCKEPFPKSDMETHMAAEHCQVTCKCNKKLEKRLL
KKHEETECPLRLAVCQHCDLELSILKLKEHEDYCGARTELCGNCGRNVLVKDLKTHPEVCGREGEEKRNEVAIPP
NAYDESWGQDGIWIASQLLRQIEALDPPMRLPRRPLRAFESDVFHNRTTNQRNITAQVSIQNNLFEEQERQERNR
GQQPPKEGGEESANLDFMLALSLQNEGQASSVAEQDFWRAVCEADQSHGGPRSLSDIKGAADEIMLPCEFCEELY
PEELLIDHQTSCNPSRALPSLNTGSSSPRGVEEPDVIFQNFLQQAASNQLDSLMGLSNSHPVEESIIIPCEFCGV
QLEEEVLFHHQDQCDQRPATATNHVTEGIPRLDSQPQETSPELPRRRVRHQGDLSSGYLDDTKQETANGPTSCLP
PSRPINNMTATYNQLSRSTSGPRPGCQPSSPCVPKLSNSDSQDIQGRNRDSQNGAIAPGHVSVIRPPQNLYPENI
VPSFSPGPSGRYGASGRSEGGRNSRVTPAAANYRSRTAKAKPSKQQGAGDAEEEEEE

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FIGURE 914

AGCTGGCTGAGAGGGGACTGGGCGCCGGCGGGGAAGGAGGAGCGCTAGGTCGGTGTACGACCGAGATTAGGGTGC
GTGCCAGCTCCGGGAGGCCGCGGTGAGGGGCCGGGCCCAAGCTGCCGACCCGAGCCGATCGTCAGGGTCGCCAGC
GCCTCAGCTCTGTGGAGGAGCAGCAGTAGTCGGAGGGTGCAGGATATTAGAA**ATG**GCTACTCCCCAGTCAATTTT
CATCTTTGCAATCTGCATTTTAATGATAACAGAATTAATTCTGGCCTCAAAAAGCTACTATGATATCTTAGGTGT
GCCAAAATCGGCATCAGAGCGCCAAATCAAGAAGGCCTTTCACAAGTTGGCCATGAAGTACCACCCTGACAAAAA
TAAGAGCCCGGATGCTGAAGCAAAATTCAGAGAGATTGCAGAAGCATATGAAACACTCTCAGATGCTAATAGACG
AAAAGAGTATGATACACTTGGACACAGTGCTTTTACTAGTGGTAAAGGACAAAGAGGTAGTGGAAGTTCTTTTGA
GCAGTCATTTAACTTCAATTTTGATGACTTATTTAAAGACTTTGGCTTTTTTGGTCAAAACCAAAACACTGGATC
CAAGAAGCGTTTTGAAAATCATTTCCAGACACGCCAGGATGGTGGTTCCAGTAGACAAAGGCATCATTTCCAAGA
ATTTTCTTTTGGAGGTGGATTATTTGATGACATGTTTGAAGATATGGAGAAAATGTTTTCTTTTAGTGGTTTTGA
CTCTACCAATCAGCATACAGTACAGACTGAAAATAGATTTCATGGATCTAGCAAGCACTGCAGGACTGTCACTCA
ACGAAGAGGAAATATGGTTACTACATACACTGACTGTTCAGGACAG**TAG**TTCTTATTCTATTCTCACTAAATCCA
ACTGGTTGACTCTTCCTCATTATCTTTGATGCTAAACAATTTTCTGTGAACTATTTTGACAAGTGCATGATTTCA
CTTTAAACAATTTGATATAGCTATTAAATATATTTAAGGGTTTTTTTTTTTTGACAAATTCAACATTCAACGAGT
AGACAAAATGCTAATTATTTCCCTGATTAGGAAAGTTTCTTTAAAAAACACGTAATTTTGCCTAGTGCTTTTTCT
CTACCTGCCCTTGGGCTCACTAATATCACCAGTATTATTACCAAGAAAATATTGAGTTTACCTGATTAAACTTTA
AAAGTTAATTGTAGATTTAAATTGTGTGAACCTAATGATTTTTGCAGTGAAACCTTTACTAATTCAAAGTTGCAT
GTTCTATGACATCTGTGACTTGCGTTGCAGAGTGTACATGAAACTGTATAATTGAGTCATTCAGTAAAGGAGAAC
AGTATCTTGGTTAATTGCTACTGAAAGGTTGAGAAAGGAATGGTTTGATATTTACCACAGCGCTGTGCCTTTCTA
CAGTAGAACTGGGGTAAAGGAAATGGTTTTATTGCCCATAGTCATTTAGGCTGGAAAAAAGTTGAAAACTTAACG
AAATATTGCCAAGAGATTGTTATGTGTTTGGTTCCAGCCTAAAAATGATTTTGTAGTGTTGAAATCATAGCTACT
TACATAGCTTTTTCATATTTCTTTCTTAGTTGTTGGCACTCTTAGGTCTTAGTATGGATTTATGTGTTTGTGTGT
GTGTAGTTTATCCTCTCTCTCATCTTTATCTAGAGATTGACTGATACCTCATTCTGTTTGTAAAACCAGCCAGTA
ATTTCTGTGCAACCTTACTATGTGCAATATTTTTAAATCCTGAGAAATGTGTGCTTTTGTTTTCGGATAGACTTA
TTTCTTTAGTTCTGCACTTTTCCACATTATACTCCATATGAGTATTAATCCTATGGATACATATTAAAACAAGTG
TCTCATACAACATTGTATGTGAGAGAAATATAAATATTTACAACCTGATATTCGTTGTTGTTTTATTGTTAAAAG
TTTATTATGCAACTCTGGAGGTATAGAGGGCATATAAGCTATGGGACATATGCTGATCACAGGCTATATTCATGA
AGTTACTTTTGACCAACCTGAAAACTGATAGGATTTTGTTTGTCATTTGGTAATTTCTACTGCATTCTTACCATC
CTTCTCTCACAAATTTTGATAGCTTGAAGATCTTTTTAATTATAATTTTGTTGTATTTGTTTCCTAGGAGCAAGT
GTTCCTGCTGCCAGTTCTTTCCTCTTTAGGCGTGGTTGAGAAAAAGCAGAAACTTTACATAAAGCTGTATTTCTT
AATCATCTTTAATTTGAAACTTAAGAAAATGAATTTATTCTGTTATATTTATGTAACTTATTTCCTGGAAGTTAT
ATCTACTAGTTTTGTTTGATAATAATAAAATTAGCTATACCTTGAA

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FIGURE 915

MATPQSIFIFAICILMITELILASKSYYDILGVPKSASERQIKKAFHKLAMKYHPDKNKSPDAEAKFREIAEAYE
TLSDANRRKEYDTLGHSAFTSGKGQRGSGSSFEQSFNFNFDDLFKDFGFFGQNQNTGSKKRFENHFQTRQDGGSS
RQRHHFQEFSFGGGLFDDMFEDMEKMFSFSGFDSTNQHTVQTENRFHGSSKHCRTVTQRRGNMVTTYTDCSGQ

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FIGURE 916

AGCTGGCTGAGAGGGGACTGGGCGCCGGCGGGGAAGGAGGAGCGCTAGGTCGGTGTACGACCGAGATTAGGGTGC
GTGCCAGCTCCGGGAGGCCGCGGTGAGGGGCCGGGCCCAAGCTGCCGACCCGAGCCGATCGTCAGGGTCGCCAGC
GCCTCAGCTCTGTGGAGGAGCAGCAGTAGTCGGAGGGTGCAGGATATTAGAA**ATG**GCTACTCCCCAGTCAATTTT
CATCTTTGCAATCTGCATTTTAATGATAACAGAATTAATTCTGGCCTCAAAAAGCTACTATGATATCTTAGGTGT
GCCAAAATCGGCATCAGAGCGCCAAATCAAGAAGGCCTTTCACAAGTTGGCCATGAAGTACCACCCTGACAAAAA
TAAGAGCCCGGATGCTGAAGCAAAATTCAGAGAGATTGCAGAAGCATATGAAACACTCTCAGATGCTAATAGACG
AAAAGAGTATGATACACTTGGACACAGTGCTTTTACTAGTGGTAAAGGACAAAGAGGTAGTGGAAGTTCTTTTGA
GCAGTCATTTAACTTCAATTTTGATGACTTATTTAAAGACTTTGGCTTTTTTGGTCAAAACCAAAACACTGGATC
CAAGAAGCGTTTTGAAAATCATTTCCAGACACGCCAGGATGGTGGTTCCAGTAGACAAAGGCATCATTTCCAAGA
ATTTTCTTTTGGAGGTGGATTATTTGATGACATGTTTGAAGATATGGAGAAAATGTTTTCTTTTAGTGGTTTTGA
CTCTACCAATCAGCATACAGTACAGACTGAAAATAGATTTCATGGATCTAGCAAGCACTGCAGGACTGTCACTCA
ACGAAGAGGAAATATGGTTACTACATACACTGACTGTTCAGGACAG**TAG**TTCTTATTCTATTCTCACTAAATCCA
ACTGGTTGACTCTTCCTCATTATCTTTGATGCTAAACAATTTTCTGTGAACTATTTTGACAAGTGCATGATTTCA
CTTTAAACAATTTGATATAGCTATTAAATATATTTAAGGGTTTTTTTTTTTTGACAAATTCAACATTCAACGAGT
AGACAAAATGCTAATTATTTCCCTGATTAGGAAAGTTTCTTTAAAAAACACGTAATTTTGCCTAGTGCTTTTTCT
CTACCTGCCCTTGGGCTCACTAATATCACCAGTATTATTACCAAGAAAATATTGAGTTTACCTGATTAAACTTTA
AAAGTTAATTGTAGATTTAAATTGTGTGAACCTAATGATTTTTGCAGTGAAACCTTTACTAATTCAAAGTTGCAT
GTTCTATGACATCTGTGACTTGCGTTGCAGAGTGTACATGAAACTGTATAATTGAGTCATTCAGTAAAGGAGAAC
AGTATCTTGGTTAATTGCTACTGAAAGGTTGAGAAAGGAATGGTTTGATATTTACCACAGCGCTGTGCCTTTCTA
CAGTAGAACTGGGGTAAAGGAAATGGTTTTATTGCCCATAGTCATTTAGGCTGGAAAAAAGTTGAAAACTTAACG
AAATATTGCCAAGAGATTGTTATGTGTTTGGTTCCAGCCTAAAAATGATTTTGTAGTGTTGAAATCATAGCTACT
TACATAGCTTTTTCATATTTCTTTCTTAGTTGTTGGCACTCTTAGGTCTTAGTATGGATTTATGTGTTTGTGTGT
GTGTAGTTTATCCTCTCTCTCATCTTTATCTAGAGATTGACTGATACCTCATTCTGTTTGTAAAACCAGCCAGTA
ATTTCTGTGCAACCTTACTATGTGCAATATTTTTAAATCCTGAGAAATGTGTGCTTTTGTTTTCGGATAGACTTA
TTTCTTTAGTTCTGCACTTTTCCACATTATACTCCATATGAGTATTAATCCTATGGATACATATTAAAACAAGTG
TCTCATACAACATTGTATGTGAGAGAAATATAAATATTTACAACCTGATATTCGTTGTTGTTTTATTGTTAAAAG
TTTATTATGCAACTCTGGAGGTATAGAGGGCATATAAGCTATGGGACATATGCTGATCACAGGCTATATTCATGA
AGTTACTTTTGACCAACCTGAAAACTGATAGGATTTTGTTTGTCATTTGGTAATTTCTACTGCATTCTTACCATC
CTTCTCTCACAAATTTTGATAGCTTGAAGATCTTTTTAATTATAATTTTGTTGTATTTGTTTCCTAGGAGCAAGT
GTTCCTGCTGCCAGTTCTTTCCTCTTTAGGCGTGGTTGAGAAAAAGCAGAAACTTTACATAAAGCTGTATTTCTT
AATCATCTTTAATTTGAAACTTAAGAAAATGAATTTATTCTGTTATATTTATGTAACTTATTTCCTGGAAGTTAT
ATCTACTAGTTTTGTTTGATAATAATAAAATTAGCTATACCTTGAA

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FIGURE 917

MATPQSIFIFAICILMITELILASKSYYDILGVPKSASERQIKKAFHKLAMKYHPDKNKSPDAEAKFREIAEAYE
TLSDANRRKEYDTLGHSAFTSGKGQRGSGSSFEQSFNFNFDDLFKDFGFFGQNQNTGSKKRFENHFQTRQDGGSS
RQRHHFQEFSFGGGLFDDMFEDMEKMFSFSGFDSTNQHTVQTENRFHGSSKHCRTVTQRRGNMVTTYTDCSGQ

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FIGURE 918

GGCGAGAGGCGGGCTGAGGCGGCCCAGCGGCGGCAGGTGAGGCGGAACCAACCCTCCTGGCCATGGGAGGGGCCG
TGGTGGACGAGGGCCCCACAGGCGTCAAGGCCCCTGACGGCGGCTGGGGCTGGGCCGTGCTCTTCGGCTGTTTCG
TCATCACTGGCTTCTCCTACGCCTTCCCCAAGGCCGTCAGTGTCTTCTTCAAGGAGCTCATACAGGAGTTTGGGA
TCGGCTACAGCGACACAGCCTGGATCTCCTCCATCCTGCTGGCCATGCTCTACGGGACAGGTCCGCTCTGCAGTG
TGTGCGTGAACCGCTTTGGCTGCCGGCCCGTCATGCTTGTGGGGGGTCTCTTTGCGTCGCTGGGCATGGTGGCTG
CGTCCTTTTGCCGGAGCATCATCCAGGTCTACCTCACCACTGGGGTCATCACGGGGTTGGGTTTGGCACTCAACT
TCCAGCCCTCGCTCATCATGCTGAACCGCTACTTCAGCAAGCGGCGCCCCATGGCCAACGGGCTGGCGGCAGCAG
GTAGCCCTGTCTTCCTGTGTGCCCTGAGCCCGCTGGGGCAGCTGCTGCAGGACCGCTACGGCTGGCGGGGCGGCT
TCCTCATCCTGGGCGGCCTGCTGCTCAACTGCTGCGTGTGTGCCGCACTCATGAGGCCCCTGGTGGTCACGGCCC
AGCCGGGCTCGGGGCCGCCGCGACCCTCCCGGCGCCTGCTAGACCTGAGCGTCTTCCGGGACCGCGGCTTTGTGC
TTTACGCCGTGGCCGCCTCGGTCATGGTGCTGGGGCTCTTCGTCCCGCCCGTGTTCGTGGTGAGCTACGCCAAGG
ACCTGGGCGTGCCCGACACCAAGGCCGCCTTCCTGCTCACCATCCTGGGCTTCATTGACATCTTCGCGCGGCCGG
CCGCGGGCTTCGTGGCGGGGCTTGGGAAGGTGCGGCCCTACTCCGTCTACCTCTTCAGCTTCTCCATGTTCTTCA
ACGGCCTCGCGGACCTGGCGGGCTCTACGGCGGGCGACTACGGCGGCCTCGTGGTCTTCTGCATCTTCTTTGGCA
TCTCCTACGGCATGGTGGGGGCCCTGCAGTTCGAGGTGCTCATGGCCATCGTGGGCACCCACAAGTTCTCCAGTG
CCATTGGCCTGGTGCTGCTGATGGAGGCGGTGGCCGTGCTCGTCGGGCCCCCTTCGGGAGGCAAACTCCTGGATG
CGACCCACGTCTACATGTACGTGTTCATCCTGGCGGGGGCCGAGGTGCTCACCTCCTCCCTGATTTTGCTGCTGG
GCAACTTCTTCTGCATTAGGAAGAAGCCCAAAGAGCCACAGCCTGAGGTGGCGGCCGCGGAGGAGGAGAAGCTCC
ACAAGCCTCCTGCAGACTCGGGGGTGGACTTGCGGGAGGTGGAGCATTTCCTGAAGGCTGAGCCTGAGAAAAACG
GGGAGGTGGTTCACACCCCGGAAACAAGTGTCTGAGTGGCTGGGCGGGGCCGGCAGGCACAGGGAGGAGGTACAG
AAGCCGGCAACGCTTGCTATTTATTTTACAAACTGGACTGGCTCAGGCAGGGCCACGGCTGGGCTCCAGCTGCCG
GCCCAGCGGATCGTCGCCCGATCAGTGTTTTGAGGGGGAAGGTGGCGGGGTGGGAACCGTGTCATTCCAGAGTGG
ATCTGCGGTGAAGCCAAGCCGCAAGGTTACAAGGCATCCTCACCAGGGGCCCCGCCTGCTGCTCCCAGGTGGCCT
GCGGCCACTGCTATGCTCAAGGACCTGGAAACCCATGCTTCGAGACAACGTGACTTTAATGGGAGGGTGGGTGGG
CCGCAGACAGGCTGGCAGGGCAGGTGCTGCGTGGGGCCCTCTCCAGCCCGTCCTACCCTGGGCTCACATGGGGCC
TGTGCCCACCCCTCTTGAGTGTCTTGGGGACAGCTCTTTCCACCCCTGGAAGATGGAAATAAACCTGCGTGTGGG
TGGAGTGTTCTCGTGCCGAATTCAAAAAGCTT

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FIGURE 919

MGGAVVDEGPTGVKAPDGGWGWAVLFGCFVITGFSYAFPKAVSVFFKELIQEFGIGYSDTAWISSILLAMLYGTG
PLCSVCVNRFGCRPVMLVGGLFASLGMVAASFCRSIIQVYLTTGVITGLGLALNFQPSLIMLNRYFSKRRPMANG
LAAAGSPVFLCALSPLGQLLQDRYGWRGGFLILGGLLLNCCVCAALMRPLVVTAQPGSGPPRPSRRLLDLSVFRD
RGFVLYAVAASVMVLGLFVPPVFVVSYAKDLGVPDTKAAFLLTILGFIDIFARPAAGFVAGLGKVRPYSVYLFSF
SMFFNGLADLAGSTAGDYGGLVVFCIFFGISYGMVGALQFEVLMAIVGTHKFSSAIGLVLLMEAVAVLVGPPSGG
KLLDATHVYMYVFILAGAEVLTSSLILLLGNFFCIRKKPKEPQPEVAAAEEEKLHKPPADSGVDLREVEHFLKAE
PEKNGEVVHTPETSV

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FIGURE 920

GGCGAGAGGCGGGCTGAGGCGGCCCAGCGGCGGCAGGTGAGGCGGAACCAACCCTCCTGGCCATGGGAGGGGCCG
TGGTGGACGAGGGCCCCACAGGCGTCAAGGCCCCTGACGGCGGCTGGGGCTGGGCCGTGCTCTTCGGCTGTTTCG
TCATCACTGGCTTCTCCTACGCCTTCCCCAAGGCCGTCAGTGTCTTCTTCAAGGAGCTCATACAGGAGTTTGGGA
TCGGCTACAGCGACACAGCCTGGATCTCCTCCATCCTGCTGGCCATGCTCTACGGGACAGGTCCGCTCTGCAGTG
TGTGCGTGAACCGCTTTGGCTGCCGGCCCGTCATGCTTGTGGGGGGTCTCTTTGCGTCGCTGGGCATGGTGGCTG
CGTCCTTTTGCCGGAGCATCATCCAGGTCTACCTCACCACTGGGGTCATCACGGGGTTGGGTTTGGCACTCAACT
TCCAGCCCTCGCTCATCATGCTGAACCGCTACTTCAGCAAGCGGCGCCCCATGGCCAACGGGCTGGCGGCAGCAG
GTAGCCCTGTCTTCCTGTGTGCCCTGAGCCCGCTGGGGCAGCTGCTGCAGGACCGCTACGGCTGGCGGGGCGGCT
TCCTCATCCTGGGCGGCCTGCTGCTCAACTGCTGCGTGTGTGCCGCACTCATGAGGCCCCTGGTGGTCACGGCCC
AGCCGGGCTCGGGGCCGCCGCGACCCTCCCGGCGCCTGCTAGACCTGAGCGTCTTCCGGGACCGCGGCTTTGTGC
TTTACGCCGTGGCCGCCTCGGTCATGGTGCTGGGGCTCTTCGTCCCGCCCGTGTTCGTGGTGAGCTACGCCAAGG
ACCTGGGCGTGCCCGACACCAAGGCCGCCTTCCTGCTCACCATCCTGGGCTTCATTGACATCTTCGCGCGGCCGG
CCGCGGGCTTCGTGGCGGGGCTTGGGAAGGTGCGGCCCTACTCCGTCTACCTCTTCAGCTTCTCCATGTTCTTCA
ACGGCCTCGCGGACCTGGCGGGCTCTACGGCGGGCGACTACGGCGGCCTCGTGGTCTTCTGCATCTTCTTTGGCA
TCTCCTACGGCATGGTGGGGGCCCTGCAGTTCGAGGTGCTCATGGCCATCGTGGGCACCCACAAGTTCTCCAGTG
CCATTGGCCTGGTGCTGCTGATGGAGGCGGTGGCCGTGCTCGTCGGGCCCCCTTCGGGAGGCAAACTCCTGGATG
CGACCCACGTCTACATGTACGTGTTCATCCTGGCGGGGGCCGAGGTGCTCACCTCCTCCCTGATTTTGCTGCTGG
GCAACTTCTTCTGCATTAGGAAGAAGCCCAAAGAGCCACAGCCTGAGGTGGCGGCCGCGGAGGAGGAGAAGCTCC
ACAAGCCTCCTGCAGACTCGGGGGTGGACTTGCGGGAGGTGGAGCATTTCCTGAAGGCTGAGCCTGAGAAAAACG
GGGAGGTGGTTCACACCCCGGAAACAAGTGTCTGAGTGGCTGGGCGGGGCCGGCAGGCACAGGGAGGAGGTACAG
AAGCCGGCAACGCTTGCTATTTATTTTACAAACTGGACTGGCTCAGGCAGGGCCACGGCTGGGCTCCAGCTGCCG
GCCCAGCGGATCGTCGCCCGATCAGTGTTTTGAGGGGGAAGGTGGCGGGGTGGGAACCGTGTCATTCCAGAGTGG
ATCTGCGGTGAAGCCAAGCCGCAAGGTTACAAGGCATCCTCACCAGGGGCCCCGCCTGCTGCTCCCAGGTGGCCT
GCGGCCACTGCTATGCTCAAGGACCTGGAAACCCATGCTTCGAGACAACGTGACTTTAATGGGAGGGTGGGTGGG
CCGCAGACAGGCTGGCAGGGCAGGTGCTGCGTGGGGCCCTCTCCAGCCCGTCCTACCCTGGGCTCACATGGGGCC
TGTGCCCACCCCTCTTGAGTGTCTTGGGGACAGCTCTTTCCACCCCTGGAAGATGGAAATAAACCTGCGTGTGGG
TGGAGTGTTCTCGTGCCGAATTCAAAAAGCTT

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FIGURE 921

MGGAVVDEGPTGVKAPDGGWGWAVLFGCFVITGFSYAFPKAVSVFFKELIQEFGIGYSDTAWISSILLAMLYGTG
PLCSVCVNRFGCRPVMLVGGLFASLGMVAASFCRSIIQVYLTTGVITGLGLALNFQPSLIMLNRYFSKRRPMANG
LAAAGSPVFLCALSPLGQLLQDRYGWRGGFLILGGLLLNCCVCAALMRPLVVTAQPGSGPPRPSRRLLDLSVFRD
RGFVLYAVAASVMVLGLFVPPVFVVSYAKDLGVPDTKAAFLLTILGFIDIFARPAAGFVAGLGKVRPYSVYLFSF
SMFFNGLADLAGSTAGDYGGLVVFCIFFGISYGMVGALQFEVLMAIVGTHKFSSAIGLVLLMEAVAVLVGPPSGG
KLLDATHVYMYVFILAGAEVLTSSLILLLGNFFCIRKKPKEPQPEVAAAEEEKLHKPPADSGVDLREVEHFLKAE
PEKNGEVVHTPETSV

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FIGURE 922A

GGCTGGAGCGGCGGCGGGCAGGCGTGCGGAGGACACTCCTGCGACCAGGTACTGGCTGTGATCGAACTTCTCAAC
CCTCAGAGACTTAGATCTTCCACCTCACTCCCTCAGCCAAGCCTCCAGGCCCCCTCGTGCATCCGTGGTGGCCTC
TCTGCCTTCTCTGTTCTGTTCTCCCCATGGCCCAGACATGAGTGGCCCCCTAGAAGGGGCTGATGGGGGAGGGGA
CCCCAGGCCTGGGGAATCATTTTGTCCTGGGGGCGTCCCATCCCCTGGGCCCCCACAGCACCGGCCTTGCCCAGG
CCCCAGCCTGGCCGATGACACCGATGCCAACAGCAATGGTTCAAGTGGCAATGAGTCCAACGGGCATGAGTCTAG
AGGCGCATCTCAGCGGAGCTCACACAGCTCCTCCTCAGGCAACGGCAAGGACTCAGCCCTGCTGGAGACCACTGA
GAGCAGCAAGAGCACAAACTCTCAGAGCCCATCCCCACCCAGCAGTTCCATTGCCTACAGCCTCCTGAGTGCCAG
CTCAGAGCAGGACAACCCGTCCACCAGTGGCTGCAGCAGTGAACAGTCAGCCCGGGCAAGGACTCAGAAGGAACT
CATGACAGCACTTCGAGAGCTCAAGCTTCGACTGCCGCCAGAGCGCCGGGGCAAGGGCCGCTCTGGGACCCTGGC
CACGCTGCAGTACGCACTGGCCTGTGTCAAGCAGGTGCAGGCCAACCAGGAATACTACCAGCAGTGGAGCCTGGA
GGAGGGCGAGCCTTGCTCCATGGACATGTCCACCTATACCCTGGAGGAGCTGGAGCACATCACGTCTGAGTACAC
ACTTCAGAACCAGGATACCTTCTCAGTGGCTGTCTCCTTCCTGACGGGCCGAATCGTCTACATTTCGGAGCAGGC
AGCCGTCCTGCTGCGTTGCAAGCGGGACGTGTTCCGGGGTACCCGCTTCTCTGAGCTCCTGGCTCCCCAGGATGT
GGGAGTCTTCTATGGTTCCACTGCTCCATCTCGCCTGCCCACCTGGGGCACAGGGGCCTCAGCAGGTTCAGGCCT
CAGGGACTTTACCCAGGAGAAGTCCGTCTTCTGCCGTATCAGAGGAGGTCCTGACCGGGATCCAGGGCCTCGGTA
CCAGCCATTCCGCCTAACCCCGTATGTGACCAAGATCCGGGTCTCAGATGGGGCCCCTGCACAGCCGTGCTGCCT
GCTGATTGCAGAGCGCATCCATTCGGGTTACGAAGCTCCCCGGATACCCCCTGACAAGAGGATTTTCACTACGCG
GCACACACCCAGCTGCCTCTTCCAGGATGTGGATGAAAGGGCTGCCCCCCTGCTGGGCTACCTGCCCCAGGACCT
CCTGGGGGCCCCAGTGCTCCTGTTCCTGCATCCTGAGGACCGACCCCTCATGCTGGCTATCCACAAGAAGATTCT
GCAGTTGGCGGGCCAGCCCTTTGACCACTCCCCTATCCGCTTCTGTGCCCGCAACGGGGAGTATGTCACCATGGA
CACCAGCTGGGCTGGCTTTGTGCACCCCTGGAGCCGCAAGGTAGCCTTCGTGTTGGGCCGCCACAAAGTACGCAC
GGCCCCCCTGAATGAGGACGTGTTCACTCCCCCGGCCCCCAGCCCAGCTCCCTCCCTGGACACTGATATCCAGGA
GCTGTCAGAGCAGATCCACCGGCTGCTGCTGCAGCCCGTCCACAGCCCCAGCCCCACGGGACTCTGTGGAGTCGG
CGCCGTGACATCCCCAGGCCCTCTCCACAGCCCTGGGTCCTCCAGTGATAGCAACGGGGGTGATGCAGAGGGGCC
TGGGCCTCCTGCGCCAGTGACTTTCCAACAGATCTGTAAGGATGTGCATCTGGTGAAGCACCAGGGCCAGCAGCT
TTTTATTGAGTCTCGGGCCCGGCCTCAGTCCCGGCCCCGCCTCCCTGCTACAGGCACGTTCAAGGCCAAGGCCCT
TCCCTGCCAATCCCCAGACCCAGAGCTGGAGGCGGGTTCTGCTCCCGTCCAGGCCCCACTAGCCTTGGTCCCTGA
GGAGGCCGAGAGGAAAGAAGCCTCCAGCTGCTCCTACCAGCAGATCAACTGCCTGGACAGCATCCTCAGGTACCT
GGAGAGCTGCAACCTCCCCAGCACCACTAAGCGTAAATGTGCCTCCTCCTCCTCCTATACCACCTCCTCAGCCTC
TGACGACGACAGGCAGAGGACAGGTCCAGTCTCTGTGGGGACCAAGAAAGATCCGCCGTCAGCAGCGCTGTCTGG
GGAGGGGGCCACCCCACGGAAGGAGCCAGTGGTGGGAGGCACCCTGAGCCCGCTCGCCCTGGCCAATAAGGCGGA
GAGTGTGGTGTCCGTCACCAGTCAGTGTAGCTTCAGCTCCACCATCGTCCATGTGGGAGACAAGAAGCCCCCGGA
GTCGGACATCATCATGATGGAGGACCTGCCTGGTCTAGCCCCAGGCCCAGCCCCCAGCCCAGCCCCCAGCCCCAC
AGTAGCCCCTGACCCAGCCCCAGACGCCTACCGTCCAGTGGGGCTGACCAAGGCCGTGCTGTCCCTGCACACGCA
GAAGGAAGAGCAAGCCTTCCTCAGCCGCTTCCGAGACCTGGGCAGGCTGCGTGGACTCGACAGCTCTTCCACAGC
TCCCTCAGCCCTTGGCGAGCGAGGCTGCCACCACGGCCCCGCACCCCCAAGCCGCCGACACCACTGCCGATCCAA
AGCCAAGCGCTCACGCCACCACCAGAACCCTCGGGCTGAAGCGCCCTGCTATGTCTCACACCCCTCACCCGTGCC
ACCCTCCACCCCCTGGCCCACCCCACCAGCCACTACCCCCTTCCCAGCGGTTGTCCAGCCCTACCCTCTCCCAGT
GTTCTCTCCTCGAGGAGGCCCCCAGCCTCTTCCCCCTGCTCCCACATCTGTGCCCCCAGCTGCTTTCCCCGCCCC
TTTGGTGACCCCAATGGTGGCCTTGGTGCTCCCTAACTATCTGTTCCCAACCCCATCCAGCTATCCTTATGGGGC
ACTCCAGACCCCTGCTGAAGGGCCTCCCACTCCTGCCTCGCACTCCCCTTCTCCATCCTTGCCCGCCCTCCCCCC
GAGTCCTCCTCACCGCCCGGACTCTCCACTGTTCAACTCGAGATGCAGCTCTCCACTCCAGCTCAATCTGCTGCA
GCTGGAGGAGCTCCCCCGTGCTGAGGGGGCTGCTGTTGCAGGAGGCCCTGGGAGCAGTGCCGGGCCCCCACCTCC
CAGTGCGGAGGCTGCTGAGCCAGAGGCCAGACTGGCGGAGGTCACTGAGTCCTCCAATCAGGACGCACTTTCCGG
CTCCAGTGACCTGCTCGAACTTCTGCTGCAAGAGGACTCGCGCTCCGGCACAGGCTCCGCAGCCTCGGGCTCCTT
GGGCTCTGGCTTGGGCTCTGGGTCTGGTTCAGGCTCCCATGAAGGGGGCAGCACCTCAGCCAGCATCACTCGCAG
CAGCCAGAGCAGCCACACAAGCAAATACTTTGGCAGCATCGACTCTTCCGAGGCTGAGGCTGGGGCTGCTCGGGG
CGGGGCTGAGCCTGGGGACCAGGTGATTAAGTACGTGCTCCAGGATCCCATTTGGCTGCTCATGGCCAATGCTGA

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FIGURE 922B

CCAGCGCGTCATGATGACCTACCAGGTGCCCTCCAGGGACATGACCTCTGTGCTGAAGCAGGATCGGGAGCGGCT
CCGAGCCATGCAGAAGCAGCAGCCTCGGTTTTCTGAGGACCAGCGGCGGGAACTGGGTGCTGTGCACTCCTGGGT
CCGGAAGGGCCAACTGCCTCGGGCTCTTGATGTGATGGCCTGTGTGGACTGTGGGAGCAGCACCCAAGATCCTGG
TCACCCTGATGACCCACTCTTCTCAGAGCTGGATGGACTGGGGCTGGAGCCCATGGAAGAGGGTGGAGGCGAGCA
GGGCAGCAGCGGTGGCGGCAGTGGTGAGGGAGAGGGCTGCGAGGAGGCCCAAGGCGGGGCCAAGGCTTCAAGCTC
TCAGGACTTGGCTATGGAGGAGGAGGAAGAAGGCAGGAGCTCATCCAGTCCAGCCTTACCTACAGCAGGAAACTG
CACCAGCTAGACTCCATTCTGGGACCATCTCCAGGAGTCCATGAGAGGCTTTCTTCTCCTATGTCCCAATTCTCA
GAACTCAGATGTGGCTAGACCAACCAGTGGGAAACTGCCCCAGCTTCTCCCACCATAGGGGGCCGGACCCCCATC
ACCAGCCTAGGATCCAGGGGCTGCCTCTGGCCTCTTAGGGAGCAGAGAGCAGAACTCCGCAGCCCAGCCCAGAGG
AGTGTCACCTCCCACCTTTGGAGAGGAATCCTTCCCTCCCCTGGACAAAGTTGCTGACAAGCTGCTGAAGTGGCC
TCTCCATATTCCAGCTGAGCCTGAATCTGACTCTTGAGGGTTGGGGCTGCACTTATTTATTGCGGGGAGACAGCT
CTCTCTCCCACCTCCTCCCCAGATGGGAGGAGAGCCTGAGGCCCAAGCAGGACCCGGGGGTTCCAGCCCCTAGCT
GCTCTGGAGTGGGGGAGGTTGGTGGACCATGGAGTCCCTGGTGCTGCCCCTCAGGTGGGACCCAGGGGTTCTCAG
CTGTACCCTCTGCCGATGGCATTTGTGTTTTTGATATTTGTGTCTGTTACTACTTTTTTAATACAAAAAGATAAA
AACGCC

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FIGURE 923

MSGPLEGADGGGDPRPGESFCPGGVPSPGPPQHRPCPGPSLADDTDANSNGSSGNESNGHESRGASQRSSHSSSS
GNGKDSALLETTESSKSTNSQSPSPPSSSIAYSLLSASSEQDNPSTSGCSSEQSARARTQKELMTALRELKLRLP
PERRGKGRSGTLATLQYALACVKQVQANQEYYQQWSLEEGEPCSMDMSTYTLEELEHITSEYTLQNQDTFSVAVS
FLTGRIVYISEQAAVLLRCKRDVFRGTRFSELLAPQDVGVFYGSTAPSRLPTWGTGASAGSGLRDFTQEKSVFCR
IRGGPDRDPGPRYQPFRLTPYVTKIRVSDGAPAQPCCLLIAERIHSGYEAPRIPPDKRIFTTRHTPSCLFQDVDE
RAAPLLGYLPQDLLGAPVLLFLHPEDRPLMLAIHKKILQLAGQPFDHSPIRFCARNGEYVTMDTSWAGFVHPWSR
KVAFVLGRHKVRTAPLNEDVFTPPAPSPAPSLDTDIQELSEQIHRLLLQPVHSPSPTGLCGVGAVTSPGPLHSPG
SSSDSNGGDAEGPGPPAPVTFQQICKDVHLVKHQGQQLFIESRARPQSRPRLPATGTFKAKALPCQSPDPELEAG
SAPVQAPLALVPEEAERKEASSCSYQQINCLDSILRYLESCNLPSTTKRKCASSSSYTTSSASDDDRQRTGPVSV
GTKKDPPSAALSGEGATPRKEPVVGGTLSPLALANKAESVVSVTSQCSFSSTIVHVGDKKPPESDIIMMEDLPGL
APGPAPSPAPSPTVAPDPAPDAYRPVGLTKAVLSLHTQKEEQAFLSRFRDLGRLRGLDSSSTAPSALGERGCHHG
PAPPSRRHHCRSKAKRSRHHQNPRAEAPCYVSHPSPVPPSTPWPTPPATTPFPAVVQPYPLPVFSPRGGPQPLPP
APTSVPPAAFPAPLVTPMVALVLPNYLFPTPSSYPYGALQTPAEGPPTPASHSPSPSLPALPPSPPHRPDSPLFN
SRCSSPLQLNLLQLEELPRAEGAAVAGGPGSSAGPPPPSAEAAEPEARLAEVTESSNQDALSGSSDLLELLLQED
SRSGTGSAASGSLGSGLGSGSGSGSHEGGSTSASITRSSQSSHTSKYFGSIDSSEAEAGAARGGAEPGDQVIKYV
LQDPIWLLMANADQRVMMTYQVPSRDMTSVLKQDRERLRAMQKQQPRFSEDQRRELGAVHSWVRKGQLPRALDVM
ACVDCGSSTQDPGHPDDPLFSELDGLGLEPMEEGGGEQGSSGGGSGEGEGCEEAQGGAKASSSQDLAMEEEEEGR
SSSSPALPTAGNCTS

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FIGURE 924

AGTCCTGCTCTCCGCACGCCACCTTAGGCCCGCAGCCGTGCCGGGTGCTCTTCAGCATGTCCTTCATCCCGGTGG
CCGAGGATTCCGACTTCCCCATCCACAACCTGCCCTACGGCGTCTTCTCGACCAGAGGCGACCCAAGACCGAGGA
TAGGTGTGGCCATTGGCGACCAGATCCTGGACCTCAGCATCATCAAGCACCTCTTTACTGGTCCTGTCCTCTCCA
AACACCAGGATGTCTTCAATCAGCCTACACTCAACAGCTTCATGGGCCTGGGTCAGGCTGCCTGGAAGGAGGCGA
GAGTGTTCTTGCAGAACTTGCTGTCTGTGAGCCAAGCCAGGCTCAGAGATGACACCGAACTTCGGAAGTGTGCAT
TCATCTCCCAGGCTTCTGCCACGATGCACCTTCCAGCCACCATAGGAGACTACACAGACTTCTATTCCTCTCGGC
AGCATGCTACCAACGTCGGAATCATGTTCAGGGACAAGGAGAATGCGTTGATGCCAAATTGGCTGCACTTACCAG
TGGGCTACCATGGCCGTGCCTCCTCTGTCGTGGTGTCTGGCACCCCAATCCGAAGGCCCATGGGACAGATGAAAC
CTGATGACTCTAAGCCTCCCGTATATGGTGCCTGCAAGCTCTTGGACATGGAGCTGGAAATGGCTTTTTTTGTAG
GCCCTGGAAACAGATTGGGAGAGCCGATCCCCATTTCCAAGGCCCATGAGCACATTTTTGGAATGGTCCTTATGA
ACGACTGGAGTGCACGAGACATTCAGAAGTGGGAGTATGTCCCTCTCGGGCCATTCCTTGGGAAGAGTTTTGGGA
CCACTGTCTCTCCGTGGGTGGTGCCCATGGATGCTCTCATGCCCTTTGCTGTGCCCAACCCGAAGCAGGACCCCA
GGCCCCTGCCGTATCTGTGCCATGACGAGCCCTACACATTTGACATCAACCTCTCTGTTAACCTGAAAGGAGAAG
GAATGAGCCAGGCGGCTACCATATGCAAGTCCAATTTTAAGTACATGTACTGGACGATGCTGCAGCAGCTCACTC
ACCACTCTGTCAACGGCTGCAACCTGCGGCCGGGGGACCTCCTGGCTTCTGGGACCATCAGCGGGCCGGAGCCAG
AAAACTTCGGCTCCATGTTGGAACTGTCGTGGAAGGGAACGAAGCCCATAGACCTGGGGAATGGTCAGACCAGGA
AGTTTCTGCTGGACGGGGATGAAGTCATCATAACAGGGTACTGCCAGGGGGATGGTTACCGCATCGGCTTTGGCC
AGTGTGCTGGAAAAGTGCTGCCTGCTCTCCTGCCATCATGAGATTTTCTCTGCTCTTCTGGAAACAAAGGGCTCA
AGCACCCCTTTCAACCCTGTGACTGGGGTCCTCCCTCGGGCTGTAGGCCTGGTCCGCCATTCAGTGACAAATAAA
GCCATTGTGCTCTGAGGCCTGC

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FIGURE 925

MSFIPVAEDSDFPIHNLPYGVFSTRGDPRPRIGVAIGDQILDLSIIKHLFTGPVLSKHQDVFNQPTLNSFMGLGQ
AAWKEARVFLQNLLSVSQARLRDDTELRKCAFISQASATMHLPATIGDYTDFYSSRQHATNVGIMFRDKENALMP
NWLHLPVGYHGRASSVVVSGTPIRRPMGQMKPDDSKPPVYGACKLLDMELEMAFFVGPGNRLGEPIPISKAHEHI
FGMVLMNDWSARDIQKWEYVPLGPFLGKSFGTTVSPWVVPMDALMPFAVPNPKQDPRPLPYLCHDEPYTFDINLS
VNLKGEGMSQAATICKSNFKYMYWTMLQQLTHHSVNGCNLRPGDLLASGTISGPEPENFGSMLELSWKGTKPIDL
GNGQTRKFLLDGDEVIITGYCQGDGYRIGFGQCAGKVLPALLPS

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FIGURE 926

CTGAGGCCCACGCAGGGCCTAGGGTGGGAAGATGGCAGGTGGGGGCGGCGACCTGAGCACCAGGAGGCTGAATGA
ATGTATTTCACCAGTAGCAAATGAGATGAACCATCTTCCTGCACACAGCCACGATTTGCAAAGGATGTTCACGGA
AGACCAGGGTGTAGATGACAGGCTGCTCTATGACATTGTATTCAAGCACTTCAAAAGAAATAAGGTGGAGATTTC
AAATGCAATAAAAAAGACATTTCCATTCCTCGAGGGCCTCCGTGATCGTGATCTCATCACAAATAAAATGTTTGA
AGATTCTCAAGATTCTTGTAGAAACCTGGTCCCTGTACAGAGAGTGGTGTACAATGTTCTTAGTGAACTGGAGAA
GACATTTAACCTGCCAGTTCTGGAAGCACTGTTCAGCGATGTCAACATGCAGGAATACCCCGATTTAATTCACAT
TTATAAAGGCTTTGAAAATGTAATCCATGACAAATTGCCTCTCCAAGAAAGTGAAGAAGAAGAGAGGGAGGAGAG
GTCTGGCCTCCAACTAAGTCTTGAACAAGGAACTGGTGAAAACTCTTTTCGAAGCCTGACTTGGCCACCTTCGGG
TTCCCCATCTCATGCTGGTACAACCCCACCTGAAAATGGACTCTCAGAGCACCCCTGTGAAACAGAACAGATAAA
TGCAAAGAGAAAAGATACAACCAGTGACAAAGATGATTCGCTAGGAAGCCAACAAACAAATGAACAATGTGCTCA
AAAGGCTGAGCCAACAGAGTCCTGCGAACAAATTGCTGTCCAAGTGAATAATGGGGATGCTGGAAGGGAGATGCC
CTGCCCGTTGCCCTGTGATGAAGAAAGCCCAGAGGCAGAGCTACACAACCATGGAATCCAAATTAATTCCTGTTC
TGTGCGACTGGTGGATATAAAAAAGGAAAAGCCATTTTCTAATTCAAAAGTTGAGTGCCAAGCCCAAGCAAGAAC
TCATCATAACCAGGCATCTGACATAATAGTCATCAGCAGTGAGGACTCTGAAGGATCCACTGACGTTGATGAGCC
CTTAGAAGTCTTCATCTCAGCACCGAGAAGTGAGCCTGTGATCAATAATGACAACCCTTTAGAATCAAATGATGA
AAAGGAGGGCCAAGAAGCCACTTGCTCACGACCCCAGATTGTACCAGAGCCCATGGATTTCAGAAAATTATCTAC
ATTCAGAGAAAGTTTTAAGAAAAGAGTGATAGGACAAGACCACGACTTTTCAGAATCCAGTGAGGAGGAGGCGCC
CGCAGAAGCCTCAAGCGGGGCACTGAGAAGCAAGCATGGTGAGAAGGCTCCTATGACTTCTAGAAGTACATCTAC
TTGGAGAATACCCAGCAGGAAGAGACGTTTCAGCAGTAGTGACTTTTCAGACCTGAGTAATGGAGAAGAGCTTCA
GGAAACCTGCAGCTCATCCCTAAGAAGAGGGTCAGGATCACAGCCACAAGAACCTGAAAATAAGAAGTGCTCCTG
TGTCATGTGTTTTCCAAAAGGTGTGCCAAGAAGCCAAGAAGCAAGGACTGAAAGTAGTCAAGCATCTGACATGAT
GGATACCATGGATGTTGAAAACAATTCTACTTTGGAAAAACACAGTGGGAAAAGAAGAAAAAAGAGAAGGCATAG
ATCTAAAGTAAATGGTCTCCAAAGAGGGAGAAAGAAAGACAGACCTAGAAAACATTTAACTCTGAATAACAAAGT
CCAAAAGAAAAGATGGCAACAAAGAGGAAGAAAAGCCAACACTAGACCTTTGAAAAGAAGAAGAAAAAAGAGGTCC
AAGAATTCCCAAAGATGAAAATATTAATTTTAAACAATCTGAACTTCCTGTGACCTGTGGTGAGGTGAAGGGCAC
TCTATATAAGGAGCGATTCAAACAAGGAACCTCAAAGAAGTGTATACAGAGTGAGGATAAAAAGTGGTTCACTCC
CAGGGAATTTGAAATTGAAGGAGACCGCGGAGCATCCAAGAACTGGAAGCTAAGTATACGCTGCGGTGGATATAC
CCTGAAAGTCCTGATGGAGAACAAATTTCTGCCAGAACCACCAAGCACAAGAAAAAAGAGAATACTGGAATCTCA
CAACAATACCTTAGTTGACCCTTGTGAGGAGCATAAGAAGAAGAACCCAGATGCTTCAGTCAAGTTCTCAGAGTT
TTTAAAGAAGTGCTCAGAGACATGGAAGACCATTTTTGCTAAAGAGAAAGGAAAATTTGAAGATATGGCAAAGGC
GGACAAGGCCCATTATGAAAGAGAAATGAAAACCTATATCCCTCCTAAAGGGGAGAAAAAAAAGAAGTTCAAGGA
TCCCAATGCACCCAAGAGGCCTCCTTTGGCCTTTTTCCTGTTCTGCTCTGAGTATCGCCCAAAAATCAAAGGAGA
ACATCCTGGCCTGTCCATTGATGATGTTGTGAAGAAACTGGCAGGGATGTGGAATAACACCGCTGCAGCTGACAA
GCAGTTTTATGAAAAGAAGGCTGCAAAGCTGAAGGAAAAATACAAAAAGGATATTGCTGCATATCGAGCTAAAGG
AAAGCCTAATTCAGCAAAAAAGAGAGTTGTCAAGGCTGAAAAAAGCAAGAAAAAGAAGGAAGAGGAAGAAGATGA
AGAGGATGAACAAGAGGAGGAAAATGAAGAAGATGATGATAAATAAGTTGCTTCTAGTGCAGTTTTTTTCTTGTC
TATAAAGCATTTAAGCTGCCTGTACACAACTCACTCCTTTTAAAGAAAAAAACTTCAACGTAAGACTGTGTAAGA
TTTGTTTTTAAACCGTACACTGTGTTTTTTTGTATAGTTAACCACTACCGAATGTGTCTTCAGATAGCCCTGTCC
TGGTGGTATTTAGCCACTAACCTTTGCCTGGTACAGTATGGGGGTTGTAAATTGGCATGGAAATTTAAAGCAGGT
TCTTGTTAGTGCACAGCACAAATTAGTTGTATAGGAGGATGGTAGTTTTTTCACCTTCAGTTGTCTCTGATGTAG
CTTATACAAAACATTTGTTGTTCTGTTAACTGAATGCCACTCTGTAATTGCAAAAAAAAAAAACAGTTGCAGCTG
TTTTGTTGACATTCTGAATGCTTCTAAGTAAATACAATTTTTAAAAAACCGTATGAGGGAACTGTGTAGACAAGG
TACCAGGTCAGTCTTCTTCCATGTTCTATTAGCTCCACAAAGCCAATCTCAATCCCTCAAAACAATCTTGTCATA
CTTGAAAATATGACACTCTAGTCAAAGCCTTGGTAAAATAATCAGTGTTTCCAATCTGTCCTGTTACAAAAGAAA
CAGATTATTATTGAACTTATGCAAATAACCATTGTCATAAGAATGTTTATGAATAGTTTCCAAATTATGGCAAAT
TCATGTAGAGAGAGAAAAGTAACTGTTTTGGTTTTGCTCACAAAAGTCTACTTTACCTAAGGGCTGTCAGATATA
AGTAACTTAAAAGAAAGAGAAGTTTTCTTGACTTTTGAAAACAAAATATGAAAAGAATCGGCAATGTTTCAAACA
AAAAGTCATAAAAGTCACTTTATTCCTCCATCAAAAAAAAAAAAAAAAAAAAA

FIGURE 927

MAGGGGDLSTRRLNECISPVANEMNHLPAHSHDLQRMFTEDQGVDDRLLYDIVFKHFKRNKVEISNAIKKTFPFL
EGLRDRDLITNKMFEDSQDSCRNLVPVQRVVYNVLSELEKTFNLPVLEALFSDVNMQEYPDLIHIYKGFENVIHD
KLPLQESEEEEREERSGLQLSLEQGTGENSFRSLTWPPSGSPSHAGTTPPENGLSEHPCETEQINAKRKDTTSDK
DDSLGSQQTNEQCAQKAEPTESCEQIAVQVNNGDAGREMPCPLPCDEESPEAELHNHGIQINSCSVRLVDIKKEK
PFSNSKVECQAQARTHHNQASDIIVISSEDSEGSTDVDEPLEVFISAPRSEPVINNDNPLESNDEKEGQEATCSR
PQIVPEPMDFRKLSTFRESFKKRVIGQDHDFSESSEEEAPAEASSGALRSKHGEKAPMTSRSTSTWRIPSRKRRF
SSSDFSDLSNGEELQETCSSSLRRGSGSQPQEPENKKCSCVMCFPKGVPRSQEARTESSQASDMMDTMDVENNST
LEKHSGKRRKKRRHRSKVNGLQRGRKKDRPRKHLTLNNKVQKKRWQQRGRKANTRPLKRRRKRGPRIPKDENINF
KQSELPVTCGEVKGTLYKERFKQGTSKKCIQSEDKKWFTPREFEIEGDRGASKNWKLSIRCGGYTLKVLMENKFL
PEPPSTRKKRILESHNNTLVDPCEEHKKKNPDASVKFSEFLKKCSETWKTIFAKEKGKFEDMAKADKAHYEREMK
TYIPPKGEKKKKFKDPNAPKRPPLAFFLFCSEYRPKIKGEHPGLSIDDVVKKLAGMWNNTAAADKQFYEKKAAKL
KEKYKKDIAAYRAKGKPNSAKKRVVKAEKSKKKKEEEEDEEDEQEEENEEDDDK

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FIGURE 928

GAGGCAGTTCTGTTGCCACTCTCTCTCCTGTCAATGATGGATCTCAGAAATACCCCAGCCAAATCTCTGGACAAG
TTCATTGAAGACTATCTCTTGCCAGACACGTGTTTCCGCATGCAAATCGACCATGCCATTGACATCATCTGTGGG
TTCCTGAAGGAAAGGTGCTTCCGAGGTAGCTCCTACCCTGTGTGTGTGTCCAAGGTGGTAAAGGGTGGCTCCTCA
GGCAAGGGCACCACCCTCAGAGGCCGATCTGACGCTGACCTGGTTGTCTTCCTCAGTCCTCTCACCACTTTTCAG
GATCAGTTAAATCGCCGGGGAGAGTTCATCCAGGAAATTAGGAGACAGCTGGAAGCCTGTCAAAGAGAGAGAGCA
CTTTCCGTGAAGTTTGAGGTCCAGGCTCCACGCTGGGGCAACCCCCGTGCGCTCAGCTTCGTACTGAGTTCGCTC
CAGCTCGGGGAGGGGGTGGAGTTCGATGTGCTGCCTGCCTTTGATGCCCTGGGTCAGTTGACTGGCAGCTATAAA
CCTAACCCCCAAATCTATGTCAAGCTCATCGAGGAGTGCACCGACCTGCAGAAAGAGGGCGAGTTCTCCACCTGC
TTCACAGAACTACAGAGAGACTTCCTGAAGCAGCGCCCCACCAAGCTCAAGAGCCTCATCCGCCTAGTCAAGCAC
TGGTACCAAAATTGTAAGAAGAAGCTTGGGAAGCTGCCACCTCAGTATGCCCTGGAGCTCCTGACGGTCTATGCT
TGGGAGCGAGGGAGCATGAAAACACATTTCAACACAGCCCAAGGATTTCGGACGGTCTTGGAATTAGTCATAAAC
TACCAGCAACTCTGCATCTACTGGACAAAGTATTATGACTTTAAAAACCCCATTATTGAAAAGTACCTGAGAAGG
CAGCTCACGAAACCCAGGCCTGTGATCCTGGACCCGGCGGACCCTACAGGAAACTTGGGTGGTGGAGACCCAAAG
GGTTGGAGGCAGCTGGCACAAGAGGCTGAGGCCTGGCTGAATTACCCATGCTTTAAGAATTGGGATGGGTCCCCA
GTGAGCTCCTGGATTCTGCTGGCTGAAAGCAACAGTACAGACGATGAGACCGACGATCCCAGGACGTATCAGAAA
TATGGTTACATTGGAACACATGAGTACCCTCATTTCTCTCATAGACCCAGCACGCTCCAGGCAGCATCCACCCCA
CAGGCAGAAGAGGACTGGACCTGCACCATCCTCTGAATGCCAGTGCATCTTGGGGGAAAGGGCTCCAGTGTTATC
TGGACCAGTTCCTTCATTTTCAGGTGGGACTCTTGATCCAGAGAAGACAAAGCTCCTCAGTGAGCTGGTGTATAA
TCCAAGACAGAACCCAAGTCTCCTGACTCCTGGCCTTCTATGCCCTCTATCCTATCATAGATAACATTCTCCACA
GCCTCACTTCATTCCACCTATTCTCTGAAAATATTCCCTGAGAGAGAACAGAGAGATTTAGATAAGAGAATGAAA
TTCCAGCCTTGACTTTCTTCTGTGCACCTGATGGGAGGGTAATGTCTAATGTATTATCAATAACAATAAAAATAA
AGCAAATACCAAAAA

FIGURE 929

MMDLRNTPAKSLDKFIEDYLLPDTCFRMQIDHAIDIICGFLKERCFRGSSYPVCVSKVVKGGSSGKGTTLRGRSD
ADLVVFLSPLTTFQDQLNRRGEFIQEIRRQLEACQRERALSVKFEVQAPRWGNPRALSFVLSSLQLGEGVEFDVL
PAFDALGQLTGSYKPNPQIYVKLIEECTDLQKEGEFSTCFTELQRDFLKQRPTKLKSLIRLVKHWYQNCKKKLGK
LPPQYALELLTVYAWERGSMKTHFNTAQGFRTVLELVINYQQLCIYWTKYYDFKNPIIEKYLRRQLTKPRPVILD
PADPTGNLGGGDPKGWRQLAQEAEAWLNYPCFKNWDGSPVSSWILLAESNSTDDETDDPRTYQKYGYIGTHEYPH
FSHRPSTLQAASTPQAEEDWTCTIL

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FIGURE 930

CCACGCGTCCGGGCGTAAGCCAGGCGTGTTAAAGCCGGTCGGAACTGCTCCGGAGGGCACGGGCTCCGTAGGCAC
CAACTGCAAGGACCCCTCCCCCTGCGGGCGCTCCCATGGCACAGTTCGCGTTCGAGAGTGACCTGCACTCGCTGC
TTCAGCTGGATGCACCCATCCCCAATGCACCCCCTGCGCGCTGGCAGCGCAAAGCCAAGGAAGCCGCAGGCCCGG
CCCCCTCACCCATGCGGGCCGCCAACCGATCCCACAGCGCCGGCAGGACTCCGGGCCGAACTCCTGGCAAATCCA
GTTCCAAGGTTCAGACCACTCCTAGCAAACCTGGCGGTGACCGCTATATCCCCCATCGCAGTGCTGCCCAGATGG
AGGTGGCCAGCTTCCTCCTGAGCAAGGAGAACCAGTCTGAAAACAGCCAGACGCCCACCAAGAAGGAACATCAGA
AAGCCTGGGCTTTGAACCTGAACGGTTTTGATGTAGAGGAAGCCAAGATCCTTCGGCTCAGTGGAAAACCACAAA
ATGCGCCAGAGGGTTATCAGAACAGACTGAAAGTACTCTACAGCCAAAAGGCCACTCCTGGCTCCAGCCGGAAGA
CCTGCCGTTACATTCCTTCCCTGCCAGACCGTATCCTGGATGCGCCTGAAATCCGAAATGACTATTACCTGAACC
TTGTGGATTGGAGTTCTGGGAATGTACTGGCCGTGGCACTGGACAACAGTGTGTACCTGTGGAGTGCAAGCTCTG
GTGACATCCTGCAGCTTTTGCAAATGGAGCAGCCTGGGGAATATATATCCTCTGTGGCCTGGATCAAAGAGGGCA
ACTACTTGGCTGTGGGCACCAGCAGTGCTGAGGTGCAGCTATGGGATGTGCAGCAGCAGAAACGGCTTCGAAATA
TGACCAGTCACTCTGCCCGAGTGGGCTCCCTAAGCTGGAACAGCTATATCCTGTCCAGTGGTTCACGTTCTGGCC
ACATCCACCACCATGATGTTCGGGTAGCAGAACACCATGTGGCCACACTGAGTGGCCACAGCCAGGAAGTGTGTG
GGCTGCGCTGGGCCCCAGATGGACGACATTTGGCCAGTGGTGGTAATGATAACTTGGTCAATGTGTGGCCTAGTG
CTCCTGGAGAGGGTGGCTGGGTTCCTCTGCAGACATTCACCCAGCATCAAGGGGCTGTCAAGGCCGTAGCATGGT
GTCCCTGGCAGTCCAATGTCCTGGCAACAGGAGGGGGCACCAGTGATCGACACATTCGCATCTGGAATGTGTGCT
CTGGGGCCTGTCTGAGTGCCGTGGATGCCCATTCCCAGGTGTGCTCCATCCTCTGGTCTCCCCATTACAAGGAGC
TCATCTCAGGCCATGGCTTTGCACAGAACCAGCTAGTTATTTGGAAGTACCCAACCATGGCCAAGGTGGCTGAAC
TCAAAGGTCACACATCCCGGGTCCTGAGTCTGACCATGAGCCCAGATGGGGCCACAGTGGCATCCGCAGCAGCAG
ATGAGACCCTGAGGCTATGGCGCTGTTTTGAGTTGGACCCTGCGCGGCGGCGGGAGCGGGAGAAGGCCAGTGCAG
CCAAAAGCAGCCTCATCCACCAAGGCATCCGCTGAAGACCAACCCATCACCTCAGTTGTTTTTTATTTTTCTAAT
AAAGTCATGTCTCCCTTCATGTTTTTTTTTTAAAA

FIGURE 931

MAQFAFESDLHSLLQLDAPIPNAPPARWQRKAKEAAGPAPSPMRAANRSHSAGRTPGRTPGKSSSKVQTTPSKPG
GDRYIPHRSAAQMEVASFLLSKENQSENSQTPTKKEHQKAWALNLNGFDVEEAKILRLSGKPQNAPEGYQNRLKV
LYSQKATPGSSRKTCRYIPSLPDRILDAPEIRNDYYLNLVDWSSGNVLAVALDNSVYLWSASSGDILQLLQMEQP
GEYISSVAWIKEGNYLAVGTSSAEVQLWDVQQQKRLRNMTSHSARVGSLSWNSYILSSGSRSGHIHHHDVRVAEH
HVATLSGHSQEVCGLRWAPDGRHLASGGNDNLVNVWPSAPGEGGWVPLQTFTQHQGAVKAVAWCPWQSNVLATGG
GTSDRHIRIWNVCSGACLSAVDAHSQVCSILWSPHYKELISGHGFAQNQLVIWKYPTMAKVAELKGHTSRVLSLT
MSPDGATVASAAADETLRLWRCFELDPARRREREKASAAKSSLIHQGIR

FIGURE 932

GCCGGGAGCGCCGCTCCAGCGAGGCGCGGGCTGTGGGGCCGCCGCGTGCCTGGCCCCGCTCGCCCGTGCCGGCCG
CTCGCCCGCCATGCCTGGCTTCGACTACAAGTTCCTGGAGAAGCCCAAGCGACGGCTGCTGTGCCCACTGTGCGG
GAAGCCCATGCGCGAGCCTGTGCAGGTTTCCACCTGCGGCCACCGTTTCTGCGATACCTGCCTGCAGGAGTTCCT
CAGTGAAGGAGTCTTCAAGTGCCCTGAGGACCAGCTTCCTCTGGACTATGCCAAGATCTACCCAGACCCGGAGCT
GGAAGTACAAGTATTGGGCCTGCCTATCCGCTGCATCCACAGTGAGGAGGGCTGCCGCTGGAGTGGGCCACTACG
TCATCTACAGGGCCACCTGAATACCTGCAGCTTCAATGTCATTCCCTGCCCTAATCGCTGCCCCATGAAGCTGAG
CCGCCGTGATCTACCTGCACACTTGCAGCATGACTGCCCCAAGCGGCGCCTCAAGTGCGAGTTTTGTGGCTGTGA
CTTCAGTGGGGAGGCCTATGAGAGCCATGAGGGTATGTGCCCCCAGGAGAGTGTCTACTGTGAGAATAAGTGTGG
TGCCCGCATGATGCGGCGGCTGCTGGCCCAGCATGCCACCTCTGAGTGCCCCAAGCGCACTCAGCCCTGCACCTA
CTGCACTAAGGAGTTCGTCTTTGACACCATCCAGAGCCACCAGTACCAGTGCCCAAGGCTGCCTGTTGCCTGCCC
CAACCAATGTGGTGTGGGCACTGTGGCTCGGGAGGACCTGCCAGGCCATCTGAAGGACAGCTGTAACACCGCCCT
GGTGCTCTGCCCATTCAAAGACTCCGGCTGCAAGCACAGGTGCCCTAAGCTGGCAATGGCACGGCATGTGGAGGA
GAGTGTGAAGCCACATCTGGCCATGATGTGTGCCCTGGTGAGCCGGCAACGGCAGGAGCTGCAGGAGCTTCGGCG
AGAGCTGGAGGAGCTATCAGTGGGCAGTGATGGCGTGCTCATCTGGAAGATTGGCAGCTATGGACGGCGGCTACA
GGAGGCCAAGGCCAAGCCCAACCTTGAGTGCTTCAGCCCAGCCTTCTACACACATAAGTATGGTTACAAGCTGCA
GGTGTCTGCATTCCTCAATGGCAATGGCAGTGGTGAGGGCACACACCTCTCACTGTACATTCGTGTGCTGCCTGG
TGCCTTTGACAATCTCCTTGAGTGGCCCTTTGCCCGCCGTGTCACCTTCTCCCTGCTGGATCAGAGCGACCCTGG
GCTGGCTAAACCACAGCACGTCACTGAGACCTTCCACCCCGACCCAAACTGGAAGAATTTCCAGAAGCCAGGCAC
GTGGCGGGGCTCCCTGGATGAGAGTTCTCTGGGCTTTGGTTATCCCAAGTTCATCTCCCACCAGGACATTCGAAA
GCGAAACTATGTGCGGGATGATGCAGTCTTCATCCGTGCTGCTGTTGAACTGCCCCGGAAGATCCTCAGCTGAGT
GCAGGTGGGGTTCGAGGGGAAAGGACGATGGGGCATGACCTCAGTCAGGCACTGGCTGAACTTGGAGAGGGGGCC
GGACCCCCGTCAGCTGCTTCTGCTGCCTAGGTTCTGTTACCCCATCCTCCCTCCCCCAGCCACCACCCTCAGGTG
CCTCCAATTGGTGCTTCAGCCCTGGCCCCTGTGGGGAACAGGTCTTGGGGTCATGAAGGGCTGGAAACAAGTGAC
CCCAGGGCCTGTCTCCCTTCTTGGGTAGGGCAGACATGCCTTGGTGCCGGTCACACTCTACACGGACTGAGGTGC
CTGCTCAGGTGCTATGTCCCAAGAGCCATAAGGGGGTGGGAATTGGGGAGGGAGAAAGGGTAGTTCAAAGAGTCT
GTCTTGAGATCTGATTTTTTCCCCCTTTACCTAGCTGTGCCCCCTCTGGTTATTTATTTCCTTAGTGCCAGGAGG
GCACAGCAGGGGAGCCCTGATTTTTAATAAATCCGGAATTGTATTTATT

FIGURE 933

MPGFDYKFLEKPKRRLLCPLCGKPMREPVQVSTCGHRFCDTCLQEFLSEGVFKCPEDQLPLDYAKIYPDPELEVQ
VLGLPIRCIHSEEGCRWSGPLRHLQGHLNTCSFNVIPCPNRCPMKLSRRDLPAHLQHDCPKRRLKCEFCGCDFSG
EAYESHEGMCPQESVYCENKCGARMMRRLLAQHATSECPKRTQPCTYCTKEFVFDTIQSHQYQCPRLPVACPNQC
GVGTVAREDLPGHLKDSCNTALVLCPFKDSGCKHRCPKLAMARHVEESVKPHLAMMCALVSRQRQELQELRRELE
ELSVGSDGVLIWKIGSYGRRLQEAKAKPNLECFSPAFYTHKYGYKLQVSAFLNGNGSGEGTHLSLYIRVLPGAFD
NLLEWPFARRVTFSLLDQSDPGLAKPQHVTETFHPDPNWKNFQKPGTWRGSLDESSLGFGYPKFISHQDIRKRNY
VRDDAVFIRAAVELPRKILS

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FIGURE 934

GTTCTGTGTTCGCTTGGGTAGAGGAAGCCGTGAGGCCGGAGCTTAGGTCGGGAAGGGATGGATCGCTGAGCCGAT
AGCGTCCGCTAGGCTGTCTGCCTCGGTACCTGTTACTGCTGCTACTTCCTCGTTTGACACCTTCCTGGAATCTCT
CTTGATTTTTGAGGAAATACCTAGTAACAAACATGACTGAGTTCTGGCTTATATCTGCTCCTGGGGAGAAAACCT
GTCAGCAAACATGGGAGAAATTGCATGCGGCAACTTCAAAGAACAATAATCTTGCTGTCACTTCCAAGTTCAATA
TTCCTGACTTAAAGGTTGGCACGTTGGATGTCTTGGTTGGCTTGTCAGATGAACTGGCTAAACTGGATGCATTTG
TAGAAGGAGTGGTTAAGAAAGTAGCTCAATACATGGCTGATGTATTGGAAGATAGCAAAGACAAAGTTCAAGAGA
ATCTGTTGGCTAATGGAGTGGACTTGGTTACTTATATAACAAGGTTCCAGTGGGACATGGCCAAATATCCAATCA
AGCAGTCCCTGAAAAATATTTCTGAAATAATTGCCAAGGGAGTAACTCAGATTGATAATGACCTGAAATCTCGAG
CATCTGCATACAATAACCTGAAAGGAAATCTTCAGAATTTGGAACGAAAGAATGCAGGAAGTTTGCTAACTAGAA
GTCTAGCAGAAATTGTGAAGAAGGATGACTTTGTTCTTGATTCAGAGTATCTCGTCACATTACTGGTAGTAGTTC
CCAAGTTAAACCACAACGACTGGATTAAGCAGTATGAAACACTAGCCGAAATGGTAGTTCCAAGGTCTAGCAATG
TTCTTTCAGAGGACCAAGACAGTTACCTGTGTAATGTCACCTTGTTTAGGAAGGCAGTTGATGACTTCAGACACA
AAGCCAGAGAAAACAAATTCATTGTTCGTGACTTCCAGTATAATGAAGAGGAGATGAAAGCAGATAAAGAAGAAA
TGAACAGGCTTTCTACTGATAAGAAAAAACAATTTGGACCACTTGTACGGTGGCTGAAAGTGAATTTTAGTGAAG
CATTTATTGCATGGATTCACGTGAAAGCATTACGGGTTTTCGTTGAGTCTGTTTTAAGGTATGGCTTGCCAGTGA
ACTTCCAAGCAATGCTACTTCAGCCCAATAAGAAAACTTTGAAGAAACTGAGAGAAGTATTACATGAATTGTATA
AACATCTAGACAGCAGTGCAGCAGCTATTATTGATGCTCCTATGGATATTCCAGGTTTAAACCTGAGTCAACAAG
AATACTACCCCTATGTGTACTACAAGATTGATTGCAACTTGCTGGAATTCAAGTGAAAATGGGCTCCTCCCCCGA
CAATCCTGTCCTTGTGTTTGTGTGTGCTAACAGAAATAAGTTGCAGTATGGTCGTACTTTTAACTCTAGTATCCT
TTGCTTGCTTCTTACCCCCTTTCCTAGGTGAATTCTCCCACAGTGGTCTGTATCTCAACATTTTCTTTTTAAAGG
AAAAAATATATATATATAGTTTCTTTTTATTGATCAGGTCTGTAAATGTGTACTAAAAAAATCAGAGTTTATTTA
TAAACAGAATAGTTTATTTAAAGAGAAGGTCTCTTCCTTATTGATATCATGGTATGCATTAATTCCATTTGTTAC
TATTGTGCACAAAAGCCCTGTTCACAGGGGAATGGTGTAAACATTTATACTGTTTTGTTCACTGTATTTAGTAGA
CATAACTGTTGAATAGTTACTGAATCATGATGTAAAGAATATGTGACCATCTTCAGGTATGGGATTTCTGAACGT
TTCAAATTTCAATCAATGAGCACTGTCAACACCCACAGGAGAGAATAAAATTACCTGTGCAAAGGTGTATTGTGG
TGTGTGTAACTTAAGATTACAGTTCTGTTTGAGAGTTAAATGATGTCATAGCTCACTTGCTATGCTGCTTCCAGG
ATTTTGTTATATGCTGAGGTGTAACCATTTGTGTTGTCTGACTTTCGTATGATTTAATTGAGCCAAATTTGGGTC
AGAACACAAATTTGAAGATGACTTTTCAGTATATGATGGGTATTTACATTTGAACACTAGAATTTTAGGTCTCTC
AAATAATTAAGAATAGAGCCAGTTTTGAATAAAGTCTAGCAGAACTATG

FIGURE 935

MTEFWLISAPGEKTCQQTWEKLHAATSKNNNLAVTSKFNIPDLKVGTLDVLVGLSDELAKLDAFVEGVVKKVAQY
MADVLEDSKDKVQENLLANGVDLVTYITRFQWDMAKYPIKQSLKNISEIIAKGVTQIDNDLKSRASAYNNLKGNL
QNLERKNAGSLLTRSLAEIVKKDDFVLDSEYLVTLLVVVPKLNHNDWIKQYETLAEMVVPRSSNVLSEDQDSYLC
NVTLFRKAVDDFRHKARENKFIVRDFQYNEEEMKADKEEMNRLSTDKKKQFGPLVRWLKVNFSEAFIAWIHVKAL
RVFVESVLRYGLPVNFQAMLLQPNKKTLKKLREVLHELYKHLDSSAAAIIDAPMDIPGLNLSQQEYYPYVYYKID
CNLLEFK

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FIGURE 936

GCGAGCGGGGGCGCGGGTGGCGCGGCGGGACGCGAGCGGCGAGCCGGAGCGCGAGCCCGCTCCCGCACCATGGAG
GAGGACGACAGCTACGTTCCCAGTGACCTGACAGCAGAGGAGCGTCAAGAACTGGAGAACATCCGACGGAGAAAA
CAGGAGCTGCTGGCTGACATTCAGAGGCTGAAGGATGAGATAGCAGAAGTAGCTAATGAAATTGAAAACCTGGGA
TCCACAGAGGAAAGGAAAAACATGCAGAGGAACAAACAGGTAGCCATGGGCAGGAAAAAATTTAATATGGACCCT
AAAAAGGGGATCCAGTTCTTAATAGAGAACGACCTCCTGAAGAACACTTGTGAAGACATTGCCCAGTTCTTATAT
AAAGGCGAAGGGCTCAACAAGACAGCCATCGGCGACTACCTAGGGGAGAGAGATGAGTTTAATATCCAGGTTCTT
CATGCATTTGTGGAGCTGCATGAGTTCACTGATCTTAATCTCGTCCAGGCACTACGGCAGTTCCTGTGGAGCTTC
CGGCTACCCGGAGAGGCCCAGAAGATCGACCGGATGATGGAGGCGTTTGCCCAGCGATATTGTCAGTGCAATAAT
GGCGTGTTCCAGTCCACGGATACTTGTTACGTCCTCTCCTTTGCCATCATCATGTTGAACACCAGTCTGCACAAC
CCCAATGTCAAAGATAAGCCCACTGTGGAGAGGTTCATTGCCATGAACCGAGGCATCAATGATGGGGGAGACCTG
CCGGAGGAGCTCCTCCGGAATCTCTATGAGAGCATAAAAAATGAACCCTTTAAAATCCCAGAAGACGACGGGAAT
GACCTCACTCACACTTTCTTCAATCCAGACCGAGAAGGCTGGCTATTGAAACTCGGTGGCAGGGTAAAGACTTGG
AAGAGACGCTGGTTCATTCTGACTGACAACTGCCTTTACTACTTTGAGTATACCACGGATAAGGAGCCCCGTGGA
ATCATCCCTTTAGAGAATCTGAGTATCCGGGAAGTGGAGGACTCCAAAAAACCAAACTGCTTTGAGCTTTATATC
CCCGACAATAAAGACCAAGTTATCAAGGCCTGCAAGACCGAGGCTGACGGGCGGGTGGTGGAGGGGAACCACATG
TTTACCGGATCTCAGCTCCGACGCCCCGAGGAGAAGGAGGAGTGGATTAAGTGCATTAAAGCAGCCATCAGCAGG
GACCCTTTCTACGAAATGCTCGCAGCACGGAAAAAGAAGGTCTCCTCCACGAAGCGACACTGAGCGTGCAGCCAA
GGGCGTTGGTCTGCGGGGGCCTTGGAGCTCCTGCTCTTCTCCCGCACCTCCATGGATGCACTGCTGCCGAGCAGA
GCGTCCTCTGCCAGGCCCCGCCCTGGATTCCTAGAGACTAGCTTCAGCTTTTGCTATTTTTTTTAAGTGGGAGAA
GGGTGGGCAGTTATCACTGGGGAAGAGAGGACCGGCCACCTGTCCAGCATGGGCTCCAGAGCCTTCCTCTCTCAC
AGGGCAGAGCTCTTGTCGGCAGGGCAGCCTCCTGGCCAGTTTCTCTGCTCAGTGTTCTGGTAGCAGAGCTCAGAG
CCAACTGTTTACCTCTTGGTTGTCCCCGTGAAGAAGCCTTCAAACCCTGCACCATAAATACATGTGTCCATATAT
TATTATATGTTAAGAGAAAAAGGTGGAAAGGAAGAGAAGCCACATACTATAAAGATCTATTTTTTTTTTTAAGA
GAGAACGTAGGGCTGTTCAGGTGCATTCTGCCCTGGCTGCGCTGGGGAGCTTCTCCCTGGAGAAGAGCACCTGGG
GCTGCGGCCAAGGGGCATCAGCCTGGGCCCGCGGCAGGGCCTGGCCTGCCTCTCCTGTGCTGTGGGAGCTCGCTG
CCTGGTGCTTGTCTTGGCGAGATGGACAGGTGAGGTCGAGGACGCAGAGGGCAGAGGCCCAGTGGAGCCTCAGAC
GGCACAGTCAGAGTCGGGGGCCTGCCTGGCCGGGGTCGCAGTCGGCAGCAGCGTGCAGTCCGGCATCTCCCGCGG
ATGCTTTTCCATCCCAAGTGCCTGCGGAGCCCGAGGAGAGGAGAGAGCTGACTGGACGCTTACGTTATTTTCCTC
CTTCAGAATCCAAGTTCTTGTTGGGCTTTAAAGTAGAAAGTCAGCATTTTCCTTGAGCTAAATACCTAATAACCA
AAACTGTGAGGAAGGTTATCGGGACAGAGGTTCCGGATAACCTGTTTCATTTTGGGTTTTCTTCCTCTTCCCCAG
ACTCCAGTCCTCGTTCTAGAGGAAGGAGTAGGACTTCCCCGATCCCCGTAGCTTCAGCTTTTTCTGCCTCAAAAC
CAGCCCTAACTGGACTACTCTGGATGCATTTTGTGGTGGGCCCCCTAGAGGGAAGATGGGCCTTTATCTGCTCCG
TGGGGTGCACTGGAGTGAGGGGGGTGGCCGGGCTGCCTCTCGCATCTCTGTCTTCCCCTGCAGGCGCTGTGTGAG
CTGGCCCTGCCCCTCCTCATTACAGTATGAAGGGAGCCGTGACACGCAGCATTTTCCTGCCGTTCTCTCAGGGAC
TCTCAGGGCAGCTCCTGCCACTCCGCCAGGGCCAGCATGCCAGTCCAGGCAGAGCAGGTGGCTGGCTGTCTGGCC
GTCTCGCCCCGCCCCTCCACAGGACCCTGGACCAGGGCGGTGCAGGGCGCAGCCCCGAGGAGGCAGGTGGAGGAG
CTGCGGGTTTTCACAGGGCCGCGTCGCCACGGCTCCTCTGATCCTTTAGGGTTGGCGAGCATCTCTGGAAATAGC
TTTTGCAGAGGAGTGGTGGGAGGAATAGAGGGGGACAGTCTGTCACCTCCCTCCCCGCCACTTTGTGTAGATCCT
ACCTGGAGGGAATGGCTTTAGGCACTTTTGTGCCAGAGCTTGTGAGGGTGACAGAAGAGGGTCCAGGCTGGAAAC
CTGAACTTTCTGGGTGGGAGAACCAGGTGGTGCCTGCCGAGGTCTGGGCGTGTTTGGGCCGGTGCTGGAGCCTGT
CCAGCTGGCCCGGGCCCTGGCCTGGTTCTCAAGTGTTTCCTAGACAGAGAGGCACCTGGGTCAGTATTAGTCTAT
TTATCAGAGGTGTAAATAATCTATGTATAGTTTTTCTCCTTTTAGATTATTTTGTATTTGTTTAAAAGAAGTTTT
GTCAAAATACAAAAATATAAAGAAATGACTGAAAGTTGTTGACAGGGTTTTTAAGAAATAATTATTCTAATTGTT
TTTGTTTGTTTGTTTTTGCCTTGTAAACTAGCGCCAAGGAACTGCAGCAAATAAACTCCAACTCTGCCCAAGCAA
AAAAAAAA

FIGURE 937

MEEDDSYVPSDLTAEERQELENIRRRKQELLADIQRLKDEIAEVANEIENLGSTEERKNMQRNKQVAMGRKKFNM
DPKKGIQFLIENDLLKNTCEDIAQFLYKGEGLNKTAIGDYLGERDEFNIQVLHAFVELHEFTDLNLVQALRQFLW
SFRLPGEAQKIDRMMEAFAQRYCQCNNGVFQSTDTCYVLSFAIIMLNTSLHNPNVKDKPTVERFIAMNRGINDGG
DLPEELLRNLYESIKNEPFKIPEDDGNDLTHTFFNPDREGWLLKLGGRVKTWKRRWFILTDNCLYYFEYTTDKEP
RGIIPLENLSIREVEDSKKPNCFELYIPDNKDQVIKACKTEADGRVVEGNHMFTGSQLRRPEEKEEWIKCIKAAI
SRDPFYEMLAARKKKVSSTKRH

FIGURE 938

CTGATTTTGTTTGGAATTTTCCAGTTCTTGCATTGGCATAATGAGGAGCAGGAGGGAAAAGGCCTTTACTAGATT
CTTGTCACAAATTTCTAGTCAATGTGTTCTTAACTGGGTGGAGAAAGAATGGAAAACCTTCAAGATCTCATCCAA
GCAAATGGCAACAACTTAGAAGAAATCATTTAGTGACTTAATTCTTTCTAAAGATGAAATGGGATTGTTTTTTAC
TCGTATTCCTTGTTAAATCATTATTTAAGCCGTTCTTATTGACCAATTCCTGACACTTGATTGTCTCCTAATGCT
TTATCCATCACCACCTGGGCTCCTGCATCCTCACTGTGGAATCAGGCACCAGCCACATAATGTTCCAGACAAAGC
CTGGAAGGGTGTGGACCCAGACGTGGAGTGGAGTGATTCTCTTGACGTTTACATATATCTCTGTGTCTCTCCATC
ATTCCAAAGCTAAATGTACATGTTTAGAATAACTTATTTTATAAACTCTTCGGGAGACATGTTGAGATTTGACCG
TAATGAAAGCCACATTTTCCTGAATTATGATGGTCTGCATTAGTCTCATGTGAAAGGGGAATGTGGAAGCTCAGG
GTTAATGTAGTGGTTGTTTTGGTTTTTATTTGCTCAATTTTGTCTGTACTCATGTCATTCAGAAACCTGAAGTGT
GGCTGCATCTTGCTGCTAATGTGTGATGTTGACGCCTAACTGAATTTGAACAGCTCACCACTGTGCCTACATTTA
AAAATACTTCTCTCTCTTTTCTAAAAAGCTTTAACTGTAGTGCCTCCTAATAAGCAGTATGTTTGTTTCATTGTG
AGATTGCAGTTCTGTATTTCGAATGAGTCTAAGAACCACAGGGATAATACTGTGCAGATTTCCTGTTCTTTACCT
GGCTCTGCTTCCAGCAGTATTGACACCTAGTCCTTGCTGCATTGTACAGTAGCTTTTCAAACTGCAGTTTTATTG
CTAAGTTTTTAGTATGGGTGATACTGGAGTCTTATCATTTGAAGTGTTTGCTTTTCTACTTTTACAGTAAAACCT
CATTAATTCTGAAATTTAAGATAATGAGTTAAGCTGAAGAGTTTACTGAAGCAAATTAATAGTGAGGAAGCCTAT
TTGAACTACTTAAACAGTATTAAAGCCCTTTTTAAAAAGCACCTATTTGGGATCATTTGAGGTCAAGAATTCGAG
ATCAGCCTGACCAACATGGTGAAACCCCATCTCTACTAAAAATACAAAAAAGTTAGCTGGGCGTGGTGGCACACA
CCTGTAGTCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATTGCTTGAACCTGGGAGGTAGAGGTTGCACTGAGCC
GAGATCGCGCCACTGCACTCTAGCCTGG

FIGURE 939A

TTCGGCACGAGGCGCGGTTGCACGTCGGCCCCAGCCCTGAGGAGCCGGACCGATGTGGAAACTGCTGCCCGCCGC
GGGCCCGGCAGGAGGAGAACCATACAGACTTTTGACTGGCGTTGAGTACGTTGTTGGAAGGAAAAACTGTGCCAT
TCTAATTGAAAATGATCAGTCGATCAGCCGAAATCATGCTGTGTTAACTGCTAACTTTTCTGTAACCAACCTGAG
TCAAACAGATGAAATCCCTGTATTGACATTAAAAGATAATTCTAAGTATGGTACCTTTGTTAATGAGGAAAAAAT
GCAGAATGGCTTTTCCCGAACTTTGAAGTCGGGGGATGGTATTACTTTTGGAGTGTTTGGAAGTAAATTCAGAAT
AGAGTATGAGCCTTTGGTTGCATGCTCTTCTTGTTTAGATGTCTCTGGGAAAACTGCTTTAAATCAAGCTATATT
GCAACTTGGAGGATTTACTGTAAACAATTGGACAGAAGAATGCACTCACCTTGTCATGGTATCAGTGAAAGTTAC
CATTAAAACAATATGTGCACTCATTTGTGGACGTCCAATTGTAAAGCCAGAATATTTTACTGAATTCCTGAAAGC
AGTTCAGTCCAAGAAGCAGCCTCCACAAATTGAAAGTTTTTACCCACCTCTTGATGAACCATCTATTGGAAGTAA
AAATGTTGATCTGTCAGGACGGCAGGAAAGAAAACAAATCTTCAAAGGGAAAACATTTATATTTTTGAATGCCAA
ACAGCATAAGAAATTGAGTTCCGCAGTTGTCTTTGGAGGTGGGGAAGCTAGGTTGATAACAGAAGAGAATGAAGA
AGAACATAATTTCTTTTTGGCTCCGGGAACGTGTGTTGTTGATACAGGAATAACAAACTCACAGACCTTAATTCC
TGACTGTCAGAAGAAATGGATTCAGTCAATAATGGATATGCTCCAAAGGCAAGGTCTTAGACCTATTCCTGAAGC
AGAAATTGGATTGGCGGTGATTTTCATGACTACAAAGAATTACTGTGATCCTCAGGGCCATCCCAGTACAGGATT
AAAGACAACAACTCCAGGACCAAGCCTTTCACAAGGCGTGTCAGTTGATGAAAAACTAATGCCAAGCGCCCCAGT
GAACACTACAACATACGTAGCTGACACAGAATCAGAGCAAGCAGATACATGGGATTTGAGTGAAAGGCCAAAAGA
AATCAAAGTCTCCAAAATGGAACAAAAATTCAGAATGCTTTCACAAGACGCACCCACTGTAAAGGAGTCCTGCAA
AACAAGCTCTAATAATAATAGTATGGTATCAAATACTTTGGCTAAGATGAGAATCCCAAACTATCAGCTTTCACC
AACTAAATTGCCAAGTATAAATAAAAGTAAAGATAGGGCTTCTCAGCAGCAGCAGACCAACTCCATCAGAAACTA
CTTTCAGCCGTCTACCAAAAAAAGGGAAAGGGATGAAGAAAATCAAGAAATGTCTTCATGCAAATCAGCAAGAAT
AGAAACGTCTTGTTCTCTTTTAGAACAAACACAACCTGCTACACCCTCATTGTGGAAAAATAAGGAGCAGCATCT
ATCTGAGAATGAGCCTGTGGACACAAACTCAGACAATAACTTATTTACAGATACAGATTTAAAATCTATTGTGAA
AAATTCTGCCAGTAAATCTCATGCTGCAGAAAAGCTAAGATCAAATAAAAAAAGGGAAATGGATGATGTGGCCAT
AGAAGATGAAGTATTGGAACAGTTATTCAAGGACACAAAACCAGAGTTAGAAATTGATGTGAAAGTTCAAAAACA
GGAGGAAGATGTCAATGTTAGAAAAAGGCCAAGGATGGATATAGAAACAAATGACACTTTCAGTGATGAAGCAGT
ACCAGAAAGTAGCAAAATATCTCAAGAAAATGAAATTGGGAAGAAACGTGAACTCAAGGAAGACTCACTATGGTC
AGCTAAAGAAATATCTAACAATGACAAACTTCAGGATGATAGTGAGATGCTTCCAAAAAAGCTGTTATTGACTGA
ATTTAGATCACTGGTGATTAAAAACTCTACTTCCAGAAATCCGTCTGGCATAAATGATGATTATGGTCAACTAAA
AAATTTCAAGAAATTCAAAAAGGTCACATATCCTGGAGCAGGAAAACTTCCACACATCATTGGAGGATCAGATCT
AATAGCTCATCATGCTCGAAAGAATACAGAACTAGAAGAGTGGCTAAGGCAGGAAATGGAGGTACAAAATCAACA
TGCAAAAGAAGAGTCTCTTGCTGATGATCTTTTTAGATACAATCCTTATTTAAAAAGGAGAAGATAACTGAGGAT
TTTAAAAAGAAGCCATGGAAAAACTTCCTAGTAAGCATCTACTTCAGGCCAACAAGGTTATATGAATATATAGTG
TATAGAAGCGATTTAAGTTACAATGTTTTATGGCCTAAATTTATTAAATAAAATGCACAAAACTTTGATTCTTTT
GTATGTAACAATTGTTTGTTCTGTTTTCAGGCTTTGTCATTGCATCTTTTTTTCATTTTTAAATGTGTTTTGTTT
ATTAAATAGTTAATATAGTCACAGTTCAAAATTCTAAATGTACGTAAGGTAAAGACTAAAGTCACCCTTCCACCA
TTGTCCTAGCTACTTGGTTCCCCTCAGAAAAAAATTCATGATACTCATTTCTTATGAATCTTTCCAGGGATTTTT
GAGTCCTATTCAAATTCCTATTTTTAAATAATTTCCTACACAAATGATAGCATAACATATGCAGTGTTCTACACC
TTGCTTTTTTACTTAGTAGATTAAAAATTATAGGAATATCAATATAATGTTTTTAATATTTTTTCTTTTCCATTA
TGCTGTAGTCTTACCTAAACTCTGGTGATCCAAACAAAATGGCTTCAGTGGTGCAGATGTCACCTACATGTTATT
CTAGTACTAGAAACTGAAGACCATGTGGAGACTTCATCAAACATGGGTTTAGTTTTCACCAGAATGGAAAGACCT
GTACCCCTTTTTGGTGGTCTTACTGAGCTGGGTGGGTGTCTGTTTTGAGCTTATTTAGAGTCCTAGTTTTCCTAC
TTATAAAGTAGAAATGGTGAGATTGTTTTCTTTTTCTACCTTAAAGGGAGATGGTAAGAAACAATGAATGTCTTT
TTTCAAACTTTATTGACAAGTGATTTTCAAGTCTGTGTTCAAAAATATATTCATGTACCTGTGATCCAGCAAGAA
GGGAGTTCCAGTCAAGAGTCACTACAACTGATTAGTTGTTTAGAGAATGAGAAATGGAACAGTGAGGAATGGAGG
CCATATTTCCATGACTTCCCTTGTAAACAGAAGCAACAGAAGGGACAAGAGGCTGGCCTCTACATCACTCTCACC
TTCCAAATCTTGTGGAAGTGCATCTACTTGCCAGAACCAAATTAACTTACTTCCAAGTTCTGGCTGCTTGCAGGT
GGAACTCCAGCTGCAAGGGAGTTAGGGAAATGAAGGTCTTTTTTTAAAAGCTTCTCAGCCTTCCTAGGGAACAGA
AATTGGGTGAGCCAATCTGCAATTTCTACTACAGGCATTGAGACCAGTTAGATTATTGAAATATTATAGAGAGTT

FIGURE 939B

ATGAACACTTAAATTATGATAGTGGTATGACATTGGATAGAACATGGGATACTTTAGAAGTAGAATTGACAGGGC
ATATTAGTTGATGAAATGGAGTCATTTGAGTCTCTTAATAGCCATGTATCATAATTACCAAGTGAAGCTGGTGGA
ACATATGGTCTCCATTTTACAGTTAAGGAATATAATGGACAGATTAATATTGTTCTCTGTCATGCCCACAATCCC
TTTCTAAGGAAGACTGCCCTACTATAGCAGTTTTTATATTTGTCAATTTATGAATATAATGAATGAGGAGTTCTG
GTACCTCCTGTCTTTACAAATATTGGGTGTTGTCCAGTATTTTTCCCTTTTTAACCATTCCAATCGGTGTGTAGT
GATGTTTCATTTTGGTTTTAATTTGTATATCCCTGATAGCTATAATTGGGTCATAGAAATTCTTTATACATTCTA
GATGCAAGTCTCTTGTCGGATATATGTATTGAGATATTACACCTAGTCTGTGGCTTGACTGTTTTCTTTATGTCT
TTTGATGAATAGAAGTTTTAAATTTTGACAAGGTCAAATTTATTTTTTTCTTTTGTTTGATATTTTTTCTCTCCA
ATTTAACCCCAAGATTTCAGATATTCTGCTCTATTATATAAACTTTATATTTTTATATTTGTGATCTACCTTGAA
TTGATATGTATGTTGTGAATTATGGATCAGGGTTCTTTTTTTCCCCCATACAAGTATCCAGTCATTGTAACACTG
TTTATTGAAAGAATTATCCTTTCCTCATTAAATTACCTTGCCAATTAGTAAAAA

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FIGURE 940

MWKLLPAAGPAGGEPYRLLTGVEYVVGRKNCAILIENDQSISRNHAVLTANFSVTNLSQTDEIPVLTLKDNSKYG
TFVNEEKMQNGFSRTLKSGDGITFGVFGSKFRIEYEPLVACSSCLDVSGKTALNQAILQLGGFTVNNWTEECTHL
VMVSVKVTIKTICALICGRPIVKPEYFTEFLKAVQSKKQPPQIESFYPPLDEPSIGSKNVDLSGRQERKQIFKGK
TFIFLNAKQHKKLSSAVVFGGGEARLITEENEEEHNFFLAPGTCVVDTGITNSQTLIPDCQKKWIQSIMDMLQRQ
GLRPIPEAEIGLAVIFMTTKNYCDPQGHPSTGLKTTTPGPSLSQGVSVDEKLMPSAPVNTTTYVADTESEQADTW
DLSERPKEIKVSKMEQKFRMLSQDAPTVKESCKTSSNNNSMVSNTLAKMRIPNYQLSPTKLPSINKSKDRASQQQ
QTNSIRNYFQPSTKKRERDEENQEMSSCKSARIETSCSLLEQTQPATPSLWKNKEQHLSENEPVDTNSDNNLFTD
TDLKSIVKNSASKSHAAEKLRSNKKREMDDVAIEDEVLEQLFKDTKPELEIDVKVQKQEEDVNVRKRPRMDIETN
DTFSDEAVPESSKISQENEIGKKRELKEDSLWSAKEISNNDKLQDDSEMLPKKLLLTEFRSLVIKNSTSRNPSGI
NDDYGQLKNFKKFKKVTYPGAGKLPHIIGGSDLIAHHARKNTELEEWLRQEMEVQNQHAKEESLADDLFRYNPYL
KRRR

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FIGURE 941A

TTCGGCACGAGGCGCGGTTGCACGTCGGCCCCAGCCCTGAGGAGCCGGACCGATGTGGAAACTGCTGCCCGCCGC
GGGCCCGGCAGGAGGAGAACCATACAGACTTTTGACTGGCGTTGAGTACGTTGTTGGAAGGAAAAACTGTGCCAT
TCTAATTGAAAATGATCAGTCGATCAGCCGAAATCATGCTGTGTTAACTGCTAACTTTTCTGTAACCAACCTGAG
TCAAACAGATGAAATCCCTGTATTGACATTAAAAGATAATTCTAAGTATGGTACCTTTGTTAATGAGGAAAAAAT
GCAGAATGGCTTTTCCCGAACTTTGAAGTCGGGGGATGGTATTACTTTTGGAGTGTTTGGAAGTAAATTCAGAAT
AGAGTATGAGCCTTTGGTTGCATGCTCTTCTTGTTTAGATGTCTCTGGGAAAACTGCTTTAAATCAAGCTATATT
GCAACTTGGAGGATTTACTGTAAACAATTGGACAGAAGAATGCACTCACCTTGTCATGGTATCAGTGAAAGTTAC
CATTAAAACAATATGTGCACTCATTTGTGGACGTCCAATTGTAAAGCCAGAATATTTTACTGAATTCCTGAAAGC
AGTTCAGTCCAAGAAGCAGCCTCCACAAATTGAAAGTTTTTACCCACCTCTTGATGAACCATCTATTGGAAGTAA
AAATGTTGATCTGTCAGGACGGCAGGAAAGAAAACAAATCTTCAAAGGGAAAACATTTATATTTTTGAATGCCAA
ACAGCATAAGAAATTGAGTTCCGCAGTTGTCTTTGGAGGTGGGGAAGCTAGGTTGATAACAGAAGAGAATGAAGA
AGAACATAATTTCTTTTTGGCTCCGGGAACGTGTGTTGTTGATACAGGAATAACAAACTCACAGACCTTAATTCC
TGACTGTCAGAAGAAATGGATTCAGTCAATAATGGATATGCTCCAAAGGCAAGGTCTTAGACCTATTCCTGAAGC
AGAAATTGGATTGGCGGTGATTTTCATGACTACAAAGAATTACTGTGATCCTCAGGGCCATCCCAGTACAGGATT
AAAGACAACAACTCCAGGACCAAGCCTTTCACAAGGCGTGTCAGTTGATGAAAAACTAATGCCAAGCGCCCCAGT
GAACACTACAACATACGTAGCTGACACAGAATCAGAGCAAGCAGATACATGGGATTTGAGTGAAAGGCCAAAAGA
AATCAAAGTCTCCAAAATGGAACAAAAATTCAGAATGCTTTCACAAGACGCACCCACTGTAAAGGAGTCCTGCAA
AACAAGCTCTAATAATAATAGTATGGTATCAAATACTTTGGCTAAGATGAGAATCCCAAACTATCAGCTTTCACC
AACTAAATTGCCAAGTATAAATAAAAGTAAAGATAGGGCTTCTCAGCAGCAGCAGACCAACTCCATCAGAAACTA
CTTTCAGCCGTCTACCAAAAAAAGGGAAAGGGATGAAGAAAATCAAGAAATGTCTTCATGCAAATCAGCAAGAAT
AGAAACGTCTTGTTCTCTTTTAGAACAAACACAACCTGCTACACCCTCATTGTGGAAAAATAAGGAGCAGCATCT
ATCTGAGAATGAGCCTGTGGACACAAACTCAGACAATAACTTATTTACAGATACAGATTTAAAATCTATTGTGAA
AAATTCTGCCAGTAAATCTCATGCTGCAGAAAAGCTAAGATCAAATAAAAAAAGGGAAATGGATGATGTGGCCAT
AGAAGATGAAGTATTGGAACAGTTATTCAAGGACACAAAACCAGAGTTAGAAATTGATGTGAAAGTTCAAAAACA
GGAGGAAGATGTCAATGTTAGAAAAAGGCCAAGGATGGATATAGAAACAAATGACACTTTCAGTGATGAAGCAGT
ACCAGAAAGTAGCAAAATATCTCAAGAAAATGAAATTGGGAAGAAACGTGAACTCAAGGAAGACTCACTATGGTC
AGCTAAAGAAATATCTAACAATGACAAACTTCAGGATGATAGTGAGATGCTTCCAAAAAAGCTGTTATTGACTGA
ATTTAGATCACTGGTGATTAAAAACTCTACTTCCAGAAATCCGTCTGGCATAAATGATGATTATGGTCAACTAAA
AAATTTCAAGAAATTCAAAAAGGTCACATATCCTGGAGCAGGAAAACTTCCACACATCATTGGAGGATCAGATCT
AATAGCTCATCATGCTCGAAAGAATACAGAACTAGAAGAGTGGCTAAGGCAGGAAATGGAGGTACAAAATCAACA
TGCAAAAGAAGAGTCTCTTGCTGATGATCTTTTTAGATACAATCCTTATTTAAAAAGGAGAAGATAACTGAGGAT
TTTAAAAAGAAGCCATGGAAAAACTTCCTAGTAAGCATCTACTTCAGGCCAACAAGGTTATATGAATATATAGTG
TATAGAAGCGATTTAAGTTACAATGTTTTATGGCCTAAATTTATTAAATAAAATGCACAAAACTTTGATTCTTTT
GTATGTAACAATTGTTTGTTCTGTTTTCAGGCTTTGTCATTGCATCTTTTTTTCATTTTTAAATGTGTTTTGTTT
ATTAAATAGTTAATATAGTCACAGTTCAAAATTCTAAATGTACGTAAGGTAAAGACTAAAGTCACCCTTCCACCA
TTGTCCTAGCTACTTGGTTCCCCTCAGAAAAAAATTCATGATACTCATTTCTTATGAATCTTTCCAGGGATTTTT
GAGTCCTATTCAAATTCCTATTTTTAAATAATTTCCTACACAAATGATAGCATAACATATGCAGTGTTCTACACC
TTGCTTTTTTACTTAGTAGATTAAAAATTATAGGAATATCAATATAATGTTTTTAATATTTTTTCTTTTCCATTA
TGCTGTAGTCTTACCTAAACTCTGGTGATCCAAACAAAATGGCTTCAGTGGTGCAGATGTCACCTACATGTTATT
CTAGTACTAGAAACTGAAGACCATGTGGAGACTTCATCAAACATGGGTTTAGTTTTCACCAGAATGGAAAGACCT
GTACCCCTTTTTGGTGGTCTTACTGAGCTGGGTGGGTGTCTGTTTTGAGCTTATTTAGAGTCCTAGTTTTCCTAC
TTATAAAGTAGAAATGGTGAGATTGTTTTCTTTTTCTACCTTAAAGGGAGATGGTAAGAAACAATGAATGTCTTT
TTTCAAACTTTATTGACAAGTGATTTTCAAGTCTGTGTTCAAAAATATATTCATGTACCTGTGATCCAGCAAGAA
GGGAGTTCCAGTCAAGAGTCACTACAACTGATTAGTTGTTTAGAGAATGAGAAATGGAACAGTGAGGAATGGAGG
CCATATTTCCATGACTTCCCTTGTAAACAGAAGCAACAGAAGGGACAAGAGGCTGGCCTCTACATCACTCTCACC
TTCCAAATCTTGTGGAAGTGCATCTACTTGCCAGAACCAAATTAACTTACTTCCAAGTTCTGGCTGCTTGCAGGT
GGAACTCCAGCTGCAAGGGAGTTAGGGAAATGAAGGTCTTTTTTTAAAAGCTTCTCAGCCTTCCTAGGGAACAGA
AATTGGGTGAGCCAATCTGCAATTTCTACTACAGGCATTGAGACCAGTTAGATTATTGAAATATTATAGAGAGTT

FIGURE 941B

ATGAACACTTAAATTATGATAGTGGTATGACATTGGATAGAACATGGGATACTTTAGAAGTAGAATTGACAGGGC
ATATTAGTTGATGAAATGGAGTCATTTGAGTCTCTTAATAGCCATGTATCATAATTACCAAGTGAAGCTGGTGGA
ACATATGGTCTCCATTTTACAGTTAAGGAATATAATGGACAGATTAATATTGTTCTCTGTCATGCCCACAATCCC
TTTCTAAGGAAGACTGCCCTACTATAGCAGTTTTTATATTTGTCAATTTATGAATATAATGAATGAGGAGTTCTG
GTACCTCCTGTCTTTACAAATATTGGGTGTTGTCCAGTATTTTTCCCTTTTTAACCATTCCAATCGGTGTGTAGT
GATGTTTCATTTTGGTTTTAATTTGTATATCCCTGATAGCTATAATTGGGTCATAGAAATTCTTTATACATTCTA
GATGCAAGTCTCTTGTCGGATATATGTATTGAGATATTACACCTAGTCTGTGGCTTGACTGTTTTCTTTATGTCT
TTTGATGAATAGAAGTTTTAAATTTTGACAAGGTCAAATTTATTTTTTTCTTTTGTTTGATATTTTTTCTCTCCA
ATTTAACCCCAAGATTTCAGATATTCTGCTCTATTATATAAACTTTATATTTTTATATTTGTGATCTACCTTGAA
TTGATATGTATGTTGTGAATTATGGATCAGGGTTCTTTTTTTCCCCCATACAAGTATCCAGTCATTGTAACACTG
TTTATTGAAAGAATTATCCTTTCCTCATTAAATTACCTTGCCAATTAGTAAAAA

FIGURE 942

MWKLLPAAGPAGGEPYRLLTGVEYVVGRKNCAILIENDQSISRNHAVLTANFSVTNLSQTDEIPVLTLKDNSKYG
TFVNEEKMQNGFSRTLKSGDGITFGVFGSKFRIEYEPLVACSSCLDVSGKTALNQAILQLGGFTVNNWTEECTHL
VMVSVKVTIKTICALICGRPIVKPEYFTEFLKAVQSKKQPPQIESFYPPLDEPSIGSKNVDLSGRQERKQIFKGK
TFIFLNAKQHKKLSSAVVFGGGEARLITEENEEEHNFFLAPGTCVVDTGITNSQTLIPDCQKKWIQSIMDMLQRQ
GLRPIPEAEIGLAVIFMTTKNYCDPQGHPSTGLKTTTPGPSLSQGVSVDEKLMPSAPVNTTTYVADTESEQADTW
DLSERPKEIKVSKMEQKFRMLSQDAPTVKESCKTSSNNNSMVSNTLAKMRIPNYQLSPTKLPSINKSKDRASQQQ
QTNSIRNYFQPSTKKRERDEENQEMSSCKSARIETSCSLLEQTQPATPSLWKNKEQHLSENEPVDTNSDNNLFTD
TDLKSIVKNSASKSHAAEKLRSNKKREMDDVAIEDEVLEQLFKDTKPELEIDVKVQKQEEDVNVRKRPRMDIETN
DTFSDEAVPESSKISQENEIGKKRELKEDSLWSAKEISNNDKLQDDSEMLPKKLLLTEFRSLVIKNSTSRNPSGI
NDDYGQLKNFKKFKKVTYPGAGKLPHIIGGSDLIAHHARKNTELEEWLRQEMEVQNQHAKEESLADDLFRYNPYL
KRRR

FIGURE 943

AGGAAATGGTTTCTGGAAAACGTTAGTAAGGTCAGTTTTTAAACACTGAATCCAAGGTTGTCTTCTGGAATATCC
AAATTGGTTATGACCAGAATGTGATTCATTATACTAAGCTAAAGGAATAGATTAAAGAATTAGCAACAGTGGCCG
GGTGCAGTGGCTCATGCCTGTAACCCCAGCACTTTGGGGGAGGCCCAGGTGGGTGGATCATTTGAGGTCAGGAGT
TTGAGACCAGCCTGGCCAACATGGTGAAACCTAAAAATACAAAAATTAGCCAGGTGTGGTGGCAGGTGCTTGTAA
TCCCAGCTGCTTGGGAGGCTGAAGCAGGAGAATTGCTTGAACCCGGAGGCAGGGGTTGCAGTGAGCCAAGATCAC
ACCATTGCACTCCAGCCTGGGTGGCAGAGTGAGACTCTGTCTCAAAAATTAAAAAGCAACAGTGTATATGCAATA
GTTGCAAGATGTAAGATCACCCAAAGAGTATGCAGAGGGAAATGAGGGACAGAACCCAGAAATATTAATACCCAG
GGAGTGAACAGGAGGAGGACCCCAAGAAGTTACTGAGTCAGATTTTTCCCACTCATCCAGGTGAAAGTTTAGGTC
AATAATGTGAAATACCAGAGGGATTAAATGTCTACAGAAATAAAACCATGTCTCACATTAAGACAAACAAGTAGG
TTGGAGGGATATTTTGAAAGGCAAGGTGATATTAAACTTTATTCTGAAAGTAGTTTGTTAGAGAAAGAGGCATGA
TAAGAGTTGCAGTTAACTGATTGGAAACTATGCAGCAGATGAAACTGGAATAAAGGAAACTCATCAGGAAATGAT
TATAGTAATAAGGGCCAGAAATAAGGGCTTGCTTGCCTGAACTAAAAACAAAGAGGATACAAAGGTTCTAGAAAT
ATTTCAAAGGAATTAGCTTTAATTCAGCAATACTCATTGAGAATCACCTATGCACCTGGCTCTGAAGATGAAGTG
CTGAGTAAACTTAGACATGGACCCTGCTATCATGGAGATGGCAGATTATTGGTCAGAATGCTCTTACCTGTCATT
GTAGCAATTTTGTTAGATCCTTAATACCTCTGAATTGCTAATAAACTTGTTTTGGCTGAAAAAATAGTCCTGTGA
ATTTTACCATGCAGTTAAATAAGAAACTAAAAGCAAACCTAAATACCACCAAAAAGGTTAGTAGTCTGTTATATG
CATTAGCCTTAATCTAAGGAAATATTTTATTATAGGTCTCCTTGAAGAAAATGATATTTTCAGGAATGCTCAAGC
AGGTGTTCTCATCAGCACTAATAGTCATCCAATCTTAAGGAAAAACAGAATATTTGATGGATTTGCCGCAGGTAT
TGAAATTACAAATCACGCAACTGCAACACTAGAAGGCAATCAGATTTTTAACAACCGGTTTGGAGGCTTATTTTT
AGCATCTGGTGTTAATGTGACAATGAAAGATAACAAAATAATGAACAATCAAGATGCCATAGAAAAGGCTGTTAG
TAGAGGCCAATGTTTATATAAAATATCAAGTTATACCAGCTATCCCATGCATGATTTCTACAGATGTCATACTTG
TAACACCACAGATCGAAATGCCATATGTGTGAACTGCATTAAGAAGTGCCATCAGGGACATGATGTAGAGTTTAT
TAGACATGATAGGTATGTAGCACACTTGCTTGATATATTACCCAATTACTTTCCCCCTCACTTTTCTAATATTTG
GGTTTCATTTTGCTTTAGGTTTTTCTGTGACTGTGGTGCTGGAACACTGTCTAATCCTTGTACATTAGCTGGTGA
GCCTACACATGATACAGATACACTATATGACTCTGCTCCACCTATAGAATCTAATACATTGCAGCACAACTGAAAT
TCCTTCCCTAAAGAAAAAGTCCTGCCATTGTAACATCATAACTTAAAACACTTTTTTGGAAGAAGATTTAAAATA
TTTGCCCATGCTACAGGAAGAGACTGTATTAAAAATGGATACACAAGGTCAGTTGACACTATGAAGCTCAAGCTA
CCAAAAAGAAAGTGGCAATATATTGACTCAGGATCTCAAAGCTGGGTGTTTTAGCATTACTGTGTAAAGACTTGA
AGGGACAGAAGTGAAGAAAATAAGCTGCAATTTTGTACAGATACCAACTTCTGAAAAGCTGGTGTTTTTACAACT
AGCATTGAATGCAGTCCAATTTGCAGTAGTAATCTTCAATAGACAAGCAGCTTTGTTGCTGCCTTTATGGACATG
GGTACCAATTGCTTTTGTAATATGGTAAAAATGTGAGCTAGCACTTCTGCGTTCCTTTTGATTTTTTTTTTTTAA
CATGTATTCAGATTGAGAAATATGATTTTAATGCCTTAATCTCATGTAGTTTGTTTTTAATTTCAAGCAAAATCT
TACTGTACTTGAATGTGCCCTGTTTTGTTAGCACACCTAGACTTGCTGTAACTGTACTCATGTCCCAGTATGTAC
GTTCTTTCTATGAAAGAGAAAACACTAATCTTAAATTATATCCAGCAATGTTTCTGGTATCCTTTAAGAAAAGTT
AAGACTATTATTTCCTTCCCTTCCCTGTGCAGCATTCAAAAATCACCCCTAGAAAAAGTGAGTGTTTTAATGAGA
CTTCCTAGGAAGGGATGCACTGTAAAACAAAAGTATTCTTGTAACTCAGTTTTGTGAAAGGTAAAAAACTACTAT
GTTTTAAGTACACTTTAGAAAGTCTCTTCAAAACAAACAGTCCTGTATTTGAACTCTGTTCATAGTTTTTTTTTG
AACAGTTTAGACAAAACTGTTGGAAATTAAACCAATTTCCTGCATTAAGCTGAGACAAGTATATAAACAGCCCTA
TACAGTTTCATAGCTTTTCCTCCCCCATTTATGTGTATTGGTGACAGTGGGTATAAAACAGCCTGAAAGTGTATG
CATGTACCATAACATTTAGACTTAATATATTGTGGAGTATTCAATAACCATTATGTAGAAGGTAGATAAGAATTA
AAAGGGTTTAATTTCCTAGAAAGAAAATGGAAAAATGGTCATTTTTAAAAAATAAAGTTTATTAGATCATAATGT
TGTCTGAATTTACCACCTTTGTCAGAAGTCAACTCAAAGCTTCCAATGTAGTCAGTCTATAATTCCTTAATCAAA
GTCAGCAATTTATGGACAGCTTCAGCATTTACAGTTGACCTTTCACTAGCCAGGCAAACTTCCCTTAAAATTAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 944

MKDNKIMNNQDAIEKAVSRGQCLYKISSYTSYPMHDFYRCHTCNTTDRNAICVNCIKKCHQGHDVEFIRHDRYVA
HLLDILPNYFPPHFSNIWVSFCFRFFCDCGAGTLSNPCTLAGEPTHDTDTLYDSAPPIESNTLQHN

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FIGURE 945

ATGTCTCTTGTCAGCTGTCTTTCAGAAGACCTGGTGGGGCAAGTCCGTGGGCATC**ATG**TTGACCGAGCTGGAGAA
AGCCTTGAACTCTATCATCGACGTCTACCACAAGTACTCCCTGATAAAGGGGAATTTCCATGCCGTCTACAGGGA
TGACCTGAAGAAATTGCTAGAGACCGAGTGTCCTCAGTATATCAGGAAAAAGGGTGCAGACGTCTGGTTCAAAGA
GTTGGATATCAACACTGATGGTGCAGTTAACTTCCAGGAGTTCCTCATTCTGGTGATAAAGATGGGCGTGGCAGC
CCACAAAAAAAGCCATGAAGAAAGCCACAAAGAG**TAG**CTGAGTTACTGGGCCCAGAGGCTGGGCCCCTGGACATG
TACCTGCAGAATAATAAAGTCATCAATACCTCAAAAAAAAAAAAAAAAAAAA

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FIGURE 946

MLTELEKALNSIIDVYHKYSLIKGNFHAVYRDDLKKLLETECPQYIRKKGADVWFKELDINTDGAVNFQEFLILV
IKMGVAAHKKSHEESHKE

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FIGURE 947A

ATGGCCCGACCGCCGCCACTACCGGGGCCTGAGGGGGCCTGGCGGAGCCCGAGCGCGGCCCGGCCCGCAGCGTGG
GGCCCCGAGCGCGGTGAAGAGATTGTTTTCTGAAAGCTGCGTTGGAGGCTGTGACAGAGCTGAGAGCCTGTGTGG
AGCGGATGGGGAGGCTTTCTCAATAACATGGCCCTTTGCCATTAGCCTTGCCATGACCACATTTTTCACCAGCGT
CCCCCCCTGGATTCAAGATGCAAAGCAGGAGGAGGAAGTGGGCTGGAAACTAGTTCCCAGGCCTCGGGGCCGGGA
GGCGGAGAGTCAAGTGAAGTGCCAATGTGAAATTTCGGGAACACCTTTCTCAAATGGGGAGAAGCTGAGGCCTCA
CAGCCTCCCGCAACCAGAGCAGAGACCATATAGCTGCCCTCAGCTGCACTGTGGCAAGGCTTTTGCTTCCAAATA
CAAGCTGTATAGGCACATGGCCACCCACTCAGCCCAGAAACCCCACCAGTGTATGTACTGTGATAAGATGTTTCA
CCGCAAGGACCATCTGCGGAACCATCTGCAGACCCATGATCCTAACAAAGAGGCCCTCCACTGCTCTGAGTGCGG
TAAGAATTACAATACGAAGCTGGGCTACCGGCGCCACCTGGCCATGCATGCTGCCAGCAGCGGTGACCTCAGCTG
CAAGGTGTGCCTGCAGACCTTTGAGAGTACCCAGGCCCTGCTAGAGCACCTGAAGGCCCACTCACGCCGGGTAGC
AGGCGGTGCCAAGGAGAAGAAGCACCCCTGTGACCACTGCGACCGGCGGTTCTATACTCGTAAGGATGTACGGCG
GCACCTAGTGGTGCACACAGGCCGTAAGGACTTCCTGTGCCAGTACTGTGCCCAGCGGTTTGGCCGTAAGGACCA
CCTGACGCGTCATGTCAAGAAGAGCCACTCGCAGGAGCTGCTCAAGATCAAGACAGAGCCCGTGGACATGTTAGG
CCTACTCAGCTGCAGCTCCACAGTCAGTGTGAAGGAAGAGCTGAGCCCTGTGCTGTGCATGGCCTCTCGGGACGT
AATGGGGACCAAGGCCTTCCCTGGCATGTTGCCCATGGGCATGTATGGTGCCCACATCCCTACCATGCCCAGCAC
GGGCGTGCCACACTCCCTGGTGCACAACACGCTGCCCATGGGTATGAGCTACCCTCTGGAATCCTCACCTATCTC
TTCCCCAGCTCAGCTCCCTCCAAAATACCAGCTTGGATCTACCTCATACTTGCCCGACAAATTGCCCAAAGTGGA
GGTGGATAGTTTTCTGGCGGAGCTTCCTGGAAGCCTGTCTCTCTCATCCGCTGAACCCCAGCCCGCCTCACCTCA
GCCGGCGGCAGCTGCGGCCCTCCTAGATGAAGCACTGCTTGCCAAGAGCCCCGCCAACCTCTCTGAGGCCCTCTG
CGCTGCTAATGTGGACTTCTCCCACCTACTGGGCTTTCTTCCACTCAACCTGCCCCCGTGTAACCCACCTGGGGC
CACAGGAGGCCTGGTCATGGGCTACTCCCAGGCTGAGGCACAGCCCCTGCTTACCACTTTGCAAGCTCAGCCTCA
AGATTCCCCAGGAGCTGGGGGACCACTGAACTTTGGGCCTCTGCACTCCTTGCCTCCTGTCTTCACGTCTGGCCT
GAGTAGCACCACCCTGCCTCGTTTCCATCAAGCATTCCAGTAGCCCCCACAGAGGCCCTCAGCTCAGTTTTTGGC
TCTGTTATGGAGCCTTAGTACCCACCCCGTCTGTGTCCCCCATGAAGGCAGCTGAGCTTTCAGAGCTGGGTTCAA
AAAAAAAAATTCCAGTGTCTGTATACAGGAGCACTTGGTTTGGGGGTTCAGGCTCTAGGATCGATTCCAGAAGGA
GCCTTGAGCCCCAACCCCGTGAAAAGATCTCATACCGTAGGACTTCAGGTATTATTTACTTTTATTTTTTTGACC
TGAATCGGGAGCCACACTTGGCCCTCTTCCTCTCCAAAGCGCCAGAACCTCCTTCTCTTTGGAGAATGGGGAGGC
CTCTTGGAGACACAGAGGGTTTCACCTTGGATGACCTCTAGAGAAATTGCCCAAGAAGCCCACCTTCTGGTCCCA
ACCTGCAGACCCCACAGCAGTCAGTTGGTCAGGCCCTGCTGTAGAAGGTCACTTGGCTCCATTGCCTGCTTCCAA
CCAATGGGCAGGAGAGAAGGCCTTTATTTCTCGCCCACCCATTCCTCCTGTACCAGCACCTCCGTTTTCAGTCAG
TGTTGTCCAGCAACGGTACCGTTTACACAGTCACCTCAGACACACCATTTCACCTCCCTTGCCAAGCTGTTAGCC
TTAGAGTGATTGCAGTGAACACTGTTTACACACCGTGAATCCATTCCCATCAGTCCATTCCAGTTGGCACCAGCC
TGAACCATTTGGTACCTGGTGTTAACTGGAGTCCTGTTTACAAGGTGGAGTCGGGGCTTGCTGACTTCTCTTCAT
TTGAGGTCACATTTTTCCCCCGTGGGGAAATAAACTGACTTTGGACTGCTTCAGTCTCTGCCATCTTCCATGACT
GCATTTGTTCCTGCCTGCCTCGGCGGTATCCACAGAAGACAGGCAAGAGGATTGGAGCAGTTTTCTCACAGGTCT
GCAATTCTGTTTTTCTCCAAGTACATTATGACCCCCTCATCCTTCTCTTGAACTGGAGAGGGGAAGAAATGAAAG
GCATGCCCACGTCCGTCACCTCCCCATCCCCTAGTCCCCACCTTGAACATCATGAGCTGTTGTTATTAGTCTTGG
AAGCAGAGTCTGGGTTGGTGTGGATAGCAAAGGAGGAAGTCTGAGCCCCTCATTGGTCTTCCTCCCACCTGTCCC
TTTTCCGGGAAGTTGTGGAATTGTTGGAAGAAGAGTTTGCAGAAGGTTAGGAATGGGTAGATAGCTAAGTCCTAA
TCTATGGGTACATTGTTGTGTCCCAAACCAAAATTTTCCTTATCCACAATGTCCCTTCTGTCTCTTCCACTTTAC
AGTGGACTCGGCCACTGTGCATAGGCTTCTCTGCTCTCCATCAAATCACTTCCACTTTCCTGTGCCCCCACCCCC
GCCTCCAGTTTTCCGCTAGTATCCGGCAAGGTTTCTTGCAACAAATGATTAGTTCTTTTCTTCTGACTCGTGGGG
CTCCCTGCTGCAGAGAGCACAGCCCTTGCCTGGAGCCCAGGAACCCCATCCTTGCTTCATCTCAGTTCTTCATGG
GCTTCACTCTTCCCACTCACGGAAGGGAGGTAGCTCAGGGACCTCCACTGTGGGACCCTTGAGATGCTTCCACTC
TGATTCAGAAACACACTTCTACCTCTTTACTGTTAACTCTTAACAGATGCAGTCAGCAGTTTCTGGGCACTTCTC
TCAGTAGGTGCCTCATGCTGACTTCTCCACTAGGGTTTCAGGACAAACTACCAAGGAATTGCCTCAGCCTCCTAC
CAGTCCTCCCTCACCCACCTTCTGTCTAGGTTCACTTGGTTTGTCATCAGGAACTGAGCAGGTCCAGGACTCAGC
TTTCTGCTTCAGCCTAAGCCAGTACTCCTTGTTTGAGGTAAAAGCCTTAAAATTTAGCTCCCTAGCTCTTGATTA

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FIGURE 947B

GAAGCAATTTGGAGTAAGTGTGTTTTGATTTAGGCAGGGTAGCTTGGGATACCTTTTTAAAAACACCAGATATTA
AAATGTCTGGCAAGGTTAGAATCAGACTAGATGATTTGCTTCTAAAAATTAGTTTCAGTGAGTCCCAGGGACTAA
TTAAGGTTTATTTTAAAAAGTGTCTACCTTGGTACGCAGCCACCTCCTGCATGCTGTGCATGTTATTGGGACTTG
TATTATAGGCGATGGTATGTGAGAATCCAGTTGGGACTCGCTGTTGCCATCCTCTTTGTTGTATCTGGTTTTCAT
CACTAGACTCAGCAACCCTTCTCACCTTAACTGCCACCTTCCCTACACTCTCAGTTTACAGAGGCCACTGGGCCT
CTGGCTGCAGAATACAAAGTCCCGGGCTGTTAGAGGAGTCCTTTCCTCTCTGCCTGCCCTTTCCTGTCCCTCCCT
GAATTCTCTCTCCCCGTAAGTGATGCTGGAAAAGTCATAGGACTGGCAAAGCAACTGTTTAAACCCTTTGTAACC
GGGGCCTTGCCCCCACCTCCTGTCTTTTCTCCTTGCCTTCCCCACTCCTGTGTCCTCCCATCTATCCTGTCTTTC
CTTTCCTCCTCTCAGTGTCCTCAGCACCCACAAGGAATTTTCCTATCACTGTGAACTTTGCTGGTACAGAGGAAT
AATATCTGCCTTCACCTTTTTTTTTTTGGACCATAGCTAGCCAGTCATTTCTTAAACCTCCCTTCCTAAAATCTG
GGGGGTCGGGGGGAAAGAAAAAAAAAGCCTTAGTGGCCTGGTTGTTCAAAGGATAAGAATAGCTTTATCCTGCAC
TCAGTACCCGAACTCACTTCAGTATGCTTACTGAGGCCATGAGAACCTGAGGGGCATCTGCCCAGGACAGAAGCC
ATGGCATATGACAAAGACCAATGAGGGACCAGGAAAAAAAGTGATGTCCCCTTTCCCTGCCACCTCCAGCCTCTG
CCAGCAATGAGCTGTCCCCCTCCCACCCTACACAGTAGCTGGTCAGGGCTGAGTACAGTCCTGGGGGTAAGGGGA
TGACATGCCCAGGTGTCAGCTCAAAGGATCTCTGCATCATCTTGAGGTGGGAGGCAGGGAAAGGAGCGCCAATGA
GGTTCCCTGCAACCCCCGCCCTCCAGCCCACCGCCCAGCCTTTTACAAATGGCATTTTCTTAATTGAAAATCCGG
GAAGCAGGTGTGATTACTTTTTTGCTCGTAGATATTGTCCTAAGTTGGAATTCTCCCACTGCCCTAAAACTTTCC
CTAGTAGTCCTTTAAACTCCCCCCTCCCTTTTTGGTAGCTGTTTCTCCGTCCTCTCTCCACCTGCCCTCTTATCT
AGGAGCTGTTTGTAAGCACGATTTTTTTAACAGGTTATATTGTACAGGATCAATATTTTGCTTTTTAACAAGGAT
ATTTATGTAATAAGAAACTTTGCCTTAGGCAGGTGTTGGCCAGAAAAGTCCAGATTCCTCTGGGATCCCACCCTG
GCCTCTCCTGGAACTCTGAACCTGCTGTGGAAGGAATTGGCCATGACCTTCACCTCTGGAGAGTAGGGTCTATGG
CGAGGGAAAAGGGTGTTCACCATGATAACCTAGTGCCTCCATAGAGGGGTTTGGAAAAATTCCAGTCCGATTTCT
TTGTGTGTCAGCTGACTTCCTTAGCTGATTGTTCCCACTTGCACCTCTCCACCTTTGGCACTAGAACTCCTGAGA
CACCACTTCTCATGCTTCTCCCTCCCTACCAGCGGTCAAGGCTTTGGAGCCACTCTTTTGTAACTCCAGATTATT
TAAAGAGAAAAGTACAAGACAGAAATCTTCTAGCACTTTGTAAACACAGTGAATAACCTCTTGGAGTATTTTTGG
CTTTATATAAAACAAGGTTTTTAATTGTAAAGTATAAGTGCCATTAGAAAATGCACAGGGCATATCTTTGTTAAA
GTAGATTTTTCAATGTTTTACAGAATTACATTTTCAAAAAAAGGTTTTTATAATGAAGTTGTTTATTAAAAACTT
CTGAATGATGTGTTC

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FIGURE 948

MTTFFTSVPPWIQDAKQEEEVGWKLVPRPRGREAESQVKCQCEISGTPFSNGEKLRPHSLPQPEQRPYSCPQLHC
GKAFASKYKLYRHMATHSAQKPHQCMYCDKMFHRKDHLRNHLQTHDPNKEALHCSECGKNYNTKLGYRRHLAMHA
ASSGDLSCKVCLQTFESTQALLEHLKAHSRRVAGGAKEKKHPCDHCDRRFYTRKDVRRHLVVHTGRKDFLCQYCA
QRFGRKDHLTRHVKKSHSQELLKIKTEPVDMLGLLSCSSTVSVKEELSPVLCMASRDVMGTKAFPGMLPMGMYGA
HIPTMPSTGVPHSLVHNTLPMGMSYPLESSPISSPAQLPPKYQLGSTSYLPDKLPKVEVDSFLAELPGSLSLSSA
EPQPASPQPAAAAALLDEALLAKSPANLSEALCAANVDFSHLLGFLPLNLPPCNPPGATGGLVMGYSQAEAQPLL
TTLQAQPQDSPGAGGPLNFGPLHSLPPVFTSGLSSTTLPRFHQAFQ

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FIGURE 949

CCGCCTGTCGCCTGTGCGCCTGCGCGCGGCGCCGAGGGGACGGGGTCCGACTCAGAAATGGCGGCCTCCATGTTC
TACGGCAGGCTAGTGGCCGTGGCCACCCTTCGGAACCACCGGCCTCGGACGGCCCAGCGGGCTGCTGCTCAGGTT
CTGGGAAGTTCTGGATTGTTTAATAACCATGGACTCCAAGTACAGCAGCAACAGCAAAGGAATCTCTCACTACAT
GAATACATGAGTATGGAATTATTGCAAGAAGCTGGTGTCTCCGTTCCCAAAGGATATGTGGCAAAGTCACCAGAT
GAAGCTTATGCAATTGCCAAAAAATTAGGTTCAAAAGATGTCGTGATAAAGGCACAGGTTTTAGCTGGTGGTAGA
GGAAAAGGAACATTTGAAAGTGGCCTCAAAGGAGGAGTGAAGATAGTTTTCTCTCCAGAAGAAGCAAAAGCTGTT
TCTTCACAAATGATTGGGAAAAAATTGTTTACCAAGCAAACGGGAGAAAAGGGCAGAATATGCAATCAAGTATTG
GTCTGTGAGCGAAAATATCCCAGGAGAGAATACTACTTTGCAATAACAATGGAAAGGTCATTTCAAGGTCCTGTA
TTAATAGGAAGTTCACATGGTGGTGTCAACATTGAAGATGTTGCTGCTGAGTCTCCTGAAGCAATAATTAAAGAA
CCTATTGATATTGAAGAAGGCATCAAAAAGGAACAAGCTCTCCAGCTTGCACAGAAGATGGGATTTCCACCTAAT
ATTGTGGAATCAGCAGCAGAAAACATGGTCAAGCTTTACAGCCTTTTTCTGAAATACGATGCAACCATGATAGAA
ATAAATCCAATGGTGGAAGATTCAGATGGAGCTGTATTGTGTATGGATGCAAAGATCAATTTTGACTCTAATTCA
GCCTATCGCCAAAAGAAAATCTTTGATCTACAGGACTGGACCCAGGAAGATGAAAGGGACAAAGATGCTGCTAAG
GCAAATCTCAACTACATTGGCCTCGATGGAAATATAGGCTGCCTAGTAAATGGTGCTGGTTTGGCTATGGCCACA
ATGGATATAATAAAACTTCATGGAGGGACTCCAGCCAACTTCCTTGATGTTGGTGGTGGTGCTACAGTCCATCAA
GTAACAGAAGCATTTAAGCTTATCACTTCAGATAAAAAGGTACTGGCTATTCTGGTCAACATTTTTGGAGGAATC
ATGCGCTGTGATGTTATTGCACAGGGTATAGTCATGGCAGTAAAAGACTTGGAAATTAAAATACCTGTTGTGGTA
CGGTTACAAGGTACACGAGTCGATGATGCTAAGGCACTGATAGCGGACAGTGGACTTAAAATACTTGCTTGTGAT
GACTTGGATGAAGCTGCTAGAATGGTTGTAAAGCTCTCTGAAATAGTGACCTTAGCGAAGCAAGCACATGTGGAT
GTGAAATTTCAGTTGCCAATATGATCTGAAAACCCAGTGGATGGCTGAAGGTGTTAAATGTGCTATAATCATTAA
GAATACTGTGTTCTGTGTTATTGTTCTTTTTCTTTTTAGTGTGTGGAGATTGTAATTGCCATCTAGGCACACAAA
CATTTAAAAGGATTTGGACTGCATTTAATTGTACCATTCAGAATGGACTGTTTGTACGAAGCATGTATAATGCAG
TTATCTTCTTTCTTTCGTCGCAGCCAGTCTTTTTTGCTTCTCCTACAAAACGTAACTTGCAATTTGCCAGTTTAT
TATTGTTGGATACAAAGTTCTTCATTGATAAGAGTCCTATAAATAAGATAAATACGAAGATAAAGCTTTATTCTT
TAGTGTTAAAATACAGTATATCTAATAACTAGCCTCATTAGTAGAGCAGTATATTAAAACAATGTTTTATGTAAA
AAGTGTTTATCTTCAGCACCAAATACATGATAAATGTATCAATCACTATTTATAAACAGAGCTTTCAAACACTCC
TCAGAATATTCTTCTAAGTATTTTGATGAAGTAACTTTGTAATTATTTGAACATTGTTTTAATCATTAGGAAACA
CTGATTAACTGCAAGTCTTCATGATTCTGTCATATTAAGAAACACCTGTAGGTTTGCTTCAAATAAAGGCATATA
TACCAAGGACTTACAGACAAAATTAAGAATGTCAATTTAAGTTAATAAAAATCTCCCAATATGAAAAAAAAAAAA
AAA

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FIGURE 950

MAASMFYGRLVAVATLRNHRPRTAQRAAAQVLGSSGLFNNHGLQVQQQQQRNLSLHEYMSMELLQEAGVSVPKGY
VAKSPDEAYAIAKKLGSKDVVIKAQVLAGGRGKGTFESGLKGGVKIVFSPEEAKAVSSQMIGKKLFTKQTGEKGR
ICNQVLVCERKYPRREYYFAITMERSFQGPVLIGSSHGGVNIEDVAAESPEAIIKEPIDIEEGIKKEQALQLAQK
MGFPPNIVESAAENMVKLYSLFLKYDATMIEINPMVEDSDGAVLCMDAKINFDSNSAYRQKKIFDLQDWTQEDER
DKDAAKANLNYIGLDGNIGCLVNGAGLAMATMDIIKLHGGTPANFLDVGGGATVHQVTEAFKLITSDKKVLAILV
NIFGGIMRCDVIAQGIVMAVKDLEIKIPVVVRLQGTRVDDAKALIADSGLKILACDDLDEAARMVVKLSEIVTLA
KQAHVDVKFQLPI

FIGURE 951

CGCGCCCCTCCCTCCTCGCGGACCTGGCGGTGCCGGCGCCCGGAGTGGCCCTTTAAAAGGCAGCTTATTGTCCGG
AGGGGGCGGGCGGGGGGCGCCGACCGCGGCCTGAGGCCCGGCCCCTCCCCTCTCCCTCCCTCTGTCCCCGCGTCG
CTCGCTGGCTAGCTCGCTGGCTCGCTCGCCCGTCCGGCGCACGCTCCGCCTCCGTCAGTTGGCTCCGCTGTCGGG
TGCGCGGCGTGGAGCGGCAGCCGGTCTGGACGCGCGGCCGGGGCTGGGGGCTGGGAGCGCGGCGCGCAAGATCTC
CCCGCGCGAGAGCGGCCCCTGCCACCGGGCGAGGCCTGCGCCGCG**ATG**GCAGAGATGGGCAGTAAAGGGGTGACG
GCGGGAAAGATCGCCAGCAACGTGCAGAAGAAGCTCACCCGCGCGCAGGAGAAGGTTCTCCAGAAGCTGGGGAAG
GCAGATGAGACCAAGGATGAGCAGTTTGAGCAGTGCGTCCAGAATTTCAACAAGCAGCTGACGGAGGGCACCCGG
CTGCAGAAGGATCTCCGGACCTACCTGGCCTCCGTCAAAGCCATGCACGAGGCTTCCAAGAAGCTGAATGAGTGT
CTGCAGGAGGTGTATGAGCCCGATTGGCCCGGCAGGGATGAGGCAAACAAGATCGCAGAGAACAACGACCTGCTG
TGGATGGATTACCACCAGAAGCTGGTGGACCAGGCGCTGCTGACCATGGACACGTACCTGGGCCAGTTCCCCGAC
ATCAAGTCACGCATTGCCAAGCGGGGGCGCAAGCTGGTGGACTACGACAGTGCCCGGCACCACTACGAGTCCCTT
CAAACTGCCAAAAAGAAGGATGAAGCCAAAATTGCCAAGGCCGAGGAGGAGCTCATCAAAGCCCAGAAGGTGTTT
GAGGAGATGAATGTGGATCTGCAGGAGGAGCTGCCGTCCCTGTGGAACAGCCGCGTAGGTTTCTACGTCAACACG
TTCCAGAGCATCGCGGGCCTGGAGGAAAACTTCCACAAGGAGATGAGCAAGCTCAACCAGAACCTCAATGATGTG
CTGGTCGGCCTGGAGAAGCAACACGGGAGCAACACCTTCACGGTCAAGGCCCAGCCCAGAAAGAAAAGTAAACTG
TTTTCGCGGCTGCGCAGAAAGAAGAACAGTGACAACGCGCCTGCAAAAGGGAACAAGAGCCCTTCGCCTCCAGAT
GGCTCCCCTGCCGCCACCCCCGAGATCAGAGTCAACCACGAGCCAGAGCCGGCCGGCGGGGCCACGCCCGGGGCC
ACCCTCCCCAAGTCCCCATCTCAGCCAGCAGAGGCCTCGGAGGTGGCGGGTGGGACCCAACCTGCGGCTGGAGCC
CAGGAGCCAGGGGAGACGGCGGCAAGTGAAGCAGCCTCCAGCTCTCTTCCTGCTGTCGTGGTGGAGACCTTCCCA
GCAACTGTGAATGGCACCGTGGAGGGCGGCAGTGGGGCCGGGCGCTTGGACCTGCCCCCAGGTTTCATGTTCAAG
GTACAGGCCCAGCACGACTACACGGCCACTGACACAGACGAGCTGCAGCTCAAGGCTGGTGATGTGGTGCTGGTG
ATCCCCTTCCAGAACCCTGAAGAGCAGGATGAAGGCTGGCTCATGGGCGTGAAGGAGAGCGACTGGAACCAGCAC
AAGGAGCTGGAGAAGTGCCGTGGCGTCTTCCCCGAGAACTTCACTGAGAGGGTCCCATGACGGCGGGGCCCAGGC
AGCCTCCGGGCGTGTGAAGAACACCTCCTCCCGAAAAATGTGTGGTTCTTTTTTTTGTTTTGTTTTCGTTTTTCA
TCTTTTGAAGAGCAAAGGGAAATCAAGAGGAGACCCCCAGGCAGAGGGGCGTTCTCCCAAAGATTAGGTCGTTTT
CCAAAGAGCCGCGTCCCGGCAAGTCCGGCGGAATTCACCAGTGTTCCTGAAGCTGCTGTGTCCTCTAGTTGAGTT
TCTGGCGCCCCTGCCTGTGCCCGCATGTGTGCCTGGCCGCAGGGCGGGGCTGGGGGCTGCCGAGCCACCATGCTT
GCCTGAAGCTTCGGCCGCGCCACCCGGGCAAGGGTCCTCTTTTCCTGGCAGCTGCTGTGGGTGGGGCCCAGACAC
CAGCCTAGCCTGGCTCTGCCCCGCAGACGGTCTGTGTGCTGTTTGAAAATAAATCTTAGTGTTCAAAACAAAATG
AAACAAAAAAAAAAATGATAAAAACTCTCAAAAAAA

FIGURE 952

MAEMGSKGVTAGKIASNVQKKLTRAQEKVLQKLGKADETKDEQFEQCVQNFNKQLTEGTRLQKDLRTYLASVKAM
HEASKKLNECLQEVYEPDWPGRDEANKIAENNDLLWMDYHQKLVDQALLTMDTYLGQFPDIKSRIAKRGRKLVDY
DSARHHYESLQTAKKKDEAKIAKAEEELIKAQKVFEEMNVDLQEELPSLWNSRVGFYVNTFQSIAGLEENFHKEM
SKLNQNLNDVLVGLEKQHGSNTFTVKAQPSDNAPAKGNKSPSPPDGSPAATPEIRVNHEPEPAGGATPGATLPKS
PSQSSLPAVVVETFPATVNGTVEGGSGAGRLDLPPGFMFKVQAQHDYTATDTDELQLKAGDVVLVIPFQNPEEQD
EGWLMGVKESDWNQHKELEKCRGVFPENFTERVP

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FIGURE 953

ACACCATCCTCTTAGTTGCTCAGACTGAAAAGCTAGCAGCCATCCTGGATTTCTCTCACACTGCCTATTCAACGT
GTGAATGCATGAGTGGAAAGCTGAGTTCGCACTCGTGACTGGCCGGGGTCGACTCTGACATTCACTCCCACTTTG
GCGCGCTGATTTGCCTCTGAGCGGATGAAGGTTGAGCCATGGCGGGCGGGGCCGGGGAGGCGGGCTTGGAGCGAG
GGGGCGGGGCAGGCGCCACAAAAACGCGCTCGCGCCGGCGCCGAACCGCAACTCCCGGCGACCCCCGCGCTCCCG
GGTGGCAAGATGGTGGCGCGCAGGAGGAAGTGCGCGCGCGGGACCCGGAGACCGTATCCCGAGCCCACTGCGTAC
GCAGCTATTCCAATCAAGTTCTCTGAAAAGCAACAGGCTTCTCACTACCTCTATGTGAGAGCACACGGCGTTCGA
CAAGGCACCAAGTCCACCTGGCCTCAGAAGAGGACTCTTTTTGTCCTCAATGTGCCCCCATACTGCACAGAGGAG
AGCCTGTCCCGCCTCCTGTCCACCTGTGGCCTCGTCCAGTCTGTAGAGTTGCAGGAGAAGCCGGACCTGGCTGAG
AGCCCAAAGGAGTCAAGGTCGAAGTTTTTTCATCCCAAGCCAGTTCCGGGTTTCCAGGTAGCCTATGTGGTGTTC
CAGAAGCCAAGTGGGGTGTCAGCGGCCTTGGCCCTGAAGGGCCCCCTGCTGGTGTCCACAGAGAGCCACCCTGTG
AAGAGTGGCATTCACAAGTGGATCAGTGACTACGCAGACTCTGTGCCCGACCCTGAGGCCCTGAGGGTGGAAGTG
GACACGTTCATGGAGGCATATGACCAGAAGATCGCTGAGGAAGAAGCTAAGGCCAAGGGGGAGGAGGGGGTCCCT
GACGAGGAGGGCTGGGTGAAGGTGACCCGCCGGGGCCGGCGCCTGTGCTCCCCCGGACTGAGGCAGCCAGCTTGC
GGGTGCTGGAGAGGGAGAGACGGAAGCGCAGCGAAAAGAGCTGCTCAACTTCTACGCCTGGCAGCATCGAGAGAG
CAAGATGGAGCATCTAGCGCAGCTCGCAAGAAGTTCGAGGAGGACAAGCAGAGGATCGAGCTGCTGCGGGCCCAG
CGCAAATTCCGACCGTACTGAGCTGTGAGAGCCGCAGTGAATGGCTGGAGGTGCAGGGCCAGGAGGAGGCGAGGC
AGGGCCTGCAGCGGTCTCTGAGAGGCCGAGCTCTGGCCAACGGGCCCCAGGTTGAAGGCCACCGCGTCCAACAGC
CCCATCAGAGTCCACACAGGCCAGGAGGGAAGGACCAGGCCACCCCTCGGGTCTTGTGCTTCAGCAGTCCTGGGG
ACCCAGGCGTGCCGAGAGGAGGACTTGTCCTTCCTGCTTCTTGCCTCCACACCCTCCTCTCCAGGACCCTGGATG
AATCCGTTCTGTGCTTCCTTTTCCCTCAATGCAAAAGCCCTTGCTGGCAACGAAAAAGCCTCAAAAGCAGTGAGA
ATACAAGAACCTTTTATTTTCCATCCAGTTGGGCAGCAGGGAAAGGCTAGGTGGGCCCAGCCTGCCCTTCCTTCC
TCCAGCTGGCTGGATATTTATTATTAGCCAGGAGAAAGCAGCCCTGGAACCCAGACTCTGTCTCCCTCTTGAGGT
CACAGATGTTGAAGTTGGAATCTCGCTCCTTCCCCTGACTACCATCCTAGGCTGGGCTCAAGACTAGTGAGGCCT
GTCCCCACCATCCCTGGCCTTGTTGTGGGGCTCAGGAACTCAGAGTCCCAGTGTTGAGTCTGGGAGCACTAGGTC
TTCATAGTTCCAGGCCCAGAGCTACAGCTGGGCTGGGAGCATGTGTGTGCACTGTAAGAAGGAGCTGATGATACT
GGCCACGTGCTGGGGTTCGCTCATGTGGACACAGTGATTGCCTGGGACTTCCACAAACTGGAACTGCTCTTTGAG
GGTGGATTTCATCGTGTCTATCATGAACGACAGGGACTCCTTCTCAGAGTAATTCTGTCTTGAATCAAAATATCC
GTGGACTGCTTTGATCAACAGGACATGGCCTGCAGCTTCCTGATGGAATGCGCACACAGCTCCCTGCTGATGAAG
TCAATGCTGTTCTCTGCCCAGGCGAGCCTCTGGTCTCTGTTCAGAACCAGACCTGTGGGCACCTTCGTGGTTCCT
CTTTGCAGGAGAACTCCCCGCACTCCTCACTCAAGTGGCTATTGCTCTTCAGTAACCTCTGCAGCAGCT

FIGURE 954

MKVEPWRAGPGRRAWSEGAGQAPQKRARAGAEPQLPATPALPGGKMVARRRKCARGTRRPYPEPTAYAAIPIKFS
EKQQASHYLYVRAHGVRQGTKSTWPQKRTLFVLNVPPYCTEESLSRLLSTCGLVQSVELQEKPDLAESPKESRSK
FFHPKPVPGFQVAYVVFQKPSGVSAALALKGPLLVSTESHPVKSGIHKWISDYADSVPDPEALRVEVDTFMEAYD
QKIAEEEAKAKGEEGVPDEEGWVKVTRRGRRLCSPGLRQPACGCWRGRDGSAAKRAAQLLRLAASREQDGASSAA
RKKFEEDKQRIELLRAQRKFRPY

FIGURE 955

CTGTGACACTGCCAGCAGCGCGCAGAGGGAGGGATGGGGGCGGGTATCGGCGTAGGGGCCCTCGGAAAGAACGGA
TATTGCTGTGACACCGCGGGGACGCTCTGAAGGGACGAGTGTCGGTGTGGCACCGGTGCACGCTGAAGGAGCCGG
CGGAACCGGGTGGCC**ATG**GGGATGTGGGCATCGCTGGACGCTTTGTGGGAGATGCCGGCCGAGAAGCGTATCTTC
GGGGCCGTGCTGCTCTTTTCCTGGACAGTGTATCTTTGGGAGACCTTCCTAGCACAGCGGCAGAGAAGGATATAT
AAAACAACAACTCATGTACCACCGGAGTTAGGACAGATCATGGATTCTGAAACATTTGAGAAATCTCGACTCTAT
CAACTGGATAAAAGCACTTTCAGCTTCTGGTCAGGACTCTATTCAGAGACTGAAGGCACTCTTATTCTTCTCTTT
GGAGGAATACCTTATCTCTGGAGACTTTCTGGACGGTTCTGTGGTTATGCTGGCTTTGGACCAGAATATGAGATC
ACTCAGTCCCTGGTGTTTCTGCTGTTGGCTACACTTTTCAGTGCATTGACTGGTTTGCCATGGAGTCTTTATAAT
ACTTTTGTGATAGAAGAAAAACATGGCTTCAATCAACAGACTTTGGGGTTCTTCATGAAAGATGCAATCAAGAAA
TTTGTTGTGACTCAGTGTATTTTGTTGCCTGTGTCTTCACTTCTACTTTACATTATTAAAATTGGGGGTGACTAT
TTTTTTATTTATGCCTGGCTGTTCACATTAGTTGTGTCTCTGGTTCTTGTCACAATCTATGCTGATTATATTGCC
CCTTTATTTGACAAATTCACACCTCTGCCTGAGGGAAAGCTTAAAGAAGAAATTGAAGTAATGGCAAAGAGTATT
GACTTTCCTTTGACGAAGGTGTATGTTGTGGAAGGATCTAAACGCTCTTCCCACAGCAATGCTTATTTTTATGGC
TTCTTCAAGAACAAGCGAATAGTTTTGTTTGACACTCTACTAGAAGAGTACTCTGTACTAAACAAAGACATCCAG
GAGGATTCTGGCATGGAACCCCGCAATGAGGAAGAAGGGAACAGTGAAGAAATAAAAGCTAAAGTTAAAAATAAG
AAACAAGGATGTAAAAATGAGGAGGTACTCGCTGTACTAGGCCATGAACTGGGGCACTGGAAGTTGGGACATACA
GTCAAAAATATCATTATTAGCCAGATGAATTCTTTCCTGTGTTTTTTTTTATTTGCTGTATTAATTGGTCGAAAG
GAGCTTTTTGCTGCATTTGGTTTTTATGATAGCCAACCCACTCTTATTGGACTATTGATCATCTTCCAGTTTATT
TTTTCACCTTACAATGAGGTTCTTTCTTTTTGCCTAACAGTCCTAAGCCGCAGATTTGAGTTTCAAGCTGATGCA
TTTGCCAAGAAACTTGGGAAGGCTAAAGACTTATATTCTGCTTTAATCAAACTTAACAAAGATAACTTGGGATTC
CCTGTTTCTGACTGGTTGTTCTCAATGTGGCATTATTCTCATCCTCCACTGCTAGAGAGACTTCAAGCTTTGAAA
ACTATGAAGCAACAC**TGA**GATGTCCAGGATCTGTGACTGAAGACATTTCTGATTATTTCTGTCCTGGCAGCATGT
TCCAGCTCTTGATGTTTTTAAACTTTTTTTTAGAAGAAAAATTAAGTACAGAAAAGCCCAGATTTAAATACATTT
AATATGTCATTTTAAAAATGATTTTAATAATTCATTTCTTAAAACACTGAATGAATTTTGAAGCTTAATGTTTTT
AAAGGCATAGTTTTATCTTTGACATCTAATTTACCATCAAGTTGTAAAATTATTTGGAAAAATACAGAACTCGTT
TTATTTGTATACTTATATGGAATCTGCATGTGAGGTGTTTGAGGGCATATGTTTGAAAGAGGGAGCATCACCACA
GGAATCCTTTCTGTGAGGTGGAAACAGTGGTCCTGAATCATTGTGCTCACACCTAACTTGAAATCTGGTCTTACT
TTCATGCTGTTATGATTTCACCTGGTGAATCAGTGTTTTAAATAAGAAAGGTAATAGTTGGTAAGGCCAATGTTA
TTTAAATGAAAGTAGTTAGAAAAATGCTCTCCTATTCTACCAAATTTTTAATTTCTTTCTTCCCTTTCTTGCTAC
ACAGTGATCAAGAGTTTCTCATAGTGCTTTGAAGTTAGAAATTATGTATAGGATATTTTAAATCATTGAGTTTTG
TGGGGTTTTTTTGTTTGTTTGTTTCTTTTGTTTTTTGGAAAATCCGTGTCTTTATCTTTTTTTCCCACGTGGTAG
ATATGATCCCATTGGAGGTAAATTGTAGCTTCTTCTCATTCATGCAGTAAATAATACATCCTTTCACTCAGCAGA
GATGGCCATATTAAACACGTTTTGCTATGTTAAAAGTGGCAGAACAGGAAAGACGAATTAAAAATAACATTTTTT
AAGCGACATAAGGATGAAATACTGATGAATCTCTGTGACATTACAGGGAAAAAAATATAGTTTTCTATCTCTTTC
AAGGGCAGAAGAGTTTTCATTTTTATTTTTGTAATTTTATCTGTAAGTCATAAATATTACTTAATCAGGCCTGAT
TCTACTTTTGAAAATTACAGTTCTTGAAATGCAGATAATGTTTACTTTGAAAACAAATGTCATGAATGATTTCCA
GTTTTTAAAGCTATATGTTTCACTGCTTCATATCTCTGTCCACTTTCTGAATGAGAACTTATTTTGTGCCTAGAG
CTCTCACTCACTGATAATGCTTATTACCTTCTGGGCATTTATTCCAAAGTGGGATCAACTGTACGCCTTTGGTAT
CTGACCATAAAGTCTTTTGCTCCGCTGACATTTGGGTGATGTCTTCACATGGAAATATAATAAAAATAAAAATCT
AGTTTAATACTGCATTATTTATTTTCCTAAGGCTAAAGAGGAGCAGTCCTATGCTTTTATTCAGCATCCTTTATC
TGTGACTTCATGCTCTGATAACTGCCTTTCCTTCCTTCTGTGCCTTTGAATACAAATTTCAGTTCTGCAAAAGTG
AAACATTAAACATTGCCAACGCAAATGT

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FIGURE 956

MGMWASLDALWEMPAEKRIFGAVLLFSWTVYLWETFLAQRQRRIYKTTTHVPPELGQIMDSETFEKSRLYQLDKS
TFSFWSGLYSETEGTLILLFGGIPYLWRLSGRFCGYAGFGPEYEITQSLVFLLLATLFSALTGLPWSLYNTFVIE
EKHGFNQQTLGFFMKDAIKKFVVTQCILLPVSSLLLYIIKIGGDYFFIYAWLFTLVVSLVLVTIYADYIAPLFDK
FTPLPEGKLKEEIEVMAKSIDFPLTKVYVVEGSKRSSHSNAYFYGFFKNKRIVLFDTLLEEYSVLNKDIQEDSGM
EPRNEEEGNSEEIKAKVKNKKQGCKNEEVLAVLGHELGHWKLGHTVKNIIISQMNSFLCFFLFAVLIGRKELFAA
FGFYDSQPTLIGLLIIFQFIFSPYNEVLSFCLTVLSRRFEFQADAFAKKLGKAKDLYSALIKLNKDNLGFPVSDW
LFSMWHYSHPPLLERLQALKTMKQH

FIGURE 957

GGAACAGTGTGGCCCGCC**ATG**TTCTTCTCCGCGGCGCTCCGGGCCCGGGCGGCTGGCCTCACCGCCCACTGGGGA
AGACATGTAAGGAATTTGCATAAGACAGCTATGCAAAATGGAGCTGGAGGAGCTTTATTTGTGCACAGAGATACT
CCTGAGAATAACCCTGATACTCCATTTGATTTCACACCAGAAAACTATAAGAGGATAGAGGCAATTGTAAAAAAC
TATCCAGAAGGCCATAAAGCAGCAGCTGTTCTTCCAGTCCTGGATTTAGCCCAAAGGCAGAATGGGTGGTTGCCC
ATCTCTGCTATGAACAAGGTTGCAGAAGTTTTACAAGTACCTCCAATGAGAGTATATGAAGTAGCAACTTTTTAT
ACAATGTATAATCGAAAGCCAGTTGGAAAGTATCACATTCAGGTCTGCACTACTACACCCTGCATGCTTCGAAAC
TCTGACAGCATACTGGAGGCCATTCAGAAAAAGCTTGGAATAAAGGTTGGGGAGACTACACCTGACAAACTTTTC
ACTCTTATAGAAGTGGAATGTTTAGGGGCCTGTGTGAACGCACCAATGGTTCAAATAAATGACAATTACTATGAG
GATTTGACAGCTAAGGATATTGAAGAAATTATTGATGAGCTCAAGGCTGGCAAAATCCCAAAACCAGGGCCAAGG
AGTGGACGCTTCTCTTGTGAGCCAGCTGGAGGTCTTACCTCTTTGACTGAACCACCCAAGGGACCTGGATTTGGT
GTACAAGCAGGCCTT**TAA**TTTATATTGAACTGTAAATATGTCACTAGAGAAATAAAATATGGACTTCCAATCTAC
GT

FIGURE 958

MFFSAALRARAAGLTAHWGRHVRNLHKTAMQNGAGGALFVHRDTPENNPDTPFDFTPENYKRIEAIVKNYPEGHK
AAAVLPVLDLAQRQNGWLPISAMNKVAEVLQVPPMRVYEVATFYTMYNRKPVGKYHIQVCTTTPCMLRNSDSILE
AIQKKLGIKVGETTPDKLFTLIEVECLGACVNAPMVQINDNYYEDLTAKDIEEIIDELKAGKIPKPGPRSGRFSC
EPAGGLTSLTEPPKGPGFGVQAGL

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FIGURE 959

CACCCTGTAAGTGGCTGCGGCGGGAAG**ATG**GCGGAGCTGCGCGTGCTCGTAGCTGTCAAGAGGGTCATCGACTAC
GCCGTGAAGATCCGAGTGAAGCCTGACAGGACCGGTGTGGTCACGGATGGTGTGAAGCACTCCATGAACCCCTTC
TGTGAGATCGCGGTGGAGGAGGCTGTGCGGCTCAAGGAGAAGAAGCTGGTGAAGGAGGTCATCGCCGTCAGCTGT
GGGCCTGCACAGTGCCAGGAGACGATTCGTACCGCCCTGGCCATGGGTGCAGACCGAGGTATCCACGTGGAGGTG
CCCCCAGCAGAAGCAGAACGCTTGGGTCCCCTGCAGGTGGCTCGGGTCCTGGCCAAGCTGGCAGAGAAGGAGAAG
GTGGACCTGGTGCTGCTGGGCAAACAGGCCATCGATGATGACTGTAACCAGACAGGGCAGATGACAGCTGGATTT
CTTGACTGGCCACAGGGCACATTCGCCTCCCAGGTGACGCTGGAGGGGGACAAGTTGAAAGTGGAGCGGGAGATC
GATGGGGGCCTGGAGACCCTGCGCCTGAAGCTGCCAGCTGTGGTGACAGCTGACCTGAGGCTCAACGAGCCCCGC
TACGCCACGCTGCCCAACATCATGAAAGCCAAGAAGAAGAAGATCGAGGTGATCAAGCCTGGGGACCTGGGTGTG
GACCTGACCTCCAAGCTCTCTGTGATCAGTGTGGAGGACCCGCCCCAGCGCACGGCCGGCGTCAAGGTGGAGACC
ACTGAGGACCTGGTGGCCAAGCTGAAGGAGATTGGGCGGATT**TGA**GCCCCTCCCAGAGATGGCAATAAAACTGAC
TCTCAACATCAAAAAAAAAAAAAAAAA

FIGURE 960

MAELRVLVAVKRVIDYAVKIRVKPDRTGVVTDGVKHSMNPFCEIAVEEAVRLKEKKLVKEVIAVSCGPAQCQETI
RTALAMGADRGIHVEVPPAEAERLGPLQVARVLAKLAEKEKVDLVLLGKQAIDDDCNQTGQMTAGFLDWPQGTFA
SQVTLEGDKLKVEREIDGGLETLRLKLPAVVTADLRLNEPRYATLPNIMKAKKKKIEVIKPGDLGVDLTSKLSVI
SVEDPPQRTAGVKVETTEDLVAKLKEIGRI

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FIGURE 961

GGCACGAGCGAGTTCCTGTCTCTCTGCCAACGCCGCCCGGATGGCTTCCCAAAACCGCGACCCAGCCGCCACTAG
CGTCGCCGCCGCCCGTAAAGGAGCTGAGCCGAGCGGGGGCGCCGCCCGGGGTCCGGTGGGCAAAAGGCTACAGCA
GGAGCTGATGACCCTCATGATGTCTGGCGATAAAGGGATTTCTGCCTTCCCTGAATCAGACAACCTTTTCAAATG
GGTAGGGACCATCCATGGAGCAGCTGGAACAGTATATGAAGACCTGAGGTATAAGCTCTCGCTAGAGTTCCCCAG
TGGCTACCCTTACAATGCGCCCACAGTGAAGTTCCTCACGCCCTGCTATCACCCCAACGTGGACACCCAGGGTAA
CATATGCCTGGACATCCTGAAGGAAAAGTGGTCTGCCCTGTATGATGTCAGGACCATTCTGCTCTCCATCCAGAG
CCTTCTAGGAGAACCCAACATTGATAGTCCCTTGAACACACATGCTGCCGAGCTCTGGAAAAACCCCACAGCTTT
TAAGAAGTACCTGCAAGAAACCTACTCAAAGCAGGTCACCAGCCAGGAGCCCTGACCCAGGCTGCCCAGCCTGTC
CTTGTGTCGTCTTTTTAATTTTTCCTTAGATGGTCTGTCCTTTTTGTGATTTCTGTATAGGACTCTTTATCTTGA
GCTGTGGTATTTTTGTTTTGTTTTTGTCTTTTAAATTAAGCCTCGGTTGAGCCCTTGTATATTAAATAAATGCAT
TTTTGTCCTTTTTTAAAAAAAAAAAAAAAAAAA

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FIGURE 962

MASQNRDPAATSVAAARKGAEPSGGAARGPVGKRLQQELMTLMMSGDKGISAFPESDNLFKWVGTIHGAAGTVYE
DLRYKLSLEFPSGYPYNAPTVKFLTPCYHPNVDTQGNICLDILKEKWSALYDVRTILLSIQSLLGEPNIDSPLNT
HAAELWKNPTAFKKYLQETYSKQVTSQEP

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FIGURE 963

GCCCTCTCCCACAGCGGAGTCCAAAACAGGCCTACCAGTCAGTTCTTATTTCTATTGGGTGTTTCCATGCTCCAC
CATGTTAAGAGCTAAGAATCAGCTTTTTTTACTTTCACCTCATTACCTGAGGCAGGTAAAAGAATCATCAGGCTC
CAGGCTCATACAGCAACGACTTCTACACCAGCAACAGCCCCTTCACCCAGAATGGGCTGCCCTGGCTAAAAAGCA
GCTGAAAGGCAAAAACCCAGAAGACCTAATATGGCACACCCCGGAAGGGATCTCTATAAAACCCTTGTATTCCAA
GAGAGATACTATGGACTTACCTGAAGAACTTCCAGGAGTGAAGCCATTCACACGTGGACCATATCCTACCATGTA
TACCTTTAGGCCCTGGACCATCCGCCAGTATGCTGGTTTTAGTACTGTGGAAGAAAGCAATAAGTTCTATAAGGA
CAACATTAAGGCTGGTCAGCAGGGATTATCAGTTGCCTTTGATCTGGCGACACATCGTGGCTATGATTCAGACAA
CCCTCGAGTTCGTGGTGATGTTGGAATGGCTGGAGTTGCTATTGACACTGTGGAAGATACCAAAATTCTTTTTGA
TGGAATTCCTTTAGAAAAAATGTCAGTTTCCATGACTATGAATGGAGCAGTTATTCCAGTTCTTGCAAATTTTAT
AGTAACTGGAGAAGAACAAGGTGTACCTAAAGAGAAACTTACTGGTACCATCCAAAATGATATACTAAAGGAATT
TATGGTTCGAAATACATACATTTTTCCTCCAGAACCATCCATGAAAATTATTGCTGACATATTTGAATATACAGC
AAAGCACATGCCAAAATTTAATTCAATTTCAATTAGTGGATACCATATGCAGGAAGCAGGGGCTGATGCCATTCT
GGAGCTGGCCTATACTTTAGCAGATGGATTGGAGTACTCTAGAACTGGACTCCAGGCTGGCCTGACAATTGATGA
ATTTGCACCAAGGTTGTCTTTCTTCTGGGGAATTGGAATGAATTTCTATATGGAAATAGCAAAGATGAGAGCTGG
TAGAAGACTCTGGGCTCACTTAATAGAGAAAATGTTTCAGCCTAAAAACTCAAAATCTCTTCTTCTAAGAGCACA
CTGTCAGACATCTGGATGGTCACTTACTGAGCAGGATCCCTACAATAATATTGTCCGTACTGCAATAGAAGCAAT
GGCAGCAGTATTTGGAGGGACTCAGTCTTTGCACACAAATTCTTTTGATGAAGCTTTGGGTTTGCCAACTGTGAA
AAGTGCTCGAATTGCCAGGAACACACAAATCATCATTCAAGAAGAATCTGGGATTCCCAAAGTGGCTGATCCTTG
GGGAGGTTCTTACATGATGGAATGTCTCACAAATGATGTTTATGATGCTGCTTTAAAGCTCATTAATGAAATTGA
AGAAATGGGTGGAATGGCCAAAGCTGTAGCTGAGGGAATACCTAAACTTCGAATTGAAGAATGTGCTGCCCGAAG
ACAAGCTAGAATAGATTCTGGTTCTGAAGTAATTGTTGGAGTAAATAAGTACCAGTTGGAAAAAGAAGACGCTGT
AGAAGTTCTGGCAATTGATAATACTTCAGTGCGAAACAGGCAGATTGAAAAACTTAAGAAGATCAAATCCAGCAG
GGATCAAGCTTTGGCTGAACATTGTCTTGCTGCACTAACCGAATGTGCTGCTAGCGGAGATGGAAATATCCTGGC
TCTTGCAGTGGATGCATCTCGGGCAAGATGTACAGTGGGAGAAATCACAGATGCCCTGAAAAAGGTATTTGGTGA
ACATAAAGCGAATGATCGAATGGTGAGTGGAGCATATCGCCAGGAATTTGGAGAAAGTAAAGAGATAACATCTGC
TATCAAGAGGGTTCATAAATTCATGGAACGTGAAGGTCGCAGACCTCGTCTTCTTGTAGCAAAAATGGGACAAGA
TGGCCATGACAGAGGAGCAAAAGTTATTGCTACAGGATTTGCTGATCTTGGTTTTGATGTGGACATAGGCCCTCT
TTTCCAGACTCCTCGTGAAGTGGCCCAGCAGGCTGTGGATGCGGATGTGCATGCTGTGGGCGTAAGCACCCTCGC
TGCTGGTCATAAAACCCTAGTTCCTGAACTCATCAAAGAACTTAACTCCCTTGGACGGCCAGATATTCTTGTCAT
GTGTGGAGGGGTGATACCACCTCAGGATTATGAATTTCTGTTTGAAGTTGGTGTTTCCAATGTATTTGGTCCTGG
GACTCGAATTCCAAAGGCTGCCGTTCAGGTGCTTGATGATATTGAGAAGTGTTTGGAAAAGAAGCAGCAATCTGT
ATAATATCCTCTTTTTGTTTTAGCTTTTGTCTAAAATATTATTTTAGTTATGATCAAAGAAGAGAGTAAAGCTAT
GTCTTCAATTTAATTTCAATACCTGATTTGTACTTTCCTTGAAAGCTTTACTTTAAAATACCTTACTTATAGGCC
TGGTGTCATGCTATAAGTATGTACATACAGTTTCACTTCAAAAATAAAAAAAAATCCCTAAAAACTCTCTATACT
CTCTATAACAATACTTTATCAAGAACTCTGGACAATGGTATTATTTTTAAAAATCATGGTGATGTATTTATTAGA
ATGTTTCTTATAAATCTCTTTCATTTTTATATTAAGAATTAAACTGTACCTAAAAAAACTCTGACTATTCCCATT
TCTCAGTTTAGCATTACATTGTCTTGAGCACCAGAAAATAAAATCCATATATTAATTAAAACCTATCTTGAAAAA
AAAAAAAAAAAAAAAAAAAAAAA

FIGURE 964

MLRAKNQLFLLSPHYLRQVKESSGSRLIQQRLLHQQQPLHPEWAALAKKQLKGKNPEDLIWHTPEGISIKPLYSK
RDTMDLPEELPGVKPFTRGPYPTMYTFRPWTIRQYAGFSTVEESNKFYKDNIKAGQQGLSVAFDLATHRGYDSDN
PRVRGDVGMAGVAIDTVEDTKILFDGIPLEKMSVSMTMNGAVIPVLANFIVTGEEQGVPKEKLTGTIQNDILKEF
MVRNTYIFPPEPSMKIIADIFEYTAKHMPKFNSISISGYHMQEAGADAILELAYTLADGLEYSRTGLQAGLTIDE
FAPRLSFFWGIGMNFYMEIAKMRAGRRLWAHLIEKMFQPKNSKSLLLRAHCQTSGWSLTEQDPYNNIVRTAIEAM
AAVFGGTQSLHTNSFDEALGLPTVKSARIARNTQIIIQEESGIPKVADPWGGSYMMECLTNDVYDAALKLINEIE
EMGGMAKAVAEGIPKLRIEECAARRQARIDSGSEVIVGVNKYQLEKEDAVEVLAIDNTSVRNRQIEKLKKIKSSR
DQALAEHCLAALTECAASGDGNILALAVDASRARCTVGEITDALKKVFGEHKANDRMVSGAYRQEFGESKEITSA
IKRVHKFMEREGRRPRLLVAKMGQDGHDRGAKVIATGFADLGFDVDIGPLFQTPREVAQQAVDADVHAVGVSTLA
AGHKTLVPELIKELNSLGRPDILVMCGGVIPPQDYEFLFEVGVSNVFGPGTRIPKAAVQVLDDIEKCLEKKQQSV

FIGURE 965A

GGACTGTGTGTGTCTGGCTGTAGCAGACGCGAGGCGGCGACGAGGCGCCGGGGACCCGCGCGAGGGGCGGCCGGG
AGGCGGCGGCGGCGGCCGCCAGAAGTAGCAGCAGGACCGGCGGCGGCGACGGCAGCCCTGAAATGCATTTTCCTC
TCCAGCGGCC**ATG**TTAACCAGGAAACCTTCGGCCGCCGCTCCCGCCGCCTACCCGACCGGCCGAGGTGGGGACAG
CGCCGTTCGTCAGCTTCAGGCTTCCCCGGGGCTCGGTGCAGGGCCCACCCGGAGCGGAGTGGGGACTGGCCCGCC
CTCCCCCATCGCCCTGCCGCCTCTCCGGGCCAGCAACGCTGCCGCCGCAGCCCACACGATTGGCGGCAGTAAGCA
CACAATGAATGATCACCTGCATGTCGGCAGCCACGCTCACGGACAGATCCAGGTTCAACAGTTGTTTGAGGATAA
CAGTAACAAGCGGACAGTGCTCACGACACAACCAAATGGGCTTACAACAGTGGGCAAAACGGGCTTGCCAGTGGT
GCCAGAGCGGCAGCTGGACAGCATTCATAGACGGCAGGGGAGCTCCACCTCTCTAAAGTCCATGGAAGGCATGGG
GAAGGTGAAAGCCACCCCCATGACACCTGAACAAGCAATGAAGCAATACATGCAAAAACTCACAGCCTTCGAACA
CCATGAGATTTTCAGCTACCCTGAAATATATTTCTTGGGTCTAAATGCTAAGAAGCGCCAGGGCATGACAGGTGG
GCCCAACAATGGTGGCTATGATGATGACCAGGGATCATATGTGCAGGTGCCCCACGATCACGTGGCTTACAGGTA
TGAGGTCCTCAAGGTCATTGGGAAGGGGAGCTTTGGGCAGGTGGTCAAGGCCTACGATCACAAAGTCCACCAGCA
CGTGGCCCTAAAGATGGTGCGGAATGAGAAGCGCTTCCACCGGCAAGCAGCGGAGGAGATCCGAATCCTGGAACA
CCTGCGGAAGCAGGACAAGGATAACACAATGAATGTCATCCATATGCTGGAGAATTTCACCTTCCGCAACCACAT
CTGCATGACGTTTGAGCTGCTGAGCATGAACCTCTATGAGCTCATCAAGAAGAATAAATTCCAGGGCTTCAGTCT
GCCTTTGGTTCGCAAGTTTGCCCACTCGATTCTGCAGTGCTTGGATGCTTTGCACAAAAACAGAATAATTCACTG
TGACCTTAAGCCCGAGAACATTTTGTTAAAGCAGCAGGGTAGAAGCGGTATTAAAGTAATTGATTTTGGCTCCAG
TTGTTACGAGCATCAGCGTGTCTACACGTACATCCAGTCGCGTTTTTACCGGGCTCCAGAAGTGATCCTTGGGGC
CAGGTATGGCATGCCCATTGATATGTGGAGCCTGGGCTGCATTTTAGCAGAGCTCCTGACGGGTTACCCCCTCTT
GCCTGGGGAAGATGAAGGGGACCAGCTGGCCTGTATGATTGAACTGTTGGGCATGCCCTCACAGAAACTGCTGGA
TGCATCCAAACGAGCCAAAAATTTTGTGAGCTCCAAGGGTTATCCCCGTTACTGCACTGTCACGACTCTCTCAGA
TGGCTCTGTGGTCCTAAACGGAGGCCGTTCCCGGAGGGGGAAACTGAGGGGCCCACCGGAGAGCAGAGAGTGGGG
GAACGCGCTGAAGGGGTGTGATGATCCCCTTTTCCTTGACTTCTTAAAACAGTGTTTAGAGTGGGATCCTGCAGT
GCGCATGACCCCAGGCCAGGCTTTGCGGCACCCCTGGCTGAGGAGGCGGTTGCCAAAGCCTCCCACCGGGGAGAA
AACGTCAGTGAAAAGGATAACTGAGAGCACCGGTGCTATCACATCTATATCCAAGTTACCTCCACCTTCTAGCTC
AGCTTCCAAACTGAGGACTAATTTGGCGCAGATGACAGATGCCAATGGGAATATTCAGCAGAGGACAGTGTTGCC
AAAACTTGTTAGC**TGA**GCTCACGTCCCCTGATGCTGGTAACCTGAAAGATACGACATTGCTGAGCCTTACTGGGT
TGAAAAGGAGTAGCTCAGACCTGTTTTTATTTGCTCAATAACTCTACTCATTTGTATCTTTTCAGCACTTAATTT
TAATGTAAGAAAGTTGTTCATTTTGTTTTTATAAAATACATGAGGACAATGCTTTAAGTTTTTATACTTTCAGAA
ACTTTTTGTGTTCTAAAAGTACAATGAGCCTTACTGTATTTAGTGTGGCAGAATAATAACATCAGTGGCAGGCCA
CTGATTACTTCATGACTGCCACGCATTTACAGATTGGTGTCAAAGACATTCACTATGTTTTTATGGTTCATGTTA
TATCCTCCCCAGGGTGACAGCCCCTTAAGGCCCTCCTTTTCCCTCCATGCTCCAGGTCCATGCACAGGTGTAGCA
TGTCCTGCTTCCGTTTTTCATAAATTAATCTGGGTGTTGGGGGTAGTGGGAGGAGAACGGTCAGAATCAAAGTGA
CATTCTAAGAAAAACTGTACCTTAGAGATTTTCCTCTAGTGCTCAAACAAATACAAAATAAGATCCCCAAGGTTT
AAACTGCCCAGTTAGCATTCTGACATTCTAAAAGCCGGCAAAGCAGCTTTTAGTGGATAAATGGGAATGGAAACG
TGTGTGTTCCTCCAAATTTTCTAGTATGATCGGTGAGCTGTTTTGTAAAGAAGCCTCATATTACAGAGTTGCTTT
TGCACCTAAATTTAGAATTGTATTCCATGAACTGTTCCTCCCTTTTCTCTGCTTTTCTCCTCTCTGTTCCTCTTT
TAATACCACACGTCTGTTGCTTGCATTTAGTTTGTCTTCTTCCTTCAGCTGTGTATCCCAGACTGTTAATACAGA
AAAGAGACATTTCAGCTGTGATTATGACCATTGTTTCATATTCCAATTAAAAAAAGAACAGCAGCCTAGCTACTT
AAGGTGGGGATTTCATAGTTCCAAAGAAGATTTAGCAGATTAGAGTGAGTTCACACTTTTCAGGTGCCACTGTAA
GGTTCTCTCAGCCTGGGAAACTATCAACTCTTTCTTTAAAAAGAAAGAGGGTTGAAAATCCTCTGGACGAACAGA
AGTCACTTTGGCTGTTCAGTAAGGCCAATGTTAACAACACGTTTAGAGGAGGAAAAGTTCAACCTCAAGTTAAAT
GGTTTGACTTATTCTTCGTATCATTAGAAGAACCCCAGAGATAGCATTCCTCTATTTTATTTTACTTTCTTTTGG
ATTGCACTGATTGTTTTTGTGGGAATGACACTTTATCTGGCAAAGTAACTGAGAGTTTGGTAAAAGAATATTTTC
TTCTCTGAATAATAATTATTTTCACAGTGAAAATTTCAGTATTTTATCACTAATGTATGAGCAATGATCTATATC
AATTTCAAGGCACGTGAAAAAAATTTTTTAGTATGTGCAATTTAATATAGAAAGATTTCTGCCTGTTTGGACAAT
AGGTTTTGGGTAGTACAGATTAGGATAAGTAAGCTTATATATGCACAGAGATTATTGTATTACCTGTAAATTGAT
TTACAAGTACTTAAAAGCGTGGTCCCCAGTGAGGCCAAGAAAGTTTCCGGTTAAGTTCTTTAATAATAATCCTAC

FIGURE 965B

AGTTTATCTTAAGAA

FIGURE 966

MLTRKPSAAAPAAYPTGRGGDSAVRQLQASPGLGAGPTRSGVGTGPPSPIALPPLRASNAAAAAHTIGGSKHTMN
DHLHVGSHAHGQIQVQQLFEDNSNKRTVLTTQPNGLTTVGKTGLPVVPERQLDSIHRRQGSSTSLKSMEGMGKVK
ATPMTPEQAMKQYMQKLTAFEHHEIFSYPEIYFLGLNAKKRQGMTGGPNNGGYDDDQGSYVQVPHDHVAYRYEVL
KVIGKGSFGQVVKAYDHKVHQHVALKMVRNEKRFHRQAAEEIRILEHLRKQDKDNTMNVIHMLENFTFRNHICMT
FELLSMNLYELIKKNKFQGFSLPLVRKFAHSILQCLDALHKNRIIHCDLKPENILLKQQGRSGIKVIDFGSSCYE
HQRVYTYIQSRFYRAPEVILGARYGMPIDMWSLGCILAELLTGYPLLPGEDEGDQLACMIELLGMPSQKLLDASK
RAKNFVSSKGYPRYCTVTTLSDGSVVLNGGRSRRGKLRGPPESREWGNALKGCDDPLFLDFLKQCLEWDPAVRMT
PGQALRHPWLRRRLPKPPTGEKTSVKRITESTGAITSISKLPPPSSSASKLRTNLAQMTDANGNIQQRTVLPKLV
S

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FIGURE 967A

AAATGTAGAGAAGCAGCCGATAAAATAGCATTGCCTGAAGAAGTTTGGAGGCTGAGAGCAGCAGTAGACTGGCCA
ACTGCAGAGCAAGTTGTTTCTCCAGCCGTGCGGTGCAGCCTCATGCCCCCAACCCAGCTTAGCCACTGTAAGAAG
ACGTTCACTGTACAGACGACCAAACTTGCCGTGGAAGAGACAGTTGTGAGATTCCCTTGCAAATTTACATACGAG
AATGGCTTGTGAAATCATGCCTCTGCAAAGTTCACAGGAAGATGAAAGACCTCTGTCACCTTTCTATTTGAGTGC
TCATGTACCCCAAGTCAGCAATGTGTCTGCAACCGGAGAACTCTTAGAAAGAACCATCCGATCAGCTGTAGAACA
ACATCTTTTTGATGTTAATAACTCTGGAGGTCAAAGTTCAGAGGACTCAGAATCTGGAACACTATCAGCATCTTC
TGCCACATCTGCCAGACAGCGCCGCCGCCAGTCCAAGGAGCAGGATGAAGTTCGACATGGGAGAGACAAGGGACT
TATCAACAAAGAAAATACTCCTTCTGGGTTCAACCACCTTGATGATTGTATTTTGAATACTCAGGAAGTCGAAAA
GGTACACAAAAATACTTTTGGTTGTGCTGGAGAAAGGAGCAAGCCTAAACGTCAGAAATCCAGTACTAAACTTTC
TGAGCTTCATGACAATCAGGACGGTCTTGTGAATATGGAAAGTCTCAATTCCACACGATCTCATGAGAGAACTGG
ACCTGATGATTTTGAATGGATGTCTGATGAAAGGAAAGGAAATGAAAAAGATGGTGGACACACTCAGCATTTTGA
GAGCCCCACAATGAAGATCCAGGAGCATCCCAGCCTATCTGACACCAAACAGCAGAGAAATCAAGATGCCGGTGA
CCAGGAGGAGAGCTTTGTCTCCGAAGTGCCCCAGTCGGACCTGACTGCATTGTGTGATGAAAAGAACTGGGAAGA
GCCTATCCCTGCTTTCTCCTCCTGGCAGCGGGAGAACAGTGACTCTGATGAAGCCCACCTCTCGCCGCAGGCTGG
GCGCCTGATCCGTCAGCTGCTGGACGAAGACAGCGACCCCATGCTCTCTCCTCGGTTCTACGCTTATGGGCAGAG
CAGGCAATACCTGGATGACACAGAAGTGCCTCCTTCCCCACCAAACTCCCATTCTTTCATGAGGCGGCGAAGCTC
CTCTCTGGGGTCCTATGATGATGAGCAAGAGGACCTGACACCTGCCCAGCTCACACGAAGGATTCAGAGCCTTAA
AAAGAAGATCCGGAAGTTTGAAGATAGATTCGAAGAAGAGAAGAAGTACAGACCTTCCCACAGTGACAAAGCAGC
CAATCCGGAGGTTCTGAAATGGACAAATGACCTTGCCAAATTCCGGAGACAACTTAAAGAATCAAAACTAAAGAT
ATCTGAAGAGGACCTAACTCCCAGGATGCGGCAGCGAAGCAACACACTCCCCAAGAGTTTTGGTTCCCAACTTGA
GAAAGAAGATGAGAAGAAGCAAGAGCTGGTGGATAAAGCAATAAAGCCCAGTGTTGAAGCCACATTGGAATCTAT
TCAGAGGAAGCTCCAGGAGAAGCGAGCGGAAAGCAGCCGCCCTGAGGACATTAAGGATATGACCAAAGACCAGAT
TGCTAATGAGAAAGTGGCTCTGCAGAAAGCTCTGTTATATTATGAAAGCATTCATGGACGGCCGGTAACAAAGAA
CGAACGGCAGGTGATGAAGCCACTATACGACAGGTACCGGCTGGTCAAACAGATCCTCTCCCGAGCTAACACCAT
ACCCATCATTGGTTCCCCCTCCAGCAAGCGGAGAAGCCCTTTGCTGCAGCCAATTATCGAGGGCGAAACTGCTTC
CTTCTTCAAGGAGATAAAGGAAGAAGAGGAGGGGTCAGAAGACGATAGCAATGTGAAGCCAGACTTCATGGTCAC
TCTGAAAACCGATTTCAGTGCACGATGCTTTCTGGACCAATTCGAAGATGACGCTGATGGATTTATTTCCCCAAT
GGATGATAAAATACCATCAAAATGCAGCCAGGACACAGGGCTTTCAAATCTCCATGCTGCCTCAATACCTGAACT
CCTGGAACACCTCCAGGAAATGAGAGAAGAAAAGAAAAGGATTCGAAAGAAACTTCGGGATTTTGAAGACAACTT
TTTCAGACAGAATGGAAGAAATGTCCAGAAGGAAGACCGCACTCCTATGGCTGAAGAATACAGTGAATATAAGCA
CATAAAGGCGAAACTGAGGCTCCTGGAGGTGCTCATCAGCAAGAGAGACACTGATTCCAAGTCCATGTGAGGGGC
ATGGCCAAGCACAGGGGGCTGGCAGCTGCGGTGAGAGTTTACTGTCCCCAGAGAAAGTGCAGCTCTGGAAGGCAG
CCTTGGGGCTGGCCCTGCAAAGCATGCAGCCCTTCTGCCTCTAGACCATTTGGCATCGGCTCCTGTTTCCATTGC
CTGCCTTAGAAACTGGCTGGAAGAAGACAATGTGACCTGACTTAGGCATTTTGTAATTGGAAAGTCAAGACTGCA
GTATGTGCACATGCGCACGCGCATGCACGCACACACACACACAGTAGTGGAGCTTTCCTAACACTAGCAGAGATT
AATCACTACATTAGACAACACTCATCTACAGAGAATATACACTGTTCTTCCCTGGATAACTGAGAAACAAGAGAC
CATTCTCTGTCTAACTGTGATAAAAACAAGCTCAGGACTTTATTCTATAGAGCAAACTTGCTGTGGAGGGCCATG
CTCTCCTTGGACCCAGTTAACTGCAAACGTGCATTGGAGCCCTATTTGCTGCCGCTGCCATTCTAGTGACCTTTC
CACAGAGCTGCGCCTTCCTCACGTGTGTGAAAGGTTTTCCCCTTCAGCCCTCAGGTAGATGGAAGCTGCATCTGC
CCACGATGGCAGTGCAGTCATCATCTTCAGGATGTTTCTTCAGGACTTCCTCAGCTGACAAGGAATTTTGGTCCC
TGCCTAGGACCGGGTCATCTGCAGAGGACAGAGAGATGGTAAGCAGCTGTATGAATGCTGATTTTAAAACCAGGT
CATGGGAGAAGAGCCTGGAGATTCTTTCCTGAACACTGACTGCACTTACCAGTCTGATTTTATCGTCAAACACCA
AGCCAGGCTAGCATGCTCATGGCAATCTGTTTGGGGCTGTTTTGTTGTGGCACTAGCCAAACATAAAGGGGCTTA
AGTCAGCCTGCATACAGAGGATCGGGGAGAGAAGGGGCCTGTGTTCTCAGCCTCCTGAGTACTTACCAGAGTTTA
ATTTTTTTAAAAAAAATCTGCACTAAAATCCCCAAACTGACAGGTAAATGTAGCCCTCAGAGCTCAGCCCAAGGC
AGAATCTAAATCACACTATTTTCGAGATCATGTATAAAAAGAAAAAAAAGAAGTCATGCTGTGTGGCCAATTATA
ATTTTTTTCAAAGACTTTGTCACAAAACTGTCTATATTAGACATTTTGGAGGGACCAGGAAATGTAAGACACCAA
ATCCTCCATCTCTTCAGTGTGCCTGATGTCACCTCATGATTTGCTGTTACTTTTTTAACTCCTGCGCCAAGGACA

FIGURE 967B

GTGGGTTCTGTGTCCACCTTTGTGCTTTGCGAGGCCGAGCCCAGGCATCTGCTCGCCTGCCACGGCTGACCAGAG
AAGGTGCTTCAGGAGCTCTGCCTTAGACGACGTGTTACAGTATGAACACACAGCAGAGGCACCCTCGTATGTTTT
GAAAGTTGCCTTCTGAAAGGGCACAGTTTTAAGGAAAAGAAAAAGAATGTAAAACTATACTGACCCGTTTTCAGT
TTTAAAGGGTCGTGAGAAACTGGCTGGTCCAATGGGATTTACAGCAACATTTTCCATTGCTGAAGTGAGGTAGCA
GCTCTCTTCTGTCAGCTGAATGTTAAGGATGGGGAAAAAGAATGCCTTTAAGTTTGCTCTTAATCGTATGGAAGC
TTGAGCTATGTGTTGGAAGTGCCCTGGTTAATCCATACACAAAGACGGTACATAATCCTACAGGTTTAAATGTAC
ATAAAAATATAGTTTGGAATTCTTTGCTCTACTGTTTACATTGCAGATTGCTATAATTTCAAGGAGTGAGATTAT
AAATAAAATGATGCACTTTAGGATGTTTCCTATTTTTGAAATCTGAACATGAATCATTCACATGACCAAAAATTG
TGTTTTTTTAAAAATACATGTCTAGTCTGTCCTTTAATAGCTCTCTTAAATAAGCTATGATATTAATCAGATCAT
TACCAGTTAGCTTTTAAAGCACATTTGTTTAAGACTATGTTTTTGGAAAAATACGCTACAGAATTTTTTTTTAAG
CTACAAATAAATGAGATGCTACTAATTGTTTTGGAATCTGTTGTTTCTGCCAAAGGTAAATTAACTAAAGATTTA
TTCAGGAATCCCCATTTGAATTTGTATGATTCAATAAAAGAAAACACCAAGTAAGTTATATAAAAT

FIGURE 968

MACEIMPLQSSQEDERPLSPFYLSAHVPQVSNVSATGELLERTIRSAVEQHLFDVNNSGGQSSEDSESGTLSASS
ATSARQRRRQSKEQDEVRHGRDKGLINKENTPSGFNHLDDCILNTQEVEKVHKNTFGCAGERSKPKRQKSSTKLS
ELHDNQDGLVNMESLNSTRSHERTGPDDFEWMSDERKGNEKDGGHTQHFESPTMKIQEHPSLSDTKQQRNQDAGD
QEESFVSEVPQSDLTALCDEKNWEEPIPAFSSWQRENSDSDEAHLSPQAGRLIRQLLDEDSDPMLSPRFYAYGQS
RQYLDDTEVPPSPPNSHSFMRRRSSSLGSYDDEQEDLTPAQLTRRIQSLKKKIRKFEDRFEEEKKYRPSHSDKAA
NPEVLKWTNDLAKFRRQLKESKLKISEEDLTPRMRQRSNTLPKSFGSQLEKEDEKKQELVDKAIKPSVEATLESI
QRKLQEKRAESSRPEDIKDMTKDQIANEKVALQKALLYYESIHGRPVTKNERQVMKPLYDRYRLVKQILSRANTI
PIIGSPSSKRRSPLLQPIIEGETASFFKEIKEEEEGSEDDSNVKPDFMVTLKTDFSARCFLDQFEDDADGFISPM
DDKIPSKCSQDTGLSNLHAASIPELLEHLQEMREEKKRIRKKLRDFEDNFFRQNGRNVQKEDRTPMAEEYSEYKH
IKAKLRLLEVLISKRDTDSKSM

FIGURE 969A

AAATGTAGAGAAGCAGCCGATAAAATAGCATTGCCTGAAGAAGTTTGGAGGCTGAGAGCAGCAGTAGACTGGCCA
ACTGCAGAGCAAGTTGTTTCTCCAGCCGTGCGGTGCAGCCTCATGCCCCCAACCCAGCTTAGCCACTGTAAGAAG
ACGTTCACTGTACAGACGACCAAACTTGCCGTGGAAGAGACAGTTGTGAGATTCCCTTGCAAATTTACATACGAG
AATGGCTTGTGAAATCATGCCTCTGCAAAGTTCACAGGAAGATGAAAGACCTCTGTCACCTTTCTATTTGAGTGC
TCATGTACCCCAAGTCAGCAATGTGTCTGCAACCGGAGAACTCTTAGAAAGAACCATCCGATCAGCTGTAGAACA
ACATCTTTTTGATGTTAATAACTCTGGAGGTCAAAGTTCAGAGGACTCAGAATCTGGAACACTATCAGCATCTTC
TGCCACATCTGCCAGACAGCGCCGCCGCCAGTCCAAGGAGCAGGATGAAGTTCGACATGGGAGAGACAAGGGACT
TATCAACAAAGAAAATACTCCTTCTGGGTTCAACCACCTTGATGATTGTATTTTGAATACTCAGGAAGTCGAAAA
GGTACACAAAAATACTTTTGGTTGTGCTGGAGAAAGGAGCAAGCCTAAACGTCAGAAATCCAGTACTAAACTTTC
TGAGCTTCATGACAATCAGGACGGTCTTGTGAATATGGAAAGTCTCAATTCCACACGATCTCATGAGAGAACTGG
ACCTGATGATTTTGAATGGATGTCTGATGAAAGGAAAGGAAATGAAAAAGATGGTGGACACACTCAGCATTTTGA
GAGCCCCACAATGAAGATCCAGGAGCATCCCAGCCTATCTGACACCAAACAGCAGAGAAATCAAGATGCCGGTGA
CCAGGAGGAGAGCTTTGTCTCCGAAGTGCCCCAGTCGGACCTGACTGCATTGTGTGATGAAAAGAACTGGGAAGA
GCCTATCCCTGCTTTCTCCTCCTGGCAGCGGGAGAACAGTGACTCTGATGAAGCCCACCTCTCGCCGCAGGCTGG
GCGCCTGATCCGTCAGCTGCTGGACGAAGACAGCGACCCCATGCTCTCTCCTCGGTTCTACGCTTATGGGCAGAG
CAGGCAATACCTGGATGACACAGAAGTGCCTCCTTCCCCACCAAACTCCCATTCTTTCATGAGGCGGCGAAGCTC
CTCTCTGGGGTCCTATGATGATGAGCAAGAGGACCTGACACCTGCCCAGCTCACACGAAGGATTCAGAGCCTTAA
AAAGAAGATCCGGAAGTTTGAAGATAGATTCGAAGAAGAGAAGAAGTACAGACCTTCCCACAGTGACAAAGCAGC
CAATCCGGAGGTTCTGAAATGGACAAATGACCTTGCCAAATTCCGGAGACAACTTAAAGAATCAAAACTAAAGAT
ATCTGAAGAGGACCTAACTCCCAGGATGCGGCAGCGAAGCAACACACTCCCCAAGAGTTTTGGTTCCCAACTTGA
GAAAGAAGATGAGAAGAAGCAAGAGCTGGTGGATAAAGCAATAAAGCCCAGTGTTGAAGCCACATTGGAATCTAT
TCAGAGGAAGCTCCAGGAGAAGCGAGCGGAAAGCAGCCGCCCTGAGGACATTAAGGATATGACCAAAGACCAGAT
TGCTAATGAGAAAGTGGCTCTGCAGAAAGCTCTGTTATATTATGAAAGCATTCATGGACGGCCGGTAACAAAGAA
CGAACGGCAGGTGATGAAGCCACTATACGACAGGTACCGGCTGGTCAAACAGATCCTCTCCCGAGCTAACACCAT
ACCCATCATTGGTTCCCCCTCCAGCAAGCGGAGAAGCCCTTTGCTGCAGCCAATTATCGAGGGCGAAACTGCTTC
CTTCTTCAAGGAGATAAAGGAAGAAGAGGAGGGGTCAGAAGACGATAGCAATGTGAAGCCAGACTTCATGGTCAC
TCTGAAAACCGATTTCAGTGCACGATGCTTTCTGGACCAATTCGAAGATGACGCTGATGGATTTATTTCCCCAAT
GGATGATAAAATACCATCAAAATGCAGCCAGGACACAGGGCTTTCAAATCTCCATGCTGCCTCAATACCTGAACT
CCTGGAACACCTCCAGGAAATGAGAGAAGAAAAGAAAAGGATTCGAAAGAAACTTCGGGATTTTGAAGACAACTT
TTTCAGACAGAATGGAAGAAATGTCCAGAAGGAAGACCGCACTCCTATGGCTGAAGAATACAGTGAATATAAGCA
CATAAAGGCGAAACTGAGGCTCCTGGAGGTGCTCATCAGCAAGAGAGACACTGATTCCAAGTCCATGTGAGGGGC
ATGGCCAAGCACAGGGGGCTGGCAGCTGCGGTGAGAGTTTACTGTCCCCAGAGAAAGTGCAGCTCTGGAAGGCAG
CCTTGGGGCTGGCCCTGCAAAGCATGCAGCCCTTCTGCCTCTAGACCATTTGGCATCGGCTCCTGTTTCCATTGC
CTGCCTTAGAAACTGGCTGGAAGAAGACAATGTGACCTGACTTAGGCATTTTGTAATTGGAAAGTCAAGACTGCA
GTATGTGCACATGCGCACGCGCATGCACGCACACACACACACAGTAGTGGAGCTTTCCTAACACTAGCAGAGATT
AATCACTACATTAGACAACACTCATCTACAGAGAATATACACTGTTCTTCCCTGGATAACTGAGAAACAAGAGAC
CATTCTCTGTCTAACTGTGATAAAAACAAGCTCAGGACTTTATTCTATAGAGCAAACTTGCTGTGGAGGGCCATG
CTCTCCTTGGACCCAGTTAACTGCAAACGTGCATTGGAGCCCTATTTGCTGCCGCTGCCATTCTAGTGACCTTTC
CACAGAGCTGCGCCTTCCTCACGTGTGTGAAAGGTTTTCCCCTTCAGCCCTCAGGTAGATGGAAGCTGCATCTGC
CCACGATGGCAGTGCAGTCATCATCTTCAGGATGTTTCTTCAGGACTTCCTCAGCTGACAAGGAATTTTGGTCCC
TGCCTAGGACCGGGTCATCTGCAGAGGACAGAGAGATGGTAAGCAGCTGTATGAATGCTGATTTTAAAACCAGGT
CATGGGAGAAGAGCCTGGAGATTCTTTCCTGAACACTGACTGCACTTACCAGTCTGATTTTATCGTCAAACACCA
AGCCAGGCTAGCATGCTCATGGCAATCTGTTTGGGGCTGTTTTGTTGTGGCACTAGCCAAACATAAAGGGGCTTA
AGTCAGCCTGCATACAGAGGATCGGGGAGAGAAGGGGCCTGTGTTCTCAGCCTCCTGAGTACTTACCAGAGTTTA
ATTTTTTTAAAAAAAATCTGCACTAAAATCCCCAAACTGACAGGTAAATGTAGCCCTCAGAGCTCAGCCCAAGGC
AGAATCTAAATCACACTATTTTCGAGATCATGTATAAAAAGAAAAAAAAGAAGTCATGCTGTGTGGCCAATTATA
ATTTTTTTCAAAGACTTTGTCACAAAACTGTCTATATTAGACATTTTGGAGGGACCAGGAAATGTAAGACACCAA
ATCCTCCATCTCTTCAGTGTGCCTGATGTCACCTCATGATTTGCTGTTACTTTTTTAACTCCTGCGCCAAGGACA

FIGURE 969B

GTGGGTTCTGTGTCCACCTTTGTGCTTTGCGAGGCCGAGCCCAGGCATCTGCTCGCCTGCCACGGCTGACCAGAG
AAGGTGCTTCAGGAGCTCTGCCTTAGACGACGTGTTACAGTATGAACACACAGCAGAGGCACCCTCGTATGTTTT
GAAAGTTGCCTTCTGAAAGGGCACAGTTTTAAGGAAAAGAAAAAGAATGTAAAACTATACTGACCCGTTTTCAGT
TTTAAAGGGTCGTGAGAAACTGGCTGGTCCAATGGGATTTACAGCAACATTTTCCATTGCTGAAGTGAGGTAGCA
GCTCTCTTCTGTCAGCTGAATGTTAAGGATGGGGAAAAAGAATGCCTTTAAGTTTGCTCTTAATCGTATGGAAGC
TTGAGCTATGTGTTGGAAGTGCCCTGGTTAATCCATACACAAAGACGGTACATAATCCTACAGGTTTAAATGTAC
ATAAAAATATAGTTTGGAATTCTTTGCTCTACTGTTTACATTGCAGATTGCTATAATTTCAAGGAGTGAGATTAT
AAATAAAATGATGCACTTTAGGATGTTTCCTATTTTTGAAATCTGAACATGAATCATTCACATGACCAAAAATTG
TGTTTTTTTAAAAATACATGTCTAGTCTGTCCTTTAATAGCTCTCTTAAATAAGCTATGATATTAATCAGATCAT
TACCAGTTAGCTTTTAAAGCACATTTGTTTAAGACTATGTTTTTGGAAAAATACGCTACAGAATTTTTTTTTAAG
CTACAAATAAATGAGATGCTACTAATTGTTTTGGAATCTGTTGTTTCTGCCAAAGGTAAATTAACTAAAGATTTA
TTCAGGAATCCCCATTTGAATTTGTATGATTCAATAAAAGAAAACACCAAGTAAGTTATATAAAAT

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FIGURE 970

MACEIMPLQSSQEDERPLSPFYLSAHVPQVSNVSATGELLERTIRSAVEQHLFDVNNSGGQSSEDSESGTLSASS
ATSARQRRRQSKEQDEVRHGRDKGLINKENTPSGFNHLDDCILNTQEVEKVHKNTFGCAGERSKPKRQKSSTKLS
ELHDNQDGLVNMESLNSTRSHERTGPDDFEWMSDERKGNEKDGGHTQHFESPTMKIQEHPSLSDTKQQRNQDAGD
QEESFVSEVPQSDLTALCDEKNWEEPIPAFSSWQRENSDSDEAHLSPQAGRLIRQLLDEDSDPMLSPRFYAYGQS
RQYLDDTEVPPSPPNSHSFMRRRSSSLGSYDDEQEDLTPAQLTRRIQSLKKKIRKFEDRFEEEKKYRPSHSDKAA
NPEVLKWTNDLAKFRRQLKESKLKISEEDLTPRMRQRSNTLPKSFGSQLEKEDEKKQELVDKAIKPSVEATLESI
QRKLQEKRAESSRPEDIKDMTKDQIANEKVALQKALLYYESIHGRPVTKNERQVMKPLYDRYRLVKQILSRANTI
PIIGSPSSKRRSPLLQPIIEGETASFFKEIKEEEEGSEDDSNVKPDFMVTLKTDFSARCFLDQFEDDADGFISPM
DDKIPSKCSQDTGLSNLHAASIPELLEHLQEMREEKKRIRKKLRDFEDNFFRQNGRNVQKEDRTPMAEEYSEYKH
IKAKLRLLEVLISKRDTDSKSM

FIGURE 971

GCGCGCAGCAGCCATCTCCACTCCAAAGTTAGACAAA**ATG**CCAGGAATGTTCTTCTCTGCTAACCCAAAGGAATT
GAAAGGAACCACTCATTCACTTCTAGACGACAAAATGCAAAAAAGGAGGCCAAAGACTTTTGGAATGGATATGAA
AGCATACCTGAGATCTATGATCCCACATCTGGAATCTGGAATGAAATCTTCCAAGTCCAAGGATGTACTTTCTGC
TGCTGAAGTAATGCAATGGTCTCAATCTCTGGAAAAACTTCTTGCCAACCAAACTGGTCAAAATGTCTTTGGAAG
TTTCCTAAAGTCTGAATTCAGTGAGGAGAATATTGAGTTCTGGCTGGCTTGTGAAGACTATAAGAAAACAGAGTC
TGATCTTTTGCCCTGTAAAGCAGAAGAGATATATAAAGCATTTGTGCATTCAGATGCTGCTAAACAAATCAATAT
TGACTTCCGCACTCGAGAATCTACAGCCAAGAAGATTAAAGCACCAACCCCCACGTGTTTTGATGAAGCACAAAA
AGTCATATATACTCTTATGGAAAAGGACTCTTATCCCAGGTTCCTCAAATCAGATATTTACTTAAATCTTCTAAA
TGACCTGCAGGCTAATAGCCTAAAG**TGA**CTGGTCCCTGGCTGAAGGGAATTAACAGATAGTATCAAGCGCAGAAG
GAATGTGCCAGTATGGCTCCCTGGGTGAACAGCTTGGCCTTTTGTGGGTGTCTTGACAGCCCAAGAAGAACAAAT
GACTCAGAATGGATTAACATGAAAGTTATCCAGGCGCAGAGTTGAAGAAGCATAAGCAAGACAAAAACAGAGAGA
CCGCAGAAGGAGGAAGATACTGTGGTACTGTCATAAAAAACAGTGGAGCTCTGTATTAGAAAGCCCCTCAGAACT
GGGAAGGCCAGGTAACTCTAGTTACACAGAAACTGTGACTAAAGTCTATGAAACTGATTACAACAGACTGTAAGA
ATCAAAGTCAACTGACATCTATGCTACATATTATTATATAGTTTGTACTGAGCTATTGAAGTCCCATTAACTTAA
AGTATATGTTTTCAAATTGCCATTGCTACTATTGCTTGTCGGTGTTATTTTATTTTATTGTTTTTGACTTTGGAA
GAGATGAACTGTGTATTTAACTTAAGCTATTGCTCTTAAAACCAGGGAGTCAGAATATATTTGTAAGTTAAATCA
TTGGTGCTAATAATAAATGTGGATTTTGTATTAAAATATATAGAAGCAATTTCTGTTTACATGTCCTTGCTACTT
TTAAAAACTTGCATTTATTCCTCAGATTTTAAAAATAAATAAATAATTCATTTAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 972

MPGMFFSANPKELKGTTHSLLDDKMQKRRPKTFGMDMKAYLRSMIPHLESGMKSSKSKDVLSAAEVMQWSQSLEK
LLANQTGQNVFGSFLKSEFSEENIEFWLACEDYKKTESDLLPCKAEEIYKAFVHSDAAKQINIDFRTRESTAKKI
KAPTPTCFDEAQKVIYTLMEKDSYPRFLKSDIYLNLLNDLQANSLK

FIGURE 973

CCATGGCAGGTCGCTCCTGCAGTATTAGTTCTTGCAGCTGGTGGCGGCGGCTGAGGCGGCATGGATCTCAGCGAG
CTGGAGAGAGACAATACAGGCCGCTGTCGCCTGAGTTCGCCTGTGCCCGCGGTGTGCCGCAAGGAGCCTTGCGTC
CTGGGCGTCGATGAGGCGGGCAGGGGCCCCGTGCTGGGCCCCATGGTCTACGCCATCTGTTATTGTCCCCTGCCT
CGCCTGGCAGATCTGGAGGCGCTGAAAGTGGCAGACTCAAAGACCCTATTGGAGAGCGAGCGGGAAAGGCTGTTT
GCGAAAATGGAGGACACGGACTTTGTCGGCTGGGCGCTGGATGTGCTGTCTCCAAACCTCATCTCTACCAGCATG
CTTGGGCGGGTCAAATACAACCTGAACTCCCTGTCACATGATACAGCCACTGGGCTTATACAGTATGCATTGGAC
CAGGGCGTGAACGTCACCCAGGTATTCGTGGACACCGTAGGGATGCCAGAGACATACCAGGCGCAGCTGCAGCAA
AGTTTTCCCGGGATTGAGGTGACGGTCAAGGCCAAAGCAGATGCCCTCTACCCGGTGGTTAGTGCTGCCAGCATC
TGTGCCAAGGTGGCCCGGGACCAGGCCGTGAAGAAATGGCAGTTCGTGGAGAAACTGCAGGACTTGGATACTGAT
TATGGCTCAGGCTACCCCAATGATCCCAAGACAAAAGCGTGGTTGAAGGAGCACGTGGAGCCTGTGTTCGGCTTC
CCCCAGTTTGTCCGGTTCAGCTGGCGCACGGCCCAGACCATCCTGGAGAAAGAGGCGGAAGATGTTATATGGGAG
GACTCAGCATCCGAGAATCAGGAGGGACTCAGGAAGATCACATCCTACTTCCTCAATGAAGGGTCCCAAGCCCGT
CCCCGTTCTTCCCACCGATATTTCCTGGAACGCGGCCTGGAGTCAGCAACCAGCCTCTAGCAGCTGCCTCTACGC
GCTCTACCTGCTTCCCCAACCCAGACATTAAAATTGTTTAAGGAG

FIGURE 974

MDLSELERDNTGRCRLSSPVPAVCRKEPCVLGVDEAGRGPVLGPMVYAICYCPLPRLADLEALKVADSKTLLESE
RERLFAKMEDTDFVGWALDVLSPNLISTSMLGRVKYNLNSLSHDTATGLIQYALDQGVNVTQVFVDTVGMPETYQ
AQLQQSFPGIEVTVKAKADALYPVVSAASICAKVARDQAVKKWQFVEKLQDLDTDYGSGYPNDPKTKAWLKEHVE
PVFGFPQFVRFSWRTAQTILEKEAEDVIWEDSASENQEGLRKITSYFLNEGSQARPRSSHRYFLERGLESATSL

FIGURE 975

GCGGCCGCCGTGGCCAGGCAACCTATGGGTACCACCGGGTTCTCGCGGGTCTTGCGAACGAACTTTTCCTTGAAA
CTCTCTGGATTCCTGTAAACAGTGGGGCTCAGCCCCTCAATGACTGGAGGCTTCGATGGTTCAAAGGGGACCTCC
GGAATCACAGGGCCGGGAGTCGCCATGTCCGGGCCACAGCAGCAGGAGAAAATCGGGACTCCGACCTCAGCCTCC
CGGTGAAGGTCATGAAAGGGGCGGGGAAACGAATAAATTGAGCCTTGTACGCAGGCGCAAATGCTCGTTGCATCC
TGGGAGTCGTAGTGCTCAGCACGGTAGTGCTACAAAAGGACTACATTTCCCCAAATGCCCGCAAAGCCTTGTGCA
CGCCTTCCGGAAGGAGTTTGTTACACGAGGTCTGAGAGACAGAGGCAGCGTGTTTGAGCTGCTGGTGCGGTGGTC
AGCGCG**ATG**CCCAAGGCCAAGGGCAAAACCCGGAGGCAGAAGTTTGGTTACAGTGTCAACCGAAAGCGTCTGAAC
CGGAATGCTCGACGGAAGGCAGCGCGCGGAATCGAATGCTCCCACATCCGACATGCCTGGGACCACGCTAAATCG
GTACGGCAGAACCTGGCCGAGATGGGGTTGGCTGTGGACCCCAACAGGGCGGTGCCCCTCCGTAAGAGAAAGGTG
AAGGCCATGGAGGTGGACATAGAGGAGAGGCCTAAAGAGCTTGTACGGAAGCCCTATGTGCTGAATGACCTGGAG
GCAGAAGCCAGCCTTCCAGAAAAGAAAGGAAATACTCTGTCTCGGGACCTCATTGACTATGTACGCTACATGGTA
GAGAACCACGGGGAGGACTATAAGGCCATGGCCCGTGATGAGAAGAATTACTATCAAGATACCCCAAAACAGATT
CGGAGTAAGATCAACGTCTATAAACGCTTTTACCCAGCAGAGTGGCAAGACTTCCTCGATTCTTTGCAGAAGAGG
AAGATGGAGGTGGAG**TAA**CTGGTTTACATCACAGCTGCCCCAGGCTGAGGCGTCCCCCGGACCAGTGAAGCTGGA
GCCAGGGTGTAAGGCAAGGAGGTGCTGTGTGGCTCCAGAGGGGCTGGCCAGGTCCCATGGAATCAGAAGGTTACA
CACACACGTGCACACTCCCCGCTCTGGGGAAGGAACTGTTCTCAGAGGCTCCAATTTATATTCATCTGGGGGTTC
ACGGAAAAGCCAGAACCTGCTGTTTTCAGGGTGGGTGATGTAAATATAGTGTGTACATAATAAAGCAAATATATT
TTAAA

FIGURE 976

MPKAKGKTRRQKFGYSVNRKRLNRNARRKAARGIECSHIRHAWDHAKSVRQNLAEMGLAVDPNRAVPLRKRKVKA
MEVDIEERPKELVRKPYVLNDLEAEASLPEKKGNTLSRDLIDYVRYMVENHGEDYKAMARDEKNYYQDTPKQIRS
KINVYKRFYPAEWQDFLDSLQKRKMEVE

FIGURE 977A

CGTCCACCGTGGAGTCTCTCCTTGCTTTGGGTCCACTGAGCCCCACACATTGTTGAGTGTCTGATTGTCTCCTTG
CCCTTACAGGACAGGAAAGCGAAATCTCTGTTCCTTTGTAGGGACCTTTCTTTTGTAGGTGAAAGGGACAGAAAT
ATGATTCTGGCCTCCTTGATGGTGAATACAGGAACACTTTCAGATAAATTACAATAGAGAGGAGTCAGCTTATTT
AAACAAACTGAGGTTAAGCCAGAGATTGCAGTTAACAGTGAAAAAATTTAAAGCAAGTACCTGGATGGATGCAAA
GCAGTGCCCAGGAGACCCAACTTACGTGACAGAGATGATCATTGTCACTCATTCATTATGTTTTGAGCACCAGCC
ATGTGCCAGGTCCAGAACTAGAAGAAACTTGGGTGTAGGTGAGATCATAGGAACAGTCCCTGCCCCAGCTGAACA
TCAGGAAGCCAGACTGGGAGCACATGCCGTGGCTGACTAGGACTCCAGCAGGGACCTGGGGTTCCATCAGATCAG
TGTAAAGCGATGGTTTCCCAAATGAGACCTCTCCAGAGATGGTTCATTCCACCCCGCAATGGCCACCAGAAACAT
TGTGCTGACCAGAGGGCTTCACTGCCCCAAACCCCAAAATCACACTCCAGGATGAGAAACCTAAAAGTCTATCTT
GATGAGGCTTCATAGCTGGAAACCACCCCTCATGGATCCACAGGCTGCATTTGATGAAAGGAGACTCCAGGAAGT
CGAGCCATTCCAGGCAGACATGTAGCAAAAGCCCGAGCTGGGGTCCGCCCTCATGCAATAAATAACACCTGTGCA
CATAAGAGAGGTGACAGGCAGGGCATCCCTGGGGACCTGGGCCTGTGGCACGTGAAGAAACACCCAAGAGAGCAC
GAAGTCCCAATGCCATGACCAGATATTTCGGTGCCAGGCATGCTTCTGGGTCCCAGCAAAAGACACACAAATCCG
TGTCCTTGGGGACCCACAGTCTAGTGACCTAGGGCTGGCCGGGTCGCACGCTTCTTTTCAAGGGCTCGAAAGCCT
CTGCATGGATGCAACTTTGGGGGAAAAGTAACCCTAACCCTCTGCTTCTCTCATCCTCCCCTCTTCTGTGTATAT
GTCTGTCTCTTTCTCTCTGTGTGTGCCCTTCCCCACTCCCATCCCCATTCCTTTTTTTATTTATTATATTTTGGT
GGTGTGTGGCTCGGTTTCTGTTGGTCCCCTCGTGTGGCCCCTCCCCTGCTGCAGAACTCGTCCAGCTCGGCCTCC
TCCGAAGCCTCGGAAACCTGCCAGTCAGTGAGCGAGTGCAGCTCCCCCACCTCTGTCAGCTCGGGCTCCACCATG
GGTGCCTGGGTGTCCACAGAGAAGGTGACCGCCCGGGTGGCAGCCACAGCGGCCCCACTCTCCCTGGTCCCCCTG
CCTGCTGCTCAGACAGCCCTCACAGCCGCGGCAACCTGGAAGCTCAGAATCGACACCAAGAGTGGGGCTCCTCTT
GGGGACAGAGGGTGGGACAAGGCTGAGAGCATTTTCTAGAATGAGTGCCTGGCTGCTGGACAATGACCACATGGT
TGTCTCAAGGGAGAGGAAGGGGTATGGGGAATTTGGAGGTGTGAAGGCTTTCTCCCAGACCAGGTGTTGCGTGCC
TGTCCATCCTCCTCCCTCCCTTCCCGAGCCACCCACCAGACCGTTGGATGAGCCATGTCACTGTGTCAGAGGCTG
TGTGCTTTTCCGCTTTTTAGTTTGCACCCCCACCCCCCTGCCCTTGATTGAGAATGTGCTCCTGAGCAATGCGAC
GATTTTGGAAACCTAGAATGAACAGATTCATTTGAAGATGCTTTGGAATTTTTAAATTTGCATAATGAAATGAGC
AAATCACTATCACCATTAAATGAGGCTTCATTAGTTACATTATCAAAAACCATTGACAAGGCCACAAATTGAGGG
CACTGATCAATTTCCAAACTTCTAAAACGTAGGTCAAACATAGATGCTTATTTGCTGTCAAACTCATGTGCATTC
TTTGCACCCCGGCTCTTTTCTCTTGCATCACAGATCATCCGTGAGCAGCAGAGCCCCAATGTTTGTTTTATTTAT
AAATATTCAGGTTTCCCCTCCCTTGAATGTCAATGCCATTTTGTATCTCCGCACTCATCCTGTTATATTAATTTT
TTTTCCTTTCCCCCCCCTTTTTTTGTTTGTTTCCAGTTGTCTAACGGGTTTTCTCACTATAGTTTATCAAGTGAG
TCCCACGTGGGGCCCACGGGTGCAGGCCTTTTCCCTCATTGCCTGCCTGCCTCCCGCCTGCTCCCTCGGGTCACC
TCTGTCCACCTTCCAGACTACGCTCATTATTACACCATTGGGCCCGGC**ATG**TTCCCGTCATCTCAGATCCCTAGC
TGGAAGGACTGGGCTAAGCCTGGGCCCTATGACCAGCCTCTGGTGAACACCCTGCAGCGCCGCAAAGAGAAGCGA
GAACCGGACCCCAACGGGGGAGGACCCACTACCGCCAGCGGCCCACCTGCAGCAGCTGAGGAGGCTCAGAGACCA
CGGAGCATGACTGTATCGGCTGCCACCAGGCCTGGTGAGGAGATGGAGGCTTGTGAGGAGCTGGCCCTGGCCCTG
TCTCGGGGCCTGCAGCTGGACACCCAGAGGAGCAGCCGGGACTCGCTTCAGTGCTCCAGCGGCTACAGCACCCAG
ACAACCACCCCCTGCTGCTCTGAGGACACCATCCCTTCCCAAGTTTCAGATTATGATTATTTCTCTGTAAGTGGT
GACCAGGAGGCAGATCAGCAGGAGTTCGACAAGTCCTCCACCATTCCAAGAAACAGCGACATCAGCCAGTCCTAC
CGACGGATGTTCCAAGCCAAGCGTCCAGCCTCAACTGCTGGCCTCCCCACCACCCTGGGACCTGCTATGGTCACT
CCAGGGGTTGCAACTATCCGACGGACCCCTTCCACCAAGCCTTCTGTCCGCCGGGGAACCATTGGAGCTGGTCCC
ATCCCCATCAAGACACCCGTGATCCCTGTCAAGACCCCAACCGTCCCAGACCTCCCAGGGGTGTTGCCAGCCCCT
CCAGATGGGCCAGAAGAGCGGGGGGAGCACAGCCCTGAGTCGCCATCTGTGGGTGAGGGCCCCCAAGGTGTCACC
AGCATGCCCTCCTCAATGTGGAGCGGCCAAGCTTCCGTTAACCCTCCACTTCCAGGCCCGAAGCCCAGTATCCCT
GAGGAGCACAGACAGGCAATTCCAGAAAGTGAAGCTGAAGACCAGGAACGGGAACCCCCAAGTGCCACTGTCTCC
CCAGGCCAGATTCCAGAGAGTGACCCTGCAGACCTGAGCCCAAGGGATACTCCACAAGGAGAAGACATGCTGAAC
GCCATCCGAAGGGGCGTGAAACTGAAGAAGACCACGACAAACGATCGCTCAGCCCCTCGCTTTTCT**TAG**GTTCAC
AAGAAATGCGCCGGTGGGGAATGAACTGTTTCATTAATAAAACCTAATTTGTCTTGATCCATTCCACTCTATAAT
AAAACAAAAGATTTTGTAGGCAACTCGGAATATAGCTCTTTTGAAAGTACTCGACACCTTTAGATAAGAATTAAA

FIGURE 977B

ACCAACCTATGTAACTGACATAATCTTGATCTTTTAATTTGTAAATATTGACAATTTTCTTTCTGCACATTTTAA
TCTTAGTTTCCCTTTTGATTTTTCTGAAGGTGCCAAATTCCATTTAACTTTTTTACAAGTCTTTGTAAAATTTTA
AATGCATAAAGGGGGTTGGGGCAGGGGAACCACGAAGTAGTTAATTTTAGAAAAGGATTTACTATACTTCACTCT
TCTTTTTTTTTCCCCACAAGCTTTTGTAGATGCATTGTAGTAGTCTAGCTTAGAAGCAAATGCAAGTTATTTTAA
TGTACAAACTAAATGGGTAAGAGGTAAAATCTTCATTTAAATATACTATGTTCTGGATGAAAAGAGCAGGAGTAA
CAATTGATGAGCAATATTCAGAGTGAAGTAAATCTGGAAATGGTAGACTGTGTTGGGATTGGGGGGAGGGCCATG
GGAGGGGTACATCGTCAACATAGCCGATCCTGTTACATTTAAGAGTAGCCTCGTAGGTTGAATTTCTTCTGGTAG
CTTCATGGTAAATGCATCCGAATAAGCCATACTGGATTGCAGTGTTTGTTTCTGTAGGGTGTTTAAGGACTTGAC
TTCCTTTCTCCCATGATTCCTCTGGACTGCACACAGCACCCACAACCAGCCCCATGCATGCTGCTGCCTCTGGGC
AGTCGTAGAATCTCCCACTTCAGTTTCTCGTTGATTGTACTCACCTTTATGGAATCCAAATACATCCAAAAGGGT
AAGGCAGTTTTAAAAATGTGAAAACATTTAAAAATGATAATAGCAGGGAATTCTTAGATTATAGTAAATGCCTTT
TACTTAACTGTGCCCAGCAGGCTGGGTGCGTTAAAAAGCCCAAGTATTTTGAAAAAACTCGAACAGATTTGACAA
GGGTAGCCAGCTTGGAGTCTAGCAACTTGCCAATGTGTTTACCAATCTGGGGGCTTGTTTTTCTTTTCTTCTTTC
AAATAAATGGCAGTTAACTGGCTTTACAGTAAACATTGAAGAGAGGAGGATTTGTTTATTGTCACTGGGAATCTG
ACCACTATACTGTCCTTTTTTTGTATTCTGGGTAATGTTTTTTGGAAAAGATTTGTCTTTTCTAAGTGGAAGTTA
AATTTGTTATACTGCCCATCCCCTAAAGCCAACAGAGATTTGTAGATTTAAAGGGATCACATTTGAAGACAATAG
TGTTTAAGAAAGCAAGCAAGTCCCTTAGCAGTCAGGTCATAACAGGGCACATTTCTGACCGAACCCTCTCAAGGC
AGAGGAGGAGTTTGGTGGGTTTCATACACCCTGCAGATTCCTGTTGGCTCTAACCCTCAATTACCTAATCTTATG
CTTTAACACATAACTGCATTGGATGTGAGAGTAACGTACCGTATGGTCATTGTTCTATATATTAACATTGAACAC
TGCTGCGATTGCTCAAGGACATTTTATGTTACGGCTTTAAAGCAAAGGCATGATTATTAGAAACTATTTAAGCTT
TTTTCTTTGAAAAACAAGCTTCTTTTACAGAATATAAACAACAGTAGTGCCTGTGGTTTAGCCCACCAATCTTGA
TGACTAAAAGTAGCTGATGCATTGTGCATATGATGCTTGAGATGGTTTTTGCAAAAGCAGAAATCGCTGCAAGGT
AATCACAATAGATAAAAGTGGTATTTTAAACCTTTGAAATAAATGGATGTAACTGTACCTTGGTACAGCTTTTCA
CTTGTTTAGTTTTTAAACGTTAGTATAATCTGAATAAATAAAATGTTGCCAAATTCAATGTAGAAAGAATGTGAC
AACACACCTTGGGTAGTTCTGCTTGTGTTTTTGCATATTGTAAAAGCAGTGTCACAGCTAAAAAGAAAGAAATCG
TTTCTAACAGTAAATTATTGTGCTTTAGTTGCTAGTTTGTACTGAGAGTTGACCTCTCCCTGTGCAGTTTTTTGT
TCTAAACTTGTATAAATAACAATTGTGTAATGTGTCTCCCTCCTACATTGTAACAATTGCTTCAGCCTACGTTAT
AAATAAAGAACCACTAGATT

FIGURE 978

MFPSSQIPSWKDWAKPGPYDQPLVNTLQRRKEKREPDPNGGGPTTASGPPAAAEEAQRPRSMTVSAATRPGEEME
ACEELALALSRGLQLDTQRSSRDSLQCSSGYSTQTTTPCCSEDTIPSQVSDYDYFSVSGDQEADQQEFDKSSTIP
RNSDISQSYRRMFQAKRPASTAGLPTTLGPAMVTPGVATIRRTPSTKPSVRRGTIGAGPIPIKTPVIPVKTPTVP
DLPGVLPAPPDGPEERGEHSPESPSVGEGPQGVTSMPSSMWSGQASVNPPLPGPKPSIPEEHRQAIPESEAEDQE
REPPSATVSPGQIPESDPADLSPRDTPQGEDMLNAIRRGVKLKKTTTNDRSAPRFS

FIGURE 979A

GGCGAGCTAAGCCGGAGGATGTGCAGCTGCGGCGGCGGCGCCGGCTACGAAGAGGACGGGGACAGGCGCCGTGCG
AACCGAGCCCAGCCAGCCGGAGGACGCGGGCAGGGCGGGACGGGAGCCCGGACTCGTCTGCCGCCGCCGTCGTCG
CCGTCGTGCCGGCCCCGCGTCCCCGCGCGCGAGCGGGAGGAGCCGCCGCCACCTCGCGCCCGAGCCGCCGCTAGC
GCGCGCCGGGCATGGTCCCCTCTTAAAGGCGCAGGCCGCGGCGGCGGGGGCGGGCGTGCGGAACAAAGCGCCGGC
GCGGGGCCTGCGGGCGGCTCGGGGGCCGCGATGGGCGCGGCGGGCCCGCGGCGGCGGCGGCGCTGCCCGGGCCGG
GCCTCGCGGCGCTAGGGCGGGCTGGCCTCCGCGGGCGGGGGCAGCGGGCTGAGGGCGCGCGGGGCCTGCGGCGGC
GGCGGCGGCGGCGGCGGCGGCCCGGCGGGCGGAGCGGCGCGGGCATGGCCGCGCGCGGCCGGCGCGCCTGGCTCA
GCGTGCTGCTCGGGCTCGTCCTGGGCTTCGTGCTGGCCTCGCGGCTCGTCCTGCCCCGGGCTTCCGAGCTGAAGC
GAGCGGGCCCACGGCGCCGCGCCAGCCCCGAGGGCTGCCGGTCCGGGCAGGCGGCGGCTTCCCAGGCCGGCGGGG
CGCGCGGCGATGCGCGCGGGGCGCAGCTCTGGCCGCCCGGCTCGGACCCAGATGGCGGCCCGCGCGACAGGAACT
TTCTCTTCGTGGGAGTCATGACCGCCCAGAAATACCTGCAGACTCGGGCCGTGGCCGCCTACAGAACATGGTCCA
AGACAATTCCTGGGAAAGTTCAGTTCTTCTCAAGTGAGGGTTCTGACACATCTGTACCAATTCCAGTAGTGCCAC
TACGGGGTGTGGACGACTCCTACCCGCCCCAGAAGAAGTCCTTCATGATGCTCAAGTACATGCACGACCACTACT
TGGACAAGTATGAATGGTTTATGAGAGCAGATGATGACGTGTACATCAAAGGAGACCGTCTGGAGAACTTCCTGA
GGAGTTTGAACAGCAGCGAGCCCCTCTTTCTTGGGCAGACAGGCCTGGGCACCACGGAAGAAATGGGAAAACTGG
CCCTGGAGCCTGGTGAGAACTTCTGCATGGGGGGGCCTGGCGTGATCATGAGCCGGGAGGTGCTTCGGAGAATGG
TGCCGCACATTGGCAAGTGTCTCCGGGAGATGTACACCACCCATGAGGACGTGGAGGTGGGAAGGTGTGTCCGGA
GGTTTGCAGGGGTGCAGTGTGTCTGGTCTTATGAGATGCAGCAGCTTTTTTATGAGAATTACGAGCAGAACAAAA
AGGGGTACATTAGAGATCTCCATAACAGTAAAATTCACCAAGCTATCACATTACACCCCAACAAAAACCCACCCT
ACCAGTACAGGCTCCACAGCTACATGCTGAGCCGCAAGATATCCGAGCTCCGCCATCGCACAATACAGCTGCACC
GCGAAATTGTCCTGATGAGCAAATACAGCAACACAGAAATTCATAAAGAGGACCTCCAGCTGGGAATCCCTCCCT
CCTTCATGAGGTTTCAGCCCCGCCAGCGAGAGGAGATTCTGGAATGGGAGTTTCTGACTGGAAAATACTTGTATT
CGGCAGTTGACGGCCAGCCCCCTCGAAGAGGAATGGACTCCGCCCAGAGGGAAGCCTTGGACGACATTGTCATGC
AGGTCATGGAGATGATCAATGCCAACGCCAAGACCAGAGGGCGCATCATTGACTTCAAAGAGATCCAGTACGGCT
ACCGCCGGGTGAACCCCATGTATGGGGCTGAGTACATCCTGGACCTGCTGCTTCTGTACAAAAAGCACAAAGGGA
AGAAAATGACGGTCCCTGTGAGGAGGCACGCGTATTTACAGCAGACTTTCAGCAAAATCCAGTTTGTGGAGCATG
AGGAGCTGGATGCACAAGAGTTGGCCAAGAGAATCAATCAGGAATCTGGATCCTTGTCCTTTCTCTCAAACTCCC
TGAAGAAGCTCGTCCCCTTTCAGCTCCCTGGGTCGAAGAGTGAGCACAAAGAACCCAAAGATAAAAAGATAAACA
TACTGATTCCTTTGTCTGGGCGTTTCGACATGTTTGTGAGATTTATGGGAAACTTTGAGAAGACGTGTCTTATCC
CCAATCAGAACGTCAAGCTCGTGGTTCTGCTTTTCAATTCTGACTCCAACCCTGACAAGGCCAAACAAGTTGAAC
TGATGACAGATTACCGCATTAAGTACCCTAAAGCCGACATGCAGATTTTGCCTGTGTCTGGAGAGTTTTCAAGAG
CCCTGGCCCTGGAAGTAGGATCCTCCCAGTTTAACAATGAATCTTTGCTCTTCTTCTGCGACGTCGACCTCGTCT
TTACTACAGAATTCCTTCAGCGATGTCGAGCAAATACAGTTCTGGGCCAACAAATATATTTTCCAATCATCTTCA
GCCAGTATGACCCAAAGATTGTTTATAGTGGGAAAGTTCCCAGTGACAACCATTTTGCCTTTACTCAGAAAACTG
GCTTCTGGAGAAACTATGGGTTTGGCATCACGTGTATTTATAAGGGAGATCTTGTCCGAGTGGGTGGCTTTGATG
TTTCCATCCAAGGCTGGGGGCTGGAGGATGTGGACCTTTTCAACAAGGTTGTCCAGGCAGGTTTGAAGACGTTTA
GGAGCCAGGAAGTAGGAGTAGTCCACGTCCACCATCCTGTCTTTTGTGATCCCAATCTTGACCCCAAACAGTACA
AAATGTGCTTGGGGTCCAAAGCATCGACCTATGGGTCCACACAGCAGCTGGCTGAGATGTGGCTGGAAAAAAATG
ATCCAAGTTACAGTAAAAGCAGCAATAATAATGGCTCAGTGAGGACAGCCTAATGTCCAGCTTTGCTGGAAAAGA
CGTTTTTAATTATCTAATTTATTTTTCAAAAATTTTTTGTATGATCAGTTTTTGAAGTCCGTATACAAGGATATA
TTTTACAAGTGGTTTTCTTACATAGGACTCCTTTAAGATTGAGCTTTCTGAACAAGAAGGTGATCAGTGTTTGCC
TTTGAACACATCTTCTTGCTGAACATTATGTAGCAGACCTGCTTAACTTTGACTTGAAATGTACCTGATGAACAA
AACTTTTTTAAAAAAATGTTTTCTTTTGAGACCCTTTGCTCCAGTCCTATGGCAGAAAACGTGAACATTCCTGCA
AAGTATTATTGTAACAAAACACTGTAACTCTGGTAAATGTTCTGTTGTGATTGTTAACATTCCACAGATTCTACC
TTTTGTGTTTTGTTTTTTTTTTTTTACAATTGTTTTAAAGCCATTTCATGTTCCAGTTGTAAGATAAGGAAATGT
GATAATAGCTGTTTCATCATTGTCTTCAGGAGAGCTTTCCAGAGTTGATCATTTCCCCTCATGGTACTCTGCTCA
GCATGGCCACGTAGGTTTTTTGTTTGTTTTGTTTTGTTCTTTTTTTGAGACGGAGTCTCACTCTGTTACCCAGGC
TGGAATGCAGTGGCGCAATCTTGGCTCACTTTAACCTCCACTTCCCTGGTTCAAGCAATTCCCCTGCCTTTGCCT

FIGURE 979B

CCCGAGTAGCTGGGATTACAGGCACACACCACCACGCCCAGCTAGTTTTTTTGTATTTTTAGTAGAGACGGGGTT
TCACCATGCAAGCCCAGCTGGCCACGTAGGTTTTAAAGCAAGGGGCGTGAAGAAGGCACAGTGAGGTATGTGGCT
GTTCTCGTGGTAGTTCATTCGGCCTAAATAGACCTGGCATTAAATTTCAAGAAGGATTTGGCATTTTCTCTTCTT
GACCCTTCTCTTTAAAGGGTAAAATATTAATGTTTAGAATGACAAAGATGAATTATTACAATAAATCTGATGTAC
ACAGACTGAAACACACACACATACACCCTAATCAAAACGTTGGGGAAAAATGTATTTGGTTTTGTTCCTTTCATC
CTGTCTGTGTTATGTGGGTGGAGATGGTTTTCATTCTTTCATTACTGTTTTGTTTTATCCTTTGTATCTGAAATA
CCTTTAATTTATTTAATATCTGTTGTTCAGAGCTCTGCCATTTCTTGAGTACCTGTTAGTTAGTATTATTTATGT
GTATCGGGAGTGTGTTTAGTCTGTTTTATTTGCAGTAAACCGATCTCCAAAGATTTCCTTTTGGAAACGCTTTTT
CCCCTCCTTAATTTTTATATTCCTTACTGTTTTACTAAATATTAAGTGTTCTTTGACAATTTTGGTGCTCATGTG
TTTTGGGGACAAAAGTGAAATGAATCTGTCATTATACCAGAAAGTTAAATTCTCAGATCAAATGTGCCTTAATAA
ATTTGTTTTCATTTAGATTTCAAACAGTGATAGACTTGCCATTTTAATACACGTCATTGGAGGGCTGCGTATTTG
TAAATAGCCTGATGCTCATTTGGAAAAATAAACCAGTGAACAATATTTTTCTATTGTACTTTTCAGAACCATTTT
GTCTCATTATTCCTGTTTTAGCTGAAGAATTGTATTACATTTGGAGAGTAAAAAACTTAAACACG

FIGURE 980

MAARGRRAWLSVLLGLVLGFVLASRLVLPRASELKRAGPRRRASPEGCRSGQAAASQAGGARGDARGAQLWPPGS
DPDGGPRDRNFLFVGVMTAQKYLQTRAVAAYRTWSKTIPGKVQFFSSEGSDTSVPIPVVPLRGVDDSYPPQKKSF
MMLKYMHDHYLDKYEWFMRADDDVYIKGDRLENFLRSLNSSEPLFLGQTGLGTTEEMGKLALEPGENFCMGGPGV
IMSREVLRRMVPHIGKCLREMYTTHEDVEVGRCVRRFAGVQCVWSYEMQQLFYENYEQNKKGYIRDLHNSKIHQA
ITLHPNKNPPYQYRLHSYMLSRKISELRHRTIQLHREIVLMSKYSNTEIHKEDLQLGIPPSFMRFQPRQREEILE
WEFLTGKYLYSAVDGQPPRRGMDSAQREALDDIVMQVMEMINANAKTRGRIIDFKEIQYGYRRVNPMYGAEYILD
LLLLYKKHKGKKMTVPVRRHAYLQQTFSKIQFVEHEELDAQELAKRINQESGSLSFLSNSLKKLVPFQLPGSKSE
HKEPKDKKINILIPLSGRFDMFVRFMGNFEKTCLIPNQNVKLVVLLFNSDSNPDKAKQVELMTDYRIKYPKADMQ
ILPVSGEFSRALALEVGSSQFNNESLLFFCDVDLVFTTEFLQRCRANTVLGQQIYFPIIFSQYDPKIVYSGKVPS
DNHFAFTQKTGFWRNYGFGITCIYKGDLVRVGGFDVSIQGWGLEDVDLFNKVVQAGLKTFRSQEVGVVHVHHPVF
CDPNLDPKQYKMCLGSKASTYGSTQQLAEMWLEKNDPSYSKSSNNNGSVRTA

FIGURE 981A

GGCACGAGTGGCGGAAAGGCTGCGGCCCCGCGCCAGAGGGCCGGTGGCTCCTCCGGGCTTCTGAGGACCCGCAGG
GAGCGGGCCTCATCATTTCTGTCTCCTGTTTCTCCACTTCCTTCTCTATTGGTTGGTCCACTGATGT**ATG**GACTT
GCACATGATGAACTGTGAACTTCTAGCCACATGTAGTGCCCTTGGGTACTTGGAGGGAGACACTTACCATAAGGA
ACCAGATTGCTTAGAGAGCGTGAAGGATCTGATCCGCTATTTGAGGCATGAGGATGAGACACGAGATGTGCGGCA
GCAGCTGGGGGCAGCCCAGATCCTACAGAGCGACCTTCTGCCCATCCTCACCCAGCACCACCAGGACAAGCCTCT
CTTTGATGCTGTTATCAGACTGATGGTGAACTTGACACAACCAGCCTTGCTCTGTTTTGGCAATCTGCCTAAGGA
GCCCAGCTTTCGGCACCATTTTTTGCAGGTGCTAACTTATTTGCAGGCCTACAAAGAGGCCTTTGCCAGTGAGAA
GGCTTTTGGAGTCCTCAGTGAAACCTTGTATGAGCTGCTGCAGCTGGGCTGGGAGGAACGGCAGGAGGAAGACAA
CTTGCTGATTGAACGGATCCTACTGCTGGTCAGAAATATTCTCCATGTCCCAGCTGACCTTGATCAGGAGAAGAA
GATTGATGATGACGCCAGTGCCCATGACCAGCTCCTCTGGGCGATTCACCTCAGCGGCCTGGATGACCTGCTCCT
CTTTCTGGCCAGCTCGTCTGCTGAGGAGCAATGGAGCCTACATGTGCTAGAGATTGTCTCCCTTATGTTTCGTGA
CCAGAACCCCGAGCAGCTGGCGGGAGTAGGGCAGGGACGCTTAGCTCAGGAGCGGAGTGCAGATTTTGCAGAACT
GGAGGTATTGCGCCAGCGAGAGATGGCAGAAAAGAAGACTCGAGCCCTCCAGCGAGGCAACAGGCATTCTCGATT
TGGGGGCTCCTATATTGTCCAGGGGTTGAAATCCATTGGGGAGAGGGACCTCATCTTTCACAAAGGCCTTCACAA
CCTACGAAACTACAGTTCAGATTTGGGAAAGCAGCCGAAAAAGGTGCCTAAACGTCGCCAGGCCGCCCGAGAGCT
GTCCATTCAGCGCCGTTCTGCCCTCAATGTGAGGCTCTTCCTCAGAGACTTCTGCTCTGAGTTCCTGGAGAACTG
TTACAACCGGCTCATGGGATCAGTAAAGGATCACCTGCTTCGGGAGAAAGCTCAGCAGCATGATGAGACCTATTA
TATGTGGGCCTTGGCTTTCTTCATGGCCTTCAACCGAGCTGCCTCCTTCCGGCCAGGCCTGGTTTCTGAGACCCT
CAGTGTCCGTACCTTCCACTTCATTGAGCAGAACCTCACCAACTACTATGAGATGATGCTGACTGACCGCAAGGA
AGCTGCCTCCTGGGCACGCCGGATGCACTTGGCTCTGAAGGCCTATCAGGAGCTGCTGGCAACAGTGAATGAGAT
GGACTTATCTCCAGATGAGGCTGTGAGGGAGAGCAGCCGCATCATCAAGAACAATATTTTCTATGTGATGGAGTA
CCGAGAACTATTCCTGGCACTTTTTCGAAAGTTTGATGAGAGATGCCAGCCCCGCTCTTTCCTTCGTGACCTGGT
GGAGACCACCCACCTCTTCCTCAAAATGTTGGAGCGATTCTGTCGGAGCCGTGGGAACCTGGTGGTGCAGAACAA
ACAAAAGAAGAGAAGGAAGAAGAAGAAGAAGGTCCTAGACCAGGCCATTGTTTCTGGTAATGTCCCATCTAGCCC
AGAAGAAGTGGAGGCTGTGTGGCCAGCCCTGGCTGAGCAGCTACAGTGCTGTGCCCAGAATTCTGAGCTCAGCAT
GGACTCCGTGGTTCCCTTTGATGCGGCCTCAGAGGTGCCAGTGGAGGAGCAGCGGGCAGAAGCTATGGTACGGAT
CCAAGACTGTCTCCTGGCTGGCCAGGCCCCACAGGCCCTGACTCTCCTGAGGTCTGCTCGGGAGGTGTGGCCTGA
AGGAGATGTGTTTGGCTCTCAAGACATTTCTCCAGAGGAAGAGATCCAGTTGCTGAAACAAATCCTCTCTGCTCC
ACTTCCCCGGCAGCAGGGCCCAGAGGAACGTGGGGCAGAGGAAGAAGAAGAGGAGGAGGAGGAGGAAGAGGAGGA
GTTGCAAGTGGTCCAGGTGTCGGAGAAAGAATTTAATTTTCTGGACTACCTGAAACGCTTTGCATGTTCAACTGT
CGTTCGAGCCTATGTGCTGCTACTAAGGAGCTACCAGCAGAATAGTGCCCACACTAACCATTGCATTGTGAAGAT
GCTGCACCGGCTGGCCCATGACCTCAAAATGGAAGCCCTACTTTTTCAGCTGTCAGTCTTCTGCCTCTTCAATCG
TCTGCTTAGTGACCCTGCTGCTGGAGCCTACAAAGAGCTAGTGACTTTTGCCAAATACATCCTGGGCAAATTTTT
TGCACTGGCTGCAGTCAACCAAAAAGCCTTTGTGGAGCTGTTGTTCTGGAAGAACACAGCTGTGGTTCGAGAGAT
GACTGAGGGCTATGGCTCCCTGGATGACAGGTCTTCCAGTCGCAGAGCACCTACATGGAGCCCCGAAGAAGAGGC
TCATCTTCAGGAGCTGTACCTCGCCAATAAGGACGTGGAAGGGCAGGATGTGGTGGAAGCCATCTTGGCCCACCT
GAATACTGTTCCTCGAACACGCAAGCAGATCATCCACCATCTGGTACAGATGGGACTGGCTGACAGTGTCAAGGA
CTTCCAAAGGAAAGGAACCCATATTGTACTGTGGACGGGGGATCAGGAGTTGGAGCTGCAGCGGCTTTTTGAGGA
ATTCCGGGACTCAGATGATGTCCTGGGTCATATCATGAAGAATATCACAGCCAAACGCTCACGGGCCCGAATAGT
GGATAAACTCTTGGCTCTGGGGCTGGTGGCTGAGCGGCGGGAGCTGTACAAGAAACGGCAGAAAAAGTTGGCATC
CTCCATCTTGCCAAATGGAGCGGAGTCCCTGAAAGATTTTTGCCAGGAAGATCTGGAAGAAGAGGAAAACCTGCC
TGAGGAAGACAGCGAAGAGGAAGAAGAAGGGGGCTCAGAAGCAGAACAAGTCCAGGGTAGCTTAGTCCTTTCAAA
TGAAAACCTTGGTCAAAGCCTGCATCAGGAAGGCTTTTCTATCCCGCTCCTATGGCTCCAGAACTGCCTGATCCG
AGCAGCTGATGATCGGGAAGAGGATGGCTGCTCCCAGGCCGTTCCATTGGTGCCACTCACAGAGGAAAATGAGGA
AGCCATGGAAAACGAACAGTTTCAGCAGCTGTTGCGCAAGCTAGGGGTTCGGCCCCCTGCCTCTGGGCAGGAAAC
CTTCTGGCGAATTCCAGCCAAGCTGAGTCCTACCCAGCTCCGGAGGGCAGCAGCTTCTTTGAGTCAACCAGAGGA
GGAACAGAAGCTGCAGCCAGAGCTGCAGCCTAAAGTCCCTGGAGAGCAAGGCTCTGATGAGGAGCACTGTAAAGA
GCACCGAGCACAAGCCCTGAGGGCCCTCTTGCTAGCCCACAAGAAGAAAGCGGGCCTGGCATCCCCAGAGGAGGA

FIGURE 981B

AGACGCTGTTGGTAAAGAGCCGCTGAAGGCAGCACCCAAGAAACGACAATTGCTGGACAGCGACGAGGAACAGGA
AGAAGATGAGGGCAGGAACAGAGCACCAGAGTTGGGAGCTCCAGGAATCCAAAAGAAGAAACGATACCAGATTGA
GGATGATGAGGATGACTGAAGAGCTAAGAAGCCTAGGGGTAGAGATAGACACGTTTTTAGATGGTGCATTCAAGT
CAGAGTTGGAAGGGTCATACAGGACCCAGAAGCTCCTCTTACTGGACAGAGCAGTAGAATCCCAGGCTCTTTCAC
GGATTTAGGCTGAGAAACTTCAGCAGCAGTATTGGACTTCTCTGCTGTCAGTCTTTGTTTCTCCCAGTTTTTATC
GGTATGCCCCAGCAGCTCTCTGGAGATTTAGTTCTCTTCTTCTAGGAACCATTTCTTTTGGTTATTGGAGCTCCT
TAGCAAATAAGAGGAGTGAGTGAAATAGAGAAAGCACCCCGGACCCCTTTTATTGGTCTGTTCCTTTGGCTTTCT
CTTGGAGGTGGGTCGCAGCACCAGATGGGGAGCTTTATGACATGACAGGCGGGAGTTTTGTACCACTTTTAGAAG
ATACCAGATGCCTCTGTCCTCATTTTGTTTCCTATGATCATCCTCTAGATACCAGATAGAGGCCCATTCCTGCAT
TTGAGATAGGGTTGGAATATAGTACTCTAGATGATGAATGTGTTTGCTTTGTGTTTGGTATTAAACATGTAAGAT
TAGAAGTTCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 982

MDLHMMNCELLATCSALGYLEGDTYHKEPDCLESVKDLIRYLRHEDETRDVRQQLGAAQILQSDLLPILTQHHQD
KPLFDAVIRLMVNLTQPALLCFGNLPKEPSFRHHFLQVLTYLQAYKEAFASEKAFGVLSETLYELLQLGWEERQE
EDNLLIERILLLVRNILHVPADLDQEKKIDDDASAHDQLLWAIHLSGLDDLLLFLASSSAEEQWSLHVLEIVSLM
FRDQNPEQLAGVGQGRLAQERSADFAELEVLRQREMAEKKTRALQRGNRHSRFGGSYIVQGLKSIGERDLIFHKG
LHNLRNYSSDLGKQPKKVPKRRQAARELSIQRRSALNVRLFLRDFCSEFLENCYNRLMGSVKDHLLREKAQQHDE
TYYMWALAFFMAFNRAASFRPGLVSETLSVRTFHFIEQNLTNYYEMMLTDRKEAASWARRMHLALKAYQELLATV
NEMDLSPDEAVRESSRIIKNNIFYVMEYRELFLALFRKFDERCQPRSFLRDLVETTHLFLKMLERFCRSRGNLVV
QNKQKKRRKKKKKVLDQAIVSGNVPSSPEEVEAVWPALAEQLQCCAQNSELSMDSVVPFDAASEVPVEEQRAEAM
VRIQDCLLAGQAPQALTLLRSAREVWPEGDVFGSQDISPEEEIQLLKQILSAPLPRQQGPEERGAEEEEEEEEEE
EEELQVVQVSEKEFNFLDYLKRFACSTVVRAYVLLLRSYQQNSAHTNHCIVKMLHRLAHDLKMEALLFQLSVFCL
FNRLLSDPAAGAYKELVTFAKYILGKFFALAAVNQKAFVELLFWKNTAVVREMTEGYGSLDDRSSSRRAPTWSPE
EEAHLQELYLANKDVEGQDVVEAILAHLNTVPRTRKQIIHHLVQMGLADSVKDFQRKGTHIVLWTGDQELELQRL
FEEFRDSDDVLGHIMKNITAKRSRARIVDKLLALGLVAERRELYKKRQKKLASSILPNGAESLKDFCQEDLEEEE
NLPEEDSEEEEEGGSEAEQVQGSLVLSNENLGQSLHQEGFSIPLLWLQNCLIRAADDREEDGCSQAVPLVPLTEE
NEEAMENEQFQQLLRKLGVRPPASGQETFWRIPAKLSPTQLRRAAASLSQPEEEQKLQPELQPKVPGEQGSDEEH
CKEHRAQALRALLLAHKKKAGLASPEEEDAVGKEPLKAAPKKRQLLDSDEEQEEDEGRNRAPELGAPGIQKKKRY
QIEDDEDD

FIGURE 983

CGTCTGTGCCAGCTCAAATCCAGCCCCTCGCCCTGTGCCACCCCAACTGTGCCTGATAGACCTGCCCCAGCGTTC
CTGACTTCTTGCTGGCCTGTGGAGGGTGAGGTGTAATTATTTGTCACCTGAACCTAATGTATATTCTCCTTGAGC
CCCAGATCCCTTCAAGCTGGAAGGGATGGGGCTGTTGGTGGGGTCAGGGTCCAAGAGGAATGGGTGTTCTGTGGC
CTCGAGTCCTCTCCTGTTTGCGAAAATACCAGTTTTGCTCTCTGTGGGACAAAGCACTGCTGATGAAGTCCCCGT
GGGCTCATCCGGGCTGGAATTCTTGGTTTTTCAGCCATTCCCTGCAGAGTCACTCAATCATCAAGTCCCTCACAG
CCATTTCTGTTCCCAGAGGAGCCAGGCCTGCAGCTGGCTGCTCAGGAGATGGCCTCATTCCTCCTGTTCTCCCAG
TTTGCTTTCCACTTAAGACAAAGCCTTGTCTATGTGGGGGGCGGGGACCGGGGAAAGAGGGAGGCTGAAATGTTT
ATTCTGCTTCTCCCGTGTTTCATGCCATCTCGCGTCCCCCTTCCTGCACATGGGTGTGAATGCACACACATACGC
GTACACACAGGACTTGGTCTGCTGGCCTGGCCTCTTCTGCCCAGGTGGGTTGGAACACGTTTGCTGCCTGAGCCT
GTGCCACTGAGCATGTTAGGTGGAGCAGTTGGTGTGGCACGTGCGGGGTGTTGGCACCGGAGGCATGGAAAAGCA
CAGGCTGTACTGCCAGGCTGCGATGCGTGCTGGCCCCCGCACAGGCTCCTGTGTGCAGGGACTGATTCCTCAGCA
CACGAGGCTTCCACAACCCAGTCTGCTCCATAGCACTCTGGCCCACCCTGTCTGCAGGTGAAACAGGAGGGCTGT
TTGCCTCTGCCCCATCCCCCCGACTGTGTTCAGGAGTCCCACCTTGCATTTCAGACCTGGGCTGGCAGTCTGTTG
GACTTCTCTTCAGGAAGAAAAAGCATCAGGGGGAAATGGAATGCCCCTGCCCCAGGAACATGGCAGAAGCACAGG
TTCTGTACCTCAGATGGACTCCTGCTGGGCCTTCGGGGTCTCAGTTGGCTTCCCCCAGATTCTGATTCTACAGCT
GCAGAATGTATATAACGCAATAAAAGCAAATGTTTGAACCAGTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 984

MASFLLFSQFAFHLRQSLVYVGGGDRGKREAEMFILLLPCFMPSRVPLPAHGCECTHIRVHTGLGLLAWPLLPRW
VGTRLLPEPVPLSMLGGAVGVARAGCWHRRHGKAQAVLPGCDACWPPHRLLCAGTDSSAHEASTTQSAP

FIGURE 985

TACTCCCGGAGTCACTCATCCCTTAAGCAAGCAGGGTGGGGTTAGGTGCGCGTGCGCGGTTTTAATACTCCTCCC
CGAACTGCCAACTCTTCACGCACGCGAAGTAGGCCCCACCCTGGCTGGGTTTACGCGTGCGCACTAACGGGCCTG
GTCCCGGAAGACCACACGCGTGCGTGGTGGGGACTACGGTGACAGTACCCCGGGTGGGGCGAGGGCCAGTCATGG
CGGAGTCCTGGTCTGGGCAGGCCTTGCAGGCTCTGCCGGCCACGGTGCTGGGCGCGCTGGGCAGCGAGTTCTTGC
GGGAGTGGGAGGCGCAGGACATGCGCGTGACCCTCTTCAAGCTGCTGCTGCTGTGGTTGGTGTTAAGTCTCCTGG
GCATCCAGCTGGCGTGGGGGTTCTACGGGAATACAGTGACCGGGTTGTATCACCGTCCAGGTCTGGGTGGTCAGA
ATGGATCCACGCCTGATGGCTCCACGCATTTCCCTTCGTGGGAAATGGCAGCAAACGAACCTCTCAAAACCCACA
GAGAATAAGGGAAGGCAGCAGAGGGTCTCCAAGGGCATCACTGGGTCTGCTGGCTTCTACACTGGGTTCTGCTAC
TCCCCAGACCTCAGGGACAACTGCCGGGGGTTCAGGGTTGGTAGCAGGGAGTACCCAGTGCCTACAGGGCTGGGC
CTCTTCTGCCTCTTAAGCCTGCTCCCTCACCCAGGCACTGGGCAAGTGAAGAGTTTGCCTGTACTCTTATCTGGG
TGCCTTAAGGAGAGAGATTGTGTTCTTCCTCTCTCAGGGGTGATAACTCAGGAAGCCTCTGGGTTGGGAAGACCA
TCAGTTCTTTTGTCTTAGGTTTCTTTTCCTGTCCCTCTTCCATCCCCAAGATGTGACCCCATAAAAATTTTTCCT
GAGTTGGCCAGGCATGGTGGCTCACGCCTGTAATCCCAACACTTTGGGAGGCTGAGGCAGGCAGATCACGAGGTC
AGGAGTTCGAGACCAGCCTGACCAACATGGTGAAAACCCCATCTCTACTAAAAATACAAAAATTAGCCGGGTGTG
GTGGCACACACCAGTAATCCCAGCTACTCGGGAGGCTGAAGCAGGAGATTTGCTTGAACCTGGGAGGCAGAGGTT
GCAGTGAGCCAAGATTGCGCCGTTGTACTCCAGCCTGGGCAACAGAGCAAGACCCATCTCAAAAAAAAAATTTTT
TTCCTGAGAGGAAGCCTGAGGTTGACCAGCTCTGGGGTTTGTAAGGCAGGTCTGTTTTCTCCTAGGCCCTGAGTT
TTCTGAATCTCTGGTTTTGCTTTGTTGGCAAGGAGCCAGGGAATCCTGACCTGAGCCAGACCTTAAGCTCTATGG
TTATTTAGCTGGCCATTCAGGTATAAGGCAGGGTGGTGTACCTGCTGGCACTATCCAGATGGAGGCACCAAACAC
CCACATACCTGGCCCAACCAGACTTCTCCCGTGAGCCAGGCAAAGGAAATTGTCATCTGCCAACTGTCCTACTCA
TATTCCTCTCAGTCCTTCTTGGGGGTAAGCTGATTACCTGAAGGACAGCTGAACCCCTGGGGTAGCCTCCTATCC
ACCACTGCTTAAGTGCCTATGGGAATGTGGGTCTGCACCTTGTCCCCTCATAGGATGGTACCAAGCATTTAGTGC
ACAGTGGCCCCATCATAGCCTGCAGCCTCATCATTTCCCATCTGGACCTGGTACAAATGCACGTCACAGGCTCAG
CTCCTCCCCACTAGCATCTTCTCTACCTTCAAGAACCAGGCAGCCCTGCCATGTCACAATAGGCCAGGGGAGTTT
CCAAAGATGTGGGTGGCAAATGCCCCTATAGAAACACCAGTACCTGAAAGCACTGTAGCCCTGGACCTGCCTCCT
TCCCTCGGGGCCATACTTCTGTTTCCATCTGCTGGGCCACCAGCCACTTTAGTGACCCCTGCCTACTTCCTTCCT
GTTGGATATCATACTTCCATCTGGCTGCCTTTGCTTAAGCCATCTTTGTGGTAGAGGGGCCCTGGAATTGCAGCT
GTACTGAGGATGATGTTATTCACAGCCCCTGGCCCACCCACTAATACTACTGCACAGAGTCAGGATCTCACATTT
CACCCCAGGCTCAACTGAGGATGTGGCTTATTAAACACGGAAGTGC

FIGURE 986

MAESWSGQALQALPATVLGALGSEFLREWEAQDMRVTLFKLLLLWLVLSLLGIQLAWGFYGNTVTGLYHRPGLGG
QNGSTPDGSTHFPSWEMAANEPLKTHRE

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FIGURE 987

GGGCGCCCCGCCGGTCACTTCCGCGCGGACACCAGCCTTGCAGAGCCCAGGGAGATGGAAGACTTCGCCCGAGGG
GCGGCCTCCCCAGGCCCCTCCCGGCCTGGCCTGGTTCCCGTCAGCATCATCGGGGCTGAGGATGAGGATTTTGAG
AACGAGCTGGAGACAAACTCAGAAGAGCAAAACAGCCAGTTCCAGAGCCTGGAGCAGGTGAAGCGGCGCCCAGCC
CACCTCATGGCCCTCCTGCAGCACGTGGCCCTGCAGTTTGAGCCAGGACCCCTGCTTTGCTGTCTGCATGCCGAC
ATGCTGGGCTCACTGGGCCCCAAGGAGGCCAAGAAGGCCTTCCTGGACTTCTACCACAGCTTCCTGGAGAAGACA
GCGGTTCTCCGGGTGCCGGTCCCTCCCAACGTCGCCTTTGAACTTGACCGCACTAGGGCTGACCTCATCTCCGAG
GATGTCCAGCGGCGGTTCGTGCAGGAGGTGGTGCAAAGCCAGCAGGTAGCCGTGGGCCGGCAGCTGGAGGACTTC
CGTTCCAAGCGGCTCATGGGCATGACGCCCTGGGAGCAGGAGCTGGCCCAGCTGGAGGCTTGGGTTGGGCGGGAC
CGAGCCAGCTACGAGGCCCGGGAGCGGCACGTGGCGGAGCGGCTGCTCATGCACCTGGAGGAGATGCAACATACC
ATCTCTACCGACGAAGAAAAGAGTGCTGCCGTGGTCAACGCCATTGGCCTGTACATGCGCCACCTTGGGGTGCGG
ACCAAGAGTGGAGACAAGAAGTCGGGGAGGAACTTCTTCCGGAAAAAGGTGATGGGGAACCGGCGGTCGGACGAG
CCTGCCAAGACCAAGAAGGGGCTGAGCAGCATCCTGGATGCCGCCCGCTGGAACCGGGGAGAGCCCCAGGTTCCA
GATTTTCGACACCTCAAAGCAGAGGTTGATGCCGAGAAGCCAGGTGCTACAGACCGGAAGGGAGGCGTGGGGATG
CCCTCTCGGGACCGGAATATCGGGGCTCCTGGGCAGGACACCCCTGGAGTCTCTCTGCACCCTCTGTCCCTGGAC
AGCCCAGACCGGGAACCAGGTGCTGACGCCCCCCTGGAGCTGGGGGACTCATCCCCGCAGGGCCCAATGAGCCTG
GAGTCCTTGGCGCCCCCAGAGAGTACCGACGAGGGGGCCGAAACCGAGAGCCCCGAGCCTGGAGATGAGGGGGAG
CCGGGGCGGTCGGGACTGGAGCTTGAACCAGAAGAGCCTCCCGGCTGGCGGGAACTCGTCCCCCCAGACACCCTG
CACAGCCTGCCCAAGAGCCAGGTGAAGCGGCAGGAGGTCATCAGCGAGCTGCTGGTGACAGAGGCGGCCCACGTG
CGCATGCTGCGGGTGCTGCACGACCTCTTCTTCCAGCCCATGGCAGAATGCCTGTTCTTCCCCTTGGAGGAGCTG
CAGAACATCTTCCCCAGCCTGGACGAGCTCATCGAGGTGCATTCCCTGTTCCTCGATCGCCTGATGAAGCGGAGG
CAGGAGAGTGGCTACCTCATCGAGGAGATCGGAGACGTGCTGCTGGCCCGGTTTGATGGTGCTGAGGGCTCCTGG
TTCCAGAAAATCTCCTCCCGCTTCTGCAGCCGCCAGTCATTTGCCTTAGAGCAGCTCAAAGCCAAGCAACGCAAG
GACCCTCGGTTCTGTGCCTTCGTGCAGGAAGCTGAGAGCCGCCCGCGGTGCCGCCGCCTGCAGCTGAAGGACATG
ATCCCCACGGAGATGCAGCGGCTGACCAAGTACCCCCTGCTCCTGCAGAGCATCGGGCAGAACACAGAAGAGCCC
ACAGAACGGGAGAAAGTGGAGCTGGCAGCCGAGTGCTGCCGGGAAATTCTACACCACGTCAACCAAGCCGTGCGT
GACATGGAGGACCTGCTGAGGCTCAAGGACTATCAGCGGCGCCTGGACTTGTCCCACCTTCGGCAGAGCAGCGAC
CCTATGCTGAGCGAGTTCAAGAACCTGGACATCACCAAGAAGAAATTGGTCCACGAGGGCCCACTGACGTGGCGG
GTGACTAAGGACAAGGCAGTGGAGGTGCATGTGCTGCTGCTGGACGACCTGCTGCTGCTGCTCCAGCGCCAGGAC
GAGCGGCTGCTGCTCAAGTCCCATAGCCGGACACTGACGCCCACGCCCGATGGCAAGACCATGCTGCGGCCCGTG
CTGCGGCTCACCTCCGCCATGACCCGCGAGGTGGCCACCGATCACAAAGCCTTCTACGTCCTTTTTACCTGGGAC
CAGGAGGCCCAGATATACGAGCTGGTGGCACAGACTGTGTCGGAGCGGAAAAACTGGTGTGCTCTCATCACTGAG
ACTGCCGGATCCCTGAAAGTCCCTGCCCCTGCCTCTCGCCCTAAGCCCCGGCCCAGCCCGAGCAGCACCCGAGAA
CCCCTCCTCAGCAGCTCTGAGAACGGCAATGGTGGCCGAGAGACGTCTCCAGCTGATGCCCGGACCGAGAGAATC
CTCAGTGACCTCCTGCCCTTCTGCAGACCAGGCCCCGAGGGCCAGCTCGCTGCCACGGCCCTTCGGAAAGTGCTG
TCCCTGAAGCAGCTTCTGTTTCCGGCGGAGGAAGACAATGGGGCGGGGCCTCCTCGAGATGGGGATGGGGTCCCA
GGGGGCGGCCCCCTGAGCCCAGCACGGACCCAGGAAATCCAGGAGAACCTGCTCAGCTTGGAGGAGACCATGAAG
CAGCTGGAGGAGTTGGAGGAGGAATTTTGCCGCCTGAGACCCCTCCTGTCTCAGCTTGGGGGGAACTCTGTCCCC
CAGCCTGGCTGCACTTGAGGTTCCCGCCCAGGAAGGCCTTTTGCAAGAAGGAGAGGAATGGGGGAGAGGACGTGA
GGGACCACCCCCACCCACACAGCTGCCGCAGCATCTCACACCCCGAGGGCCTGAGGAGAGGGAGCTGTGGGCCAC
GCCTGGGAGGGGCCCAGCTGGGGTTACTGGCCCCGCATGAGCCTCGGCCATCTCTCCCTCCTGCCCTCTGCTTGG
GGGACTCAGGGCTCCATTCTGGAGGGCACCACGGTGACCCGGGCCATCTCAGTATTGCCTGTGGGGGCCACCCCT
CCACCCCCACCCCCAAGTGCCTTCGCTCTGTTTTTATACCCTGAATTGGAGGGTTTATTTTTTAATATATATTAT
CTAAGAAGAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 988

MEDFARGAASPGPSRPGLVPVSIIGAEDEDFENELETNSEEQNSQFQSLEQVKRRPAHLMALLQHVALQFEPGPL
LCCLHADMLGSLGPKEAKKAFLDFYHSFLEKTAVLRVPVPPNVAFELDRTRADLISEDVQRRFVQEVVQSQQVAV
GRQLEDFRSKRLMGMTPWEQELAQLEAWVGRDRASYEARERHVAERLLMHLEEMQHTISTDEEKSAAVVNAIGLY
MRHLGVRTKSGDKKSGRNFFRKKVMGNRRSDEPAKTKKGLSSILDAARWNRGEPQVPDFRHLKAEVDAEKPGATD
RKGGVGMPSRDRNIGAPGQDTPGVSLHPLSLDSPDREPGADAPLELGDSSPQGPMSLESLAPPESTDEGAETESP
EPGDEGEPGRSGLELEPEEPPGWRELVPPDTLHSLPKSQVKRQEVISELLVTEAAHVRMLRVLHDLFFQPMAECL
FFPLEELQNIFPSLDELIEVHSLFLDRLMKRRQESGYLIEEIGDVLLARFDGAEGSWFQKISSRFCSRQSFALEQ
LKAKQRKDPRFCAFVQEAESRPRCRRLQLKDMIPTEMQRLTKYPLLLQSIGQNTEEPTEREKVELAAECCREILH
HVNQAVRDMEDLLRLKDYQRRLDLSHLRQSSDPMLSEFKNLDITKKKLVHEGPLTWRVTKDKAVEVHVLLLDDLL
LLLQRQDERLLLKSHSRTLTPTPDGKTMLRPVLRLTSAMTREVATDHKAFYVLFTWDQEAQIYELVAQTVSERKN
WCALITETAGSLKVPAPASRPKPRPSPSSTREPLLSSSENGNGGRETSPADARTERILSDLLPFCRPGPEGQLAA
TALRKVLSLKQLLFPAEEDNGAGPPRDGDGVPGGGPLSPARTQEIQENLLSLEETMKQLEELEEEFCRLRPLLSQ
LGGNSVPQPGCT

FIGURE 989

ACCTCCCTCCGCGGAGCAGCCAGACAGCGAGGGCCCCGGCCGGGGGCAGGGGGGACGCCCCGTCCGGGGCACCCC
CCCCGGCTCTGAGCCGCCCGCGGGGCCGGCCTCGGCCCGGAGCGGAGGAAGGAGTCGCCGAGGAGCAGCCTGAGG
CCCCAGAGTCTGAGACGAGCCGCCGCCGCCCCCGCCACTGCGGGGAGGAGGGGGAGGAGGAGCGGGAGGAGGGAC
GAGCTGGTCGGGAGAAGAGGAAAAAAACTTTTGAGACTTTTCCGTTGCCGCTGGGAGCCGGAGGCGCGGGGACCT
CTTGGCGCGACGCTGCCCCGCGAGGAGGCAGGACTTGGGGACCCCAGACCGCCTCCCTTTGCCGCCGGGGACGCT
TGCTCCCTCCCTGCCCCCTACACGGCGTCCCTCAGGCGCCCCCATTCCGGACCAGCCCTCGGGAGTCGCCGACCC
GGCCTCCCGCAAAGACTTTTCCCCAGACCTCGGGCGCACCCCCTGCACGCCGCCTTCATCCCCGGCCTGTCTCCT
GAGCCCCCGCGCATCCTAGACCCTTTCTCCTCCAGGAGACGGATCTCTCTCCGACCTGCCACAGATCCCCTATTC
AAGACCACCCACCTTCTGGTACCAGATCGCGCCCATCTAGGTTATTTCCGTGGGATACTGAGACACCCCCGGTCC
AAGCCTCCCCTCCACCACTGCGCCCTTCTCCCTGAGGAGCCTCAGCTTTCCCTCGAGGCCCTCCTACCTTTTGCC
GGGAGACCCCCAGCCCCTGCAGGGGCGGGGCCTCCCCACCACACCAGCCCTGTTCGCGCTCTCGGCAGTGCCGGG
GGGCGCCGCCTCCCCC**ATG**CCGCCCTCCGGGCTGCGGCTGCTGCCGCTGCTGCTACCGCTGCTGTGGCTACTGGT
GCTGACGCCTGGCCCGCCGGCCGCGGGACTATCCACCTGCAAGACTATCGACATGGAGCTGGTGAAGCGGAAGCG
CATCGAGGCCATCCGCGGCCAGATCCTGTCCAAGCTGCGGCTCGCCAGCCCCCCGAGCCAGGGGGAGGTGCCGCC
CGGCCCGCTGCCCGAGGCCGTGCTCGCCCTGTACAACAGCACCCGCGACCGGGTGGCCGGGGAGAGTGCAGAACC
GGAGCCCGAGCCTGAGGCCGACTACTACGCCAAGGAGGTCACCCGCGTGCTAATGGTGGAAACCCACAACGAAAT
CTATGACAAGTTCAAGCAGAGTACACACAGCATATATATGTTCTTCAACACATCAGAGCTCCGAGAAGCGGTACC
TGAACCCGTGTTGCTCTCCCGGGCAGAGCTGCGTCTGCTGAGGAGGCTCAAGTTAAAAGTGGAGCAGCACGTGGA
GCTGTACCAGAAATACAGCAACAATTCCTGGCGATACCTCAGCAACCGGCTGCTGGCACCCAGCGACTCGCCAGA
GTGGTTATCTTTTGATGTCACCGGAGTTGTGCGGCAGTGGTTGAGCCGTGGAGGGGAAATTGAGGGCTTTCGCCT
TAGCGCCCACTGCTCCTGTGACAGCAGGGATAACACACTGCAAGTGGACATCAACGGGTTCACTACCGGCCGCCG
AGGTGACCTGGCCACCATTCATGGCATGAACCGGCCTTTCCTGCTTCTCATGGCCACCCCGCTGGAGAGGGCCCA
GCATCTGCAAAGCTCCCGGCACCGCCGAGCCCTGGACACCAACTATTGCTTCAGCTCCACGGAGAAGAACTGCTG
CGTGCGGCAGCTGTACATTGACTTCCGCAAGGACCTCGGCTGGAAGTGGATCCACGAGCCCAAGGGCTACCATGC
CAACTTCTGCCTCGGGCCCTGCCCCTACATTTGGAGCCTGGACACGCAGTACAGCAAGGTCCTGGCCCTGTACAA
CCAGCATAACCCGGGCGCCTCGGCGGCGCCGTGCTGCGTGCCGCAGGCGCTGGAGCCGCTGCCCATCGTGTACTA
CGTGGGCCGCAAGCCCAAGGTGGAGCAGCTGTCCAACATGATCGTGCGCTCCTGCAAGTGCAGC**TGA**GGTCCCGC
CCCGCCCCGCCCCGCCCCGGCAGGCCCGGCCCCACCCCGCCCCGCCCCCGCTGCCTTGCCCATGGGGGCTGTATT
TAAGGACACCGTGCCCCAAGCCCACCTGGGGCCCCATTAAAGATGGAGAGAGGACTGCGGATCTCTGTGTCATTG
GGCGCCTGCCTGGGGTCTCCATCCCTGACGTTCCCCCACTCCCACTCCCTCTCTCTCCCTCTCTGCCTCCTCCTG
CCTGTCTGCACTATTCCTTTGCCCGGCATCAAGGCACAGGGGACCAGTGGGGAACACTACTGTAGTTAGATCTAT
TTATTGAGCACCTTGGGCACTGTTGAAGTGCCTTACATTAATGAACTCATTCAGTCACCATAGCAACACTCTGAG
ATGGCAGGGACTCTGATAACACCCATTTTAAAGGTTGAGGAAACAAGCCCAGAGAGGTTAAGGGAGGAGTTCCTG
CCCACCAGGAACCTGCTTTAGTGGGGGATAGTGAAGAAGACAATAAAAGATAGTAGTTCAGGCCAGGCGGGGTGC
TCACGCCTGTAATCCTAGCACTTTTGGGAGGCAGAGATGGGAGGATACTTGAATCCAGGCATTTGAGACCAGCCT
GGGTAACATAGTGAGACCCTATCTCTACAAAACACTTTTAAAAAATGTACACCTGTGGTCCCAGCTACTCTGGAG
GCTAAGGTGGGAGGATCACTTGATCCTGGGAGGTCAAGGCTGCAG

FIGURE 990

MPPSGLRLLPLLLPLLWLLVLTPGPPAAGLSTCKTIDMELVKRKRIEAIRGQILSKLRLASPPSQGEVPPGPLPE
AVLALYNSTRDRVAGESAEPEPEPEADYYAKEVTRVLMVETHNEIYDKFKQSTHSIYMFFNTSELREAVPEPVLL
SRAELRLLRRLKLKVEQHVELYQKYSNNSWRYLSNRLLAPSDSPEWLSFDVTGVVRQWLSRGGEIEGFRLSAHCS
CDSRDNTLQVDINGFTTGRRGDLATIHGMNRPFLLLMATPLERAQHLQSSRHRRALDTNYCFSSTEKNCCVRQLY
IDFRKDLGWKWIHEPKGYHANFCLGPCPYIWSLDTQYSKVLALYNQHNPGASAAPCCVPQALEPLPIVYYVGRKP
KVEQLSNMIVRSCKCS

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FIGURE 991

CGTGGATCCCGAGAAAGAGGCGCAGGACGAGGAGGCAGAACCCGACTGGCGCGTAGAGCAGCAGCACGAGCAGTA
GGAAGCAGTCACCCGGAAGCCTGGGGGCGAGAGGCGAAGTGGTCAGGCGCCGAAGGCCGAGAGCACGCGGGGATC
GGTCTCTTCCCGCCGGGTCTCTTACCGGTGCGAGTCAAAGAGCCGCTCCGGCCCCGGCCCTGAGGGAAGCTCCAT
AACTGCTGCTTCAGGAGCGCCCGGCCGTCGCCGCCGCCGCCATTTTCGCGCCCGGCCGCAGGGGCTCTTGGGAAG
GCGGAGTCTTTGGGCATCCGCCCGGGGTGAGGGGACCCGAAGTCCTGAGGCGCGCCGGAAGGGCTAGCGGTCCCA
GCATACCCCGCGGCCCCTTGGGCCGTCTCACAACTCGCGTCCGGCGGAGACCACAATTCCCGGCATTCGTGGGGC
AGGGAGGAGTCGGCCTCCCGGAATCCTGGTCCCGGCGTGCACTTCTGAAGGACTTCAGGTACCGGCGTGCCCCGC
GTCCTACTGTCCGCCTGCTCGCGTCCTGGGTGCCGCCTCTGAGTAGGGCGGGCGAGGAGGCAGCCAAGGCGGAGC
TGATGGCTGCGCCGAGGGCGGGGCGGGGTGCAGGCTGGAGCCTTCGGGCATGGCGGGCTTTGGGGGGCATTCGCT
GGGGGAGGAGACCCCGTTTGACCCCTGACCTCCGGGCCCTGCTGACGTCAGGAACTTCTGACCCCCGGGCCCGAG
TGACTTATGGGACCCCCAGTCTCTGGGCCCGGTTGTCTGTTGGGGTCACTGAACCCCGAGCATGCCTGACGTCTG
GGACCCCGGGTCCCCGGGCACAACTGACTGCGGTGACCCCAGATACCAGGACCCGGGAGGCCTCAGAGAACTCTG
GAACCCGTTCGCGCGCGTGGCTGGCGGTGGCGCTGGGCGCTGGGGGGGCAGTGCTGTTGTTGTTGTGGGGCGGGG
GTCGGGGTCCTCCGGCCGTCCTCGCCGCCGTCCCTAGCCCGCCGCCCGCTTCTCCCCGGAGTCAGTACAACTTCA
TCGCAGATGTGGTGGAGAAGACAGCACCTGCCGTGGTCTATATCGAGATCCTGGACCGGCACCCTTTCTTGGGCC
GCGAGGTCCCTATCTCGAACGGCTCAGGATTCGTGGTGGCTGCCGATGGGCTCATTGTCACCAACGCCCATGTGG
TGGCTGATCGGCGCAGAGTCCGTGTGAGACTGCTAAGCGGCGACACGTATGAGGCCGTGGTCACAGCTGTGGATC
CCGTGGCAGACATCGCAACGCTGAGGATTCAGACTAAGGAGCCTCTCCCCACGCTGCCTCTGGGACGCTCAGCTG
ATGTCCGGCAAGGGGAGTTTGTTGTTGCCATGGGAAGTCCCTTTGCACTGCAGAACACGATCACATCCGGCATTG
TTAGCTCTGCTCAGCGTCCAGCCAGAGACCTGGGACTCCCCCAAACCAATGTGGAATACATTCAAACTGATGCAG
CTATTGATTTTGGAAACTCTGGAGGTCCCCTGGTTAACCTGGATGGGGAGGTGATTGGAGTGAACACCATGAAGG
TCACAGCTGGAATCTCCTTTGCCATCCCTTCTGATCGTCTTCGAGAGTTTCTGCATCGTGGGGAAAAGAAGAATT
CCTCCTCCGGAATCAGTGGGTCCCAGCGGCGCTACATTGGGGTGATGATGCTGACCCTGAGTCCCAGCATCCTTG
CTGAACTACAGCTTCGAGAACCAAGCTTTCCCGATGTTCAGCATGGTGTACTCATCCATAAAGTCATCCTGGGCT
CCCCTGCACACCGGGCTGGTCTGCGGCCTGGTGATGTGATTTTGGCCATTGGGGAGCAGATGGTACAAAATGCTG
AAGATGTTTATGAAGCTGTTCGAACCCAATCCCAGTTGGCAGTGCAGATCCGGCGGGGACGAGAAACACTGACCT
TATATGTGACCCCTGAGGTCACAGAATGAATAGATCACCAAGAGTATGAGGCTCCTGCTCTGATTTCCTCCTTGC
CTTTCTGGCTGAGGTTCTGAGGGCACCGAGACAGAGGGTTAAATGAACCAGTGGGGGCAGGTCCCTCCAACCACC
AGCACTGACTCCTGGGCTCTGAAGAATCACAGAAACACTTTTTATATAAAATAAAATTATACCTAGCAACATATT
ATAGTAAAAAATGAGGTGGGAGGGCTGGATCTTTTCCCCCACCAAAAGGCTAGAGGTAAAGCTGTATCCCCCTAA
ACTTAGGGGAGATACTGGAGCTGACCATCCTGACCTCCTATTAAAGAAAATGAGCTGCTGAAAAAAAAAAAAAAA
A

FIGURE 992

MAAPRAGRGAGWSLRAWRALGGIRWGRRPRLTPDLRALLTSGTSDPRARVTYGTPSLWARLSVGVTEPRACLTSG
TPGPRAQLTAVTPDTRTREASENSGTRSRAWLAVALGAGGAVLLLLWGGGRGPPAVLAAVPSPPPASPRSQYNFI
ADVVEKTAPAVVYIEILDRHPFLGREVPISNGSGFVVAADGLIVTNAHVVADRRRVRVRLLSGDTYEAVVTAVDP
VADIATLRIQTKEPLPTLPLGRSADVRQGEFVVAMGSPFALQNTITSGIVSSAQRPARDLGLPQTNVEYIQTDAA
IDFGNSGGPLVNLDGEVIGVNTMKVTAGISFAIPSDRLREFLHRGEKKNSSSGISGSQRRYIGVMMLTLSPSILA
ELQLREPSFPDVQHGVLIHKVILGSPAHRAGLRPGDVILAIGEQMVQNAEDVYEAVRTQSQLAVQIRRGRETLTL
YVTPEVTE

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FIGURE 993

GTGATGGCGGCGCCGGAGGCGGAGGTTCTGTCCTCAGCCGCAGTCCCTGATTTGGAGTGGTATGAGAAGTCCGAA
GAAACTCACGCCTCCCAGATAGAACTACTTGAGACAAGCTCTACGCAGGAACCTCTCAACGCTTCGGAGGCCTTT
TGCCCAAGAGACTGCATGGTACCAGTGGTGTTTCCTGGGCCTGTGAGCCAGGAAGGCTGCTGTCAGTTTACTTGT
GAACTTCTAAAGCATATCATGTATCAACGCCAGCAGCTCCCTCTGCCCTATGAACAGCTTAAGCACTTTTACCGA
AAACCTTCTCCCCAGGCAGAGGAGATGCTGAAGAAGAAACCTCGGGCCACCACTGAGGTGAGCAGCAGGAAATGC
CAACAAGCCCTGGCAGAACTGGAGAGTGTCCTCAGCCACCTGGAGGACTTCTTTGCACGGACACTAGTACCGCGA
GTGCTGATTCTCCTTGGGGGCAATGCCCTAAGCCCCAAGGAGTTCTATGAACTCGACTTGTCTCTGCTGGCCCCC
TACAGCGTGGACCAGAGCCTGAGCACAGCAGCTTGTTTGCGCCGTCTCTTCCGAGCCATATTCATGGCTGATGCC
TTTAGCGAGCTTCAGGCTCCTCCACTCATGGGCACCGTCGTCATGGCACAGGGACACCGCAACTGTGGAGAAGAT
TGGTTTCGACCCAAGCTCAACTATCGAGTGCCCAGCCGGGGCCATAAACTGACTGTGACCCTGTCATGTGGCAGA
CCTTCCATCCGAACCACGGCTTGGGAAGACTACATTTGGTTCCAGGCACCAGTGACATTTAAAGGCTTCCGCGAG
TGAATGAGTGCTTCTTAATCCTAAAAACACAATGGCTGAATTATCTTTCTCCATGTGGCGCTGAATCACCCATCT
GGTTTGGAGCTAGAGTTGCTTCCTGGTGAGAGAGGAAGCAACTCTCCTTCTGGTTGTCTGCCTCCCCTCAGATTT
CCTGATAGGCTGATGGCATGTGGCTGTGACTGTGACTGTAATCATTGCTGAACAACATCTCTTTGAATCAAAGGT
TGATTTTCCCAGAGGGTGCTGGGTCAGGCATTTCTATTAGGAGTTGGAAAGCAAAAATGGGTCCATAGACACTCT
ATGGAGGTGTCCCTTTCTGCTCTTTGCTGTGTCCTTTCAGAATTTTTACCAGGAACATAATGTGGATGTGACTTA
TGAACTTAAATATAAAATAAATAGATTCTTATT

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FIGURE 994

MAAPEAEVLSSAAVPDLEWYEKSEETHASQIELLETSSTQEPLNASEAFCPRDCMVPVVFPGPVSQEGCCQFTCE
LLKHIMYQRQQLPLPYEQLKHFYRKPSPQAEEMLKKKPRATTEVSSRKCQQALAELESVLSHLEDFFARTLVPRV
LILLGGNALSPKEFYELDLSLLAPYSVDQSLSTAACLRRLFRAIFMADAFSELQAPPLMGTVVMAQGHRNCGEDW
FRPKLNYRVPSRGHKLTVTLSCGRPSIRTTAWEDYIWFQAPVTFKGFRE

FIGURE 995

GGGCGCGGTGTGCCGCGGGGCAGTTGCGGGTTGTCATAACGGTCCCCGCCGGAGTGAGGCGAGGCCGCGTCGCTC
AGTTCTGGCCGTCTAGGGCCCCTGTAAGGATGAGAGCGCAGAGGACGCAGGGCCGCTGGAGGCGCAGGTAACGAA
GCTAGGGTGCGGTTGGGACCGCGGCTGAGCTTTTTCCGGGACCCGTGGTGCTGAATGGAGAGGACGGAGACGAAG
CCGAGCCGCGGCTCCTAGCGGCGGCGCCGATGCTCGAGCTGTAGCTGCCAGGCGAGGATGTGTGGAGCGCAGGCG
GCGCGGGGTAAATGAGAGGTCTCGGGCCCCAGGACCCCCGGGGCCCGGGATGAGTTAGCGAGGGCAGCCGCGGGG
GCCAGTTCCGACCGTGACAGGCCAAGGCGACGGCCGCCGCCCGCCCGCCCCTTCCGTGCAGAAGCAGCTGCTCCT
TTCCGCGCCCGCCCGCCTGCGCTCCCGGCCCTGGAGACC**ATG**AGGTTCCGCATCTACAAACGGAAGGTGCTAATC
CTGACGCTCGTGGTGGCCGCCTGCGGCTTCGTCCTCTGGAGCAGCAATGGGCGACAAAGGAAGAACGAGGCCCTC
GCCCCACCGTTGCTGGACGCCGAACCCGCGCGGGGTGCCGGCGGCCGCGGTGGGGACCACCCCTCTGTGGCTGTG
GGCATCCGCAGGGTCTCCAACGTGTCGGCGGCTTCCCTGGTCCCGGCGGTCCCCCAGCCCGAGGCGGACAACCTG
ACGCTGCGGTACCGGTCCCTGGTGTACCAGCTGAACTTTGATCAGACCCTGAGGAATGTAGATAAGGCTGGCACC
TGGGCCCCCCGGGAGCTGGTGCTGGTGGTCCAGGTGCATAACCGGCCCGAATACCTCAGACTGCTGCTGGACTCA
CTTCGAAAAGCCCAGGGAATTGACAACGTCCTCGTCATCTTTAGCCATGACTTCTGGTCGACCGAGATCAATCAG
CTGATCGCCGGGGTGAATTTCTGTCCGGTTCTGCAGGTGTTCTTTCCTTTCAGCATTCAGTTGTACCCTAACGAG
TTTCCAGGTAGTGACCCTAGAGATTGTCCCAGAGACCTGCCGAAGAATGCCGCTTTGAAATTGGGGTGCATCAAT
GCTGAGTATCCCGACTCCTTCGGCCATTATAGAGAGGCCAAATTCTCCCAGACCAAACATCACTGGTGGTGGAAG
CTGCATTTTGTGTGGGAAAGAGTGAAAATTCTTCGAGATTATGCTGGCCTTATACTTTTCCTAGAAGAGGATCAC
TACTTAGCCCCAGACTTTTACCATGTCTTCAAAAAGATGTGGAAACTGAAGCAGCAAGAGTGCCCTGAATGTGAT
GTTCTCTCCCTGGGGACCTATAGTGCCAGTCGCAGTTTCTATGGCATGGCTGACAAGGTAGATGTGAAAACTTGG
AAATCCACAGAGCACAATATGGGTCTAGCCTTGACCCGGAATGCCTATCAGAAGCTGATCGAGTGCACAGACACT
TTCTGTACTTATGATGATTATAACTGGGACTGGACTCTTCAATACTTGACTGTATCTTGTCTTCCAAAATTCTGG
AAAGTGCTGGTTCCTCAAATTCCTAGGATCTTTCATGCTGGAGACTGTGGTATGCATCACAAGAAAACCTGTAGA
CCATCCACTCAGAGTGCCCAAATTGAGTCACTCTTAAATAATAACAAACAATACATGTTTCCAGAAACTCTAACT
ATCAGTGAAAAGTTTACTGTGGTAGCCATTTCCCCACCTAGAAAAAATGGAGGGTGGGGAGATATTAGGGACCAT
GAACTCTGTAAAAGTTATAGAAGACTGCAG**TGA**AAATCACAGTTACAAAAGCGACAGTCTTCTATTTTTGATATT
TGTCCAAACAGGACATACAATTGAATAAAAGAGTTTAGGAACTGGTTTCTGCTTTAATACAAAAACAAAATCTTG
TAAAAGGTGTCCAAATACATAGTAATCTTTTCCAGTTATGTCTGATTAAGATTTAAAACTGAAGGTTTCATTTTG
GGAGTAGGGTTTTAAAGCTCAATCTGTTATCTGCTAAAATTGATTATTGTTGATATGAGAGAAGAGGGGAAATTT
TATTTAAATTGCATTTATTAATCTTTTTATCTGAAACTTTGTACACTTTTCCACTTTCAAAACCTATTTTAAGTA
CAGCAAAATTTATTTAAAACTGTGATAGCAGTAAAAAGTATTACGATGAAATTGTTAGGGTATTAATGGAACAAA
CCCAGTTTCACTCTCTTGACACACTTATTAGGAAGGGATTGCTTCACTGGTTTAATAATTTAAAAGTTATGTTTG
TTAAACACCCTGTCAGAACAGTCATTTTCAGTATTAGATTCCTGTACTATTGTGTTTTGAGTGTGTTTTGGAACC
TTCATAGAACACACTTTCTTTTGGAATGTATTTGATTGATAAGAAAGTTTAAACATTGTTTTCACCTCAATGTAG
AAATACAGTGGTTTTGTTTTTTTTTTCTTTTAGTGCTGACAAAATAAAATACTCATTTTTGCATAAAAAGGTTC
CTAATCCTTTTGCAGAATAAGTTTTGTTTACTCTTTATACCAAAATTCAGTGAAGGCATTCTACAAGTTTTGAGT
TAGCATTACATTTTAATATTTACTATTGCTACATTGTATAATTGAGTTTGAA

FIGURE 996

MRFRIYKRKVLILTLVVAACGFVLWSSNGRQRKNEALAPPLLDAEPARGAGGRGGDHPSVAVGIRRVSNVSAASL
VPAVPQPEADNLTLRYRSLVYQLNFDQTLRNVDKAGTWAPRELVLVVQVHNRPEYLRLLLDSLRKAQGIDNVLVI
FSHDFWSTEINQLIAGVNFCPVLQVFFPFSIQLYPNEFPGSDPRDCPRDLPKNAALKLGCINAEYPDSFGHYREA
KFSQTKHHWWWKLHFVWERVKILRDYAGLILFLEEDHYLAPDFYHVFKKMWKLKQQECPECDVLSLGTYSASRSF
YGMADKVDVKTWKSTEHNMGLALTRNAYQKLIECTDTFCTYDDYNWDWTLQYLTVSCLPKFWKVLVPQIPRIFHA
GDCGMHHKKTCRPSTQSAQIESLLNNNKQYMFPETLTISEKFTVVAISPPRKNGGWGDIRDHELCKSYRRLQ

FIGURE 997

CCCTTTCATCAGTCTTCCCGCGTCCGCCGATTCCTCCTCCTTGGTCGCCGCGTCCTTGGCTGGCGTTAGAGACGG
GGTTTCAACGTGTTGGCCAGGATGGTCTCAGTCTCCAGACCCTGTGATCCGCCCGCCTCGGCCTCCCAAAGTGTT
GGGATTACAGGTGTGAGCCACCGTCCTGGCCGAGGCTCCTTCTTTTATGAGGAGCGGGAAGGCCTCCTGCACCCT
GGAGACCGTGTGGGAAGACAAGCACAAGTATGAGGAGGCCGAGCGGCGCTTCTACGAACACGAGGCCACACAGGC
GGCCGCCTCCGCCCAGCAGCTGCCAGCCGAGGGGCCAGCCATGAATGGGCCCGGCCAGGACGACCCTGAGGACGC
TGATGAGGCGGAAGCCCCTGACGGCGGCAGCAGGCGTGATCCCAGGAAGAGCCAGGACAGCAGGAAGCCCCTGCA
GAAAAAGAGGAAGCGCTCCCCCAAGAGCGGGCTCGGCCCCGCGGACCTGGCCCTCCTGGGCCTCTCGGCCGAACG
TGTGTGGCTGGACAAGTCACTTTTCGACCAGGCAGAGAGCTCCTACCGCCAGAAGCTGGCAGATGTGGCTGCCCA
GGCAGCCTGGCCTCCTGCCTTGGCCCCTTGGGGTCTCTGCACCCATGGAAACCAGGTGGCCTGCCACCACGTGAC
CTGGGGGATCTGGGTCAACAAGTCCTCCTTCGACCAGGCTGAGCGGGCCTTCGTGGAGTGGTCTCAGGCCCTGTT
GCTGGCCCCCGAGGGCAGCCGCAGGCAGGGGACTCCCAACACAGGCCAGCAGGTGGCCGTCCCCGACCTGGCCCA
CCAGCCCAGCCCACCGGTCAATGGCCAGCCCCCGCTGGGCAGCCTGCAGGCACTGGTTCGGGAGGTGTGGCTGGA
GAAGCCCCGGTATGATGCAGCCGAGAGGGGCTTCTACGAGGCCCTGTTTGACGGCCATCCCCCAGGGAAGGTGCG
CCTGCAAGAGCGAGCCGGCCTGGCCGAGGGTGCCCGGCGGGGCCGCAGAGACCGGCGGGGCCGCAACATCTTAGG
GAACAAGCGGGCCGGGCTGCGACGGGCCGATGGGGAGGCCCCCTCTGCCTTGCCCTACTGTTACTTCCTGCAGAA
GGATGCAGAGGCCCCCTGGCTCAGCAAGCCTGCCTACGACAGCGCCGAGTGCCGCCACCACGCTGCCGAGGCCCT
GCGTGTGGCCTGGTGCCTCGAAGCTGCCTCCCTGTCTCACCGACCCGGTCCTCGGTCTGGCCTGTCCGTGTCCAG
CCTGAGACCCAACAGAAAAATGGCTACAAACTTCCTAGCACATGAGAAGATCTGGTTCGACAAGTTCAAATATGA
CGACGCAGAAAGGAGATTCTACGAGCAGATGAACGGGCCTGTGGCAGGTGCCTCCCGCCAGGAGAACGGCGCCAG
CGTGATCCTCCGTGACATTGCGAGAGCCAGAGAGAACATCCAGAAATCCCTGGCTGGAAGCTCAGGCCCCGGGGC
CTCCAGCGGCACCAGCGGAGACCACGGTGAGCTCGTCGTCCGGATTGCCAGTCTGGAAGTGGAGAACCAGAGTCT
GCGTGGCGTGGTACAGGAGCTGCAGCAGGCCATCTCCAAGCTGGAGGCCCGGCTGAACGTGCTGGAGAAGAGCTC
GCCTGGCCACCGGGCCACGGCCCCACAGACCCAGCACGTATCTCCCATGCGCCAAGTGGAGCCCCCAGCCAAGAA
GCCAGCCACACCAGCAGAGGATGACGAGGATGATGACATTGACCTGTTTGGCAGTGACAATGAGGAGGAGGACAA
GGAGGCGGCACAGCTGCGGGAGGAGCGGCTACGGCAGTACGCGGAGAAGAAGGCCAAGAAGCCTGCACTGGTGGC
CAAGTCCTCCATCCTGCTGGATGTCAAGCCTTGGGATGATGAGACGGACATGGCCCAGCTGGAGGCCTGTGTGCG
CTCTATCCAGCTGGACGGGCTGGTCTGGGGGGCTTCCAAGCTGGTGCCCGTGGGCTACGGTATCCGGAAGCTACA
GATTCAGTGTCTGGTGGAGGACGCCAAGGTGGGGACAAACTTGGTGGAGGAGGAGATCCCCAAGTTTGAGGAGCG
CGTGCAAAGTGTCGATATCCCAGCTTTCAACAAAATTTGAAGCCTGAGTGTGTGTACGAGGGGGCGTGCGTGAGG
CCCTCCCCCGATTAAATAATTGGCCCGGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAA

FIGURE 998

MRSGKASCTLETVWEDKHKYEEAERRFYEHEATQAAASAQQLPAEGPAMNGPGQDDPEDADEAEAPDGGSRRDPR
KSQDSRKPLQKKRKRSPKSGLGPADLALLGLSAERVWLDKSLFDQAESSYRQKLADVAAQAAWPPALAPWGLCTH
GNQVACHHVTWGIWVNKSSFDQAERAFVEWSQALLLAPEGSRRQGTPNTGQQVAVPDLAHQPSPPVNGQPPLGSL
QALVREVWLEKPRYDAAERGFYEALFDGHPPGKVRLQERAGLAEGARRGRRDRRGRNILGNKRAGLRRADGEAPS
ALPYCYFLQKDAEAPWLSKPAYDSAECRHHAAEALRVAWCLEAASLSHRPGPRSGLSVSSLRPNRKMATNFLAHE
KIWFDKFKYDDAERRFYEQMNGPVAGASRQENGASVILRDIARARENIQKSLAGSSGPGASSGTSGDHGELVVRI
ASLEVENQSLRGVVQELQQAISKLEARLNVLEKSSPGHRATAPQTQHVSPMRQVEPPAKKPATPAEDDEDDDIDL
FGSDNEEEDKEAAQLREERLRQYAEKKAKKPALVAKSSILLDVKPWDDETDMAQLEACVRSIQLDGLVWGASKLV
PVGYGIRKLQIQCLVEDAKVGTNLVEEEIPKFEERVQSVDIPAFNKI

FIGURE 999

CACTGCTCCTCCGGCTCCCGGGAAGCCGCGAGTTTCCGCAGGGAGGCGGCGGCAGCTGCGGCGGGGCCGGTCTGT
AGCCTTTGCTGAGTCAACACTACTCACAGTGAAAGTGATGCCTTTTCTCCATTTGCACAACATGAGTGTGACGTG
GTTAGCCAGACCAGGAGCTCAACCTCATGTAGAATCCAGTCCACTGCTCTG**ATG**CCGAAGGGGAGGCAGAAAGTG
CCACACTTGGATGCCCCCCTGGGCCTGCCCACCTGCCTCTGGCTGGAATTAGCCGGGCTCTTCTTACTGGTTCCC
TGGGTCATGGGCCTGGCAGGGACAGGTGGGCCTGATGGCCAGGGCACAGGGGGGCCGAGCTGGGCTGTGCACCTG
GAAAGCCTGGAAGGTGACGGGGAGGAAGAGACTCTGGAGCAGCAGGCGGATGCCTTGGCCCAGGCAGCAGGGCTG
GTGAATGCTGGACGCATCGGAGAGCTTCAGGGGCACTACCTCTTTGTCCAGCCTGCTGGGCACAGGCCGGCCCTG
GAGGTGGAGGCCATCCGGCAGCAGGTGGAGGCTGTGTTGGCTGGGCATGAAGCTGTGCGCTGGCACTCAGAGCAG
AGGCTGCTAAGGCGGGCCAAGCGCAGCGTCCACTTCAACGACCCCAAGTACCCGCAGCAATGGCACCTGAATAAC
CGACGGAGCCCGGGCAGGGACATCAACGTGACGGGTGTGTGGGAACGCAATGTGACTGGGCGAGGGGTGACGGTG
GTGGTAGTGGATGACGGAGTGGAACACACCATCCAGGACATTGCACCCAACTATAGCCCTGAGGGTAGCTATGAC
CTCAACTCTAATGACCCTGACCCCATGCCCCACCCGGATGTGGAGAATGGCAACCACCATGGCACGCGATGTGCA
GGAGAGATCGCGGCTGTGCCCAACAACAGCTTCTGTGCCGTGGGCGTGGCCTACGGGAGCCGCATCGCAGGTATC
CGGGTACTGGATGGACCTCTCACAGACAGCATGGAGGCAGTGGCGTTCAACAAGCACTATCAGATCAATGACATC
TACAGCTGCAGCTGGGGACCAGATGACGATGGGAAGACAGTGGATGGCCCCCATCAGCTTGGAAAGGCTGCCTTA
CAACATGGGGTGATTGCTGGTCGCCAGGGCTTTGGGAGCATCTTTGTGGTAGCCAGTGGCAACGGAGGCCAACAC
AACGACAACTGCAACTACGATGGCTACGCCAACTCCATCTACACCGTCACCATAGGAGCTGTGGATGAGGAGGGA
CGCATGCCTTTCTATGCAGAAGAATGTGCCTCCATGCTGGCAGTCACCTTCAGTGGTGGGGACAAGATGCTTCGG
AGCATTGTGACCACTGACTGGGACCTTCAGAAGGGCACTGGCTGCACTGAGGGCCACACAGGGACCTCAGCTGCA
GCGCCTCTGGCAGCTGGCATGATAGCCTTAATGCTGCAGGTGCGGCCCTGCCTCACGTGGCGTGACGTCCAGCAC
ATCATTGTCTTCACAGCCACCCGGTATGAGGATCGCCGTGCAGAGTGGGTCACCAACGAGGCAGGCTTCAGCCAT
AGCCACCAGCACGGTTTCGGCCTCCTCAACGCCTGGAGGCTCGTGAATGCAGCCAAGATCTGGACATCTGTCCCT
TACTTAGCATCCTACGTCAGTCCCGTGTTAAAAGAAAACAAGGCGATTCCGCAGTCCCCCCGTTCCCTGGAGGTC
CTGTGGAATGTCAGCAGGATGGACCTGGAGATGTCAGGGCTGAAGACCCTGGAGCATGTGGCAGTGACAGTCTCC
ATCACTCACCCACGGCGCGGCAGCTTGGAGCTGAAGCTGTTCTGCCCCAGTGGCATGATGTCCCTCATCGGCGCC
CCCCGCAGCATGGACTCGGATCCCAACGGCTTCAATGACTGGACCTTCTCCACTGTGCGATGCTGGGGGGAGAGA
GCCCGAGGGACCTACAGGCTTGTCATCAGGGATGTCGGGGATGAGTCATTCCAGGTCGGCATCCTCCGGCAATGG
CAGCTGACCCTATATGGCTCTGTGTGGAGTGCAGTAGACATCAGGGACAGACAAAGGCTGTTAGAGAGTGCCATG
AGTGGAAAATACCTGCACGATGACTTCGCCCTGCCCTGCCCACCGGGGCTGAAAATTCCTGAGGAAGATGGTTAC
ACCATCACCCCCAACACCCTCAAGACCCTGGTGCTGGTAGGCTGTTTCACCGTCTTCTGGACTGTTTACTACATG
CTGGAAGTATATTTGAGCCAGAGGAATGTGGCTTCCAATCAAGTTTGTAGGAGTGGACCCTGCCACTGGCCCCAT
CGGAGCCGGAAAGCCAAGGAGGAAGGGACAGAGCTAGAATCAGTGCCACTTTGCAGCAGCAAGGATCCAGACGAA
GTGGAAACAGAGAGCAGGGGCCCTCCCACCACCTCTGACCTCCTTGCCCCAGACCTGCTGGAGCAAGGGGACTGG
AGCCTGTCCCAGAACAAGAGCGCCCTGGACTGCCCTCATCAGCACCTAGACGTACCGCACGGGAAGGAGGAGCAG
ATCTGC**TGA**CCTCAGGGCCTGACAGTGTGGGACAGGCTCTTCTTTCCCAAAATTAGGGAGCTCTTGACAGAAAGC
AGTTCTGATGCTTACATCTGGAATCTGAGGCATCCTCTGACTCCACTCAAAGAGGGTGAGGGCCTTCTTAAGATA
CAAATGGTGGAGGATTGCTGCCAGAGAAGTCTGGTCAGAGCCACAGGGTCTGCCTCCAGCCAAACGGGAGCTTTT
GGTGAGAAGGTGTTGGACAGGGGATTGGCGCCCCCCTTTGGTTTGGCCTCCATCCTCATCTCTCTTGGGCCAAGC
CAGCTGCCTAGGTCCCCCAAGCATGGGGGACCCCTTCCCACATATAAGTTGAGAAGGTGCCTGCCATAGCCAGGA
GCGCATCTCAATGGAAACATCACTGGGGTCACTTGGGAAGAGGACTTCGGGGGTAGAGGCTGGGAGGAGCCCCTGG
ACATGCCTGTCCTGAAAGCGGCTGCCTCCATTATCCATTCCCAAGATGCCTGATCAGAAACCAACCATGAATGAA
CCCCTGGCTCCTTCACCACCCCCACGATTGGTATGATGCTGCCGGCACAGCTGGGATACACACGGCTCCCCCAGG
CCTGAGCTGCTTCACTAGGGAATCCTGCGGCAGGACTGCAGAGCAGATGGCAGATGCACATGTTGGAGGAGAGAG
CCTTGGGAGCCACTGCCACTCCAGTCCTGCCACCACCCTGTCTTCCTCTGCAAGTGCTCAGGGAAATGGCCTTCC
CGCCGGAGGCCAGCTATCTGCCTGACAGGCTGTGACTCTTCTCTCAACCTTGGCCTTCTCCCCTCTTCTGAGCTA
GTTGGTTGAATTTTTTTTAATGCTTAAGATTTGTTTTTCTCTTTTCACAGCAACATTTTCTTGAATTTTTTTCTG
CACAGCTTTTCCAAAATAAAAACCTTCCAAACAAAAAAAAAAAAAAA

FIGURE 1000

MPKGRQKVPHLDAPLGLPTCLWLELAGLFLLVPWVMGLAGTGGPDGQGTGGPSWAVHLESLEGDGEEETLEQQAD
ALAQAAGLVNAGRIGELQGHYLFVQPAGHRPALEVEAIRQQVEAVLAGHEAVRWHSEQRLLRRAKRSVHFNDPKY
PQQWHLNNRRSPGRDINVTGVWERNVTGRGVTVVVVDDGVEHTIQDIAPNYSPEGSYDLNSNDPDPMPHPDVENG
NHHGTRCAGEIAAVPNNSFCAVGVAYGSRIAGIRVLDGPLTDSMEAVAFNKHYQINDIYSCSWGPDDDGKTVDGP
HQLGKAALQHGVIAGRQGFGSIFVVASGNGGQHNDNCNYDGYANSIYTVTIGAVDEEGRMPFYAEECASMLAVTF
SGGDKMLRSIVTTDWDLQKGTGCTEGHTGTSAAAPLAAGMIALMLQVRPCLTWRDVQHIIVFTATRYEDRRAEWV
TNEAGFSHSHQHGFGLLNAWRLVNAAKIWTSVPYLASYVSPVLKENKAIPQSPRSLEVLWNVSRMDLEMSGLKTL
EHVAVTVSITHPRRGSLELKLFCPSGMMSLIGAPRSMDSDPNGFNDWTFSTVRCWGERARGTYRLVIRDVGDESF
QVGILRQWQLTLYGSVWSAVDIRDRQRLLESAMSGKYLHDDFALPCPPGLKIPEEDGYTITPNTLKTLVLVGCFT
VFWTVYYMLEVYLSQRNVASNQVCRSGPCHWPHRSRKAKEEGTELESVPLCSSKDPDEVETESRGPPTTSDLLAP
DLLEQGDWSLSQNKSALDCPHQHLDVPHGKEEQIC

FIGURE 1001A

CCTTGGCCGAGACCGGTCCTCTGCGGAGAGGGCCCCGCCCTCTGTGAAGGCCCGCCCGGGAATTGGCGGCGGCGC
TGCAGCCATTTCCGGTTTCGGGGAGGTGGGTGGGGTGCGGAGCGGGACTTGGAGCAGCCGCCGCCGCTGCCACCG
CCTACAGAGCCTGCCTTGCGCCTGGTGCTGCCAGGAAGATGCGGCCGGAGCCCGGAGGCTGCTGCTGCCGCCGCA
CGGTGCGGGCGAATGGCTGCGTGGCGAACGGGGAAGTACGGAACGGGTACGTGAGGAGCAGCGCTGCAGCCGCAG
CCGCAGCCGCCGCCGGCCAGATCCATCATGTTACACAAAATGGAGGACTATATAAAAGACCGTTTAATGAAGCTT
TTGAAGAAACACCAATGCTGGTTGCTGTGCTCACGTATGTGGGGTATGGCGTACTCACCCTCTTTGGATATCTTC
GAGATTTCTTGAGGTATTGGAGAATTGAAAAGTGTCACCATGCAACAGAAAGAGAAGAACAAAAGGACTTTGTGT
CATTGTATCAAGATTTTGAAAACTTTTATACAAGGAATCTGTACATGAGGATAAGAGACAACTGGAATCGGCCAA
TCTGTAGTGTGCCTGGAGCCAGGGTGGACATCATGGAGAGACAGTCTCATGATTATAACTGGTCCTTCAAGTATA
CAGGGAATATAATAAAGGGTGTTATAAACATGGGTTCCTACAACTATCTTGGATTTGCACGGAATACTGGATCAT
GTCAAGAAGCAGCCGCCAAAGTCCTTGAGGAGTATGGAGCTGGAGTGTGCAGTACTCGGCAGGAAATTGGAAACC
TGGACAAGCATGAAGAACTAGAGGAGCTTGTAGCAAGGTTCTTAGGAGTAGAAGCTGCTATGGCGTATGGCATGG
GATTTGCAACGAATTCAATGAACATTCCTGCTCTTGTTGGCAAAGGTTGCCTGATTCTGAGTGATGAACTGAACC
ATGCATCACTGGTTCTGGGAGCCAGACTGTCAGGAGCAACCATTAGAATCTTCAAACACAACAATATGCAAAGCC
TAGAGAAGCTATTGAAAGATGCCATTGTTTATGGTCAGCCTCGGACACGAAGGCCCTGGAAGAAAATTCTCATCC
TTGTGGAAGGAATATATAGCATGGAGGGATCTATTGTTCGTCTTCCTGAAGTGATTGCCCTCAAGAAGAAATACA
AGGCATACTTGTATCTGGATGAGGCTCACAGCATTGGCGCCCTGGGCCCCACAGGCCGGGGTGTGGTGGAGTACT
TTGGCCTGGATCCCGAGGATGTGGATGTTATGATGGGAACGTTCACAAAGAGTTTTGGTGCTTCTGGAGGATATA
TTGGAGGCAAGAAGGAGCTGATAGACTACCTGCGAACACATTCTCATAGTGCAGTGTATGCCACGTCATTGTCAC
CTCCTGTAGTGGAGCAGATCATCACCTCCATGAAGTGCATCATGGGGCAGGATGGCACCAGCCTTGGTAAAGAGT
GTGTACAACAGTTAGCTGAAAACACCAGGTATTTCAGGAGACGCCTGAAAGAGATGGGCTTCATCATCTATGGAA
ATGAAGACTCTCCAGTAGTGCCTTTGATGCTCTACATGCCTGCCAAAATTGGCGCCTTTGGACGGGAGATGCTGA
AGCGGAACATCGGTGTCGTTGTGGTTGGATTTCCTGCCACCCCAATTATTGAGTCCAGAGCCAGGTTTTGCCTGT
CAGCAGCTCATACCAAAGAAATACTTGATACTGCTTTAAAGGAGATAGATGAAGTTGGGGACCTATTGCAGCTGA
AGTATTCCCGTCATCGGTTGGTACCTCTACTGGACAGGCCCTTTGACGAGACGACGTATGAAGAAACAGAAGACTT
GAGCCTTTTTGGTGCTCCCTCAGAGGAACTCTCCCTCACCCAGGACAGCCTGTGGCCTTTGTGAGCCAGTTCCAG
GAACCACACTTCTGTGGCCATCTCACGTGAAAGACATTGCCTCAGCTACTGAAGGTGGCCACCTCCACTCTAAAT
GACATTTTGTAAATAGTAAAAAACTGCTTCTAATCCTTCCTTTGCTAAATCTCACCTTTAAAAACGAAGGTGACT
CACTTTGCTTTTTCAGTCCATTAAAAAAACATTTTATTTTGCAACCATTCTACTTGTGAAATCACGCTGACCCTA
GCCTGTCTCTGGCTAACCACACAGGCCATTCCCCTCTCCCAGCACCTTGCAGACTTGGGCCCATCAAGAGCTACT
GCTGGCCCTGGCTCCGCAGCCTGGATACTTACCTGGCCCTCCTCCCTAGGGAGCAAGTGCCTTCCACTTACTTCC
CATCCAGGTCTCAGAGGTCTCAAGGCCAACCTTGGAATCCTTATTTAACCATTCAAGTAATCAACGGAAGTTTTC
ACCCTTTAATCTTAAGTTTAGCCTTTTAAGAAAAACAGTAAGCGATGACTGCTGAAAGGCTCATTGTGTAATCTC
CCAAGGGTTTGGTCTTATTCCATTTTCTTCTGGTCACCAGATGATTTCTTCCTTTACCATCAAATACTTCTTCAT
AATGGTCACAGTCTGAGGATGTGCGCAAATTCTGGTTCTTCCCAAGCTCTAACCGTAACACGTCCCACCCCCTTT
TTAAAGCACTTACTGTTTTCAGAGCACCCATATCCCACCCTGGTGAGAAGGCCACTCTCACATCTGAGTGTTGGG
TACAAAGCTGCTCCGTAGAGTGATGTGCACTCCTGGTGGGTGAGGGGCAGGGGCAGTGGCAGTGTGCAAAGAATT
GATTACTCCTTGCAGAGCCTGTGGCTTGCATTTCCTACTGCTTTCTACGTTTGAAAATTATGACAGTCTCTGGCT
AGGTCTGGGTCCAGATTAGGATTTAAACTGATAAAGGAAACTGTTGGTAAATCCTCTGCTCAGAAAGCATTTATC
ATGTTCCTATTTAAGGATTAGGTTTATTAATTTAGGCCTCTTAGAAGCTAACCCACTTAAATATTACTCTTCTGA
ATGCTAGTTCTCTTTTATTCTTGATGTCCTAAGTCAATTGAATCTGGCATCTGGGGCTAGGGTCTGCCTGTCTAC
ATATTTTTTATTTTTTTCTGAGAAATTCTGAACACATAGATCTCTTTCCTAAACTGACATTTTCTATTTTGACTG
TTTTCATACTATAACCAGGTAAAGGGACTTCTTTCAGAGAGCTTTATACTGCCTGACCAAAGAACAAATCTGAAA
ATCACCATTTTAAAGTTATTTTTTCAGTTGAACCAAAGTTTAAGTGAAGAGGACTTTTGGCATATTATACCCAGG
ATCAGTTTGTCTTTTTGTATCCATCAAGTATTACAGGAGAAGGATTGGGAACAGAATGGAAAAACAGTGTATGAA
AGTCATGTTACAGGCCGAGTGCGGTGGCTCACACCTGTAATCCTAGCACTTTGGGAGGCTGAGGCAGGTGGCTCA
CTTGAGGTCAGGAATTCAAGACCAGCCTGGCCAACATGGTGAAACCCCGTCTCTACTAAAAAGACAAAAAATTAG
CTGGGCGTGGTGGCGGGCACCTATAATCCCACCTACTTGGTAGGCTGAGGCAGGAGAATCGCTTGAACCCAGGAG

FIGURE 1001B

GCGGAGGTTGCAGTGAGACGAGATTGTGCCACTGCACTCTAGCCTGGGTGACAGAGCAAAACTGTGTCTCAAAAA
AAAAAAAGTCATGTTACACATTTAAGTTTTTGAAATTGCTCCTTTTATCGGTAAAGATTCTCAATCCAAATTCTC
CTGGGTGTGTTGTCATCAGCTGTGATATGTTTGTGCACATTACGTATAGCAGAGGATGTAAGCAATATTATTGTT
TGTGAAGTTTTGTTTTTAATGTCTTGAGTATGAGTTATGTTTAGTCACTGTCAGCATCTGAGAACTTTAATAAGC
CCTTGAGATATTCCAAAGTTTTATTTTACTTTTTTAAAGAACAGAAAAAGATGAATGAAAGAACCAAGGAGAGAT
GCAGAGACTATATTTAGCATGTATAGGTTAAAGTAAGAAGGAGGTTGTGGTAACTAAATAGGAGTCCTATAAAAT
CAAATACATTGTCAACCTTTTCTGCACATCTAGTTTCCTACCATAGAATCCCACTGGAATACCACATAGCTTTTG
CACTGCAGTTACTATTTACTAATGTAAACGTAGGGTTTGTAAAAGTCACAAACTTATAAGCAATGAACTTACCTG
CTAGTCTTTTTATTTTGGCTTGCATGAAGTCACTGCAAATTCAAATGTCAGTACCGGCATTTAAAATATATCTAT
ATCACTTTGTTGGTACAAAGTTATTTCAAGATAAGTGTAATTTTGTTACAAGTTTATTTTGAAGAGACAAATCTC
CTGTGATCTATGCAGGACCTCTGTACTTTCTAAAGAACAAAATGTTATGTAGACATTATACATGGTTGGTTGTCT
CTTCTTGAAACTGTAATGTAAATCTAGGGTCCAGTCATATCCTAGGTATCATCATTTATCCAAGTACTTGGAGGA
ATACAAGTATATATAAATACAGTCATTGAGAATAAGTCGATTTGAGGCATACAAGAGTAGTTTCTTACACAGTTT
AACACAGCCTGATTCAAGACTCTGATAGGATTCAAACAGATACCGGTTAACCATGACTACCAAAACTGATCATCT
GAGTCGATTGATAGAGGTGTGACTAGTCCTTAGCACTTTTTCTCATTCCTCTTTTTATTCAGCATTGCTGTTACC
TATTTCAGGTTTATAAGACCTCTTTCAGCAGATCACATCAGAAGCCAGGAAATGCATAGCTAGGAGATGTCAAAA
GCCCATATGAGGAGTGGACCAAGCAGCAGTGGCGGTTTCTCCTCGCATCTTTTTTTTTTTAAGCTTTAACTTAGC
AGGGGCATGGACTTTATAGCACTTTTTCAACTTTTTGCTTTGCTTTGGATAAGAAATCCTTACCTTTAAAAAAAG
CTTCTAGTCTCCATAACCCCCAAAGTACTGCTTATTTGTTTGAAGAATCCAGCCATCGTAGTGCTTTAGTCACTA
TCGTAAACATTCATGATAGGGCAAGGATTTTAAAACAGGATTCTTGCTTCTGTAGTCATCAAGGTGAACAGAAGC
ATCCTACACAACCACTAAGGGCTCTATGTTTGTGTCATGCCTCTTCAAACACCAAGGAGTTGAACATGCTTCCAG
TGATTTGTCTCCGTAATGCCTTCTTCCTTTATTTGGCCTTTCTTTCTTTCTGTACCTTCAAGTTCTTGATTTTTA
AAATTCCAACTCTAGAGAAAACCAATATATGGTGGTGCTGGGCTTTGAAGATAGCATATCAGACGCCTTGGTTCT
GTTTGTACACTTAGCCTTACATTTCAGGAGGAGGCTTTTCATTAGGGGCTTAAGCTAGCTCCTTTGGCTTTTAAA
AAAAATTTTTTTTCAAATTTCTTCATTACCTAAGGGAGCCTGCATCTAAATTTCTCAACTAGTTCAGCCTAGCTG
AATTTTCTAGTGTGTAATACACTTTGCTTCCTTCTTATTGGTGAAAACCAGGGGGATGAGTGGCTTCCATGGAGA
GATTTCCTGATTTCTCAGGGAGGAAAAAAGTGATGACATTTACCACTACTTTTATGTTTTTCCCCTTTTTCCAAA
TTGATAAGGATTTCTGGTTCCTAGTGATCCGGGATTGGGCAACAGTGCAGAACTGCCAGTCATGCCGTAGGCCGT
GAAGAAAGAATGTGAGTAACTGTTGTTTTGCAAGGATTTGTAGGGTTATGGGCAGTTGTTGTTTGAAGCATTGCT
ATGACCTAATTCCCAAGGTATCTTTCCTCTCTTGGTGTTCTAGGTAAGCCAATGAGCTTTAATCTCTACTTGCTA
TAACCGTGTGCTTAGAAAAAGAGGTGAGAGTAGTGGTTTTCCTTCAAACTGTCCACATTCATGAAGATTATGAAT
TGTTAGGACAGCCAGGGCAAGATAGACCCTGTCTCTACAAAAATTTTTTTCTAAATTAACCGGGCATGGTGGTGC
CTGCCTGTAGTCCCACCTGTGTGGGAGAATCACTTGAGCCTGGGAGGTCAAGGCTGCAGTGAGCCATGATTGCAC
CCCTGCACTCCAGCCTGGGTGACAGAGTGAGACCCTGGCTCAATAAGAGGGGGAAAAAAAATTGTTAGGAGCTGG
GTGCGGATGCAGCCTGCAATCCCAGCTACTTGAGAGGCTGAGGCCGGAGGATTGCTTAAACCCAAGAATTTGAGC
GTAGCCTGGGCAACACAGCAAGACCCCATCTAAGAAAAAAATGTTTTTTAAATCAGCTTAGCCCAAAGGGGTTGT
GAATGGGGAGGTATAAAAAGCAAAGATTATTTTTTGGCTACTAAGCCAAGAACTTACAGGGATTTTTTTTTTCAG
TCCCAGAACCTACAGATACCCTGCTACTTGCTTCACGTGGATGCTCAGTGCCCAGCAGCCATCTTAATACATTAA
ACCAGTTTAAAAAATACCTTCCATGTGGAGAAAAACATGTCTTTTTCTCGCCTCAACTTTATCCACATGAAATGT
GTGCCCATGGCTGGGCGCAGTGGCTCACCTGTAATCCCAACACTTTGGGAGGCTGAAGCAGGCAGATTGCTTGAG
GCCAGGAGTTCGAGAACAGTCTGGCCAACATGGCGAAACCTCATCTCTACTAAAATTACAAAAATTAGCCGGGCA
TGGTGGCACATGCCTGTAATCCCAGCTACGTCAGGAGGCTGAGGCACAGGAATTGCTTGAACCCAAGAGGCAGAG
GATGCAATGAGCCAAGATCACACCACTGCACTCCAGCCTTGGCGACAGAGGGAGACTCTGTCTC

FIGURE 1002

MRPEPGGCCCRRTVRANGCVANGEVRNGYVRSSAAAAAAAAAGQIHHVTQNGGLYKRPFNEAFEETPMLVAVLTY
VGYGVLTLFGYLRDFLRYWRIEKCHHATEREEQKDFVSLYQDFENFYTRNLYMRIRDNWNRPICSVPGARVDIME
RQSHDYNWSFKYTGNIIKGVINMGSYNYLGFARNTGSCQEAAAKVLEEYGAGVCSTRQEIGNLDKHEELEELVAR
FLGVEAAMAYGMGFATNSMNIPALVGKGCLILSDELNHASLVLGARLSGATIRIFKHNNMQSLEKLLKDAIVYGQ
PRTRRPWKKILILVEGIYSMEGSIVRLPEVIALKKKYKAYLYLDEAHSIGALGPTGRGVVEYFGLDPEDVDVMMG
TFTKSFGASGGYIGGKKELIDYLRTHSHSAVYATSLSPPVVEQIITSMKCIMGQDGTSLGKECVQQLAENTRYFR
RRLKEMGFIIYGNEDSPVVPLMLYMPAKIGAFGREMLKRNIGVVVVGFPATPIIESRARFCLSAAHTKEILDTAL
KEIDEVGDLLQLKYSRHRLVPLLDRPFDETTYEETED

FIGURE 1003

GCCAGCTGCCGGTCTTTCGGGGGCTCCGTAACTTTCTATCCGTCCGCGTCAGCGCCTTGCCACCCTCATCTCCAA
TATGCCTGGTCCGACCCCCAGTGGCACTAACGTGGGATCCTCAGGGCGCTCTCCCAGCAAAGCAGTGGCCGCCCG
GGCGGCGGGATCCACTGTCCGGCAGAGGAAAAATGCCAGCTGTGGGACAAGGAGTGCAGGCCGCACAACCTCGGC
AGGCACCGGGGGGGATGTGGCGATTCTACACAGAAGATTCACCTGGGCTCAAAGTTGGCCCTGTTCCAGTATTGGT
TATGAGTCTTCTGTTCATCGCTTCTGTATTTATGTTGCACATTTGGGGCAAGTACACTCGTTCGTAGATTCAGTT
ACATCCATCTGTCATCTGAAGAAGGAGGAAAAAACCCAACATTTCTTGGACCAAAAGTATAGTGACTATCTGTTC
ATGAGAGAAATTTTCTGTAAGCTTGCTGTTTTACAGGGGATTTATCAATAATTGATTTTGAGGAATCAGTTTTTT
TCTATGGCTAATAAACTTTTTAATTCACTTATACTGAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1004

MPGPTPSGTNVGSSGRSPSKAVAARAAGSTVRQRKNASCGTRSAGRTTSAGTGGMWRFYTEDSPGLKVGPVPVLV
MSLLFIASVFMLHIWGKYTRS

FIGURE 1005

CGTCCTTCCTCAGCCGCGGGTGATCGTAGCTCGGAAATGGCGGGATTTGGTGCTATGGAGAAATTTTTGGTAGAA
TATAAGAGTGCAGTGGAGAAGAAACTGGCAGAGTACAAATGTAACACCAACACAGCAATTGAACTAAAATTAGTT
CGTTTTCCTGAAGATCTTGAAAATGACATTAGAACTTTCTTTCCTGAGTATACCCATCAACTCTTTGGGGATGAT
GAAACTGCTTTTGGTTACAAGGGTCTAAAGATCCTGTTATACTATATTGCTGGTAGCCTGTCAACAATGTTCCGT
GTTGAATATGCATCTAAAGTTGATGAGAACTTTGACTGTGTAGAGGCAGATGATGTTGAGGGCAAAATTAGACAA
ATCATTCCACCTGGATTTTGCACAAACACGAATGATTTCCTTTCTTTACTGGAAAAGGAAGTTGATTTCAAGCCA
TTCGGAACCTTACTTCATACCTACTCAGTTCTCAGTCCAACAGGAGGAGAAAACTTTACCTTTCAGATATATAAG
GCTGACATGACATGTAGAGGCTTTCGAGAATATCATGAAAGGCTTCAGACCTTTTTGATGTGGTTTATTGAAACT
GCTAGCTTTATTGACGTGGATGATGAAAGATGGCACTACTTTCTAGTATTTGAGAAGTATAATAAGGATGGAGCT
ACGCTCTTTGCGACCGTAGGCTACATGACAGTCTATAATTACTATGTGTACCCAGACAAAACCCGGCCACGTGTA
AGTCAGATGCTGATTTTGACTCCATTTCAAGGTCAAGGCCATGGTGCTCAACTTCTTGAAACAGTTCATAGATAC
TACACTGAATTTCCTACAGTTCTTGATATTACAGCGGAAGATCCATCCAAAAGCTATGTGAAATTACGAGACTTT
GTGCTTGTGAAGCTTTGTCAAGATTTGCCCTGTTTTTCCCGGGAAAAATTAATGCAAGGATTCAATGAAGATATG
GCGATAGAGGCACAACAGAAGTTCAAAATAAATAAGCAACACGCTAGAAGGGTTTATGAAATTCTTCGACTACTG
GTAACTGACATGAGTGATGCCGAACAATACAGAAGCTACAGACTGGATATTAAAAGAAGACTAATTAGCCCATAT
AAGAAAAAGCAGAGAGATCTTGCTAAGATGAGAAAATGTCTCAGACCAGAAGAACTGACAAACCAGATGAACCAA
ATAGAAATAAGCATGCAACATGAACAGCTGGAAGAGAGTTTTCAGGAACTAGTGGAAGATTACCGGCGTGTTATT
GAACGACTTGCTCAAGAGTAAAGATTATACTGCTCTGTACAGGAAGCTTGCAAATTTTCTGTACAATGTGCTGTG
AAAAATCTGATGACTTTAATTTTAAAATCTTGTGACATTTTGCTTATACTAAAAGTTATCTATCTTTAGTTGAAT
ATTTTCTTTTGGAGAGATTGTATATTTTAAAATACTGTTTAGAGTTTATGAGCATATATTGCATTTAAAGAAAGA
TAAAGCTTCTGAAATACTACTGCAATTGCTTCCCTTCTTAAACAGTATAATAAATGCTTAGTTGTGAT

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FIGURE 1006

MAGFGAMEKFLVEYKSAVEKKLAEYKCNTNTAIELKLVRFPEDLENDIRTFFPEYTHQLFGDDETAFGYKGLKIL
LYYIAGSLSTMFRVEYASKVDENFDCVEADDVEGKIRQIIPPGFCTNTNDFLSLLEKEVDFKPFGTLLHTYSVLS
PTGGENFTFQIYKADMTCRGFREYHERLQTFLMWFIETASFIDVDDERWHYFLVFEKYNKDGATLFATVGYMTVY
NYYVYPDKTRPRVSQMLILTPFQGQGHGAQLLETVHRYYTEFPTVLDITAEDPSKSYVKLRDFVLVKLCQDLPCF
SREKLMQGFNEDMAIEAQQKFKINKQHARRVYEILRLLVTDMSDAEQYRSYRLDIKRRLISPYKKKQRDLAKMRK
CLRPEELTNQMNQIEISMQHEQLEESFQELVEDYRRVIERLAQE

FIGURE 1007

GGCCCCTCGAGCCTCGAACCGGAACCTCCAAATCCGAGACGCTCTGCTTATGAGGACCTCGAAATATGCCGGCCA
GTGAAAAAATCTTGTGGCTTTGAGGGCTTTTGGTTGGCCAGGGGCAGTAAAAATCTCGGAGAGCTGACACCAAGT
CCTCCCCTGCCACGTAGCAGTGGTAAAGTCCGAAGCTCAAATTCCGAGAATTGAGCTCTGTTGATTCTTAGAACT
GGGGTTCTTAGAAGTGGTGATGCAAGAAGTTTCTAGGAAAGGCCGGACACCAGGTTTTGAGCAAAATTTTGGACT
GTGAAGCAAGGCATTGGTGAAGACAAAATGGCCTCGCCGGCTGACAGCTGTATCCAGTTCACCCGCCATGCCAGT
GATGTTCTTCTCAACCTTAATCGTCTCCGGAGTCGAGACATCTTGACTGATGTTGTCATTGTTGTGAGCCGTGAG
CAGTTTAGAGCCCATAAAACGGTCCTCATGGCCTGCAGTGGCCTGTTCTATAGCATCTTTACAGACCAGTTGAAA
TGCAACCTTAGTGTGATCAATCTAGATCCTGAGATCAACCCTGAGGGATTCTGCATCCTCCTGGACTTCATGTAC
ACATCTCGGCTCAATTTGCGGGAGGGCAACATCATGGCTGTGATGGCCACGGCTATGTACCTGCAGATGGAGCAT
GTTGTGGACACTTGCCGGAAGTTTATTAAGGCCAGTGAAGCAGAGATGGTTTCTGCCATCAAGCCTCCTCGTGAA
GAGTTCCTCAACAGCCGGATGCTGATGCCCCAAGACATCATGGCCTATCGGGGTCGTGAGGTGGTGGAGAACAAC
CTGCCACTGAGGAGCGCCCCTGGGTGTGAGAGCAGAGCCTTTGCCCCCAGCCTGTACAGTGGCCTGTCCACACCG
CCAGCCTCTTATTCCATGTACAGCCACCTCCCTGTCAGCAGCCTCCTCTTCTCCGATGAGGAGTTTCGGGATGTC
CGGATGCCTGTGGCCAACCCCTTCCCCAAGGAGCGGGCACTCCCATGTGATAGTGCCAGGCCAGTCCCTGGTGAG
TACAGCCGGCCGACTTTGGAGGTGTCCCCCAATGTGTGCCACAGCAATATCTATTCACCCAAGGAAACAATCCCA
GAAGAGGCACGAAGTGATATGCACTACAGTGTGGCTGAGGGCCTCAAACCTGCTGCCCCCTCAGCCCGAAATGCC
CCCTACTTCCCTTGTGACAAGGCCAGCAAAGAAGAAGAGAGACCCTCCTCGGAAGATGAGATTGCCCTGCATTTC
GAGCCCCCCAATGCACCCCTGAACCGGAAGGGTCTGGTTAGTCCACAGAGCCCCCAGAAATCTGACTGCCAGCCC
AACTCGCCCACAGAGTCCTGCAGCAGTAAGAATGCCTGCATCCTCCAGGCTTCTGGCTCCCCTCCAGCCAAGAGC
CCCACTGACCCCAAAGCCTGCAACTGGAAGAAATACAAGTTCATCGTGCTCAACAGCCTCAACCAGAATGCCAAA
CCAGAGGGGCCTGAGCAGGCTGAGCTGGGCCGCCTTTCCCCACGAGCCTACACGGCCCCACCTGCCTGCCAGCCA
CCCATGGAGCCTGAGAACCTTGACCTCCAGTCCCCAACCAAGCTGAGTGCCAGCGGGGAGGACTCCACCATCCCA
CAAGCCAGCCGGCTCAATAACATCGTTAACAGGTCCATGACGGGCTCTCCCCGCAGCAGCAGCGAGAGCCACTCA
CCACTCTACATGCACCCCCCGAAGTGCACGTCCTGCGGCTCTCAGTCCCCACAGCATGCAGAGATGTGCCTCCAC
ACCGCTGGCCCCACGTTCCCTGAGGAGATGGGAGAGACCCAGTCTGAGTACTCAGATTCTAGCTGTGAGAACGGG
GCCTTCTTCTGCAATGAGTGTGACTGCCGCTTCTCTGAGGAGGCCTCACTCAAGAGGCACACGCTGCAGACCCAC
AGTGACAAACCCTACAAGTGTGACCGCTGCCAGGCCTCCTTCCGCTACAAGGGCAACCTCGCCAGCCACAAGACC
GTCCATACCGGTGAGAAACCCTATCGTTGCAACATCTGTGGGGCCCAGTTCAACCGGCCAGCCAACCTGAAAACC
CACACTCGAATTCACTCTGGAGAGAAGCCCTACAAATGCGAAACCTGCGGAGCCAGATTTGTACAGGTGGCCCAC
CTCCGTGCCCATGTGCTTATCCACACTGGTGAGAAGCCCTATCCCTGTGAAATCTGTGGCACCCGTTTCCGGCAC
CTTCAGACTCTGAAGAGCCACCTGCGAATCCACACAGGAGAGAAACCTTACCATTGTGAGAAGTGTAACCTGCAT
TTCCGTCACAAAAGCCAGCTGCGACTTCACTTGCGCCAGAAGCATGGCGCCATCACCAACACCAAGGTGCAATAC
CGCGTGTCAGCCACTGACCTGCCTCCGGAGCTCCCCAAAGCCTGCTGAAGCATGGAGTGTTGATGCTTTCGTCTC
CAGCCCCTTCTCAGAATCTACCCAAAGGATACTGTAACACTTTACAATGTTCATCCCATGATGTAGTGCCTCTTT
CATCCACTAGTGCAAATCATAGCTGGGGGTTGGGGGTGGTGGGGGTCGGGGCCTGGGGGACTGGGAGCCGCAGCA
GCTCCCCCTCCCCCACTGCCATAAAACATTAAGAAAATCATATTGCTTCTTCTCCTATGTGTAAGGTGAACCATG
TCAGCAAAAAGCAAAATCATTTTATATGTCAAAGCAGGGGAGTATGCAAAAGTTCTGACTTGACTTTAGTCTGCA
AAATGAGGAATGTATATGTTTTGTGGGAACAGATGTTTCTTTTGTATGTAAATGTGCATTCTTTTAAAAGACAAG
ACTTCAGTATGTTGTCAAAGAGAGGGCTTTAATTTTTTTAACCAAAGGTGAAGGAATATATGGCAGAGTTGTAAA
TATATAAATATATATATATATAAAATAAATATATATAAACCTAACAAAGATATATTAAAAATATAAAACTGCGTT
AAAGGCTCGATTTTGTATCTGCAGGCAGACACGGATCTGAGAATCTTTATTGAGAAAGAGCACTTAAGAGAATAT
TTTAAGTATTGCATCTGTATAAGTAAGAAAATATTTTGTCTAAAATGCCTCAGTGTATTTGTATTTTTTTGCAAG
TGAAGGTTTACAATTTACAAAGTGTGTATTAAAAAAAACAAAAAGAACAAAAAAATCTGCAGAAGGAAAAATGTG
TAATTTTGTTCTAGTTTTCAGTTTGTATATACCCGTACAACGTGTCCTCACGGTGCCTTTTTTCACGGAAGTTTT
CAATGATGGGCGAGCGTGCACCATCCCTTTTTGAAGTGTAGGCAGACACAGGGACTTGAAGTTGTTACTAACTAA
ACTCTCTTTGGGAATGTTTGTCTCATCCCATTCTGCGTCATGCTTGTGTTATAACTACTCCGGAGACAGGGTTTG
GCTGTGTCTAAACTGCATTACCGCGTTGTAAAATATAGCTGTACAAATATAAGAATAAAATGTTGAAAAGTCAAA
CTGGAAAAAAAA

FIGURE 1008

MASPADSCIQFTRHASDVLLNLNRLRSRDILTDVVIVVSREQFRAHKTVLMACSGLFYSIFTDQLKCNLSVINLD
PEINPEGFCILLDFMYTSRLNLREGNIMAVMATAMYLQMEHVVDTCRKFIKASEAEMVSAIKPPREEFLNSRMLM
PQDIMAYRGREVVENNLPLRSAPGCESRAFAPSLYSGLSTPPASYSMYSHLPVSSLLFSDEEFRDVRMPVANPFP
KERALPCDSARPVPGEYSRPTLEVSPNVCHSNIYSPKETIPEEARSDMHYSVAEGLKPAAPSARNAPYFPCDKAS
KEEERPSSEDEIALHFEPPNAPLNRKGLVSPQSPQKSDCQPNSPTESCSSKNACILQASGSPPAKSPTDPKACNW
KKYKFIVLNSLNQNAKPEGPEQAELGRLSPRAYTAPPACQPPMEPENLDLQSPTKLSASGEDSTIPQASRLNNIV
NRSMTGSPRSSSESHSPLYMHPPKCTSCGSQSPQHAEMCLHTAGPTFPEEMGETQSEYSDSSCENGAFFCNECDC
RFSEEASLKRHTLQTHSDKPYKCDRCQASFRYKGNLASHKTVHTGEKPYRCNICGAQFNRPANLKTHTRIHSGEK
PYKCETCGARFVQVAHLRAHVLIHTGEKPYPCEICGTRFRHLQTLKSHLRIHTGEKPYHCEKCNLHFRHKSQLRL
HLRQKHGAITNTKVQYRVSATDLPPELPKAC

FIGURE 1009A

ACAGACGGCGGGTGAACATGGCGTCCTCGACTTGGTCTGAGACGTGATAGGCCTGCCTTCTGGTTGAAGATGTGG
CGAGTGAAAAAACTGAGCCTCAGCCTGTCGCCTTCGCCCCAGACGGGAAAACCATCTATGAGAACTCCTCTCCGT
GAACTTACCCTGCAGCCCGGTGCCCTCACCACCTCTGGAAAAAGATCCCCCGCTTGCTCCTCGCTGACCCCATCA
CTGTGCAAGCTGGGGCTGCAGGAAGGCAGCAACAACTCGTCTCCAGTGGATTTTGTAAATAACAAGAGGACAGAC
TTATCTTCAGAACATTTCAGTCATTCCTCAAAGTGGCTAGAAACTTGTCAGCATGAATCAGATGAGCAGCCTCTA
GATCCAATTCCCCAAATTAGCTCTACTCCTAAAACGTCTGAGGAAGCAGTAGACCCACTGGGCAATTATATGGTT
AAAACCATCGTCCTTGTACCATCTCCACTGGGGCAGCAACAAGACATGATATTTGAGGCCCGTTTAGATACCATG
GCAGAGACAAACAGCATATCTTTAAATGGACCTTTGAGAACAGACGATCTGGTGAGAGAGGAGGTGGCACCCTGC
ATGGGAGACAGGTTTTCAGAAGTTGCTGCTGTATCTGAGAAACCTATCTTTCAGGAATCTCCGTCCCATCTCTTA
GAGGAGTCTCCACCAAATCCCTGTTCTGAACAACTACATTGCTCCAAGGAAAGCCTGAGCAGTAGAACTGAGGCT
GTGCGTGAGGACTTAGTACCTTCTGAAAGTAACGCCTTCTTGCCTTCCTCTGTTCTCTGGCTTTCCCCTTCAACT
GCCTTGGCAGCAGATTTCCGTGTCAATCATGTGGACCCAGAGGAGGAAATTGTAGAGCATGGAGCTATGGAGGAA
AGAGAAATGAGGTTTCCCACACATCCTAAGGAGTCTGAAACAGAAGATCAAGCACTTGTCTCAAGTGTGGAAGAT
ATTCTGTCCACATGCCTGACACCAAATCTAGTAGAAATGGAATCCCAAGAAGCTCCAGGCCCAGCAGTAGAAGAT
GTTGGTAGGATTCTTGGCTCTGATACAGAGTCTTGGATGTCCCCACTGGCCTGGCTGGAAAAAGGTGTAAATACC
TCCGTCATGCTGGAAAATCTCCGCCAAAGCTTATCCCTTCCCTCGATGCTTCGGGATGCTGCAATTGGCACTACC
CCTTTCTCTACTTGCTCGGTGGGGACTTGGTTTACTCCTTCAGCACCACAGGAAAAGAGTACAAACACATCCCAG
ACAGGCCTGGTTGGCACCAAGCACAGTACTTCTGAGACAGAGCAGCTCCTGTGTGGCCGGCCTCCAGATCTGACT
GCCTTGTCTCGACATGACTTGGAAGATAACCTGCTGAGCTCTCTTGTCATTGTGGAGTTTCTCTCCCGCCAGCTT
CGGGACTGGAAGAGCCAGCTGGCTGTCCCTCACCCAGAAACCCAGGACAGTAGCACACAGACTGACACATCTCAC
AGTGGGATAACTAATAAACTTCAGCATCTTAAGGAGAGCCATGAGATGGGACAGGCCCTACAGCAGGCCAGAAAT
GTCATGCAATCATGGGTGCTTATCTCTAAAGAGCTGATATCCTTGCTTCACCTATCCCTGTTGCATTTAGAAGAA
GATAAGACTACTGTGAATCAGGAGTCTCGGCGTGCAGAAACATTGGTCTGTTGCTGTTTTGATTTGCTGAAGAAA
TTGAGGGCAAAGCTCCAGAGCCTCAAAGCAGAAAGGGAGGAGGCAAGGCACAGAGAGGAAATGGCTCTCAGAGGC
AAGGATGCGGCAGAGATAGTGTTGGAGGCTTTCTGTGCACACGCCAGCCAGCGCATCAGCCAGCTGGAACAGGAC
CTAGCATCCATGCGGGAATTCAGAGGCCTTCTGAAGGATGCCCAGACCCAACTGGTAGGGCTTCATGCCAAGCAA
GAAGAGCTGGTTCAGCAGACAGTGAGTCTTACTTCTACCTTGCAACAAGACTGGAGGTCCATGCAACTGGATTAT
ACAACATGGACAGCTTTGCTGAGTCGGTCCCGACAACTCACAGAGAAACTCACAGTCAAGAGCCAGCAAGCCCTG
CAGGAACGTGATGTGGCAATTGAGGAAAAGCAGGAGGTTTCTAGGGTGCTGGAACAAGTCTCTGCCCAGTTAGAG
GAGTGCAAAGGCCAAACAGAACAACTGGAGTTGGAAAACATTCGTCTAGCAACAGATCTCCGGGCTCAGTTGCAG
ATTCTGGCCAACATGGACAGCCAGCTAAAAGAGCTACAGAGTCAGCATACCCATTGTGCCCAGGACCTGGCTATG
AAGGATGAGTTACTCTGCCAGCTTACCCAGAGCAATGAGGAGCAGGCTGCTCAATGCGTAAAGGAAGAGATGGCA
CTAAAACACATGCAGGCAGAACTGCAGCAGCAACAAGCTGTCCTGGCCAAAGAGGTGCGGGACCTGAAAGAGACC
TTGGAGTTTGCAGACCAGGAGAATCAGGTTGCTCACCTGGAGCTGGGTCAGGTTGAGTGTCAATTGAAAACCACA
CTGGAAGTGCTCCGGGAGCGCAGCTTGCAGTGTGAGAACCTCAAGGACACTGTAGAGAACCTAACGGCTAAACTG
GCCAGCACCATAGCAGATAACCAGGAGCAAGATCTGGAGAAAACACGGCAGTACTCTCAAAAGCTAGGGCTGCTG
ACTGAGCAACTACAGAGCCTGACTCTCTTTCTACAGACAAAACTAAAGGAGAAGACTGAACAAGAGACCCTTCTG
CTGAGTACAGCCTGTCCTCCCACCCAGGAACACCCTCTGCCTAATGACAGGACCTTCCTGGGAAGCATCTTGACA
GCAGTGGCAGATGAAGAGCCAGAATCAACTCCTGTGCCCTTGCTTGGAAGTGACAAGAGTGCTTTCACCCGAGTA
GCATCAATGGTTTCCCTTCAGCCCGCAGAGACCCCAGGCATGGAGGAGAGCCTGGCAGAAATGAGTATTATGACT
ACTGAGCTTCAGAGTCTTTGTTCCCTGCTACAAGAGTCTAAAGAAGAAGCCATCAGGACTCTGCAGCGAAAAATT
TGTGAGCTGCAAGCTAGGCTGCAGGCCCAGGAAGAACAGCATCAGGAAGTCCAGAAGGCAAAAGAAGCAGACATA
GAGAAGCTGAACCAGGCCTTGTGCTTGCGCTACAAGAATGAAAAGGAGCTCCAGGAAGTGATACAGCAGAATGAG
AAGATCCTAGAACAGATAGACAAGAGTGGCGAGCTCATAAGCCTTAGAGAGGAGGTGACCCACCTTACCCGCTCA
CTTCGGCGTGCGGAGACAGAGACCAAAGTGCTCCAGGAGGCCTGGCAGGCCAGCTGGACTCCAACTGCCAGCCTA
TGGCCACCAATTGGATCCAGGAGAAAGTGTGGCTCTCTCAGGAGGTGGACAAACTGAGAGTGATGTTCCTGGAGA
TGAAAAATGAGAAGGAAAACTCCTGATCAAGTTCCAGAGCCCATAGAAATATCCTAGAGGAGAACCTTCGGCGCT
CTGACAAGGAGTTAGAAAAACTAGATGACATTGTTCAGCATATTTATAAGACCCTGCTCTCTATTCCAGAGGTGG

FIGURE 1009B

TGAGGGGATGCAAAGAACTACAGGGATTGCTGGAATTTCTGAGCTAAGAAACTGAAAGCCAGAATTTGTTTCACC
TCTTTTTACCTGCAATACCCCCTTACCCCAATACCAAGACCAACTGGCATAGAGCCAACTGAGATAAATGCTATT
TAAATAAAGTGTATTTAATGAAAAAAAAAAAAAAAAAAAA

FIGURE 1010

MWRVKKLSLSLSPSPQTGKPSMRTPLRELTLQPGALTTSGKRSPACSSLTPSLCKLGLQEGSNNSSPVDFVNNKR
TDLSSEHFSHSSKWLETCQHESDEQPLDPIPQISSTPKTSEEAVDPLGNYMVKTIVLVPSPLGQQQDMIFEARLD
TMAETNSISLNGPLRTDDLVREEVAPCMGDRFSEVAAVSEKPIFQESPSHLLEESPPNPCSEQLHCSKESLSSRT
EAVREDLVPSESNAFLPSSVLWLSPSTALAADFRVNHVDPEEEIVEHGAMEEREMRFPTHPKESETEDQALVSSV
EDILSTCLTPNLVEMESQEAPGPAVEDVGRILGSDTESWMSPLAWLEKGVNTSVMLENLRQSLSLPSMLRDAAIG
TTPFSTCSVGTWFTPSAPQEKSTNTSQTGLVGTKHSTSETEQLLCGRPPDLTALSRHDLEDNLLSSLVIVEFLSR
QLRDWKSQLAVPHPETQDSSTQTDTSHSGITNKLQHLKESHEMGQALQQARNVMQSWVLISKELISLLHLSLLHL
EEDKTTVNQESRRAETLVCCCFDLLKKLRAKLQSLKAEREEARHREEMALRGKDAAEIVLEAFCAHASQRISQLE
QDLASMREFRGLLKDAQTQLVGLHAKQEELVQQTVSLTSTLQQDWRSMQLDYTTWTALLSRSRQLTEKLTVKSQQ
ALQERDVAIEEKQEVSRVLEQVSAQLEECKGQTEQLELENIRLATDLRAQLQILANMDSQLKELQSQHTHCAQDL
AMKDELLCQLTQSNEEQAAQCVKEEMALKHMQAELQQQQAVLAKEVRDLKETLEFADQENQVAHLELGQVECQLK
TTLEVLRERSLQCENLKDTVENLTAKLASTIADNQEQDLEKTRQYSQKLGLLTEQLQSLTLFLQTKLKEKTEQET
LLLSTACPPTQEHPLPNDRTFLGSILTAVADEEPESTPVPLLGSDKSAFTRVASMVSLQPAETPGMEESLAEMSI
MTTELQSLCSLLQESKEEAIRTLQRKICELQARLQAQEEQHQEVQKAKEADIEKLNQALCLRYKNEKELQEVIQQ
NEKILEQIDKSGELISLREEVTHLTRSLRRAETETKVLQEAWQASWTPTASLWPPIGSRRKCGSLRRWTN

FIGURE 1011A

CGCTCCCCGCTCCCGTGGCTGCCGCCGCCCCGGGGAAGAAGAGACAGGGGTGGGGTTTGGGGGAAGCGAGAGAGG
AGGGGAGAGACCCTGGCCAGGCTGGAGCCTGGATTCGAGGGGAGGAGGGACGGGAGGAGGAGAAAGGTGGAGGAG
AAGGGAGGGGGGAGCGGGGAGGAGCGGCCGGGCCTGGGGCCTTGAGGCCCGGGGAGAGCCGGGGAGCCGGGCCCG
CGCGCCGAGATGTTGCTGCTGCTGTTACTGGCGCCACTCTTCCTCCGCCCCCCGGGCGCGGGCGGGGCGCAGACC
CCCAACGCCACCTCAGAAGGTTGCCAGATCATACACCCGCCCTGGGAAGGGGGCATCAGGTACCGGGGCCTGACT
CGGGACCAGGTGAAGGCTATCAACTTCCTGCCAGTGGACTATGAGATTGAGTATGTGTGCCGGGGGGAGCGCGAG
GTGGTGGGGCCCAAGGTCCGCAAGTGCCTGGCCAACGGCTCCTGGACAGATATGGACACACCCAGCCGCTGTGTC
CGAATCTGCTCCAAGTCTTATTTGACCCTGGAAAATGGGAAGGTTTTCCTGACGGGTGGGGACCTCCCAGCTCTG
GACGGAGCCCGGGTGGATTTCCGGTGTGACCCCGACTTCCATCTGGTGGGCAGCTCCCGGAGCATCTGTAGTCAG
GGCCAGTGGAGCACCCCCAAGCCCCACTGCCAGGTGAATCGAACGCCACACTCAGAACGGCGCGCAGTGTACATC
GGGGCACTGTTTCCCATGAGCGGGGGCTGGCCAGGGGGCCAGGCCTGCCAGCCCGCGGTGGAGATGGCGCTGGAG
GACGTGAATAGCCGCAGGGACATCCTGCCGGACTATGAGCTCAAGCTCATCCACCACGACAGCAAGTGTGATCCA
GGCCAAGCCACCAAGTACCTATATGAGCTGCTCTACAACGACCCTATCAAGATCATCCTTATGCCTGGCTGCAGC
TCTGTCTCCACGCTGGTGGCTGAGGCTGCTAGGATGTGGAACCTCATTGTGCTTTCCTATGGCTCCAGCTCACCA
GCCCTGTCAAACCGGCAGCGTTTCCCCACTTTCTTCCGAACGCACCCATCAGCCACACTCCACAACCCTACCCGC
GTGAAACTCTTTGAAAAGTGGGGCTGGAAGAAGATTGCTACCATCCAGCAGACCACTGAGGTCTTCACTTCGACT
CTGGACGACCTGGAGGAACGAGTGAAGGAGGCTGGAATTGAGATTACTTTCCGCCAGAGTTTCTTCTCAGATCCA
GCTGTGCCCGTCAAAAACCTGAAGCGCCAGGATGCCCGAATCATCGTGGGACTTTTCTATGAGACTGAAGCCCGG
AAAGTTTTTTGTGAGGTGTACAAGGAGCGTCTCTTTGGGAAGAAGTACGTCTGGTTCCTCATTGGGTGGTATGCT
GACAATTGGTTCAAGATCTACGACCCTTCTATCAACTGCACAGTGGATGAGATGACTGAGGCGGTGGAGGGCCAC
ATCACAACTGAGATTGTCATGCTGAATCCTGCCAATACCCGCAGCATTTCCAACATGACATCCCAGGAATTTGTG
GAGAAACTAACCAAGCGACTGAAAAGACACCCTGAGGAGACAGGAGGCTTCCAGGAGGCACCGCTGGCCTATGAT
GCCATCTGGGCCTTGGCACTGGCCCTGAACAAGACATCTGGAGGAGGCGGCCGTTCTGGTGTGCGCCTGGAGGAC
TTCAACTACAACAACCAGACCATTACCGACCAAATCTACCGGGCAATGAACTCTTCGTCCTTTGAGGGTGTCTCT
GGCCATGTGGTGTTTGATGCCAGCGGCTCTCGGATGGCATGGACGCTTATCGAGCAGCTTCAGGGTGGCAGCTAC
AAGAAGATTGGCTACTATGACAGCACCAAGGATGATCTTTCCTGGTCCAAAACAGATAAATGGATTGGAGGGTCC
CCCCCAGCTGACCAGACCCTGGTCATCAAGACATTCCGCTTCCTGTCACAGAAACTCTTTATCTCCGTCTCAGTT
CTCTCCAGCCTGGGCATTGTCCTAGCTGTTGTCTGTCTGTCCTTTAACATCTACAACTCACATGTCCGTTATATC
CAGAACTCACAGCCCAACCTGAACAACCTGACTGCTGTGGGCTGCTCACTGGCTTTAGCTGCTGTCTTCCCCCTG
GGGCTCGATGGTTACCACATTGGGAGGAACCAGTTTCCTTTCGTCTGCCAGGCCCGCCTCTGGCTCCTGGGCCTG
GGCTTTAGTCTGGGCTACGGTTCCATGTTCACCAAGATTTGGTGGGTCCACACGGTCTTCACAAAGAAGGAAGAA
AAGAAGGAGTGGAGGAAGACTCTGGAACCCTGGAAGCTGTATGCCACAGTGGGCCTGCTGGTGGGCATGGATGTC
CTCACTCTCGCCATCTGGCAGATCGTGGACCCTCTGCACCGGACCATTGAGACATTTGCCAAGGAGGAACCTAAG
GAAGATATTGACGTCTCTATTCTGCCCCAGCTGGAGCATTGCAGCTCCAGGAAGATGAATACATGGCTTGGCATT
TTCTATGGTTACAAGGGGCTGCTGCTGCTGCTGGGAATCTTCCTTGCTTATGAGACCAAGAGTGTGTCCACTGAG
AAGATCAATGATCACCGGGCTGTGGGCATGGCTATCTACAATGTGGCAGTCCTGTGCCTCATCACTGCTCCTGTC
ACCATGATTCTGTCCAGCCAGCAGGATGCAGCCTTTGCCTTTGCCTCTCTTGCCATAGTTTTCTCCTCCTATATC
ACTCTTGTTGTGCTCTTTGTGCCCAAGATGCGCAGGCTGATCACCCGAGGGGAATGGCAGTCGGAGGCGCAGGAC
ACCATGAAGACAGGGTCATCGACCAACAACAACGAGGAGGAGAAGTCCCGGCTGTTGGAGAAGGAGAACCGTGAA
CTGGAAAAGATCATTGCTGAGAAAGAGGAGCGTGTCTCTGAACTGCGCCATCAACTCCAGTCTCGGCAGCAGCTC
CGCTCCCGGCGCCACCCACCGACACCCCCAGAACCCTCTGGGGGCCTGCCCAGGGGACCCCCTGAGCCCCCCGAC
CGGCTTAGCTGTGATGGGAGTCGAGTGCATTTGCTTTATAAGTGAGGGTAGGGTGAGGGAGGACAGGCCAGTAGG
GGGAGGGAAAGGGAGAGGGGAAGGGCAGGGGACTCAGGAAGCAGGGGGTCCCCATCCCCAGCTGGGAAGAACATG
CTATCCAATCTCATCTCTTGTAAATACATGTCCCCCTGTGAGTTCTGGGCTGATTTGGGTCTCTCATACCTCTGG
GAAACAGACCTTTTTCTCTCTTACTGCTTCATGTAATTTTGTATCACCTCTTCACAATTTAGTTCGTACCTGGCT
TGAAGCTGCTCACTGCTCACACGCTGCCTCCTCAGCAGCCTCACTGCATCTTTCTCTTCCCATGCAACACCCTCT
TCTAGTTACCACGGCAACCCCTGCAGCTCCTCTGCCTTTGTGCTCTGTTCCTGTCCAGCAGGGGTCTCCCAACAA
GTGCTCTTTCCACCCCAAAGGGGCCTCTCCTTTTCTCCACTGTCATAATCTCTTTCCATCTTACTTGCCCTTCTA

FIGURE 1011B

TACTTTCTCACATGTGGCTCCCCCTGAATTTTGCTTCCTTTGGGAGCTCATTCTTTTCGCCAAGGCTCACATGCT
CCTTGCCTCTGCTCTGTGCACTCACGCTCAGCACACATGCATCCTCCCCTCTCCTGCGTGTGCCCACTGAACATG
CTCATGTGTACACACGCTTTTCCCGTATGCTTTCTTCATGTTCAGTCACATGTGCTCTCGGGTGCCCTGCATTCA
CAGCTACGTGTGCCCCTCTCATGGTCATGGGTCTGCCCTTGAGCGTGTTTGGGTAGGCATGTGCAATTTGTCTAG
CATGCTGAGTCATGTCTTTCCTATTTGCACACGTCCATGTTTATCCATGTACTTTCCCTGTGTACCCTCCATGTA
CCTTGTGTACTTTCTTCCCTTAAATCATGGTATTCTTCTGACAGAGCCATATGTACCCTACCCTGCACATTGTTA
TGCACTTTTCCCCAATTCATGTTTGGTGGGGCCATCCACACCCTCTCCTTGTCACAGAATCTCCATTTCTGCTCA
GATTCCCCCCATCTCCATTGCATTCATGTACTACCCTCAGTCTACACTCACAATCATCTTCTCCCAAGACTGCTC
CCTTTTGTTTTGTGTTTTTTTGAGGGGAATTAAGGAAAAATAAGTGGGGGCAGGTTTGGAGAGCTGCTTCCAGTG
GATAGTTGATGAGAATCCTGACCAAAGGAAGGCACCCTTGACTGTTGGGATAGACAGATGGACCTATGGGGTGGG
AGGTGGTGTCCCTTTCACACTGTGGTGTCTCTTGGGGAAGGATCTCCCCGAATCTCAATAAACCAGTGAACAGTG
TGACTCGGCAAAAAAAAAAA

FIGURE 1012

MLLLLLLAPLFLRPPGAGGAQTPNATSEGCQIIHPPWEGGIRYRGLTRDQVKAINFLPVDYEIEYVCRGEREVVG
PKVRKCLANGSWTDMDTPSRCVRICSKSYLTLENGKVFLTGGDLPALDGARVDFRCDPDFHLVGSSRSICSQGQW
STPKPHCQVNRTPHSERRAVYIGALFPMSGGWPGGQACQPAVEMALEDVNSRRDILPDYELKLIHHDSKCDPGQA
TKYLYELLYNDPIKIILMPGCSSVSTLVAEAARMWNLIVLSYGSSSPALSNRQRFPTFFRTHPSATLHNPTRVKL
FEKWGWKKIATIQQTTEVFTSTLDDLEERVKEAGIEITFRQSFFSDPAVPVKNLKRQDARIIVGLFYETEARKVF
CEVYKERLFGKKYVWFLIGWYADNWFKIYDPSINCTVDEMTEAVEGHITTEIVMLNPANTRSISNMTSQEFVEKL
TKRLKRHPEETGGFQEAPLAYDAIWALALALNKTSGGGGRSGVRLEDFNYNNQTITDQIYRAMNSSSFEGVSGHV
VFDASGSRMAWTLIEQLQGGSYKKIGYYDSTKDDLSWSKTDKWIGGSPPADQTLVIKTFRFLSQKLFISVSVLSS
LGIVLAVVCLSFNIYNSHVRYIQNSQPNLNNLTAVGCSLALAAVFPLGLDGYHIGRNQFPFVCQARLWLLGLGFS
LGYGSMFTKIWWVHTVFTKKEEKKEWRKTLEPWKLYATVGLLVGMDVLTLAIWQIVDPLHRTIETFAKEEPKEDI
DVSILPQLEHCSSRKMNTWLGIFYGYKGLLLLLGIFLAYETKSVSTEKINDHRAVGMAIYNVAVLCLITAPVTMI
LSSQQDAAFAFASLAIVFSSYITLVVLFVPKMRRLITRGEWQSEAQDTMKTGSSTNNNEEEKSRLLEKENRELEK
IIAEKEERVSELRHQLQSRQQLRSRRHPPTPPEPSGGLPRGPPEPPDRLSCDGSRVHLLYK

FIGURE 1013

CCAGATCTCAGAGGAGCCTGGCTAAGCAAAACCCTGCAGAACGGCTGCCTAATTTACAGCAACCATGAGTACAAA
TGGTGATGATCATCAGGTCAAGGATAGTCTGGAGCAATTGAGATGTCACTTTACATGGGAGTTATCCATTGATGA
CGATGAAATGCCTGATTTAGAAAACAGAGTCTTGGATCAGATTGAATTCCTAGACACCAAATACAGTGTGGGAAT
ACACAACCTACTAGCCTATGTGAAACACCTGAAAGGCCAGAATGAGGAAGCCCTGAAGAGCTTAAAAGAAGCTGA
AAACTTAATGCAGGAAGAACATGACAACCAAGCAAATGTGAGGAGTCTGGTGACCTGGGGCAACTTTGCCTGGAT
GTATTACCACATGGGCAGACTGGCAGAAGCCCAGACTTACCTGGACAAGGTGGAGAACATTTGCAAGAAGCTTTC
AAATCCCTTCCGCTATAGAATGGAGTGTCCAGAAATAGACTGTGAGGAAGGATGGGCCTTGCTGAAGTGTGGAGG
AAAGAATTATGAACGGGCCAAGGCCTGCTTTGAAAAGGTGCTTGAAGTGGACCCTGAAAACCCTGAATCCAGCGC
TGGGTATGCGATCTCTGCCTATCGCCTGGATGGCTTTAAATTAGCCACAAAAAATCACAAGCCATTTTCTTTGCT
TCCCCTAAGGCAGGCTGTCCGCTTAAATCCAGACAATGGATATATTAAGGTTCTCCTTGCCCTGAAGCTTCAGGA
TGAAGGACAGGAAGCTGAAGGAGAAAAGTACATTGAAGAAGCTCTAGCCAACATGTCCTCACAGACCTATGTCTT
TCGATATGCAGCCAAGTTTTACCGAAGAAAAGGCTCTGTGGATAAAGCTCTTGAGTTATTAAAAAAGGCCTTGCA
GGAAACACCCACTTCTGTCTTACTGCATCACCAGATAGGGCTTTGCTACAAGGCACAAATGATCCAAATCAAGGA
GGCTACAAAAGGGCAGCCTAGAGGGCAGAACAGAGAAAAGCTAGACAAAATGATAAGATCAGCCATATTTCATTT
TGAATCTGCAGTGGAAAAAAAGCCCACATTTGAGGTGGCTCATCTAGACCTGGCAAGAATGTATATAGAAGCAGG
CAATCACAGAAAAGCTGAAGAGAATTTTCAAAAATTGTTATGCATGAAACCAGTGGTAGAAGAAACAATGCAAGA
CATACATTTCTACTATGGTCGGTTTCAGGAATTTCAAAAGAAATCTGACGTCAATGCAATTATCCATTATTTAAA
AGCTATAAAAATAGAACAGGCATCATTAACAAGGGATAAAAGTATCAATTCTTTGAAGAAATTGGTTTTAAGGAA
ACTTCGGAGAAAGGCATTAGATCTGGAAAGCTTGAGCCTCCTTGGGTTCGTCTATAAATTGGAAGGAAATATGAA
TGAAGCCCTGGAGTACTATGAGCGGGCCCTGAGACTGGCTGCTGACTTTGAGAACTCTGTGAGACAAGGTCCTTA
GGCACCCAGATATCAGCCACTTTCACATTTCATTTCATTTTATGCTAACATTTACTAATCATCTTTTCTGCTTAC
TGTTTTCAGAAACATTATAATTCACTGTAATGATGTAATTCTTGAATAATAAATCTGACAAAATATT

FIGURE 1014

MSTNGDDHQVKDSLEQLRCHFTWELSIDDDEMPDLENRVLDQIEFLDTKYSVGIHNLLAYVKHLKGQNEEALKSL
KEAENLMQEEHDNQANVRSLVTWGNFAWMYYHMGRLAEAQTYLDKVENICKKLSNPFRYRMECPEIDCEEGWALL
KCGGKNYERAKACFEKVLEVDPENPESSAGYAISAYRLDGFKLATKNHKPFSLLPLRQAVRLNPDNGYIKVLLAL
KLQDEGQEAEGEKYIEEALANMSSQTYVFRYAAKFYRRKGSVDKALELLKKALQETPTSVLLHHQIGLCYKAQMI
QIKEATKGQPRGQNREKLDKMIRSAIFHFESAVEKKPTFEVAHLDLARMYIEAGNHRKAEENFQKLLCMKPVVEE
TMQDIHFYYGRFQEFQKKSDVNAIIHYLKAIKIEQASLTRDKSINSLKKLVLRKLRRKALDLESLSLLGFVYKLE
GNMNEALEYYERALRLAADFENSVRQGP

FIGURE 1015

CCTCGCTAGTGGCGGGCATGATAACACACGCCGGAGGGTCGCACGCGGGTTCCAGTTGTGATTGCTGGAGTTGTG
TATTGCCAGGAGGCTCTCCGAGATTGGGGTCGGGTCACTGCCTCATCCACCGGAGCGATGGCGTTTCTCCGAAGC
ATGTGGGGCGTGCTGAGTGCCCTGGGAAGGTCTGGAGCAGAGCTGTGCACCGGCTGTGGAAGTCGACTGCGCTCC
CCCTTCAGTTTTGTGTATTTACCGAGGTGGTTTTCATCTGTCTTGGCAAGTTGTCCAAAGAAACCTGTAAGTTCT
TACCTTCGATTTTCTAAAGAACAACTACCCATATTTAAAGCTCAGAACCCAGATGCAAAAACTACAGAACTAATT
AGAAGAATTGCCCAGCGTTGGAGGGAACTTCCTGATTCAAAGAAAAAAATATATCAAGATGCTTATAGGGCGGAG
TGGCAGGTATATAAAGAAGAGATAAGCAGATTTAAAGAACAGCTAACTCCAAGTCAGATTATGTCTTTGGAAAAA
GAAATCATGGACAAACATTTAAAAAGGAAAGCTATGACAAAAAAAAAAAGAGTTAACACTGCTTGGAAAACCAAAA
AGACCTCGTTCAGCTTATAACGTTTATGTAGCTGAAAGATTCCAAGAAGCTAAGGGTGATTCACCGCAGGAAAAG
CTGAAGACTGTAAAGGAAAACTGGAAAAATCTGTCTGACTCTGAAAAGGAATTATATATTCAGCATGCTAAAGAG
GACGAAACTCGTTATCATAATGAAATGAAGTCTTGGGAAGAACAAATGATTGAAGTTGGACGAAAGGATCTTCTA
CGTCGCACAATAAAGAAACAACGAAAATATGGTGCTGAGGAGTGTTAAAAGTAGAAGATTGAGATGTGTTCACAA
TGGATAGGCACAGGAAACCAGTTAGGTCTCAATACCTGAAGCTATCGTAAAATTAAGAAAGGATAAAGTTGGTAA
ACCTTTTATATTTAGTATCTTTTTATTCAGCTCATGGACTTCTGCCAGCATAATACTTGCTTTGGAAAACCCAGA
TAAAGGTTCATGCAAACTTTATTTTGTGTTTAGGAACTACTGAGGATCAGAGTAATCCAAGCAAATGTGAATCAT
TTTACCTTTGACAAAGGTAAATCAGACTATGAAGTTTTTTTTATACAGGATGATGACTATGGAAAGAGTACTCTT
GTTTCCTTATATTATGGAGGCAGGAGTTTCGTTTTCAAAATTGTTACAAATTGTAGAAGCCACGGTGTTCTGTGA
TATAAGTGTGTGTTTTTCATAAAGCAGGCAGAACTCATCTAGGTAAATTACAGTTCCTAGGTATAATTCACATTG
TATTCAGAGTTGATGGTTGTACATATAAGTGATTGCTGGTTTTAGTTGCAACTTTGTATAAAAGGGACTGAGAAA
TTTATAAACTTTTTTCTTACTGTCTTTTTTCTAAAGTAAAAACAAAGAAATTATGTGCCAGATTTATGCATATTA
TTTTATGTTGCATAGAATAAAATTTTTAATCTTTAATTTTACATTTCCTAAATATATTTTAAGACGAAACATTTG
TTCTATAGCTTTTCCCTTTTTTTAAGTAAGGAATTTTATTTTTTTCTGAATTATTTTCTCTCGTGAGTATATTGA
TCCAGAAAGAAAACTTGTATTATGTGTGTTTTAAAATGAGAAATCTAAAAAACGAAAAGTCTCCAAAGTCTCTGG
AATTTGAAACACTTTGCATAACGTATAAAAGCCTGTTTAAGAGACAGCCAACTATGGCCTGTGGATCAAATCCAG
CCTGCTGCCTGCTTTTTATGGCCTGTGAGCTAGGAATTGTGTTTATAATTTTAAATGTTTTTTTTTAAAGACTTT
TATGATACTTGAAAATTAACATGAATATTTAGTGTTCATAAATAAAGTTTGTTGAAACACA

FIGURE 1016

MAFLRSMWGVLSALGRSGAELCTGCGSRLRSPFSFVYLPRWFSSVLASCPKKPVSSYLRFSKEQLPIFKAQNPDA
KTTELIRRIAQRWRELPDSKKKIYQDAYRAEWQVYKEEISRFKEQLTPSQIMSLEKEIMDKHLKRKAMTKKKELT
LLGKPKRPRSAYNVYVAERFQEAKGDSPQEKLKTVKENWKNLSDSEKELYIQHAKEDETRYHNEMKSWEEQMIEV
GRKDLLRRTIKKQRKYGAEEC

FIGURE 1017

GGTGCTTCTGAGATGTGGGCTTGCACACGCTGTTGCTATAGTACGTGTGATCCTGACTGCTGTCATGGCGTGCCC
TCTGGAGAAGGCCCTGGATGTGATGGTGTCCACCTTCCACAAGTACTCGGGCAAAGAGGGTGACAAGTTCAAGCT
CAACAAGTCAGAACTAAAGGAGCTGCTGACCCGGGAGCTGCCCAGCTTCTTGGGGAAAAGGACAGATGAAGCTGC
TTTCCAGAAGCTGATGAGCAACTTGGACAGCAACAGGGACAACGAGGTGGACTTCCAAGAGTACTGTGTCTTCCT
GTCCTGCATCGCCATGATGTGTAACGAATTCTTTGAAGGCTTCCCAGATAAGCAGCCCAGGAAGAAATGAAAACT
CCTCTGATGTGGTTGGGGGGTCTGCCAGCTGGGGCCCTCCCTGTCGCCAGTGGGCACTTTTTTTTTTCCACCCTG
GCTCCTTCAGACACGTGCTTGATGCTGAGCAAGTTCAATAAAGATTCTTGGAAGTTT

FIGURE 1018

MACPLEKALDVMVSTFHKYSGKEGDKFKLNKSELKELLTRELPSFLGKRTDEAAFQKLMSNLDSNRDNEVDFQEY
CVFLSCIAMMCNEFFEGFPDKQPRKK

FIGURE 1019A

GGCGCGGGGTCCGCGCCCGGAGCGCCCCGCCGCGCACAGGAGTTGACCACATTTGGCCATTTCCCAGAAGGGCCC
CACCCCAAGGGTGAGTGGCCAATGGGGAGCTGTTTCTGCTGACATCAATTCCCCAGGAGGTACTCACCCCAAGTC
TGCCCAAGTGAAGATGGCTGATACCCACCCTGGGATGGAGCCCAGCGCCTGAGGCCCTTATC**ATG**GTGATGGTCC
TAAGTGAAAGCCTCAGCACCCGGGGAGCTGACTCCATTGCATGTGGGACCTTCAGCCGTGAACTGCACACGCCAA
AGAAGATGAGTCAAGGACCTACACTTTTCTCTTGTGGAATTATGGAAAATGACAGATGGCGAGACCTGGACAGGA
AATGCCCTCTTCAGATTGACCAACCGAGCACCAGCATCTGGGAATGCCTGCCTGAAAAGGACAGCTCACTATGGC
ACCGGGAGGCAGTGACCGCCTGCGCTGTGACCAGTCTGATCAAAGACCTCAGCATCAGCGACCACAACGGGAACC
CCTCAGCACCCCCTAGCAAGCGCCAGTGCCGCTCACTGTCCTTCTCCGATGAGATGTCCAGTTGCCGGACATCAT
GGAGGCCCTTGGGCTCCAAAGTCTGGACTCCCGTGGAAAAGAGACGCTGCTACAGCGGGGGCAGCGTCCAGCGCT
ATTCCAACGGCTTCAGCACCATGCAGAGGAGTTCCAGCTTCAGCCTCCCTTCCCGGGCCAACGTGCTCTCCTCAC
CCTGCGACCAGGCAGGACTCCACCACCGATTTGGAGGGCAGCCCTGCCAAGGGGTGCCAGGCTCAGCCCCGTGTG
GACAGGCAGGTGACACCTGGAGCCCTGACCTGCACCCCGTGGGAGGAGGCCGGCTGGACCTGCAGCGGTCCCTCT
CTTGCTCACATGAGCAGTTTTCCTTTGTGGAATACTGTCCTCCCTCAGCCAACAGCACACCTGCCTCAACACCAG
AGCTGGCGAGACGCTCCAGCGGCCTTTCCCGCAGCCGCTCCCAGCCGTGTGTCCTTAACGACAAGAAGGTCGGTG
TTAAAAGGCGGCGCCCTGAAGAAGTGCAAGAGCAGAGGCCTTCTCTAGACCTTGCCAAGATGGCACAGAACTGTC
AGACCTTCAGCAGCCTCAGCTGCCTGAGCGCAGGGACAGAGGACTGCGGTCCCCAGAGCCCCTTCGCCCGCCACG
TCAGCAACACCAGGGCCTGGACCGCCCTGCTCTCAGCCTCCGGCCCAGGGGGCAGGACCCCCGCTGGGACCCCGG
TCCCTGAGCCTCTTCCCCCTTCCTTCGACGACCACCTCGTCTGCCAGGAGGACCTGTCCTGTGAGGAGTCAGACA
GCTGCGCCCTGGACGAGGATTGTGGCAGGAGAGCGGAGCCGGCTGCAGCCTGGCGGGACCGCGGGGCCCCTGGGA
ACAGCCTCTGCTCCCTGGACGGCGAGTTGGACATTGAGCAGATAGAGAAGAAC**TGA**GGGGGTGTGGGCCCAGGCA
GGGCTGGGGTGTGCTGGCATCGACAGCCCCCACTCTGGGCACTAGGTGGGCCCTTGAAGGGGAGCCCAACTCGTG
GGCCTGATGAAAGCTTCCTGAGTGGTGTCGGGTCCCAGAGAGGGAGCCCACCTGCTGCCTGGGGGAGAGCCTGGC
CTGGCCGCGTCATACAGCGGGTGTGTCAGCCTCTCACCGGCTCCCCGAGCGTGGCAGCCACCAGGTCCACAGAAC
TACTGCAGCCCAGAGGACAGCTTTGAAGTTTGCGTCTTTTCTGCCTCTTTCCCTGTGGGATGTTGGGCAGTCTCT
GTTGTCCCCGGCAGAGCTGGGCACCGCTCTGTATCCCCCTGGTGGTGGGGGCTGTCAGGGAGGGCCTGGGGTGGG
GGCCAGGGGCCATCTGCTATGTCAGGGCCCTTCTTGGCCTCACTCAGGTTCACTTCTGGGGAGTCGGCCCCGCAG
CTTCTTTCACTCAGTTTTACTCCGTGCCTTCTCTCCCAGGTCTCCCTGCTTCAGGCTTGGGAAGGTTCGGGAGAT
GCTTCCTTCTGTAACACCAGAACCATTTGGCCTTAATTCCAATGTGAGAGACAGAATCCCTGGGGTGCTGGACTG
GCCCTCCAGAGGGTAAGCCATGTCCGGAGTCTCGGGCCCAAGGAACGATTTGGAGGGTGCTTGTTAGGGCCTCCC
GTGTTGGGTAGAAATTTGGTGGATCTGTTGGCTGAAAAGATGGACTTGCTTGCCTCTCCTACAGCATGGAGAGGC
TGACCCCATGGCTCTGCCACCGTTGGGGCAGGGTTAGCAGATGGCAGCCCTTCTCTGTGGCTGACAGGTCACTGA
GTGATAAGCATGGTTGGTTCCGGTGAGTGTAGGGATGGCACGATACCAGGGCAGCCTCTTGAAAACGGCCTCGGG
AGACGGGAGCTGCGAGCAGGTGGGCAGATGAGGGCCCTATGCGCACTCAGGGGTGAAGGGCGTCCGCTGGCCACT
CTGCAGGGGCCCCTGCAGGATTCCAGGCACCTCCCGTTTGTCCTTGAGGACTGCTGGCTGTAACCAGGGCACATC
ACCCACCTCAAGACAAGCCCACGCCCTTGTCAGCTTAGGGGGAGCCCAGTCCTGAGGGCTGCATCTCTGTTGTAG
GCCCAGCCACCGGCACAAAGCTGGATTCATGCTCCCTGCCCCTACCCCACCCTGGCTCCTCACCCTGGGGCATCC
GAGGAGCCTAGCCCCCTGAGGGTTTGCTCTCCTCTCAAGGTTTGTAGCTCCTCTCCGGCTGCCTTGCAGACACCA
CCACATGGGCTCTGCTCTATGGGAATCTGGCTTTTAGCGAATGTGGCGTCTTCTGCAAACAATAGCAATTGGGCT
GGCTTAGGAGCAAGTGGCTCATTTTCCCATAAGGCTAAAAATAACTGGTGCGCTCCCTTGTGTTGGCTGACACGC
GCGTTCAAAGCACTTTTGTAGTCACTTTGCTTTTGCTCGTCTTCATGGACGAGTGAACGCCTCGCTTCTGCAGGT
TGAGTCCAGATGCTTCTCACCTTCTTTCTCCTCAAGAAAGATGCTTTTTGGGAAACGTTGTTTAAATCTTATTTT
TTTACTACATCAAAAGGATGGTGGTTCAAGTTCCCAATATGTGGGTGGCACTTCTTAAAAATCAGCTTTAAGGAG
CTGGCAGAAAGCCCCCAGCCCCACAGCCCTGAGAGATGGTGTTGCTAGCTCAGGTGGCTGACACATGGGGTATGC
CGGGCACTGGGCAGGTCCCAGAGCCGGGGAACCAGCTCACCTCTGGTTGCTGTAGCTCCTGCCGGAGGCATGTCT
ACTTGTGATCCCGGACAGCCGAACCCAAGAGCTGGTGGCTCTGAGCAGACAGAGACATCTTGGCCTGTCCCTGCC
TGGGGGTCATGGAGACCATGTCTTCTTAGAGCAAATGTGGAGGCGGCCAGGGCAGTTGTTGGGTGAATGTGGAGA
GCACATGGCCATGTCTTGCCCCCGGAGTACCACTGGGCGTGGGGGGTCCTGGCACCACATGCCCGGTGTGGCCGA
GGGCACACAGCCTCTATAGCAGGCCTTCCTGTGGAAGGCAGAGGCAGTGAGGGAGGTGGACGGTGCCAGCTGAGG

FIGURE 1019B

CTGAGGCATGCAGCAGCCCCCAGCTACCTTTGCTTAGGGCTGGGGTGGGAGGCACATGGTGACAGGTATATGTCG
TGGGACTGGGGTGTGGGTGACCTGCCCTCAAACCTTGCCTGCCACCTCCCCATTCAGGCCTGGTGGCAGGAAGGG
ACAAGCTGTGGAGCTGGCTGAGTCACAGCCACCTCCCCACCTCCCCGCAAGCTGGTCCCATCGACCAGCAAGCCC
AGCCCCAGGGCGCTTAGGGAGAAATGACCCAGCCTCCTCAGACCCCGCCTGCCTGTCCTGTGCCCACCACGCAGC
AGTCAGGGGAGAAAATGGTGGCTATCCCTTCTGCTTAGAGAAAGAAATGGCCTTTAGCTGGTTTCATGTTTGTGT
TTTGACTGGAGGGAGTAGACCCTATCTATAAGGTGCCACCCCATCATCCAAGCTGCCACACTGCCCGGAGCAGCC
TGTTCCTGCACTCCACCCTGCTGGCCCCAGGACTTCTGATCTCAGTCCTCTGGGAGGGAGGTTCGCCTAGGAGGT
GCCCCCCACATTGGTGTCCCCATGGGCAGCAGGCAGACAGCTCACCCCCACCAGCATGATGGCCCCAGCTGGGGG
CAGTGGCAGGAGCCTTACTTTTGTCACAGCCTTGCCCACAAACCCTGCCTCTGAGGGGAGACTGAGGAAGGGCAG
AGCCAGAAGCAAGCCGTGCCAGGCCATCTGCCTGCTCATGGGGTCCTAAAGCGCGGGCTAAGCCTGCAGGAAAGC
CGGGGCGGTGGGGGGGGCTTAGTGCCACATGCACCCCACTCATTCCAAAGCCACCAAACTGCCAGGGGCTGCCGT
CCACCCGTGGGGCCCAGGGGCTGGGGCCACAGCCTTGCCATTTTCGTTGCCATACCCTCTTGCCTTACTCGCGGT
GGAGGCCGGATTTGCACGGGCAGACGTGCACCTGGGCCCGTGGGGAGCTTGTTCTGACCAGACGTACAGATTTTC
ATTCTCAGAAAGCCTTACTTTTCAACCAAATTTTTGTAGCCAGTTTTGTGAATTTGTACACTGAAAGAAAATTTA
AATAAAGGGGAAGTCCACATTAAAAAGAAAACAAAACAAACCCTAACTAACTTCCAAATGGGTCTCCTGGTGCGG
GGGCGTGAGTGGCCGTGCCCTGGGTGTGCTGCCTGTCTGAGCAAGCTTCCCTAGCTGTGGAACCCCGGGCCCCCT
GCTGCGGGCTCTGCCTTGGTGTCATGCCTGCTGCACCCCCGTTTCCACTGACGTGCCGTCTGTGGCTATGGGGGT
GGTCACTGGAATGACGGTCACTCCAGACGTCAGCCGGCAGGGATGCAGCAGGCTGGCCGCGCACCGGGGCTCGGG
CACCCTCTGGCCCCACACTGGCAATGATGCCACACCTTGCCATGTCCACGCTGTTGGTCAAACCCCTCTGTCATG
CCTCTTTAAAGAGAAAAGAAGAGAAAGATTTTTTTTTTTTTAATGGCAGACCGAAGTGGAGATCTTGTAGCCTA
GATAGGATAGTCTGACCTTCTAGCATAGTCTTTTTGGCAAATGATTTGTGTTTTCAGTGTGTGGGGAAGCTGTCC
TGGGGGCTGGGGCGACAGATAGCACATAGGCTGTTTCTGGGGCTGCAGGGGCTTCCCTGAGCTGGATGTTGTGGG
TGTTGCCGTGCTTCAGGAAGTGTGGCGACCAGAAAGCGTAGACCCGGGGCCCAGGGTCTGCCCGCCCCTGCAGCC
TGGCCTCCCCGCACAGGCTGTGGCTTGCACTCCAGCCGCTCTAGTCTCTCAGGAATTTGCTTGTTACTTGTACTG
TGTAAATAAAGCTTCCTGGTTCAATACCC

FIGURE 1020

MVMVLSESLSTRGADSIACGTFSRELHTPKKMSQGPTLFSCGIMENDRWRDLDRKCPLQIDQPSTSIWECLPEKD
SSLWHREAVTACAVTSLIKDLSISDHNGNPSAPPSKRQCRSLSFSDEMSSCRTSWRPLGSKVWTPVEKRRCYSGG
SVQRYSNGFSTMQRSSSFSLPSRANVLSSPCDQAGLHHRFGGQPCQGVPGSAPCGQAGDTWSPDLHPVGGGRLDL
QRSLSCSHEQFSFVEYCPPSANSTPASTPELARRSSGLSRSRSQPCVLNDKKVGVKRRRPEEVQEQRPSLDLAKM
AQNCQTFSSLSCLSAGTEDCGPQSPFARHVSNTRAWTALLSASGPGGRTPAGTPVPEPLPPSFDDHLVCQEDLSC
EESDSCALDEDCGRRAEPAAAWRDRGAPGNSLCSLDGELDIEQIEKN

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FIGURE 1021

GTAAGTGCCAGGGTCTCAGGGTCAGGTCGCGGCTGGTCACTGTGCAGGCGCTTGGGTGACGCGACGATCTCAGCG
GATCTGGTCACCTTCGTCTCCCCGCCATGGAGACCTCAGCACTCAAGCAGCAGGAGCAGCCCGCGGCGACCAAGA
TCAGGAACCTGCCCTGGGTTGAAAAATACCGGCCACAGACCCTGAATGATCTCATTTCTCATCAGGACATTCTGA
GTACCATTCAGAAGTTTATCAATGAAGACCGACTGCCACACTTGCTTCTCTACGGTCCCCCAGGGACAGGCAAGA
CATCTACCATCCTAGCCTGTGCGAAACAGCTATATAAAGACAAAGAATTTGGCTCCATGGTCTTGGAGCTGAATG
CTTCAGATGACCGAGGAATAGACATCATTCGAGGACCGATCCTGAGCTTTGCTAGCACAAGGACAATATTTAAGA
AAGGCTTTAAGCTAGTGATCTTGGATGAAGCAGACGCCATGACTCAGGACGCCCAGAATGCCTTGAGAAGAGTAA
TTGAGAAATTCACAGAAAATACCAGATTCTGCCTCATCTGTAACTATCTGTCAAAGATCATCCCTGCCTTGCAGT
CCCGCTGCACGAGGTTTCGGTTCGGTCCCCTGACTCCTGAACTCATGGTTCCCCGCCTGGAACATGTCGTGGAAG
AAGAGAAAGTTGATATAAGTGAAGATGGAATGAAAGCACTAGTCACTCTTTCCAGTGGAGACATGCGTAGGGCTC
TGAACATTTTGCAGAGCACCAATATGGCCTTTGGGAAGGTGACAGAGGAGACTGTCTACACCTGCACCGGGCACC
CGCTCAAGTCAGACATTGCCAACATCCTGGACTGGATGTTGAATCAAGATTTCACCACAGCCTACAGAAATATTA
CAGAGTTGAAAACTCTGAAGGGGTTGGCACTGCATGATATCCTGACAGAGATACACTTGTTTGTGCATAGAGTTG
ACTTTCCATCTTCAGTTCGAATACATTTATTGACCAAAATGGCAGACATTGAGTACAGGCTTTCTGTTGGCACCA
ACGAGAAGATCCAGCTGAGCTCCCTCATTGCTGCATTTCAAGTCACCAGAGACCTGATTGTTGCAGAGGCCTAGA
TGCTCTGAGGGCCATTCACAATTCTCAGGGCTCAGCAGTGATGGGAGAACAGAGGACAGTTCCAGGATAAACTGC
TGCCTGGGGCTGTGGGATGAATCAGTCACCCCGAATCTTGGAAAAACCCCCTTCCAGGAGAGGATGGGCAGGCAT
TTAAAAAGTACCATTTTTGTGGTTGTTTGGAGCAGGGATGTACAAAATAATTTTAATGTATTAACTCATACTGCC
TGTCTTTTATAGGGGAAAAAAATAACCTTTTTTATTTTAAAGTTATAAGGTTTTTACCTTTTAGTTGCTTGGATG
ACAGGGAATTAGCCTACCCCATTTTGGTCTGGAACAGAAGACTTTCAAATTTAATATGGTCCAAGTGTCTTCCTA
CTCAAGGTAAACATTATCTCCAAAATTACATTTATGATTCTAATATTTGGCATTGTGTCTGTATCTAATTTAAAC
AGATGTTAATGGACGTCTGGCCGAAACTATTATACTTTTATAAGATGAGCTGAATCCTCTTACTTTAAAAACTGG
TCTTTTTATTTACCCTCTGTGGTAGAAGAGTCACCAGCAGGTTCCAAATTGATGTGTATGATAGGAAAAAAACCT
TAATTTTAAATATAATATAGAGCCTTAAACTATGCCACTGGGTGGCAGAGGCTGTATAAAACGCACTTGTTTTCA
TGCAGGAGCGGGGCAAGTAAGGTTGAGCCTGACTGTAAACCTAGAACTGCGGAAGGACTGGGACTTTTGTACAAA
TTTCACATTTATTTTACAGCAATCATGCTGCATTTGTGTTAGTGTTCTTTATAATAAAAAACAAAGCAGCCTCCT
GGCTGGCTGTGTTACAAGTGACTCTTCCTTAGACAGCTAGAAAGATGCTGACTTTGTCAAACTTGCATTTATATG
AAAACCTTCTGTCTCTAATATCACAGAATAAACTTTCTTTAGATGCTGTTCTTTAAAAAAAAAAAAAAAAAA

FIGURE 1022

METSALKQQEQPAATKIRNLPWVEKYRPQTLNDLISHQDILSTIQKFINEDRLPHLLLYGPPGTGKTSTILACAK
QLYKDKEFGSMVLELNASDDRGIDIIRGPILSFASTRTIFKKGFKLVILDEADAMTQDAQNALRRVIEKFTENTR
FCLICNYLSKIIPALQSRCTRFRFGPLTPELMVPRLEHVVEEEKVDISEDGMKALVTLSSGDMRRALNILQSTNM
AFGKVTEETVYTCTGHPLKSDIANILDWMLNQDFTTAYRNITELKTLKGLALHDILTEIHLFVHRVDFPSSVRIH
LLTKMADIEYRLSVGTNEKIQLSSLIAAFQVTRDLIVAEA

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FIGURE 1023

GTAAGTGCCAGGGTCTCAGGGTCAGGTCGCGGCTGGTCACTGTGCAGGCGCTTGGGTGACGCGACGATCTCAGCG
GATCTGGTCACCTTCGTCTCCCCGCC**ATG**GAGACCTCAGCACTCAAGCAGCAGGAGCAGCCCGCGGCGACCAAGA
TCAGGAACCTGCCCTGGGTTGAAAAATACCGGCCACAGACCCTGAATGATCTCATTTCTCATCAGGACATTCTGA
GTACCATTCAGAAGTTTATCAATGAAGACCGACTGCCACACTTGCTTCTCTACGGTCCCCCAGGGACAGGCAAGA
CATCTACCATCCTAGCCTGTGCGAAACAGCTATATAAAGACAAAGAATTTGGCTCCATGGTCTTGGAGCTGAATG
CTTCAGATGACCGAGGAATAGACATCATTCGAGGACCGATCCTGAGCTTTGCTAGCACAAGGACAATATTTAAGA
AAGGCTTTAAGCTAGTGATCTTGGATGAAGCAGACGCCATGACTCAGGACGCCCAGAATGCCTTGAGAAGAGTAA
TTGAGAAATTCACAGAAAATACCAGATTCTGCCTCATCTGTAACTATCTGTCAAAGATCATCCCTGCCTTGCAGT
CCCGCTGCACGAGGTTTCGGTTCGGTCCCCTGACTCCTGAACTCATGGTTCCCCGCCTGGAACATGTCGTGGAAG
AAGAGAAAGTTGATATAAGTGAAGATGGAATGAAAGCACTAGTCACTCTTTCCAGTGGAGACATGCGTAGGGCTC
TGAACATTTTGCAGAGCACCAATATGGCCTTTGGGAAGGTGACAGAGGAGACTGTCTACACCTGCACCGGGCACC
CGCTCAAGTCAGACATTGCCAACATCCTGGACTGGATGTTGAATCAAGATTTCACCACAGCCTACAGAAATATTA
CAGAGTTGAAAACTCTGAAGGGGTTGGCACTGCATGATATCCTGACAGAGATACACTTGTTTGTGCATAGAGTTG
ACTTTCCATCTTCAGTTCGAATACATTTATTGACCAAAATGGCAGACATTGAGTACAGGCTTTCTGTTGGCACCA
ACGAGAAGATCCAGCTGAGCTCCCTCATTGCTGCATTTCAAGTCACCAGAGACCTGATTGTTGCAGAGGCC**TAG**A
TGCTCTGAGGGCCATTCACAATTCTCAGGGCTCAGCAGTGATGGGAGAACAGAGGACAGTTCCAGGATAAACTGC
TGCCTGGGGCTGTGGGATGAATCAGTCACCCCGAATCTTGGAAAAACCCCCTTCCAGGAGAGGATGGGCAGGCAT
TTAAAAAGTACCATTTTTGTGGTTGTTTGGAGCAGGGATGTACAAAATAATTTTAATGTATTAACTCATACTGCC
TGTCTTTTATAGGGGAAAAAAATAACCTTTTTTATTTTAAAGTTATAAGGTTTTTACCTTTTAGTTGCTTGGATG
ACAGGGAATTAGCCTACCCCATTTTGGTCTGGAACAGAAGACTTTCAAATTTAATATGGTCCAAGTGTCTTCCTA
CTCAAGGTAAACATTATCTCCAAAATTACATTTATGATTCTAATATTTGGCATTGTGTCTGTATCTAATTTAAAC
AGATGTTAATGGACGTCTGGCCGAAACTATTATACTTTTATAAGATGAGCTGAATCCTCTTACTTTAAAAACTGG
TCTTTTTATTTACCCTCTGTGGTAGAAGAGTCACCAGCAGGTTCCAAATTGATGTGTATGATAGGAAAAAAACCT
TAATTTTAAATATAATATAGAGCCTTAAACTATGCCACTGGGTGGCAGAGGCTGTATAAAACGCACTTGTTTTCA
TGCAGGAGCGGGGCAAGTAAGGTTGAGCCTGACTGTAAACCTAGAACTGCGGAAGGACTGGGACTTTTGTACAAA
TTTCACATTTATTTTACAGCAATCATGCTGCATTTGTGTTAGTGTTCTTTATAATAAAAAACAAAGCAGCCTCCT
GGCTGGCTGTGTTACAAGTGACTCTTCCTTAGACAGCTAGAAAGATGCTGACTTTGTCAAACTTGCATTTATATG
AAAACCTTCTGTCTCTAATATCACAGAATAAACTTTCTTTAGATGCTGTTCTTTAAAAAAAAAAAAAAAAA

FIGURE 1024

METSALKQQEQPAATKIRNLPWVEKYRPQTLNDLISHQDILSTIQKFINEDRLPHLLLYGPPGTGKTSTILACAK
QLYKDKEFGSMVLELNASDDRGIDIIRGPILSFASTRTIFKKGFKLVILDEADAMTQDAQNALRRVIEKFTENTR
FCLICNYLSKIIPALQSRCTRFRFGPLTPELMVPRLEHVVEEEKVDISEDGMKALVTLSSGDMRRALNILQSTNM
AFGKVTEETVYTCTGHPLKSDIANILDWMLNQDFTTAYRNITELKTLKGLALHDILTEIHLFVHRVDFPSSVRIH
LLTKMADIEYRLSVGTNEKIQLSSLIAAFQVTRDLIVAEA

FIGURE 1025A

CTCCTTCCATAAGGGTCTGGTCCTTCATCCCTCCCGCTTCACCAGACCCCCTCACCCTGGGAGCCGCCACCTCCC
TTTCCCCAAGACCAGATGTCGCGCGGCCGGACACAGCCAGCACGGAGAGTCGATGCCGGCGTCTGAGCTGCGCAG
TGGGGTCTTCCCGCTGCCCAGCAGCCTACAGGCGCGGTGCACTCTGGGGGAACATGGCCGCTTCCGGTCTCCCTC
CCGGGCCGGCGCTGGCCTGACTGCGGCCCCGGTCCGTAGCACTCCGCCCTCCGCTTCTCCCGCCCTGTAGCCGCG
AAGACTGCTTCAGCCTTTCCCTGTGCTGCCCCTGCCGCGCGATGGAGACGAGCTCGAGCTGCGAGAGTCTTGGCT
CCCAGCCGGCGGCGGCTCGGCCGCCCAGCGTGGACTCCTTGTCCAGTGCCTCCACTTCTCATTCAGAGAATTCAG
TGCATACAAAATCAGCTTCTGTTGTATCATCAGATTCCATTTCAACTTCTGCCGACAACTTTTCTCCTGATTTGA
GGGTCCTGAGGGAGTCTAACAAGTTAGCAGAAATGGAAGAACCACCCTTGCTTCCAGGAGAAAATATTAAAGACA
TGGCCAAAGATGTAACTTATATATGTCCATTCACTGGCGCTGTACGAGGAACTCTGACTGTCACGAATTATAGGT
TATATTTCAAAAGCATGGAACGGGATCCCCCATTTGTTTTAGATGCTTCCCTTGGTGTGATAAATAGAGTAGAAA
AAATTGGTGGTGCTTCTAGTCGAGGTGAAAATTCTTATGGACTAGAAACTGTGTGTAAGGATATTAGGAATTTAC
GATTTGCTCATAAACCTGAGGGGCGGACAAGAAGATCCATATTTGAGAATCTAATGAAATATGCATTTCCTGTCT
CTAATAACCTGCCTCTTTTTGCTTTTGAATACAAAGAAGTATTCCCTGAAAATGGGTGGAAGCTATATGACCCTC
TTTTAGAGTATAGAAGGCAGGGAATTCCAAATGAAAGCTGGAGAATAACAAAGATAAATGAACGATATGAACTTT
GTGATACATACCCTGCCCTCCTGGTTGTGCCAGCAAATATTCCTGATGAAGAATTAAAGAGAGTGGCATCCTTCA
GATCAAGAGGCCGTATCCCAGTTTTATCATGGATTCATCCTGAAAGTCAAGCCACAATCACTCGGTGTAGCCAGC
CCATGGTTGGAGTGAGTGGAAAGCGAAGCAAAGAAGATGAAAAATACCTTCAAGCTATCATGGATTCCAATGCCC
AGTCTCACAAAATCTTTATATTTGATGCCCGGCCAAGTGTTAATGCTGTTGCCAACAAGGCAAAGGGTGGAGGTT
ATGAAAGTGAAGATGCCTATCAAAATGCTGAACTAGTTTTCCTGGATATCCACAATATTCATGTTATGAGAGAAT
CATTACGAAAACTTAAGGAGATTGTGTACCCCAACATTGAGGAAACTCACTGGTTGTCTAACTTGGAATCTACTC
ATTGGCTAGAACATATTAAGCTTATTCTTGCAGGGGCTCTTAGGATTGCTGACAAGGTAGAGTCAGGGAAGACGT
CTGTGGTAGTGCATTGCAGTGATGGTTGGGATCGCACAGCTCAGCTCACTTCCCTTGCCATGCTCATGTTGGATG
GATACTATCGAACCATCCGAGGATTTGAAGTCCTTGTGGAGAAAGAATGGCTAAGTTTTGGACATCGATTTCAAC
TAAGAGTTGGCCATGGAGATAAGAACCATGCAGATGCAGACAGATCGCCTGTTTTTCTTCAATTTATTGACTGTG
TCTGGCAGATGACAAGACAGTTTCCTACCGCATTTGAATTCAATGAGTATTTTCTCATTACCATTTTGGACCACC
TATACAGCTGCTTATTCGGAACATTCCTCTGTAATAGTGAACAACAGAGAGGAAAAGAGAATCTTCCTAAAAGGA
CTGTGTCACTGTGGTCTTACATAAACAGCCAGCTGGAAGACTTCACTAATCCTCTCTATGGGAGCTATTCCAATC
ATGTCCTTTATCCAGTAGCCAGCATGCGCCACCTAGAGCTCTGGGTGGGATATTACATAAGGTGGAATCCACGGA
TGAAACCACAGGAACCTATTCACAACAGATACAAAGAACTTCTTGCTAAACGAGCAGAGCTTCAGAAAAAAGTAG
AGGAACTACAGAGAGAGATTTCTAACCGATCAACCTCATCCTCAGAGAGAGCCAGCTCTCCTGCACAGTGTGTCA
CTCCTGTCCAAACTGTTGTATAAAGGACTGTAAGATCAGGGGCATCATTGCTATACACTCTTGATTACACTGGCA
GCTCTATGAGTAGAAAGTCTTCGGAATTTAGAACCCATCTATGAGAGAAAGTTCAGTCACTTTATTTATTTTAAA
TCTCTCTAGGATGAGTTTAGAACTGTAGCAGTGCAGGTGGCTTAAGTGAAGTAACTCCATATGTAATTACATGAT
TATGATACTAATCTTTTAAGTATCCAAAGAATATTAAAATACTTCAATCCTGGATTCACAGTGGGAACAAGTTTC
TATTAAAAGGCAAATGCTGTTACAAATTTTTGGCATCTGGTAATATTAAAACCATTTTAGAAATACACTCTGTGC
TCACTGTGCAGAGGAACATCAGTTTTCAAACCAACACTGAAATTCTGTGGCATCACATATATTGGGCCTTGATGT
CATGACAGATCAAAATCATTTGATATCCCTTTCTCCATTCTAGGTTTTTCTTTTTTTCAGTAACTGATTTACCTT
GATCACTTTTCAACTTCCATATTCTTCATATAGTAAAAGGCAAAGTATTGAAGATACTACGGTGTGGTAGTAGTT
GAAAATTATTGCCGTCATTATTTACATACTTAAGACATATTAGCAAGTTGATCCAAAATGGGAGGCCTTATAGAT
GTGCTTGGGGGAAAATGAAGGGGAGAAAGTAGCCATACAGGAGTTCAAAGAATTCCATGCCCTTCAGATTAGCCC
AATTACCAGAAACATCATGAAAGATATTTTAAAAACTAATTATTTACTACAGTGTATTTCACTTGTCTTGTGTGT
CTGAACACACAGAAGCTAATTAGCAAGTTTTTAAGAAGTATTTAAAAATCTTACTAGGATTGACATTTTTTCTGA
ATTCTGTATAAATAGCTTATAGTGAGAAGTACTGTGCTCAAATTTTACATTTTTTTCCTTTGCAAATTCTGTAAT
TTCACTCAACGATTAAGTCTACCAAAGAACACACTGCATGTAAAAGATGTATTACAATCTCAAAGCCAGTAAAAG
AAATCTTGCTTCACTGTTCACCTGCTACAAGTAAGAGTTTGGTGCTGGTAGAAACATTTGACTCTGATGTCTATT
TTATTCTACATAAGAGCCATATGTAATGTACTGTAACAAAGGAGCTTCTTGTCCCCTTGGTCTTTTAATTAAAAG
AAATTCCAACTGACTTTTAAACTTTGTTCTTGTCCAAAGTTGCCATTTCTTTTTTTTCCCCAGAAATATTTGGAA
ATTATTGGAGGAATATGCACCCCAGATGAAAATGTTCAGTTTGTACCCATTTTTCCTTAACCAACACCCAAATCA

FIGURE 1025B

AACAATTAAAATATACAGTGTTTTTCCACTCACTAATTCACTATACAGAGAGTCTGAACCTTAGCCTCCCTCTTG
GTCTTGCAGTGAGGAAATTTCTATTAGTATATCCAATTTAGCAAAATTGGTACCAAAATGATTTCTTTGGTAATT
GTGTGAAATATAAGCTTTTTAACAGGGCATTTAAGTGGCTAGCAAATCAGTAATTAAAAATTAAGCTTTCTACTC
CAAGTATTTCACAAATGCATCTGCCATTTTCCTCATTTAAACCTTGGTTATCTTGGCCTGATACCACATAAAAGA
ATGTAGAATGGCTGAAGAGATCAAGAATTTAAAGCTTCTAGTCTTAACATACTTGCATCCACTTCAAATTCAAAT
CAAAAGCCAGGGAAATCTAAGTGCAACCCTACCACTTCTCTGCTGAGAACCTTCCAGTGGTTCCCCTCACCTTCT
GCAGAAGTCTCCAATATGGAGTACATGCACTTGGGCATTTAATATATACCACTGGTGTGTGTGGGAGGGAGGGAG
GAGGAATACTAGCCCTTTTTATATATTTACACAAGCAAAACTTTTAAATATTTGAATTGACAGTTACATGTTTCA
TAACTTCGTATGTCTATTGGTTGTGCAGGTGTAATTTTTTCCCTTTTTGATTAGGGTTACAAAATTTAGAGACCA
GTATGATTAAGTTGAAGCTCCTTAGCCTCCTTCGACCTAGTCTCTGCATACCTCAACTTTTACGTACCAATGCTA
CTCTGCTGTTCACAATTGCCTCATGTAATCTGCAGATTCCTGCCTCCCCACTTTGGTTCAGTCTGTCTTGTGCAC
CTGGAACAACTGTTCTCCCTTGTGACTAATTCCTATTTTCTAGAGTTTAGGCATCATCTCTTCCTTTGGGAAGTT
ATCTGATTCACGACTGCCTTCTCTGACATCCCCACCTTCCTCTGTGCCCCCATAGCACTGTGTATACCGCTACTA
CCACTGCAATTCACATTATATTGGAATGAACAATTCACATGTCTACCACAAGTCTGTAAACATAACCTTATTTGA
AATGAATTGCAATAAAGCTCTGTTACAACGT

FIGURE 1026

METSSSCESLGSQPAAARPPSVDSLSSASTSHSENSVHTKSASVVSSDSISTSADNFSPDLRVLRESNKLAEMEE
PPLLPGENIKDMAKDVTYICPFTGAVRGTLTVTNYRLYFKSMERDPPFVLDASLGVINRVEKIGGASSRGENSYG
LETVCKDIRNLRFAHKPEGRTRRSIFENLMKYAFPVSNNLPLFAFEYKEVFPENGWKLYDPLLEYRRQGIPNESW
RITKINERYELCDTYPALLVVPANIPDEELKRVASFRSRGRIPVLSWIHPESQATITRCSQPMVGVSGKRSKEDE
KYLQAIMDSNAQSHKIFIFDARPSVNAVANKAKGGGYESEDAYQNAELVFLDIHNIHVMRESLRKLKEIVYPNIE
ETHWLSNLESTHWLEHIKLILAGALRIADKVESGKTSVVVHCSDGWDRTAQLTSLAMLMLDGYYRTIRGFEVLVE
KEWLSFGHRFQLRVGHGDKNHADADRSPVFLQFIDCVWQMTRQFPTAFEFNEYFLITILDHLYSCLFGTFLCNSE
QQRGKENLPKRTVSLWSYINSQLEDFTNPLYGSYSNHVLYPVASMRHLELWVGYYIRWNPRMKPQEPIHNRYKEL
LAKRAELQKKVEELQREISNRSTSSSERASSPAQCVTPVQTVV

FIGURE 1027

TCGCACTTGGCTTCAAAGCTGGCTCTTGGAAATTGAGCGGAGAGCGACGCGGTTGTTGTAGCTGCCGCTGCGGCC
GCCGCGGAATAATAAGCCGGGATCTACCATACCCATTGACTAACTATGGAAGATTATACCAAAATAGAGAAAATT
GGAGAAGGTACCTATGGAGTTGTGTATAAGGGTAGACACAAAACTACAGGTCAAGTGGTAGCCATGAAAAAAATC
AGACTAGAAAGTGAAGAGGAAGGGGTTCCTAGTACTGCAATTCGGGAAATTTCTCTATTAAAGGAACTTCGTCAT
CCAAATATAGTCAGTCTTCAGGATGTGCTTATGCAGGATTCCAGGTTATATCTCATCTTTGAGTTTCTTTCCATG
GATCTGAAGAAATACTTGGATTCTATCCCTCCTGGTCAGTACATGGATTCTTCACTTGTTAAGAGTTATTTATAC
CAAATCCTACAGGGGATTGTGTTTTGTCACTCTAGAAGAGTTCTTCACAGAGACTTAAAACCTCAAAATCTCTTG
ATTGATGACAAAGGAACAATTAAACTGGCTGATTTTGGCCTTGCCAGAGCTTTTGGAATACCTATCAGAGTATAT
ACACATGAGGTAGTAACACTCTGGTACAGATCTCCAGAAGTATTGCTGGGGTCAGCTCGTTACTCAACTCCAGTT
GACATTTGGAGTATAGGCACCATATTTGCTGAACTAGCAACTAAGAAACCACTTTTCCATGGGGATTCAGAAATT
GATCAACTCTTCAGGATTTTCAGAGCTTTGGGCACTCCCAATAATGAAGTGTGGCCAGAAGTGGAATCTTTACAG
GACTATAAGAATACATTTCCCAAATGGAAACCAGGAAGCCTAGCATCCCATGTCAAAAACTTGGATGAAAATGGC
TTGGATTTGCTCTCGAAAATGTTAATCTATGATCCAGCCAAACGAATTTCTGGCAAAATGGCACTGAATCATCCA
TATTTTAATGATTTGGACAATCAGATTAAGAAGATGTAGCTTTCTGACAAAAAGTTTCCATATGTTATGTCAACA
GATAGTTGTGTTTTTATTGTTAACTCTTGTCTATTTTTGTCTTATATATATTTCTTTGTTATCAAACTTCAGCTG
TACTTCGTCTTCTAATTTCAAAAATATAACTTAAAAATGTAAATATTCTATATGAATTTAAATATAATTCTGTAA
ATGTGTGTAGGTCTCACTGTAACAACTATTTGTTACTATAATAAAACTATAATATTGATGTCAGGAATCAGGAAA
AAATTTGAGTTGGCTTAAATCATCTCAGTCCTTATGGCAGTTTTATTTTCCTGTAGTTGGAACTACTAAAATTTA
GGAAAATGCTAAGTTCAAGTTTCGTAATGCTTTGAAGTATTTTTATGCTCTGAATGTTTAAATGTTCTCATCAGT
TTCTTGCCATGTTGTTAACTATACAACCTGGCTAAAGATGAATATTTTTCTACTGGTATTTTAATTTTTGACCTA
AATGTTTAAGCATTCGGAATGAGAAAACTATACAGATTTGAGAAATGATGCTAAATTTATAGGAGTTTTCAGTAA
CTTAAAAAGCTAACATGAGAGCATGCCAAAATTTGCTAAGTCTTACAAAGATCAAGGGCTGTCCGCAACAGGGAA
GAACAGTTTTGAAAATTTATGAACTATCTTATTTTTAGGTAGGTTTTGAAAGCTTTTTGTCTAAGTGAATTCTTA
TGCCTTGGTCAGAGTAATAACTGAAGGAGGTGCTTATCTTGGCTTTCGAGTCTGAGTTTAAAACTACACATTTTG
ACATAGTGTTTATTAGCAGCCATCTAAAAAGGCTCTAATGTATATTTAACTAAAATTACTAGCTTTGGGAATTAA
ACTGTTTAACAAATTAGGA

FIGURE 1028

ALGFKAGSWKLSGERRGCCSCRCGRRGIISRDLPYPLTNYGRLYQNREKIGEGTYGVVYKGRHKTTGQVVAMKKI
RLESEEEGVPSTAIREISLLKELRHPNIVSLQDVLMQDSRLYLIFEFLSMDLKKYLDSIPPGQYMDSSLVKSYLY
QILQGIVFCHSRRVLHRDLKPQNLLIDDKGTIKLADFGLARAFGIPIRVYTHEVVTLWYRSPEVLLGSARYSTPV
DIWSIGTIFAELATKKPLFHGDSEIDQLFRIFRALGTPNNEVWPEVESLQDYKNTFPKWKPGSLASHVKNLDENG
LDLLSKMLIYDPAKRISGKMALNHPYFNDLDNQIKKM

FIGURE 1029

GGGGGGGGGGGGCACTTGGCTTCAAAGCTGGCTCTTGGAAATTGAGCGGAGAGCGACGCGGTTGTTGTAGCTGCC
GCTGCGGCCGCCGCGGAATAATAAGCCGGGATCTACCATACCCATTGACTAACTATGGAAGATTATACCAAAATA
GAGAAAATTGGAGAAGGTACCTATGGAGTTGTGTATAAGGGTAGACACAAAACTACAGGTCAAGTGGTAGCCATG
AAAAAAATCAGACTAGAAAGTGAAGAGGAAGGGGTTCCTAGTACTGCAATTCGGGAAATTTCTCTATTAAAGGAA
CTTCGTCATCCAAATATAGTCAGTCTTCAGGATGTGCTTATGCAGGATTCCAGGTTATATCTCATCTTTGAGTTT
CTTTCCATGGATCTGAAGAAATACTTGGATTCTATCCCTCCTGGTCAGTACATGGATTCTTCACTTGTTAAGAGT
TATTTATACCAAATCCTACAGGGGATTGTGTTTTGTCACTCTAGAAGAGTTCTTCACAGAGACTTAAAACCTCAA
AATCTCTTGATTGATGACAAAGGAACAATTAAACTGGCTGATTTTGGCCTTGCCAGAGCTTTTGGAATACCTATC
AGAGTATATACACATGAGGTAGTAACACTCTGGTACAGATCTCCAGAAGTATTGCTGGGGTCAGCTCGTTACTCA
ACTCCAGTTGACATTTGGAGTATAGGCACCATATTTGCTGAACTAGCAACTAAGAAACCACTTTTCCATGGGGAT
TCAGAAATTGATCAACTCTTCAGGATTTTCAGAGCTTTGGGCACTCCCAATAATGAAGTGTGGCCAGAAGTGGAA
TCTTTACAGGACTATAAGAATACATTTCCCAAATGGAAACCAGGAAGCCTAGCATCCCATGTCAAAAACTTGGAT
GAAAATGGCTTGGATTTGCTCTCGAAAATGTTAATCTATGATCCAGCCAAACGAATTTCTGGCAAAATGGCACTG
AATCATCCATATTTTAATGATTTGGACAATCAGATTAAGAAGATGTAGCTTTCTGACAAAAAGTTTCCATATGTT
ATGTCAACAGATAGTTGTGTTTTTATTGTTAACTCTTGTCTATTTTTGTCTTATATATATTTCTTTGTTATCAAA
CTTCAGCTGTACTTCGTCTTCTAATTTCAAAAATATAACTTAAAAATGTAAATATTCTATATGAATTTAAATATA
ATTCTGTAAATGTGAAAAAAAAAAAAAAAAAAAA

FIGURE 1030

MEDYTKIEKIGEGTYGVVYKGRHKTTGQVVAMKKIRLESEEEGVPSTAIREISLLKELRHPNIVSLQDVLMQDSR
LYLIFEFLSMDLKKYLDSIPPGQYMDSSLVKVVTLWYRSPEVLLGSARYSTPVDIWSIGTIFAELATKKPLFHGD
SEIDQLFRIFRALGTPNNEVWPEVESLQDYKNTFPKWKPGSLASHVKNLDENGLDLLSKMLIYDPAKRISGKMAL
NHPYFNDLDNQIKKM

FIGURE 1031

GGCGAATGGAGCAGGGGCGCGCAGATAATTAAAGATTTACACACAGCTGGAAGAAATCATAGAGAAGCCGGGCGT
GGTGGCTCATGCCTATAATCCCAGCACTTTTGGAGGCTGAGGCGGGCAGATCACTTGAGATCAGGAGTTCGAGAC
CAGCCTGGTGCCTTGGCATCTCCCA**ATG**GGGTGGCTTTGCTCTGGGCTCCTGTTCCCTGTGAGCTGCCTGGTCCT
GCTGCAGGTGGCAAGCTCTGGGAACATGAAGGTCTTGCAGGAGCCCACCTGCGTCTCCGACTACATGAGCATCTC
TACTTGCGAGTGGAAGATGAATGGTCCCACCAATTGCAGCACCGAGCTCCGCCTGTTGTACCAGCTGGTTTTTCT
GCTCTCCGAAGCCCACACGTGTATCCCTGAGAACAACGGAGGCGCGGGGTGCGTGTGCCACCTGCTCATGGATGA
CGTGGTCAGTGCGGATAACTATACACTGGACCTGTGGGCTGGGCAGCAGCTGCTGTGGAAGGGCTCCTTCAAGCC
CAGCGAGCATGTGAAACCCAGGGCCCCAGGAAACCTGACAGTTCACACCAATGTCTCCGACACTCTGCTGCTGAC
CTGGAGCAACCCGTATCCCCCTGACAATTACCTGTATAATCATCTCACCTATGCAGTCAACATTTGGAGTGAAAA
CGACCCGGCAGATTTCAGAATCTATAACGTGACCTACCTAGAACCCTCCCTCCGCATCGCAGCCAGCACCCTGAA
GTCTGGGATTTCCTACAGGGCACGGGTGAGGGCCTGGGCTCAGTGCTATAACACCACCTGGAGTGAGTGGAGCCC
CAGCACCAAGTGGCACAACTCCTACAGGGAGCCCTTCGAGCAGCACCTCCTGCTGGGCGTCAGCGTTTCCTGCAT
TGTCATCCTGGCCGTCTGCCTGTTGTGCTATGTCAGCATCACCAAGATTAAGAAAGAATGGTGGGATCAGATTCC
CAACCCAGCCCGCAGCCGCCTCGTGGCTATAATAATCCAGGATGCTCAGGGGTCACAGTGGGAGAAGCGGTCCCG
AGGCCAGGAACCAGCCAAGTGCCCACACTGGAAGAATTGTCTTACCAAGCTCTTGCCCTGTTTTCTGGAGCACAA
CATGAAAAGGGATGAAGATCCTCACAAGGCTGCCAAAGAGATGCCTTTCCAGGGCTCTGGAAAATCAGCATGGTG
CCCAGTGGAGATCAGCAAGACAGTCCTCTGGCCAGAGAGCATCAGCGTGGTGCGATGTGTGGAGTTGTTTGAGGC
CCCGGTGGAGTGTGAGGAGGAGGAGGAGGTAGAGGAAGAAAAAGGGAGCTTCTGTGCATCGCCTGAGAGCAGCAG
GGATGACTTCCAGGAGGGAAGGGAGGGCATTGTGGCCCGGCTAACAGAGAGCCTGTTCCTGGACCTGCTCGGAGA
GGAGAATGGGGGCTTTTGCCAGCAGGACATGGGGGAGTCATGCCTTCTTCCACCTTCGGGAAGTACGAGTGCTCA
CATGCCCTGGGATGAGTTCCCAAGTGCAGGGCCCAAGGAGGCACCTCCCTGGGGCAAGGAGCAGCCTCTCCACCT
GGAGCCAAGTCCTCCTGCCAGCCCGACCCAGAGTCCAGACAACCTGACTTGCACAGAGACGCCCCTCGTCATCGC
AGGCAACCCTGCTTACCGCAGCTTCAGCAACTCCCTGAGCCAGTCACCGTGTCCCAGAGAGCTGGGTCCAGACCC
ACTGCTGGCCAGACACCTGGAGGAAGTAGAACCCGAGATGCCCTGTGTCCCCCAGCTCTCTGAGCCAACCACTGT
GCCCCAACCTGAGCCAGAAACCTGGGAGCAGATCCTCCGCCGAAATGTCCTCCAGCATGGGGCAGCTGCAGCCCC
CGTCTCGGCCCCCACCAGTGGCTATCAGGAGTTTGTACATGCGGTGGAGCAGGGTGGCACCCAGGCCAGTGCGGT
GGTGGGCTTGGGTCCCCCAGGAGAGGCTGGTTACAAGGCCTTCTCAAGCCTGCTTGCCAGCAGTGCTGTGTCCCC
AGAGAAATGTGGGTTTGGGGCTAGCAGTGGGGAAGAGGGGTATAAGCCTTTCCAAGACCTCATTCCTGGCTGCCC
TGGGGACCCTGCCCCAGTCCCTGTCCCCTTGTTCACCTTTGGACTGGACAGGGAGCCACCTCGCAGTCCGCAGAG
CTCACATCTCCCAAGCAGCTCCCCAGAGCACCTGGGTCTGGAGCCGGGGGAAAAGGTAGAGGACATGCCAAAGCC
CCCACTTCCCCAGGAGCAGGCCACAGACCCCCTTGTGGACAGCCTGGGCAGTGGCATTGTCTACTCAGCCCTTAC
CTGCCACCTGTGCGGCCACCTGAAACAGTGTCATGGCCAGGAGGATGGTGGCCAGACCCCTGTCATGGCCAGTCC
TTGCTGTGGCTGCTGCTGTGGAGACAGGTCCTCGCCCCCTACAACCCCCCTGAGGGCCCCAGACCCCTCTCCAGG
TGGGGTTCCACTGGAGGCCAGTCTGTGTCCGGCCTCCCTGGCACCCTCGGGCATCTCAGAGAAGAGTAAATCCTC
ATCATCCTTCCATCCTGCCCCTGGCAATGCTCAGAGCTCAAGCCAGACCCCCAAAATCGTGAACTTTGTCTCCGT
GGGACCCACATACATGAGGGTCTCT**TAG**GTGCATGTCCTCTTGTTGCTGAGTCTGCAGATGAGGACTAGGGCTTA
TCCATGCCTGGGAAATGCCACCTCCTGGAAGGCAGCCAGGCTGGCAGATTTCCAAAAGACTTGAAGAACCATGGT
ATGAAGGTGATTGGCCCCACTGACGTTGGCCTAACACTGGGCTGCAGAGACTGGACCCCGCCCAGCATTGGGCTG
GGCTCGCCACATCCCATGAGAGTAGAGGGCACTGGGTCGCCGTGCCCCACGGCAGGCCCCTGCAGGAAAACTGAG
GCCCTTGGGCACCTCGACTTGTGAACGAGTTGTTGGCTGCTCCCTCCACAGCTTCTGCAGCAGACTGTCCCTGTT
GTAACTGCCCAAGGCATGTTTTGCCCACCAGATCATGGCCCACGTGGAGGCCCACCTGCCTCTGTCTCACTGAAC
TAGAAGCCGAGCCTAGAAACTAACACAGCCATCAAGGGAATGACTTGGGCGGCCTTGGGAAATCGATGAGAAATT
GAACTTCAGGGAGGGTGGTCATTGCCTAGAGGTGCTCATTCATTTAACAGAGCTTCCTTAGGTTGATGCTGGAGG
CAGAATCCCGGCTGTCAAGGGGTGTTCAGTTAAGGGGAGCAACAGAGGACATGAAAAATTGCTATGACTAAAGCA
GGGACAATTTGCTGCCAAACACCCATGCCCAGCTGTATGGCTGGGGGCTCCTCGTATGCATGGAACCCCCAGAAT
AAATATGCTCAGCCACCCTGTGGGCCGGGCAATCCAGACAGCAGGCATAAGGCACCAGTTACCCTGCATGTTGGC
CCAGACCTCAGGTGCTAGGGAAGGCGGGAACCTTGGGTTGAGTAATGCTCGTCTGTGTGTTTTAGTTTCATCACC
TGTTATCTGTGTTTGCTGAGGAGAGTGGAACAGAAGGGGTGGAGTTTTGTATAAATAAAGTTTCTTTGTCTC

FIGURE 1032

MGWLCSGLLFPVSCLVLLQVASSGNMKVLQEPTCVSDYMSISTCEWKMNGPTNCSTELRLLYQLVFLLSEAHTCI
PENNGGAGCVCHLLMDDVVSADNYTLDLWAGQQLLWKGSFKPSEHVKPRAPGNLTVHTNVSDTLLLTWSNPYPPD
NYLYNHLTYAVNIWSENDPADFRIYNVTYLEPSLRIAASTLKSGISYRARVRAWAQCYNTTWSEWSPSTKWHNSY
REPFEQHLLLGVSVSCIVILAVCLLCYVSITKIKKEWWDQIPNPARSRLVAIIIQDAQGSQWEKRSRGQEPAKCP
HWKNCLTKLLPCFLEHNMKRDEDPHKAAKEMPFQGSGKSAWCPVEISKTVLWPESISVVRCVELFEAPVECEEEE
EVEEEKGSFCASPESSRDDFQEGREGIVARLTESLFLDLLGEENGGFCQQDMGESCLLPPSGSTSAHMPWDEFPS
AGPKEAPPWGKEQPLHLEPSPPASPTQSPDNLTCTETPLVIAGNPAYRSFSNSLSQSPCPRELGPDPLLARHLEE
VEPEMPCVPQLSEPTTVPQPEPETWEQILRRNVLQHGAAAAPVSAPTSGYQEFVHAVEQGGTQASAVVGLGPPGE
AGYKAFSSLLASSAVSPEKCGFGASSGEEGYKPFQDLIPGCPGDPAPVPVPLFTFGLDREPPRSPQSSHLPSSSP
EHLGLEPGEKVEDMPKPPLPQEQATDPLVDSLGSGIVYSALTCHLCGHLKQCHGQEDGGQTPVMASPCCGCCCGD
RSSPPTTPLRAPDPSPGGVPLEASLCPASLAPSGISEKSKSSSSFHPAPGNAQSSSQTPKIVNFVSVGPTYMRVS

FIGURE 1033

GGCACGAGGGCGCGCAAGGCACCGGTGGCAGCGGCGACGGCAGCTGCGACAGCAACCCCTGCTGGGCCGAAACTG
GGCAGAGCGGAGCAGACGTCTGAAGCAGCGCGAGTGAGGCGCGAGGGTAGCGCCCGCGCCCGGGAAGACCCCTCG
GCGCGAACCGGCAGCCCAGCCCCGGGTCCCGGTTCCCAAGGCCCCGCCTCTAGGGCCTGGGGACTAATCGGATTG
AGAGCGCGCCGGCCCGGGCCGCGAACTCGCCAATTGCGGAGGGCGGTGGCCACCGCCCAATCCGGAGCAGACAGG
TGCGAGGTCCGGAAGGCGGAGGCCAATCGGCGGCGGTTGCGACCTGCTGGGGCAGGTCTCGGCCAATAAGGAGGC
TCGAGTGACATCTTCGCGCACCAATCGGGAGTGAGGGAGCATTCGTGCCCGCTCGCCCTTCCGGCCAGACCTCTA
TTTACCAGGGGCGTGCAGCCCGCTTGCCAATCAGAGCGCGGCTGAGCGGCCCCGCAGCCAACCCCCGAGGAGCGG
CCGGCTGGCGTCCGCCGCGCCCAGGAGTTGGGG**ATG**TCCTACAAACCCATCGCCCCTGCTCCCAGCAGCACCCCT
GGCTCCAGCACCCCTGGGCCGGGCACCCCGGTCCCTACAGGAAGCGTCCCGTCGCCGTCGGGCTCAGTGCCAGGA
GCCGGCGCTCCTTTCAGACCGCTGTTTAACGACTTTGGACCGCCTTCCATGGGCTACGTGCAGGCGATGAAGCCA
CCCGGCGCCCAGGGCTCCCAGAGCACCTACACGGACCTGCTGTCAGTCATAGAGGAGATGGGCAAAGAGATCCGG
CCTACCTATGCTGGCAGCAAGAGCGCCATGGAGCGCCTGAAGAGAGGTATCATCCATGCCCGGGCCCTAGTCAGA
GAGTGCCTGGCAGAGACAGAGCGGAACGCCCGCACG**TAA**CAGGAAGCGCCTCGGCCTCAGCGTCTGGACCTATCC
GGCCACTGCAGAGCACCCGCTTCTCCCTGGCCTTCATCCCGAGTTGCACTAACCATCCTGGGCTTCCTGTCCTGT
GTCCCTTGGTGGGTCCCCTCCAGGAACCAAGGAGTGGCCCTCCAGGTGGCAGCACTAAGGACACCCCCCCACAAC
AAGAGTTAGCAGCGAGGTCCCCATGAGTCCCACCCATGACCTGCCGACAGTGTTGCCCACCGGAACTTTTGTGGC
CCCTACCGCTCAGCCCTTCCCAGCACTTCTCCCACTTTGTCCCGAGCCTCCTTCTCCCCCAGCAGGGGCACAGGC
CTGGCACCTCCCTGCCTTGTGTCCTGAGCCATAGTGACTCTTTTATCTGTGTGTCTTTTGCTAAATATGCCCTTT
TTATATTAATAAAAGATGATTTGGAGTTGTGCTCTCAAAAAAAAAAAAAAAAAAAA

FIGURE 1034

MSYKPIAPAPSSTPGSSTPGPGTPVPTGSVPSPSGSVPGAGAPFRPLFNDFGPPSMGYVQAMKPPGAQGSQSTYT
DLLSVIEEMGKEIRPTYAGSKSAMERLKRGIIHARALVRECLAETERNART

FIGURE 1035

AATTCGCCAGCGGCGCGGTGGACAGTC**ATG**GCGGCCCGGCGCGGGGCTCTCATAGTGCTGGAGGGCGTGGACCGC
GCCGGGAAGAGCACGCAGAGCCGCAAGCTGGTGGAAGCGCTGTCGCGCGGGCCACCGCCCGAACTGCTCCGGTTC
CCGGAAAGATCAACTGAAATCGGCAAACTTCTGAGTTCCTACTTGCAAAAGAAAAGTGACGTGGAGGATCACTCG
GTGCACCTGCTTTTTTCTGCAAATCGCTGGGAACAAGTGCCGTTAATTAAGGAAAAGTTGAGCCAGGGCGTGACC
CTCGTCGTGGACAGATACGCATTTTCTGGTGTGGCCTTCACCGGTGCCAAGGAGAATTTTTCCCTAGACTGGTGT
AAACAGCCAGACGTGGGCCTTCCCAAACCCGACCTGGTCCTGTTCCTCCAGTTACAGCTGGCGGATGCTGCCAAG
CGGGGAGCGTTTGGCCATGAGCGCTATGAGAACGGGGCTTTCCAGGAGCGGGCGCTCCGGTGTTTCCACCAGCTC
ATGAAAGACACGACTTTGAACTGGAAGATGGTGGATGCTTCCAAAAGACTCGAAGCTGTCCATGAGGAACTCCGC
GTGCTCTCTGAGGACGCCATCCGCACTGCCACAGAGAAGCCGCTGGGGGGAGCTATGGAAG**TGA**CCCAAGGCTGCC
CACTGGAGACGCCTCTCCCTGCAGTCCCCCGAGAGGTGGGAGACTCGCGGAAGGCCCCGTCCCCAGCGGAGTCCA
GACCCCACAACTTCAGGAGCTCTTTCCCGGCAGCAGAGATCTGCAGGCTGCCTCTTCTGCCCCGGAGCTGGGGTG
CACTGGGGACCCCCGTGGTGGGGACCTTGGCAGTGTGGACATGAGCAGAGCGATGGAGCAGTCTCCTGCCCTCTC
CCCTGTCCTGATGGCACTCTGTTGTATTTTCTTACTGAAGTTCAGTGATAACTCTGAGCAGTTTCATTGTGATCA
CTGTAAATGGTAATCAGTTGGAATT

FIGURE 1036

MAARRGALIVLEGVDRAGKSTQSRKLVEALSRGPPPELLRFPERSTEIGKLLSSYLQKKSDVEDHSVHLLFSANR
WEQVPLIKEKLSQGVTLVVDRYAFSGVAFTGAKENFSLDWCKQPDVGLPKPDLVLFLQLQLADAAKRGAFGHERY
ENGAFQERALRCFHQLMKDTTLNWKMVDASKRLEAVHEELRVLSEDAIRTATEKPLGELWK

FIGURE 1037

ATGGCGACTGCGACCCCCGTGCCGCCGCGGATGGGCAGCCGCGCTGGCGGCCCCACCACGCCGCTGAGCCCCACG
CGCCTGTCGCGGCTCCAGGAGAAGGAGGAGCTGCGCGAGCTCAATGACCGGCTGGCGGTGTACATCGACAAGGTG
CGCAGCCTGGAGACGGAGAACAGCGCGCTGCAGCTGCAGGTGACGGAGCGCGAGGAGGTGCGCGGCCGTGAGCTC
ACCGGCCTCAAGGCGCTCTACGAGACCGAGCTGGCCGACGCGCGACGCGCGCTCGACGACACGGCCCGCGAGCGC
GCCAAGCTGCAGATCGAGCTGGGCAAGTGCAAGGCGGAACACGACCAGCTGCTCCTCAACTATGCTAAGAAGGAA
TCTGATCTTAATGGCGCCCAGATCAAGCTTCGAGAATATGAAGCAGCACTGAATTCGAAAGATGCAGCTCTTGCT
ACTGCACTTGGTGACAAAAAAAGTTTAGAGGGAGATTTGGAGGATCTGAAGGATCAGATTGCCCAGTTGGAAGCC
TCCTTAGCTGCAGCCAAAAAACAGTTAGCAGATGAAACTTTACTTAAAGTAGATTTGGAGAATCGTTGTCAGAGC
CTTACTGAGGACTTGGAGTTTCGCAAAAGCATGTATGAAGAGGAGATTAACGAGACCAGAAGGAAGCATGAAACG
CGCTTGGTAGAGGTGGATTCTGGGCGTCAAATTGAGTATGAGTACAAGCTGGCGCAAGCCCTTCATGAGATGAGA
GAGCAACATGATGCCCAAGTGAGGCTGTATAAGGAGGAGCTGGAGCAGACTTACCATGCCAAACTTGAGAATGCC
AGACTGTCATCAGAGATGAATACTTCTACTGTCAACAGTGCCAGGGAAGAACTGATGGAAAGCCGCATGAGAATT
GAGAGCCTTTCATCCCAGCTTTCTAATCTACAGAAAGAGTCTAGAGCATGTTTGGAAAGGATTCAAGAATTAGAG
GACTTGCTTGCTAAAGAAAAAGACAACTCTCGTCGCATGCTGACAGACAAAGAGAGAGAGATGGCGGAAATAAGG
GATCAAATGCAGCAACAGCTGAATGACTATGAACAGCTTCTTGATGTAAAGTTAGCCCTGGACATGGAAATCAGT
GCTTACAGGAAACTCTTAGAAGGCGAAGAAGAGAGGTTGAAGCTGTCTCCAAGCCCTTCTTCCCGTGTGACAGTA
TCCCGAGCATCCTCAAGTCGTAGTGTACGTACAACTAGAGGAAAGCGGAAGAGGGTTGATGTGGAAGAATCAGAG
GCGAGTAGTAGTGTTAGCATCTCTCATTCCGCCTCAGCCACTGGAAATGTTTGCATCGAAGAAATTGATGTTGAT
GGGAAATTTATCCGCTTGAAGAACACTTCTGAACAGGATCAACCAATGGGAGGCTGGGAGATGATCAGAAAAATT
GGAGACACATCAGTCAGTTATAAATATACCTCAAGATATGTGCTGAAGGCAGGCCAGACTGTTACAATTTGGGCT
GCAAACGCTGGTGTCACAGCCAGCCCCCCAACTGACCTCATCTGGAAGAACCAGAACTCGTGGGGCACTGGCGAA
GATGTGAAGGTTATATTGAAAAATTCTCAGGGAGAGGAGGTTGCTCAAAGAAGTACAGTCTTTAAAACAACCATA
CCTGAAGAAGAGGAGGAGGAGGAAGAAGCAGCTGGAGTGGTTGTTGAGGAAGAACTTTTCCACCAGCAGGGAACC
CCAAGAGCATCCAATAGAAGCTGTGCAATTATGTAAAATTTTCAACTGTCTTCCTCAAAATAAAGAAGTATGGTA
ATCTTTACCTGTATACAGTGCAGAGCCTTCTCAGAAGCACAGAATATTTTTATATTTCCTTTATGTGAATTTTTA
AGCTGCAAATCTGATGGCCTTAATTTCCTTTTTGACACTGAAAGTTTTGTAAAAGAAATCATGTCCATACACTTT
GTTGCAAGATGTGAATTATTGACACTGAACTTAATAACTGTGTACTGTTCGGAAGGGGTTCCTCAAATTTTTTGA
CTTTTTTTGTATGTGTGTTTTTTCTTTTTTTTTAAGTTCTTATGAGGAGGGGAGGGTAAATAAACCACTGTGCGT
CTTGGTGTAATTTGAAGATTGCCCCATCTAGACTAGCAATCTCTTCATTATTCTCTGCTATATATAAAACGGTGC
TGTGAGGGAGGGGAAAAGCATTTTTCAATATATTGAACTTTTGTACTGAATTTTTTTGTAATAAGCAATCAAGGT
TATAATTTTTTTTAAAATAGAAATTTTGTAAGAAGGCAATATTAACCTAATCACCATGTAAGCACTCTGGATGAT
GGATTCCACAAAACTTGGTTTTATGGTTACTTCTTCTCTTAGATTCTTAATTCATGAGGAGGGTGGGGGAGGGAG
GTGGAGGGAGGGAAGGGTTTCTCTATTAAAATGCATTCGTTGTGTTTTTTAAGATAGTGTAACTTGCTTAAATTT
CTTATGTGACATTAACAAATAAAAAAGCTCTTTT

FIGURE 1038

MATATPVPPRMGSRAGGPTTPLSPTRLSRLQEKEELRELNDRLAVYIDKVRSLETENSALQLQVTEREEVRGREL
TGLKALYETELADARRALDDTARERAKLQIELGKCKAEHDQLLLNYAKKESDLNGAQIKLREYEAALNSKDAALA
TALGDKKSLEGDLEDLKDQIAQLEASLAAAKKQLADETLLKVDLENRCQSLTEDLEFRKSMYEEEINETRRKHET
RLVEVDSGRQIEYEYKLAQALHEMREQHDAQVRLYKEELEQTYHAKLENARLSSEMNTSTVNSAREELMESRMRI
ESLSSQLSNLQKESRACLERIQELEDLLAKEKDNSRRMLTDKEREMAEIRDQMQQQLNDYEQLLDVKLALDMEIS
AYRKLLEGEEERLKLSPSPSSRVTVSRASSSRSVRTTRGKRKRVDVEESEASSSVSISHSASATGNVCIEEIDVD
GKFIRLKNTSEQDQPMGGWEMIRKIGDTSVSYKYTSRYVLKAGQTVTIWAANAGVTASPPTDLIWKNQNSWGTGE
DVKVILKNSQGEEVAQRSTVFKTTIPEEEEEEEEAAGVVVEEELFHQQGTPRASNRSCAIM

FIGURE 1039

GTCCCAGCTAGAGCTCCAGCGCCCGCTCAGGCCCCACTCGACCCTCTCGGGCCTCGGCTACTTGGACTGCGGCGG
AATATGGCGGCTCCGATGACTCCCGCGGCTCGGCCCGAGGACTACGAGGCGGCGCTCAATGCCGCCCTGGCTGAC
GTGCCCGAACTGGCCAGACTCCTGGAGATCGACCCGTACTTGAAGCCCTACGCCGTGGACTTCCAGCGCAGGTAT
AAGCAGTTTAGCCAAATTTTGAAGAACATTGGAGAAAATGAAGGTGGTATTGATAAGTTTTCCAGAGGCTATGAA
TCATTTGGCGTCCACAGATGTGCTGATGGTGGTTTATACTCCAAAGAATGGGCCCCGGGAGCAGAAGGAGTTTTT
CTTACTGGAGATTTTAATGGTTGGAATCCATTTTCGTACCCATACAAAAAACTGGATTATGGAAAATGGGAGCTG
TATATCCCACCAAAGCAGAATAAATCTGTACTCGTGCCTCATGGATCCAAATTAAAGGTAGTTATTACTAGTAAA
AGCGGAGAGATCTTGTATCGTATTTCACCGTGGGCAAAGTATGTGGTTCGTGAAGGTGATAATGTGAATTATGAT
TGGATACACTGGGATCCAGAACACTCATATGAGTTTAAGCATTCCAGACCAAAGAAGCCACGGAGTCTAAGAATT
TATGAATCTCATGTGGGAATTTCTTCCCATGAAGGAAAAGTAGCTTCTTATAAACATTTTACATGCAATGTACTA
CCAAGAATCAAAGGCCTTGGATACAACTGCATTCAGTTGATGGCAATCATGGAGCATGCTTACTATGCCAGCTTT
GGTTACCAAATCACAAGCTTCTTTGCAGCTTCCAGCCGTTATGGAACACCTGAAGAGCTACAAGAACTGGTAGAC
ACAGCTCATTCCATGGGTATCATAGTCCTCTTAGATGTGGTACACAGCCATGCTTCAAAAAATTCAGCAGATGGA
TTGAATATGTTTGATGGGACAGATTCCTGTTATTTTCATTCTGGACCTAGAGGGACTCATGATCTTTGGGATAGC
AGATTGTTTGCCTACTCCAGCTGGGAAGTTTTAAGATTCCTTCTGTCAAACATAAGATGGTGGTTGGAAGAATAT
CGCTTTGATGGATTTCGTTTTGATGGTGTTACGTCCATGCTTTATCATCACCATGGAGTGGGTCAAGGTTTCTCA
GGTGATTACAGTGAATATTTCGGACTACAAGTAGATGAAGATGCCTTGACTTACCTCATGTTGGCAAATCATTTG
GTTCACACGCTGTGTCCCGATTCTATAACAATAGCTGAGGATGTATCAGGAATGCCAGCTCTGTGCTCTCCAATT
TCCCAGGGAGGGGGTGGTTTTGACTATCGACTAGCCATGGCAATTCCAGATAAGTGGATTCAGCTACTTAAAGAG
TTTAAAGATGAAGACTGGAACATGGGCGATATAGTATACACGCTCACAAACAGGCGCTACCTTGAAAAGTGCATT
GCTTATGCAGAGAGCCATGATCAGGCATTGGTTGGGGATAAGTCGCTGGCATTTTGGTTGATGGATGCCGAAATG
TATACAAACATGAGTGTCCTGACTCCTTTTACTCCAGTTATTGATCGTGGAATACAGCTTCATAAAATGATTCGA
CTCATTACGCATGGGCTTGGTGGAGAAGGCTATCTCAATTTCATGGGTAATGAATTTGGGCATCCTGAATGGTTA
GACTTCCCAAGAAAAGGAAATAATGAGAGTTACCATTATGCCAGGCGGCAGTTTCATTTAACTGACGACGACCTT
CTTCGCTACAAGTTCCTAAATAATTTTGACAGGGATATGAATAGATTGGAAGAAAGATATGGTTGGCTTGCAGCT
CCACAGGCCTACGTGAGTGAAAAACATGAAGGCAATAAGATCATTGCTTTTGAAAGAGCAGGTCTTCTTTTCATT
TTCAACTTCCATCCAAGCAAGAGCTACACTGACTACCGAGTTGGAACAGCATTGCCAGGGAAATTCAAAATTGTG
CTAGATTCAGATGCAGCGGAATATGGAGGGCATCAGAGACTGGACCACAGCACTGACTTTTTTTCTGAGGCTTTT
GAACATAATGGGCGTCCCTATTCTCTTTTGGTGTACATTCCAAGCAGAGTGGCCCTCATCCTTCAGAATGTGGAT
CTGCCGAATTGAAGAGGCCTGATTTCAGCTCCACCAGATGCAGATTTGTGTTTTGTTTTCTTGTTATCACTGTCA
CACAGCTTATAACATGTATGCTTTTCAGAATACAGTTGTCTAGCCAAGCCATCAAGTGTCTGAAATTCAATATTG
GTTTATGCAAATACAGCAAACTTTTATTTAAGTAGATAGGAGAATATGTTTAAAATATTAGGAATCCTAGACCAT
ATTTTCAAGTCATCTTAGCAGCTAGGATTCTCAAATGGAAGTGTTATATATAATATGTTAAAAACATTTTGCTTT
CCTGGCTAATTATTTGATCCTTTTAAATCCAAATTTGAATCATTTGTCATGTATGATTATTTCTGTTAAATGTAC
ACAGTATTTAAGATGGATATTTGGTGGCTCTATTTGTTCTGATATCTTTTGGTCTAAATTATGAGGTACCAAGAT
TGTTTCTTTGTTTCTTTTTTTCAAATTGTGTTTAGAAATACTGTAATAAATATGCAGTAGTGATATAAAGAATTA
TATCCAAGGTAATATAAAAGCCATTACGTATGAACTCATCCGTGTCTCATTTTGTGTTTTATTTTGTGATCTCTT
GTCCACTAAGTATCTTGTTAAATGCCAGTATCTCAGTCTTTCTGAAGCCCTGAAATGGTAATTGTAGCATTTCAG
AAAATGTCTTTCATTTCAATCAATAAAAAGCTTTTGTAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1040

MAAPMTPAARPEDYEAALNAALADVPELARLLEIDPYLKPYAVDFQRRYKQFSQILKNIGENEGGIDKFSRGYES
FGVHRCADGGLYSKEWAPGAEGVFLTGDFNGWNPFSYPYKKLDYGKWELYIPPKQNKSVLVPHGSKLKVVITSKS
GEILYRISPWAKYVVREGDNVNYDWIHWDPEHSYEFKHSRPKKPRSLRIYESHVGISSHEGKVASYKHFTCNVLP
RIKGLGYNCIQLMAIMEHAYYASFGYQITSFFAASSRYGTPEELQELVDTAHSMGIIVLLDVVHSHASKNSADGL
NMFDGTDSCYFHSGPRGTHDLWDSRLFAYSSWEVLRFLLSNIRWWLEEYRFDGFRFDGVTSMLYHHHGVGQGFSG
DYSEYFGLQVDEDALTYLMLANHLVHTLCPDSITIAEDVSGMPALCSPISQGGGGFDYRLAMAIPDKWIQLLKEF
KDEDWNMGDIVYTLTNRRYLEKCIAYAESHDQALVGDKSLAFWLMDAEMYTNMSVLTPFTPVIDRGIQLHKMIRL
ITHGLGGEGYLNFMGNEFGHPEWLDFPRKGNNESYHYARRQFHLTDDDLLRYKFLNNFDRDMNRLEERYGWLAAP
QAYVSEKHEGNKIIAFERAGLLFIFNFHPSKSYTDYRVGTALPGKFKIVLDSDAAEYGGHQRLDHSTDFFSEAFE
HNGRPYSLLVYIPSRVALILQNVDLPN

FIGURE 1041A

AGGGAGGGAAGGAAGGAAGAGAGGGAGGCGGGCAAGCAGGCGGGCGCGGGGGTCGGGGACTGAGGCAGTAGAGGG
AGGCGAGAGCCCGGCAGCCGCTTCGCGCTGTTTGCTGCGCGGGCTTTTGGAGGGGGCGGCCGTTTAGTCGGCTGA
GGAGAAGCGGACACCAGCGGCGTTGGTGATAGCGCCTGGGGGAGGGGGACTGGAGAGGCGAGAAGGGGGGTCGCT
GCGGTGGTTCTCTCGCTGTCGCTCTCTCTTTGCCTCGCTCCCGGCTCGGCGGGCTCCTCCCGGCGTCTCTCTCGC
CTCCGGGGTCCCGCTCCCCGCCCCCCGCGGTATGTCTTGATCCCGAGCAGCGGGTTTC**ATG**GGGCTCCTCAGGAT
TATGATGCCGCCCAAGTTGCAGCTGCTGGCGGTGGTGGCCTTCGCGGTGGCGATGCTCTTCTTGGAAAACCAGAT
CCAGAAACTGGAGGAGTCCCGCTCGAAGCTAGAAAGGGCTATTGCAAGACACGAAGTCCGAGAAATTGAGCAGCG
ACATACAATGGATGGCCCTCGGCAAGATGCCACTTTAGATGAGGAAGAGGACATGGTGATCATTTATAACAGAGT
TCCCAAAACGGCAAGCACTTCATTTACCAATATCGCCTATGACCTGTGTGCAAAGAATAAATACCATGTCCTTCA
TATCAACACTACCAAAAATAATCCAGTGATGTCATTGCAAGATCAGGTGCGCTTTGTAAAGAATATAACTTCCTG
GAAAGAGATGAAACCAGGATTTTATCATGGACACGTTTCTTACTTGGATTTTGCAAAATTTGGTGTGAAGAAGAA
ACCAATTTACATTAATGTCATAAGGGATCCTATTGAGAGGCTAGTTTCTTATTATTACTTTCTGAGATTTGGAGA
TGATTATAGACCAGGGTTACGGAGACGAAAACAAGGAGACAAAAAGACCTTTGATGAATGTGTAGCAGAAGGTGG
CTCAGACTGTGCTCCAGAGAAGCTCTGGCTTCAAATCCCGTTCTTCTGTGGCCATAGCTCCGAATGCTGGAATGT
GGGAAGCAGGTGGGCTATGGATCAAGCCAAGTATAACCTAATTAATGAATATTTTCTGGTGGGAGTTACTGAAGA
ACTTGAAGATTTTATCATGTTATTGGAGGCAGCATTGCCCCGGTTTTTCAGGGGTGCTACTGAACTCTATCGCAC
AGGAAAGAAATCTCATCTTAGGAAAACCACAGAGAAGAAACTCCCCACTAAACAAACCATTGCAAAACTACAGCA
ATCTGATATTTGGAAAATGGAGAATGAGTTCTATGAATTTGCACTAGAGCAGTTCCAATTCATCAGAGCCCATGC
CGTTCGAGAAAAAGATGGAGACCTCTACATCCTCGCACAAAACTTTTTCTATGAAAAGATTTACCCTAAGTCGAA
C**TGA**GTATAAGGTGTGACTATTAGATTCTTGAACTAAAATTTGACCCTGTCTTCACCTTTGTTCTCAGCTCCACA
GTCTGGATTGCTGACAGTAGGTGTATATGACAATTTGTATTGAGCCAAATTAGGAAACAGACAGTAACGTCAAGG
AAGTAGATACTGGCTGGCATTGTCAGTGTTCTAAGTTTCAGGCATTTTTATTTTTCCTGGCTAAACGTTGGTGAA
AGTTATAACCTCCTGCCTGGGAGAAAATATACATCACCTAAAATGAACTTATGGCAGGTCTAATCAAAAGGCTAA
ATACAATTTCAGAAAAGGTTCTGATACTCTTGTTTTTGATAAAGCATTTTTTCAACTAACCATGAATTAAGATGA
GTCCATTTGCCTCTTCTGCCTTCACTGAGGGTTTGGGTTATACACCTCTACTGAATTGTGTTAATAACTGTTTGG
CAGTGTGTACTTTGTTTTTGTGAGTCATGTCTCATGAAATTTATTGGAATGTTTAATCATATTTGCTAAGAAATG
TTTCTGCTGTAGTTGGATTTGCCCATATTTATGTAGGTGGTTTTAATTTTTTAAATGGTGATTAGTGTTAAAAAT
CAATTTAAATCATGACTAATATGGTAAAAAGATAAAGCATCAAAGCAGTATTTCTCATTCCTGCCTCCTCAATAT
CTAATACTGGGAAGATACTTCAAAGAATATTGAGATTGTCTGAAGTTTTAGTTAAGATTTTCACACATTAATATC
AAAAAAGTAAGTTTAGTATTTGTTTCTCCATGGGTTATTTGTAAAGCTGTAAACTGAGATATCGGTGACTCCGTA
TTATGACTCCATTAGTGAGCTGTGGTATGGGTAGGATTTTCCTACTTCTTCTGTACTTTTACCTGTAGACTATTT
TTACTAAGGTGCTTTATAATGTGTTTTAAAGCATTGCATTTACAAAACAAGGAAAATGCTGTAAATATTGCATAT
TTTATGTATTTGGACCAAAAGGTTACAAGTAATTAGACAAAAGTGGTTTTGCACCAATTTTATGTCAAGTAAAAC
CATCAGACCTACTGTTCTTGTATTTCTCATTTAACTTTACTGTTAAGACATCACTGAAATGAACTTCAGTAAGCT
TTCAATTTTGATACACAGTTCATTATTCATAACTTGAGGCAGTAATTACAGTGGAATGAGTACTGGACAAGGAGT
CAAAAAACTTGATTTCAGGTCCTAGCTCTAGCACTTACAGCTGTGTGATCTTGGGCAAGTCACTTAACCTCTCTT
TGCCTCAATTTCCTCATCTTGAAATGAGGATAATAATACCTGCTGTACCTACCTCACAGGGCTGTTGTGAGGATT
AAATGAGATGGCATGTGAAAGCACTTTGAAAATTGTAAAGCGCTATGTAAATGTAAGGTATTATAGAAACATCTT
TAACATATAGTTTCATACCATTCATTTTTTAACAAAGAAAGGGAAAAGTCTGCTTGTAAGCTGGTTGAAAAAGTT
AATCTTGATATAAATTTGTGTTTGATAAATATCCTCTCAGTGTTTTATCTTCCATGTTTCAACAACTATTGAAAT
ATGAAATGCCTGTGAACTCTTAAAGCTTCATGAGCAGCTGCTTGAGTTCAGGAAGTTCACTGTTAGAAATAGGCT
TTGTTAGCTGACTAGGGTCAGGGAAACTTTTCTCTTCAAATTTGAAAGCTGTTTCTGTTTTCATTTTACATTATT
ATTCAGAAATGGTAGCTATTCTATACCTATGGTTTAAGTAAATATTTCTGAATAAGGCTTCACCATACTGTAAGC
ATTTTAGGTAGATTGCCTTAAAGGTTATGGGAGGGCATGAGGGAACACTTCTTATGAGAAAACATTTATAAACAA
AAGAAACATTTATAAACTAAAGAAAAACTAAAAGAATGACAGAACAATCATCTTAGCACCCTTTCCTCACAATAA
TATAAAAATATTAAAAGAACATAGGCAGGCTTTTTTTAAATTTGGCTTTTTTCTTTCCTTTTTTCAAATTGACTT
TTATAGGTATTTCCTGAAAGTGTATACAAATTATTTCCTCGCCCAAAATAAAGCACCACTTCAAGGTGTGGTTTG
ACATTACATGCTAATGAACAAACCCAGTATGCAAGTTATTCTTGCACCACATGCTCAAATCTTCTTGAGGTGCAT

FIGURE 1041B

TAACTCTTTTAGGTAACTAGAGCAGTACTTGGTGAACTAGATCAGGAGGTCAGTAAACTTTCTGTGGAAGGGCCA
GAGAGTAAATATTTTAGGCTTTGCAGCCCATACGGTCTCTGTCACAGCTAGTCAACCCTGCCATTTTACCACAAA
AGCAGCAATAGACATTATGTAAACAAATGAGCACAGTTATGTTCCAATAAAACTTTATTTACAAAAACAGATGAC
ATCCCAGATGCAGACCATGGGCAACCAACCATTGCACTGGCTAAATCATTATTTATGGAGAAATCCTCTTTGTGT
CTCTACTCTAGATGCCTAAAAGAGTTTATATACTTCTAAAAGCTCCTAACTTATATCCAAAGAATTGCTTTCTGA
TTCGTGTAGTCTCTCCCACAGATTCATAAACTTTTATGACTTATATTGTTTCCAGGTGGGCATGGTTTATTTCCC
AGTTTAACAGTTCAGAATAGGGGCATTTATTTTATCATATTTTAGGGTGGGTTAGGAGTATCCTTTCTGGAGACT
GAGAAAGGGGTGTATTTAATTCCATCAGGTCCAGTACAGTACTAGGAGTCATAATACTTTATAATCAATTAAATA
AATAGAACCACTGAGACAATAATGTATTTTTTTAAAGTGGCAAATGTGGTTTTCTTTTTTCAGCCTTTGCGCTTT
TTCAGTATTTTGACCATAGGGAGATAATTTTTTTATAATACAAAAGTAACCACTTGGAATTTTAAAGATAATGTT
ATGTGTGTATGTGAAATATATATACATATATATATATATTTCCTAAAAGAAGAAAAGATACCTTTCTGTTCAACT
TGTATCAACTCCTCTTTTCTAATTGCTGTGAAATGGCAACTGTTGATAAATTATTGTGATTGTTTTAAAATCTAA
TGGGAAGTAAAATATATTTTGATTTTACCCAGCTTAATCTGTAAAGTAGCACTTAAATATATCTGATAGCAACAC
TTAAGATATTGCATGGGGATTACTTTCCTATCATCCATATGCATTTGTGCAACTTCAAACATATTGGGTGCTTCT
GAATTCCTGATGATTGGATTTAAGCTATTGAAAATTGGATAATTTAAACTTAATGATTTTTATAATTTTCTGATC
TTAAAATTTGGTTAATGCCTATAATCTGTTGCTTTTTCTCAATATGTGTCCTATTGGAAATTCCTCAAATCGTTG
GTGCCATCAGTGATTTACAAACAATATTTTGATATTGCAGATGACTTGCTTACTGTATTTGCATTGTTAGAAAAC
AGTTTGTAGACAATGATTCTTTTTTAATAAAATCAAATAATTCTAAAAGTGCTAGAGAATTTAACTAAAAGCTGG
TTCCCAAATGCATAGCTGGCATTTTAATTTAAATTCAAATCTACATAGAGAACATCCGTGTAAATCATCTAACTG
GATTTTCCCATTGGTCATTCCCAAACACACCTATGGTCCTAGAATCCTTAAGAGAAGCACCCTGTAACCTTTTAT
GTGGTTTGCCTTTAAGAGGCCCAGGTGCTTCTCCTTTATGATTTGAGTTGGCCTCTTCATAAATTAGTGCTGTTT
ACTTTCAGAGGAAGCAGAGAAGTTGCTGTTATGTTTTTGCATCCGTTTACCCTATGCAAAGTTGCTGTATGATGC
CAACTAAACTGCTCTTTAGGCAGCCTTCTGAGGAGAAAAGCAACCCTGTTTCAAATCCACTGCCAATTCAGCTCC
TCTGGAGTGGAGCTTTCTGATTTCTTGGAGCAGGAATTTTAGAGATTGAAATGAATGATCATTTAGTCAGATTTA
TCCTGTAATTTCATGCAGCTTTGTGGCCTTTGCAGTACTATTTATAAAATGGACCCTGATGGTGATGAACTCTTT
AGAACGCATTACTGTTAAGCCTGTGTTGAGACATTGATGCTGTCTATCTCATTTTTTAGACAGTTTTTGTAGCTT
TCTATTGAGAGTCAGGTATGTGAGCATCTCTGAAGCAGTGTTGAATGTAATTTTCGGAAACATGGATTGTGTATT
TTGACTTTTATTTTATAAATACACAGCTCAACAGTGCCTTTTTTTTCCCTCATAGTCCTGTTGGAAGATGCTCAC
TACTTTCTCTCTTCTCTCTCCCTGCCCTCCCCCACTCCATTCAGTTGATTCATTTATGCAAATTCTGTTTCCAAC
TTGAAACCATTTTGTCACATCTGTTGGAGAGATAATCACTCCTTTTCCTTAACATTCTGCCAGCTTTCTGATGTT
GAAGTGTTTCAGTTGACTACCTGATGCAAAAGCTATAAAATAAACAGTGGGAAGGGGAAAAATTGGTGTCCTGTT
TTAATATTTTCTTTTGTAGCCTTGACACTGATGGACATTTTCCAAGCTGACTCAGTGTTCAGTGTCAACTTAACT
CTCAGATAGTGTTGCCATCAAGAAAGCATGCAACATCATTGGTTTCTAATGATTTTATGGCTTGTGACAATATTT
TATCTGGACTGACATGCCTCTGCTGCTTTTGCTTTGTACTTCATTGCTGGTAATAAAATTTCAGATGGAAAACTT
ACAAAATATATACTTAATTAGAAGAAAAAAATAGAGAAAGGGCTATTAGAATTAAAAAAATTTGAAAGTAACTTA
ATCTAACATTTATGGCACAGTTTGGACATATCCATAATTTTTTTTGGGAACACACATTTCTGATTTTTTTTTTCC
CCCTTAAAGAAGAAAGTCTCAATTCCATTGATTTTCAATTCTTAGCCACTGGCTCATTGCTTTGAGCAATGCTTG
ATTGATTCTATTTATATTATATGATATTGGGTTGATAAAATACCAGTTCAATGATGAGTTTTCTTAACAGAATTT
GGTTTGTACTTGCAGTGGCTGAACAAAGAGCATGGCTTGAGAATCAAAGGGATCTGCATTTAGCAATGTGATGTC
AGTAAATGGACATAACAGGATTGTTGTAAAGGTTGGGCATGATGTATGCAAAGTACTGGCCAGGGTAGACTAATA
ACTGATGGCATTTATATGCTGTGCTGGAATATTGTTACCAAGCTGATGTGCCGTTCTCACCCTGCAGAATACTGG
TTTTGTCATTTCATAAATGATATTTTTATAAAT

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FIGURE 1042

MGLLRIMMPPKLQLLAVVAFAVAMLFLENQIQKLEESRSKLERAIARHEVREIEQRHTMDGPRQDATLDEEEDMV
IIYNRVPKTASTSFTNIAYDLCAKNKYHVLHINTTKNNPVMSLQDQVRFVKNITSWKEMKPGFYHGHVSYLDFAK
FGVKKKPIYINVIRDPIERLVSYYYFLRFGDDYRPGLRRRKQGDKKTFDECVAEGGSDCAPEKLWLQIPFFCGHS
SECWNVGSRWAMDQAKYNLINEYFLVGVTEELEDFIMLLEAALPRFFRGATELYRTGKKSHLRKTTEKKLPTKQT
IAKLQQSDIWKMENEFYEFALEQFQFIRAHAVREKDGDLYILAQNFFYEKIYPKSN

FIGURE 1043

CTCTAAAGCTTAGAGCCAAGATGGCGGGATCCAGGCAAAGGGGTCTCCGGGCCAGAGTTCGGCCGCTGTTCTGCG
CCTTGCTGCTGTCACTCGGTCGCTTCGTCCGGGGCGACGGCGTGGGAGGAGACCCCGCGGTCGCGTTGCCACATC
GCCGTTTCGAGTACAAATACAGCTTCAAGGGGCCGCACCTGGTGCAGAGCGACGGGACCGTGCCCTTCTGGGCCC
ACGCGGGGAATGCTATTCCAAGTTCAGATCAAATTCGAGTAGCACCATCTTTAAAAAGCCAAAGAGGCTCAGTGT
GGACAAAGACAAAAGCGGCCTTTGAGAACTGGGAAGTTGAGGTGACATTTCGAGTGACTGGAAGAGGTCGAATTG
GAGCTGATGGCCTAGCAATTTGGTATGCAGAAAATCAAGGCTTGGAGGGCCCTGTGTTTGGATCAGCTGATCTGT
GGAATGGTGTTGGAATATTTTTTGATTCTTTTGACAATGATGGAAAGAAAAATAATCCTGCTATAGTAATTATAG
GCAACAATGGACAAATCCATTATGACCATCAAAATGACGGGGCTAGTCAAGCTTTGGCAAGTTGCCAGAGGGACT
TCCGCAACAAACCCTATCCTGTCCGAGCAAAGATTACCTATTACCAGAACACACTGACAGTAATGATCAATAATG
GCTTTACACCAGATAAAAATGATTATGAATTTTGTGCCAAAGTGGAAAATATGATTATCCCTGCACAAGGGCATT
TTGGAATATCTGCTGCAACTGGAGGTCTTGCAGATGACCATGATGTCCTTTCTTTTCTGACTTTCCAGTTGACTG
AACCTGGAAAAGAGCCGCCCACACCAGATAAAGAAATTTCGGAAAAGGAAAAAGAAAAGTATCAGGAGGAATTTG
AGCACTTTCAACAAGAATTGGATAAAAAAAAAAGAGGAATTCCAGAAGGGCCACCCCGACCTCCAAGGGCAGCCTG
CGGAGGAAATATTTGAGAGTGTAGGAGATCGAGAGCTAAGACAAGTCTTTGAAGGACAGAATCGTATTCATCTTG
AAATCAAGCAGCTGAACCGGCAGTTAGATATGATTCTTGATGAACAGAGAAGATATGTCTCTTCCTTAACAGAGG
AAATCTCTAAAAGAGGAGCAGGAATGCCTGGGCAGCATGGGCAGATTACTCAACAAGAACTGGATACTGTTGTGA
AAACTCAGCATGAGATTCTGAGACAAGTAAATGAAATGAAAAATTCCATGAGTGAAACCGTCAGACTGGTCAGTG
GAATGCAGCACCCTGGCTCTGCTGGAGGCGTCTATGAGACAACACAGCACTTCATTGACATCAAAGAGCACCTGC
ACATAGTAAAGAGGGACATAGATAACTTAGTGCAGCGAAATATGCCATCAAATGAAAAGCCGAAATGCCCAGAAC
TACCACCATTTCCATCATGTTTGTCTACGGTCCACTTCATTATATTTGTTGTGGTGCAAACTGTATTATTCATTG
GTTATATCATGTATAGGTCTCAGCAAGAAGCAGCTGCCAAAAAATTCTTTTGACTACCATTTTCCTGTGTACTTC
ATCTATTTGTGTACAAAATGATGTCGTTTTGAGGGAATTTAAGTATTTAAATTGCTTCATAGTCTAAATTATTAA
TTTTCTTAATAAAATAACTGTTTAAACATTGATTTGCAGTTAAGAATAAACCTTAAAGCAAAGACAACCACATTT
TAATTTGTTCACAGTATGTAAATCTGTCTAAATTTCAGTGAATTTCTGGTCAGTATGATGCAGCCTCTGAGCAGA
TATTGACCAGTAAGAGGGTAAATAAAGTGGGGGCAACCCCTGGATATGAATGTTACCCCCTAAGTCTCCAATATT
GCAGGTTTCCCTGTATAACGTAAACACACTTGCCCTCATGCCTCCCAGAATATGAGGTCTAATTAAGAAGTCCCA
TCAGGTTTATTTTGTAACCAAAGTCTTTTTTAGAGGTCAGACTTCCTAATCAAAGGCCTGGGCCTGCAGTCCTTT
CATCTTAATGCAACTTCCTTTGAAATCAAAGAATATTTTGTCTGAGAGCTTTAAGGATCTGGTAATAGACTTCAA
AATGTTAAGTGAAATTTTTTTTCCTCTATTTATCAATGATATATTTCACTTTTAAAGGAAATTTTGGAGGAAAAT
ATAGCTGCTTTTTGCCTAAAAAACCTTGTGGGTGGAAATATTCCTCTGAGAATGGCTTTTATAGGTATTTTGCCT
GGTAATGTATTCATTCATGATTGCCCATATTCTTGAATGTTTCTTCATTCCAATGGGGTCAGGTCAATATTATGA
AAATAATTTTTATATTTATATTTGTAACTAAGAATTTATTTCTCCCTTTACTACACGATGTAAATTCACGTCAAA
TTCGATGATCTGAGGATTTAAATTCACAAAACCTGCCACTACATTCTGGTTTACATTAGTTACTTCATGCTGGCT
GGGGTTAGTGACCATTTGCATACTCTTTTAAATCAAGGAGGCTGTAGTAGAGGCAGTTTTAAGATTCTTGAAGGC
AAAATTTGAAAAACAGTGAATACTTCTAATTGTTTCCTTTTAGTGCCAGAACTAAGACATTGTGAAGCACTTGTT
AGTAAACTTAACCTTGAAATGTCAGACTGGAAGGAGTTTTTATGTCTTTGTGCATACTTCTGGGTATTACAGAAA
CAGTCTGTAAATAACATTTTAAGATGCAAATTTAATTCTGTTCACAGCTGATTTATACTGATTT

FIGURE 1044

MAGSRQRGLRARVRPLFCALLLSLGRFVRGDGVGGDPAVALPHRRFEYKYSFKGPHLVQSDGTVPFWAHAGNAIP
SSDQIRVAPSLKSQRGSVWTKTKAAFENWEVEVTFRVTGRGRIGADGLAIWYAENQGLEGPVFGSADLWNGVGIF
FDSFDNDGKKNNPAIVIIGNNGQIHYDHQNDGASQALASCQRDFRNKPYPVRAKITYYQNTLTVMINNGFTPDKN
DYEFCAKVENMIIPAQGHFGISAATGGLADDHDVLSFLTFQLTEPGKEPPTPDKEISEKEKEKYQEEFEHFQQEL
DKKKEEFQKGHPDLQGQPAEEIFESVGDRELRQVFEGQNRIHLEIKQLNRQLDMILDEQRRYVSSLTEEISKRGA
GMPGQHGQITQQELDTVVKTQHEILRQVNEMKNSMSETVRLVSGMQHPGSAGGVYETTQHFIDIKEHLHIVKRDI
DNLVQRNMPSNEKPKCPELPPFPSCLSTVHFIIFVVVQTVLFIGYIMYRSQQEAAAKKFF

FIGURE 1045

GTTCTGCGTTTTGCCAGTCACCTCTCAACTGTGTGCCAAAGAAGGACTCCATGAAAGATGACAGAAGAAGTTATT
GTGATAGCCAAGTGGGACTACACCGCCCAGCAGGACCAGGAGCTGGACATCAAGAAGAACGAGCGGCTGTGGTTG
CTGGACGACTCCAAGACGTGGTGGCGGGTGAGGAACGCGGCCAACAGGACGGGCTATGTACCGTCCAACTACGTG
GAGCGGAAGAACAGCCTGAAGAAGGGCTCCCTCGTGAAGAACCTGAAGGACACACTAGGCCTCGGCAAGACGCGC
AGGAAGACCAGCGCGCGGGATGCGTCCCCCACGCCCAGCACGGACGCCGAGTACCCCGCCAATGGCAGCGGCGCC
GACCGCATCTACGACCTCAACATCCCGGCCTTCGTCAAGTTCGCCTATGTGGCCGAGCGGGAGGATGAGTTGTCC
CTGGTGAAGGGGTCGCGCGTCACCGTCATGGAGAAGTGCAGCGACGGTTGGTGGCGGGGCAGCTACAACGGGCAG
ATCGGCTGGTTCCCCTCCAACTACGTCTTGGAGGAGGTGGACGAGGCGGCTGCGGAGTCCCCAAGCTTCCTGAGC
CTGCGCAAGGGCGCCTCGCTGAGCAATGGCCAGGGCTCCCGCGTGCTGCATGTGGTCCAGACGCTGTACCCCTTC
AGCTCAGTCACCGAGGAGGAGCTCAACTTCGAGAAGGGGGAGACCATGGAGGTGATTGAGAAGCCGGAGAACGAC
CCCGAGTGGTGGAAATGCAAAAATGCCCGGGGCCAGGTGGGCCTCGTCCCCAAAAACTACGTGGTGGTCCTCAGT
GACGGGCCTGCCCTGCACCCTGCGCACGCCCCACAGATAAGCTACACCGGGCCCTCGTCCAGCGGGCGCTTCGCG
GGCAGAGAGTGGTACTACGGGAACGTGACGCGGCACCAGGCCGAGTGCGCCCTCAACGAGCGGGGCGTGGAGGGC
GACTTCCTCATTAGGGACAGCGAGTCCTCGCCCAGCGACTTCTCCGTGTCCCTTAAAGCGTCAGGGAAGAACAAA
CACTTCAAGGTGCAGCTCGTGGACAATGTCTACTGCATTGGGCAGCGGCGCTTCCACACCATGGACGAGCTGGTG
GAACACTACAAAAAGGCGCCCATCTTCACCAGCGAGCACGGGGAGAAGCTCTACCTCGTCAGGGCCCTGCAGTGA

CGGCGCCCCGGCCCCACACTCGCCTCCCGGGCCCCACGGTGGAGCTGCCCGCCCGGCCTTGTGGCAGAGGCTCCT
CCCGCGGGGACGGCCCCGACGGCTTCTCTGCGAGTCTCTCTTTATGTTCAGGTCGCTTGGTCGGTTCGTCTCCCA
TTTGCCATCCAGGCCTCACACCCACACTCGAGCCCACCCGGCCGGCCAGCTTTAGAGGAGGGGAGGAGCAGGGCG
AGTTCACATTATTCCTTTTCCATCGGAAGTGGCGCTCGTGCATTCAACTCGTTCCCGCTCATGGAACCCCTCTTT
AAAAAGACGCAGGGCACCTGTGAGCGCAGGAGCGAGCCTAAGGCCACCCAGCGGCAGCGCCCGTGTCCTGGGCAC
TCAGCGTGCTGGGCAGAGCAGGTGCGATGGCCCCAGTCCTAGCAGCCCTCGCCCATGTCCTGTGCCCTTACATGG
CTCCCGGACTGTGCAGGGAGCCGATACGTTTGCTGATAGCAATACTGGAACCACCGGGTGCGATGGCAGTGAGGA
GACTGCCCAGTGCCTTTGGGGCTGTGCTTGCAATAAAGAAAGAATTTCCTGGAAAGGCAGTCTGCAAAAGAGGGA
ACCGGTGACTCAGAAAGACAGATGTTTTGGTAATTTACCCCAAATGTGCCATCCACATAGTGCTTTTTCCTCTTG
CCCTTCGGCTTGTTTGAATCTCACAATTATGTATTTAATTCTCAAAGAAATATGTATCTGTAGCCGTTTGTTGAC
ACTAATACAGATGATTAAGGAAAACAGCTGATCTTTGGGGAAGGGAGCTACCAACACTTTATACACACACACACG
TGCACACACACACACACACACACACTATATATATATATATTATTTACAGGGAAATTTTTCAGGGTTTACAAAAGA
GTATGTGATTGGTAGTAAGAGACACACAGAATGTTTATGAAGAAATTGCATTTTCTTTTTCCTTTACATTTGAAC
TTCTTTATAGTTTAAATATAACGTCTTGAGATGGCACATTCCTACGATTGAAGAAGGGGTCTTGAGATCCCCTAA
ACTTGCATACCCAGTTTTTTGGATATTGTAATAAAAAAAAGTATTATGACAAGAAAAAAAAAAAAAAAAAAAAA

FIGURE 1046

MTEEVIVIAKWDYTAQQDQELDIKKNERLWLLDDSKTWWRVRNAANRTGYVPSNYVERKNSLKKGSLVKNLKDTL
GLGKTRRKTSARDASPTPSTDAEYPANGSGADRIYDLNIPAFVKFAYVAEREDELSLVKGSRVTVMEKCSDGWWR
GSYNGQIGWFPSNYVLEEVDEAAAESPSFLSLRKGASLSNGQGSRVLHVVQTLYPFSSVTEEELNFEKGETMEVI
EKPENDPEWWKCKNARGQVGLVPKNYVVVLSDGPALHPAHAPQISYTGPSSSGRFAGREWYYGNVTRHQAECALN
ERGVEGDFLIRDSESSPSDFSVSLKASGKNKHFKVQLVDNVYCIGQRRFHTMDELVEHYKKAPIFTSEHGEKLYL
VRALQ

FIGURE 1047A

GTTGCTGTCGCCGTTGCTGTCGGCCGAGGCCACCAAGAGGCAACGGGCGGCAGGTTGCAGTGGAGGGGCCTCCGC
TCCCCTCGGTGGTGTGTGGGTCCTGGGGGTGCCTGCCGGCCCAGCCGAGGAGGCCCACGCCCACCATGGTCCCCT
GCTGGAACCATGGCAACATCACCCGCTCCAAGGCGGAGGAGCTGCTTTCCAGGACAGGCAAGGACGGGAGCTTCC
TCGTGCGTGCCAGCGAGTCCATCTCCCGGGCATACGCGCTCTGCGTGCTGTATCGGAATTGCGTTTACACTTACA
GAATTCTGCCCAATGAAGATGATAAATTCACTGTTCAGGCATCCGAAGGCGTCTCCATGAGGTTCTTCACCAAGC
TGGACCAGCTCATCGAGTTTTACAAGAAGGAAAACATGGGGCTGGTGACCCATCTGCAATACCCTGTGCCGCTGG
AGGAAGAGGACACAGGCGACGACCCTGAGGAGGACACAGAAAGTGTCGTGTCTCCACCCGAGCTGCCCCCAAGAA
ACATCCCGCTGACTGCCAGCTCCTGTGAGGCCAAGGAGGTTCCTTTTTCAAACGAGAATCCCCGAGCGACCGAGA
CCAGCCGGCCGAGCCTCTCCGAGACATTGTTCCAGCGACTGCAAAGCATGGACACCAGTGGGCTTCCAGAAGAGC
ATCTTAAGGCCATCCAAGATTATTTAAGCACTCAGCTCGCCCAGGACTCTGAATTTGTGAAGACAGGGTCCAGCA
GTCTTCCTCACCTGAAGAAACTGACCACACTGCTCTGCAAGGAGCTCTATGGAGAAGTCATCCGGACCCTCCCAT
CCCTGGAGTCTCTGCAGAGGTTATTTGACCAGCAGCTCTCCCCGGGCCTCCGTCCACGTCCTCAGGTTCCTGGTG
AGGCCAATCCCATCAACATGGTGTCCAAGCTCAGCCAACTGACAAGCCTGTTGTCGTCCATTGAAGACAAGGTCA
AGGCCTTGCTGCACGAGGGTCCTGAGTCTCCGCACCGGCCCTCCCTTATCCCTCCAGTCACCTTTGAGGTGAAGG
CAGAGTCTCTGGGGATTCCTCAGAAAATGCAGCTCAAAGTCGACGTTGAGTCTGGGAAACTGATCATTAAGAAGT
CCAAGGATGGTTCTGAGGACAAGTTCTACAGCCACAAGAAAATCCTGCAGCTGATTAAGTCACAGAAATTTCTGA
ATAAGTTGGTGATCTTGGTGGAAACGGAGAAGGAGAAGATCCTGCGGAAGGAATATGTTTTTGCTGACTCCAAAA
AGAGAGAAGGCTTCTGCCAGCTCCTGCAGCAGATGAAGAACAAGCACTCAGAGCAGCCGGAGCCCGACATGATCA
CCATCTTCATCGGCACCTGGAACATGGGTAACGCCCCCCCTCCCAAGAAGATCACGTCCTGGTTTCTCTCCAAGG
GGCAGGGAAAGACGCGGGACGACTCTGCGGACTACATCCCCCATGACATTTACGTGATCGGCACCCAAGAGGACC
CCCTGAGTGAGAAGGAGTGGCTGGAGATCCTCAAACACTCCCTGCAAGAAATCACCAGTGTGACTTTTAAAACAG
TCGCCATCCACACGCTCTGGAACATCCGCATCGTGGTGCTGGCCAAGCCTGAGCACGAGAACCGGATCAGCCACA
TCTGTACTGACAACGTGAAGACAGGCATTGCAAACACACTGGGGAACAAGGGAGCCGTGGGGGTGTCGTTCATGT
TCAATGGAACCTCCTTAGGGTTCGTCAACAGCCACTTGACTTCAGGAAGTGAAAAGAAACTCAGGCGAAACCAAA
ACTATATGAACATTCTCCGGTTCCTGGCCCTGGGCGACAAGAAGCTGAGTCCCTTTAACATCACTCACCGCTTCA
CGCACCTCTTCTGGTTTGGGGATCTTAACTACCGTGTGGATCTGCCTACCTGGGAGGCAGAAACCATCATCCAGA
AAATCAAGCAGCAGCAGTACGCAGACCTCCTGTCCCACGACCAGCTGCTCACAGAGAGGAGGGAGCAGAAGGTCT
TCCTACACTTCGAGGAGGAAGAAATCACGTTTGCCCCAACCTACCGTTTTGAGAGACTGACTCGGGACAAATACG
CCTACACCAAGCAGAAAGCGACAGGGATGAAGTACAACTTGCCTTCCTGGTGTGACCGAGTCCTCTGGAAGTCTT
ATCCCCTGGTGCACGTGGTGTGTCAGTCTTATGGCAGTACCAGCGACATCATGACGAGTGACCACAGCCCTGTCT
TTGCCACATTTGAGGCAGGAGTCACTTCCCAGTTTGTCTCCAAGAACGGTCCCGGGACTGTTGACAGCCAAGGAC
AGATTGAGTTTCTCAGGTGCTATGCCACATTGAAGACCAAGTCCCAGACCAAATTCTACCTGGAGTTCCACTCGA
GCTGCTTGGAGAGTTTTGTCAAGAGTCAGGAAGGAGAAAATGAAGAAGGAAGTGAGGGGGAGCTGGTGGTGAAGT
TTGGTGAGACTCTTCCAAAGCTGAAGCCCATTATCTCTGACCCTGAGTACCTGCTAGACCAGCACATCCTCATCA
GCATCAAGTCCTCTGACAGCGACGAATCCTATGGCGAGGGCTGCATTGCCCTTCGGTTAGAGGCCACAGAAACGC
AGCTGCCCATCTACACGCCTCTCACCCACCATGGGGAGTTGACAGGCCACTTCCAGGGGGAGATCAAGCTGCAGA
CCTCTCAGGGCAAGACGAGGGAGAAGCTCTATGACTTTGTGAAGACGGAGCGTGATGAATCCAGTGGGCCAAAGA
CCCTGAAGAGCCTCACCAGCCACGACCCCATGAAGCAGTGGGAAGTCACTAGCAGGGCCCCTCCGTGCAGTGGCT
CCAGCATCACTGAAATCATCAACCCCAACTACATGGGAGTGGGGCCCTTTGGGCCACCAATGCCCCTGCACGTGA
AGCAGACCTTGTCCCCTGACCAGCAGCCCACAGCCTGGAGCTACGACCAGCCGCCCAAGGACTCCCCGCTGGGGC
CCTGCAGGGGAGAAAGTCCTCCGACACCTCCCGGCCAGCCGCCCATATCACCCAAGAAGTTTTTACCCTCAACAG
CAAACCGGGGTCTCCCTCCCAGGACACAGGAGTCAAGGCCCAGTGACCTGGGGAAGAACGCAGGGGACACGCTGC
CTCAGGAGGACCTGCCGCTGACGAAGCCCGAGATGTTTGAGAACCCCCTGTATGGGTCCCTGAGTTCCTTCCCTA
AGCCTGCTCCCAGGAAGGACCAGGAATCCCCCAAAATGCCGCGGAAGGAACCCCCGCCCTGCCCGGAACCCGGCA
TCTTGTCGCCCAGCATCGTGCTCACCAAAGCCCAGGAGGCTGATCGCGGCGAGGGGCCCGGCAAGCAGGTGCCCG
CGCCCCGGCTGCGCTCCTTCACGTGCTCATCCTCTGCCGAGGGCAGGGCGGCCGGCGGGGACAAGAGCCAAGGGA
AGCCCAAGACCCCGGTCAGCTCCCAGGCCCCGGTGCCGGCCAAGAGGCCCATCAAGCCTTCCAGATCGGAAATCA
ACCAGCAGACCCCGCCCACCCCGACGCCGCGGCCGCCGCTGCCAGTCAAGAGCCCGGCGGTGCTGCACCTCCAGC

FIGURE 1047B

ACTCCAAGGGCCGCGACTACCGCGACAACACCGAGCTCCCGTATCACGGCAAGCACCGGCCGGAGGAGGGGCCAC
CAGGGCCTCTAGGCAGGACTGCCATGCAGTGAAGCCCTCAGTGAGCTGCCACTGAGTCGGGAGCCCAGAGGAACG
GCGTGAAGCCACTGGACCCTCTCCCGGGACCTCCTGCTGGCTCCTCCTGCCCAGCTTCCTATGCAAGGCTTTGTG
TTTTCAGGAAAGGGCCTAGCTTCTGTGTGGCCCACAGAGTTCACTGCCTGTGAGACTTAGCACCAAGTGCTGAGG
CTGGAAGAAAAACGCACACCAGACGGGCAACAAACAGTCTGGGTCCCCAGCTCGCTCTTGGTACTTGGGACCCCA
GTGCCTTGTTGAGGGCGCCATTCTGAAGAAAGGAACTGCAGCGCCGATTTGAGGGTGGAGATATAGATAATAATA
ATATTAATAATAATAATGGCCACATGGATCGAACACTCATGGTGTGCCAAGTGCTGTGCTAAGTGCTTTACGAAC
ATTCGTCATATCAGGATGACCTCGAGAGCTGAGGCTCTAGCACCTAAAACCACGTGCCCAAACCCACCAGTTTAA
AACGGTGTGTGTTCGGAGGGGTGAAAGCATTAAGAAGCCCAGTGCCCTCCTGGAGTGAGACAAGGGCTCGGCCTT
AAGGAGCTGAAGAGTCTGGGTAGCTTGTTTAGGGTACAAGAAGCCTGTTCTGTCCAGCTTCAGTGACACAAGCTG
CTTTAGCTAAAGTCCCGCGGGTTCCGGCATGGCTAGGCTGAGAGCAGGGATCTACCTGGCTTCTCAGTTCTTTGG
TTGGAAGGAGCAGGAAATCAGCTCCTATTCTCCAGTGGAGAGATCTGGCCTCAGCTTGGGCTAGAGATGCCAAGG
CCTGTGCCAGGTTCCCTGTGCCCTCCTCGAGGTGGGCAGCCATCACCAGCCACAGTTAAGCCAAGCCCCCCAACA
TGTATTCCATCGTGCTGGTAGAAGAGTCTTTGCTGTTGCTCCCGAAAGCCGTGCTCTCCAGCCTGGCTGCCAGGG
AGGGTGGGCCTCTTGGTTCCAGGCTCTTGAAATAGTGCAGCCTTTTCTTCCTATCTCTGTGGCTTTCAGCTCTGC
TTCCTTGGTTATTAGGAGAATAGATGGGTGATGTCTTTCCTTATGTTGCTTTTTCAACATAGCAGAATTAATGTA
GGGAGCTAAATCCAGTGGTGTGTGTGAATGCAGAAGGGAATGCACCCCACATTCCCATGATGGAAGTCTGCGTAA
CCAATAAATTGTGCCTTTCTCACTCAAAACC

FIGURE 1048

MVPCWNHGNITRSKAEELLSRTGKDGSFLVRASESISRAYALCVLYRNCVYTYRILPNEDDKFTVQASEGVSMRF
FTKLDQLIEFYKKENMGLVTHLQYPVPLEEEDTGDDPEEDTESVVSPPELPPRNIPLTASSCEAKEVPFSNENPR
ATETSRPSLSETLFQRLQSMDTSGLPEEHLKAIQDYLSTQLAQDSEFVKTGSSSLPHLKKLTTLLCKELYGEVIR
TLPSLESLQRLFDQQLSPGLRPRPQVPGEANPINMVSKLSQLTSLLSSIEDKVKALLHEGPESPHRPSLIPPVTF
EVKAESLGIPQKMQLKVDVESGKLIIKKSKDGSEDKFYSHKKILQLIKSQKFLNKLVILVETEKEKILRKEYVFA
DSKKREGFCQLLQQMKNKHSEQPEPDMITIFIGTWNMGNAPPPKKITSWFLSKGQGKTRDDSADYIPHDIYVIGT
QEDPLSEKEWLEILKHSLQEITSVTFKTVAIHTLWNIRIVVLAKPEHENRISHICTDNVKTGIANTLGNKGAVGV
SFMFNGTSLGFVNSHLTSGSEKKLRRNQNYMNILRFLALGDKKLSPFNITHRFTHLFWFGDLNYRVDLPTWEAET
IIQKIKQQQYADLLSHDQLLTERREQKVFLHFEEEEITFAPTYRFERLTRDKYAYTKQKATGMKYNLPSWCDRVL
WKSYPLVHVVCQSYGSTSDIMTSDHSPVFATFEAGVTSQFVSKNGPGTVDSQGQIEFLRCYATLKTKSQTKFYLE
FHSSCLESFVKSQEGENEEGSEGELVVKFGETLPKLKPIISDPEYLLDQHILISIKSSDSDESYGEGCIALRLEA
TETQLPIYTPLTHHGELTGHFQGEIKLQTSQGKTREKLYDFVKTERDESSGPKTLKSLTSHDPMKQWEVTSRAPP
CSGSSITEIINPNYMGVGPFGPPMPLHVKQTLSPDQQPTAWSYDQPPKDSPLGPCRGESPPTPPGQPPISPKKFL
PSTANRGLPPRTQESRPSDLGKNAGDTLPQEDLPLTKPEMFENPLYGSLSSFPKPAPRKDQESPKMPRKEPPPCP
EPGILSPSIVLTKAQEADRGEGPGKQVPAPRLRSFTCSSSAEGRAAGGDKSQGKPKTPVSSQAPVPAKRPIKPSR
SEINQQTPPTPTPRPPLPVKSPAVLHLQHSKGRDYRDNTELPYHGKHRPEEGPPGPLGRTAMQ

FIGURE 1049

CAAGAGGTGCAGAGCAAGCGCATGCGTCGTGACGGCCCGGCTTAGGCGACTCTGGGCGGGTCTGGGCCGCTCCAG
TGTTTTGGGGCACAGAAGCTGTGGGAGGAGCTGGAGGCTTCACCGTGGTAACCACAGCGCCGCTGCTGCCCCGCC
TTGCAGGCCTCAGGACTGTCATCGCCTCTGGGTGTGAGGGTACTTTGGCCACCGTCCCCGGAAATAACCGCGCCT
GCCTCTCAAGATACCCCATCCTCTCCACGCCGCTGCCGCTGCCGCC**ATG**CAAGGGGAGGACGCCAGATACCTCAA
AAGGAAAGTTAAAGGAGGGAATATAGATGTACATCCATCAGAAAAAGCACTCATTGTTCACTATGAAGTGGAAGC
TACCATTCTTGGAGAAATGGGGGACCCCATGTTGGGAGAACGAAAAGAATGTCAAAAAATCATTCGACTTAAGAG
TCTCAATGCCAACACAGATATAACTTCCCTGGCAAGGAAGGTGGTTGAAGAATGTAAACTCATTCATCCTTCAAA
ACTAAATGAGGTAGAACAGCTGTTGTACTATCTACAGAACCGCCGTGATTCATTGTCAGGAAAAGAGAAAAAAGA
AAAATCAAGCAAGCCTAAAGATCCACCTCCTTTTGAAGGAATGGAGATTGATGAAGTTGCTAACATTAATGACAT
GGATGAATATATTGAGTTATTATATGAAGATATTCCTGACAAAGTTCGGGGTTCTGCTTTGATCCTGCAGCTTGC
TCGAAATCCTGATAACTTGGAAGAACTACTATTGAATGAAACTGCCCTTGGTGCATTAGCAAGGGTCCTGAGAGA
AGACTGGAAGCAAAGTGTCGAGTTAGCTACAAACATAATTTACATCTTTTTTTGTTTCTCCAGCTTTTCTCAATT
TCATGGACTTATTACTCACTATAAAATTGGAGCTCTGTGTATGAATATTATTGATCATGAGTTAAAAAGACATGA
GCTTTGGCAAGAAGAACTCTCAAAGAAGAAGAAAGCTGTTGATGAAGACCCTGAAAACCAAACCTTGAGAAAGGA
TTATGAAAAAACCTTTAAAAAGTACCAGGGGCTTGTGGTAAAACAGGAACAGCTATTACGAGTTGCTCTTTATTT
GCTTCTGAATCTTGCTGAGGATACTCGTACCGAACTGAAAATGAGGAACAAGAACATAGTTCACATGTTGGTGAA
AGCCCTTGATCGGGACAATTTTGAGCTGCTAATTTTAGTTGTGTCATTCTTGAAGAAACTCAGCATTTTTATGGA
GAATAAAAATGATATGGTGGAAATGGATATTGTTGAAAAACTGGTGAAAATGATACCTTGTGAGCATGAAGACCT
GCTGAATATCACCCTCCGACTTTTACTAAACCTATCCTTTGACACAGGACTGAGGAATAAGATGGTACAAGTTGG
ACTGCTTCCCAAGCTCACTGCACTCCTAGGCAATGACAACTACAAACAAATAGCAATGTGTGTTCTTTACCACAT
AAGCATGGATGACCGCTTTAAATCAATGTTTGCATACACTGACTGTATACCACAGTTAATGAAGATGCTGTTTGA
ATGTTCAGATGAACGAATTGACTTGGAACTCATTTCTTTCTGCATTAATCTTGCTGCTAACAAAAGAAATGTACA
GCTTATCTGTGAAGGAAATGGGCTGAAGATGCTCATGAAGAGGGCTCTGAAGTTTAAGGATCCATTGCTGATGAA
AATGATTAGAAACATTTCTCAGCATGATGGACCAACTAAAAATCTGTTTATTGATTATGTTGGGGACCTTGCAGC
CCAGATCTCTAATGATGAAGAAGAGGAGTTTGTGATTGAATGTTTGGGAACTCTTGCAAACTTGACCATTCCAGA
CTTAGACTGGGAATTGGTTCTTAAAGAATATAAGTTGGTTCCATACCTCAAGGATAAACTAAAACCAGGTGCTGC
AGAAGATGATCTTGTTTTAGAAGTGGTTATAATGATTGGAACTGTATCCATGGATGACTCTTGTGCTGCATTGCT
AGCCAAATCTGGCATAATCCCTGCACTCATTGAATTGCTAAATGCTCAACAAGAAGATGATGAATTTGTGTGTCA
GATAATTTATGTCTTCTACCAGATGGTTTTCCACCAAGCCACAAGAGACGTCATAATCAAGGAAACACAGGCTCC
AGCATATCTCATAGACCTAATGCATGATAAGAATAATGAAATCCGAAAGGTCTGTGATAATACATTAGATATTAT
AGCGGAATATGATGAAGAATGGGCTAAGAAAATTCAGAGTGAAAAGTTTCGCTGGCATAACTCTCAGTGGCTGGA
GATGGTAGAGAGTCGTCAGATGGATGAGAGTGAGCAGTACTTGTATGGTGATGATCGAATTGAGCCATACATTCA
TGAAGGAGATATTCTCGAAAGACCTGACCTTTTCTACAACTCAGATGGATTAATTGCCTCTGAAGGAGCCATAAG
TCCCGATTTCTTCAATGATTACCACCTTCAAAATGGAGATGTTGTTGGGCAGCATTCATTTCCTGGCAGCCTTGG
AATGGATGGCTTTGGCCAACCAGTTGGCATTCTTGGACGCCCTGCCACAGCATATGGATTCCGCCCTGATGAACC
TTACTACTATGGCTATGGATCT**TGA**TAAAGTATCTGTTTCCATGTGTAATCTCAGCTTAGAAGAAATCTGTGTGG
GTTGGGTTAATTTTGGATCTTTGCCTAATAATGCATGTTGATGTTATTGTGGGTCTGTGTTTGTTTTTATTTTTA
TATGTTGTTAGCTGCAGATTAACCCCAGCCCCTCTGTCTTCTGTTAAGTACAGTTGATACTGACATTGTTCACTC
ATCAAACCACATCTTGATGCTAAGTAACATTTCCCATGAGCCTCAAAACTGAATGCTGAAAAGCTACTAGACTGG
AAAACAAACACTGCATTATGTATGTTAAGTGACTAATTTAATTTCAATTAAAAAGCGTAAAGTGAAAATGAA

FIGURE 1050

MQGEDARYLKRKVKGGNIDVHPSEKALIVHYEVEATILGEMGDPMLGERKECQKIIRLKSLNANTDITSLARKVV
EECKLIHPSKLNEVEQLLYYLQNRRDSLSGKEKKEKSSKPKDPPPFEGMEIDEVANINDMDEYIELLYEDIPDKV
RGSALILQLARNPDNLEELLLNETALGALARVLREDWKQSVELATNIIYIFFCFSSFSQFHGLITHYKIGALCMN
IIDHELKRHELWQEELSKKKKAVDEDPENQTLRKDYEKTFKKYQGLVVKQEQLLRVALYLLLNLAEDTRTELKMR
NKNIVHMLVKALDRDNFELLILVVSFLKKLSIFMENKNDMVEMDIVEKLVKMIPCEHEDLLNITLRLLLNLSFDT
GLRNKMVQVGLLPKLTALLGNDNYKQIAMCVLYHISMDDRFKSMFAYTDCIPQLMKMLFECSDERIDLELISFCI
NLAANKRNVQLICEGNGLKMLMKRALKFKDPLLMKMIRNISQHDGPTKNLFIDYVGDLAAQISNDEEEEFVIECL
GTLANLTIPDLDWELVLKEYKLVPYLKDKLKPGAAEDDLVLEVVIMIGTVSMDDSCAALLAKSGIIPALIELLNA
QQEDDEFVCQIIYVFYQMVFHQATRDVIIKETQAPAYLIDLMHDKNNEIRKVCDNTLDIIAEYDEEWAKKIQSEK
FRWHNSQWLEMVESRQMDESEQYLYGDDRIEPYIHEGDILERPDLFYNSDGLIASEGAISPDFFNDYHLQNGDVV
GQHSFPGSLGMDGFGQPVGILGRPATAYGFRPDEPYYYGYGS

FIGURE 1051

GAGCACAGCATGGCGGTCAAGGTGCAGACAACTAAGCGAGGGGATCCTCATGAGTTAAGAAACATATTTCTACAG
TATGCCAGTACTGAGGTTGATGGAGAGCGTTATATGACCCCAGAAGACTTTGTTCAGCGCTATCTTGGACTGTAT
AATGATCCAAATAGTAACCCAAAGATCGTGCAGCTCTTGGCAGGAGTAGCTGATCAAACCAAGGATGGGTTGATC
TCCTATCAAGAGTTTTTGGCATTTGAATCTGTTTTATGTGCTCCAGATTCCATGTTCATAGTGGCTTTCCAGTTG
TTTGACAAGAGTGGAAATGGAGAGGTGACATTTGAAAATGTCAAAGAAATTTTTGGACAGACTATTATTCATCAT
CATATCCCTTTTAACTGGGATTGTGAATTTATCCGACTGCATTTTGGGCATAACCGGAAGAAGCATCTTAACTAC
ACAGAATTCACGCAGTTTCTCCAGGAGCTGCAATTGGAACATGCAAGACAAGCCTTTGCACTCAAAGACAAAAGC
AAAAGTGGCATGATTTCTGGTCTGGATTTCAGTGACATCATGGTTACCATTAGATCTCACATGCTTACTCCTTTT
GTGGAGGAGAACTTAGTTTCAGCAGCTGGAGGAAGTATCTCACACCAGGTTAGCTTCTCCTACTTCAATGCATTT
AACTCGTTACTGAATAACATGGAGCTTGTTCGTAAGATATATAGCACTCTAGCTGGCACAAGGAAAGATGTTGAA
GTCACAAAGGAGGAATTTGCCCAGAGTGCCATACGCTATGGACAAGTCACACCACTAGAAATTGATATTCTATAT
CAGCTTGCAGACTTATATAATGCTTCAGGGCGCTTGACTTTGGCAGATATTGAGAGAATAGCCCCATTGGCTGAG
GGGGCCTTACCTTACAACCTGGCAGAACTTCAGAGACAGCAGTCTCCTGGGTTAGGCAGGCCTATCTGGCTCCAG
ATTGCCGAGTCTGCTTACAGATTCACTCTGGGCTCAGTTGCTGGAGCTGTGGGAGCCACTGCAGTGTATCCTATA
GATCTGGTGAAGACCCGAATGCAAAACCAGCGTGGCTCTGGCTCTGTTGTTGGGGAGCTAATGTACAAAAACAGC
TTTGACTGTTTTAAGAAAGTCTTGCGTTATGAGGGCTTCTTTGGACTCTACAGGGGTCTGATACCACAACTTATA
GGGGTTGCTCCAGAAAAGGCCATTAAACTGACTGTTAATGATTTTGTTCGGGACAAATTTACCAGAAGAGATGGC
TCTGTTCCACTTCCAGCAGAAGTTCTTGCTGGAGGCTGTGCTGGAGGCTCTCAGGTCATTTTTACCAACCCATTG
GAGATAGTGAAGATTCGTCTGCAAGTAGCTGGAGAGATCACCACGGGACCCAGAGTCAGCGCCCTGAATGTGCTC
CGGGACTTGGGAATTTTTGGTCTGTATAAGGGTGCCAAAGCGTGTTTCCTCCGAGACATTCCCTTCTCTGCAATC
TATTTTCCTGTTTATGCTCATTGCAAACTACTTCTGGCTGATGAAAATGGACACGTGGGAGGTTTAAATCTTCTT
GCAGCTGGAGCCATGGCAGGTGTCCCAGCTGCATCTCTGGTGACCCCTGCTGATGTCATCAAGACAAGACTGCAG
GTGGCTGCCCGCGCTGGCCAGACGACATACAGTGGTGTCATCGACTGTTTCAGGAAGATTCTCCGGGAAGAAGGG
CCCTCAGCATTTTGGAAAGGGACTGCAGCTCGAGTGTTTCGATCCTCTCCCCAGTTTGGTGTTACCTTGGTCACT
TATGAACTTCTCCAGCGGTGGTTTTACATTGATTTTGGAGGCCTCAAACCCGCTGGTTCAGAACCAACACCTAAG
TCACGCATTGCAGACCTTCCTCCTGCCAACCCTGATCACATCGGTGGATACAGACTCGCCACAGCCACGTTTGCA
GGCATCGAAAACAAATTTGGCCTTTATCTCCCGAAATTTAAGTCTCCTAGTGTTGCTGTGGTTCAGCCAAAGGCA
GCAGTGGCAGCCACTCAGTGAGACAACTGTTGAGTGTGGCAAAATGGCGCCTTGAAGAAAGAGGCCTAGGAG
AGCAGCCCTGTAATGTATCCAGTCAGCTGCATGGTACTGACTGAGCTGAGGAGTCAAACTCTTCTTTCTGTATGA
CATATACATATACTTGTTTATAAAATAATCATTTGCCCAGGGAAAAAACCACAACGCTGTTTCAAGCTTTAGTCT
TATGTGTTGAAATGTTTTTGTAAGCCTTGGCATGAATTAGTGTTCTAGACTCTGCTTTGCACAGCTTGCACTTAC
AGTGATTGTACATATTGTACATCTTTGTACAGAGACATCTTGGCACCTCATCCCAACAAATCACATTTGTAGAAA
TGTAATGCGGTTCTGAGTGGCTTGAAATGTACAGAATGTTTTGAAAGTGTTTTATTAAGAATCACACAAAAATAA
ATGTATTAAAATTAAATTCATTCTCTTATTGGTGACTTATGGAAATAAAGCATCAATATTGGATGTATTTAATTC
CTAGTTTGTTTTCCATTCTGGAATAAAAAGGTATTTGCTGATAAAAGGCATAACGAGACATAGTGCTGCTACCAC
TGAATAAGTGATACTTTGGAAAGATGCATGCCAGTGGATGCCAGAGGACCAGGCTAATGACTTGTGTGTGCTGAT
GTGTTTCCATTTGTATTTAATGTGTGTAGACCCTCCTCTGTTCATCAATCAAAAAGCATTTCCTAGGCAGCTCCT
CGCCTGTCAGTGTGCATATGGAAACAGGGACATCTCCATCATTACTGGCTTAGTTTTGCTTTCCTTTGACACAGT
AAGGCAAAGGCCAAGCTTTCAAAAGAGTAAAGGATACTTTCACAATTTCCCTTCATATGGATATGATTCCAGTCA
AAAATAAAATGCACACCAAAATGTAAAAAAAAAAAAAAA

FIGURE 1052

MAVKVQTTKRGDPHELRNIFLQYASTEVDGERYMTPEDFVQRYLGLYNDPNSNPKIVQLLAGVADQTKDGLISYQ
EFLAFESVLCAPDSMFIVAFQLFDKSGNGEVTFENVKEIFGQTIIHHHIPFNWDCEFIRLHFGHNRKKHLNYTEF
TQFLQELQLEHARQAFALKDKSKSGMISGLDFSDIMVTIRSHMLTPFVEENLVSAAGGSISHQVSFSYFNAFNSL
LNNMELVRKIYSTLAGTRKDVEVTKEEFAQSAIRYGQVTPLEIDILYQLADLYNASGRLTLADIERIAPLAEGAL
PYNLAELQRQQSPGLGRPIWLQIAESAYRFTLGSVAGAVGATAVYPIDLVKTRMQNQRGSGSVVGELMYKNSFDC
FKKVLRYEGFFGLYRGLIPQLIGVAPEKAIKLTVNDFVRDKFTRRDGSVPLPAEVLAGGCAGGSQVIFTNPLEIV
KIRLQVAGEITTGPRVSALNVLRDLGIFGLYKGAKACFLRDIPFSAIYFPVYAHCKLLLADENGHVGGLNLLAAG
AMAGVPAASLVTPADVIKTRLQVAARAGQTTYSGVIDCFRKILREEGPSAFWKGTAARVFRSSPQFGVTLVTYEL
LQRWFYIDFGGLKPAGSEPTPKSRIADLPPANPDHIGGYRLATATFAGIENKFGLYLPKFKSPSVAVVQPKAAVA
ATQ

FIGURE 1053

CGCACCATACCGGCGCGGGCACCTGGGGAGAAATGGATGGAGAAGGGACCTGGCTGGAAAGCTTTGCCCCGCTGC
TCTGCTCCGCCCATAAGAGGACCCCTGAAATGTCCCGTGCAGTTTGTTCAAGTCCCCTGTGTGATGAAATGTGCC
TCTCGCCTTACCCGTGTGAGAATACCTGTGGTGTGGCAGCGAGTATTTTGGTATTTGACCTGTCCAAAGACGACT
TGATACCTCTATAATGTAACAGAAAAGGTCAGAAAATATTAAGCAAGTAGAAGTGTGGAGCATATTAAGCAAGATT
GAACATCTCGGGAAGCAGCTGTGGAAGCCCTAACTCTGCAGATACATCTAGTGACTTTAAGGACCTTTGGACAAA
ACTAAAAGAATGTCATGATAGAGAAGTACAAGGTTTACAAGTAAAAGTAACCAAGCTAAAACAGGAACGAATCTT
AGATGCACAAAGACTAGAAGAATTCTTCACCAAAAATCAACAGCTGAGGGAACAGCAGAAAGTCCTTCATGAAAC
CATTAAAGTTTTAGAAGATCGGTTAAGAGCAGGCTTATGTGATCGCTGTGCAGTAACTGAAGAACATATGCGGAA
AAAACAGCAAGAGTTTGAAAATATCCGGCAGCAGAATCTTAAACTTATTACAGAACTTATGAATGAAAGGAATAC
TCTACAGGAAGAAAATAAAAAGCTTTCTGAACAACTCCAGCAGAAAATTGAGAATGATCAACAGCATCAAGCAGC
TGAGCTTGAATGTGAGGAAGACGTTATTCCAGATTCACCGATAACAGCCTTCTCATTTTCTGGCGTTAACCGGCT
ACGAAGAAAGGAGAACCCCCATGTCCGATACATAGAACAAACACATACTAAATTGGAGCACTCTGTGTGTGCAAA
TGAAATGAGAAAAGTTTCCAAGTCTTCAACTCATCCACAACATAATCCTAATGAAAATGAAATTCTAGTAGCTGA
CACTTATGACCAAAGTCAATCTCCAATGGCCAAAGCACATGGAACAAGCAGCTATACCCCTGATAAGTCATCTTT
TAATTTAGCTACAGTTGTTGCTGAAACACTTGGACTTGGTGTTCAAGAAGAATCTGAAACTCAAGGTCCCATGAG
CCCCCTTGGTGATGAGCTCTACCACTGTCTGGAAGGAAATCACAAGAAACAGCCTTTTGAGGAATCTACAAGAAA
TACTGAAGATAGTTTAAGATTTTCAGATTCTACTTCAAAGACTCCTCCTCAAGAAGAATTACCTACTCGAGTGTC
ATCTCCTGTATTTGGAGCTACCTCTAGTATCAAAAGTGGTTTAGATTTGAATACAAGTTTGTCCCCTTCTCTTTT
ACAGCCTGGGAAAAAAAAACATCTGAAAACACTCCCTTTTAGCAACACTTGTATATCTAGATTAGAAAAAACTAG
ATCAAAATCTGAAGATAGTGCCCTTTTCACACATCACAGTCTTGGGTCTGAAGTGAACAAGATCATTATCCAGTC
ATCTAATAAACAGATACTTATAAATAAAAATATAAGTGAATCCCTAGGTGAACAGAATAGGACTGAGTACGGTAA
AGATTCTAACACTGATAAACATTTGGAGCCCCTGAAATCATTGGGAGGCCGAACATCCAAAAGGAAGAAAACTGA
GGAAGAAAGTGAACATGAAGTAAGCTGCCCCCAAGCTTCTTTTGATAAAGAAAATGCTTTCCCTTTTCCAATGGA
TAATCAGTTTTCCATGAATGGAGACTGTGTGATGGATAAACCTCTGGATCTGTCTGATCGATTTTCAGCTATTCA
GCGTCAAGAGAAAAGCCAAGGAAGTGAGACTTCTAAAAACAAATTTAGGCAAGTGACTCTTTATGAGGCTTTGAA
GACCATTCCAAAGGGCTTTTCCTCAAGCCGTAAGGCCTCAGATGGCAACTGCACGTTGCCCAAAGATTCCCCAGG
GGAGCCCTGTTCACAGGAATGCATCATCCTTCAGCCCTTGAATAAATGCTCTCCAGACAATAAACCATCATTACA
AATAAAAGAAGAAAATGCTGTCTTTAAAATTCCTCTACGTCCACGTGAAAGTTTGGAGACTGAGAATGTTTTAGA
TGACATAAAGAGTGCTGGTTCTCATGAGCCAATAAAAATACAAACCAGGTCAGACCATGGAGGATGTGAACTTGC
ATCAGTTCTTCAGTTAAATCCATGTAGAACTGGTAAAATAAAGTCTCTACAAAACAACCAAGATGTATCCTTTGA
AAATATCCAGTGGAGTATAGATCCGGGAGCAGACCTTTCTCAGTATAAAATGGATGTTACTGTAATAGATACAAA
GGATGGCAGTCAGTCAAAATTAGGAGGAGAGACAGTGGACATGGACTGTACATTGGTTAGTGAAACCGTTCTCTT
AAAAATGAAGAAGCAAGAGCAGAAGGGAGAAAAAAGTTCAAATGAAGAAAGAAAAATGAATGATAGCTTGGAAGA
TATGTTTGATCGGACAACACATGAAGAGTATGAATCCTGTTTGGCAGACAGTTTCTCCCAAGCAGCAGATGAAGA
GGAGGAATTGTCTACTGCCACAAAGAAACTACACACTCATGGTGATAAACAAGACAAAGTCAAGCAGAAAGCGTT
TGTGGAGCCGTATTTTAAAGGTGATGAAAGAGAGACTAGCTTGCAAAATTTTCCTCATATTGAGGTGGTTCGGAA
AAAAGAGGAGAGAAGAAAACTGCTTGGGCACACGTGTAAGGAATGTGAAATTTATTATGCAGATATGCCAGCAGA
AGAAAGAGAAAAGAAATTGGCTTCCTGCTCAAGACACCGATTCCGCTACATTCCACCCAACACACCAGAGAATTT
TTGGGAAGTTGGTTTTCCTTCCACTCAGACTTGTATGGAAAGAGGTTATATTAAGGAAGATCTTGATCCTTGTCC
TCGTCCAAAAAGACGTCAGCCTTACAACGCAATATTTTCTCCAAAAGGCAAGGAGCAGAAGACATAGACGTTGAA
ACAGAAACAGAAGGATGAAGGACAGTTTTTTCCTTCTTAGTTATTTATAGTTAAAGTTGGTACTAAACATTGATT
TTTTTGATCTTCTGTAAATGGATTTATAAATCAGTTTTCTATTGAAAATGTTTGTGATATTTTGCTTTTGCACCT
TTAAAACAATAAGGCGCTTTCATTTTGCACTCTAACTTAAGAGTTTTTACTTTATGTAGTGATACCTAATACAAT
TTTGAAAATACAAAAAAAAAA

FIGURE 1054

MNISGSSCGSPNSADTSSDFKDLWTKLKECHDREVQGLQVKVTKLKQERILDAQRLEEFFTKNQQLREQQKVLHE
TIKVLEDRLRAGLCDRCAVTEEHMRKKQQEFENIRQQNLKLITELMNERNTLQEENKKLSEQLQQKIENDQQHQA
AELECEEDVIPDSPITAFSFSGVNRLRRKENPHVRYIEQTHTKLEHSVCANEMRKVSKSSTHPQHNPNENEILVA
DTYDQSQSPMAKAHGTSSYTPDKSSFNLATVVAETLGLGVQEESETQGPMSPLGDELYHCLEGNHKKQPFEESTR
NTEDSLRFSDSTSKTPPQEELPTRVSSPVFGATSSIKSGLDLNTSLSPSLLQPGKKKHLKTLPFSNTCISRLEKT
RSKSEDSALFTHHSLGSEVNKIIIQSSNKQILINKNISESLGEQNRTEYGKDSNTDKHLEPLKSLGGRTSKRKKT
EEESEHEVSCPQASFDKENAFPFPMDNQFSMNGDCVMDKPLDLSDRFSAIQRQEKSQGSETSKNKFRQVTLYEAL
KTIPKGFSSSRKASDGNCTLPKDSPGEPCSQECIILQPLNKCSPDNKPSLQIKEENAVFKIPLRPRESLETENVL
DDIKSAGSHEPIKIQTRSDHGGCELASVLQLNPCRTGKIKSLQNNQDVSFENIQWSIDPGADLSQYKMDVTVIDT
KDGSQSKLGGETVDMDCTLVSETVLLKMKKQEQKGEKSSNEERKMNDSLEDMFDRTTHEEYESCLADSFSQAADE
EEELSTATKKLHTHGDKQDKVKQKAFVEPYFKGDERETSLQNFPHIEVVRKKEERRKLLGHTCKECEIYYADMPA
EEREKKLASCSRHRFRYIPPNTPENFWEVGFPSTQTCMERGYIKEDLDPCPRPKRRQPYNAIFSPKGKEQKT

FIGURE 1055

CACCGCGGGAAACCAAAATGGCGAGGGGCTGTATTGAAGTGGGCTGTGTTTGAGGCCGGTGTAAGAACGCTCATT
CTACCCCCAACCCTTGTCTCCAAGGACCTCGGTTTGTGCGTGCATATGTGCCGGGTACCCGGTGGGGCGGGTGCC
CAGTAAGTGCTCGGACTCGCAGGGGAAGCGCCCACGGGGACGGATTGGTTGTTTTTTCCTGTATGAAGCGGTTGG
CACCACTGAAGTGACCGA**ATG**AGAGACTCTACAGGGGCAGGTAATTCACTGGTCCACAAGCGGTCTCCTTTACGT
CGAAACCAAAAGACCCCAACATCCTTGACCAAGCTGTCTTTACAGGATGGACATAAAGCCAAAAAGCCAGCATGT
AAATTTGAAGAGGGTCAGGATGTCCTAGCTAGATGGTCAGATGGCTTGTTTTATCTTGGCACTATCAAAAAGATA
AACATATTGAAACAGAGCTGCTTCATCATATTTGAAGACAGTTCTAAATCCTGGGTTCTCTGGAAGGACATTCAA
ACAGGAGCCACTGGAAGTGGGGAAATGGTCTGTACAATATGTCAAGAAGAGTATTCAGAAGCTCCCAATGAAATG
GTTATATGTGACAAGTGTGGCCAAGGATATCATCAGTTGTGTCACACACCTCATATTGATTCCAGTGTGATTGAT
TCAGATGAAAAATGGCTCTGTCGGCAGTGTGTTTTTGCAACAACAACAAAGAGGGGTGGTGCACTTAAGAAAGGA
CCAAATGCCAAAGCATTGCAAGTCATGAAGCAGACATTACCCTATAGTGTGGCAGACCTTGAATGGGATGCAGGT
CATAAAACCAATGTCCAGCAGTGTTACTGCTATTGTGGAGGCCCTGGAGACTGGTATTTGAAGATGCTACAGTGC
TGCAAATGTAAGCAGTGGTTTCATGAGGCTTGTGTGCAATGCCTTCAAAAGCCAATGCTATTTGGAGACAGATTT
TATACGTTTATATGCTCTGTCTGCAGTTCTGGACCAGAATACCTCAAACGTCTACCATTACAGTGGGTAGATATA
GCACACCTATGCCTTTACAACCTAAGTGTTATTCATAAGAAGAAATACTTTGATTCTGAACTTGAGCTTATGACA
TACATTAATGAAAACTGGGATAGATTGCACCCTGGAGAGCTGGCAGACACACCGAAATCTGAAAGATATGAGCAT
GTTCTGGAGGCATTAAATGATTACAAGACCATGTTTATGTCTGGGAAAGAAATAAAGAAGAAGAAGCATTTGTTT
GGGTTGCGAATTCGTGTTCCTCCTGTGCCACCAAATGTGGCTTTCAAAGCAGAGAAAGAACCTGAAGGAACATCT
CATGAATTTAAAATTAAAGGCAGAAAGGCATCCAAACCTATATCTGATTCAAGGGAAGTAAGCAATGGCATAGAA
AAAAAAGGAAAGAAAAAATCTGTAGGTCGTCCACCTGGCCCATATACAAGAAAAATGATTCAAAAAACTGCTGAG
CCACTTTTGGATAAGGAATCAATTTCAGAGAATCCTACTTTGGATTTACCTTGTTCTATAGGGAGAACTGAGGGA
ACTGCACATTCATCCAATACCTCAGATGTGGATTTCACGGGTGCTTCCAGTGCAAAAGAAACTACCTCGTCTAGC
ATTTCCAGGCATTATGGATTATCTGACTCCAGAAAAAGAACGCGTACAGGAAGATCTTGGCCTGCTGCAATACCA
CATTTGAGGAGAAGAAGAGGTCGTCTTCCAAGAAGAGCACTCCAGACTCAGAACTCAGAAATTGTAAAAGATGAT
GAAGGCAAAGAAGATTATCAGTTTGATGAACTCAACACAGAGATTCTGAATAACTTAGCAGATCAGGAGTTACAA
CTCAATCATCTAAAGAACTCCATTACCAGTTATTTTGGTGCTGCAGGTAGAATAGCATGTGGCGAAAAATACCGA
GTTTTGGCACGTCGGGTGACACTTGATGGAAAGGTGCAGTATCTTGTGGAATGGGAAGGAGCAACTGCATCC**TGA**

CTGTAGGACTGAACATTATGTTCACTGCACTCTGATTTTCTGTAGGTACAGTTCAAAGCCCTAAAGGGAGTCTGG
CTTTTACTATCTTTCTTAAAAAAAAAAAAAAAAGAGTCAAAAAAATTCAAAAAAGGGGATGATACTAGCCTTAACA
TGTACCTGTCAATGTTATGGATATTGTCATAAAAAGGTATCTTTTAAAAATCAGAACAGAGACTTAATTTTTTAA
ATCTTAAGATTTGTAGAATGTTTCTAGGATAGGATATTAAAAATGATTGAAACCCATGCATGGTGTTAGACAATT
TTTCTAATTATTCCATTGAGTCAGTTTTTTGTGATTAGTGATTATCAGAGCAAACATCATGTAGATAGCACAAGT
ATTTGGAGAAACGTTGTTTGTTTTGATTAGTGATTATCAGAGCAAACATCATGTAGATAGCACAAGTATTTGGAG
AAACGTTGTTTGTTTTGTTACCAAAATGTTGGAAAAATTTATTTCAATACCTTTTAGATTTCATAAAGTGCAGTG
TATATAATGCCTACTGAAAGACTGTAAAATATTGAAATTTTCTTTCAAGCAAAGTGTAAAAAAATATATTGAGCC
TGTAAATTGCAAAAAAAAAAAAA

FIGURE 1056

MRDSTGAGNSLVHKRSPLRRNQKTPTSLTKLSLQDGHKAKKPACKFEEGQDVLARWSDGLFYLGTIKKINILKQS
CFIIFEDSSKSWVLWKDIQTGATGSGEMVCTICQEEYSEAPNEMVICDKCGQGYHQLCHTPHIDSSVIDSDEKWL
CRQCVFATTTKRGGALKKGPNAKALQVMKQTLPYSVADLEWDAGHKTNVQQCYCYCGGPGDWYLKMLQCCKCKQW
FHEACVQCLQKPMLFGDRFYTFICSVCSSGPEYLKRLPLQWVDIAHLCLYNLSVIHKKKYFDSELELMTYINENW
DRLHPGELADTPKSERYEHVLEALNDYKTMFMSGKEIKKKKHLFGLRIRVPPVPPNVAFKAEKEPEGTSHEFKIK
GRKASKPISDSREVSNGIEKKGKKKSVGRPPGPYTRKMIQKTAEPLLDKESISENPTLDLPCSIGRTEGTAHSSN
TSDVDFTGASSAKETTSSSISRHYGLSDSRKRTRTGRSWPAAIPHLRRRRGRLPRRALQTQNSEIVKDDEGKEDY
QFDELNTEILNNLADQELQLNHLKNSITSYFGAAGRIACGEKYRVLARRVTLDGKVQYLVEWEGATAS

FIGURE 1057

GCGAGGGCCGCTGGGGCCGCGAAGTGGGGCGGCCGGGTGGGCTACGAGCCGGGTCTGGGCTGAGGGGCGCGGCTT
CGCGGTGGACCCCAGCCCGGCAACGGAAGGCGAGCTCTCCTCCACCGTCCAAAGTAAACTTTGCCGCTCCTTCCG
CGGCGCTCCCGAGTCCTCGCCGCCGCCGGGCCGCCGCAGTCCGCGAAGAGCCGTCCTGCGTCAGGGCCTCCTTCC
CTGCCCCGGCGCGGGGCCACTGCGCC**ATG**GACGCCACAGCACTGGAGCGGGACGCTGTGCAGTTCGCCCGTCTGG
CGGTTCAGCGCGACCACGAAGGCCGCTACTCCGAGGCGGTGTTTTATTACAAGGAAGCTGCACAAGCCTTAATTT
ATGCTGAGATGGCAGGATCAAGCCTAGAAAATATTCAAGAAAAAATAACTGAGTATCTGGAAAGAGTTCAAGCTC
TACATTCAGCAGTTCAGTCAAAGAGTGCTGATCCTTTGAAGTCAAAACATCAGTTGGACTTAGAGCGTGCTCATT
TCCTTGTTACACAAGCTTTTGATGAAGATGAAAAAGAGAATGTTGAAGATGCTATAGAATTGTACACAGAAGCTG
TGGATCTCTGTCTGAAAACATCTTATGAAACTGCTGATAAAGTCCTGCAAAATAAACTGAAACAGTTGGCTCGAC
AGGCACTAGACAGAGCAGAAGCGCTGAGTGAGCCTTTGACCAAGCCAGTTGGCAAAATCAGTTCAACAAGTGTTA
AGCCAAAGCCACCTCCAGTGAGAGCACATTTTCCACTGGGCGCTAATCCCTTCCTTGAAAGACCTCAGTCATTTA
TAAGTCCTCAGTCATGTGATGCACAAGGACAGAGATACACAGCAGAAGAAATAGAAGTACTCAGGACAACATCAA
AAATAAATGGTATAGAATATGTTCCTTTCATGAATGTTGACCTGAGAGAACGTTTTGCCTATCCAATGCCTTTCT
GTGATAGATGGGGCAAGCTACCATTATCACCTAAACAAAAAACTACATTTTCCAAGTGGGTACGACCAGAAGACC
TCACCAACAATCCTACAATGATATATACTGTGTCCAGTTTTAGCATAAAGCAGACAATAGTATCGGATTGCTCCT
TTGTGGCATCACTGGCCATCAGTGCAGCTTATGAAAGACGTTTTAATAAGAAGTTAATTACCGGCATAATTTACC
CTCAAAACAAGGATGGTGAACCAGAATACAATCCATGTGGGAAGTATATGGTAAAACTTCACCTCAATGGTGTCC
CAAGAAAGGTGATAATTGATGACCAGTTACCTGTTGATCACAAGGGAGAATTGCTCTGTTCTTATTCCAACAACA
AAAGTGAATTATGGGTTTCTCTCATAGAAAAAGCATACATGAAAGTCATGGGAGGATATGATTTTCCAGGATCCA
ACTCCAATATTGATCTTCATGCACTGACTGGCTGGATACCAGAAAGAATTGCTATGCATTCAGATAGCCAAACTT
TCAGTAAGGATAATTCTTTCAGAATGCTTTATCAAAGATTTCACAAGGGAGATGTCCTCATCACTGCGTCAACTG
GAATGATGACAGAAGCTGAAGGAGAGAAGTGGGGTCTGGTTCCCACACACGCATATGCTGTTTTGGATATTAGAG
AGTTCAAGGGGCTGCGATTTATCCAGTTGAAAAATCCTTGGAGTCATTTACGTTGGAAAGGAAGATACAGTGAAA
ATGATGTAAAAAACTGGACTCCAGAGTTGCAAAAGTATTTAAACTTTGATCCCCGAACAGCTCAGAAAATAGACA
ACGGAATATTTTGGATTTCCTGGGATGATCTCTGCCAGTATTATGATGTGATTTATTTGAGTTGGAATCCAGGTC
TTTTTAAAGAATCAACATGTATTCACAGTACTTGGGATGCTAAGCAAGGACCTGTGAAAGATGCCTATAGCCTGG
CCAACAACCCCCAGTACAAACTGGAGGTGCAGTGTCCACAGGGGGGTGCTGCAGTTTGGGTTTTGCTTAGTAGAC
ACATAACAGACAAGGATGATTTTGCGAATAATCGAGAATTTATCACAATGGTTGTATACAAGACTGATGGGAAAA
AAGTTTATTACCCAGCTGACCCACCTCCATACATTGATGGAATTCGAATTAACAGCCCTCATTATTTGACTAAGA
TAAAGCTGACCACACCTGGCACCCATACCTTTACATTAGTGGTTTCTCAATATGAAAAACAGAACACAATCCATT
ACACGGTTCGGGTATATTCAGCATGCAGCTTTACTTTTTCAAAGATTCCTTCACCATACACCTTATCAAAACGGA
TTAATGGAAAGTGGAGTGGTCAGAGTGCTGGAGGATGTGGAAATTTCCAAGAGACTCACAAAAATAACCCCATCT
ACCAATTCCATATAGAAAAGACTGGGCCGTTACTGATTGAGCTACGAGGACCAAGGCAATATAGCGTTGGATTTG
AGGTTGTAACAGTTTCTACTCTAGGAGATCCTGGTCCCCATGGCTTTCTGAGGAAATCTAGTGGTGACTATAGGT
GTGGGTTTTGCTACCTGGAATTAGAAAATATACCTTCTGGGATCTTCAATATCATTCCTAGTACCTTTTTGCCTA
AACAAGAAGGACCTTTTTTCTTGGACTTTAATAGTATTATCCCCATCAAGATCACACAACTTCAG**TGA**TGGAGAA
ATCTCAAGTTACTGGCTTTTATACTTACCAAACATCAGTTCTTCAAATAAGGACGCAAATCTTCAGGACAGTAAG
CAGAACAATCAGAATGGAATTAAATCTCTAAAAACGTG

FIGURE 1058

MDATALERDAVQFARLAVQRDHEGRYSEAVFYYKEAAQALIYAEMAGSSLENIQEKITEYLERVQALHSAVQSKS
ADPLKSKHQLDLERAHFLVTQAFDEDEKENVEDAIELYTEAVDLCLKTSYETADKVLQNKLKQLARQALDRAEAL
SEPLTKPVGKISSTSVKPKPPPVRAHFPLGANPFLERPQSFISPQSCDAQGQRYTAEEIEVLRTTSKINGIEYVP
FMNVDLRERFAYPMPFCDRWGKLPLSPKQKTTFSKWVRPEDLTNNPTMIYTVSSFSIKQTIVSDCSFVASLAISA
AYERRFNKKLITGIIYPQNKDGEPEYNPCGKYMVKLHLNGVPRKVIIDDQLPVDHKGELLCSYSNNKSELWVSLI
EKAYMKVMGGYDFPGSNSNIDLHALTGWIPERIAMHSDSQTFSKDNSFRMLYQRFHKGDVLITASTGMMTEAEGE
KWGLVPTHAYAVLDIREFKGLRFIQLKNPWSHLRWKGRYSENDVKNWTPELQKYLNFDPRTAQKIDNGIFWISWD
DLCQYYDVIYLSWNPGLFKESTCIHSTWDAKQGPVKDAYSLANNPQYKLEVQCPQGGAAVWVLLSRHITDKDDFA
NNREFITMVVYKTDGKKVYYPADPPPYIDGIRINSPHYLTKIKLTTPGTHTFTLVVSQYEKQNTIHYTVRVYSAC
SFTFSKIPSPYTLSKRINGKWSGQSAGGCGNFQETHKNNPIYQFHIEKTGPLLIELRGPRQYSVGFEVVTVSTLG
DPGPHGFLRKSSGDYRCGFCYLELENIPSGIFNIIPSTFLPKQEGPFFLDFNSIIPIKITQLQ

FIGURE 1059

CGGACGCGTGGGTCCGGTCGCGTCCGACACCCGGTGGGACTCAGAAGGCAGTGGAGCCCCGGCGGCGGCGGCGGC
GGCGCGCGGGGGCGACGCGCGGGAACAACGCGAGTCGGCGCGCGGGACGAAGAATAATCATGGGCCAGACTGGGA
AGAAATCTGAGAAGGGACCAGTTTGTTGGCGGAAGCGTGTAAAATCAGAGTACATGCGACTGAGACAGCTCAAGA
GGTTCAGACGAGCTGATGAAGTAAAGAGTATGTTTAGTTCCAATCGTCAGAAAATTTTGGAAAGAACGGAAATCT
TAAACCAAGAATGGAAACAGCGAAGGATACAGCCTGTGCACATCCTGACTTCTGTGAGCTCATTGCGCGGGACTA
GGGAGTGTTCGGTGACCAGTGACTTGGATTTTCCAACACAAGTCATCCCATTAAAGACTCTGAATGCAGTTGCTT
CAGTACCCATAATGTATTCTTGGTCTCCCCTACAGCAGAATTTTATGGTGGAAGATGAAACTGTTTTACATAACA
TTCCTTATATGGGAGATGAAGTTTTAGATCAGGATGGTACTTTCATTGAAGAACTAATAAAAAATTATGATGGGA
AAGTACACGGGGATAGAGAATGTGGGTTTATAAATGATGAAATTTTTGTGGAGTTGGTGAATGCCCTTGGTCAAT
ATAATGATGATGACGATGATGATGATGGAGACGATCCTGAAGAAAGAGAAGAAAAGCAGAAAGATCTGGAGGATC
ACCGAGATGATAAAGAAAGCCGCCCACCTCGGAAATTTCCTTCTGATAAAATTTTTGAAGCCATTTCCTCAATGT
TTCCAGATAAGGGCACAGCAGAAGAACTAAAGGAAAAATATAAAGAACTCACCGAACAGCAGCTCCCAGGCGCAC
TTCCTCCTGAATGTACCCCCAACATAGATGGACCAAATGCTAAATCTGTTCAGAGAGAGCAAAGCTTACACTCCT
TTCATACGCTTTTCTGTAGGCGATGTTTTAAATATGACTGCTTCCTACATCGTAAGTGCAATTATTCTTTTCATG
CAACACCCAACACTTATAAGCGGAAGAACACAGAAACAGCTCTAGACAACAAACCTTGTGGACCACAGTGTTACC
AGCATTTGGAGGGAGCAAAGGAGTTTGCTGCTGCTCTCACCGCTGAGCGGATAAAGACCCCACCAAAACGTCCAG
GAGGCCGCAGAAGAGGACGGCTTCCCAATAACAGTAGCAGGCCCAGCACCCCCACCATTAATGTGCTGGAATCAA
AGGATACAGACAGTGATAGGGAAGCAGGGACTGAAACGGGGGGAGAGAACAATGATAAAGAAGAAGAAGAGAAGA
AAGATGAAACTTCGAGCTCCTCTGAAGCAAATTCTCGGTGTCAAACACCAATAAAGATGAAGCCAAATATTGAAC
CTCCTGAGAATGTGGAGTGGAGTGGTGCTGAAGCCTCAATGTTTAGAGTCCTCATTGGCACTTACTATGACAATT
TCTGTGCCATTGCTAGGTTAATTGGGACCAAAACATGTAGACAGGTGTATGAGTTTAGAGTCAAAGAATCTAGCA
TCATAGCTCCAGCTCCCGCTGAGGATGTGGATACTCCTCCAAGGAAAAAGAAGAGGAAACACCGGTTGTGGGCTG
CACACTGCAGAAAGATACAGCTGAAAAAGGACGGCTCCTCTAACCATGTTTACAACTATCAACCCTGTGATCATC
CACGGCAGCCTTGTGACAGTTCGTGCCCTTGTGTGATAGCACAAAATTTTTGTGAAAAGTTTTGTCAATGTAGTT
CAGAGTGTCAAAACCGCTTTCCGGGATGCCGCTGCAAAGCACAGTGCAACACCAAGCAGTGCCCGTGCTACCTGG
CTGTCCGAGAGTGTGACCCTGACCTCTGTCTTACTTGTGGAGCCGCTGACCATTGGGACAGTAAAAATGTGTCCT
GCAAGAACTGCAGTATTCAGCGGGGCTCCAAAAAGCATCTATTGCTGGCACCATCTGACGTGGCAGGCTGGGGGA
TTTTTATCAAAGATCCTGTGCAGAAAAATGAATTCATCTCAGAATACTGTGGAGAGATTATTTCTCAAGATGAAG
CTGACAGAAGAGGGAAAGTGTATGATAAATACATGTGCAGCTTTCTGTTCAACTTGAACAATGATTTTGTGGTGG
ATGCAACCCGCAAGGGTAACAAAATTCGTTTTGCAAATCATTCGGTAAATCCAAACTGCTATGCAAAAGTTATGA
TGGTTAACGGTGATCACAGGATAGGTATTTTTGCCAAGAGAGCCATCCAGACTGGCGAAGAGCTGTTTTTTGATT
ACAGATACAGCCAGGCTGATGCCCTGAAGTATGTCGGCATCGAAAGAGAAATGGAAATCCCTTGACATCTGCTAC
CTCCTCCCCCCTCCTCTGAAACAGCTGCCTTAGCTTCAGGAACCTCGAGTACTGTGGGCAATTTAGAAAAAGAAC
ATGCAGTTTGAAATTCTGAATTTGCAAAGTACTGTAAGAATAATTTATAGTAATGAGTTTAAAAATCAACTTTTT
ATTGCCTTCTCACCAGCTGCAAAGTGTTTTGTACCAGTGAATTTTTGCAATAATGCAGTATGGTACATTTTTCAA
CTTTGAATAAAGAATACTTGAACTTGAAAAAAAAAAAAAAAA

FIGURE 1060

MGQTGKKSEKGPVCWRKRVKSEYMRLRQLKRFRRADEVKSMFSSNRQKILERTEILNQEWKQRRIQPVHILTSVS
SLRGTRECSVTSDLDFPTQVIPLKTLNAVASVPIMYSWSPLQQNFMVEDETVLHNIPYMGDEVLDQDGTFIEELI
KNYDGKVHGDRECGFINDEIFVELVNALGQYNDDDDDDDGDDPEEREEKQKDLEDHRDDKESRPPRKFPSDKIFE
AISSMFPDKGTAEELKEKYKELTEQQLPGALPPECTPNIDGPNAKSVQREQSLHSFHTLFCRRCFKYDCFLHRKC
NYSFHATPNTYKRKNTETALDNKPCGPQCYQHLEGAKEFAAALTAERIKTPPKRPGGRRRGRLPNNSSRPSTPTI
NVLESKDTDSDREAGTETGGENNDKEEEEKKDETSSSSEANSRCQTPIKMKPNIEPPENVEWSGAEASMFRVLIG
TYYDNFCAIARLIGTKTCRQVYEFRVKESSIIAPAPAEDVDTPPRKKKRKHRLWAAHCRKIQLKKDGSSNHVYNY
QPCDHPRQPCDSSCPCVIAQNFCEKFCQCSSECQNRFPGCRCKAQCNTKQCPCYLAVRECDPDLCLTCGAADHWD
SKNVSCKNCSIQRGSKKHLLLAPSDVAGWGIFIKDPVQKNEFISEYCGEIISQDEADRRGKVYDKYMCSFLFNLN
NDFVVDATRKGNKIRFANHSVNPNCYAKVMMVNGDHRIGIFAKRAIQTGEELFFDYRYSQADALKYVGIEREMEI
P

FIGURE 1061

GAATTCGGGGCGCCAGCTACGCCGCTGCCGCTGTCACTATGGCCCATTACAAAGCCGCCGACTCGAAGCGTGAGC
AGTTCCGGAGGTACTTGGAGAAGTCGGGGGTGCTGGACACGCTGACCAAGGTGTTGGTAGCCTTATATGAAGAAC
CAGAGAAACCTAACAGTGCTTTGGATTTTTTAAAGCATCACTTAGGAGCTGCTACTCCAGAAAATCCAGAAATAG
AGCTCGTTCGCCTAGAACTGGCCGAAATGAAAGAGAAGTATGAAGCTATTGTAGAAGAAAATAAAAAACTGAAAG
CAAAGCTTGCTCAGTATGAACCACCTCAGGAGGAGAAGCGTGCTGAATAGGATTCTTCTCAGTTTGAAAGACAAT
GAAAAATGGTTTTGTATGACTTGAATAGTTTGTATAGTATATAATCTTTTCTGAACAGATGCTATAGAACTCTTT
TAATATGTTTAATTCACCTATCACACTCTGTTAAAAACACATAGAATCATCAATAAAAACTCAATATAACTTTCT
TTGGGTCTTAAAGCAGGAGAATCCAAAGTAAATCCTGAACAAAACCTAAACACAGCCATCTAACTCATTACCTTA
AAAGACATTCTGTTTATTAGTCTGATTAGGAATGATGGCACTGGTTGTATTTTAGCCAAGACAGTTTAGCATGGA
GCTATTCCTTGGTGCAGTTCAGGATATGAACACAGGTACAGTCATTCTTTGAACGGTGACACTGTTCTGTATATT
CCCTATAGGCAGCTGGAGAGATCTGTGTGACACAAGATGCTTTTGTACGGGTTCCCATGAATCTTCTGCTCTTGT
TTGTGTGACATGAAACAAATAACTTCTTTGCCACCACTTTGCCTTAGATAACTGTGTGTGTGTGTGCCAGTTTGA
ACTCTGACACCACATTTTCCTTCTATGCAATCATGCCTGTCTGATAATCTTGCATTGCTTTCCTCTGAGCTTTAG
TGGGTCCTAGTGCACAATGGCCTTTCTGTGCTGTTTTTCAATTTGCCTAATAATAGCAGTTACCCTGATTGTAAT
TTATGTAACTTTAAACAGGATCACACTGTACCCCCTGCCTGCCTTATTTGCTTACTGAGCACAGGACAGAGGCAA
TATACAACTCTGGGTTCACACACAAGCTGAGATGAGAAGAGGAATGAGCCATATATTGGGGAAAATCATAGTTTG
TAGGTATAATTATATAGTGCTTTTCTCCCTCAAAGTATTTTTCTAGCCTTGAATTCATTTTATCTTCATTATCCC
TGTGAAGTAGGTGGGACAAGTATAAGGGGAAGAGGGGTGCTGAATTTTTAGGCCAAAGACTGATATTAATACAAA
TCACTCACTAACTGTAGAGCCTTGGGCATTATCAGTGAACTACTCTGAGATTTACTGTCTTCATCTGTTTAATGA
GTAGAATGTCCGTGATGCCTACCTCACAGGGTTGTTGTGAGGGTCAAATGAGAATGTATGTGAAAGATTTGTAAA
TGGTAAAGCACTATATTCTTGTTTGTTAGTCCTTTTTCCTTTCTTTGGGTAGACCTACAGTCAGATGTTTTGTTT
TATGGATCACTTATTTTCCTTACTGGTAGACTGTCGTTTTATAGACATATTCCTATTTCATATATTCTCTCCCTG
TTGTTAGAGAACCTATCTTTGTTTTTGGTCAAXACACACATAGAAAACAAAATGATCCAATGAAAACTGGTTTAA
CTAGCAAAAGCCTTGGCACCTGTTGGAGACTATGACCAAGCCAATAAAAAGGGCATTTAAATCAGCCCTGTTAGT
AGGAATGTGGCTATGGCTGGTGCCTCTTCTAGTCACAAGTTTGTTTTTGGAGGGGGTCCAGAAGATCATTCCCTT
GCATAGATTTCTCTTTTACCAATTTGAGTGCCTCCTACATGGGCAGCAGTGGACTAAGTGCTGGGTGTGATAAAG
AGGAATGACTTAATTATGAGACTGTATATAATCAAATACAGTGTGGGTTAGGACCTGTGGCAGACCATTATAATA
AAGCATGGCCCCGTGAGGGTTTTGAAAGAGAAAAAAAAAAAAAAA

FIGURE 1062

MAHYKAADSKREQFRRYLEKSGVLDTLTKVLVALYEEPEKPNSALDFLKHHLGAATPENPEIELVRLELAEMKEK
YEAIVEENKKLKAKLAQYEPPQEEKRAE

FIGURE 1063

GGGAAGTGCTGTTGGAGCCGCTGTGGTTGCTGTCCGCGGAGTGGAAGCGCGTGCTTTTGTTTGTGTCCCTGGCCA
TGGCGCTGCAGCTCTCCCGGGAGCAGGGAATCACCCTGCGCGGGAGCGCCGAAATCGTGGCCGAGTTCTTCTCAT
TCGGCATCAACAGCATTTTATATCAGCGTGGCATATATCCATCTGAAACCTTTACTCGAGTGCAGAAATACGGAC
TCACCTTGCTTGTAACTACTGATCTTGAGCTCATAAAATACCTAAATAATGTGGTGGAACAACTGAAAGATTGGT
TATACAAGTGTTCAGTTCAGAAACTGGTTGTAGTTATCTCAAATATTGAAAGTGGTGAGGTCCTGGAAAGATGGC
AGTTTGATATTGAGTGTGACAAGACTGCAAAAGATGACAGTGCACCCAGAGAAAAGTCTCAGAAAGCTATCCAGG
ATGAAATCCGTTCAGTGATCAGACAGATCACAGCTACGGTGACATTTCTGCCACTGTTGGAAGTTTCTTGTTCAT
TTGATCTGCTGATTTATACAGACAAAGATTTGGTTGTACCTGAAAAATGGGAAGAGTCGGGACCACAGTTTATTA
CCAATTCTGAGGAAGTCCGCCTTCGTTCATTTACTACTACAATCCACAAAGTAAATAGCATGGTGGCCTACAAAA
TTCCTGTCAATGACTGAGGATGACATGAGGAAAATAATGTAATTGTAATTTTGAAATGTGGTTTTCCTGAAATCA
GGTCATCTATAGTTGATATGTTTTATTTCATTGGTTAATTTTTACATGGAGAAAACCAAAATGATACTTACTGAA
CTGTGTGTAATTGTTCCTTTATTTTTTTGGTACCTATTTGACTTACCATGGAGTTAACATCATGAATTTATTGCA
CATTGTTCAAAAGGAACCAGGAGGTTTTTTTGTCAACATTGTGATGTATATTCCTTTGAAGATAGTAACTGTAGA
TGGAAAAACTTGTGCTATAAAGCTAGATGCTTTCCTAAATCAGATGTTTTGGTCAAGTAGTTTGACTCAGTATAG
GTAGGGAGATATTTAAGTATAAAATACAACAAAGGAAGTCTAAATATTCAGAATCTTTGTTAAGGTCCTGAAAGT
AACTCATAATCTATAAACAATGAAATATTGCTGTATAGCTCCTTTTGACCTTCATTTCATGTATAGTTTTCCCTA
TTGAATCAGTTTCCAATTATTTGACTTTAATTTATGTAACTTGAACCTATGAAGCAATGGATATTTGTACTGTTT
AATGTTCTGTGATACAGAACTCTTAAAAATGTTTTTTCATGTGTTTTATAAAATCAAGTTTTAAGTGAAAGTGAG
GAAATAAAGTTAAGTTTGTTTTAAAAAAAAAAAAAAAAA

FIGURE 1064

MALQLSREQGITLRGSAEIVAEFFSFGINSILYQRGIYPSETFTRVQKYGLTLLVTTDLELIKYLNNVVEQLKDW
LYKCSVQKLVVVISNIESGEVLERWQFDIECDKTAKDDSAPREKSQKAIQDEIRSVIRQITATVTFLPLLEVSCS
FDLLIYTDKDLVVPEKWEESGPQFITNSEEVRLRSFTTTIHKVNSMVAYKIPVND

FIGURE 1065

AGCCGCGGCCTCAACTAAAAGTGGCCATTGACCTTTCAAGCTTTCGAGCAGTGATGCAATAGAATAGTATTTCAA
AGAAAAATGCTTATCGAAATTTTGGATCCGGTTTTCCCGTGATTGTTAAGGGTTTCTTTTAAAAAGTAGGTCACA
TTTCAAGTAGGTCATATTTCGGGGGCGGGTGCGCAGACAAGGAGATGAGTTTCCACTAAGGCCAGGGGGCCTCCA
ACGGGGTTGGAGGTGAGAATCCCAGGTAGGGTAGAGGTGCCGAGATCCTTCCGAATCCCAGCCCTGGGGCGTCAG
CCCTGCAGGGAATGGCAGAGACACTCTCCGGACTGAGGGAACCGAGGCCAGTCACCAAGCCCCTTCCGGGCGCGC
AGGCGATCAGTGGGTGACCGCGGCTGCGAGGGACTTTGTCATCCGTCCTCCAGGATCTGGGGAGAAAGAGCCCCA
TCCCTTCTCTCTCTGCCACCATTTCGGACACCCCGCAGGGACTCGTTTTGGGATTCGCACTGACTTCAAGGAAGG
ACGCGAACCCTTCTCTGACCCCAGCTCGGGCGGCCACCTGTCTTTGCCGCGGTGACCCTTCTCTC**ATG**ACCCTGC
GGTGCCTTGAGCCCTCCGGGAATGGCGGGGAAGGGACGCGGAGCCAGTGGGGGACCGCGGGGTCGGCGGAGGAGC
CATCCCCGCAGGCGGCGCGTCTGGCGAAGGCCCTGCGGGAGCTCGGTCAGACAGGATGGTACTGGGGAAGTATGA
CTGTTAATGAAGCCAAAGAGAAATTAAAAGAGGCACCAGAAGGAACTTTCTTGATTAGAGATAGCTCGCATTCAG
ACTACCTACTAACAATATCTGTTAAAACATCAGCTGGACCAACTAATCTTCGAATCGAATACCAAGACGGAAAAT
TCAGATTGGACTCTATCATATGTGTCAAATCCAAGCTTAAACAATTTGACAGTGTGGTTCATCTGATCGACTACT
ATGTTCAGATGTGCAAGGATAAGCGGACAGGTCCAGAAGCCCCCCGGAACGGCACTGTTCACCTTTATCTGACCA
AACCGCTCTACACGTCAGCACCATCTCTGCAGCATCTCTGTAGGCTCACCATTAACAAATGTACCGGTGCCATCT
GGGGACTGCCTTTACCAACAAGACTAAAAGATTACTTGGAAGAATATAAATTCCAGGTA**TAA**ATGTTTCTCTTTT
TTTAAACATGTCTCACATAGAGTATCTCCGAATGCAGCTATGTAAAAGAGAACCAAAACTTGAGTGCTCTGGATA
ACTATATGGAATGCTTTCTAAGAACAGCTGAAGCTAATCTAATTTAAATTTAACAGCTTGAAGAGGTAGCTAGGT
GTTTAAAGTTCCTCCAGATACTTTTACCTGAGTGATGCTTCCCTTCCTAAGGCTGACCAAGACCTGTTGATCCTT
TTAGATTAAAAATAAAATGTCGCATGTAAAGGCTGAAGTCGCGTTTTATCAGAATGCCTTGCCTTCTTAGGTTCT
TTTCCATTATGTCAAAGGTCCAGGCTCCAGTAGGAGAGAAAGAACTCCTCATAGGAATACTGAAGAAGTGGGAAG
GAACCAAGCTGACACAGGCCTCACTGCAATTTGATATGCCTGCTGATCAGAGTCTCTTGGGCATTTTATATTTTG
CATTCTGATGTACCTAGGAGTTTTGTTAAACAGATGATGTATGTGAGTATTTATCCCATTTTATGCAATTAACCA
AATCAACCAAAAAAAGTGACCATGAAGTCCTGTATTTGTCTTTTTACTACATGTAGGAACTCTCATGTGAATGAG
TACTGTAGTAATCCATTCTATGGGAGCCTTATTTCAGAAATATTTCAAACTGGTGCAAATGGAAAAGACTTTCTC
TTTTCCTTTAAAGCTAAAGACAAGAATATCATGCTATACAGGTGCAACTCAATCCCCGTTAATAAAAACCAATGT
AGGTATAGGCATTCTACCCTTTGAAATAGCTGTGTCCCAACCTGTTGCCATTGATTTTTTGGAAATGGCTTTAGA
AATATCCAAGTTGTCCTTGAATTGTCTAACCATGGACATAAACAGTTGTCTCCCTTCTACTGTGTAGAATACTTT
GACTTAATTTTCTTCCAGATACAGGGGGATACCTGCCTGTTTTTCAAAGTGTTTATTTACTGCTGTTACTATTTG
ATTAGAATGTATTAAATAAAAAAAACCTGATTTCT

FIGURE 1066

MTLRCLEPSGNGGEGTRSQWGTAGSAEEPSPQAARLAKALRELGQTGWYWGSMTVNEAKEKLKEAPEGTFLIRDS
SHSDYLLTISVKTSAGPTNLRIEYQDGKFRLDSIICVKSKLKQFDSVVHLIDYYVQMCKDKRTGPEAPRNGTVHL
YLTKPLYTSAPSLQHLCRLTINKCTGAIWGLPLPTRLKDYLEEYKFQV

FIGURE 1067

AGCCGCGGCCTCAACTAAAAGTGGCCATTGACCTTTCAAGCTTTCGAGCAGTGATGCAATAGAATAGTATTTCAA
AGAAAAATGCTTATCGAAATTTTGGATCCGGTTTTCCCGTGATTGTTAAGGGTTTCTTTTAAAAAGTAGGTCACA
TTTCAAGTAGGTCATATTTCGGGGGCGGGTGCGCAGACAAGGAGATGAGTTTCCACTAAGGCCAGGGGGCCTCCA
ACGGGGTTGGAGGTGAGAATCCCAGGTAGGGTAGAGGTGCCGAGATCCTTCCGAATCCCAGCCCTGGGGCGTCAG
CCCTGCAGGGAATGGCAGAGACACTCTCCGGACTGAGGGAACCGAGGCCAGTCACCAAGCCCCTTCCGGGCGCGC
AGGCGATCAGTGGGTGACCGCGGCTGCGAGGGACTTTGTCATCCGTCCTCCAGGATCTGGGGAGAAAGAGCCCCA
TCCCTTCTCTCTCTGCCACCATTTCGGACACCCCGCAGGGACTCGTTTTGGGATTCGCACTGACTTCAAGGAAGG
ACGCGAACCCTTCTCTGACCCCAGCTCGGGCGGCCACCTGTCTTTGCCGCGGTGACCCTTCTCTC**ATG**ACCCTGC
GGTGCCTTGAGCCCTCCGGGAATGGCGGGGAAGGGACGCGGAGCCAGTGGGGGACCGCGGGGTCGGCGGAGGAGC
CATCCCCGCAGGCGGCGCGTCTGGCGAAGGCCCTGCGGGAGCTCGGTCAGACAGGATGGTACTGGGGAAGTATGA
CTGTTAATGAAGCCAAAGAGAAATTAAAAGAGGCACCAGAAGGAACTTTCTTGATTAGAGATAGCTCGCATTCAG
ACTACCTACTAACAATATCTGTTAAAACATCAGCTGGACCAACTAATCTTCGAATCGAATACCAAGACGGAAAAT
TCAGATTGGACTCTATCATATGTGTCAAATCCAAGCTTAAACAATTTGACAGTGTGGTTCATCTGATCGACTACT
ATGTTCAGATGTGCAAGGATAAGCGGACAGGTCCAGAAGCCCCCCGGAACGGCACTGTTCACCTTTATCTGACCA
AACCGCTCTACACGTCAGCACCATCTCTGCAGCATCTCTGTAGGCTCACCATTAACAAATGTACCGGTGCCATCT
GGGGACTGCCTTTACCAACAAGACTAAAAGATTACTTGGAAGAATATAAATTCCAGGTA**TAA**ATGTTTCTCTTTT
TTTAAACATGTCTCACATAGAGTATCTCCGAATGCAGCTATGTAAAAGAGAACCAAAACTTGAGTGCTCTGGATA
ACTATATGGAATGCTTTCTAAGAACAGCTGAAGCTAATCTAATTTAAATTTAACAGCTTGAAGAGGTAGCTAGGT
GTTTAAAGTTCCTCCAGATACTTTTACCTGAGTGATGCTTCCCTTCCTAAGGCTGACCAAGACCTGTTGATCCTT
TTAGATTAAAAATAAAATGTCGCATGTAAAGGCTGAAGTCGCGTTTTATCAGAATGCCTTGCCTTCTTAGGTTCT
TTTCCATTATGTCAAAGGTCCAGGCTCCAGTAGGAGAGAAAGAACTCCTCATAGGAATACTGAAGAAGTGGGAAG
GAACCAAGCTGACACAGGCCTCACTGCAATTTGATATGCCTGCTGATCAGAGTCTCTTGGGCATTTTATATTTTG
CATTCTGATGTACCTAGGAGTTTTGTTAAACAGATGATGTATGTGAGTATTTATCCCATTTTATGCAATTAACCA
AATCAACCAAAAAAAGTGACCATGAAGTCCTGTATTTGTCTTTTTACTACATGTAGGAACTCTCATGTGAATGAG
TACTGTAGTAATCCATTCTATGGGAGCCTTATTTCAGAAATATTTCAAACTGGTGCAAATGGAAAAGACTTTCTC
TTTTCCTTTAAAGCTAAAGACAAGAATATCATGCTATACAGGTGCAACTCAATCCCCGTTAATAAAAACCAATGT
AGGTATAGGCATTCTACCCTTTGAAATAGCTGTGTCCCAACCTGTTGCCATTGATTTTTTGGAAATGGCTTTAGA
AATATCCAAGTTGTCCTTGAATTGTCTAACCATGGACATAAACAGTTGTCTCCCTTCTACTGTGTAGAATACTTT
GACTTAATTTTCTTCCAGATACAGGGGGATACCTGCCTGTTTTTCAAAGTGTTTATTTACTGCTGTTACTATTTG
ATTAGAATGTATTAAATAAAAAAAACCTGATTTCT

FIGURE 1068

MTLRCLEPSGNGGEGTRSQWGTAGSAEEPSPQAARLAKALRELGQTGWYWGSMTVNEAKEKLKEAPEGTFLIRDS
SHSDYLLTISVKTSAGPTNLRIEYQDGKFRLDSIICVKSKLKQFDSVVHLIDYYVQMCKDKRTGPEAPRNGTVHL
YLTKPLYTSAPSLQHLCRLTINKCTGAIWGLPLPTRLKDYLEEYKFQV

FIGURE 1069

GCGTGGAGGTCGACGACTCCGTCGCAGACTACGGACCTGTCTGGGTCTCAGCCGCCAAAGACCCCGTCCGGTAGG
TGAGTGGCTCACTTTGAGGGCAAGCCTTCTCGGATCGAGGCTTCTTCATGGCCGCTCAGATCGTGAGCGGCCGGG
GCTGCTCTCTTTGCGGAGGATGGCGTCTAATGAGCGCAGTTGATTCGAGGAAGTACTAGCCGGACATCATGAGTG
GCTGTCGGGTATTCATCGGGAGACTAAATCCAGCGGCCAGGGAGAAGGACGTGGAAAGATTCTTCAAGGGATATG
GACGGATAAGAGATATTGATCTGAAAAGAGGCTTTGGTTTTGTGGAATTTGAGGATCCAAGGGATGCAGATGATG
CTGTGTATGAGCTTGATGGAAAAGAACTCTGTAGTGAAAGGGTTACTATTGAACATGCTAGGGCTCGGTCACGAG
GTGGAAGAGGTAGAGGACGATACTCTGACCGTTTTAGTAGTCGCAGACCTCGAAATGATAGACGGTATGTGAAGG
GTGGATGGCTGCATTGAACAATTATTGTAGGGGTAGCATTTAAGATTCAGGAGTCATTAGCAGTGATGATTTTGG
GACCTGCCGTATAATCTGTTCTTCTATTCCCACGTTAGCCAATTGTTCTTGATGAATCTATATGAGTCATAGAAC
ACAAATCTATTGACGGAAGTCATTAGAATGGCTTGTGATATCTGATGGCTTGAACTTGCCCACAGTTGAACACAA
GTGCTGTCATTGCATTTCTTCCATTGTGAATACGAATTTTCTTCCTCAGAAATGCTCCACCTGTAAGAACAGAAA
ATCGTCTTATAGTTGAGAATTTATCCTCAAGAGTCAGCTGGCAGGATCTCAAAGATTTCATGAGACAAGCTGGGG
AAGTAACGTTTGCGGATGCACACCGACCTAAATTAAATGAAGGGGTGGTTGAGTTTGCCTCTTATGGTGACTTAA
AGAATGCTATTGAAAAACTTTCTGGAAAGGAAATAAATGGGAGAAAAATAAAATTAATTGAAGGCAGCAAAAGGC
ACAGGTCAAGAAGCAGGTCTCGATCCCGGACCAGAAGTTCCTCTAGGTCTCGTAGCCGATCCCGTTCCCGTAGTC
GCAAATCTTACAGCCGGTCAAGAAGCAGGAGCAGGAGCCGGAGCCGGAGCAAGTCCCGTTCTGTTAGTAGGTCTC
CCGTGCCTGAGAAGAGCCAGAAACGTGGTTCTTCAAGTAGATCTAAGTCTCCAGCATCTGTGGATCGCCAGAGGT
CCCGGTCCCGATCAAGGTCCAGATCAGTTGACAGTGGCAATTAAACTGTAAATAACTTGCCCTGGGGGCCTTTTT
TTTTAAAAAACAAAAACCACAAAAATTCCCAAACCATACTTGCTAAAAATTCTGGTAAGTATGTGCTTTTCTGTG
GGGGTGGGATTTGGAAGGGGGGTTGGGTTGGGCTGGATATCTTTGTAGATGTGGACCACCAAGGGGTTGTTGAAA
ACTAATTGTATTAAATGTCTTTTGATAAGCCTTCTGCTCACATTTTTGTGAATGTCTGAAGTATATAGTTTGTGT
ATATTGACAGAGCTCTTTTATAACTAAAGCAAATTTAATTTTTTTGTACTAGAAAAAAATTTGAACATTTTAGTT
CTTGGTTATAAAAATGTTAATTCAGAATTAGTTTAATGCCTTAATTAAACTAATTAATAGCTTTGGACACTTAAA
AGAGCTCTAAATTTGCTTGTACATAAAGGCTTAATTTGTTTTCCTTGTTAGGGTCAAGGGTGTCCTCCACTCTTT
AACAGCTGCTGGACAGACACATTAGAGCAGCTGTTTGTTATTGATAATAAAATATTATAAAACTA

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FIGURE 1070

MSGCRVFIGRLNPAAREKDVERFFKGYGRIRDIDLKRGFGFVEFEDPRDADDAVYELDGKELCSERVTIEHARAR
SRGGRGRGRYSDRFSSRRPRNDRRYVKGGWLH

FIGURE 1071

GGGGCGGTCGCAGCTGAAGCAGGCCTACCCTCTGAAGAGGTCCAAGCAACGGAAGTACTACTACGAAGCTGCCTT
TCTGGCCATCCTTGAGAAAAATAGACAGATGGCCAAGGAGAGGGGCCTAATAAGCCCCAGTGATTTTGCCCAGCT
GCAAAAATACATGGAATACTCCACCAAAAAGGTCAGTGATGTCCTAAAGCTCTTCGAGGATGGCGAGATGGCTAA
ATATGTCCAAGGAGATGCCATTGGGTACGAGGGATTCCAGCAATTCCTGAAAATCTATCTCGAAGTGGATAATGT
TCCCAGACACCTAAGCCTGGCACTGTTTCAATCCTTTGAGACTGGTCACTGCTTAAATGAGACAAATGTGACAAA
AGATGTGGTGTGTCTCAATGATGTTTCCTGCTACTTTTCCCTTCTGGAGGGTGGTCGGCCAGAAGACAAGTTAGA
ATTCACCTTCAAGCTGTACGACACGGACAGAAATGGGATCCTGGACAGCTCAGAAGTGGACAAAATTATCCTACA
GATGATGCGAGTGGCTGAATACCTGGATTGGGATGTGTCTGAGCTGAGGCCGATTCTTCAGGAGATGATGAAAGA
GATTGACTATGATGGCAGTGGCTCTGTCTCTCAAGCTGAGTGGGTCCGGGCTGGGGCCACCACCGTGCCACTGCT
AGTGCTGCTGGGTCTGGAGATGACTCTGAAGGACGACGGACAGCACATGTGGAGGCCCAAGAGGTTCCCCAGACC
AGTCTACTGCAATCTGTGCGAGTCAAGCATTGGTCTTGGCAAACAGGGACTGAGCTGTAACCTCTGTAAGTACAC
TGTTCACGACCAGTGTGCCATGAAAGCCCTGCCTTGTGAAGTCAGCACCTATGCCAAGTCTCGGAAGGACATTGG
TGTCCAATCACATGTGTGGGTGCGAGGAGGCTGTGAGTCCGGGCGCTGCGACCGCTGTCAGAAAAAGATCCGGAT
CTACCACAGTCTGACCGGGCTGCATTGTGTATGGTGCCACCTAGAGATCCACGATGACTGCCTGCAAGCGGTGGG
CCATGAGTGTGACTGTGGGCTGCTCCGGGATCACATCCTGCCTCCATCTTCCATCTATCCCAGTGTCCTGGCCTC
TGGACCGGATCGTAAAAATAGCAAAACAAGCCAGAAGACCATGGATGATTTAAATTTGAGCACCTCTGAGGCTCT
GCGGATTGACCCTGTTCCTAACACCCACCCACTTCTCGTCTTTGTCAATCCTAAGAGTGGCGGGAAGCAGGGGCA
GAGGGTGCTCTGGAAGTTCCAGTATATATTAAACCCTCGACAGGTGTTCAACCTCCTAAAGGATGGTCCTGAGAT
AGGGCTCCGATTATTCAAGGATGTTCCTGATAGCCGGATTTTGGTGTGTGGTGGAGACGGCACAGTAGGCTGGAT
TCTAGAGACCATTGACAAAGCTAACTTGCCAGTTTTGCCTCCTGTTGCTGTGTTGCCCCTGGGTACTGGAAATGA
TCTGGCTCGATGCCTAAGATGGGGAGGAGGTTATGAAGGACAGAATCTGGCAAAGATCCTCAAGGATTTAGAGAT
GAGTAAAGTGGTACATATGGATCGATGGTCTGTGGAGGTGATACCTCAACAAACTGAAGAAAAAAGTGACCCAGT
CCCCTTTCAAATCATCAATAACTACTTCTCTATTGGCGTGGATGCCTCTATTGCTCATCGATTCCACATCATGCG
AGAGAAATATCCGGAGAAGTTCAACAGCAGAATGAAGAACAAGCTATGGTACTTCGAATTTGCCACATCTGAATC
CATCTTCTCAACATGCAAAAAGCTGGAGGAGTCTTTGACAGTTGAGATCTGTGGGAAACCGCTGGATCTGAGCAA
CCTGTCCCTAGAAGGCATCGCAGTGCTAAACATCCCTAGCATGCATGGTGGCTCCAACCTCTGGGGTGATACCAG
GAGACCCCATGGGGATATCTATGGGATCAACCAGGCCTTAGGTGCTACAGCTAAAGTCATCACCGACCCTGATAT
CCTGAAAACCTGTGTACCAGACCTAAGTGACAAGAGACTGGAAGTGGTTGGGCTGGAGGGTGCAATTGAGATGGG
CCAAATCTATACCAAGCTCAAGAATGCTGGACGTCGGCTGGCCAAGTGCTCTGAGATCACCTTCCACACCACAAA
AACCCTTCCCATGCAAATTGACGTAGAACCCTGGATGCAGACGCCCTGTACAATCAAGATCACCCACAAGAACCA
GATGCCCATGCTCATGGGCCCACCCCCCCGCTCCACCAATTTCTTTGGCTTCTTGAGCTAAGGGGGACACCCTTG
GCCTCCAAGCCAGCCTTGAACCCACCTCCCTGTCCCTGGACTCTACTCCCGAGGCTCTGTACATTGCTGCCACAT
ACTCCTGCCAGCTTGGGGGAGTGTTCCTTCACCCTCACAGTATTTATTATCCTGCACCACCTCACTGTTCCCCAT
GCGCACACACATACACACACCCCAAAACACATACATTGAAAGTGCCTCATCTGAATAAAATGACTTGTGTTTCCC
TTTGGGATCTGCTG

FIGURE 1072

MAKERGLISPSDFAQLQKYMEYSTKKVSDVLKLFEDGEMAKYVQGDAIGYEGFQQFLKIYLEVDNVPRHLSLALF
QSFETGHCLNETNVTKDVVCLNDVSCYFSLLEGGRPEDKLEFTFKLYDTDRNGILDSSEVDKIILQMMRVAEYLD
WDVSELRPILQEMMKEIDYDGSGSVSQAEWVRAGATTVPLLVLLGLEMTLKDDGQHMWRPKRFPRPVYCNLCESS
IGLGKQGLSCNLCKYTVHDQCAMKALPCEVSTYAKSRKDIGVQSHVWVRGGCESGRCDRCQKKIRIYHSLTGLHC
VWCHLEIHDDCLQAVGHECDCGLLRDHILPPSSIYPSVLASGPDRKNSKTSQKTMDDLNLSTSEALRIDPVPNTH
PLLVFVNPKSGGKQGQRVLWKFQYILNPRQVFNLLKDGPEIGLRLFKDVPDSRILVCGGDGTVGWILETIDKANL
PVLPPVAVLPLGTGNDLARCLRWGGGYEGQNLAKILKDLEMSKVVHMDRWSVEVIPQQTEEKSDPVPFQIINNYF
SIGVDASIAHRFHIMREKYPEKFNSRMKNKLWYFEFATSESIFSTCKKLEESLTVEICGKPLDLSNLSLEGIAVL
NIPSMHGGSNLWGDTRRPHGDIYGINQALGATAKVITDPDILKTCVPDLSDKRLEVVGLEGAIEMGQIYTKLKNA
GRRLAKCSEITFHTTKTLPMQIDVEPWMQTPCTIKITHKNQMPMLMGPPPRSTNFFGFLS

FIGURE 1073

GCGCATGCGCGGGGGCCATATTAGCAGCGGTTATTCGGTGAGCGGTGGTGGTTTATTCTTCCGTGGAGTTAAGGG
CTCCGTGGACATCTCAGGTCTTCAGGGTCTTCCATCTGGAACTATATAAAGTTCAGAAAACATGTCTCGAAGATA
TGACTCCAGGACCACTATATTTTCTCCAGAAGGTCGCTTATACCAAGTTGAATATGCCATGGAAGCTATTGGACA
TGCAGGCACCTGTTTGGGAATTTTAGCAAATGATGGTGTTTTGCTTGCAGCAGAGAGACGCAACATCCACAAGCT
TCTTGATGAAGTCTTTTTTTCTGAAAAAATTTATAAACTCAATGAGGACATGGCTTGCAGTGTGGCAGGCATAAC
TTCTGATGCTAATGTTCTGACTAATGAACTAAGGCTCATTGCTCAAAGGTATTTATTACAGTATCAGGAGCCAAT
ACCTTGTGAGCAGTTGGTTACAGCGCTGTGTGATATCAAACAAGCTTATACACAATTTGGAGGAAAACGTCCCTT
TGGTGTTTCATTGCTGTACATTGGCTGGGATAAGCACTATGGCTTTCAGCTCTATCAGAGTGACCCTAGTGGAAA
TTACGGGGGATGGAAGGCCACATGCATTGGAAATAATAGCGCTGCAGCTGTGTCAATGTTGAAACAAGACTATAA
AGAAGGAGAAATGACCTTGAAGTCAGCACTTGCTTTAGCTATCAAAGTACTAAATAAGACCATGGATGTTAGTAA
ACTCTCTGCTGAAAAAGTGGAAATTGCAACACTAACAAGAGAGAATGGAAAGACAGTAATCAGAGTTCTCAAACA
AAAAGAAGTGGAGCAGTTGATCAAAAAACATGAGGAAGAAGAAGCCAAAGCTGAGCGTGAGAAGAAAGAAAAAGA
ACAGAAAGAAAAGGATAAATAGAATCAGAGATTTTATTACTCATTTGGGGCACCATTTCAGTGTAAAAGCAGTCC
TACTCTTCCACACTAGGAAGGCTTTACTTTTTTTAACTGGTGCAGTGGGAAAATAGGACATTACATACTGAATTG
GGTCCTTGTCATTTCTGTCCAATTGAATACTTTATTGTAACGATGATGGTTACCCTTCATGGACGTCTTAATCTT
CCACACACATCCCCTTTTTTTGGAATAAAATTTGGAAAATGGAAATGAAAAAAAAAAAAAAAAA

FIGURE 1074

MSRRYDSRTTIFSPEGRLYQVEYAMEAIGHAGTCLGILANDGVLLAAERRNIHKLLDEVFFSEKIYKLNEDMACS
VAGITSDANVLTNELRLIAQRYLLQYQEPIPCEQLVTALCDIKQAYTQFGGKRPFGVSLLYIGWDKHYGFQLYQS
DPSGNYGGWKATCIGNNSAAAVSMLKQDYKEGEMTLKSALALAIKVLNKTMDVSKLSAEKVEIATLTRENGKTVI
RVLKQKEVEQLIKKHEEEEAKAEREKKEKEQKEKDK

FIGURE 1075

CTCGCGCAAGCGGCGTGCGGTCCCGCGGCGCTGCAGTTGTGTCCAGCCGGTCACGGGGCGGCTATGGCGGCCACG
TTCTTCGGAGAGGTGGTGAAGGCGCCGTGCCGAGCTGGGACTGAGGACGAAGAGGAGGAGGAGGAGGGGCGGAGG
GAGACGCCCGAGGACAGGGAGGTGCGTCTGCAGCTGGCGCGGAAGAGGGAAGTGCGGCTCCTTCGAAGACAAACA
AAAACATCTTTGGAAGTTTCTTTGCTAGAAAAATATCCGTGCTCCAAGTTTATAATTGCTATAGGAAATAATGCA
GTAGCATTTCTGTCATCATTTGTTATGAATTCAGGAGTCTGGGAGGAAGTTGGTTGTGCCAAACTCTGGAATGAA
TGGTGTAGAACAACAGACACTACACATCTGTCCTCCACAGAGGCTTTTTGTGTGTTTTATCATCTAAAATCCAAT
CCCTCGGTTTTTCTCTGTCAGTGCAGTTGCTATGTTGCAGAAGATCAACAGTATCAGTGGCTGGAAAAGGTTTTT
GGCTCTTGTCCAAGGAAGAACATGCAGATAACTATTCTCACATGTCGACATGTTACCGATTATAAAACCTCAGAA
TCCACCGGCAGCCTTCCTTCTCCTTTCCTGAGAGCCCTAAAAACACAGAATTTCAAAGACTCGGCGTGTTGTCCA
TTGCTAGAACAACCGAATATAGTACACGACCTTCCTGCAGCAGTTCTAAGCTACTGTCAAGTATGGAAAATCCCA
GCAATTCTGTACTTGTGTTATACTGATGTGATGAAATTAGACCTAATCACAGTGGAAGCTTTTAAGCCTATACTT
TCTACCAGAAGCTTGAAGGGTTTGGTTAAGAATATTCCCCAAAGCACTGAGATACTAAAGAAATTGATGACAACA
AATGAGATTCAGAGTAACATTTATACATGATCTTAAACATTGTTTTGTAGTGTATATTACTTGTCCATTCCTTTA
AGGGGAGCAGCCTGCACTCTTTTGTAGATTACTTTTGGGGGATATATTTTGAGAATGATGAAACGGAATAAAATT
GTAAAAAACTAAAAAAAAAAAAAAAAAAA

FIGURE 1076

MAATFFGEVVKAPCRAGTEDEEEEEEGRRETPEDREVRLQLARKREVRLLRRQTKTSLEVSLLEKYPCSKFIIAI
GNNAVAFLSSFVMNSGVWEEVGCAKLWNEWCRTTDTTHLSSTEAFCVFYHLKSNPSVFLCQCSCYVAEDQQYQWL
EKVFGSCPRKNMQITILTCRHVTDYKTSESTGSLPSPFLRALKTQNFKDSACCPLLEQPNIVHDLPAAVLSYCQV
WKIPAILYLCYTDVMKLDLITVEAFKPILSTRSLKGLVKNIPQSTEILKKLMTTNEIQSNIYT

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FIGURE 1077

GGTCGCGCAGCTGTGTTCGCGGACTCAGGTGGAAGGAATTTCTTCTCTTCGTTGACGTTGCTGGTGTTCACTGTT
TGGAATTAGTCAAGTTTCGGGAATCACCGTCGCTGCCATCAACATGTCGGTCCCAAGCGCTCTCATGAAGCAACC
GCCCATTCAGTCTACGGCTGGGGCCGTCCCAGTTCGCAATGAGAAAGGTGAGATTTCAATGGAAAAAGTGAAGGT
AAAGCGTTATGTGTCCGGAAAAAGGCCAGACTATGCCCCTATGGAGTCCTCAGATGAGGAGGATGAAGAATTTCA
GTTCATTAAGAAAGCCAAAGAACAAGAAGCAGAGCCTGAGGAACAGGAGGAGGATTCATCCAGTGACCCCCGGCT
ACGGCGTTTACAGAACCGTATTAGTGAAGATGTGGAAGAGAGATTGGCTCGACATCGAAAAATAGTGGAACCTGA
AGTGGTAGGAGAGAGTGACTCAGAAGTAGAAGGAGATGCTTGGCGCATGGAACGAGAAGACAGCAGTGAAGAAGA
GGAGGAGGAAATTGATGATGAGGAAATAGAGCGGCGGCGTGGCATGATGCGTCAGCGAGCACAGGAGAGAAAAAA
TGAAGAGATGGAAGTCATGGAAGTGGAAGATGAGGGTCGTTCTGGAGAGGAGTCAGAATCAGAGTCTGAGTATGA
AGAGTACACAGACAGTGAAGATGAGATGGAGCCTCGCCTTAAGCCAGTCTTCATTCGAAAGAAGGACCGAGTGAC
AGTTCAAGAACGTGAAGCCGAAGCATTGAAACAGAAGGAGCTGGAGCAGGAAGCCAAACGCATGGCTGAGGAAAG
GCGCCAGTACACACTCCAGATTGTCGGAGAGGAAACCCCAAAAGAGCTGGAAGAGAACAAGCGATCCCTGGCTGC
ATTGGATGCACTCAATACTGATGATGAAAATGATGAGGAGGAATATGAGGCATGGAAAGTTCGAGAGCTAAAAAG
AATCAAGAGGGACAGAGAAGATCGAGAAGCGCTTGAGAAGGAGAAAGCAGAAATTGAACGCATGCGAAACCTGAC
TGAGGAAGAGAGGAGAGCTGAACTTCGGGCAAACGGCAAAGTCATTACCAACAAAGCTGTTAAGGGCAAATACAA
GTTCTTACAGAAGTATTATCACCGGGGTGCCTTCTTCATGGATGAGGATGAAGAAGTATACAAGAGAGATTTCAG
CGCTCCTACCCTGGAGGATCATTTCAATAAAACCATTCTTCCTAAAGTCATGCAGGTCAAGAACTTTGGACGCTC
AGGTCGCACCAAATACACTCACCTTGTGGATCAAGATACCACCTCCTTTGACTCAGCTTGGGGCCAAGAGAGTGC
CCAGAACACAAAGTTCTTCAAACAAAAGGCAGCTGGGGTACGAGATGTATTTGAGCGGCCATCTGCCAAGAAGCG
GAAAACTACCTAGGGTCCAACTGCTTATTCTTCCAACTGTGGAACACAAGGGGAGTCTCAGCATCTGGTCCTTGA
TTGGGTTTTTTCATTGTTTCCTTGGCCCCTGTATCCAGATATTGGACTTACTGCTATACTTGTGATACTGGGTAG
CCCAGACTTTGAAGGTGCTTTGTGAGGTTTGGACTCATGCTGAGAAACCCACAGGAAAGCACTGTCCAGGTAGGA
TTAGAGGCTTCCCACTTAAAACTATTTCTGAGAAATCTTAGGTTTTATCACTGCTATGGTTTCCCATATTTACTT
GGGACTGTTCTGACTTTCTTTTTCCAGCCCTTAGCTTGGGTTAGAAAAGTGGACATGTAAGTGAACAATGCATTA
CTTCTACCTTAGGTTTAGGAGTAATATACCCGGAAATCTAAGCTCATGGAAACATGTTTTCCATTTGGGGTTGGA
GTCCGTTTTTCTAGTTGTACATACTTGXGGATCCATATATGTGTGCATGTCAWGAAATAAAAGAATCACACAACA
AAAAA

FIGURE 1078

MSVPSALMKQPPIQSTAGAVPVRNEKGEISMEKVKVKRYVSGKRPDYAPMESSDEEDEEFQFIKKAKEQEAEPEE
QEEDSSSDPRLRRLQNRISEDVEERLARHRKIVEPEVVGESDSEVEGDAWRMEREDSSEEEEEEIDDEEIERRRG
MMRQRAQERKNEEMEVMEVEDEGRSGEESESESEYEEYTDSEDEMEPRLKPVFIRKKDRVTVQEREAEALKQKEL
EQEAKRMAEERRQYTLQIVGEETPKELEENKRSLAALDALNTDDENDEEEYEAWKVRELKRIKRDREDREALEKE
KAEIERMRNLTEEERRAELRANGKVITNKAVKGKYKFLQKYYHRGAFFMDEDEEVYKRDFSAPTLEDHFNKTILP
KVMQVKNFGRSGRTKYTHLVDQDTTSFDSAWGQESAQNTKFFKQKAAGVRDVFERPSAKKRKTT

FIGURE 1079

GAGCTCCAAGCTGGTTTGAACAAGCCCTGGGCATGTTTGGCGGGAAGTTGGCTTAGCTCGGCTACCTGTGGCCCC
GCAGTTTTGTAGTCCCCGCCTTGTTTCTCCCCAGAGGCCTCTCAATCCTCCCTCCATGATCTTCGCATAGAGCAC
AGTACCCCTTCACACGGAGGACGCG**ATG**GCTCCCAAGAAACGCCCAGAAACCCAGAAGACCTCCGAGATTGTATT
ACGCCCCAGGAACAAGAGGAGCAGGAGTCCCCTGGAGCTGGAGCCCGAGGCCAAGAAGCTCTGTGCGAAGGGCTC
CGGTCCTAGCAGAAGATGTGACTCAGACTGCCTCTGGGTGGGGCTGGCTGGCCCACAGATCCTGCCACCATGCCG
CAGCATCGTCAGGACCCTCCACCAGCATAAGCTGGGCAGAGCTTCCTGGCCATCTGTCCAGCAGGGGCTCCAGCA
GTCCTTTTTGCACACTCTGGATTCTTACCGGATATTACAAAAGGCTGCCCCCTTTGACAGGAGGGCTACATCCTT
GGCGTGGCACCCAACTCACCCCAGCACCGTGGCTGTGGGTTCCAAAGGGGGAGATATCATGCTCTGGAATTTTGG
CATCAAGGACAAACCCACCTTCATCAAAGGGATTGGAGCTGGAGGGAGCATCACTGGGCTGAAGTTTAACCCTCT
CAATACCAACCAGTTTTACGCCTCCTCAATGGAGGGAACAACTAGGCTGCAAGACTTTAAAGGCAACATTCTACG
AGTTTTTGCCAGCTCAGACACCATCAACATCTGGTTTTGTAGCCTGGATGTGTCTGCTAGTAGCCGAATGGTGGT
CACAGGAGACAACGTGGGGAACGTGATCCTGCTGAACATGGACGGCAAAGAGCTTTGGAATCTCAGAATGCACAA
AAAGAAAGTGACGCATGTGGCCCTGAACCCATGCTGTGATTGGTTCCTGGCCACAGCCTCCGTAGATCAAACAGT
GAAAATTTGGGACCTGCGCCAGGTTAGAGGGAAAGCCAGCTTCCTCTACTCGCTGCCGCACAGGCATCCTGTCAA
CGCAGCTTGTTTCAGTCCCGATGGAGCCCGGCTCCTGACCACGGACCAGAAGAGCGAGATCCGAGTTTACTCTGC
TTCCCAGTGGGACTGCCCCCTGGGCCTGATCCCGCACCCTCACCGTCACTTCCAGCACCTCACACCCATCAAGGC
AGCCTGGCATCCTCGCTACAACCTCATTGTTGTGGGCCGATACCCAGATCCTAATTTCAAAAGTTGTACCCCTTA
TGAATTGAGGACGATCGACGTGTTCGATGGAAACTCAGGGAAGATGATGTGTCAGCTCTATGACCCAGAATCTTC
TGGCATCAGTTCGCTTAATGAATTCAATCCCATGGGGGACACGCTGGCCTCTGCAATGGGTTACCACATTCTCAT
CTGGAGCCAGGAGGAAGCCAGGACACGGAAG**TGA**GAGACACTAAAGAAGGTGTGGGCCAGACAAGGCCTTGGAGC
CCACACATGGGATCAAGTCCTGCAAGCAGAGGTGGTGATTTGTTAAAGGGCCAAAAGTATCCAAGGTTAGGGTTG
GAGCAGGGGTGCTGGGACCTGGGGCACTGTGGGACTGGGACACTTTTATGTTAATGCTCTGGACTTGCCTCCAGA
GACTGCTCCAGAGTTGGTGACACAGCTGTCCCAAGGGCCCCTCTGTATCTAGCCTGGAACCAAGGTTATCTTGGA
ACTAAATGACTTTTCTCCTCTCAGTGGGTGGTAGCAGAGGGATCAAGCAGTTATTTGATTTGTGCTCTTTTGATA
TGGCCAATAAAACCATACCG

FIGURE 1080

MAPKKRPETQKTSEIVLRPRNKRSRSPLELEPEAKKLCAKGSGPSRRCDSDCLWVGLAGPQILPPCRSIVRTLHQ
HKLGRASWPSVQQGLQQSFLHTLDSYRILQKAAPFDRRATSLAWHPTHPSTVAVGSKGGDIMLWNFGIKDKPTFI
KGIGAGGSITGLKFNPLNTNQFYASSMEGTTRLQDFKGNILRVFASSDTINIWFCSLDVSASSRMVVTGDNVGNV
ILLNMDGKELWNLRMHKKKVTHVALNPCCDWFLATASVDQTVKIWDLRQVRGKASFLYSLPHRHPVNAACFSPDG
ARLLTTDQKSEIRVYSASQWDCPLGLIPHPHRHFQHLTPIKAAWHPRYNLIVVGRYPDPNFKSCTPYELRTIDVF
DGNSGKMMCQLYDPESSGISSLNEFNPMGDTLASAMGYHILIWSQEEARTRK

FIGURE 1081

TTGGGAGGAGCAGTCTCTCCGCTCGTCTCCCGGAGCTTTCTCCATTGTCTCTGCCTTTACAACAGAGGGAGACGA
TGGACTGAGCTGATCCGCACC**ATG**GAGTCTCGGGTCTTACTGAGAACATTCTGTTTGATCTTCGGTCTCGGAGCA
GTTTGGGGGCTTGGTGTGGACCCTTCCCTACAGATTGACGTCTTAACAGAGTTAGAACTTGGGGAGTCCACGACC
GGAGTGCGTCAGGTCCCGGGGCTGCATAATGGGACGAAAGCCTTTCTCTTTCAAGATACTCCCAGAAGCATAAAA
GCATCCACTGCTACAGCTGAACAGTTTTTTCAGAAGCTGAGAAATAAACATGAATTTACTATTTTGGTGACCCTA
AAACAGACCCACTTAAATTCAGGAGTTATTCTCTCAATTCACCACTTGGATCACAGGTACCTGGAACTGGAAAGT
AGTGGCCATCGGAATGAAGTCAGACTGCATTACCGCTCAGGCAGTCACCGCCCTCACACAGAAGTGTTTCCTTAC
ATTTTGGCTGATGACAAGTGGCACAAGCTCTCCTTAGCCATCAGTGCTTCCCATTTGATTTTACACATTGACTGC
AATAAAATTTATGAAAGGGTAGTAGAAAAGCCCTCCACAGACTTGCCTCTAGGCACAACATTTTGGCTAGGACAG
AGAAATAATGCGCATGGATATTTTAAGGGTATAATGCAAGATGTCCAATTACTTGTCATGCCCCAGGGATTTATT
GCTCAGTGCCCAGATCTTAATCGCACCTGTCCAACTTGCAATGACTTCCATGGACTTGTGCAGAAAATCATGGAG
CTACAGGATATTTTAGCCAAAACATCAGCCAAGCTGTCTCGAGCTGAACAGCGAATGAATAGATTGGATCAGTGC
TATTGTGAAAGGACTTGCACCATGAAGGGAACCACCTACCGAGAATTTGAGTCCTGGATAGACGGCTGTAAGAAC
TGCACATGCCTGAATGGAACCATCCAGTGTGAAACTCTAATCTGCCCAAATCCTGACTGCCCACTTAAGTCGGCT
CTTGCGTATGTGGATGGCAAATGCTGTAAGGAATGCAAATCGATATGCCAATTTCAAGGACGAACCTACTTTGAA
GGAGAAAGAAATACAGTCTATTCCTCTTCTGGAGTATGTGTTCTCTATGAGTGCAAGGACCAGACCATGAAACTT
GTTGAGAGTTCAGGCTGTCCAGCTTTGGATTGTCCAGAGTCTCATCAGATAACCTTGTCTCACAGCTGTTGCAAA
GTTTGTAAAGGTTATGACTTTTGTTCTGAAAGGCATAACTGCATGGAGAATTCCATCTGCAGAAATCTGAATGAC
AGGGCTGTTTGTAGCTGTCGAGATGGTTTTAGGGCTCTTCGAGAGGATAATGCCTACTGTGAAGACATCGATGAG
TGTGCTGAAGGGCGCCATTACTGTCGTGAAAATACAATGTGTGTCAACACCCCGGGTTCTTTTATGTGCATCTGC
AAAACTGGATACATCAGAATTGATGATTATTCATGTACAGAACATGATGAGTGTATCACAAATCAGCACAACTGT
GATGAAAATGCTTTATGCTTCAACACTGTTGGAGGACACAACTGTGTTTGCAAGCCGGGCTATACAGGGAATGGA
ACGACATGCAAAGCATTTTGCAAAGATGGCTGTAGGAATGGAGGAGCCTGTATTGCCGCTAATGTGTGTGCCTGC
CCACAAGGCTTCACTGGACCCAGCTGTGAAACGGACATTGATGAATGCTCTGATGGTTTTGTTCAATGTGACAGT
CGTGCTAATTGCATTAACCTGCCTGGATGGTACCACTGTGAGTGCAGAGATGGCTACCATGACAATGGGATGTTT
TCACCAAGTGGAGAATCGTGTGAAGATATTGATGAGTGTGGGACCGGGAGGCACAGCTGTGCCAATGATACCATT
TGCTTCAATTTGGATGGCGGATATGATTGTCGATGTCCTCATGGAAAGAATTGCACAGGGGACTGCATCCATGAT
GGAAAAGTTAAGCACAATGGTCAGATTTGGGTGTTGGAAAATGACAGGTGCTCTGTGTGCTCATGTCAGAATGGA
TTCGTTATGTGTCGACGGATGGTCTGTGACTGTGAGAATCCCACAGTTGATCTTTTTTGCTGCCCTGAATGTGAC
CCAAGGCTTAGTAGTCAGTGCCTCCATCAAAATGGGGAAACTTTGTATAACAGTGGTGACACCTGGGTCCAGAAT
TGTCAACAGTGCCGCTGCTTGCAAGGGGAAGTTGATTGTTGGCCCCTGCCTTGCCCAGATGTGGAGTGTGAATTC
AGCATTCTCCCAGAGAATGAGTGCTGCCCGCGCTGTGTCACAGACCCTTGCCAGGCTGACACCATCCGCAATGAC
ATCACCAAGACTTGCCTGGACGAAATGAATGTGGTTCGCTTCACCGGGTCCTCTTGGATCAAACATGGCACTGAG
TGTACTCTCTGCCAGTGCAAGAATGGCCACATCTGTTGCTCAGTGGATCCACAGTGCCTTCAGGAACTG**TGA**AGT
TAACTGTCTCATGGGAGATTTCTGTTAAAAGAATGTTCTTTCATTAAAAGACCAAAAAGAAGTTAAAACTTAAAT
TGGGTGATTTGTGGGCAGCTAAATGCAGCTTTGTTAATAGCTGAGTGAACTTTCAATTATGAAATTTGTGGAGCT
TGACAAAATCACAAAAGGAAAATTACTGGGGCAAAATTAGACCTCAAGTCTGCCTCTACTGTGTCTCACATCACC
ATGTAGAAGAATGGGCGTACAGTATATACCGTGACATCCTGAACCCTGGATAGAAAGCCTGAGCCCATTGGATCT
GTGAAAGCCTCTAGCTTCACTGGTGCAGAAAATTTTCCTCTAGATCAGAATCTTCAGAATCAGTTAGGTTCCTCA
CTGCAAGAAATAAAATGTCAGGCAGTGAATGAATTATATTTTCAGAAGTAAAGCAAAGAAGCTATAACATGTTAT
GTACAGTACACTCTGAAAAGAAATCTGAAACAAGTTATTGTAATGATAAAAATAATGCACAGGCATGGTTACTTA
ATATTTTCTAACAGGAAAAGTCATCCCTATTTCCTTGTTTTACTGCACTTAATATTATTTGGTTGAATTTGTTCA
GTATAAGCTCGTTCTTGTGCAAAATTAAATAAATATTTCTCTTACCTT

FIGURE 1082

MESRVLLRTFCLIFGLGAVWGLGVDPSLQIDVLTELELGESTTGVRQVPGLHNGTKAFLFQDTPRSIKASTATAE
QFFQKLRNKHEFTILVTLKQTHLNSGVILSIHHLDHRYLELESSGHRNEVRLHYRSGSHRPHTEVFPYILADDKW
HKLSLAISASHLILHIDCNKIYERVVEKPSTDLPLGTTFWLGQRNNAHGYFKGIMQDVQLLVMPQGFIAQCPDLN
RTCPTCNDFHGLVQKIMELQDILAKTSAKLSRAEQRMNRLDQCYCERTCTMKGTTYREFESWIDGCKNCTCLNGT
IQCETLICPNPDCPLKSALAYVDGKCCKECKSICQFQGRTYFEGERNTVYSSSGVCVLYECKDQTMKLVESSGCP
ALDCPESHQITLSHSCCKVCKGYDFCSERHNCMENSICRNLNDRAVCSCRDGFRALREDNAYCEDIDECAEGRHY
CRENTMCVNTPGSFMCICKTGYIRIDDYSCTEHDECITNQHNCDENALCFNTVGGHNCVCKPGYTGNGTTCKAFC
KDGCRNGGACIAANVCACPQGFTGPSCETDIDECSDGFVQCDSRANCINLPGWYHCECRDGYHDNGMFSPSGESC
EDIDECGTGRHSCANDTICFNLDGGYDCRCPHGKNCTGDCIHDGKVKHNGQIWVLENDRCSVCSCQNGFVMCRRM
VCDCENPTVDLFCCPECDPRLSSQCLHQNGETLYNSGDTWVQNCQQCRCLQGEVDCWPLPCPDVECEFSILPENE
CCPRCVTDPCQADTIRNDITKTCLDEMNVVRFTGSSWIKHGTECTLCQCKNGHICCSVDPQCLQEL

FIGURE 1083

CGGCAGCCAGCCTATTCTTTGGCCGGGTCGGTGCGAGTGGTCGGCTGGGCAGAGTGCACGCTGCTTGGCGCCGCA
GGCTGATCCCGCCGTCCACTCCCGGGAGCAGTGATGTTGGGCAACTCTGCGCCGGGGCCTGCGACCCGCGAGGCG
GGCTCGGCGCTGCTAGCATTGCAGCAGACGGCGCTCCAAGAGGACCAGGAGAATATCAACCCGGAAAAGGCAGCG
CCCGTCCAACAACCGCGGACCCGGGCCGCGCTGGCGGTACTGAAGTCCGGGAACCCGCGGGGTCTAGCGCAGCAG
CAGAGGCCGAAGACGAGACGGGTTGCACCCCTTAAGGATCTTCCTGTAAATGATGAGCATGTCACCGTTCCTCCT
TGGAAAGCAAACAGTAAACAGCCTGCGTTCACCATTCATGTGGATGAAGCAGAAAAAGAAGCTCAGAAGAAGCCA
GCTGAATCTCAAAAAATAGAGCGTGAAGATGCCCTGGCTTTTAATTCAGCCATTAGTTTACCTGGACCCAGAAAA
CCATTGGTCCCTCTTGATTATCCAATGGATGGTAGTTTTGAGTCACCACATACTATGGACATGTCAATTGTATTA
GAAGATGAAAAGCCAGTGAGTGTTAATGAAGTACCAGACTACCATGAGGATATTCACACATACCTTAGGGAAATG
GAGGTTAAATGTAAACCTAAAGTGGGTTACATGAAGAAACAGCCAGACATCACTAACAGTATGAGAGCTATCCTC
GTGGACTGGTTAGTTGAAGTAGGAGAAGAATATAAACTACAGAATGAGACCCTGCATTTGGCTGTGAACTACATT
GATAGGTTCCTGTCTTCCATGTCAGTGCTGAGAGGAAAACTTCAGCTTGTGGGCACTGCTGCTATGCTGTTAGCC
TCAAAGTTTGAAGAAATATACCCCCCAGAAGTAGCAGAGTTTGTGTACATTACAGATGATACCTACACCAAGAAA
CAAGTTCTGAGAATGGAGCATCTAGTTTTGAAAGTCCTTACTTTTGACTTAGCTGCTCCAACAGTAAATCAGTTT
CTTACCCAATACTTTCTGCATCAGCAGCCTGCAAACTGCAAAGTTGAAAGTTTAGCAATGTTTTTGGGAGAATTA
AGTTTGATAGATGCTGACCCATACCTCAAGTATTTGCCATCAGTTATTGCTGGAGCTGCCTTTCATTTAGCACTC
TACACAGTCACGGGACAAAGCTGGCCTGAATCATTAATACGAAAGACTGGATATACCCTGGAAAGTCTTAAGCCT
TGTCTCATGGACCTTCACCAGACCTACCTCAAAGCACCACAGCATGCACAACAGTCAATAAGAGAAAAGTACAAA
AATTCAAAGTATCATGGTGTTTCTCTCCTCAACCCACCAGAGACACTAAATCTGTAACAATGAAAGACTGCCTTT
GTTTTCTAAGATGTAAATCACTCAAAGTATATGGTGTACAGTTTTTAACTTAGGTTTTAATTTTACAATCATTTC
TGAATACAGAAGTTGTGGCCAAGTACAAATTATGGTATCTATTACTTTTTAAATGGTTTTAATTTGTATATCTTT
TGTATATGTATCTGTCTTAGATATTTGGCTAATTTTAAGTGGTTTTGTTAAAGTATTAATGATGCCAGCTGTCAG
GATAATAAATTGATTTGGAAAACTTAAAAAAA

FIGURE 1084

MLGNSAPGPATREAGSALLALQQTALQEDQENINPEKAAPVQQPRTRAALAVLKSGNPRGLAQQQRPKTRRVAPL
KDLPVNDEHVTVPPWKANSKQPAFTIHVDEAEKEAQKKPAESQKIEREDALAFNSAISLPGPRKPLVPLDYPMDG
SFESPHTMDMSIVLEDEKPVSVNEVPDYHEDIHTYLREMEVKCKPKVGYMKKQPDITNSMRAILVDWLVEVGEEY
KLQNETLHLAVNYIDRFLSSMSVLRGKLQLVGTAAMLLASKFEEIYPPEVAEFVYITDDTYTKKQVLRMEHLVLK
VLTFDLAAPTVNQFLTQYFLHQQPANCKVESLAMFLGELSLIDADPYLKYLPSVIAGAAFHLALYTVTGQSWPES
LIRKTGYTLESLKPCLMDLHQTYLKAPQHAQQSIREKYKNSKYHGVSLLNPPETLNL

FIGURE 1085A

GGGGGAGGGAAACGGAGCAGTAACAAGTATCCCAGAGGGTGCTGCTGAGGCGACGATGGCCGAGGGGCCCGAGGA
AGCCCGAGGCCACCCTCCCGGGCAGGACGATGGCGGGGGGGACCACGAGCCCGTCCCTTCCCTGAGAGGCCCTCC
TACCACCGCCGTCCCATGCCCCCGCGACGACCCCCAGGCCGAACCCCAGGCCCCGGGCCGGCCCACAGCCCCGGG
CCTCGCGGCTGCCGCCGCAGCCGACAAATTGGAGCCGCCGCGCGAGCTCAGGAAGCGCGGGGAGGCGGCCTCCGG
CTCCGGTGCAGAGCTGCAGGAGCAGGCGGGCTGCGAGGCGCCCGAAGCCGCGGCGCCACGAGAGAGACCAGCTCG
GCTGAGCGCCCGCGAGTACTCCCGGCAAGTGCACGAGTGGCTGTGGCAGTCCTACTGCGGCTACCTCACCTGGCA
CAGCGGCCTGGCCGCCTTCCCAGCCTACTGCAGCCCCCAGCCCTCCCCGCAAAGCTTCCCTTCGGGCGGCGCTGC
AGTCCCCCAGGCCGCGGCGCCGCCGCCCCCGCAGCTGGGCTATTACAACCCCTTCTACTTCCTGAGCCCCGGGGC
CGCGGGGCCTGACCCGCGGACAGCTGCCGGCATCAGCACCCCTGCTCCAGTCGCGGGCCTGGGACCCCGGGCTCC
TCACGTGCAGGCGTCGGTCCGGGCCACTCCAGTGACGAGGGTAGGATCCGCAGCCCCTTCGCGAAGCCCGAGCGA
GACCGGGCGACAGGCAGGCAGAGAATATGTTATTCCATCCTTGGCCCACAGATTTATGGCAGAGATGGTGGATTT
CTTTATTCTCTTCTTTATAAAAGCAACCATTGTCTTAAGCATTATGCACCTCAGTGGGATAAAGGATATCTCTAA
GTTTGCTATGCATTATATAATAGAAGAAATAGATGAAGACACATCAATGGAAGACTTGCAGAAAATGATGGTTGT
GGCACTTATATACAGATTATTAGTTTGTTTCTATGAGATAATTTGCATTTGGGGAGCAGGTGGAGCTACCCCAGG
GAAGTTCCTGCTGGGGCTTCGAGTTGTGACATGTGATACATCAGTGCTTATTGCACCAAGTCGGGTTTTAGTGAT
TCCTTCCTCAAATGTTAGCATTACAACGTCCACTATCCGAGCTTTGATCAAGAATTTTTCAATTGCTTCTTTTTT
CCCTGCTTTCATCACACTGCTGTTTTTTCAGCATAATCGAACAGCTTATGACATTGTAGCAGGAACCATTGTGGT
AAAAAGAAATGGGGTCAGATGATGCCCCCCAAAACCCTGATTTCCACACACTAAGACTAAATTATGTATCAAGGC
CATCAGTATCCCTGGGTTACACTAATTGATGATTTAGAAATTAAAGCAGTCACTCCAGTGTGATGCAGGTGACTA
CTCTGAAAGTATTGATTATACTTGAATGCCAAAGAACTTGTCCAGAAGAAAAACCTGTTAAATTCAAGTATTAAA
ATTTTTAGATCAAAAAGGCAAATGATTTTATAAACAATGGACAATATATACTTTCTTAAGATCTAAGGTACTTTC
TTAAGATCTAAGAATTTGCTGAAAGCATTTTCAGCTTTGAAATCTCCAAATGAAACTTTAAAATTTATTTTGGTT
TATCCCAAAATAATGGAAAATGTCCAGTTGTGTTTTGTAAACACCTATGTAACTCATCTTTTAGTTTACACTTCC
TGGGGAAATTGTCTTTGGTGTTTAGAGGAGGGAATGAGAACACAAATTGGATAATCCACTGTCTCCCATCCCAGG
AGGTGGTGAGTTGGCTACAAGAGAAAGGGACAAGTGAGGCAGGCCTAGCAGTTCCCTTACCTGAAGTTTTCAAAT
CCATACTGCAGTTCCCTCTCGTAATGATGTAACTTTACAACTATTCTTAATGCTTGAACATGTATTTAGGGGCAA
GTTTCTCATGATGATGAAAAAGTATCAAGTCATATTGCTATGTTAATTGGTTTTTTTTTTTAAAAGGTAAGTTAG
TGATTACTGTTAATGGTGGGGGAGTAAGTTTTCACTGTAAATTGAACTTATAATTTATGTGCAAGTGTTTTCAGT
GCCCTGAATCAAACTATAAATGTGGGGAGAAATCACCTCCATCAAACAGTTGCATATTTACTGTAAAAGTATTCC
CAGTATGTGTGCAGCATGAAGAAAGTATTAGTGCTTCTCAGTGTTCTCAGTGTAAATTCTATTTATATACAGCAT
ATTCACATACTACTTTCCTTATATTTTATATAGTTCTATGACTGTTGAAACATCAAGGAGTTAAAAAAATCTTAA
TATTTCATGATTAACTCTAAGTACTATTAATAGCTTGCGAAATATTAGCAATTTTCCCATTATGGACTATCTCTC
TAAAGCAAGAGAGACTAGCATTCCCAGACATCATTCTAGGGTCTTTAAGCTCATTTTGGGTCTGCTAAAGTTTGG
GGGGAAATGTTACGCAAAGTGATACTGTGTATGTTGCCATTTTGCTTTATTCTTCTGTTGAAGCAAAATTGTGGG
GTTTTATTATGTGTGTGTGCTTTTCCTAGATGTCCCAGTTAGCTGTGCTGAGATATACCTGTACTATTTATGGTT
TAAGTTTTGATTCTTAGGTATTTTCTCCAGCTCTGACATTGTTTTCCAAAGACACACTAAACTGCATTGCACAGT
TCAAAATTTGATTACTTAAGGGATCAATCTAGGTGGTGTTCTTGGTCTTAAATTTAACAGCAAACACAGCACATA
TCTATTATCACTATATTAATTTTCAAAGGTTTTTCTGTGACGTTTAAAACTGTGACAACAGATATTCACATTTGA
TTATAGAAACTTAATGTCTATTAATAATTTTAGTACAAAATTTCATAAACCGTGTTTTTCAAAATAAGTTTATGT
CAAATCCAGCTTCCCAGAAACACTAATAATTAAGTACATCAATGTACTAAATAAATCATTCAGTTGCACCCATGG
GGAAGATTGTGTTACTGCCCTTCACAGTGAAAAAAAGAAAAATCTTTCATTTTTAAAATTAGGAGATGTTACGTA
ACTTGGCACTTTAGTAGTGTATACACTAGCATTAGTTTATACACCACTTTTGCCGCTGGGGATTCAAGTTGAAAT
GTCCCTCAATCATATAGGTCTGGAATACATCTTTCATTCATAATTTCTGCTCAGATAATTGAATAGTTTGCCATC
GAGATTATTTTCATTTATACTATAAAACAAAAGCAAACTAGTCCAGTTTAATTTTTTGTACTTAGAATATTGCAC
ATTTTCTATATATGAGTTATTCAGATTAGTATCTATGTAGGTTCAGTCAGATCCAACCATGGATTCGAGGTATTA
TACTGTATAACCCTACAAAATACATAGAAGTATTATTTGCCTTCATAATAGAACCCAAGAGTCTGTTTCAATTTA
TGAATTCAGTATTTGCACCGAGATTTTGATTCCCAAAGTTTGGAAAAAAATGACAAAACAACGAGGGAAGAAGGA
ACCAGACCTTAGTGCCACATATTTTTCTCTTGGGGTTGTAAGGTAGTCTCCTGCTTTCCAGAACACTTTATTATA

FIGURE 1085B

TTTCACTTATAGACCTGATTTTCTGTGTCAAAGTATAATTCTCATGCTGAAGCTGTAGCCTAAAAAGCCAAAAGA
AAGTTGTCTTCATTGTACAAACATATTCATCACTTTAACAATAAGGGAACAAAATTTAGTATTCAAGCTGAGTGA
GAATACTGGTTCAATGGACATGTCCCTAAGATAAACCAGAATTGGCAGTTAATTTAGGCGTCTAGAAAATCTCAG
TTCCCACCAGTAAAATTATCCTGAGTAGCTAATGCACCTTGAGAAAAATCTGGCATACTGAATAAGTAACATTAA
CTTGGGAGCCAAGAGCTGGGTAAGCCTTACCTTTAGACTACTCTGTGACTACAGAAATAAAGCCAGCACTTTTGG
AACTAATAAGCCTTCACTTGTCAGTATCATAAAGAGTATTGCCCAACTGAACTTTGCTCCCACTGGTTTAATAGT
TACTTATTTCTGCCTAAGCACTCACCTTCCGATTTTACCCAAGTATATATATAGGATAGAAAAAAATGCATTATA
TTTGAGAGCTCACTTCGCCCGAATTACAAAATGAGTGTTTTTAGATTCAAGTGACGGTAAAAGGATTTGTTCCCT
TCAGTGACTTGAGTGTTTTAGTTATGCATAAGTATTTCTAGCAAAGGAAGGGTAGAAAGGAATTGAAAATTAATT
TACACTAGTTGCTACTTGGGAATAAAGGGCTTTTTGAGGGGGGTATGGATATTAAATGTTTTCGTTATATACTTA
TCCCTATTAAAACAGGCAGTTGTTTCTTTGAATATGCCTAAATAACAGTATTCTTAAAATCTGACAGACAAGTAA
CATGTCAATTACTTGATATTCCTTGTCTCCAGTACCACAGGCCACTCTTGACATCCCATGTTTGCCTGGATAAAG
TTCCTCATTTCAAACAGTATACATACTTCTTTGCAGTTCATTATAGTAAGGCTTAACCTGTAAACAGTATCTGAT
GGCCCACCTATAAATAAAATTCAGCATTCTATTTTTAATAATTTGTATGCCACCAATTTGTATTATTTGTCTCAA
TAAATACTTAGTCATCGATGCAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1086

MAEGPEEARGHPPGQDDGGGDHEPVPSLRGPPTTAVPCPRDDPQAEPQAPGRPTAPGLAAAAAADKLEPPRELRK
RGEAASGSGAELQEQAGCEAPEAAAPRERPARLSAREYSRQVHEWLWQSYCGYLTWHSGLAAFPAYCSPQPSPQS
FPSGGAAVPQAAAPPPPQLGYYNPFYFLSPGAAGPDPRTAAGISTPAPVAGLGPRAPHVQASVRATPVTRVGSAA
PSRSPSETGRQAGREYVIPSLAHRFMAEMVDFFILFFIKATIVLSIMHLSGIKDISKFAMHYIIEEIDEDTSMED
LQKMMVVALIYRLLVCFYEIICIWGAGGATPGKFLLGLRVVTCDTSVLIAPSRVLVIPSSNVSITTSTIRALIKN
FSIASFFPAFITLLFFQHNRTAYDIVAGTIVVKRNGVR

FIGURE 1087

AGTCAGGGGTCACGGCGGCGTAGGCTGTGGCGGGAAACGCTGTTTGAAGCGGGATGGATGGCAAGCGGCGGCCAG
GCCCAGGGCCCGGGGTGCCCCCAAAGCGGGCCCGTGGGGGCCTCTGGGATGATGATGATGCACCTTGGCCATCCC
AATTCGAGGAGGACCTGGCACTGATGGAGGAGATGGAGGCAGAACACAGGCTGCAGGAGCAGGAGGAGGAGGAGC
TGCAGTCAGTCCTGGAGGGGGTTGCAGACGGGCAGGTCCCACCATCAGCCATAGATCCTCGCTGGCTTCGGCCCA
CACCACCAGCGCTGGACCCCCAGACAGAGCCCCTCATCTTCCAACAGTTGGAGATTGACCATTATGTGGGCCCAG
CGCAGCCTGTGCCTGGGGGGCCCCCACCATCCCGCGGCTCCGTGCCTGTGCTCCGCGCCTTCGGGGTCACCGATG
AGGGGTTCTCTGTCTGCTGCCACATCCACGGCTTCGCTCCCTACTTCTACACCCCAGCGCCCCCTGGTTTCGGGC
CCGAGCACATGGGTGACCTGCAACGGGAGCTGAACTTGGCCATCAGCCGGGACAGTCGCGGGGGGAGGGAGCTGA
CTGGGCCGGCCGTGCTGGCTGTGGAACTGTGCTCCCGAGAGAGCATGTTTGGGTACCACGGGCACGGCCCCTCCC
CGTTCCTGCGCATCACCGTGGCGCTGCCGCGCCTCGTGGCCCCGGCCCGCCGTCTCCTGGAACAGGGCATCCGTG
TGGCAGGCCTGGGCACGCCCAGCTTCGCGCCCTACGAGGCCAACGTCGACTTTGAGATCCGGTTCATGGTGGACA
CGGACATCGTCGGCTGCAACTGGCTGGAGCTCCCAGCTGGGAAATACGCCCTGAGGCTGAAGGAGAAGGCTACGC
AGTGCCAGCTGGAGGCGGACGTGCTGTGGTCTGACGTGGTCAGTCACCCACCGGAAGGGCCATGGCAGCGCATTG
CGCCCTTGCGCGTGCTCAGCTTCGATATCGAGTGCGCCGGCCGCAAAGGCATCTTCCCTGAGCCTGAGCGGGACC
CTGTCATCCAGATCTGCTCGCTGGGCCTGCGCTGGGGGGAGCCGGAGCCCTTCCTACGCCTGGCGCTCACCCTGC
GGCCCTGTGCCCCCATCCTGGGTGCCAAGGTGCAGAGCTACGAGAAGGAGGAGGACCTGCTGCAGGCCTGGTCCA
CCTTCATCCGTATCATGGACCCCGACGTGATCACCGGTTACAACATCCAGAACTTCGACCTTCCGTACCTCATCT
CTCGGGCCCAGACCCTCAAGGTACAAACATTCCCTTTCCTGGGCCGTGTGGCCGGCCTTTGCTCCAACATCCGGG
ACTCTTCATTCCAGTCCAAGCAGACGGGCCGGCGGGACACCAAGGTTGTCAGCATGGTGGGCCGCGTGCAGATGG
ACATGCTGCAGGTGCTGCTGCGGGAGTACAAGCTCCGCTCCCACACGCTCAATGCCGTGAGCTTCCACTTCCTGG
GCGAGCAGAAGGAGGACGTGCAGCACAGCATCATCACCGACCTGCAGAATGGGAACGACCAGACCCGCCGCCGCC
TGGCTGTGTACTGCCTGAAGGATGCCTACCTGCCACTGCGGCTGCTGGAGCGGCTCATGGTGCTGGTGAACGCCG
TGGAGATGGCGAGGGTCACTGGCGTGCCCCTCAGCTACCTGCTCAGTCGTGGCCAGCAGGTCAAAGTCGTATCCC
AGCTGTTGCGGCAGGCCATGCACGAGGGGCTGCTGATGCCCGTGGTGAAGTCAGAGGGCGGCGAGGACTACACGG
GAGCCACTGTCATCGAGCCCCTCAAAGGGTACTACGACGTCCCCATCGCCACCCTGGACTTCTCCTCGCTGTACC
CGTCCATCATGATGGCCCACAACCTGTGTTACACCACGCTCCTTCGGCCCGGGACTGCACAGAAACTGGGCCTGA
CTGAGGATCAGTTCATCAGGACCCCCACCGGGGACGAGTTTGTGAAGACCTCAGTGCGGAAGGGGCTGCTGCCCC
AGATCCTGGAGAACCTGCTCAGTGCCCGGAAGAGGGCCAAGGCCGAGCTGGCCAAGGAGACAGACCCCCTCCGGC
GCCAGGTCCTGGATGGACGGCAGCTGGCGCTGAAGGTGAGCGCCAACTCCGTATACGGCTTCACTGGCGCCCAGG
TGGGCAAGTTGCCGTGCCTGGAGATCTCACAGAGCGTCACGGGGTTCGGACGTCAGATGATCGAGAAAACCAAGC
AGCTGGTGGAGTCTAAGTACACAGTGGAGAATGGCTACAGCACCAGTGCCAAGGTGGTGTATGGTGACACTGACT
CCGTCATGTGCCGATTCGGCGTGTCCTCGGTGGCTGAGGCGATGGCCCTGGGGCGGGAGGCCGCGGACTGGGTGT
CAGGTCACTTCCCGTCGCCCATCCGGCTGGAGTTTGAGAAGGTCTACTTCCCATACCTGCTTATCAGCAAGAAGC
GCTACGCGGGCCTGCTCTTCTCCTCCCGGCCCGACGCCCACGACCGCATGGACTGCAAGGGCCTGGAGGCCGTGC
GCAGGGACAACTGCCCCCTCGTGGCCAACCTGGTCACTGCCTCACTGCGCCGCCTGCTCATCGACCGAGACCCTG
AGGGCGCGGTGGCTCACGCACAGGACGTCATCTCGGACCTGCTGTGCAACCGCATCGATATCTCCCAGCTGGTCA
TCACCAAGGAGCTGACCCGCGCGGCCTCCGACTATGCCGGCAAGCAGGCCCACGTGGAGCTGGCCGAGAGGATGA
GGAAGCGGGACCCCGGGAGTGCGCCCAGCCTGGGCGACCGCGTCCCCTACGTGATCATCAGTGCCGCCAAGGGTG
TGGCCGCCTACATGAAGTCGGAGGACCCGCTGTTCGTGCTGGAGCACAGCCTGCCCATTGACACGCAGTACTACC
TGGAGCAGCAGCTGGCCAAGCCCCTCCTGCGCATCTTCGAGCCCATCCTGGGCGAGGGCCGTGCCGAGGCTGTGC
TACTGCGGGGGGACCACACGCGCTGCAAGACGGTGCTCACGGGCAAGGTGGGCGGCCTCCTGGCCTTCGCCAAAC
GCCGCAACTGCTGCATTGGCTGCCGCACAGTGCTCAGCCACCAGGGAGCCGTGTGTGAGTTCTGCCAGCCCCGGG
AGTCTGAGCTGTATCAGAAGGAGGTATCCCATCTGAATGCCCTGGAGGAGCGCTTCTCGCGCCTCTGGACGCAGT
GCCAGCGCTGCCAGGGCAGCCTGCACGAGGACGTCATCTGCACCAGCCGGGACTGCCCCATCTTCTACATGCGCA
AGAAGGTGCGGAAGGACCTGGAAGACCAGGAGCAGCTCCTGCGGCGCTTCGGACCCCCTGGACCTGAGGCCTGGT
GACCTTGCAAGCATCCCATGGGGCGGGGGCGGGACCAGGGAGAATTAATAAAGTTCTGGACTTTTGCT

FIGURE 1088

MDGKRRPGPGPGVPPKRARGGLWDDDDAPWPSQFEEDLALMEEMEAEHRLQEQEEEELQSVLEGVADGQVPPSAI
DPRWLRPTPPALDPQTEPLIFQQLEIDHYVGPAQPVPGGPPPSRGSVPVLRAFGVTDEGFSVCCHIHGFAPYFYT
PAPPGFGPEHMGDLQRELNLAISRDSRGGRELTGPAVLAVELCSRESMFGYHGHGPSPFLRITVALPRLVAPARR
LLEQGIRVAGLGTPSFAPYEANVDFEIRFMVDTDIVGCNWLELPAGKYALRLKEKATQCQLEADVLWSDVVSHPP
EGPWQRIAPLRVLSFDIECAGRKGIFPEPERDPVIQICSLGLRWGEPEPFLRLALTLRPCAPILGAKVQSYEKEE
DLLQAWSTFIRIMDPDVITGYNIQNFDLPYLISRAQTLKVQTFPFLGRVAGLCSNIRDSSFQSKQTGRRDTKVVS
MVGRVQMDMLQVLLREYKLRSHTLNAVSFHFLGEQKEDVQHSIITDLQNGNDQTRRRLAVYCLKDAYLPLRLLER
LMVLVNAVEMARVTGVPLSYLLSRGQQVKVVSQLLRQAMHEGLLMPVVKSEGGEDYTGATVIEPLKGYYDVPIAT
LDFSSLYPSIMMAHNLCYTTLLRPGTAQKLGLTEDQFIRTPTGDEFVKTSVRKGLLPQILENLLSARKRAKAELA
KETDPLRRQVLDGRQLALKVSANSVYGFTGAQVGKLPCLEISQSVTGFGRQMIEKTKQLVESKYTVENGYSTSAK
VVYGDTDSVMCRFGVSSVAEAMALGREAADWVSGHFPSPIRLEFEKVYFPYLLISKKRYAGLLFSSRPDAHDRMD
CKGLEAVRRDNCPLVANLVTASLRRLLIDRDPEGAVAHAQDVISDLLCNRIDISQLVITKELTRAASDYAGKQAH
VELAERMRKRDPGSAPSLGDRVPYVIISAAKGVAAYMKSEDPLFVLEHSLPIDTQYYLEQQLAKPLLRIFEPILG
EGRAEAVLLRGDHTRCKTVLTGKVGGLLAFAKRRNCCIGCRTVLSHQGAVCEFCQPRESELYQKEVSHLNALEER
FSRLWTQCQRCQGSLHEDVICTSRDCPIFYMRKKVRKDLEDQEQLLRRFGPPGPEAW

FIGURE 1089

AATAGGAAAGCTGCAAAACACTGTGGAGTGCTCCCGTGTAAATAAAAAGAGGAAAAAAGTTTCTCAAGTCGCCGC
TGCACGACGTCTGGCCGGCGCTGGAGCGGGGGTCTGCGCTCTCCCGAGCGGCCGCGCGCTGGACTTTATTGTGCC
GCAACCAGCCCCAGTTCCCATTGTTTGTGTTTTTTTCAAAATATGGCAAAGGTTCAGGTGAACAATGTAGTGGTG
CTGGATAACCCTTCTCCTTTCTACAACCCGTTCCAGTTCGAGATCACCTTCGAGTGCATCGAGGACCTGTCTGAA
GACTTGGAATGGAAAATTATCTATGTGGGCTCTGCAGAAAGTGAAGAATACGATCAAGTTTTAGACTCTGTTTTA
GTGGGTCCTGTTCCCGCAGGAAGGCATATGTTTGTATTTCAGGCTGATGCACCTAATCCAGGACTCATTCCAGAT
GCAGATGCAGTAGGCGTAACTGTTGTGCTAATTACTTGTACCTATCGAGGACAAGAATTTATTAGAGTTGGCTAT
TATGTAAATAATGAATATACTGAGACAGAATTAAGGGAAAATCCACCAGTAAAACCAGACTTTTCTAAGCTTCAA
AGGAATATTTTGGCATCTAATCCCAGGGTCACAAGATTCCACATTAATTGGGAAGATAACACAGAAAAACTGGAA
GATGCAGAGAGCAGTAATCCAAATCTACAGTCACTTCTTTCAACAGATGCATTACCTTCAGCATCAAAGGGATGG
TCCACATCAGAAAACTCACTAAATGTCATGTTAGAATCCCACATGGACTGCATGTGACCACCTACCATCCCTTTA
GTACAAATTAAGCTATTAAAAATACACAGAACTATTTCCCTGAATTCCGTAAGTACATAGTCAAAACACAATGTG
AAGAATTTGTTTAAAAACATCCTGTAGAAAGTTTATAAGAAAACCAGTATTTGAACAAATTGTGGAATATAAATA
CAACTATTTTTAAGTAATTTTTTTCTCTAATGTGTTATTTTATTTGTTCTGAAACTAATCTGATTAAAGCATATA
TATTATTTTCTTCTCCTTTATATGTAATGAAAGCACTTATAAAGAAACAGGAATCATTAGACCAGGTTGTAAAGA
TGTCTTGGCCTCCCAGACAGTCTTTGGACCACTATTTTACTGGCCTTTGAAAGAACAAAGTTTACTTCAACTAAA
ATGTTTCTTCCTGTGAAGACATATGGTATCATTTTAATTTAAGGGGCAGATTTCCATTCTTTTTTGGCATGTCCT
TAAAAAGAGGATTTGAAATCAACTATATGCTACCAAGAACTTTAGGATCCAATTTTCCAAGCCACCGTGAAGCCT
CTTATGGCTACTATTATAGTTCATGAGATGTTGGACAGCATTTGGTTTGTTTGGTAAGAGAAGAACAAATATGGC
TAATTGTTAATAAGGTCCCCTGGCTATGGTTTTTGTTCTTATAACAGAGTTTAGAATATCAGAGCATTTCTTGAA
TCATACATCATTATTGTCCAGTGAATTCAAGACCGAATACAATATCGGGAGAAAATACAAACTCCCTGTGTTTAA
GAATAGGGGATTATAATGGCTCAAATTGGTTCATTTGATTTCTAAAAATACCATGACCTTTAAAAATTCTTTTAA
TAGATCATGTTATTGGCAGTATTTATATAAAAACCATGGATTTAGAAAGGTATATTTAGCTTTATTATAATAGAT
ACGTTACTATTTTGGAAATATATATATTTTCACACCTGTAGTACTCTTCCCCATTTCCTCTGACACTCATGCAGA
ATGAGATCAGGCATATTTGTGGTTGACATACTCTAGATAGCTTTTCCAACAAATCTTTGAAAAGCAATCTTGGAA
AGGAATTCATTAACTAAATGGGGTAAAAGGTTTCTTTTTCTTTGAGAGTTAAGTCCTTCCTCAAAAAATTTTCTT
ATGCTCCATAAAATTGAGGTAGAATACTTTCATTATTCTTGCAGCTAAGCAAGACAGCCATATGATGCAGGTTAT
GCAGTGCCTTCATATCTAAAACTTTTATACTGCACTTTTTAAAGCTTTTATGTTGAGGAAAGGAAAAGGGCATTT
GTCTAAACATGGATTCTGAGTTGTATATATTTCCTATCATTCTAAAAAAGTGAATTTGTGAAGCAAAGTTTTGCC
AGATGTTAAACTTTGAATTTAATATACCAGATTATTAAAATATTGTCCATTAACTAGTTCATAGATTTTAAAAGT
AAAATACTTCTGACTGTTAAAACTATATAAAGAAAATCTCATTTGTCTAATTGCAATTAAAAGAAAAATGTTAAA
ATATTAAAATGAAAATAAAAGCATTACTTTCCAAAAAAAAAA

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FIGURE 1090

MAKVQVNNVVVLDNPSPFYNPFQFEITFECIEDLSEDLEWKIIYVGSAESEEYDQVLDSVLVGPVPAGRHMFVFQ
ADAPNPGLIPDADAVGVTVVLITCTYRGQEFIRVGYYVNNEYTETELRENPPVKPDFSKLQRNILASNPRVTRFH
INWEDNTEKLEDAESSNPNLQSLLSTDALPSASKGWSTSENSLNVMLESHMDCM

FIGURE 1091A

GGTAATGCTTAAACTTCCTGCCTCTTTTGCCTCTACAGGAAAGAAGAAAGAACACAAGAAAGTGAAGTCCACTAG
GGATATTGTTCCTTTTTCTGAACTTGGAACTACTCCCTCTGGTGGTGGATTTTTTCAGGGTATTTCTTTTCCTGA
AATCTCCACCCGTCCTCCTTTGGGCAGTACCGAACTACAGGCAGCTAAGAAAGTACATACTTCTAAGGGAGACCT
ACCTAGGGAGCCTCTTGTTGCCACAAACTTGCCTGGCAGGGGACAGTTGCAGAAGTTAGCCTCTGAAAGGAATTT
GTTTATTTCATGCAAGTCTAGCCATGATAGGTGTTTAGAGAAAAGTTCTTCGTCATCTTCTCAGCCTGAACACAG
TGCCATGTTGGTCTCTACTGCAGCTTCTCCTTCACTGATTAAAGAAACCACCACTGGTTACTATAAAGACATAGT
AGAAAATATTTGCGGTAGAGAGAAAAGTGGAATTCAACCATTATGTCCTGAGAGGTCCCATATTTCAGATCAATC
GCCTCTCTCCAGTAAAAGGAAAGCACTAGAAGAGTCTGAGAGCTCACAACTAATTTCTCCGCCACTTGCCCAGGC
AATCAGAGATTATGTCAATTCTCTGTTGGTCCAGGGTGGGGTAGGTAGTTTGCCTGGAACTTCTAACTCTATGCC
CCCACTGGATGTAGAAAACATACAGAAGAGAATTGATCAGTCTAAGTTTCAAGAAACTGAATTCCTGTCTCCTCC
AAGAAAAGTCCCTAGACTGAGTGAGAAGTCAGTGGAGGAAAGGGATTCAGGTTCCTTTGTGGCATTTCAGAACAT
ACCTGGATCCGAACTGATGTCTTCTTTTGCCAAAACTGTTGTCTCTCATTCACTCACTACCTTAGGTCTAGAAGT
GGCTAAGCAATCACAGCATGATAAAATAGATGCCTCAGAACTATCTTTTCCCTTCCATGAATCTATTTTAAAAGT
AATTGAAGAAGAATGGCAGCAAGTTGACAGGCAGCTGCCTTCACTGGCATGCAAATATCCAGTTTCTTCCAGGGA
GGCAACACAGATATTATCAGTTCCAAAAGTAGATGATGAAATCCTAGGGTTTATTTCTGAAGCCACTCCACTAGG
AGGTATTCAAGCAGCCTCCACTGAGTCTTGCAATCAGCAGTTGGACTTAGCACTCTGTAGAGCATATGAAGCTGC
AGCATCAGCATTGCAGATTGCAACTCACACTGCCTTTGTAGCTAAGGCTATGCAGGCAGACATTAGTGAAGCTGC
ACAGATTCTTAGCTCAGATCCTAGTCGTACCCACCAAGCGCTTGGGATTCTGAGCAAAACATATGATGCAGCCTC
ATATATTTGTGAAGCTGCATTTGATGAAGTGAAGATGGCTGCCCATACCATGGGAAATGCCACTGTAGGTCGTCG
ATACCTCTGGCTGAAGGATTGCAAAATTAATTTAGCTTCTAAGAATAAGCTGGCTTCCACTCCCTTTAAAGGTGG
AACATTATTTGGAGGAGAAGTATGCAAAGTAATTAAAAAGCGTGGAAATAAACACTAGTAAAATTAAGGACAAAA
AGACATCTATCTTATCTTTCAGGTACTTTATGCCAACATTTTCTTTTCTGTTAAGGTTGTTTTAGTTTCCAGATA
GGGCTAATTACAAAATGTTAAGCTTCTACCCATCAAATTACAGTATAAAAGTAATTGCCTGTGTAGAACTACTTG
TCTTTTCTAAAGATTTGCGTAGATAGGAAGCCTGGTACAAACAATTTAACGCTTTCTAGATCACATATTAGTCTC
TAAGTTGTTTTCTGTTTCCTGCTTTACTTATGTTTTTACAATTCTCCAAAACTAAGAAAATTCTAATTAGGATAT
AAGGAGTATTTACTGTTCAATAGAATAATATGCATCCTCCTTTATACCTAGGACAGAATTAAACATTTGTTACAC
ATTCAGAACAGTGATGTTGTTCTTTTTGATACTTTTATCTCAGTATCTTTTCACGTTCCATAACTTGTCCATATT
TTTGCTCATATTTTCTTACTTTTCTTTGTTATTTATTCATGTCTGCAACATCAATCATAGTAGTCTAGATCAATG
CAACTCAAAGCACCAGTCTACAAACTGTTACTTATCCACAGGCAAGATAAGCATGCACAAGAATTTAAATCTAGA
GATACTTTTTAGGTCAATGACAGGATTTGATTTTTTAGCAAAATTTTATTAATAGCTAAAGCAATGTATTGATTT
ACACTCTGATGCAAGTAATTTATCTCTTCATTGACTGGTAGCAACCAATTCATGGACCAGTACCATGGACCACAC
TTTGAGAAACACTTCTTTGGATAATAATAGATATCCTGGGATAGTGCATGTTCACCATCTATTTTGTCAGATAAT
GGGGCCTTTTAAAAAATAATACTTTGCTTTCATGATATATTGTATTTTGTGGAAAGTTAAGTTTAGCAATATAGA
CTCTAAAAGCAAATTAAATTTTTTTAAGCCATAAGAAATTATACTATATCCCAGTATCTGTATGTCTGTATAAAG
CAGTGTATTATCATGTTTTCATTTCTGTGATTGTAAGTTAAGAGTCTTAACTGCAGAGGTATTGTGGAAAGTAGT
AGCCTTAAGCATAATAAAATATGGTCTCTTGGGTACTCCCTCTGGCCATTACCACATTCTTAGATTATATGTGTC
CATCTTTGCAGCTTTCTGAGAGTAATTTTATTTGTTGTCTTCTGAAATGTACATGTATACATGTACCTACTGAGT
GCTATGTGATTTTTAAAAATGTATTACTGTAGAATGCTTCTGCAAATTCAATAAAGTTGTTAAATTTGAACAGTG
TTGTGTGGTCTCCAGAAACATGTTGTTCTGTGTGCTTTATTCTTGGAGTTGCAACAAGTTAAATATTTGTATATG
AACACCCCTTTTCCATTTCATCATTGAAACTCACTTTGACATTTCAGTGGTATAATTGAAAATATTCTGATTATG
GTATGGTTTTTCTTCTGTTTGAGGACCATGTTTTTATTGACTGTTGGAATCTAAATTTATAAGAGGAATTAATCT
GTAACCAGATACCTTATTCGTTTAACCGATTTCTATTCCACTACTAATGGTTTTTTTTACTTTGTGCTTTCTAGT
TCTTAGATTCTGAGTTAACAAAGCATAAAATAGATTTTATATTGCTGGGGGTTGTACCAAACATAGATACATTGA
CAGATCCATTGATAGAAGTGTTGGGAGATGGACTTGAAATCTTAGTCCTAAATAAAGACTGAACTGTTTAAACTA
ACTTGATAAAAATCACTGTTCGTTTTTGGGAACCTGCAAGTATTAAATAGATTCTGTACTAACTAGTATTAACAC
TGGAAAGTTAGCAAGACACATATAGATGTCTTGACCACTTTTTCACACAAGTTCAGAGTTCATGTAAAACTTTAG
AATTGACTTCCTTTCTGTCTCTTCAGTAAGAAAGTAATCTAACTTAAATTTTTGGTAGTAGAAGTTTTAGAAATA
ACAACTGACTAATTTTGCTATACCATGATAAATGTCTACAAAAAGGGATTTTTTTTTTTTTGAAATGAAGTTTCG

FIGURE 1091B

CTCTTGTCCCCAAAGCTGGAGTGCAATGGTGTGATCTCAGCTCGCTGCAACCTCCGCCTCCCAGGTTCAAGCAAT
TCTCCTGCCTTAGCCTCCTGAGTAGCTGGGATTACAGGTGTCTGCCACCAACCCTGGCTAATGTTTGTATTTTTA
GTAGAGACGGGGTTTCACCATGTTGGCCAGGATGGTCTTAAGCTGACCTCAGGTGATCCGCCCACCTCGGCCTTC
CAAAGTGCTGGGATTACAAGCGTGAGCCACCATGCCCTGCCAGGGATGTTAACTAAAATCAGTCTTTTCAAAACC
TAGATCTTCAAATGATGATGAATTTAAGACTAGGAGACTGGAATATTGAAGCCTATTAAAAAATACATATCCTTG
CGTTGTTAGGTTAATAACTATCATGGTGACAAGTGTATAAGTATTGGCTTCTTTTCAAAGAAATGTTATTTTTAT
TATAAGGACTGGGACGAGAAGTGACCTGTGATTGGTCGTATTTTTCTGTGAACAAGATTCCTTCTTTACCTGAGT
TGTACCTAGGTTTTTTATAACTACATCAAAAAAGCTTTTATATTGTACTTATTAATGTTATGGCAGTTACTTATA
GAAGCTTGGTACTATATGGATTTTTTTCATTTTTAAACTTTCCCTTCTATGTTCCAAATTTTAATTTAGTAAGTC
AACCTTTGCTGTACAGTAGTAGTATACTGTATGGACAAAACAATGGTAACAATTGTGTTATTTTAAATGGCCTTT
TTCCACATCTAAATTGTTCTTACTGAAAAGCTTTCGTGGGAGCATTTTGAACTCACTTCATGTTCAAAGCTATGA
GTCCCAGATAAAGGAAAGGAGAATAGGTAGGAAGAAGTGGTTGTCAGATGAAAGGGTAAGGGAGATAAGCAAAAA
TGGGATAAATAATGAAACAGTTTTCAAGACAAATTGCAGTTAAACAATTTTGGACTAGTGAGGTATTACCAGTAG
ACTTGTTTTTCACCTTTTAATGTGCCTAAAACCAGGGTTCCCGATTAATATTAGGATAACATCATCATTTATTGA
GTGTTTCAGAGAGTAATGGTTTCTCCAATGTTATTTCCAGACTCTAAAATAGAGCTCAAGCTTGAGAAGAGAGAA
CCACTAAAGGGCAGAGCAAAGACTCCAGTAACACTCAAGCAAAGAAGAGTTGAGCACAATCAGGTATCTTTAGTT
TTATTACCACCGTGTACAGGTATAAATAACCTCCTGACAACACTAATCCATGTTTTAGCCTTTAATGGTTGACAC
CCAGATTCCAGCACGCTCAATAAACTTAATTCTGTTGTTAAATGATACTAAAAATCTAAACTTTGTGGGTTTTGT
CAGTAGTGTAGCCTGTGATTACAGCAAAAGCAAATTTTTAATGTCTCATTTGTGTTTGAGTCTGTGCTAGATGTA
GTTCAAAGCCAGTTATATGGTGTTTTGAAAGAAATATTTTAAAAGGTGGAAATATCTAGACACTTTTGATACAAT
TTCTTTAAAAGGCAATGGAAGGGTTTTATATTTGTGTCTTTGTCTCTAGATTTCTGACTTTGATTTTATGTTTGC
CTGTCTTGTCTTCTGCGATTCTTTCCTAAACTCAGAAGCTAGTCTGGTCCTAAGACTACAGTTTTCTTTCCTTAT
TTCAGATGAAAATTTACCTTTTCTATTGTGGGAGAGGCGTTTCAGTTTTTCAAAAGGGAAATGTAGGAAACTAAG
GAGAAAATAAGCATAGGTATAAATGAACAGAGAACAAATTATTGACTAACCTAGTATTGTTTACAGAGAACAAAT
TATTGACTAACCTAGTATTGTTTACAGAGAACAAATTATTGACTAACCTAGTATTGTTTACAGAGAACAAATTAT
TGACTAATGCAGCATTGATTTGGCTGATGCTTTATAAGACAGCTATTCCTAGAGTCATTTTCCTTACCCCTGCTA
TGTCTAGCTGGATGATTTGTCTAGTTGGTTATCTTTTCCATCTCCTATTTGTCACTTTGTGTGTTTGTTTGTGAC
GGAGTTTTGCTCTTGTCACCCGGGCTGGAGTGCAGTGGCGTGATCCCATCTCATTGCAACCTCCACCCTGCTGGG
CTCAAGCGATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGATTACAGGCACATGCCACCACGCTCAGCTAATTTT
TGTATTTTTAGTAGAGACGGGGTTTCACCGTGTTGGCCAGGCTGGTCTCAAACTCCTGACCTCAGGTGATCCACC
TGCATTGGCCTCCGAAAGTGCTGGGATTACAGGTGTGAGCCACCGCGCCCAGCCTGTTTGTCGTTTTAAAATCAA
ATCCTTAGAGGAATTATTCTTGATTCCTTAAGGCAAGTCAGTCTCTCTCTTCATTTGATGTAGTTGATAAGTTGA
ATTTCAGAACGATTTGTTAGAAATGAGCTTTGTGACAAGAACATACAGAGCATTGAATGAATGAAGACTTTGTTA
ACATAGAACCAAATACTGGAATACATGTTTTATTGCCCTTTTATGTAGTAGTCCTAACAAATAGCTTCAGGAGCA
TGCTGAAGAATAAGGAAATAGGCCGGGCGCAGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGCGG
GCGGATCACCTGAGGTCCGGAGTTCGAGACGAGCCTGACCAACATGGAGAAACCCTGTCTCTACTAAAAATACAA
AATTAGCCAGGCATGGTGGTGCATGCCTGTAATCCTAGCTACTCCGGAGGCTGAGGCAGGAGAATCGCTTGAACC
TTGGAGGCGGAGGTTGCTGTGAGCCGAGATCGCGCCATTGCACTCTAGCCTGGGCAACAAGAGCGAAACTCTGTC
TCAAAAATAAATAAATAAATAAATAAATAATAAAGATGGTCTAAGGGATAATTGAGTTGGAGGAATCTAAACTGA
GGAGCAGAATAAATAGTCAAAGGAGTGTAGGTTTAGATGACAGGCAGAATTAGACAGTGGCTTTATTGCAGAAAA
TTTAAAACATGTAGAAGAGTGGAGGGAAGAGTTTAATGACCCTCCAGTCATAGATGTGCCACAGTTGTCAGTGTT
TTACCAGTTTGGTTTCATCACCCCACACCCTCCAGCTTTTTAAATTACTTTTTTTTTTTTTTTTTTGAGACA
GAATCTCACTCTGTCGCCCAGGTTGGAGTGCAGTGGCACAATCTCGGCTCACTTGCAACCTCCGCCTCCTGGGTT
CAAGCAGTTCTCCTGCTTCAGCCTCCTGAGTAGCTGGGATTACAGGTTCCCGCCACCATGCCCAGCTAGTTTTTG
AATTC

FIGURE 1092A

GCCATTTCCTCCTCTTGTTTTCACTCCGGATTCTCCATGTTGGACCCAAACTGAGGAGCCCGGAGCTGCCGCTGG
GGGATCGGGGCCGGGGGCACCCGGGGGAGCCGCTGCCCGGGCCGCCCGCCCTTTGTACAGGCCGCCTCCCTTCCC
GGTCCGGGGAGGAAACGAGAGGGGGGATGTGAACAGCTGTGGAAGTCGGAGTCTCGGGAGCCGGAGCGGGCCCCC
GCCCAGGCCCCCCAGCCCAGCCCAGCCCGCGCGCCCGCCCGTCCTCCCGTCCAGCCAGCCCGGGCCCGCGGGATT
GTTAGATGGAACACGGCTCCATCATCACCCAGGCGCGGAGGGAAGACGCCCTGGTGCTCACCAAGCAAGGCCTGG
TCTCCAAGTCCTCTCCTAAGAAGCCTCGTGGACGTAACATCTTCAAGGCCCTTTTCTGCTGTTTTCGCGCCCAGC
ATGTTGGCCAGTCAAGTTCCTCCACTGAGCTCGCTGCGTATAAGGAGGAAGCAAACACCATTGCTAAGTCGGATC
TGCTCCAGTGTCTCCAGTACCAGTTCTACCAGATCCCAGGGACCTGCCTGCTCCCAGAGGTGACAGAGGAAGATC
AAGGAAGGATCTGTGTGGTCATTGACCTCGATGAAACCCTTGTGCATAGCTCCTTTAAGCCAATCAACAATGCTG
ACTTCATAGTGCCTATAGAGATTGAGGGGACCACTCACCAGGTGTATGTGCTCAAGAGGCCTTATGTGGATGAGT
TCCTGAGACGCATGGGGGAACTCTTTGAATGTGTTCTCTTCACTGCCAGCCTGGCCAAGTATGCCGACCCTGTGA
CAGACCTGCTGGACCGGTGTGGGGTGTTCCGGGCCCGCCTATTCCGTGAGTCTTGCGTGTTCCACCAGGGCTGCT
ACGTCAAGGACCTCAGCCGCCTGGGGAGGGACCTGAGAAAGACCCTCATCCTGGACAACTCGCCTGCTTCTTACA
TATTCCACCCCGAGAATGCAGTGCCTGTGCAGTCCTGGTTTGATGACATGGCAGACACTGAGTTGCTGAACCTGA
TCCCAATCTTTGAGGAGCTGAGCGGAGCAGAGGACGTCTACACCAGCCTTGGGGCAGCTGCGGGCCCCTTAGCCT
GCCCTGCTTCCAAGCGACGGCCATCCCAGTAGGGGACTTTCCCACACTGTGCCTTTACGATCAGCGTGACAGAGT
AGAAGCTGGAGTGCCTCACCACACGGCCCGGAAACAGCGGGAAGTAACTGGAAAGAGCTTTAGGACAGCTTAGAT
GCCGAGTGGGCGAATGCCAGACCAATGATACCCAGAGCTACCTGCCGCCAACTTGTTGAGATGTGTGTTTGACTG
TGAGAGAGTGTGTGTTTGTGTGTGTGTTTTGCCATGAACTGTGGCCCCAGTGTATAGTGTTTCAGTGGGGGAGAA
GCTGAAAGACCAAGACTCTTCCCAAGTTAGCTTGTCTCCTCTCCTGTCACCCTAAGAGCCACTGAGTTGTGTAGG
GATGAARACTATTGAAGACTCCATTGCCAAACCATGGCCTTTCCTCAGTGTTGTAAGGCCTATGCCAAGGATAAA
GGAAGGGTATGCCTTTGGGTACTCCAGGCATACACCTTTCTGAAATCCTTCTCCAGCCAGCTGCTGCAGACAAAA
GATCACATTTCTGGGAAGATGAGAACTTGTTTCCAGACCAGCATCCAGTGGCCATCAGGTCTTGTGGCCCAAAGG
CTATGCTTGCCTCCGGCTGAGTGCCTGGGATAGGCCTTTTCTATGTCTCCCCAAGGCTGGGGTGCTGAGCCTGCC
TTCCTCACCACCTAGCCATAGTCTCAAACCTGTGGGGAAGGAGGTTTTCTCCCTGCCCGGGAAGAGGACAGATAA
CTGATTTCCGTTCTTTTGACTGTGTTTTAAAATTCTCTTTCTAAACACAGAGTGTTGGGCCTGGTTTGTTTCTGA
CAAAGTTACAGTCCTGGGCCTGTAATGAATGTCGGCGGCGCTGGGGTTGCAGGGAAAAGACAAATCCTCAAAGCG
TGGACGTGTGTCCCCATGGCTTGTGGATCAGCTAAGCTCGGGATCATTTCCATAAGTCTGCTTTTCAGGGATTCT
CTGCTGGTGCTGGTGCAAGGACTTCTGTTCCAAAGGCTGGGAAAAACTAAGCTGTCCCAGCCCCTCCCATTTCTT
GGGCAGGGCTCTTTTCCTGTTGTGTCTTCCCCCAGGGCCTGTCCTGTACCGAGCTCTGTCTGTTCCAGCCTACAT
CCTTCCTGGGTGTTGCTTTTCCTCTTAAGGGCCTCAGAACTCTTGCTCTTCCTGGGGTGAGGGGGAATGAGTGTT
CTTGACATGTGACAGCCTAATGCGCATGCTTTCTGCCTCTGGTAACAGGAGTGAGTGAGCCCCTCAGACCTGCAC
TCTGGGTGTCTCCTGCTTACAAAGGTTCTTAATAGTGAATGCTTTAAAATTAAAGTCATCACGAAATGGAAGTTT
TCCCAGGGTGGAAAATAAGAGGAAGTGCTGCTGTAATTGGGAGCACAAGGGGCCTCCCAAAAAGGAGCCCCACCT
CAGCATCACTGCCTTAATCGTGGCCTCCCTGGGGTGGGTGGGGTTCTCTCCTCCCTCCCTCCCTCCTCCTGGGGT
GGGAGGGCGCTCCTGTTCCCATCTCTGTGTTCCCTGGAGGCAGGTATCACAAAGCATTTGTGAATTGCTTTAGGT
GCAGGGACACCACCCACTCAGGACTCTTCCCCATCATCCCTTCCATTGCCACACCCTAGATCCAGCCTCAGGAAC
TAACAAGTTKTGAGAAAAGCAGGTGGTAGAGCAGCAGCTTCGTGCTCTCAGCGGTGGCTGGCTGGCATTTTTCTC
TAGCGTTGTGGTGCCACCTTCCCTTCTTGTCCCAAGGTTATAAGGCCTTGTCTTTCTCTTTGGAATCATAAAGTG
GAACAGAGTCCCCAGAACTCATGTGGHCATTTCCGACAGCATCACTCCCCGGTGCCTATGGGGTCCCGGTGTACC
TAAAGGGAGAAGGACCCCATGTGCTAGCCAGAAATATACTGTCTCTTGAAGGAAAGCAGGAGCTCAGACTCTTAG
AGCCAGCTGTGGCTTCGGACCCAAGGCCTGACCTAGGCTGCTATCCTAATATTGGAGGAGGGGCCTCTCTTCCAA
GCCCCACCCTAAGGGTTAGCCCTTGGACAAATCTTGTGCCGTCTAGGCCCAGCCAGGCTTTTCTGACTAAATAAG
CAATAAGAGGCTCTAAGCTGACTGAGTTGCAAGGACCCTTTCCGCCCTCCCTTGGATCTCCATGTTTCTCCAGAT
GGCGGAAGAGCATGTGCCACCCCCTTTCCTAACAGACTTGTCCAAGTGCTTGGCGTGGGACCCATGACCAAAGCC
CAGGATGGCTTGGTGGGAGTGTCCCTGCTGCATCTGCATGAAGCCCCTGCTTTTTAGGCCTCACTCCCATCAGAA
CCCTGCCTGCCCACCTGCAACTCCCCCCCAACAATGCCATTCCCACTTGCCCCAGAGAAGCTACTCGGCCAAACC
TAGCCAGGGTCTGTTCTTGTGGACCAGAGCCAGCCTAGTCATTATTTGCTGTCGGGTTTCCAGTTTCACCGTGTG

FIGURE 1092B

TTAGGGTGAGGGATGATTGTAAAATTTGCTCCTCAAAGGAATCAGGCCAGACTCAATTTTGGGAGGGCAAGACAG
GGAGGAGGCCGCTTCATCCCAGACTCTCTTCTAGGGCTTCCCACCATCAGCCCCTCCCACTTGAGACTGGTCTTT
GGGAGGCAATAGGCCACCATGCCTGGTCAGCACCAATTCAAGCCATGCCAGGAATCTGCCTACCTGCCAGGTTCA
GTTCTTTTAAGGTGCCTCTTCAGGGACACAGTGTGTCTCTCTGATTGGGCTTCTAAATCAAAAGCCTGATGTTCG
TGTCCCTCTCATAGGGGGAGCTTTGGACACAGGACCAGTTTGGAAAAGGGTCAGGTAAGGGTTTCCACTCTGCAC
ATTGTAGAGGGAACACTCTGTAGGCCCATGGGTCCCTTACTAGAGAGGTTGAGTGAATTTGCCTTCAGTTAACAT
GGGACCTTCTGTTTAGCTTCCTCTTGCTTCCCAAAGATTTTAAGCATTTTGTAAATGTATAAACTCACCTCTGGT
AACAGTGGCCCAGACGCTGCTTTGTGCTAAAAGCATGGGAAATGTAAAGGCAGTCTTTCTCTGGGAAATGGATGC
TATTCTATTCTGCTGCCCCTACCTGTTCCTGAGGCCTCATTTAGAAAGAAAATCCCCTCAGAAGGCTGTCTGGCA
CCCAGTGTCCTAGCCAGGCCAAGTATATGAGAAAGGTAAGTCCATTTTCCCCTTCAGGTCCTCAGTGGATTACTT
AACCACTGCTGTCCCTCGGTCCCTTTTTCCTAAACGGGTTTAGTTCTGTCTTTTTTCTCCTTTTTTCTAAATGCT
GGTAAATATTTACATTCAGCCAGGGAAGAGGAGGCCAGAGGTCGGGCCAGCTGCCCCATTCTTTTAACGTTGTAG
GGCCTGCCCATGGAGCGGACCCTCCTCTTTGGGCCTCGTGAGCTTTTTTGCTTATCATGTTCCATTTCGTGCCGC
TTTCCCCCTTCAAGATGCCATTTGGAGGGTAGGGGATCTGCTTCCGCACTGTGACTGGGCTATGGGATTCTGACTA
CCTTGCTTACAGATTCATGGTTTGATAAATTTGTTGTATTCCAAAACTTGAAATGCAGGACGCCATTAAGTGTCT
GTTTATATTTTTGGAATATTTGTATTACTTACAATTAATTAATAAAAGTGGGTTTAAAAAACCTTTCCAGGAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1093

MEHGSIITQARREDALVLTKQGLVSKSSPKKPRGRNIFKALFCCFRAQHVGQSSSSTELAAYKEEANTIAKSDLL
QCLQYQFYQIPGTCLLPEVTEEDQGRICVVIDLDETLVHSSFKPINNADFIVPIEIEGTTHQVYVLKRPYVDEFL
RRMGELFECVLFTASLAKYADPVTDLLDRCGVFRARLFRESCVFHQGCYVKDLSRLGRDLRKTLILDNSPASYIF
HPENAVPVQSWFDDMADTELLNLIPIFEELSGAEDVYTSLGAAAGPLACPASKRRPSQ

FIGURE 1094

CTGTCGCCCTGCACGGTGACCCGCGTGTGCGAGGCCTTCATGGCCAGGATCCGGGTGGAGAGGCGCTGCTGACAC
CGCCGCCACACCGCCGCCACACCGCCGCTGCCTCAGTC**ATG**CCGAAGCACGAGTTCTCTGTGGACATGACCTGTG
GAGGCTGTGCTGAAGCTGTCTCTCGGGTCCTCAATAAGCTTGGAGGAGTTAAGTATGACATTGACCTGCCCAACA
AGAAGGTCTGCATTGAATCTGAGCACAGCATGGACACTCTGCTTGCAACCCTGAAGAAAACAGGAAAGACTGTTT
CCTACCTTGGCCTTGAG**TAG**CAGGGGCCTGGTCCCCACAGCCCACAGGATGGACCAAAGGGGGCAGGATGCTGAT
CCTCCCGCTGGCTTCCAGACAGACCTGGGACTTGGCAGTCATGCCGGGTGATCGTGTTCCTGCGGAGACCCTCAG
TTGTCCTATTCCTTCCTAGCTTCCCTGCAATAAATCAAGCTGCTTTTGTTGG

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FIGURE 1095

MPKHEFSVDMTCGGCAEAVSRVLNKLGGVKYDIDLPNKKVCIESEHSMDTLLATLKKTGKTVSYLGLE

FIGURE 1096

GTCTTGACGTGAGCTAGCTGGCATGGCGGCCTGCATTGCAGCGGGGCACTGGGCTGCAATGGGCCTAGGCCGGAG
TTTCCAAGCCGCCAGGACTCTGCTCCCCCCGCCGGCCTCTATCGCCTGCAGGGTCCACGCGGGGCCTGTCCGGCA
GCAGAGCACTGGGCCTTCCGAGCCCGGTGCGTTCCAACCGCCGCCGAAACCGGTCATCGTGGACAAGCACCGCCC
CGTGGAACCGGAACGCAGGTTCTTGAGTCCTGAATTCATTCCTCGAAGGGGAAGAACAGATCCTCTGAAATTTCA
AATAGAAAGAAAAGATATGTTAGAAAGGAGAAAAGTACTCCACATTCCAGAGTTCTATGTTGGAAGTATTCTTCG
TGTTACTACAGCTGACCCATATGCCAGTGGAAAAATCAGCCAGTTTCTGGGGATTTGCATTCAGAGATCAGGAAG
AGGACTTGGAGCTACTTTCATCCTTAGGAATGTTATCGAAGGACAAGGTGTCGAGATTTGCTTTGAACTTTATAA
TCCTCGGGTCCAGGAGATTCAGGTGGTCAAATTAGAGAAACGGCTGGATGATAGCTTGCTATACTTACGAGATGC
CCTTCCTGAATATAGCACTTTTGATGTGAATATGAAGCCAGTAGTACAAGAGCCTAACCAAAAAGTTCCTGTTAA
TGAGCTGAAAGTAAAAATGAAGCCTAAGCCCTGGTCTAAACGCTGGGAACGTCCAAATTTTAATATTAAAGGAAT
CAGATTTGATCTTTGTTTAACTGAACAGCAAATGAAAGAAGCTCAGAAGTGGAATCAGCCATGGCTTGAATTTGA
TATGATGAGGGAATATGATACTTCAAAAATTGAAGCTGCAATATGGAAGGAAATTGAAGCGTCGAAAAGGTCTTG
ATTCTGAGAATGAATTTGGTTAGTTGCAGAAGATACATTGGCTCTAAGAGGATATATTTTGAGACCAATTTAATT
TCATTTATAAGAACATAGTAATTAAGTGAACTAAGCATTCATTGTTTTATTAATACTTTTTTTCTAAAATAAAAC
TTGTACACCAGTTTATTACTCTAAAAAGAGAATTACACATGCCAAATGGACCAATGTCCATTTGCTTATTGGAGG
CAAAGCTACAATAGAAGTCAGAGCATCACCAGAATGGTCTTTAATGAGCATGGAACCTGAGCAAAGGGAATAGGT
GGGATGAATTTTTTTTTTAATTGTGAAACAATTCATAAGCACAATATGATTTACAGAATAATAAACATTCATGTA
CCCACTATCAGGTTAAGAAATAGAACATTTATTAATATGTAGGAATGTTAAGAAATAAAACATTTAATAAGA

FIGURE 1097

MGLGRSFQAARTLLPPPASIACRVHAGPVRQQSTGPSEPGAFQPPPKPVIVDKHRPVEPERRFLSPEFIPRRGRT
DPLKFQIERKDMLERRKVLHIPEFYVGSILRVTTADPYASGKISQFLGICIQRSGRGLGATFILRNVIEGQGVEI
CFELYNPRVQEIQVVKLEKRLDDSLLYLRDALPEYSTFDVNMKPVVQEPNQKVPVNELKVKMKPKPWSKRWERPN
FNIKGIRFDLCLTEQQMKEAQKWNQPWLEFDMMREYDTSKIEAAIWKEIEASKRS

FIGURE 1098A

GTAATTGCGAGCGAGAGTGAGTGGGGCCGGGACCCGCAGAGCCGAGCCGACCCTTCTCTCCCGGGCTGCGGCAGG
GCAGGGCGGGGAGCTCCGCGCACCAACAGAGCCGGTTCTCAGGGCGCTTTGCTCCTTGTTTTTTCCCCGGTTCTG
TTTTCTCCCCTTCTCCGGAAGGCTTGTCAAGGGGTAGGAGAAAGAGACGCAAACACAAAAGTGGAAAACAGTTAA
TGACCAGCCACGGCGTCCCTGCTGTGAGCTCTGGCCGCTGCCTTCCAGGGCTCCCGAGCCACACGCTGGGGGTGC
TGGCTGAGGGAAC**ATG**GCTTGTTGGCCTCAGCTGAGGTTGCTGCTGTGGAAGAACCTCACTTTCAGAAGAAGACA
AACATGTCAGCTGCTGCTGGAAGTGGCCTGGCCTCTATTTATCTTCCTGATCCTGATCTCTGTTCGGCTGAGCTA
CCCACCCTATGAACAACATGAATGCCATTTTCCAAATAAAGCCATGCCCTCTGCAGGAACACTTCCTTGGGTTCA
GGGGATTATCTGTAATGCCAACAACCCCTGTTTCCGTTACCCGACTCCTGGGGAGGCTCCCGGAGTTGTTGGAAA
CTTTAACAAATCCATTGTGGCTCGCCTGTTCTCAGATGCTCGGAGGCTTCTTTTATACAGCCAGAAAGACACCAG
CATGAAGGACATGCGCAAAGTTCTGAGAACATTACAGCAGATCAAGAAATCCAGCTCAAACTTGAAGCTTCAAGA
TTTCCTGGTGGACAATGAAACCTTCTCTGGGTTCCTGTATCACAACCTCTCTCTCCCAAAGTCTACTGTGGACAA
GATGCTGAGGGCTGATGTCATTCTCCACAAGGTATTTTTGCAAGGCTACCAGTTACATTTGACAAGTCTGTGCAA
TGGATCAAAATCAGAAGAGATGATTCAACTTGGTGACCAAGAAGTTTCTGAGCTTTGTGGCCTACCAAGGGAGAA
ACTGGCTGCAGCAGAGCGAGTACTTCGTTCCAACATGGACATCCTGAAGCCAATCCTGAGAACACTAAACTCTAC
ATCTCCCTTCCCGAGCAAGGAGCTGGCTGAAGCCACAAAAACATTGCTGCATAGTCTTGGGACTCTGGCCCAGGA
GCTGTTCAGCATGAGAAGCTGGAGTGACATGCGACAGGAGGTGATGTTTCTGACCAATGTGAACAGCTCCAGCTC
CTCCACCCAAATCTACCAGGCTGTGTCTCGTATTGTCTGCGGGCATCCCGAGGGAGGGGGGCTGAAGATCAAGTC
TCTCAACTGGTATGAGGACAACAACTACAAAGCCCTCTTTGGAGGCAATGGCACTGAGGAAGATGCTGAAACCTT
CTATGACAACTCTACAACTCCTTACTGCAATGATTTGATGAAGAATTTGGAGTCTAGTCCTCTTTCCCGCATTAT
CTGGAAAGCTCTGAAGCCGCTGCTCGTTGGGAAGATCCTGTATACACCTGACACTCCAGCCACAAGGCAGGTCAT
GGCTGAGGTGAACAAGACCTTCCAGGAACTGGCTGTGTTCCATGATCTGGAAGGCATGTGGGAGGAACTCAGCCC
CAAGATCTGGACCTTCATGGAGAACAGCCAAGAAATGGACCTTGTCCGGATGCTGTTGGACAGCAGGGACAATGA
CCACTTTTGGGAACAGCAGTTGGATGGCTTAGATTGGACAGCCCAAGACATCGTGGCGTTTTTGGCCAAGCACCC
AGAGGATGTCCAGTCCAGTAATGGTTCTGTGTACACCTGGAGAGAAGCTTTCAACGAGACTAACCAGGCAATCCG
GACCATATCTCGCTTCATGGAGTGTGTCAACCTGAACAAGCTAGAACCCATAGCAACAGAAGTCTGGCTCATCAA
CAAGTCCATGGAGCTGCTGGATGAGAGGAAGTTCTGGGCTGGTATTGTGTTCACTGGAATTACTCCAGGCAGCAT
TGAGCTGCCCCATCATGTCAAGTACAAGATCCGAATGGACATTGACAATGTGGAGAGGACAAATAAAATCAAGGA
TGGGTACTGGGACCCTGGTCCTCGAGCTGACCCCTTTGAGGACATGCGGTACGTCTGGGGGGGCTTCGCCTACTT
GCAGGATGTGGTGGAGCAGGCAATCATCAGGGTGCTGACGGGCACCGAGAAGAAAACTGGTGTCTATATGCAACA
GATGCCCTATCCCTGTTACGTTGATGACATCTTTCTGCGGGTGATGAGCCGGTCAATGCCCCTCTTCATGACGCT
GGCCTGGATTTACTCAGTGGCTGTGATCATCAAGGGCATCGTGTATGAGAAGGAGGCACGGCTGAAAGAGACCAT
GCGGATCATGGGCCTGGACAACAGCATCCTCTGGTTTAGCTGGTTCATTAGTAGCCTCATTCCTCTTCTTGTGAG
CGCTGGCCTGCTAGTGGTCATCCTGAAGTTAGGAAACCTGCTGCCCTACAGTGATCCCAGCGTGGTGTTTGTCTT
CCTGTCCGTGTTTGCTGTGGTGACAATCCTGCAGTGCTTCCTGATTAGCACACTCTTCTCCAGAGCCAACCTGGC
AGCAGCCTGTGGGGGCATCATCTACTTCACGCTGTACCTGCCCTACGTCCTGTGTGTGGCATGGCAGGACTACGT
GGGCTTCACACTCAAGATCTTCGCTAGCCTGCTGTCTCCTGTGGCTTTTGGGTTTGGCTGTGAGTACTTTGCCCT
TTTTGAGGAGCAGGGCATTGGAGTGCAGTGGGACAACCTGTTTGAGAGTCCTGTGGAGGAAGATGGCTTCAATCT
CACCACTTCGGTCTCCATGATGCTGTTTGACACCTTCCTCTATGGGGTGATGACCTGGTACATTGAGGCTGTCTT
TCCAGGCCAGTACGGAATTCCCAGGCCCTGGTATTTTCCTTGCACCAAGTCCTACTGGTTTGGCGAGGAAAGTGA
TGAGAAGAGCCACCCTGGTTCCAACCAGAAGAGAATATCAGAAATCTGCATGGAGGAGGAACCCACCCACTTGAA
GCTGGGCGTGTCCATTCAGAACCTGGTAAAAGTCTACCGAGATGGGATGAAGGTGGCTGTCGATGGCCTGGCACT
GAATTTTTATGAGGGCCAGATCACCTCCTTCCTGGGCCACAATGGAGCGGGGAAGACGACCACCATGTCAATCCT
GACCGGGTTGTTCCCCCCGACCTCGGGCACCGCCTACATCCTGGGAAAAGACATTCGCTCTGAGATGAGCACCAT
CCGGCAGAACCTGGGGGTCTGTCCCCAGCATAACGTGCTGTTTGACATGCTGACTGTCGAAGAACACATCTGGTT
CTATGCCCGCTTGAAAGGGCTCTCTGAGAAGCACGTGAAGGCGGAGATGGAGCAGATGGCCCTGGATGTTGGTTT
GCCATCAAGCAAGCTGAAAAGCAAAACAAGCCAGCTGTCAGGTGGAATGCAGAGAAAGCTATCTGTGGCCTTGGC
CTTTGTCGGGGGATCTAAGGTTGTCATTCTGGATGAACCCACAGCTGGTGTGGACCCTTACTCCCGCAGGGGAAT
ATGGGAGCTGCTGCTGAAATACCGACAAGGCCGCACCATTATTCTCTCTACACACCACATGGATGAAGCGGACGT

FIGURE 1098B

CCTGGGGGACAGGATTGCCATCATCTCCCATGGGAAGCTGTGCTGTGTGGGCTCCTCCCTGTTTCTGAAGAACCA
GCTGGGAACAGGCTACTACCTGACCTTGGTCAAGAAAGATGTGGAATCCTCCCTCAGTTCCTGCAGAAACAGTAG
TAGCACTGTGTCATACCTGAAAAAGGAGGACAGTGTTTCTCAGAGCAGTTCTGATGCTGGCCTGGGCAGCGACCA
TGAGAGTGACACGCTGACCATCGATGTCTCTGCTATCTCCAACCTCATCAGGAAGCATGTGTCTGAAGCCCGGCT
GGTGGAAGACATAGGGCATGAGCTGACCTATGTGCTGCCATATGAAGCTGCTAAGGAGGGAGCCTTTGTGGAACT
CTTTCATGAGATTGATGACCGGCTCTCAGACCTGGGCATTTCTAGTTATGGCATCTCAGAGACGACCCTGGAAGA
AATATTCCTCAAGGTGGCCGAAGAGAGTGGGGTGGATGCTGAGACCTCAGATGGTACCTTGCCAGCAAGACGAAA
CAGGCGGGCCTTCGGGGACAAGCAGAGCTGTCTTCGCCCGTTCACTGAAGATGATGCTGCTGATCCAAATGATTC
TGACATAGACCCAGAATCCAGAGAGACAGACTTGCTCAGTGGGATGGATGGCAAAGGGTCCTACCAGGTGAAAGG
CTGGAAACTTACACAGCAACAGTTTGTGGCCCTTTTGTGGAAGAGACTGCTAATTGCCAGACGGAGTCGGAAAGG
ATTTTTTGCTCAGATTGTCTTGCCAGCTGTGTTTGTCTGCATTGCCCTTGTGTTCAGCCTGATCGTGCCACCCTT
TGGCAAGTACCCCAGCCTGGAACTTCAGCCCTGGATGTACAACGAACAGTACACATTTGTCAGCAATGATGCTCC
TGAGGACACGGGAACCCTGGAACTCTTAAACGCCCTCACCAAAGACCCTGGCTTCGGGACCCGCTGTATGGAAGG
AAACCCAATCCCAGACACGCCCTGCCAGGCAGGGGAGGAAGAGTGGACCACTGCCCCAGTTCCCCAGACCATCAT
GGACCTCTTCCAGAATGGGAACTGGACAATGCAGAACCCTTCACCTGCATGCCAGTGTAGCAGCGACAAAATCAA
GAAGATGCTGCCTGTGTGTCCCCCAGGGGCAGGGGGGCTGCCTCCTCCACAAAGAAAACAAAACACTGCAGATAT
CCTTCAGGACCTGACAGGAAGAAACATTTCGGATTATCTGGTGAAGACGTATGTGCAGATCATAGCCAAAAGCTT
AAAGAACAAGATCTGGGTGAATGAGTTTAGGTATGGCGGCTTTTCCCTGGGTGTCAGTAATACTCAAGCACTTCC
TCCGAGTCAAGAAGTTAATGATGCCATCAAACAAATGAAGAAACACCTAAAGCTGGCCAAGGACAGTTCTGCAGA
TCGATTTCTCAACAGCTTGGGAAGATTTATGACAGGACTGGACACCAAAAATAATGTCAAGGTGTGGTTCAATAA
CAAGGGCTGGCATGCAATCAGCTCTTTCCTGAATGTCATCAACAATGCCATTCTCCGGGCCAACCTGCAAAAGGG
AGAGAACCCTAGCCATTATGGAATTACTGCTTTCAATCATCCCCTGAATCTCACCAAGCAGCAGCTCTCAGAGGT
GGCTCTGATGACCACATCAGTGGATGTCCTTGTGTCCATCTGTGTCATCTTTGCAATGTCCTTCGTCCCAGCCAG
CTTTGTCGTATTCCTGATCCAGGAGCGGGTCAGCAAAGCAAAACACCTGCAGTTCATCAGTGGAGTGAAGCCTGT
CATCTACTGGCTCTCTAATTTTGTCTGGGATATGTGCAATTACGTTGTCCCTGCCACACTGGTCATTATCATCTT
CATCTGCTTCCAGCAGAAGTCCTATGTGTCCTCCACCAATCTGCCTGTGCTAGCCCTTCTACTTTTGCTGTATGG
GTGGTCAATCACACCTCTCATGTACCCAGCCTCCTTTGTGTTCAAGATCCCCAGCACAGCCTATGTGGTGCTCAC
CAGCGTGAACCTCTTCATTGGCATTAATGGCAGCGTGGCCACCTTTGTGCTGGAGCTGTTCACCGACAATAAGCT
GAATAATATCAATGATATCCTGAAGTCCGTGTTCTTGATCTTCCCACATTTTTGCCTGGGACGAGGGCTCATCGA
CATGGTGAAAAACCAGGCAATGGCTGATGCCCTGGAAAGGTTTGGGGAGAATCGCTTTGTGTCACCATTATCTTG
GGACTTGGTGGGACGAAACCTCTTCGCCATGGCCGTGGAAGGGGTGGTGTTCTTCCTCATTACTGTTCTGATCCA
GTACAGATTCTTCATCAGGCCCAGACCTGTAAATGCAAAGCTATCTCCTCTGAATGATGAAGATGAAGATGTGAG
GCGGGAAAGACAGAGAATTCTTGATGGTGGAGGCCAGAATGACATCTTAGAAATCAAGGAGTTGACGAAGATATA
TAGAAGGAAGCGGAAGCCTGCTGTTGACAGGATTTGCGTGGGCATTCCTCCTGGTGAGTGCTTTGGGCTCCTGGG
AGTTAATGGGGCTGGAAAATCATCAACTTTCAAGATGTTAACAGGAGATACCACTGTTACCAGAGGAGATGCTTT
CCTTAACAAAAATAGTATCTTATCAAACATCCATGAAGTACATCAGAACATGGGCTACTGCCCTCAGTTTGATGC
CATCACAGAGCTGTTGACTGGGAGAGAACACGTGGAGTTCTTTGCCCTTTTGAGAGGAGTCCCAGAGAAAGAAGT
TGGCAAGGTTGGTGAGTGGGCGATTCGGAAACTGGGCCTCGTGAAGTATGGAGAAAAATATGCTGGTAACTATAG
TGGAGGCAACAAACGCAAGCTCTCTACAGCCATGGCTTTGATCGGCGGGCCTCCTGTGGTGTTTCTGGATGAACC
CACCACAGGCATGGATCCCAAAGCCCGGCGGTTCTTGTGGAATTGTGCCCTAAGTGTTGTCAAGGAGGGGAGATC
AGTAGTGCTTACATCTCATAGTATGGAAGAATGTGAAGCTCTTTGCACTAGGATGGCAATCATGGTCAATGGAAG
GTTCAGGTGCCTTGGCAGTGTCCAGCATCTAAAAAATAGGTTTGGAGATGGTTATACAATAGTTGTACGAATAGC
AGGGTCCAACCCGGACCTGAAGCCTGTCCAGGATTTCTTTGGACTTGCATTTCCTGGAAGTGTTCTAAAAGAGAA
ACACCGGAACATGCTACAATACCAGCTTCCATCTTCATTATCTTCTCTGGCCAGGATATTCAGCATCCTCTCCCA
GAGCAAAAAGCGACTCCACATAGAAGACTACTCTGTTTCTCAGACAACACTTGACCAAGTATTTGTGAACTTTGC
CAAGGACCAAAGTGATGATGACCACTTAAAAGACCTCTCATTACACAAAAACCAGACAGTAGTGGACGTTGCAGT
TCTCACATCTTTTCTACAGGATGAGAAAGTGAAAGAAAGCTATGTATGAAGAATCCTGTTCATACGGGGTGGCTG
AAAGTAAAGAGGAACTAGACTTTCCTTTGCACCATGTGAAGTGTTGTGGAGAAAAGAGCCAGAAGTTGATGTGGG

FIGURE 1098C

AAGAAGTAAACTGGATACTGTACTGATACTATTCAATGCAATGCAATTCAATGCAATGAAAACAAAATTCCATTA
CAGGGGCAGTGCCTTTGTAGCCTATGTCTTGTATGGCTCTCAAGTGAAAGACTTGAATTTAGTTTTTTACCTATA
CCTATGTGAAACTCTATTATGGAACCCAATGGACATATGGGTTTGAACTCACACTTTTTTTTTTTTTTGTTCC
TGTGTATTCTCATTGGGGTTGCAACAATAATTCATCAAGTAATCATGGCCAGCGATTATTGATCAAAATCAAAAG
GTAATGCACATCCTCATTCACTAAGCCATGCCATGCCCAGGAGACTGGTTTCCCGGTGACACATCCATTGCTGGC
AATGAGTGTGCCAGAGTTATTAGTGCCAAGTTTTTCAGAAAGTTTGAAGCACCATGGTGTGTCATGCTCACTTTT
GTGAAAGCTGCTCTGCTCAGAGTCTATCAACATTGAATATCAGTTGACAGAATGGTGCCATGCGTGGCTAACATC
CTGCTTTGATTCCCTCTGATAAGCTGTTCTGGTGGCAGTAACATGCAACAAAAATGTGGGTGTCTCCAGGCACGG
GAAACTTGGTTCCATTGTTATATTGTCCTATGCTTCGAGCCATGGGTCTACAGGGTCATCCTTATGAGACTCTTA
AATATACTTAGATCCTGGTAAGAGGCAAAGAATCAACAGCCAAACTGCTGGGGCTGCAAGCTGCTGAAGCCAGGG
CATGGGATTAAAGAGATTGTGCGTTCAAACCTAGGGAAGCCTGTGCCCATTTGTCCTGACTGTCTGCTAACATGG
TACACTGCATCTCAAGATGTTTATCTGACACAAGTGTATTATTTCTGGCTTTTTGAATTAATCTAGAAAATGAAA
AGATGGAGTTGTATTTTGACAAAAATGTTTGTACTTTTTAATGTTATTTGGAATTTTAAGTTCTATCAGTGACTT
CTGAATCCTTAGAATGGCCTCTTTGTAGAACCCTGTGGTATAGAGGAGTATGGCCACTGCCCCACTATTTTTATT
TTCTTATGTAAGTTTGCATATCAGTCATGACTAGTGCCTAGAAAGCAATGTGATGGTCAGGATCTCATGACATTA
TATTTGAGTTTCTTTCAGATCATTTAGGATACTCTTAATCTCACTTCATCAATCAAATATTTTTTGAGTGTATGC
TGTAGCTGAAAGAGTATGTACGTACGTATAAGACTAGAGAGATATTAAGTCTCAGTACACTTCCTGTGCCATGTT
ATTCAGCTCACTGGTTTACAAATATAGGTTGTCTTGTGGTTGTAGGAGCCCACTGTAACAATACTGGGCAGCCTT
TTTTTTTTTTTTTTTAATTGCAACAATGCAAAAGCCAAGAAAGTATAAGGGTCACAAGTCTAAACAATGAATTCT
TCAACAGGGAAAACAGCTAGCTTGAAAACTTGCTGAAAAACACAACTTGTGTTTATGGCATTTAGTACCTTCAAA
TAATTGGCTTTGCAGATATTGGATACCCCATTAAATCTGACAGTCTCAAATTTTTCATCTCTTCAATCACTAGTC
AAGAAAAATATAAAAACAACAAATACTTCCATATGGAGCATTTTTCAGAGTTTTCTAACCCAGTCTTATTTTTCT
AGTCAGTAAACATTTGTAAAAATACTGTTTCACTAATACTTACTGTTAACTGTCTTGAGAGAAAAGAAAAATATG
AGAGAACTATTGTTTGGGGAAGTTCAAGTGATCTTTCAATATCATTACTAACTTCTTCCACTTTTTCCAGAATTT
GAATATTAACGCTAAAGGTGTAAGACTTCAGATTTCAAATTAATCTTTCTATATTTTTTAAATTTACAGAATATT
ATATAACCCACTGCTGAAAAAGAAAAAAATGATTGTTTTAGAAGTTAAAGTCAATATTGATTTTAAATATAAGTA
ATGAAGGCATATTTCCAATAACTAGTGATATGGCATCGTTGCATTTTACAGTATCTTCAAAAATACAGAATTTAT
AGAATAATTTCTCCTCATTTAATATTTTTCAAAATCAAAGTTATGGTTTCCTCATTTTACTAAAATCGTATTCTA
ATTCTTCATTATAGTAAATCTATGAGCAACTCCTTACTTCGGTTCCTCTGATTTCAAGGCCATATTTTAAAAAAT
CAAAAGGCACTGTGAACTATTTTGAAGAAAACACAACATTTTAATACAGATTGAAAGGACCTCTTCTGAAGCTAG
AAACAATCTATAGTTATACATCTTCATTAATACTGTGTTACCTTTTAAAATAGTAATTTTTTACATTTTCCTGTG
TAAACCTAATTGTGGTAGAAATTTTTACCAACTCTATACTCAATCAAGCAAAATTTCTGTATATTCCCTGTGGAA
TGTACCTATGTGAGTTTCAGAAATTCTCAAAATACGTGTTCAAAAATTTCTGCTTTTGCATCTTTGGGACACCTC
AGAAAACTTATTAACAACTGTGAATATGAGAAATACAGAAGAAAATAATAAGCCCTCTATACATAAATGCCCAGC
ACAATTCATTGTTAAAAAACAACCAAACCTCACACTACTGTATTTCATTATCTGTACTGAAAGCAAATGCTTTGT
GACTATTAAATGTTGCACATCATTCATTCACTGTATAGTAATCATTGACTAAAGCCATTTGTCTGTGTTTTCTTC
TTGTGGTTGTATATATCAGGTAAAATATTTTCCAAAGAGCCATGTGTCATGTAATACTGAACCACTTTGATATTG
AGACATTAATTTGTACCCTTGTTATTATCTACTAGTAATAATGTAATACTGTAGAAATATTGCTCTAATTCTTTT
CAAAATTGTTGCATCCCCCTTAGAATGTTTCTATTTCCATAAGGATTTAGGTATGCTATTATCCCTTCTTATACC
CTAAGATGAAGCTGTTTTTGTGCTCTTTGTTCATCATTGGCCCTCATTCCAAGCACTTTACGCTGTCTGTAATGG
GATCTATTTTTGCACTGGAATATCTGAGAATTGCAAAACTAGACAAAAGTTTCACAACAGATTTCTAAGTTAAAT
CATTTTCATTAAAAGGAAAAAAGAAAAAAAATTTTGTATGTCAATAACTTTATATGAAGTATTAAAATGCATATT
TCTATGTTGTAATATAATGAGTCACAAAATAAAGCTGTGACAGTTCTGTTGGTCTACAGAAA

FIGURE 1099

MACWPQLRLLLWKNLTFRRRQTCQLLLEVAWPLFIFLILISVRLSYPPYEQHECHFPNKAMPSAGTLPWVQGIIC
NANNPCFRYPTPGEAPGVVGNFNKSIVARLFSDARRLLLYSQKDTSMKDMRKVLRTLQQIKKSSSNLKLQDFLVD
NETFSGFLYHNLSLPKSTVDKMLRADVILHKVFLQGYQLHLTSLCNGSKSEEMIQLGDQEVSELCGLPREKLAAA
ERVLRSNMDILKPILRTLNSTSPFPSKELAEATKTLLHSLGTLAQELFSMRSWSDMRQEVMFLTNVNSSSSSTQI
YQAVSRIVCGHPEGGGLKIKSLNWYEDNNYKALFGGNGTEEDAETFYDNSTTPYCNDLMKNLESSPLSRIIWKAL
KPLLVGKILYTPDTPATRQVMAEVNKTFQELAVFHDLEGMWEELSPKIWTFMENSQEMDLVRMLLDSRDNDHFWE
QQLDGLDWTAQDIVAFLAKHPEDVQSSNGSVYTWREAFNETNQAIRTISRFMECVNLNKLEPIATEVWLINKSME
LLDERKFWAGIVFTGITPGSIELPHHVKYKIRMDIDNVERTNKIKDGYWDPGPRADPFEDMRYVWGGFAYLQDVV
EQAIIRVLTGTEKKTGVYMQQMPYPCYVDDIFLRVMSRSMPLFMTLAWIYSVAVIIKGIVYEKEARLKETMRIMG
LDNSILWFSWFISSLIPLLVSAGLLVVILKLGNLLPYSDPSVVFVFLSVFAVVTILQCFLISTLFSRANLAAACG
GIIYFTLYLPYVLCVAWQDYVGFTLKIFASLLSPVAFGFGCEYFALFEEQGIGVQWDNLFESPVEEDGFNLTTSV
SMMLFDTFLYGVMTWYIEAVFPGQYGIPRPWYFPCTKSYWFGEESDEKSHPGSNQKRISEICMEEEPTHLKLGVS
IQNLVKVYRDGMKVAVDGLALNFYEGQITSFLGHNGAGKTTTMSILTGLFPPTSGTAYILGKDIRSEMSTIRQNL
GVCPQHNVLFDMLTVEEHIWFYARLKGLSEKHVKAEMEQMALDVGLPSSKLKSKTSQLSGGMQRKLSVALAFVGG
SKVVILDEPTAGVDPYSRRGIWELLLKYRQGRTIILSTHHMDEADVLGDRIAIISHGKLCCVGSSLFLKNQLGTG
YYLTLVKKDVESSLSSCRNSSSTVSYLKKEDSVSQSSSDAGLGSDHESDTLTIDVSAISNLIRKHVSEARLVEDI
GHELTYVLPYEAAKEGAFVELFHEIDDRLSDLGISSYGISETTLEEIFLKVAEESGVDAETSDGTLPARRNRRAF
GDKQSCLRPFTEDDAADPNDSDIDPESRETDLLSGMDGKGSYQVKGWKLTQQQFVALLWKRLLIARRSRKGFFAQ
IVLPAVFVCIALVFSLIVPPFGKYPSLELQPWMYNEQYTFVSNDAPEDTGTLELLNALTKDPGFGTRCMEGNPIP
DTPCQAGEEEWTTAPVPQTIMDLFQNGNWTMQNPSPACQCSSDKIKKMLPVCPPGAGGLPPPQRKQNTADILQDL
TGRNISDYLVKTYVQIIAKSLKNKIWVNEFRYGGFSLGVSNTQALPPSQEVNDAIKQMKKHLKLAKDSSADRFLN
SLGRFMTGLDTKNNVKVWFNNKGWHAISSFLNVINNAILRANLQKGENPSHYGITAFNHPLNLTKQQLSEVALMT
TSVDVLVSICVIFAMSFVPASFVVFLIQERVSKAKHLQFISGVKPVIYWLSNFVWDMCNYVVPATLVIIIFICFQ
QKSYVSSTNLPVLALLLLLYGWSITPLMYPASFVFKIPSTAYVVLTSVNLFIGINGSVATFVLELFTDNKLNNIN
DILKSVFLIFPHFCLGRGLIDMVKNQAMADALERFGENRFVSPLSWDLVGRNLFAMAVEGVVFFLITVLIQYRFF
IRPRPVNAKLSPLNDEDEDVRRERQRILDGGGQNDILEIKELTKIYRRKRKPAVDRICVGIPPGECFGLLGVNGA
GKSSTFKMLTGDTTVTRGDAFLNKNSILSNIHEVHQNMGYCPQFDAITEL

FIGURE 1100A

GGCGCGGGCGGCCTGGAGCCCCGGGAGCGGCGCGCGGTCCCGGCCCAGCCGGCTCTCCTGGCCTCGCGCTGCA
CATTCTCTCCTGGCGGCGGCGCCACCTGCAGTAGCGTTCGCCCGAACATGGCGACACGGAGCAGCAGGAGGGAGT
CGCGACTCCCGTTCCTATTCACCCTGGTCGCACTGCTGCCGCCCGGAGCTCTCTGCGAAGTCTGGACGCAGAGGC
TGCACGGCGGCAGCGCGCCCTTGCCCCAGGACCGGGGCTTCCTCGTGGTGCAGGGCGACCCGCGCGAGCTGCGGC
TGTGGGCGCGCGGGGATGCCAGGGGGGCGAGCCGCGCGGACGAGAAGCCGCTCCGGAGGAAACGGAGCGCTGCCC
TGCAGCCCGAGCCCATCAAGGTGTACGGACAGGTTAGTCTGAATGATTCCCACAATCAGATGGTGGTGCACTGGG
CTGGAGAGAAAAGCAACGTGATCGTGGCCTTGGCCCGAGATAGCCTGGCATTGGCGAGGCCCAAGAGCAGTGATG
TGTACGTGTCTTACGACTATGGAAAATCATTCAAGAAAATTTCAGACAAGTTAAACTTTGGCTTGGGAAATAGGA
GTGAAGCTGTTATCGCCCAGTTCTACCACAGCCCTGCGGACAACAAGCGGTACATCTTTGCAGACGCTTATGCCC
AGTACCTCTGGATCACGTTTGACTTCTGCAACACTCTTCAAGGCTTTTCCATCCCATTTCGGGCAGCTGATCTCC
TCCTACACAGTAAGGCCTCCAACCTTCTCTTGGGCTTTGACAGGTCCCACCCCAACAAGCAGCTGTGGAAGTCAG
ATGACTTTGGCCAGACCTGGATCATGATTCAGGAACATGTCAAGTCCTTTTCTTGGGGAATTGATCCCTATGACA
AACCAAATACCATCTACATTGAACGACACGAACCCTCTGGCTACTCCACTGTCTTCCGAAGTACAGATTTCTTCC
AGTCCCGGGAAAACCAGGAAGTGATCCTTGAGGAAGTGAGAGATTTTCAGCTTCGGGACAAGTACATGTTTGCTA
CAAAGGTGGTGCATCTCTTGGGCAGTGAACAGCAGTCTTCTGTCCAGCTCTGGGTCTCCTTTGGCCGGAAGCCCA
TGAGAGCAGCCCAGTTTGTCACAAGACATCCTATTAATGAATATTACATCGCAGATGCCTCCGAGGACCAGGTGT
TTGTGTGTGTCAGCCACAGTAACAACCGCACCAATTTATACATCTCAGAGGCAGAGGGGCTGAAGTTCTCCCTGT
CCTTGGAGAACGTGCTCTATTACAGCCCAGGAGGGGCCGGCAGTGACACCTTGGTGAGGTATTTTGCAAATGAAC
CATTTGCTGACTTCCACCGAGTGGAAGGATTGCAAGGAGTCTACATTGCTACTCTGATTAATGGTTCTATGAATG
AGGAGAACATGAGATCGGTCATCACCTTTGACAAAGGGGGAACCTGGGAGTTTCTTCAGGCTCCAGCCTTCACGG
GATATGGAGAGAAAATCAATTGTGAGCTTTCCCAGGGCTGTTCCCTTCATCTGGCTCAGCGCCTCAGTCAGCTCC
TCAACCTCCAGCTCCGGAGAATGCCCATCCTGTCCAAGGAGTCGGCTCCAGGCCTCATCATCGCCACTGGCTCAG
TGGGAAAGAACTTGGCTAGCAAGACAAACGTGTACATCTCTAGCAGTGCTGGAGCCAGGTGGCGAGAGGCACTTC
CTGGACCTCACTACTACACATGGGGAGACCACGGCGGAATCATCACGGCCATTGCCCAGGGCATGGAAACCAACG
AGCTAAAATACAGTACCAATGAAGGGGAGACCTGGAAAACATTCATCTTCTCTGAGAAGCCAGTGTTTGTGTATG
GCCTCCTCACAGAACCTGGGGAGAAGAGCACTGTCTTCACCATCTTTGGCTCGAACAAAGAGAATGTCCACAGCT
GGCTGATCCTCCAGGTCAATGCCACGGATGCCTTGGGAGTTCCCTGCACAGAGAATGACTACAAGCTGTGGTCAC
CATCTGATGAGCGGGGGAATGAGTGTTTGCTGGGACACAAGACTGTTTTCAAACGGCGGACCCCCCATGCCACAT
GCTTCAATGGAGAGGACTTTGACAGGCCGGTGGTCGTGTCCAACTGCTCCTGCACCCGGGAGGACTATGAGTGTG
ACTTCGGTTTCAAGATGAGTGAAGATTTGTCATTAGAGGTTTGTGTTCCAGATCCGGAATTTTCTGGAAAGTCAT
ACTCCCCTCCTGTGCCTTGCCCTGTGGGTTCTACTTACAGGAGAACGAGAGGCTACCGGAAGATTTCTGGGGACA
CTTGTAGCGGAGGAGATGTTGAAGCGCGACTGGAAGGAGAGCTGGTCCCCTGTCCCCTGGCAGAAGAGAACGAGT
TCATTCTGTATGCTGTGAGGAAATCCATCTACCGCTATGACCTGGCCTCGGGAGCCACCGAGCAGTTGCCTCTCA
CCGGGCTACGGGCAGCAGTGGCCCTGGACTTTGACTATGAGCACAACTGTTTGTATTGGTCCGACCTGGCCTTGG
ACGTCATCCAGCGCCTCTGTTTGAATGGAAGCACAGGGCAAGAGGTGATCATCAATTCTGGCCTGGAGACAGTAG
AAGCTTTGGCTTTTGAACCCCTCAGCCAGCTGCTTTACTGGGTAGATGCAGGCTTCAAAAAGATTGAGGTAGCTA
ATCCAGATGGCGACTTCCGACTCACAATCGTCAATTCCTCTGTGCTTGATCGTCCCAGGGCTCTGGTCCTCGTGC
CCCAAGAGGGGGTGATGTTCTGGACAGACTGGGGAGACCTGAAGCCTGGGATTTATCGGAGCAATATGGATGGTT
CTGCTGCCTATCACCTGGTGTCTGAGGATGTGAAGTGGCCCAATGGCATCTCTGTGGACGACCAGTGGATTTACT
GGACGGATGCCTACCTGGAGTGCATAGAGCGGATCACGTTCAGTGGCCAGCAGCGCTCTGTCATTCTGGACAACC
TCCCGCACCCCTATGCCATTGCTGTCTTTAAGAATGAAATCTACTGGGATGACTGGTCACAGCTCAGCATATTCC
GAGCTTCCAAATACAGTGGGTCCCAGATGGAGATTCTGGCAAACCAGCTCACGGGGCTCATGGACATGAAGATTT
TCTACAAGGGGAAGAACACTGGAAGCAATGCCTGTGTGCCCAGGCCATGCAGCCTGCTGTGCCTGCCCAAGGCCA
ACAACAGTAGAAGCTGCAGGTGTCCAGAGGATGTGTCCAGCAGTGTGCTTCCATCAGGGGACCTGATGTGTGACT
GCCCTCAGGGCTATCAGCTCAAGAACAATACCTGTGTCAAAGAAGAGAACACCTGTCTTCGCAACCAGTATCGCT
GCAGCAACGGGAACTGTATCAACAGCATTTGGTGGTGTGACTTTGACAACGACTGTGGAGACATGAGCGATGAGA
GAAACTGCCCTACCACCATCTGTGACCTGGACACCCAGTTTCGTTGCCAGGAGTCTGGGACTTGTATCCCACTGT
CCTATAAATGTGACCTTGAGGATGACTGTGGAGACAACAGTGATGAAAGTCATTGTGAAATGCACCAGTGCCGGA

FIGURE 1100B

GTGACGAGTACAACTGCAGTTCCGGCATGTGCATCCGCTCCTCCTGGGTATGTGACGGGGACAACGACTGCAGGG
ACTGGTCTGATGAAGCCAACTGTACCGCCATCTATCACACCTGTGAGGCCTCCAACTTCCAGTGCCGAAACGGGC
ACTGCATCCCCCAGCGGTGGGCGTGTGACGGGGATACGGACTGCCAGGATGGTTCCGATGAGGATCCAGTCAACT
GTGAGAAGAAGTGCAATGGATTCCGCTGCCCAAACGGCACTTGCATCCCATCCAGCAAACATTGTGATGGTCTGC
GTGATTGCTCTGATGGCTCCGATGAACAGCACTGCGAGCCCCTCTGTACGCACTTCATGGACTTTGTGTGTAAGA
ACCGCCAGCAGTGCCTGTTCCACTCCATGGTCTGTGACGGAATCATCCAGTGCCGCGACGGGTCCGATGAGGATG
CGGCGTTTGCAGGATGCTCCCAAGATCCTGAGTTCCACAAGGTATGTGATGAGTTCGGTTTCCAGTGTCAGAATG
GAGTGTGCATCAGTTTGATTTGGAAGTGCGACGGGATGGATGATTGCGGCGATTATTCTGATGAAGCCAACTGCG
AAAACCCCACAGAAGCCCCAAACTGCTCCCGCTACTTCCAGTTTCGGTGTGAGAATGGCCACTGCATCCCCAACA
GATGGAAATGTGACAGGGAGAACGACTGTGGGGACTGGTCTGATGAGAAGGATTGTGGAGATTCACATATTCTTC
CCTTCTCGACTCCTGGGCCCTCCACGTGTCTGCCCAATTACTACCGCTGCAGCAGTGGGACCTGCGTGATGGACA
CCTGGGTGTGCGACGGGTACCGAGATTGTGCAGATGGCTCTGACGAGGAAGCCTGCCCCTTGCTTGCAAACGTCA
CTGCTGCCTCCACTCCCACCCAACTTGGGCGATGTGACCGATTTGAGTTCGAATGCCACCAACCGAAGACGTGTA
TTCCCAACTGGAAGCGCTGTGACGGCCACCAAGATTGCCAGGATGGCCGGGACGAGGCCAATTGCCCCACACACA
GCACCTTGACTTGCATGAGCAGGGAGTTCCAGTGCGAGGACGGGGAGGCCTGCATTGTGCTCTCGGAGCGCTGCG
ACGGCTTCCTGGACTGCTCGGACGAGAGCGATGAAAAGGCCTGCAGTGATGAGTTGACTGTGTACAAAGTACAGA
ATCTTCAGTGGACAGCTGACTTCTCTGGGGATGTGACTTTGACCTGGATGAGGCCCAAAAAAATGCCCTCTGCTT
CTTGTGTATATAATGTCTACTACAGGGTGGTTGGAGAGAGCATATGGAAGACTCTGGAGACCCACAGCAATAAGA
CAAACACTGTATTAAAAGTCTTGAAACCAGATACCACGTATCAGGTTAAAGTACAGGTTCAGTGTCTCAGCAAGG
CACACAACACCAATGACTTTGTGACCCTGAGGACCCCAGAGGGATTGCCAGATGCCCCTCGAAATCTCCAGCTGT
CACTCCCCAGGGAAGCAGAAGGTGTGATTGTAGGCCACTGGGCTCCTCCCATCCACACCCATGGCCTCATCCGTG
AGTACATTGTAGAATACAGCAGGAGTGGTTCCAAGATGTGGGCCTCCCAGAGGGCTGCTAGTAACTTTACAGAAA
TCAAGAACTTATTGGTCAACACTCTATACACCGTCAGAGTGGCTGCGGTGACTAGTCGTGGAATAGGAAACTGGA
GCGATTCTAAATCCATTACCACCATAAAAGGAAAAGTGATCCCACCACCAGATATCCACATTGACAGCTATGGTG
AAAATTATCTAAGCTTCACCCTGACCATGGAGAGTGATATCAAGGTGAATGGCTATGTGGTGAACCTTTTCTGGG
CATTTGACACCCACAAGCAAGAGAGGAGAACTTTGAACTTCCGAGGAAGCATATTGTCACACAAAGTTGGCAATC
TGACAGCTCATACATCCTATGAGATTTCTGCCTGGGCCAAGACTGACTTGGGGGATAGCCCTCTGGCATTTGAGC
ATGTTATGACCAGAGGGGTTCGCCCACCTGCACCTAGCCTCAAGGCCAAAGCCATCAACCAGACTGCAGTGGAAT
GTACCTGGACCGGCCCCCGGAATGTGGTTTATGGTATTTTCTATGCCACGTCCTTTCTTGACCTCTATCGCAACC
CGAAGAGCTTGACTACTTCACTCCACAACAAGACGGTCATTGTCAGTAAGGATGAGCAGTATTTGTTTCTGGTCC
GTGTAGTGGTACCCTACCAGGGGCCATCCTCTGACTACGTTGTAGTGAAGATGATCCCGGACAGCAGGCTTCCAC
CCCGTCACCTGCATGTGGTTCATACGGGCAAAACCTCCGTGGTCATCAAGTGGGAATCACCGTATGACTCTCCTG
ACCAGGACTTGTTGTATGCAATTGCAGTCAAAGATCTCATAAGAAAGACTGACAGGAGCTACAAAGTAAAATCCC
GTAACAGCACTGTGGAATACACCCTTAACAAGTTGGAGCCTGGCGGGAAATACCACATCATTGTCCAACTGGGGA
ACATGAGCAAAGATTCCAGCATAAAAATTACCACAGTTTCATTATCAGCACCTGATGCCTTAAAAATCATAACAG
AAAATGATCATGTTCTTCTGTTTTGGAAAAGCCTGGCTTTAAAGGAAAAGCATTTTAATGAAAGCAGGGGCTATG
AGATACACATGTTTGATAGTGCCATGAATATCACAGCTTACCTTGGGAATACTACTGACAATTTCTTTAAAATTT
CCAACCTGAAGATGGGTCATAATTACACGTTCACCGTCCAAGCAAGATGCCTTTTTGGCAACCAGATCTGTGGGG
AGCCTGCCATCCTGCTGTACGATGAGCTGGGGTCTGGTGCAGATGCATCTGCAACGCAGGCTGCCAGATCTACGG
ATGTTGCTGCTGTGGTGGTGCCCATCTTATTCCTGATACTGCTGAGCCTGGGGGGTGGGGTTTGCCATCCTGTACA
CGAAGCACCGGAGGCTGCAGAGCAGCTTCACCGCCTTCGCCAACAGCCACTACAGCTCCAGGCTGGGGTCCGCAA
TCTTCTCCTCTGGGGATGACCTGGGGGAAGATGATGAAGATGCCCCTATGATAACTGGATTTTCAGATGACGTCC
CCATGGTGATAGCCTGAAAGAGCTTTCCTCACTAGAAACCAAATGGTGTAAATATTTTATTTGATAAAGATAGTT
GATGGTTTATTTTAAAAGATGCACTTTGAGTTGCAATATGTTATTTTTATATGGGCCAAAAACAAAAAACAAAAA
AAAAAA

FIGURE 1101

MATRSSRRESRLPFLFTLVALLPPGALCEVWTQRLHGGSAPLPQDRGFLVVQGDPRELRLWARGDARGASRADEK
PLRRKRSAALQPEPIKVYGQVSLNDSHNQMVVHWAGEKSNVIVALARDSLALARPKSSDVYVSYDYGKSFKKISD
KLNFGLGNRSEAVIAQFYHSPADNKRYIFADAYAQYLWITFDFCNTLQGFSIPFRAADLLLHSKASNLLLGFDRS
HPNKQLWKSDDFGQTWIMIQEHVKSFSWGIDPYDKPNTIYIERHEPSGYSTVFRSTDFFQSRENQEVILEEVRDF
QLRDKYMFATKVVHLLGSEQQSSVQLWVSFGRKPMRAAQFVTRHPINEYYIADASEDQVFVCVSHSNNRTNLYIS
EAEGLKFSLSLENVLYYSPGGAGSDTLVRYFANEPFADFHRVEGLQGVYIATLINGSMNEENMRSVITFDKGGTW
EFLQAPAFTGYGEKINCELSQGCSLHLAQRLSQLLNLQLRRMPILSKESAPGLIIATGSVGKNLASKTNVYISSS
AGARWREALPGPHYYTWGDHGGIITAIAQGMETNELKYSTNEGETWKTFIFSEKPVFVYGLLTEPGEKSTVFTIF
GSNKENVHSWLILQVNATDALGVPCTENDYKLWSPSDERGNECLLGHKTVFKRRTPHATCFNGEDFDRPVVVSNC
SCTREDYECDFGFKMSEDLSLEVCVPDPEFSGKSYSPPVPCPVGSTYRRTRGYRKISGDTCSGGDVEARLEGELV
PCPLAEENEFILYAVRKSIYRYDLASGATEQLPLTGLRAAVALDFDYEHNCLYWSDLALDVIQRLCLNGSTGQEV
IINSGLETVEALAFEPLSQLLYWVDAGFKKIEVANPDGDFRLTIVNSSVLDRPRALVLVPQEGVMFWTDWGDLKP
GIYRSNMDGSAAYHLVSEDVKWPNGISVDDQWIYWTDAYLECIERITFSGQQRSVILDNLPHPYAIAVFKNEIYW
DDWSQLSIFRASKYSGSQMEILANQLTGLMDMKIFYKGKNTGSNACVPRPCSLLCLPKANNSRSCRCPEDVSSSV
LPSGDLMCDCPQGYQLKNNTCVKEENTCLRNQYRCSNGNCINSIWWCDFDNDCGDMSDERNCPTTICDLDTQFRC
QESGTCIPLSYKCDLEDDCGDNSDESHCEMHQCRSDEYNCSSGMCIRSSWVCDGDNDCRDWSDEANCTAIYHTCE
ASNFQCRNGHCIPQRWACDGDTDCQDGSDEDPVNCEKKCNGFRCPNGTCIPSSKHCDGLRDCSDGSDEQHCEPLC
THFMDFVCKNRQQCLFHSMVCDGIIQCRDGSDEDAAFAGCSQDPEFHKVCDEFGFQCQNGVCISLIWKCDGMDDC
GDYSDEANCENPTEAPNCSRYFQFRCENGHCIPNRWKCDRENDCGDWSDEKDCGDSHILPFSTPGPSTCLPNYYR
CSSGTCVMDTWVCDGYRDCADGSDEEACPLLANVTAASTPTQLGRCDRFEFECHQPKTCIPNWKRCDGHQDCQDG
RDEANCPTHSTLTCMSREFQCEDGEACIVLSERCDGFLDCSDESDEKACSDELTVYKVQNLQWTADFSGDVTLTW
MRPKKMPSASCVYNVYYRVVGESIWKTLETHSNKTNTVLKVLKPDTTYQVKVQVQCLSKAHNTNDFVTLRTPEGL
PDAPRNLQLSLPREAEGVIVGHWAPPIHTHGLIREYIVEYSRSGSKMWASQRAASNFTEIKNLLVNTLYTVRVAA
VTSRGIGNWSDSKSITTIKGKVIPPPDIHIDSYGENYLSFTLTMESDIKVNGYVVNLFWAFDTHKQERRTLNFRG
SILSHKVGNLTAHTSYEISAWAKTDLGDSPLAFEHVMTRGVRPPAPSLKAKAINQTAVECTWTGPRNVVYGIFYA
TSFLDLYRNPKSLTTSLHNKTVIVSKDEQYLFLVRVVVPYQGPSSDYVVVKMIPDSRLPPRHLHVVHTGKTSVVI
KWESPYDSPDQDLLYAIAVKDLIRKTDRSYKVKSRNSTVEYTLNKLEPGG

FIGURE 1102

GGCACGAGGCTGCGCCGGAAGTCCCTAGCCAGGCCTGGCGGTAACCTTGGGGGCCTCACTGCAGCCGCCGCTGCT
GTTGGAGTGGGCTTTGCGAGTCTGAACGTTGGCGGGGCTAGGCTCGTTAACTGCCGAGAGCCTCCGGGTTTGCGG
TGGAGGACGCTGAGGCCCGTGGGGGGCAGGCACCCGGGCGCCGGGCCTCCCAGCCGACATGTCTCTAGTGGCGGA
AGCCTTCGTCTCCCAGATTGCAGCTGCAGAACCTTGGCCTGAAAATGCTACATTATATCAGCAATTGAAAGGGGA
GCAAATTTTACTTTCTGACAATGCAGCTTCTCTTGCAGTGCAGGCCTTTTTGCAAATGTGTAACTTGCCTATCAA
AGTAGTTTGTAGGGCAAATGCAGAATATATGTCTCCATCTGGTAAAGTACCTTTTATTCATGTGGGAAATCAAGT
AGTATCAGAACTTGGTCCAATAGTCCAATTTGTTAAAGCCAAGGGCCATTCTCTTAGTGATGGGCTGGAGGAAGT
CCAAAAAGCAGAAATGAAAGCTTACATGGAATTAGTCAACAATATGCTGTTGACTGCAGAGCTGTATCTTCAGTG
GTGTGATGAAGCTACAGTAGGGGAGATCACTCATGCTAGGTATGGATCTCCTTACCCTTGGCCTCTGAATCATAT
TTTGGCCTATCAAAAACAGTGGGAAGTCAAACGTAAGATGAAAGCTATTGGATGGGGAAAGAAGACTCTGGACCA
GGTCTTAGAGGATGTAGACCAGTGCTGTCAAGCTCTCTCTCAAAGACTGGGAACACAACCGTATTTCTTCAATAA
GCAGCCTACTGAACTTGACGCACTGGTATTTGGCCATCTATACACCATTCTTACCACACAATTGACAAATGATGA
ACTTTCTGAGAAGGTGAAAAACTATAGCAACCTCCTTGCTTTCTGTAGGAGAATTGAACAGCACTATTTTGAAGA
TCGTGGTAAAGGCAGGCTGTCATAGAGTTATGTGTTAGTCTCAGGAGTCTTAACTTTTGAAATATGTTTTACTTG
AATGTTACATTAGATATTGGTGTCAGAATTTTAAAACCAAATTACTGCTTTTTGAAACCTCAAATTATATAATGT
ATCTTATGTATGTGCTTTATATTGTTATTTGTGTATACATTAAAATAATTCTGAATTATTTAATCTGATATGTTG
TATTCTGTATCTTGAAATTTTTGTTTCCTTGAAACATGCATGCATTTAAAAATAAAGCTTAAACAACTGT

FIGURE 1103

MSLVAEAFVSQIAAAEPWPENATLYQQLKGEQILLSDNAASLAVQAFLQMCNLPIKVVCRANAEYMSPSGKVPFI
HVGNQVVSELGPIVQFVKAKGHSLSDGLEEVQKAEMKAYMELVNNMLLTAELYLQWCDEATVGEITHARYGSPYP
WPLNHILAYQKQWEVKRKMKAIGWGKKTLDQVLEDVDQCCQALSQRLGTQPYFFNKQPTELDALVFGHLYTILTT
QLTNDELSEKVKNYSNLLAFCRRIEQHYFEDRGKGRLS

FIGURE 1104A

GCGGCCGCGTCGACGCGGCGGCGGCAGCGGCGTCGGCTCGGGGTTCTCCGGGAGAGGGGGAGTGCGCGGCGGCCG
CAGCTGCCACAAACCAGGTGAAGCTTTGTTCTAAGAATATTTGTTTCATCTAGTTTATGAGTCCAAATGATATAG
ACTGTAAATGTCACAGCAGTGGTGAAAGACTGCTCGGTCATGAGCACCGACAGTAACTCACTGGCACGTGAATTT
CTGACCGATGTCAACCGGCTTTGCAATGCAGTGGTCCAGAGGGTGGAGGCCAGGGAGGAAGAAGAGGAGGAGACG
CACATGGCAACCCTTGGACAGTACCTTGTCCATGGTCGAGGATTTCTATTACTTACCAAGCTAAATTCTATAATT
GATCAGGCATTGACATGTAGAGAAGAACTCCTGACTCTTCTTCTGTCTCTCCTTCCACTGGTATGGAAGATACCT
GTCCAAGAAGAAAAGGCAACAGATTTTAACCTACCGCTCTCAGCAGATATAATCCTGACCAAAGAAAAGAACTCA
AGTTCACAAAGATCCACTCAGGAAAAATTACATTTAGAAGGAAGTGCCCTGTCTAGTCAGGTTTCTGCAAAAGTA
AATGTTTTTCGAAAAAGCAGACGACAGCGTAAAATTACCCATCGCTATTCTGTAAGAGATGCAAGAAAGACACAG
CTCTCCACCTCAGATTCAGAAGCCAATTCAGATGAAAAAGGCATAGCAATGAATAAGCATAGAAGGCCCCATCTG
CTGCATCATTTTTTAACATCGTTTCCTAAACAAGACCACCCCAAAGCTAAACTTGACCGCTTAGCAACCAAAGAA
CAGACTCCTCCAGATGCTATGGCTTTGGAAAATTCCAGAGAGATTATTCCAAGACAGGGGTCAAACACTGACATT
TTAAGTGAGCCAGCTGCCTTGTCTGTTATCAGTAACATGAACAATTCTCCATTTGACTTATGTCATGTTTTGTTA
TCTTTATTAGAAAAAGTTTGTAAGTTTGACGTTACCTTGAATCATAATTCTCCTTTAGCAGCCAGTGTAGTGCCC
ACACTAACTGAATTCCTAGCAGGCTTTGGGGACTGCTGCAGTCTGAGCGACAACTTGGAGAGTCGAGTAGTTTCT
GCAGGTTGGACCGAAGAACCGGTGGCTTTGATTCAAAGGATGCTCTTTCGAACAGTGTTGCATCTTCTGTCAGTA
GATGTTAGTACTGCAGAGATGATGCCAGAAAATCTTAGGAAAAATTTAACTGAATTGCTTAGAGCAGCTTTAAAA
ATTAGAATATGCCTAGAAAAGCAGCCTGACCCTTTTGCACCAAGACAAAAGAAAACACTGCAGGAGGTTCAGGAA
GATTTTGTGTTTTCAAAGTATCGTCATAGAGCCCTTCTTTTACCTGAGCTTTTGGAAGGAGTTCTTCAGATTCTG
ATCTGTTGTCTTCAAAGTGCAGCTTCAAATCCCTTCTACTTCAGTCAAGCCATGGATTTGGTTCAAGAATTCATT
CAGCATCATGGATTTAATTTATTTGAAACAGCAGTTCTTCAAATGGAATGGCTGGTTTTAAGAGATGGAGTTCCT
CCCGAGGCCTCAGAGCATTTGAAAGCCCTAATAAATAGTGTGATGAAAATAATGAGCACTGTCAAAAAAGTGAAA
TCAGAGCAACTTCATCATTCGATGTGTACAAGAAAAAGGCACAGACGATGTGAATATTCTCATTTTATGCATCAT
CACCGAGATCTCTCAGGTCTTCTGGTTTCGGCTTTTAAAAACCAGGTTTCCAAAAACCCATTTGAAGAGACTGCA
GATGGAGATGTTTATTATCCTGAGCGGTGCTGTTGCATTGCAGTGTGTGCCCATCAGTGCTTGCGCTTACTACAG
CAGGCTTCCTTGAGCAGCACTTGTGTCCAGATCCTATCGGGTGTTCATAACATTGGAATATGCTGTTGTATGGAT
CCCAAATCTGTAATCATTCCTTTGCTCCATGCTTTTAAATTGCCAGCACTGAAAAATTTTCAGCAGCATATATTG
AATATCCTTAACAAACTTATTTTGGATCAGTTAGGAGGAGCAGAGATATCACCAAAAATTAAAAAAGCAGCTTGT
AATATTTGTACTGTTGACTCTGACCAACTAGCCCAATTAGAAGAGACACTGCAGGGAAACTTATGTGATGCTGAA
CTCTCCTCAAGTTTATCCAGTCCTTCTTACAGATTTCAAGGGATCCTGCCCAGCAGTGGATCTGAAGATTTGTTG
TGGAAATGGGATGCTTTAAAGGCTTATCAGAACTTTGTTTTTGAAGAAGACAGATTACATAGTATACAGATTGCA
AATCACATTTGCAATTTAATCCAGAAAGGCAATATAGTTGTTCAGTGGAAATTATATAATTACATATTTAATCCT
GTGCTCCAAAGAGGAGTTGAATTAGCACATCATTGTCAACACCTAAGCGTTACTTCAGCTCAAAGTCATGTATGT
AGCCATCATAACCAGTGCTTGCCTCAGGACGTGCTTCAGATTTATGTAAAAACTCTGCCTATCCTGCTTAAATCC
AGGGTAATAAGAGATTTGTTTTTGAGTTGTAATGGAGTAAGTCAAATAATCGAATTAAATTGCTTAAATGGTATT
CGAAGTCATTCTCTAAAAGCATTTGAAACTCTGATAATCAGCCTAGGGGAGCAACAGAAAGATGCCTCAGTTCCA
GATATTGATGGGATAGACATTGAACAGAAGGAGTTGTCCTCTGTACATGTGGGTACTTCTTTTCATCATCAGCAA
GCTTATTCAGATTCTCCTCAGAGTCTCAGCAAATTTTATGCTGGCCTCAAAGAAGCTTATCCAAAGAGACGGAAG
ACTGTTAACCAAGATGTTCATATCAACACAATAAACCTATTCCTCTGTGTGGCTTTTTTATGCGTAAGTAAAGAA
GCAGAGTCTGACAGGGAGTCGGCCAATGACTCAGAAGATACTTCTGGCTATGACAGCACAGCCAGCGAGCCTTTA
AGTCATATGCTGCCATGTATATCTCTCGAGAGCCTTGTCTTGCCTTCTCCTGAACATATGCACCAAGCAGCAGAC
ATTTGGTCTATGTGTCGTTGGATCTACATGTTGAGTTCAGTGTTCCAGAAACAGTTTTATAGGCTTGGTGGTTTC
CGAGTATGCCATAAGTTAATATTTATGATAATACAGAAACTGTTCAGAAGTCACAAAGAGGAGCAAGGAAAAAAG
GAGGGAGATACAAGTGTAAATGAAAACCAGGATTTAAACAGAATTTCTCAACCTAAGAGAACTATGAAGGAAGAT
TTATTATCTTTGGCTATAAAAAGTGACCCCATACCATCAGAACTAGGTAGTCTAAAAAAGAGTGCTGACAGTTTA
GGTAAATTAGAGTTACAGCATATTTCTTCCATAAATGTGGAAGAAGTTTCAGCTACTGAAGCCGCTCCCGAGGAA
GCAAAGCTATTTACAAGTCAAGAAAGTGAGACCTCACTTCAAAGTATACGACTTTTGGAAGCCCTTCTGGCCATT
TGTCTTCATGGTGCCAGAACTAGTCAACAGAAGATGGAATTGGAGTTACCTAATCAGAACTTGTCTGTGGAAAGT

FIGURE 1104B

ATATTATTTGAAATGAGGGACCATCTTTCCCAGTCAAAGGTGATTGAAACACAACTAGCAAAGCCGTTATTTGAT
GCCCTGCTTCGAGTTGCCCTCGGGAATTATTCAGCAGATTTTGAACATAATGATGCTATGACTGAGAAGAGTCAT
CAATCTGCAGAAGAATTGTCATCCCAGCCTGGTGATTTTTCAGAAGAAGCTGAGGATTCTCAGTGTTGTAGTTTT
AAACTTTTAGTTGAAGAAGAAGGTTACGAAGCAGATAGTGAAAGCAATCCTGAAGATGGCGAAACCCAGGATGAT
GGGGTAGACTTAAAGTCTGAAACAGAAGGTTTCAGTGCATCAAGCAGTCCAAATGACTTACTCGAAAACCTCACT
CAAGGGGAAATAATTTATCCTGAGATTTGTATGCTGGAATTAAATTTGCTTTCTGCTAGTAAAGCCAAACTTGAT
GTGCTTGCCCATGTATTTGAGAGTTTTTTGAAAATTATTAGGCAGAAAGAAAAGAATGTTTTTCTGCTCATGCAA
CAGGGAACTGTGAAAAATCTTTTAGGAGGGTTCTTGAGTATTTTAACACAGGATGATTCTGATTTTCAAGCATGC
CAGAGAGTATTGGTGGATCTTTTGGTATCTTTGATGAGTTCAAGAACATGTTCAGAAGAGCTAACCCTTCTTTTG
AGAATATTTCTGGAGAAATCTCCTTGTACAAAAATTCTTCTTCTGGGTATTCTGAAAATTATTGAAAGTGATACT
ACTATGAGCCCTTCACAGTATCTAACCTTCCCTTTACTGCACGCTCCAAATTTAAGCAACGGTGTTTCATCACAA
AAGTATCCTGGGATTTTAAACAGTAAGGCCATGGGTTTATTGAGAAGAGCACGAGTTTCACGGAGCAAGAAAGAG
GCTGATAGAGAGAGTTTTCCCCATCGGCTGCTTTCATCTTGGCACATAGCCCCAGTCCACCTGCCGTTGCTGGGG
CAAAACTGCTGGCCACACCTATCAGAAGGTTTCAGTGTTTCCCTGTGGTTTAATGTGGAGTGTATCCATGAAGCT
GAGAGTACTACAGAAAAAGGAAAGAAGATAAAGAAAAGAAACAAATCATTAATTTTACCAGATAGCAGTTTTGAT
GGTACAGAGAGCGACAGACCAGAAGGTGCAGAGTACATAAATCCTGGTGAAAGACTCATAGAAGAAGGATGTATT
CATATAATTTCACTGGGATCCAAAGCGTTGATGATCCAAGTGTGGGCTGATCCCCACAATGCCACTCTTATCTTT
CGTGTGTGCATGGATTCAAATGATGACATGAAAGCTGTTTTACTAGCACAGGTTGAATCACAGGAGAATATTTTC
CTCCCAAGCAAATGGCAACATTTAGTACTCACCTACTTACAGCAGCCCCAAGGGAAAAGGAGGATTCATGGGAAA
ATCTCCATATGGGTCTCTGGACAGAGGAAGCCTGATGTTACTTTGGATTTTATGCTTCCAAGAAAAACAAGTTTG
TCATCTGATAGCAATAAAACATTTTGCATGATTGGCCATTGTTTATCATCCCAAGAAGAGTTTTTGCAGTTGGCT
GGAAAATGGGACCTGGGAAATTTGCTTCTCTTCAACGGAGCTAAGGTTGGTTCACAAGAGGCCTTTTATCTGTAT
GCTTGTGGACCCAACCATACATCTGTAATGCCATGTAAGTATGGCAAGCCAGTCAATGACTACTCCAAATATATT
AATAAAGAAATTTTGCGATGTGAACAAATCAGAGAACTTTTTATGACCAAGAAAGATGTGGATATTGGTCTCTTA
ATTGAAAGTCTTTCAGTTGTTTATACAACTTACTGTCCTGCTCAGTATACCATCTATGAACCAGTGATTAGACTT
AAAGGTCAAATGAAAACCCAACTCTCTCAAAGACCCTTCAGCTCAAAAGAAGTTCAGAGCATCTTATTAGAACCT
CATCATCTAAAGAATCTCCAACCTACTGAATATAAAACTATTCAAGGCATTCTGCACGAAATTGGTGGAACTGGC
ATATTTGTTTTTCTCTTTGCCAGGGTTGTTGAACTCAGTAGCTGTGAAGAAACTCAAGCATTAGCACTGCGAGTT
ATACTCTCATTAATTAAATACAACCAACAAAGAGTACATGAATTAGAAAATTGTAATGGACTTTCTATGATTCAT
CAGGTGTTGATCAAACAAAAATGCATTGTTGGGTTTTACATTTTGAAGACCCTTCTTGAAGGATGCTGTGGTGAA
GATATTATTTATATGAATGAGAATGGAGAGTTTAAGTTGGATGTAGACTCTAATGCTATAATCCAAGATGTTAAG
CTGTTAGAGGAACTATTGCTTGACTGGAAGATATGGAGTAAAGCAGAGCAAGGTGTTTGGGAAACTTTGCTAGCA
GCTCTAGAAGTCCTCATCAGAGCAGATCACCACCAGCAGATGTTTAATATTAAGCAGTTATTGAAAGCTCAAGTG
GTTCATCACTTTCTACTGACTTGTCAGGTTTTGCAGGAATACAAAGAGGGGCAACTCACACCCATGCCCCGAGAG
GTTTGTAGATCATTTGTGAAAATTATAGCAGAAGTCCTTGGATCTCCTCCAGATTTGGAATTATTGACAATTATC
TTCAATTTCCTTTTAGCAGTTCACCCTCCTACTAATACTTACGTTTGTCACAATCCCACGAACTTCTACTTTTCT
TTGCACATAGATGGCAAGATCTTTCAGGAGAAAGTGCGGTCAATCATGTACCTGAGGCATTCCAGCAGTGGAGGA
AGGTCCCTTATGAGCCCTGGATTTATGGTAATAAGCCCATCTGGTTTTACTGCTTCACCATATGAAGGAGAGAAT
TCCTCTAATATTATTCCACAACAGATGGCCGCCCATATGCTGCGTTCTAGAAGCCTACCAGCATTCCCTACTTCT
TCACTACTAACGCAATCACAAAAACTGACTGGAAGTTTGGGTTGTAGTATCGACAGGTTACAAAATATTGCAGAT
ACTTATGTTGCCACCCAATCAAAGAAACAAAATTCTTTGGGGAGTTCCGACACACTGAAAAAAGGCAAAGAGGAC
GCATTCATCAGTAGCTGTGAGTCTGCAAAAACTGTTTGTGAAATGGAAGCTGTCCTCTCAGCCCAGGTCTCTGTC
AGTGATGTCCCAAAGGGAGTGCTGGGATTTCCAGTGGTCAAAGCAGATCATAAACAGTTGGGAGCAGAACCCAGG
TCAGAAGATGACAGTCCTGGGGATGAGTCCTGCCCACGCCGACCTGATTACCTAAAGGGATTGGCCTCCTTCCAG
CGAAGCCACAGCACTATTGCAAGCCTTGGGCTAGCTTTTCCTTCACAGAACGGATCTGCAGCTGTTGGCCGTTGG
CCAAGTCTTGTTGATAGAAACACTGATGATTGGGAAAACTTTGCCTATTCTCTTGGTTATGAGCCAAATTACAAC
CGAACTGCAAGTGCTCACAGTGTAACTGAAGACTGTTTGGTACCTATATGCTGTGGATTATATGAACTCCTAAGT
GGGGTTCTTCTTATCCTGCCTGATGTTTTGCTTGAAGATGTGATGGACAAGCTTATTCAAGCAGATACACTTTTG

FIGURE 1104C

GTCCTCGTTAACCACCCATCACCAGCTATACAACAAGGTGTTATTAAACTATTAGATGCATATTTTGCTAGAGCA
TCTAAGGAACAAAAAGATAAATTTCTGAAGAATCGTGGATTTTCCTTGCTAGCCAACCAGTTGTATCTTCATCGA
GGAACTCAAGAATTGTTAGAATGCTTCATCGAAATGTTCTTTGGTCGACATATTGGCCTTGATGAAGAATTTGAT
CTGGAAGATGTGAGAAACATGGGATTGTTTCAGAAGTGGTCTGTCATTCCTATTCTGGGACTAATAGAGACCTCT
CTATATGACAACATACTCTTGCATAATGCTCTTTTACTTCTTCTCCAAATTTTAAATTCTTGTTCTAAGGTAGCA
GATATGTTGCTGGATAATGGTCTACTCTATGTGTTATGTAATACAGTAGCAGCCCTGAATGGATTAGAAAAGAAC
ATTCCCATGAGTGAATATAAATTGCTTGCTTGTGATATACAGCAACTTTTCATAGCAGTTACAATTCATGCTTGC
AGTTCCTCAGGCTCACAATATTTTAGGGTTATTGAAGACCTTATTGTAATGCTTGGATATCTTCAAAATAGCAAA
AACAAGAGGACACAAAATATGGCTGTTGCACTACAGCTTAGAGTTCTCCAGGCTGCTATGGAATTTATAAGGACC
ACCGCAAATCATGACTCTGAAAACCTCACAGATTCACTCCAGTCACCTTCTGCTCCCCATCATGCAGTAGTTCAA
AAGCGGAAAAGCATTGCTGGTCCTCGAAAATTTCCCCTTGCTCAAACTGAATCGCTTCTGATGAAAATGCGTTCA
GTGGCAAATGATGAGCTTCATGTGATGATGCAACGGAGAATGAGCCAAGAGAACCCTAGCCAAGCAACTGAAACG
GAACTTGCGCAGAGACTACAGAGGCTCACTGTTTTAGCAGTCAACAGGATTATTTATCAAGAATTTAATTCAGAC
ATTATTGACATTTTGAGAACTCCAGAAAATGTAACTCAAAGCAAGACCTCAGTTTTCCAGACCGAAATTTCTGAG
GAAAATATTCATCATGAACAGTCTTCTGTTTTCAATCCATTTCAGAAAGAAATTTTTACATATCTGGTAGAAGGA
TTCAAAGTATCTATTGGTTCAAGTAAAGCCAGTGGTTCCAAGCAGCAATGGACTAAAATTCTGTGGTCTTGTAAG
GAGACCTTCCGAATGCAGCTTGGGAGACTACTAGTGCATATTTTGTCGCCAGCCCACGCTGCACAAGAGAGAAAG
CAAATTTTTGAAATAGTTCATGAACCAAATCATCAGGAAATACTACGAGACTGTCTCAGCCCATCCCTACAACAT
GGAGCCAAGTTAGTTTTGTATTTGTCAGAGTTGATACATAATCACCAAGGTGAATTGACTGAAGAAGAGCTAGGC
ACAGCAGAACTGCTTATGAATGCTTTGAAGTTATGTGGTCACAAGTGCATCCCTCCCAGTGCATCAACAAAAGCA
GACCTTATTAAAATGATCAAAGAGGAACAAAAGAAATATGAAACTGAAGAAGGAGTGAATAAAGCTGCTTGGCAG
AAAACAGTTAACAATAATCAACAAAGTCTCTTTCAGCGTCTGGATTCAAAATCAAAGGATATATCTAAAATAGCT
GCAGATATCACCCAGGCAGTGTCTCTCTCCCAAGGAAATGAGAGAAAAAAGGTGATCCAGCATATTAGAGGAATG
TATAAAGTAGATTTGAGTGCCAGCAGACATTGGCAGGAACTTATTCAGCAGCTGACACATGATAGAGCAGTATGG
TATGACCCCATCTACTATCCAACCTCATGGCAGTTGGATCCAACAGAAGGGCCAAATCGAGAGAGGAGACGTTTA
CAGAGATGTTATTTAACTATTCCAAATAAGTATCTCCTTAGGGATAGACAGAAATCAGAAGATGTTGTCAAACCA
CCACTCTCTTACCTGTTTGAAGACAAAACTCATTCTTCTTTCTCTTCTACTGTCAAAGACAAAGCTGCAAGTGAA
TCTATAAGAGTGAATCGAAGATGCATCAGTGTTGCACCATCTAGAGAGACAGCTGGTGAATTGTTACTAGGTAAA
TGTGGAATGTATTTTGTGGAAGATAATGCTTCTGATACAGTTGAAAGTTCGAGCCTTCAGGGAGAGTTGGAACCA
GCATCATTTTCCTGGACATATGAAGAAATTAAAGAAGTTCACAAGCGTTGGTGGCAATTGAGAGATAATGCTGTA
GAAATCTTTCTAACAAATGGCAGAACACTCCTGTTGGCATTTGATAACACCAAGGTTCGTGATGATGTATACCAC
AATATACTCACAAATAACCTCCCTAATCTTCTGGAATATGGTAACATCACCGCTCTGACAAATTTATGGTATACT
GGGCAAATTACTAATTTTGAATATTTGACTCACTTAAACAAACATGCTGGCCGATCCTTCAATGATCTCATGCAG
TATCCTGTGTTCCCATTTATACTTGCTGACTACGTTAGTGAGACACTTGACCTCAATGATCTGTTGATATACAGA
AATCTCTCTAAACCTATAGCTGTTCAGTATAAAGAAAAAGAAGATCGTTATGTGGACACATACAAGTACTTGGAG
GAAGAGTACCGCAAAGGAGCCAGAGAAGATGACCCCATGCCTCCCGTGCAGCCCTATCACTATGGCTCCCACTAT
TCCAATAGCGGCACTGTGCTTCACTTCCTGGTCAGGATGCCTCCTTTCACTAAAATGTTTTTAGCCTATCAAGAT
CAAAGTTTTGACATTCCAGACAGAACTTTTCATTCTACAAATACAACTTGGCGACTCTCATCTTTTGAATCTATG
ACTGATGTGAAAGAACTTATCCCAGAGTTTTTCTATCTTCCAGAGTTCCTAGTTAACCGTGAAGGTTTTGATTTT
GGTGTGCGTCAGAATGGTGAACGGGTTAATCACGTCAACCTTCCCCCTTGGGCGCGTAATGATCCTCGTCTTTTT
ATCCTCATCCATCGGCAGGCTCTAGAGTCTGACTACGTGTCGCAGAACATCTGTCAGTGGATTGACTTGGTGTTT
GGGTATAAGCAAAAGGGGAAGGCTTCTGTTCAAGCGATCAATGTTTTTCATCCTGCTACATATTTTGGAATGGAT
GTCTCTGCAGTTGAAGATCCAGTTCAGAGACGAGCGCTAGAAACCATGATAAAAACCTACGGGCAGACTCCCCGT
CAGCTGTTCCACATGGCCCATGTGAGCAGACCTGGAGCCAAGCTCAATATTGAAGGAGAGCTTCCAGCTGCTGTG
GGGTTGCTAGTGCAGTTTGCTTTCAGGGAGACCCGAGAACAGGTCAAAGAAATCACCTATCCGAGTCCTTTGTCA
TGGATAAAAGGCTTGAAATGGGGGGAATACGTGGGTTCCCCCAGTGCTCCAGTACCTGTGGTCTGCTTCAGCCAG
CCCCACGGAGAAAGATTTGGCTCTCTCCAGGCTCTGCCCACCAGAGCAATCTGTGGTTTGTCACGGAATTTCTGT
CTTGTGATGACATATAGCAAGGAACAAGGTGTGAGAAGCATGAACAGTACGGACATTCAGTGGTCAGCCATCCTG

FIGURE 1104D

AGCTGGGGATATGCTGATAATATTTTAAGGTTGAAGAGTAAACAAAGTGAGCCTCCAGTAAACTTTATTCAAAGT
TCACAACAGTACCAGGTGACTAGTTGTGCTTGGGTGCCTGACAGTTGCCAGCTGTTTACTGGAAGCAAATGCGGT
GTCATCACAGCCTACACAAACAGATTTACAAGCAGCACGCCATCAGAAATAGAAATGGAGACTCAAATACATCTC
TATGGTCACACAGAAGAGATAACCAGCTTATTTGTTTGCAAACCATACAGTATACTGATAAGTGTGAGCAGAGAC
GGAACCTGCATCATATGGGATTTAAACAGGTTATGCTATGTACAAAGTCTGGCGGGACACAAAAGCCCTGTCACA
GCTGTCTCTGCCAGTGAAACCTCAGGTGATATTGCTACTGTGTGTGATTCAGCTGGCGGAGGCAGTGACCTCAGA
CTCTGGACGGTGAACGGGGATCTCGTTGGACATGTCCACTGCAGGGAGATCATCTGTTCCGTGGCTTTCTCCAAC
CAGCCTGAGGGAGTATCTATCAATGTAATCGCTGGGGGATTAGAAAATGGAATTGTAAGGTTATGGAGCACATGG
GACTTAAAGCCTGTGAGAGAAATTACATTTCCCAAATCAAATAAGCCCATCATCAGCCTTACATTTTCTTGTGAT
GGCCACCATTTGTACACAGCAAACAGTGATGGGACCGTGATTGCCTGGTGTCGGAAGGACCAGCAGCGCTTGAAA
CAGCCAATGTTCTATTCCTTCCTTAGCAGCTATGCAGCCGGGTGAATGCGAATGAACTTCACGTTCTCCAAAGCA
CTTTAACTCCAAACTAGATTTGTTGACTTCACCAGTTTTAGGAGGTTGAACCTAAAGAAATGGATGACTGGACAA
ACCATCCAAATAATGATAAAGTCTATTCATCTGCACAAAATTCTGAAGAGTCACATGATCCTAAGAGGAAAGTTC
TGTTCTATTTTAGTGATAATCTGGAAGATTGTGTCAATATGCACTAGCCAACAAGTTTTAAGCCTCGCATGGTAC
ATTAAAATGATATTCTTAAAATTTTTTCCCACCAAGGTATTCCAAAGAAAATATTAAGGTCTCCCCTTTTTCTAT
GATTCCAAAAGGACCAGTAGAATTTAAATTGGTTGGTTGATXGTTTATATAAAACACACTAAAATTATATTTTAA
AAGTTTAXTGCCXTGAAATACTCCTCCCACCACACACACATGCTCCAAAAGAGGAAAGAAAAAAAGATAATTTTT
AGGACTTGATAATTGCTTTCTTTGAGAAGCAAATTATTCAGTAGGTGCCTCTGTACCAAATATTTTATGGAATAT
CTAAATACTAAAATAAACTATGAATGAATCTCAAAATTAGGCAGTTTTTGCCAGTTGCTTTCTTAGCTCAAAGGA
GAACCAGAATTTTTTTGACAGCCACAAACAAGAATACAGGTATCTTGGATTTCAGACACATTCTGTTTCTTCATA
AAAATTTTACTTAAAATCTGTAACGCTAGATATTGACTATCCTTAGTTGAGTCACTGAGGTTTAAACACAATGGT
AAGTCTTAAAGTCTGCTATTTACAGAGCATTGAATCTGTACCAATTTGCAATAGAAAGCCTTCAGTATGCAAGAA
GTTTGCATGGGTATTAAGAACACAGCCTAAATAAGGCATTTGATCTAATCTGCAGGAAGAATTTTCTTCCCCAAA
ACAGAATTATAAAAGCTTACTTTAAACAGGAGGCAGAATAATTCTTTTAGGAAACCATTTCATTCTGTTTCTACT
AACCTATACCATCTGAGAATTCCTAAACATCTTGGAGCCGTCTGTCTCTCCCATATGATGGCTGTCTGTATATTT
TTACTTGGGGTGCTGCTTTATTGGCTTTGAAAACACTGTCAGATAAGCTCAGTAATATGTTACCATGGGATAAAA
ATATGTATCCCTGCCTAAGAATAACTTGTGCATTTGTTATGGAAATTTAATTCATATGGTGTTTACAGTACTACT
TTTGTAACTTCCAGACTTTCTAAAACATTCTGCTTAAAAACCATATAAAATATAATTCCAAAGTCTCTGCTGTCA
AGATAGATTCGAGAGAAAGCACGTGGCCATGTATGCTTTAACCTTAAACTGCATACACATGTAGTGATACCTAGG
CTGCATTTAGATCACCGTGTGCTCAGGCCAGGTGTGAATCCTGAGGTCCATGGAGGTGCAGAGATGAGATTACTC
CTATTCACGTTGAAGTGATTTGCTTTGTTAACAAAAAATTGCAGCTATTGTCTAGCTTTCATTTTTTTACTGAGA
ACTTTAAATTAGTCCCCTATTAGAATAGGGTTGCTACTCATCTTTTTTTAAAAACCGAATTTCATCATTTATCTA
AAGAGAAAATATGCAGAATAACTGGTCTTGTTAAGAGTGCAATATTATATTTTTATGTAAAAATAAAAATTAATT
TGGGGGGATTATTTATTCAGCATGAAACCTAATATGTATATGTTTGAAATACTTCATAATGTGCATGTTGTAGCA
AACATTTCTGTAAATTATCACAAGCTCTGTTACCTTTATATACGCTGCCTCTTCAATTTGGAAATAAATTTCATA
AAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1105

MSTDSNSLAREFLTDVNRLCNAVVQRVEAREEEEEETHMATLGQYLVHGRGFLLLTKLNSIIDQALTCREELLTL
LLSLLPLVWKIPVQEEKATDFNLPLSADIILTKEKNSSSQRSTQEKLHLEGSALSSQVSAKVNVFRKSRRQRKIT
HRYSVRDARKTQLSTSDSEANSDEKGIAMNKHRRPHLLHHFLTSFPKQDHPKAKLDRLATKEQTPPDAMALENSR
EIIPRQGSNTDILSEPAALSVISNMNNSPFDLCHVLLSLLEKVCKFDVTLNHNSPLAASVVPTLTEFLAGFGDCC
SLSDNLESRVVSAGWTEEPVALIQRMLFRTVLHLLSVDVSTAEMMPENLRKNLTELLRAALKIRICLEKQPDPFA
PRQKKTLQEVQEDFVFSKYRHRALLLPELLEGVLQILICCLQSAASNPFYFSQAMDLVQEFIQHHGFNLFETAVL
QMEWLVLRDGVPPEASEHLKALINSVMKIMSTVKKVKSEQLHHSMCTRKRHRRCEYSHFMHHHRDLSGLLVSAFK
NQVSKNPFEETADGDVYYPERCCCIAVCAHQCLRLLQQASLSSTCVQILSGVHNIGICCCMDPKSVIIPLLHAFK
LPALKNFQQHILNILNKLILDQLGGAEISPKIKKAACNICTVDSDQLAQLEETLQGNLCDAELSSSLSSPSYRFQ
GILPSSGSEDLLWKWDALKAYQNFVFEEDRLHSIQIANHICNLIQKGNIVVQWKLYNYIFNPVLQRGVELAHHCQ
HLSVTSAQSHVCSHHNQCLPQDVLQIYVKTLPILLKSRVIRDLFLSCNGVSQIIELNCLNGIRSHSLKAFETLII
SLGEQQKDASVPDIDGIDIEQKELSSVHVGTSFHHQQAYSDSPQSLSKFYAGLKEAYPKRRKTVNQDVHINTINL
FLCVAFLCVSKEAESDRESANDSEDTSGYDSTASEPLSHMLPCISLESLVLPSPEHMHQAADIWSMCRWIYMLSS
VFQKQFYRLGGFRVCHKLIFMIIQKLFRSHKEEQGKKEGDTSVNENQDLNRISQPKRTMKEDLLSLAIKSDPIPS
ELGSLKKSADSLGKLELQHISSINVEEVSATEAAPEEAKLFTSQESETSLQSIRLLEALLAICLHGARTSQQKME
LELPNQNLSVESILFEMRDHLSQSKVIETQLAKPLFDALLRVALGNYSADFEHNDAMTEKSHQSAEELSSQPGDF
SEEAEDSQCCSFKLLVEEEGYEADSESNPEDGETQDDGVDLKSETEGFSASSSPNDLLENLTQGEIIYPEICMLE
LNLLSASKAKLDVLAHVFESFLKIIRQKEKNVFLLMQQGTVKNLLGGFLSILTQDDSDFQACQRVLVDLLVSLMS
SRTCSEELTLLLRIFLEKSPCTKILLLGILKIIESDTTMSPSQYLTFPLLHAPNLSNGVSSQKYPGILNSKAMGL
LRRARVSRSKKEADRESFPHRLLSSWHIAPVHLPLLGQNCWPHLSEGFSVSLWFNVECIHEAESTTEKGKKIKKR
NKSLILPDSSFDGTESDRPEGAEYINPGERLIEEGCIHIISLGSKALMIQVWADPHNATLIFRVCMDSNDDMKAV
LLAQVESQENIFLPSKWQHLVLTYLQQPQGKRRIHGKISIWVSGQRKPDVTLDFMLPRKTSLSSDSNKTFCMIGH
CLSSQEEFLQLAGKWDLGNLLLFNGAKVGSQEAFYLYACGPNHTSVMPCKYGKPVNDYSKYINKEILRCEQIREL
FMTKKDVDIGLLIESLSVVYTTYCPAQYTIYEPVIRLKGQMKTQLSQRPFSSKEVQSILLEPHHLKNLQPTEYKT
IQGILHEIGGTGIFVFLFARVVELSSCEETQALALRVILSLIKYNQQRVHELENCNGLSMIHQVLIKQKCIVGFY
ILKTLLEGCCGEDIIYMNENGEFKLDVDSNAIIQDVKLLEELLLDWKIWSKAEQGVWETLLAALEVLIRADHHQQ
MFNIKQLLKAQVVHHFLLTCQVLQEYKEGQLTPMPREVCRSFVKIIAEVL

FIGURE 1106A

CTGCGGCGGCGCGCTCCGAGCCTGCGTCTAGGGCGCCCCCGGGTCAGAGCTGTCGCCGTGGCCGCCGCTGCAAAG
AACAATGTACCGCAAGCAGCGCTCGCTCCTCCGTTTCTTCCCACCGGCCTAAAGACGACGGCGGGGGCGGCCCGC
GCAGCGGCCGCAGCTCTGGCTCCTCTTCAGGCCCGGCTCGCCGCAGCTCACCGCCGCCTTCCGCCCTCCGGCTCC
TCGTCGCGGACCCCGGCTCGCCGACCCCGCTCGCCCTCAAGGCACCGCGGCCGCCGGGCCTCGCCGTCCCCGCCA
CGGGTTCGTCGCGTCTCCCCGTCCCCGCCTCGGGCCCGTCGCGGCTCCCCGTCGCCACCGCGGGGCCGACGACTC
TTCCCGCCGGGCCCGGCCGGCTTCAGAGGCAGCAGCCGAGGGGAGTCCCGCGCCGACTATGCCCGGGACGGCCGC
GGAGACCATCCAGGCGACAGCGGCAGCCGGAGACGCTCTCCTGGTCTGTGTTCTGACTCTTTGGAAAAGAGCTTA
AGGATCACTGTTGGCAATGACCACTTCTGTGTTAGCACACCAGAACGGCGACGGCTTAGTGATCGGCTGGGGTCA
CCAGTGGATAATCTGGAAGACATGGACAGGGATGACCTGACTGATGATTCTGTCTTCACTCGAAGCTCCCAGTGC
TCTCGGGGTCTTGAGCGATATATTTCCCAGGAGGAAGGGCCTCTCAGTCCCTTCTTGGGACAACTTGATGAGGAC
TACCGAACAAAAGAAACTTTCCTGCATCGATCTGATTATAGTCCCCATATCAGTTGTCATGATGAGCTGTTGCGG
GGAACAGAACGGAATCGAGAAAAACTCAAAGGCTACTCCATACGATCTGAAGAAAGGAGCCGGGAGGCCAAAAGA
CCCCGTTATGATGACACAGTGAAGATAAACAGCATGGGAGGGGATCACCCAAGTTTTACATCAGGAACTCGCAAC
TATCGACAGCGTAGAAGAAGCCCAAGTCCTAGGTTTCTCGACCCTGAGTTTCGAGAACTGGATCTTGCCAGACGA
AAGCGAGAGGAAGAGGAGGAGCGAAGTAGGAGCTTGAGTCAGGAGCTGGTTGGGGTTGATGGTGGTGGTACTGGC
TGTTCCATCCCTGGATTGTCAGGTGTCCTAACAGCATCGGAGCCAGGATATTCTTTGCATCGGCCTGAGGAAGTA
TCTGTGATGCCCAAGAAATCCATTTTGAAGAAGCGGATTGAGGTGGACATAATGGAGCCCTCCATGCAGCTTGAG
AGTTTTTCCAGCAGTACCAGCTCCAGCCAGGATCACCCTCTCTACTCTGGGCACCCATCCCTTCCACTAAGTGGT
GCTATTGCTGCTTTTGCCTCAGAGATTGAAAACAAGGGGACTATGGTAGAGACTGCCTTGAAGGAACCTCAGGGC
AACCTCTACCAATGGGGTCCCCTTCCTGGGATTCCCAAAGACAACAGTCCTCTCAGAGAAAAATTTGGAAGTTTT
CTATGCCACAAGGATAATTTGGATTTGAAGGCTGAGGGACCTGAGCGACACACAGACTTCCTGCTGCCCCATGAG
AGAGCTAGCCAGGATGGCAGTGGTTTTTCCCGCATTCTGAGCATGTTGGCTGATTCTACCAGTACACAGGAAAAA
AGGCGACGTAGCTTTCCCGACATTGAAGATGAGGAGAAATTTCTCTATGGGGATGAAGAAGAGGATTTAAAGGCA
GAATCCGTACCAAAGCCCCTTGGGAGCTCTGAGAGTGAAGTTATGAGGCAGAAGGCAAGCTCCCTGCCGTCTTCA
GCTCCAGCTGTAAAGCTAGAATCACTAGAAGAGACCAATCCAGAATATGCGAAGATCCATGACTTGCTCAAGACA
ATAGGGCTGGATATTGGAGTAGCAGAGATTAGTCAATTGGCTGCACGCACCCAGGAACGACTTCATGGCAAGAAG
CCATCATTACGCTCCTCAGCTGACCGCCGTTCCTCAGTTGACCGATACTTTTCAGCTGACCACTGTTCCTCAGTT
GACCACCGCTTCTCAGCTGACCGCTGTTCCTCAGTTGACCACTGCTTCTCAGCTGATCGACGTTCCTCAGATCCC
CACAGACTAGAGAGCAGGGAGGCACATCATAGCAATACCCACTCTCCAGAGGTGTCCCATCCACACCCACCTTCT
CCTGTGGATCCTTACCTGCTCACAAAAAACAGCCCTCCATTCCTAAAGTCTGACCATCCAGTGGGTCATATTTCA
GGACCAGAGGTGGTTGGTAGTGGGTTTCAGTCATCTGTTGCAGTCAGGTGCATGTTGCCATCAGCCCCATCTGCC
CCAATTAGACTTCCACACACTGCTGCTTTATCTCAGTTTCACATGCCAAGGGCCTCTCAGTTTGCTGCAGCTCGG
ATACCTCCGAACTACCAGGGACCTGCCATTCCCCCTGCCTCTTTTGATGCCTATAGGCACTACATGGCATATGCA
GCCTCCAGATGGCCCATGTATCCCACCTCTCAACCGTCAAACCACCCTGTACCTGAACCACACAGGATAATGCCA
ATAACCAAACAAGCTACTCGTAGCCGTCCCAATCTTCGTGTGATCCCCACTGTGACTCCTGATAAGCCTAAGCAG
AAAGAGTCTCTGCGAGGCTCAATTCCTGCGGCCCAAGTGCCTGTCCAGGTGTCCATTCCATCACTCATAAGATAT
AATCCAGAGAAGATCTCTGATGAGAAGAACCGTGCTTCCCAGAAGCAAAAGGTTATTGAAGAGAGGGAAAAACTA
AAGAATGACCGGGAAGCCCGCCAGAAGAAGATGTACTATCTTAGGACCGAGTTAGAGCGGCTTCATAAACAACAA
GGAGAAATGCTGCGCAAGAAACGAAGGGAGAAGGATGGCCACAAAGATCCTCTCTTGGTGGAGGTGAGTCGGCTT
CAGGATAACATTATGAAGGACATTGCAGAGCTACGGCAAGAGGCAGAAGAGGCAGAAAAGAAGCAATCTGAACTG
GACAAAGTGGCTCAGATCTTGGGAATTAACATTTTCGATAAATCCCAGAAGTCTTTAAGTGACAGTAGAGAGCCT
ACAGAGAAGCCTGGGAAAGCAGAAAAATCTAAGAGCCCAGAAAAAGTGTCATCGTTCTCAAACTCCTCCTCCAAC
AAGGAATCAAAAGTAAACAATGAGAAGTTTTGTATTAAGAGCCCCAAGCCTGCCGAAAGCCCCCAGTCAGCCACT
AAGCAGTTGGATCAGCCCACTGCTGCTTATGAGTATTATGATGCTGGCAATCACTGGTGCAAAGACTGCAACACC
ATCTGTGGGACCATGTTTGATTTCTTCACTCATATGCACAATAAGAAGCACACACAGACACTGGATCCCTACAAC
AGACCTTGGGCTTCAAAGACCCAGAGTGAGGCCAAGCAAGATGCCATAAAGCGCACTGACAAGATAACTGTTCCT
GCAAAAGGCTCTGAGTTTCTGGTTCCCATCAGTGGATTTTATTGCCAGCTCTGTGAGGAATTTTTGGGGGATCCA
ATTTCTGGGGAGCAACATGTGAAGGGTCACCAACACAATGAGAAATACAAGAAATATGTGGATGAAAACCCATTA

FIGURE 1106B

TATGAGGAGCGGCGGAATCTGGACCGCCAAGCTGGCTTGGCTGTGGTCCTAGAGACAGAACGGCGACGGCAGAGT
GAGCTAAAGCGCAAACTTAGTGAGAAACCAAAGGAGGAGAAGAAAGAAAAAAAGGCAAAGGCTGTGAAAGAAGTA
AAGGAGGATGACAAGGTCTCTGAGAAATTAGAAGACCAACTCTCTGAGGGTAGGAACTCCCCTGAAAAAGCTGAA
AATAAAAGGAACACTGGCATCAAACTCCAGTTTAAAGAAGAAGTAAAGAAGGAATCACCAACATCATCTTCTTTT
GGGAAATTCAGCTGGAAGAAGCCCGAAAAAGAAGAGGAGAAAAGTTCCTTGGTGACCCCAAGTATCTCTAAAGAA
GAGATTCTAGAAAGTAGTAAGGACAAAGAGGATGGCAAAACTGAAGCTGGGAAGGCAAAGCCTATCAAAATCAAG
CTCTCTGGGAAAACTGTTGTTGCACATACCAGCCCTTGGATGCCTGTTGTGACAACTTCCACACAGACTAAGATC
GGACCCAACCTGCCTATTCCATCCACAGTACTCCGCAAGTCATGTTCAGCCACAATGAGCAAGCCAGCTCCTCTT
AACACCTTTCTGTCTATTAAGTCCTCTGGAACCACTGCTAAACCTCTGCCAGTGGTTAAAGAGTCTTCAGCTGAT
CTCCTCTTACCTCCAGACATCATCTCCAAAGCATTTGGAGGGGAAGAGGTGATTCTAAAAGGGTCTCCAGAGGAA
AAAGTGGTGTTGGCTGAAAAGAGTGAGCCATCTCATTTACCTGAACAAATACTACCACCTCCTCCACCACCCCCA
CCTCCACCACCTCCACCACCCCCCGTTATACCTCATCCAGCTGCCCCGTCTGCTGCTCAAGCAAATGCTATCTTG
GCTCCAGTAAAATCAAACCCAGTTGTATCTCAAACTCTCAGCCCTGGCTTCGTGGGTCCTAACATTTTGAACCCA
GTGTTGCCTGTAGCCATCATGGCCTCAGCACAGCCAGCTGCCATTCCTTCTGATGAGACAGCTCCTGGGGTGAGT
GAGAGTGACCGAGACCAGACCCTGTTCTCTGTGTTAGTACGTCCTCCACCACCCCTCTCAAGTGTGTTCAGTGAA
CAAGCCAAAAAATTAGAGAAGCGAAATTCATGCTTAGCCACAGCCAATGCTAAGGACCTGTATGACATATTCTAT
AGTAGTGGTGGAAAGGGGGCCCCTGAGACTAAGGGGGCCCCTGAGACTAAGCTAAGTGGTGGTCCATTGGCCAAT
GGGGAAAATAGCAACCTCTCTAGAACCAAAAGTTCAGACACCTCTTCTACTTCTCCTTTGAACAGCAGTGCATCC
CAAGAGGAGTTGCATCAAGATGAGGGTTTGGTCGCTGCTCCTATAGTTAGCAACTCTGAAAAGCCCATTGCAAAA
ACTCTGGTGGCCCTAGGGAAATGGTCAGTTGTAGAACATGTAGGCCCAAAAAGCACAGGCAGCACCTATGGCTTC
CTACAGCCTCTGACAAGGTTGTGCCAAAGCAGGCCTTATGAAACAATTACCCCAAAGACAGACACTTTGGCCATA
TGGACCTCTAGTTCCTTCCAGAGTGACACTAGTAGGGATATATCTCCAGAGAAGAGTGAGCTTGACCTGGGAGAG
CCAGGACCACCTGGTGTAGAACCACCTCCTCAACTGTTAGATATACAGTGCAAAGAATCTCAGAAGTTGGTAGAA
ATCCACCTCAGAGAATCTGTTAACCAGGATAAGGAAAGCCAAGAGCTCCGTAAATCTGAGGATTGTAGAGAAAGT
GAGATAGAGACAAACACTGAACTAAAAGAAAGGGTAAAGGAGCTGTCTGAGGGGATAGTTGATGAGGGAGCAAGT
ACCAGCATTGGACCCCACAGCATAGATGATTCTAATTTGAACCATGGAAACAGATACATGTGGGAGGGAGAAGTA
AAACAGCCCAACTTGCTAATGATTGACAAAGAGGCTGAACAGTCCAATAAATTGATGACAGGAAGTGAAACTCCA
AGTAAAGTAGTGATCAAATTGAGTCCACAGGCTTGCTCTTTCACAAAGGCAAAATTAGACTCATTTTTATCAGAA
GCTAGGTCTTTACTCAACCCACAAGATACACCTGTGAAAATTTCTGCCCCAGAGTTGCTGCTTCATTCCCCAGCC
AGATCAGCTATGTGTTTAACAGGTAGTCCACAAGAGCAAGGAGTTTCAGTTGTTAGTGAGGAGGGGCTAGAGAAT
TCAGCTCCAGAATCAGCTTCTAGAACTTCTAGGTACAGAAGTCTCAAACTCAAGAGAGAAAGATCAAAAGACTTT
CAAGTTAAAAAGATCTATGAGTTGGCTGTTTGGGATGAAAACAAGAAGAGGCCAGAGACCTGGGAGAGCCCAGAG
AAACCAAAAACAGAAGCACTGGAGCTACAAGATGTCCATCCAGAGTTAACAGTGACAATAGAAAGCAAGGCCCTA
GAAGACTTTGAAGCTACAGACTTAAAGGTAGAGGAGCTTACTGCCCTGGGGAATCTGGGGGATATGCCTGTTGAT
TTCTGCACTACTCGGGTAAGCCCAGCACATAGATCCCCAACTGTCTTGTGTCAGAAAGTGTGTGAAGAAAATTCT
GTATCACCTATAGGGTGTAATTCCTCCGATCCCGCTGACTTCGAACCAATCCCATCTTTTTCTGGGTTTCCGTTA
GATTCTCCCAAAACCTTGGTGCTTGACTTTGAGACAGAGGGTGAACGAAACTCACCTAATCCCAGGAGTGTTAGG
ATCCCTTCTCCTAACATTTTGAAAACTGGACTTACAGAAAATGTTGACCGTGGCTTGGGGGGCCTAGAGGGAACA
CACCAGGCCCTTGACCTGTTAGCAGGAGGAATGATGCCTGAGGAAGTAAAAGAATCTTCCCAATTAGACAAACAA
GAGTCACTCGGATTGGAATTAAAAACAATTAATTTTGCAGGCCTTGGGCCATCTCCTTGCCTTCCAGACCTTGTT
GACTTTGTCACACGGACCTCTGGAGTTCAAAAAGATAAACTGTGTTCTCCACTCTCTGAGCCAGGTGACCCTTCT
AAATGTAGTTCCCTGGAGTTGGGGCCATTACAGCTAGAAATATCGAATGCATCCACCACAGAGGTGGCAATTCTG
CAAGTAGATGATGACAGTGGCGACCCTCTGAATTTGGTTAAAGCTCCAGTGTCAAGGTCCCCTCCAAGGGAGCAG
GTAATTGAAGACAATATGGTCCCTCAGGGAATGCCTGAACAGGAAACTACAGTTGGTGCCATCCAGGACCACACA
GAATCCAGTGTTCACAACTAAGAATAAATACCTAGAGCTACTTGTGAGTGAATCATTGGCTTCTAGAAATCAGAT
GCCCAGATGATCCAAGACTAGTTTGTTATCTCATCTGGAACCTACACCAAGAGATGCAGTCAGCATCTTAAAGTA
AATGTTCATGGAAGCTAAAAAATTTACCTCCTTTCCTTTTCCCTTTCCCCTTAAAACACCAGACAAATCGATAAC
AACTTATATATATATATATATATATCTGTAAAAATGTATTTTGTTAATTTTTTTGGCCAATTTATTTTCTCCCAC

FIGURE 1106C

TTTGTCATTAAAATCACATGTCTAACTGGCTCACCACATAGTGTGCTTTGATTGTATTTTGGCTTTGACTCTGCC
ATTTCTGAAATGTGGGGGAGGATGGAGGCAGCTGACCTCTCCAGTTGCTGTGTTGTATTCCTACCCAATTTCCTG
GGCAGTTGATGCATCTCTGGGAAAAACACCAGAAAGCTTGCTGAAATGGAAAACTTGGAAGAATTGTTCATCTCT
TAGGCTTCCATTTGGATGGGCCTGCCTTAACATTGTTTGAAATGCAGCGTGAGTAGCTCTTTTGTTTACTGTTTA
CACCCCTTATTGGCATGTCAACTCCTGTACTTCCCTTACTCTGTTGCCTTTCTTGAGATGCATTGTCCTGCTAAC
CCACAAACCTGTTTGGAAATAAACATGGAAGAATATCTGGCAGGCTTACTTTTAGAAGACGACAAATCGGTAAGG
CTTATTCATGGTTCATTGCCAGGAGCAGATATGCTTTTGAGATCACTTTTATTTTTGAAATGGCCTTTGTTCATT
GTATTGTGATCCAATAACACTTTGTATTAAATTGTTTAGCAGCCATTTGTGTTGTGAAGGGGTAGAAGATCTCTG
AAACTTGTCTTTAGATTGAACTCATTCCCTGTTCCACAAACCCATATGTATCCTTTCCTCAACCTCCTCCTTTCC
CAATTAATTTCAACCATAGTACGATGTTTGGGGTTGTATATTTTGTTAAAAAGATTAAAGAATTTATGAGTTGGC
TTGGACAAGTTTAACTTTATTTTTAATGTGTTAATTACTTGGAATAAATGCATTAATTTCAGAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAA

FIGURE 1107

MDRDDLTDDSVFTRSSQCSRGLERYISQEEGPLSPFLGQLDEDYRTKETFLHRSDYSPHISCHDELLRGTERNRE
KLKGYSIRSEERSREAKRPRYDDTVKINSMGGDHPSFTSGTRNYRQRRRSPSPRFLDPEFRELDLARRKREEEEE
RSRSLSQELVGVDGGGTGCSIPGLSGVLTASEPGYSLHRPEEVSVMPKKSILKKRIEVDIMEPSMQLESFSSSTS
SSQDHPLYSGHPSLPLSGAIAAFASEIENKGTMVETALKEPQGNLYQWGPLPGIPKDNSPLREKFGSFLCHKDNL
DLKAEGPERHTDFLLPHERASQDGSGFSRILSMLADSTSTQEKRRRSFPDIEDEEKFLYGDEEEDLKAESVPKPL
GSSESEVMRQKASSLPSSAPAVKLESLEETNPEYAKIHDLLKTIGLDIGVAEISQLAARTQERLHGKKPSLRSSA
DRRSSVDRYFSADHCSSVDHRFSADRCSSVDHCFSADRRSSDPHRLESREAHHSNTHSPEVSHPHPPSPVDPYLL
TKNSPPFLKSDHPVGHISGPEVVGSGFQSSVAVRCMLPSAPSAPIRLPHTAALSQFHMPRASQFAAARIPPNYQG
PAIPPASFDAYRHYMAYAASRWPMYPTSQPSNHPVPEPHRIMPITKQATRSRPNLRVIPTVTPDKPKQKESLRGS
IPAAQVPVQVSIPSLIRYNPEKISDEKNRASQKQKVIEEREKLKNDREARQKKMYYLRTELERLHKQQGEMLRKK
RREKDGHKDPLLVEVSRLQDNIMKDIAELRQEAEEAEKKQSELDKVAQILGINIFDKSQKSLSDSREPTEKPGKA
EKSKSPEKVSSFSNSSSNKESKVNNEKFCIKSPKPAESPQSATKQLDQPTAAYEYYDAGNHWCKDCNTICGTMFD
FFTHMHNKKHTQTLDPYNRPWASKTQSEAKQDAIKRTDKITVPAKGSEFLVPISGFYCQLCEEFLGDPISGEQHV
KGHQHNEKYKKYVDENPLYEERRNLDRQAGLAVVLETERRRQSELKRKLSEKPKEEKKEKKAKAVKEVKEDDKVS
EKLEDQLSEGRNSPEKAENKRNTGIKLQFKEEVKKESPTSSSFGKFSWKKPEKEEEKSSLVTPSISKEEILESSK
DKEDGKTEAGKAKPIKIKLSGKTVVAHTSPWMPVVTTSTQTKIGPNLPIPSTVLRKSCSATMSKPAPLNTFLSIK
SSGTTAKPLPVVKESSADLLLPPDIISKAFGGEEVILKGSPEEKVVLAEKSEPSHLPEQILPPPPPPPPPPPPPP
PVIPHPAAPSAAQANAILAPVKSNPVVSQTLSPGFVGPNILNPVLPVAIMASAQPAAIPSDETAPGVSESDRDQT
LFSVLVRPPPPLSSVFSEQAKKLEKRNSCLATANAKDLYDIFYSSGGKGAPETKGAPETKLSGGPLANGENSNLS
RTKSSDTSSTSPLNSSASQEELHQDEGLVAAPIVSNSEKPIAKTLVALGKWSVVEHVGPKSTGSTYGFLQPLTRL
CQSRPYETITPKTDTLAIWTSSSFQSDTSRDISPEKSELDLGEPGPPGVEPPPQLLDIQCKESQKLVEIHLRESV
NQDKESQELRKSEDCRESEIETNTELKERVKELSEGIVDEGASTSIGPHSIDDSNLNHGNRYMWEGEVKQPNLLM
IDKEAEQSNKLMTGSETPSKVVIKLSPQACSFTKAKLDSFLSEARSLLNPQDTPVKISAPELLLHSPARSAMCLT
GSPQEQGVSVVSEEGLENSAPESASRTSRYRSLKLKRERSKDFQVKKIYELAVWDENKKRPETWESPEKPKTEAL
ELQDVHPELTVTIESKALEDFEATDLKVEELTALGNLGDMPVDFCTTRVSPAHRSPTVLCQKVCEENSVSPIGCN
SSDPADFEPIPSFSGFPLDSPKTLVLDFETEGERNSPNPRSVRIPSPNILKTGLTENVDRGLGGLEGTHQALDLL
AGGMMPEEVKESSQLDKQESLGLELKTINFAGLGPSPCLPDLVDFVTRTS

FIGURE 1108A

CTGCGGCGGCGCGCTCCGAGCCTGCGTCTAGGGCGCCCCCGGGTCAGAGCTGTCGCCGTGGCCGCCGCTGCAAAG
AACAATGTACCGCAAGCAGCGCTCGCTCCTCCGTTTCTTCCCACCGGCCTAAAGACGACGGCGGGGGCGGCCCGC
GCAGCGGCCGCAGCTCTGGCTCCTCTTCAGGCCCGGCTCGCCGCAGCTCACCGCCGCCTTCCGCCCTCCGGCTCC
TCGTCGCGGACCCCGGCTCGCCGACCCCGCTCGCCCTCAAGGCACCGCGGCCGCCGGGCCTCGCCGTCCCCGCCA
CGGGTTCGTCGCGTCTCCCCGTCCCCGCCTCGGGCCCGTCGCGGCTCCCCGTCGCCACCGCGGGGCCGACGACTC
TTCCCGCCGGGCCCGGCCGGCTTCAGAGGCAGCAGCCGAGGGGAGTCCCGCGCCGACTATGCCCGGGACGGCCGC
GGAGACCATCCAGGCGACAGCGGCAGCCGGAGACGCTCTCCTGGTCTGTGTTCTGACTCTTTGGAAAAGAGCTTA
AGGATCACTGTTGGCAATGACCACTTCTGTGTTAGCACACCAGAACGGCGACGGCTTAGTGATCGGCTGGGGTCA
CCAGTGGATAATCTGGAAGAC**ATG**GACAGGGATGACCTGACTGATGATTCTGTCTTCACTCGAAGCTCCCAGTGC
TCTCGGGGTCTTGAGCGATATATTTCCCAGGAGGAAGGGCCTCTCAGTCCCTTCTTGGGACAACTTGATGAGGAC
TACCGAACAAAAGAAACTTTCCTGCATCGATCTGATTATAGTCCCCATATCAGTTGTCATGATGAGCTGTTGCGG
GGAACAGAACGGAATCGAGAAAAACTCAAAGGCTACTCCATACGATCTGAAGAAAGGAGCCGGGAGGCCAAAAGA
CCCCGTTATGATGACACAGTGAAGATAAACAGCATGGGAGGGGATCACCCAAGTTTTACATCAGGAACTCGCAAC
TATCGACAGCGTAGAAGAAGCCCAAGTCCTAGGTTTCTCGACCCTGAGTTTCGAGAACTGGATCTTGCCAGACGA
AAGCGAGAGGAAGAGGAGGAGCGAAGTAGGAGCTTGAGTCAGGAGCTGGTTGGGGTTGATGGTGGTGGTACTGGC
TGTTCCATCCCTGGATTGTCAGGTGTCCTAACAGCATCGGAGCCAGGATATTCTTTGCATCGGCCTGAGGAAGTA
TCTGTGATGCCCAAGAAATCCATTTTGAAGAAGCGGATTGAGGTGGACATAATGGAGCCCTCCATGCAGCTTGAG
AGTTTTTCCAGCAGTACCAGCTCCAGCCAGGATCACCCTCTCTACTCTGGGCACCCATCCCTTCCACTAAGTGGT
GCTATTGCTGCTTTTGCCTCAGAGATTGAAAACAAGGGGACTATGGTAGAGACTGCCTTGAAGGAACCTCAGGGC
AACCTCTACCAATGGGGTCCCCTTCCTGGGATTCCCAAAGACAACAGTCCTCTCAGAGAAAAATTTGGAAGTTTT
CTATGCCACAAGGATAATTTGGATTTGAAGGCTGAGGGACCTGAGCGACACACAGACTTCCTGCTGCCCCATGAG
AGAGCTAGCCAGGATGGCAGTGGTTTTTCCCGCATTCTGAGCATGTTGGCTGATTCTACCAGTACACAGGAAAAA
AGGCGACGTAGCTTTCCCGACATTGAAGATGAGGAGAAATTTCTCTATGGGGATGAAGAAGAGGATTTAAAGGCA
GAATCCGTACCAAAGCCCCTTGGGAGCTCTGAGAGTGAAGTTATGAGGCAGAAGGCAAGCTCCCTGCCGTCTTCA
GCTCCAGCTGTAAAGCTAGAATCACTAGAAGAGACCAATCCAGAATATGCGAAGATCCATGACTTGCTCAAGACA
ATAGGGCTGGATATTGGAGTAGCAGAGATTAGTCAATTGGCTGCACGCACCCAGGAACGACTTCATGGCAAGAAG
CCATCATTACGCTCCTCAGCTGACCGCCGTTCCTCAGTTGACCGATACTTTTCAGCTGACCACTGTTCCTCAGTT
GACCACCGCTTCTCAGCTGACCGCTGTTCCTCAGTTGACCACTGCTTCTCAGCTGATCGACGTTCCTCAGATCCC
CACAGACTAGAGAGCAGGGAGGCACATCATAGCAATACCCACTCTCCAGAGGTGTCCCATCCACACCCACCTTCT
CCTGTGGATCCTTACCTGCTCACAAAAAACAGCCCTCCATTCCTAAAGTCTGACCATCCAGTGGGTCATATTTCA
GGACCAGAGGTGGTTGGTAGTGGGTTTCAGTCATCTGTTGCAGTCAGGTGCATGTTGCCATCAGCCCCATCTGCC
CCAATTAGACTTCCACACACTGCTGCTTTATCTCAGTTTCACATGCCAAGGGCCTCTCAGTTTGCTGCAGCTCGG
ATACCTCCGAACTACCAGGGACCTGCCATTCCCCCTGCCTCTTTTGATGCCTATAGGCACTACATGGCATATGCA
GCCTCCAGATGGCCCATGTATCCCACCTCTCAACCGTCAAACCACCCTGTACCTGAACCACACAGGATAATGCCA
ATAACCAAACAAGCTACTCGTAGCCGTCCCAATCTTCGTGTGATCCCCACTGTGACTCCTGATAAGCCTAAGCAG
AAAGAGTCTCTGCGAGGCTCAATTCCTGCGGCCCAAGTGCCTGTCCAGGTGTCCATTCCATCACTCATAAGATAT
AATCCAGAGAAGATCTCTGATGAGAAGAACCGTGCTTCCCAGAAGCAAAAGGTTATTGAAGAGAGGGAAAAACTA
AAGAATGACCGGGAAGCCCGCCAGAAGAAGATGTACTATCTTAGGACCGAGTTAGAGCGGCTTCATAAACAACAA
GGAGAAATGCTGCGCAAGAAACGAAGGGAGAAGGATGGCCACAAAGATCCTCTCTTGGTGGAGGTGAGTCGGCTT
CAGGATAACATTATGAAGGACATTGCAGAGCTACGGCAAGAGGCAGAAGAGGCAGAAAAGAAGCAATCTGAACTG
GACAAAGTGGCTCAGATCTTGGGAATTAACATTTTCGATAAATCCCAGAAGTCTTTAAGTGACAGTAGAGAGCCT
ACAGAGAAGCCTGGGAAAGCAGAAAAATCTAAGAGCCCAGAAAAAGTGTCATCGTTCTCAAACTCCTCCTCCAAC
AAGGAATCAAAAGTAAACAATGAGAAGTTTTGTATTAAGAGCCCCAAGCCTGCCGAAAGCCCCCAGTCAGCCACT
AAGCAGTTGGATCAGCCCACTGCTGCTTATGAGTATTATGATGCTGGCAATCACTGGTGCAAAGACTGCAACACC
ATCTGTGGGACCATGTTTGATTTCTTCACTCATATGCACAATAAGAAGCACACACAGACACTGGATCCCTACAAC
AGACCTTGGGCTTCAAAGACCCAGAGTGAGGCCAAGCAAGATGCCATAAAGCGCACTGACAAGATAACTGTTCCT
GCAAAAGGCTCTGAGTTTCTGGTTCCCATCAGTGGATTTTATTGCCAGCTCTGTGAGGAATTTTTGGGGGATCCA
ATTTCTGGGGAGCAACATGTGAAGGGTCACCAACACAATGAGAAATACAAGAAATATGTGGATGAAAACCCATTA

FIGURE 1108B

TATGAGGAGCGGCGGAATCTGGACCGCCAAGCTGGCTTGGCTGTGGTCCTAGAGACAGAACGGCGACGGCAGAGT
GAGCTAAAGCGCAAACTTAGTGAGAAACCAAAGGAGGAGAAGAAAGAAAAAAAGGCAAAGGCTGTGAAAGAAGTA
AAGGAGGATGACAAGGTCTCTGAGAAATTAGAAGACCAACTCTCTGAGGGTAGGAACTCCCCTGAAAAAGCTGAA
AATAAAAGGAACACTGGCATCAAACTCCAGTTTAAAGAAGAAGTAAAGAAGGAATCACCAACATCATCTTCTTTT
GGGAAATTCAGCTGGAAGAAGCCCGAAAAAGAAGAGGAGAAAAGTTCCTTGGTGACCCCAAGTATCTCTAAAGAA
GAGATTCTAGAAAGTAGTAAGGACAAAGAGGATGGCAAAACTGAAGCTGGGAAGGCAAAGCCTATCAAAATCAAG
CTCTCTGGGAAAACTGTTGTTGCACATACCAGCCCTTGGATGCCTGTTGTGACAACTTCCACACAGACTAAGATC
GGACCCAACCTGCCTATTCCATCCACAGTACTCCGCAAGTCATGTTCAGCCACAATGAGCAAGCCAGCTCCTCTT
AACACCTTTCTGTCTATTAAGTCCTCTGGAACCACTGCTAAACCTCTGCCAGTGGTTAAAGAGTCTTCAGCTGAT
CTCCTCTTACCTCCAGACATCATCTCCAAAGCATTTGGAGGGGAAGAGGTGATTCTAAAAGGGTCTCCAGAGGAA
AAAGTGGTGTTGGCTGAAAAGAGTGAGCCATCTCATTTACCTGAACAAATACTACCACCTCCTCCACCACCCCCA
CCTCCACCACCTCCACCACCCCCCGTTATACCTCATCCAGCTGCCCCGTCTGCTGCTCAAGCAAATGCTATCTTG
GCTCCAGTAAAATCAAACCCAGTTGTATCTCAAACTCTCAGCCCTGGCTTCGTGGGTCCTAACATTTTGAACCCA
GTGTTGCCTGTAGCCATCATGGCCTCAGCACAGCCAGCTGCCATTCCTTCTGATGAGACAGCTCCTGGGGTGAGT
GAGAGTGACCGAGACCAGACCCTGTTCTCTGTGTTAGTACGTCCTCCACCACCCCTCTCAAGTGTGTTCAGTGAA
CAAGCCAAAAAATTAGAGAAGCGAAATTCATGCTTAGCCACAGCCAATGCTAAGGACCTGTATGACATATTCTAT
AGTAGTGGTGGAAAGGGGGCCCCTGAGACTAAGGGGGCCCCTGAGACTAAGCTAAGTGGTGGTCCATTGGCCAAT
GGGGAAAATAGCAACCTCTCTAGAACCAAAAGTTCAGACACCTCTTCTACTTCTCCTTTGAACAGCAGTGCATCC
CAAGAGGAGTTGCATCAAGATGAGGGTTTGGTCGCTGCTCCTATAGTTAGCAACTCTGAAAAGCCCATTGCAAAA
ACTCTGGTGGCCCTAGGGAAATGGTCAGTTGTAGAACATGTAGGCCCAAAAAGCACAGGCAGCACCTATGGCTTC
CTACAGCCTCTGACAAGGTTGTGCCAAAGCAGGCCTTATGAAACAATTACCCCAAAGACAGACACTTTGGCCATA
TGGACCTCTAGTTCCTTCCAGAGTGACACTAGTAGGGATATATCTCCAGAGAAGAGTGAGCTTGACCTGGGAGAG
CCAGGACCACCTGGTGTAGAACCACCTCCTCAACTGTTAGATATACAGTGCAAAGAATCTCAGAAGTTGGTAGAA
ATCCACCTCAGAGAATCTGTTAACCAGGATAAGGAAAGCCAAGAGCTCCGTAAATCTGAGGATTGTAGAGAAAGT
GAGATAGAGACAAACACTGAACTAAAAGAAAGGGTAAAGGAGCTGTCTGAGGGGATAGTTGATGAGGGAGCAAGT
ACCAGCATTGGACCCCACAGCATAGATGATTCTAATTTGAACCATGGAAACAGATACATGTGGGAGGGAGAAGTA
AAACAGCCCAACTTGCTAATGATTGACAAAGAGGCTGAACAGTCCAATAAATTGATGACAGGAAGTGAAACTCCA
AGTAAAGTAGTGATCAAATTGAGTCCACAGGCTTGCTCTTTCACAAAGGCAAAATTAGACTCATTTTTATCAGAA
GCTAGGTCTTTACTCAACCCACAAGATACACCTGTGAAAATTTCTGCCCCAGAGTTGCTGCTTCATTCCCCAGCC
AGATCAGCTATGTGTTTAACAGGTAGTCCACAAGAGCAAGGAGTTTCAGTTGTTAGTGAGGAGGGGCTAGAGAAT
TCAGCTCCAGAATCAGCTTCTAGAACTTCTAGGTACAGAAGTCTCAAACTCAAGAGAGAAAGATCAAAAGACTTT
CAAGTTAAAAAGATCTATGAGTTGGCTGTTTGGGATGAAAACAAGAAGAGGCCAGAGACCTGGGAGAGCCCAGAG
AAACCAAAAACAGAAGCACTGGAGCTACAAGATGTCCATCCAGAGTTAACAGTGACAATAGAAAGCAAGGCCCTA
GAAGACTTTGAAGCTACAGACTTAAAGGTAGAGGAGCTTACTGCCCTGGGGAATCTGGGGGATATGCCTGTTGAT
TTCTGCACTACTCGGGTAAGCCCAGCACATAGATCCCCAACTGTCTTGTGTCAGAAAGTGTGTGAAGAAAATTCT
GTATCACCTATAGGGTGTAATTCCTCCGATCCCGCTGACTTCGAACCAATCCCATCTTTTTCTGGGTTTCCGTTA
GATTCTCCCAAAACCTTGGTGCTTGACTTTGAGACAGAGGGTGAACGAAACTCACCTAATCCCAGGAGTGTTAGG
ATCCCTTCTCCTAACATTTTGAAAACTGGACTTACAGAAAATGTTGACCGTGGCTTGGGGGGCCTAGAGGGAACA
CACCAGGCCCTTGACCTGTTAGCAGGAGGAATGATGCCTGAGGAAGTAAAAGAATCTTCCCAATTAGACAAACAA
GAGTCACTCGGATTGGAATTAAAAACAATTAATTTTGCAGGCCTTGGGCCATCTCCTTGCCTTCCAGACCTTGTT
GACTTTGTCACACGGACCTCTGGAGTTCAAAAAGATAAACTGTGTTCTCCACTCTCTGAGCCAGGTGACCCTTCT
AAATGTAGTTCCCTGGAGTTGGGGCCATTACAGCTAGAAATATCGAATGCATCCACCACAGAGGTGGCAATTCTG
CAAGTAGATGATGACAGTGGCGACCCTCTGAATTTGGTTAAAGCTCCAGTGTCAAGGTCCCCTCCAAGGGAGCAG
GTAATTGAAGACAATATGGTCCCTCAGGGAATGCCTGAACAGGAAACTACAGTTGGTGCCATCCAGGACCACACA
GAATCCAGTGTTCACAACTAAGAATAAATACCTAGAGCTACTTGTGAGTGAATCATTGGCTTCTAGAAATCAGAT
GCCCAGATGATCCAAGACTAGTTTGTTATCTCATCTGGAACCTACACCAAGAGATGCAGTCAGCATCTTAAAGTA
AATGTTCATGGAAGCTAAAAAATTTACCTCCTTTCCTTTTCCCTTTCCCCTTAAAACACCAGACAAATCGATAAC
AACTTATATATATATATATATATATCTGTAAAAATGTATTTTGTTAATTTTTTTGGCCAATTTATTTTCTCCCAC

FIGURE 1108C

TTTGTCATTAAAATCACATGTCTAACTGGCTCACCACATAGTGTGCTTTGATTGTATTTTGGCTTTGACTCTGCC
ATTTCTGAAATGTGGGGGAGGATGGAGGCAGCTGACCTCTCCAGTTGCTGTGTTGTATTCCTACCCAATTTCCTG
GGCAGTTGATGCATCTCTGGGAAAAACACCAGAAAGCTTGCTGAAATGGAAAACTTGGAAGAATTGTTCATCTCT
TAGGCTTCCATTTGGATGGGCCTGCCTTAACATTGTTTGAAATGCAGCGTGAGTAGCTCTTTTGTTTACTGTTTA
CACCCCTTATTGGCATGTCAACTCCTGTACTTCCCTTACTCTGTTGCCTTTCTTGAGATGCATTGTCCTGCTAAC
CCACAAACCTGTTTGGAAATAAACATGGAAGAATATCTGGCAGGCTTACTTTTAGAAGACGACAAATCGGTAAGG
CTTATTCATGGTTCATTGCCAGGAGCAGATATGCTTTTGAGATCACTTTTATTTTTGAAATGGCCTTTGTTCATT
GTATTGTGATCCAATAACACTTTGTATTAAATTGTTTAGCAGCCATTTGTGTTGTGAAGGGGTAGAAGATCTCTG
AAACTTGTCTTTAGATTGAACTCATTCCCTGTTCCACAAACCCATATGTATCCTTTCCTCAACCTCCTCCTTTCC
CAATTAATTTCAACCATAGTACGATGTTTGGGGTTGTATATTTTGTTAAAAAGATTAAAGAATTTATGAGTTGGC
TTGGACAAGTTTAACTTTATTTTTAATGTGTTAATTACTTGGAATAAATGCATTAATTTCAGAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAA

FIGURE 1109

MDRDDLTDDSVFTRSSQCSRGLERYISQEEGPLSPFLGQLDEDYRTKETFLHRSDYSPHISCHDELLRGTERNRE
KLKGYSIRSEERSREAKRPRYDDTVKINSMGGDHPSFTSGTRNYRQRRRSPSPRFLDPEFRELDLARRKREEEEE
RSRSLSQELVGVDGGGTGCSIPGLSGVLTASEPGYSLHRPEEVSVMPKKSILKKRIEVDIMEPSMQLESFSSSTS
SSQDHPLYSGHPSLPLSGAIAAFASEIENKGTMVETALKEPQGNLYQWGPLPGIPKDNSPLREKFGSFLCHKDNL
DLKAEGPERHTDFLLPHERASQDGSGFSRILSMLADSTSTQEKRRRSFPDIEDEEKFLYGDEEEDLKAESVPKPL
GSSESEVMRQKASSLPSSAPAVKLESLEETNPEYAKIHDLLKTIGLDIGVAEISQLAARTQERLHGKKPSLRSSA
DRRSSVDRYFSADHCSSVDHRFSADRCSSVDHCFSADRRSSDPHRLESREAHHSNTHSPEVSHPHPPSPVDPYLL
TKNSPPFLKSDHPVGHISGPEVVGSGFQSSVAVRCMLPSAPSAPIRLPHTAALSQFHMPRASQFAAARIPPNYQG
PAIPPASFDAYRHYMAYAASRWPMYPTSQPSNHPVPEPHRIMPITKQATRSRPNLRVIPTVTPDKPKQKESLRGS
IPAAQVPVQVSIPSLIRYNPEKISDEKNRASQKQKVIEEREKLKNDREARQKKMYYLRTELERLHKQQGEMLRKK
RREKDGHKDPLLVEVSRLQDNIMKDIAELRQEAEEAEKKQSELDKVAQILGINIFDKSQKSLSDSREPTEKPGKA
EKSKSPEKVSSFSNSSSNKESKVNNEKFCIKSPKPAESPQSATKQLDQPTAAYEYYDAGNHWCKDCNTICGTMFD
FFTHMHNKKHTQTLDPYNRPWASKTQSEAKQDAIKRTDKITVPAKGSEFLVPISGFYCQLCEEFLGDPISGEQHV
KGHQHNEKYKKYVDENPLYEERRNLDRQAGLAVVLETERRRQSELKRKLSEKPKEEKKEKKAKAVKEVKEDDKVS
EKLEDQLSEGRNSPEKAENKRNTGIKLQFKEEVKKESPTSSSFGKFSWKKPEKEEEKSSLVTPSISKEEILESSK
DKEDGKTEAGKAKPIKIKLSGKTVVAHTSPWMPVVTTSTQTKIGPNLPIPSTVLRKSCSATMSKPAPLNTFLSIK
SSGTTAKPLPVVKESSADLLLPPDIISKAFGGEEVILKGSPEEKVVLAEKSEPSHLPEQILPPPPPPPPPPPPPP
PVIPHPAAPSAAQANAILAPVKSNPVVSQTLSPGFVGPNILNPVLPVAIMASAQPAAIPSDETAPGVSESDRDQT
LFSVLVRPPPPLSSVFSEQAKKLEKRNSCLATANAKDLYDIFYSSGGKGAPETKGAPETKLSGGPLANGENSNLS
RTKSSDTSSTSPLNSSASQEELHQDEGLVAAPIVSNSEKPIAKTLVALGKWSVVEHVGPKSTGSTYGFLQPLTRL
CQSRPYETITPKTDTLAIWTSSSFQSDTSRDISPEKSELDLGEPGPPGVEPPPQLLDIQCKESQKLVEIHLRESV
NQDKESQELRKSEDCRESEIETNTELKERVKELSEGIVDEGASTSIGPHSIDDSNLNHGNRYMWEGEVKQPNLLM
IDKEAEQSNKLMTGSETPSKVVIKLSPQACSFTKAKLDSFLSEARSLLNPQDTPVKISAPELLLHSPARSAMCLT
GSPQEQGVSVVSEEGLENSAPESASRTSRYRSLKLKRERSKDFQVKKIYELAVWDENKKRPETWESPEKPKTEAL
ELQDVHPELTVTIESKALEDFEATDLKVEELTALGNLGDMPVDFCTTRVSPAHRSPTVLCQKVCEENSVSPIGCN
SSDPADFEPIPSFSGFPLDSPKTLVLDFETEGERNSPNPRSVRIPSPNILKTGLTENVDRGLGGLEGTHQALDLL
AGGMMPEEVKESSQLDKQESLGLELKTINFAGLGPSPCLPDLVDFVTRTSGVQKDKLCSPLSEPGDPSKCSSLEL
GPLQLEISNASTTEVAILQVDDDSGDPLNLVKAPVSRSPPREQVIEDNMVPQGMPEQETTVGAIQDHTESSVHN

FIGURE 1110

TTTAACACCCATAGTAGGCCTAAAAGCAGCCACCAATTAAGAAAGCCACAGCACGTACACCCACTCCAGGGATCT
GCCAGCACCCTGTGGGGCCCAGACTACAGGCTGATGGCGGAGGCTTCGAGTGACCCGGGTGCTGAGGAGCGGGAA
GAGTTGCTGGGGCCCACTGCTCAGTGGAGCGTGGAGGACGAGGAGGAGGCCGTCCACGAGCAATGCCAGCATGAG
AGAGACAGGCAGCTTCAGGCCCAGGACGAGGAGGGAGGCGGCCATGTCCCCGAGCGGCCGAAGCAGGAGATGCTC
CTCAGCCTGAAGCCCTCGGAGGCCCCTGAACTGGATGAGGACGAGGGCTTTGGCGACTGGTCCCAGAGGCCAGAG
CAGCGGCAGCAGCACGAGGGGGCGCAGGGCGCCTTGGACAGCGGAGAGCCCCCCCAGTGCAGGAGTCCTGAGGGG
GAGCAAGAGGACAGGCCCGGCCTGCATGCCTACGAAAAGGAGGACAGTGATGAAGTCCACCTGGAGGAGTTGAGT
CTGAGCAAGGAGGGGCCAGGCCCAGAGGACACTGTCCAGGACAACCTGGGGGCCGCAGGGGCTGAGGAGGAACAG
GAGGAGCACCAGAAATGTCAGCAGCCCAGGACACCCAGCCCCTTGGTCTTGGAGGGGACCATCGAACAGAGCTCG
CCTCCCCTGAGCCCTACCACCAAACTCATCGACAGGACCGAGTCCCTAAACCGCTCCATAGAGAAGAGTAACAGT
GTGAAGAAATCCCAGCCAGACTTGCCCATCTCCAAGATTGATCAGTGGCTGGAACAATACACCCAGGCCATCGAG
ACCGCTGGCCGGACCCCCAAGCTAGCCCGCCAGGCCTCCATAGAGCTGCCCAGCATGGCTGTGGCCAGTACCAAG
AGTCGGTGGGAGACGGGTGAGGTACAGGCTCAGTCTGCGGCCAAGACTCCGTCCTGCAAGGATATTGTGGCTGGA
GACATGAGCAAGAAAAGCCTCTGGGAGCAGAAGGGAGGCTCCAAGACCTCATCAACAATTAAGAGCACCCCATCT
GGGAAGAGGTATAAGTTTGTGGCCACCGGGCATGGGAAGTATGAGAAGGTGCTTGTGGAAGGGGGCCCGGCTCCC
TAGGCGTCCCATCTCGCTTCCTGGGTCTGCAGGTCCAGCCGGCTGGCACCCTCCATGTACCCAGGGGAGATTCCA
GCCAGACACCCGCCCCCCGGCCCTGGCTAAGAAGTTGCTTCCTGTTGCCAGCATGACCTACCCTCGCCTCTTTGA
TGCCATCCGCTGCCACCTCCTTTTGCTCCTGGACCCTTTAGCCTCTCTGCCCTTCCACTCTCTGACCACCGCCCC
CGCCCTCCCCACCCAGCTCCGCTTCTTGTTACTTGGGGGAGGAAAGAAACTCCTGATCATTGGCCAAAGGGACTT
ACCCCTGGAGAGGCCAAGTGCCTTCTAGGAAGTTAGGAGGTTGAGGCACAGCCTGTGCAGAGAGGGTGGGTCACC
CCCCCAGATCCAAGGGGAAACTGCAGGTCAAGGGCTGATAACGGCCATGCAGGATGCTTGATGCTGCGTCCCCCG
CTGCTTGCCGCCCCCCACCCCGCCATTTTGTATAATAAAGCTCCCTGTGTATTCTC

FIGURE 1111

MAEASSDPGAEEREELLGPTAQWSVEDEEEAVHEQCQHERDRQLQAQDEEGGGHVPERPKQEMLLSLKPSEAPEL
DEDEGFGDWSQRPEQRQQHEGAQGALDSGEPPQCRSPEGEQEDRPGLHAYEKEDSDEVHLEELSLSKEGPGPEDT
VQDNLGAAGAEEEQEEHQKCQQPRTPSPLVLEGTIEQSSPPLSPTTKLIDRTESLNRSIEKSNSVKKSQPDLPIS
KIDQWLEQYTQAIETAGRTPKLARQASIELPSMAVASTKSRWETGEVQAQSAAKTPSCKDIVAGDMSKKSLWEQK
GGSKTSSTIKSTPSGKRYKFVATGHGKYEKVLVEGGPAP

FIGURE 1112

AAACACTCTGTGTGGCTCCTCGGCTTTGGGACAGAGTGCAAGACGATGACTTGCAAAATGTCGCAGCTGGAACGC
AACATAGAGACCATCATCAACACCTTCCACCAATACTCTGTGAAGCTGGGGCACCCAGACACCCTGAACCAGGGG
GAATTCAAAGAGCTGGTGCGAAAAGATCTGCAAAATTTTCTCAAGAAGGAGAATAAGAATGAAAAGGTCATAGAA
CACATCATGGAGGACCTGGACACAAATGCAGACAAGCAGCTGAGCTTCGAGGAGTTCATCATGCTGATGGCGAGG
CTAACCTGGGCCTCCCACGAGAAGATGCACGAGGGTGACGAGGGCCCTGGCCACCACCATAAGCCAGGCCTCGGG
GAGGGCACCCCCTAAGACCACAGTGGCCAAGATCACAGTGGCCACGGCCATGGCCACAGTCATGGTGGCCACGGC
CACAGGCCACTAATCAGGAGGCCAGGCCACCCTGCCTCTACCCAACCAGGGCCCCGGGGCCTGTTATGTCAAACT
GTCTTGGCTGTGGGGCTAGGGGCTGGGGCCAAATAAAGTCTCTTCCTCCAA

FIGURE 1113

MTCKMSQLERNIETIINTFHQYSVKLGHPDTLNQGEFKELVRKDLQNFLKKENKNEKVIEHIMEDLDTNADKQLS
FEEFIMLMARLTWASHEKMHEGDEGPGHHHKPGLGEGTP

FIGURE 1114A

CACGTTGGGTGACATAATGGGGTTTTTTTAATTATAGATTCACACTGCATTTATTCATCACCCCTGTCCTCTCAT
CCATAACTCAAATTTACTACCAGCAACACAAAATACAAAGATGTGTCCAGTTTCACTACAGCTCTTCGCGTTTAC
AAGTGTCGAGCGCTTGCTTTCGGAACGCCCTTGTGATTGGCCGAGCCAATGCCAGTGACATCAACCAACTTACTT
TTGATTGGAAGGCTGGTTGCTGGGACTGTAGCGTTTGCAGGAAGTCACTTAACTGTTTGGGAGCTGGAAAACCGA
AGCTGAAGTTCTCTTTTGCCATAGGAACGAGCGCAACTGACTAGGAAAGATGTGTCCCAAAGCTCCGCAAGCTGG
AACGTGAGCCAGGAGGCCCGGACCGGCCACGGGACCGCGAGGCACTCCGAAAGTGTGCGGCTGCCCCTTCCCTGC
CTCCCAGCTGTTACCCTTTTAAATGTCAGTGTTCGAGGCTGTAGGGGTAGCACGAGGCAGCGAAACGGAACAGTC
GGATTGGCCGCACGCCTCAGTTCTAGACGCACCTCTCCACCGAAGCCGTTCTGACTGGCAGGGGGAGAAAGTAAA
CAGAGTTGAATCACCCTCCCCACTGGCCAATTGGAGGGGGTTTGGTTTGTGACGTGATGGGATTCTGCGAAATTG
TTACTGAGCAAGAGAATGCCGGAACGTGCGGACCGGCCGGAGCAGGGGTTCAGAAGCCGTCAGTGGACTCGGGAA
AAAGTGTCTCTTAGACCTGGCGCTCGGCGGGGCCCTCGCCACCCGCGTCGGGGTGATCGGGTGAATGTCCTGGGG
CTTTGGCTCGACGGCGAGGCGGCCGAGGGCGTGCACCTCTCTTGCAGTTTCCTCTCCCAGCGCCTCGGGGGCGTT
TTCAGTCGAATAAACTTGCGACCGCCACGTGTGGCATCTTTCCAAGGGAGCCGGCTCAGAGGGGCCGGCGCGCCC
GTCGGGGGATCGCGGCCGGCGCGGGGCAGGGGCGGCGGCTAGAGGCGGCGGCGCGGCGGAGCCCGGGGCCGTGGA
TGCTGCGTGCGGAGGCGCTGCCGGTTACGTAAAGATGAGGGGCTGAGGTCGCCTCGGCGCTCCTGCGAGTCGGAA
GCGCCCCGCGCCCCCGCCCCCTTGGCCGCCGCGCCGTGCCGGGCGGGCGGGTCGTCGTCCGAGGCCAGGGAGGGC
GAGCCGAACCTCCGCAGCCACCGCCAAGTTTGTCCGCGCCGCCTGGGCTGCCGTCGCCCGCACC**ATG**TCCGCGGC
CGCCTACATGGACTTCGTGGCTGCCCAGTGTCTGGTTTCCATTTCGAACCGCGCTGCGGTGCCGGAGCATGGGGT
CGCTCCGGACGCCGAGCGGCTGCGACTACCTGAGCGCGAGGTGACCAAGGAGCACGGTGACCCGGGGGACACCTG
GAAGGATTACTGCACACTGGTCACCATCGCCAAGAGCTTGTTGGACCTGAACAAGTACCGACCCATCCAGACCCC
CTCCGTGTGCAGCGACAGTCTGGAAAGTCCAGATGAGGATATGGGATCCGACAGCGACGTGACCACCGAATCTGG
GTCGAGTCCTTCCCACAGCCCGGAGGAGAGACAGGATCCTGGCAGCGCGCCCAGCCCGCTCTCCCTCCTCCATCC
TGGAGTGGCTGCGAAGGGGAAACACGCCTCCGAAAAGAGGCACAAGTGCCCCTACAGTGGCTGTGGGAAAGTCTA
TGGAAAATCCTCCCATCTCAAAGCCCATTACAGAGTGCATACAGGTGAACGGCCCTTCCCCTGCACGTGGCCAGA
CTGCCTTAAAAAGTTCTCCCGCTCAGACGAGCTGACCCGCCACTACCGGACCCACACTGGGGAAAAGCAGTTCCG
CTGTCCGCTGTGTGAGAAGCGCTTCATGAGGAGTGACCACCTCACAAAGCACGCCCGGCGGCACACCGAGTTCCA
CCCCAGCATGATCAAGCGATCGAAAAAGGCGCTGGCCAACGCTTTG**TGA**GGTGCTGCCCGTGGAAGCCAGGGAGG
GATGGACCCCGAAAGGACAAAAGTACTCCCAGGAAACAGACGCGTGAAAACTGAGCCCCAGAAGAGGCACACTTG
ACGGCACAGGAAGTCACTGCTCTTTGGTCAATATTCTGATTTTCCTCTCCCTGCATTGTTTTTAAAAAGCACATT
GTAGCCTAAGATCAAAGTCAACAACACTCGGTCCCCTTGAAGAGGCAACTCTCTGAACCCGTCTCTGACTGTTGG
AGGGAAGGCAAATGCTTTTGGGTTTTTTGGTTTTTGTTTTTGTTTTTTTTTCTCCTTTTATTTTTTTGCGGGGGA
GGGTAGGGAGTGGGTGGGGGGGGAGGGGGTAAGGCCAAGACTGGGTAGATTTTAAAGATTCAACACTGGTGTACAT
ATGTCCGCTGGGTGAGTTGACCTGTGGCCTCGCACAGTGATTCTAGGCCCTTTATGCTTGCTGTCTCTCAGAATT
GTTTTCTTACCTTTTAATGTAATGACGAGTGTGCTTCAGTTTGTTTAGCAAAACCACTCTCTTGAATCACGTTAA
CTTTTGAGATTAAAAAAAAAAACGCCATAGCACAGCTGTCTTTATGCAAGCAAGAGCACATCTACTCCAGCATGA
TCTGTCATCTAAAGACTTGAAAACAAAAAACAGTTACTTATAGTCAATGGGTAAGCAGAGTCTGAATTTATACTA
ATCAAGACAAACCTTTGAAAGGTTACACTAAGTACAGAACTTTTAAACCTTGCTTTGTATGAGTTGTACTTTTTG
AACATAAGCTGCACTTTTATTTTCTAATGCAGAGGATGAATAAGTTAAATACATGCTTTGAGGATAGAAGCAGAT
GTTCTGTTTGGCACCACGTTATAATCTGCTTATTTTACAATATACACGTTTCCCTAAGAAATCATGCGCAGAGAT
GTGAGGGCAGAATATACACAACAGATGCTGAAGGAGAAGGAGGGTAGTGTTTTGCAAAAGAAAAAGAAAAGAACC
AACAGAATTTTAACTCTATTAACTTTTCCAAATTTTCCTATGCTTTTAGTTAACATCATTATTGTATCCTAATGC
CACTAGGGGAGAGAGCTTTTGACTCTGTTGGGTTTTATTTGAATGTGTGCATAACAGTAATGAGATCTGGAAACA
CCTATTTTTTGGGGAAAAAGGTTTGTTGGTCTCCTTCCTGTGTTCCTACAAAACTCCCACTCTCAGGTGCAAGAG
TTATGTAGAAGGAAAGGGAGCTGAAATAGGAACAGAAAAATCAACCCCTATAACTAGTGAACACCAAGGGAAAAT
ACCACAATGATTTCAGAGGAGACTCTGCAAAATCGTCCCTTGTGGAGAATGCAGGCAACATGGAATACTACGAAT
GAAATCACATCACTGTATCTTTTACATCAATAGCCTCACCACTAATATATCTTGTATCTAGGTGTCTATAATGGC
TGAAACCACTACATCCATCTATGCCATTTACCTGAAAACTTAACTGTGGCCTTTATGAGGCCAGAAAAGTGAACT
GAGTTTTGTAGTTAAGACCTCAAATGAGGGGAGTCAGCAGTGATCATGGGGGAAATGTTTACATTTTTTTTTTCT

FIGURE 1114B

TCAGAAGTAACGCTTTCTGATGATTTTATCTGATATTTAAAACAGGGAGCTATGGTGCACTCTAGTTTATACTTG
CGCTCTGAAATGTGTAAACATAGGGTGCCTACCTATTTCACCTGACCCATACTCGTTTCTGATTCAGAATCAGTG
TGGGCTCCTGCAGTGGGCGCGGGTCACGGCTGACTCCAACTTCCAATACAACAGCCATCACTAGCACAGTGTTTT
TTTGTTTAACCAACGTAGTGTTATTAGTAGTTCTATAAAGAGAACTGCTTTTAACATTAGGGACTGGGAGCAGTC
CATGGGATAAAAAGGAAAGTGTTTTCTCACGAGAAAACATGTCAGGAAAAATAAAGAACACTTTCTACCTCTGTT
TCAGATTTTTGAAACACTTATTTTAAACCAAATTTTAATTTCTGTGTCCAAAATAAGTTTTAAGGACATCTGTTC
TTCCATACGAAATAGGTTAGGCTGCCTATTTCTCACTGAGCTCATGGAATGGTTCTGCTTATGATACTCTGCACG
CTGCCTTTTAGTGAGTGAGGAGTTTGGGGTTGCCTAGCACTTGCTAACTTGTAAAAAGTCATCTTTCCCTCACAG
AAAGAAACGAAAGAAAGCAAAGCAAAGTCAGTGAAAGACAATCTTTATAGTTTCAGGAGTAAATCTAAATGTGGC
TTTTGTCAAGCACTTAGATGGATATAAATGCAGCAACTTGTTTTAAAAAAATGCACATTTACTTCCCAAAAAAGT
TGTTACTTGCCTTTTCAAGTGTGACAAACTCACATTTGATATTCTCTTATATGTTATAGTAATGTAACGTATAAA
CTCAAGCCTTTTTATTCTTTGTGATTAAATCCTGTTTTAAAATGTCACAAAACAGGAACCAGCATTCTAATTAGA
TTTACTATATCAAGATATGGTTCAAATAGGACTACTAGAGTTCATTGAACACTAAAACTATGAAACAATTACTTT
TTATATTAAAAAGACCATGGATTTAACTTATGAAAATCCAAATGCAGGATAGTAATTTTTGTTTACTTTTTTAAC
CAAACTGAATTTTTGAAAGACTATTGCAGGTGTTTAAAAAGAAAGAAAAGTTGTTTTATCTAATACTGTAAGTAG
TTGTCATATTCTGGAAAATTTAATAGTTTTAGAGTTAAGATATCTCCTCTCTTTGGTTAGGGAAGAAGAAAGCCC
TTCACCATTGTGGAATGATGCCCTGGCTTTAAGGTTTAGCTCCACATCATGCTTCTCTT

FIGURE 1115

MSAAAYMDFVAAQCLVSISNRAAVPEHGVAPDAERLRLPEREVTKEHGDPGDTWKDYCTLVTIAKSLLDLNKYRP
IQTPSVCSDSLESPDEDMGSDSDVTTESGSSPSHSPEERQDPGSAPSPLSLLHPGVAAKGKHASEKRHKCPYSGC
GKVYGKSSHLKAHYRVHTGERPFPCTWPDCLKKFSRSDELTRHYRTHTGEKQFRCPLCEKRFMRSDHLTKHARRH
TEFHPSMIKRSKKALANAL

FIGURE 1116A

CACGTTGGGTGACATAATGGGGTTTTTTTAATTATAGATTCACACTGCATTTATTCATCACCCCTGTCCTCTCAT
CCATAACTCAAATTTACTACCAGCAACACAAAATACAAAGATGTGTCCAGTTTCACTACAGCTCTTCGCGTTTAC
AAGTGTCGAGCGCTTGCTTTCGGAACGCCCTTGTGATTGGCCGAGCCAATGCCAGTGACATCAACCAACTTACTT
TTGATTGGAAGGCTGGTTGCTGGGACTGTAGCGTTTGCAGGAAGTCACTTAACTGTTTGGGAGCTGGAAAACCGA
AGCTGAAGTTCTCTTTTGCCATAGGAACGAGCGCAACTGACTAGGAAAGATGTGTCCCAAAGCTCCGCAAGCTGG
AACGTGAGCCAGGAGGCCCGGACCGGCCACGGGACCGCGAGGCACTCCGAAAGTGTGCGGCTGCCCCTTCCCTGC
CTCCCAGCTGTTACCCTTTTAAATGTCAGTGTTCGAGGCTGTAGGGGTAGCACGAGGCAGCGAAACGGAACAGTC
GGATTGGCCGCACGCCTCAGTTCTAGACGCACCTCTCCACCGAAGCCGTTCTGACTGGCAGGGGGAGAAAGTAAA
CAGAGTTGAATCACCCTCCCCACTGGCCAATTGGAGGGGGTTTGGTTTGTGACGTGATGGGATTCTGCGAAATTG
TTACTGAGCAAGAGAATGCCGGAACGTGCGGACCGGCCGGAGCAGGGGTTCAGAAGCCGTCAGTGGACTCGGGAA
AAAGTGTCTCTTAGACCTGGCGCTCGGCGGGGCCCTCGCCACCCGCGTCGGGGTGATCGGGTGAATGTCCTGGGG
CTTTGGCTCGACGGCGAGGCGGCCGAGGGCGTGCACCTCTCTTGCAGTTTCCTCTCCCAGCGCCTCGGGGGCGTT
TTCAGTCGAATAAACTTGCGACCGCCACGTGTGGCATCTTTCCAAGGGAGCCGGCTCAGAGGGGCCGGCGCGCCC
GTCGGGGGATCGCGGCCGGCGCGGGGCAGGGGCGGCGGCTAGAGGCGGCGGCGCGGCGGAGCCCGGGGCCGTGGA
TGCTGCGTGCGGAGGCGCTGCCGGTTACGTAAAGATGAGGGGCTGAGGTCGCCTCGGCGCTCCTGCGAGTCGGAA
GCGCCCCGCGCCCCCGCCCCCTTGGCCGCCGCGCCGTGCCGGGCGGGCGGGTCGTCGTCCGAGGCCAGGGAGGGC
GAGCCGAACCTCCGCAGCCACCGCCAAGTTTGTCCGCGCCGCCTGGGCTGCCGTCGCCCGCACC**ATG**TCCGCGGC
CGCCTACATGGACTTCGTGGCTGCCCAGTGTCTGGTTTCCATTTCGAACCGCGCTGCGGTGCCGGAGCATGGGGT
CGCTCCGGACGCCGAGCGGCTGCGACTACCTGAGCGCGAGGTGACCAAGGAGCACGGTGACCCGGGGGACACCTG
GAAGGATTACTGCACACTGGTCACCATCGCCAAGAGCTTGTTGGACCTGAACAAGTACCGACCCATCCAGACCCC
CTCCGTGTGCAGCGACAGTCTGGAAAGTCCAGATGAGGATATGGGATCCGACAGCGACGTGACCACCGAATCTGG
GTCGAGTCCTTCCCACAGCCCGGAGGAGAGACAGGATCCTGGCAGCGCGCCCAGCCCGCTCTCCCTCCTCCATCC
TGGAGTGGCTGCGAAGGGGAAACACGCCTCCGAAAAGAGGCACAAGTGCCCCTACAGTGGCTGTGGGAAAGTCTA
TGGAAAATCCTCCCATCTCAAAGCCCATTACAGAGTGCATACAGGTGAACGGCCCTTCCCCTGCACGTGGCCAGA
CTGCCTTAAAAAGTTCTCCCGCTCAGACGAGCTGACCCGCCACTACCGGACCCACACTGGGGAAAAGCAGTTCCG
CTGTCCGCTGTGTGAGAAGCGCTTCATGAGGAGTGACCACCTCACAAAGCACGCCCGGCGGCACACCGAGTTCCA
CCCCAGCATGATCAAGCGATCGAAAAAGGCGCTGGCCAACGCTTTG**TGA**GGTGCTGCCCGTGGAAGCCAGGGAGG
GATGGACCCCGAAAGGACAAAAGTACTCCCAGGAAACAGACGCGTGAAAACTGAGCCCCAGAAGAGGCACACTTG
ACGGCACAGGAAGTCACTGCTCTTTGGTCAATATTCTGATTTTCCTCTCCCTGCATTGTTTTTAAAAAGCACATT
GTAGCCTAAGATCAAAGTCAACAACACTCGGTCCCCTTGAAGAGGCAACTCTCTGAACCCGTCTCTGACTGTTGG
AGGGAAGGCAAATGCTTTTGGGTTTTTTGGTTTTTGTTTTTGTTTTTTTTTCTCCTTTTATTTTTTTGCGGGGGA
GGGTAGGGAGTGGGTGGGGGGGAGGGGGTAAGGCCAAGACTGGGTAGATTTTAAAGATTCAACACTGGTGTACAT
ATGTCCGCTGGGTGAGTTGACCTGTGGCCTCGCACAGTGATTCTAGGCCCTTTATGCTTGCTGTCTCTCAGAATT
GTTTTCTTACCTTTTAATGTAATGACGAGTGTGCTTCAGTTTGTTTAGCAAAACCACTCTCTTGAATCACGTTAA
CTTTTGAGATTAAAAAAAAAAACGCCATAGCACAGCTGTCTTTATGCAAGCAAGAGCACATCTACTCCAGCATGA
TCTGTCATCTAAAGACTTGAAAACAAAAAACAGTTACTTATAGTCAATGGGTAAGCAGAGTCTGAATTTATACTA
ATCAAGACAAACCTTTGAAAGGTTACACTAAGTACAGAACTTTTAAACCTTGCTTTGTATGAGTTGTACTTTTTG
AACATAAGCTGCACTTTTATTTTCTAATGCAGAGGATGAATAAGTTAAATACATGCTTTGAGGATAGAAGCAGAT
GTTCTGTTTGGCACCACGTTATAATCTGCTTATTTTACAATATACACGTTTCCCTAAGAAATCATGCGCAGAGAT
GTGAGGGCAGAATATACACAACAGATGCTGAAGGAGAAGGAGGGTAGTGTTTTGCAAAAGAAAAAGAAAAGAACC
AACAGAATTTTAACTCTATTAACTTTTCCAAATTTTCCTATGCTTTTAGTTAACATCATTATTGTATCCTAATGC
CACTAGGGGAGAGAGCTTTTGACTCTGTTGGGTTTTATTTGAATGTGTGCATAACAGTAATGAGATCTGGAAACA
CCTATTTTTTGGGGAAAAAGGTTTGTTGGTCTCCTTCCTGTGTTCCTACAAAACTCCCACTCTCAGGTGCAAGAG
TTATGTAGAAGGAAAGGGAGCTGAAATAGGAACAGAAAAATCAACCCCTATAACTAGTGAACACCAAGGGAAAAT
ACCACAATGATTTCAGAGGAGACTCTGCAAAATCGTCCCTTGTGGAGAATGCAGGCAACATGGAATACTACGAAT
GAAATCACATCACTGTATCTTTTACATCAATAGCCTCACCACTAATATATCTTGTATCTAGGTGTCTATAATGGC
TGAAACCACTACATCCATCTATGCCATTTACCTGAAAACTTAACTGTGGCCTTTATGAGGCCAGAAAAGTGAACT
GAGTTTTGTAGTTAAGACCTCAAATGAGGGGAGTCAGCAGTGATCATGGGGGAAATGTTTACATTTTTTTTTTCT

FIGURE 1116B

TCAGAAGTAACGCTTTCTGATGATTTTATCTGATATTTAAAACAGGGAGCTATGGTGCACTCTAGTTTATACTTG
CGCTCTGAAATGTGTAAACATAGGGTGCCTACCTATTTCACCTGACCCATACTCGTTTCTGATTCAGAATCAGTG
TGGGCTCCTGCAGTGGGCGCGGGTCACGGCTGACTCCAACTTCCAATACAACAGCCATCACTAGCACAGTGTTTT
TTTGTTTAACCAACGTAGTGTTATTAGTAGTTCTATAAAGAGAACTGCTTTTAACATTAGGGACTGGGAGCAGTC
CATGGGATAAAAAGGAAAGTGTTTTCTCACGAGAAAACATGTCAGGAAAAATAAAGAACACTTTCTACCTCTGTT
TCAGATTTTTGAAACACTTATTTTAAACCAAATTTTAATTTCTGTGTCCAAAATAAGTTTTAAGGACATCTGTTC
TTCCATACGAAATAGGTTAGGCTGCCTATTTCTCACTGAGCTCATGGAATGGTTCTGCTTATGATACTCTGCACG
CTGCCTTTTAGTGAGTGAGGAGTTTGGGGTTGCCTAGCACTTGCTAACTTGTAAAAAGTCATCTTTCCCTCACAG
AAAGAAACGAAAGAAAGCAAAGCAAAGTCAGTGAAAGACAATCTTTATAGTTTCAGGAGTAAATCTAAATGTGGC
TTTTGTCAAGCACTTAGATGGATATAAATGCAGCAACTTGTTTTAAAAAAATGCACATTTACTTCCCAAAAAAGT
TGTTACTTGCCTTTTCAAGTGTGACAAACTCACATTTGATATTCTCTTATATGTTATAGTAATGTAACGTATAAA
CTCAAGCCTTTTTATTCTTTGTGATTAAATCCTGTTTTAAAATGTCACAAAACAGGAACCAGCATTCTAATTAGA
TTTACTATATCAAGATATGGTTCAAATAGGACTACTAGAGTTCATTGAACACTAAAACTATGAAACAATTACTTT
TTATATTAAAAAGACCATGGATTTAACTTATGAAAATCCAAATGCAGGATAGTAATTTTTGTTTACTTTTTTAAC
CAAACTGAATTTTTGAAAGACTATTGCAGGTGTTTAAAAAGAAAGAAAAGTTGTTTTATCTAATACTGTAAGTAG
TTGTCATATTCTGGAAAATTTAATAGTTTTAGAGTTAAGATATCTCCTCTCTTTGGTTAGGGAAGAAGAAAGCCC
TTCACCATTGTGGAATGATGCCCTGGCTTTAAGGTTTAGCTCCACATCATGCTTCTCTT

FIGURE 1117

MSAAAYMDFVAAQCLVSISNRAAVPEHGVAPDAERLRLPEREVTKEHGDPGDTWKDYCTLVTIAKSLLDLNKYRP
IQTPSVCSDSLESPDEDMGSDSDVTTESGSSPSHSPEERQDPGSAPSPLSLLHPGVAAKGKHASEKRHKCPYSGC
GKVYGKSSHLKAHYRVHTGERPFPCTWPDCLKKFSRSDELTRHYRTHTGEKQFRCPLCEKRFMRSDHLTKHARRH
TEFHPSMIKRSKKALANAL

FIGURE 1118

GCGGCCTCAGATGAATGCGGCTGTTAAGACCTGCAATAATCCAGAATGGCTACTCTGATCTATGTTGATAAGGAA
AATGGAGAACCAGGCACCCGTGTGGTTGCTAAGGATGGGCTGAAGCTGGGGTCTGGACCTTCAATCAAAGCCTTA
GATGGGAGATCTCAAGTTTCAACACCACGTTTTGGCAAAACGTTCGATGCCCCACCAGCCTTACCTAAAGCTACT
AGAAAGGCTTTGGGAACTGTCAACAGAGCTACAGAAAAGTCTGTAAAGACCAAGGGACCCCTCAAACAAAAACAG
CCAAGCTTTTCTGCCAAAAAGATGACTGAGAAGACTGTTAAAGCAAAAAGCTCTGTTCCTGCCTCAGATGATGCC
TATCCAGAAATAGAAAAATTCTTTCCCTTCAATCCTCTAGACTTTGAGAGTTTTGACCTGCCTGAAGAGCACCAG
ATTGCGCACCTCCCCTTGAGTGGAGTGCCTCTCATGATCCTTGACGAGGAGAGAGAGCTTGAAAAGCTGTTTCAG
CTGGGCCCCCCTTCACCTGTGAAGATGCCCTCTCCACCATGGGAATCCAATCTGTTGCAGTCTCCTTCAAGCATT
CTGTCGACCCTGGATGTTGAATTGCCACCTGTTTGCTGTGACATAGATATTTAAATTTCTTAGTGCTTCAGAGTT
TGTGTGTATTTGTATTAATAAAGCATTCTTCAACAGAAAAAAAAAAAAAAAA

FIGURE 1119

MATLIYVDKENGEPGTRVVAKDGLKLGSGPSIKALDGRSQVSTPRFGKTFDAPPALPKATRKALGTVNRATEKSV
KTKGPLKQKQPSFSAKKMTEKTVKAKSSVPASDDAYPEIEKFFPFNPLDFESFDLPEEHQIAHLPLSGVPLMILD
EERELEKLFQLGPPSPVKMPSPPWESNLLQSPSSILSTLDVELPPVCCDIDI

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FIGURE 1120

AGGAGGACCTGGGGGTGTGGCAGCGAGGAAGGGCCGAGCCACGGACTGTGGGGCCGAAACTCGCTCCCGCCCACC
CTTTCTCGAGGCTGTGGCCTCCGCGAGAGCCGAGCGGGCCGCACCGCCGGCCGTGCGACTGCCCCAGTCAGACAC
GACCCCGGCTTCTAGCCCGCCTAAGCCTGTTTGGGGTTGCTGACTCGTTTCCTCCCCGAGTTTCCCGCGGGAACT
AACTCTTCAAGAGGACCAACCGCAGCCCAGAGCTTCGCAGACCCGGCCAACCAGAGGCGAGGTTGAGAGCCCGGC
GGGCCGCGGGGAGAGAGCGTCCCATCTGTCCTGGAAAGCCTGGGCGGGTGGATTGGGACCCCGAGAGAAGCAGGG
GAGCTCGGCGGGGTGCAGAAGTGCCCAGGCCCCTCCCCGCTGGGGTTGGGAGCTTGGGCAGGCCAGCTTCACCCT
TCCTAAGTCCGCTTCTGGTCTCCGGGCCCAGCCTCGGCCACC**ATG**TCCCGCCAGACCACCTCTGTGGGCTCCAGC
TGCCTGGACCTGTGGAGGGAAAAGAATGACCGGCTCGTTCGACAGGCCAAGGTGGCTCAGAACTCCGGTCTGACT
CTGAGGCGACAGCAGTTGGCTCAGGATGCACTGGAAGGGCTCAGAGGGCTCCTCCATAGTCTGCAAGGGCTCCCT
GCAGCTGTTCCTGTTCTTCCCTTGGAGCTGACTGTCACCTGCAACTTCATTATCCTGAGGGCAAGCTTGGCCCAG
GGTTTCACAGAGGATCAGGCCCAGGATATCCAGCGGAGCCTAGAGAGAGTGCTGGAGACACAGGAGCAGCAGGGG
CCCAGGTTGGAACAGGGGCTCAGGGAGCTGTGGGACTCTGTCCTTCGTGCTTCCTGCCTTCTGCCGGAGCTGCTG
TCTGCCCTGCACCGCCTGGTTGGCCTGCAGGCTGCCCTCTGGTTGAGTGCTGACCGTCTTGGGGACCTGGCCTTG
TTACTAGAGACCCTGAATGGCAGCCAGAGTGGAGCCTCTAAGGATCTGCTGTTACTTCTGAAAACTTGGAGTCCC
CCAGCTGAGGAATTAGATGCTCCATTGACCCTGCAGGATGCCCAGGGATTGAAGGATGTCCTCCTGACAGCATTT
GCCTACCGCCAAGGTCTCCAGGAGCTGATCACAGGGAACCCAGACAAGGCACTAAGCAGCCTTCATGAAGCGGCC
TCAGGCCTGTGTCCACGGCCTGTGTTGGTCCAGGTGTACACAGCACTGGGGTCCTGTCACCGTAAGATGGGAAAT
CCACAGAGAGCACTGTTGTACTTGGTTGCAGCCCTGAAAGAGGGATCAGCCTGGGGTCCTCCACTTCTGGAGGCC
TCTAGGCTCTATCAGCAACTGGGGGACACAACAGCAGAGCTGGAGAGTCTGGAGCTGCTAGTTGAGGCCTTGAAT
GTCCCATGCAGTTCCAAAGCCCCGCAGTTTCTCATTGAGGTAGAATTACTACTGCCACCACCTGACCTAGCCTCA
CCCCTTCATTGTGGCACTCAGAGCCAGACCAAGCACATACTAGCAAGCAGGTGCCTACAGACGGGGAGGGCAGGA
GACGCTGCAGAGCATTACTTGGACCTGCTGGCCCTGTTGCTGGATAGCTCGGAGCCAAGGTTCTCCCCACCCCCC
TCCCCTCCAGGGCCCTGTATGCCTGAGGTGTTTTTGGAGGCAGCGGTAGCACTGATCCAGGCAGGCAGAGCCCAA
GATGCCTTGACTCTATGTGAGGAGTTGCTCAGCCGCACATCATCTCTGCTACCCAAGATGTCCCGGCTGTGGGAA
GATGCCAGAAAAGGAACCAAGGAACTGCCATACTGCCCACTCTGGGTCTCTGCCACCCACCTGCTTCAGGGCCAG
GCCTGGGTTCAACTGGGTGCCCAAAAAGTGGCAATTAGTGAATTTAGCAGGTGCCTCGAGCTGCTCTTCCGGGCC
ACACCTGAGGAAAAAGAACAAGGGGCAGCTTTCAACTGTGAGCAGGGATGTAAGTCAGATGCGGCACTGCAGCAG
CTTCGGGCAGCCGCCCTAATTAGTCGTGGACTGGAATGGGTAGCCAGCGGCCAGGATACCAAAGCCTTACAGGAC
TTCCTCCTCAGTGTGCAGATGTGCCCAGGTAATCGAGACACTTACTTTCACCTGCTTCAGACTCTGAAGAGGCTA
GATCGGAGGGATGAGGCCACTGCACTCTGGTGGAGGCTGGAGGCCCAAACTAAGGGGTCACATGAAGATGCTCTG
TGGTCTCTCCCCCTGTACCTAGAAAGCTATTTGAGCTGGATCCGTCCCTCTGATCGTGACGCCTTCCTTGAAGAA
TTTCGGACATCTCTGCCAAAGTCTTGTGACCTG**TAG**CTGCCACGTTTTGAAGAGCTTGAGCTGGGTCCCCAGTGG
GCTGTCTCTCTGTGGGGAGGGCTTTCTGCTTCACCATCATTAGGAATGTGACCATTCCTATATAATTCCTGGACT
GGTGAGATTGGTGGTAGGCCTGTGAAATTTGCCCTAGTTACTACCATTCTCGTTTTGGAGGAAACAATCTCTGCC
ACCACCAAGTCATTGACTTTGCTCGAGGCACCTTTTTTCCTGTTTCTCCTTTTCTGTTGTCGAGTAAAATTTCAT
ATTTATAAAAAAAAAAAAAAAAA

FIGURE 1121

MSRQTTSVGSSCLDLWREKNDRLVRQAKVAQNSGLTLRRQQLAQDALEGLRGLLHSLQGLPAAVPVLPLELTVTC
NFIILRASLAQGFTEDQAQDIQRSLERVLETQEQQGPRLEQGLRELWDSVLRASCLLPELLSALHRLVGLQAALW
LSADRLGDLALLLETLNGSQSGASKDLLLLLKTWSPPAEELDAPLTLQDAQGLKDVLLTAFAYRQGLQELITGNP
DKALSSLHEAASGLCPRPVLVQVYTALGSCHRKMGNPQRALLYLVAALKEGSAWGPPLLEASRLYQQLGDTTAEL
ESLELLVEALNVPCSSKAPQFLIEVELLLPPPDLASPLHCGTQSQTKHILASRCLQTGRAGDAAEHYLDLLALLL
DSSEPRFSPPPSPPGPCMPEVFLEAAVALIQAGRAQDALTLCEELLSRTSSLLPKMSRLWEDARKGTKELPYCPL
WVSATHLLQGQAWVQLGAQKVAISEFSRCLELLFRATPEEKEQGAAFNCEQGCKSDAALQQLRAAALISRGLEWV
ASGQDTKALQDFLLSVQMCPGNRDTYFHLLQTLKRLDRRDEATALWWRLEAQTKGSHEDALWSLPLYLESYLSWI
RPSDRDAFLEEFRTSLPKSCDL

FIGURE 1122

GACCCACGCGTCCGAAAAGCTATGGCCTCAACCACCAGCACCAAGAAGATGATGGAGGAAGCCACCTGCTCCATC
TGCCTGAGCCTGATGACGAACCCAGTAAGCATCAACTGTGGACACAGCTACTGCCACTTGTGTATAACAGACTTC
TTTAAAAACCCAAGCCAAAAGCAACTGAGGCAGGAGACATTCTGCTGTCCCCAGTGTCGGGCTCCATTTCATATG
GATAGCCTCCGACCCAACAAGCAGCTGGGAAGCCTCATTGAAGCCCTCAAAGAGACGGATCAAGAAATGTCATGT
GAGGAACACGGAGAGCAGTTCCACCTGTTCTGCGAAGACGAGGGGCAGCTCATCTGCTGGCGCTGTGAGCGGGCA
CCACAGCACAAAGGGCACACCACAGCTCTTGTTGAAGACGTATGCCAGGGCTACAAGGAAAAGCTCCAGAAAGCT
GTGACAAAACTGAAGCAACTTGAAGACAGATGTACGGAGCAGAAGCTGTCCACAGCAATGCGAATAACTAAATGG
AAAGAGAAGGTACAGATTCAGAGACAAAAAATCCGGTCTGACTTTAAGAATCTCCAGTGTTTCCTACATGAGGAA
GAGAAGTCTTATCTCTGGAGGCTGGAGAAAGAAGAACAACAGACTCTGAGTAGACTGAGGGACTATGAGGCTGGT
CTGGGGCTGAAGAGCAATGAACTCAAGAGCCACATCCTGGAACTGGAGGAAAAATGTCAGGGCTCAGCCCAGAAA
TTGCTGCAGAATGTGAATGACACTTTGAGCAGGAGTTGGGCTGTGAAGCTGGAAACATCAGAGGCTGTCTCCTTG
GAACTTCATACTATGTGCAATGTTTCCAAGCTTTACTTCGATGTGAAGAAAATGTTAAGGAGTCATCAAGTTAGT
GTGACTCTGGATCCAGATACAGCTCATCACGAACTAATTCTCTCTGAGGATCGGAGACAAGTGACTCGTGGATAC
ACCCAGGAGAATCAGGACACATCTTCCAGGAGATTTACTGCCTTCCCCTGTGTCTTGGGTTGTGAAGGCTTCACC
TCAGGAAGACGTTACTTTGAAGTGGATGTTGGCGAAGGAACCGGATGGGATTTAGGAGTTTGTATGGAAAATGTG
CAGAGGGGCACTGGCATGAAGCAAGAGCCTCAGTCTGGATTCTGGACCCTCAGGCTGTGCAAAAAGAAAGGCTAT
GTAGCACTTACTTCTCCCCCAACTTCCCTTCATCTGCATGAGCAGCCCCTGCTTGTGGGAATTTTTCTGGACTAT
GAGGCCGGAGTTGTATCCTTTTATAACGGGAATACTGGCTGCCACATCTTTACTTTCCCGAAGGCTTCCTTCTCT
GATACTCTCCGGCCCTATTTCCAGGTTTATCAATATTCTCCTTTGTTTCTGCCTCCCCCAGGTGACTAAGGAAAA
GAGCAGAAGCTCCTTGGTTTAACCAGCACAGAGAAAATAATATAAATCCCATAAGGGCAGACGTTTGGTCTGTTT
TCTTCGCTGTCATTTCCTTAGTAGTTAGACTAGTGCTGAGATTTTAGTGGATATATAATTGATTTATGTTGAATA
TATGGACTTAGCAACTAAAAATACCACAGATGGTTAACCTGGACTGGGGCAAAGCAAGATAATAGTGATGATCGT
ATGTTGCTGTCTCCATCCGTCTTTAATGGGTCAGGGCTTTGATTTCCAAGGGTCTTCAGGTGATGAGTAGGGGTA
CCCACAAGTCAGAAGGTCTGCGTTCTCCTAGTTTGTTTGCTGCCATTTGAACTCATGTAGGGAATGAAAGAAAGC
TGCAATTATCCGCCAACTGCATTTAAAACAAAACAAAACAGAAAAATCAAAATAACATTGACTCTTCCAACCACT
GACATGTTGTTTAATAATCTAAGCGGCAGTCCTGGAGGCTACCAGACTTACTGAGTTCTACCTGAGAAACAGCCA
AGCAAAGTGTGAGAGAAGGGTTAAGACTGGCTTACAATGAGATGCTTCAAATGAAAAGGGAATTATGAGTAAAAT
TGAACTTTGATGGGGGATTCAGTTCTGGAAAAGAATTTGGTATTTTCCAGTCTGCTAGGACCAATTACCTTGAAA
TATTTTAAAATCTCAGTAAATAGTTATTGCTGAAATGGCTGTTGGCAGTTCTTATTATGATTCAGAGAAGAGCAA
ATAGACCTTAACTTCATTTTGAAAAAGACCAAATTACCATACCCGAGTGAGTAATGACAGGACTACAACTAAAAC
ATAAACAACATTAATGATGACCATAAAAAGTCACAAAATTGCTAAATGTTATAATTTAGAGTTGACATAAAAATT
GATGGCCAGGCATGGTGGCTCACGCCTGTAATCCCAGAACTATGTGAGGCTGAGGCAGGTGGATCACTTGAGGTC
AGGAGTTCAACACCAGCCTGGCCAACATGGTGAAACCCTGTCTCTACTAAAAATACAAAAATTAGCCGGGCATGG
TGGTAGGGGCCTGTAACCCAGCTACTCGTGAGGCCAAGGCAGGAGAATTGCTTGAGCCTGCAGCAGCTGCAGTAA
GCCAAGATCATGCTGTGCCTCAAGGAAAAAAAAAAATTAATGTTTACTGATATTTGTTGAAGTCCTACAACATCAC
CTCTGAGAATAGGAGAAATGAAGCAACAGTTGTGTCTAGATGTCAGAGGCATGGCTGGGCCTCCATCTCTGCCTA
AGGGAGATATAAAAGAGTTCAAACTATTGCCCATGTTCCCCAGGGTCAGAAGTTCTAATTATGATGATAGAGGCT
GGGTTGTAAGTAGTAAGTGAAGGGTAGCAGAATATGCCATCTTTGGCATAAGAAGTATTTTGAGTTGAAGACAAT
TGAGAAAAAAAAAAAAAAAAAA

FIGURE 1123

MASTTSTKKMMEEATCSICLSLMTNPVSINCGHSYCHLCITDFFKNPSQKQLRQETFCCPQCRAPFHMDSLRPNK
QLGSLIEALKETDQEMSCEEHGEQFHLFCEDEGQLICWRCERAPQHKGHTTALVEDVCQGYKEKLQKAVTKLKQL
EDRCTEQKLSTAMRITKWKEKVQIQRQKIRSDFKNLQCFLHEEEKSYLWRLEKEEQQTLSRLRDYEAGLGLKSNE
LKSHILELEEKCQGSAQKLLQNVNDTLSRSWAVKLETSEAVSLELHTMCNVSKLYFDVKKMLRSHQVSVTLDPDT
AHHELILSEDRRQVTRGYTQENQDTSSRRFTAFPCVLGCEGFTSGRRYFEVDVGEGTGWDLGVCMENVQRGTGMK
QEPQSGFWTLRLCKKKGYVALTSPPTSLHLHEQPLLVGIFLDYEAGVVSFYNGNTGCHIFTFPKASFSDTLRPYF
QVYQYSPLFLPPPGD

FIGURE 1124A

CACTGGGAGAGTTTATGTGGCCGAGGCAGACAAGTGGAATTAGGCCTTGCTGCAGGGGACTTCATTTCCTTCTCA
GTACTGGACCCATTTATGAGGAGGTGGCTTATGAAAGTGTGATGTTCGCGTATTTCTTGACAGGCAGTGGCGTGA
TCTTGGCTCACTGCAACCTCCGACTCCCTGGTTCAAGCGATTCTCCTGCCTCAGCCTCCTGAGTGGGGATTACAG
GCCACAGCAAACACAGGTGTGCAGGAACCGTTTGTCATGGAAGCCAGGGAGCCTGGGAGGCCCACACCCACCTAC
CATCTTGTCCCTAACACCAGCCAGTCCCAGGTGGAAGAAGATGTCAGCTCGCCACCTCAAAGGTCCTCCGAAACT
ATGCAGCTGAAGAAGGAGATCTCCCTGCTGAATGGGGTCAGCCTGGTGGTGGGCAACATGATCGGCTCAGGGATC
TTTGTCTCACCCAAGGGTGTGCTGGTACACACTGCCTCCTATGGGATGTCACTGATTGTGTGGGCCATTGGTGGG
CTCTTCTCTGTTGTGGGTGCCCTTTGTTATGCAGAGCTGGGGACCACCATCACCAAGTCGGGAGCCAGCTACGCT
TATATTCTAGAGGCCTTTGGGGGCTTCATTGCCTTCATCCGCCTGTGGGTCTCACTGCTAGTTGTTGAGCCCACC
GGTCAGGCCATCATCGCCATCACCTTTGCCAACTACATCATCCAGCCGTCCTTCCCCAGCTGTGATCCCCCATAC
CTGGCCTGCCGTCTCCTGGCTGCTGCTTGCATATGTCTGCTGACATTTGTGAACTGTGCCTATGTCAAGTGGGGC
ACACGTGTGCAGGACACGTTCACTTACGCCAAGGTCGTAGCGCTCATTGCCATCATTGTCATGGGCCTTGTTAAA
CTGTGCCAGGGACACTCTGAGCACTTTCAGGACGCCTTTGAGGGTTCCTCCTGGGACATGGGAAACCTCTCTCTT
GCCCTCTACTCTGCCCTCTTCTCTTACTCAGGTTGGGACACCCTTAATTTTGTAACAGAAGAAATCAAAAACCCA
GAAAGAAATTTGCCCTTGGCCATTGGGATTTCTATGCCAATTGTGACGCTCATCTACATCCTGACCAATGTGGCC
TATTACACAGTGCTGAACATTTCAGATGTCCTTAGCAGTGATGCTGTGGCTGTGACATTTGCTGACCAGACGTTT
GGCATGTTCAGCTGGACCATCCCCATTGCTGTTGCCCTGTCCTGCTTTGGGGGCCTCAATGCATCCATCTTTGCT
TCATCAAGGTTGTTCTTCGTGGGCTCCCGGGAGGGCCACCTACCGGACCTTCTGTCCATGATCCACATTGAGCGT
TTTACACCTATCCCTGCTTTACTGTTCAATTGCACCATGGCACTCATCTACCTCATCGTGGAGGATGTTTTCCAG
CTTATCAACTACTTCAGCTTCAGCTACTGGTTCTTCGTGGGCCTGTCTGTTGTTGGACAGCTCTACCTCCGCTGG
AAGGAGCCCAAGCGGCCCCGGCCTCTCAAGCTGAGCGTGTTTTTCCCCATCGTGTTCTGCATATGCTCCGTGTTT
CTGGTGATAGTGCCCCTCTTCACTGACACCATTAATTCCCTCATTGGCATCGGGATTGCCCTTTCTGGAGTCCCT
TTCTACTTCATGGGTGTTTACCTGCCAGAGTCCCGGAGGCCATTGTTTATTCGGAATGTCCTGGCTGCTATCACC
AGAGGCACCCAGCAGCTTTGCTTTTGTGTCCTGACTGAGCTTGATGTAGCCGAAGAAAAAAAGGATGAGAGGAAA
ACTGACTAGAGGTCAGAGGTGGCTTTCTGAGGCCTGGAAGGCAGGCCAACCAGCAAAATCCTGATAACAAGACTC
TGTGGGCCCAACTCTCCTGAATTAAAGGAGCCTTTTGACCCAATCATATAGTGGGGCTCAGGGCCAGTGCTCACT
CTTATTGGTAAGCTATAGGAGACTCAGGATCTGGGCCAACCTCAAGGTGGGGGCTTCAGAGGGTGGGGGGAAGAT
TGGGGAACGGGGGGAATGGTCATTTAGTTTTACTCCTGATAGGTAGATGCAGCTCTTACAGATATTTACTTGGTA
AAGTGCAGTGGGGAAGAGGGAATGCTAGGTTGATAGGGCTGGTGGCTTCTGAATTTGGTATTTGAACTAGGAGTC
CCTATAGAGGGGCTGCTTTATGGGAAGTTTTTCTCTGACCAGGTACAACACCTGACTTTAAAGGCCTGAAATGCT
ACCATTTCTTCCTCTGGCTCAAAATTCTTCCCTGGGGAGAGAGTTATATTCCCTTATTTATTGATATTTAGTCCA
GAACACCAGTTCTAACGAAGCATGCGTGTCTCTTCATCTACAGGATGCAATAGGCTGATTGTATTTAAAAATCAA
AGTACCCAAAACTGAGTCCCTTTGGGCTCAGAAATGTCTGTGGTATTGGGTCAGACTCTGACCACAGATTTTATG
CTGTTTAGCACAATTTCTATTGAGTCTTACCTGCAACAATGAACCTTAAAGATTTTTTTACTCACGTACCTGTTA
CACTTTAGCATACAGATAGATCATAGATCACGTTACAAGCACTTGGCTCAGGTCCAGCAAGGACAGATGAACAAA
TTCCTGAGTCAGAAGTCTGTTAATATTGCTGTTTTGAAGGACAATCCTTTATTTTACTTGAGACCTTACATCTTT
GTTCTAGCTGACAGTAAATCTCTGGGTTTCTGTTACGAACTCTAAGAGGGCTGAAACTTCTGATATTCAGGTGGA
TCACCTGAATTCTCTCAGCTGTCAATGGCTTGGAGAACATCTCATGGGCCCAAGTCATCAAATAACCTGTTCCTC
TCTGTAAGGGCAGTGTGAGGGACTGCTGTGCAGACCCAAGCAATCCCAACCTGGTGCTAGGTCATTTCACTTTTC
TGAAAACCTCACATCAGGCTGCATCCTCTTCTGTCCCTGGCACCAGGCTTTGTTTACACTTGGAGCCACCTTGGT
GTGGGTCACCGGGACAGTGTACTCCTCTCCTGCCAGCCTCCCCTTCCCCGAGGTGTGGTGGCTGCAGTCTCAGGA
AGAGCTTGGTACTTGTGGGGACTTCTGTTTTCTCCCTGTGGAGATCAGTGAAGACTGGGAGGAAAGCTGCTTCAA
CCTGAGTCCGGCTCTTCAGCAGGCTGCACAAGTGGAAGCAACTAATTCTGGTGCTCAGGCTGGGCTCTCCACCCA
AGTTAGGCCTGCTCTGGCCTAATGGATCTTACTGTATGAGCAGGACGGCTGCATTGGATTGTACAACTGTTTTGT
GATGCCCCCAGACACTGTCATCCTAGGCCGAGAAGAACCTGCTAGCTTGACATACCCCATGGGCTTATCCTTAGG
TTTTGGAATTGGTCAACAGTGAGGCAGTCTCCCTTCCTGACCATTCTTCTCCACCCAGTCACAGATAAGGGAATA
ACCTTGGCCATATATTTGCTCAATAAAGATTGAAGGAAGCATGGTCATAGTTGCCCTGGGTTCAGAGCATAATGC
ATATGTGAAGCATGGGGTGACATTCCTACTGTCATGGGTTTGGGATTTGTAACGGCAAATTCCTGCCCGACGACA

FIGURE 1124B

GGGTGTCTTATGCAAAGGCTGACTTGCCTGAACGCTAAGAACATGACTTCTGTCTGAGCTAAGCTGGCACCCATC
CCAGGGCTCCTCTGGAGCTAATCCTTTAAGCAAAATGTGCTTGCCTTTTAAAGATCCCTGACCCCAGCTTTAGCT
TTCTCCACCAGATAACCAGCTAATCCCAGGAATTTGCTGCCCCCCACCAGTGGCTTCTAGGGAAAGCAAGGACCT
CACATGCCAGGTGCCCTAGTACTTGCTTAGTGAGCCATGTCATCCTCCTTTCATTTTTGGATGGTGACAGCATTT
TTCCCCTCTGTGCTGGATACAGACTTCTCCCAGGATCCTCTCTTTGGGAGCGAAGCCAGAGGATCCCTACAGCAC
TCAAGCTTCATGGTGGAATTAATTTCTGCCAGCTCTTTGTTGTCTGTCTCCTTAAATCCTTTTCCTGGTGTGCTT
ATTATCCCTTTTGCAGTGAGTACAGTTTATTAAGTTGTCAGCCCTTTAATATTGGGGAAACTTAATGAGTATAAA
TAGCAGGGAGCACATTGTAACAGCACAGTGTTTTGTTTTTTTCACCCGGTTGCTGTATGAGAATGGCTTTCAATC
CTTTGTTTCTATGCCTACAGACAGAAAGCAAGATGTCTAATATTAGACATACAAGTTGCTGCCTGTTATAACGGT
GAATTATACCTTTGTGCATGCCTAGGATGTTTGTTGTTTTAATTAGCTGCAATATATACGGCCTGTGTACACAGA
ATTTAATCACTTCGGCAGGTTGAACAACTCCATGTAGATAAGAGCAAGTGTAGGCAAAGGTTTAGAAAATGGACA
TAAAGTCAAAGAATGATGGCAGGTAGGATGAAGGAGAGATACTTAGGAAATCCTAAAAGAGGCGGCAAGAAGGTA
CCTCCCTGTGTAACTCACCTTCCCCCATGACAGTAAGAGACACTCACAGGCTATGAGGGTACACCCCTAGCTGAA
TGTTCTGTGTTGTTTCCTTAGACCTGTGGTGTCCGCTGCAACAGCTACTAGCCACGTGTAGCTAATTACATTAAA
ATGAAATAAAATTAAAAGCTCAGTTTCTCAGTTGCGCTAATCACATTTCAAGTGCTCAGCAGCCACCCGTGTCTA
CTACTACACAGTGCAGACACAGAACATATCATCACTGCAGATAGTTCTACTGGACAATGTTACGCTAGAATAAAC
ACCAAGGCAGTCAGTTAAGGCAGCTATGGTTTGGAAAGGCATACGGACAGAGTCTGCTTAGAAGAGATACAAGTT
GTTAATAAAATTGATCCTGTTGATAGTAGTTTGTTTTTGTGGTGGGTGCTGTGAAGAGTAAACATTACTCAGTGG
AAAGCTAAGTTCAGAAGGTACTTTGTTTTTCCTCCCTTGCCTTAAGTCCTTGGTATTTATAATCAATGCTGAACC
TTCTATTTCACTACCGCTCCCTGTTTTAGATATTCAGATTTAAAAGGTTTTCAAAGAATTACTTTCTTCCATGTT
CAAAGCTAGATTTTACTAAACACATGTATCACATTCATATATATTGTTTCTTGGCCCCACTGCCAAAGGAAGTCA
GTCAGTAATTTCACAACCGTTATCAGAGTTTGGAAGCAGAAATAGCTGTTAACTAAAATCTCCCACTGCTCAGAC
TACTTTCTGCCCTAATGGCCATTACTATCCAGTCTGTATTGCTACAAGGGACCCACTGGTACCCCTTTTAGATTC
TATCAAAAGGAACAGGGTTTTCCTAGAGGCAGGCAGCCTGGTGGTATGGCACAGCAGAAGCTTACTGCTAATGAA
ATGGGAACCTCCCCCTCCCTTGTGGTTTCAGCACAGAACCTGAATGCCAGGAAAAATTCCTGGGCCAAGAAGCTA
AAGCTAAAGAAACCTTCCTTTTTTCAACGTTTTTTTTTCTTTCAAACTGTAGGGTCACTTTTGATTGAGGCAAAG
GGGTCCTACTGTAAGTGGAAAAGACTCACTCCCCTAACATAAGTTTTCACTGTGGTGGGATGGTGCCGCCCGATA
TGCTTGATATGCTTTTCCTTCCACATGTTAAGCTAGGAAACCTAACAGGATGTCAGCAGGGCAGTTAACTCTGGA
CTCAGAGCCCTCAAGGGCATGTGGCAGAACCTCATGGACATCACAAGACCATCAGTCTGAATCCAGGTCGTGGGG
GCTGTCATAGCCGAACTCCTTCTGCACATCCAGAGGGTACTTGCTCCACATCCGCTGTCTGCTGCTGCCTCTTTC
CTCCTCACTCAGGCTGTTGTAGTCAGCAGAGCCTAGAATGACATCCCGGGAGTGGATTCTAAATGTGATTTTCCT
AGGCTACTGCAGGAGCCCCTTCTCTTCTCAGAAAGGTCTGTTTTTGTTCCCGATTGTAATGCAAAATCCTTGCTC
AATAAATAAAAAAGAATATAGAATTCTTTTTTTTTTAAAGAAGGAATCACTTTCCTATCATCTAAACCAAGTTCC
TTCACACTGGAGTATTTTGTCACTTCTCCCCTCCGTGGAGTATTTTGTCACTTCTCCCCTCCGTATAGGATTTTT
TGTTGTTGTAAGAGTTGTAGTCATATTGTAAATATTTTTGTACCTTTCTCCTTTTAACGTGTTATTGACAAACCT
CCCCAAAAGAATATGCAATTGTTTGATTCATTTCTCTGTTATCAGACACCAATAAATTCTTTTTGTTGGGC

FIGURE 1125

MEAREPGRPTPTYHLVPNTSQSQVEEDVSSPPQRSSETMQLKKEISLLNGVSLVVGNMIGSGIFVSPKGVLVHTA
SYGMSLIVWAIGGLFSVVGALCYAELGTTIITKSGASYAYILEAFGGFIAFIRLWVSLLVVEPTGQAIIAITFANY
IIQPSFPSCDPPYLACRLLAAACICLLTFVNCAYVKWGTRVQDTFTYAKVVALIAIIVMGLVKLCQGHSEHFQDA
FEGSSWDMGNLSLALYSALFSYSGWDTLNFVTEEIKNPERNLPLAIGISMPIVTLIYILTNVAYYTVLNISDVLS
SDAVAVTFADQTFGMFSWTIPIAVALSCFGGLNASIFASSRLFFVGSREGHLPDLLSMIHIERFTPIPALLFNCT
MALIYLIVEDVFQLINYFSFSYWFFVGLSVVGQLYLRWKEPKRPRPLKLSVFFPIVFCICSVFLVIVPLFTDTIN
SLIGIGIALSGVPFYFMGVYLPESRRPLFIRNVLAAITRGTQQLCFCVLTELDVAEEKKDERKTD

FIGURE 1126

GGGAAG**ATG**GCGAAGGTCTCAGAGCTTTACGATGTCACTTGGGAAGAAATGAGAGATAAAATGAGAAAATGGAGA
GAAGAAAACTCAAGAAATAGTGAGCAAATTGTGGAAGTTGGAGAAGAATTAATTAATGAATATGCTTCTAAGCTG
GGAGATGATATTTGGATCATATATGAACAGGTGATGATTGCAGCACTAGACTATGGTCGGGATGACTTGGCATTG
TTTTGTCTTCAAGAGCTGAGAAGACAGTTCCCTGGCAGTCACAGAGTCAAGCGATTAACAGGCATGAGATTTGAA
GCCATGGAAAGATATGATGATGCTATACAGCTATATGATAGGATTTTACAAGAAGATCCAACTAACACTGCTGCA
AGAAAGCGTAAGATTGCCATTCGAAAAGCCCAGGGGAAAAATGTGGAGGCCATTCGGGAGCTGAATGAGTATCTG
GAACAATTTGTTGGAGACCAAGAAGCCTGGCATGAACTTGCAGAACTTTACATCAATGAACATGACTATGCAAAA
GCAGCCTTTTGTTTAGAGGAACTAATGATGACTAATCCACACAACCACTTATACTGTCAGCAGTATGCTGAAGTT
AAGTATACCCAAGGTGGACTTGAAAACCTCGAACTTTCAAGAAAGTATTTTGCACAGGCATTGAAACTGAACAAC
AGAAATATGAGAGCTTTGTTTGGACTTTATATGTCGGCAAGTCATATTGCTTCTAATCCAAAAGCAAGTGCAAAA
ACGAAAAAAGGACAACATGAAATATGCTAGTTGGGCAGCTAGTCAAATAAACAGAGCTTATCAGTTTGCAGGTCGA
AGTAAGAAGGAAACCAAATATTCTCTTAAGGCTGTCGAAGACATGTTGGAAACATTGCAGATCACCCAGTCT**TAA**

GGTTTCAAAAACTCTTTGACATTAGATTTCACAACTGCACAATTGAACTTATTGGCCTGTAACTTATTTACTAAA
TGCTCAGTGCTATTTATATACTACAGTAATTTTCTGTTAAGAAGGCAGTTGTAAAGAATGTGTTTATATAAACCT
AAAAATGCCTTTTACTGCTAAGTGGGGAGATGGGGGAAATCCATGGAAGAGAGATTTAAGACTTATTGATTGTAC
ATCAGTCTCTTCATATCACATATACATGTATATATATAAAACTCTAATGTAGTATAACCTTGTTAAATAAACCAT
GATGATTTATTAAACTTGC

FIGURE 1127

MAKVSELYDVIWEEMRDKMRKWREENSRNSEQIVEVGEELINEYASKLGDDIWIIYEQVMIAALDYGRDDLALFC
LQELRRQFPGSHRVKRLTGMRFEAMERYDDAIQLYDRILQEDPTNTAARKRKIAIRKAQGKNVEAIRELNEYLEQ
FVGDQEAWHELAELYINEHDYAKAAFCLEELMMTNPHNHLYCQQYAEVKYTQGGLENLELSRKYFAQALKLNNRN
MRALFGLYMSASHIASNPKASAKTKKDNMKYASWAASQINRAYQFAGRSKKETKYSLKAVEDMLETLQITQS

FIGURE 1128

GCTGACTCCAGTGTCCCGAGAGGCGCCGCTTCTTCCGCTTTCTCGTCAGGCTCCTGCAACCCCAGGCATGAACCA
AGGTTTCTGAACTACTGGGCGGGAGCCAACGTCTCTTCTTTCTCCCGCTCTGGCGGAGGCTTTGTCGCTGCGGGC
TGGGCCCCAGGGTGTCCCCC**ATG**GCGGGGCCGCGGGTGGAGGTCGATGGCAGCATCATGGAAGGGGGCGGCCAGA
TCCTGAGAGTCTCTACGGCCTTGAGCTGTCTCCTAGGCCTCCCCTTGCGGGTGCAGAAGATCCGAGCCGGCCGGA
GCACGCCAGGCCTGAGGCCTCAACATTTATCTGGACTGGAAATGATTCGAGATTTGTGTGATGGGCAACTGGAGG
GGGCAGAAATTGGCTCAACAGAAATAACCTTTACACCAGAGAAGATCAAAGGTGGAATCCACACAGCAGATACCA
AGACAGCAGGGAGTGTGTGCCTCTTGATGCAGGTCTCAATGCCGTGTGTTCTCTTTGCTGCTTCTCCATCAGAAC
TTCATTTGAAAGGTGGAACTAATGCTGAAATGGCACCACAGATCGATTATACAGTGATGGTCTTCAAGCCAATTG
TTGAAAAATTTGGTTTCATATTTAATTGTGACATTAAAACAAGGGGATATTACCCAAAAGGGGGTGGTGAAGTGA
TTGTTCGAATGTCACCAGTTAAACAATTGAACCCTATAAATTTAACTGAGCGTGGCTGTGTGACTAAGATATATG
GAAGAGCTTTCGTTGCTGGTGTTTTGCCATTTAAAGTAGCAAAAGATATGGCAGCGGCAGCAGTTAGATGCATCA
GAAAGGAGATCCGGGATTTGTATGTTAACATCCAGCCTGTTCAAGAACCTAAAGACCAAGCATTTGGCAATGGAA
ATGGAATAATAATTATTGCTGAGACCTCCACTGGCTGTTTGTTTGCTGGATCATCGCTTGGTAAACGAGGTGTAA
ATGCAGACAAAGTTGGAATTGAAGCTGCCGAAATGCTATTAGCAAATCTTAGACATGGTGGTACTGTGGATGAGT
ATCTGCAAGACCAGCTGATTGTTTTCATGGCATTAGCCAATGGAGTTTCCAGAATAAAAACAGGACCAGTTACAC
TCCATACGCAAACCGCGATACATTTTGCTGAACAAATAGCAAAGGCTAAATTTATTGTGAAGAAATCAGAAGATG
AAGAAGACGCCGCTAAAGATACTTATATTATTGAATGCCAAGGAATTGGGATGACAAATCCAAATCTA**TAG**AGTA
TTTGCCTCTTAAATGATACCTCATTGATATATTGCACTATTTCATAAATACTATAAAATAATGACTAGGAAGTAA
CTTATTAAAGGCTATGACTTAAATTTGAAGATGAAGTACAGTGTTCTAGGTTTGCTGAGAAGGCTTCATTAAATT
AATCTCACTTTGAATATCTCCTGAGAGATGGACAATGAAATATCAGTTGGTGGATATGTGTGATAGCTGATTTCA
ATATTGAAGTATTGAAATAAAATATTCTTTACACCTGAG

FIGURE 1129

MAGPRVEVDGSIMEGGGQILRVSTALSCLLGLPLRVQKIRAGRSTPGLRPQHLSGLEMIRDLCDGQLEGAEIGST
EITFTPEKIKGGIHTADTKTAGSVCLLMQVSMPCVLFAASPSELHLKGGTNAEMAPQIDYTVMVFKPIVEKFGFI
FNCDIKTRGYYPKGGGEVIVRMSPVKQLNPINLTERGCVTKIYGRAFVAGVLPFKVAKDMAAAAVRCIRKEIRDL
YVNIQPVQEPKDQAFGNGNGIIIIAETSTGCLFAGSSLGKRGVNADKVGIEAAEMLLANLRHGGTVDEYLQDQLI
VFMALANGVSRIKTGPVTLHTQTAIHFAEQIAKAKFIVKKSEDEEDAAKDTYIIECQGIGMTNPNL

FIGURE 1130A

CTGGCGCGCGCACGCGCACGCGCACGCCCACCGCGCGGCTTCCCCCGCTCCCCGGTGCTGAGGAGAGAGCGATCC
GAGGGACTGCGCCGCCCGGACGGCCTGCAGAGCGCTGCCATCATGAGTGAAATTCGTAAGGACACCTTGAAGGCC
ATTCTGTTGGAGTTAGAATGTCATTTTACATGGAATTTACTTAAGGAAGACATTGATCTGTTTGAGGTAGAAGAT
ACAATTGGGCAACAGCTTGAATTTCTTACCACAAAATCTAGACTTGCTCTTTATAACCTATTGGCCTATGTGAAA
CACCTAAAAGGCCAAAATAAAGACGCCCTTGAGTGCTTGGAACAAGCAGAAGAAATAATCCAGCAAGAACACTCA
GACAAAGAAGAAGTACGAAGCCTGGTCACTTGGGGAAACTATGCCTGGGTGTATTATCACATGGACCAGCTTGAA
GAAGCTCAGAAGTATACAGGTAAGATAGGGAATGTCTGTAAGAAATTGTCCAGTCCTTCTAACTACAAGTTGGAG
TGTCCTGAGACTGACTGTGAGAAAGGCTGGGCACTCTTGAAATTTGGAGGAAAGTATTATCAAAAGGCTAAAGCG
GCTTTTGAGAAGGCTCTGGAAGTGGAGCCTGACAATCCAGAATTTAACATCGGCTATGCTATCACAGTGTATCGG
CTGGATGATTCTGATAGAGAAGGGTCTGTAAAGAGCTTTTCTCTGGGGCCTTTGAGAAAGGCTGTTACCCTGAAC
CCAGATAACAGCTATATTAAGGTTTTTCTGGCACTGAAGCTTCAAGATGTACATGCAGAAGCTGAAGGGGAAAAG
TATATTGAAGAAATCCTGGACCAAATATCATCCCAGCCTTACGTCCTTCGTTATGCAGCCAAGTTCTATAGGAGA
AAAAATTCCTGGAACAAAGCTCTCGAACTTTTAAAAAAGGCCTTGGAGGTGACACCAACTTCTTCTTTCCTGCAT
CACCAGATGGGACTTTGCTACAGGGCACAAATGATCCAAATCAAGAAGGCCACACACAACAGACCTAAAGGAAAG
GATAAACTAAAGGTTGATGAGCTGATTTCATCTGCTATATTTCATTTCAAAGCAGCCATGGAACGAGACTCTATG
TTTGCATTTGCCTACACAGACCTGGCCAACATGTATGCTGAAGGAGGCCAGTATAGCAATGCTGAGGACATTTTC
CGGAAAGCTCTTCGTCTGGAGAACATAACCGATGATCACAAACATCAGATCCATTACCACTATGGCCGCTTTCAG
GAATTTCACCGTAAATCAGAAAATACTGCCATCCATCATTATTTAGAAGCCTTAAAGGTCAAAGACAGATCACCC
CTTCGCACCAAACTGACAAGTGCTCTGAAGAAATTGTCTACCAAGAGACTTTGTCACAATGCTTTAGATGTGCAG
AGTTTAAGTGCCCTAGGGTTTGTTTACAAGCTGGAAGGAGAAAAGAGGCAAGCTGCTGAGTACTATGAGAAGGCA
CAAAAGATAGATCCAGAAAATGCAGAATTCCTGACTGCTCTCTGTGAGCTCCGACTTTCCATTTAAATACATACT
CTAGGAAATTAGCTCTAAGTTTTTCCCTTCATTTTGGGTTCTCCTGTTTGTTTTTTTTTTATTATTTTAATCCCT
TGTTTATTATAGAGCTAATATTTATTGAATAGTTATTGTGTACCAAGCATTGTGCTAAATACTTTATATGCATTA
TGATGAATCTTGTGCGGTTTTCTTTCTTTTTTTCTTTTTAATTAAAATACTATAATCCATTGAGAAATAGCAATA
TTCTAGCTATTGTAACTTCTAAAAATGGTATGGCCATTAGATCTGTGCTTTTTATCTCTGCTCTTTGAATTTCTC
ATATTATATAGTAAATATATTCCTACGTAAACCTTTGATACCTAGATCAGGAATACTCTTCCAGGAGTACAAAAT
TACATTATTGATAGTTAAGCTCTTAATTGTGTAGCTTGCAAAAGACAGCACTTTTTAGTTACAGATGTTTTGACT
TTGATGAGGATATTTAGCTATCAATCTAATAGTCACCTAAAATATCTTTTTTGTTGGAAAAAAGTTTATAATAAA
AAAGTTTGTCATCTCTAGTGACTTCAATAAAGAAAAAACTAGAAGAGGAGAAAAAGGATTTCCTCAAATTTTAAA
TATGTAACTTCAGGGATTCAATCCCCAAATGTTTATTAAGTAGCTAGAAATAATTATGTGGAAAAAAATGAATAA
TGGAAAATAGTGAGTCTCAAATTGTTTTTTTTTAACTAAAATCTGCAATGAATCTAGATGCAATTAATTTTATTC
CTTCCAACTAAAATTACAATATTTTTAGGTTAAAATTATTGAGATATAAAGCAGCCATTGGGAAATTGGGAGAAA
TGATAAACAAATGGAAAAAGAAGATGTCCCTAACCTACACCCATAGATTACCAAGGTTTCAGTGTACTAGTTTTG
AATCTGTTCTGAATGGAGTTTTTATACCCTCAATTTCTGGCCTTTGGCTATTTTAGCATTTCAAAGTGACTTCTA
TGAAGCTTTTTTTTTAATGTGAAATTTTCAGAATGTTGTTTTTTTCATGTAGATACTCCAGGAAGAGTTAAGCAC
TGCTTTCAGTTTTAATATCCACCTTGAGGGGTCGCTGCTTGAGGGCTCTTATCCCAGGGGACTTTTTAATTCGGA
TGTTACTTAATGTGGCTTCTCTAATGTAGTTTCTTTGATTACCGACTACACAATTATGTACCATCACAGTATTAG
TGGAAAAGTACCATGTGATTTAATTCTCCATTCCTCCAATGTAACTCTTAAAATTATTATGTATGTGTATGTGTT
TTACTTTTTGTTTTTTATCATCTTTAAAATTTCTATTATGGTTTGATTATTATAAAAATAATGAATTCTCACTGT
AAATTTCAAAAAAAAAATTACAAAAGTATGTGAATTTAAAAATGAGAGCAGTCCCCTCACCCTACCACAGTTCCA
CACCCTCAAGGTAAACTTATAACTTATAATTTGATATGTAAACTTCCAGATCTTTTTTCTATGCGTAATCAGACA
TACATATATACTGCAGTGTATCTCACGTATTAATTTTTAAAAATCTTTTGTTTTACTTAATTCTGTTTTTTATTAT
TATTATTATTTTGTTTGATCTATTAAGGAAGAACAAGGAAGGGAATGATCTTTACTCAAGAATTTCAGAAAGTCA
GCACTGAAGTCCTGACCTATCAGTAGACACATTTGTCCCTTTCAGATATTTTAGGATATTCTAGCAAAGCAGGCC
ATTTCTCCCACCTGAAAGTACATAACTTCTATCACTTGCCACATAATTAAAAGAACTCACATTAAGCGGTTACTC
AGACAGTTAATCATAGAAAAGATTATTTGCTTCATCAGTTCATAGAAAAGATTATTTGCTTCATCAGTTAACTTG
TTTTTATAAATCAGGGCCTGTGTTCATACACAGAAGGGGCCTGAGATTTCTGCACTTTAAACAAGCTCCTCCTAG
GTGAGGATGCTGTGGCTGTTCTAATTACATTTTGAGTAGTAAGGTCTACAGCATTGTTCCTCAAACTTGGCTACG

FIGURE 1130B

TATTGGAATCACCTAAAAAGTTAAAACAAAACATGGATGTCTGGGTCCCGCCCCATAGAGAATGACTTAATTGGC
ATGGGGTGCAGTCCAGGCATCATGATTTTTAGATTTCCCAGTTGGAACTTGTGCAGCAAAGTTTGGGAGCTACTG
ATGGACATGTGAAAAGTAAGTATAAATGGAATAAAATTAATTAGGCTAATAGGCTTAACCCAGGAAATCCTAAGT
TCCTTGAATATCCAGTTTGCATTTGGGACTCCTCATCATATACTTGGTATATAATACTCTAATAAAAGCTGCCTG
AGTTGA

FIGURE 1131

MSEIRKDTLKAILLELECHFTWNLLKEDIDLFEVEDTIGQQLEFLTTKSRLALYNLLAYVKHLKGQNKDALECLE
QAEEIIQQEHSDKEEVRSLVTWGNYAWVYYHMDQLEEAQKYTGKIGNVCKKLSSPSNYKLECPETDCEKGWALLK
FGGKYYQKAKAAFEKALEVEPDNPEFNIGYAITVYRLDDSDREGSVKSFSLGPLRKAVTLNPDNSYIKVFLALKL
QDVHAEAEGEKYIEEILDQISSQPYVLRYAAKFYRRKNSWNKALELLKKALEVTPTSSFLHHQMGLCYRAQMIQI
KKATHNRPKGKDKLKVDELISSAIFHFKAAMERDSMFAFAYTDLANMYAEGGQYSNAEDIFRKALRLENITDDHK
HQIHYHYGRFQEFHRKSENTAIHHYLEALKVKDRSPLRTKLTSALKKLSTKRLCHNALDVQSLSALGFVYKLEGE
KRQAAEYYEKAQKIDPENAEFLTALCELRLSI

FIGURE 1132A

CTGGCGCGCGCACGCGCACGCGCACGCCCACCGCGCGGCTTCCCCCGCTCCCCGGTGCTGAGGAGAGAGCGATCC
GAGGGACTGCGCCGCCCGGACGGCCTGCAGAGCGCTGCCATCATGAGTGAAATTCGTAAGGACACCTTGAAGGCC
ATTCTGTTGGAGTTAGAATGTCATTTTACATGGAATTTACTTAAGGAAGACATTGATCTGTTTGAGGTAGAAGAT
ACAATTGGGCAACAGCTTGAATTTCTTACCACAAAATCTAGACTTGCTCTTTATAACCTATTGGCCTATGTGAAA
CACCTAAAAGGCCAAAATAAAGACGCCCTTGAGTGCTTGGAACAAGCAGAAGAAATAATCCAGCAAGAACACTCA
GACAAAGAAGAAGTACGAAGCCTGGTCACTTGGGGAAACTATGCCTGGGTGTATTATCACATGGACCAGCTTGAA
GAAGCTCAGAAGTATACAGGTAAGATAGGGAATGTCTGTAAGAAATTGTCCAGTCCTTCTAACTACAAGTTGGAG
TGTCCTGAGACTGACTGTGAGAAAGGCTGGGCACTCTTGAAATTTGGAGGAAAGTATTATCAAAAGGCTAAAGCG
GCTTTTGAGAAGGCTCTGGAAGTGGAGCCTGACAATCCAGAATTTAACATCGGCTATGCTATCACAGTGTATCGG
CTGGATGATTCTGATAGAGAAGGGTCTGTAAAGAGCTTTTCTCTGGGGCCTTTGAGAAAGGCTGTTACCCTGAAC
CCAGATAACAGCTATATTAAGGTTTTTCTGGCACTGAAGCTTCAAGATGTACATGCAGAAGCTGAAGGGGAAAAG
TATATTGAAGAAATCCTGGACCAAATATCATCCCAGCCTTACGTCCTTCGTTATGCAGCCAAGTTCTATAGGAGA
AAAAATTCCTGGAACAAAGCTCTCGAACTTTTAAAAAAGGCCTTGGAGGTGACACCAACTTCTTCTTTCCTGCAT
CACCAGATGGGACTTTGCTACAGGGCACAAATGATCCAAATCAAGAAGGCCACACACAACAGACCTAAAGGAAAG
GATAAACTAAAGGTTGATGAGCTGATTTCATCTGCTATATTTCATTTCAAAGCAGCCATGGAACGAGACTCTATG
TTTGCATTTGCCTACACAGACCTGGCCAACATGTATGCTGAAGGAGGCCAGTATAGCAATGCTGAGGACATTTTC
CGGAAAGCTCTTCGTCTGGAGAACATAACCGATGATCACAAACATCAGATCCATTACCACTATGGCCGCTTTCAG
GAATTTCACCGTAAATCAGAAAATACTGCCATCCATCATTATTTAGAAGCCTTAAAGGTCAAAGACAGATCACCC
CTTCGCACCAAACTGACAAGTGCTCTGAAGAAATTGTCTACCAAGAGACTTTGTCACAATGCTTTAGATGTGCAG
AGTTTAAGTGCCCTAGGGTTTGTTTACAAGCTGGAAGGAGAAAAGAGGCAAGCTGCTGAGTACTATGAGAAGGCA
CAAAAGATAGATCCAGAAAATGCAGAATTCCTGACTGCTCTCTGTGAGCTCCGACTTTCCATTTAAATACATACT
CTAGGAAATTAGCTCTAAGTTTTTCCCTTCATTTTGGGTTCTCCTGTTTGTTTTTTTTTTATTATTTTAATCCCT
TGTTTATTATAGAGCTAATATTTATTGAATAGTTATTGTGTACCAAGCATTGTGCTAAATACTTTATATGCATTA
TGATGAATCTTGTGCGGTTTTCTTTCTTTTTTTCTTTTTAATTAAAATACTATAATCCATTGAGAAATAGCAATA
TTCTAGCTATTGTAACTTCTAAAAATGGTATGGCCATTAGATCTGTGCTTTTTATCTCTGCTCTTTGAATTTCTC
ATATTATATAGTAAATATATTCCTACGTAAACCTTTGATACCTAGATCAGGAATACTCTTCCAGGAGTACAAAAT
TACATTATTGATAGTTAAGCTCTTAATTGTGTAGCTTGCAAAAGACAGCACTTTTTAGTTACAGATGTTTTGACT
TTGATGAGGATATTTAGCTATCAATCTAATAGTCACCTAAAATATCTTTTTTGTTGGAAAAAAGTTTATAATAAA
AAAGTTTGTCATCTCTAGTGACTTCAATAAAGAAAAAACTAGAAGAGGAGAAAAAGGATTTCCTCAAATTTTAAA
TATGTAACTTCAGGGATTCAATCCCCAAATGTTTATTAAGTAGCTAGAAATAATTATGTGGAAAAAAATGAATAA
TGGAAAATAGTGAGTCTCAAATTGTTTTTTTTTAACTAAAATCTGCAATGAATCTAGATGCAATTAATTTTATTC
CTTCCAACTAAAATTACAATATTTTTAGGTTAAAATTATTGAGATATAAAGCAGCCATTGGGAAATTGGGAGAAA
TGATAAACAAATGGAAAAAGAAGATGTCCCTAACCTACACCCATAGATTACCAAGGTTTCAGTGTACTAGTTTTG
AATCTGTTCTGAATGGAGTTTTTATACCCTCAATTTCTGGCCTTTGGCTATTTTAGCATTTCAAAGTGACTTCTA
TGAAGCTTTTTTTTTAATGTGAAATTTTCAGAATGTTGTTTTTTTCATGTAGATACTCCAGGAAGAGTTAAGCAC
TGCTTTCAGTTTTAATATCCACCTTGAGGGGTCGCTGCTTGAGGGCTCTTATCCCAGGGGACTTTTTAATTCGGA
TGTTACTTAATGTGGCTTCTCTAATGTAGTTTCTTTGATTACCGACTACACAATTATGTACCATCACAGTATTAG
TGGAAAAGTACCATGTGATTTAATTCTCCATTCCTCCAATGTAACTCTTAAAATTATTATGTATGTGTATGTGTT
TTACTTTTTGTTTTTTATCATCTTTAAAATTTCTATTATGGTTTGATTATTATAAAAATAATGAATTCTCACTGT
AAATTTCAAAAAAAAAATTACAAAAGTATGTGAATTTAAAAATGAGAGCAGTCCCCTCACCCTACCACAGTTCCA
CACCCTCAAGGTAAACTTATAACTTATAATTTGATATGTAAACTTCCAGATCTTTTTTCTATGCGTAATCAGACA
TACATATATACTGCAGTGTATCTCACGTATTAATTTTTAAAAATCTTTTGTTTTACTTAATTCTGTTTTTATTAT
TATTATTATTTTGTTTGATCTATTAAGGAAGAACAAGGAAGGGAATGATCTTTACTCAAGAATTTCAGAAAGTCA
GCACTGAAGTCCTGACCTATCAGTAGACACATTTGTCCCTTTCAGATATTTTAGGATATTCTAGCAAAGCAGGCC
ATTTCTCCCACCTGAAAGTACATAACTTCTATCACTTGCCACATAATTAAAAGAACTCACATTAAGCGGTTACTC
AGACAGTTAATCATAGAAAAGATTATTTGCTTCATCAGTTCATAGAAAAGATTATTTGCTTCATCAGTTAACTTG
TTTTTATAAATCAGGGCCTGTGTTCATACACAGAAGGGGCCTGAGATTTCTGCACTTTAAACAAGCTCCTCCTAG
GTGAGGATGCTGTGGCTGTTCTAATTACATTTTGAGTAGTAAGGTCTACAGCATTGTTCCTCAAACTTGGCTACG

FIGURE 1132B

TATTGGAATCACCTAAAAAGTTAAAACAAAACATGGATGTCTGGGTCCCGCCCCATAGAGAATGACTTAATTGGC
ATGGGGTGCAGTCCAGGCATCATGATTTTTAGATTTCCCAGTTGGAACTTGTGCAGCAAAGTTTGGGAGCTACTG
ATGGACATGTGAAAAGTAAGTATAAATGGAATAAAATTAATTAGGCTAATAGGCTTAACCCAGGAAATCCTAAGT
TCCTTGAATATCCAGTTTGCATTTGGGACTCCTCATCATATACTTGGTATATAATACTCTAATAAAAGCTGCCTG
AGTTGA

FIGURE 1133

MSEIRKDTLKAILLELECHFTWNLLKEDIDLFEVEDTIGQQLEFLTTKSRLALYNLLAYVKHLKGQNKDALECLE
QAEEIIQQEHSDKEEVRSLVTWGNYAWVYYHMDQLEEAQKYTGKIGNVCKKLSSPSNYKLECPETDCEKGWALLK
FGGKYYQKAKAAFEKALEVEPDNPEFNIGYAITVYRLDDSDREGSVKSFSLGPLRKAVTLNPDNSYIKVFLALKL
QDVHAEAEGEKYIEEILDQISSQPYVLRYAAKFYRRKNSWNKALELLKKALEVTPTSSFLHHQMGLCYRAQMIQI
KKATHNRPKGKDKLKVDELISSAIFHFKAAMERDSMFAFAYTDLANMYAEGGQYSNAEDIFRKALRLENITDDHK
HQIHYHYGRFQEFHRKSENTAIHHYLEALKVKDRSPLRTKLTSALKKLSTKRLCHNALDVQSLSALGFVYKLEGE
KRQAAEYYEKAQKIDPENAEFLTALCELRLSI

FIGURE 1134

TCGGAGGGAGGTTCGGGTGGGCATCGGGCGGCTGGAAGAGCTCGACTCGTCCCGCTGGGAAAGCGCGAGTCTGAG
TGGAACCCTGGACGACTTGCAGAGCGGCTGGCGCAGTCATGGCGGACTACTGGAAGTCACAGCCAAAGAAATTCT
GTGATTACTGCAAGTGCTGGATAGCAGACAATAGGCCTAGTGTTGAATTTCATGAAAGAGGAAAGAATCATAAGG
AAAATGTGGCAAAAAGGATCAGTGAGATTAAACAGAAAAGCCTGGATAAGGCAAAGGAAGAAGAAAAGGCATCAA
AGGAGTTTGCTGCAATGGAGGCAGCTGCCCTGAAAGCATACCAAGAGGATTTGAAAAGACTTGGCTTAGAGTCAG
AAATTTTGGAGCCAAGCATAACACCAGTAACCAGCACTATCCCACCTACCTCGACATCAAATCAACAGAAAGAAA
AGAAAGAAAAGAAGAAAAGAAAAAAAGATCCTTCAAAGGGCAGATGGGTAGAAGGCATAACCTCTGAGGGTTACC
ATTACTATTATGATCTTATCTCAGGAGCATCTCAGTGGGAGAAACCTGAAGGATTTCAAGGAGACTTAAAAAAGA
CAGCAGTGAAGACCGTTTGGGTAGAAGGTTTAAGTGAAGATGGTTTTACCTATTACTATAATACAGAAACAGGAG
AATCCAGATGGGAGAAACCTGATGATTTCATTCCACACACTAGTGATCTGCCTTCTAGTAAGGTCAATGAAAATT
CACTTGGCACCCTAGATGAATCCAAATCATCAGATTCGCATAGTGATTCTGATGGGGAACAGGAAGCAGAAGAAG
GAGGGGTCTCTACAGAGACAGAAAAGCCAAAAATAAAGTTTAAGGAAAAAAATAAAAATAGTGATGGAGGAAGTG
ACCCAGAAACACAGAAAGAAAAAAGTATTCAGAAACAGAATTCATTAGGTTCAAATGAAGAAAAATCGAAAACTC
TTAAGAAATCAAACCCATATGGAGAATGGCAAGAAATTAAACAAGAGGTTGAGTCTCATGAGGAGGTAGATTTGG
AACTTCCAAGCACTGAAAATGAGTATGTATCAACTTCAGAAGCTGATGGTGGCGGAGAACCCAAAGTGGTATTTA
AAGAAAAAACAGTCACTTCTCTTGGAGTTATGGCAGATGGAGTGGCCCCAGTCTTCAAAAAGAGAAGAACTGAAA
ATGGAAAATCTAGAAATTTAAGGCAACGAGGTGATGATCAATAGTTGCAGGAGAGCTTTTTGTACATGCTTTTAG
GACAGAATGGAGACTTATACACCCAAAGTTTATCTGTGTTTGTTTGTAAGTATTATGATGCTAAAAATTTAGATT
TATTCTAAATGTATTTGATGTGAATTAAAATAAATATTTTTTCATGTGAAATTTATTTTGGTTCCTAAAATGGAA
GCCTACCACATTGCATTGTAATACAGTGTATTATGTTCAGTGTCTAAAAACTGCTAATTAAGTCATAATTTAAGA
TGCTATGTATCTGTTATTTAAAACATGGAGAAACAGGGCCTTTATTCCATTCATATTCATAAGAGCATATTTATC
CTGCATTGAAAATGCATTACTTTTGCACATTGATATTAACTGTTGTCCAACAAATAAGTATCGGAGTACGTGAGA
ATATTCCCAGCCCAGTGATGATTTGGTTCTGAGGCTGATGTGAGAAAGCTGATGTAAAAAATGTATGCATATTGG
CTTACCTTACTCAATTTAAAGTCAAAAGCCAACAGCCAGGAGCAGCTCAGGTACTTCAGATGTGCTTAATATGGA
GTGAAAACTGGACCAGAGGTGGAAAGATGTATTTGCCCCAGTTCACTTCAAAGCAGCAAACGTTGTTTAAGCATT
TTAGTTTGAACCAGGCATTGTGTTAGGAATCCAGGGATAAAGATGAATGAAATGTATTTCTGTTCTTCAGGAGTT
CACATTCTAGCATATGCCTTTTTTCCCCCAGTCATGCACTCTTTTTAGCAGTCTTATATGTACTAGAAAAGATTT
TTTAAAGTTTATTTAAAGCTGTGTAGATGAAGGCTTGATCTAAAATAGTATAAGGTCTCCAGCTTCAGTAAAAGT
TTTTAGTGTTTACTTAAATTAGTAATTTCTCACTTTCTGTCTGGTTAAAATGTCTTAAAAAGTAGAATTTTCTTC
TTTAATCCGTTTAGTAGTTACCTCCCTTTTACTTTTCAAATTCACAAAATTACATTTCTCATAAATTGTATAGTA
TTTAACTTATAATAGTTAATATTTGTCTTTTTAAGATGACTGTACATGTAAGAAAAAAGCTTATTAAAAACTTGA
TCAAAGAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1135

MADYWKSQPKKFCDYCKCWIADNRPSVEFHERGKNHKENVAKRISEIKQKSLDKAKEEEKASKEFAAMEAAALKA
YQEDLKRLGLESEILEPSITPVTSTIPPTSTSNQQKEKKEKKKRKKDPSKGRWVEGITSEGYHYYYDLISGASQW
EKPEGFQGDLKKTAVKTVWVEGLSEDGFTYYYNTETGESRWEKPDDFIPHTSDLPSSKVNENSLGTLDESKSSDS
HSDSDGEQEAEEGGVSTETEKPKIKFKEKNKNSDGGSDPETQKEKSIQKQNSLGSNEEKSKTLKKSNPYGEWQEI
KQEVESHEEVDLELPSTENEYVSTSEADGGGEPKVVFKEKTVTSLGVMADGVAPVFKKRRTENGKSRNLRQRGDD
Q

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FIGURE 1136

CTTCCAGCTGGTGGGAGTTGACGACGTGGTGCTGGGCGTTGGGACCCTACTTTATCTAGTTCGGGAAGTTGGGTT
GTGGGGTCATACCTGTCTGTCTGCTCCCAGCTTTCTTGGGTTTCTTCCGACGGCGTGGGGCCTCGCTAAGGAATT
CCCGGCCCCTCAGGGCCACGGCTTTAGCGGTGTCTTTTGCGAGTTCTTCGTAAGTACATCTTAAAGCTGTCAAGA
TGGTTCTAGCAGACCTTGGAAGAAAAATAACATCAGCATTACGCTCATTGAGCAATGCCACCATTATCAATGAAG
AGGTATTGAATGCTATGCTAAAAGAAGTCTGTACCGCTTTGTTGGAAGCAGATGTTAATATTAAACTAGTGAAGC
AACTAAGAGAAAATGTTAAGTCTGCTATTGATCTTGAAGAGATGGCATCTGGTCTTAACAAAAGAAAAATGATTC
AGCATGCTGTATTTAAAGAACTTGTGAAGCTTGTAGACCCTGGAGTTAAGGCATGGACACCCACTAAAGGAAAAC
AAAATGTGATTATGTTTGTTGGATTGCAAGGGAGTGGTAAAACAACAACATGTTCAAAGCTAGCATATTATTACC
AGAGGAAAGGTTGGAAGACCTGTTTAATATGTGCAGACACATTCAGAGCAGGGGCTTTTGACCAACTAAAACAGA
ATGCTACCAAAGCAAGAATTCCATTTTATGGAAGCTATACAGAAATGGATCCTGTCATCATTGCTTCTGAAGGAG
TAGAGAAATTTAAAAATGAAAATTTTGAAATTATTATTGTTGATACAAGTGGCCGCCACAAACAAGAAGACTCTT
TGTTTGAAGAAATGCTTCAAGTTGCTAATGCTATACAACCTGATAACATTGTTTATGTGATGGATGCCTCCATTG
GGCAGGCTTGTGAAGCCCAGGCTAAGGCTTTTAAAGATAAAGTAGATGTAGCCTCAGTAATAGTGACAAAACTTG
ATGGCCATGCAAAAGGAGGTGGTGCACTCAGTGCAGTCGCTGCCACAAAAAGTCCGATTATTTTCATTGGTACAG
GGGAACATATAGATGACTTTGAACCTTTCAAAACACAGCCTTTTATTAGCAAACTTCTTGGTATGGGCGACATTG
AAGGACTGATAGATAAAGTCAACGAGTTGAAGTTGGATGACAATGAAGCACTTATAGAGAAGTTGAAACATGGTC
AGTTTACGTTGCGAGACATGTATGAGCAATTTCAAAATATCATGAAAATGGGCCCCTTCAGTCAGATCTTGGGGA
TGATCCCTGGTTTTGGGACAGATTTTATGAGCAAAGGAAATGAACAGGAGTCAATGGCAAGGCTAAAGAAATTAA
TGACAATAATGGATAGTATGAATGATCAAGAACTAGACAGTACGGATGGTGCCAAAGTTTTTAGTAAACAACCAG
GAAGAATCCAAAGAGTAGCAAGAGGATCGGGTGTATCAACAAGAGATGTTCAAGAACTTTTGACACAATATACCA
AGTTTGCACAGATGGTAAAAAAGATGGGAGGTATCAAAGGACTTTTCAAAGGTGGCGACATGTCTAAGAATGTGA
GCCAGTCACAGATGGCAAAATTGAACCAACAAATGGCCAAAATGATGGATCCTAGGGTTCTTCATCACATGGGTG
GTATGGCAGGACTTCAGTCAATGATGAGGCAGTTTCAACAGGGTGCTGCTGGCAACATGAAAGGCATGATGGGAT
TCAATAATATGTAAAGAAAATGCCTTAATATAAACTGACTCAGTTGAATACCTAATTTGCTGAGACCTCAGCGTT
TCCCTTCTTTTTGCGAATTGGGGGGAAAGTGTATTTTTCTTGCTTATCATGCACTCTTTCCTTTTCTTCTCGCCC
GCTTTTCCCCTCCTTTTCTTTTTCCTTCCTTCTTTCCTCCCTTTAATATAAGGGAGAAATACATGGTTTTTGTGG
AAATCATTATATGTTTGCTTTAGATTTTCTTCTGTTTTCACCATCATAACACTTAAGTTAAATCATGATGTAAAA
TTTTAGTACTTAAAGGTTTTTAATTATCTCGAAGGCCAAGCATTGCATTTGTAAACAGTCCTGGTCAGTAGTTAA
ATAATGTTTCAATTAAAGTGCTGTAAAATAAACTTCAAAGTGGTTATAAAAAAAAAAAAAAAAA

FIGURE 1137

MVLADLGRKITSALRSLSNATIINEEVLNAMLKEVCTALLEADVNIKLVKQLRENVKSAIDLEEMASGLNKRKMI
QHAVFKELVKLVDPGVKAWTPTKGKQNVIMFVGLQGSGKTTTCSKLAYYYQRKGWKTCLICADTFRAGAFDQLKQ
NATKARIPFYGSYTEMDPVIIASEGVEKFKNENFEIIIVDTSGRHKQEDSLFEEMLQVANAIQPDNIVYVMDASI
GQACEAQAKAFKDKVDVASVIVTKLDGHAKGGGALSAVAATKSPIIFIGTGEHIDDFEPFKTQPFISKLLGMGDI
EGLIDKVNELKLDDNEALIEKLKHGQFTLRDMYEQFQNIMKMGPFSQILGMIPGFGTDFMSKGNEQESMARLKKL
MTIMDSMNDQELDSTDGAKVFSKQPGRIQRVARGSGVSTRDVQELLTQYTKFAQMVKKMGGIKGLFKGGDMSKNV
SQSQMAKLNQQMAKMMDPRVLHHMGGMAGLQSMMRQFQQGAAGNMKGMMGFNNM

FIGURE 1138

CACCGCGCAAGCGCATCCTGGCCTTTCTTCAGTCCCCACGTGCGATCCTTCCCGGCAACTTTTTCGAGAAAAATG
CCCAAATTCAAGGCGGCCCGTGGGGTGGGGGGTCAGGAAAAACATGCGCCCCTGGCCGATCAGATCCTGGCTGGG
AATGCGGTGCGGGCGGGGGTCCGGGAGAAGCGGCGGGGTCGCGGGACAGGAGAAGCGGAGGAAGAGTATGTGGGG
CCCCGGCTGAGCCGACGGATTTTGCAGCAAGCACGGCAGCAACAGGAGGAACTCGAGGCCGAGCATGGGACTGGG
GACAAGCCCGCGGCGCCGCGGGAACGCACCACGCGGCTGGGTCCAAGAATGCCTCAGGATGGATCAGATGACGAG
GACGAGGAGTGGCCCACCCTGGAGAAGGCTGCCACAATGACAGCAGCGGGCCATCATGCAGAGGTGGTTGTGGAC
CCTGAGGATGAGCGTGCCATAGAGATGTTC**ATG**AACAAGAACCCTCCTGCCAGGCGCACCCTGGCTGACATCATC
ATGGAGAAGCTGACTGAGAAGCAGACAGAGGTTGAGACAGTCATGTCAGAGGTGTCGGGCTTCCCTATGCCCCAG
CTGGACCCCCGGGTCCTAGAAGTGTACAGGGGGGTCCGGGAGGTATTATCTAAGTACCGCAGTGGAAAACTGCCC
AAGGCATTTAAGATCATCCCTGCACTCTCCAACTGGGAGCAAATCCTCTACGTCACAGAGCCGGAGGCCTGGACT
GCAGCTGCCATGTACCAGGCCACCAGGATTTTTGCCTCTAACCTGAAGGAACGCATGGCCCAGCGCTTCTACAAC
CTTGTCCTGCTCCCTCGAGTACGAGATGACGTTGCTGAATACAAACGACTCAACTTCCATCTCTACATGGCTCTC
AAGAAGGCCCTTTTCAAACCTGGAGCCTGGTTCAAAGGGATCCTGATTCCACTGTGCGAGTCTGGCACTTGTACC
CTCCGGGAAGCCATCATTGTGGGTAGCATCATCACCAAGTGCTCCATCCCTGTGTTGCACTCCAGTGCGGCCATG
CTGAAAATTGCTGAGATGGAATACAGCGGTGCCAACAGCATCTTCCTGCGACTGCTGCTGGATAAGAAGTATGCA
CTGCCTTACCGGGTGCTGGATGCCCTAGTCTTCCACTTCCTGGGGTTCCGGACAGAGAAGCGTGAACTGCCTGTG
CTGTGGCACCAGTGCCTCCTGACTTTGGTCCAGCGCTACAAGGCCGACTTGGCCACAGACCAGAAAGAGGCCCTC
TTAGAACTGCTCCGGCTGCAGCCCCATCCACAGCTATCGCCCGAAATCAGGCGTGAGCTTCAGAGTGCAGTCCCC
CGCGATGTGGAAGATGTTCCCATCACCGTGGAG**TGA**GGAAAACAGTCAGCTGTCCTGGCCAAAGGGGTTTGGAAG
GACACCAAGACCCCCGTTGGTGACTGAAGATGACACTGAGCTTTAATGGCTGAAGACCCAGATCAGGGCAGTGAC
AGATCACAGGGACATCTGTGGCTCCCAGTCCAGGACAGGAAGGACTGAGGGTCTGGCTGGTTCCCTCTTCCATTC
TAGGCCCTTATCCCTGTTTAGTTCTGAGAGCCAACTTGAGATACCATATGCTAGCATTCCCAGTCCCCAGCTGGG
GCTTGGTGTGAGTACTTTTTCTATGGCTATTGTGTCAGGTCACTGTGGATAAAGGCAAAGACAGATATTTATTGA
AAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1139

MNKNPPARRTLADIIMEKLTEKQTEVETVMSEVSGFPMPQLDPRVLEVYRGVREVLSKYRSGKLPKAFKIIPALS
NWEQILYVTEPEAWTAAAMYQATRIFASNLKERMAQRFYNLVLLPRVRDDVAEYKRLNFHLYMALKKALFKPGAW
FKGILIPLCESGTCTLREAIIVGSIITKCSIPVLHSSAAMLKIAEMEYSGANSIFLRLLLDKKYALPYRVLDALV
FHFLGFRTEKRELPVLWHQCLLTLVQRYKADLATDQKEALLELLRLQPHPQLSPEIRRELQSAVPRDVEDVPITV
E

FIGURE 1140

AGCCTTTAAGATTTCCGGGGATGGAATCCGAAATGGAAACGCAGAGCGCCAGGGCAGAGGAGGGCTTTACCCAGG
TCACCCGCAAGGGTGGCCGACGGGCGAAGAAACGACAGGCTGAACAGCTGTCCGCAGCAGGAGAGGGCGGGGATG
CGGGCCGCATGGACACAGAGGAGGCCAGGCCGGCGAAGAGGCCCGTCTTCCCACCCCTCTGTGGGGACGGGCTCC
TGAGTGGGAAAGAAGAAACAAGGAAAATTCCAGTCCCAGCTAACAGATACACACCATTGAAAGAAAACTGGATGA
AGATATTTACTCCTATTGTGGAACATTTGGGACTTCAGATACGCTTTAACTTGAAATCAAGGAATGTAGAAATCA
GGACTTGTAAAGAAACCAAGGATGTTAGTGCTCTGACAAAAGCAGCTGATTTTGTGAAAGCTTTTATTCTCGGCT
TTCAGGTGGAGGATGCACTTGCCCTCATCAGGTTGGATGACCTCTTCCTAGAGTCTTTTGAAATTACAGATGTTA
AACCCCTAAAGGGAGACCATCTATCCAGGGCAATAGGAAGAATCGCTGGCAAAGGAGGAAAAACCAAATTCACCA
TAGAGAATGTGACACGGACAAGGATAGTTTTGGCTGATGTGAAAGTTCACATCCTTGGCTCCTTCCAAAATATCA
AGATGGCAAGAACTGCCATTTGCAACCTAATCTTGGGAAATCCTCCTTCCAAGGTTTATGGCAATATTCGAGCTG
TGGCTAGCAGATCAGCAGATCGATTCTGATTTCAAGTCAGAGACTTTTTATCTTGCCTTTGGACTCTGGTGAAAA
ATACTTTACAGTGGTCGGTCACAAGAAACCATCTGAACAATTTCAGTCATTTGAAGCCTCCGTCCCTTCTTCCAT
TCTCAGCCAGAAGCATAAACAGAAAAGAAAGATTTAAGAGGATTCACACTCAACAGGTTTTAGGATAATTTAAAT
ATCAAAAATTGATTGTTATACTTACACATTAGGTATAATTTATCATTTATCTGAAATCACATGTAGCAGATTGCA
TAGTCTGTAATCCTCTCAGAGGGAAACTTCTTGTTTAAACAGCTCTATATGGATTTATACTTTTATATTTATAAA
TTTATAACTTCATACAAATTTATAAACATTTCTTTATAAATTGTAATTTAATAGATTATCTCAGAAAAA

FIGURE 1141

MESEMETQSARAEEGFTQVTRKGGRRAKKRQAEQLSAAGEGGDAGRMDTEEARPAKRPVFPPLCGDGLLSGKEET
RKIPVPANRYTPLKENWMKIFTPIVEHLGLQIRFNLKSRNVEIRTCKETKDVSALTKAADFVKAFILGFQVEDAL
ALIRLDDLFLESFEITDVKPLKGDHLSRAIGRIAGKGGKTKFTIENVTRTRIVLADVKVHILGSFQNIKMARTAI
CNLILGNPPSKVYGNIRAVASRSADRF

FIGURE 1142

CGGGCTGTAGAGCCTTGCGCGCGCAGTGGGGATGGAACGTTGCTAGGCTTAGCGGGTCTGGCTGCTGGGGGCCCG
AGCAGCACGCTCGGAGCCGCCGCGCGCCAAAGCGGGAATCTGGGAGGCGAGCAGCTCTGCAGTTAATGCACGTAT
TTTAAACTCCCGGGCCTGCGGACGCTATGCACAGGAAGCACCTCCAGGAGATTCCAGACCTGAGTAGCAACGTTG
CCACCAGCTTCACGTGGGGATGGGATTCCAGCAAGACTTCTGAACTGCTGTCAGGCATGGGGGTCTCCGCCCTGG
AGAAAGAGGAGCCCGACAGTGAGAACATCCCCCAGGAACTGCTCTCAAACCTGGGCCACCCGGAGAGCCCCCCAC
GGAAACGGCTGAAGAGCAAAGGGAGTGACAAAGACTTTGTGATTGTCCGCAGGCCTAAGCTAAATCGAGAGAACT
TTCCAGGTGTTTCATGGGACTCCCTTCCGGATGAGCTGCTCTTGGGAATCTTTTCCTGTCTGTGCCTCCCTGAGC
TGCTAAAGGTCTCTGGTGTTTGTAAGAGGTGGTATCGCCTAGCGTCTGATGAGTCTCTATGGCAGACCTTAGACC
TCACAGGTAAAAATCTGCACCCGGATGTGACTGGTCGGTTGCTGTCTCAAGGGGTGATTGCCTTCCGCTGCCCAC
GATCATTTATGGACCAACCATTGGCTGAACATTTCAGCCCTTTTCGTGTACAGCACATGGACCTATCGAACTCAG
TTATAGAAGTGTCCACCCTCCACGGCATACTGTCTCAGTGTTCCAAGTTGCAGAATCTAAGCCTGGAAGGCCTGC
GGCTTTCGGATCCCATTGTCAATACTCTCGCAAAAAACTCAAATTTAGTGCGACTTAACCTTTCTGGGTGTTCTG
GATTCTCTGAATTTGCCCTGCAGACTTTGCTAAGCAGCTGTTCCAGACTGGATGAGCTGAACCTCTCCTGGTGTT
TTGATTTCACTGAAAAGCATGTACAGGTGGCTGTTGCGCATGTGTCAGAGACCATCACCCAGCTGAATCTTAGCG
GCTACAGAAAGAATCTCCAGAAATCAGATCTCTCTACTTTAGTTAGAAGATGCCCCAATCTTGTCCATCTAGACT
TAAGTGATAGTGTCATGCTAAAGAATGACTGCTTTCAGGAATTTTTCCAGCTCAACTACCTCCAACACCTATCAC
TCAGTCGGTGCTATGATATAATACCTGAAACTTTACTATTAGTGACAAGAGCTGGGGTTAGGATCCGGTTGGACT
CTGACATCGGATGCCCTCAAACATACAGAACTTCCAAACTCAAGTCCAGCCATAAGCTATTTTGCCAACATGTCA
GAGTAATCTGTATTTTTGTATGTGATTTCTACTTTTATAGACTTGTTTTAAAACAATAAAACACATTTTTATAAA
AATGAGTGCTTAAACTAAAAAAAAAAAAAAAAAAAAA

FIGURE 1143

MHRKHLQEIPDLSSNVATSFTWGWDSSKTSELLSGMGVSALEKEEPDSENIPQELLSNLGHPESPPRKRLKSKGS
DKDFVIVRRPKLNRENFPGVSWDSLPDELLLGIFSCLCLPELLKVSGVCKRWYRLASDESLWQTLDLTGKNLHPD
VTGRLLSQGVIAFRCPRSFMDQPLAEHFSPFRVQHMDLSNSVIEVSTLHGILSQCSKLQNLSLEGLRLSDPIVNT
LAKNSNLVRLNLSGCSGFSEFALQTLLSSCSRLDELNLSWCFDFTEKHVQVAVAHVSETITQLNLSGYRKNLQKS
DLSTLVRRCPNLVHLDLSDSVMLKNDCFQEFFQLNYLQHLSLSRCYDIIPETLLELGEIPTLKTLQVFGIVPDGT
LQLLKEALPHLQINCSHFTTIARPTIGNKKNQEIWGIKCRLTLQKPSCL

FIGURE 1144A

TTGAGAAAGGGGAATTTCATCCCAAATAAAAGGAATGAAGTCTGGCTCCGGAGGAGGGTCCCCGACCTCGCTGTG
GGGGCTCCTGTTTCTCTCCGCCGCGCTCTCGCTCTGGCCGACGAGTGGAGAAATCTGCGGGCCAGGCATCGACAT
CCGCAACGACTATCAGCAGCTGAAGCGCCTGGAGAACTGCACGGTGATCGAGGGCTACCTCCACATCCTGCTCAT
CTCCAAGGCCGAGGACTACCGCAGCTACCGCTTCCCCAAGCTCACGGTCATTACCGAGTACTTGCTGCTGTTCCG
AGTGGCTGGCCTCGAGAGCCTCGGAGACCTCTTCCCCAACCTCACGGTCATCCGCGGCTGGAAACTCTTCTACAA
CTACGCCCTGGTCATCTTCGAGATGACCAATCTCAAGGATATTGGGCTTTACAACCTGAGGAACATTACTCGGGG
GGCCATCAGGATTGAGAAAAATGCTGACCTCTGTTACCTCTCCACTGTGGACTGGTCCCTGATCCTGGATGCGGT
GTCCAATAACTACATTGTGGGGAATAAGCCCCCAAAGGAATGTGGGGACCTGTGTCCAGGGACCATGGAGGAGAA
GCCGATGTGTGAGAAGACCACCATCAACAATGAGTACAACTACCGCTGCTGGACCACAAACCGCTGCCAGAAAAT
GTGCCCAAGCACGTGTGGGAAGCGGGCGTGCACCGAGAACAATGAGTGCTGCCACCCCGAGTGCCTGGGCAGCTG
CAGCGCGCCTGACAACGACACGGCCTGTGTAGCTTGCCGCCACTACTACTATGCCGGTGTCTGTGTGCCTGCCTG
CCCGCCCAACACCTACAGGTTTGAGGGCTGGCGCTGTGTGGACCGTGACTTCTGCGCCAACATCCTCAGCGCCGA
GAGCAGCGACTCCGAGGGGTTTGTGATCCACGACGGCGAGTGCATGCAGGAGTGCCCCTCGGGCTTCATCCGCAA
CGGCAGCCAGAGCATGTACTGCATCCCTTGTGAAGGTCCTTGCCCGAAGGTCTGTGAGGAAGAAAAGAAAACAAA
GACCATTGATTCTGTTACTTCTGCTCAGATGCTCCAAGGATGCACCATCTTCAAGGGCAATTTGCTCATTAACAT
CCGACGGGGGAATAACATTGCTTCAGAGCTGGAGAACTTCATGGGGCTCATCGAGGTGGTGACGGGCTACGTGAA
GATCCGCCATTCTCATGCCTTGGTCTCCTTGTCCTTCCTAAAAAACCTTCGCCTCATCCTAGGAGAGGAGCAGCT
AGAAGGGAATTACTCCTTCTACGTCCTCGACAACCAGAACTTGCAGCAACTGTGGGACTGGGACCACCGCAACCT
GACCATCAAAGCAGGGAAAATGTACTTTGCTTTCAATCCCAAATTATGTGTTTCCGAAATTTACCGCATGGAGGA
AGTGACGGGGACTAAAGGGCGCCAAAGCAAAGGGGACATAAACACCAGGAACAACGGGGAGAGAGCCTCCTGTGA
AAGTGACGTCCTGCATTTCACCTCCACCACCACGTCGAAGAATCGCATCATCATAACCTGGCACCGGTACCGGCC
CCCTGACTACAGGGATCTCATCAGCTTCACCGTTTACTACAAGGAAGCACCCTTTAAGAATGTCACAGAGTATGA
TGGGCAGGATGCCTGCGGCTCCAACAGCTGGAACATGGTGGACGTGGACCTCCCGCCCAACAAGGACGTGGAGCC
CGGCATCTTACTACATGGGCTGAAGCCCTGGACTCAGTACGCCGTTTACGTCAAGGCTGTGACCCTCACCATGGT
GGAGAACGACCATATCCGTGGGGCCAAGAGTGAGATCTTGTACATTCGCACCAATGCTTCAGTTCCTTCCATTCC
CTTGGACGTTCTTTCAGCATCGAACTCCTCTTCTCAGTTAATCGTGAAGTGGAACCCTCCCTCTCTGCCCAACGG
CAACCTGAGTTACTACATTGTGCGCTGGCAGCGGCAGCCTCAGGACGGCTACCTTTACCGGCACAATTACTGCTC
CAAAGACAAAATCCCCATCAGGAAGTATGCCGACGGCACCATCGACATTGAGGAGGTCACAGAGAACCCCAAGAC
TGAGGTGTGTGGTGGGGAGAAAGGGCCTTGCTGCGCCTGCCCCAAAACTGAAGCCGAGAAGCAGGCCGAGAAGGA
GGAGGCTGAATACCGCAAAGTCTTTGAGAATTTCCTGCACAACTCCATCTTCGTGCCCAGACCTGAAAGGAAGCG
GAGAGATGTCATGCAAGTGGCCAACACCACCATGTCCAGCCGAAGCAGGAACACCACGGCCGCAGACACCTACAA
CATCACCGACCCGGAAGAGCTGGAGACAGAGTACCCTTTCTTTGAGAGCAGAGTGGATAACAAGGAGAGAACTGT
CATTTCTAACCTTCGGCCTTTCACATTGTACCGCATCGATATCCACAGCTGCAACCACGAGGCTGAGAAGCTGGG
CTGCAGCGCCTCCAACTTCGTCTTTGCAAGGACTATGCCCGCAGAAGGAGCAGATGACATTCCTGGGCCAGTGAC
CTGGGAGCCAAGGCCTGAAAACTCCATCTTTTTAAAGTGGCCGGAACCTGAGAATCCCAATGGATTGATTCTAAT
GTATGAAATAAAATACGGATCACAAGTTGAGGATCAGCGAGAATGTGTGTCCAGACAGGAATACAGGAAGTATGG
AGGGGCCAAGCTAAACCGGCTAAACCCGGGGAACTACACAGCCCGGATTCAGGCCACATCTCTCTCTGGGAATGG
GTCGTGGACAGATCCTGTGTTCTTCTATGTCCAGGCCAAAACAGGATATGAAAACTTCATCCATCTGATCATCGC
TCTGCCCGTCGCTGTCCTGTTGATCGTGGGAGGGTTGGTGATTATGCTGTACGTCTTCCATAGAAAGAGAAATAA
CAGCAGGCTGGGGAATGGAGTGCTGTATGCCTCTGTGAACCCGGAGTACTTCAGCGCTGCTGATGTGTACGTTCC
TGATGAGTGGGAGGTGGCTCGGGAGAAGATCACCATGAGCCGGGAACTTGGGCAGGGGTCGTTTGGGATGGTCTA
TGAAGGAGTTGCCAAGGGTGTGGTGAAAGATGAACCTGAAACCAGAGTGGCCATTAAAACAGTGAACGAGGCCGC
AAGCATGCGTGAGAGGATTGAGTTTCTCAACGAAGCTTCTGTGATGAAGGAGTTCAATTGTCACCATGTGGTGCG
ATTGCTGGGTGTGGTGTCCCAAGGCCAGCCAACACTGGTCATCATGGAACTGATGACACGGGGCGATCTCAAAAG
TTATCTCCGGTCTCTGAGGCCAGAAATGGAGAATAATCCAGTCCTAGCACCTCCAAGCCTGAGCAAGATGATTCA
GATGGCCGGAGAGATTGCAGACGGCATGGCATACCTCAACGCCAATAAGTTCGTCCACAGAGACCTTGCTGCCCG
GAATTGCATGGTAGCCGAAGATTTCACAGTCAAAATCGGAGATTTTGGTATGACGCGAGATATCTATGAGACAGA
CTATTACCGGAAAGGAGGGAAAGGGCTGCTGCCCGTGCGCTGGATGTCTCCTGAGTCCCTCAAGGATGGAGTCTT

FIGURE 1144B

CACCACTTACTCGGACGTCTGGTCCTTCGGGGTCGTCCTCTGGGAGATCGCCACACTGGCCGAGCAGCCCTACCA
GGGCTTGTCCAACGAGCAAGTCCTTCGCTTCGTCATGGAGGGCGGCCTTCTGGACAAGCCAGACAACTGTCCTGA
CATGCTGTTTGAACTGATGCGCATGTGCTGGCAGTATAACCCCAAGATGAGGCCTTCCTTCCTGGAGATCATCAG
CAGCATCAAAGAGGAGATGGAGCCTGGCTTCCGGGAGGTCTCCTTCTACTACAGCGAGGAGAACAAGCTGCCCGA
GCCGGAGGAGCTGGACCTGGAGCCAGAGAACATGGAGAGCGTCCCCCTGGACCCCTCGGCCTCCTCGTCCTCCCT
GCCACTGCCCGACAGACACTCAGGACACAAGGCCGAGAACGGCCCCGGCCCTGGGGTGCTGGTCCTCCGCGCCAG
CTTCGACGAGAGACAGCCTTACGCCCACATGAACGGGGGCCGCAAGAACGAGCGGGCCTTGCCGCTGCCCCAGTC
TTCGACCTGC**TGA**TCCTTGGATCCTGAATCTGTGCAAACAGTAACGTGTGCGCACGCGCAGCGGGGTGGGGGGGG
AGAGAGAGTTTTAACAATCCATTCACAAGCCTCCTGTACCTCAGTGGATCTTCAGAACTGCCCTTGCTGCCCGCG
GGAGACAGCTTCTCTGCAGTAAAACACATTTGGGATGTTCCTTTTTTCAATATGCAAGCAGCTTTTTATTCCCTG
CCCAAACCCTTAACTGACATGGGCCTTTAAGAACCTTAATGACAACACTTAATAGCAACAGAGCACTTGAGAACC
AGTCTCCTCACTCTGTCCCTGTCCTTCCCTGTTCTCCCTTTCTCTCTCCTCTCTGCTTCATAACGGAAAAATAAT
TGCCACAAGTCCAGCTGGGAAGCCCTTTTTATCAGTTTGAGGAAGTGGCTGTCCCTGTGGCCCCATCCAACCACT
GTACACACCCGCCTGACACCGTGGGTCATTACAAAAAAACACGTGGAGATGGAAATTTTTACCTTTATCTTTCAC
CTTTCTAGGGACATGAAATTTACAAAGGGCCATCGTTCATCCAAGGCTGTTACCATTTTAACGCTGCCTAATTTT
GCCAAAATCCTGAACTTTCTCCCTCATCGGCCCGGCGCTGATTCCTCGTGTCCGGAGGCATGGGTGAGCATGGCA
GCTGGTTGCTCCATTTGAGAGACACGCTGGCGACACACTCCGTCCATCCGACTGCCCCTGCTGTGCTGCTCAAGG
CCACAGGCACACAGGTCTCATTGCTTCTGACTAGATTATTATTTGGGGGAACTGGACACAATAGGTCTTTCTCTC
AGTGAAGGTGGGGAGAAGCTGAACCGGCTTCCCTGCCCTGCCTCCCCAGCCCCCTGCCCAACCCCCAAGAATCTG
GTGGCCATGGGCCCCGAAGCAGCCTGGCGGACAGGCTTGGAGTCAAGGGGCCCCATGCCTGCTTCTCTCCCAGCC
CCAGCTCCCCCGCCCGCCCCCAAGGACACAGATGGGAAGGGGTTTCCAGGGACTCAGCCCCACTGTTGATGCAGG
TTTGCAAGGAAAGAAATTCAAACACCACAACAGCAGTAAGAAGAAAAGCAGTCAATGGATTCAAGCATTCTAAGC
TTTGTTGACATTTTCTCTGTTCCTAGGACTTCTTCATGGGTCTTACAGTTCTATGTTAGACCATGAAACATTTGC
ATACACATCGTCTTTAATGTCACTTTTATAACTTTTTTACGGTTCAGATATTCATCTATACGTCTGTACAGAAAA
AAAAAAGCTGCTATTTTTTTTGTTCTTGATCTTTGTGGATTTAATCTATGAAAACCTTCAGGTCCACCCTCTCCC
CTTTCTGCTCACTCCAAGAAACTTCTTATGCTTTGTACTAGAGTGCGTGACTTTCTTCCTCTTTTCCCGGTAATG
GATACTTCTATCACATAATTTGCCATGAACTGTTGGATGCCTTTTTATAAATACATCCCCCATCCCTGCTCCCAC
CTGCCCCTTTAGTTGTTTTCTAACCCGTAGGCTCTCTGGGCACGAGGCAGAAAGCAGGCCGGGCACCCATCCTGA
GAGGGCCGCGCTCCTCTCCCCAGCCTGCCCTCACAGCATTGGAGCCTGTTACAGTGCAAGACATGATACAAACTC
AGGTCAGAAAAACAAAGGTTAAATATTTCACACGTCTTTGTTCAGTGTTTCCACTCACCGTGGTTGAGAAGCCTC
ACCCTCTCTTTCCCTTGCCTTTGCTTAGGTTGTGACACACATATATATATATTTTTTTAATTCTTGGGTACAACA
GCAGTGTTAACCGCAGACACTAGGCATTTGGATTACTATTTTTCTTAATGGCTATTTAATCCTTCCATCCCACGA
AAAACAGCTGCTGAGTCCAAGGGAGCAGCAGAGCGTGGTCCGGCAGGGCCTGTTGTGGCCCTCGCCACCCCCCTC
ACCGGACCGACTGACCTGTCTTTGGAACCAGAACATCCCAAGGGAACTCCTTCGCACTGGCGTTGAGTGGGACCC
CGGGATCCAGGCTGGCCCAGGGCGGCACCCTCAGGGCTGTGCCCGCTGGAGTGCTAGGTGGAGGCAGCACAGACG
CCACGGTGGCCCAAGAGCCCCTTTGCTTCTTGCTGGGGGACCAGGGCTGTGGTGCTGGCCCACTTTCCCTCGGCC
AGGAATCCAGGTCCTTGGGGCCCAGGGGTCTTGTCTTGTTTCATTTTTAGCACTTCTCACCAGAGAGATGACAGC
ACAAGAGTTGCTTCTGGGATAGAAATGTTTAGGAGTAAGAACAAAGCTGGGATACGGTGATTGCTAGTTGTGACT
GAAGATTCAACACAGAAAAGAAAGTTTATACGGCTTTTTTGCTGGTCAGCAGTTTGTCCCACTGCTTTCTCTAGT
CTCTATCCCATAGCGTGTTCCCTTTAAAAAAAAAAAAAGGTATTATATGTAGGAGTTTTCTTTTAATTTATTTTG
TGATAAATTACCAGTTTCAATCACTGTAGAAAAGCCCCATTATGAATTTAAATTTCAAGGAAAGGGTGTGTGTGG
AA

FIGURE 1145

MKSGSGGGSPTSLWGLLFLSAALSLWPTSGEICGPGIDIRNDYQQLKRLENCTVIEGYLHILLISKAEDYRSYRF
PKLTVITEYLLLFRVAGLESLGDLFPNLTVIRGWKLFYNYALVIFEMTNLKDIGLYNLRNITRGAIRIEKNADLC
YLSTVDWSLILDAVSNNYIVGNKPPKECGDLCPGTMEEKPMCEKTTINNEYNYRCWTTNRCQKMCPSTCGKRACT
ENNECCHPECLGSCSAPDNDTACVACRHYYYAGVCVPACPPNTYRFEGWRCVDRDFCANILSAESSDSEGFVIHD
GECMQECPSGFIRNGSQSMYCIPCEGPCPKVCEEEKKTKTIDSVTSAQMLQGCTIFKGNLLINIRRGNNIASELE
NFMGLIEVVTGYVKIRHSHALVSLSFLKNLRLILGEEQLEGNYSFYVLDNQNLQQLWDWDHRNLTIKAGKMYFAF
NPKLCVSEIYRMEEVTGTKGRQSKGDINTRNNGERASCESDVLHFTSTTTSKNRIIITWHRYRPPDYRDLISFTV
YYKEAPFKNVTEYDGQDACGSNSWNMVDVDLPPNKDVEPGILLHGLKPWTQYAVYVKAVTLTMVENDHIRGAKSE
ILYIRTNASVPSIPLDVLSASNSSSQLIVKWNPPSLPNGNLSYYIVRWQRQPQDGYLYRHNYCSKDKIPIRKYAD
GTIDIEEVTENPKTEVCGGEKGPCCACPKTEAEKQAEKEEAEYRKVFENFLHNSIFVPRPERKRRDVMQVANTTM
SSRSRNTTAADTYNITDPEELETEYPFFESRVDNKERTVISNLRPFTLYRIDIHSCNHEAEKLGCSASNFVFART
MPAEGADDIPGPVTWEPRPENSIFLKWPEPENPNGLILMYEIKYGSQVEDQRECVSRQEYRKYGGAKLNRLNPGN
YTARIQATSLSGNGSWTDPVFFYVQAKTGYENFIHLIIALPVAVLLIVGGLVIMLYVFHRKRNNSRLGNGVLYAS
VNPEYFSAADVYVPDEWEVAREKITMSRELGQGSFGMVYEGVAKGVVKDEPETRVAIKTVNEAASMRERIEFLNE
ASVMKEFNCHHVVRLLGVVSQGQPTLVIMELMTRGDLKSYLRSLRPEMENNPVLAPPSLSKMIQMAGEIADGMAY
LNANKFVHRDLAARNCMVAEDFTVKIGDFGMTRDIYETDYYRKGGKGLLPVRWMSPESLKDGVFTTYSDVWSFGV
VLWEIATLAEQPYQGLSNEQVLRFVMEGGLLDKPDNCPDMLFELMRMCWQYNPKMRPSFLEIISSIKEEMEPGFR
EVSFYYSEENKLPEPEELDLEPENMESVPLDPSASSSSLPLPDRHSGHKAENGPGPGVLVLRASFDERQPYAHMN
GGRKNERALPLPQSSTC

FIGURE 1146A

GTTGGCCCCCGTTACTTTTCCTCTGGGAAATATGGCGCACGCTGGGAGAACAGGGTACGATAACCGGGAGATAGT
GATGAAGTACATCCATTATAAGCTGTCGCAGAGGGGCTACGAGTGGGATGCGGGAGATGTGGGCGCCGCGCCCCC
GGGGGCCGCCCCCGCGCCGGGCATCTTCTCCTCGCAGCCCGGGCACACGCCCCATACAGCCGCATCCCGGGACCC
GGTCGCCAGGACCTCGCCGCTGCAGACCCCGGCTGCCCCCGGCGCCGCCGCGGGGCCTGCGCTCAGCCCGGTGCC
ACCTGTGGTCCACCTGACCCTCCGCCAGGCCGGCGACGACTTCTCCCGCCGCTACCGCCGCGACTTCGCCGAGAT
GTCCAGGCAGCTGCACCTGACGCCCTTCACCGCGCGGGGACGCTTTGCCACGGTGGTGGAGGAGCTCTTCAGGGA
CGGGGTGAACTGGGGGAGGATTGTGGCCTTCTTTGAGTTCGGTGGGGTCATGTGTGTGGAGAGCGTCAACCGGGA
GATGTCGCCCCTGGTGGACAACATCGCCCTGTGGATGACTGAGTACCTGAACCGGCACCTGCACACCTGGATCCA
GGATAACGGAGGCTGGGATGCCTTTGTGGAACTGTACGGCCCCAGCATGCGGCCTCTGTTTGATTTCTCCTGGCT
GTCTCTGAAGACTCTGCTCAGTTTGGCCCTGGTGGGAGCTTGCATCACCCTGGGTGCCTATCTGGGCCACAAGTG
AAGTCAACATGCCTGCCCCAAACAAATATGCAAAAGGTTCACTAAAGCAGTAGAAATAATATGCATTGTCAGTGA
TGTTCCATGAAACAAAGCTGCAGGCTGTTTAAGAAAAAATAACACACATATAAACATCACACACACAGACAGACA
CACACACACACAACAATTAACAGTCTTCAGGCAAAACGTCGAATCAGCTATTTACTGCCAAAGGGAAATATCATT
TATTTTTTACATTATTAAGAAAAAAAGATTTATTTATTTAAGACAGTCCCATCAAAACTCCTGTCTTTGGAAATC
CGACCACTAATTGCCAAGCACCGCTTCGTGTGGCTCCACCTGGATGTTCTGTGCCTGTAAACATAGATTCGCTTT
CCATGTTGTTGGCCGGATCACCATCTGAAGAGCAGACGGATGGAAAAAGGACCTGATCATTGGGGAAGCTGGCTT
TCTGGCTGCTGGAGGCTGGGGAGAAGGTGTTCATTCACTTGCATTTCTTTGCCCTGGGGGCTGTGATATTAACAG
AGGGAGGGTTCCTGTGGGGGGAAGTCCATGCCTCCCTGGCCTGAAGAAGAGACTCTTTGCATATGACTCACATGA
TGCATACCTGGTGGGAGGAAAAGAGTTGGGAACTTCAGATGGACCTAGTACCCACTGAGATTTCCACGCCGAAGG
ACAGCGATGGGAAAAATGCCCTTAAATCATAGGAAAGTATTTTTTTAAGCTACCAATTGTGCCGAGAAAAGCATT
TTAGCAATTTATACAATATCATCCAGTACCTTAAGCCCTGATTGTGTATATTCATATATTTTGGATACGCACCCC
CCAACTCCCAATACTGGCTCTGTCTGAGTAAGAAACAGAATCCTCTGGAACTTGAGGAAGTGAACATTTCGGTGA
CTTCCGCATCAGGAAGGCTAGAGTTACCCAGAGCATCAGGCCGCCACAAGTGCCTGCTTTTAGGAGACCGAAGTC
CGCAGAACCTGCCTGTGTCCCAGCTTGGAGGCCTGGTCCTGGAACTGAGCCGGGGCCCTCACTGGCCTCCTCCAG
GGATGATCAACAGGGCAGTGTGGTCTCCGAATGTCTGGAAGCTGATGGAGCTCAGAATTCCACTGTCAAGAAAGA
GCAGTAGAGGGGTGTGGCTGGGCCTGTCACCCTGGGGCCCTCCAGGTAGGCCCGTTTTCACGTGGAGCATGGGAG
CCACGACCCTTCTTAAGACATGTATCACTGTAGAGGGAAGGAACAGAGGCCCTGGGCCCTTCCTATCAGAAGGAC
ATGGTGAAGGCTGGGAACGTGAGGAGAGGCAATGGCCACGGCCCATTTTGGCTGTAGCACATGGCACGTTGGCTG
TGTGGCCTTGGCCCACCTGTGAGTTTAAAGCAAGGCTTTAAATGACTTTGGAGAGGGTCACAAATCCTAAAAGAA
GCATTGAAGTGAGGTGTCATGGATTAATTGACCCCTGTCTATGGAATTACATGTAAAACATTATCTTGTCACTGT
AGTTTGGTTTTATTTGAAAACCTGACAAAAAAAAAAGTTCCAGGTGTGGAATATGGGGGTTATCTGTACATCCTGG
GGCATTAAAAAAAAAATCAATGGTGGGGAACTATAAAGAAGTAACAAAAGAAGTGACATCTTCAGCAAATAAACT
AGGAAATTTTTTTTTCTTCCAGTTTAGAATCAGCCTTGAAACATTGATGGAATAACTCTGTGGCATTATTGCATT
ATATACCATTTATCTGTATTAACTTTGGAATGTACTCTGTTCAATGTTTAATGCTGTGGTTGATATTTCGAAAGC
TGCTTTAAAAAAATACATGCATCTCAGCGTTTTTTTGTTTTTAATTGTATTTAGTTATGGCCTATACACTATTTG
TGAGCAAAGGTGATCGTTTTCTGTTTGAGATTTTTATCTCTTGATTCTTCAAAAGCATTCTGAGAAGGTGAGATA
AGCCCTGAGTCTCAGCTACCTAAGAAAAACCTGGATGTCACTGGCCACTGAGGAGCTTTGTTTCAACCAAGTCAT
GTGCATTTCCACGTCAACAGAATTGTTTATTGTGACAGTTATATCTGTTGTCCCTTTGACCTTGTTTCTTGAAGG
TTTCCTCGTCCCTGGGCAATTCCGCATTTAATTCATGGTATTCAGGATTACATGCATGTTTGGTTAAACCCATGA
GATTCATTCAGTTAAAAATCCAGATGGCAAATGACCAGCAGATTCAAATCTATGGTGGTTTGACCTTTAGAGAGT
TGCTTTACGTGGCCTGTTTCAACACAGACCCACCCAGAGCCCTCCTGCCCTCCTTCCGCGGGGGCTTTCTCATGG
CTGTCCTTCAGGGTCTTCCTGAAATGCAGTGGTGCTTACGCTCCACCAAGAAAGCAGGAAACCTGTGGTATGAAG
CCAGACCTCCCCGGCGGGCCTCAGGGAACAGAATGATCAGACCTTTGAATGATTCTAATTTTTAAGCAAAATATT
ATTTTATGAAAGGTTTACATTGTCAAAGTGATGAATATGGAATATCCAATCCTGTGCTGCTATCCTGCCAAAATC
ATTTTAATGGAGTCAGTTTGCAGTATGCTCCACGTGGTAAGATCCTCCAAGCTGCTTTAGAAGTAACAATGAAGA
ACGTGGACGCTTTTAATATAAAGCCTGTTTTGTCTTCTGTTGTTGTTCAAACGGGATTCACAGAGTATTTGAAAA
ATGTATATATATTAAGAGGTCACGGGGGCTAATTGCTGGCTGGCTGCCTTTTGCTGTGGGGTTTTGTTACCTGGT
TTTAATAACAGTAAATGTGCCCAGCCTCTTGGCCCCAGAACTGTACAGTATTGTGGCTGCACTTGCTCTAAGAGT

FIGURE 1146B

AGTTGATGTTGCATTTTCCTTATTGTTAAAAACATGTTAGAAGCAATGAATGTATATAAAAGCCTCAACTAGTCA
TTTTTTTCTCCTCTTCTTTTTTTTCATTATATCTAATTATTTTGCAGTTGGGCAACAGAGAACCATCCCTATTTT
GTATTGAAGAGGGATTCACATCTGCATCTTAACTGCTCTTTATGAATGAAAAAACAGTCCTCTGTATGTACTCCT
CTTTACACTGGCCAGGGTCAGAGTTAAATAGAGTATATGCACTTTCCAAATTGGGGACAAGGGCTCTAAAAAAAG
CCCCAAAAGGAGAAGAACATCTGAGAACCTCCTCGGCCCTCCCAGTCCCTCGCTGCACAAATACTCCGCAAGAGA
GGCCAGAATGACAGCTGACAGGGTCTATGGCCATCGGGTCGTCTCCGAAGATTTGGCAGGGGCAGAAAACTCTGG
CAGGCTTAAGATTTGGAATAAAGTCACAGAATCAAGGAAGCACCTCAATTTAGTTCAAACAAGACGCCAACATTC
TCTCCACAGCTCACTTACCTCTCTGTGTTCAGATGTGGCCTTCCATTTATATGTGATCTTTGTTTTATTAGTAAA
TGCTTATCATCTAAAGATGTAGCTCTGGCCCAGTGGGAAAAATTAGGAAGTGATTATAAATCGAGAGGAGTTATA
ATAATCAAGATTAAATGTAAATAATCAGGGCAATCCCAACACATGTCTAGCTTTCACCTCCAGGATCTATTGAGT
GAACAGAATTGCAAATAGTCTCTATTTGTAATTGAACTTATCCTAAAACAAATAGTTTATAAATGTGAACTTAAA
CTCTAATTAATTCCAACTGTACTTTTAAGGCAGTGGCTGTTTTTAGACTTTCTTATCACTTATAGTTAGTAATGT
ACACCTACTCTATCAGAGAAAAACAGGAAAGGCTCGAAATACAAGCCATTCTAAGGAAATTAGGGAGTCAGTTGA
AATTCTATTCTGATCTTATTCTGTGGTGTCTTTTGCAGCCCAGACAAATGTGGTTACACACTTTTTAAGAAATAC
AATTCTACATTGTCAAGCTTATGAAGGTTCCAATCAGATCTTTATTGTTATTCAATTTGGATCTTTCAGGGATTT
TTTTTTTAAATTATTATGGGACAAAGGACATTTGTTGGAGGGGTGGGAGGGAGGAACAATTTTTAAATATAAAAC
ATTCCCAAGTTTGGATCAGGGAGTTGGAAGTTTTCAGAATAACCAGAACTAAGGGTATGAAGGACCTGTATTGGG
GTCGATGTGATGCCTCTGCGAAGAACCTTGTGTGACAAATGAGAAACATTTTGAAGTTTGTGGTACGACCTTTAG
ATTCCAGAGACATCAGCATGGCTCAAAGTGCAGCTCCGTTTGGCAGTGCAATGGTATAAATTTCAAGCTGGATAT
GTCTAATGGGTATTTAAACAATAAATGTGCAGTTTTAACTAACAGGATATTTAATGACAACCTTCTGGTTGGTAG
GGACATCTGTTTCTAAATGTTTATTATGTACAATACAGAAAAAAATTTTATAAAATTAAGCAATGTGAAACTGAA
TTGGAGAGTGATAATACAAGTCCTTTAGTCTTACCCAGTGAATCATTCTGTTCCATGTCTTTGGACAACCATGAC
CTTGGACAATCATGAAATATGCATCTCACTGGATGCAAAGAAAATCAGATGGAGCATGAATGGTACTGTACCGGT
TCATCTGGACTGCCCCAGAAAAATAACTTCAAGCAAACATCCTATCAACAACAAGGTTGTTCTGCATACCAAGCT
GAGCACAGAAGATGGGAACACTGGTGGAGGATGGAAAGGCTCGCTCAATCAAGAAAATTCTGAGACTATTAATAA
ATAAGACTGTAGTGTAGATACTGAGTAAATCCATGCACCTAAACCTTTTGGAAAATCTGCCGTGGGCCCTCCAGA
TAGCTCATTTCATTAAGTTTTTCCCTCCAAGGTAGAATTTGCAAGAGTGACAGTGGATTGCATTTCTTTTGGGGA
AGCTTTCTTTTGGTGGTTTTGTTTATTATACCTTCTTAAGTTTTCAACCAAGGTTTGCTTTTGTTTTGAGTTACT
GGGGTTATTTTTGTTTTAAATAAAAATAAGTGTACAATAAGTGTTTTTGTATTGAAAGCTTTTGTTATCAAGATT
TTCATACTTTTACCTTCCATGGCTCTTTTTAAGATTGATACTTTTAAGAGGTGGCTGATATTCTGCAACACTGTA
CACATAAAAAATACGGTAAGGATACTTTACATGGTTAAGGTAAAGTAAGTCTCCAGTTGGCCACCATTAGCTATA
ATGGCACTTTGTTTGTGTTGTTGGAAAAAGTCACATTGCCATTAAACTTTCCTTGTCTGTCTAGTTAATATTGTG
AAGAAAAATAAAGTACAGTGTGAGATACTG

FIGURE 1147

MAHAGRTGYDNREIVMKYIHYKLSQRGYEWDAGDVGAAPPGAAPAPGIFSSQPGHTPHPAASRDPVARTSPLQTP
AAPGAAAGPALSPVPPVVHLALRQAGDDFSRRYRGDFAEMSSQLHLTPFTARGRFATVVEELFRDGVNWGRIVAF
FEFGGVMCVESVNREMSPLVDNIALWMTEYLNRHLHTWIQDNGGWVGASGDVSLG

FIGURE 1148A

AAATAATAAAGAAATTGAAAACAATACATTAATATACCATAACACTAAAAAGAGCAGGAGCGAGAGATGAGAAAG
GGAATCCAGCCCGCTCTGGAGCAGTACCTGGTGACCGCCGGGGGTGGGGAGGGGGCGGCTGTCGTCGCCGCCGCC
GCTGCAGCCTCCATGGACAAAAGGGCACTGCTAGCCAGCCCCGGCTTCGCCGCCGCCGCCGCCGCTGCCGCCGCC
CCGGGCGCGTACATCCAGATCCTCACCACGAACACTTCCACCACCTCCTGTTCCTCCTCCCTCCAAAGCGGCGCC
GTAGCCGCCGGCCCCCTCCTCCCCAGTGCCCCCGGCGCGGAGCAGACCGCCGGCAGCCTCCTCTACACCACGCCG
CACGGACCCTCCAGCAGAGCCGGGCTGCTGCAGCAGCCACCAGCGCTGGGACGCGGCGGCAGCGGCGGCGGCGGC
GGCCCTCCGGCAAAGCGAAGGCTGGAGCTAGGAGAAAGCGGTCATCAGTACCTCTCAGATGGTTTAAAAACCCCC
AAGGGCAAAGGAAGAGCTGCACTACGAAGTCCAGATAGTCCAAAAACTCCAAAATCTCCCTCAGAAAAAACGCGG
TATGATACGTCTCTTGGTCTGCTCACCAAGAAGTTCATTCAGCTCCTGAGCCAGTCACCCGATGGGGTATTGGAT
TTGAACAAGGCAGCAGAAGTGCTAAAAGTGCAAAAGAGAAGGATTTATGATATCACCAACGTTCTGGAAGGCATC
CACCTCATTAAGAAGAAGTCTAAAAACAACGTCCAATGGATGGGCTGCAGTCTGTCTGAGGATGGGGGCATGCTG
GCCCAGTGTCAAGGCCTGTCAAAAGAAGTGACCGAGCTCAGTCAGGAAGAGAAGAAATTAGATGAACTGATCCAA
AGCTGCACCCTGGACCTCAAACTGTTAACCGAGGATTCAGAGAATCAAAGGTTAGCTTATGTTACATATCAAGAT
ATTCGAAAAATTAGTGGCCTTAAAGACCAAACTGTTATAGTTGTGAAAGCCCCTCCAGAAACAAGACTTGAAGTG
CCTGACTCAATAGAGAGCCTACAAATACATTTGGCAAGTACCCAAGGGCCCATTGAGGTTTACTTATGTCCAGAA
GAGACTGAAACACACAGTCCAATGAAAACAAACAACCAAGACCACAATGGGAATATCCCTAAACCCGCTTCCAAA
GACTTGGCTTCAACCAACTCAGGACATAGCGATTGCTCAGTTTCTATGGGAAACCTTTCTCCTCTGGCCTCCCCA
GCCAACCTCTTACAGCAGACTGAGGACCAAATTCCTTCCAACCTAGAAGGACCGTTTGTGAACTTACTGCCTCCC
CTGCTGCAAGAGGACTATCTCCTGAGCCTCGGGGAGGAGGAAGGCATCAGCGATCTCTTCGATGCTTACGATTTG
GAAAAGCTCCCACTGGTGGAAGACTTCATGTGTAGTTGATTATGCTTCGTGTGAACTCTCCTTAAAAACCGATAT
TTTTTTATCATGGACCAGAACATCTGTCATGCAGTGTTGTCCCTTCCTACCTTCTTCCTCCAAGAGAGTATCATG
AAGTAAACTACAAACTTCAGAAGAAAGCTGACATTTTAATGAATTTTTTAAAAAATTAATAAACAAATTGTCTAA
ACGCACAGTTGCAGGCTCCCTTGGGAAAGCCCTGCTTTGCTCCAGGCTCCAAGATCTCCTGGCTAAGTCAGCAAG
TGAGAAAATGTGCAATCAGGTGTCTCTCACCCCGAATTGTCCTTCCTCCTTCCTCCCCGGATTGGCTTGCTGTGC
CTGACGGATGGGCTGTAGAATGGGGTCTGGCCACCTGGCCTGCTGGGAAACAGCAATCTTCCTTAATAGCATTTC
AAGCCGTGCCTTCTCCGCAGAATGCATGTCTTTGAGGTCTGCTAATATGGAATGGAACTGCAGCAAATGCAAACT
TGAAGTCATGCAAAAGTATGAAATGGATTTCTTCAGCTCTTCTTAGGAATATTTAAATTACTGTCATAATTCAGT
TTAAGCTATGAACTGTGTGTCCCAGTAGGAGGTCAAGAAAACCTCCACAGCCTTCTGGATGAAGAACCTGTTTTC
AAATATACTTGTTGCAGATACAGAAGACTAGTAGAGTTCTGCCACTCTAAGCTGTTGTGGATTTTCCTGTCTCCA
TGAACCACTCCCATTCCCCCGTCCCCAATGTGTTTGTGAGTTTCCAGTTGATTTGTAGCAAATGCCTACTTAGTT
CTTTGTGGATTGTTCTAGACTTTTAATTTTTTTAGCTGCCATTTAAGCATTCCTGTGGCACCCATCACCATTTCA
ATTTAATTGTTTACTTTGAAGCGGTTTTTGCAAATTCATATTACTTAAGCAGAGGGAGAGAACCTCTACTGATCA
GAGCATCTAAACCTGTGTGATCTAAGGTTTATCAGCCTCTGCAAGGAGCTTTGTCCCATCGTGCTTCCATTCCCA
GGAGGGGGAGCTTGGAGCGAGTCAGTCCTGGGGCTTGCTGACATGGGTGGCCCATTGGAAAGGAGAACCAGGTCA
GATGATGTAACAGCCCCAAGGAGCAGCAGGCATGGGTCCCTCCATCCTTGGGCTTCCCGGGCCCCTGTGACAGGG
GAAAGGGCTCTCTTACACCGCACTCAGGGAGACCACTTCTCAGGATGGGGTCAGATGGAGAGACCTCTAGGGAGA
AAGACATCCCCATTGTGTGAGTGGCATTTCCTTAAGCTGGCAGGAACAGGGAGCAGCCCTGTGTCGGGGGCTGGA
ATAGTTCTGGCCAGACCCCGTTCCCCTTCCTCTATGAAGGAATAAGTTGGACCAAGGGAAGTCGGGGACGTAAAA
AATGAAGCAAAACAATGCCAGGGTGTCTCCCGCTTTACTCTTCAGGAATGGTGTCCCAAGTTGGAGGCTTTGTGT
CAGCTGCAAATCCTACCAGTTATGTCCAAGAATGGCTTTCCCTCGGGCAGGTGGCAGCGGCCATCTCCCACTGGG
AATATGGCGTAGTATCTCCGGTCCATTCCTTGGATGCTAAGGACTGCGGGAATGAGGGAGTCAGATAAAGAACAA
ACCTCGAAACGAACAGTTAAATTGAAATGCTATGTGCCTGACCCAATGGTAGGCACATAGTAGGCACTCAACTCA
TATGTTTAATTGAATTGAAAATATCCCTTAGGAAAAAAAAAAAACACACAAAAAACCACAAGAGCCCCAGCCAGT
TTACTCCAGGTAGATTTCCACAATATGCAAAGTGGTGGTGGGGTCAAGACAGATGACACCAGCACTTTAAACTCT
TTGTGTGGGTATGCGTGGGTGTATGTTTGGGAAGAAAAACAAAGGTGCAGACTATCTTCCTTTTTTTCTTCTTCA
GCCTCCATCCCTGGCCTCCTCCCCTCACACACACTGGACTTGGTACAAAATGTCGGTGTGGTCCTAGATGAAGCA
TTGGGGTGGGGGAGGGAGAGGGAGCTTTGTGTTAAGTGCCTACTGGAAATGCACTGTGGGGTTTTTTCCTGTATG
GGAAACCATTTATGCCAAGCTTTTCCCCATTTCCCATATTTATCTCATCTGGTTAGCTGCCTCTGCTTCCAGCTT

FIGURE 1148B

TGTGTAATTCTCTTTGCCAGCTGCACAAAGCTGATTTTTTCCAAAGTCTAAAGACTGAGCTCACCTGGCTAGATT
GTTGTGTGTTTTGTTGAATTTTTTCATAATGTAATGCCGTATTTATTGTTTTTAAAATGAAAGGAATACTAATAA
GTCTTAAAAGTTCCTTCATGCATAAGATTTTTTTCCAGTTACTGGGCTTAACTGGTGTACATTAATTAGATGTCC
ATACTGTATTTTGTTTGCATTAAGTAATTTTCTTTTTGACTTAGTATCCGGCACACAAAGTGGGTTAGTACTACA
GTATTTGCGTTACTTTAAGTACTAAGTATGCAGGTTTCCTGGTACCATTGAGTTGCTGCTATTAAAGCTCACACA
CGAAATGGCTAAAAGTTACAAGTGTGCAAATTATGACTGCGTGAGCCTTAGAAAATAAAATGTATAAAGGGCAAC
ACATGAGCTGTCAAACAGTGTTAGGAGTGTGTTTATATGTACAGAGTTGTGCATAGCAATCGTTTTATTTAAGTT
GATATGTAGTCTACTCACATTTTCATTATTTAGCAATTTTGTACAAAAATAGCAATTAATTTGTAAACACTGCCA
GAATACTTTCTAGCTGCTTTGTAATTTTTTAAGAGTGTTATTTTGTTTTTGTTTTTCTGTTCTTTGTTGTGGCTC
TTGTTTTCATTTTTGTTGTACGTGTAGATCTGTAAATAAAATTGCAGTATTTAAAGCTTAAGCTTTCAGGAAAAA
GAAAATAAGAATTCAGTGTGTGCATGACAACTCGTGTGTATGAGAAGGAGGGATATGAAGGAAGATGGCTTGCAG
AGTAAGTCGGGTGGCAATTGTCAGGGTGTGGGAATTTCTTTTCCTACGGGGTACGTGATTTTGTAAAAAGGAAGT
ATTTCTCCCAAAATTGGGAGTAGGCAAACTACTAATCAGTTTAGCTTTGTGTTGTATGCTAGTTTAAAAAAGAAA
ATATGTAATATAATGTAAAAAAAAACAAAAAAAAGCTTTTATGATGGATTTTGTAAATAGATTTGTTACAGGGTG
ACCTGTTCTCTAGCTGTGATCTTACCACTTCAAATGGGTGTAATTTGAATAAATTTTGTATGGTAAAGGATCAAT
AAAATGATTTTTTTTAAGA

1290/8433

FIGURE 1149

MRKGIQPALEQYLVTAGGGEGAAVVAAAAAASMDKRALLASPGFAAAAAAAAAPGAYIQILTTNTSTTSCSSSLQ
SGAVAAGPLLPSAPGAEQTAGSLLYTTPHGPSSRAGLLQQPPALGRGGSGGGGGPPAKRRLELGESGHQYLSDGL
KTPKGKGRAALRSPDSPKTPKSPSEKTRYDTSLGLLTKKFIQLLSQSPDGVLDLNKAAEVLKVQKRRIYDITNVL
EGIHLIKKKSKNNVQWMGCSLSEDGGMLAQCQGLSKEVTELSQEEKKLDELIQSCTLDLKLLTEDSENQRLAYVT
YQDIRKISGLKDQTVIVVKAPPETRLEVPDSIESLQIHLASTQGPIEVYLCPEETETHSPMKTNNQDHNGNIPKP
ASKDLASTNSGHSDCSVSMGNLSPLASPANLLQQTEDQIPSNLEGPFVNLLPPLLQEDYLLSLGEEEGISDLFDA
YDLEKLPLVEDFMCS

FIGURE 1150

CAATTTGAGTTTCCATTTCTCGGATTTGGGAACTGGTATAAGCATTGTCTGTGATGTAAACAAAGTCTTCAATAT
TTGGAGAAAACATCTCCTCATACTTGAGAGCACAAGAGGAAGAGAGAGACCCTCACTGCTGGGGAGTCCCTGCCA
CACTCAGTCCCCCACCACACTGAATCGGAATTCCGAGAGGGAAGAGGAGGCGCGAGAATGGAGGTGGAGGCCGTC
TGTGGTGGCGCGGGCGAGGTGGAGGCCCAGGACTCTGACCCTGCCCCTGCCTTCAGCAAGGCCCCCGGCAGCGCC
GGCCACTACGAACTGCCGTGGGTTGAAAAATATAGGCCAGTAAAGCTGAATGAAATTGTCGGGAATGAAGACACC
GTGAGCAGGCTAGAGGTCTTTGCAAGGGAAGGAAATGTGCCCAACATCATCATTGCGGGCCCTCCAGGAACCGGC
AAGACCACAAGCATTCTGTGCTTGGCCCGGGCCCTGCTGGGCCCAGCACTCAAAGATGCCATGTTGGAACTCAAT
GCTTCAAATGACAGGGGCATTGACGTTGTGAGGAATAAAATTAAAATGTTTGCTCAACAAAAAGTCACTCTTCCC
AAAGGCCGACATAAGATCATCATTCTGGATGAAGCAGACAGCATGACCGACGGAGCCCAGCAAGCCTTGAGGAGA
ACCATGGAAATCTACTCTAAAACCACTCGCTTCGCCCTTGCTTGTAATGCTTCGGATAAGATCATCGAGCCCATT
CAGTCCCGCTGTGCAGTCCTCCGGTACACAAAGCTGACCGACGCCCAGATCCTCACCAGGCTGATGAATGTTATC
GAGAAGGAGAGGGTACCCTACACTGATGACGGCCTAGAAGCCATCATCTTCACGGCCCAGGGAGACATGAGGCAG
GCGCTGAACAACCTGCAGTCCACCTTCTCAGGATTTGGCTTCATTAACAGTGAGAACGTGTTCAAGGTCTGTGAC
GAGCCCCACCCACTGCTGGTAAAGGAGATGATCCAGCACTGTGTGAATGCCAACATTGACGAAGCCTACAAGATT
CTTGCTCACTTGTGGCATCTGGGCTACTCACCAGAAGATATCATTGGCAACATCTTTCGAGTGTGTAAAACTTTC
CAAATGGCAGAATACCTGAAACTGGAGTTTATCAAGGAAATTGGATACACTCACATGAAAATAGCGGAAGGAGTG
AACTCTCTTTTGCAGATGGCAGGCCTCCTGGCAAGGCTGTGTCAGAAGACAATGGCCCCGGTGGCCAGTTAGAGC
AGAGACTTCACTGACTGACTTACAGGTGCCCTATTCTGAGGTACAGGAGCCGCGGCTTTCTGATGGGGGAAAATG
CGCCTTAGGCTGAGCCAACATGACTGTCCCCCAAACTCCAGTGGCTGGCCAGGCGCGGTAGTCACGCCTGTAATC
CCAACACTTTGGGAGGCCGAGGCAGGTGGATCACCTGAGGTCAGAAGTTCAAGACCAGCCTGGCCAACATGGGGA
AACCCTGTCTTTACTAAAAATATAAAAATTAGCTGGGTGTGGTGGCGGGCACCTGTAATCCCAGCTACTCGGGAG
GCTGTGGCAGGCGAAATCGCTTGAACCCAGGAGGAGGAGGTGGAGGTTGCAGTGAGCCAAGATCACACCATTGCA
CTCCAGCCTGGGCGACAGAGACTCCATCTGGGGAAAAAAATTAAATAAATAAACTCCCG

FIGURE 1151

MEVEAVCGGAGEVEAQDSDPAPAFSKAPGSAGHYELPWVEKYRPVKLNEIVGNEDTVSRLEVFAREGNVPNIIIA
GPPGTGKTTSILCLARALLGPALKDAMLELNASNDRGIDVVRNKIKMFAQQKVTLPKGRHKIIILDEADSMTDGA
QQALRRTMEIYSKTTRFALACNASDKIIEPIQSRCAVLRYTKLTDAQILTRLMNVIEKERVPYTDDGLEAIIFTA
QGDMRQALNNLQSTFSGFGFINSENVFKVCDEPHPLLVKEMIQHCVNANIDEAYKILAHLWHLGYSPEDIIGNIF
RVCKTFQMAEYLKLEFIKEIGYTHMKIAEGVNSLLQMAGLLARLCQKTMAPVAS

FIGURE 1152A

GTTGCTGTCGGAGAGAGAAAGCCGCACCCGAGAGGAGGTGTGGGTGTTCCGCTTCCATCCTAACGGAACGAGCTC
CCTCTTCGCGGACATGGGATTACCCAGCGGCTGCTAACCCCTCTCCTCGCCCTGCTCCCCCAAACCGGCGTGGCT
CCCCGGGCACCAAGGAGCTGACTACAGAGGAGCAGGATTTGCACCCCTCGCTGGGCTTGCTTTGGCAACAGAGTG
CCTGACCCAGGTCAGGATTTTCAAGAAAGACATGTCTGACAAAATGTCTAGCTTCCTACATATTGGAGACATTTG
TTCTCTGTACGCGGAGGGATCGACAAATGGATTTATTAGCACCTTGGGCCTGGTTGATGATCGTTGTGTTGTACA
GCCAGAAACCGGGGACCTTAACAATCCACCTAAGAAATTCAGAGACTGCCTCTTTAAGCTATGTCCCATGAACCG
CTACTCTGCCCAAAAGCAGTTCTGGAAAGCCGCTAAGCCTGGGGCCAACAGCACCACAGACGCAGTGCTACTCAA
CAAACTGCACCACGCTGCAGACTTGGAAAAGAAGCAGAATGAGACAGAAAACAGGAAATTGCTGGGGACCGTAAT
CCAGTATGGCAATGTGATCCAGCTCCTGCATTTGAAAAGTAATAAATACCTAACAGTGAATAAGAGGCTTCCTGC
TCTGTTGGAGAAGAATGCCATGAGAGTCACATTGGACGAGGCTGGAAATGAAGGGTCCTGGTTTTATATTCAGCC
ATTCTACAAGCTGCGATCCATTGGAGACAGCGTGGTCATAGGTGACAAGGTGGTTCTGAACCCCGTCAATGCTGG
TCAGCCCCTACATGCTAGCAGCCATCAACTGGTAGATAACCCAGGCTGCAATGAGGTCAATTCCGTCAACTGCAA
TACAAGCTGGAAAATAGTCCTTTTCATGAAATGGAGTGATAACAAAGACGACATATTAAAGGGGGGTGACGTGGT
GAGGCTGTTTCATGCTGAGCAGGAGAAGTTTCTCACCTGTGACGAACACAGGAAGAAGCAGCACGTCTTCCTGAG
AACCACGGGCCGGCAGTCGGCCACATCTGCCACCAGTTCAAAAGCCCTGTGGGAGGTGGAGGTGGTCCAGCATGA
CCCATGTCGGGGCGGAGCAGGGTATTGGAACAGCCTTTTCCGTTTCAAGCATCTGGCCACGGGGCATTACTTGGC
AGCAGAGGTGGACCCTGATCAGGACGCCTCTCGAAGTAGGTTGCGGAATGCCCAAGAAAAGATGGTATACTCCCT
GGTCTCTGTGCCTGAAGGCAATGACATCTCCTCCATTTTCGAGCTAGATCCCACCACTCTGCGTGGAGGTGACAG
CCTTGTCCCAAGGAACTCTTATGTTCGGCTCAGACACCTATGTACTAATACCTGGGTTCACAGCACAAATATTCC
TATTGACAAGGAAGAAGAAAAGCCCGTGATGCTGAAAATTGGCACCTCTCCTGTGAAGGAGGATAAGGAAGCATT
TGCCATAGTTCCGGTTTCTCCTGCTGAAGTTCGGGACCTGGACTTTGCCAATGATGCCAGCAAGGTGCTGGGCTC
CATTGCTGGGAAGCTAGAGAAGGGCACCATCACCCAGAATGAAAGGAGGTCTGTAACCAAGCTGCTAGAAGATTT
GGTTTACTTCGTCACTGGTGGAACTAATTCTGGTCAAGATGTTCTCGAAGTTGTCTTCTCCAAGCCCAACAGAGA
ACGGCAGAAACTGATGAGAGAACAGAATATTCTCAAGCAGATCTTCAAGTTGTTACAAGCCCCATTCACAGACTG
CGGTGATGGCCCAATGCTTCGGCTGGAAGAGCTCGGGGACCAGCGGCACGCTCCTTTCAGACACATCTGCCGGCT
CTGCTACAGGGTGCTGAGACACTCGCAGCAAGACTACAGGAAGAACCAGGAGTATATAGCCAAGCAGTTTGGCTT
CATGCAGAAGCAGATTGGCTATGATGTGTTGGCTGAAGACACTATCACTGCCCTGCTCCACAATAATCGGAAACT
CCTGGAAAAACACATTACCGCGGCAGAGATTGACACATTTGTCAGCCTGGTGCGAAAGAACAGGGAGCCCAGATT
CTTAGATTACCTCTCCGACCTCTGTGTCTCCATGAACAAATCAATTCCAGTGACCCAGGAACTGATATGTAAAGC
TGTGCTGAACCCCACCAACGCTGACATCCTGATTGAGACCAAATTGGTTCTTTCTCGTTTTGAATTTGAAGGTGT
CTCTTCCACTGGAGAGAATGCTCTGGAGGCAGGAGAAGACGAGGAAGAGGTGTGGCTGTTTTGGAGGGACAGCAA
CAAAGAGATTCGCAGCAAGAGTGTGAGGGAATTGGCTCAGGATGCTAAAGAAGGGCAGAAGGAGGACCGAGACGT
TCTCAGCTACTACAGATATCAGCTGAACCTCTTTGCGAGGATGTGTCTGGACCGCCAATACCTGGCCATCAACGA
AATCTCAGGCCAGCTGGATGTCGATCTCATTCTCCGCTGCATGTCTGACGAGAACCTGCCCTATGACCTCAGGGC
GTCCTTCTGCCGCCTCATGCTTCACATGCATGTGGACCGAGATCCCCAGGAACAAGTCACCCCCGTGAAATATGC
CCGCCTCTGGTCGGAGATTCCCTCGGAGATCGCCATTGACGACTATGATAGTAGTGGAGCTTCCAAAGATGAAAT
TAAGGAGAGATTTGCTCAGACCATGGAGTTTGTGGAGGAGTATTTAAGAGATGTGGTTTGTCAGAGGTTCCCTTT
CTCTGATAAAGAGAAGAATAAGCTTACGTTTGAGGTTGTAAATTTAGCTAGGAATCTCATATACTTTGGTTTCTA
CAACTTCTCTGACCTTCTCCGATTAACTAAGATCCTTCTGGCCATATTGGACTGTGTACATGTGACAACAATCTT
CCCCATTAGCAAGATGGCGAAAGGAGAAGAGAATAAAGGCAGTAACGTGATGAGATCTATTCATGGCGTGGGAGA
GCTGATGACCCAGGTGGTGCTCCGGGGAGGAGGCTTTTTGCCCATGACTCCCATGGCTGCTGCCCCTGAAGGCAA
TGTGAAGCAGGCAGAGCCTGAGAAGGAGGACATCATGGTCATGGACACCAAGCTGAAGATCATTGAGATACTCCA
GTTTATTTTGAATGTGAGGTTGGATTATAGGATCTCCTGCCTCCTGTGTATATTTAAGCGAGAGTTTGATGAAAG
CAATTCCCAGACTTCAGAAACATCCTCCGGAAACAGCAGCCAAGAAGGGCCAAGTAATGTACCAGGTGCTCTTGA
CTTTGAACACATTGAAGAACAAGCAGAAGGCATCTTTGGAGGAAGTGAGGAGAACACCCCACTGGACTTGGATGA
CCACGGCGGCAGAACCTTTCTCCGTGTCCTGCTCCACTTGACGATGCATGACTACCCACCCCTGGTGTCAGGGGC
CCTGCAGCTCCTCTTCCGGCACTTCAGCCAGAGGCAGGAGGTGCTCCAGGCCTTCAAACAGGTTCAACTGCTGGT
TACCAGCCAAGATGTGGACAACTACAAACAGATCAAACAAGACTTGGATCAACTGAGGTCCATCGTGGAAAAGTC

FIGURE 1152B

AGAGCTTTGGGTGTACAAAGGGCAGGGCCCCGATGAGACTATGGATGGTGCATCTGGAGAAAATGAACATAAGAA
AACGGAGGAGGGAAATAACAAGCCACAAAAGCATGAAAGCACCAGCAGCTACAACTACAGAGTGGTCAAAGAGAT
TTTGATTCGGCTTAGCAAACTCTGTGTTCAAGAGAGTGCCTCAGTGAGAAAGAGCAGGAAGCAGCAACAGCGTCT
GCTCCGGAACATGGGCGCGCACGCCGTGGTGCTGGAGCTGCTGCAGATTCCCTATGAGAAGGCCGAAGATACCAA
GATGCAAGAGATAATGAGGTTGGCTCATGAATTTTTGCAGAATTTCTGCGCAGGCAACCAGCAGAATCAAGCTTT
GCTACATAAACACATAAACCTGTTTCTCAACCCAGGGATCCTGGAGGCAGTAACCATGCAGCACATCTTCATGAA
CAATTTCCAGCTTTGCAGTGAGATCAACGAGAGAGTTGTTCAGCACTTCGTTCACTGCATAGAGACTCACGGTCG
GAATGTCCAGTATATAAAGTTCTTACAGACAATTGTCAAGGCAGAAGGGAAATTTATTAAAAAATGCCAAGACAT
GGTTATGGCCGAGCTGGTCAATTCGGGAGAGGATGTCCTCGTGTTCTACAACGACAGAGCCTCTTTCCAGACTCT
GATCCAGATGATGCGGTCAGAACGGGATCGGATGGATGAGAACAGCCCTCTCATGTACCACATCCACTTGGTCGA
GCTCCTGGCTGTGTGCACGGAGGGTAAGAATGTCTACACAGAGATCAAGTGCAACTCCCTGCTCCCGCTGGATGA
CATCGTTCGCGTGGTGACCCACGAGGACTGCATCCCTGAGGTTAAAATTGCATACATTAACTTCCTGAATCACTG
CTATGTGGATACAGAGGTGGAAATGAAGGAGATTTATACCAGCAATCACATGTGGAAATTGTTTGAGAATTTCCT
TGTAGACATCTGCAGGGCCTGTAACAACACTAGTGACAGGAAACATGCAGACTCGATTTTGGAGAAGTATGTCAC
CGAAATCGTCATGAGTATTGTTACTACTTTCTTCAGCTCTCCCTTCTCAGACCAGAGTACGACTTTGCAGACTCG
CCAGCCTGTCTTTGTGCAACTGCTGCAAGGCGTGTTCAGGGTTTACCACTGCAACTGGTTAATGCCAAGCCAAAA
AGCCTCCGTGGAGAGCTGTATTCGGGTGCTGTCTGATGTAGCCAAGAGCCGGGCCATTGCCATTCCCGTGGACCT
GGACAGCCAAGTCAACAACCTCTTTCTCAAGTCCCACAGCATTGTGCAGAAAACAGCCATGAACTGGCGGCTCTC
AGCCCGCAATGCCGCACGCAGGGACTCTGTTCTGGCAGCTTCCAGAGACTACCGGAATATCATTGAGAGATTGCA
GGACATCGTCTCCGCGCTGGAGGACCGTCTCAGGCCCCTGGTGCAGGCAGAGTTATCTGTGCTCGTGGATGTTCT
CCACAGACCCGAGCTGCTTTTCCCAGAGAACACAGACGCCAGAAGGAAATGTGAAAGTGGCGGTTTCATTTGCAA
GTTAATAAAGCATACAAAACAGCTGCTAGAAGAAAATGAAGAGAAGCTCTGCATTAAGGTCCTACAGACCCTGAG
GGAAATGATGACCAAAGATAGAGGCTATGGAGAAAAGGGTGAGGCGCTCAGGCAAGTTCTGGTCAACCGTTACTA
TGGAAACGTCAGACCTTCGGGACGAAGAGAGAGCCTTACCAGCTTTGGCAATGGCCCACTGTCAGCAGGAGGACC
CGGCAAGCCCGGGGGAGGAGGGGGAGGTTCCGGATCCAGCTCTATGAGCAGGGGTGAGATGAGTCTGGCCGAGGT
TCAGTGTCACCTTGACAAGGAGGGGGCTTCCAATCTAGTTATCGACCTCATCATGAACGCATCCAGTGACCGAGT
GTTCCATGAAAGCATTCTCCTGGCCATTGCCCTTCTGGAAGGAGGCAACACCACCATCCAGCACTCCTTTTTCTG
TCGCTTGACAGAAGATAAGAAGTCAGAGAAATTCTTTAAGGTGTTTTATGACCGGATGAAGGTGGCCCAGCAAGA
AATCAAAGCAACAGTGACAGTGAACACCAGTGACTTGGGAAATAAAAAGAAAGACGATGAGGTAGACAGGGATGC
CCCATCACGGAAAAAAGCTAAAGAGCCCACAACACAGATAACAGAAGAGGTCCGGGATCAGCTCCTGGAGGCCTC
CGCTGCCACCAGGAAAGCCTTCACCACTTTCAGGAGGGAGGCTGATCCCGACGACCACTACCAGCCTGGAGAGGG
CACCCAGGCCACTGCCGACAAGGCCAAGGACGACCTGGAGATGAGCGCGGTCATCACCATCATGCAGCCCATCCT
CCGCTTCCTTCAGCTCCTGTGTGAAAACCACAACCGAGACCTGCAGAACTTCCTCCGTTGCCAAAATAACAAGAC
CAACTACAATTTGGTATGTGAGACCCTGCAGTTTCTGGACTGTATTTGTGGAAGCACAACTGGAGGCCTTGGTCT
TCTGGGCTTGTATATAAATGAAAAGAACGTAGCGCTTATCAACCAAACCCTGGAAAGTCTGACCGAATACTGTCA
AGGACCTTGCCATGAGAACCAGAACTGCATAGCCACCCATGAATCCAATGGCATTGACATCATCACAGCCCTGAT
CCTCAATGATATCAATCCTTTGGGAAAGAAGAGGATGGACCTTGTGTTAGAACTGAAGAACAATGCCTCGAAGTT
GCTCCTGGCCATCATGGAAAGCAGGCACGACAGTGAAAACGCAGAGAGGATACTTTATAACATGAGGCCCAAGGA
ACTGGTGGAAGTGATCAAGAAAGCCTACATGCAAGGTGAAGTGGAATTTGAGGATGGAGAAAACGGTGAGGATGG
GGCGGCGTCCCCCAGGAACGTGGGGCACAACATCTACATATTAGCCCATCAGTTGGCTCGGCATAACAAAGAACT
TCAGAGCATGCTGAAACCTGGTGGCCAAGTGGACGGAGATGAAGCCCTGGAGTTTTATGCCAAGCACACGGCGCA
GATAGAGATTGTCAGATTAGACCGAACAATGGAACAGATAGTCTTTCCCGTGCCCAGCATATGTGAATTCCTAAC
CAAGGAGTCAAAACTACGAATTTACTATACTACAGAGAGAGACGAACAAGGCAGCAAAATCAATGATTTCTTTCT
GCGGTCTGAAGACCTCTTCAATGAAATGAATTGGCAGAAGAAACTGAGAGCCCAGCCCGTGTTGTACTGGTGTGC
CCGCAACATGTCTTTCTGGAGCAGCATTTCGTTTAACCTGGCCGTCCTGATGAACCTGCTGGTGGCGTTTTTCTA
CCCGTTTAAGGGAGTCCGAGGAGGAACCCTGGAGCCCCACTGGTCGGGACTCCTGTGGACAGCCATGCTCATCTC
TCTGGCCATCGTCATTGCCCTCCCCAAGCCCCATGGCATCCGGGCCTTAATTGCCTCCACAATTCTACGACTGAT
ATTTTCAGTCGGGTTACAACCCACGTTGTTTCTTCTGGGCGCTTTCAATGTATGCAATAAAATCATCTTTCTAAT

FIGURE 1152C

GAGCTTTGTGGGCAACTGTGGGACATTCACAAGAGGCTACCGAGCCATGGTTCTGGATGTTGAGTTCCTCTATCA
TTTGTTGTATCTGGTGATCTGTGCCATGGGGCTCTTTGTCCATGAATTCTTCTACAGTCTGCTGCTTTTTGATTT
AGTGTACAGAGAAGAGACTTTGCTTAATGTCATTAAAAGTGTCACTCGCAATGGACGGTCCATCATCCTGACAGC
AGTTCTGGCTCTGATCCTCGTTTACCTGTTCTCAATAGTGGGCTATCTTTTCTTCAAGGATGACTTTATCTTGGA
AGTAGATAGGCTGCCCAATGAAACAGCTGTTCCAGAAACCGGCGAGAGTTTGGCAAGCGAGTTCCTGTTCTCCGA
TGTGTGTAGGGTGGAGAGTGGGGAGAACTGCTCCTCTCCTGCACCCAGAGAAGAGCTGGTCCCTGCAGAAGAGAC
GGAACAGGATAAAGAGCACACATGTGAGACGCTGCTGATGTGCATTGTCACCGTGCTGAGTCACGGGCTGCGGAG
CGGGGGTGGAGTAGGAGATGTACTCAGGAAACCGTCCAAAGAGGAACCCCTGTTTGCTGCTAGAGTTATTTATGA
CCTCTTGTTCTTCTTCATGGTCATCATCATTGTTCTTAACCTGATTTTTGGGGTTATCATTGACACTTTTGCTGA
CCTGAGGAGTGAGAAGCAGAAGAAGGAAGAGATCTTGAAGACCACGTGCTTTATCTGTGGCTTGGAAAGAGACAA
GTTTGACAACAAGACTGTCACCTTTGAAGAGCACATCAAGGAAGAACACAACATGTGGCACTATCTGTGCTTCAT
CGTCCTGGTGAAAGTAAAGGACTCCACCGAATATACTGGGCCTGAGAGTTACGTGGCAGAAATGATCAAGGAAAG
AAACCTTGACTGGTTCCCCAGGATGAGAGCCATGTCATTGGTCAGCAGTGATTCTGAAGGAGAACAGAATGAGCT
GAGAAACCTGCAGGAGAAGCTGGAGTCCACCATGAAACTTGTCACGAACCTTTCTGGCCAGCTGTCGGAATTAAA
GGATCAGATGACAGAACAAAGGAAGCAGAAACAAAGAATTGGTCTTCTAGGACATCCTCCTCACATGAATGTCAA
CCCACAACAACCAGCATAAGCAAATGAAAGAAAGGAATTGTATTTACCTTTTATAATTATTATTAGTGTGGGTAT
GGCTAATGAGTTCTGATTCACCCACGAAGGTTACATTTATGCTGAATACATTTGTAAATACTCAGTTTTATACTG
TATGTATATGATTGCTACTCTAAAGGTTTGGATATATGTATTGTAATTAGAATTGTTGGCATGATGACATTTCAT
TTGTGCCAAAAATATTAAAAATGCCTTTTTTGGAAGGACTAACAGAAAGCACCTGATTTGCACTTGAACCAGATT
ATAGATTTAAAAGTATATGACATGTATTTTGTATTTAAAACTAGAATAGCCAGTATTTATGTTTTTTATAAAACT
GTGCAATACGAATTATGCAATCACAATACATTTGTAGCTCCCGAGTGTCCTAAAGGGAGTGCACTTCTTTGAAGC
TGGTGTGTTAATACTATGTAATAAATGGTTAACTTTCAAATGATGCTGCTGCCAAAATTATATTAATAGTGAGTT
TCAGGCCCCTGGGCATTTTGTACCATGTAATTATCCTCTGGTGATGCTGTTTCTCGTTAGTGGCAGTAGTGCCTC
CGTCTCCTAGTGATAATGCTCCAAGTCTATGAACTGTTAAATCAGCATTCATTTTAAGAAAAGCAACTTTAGTTT
CAAAGATACTTTTAAGCTTCTAAATTGATCATTTAAACTATTTCTTTAAATAAGAGAGCCAAATTAGAGGCTCAT
ACTTTAGCTTGTGAAGAAGATAATGAATTTTTTAAAGGGAACTTTCTATGCAATGTTCAGGATAAATCGATACTG
CTGGCCAATCAGTGTCATCTCCTGGGTAAATTTTGATGTCGCATTATAAAGACATGCATAATTGATGGTTTCTAG
ATTATCTAGTCCAAACAATAGAGTTTATTTTTTCTTCATCTGAACCAACATGCTACAGTAGCTAAGAAGTATTAA
AACTATATACATCCATATAAAGATGAAATATGAACTATCTCATTAGAAGTCATAGTTGACCACAGACATGTTATT
CTTCTGAAAGAGCCACATTTTGGTTTTATTTCTTGTCACATGATTTCTTTTCTTGATGGATGAAAAATATGAAAT
GAAATCTTTTATATCTGTTGCCTAGTTTTGTACATGGATCTCATTTTACAAGAGAATCTCTCTGCTA

FIGURE 1153

MSDKMSSFLHIGDICSLYAEGSTNGFISTLGLVDDRCVVQPETGDLNNPPKKFRDCLFKLCPMNRYSAQKQFWKA
AKPGANSTTDAVLLNKLHHAADLEKKQNETENRKLLGTVIQYGNVIQLLHLKSNKYLTVNKRLPALLEKNAMRVT
LDEAGNEGSWFYIQPFYKLRSIGDSVVIGDKVVLNPVNAGQPLHASSHQLVDNPGCNEVNSVNCNTSWKIVLFMK
WSDNKDDILKGGDVVRLFHAEQEKFLTCDEHRKKQHVFLRTTGRQSATSATSSKALWEVEVVQHDPCRGGAGYWN
SLFRFKHLATGHYLAAEVDPDQDASRSRLRNAQEKMVYSLVSVPEGNDISSIFELDPTTLRGGDSLVPRNSYVRL
RHLCTNTWVHSTNIPIDKEEEKPVMLKIGTSPVKEDKEAFAIVPVSPAEVRDLDFANDASKVLGSIAGKLEKGTI
TQNERRSVTKLLEDLVYFVTGGTNSGQDVLEVVFSKPNRERQKLMREQNILKQIFKLLQAPFTDCGDGPMLRLEE
LGDQRHAPFRHICRLCYRVLRHSQQDYRKNQEYIAKQFGFMQKQIGYDVLAEDTITALLHNNRKLLEKHITAAEI
DTFVSLVRKNREPRFLDYLSDLCVSMNKSIPVTQELICKAVLNPTNADILIETKLVLSRFEFEGVSSTGENALEA
GEDEEEVWLFWRDSNKEIRSKSVRELAQDAKEGQKEDRDVLSYYRYQLNLFARMCLDRQYLAINEISGQLDVDLI
LRCMSDENLPYDLRASFCRLMLHMHVDRDPQEQVTPVKYARLWSEIPSEIAIDDYDSSGASKDEIKERFAQTMEF
VEEYLRDVVCQRFPFSDKEKNKLTFEVVNLARNLIYFGFYNFSDLLRLTKILLAILDCVHVTTIFPISKMAKGEE
NKGSNVMRSIHGVGELMTQVVLRGGGFLPMTPMAAAPEGNVKQAEPEKEDIMVMDTKLKIIEILQFILNVRLDYR
ISCLLCIFKREFDESNSQTSETSSGNSSQEGPSNVPGALDFEHIEEQAEGIFGGSEENTPLDLDDHGGRTFLRVL
LHLTMHDYPPLVSGALQLLFRHFSQRQEVLQAFKQVQLLVTSQDVDNYKQIKQDLDQLRSIVEKSELWVYKGQGP
DETMDGASGENEHKKTEEGNNKPQKHESTSSYNYRVVKEILIRLSKLCVQESASVRKSRKQQQRLLRNMGAHAVV
LELLQIPYEKAEDTKMQEIMRLAHEFLQNFCAGNQQNQALLHKHINLFLNPGILEAVTMQHIFMNNFQLCSEINE
RVVQHFVHCIETHGRNVQYIKFLQTIVKAEGKFIKKCQDMVMAELVNSGEDVLVFYNDRASFQTLIQMMRSERDR
MDENSPLMYHIHLVELLAVCTEGKNVYTEIKCNSLLPLDDIVRVVTHEDCIPEVKIAYINFLNHCYVDTEVEMKE
IYTSNHMWKLFENFLVDICRACNNTSDRKHADSILEKYVTEIVMSIVTTFFSSPFSDQSTTLQTRQPVFVQLLQG
VFRVYHCNWLMPSQKASVESCIRVLSDVAKSRAIAIPVDLDSQVNNLFLKSHSIVQKTAMNWRLSARNAARRDSV
LAASRDYRNIIERLQDIVSALEDRLRPLVQAELSVLVDVLHRPELLFPENTDARRKCESGGFICKLIKHTKQLLE
ENEEKLCIKVLQTLREMMTKDRGYGEKGEALRQVLVNRYYGNVRPSGRRESLTSFGNGPLSAGGPGKPGGGGGGS
GSSSMSRGEMSLAEVQCHLDKEGASNLVIDLIMNASSDRVFHESILLAIALLEGGNTTIQHSFFCRLTEDKKSEK
FFKVFYDRMKVAQQEIKATVTVNTSDLGNKKKDDEVDRDAPSRKKAKEPTTQITEEVRDQLLEASAATRKAFTTF
RREADPDDHYQPGEGTQATADKAKDDLEMSAVITIMQPILRFLQLLCENHNRDLQNFLRCQNNKTNYNLVCETLQ
FLDCICGSTTGGLGLLGLYINEKNVALINQTLESLTEYCQGPCHENQNCI

FIGURE 1154

CCCACGCGTCCGATGGAAGTTAAAGGGAAAAAGCAATTCACAGGAAAGAATACAAAGACAGCACAAGAAAAAAAC
AGATTTCATAAAAATAGTGATTCTGGTTCTTCAAAGACATTTCCAACAAGGAAAGTTGCTAAAGAAGGTGGACCT
AAAGTCACATCTAGGAACTTTGAGAAAAGTATCACAAAACTTGGGAAAAAGGGTGTAAAGCAGTTCAAGAATAAG
CAGCAAGGGGACAAATCACCAAAGAACAAATTCCAGCCGGCAAATAAATTCAACAAGAAGAGAAAATTCCAGCCA
GATGGTAGAAGCGATGAATCAGCAGCCAAGAAGCCCAAATGGGATGACTTCAAAAAGAAGAAGAAAGAACTGAAG
CAAAGCAGACAACTCAGTGATAAAACCAACTATGACATTGTTGTTCGGGCAAAGCAGATGTGGGAGATTTTAAGA
AGAAAAGACTGTGACAAAGAAAAAAGAGTAAAGTTAATGAGTGATTTGCAGAAGTTGATTCAAGGGAAAATTAAA
ACTATTGCATTTGCACACGATTCAACTCGTGTGATCCAGTGTTACATTCAGTATGGTAATGAAGAACAGAGAAAA
CAGGCTTTTGAAGAATTGCGAGATGATTTGGTTGAGTTAAGTAAAGCCAAATATTCGAGAAATATTGTTAAGAAA
TTTCTCATGTATGGAAGTAAACCACAGATTGCAGAGATAATCAGAAGTTTTAAAGGCCACGTGAGGAAGATGCTG
CGGCATGCGGAAGCATCAGCCATCGTGGAGTACGCATACAATGACAAAGCCATTTTGGAGCAGAGGAACATGCTG
ACGGAAGAGCTCTATGGGAACACATTTCAGCTTTACAAGTCAGCAGATCACCCAACTCTGGACAAAGTGTTAGAG
TTACAGCCAGAAAAATTAGAACTTATTATGGATGAAATGAAACAGATTCTAACTCCAATGGCCCAAAAGGAAGCT
GTGATTAAGCACTCATTGGTGCATAAAGTATTCTTGGACTTTTTTACCTATGCACCCCCCAAACTCAGATCAGAA
ATGATTGAAGCCATCCGCGAAGCGGTGGTCTACCTGGCACACACACACGATGGCGCCAGAGTGGCCATGCACTGC
CTGTGGCATGGCACGCCCAAGGACAGGAAAGTGATTGTGAAAACAATGAAGACTTATGTTGAAAAGGTGGCTAAT
GGCCAATACTCCCATTTGGTTTTACTGGCGGCATTTGATTGTATTGATGATACTAAGCTTGTGAAGCAGATAATC
ATATCAGAAATTATCAGTTCATTGCCTAGCATAGTAAATGACAAATATGGAAGGAAGGTCCTATTGTACTTACTA
AGCCCCAGAGATCCTGCACATACAGTACGAGAAATCATTGAAGTTCTGCAAAAAGGAGATGGAAATGCACACAGT
AAGAAAGATACAGAGGTCCGCAGACGGGAGCTCCTAGAATCCATTTCTCCAGCTTTGTTAAGCTACCTGCAAGAA
CACGCCCAAGAAGTGGTGCTAGATAAGTCTGCGTGTGTGTTGGTGTCTGACATTCTGGGATCTGCCACTGGAGAC
GTTCAGCCTACCATGAATGCCATCGCCAGCTTGGCAGCAACAGGACTGCATCCTGGTGGCAAGGACGGAGAGCTT
CACATTGCAGAACATCCTGCAGGACATCTAGTTCTGAAGTGGTTAATAGAGCAAGATAAAAAGATGAAAGAAAAT
GGGAGAGAAGGTTGTTTTGCAAAAACACTTGTAGAGCATGTTGGTATGAAGAACCTGAAGTCCTGGGCTAGTGTA
AATCGAGGTGCCATTATTCTTTCTAGCCTCCTCCAGAGTTGTGACCTGGAAGTTGCAAACAAAGTCAAAGCTGCA
CTGAAAAGCTTGATTCCTACATTGGAAAAAACCAAAAGCACCAGCAAAGGAATAGAAATTCTACTTGAAAAACTG
AGCACATAGGTGGAAAGAGTTAAGAGCAAGATGGAATGATTTTTTCTGTTCTCTGTTCTGTTTCCCAATGCAGAA
AAGAAGGGGTAGGGTCCACCATACTGGTAATTGGGGTACTCTGTATATGTGTTTCTTCTTTGTATACGAATCTAT
TTATATAAATTGTTTTTTTAAATGGTCTTTTTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1155

MWEILRRKDCDKEKRVKLMSDLQKLIQGKIKTIAFAHDSTRVIQCYIQYGNEEQRKQAFEELRDDLVELSKAKYS
RNIVKKFLMYGSKPQIAEIIRSFKGHVRKMLRHAEASAIVEYAYNDKAILEQRNMLTEELYGNTFQLYKSADHPT
LDKVLELQPEKLELIMDEMKQILTPMAQKEAVIKHSLVHKVFLDFFTYAPPKLRSEMIEAIREAVVYLAHTHDGA
RVAMHCLWHGTPKDRKVIVKTMKTYVEKVANGQYSHLVLLAAFDCIDDTKLVKQIIISEIISSLPSIVNDKYGRK
VLLYLLSPRDPAHTVREIIEVLQKGDGNAHSKKDTEVRRRELLESISPALLSYLQEHAQEVVLDKSACVLVSDIL
GSATGDVQPTMNAIASLAATGLHPGGKDGELHIAEHPAGHLVLKWLIEQDKKMKENGREGCFAKTLVEHVGMKNL
KSWASVNRGAIILSSLLQSCDLEVANKVKAALKSLIPTLEKTKSTSKGIEILLEKLST

FIGURE 1156

CGCCCAGCAGCCCGTGGGCAGGCGCGGCGGAGCGAGCGGGGCCGGCGGCGGGCGCCGAGGGACGCCGAGGCCTCG
GGCGGGGGCTGGCCCGGGGTTCCAGGTCTCCAGTGGGGGCTGCAGACTAAGCAAAATGAGGCGGTTCCTGAGGCC
AGGGCATGACCCTGTGCGGGAGAGGCTCAAGCGGGACCTGTTCCAGTTTAACAAGACGGTGGAGCATGGCTTCCC
GCACCAGCCCAGCGCCCTCGGCTACAGCCCGTCCCTGCACATCCTGGCCATCGGCACCCGTTCTGGAGCCATCAA
GCTCTACGGAGCCCCAGGCGTGGAGTTCATGGGGCTGCACCAGGAGAACAACGCTGTGACGCAGATCCACCTCCT
GCCCGGCCAGTGCCAGCTGGTCACCCTGCTGGATGACAACAGCCTGCACCTTTGGAGCCTGAAGGTCAAGGGCGG
GGCATCGGAGCTGCAGGAGGATGAGAGCTTCACACTGCGTGGACCCCCAGGGGCTGCCCCCAGTGCCACACAGAT
CACCGTGGTCCTGCCACATTCCTCCTGCGAGCTGCTCTACCTGGGCACCGAGAGTGGCAACGTGTTTGTGGTGCA
GCTGCCAGCTTTTCGTGCGCTGGAGGACCGGACCATCAGCTCGGACGCGGTGCTGCAGCGGTTGCCAGAGGAGGC
CCGCCACCGGCGTGTGTTCGAGATGGTGGAGGCACTGCAGGAGCACCCTCGAGACCCCAACCAGATCCTGATCGG
CTACAGCCGAGGCCTCGTTGTCATCTGGGACCTACAGGGCAGCCGCGTGCTCTACCACTTCCTCAGCAGCCAGCA
ACTGGAGAACATCTGGTGGCAGCGGGACGGCCGCCTGCTCGTCAGCTGTCACTCTGACGGCAGCTACTGCCAGTG
GCCCGTGTCCAGCGAAGCCCAGCAACCAGAGCCCCTCCGCAGCCTCGTGCCTTACGGTCCCTTTCCTTGCAAAGC
GATTACCAGAATCCTCTGGCTGACCACTAGGCAGGGGTTGCCCTTCACCATCTTCCAGGGTGGCATGCCACGGGC
CAGCTACGGGGACCGCCACTGCATCTCAGTGATCCACGATGGCCAGCAGACGGCCTTCGACTTCACCTCCCGTGT
CATCGGCTTCACTGTCCTCACAGAGGCAGACCCTGCAGCCACCTTTGACGACCCCTATGCCCTGGTGGTGCTGGC
TGAGGAGGAGCTGGTGGTGATTGACCTGCAGACAGCAGGCTGGCCACCGGTCCAGCTGCCCTACCTGGCTTCTCT
GCACTGTTCCGCCATCACCTGCTCTCACCACGTCTCCAACATCCCGCTGAAGCTGTGGGAGCGGATCATTGCCGC
CGGCAGCCGGCAGAACGCACACTTCTCCACCATGGAGTGGCCAATTGATGGTGGCACCAGCCTGACCCCAGCCCC
ACCCCAGAGGGACCTGCTGCTCACAGGGCACGAGGACGGCACGGTGCGGTTCTGGGATGCCTCGGGTGTCTGCCT
GCGGCTGCTCTACAAACTCAGCACTGTGCGCGTGTTCCTCACCGACACGGACCCCAACGAGAACTTCAGTGCCCA
GGGCGAGGACGAGTGGCCCCCACTCCGCAAGGTGGGCTCCTTTGACCCCTACAGTGATGACCCCCGGCTGGGCAT
CCAGAAGATCTTCCTCTGCAAGTACAGCGGCTACCTGGCTGTGGCAGGCACGGCAGGGCAGGTGCTGGTACTGGA
ACTGAATGACGAGGCAGCGGAGCAGGCTGTGGAGCAGGTGGAGGCCGACCTGCTGCAGGACCAAGAGGGCTACCG
CTGGAAGGGGCACGAGCGCCTGGCAGCCCGCTCAGGGCCCGTGCGCTTTGAGCCTGGCTTTCAGCCCTTCGTGTT
GGTGCAGTGTCAGCCCCCGGCTGTGGTCACCTCCTTGGCCCTGCACTCTGAGTGGCGGCTCGTGGCCTTCGGCAC
CAGCCATGGCTTTGGCCTCTTTGACCACCAGCAGCGGCGGCAGGTCTTTGTTAAGTGCACACTGCACCCCAGTGA
CCAGCTGGCCTTGGAGGGCCCACTCTCCCGCGTCAAGTCCCTCAAGAAGTCCTTGCGTCAGTCATTCCGCCGGAT
GCGTCGGAGCCGGGTGTCCAGCCGGAAGCGGCACCCGGCTGGCCCCCCAGGAGAGGCACAGGAGGGGAGTGCCAA
GGCTGAGCGGCCAGGCCTCCAGAACATGGAGCTGGCGCCTGTGCAGCGCAAGATCGAGGCTCGCTCGGCAGAGGA
CTCCTTCACAGGCTTCGTCCGGACCCTGTACTTTGCTGACACCTACCTGAAGGACAGCTCCCGGCACTGCCCCTC
GCTGTGGGCTGGCACCAATGGGGGCACCATCTATGCCTTCTCCCTGCGTGTGCCTCCCGCCGAGCGGAGAATGGA
TGAGCCTGTGCGGGCAGAGCAGGCCAAGGAGATCCAGCTGATGCACCGGGCGCCGGTGGTGGGCATCCTGGTGCT
CGACGGACACAGCGTACCCCTTCCCGAGCCCCTCGAAGTGGCCCATGATCTGTCGAAGAGCCCTGACATGCAGGG
AAGCCACCAGCTGCTCGTCGTATCAGAGGAGCAGTTCAAGGTGTTCACGCTGCCCAAGGTGAGTGCCAAGCTGAA
GTTGAAGCTGACGGCCCTGGAGGGCTCAAGAGTGCGGCGGGTCAGCGTGGCCCACTTCGGCAGTCGTCGAGCCGA
GGACTACGGGGAGCACCACCTGGCAGTCCTTACCAACCTGGGCGACATCCAGGTGGTCTCGCTGCCCCTGCTCAA
GCCCCAGGTGCGCTACAGCTGCATCCGCCGGGAGGACGTCAGTGGCATCGCCTCCTGCGTCTTCACCAAATATGG
CCAAGGCTTCTACCTGATCTCACCCTCGGAGTTTGAGCGCTTCTCTCTCTCCACCAAGTGGCTGGTGGAGCCCCG
GTGTCTGGTGGATTCAGCAGAAACCAAGAACCACCGCCCTGGTAACGGTGCGGGCCCCAAGAAGGCCCCGAGCCG
AGCCAGGAACTCAGGGACTCAGAGTGATGGCGAGGAGAAGCAGCCCGGCCTGGTGATGGAGCGCGCTCTGCTCAG
TGATGAGAGAGCGGCAACTGGCGTTCACATCGAGCCGCCGTGGGGTGCAGCCTCAGCAATGGCGGAGCAGAGTGA
GTGGCTGAGCGTCCAGGCTGCGCGATGAGCACACACTACTACTGATGGCCTTTCGGGGGTCCCTGCCCCAACCGG
AGAGGCCGGTGCACAGGGCCCCGCCAGGGGCTGGGGGCATCCCGGCTTCCACAATGCAGCTGCTCTGGGCCTCGG
GAGAGGAGAGACCCCAGTCCCCTGGGCTGCCCTTCCCGGGCCTCGTCTGTCTGGGTCCTTTGGTCAATGTTGCAC
AGTTTTTATTGCTCCCATCCCTTTTTGTAGTGGGCTGGGTTTTAAGTTATAAATGTTAACTGCCTCTGGGTGAAA
AAGTTTTTAATAAACACCTATTACCTCTTG

FIGURE 1157

MRRFLRPGHDPVRERLKRDLFQFNKTVEHGFPHQPSALGYSPSLHILAIGTRSGAIKLYGAPGVEFMGLHQENNA
VTQIHLLPGQCQLVTLLDDNSLHLWSLKVKGGASELQEDESFTLRGPPGAAPSATQITVVLPHSSCELLYLGTES
GNVFVVQLPAFRALEDRTISSDAVLQRLPEEARHRRVFEMVEALQEHPRDPNQILIGYSRGLVVIWDLQGSRVLY
HFLSSQQLENIWWQRDGRLLVSCHSDGSYCQWPVSSEAQQPEPLRSLVPYGPFPCKAITRILWLTTRQGLPFTIF
QGGMPRASYGDRHCISVIHDGQQTAFDFTSRVIGFTVLTEADPAATFDDPYALVVLAEEELVVIDLQTAGWPPVQ
LPYLASLHCSAITCSHHVSNIPLKLWERIIAAGSRQNAHFSTMEWPIDGGTSLTPAPPQRDLLLTGHEDGTVRFW
DASGVCLRLLYKLSTVRVFLTDTDPNENFSAQGEDEWPPLRKVGSFDPYSDDPRLGIQKIFLCKYSGYLAVAGTA
GQVLVLELNDEAAEQAVEQVEADLLQDQEGYRWKGHERLAARSGPVRFEPGFQPFVLVQCQPPAVVTSLALHSEW
RLVAFGTSHGFGLFDHQQRRQVFVKCTLHPSDQLALEGPLSRVKSLKKSLRQSFRRMRRSRVSSRKRHPAGPPGE
AQEGSAKAERPGLQNMELAPVQRKIEARSAEDSFTGFVRTLYFADTYLKDSSRHCPSLWAGTNGGTIYAFSLRVP
PAERRMDEPVRAEQAKEIQLMHRAPVVGILVLDGHSVPLPEPLEVAHDLSKSPDMQGSHQLLVVSEEQFKVFTLP
KVSAKLKLKLTALEGSRVRRVSVAHFGSRRAEDYGEHHLAVLTNLGDIQVVSLPLLKPQVRYSCIRREDVSGIAS
CVFTKYGQGFYLISPSEFERFSLSTKWLVEPRCLVDSAETKNHRPGNGAGPKKAPSRARNSGTQSDGEEKQPGLV
MERALLSDERAATGVHIEPPWGAASAMAEQSEWLSVQAAR

FIGURE 1158

GAGTGACTCCACCGCCCGGAGCAGCGGTGCAGGACGCGCGTCTCCGCCGCCCGCGGTGACTTCTGCCTGCGCTCC
TTCTCTGAACGCTCACTTCCGAGGAGACGCCGACG**ATG**AAGACACCGTGGAAGGTTCTTCTGGGACTGCTGGGTG
CTGCTGCGCTTGTCACCATCATCACCGTGCCCGTGGTTCTGCTGAACAAAGGCACAGATGATGCTACAGCTGACA
GTCGCAAAACTTACACTCTAACTGATTACTTAAAAAATACTTATAGACTGAAGTTATACTCCTTAAGATGGATTT
CAGATCATGAATATCTCTACAAACAAGAAAATAATATCTTGGTATTCAATGCTGAATATGGAAACAGCTCAGTTT
TCTTGGAGAACAGTACATTTGATGAGTTTGGACATTCTATCAATGATTATTCAATATCTCCTGATGGGCAGTTTA
TTCTCTTAGAATACAACTACGTGAAGCAATGGAGGCATTCCTACACAGCTTCATATGACATTTATGATTTAAATA
AAAGGCAGCTGATTACAGAAGAGAGGATTCCAAACAACACACAGTGGGTCACATGGTCACCAGTGGGTCATAAAT
TGGCATATGTTTGGAACAATGACATTTATGTTAAAATTGAACCAAATTTACCAAGTTACAGAATCACATGGACGG
GGAAAGAAGATATAATATATAATGGAATAACTGACTGGGTTTATGAAGAGGAAGTCTTCAGTGCCTACTCTGCTC
TGTGGTGGTCTCCAAACGGCACTTTTTTAGCATATGCCCAATTTAACGACACAGAAGTCCCACTTATTGAATACT
CCTTCTACTCTGATGAGTCACTGCAGTACCCAAAGACTGTACGGGTTCCATATCCAAAGGCAGGAGCTGTGAATC
CAACTGTAAAGTTCTTTGTTGTAAATACAGACTCTCTCAGCTCAGTCACCAATGCAACTTCCATACAAATCACTG
CTCCTGCTTCTATGTTGATAGGGGATCACTACTTGTGTGATGTGACATGGGCAACACAAGAAAGAATTTCTTTGC
AGTGGCTCAGGAGGATTCAGAACTATTCGGTCATGGATATTTGTGACTATGATGAATCCAGTGGAAGATGGAACT
GCTTAGTGGCACGGCAACACATTGAAATGAGTACTACTGGCTGGGTTGGAAGATTTAGGCCTTCAGAACCTCATT
TTACCCTTGATGGTAATAGCTTCTACAAGATCATCAGCAATGAAGAAGGTTACAGACACATTTGCTATTTCCAAA
TAGATAAAAAAGACTGCACATTTATTACAAAAGGCACCTGGGAAGTCATCGGGATAGAAGCTCTAACCAGTGATT
ATCTATACTACATTAGTAATGAATATAAAGGAATGCCAGGAGGAAGGAATCTTTATAAAATCCAACTTAGTGACT
ATACAAAAGTGACATGCCTCAGTTGTGAGCTGAATCCGGAAAGGTGTCAGTACTATTCTGTGTCATTCAGTAAAG
AGGCGAAGTATTATCAGCTGAGATGTTCCGGTCCTGGTCTGCCCCTCTATACTCTACACAGCAGCGTGAATGATA
AAGGGCTGAGAGTCCTGGAAGACAATTCAGCTTTGGATAAAATGCTGCAGAATGTCCAGATGCCCTCCAAAAAAC
TGGACTTCATTATTTTGAATGAAACAAAATTTTGGTATCAGATGATCTTGCCTCCTCATTTTGATAAATCCAAGA
AATATCCTCTACTATTAGATGTGTATGCAGGCCCATGTAGTCAAAAAGCAGACACTGTCTTCAGACTGAACTGGG
CCACTTACCTTGCAAGCACAGAAAACATTATAGTAGCTAGCTTTGATGGCAGAGGAAGTGGTTACCAAGGAGATA
AGATCATGCATGCAATCAACAGAAGACTGGGAACATTTGAAGTTGAAGATCAAATTGAAGCAGCCAGACAATTTT
CAAAAATGGGATTTGTGGACAACAAACGAATTGCAATTTGGGGCTGGTCATATGGAGGGTACGTAACCTCAATGG
TCCTGGGATCGGGAAGTGGCGTGTTCAAGTGTGGAATAGCCGTGGCGCCTGTATCCCGGTGGGAGTACTATGACT
CAGTGTACACAGAACGTTACATGGGTCTCCCAACTCCAGAAGACAACCTTGACCATTACAGAAATTCAACAGTCA
TGAGCAGAGCTGAAAATTTTAAACAAGTTGAGTACCTCCTTATTCATGGAACAGCAGATGATAACGTTCACTTTC
AGCAGTCAGCTCAGATCTCCAAAGCCCTGGTCGATGTTGGAGTGGATTTCCAGGCAATGTGGTATACTGATGAAG
ACCATGGAATAGCTAGCAGCACAGCACACCAACATATATATACCCACATGAGCCACTTCATAAAACAATGTTTCT
CTTTACCT**TAG**CACCTCAAAATACCATGCCATTTAAAGCTTATTAAAACTCATTTTTGTTTTCATTATCTCAAAA
CTGCACTGTCAAGATGATGATGATCTTTAAAATACACACTCAAATCAAGAAACTTAAGGTTACCTTTGTTCCCAA
ATTTCATACCTATCATCTTAAGTAGGGACTTCTGTCTTCACAACAGATTATTACCTTACAGAAGTTTGAATTATC
CGGTCGGGTTTTATTGTTTAAAATCATTTCTGCATCAGCTGCTGAAACAACAAATAGGAATTGTTTTTATGGAGG
CTTTGCATAGATTCCCTGAGCAGGATTTTAATCTTTTTCTAACTGGACTGGTTCAAATGTTGTTCTCTTCTTTAA
AGGGATGGCAAGATGTGGGCAGTGATGTCACTAGGGCAGGGACAGGATAAGAGGGATTAGGGAGAGAAGATAGCA
GGGCATGGCTGGGAACCCAAGTCCAAGCATACCAACACGAGCAGGCTACTGTCAGCTCCCCTCGGAGAAGAGCTG
TTCACAGCCAGACTGGCACAGTTTTCTGAGAAAGACTATTCAAACAGTCTCAGGAAATCAAATATGCAAAGCACT
GACTTCTAAGTAAAACCACAGCAGTTGAAAAGACTCCAAAGAAATGTAAGGGAAACTGCCAGCAACGCAGGCCCC
CAGGTGCCAGTTATGGCTATAGGTGCTACAAAAACACAGCAAGGGTGATGGGAAAGCATTGTAAATGTGCTTTTA
AAAAAAAATACTGATGTTCCTAGTGAAAGAGGCAGCTTGAAACTGAGATGTGAACACATCAGCTTGCCCTGTTAA
AAGATGAAAATATTTGTATCACAAATCTTAACTTGAAGGAGTCCTTGCATCAATTTTTCTTATTTCATTTCTTTG
AGTGTCTTAATTAAAAGAATATTTTAACTTCCTTGGACTCATTTTAAAAAATGGAACATAAAATACAATGTTATG
TATTATTATTCCCATTCTACATACTATGGAATTTCTCCCAGTCATTTAATAAATGTGCCTTCATTTTTTC

FIGURE 1159

MKTPWKVLLGLLGAAALVTIITVPVVLLNKGTDDATADSRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENN
ILVFNAEYGNSSVFLENSTFDEFGHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPN
NTQWVTWSPVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSPNGTFLAY
AQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSSVTNATSIQITAPASMLIGDHYL
CDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWNCLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKII
SNEEGYRHICYFQIDKKDCTFITKGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELN
PERCQYYSVSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFIILNETKFW
YQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASFDGRGSGYQGDKIMHAINRRLGT
FEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSMVLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPT
PEDNLDHYRNSTVMSRAENFKQVEYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQH
IYTHMSHFIKQCFSLP

FIGURE 1160

AAGTGCTGCGAGCCCTGGGCCACGCTGGCCGTGCTGGCAGTGGGCCGCCTCGATCCCTCTGCAGTCTTTCCCTTG
AGGCTCCAAGACCAGCAGGTGAGGCCTCGCGGCGCTGAAACCGTGAGGCCCGGACCACAGGCTCCAGATGGACCC
TGGGAAGGACAAAGAGGGGGTGCCCCAGCCCTCAGGGCCGCCAGCAAGGAAGAAATTTGTGATACCCCTCGACGA
GGATGAGGTCCCTCCTGGAGTGGCCAAGCCCTTATTCCGATCTACACAGAGCCTTCCCACTGTGGACACCTCGGC
CCAGGCGGCCCCTCAGACCTACGCCGAATATGCCATCTCACAGCCTCTGGAAGGGGCTGGGGCCACGTGCCCCAC
AGGGTCAGAGCCCCTGGCAGGAGAGACGCCCAACCAGGCCCTGAAACCCGGGGCAAAATCCAACAGCATCATTGT
GAGCCCTCGGCAGAGGGGCAATCCCGTACTGAAGTTCGTGCGCAACGTGCCCTGGGAATTTGGCGACGTAATTCC
CGACTATGTGCTGGGCCAGAGCACCTGTGCCCTGTTCCTCAGCCTCCGCTACCACAACCTGCACCCAGACTACAT
CCATGGGCGGCTGCAGAGCCTGGGGAAGAACTTCGCCTTGCGGGTCCTGCTTGTCCAGGTGGATGTGAAAGATCC
CCAGCAGGCCCTCAAGGAGCTGGCTAAGATGTGTATCCTGGCCGACTGCACATTGATCCTCGCCTGGAGCCCCGA
GGAAGCTGGGCGGTACCTGGAGACCTACAAGGCCTATGAGCAGAAACCAGCGGACCTCCTGATGGAGAAGCTAGA
GCAGGACTTCGTCTCCCGGGTGACTGAATGTCTGACCACCGTGAAGTCAGTCAACAAAACGGACAGTCAGACCCT
CCTGACCACATTTGGATCTCTGGAACAGCTCATCGCCGCATCAAGAGAAGATCTGGCCTTATGCCCAGGCCTGGG
CCCTCAGAAAGCCCGGAGGCTGTTTGATGTCCTGCACGAGCCCTTCTTGAAAGTACCCTGATGACCCCAGCTGCC
AAGGAAACCCCCAGTGTAATAATAAATCGTCCTCCCAGGCCAGGCTC

FIGURE 1161

MDPGKDKEGVPQPSGPPARKKFVIPLDEDEVPPGVAKPLFRSTQSLPTVDTSAQAAPQTYAEYAISQPLEGAGAT
CPTGSEPLAGETPNQALKPGAKSNSIIVSPRQRGNPVLKFVRNVPWEFGDVIPDYVLGQSTCALFLSLRYHNLHP
DYIHGRLQSLGKNFALRVLLVQVDVKDPQQALKELAKMCILADCTLILAWSPEEAGRYLETYKAYEQKPADLLME
KLEQDFVSRVTECLTTVKSVNKTDSQTLLTTFGSLEQLIAASREDLALCPGLGPQKARRLFDVLHEPFLKVP

FIGURE 1162A

GAATTCCGGAGGGAGGGTCCCCAACGCTGGGCTTGCTTGGGGGCAGCCCCTCAGCACAGCCGGGGACCGGGAATG
TGGAGGCGGGAATTCCTTCTGGCAGAATGCTGGAGCCTTTGCCCTGTTGGGACGCTGCGAAAGATCTGAAAGAAC
CTCAGTGCCCTCCTGGGGACAGGGTGGGTGTGCAGCCTGGGAACTCCAGGGTTTGGCAGGGCACCATGGAGAAAG
CCGGTTTGGCTTGGACGCGTGGCACAGGGGTGCAATCAGAGGGGACTTGGGAAAGCCAGCGGCAGGACAGTGATG
CCCTCCCAAGTCCGGAGCTGCTACCCCAAGATCAGGACAAGCCTTTCCTGAGGAAGGCCTGCAGCCCCAGCAACA
TACCTGCTGTCATCATTACAGACATGGGCACCCAGGAGGATGGGGCCTTGGAGGAGACGCAGGGAAGCCCTCGGG
GCAACCTGCCCCTGAGGAAACTGTCCTCTTCCTCGGCCTCCTCCACGGGCTTCTCCTCATCCTACGAAGACTCAG
AGGAGGACATCTCCAGTGACCCTGAGCGCACCCTGGACCCCAACTCAGCTTTCCTGCATACCCTGGACCAGCAGA
AACCTAGAGTGAGCAAATCATGGAGGAAGATAAAAAACATGGTGCACTGGTCTCCCTTCGTCATGTCCTTCAAGA
AGAAGTACCCCTGGATCCAGCTGGCAGGACACGCAGGGAGTTTCAAGGCAGCTGCCAATGGCAGGATCCTGAAGA
AGCACTGTGAGTCAGAGCAGCGCTGCCTGGACCGGCTGATGGTGGATGTGCTGAGGCCCTTCGTACCTGCCTACC
ATGGGGATGTGGTGAAGGACGGGGAGCGCTACAACCAGATGGACGACCTGCTGGCCGACTTCGACTCGCCCTGTG
TGATGGACTGCAAGATGGGAATCAGGACCTACCTGGAGGAGGAGCTCACGAAGGCCCGGAAGAAGCCCAGCCTGC
GGAAGGACATGTACCAGAAGATGATCGAGGTGGACCCCGAGGCCCCCACCGAGGAGGAAAAAGCACAGCGGGCTG
TGACCAAGCCACGGTACATGCAGTGGCGGGAGACCATCAGCTCCACGGCCACCCTGGGGTTCAGGATCGAGGGAA
TCAAGAAAGAAGACGGCACCGTGAACCGGGACTTCAAGAAGACCAAAACGAGGGAGCAGGTCACCGAGGCCTTCA
GAGAGTTCACTAAAGGAAACCATAACATCCTGATCGCCTATCGGGACCGGCTGAAGGCCATTCGAACCACTCTAG
AAGTTTCTCCCTTCTTCAAGTGCCACGAGGTCATTGGCAGCTCCCTCCTCTTCATCCACGACAAGAAGGAACAGG
CCAAAGTGTGGATGATCGACTTTGGGAAAACCACGCCCCTGCCTGAGGGCCAGACCCTGCAGCATGACGTCCCCT
GGCAGGAGGGGAACCGGGAGGATGGCTACCTCTCGGGGCTCAATAACCTCGTCGACATCCTGACCGAGATGTCCC
AGGATGCCCCACTCGCCTGAGCTGCCCACGCCCTCCCTGGCCCCCGCCTGGGCCTCCTTTCCTCCTCCTGTGCTT
CCTTTCTCGTTCCTAACTTTTCCTTCACTTACACCTGACTGACCCTCCTGAACTGCACTACAAGACACTTTGTAG
AAGAGGAGATGAGAGTTTCTAGTCATTTTCCTAACTTCAGGGCTTGGAGGTGGTGTTTGCACTGCTTTTTGTAGA
GAGGGTCACCTACTAGAAGAGAAATGCCCAGTCTTAGAGGTGGGTCAGGTGTAGAGCTGGAGGGGGTCCCTGGCT
GCTGAGGGGACCCTACCAGATGAGCCCTGCCTCTGGGAGCCCCCTAGGAAGCACCAGCCTGGACCTACCACCTGC
GGAGGCCTGCTGCCCCCTGGCGGCCAGTGCTGTTAGAGTGCTGCCAAGCACAGCCTTATTTCTGCCGGGGCCTCC
CCACCGGAGAGCCCAGGGGGCCGGCCGGGTTCCTGGTCCCTGGCTGGGAGCAGGGCTTTCTGGTAGTTGGGGCAC
AAAACCATCGGGGAACCACATGTTGACTGTGAGCAAAGTGTCTTCCGATTAGCAGCCTCAGGGATGCCCTGGTGG
CCTCTCCAGGGCTGCTCAGGCAAGGCCCCCCACCCATCTGGTATGGAAACCTGCCGGCTCCAGGCCAGACCCAGG
AGCCAAGAGAAGGCTGAAGCCAGCTTGGCTGTGTTCTCTGATCTAGGCCTTCCCAGAGGAGGCGAGCAGAAGCTG
TGCCACTTGGAATTGCAACCCATGAGTTCAGAAGGCACACTCTGCCATGCTGAGCTCCAAGGGTGCTACCAGGGG
AAGATGGGATCTATAGAGTCTCTGGGCCCTGGCCCCAGGGAGGAGCACATTTTTCTTGACCCTCACCTACCTGGT
GCTAGTTGGTCAACCCTGCCTGCATACATGGGCTCCTGTCATGGGGCCCAGAGTCCCTTGCAGATATAGAAATAG
GGGAGGAGCTCAGGTCTGCGCCAGGCAGGAAGAAGGCAGGCTTCTGGCTTCCAGAGGTGCCGCGGTGGCCTCCTG
GCATCATTTGTTATTGCCTCTGAAACAAGCCTTACTGCCTGGAGGGCTTAGATTCCTGCTTCCCCAATGTAGTGT
GGGTATCTTGTAGGGTATGTGGTGGATGCCAGGGCGTGCTCCAGGCACCTCTTCCTGAAGTCTCTGCATTTGGAG
ATTCGTGGAGAACCTATTTAAGCCCAATTTTAACTGAAAGCCAGTGAGTCTGATATGGAAGGGAATGTAAAATTT
GCCTGACTTCTTAAGAACAAAACCCCCAGCTCTGTGCCCCATGCTCCTTGGGGCTTGCCACCCACTCCTTTGCTG
TCAGAGGTACAGGAGCTGGGAGAGTCCAGGAGCTAGGGACACAGAGGGAGACTATGGACCAAGGTGTGTGTGTCT
GGAGGAACCACTGCCCACCCCACCACCCCGGGGTCTCTGGGGAACTGTCAACCTGCCCACGGGACATGTACATTT
CCCCTTTTGTGCTGGAAGTGTGAGTGACACTTGCTGGGGGTGGAGGGTGGGACACATGAGGATGTATAAGTACAG
ATTTTAAAAAAGGAAATCAACTTACACTTCCTGGCTCTTGTTTAAAACAGTGGTGAGCTCCTGTGTGGGCCGACT
TGCTAAAGGTCACACACGCGCCCGGTGGAGCACGAGAGACCTCGTGGCAGCATGTGATCTGGAAGGCAGGCAGGA
CGGGGGCGTTGGGGAGCCAAAGTCAACTCTGGGCCTCTGGAGCTATAGTGACTTTTGGGCTAGAAGGGACCCTGG
TGGTCTGTGCTTCAGCCATTTGCAGGGCAGGGGCATCATTAATTCAGACGTAAAGATTCTATGAATATGGACTGG
CCAAAAGTTATCCTTACTCCATCTGTGAAAGAAGTTTGCTAAAGCAAATCATGATATGAACAAAAATTACAGGGG
ACCTGTTTAAGAGAACAAAATGTTCCAAGCACTTTAGGCAGACACCAGCTGTTTGCAAACAATGTGCTAATATGC
AAATGATGTGCTTATTAAAGGAGGCCCATGGGGCCTCTTATTGGCAATACTTGGCTGTGGGTTACATTAAATATG

FIGURE 1162B

TGAACATAGTATGAAGTAGCATCATTTTAGGGTTATTCTGTTACTTAGGGTTTTTGTTTTCTGTTTTTTTTTTCT
CTTTTTTTGTATTTACCGTGCTAGTTCTCTTCTACACCTACTCTGTCTCTCAAGCCATTTTGCCACTCGCTTCCC
TGCCATCTGGCCCTTCCCTTTGTCTCAGTGGGATAGATGGATTGTGAAATGGAATCTCCCAGAACCCCTGCCCTG
GCAGCCTGGAAGACCGTGCCTGCCCAGCCCTCGTCACCACAGGGACTCCTTGGGTCCTGGCAGTGCATGTGCCAG
CAGGCAGGACAAACTCTGTGTACCTGTGCCCAGGTGAATGGGCGCAGGGTCCTCTTGCCCTGTCCTGCGGGGGGC
CCCACGAGTTCCTGGCATTCAGCACTGCTTAGCATTCTCGGAAGGTTTCTTCAACTGCTTGCTTTTCCCAGGCTT
GCCTTTAGTGTCATGTAAGACATTTTTAAGTTATATTTATTTTGTTGGGTTTTAAAATTGCACAGAACACTAAGA
CCGAAAGGCTGGACTCTTGTTTCTCCTTGAAAGCTTTGCCTTTGTTTTGAACTTCCTTTCCCACTTGGTAGAAAG
AGCCCAGAAGCAGCCCTGGCCCTGTAAGATGGACTCTTTCATCCTTCAGTTGTATTTAGCTTTGAGTTTCTCTGC
ATCTGTCCACCCCATGTGTATATAACCCAGCCCCTGGCTCTGGGGTGGTCACCTCGTCAGTGCCTTTTGTTCTGG
AGGAGAGGACCCCCCCGCCTGCCGAGAGGCTCTCTTCCTGTTCTGCACCCCTCTCCCCATGGGACCTTGGAGAAA
ACTGAACTGTTACAAACCCCTGCACAGTGCCTGTCAAACAGATGCAAACCTTCCTGAATAAAGCCTTGGAGACGG
AATTC

FIGURE 1163

MLEPLPCWDAAKDLKEPQCPPGDRVGVQPGNSRVWQGTMEKAGLAWTRGTGVQSEGTWESQRQDSDALPSPELLP
QDQDKPFLRKACSPSNIPAVIITDMGTQEDGALEETQGSPRGNLPLRKLSSSSASSTGFSSSYEDSEEDISSDPE
RTLDPNSAFLHTLDQQKPRVSKSWRKIKNMVHWSPFVMSFKKKYPWIQLAGHAGSFKAAANGRILKKHCESEQRC
LDRLMVDVLRPFVPAYHGDVVKDGERYNQMDDLLADFDSPCVMDCKMGIRTYLEEELTKARKKPSLRKDMYQKMI
EVDPEAPTEEEKAQRAVTKPRYMQWRETISSTATLGFRIEGIKKEDGTVNRDFKKTKTREQVTEAFREFTKGNHN
ILIAYRDRLKAIRTTLEVSPFFKCHEVIGSSLLFIHDKKEQAKVWMIDFGKTTPLPEGQTLQHDVPWQEGNREDG
YLSGLNNLVDILTEMSQDAPLA

FIGURE 1164

CAGTGGCTGGTAGGCAGTGGCTGGGAGGCAGCGGCCCAATTAGTGTCGTGCGGCCCGTGGCGAGGCGAGGTCCGG
GGAGCGAGCGAGCAAGCAAGGCGGGAGGGGTGGCCGGAGCTGCGGCGGCTGGCACAGGAGGAGGAGCCCGGGCGG
GCGAGGGGCGGCCGGAGAGCGCCAGGGCCTGAGCTGCCGGAGCGGCGCCTGTGAGTGAGTGCAGAAAGCAGGCGC
CCGCGCGCTAGCCGTGGCAGGAGCAGCCCGCACGCCGCGCTCTCTCCCTGGGCGACCTGCAGTTTGCAATATGAC
TTTGGAGGAATTCTCGGCTGGAGAGCAGAAGACCGAAAGGATGGATAAGGTGGGGGATGCCCTGGAGGAAGTGCT
CAGCAAAGCCCTGAGTCAGCGCACGATCACTGTCGGGGTGTACGAAGCGGCCAAGCTGCTCAACGTCGACCCCGA
TAACGTGGTGTTGTGCCTGCTGGCGGCGGACGAGGACGACGACAGAGATGTGGCTCTGCAGATCCACTTCACCCT
GATCCAGGCGTTTTGCTGCGAGAACGACATCAACATCCTGCGCGTCAGCAACCCGGGCCGGCTGGCGGAGCTCCT
GCTCTTGGAGACCGACGCTGGCCCCGCGGCGAGCGAGGGCGCCGAGCAGCCCCCGGACCTGCACTGCGTGCTGGT
GACGAATCCACATTCATCTCAATGGAAGGATCCTGCCTTAAGTCAACTTATTTGTTTTTGCCGGGAAAGTCGCTA
CATGGATCAATGGGTTCCAGTGATTAATCTCCCTGAACGGTGATGGCATCTGAATGAAAATAACTGAACCAAATT
GCACTGAAGTTTTTGAAATACCTTTGTAGTTACTCAAGCAGTTACTCCCTACACTGATGCAAGGATTACAGAAAC
TGATGCCAAGGGGCTGAGTGAGTTCAACTACATGTTCTGGGGGCCCGGAGATAGATGACTTTGCAGATGGAAAGA
GGTGAAAATGAAGAAGGAAGCTGTGTTGAAACAGAAAAATAAGTCAAAAGGAACAAAAATTACAAAGAACCATGC
AGGAAGGAAAACTATGTATTAATTTAGAATGGTTGAGTTACATTAAAATAAACCAAATATGTTAAAGTTTAAGTG
TGCAGCCATAGTTTGGGTATTTTTGGTTTATATGCCCTCAAGTAAAAGAAAAGCCGAAAGGGTTAATCATATTTG
AAAACCATATTTTATTGTATTTTGATGAGATATTAAATTCTCAAAGTTTTATTATAAATTCTACTAAGTTATTTT
ATGACATGAAAAGTTATTTATGCTATAAATTTTTTGAAACACAATACCTACAATAAACTGGTATGAATAATTGCA
TCATT

FIGURE 1165

MTLEEFSAGEQKTERMDKVGDALEEVLSKALSQRTITVGVYEAAKLLNVDPDNVVLCLLAADEDDDRDVALQIHF
TLIQAFCCENDINILRVSNPGRLAELLLLETDAGPAASEGAEQPPDLHCVLVTNPHSSQWKDPALSQLICFCRES
RYMDQWVPVINLPER

FIGURE 1166

GAAGGAGGCCCAGACAGTGAGGGCAGGAGGGAGAGAAGAGACGCAGAAGGAGAGCGAGCGAGAGAGAAAGGGTTC
TGGATTGGAGGGGAGAGCAAGGGAGGGAGGAAGGCGGTGAGAGAGGCGGGGGCCTCGGGAGGGTGAAAGGAGGGA
GGAGAAGGGCGGGGCACGGAGGCCCGAGCGAGGGACAAGACTCCGACTCCAGCTCTGACTTTTTTCGCGGCTCTC
GGCTTCCACTGCAGCC**ATG**TCACTCCTCTTGCTGGTGGTCTCAGCCCTTCACATCCTCATTCTTATACTGCTTTT
CGTGGCCACTTTGGACAAGTCCTGGTGGACTCTCCCTGGGAAAGAGTCCCTGAATCTCTGGTACGACTGCACGTG
GAACAACGACACCAAAACATGGGCCTGCAGTAATGTCAGCGAGAATGGCTGGCTGAAGGCGGTGCAGGTCCTCAT
GGTGCTCTCCCTCATTCTCTGCTGTCTCTCCTTCATCCTGTTCATGTTCCAGCTCTACACCATGCGACGAGGAGG
TCTCTTCTATGCCACCGGCCTCTGCCAGCTTTGCACCAGCGTGGCGGTGTTTACTGGCGCCTTGATCTATGCCAT
TCACGCCGAGGAGATCCTGGAGAAGCACCCGCGAGGGGGCAGCTTCGGATACTGCTTCGCCCTGGCCTGGGTGGC
CTTCCCCCTCGCCCTGGTCAGCGGCATCATCTACATCCACCTACGGAAGCGGGAG**TGA**GCGCCCCGCCTCGCTCG
GCTGCCCCCGCCCCTTCCCGGCCCCCCTCGCCGCGCGTCCTCCAAAAAAATAAAACTTTAACGGCGG

FIGURE 1167

MSLLLLVVSALHILILILLFVATLDKSWWTLPGKESLNLWYDCTWNNDTKTWACSNVSENGWLKAVQVLMVLSLI
LCCLSFILFMFQLYTMRRGGLFYATGLCQLCTSVAVFTGALIYAIHAEEILEKHPRGGSFGYCFALAWVAFPLAL
VSGIIYIHLRKRE

FIGURE 1168A

GCCAGCGATCAGAGCAGCGCTGGGTGTTCAGGGGCCAAGATGGCGGCGCGCCGGGGACGGAGAGACGGAGTCGCG
CCGCCCCCGAGTGGGGGCCCCGGTCCGGACCCTGGCGGGGGAGCCCGCGGCAGTGGTTGGCGAAGTCGAAGCCAA
GCGCCGTATGGGACTTTGGGCGCTGTGAGCGGCGGCGAGCAGGTGCTGCTGCATGAGGAGGCGGGTGATTCTGGC
TTTGTCAGTCTCTCTCGGCAGGGCCCATCTCTGAGGGACAAGGACCTGGAAATGGAGGAGCTAATGCTGCAGGAT
GAGACACTGCTGGGGACCATGCAGAGCTACATGGATGCCTCCCTTATCTCCCTCATTGAGGATTTTGGGAGCCTT
GGAGAGAGCAGGTTATCTCTGGAGGACCACAATGAAGTGTCGCTGCTCACGGCTCTGACGGAGATCTTGGACAAT
GCAGATTCTGAGAACCTTTCTCCATTTGACAGCATTCCTGATTCGGAGCTGCTTGTGTCACCCCGGGAGGGCTCC
TCTCTGCACAAGCTGCTTACTCTCTCTCGGACACCCCCAGAACGTGACCTCATCACCCCAGTTGACCCACTGGGG
CCCAGTACGGGCAGCAGTAGAGGGAGTGGGGTTGAAATGTCTCTTCCAGATCCCTCTTGGGACTTCTCCCCACCC
TCTTTCTTAGAGACCTCTTCCCCCAAGCTTCCTAGCTGGAGACCCCCAAGATCAAGACCACGCTGGGGCCAATCC
CCACCTCCCCAGCAGCGCAGTGATGGAGAAGAAGAGGAGGAGGTGGCCAGCTTCAGTGGCCAGATTCTTGCCGGG
GAGCTTGACAACTGTGTGAGCAGTATCCCGGACTTCCCCATGCATTTGGCCTGCCCTGAGGAGGAAGATAAAGCA
ACAGCAGCAGAGATGGCAGTGCCAGCAGCTGGTGATGAGAGCATCTCCTCCCTGAGTGAGCTGGTGCGGGCCATG
CACCCATACTGCCTGCCCAACCTCACCCACCTGGCATCACTTGAGGATGAGCTTCAGGAGCAGCCAGATGATTTG
ACACTGCCTGAGGGCTGCGTAGTGCTGGAGATTGTGGGGCAGGCAGCCACAGCTGGCGATGACCTGGAGATCCCA
GTTGTGGTGCGACAGGTCTCTCCTGGACCCCGGCCTGTGCTCCTGGATGACTCGCTAGAGACTAGTTCTGCCTTG
CAGCTGCTTATGCCTACACTGGAGTCAGAGACAGAGGCTGCTGTGCCCAAGGTAACCCTCTGCTCTGAGAAAGAG
GGGTTGTCATTGAACTCAGAGGAGAAGCTGGACTCAGCCTGCTTATTGAAGCCCAGGGAGGTCGTGGAGCCGGTG
GTGCCCAAGGAGCCTCAGAACCCACCTGCCAATGCAGCACCAGGTTCCCAGAGAGCTCGAAAGGGCAGGAAGAAG
AAGAGCAAGGAGCAGCCAGCAGCCTGTGTGGAAGGCTATGCCAGGAGGCTGAGGTCATCTTCTCGCGGGCAGTCT
ACTGTAGGTACAGAAGTGACCTCTCAGGTAGACAACTTGCAGAAACAGCCTCAGGAAGAACTTCAAAAAGAGTCT
GGGCCTCTCCAGGGTAAGGGGAAGCCCCGGGCTTGGGCTCGGGCCTGGGCAGCTGCCTTGGAGAATTCTAGCCCT
AAGAACTTGGAGAGAAGTGCTGGACAAAGTAGTCCTGCTAAAGAAGGCCCTCTAGACCTCTACCCAAAGCTGGCT
GACACTATCCAAACCAATCCTATACCAACCCATCTCTCATTGGTCGACTCTGCCCAAGCCAGCCCCATGCCAGTT
GACTCTGTTGAAGCTGATCCCACTGCAGTTGGCCCTGTTCTAGCTGGCCCTGTACCTGTTGACCCTGGGTTGGTT
GACCTTGCTTCAACCAGCTCAGAACTGGTTGAGCCTCTCCCGGCTGAGCCAGTGCTGATCAACCCAGTCCTGGCT
GACTCAGCAGCAGTTGACCCTGCAGTGGTTCCCATCTCAGATAACTTGCCACCAGTTGATGCTGTCCCGTCTGGC
CCAGCACCAGTTGATCTAGCACTGGTTGACCCTGTTCCTAATGACCTGACTCCAGTTGACCCAGTGCTAGTTAAG
TCCAGACCAACTGATCCCAGACGTGGTGCAGTGTCATCAGCCCTGGGGGGTTCAGCACCCCAGCTCCTCGTGGAG
TCAGAGTCCTTGGACCCACCAAAGACCATCATCCCTGAAGTCAAAGAGGTTGTGGATTCTCTGAAAATTGAAAGT
GGTACCAGTGCTACAACCCATGAAGCCAGACCTCGGCCTCTCAGCTTATCTGAGTACCGGCGACGAAGGCAGCAA
CGCCAAGCAGAAACAGAAGAGAGAAGTCCACAGCCCCCAACTGGGAAGTGGCCTAGCCTTCCAGAGACTCCCACA
GGGCTGGCAGACATCCCTTGTCTTGTCATCCCACCAGCCCCAGCCAAGAAGACAGCTCTGCAGAGAAGCCCTGAA
ACACCCCTTGAGATTTGCCTTGTGCCTGTAGGTCCCAGCCCTGCTTCTCCTAGTCCTGAGCCACCTGTAAGCAAA
CCTGTGGCCTCATCTCCCACTGAGCAGGTGCCATCCCAGGAGATGCCACTGTTGGCGAGACCTTCCCCTCCTGTG
CAGTCTGTGTCCCCTGCTGTGCCCACACCTCCCTCGATGTCTGCTGCCCTGCCTTTCCCTGCAGGTGGGCTTGGC
ATGCCCCCCAGTCTGCCCCCACCTCCCTTGCAGCCTCCTAGTCTTCCATTGTCTATGGGGCCAGTACTACCTGAT
CCGTTTACTCACTATGCCCCCTTGCCATCCTGGCCTTGTTATCCTCATGTGTCCCCTTCTGGCTATCCTTGCCTG
CCCCCCCCACCAACGGTGCCCCTAGTGTCTGGTACTCCTGGTGCCTATGCCGTGCCTCCCACTTGCAGTGTGCCT
TGGGCACCCCCTCCTGCCCCAGTCTCACCTTACAGTTCCACATGTACCTATGGGCCCTTGGGATGGGGCCCAGGG
CCTCAACATGCTCCATTCTGGTCTACTGTTCCCCCACCTCCTTTGCCTCCAGCCTCCATTGGGAGAGCTGTTCCC
CAACCTAAAATGGAGTCTAGGGGCACTCCAGCTGGCCCTCCTGAAAATGTACTTCCCTTGTCGATGGCTCCTCCC
CTCAGTCTTGGGCTACCTGGCCATGGAGCTCCTCAGACAGAGCCTACCAAGGTGGAGGTCAAGCCAGTGCCTGCA
TCTCCCCATCCGAAACACAAGGTGTCTGCCCTGGTGCAAAGTCCCCAGATGAAGGCTCTAGCATGTGTGTCTGCT
GAAGGTGTGACTGTTGAGGAGCCTGCATCAGAGAGGCTAAAGCCTGAGACCCAAGAGACCAGGCCCAGGGAGAAG
CCCCCCTTGCCTGCTACCAAGGCTGTTCCCACACCAAGGCAGAGCACTGTCCCCAAGCTGCCTGCTGTCCACCCA
GCCCGTCTAAGGAAGCTGTCCTTCCTGCCTACCCCACGTACTCAGGGTTCTGAAGATGTGGTACAGGCTTTCATC
AGTGAGATTGGAATTGAGGCATCGGACCTGTCCAGTCTGCTGGAGCAGTTTGAGAAATCAGAAGCCAAAAAGGAG

FIGURE 1168B

TGTCCTCCTCCGGCTCCTGCTGACAGCTTGGCTGTAGGAAACTCAGGCGGCGTTGACATTCCCCAGGAGAAGAGG
CCCCTAGACCGGTTACAAGCCCCAGAACTGGCCAACGTGGCAGGGCTCACCCCTCCAGCTACCCCTCCCCACCAG
TTATGGAAGCCCCTGGCTGCTGTCTCACTGCTGGCCAAAGCCAAATCTCCTAAGTCCACCGCCCAGGAGGGAACC
CTGAAGCCTGAAGGAGTTACGGAGGCCAAACATCCAGCTGCAGTTCGCCTCCAAGAAGGGGTCCATGGCCCTAGT
CGAGTCCATGTGGGCTCTGGGGACCATGACTATTGTGTCCGGAGCAGGACCCCCCCAAAAAAGATGCCTGCCCTA
GTCATTCCAGAGGTGGGCTCCCGATGGAATGTCAAGCGCCATCAGGACATCACCATCAAACCTGTCTTGTCCTTG
GGCCCAGCTGCCCCTCCGCCCCCATGCATAGCTGCCTCCCGGGAGCCGCTTGATCACAGGACTAGCAGTGAGCAG
GCAGATCCCTCAGCACCCTGCCTTGCCCCATCCAGCTTGCTGTCCCCTGAGGCCTCACCCTGCCGGAATGACATG
AACACTAGGACTCCCCCTGAACCCTCAGCCAAGCAGCGGTCAATGCGCTGTTACCGAAAAGCCTGCAGGTCAGCC
AGCCCCTCAAGCCAGGGCTGGCAGGGCCGCCGAGGCCGCAACAGCCGTTCTGTCAGCTCTGGGTCCAACCGGACT
AGCGAAGCATCTTCCTCATCCTCATCATCGTCTTCCTCATCCCGATCTCGGTCCAGGTCCCTCTCCCCCCCACAC
AAGAGGTGGCGAAGGTCCAGCTGTAGTTCCTCTGGACGTTCTCGAAGATGCTCTTCCTCTTCTTCGTCATCATCT
TCCTCTTCGTCTTCCTCATCCTCATCATCCAGTTCTCGAAGCCGCTCACGATCCCCATCCCCCCGCCGGAGAAGT
GACAGGAGGCGGCGGTACAGCTCTTATCGTTCACATGACCATTACCAAAGGCAAAGAGTGCTACAAAAGGAGCGT
GCAATAGAAGAAAGAAGGGTGGTCTTCATTGGAAAGATACCTGGCCGCATGACTCGATCAGAGCTGAAACAGAGG
TTCTCCGTTTTTGGAGAGATTGAGGAGTGCACCATCCACTTCCGTGTCCAAGGGGACAACTACGGCTTCGTCACT
TATCGCTATGCTGAGGAGGCATTTGCAGCCATTGAGAGTGGCCACAAGCTGCGGCAGGCAGATGAGCAGCCCTTT
GATCTCTGCTTTGGGGGCCGAAGGCAGTTCTGCAAGAGGAGCTATTCTGATCTTGACTCCAACCGGGAAGACTTT
GACCCAGCACCTGTAAAGAGCAAATTTGATTCTCTTGACTTTGACACATTGTTGAAACAGGCCCAGAAGAACCTC
AGGAGGTAACCTTGGGCCCTTCCCTGCTATCCTTTTTCTCCTTTGGAGGTGCCCAACCTCCTCCACCCCCTTCCC
CTACTCTAGGGGAGAGAGCTGCTAGTGAGATGACTGTTTTATAAAGAAATGGAAAAAAGTGAAATAAAAAATATG
TTGAATCAGATTTTTTAAAAGGGGTATTTGTTTTTTTATAACAGGTATTGAAACAAGTTAACTTGCATTCCTATG
TAAGATAGGAGGGGCTGAGGGGATCCCCAGTGTTTGGAACATAAGTCACTATGCAGACTAATAAACATCAACTAG
AGAGAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1169

MAARRGRRDGVAPPPSGGPGPDPGGGARGSGWRSRSQAPYGTLGAVSGGEQVLLHEEAGDSGFVSLSRQGPSLRD
KDLEMEELMLQDETLLGTMQSYMDASLISLIEDFGSLGESRLSLEDHNEVSLLTALTEILDNADSENLSPFDSIP
DSELLVSPREGSSLHKLLTLSRTPPERDLITPVDPLGPSTGSSRGSGVEMSLPDPSWDFSPPSFLETSSPKLPSW
RPPRSRPRWGQSPPPQQRSDGEEEEEVASFSGQILAGELDNCVSSIPDFPMHLACPEEEDKATAAEMAVPAAGDE
SISSLSELVRAMHPYCLPNLTHLASLEDELQEQPDDLTLPEGCVVLEIVGQAATAGDDLEIPVVVRQVSPGPRPV
LLDDSLETSSALQLLMPTLESETEAAVPKVTLCSEKEGLSLNSEEKLDSACLLKPREVVEPVVPKEPQNPPANAA
PGSQRARKGRKKKSKEQPAACVEGYARRLRSSSRGQSTVGTEVTSQVDNLQKQPQEELQKESGPLQGKGKPRAWA
RAWAAALENSSPKNLERSAGQSSPAKEGPLDLYPKLADTIQTNPIPTHLSLVDSAQASPMPVDSVEADPTAVGPV
LAGPVPVDPGLVDLASTSSELVEPLPAEPVLINPVLADSAAVDPAVVPISDNLPPVDAVPSGPAPVDLALVDPVP
NDLTPVDPVLVKSRPTDPRRGAVSSALGGSAPQLLVESESLDPPKTIIPEVKEVVDSLKIESGTSATTHEARPRP
LSLSEYRRRRQQRQAETEERSPQPPTGKWPSLPETPTGLADIPCLVIPPAPAKKTALQRSPETPLEICLVPVGPS
PASPSPEPPVSKPVASSPTEQVPSQEMPLLARPSPPVQSVSPAVPTPPSMSAALPFPAGGLGMPPSLPPPPLQPP
SLPLSMGPVLPDPFTHYAPLPSWPCYPHVSPSGYPCLPPPPTVPLVSGTPGAYAVPPTCSVPWAPPPAPVSPYSS
TCTYGPLGWGPGPQHAPFWSTVPPPPLPPASIGRAVPQPKMESRGTPAGPPENVLPLSMAPPLSLGLPGHGAPQT
EPTKVEVKPVPASPHPKHKVSALVQSPQMKALACVSAEGVTVEEPASERLKPETQETRPREKPPLPATKAVPTPR
QSTVPKLPAVHPARLRKLSFLPTPRTQGSEDVVQAFISEIGIEASDLSSLLEQFEKSEAKKECPPPAPADSLAVG
NSGGVDIPQEKRPLDRLQAPELANVAGLTPPATPPHQLWKPLAAVSLLAKAKSPKSTAQEGTLKPEGVTEAKHPA
AVRLQEGVHGPSRVHVGSGDHDYCVRSRTPPKKMPALVIPEVGSRWNVKRHQDITIKPVLSLGPAAPPPPCIAAS
REPLDHRTSSEQADPSAPCLAPSSLLSPEASPCRNDMNTRTPPEPSAKQRSMRCYRKACRSASPSSQGWQGRRGR
NSRSVSSGSNRTSEASSSSSSSSSSSRSRSRSLSPPHKRWRRSSCSSSGRSRRCSSSSSSSSSSSSSSSSSSSR
SRSRSPSPRRRSDRRRRYSSYRSHDHYQRQRVLQKERAIEERRVVFIGKIPGRMTRSELKQRFSVFGEIEECTIH
FRVQGDNYGFVTYRYAEEAFAAIESGHKLRQADEQPFDLCFGGRRQFCKRSYSDLDSNREDFDPAPVKSKFDSLD
FDTLLKQAQKNLRR

FIGURE 1170A

TGAGGAACTGCGTGTGGAGTCAGCCCAGTCTGGATGCACAGGAGGATGCTGGCGGCACAGTGAGTGAGGCCTGGT
GCCAGAGCTGTGCGGACCCCTTGTTGGCCATGGAGCAGCAGGCCCAGAGGCCCTCTCCCCAGCCCTGCTTGCCTG
CCTCGGAGAGGACAGAGGCCTAGGCCCACGGGGGAGGGTGTTGGCAGACAGATGCCCTCCAGGCCCTGGGGCCTC
CTTAACGGCCCCTTAACGACACGCGTGCCAAGGGTGGAGGATGCCAGCCAAGGGGCGCTACTTCCTCAACGAGGG
CGAGGAGGGCCCTGACCAAGATGCGCTCTACGAGAAGTACCAGCTCACCAGCCAGCATGGGCCGCTGCTGCTCAC
GCTCCTGCTGGTGGCCGCCACTGCCTGCGTGGCCCTCATCATCATTGCCTTCAGCCAGGGGGACCCCTCCAGACA
CCAGGCCATTCTGGGCATGGCGTTCCTGGTGCTGGCGGTGTTTGCGGCCCTCTCTGTGCTGATGTACGTCGAGTG
TCTCCTGCGGCGCTGGCTCAGGGCCTTGGCGCTGCTCACCTGGGCCTGCTTGGTGGCGCTGGGCTATGTGCTGGT
GTTCGACGCATGGACAAAGGCGGCCTGTGCGTGGGAGCAGGTGCCCTTCTTCCTGTTCATTGTCTTCGTGGTGTA
CACACTACTGCCCTTCAGCATGCGGGGCGCTGTCGCCGTTGGGGCCGTCTCCACTGCCTCCCACCTCCTGGTGCT
CGGTTCTTTGATGGGAGGCTTCACGACACCCAGTGTCCGGGTGGGGCTGCAGCTGCTGGCCAACGCAGTCATCTT
CCTGTGTGGGAACCTGACAGGCGCCTTCCACAAGCACCAAATGCAGGATGCGTCCCGGGACCTCTTCACCTACAC
TGTGAAGTGCATCCAGATCCGCCGGAAGCTGCGCATCGAGAAGCGCCAGCAGGAGAACCTGCTGCTGTCAGTGCT
TCCGGCCCACATCTCCATGGGCATGAAGCTGGCCATCATCGAACGGCTCAAGGAGCATGGTGACCGTCGCTGCAT
GCCTGACAACAACTTCCACAGCCTCTACGTCAAGAGGCACCAGAATGTCAGCATCCTCTATGCGGACATCGTGGG
CTTCACGCAGCTGGCCAGCGACTGTTCTCCCAAGGAGCTGGTGGTGGTGCTGAATGAGCTCTTTGGCAAGTTCGA
CCAGATCGCCAAGGCCAACGAGTGCATGCGAATCAAGATCCTCGGCGACTGCTACTACTGTGTATCGGGCCTGCC
CGTGTCGCTGCCTACCCACGCCCGGAACTGCGTGAAGATGGGGCTGGACATGTGCCAGGCCATCAAGCAGGTGCG
GGAGGCCACGGGCGTGGACATCAACATGCGTGTGGGCATACACTCGGGGAATGTGCTGTGCGGGGTCATCGGGCT
GCGCAAGTGGCAGTATGACGTGTGGTCCCACGACGTGTCCCTGGCCAACCGGATGGAGGCAGCCGGAGTACCCGG
CCGGGTGCACATCACGGAGGCCACGCTAAAGCACCTGGACAAGGCGTACGAGGTGGAGGATGGGCACGGGCAGCA
GCGGGACCCCTACCTCAAGGAGATGAACATCCGCACCTACCTGGTCATCGACCCCCGGAGCCAGCAGCCACCCCC
GCCCAGCCAACACCTCCCCAGGCCCAAGGGGGACGCGGCCCTGAAGATGCGGGCGTCAGTGCGCATGACCCGGTA
CCTCGAGTCCTGGGGGGCGGCACGGCCCTTTGCACATCTCAACCACCGTGAGAGCGTGAGCAGTGGTGAGACCCA
CGTCCCCAACGGGCGGAGGCCTAAGAGCGTTCCCCAGCGCCACCGCCGGACCCCAGACAGAAGCATGTCCCCCAA
GGGGCGGTCGGAGGATGACTCGTACGATGACGAGATGCTGTCAGCCATTGAGGGGCTCAGCTCCACGAGGCCCTG
CTGCTCCAAGTCCGATGACTTCTACACCTTTGGGTCCATCTTCCTGGAGAAGGGCTTTGAGCGCGAGTACCGCCT
GGCACCCATCCCCCGGGCCCGCCACGACTTTGCCTGCGCCAGCCTGATCTTCGTCTGCATCCTGCTCGTCCATGT
CCTGCTCATGCCCAGGACGGCGGCACTGGGTGTGTCCTTCGGGCTGGTGGCCTGTGTACTGGGGCTGGTGCTGGG
CCTGTGCTTTGCCACCAAGTTCTCGAGGTGCTGCCCAGCTCGGGGGACGCTCTGCACTATCTCTGAGAGGGTGGA
GACACAGCCCCTGCTGAGGCTGACCCTGGCCGTCCTGACCATCGGCAGCCTGCTCACTGTGGCCATCATCAACCT
GCCCCTGATGCCTTTCCAAGTTCCAGAGCTGCCTGTTGGCAATGAGACAGGCCTACTGGCCGCGAGCAGCAAGAC
AAGAGCCCTGTGTGAGCCCCTCCCGTACTACACCTGCAGCTGTGTCCTGGGCTTCATCGCCTGCTCGGTCTTCCT
GAGGATGAGCCTGGAGCCAAAGGTTGTGCTGCTGACAGTGGCCCTGGTGGCCTACCTGGTGCTCTTCAACCTCTC
CCCATGCTGGCAGTGGGACTGCTGCGGCCAAGGCCTGGGCAACCTCACCAAGCCCAACGGCACCACCAGTGGCAC
CCCTAGCTGTTCCTGGAAGGACCTGAAGACCATGACCAATTTCTACCTGGTCCTGTTCTACATCACCCTGCTTAC
ACTCTCCAGACAGATTGACTATTACTGCCGCTTGGACTGCCTATGGAAGAAGAAGTTCAAGAAGGAGCACGAGGA
GTTTGAGACCATGGAGAACGTGAACCGCCTTCTTCTGGAGAACGTCCTGCCAGCCCACGTGGCTGCCCACTTTAT
CGGTGACAAGTTAAACGAGGACTGGTACCATCAGTCCTATGACTGCGTCTGTGTCATGTTTGCCTCCGTGCCGGA
CTTCAAAGTGTTCTACACAGAGTGCGATGTCAACAAAGAAGGGCTGGAGTGCCTACGCCTGCTCAATGAGATCAT
TGCCGACTTCGACGAGCTCCTACTGAAGCCCAAGTTCAGCGGCGTGGAGAAGATCAAGACCATCGGCAGCACGTA
CATGGCAGCTGCAGGGCTCAGCGTCGCCTCAGGGCACGAGAACCAGGAGCTGGAGCGGCAGCATGCCCACATTGG
TGTCATGGTGGAGTTCAGCATCGCCCTGATGAGTAAGCTGGACGGCATCAACAGGCACTCCTTCAACTCCTTCCG
CCTCCGCGTCGGCATAAACCATGGGCCTGTGATTGCTGGAGTGATTGGGGCCCGAAAACCTCAGTATGACATCTG
GGGAAACACTGTCAATGTGGCCAGCCGAATGGAAAGCACTGGAGAACTTGGGAAAATCCAGGTTACCGAGGAGAC
CTGCACCATCCTCCAGGGCCTCGGGTACTCTTGTGAATGCCGTGGCCTGATCAACGTCAAAGGCAAAGGCGAGCT
GAGGACTTACTTTGTCTGTACGGACACTGCCAAGTTTCAGGGGCTGGGGCTGAACTGAGGGCTCCTGCTGGATTC
CGAAAAGGCCGGGAAGCCAGTCTCCTTCCCTGAAGCAAGCCCAGGAGAAGACTCTCCGCCCCACGCCAATCCCAA

FIGURE 1170B

AGGCATGCAGATGGCTGTGCATGTTGGCTTCTTTGGACCTGCACTGGAGGATTTCTCAGACACATGCACCAGATT
CTGGCTCGAAGCAGCCACTGAGCCATAATGCGCAGGGGAGGCCAGAAGCTCTGTGCCTGGTCTGTAACAGTTTCC
AGGCCAGCTGGAGAATGTTCACTGGTTCGGGGCTGACTTTGAGATCTTTGTTCCCTGAGGTGCCAGGCAGGCAAC
TTTAGCACATGATGAAAACAGACTTCCACCTCAGTGGCCTGTGGGCACGCACAAGTGAGGTCTGTTTTTCTAGAC
ACCAAGGGGGAGTAAGCTGAGCTGTCTAGCACGGATTGGAGACTCCCTCTCCCTGGTGGGCCTGGCAATGACAGC
ATTTCTCACAGAGGCATTCTGGTAAATGAAGCTGAAAGGGGTGTTTTACATCTGTAAACGGTTTCAAACAGGTAG
AGAGAAAAACACCACAATTAACACTGTTACTTTTTGCCTTGTCTGGCATGTTTGTTTTAAATGAATACATTAATG
GGGTTTTTATCCTTTTGAATGACTTTTCAGACACTAGACATAAATCTCTTCCCTCCAGTGTATGCTCTGCCTTTT
TAACCACTGACATGTAAGGAGGACTACTGTCTAGCATCAGCTTATGGGGTCAGCTGGCTGTGGGGATAGAGTCCT
GAGGAATGTGGTCACAGCAAGAAGGCGGGGAGCAGCAGAGCCTTGCCTTTGAATGAGGCAGCTTGTGAGGCAAGC
ATTCTGGAGAGAGGTGCTTTGAAAGTAAGGTGCGGCCTTTCACCTCTTCCTTGATTACTCACACATCTTTGCGTT
CTCCCCTGCCGTCCTTCAACTGTATCTTACTTTTCTTACCAGAAAGGAATGGAGTCTGTTTAGAGACAACTTGGA
CAACCTGTGAGTGCATCTCTTCTTTCCTTTAGTCTTCACAGCTAACTCTGGAGAGCTTCAAAACTAGAAGGATCT
ACTCCGCATGGGTGCATGCAGAGGCTCCTGGATCTGGGAAGCCCGCCCCCTCACAAATGCTGAGCCGTTCTTGCT
CTGAAACTGCGTGAGTCAAGGCAAATGCAAAAAGCCAGGTTTTGGGGATGTGTCTTACTGTGCTTCAACTTCCCA
AGGAATTGAAAGTCAACCTAACTGTAACAACAGGGTGAGAAATGACCAAACTGCCCGTGACTTTTTCTGAATGGA
CTTCATAACCGGAAGACTTAACCGGTGGCCTCATCACCAGAGCATCGCCAGGATTTCTAATGCACTCAGTTTCCC
TACATAGCAGGGATTCTTAGCTAGGTGTCCCCATGAACCCCGTAAAGTTCTACACAAAGTCTTGCATACAGGAGC
CTTTACAAGATGATTATACAGGGTTGCAGATTGGGTGACTGACCAGACTTGTTGGGGTCCTGGGATGAGTTGCCC
CGGGCTGCAAATTAAGAGTACAGCTAAGTGCGGGGGTGGCGGTGGAGGGAACGAAAATTGAACCTGTCTGCCTGT
GCTGTGTCGTGTGGCTTTATCAGCCCGAGGAAGGGCAGGTGTATTCTAATTTGCACAAAGGTGCTGGGTAGACTA
GTGGCAGCTCTCATGTGCTGCACATAAGTGGAATCAGTATGAATAGAAGAACTTGCTGTATAAAGGAATTTCATG
GCAACAATGCTGGTAAGGGCAATTAGCCTCGCTTAAGTTGCCTTTTTTACACACCAAAACTTTTTACATGAAGGG
CTGGTTTCACATGAATACTATACTGAAATCTGTGCCACACCAAAACTTTTTACATGAAGGGCTGGTTTCACATGA
ATACTATACTGAAATCTGTGCTCTCAAGATCTAGCAGTGACCAGGGCTGCCCGGCGGGGGCTCTCCTGGCAAGTC
AGGAAGGTTTCTGTTGCTAATATAACATAGAAACACATTAGTGCACTGGGCCTCTCTGAGGTCAGCATATTTGTA
CTCTTGGAATATTTGTTTTTTTCTTCAGTAACAACAGAAACCCCAGTTGGGAGTTTAACAAATAACTGACTACCA
CTCACTCATGCATTTTTATTTCCAATTAAAGCAAAGCACTGTGCTGTGCTCAGATAATAATAGTTTGTAAGTAAA
AGTTTTTAGTTTTCAGTGTTCAGGTTATAGAATATAACTGACCATAAAAATTACCTGCAGGTATTTTCTTTTTAT
GAACTTGTTTTTAAATTACCAAGTAATTACTGGTGTCATTTTGTTTTATGACAGACACACGTATCTAACAAACAA
ACAAACAGTGACCTTCTCCATGGGTCAAGGACTTCCTTACAATTTCTCCTGAGTTAACTTTTGTGAAAATAATAC
CTAAGGTTTTCTGGCTTATTGAGGAAATTTCCTAACAAACAAACAAACAAACAAACAGAAGAGAAGATCATTAAC
CACTGTATACTTTGTGTATATAATAGGTCAGTGTAAAGAAATATGATTTGAGGTGGTGCATGCAAGTAACTAGGG
TTTATTCTATATAATGAATATTTATAGATCTGTAACATTTGTTTCAAAATGCTGTTTCATTTTTATAAAGTACCA
GTGTTTAGCTGCTTTTTATACATTAAATTAGCAATTTGAAAAACTC

FIGURE 1171

MPAKGRYFLNEGEEGPDQDALYEKYQLTSQHGPLLLTLLLVAATACVALIIIAFSQGDPSRHQAILGMAFLVLAV
FAALSVLMYVECLLRRWLRALALLTWACLVALGYVLVFDAWTKAACAWEQVPFFLFIVFVVYTLLPFSMRGAVAV
GAVSTASHLLVLGSLMGGFTTPSVRVGLQLLANAVIFLCGNLTGAFHKHQMQDASRDLFTYTVKCIQIRRKLRIE
KRQQENLLLSVLPAHISMGMKLAIIERLKEHGDRRCMPDNNFHSLYVKRHQNVSILYADIVGFTQLASDCSPKEL
VVVLNELFGKFDQIAKANECMRIKILGDCYYCVSGLPVSLPTHARNCVKMGLDMCQAIKQVREATGVDINMRVGI
HSGNVLCGVIGLRKWQYDVWSHDVSLANRMEAAGVPGRVHITEATLKHLDKAYEVEDGHGQQRDPYLKEMNIRTY
LVIDPRSQQPPPPSQHLPRPKGDAALKMRASVRMTRYLESWGAARPFAHLNHRESVSSGETHVPNGRRPKSVPQR
HRRTPDRSMSPKGRSEDDSYDDEMLSAIEGLSSTRPCCSKSDDFYTFGSIFLEKGFEREYRLAPIPRARHDFACA
SLIFVCILLVHVLLMPRTAALGVSFGLVACVLGLVLGLCFATKFSRCCPARGTLCTISERVETQPLLRLTLAVLT
IGSLLTVAIINLPLMPFQVPELPVGNETGLLAASSKTRALCEPLPYYTCSCVLGFIACSVFLRMSLEPKVVLLTV
ALVAYLVLFNLSPCWQWDCCGQGLGNLTKPNGTTSGTPSCSWKDLKTMTNFYLVLFYITLLTLSRQIDYYCRLDC
LWKKKFKKEHEEFETMENVNRLLLENVLPAHVAAHFIGDKLNEDWYHQSYDCVCVMFASVPDFKVFYTECDVNKE
GLECLRLLNEIIADFDELLLKPKFSGVEKIKTIGSTYMAAAGLSVASGHENQELERQHAHIGVMVEFSIALMSKL
DGINRHSFNSFRLRVGINHGPVIAGVIGARKPQYDIWGNTVNVASRMESTGELGKIQVTEETCTILQGLGYSCEC
RGLINVKGKGELRTYFVCTDTAKFQGLGLN

FIGURE 1172

CTCGCTGCGCCACCGCCTCCCGCCACCCCTGCCCGCCCGACAGCGCCGCCGCCTGCCCCGCCATGGGTCGACAGA
AGGAGCTGGTGTCCCGCTGCGGGGAGATGCTCCACATCCGCTACCGGCTGCTCCGACAGGCGCTGGCCGAGTGCC
TGGGGACCCTCATCCTGGTGATGTTTGGCTGTGGCTCCGTGGCCCAGGTTGTGCTCAGCCGGGGCACCCACGGTG
GTTTCCTCACCATCAACCTGGCCTTTGGCTTTGCTGTCACTCTGGGCATCCTCATCGCTGGCCAGGTCTCTGGGG
CCCACCTGAACCCTGCCGTGACCTTTGCCATGTGCTTCCTGGCTCGTGAGCCCTGGATCAAGCTGCCCATCTACA
CCCTGGCACAGACGCTGGGAGCCTTCTTGGGTGCTGGAATAGTTTTTGGGCTGTATTATGATGCAATCTGGCACT
TCGCCGACAACCAGCTTTTTGTTTCGGGCCCCAATGGCACAGCCGGCATCTTTGCTACCTACCCCTCTGGACACT
TGGATATGATCAATGGCTTCTTTGACCAGTTCATAGGCACAGCCTCCCTTATCGTGTGTGTGCTGGCCATTGTTG
ACCCCTACAACAACCCCGTCCCCCGAGGCCTGGAGGCCTTCACCGTGGGCCTGGTGGTCCTGGTCATTGGCACCT
CCATGGGCTTCAACTCCGGCTATGCCGTCAACCCTGCCCGGGACTTTGGCCCCCGCCTTTTTACAGCCCTTGCGG
GCTGGGGCTCTGCAGTCTTCACGACCGGCCAGCATTGGTGGTGGGTGCCCATCGTGTCCCCACTCCTGGGCTCCA
TTGCGGGTGTCTTCGTGTACCAGCTGATGATCGGCTGCCACCTGGAGCAGCCCCCACCCTCCAACGAGGAAGAGA
ATGTGAAGCTGGCCCATGTGAAGCACAAGGAGCAGATCTGAGTGGGCAGGGGCCATCTCCCCACTCCGCTGCCCT
GGCCTTGAGCATCCACTGACTGTCCAAGGGCCACTCCCAAGAAGCCCCCTTCACGATCCACCCTTTCAGGCTAAG
GAGCTCCCTATCTACCCTCACCCCACGAGACAGCCCCTTCAGGATTTCCACTGGACCTTGCCCAAATAGCACCTT
AGGCCACTGCCCCTAAGCTGGGGTGGAACCGGAATTTGGGTCAATACATCCTTTTGTCTCCCAAGGGAAGAGAAT
GGGCAGCAGGTATGTGTGTGTGTGCATGTGTGTGCATGTGTGTGCATGTGTGTGCAGGGGTGTGTGTGTGTGGGG
GGGGTTCCCAGATATTCAGGGCAAGGGACCAGTCGGAAGGGATTCTGGCTATTGGGGGAGCCCAGAGACAGGGGA
AGGCAGCCTGTCCATCTGTGCATAAGGAGAGGAAAGTTCCAGGGTGTGTATGTTTCAGGGGCTTCACATGGAGGA
GCTGCAGATAGATATGTGTTTCTGTGTATGTGTATGTCTGCCTTTTTTTCTAAGTGGGGGCTTCTACAGGCTTTT
GGGAAGTAGGGTGGATGTGGGTAGGGCTGGGAGGAGGGGGCCACAGCTTAGGTTTGGAGCTCTGGATGTACATAC
ATAAGTAGGAGCAGTGGGACGTGTTTCTGTCATAATGCAGGCATGAAGGGTGGAGTGAAGTCAGGTCATAAGTTT
CATGTTTGCTTTTGTTTTGTTTTGTTTTTAATGTATGTAGCAGATGTTACAGTCTTAGGGATCCGGGATGGGAGA
CCCCACTTTAGAAAGGGTCGTCACTCCTTTAATCCTCTACTCAACAATGTACTCTTTTACTTTTATATTAAAAAA
AATAAAATAAATATGTGCCTAAAAAAAAAAAAAAA

FIGURE 1173

MGRQKELVSRCGEMLHIRYRLLRQALAECLGTLILVMFGCGSVAQVVLSRGTHGGFLTINLAFGFAVTLGILIAG
QVSGAHLNPAVTFAMCFLAREPWIKLPIYTLAQTLGAFLGAGIVFGLYYDAIWHFADNQLFVSGPNGTAGIFATY
PSGHLDMINGFFDQFIGTASLIVCVLAIVDPYNNPVPRGLEAFTVGLVVLVIGTSMGFNSGYAVNPARDFGPRLF
TALAGWGSAVFTTGQHWWWVPIVSPLLGSIAGVFVYQLMIGCHLEQPPPSNEEENVKLAHVKHKEQI

FIGURE 1174

AGACTTGGAAACCCCAAAGTGTCCGCGACCCTGCACGGCAGCTCCCTTCCAGCTTCATGGGCAAAGTGTGGAAAC
AGCAGATGTACCCTCAGTACGCCACCTACTATTACCCCCAGTATCTGCAAGCCAAGCAGTCTCTGGTCCCAGCCC
ACCCCATGGCCCCTCCCAGTCCCAGCACCACCAGCAGTAATAACAACAGTAGCAGCAGTAGCAACTCAGGATGGG
ATCAGCTCAGCAAAACGAACCTCTATATCCGAGGACTGCCTCCCCACACCACCGACCAGGACCTGGTGAAGCTCT
GTCAACCATATGGGAAAATAGTCTCCACAAAGGCAATTTTGGATAAGACAACGAACAAATGCAAAGGTTATGGTT
TTGTCGACTTTGACAGCCCTGCAGCAGCTCAAAAAGCTGTGTCTGCCCTGAAGGCCAGTGGGGTTCAAGCTCAAA
TGGCAAAGCAACAGGAACAAGATCCTACCAACCTCTACATTTCTAATTTGCCACTCTCCATGGATGAGCAAGAAC
TAGAAAATATGCTCAAACCATTTGGACAAGTTATTTCTACAAGGATACTACGTGATTCCAGTGGTACAAGTCGTG
GTGTTGGCTTTGCTAGGATGGAATCAACAGAAAAATGTGAAGCTGTTATTGGTCATTTTAATGGAAAATTTATTA
AGACACCACCAGGAGTTTCTGCCCCCACAGAACCTTTATTGTGTAAGTTTGCTGATGGAGGACAGAAAAAGAGAC
AGAACCCAAACAAATACATCCCTAATGGAAGACCATGGCATAGAGAAGGAGAGGCTGGAATGACACTTACTTACG
ACCCAACTACAGCTGCTATACAGAACGGATTTTATCCTTCACCATACAGTATTGCTACAAACCGAATGATCACTC
AAACTTCTATTACACCCTATATTGCATCTCCTGTATCTGCCTACCAGGTGGCAAAGGAAACCAGAGAAAACAAGT
ATCGGGGCTCTGCTATCAAGGTGCAAAGTCCTTCGTGGATGCAACCTCAACCATATATTCTACAGCACCCTGGTG
CCGTGTTAACTCCCTCAATGGAGCACACCATGTCACTACAGCCCGCATCAATGATCAGCCCTCTGGCCCAGCAGA
TGAGTCATCTGTCACTAGGCAGCACCGGAACATACATGCCTGCAACGTCAGCTATGCAAGGAGCCTACTTGCCAC
AGTATGCACATATGCAGACGACAGCGGTTCCTGTTGAGGAGGCAAGTGGTCAACAGCAGGTGGCTGTCGAGACGT
CTAATGACCATTCTCCATATACCTTTCAACCTAATAAGTAACTGTGAGATGTACAGAAAGGTGTTCTTACATGAA
GAAGGGTGTGAAGGCTGAACAATCATGGATTTTTCTGATCAATTGTGCTTTAGGAAATTATTGACAGTTTTGCAC
AGGTTCTTGAAAACGTTATTTATAATGAAATCAACTAAAACTATTTTTGCTATAAGTTCTATAAGGTGCATAAAA
CCCTTAAATTCATCTAGTAGCTGTTCCCCCGAACAGGTTTATTTTAGT

FIGURE 1175

MGKVWKQQMYPQYATYYYPQYLQAKQSLVPAHPMAPPSPSTTSSNNNSSSSSNSGWDQLSKTNLYIRGLPPHTTD
QDLVKLCQPYGKIVSTKAILDKTTNKCKGYGFVDFDSPAAAQKAVSALKASGVQAQMAKQQEQDPTNLYISNLPL
SMDEQELENMLKPFGQVISTRILRDSSGTSRGVGFARMESTEKCEAVIGHFNGKFIKTPPGVSAPTEPLLCKFAD
GGQKKRQNPNKYIPNGRPWHREGEAGMTLTYDPTTAAIQNGFYPSPYSIATNRMITQTSITPYIASPVSAYQVAK
ETRENKYRGSAIKVQSPSWMQPQPYILQHPGAVLTPSMEHTMSLQPASMISPLAQQMSHLSLGSTGTYMPATSAM
QGAYLPQYAHMQTTAVPVEEASGQQQVAVETSNDHSPYTFQPNK

FIGURE 1176

CCGAGGCTATAAGAGGGCGCACAAGTGGCGCGGCGCAGGAGCCGCCGCCAGTGGAGGGCCGGGCGCTGCGGCCGC
GGCCGGGGCGGGCGCAGGGCCGAGCGGACGGGGGGGCGCGGGCCCCCCGGGAGGCCGCGGCCACTCCCCCCCGGG
CCGGCGCGGCGGGGGAGGCGGAGGATGGAAACACCCTTCTACGGCGATGAGGCGCTGAGCGGCCTGGGCGGCGGC
GCCAGTGGCAGCGGCGGCACGTTCGCGTCCCCGGGCCGCTTGTTCCCCGGGGCGCCCCCGACGGCCGCGGCCGGC
AGCATGATGAAGAAGGACGCGCTGACGCTGAGCCTGAGTGAGCAGGTGGCGGCAGCGCTCAAGCCTGCGCCCGCG
CCCGCCTCCTACCCCCCTGCCGCCGACGGCGCCCCCAGCGCGGCACCCCCCGACGGCCTGCTCGCCTCTCCCGAC
CTGGGGCTGCTGAAGCTGGCCTCCCCCGAGCTCGAGCGCCTCATCATCCAGTCCAACGGGCTGGTCACCACCACG
CCGACGAGCTCACAGTTCCTCTACCCCAAGGTGGCGGCCAGCGAGGAGCAGGAGTTCGCCGAGGGCTTCGTCAAG
GCCCTGGAGGATTTACACAAGCAGAACCAGCTCGGCGCGGGCCGGGCCGCTGCCGCCGCCGCCGCCGCCGCCGGG
GGGCCCTCGGGCACGGCCACGGGCTCCGCGCCCCCCGGCGAGCTGGCCCCGGCGGCGGCCGCGCCCGAAGCGCCT
GTCTACGCGAACCTGAGCAGCTACGCGGGCGGCGCCGGGGGCGCGGGGGGCGCCGCGACGGTCGCCTTCGCTGCC
GAACCTGTGCCCTTCCCGCCGCCGCCACCCCCAGGCGCGTTGGGGCCGCCGCGCCTGGCTGCGCTCAAGGACGAG
CCACAGACGGTGCCCGACGTGCCGAGCTTCGGCGAGAGCCCGCCGTTGTCGCCCATCGACATGGACACGCAGGAG
CGCATCAAGGCGGAGCGCAAGCGGCTGCGCAACCGCATCGCCGCCTCCAAGTGCCGCAAGCGCAAGCTGGAGCGC
ATCTCGCGCCTGGAAGAGAAAGTGAAGACCCTCAAGAGTCAGAACACGGAGCTGGCGTCCACGGCGAGCCTGCTG
CGCGAGCAGGTGGCGCAGCTCAAGCAGAAAGTCCTCAGCCACGTCAACAGCGGCTGCCAGCTGCTGCCCCAGCAC
CAGGTCCCGGCGTACTGAGTCGGGCATGGCGGCCACCTCCAAGGGGCGGGCTCGCGGGGGGGTGTCGTGGGCGCC
CCGGACTTGGAGAGGGTGCGGCCCTCCACCCCCCCCTCCCCGAGTGTGCCCAGGAACTCAGAGAGGCGCGGCCCC
GGGGATTCCCCCCCGAGGTGCCCAGGACTCGGAAGGGGCGCCCCGGACTCGACAAGCTGGACCCCCTGCTCCCGG
GGGCGAGCGCATGACCCCCCCGCCCTCGCGCTGCCTCTTTCCCCCGCGCGGCCGCCCCGTGTTGCACAAACCCGC
GCGTCTCGGCTGCCCCTTTGTACACCGCGCCGCAAGGGGGCTCCGAGGGGGCGCACGTCAAACCCTGCCTTTCCT
TTACTTTTACTTTTTTTTTTTCTTTGGAAGAGAGAAGAACAGAGTGTTCGATTCTGCCCTATTTATGTTTCTACT
CGGGGAACAAACGTTGGTTGTGTGTGTGTGTGTTTTCTTGTGTTGGTTTTTTAAAGAAATGGGAAGAAGAAAAAA
AAATTCTCCGCCCCTTTCCTCGATCTCGCTCCCCCTTCGGTCTTTCGACCGTCCCCCCCTCCCCTTTTTTTGTTC
TGTTTTGTTTTGTTTTGCTACGAGTCCACATTCCTGTTTGTAATCCTTGGTTCGCCCGGTTTTCTGTTTTCAGTA
AAGTCTCGTTACGCCA

FIGURE 1177

METPFYGDEALSGLGGGASGSGGTFASPGRLFPGAPPTAAAGSMMKKDALTLSLSEQVAAALKPAPAPASYPPAA
DGAPSAAPPDGLLASPDLGLLKLASPELERLIIQSNGLVTTTPTSSQFLYPKVAASEEQEFAEGFVKALEDLHKQ
NQLGAGRAAAAAAAAAGGPSGTATGSAPPGELAPAAAAPEAPVYANLSSYAGGAGGAGGAATVAFAAEPVPFPPP
PPPGALGPPRLAALKDEPQTVPDVPSFGESPPLSPIDMDTQERIKAERKRLRNRIAASKCRKRKLERISRLEEKV
KTLKSQNTELASTASLLREQVAQLKQKVLSHVNSGCQLLPQHQVPAY

FIGURE 1178A

GTTTGTTAGGGAGTCGTGTGCGTGCCTTGGTCGCTTCTGTAGCTCCGAGGGCAGGTTGCGGAAGAAAGCCCAGGC
GGTCTGTGGCCCAGAGGAAAGGCCTGCAGCAGGACGAGGACCTGAGCCAGGAATGCAGGATGGCGGCGGTGAAGA
AGGAAGGGGGTGCTCTGAGTGAAGCCATGTCCCTGGAGGGAGATGAATGGGAACTGAGTAAAGAAAATGTACAAC
CTTTAAGGCAAGGGCGGATCATGTCCACGCTTCAGGGAGCACTGGCACAAGAATCTGCCTGTAACAATACTCTTC
AGCAGCAGAAACGGGCATTTGAATATGAAATTCGATTTTACACTGGAAATGACCCTCTGGATGTTTGGGATAGGT
ATATCAGCTGGACAGAGCAGAACTATCCTCAAGGTGGGAAGGAGAGTAATATGTCAACGTTATTAGAAAGAGCTG
TAGAAGCACTACAAGGAGAAAAACGATATTATAGTGATCCTCGATTTCTCAATCTCTGGCTTAAATTAGGGCGTT
TATGCAATGAGCCTTTGGATATGTACAGTTACTTGCACAACCAAGGGATTGGTGTTTCACTTGCTCAGTTCTATA
TCTCATGGGCAGAAGAATATGAAGCTAGAGAAAACTTTAGGAAAGCAGATGCGATATTTCAGGAAGGGATTCAAC
AGAAGGCTGAACCACTAGAAAGACTACAGTCCCAGCACCGACAATTCCAAGCTCGAGTGTCTCGGCAAACTCTGT
TGGCACTTGAGAAAGAAGAAGAGGAGGAAGTTTTTGAGTCTTCTGTACCACAACGAAGCACACTAGCTGAACTAA
AGAGCAAAGGGAAAAAGACAGCAAGAGCTCCAATCATCCGTGTAGGAGGTGCTCTCAAGGCTCCAAGCCAGAACA
GAGGACTCCAAAATCCATTTCCTCAACAGATGCAAAATAATAGTAGAATTACTGTTTTTGATGAAAATGCTGATG
AGGCTTCTACAGCAGAGTTGTCTAAGCCTACAGTCCAGCCATGGATAGCACCCCCCATGCCCAGGGCCAAAGAGA
ATGAGCTGCAAGCAGGCCCTTGGAACACAGGCAGGTCCTTGGAACACAGGCCTCGTGGCAATACAGCTTCACTGA
TAGCTGTACCCGCTGTGCTTCCCAGTTTCACTCCATATGTGGAAGAGACTGCACAACAGCCAGTTATGACACCAT
GTAAAATTGAACCTAGTATAAACCACATCCTAAGCACCAGAAAGCCTGGAAAGGAAGAAGGAGATTCTCTACAAA
GGGTTCAGAGCCATCAGCAAGCGTCTGAGGAGAAGAAAGAGAAGATGATGTATTGTAAGGAGAAGATTTATGCAG
GAGTAGGGGAATTCTCCTTTGAAGAAATTCGGGCTGAAGTTTTCCGGAAGAAATTAAAAGAGCAAAGGGAAGCCG
AGCTATTGACCAGTGCAGAGAAGAGAGCAGAAATGCAGAAACAGATTGAAGAGATGGAGAAGAAGCTAAAAGAAA
TCCAAACTACTCAGCAAGAAAGAACAGGTGATCAGCAAGAAGAGACGATGCCTACAAAGGAGACAACTAAACTGC
AAATTGCTTCCGAGTCTCAGAAAATACCAGGAATGACTCTATCCAGTTCTGTTTGTCAAGTAAACTGTTGTGCCA
GAGAAACTTCACTTGCGGAGAACATTTGGCAGGAACAACCTCATTCTAAAGGTCCCAGTGTACCTTTCTCCATTT
TTGATGAGTTTCTTCTTTCAGAAAAGAAGAATAAAAGTCCTCCTGCAGATCCCCCACGAGTTTTAGCTCAACGAA
GACCCCTTGCAGTTCTCAAAACCTCAGAAAGCATCACCTCAAATGAAGATGTGTCTCCAGATGTTTGTGATGAAT
TTACAGGAATTGAACCCTTGAGCGAGGATGCCATTATCACAGGCTTCAGAAATGTAACAATTTGTCCTAACCCAG
AAGACACTTGTGACTTTGCCAGAGCAGCTCGTTTTGTATCCACTCCTTTTCATGAGATAATGTCCTTGAAGGATC
TCCCTTCTGATCCTGAGAGACTGTTACCGGAAGAAGATCTAGATGTAAAGACCTCTGAGGACCAGCAGACAGCTT
GTGGCACTATCTACAGTCAGACTCTCAGCATCAAGAAGCTGAGCCCAATTATTGAAGACAGTCGTGAAGCCACAC
ACTCCTCTGGCTTCTCTGGTTCTTCTGCCTCGGTTGCAAGCACCTCCTCCATCAAATGTCTTCAAATTCCTGAGA
AACTAGAACTTACTAATGAGACTTCAGAAAACCCTACTCAGTCACCATGGTGTTCACAGTATCGCAGACAGCTAC
TGAAGTCCCTACCAGAGTTAAGTGCCTCTGCAGAGTTGTGTATAGAAGACAGACCAATGCCTAAGTTGGAAATTG
AGAAGGAAATTGAATTAGGTAATGAGGATTACTGCATTAAACGAGAATACCTAATATGTGAAGATTACAAGTTAT
TCTGGGTGGCGCCAAGAAACTCTGCAGAATTAACAGTAATAAAGGTATCTTCTCAACCTGTCCCATGGGACTTTT
ATATCAACCTCAAGTTAAAGGAACGTTTAAATGAAGATTTTGATCATTTTTGCAGCTGTTATCAATATCAAGATG
GCTGTATTGTTTGGCACCAATATATAAACTGCTTCACCCTTCAGGATCTTCTCCAACACAGTGAATATATTACCC
ATGAAATAACAGTGTTGATTATTTATAACCTTTTGACAATAGTGGAGATGCTACACAAAGCAGAAATAGTCCATG
GTGACTTGAGTCCAAGGTGTCTGATTCTCAGAAACAGAATCCACGATCCCTATGATTGTAACAAGAACAATCAAG
CTTTGAAGATAGTGGACTTTTCCTACAGTGTTGACCTTAGGGTGCAGCTGGATGTTTTTACCCTCAGCGGCTTTC
GGACTGTACAGATCCTGGAAGGACAAAAGATCCTGGCTAACTGTTCTTCTCCCTACCAGGTAGACCTGTTTGGTA
TAGCAGATTTAGCACATTTACTATTGTTCAAGGAACACCTACAGGTCTTCTGGGATGGGTCCTTCTGGAAACTTA
GCCAAAATATTTCTGAGCTAAAAGATGGTGAATTGTGGAATAAATTCTTTGTGCGGATTCTGAATGCCAATGATG
AGGCCACAGTGTCTGTTCTTGGGGAGCTTGCAGCAGAAATGAATGGGGTTTTTGACACTACATTCCAAAGTCACC
TGAACAAAGCCTTATGGAAGGTAGGGAAGTTAACTAGTCCTGGGGCTTTGCTCTTTCAGTGAGCTAGGCAATCAA
GTCTCACAGATTGCTGCCTCAGAGCAATGGTTGTATTGTGGAACACTGAAACTGTATGTGCTGTAATTTAATTTA
GGACACATTTAGATGCACTACCATTGCTGTTCTACTTTTTGGTACAGGTATATTTTGACGTCACTGATATTTTTT
ATACAGTGATATACTTACTCATGGCCTTGTCTAACTTTTGTGAAGAACTATTTTATTCTAAACAGACTCATTACA
AATGGTTACCTTGTTATTTAACCCATTTGTCTCTACTTTTCCCTGTACTTTTCCCATTTGTAATTTGTAAAATGT

FIGURE 1178B

TCTCTTATGATCACCATGTATTTTGTAAATAATAAAATAGTATCTGTTAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1179

MAAVKKEGGALSEAMSLEGDEWELSKENVQPLRQGRIMSTLQGALAQESACNNTLQQQKRAFEYEIRFYTGNDPL
DVWDRYISWTEQNYPQGGKESNMSTLLERAVEALQGEKRYYSDPRFLNLWLKLGRLCNEPLDMYSYLHNQGIGVS
LAQFYISWAEEYEARENFRKADAIFQEGIQQKAEPLERLQSQHRQFQARVSRQTLLALEKEEEEEVFESSVPQRS
TLAELKSKGKKTARAPIIRVGGALKAPSQNRGLQNPFPQQMQNNSRITVFDENADEASTAELSKPTVQPWIAPPM
PRAKENELQAGPWNTGRSLEHRPRGNTASLIAVPAVLPSFTPYVEETAQQPVMTPCKIEPSINHILSTRKPGKEE
GDSLQRVQSHQQASEEKKEKMMYCKEKIYAGVGEFSFEEIRAEVFRKKLKEQREAELLTSAEKRAEMQKQIEEME
KKLKEIQTTQQERTGDQQEETMPTKETTKLQIASESQKIPGMTLSSSVCQVNCCARETSLAENIWQEQPHSKGPS
VPFSIFDEFLLSEKKNKSPPADPPRVLAQRRPLAVLKTSESITSNEDVSPDVCDEFTGIEPLSEDAIITGFRNVT
ICPNPEDTCDFARAARFVSTPFHEIMSLKDLPSDPERLLPEEDLDVKTSEDQQTACGTIYSQTLSIKKLSPIIED
SREATHSSGFSGSSASVASTSSIKCLQIPEKLELTNETSENPTQSPWCSQYRRQLLKSLPELSASAELCIEDRPM
PKLEIEKEIELGNEDYCIKREYLICEDYKLFWVAPRNSAELTVIKVSSQPVPWDFYINLKLKERLNEDFDHFCSC
YQYQDGCIVWHQYINCFTLQDLLQHSEYITHEITVLIIYNLLTIVEMLHKAEIVHGDLSPRCLILRNRIHDPYDC
NKNNQALKIVDFSYSVDLRVQLDVFTLSGFRTVQILEGQKILANCSSPYQVDLFGIADLAHLLLFKEHLQVFWDG
SFWKLSQNISELKDGELWNKFFVRILNANDEATVSVLGELAAEMNGVFDTTFQSHLNKALWKVGKLTSPGALLFQ

FIGURE 1180

AGCAAACCAATCGCAAGCCTCGTTGAGTGGAAGGGGTGGGATCTTCCCCGGAAGTTTTGGTTAAAGCCCCTCCAA
TCAGCGGCTCGGTGCGGCAAGTTTGAATTTCGTGGAGGCTCGGGTTGTGAGGGTTCCTGCTTCGGAGTCGGCGGT
GGTCGTCCAGACCGAGTGTTCTTTACTTTTTGTTTGGTTGAGGTTTCACGCTAGAAGGTGGCTCAGGATGTCTTC
ATCACATTTTGCCAGTCGACACAGGAAGGATATAAGTACTGAAATGATTAGAACTAAAATTGCTCATAGGAAATC
ACTGTCTCAGAAAGAAAATAGACATAAGGAATACGAACGAAATAGACACTTTGGTTTGAAAGATGTAAACATTCC
AACCTTGGAAGGTAGAATTCTTGTTGAATTAGATGAGACATCTCAAGAGCTTGTTCCAGAAAAGACCAATGTTAA
GCCAAGGGCAATGAAAACTATTCTAGGTGATCAACGAAAACAGATGCTCCAAAAATACAAAGAAGAAAAGCAACT
TCAAAAATTGAAAGAGCAGAGAGAGAAAGCTAAACGAGGAATATTTAAAGTGGGTCGTTATAGACCTGATATGCC
TTGTTTTCTTTTATCAAACCAGAATGCTGTGAAAGCTGAGCCAAAAAAAGGCTATTCCATCTTCTGTACGGATTAC
AAGGTCAAAGGCCAAAGACCAAATGGAGCAGACTAAGATTGATAACGAGAGTGATGTTCGAGCAATCCGACCTGG
TCCAAGACAAACTTCTGAAAAGAAAGTGTCAGACAAAGAGAAAAAAGTTGTGCAGCCTGTAATGCCCACGTCGTT
GAGAATGACTCGATCAGCTACTCAAGCAGCAAAGCAGGTTCCCAGAACAGTCTCATCTACCACAGCAAGAAAGCC
AGTCACAAGAGCTGCTAATGAAAACGAACCAGAAGGAAAGGTGCCAAGTAAAGGAAGACCTGCCAAAAATGTAGA
AACAAAACCCGACAAGGGTATTTCTTGTAAAGTCGATAGTGAAGAAAATACTTTGAATTCACAAACTAATGCAAC
AAGTGGAATGAATCCAGATGGAGTCTTATCAAAAATGGAAAACTTACCTGAGATAAATACTGCAAAAATAAAAGG
GAAGAATTCCTTCGCACCTAAGGATTTTATGTTTCAGCCACTGGATGGTCTGAAGACCTATCAAGTAACACCTAT
GACTCCCAGAAGTGCCAATGCTTTTTTGACACCCAGTTACACCTGGACTCCTTTAAAAACAGAAGTTGATGAGTC
TCAAGCAACAAAAGAAATTTTGGCACAAAAATGTAAAACTTACTCTACCAAGACAATACAGCAAGATTCAAATAA
ATTGCCATGTCCTTTGGGTCCTCTAACTGTTTGGCATGAAGAACATGTTTTAAATAAAAATGAAGCTACTACTAA
AAATTTAAATGGCCTTCCAATAAAAGAAGTCCCATCACTTGAAAGAAATGAAGGTCGAATTGCTCAGCCCCACCA
TGGTGTGCCATATTTCAGAAATATCCTCCAGTCAGAAACTGAGAAATTAACTTCACATTGCTTCGAGTGGGACAG
GAAACTTGAATTGGACATTCCAGATGATGCTAAAGATCTTATTCGCACAGCAGTTGGTCAAACAAGACTCCTTAT
GAAGGAAAGGTTTAAACAGTTTGAAGGACTGGTTGATGATTGTGAATATAAACGAGGTATAAAGGAGACTACCTG
TACAGATCTGGATGGATTTTGGGATATGGTTAGTTTTCAGATAGAAGATGTAATCCACAAATTCAACAATCTGAT
CAAACTTGAGGAATCTGGGTGGCAAGTCAATAATAATATGAATCATAATATGAACAAAAATGTCTTTAGGAAAAA
AGTTGTCTCAGGTATAGCAAGTAAACCAAAACAGGATGATGCTGGAAGAATTGCAGCGAGAAATCGCCTAGCTGC
CATAAAAAATGCAATGAGAGAGAGAATTAGGCAGGAAGAATGTGCTGAAACAGCAGTTTCTGTGATACCAAAGGA
AGTTGATAAAATAGTGTTCGATGCTGGATTTTTCAGAGTTGAAAGTCCTGTTAAATTATTCTCAGGACTTTCTGT
CTCTTCTGAAGGCCCTTCTCAAAGACTTGGAACACCTAAGTCTGTCAACAAAGCTGTATCTCAGAGTAGAAATGA
GATGGGCATTCCACAACAAACTACATCACCAGAAAATGCCGGTCCTCAGAATACGAAAAGTGAACATGTGAAGAA
GACTTTGTTTTTGAGTATTCCTGAAAGCAGGAGCAGCATAGAAGATGCTCAGTGTCCTGGATTACCAGATTTAAT
TGAAGAAAACCATGTTGTAAATAAGACAGACTTGAAGGTGGATTGTTTATCCAGTGAGAGAATGAGTTTGCCTCT
TCTTGCTGGTGGAGTAGCAGATGATATTAATACTAACAAAAAAGAAGGAATTTCAGATGTTGTGGAAGGAATGGA
ACTGAATTCTTCAATTACATCACAGGATGTTTTGATGAGTAGCCCTGAAAAAAATACAGCTTCACAAAATAGCAT
CTTAGAAGAAGGGGAAACTAAAATTTCTCAGTCAGAACTATTTGATAATAAAAGTCTCACTACTGAATGCCACCT
TCTTGATTCACCAGGTCTAAACTGCAGTAATCCATTTACTCAGCTGGAGAGGAGACATCAAGAACATGCCAGACA
CATTTCTTTTGGTGGTAACCTGATTACTTTTTCACCTCTACAACCAGGAGAATTTTGAATTTAAAAATAAATCCA
AACATTTTCCTTCATATTATCAATGCTTATATATTCCTTAGACTATTGAAATTTTGGAGAAAATGTATTTGTGTT
CACTTCTATAGCATATAATGTTTTAATATTCTGTGTTCATCAAAGTGTATTTTAGATATACTCTTTCTCAAGGGA
AGTGGGGATATTTTGTACATTTTCAACACAGAATAAAAAATGTACTGTGCCTTG

FIGURE 1181

MSSSHFASRHRKDISTEMIRTKIAHRKSLSQKENRHKEYERNRHFGLKDVNIPTLEGRILVELDETSQELVPEKT
NVKPRAMKTILGDQRKQMLQKYKEEKQLQKLKEQREKAKRGIFKVGRYRPDMPCFLLSNQNAVKAEPKKAIPSSV
RITRSKAKDQMEQTKIDNESDVRAIRPGPRQTSEKKVSDKEKKVVQPVMPTSLRMTRSATQAAKQVPRTVSSTTA
RKPVTRAANENEPEGKVPSKGRPAKNVETKPDKGISCKVDSEENTLNSQTNATSGMNPDGVLSKMENLPEINTAK
IKGKNSFAPKDFMFQPLDGLKTYQVTPMTPRSANAFLTPSYTWTPLKTEVDESQATKEILAQKCKTYSTKTIQQD
SNKLPCPLGPLTVWHEEHVLNKNEATTKNLNGLPIKEVPSLERNEGRIAQPHHGVPYFRNILQSETEKLTSHCFE
WDRKLELDIPDDAKDLIRTAVGQTRLLMKERFKQFEGLVDDCEYKRGIKETTCTDLDGFWDMVSFQIEDVIHKFN
NLIKLEESGWQVNNNMNHNMNKNVFRKKVVSGIASKPKQDDAGRIAARNRLAAIKNAMRERIRQEECAETAVSVI
PKEVDKIVFDAGFFRVESPVKLFSGLSVSSEGPSQRLGTPKSVNKAVSQSRNEMGIPQQTTSPENAGPQNTKSEH
VKKTLFLSIPESRSSIEDAQCPGLPDLIEENHVVNKTDLKVDCLSSERMSLPLLAGGVADDINTNKKEGISDVVE
GMELNSSITSQDVLMSSPEKNTASQNSILEEGETKISQSELFDNKSLTTECHLLDSPGLNCSNPFTQLERRHQEH
ARHISFGGNLITFSPLQPGEF

FIGURE 1182

CTTCCGAGGGGGTGAGTGGCTTCACCGCCGGTCCCTTGCAGCGCTGCCTTTCGATCTCTCCACATCTCGGTGGCG
CGGGATCTCAAGATGCGCCTCCACCTGCTCCTGCTGCTCGCGCTGTGCGGTGCAGGCACCACCGCCGCGGAGCTC
AGTTACAGCTTGCGTGGCAACTGGAGCATCTGCAATGGGAACGGCTCGCTGGAGCTGCCCGGGGCGGTCCCTGGC
TGCGTGCACAGCGCCTTGTTCCAGCAGGGCCTGATCCAGGATTCTTACTACAGATTTAATGACCTTAACCACAGA
TGGGTCTCTTTGGATAACTGGACCTATAGCAAAGAATTTAAAATCCCCTTTGAAATTAGCAAATGGCAAAAAGTA
AATTTGATTCTTGAGGGAGTGGATACGGTTTCAAAAATCCTGTTCAATGAAGTCACTATTGGGGAAACAGACAAT
ATGTTCAATAGATATAGCTTTGATATTACCAACGTGGTCAGGGACGTGAACTCCATTGAGCTGCGTTTCCAGTCA
GCGGTGTTGTATGCAGCACAGCAGAGCAAAGCTCACACTCSCTACCAGGTTCCCCCAGACTGCCCTCCACTTGTG
CAGAAGGGTGAATGCCATGTCAACTTTGTTCGGAAGGAGCAATGTTCCTTTAGTTGGGACTGGGGGCCTTCCTTT
CCTACCCAGGGAATCTGGAAAGATGTTAGAATTGAAGCCTATAATATTTGTCACCTGAACTACTTCACATTTTCC
CCAATATATGATAAGAGTGCCCAGGAGTGGAATCTGGAAATAGAGTCTACATTTGATGTTGTCAGCTCAAAGCCA
GTTGGTGGTCAAGTGATCXTAGCCATCCCTAAGTTGCAAACACAACAGACATACAGCATTGAACTTCAACCTGGG
AAAAGGATTGTTGAGCTATTTGTGAACATTAGCAAGAATATTACTGTAGAAACTTGGTGGCCTCATGGACATGGA
AACCAGACTGGGTACAACATGACTGTTCTTTTTGAACTGGATGGAGGCTTAAATATTGAAAAATCAGCTAAGGTT
TATTTTAGGACAGTGGAACTTATAGAAGAGCCTATAAAAGGGTCTCCTGGTTTGAGTTTCTATTTCAAAATTAAT
GGATTTCCCATATTTCTAAAAGGCTCAAACTGGATCCCAGCAGATTCATTCCAGGACCGAGTAACCTCTGAGTTG
TTACGGCTCCTTTTACAGTCTGTTGTGGATGCTAATATGAATACTCTTCGGGTTTGGGGAGGAGGAATTTATGAG
CAGGATGAATTCTATGAACTCTGTGATGAACTAGGAATAATGGTATGGCAGGATTTTATGTTTGCCTGTGCCCTT
TATCCAACTGATCAGGGCTTCCTGGATTCAGTGACAGCAGAAGTTGCCTACCAGATCAAGAGACTGAAATCTCAT
CCTTCTATCATCATATGGAGTGGCAATAATGAAAATGAGGAGGCGCTGATGATGAATTGGTATCATATCAGTTTC
ACTGACCGGCCAATCTACATCAAGGACTATGTGACACTCTATGTGAAAAACATCAGAGAGCTCGTACTGGCAGGA
GACAAGAGTCGTCCTTTTATTACGTCCAGTCCTACAAATGGGGCTGAAACTGTTGCAGAAGCCTGGGTCTCTCAA
AACCCTAATAGCAATTATTTTGGTGATGTACATTTTTATGACTATATCAGTGATTGCTGGAACTGGAAAGTTTTC
CCAAAAGCTCGATTTGCATCTGAATATGGATATCAGTCCTGGCCGTCCTTCAGTACATTAGAAAAGGTCTCGTCT
ACAGAGGACTGGTCTTTCAATAGCAAGTTTTCACTTCATCGACAACATCACGAAGGTGGTAACAAACAAATGCTT
TATCAGGCTGGACTTCATTTCAAACTCCCCCAAAGCACAGATCCATTACGCACATTTAAAGATACCATCTACCTT
ACTCAGGTGATGCAGGCCCAGTGTGTCAAAACAGAAACTGAATTCTACCGCCGTAGTCGCAGCGAGATAGTGGAT
CAGCAAGGGCACACGATGGGGGCACTTTATTGGCAGTTGAATGACATCTGGCAAGCTCCTTCCTGGGCTTCTCTT
GAGTACGGAGGAAAGTGGAAAATGCTTCATTACTTTGCTCAGAATTTCTTTGCTCCACTGTTGCCAGTAGGCTTT
GAGAATGAAAACACGTTCTATATCTATGGTGTGTCAGATCTTCACTCGGATTATTCGATGACACTCAGTGTGAGA
GTCCATACATGGAGCTCCCTGGAGCCCGTGTGCTCTCGTGTGACTGAACGTTTTGTGATGAAAGGAGGAGAGGCT
GTCTGCCTTTATGAGGAGCCAGTGTCTGAATTGCTGAGGAGATGTGGGAATTGCACACGGGAAAGCTGTGTGGTT
TCCTTTTACCTTTCAGCTGACCATGAACTCCTGAGCCCGACCAACTACCACTTCTTGTCCTCACCGAAGGAGGCC
GTGGGGCTCTGCAAGGCGCAGATCACTGCCATCATCTCTCAGCAAGGTGACATATTTGTTTTTGACCTGGAGACC
TCAGCTGTCGCTCCCTTTGTTTGGTTGGATGTAGGAAGCATCCCAGGGAGATTTAGTGACAATGGTTTCCTCATG
ACTGAGAAGACACGAACTATATTATTTTACCCTTGGGAGCCCACCAGCAAGAATGAGTTGGAGCAATCTTTTCAT
GTGACCTCCTTAACAGATATTTACTGAAGGAATCTAGGTTGTATTTTCAGTGGACAATGGGAATAAAGCATTTCT
AAAGCACCGACTGGAGAGGAAGGCAACAGAGACAAGGAGAGAAGCCGAGAGACATGTCTGCGTGCTGCCACGCAT
TTGAGCGATTGCTCTGTGAAGAGTTGTACACTGAACACTTCCAGGGGAGGCTGTTTACCCAGGCAATGTCCTCAA
ACAAGCCTGTGCCGGGGTGTCCTGGAATCTGTGCCAGGACTGTGTTTTTAGCCCTTCACCTCTCAGCTTTAGCAG
GACATGAACCAGTTATAACAAGATGGCCCTGCAGCTGGTTACAAGAATGTGACATGGCAGGATCTATGGAACCAA
ATGGAAGGTTTTGAGGTGATGTAGGTCTTTCACAGCTAGCTTTGGGGAATACGGAATACTCAAATAAAGTGCTTT
GTTATTATTTCAGAGGGAATGGCGATTGAAATGTTACAACAGAGATTTCTTGGTGGTAGCTATTTGGGTAAAGGT
ATATGGGTATTTTTCTGTACATGTGAAATTATATAAAAATAAAAGTTATATAAATTACATTGACAACTAAAAAAA
AAAAA

FIGURE 1183

MRLHLLLLLALCGAGTTAAELSYSLRGNWSICNGNGSLELPGAVPGCVHSALFQQGLIQDSYYRFNDLNHRWVSL
DNWTYSKEFKIPFEISKWQKVNLILEGVDTVSKILFNEVTIGETDNMFNRYSFDITNVVRDVNSIELRFQSAVLY
AAQQSKAHTXYQVPPDCPPLVQKGECHVNFVRKEQCSFSWDWGPSFPTQGIWKDVRIEAYNICHLNYFTFSPIYD
KSAQEWNLEIESTFDVVSSKPVGGQVIXAIPKLQTQQTYSIELQPGKRIVELFVNISKNITVETWWPHGHGNQTG
YNMTVLFELDGGLNIEKSAKVYFRTVELIEEPIKGSPGLSFYFKINGFPIFLKGSNWIPADSFQDRVTSELLRLL
LQSVVDANMNTLRVWGGGIYEQDEFYELCDELGIMVWQDFMFACALYPTDQGFLDSVTAEVAYQIKRLKSHPSII
IWSGNNENEEALMMNWYHISFTDRPIYIKDYVTLYVKNIRELVLAGDKSRPFITSSPTNGAETVAEAWVSQNPNS
NYFGDVHFYDYISDCWNWKVFPKARFASEYGYQSWPSFSTLEKVSSTEDWSFNSKFSLHRQHHEGGNKQMLYQAG
LHFKLPQSTDPLRTFKDTIYLTQVMQAQCVKTETEFYRRSRSEIVDQQGHTMGALYWQLNDIWQAPSWASLEYGG
KWKMLHYFAQNFFAPLLPVGFENENTFYIYGVSDLHSDYSMTLSVRVHTWSSLEPVCSRVTERFVMKGGEAVCLY
EEPVSELLRRCGNCTRESCVVSFYLSADHELLSPTNYHFLSSPKEAVGLCKAQITAIISQQGDIFVFDLETSAVA
PFVWLDVGSIPGRFSDNGFLMTEKTRTILFYPWEPTSKNELEQSFHVTSLTDIY

FIGURE 1184

GGGGGAGGCTGTGATGGGTTGACAGGTGCGTGACAGTGGGAGCTGCTCTCGGCACAAGCATGTACGGCAAAGGCA
AGAGTAACAGCAGCGCCGTCCCGTCCGACAGCCAGGCCCGGGAGAAGTTAGCACTCTACGTATATGAATATCTGC
TCCATGTAGGAGCTCAGAAATCAGCTCAAACATTTTTATCAGAGATAAGATGGGAAAAAAACATCACATTGGGGG
AACCACCAGGATTCTTACATTCTTGGTGGTGTGTATTTTGGGATCTCTACTGTGCAGCTCCAGAGAGACGTGAAA
CATGTGAACACTCAAGTGAAGCAAAAGCCTTCCATGATTACAGTGCTGCAGCAGCTCCCAGTCCAGTGCTAGGAA
ACATTCCCCCAGGAGATGGCATGCCAGTAGGTCCTGTACCACCAGGGTTCTTTCAGCCTTTTATGTCACCTCGGT
ACCCTGGAGGTCCAAGGCCCCCATTGAGGATACCTAATCAGGCACTTGGAGGTGTCCCAGGAAGTCAGCCATTAC
TCCCCAGAGGAATGGATCCAACTCGACAACAAGGACATCCAAATATGGGTGGGCCAATGCAGAGAATGACTCCTC
CAAGAGGAATGGTGCCCTTAGGACCACAGAACTATGGAGGTGCAATGAGACCCCCACTGAATGCTTTAGGTGGCC
CTGGAATGCCTGGAATGAACATGGGTCCAGGTGGTGGTAGACCTTGGCCAAACCCAACAAATGCCAATTCAATAC
CATACTCCTCAGCATCTCCTGGGAATTATGTAGGTCCTCCAGGAGGTGGAGGGCCACCAGGAACACCCATCATGC
CTAGTCCAGCAGATTCAACCAACTCTGGTGATAACATGTATACTTTAATGAATGCAGTACCTCCTGGACCTAACA
GACCTAATTTTCCAATGGGCCCTGGGTCAGATGGTCCCATGGGTGGATTAGGAGGAATGGAGTCACATCACATGA
ATGGCTCTTTAGGCTCAGGAGATATGGACAGTATTTCCAAGAATTCTCCCAATAATATGAGCCTGAGTAATCAAC
CGGGCACTCCAAGGGATGATGGCGAAATGGGGGGAAATTTCTTAAATCCTTTTCAGAGTGAGAGTTACTCCCCTA
GCATGACAATGAGCGTGTGATCCATTACCAAGTCTCCTCATGAAAACCACAGTGAGTCAGCCCTTCACAGAACTA
CTACGGAAGAAAATTATTCATCACAGTGTACAGTTAAACAAAGGAATCTCAGTCACACCAAACCAACCTTTTCAT
TTCCTGCTCTCTCCCCTCTTTTGTGAAGAAAGCGGGTCCAGATGTGATTCAAACAACTGTACGGAGTGGCATATT
AGAATTGCCCTAAACTGAACTGCAAATAATTATGTGTGTATGTATATGTGTGGGAAAGAGAATGTACTGTATATG
TGTATGTTATACAGACATATACACATACATACATTGACCCACAGGACATTGTAAAATATTATCACATGACATCTT
AAGTAGAAATAAGTAGGGACTTTTATTCCATCCTTTTTTTCACGTTTACATTTTAATTATTACAAGTTGCTCCTG
CCCCCTCCCTGAACTATTTTGTGCTGTGTATATCACTGCTTTATATAAGTTATTTTTTAAGGTGAACTCAGATGT
TATGGTTTTGTATATGTCTGCAATCATGGATAGGAATAAAATCGCTTATTTGAGAGCTTTCAAAAAAAAAAAAAA
AAAAAC

FIGURE 1185

MYGKGKSNSSAVPSDSQAREKLALYVYEYLLHVGAQKSAQTFLSEIRWEKNITLGEPPGFLHSWWCVFWDLYCAA
PERRETCEHSSEAKAFHDYSAAAAPSPVLGNIPPGDGMPVGPVPPGFFQPFMSPRYPGGPRPPLRIPNQALGGVP
GSQPLLPRGMDPTRQQGHPNMGGPMQRMTPPRGMVPLGPQNYGGAMRPPLNALGGPGMPGMNMGPGGGRPWPNPT
NANSIPYSSASPGNYVGPPGGGGPPGTPIMPSPADSTNSGDNMYTLMNAVPPGPNRPNFPMGPGSDGPMGGLGGM
ESHHMNGSLGSGDMDSISKNSPNNMSLSNQPGTPRDDGEMGGNFLNPFQSESYSPSMTMSV

FIGURE 1186A

GCTCCGGGCCGCGCTGCCCGCGCTCCTGCTGCCGTTGCTGGGCCTCGCCGCTGCTGCCGTCGCGGACTGTCCTTC
ATCTACTTGGATTCAGTTCCAAGACAGTTGTTACATTTTTCTCCAAGAAGCCATCAAAGTAGAAAGCATAGAGGA
TGTCAGAAATCAGTGTACTGACCATGGAGCGGACATGATAAGCATACATAATGAAGAAGAAAATGCTTTTATACT
GGATACTTTGAAAAAGCAATGGAAAGGCCCAGATGATATCCTACTAGGCATGTTTTATGACACAGATGATGCGAG
TTTCAAGTGGTTTGATAATTCAAATATGACATTTGATAAGTGGACAGACCAAGATGATGATGAGGATTTAGTTGA
CACCTGTGCTTTTCTGCACATCAAGACAGGTGAATGGAAAAAAGGAAATTGTGAAGTTTCTTCTGTGGAAGGAAC
ACTATGCAAAACAGCTATCCCATACAAAAGGAAATATTTATCAGATAACCACATTTTAATATCAGCATTGGTGAT
TGCTAGCACGGTAATTTTGACAGTTTTGGGAGCAATCATTTGGTTCCTGTACAAAAAACATTCTGATTCTCGTTT
CACCACAGTTTTTTCAACCGCACCCCAATCACCTTATAATGAAGACTGTGTTTTGGTAGTTGGAGAAGAAAATGA
ATATCCTGTTCAATTTGACTAAGTTTTTGGTAATCTTGCACTAAGACATCAACAAATGCCCTGGCAGAGATAACT
TGGGAAAGATTTTAATATAAAACTTGACATTGGATATTAGAGCTTTAATGGTATTCCTTATTCCAGTAACATTTT
TATGTACTCATCTGCTGTGAAAAGTCTTTAGGTTCATTAAAAAAACAGGTTTTAGAAATGATCTTAGATCTAATA
TAGTGATTTTAAGCATCCCGTCAAAGGCAGAATCTGTCACTTGAATGAAGGAAAGCTTAAAGCCCAAGCAGATAA
AAATAAAAGCCCAGCCTATTTGTCTTGCCTGCTGTATCTTCCCTATTTAGTTGACCCACTTTAGTTTATATGTTT
ATTAGTAAACATGAAATGGGGAATAAGTGATTTTAAGTACATCCCATACATTTAAATATCTTTGATAATTGTTAT
TTTTTTGGCAGATAATTCCTCTAGAATGTGTATCTTTTTATGATTTAGATGAAGAAAATTTTACAACTTTTAACA
CCCCACACCAATTTTAGTTTCATTACTTTTACACACACCATTTTATCACAAATGACTCAAGTTTTAATGAATGTT
TATAAATTATTTGAAACAAAATATGATCGCTGTGTCCAGGATGGCATAGAGAAAGCTGGCAATTAGGTTAACACT
TACATATTATAGTGCCCCTTTAAGGATTTCTCTCTTGCCACCATACCTTTTGTACTTTCCCCTATACAAGATGTA
TCTCATTCTCCTCAAGCATTTATAAATTTTTCCTTCAATGACATGAAAACTGTGCAAGCAAAAACCGAAGAAAAA
CACTTAAGTACAACTGTAGTGACAGTGATCAAAGTTTTCAGTGCATTTATTGTACATTTTAAGAAAAAGGTGAAA
ATCATTTGGGGAGTAAAAAAATGAAAAAGCTGAAACGAGTAATTTTCCTCACCATCAATAAACCAAAAACAGGAA
AGATAAAGAATGTATAAATTTCACGTAAATTAGTCACGTATCACTTATCAATGGGGATACGTTCTAAGAAATGCA
TAGTTAGGGAATCTTGTGTGAAAATCAGCTTGTATTTACACAAACCCAGATGGTAGAGCCTATTTTGTCCCAAAC
CTACACAGCATGTTACTGTGCTGAATACTGCAGACAATTGTAACACAATATTTGTGTATCTAAATATAGAAAAGG
TACAGTAAAAATATGGTCTACTAAGGAAACACTGTTCTATATGTGGTCCATTACTGACTGAAGTATACTGTCTAG
AAGTCTGAGGCTCAAAGAAAAGTAATCCCTCTTCTGAATCCACACCCCATCAATTATCTTACTTTCTTCTGGGGA
GATAGATAGATATACTATCTCACTAGCTTGACTAATGGCAACAAAGTTCCAGCTTGTGTAGTCTCTTTTTATTGA
CCACATGAATCGAAAACACTCATCACAATTAATGGCACTATCATTAATGAGACATGAGTAACTAAAAAGTGATAG
AAAACTATTACAGTGCGGCTACATGGTACTGAAAATGCAGGCATTACACCAGCTGTTACACAAGCACAAGCATGC
TCTGTAAGAGCTTTACATTTCTGAGATTTTGTATAGTGATTGAGATGTCTATTTTATTATTGATAGACTATTACT
AATGTCAATATTGAACACTACCCTGGAATTCCTGCCTGGTTTTCCTACCCAAATTGTACCACTCCTTGAAGAACT
ACAGGCACAGTAAAAAAATATGGCGTATTATGTGAACTAAAAGAGTTCTAAAGGAGTTCTTAAAGGAGTGGTAGA
ATTTGGGTAGGAAAGTGATTAAGTCCAACTTAAAACCAACAGTCTCAAACGTCTACAACTACAATGTCCAATGAG
CCACTAGCCACATGAGGCTATTTAAGTAAATTTAGTTTAAAATCCAGTTTTCGAATTACATTAGCCACATTGTCA
AGTGTTCAAATCACAGGTGGTTAGTGGCTACTGTACTGGGCAACATACATTATAGAACATTTTCATTATAGGAAG
TTTTATTGGGCAGTGCTGCTCTTAAATCCTACCTTCCACTCAACTCCCATACAACTTTCTTTTGTACATTTTGAT
ACTTTCTACCTAATGGCAGCTCTTCCAAAATAGCTGCTTTAAACTCTGATTTAATTTTCAATATTTGGTTTCATT
TTTCAACAGGCCAAGAGGCCTCTGGTAATGAAGTGCTATATATATATATATATGACGGAGTCTCACTGTGCTGCC
CAGGCTACAGTGCAGTGGCTCGATCTTGGCTCTCTCCAATCTCCGCCTTGCAGGTTTTCAAGCAATTCTCCTGCC
TCAGCCTCCTTAGTAGCTGGGACCACAGACATCTGTCACCACACCCAGCTAACTTTTTGTATTTTTGGTAGAGAC
GGGGTTTCGCCATATTGACTGGGCTGGTCTCAAACTCCTGACCTCAAGTGATCCACCCACCTTGGTCTCCCAAAG
TGCTGGGATTACATGCGTGAGCCACCACACTTGGCCTACATTTTTTCTTTATATACCAGAACATCTATAACAGGC
ACCTTATCTACTCATTAGTGAAGAGATAATTGGATTACACAGGCAGGCTTGTTTACTACATCCAGAATGTAGAAA
CTGCTTTCTTCAACATCTTGGTTCTAGCTAGTAATAACAATATAATTCTTTGGCAGATATTCAGAATAACATTTT
AAACTACATTTTCTTAGAAAATTGCATTCTTGTAGTGAGCAGTGTATGGTCTCTTTTGTTCAGAATTTAAAACTG
ATAACCAATGAAAGCCTTTTCTCTTATTCCTCTACCGTCATTTACATGATAATCTGAAGCTAATATGACAATATT
TAAATACTAAGTGGTACTAGGGAACTACAAGAATACTGTAAAGCTTAAGCCATTGTTATCACTGTCATTTAGCAT

FIGURE 1186B

TTAATAACAAAACTATACAGAATTATGTGCATACCAATGAATGTTTTGTACCATCTAGTTAAATTTTTTAAATAA
AGTTTTATGGGTTAAGCAG

FIGURE 1187

MISIHNEEENAFILDTLKKQWKGPDDILLGMFYDTDDASFKWFDNSNMTFDKWTDQDDDEDLVDTCAFLHIKTGE
WKKGNCEVSSVEGTLCKTAIPYKRKYLSDNHILISALVIASTVILTVLGAIIWFLYKKHSDSRFTTVFSTAPQSP
YNEDCVLVVGEENEYPVQFD

FIGURE 1188

AACGGTGCGCTGGAGCGAGTGAGCAGCGATACCTAGGGCGGAAGTGCTCTCGGCGGAAGTGATCGCTGTGTGAAT
CGTGGGTGGGATGGCCGCGGGCCGCCTCTTTCTAAGTCGGCTTCGAGCACCCTTCAGTTCCATGGCCAAGAGCCC
ACTCGAGGGCGTTTCCTCCTCCAGAGGCCTGCACGCGGGGCGCGGGCCCCGAAGGCTCTCCATCGAAGGCAACAT
TGGTAACATCCTCAAGCAAATCAGAATGAGAGCACCCATTCAGGAAACCTGAACAGGGAAGGTGAACCCCTGTCC
TGACCAAAATTGGGCCTGCACTGCCCAAAGTCTTGGAAACTTGCTGGATATGATGTACCGGGAGCCAGCACGATG
GTCCTACACATTCCAGACATTTTCCTTTTTGAGCCGCCTGAAAGTACAGCTGGAGCCCTTCCCTGAGAAACTCTT
ACAGGCCAGGAAGCCAGTACAGATCTTTGAGAGGTCTGTGTACAGTGACAGGTATATCTTTGCAAAGAATCTTTT
TGAAAATGGTTCCCTCAGTGACATCGAGTGGCATATCTATCAGGACTGGCATTCTTTTCTCCTGTGGGAGTTTGC
CAGCCGGATCACATTACATGGCTTCATCTACCTCCAGGCTTCTCCCCAGGTTTGTTTGAAGAGACTGTACCAGAG
GGCCAGGGAGGAGGAGAAAGGAATTGAGCTGGCCTATCTAGAGCAGCTGCATGGCCAACACGAAGCCTGGCTTAT
TCACAAGACAACGAAGCTCCACTTTGAGGCTCTGATGAACATTCCAGTGCTGGTGTTGGATGTCAATGATGATTT
TTCTGAGGAAGTAACCAAACAAGAAGACCTCATGAGAGAGGTAAACACCTTTGTAAAGAATCTGTAACCAATACC
ATGAAGTTCAGGCTGTGATCTGGGCTCCCTGACTTTCTGAAGCTAGAAAAATGTTGTGTCTCCCAACCACCTTTC
CATCCCCAGCCCCTCTCATCCCTGGAGCACTCTGCCGCTCAAGAGCTGGTTTGTTAATTATTGTTAGACTTTGCC
ATTGTTTTCTTTTGTACCTGAAGCATTTTGAAAATAAAGTTTACTTAAGTTATGCTTGTTTTTCTAA

FIGURE 1189

MAAGRLFLSRLRAPFSSMAKSPLEGVSSSRGLHAGRGPRRLSIEGNIAVGKSTFVKLLTKTYPEWHVATEPVATW
QNIQAAGTQKACTAQSLGNLLDMMYREPARWSYTFQTFSFLSRLKVQLEPFPEKLLQARKPVQIFERSVYSDRLH
FEALMNIPVLVLDVNDDFSEEVTKQEDLMREVNTFVKNL

FIGURE 1190

CACAGGGCCGCTCAGAGGCCGCCGCAATGCTCCCCTCTTTGCAGGAGTCGATGGATGGAGATGAAAAGGAACTAG
AGAGCAGCGAAGAGGGAGGCTCAGCCGAGGAGCGGAGACTCGAGCCGCCGTCCAGCAGCCACTACTGTCTTTACA
GCTATCGCGGAAGCAGATTGGCACAGCAACGAGGGGACAGTGAGGACGGAAGCCCAAGTGGCACAAATGCAGAAA
CTCCCTCTGGTGATGATTTCAGCCTCTCCTTGGCAGATACTAATCTACCATCCGAAGTGGAGCCAGAGCTGCGCA
GTTTCATTGCTAAGCGTCTTTCAAGAGGTGCAGTCTTTGAAGGGCTGGGTAATGTTGCATCTGTGGAGCTAAAAA
TTCCAGGTTACCGAGTTGGTTGTTATTACTGCCTTTTCCAAAATGAAAAACTGCTTCCTGAAACAGTAACGATAG
ACTCTGAACGTAACCCTTCAGAATATGTGGTCTGTTTTTTAGGAGGGTCTGAAAAAGGACTTGAGCTTTTCAGGC
TTGAATTGGACAAGTACATTCAAGGGCTGAAAAATAACATGAATTGTGAGGCAAGGGGCCTGGAGAGTCACATAA
AATCCTATCTGAGCAGCTGGTTTGAGGATGTTGTATGCCCAATCCAAAGGGTTGTTCTTCTCTTTCAGGAAAAGC
TTACCTTTCTGCTACATGCTGCTTTGAGTTACACTCCTGTTGAAGTTAAAGAATCAGATGAAAAAACAAAGAGAG
ACATTAACAGGTTTCTGAGTGTGGCCAGTCTTCAAGGACTTATTCATGAAGGCACCATGACTTCTTTGTGCATGG
CCATGACAGAGGAGCAGCATAAGTCTGTGGTCATCGATTGCAGCAGCTCCCAGCCTCAGTTCTGCAATGCAGGAA
GTAACCGGTTTTGTGAGGATTGGATGCAAGCTTTTTTAAATGGTGCCAAAGGAGGTAACCCTTTTTTTTTCCGAC
AAGTACTGGAGAACTTTAAACTAAAGGCCATACAAGACACAAACAATTTGAAGAGATTTATCCGACAGGCAGAAA
TGAATCATTATGCTTTGTTTAAATGTTACATGTTCCTAAAGAACTGTGGTAGTGGAGATACTTTTGAAGATTGTT
AAAGTGGAACATGAAGAAATGCCTGAAGCCAAAAATGTGATAGCTGTCCTTGAAGAATTCATGAAAGAAGCTCTT
GACCAAAGTTTTTGATCATATGTTTTGAGATAATTGTATGATCAAGTTGTATATTTAAGTCTTAGTGTTTGAAAT
TGCAGTTATAATTGTTCATAGGATTGCTATTTAAGATGATTTGAAACTCAATCCAGATTTTCTTTTTGTATTTTA
CCAATTTAACTTAAATAAAAATCTGAAGAACAAAAAAAAAAAAA

FIGURE 1191

MLPSLQESMDGDEKELESSEEGGSAEERRLEPPSSSHYCLYSYRGSRLAQQRGDSEDGSPSGTNAETPSGDDFSL
SLADTNLPSEVEPELRSFIAKRLSRGAVFEGLGNVASVELKIPGYRVGCYYCLFQNEKLLPETVTIDSERNPSEY
VVCFLGGSEKGLELFRLELDKYIQGLKNNMNCEARGLESHIKSYLSSWFEDVVCPIQRVVLLFQEKLTFLLHAAL
SYTPVEVKESDEKTKRDINRFLSVASLQGLIHEGTMTSLCMAMTEEQHKSVVIDCSSSQPQFCNAGSNRFCEDWM
QAFLNGAKGGNPFFFRQVLENFKLKAIQDTNNLKRFIRQAEMNHYALFKCYMFLKNCGSGDTFEDC

FIGURE 1192A

AGGGGGCGGGAGGGCGTGGGGGGAGGGTCTCGCTCTCCCGACTACCAGAGCCCGAGGGAGACCCTGGCGGCGGCG
GCGGCGCCTGACACTCGGCGCCTCCTGCCGTGCTCCGGGGCGGCATGTCCGAGGCTGGCGGGGCCGGGCCGGGCG
GCTGCGGGGCAGGAGCCGGGGCAGGGGCCGGGCCCGGGGCGCTGCCCCCGCAGCCTGCGGCGCTTCCGCCCGCGC
CCCCGCAGGGCTCCCCCTGCGCCGCTGCCGCCGGGGGCTCGGGCGCCTGCGGTCCGGCGACGGCAGTGGCTGCAG
CGGGCACGGCCGAAGGACCGGGAGGCGGTGGCTCGGCCCGAATCGCCGTGAAGAAAGCGCAACTACGCTCCGCTC
CGCGGGGCCAAGAAACTGGAGAAACTCGGAGTGTACTCCGCCTGCAAGGCCGAGGAGTCTTGTAAATGTAATGGC
TGGAAAAACCCTAACCCCTCACCCACTCCCCCCAGAGCCGACCTGCAGCAAATAATTGTCAGTCTAACAGAATCC
TGTCGGAGTTGTAGCCATGCCCTAGCTGCTCATGTTTCCCACCTGGAGAATGTGTCAGAGGAAGAAATGAACAGA
CTCCTGGGAATAGTATTGGATGTGGAATATCTCTTTACCTGTGTCCACAAGGAAGAAGATGCAGATACCAAACAA
GTTTATTTCTATCTATTTAAGCTTTTGAGAAAGTCTATTTTACAAAGAGGAAAACCTGTGGTTGAAGGCTCTTTG
GAAAAGAAACCCCCATTTGAAAAACCTAGCATTGAACAGGGTGTGAATAACTTTGTGCAGTACAAATTTAGTCAC
CTGCCAGCAAAAGAAAGGCAAACAATAGTTGAGTTGGCAAAAATGTTCCTAAACCGCATCAACTATTGGCATCTG
GAGGCACCATCTCAACGAAGACTGCGATCTCCCAATGATGATATTTCTGGATACAAAGAGAACTACACAAGGTGG
CTGTGTTACTGCAACGTGCCACAGTTCTGCGACAGTCTACCTCGGTACGAAACCACACAGGTGTTTGGGAGAACA
TTGCTTCGCTCGGTCTTCACTGTTATGAGGCGACAACTCCTGGAACAAGCAAGACAGGAAAAAGATAAACTGCCT
CTTGAAAAACGAACTCTAATCCTCACTCATTTCCCAAAATTTCTGTCCATGCTAGAAGAAGAAGTATATAGTCAA
AACTCTCCCATCTGGGATCAGGATTTTCTCTCAGCCTCTTCCAGAACCAGCCAGCTAGGCATCCAAAACAGTTAT
CAATCCACCTCCTGTGGCTGGGACAATTTCATACAATTCAACCTCATCTTCCCTTGAGCAGCCAAACGCAGGGAG
CAGCAGTCCTGCCTGCAAAGCCTCTTCTGGACTTGAGGCAAACCCAGGAGAAAAGAGGAAAATGACTGATTCTCA
TGTTCTGGAGGAGGCCAAGAAACCCCGAGTTATGGGGGATATTCCGATGGAATTAATCAACGAGGTTATGTCTAC
CATCACGGACCCTGCAGCAATGCTTGGACCAGAGACCAATTTTCTGTCAGCACACTCGGCCAGGGATGAGGCGGC
AAGGTTGGAAGAGCGCAGGGGTGTAATTGAATTTCACGTGGTTGGCAATTCCCTCAACCAGAAACCAAACAAGAA
GATCCTGATGTGGCTGGTTGGCCTACAGAACGTTTTCTCCCACCAGCTGCCCCGAATGCCAAAAGAATACATCAC
ACGGCTCGTCTTTGACCCGAAACACAAAACCCTTGCTTTAATTAAAGATGGCCGTGTTATTGGTGGTATCTGTTT
CCGTATGTTCCCATCTCAAGGATTCACAGAGATTGTCTTCTGTGCTGTAACCTCAAATGAGCAAGTCAAGGGCTA
TGGAACACACCTGATGAATCATTTGAAAGAATATCACATAAAGCATGACATCCTGAACTTCCTCACATATGCAGA
TGAATATGCAATTGGATACTTTAAGAAACAGGGTTTCTCCAAAGAAATTAAAATACCTAAAACCAAATATGTTGG
CTATATCAAGGATTATGAAGGAGCCACTTTAATGGGATGTGAGCTAAATCCACGGATCCCGTACACAGAATTTTC
TGTCATCATTAAAAAGCAGAAGGAGATAATTAAAAAACTGATTGAAAGAAAACAGGCACAAATTCGAAAAGTTTA
CCCTGGACTTTCATGTTTTAAAGATGGAGTTCGACAGATTCCTATAGAAAGCATTCCTGGAATTAGAGAGACAGG
CTGGAAACCGAGTGGAAAAGAGAAAAGTAAAGAGCCCAGAGACCCTGACCAGCTTTACAGCACGCTCAAGAGCAT
CCTCCAGCAGGTGAAGAGCCATCAAAGCGCTTGGCCCTTCATGGAACCTGTGAAGAGAACAGAAGCTCCAGGATA
TTATGAAGTTATAAGGTTCCCCATGGATCTGAAAACCATGAGTGAACGCCTCAAGAATAGGTACTACGTGTCTAA
GAAATTATTCATGGCAGACTTACAGCGAGTCTTTACCAATTGCAAAGAGTACAACCCCCCTGAGAGTGAATACTA
CAAATGTGCCAATATCCTGGAGAAATTCTTCTTCAGTAAAATTAAGGAAGCTGGATTAATTGACAAGTGATTTTT
TTTCCCCTCTGCTTCTTAGAAACTCACCAAGCAGTGTGCCTAAAGCAAGGTGGTTTAGTTTTTTACAAAGAATTG
GACATGATGTATTGAAGAGACTTGTAAATGTAATAATTAGCACTTTTGAAAAAACAAAAAACCTCCTTTTAGCTT
TTCAGATATGTATTTAAATTGAAGTCATAGGACATTTTTATTTTATGGAATAGATTTTAATCTATTTACTACTAT
TAAGGTAAATTTTCTATGGCATGTCCATTAGCTATTTCATGATAGATGATTAGGGGTTTCCTCAAAACCTGTGTG
TGAGGAAATTGCACACAGTAGCAAAATTTGGGGAAATCCATAACATTTTCAGACCATGAATGAATGTTTCCATTT
TTTTCTAATGGAATGTGAGAGTTTACTTTTATTTTATTCTGAAGGACTTTAAGGAAGGGATACATGATTTTAAAA
AAGCCTGTAAGAGGTGAAATATGTGATGTTTGAAGTCTCTTTATAGACTTTTTATATATATTTTTTAAAACACTC
ATCTAGATGAGGTGCTTTGAGCAGTTCTGAAAAATGCAGTTCCAGGAAAGCAACTGCTTTGGTTCCTAAGGAAGA
AATTCTAAATAATGCAAACTTTTAAAATAAGCATCTAGGTTTTTGATAATTCTGTCTACTTACAACAAACTTGTT
AGTACATAACCACTATTTTAATAATTATTTTCTCTACACAAATGTGTAATATCATATTTGACTTTGCTTATGCAG
GCCATAAGTTCCAAAAGATAATTTCCCTGCCCACAAAGGCATAAACTTGAAAACACATGAGATTGAATCAACATG
CTTTAATAGGAAAAGATGTATGGTCTATATATGTATCAATCTGGTGAATCCTCGTTCTAATAAAGGTTCTTTTTC
TTTTCTATGATACACACAGCCACGCTGATAATATGCAAATGAACATTTTCCTTTATGTCTCTCCAGATAATGTTT

FIGURE 1192B

ATTGTCTGAGGTAAATTAAATTCCCACCAGGGTTTGCTGTCAGTATTTTAACACCCACATTAGTATATGCGTCCA
GGGTCATAACCCCCTAAAATCCATCATGCAACCTTATTAATCTGTCTTGGGATTCCAGTTTAGTGCTTGGATTTA
TTTCCTGATTACACTACATAGAAAAGTGAGACATCTGCCATTCCCAACTCTGGGAAAACCAACTAATATACAACC
ATATAAATGAAGGCCATCTTGATGGTCTCAACACTAATTTTTATGATGCAAATTTATACACTGATTTTTGTAAAG
GACAAAGTTTTAAAAGCGTATTTAACTTGATGTTTTCTATCAGCATAAATAAAATGGTCATGAATAGTCATTAAA
AACAGTTGCCAGTGATAATCTGCATGAAGGAAAAAGAACCCTGCAAATGGCTATTGAGTTGGAAGTATTGTTTTT
GATATGTAAGAGATATTCAGAATGCTCACACTGAAAATGCCTCAACTTTTTAAAGTGTAAGAAACCACCATGAGT
GGTGTCTAGATTTCTAATGAAGAATCATGATACAGTTTGGATTAAGTATCTTGGACTGGTTTTAAACAGTGCTTT
GTACCGGATCTGCTGAAGCATCTGTCCAGCTGGTATCCTGTGAAAGTTTGTTATTTTCTGAGTAGACATTCTTAT
AGAGTATTGTCTTTAAAATCAGATTGTCTCTTCTATATTGAAAGCATTTTTATGTTTTCTAATTTAAAAATTAAT
ATTTTCTTATAGATATTGTGCAATAAAGCTGAAGTAGAATGTGTGGTTTTTGCAAATGCTTTAACAGCTGATAAA
AATTTTACATTTGTAAAATTAATATATTGTACTGGTACAAAATAGTTTTAAATTATATTTTAAAAAGCTTCCAAA
AA

FIGURE 1193

GGGRAWGEGLALPTTRARGRPWRRRRRLTLGASCRAPGRHVRGWRGRAGRLRGRSRGRGRARGAAPAACGASARA
PAGLPLRRCRRGLGRLRSGDGSGCSGHGRRTGRRWLGPNRRERKRNYAPLRGAKKLEKLGVYSACKAEESCKCNG
WKNPNPSPTPPRADLQQIIVSLTESCRSCSHALAAHVSHLENVSEEEMNRLLGIVLDVEYLFTCVHKEEDADTKQ
VYFYLFKLLRKSILQRGKPVVEGSLEKKPPFEKPSIEQGVNNFVQYKFSHLPAKERQTIVELAKMFLNRINYWHL
EAPSQRRLRSPNDDISGYKENYTRWLCYCNVPQFCDSLPRYETTQVFGRTLLRSVFTVMRRQLLEQARQEKDKLP
LEKRTLILTHFPKFLSMLEEEVYSQNSPIWDQDFLSASSRTSQLGIQNSYQSTSCGWDNFIQFNLIFPEQPNAGS
SSPACKASSGLEANPGEKRKMTDSHVLEEAKKPRVMGDIPMELINEVMSTITDPAAMLGPETNFLSAHSARDEAA
RLEERRGVIEFHVVGNSLNQKPNKKILMWLVGLQNVFSHQLPRMPKEYITRLVFDPKHKTLALIKDGRVIGGICF
RMFPSQGFTEIVFCAVTSNEQVKGYGTHLMNHLKEYHIKHDILNFLTYADEYAIGYFKKQGFSKEIKIPKTKYVG
YIKDYEGATLMGCELNPRIPYTEFSVIIKKQKEIIKKLIERKQAQIRKVYPGLSCFKDGVRQIPIESIPGIRETG
WKPSGKEKSKEPRDPDQLYSTLKSILQQVKSHQSAWPFMEPVKRTEAPGYYEVIRFPMDLKTMSERLKNRYYVSK
KLFMADLQRVFTNCKEYNPPESEYYKCANILEKFFFSKIKEAGLIDK

FIGURE 1194A

ATGAGCGGCGGCGGCGACGTGGTGTGCACCGGCTGGCTGAGGAAATCGCCTCCCGAGAAGAAGTTGAGGCGCTAT
GCCTGGAAGAAACGCTGGTTTATCCTGCGGAGTGGCCGGATGAGCGGTGACCCAGATGTTCTGGAATACTACAAG
AACGATCACTCCAAGAAGCCTCTGCGGATCATCAACCTGAACTTCTGTGAGCAGGTAGATGCAGGCCTGACCTTT
AACAAGAAGGAGCTGCAGGATAGTTTTGTGTTTGACATCAAGACCAGTGAACGCACCTTTTACCTGGTGGCTGAG
ACAGAAGAGGACATGAATAAGTGGGTCCAGAGCATCTGCCAGATCTGTGGCTTCAATCAGGCTGAGGAGAGCACA
GACTCCCTGAGAAATGTTTCCTCAGCCGGTCATGGCCCCCGCTCTTCTCCAGCTGAGCTCAGCAGCTCTAGCCAG
CACCTTCTCCGAGAGCGCAAGTCCTCAGCCCCATCACACTCCAGCCAGCCAACTCTGTTCACGTTTGAACCCCCT
GTGTCAAACCACATGCAGCCCACCTTGTCCACCAGCGCACCTCAGGAGTATCTCTACTTGCACCAGTGCATAAGC
CGAAGAGCAGAAAATGCAAGGAGTGCCAGCTTCTCTCAGGGCACCAGAGCCTCTTTTCTCATGAGGAGTGACACA
GCTGTACAAAAACTTGCCCAGGGCAATGGACACTGTGTCAACGGGATCAGTGGTCAAGTCCATGGCTTCTATAGC
CTTCCCAAGCCGAGCCGGCACAATACAGAATTCAGAGACAGTACCTACGACCTCCCCCGCAGCCTGGCCTCCCAT
GGCCACACCAAGGGCAGCCTCACAGGCTCCGAGACAGATAATGAGGATGTGTACACCTTCAAGACGCCCAGCAAC
ACCCTGTGCAGGGAGTTCGGGGACCTCCTGGTAGACAATATGGATGTTCCGGCCACCCCACTCTCAGCCTACCAG
ATCCCTAGGACATTCACTCTGGACAAAAACCACAATGCCATGACAGTGGCCACTCCTGGGGACTCAGCCATAGCT
CCCCCACCCCGCCCCCCCAAGCCAAGTCAGGCAGAAACACCTCGATGGGGCAGTCCTCAGCAGAGACCGCCAATC
AGTGAAAATAGCAGATCTGTCGCTGCCACCATCCCCAGACGCAACACCCTCCCTGCAATGGACAACAGCCGACTT
CACCGAGCTTCTTCCTGTGAGACCTACGAGTACCCACAGCGTGGTGGAGAGAGTGCAGGCCGGTCTGCTGAATCC
ATGAGTGATGGAGTTGGCTCTTTCCTGCCAGGGAAAATGATTGTGGGCCGATCGGACAGCACCAATTCTGAAGAC
AACTATGTGCCCATGAATCCAGGTTCTTCCACCCTGTTGGCCATGGAACGAGCAGGTGATAATTCCCAGAGCGTC
TACATCCCAATGAGCCCAGGGGCCCATCACTTTGACTCACTTGGCTACCCATCAACAACCCTTCCTGTGCACCGA
GGCCCCAGCAGAGGAAGTGAGATTCAGCCACCCCCTGTCAACCGCAACCTCAAACCTGATCGGAAAGCAAAGCCA
ACACCACTTGACCTGAGGAACAACACCGTCATCGATGAACTCCCCTTCAAGTCACCTATCACCAAGTCTTGGTCT
AGGGCCAACCACACCTTCAACTCCAGCTCCTCCCAGTACTGCCGCCCCATCTCCACCCAGAGCATCACCAGCACA
GACTCAGGAGACAGCGAAGAGAACTATGTCCCTATGCAAAACCCAGTGTCTGCATCTCCCGTTCCCAGTGGCACG
AACAGTCCTGCCCCTAAGAAGAGCACCGGCAGCGTTGATTATCTGGCCCTGGACTTCCAGCCGAGCTCCCCAAGC
CCCCACCGCAAGCCATCTACTTCATCCGTCACCTCTGATGAGAAGGTGGACTACGTTCAGGTGGACAAGGAGAAG
ACCCAGGCCCTGCAGAACACCATGCAGGAGTGGACAGACGTGCGGCAGTCCTCAGAGCCTTCCAAGGGTGCCAAG
CTGTGATGAGAGGGCCACCGCAGAGCCCAGGAGGCAGCATCTCCAGAGCTGGCCCTTCCCATCTCCCCTCTCCCC
TCTCCCGTTCTTCCTCCCATCCACCTCCTCTCTACTCTGCCAGTCTCAGCCTTCAAAGCACTTGACATCAGGGAC
CCTGAACCCTTCCCCTGGGAGGTGAGGGCCTGATCAAGGCACCTCCTCTGCCCACTCGGGGCCCAGCTGTGATTT
TTATCAGTAATGGCCATGCCTCCACCCACCTTAGTTAGGAGCTACTTCCAAAAAGCATCCTTCAGCCTCTTCCTG
TCCTTTAGACCTGACTCTCTACCAGATGTTTGGAGGGAAGGGCTGGGGCTCTGAGCCAGATTCCACACCTCACGT
TCAGTCACAGCCCTCAGCTATCTTCCCTCCGGCCACTGGGCTACCTCTCCTTCAGTCCCAGAAGACAAGTCTCAC
CAACCCAGGGAGTCAAGGACCAGCAAACCAAAGTGGATAATGGACTTTTTCATTCCTGTTTTTCTTGGCAGGAGA
GAAGCAAGGCCACTAAAAGAGGAGATGGTGGAGACGGAGGCTCAGCAGTGGTCTTGAGGGGTAAAGGACTTAGAT
GCCCAGATGAAGAGGGAAAGCTGACATCTGCAGGGAACCCACTTTGAGGCTGAGGCCATGGCAGGACAGCTGCTG
TGGGGTGCAGAGGCAGAAGATGAAGGACAAAAGGAAGGGAAAACTGATGGCCAACCTAGAGCAGCAAGGAGCAGG
GCTTGGAGCTCGGGTGGTGGAGATGACAAGGACACTGTGGGGTCTGGGTCCCCAGAACTCTGGAGCTACAGGCCA
CTCTAGGCCCAAGGGCTAGTCCTCTTCCCCAGTCCCCTCAGAGGCCCCCGCCAGCCCCACCTTGAAAGCAGCATA
CAGGGGAAGGCTTGGACCAAGCTGGGCGACCAAGCACATGGGGCAGGAACACATGGTAAAGGGGTGGGGAATATG
GGAGGGAGTGTGGTGTGGATGGGGGTGATGCAGGGACTGAGGGGAACCCTGGGACAGGCACAGGCTGGGCAGAGG
CACAGGGCAGTGCAGGGGACTCTGCAGTGGGGTCGGGAAGTGAGTTTCTTTGCAGTGAGCAGTGCAGTGGAAGTC
GGGCACAGAGGTAGCAGACAGATGTGAAGCAGTGGTGAAGGCCATGTAGCAAGTGGGGAAATACATCCAAAGGGC
CTGGGAGTTGGGGGGTGCCCAACGCAATCCTTGGGGGTGCAGGGTGGAGCAGAAAGTGAAGGAGGGACACGTGCA
AGAGTGGTGTGCATGGTGGTGTGACATGAGGACCGTTCCTAGGATGGGACAGTGGGTCAGGCAGGACAAGGAGAA
AGCAGGGCAGAATGATGCCTAGAGGACCACATCAGGCATGGCTGACAGCTTGTGCCCATGGGCTGTGGCGTATGT
CAGATCGCAGGGTAGGAACGAGTCTGGCCTGGTGCCGGCCCAGTGTTTCCTCAGCTCATCCGCCCTCTGTTGCTC
CCTAGCATTCCAGGAGCCATCTTGGACTCTCCTCCCCAGGTTTGAAAGGCCATCAGATTAGCAGGGACGGGGTGT

FIGURE 1194B

AGGGCATCACCCAAGGTTCCTTCTCTTAAACTAAGGGTGGGGGATCTGAATGTTTTTATGTTGACTGTTCTTGAC
TAAATTTTCAAGAGTTTCAGAAGCAACAGGACAGACCAGACGTTTCATTCTACCCTGGGGCGAACAGAACTTCTT
CCTCCCAAACAATGACTTCCTGCCATGTTTGATGGGGACAGCTACCACTGTCCTCTGCCCCCATTCCCCTTTCAG
CTCCCATGAGCATGCATAGTTCACCAGACCAATGGCCTAGCCATTCTCTAAGTCCCATCCTGGAAGAAGTTATTT
CTTCAAGAGCTGCACCTCTCCTCCTAGCATTAGTTTAGATCAACTCAAGGAGTATTTATTAATGGCTGCTGTCTC
CAGTTTCTGGGGTTAAGCACTAAGGACACAAGAATCAATCAGACCTTCTCCCTGAACTTAAGATAGCCACAATCA
GAAAAAGGACAAGGACATGAGACAGTGGTGATGGCCATCAGACAGAGACTTCAAATGCTGATGGAGGGCAGAGGA
AGTACTTAGGGAGGTTGGTGTCAGAGGCAGGAGTGGGGGATCAGGGAAGGTGGATTCTAGGAAAAGGGAGTGCCT
GAGGTAGGCCTTAGAAGGGGATGAGTCAGATTTTTACAGAGGAGGAGGGCAGGGCTTGGGTCCAGTGGAGGAAGA
AGGAAGGAGAGGCTTGGAAAGCCTTGTGTCTTGGGAAAAAAAGGCCTTTGAGCATATGGGTCCAGCCACTCAGAA
GTGCAGGGGCCATGCCTTGGTGTTCCAATAAGTGAATGGAAGCAGTGGTGGTAGCTACACTGGGCAGAGTTGGCA
GGGTGCTGGTTCACTCTGCCCAGCCCTGAATGTGTGCCTTAAAGGCCCCCTACAAGGGGCCCCATACGACAGAGC
TTTTAACTGGTGCCTTCCCTGTACCCGCAGCAGCCACAAGTGGGCCCAGACTATTGCAGCCTCCCATAAACATGT
GAGCATGTTCTGAGTGTGCCATGATGTGAGTGGACCTGGCTGGAATCTTCGGAGAGCGACTGAGGTGTTCAAATC
GAATCTCCCAGGAGGCTTCCTTCCAGCCCCCTATTCTGGTAACTACCAGGAGGCTTCCTTCCAGCCCCCTATTCT
GGTAACTACCAAAATCCCTCGGGTGCAAGTGTAGGGGTAGAGATGGAAGGATGAGAGGTGAAATTGACCTTTTGA
AAGCAAAGCTCTGGCTCACAGGCCCCAAACTACCAGCCGTATCTAGCATATCCCCACCCTCCACCCACTACCTCC
TCCAACAAAGGAGTCAACTCAGTTGAAAAAACTGGTCCTTTGGCCTATCCATGGGTCAAAGTCCACCTCTCCTGG
GGGCCTGGAGAGGACTGAGCCTACGGAAAGGGGATACCTTCCCACTCAGCACTGCTTCACACAGGCCCCCTGCCT
GGGGCTCTCCAAGGAGCCTTCTTCACCCACTTCCAGCTCCACTTCTGCAAGGTTAAGTCAAGTGAGAACGATGAG
AAATAGGGAGATGGTGTCTCCTTAAGTCCTTGATCTGCCTGTCTGTGGAATGGGAGGTTGGATTAGCTGCGCTGA
GGTCCCATCCACAGCTGGTGCTCAGCTGCTTGAAGGGGAGACTCCCTCCTCTGTAACTTCTTTCTGGGGGATTGG
GGTGGGCAGTACCTATCCCCAGTCCCCTCCTAGCTTGACTTTAGTGGTTTCCAATGTAGAAGTTAACAAAGTATG
CCCCATTCCTGTGACAAAAGCACAACCATTCTGAAGTTACTGGAGCATGGGCTCAGCTCATCCTCCCTCTGGCCC
CTTCTCCCATGGGGACATCTCGGCCCAGCACCCCTATCCCATTTCCAGAGTTCTTCCTTCCCCATCTGGGCCTTC
ATAAAATGCAGGGGAAGCCAGACTGGTCTCAGGAGCGCTAAAGCCCTTCCGTGGGGGGTCGTCTTTCTGGGACTA
GCCCTGCTGTTTAGGACCTGGGACCACAATGGGGTACCTGCCGAGGGGGTCCCCAAGAGATCCAGGCTGTCATGT
GATTTATGGTGGCATGTGTTGTGTATTTGTTGGCTACTTGTGTCTTGAAATCTAGAATTATTTCACGCAGAATTG
TCACTGTTTGTCAGGAAGAGAAAATGGGCTAGTGGAAGCCCAGTCTTGAGTTCTTGTCTTGTTACCATTTAAAAT
TGACATTTAATTTTCAAATCACTGTTGGTGCCTAATCACTTAAGTTATTAATTTATTCTGTTGTATTCTTTTTTT
TAAATTGTAACATATTTATCCGGTGGGTGGGACAGGAGTGTGTTCAAGTGGGTCATGTTTTTGCTGTGGTGACAC
ATGGTACAGGCTTGGAGCTTGCAGGTCCCTTTCTACTGTGGTGTTGGAGCAGGACAATAAAGTCCACTAGAAATG
CACCCCA

FIGURE 1195

MSGGGDVVCTGWLRKSPPEKKLRRYAWKKRWFILRSGRMSGDPDVLEYYKNDHSKKPLRIINLNFCEQVDAGLTF
NKKELQDSFVFDIKTSERTFYLVAETEEDMNKWVQSICQICGFNQAEESTDSLRNVSSAGHGPRSSPAELSSSSQ
HLLRERKSSAPSHSSQPTLFTFEPPVSNHMQPTLSTSAPQEYLYLHQCISRRAENARSASFSQGTRASFLMRSDT
AVQKLAQGNGHCVNGISGQVHGFYSLPKPSRHNTEFRDSTYDLPRSLASHGHTKGSLTGSETDNEDVYTFKTPSN
TLCREFGDLLVDNMDVPATPLSAYQIPRTFTLDKNHNAMTVATPGDSAIAPPPRPPKPSQAETPRWGSPQQRPPI
SENSRSVAATIPRRNTLPAMDNSRLHRASSCETYEYPQRGGESAGRSAESMSDGVGSFLPGKMIVGRSDSTNSED
NYVPMNPGSSTLLAMERAGDNSQSVYIPMSPGAHHFDSLGYPSTTLPVHRGPSRGSEIQPPPVNRNLKPDRKAKP
TPLDLRNNTVIDELPFKSPITKSWSRANHTFNSSSSQYCRPISTQSITSTDSGDSEENYVPMQNPVSASPVPSGT
NSPAPKKSTGSVDYLALDFQPSSPSPHRKPSTSSVTSDEKVDYVQVDKEKTQALQNTMQEWTDVRQSSEPSKGAK
L

FIGURE 1196A

GCGGCGGCGGCGGCGGCGGCGGCAGCGGCGGCCAAGCGGCCAGGTTGGCGGCCGGGGCTCCGGGCCGCGCGAGGC
CACGGCCACGCCGCGCCGCTGCGCACAACCAACGAGGCAGAGCGCCGCCCGGCGCGAGACTGCGGCCGAAGCGTG
GGGCGCGCGTGCGGAGGACCAGGCGCGGCGCGGCTGCGGCTGAGAGTGGAGCCTTTCAGGCTGGCATGGAGAGCT
TAAGGGGCAACTGAAGGAGACACACTGGCCAAGCGCGGAGTTCTGCTTACTTCAGTCCTGCTGAGATACTCTCTC
AGTCCGCTCGCACCGAAGGAAGCTGCCTTGGGATCAGAGCAGACATAAAGCTAGAAAAATTTCAAGACAGAAACA
GTCTCCGCCAGTCAAGAAACCCTCAAAAGTATTTTGCC**ATG**GATATAGAAGATGAAGAAAACATGAGTTCCAGCA
GCACTGATGTGAAGGAAAACCGCAATCTGGACAACGTGTCCCCCAAGGATGGCAGCACACCTGGGCCTGGCGAGG
GCTCTCAGCTCTCCAATGGGGGTGGTGGTGGCCCCGGCAGAAAGCGGCCCCTGGAGGAGGGCAGCAATGGCCACT
CCAAGTACCGCCTGAAGAAAAGGAGGAAAACACCAGGGCCCGTCCTCCCCAAGAACGCCCTGATGCAGCTGAATG
AGATCAAGCCTGGTTTGCAGTACACACTCCTGTCCCAGACTGGGCCCGTGCACGCGCCTTTGTTTGTCATGTCTG
TGGAGGTGAATGGCCAGGTTTTTGAGGGCTCTGGTCCCACAAAGAAAAAGGCAAAACTCCATGCTGCTGAGAAGG
CCTTGAGGTCTTTCGTTCAGTTTCCTAATGCCTCTGAGGCCCACCTGGCCATGGGGAGGACCCTGTCTGTCAACA
CGGACTTCACATCTGACCAGGCCGACTTCCCTGACACGCTCTTCAATGGTTTTGAAACTCCTGACAAGGCGGAGC
CTCCCTTTTACGTGGGCTCCAATGGGGATGACTCCTTCAGTTCCAGCGGGGACCTCAGCTTGTCTGCTTCCCCGG
TGCCTGCCAGCCTAGCCCAGCCTCCTCTCCCTGTCTTACCACCATTCCCACCCCCGAGTGGGAAGAATCCCGTGA
TGATCTTGAACGAACTGCGCCCAGGACTCAAGTATGACTTCCTCTCCGAGAGCGGGGAGAGCCATGCCAAGAGCT
TCGTCATGTCTGTGGTCGTGGATGGTCAGTTCTTTGAAGGCTCGGGGAGAAACAAGAAGCTTGCCAAGGCCCGGG
CTGCGCAGTCTGCCCTGGCCGCCATTTTTAACTTGCACTTGGATCAGACGCCATCTCGCCAGCCTATTCCCAGTG
AGGGTCTTCAGCTGCATTTACCGCAGGTTTTAGCTGACGCTGTCTCACGCCTGGTCCTGGGTAAGTTTGGTGACC
TGACCGACAACTTCTCCTCCCCTCACGCTCGCAGAAAAGTGCTGGCTGGAGTCGTCATGACAACAGGCACAGATG
TTAAAGATGCCAAGGTGATAAGTGTTTCTACAGGAACAAAATGTATTAATGGTGAATACATGAGTGATCGTGGCC
TTGCATTAAATGACTGCCATGCAGAAATAATATCTCGGAGATCCTTGCTCAGATTTCTTTATACACAACTTGAGC
TTTACTTAAATAACAAAGATGATCAAAAAAGATCCATCTTTCAGAAATCAGAGCGAGGGGGGTTTAGGCTGAAGG
AGAATGTCCAGTTTCATCTGTACATCAGCACCTCTCCCTGTGGAGATGCCAGAATCTTCTCACCACATGAGCCAA
TCCTGGAAGGGTCTCGCTCTTACACCCAGGCTGGAGTGCAGTGGTGCAATCATGGCTCACTGCAGCCTCGACCTC
CTGGGCTCTTAAGCGATCCTTCCACCTCAACCTTCCAAGGAGCTGGGACTACAGAACCAGCAGATAGACACCCAA
ATCGTAAAGCAAGAGGACAGCTACGGACCAAAATAGAGTCTGGTGAGGGGACGATTCCAGTGCGCTCCAATGCGA
GCATCCAAACGTGGGACGGGGTGCTGCAAGGGGAGCGGCTGCTCACCATGTCCTGCAGTGACAAGATTGCACGCT
GGAACGTGGTGGGCATCCAGGGATCCCTGCTCAGCATTTTCGTGGAGCCCATTTACTTCTCGAGCATCATCCTGG
GCAGCCTTTACCACGGGGACCACCTTTCCAGGGCCATGTACCAGCGGATCTCCAACATAGAGGACCTGCCACCTC
TCTACACCCTCAACAAGCCTTTGCTCAGTGGCATCAGCAATGCAGAAGCACGGCAGCCAGGGAAGGCCCCCAACT
TCAGTGTCAACTGGACGGTAGGCGACTCCGCTATTGAGGTCATCAACGCCACGACTGGGAAGGATGAGCTGGGCC
GCGCGTCCCGCCTGTGTAAGCACGCGTTGTACTGTCGCTGGATGCGTGTGCACGGCAAGGTTCCCTCCCACTTAC
TACGCTCCAAGATTACCAAGCCCAACGTGTACCATGAGTCCAAGCTGGCGGCAAAGGAGTACCAGGCCGCCAAGG
CGCGTCTGTTCACAGCCTTCATCAAGGCGGGGCTGGGGGCCTGGGTGGAGAAGCCCACCGAGCAGGACCAGTTCT
CACTCACGCCC**TGA**CCCGGGCAGACATGATGGGGGGTGCAGGGGGCTGTGGGCATCCAGCGTCATCCTCCAGAAC
CTCACATCTGAACTGGGGGCAGGTGCATACCTTGGGGAGGGAGTAGGGGGACACGGGGGACCACCAGGTGTCCAC
GGTTGTCCCCAGCATCTCACATCAGACCTGGGGCAGGTGCGCAGTGTGGGGAGGGGATGGGGTGCGTCAGGGCCC
AGCATCGCCGCCTGGCATCTCTCTGCCGCAGCATTTCCCCTTCTGAACCGTCCAGTGACTGCTTTCAATCTCGGT
TTACGTTTAGAAATTGAGTTCTACTGAGTAGGGCTTCCTTAAGTTTAGGAAAATAGAAATTACTTTGTGTGAAAT
TCTTGAATAAATAATTTATTCAGAGCTAGGAATGTGGTTTATAAAATAGGAAGTAATTGTGTCAGGTCACTTTTA
TGCCACATTATTTTAATTGCAAAAAAGCATCTATATATGGAGGAGGGTGGGAAAATAGAGGTAGGAAATAGTAGC
CTAAAGGAAATCGCCACACGTCTGTCTAAACTTAGGTCTCTTTTCTCCGTAGGTACCTCCCTGGGTAGTTCCACA
CACTAGGTTGTAACAGTCTCTCCCTGAGGAGCAGACTCCCAGCATGGTGTAGCGTGGCCCTGTCATGCACATGGG
GTCCCGCAGCAGTGACTGTGTGTCCTGCAGAGGCGTGACCCAGGCCCCTGTAGCCCTCAGCCTCCTCTAGAAGCT
TCTGTACTCCTTGTAGGATCAGATCATGGAAAACTTTTCTCAGTTTACTTCTAAGTAATCACAGATAATACATGG
CCAGTAATCCCAGGCTGGCCATTCATTCAGGTTTTTTAAAGGATATTTAACTTTTATGGACTAGAAGGAATCACG
AGGGCTACTGCACAATACATGGCCTAAGTTCCCTCTGTTCCTTCCTCTGAATCGAATGGATGTGGGTGACCGCCC

FIGURE 1196B

GAAGGCCTTCACAGGATGGAAGTAGAATGATTTCAGTAGATACTCATTCTTGGAAAATGCCATAGTTTTAAATTA
TTGTTTCCAGCTTTATCAAAGACATGTTTGAAAAATAAAAAGCATCCAAGTGAGAGCTGGTGAGACCACGTGCTG
CTGGCGTAGTGTAGGCCAGACATTGACAGTCCTGACGGGAGCTCAGGGCTGCCCAGCGCCCAGCGTGCACGGGAC
GGCCCCACGACAGAGGGAGTCAGCCCGGGAGGTCAGGAGCGCGGCGGGCGAGGGCCCTGTGTGGACCACCTCCAC
CAAGCTCAGAGATTTGCAACCAGGTGCCTTGTTGCCTCCGCTCAGGATGAAAGAGGAGCTGAGAGAAGTGCTCTG
CCTGCCAGTGCAGTGCCCAGCTCCAAGGCTCTAGAGGGTGTTCAGGTACACTGAGGAGGGGACGGCTCCGTCTTC
ACATTGTGCACAGATCTGAGGATGGGATTAGCGAAGCTGTGGAGACTGCACATCCGGACCTGCCCATGTCTCAAA
ACAAACACATGTACAGTGGCTCTTTTTCCTTCTCAAACACTTTACCCCAGAAGCAGGTGGTCTGCCCCAGGCATA
AAGAAGGAAAATTGGCCATCTTTCCCACCTCTAAATTCTGTAAAATTATAGACTTGCTCAAAAGATTCCTTTTTA
TCATCCCCACGCTGTGTAAGTGGAAAGGGCATTGTGTTCCGTGTGTGTCCAGTTTACAGCGTCTCTGCCCCCTAG
CGTGTTTTGTGACAATCTCCCCTGGGTGAGGAGTGGGTGCACCCAGCCCCGAGGCCAGTGGTTGCTCGGGGCCTT
CCGTGTGAGTTCTAGTGTTCACTTGATGCCGGGGAATAGAATTAGAGAAAACTCTGACCTGCCGGGTTCCAGGGA
CTGGTGGAGGTGGATGGCAGGTCCGACTCGACCATGACTTAGTTGTAAGGGTGTGTCGGCTTTTTCAGTCTCATG
TGAAAATCCTCCTGTCTCTGGCAGCACTGTCTGCACTTTCTTGTTTACTGTTTGAAGGGACGAGTACCAAGCCAC
AAGGAACACTTCTTTTGGCCACAGCATAAGCTGATGGTATGTAAGGAACCGATGGGCCATTAAACATGAACTGAA
CGGTTAAAAGCACAGTCTATGGAACGCTAATGGAGTCAGCCCCTAAAGCTGTTTGCTTTTTCAGGCTTTGGATTA
CATGCTTTTAATTTGATTTTAGAATCTGGACACTTTCTATGAATGTAATTCGGCTGAGAAACATGTTGCTGAGAT
GCAATCCTCAGTGTTCTCTGTATGTAAATCTGTGTATACACCACACGTTACAACTGCATGAGCTTCCTCTCGCAC
AAGACCAGCTGGAACTGAGCATGAGACGCTGTCAAATACAGACAAAGGATTTGAGATGTTCTCAATAAAAAGAAA
ATGTTTCACT

FIGURE 1197

MDIEDEENMSSSSTDVKENRNLDNVSPKDGSTPGPGEGSQLSNGGGGGPGRKRPLEEGSNGHSKYRLKKRRKTPG
PVLPKNALMQLNEIKPGLQYTLLSQTGPVHAPLFVMSVEVNGQVFEGSGPTKKKAKLHAAEKALRSFVQFPNASE
AHLAMGRTLSVNTDFTSDQADFPDTLFNGFETPDKAEPPFYVGSNGDDSFSSSGDLSLSASPVPASLAQPPLPVL
PPFPPPSGKNPVMILNELRPGLKYDFLSESGESHAKSFVMSVVVDGQFFEGSGRNKKLAKARAAQSALAAIFNLH
LDQTPSRQPIPSEGLQLHLPQVLADAVSRLVLGKFGDLTDNFSSPHARRKVLAGVVMTTGTDVKDAKVISVSTGT
KCINGEYMSDRGLALNDCHAEIISRRSLLRFLYTQLELYLNNKDDQKRSIFQKSERGGFRLKENVQFHLYISTSP
CGDARIFSPHEPILEGSRSYTQAGVQWCNHGSLQPRPPGLLSDPSTSTFQGAGTTEPADRHPNRKARGQLRTKIE
SGEGTIPVRSNASIQTWDGVLQGERLLTMSCSDKIARWNVVGIQGSLLSIFVEPIYFSSIILGSLYHGDHLSRAM
YQRISNIEDLPPLYTLNKPLLSGISNAEARQPGKAPNFSVNWTVGDSAIEVINATTGKDELGRASRLCKHALYCR
WMRVHGKVPSHLLRSKITKPNVYHESKLAAKEYQAAKARLFTAFIKAGLGAWVEKPTEQDQFSLTP

FIGURE 1198

CCGGAAGTGACTGCGGACGAATCGGCGTTTGCCGAGGCTGGCATAGATTTGGCTGTCTCCGCTCATAGCTGCTTT
TGGCGCGAAAGATGCCGGGTCTGGTTGACTCAAACCCTGCCCCGCCTGAGTCTCAGGAGAAGAAGCCGCTGAAGC
CCTGCTGCGCTTGCCCGGAGACCAAGAAGGCGCGCGATGCGTGTATCATCGAGAAAGGAGAAGAACACTGTGGAC
ATCTAATTGAGGCCCACAAGGAATGCATGAGAGCCCTAGGATTTAAAATATGAAATGGTGGTCTGCTGTGTGAAT
AAATAATTCCTGAAGAATGAAGAAGATTAATTTTGGGAGTTCTTTGACGAACTTTGATATGTGGAAAAAGTATTT
ATAATTTATTGTAAGAAGAAAGTAAAATATTACTAGTGGAAGATCTTC

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FIGURE 1199

MPGLVDSNPAPPESQEKKPLKPCCACPETKKARDACIIEKGEEHCGHLIEAHKECMRALGFKI

FIGURE 1200

CTGGGCCGGGGGCTGGAGAGTGACCGTGGTCTGAGTGACCTGGGGCGGCTGCGTGGGCCGGGGTGGGCCTCAAAG
CCGGGCACCAGACGGGAGGGGCGGCGCTCGGGCCGCGCGCTGCCCGCGCCGGGTCCTGGCGGGCGGCGAGGCTGG
GGCTGACTCCTGCCTCAGGATGCCGGGGGGAGGAAGAGGAGCGGGCCTTCCTGGTGGCCCGCGAGGAGCTGGCGAG
CGCCCTGAGGAGGGATTCCGGGCAGGCGTTTTCCCTGGAGCAGCTCCGGCCGCTACTAGCCAGCTCTCTGCCGCT
AGCCGCCCGCTACCTGCAGCTGGACGCCGCACGCCTTGTCCGCTGCAACGCTCATGGGGAGCCCCGAAACTACCT
CAACACCCTGTCCACGGCTCTGAACATCCTGGAGAAATACGGCCGCAACCTTCTCAGCCCTCAGCGGCCTCGGTA
CTGGCGTGGTGTCAAGTTTAATAACCCTGTCTTTCGCAGCACGGTGGATGCTGTGCAGGGGGGCCGAGATGTGCT
GCGATTATATGGCTACACAGAGGAGCAACCAGATGGGTTGAGCTTCCCCGAAGGGCAGGAGGAGCCAGATGAGCA
CCAGGTTGCTACAGTCACACTGGAAGTACTGCTGCTTCGGACAGAGCTCAGCCTGCTATTGCAGAATACTCATCC
AAGACAGCAGGCACTGGAGCAGCTGTTGGAAGACAAGGTTGAAGATGATATGCTGCAGCTTTCAGAATTTGACCC
CCTATTGAGAGAGATTGCTCCTGGCCCCCTCACCACACCCTCTGTCCCAGGCTCCACTCCTGGTCCCTGCTTCCT
CTGTGGTTCTGCCCCAGGCACACTGCACTGCCCATCCTGTAAACAGGCCCTGTGTCCAGCCTGTGACCACCTGTT
CCATGGACACCCATCCCGTGCTCATCACCTCCGCCAGACCCTGCCTGGGGTCCTGCAGGGTACCCACCTGAGCCC
CAGTTTACCTGCCTCAGCCCAACCACGGCCCCAGTCGACCTCCCTGCTGGCCCTGGGAGACAGCTCTCTTTCTTC
CCCTAATCCTGCAAGTGCTCATTTGCCCTGGCACTGTGCTGCCTGTGCCATGCTAAATGAGCCTTGGGCAGTGCT
CTGTGTGGCCTGTGATCGGCCCCGAGGCTGTAAGGGGTTGGGGTTGGGAACTGAGGGTCCCCAAGGAACTGGAGG
CCTAGAACCTGATCTTGCACGGGGTCGGTGGGCCTGCCAGAGCTGTACCTTTGAGAATGAGGCAGCTGCTGTGCT
ATGTTCCATATGTGAGCGACCTCGGCTGGCCCAGCCTCCCAGCTTGGTGGTGGATTCCCGAGATGCTGGCATTTG
CCTGCAACCCCTTCAGCAGGGGGATGCTTTGCTGGCCTCTGCCCAGAGTCAAGTCTGGTACTGTATTCACTGTAC
CTTCTGCAACTCGAGCCCTGGCTGGGTGTGTGTTATGTGCAACCGGACTAGTAGCCCCATTCCAGCACAACATGC
CCCCCGGCCCTATGCCAGCTCTTTGGAAAAGGGACCCCCCAAGCCTGGGCCCCCACGACGCCTTAGTGCCCCCCT
GCCCAGTTCCTGTGGAGATCCTGAGAAGCAGCGCCAAGACAAGATGCGGGAAGAAGGCCTCCAGCTAGTGAGCAT
GATCCGGGAAGGGGAAGCCGCAGGTGCCTGTCCAGAGGAGATCTTCTCGGCTCTGCAGTACTCGGGCACTGAGGT
GCCTCTGCAGTGGTTGCGCTCAGAACTGCCCTACGTCCTGGAGATGGTGGCTGAGCTGGCTGGACAGCAGGACCC
TGGGCTGGGTGCCTTTTCCTGTCAGGAGGCCCGGAGAGCCTGGCTGGATCGTCATGGCAACCTTGATGAAGCTGT
GGAGGAGTGTGTGAGGACCAGGCGAAGGAAGGTGCAGGAGCTCCAGTCTCTAGGCTTTGGGCCTGAGGAGGGGTC
TCTCCAGGCATTGTTCCAGCACGGAGGTGATGTGTCACGGGCCCTGACTGAGCTACAGCGCCAACGCCTAGAGCC
CTTCCGCCAGCGCCTCTGGGACAGTGGCCCTGAGCCCACCCCTTCCTGGGATGGGCCAGACAAGCAGAGCCTGGT
CAGGCGGCTTTTGGCAGTCTACGCACTCCCCAGCTGGGGCCGGGCAGAGCTGGCACTGTCACTGCTGCAGGAGAC
ACCCAGGAACTATGAGTTGGGGGATGTGGTAGAAGCTGTGAGGCACAGCCAGGACCGGGCCTTCCTGCGCCGCTT
GCTTGCCCAGGAGTGTGCCGTGTGTGGCTGGGCCCTGCCCCACAACCGGATGCAGGCCCTGACTTCCTGTGAGTG
CACCATCTGTCCTGACTGCTTCCGCCAGCACTTCACCATCGCCTTGAAGGAGAAGCACATCACAGACATGGTGTG
CCCTGCCTGTGGCCGCCCCGACCTCACCGATGACACACAGTTGCTCAGCTACTTCTCTACCCTTGACATCCAGCT
TCGCGAGAGCCTAGAGCCAGATGCCTATGCGTTGTTCCATAAGAAGCTGACCGAGGGTGTGCTGATGCGGGACCC
CAAGTTCTTGTGGTGTGCCCAGTGCTCCTTTGGCTTCATATATGAGCGTGAGCAGCTGGAGGCAACTTGTCCCCA
GTGTCACCAGACCTTCTGTGTGCGCTGCAAGCGCCAGTGGGAGGAGCAGCACCGAGGTCGGAGCTGTGAGGACTT
CCAGAACTGGAAACGCATGAACGACCCAGAATACCAGGCCCAGGGCCTAGCAATGTATCTTCAGGAAAACGGCAT
TGACTGCCCCAAATGCAAGTTCTCGTACGCCCTGGCCCGAGGAGGCTGCATGCACTTTCACTGTACCCAGTGCCG
CCACCAGTTCTGCAGCGGCTGCTACAATGCCTTTTACGCCAAGAATAAATGTCCAGAGCCTAACTGCAGGGTGAA
AAAGTCCCTGCACGGCCACCACCCTCGAGACTGCCTCTTCTACCTGCGGGACTGGACTGCTCTCCGGCTTCAGAA
GCTGCTACAGGACAATAACGTCATGTTTAATACAGAGCCTCCAGCTGGGGCCCGGGCAGTCCCTGGAGGCGGCTG
CCGAGTGATAGAGCAGAAGGAGGTTCCCAATGGGCTCAGGGACGAAGCTTGTGGCAAGGAAACTCCAGCTGGCTA
TGCCGGCCTGTGCCAGGCACACTACAAAGAGTATCTTGTGAGCCTCATCAATGCCCACTCGCTGGACCCAGCCAC
CTTGTATGAGGTGGAAGAGCTGGAGACGGCCACTGAGCGCTACCTGCACGTACGCCCCCAGCCTTTGGCTGGAGA
GGATCCCCCTGCTTACCAGGCCCGCTTGTTACAGAAGCTGACAGAAGAGGTACCCTTGGGACAGAGTATCCCCCG
CAGGCGGAAGTAGCTGAGGGCAAGGGTCCCGATGAGGGTCCCATGGCCTGCTCCCTCAGGAACAGCTCCAGCACC
AATAAAGAGGCATCTTACCACCAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1201

MPGEEEERAFLVAREELASALRRDSGQAFSLEQLRPLLASSLPLAARYLQLDAARLVRCNAHGEPRNYLNTLSTA
LNILEKYGRNLLSPQRPRYWRGVKFNNPVFRSTVDAVQGGRDVLRLYGYTEEQPDGLSFPEGQEEPDEHQVATVT
LEVLLLRTELSLLLQNTHPRQQALEQLLEDKVEDDMLQLSEFDPLLREIAPGPLTTPSVPGSTPGPCFLCGSAPG
TLHCPSCKQALCPACDHLFHGHPSRAHHLRQTLPGVLQGTHLSPSLPASAQPRPQSTSLLALGDSSLSSPNPASA
HLPWHCAACAMLNEPWAVLCVACDRPRGCKGLGLGTEGPQGTGGLEPDLARGRWACQSCTFENEAAAVLCSICER
PRLAQPPSLVVDSRDAGICLQPLQQGDALLASAQSQVWYCIHCTFCNSSPGWVCVMCNRTSSPIPAQHAPRPYAS
SLEKGPPKPGPPRRLSAPLPSSCGDPEKQRQDKMREEGLQLVSMIREGEAAGACPEEIFSALQYSGTEVPLQWLR
SELPYVLEMVAELAGQQDPGLGAFSCQEARRAWLDRHGNLDEAVEECVRTRRRKVQELQSLGFGPEEGSLQALFQ
HGGDVSRALTELQRQRLEPFRQRLWDSGPEPTPSWDGPDKQSLVRRLLAVYALPSWGRAELALSLLQETPRNYEL
GDVVEAVRHSQDRAFLRRLLAQECAVCGWALPHNRMQALTSCECTICPDCFRQHFTIALKEKHITDMVCPACGRP
DLTDDTQLLSYFSTLDIQLRESLEPDAYALFHKKLTEGVLMRDPKFLWCAQCSFGFIYEREQLEATCPQCHQTFC
VRCKRQWEEQHRGRSCEDFQNWKRMNDPEYQAQGLAMYLQENGIDCPKCKFSYALARGGCMHFHCTQCRHQFCSG
CYNAFYAKNKCPEPNCRVKKSLHGHHPRDCLFYLRDWTALRLQKLLQDNNVMFNTEPPAGARAVPGGGCRVIEQK
EVPNGLRDEACGKETPAGYAGLCQAHYKEYLVSLINAHSLDPATLYEVEELETATERYLHVRPQPLAGEDPPAYQ
ARLLQKLTEEVPLGQSIPRRRK

FIGURE 1202A

GGGCGGGCGGGAGGCGCGGAGGCAGCGGAGGCTGCTCGGCCGCAAGGAGGCAGGCGGGAGGCCAGGGGTGCAGAA
TTGGGGCGGGGGGCTCCCTTCACCCCCGCAGCCCTCCGCCCGGGTCCGTGTGGCCAGGCCTCACGTGCCCGCAGG
CCTGGGGAAGGTGGAGACAGGGGCGGGGGTCCGCGCAGAGGCCTGCACGGCGCGGCCAGGTGATGGTGGGCCTCT
GTGTTTCTCCAGACGAAAGGGGACCCCCGGAGCGGCCGTGCCCCTGGGCTGCCCCCGCGAGGCGTTTTGACATCA
GCCATAGGGAAGTCGGGGAGCCCTGAGCCTGCCTGTTTCCGTTAAGTGTCCTTAGGATGCAGTGATTAAGGAATT
AGGCTCTCCCTCCGGGAGGGGCACTGCCTGTGCTAGGGAACTCGGGGGCAGAGAAACAGGACAGGATGATGCTGT
CCGAGCAAGCCCAAAAGTGGTTTCCAACCCACGTGCAGGTCACAGTGCTCCAAGCCAAAGATCTGAAGCCAAAAG
GCAAAAGTGGTACCAATGACACATACACTATAATTCAGCTGGGCAAGGAAAAGTACTCCACCTCTGTAGCTGAGA
AAACCCTTGAGCCAGTTTGGAAGGAGGAGGCCTCTTTCGAGCTACCTGGATTGCTAATTCAGGGAAGTCCAGAGA
AATACATTCTTTTCCTTATAGTTATGCACAGGTCCCTGGTGGGTCTGGATAAATTTTTAGGGCAGGTGGCAATCA
ATCTCAATGACATCTTTGAGGACAAACAAAGAAGGAAAACAGAGTGGTTTAGATTAGAATCCAAACAAGGAAAAC
GAATCAAAAACAGGGGTGAGATAAAGGTCAATATTCAGTTTATGAGGAACAATATGACCGCAAGTATGTTTGACT
TATCAATGAAGGACAAAACCAGATCTCCTTTTGCAAAGTTAAAAGATAAGATGAAGGGTAGAAAAAATGATGGAA
CATTTTCTGATACGTCTTCTGCAATCATTCCAAGTACTCACATGCCCGATGCCAATAGTGAATTTTCAAGTGGTG
AAATACAGATGAAATCCAAACCAAAAAAGCCTTTTCTCTTGGGTCCTCAGCGACTCTCGTCAGCGCATTCAATGT
CTGATTTATCTGGGTCCCATATGTCTTCTGAGAAACTGAAGGCTGGCACCATAGGTCAAACACATCTTCTCGGAC
ACCAGTTAGATTCCTTTGGAACAGTTCCAGAAAGTGGAAGTCTCAAATCTCCACACAGAAGAACATTAAGCTTTG
ATACTTCTAAAATGAACCAACCTGACAGCATTGTGGATGAAGGTGAATTGTGTTTCGGAAGACAAAATGACCCAT
TTACAAATGTGACTGCTTCATTACCCCAAAAATTTGCAACACTGCCAAGGAAGAAAAATCCATTTGAAGAAAGCA
GCGAAACATGGGACAGCAGCATGAATTTATTTTCAAAACCAATTGAAATAAGAAAAGAAAATAAAAGAGAGAAAA
GGGAGAAAGTTAGCCTGTTTGAAAGAGTGACTGGAAAAAAAGATAGCAGAAGATCTGATAAACTTAACAATGGGG
GATCTGATAGCCCTTGTGACTTGAAATCACCTAATGCATTTAGTGAAAATCGCCAGGACTATTTTGATTATGAGT
CAACCAATCCATTTACAGCAAAATTCAGGGCTTCAAATATAATGCCATCTTCAAGTTTTCATATGAGTCCAACAA
GCAATGAAGACCTCAGGAAAATCCCGGACAGCAACCCCTTTGATGCCACTGCAGGGTATCGTAGTCTGACCTATG
AAGAGGTTCTACAGGAGCTGGTGAAACACAAAGAACTCCTTAGGAGGAAAGACACCCACATCCGGGAACTCGAGG
ACTACATCGACAACCTCCTTGTAAGGGTAATGGAAGAAACGCCCAGTATTCTCAGAGTGCCATATGAACCATCCA
GGAAAGCTGGCAAATTCTCTAACAGTTAATAAAGCCAATTGTATTGTATTGATAATTGGACAAAGAGAGAGAAAG
AAAGAAGGAAGGAAGGAAAAACTTGTTACTGAAAGAGACTACACTATCAGGTTTCATTACATATTCTCCTTTATT
GTGAAGAGTAGTTTTACCTGTAAATATTAGCAGGGACTATCAAGAGTGACCTTTGAAGCAAGCTAAATCATTTAA
ATGTTTAAATTGAAAATGGGCCAGATTCTCAATGAATAAGTGGTTCCTTAGGACTCACTCAGGTGCTGGTACTGA
CCCACTAATCTGCCATAGGCCCAGAAATATCTTCAGAAGTACGTGAGTTGTTCCTCAGGAATAGATTTTTCATAA
AGCAGAATTGATCCTGTGGCTGGTTTCTCAGAAATCAGTTTGTAGAAATATTTAGCTTCAGGAATACTGCTCGTT
ATAAACACTACTAAAAAAACAGTTTATATTTTATATACACATATGTACATGAATATATATATATTCATGTATCTT
GTATATAAAATATAGGCATATACCTCATATATACATGTGTTTTTAGAACATTTAGAAACAATTGATTGCCTCTAA
AGTTAGGCTACCAATTTCTTGATTTGAAAATGTGTGTGCTCTATTGATGCAAGACAAGTCATCCTTCCTACTGTC
ATGGTTTGTTATAGAGAAGCTGCTTCAAATCACTCTTGACTACATGGACCTTGGTTTCAAAGTGAGCTGCTATAT
ATTATTCTAGCATCAAAGTTTTTCTCTTTCCCCAAAAGTGATGATCTCAAGTCCTTTTTTAAAGAATGACAAATT
TTAGGAGACTTCATTAACTTCATAACAGCATGAATTTATTTGAATTAATTAACATTTGAGTTTGTTTAAGGTATA
AGCAGAAGATAAGCTAATATAGCTTGTTTTGTTGAAATTCTGCATGCCTTTAAATCACTAGCAAAGCAAATATTA
TAAAGTTATATCTGAAAATAATTGTGGGAAGTATGTGATTGCCTGGTGTGTCTGATAACCCAAAGCAGCGGGCAG
ATTCCAGGAATGAAGAATTAGGCTTGGTTTCAGGTTACATAAATAATAGAGCAGATGGTTGCCTTTGGGTCTTGA
ACCAAAATAAGACTTACTAAAGGAAGAGTGAGTTTTTAGAAGAGAACTTTACGAGCGTGACATTATGCATTACTC
CACATCCACCCTTTAAGAATTGATTTATTACAAAATTATGTTCTATTTTAAAGTCCACTCCCCCAAAATACTGAT
TTCTTCCATGGATTATTTTTATATGATTTGTACAAATTTTTTCTGAAATTTAAGTTGACAAGCAATGTTATAAAA
ATATTGCTAATCTTCTGCTTATTTTTCAGCCTTTAAAGTCTGAAATACTATAAAACACTGAGAGTATCTATGTCT
TTCTGAATTTAAAATGAAAATTCATGTCCATATGGAGACTTACATATTCCCCAATCTTTCCATGAATTGCATTTT
TTTCTAATACTTATCTCTGTTAAGACTCCATTGAAAGTTAAACAAAAAGCCGATATAATAGTTTGGGTTTTTTTT
TTTTGCTTATTTTAGTATTTTGAATCAGAGAATACTTGGCCAAGCTCGTATTTGTAAACTAAAACCCCTTGTTAT

FIGURE 1202B

TTGTATCTTCTGCATTTCAGTTTTACTGTAAGAACATACATTTTGAAATTATGAACATTTTTTTCATAAAAATTA
AATGCTTTAAGAAATGGAGAAGGAAAAATAGCTTTTATCAATTTTTTTCTCCTCAAGATTCTGTAATAAACCTCA
AAGTCTGGTGTAGAATGGTATTTTCCCGTTTGAGGTCTTGGTAGTTTTTTTTTTTTTTTTAAACATGGTGCCACT
TTTAATTAACTAAATGTTACAAAATTCTCAGCATTTGTTTTTGTCTGGTAGTATTATTGAGTCTTTTCATACACT
TCTTAAAATGTGAAAATCTATGTTTTCAGTATTATGACAGTATCTGCAGATACTATAATAATATGCTTTGGCCAA
ATTTGCTGTTTATAGAGTGAACCAAGATGTCAGTTTTGTATTGGGGATATGTTTTACATAAATAGAACTCATTTA
AAAGTATGGTTCAAGTACTGCTCTTCTTTTTATGGGGAAATTGATTTTTAAGGAGCGATTCTTTTCCTATATAAA
AGCTATTGAGGCTTAGCTTTATTCATACATGAGTGATTTGGTTATAACTCAATCAAAATTTTTATCTTTAAATCT
GAGACAAGTATTATATTTAAAACTAGATCTATTAATACATTCATCACTGCCTGAAAATTTGCTGTTCTAATGTTT
GTGAATTTTCACTCATTACCTAGAGTAAACTTATTGCATATTTTCATAATCAGTCAAAATAATAAAACTAAAAAC
AAAAAGTAAAAATTAGTTCCCAAGTAAATATATCAGTGTTTCCTGTGTTTGGGCAGAAGTGCAAAGTAGTTTTAA
TTTCTCACGTTGTAGAAAAAGAGGCCAAAAAGGTCACCTTAGTTTATTTTTCCAAAACATAACTTTAGGTATTCT
AATGTATTTTGTTAGTTGCTTAGAAATGGAAATAAAATATATGTGCTTATTAAATAATGCACAGTACACTAGATT
ATAGAGTTTATTTTTGCTTTTATGCTTTAAAGAATGCATGCCCAAAACACTACTACCAACAGGAGGATTTTTTAA
AATCACAGAATTGATATTTATCTCAAGACTATCTTAAGCTAATGTACTTCTGTTACATAATTAAACTATTTCTGC
TATTATTTTTAAAGCAGTATTATTTTATAACCAATTCTAAAATTCAGCTTTAAAAATATTGAACATACCTTCCTA
CCACTTACGCTTCAAGTTTCATTTATTGAATACCAGGGTCATATCTTAGAATTGTATATAAAACAACATGTAACC
CATTCATGAAAAACGTTTTTAAGTATTGCTTTTTGCTGCTATGTTCTGCATTGAGCCTAGTTTTGCCATTGTCCC
CTGAATGTAGTATTATCTATAGATTATACATAACTACATCTATTGCTTTTGGTGGTAAATCAAGATTTAGTTGTA
ATTTTCCAGCTGTGAAAATGTTGCCTTGTATTTAAAAGGGTTTCATGAATGGAAACCTAAGTAAAACTAAGCTCA
TTAGTGACAGACTTGTTTTCTTCTTGTTATTCCTCCAGCAACTCCCTCACCACCACGCCTCCCTGCCTACCATCC
CCGGAAGGGTGCTTATTCTTTAACAAAGAGAATCTAAAAAAAAAAAACAAAAAACTGTTGTCTAATATATCTACAG
TAAATGTTACACTAGAGCTTTTATTTTCCTCTGTAGCTTTTCAGAAGAAGCAATTTACCTTGGATTTGTAAATCA
AGCTGAAACTTTTTTGATGTTCATGTACTCATATGTCTTGTAGGTGGTAGGTGTCACTTGTGTGTATGTGTAAGT
GAAGTATGATGCATGCTCATTCACTTGGTCCCTTTGAAATAAGGGAAAGGATCACAGTGCTGCTGGGCCATGATG
GTATGTAGAAGGGTCTGTCAGCACACATGGAAAGCCCCCATTTGCACAGATGTAGAACTTTAATAATCCAGATGC
AATCATTGGAAGTATTTAATATGCAATTGGTAGCACCTTAGCTAATTAATCTGCATATGAAGCATTTTCTGATAT
ATTTAATAAGAGGTATAGAAGCTCTTCAAGCATTAAAATAGAGTTGATGTTTCATTCCATTTGTTTTATCCATCA
AAAAATGCACTCTCACAGTGGAGTTGAAGTCTAATACATGATACATGTGGGCCTGTTAGTCTTCGAAGCTTCCAG
ATGGTTTGTGTTTTGAGGTACAAAAAAATGCTGCAGATCTAGAAATGCATATATTTAGCGGGTATTTGAAAGATA
GAAGCATTATTTATAACTGAAGAGTATAACACTTATCTTCTTAAGTAAATGCTCTCATAACTTGTATACATTTTT
GCAGGTACAAATTCAAAAGTATGTAAGCATTGTATAATGTGACAATTGTATAATTTATGTAATCTGATGCATGAA
TCAGAATTTTTATATAATATATGATTATTGACTTATAGTTGATTAAAGTGTTTAAACTT

FIGURE 1203

MMLSEQAQKWFPTHVQVTVLQAKDLKPKGKSGTNDTYTIIQLGKEKYSTSVAEKTLEPVWKEEASFELPGLLIQG
SPEKYILFLIVMHRSLVGLDKFLGQVAINLNDIFEDKQRRKTEWFRLESKQGKRIKNRGEIKVNIQFMRNNMTAS
MFDLSMKDKTRSPFAKLKDKMKGRKNDGTFSDTSSAIIPSTHMPDANSEFSSGEIQMKSKPKKPFLLGPQRLSSA
HSMSDLSGSHMSSEKLKAGTIGQTHLLGHQLDSFGTVPESGSLKSPHRRTLSFDTSKMNQPDSIVDEGELCFGRQ
NDPFTNVTASLPQKFATLPRKKNPFEESSETWDSSMNLFSKPIEIRKENKREKREKVSLFERVTGKKDSRRSDKL
NNGGSDSPCDLKSPNAFSENRQDYFDYESTNPFTAKFRASNIMPSSSFHMSPTSNEDLRKIPDSNPFDATAGYRS
LTYEEVLQELVKHKELLRRKDTHIRELEDYIDNLLVRVMEETPSILRVPYEPSRKAGKFSNS

FIGURE 1204

GCGAGGCGCCCGAAGCCGTCGCGGCGGGGACC**ATG**TTGCTTCCGAACATCCTGCTCACCGGTACACCAGGGGTTG
GAAAAACCACACTAGGCAAAGAACTTGCGTCAAAATCAGGACTGAAATACATTAATGTGGGTGATTTAGCTCGAG
AAGAGCAATTGTATGATGGCTATGATGAAGAGTATGACTGTCCCATTTTAGATGAAGACAGAGTAGTTGATGAGT
TAGATAACCAAATGAGAGAAGGTGGAGTTATTGTTGATTACCATGGTTGTGATTTCTTCCCTGAACGCTGGTTTC
ATATAGTTTTTGTGCTGAGAACAGATACCAATGTATTGTACGAAAGACTTGAAACAAGGGGTTATAATGAGAAGA
AACTAACAGACAATATTCAGTGTGAGATTTTTCAAGTTCTTTATGAAGAAGCCACAGCATCCTACAAGGAAGAAA
TCGTGCATCAGCTGCCCAGTAATAAACCAGAAGAGCTAGAAAATAATGTAGATCAGATCTTGAAATGGATTGAGC
AGTGGATCAAAGATCATAACTCT**TGA**CTTATAAGGCTAGCTACTTAATAATCACTCTTGTTGATATCTCTGCCGA
CATCATAGAAATTGTTCAAGTGTCAGTAACACTTTATTAAAATCATGTTGCAGAACCAGCAGGTGGATAGTATAT
AGGTTTATGCCTGTGTTTCTTTTTCTCCATGAGAAAGCTAAACATGAAATATAATGAATATAGTATTATTAAGGA
TTGAGACAAAAACTGTGATTTTAATACTTAAATTGCTAAAGAATAAATAAATCTGACAAAATGGGTGGATATCTT
TTAAGTTTATTACAGAAAAAAATGCAGATGATCTCTTAAAATAAAACTAAAGATAAAGCAAAAAAA

FIGURE 1205

MLLPNILLTGTPGVGKTTLGKELASKSGLKYINVGDLAREEQLYDGYDEEYDCPILDEDRVVDELDNQMREGGVI
VDYHGCDFFPERWFHIVFVLRTDTNVLYERLETRGYNEKKLTDNIQCEIFQVLYEEATASYKEEIVHQLPSNKPE
ELENNVDQILKWIEQWIKDHNS

FIGURE 1206A

GACCTCCATCCTGCGCAAGCAGGCTGAGGAGGAGGCCATCAAGCGCTCACGCTCACTCTCCGAGAGCTATGAGCT
CTCCTCGGACCTGCAGGACAAGTAGGTGGAGATGCTAGAACGAAAGTATGGGGGGCGCCTGGTAACCCGCCATGC
GGCCCGCACCATCCAGACGGCGTTTCGCCAGTACCAGATGAACAAGAACTTCGAGCGCTTGCGCAGCTCCATGTC
AGAGAACCGCATGTCACGCCGGATTGTGCTGTCCAACATGAGGATGCAGTTCTCCTTTGAGGGGCCTGAGAAAGT
GCACAGCTCCTACTTCGAGGGGAAGCAGGTCTCAGTGACTAACGACGGCTCCCAGCTGGGAGCCCTGGTGTCCCC
TGAGTGTGGTGACCTCAGCGAGCCCACCACCCTCAAGTCTCCGGCCCCCTCCAGTGACTTTGCGGACGCCATCAC
CGAGCTGGAGGACGCCTTCTCTAGGCAAGTGAAATCACTGGCCGAGTCCATCGACGATGCCCTCAACTGCCGCAG
CCTGCACACTGAGGAGGCACCGGCCCTGGATGCGGCGCGGGCCCGGGACACCGAACCCCAGACAGCCCTGCACGG
CATGGACCACCGCAAACTGGACGAGATGACGGCCTCGTACAGTGATGTCACCCTGTACATCGATGAGGAGGAGCT
GTCGCCCCCTCTGCCCCTCTCGCAGGCAGGGGACCGGCCGTCCAGCACCGAGTCGGACCTGCGGCTACGGGCTGG
GGGCGCAGCCCCAGACTACTGGGCCCTGGCCCACAAAGAGGACAAGGCTGACACGGACACGAGCTGCCGGAGCAC
GCCGTCGCTGGAGCGGCAGGAGCAGCGGCTGCGGGTGGAGCATCTGCCGCTGCTCACCATCGAGCCACCCAGCGA
CAGCTCTGTGGACCTTAGTGACCGCTCGGAGCGGGGGTCACTCAAGAGGCAGAGTGCTTACGAGCGCAGCCTTGG
CGGGCAGCAGGGCAGTCCCAAGCATGGTCCCCACAGCGGCGCCCCCAAGAGCCTCCCCCGGGAGGAGCCTGAGTT
GCGGCCCCGGCCCCCCAGGCCCCTGGACAGCCACTTGGCCATCAATGGCTCAGCCAACCGGCAGAGCAAGTCTGA
GTCGGACTACTCAGACGGTGACAATGACAGCATCAACAGCACGTCCAACTCCAACGATACCATCAACTGCAGCTC
CGAGTCATCGTCCCGTGACAGCCTGCGGGAGCAGACGCTCAGCAAGCAGACCTACCACAAGGAGGCCCGCAACAG
CTGGGACTCGCCTGCCTTTAGCAACGATGTCATCCGCAAGAGGCACTACCGCATCGGCCTGAACCTCTTCAACAA
GAAGCCTGAGAAGGGAGTCCAGTACCTCATCGAGCGTGGCTTTGTGCCCGACACGCCCGTCGGGGTGGCCCACTT
CCTGCTGCAGCGCAAGGGCCTCAGCCGGCAGATGATCGGCGAGTTCCTGGGCAACCGGCAGAAGCAGTTCAACCG
TGACGTGCTCGACTGCGTCGTGGACGAGATGGACTTCTCTACCATGGAGCTGGATGAGGCCCTCAGGAAATTCCA
GGCGCACATCCGTGTCCAAGGGGAGGCTCAGAAAGTGGAGCGGCTCATAGAGGCGTTCAGCCAGCGCTACTGCAT
CTGCAACCCTGGGGTGGTGCGGCAATTCCGGAACCCAGACACCATTTTCATCCTGGCCTTCGCCATCATCCTGCT
GAACACCGACATGTACAGCCCCAATGTCAAGCCCGAGCGGAAAATGAAGCTAGAGGACTTCATCAAGAACCTCCG
AGGTGTGGACGATGGTGAGGACATTCCCCGTGAGATGCTGATGGGGATCTATGAACGGATCCGTAAGCGAGAGCT
AAAGACCAATGAGGACCATGTGTCCCAGGTGCAGAAGGTGGAGAAGCTCATTGTGGGGAAAAAGCCGATCGGATC
CCTGCATCCCGGGCTCGGCTGTGTGCTCTCTCTGCCCCACCGTCGGTTGGTCTGCTACTGCCGGCTCTTTGAGGT
TCCAGACCCAAACAAGCCCCAGAAACTCGGACTACACCAGCGAGAAATCTTCCTGTTCAACGACCTCCTGGTGGT
CACCAAGATCTTCCAGAAGAAGAAGAACTCGGTGACGTACAGCTTCCGACAGTCCTTCTCCTTGTACGGCATGCA
GGTCCTGCTCTTCGAGAACCAGTACTACCCCAATGGCATCCGGCTCACCTCGTCTGTCCCCGGAGCAGATATCAA
AGTGTTAATAAACTTCAACGCCCCCAACCCTCAAGACCGGAAGAAATTCACCGATGACCTGCGGGAGTCCATTGC
GGAAGTCCAAGAGATGGAGAAGCACAGGATAGAGTCGGAGCTCGAGAAGCAGAAAGGCGTCGTGCGGCCCAGCAT
GTCCCAGTGCTCTAGCCTCAAAAAGGAGTCGGGCAACGGAACACTGAGCCGGGCCTGCCTGGACGACAGCTATGC
CAGCGGTGAGGGCCTCAAGCGCAGCGCCCTCAGCAGCTCCCTGCGGGACCTCTCGGAAGCCGGGAAGCGAGGGCG
TCGCAGCAGTGCGGGATCGCTAGAGAGCAATGTGGAATTTCAGCCTTTCGAGCCACTGCAGCCGTCAGTGCTGTG
CTCCTAAGCCATGGGACCCGAGGACTGCCCCCCGGCGCCTGCCCAGGCGGAGGCCCTTTCAGAAAGGGCGAAGCT
CACGCCTGACTCTGCGGGCCGCGGGGCCGCGTTCCCAGTGGACAGCGTGGTGAGCCGTGGCCGGACGGCAGGAGG
AGAGGGGAGCCCCCTCTGGCTGTGTGTCACCTTGGCTGGCTGGCTGGCCAGGGTTTTGCCGATTTCCCTCCTCAC
ATCCCTCCCACCCTCGGTCATATCATTGAGATCACCGTACCAGCAAATCTGCAAACCAAGCACTTTGTTAATCTC
CAGAGAGAGCAAATACAGCAATCTAGAGTTTAGCCTTTTTAAAAATGTGACTTTAACCCGCCCACCTGTGTCCTC
CCATTGGCGTGGCATTTCTTTGGTGTCTGCTCAGAAAGAAACAGCATGGGACCGTGTGATTGGGTCCAGGCTGGG
CTGTCAGGGAAGCGCCCTGGTGTCTCCGACTCATCAATTCTCGGGTTTTTTTTAAAAGCCAGGCTCCCCAAAGCA
CTCTTTGTCTCGCAATTTTGAGGAGGTTGTTCCGACCTGGAAGCGTTAAACTGCTGCATGTCATCTGGCGTCAGC
TGTGAGGCTGCGCTCTGCGTGTTGTGCGTTTGCAAAATGTATTGGCGTGACTGTAAACACATCGTTGAAGTAAAG
CGATTACATATTGAGTATGTCAGCTTTTCTCACCCTCTTCTGTGCTGGGAGGAGAGTCTAACTGTAACCTTTAGG
TTGTTCCAGAAAAGATTCAGGCCGTTTGGCACAGAATTGCTCTTTCTGAAGGGTAGCAGTAATGAATAGGAACAG
ACAGAAAACCCCAGGAGGGGCTTTCAGGAAACTCTCCCTCTCCATCGCCATCCTGCAAGCTCCACAGCCTCGGGC
TGCCAGCCTGTGGCACTGTCCTCGGTGTGTCCTGGAGCTGTGCTGGGCAGCAGGGCCTCGCGTAAGGAACTGCTG

FIGURE 1206B

GAACCCACTGAGCCCTTCCCGGGGTTTCCCGCCGCACTTAGTGTGTTCCTTCAGGCTAGTGAGGTTTCATTCTGT
TTATTTGCAAGCTTATCAAAAGTTTGTGGAAGATACATTGTTGGGTTCCAGAGGCTGGAGTCATGCTGCCCACAT
CTTGTTTGGGAAAGCAAAAGCTCCCAGTGAGCTGGTGTCCCCGTGTGTCTTTCATGGGACTGTCCCCTTTAGAGA
TCCCACCTGTCAGAGCCACAGCTTCGGGGTCCTGTCATCACATCCCCTGGGAGGGGAGGCAGGAGGAGGCCGAGG
GCCCCAGGATGTCTGCCTGGTCCCTTCTCACTGTGAGGACGCCCTTGGCACACCTTTCTCAAGTCACACAAATTA
TTGCAGTTACATACAGAATTGCTGACAGGAGCAGGAGACGCTGAGGGAAACAGCTGGCAATGTGACAAAAGTCTT
TTCTGGGACAACAATCAAATCATGTATTTGTATTTTTTTAAGTTTACCAATGAATTGTACAACAATGTAAAAATA
AAGTTCATCCTAATATGCTGTGC

FIGURE 1207

MLERKYGGRLVTRHAARTIQTAFRQYQMNKNFERLRSSMSENRMSRRIVLSNMRMQFSFEGPEKVHSSYFEGKQV
SVTNDGSQLGALVSPECGDLSEPTTLKSPAPSSDFADAITELEDAFSRQVKSLAESIDDALNCRSLHTEEAPALD
AARARDTEPQTALHGMDHRKLDEMTASYSDVTLYIDEEELSPPLPLSQAGDRPSSTESDLRLRAGGAAPDYWALA
HKEDKADTDTSCRSTPSLERQEQRLRVEHLPLLTIEPPSDSSVDLSDRSERGSLKRQSAYERSLGGQQGSPKHGP
HSGAPKSLPREEPELRPRPPRPLDSHLAINGSANRQSKSESDYSDGDNDSINSTSNSNDTINCSSESSSRDSLRE
QTLSKQTYHKEARNSWDSPAFSNDVIRKRHYRIGLNLFNKKPEKGVQYLIERGFVPDTPVGVAHFLLQRKGLSRQ
MIGEFLGNRQKQFNRDVLDCVVDEMDFSTMELDEALRKFQAHIRVQGEAQKVERLIEAFSQRYCICNPGVVRQFR
NPDTIFILAFAIILLNTDMYSPNVKPERKMKLEDFIKNLRGVDDGEDIPREMLMGIYERIRKRELKTNEDHVSQV
QKVEKLIVGKKPIGSLHPGLGCVLSLPHRRLVCYCRLFEVPDPNKPQKLGLHQREIFLFNDLLVVTKIFQKKKNS
VTYSFRQSFSLYGMQVLLFENQYYPNGIRLTSSVPGADIKVLINFNAPNPQDRKKFTDDLRESIAEVQEMEKHRI
ESELEKQKGVVRPSMSQCSSLKKESGNGTLSRACLDDSYASGEGLKRSALSSSLRDLSEAGKRGRRSSAGSLESN
VEFQPFEPLQPSVLCS

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FIGURE 1208

ATCCAATACAGGAGTGACTTGGAACTCCATTCTATCACTATGAAGAAAAGTGGTGTTCTTTTCCTCTTGGGCATC
ATCTTGCTGGTTCTGATTGGAGTGCAAGGAACCCCAGTAGTGAGAAAGGGTCGCTGTTCCTGCATCAGCACCAAC
CAAGGGACTATCCACCTACAATCCTTGAAAGACCTTAAACAATTTGCCCCAAGCCCTTCCTGCGAGAAAATTGAA
ATCATTGCTACACTGAAGAATGGAGTTCAAACATGTCTAAACCCAGATTCAGCAGATGTGAAGGAACTGATTAAA
AAGTGGGAGAAACAGGTCAGCCAAAAGAAAAAGCAAAAGAATGGGAAAAAACATCAAAAAAAGAAAGTTCTGAAA
GTTCGAAAATCTCAACGTTCTCGTCAAAAGAAGACTACATAAGAGACCACTTCACCAATAAGTATTCTGTGTTAA
AAATGTTCTATTTTAATTATACCGCTATCATTCCAAAGGAGGATGGCATATAATACAAAGGCTTATTAATTTGAC
TAGAAAATTTAAAACATTACTCTGAAATTGTAACTAAAGTTAGAAAGTTGATTTTAAGAATCCAAACGTTAAGAA
TTGTTAAAGGCTATGATTGTCTTTGTTCTTCTACCACCCACCAGTTGAATTTCATCATGCTTAAGGCCATGATTT
TAGCAATACCCATGTCTACACAGATGTTCACCCAACCACATCCCACTCACAACAGCTGCCTGGAAGAGCAGCCCT
AGGCTTCCACGTACTGCAGCCTCCAGAGAGTATCTGAGGCACATGTCAGCAAGTCCTAAGCCTGTTAGCATGCTG
GTGAGCCAAGCAGTTTGAAATTGAGCTGGACCTCACCAAGCTGCTGTGGCCATCAACCTCTGTATTTGAATCAGC
CTACAGGCCTCACACACAATGTGTCTGAGAGATTCATGCTGATTGTTATTGGGTATCACCACTGGAGATCACCAG
TGTGTGGCTTTCAGAGCCTCCTTTCTGGCTTTGGAAGCCATGTGATTCCATCTTGCCCGCTCAGGCTGACCACTT
TATTTCTTTTTGTTCCCCTTTGCTTCATTCAAGTCAGCTCTTCTCCATCCTACCACAATGCAGTGCCTTTCTTCT
CTCCAGTGCACCTGTCATATGCTCTGATTTATCTGAGTCAACTCCTTTCTCATCTTGTCCCCAACACCCCACAGA
AGTGCTTTCTTCTCCCAATTCATCCTCACTCAGTCCAGCTTAGTTCAAGTCCTGCCTCTTAAATAAACCTTTTTG
GACACACAAATTATCTTAAAACTCCTGTTTCACTTGGTTCAGTACCACATGGGTGAACACTCAATGGTTAACTAA
TTCTTGGGTGTTTATCCTATCTCTCCAACCAGATTGTCAGCTCCTTGAGGGCAAGAGCCACAGTATATTTCCCTG
TTTCTTCCACAGTGCCTAATAATACTGTGGAACTAGGTTTTAATAATTTTTTAATTGATGTTGTTATGGGCAGGA
TGGCAACCAGACCATTGTCTCAGAGCAGGTGCTGGCTCTTTCCTGGCTACTCCATGTTGGCTAGCCTCTGGTAAC
CTCTTACTTATTATCTTCAGGACACTCACTACAGGGACCAGGGATGATGCAACATCCTTGTCTTTTTATGACAGG
ATGTTTGCTCAGCTTCTCCAACAATAAGAAGCACGTGGTAAAACACTTGCGGATATTCTGGACTGTTTTTAAAAA
ATATACAGTTTACCGAAAATCATATAATCTTACAATGAAAAGGACTTTATAGATCAGCCAGTGACCAACCTTTTC
CCAACCATACAAAAATTCCTTTTCCCGAAGGAAAAGGGCTTTCTCAATAAGCCTCAGCTTTCTAAGATCTAACAA
GATAGCCACCGAGATCCTTATCGAAACTCATTTTAGGCAAATATGAGTTTTATTGTCCGTTTACTTGTTTCAGAG
TTTGTATTGTGATTATCAATTACCACACCATCTCCCATGAAGAAAGGGAACGGTGAAGTACTAAGCGCTAGAGGA
AGCAGCCAAGTCGGTTAGTGGAAGCATGATTGGTGCCCAGTTAGCCTCTGCAGGATGTGGAAACCTCCTTCCAGG
GGAGGTTCAGTGAATTGTGTAGGAGAGGTTGTCTGTGGCCAGAATTTAAACCTATACTCACTTTCCCAAATTGAA
TCACTGCTCACACTGCTGATGATTTAGAGTGCTGTCCGGTGGAGATCCCACCCGAACGTCTTATCTAATCATGAA
ACTCCCTAGTTCCTTCATGTAACTTCCCTGAAAAATCTAAGTGTTTCATAAATTTGAGAGTCTGTGACCCACTTA
CCTTGCATCTCACAGGTAGACAGTATATAACTAACAACCAAAGACTACATATTGTCACTGACACACACGTTATAA
TCATTTATCATATATATACATACATGCATACACTCTCAAAGCAAATAATTTTTCACTTCAAAACAGTATTGACTT
GTATACCTTGTAATTTGAAATATTTTCTTTGTTAAAATAGAATGGTATCAATAAATAGACCATTAATCAG

FIGURE 1209

MKKSGVLFLLGIILLVLIGVQGTPVVRKGRCSCISTNQGTIHLQSLKDLKQFAPSPSCEKIEIIATLKNGVQTCL
NPDSADVKELIKKWEKQVSQKKKQKNGKKHQKKKVLKVRKSQRSRQKKTT

FIGURE 1210

GGCACGAGGCTGCGGCCGCAGTAGCCGGAGCCGGAGCCGCAGCCACCGGTGCCTTCCTTTCCCGCCGCCGCCCAG
CCGCCGTCCGGCCTCCCTCGGGCCCGAGCGCAGACCAGGCTCCAGCCGCGCGGCGCCGGCAGCCTCGCGCTCCCT
CTCGGGTCTCTCTCGGGCCTCGGGCACCGCGTCCTGTGGGCGGCCGCCTGCCTGCCCGCCCGCCCGCAGCCCCTT
GCCTGCCGGCCCCTGGGCGGCCCGTGCC**ATG**GGCACCGACAGCCGCGCGGCCAAGGCGCTCCTGGCGCGGGCCCG
CACCCTGCACCTGCAGACGGGGAACCTGCTGAACTGGGGCCGCCTGCGGAAGAAGTGCCCGTCCACGCACAGCGA
GGAGCTTCATGATTGTATCCAAAAAACCTTGAATGAATGGAGTTCCCAAATCAACCCAGATTTGGTCAGGGAGTT
TCCAGATGTCTTGGAATGCACTGTATCTCATGCAGTAGAAAAGATAAATCCTGATGAAAGAGAAGAAATGAAAGT
TTCTGCAAAACTGTTCATTGTAGAATCAAACTCTTCATCATCAACTAGAAGTGCAGTTGACATGGCCTGTTCAGT
CCTTGGAGTTGCACAGCTGGATTCTGTGATCATTGCTTCACCTCCTATTGAAGATGGAGTTAATCTTTCCTTGGA
GCATTTACAGCCTTACTGGGAGGAATTAGAAAACTTAGTTCAGAGCAAAAAGATTGTTGCCATAGGTACCTCTGA
TCTAGACAAAACACAGTTGGAACAGCTGTATCAGTGGGCACAGGTAAAACCAAATAGTAACCAAGTTAATCTTGC
CTCCTGCTGTGTGATGCCACCAGATTTGACTGCATTTGCTAAACAATTTGACATACAGCTGTTGACTCACAATGA
TCCAAAAGAACTGCTTTCTGAAGCAAGTTTCCAAGAAGCTCTTCAGGAAAGCATTCCTGACATTCAAGCGCACGA
GTGGGTGCCGCTGTGGCTACTGCGGTATTCGGTCATTGTGAAAAGTAGAGGAATTATCAAATCAAAAGGCTACAT
TTTACAAGCTAAAAGAAGGGGTTCT**TAA**CTGACTTAGGAGCATAACTTACCTGTAATTTCCTTCAATATGAGAGA
AAATTGAGATGTGTAAAATCTAGTTACTGCCTGTAAATGGTGTCATTGAGGCAGATATTCTTTCGTCATATTTGA
CAGTATGTTGTCTGTCAAGTTTTAAATACTTATCTTGCCTCCATATCAATCCATTCTCATGAACCTCTGTATTGC
TTTCCTTAAACTATTGTTTTCTAATTGAAATTGTCTATAAAGAAAATACTTGCAATATATTTTTCCTTTATTTTT
ATGACTAATATAAATCAAGAAAATTTGTTGTTAGATATATTTTGGCCTAGGTATCAGGGTAATGTATATACATAT
TTTTTATTTCCAAAAAAAATTCATTAATTGCTTCTTAACTCTTATTATAACCAAGCAATTTAATTACAATTGTTA
AAACTGAAATACTGGAAGAAGATATTTTTCCTGTCATTGATGAGATATATCAGAGTAACTGGAGTAGCTGGGATT
TACTAGTAGTGTAAATAAAATTCACTCTTCAATAC

FIGURE 1211

MGTDSRAAKALLARARTLHLQTGNLLNWGRLRKKCPSTHSEELHDCIQKTLNEWSSQINPDLVREFPDVLECTVS
HAVEKINPDEREEMKVSAKLFIVESNSSSSTRSAVDMACSVLGVAQLDSVIIASPPIEDGVNLSLEHLQPYWEEL
ENLVQSKKIVAIGTSDLDKTQLEQLYQWAQVKPNSNQVNLASCCVMPPDLTAFAKQFDIQLLTHNDPKELLSEAS
FQEALQESIPDIQAHEWVPLWLLRYSVIVKSRGIIKSKGYILQAKRRGS

FIGURE 1212

CCCGAATTTTCCGGCTCGAATGCCCGGCAGCCGTGGCGGCTAGAGCGTTCCTCCCCAGCTCGAATGCCCGGCGGC
GAGGCGGCTAGAGCGTCGCCTCCTCCCGGGGAACCGCGTGTGACCTTCCAGCCCGCGGACCGATGCTGCCGGCGG
CCGCTCGCCCCCTGTGGGGGCCTTGCCTTGGGCTTCGGGCCGCTGCGTTCCGCCTTGCCAGGCGACAGGTGCCAT
GTGTCTGTACCGTGCGACATATGAGGAGCAGCGGCCATCAGAGGTGTGAGGCCCTCGCTGGTGCACCCCTGGATA
ACGCCCCCAAGGAGTACCCCCCCAAGATACAGCAGCTGGTCCAGGACATCGCCAGCCTCACTCTCTTGGAAATCT
CAGACCTCAACGAGCTCCTGAAGAAAACGTTGAAGATCCAGGATGTCGGGCTTGTGCCGATGGGTGGTGTGATGT
CTGGGGCTGTCCCTGCTGCAGCAGCCCAGGAGGCGGTGGAAGAAGATATCCCCATAGCGAAAGAACGGACACATT
TCACCGTCCGCCTGACCGAGGCGAAGCCCGTGGACAAAGTGAAGCTGATCAAGGAAATCAAGAACTACATCCAAG
GCATCAACCTCGTCCAGGCAAAGAAGCTGGTGGAGTCCCTGCCCCAGGAAATCAAAGCCAATGTCGCCAAAGCTG
AGGCGGAGAAGATCAAGGCGGCCCTGGAGGCGGTGGGCGGCACCGTGGTTCTGGAGTAGCCTCCAGCTCGGAGGA
CTTGTGTTCAGGGGTCCTGGGCCCCGGCGAGGTCCCGCCCTCCCGTGGTCACTGGCTCCGCCCCCAGCACCAGGC
GCCCAGTGGAGCCGTTTGGGAGAATTGCCTGCGCCACGCAGCGGGCCGGACAGGCCGCACAGACCTACTGTGGCG
GGAGGGAGGGGCGGCTGCTGCCTGGTGACGGCACCCGGAAGCCCACCAGGACGCGCCACCGGTCAATGTGCCTCT
GGTGGCTGCTGAGAAAAATACACTGTGCAGCTC

FIGURE 1213

MLPAAARPLWGPCLGLRAAAFRLARRQVPCVCTVRHMRSSGHQRCEALAGAPLDNAPKEYPPKIQQLVQDIASLT
LLEISDLNELLKKTLKIQDVGLVPMGGVMSGAVPAAAAQEAVEEDIPIAKERTHFTVRLTEAKPVDKVKLIKEIK
NYIQGINLVQAKKLVESLPQEIKANVAKAEAEKIKAALEAVGGTVVLE

FIGURE 1214

GAGCCCGGAAGGTCCGGCGCCCAGAGCTAACGGGAGTCCCAGGTTAAACACTTTAAGATGAGAAAAATTGATCTC
TGTCTGAGCTCTGAAGGGTCCGAAGTGATTTTAGCTACATCAAGTGATGAAAAACACCCACCTGAAAATATCATT
GATGGGAATCCAGAAACGTTTTGGACCACCACAGGAATGTTTCCCCAGGAATTCATTATTTGTTTCCACAAACAT
GTAAGGATTGAAAGGCTTGTAATCCAAAGTTACTTTGTACAGACCTTGAAGATTGAAAAAACACGTCTAAAGAGC
CAGTTGATTTTGAGCAATGGATTGAAAAAGATTTGGTACACACAGAGGGGCAGCTTCAAAATGAAGAAATTGTGG
CACATGATGGCTCCGCTACTTACTTGAGATTCATTATTGTATCAGCCTTTGATCATTTTGCATCTGTGCATAGCG
TTTCTGCAGAAGGAACAGTAGTCTCAAATCTTTCCTCATAATGATAACAAAATGCTCTTGCATGATTTTTTAACA
ATATATTTAAACAGGAAGTTGTCACTGATATACTTTATTAAAAGGATTTTTATCAAAAAAAAAAAAAAAAAAA

FIGURE 1215

MRKIDLCLSSEGSEVILATSSDEKHPPENIIDGNPETFWTTTGMFPQEFIICFHKHVRIERLVIQSYFVQTLKIE
KTRLKSQLILSNGLKKIWYTQRGSFKMKKLWHMMAPLLT

FIGURE 1216

GGATCCGCGTGCTAAAGAAAAATCGCCGTTAAAGCAGTTTTCTTTTTCACTGTCTTTTTCTTTTCGCGGGGAACC
CAGCTGTTCCTGCGAGGGCCACCTCCTCAGGAAGACCCCGCAGCTCTCCCGCGGCGCTTCTGCAGGAGGCAGCGA
CAGTTTCGAGAACCCGGGCCTTCCCCTCCCAGTGCCTCCGGGGGTTCGCGTTTCAGGCGCTCGTGTTTTCCGGGA
AGGGCAGGCGCGCTGGGCCTTGGGGAGCTGCGCTCGGCGGGCGGACCGGGGGATC**ATG**GAAGCTGATAAAGATGA
CACACAACAAATTCTTAAGGAGCATTCGCCAGATGAATTTATAAAAGATGAACAAAATAAGGGACTAATTGATGA
AATTACAAAGAAAAATATTCAGCTAAAGAAGGAGATCCAAAAGCTTGAAACGGAGTTACAAGAGGCTACCAAAGA
ATTCCAGATTAAAGAGGATATTCCTGAAACAAAGATGAAATTCTTATCAGTTGAAACTCCTGAGAATGACAGCCA
GTTGTCAAATATCTCCTGTTCGTTTCAAGTGAGCTCGAAAGTTCCTTATGAGATACAAAAAGGACAAGCACTTAT
CACCTTTGAAAAAGAAGAAGTTGCTCAAAATGTGGTAAGCATGAGTAAACATCATGTACAGATAAAAGATGTAAA
TCTGGAGGTTACGGCCAAGCCAGTTCCATTAAATTCAGGAGTCAGATTCCAGGTTTATGTAGAAGTTTCTAAAAT
GAAAATCAATGTTACTGAAATTCCTGACACACTGCGTGAAGATCAAATGAGAGACAAACTAGAGCTGAGCTTTTC
AAAGTTCCGAAATGGAGGCGGAGAGGTGGACCGCGTGGACTATGACAGACAGTCCGGGAGTGCAGTCATCACGTT
TGTGGAGATTGGAGTGGCTGACAAGATTTTGAAAAAGAAAGAATACCCTCTTTATATAAATCAAACCTGCCATAG
AGTTACTGTTTCTCCATACACAGAAATACACTTGAAAAAGTATCAGATATTTTCAGGAACATCTAAGAGGACAGT
GCTTCTGACAGGAATGGAAGGCATTCAAATGGATGAAGAAATTGTGGAGGATTTAATTAACATTCACTTTCAACG
GGCAAAGAATGGAGGTGGAGAAGTAGATGTGGTCAAGTGTTCTCTAGGTCAACCTCACATAGCATACTTTGAAGA
A**TAG**ACTTAACAGAATCATGAAAACTATAGCTTTTTAACCCGGATTACTGTAAATGTTTGACAAGAATGAATATG
CTTTTCCTTAAAAAATGAAAACTTTAATTTTTACCATCCATTTATGTTTAGATACAAAACTTATTTCCATGTTTC
TGAATCTTCTTTGTTTCAAATGGTGCTGCATGTTTTCAACTACAATAAGTGCACTGTAATAAAAAGTTTTGTTTA
T

FIGURE 1217

MEADKDDTQQILKEHSPDEFIKDEQNKGLIDEITKKNIQLKKEIQKLETELQEATKEFQIKEDIPETKMKFLSVE
TPENDSQLSNISCSFQVSSKVPYEIQKGQALITFEKEEVAQNVVSMSKHHVQIKDVNLEVTAKPVPLNSGVRFQV
YVEVSKMKINVTEIPDTLREDQMRDKLELSFSKFRNGGGEVDRVDYDRQSGSAVITFVEIGVADKILKKKEYPLY
INQTCHRVTVSPYTEIHLKKYQIFSGTSKRTVLLTGMEGIQMDEEIVEDLINIHFQRAKNGGGEVDVVKCSLGQP
HIAYFEE

FIGURE 1218

GAGCGCGGCTGGAGTTTGCTGCTGCCGCTGTGCAGTTTGTTCAGGGGCTTGTGGTGGTGAGTCCGAGAGGCTGCG
TGTGAGAGACGTGAGAAGGATCCTGCACTGAGGAGGTGGAAAGAAGAGGATTGCTCGAGGAGGCCTGGGGTCTGT
GAGGCAGCGGAGCTGGGTGAAGGCTGCGGGTTCCGGCGAGGCCTGAGCTGTGCTGTCGTCATGCCTCAAACCCGA
TCCCAGGCACAGGCTACAATCAGTTTTCCAAAAAGGAAGCTGTCTCGGGCATTGAACAAAGCTAAAAACTCCAGT
GATGCCAAACTAGAACCAACAAATGTCCAAACCGTAACCTGTTCTCCTCGTGTAAAAGCCCTGCCTCTCAGCCCC
AGGAAACGTCTGGGCGATGACAACCTATGCAACACTCCCCATTTACCTCCTTGTTCTCCACCAAAGCAAGGCAAG
AAAGAGAATGGTCCCCCTCACTCACATACACTTAAGGGACGAAGATTGGTATTTGACAATCAGCTGACAATTAAG
TCTCCTAGCAAAAGAGAACTAGCCAAAGTTCACCAAAACAAAATACTTTCTTCAGTTAGAAAAAGTCAAGAGATC
ACAACAAATTCTGAGCAGAGATGTCCACTGAAGAAAGAATCTGCATGTGTGAGACTATTCAAGCAAGAAGGCACT
TGCTACCAGCAAGCAAAGCTGGTCCTGAACACAGCTGTCCCAGATCGGCTGCCTGCCAGGGAAAGGGAGATGGAT
GTCATCAGGAATTTCTTGAGGGAACACATCTGTGGGAAAAAAGCTGGAAGCCTTTACCTTTCTGGTGCTCCTGGA
ACTGGAAAAACTGCCTGCTTAAGCCGGATTCTGCAAGACCTCAAGAAGGAACTGAAAGGCTTTAAAACTATCATG
CTGAATTGCATGTCCTTGAGGACTGCCCAGGCTGTATTCCCAGCTATTGCTCAGGAGATTTGTCAGGAAGAGGTA
TCCAGGCCAGCTGGGAAGGACATGATGAGGAAATTGGAAAAACATATGACTGCAGAGAAGGGCCCCATGATTGTG
TTGGTATTGGACGAGATGGATCAACTGGACAGCAAAGGCCAGGATGTATTGTACACGCTATTTGAATGGCCATGG
CTAAGCAATTCTCACTTGGTGCTGATTGGTATTGCTAATACCCTGGATCTCACAGATAGAATTCTACCTAGGCTT
CAAGCTAGAGAAAAATGTAAGCCACAGCTGTTGAACTTCCCACCTTATACCAGAAATCAGATAGTCACTATTTTG
CAAGATCGACTTAATCAGGTATCTAGAGATCAGGTTCTGGACAATGCTGCAGTTCAATTCTGTGCCCGCAAAGTC
TCTGCTGTTTCAGGAGATGTTCGCAAAGCACTGGATGTTTGCAGGAGAGCTATTGAAATTGTAGAGTCAGATGTC
AAAAGCCAGACTATTCTCAAACCACTGTCTGAATGTAAATCACCTTCTGAGCCTCTGATTCCCAAGAGGGTTGGT
CTTATTCACATATCCCAAGTCATCTCAGAAGTTGATGGTAACAGGATGACCTTGAGCCAAGAAGGAGCACAAGAT
TCCTTCCCTCTTCAGCAGAAGATCTTGGTTTGCTCTTTGATGCTCTTGATCAGGCAGTTGAAAATCAAAGAGGTC
ACTCTGGGGAAGTTATATGAAGCCTACAGTAAAGTCTGTCGCAAACAGCAGGTGGCGGCTGTGGACCAGTCAGAG
TGTTTGTCACTTTCAGGGCTCTTGGAAGCCAGGGGCATTTTAGGATTAAAGAGAAACAAGGAAACCCGTTTGACA
AAGGTGTTTTTCAAGATTGAAGAGAAAGAAATAGAACATGCTCTGAAAGATAAAGCTTTAATTGGAAATATCTTA
GCTACTGGATTGCCTTAAATTCTTCTCTTACACCCCACCCGAAAGTATTCAGCTGGCATTTAGAGAGCTACAGTC
TTCATTTTAGTGCTTTACACATTCGGGCCTGAAAACAAATATGACCTTTTTTACTTGAAGCCAATGAATTTTAAT
CTATAGATTCTTTAATATTAGCACAGAATAATATCTTTGGGTCTTACTATTTTTACCCATAAAAGTGACCAGGTA
GACCCTTTTTAATTACATTCACTACTTCTACCACTTGTGTATCTCTAGCCAATGTGCTTGCAAGTGTACAGATCT
GTGTAGAGGAATGTGTGTATATTTACCTCTTCGTTTGCTCAAACATGAGTGGGTATTTTTTTGTTTGTTTTTTTT
GTTGTTGTTGTTTTTGAGGCGCGTCTCACCCTGTTGCCCAGGCTGGAGTGCAATGGCGCGTTCTCTGCTCACTAC
AGCACCCGCTTCCCAGGTTGAAGTGATTCTCTTGCCTCAGCCTCCCGAGTAGCTGGGATTACAGGTGCCCACCAC
CGCGCCCAGCTAATTTTTTAATTTTTAGTAGAGACAGGGTTTTACCATGTTGGCCAGGCTGGTCTTGAACTCCTG
ACCCTCAAGTGATCTGCCCACCTTGGCCTCCCTAAGTGCTGGGATTATAGGCGTGAGCCACCATGCTCAGCCATT
AAGGTATTTTGTTAAGAACTTTAAGTTTAGGGTAAGAAGAATGAAAATGATCCAGAAAAATGCAAGCAAGTCCAC
ATGGAGATTTGGAGGACACTGGTTAAAG

FIGURE 1219

MPQTRSQAQATISFPKRKLSRALNKAKNSSDAKLEPTNVQTVTCSPRVKALPLSPRKRLGDDNLCNTPHLPPCSP
PKQGKKENGPPHSHTLKGRRLVFDNQLTIKSPSKRELAKVHQNKILSSVRKSQEITTNSEQRCPLKKESACVRLF
KQEGTCYQQAKLVLNTAVPDRLPAREREMDVIRNFLREHICGKKAGSLYLSGAPGTGKTACLSRILQDLKKELKG
FKTIMLNCMSLRTAQAVFPAIAQEICQEEVSRPAGKDMMRKLEKHMTAEKGPMIVLVLDEMDQLDSKGQDVLYTL
FEWPWLSNSHLVLIGIANTLDLTDRILPRLQAREKCKPQLLNFPPYTRNQIVTILQDRLNQVSRDQVLDNAAVQF
CARKVSAVSGDVRKALDVCRRAIEIVESDVKSQTILKPLSECKSPSEPLIPKRVGLIHISQVISEVDGNRMTLSQ
EGAQDSFPLQQKILVCSLMLLIRQLKIKEVTLGKLYEAYSKVCRKQQVAAVDQSECLSLSGLLEARGILGLKRNK
ETRLTKVFFKIEEKEIEHALKDKALIGNILATGLP

FIGURE 1220

GAGCGCGGCTGGAGTTTGCTGCTGCCGCTGTGCAGTTTGTTCAGGGGCTTGTGGTGGTGAGTCCGAGAGGCTGCG
TGTGAGAGACGTGAGAAGGATCCTGCACTGAGGAGGTGGAAAGAAGAGGATTGCTCGAGGAGGCCTGGGGTCTGT
GAGGCAGCGGAGCTGGGTGAAGGCTGCGGGTTCCGGCGAGGCCTGAGCTGTGCTGTCGTCATGCCTCAAACCCGA
TCCCAGGCACAGGCTACAATCAGTTTTCCAAAAAGGAAGCTGTCTCGGGCATTGAACAAAGCTAAAAACTCCAGT
GATGCCAAACTAGAACCAACAAATGTCCAAACCGTAACCTGTTCTCCTCGTGTAAAAGCCCTGCCTCTCAGCCCC
AGGAAACGTCTGGGCGATGACAACCTATGCAACACTCCCCATTTACCTCCTTGTTCTCCACCAAAGCAAGGCAAG
AAAGAGAATGGTCCCCCTCACTCACATACACTTAAGGGACGAAGATTGGTATTTGACAATCAGCTGACAATTAAG
TCTCCTAGCAAAAGAGAACTAGCCAAAGTTCACCAAAACAAAATACTTTCTTCAGTTAGAAAAAGTCAAGAGATC
ACAACAAATTCTGAGCAGAGATGTCCACTGAAGAAAGAATCTGCATGTGTGAGACTATTCAAGCAAGAAGGCACT
TGCTACCAGCAAGCAAAGCTGGTCCTGAACACAGCTGTCCCAGATCGGCTGCCTGCCAGGGAAAGGGAGATGGAT
GTCATCAGGAATTTCTTGAGGGAACACATCTGTGGGAAAAAAGCTGGAAGCCTTTACCTTTCTGGTGCTCCTGGA
ACTGGAAAAACTGCCTGCTTAAGCCGGATTCTGCAAGACCTCAAGAAGGAACTGAAAGGCTTTAAAACTATCATG
CTGAATTGCATGTCCTTGAGGACTGCCCAGGCTGTATTCCCAGCTATTGCTCAGGAGATTTGTCAGGAAGAGGTA
TCCAGGCCAGCTGGGAAGGACATGATGAGGAAATTGGAAAAACATATGACTGCAGAGAAGGGCCCCATGATTGTG
TTGGTATTGGACGAGATGGATCAACTGGACAGCAAAGGCCAGGATGTATTGTACACGCTATTTGAATGGCCATGG
CTAAGCAATTCTCACTTGGTGCTGATTGGTATTGCTAATACCCTGGATCTCACAGATAGAATTCTACCTAGGCTT
CAAGCTAGAGAAAAATGTAAGCCACAGCTGTTGAACTTCCCACCTTATACCAGAAATCAGATAGTCACTATTTTG
CAAGATCGACTTAATCAGGTATCTAGAGATCAGGTTCTGGACAATGCTGCAGTTCAATTCTGTGCCCGCAAAGTC
TCTGCTGTTTCAGGAGATGTTCGCAAAGCACTGGATGTTTGCAGGAGAGCTATTGAAATTGTAGAGTCAGATGTC
AAAAGCCAGACTATTCTCAAACCACTGTCTGAATGTAAATCACCTTCTGAGCCTCTGATTCCCAAGAGGGTTGGT
CTTATTCACATATCCCAAGTCATCTCAGAAGTTGATGGTAACAGGATGACCTTGAGCCAAGAAGGAGCACAAGAT
TCCTTCCCTCTTCAGCAGAAGATCTTGGTTTGCTCTTTGATGCTCTTGATCAGGCAGTTGAAAATCAAAGAGGTC
ACTCTGGGGAAGTTATATGAAGCCTACAGTAAAGTCTGTCGCAAACAGCAGGTGGCGGCTGTGGACCAGTCAGAG
TGTTTGTCACTTTCAGGGCTCTTGGAAGCCAGGGGCATTTTAGGATTAAAGAGAAACAAGGAAACCCGTTTGACA
AAGGTGTTTTTCAAGATTGAAGAGAAAGAAATAGAACATGCTCTGAAAGATAAAGCTTTAATTGGAAATATCTTA
GCTACTGGATTGCCTTAAATTCTTCTCTTACACCCCACCCGAAAGTATTCAGCTGGCATTTAGAGAGCTACAGTC
TTCATTTTAGTGCTTTACACATTCGGGCCTGAAAACAAATATGACCTTTTTTACTTGAAGCCAATGAATTTTAAT
CTATAGATTCTTTAATATTAGCACAGAATAATATCTTTGGGTCTTACTATTTTTACCCATAAAAGTGACCAGGTA
GACCCTTTTTAATTACATTCACTACTTCTACCACTTGTGTATCTCTAGCCAATGTGCTTGCAAGTGTACAGATCT
GTGTAGAGGAATGTGTGTATATTTACCTCTTCGTTTGCTCAAACATGAGTGGGTATTTTTTTGTTTGTTTTTTTT
GTTGTTGTTGTTTTTGAGGCGCGTCTCACCCTGTTGCCCAGGCTGGAGTGCAATGGCGCGTTCTCTGCTCACTAC
AGCACCCGCTTCCCAGGTTGAAGTGATTCTCTTGCCTCAGCCTCCCGAGTAGCTGGGATTACAGGTGCCCACCAC
CGCGCCCAGCTAATTTTTTAATTTTTAGTAGAGACAGGGTTTTACCATGTTGGCCAGGCTGGTCTTGAACTCCTG
ACCCTCAAGTGATCTGCCCACCTTGGCCTCCCTAAGTGCTGGGATTATAGGCGTGAGCCACCATGCTCAGCCATT
AAGGTATTTTGTTAAGAACTTTAAGTTTAGGGTAAGAAGAATGAAAATGATCCAGAAAAATGCAAGCAAGTCCAC
ATGGAGATTTGGAGGACACTGGTTAAAG

FIGURE 1221

MPQTRSQAQATISFPKRKLSRALNKAKNSSDAKLEPTNVQTVTCSPRVKALPLSPRKRLGDDNLCNTPHLPPCSP
PKQGKKENGPPHSHTLKGRRLVFDNQLTIKSPSKRELAKVHQNKILSSVRKSQEITTNSEQRCPLKKESACVRLF
KQEGTCYQQAKLVLNTAVPDRLPAREREMDVIRNFLREHICGKKAGSLYLSGAPGTGKTACLSRILQDLKKELKG
FKTIMLNCMSLRTAQAVFPAIAQEICQEEVSRPAGKDMMRKLEKHMTAEKGPMIVLVLDEMDQLDSKGQDVLYTL
FEWPWLSNSHLVLIGIANTLDLTDRILPRLQAREKCKPQLLNFPPYTRNQIVTILQDRLNQVSRDQVLDNAAVQF
CARKVSAVSGDVRKALDVCRRAIEIVESDVKSQTILKPLSECKSPSEPLIPKRVGLIHISQVISEVDGNRMTLSQ
EGAQDSFPLQQKILVCSLMLLIRQLKIKEVTLGKLYEAYSKVCRKQQVAAVDQSECLSLSGLLEARGILGLKRNK
ETRLTKVFFKIEEKEIEHALKDKALIGNILATGLP

FIGURE 1222

GCGGTGGTGGACACGTCGAGCCGGGTAGAAGTGGAGGGGCCGTTCGAAGAGTCGTGAGGGGGTGACGGGTTAAGA
TTCGGAGAGAGAGGTGCTAGTGGCTGGACTTGACCTGGAAAGAATCTTCTGCTGACTCTCAACTTTTCCTGGAAA
AAATGGATCATTCCCACCATATGGGGATGAGCTATATGGACTCCAACAGTACCATGCAACCTTCTCACCATCACC
CAACCACTTCAGCCTCACACTCCCATGGTGGAGGAGACAGCAGCATGATGATGATGCCTATGACCTTCTACTTTG
GCTTTAAGAATGTGGAACTACTGTTTTCCGGTTTGGTGATCAATACAGCTGGAGAAATGGCTGGAGCTTTTGTGG
CAGTGTTTTTACTAGCAATGTTCTATGAAGGACTCAAGATAGCCCGAGAGAGCCTGCTGCGTAAGTCACAAGTCA
GCATTCGCTACAATTCCATGCCTGTCCCAGGACCAAATGGAACCATCCTTATGGAGACACACAAAACTGTTGGGC
AACAGATGCTGAGCTTTCCTCACCTCCTGCAAACAGTGCTGCACATCATCCAGGTGGTCATAAGCTACTTCCTCA
TGCTCATCTTCATGACCTACAACGGGTACCTCTGCATTGCAGTAGCAGCAGGGGCCGGTACAGGATACTTCCTCT
TCAGCTGGAAGAAGGCAGTGGTAGTGGATATCACAGAGCATTGCCATTGACATCAAACTCTATGGCGTGGCCTTA
TCGATTGCAGTGGGAAGTTGTTGAAGACTTGAAGACGTGATTCCTGCTCCAATCATCCCTTCTTGCTCCTCTTTG
TGCACGTACACACACACACACACACACACACACACACACACACACACCCCTGCTCAACAGAGGTTTAGTTTACAGTCTC
TGAACTAAAGTAGTAACCTCCCAAATTGTTTTTTCTAATAAGCTGAGATTCCCATTTCTCTTAAGGAGAAGCCAC
CCATGAGATGTCTTTTCCTTCTCCATCATCTTAGAGCCAAGTTATATGTTCTTGTCTAATCCATGTAGCTTTTTG
TTCAATGACTTGATCATCTGCTTCCTTTTTGAATTTTTAACAGATAGTAAGTAAATTTGGTGGTTTTTTCCCCTG
GGTCAGTGATGGAAAGGGGTTAACTTCAGCCAGGATTGATGGCAGCTGAGGGAAATTCTTGCCCAACTAAACCCA
GAACTCAAACTTAACATTAGAAAATAAGGTCCAGGGCCGGACACAGTGGCCCATGCCTGTAATCCCAGCACTTTG
GGGGGCCAAGGCAGGCTGGATCACCTGAGGACAGGAGTTCGAGACCAGTCTGGCCAACATGGGGAAACCCCGTCT
CTACTAAAAATACAAAAATTAGCCGGGCATGGTGGTGGGCGCCTGTAATCCCAGCTACTCAGAAGGCTGAGGCAG
GAGAATCACTTGAACCTAGGAGGCGGAGGTTGCAGTGAGCCAAGATGGCGCCATTGCACTCCAGCCTGGGTGACA
AGAGTGAAACTCCATCTCAAAAAAAAAGAAAAGAAGGTCCAGCTTTTGGATTCAATGAGTGGGAAATACATTGTG
CCTTTCTCTAGATGTGATACGTTATACCAAAATCTTTGTAGTGTGCAGAGCGGTGGTTTGAGACTAAATACAGGC
TTAGAACTTGCAGAGTGTGTATTCTTGGATGGCTGATGCATCGACTTGCATTCCCACTTAACACTTTGATTAGCC
ATGAACTTGCCAATCAAAAAATGACAATCAATTTGAGAAAATAGAAATAGATATTTTTAAATAAAACCATTCACA
GTTT

FIGURE 1223

MDHSHHMGMSYMDSNSTMQPSHHHPTTSASHSHGGGDSSMMMMPMTFYFGFKNVELLFSGLVINTAGEMAGAFVA
VFLLAMFYEGLKIARESLLRKSQVSIRYNSMPVPGPNGTILMETHKTVGQQMLSFPHLLQTVLHIIQVVISYFLM
LIFMTYNGYLCIAVAAGAGTGYFLFSWKKAVVVDITEHCH

FIGURE 1224

GGAGTGCGGGGCGCCCGGCGCCAGGGGAGCCGCCACAGCCATGGATTGCAAAGATAGACCAGCTTTTCCAGTTAA
GAAGTTAATACAAGCCCGTCTGCCGTTTAAGCGCCTGAATCTTGTCCCAAAGGGGAAAGCCGATGACATGTCAGA
CGATCAGGGTACTTCTGTGCAAAGTAAAAGCCCCGATTTAGAGGCCTCTTTGGACACCTTGGAAAACAACTGTCA
TGTGGGTTCTGACATAGACTTTAGACCGAAACTTGTCAACGGGAAGGGTCCCTTAGATAACTTTTTAAGAAATAG
AATCGAAACCAGTATTGGCCAGAGCACAGTCATCATTGATTTGACAGAGGACTCGAATGAGCAGCCAGACAGTCT
TGTGGACCACAATAAACTAAATTCTGAAGCCTCTCCCTCCAGGGAGGCAATAAATGGCCAGCGAGAAGACACTGG
GGATCAGCAGGGGTTGTTGAAGGCCATTCAGAACGACAAGTTGGCATTTCCTGGAGAGACCCTTTCAGACATTCC
TTGCAAAACAGAGGAGGAGGGTGTTGGCTGTGGAGGTGCAGGGAGGAGAGGCGACTCCCAGGAATGTTCGCCACG
GAGCTGCCCGGAGCTGACGAGTGGCCCGAGAATGTGCCCCAGAAAGGAGCAGGACAGTTGGAGTGAAGCTGGGGG
CATCCTGTTCAAAGGGAAGGTGCCTATGGTGGTCTTGCAGGACATCTTGGCTGTGAGACCACCGCAAATCAAGTC
CCTTCCAGCCACACCCCAAGGCAAGAACATGACCCCTGAGAGTGAGGTGCTGGAATCTTTCCCCGAAGAAGACTC
TGTACTCAGCCATTCGTCCCTGAGCTCTCCCTCTTCCACCAGCTCGCCCGAGGGGCCGCCTGCTCCCCCAAAGCA
GCACAGCAGTACCAGTCCCTTCCCCACCTCCACGCCCCTCCGCAGAATAACTAAGAAATTCGTCAAAGGCTCTAC
AGAGAAGAACAAGCTCAGACTGCAAAGAGATCAGGAGCGTCTGGGCAAGCAGCTCAAGTTACGTGCAGAAAGGGA
AGAAAAGGAGAAGCTGAAAGAGGAGGCCAAGCGGGCCAAGGAGGAGGCCAAGAAGAAGAAGGAGGAAGAGAAGGA
GCTTAAGGAAAAGGAGAGGCGGGAGAAGCGGGAGAAGGATGAGAAGGAGAAGGCGGAGAAGCAGCGGCTCAAGGA
GGAGCGGCGCAAGGAGAGACAGGAAGCCCTGGAGGCTAAACTTGAGGAAAAAAGGAAAAAGGAAGAAGAGAAACG
GTTAAGAGAAGAAGAGAAGCGCATTAAAGCAGAGAAGGCCGAAATCACGAGGTTCTTCCAGAAACCAAAGACTCC
ACAGGCCCCCAAGACCCTGGCCGGCTCCTGTGGGAAGTTTGCCCCCTTTGAAATTAAAGAGCACATGGTCCTGGC
CCCTCGGCGTCGGACCGCTTTCCATCCAGACCTCTGCAGTCAGCTGGACCAGCTCCTCCAGCAGCAGAGCGGCGA
GTTCTCCTTCTTGAAAGACCTCAAAGGCCGGCAGCCCCTGAGGTCCGGACCCACGCACGTTTCCACCCGGAATGC
AGATATTTTTAACAGTGATGTCGTCATCGTGGAGCGTGGGAAGGGCGACGGTGTTCCCGAGAGGAGGAAGTTTGG
CAGGATGAAGCTCCTGCAGTTCTGTGAGAACCACCGGCCTGCCTACTGGGGTACCTGGAATAAGAAGACGGCACT
CATCCGCGCGCGAGACCCCTGGGCCCAGGACACGAAGCTCCTGGACTATGAGGTGGACAGTGATGAGGAGTGGGA
AGAAGAGGAGCCTGGGGAGTCCCTGTCCCACAGTGAGGGGGATGATGATGACGACATGGGAGAGGATGAAGATGA
GGACGATGGTTTCTTTGTGCCCCATGGGTACCTGTCTGAGGACGAAGGTGTGACAGAGGAGTGTGCCGACCCTGA
GAACCATAAGGTCCGCCAGAAACTGAAGGCCAAGGAGTGGGACGAGTTCCTGGCTAAGGGGAAGCGCTTTCGCGT
CCTGCAACCTGTGAAGATCGGCTGCGTGTGGGCGGCTGACAGAGACTGCGCAGGCGATGACCTGAAGGTACTGCA
GCAGTTCGCAGCCTGCTTCCTGGAGACCCTGCCGGCCCAGGAGGAGCAGACGCCCAAGGCCTCCAAGCGGGAGAG
GAGAGACGAGCAGATCCTGGCCCAGCTGCTGCCGCTCCTGCACGGCAATGTGAACGGGAGCAAGGTCATCATCCG
GGAGTTCCAGGAGCACTGCCGCCGGGGACTGCTCAGCAACCACACCGGCAGCCCGCGGACGCCCTCCACCACCTA
CCTGCACACCCCCACCCCCAGCGAGGATGCCGCCATCCCCTCTAAGTCCCGGCTCAAGCGGCTCATTTCCGAGAA
CTCAGTGTATGAGAAGCGGCCTGACTTCAGGATGTGCTGGTACGTGCACCCGCAGGTGCTACAGAGCTTCCAGCA
GGAGCACCTGCCCGTGCCGTGCCAGTGGAGCTATGTGACATCGGTGCCCTCGGCCCCCAAAGAGGACAGTGGCAG
CGTCCCCTCCACGGGGCCCAGCCAGGGCACTCCCATCTCGCTGAAGAGGAAGTCAGCGGGCAGCATGTGCATCAC
CCAATTCATGAAGAAGCGCAGGCACGACGGCCAGATTGGTGCTGAAGACATGGACGGCTTCCAGGCAGACACGGA
GGAGGAGGAAGAGGAGGAGGGCGACTGTATGATCGTGGATGTCCCGGATGCTGTGGAGGTCCAAGCCCCGTGTGG
AGCCGCTTCCGGAGCTGGGGGTGGTGTGGGGGTGGACACCGGCAAGGCCACCCTGACCGCGAGCCCACTGGGTGC
ATCCTGAGAGCAGGGGTGACGTATGTAGAACGCTTAGGGTGTCCTCCCCACAGAGCAGATACTTGAACCGACTCA
ATTCCTGTGTAAAGAGCACTTTGTCCTGCTTCACGGACCTCCCCAAAGTGTGCAGAGTTCTATATAGGATGCTGG
ATTAGTTCCTTTGATATTTGTAAAAATTCCCCCAAGAGCCGCATATGAATCTGCCCTTTAATAAAGCATTATTGA
GATTGCTGGCCTATTGGGGAAGCTGCGGGCACAGGA

FIGURE 1225

MDCKDRPAFPVKKLIQARLPFKRLNLVPKGKADDMSDDQGTSVQSKSPDLEASLDTLENNCHVGSDIDFRPKLVN
GKGPLDNFLRNRIETSIGQSTVIIDLTEDSNEQPDSLVDHNKLNSEASPSREAINGQREDTGDQQGLLKAIQNDK
LAFPGETLSDIPCKTEEEGVGCGGAGRRGDSQECSPRSCPELTSGPRMCPRKEQDSWSEAGGILFKGKVPMVVLQ
DILAVRPPQIKSLPATPQGKNMTPESEVLESFPEEDSVLSHSSLSSPSSTSSPEGPPAPPKQHSSTSPFPTSTPL
RRITKKFVKGSTEKNKLRLQRDQERLGKQLKLRAEREEKEKLKEEAKRAKEEAKKKKEEEKELKEKERREKREKD
EKEKAEKQRLKEERRKERQEALEAKLEEKRKKEEEKRLREEEKRIKAEKAEITRFFQKPKTPQAPKTLAGSCGKF
APFEIKEHMVLAPRRRTAFHPDLCSQLDQLLQQQSGEFSFLKDLKGRQPLRSGPTHVSTRNADIFNSDVVIVERG
KGDGVPERRKFGRMKLLQFCENHRPAYWGTWNKKTALIRARDPWAQDTKLLDYEVDSDEEWEEEEPGESLSHSEG
DDDDDMGEDEDEDDGFFVPHGYLSEDEGVTEECADPENHKVRQKLKAKEWDEFLAKGKRFRVLQPVKIGCVWAAD
RDCAGDDLKVLQQFAACFLETLPAQEEQTPKASKRERRDEQILAQLLPLLHGNVNGSKVIIREFQEHCRRGLLSN
HTGSPRTPSTTYLHTPTPSEDAAIPSKSRLKRLISENSVYEKRPDFRMCWYVHPQVLQSFQQEHLPVPCQWSYVT
SVPSAPKEDSGSVPSTGPSQGTPISLKRKSAGSMCITQFMKKRRHDGQIGAEDMDGFQADTEEEEEEEGDCMIVD
VPDAVEVQAPCGAASGAGGGVGVDTGKATLTASPLGAS

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FIGURE 1226

GGCGGGGGGCGCACAGAGCCAGAGGGGCTTGCGAGCGGCGGCTGAGGGACCGCGGGGAGGGGGCGCCGAGCGGCT
CCAGCGCAGAGACTCTCACTGCACGCCGGAGGCCCCTTCCTCGCTCCGCCCGCGCGACCGCGCGCCCCAGTCCCG
CCCCGCCCCGCTAACCGCCCCAGACACAGCGCTCGCCGAGGGTCGCTTGGACCCTGATCTTACCCGTGGGCACCC
TGCGCTCTGCCTGCCGCGAAGACCGGCTCCCCGACCCGCAGAAGTCAGGAGAGAGGGTGAAGCGGAGCAGCCCGA
GGCGGGGCAGCCTCCCGGAGCAGCGCCGCGCAGAGCCCGGGACA**ATG**GGGCCGCGGCGGCTGCTGCTGGTGGCCG
CCTGCTTCAGTCTGTGCGGCCCGCTGTTGTCTGCCCGCACCCGGGCCCGCAGGCCAGAATCAAAAGCAACAAATG
CCACCTTAGATCCCCGGTCATTTCTTCTCAGGAACCCCAATGATAAATATGAACCATTTTGGGAGGATGAGGAGA
AAAATGAAAGTGGGTTAACTGAATACAGATTAGTCTCCATCAATAAAAGCAGTCCTCTTCAAAAACAACTTCCTG
CATTCATCTCAGAAGATGCCTCCGGATATTTGACCAGCTCCTGGCTGACACTCTTTGTCCCATCTGTGTACACCG
GAGTGTTTGTAGTCAGCCTCCCACTAAACATCATGGCCATCGTTGTGTTCATCCTGAAAATGAAGGTCAAGAAGC
CGGCGGTGGTGTACATGCTGCACCTGGCCACGGCAGATGTGCTGTTTGTGTCTGTGCTCCCCTTTAAGATCAGCT
ATTACTTTTCCGGCAGTGATTGGCAGTTTGGGTCTGAATTGTGTCGCTTCGTCACTGCAGCATTTTACTGTAACA
TGTACGCCTCTATCTTGCTCATGACAGTCATAAGCATTGACCGGTTTCTGGCTGTGGTGTATCCCATGCAGTCCC
TCTCCTGGCGTACTCTGGGAAGGGCTTCCTTCACTTGTCTGGCCATCTGGGCTTTGGCCATCGCAGGGGTAGTGC
CTCTCGTCCTCAAGGAGCAAACCATCCAGGTGCCCGGGCTCAACATCACTACCTGTCATGATGTGCTCAATGAAA
CCCTGCTCGAAGGCTACTATGCCTACTACTTCTCAGCCTTCTCTGCTGTCTTCTTTTTTGTGCCGCTGATCATTT
CCACGGTCTGTTATGTGTCTATCATTCGATGTCTTAGCTCTTCCGCAGTTGCCAACCGCAGCAAGAAGTCCCGGG
CTTTGTTCCTGTCAGCTGCTGTTTTCTGCATCTTCATCATTTGCTTCGGACCCACAAACGTCCTCCTGATTGCGC
ATTACTCATTCCTTTCTCACACTTCCACCACAGAGGCTGCCTACTTTGCCTACCTCCTCTGTGTCTGTGTCAGCA
GCATAAGCTCGTGCATCGACCCCCTAATTTACTATTACGCTTCCTCTGAGTGCCAGAGGTACGTCTACAGTATCT
TATGCTGCAAAGAAAGTTCCGATCCCAGCAGTTATAACAGCAGTGGGCAGTTGATGGCAAGTAAAATGGATACCT
GCTCTAGTAACCTGAATAACAGCATATACAAAAAGCTGTTAACT**TAG**GAAAAGGGACTGCTGGGAGGTTAAAAAG
AAAAGTTTATAAAAGTGAATAACCTGAGGATTCTATTAGTCCCCACCCAAACTTTATTGATTCACCTCCTAAAAC
AACAGATGTACGACTTGCATACCTGCTTTTTATGGGAGCTGTCAAGCATGTATTTTTGTCAATTACCAGAAAGAT
AACAGGACGAGATGACGGTGTTATTCCAAGGGAATATTGCCAATGCTACAGTAATAAATGAATGTCACTTCTGGA
TATAGCTAGGTGACATATACATACTTACATGTGTGTATATGTAGATGTATGCACACACATATATTATTTGCAGTG
CAGTATAGAATAGGCACTTTAAAACACTCTTTCCCCGCACCCCAGCAATTATGAAAATAATCTCTGATTCCCTGA
TTTAATATGCAAAGTCTAGGTTGGTAGAGTTTAGCCCTGAACATTTCATGGTGTTCATCAACAGTGAGAGACTCC
ATAGTTTGGGCTTGTACCACTTTTGCAAATAAGTGTATTTTGAAATTGTTTGACGGCAAGGTTTAAGTTATTAAG
AGGTAAGACTTAGTACTATCTGTGCGTAGAAGTTCTAGTGTTTTCAATTTTAAACATATCCAAGTTTGAATTCCT
AAAATTATGGAAACAGATGAAAAGCCTCTGTTTTGATATGGGTAGTATTTTTTACATTTTACACACTGTACACAT
AAGCCAAAACTGAGCATAAGTCCTCTAGTGAATGTAGGCTGGCTTTCAGAGTAGGCTATTCCTGAGAGCTGCATG
TGTCCGCCCCCGATGGAGGACTCCAGGCAGCAGACACATGCCAGGGCCATGTCAGACACAGATTGGCCAGAAACC
TTCCTGCTGAGCCTCACAGCAGTGAGACTGGGGCCACTACATTTGCTCCATCCTCCTGGGATTGGCTGTGAACTG
ATCATGTTTATGAGAAACTGGCAAAGCAGAATGTGATATCCTAGGAGGTAATGACCATGAAAGACTTCTCTACCC
ATCTTAAAAACAACGAAAGAAGGCATGGACTTCTGGATGCCCATCCACTGGGTGTAAACACATCTAGTAGTTGTT
CTGAAATGTCAGTTCTGATATGGAAGCACCCATTATGCGCTGTGGCCACTCCAATAGGTGCTGAGTGTACAGAGT
GGAATAAGACAGAGACCTGCCCTCAAGAGCAAAGTAGATCATGCATAGAGTGTGATGTATGTGTAATAAATATGT
TTCACACAAACAAGGCCTGTCAGCTAAAGAAGTTTGAACATTTGGGTTACTATTTCTTGTGGTTATAACTTAATG
AAAACAATGCAGTACAGGACATATATTTTTTAAAATAAGTCTGATTTAATTGGGCACTATTTATTTACAAATGTT
TTGCTCAATAGATTGCTCAAATCAGGTTTTCTTTTAAGAATCAATCATGTCAGTCTGCTTAGAAATAACAGAAGA
AAATAGAATTGACATTGAAATCTAGGAAAATTATTCTATAATTTCCATTTACTTAAGACTTAATGAGACTTTAAA
AGCATTTTTTAACCTCCTAAGTATCAAGTATAGAAAATCTTCATGGAATTCACAAAGTAATTTGGAAATTAGGTT
GAAACATATCTCTTATCTTACGAAAAAATGGTAGCATTTTAAACAAAATAGAAAGTTGCAAGGCAAATGTTTATT
TAAAAGAGCAGGCCAGGCGCGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCTGAGGCGGGTGGATCACG
AGGTCAGGAGATCGAGACCATCCTGGCTAACACGGTGAAACCCCGTCTCTACTAAAAATGCAAAAAAAAATTAGCCG
GGCGTGGTGGCAGGCACCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCAGGAGACTGGCGTGAACCCAGGAGGCG
GACCTTGTAGTGAGCCGAGATCGCGCCACTGTGCTCCAGCCTGGGCAACAGAGCAAGACTCCATCTC

FIGURE 1227

MGPRRLLLVAACFSLCGPLLSARTRARRPESKATNATLDPRSFLLRNPNDKYEPFWEDEEKNESGLTEYRLVSIN
KSSPLQKQLPAFISEDASGYLTSSWLTLFVPSVYTGVFVVSLPLNIMAIVVFILKMKVKKPAVVYMLHLATADVL
FVSVLPFKISYYFSGSDWQFGSELCRFVTAAFYCNMYASILLMTVISIDRFLAVVYPMQSLSWRTLGRASFTCLA
IWALAIAGVVPLVLKEQTIQVPGLNITTCHDVLNETLLEGYYAYYFSAFSAVFFFVPLIISTVCYVSIIRCLSSS
AVANRSKKSRALFLSAAVFCIFIICFGPTNVLLIAHYSFLSHTSTTEAAYFAYLLCVCVSSISSCIDPLIYYYAS
SECQRYVYSILCCKESSDPSSYNSSGQLMASKMDTCSSNLNNSIYKKLLT

FIGURE 1228

TCTTTGGTGACTTGTCCACTCCAGTGTGGCATCATGTGGCAGCTGCTCCTCCCAACTGCTCTGCTACTTCTAGTT
TCAGCTGGCATGCGGACTGAAGATCTCCCAAAGGCTGTGGTGTTCCTGGAGCCTCAATGGTACAGCGTGCTTGAG
AAGGACAGTGTGACTCTGAAGTGCCAGGGAGCCTACTCCCCTGAGGACAATTCCACACAGTGGTTTCACAATGAG
AGCCTCATCTCAAGCCAGGCCTCGAGCTACTTCATTGACGCTGCCACAGTCAACGACAGTGGAGAGTACAGGTGC
CAGACAAACCTCTCCACCCTCAGTGACCCGGTGCAGCTAGAAGTCCATATCGGCTGGCTGTTGCTCCAGGCCCCT
CGGTGGGTGTTCAAGGAGGAAGACCCTATTCACCTGAGGTGTCACAGCTGGAAGAACACTGCTCTGCATAAGGTC
ACATATTTACAGAATGGCAAAGACAGGAAGTATTTTCATCATAATTCTGACTTCCACATTCCAAAAGCCACACTC
AAAGATAGCGGCTCCTACTTCTGCAGGGGGCTTGTTGGGAGTAAAAATGTGTCTTCAGAGACTGTGAACATCACC
ATCACTCAAGGTTTGGCAGTGTCAACCATCTCATCATTCTCTCCACCTGGGTACCAAGTCTCTTTCTGCTTGGTG
ATGGTACTCCTTTTTGCAGTGGACACAGGACTATATTTCTCTGTGAAGACAAACATTTGAAGCTCAACAAGAGAC
TGGAAGGACCATAAACTTAAATGGAGAAAGGACCCTCAAGACAAATGACCCCCATCCCATGGGAGTAATAAGAGC
AGTGGCAGCAGCATCTCTGAACATTTCTCTGGATTTGCAACCCCATCATCCTCAGGCCTCTC

FIGURE 1229

MWQLLLPTALLLLVSAGMRTEDLPKAVVFLEPQWYSVLEKDSVTLKCQGAYSPEDNSTQWFHNESLISSQASSYF
IDAATVNDSGEYRCQTNLSTLSDPVQLEVHIGWLLLQAPRWVFKEEDPIHLRCHSWKNTALHKVTYLQNGKDRKY
FHHNSDFHIPKATLKDSGSYFCRGLVGSKNVSSETVNITITQGLAVSTISSFSPPGYQVSFCLVMVLLFAVDTGL
YFSVKTNI

FIGURE 1230

CACTCCAGTGTGGCATCATGTGGCAGCTGCTCCTCCCAACTGCTCTGCTACTTCTAGTTTCAGCTGGCATGCGGA
CTGAAGATCTCCCAAAGGCTGTGGTGTTCCTGGAGCCTCAATGGTACAGGGTGCTCGAGAAGGACAGTGTGACTC
TGAAGTGCCAGGGAGCCTACTCCCCTGAGGACAATTCCACACAGTGGTTTCACAATGAGAACCTCATCTCAAGCC
AGGCCTCGAGCTACTTCATTGACGCTGCCACAGTCGACGACAGTGGAGAGTACAGGTGCCAGACAAACCTCTCCA
CCCTCAGTGACCCGGTGCAGCTAGAAGTCCATGTCGGCTGGCTGTTGCTCCAGGCCCCTCGGTGGGTGTTCAAGG
AGGAAGACCCTATTCACCTGAGGTGTCACAGCTGGAAGAACACTGCTCTGCATAAGGTCACATATTTACAGAATG
GCAAAGACAGGAAGTATTTTCATCATAATTCTGACTTCCACATTCCAAAAGCCACACTCAAAGATAGCGGCTCCT
ACTTCTGCAGGGGGCTTGTTGGGAGTAAAAATGTGTCTTCAGAGACTGTGAACATCACCATCACTCAAGGTTTGG
CAGTGTCAACCATCTCATCATTCTCTCCACCTGGGTACCAAGTCTCTTTCTGCTTGGTGATGGTACTCCTTTTTG
CAGTGGACACAGGACTATATTTCTCTGTGAAGACAAACATTTGAAGCTCAACAAGAGACTGGAAGGACCATAAAC
TTAAATGGAGAAAGGACCCTCAAGACAAATGACCCCCATCCCATGGGAGTAATAAGAGCAGTGGCAGCAGCATCT
CTGAACATTTCTCTGGATTTGCAACCCCATCATCCTCAGGCCTCTCTACAAGCAGCAGGAAACATAGAACTCAGA
GCCAGATCCTTTATCCAACTCTCGATTTTTCCTTGGTCTCCAGTGGAAGGGAAAAGCCCATGATCTTCAAGCAGG
GAAGCCCCAGTGAGTAGCTGCATTCCTAGAAATTGAAGTTTCAGAGCTACACAAACACTTTTTCTGTCCCAACCA
TTCCCTCACAGTAAAACAACAATACAGGCTAGGGATGGTAATCCTTTAAACATACAAAAATTGCTCGTATTATAA
ATTACCCAGTTTAGAGGGGAAAAAAGAAAATAATTATTCCTAAACAAATGGATAAGTAGAATTAATGATTGAGGC
AGGACCCTACAGAGTGTGGGAACTGCTGGGGATCTAGAGAATTCAGTGGGACCAATGAAAGCATGGCTGAGAAAT
AGCAGGGTAGTCCAGGATAGTCTAAGGGAGGTGTTCCCATCTGAGCCCAGAGATAAGGGTGTCTTCCTAGAACAT
TAGCCGTAGTGGAATTAACAGGAAATCATGAGGGTGACGTAGAATTGAGTCTTCCAGGGGACTCTATCAGAACTG
GACCATTTCCAAGTATATAACGATGAGCCCTCTAATGCTAGGAGTAGCAAATGGTCCTAGGAAGGGGACTGAGGA
TTGGGGTGGGGGTGGGGTGGAAAAGAAAGTACAGAACAAACCCTGTGTCACTGTCCCAAGTTAAGCTAAGTGAAC
AGAACTATCTCAGCATCAGAATGAGAATGAGAAAGCCTGAGAAGAAAGAACCAACCACAAGCACACAGGAAGGAA
AGCGCAGGAGGTGAAAATGCTTTCTTGGCCAGGGTAGTAAGAATTAGAGGTTAATGCAGGGACTGTAAAACCACC
TTTTCTGCTTCAATGTCTAGTTCCTGTATAGCTTTGTTCATTGCATTTATTAAACAAATGTTGTATAACCAATAC
TAAATGTACTACTGAGCTTCACTGAGTTACGCTGTGAAACTTTCAAATCCTTCTTCAGTCAGTTCCAATGAGGTG
GGGATGGAGAAGACAATTGTTGCTTATGAAAAAAAGCTTTAGCTGTCTCCTGTTTTGTAAGCTTTCAGTGCAACA
TTTCTTGGTTCCAATAAAGCATTTTAC

FIGURE 1231

MWQLLLPTALLLLVSAGMRTEDLPKAVVFLEPQWYRVLEKDSVTLKCQGAYSPEDNSTQWFHNENLISSQASSYF
IDAATVDDSGEYRCQTNLSTLSDPVQLEVHVGWLLLQAPRWVFKEEDPIHLRCHSWKNTALHKVTYLQNGKDRKY
FHHNSDFHIPKATLKDSGSYFCRGLVGSKNVSSETVNITITQGLAVSTISSFSPPGYQVSFCLVMVLLFAVDTGL
YFSVKTNI

FIGURE 1232

GCAGTTCAGACCCCCCCACACCCATCAAAGAGCCGCTCCTCCCCCCCGCAGGCGCCTTCGCCGCCTCCCTCCCTT
CCTTTCCTTTCCGCTCCTCTTCCGACCTGTCCACCCGGGAGGAAGGGAGCTGGAAAGGGGGCGGAAACCTCTCCC
CTCCAAAAAGCACAACAAAACTGTTCAGTGCGGAGGAGCCGGGTTCGCCCCTGCCGGACAGCGGGGGGCTTTGTT
CCCCGCAGTTGTTTCCTGCCCATTTGACCTGTCAGCTGCTGGGGAAACGCTGCTGTTGACCTTTGGTTGAACTGC
TAAGGCGATTTTGCTGATTTTTCTTTCTTTTTCCGCGAGGGCTGTCTTTTGCTCCTCCAAATGAGCCCAGTCCCC
CTCCCTTCTCCCCAAAGCGCTCCAAGAGAAAGTGCCAGGAAGGGGCTTGTCCCGGAAGGCCTGGCGGCTGAGCGG
GGCCAGGTCCTGGTTAGGCCACCAGGGTGGGCGTCCGCGCCATTGTTTGAGCTTGTCGGCGCTGGTGGGAGAGAT
GAGGGCAATTCCTCTGGGACGCAAGTCCCCTCGAATGGCCGGGGCTGGCCGGGATGTTCCCCGCACGGCGCTGCC
CTCGAGTCCCCCCGATGGAGAGCGCGGGCGCGCCTTCCTTCGCTGGCGTCCAAACCCGGGACCAGCTAGAACACA
GCAGGGCTGGGACTGGGTTCCAGCCCCACGTGGAGTCTGGATTTGTTTTGTTGTGTTTTGCTTTCCTTCCTGGAA
GAAATCCCGAGGGGACCGCCCTAGAGCGGCAGCTCCAGGACCTCGGCCCTTGGGCTTCCGGGGGTGCAGCCACTT
AGGCCCCGCTCCCGGGGAGAGAGGGATTATTTTTTAAGATTTATCCCCAGGGCGCGCGGCATTTCCCTGTCCCTC
GTGAATCCCGTTGAGAGTCCTCCCTCCCCAACCTCCTCCATTTCCCCAGCCAGACCGATTCGAGAGCCCTGGAGA
TTCTGGGCGAGGCTAGTGACTGGGTAGTACAGGCCTCTAGCCCCACCATTGCTCTCTCTGTCTTCAGTTCCCCAG
GAGGGCAATGGCATCAAACAGCACAGCTCTGGGGGATGTCAATATTGCATACCTTTTCTACCTAAAGGGAAAATG
ACTCGCTTTTCTGCTTGCAAATATGGTAGTTTCTGCTTACAAATGTAATACAATGCCCATGACAGCCAAGGACTG
GAAGCATAAGTTGCTAGGTCTTACAGGTGATTTTTTACAATGAAGCAAACTCACTATGTTAGACACCATTTACAT
TGGATGTCTCCAACTAACAAAAGTAACTAAAGACAGATGTAGGTGTAAATTGAGAGTGAAATTTGACCCTTTAGA
CCGTCACAACTTCCTTGGGCTTATCCTGGGTGCTTATAGGAGAGGTGGGCTCCACCCACAAAAATGGACTGCTCA
GAAAAATGAGGGAGAGAGAAAGGGTGGCCACTTTCCCGAGCCAAGAAATTCCTTGAAAAAAAATCAGAACATCTG
AAACCAGAGAGCCGATTTCCTTACCGGGAGGCAGTTCCTGGCTAACGAAGAGGAAGCACG**ATG**GGAAGAAAAGTT
CACTCCAACGGAAGCCAGTTTGCTGAACATAGCAGATCGCCCAGGAGGACTGGGAGAGACTGCAAACCAGTTCGA
GCCCCCAGCATGGCGTTAGGTGTCAGCCAGCTGGCAGGAAGGTCCAGGTGTCTGTGTTCAGAGTCTCAAGGCGGC
TATGAGAGGTTTTCCTCCGAGTACCCAGAATTCTGTTCTAAAACCAAGGCCCTGGCAGCCATCCCACCCCCGGTT
CCCCCCAGTGCCACAGAGCCCTTGGACCTGGGCTGCAGCTCCTGTGGGACCCCACTACACGACCAGGGGGGTCCT
GTGGAGATCCTTCCCTTCCTCTACCTCGGCAGTGCCTACCATGCTGCCCGGAGAGACATGCTGGACGCCCTGGGC
ATCACGGCTCTGTTGAATGTCTCCTCGGACTGCCCAAACCACTTTGAAGGACACTATCAGTACAAGTGCATCCCA
GTGGAAGATAACCACAAGGCCGACATCAGCTCCTGGTTCATGGAAGCCATAGAGTACATCGATGCCGTGAAGGAC
TGCCGTGGGCGCGTGCTGGTGCACTGCCAGGCGGGCATCTCGCGGTCGGCCACCATCTGCCTGGCCTACCTGATG
ATGAAGAAACGGGTGAGGCTGGAGGAGGCCTTCGAGTTCGTTAAGCAGCGCCGCAGCATCATCTCGCCCAACTTC
AGCTTCATGGGGCAGCTGCTGCAGTTCGAGTCCCAGGTGCTGGCCACGTCCTGTGCTGCGGAGGCTGCTAGCCCC
TCGGGACCCCTGCGGGAGCGGGGCAAGACCCCCGCCACCCCCACCTCGCAGTTCGTCTTCAGCTTTCCGGTCTCC
GTGGGCGTGCACTCGGCCCCCAGCAGCCTGCCCTACCTGCACAGCCCCATCACCACCTCTCCCAGCTGT**TAG**AGC
CGCCCTGGGGGCCCCAGAACCAGAGCTGGCTCCCAGCAAGGGTAGGACGGGCCGCATGCGGGCAGAAAGTTGGGA
CTGAGCAGCTGGGAGCAGGCGACCGAGCTCCTTCCCCATCATTTCTCCTTGGCCAACGACGAGGCCAGCCAGAAT
GGCAATAAGGACTCCGAATACATAATAAAAGCAAACAGAACACTCCAACTTAGAGCAATAACGGCTGCCGCAGCA
GCCAGGGAAGACCTTGGTTTGGTTTATGTGTCAGTTTCACTTTTCCGATAGAAATTTCTTACCTCATTTTTTTAA
GCAGTAAGGCTTGAAGTGATGAAACCCACAGATCCTAGCAAATGTGCCCAACCAGCTTTACTAAAGGGGGAGGAA
GGGAGGGCAAAGGGATGAGAAGACAAGTTTCCCAGAAGTGCCTGGTTCTGTGTACTTGTCCCTTTGTTGTCGTTG
TTGTAGTTAAAGGAATTTCATTTTTTAAAAGAAATCTTCGAAGGTGTGGTTTTCATTTCTCAGTCACCAACAGAT
GAATAATTATGCTTAATAATAAAGTATTTATTAAGACTTTCTTCAGAGTATGAAAGTACAAAAAGTCTAGTTACA
GTGGATTTAGAATATATTTATGTTGATGTCAAACAGCTGAGCACCGTAGCATGCAGATGTCAAGGCAGTTAGGAA
GTAAATGGTGTCTTGTAGATATGTGCAAGGTAGCATGATGAGCAACTTGAGTTTGTTGCCACTGAGAAGCAGGCG
GGTTGGGTGGGAGGAGGAAGAAAGGGAAGAATTAGGTTTGAATTGCTTTTTAAAAAAAAAAGAAAAGAAAAAGAC
AGCATCTCACTATGTTGCCAAGGCTCATCTTGAGAAGCAGGCGGGTTGGGTGGGAGGAGGAAGAAAGGGAAGAAT
TAGGTTTGAATTGCTTTTTTAAAAAAAAA

FIGURE 1233

MGRKVHSNGSQFAEHSRSPRRTGRDCKPVRAPSMALGVSQLAGRSRCLCSESQGGYERFSSEYPEFCSKTKALAA
IPPPVPPSATEPLDLGCSSCGTPLHDQGGPVEILPFLYLGSAYHAARRDMLDALGITALLNVSSDCPNHFEGHYQ
YKCIPVEDNHKADISSWFMEAIEYIDAVKDCRGRVLVHCQAGISRSATICLAYLMMKKRVRLEEAFEFVKQRRSI
ISPNFSFMGQLLQFESQVLATSCAAEAASPSGPLRERGKTPATPTSQFVFSFPVSVGVHSAPSSLPYLHSPITTS
PSC

FIGURE 1234

CTTTGCGGCCACTTCTGCAGGCGTCCCTTCTTAGCTCTCGCCCGCCCCTTTCTGCAGCCTAGGCGGCCCGGGTTC
TCTTCTCTTCCTCGCGCGCCCAGCCGCCTCGGTTCCCGGCGACCATGGTGACGATGGAGGAGCTGCGGGAGATGG
ACTGCAGTGTGCTCAAAAGGCTGATGAACCGGGACGAGAATGGCGGCGGCGCGGGCGGCAGCGGCAGCCACGGCA
CCCTGGGGCTGCCGAGCGGCGGCAAGTGCCTGCTGCTGGACTGCAGACCGTTCCTGGCGCACAGCGCGGGCTACA
TCCTAGGTTCGGTCAACGTGCGCTGTAACACCATCGTGCGGCGGCGGGCTAAGGGCTCCGTGAGCCTGGAGCAGA
TCCTGCCCGCCGAGGAGGAGGTACGCGCCCGCTTGCGCTCCGGCCTCTACTCGGCGGTCATCGTCTACGACGAGG
GCAGCCCGCGCGCCGAGAGCCTCCGCGAGGACAGCACCGTGTCGCTGGTGGTGCAGGCGCTGCGCCGCAACGCCG
AGCGCACCGACATCTGCCTGCTCAAAGGCGGCTATGAGAGGTTTTCCTCCGAGTACCCAGAATTCTGTTCTAAAA
CCAAGGCCCTGGCAGCCATCCCACCCCCGGTTCCCCCCAGCGCCACAGAGCCCTTGGACCTGGGCTGCAGCTCCT
GTGGGACCCCACTACACGACCAGGGGGGTCCTGTGGAGATCCTTCCCTTCCTCTACCTCGGCAGTGCCTACCATG
CTGCCCGGAGAGACATGCTGGACGCCCTGGGCATCACGGCTCTGTTGAATGTCTCCTCGGACTGCCCAAACCACT
TTGAAGGACACTATCAGTACAAGTGCATCCCAGTGGAAGATAACCACAAGGCCGACATCAGCTCCTGGTTCATGG
AAGCCATAGAGTACATCGATGCCGTGAAGGACTGCCGTGGGCGCGTGCTGGTGCACTGCCAGGCGGGCATCTCGC
GGTCGGCCACCATCTGCCTGGCCTACCTGATGATGAAGAAACGGGTGAGGCTGGAGGAGGCCTTCGAGTTCGTTA
AGCAGCGCCGCAGCATCATCTCGCCCAACTTCAGCTTCATGGGACAGCTGCTGCAGTTCGAGTCCCAGGTGCTGG
CCACGTCCTGTGCTGCGGAGGCTGCTAGCCCCTCGGGACCCCTGCGGGAGCGGGGCAAGACCCCCGCCACCCCCA
CCTCGCAGTTCGTCTTCAGCTTTCCGGTCTCCGTGGGCGTGCACTCGGCCCCCAGCAGCCTGCCCTACCTGCACA
GCCCCATCACCACCTCTCCCAGCTGTTAGAGCCGCCCTGGGGGCCCCAGAACCAGAGCTGGCTCCCAGCAAGGGT
AGGACGGGCCGCATGCGGGCAGAAAGTTGGGACTGAGCAGCTGGGAGCAGGCGACCGAGCTCCTTCCCCATCATT
TCTCCTTGGCCAACGACGAGGCCAGCCAGAATGGCAATAAGGACTCCGAATACATAATAAAAGCAAACAGAACAC
TCCAACTTAGAGCAATAACGGCTGCCGCAGCAGCCAGGGAAGACCTTGGTTTGGTTTATGTGTCAGTTTCACTTT
TCCGATAGAAATTTCTTACCTCATTTTTTTAAGCAGTAAGGCTTGAAGTGATGAAACCCACAGATCCTAGCAAAT
GTGCCCAACCAGCTTTACTAAAGGGGGAGGAAGGGAGGGCAAAGGGATGAGAAGACAAGTTTCCCAGAAGTGCCT
GGTTCTGTGTACTTGTCCCTTTGTTGTCGTCGTTGTAGTTAAAGGAATTTCATTTTTTAAAAGAAATCTTCGAAG
GTGTGGTTTTCATTTCTCAGTCACCAACAGATGAATAATTATGCTTAATAATAAAGTATTTATTAAGACTTTCTT
CAGAGTATGAAAGTACAAAAAGTCTAGTTACAGTGGATTTAGAATATATTTATGTTGATGTCAAACAGCTGAGCA
CCGTAGCATGCAGATGTCAAGGCAGTTAGGAAGTAAATCGGTGTCTTGTAGATATGTGCAAGGTAGCATGATGAG
CAACTTGAGTTTGTTGCCACTGAGAAGCAGGCGGGTTGGGTGGGAGGAGGAAGAAARGGAAGAATTAGGTTTGAA
TTGCTTTTTAAAAAAAAAAGAAAAGAAAAAGACAGCATCTCACTATGTTGCCAAGGCTCATCTTGAGAAGCAGGC
GGGTTGGGTGGGAGGAGGAAGAAAGGGAAGAATTAGGTTTGAATTGCTTTTTTAAAAAAAAAGAAG

FIGURE 1235

MVTMEELREMDCSVLKRLMNRDENGGGAGGSGSHGTLGLPSGGKCLLLDCRPFLAHSAGYILGSVNVRCNTIVRR
RAKGSVSLEQILPAEEEVRARLRSGLYSAVIVYDEGSPRAESLREDSTVSLVVQALRRNAERTDICLLKGGYERF
SSEYPEFCSKTKALAAIPPPVPPSATEPLDLGCSSCGTPLHDQGGPVEILPFLYLGSAYHAARRDMLDALGITAL
LNVSSDCPNHFEGHYQYKCIPVEDNHKADISSWFMEAIEYIDAVKDCRGRVLVHCQAGISRSATICLAYLMMKKR
VRLEEAFEFVKQRRSIISPNFSFMGQLLQFESQVLATSCAAEAASPSGPLRERGKTPATPTSQFVFSFPVSVGVH
SAPSSLPYLHSPITTSPSC

FIGURE 1236

ACTCTTCTGGTCCCCACAGACTCAGAGAGAACCCACC**ATG**GTGCTGTCTCCTGCCGACAAGACCAACGTCAAGGC
CGCCTGGGGTAAGGTCGGCGCGCACGCTGGCGAGTATGGTGCGGAGGCCCTGGAGAGGATGTTCCTGTCCTTCCC
CACCACCAAGACCTACTTCCCGCACTTCGACCTGAGCCACGGCTCTGCCCAGGTTAAGGGCCACGGCAAGAAGGT
GGCCGACGCGCTGACCAACGCCGTGGCGCACGTGGACGACATGCCCAACGCGCTGTCCGCCCTGAGCGACCTGCA
CGCGCACAAGCTTCGGGTGGACCCGGTCAACTTCAAGCTCCTAAGCCACTGCCTGCTGGTGACCCTGGCCGCCCA
CCTCCCCGCCGAGTTCACCCCTGCGGTGCACGCCTCCCTGGACAAGTTCCTGGCTTCTGTGAGCACCGTGCTGAC
CTCCAAATACCGT**TAA**GCTGGAGCCTCGGTAGCCGTTCCTCCTGCCCGCTGGGCCTCCCAACGGGCCCTCCTCCC
CTCCTTGCACCGGCCCTTCCTGGTCTTTGAATAAAGTCTGAGTGGGCGGC

FIGURE 1237

MVLSPADKTNVKAAWGKVGAHAGEYGAEALERMFLSFPTTKTYFPHFDLSHGSAQVKGHGKKVADALTNAVAHVD
DMPNALSALSDLHAHKLRVDPVNFKLLSHCLLVTLAAHLPAEFTPAVHASLDKFLASVSTVLTSKYR

FIGURE 1238

GCGGACGCGTGGGCTGGAAACAACCCAATTGTCTATCAACAGTGACTGGAAGGACAAATTGTGCTATGTCCACAC
ATTAGAATACCAGTTGGCAGTCAAAAAGGAAGAGCTGATCTGTGCAGCAATTTGAGTCTCAGTAATTTCATGTGA
ATAACCCTATACCTTCCAATTTGAAATCAGAAGCAAAAAAGGCTGCCAAAATATTAAGAGAATTCACAGAAATAA
CTTCCAGAAATGGACCTGATAAGATCATTCCTGCTCACGTAATTGCGAAGGCTAAAGGCCTTGCAATTCTGTCTG
TGATCAAAGCCGGGTTCCTGGTGACTGCCAGAGGAGGCAGCGGGATTGTAGTGGCGCGCCTTCCAGATGGAAAAT
GGTCTGCACCCTCAGCCATTGGGATAGCTGGCCTTGGTGGAGGATTTGAAATAGGAATTGAGACACATTTACAGC
TACATATTCCCTCTGAGCATTGCCCTGGCTGCCTTCCATAAGTGTGGAGTGCCACTCCAGCTTTCTTAGGTTGCC
ATCTGCATGACACATCTTTCTCCATCCTTTTACTGTCAATCTA**ATG**GTATCAGACTTGGTGATAATTCTGAATTA
TGACCGTGCTGTAGAAGCTTTTGCAAAAGGCGGAAATCTGACCCTCGGAGGGAACTTGACTGTGGCGGTTGGGCC
CTTGGGAAGGAACTTGGAAGGAAACGTGGCCCTGAGAAGCTCCGCTGCCGTCTTCACGTACTGCAAGTCAAGGGG
ACTCTTTGCAGGCGTGTCTTTAGAAGGGAGCTGTTTGATTGAAAGGAAAGAAACTAATAGAAAATTTTATTGTCA
AGATATCCGAGCTTATGACATTTTATTTGGAGATACACCGCGGCCTGCTCAAGCCGAAGATCTTTATGAAATTCT
TGATTCCTTTACTGAAAAGTATGAAAATGAAGGACAACGAATCAATGCAAGAAAAGCAGCAAGGGAGCAGAGGAA
GTCTTCTGCTAAAGAATTACCTCCAAAGCCATTGTCAAGACCACAGCAGTCATCTGCACCAGTCCAGCTGAACTC
TGGCTCTCAAAGCAACAGAAATGAATATAAGCTCTATCCTGGACTTTCCAGCTATCATGAGAGAGTTGGCAATTT
GAATCAACCCATAGAAGTGACAGCGCTGTATTCATTTGAAGGACAGCAGCCTGGGGATTTGAATTTTCAAGCTGG
AGACAGAATCACAGTTATATCAAAAACAGATTCACATTTTGATTGGTGGGAAGGAAAACTTCGAGGTCAAACTGG
CATTTTTCCAGCCAACTACGTAACCATGAAT**TAA**AGCGTATACTATTTTCTTCTTTGAGAATTACAAAAAAATTA
TTTCTACACTGACAGGATTTACTAGTTAAGCAATGTTTAATATAAATTTTAAAAAACTTCTGTTCTACAAAATTT
CCATTCCGTATGTAAAAGATTTTGTTTTTCTATATAAAAAGAGCTGACTGACATATCTTTAAATACTTTGTACTA
ACTTTATCACACTTACTGTGTCATAGAATATCATACAGTTTATACGCTCATAGTTCTCTTGTGAACACTTCAAAC
ATCGCTAAGCATTTGATCTGGCCATGTATATGGTAGCTGTGTTTTAATTTGAGAATCTTGAGGGTAGAGCCACAA
ATTTCAATTCTTACATTTCCATTTGCAAAGTGACTAGAGAAAAAGAAATCAGCTTAAATGAGGTATTAAGTAATG
TTTAGAGTTGTAGGTATTAACTAGAATATAAATCCTTAGAAATTGTCTTTATACCTTCAAAAATTATACTATGCA
TTTATCATAGAAATGTGATTACAAAGAAGTCTGACTACCATGTCTTTAAACATATGGCATCTCTCAACTTTTCTT
CCTTATGGGGCTACATTTGTTCATTTCCAGCAGTAGCATAAACTTACGGTGACATGGTAGACTTGTCTCTAAATA
AAATTTTTAAATGTTAAAAAAAAAAAAAAAAA

FIGURE 1239

MVSDLVIILNYDRAVEAFAKGGNLTLGGNLTVAVGPLGRNLEGNVALRSSAAVFTYCKSRGLFAGVSLEGSCLIE
RKETNRKFYCQDIRAYDILFGDTPRPAQAEDLYEILDSFTEKYENEGQRINARKAAREQRKSSAKELPPKPLSRP
QQSSAPVQLNSGSQSNRNEYKLYPGLSSYHERVGNLNQPIEVTALYSFEGQQPGDLNFQAGDRITVISKTDSHFD
WWEGKLRGQTGIFPANYVTMN

FIGURE 1240

CTGCCATTTAGGACAAGCTGGATGATGATGGTTTGATAGCTCCAGGGGTTCGTGTATAGGAGATGATGAATCTGC
TTCATCCAGAATCACAATCTTAAAAGGCGGGAACTGAGGCGACTGTGGGGACATCAGTGATCGTAAGTCTCCTGG
GCCCGTTATTCTCAGATTAGGTGACGGAGCTAAGACTTCGAGACCATCTCGTCCTTTTTGTATCGCGGAAACCTG
AGGAACGAGCCGGCGGCGGTGACCTGCACGAGAAGCCAGGCTAACTGGGTGAAGTACCATGCAAGCATTTCTTAA
AGGTACATCCATCAGTACTAAACCCCCGCTGACCAAGGATCGAGGAGTAGCTGCCAGTGCGGGAAGTAGCGGAGA
GAACAAGAAAGCCAAACCCGTTCCCTGGGTGGAAAAATATCGCCCAAAATGTGTGGATGAAGTTGCTTTCCAGGA
AGAAGTGGTTGCAGTGCTGAAAAAATCTTTAGAAGGAGCAGATCTTCCTAATCTCTTGTTTTACGGACCACCTGG
AACTGGAAAAACATCCACTATTTTGGCAGCAGCTAGAGAACTCTTTGGGCCTGAACTTTTCCGATTAAGAGTTCT
TGAGTTAAATGCATCTGATGAACGTGGAATACAAGTAGTTCGAGAGAAAGTGAAAAATTTTGCTCAATTAACTGT
GTCAGGAAGTCGCTCAGATGGGAAGCCGTGTCCGCCTTTTAAGATTGTGATTCTGGATGAAGCAGATTCTATGAC
CTCAGCTGCTCAGGCAGCTTTAAGACGTACCATGGAGAAGGAGTCGAAAACCACCCGATTCTGTCTTATCTGTAA
CTATGTCAGTCGAATAATTGAACCCCTGACCTCTAGATGTTCAAAATTCCGCTTCAAGCCTCTGTCAGATAAAAT
TCAACAGCAGCGATTACTAGACATTGCCAAGAAGGAAAATGTCAAAATTAGTGATGAGGGAATAGCTTATCTTGT
TAAAGTGTCAGAAGGAGACTTAAGAAAAGCCATTACATTTCTTCAAAGCGCTACTCGATTAACAGGTGGAAAGGA
GATCACAGAGAAAGTGATTACAGACATTGCTGGGGTAATACCAGCTGAGAAAATTGATGGAGTATTTGCTGCCTG
TCAGAGTGGCTCTTTTGACAAACTAGAAGCTGTGGTCAAGGATTTAATAGATGAGGGTCATGCAGCAACTCAGCT
CGTCAATCAACTCCATGATGTGGTTGTAGAAAATAACTTATCTGATAAACAGAAGTCTATTATCACAGAAAAACT
TGCCGAAGTTGACAAATGCCTAGCAGATGGTGCTGATGAACATTTGCAACTCATCAGCCTTTGTGCAACTGTGAT
GCAGCAGTTATCTCAGAATTGTTAACGTGATATATCTGGATGGGGGGTTTTGTAAATAATGAAGTTGTAATAAAA
ATAAAATGACCAAAAGCACCG

FIGURE 1241

MQAFLKGTSISTKPPLTKDRGVAASAGSSGENKKAKPVPWVEKYRPKCVDEVAFQEEVVAVLKKSLEGADLPNLL
FYGPPGTGKTSTILAAARELFGPELFRLRVLELNASDERGIQVVREKVKNFAQLTVSGSRSDGKPCPPFKIVILD
EADSMTSAAQAALRRTMEKESKTTRFCLICNYVSRIIEPLTSRCSKFRFKPLSDKIQQQRLLDIAKKENVKISDE
GIAYLVKVSEGDLRKAITFLQSATRLTGGKEITEKVITDIAGVIPAEKIDGVFAACQSGSFDKLEAVVKDLIDEG
HAATQLVNQLHDVVVENNLSDKQKSIITEKLAEVDKCLADGADEHLQLISLCATVMQQLSQNC

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FIGURE 1242

GGCACGAGCTCGGCTCCTGGAAAGATGGAGGCAGCGGAGACAGAGGCGGAAGCTGCAGCCCTAGAGGTCCTGGCT
GAGGTGGCAGGCATCTTGGAACCTGTAGGCCTGCAGGAGGAGGCAGAACTGCCAGCCAAGATCCTGGTTGAGTTT
GTGGTGGACTCTCAGAAGAAAGACAAGCTGCTCTGCAGCCAGCTTCAGGTAGCGGATTTCCTGCAGAACATCCTG
GCTCAGGAGGACACTGCTAAGGGTCTCGACCCCTTGGCTTCTGAAGACACGAGCCGACAGAAGGCAATTGCAGCT
AAGGAACAATGGAAAGAGCTGAAGGCCACCTACAGGGAGCACGTAGAGGCCATCAAAATTGGCCTCACCAAGGCC
CTGACTCAGATGGAGGAAGCCCAGAGGAAACGGACACAACTCCGGGAAGCCTTTGAGCAGCTCCAGGCCAAGAAA
CAAATGGCCATGGAGAAACGCAGAGCAGTCCAGAACCAGTGGCAGCTACAACAGGAGAAGCATCTGCAGCATCTG
GCGGAGGTTTCTGCAGAGGTGAGGGAGCGTAAGACAGGGACTCAGCAGGAGCTTGACAGGGTGTTTCAGAAACTT
GGAAACCTGAAGCAGCAGGCAGAACAGGAGCGGGACAAGCTGCAGAGGTATCAGACCTTCCTCCAGCTTCTGTAT
ACCCTGCAGGGTAAGCTGTTGTTCCCTGAGGCTGAGGCTGAGGCAGAGAATCTTCCAGATGATAAACCCCAGCAG
CCGACTCGACCCCAGGAGCAGAGTACAGGAGACACCATGGGGAGAGACCCTGGTGTGTCCTTCAAGGCTGTTGGT
CTACAACCTGCTGGAGATGTAAATTTGCCATGACTTCCTGGAGGACAGCAGCATGGAGAAAGATCCTAGAAAAGG
CCTCTGACTTCCCTCACCTCCCAACCATCATTACAGGAAAGACTGTGAACTCCTGAGTTCAGCTTGATTTCTGAC
TACATCCCAGCAAGCTCTGGCATCTGTGGATTAAAATCCCTGGATCTCTCTCAGTTGTGTATTTGTTCATCTTCA
TATGCTGGCAGGAACAACTATTAATACAGATACTCAGAAGCCAATAACATGACAGGAGCTGGGACTGGTTTGAAC
ACAGGGTGTGCAGATGGGGAGGGGGTACTGGCCTTGGGCCTCCTATGATGCAGACATGGTGAATTTAATTCAAGG
AGGAGGAGAATGTTTTAGGCAGGTGGTTATATGTGGGAAGATAATTTTATTCATGGATCCAAATGTTTGTTGAGT
CCTTTCTTTGTGCTAAGGTTCTTGCGGTGAACCAGAATTATAACAGTGAGCTCATCTGACTGTTTTAGGATGTAC
AGCCTAGTGTTAACATTCTTGGTATCTTTTTGTGCCTTATCTAAAACATTTCTCGATCACTGGTTTCAGATGTTC
ATTTATTATATTCTTTTCAAAGATTCAGAGATTGGCTTTTGTCATCCACTATTGTATGTTTTGTTTCATTGACCT
CTAGTGATACCTTGATCTTTCCCACTTTCTGTTTTCGGATTGGAGAAGATGTACCTTTTTTGTCAACTCTTACTT
TTATCAGATGATCAACTCACGTATTTGGATCTTTATTTGTTTTCTCAAATAAATATTTAAGGTTAAAAAAAAAAA
AAAAAAAA

FIGURE 1243

MEAAETEAEAAALEVLAEVAGILEPVGLQEEAELPAKILVEFVVDSQKKDKLLCSQLQVADFLQNILAQEDTAKG
LDPLASEDTSRQKAIAAKEQWKELKATYREHVEAIKIGLTKALTQMEEAQRKRTQLREAFEQLQAKKQMAMEKRR
AVQNQWQLQQEKHLQHLAEVSAEVRERKTGTQQELDRVFQKLGNLKQQAEQERDKLQRYQTFLQLLYTLQGKLLF
PEAEAEAENLPDDKPQQPTRPQEQSTGDTMGRDPGVSFKAVGLQPAGDVNLP

FIGURE 1244

CGAAGCTAGGGCGGGGCCCGCGGGCTGAGGCAGCGGCTGTGGCGGCGACGCTGGGCGTGAGGTGGCGGCGGCCGC
GCCCTGGTTGGGTCCCCACTGCTCTCGGGGGCGCCATGGACGAGGCCGTGGGCGACCTGAAGCAGGCGCTTCCCT
GTGTGGCCGAGTCGCCAACGGTCCACGTGGAGGTGCATCAGCGCGGCAGCAGCACTGCAAAGAAAGAAGACATAA
ACCTGAGTGTTAGAAAGCTACTCAACAGACATAATATTGTGTTTGGTGATTACACATGGACTGAGTTTGATGAAC
CTTTTTTGACCAGAAATGTGCAGTCTGTGTCTATTATTGACACAGAATTAAAGGTTAAAGACTCACAGCCCATCG
ATTTGAGTGCATGCACTGTTGCACTTCACATTTTCCAGCTGAATGAAGATGGCCCCAGCAGTGAAAATCTGGAGG
AAGAGACAGAAAACATAATTGCAGCAAATCACTGGGTTCTACCTGCAGCTGAATTCCATGGGCTTTGGGACAGCT
TGGTATACGATGTGGAAGTCAAATCCCATCTCCTCGATTATGTGATGACAACTTTACTGTTTTCAGACAAGAACG
TCAACAGCAACCTCATCACCTGGAACCGGGTGGTGCTGCTCCACGGTCCTCCTGGCACTGGAAAAACATCCCTGT
GTAAAGCGTTAGCCCAGAAATTGACAATTAGACTTTCAAGCAGGTACCGATATGGCCAATTAATTGAAATAAACA
GCCACAGCCTCTTTTCTAAGTGGTTTTCGGAAAGTGGCAAGCTGGTAACCAAGATGTTTCAGAAGATTCAGGATT
TGATTGATGATAAAGACGCCCTGGTGTTCGTGCTGATTGATGAGGTGGAGAGTCTCACAGCCGCCCGAAATGCCT
GCAGGGCGGGCACCGAGCCATCAGATGCCATCCGCGTGGTCAATGCTGTCTTGACCCAAATTGATCAGATTAAAA
GGCATTCCAATGTTGTGATTCTGACCACTTCTAACATCACCGAGAAGATCGACGTGGCCTTCGTGGACAGGGCTG
ACATCAAGCAGTACATTGGGCCACCCTCTGCAGCAGCCATCTTCAAAATCTACCTCTCTTGTTTGGAAGAACTGA
TGAAGTGTCAGATCATATACCCTCGCCAGCAGCTGCTGACCCTCCGAGAGCTAGAGATGATTGGCTTCATTGAAA
ACAACGTGTCAAAATTGAGCCTTCTTTTGAATGACATTTCAAGGAAGAGCGAGGGCCTCAGCGGCCGGGTCCTGA
GAAAACTCCCCTTTCTGGCTCATGCGCTGTATGTCCAGGCCCCCACCGTCACCATAGAGGGGTTCCTCCAGGCCC
TGTCTCTGGCAGTGGACAAGCAGTTTGAAGAGAGAAAGAAGCTTGCAGCTTACATCTGATCCTGGGCTTCCCCAT
CTGGTGCTTTTCCCATGGAGAACACACAACCAGTAAGTGAGGTTGCCCCACACAGCCGTCTCCCAGGGAATCCCT
TCTGCAAACCAAACGTTACTTAGACTGCAAGCTAGAAAGCCACCAAGGCCAGGCTTTGTTAAAAGAAGTGTATTC
TATTTATGTTGTTTTAAAATGCATACTGAGAGACAAACATCTTGTCATTTTCACTGTTTGTAAAAGATAATTCAG
ATTGTTTGTCTCCTTGTGAAGAACCATCGAAACCTGTTTGTTCCCAGCCCACCCCCAGTGGATGGGATGCATAAT
GCCAGCAAGTTTTGTTTAACAGCAAAAAAGGAAGATTAATGCAGGTGTTATAGAAGCCAGAAGAGAAACTGTGTC
ACCCTAAAGAAGCATATAATCATAGCATTAAAAATGCACACATTACTCCAGGTGGAAGGTGGCAATTGCTTTCTG
ATATCAGCTCGTTTGATTTAGTGCAAAAATGTTTTCAAGACTATTTAATGGATGTAAAAAAGCCTATTTCTACAT
TATACCAACTGAGAAAAAAATGGTCGGTAAAGTGTTCTTTCATAATAAATAATCAGACATGGTCCCATTTGCAGG
AAAAGTGCAGACTCTGAGTGTTCCAGGGAAACACATGCTGGACATCCCTTGTAACCCGGTATGGGCGCCCCTGCA
TTGCTGGGATGTTTCTGCCCACGGTTTTGTTTGTGCAATAACGTTATCACATTTCTAATGAGGATTCACATTAAT
ATAATATAAAATAAATAGGTCAGTTACTGGTCTCTTTCTCCGAATGTTATGTTTTGCTTTTATCTCACAGTAAAA
TAAATATAATTAATGGTTTGCATGTGAAATTCACTTTTGAAAGAACATGTTACCTTACCTTTTGTTTTAGAAGTT
TTCAAGTATTAAAATATTTTTTAGAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1245

MDEAVGDLKQALPCVAESPTVHVEVHQRGSSTAKKEDINLSVRKLLNRHNIVFGDYTWTEFDEPFLTRNVQSVSI
IDTELKVKDSQPIDLSACTVALHIFQLNEDGPSSENLEEETENIIAANHWVLPAAEFHGLWDSLVYDVEVKSHLL
DYVMTTLLFSDKNVNSNLITWNRVVLLHGPPGTGKTSLCKALAQKLTIRLSSRYRYGQLIEINSHSLFSKWFSES
GKLVTKMFQKIQDLIDDKDALVFVLIDEVESLTAARNACRAGTEPSDAIRVVNAVLTQIDQIKRHSNVVILTTSN
ITEKIDVAFVDRADIKQYIGPPSAAAIFKIYLSCLEELMKCQIIYPRQQLLTLRELEMIGFIENNVSKLSLLLND
ISRKSEGLSGRVLRKLPFLAHALYVQAPTVTIEGFLQALSLAVDKQFEERKKLAAYI

FIGURE 1246

AGCGGTGGCTGCCGGGCGTGGTGTCGGTGGGTCGGTTGGTTTTTGTCTCACCGTTGGTGTCCGTGCCGTTCAGTT
GCCCGCCATGGCTGAGCTGGATCCGTTCGGCGCCCCTGCCGGCGCCCCTGGCGGTCCCGCGCTGGGGAACGGAGT
GGCCGGCGCCGGCGAAGAAGACCCGGCTGCGGCCTTCTTGGCGCAGCAAGAGAGCGAGATTGCGGGCATCGAGAA
CGACGAGGCCTTCGCCATCCTGGACGGCGGCGCCCCCGGGCCCCAGCCGCACGGCGAGCCGCCGGGGGGTCCGGA
TGCTGTTGATGGAGTAATGAATGGTGAATACTACCAGGAAAGTAATGGTCCAACAGACAGTTATGCAGCTATTTC
ACAAGTGGATCGATTGCAGTCAGAGCCTGAAAGTATCCGTAAATGGAGAGAAGAACAAATGGAACGCTTGGAAGC
CCTTGATGCCAATTCTCGGAAGCAAGAAGCAGAGTGGAAAGAAAAGGCAATAAAGGAGCTAGAAGAATGGTATGC
AAGACAGGACGAGCAGCTACAGAAAACAAAAGCAAACAACAGGGCAGCAGAAGAAGCCTTTGTAAATGACATTGA
CGAGTCGTCCCCAGGCACTGAGTGGGAACGGGTGGCCCGGCTGTGTGACTTTAACCCCAAGTCTAGCAAGCAGGC
CAAAGATGTCTCCCGCATGCGCTCAGTCCTCATCTCCCTCAAGCAGGCCCCGCTGGTGCACTGAAGAGCCACCCT
GTGGAAACACTACATCTGCAATATCTTAATCCTACTCAGTGAAGCTCTTCACAGTCATTGGATTAATTATGTTGA
GTTCTTTTGGACCAAACCTTTTTGTCTTTAGAGTTGTTCATTGTTTGTGATTGCATGTTTCCTTCCTTCAACTGT
GTTCTCCCTGGCATTCAGAGAGGAGGGAGAGGAGGAAGAGGAAGGGGAGGGAAGCTTCCCAAGAGTAGCCTCAAC
CTGTGCTTCTGTGCATTATTCTGAGAATAAATTTCTGTTTCAAACTGT

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FIGURE 1247

MAELDPFGAPAGAPGGPALGNGVAGAGEEDPAAAFLAQQESEIAGIENDEAFAILDGGAPGPQPHGEPPGGPDAV
DGVMNGEYYQESNGPTDSYAAISQVDRLQSEPESIRKWREEQMERLEALDANSRKQEAEWKEKAIKELEEWYARQ
DEQLQKTKANNRAAEEAFVNDIDESSPGTEWERVARLCDFNPKSSKQAKDVSRMRSVLISLKQAPLVH

FIGURE 1248

CCTCCCCTCGCCCGGCGCGGTCCCGTCCGCCTCTCGCTCGCCTCCCGCCTCCCCTCGGTCTTCCGAGGCGCCCGG
GCTCCCGGCGCGGCGGCGGAGGGGGCGGGCAGGCCGGCGGGCGGTGATGTGGCAGGACTCTTTATGCGCTGCGGC
AGGATACGCGCTCGGCGCTGGGACGCGACTGCGCTCAGTTCTCTCCTCTCGGAAGCTGCAGCCATGATGGAAGTT
TGAGAGTTGAGCCGCTGTGAGGCGAGGCCGGGCTCAGGCGAGGGAGATGAGAGACGGCGGCGGCCGCGGCCCGGA
GCCCCTCTCAGCGCCTGTGAGCAGCCGCGGGGGCAGCGCCCTCGGGGAGCCGGCCGGCCTGCGGCGGCGGCAGCG
GCGGCGTTTCTCGCCTCCTCTTCGTCTTTTCTAACCGTGCAGCCTCTTCCTCGGCTTCTCCTGAAAGGGAAGGTG
GAAGCCGTGGGCTCGGGCGGGAGCCGGCTGAGGCGCGGCGGCGGCGGCGGCGGCACCTCCCGCTCCTGGAGCGGG
GGGGAGAAGCGGCGGCGGCGGCGGCCGCGGCGGCTGCAGCTCCAGGGAGGGGGTCTGAGTCGCCTGTCACCATTT
CCAGGGCTGGGAACGCCGGAGAGTTGGTCTCTCCCCTTCTACTGCCTCCAACACGGCGGCGGCGGCGGCGGCACA
TCCAGGGACCCGGGCCGGTTTTAAACCTCCCGTCCGCCGCCGCCGCACCCCCCGTGGCCCGGGCTCCGGAGGCCG
CCGGCGGAGGCAGCCGTTCGGAGGATTATTCGTCTTCTCCCCATTCCGCTGCCGCCGCTGCCAGGCCTCTGGCTG
CTGAGGAGAAGCAGGCCCAGTCGCTGCAACCATCCAGCAGCCGCCGCAGCAGCCATTACCCGGCTGCGGTCCAGA
GCCAAGCGGCGGCAGAGCGAGGGGCATCAGCTACCGCCAAGTCCAGAGCCATTTCCATCCTGCAGAAGAAGCCCC
GCCACCAGCAGCTTCTGCCATCTCTCTCCTCCTTTTTCTTCAGCCACAGGCTCCCAGACATGACAGCCATCATCA
AAGAGATCGTTAGCAGAAACAAAAGGAGATATCAAGAGGATGGATTCGACTTAGACTTGACCTATATTTATCCAA
ACATTATTGCTATGGGATTTCCTGCAGAAAGACTTGAAGGCGTATACAGGAACAATATTGATGATGTAGTAAGGT
TTTTGGATTCAAAGCATAAAAACCATTACAAGATATACAATCTTTGTGCTGAAAGACATTATGACACCGCCAAAT
TTAATTGCAGAGTTGCACAATATCCTTTTGAAGACCATAACCCACCACAGCTAGAACTTATCAAACCCTTTTGTG
AAGATCTTGACCAATGGCTAAGTGAAGATGACAATCATGTTGCAGCAATTCACTGTAAAGCTGGAAAGGGACGAA
CTGGTGTAATGATATGTGCATATTTATTACATCGGGGCAAATTTTTAAAGGCACAAGAGGCCCTAGATTTCTATG
GGGAAGTAAGGACCAGAGACAAAAAGGGAGTAACTATTCCCAGTCAGAGGCGCTATGTGTATTATTATAGCTACC
TGTTAAAGAATCATCTGGATTATAGACCAGTGGCACTGTTGTTTCACAAGATGATGTTTGAAACTATTCCAATGT
TCAGTGGCGGAACTTGCAATCCTCAGTTTGTGGTCTGCCAGCTAAAGGTGAAGATATATTCCTCCAATTCAGGAC
CCACACGACGGGAAGACAAGTTCATGTACTTTGAGTTCCCTCAGCCGTTACCTGTGTGTGGTGATATCAAAGTAG
AGTTCTTCCACAAACAGAACAAGATGCTAAAAAAGGACAAAATGTTTCACTTTTGGGTAAATACATTCTTCATAC
CAGGACCAGAGGAAACCTCAGAAAAAGTAGAAAATGGAAGTCTATGTGATCAAGAAATCGATAGCATTTGCAGTA
TAGAGCGTGCAGATAATGACAAGGAATATCTAGTACTTACTTTAACAAAAAATGATCTTGACAAAGCAAATAAAG
ACAAAGCCAACCGATACTTTTCTCCAAATTTTAAGGTGAAGCTGTACTTCACAAAAACAGTAGAGGAGCCGTCAA
ATCCAGAGGCTAGCAGTTCAACTTCTGTAACACCAGATGTTAGTGACAATGAACCTGATCATTATAGATATTCTG
ACACCACTGACTCTGATCCAGAGAATGAACCTTTTGATGAAGATCAGCATACACAAATTACAAAAGTCTGAATTT
TTTTTTATCAAGAGGGATAAAACACCATGAAAATAAACTTGAATAAACTGAAAATGGACCTTTTTTTTTTTAATG
GCAATAGGACATTGTGTCAGATTACCAGTTATAGGAACAATTCTCTTTTCCTGACCAATCTTGTTTTACCCTATA
CATCCACAGGGTTTTGACACTTGTTGTCCAGTTGAAAAAAGGTTGTGTAGCTGTGTCATGTATATACCTTTTTGT
GTCAAAAGGACATTTAAAATTCAATTAGGATTAATAAAGATGGCACTTTCCCGTTTTATTCCAGTTTTATAAAAA
GTGGAGACAGACTGATGTGTATACGTAGGAATTTTTTCCTTTTGTGTTCTGTCACCAACTGAAGTGGCTAAAGAG
CTTTGTGATATACTGGTTCACATCCTACCCCTTTGCACTTGTGGCAACAGATAAGTTTGCAGTTGGCTAAGAGAG
GTTTCCGAAAGGTTTTGCTACCATTCTAATGCATGTATTCGGGTTAGGGCAATGGAGGGGAATGCTCAGAAAGGA
AATAATTTTATGCTGGACTCTGGACCATATACCATCTCCAGCTATTTACACACACCTTTCTTTAGCATGCTACAG
TTATTAATCTGGACATTCGAGGAATTGGCCGCTGTCACTGCTTGTTGTTTGCGCATTTTTTTTTAAAGCATATTG
GTGCTAGAAAAGGCAGCTAAAGGAAGTGAATCTGTATTGGGGTACAGGAATGAACCTTCTGCAACATCTTAAGAT
CCACAAATGAAGGGATATAAAAATAATGTCATAGGTAAGAAACACAGCAACAATGACTTAACCATATAAATGTGG
AGGCTATCAACAAAGAATGGGCTTGAAACATTATAAAAATTGACAATGATTTATTAAATATGTTTTCTCAATTGT
AAAAAAAAAA

FIGURE 1249

MTAIIKEIVSRNKRRYQEDGFDLDLTYIYPNIIAMGFPAERLEGVYRNNIDDVVRFLDSKHKNHYKIYNLCAERH
YDTAKFNCRVAQYPFEDHNPPQLELIKPFCEDLDQWLSEDDNHVAAIHCKAGKGRTGVMICAYLLHRGKFLKAQE
ALDFYGEVRTRDKKGVTIPSQRRYVYYYSYLLKNHLDYRPVALLFHKMMFETIPMFSGGTCNPQFVVCQLKVKIY
SSNSGPTRREDKFMYFEFPQPLPVCGDIKVEFFHKQNKMLKKDKMFHFWVNTFFIPGPEETSEKVENGSLCDQEI
DSICSIERADNDKEYLVLTLTKNDLDKANKDKANRYFSPNFKVKLYFTKTVEEPSNPEASSSTSVTPDVSDNEPD
HYRYSDTTDSDPENEPFDEDQHTQITKV

FIGURE 1250A

GCGCGCGCGAGGGCGTTGGGCGCCGCCGCGAGGCGGGGAAGCGCGGGGCCGCGGCGGTGCGGGTTCTAGGGCGGC
GGCCGTCGCCGTCGCAGCAGCGCCCCGAGCGGGGAGGGCCGAGGAGGCCCGACGAGCTGGGGATGGAGAGTACCG
GGCCCCTCACTGCCTCAGAGCGCGTGTGCGGCTCTGGGCGCGCACAGTGACGGTGACGGCACCCCTGGCCCGGCA
GCGCCGAGGCCGCTTCGCCAGACAGCCAGCGGCCGGCGGCAGGCCGGGCCATGAGCGGCAGGGGCCGGGCCGGGC
CTCGCTGACCCTGGCTCCGCGCGGCAGCTTCCCCAGTTTCCGCTCCGGTCTCTCGGCATGAGAGTCCGCCCGGGC
CCGGGGCTGCGGCTGCCCCAGACCCGCCGCACGCTGGCGCGCTCCGGGCCCGCGGAGCCGCGGTGCTGATACCTG
CGCCGCACTGCGCCGCCCGCCCGTCCGCTGTGTGCCCCGGGGGCGCGGCC**ATG**GAGGTGGTGGGTGACTTCGAGT
ACAGCAAGAGGGATCTCGTGGGACACGGGGCCTTCGCCGTGGTCTTCCGGGGGCGGCACCGCCAGAAAACTGATT
GGGAGGTAGCTATTAAAAGTATTAATAAAAAGAACTTGTCAAAATCACAAATACTGCTTGGAAAGGAAATTAAAA
TCTTAAAGGAACTTCAGCATGAAAATATTGTAGCACTCTATGATGTTCAGGAATTACCCAACTCTGTCTTTTTGG
TGATGGAGTATTGCAATGGTGGAGACCTCGCAGATTATTTGCAAGCGAAAGGGACTCTCAGTGAAGACACGATCA
GAGTGTTTCTGCATCAGATTGCTGCTGCCATGCGAATCCTGCACAGCAAAGGAATCATCCACAGAGATCTCAAAC
CACAGAACATCTTGCTGTCCTATGCCAATCGCAGAAAATCAAGTGTCAGTGGTATTCGCATCAAAATAGCGGATT
TTGGTTTTGCTCGTTACCTACATAGTAACATGATGGCTGCAACACTGTGTGGATCCCCGATGTACATGGCTCCTG
AGGTTATTATGTCTCAACATTATGATGCTAAGGCTGACTTGTGGAGCATAGGAACAGTGATATACCAATGCCTAG
TTGGAAAACCACCTTTTCAGGCCAATAGTCCTCAAGACTTAAGGATGTTTTATGAAAAAAACAGGAGCTTAATGC
CTAGTATTCCCAGAGAAACATCACCTTATTTGGCTAATCTCCTTTTGGGTTTGCTTCAGAGAAACCAAAAAGATA
GAATGGACTTTGAAGCGTTTTTTAGCCATCCTTTTCTTGAGCAAGGTCCAGTAAAAAAATCTTGCCCAGTTCCAG
TGCCCATGTATTCTGGTTCTGTCTCTGGAAGCTCCTGTGGCAGCTCTCCATCTTGTCGTTTTGCTTCTCCACCAT
CCCTTCCAGATATGCAGCATATTCAGGAAGAAAACTTATCTTCCCCACCATTGGGTCCTCCCAACTATCTACAAG
TTTCCAAAGATTCTGCCAGTACTAGTAGCAAGAACTCTTCTTGTGACACGGATGACTTTGTTTTGGTGCCACACA
ACATCTCGTCAGACCACTCATGTGATATGCCAATGGGGACTGCTGGCAGACGTGCTTCAAATGAATTCTTGGTGT
GTGGAGGGCAGTGTCAGCCTACTGTGTCACCTCACAGCGAAACAGCACCAATTCCAGTTCCTACTCAAATAAGGA
ATTATCAGCGCATAGAGCAGAATCTTACATCTACTGCCAGCTCAGGCACAAATGTACATGGTTCTCCAAGATCTG
CAGTGGTACGAAGGTCCAACACCAGCCCCATGGGCTTCCTCCGGCCGGGATCATGCTCCCCAGTACCAGCAGACA
CAGCACAGACAGTTGGACGAAGGCTCTCCACTGGGTCTTCTAGGCCTTACTCACCTTCCCCTTTGGTTGGTACCA
TTCCTGAGCAATTCAGTCAGTGCTGCTGTGGGCATCCTCAGGGCCATGACTCCAGGAGTAGAAACTCCTCAGGTT
CTCCAGTGCCACAAGCTCAGTCCCCACAGTCTCTCTTATCGGGTGCTAGACTGCAGAGCGCCCCCACCCTCACTG
ACATCTATCAGAACAAGCAGAAGCTCAGAAAACAGCACTCTGACCCCGTGTGCCCATCCCATACTGGGGCTGGGT
ACAGCTACTCGCCTCAGCCCAGTCGGCCTGGCAGCCTTGGAACTTCTCCCACCAAGCACTTGGGGTCCTCTCCAC
GGAGTTCTGACTGGTTCTTTAAAACTCCTTTGCCAACAATCATTGGCTCTCCTACTAAGACCACAGCTCCTTTCA
AAATCCCTAAAACTCAAGCATCTTCCAACCTGTTAGCCTTGGTTACTCGTCATGGGCCTGCTGAAGAACAGTCGA
AAGATGGGAATGAGCCACGGGAATGTGCCCATTGCCTCTTAGTGCAAGGAAGTGAGAGGCAGCGGGCCGAGCAGC
AGAGCAAGGCAGTGTTTGGCAGATCTGTCAGTACCGGGAAGTTATCAGATCAACAAGGAAAGACTCCTATATGTC
GACATCAGGGCAGCACAGACAGTTTAAATACAGAACGACCAATGGATATAGCTCCGGCAGGAGCCTGTGGTGGTG
TTCTGGCACCTCCTGCAGGTACAGCAGCAAGTTCCAAGGCTGTCCTCTTCACTGTAGGGTCTCCTCCACACAGTG
CGGCAGCCCCCACTTGTACCCACATGTTCCTTCGAACAAGAACAACCTCAGTGGGGCCCAGCAACTCCGGGGGCT
CTCTTTGTGCCATGAGTGGCCGCGTGTGCGTGGGGTCCCCGCCTGGCCCAGGCTTCGGCTCTTCCCCTCCAGGAG
CAGAGGCAGCTCCCAGCCTGAGATACGTGCCTTACGGTGCTTCACCCCCCAGCCTAGAGGGGCTCATCACCTTTG
AAGCCCCTGAACTGCCGGAGGAGACGCTGATGGAGCGGGAACACACAGACACCTTACGCCATCTGAATGTGATGC
TGATGTTCACTGAGTGTGTGCTGGACCTGACAGCCATGAGGGGAGGAAACCCTGAGCTGTGCACATCTGCTGTGT
CCTTGTACCAGATCCAGGAGAGTGTGGTGGTGGACCAGATCAGTCAGCTGAGCAAAGACTGGGGGTGGGTGGAGC
AGCTGGTGTTGTACATGAAAGCAGCACAGCTGCTTGCGGCTTCTCTGCATCTTGCCAAAGCCCAGATCAAGTCCG
GGAAACTGAGCCCATCCACAGCTGTGAAACAAGTTGTCAAGAATCTGAACGAACGATATAAATTCTGCATCACCA
TGTGCAAGAAACTTACAGAAAAGCTGAATCGATTCTTCTCTGACAAACAGAGGTTTATTGATGAAATCAACAGTG
TGACTGCAGAGAAACTCATCTATAATTGTGCTGTAGAAATGGTTCAGTCTGCAGCCCTGGATGAGATGTTTCAGC
AGACCGAAGATATTGTTTATCGCTATCATAAGGCAGCCCTTCTTTTGGAAGGCCTAAGTAGGATTCTACAGGACC
CTGCAGATATTGAAAATGTGCATAAATATAAATGTAGTATTGAGAGAAGACTGTCGGCGCTCTGCCATAGCACCG

FIGURE 1250B

CAACCGTGTGAGCAGCAGGCTCATCCCGTGGACCGGTGGTGGGAACGTGAGGTGATGCCTTTGGGATTACAGCTT
GAGTTCTGTCACCCCATCCCCAGGAAACTGTAGCTTCTTAACTGGTGACTACCAAAGAACAAGCAGTGATTTGAA
AAAGGAAAAACAATCCAAAAACTACATATTTGTAGGAAATCTGCCTTATTGGAGAAAATCACCCTTTCCCTTTTT
CTTTGTAGAAGCAGGAGCAAGAGTGTTTGGCTCCCAGTTTGGACTTGGTGAATAAATGTACCTTAGAACTAGGAT
AATCGGTACAGTTATTCTTAAAGATAATTAAAAATGAAACAAAGTGAGTGCTCGTCACTGGGTTCATCAGAGCAG
TGTGTGAAATTCCATGTGTTTGCTGAGGTGTAAAGGTAAATGTATTCACCCCTCATCCAGGCAGTTTGATATTTG
GAGTAAGTTTGTTTAAATCTGAGCATGCATCTTTAAACAGCTCAGGAAGAAATAGCTTAAGAAGAAGTGAAACAT
GGATCTTGGAAGAAATTTTGAAATCTTCAATTTGATCCTAATATGGATACATGTTAATCTTCCAAAATCTTTCAT
ATTGCACTAATTTATTAAAACAACTGTGTATTGGATTTTGTAATTTAACTAAGGCACAATGGACTTGTTTAAAAT
ATTTTACTTGATTGTATACATAGACCCTTTCCAGAATTCACATGTAATCTCCAGTGAACTTTTAAGTGGTTAAAA
CTTGTATTCATGTGAACCTTTGCACATTTTTTTTTTTTACTTCTTTATCTACACCTACAGATTTTCTCAGTAATG
TTTTTGTTAGCTTTTGGTTCCATTTTTTATTGTGCATGCAGAATGTACATTGATGCCTGTGACCTTAGGTTTATT
AAAGGCTAGGTTTATTTGGGCAGTATTAGAAACAAAATCATGGATCAAGAGATACTCTTGATAATTTGAATAGGG
CCAAAACAAAGTTGGTGACCTAAAGGCTTGTTAGTGATGTGGAGTTCCTACATGCAGTGAGTGGAAAATGAAGTT
CGTTTTCTCTTAGGAAAATGGGCAGCTGTCTTCTGCCTAATGTGTATTTTTCATGTTAATTCTGACAGTTCACCA
AATAGCTAGTCATGGAGAATGCAGGCAGTTAACTTAATATCCCTCCAGGAATGGTTCCTACGTTGTGTATTATTT
GGTTTCTTTTACTTACCTGCTTGAATACTTGAATAAACCATTCACCAATTTTAATCCTTTTATTTTAATCCTTTT
ACATAAAATAATCTGAACTCTTTGACAAATTGCACAGAGCTCTTTGGCATTAATCTAATTTTAATGTACTGATAA
AAACAAACATGGTTGTCCTTTACTTTGACAAAGTAATGTAATTTTTACCTTATTTATCTGTATGAAATTCCAGTA
GTTAATTTGAACATTTATTTATATGACGTTTGTATTTTTAGGTCTTTAATACAGTGTTTCTACCTCTCATTTGTA
ACTGCATGCATTATTCTTGAAACTAGGTAAAACTCACTGAATTGTTGTGTAATAGCCTTTTTATTATTGCCTGTA
CAAATGTATATTAAGGTAAAATAAAACTGACAAAGTGTTTCTAGGGTGTAGCTGGGTACATATTAAGTGGCTTGT
TGAGCCAGGTACTTCCTTAGTGAGTTTAGAGACTTGGCCATGAATATCCTTTGTCCTGCCCCAGGATTTAGATCT
TGGCTACTGTCATGCAGGCTTCCAGGAACATAGACTGTTTTACCTCCACAACCCTATTTGTTATTAGTGATACTT
TATTTTATATAATATTTTTTATTCACAGTGAAATTTCATTCATGTTCTTTCAGTTATCACCTGTGTTATCTCAGT
TGTAGGTTTATTCTATCCTCTCCTCTTCCTCTCCCATTTCTTTTTTAACACAGGATGAAACAGGTTCAGAGAGGG
GAAGTGATTGGCCTAAAGTCAGGAACTAGGCAAGTGGTCAAGCCATGCTTTGTGACTTTCAAGTTAATTCTTCTT
GTTCTTGTATATTAAAGGTCTTGGGGTAGATGGTGTGTGTGAAACAGTGAAGTCTCAACAGCAGAAAAGAACAAA
ATGTAAATTCATGAATAATGGTTCTGGTTATACTTCCATTATCAAGGCTAATTAAGAGATTTTGCCTTGAGTATA
GCAATAATAAACAAATGCTTTATGTTTCCCTG

FIGURE 1251

MEVVGDFEYSKRDLVGHGAFAVVFRGRHRQKTDWEVAIKSINKKNLSKSQILLGKEIKILKELQHENIVALYDVQ
ELPNSVFLVMEYCNGGDLADYLQAKGTLSEDTIRVFLHQIAAAMRILHSKGIIHRDLKPQNILLSYANRRKSSVS
GIRIKIADFGFARYLHSNMMAATLCGSPMYMAPEVIMSQHYDAKADLWSIGTVIYQCLVGKPPFQANSPQDLRMF
YEKNRSLMPSIPRETSPYLANLLLGLLQRNQKDRMDFEAFFSHPFLEQGPVKKSCPVPVPMYSGSVSGSSCGSSP
SCRFASPPSLPDMQHIQEENLSSPPLGPPNYLQVSKDSASTSSKNSSCDTDDFVLVPHNISSDHSCDMPMGTAGR
RASNEFLVCGGQCQPTVSPHSETAPIPVPTQIRNYQRIEQNLTSTASSGTNVHGSPRSAVVRRSNTSPMGFLRPG
SCSPVPADTAQTVGRRLSTGSSRPYSPSPLVGTIPEQFSQCCCGHPQGHDSRSRNSSGSPVPQAQSPQSLLSGAR
LQSAPTLTDIYQNKQKLRKQHSDPVCPSHTGAGYSYSPQPSRPGSLGTSPTKHLGSSPRSSDWFFKTPLPTIIGS
PTKTTAPFKIPKTQASSNLLALVTRHGPAEEQSKDGNEPRECAHCLLVQGSERQRAEQQSKAVFGRSVSTGKLSD
QQGKTPICRHQGSTDSLNTERPMDIAPAGACGGVLAPPAGTAASSKAVLFTVGSPPHSAAAPTCTHMFLRTRTTS
VGPSNSGGSLCAMSGRVCVGSPPGPGFGSSPPGAEAAPSLRYVPYGASPPSLEGLITFEAPELPEETLMEREHTD
TLRHLNVMLMFTECVLDLTAMRGGNPELCTSAVSLYQIQESVVVDQISQLSKDWGRVEQLVLYMKAAQLLAASLH
LAKAQIKSGKLSPSTAVKQVVKNLNERYKFCITMRKKLTEKLNRFFSDKQRFIDEINSVTAEKLIYNCAVEMVQS
AALDEMFQQTEDIVYRYHKAALLLEGLSRILQDPADIENVHKYKCSIERRLSALCHSTATV

FIGURE 1252

CCGCGGAGTTACGGGAAAGTTGGTCCGAGTTCCCAGAGTTTCCCTCTGTGGTGCCCTAGGCTTCGGCCCGGTGCC
CCGGCTCCTTTCCTCCTTTCGGCCTTCGCCGTCCACCAGGTCCCTCTCTCTGTCCCGGCCGCCATGGAGCAGCCG
CCGGCGCCTAAGAGTAAACTAAAAAAGCTGAGTGAAGACAGTTTGACTAAGCAGCCTGAAGAAGTTTTTGATGTA
TTAGAGAAGCTTGGAGAAGGGTCTTATGGAAGTGTATTTAAAGCAATACACAAGGAATCCGGTCAAGTTGTCGCA
ATTAAACAAGTACCTGTTGAATCAGATCTTCAGGAAATAATCAAAGAAATTTCCATAATGCAGCAATGTGACAGC
CCATATGTTGTAAAGTACTATGGCAGTTATTTTAAGAATACAGACCTCTGGATTGTTATGGAGTACTGTGGCGCT
GGCTCTGTCTCAGACATAATTAGATTACGAAACAAGACATTAATAGAAGATGAAATTGCAACCATTCTTAAATCT
ACATTGAAAGGACTAGAATATTTGCACTTTATGAGAAAAATACACAGAGATATAAAAGCTGGAAATATTCTCCTC
AATACAGAAGGACATGCAAAATTGGCAGATTTTGGAGTGGCTGGTCAGTTAACAGATACAATGGCAAAACGCAAT
ACTGTAATAGGAACTCCATTTTGGATGGCTCCTGAGGTGATTCAAGAAATAGGCTATAACTGTGTGGCCGACATC
TGGTCCCTTGGCATTACTTCTATAGAAATGGCTGAAGGAAAACCTCCTTATGCTGATATACATCCAATGAGGGCT
ATTTTTATGATTCCCACAAATCCACCACCAACATTCAGAAAGCCAGAACTTTGGTCCGATGATTTCACCGATTTT
GTTAAAAAGTGTTTGGTGAAGAATCCTGAGCAGAGAGCTACTGCAACACAACTTTTACAGCATCCTTTTATCAAG
AATGCCAAACCTGTATCAATATTAAGAGACCTGATCACAGAAGCTATGGAGATCAAAGCTAAAAGACATGACGAA
CAGCAACGAGAATTGGAAGAGGAAGAAGAAAATTCGGATGAAGATGAGCTGGATTCCCACACCATGGTGAAGACT
AGTGTGGGAGAGTGTGGCACCATGCGGGCCACAAGCACGATGAGTGAAGGGGCCCAGACCATGATTGAACATAAT
AGCACGATGTTGGAATCCGACTTGGGGACCATGGTGATAAACAGTGAGGATGAGGAAGAAGAAGATGGAACTATG
AAAAGAAATGCAACCTCACCACAAGTACAAAGACCATCTTTCATGGACTACTTTGATAAGCAAGACTTCAAGAAT
AAGAGTCACGAAAACTGTAATCAGAACATGCATGAACCCTTCCCTATGTCCAAAAACGTTTTTCCTGATAACTGG
AAAGTTCCTCAAGATGGAGACTTTGACTTTTTGAAAAATCTAAGTTTAGAAGAACTACAGATGCGGTTAAAAGCA
CTGGACCCCATGATGGAACGGGAGATAGAAGAACTTCGTCAGAGATACACTGCGAAAAGACAGCCCATTCTGGAT
GCGATGGATGCAAAGAAAAGAAGGCAGCAAAACTTTTGAGTCTAATTTCCTCTCTGTTTTTAACTATTCTGGAGA
CCAAGAAACCACTAGGAATTGAAGGAATATTTGGATATTTTTAATCCTAAGATTTTGCCCTACAATTAGGCAGAG
GTCAAAAAGTGACAATGGTACATGCCCAGGTAAATTCCCAAAAGGCAGAATTGACAGTTGTATCTGCTGTGCATT
CACTCTAAGATGAGGAGAACAAAAGAAGTGTATTCTCTTGTTCTGTCAGCTGCATACCAGTAATAAAACTGTTAT
GAAATGGATTTTCAAGGTCTCTAAACCTTGAAAATCCAAAGGCTATTGTTGCATTGTACAGCACTGAAAGGGCTT
TATGTTACAATATTCTTTATTCCTATCTAGTATACTAGGCTATTTATTGTCCCCTTAGGTAAACTTATTTATTTA
TGCTATTTTGGCTTTGTTTCATTTTTTAAGGACAAGATCAGGATAGCTTTGGTGAAGGTAGGGTCATATTAATAT
GATGATAATGTGCAACCAATTTATACTTTCTGCAGGGAGCTATGGGGTACATTCCTTGATTTCCAGGATAGTTTT
TCAAATAGGAAAGCAATAATGGCAGTAGTTCTCAAATGGGCTAGGCCTTTTTTATATTGAAGCAATAATTCCATT
TTTACCCTTTGAAATTTTGTTTTTTTGATTTTTGATGTTTGGTACAAATAGAACTATATATATTTAGGTAAAATA
GATCTATCGTGTTTAAAACCAAAGAAATCAATGGAACCCTTGCACAAAAAAAGTGTGATAAATATTTTTAAATAAA
AACTTAATACAAATGTAATTTGTTAATATTGTTTCATGTTTTATGTGTAGATCTAATAGCTGAACTGATTCAAAC
TGTAATAAGCTCATCAATTTCATTTCTATGAAAATGTGCTCTGTTGTCACAGGATGTTTCTGTTGATTTTATTCA
TTTCCTGGGAATTGGTAAACATCATGTTCCTGATGATAACCCAGTAGCAAAAACATTTGTACTGAGTGGTACAAG
CCTTGGGGACTGAAAAAAAAAAAAAGATTAAAACCATTAAAAAGAAACTCATTTTTACGCTGAATGAACATTTATA
TGATTGCATTGGGACCAGTCATTTCCTAAGCTACATATGGCCATCTTGACAGTGTTTTTTCTTTTGTGTGTTTAA
TTATTATGTGTAAATCATAAAGACAAATAAATTTCACTGTGCCAC

FIGURE 1253

MEQPPAPKSKLKKLSEDSLTKQPEEVFDVLEKLGEGSYGSVFKAIHKESGQVVAIKQVPVESDLQEIIKEISIMQ
QCDSPYVVKYYGSYFKNTDLWIVMEYCGAGSVSDIIRLRNKTLIEDEIATILKSTLKGLEYLHFMRKIHRDIKAG
NILLNTEGHAKLADFGVAGQLTDTMAKRNTVIGTPFWMAPEVIQEIGYNCVADIWSLGITSIEMAEGKPPYADIH
PMRAIFMIPTNPPPTFRKPELWSDDFTDFVKKCLVKNPEQRATATQLLQHPFIKNAKPVSILRDLITEAMEIKAK
RHDEQQRELEEEEENSDEDELDSHTMVKTSVGECGTMRATSTMSEGAQTMIEHNSTMLESDLGTMVINSEDEEEE
DGTMKRNATSPQVQRPSFMDYFDKQDFKNKSHENCNQNMHEPFPMSKNVFPDNWKVPQDGDFDFLKNLSLEELQM
RLKALDPMMEREIEELRQRYTAKRQPILDAMDAKKRRQQNF

FIGURE 1254A

AGGGGGCGGCGCTCCCGGCCCATCCCTTAGCCCCGCGGCGGCCGTGTGGGCCGGAGGCTGCCTGCACCGCGTCAG
GGAGGCCGGCCTAGAAACCCTCCCTCCCAGAAGAAAGCCGATCCCAGTTCAGGTGGGGTCTTCCTCGGTTGCGTA
CCTGGCTGGAGCCGAGCTGGTGGGCGGCCGGCAGCCGGCGTTTCTGGTGATGACAGCCCCGAAATGAAAGCAGCG
CGGCCGCCGCCTCCGAGGGCTGCAGGGAGATCAGCGTCCAGCAAATAAGAAGCAAGTCCTGGACCCGGAGGAGGA
GGAGCGGCCGAGCATCTCTCTCTGCTCCGCCGTGTCCTTTAGATGAGCACTCCCGGCCGGAGCCGGAGGTGGATC
CGCAGAGCTGCCTCTGGGCGCCTGACCCCGCGCTGACATCACAACCTGTGACAGGCGCATCACGCCCGGTACCTG
CTCCCGGCCGCTGCCCGTCCTCCCAGCCTCTTTGTATGCCGCAGACATGGCCAGCCAGCAGGATTCGGGCTTCTT
TGAGATCAGTATCAAATATTTACTGAAATCCTGGAGTAATACTTCTCCCGTTGGCAACGGTTACATCAAGCCTCC
GGTTCCACCTGCTTCTGGCACGCACAGGGAGAAAGGGCCGCCAACCATGCTACCCATCAATGTGGACCCAGACAG
TAAACCAGGAGAATATGTCCTCAAAAGTTTATTTGTCAACTTCACCACTCAGGCTGAACGCAAGATTCGTATCAT
TATGGCAGAGCCCCTGGAAAAGCCATTGACGAAATCTCTGCAACGTGGAGAAGACCCCCAATTTGATCAGGTCAT
CAGCTCAATGAGCTCCCTTTCTGAGTACTGCCTGCCTTCCATTCTACGTACATTATTTGACTGGTATAAAAGGCA
AAATGGCATTGAGGATGAATCACATGAATACAGACCAAGAACAAGCAATAAATCAAAAAGCGATGAACAACAGCG
AGATTATTTAATGGAAAGACGGGACCTCGCCATTGATTTTATTTTTCTTTAGTATTAATAGAAGTTTTGAAACA
GATTCCACTTCATCCTGTAATAGACAGTTTAATACATGATGTTATTAACTTGGCTTTCAAGCACTTTAAATACAA
AGAAGGGTACCTTGGTCCCAACACTGGCAATATGCATATTGTGGCAGACCTGTATGCAGAAGTCATTGGAGTGTT
GGCACAAGCCAAATTCCCTGCTGTAAAGAAGAAATTTATGGCGGAGCTAAAAGAATTACGGCACAAAGAGCAGAA
CCCATATGTGGTTCAAAGCATTATCAGCTTAATAATGGGCATGAAATTCTTTCGAATTAAGATGTATCCAGTGGA
GGATTTTGAGGCCTCTCTTCAGTTTATGCAGGAATGTGCACATTACTTCCTCGAGGTCAAAGACAAAGATATCAA
GCATGCCTTGGCTGGGCTTTTTGTTGAAATACTTGTTCCAGTTGCTGCTGCTGTTAAAAATGAAGTAAATGTTCC
CTGCCTTAGAAATTTTGTGGAAAGCCTGTATGACACCACGCTGGAACTTTCTTCTCGAAAGAAGCATTCCTTGGC
CTTGTACCCCCTGGTGACCTGTTTGCTCTGTGTCAGTCAGAAGCAGCTGTTCCTGAACAGGTGGCACATTTTCCT
CAACAACTGCTTGTCCAACCTTAAAAACAAAGATCCCAAGATGGCTCGAGTTGCACTGGAATCTCTCTACAGATT
ACTTTGGGTTTACATGATTCGAATTAAATGTGAAAGCAACACAGCTACTCAGAGCCGACTTATAACCATCATCAC
AACACTTTTCCCCAAAGGGTCCCGCGGTGTGGTACCAAGGGACATGCCTCTGAACATCTTTGTGAAAATCATCCA
GTTCATTGCCCAGGAACGTTTAGATTTTGCAATGAAAGAAATCATTTTCGATTTTCTTTGTGTGGGAAAACCAGC
AAAAGCATTCAGTCTCAACCCAGAGAGAATGAACATTGGTTTACGGGCATTCTTGGTCATAGCTGATAGCTTGCA
GCAGAAAGATGGGGAACCTCCCATGCCGGTTACAGGAGCCGTTCTTCCTTCAGGAAACACGTTAAGAGTAAAGAA
AACATATTTGAGTAAAACACTAACTGAAGAGGAAGCCAAAATGATAGGCATGTCCTTATATTACTCTCAAGTACG
AAAAGCTGTAGACAACATTTTAAGGCACCTTGATAAAGAAGTAGGAAGGTGTATGATGCTGACTAATGTACAGAT
GTTAAACAAAGAACCGGAAGACATGATCACGGGTGAGAGAAAGCCAAAAATAGATCTTTTCAGGACCTGTGTTGC
TGCTATTCCTCGACTGCTTCCTGATGGGATGTCAAAACTTGAACTTATTGACTTACTGGCTAGGCTCTCTATTCA
TATGGATGATGAATTGCGACATATTGCACAAAATTCTCTTCAGGGTTTACTTGTTGACTTCTCAGATTGGAGGGA
AGATGTACTATTTGGCTTTACCAACTTCCTGCTCCGGGAAGTAAATGATATGCATCACACACTCCTTGATTCGTC
CCTGAAGTTGCTGCTGCAGCTGCTCACCCAGTGGAAACTAGTCATCCAGACACAAGGAAAAGTCTATGAACAAGC
CAACAAAATCAGAAATTCAGAGCTCATCGCAAATGGCTCCAGTCACAGAATTCAGTCGGAACGAGGTCCCCACTG
CAGTGTACTCCACGCTGTAGAAGGTTTTGCTCTGGTTTTACTCTGCAGTTTCCAGGTGGCCACACGCAAACTGTC
CGTTTTAATACTCAAGGAAATTCGAGCGTTGTTTATTGCCCTGGGGCAGCCTGAGGATGACGACAGGCCGATGAT
TGATGTCATGGATCAGCTAAGTTCTTCCATTCTAGAAAGTTTTATTCATGTAGCAGTTTCGGATTCAGCAACATT
ACCACTCACCCACAATGTGGATCTGCAGTGGTTGGTGGAATGGAACGCAGTCCTGGTCAATAGCCATTATGATGT
GAAAAGCCCTTCCCATGTCTGGATATTTGCACAGTCTGTCAAAGACCCCTGGGTCCTCTGCCTCTTCAGCTTCCT
CCGGCAGGAGAACTTACCCAAGCACTGCCCCACAGCCCTCAGCTATGCCTGGCCTTATGCCTTCACTCGGCTCCA
GTCGGTGATGCCTCTGGTGGACCCAAATAGCCCAATTAATGCCAAGAAAACCAGCACTGCCGGCAGCGGAGACAA
CTATGTTACTTTGTGGAGAAATTACCTAATTCTTTGTTTTGGAGTTGCAAAACCCAGTATTATGAGCCCAGGACA
CTTAAGAGCTTCCACTCCAGAAATAATGGCGACCACACCTGATGGTACAGTGAGCTACGATAACAAGGCCATAGG
CACCCCATCGGTGGGAGTTCTGTTAAAGCAGTTGGTGCCTTTGATGAGACTAGAGAGCATTGAGATCACAGAGTC
CTTAGTTTTAGGATTTGGAAGAACAAATTCCCTTGTTTTCAGAGAATTGGTAGAAGAACTTCATCCATTAATGAA
AGAAGCTCTGGAAAGAAGACCAGAGAACAAGAAACGCCGAGAACGGCGAGACTTGTTAAGGCTACAACTACTTCG

FIGURE 1254B

AATTTTTGAACTTTTGGCTGATGCTGGTGTAATAAGTGACAGCACAAATGGAGCCCTAGAGCGGGATACTTTAGC
CCTGGGAGCTTTGTTCTTAGAATATGTGGACTTGACCCGCATGCTCCTAGAAGCTGAAAATGACAAAGAAGTTGA
AATTCTTAAAGATATCCGGGCACATTTTAGTGCAATGGTGGCCAACTTGATTCAGTGTGTTCCAGTTCACCACCG
AAGATTTCTCTTCCCCCAGCAAAGTCTGAGGCACCACCTTTTCATCTTATTCAGCCAGTGGGCAGGACCCTTCAG
CATTATGTTCACTCCTCTGGATCGTTACAGTGACAGAAATCATCAGATTACAAGATATCAGTATTGTGCATTAAA
AGCAATGTCAGCAGTACTGTGCTGTGGCCCTGTCTTTGACAATGTGGGCCTTTCCCCAGATGGCTACCTATATAA
ATGGCTTGACAACATTCTGGCTTGTCAAGATTTACGAGTTCATCAACTTGGCTGCGAAGTTGTTGTCTTGCTACT
GGAACTTAATCCTGACCAAATAAATCTTTTTAACTGGGCAATTGACCGATGCTACACAGGTTCCTACCAACTTGC
ATCTGGCTGCTTCAAAGCCATAGCAACTGTGTGTGGAAGCAGGAACTATCCCTTCGACATAGTGACATTGTTAAA
CCTTGTTCTATTCAAGGCCTCTGACACCAACAGAGAGATTTATGAAATCTCCATGCAGCTCATGCAGATCCTTGA
AGCAAAGCTTTTTGTATACTCAAAGAAAGTCGCTGAGCAAAGACCGGGAAGTATTCTCTATGGAACACACGGCCC
GCTGCCACCCCTCTACAGCGTGTCACTCGCCCTCTTGTCATGTGAGCTGGCCAGGATGTACCCTGAGCTCACACT
CCCCCTCTTCTCAGGTAAGCCAGCGATTCCCCACAACACACCCCAACGGGCGCCAGATCATGCTTACCTACCTGC
TGCCCTGGCTGCACAACATCGAGCTGGTGGACAGCAGGCTCCTCCTCCCGGGTCGAGCCCCAGCAGCCCAGAGGA
CGAAGTCAAGGACCGGGAAGGTGACGTGACTGCTTCTCACGGGCTGAGAGGAAATGGCTGGGGCTCTCCAGAAGC
CACGTCACTGGTCCTGAACAACCTCATGTACATGACGGCCAAGTATGGAGATGAAGTTCCTGGGCCAGAAATGGA
AAATGCTTGGAATGCTTTAGCCAACAATGAGAAATGGAGCAACAACCTGAGGATCACCTTGCAGTTCCTGATTAG
CCTCTGTGGGGTCAGCAGCGACACAGTTCTCCTACCCTATATTAAAAAAGTGGCAATATACTTGTGCCGTAACAA
CACCATTCAAACCATGGAAGAGCTTCTCTTTGAGCTGCAGCAGACAGAACCCGTGAACCCCATCGTCCAGCATTG
TGACAACCCGCCCTTCTACCGCTTCACGGCCAGTAGCAAGGCTTCCGCAGCAGCCTCAGGAACCACCTCTAGCAG
CAATACAGTGGTTGCTGGCCAGGAAAATTTCCCAGATGCTGAGGAGAACAAGATATTGAAAGAATCTGATGAAAG
GTTTAGTAATGTCATCAGAGCCCACACTCGCCTCGAGTCAAGATACAGCAATAGCTCTGGAGGATCCTACGATGA
AGATAAAAATGATCCAATTTCTCCCTACACGGGCTGGTTGCTGACTATTACAGAGACCAAGCAGCCGCAGCCCTT
ACCGATGCCTTGTACTGGAGGATGCTGGGCCCCCCTGGTTGACTATCTCCCGGAGACCATCACTCCCCGGGGGCC
ACTCCACAGGTGCAATATTGCTGTAATTTTTATGACTGAAATGGTGGTGGATCACAGTGTACGAGAAGACTGGGC
GCTTCATCTACCATTATTACTTCATGCTGTCTTCTTAGGTTTAGACCACTACCGGCCTGAAGTCTTTGAACACAG
CAAAAAACTGCTTCTTCACCTCTTGATTGCCCTCTCTTGCAACAGCAATTTCCATTCCATTGCTTCCGTGCTCCT
GCAGACCCGAGAGATGGGTGAAGCTAAGACTCTAACCGTGCAGCCAGCCTACCAACCTGAATATCTCTATACAGG
TGGCTTTGACTTCCTGAGAGAGGACCAGTCATCCCCGGTGCCTGACTCAGGGCTTAGTTCAAGCTCCACCTCCTC
TAGCATCAGTCTGGGAGGCAGCAGTGGAAACCTCCCACAGATGACCCAGGAGGTAGAAGATGTGGACACAGCTGC
TGAAACAGATGAGAAGGCAAACAAGCTCATTGAGTTTCTCACGACCAGGGCATTTGGTCCACTTTGGTGCCATGA
AGACATCACACCTAAAAATCAAAATTCAAAGAGTGCTGAACAGCTCACTAATTTTCTACGTCACGTTGTATCTGT
ATTTAAAGATTCCAAATCAGGCTTCCATCTGGAGCACCAGTTGAGTGAAGTTGCATTGCAGACAGCCCTCGCAAG
CTCTTCAAGGCACTATGCTGGTCGGTCCTTCCAGATATTCCGGGCCCTCAAGCAACCTCTGTCAGCACATGCCTT
ATCTGACCTTCTCTCAAGATTGGTGGAGGTGATAGGAGAACATGGAGATGAGATTCAGGGTTATGTAATGGAAGC
GCTCCTAACCTTGGAGGCGGCTGTGGATAACTTGTCTGACTGCTTGAAGAACAGTGACCTCCTAACTGTATTGTC
CCGCTCTTCCTCACCAGATTTAAGCTCCAGCAGTAAACTAACAGCAAGCAGAAAGAGCACAGGACAACTAAACAT
GAACCCGGGAACCACCAGCGGCAACACCGCAACTGCCGAACGGAGCCGGCATCAACGAAGCTTCTCTGTGCCCAA
GAAGTTTGGTGTCATCGACCGATCCTCTGACCCACCTCGAAGTGCCACACTGGACAGAATTCAGGCTTGTACCCA
ACAAGGCCTCTCCTCAAAAACCAGAAGCTCATCCTCCTTGAAGGACAGTCTCACGGACCCATCCCACATAAACCA
TCCCACCAACCTGCTGGCCACCATATTCTGGGTCACAGTGGCCTTGATGGAGTCTGATTTTGAGTTTGAATACTT
AATGGCCTTAAGGCTGTTGAGCAGACTACTGGCACATATGCCACTCGATAAGGCTGAGAACCGAGAAAAGCTTGA
GAAACTCCAGGCACAGCTGAAGTGGGCCGACTTCTCCGGGCTGCAGCAGCTGCTGCTGAAAGGATTCACATCCCT
CACCACCACAGACCTGACCCTGCAGCTCTTCAGTCTGCTGACACCAGTGTCCAAAATATCCATGGTGGATGCATC
CCACGCTATTGGGTTTCCACTGAATGTCTTGTGTCTCCTGCCTCAGCTGATTCAGCATTTTGAAAATCCCAATCA
GTTCTGTAAGGATATAGCCGAAAGGATTGCTCAGGTTTGTTTAGAAGAGAAGAACCCCAAACTTTCAAATCTTGC
ACATGTCATGACTCTTTATAAAACGCACAGCTACACGAGGGACTGTGCCACGTGGGTCAATGTGGTCTGTCGATA
CCTTCATGAAGCATATGCTGACATTACCTTGAATATGGTTACCTACCTGGCAGAGCTGCTGGAGAAGGGCCTCCC

FIGURE 1254C

TAGTGTGCAGCAGCCCCTGCTCCAGGTGATCTACAGTCTTCTCAGCTACATGGACCTTTCTGTCGTTCCTGTCAA
ACAGTTCAATGTGGAAGTTCTGAAGACAATTGAAAAATATGTGCAAAGTGTTCACTGGAGAGAAGCTCTGAATAT
CTTGAAGCTGGTAGTTTCTCGGTCAGCCAGCCTTGTTTTACCTTCATACCAGCACAGTGACCTCTCAAAAATAGA
AATACATCGAGTGTGGACTAGTGCTTCCAAGGAATTACCTGGGAAAACCCTGGACTTCCACTTCGATATTTCGGA
GACTCCAATCATCGGGAGGCGGTATGATGAGCTGCAGAATTCTTCTGGGCGTGATGGGAAGCCCAGGGCCATGGC
CGTCACCCGGAGCACATCTTCCACTTCCTCAGGCTCCAACTCCAACGTCCTTGTTCCAGTGAGCTGGAAAAGGCC
CCAGTATTCTCAGAAGAGAACAAAAGAGAAGTTGGTACATGTCCTTTCTCTGTGTGGCCAAGAAGTAGGATTGAG
CAAAAATCCATCAGTGATTTTTTCATCGTGTGGGGATCTGGATCTGCTTGAGCACCAGACAAGCTTGGTATCTTC
TGAGGACGGTGCCCGAGAGCAGGAGAACATGGATGACACAAACAGCGAGCAGCAGTTTAGAGTCTTCAGAGACTT
CGACTTCCTAGATGTGGAGCTGGAGGATGGAGAGGGTGAGAGTATGGACAATTTCAACTGGGGAGTGCGCAGACG
TTCTCTGGACAGCCTGGATAAGTGTGATATGCAGATTCTGGAGGAGCGCCAACTGTCAGGAAGCACTCCTAGCCT
GAATAAAATGCACCATGAGGACTCCGATGAATCATCCGAGGAGGAGGACCTCACAGCCAGCCAGATCCTGGAGCA
CTCAGACCTAATCATGACTCTCTCCCCCTCTGAAGAGACGAATCCCATGGAGCTGCTCACCACAGCCTGTGACTC
GACCCCTGCAGAACCTCATTCCTTTAACACCAGAATGTCCAGCTTTGATGCTTCCTTGCCTGATATGAATAATCT
GCAGATTTCTGAGGGTTCAAAGGCTGAAGCTGTTCGTGAGGAGGAGGACACCACCGTGCATGAGGATGATCTTTC
TAGTTCCATCAATGAACTCCCAGCAGCTTTTGAATGCAGCGACAGCTTTAGCCTGGACATGACTGAGGGGGAAGA
AAAAGGCAATCGGGCACTGGACCAGTTTACCCTGGCGAGCTTTGGAGAAGGTGACAGGGGAGTCTCTCCCCCTCC
CTCGCCCTTCTTCTCAGCCATCCTTGCCGCCTTTCAGCCCGCAGCCTGTGACGATGCCGAGGAGGCCTGGCGCAG
CCACATCAACCAGCTTATGTGTGACTCAGATGGCTCCTGTGCTGTGTATACATTTCATGTGTTCTCCTCCTTGTT
TAAGAATATTCAGAAAAGGTTCTGCTTCCTAACCTGTGATGCAGCCAGTTACCTTGGAGATAACCTCCGGGGAAT
CGGATCCAAATTTGTCAGCTCTTCCCAGATGCTCACCTCCTGCTCTGAATGTCCTACACTTTTTGTGGATGCCGA
GACTCTCCTTTCATGTGGACTTCTGGACAAGCTCAAGTTCAGTGTGTTAGAACTGCAAGAATATTTGGATACCTA
CAACAACAGGAAAGAGGCCACACTCTCTTGGCTTGCAAATTGTAAGGCAACATTTGCAGGGGGATCAAGAGATGG
AGTAATTACCTGTCAACCAGGGGACTCCGAAGAAAAGCAATTGGAACTGTGTCAGAGATTATATAAGCTACACTT
CCAGCTGCTATTGCTTTTTCAGTCCTACTGTAAGCTCATCGGCCAGGTGCACGAAGTTAGCTCCATGCCAGAGCT
GCTGAATATGTCCAGGGAACTGAGTGACCTAAAGAAACACCTGAAGGAAGCCAGTGCAGTCATTGCAGCTGACCC
TCTCTATTCAGACGGCGCGTGGTCCGAGCCCACCTTCACGTCCACTGAAGCAGCCATCCAGTCCATGCTGGAGTG
CCTGAAGAACAACGAACTCGGCAAAGCTTTGCGGCAGATCAGGGAGTGCAGAAGTCTGTGGCCCAATGACATCTT
TGGAAGCAGTTCTGATGATGAGGTCCAGACACTACTGAATATTTATTTCCGTCACCAAACTCTGGGACAGACGGG
TACTTATGCCCTGGTGGGGTCTAACCAGAGCCTGACCGAGATCTGCACCAAGCTGATGGAGCTGAACATGGAGAT
CCGGGACATGATCCGCAGGGCCCAGAGTTACCGAGTCCTCACTACTTTTCTTCCAGACTCCAGTGTTTCTGGCAC
TAGTCTCTGACAGGAGCCTCCTGTCCCCACTGGGTTCCAAACTGCAGTGCTGCCATGCTGGGGCAACGTCATTCA
GTGTCTTCTCGGCCTTCAAAAGGCTTGGACAGACTGTTCTCCCTCTTGTTACCTGTAGGGCTTTTTCTAAAGAGG
ATGGCAGAACTTCCAACGTGTAGCAATACTATAAGAACCAAGGTAGCTTAGAACGTCCTGGACAGACTCCACTCA
TCATGCTGTGTGGCACAAATGTGTTACATTTGACCGAGCATATGCAACTCGCTACTGAAGAAGTGACTTCCGTTG
CATACCAAAGCCGACTACACTGAACAGTACCTTCCTTTCTAGAAACAATTTTAGATTGGCAAAAGTGCAATGTTT
TCTTCACTCAAAAAATTTTATATTCTCAAACATGTATATTCTTTCCCTGTCTTGTTCCATTTTCTTTTCTTTTTT
CTTTTTTCTTTTTCCTTTCTTTCGTGGGCTGAGAAAGGGGCAGGCAAAATGAAGCTGGCCACTGAAAACTGTAAG
ATGGTCAAAAGCTGACAGCCTGTGTATGTGAAAAGGGAATTGTAAATGGACTGCAATGTAATGTACACTGTAATT
TGAATACAATTACTGTATCTAAAAGGAGCTGCTATGAAGTACCTTTCTTATGTTGCTAGGCTACTGTTTCTGAAA
GCCCTGGATCTCTTTGCACCAAAAATGGTCCAGATAGACTCTTTTTAAGGATCTTGGCTGCTTTTTACTAGAAGG
TTGCTTTTATGAGCATATTTATACTGCTGAAGGATGAGTGTTAATTTTAATTAACTTTGCCGTTTTGTAGAGAAA
ACTATTCACAAGATAAATTCCAAGTCTTTTCACCTGTCAGGCATGCATATTTTAATATCTGTTTGGATAGTCAGA
AGTAGAATCATAAAGGTAAAATATGAGTTGTTACTTTGTTTCTTCGATGTCATATTTTATGTGTAATATATATGT
AAAGGGCCATTCTTAAGTTCTCTCCTTAAACTTAATGCTGTCAAGTGTTAGATGTGTGCATGTGAACTTGTTGCA
CTGCAGAAACATATTCAGAGTTTATCTATGTAACTTATTCACTCTGTAAATACATTTAAAGTTTTTGTGATGTAA
GCTTAATTGATATTCTGTTCAGAACTTTCTTTAGACTAAAAAAAAAAAAAAAAAGACAAA

FIGURE 1255

MASQQDSGFFEISIKYLLKSWSNTSPVGNGYIKPPVPPASGTHREKGPPTMLPINVDPDSKPGEYVLKSLFVNFT
TQAERKIRIIMAEPLEKPLTKSLQRGEDPQFDQVISSMSSLSEYCLPSILRTLFDWYKRQNGIEDESHEYRPRTS
NKSKSDEQQRDYLMERRDLAIDFIFSLVLIEVLKQIPLHPVIDSLIHDVINLAFKHFKYKEGYLGPNTGNMHIVA
DLYAEVIGVLAQAKFPAVKKKFMAELKELRHKEQNPYVVQSIISLIMGMKFFRIKMYPVEDFEASLQFMQECAHY
FLEVKDKDIKHALAGLFVEILVPVAAAVKNEVNVPCLRNFVESLYDTTLELSSRKKHSLALYPLVTCLLCVSQKQ
LFLNRWHIFLNNCLSNLKNKDPKMARVALESLYRLLWVYMIRIKCESNTATQSRLITIITTLFPKGSRGVVPRDM
PLNIFVKIIQFIAQERLDFAMKEIIFDFLCVGKPAKAFSLNPERMNIGLRAFLVIADSLQQKDGEPPMPVTGAVL
PSGNTLRVKKTYLSKTLTEEEAKMIGMSLYYSQVRKAVDNILRHLDKEVGRCMMLTNVQMLNKEPEDMITGERKP
KIDLFRTCVAAIPRLLPDGMSKLELIDLLARLSIHMDDELRHIAQNSLQGLLVDFSDWREDVLFGFTNFLLREVN
DMHHTLLDSSLKLLLQLLTQWKLVIQTQGKVYEQANKIRNSELIANGSSHRIQSERGPHCSVLHAVEGFALVLLC
SFQVATRKLSVLILKEIRALFIALGQPEDDDRPMIDVMDQLSSSILESFIHVAVSDSATLPLTHNVDLQWLVEWN
AVLVNSHYDVKSPSHVWIFAQSVKDPWVLCLFSFLRQENLPKHCPTALSYAWPYAFTRLQSVMPLVDPNSPINAK
KTSTAGSGDNYVTLWRNYLILCFGVAKPSIMSPGHLRASTPEIMATTPDGTVSYDNKAIGTPSVGVLLKQLVPLM
RLESIEITESLVLGFGRTNSLVFRELVEELHPLMKEALERRPENKKRRERRDLLRLQLLRIFELLADAGVISDST
NGALERDTLALGALFLEYVDLTRMLLEAENDKEVEILKDIRAHFSAMVANLIQCVPVHHRRFLFPQQSLRHHLFI
LFSQWAGPFSIMFTPLDRYSDRNHQITRYQYCALKAMSAVLCCGPVFDNVGLSPDGYLYKWLDNILACQDLRVHQ
LGCEVVVLLLELNPDQINLFNWAIDRCYTGSYQLASGCFKAIATVCGSRNYPFDIVTLLNLVLFKASDTNREIYE
ISMQLMQILEAKLFVYSKKVAEQRPGSILYGTHGPLPPLYSVSLALLSCELARMYPELTLPLFSGKPAIPHNTPQ
RAPDHAYLPAALAAQHRAGGQQAPPPGSSPSSPEDEVKDREGDVTASHGLRGNGWGSPEATSLVLNNLMYMTAKY
GDEVPGPEMENAWNALANNEKWSNNLRITLQFLISLCGVSSDTVLLPYIKKVAIYLCRNNTIQTMEELLFELQQT
EPVNPIVQHCDNPPFYRFTASSKASAAASGTTSSSNTVVAGQENFPDAEENKILKESDERFSNVIRAHTRLESRY
SNSSGGSYDEDKNDPISPYTGWLLTITETKQPQPLPMPCTGGCWAPLVDYLPETITPRGPLHRCNIAVIFMTEMV
VDHSVREDWALHLPLLLHAVFLGLDHYRPEVFEHSKKLLLHLLIALSCNSNFHSIASVLLQTREMGEAKTLTVQP
AYQPEYLYTGGFDFLREDQSSPVPDSGLSSSSTSSSISLGGSSGNLPQMTQEVEDVDTAAETDEKANKLIEFLTT
RAFGPLWCHEDITPKNQNSKSAEQLTNFLRHVVSVFKDSKSGFHLEHQLSEVALQTALASSSRHYAGRSFQIFRA
LKQPLSAHALSDLLSRLVEVIGEHGDEIQGYVMEALLTLEAAVDNLSDCLKNSDLLTVLSRSSSPDLSSSSKLTA
SRKSTGQLNMNPGTTSGNTATAERSRHQRSFSVPKKFGVIDRSSDPPRSA

FIGURE 1256

GGAAGACTTGGGTCCTTGGGTCGCAGGTGGGAGCCGACGGGTGGGTAGACCGTGGGGGATATCTCAGTGGCGGAC
GAGGACGGCGGGGACAAGGGGCGGCTGGTCGGAGTGGCGGAGCGTCAAGTCCCCTGTCGGTTCCTCCGTCCCTGA
GTGTCCTTGGCGCTGCCTTGTGCCCGCCCAGCGCCTTTGCATCCGCTCCTGGGCACCGAGGCGCCCTGTAGGATA
CTGCTTGTTACTTATTACAGCTAGAGGCATCATGGACCGATCTAAAGAAAACTGCATTTCAGGACCTGTTAAGGC
TACAGCTCCAGTTGGAGGTCCAAAACGTGTTCTCGTGACTCAGCAAATTCCTTGTCAGAATCCATTACCTGTAAA
TAGTGGCCAGGCTCAGCGGGTCTTGTGTCCTTCAAATTCTTCCCAGCGCGTTCCTTTGCAAGCACAAAAGCTTGT
CTCCAGTCACAAGCCGGTTCAGAATCAGAAGCAGAAGCAATTGCAGGCAACCAGTGTACCTCATCCTGTCTCCAG
GCCACTGAATAACACCCAAAAGAGCAAGCAGCCCCTGCCATCGGCACCTGAAAATAATCCTGAGGAGGAACTGGC
ATCAAAACAGAAAAATGAAGAATCAAAAAAGAGGCAGTGGGCTTTGGAAGACTTTGAAATTGGTCGCCCTCTGGG
TAAAGGAAAGTTTGGTAATGTTTATTTGGCAAGAGAAAAGCAAAGCAAGTTTATTCTGGCTCTTAAAGTGTTATT
TAAAGCTCAGCTGGAGAAAGCCGGAGTGGAGCATCAGCTCAGAAGAGAAGTAGAAATACAGTCCCACCTTCGGCA
TCCTAATATTCTTAGACTGTATGGTTATTTCCATGATGCTACCAGAGTCTACCTAATTCTGGAATATGCACCACT
TGGAACAGTTTATAGAGAACTTCAGAAACTTTCAAAGTTTGATGAGCAGAGAACTGCTACTTATATAACAGAATT
GGCAAATGCCCTGTCTTACTGTCATTCGAAGAGAGTTATTCATAGAGACATTAAGCCAGAGAACTTACTTCTTGG
ATCAGCTGGAGAGCTTAAAATTGCAGATTTTGGGTGGTCAGTACATGCTCCATCTTCCAGGAGGACCACTCTCTG
TGGCACCCTGGACTACCTGCCCCCTGAAATGATTGAAGGTCGGATGCATGATGAGAAGGTGGATCTCTGGAGCCT
TGGAGTTCTTTGCTATGAATTTTTAGTTGGGAAGCCTCCTTTTGAGGCAAACACATACCAAGAGACCTACAAAAG
AATATCACGGGTTGAATTCACATTCCCTGACTTTGTAACAGAGGGAGCCAGGGACCTCATTTCAAGACTGTTGAA
GCATAATCCCAGCCAGAGGCCAATGCTCAGAGAAGTACTTGAACACCCCTGGATCACAGCAAATTCATCAAAACC
ATCAAATTGCCAAAACAAAGAATCAGCTAGCAAACAGTCTTAGGAATCGTGCAGGGGGAGAAATCCTTGAGCCAG
GGCTGCCATATAACCTGACAGGAACATGCTACTGAAGTTTATTTTACCATTGACTGCTGCCCTCAATCTAGAACG
CTACACAAGAAATATTTGTTTTACTCAGCAGGTGTGCCTTAACCTCCCTATTCAGAAAGCTCCACATCAATAAAC
ATGACACTCTGAAGTGAAAGTAGCCACGAGAATTGTGCTACTTATACTGGTTCATAATCTGGAGGCAAGGTTCGA
CTGCAGCCGCCCCGTCAGCCTGTGCTAGGCATGGTGTCTTCACAGGAGGCAAATCCAGAGCCTGGCTGTGGGGAA
AGTGACCACTCTGCCCTGACCCCGATCAGTTAAGGAGCTGTGCAATAACCTTCCTAGTACCTGAGTGAGTGTGTA
ACTTATTGGGTTGGCGAAGCCTGGTAAAGCTGTTGGAATGAGTATGTGATTCTTTTTAAGTATGAAAATAAAGAT
ATATGTACAGACTTGTATTTTTTCTCTGGTGGCATTCCTTTAGGAATGCTGTGTGTCTGTCCGGCACCCCGGTAG
GCCTGATTGGGTTTCTAGTCCTCCTTAACCACTTATCTCCCATATGAGAGTGTGAAAAATAGGAACACGTGCTCT
ACCTCCATTTAGGGATTTGCTTGGGATACAGAAGAGGCCATGTGTCTCAGAGCTGTTAAGGGCTTATTTTTTTAA
AACATTGGAGTCATAGCATGTGTGTAAACTTTAAATATGCAAATAAATAAGTATCTATGTCTAAAAAAAAAAAAA
AAA

FIGURE 1257

MDRSKENCISGPVKATAPVGGPKRVLVTQQIPCQNPLPVNSGQAQRVLCPSNSSQRVPLQAQKLVSSHKPVQNQK
QKQLQATSVPHPVSRPLNNTQKSKQPLPSAPENNPEEELASKQKNEESKKRQWALEDFEIGRPLGKGKFGNVYLA
REKQSKFILALKVLFKAQLEKAGVEHQLRREVEIQSHLRHPNILRLYGYFHDATRVYLILEYAPLGTVYRELQKL
SKFDEQRTATYITELANALSYCHSKRVIHRDIKPENLLLGSAGELKIADFGWSVHAPSSRRTTLCGTLDYLPPEM
IEGRMHDEKVDLWSLGVLCYEFLVGKPPFEANTYQETYKRISRVEFTFPDFVTEGARDLISRLLKHNPSQRPMLR
EVLEHPWITANSSKPSNCQNKESASKQS

FIGURE 1258

TTCCCCCCCCCCCCCCCCCCCCCCCGCCCGAGCACAGGACACAGCTGGGTTCTGAAGCTTCTGAGTTCTGCAGCCT
CACCTCTGAGAAAACCTCTTTTCCACCAATACCATGAAGCTCTGCGTGACTGTCCTGTCTCTCCTCATGCTAGTA
GCTGCCTTCTGCTCTCCAGCGCTCTCAGCACCAATGGGCTCAGACCCTCCCACCGCCTGCTGCTTTTCTTACACC
GCGAGGAAGCTTCCTCGCAACTTTGTGGTAGATTACTATGAGACCAGCAGCCTCTGCTCCCAGCCAGCTGTGGTA
TTCCAAACCAAAAGAAGCAAGCAAGTCTGTGCTGATCCCAGTGAATCCTGGGTCCAGGAGTACGTGTATGACCTG
GAACTGAACTGAGCTGCTCAGAGACAGGAAGTCTTCAGGGAAGGTCACCTGAGCCCGGATGCTTCTCCATGAGAC
ACATCTCCTCCATACTCAGGACTCCTCTCCGCAGTTCCTGTCCCTTCTCTTAATTTAATCTTTTTTATGTGCCGT
GTTATTGTATTAGGTGTCATTTCCATTATTTATATTAGTTTAGCCAAAGGATAAGTGTCCTATGGGGATGGTCCA
CTGTCACTGTTTCTCTGCTGTTGCAAATACATGGATAACACATTTGATTCTGTGTGTTTTCCATAATAAAACTTT
AAAATAAAATGCAGACAGTTA

1415/8433

FIGURE 1259

MKLCVTVLSLLMLVAAFCSPALSAPMGSDPPTACCFSYTARKLPRNFVVDYYETSSLCSQPAVVFQTKRSKQVCA
DPSESWVQEYVYDLELN

1416/8433

FIGURE 1260

TCCTGCGTTGCTGGGAAGTTCTGGAAGGAAGCATGTGCTCCAGAGGTTGGGATTCGTGTCTGGCTCTGGAATTGC
TACTGCTGCCTCTGTCACTCCTGGTGACCAGCATTCAAGGTCACTTGGTACATATGACCGTGGTCTCCGGCAGCA
ACGTGACTCTGAACATCTCTGAGAGCCTGCCTGAGAACTACAAACAACTAACCTGGTTTTATACTTTCGACCAGA
AGATTGTAGAATGGGATTCCAGAAAATCTAAGTACTTTGAATCCAAATTTAAAGGCAGGGTCAGACTTGATCCTC
AGAGTGGCGCACTGTACATCTCTAAGGTCCAGAAAGAGGACAACAGCACCTACATCATGAGGGTGTTGAAAAAGA
CTGGGAATGAGCAAGAATGGAAGATCAAGCTGCAAGTGCTTGACCCTGTACCCAAGCCTGTCATCAAAATTGAGA
AGATAGAAGACATGGATGACAACTGTTATTTGAAACTGTCATGTGTGATACCTGGCGAGTCTGTAAACTACACCT
GGTATGGGGACAAAAGGCCCTTCCCAAAGGAGCTCCAGAACAGTGTGCTTGAAACCACCCTTATGCCACATAATT
ACTCCAGGTGTTATACTTGCCAAGTCAGCAATTCTGTGAGCAGCAAGAATGGCACGGTCTGCCTCAGTCCACCCT
GTACCCTGGCCCGGTCCTTTGGAGTAGAATGGATTGCAAGTTGGCTAGTGGTCACGGTGCCCACCATTCTTGGCC
TGTTACTTACCTGAGATGAGCTCTTTTAACTCAAGCGAAACTTCAAGGCCAGAAGATCTTGCCTGTTGGTGATCA
TGCTCCTCACCAGGACAGAGACTGTATAGGCTGACCAGAAGCATGCTGCTGAATTATCAACGAGGATTTTCAAGT
TAACTTTTAAATACTGGTTATTATTTAATTTTATATCCCTTTGTTGTTTTCTAGTACACAGAGATATAGAGATAC
ACATGCTTTTTTCCCACCCAAAATTGTGACAACATTATGTGAATGTTTTATTATTTTTTAAAATAAACATTTGAT
ATAATTATCAATTAACTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1261

MCSRGWDSCLALELLLLPLSLLVTSIQGHLVHMTVVSGSNVTLNISESLPENYKQLTWFYTFDQKIVEWDSRKSK
YFESKFKGRVRLDPQSGALYISKVQKEDNSTYIMRVLKKTGNEQEWKIKLQVLDPVPKPVIKIEKIEDMDDNCYL
KLSCVIPGESVNYTWYGDKRPFPKELQNSVLETTLMPHNYSRCYTCQVSNSVSSKNGTVCLSPPCTLARSFGVEW
IASWLVVTVPTILGLLLT

FIGURE 1262

CCACGCGTCCGCGCTGCGCCACATCCCACCGGCCCTTACACTGTGGTGTCCAGCAGCATCCGGCTTC**ATG**GGGGG
ACTTGAACCCTGCAGCAGGCTCCTGCTCCTGCCTCTCCTGCTGGCTGTAAGTGGTCTCCGTCCTGTCCAGGCCCA
GGCCCAGAGCGATTGCAGTTGCTCTACGGTGAGCCCGGGCGTGCTGGCAGGGATCGTGATGGGAGACCTGGTGCT
GACAGTGCTCATTGCCCTGGCCGTGTACTTCCTGGGCCGGCTGGTCCCTCGGGGGCGAGGGGCTGCGGAGGCAGC
GACCCGGAAACAGCGTATCACTGAGACCGAGTCGCCTTATCAGGAGCTCCAGGGTCAGAGGTCGGATGTCTACAG
CGACCTCAACACACAGAGGCCGTATTACAAA**TGA**GCCCGAATCATGACAGTCAGCAACATGATACCTGGATCCAG
CCATTCCTGAAGCCCACCCTGCACCTCATTCCAACTCCTACCGCGATACAGACCCACAGAGTGCCATCCCTGAGA
GACCAGACCGCTCCCCAATACTCTCCTAAAATAAACATGAAGCACAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAA

FIGURE 1263

MGGLEPCSRLLLLPLLLAVSGLRPVQAQAQSDCSCSTVSPGVLAGIVMGDLVLTVLIALAVYFLGRLVPRGRGAA
EAATRKQRITETESPYQELQGQRSDVYSDLNTQRPYYK

FIGURE 1264

GGTGTGTCCCGGGTGTGGGGAGGCGACAGAGCCCTGGCACTTGAGGGTTGAGGGGGCCTCCCCAGCGCGGCGAAC
CGTCTAGCCTCCGGAGGCCAGGCCGTGAGTGCGGGAGGTATACGCCAAGGCGGAAGAATTTTGCCACTCACTACC
TGTGTGACCTCGGGTAAATTAGCCTTGGAACGTCAGTTTCTTCGTCTCTATAATTGAAATAATAATAGTACCTCT
CTCAGGATTGTTGTGAGCCGTCAGTGAAACACTTAGAGCAGTTTCTGGCACATGGTAGAATTGGGCTATTTGCTT
GAAGCTTCTTGGTGGCCCTTGCTAGCCCAGGAAGAAACTTACATTTTGATTTTTTTGTACCATGGCTTTGGTTCA
CAAATTGCTGCATGGTACTTATTTTCTCAGAAAATTCTCTAAGCCAACTTCTGCCTTGTATCCATTTTTGGGTAT
CCGCTTTGCAGAGTATTCCAGTAGTCTTCAGAAACCAGTGGCTTCTCCTGGCAAAGCCTCCTCACAGAGGAAGAC
TGAAGGGGATTTGCAAGGAGATCACCAGAAAGAAGTTGCTTTGGATATAACTTCTTCTGAGGAGAAGCCTGATGT
TAGTTTCGATAAAGCAATTAGAGATGAAGCAATATACCATTTTAGGCTTTTGAAGGATGAAATTGTGGATCATTG
GAGAGGACCGGAAGGCCACCCTCTGCATGAGGTCTTGCTGGAACAAGCCAAGGTTGTCTGGCAATTCCGGGGGAA
AGAAGATTTGGATAAGTGGACAGTGACTTCTGATAAGACGATTGGAGGCAGAAGTGAAGTGTTTTTGAAAATGGG
CAAGAATAACCAAAGTGCACTGCTATATGGAACTCTGAGCTCTGAGGCGCCTCAGGACGGCGAGTCTTCCCGAAG
TGGGTACTGTGCAATGATATCCAGGATTCCAAGGGGTGCTTTTAAGAGGAAGATGTCTTACGATTGGTCCCAGTT
CAATACTCTGTATCTCCGTGTACGTGGGGATGGTCGGCCTTGGATGGTGAATATCAAGGAGGACACAGATTTCTT
CCAGAGGACGAATCAGATGTATAGTTACTTCATGTTCACCCGCGGGGGACCCTACTGGCAGGAGGTCAAGATTCC
TTTTTCCAAATTTTTCTTCTCTAATCGAGGAAGAATCCGGGATGTTCAGCATGAGCTTCCGCTTGATAAGATCTC
TTCTATAGGATTCACCTTGGCTGATAAAGTGGATGGTCCATTCTTCCTGGAGATAGATTTTATTGGCGTGTTTAC
TGATCCAGCTCATACAGAAGAATTTGCCTATGAAAATTCTCCAGAGCTTAACCCAAGGCTTTTTAAATAAAGATC
ATATGGTAGTTTTGTTTTACTAATCTAAGGGTACTAGCATCTACAATGATATAGACAAAATAAAATATTTCTTTA
ATGGCATCCAAA

FIGURE 1265

MALVHKLLHGTYFLRKFSKPTSALYPFLGIRFAEYSSSLQKPVASPGKASSQRKTEGDLQGDHQKEVALDITSSE
EKPDVSFDKAIRDEAIYHFRLLKDEIVDHWRGPEGHPLHEVLLEQAKVVWQFRGKEDLDKWTVTSDKTIGGRSEV
FLKMGKNNQSALLYGTLSSEAPQDGESSRSGYCAMISRIPRGAFKRKMSYDWSQFNTLYLRVRGDGRPWMVNIKE
DTDFFQRTNQMYSYFMFTRGGPYWQEVKIPFSKFFFSNRGRIRDVQHELPLDKISSIGFTLADKVDGPFFLEIDF
IGVFTDPAHTEEFAYENSPELNPRLFK

FIGURE 1266

GGCACGAGGCCTCGTGCCGCCGGGCTCTTGGTACCTCAGCGCGAGCGCCAGGCGTCCGGCCGCCGTGGCTATGTT
CGTGTCCGATTTCCGCAAAGAGTTCTACGAGGTGGTCCAGAGCCAGAGGGTCCTTCTCTTCGTGGCCTCGGACGT
GGATGCTCTGTGTGCGTGCAAGATCCTTCAGGCCTTGTTCCAGTGTGACCACGTGCAATATACGCTGGTTCCAGT
TTCTGGGTGGCAAGAACTTGAAACTGCATTTCTTGAGCATAAAGAACAGTTTCATTATTTTATTCTCATAAACTG
TGGAGCTAATGTAGACCTATTGGATATTCTTCAACCTGATGAAGACACTATATTCTTTGTGTGTGACACCCATAG
GCCAGTCAATGTCGTCAATGTATACAACGATACCCAGATCAAATTACTCATTAAACAAGATGATGACCTTGAAGT
TCCCGCCTATGAAGACATCTTCAGGGATGAAGAGGAGGATGAAGAGCATTCAGGAAATGACAGTGATGGGTCAGA
GCCTTCTGAGAAGCGCACACGGTTAGAAGAGGAGATAGTGGAGCAAACCATGCGGAGGAGGCAGCGGCGAGAGTG
GGAGGCCCGGAGAAGAGACATCCTCTTTGACTACGAGCAGTATGAATATCATGGGACATCGTCAGCCATGGTGAT
GTTTGAGCTGGCTTGGATGCTGTCCAAGGACCTGAATGACATGCTGTGGTGGGCCATCGTTGGACTAACAGACCA
GTGGGTGCAAGACAAGATCACTCAAATGAAATACGTGACTGATGTTGGTGTCCTGCAGCGCCACGTTTCCCGCCA
CAACCACCGGAACGAGGATGAGGAGAACACACTCTCCGTGGACTGCACACGGATCTCCTTTGAGTATGACCTCCG
CCTGGTGCTCTACCAGCACTGGTCCCTCCATGACAGCCTGTGCAACACCAGCTATACCGCAGCCAGGTTCAAGCT
GTGGTCTGTGCATGGACAGAAGCGGCTCCAGGAGTTCCTTGCAGACATGGGTCTTCCCCTGAAGCAGGTGAAGCA
GAAGTTCCAGGCCATGGACATCTCCTTGAAGGAGAATTTGCGGGAAATGATTGAAGAGTCTGCAAATAAATTTGG
GATGAAGGACATGCGCGTGCAGACTTTCAGCATTCATTTTGGGTTCAAGCACAAGTTTCTGGCCAGCGACGTGGT
CTTTGCCACCATGTCTTTGATGGAGAGCCCCGAGAAGGATGGCTCAGGGACAGATCACTTCATCCAGGCTCTGGA
CAGCCTCTCCAGGAGTAACCTGGACAAGCTGTACCATGGCCTGGAACTCGCCAAGAAGCAGCTGCGAGCCACCCA
GCAGACCATTGCCAGCTGCCTTTGCACCAACCTCGTCATCTCCCAGGGGCCTTTCCTGTACTGCTCTCTCATGGA
GGGCACTCCAGATGTCATGCTGTTCTCTAGGCCGGCATCCCTAAGCCTGCTCAGCAAACACCTGCTCAAGTCCTT
TGTGTGTTCGACAAAGAACCGGCGCTGCAAACTGCTGCCCCTGGTGATGGCTGCCCCCCTGAGCATGGAGCATGG
CACAGTGACCGTGGTGGGCATCCCCCCAGAGACCGACAGCTCGGACAGGAAGAACTTTTTTGGGAGGGCGTTTGA
GAAGGCAGCGGAAAGCACCAGCTCCCGGATGCTGCACAACCATTTTGACCTCTCAGTAATTGAGCTGAAAGCTGA
GGATCGGAGCAAGTTTCTGGACGCACTTATTTCCCTCCTGTCCTAGGAATTTGATTCTTCCAGAATGACCTTCTT
ATTTATGTAACTGGCTTTCATTTAGATTGTAAGTTATGGACATGATTTGAGATGTAGAAGCCATTTTTTATTAAA
TAAAATGCTTATTTTAGGCTCCGTCCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1267

MFVSDFRKEFYEVVQSQRVLLFVASDVDALCACKILQALFQCDHVQYTLVPVSGWQELETAFLEHKEQFHYFILI
NCGANVDLLDILQPDEDTIFFVCDTHRPVNVVNVYNDTQIKLLIKQDDDLEVPAYEDIFRDEEEDEEHSGNDSDG
SEPSEKRTRLEEEIVEQTMRRRQRREWEARRRDILFDYEQYEYHGTSSAMVMFELAWMLSKDLNDMLWWAIVGLT
DQWVQDKITQMKYVTDVGVLQRHVSRHNHRNEDEENTLSVDCTRISFEYDLRLVLYQHWSLHDSLCNTSYTAARF
KLWSVHGQKRLQEFLADMGLPLKQVKQKFQAMDISLKENLREMIEESANKFGMKDMRVQTFSIHFGFKHKFLASD
VVFATMSLMESPEKDGSGTDHFIQALDSLSRSNLDKLYHGLELAKKQLRATQQTIASCLCTNLVISQGPFLYCSL
MEGTPDVMLFSRPASLSLLSKHLLKSFVCSTKNRRCKLLPLVMAAPLSMEHGTVTVVGIPPETDSSDRKNFFGRA
FEKAAESTSSRMLHNHFDLSVIELKAEDRSKFLDALISLLS

FIGURE 1268

GCGGGATTTTCAAGCGTAGGCCCCCGGGAACTCGAGCTGCCATGAGCCTCTGGGTGGACAAGTATCGGCCCTGCT
CCTTGGGACGGCTGGACTATCACAAGGAGCAGGCGGCCCAGCTGCGGAACCTGGTGCAGTGTGGTGACTTTCCTC
ATCTGTTAGTGTACGGACCATCAGGTGCTGGAAAAAAGACAAGAATTATGTGTATTCTACGTGAACTTTATGGTG
TTGGAGTGGAAAAATTGAGAATTGAACATCAGACCATCACAACTCCATCTAAAAAAAAAATTGAAATTAGCACCA
TTGCAAGTAACTACCACCTTGAAGTTAATCCTAGTGATGCTGGAAATAGTGACCGAGTAGTCATTCAGGAGATGT
TGAAAACAGTGGCACAATCACAACAACTTGAAACAAACTCTCAAAGGGATTTTAAAGTGGTATTATTGACAGAAG
TTGACAAACTCACCAAAGATGCTCAGCATGCCTTGCGAAGAACCATGGAAAAATATATGTCTACCTGCAGATTGA
TCTTGTGCTGCAATTCTACATCTAAAGTGATCCCACCTATTCGTAGTAGGTGCTTGGCGGTTCGTGTGCCTGCTC
CCAGCATTGAAGATATTTGCCACGTGTTATCTACTGTGTGTAAGAAGGAAGGTCTGAATCTTCCTTCACAACTGG
CTCATAGACTTGCAGAGAAGTCTTGTAGAAATCTCAGAAAAGCCCTGCTTATGTGTGAAGCCTGCAGAGTGCAAC
AATATCCTTTTACTGCAGATCAAGAAATCCCTGAGACAGATTGGGAGGTGTATCTGAGGGAGACTGCAAATGCTA
TTGTCAGTCAGCAAACTCCACAAAGGCTCCTTGAAGTTCGTGGAAGGCTGTATGAGCTTCTAACTCATTGTATTC
CTCCTGAGATAATAATGAAGGGCCTTCTCTCAGAACTGTTACATAATTGTGATGGACAACTGAAAGGGGAGGTGG
CACAAATGGCAGCTTACTATGAGCATCGTCTACAGCTGGGTAGCAAAGCCATTTATCACTTGGAAGCGTTTGTGG
CCAAATTCATGGCACTTTATAAGAAGTTCATGGAGGATGGATTGGAAGGCATGATGTTCTGACTTCTGTCAGTTA
TTCTTGCAAAGATTTCTCAGTATCAGTATTTACATACAGCTTATATTAAAAGAGCTGTGGGTAAATTAACTGAAC
TTAATCATGTCGTATTTGCGTTTTTTTGGTAATAACTTCTCTGTGAACTATTAATCATCCTCTGAGTTAAATAAT
TGCTCCTATACTATTGAAGTATGTAGTTTTGTACATAACTTAGAGACTTTAGAGTCTAAGAAAATGATCTTAATT
TACTTTAAGCATTGGTTATTCAAGTATTCATTGTTGATCCTCCTATTCTCTTCCGTCTAATCTCTCACCTGCTAA
AGGAGATTTACACATTAGAAAGCAAAGATTATTTTCATTTATCCAGATGACCATTTTCTGCCACAGGTAACATGA
TTGTTTGACACACCATTATATTTAATTCTAGTTTCTCTCAATGAATAATTGTATTTTTGTAGGAAATGTAAGATT
TCATTCTGAAACATAATTATTGGTATGGACAAAATTGCAGATACCATTTCTGTTGAGGCTGCAGATTTCCAACTT
TTATTTCAGTGGTTCAGATTAGTATTAGGTCGGTACTAAGAAATAAGCATGTTTTCACTAATTTAAGTACTTGAG
ACTCTTGAAGAAAATTCAGAATGAAGTTCTGGAGAAAGGTATGTTACTGTAGTAATTACTCTTTGAACAGGTTTT
GTGTTTTGTCATTAGCTCTGCCCTTTTTAATTAAATATTTTGGTTCATGGACCAAAGGGTTTACTTGACAAATTT
GTGTGACAGACTCCGAACAATTCCTTTACTACGAAGTATAATTTATAAAATAAAATATACCCATTTTAAGGGTAC
AGTTTGATTTTTGACCAGTGAAACTATGATCCCAATCAAGGTATAGATGCCGTCACCCCAAAAAGTTCCCTCCAT
ATCCCTTTGCAGTCAGTTCATCCCTACCCTGGCCCAGATGATCACTGATCTTGTCATTATAGATGAGTTTTGCCA
GTTCAAGAATTTAATGGAATCAGATATTGTAAGCATTCTTGTGTAATACTTCATTCTCTCTCATTATTGAGATTC
ATCCATATTGTTGAATGTTTCACTAGTTAATGTTTATTGTTCAATATTTTTGTATATACTTTTAAAGCCTATTCA
CTTGCTGATGGATCTTTGGTTTGTTTCCAGGTTTGGTTATTATGAATAAAGTTGCTGTGAATAAAAAAAAAAAAA
AAAAAA

FIGURE 1269

MSLWVDKYRPCSLGRLDYHKEQAAQLRNLVQCGDFPHLLVYGPSGAGKKTRIMCILRELYGVGVEKLRIEHQTIT
TPSKKKIEISTIASNYHLEVNPSDAGNSDRVVIQEMLKTVAQSQQLETNSQRDFKVVLLTEVDKLTKDAQHALRR
TMEKYMSTCRLILCCNSTSKVIPPIRSRCLAVRVPAPSIEDICHVLSTVCKKEGLNLPSQLAHRLAEKSCRNLRK
ALLMCEACRVQQYPFTADQEIPETDWEVYLRETANAIVSQQTPQRLLEVRGRLYELLTHCIPPEIIMKGLLSELL
HNCDGQLKGEVAQMAAYYEHRLQLGSKAIYHLEAFVAKFMALYKKFMEDGLEGMMF

FIGURE 1270

CGAGCTGCCATGAGCCTCTGGGTGGACAAGTATCGGCCCTGCTCCTTGGGACGGCTGGACTATCACAAGGAGCAG
GCGGCCCAGCTGCGGAACCTGGTGCAGTGTGGTGACTTTCCTCATCTGTTAGTGTACGGACCATCAGGTGCTGGA
AAAAAGACAAGAATTATGTGTATTTTACGTGAACTTTATGGTGTTGGAGTGGAAAAATTGAGAATTGAACATCAG
ACCATCACAACTCCATCTAAAAAAAAAAATTGAAATTAGCACCATTGCAAGTAACTACCACCTTGAAGTTAATCCT
AGTGATGCTGGAAATAGTGACCGAGTAGTCATTCAGGAGATGTTGAAAACAGTGGCACAATCACAACAACTTGAA
ACAAACTCTCAAAGGGATTTTAAAGTGGTATTATTGACAGAAGTTGACAAACTCACCAAAGATGCTCAGCATGCC
TTGCGAAGAACCATGGAAAAATATATGTCTACCTGCAGATTGATCTTGTGCTGCAATTCTACATCTAAAGTGATC
CCACCTATTCGTAGTAGGTGCTTGGCGGTTCGTGTGCCTGCTCCCAGCATTGAAGATATTTGCCACGTGTTATCT
ACTGTGTGTAAGAAGGAAGGTCTGAATCTTCCTTCACAACTGGCTCATAGACTTGCAGAGAAGTCTTGTAGAAAT
CTCAGAAAAGCCCTGCTTATGTGTGAAGCCTGCAGAGTGCAACAATATCCTTTTACTGCAGATCAAGAAATCCCT
GAGACAGATTGGGAGGTGTATCTGAGGGAGACTGCAAATGCTATTGTCAGTCAGCAAACTCCACAAAGGCTCCTT
GAAGTTCGTGGAAGGCTGTATGAGCTTCTAACTCATTGTATTCCTCCTGAGATAATAATGAAGGGCCTTCTCTCA
GAACTGTTACATAATTGTGATGGACAACTGAAAGGGGAGGTGGCACAAATGGCAGCTTACTATGAGCATCGTCTA
CAGCTGGGTAGCAAAGCCATTTATCACTTGGAAGCGTTTGTGGCCAAATTCATGGCACTTTATAAGAAGTTCATG
GAGGATGGATTGGAAGGCATGATGTTCTGACTTCTGTCAGTTATTCTTGCAAAGATTTCTCAGTATCAGTATTTA
CATACAGCTTATATTAAAAGAGCTGTGGGTAAATTAACTGAACTTAATCATGTCGTATTTGGGTTTTTTTGGTAA
TAACTTCTCTGTGAACTATTAATCATCCTCTGAGTTAAATAATTGCTCCTATACTATTGAAGTATGTAGTTTTGT
ACATAACTTAGAGACTTTAGAGTCTAAGAAAATGATCTTAATTTACTTTAAGCATTGGTTATTCAAGTATTCATT
GTTGATCCTCCTATTCTCTTCCGTCTAATCTCTCACCTGCTAAAGGAGATTTACACATTAGAAAGCAAAGATTAT
TTTCATTTATCCAGATGACCATTTTCTGCCACAGGTAACATGATTGTTTGACGG

FIGURE 1271

MSLWVDKYRPCSLGRLDYHKEQAAQLRNLVQCGDFPHLLVYGPSGAGKKTRIMCILRELYGVGVEKLRIEHQTIT
TPSKKKIEISTIASNYHLEVNPSDAGNSDRVVIQEMLKTVAQSQQLETNSQRDFKVVLLTEVDKLTKDAQHALRR
TMEKYMSTCRLILCCNSTSKVIPPIRSRCLAVRVPAPSIEDICHVLSTVCKKEGLNLPSQLAHRLAEKSCRNLRK
ALLMCEACRVQQYPFTADQEIPETDWEVYLRETANAIVSQQTPQRLLEVRGRLYELLTHCIPPEIIMKGLLSELL
HNCDGQLKGEVAQMAAYYEHRLQLGSKAIYHLEAFVAKFMALYKKFMEDGLEGMMF

FIGURE 1272

GGCACGAGGGGGAGGAGGAGGAATGTGGAAGGTGGCGGCGCGCGAGCTGACAGGCGGTTCCTCGGGCGGGCTGCG
GCGACGGCCCGAGCGCTTCTCCTTCGCCGAGGTTGCGCGCCCCCTCCTCGCCGTGCCCCGGGCCCGCGCGGGATC
GTGCGTCGTCCCGCCGCGTCCCTGAAGGGAAGGAAGCGAGGCGGCGGCGGCGGCGCCCGGGAGCCGGAGCCTTCG
CGGCGTCCACGTCCCTCCCCCGCTGCACCCCGCCCCGGCGCGAGAGGAGAGCGCGAGAGCCCCAGCCGCGGGCGG
GCGGGCGGCGAAGATGGCAGAGGCACCGGCTTCCCCGGCCCCGCTCTCTCCGCTCGAAGTGGAGCTGGACCCGGA
GTTCGAGCCCCAGAGCCGTCCGCGATCCTGTACGTGGCCCCTGCAAAGGCCGGAGCTCCAAGCGAGCCCTGCCAA
GCCCTCGGGGGAGACGGCCGCCGACTCCATGATCCCCGAGGAGGAGGACGATGAAGACGACGAGGACGGCGGGGG
ACGGGCCGGCTCGGCCATGGCGATCGGCGGCGGCGGCGGGAGCGGCACGCTGGGCTCCGGGCTGCTCCTTGAGGA
CTCGGCCCGGGTGCTGGCACCCGGAGGGCAAGACCCCGGGTCTGGGCCAGCCACCGCGGCGGGCGGGCTGAGCGG
GGGTACACAGGCGCTGCTGCAGCCTCAGCAACCGCTGCCACCGCCGCAGCCGGGGGCGGCTGGGGGCTCCGGGCA
GCCGAGGAAATGTTCGTCGCGGCGGAACGCCTGGGGAAACCTGTCCTACGCGGACCTGATCACCCGCGCCATCGA
GAGCTCCCCGGACAAACGGCTCACTCTGTCCCAGATCTACGAGTGGATGGTGCGTTGCGTGCCCTACTTCAAGGA
TAAGGGCGACAGCAACAGCTCTGCCGGCTGGAAGAACTCCATCCGGCACAACCTGTCACTGCATAGTCGATTCAT
GCGGGTCCAGAATGAGGGAACTGGCAAGAGCTCTTGGTGGATCATCAACCCTGATGGGGGGAAGAGCGGAAAAGC
CCCCCGGCGGCGGGCTGTCTCCATGGACAATAGCAACAAGTATACCAAGAGCCGTGGCCGCGCAGCCAAGAAGAA
GGCAGCCCTGCAGACAGCCCCCGAATCAGCTGACGACAGTCCCTCCCAGCTCTCCAAGTGGCCTGGCAGCCCCAC
GTCACGCAGCAGTGATGAGCTGGATGCGTGGACGGACTTCCGTTCACGCACCAATTCTAACGCCAGCACAGTCAG
TGGCCGCCTGTCGCCCATCATGGCAAGCACAGAGTTGGATGAAGTCCAGGACGATGATGCGCCTCTCTCGCCCAT
GCTCTACAGCAGCTCAGCCAGCCTGTCACCTTCAGTAAGCAAGCCGTGCACGGTGGAACTGCCACGGCTGACTGA
TATGGCAGGCACCATGAATCTGAATGATGGGCTGACTGAAAACCTCATGGACGACCTGCTGGATAACATCACGCT
CCCGCCATCCCAGCCATCGCCCACTGGGGGACTCATGCAGCGGAGCTCTAGCTTCCCGTATACCACCAAGGGCTC
GGGCCTGGGCTCCCCAACCAGCTCCTTTAACAGCACGGTGTTCGGACCTTCATCTCTGAACTCCCTACGCCAGTC
TCCCATGCAGACCATCCAAGAGAACAAGCCAGCTACCTTCTCTTCCATGTCACACTATGGTAACCAGACACTCCA
GGACCTGCTCACTTCGGACTCACTTAGCCACAGCGATGTCATGATGACACAGTCGGACCCCTTGATGTCTCAGGC
CAGCACCGCTGTGTCTGCCCAGAATTCCCGCCGGAACGTGATGCTTCGCAATGATCCGATGATGTCCTTTGCTGC
CCAGCCTAACCAGGGAAGTTTGGTCAATCAGAACTTGCTCCACCACCAGCACCAAACCCAGGGCGCTCTTGGTGG
CAGCCGTGCCTTGTCGAATTCTGTCAGCAACATGGGCTTGAGTGAGTCCAGCAGCCTTGGGTCAGCCAAACACCA
GCAGCAGTCTCCTGTCAGCCAGTCTATGCAAACCCTCTCGGACTCTCTCTCAGGCTCCTCCTTGTACTCAACTAG
TGCAAACCTGCCCGTCATGGGCCATGAGAAGTTCCCCAGCGACTTGGACCTGGACATGTTCAATGGGAGCTTGGA
ATGTGACATGGAGTCCATTATCCGTAGTGAACTCATGGATGCTGATGGGTTGGATTTTAACTTTGATTCCCTCAT
CTCCACACAGAATGTTGTTGGTTTGAACGTGGGGAACTTCACTGGTGCTAAGCAGGCCTCATCTCAGAGCTGGGT
GCCAGGCTGAAGGATCACTGAGGAAGGGGAAGTGGGCAAAGCAGACCCTCAAACTGACACAAGACCTACAGAGAA
AACCCTTTGCCAAATCTGCTCTCAGCAAGTGGACAGTGATACCGTTTACAGCTTAACACCTTTGTGAATCCCACG
CCATTTTCCTAACCCAGCAGAGACTGTTAATGGCCCCTTACCCTGGGTGAAGCACTTACCCTTGGAACAGAACTC
TAAAAAGTATGCAAAATCTTCCTTGTACAGGGTGGTGAGCCGCCTGCCAGTGGAGGACAGCACCCCTCAGCACCA
CCCACCCTCATTCAGAGCACACCGTGAGCCCCCGTCGGCCATTCTGTGGTGTTTTAATATTGCGATGGTTTATGG
GACGTTTTAAGTGTTGTTCTTGTGTTTGTTTTCCTTTGACTTTCTGAGTTTTTCACATGCATTAACTTGCGGTAT
TTTTCTGTTAAAATGTTAACCGTCCTTCCCCTAGCAAATTTAAAAACAGAAAGAAAATGTTGTACCAGTTACCAT
TCCGGGTTCGAGCATCACAAGCTTTTGAGCGCATGGAACTCCATAAACTAACAAATTACATAAACTAAAGGGGGA
TTTTCTTTCTTCTTTTGTTTGGTAGAAAATTATCCTTTTCTAAAAACTGAACAATGGCACAATTGTTTGCTATGT
GCACCCGTCCAGGACAGAACCGTGCATAGGCAAAAGGAGTGGAGCACAGCGTCCGGCCCAGTGTGTTTCCGGTTC
TGAGTCAGGGTGATCTGTGGACGGGACCCCAGCACCAAGTCTACGGGTGCCAGATCAGTAGGGCCTGTGATTTCC
TGTCAGTGTCCTCAGCTAATGTGAACAGTGTTGGTCTGCTGGTTAGAAACTAGAATATTGATATTTTCAGGAAAG
AAATCAGCTCAGCTCTCCACTCATTGCCAAATGTCACTAAAGGGTTTAGTTTTAAGGAGAAAGAAAAAAAAAAAA
AAAAAAAAA

FIGURE 1273

MAEAPASPAPLSPLEVELDPEFEPQSRPRSCTWPLQRPELQASPAKPSGETAADSMIPEEEDDEDDEDGGGRAGS
AMAIGGGGGSGTLGSGLLLEDSARVLAPGGQDPGSGPATAAGGLSGGTQALLQPQQPLPPPQPGAAGGSGQPRKC
SSRRNAWGNLSYADLITRAIESSPDKRLTLSQIYEWMVRCVPYFKDKGDSNSSAGWKNSIRHNLSLHSRFMRVQN
EGTGKSSWWIINPDGGKSGKAPRRRAVSMDNSNKYTKSRGRAAKKKAALQTAPESADDSPSQLSKWPGSPTSRSS
DELDAWTDFRSRTNSNASTVSGRLSPIMASTELDEVQDDDAPLSPMLYSSSASLSPSVSKPCTVELPRLTDMAGT
MNLNDGLTENLMDDLLDNITLPPSQPSPTGGLMQRSSSFPYTTKGSGLGSPTSSFNSTVFGPSSLNSLRQSPMQT
IQENKPATFSSMSHYGNQTLQDLLTSDSLSHSDVMMTQSDPLMSQASTAVSAQNSRRNVMLRNDPMMSFAAQPNQ
GSLVNQNLLHHQHQTQGALGGSRALSNSVSNMGLSESSSLGSAKHQQQSPVSQSMQTLSDSLSGSSLYSTSANLP
VMGHEKFPSDLDLDMFNGSLECDMESIIRSELMDADGLDFNFDSLISTQNVVGLNVGNFTGAKQASSQSWVPG

FIGURE 1274

CGGCGCGATGCGCGGAGACCCCCGCGGGGGCGGCGGCGGCCGTGAGCCCCGATGAGGCCCGAGCGTCCCCGGCCG
CGCGGCAGCGCCCCCGGCCCGATGGAGACCCCGCCGTGGGACCCAGCCCGCAACGACTCGCTGCCGCCCACGCTG
ACCCCGGCCGTGCCCCCCTACGTGAAGCTTGGCCTCACCGTCGTCTACACCGTGTTCTACGCGCTGCTCTTCGTG
TTCATCTACGTGCAGCTCTGGCTGGTGCTGCGTTACCGCCACAAGCGGCTCAGCTACCAGAGCGTCTTCCTCTTT
CTCTGCCTCTTCTGGGCCTCCCTGCGGACCGTCCTCTTCTCCTTCTACTTCAAAGACTTCGTGGCGGCCAATTCG
CTCAGCCCCTTCGTCTTCTGGCTGCTCTACTGCTTCCCTGTGTGCCTGCAGTTTTTCACCCTCACGCTGATGAAC
TTGTACTTCACGCAGGTGATTTTCAAAGCCAAGTCAAAATATTCTCCAGAATTACTCAAATACCGGTTGCCCCTC
TACCTGGCCTCCCTCTTCATCAGCCTTGTTTTCCTGTTGGTGAATTTAACCTGTGCTGTGCTGGTAAAGACGGGA
AATTGGGAGAGGAAGGTTATCGTCTCTGTGCGAGTGGCCATTAATGACACGCTCTTCGTGCTGTGTGCCGTCTCT
CTCTCCATCTGTCTCTACAAAATCTCTAAGATGTCCTTAGCCAACATTTACTTGGAGTCCAAGGGCTCCTCCGTG
TGTCAAGTGACTGCCATCGGTGTCACCGTGATACTGCTTTACACCTCTCGGGCCTGCTACAACCTGTTCATCCTG
TCATTTTCTCAGAACAAGAGCGTCCATTCCTTTGATTATGACTGGTACAATGTATCAGACCAGGCAGATTTGAAG
AATCAGCTGGGAGATGCTGGATACGTATTATTTGGAGTGGTGTTATTTGTTTGGGAACTCTTACCTACCACCTTA
GTCGTTTATTTCTTCCGAGTTAGAAATCCTACAAAGGACCTTACCAACCCTGGAATGGTCCCCAGCCATGGATTC
AGTCCCAGATCTTATTTCTTTGACAACCCTCGAAGATATGACAGTGATGATGACCTTGCCTGGAACATTGCCCCT
CAGGGACTTCAGGGAGGTTTTGCTCCAGATTACTATGATTGGGGACAACAAACTAACAGCTTCCTGGCACAAGCA
GGAACTTTGCAAGACTCAACTTTGGATCCTGACAAACCAAGCCTTGGGTAGCATCAGTTAACAGTTTTATGGACG
ATTCCTCAGATGAAAAGCTTCAGAAAAGCATAGTGACAGCTGAATTTTTAGGGCACTTTTCCTTAAGAAATAGAA
CTTGATTTTTATTTGTTACAGGTTTCCAATGGCCCCATAGGAATAAGCAATAATGTAGACTGATAAACCCTTATT
TTAGTACTAAAGAGGGAGCCTTGCTATTTCAGTGGGTATAATTTAAACTTTTTAAAGAAAATCTGTACTTTTATA
AAGATGTATTTTGTATAACTTAAATAATAATGCTAAAGTATACTAGGGTTTTTTTTTCTTGAGAATGTTACTGCA
ATCATGTTGTAGTTTGCACAGACTTTTATGCATAATTCACTTTAAAAATATAGAATATATGGTCTAATAGTTTTT
TAAAGCTTTTGGACTAAAGTATTCCACAAATCTTACCTCTTTAGGTCACTGATGGTCACTCCGATTCTGAGTGCC
ACATTGGTAGACTCCTAAAATACAGTTGACAACTTAGCCAATTGCAACTCCAGTGTTGATAATTAAAATGAAATG
GTAAAGCAGCAGACTGTAAGGTCTTTAGAGATTTTTTTTTAAGGTTCAGGCCGTAGGTTCCTCAAGGAATCTCTT
AAGTTTTGCCCAAAGACTGGTACTTCCTTTCAGTAGGGCGCTAATGTATACACATTAATGATAAGTTGATAACAT
TAAAAATGTAGCTGACTTATCCTATTAAACCTCCTCTGCTATGTTCAC

FIGURE 1275

MRPERPRPRGSAPGPMETPPWDPARNDSLPPTLTPAVPPYVKLGLTVVYTVFYALLFVFIYVQLWLVLRYRHKRL
SYQSVFLFLCLFWASLRTVLFSFYFKDFVAANSLSPFVFWLLYCFPVCLQFFTLTLMNLYFTQVIFKAKSKYSPE
LLKYRLPLYLASLFISLVFLLVNLTCAVLVKTGNWERKVIVSVRVAINDTLFVLCAVSLSICLYKISKMSLANIY
LESKGSSVCQVTAIGVTVILLYTSRACYNLFILSFSQNKSVHSFDYDWYNVSDQADLKNQLGDAGYVLFGVVLFV
WELLPTTLVVYFFRVRNPTKDLTNPGMVPSHGFSPRSYFFDNPRRYDSDDDLAWNIAPQGLQGGFAPDYYDWGQQ
TNSFLAQAGTLQDSTLDPDKPSLG

FIGURE 1276

GGGGAACAAGAATTTGAGAACTGTAAATACCAATCCTTGAAAGGGACCATGGTGCGGCCTGTGAGACATAAGAAA
CCAGTCAATTACTCACAGTTTGACCACTCTGACAGTGATGATGATTTTGTTTCTGCAACTGTACCTTTAAACAAG
AAATCCAGAACAGCACCAAAGGAGTTAAAACAAGATAAACCAAAACCTAACTTGAACAATCTCCGGAAAGAAGAA
ATCCCAGTACAAGAGAAAACCCCTAAAAAAAGACTCCCTGAAGGTACTTTTAGTATTCCAGCTAGTGCAGTGCCT
TGTACAAAGATGGCTTTAGATGACAAGCTCTACCAGAGAGACTTAGAAGTTGCACTAGCTTTATCAGTGAAGGAA
CTTCCAACAGTCACCACTAATGTGCAGAACTCTCAAGATAAAAGCATTGAAAAACATGGCAGTAGTAAAATAGAA
ACAATGAATAAGTCTCCTCATATCTCTAATTGCAGTGTAGCCAGTGATTATTTAGATTTGGATAAGATTACTGTG
GAAGATGATGTTGGTGGTGTTCAAGGGAAAAGAAAAGCAGCATCTAAAGCTGCAGCACAGCAGAGGAAGATTCTT
CTGGAAGGCAGTGATGGTGATAGTGCTAATGACACTGAACCAGACTTTGCACCTGGTGAAGATTCTGAGGATGAT
TCTGATTTTTGTGAGAGTGAGGATAATGACGAAGACTTCTCTATGAGAAAAAGTAAAGTTAAAGAAATTAAAAAG
AAAGAAGTGAAGGTAAAATCCCCAGTAGAAAAGAAAGAGAAGAAATCTAAATCCAAATGTAATGCTTTGGTGACT
TCGGTGGACTCTGCTCCAGCTGCCGTCAAATCAGAATCTCAGTCCTTGCCAAAAAAGGTTTCTCTGTCTTCAGAT
ACCACTAGGAAACCATTAGAAATACGCAGTCCTTCAGCTGAAAGCAAGAAACCTAAATGGGTCCCACCAGCGGCA
TCTGGAGGTAGCAGAAGTAGCAGCAGCCCACTGGTGGTAGTGTCTGTGAAGTCTCCCAATCAGAGTCTCCGCCTT
GGCTTGTCCAGATTAGCACGAGTTAAACCTTTGCATCCAAATGCCACTAGCACCTGAGTGTGGTACAGGAGGAAT
GTTTGGTTGGGAGAATCACAGCTTTACAAGGGTGTTTATATTTGATTTGTGTTTATATTTGAGGCAGGTATTGTA
ATATAAAGGAATCCATTACCATGTCCTATAAATGACCTCTAGCCATTTTATGATTATGTTCTCTGTAAAACTCTT
CAAGACTTCAATGAGAAGTTTGTTTATAAGAATTATCTTCTCATACCTTTCCTTGTGAAGAGCGTATTCTGTTTT
TCTATCAGTTCGACATGAAGTCCACATCACATGCTGTTCTTTTCTAGTTACATGATGTGCCTTTCTAGCTTTGTC
TAGTTTATAGCACCTTAACTTTAACTGTTCAGTTTTATCTGGCAGAGGAAAACATTCTTATTTCTTTCAGAAGAC
ATTTCTGAAATCTTATAAGCTACTTAAGCTACGTTGTCAGTTTTATCGCAAAGATGTTTTGTATTTTAGCCAAAT
CTTTTTATAGTACAAACTTAGAATTATTTTACACACTAAAATGGTTGCAGTTTTATGGCATATGTCTCCGATTTA
GATGGTTATTCTCTAGAAAATAGTATTTAAAGACATTTTATGAAATCTTCATTGTCAAAACCTTTAATAAAAGTG
GAAATATTTTGAAATGCCCTTTTTCTTGATACCACTCATCCACGTGTTCCTGATTGTCCACATTTCATGATAAAA
TGAGAGCTCTGCAGAGAATGTTAGCCTTTCTGTTGTAAATGTAATCTTCAAGTAGTCACTTTTTGTTAAGTTCTT
TAGAAAGTAGTTGTCAAGTACTTAGTCATCCCTATTATGATATGAGATAGTACAGCTTTTCAGGAAGCTTAGATC
TGAATTTACTTTGAAAAACAATTGTAATGAATATTTTATATTTACATTGAGAATTTCAACTAGCTTCTGATCAAT
TTTTAATAAAAAATTTTCAAATCATGTTAGCTGTTAAAAAATGTATAATAACTCAGTTTTTCTTGGTTTATGGAA
ATATCTATATTAATGTGAAAATAATTAATTTAGAATTGTGATTAAAGTGAGCATTTGTCTACAAAAAAAAAAAAA
AAAAAAAAAAAAAAA

FIGURE 1277

MVRPVRHKKPVNYSQFDHSDSDDDFVSATVPLNKKSRTAPKELKQDKPKPNLNNLRKEEIPVQEKTPKKRLPEGT
FSIPASAVPCTKMALDDKLYQRDLEVALALSVKELPTVTTNVQNSQDKSIEKHGSSKIETMNKSPHISNCSVASD
YLDLDKITVEDDVGGVQGKRKAASKAAAQQRKILLEGSDGDSANDTEPDFAPGEDSEDDSDFCESEDNDEDFSMR
KSKVKEIKKKEVKVKSPVEKKEKKSKSKCNALVTSVDSAPAAVKSESQSLPKKVSLSSDTTRKPLEIRSPSAESK
KPKWVPPAASGGSRSSSSPLVVVSVKSPNQSLRLGLSRLARVKPLHPNATST

FIGURE 1278

CCATGGCTCAGCCTCTGGGTCCAGAGCCTCAGCTCCTACCTCTTCCCTCCTTGCCAGCCCCTGATGCCTGCCAGA
CTTTTGCCTCTGCTGGAGCCCCTGCCTGACCAGCTTCCCCTCCCTGTCTGGTTGGGATTTGGGGGCTGAGCTGTC
TGGGGTCCCAGGGCCAACCA**ATG**CAGTGCCGGCTCCCGCGGGGCCTGGCTGGAGCCCTCCTCACCCTCCTGTGCA
TGGGGCTCCTGTGTCTGCGGTACCACTTGAACCTGTCCCCGCAGCGGGTACAAGGGACCCCCGAGCTGAGCCAGC
CGAACCCGGGGCCCCCTAAGCTACAGCTACACGATGTCTTCATTGCAGTGAAGACGACCCGGGCTTTCCACCGCT
TGCGCCTGGAGCTGCTGCTTGACACGTGGGTTTCCAGGACCAGGGAACAGACATTTGTCTTCACCGACAGCCCAG
ACAAAGGCCTCCAGGAGAGACTGGGGTCCCACCTTGTGGTCACCAACTGCTCCGCGGAACACAGCCACCCAGCTC
TGTCCTGCAAGATGGCTGCTGAGTTCGACACCTTCTTGGCCAGTGGGCTTAGGTGGTTCTGCCATGTGGACGATG
ACAACTATGTGAACCCAAGGGCGCTGCTGCAGCTTCTGAGAGCCTTCCCGCTGGCCCGCGACGTCTATGTGGGAA
GGCCCAGCCTGAACCGGCCCATCCATGCCTCAGAGCCACAGCCCCACAACCGCACGAGGCTGGTACAGTTCTGGT
TTGCCACTGGGGGTGCTGGCTTCTGCATCAATCGCAAACTGGCTTTGAAGATGGCTCCGTGGGCCAGTGGCTCCC
GTTTCATGGACACATCTGCTCTCATCCGGCTGCCTGATGACTGCACCATGGGCTATATCATTGAGTGCAAGCTGG
GCGGCCGCCTGCAGCCCAGCCCCCTCTTTCACTCCCACCTGGAGACCCTGCAGCTGCTGAGGACTGCACAGCTCC
CAGAACAGGTCACCCTCAGCTACGGTGTCTTTGAGGGGAAACTCAACGTCATTAAGCTACAGGGCCCCTTCTCCC
CGGAGGAGGACCCCTCCAGATTTCGCTCCCTCCATTGTCTGCTCTATCCAGATACACCCTGGTGTCCCCAGCTGG
GTGCCCGA**TGA**ATCCTGAACTGCTGGGCAAAGGTTGGGCAGAGACTTCTGGGTGTGCCTTGGCTCCCAAGGTGGC
ACTGTGGGTCCCTGGCAAGTGTCTTGTGATAGGCAGTCCCTGGCAGGGCCTTCGGGTGGTTGGCAAGCCCAGGAT
CTGAGTGGCAATTGGCACTGAAGGCACCCCAGGCCCCTGGGAGGTGAGTTAGACAGCCCAGGGGACCAGGTGGAC
CAGGTGGTGGCCAGAGAGGCTCCAGGGGCTAGACTCCCTCAGGAGGCTGAATTGAAAAAGGGCAGGGGGCACTTG
AGCTGGGCTGGGGCTCAGGGGTCCTAACCCTTTAGGCAGTGACATGGCCTCTGGGTGGGGTCTGGCCGTTGGCCC
TGGCTAATGTCTCTCAGTCATTCCCCTGGGGCTCAAGCGCTGGGCCGCCCACTCCTGCCTCCCTCATCTGTGTCC
CGAGTTCCTGAAGGGACATGGGTGGAATGATGGCAGAATCCAGGGTCTGCAGCACCTGCTGTTGTTGCCAACCAG
TCTCCCAAAGCTCCTTGCTCCCCACCCCTTGCGAACAGGACCAGATTTTGTTTGGAGCCTCAGCATGCCGGGGCC
CAGATGATGGAGCATAACGGGTCCCAGCCAATTGTGATGATCCTTTTTGCTCATTTCCCAGCCTTTCTTGCTGTT
AGGGGCTACCATGGGACCAGCTCTGGCCAGAGGGAACTAAGCAAATCCAATAGAGATGTTTCTGGGGAAGGTTTT
GCAGCCCACTCCCCATCTTCCTGCTATAAATGTGGGTGTGATGGCTGGATCTGGGGCAGCCACCTTGCTACCATG
AAGGAAAGGCCAAGACAATCATCCACAGCTATTCCCTCCAGCATCTGGTTCTGTACAAAAATTAAATGCTTATTT
GTTTAAGTCAAAAAA

FIGURE 1279

MQCRLPRGLAGALLTLLCMGLLCLRYHLNLSPQRVQGTPELSQPNPGPPKLQLHDVFIAVKTTRAFHRLRLELLL
DTWVSRTREQTFVFTDSPDKGLQERLGSHLVVTNCSAEHSHPALSCKMAAEFDTFLASGLRWFCHVDDDNYVNPR
ALLQLLRAFPLARDVYVGRPSLNRPIHASEPQPHNRTRLVQFWFATGGAGFCINRKLALKMAPWASGSRFMDTSA
LIRLPDDCTMGYIIECKLGGRLQPSPLFHSHLETLQLLRTAQLPEQVTLSYGVFEGKLNVIKLQGPFSPEEDPSR
FRSLHCLLYPDTPWCPQLGAR

FIGURE 1280

CCATGGCTCAGCCTCTGGGTCCAGAGCCTCAGCTCCTACCTCTTCCCTCCTTGCCAGCCCCTGATGCCTGCCAGA
CTTTTGCCTCTGCTGGAGCCCCTGCCTGACCAGCTTCCCCTCCCTGTCTGGTTGGGATTTGGGGGCTGAGCTGTC
TGGGGTCCCAGGGCCAACCA**ATG**CAGTGCCGGCTCCCGCGGGGCCTGGCTGGAGCCCTCCTCACCCTCCTGTGCA
TGGGGCTCCTGTGTCTGCGGTACCACTTGAACCTGTCCCCGCAGCGGGTACAAGGGACCCCCGAGCTGAGCCAGC
CGAACCCGGGGCCCCCTAAGCTACAGCTACACGATGTCTTCATTGCAGTGAAGACGACCCGGGCTTTCCACCGCT
TGCGCCTGGAGCTGCTGCTTGACACGTGGGTTTCCAGGACCAGGGAACAGACATTTGTCTTCACCGACAGCCCAG
ACAAAGGCCTCCAGGAGAGACTGGGGTCCCACCTTGTGGTCACCAACTGCTCCGCGGAACACAGCCACCCAGCTC
TGTCCTGCAAGATGGCTGCTGAGTTCGACACCTTCTTGGCCAGTGGGCTTAGGTGGTTCTGCCATGTGGACGATG
ACAACTATGTGAACCCAAGGGCGCTGCTGCAGCTTCTGAGAGCCTTCCCGCTGGCCCGCGACGTCTATGTGGGAA
GGCCCAGCCTGAACCGGCCCATCCATGCCTCAGAGCCACAGCCCCACAACCGCACGAGGCTGGTACAGTTCTGGT
TTGCCACTGGGGGTGCTGGCTTCTGCATCAATCGCAAACTGGCTTTGAAGATGGCTCCGTGGGCCAGTGGCTCCC
GTTTCATGGACACATCTGCTCTCATCCGGCTGCCTGATGACTGCACCATGGGCTATATCATTGAGTGCAAGCTGG
GCGGCCGCCTGCAGCCCAGCCCCCTCTTTCACTCCCACCTGGAGACCCTGCAGCTGCTGAGGACTGCACAGCTCC
CAGAACAGGTCACCCTCAGCTACGGTGTCTTTGAGGGGAAACTCAACGTCATTAAGCTACAGGGCCCCTTCTCCC
CGGAGGAGGACCCCTCCAGATTTCGCTCCCTCCATTGTCTGCTCTATCCAGATACACCCTGGTGTCCCCAGCTGG
GTGCCCGA**TGA**ATCCTGAACTGCTGGGCAAAGGTTGGGCAGAGACTTCTGGGTGTGCCTTGGCTCCCAAGGTGGC
ACTGTGGGTCCCTGGCAAGTGTCTTGTGATAGGCAGTCCCTGGCAGGGCCTTCGGGTGGTTGGCAAGCCCAGGAT
CTGAGTGGCAATTGGCACTGAAGGCACCCCAGGCCCCTGGGAGGTGAGTTAGACAGCCCAGGGGACCAGGTGGAC
CAGGTGGTGGCCAGAGAGGCTCCAGGGGCTAGACTCCCTCAGGAGGCTGAATTGAAAAAGGGCAGGGGGCACTTG
AGCTGGGCTGGGGCTCAGGGGTCCTAACCCTTTAGGCAGTGACATGGCCTCTGGGTGGGGTCTGGCCGTTGGCCC
TGGCTAATGTCTCTCAGTCATTCCCCTGGGGCTCAAGCGCTGGGCCGCCCACTCCTGCCTCCCTCATCTGTGTCC
CGAGTTCCTGAAGGGACATGGGTGGAATGATGGCAGAATCCAGGGTCTGCAGCACCTGCTGTTGTTGCCAACCAG
TCTCCCAAAGCTCCTTGCTCCCCACCCCTTGCGAACAGGACCAGATTTTGTTTGGAGCCTCAGCATGCCGGGGCC
CAGATGATGGAGCATAACGGGTCCCAGCCAATTGTGATGATCCTTTTTGCTCATTTCCCAGCCTTTCTTGCTGTT
AGGGGCTACCATGGGACCAGCTCTGGCCAGAGGGAACTAAGCAAATCCAATAGAGATGTTTCTGGGGAAGGTTTT
GCAGCCCACTCCCCATCTTCCTGCTATAAATGTGGGTGTGATGGCTGGATCTGGGGCAGCCACCTTGCTACCATG
AAGGAAAGGCCAAGACAATCATCCACAGCTATTCCCTCCAGCATCTGGTTCTGTACAAAAATTAAATGCTTATTT
GTTTAAGTCAAAAAA

FIGURE 1281

MQCRLPRGLAGALLTLLCMGLLCLRYHLNLSPQRVQGTPELSQPNPGPPKLQLHDVFIAVKTTRAFHRLRLELLL
DTWVSRTREQTFVFTDSPDKGLQERLGSHLVVTNCSAEHSHPALSCKMAAEFDTFLASGLRWFCHVDDDNYVNPR
ALLQLLRAFPLARDVYVGRPSLNRPIHASEPQPHNRTRLVQFWFATGGAGFCINRKLALKMAPWASGSRFMDTSA
LIRLPDDCTMGYIIECKLGGRLQPSPLFHSHLETLQLLRTAQLPEQVTLSYGVFEGKLNVIKLQGPFSPEEDPSR
FRSLHCLLYPDTPWCPQLGAR

FIGURE 1282

CGGGGATTTTGTGCCCCGATCTATAGTTCCTTGAGTCTCCACACACACTCCTCACAGAGATCTGTAGCGTAGGTA
CGTGACAGCTCTGCCTACATCTGACGTCCGGAGTCATTAACCAGGAATGTATGTGTGTCTGTGTGTCTCTCTGTG
GAGTCGTCAGAATTCTTCATAGGGGTTAAGCTAAAAAAGCGAGGCGAGGAGCCCCTCTCCAATGGCTCAGTTTTG
CTGAATAATCACGTGTGAATCGAGGGGCGGGCTTTTGGCAGGCAGATCTTACTAGTATTTACTACCAAGCTCTAC
TCCAGATTAACCATCCCAGTCCTTCTGTCAGTCTCCGATGCCATCATGCAGCCTGGTTAGGAGCAAAGGAAAGGG
GAAAAAGAAAAACGACTAATTCATCTTTTCCTGATCGTCAGGACCCTAAAGAATGGCCGAGCCTTGGGGGAACGA
GTTGGCGTCCGCAGCTGCCAGGGGGGACCTAGAGCAACTTACTAGTTTGTTGCAAAATAATGTAAACGTCAATGC
ACAAAATGGATTTGGAAGGACTGCGCTGCAGGTTATGAAACTTGGAAATCCCGAGATTGCCAGGAGACTGCTACT
TAGAGGTGCTAATCCCGATTTGAAAGACCGAACTGGTTTCGCTGTCATTCATGATGCGGCCAGAGCAGGTTTCCT
GGACACTTTACAGACTTTGCTGGAGTTTCAAGCTGATGTTAACATCGAGGATAATGAAGGGAACCTGCCCTTGCA
CTTGGCTGCCAAAGAAGGCCACCTCCGGGTGGTGGAGTTCCTGGTGAAGCACACGGCCAGCAATGTGGGGCATCG
GAACCATAAGGGGGACACCGCCTGTGATTTGGCCAGGCTCTATGGGAGGAATGAGGTTGTTAGCCTGATGCAGGC
AAACGGGGCTGGGGGAGCCACAAATCTTCAATAAACGTGGGGAGGGCTCCCCCACGTTGCCTCTACTTTATCAAT
TAACTGAGTAGCTCTCCTGACTTTTAATGTCATTTGTTAAAATACAGTTCTGTCATATGTTAAGCAGCTAAATTT
TCTGAAACTGCATAAGTGAAAATCTTACAACAGGTTTATGAATATATTTAAGCAACATCTTTTTAACCTGCAAAA
TCTGTTCTAACATGTAATTGCAGATAACTTTGACTTTCTTCTGAATATTTTATCTTTCCTTGGCTTTTCCCTTGC
TTCCCCTTTTGCCAATCTCAACACCCAAGTTGAAGACTTTGTTTTTAAAATGGTTTGTCCTGATGCTTTTGTCTA
ATTAAAACACTTTCAAAACAGGAAAAAAAAAAAAAAAAA

FIGURE 1283

MAEPWGNELASAAARGDLEQLTSLLQNNVNVNAQNGFGRTALQVMKLGNPEIARRLLLRGANPDLKDRTGFAVIH
DAARAGFLDTLQTLLEFQADVNIEDNEGNLPLHLAAKEGHLRVVEFLVKHTASNVGHRNHKGDTACDLARLYGRN
EVVSLMQANGAGGATNLQ

FIGURE 1284

CTCGAGCCACGAAGGCCCCGCTGTCCTGTCTAGCAGATACTTGCACGGTTTACAGAAATTCGGTCCCTGGGTCGT
GTCAGGAAACTGGAAAAAAGGTCATAAGCATGAAGCGCAGTTCAGTTTCCAGCGGTGGTGCTGGCCGCCTCTCCA
TGCAGGAGTTAAGATCCCAGGATGTAAATAAACAAGGCCTCTATACCCCTCAAACCAAAGAGAAACCAACCTTTG
GAAAGTTGAGTATAAACAAACCGACATCTGAAAGAAAAGTCTCGCTATTTGGCAAAAGAACTAGTGGACATGGAT
CCCGGAATAGTCAACTTGGTATATTTTCCAGTTCTGAGAAAATCAAGGACCCGAGACCACTTAATGACAAAGCAT
TCATTCAGCAGTGTATTCGACAACTCTGTGAGTTTCTTACAGAAAATGGTTATGCACATAATGTGTCCATGAAAT
CTCTACAAGCTCCCTCTGTTAAAGACTTCCTGAAGATCTTCACATTTCTTTATGGCTTCCTGTGCCCCTCATACG
AACTTCCTGACACAAAGTTTGAAGAAGAGGTTCCAAGAATCTTTAAAGACCTTGGGTATCCTTTTGCACTATCCA
AAAGCTCCATGTACACAGTGGGGGCTCCTCATACATGGCCTCACATTGTGGCAGCCTTAGTTTGGCTAATAGACT
GCATCAAGATACATACTGCCATGAAAGAAAGCTCACCTTTATTTGATGATGGGCAGCCTTGGGGAGAAGAAACTG
AAGATGGAATTATGCATAATAAGTTGTTTTTGGACTACACCATAAAATGCTATGAGAGTTTTATGAGTGGTGCCG
ACAGCTTTGATGAGATGAATGCAGAGCTGCAGTCAAAACTGAAGGATTTATTTAATGTGGATGCTTTTAAGCTGG
AATCATTAGAAGCAAAAAACAGAGCATTGAATGAACAGATTGCAAGATTGGAACAAGAAAGAGAAAAAGAACCGA
ATCGTCTAGAGTCGTTGAGAAAACTGAAGGCTTCCTTACAAGGAGATGTTCAAAAGTATCAGGCATACATGAGCA
ATTTGGAGTCTCATTCAGCCATTCTTGACCAGAAATTAAATGGTCTCAATGAGGAAATTGCTAGAGTAGAACTAG
AATGTGAAACAATAAAACAGGAGAACACTCGACTACAGAATATCATTGACAACCAGAAGTACTCAGTTGCAGACA
TTGAGCGAATAAATCATGAAAGAAATGAATTGCAGCAGACTATTAATAAATTAACCAAGGACCTGGAAGCTGAAC
AACAGAAGTTGTGGAATGAGGAGTTAAAATATGCCAGAGGCAAAGAAGCGATTGAAACACAATTAGCAGAGTATC
ACAAATTGGCTAGAAAATTAAAACTTATTCCTAAAGGTGCTGAGAATTCCAAAGGTTATGACTTTGAAATTAAGT
TTAATCCCGAGGCTGGTGCCAACTGCCTTGTCAAATACAGGGCTCAAGTTTATGTACCTCTTAAGGAACTCCTGA
ATGAAACTGAAGAAGAAATTAATAAAGCCCTAAATAAAAAAATGGGTTTGGAGGATACTTTAGAACAATTGAATG
CAATGATAACAGAAAGCAAGAGAAGTGTGAGAACTCTGAAAGAAGAAGTTCAAAAGCTGGATGATCTTTACCAAC
AAAAAATTAAGGAAGCAGAGGAAGAGGATGAAAAATGTGCCAGTGAGCTTGAGTCCTTGGAGAAACACAAGCACC
TGCTAGAAAGTACTGTTAACCAGGGGCTCAGTGAAGCTATGAATGAATTAGATGCTGTTCAGCGGGAATACCAAC
TAGTTGTGCAAACCACGACTGAAGAAAGACGAAAAGTGGGAAATAACTTGCAACGTCTGTTAGAGATGGTTGCTA
CACATGTTGGGTCTGTAGAGAAACATCTTGAGGAGCAGATTGCTAAAGTTGATAGAGAATATGAAGAATGCATGT
CAGAAGATCTCTCGGAAAATATTAAAGAGATTAGAGATAAGTATGAGAAGAAAGCTACTCTAATTAAGTCTTCTG
AAGAATGAAGATAAAATGTTGATCATGTATATATATCCATAGTGAATAAAATTGTCTCAGTAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1285

MKRSSVSSGGAGRLSMQELRSQDVNKQGLYTPQTKEKPTFGKLSINKPTSERKVSLFGKRTSGHGSRNSQLGIFS
SSEKIKDPRPLNDKAFIQQCIRQLCEFLTENGYAHNVSMKSLQAPSVKDFLKIFTFLYGFLCPSYELPDTKFEEE
VPRIFKDLGYPFALSKSSMYTVGAPHTWPHIVAALVWLIDCIKIHTAMKESSPLFDDGQPWGEETEDGIMHNKLF
LDYTIKCYESFMSGADSFDEMNAELQSKLKDLFNVDAFKLESLEAKNRALNEQIARLEQEREKEPNRLESLRKLK
ASLQGDVQKYQAYMSNLESHSAILDQKLNGLNEEIARVELECETIKQENTRLQNIIDNQKYSVADIERINHERNE
LQQTINKLTKDLEAEQQKLWNEELKYARGKEAIETQLAEYHKLARKLKLIPKGAENSKGYDFEIKFNPEAGANCL
VKYRAQVYVPLKELLNETEEEINKALNKKMGLEDTLEQLNAMITESKRSVRTLKEEVQKLDDLYQQKIKEAEEED
EKCASELESLEKHKHLLESTVNQGLSEAMNELDAVQREYQLVVQTTTEERRKVGNNLQRLLEMVATHVGSVEKHL
EEQIAKVDREYEECMSEDLSENIKEIRDKYEKKATLIKSSEE

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FIGURE 1286

CGGGAGAGCGGCAGCGGGACCCCAGCGCGGGCGGCGGCGGCTGGGCGGGAGCCCAGAGGGCAGGAACTGCTGCCA
CAACCTCAGGCTGGACACCAAACACCCGTGCCCGCCAATGCGGCCCAGCCCCCGGAGAGTCAGGCCCACAGAGCA
TGCCCATGTGGGCCGGCGGTGTGGGGAGCCCTCGGCGGGGCATGGCCCCTGCGTCCACAGATGACCTCTTTGCCC
GCAAGCTGCGCCACCCAGCAAGGCCCCCGCTGACACCGCACACCTTTGAGCCGAGGCCAGTCCGGGGCCCACTCC
TGCGCAGGGCAGCGAATGCAGGCGAGGCCAGGCCCCCCACGCCAGCCAGCCCCCGTGCCCGTGCCCACAGCCACG
AAGAGGCCAGCCGACCTGCAGCCACTTCCACCCGGCTCTTCACTGACCCGCAGGCACTGCTGGGGCTGCCAGCAG
AGGAACCAGAGCCTGCCTTCCCACCAGTGCTTGAGCCTCGATGGTTTGCCCACTATGACGTGCAAAGCCTGCTCT
TTGATTGGGCTCCGAGGTCTCAGGGGATGGGGAGCCACTCAGAGGCCAGCTCTGGGACCCTGGCTTCAGCCGAGG
ACCAGGCTGCCAGCTCGGACCTGCTGCATGGGGCACCTGGCTTTGTGTGTGAGCTCGGGGGTGAGGGTGAGCTAG
GCCTGGGTGGACCAGCATCCCCACCTGTGCCCCCTGCACTGCCCAACGCGGCCGTGTCCATCCTGGAGGAGCCAC
AGAACCGAACCTCGGCCTACAGCCTGGAGCACGCAGACCTGGGTGCTGGCTACTACCGCAAATACTTCTATGGCA
AAGAACATCAGAACTTCTTCGGGATGGACGAGTCGCTGGGCCCGGTGGCAGTGAGCCTGCGGCGGGAGGAGAAGG
AGGGCAGCGGAGGGGGCACCCTGCACAGCTACCGCGTCATCGTGCGGACCACGCAGCTCCGGACACTCCGTGGCA
CCATCTCGGAGGACGCGCTGCCGCCGGGGCCCCCACGGGGTCTGTCCCCAAGGAAACTTCTGGAGCACGTGGCGC
CGCAGCTGAGCCCCAGCTGCCTGCGCCTGGGCTCAGCTTCACCCAAGGTACCACGGACGCTGCTCACACTGGATG
AGCAAGTGCTGAGCTTCCAACGCAAGGTGGGCATCCTGTACTGCCGGGCAGGCCAGGGCTCGGAGGAGGAGATGT
ACAACAACCAGGAGGCGGGACCGGCCTTCATGCAGTTTCTCACCTTGCTGGGCGATGTGGTGCGGCTCAAAGGCT
TTGAGAGTTACCGGGCCCAGCTAGACACCAAAACGGATTCCACAGGCACGCACTCCCTCTACACCACATACCAGG
ACCACGAGATCATGTTCCACGTGTCCACGATGCTGCCTTACACCCCTAATAACCAGCAGCAGCTCCTCCGGAAGC
GCCACATTGGCAACGACATTGTGACCATCGTGTTCCAGGAGCCTGGCAGCAAGCCCTTCTGCCCCACCACCATCC
GCTCGCACTTCCAGCACGTGTTCCTAGTGGTGCGGGCACACACACCCTGCAGGCCACACACCACCTACAGGGTGG
CCGTGAGCCGCACCCAGGACACCCCTGCCTTCGGGCCAGCTCTGCCTGCTGGCGGAGGCCCCTTCGCAGCCAACG
CCGACTTCCGGGCCTTCCTGCTGGCCAAAGCGCTGAATGGTGAGCAGGCGGCCGGCCACGCGCGCCAGTTCCACG
CCATGGCCACGCGCACCCGCCAGCAGTACCTGCAAGACCTGGCCACCAACGAGGTGACCACTACGTCGCTGGACT
CGGCTTCACGCTTCGGCCTGCCCTCCCTGGGTGGGAGGCGCCGGGCGGCCCCTCGGGGCCCAGGCGCCGAGCTGC
AGGCAGCGGGCTCACTGGTGTGGGGAGTGCGCGCGGCGCCCGGGGCGCGGGTCGCCGCCGGGGCTCAGGCGAGCG
GCCCCGAAGGCATCGAGGTGCCCTGCCTGCTGGGCATCTCGGCCGAGGCTCTGGTGCTGGTGGCGCCGCGCGACG
GCCGCGTAGTGTTCAATTGCGCCTGTCGCGACGTGCTGGCCTGGACCTTCTCCGAGCAGCAGCTGGACCTGTACC
ACGGCCGCGGGGAGGCGATCACGCTGCGCTTCGACGGGTCCCCCGGCCAAGCCGTGGGCGAGGTGGTGGCGCGCC
TGCAGCTGGTGAGCCGTGGCTGCGAGACCCGCGAGCTGGCGCTGCCCCGCGACGGTCAAGGCCGCCTGGGCTTCG
AGGTGGACGCCGAGGGATTCGTCACGCACGTGGAGCGCTTCACATTCGCCGAGACGGCGGCTGCGGCCGGGGCGC
GCCTCCTGCGCGTGTGCGGCCAGACGCTGCCCAGCCTCCGGCCCGAGGCCGCTGCCCAGCTCCTGCGCTCGGCGC
CCAAGGTCTGCGTCACCGTCCTGCCCCCCGACGAGAGCGGCCGGCCCCGCAGGAGTTTTTCGGAGCTGTACACGC
TGTCGCTGCAGGACGCTAGCCGGCGGGGGGCCCCAGATCCTGTGCAGGATGAGGTCCAGGGGGTGACCCTGCTGC
CCACCACAAAGCAGCTGCTGCACCTGTGCCTGCAAGATGGTGGCAGTCCTCCAGGGCCTGGGGATCTGGCCGAGG
AGAGGACTGAGTTCCTGCACAGCCAGAACTCGCTGTCACCACGCAGCTCTCTGTCGGATGAGGCCCCAGTCCTGC
CCAACACCACCCCGGACCTCCTCCTGGCCACCACAGCCAAGCCATCAGTACCCAGTGCTGACAGTGAGACACCCC
TGACCCAGGACAGGCCAGGCAGTCCCAGTGGCTCTGAGGACAAGGGCAACCCGGCGCCGGAGCTCAGGGCCTCCT
TTCTGCCACGTACCTTGTCTCTGCGGAACTCCATCAGCAGGATCATGTCGGAGGCGGGCAGTGGGACCCTGGAGG
ACGAGTGGCAGGCCATCTCGGAGATTGCCTCTACTTGCAACACCATTCTGGAGTCGCTGTCCCGAGAGGGACAGC
CCATCCCAGAGAGTGGAGACCCTAAGGGAACTCCAAAATCTGATGCTGAGCCAGAGCCTGGGAACCTCTCAGAGA
AGGTCTCTCACTTGGAGTCCATGCTCAGGAAGCTGCAGGAGGACCTGCAGAAGGAGAAGGCGGACAGGGCGGCCC
TGGAGGAGGAGGTGCGGAGCCTGAGACACAACAACCGGCGGCTGCAGGCGGAGTCTGAGAGTGCAGCCACACGCC
TCCTCCTGGCCTCCAAGCAGCTGGGCTCACCCACCGCCGACCTGGCCTGAGCCGTCTGGAACCACCTGGGCCCCT
GGAGGGCACTGTGGTCACACTGGGCCCTCCTCAGGAACTCTCCCTGCGCAGAGGCGTGTCTTAGCACTGCCCCCC
TCCCTAGCCCCCTTATTTGGTGGCGGAAGTGGCCTCCACCCCTTCCCTGTTTGTAAATATTCTGTGAAGAAAAGA
GGACTTCAGGGAGTAAAAAAGCCACTGATGTCTGTGTCTG

FIGURE 1287

MPMWAGGVGSPRRGMAPASTDDLFARKLRHPARPPLTPHTFEPRPVRGPLLRRAANAGEARPPTPASPRARAHSH
EEASRPAATSTRLFTDPQALLGLPAEEPEPAFPPVLEPRWFAHYDVQSLLFDWAPRSQGMGSHSEASSGTLASAE
DQAASSDLLHGAPGFVCELGGEGELGLGGPASPPVPPALPNAAVSILEEPQNRTSAYSLEHADLGAGYYRKYFYG
KEHQNFFGMDESLGPVAVSLRREEKEGSGGGTLHSYRVIVRTTQLRTLRGTISEDALPPGPPRGLSPRKLLEHVA
PQLSPSCLRLGSASPKVPRTLLTLDEQVLSFQRKVGILYCRAGQGSEEEMYNNQEAGPAFMQFLTLLGDVVRLKG
FESYRAQLDTKTDSTGTHSLYTTYQDHEIMFHVSTMLPYTPNNQQQLLRKRHIGNDIVTIVFQEPGSKPFCPTTI
RSHFQHVFLVVRAHTPCRPHTTYRVAVSRTQDTPAFGPALPAGGGPFAANADFRAFLLAKALNGEQAAGHARQFH
AMATRTRQQYLQDLATNEVTTTSLDSASRFGLPSLGGRRRAAPRGPGAELQAAGSLVWGVRAAPGARVAAGAQAS
GPEGIEVPCLLGISAEALVLVAPRDGRVVFNCACRDVLAWTFSEQQLDLYHGRGEAITLRFDGSPGQAVGEVVAR
LQLVSRGCETRELALPRDGQGRLGFEVDAEGFVTHVERFTFAETAAAAGARLLRVCGQTLPSLRPEAAAQLLRSA
PKVCVTVLPPDESGRPRRSFSELYTLSLQDASRRGAPDPVQDEVQGVTLLPTTKQLLHLCLQDGGSPPGPGDLAE
ERTEFLHSQNSLSPRSSLSDEAPVLPNTTPDLLLATTAKPSVPSADSETPLTQDRPGSPSGSEDKGNPAPELRAS
FLPRTLSLRNSISRIMSEAGSGTLEDEWQAISEIASTCNTILESLSREGQPIPESGDPKGTPKSDAEPEPGNLSE
KVSHLESMLRKLQEDLQKEKADRAALEEEVRSLRHNNRRLQAESESAATRLLLASKQLGSPTADLA

FIGURE 1288A

GCCCGAAACCCGGAAGTGAGCGGCGGCAGCTGCGAGGCTCGGAGAAACAGGCGCCGCGGGCTCCGCGCCCGGCCG
GACCCGGGCCCGAGATCATGATGCTGCCGCCACCGCCGCCACCACGGAGCGAGAAGCCCAGATAGACGCCCCGGC
GGCCCCGGGTCCTGGAGTCCCGCCGCCTGCTGCCCGGCCGAGGACCCCACCCCGCCTGCCGCCCG**ATG**CTTGCAG
TGGGGCCCGCCATGGACAGGGATTACCCGCAGCATGAACCCCCGCCGGCGGGCAGCCTCCTGTACAGCCCGCCGC
CCCTGCAGAGCGCCATGCTGCACTGCCCCTACTGGAACACCTTCTCGCTGCCGCCATACCCTGCCTTCTCCAGCG
ACAGCCGCCCGTTCATGAGCTCCGCCTCCTTCCTCGGCAGCCAGCCCTGCCCAGACACCAGCTATGCCCCCGTGG
CCACCGCCTCCAGCTTGCCACCAAAGACCTGCGACTTTGCTCAGGACTCCTCCTATTTTGAGGACTTCTCCAACA
TCTCCATCTTCTCCTCGTCCGTGGACTCCCTGTCGGACATCGTGGACACGCCCGACTTCCTGCCGGCTGACAGCC
TCAACCAGGTGTCCACCATCTGGGACGATAACCCTGCCCCCTCCACCCACGATAAGCTGTTCCAGCTCAGCAGGC
CGTTTGCAGGCTTCGAGGACTTTCTGCCCTCCCACAGCACCCCGCTTCTCGTCAGCTACCAGGAGCAGAGTGTGC
AGAGCCAGCCAGAGGAGGAGGACGAGGCTGAGGAGGAGGAGGCGGAGGAGCTGGGGCACACAGAGACCTACGCCG
ACTACGTGCCGTCCAAGTCCAAGATCGGGAAGCAGCACCCAGACCGCGTGGTGGAGACCAGCACACTGTCCAGCG
TCCCACCCCCAGACATCACCTACACCCTGGCCCTGCCCTCGGACAGCGGGGCCCTGTCTGCCCTGCAGCTAGAGG
CCATCACCTACGCCTGCCAGCAACACGAGGTCCTGCTCCCCAGCGGGCAGCGCGCGGGCTTTCTCATCGGCGATG
GGGCCGGCGTGGGCAAAGGCCGGACGGTGGCCGGAGTCATCCTGGAGAACCACCTGCGCGGCCGGAAGAAAGCAT
TGTGGTTCAGCGTCTCCAACGACCTCAAGTACGATGCGGAGCGCGACCTGCGGGACATCGAAGCCACGGGCATCG
CGGTGCACGCGCTCAGCAAGATCAAGTACGGTGACACCACTACCTCAGAGGGCGTCCTCTTCGCCACCTACTCCG
CCCTGATTGGGGAGAGCCAGGCCGGTGGCCAGCACCGCACTCGCCTCCGGCAGATCCTGGACTGGTGTGGGGAGG
CCTTTGAGGGCGTCATCGTGTTCGACGAGTGTCACAAAGCCAAGAATGCCGGCTCCACCAAGATGGGCAAGGCCG
TGCTAGACCTGCAGAACAAGCTGCCCCTGGCCCGCGTGGTCTACGCCAGCGCCACAGGTGCCTCTGAGCCTCGGA
ACATGATCTACATGAGCCGCTTGGGTATCTGGGGCGAGGGCACACCCTTCCGGAACTTTGAGGAGTTCCTGCACG
CCATCGAGAAGAGGGGCGTTGGCGCCATGGAGATCGTGGCCATGGACATGAAGGTCAGCGGCATGTACATCGCAC
GCCAGCTCAGCTTCTCCGGCGTCACCTTCCGCATCGAGGAGATCCCGCTGGCCCCAGCCTTCGAGTGCGTCTACA
ACCGCGCAGCCCTGCTGTGGGCCGAGGCCCTGAACGTGTTCCAGCAGGCGGCCGACTGGATCGGCCTGGAGTCGC
GCAAGTCCCTGTGGGGCCAGTTCTGGTCGGCACACCAGCGCTTCTTCAAGTATCTGTGCATCGCAGCCAAGGTGC
GCCGGCTGGTGGAGCTGGCCCGAGAGGAGCTGGCGCGAGACAAGTGCGTGGTCATCGGGCTGCAGTCCACGGGCG
AGGCGCGCACGCGGGAGGTGCTGGGGGAGAACGATGGGCACCTCAACTGCTTCGTCTCGGCCGCTGAAGGCGTGT
TCCTGTCGCTAATTCAGAAGCACTTTCCGTCCACCAAGAGAAAGCGGGACAGAGGAGCGGGCAGCAAGCGGAAAC
GGCGACCTCGGGGACGCGGGGCCAAAGCCCCCCGGCTGGCGTGCGAGACAGCGGGCGTCATCCGCATCAGTGACG
ACAGCAGCACGGAGTCGGACCCTGGCCTGGACAGCGACTTCAACTCCTCCCCCGAGTCCCTGGTGGATGACGACG
TTGTCATCGTTGATGCAGTCGGGCTCCCCAGTGACGACCGGGGATCCCTGTGCCTCCTGCAGAGAGACCCGCATG
GCCCCGGGGTCCTGGAGCGGGTGGAGCGGCTGAAGCAGGATCTGCTGGACAAAGTGCGCCGGCTGGGCCGGGAAC
TGCCAGTCAACACCCTGGACGAGCTCATCGACCAGCTGGGCGGCCCCCAGCGGGTGGCGGAGATGACCGGCAGGA
AAGGCCGCGTGGTGTCCAGGCCCGACGGGACGGTGGCCTTCGAGTCGCGGGCAGAGCAGGGTCTGTCCATCGACC
ACGTGAACCTCAGGGAGAAGCAGCGCTTCATGAGCGGCGAGAAGCTCGTGGCCATCATCTCGGAGGCCTCCAGCT
CGGGTGTCTCCCTCCAAGCCGACCGCCGTGTCCAGAACCAGCGGCGCCGCGTGCACATGACCTTGGAGCTGCCGT
GGAGCGCCGACCGCGCCATCCAGCAGTTCGGCCGCACCCACCGGTCCAACCAGGTCTCCGCGCCAGAGTATGTCT
TCCTCATCTCGGAGCTGGCCGGGGAGCGCCGGTTCGCCTCCATCGTGGCCAAGCGCCTGGAGAGTCTGGGGGCCC
TGACCCACGGAGACCGCCGCGCCACGGAGTCCCGTGACCTCAGCAAGTACAACTTTGAGAACAAGTATGGCACCC
GGGCCCTGCACTGTGTCCTCACCACCATCCTGAGCCAGACTGAGAACAAAGTGCCTGTGCCCCAGGGATACCCTG
GAGGGGTCCCCACCTTCTTCCGGGACATGAAGCAGGGCCTGCTGTCTGTGGGCATTGGTGGCCGGGAGTCCCGGA
ATGGCTGCCTGGACGTGGAGAAGGACTGTTCCATCACCAAGTTCCTGAACCGCATCCTGGGGCTGGAGGTGCACA
AGCAGAATGCCCTGTTCCAGTACTTCTCAGACACCTTCGACCACCTCATCGAGATGGACAAGCGGGAGGGCAAAT
ACGACATGGGCATCCTGGACCTTGCTCCCGGTATCGAGGAGATCTACGAGGAGAGCCAGCAGGTGTTCCTGGCTC
CCGGGCACCCGCAGGACGGGCAGGTGGTCTTCTACAAGATCAGCGTGGACCGCGGCCTGAAGTGGGAGGACGCCT
TTGCCAAGTCGCTGGCGCTGACGGGCCCCTATGACGGCTTCTACCTCTCCTACAAGGTCCGCGGTAACAAGCCCA
GCTGCCTGCTGGCGGAGCAGAACCGCGGCCAGTTCTTCACGGTGTACAAGCCCAACATCGGCCGGCAGAGCCAGC
TGGAGGCCCTGGACAGCCTCCGCCGCAAGTTCCACCGGGTCACCGCGGAGGAGGCCAAGGAGCCCTGGGAGAGTG

FIGURE 1288B

GCTACGCTTTGTCGCTGACGCACTGCAGCCACAGCGCCTGGAACCGGCACTGCCGGCTGGCGCAGGAGGGTAAGG
ACTGCCTGCAGGGGCTGCGGCTGCGGCACCACTACATGCTGTGCGGCGCGCTGCTGCGCGTGTGGGGCCGCATCG
CCGCCGTCATGGCCGACGTCAGCAGCAGCAGCTACCTGCAGATCGTGCGGCTGAAGACCAAGGACAGGAAGAAGC
AAGTGGGCATCAAGATCCCCGAGGGCTGCGTGCGCCGGGTGCTGCAGGAGCTGCGGCTGATGGATGCGGACGTGA
AGCGCAGGCAGGCGCCCGCCCTGGGCTGCCCCGCCCCGCCCGCCCCGCGCCCGCTGGCGCTGCCTTGCGGCCCCG
GAGAGGTGCTGGACCTCACCTACAGCCCCCCGGCCGAGGCCTTCCCGCCGCCCCCGCACTTCTCTTTCCCGGCGC
CGCTGTCCCTGGACGCCGGCCCCGGCGTCGTGCCGCTGGGCACCCCCGACGCCCAGGCCGACCCTGCGGCCCTCG
CGCACCAGGGCTGCGACATCAACTTCAAGGAGGTGCTGGAGGACATGCTGCGCTCGCTGCACGCGGGGCCGCCCT
CCGAGGGCGCGCTGGGGGAGGGCGCGGGGGCGGGGGGCGCGGCGGGCGGTGGTCCCGAGCGGCAGAGCGTGATCC
AGTTCAGCCCACCCTTCCCCGGCGCCCAGGCTCCTCTCTGACACGCCTTTAGGCGAAACATGCCCCAAGACACAG
GGACCGTTTCTCCCCTAGGAGCAGCGGTGGGGAGCAGGGCCAAGGTCCCCTGACCACTGCTCAGAGGAGCCCTAG
GCCCTGGCCGCAGTGCCTTCAGCGCCCGACCCGGGCCCCCACCTGGTCAGCCCTGGCGGGGCCCACTCAGGACAG
CTGGGGGCCGGGGCGTGGCAGGGCCCTCTCTGTGCCTCTCCTCCTAAGTAGGAAGGGGCTCCGGGTGGCTGCTCT
GGGACTGGGCACCCACAAGGGCTCAGTGGGCCCAAACCCTTGAAATCCGTGAAACCGGGTGGTCCCAAGAGCTAG
AAACTCAGGAAACCCCAGGTGCTCAGGGCCCCGCGTCTCGGGGGCTCCGTGGGGCAGACCCCTGCTAATATATGC
AATTCTCCCTCCCCCAGCCCTTCCCTGACCCCTAAGTTATTGCCCGCTCACCTCTCCCAGGCCCCAGGCCGCGGA
GCTGGCAGGGTGGCGCCTGCGGTTTCTATGTATTTATAGCAAGTTCTGATGTACATATGTAAAGGACTTTTTTAA
AT

FIGURE 1289

MLAVGPAMDRDYPQHEPPPAGSLLYSPPPLQSAMLHCPYWNTFSLPPYPAFSSDSRPFMSSASFLGSQPCPDTSY
APVATASSLPPKTCDFAQDSSYFEDFSNISIFSSSVDSLSDIVDTPDFLPADSLNQVSTIWDDNPAPSTHDKLFQ
LSRPFAGFEDFLPSHSTPLLVSYQEQSVQSQPEEEDEAEEEEAEELGHTETYADYVPSKSKIGKQHPDRVVETST
LSSVPPPDITYTLALPSDSGALSALQLEAITYACQQHEVLLPSGQRAGFLIGDGAGVGKGRTVAGVILENHLRGR
KKALWFSVSNDLKYDAERDLRDIEATGIAVHALSKIKYGDTTTSEGVLFATYSALIGESQAGGQHRTRLRQILDW
CGEAFEGVIVFDECHKAKNAGSTKMGKAVLDLQNKLPLARVVYASATGASEPRNMIYMSRLGIWGEGTPFRNFEE
FLHAIEKRGVGAMEIVAMDMKVSGMYIARQLSFSGVTFRIEEIPLAPAFECVYNRAALLWAEALNVFQQAADWIG
LESRKSLWGQFWSAHQRFFKYLCIAAKVRRLVELAREELARDKCVVIGLQSTGEARTREVLGENDGHLNCFVSAA
EGVFLSLIQKHFPSTKRKRDRGAGSKRKRRPRGRGAKAPRLACETAGVIRISDDSSTESDPGLDSDFNSSPESLV
DDDVVIVDAVGLPSDDRGSLCLLQRDPHGPGVLERVERLKQDLLDKVRRLGRELPVNTLDELIDQLGGPQRVAEM
TGRKGRVVSRPDGTVAFESRAEQGLSIDHVNLREKQRFMSGEKLVAIISEASSSGVSLQADRRVQNQRRRVHMTL
ELPWSADRAIQQFGRTHRSNQVSAPEYVFLISELAGERRFASIVAKRLESLGALTHGDRRATESRDLSKYNFENK
YGTRALHCVLTTILSQTENKVPVPQGYPGGVPTFFRDMKQGLLSVGIGGRESRNGCLDVEKDCSITKFLNRILGL
EVHKQNALFQYFSDTFDHLIEMDKREGKYDMGILDLAPGIEEIYEESQQVFLAPGHPQDGQVVFYKISVDRGLKW
EDAFAKSLALTGPYDGFYLSYKVRGNKPSCLLAEQNRGQFFTVYKPNIGRQSQLEALDSLRRKFHRVTAEEAKEP
WESGYALSLTHCSHSAWNRHCRLAQEGKDCLQGLRLRHHYMLCGALLRVWGRIAAVMADVSSSSYLQIVRLKTKD
RKKQVGIKIPEGCVRRVLQELRLMDADVKRRQAPALGCPAPPAPRPLALPCGPGEVLDLTYSPPAEAFPPPPHFS
FPAPLSLDAGPGVVPLGTPDAQADPAALAHQGCDINFKEVLEDMLRSLHAGPPSEGALGEGAGAGGAAGGGPERQ
SVIQFSPPFPGAQAPL

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FIGURE 1290

AGTCTCCGGCGAGTTGTTGCCTGGGCTGGACGTGGTTTTGTCTGCTGCGCCCGCTCTTCGCGCTCTCGTTTCATT
TTCTGCAGCGCGCCACGAGGATGGCCCACAAGCAGATCTACTACTCGGACAAGTACTTCGACGAACACTACGAGT
ACCGGCATGTTATGTTACCCAGAGAACTTTCCAAACAAGTACCTAAAACTCATCTGATGTCTGAAGAGGAGTGGA
GGAGACTTGGTGTCCAACAGAGTCTAGGCTGGGTTCATTACATGATTCATGAGCCAGAACCACATATTCTTCTCT
TTAGACGACCTCTTCCAAAAGATCAACAAAAATGAAGTTTATCTGGGGATCGTCAAATCTTTTTCAAATTTAATG
TATATGTGTATATAAGGTAGTATTCAGTGAATACTTGAGAAATGTACAAATCTTTCATCCATACCTGTGCATGAG
CTGTATTCTTCACAGCAACAGAGCTCAGTTAAATGCAACTGCAAGTAGGTTACTGTAAGATGTTTAAGATAAAAG
TTCTTCCAGTCAGTTTTTCTCTTAAGTGCCTGTTTGAGTTTACTGAAACAGTTTACTTTTGTTCAATAAAGTTTG
TATGTTGCATTTAAAAAAAAAAAAAAA

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FIGURE 1291

MAHKQIYYSDKYFDEHYEYRHVMLPRELSKQVPKTHLMSEEEWRRLGVQQSLGWVHYMIHEPEPHILLFRRPLPK
DQQK

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FIGURE 1292

GGCACGAGGGGGGCTCAAACGCAGGGCTCTGGGACGCAGGCACTGCTCCAGGTGATAGTGCGGGAACATGGCCTT
GCAGCTGGGCAGGCTGAGCTCGGGCCCCTGCTGGCTCGTGGCGCGGGGCGGCTGCGGAGGGCCCCGCGCCTGGTC
CCAGTGCGGCGGCGGAGGGCTCCGAGCCTGGTCCCAGCGCAGCGCAGCCGGACGCGTCTGCCGGCCCCCTGGCCC
GGCTGGCACGGAGCAGAGCCGCGGGCTGGGGCACGGCTCGACGTCGAGAGGCGGCCCCTGGGTGGGGACAGGGCT
GGCCGCGGCGCTGGCGGGGTTGGTGGGGCTGGCCACCGCCGCCTTCGGGCATGTGCAGCGGGCGGAGATGTTGCC
TAAGACCTCGGGGACGCGGGCCACTTCGCTGGGGAGGCCGGAGGAGGAGGAGGATGAGCTGGCCCACCGCTGCAG
CAGCTTCATGGCCCCGCCTGTGACCGACCTGGGCGAGCTGCGAAGGAGGCCGGGCGACATGAAGACCAAGATGGA
GCTGCTGATTCTGGAGACCCAGGCCCAGGTGTGCCAGGCTCTGGCACAGGTAGACGGGGGCGCCAACTTTTCTGT
GGACCGGTGGGAGAGGAAGGAAGGAGGTGGCGGCATCAGCTGTGTACTTCAAGATGGGTGTGTTTTCGAAAAGGC
TGGGGTGAGCATTTCTGTTGTTCATGGAAATCTTTCAGAGGAAGCTGCAAAACAAATGAGAAGCAGAGGAAAAGT
TCTGAAGACTAAAGATGGTAAATTGCCATTTTGTGCTATGGGCGTGAGCTCTGTTATCCACCCCAAGAATCCTCA
TGCTCCTACTATCCATTTCAACTACAGATACTTTGAAGTAGAAGAAGCTGATGGCCACAAGCAGTGGTGGTTTGG
TGGTGGATGTGACCTCACTCCAACATACTTGAATCAAGAAGACGCTGTCCATTTTCACAGAACTCTGAAGGAGGC
TTGTGACCAGCATGGTCCAGATCTCTACCCCAAATTTAAAAAATGGTGTGATGATTACTTCTTTATAGCCCATCG
TGGAGAGCGGCGGGGCATTGGTGGTATCTTTTTTGATGATCTTGACTCTCCGTCCAAGGAGGAGGTGTTTCGCTT
TGTACAGAGCTGTGCCAGGGCTGTAGTTCCTTCTTACATTCCCCTTGTGAAAAAGCACTGTGATGACTCATTCAC
CCCCCAGGAGAAGCTGTGGCAGCAGCTCAGAAGAGGACGGTATGTAGAATTTAATCTGCTGTATGATCGGGGCAC
AAAGTTTGGCCTCTTCACTCCAGGATCCAGAATTGAAAGTATCTTGATGTCTTTACCTCTAACTGCCCGATGGGA
GTACATGCATTCACCCTCAGAGAATTCCAAAGAAGCTGAAATTCTGGAAGTTCTACGCCATCCAAGGGACTGGGT
GCGTTGATGCAGGCAGAATGGCTGTGCAGGGGTTTGGAGGGCACACGATGTGTGCTCCCCATGCCACTGGTCGGC
ACTTTGCCACTGTGTGGCAGTTACCCGTGCCTTAGTCTTCTCCACTCTGCACCCTACCTCGTGGGCAGATGATAA
CATGTTTTGGATGCTGTCAGTGATGAATGGTGAGATGGCAGATTGTCAGAGTCAATTGATTAAACCTCATTTATA
CTTCTAGTGTCATTTTATATGACTAGTTTACAAAATAGGACATTGAGTTTCCAAGTATTGAGATAAGGGAATATA
AATAGTATTATATGTATCAGGAAATCTCTCATCTTGTTTTTGTTTCATGTATTTTTTAAAGTTTTCATTTGTGCC
ACAAAAATCTGTCGTGGAATATATTTTATTTTCATTAATTCAGTGAAGTTGAGACTTCATAGTAATTTTAGAATG
CAACTTGAAGGTAAAAATTTTACTTTGTCAATACTGAAGTCTCTGCTGTAATCCTTATATATCTTTCTCCAGAGA
ACATAATATTGTCAAATAGATACACATTTTTCTAATAGGTATTTAGAAGCACTTGAAATATTCTTAATCTCTGCA
TGTGTTACAATTCAGTTATTTCTGTAGTTTGTAAACTCTAAAGTGACATTACTATTATTTTAGAGATGTCTAAGT
TGTAATTTTGATTTTTGTGGAACCATTGTTTGTTAATGTTGGGATTCTCTGCACTTTTGAATGTGAAAGCTTATA
TCCCTGAATTCTGATACTTAAGAGTTTTCTATTTCAGACATCTCTGTGTGGAAGTTGAGACTAAGAATAATCCTA
GGGATGTCATGAATTTAGGCAATGTTTCTCATTTGGAAAATGAAATGAGAAATAATTTCCTTCTTTAAAGCAAGT
ATATATAGTATGAGAAACTTGGAGGCATTTCATACACACGTTTCTTAGGAAAATGGACACATTGAAAATGTCCTC
TTTTTTTATATTAGAGATTCTGCAGCTCTTTGCTCTTAAGAGCAAATCACAACAGGATTCTTAATGTATGATTTC
TTTGTTCATATATTATGAATGTATTATTTTATTTGCTTCGTAATAAAGTTTATAAGGAAGAGCATCTCATACATA
TCATTATCGTGGAACACGTTGAATGTTTGTGATTCTGTGTGGCCTTTTTGGGGCTGGAAAATGTATGAATTCTTC
AACTGTCTTACAAGAGATCTGCTAATAAATTTTATTATTAAATAAGAAAAAAAAAAAAAAAAAAA

FIGURE 1293

MALQLGRLSSGPCWLVARGGCGGPRAWSQCGGGGLRAWSQRSAAGRVCRPPGPAGTEQSRGLGHGSTSRGGPWVG
TGLAAALAGLVGLATAAFGHVQRAEMLPKTSGTRATSLGRPEEEEDELAHRCSSFMAPPVTDLGELRRRPGDMKT
KMELLILETQAQVCQALAQVDGGANFSVDRWERKEGGGGISCVLQDGCVFEKAGVSISVVHGNLSEEAAKQMRSR
GKVLKTKDGKLPFCAMGVSSVIHPKNPHAPTIHFNYRYFEVEEADGHKQWWFGGGCDLTPTYLNQEDAVHFHRTL
KEACDQHGPDLYPKFKKWCDDYFFIAHRGERRGIGGIFFDDLDSPSKEEVFRFVQSCARAVVPSYIPLVKKHCDD
SFTPQEKLWQQLRRGRYVEFNLLYDRGTKFGLFTPGSRIESILMSLPLTARWEYMHSPSENSKEAEILEVLRHPR
DWVR

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FIGURE 1294

GAGATGGGTGCCCCCATCCGCACACTGTCCTTTGGCCACCGGACATCATGCCTCCCAAGAAGGATGTTCCCGTGA
AGAAACCAGCAGGGCCCTCCATCTCCAAACCTGCTGCTAAGCCAGCAGCAGCAGGGGCTCCTCCAGCCAAGACCA
AAGCTGAGCCAGCTGTCCCCCAGGCCCCTCAGAAAACCCAGGAGCCTCCAGTCGATCTCTCCAAAGTGGTGATCG
AGTTTAACAAGGACCAGCTGGAGGAGTTCAAGGAGGCCTTCGAGCTGTTTGACCGAGTGGGGGATGGCAAGATCC
TGTACAGCCAGTGTGGGGACGTGATGAGGGCCCTGGGCCAGAACCCCACCAACGCCGAGGTGCTCAAGGTCCTGG
GGAACCCCAAGAGTGATGAGCTGAAGTCGCGGCGTGTGGACTTTGAGACTTTCCTGCCCATGCTCCAGGCAGTGG
CCAAGAACCGAGGCCAAGGCACATATGAGGACTACTTGGAGGGGTTTCGTGTGTTTGACAAGGAGGGGAACGGCA
AAGTCATGGGAGCAGAGCTCAGACATGTTCTCACCACCCTTGGAGAGAAGATGACTGAGGAGGAGGTGGAGACCG
TTCTGGCAGGACACGAGGACAGCAACGGCTGCATCAACTACGAGGCCTTCTTGAAACACATCCTAAGCGTCTGAG
TGCTGCAGATCCAGTGGGGTCCGGACACTGGGCCCCGCAGGCGAAAGCACGTTCCAGCCACCAGGAGGCCACCTA
TTGTTTCAAAATAAAGACTGGGTTCCTC

FIGURE 1295

MPPKKDVPVKKPAGPSISKPAAKPAAAGAPPAKTKAEPAVPQAPQKTQEPPVDLSKVVIEFNKDQLEEFKEAFEL
FDRVGDGKILYSQCGDVMRALGQNPTNAEVLKVLGNPKSDELKSRRVDFETFLPMLQAVAKNRGQGTYEDYLEGF
RVFDKEGNGKVMGAELRHVLTTLGEKMTEEEVETVLAGHEDSNGCINYEAFLKHILSV

FIGURE 1296

CGTGTCAGTGGTGGACCTGACCTGCTCCTGGCCCCTTGGCTGGCCGGGCTGTTTCTGGCCATGGGTCGCTCCCGC
CGGACAGGCGCGCACCGAGCGCACTCTCTAGCCCGGCAG**ATG**AAGGCGAAGCGGCGGCGGCCGGACTTGGATGAG
ATTCACCGCGAGCTGCGGCCTCAGGGATCCGCACGACCCCAGCCCGACCCAAACGCCGAGTTCGACCCCGACCTG
CCAGGGGGCGGTCTGCACCGCTGTCTGGCCTGCGCGAGGTACTTCATCGATTCCACCAACCTGAAGACCCACTTC
CGATCCAAAGACCACAAGAAAAGGCTGAAGCAGCTGAGCGTCGAGCCCTACAGTCAGGAAGAGGCGGAGAGGGCA
GCGGGTATGGGATCCTATGTGCCCCCCAGGCGGCTGGCAGTGCCCACGGAAGTGTCCACTGAGGTCCCTGAGATG
GATACCTCTACC**TGA**CATGGCCTGAAGATGCAGGGCAGAGGAATTGCCCATGGACAGTGACGCAAGGACTAGGCT
GGGAGGGAGCGTGCCAACCCCTTTTGCCTCTGGGTTTGGGGAGCGGAGGGCCTCTTCTTGGTGCCCTGCCCCCAA
TAAAGGAACTGGACAAAGAGAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1297

MKAKRRRPDLDEIHRELRPQGSARPQPDPNAEFDPDLPGGGLHRCLACARYFIDSTNLKTHFRSKDHKKRLKQLS
VEPYSQEEAERAAGMGSYVPPRRLAVPTEVSTEVPEMDTST

FIGURE 1298

GTCTCCCCCACTGTCAGCACCTCTTCTGTGTGGTGAGTGGACCGCTTACCCCACTAGGTGAAGATGTCAGCCCAG
GAGAGCTGCCTCAGCCTCATCAAGTACTTCCTCTTCGTTTTCAACCTCTTCTTCTTCGTCCTCGGCAGCCTGATC
TTCTGCTTCGGCATCTGGATCCTCATCGACAAGACCAGCTTCGTGTCCTTTGTGGGCTTGGCCTTCGTGCCTCTG
CAGATCTGGTCCAAAGTCCTGGCCATCTCAGGAATCTTCACCATGGGCATCGCCCTCCTGGGTTGTGTGGGGGCC
CTCAAGGAGCTCCGCTGCCTCCTGGGCCTGTATTTTGGGATGCTGCTGCTCCTGTTTGCCACACAGATCACCCTG
GGAATCCTCATCTCCACTCAGCGGGCCCAGCTGGAGCGAAGCTTGCGGGACGTCGTAGAGAAAACCATCCAAAAG
TACGGCACCAACCCCGAGGAGACCGCGGCCGAGGAGAGCTGGGACTATGTGCAGTTCCAGCTGCGCTGCTGCGGC
TGGCACTACCCGCAGGACTGGTTCCAAGTCCTCATCCTGAGAGGTAACGGGTCGGAGGCGCACCGCGTGCCCTGC
TCCTGCTACAACTTGTCGGCGACCAACGACTCCACAATCCTAGATAAGGTGATCTTGCCCCAGCTCAGCAGGCTT
GGACACCTGGCGCGGTCCAGACACAGTGCAGACATCTGCGCTGTCCCTGCAGAGAGCCACATCTACCGCGAGGGC
TGCGCGCAGGGCCTCCAGAAGTGGCTGCACAACAACCTTATTTCCATAGTGGGCATTTGCCTGGGCGTCGGCCTA
CTCGAGCTCGGGTTCATGACGCTCTCGATATTCCTGTGCAGAAACCTGGACCACGTCTACAACCGGCTCGCTCGA
TACCGTTAGGCCCCGCCCTCCCCAAAGTCCCGCCCCGCCCCCGTCACGTGCGCTGGGCACTTCCCTGCTGCCTGT
AAATATTTGTTTAATCCCCAGTTCGCCTGGAGCCCTCCGCCTTCACATTCCCCTGGGGACCCACGTGGCTGCGTG
CCCCTGCTGCTGTCACCTCTCCCACGGGACCTGGGGCTTTCGTCCACAGCTTCCTGTCCCCATCTGTCGGCCTAC

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FIGURE 1299

MSAQESCLSLIKYFLFVFNLFFFVLGSLIFCFGIWILIDKTSFVSFVGLAFVPLQIWSKVLAISGIFTMGIALLG
CVGALKELRCLLGLYFGMLLLLFATQITLGILISTQRAQLERSLRDVVEKTIQKYGTNPEETAAEESWDYVQFQL
RCCGWHYPQDWFQVLILRGNGSEAHRVPCSCYNLSATNDSTILDKVILPQLSRLGHLARSRHSADICAVPAESHI
YREGCAQGLQKWLHNNLISIVGICLGVGLLELGFMTLSIFLCRNLDHVYNRLARYR

FIGURE 1300

CTGCCAGGGGGAGGGCCCCAGAGAAAACCAGAAAGAGGGTGAGAGACTGAGGAAGATAAAGCGTCCCAGGGCCTC
CTACACCAGCGCCTGAGCAGGAAGCGGGAGGGGCCATGACTACGAGGCCCTGGGAGGTCACTTTAGGGAGGGCTG
TCCTAAAACCAGAAGCTTGGAGCAGAAAGTGAAACCCTGGTGCTCCAGACAAAGATCTTAGTCGGGACTAGCCGG
CCAAGGATGAAGCCTCACTTCAGAAACACAGTGGAGCGAATGTATCGAGACACATTCTCCTACAACTTTTATAAT
AGACCCATCCTTTCTCGTCGGAATACCGTCTGGCTGTGCTACGAAGTGAAAACAAAGGGTCCCTCAAGGCCCCCT
TTGGACGCAAAGATCTTTCGAGGCCAGGTGTATTCCGAACTTAAGTACCACCCAGAGATGAGATTCTTCCACTGG
TTCAGCAAGTGGAGGAAGCTGCATCGTGACCAGGAGTATGAGGTCACCTGGTACATATCCTGGAGCCCCTGCACA
AAGTGTACAAGGGATATGGCCACGTTCCTGGCCGAGGACCCGAAGGTTACCCTGACCATCTTCGTTGCCCGCCTC
TACTACTTCTGGGACCCAGATTACCAGGAGGCGCTTCGCAGCCTGTGTCAGAAAAGAGACGGTCCGCGTGCCACC
ATGAAGATCATGAATTATGACGAATTTCAGCACTGTTGGAGCAAGTTCGTGTACAGCCAAAGAGAGCTATTTGAG
CCTTGGAATAATCTGCCTAAATATTATATATTACTGCACATCATGCTGGGGGAGATTCTCAGACACTCGATGGAT
CCACCCACATTCACTTTCAACTTTAACAATGAACCTTGGGTCAGAGGACGGCATGAGACTTACCTGTGTTATGAG
GTGGAGCGCATGCACAATGACACCTGGGTCCTGCTGAACCAGCGCAGGGGCTTTCTATGCAACCAGGCTCCACAT
AAACACGGTTTCCTTGAAGGCCGCCATGCAGAGCTGTGCTTCCTGGACGTGATTCCCTTTTGGAAGCTGGACCTG
GACCAGGACTACAGGGTTACCTGCTTCACCTCCTGGAGCCCCTGCTTCAGCTGTGCCCAGGAAATGGCTAAATTC
ATTTCAAAAAACAAACACGTGAGCCTGTGCATCTTCACTGCCCGCATCTATGATGATCAAGGAAGATGTCAGGAG
GGGCTGCGCACCCTGGCCGAGGCTGGGGCCAAAATTTCAATAATGACATACAGTGAATTTAAGCACTGCTGGGAC
ACCTTTGTGGACCACCAGGGATGTCCCTTCCAGCCCTGGGATGGACTAGATGAGCACAGCCAAGACCTGAGTGGG
AGGCTGCGGGCCATTCTCCAGAATCAGGAAAACTGAAGGATGGGCCTCAGTCTCTAAGGAAGGCAGAGACCTGGG
TTGAGCCTCAGAATAAAAGATCTTCTTCCAAGAAATGCAAACAGGCTGTTCACCACCATCTCCAGCTGATCACAG
ACACCAGCAAAGCAATGCACTCCTGACCAAGTAGATTCTTTTAAAAATTAGAGTGCATTACTTTGAATCAAAAAT
TTATTTATATTTCAAGAATAAAGTACTAAGATTGTGCTCAATACACAGAAAAGTTTCAAACCTACTAATCCAGCG
ACAATTTGAATCGGTTTTGTAGGTAGAGGAATAAAATGAAATACTAAATCTTTCTGTAAAAAAAAAA

FIGURE 1301

MKPHFRNTVERMYRDTFSYNFYNRPILSRRNTVWLCYEVKTKGPSRPPLDAKIFRGQVYSELKYHPEMRFFHWFS
KWRKLHRDQEYEVTWYISWSPCTKCTRDMATFLAEDPKVTLTIFVARLYYFWDPDYQEALRSLCQKRDGPRATMK
IMNYDEFQHCWSKFVYSQRELFEPWNNLPKYYILLHIMLGEILRHSMDPPTFTFNFNNEPWVRGRHETYLCYEVE
RMHNDTWVLLNQRRGFLCNQAPHKHGFLEGRHAELCFLDVIPFWKLDLDQDYRVTCFTSWSPCFSCAQEMAKFIS
KNKHVSLCIFTARIYDDQGRCQEGLRTLAEAGAKISIMTYSEFKHCWDTFVDHQGCPFQPWDGLDEHSQDLSGRL
RAILQNQEN

FIGURE 1302

GGCTGAGCACTCAGGCAATCACACTCTCAGAAACTGCGGCGGCTCTGGACTGCAGCCTCCAAGGCTCCATGCCAG
ACAAAGCTATGCGTAGTCACACTTGCTACAATAGCCTGGATGGTTTCTTTTGTCTCCAATTATTCACACACAGCA
AATATTTTGCCAGATATCGAAAATGAAGATTTCATCAAAGACTGCGTTCGAATCCATAACAAGTTCCGATCAGAG
GTGAAACCAACAGCCAGTGATATGCTATACATGACTTGGGACCCAGCACTAGCCCAAATTGCAAAAGCATGGGCC
AGCAATTGCCAGTTTTCACATAATACACGGCTGAAGCCACCCCACAAGCTGCACCCAAACTTCACTTCACTGGGA
GAGAACATCTGGACTGGGTCTGTGCCCATTTTTTCTGTGTCTTCCGCCATCACAAACTGGTATGACGAAATCCAG
GACTATAACTTCAAGACTCGGATATGCAAAAAAGTCTGTGGCCACTACACTCAGGTTGTTTGGGCAGATAGTTAC
AAAGTTGGCTGCGCAGTTCAATTTTGCCCTAAAGTTTCTGGCTTTGACGCTCTTTCCAATGGAGCACATTTTATA
TGCAACTACGGACCAGGAGGGAATTACCCAACTTGGCCATATAAGAGAGGAGCCACCTGCAGTGCCTGCCCCAAT
AATGACAAGTGTTTGGACAATCTCTGTGTTAACGACAGCGAGACCAAGTCAAACGTTACTACTATGTTGTATATC
AGGCTGGCCCATATATCCACGTAACAGATACACTTCTCTCTTTCTCATTGTTAATTCAGTAATTCTAATACTGTC
TGTTATAATTACCATTTTGGTACAGCACAAGTACCCTAATTTAGTTCTTTTGGACTAATACAATTCAGGAAAGAA
AAAACCCAAAAACCAACCTCATTCACATATGGCTTTTTTTTTAACCCAATAACAATTAGGTGTACCTTCCTATTT
AAACATTTCATAAAAAAATATATGTTATAGCAATACTCTTACTCAAAAGAAGAAATTTCCTAACTCTATCAGATA
AACTCATCTTTAGTATAAATAAGCATTATTTGCAGGTTGCCTACAGGTGGACTTTTAGTAAGTAACCTAACCCAT
GTTTCAGCTTCTAAATCTCGAAAATGAGCAAGGTACAGGTACAGTAGCACATTTTTAGGTGATTCTTAGTAACTC
CAGTAGCCTTCATTAGTTAAAAACATTATTATTTTTTGCATGCTGCTTCGACTCTAAATATCTTGTTTTCCCTGT
CTTTTTGGTTTACTACTTCCCCAGATTCAGAACAGAGGAGTAACTAGGGGATCTGATTTTAGAGGCCTAATTTTC
TGTTCATGGACTGTTAAAAGTAAAACCAAACTTTCAAAAGGGATAAACCTAAATATTTACTTGTTATCATTAGAG
AGGGAACATCAAATGCTGGCACTATATACATACGATCAGCCTGATTATGATATCACAATGGTCGTAATGTATACA
AAGACTTATATACCACTTTCTCGTATAAATTTTTCAAAAAATACAATAATAATATAATTTATAAAGAACACTCTT
CTATGAACAACCACCACCACCA

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FIGURE 1303

MVSFVSNYSHTANILPDIENEDFIKDCVRIHNKFRSEVKPTASDMLYMTWDPALAQIAKAWASNCQFSHNTRLKP
PHKLHPNFTSLGENIWTGSVPIFSVSSAITNWYDEIQDYNFKTRICKKVCGHYTQVVWADSYKVGCAVQFCPKVS
GFDALSNGAHFICNYGPGGNYPTWPYKRGATCSACPNNDKCLDNLCVNDSETKSNVTTMLYIRLAHIST

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FIGURE 1304

CTCTGTTTTCTCAAAGCTGAAGTCGGCTAGGTTTGCAAAGCTGTGGGCTGAGCACTCAGGCAATCACACTCTCAG
AAACTGCGGCGGCTCTGGACTGCAGCCTCCCAAGGCTCCATGCCAGACAAAGCATGCGTGTCACACTTGCTACAA
TAGCCTGGATGGTTTCTTTTGTCTCCAATTATTCACACACAGCAAATATTTTGCCAGATATCGAAAATGAAGATT
TCATCAAAGACTGCGTTCGAATCCATAACAAGTTCCGATCAGAGGTGAAACCAACAGCCAGTGATATGCTATACA
TGACTTGGGACCCAGCACTAGCCCAAATTGCAAAAGCATGGGCCAGCAATTGCCAGTTTTCACATAATACACGGC
TGAAGCCACCCCACAAGCTGCACCCAAACTTCACTTCACTGGGAGAGAACATCTGGACTGGGTCTGTGCCCATTT
TTTCTGTGTCTTCCGCCATCACAAACTGGTATGACGAAATCCAGGACTATGACTTCAAGACTCGGATATGCAAAA
AAGTCTGTGGCCACTACACTCAGGTTGTTTGGGCAGATAGTTACAAAGTTGGCTGCGCAGTTCAATTTTGCCCTA
AAGTTTCTGGCTTTGACGCTCTTTCCAATGGAGCACATTTTATATGCAACTACGGACCAGGAGGGAATTACCCAA
CTTGGCCATATAAGAGAGGAGCCACCTGCAGTGCCTGCCCCAATAATGACAAGTGTTTGGACAATCTCTGTGTTA
ACCGACAGCGAGACCAAGTGAAACGTTACTACTCTGTTGTATATCCAGGCTGGCCCATATATCCACGTAACAGAT
ACACTTCTCTCTTTCTCATTGTTAATTCAGTAATTCTAATACTGTCTGTTATAATTACCATTTTGGTACAGCTCA
AGTACCCTAATTTAGTTCTTTTGGACTAATACAATTCAGGAAAGAAAAAACCCAAAAACCAACCTCATTCACATA
TGGCTTTTTTTTAACCAATAACAATTAGGTGTACTTCTATTTTAAAACATTTCAGAAAAAAATATATGTTATAGC
AATACTCTTAC

FIGURE 1305

MRVTLATIAWMVSFVSNYSHTANILPDIENEDFIKDCVRIHNKFRSEVKPTASDMLYMTWDPALAQIAKAWASNC
QFSHNTRLKPPHKLHPNFTSLGENIWTGSVPIFSVSSAITNWYDEIQDYDFKTRICKKVCGHYTQVVWADSYKVG
CAVQFCPKVSGFDALSNGAHFICNYGPGGNYPTWPYKRGATCSACPNNDKCLDNLCVNRQRDQVKRYYSVVYPGW
PIYPRNRYTSLFLIVNSVILILSVIITILVQLKYPNLVLLD

FIGURE 1306

CCGGCTCGGAGTGTGATCTAAGCAGGTCGCGTACCTTCCTCAGGTGACTCCGGCCACAGCCCATTGTCCGCGGCC
ACCGGCGGAGTTTAGCCGCAGACCTCGAAGCGCCCCGGGGTCCTTCCCGAACGGCAGCGGCTGCGGCGGGTCCATT
GGAGAAGGGCCCTGTGCGGGCACCGGCGGAGAAGCCGCGGGGCGCCAGGTGCAGCAATGGGTTCCCCGAGCGGGA
TCCGCCGCGGCCCGGGCCCAGCAGGCCGGCGGAGAAGCCCCCGCGGCCCGAGGCCAAGAGCGCGCAGCCCGCGGA
CGGCTGGAAGGGCGAGCGGCCCCGCAGCGAGGAGGATAACGAGCTGAACCTCCCTAACCTGGCAGCCGCCTACTC
GTCCATCCTGAGCTCGCTGGGCGAGAACCCCCAGCGGCAAGGGCTGCTCAAGACGCCCTGGAGGGCGGCCTCGGC
CATGCAGTTCTTCACCAAGGGCTACCAGGAGACCATCTCAGATGTCCTAAACGATGCTATATTTGATGAAGATCA
TGATGAGATGGTGATTGTGAAGGACATAGACATGTTTTCCATGTGTGAGCATCACTTGGTTCCATTTGTTGGAAA
GGTCCATATTGGTTATCTTCCTAACAAGCAAGTCCTTGGCCTCAGCAAACTTGCGAGGATTGTAGAAATCTATAG
TAGAAGACTACAAGTTCAGGAGCGCCTTACAAAACAAATTGCTGTAGCAATCACGGAAGCCTTGCGGCCTGCTGG
AGTCGGGGTAGTGGTTGAAGCAACACACATGTGTATGGTAATGCGAGGTGTACAGAAAATGAACAGCAAAACTGT
GACCAGCACAATGTTGGGTGTGTTCCGGGAGGATCCAAAGACTCGGGAAGAGTTCCTGACTCTCATTAGGAGCTG
AGCTTCATTCAGTGTGTGTGCGTTGGTTGCCGATCGTACTGCCAGTAGCATTGTCTGTCTGTCCGGTCTTGTTTG
TACATTCCATTTTCAATTGTTACAGATGTGAACTTTATTCCTTGTCACTAATTATATTTAAAATTATTTCTAGGA
AGTCAAATAAATATAATAAAGGGTTGAGCCTCTACTTTCTTCTTGCCACCTTTTTGTGGCAATATTAAAGTGAAC
TGCTAATAGTGTAAGTATGTGCACAAAACCACTGCCAGATAACCAGAGGGGCCTGGGAAGGGAGAAGAATTAGTG
TATTTTTTTCAAATAGTACAGTAATTTGCCTCATAAGCATAGGAGCATTGGGAATGAGAGGGAACTGTGCCCAGT
ATACTGTTTTTTTTCTTCCTCCAATAAAAGTGGTGTAGTGCCGAAAGTGCTAAAATATTTAGTGCGGTATTGCTC
TGTGAATTCAAGTTCAACAGACTTCACTTTGGTCATGTTTATTAAACCACCAGTGACATTTAAAAATATATTTTT
AGCAGTCGTAATGTTAGTCACCAAGGGAAGGTGGTGGAATGTCTATGTTTTTGATTTTACTGTGAGTTAAAAAGG
CACATTTCTACCTTCTATTGTTTTTAAATTCAAGAATAGGGAATTAGTTCCTGGTGTTGTTTACGAGTGTATTCT
CGTGTCAACATACAGGGATTTAGACATTTAACTCTCTGTGCCTTGATAAGAATATCATTTAGAGTGTAGATACTT
TTGCCTTTTTAAAAAAGCCATTATTTTATGAGACTTAGTACTCACACTGCAAATAACTAGTCAGCTCAGTTTTAA
CTTTATAGGTTTATTGAGTTTCCTTTGTGTGATCCATGTAGATGCCTCAAAATGTTTCTTCTTCTTCTTTTTTTT
AATCTTATAAGATATTTTTCTAAGTATTTCCAGAAACATTTGAGAGTGCCCATCATTTTCAGGTCTGCAGAACCA
TAGCTTCCACGCACCTGAACGAGCACAGAATGAACTGACGGTGGAAGACATTATGAGCTGTGTCCAACGTTTTAA
CCAAAGCGTATCGTACCAACGATCTGTGAAAATGCACTGGAAGCTTCTGGTCCCGGTTTCCTTTGTGGTCTATGT
GGGTCTTGTCCTCATTGTAACTCCGTATAGATGGTATAGGTATTTTAATCCTGGAAGCTGTTGCCTTATTAATGA
TTATCTTAAAATTTCCTCCATTGGGGCAGCGTGGGCCAAATTAAAACAAACAAAACCGCAACTCCTCCACAGAAA
CACAAACACAGTTATTCCATGAAGTTTAGTATTTGGTTGACATAGTGCTCTTCAAATTCATCCCATTACCCTAAA
AGTAATAACTTTGATGCTTGCTTTAACTTTAGTCCCATCTCTGCCACTTTGATGCTATTTGGGTTATGATGGGGC
AAGATGGCAGAGGTATTGGGTTTTTTTGTTTTTTTCCATTCCTCTCTACTTCTGTTTCCTAGCTTTTTCTTTCTG
GAGTTTAAGTACAGTGATGGTTGGCTTGAGTACCTTTTTAAATCTAGCCCAGTATAAACATTAGCCTGCTTAATA
TTTAGACATTTATAGGTAGAATTCTGAGCACTCAACTCATGTTTGGCATTTTAAAGTAAAAACAAGTGTGACTTC
GAGGACCAAAGAAATTGTCAGCTATACATTTATCTTTATGAACTCATTTATATTCCTTTTTAATGACTCGTTGTT
CTAACATTTCCTAGAAGTGTTCTTATAAAGGTCTAATGTATCCACAGGCTGTTGTCTTATTAGTAAATGCAAAGT
AATGACTTTGTCTGTTTTACTCTAGTCTTTAGTACTTCAAAATTACCTTTTCATATCCATGATCTTGAGTCCATT
TGGGGGATTTTTAAGAATTTGATGTATTTCAATACACTGTTCAAAATTAAATTGTTTAATTTTATGTATGAGTAT
GTATGTTCCTGAAGTTGGTCCTATTTAAATTATTAAACTATTGTAACTTTAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1307

MEKGPVRAPAEKPRGARCSNGFPERDPPRPGPSRPAEKPPRPEAKSAQPADGWKGERPRSEEDNELNLPNLAAAY
SSILSSLGENPQRQGLLKTPWRAASAMQFFTKGYQETISDVLNDAIFDEDHDEMVIVKDIDMFSMCEHHLVPFVG
KVHIGYLPNKQVLGLSKLARIVEIYSRRLQVQERLTKQIAVAITEALRPAGVGVVVEATHMCMVMRGVQKMNSKT
VTSTMLGVFREDPKTREEFLTLIRS

FIGURE 1308

CAGAACGGCCGATCTCCAGCCCAAGATGATTCCAGCAGTGGTCTTGCTCTTACTCCTTTTGGTTGAACAAGCAGC
GGCCCTGGGAGAGCCTCAGCTCTGCTATATCCTGGATGCCATCCTGTTTCTGTATGGAATTGTCCTCACCCTCCT
CTACTGTCGACTGAAGATCCAAGTGCGAAAGGCAGCTATAACCAGCTATGAGAAATCAGATGGTGTTTACACGGG
CCTGAGCACCAGGAACCAGGAGACTTACGAGACTCTGAAGCATGAGAAACCACCACAGTAGCTTTAGAATAGATG
CGGTCATATTCTTCTTTGGCTTCTGGTTCTTCCAGCCCTCATGGTTGGCATCACATATGCCTGCATGCCATTAAC
ACCAGCTGGCCCTACCCCTATAATGATCCTGTGTCCTAAATTAATATACACCAGTGGTTCCTCCTCCCTGTTAAA
GACTAATGCTCAGATGCTGTTTACGGATATTTATATTCTAGTCTCACTCTCTTGTCCCACCCTTCTTCTCTTCCC
CATTCCCAACTCCAGCTAAAATATGGGAAGGGAGAACCCCCAATAAAACTGCCATGGACTGGACTC

FIGURE 1309

MIPAVVLLLLLLVEQAAALGEPQLCYILDAILFLYGIVLTLLYCRLKIQVRKAAITSYEKSDGVYTGLSTRNQET
YETLKHEKPPQ

FIGURE 1310

GAATTCCCAAACGTGCACAGGGGAGTGAGGGCAGGGCGCTCGCAGGGGGCACGCAGGGAGGGCCCAGGGCGCCAG
GGAGGCCGCGCCGGGCTAATCCGAAGGGGCTGCGAGGTCAGGCTGTAACCGGGTCAATGTGTGGAATATTGGGGG
GCTCGGCTGCAGACTTGGCCAA**ATG**GACGGGACTATTAAGGAGGCTCTGTCGGTGGTGAGCGACGACCAGTCCCT
CTTTGACTCAGCGTACGGAGCGGCAGCCCATCTCCCCAAGGCCGACATGACTGCCTCGGGGAGTCCTGACTACGG
GCAGCCCCACAAGATCAACCCCCTCCCACCACAGCAGGAGTGGATCAATCAGCCAGTGAGGGTCAACGTCAAGCG
GGAGTATGACCACATGAATGGATCCAGGGAGTCTCCGGTGGACTGCAGCGTTAGCAAATGCAGCAAGCTGGTGGG
CGGAGGCGAGTCCAACCCCATGAACTACAACAGCTATATGGACGAGAAGAATGGCCCCCCTCCTCCCAACATGAC
CACCAACGAGAGGAGAGTCATCGTCCCCGCAGACCCCACACTGTGGACACAGGAGCATGTGAGGCAATGGCTGGA
GTGGGCCATAAAGGAGTACAGCTTGATGGAGATCGACACATCCTTTTTCCAGAACATGGATGGCAAGGAACTGTG
TAAAATGAACAAGGAGGACTTCCTCCGCGCCACCACCCTCTACAACACGGAAGTGCTGTTGTCACACCTCAGTTA
CCTCAGGGAAAGTTCACTGCTGGCCTATAATACAACCTCCCACACCGACCAATCCTCACGATTGAGTGTCAAAGA
AGACCCTTCTTATGACTCAGTCAGAAGAGGAGCTTGGGGCAATAACATGAATTCTGGCCTCAACAAAAGTCCTCC
CCTTGGAGGGGCACAAACGATCAGTAAGAATACAGAGCAACGGCCCCAGCCAGATCCGTATCAGATCCTGGGCCC
GACCAGCAGTCGCCTAGCCAACCCTGGAAGCGGGCAGATCCAGCTGTGGCAATTCCTCCTGGAGCTGCTCTCCGA
CAGCGCCAACGCCAGCTGTATCACCTGGGAGGGGACCAACGGGGAGTTCAAAATGACGGACCCCGATGAGGTGGC
CAGGCGCTGGGGCGAGCGGAAAAGCAAGCCCAACATGAATTACGACAAGCTGAGCCGGGCCCTCCGTTATTACTA
TGATAAAAACATTATGACCAAAGTGCACGGCAAAAGATATGCTTACAAATTTGACTTCCACGGCATTGCCCAGGC
TCTGCAGCCACATCCGACCGAGTCGTCCATGTACAAGTACCCTTCTGACATCTCCTACATGCCTTCCTACCATGC
CCACCAGCAGAAGGTGAACTTTGTCCCTCCCCATCCATCCTCCATGCCTGTCACTTCCTCCAGCTTCTTTGGAGC
CGCATCACAATACTGGACCTCCCCCACGGGGGGAATCTACCCCAACCCCAACGTCCCCCGCCATCCTAACACCCA
CGTGCCTTCACACTTAGGCAGCTACTAC**TAG**AAGCTTCTTCTAGCTGAAGCCCATCCTGCACACTTACTGGATGC
TTTGGACTCAACAGGACATATGTGGCCTTGAAGGGAAGACAAAACTGGATGTTCTTTCTTGTTGGATAGAACCTT
TGTATTTGTTCTTTAAAAACATTTTTTTTAATGTTGGTAACTTTTGCTTCCTCTACCTGAACAAAGAGATGAATA
ATTCCATGGGCCAGTATGCCAGTTTGAATTCTCAGTCTCCTAGCATCTTGTGAGTTGCATATTAAGATTACTGGA
ATGGTTAAGTCATGGTTCTGAGAAAGAAGCTGTACGTTTTCTTTATGTTTTTATGACCAAAGCAGTTTCTTGTCA
ATACACGGGGTTCAGTATGACACAGAATCATGGACTTAACCCGTCATGTTCTGGTTTGAGATTTAGTGACAAATA
GAGGTGGGAAGCTTATAATCTAATTTTAGGAGGACCAAATTCAGCGGATGGCAACTGGAACATTGATTGTAAGGC
CAGTGAAGTTTTCACCCAACTGGAATTTGATGGAAAGAAGGTTTGTGTGTTTAAGACGCCAAGGGCATTGCAGAA
TCCCTCTCAGTGGACAGTATGCACTCAGCTGACCACTCTCTCTAGAAATAGTCAAGATATGAACTAAGAAATTTT
AATGCAAATACATACATTCCTGAAAGACGGGGAATTAAATTACTAATTTTTTTTTTTTAAATGATGACAGTGGTC
CCAGAACTTGGAAAAGTTGTAGGGATTTCTAAACTCAAGCAGATTCGCAAGTGCTGTGCGCTTGTCAGACCATCA
GACCAGGGCCAACCAATCAGAAGGCAACTTACTGTATAAATTATGCAGAGTTATTTTCCTATATCTCACAGTATT
AAAAAATAAATAATTAAAAATTAAGAATAAATAAACGAGTTGACCTCGGTCACAAAAGCAGTTTTACTATCGAAT
CAATCGCTGTTATTTTTTTTTAATGTAATTTGTACATCTTTTTTCAATCTGTACATTTGGGCTGTCTTGTATGTT
TTTATGCTCCTTTTTAAAAAGCATAATATGCCTATAGCTGAAAAGGAAACAGGGCTGTTTAAGTCACTGACTTAT
GAGAAAGCAAAGCACTGGTACAGTTATTTAACAGGCATACACAAGCAGGGAAAAGATAATCCATTTAGATCTTTA
ATGCTTTGGAAATGCGTGTAACAGTACTGCAATAATCACAGCTCTGGGAAAAACAACGAAACTTTCCCTTGTGGA
GAGGAGGGATTTTCCTGCTCTATATAAGCAACATATTTTTAGACATTAAAATATATATAATTTTGCAGGTAATTG
TTGACTTTTTTAACTATATTAAGTGTTAAGCTGACAACTGTCAAAGAAGACCATGTTGTAAAATAATTTGACTAA
ATAAATGGTTCCTTCTCTCAAAAAAAAAAAAA

FIGURE 1311

MDGTIKEALSVVSDDQSLFDSAYGAAAHLPKADMTASGSPDYGQPHKINPLPPQQEWINQPVRVNVKREYDHMNG
SRESPVDCSVSKCSKLVGGGESNPMNYNSYMDEKNGPPPPNMTTNERRVIVPADPTLWTQEHVRQWLEWAIKEYS
LMEIDTSFFQNMDGKELCKMNKEDFLRATTLYNTEVLLSHLSYLRESSLLAYNTTSHTDQSSRLSVKEDPSYDSV
RRGAWGNNMNSGLNKSPPLGGAQTISKNTEQRPQPDPYQILGPTSSRLANPGSGQIQLWQFLLELLSDSANASCI
TWEGTNGEFKMTDPDEVARRWGERKSKPNMNYDKLSRALRYYYDKNIMTKVHGKRYAYKFDFHGIAQALQPHPTE
SSMYKYPSDISYMPSYHAHQQKVNFVPPHPSSMPVTSSSFFGAASQYWTSPTGGIYPNPNVPRHPNTHVPSHLGS
YY

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FIGURE 1312

GCGCGGGCGGCTGGGGAATGGCTGCTGCCATGGTGCCGGGGCGCAGCGAGAGCTGGGAGCGCGGGGAGCCTGGCC
GCCCGGCCCTGTACTTCTGCGGGAGCATTCGCGGCGGACGCGAGGACAGGACGCTGTACGAGCGGATCGTGTCTC
GGCTGCGGCGATTCGGGACAGTGCTCACCGAGCACGTGGCGGCCGCCGAGCTGGGCGCGCGCGGGGAAGAGGCTG
CTGGGGGTGACAGGCTCATCCATGAGCAGGACCTGGAGTGGCTGCAGCAGGCGGACGTGGTCGTGGCAGAAGTGA
CACAGCCATCCTTGGGTGTAGGCTATGAGCTGGGCCGGGCCGTGGCCTTTAACAAGCGGATCCTGTGCCTGTTCC
GCCCGCAGTCTGGCCGCGTGCTTTCGGCCATGATCCGGGGAGCAGCAGATGGCTCTCGGTTCCAGGTGTGGGACT
ATGAGGAGGGAGAGGTGGAGGCCCTGCTGGATCGATACTTCGAGGCTGATCCTCCAGGGCAGGTGGCTGCCTCCC
CTGACCCAACCACTTGACTTAATCTCACTTTCTTAAATTCTTCTATTCTCAGACACTGCTCTAGTACCATTCCTT
CCTCTTAGCCCCAGGAGCAAATTAAAAGGTACAGTTAAAATCCT

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FIGURE 1313

MAAAMVPGRSESWERGEPGRPALYFCGSIRGGREDRTLYERIVSRLRRFGTVLTEHVAAAELGARGEEAAGGDRL
IHEQDLEWLQQADVVVAEVTQPSLGVGYELGRAVAFNKRILCLFRPQSGRVLSAMIRGAADGSRFQVWDYEEGEV
EALLDRYFEADPPGQVAASPDPTT

FIGURE 1314A

CGGCGCGGGTGTTGAGAGCGGTGTGGTAGGTGTTGTAGCCGCTATGGTGAAGTTCGCTTTGTAGCGGCCCCGGCT
AGAGAGTTGGCCTGTTCCCTGCCTTTGTGACCCGGAGGAGCTTTTGGGGGTGCGTCAAGCCCCTGGCCTGAGGCA
GCGAACTGGTTTGTGGCCTGTTTGATTCCTGTCAGAGGTTTGCTGACCCAAGACAGTATCGAAA**ATG**CATATTAA
GTCAATTATTCTAGAGGGATTCAAGTCCTATGCTCAGAGGACCGAAGTCAATGGTTTTGACCCCCTCTTCAATGC
TATCACTGGCTTAAATGGTAGTGGGAAATCCAACATATTGGACTCCATCTGCTTTTTACTGGGCATCTCCAACCT
GTCTCAGGTTCGGGCTTCTAATTTACAAGATTTAGTTTACAAAAATGGGCAGGCTGGTATTACCAAAGCCTCTGT
GTCAATCACTTTTGATAATTCTGACAAAAAGCAAAGTCCTTTAGGATTTGAGGTTCATGATGAAATCACAGTAAC
AAGGCAGGTGGTTATTGGTGGTAGAAATAAATATTTAATCAATGGAGTCAATGCCAACAACACCAGAGTACAGGA
TCTCTTCTGTTCTGTTGGCCTTAATGTTAACAACCCTCACTTTCTCATCATGCAGGGCCGAATTACAAAAGTATT
GAATATGAAACCACCAGAGATTTTATCCATGATAGAAGAAGCAGCTGGAACCAGGATGTATGAATACAAAAAAAT
AGCTGCACAGAAAACTATAGAAAAAAAGGAGGCTAAGCTGAAAGAAATTAAGACGATACTTGAAGAAGAGATTAC
TCCAACCATTCAAAAATTAAAAGAGGAAAGATCGTCCTACTTGGAGTACCAAAAAGTAATGAGAGAAATAGAACA
TTTGAGTCGTTTATATATTGCTTATCAGTTTTTGCTGGCTGAAGATACCAAAGTACGCTCAGCTGAGGAATTAAA
AGAAATGCAAGATAAAGTTATAAAGCTTCAGGAAGAATTGTCTGAGAATGATAAAAAAATAAAAGCACTTAATCA
TGAAATAGAAGAATTGGAAAAAAGAAAAGATAAGGAAACTGGAGTTATACTTCGATCTTTAGAAGATGCTCTTGC
AGAGGCTCAGCGAGTTAATACTAAATCTCAAAGCGCATTTGATCTCAAGAAGAAAAATCTGGCATGTGAGGAAAG
CAAACGCAAAGAGCTGGAAAAAAATATGGTTGAGGACTCAAAAACTTTAGCAGCAAAGGAAAAAGAGGTTAAAAA
GATAACAGATGGACTGCATGCCCTTCAAGAAGCAAGTAATAAAGATGCTGAAGCTCTGGCAGCTGCACAGCAGCA
CTTCAATGCTGTTTCCGCTGGCCTGTCCAGTAATGAAGATGGAGCAGAAGCAACTCTTGCTGGTCAAATGATGGC
CTGTAAAAATGATATAAGTAAAGCTCAGACAGAAGCCAAACAGGCTCAGATGAAGTTGAAGCATGCTCAACAGGA
ATTAAAGAATAAACAAGCTGAAGTTAAGAAGATGGATAGTGGCTACAGGAAGGATCAAGAAGCTCTAGAAGCTGT
AAAAAGACTTAAAGAAAAACTTGAAGCTGAAATGAAAAAGCTAAATTATGAAGAAAATAAAGAGGAAAGCCTTTT
GGAAAAGCGCAGGCAGCTGTCTCGTGATATTGGTAGATTGAAAGAAACATATGAAGCTCTATTAGCCAGATTTCC
CAATCTTCGATTTGCATACAAGGATCCAGAGAAGAACTGGAATAGAAATTGTGTGAAAGGACTTGTGGCTTCTCT
GATTAGTGTGAAAGACACTTCTGCAACCACAGCTTTAGAATTAGTGGCTGGAGAACGACTCTACAATGTTGTAGT
AGACACAGAAGTTACTGGTAAAAAGCTACTAGAAAGGGGGGAACTGAAACGTCGATACACTATAATTCCACTCAA
TAAAATTTCAGCCAGATGTATTGCACCAGAAACTCTGAGAGTTGCTCAGAATCTTGTTGGCCCTGACAACGTTCA
TGTGGCTCTTTCCTTGGTTGAATATAAACCAGAACTTCAGAAAGCAATGGAGTTTGTCTTTGGAACAACATTTGT
TTGTGACAATATGGATAATGCCAAAAAAGTGGCCTTTGATAAGAGGATAATGACTAGAACTGTAACTCTCGGAGG
TGATGTGTTTGATCCTCATGGGACATTGAGTGGAGGTGCTCGATCCCAGGCAGCTTCCATTTTAACCAAGTTTCA
AGAACTCAAAGATGTTCAGGATGAACTGAGAATCAAAGAGAATGAGCTGCGGGCTCTAGAAGAGGAATTAGCAGG
TCTTAAAAACACTGCTGAAAAGTATCGCCAACTAAAACAGCAGTGGGAGATGAAAACTGAAGAGGCAGATTTATT
ACAAACCAAGCTCCAGCAAAGCTCATATCACAAGCAACAAGAAGAATTAGATGCCCTTAAAAAAACCATTGAGGA
AAGTGAGGAGACTTTGAAAAACACTAAAGAAATCCAAAGAAAAGCAGAAGAAAAATATGAAGTATTGGAAAATAA
AATGAAAAATGCAGAAGCTGAAAGAGAGCGAGAACTGAAAGATGCTCAGAAAAAACTGGATTGTGCCAAAACAAA
GGCAGATGCATCTAGCAAGAAGATGAAAGAAAAACAACAGGAAGTTGAAGCTATCACTCTGGAACTGGAAGAGCT
CAAGAGAGAGCATACATCTTACAAACAACAGCTTGAAGCTGTAAATGAAGCTATCAAATCCTATGAAAGTCAGAT
TGAAGTAATGGCAGCTGAGGTGGCTAAAAATAAGGAGTCAGTAAATAAAGCTCAAGAAGAGGTGACCAAGCAAAA
AGAGGTGATAACAGCCCAAGACACTGTAATTAAGCTAAATATGCAGAAGTGGCAAAACACAAGGAGCAAAACAAT
GATTCTCAGCCTTAAAATTAAGGAATTAGACCACCACATCAGCAAACATAAACGGGAGGCTGAAGATGGTGCTGC
AAAGGTATCCAAAATGTTGAAAGATTATGACTGGATTAATGCAGAGAGACACCTCTTTGGCCAACCCAATAGTGC
CTATGATTTCAAAACTAACAACCCTAAAGAAGCTGGTCAGAGACTTCAGAAGTTGCAAGAAATGAAGGAGAAACT
AGGAAGAAATGTCAATATGAGAGCTATGAATGTATTGACAGAAGCTGAAGAGCGATGCAATGACTTGATGAAGAA
GAAGAGAATTGTAGAAAATGACAAATCCAAAATTCTTACAACTATAGAAGACCTTGACCAGAAGAAAAACCAAGC
CCTAAATATTGCATGGCAAAAGGTGAACAAGGACTTTGGGTCTATTTTTTCTACTCTTTTGCCTGGTGCTAATGC
TATGCTTGCACCACCAGAGGGTCAAACTGTTTTGGATGGTCTGGAGTTCAAGGTTGCCTTAGGAAATACCTGGAA
AGAAAACCTAACTGAACTTAGTGGTGGTCAGAGGTCTTTAGTGGCCTTGTCATTAATACTGTCCATGCTTCTCTT
CAAACCTGCTCCAATTTATATCCTTGATGAGGTAGATGCAGCCTTGGATCTTTCTCATACCCAAAACATTGGACA

FIGURE 1314B

GATGCTGCGTACTCATTTCACACATTCTCAGTTCATTGTGGTGTCACTAAAAGAAGGTATGTTCAACAATGCAAA
CGTTCTTTTCAAAACCAAGTTTGTGGATGGTGTTTCTACAGTAGCCAGATTTACTCAATGTCAAAATGGAAAGAT
TTCAAAGGAAGCAAAATCCAAGGCAAAACCACCCAAAGGAGCACATGTGGAAGTTTAAACTACAAAGTTATTTCT
TCATCTTGACCTGTTTTTTTAAATGTAAACTTTTAAGGACTTGAGATAACTAATTTGTTTATATACAAAAATTAA
TGTTACTGTGTTACTTAACCCATGTTTTCTCTTTATATAATCACTTATCGCTTACAAATGAGCATATATTCCTCA
TCTCTTAACTAGTCTAATTATGGTCCAATTATTGTGGTTGTGATTTTATGCATATCCATCAAAATGTTTTTTTTC
TTATGCGGGTCTTTTATATATTAGGGATCCTGAGATACCCGATTCTATATGTAAAAGCTAATATACAAAAAAGCA
GATTAAATTACATGATAAATGTAGCTGAAAAAAAAAAAAAA

FIGURE 1315

MHIKSIILEGFKSYAQRTEVNGFDPLFNAITGLNGSGKSNILDSICFLLGISNLSQVRASNLQDLVYKNGQAGIT
KASVSITFDNSDKKQSPLGFEVHDEITVTRQVVIGGRNKYLINGVNANNTRVQDLFCSVGLNVNNPHFLIMQGRI
TKVLNMKPPEILSMIEEAAGTRMYEYKKIAAQKTIEKKEAKLKEIKTILEEEITPTIQKLKEERSSYLEYQKVMR
EIEHLSRLYIAYQFLLAEDTKVRSAEELKEMQDKVIKLQEELSENDKKIKALNHEIEELEKRKDKETGVILRSLE
DALAEAQRVNTKSQSAFDLKKKNLACEESKRKELEKNMVEDSKTLAAKEKEVKKITDGLHALQEASNKDAEALAA
AQQHFNAVSAGLSSNEDGAEATLAGQMMACKNDISKAQTEAKQAQMKLKHAQQELKNKQAEVKKMDSGYRKDQEA
LEAVKRLKEKLEAEMKKLNYEENKEESLLEKRRQLSRDIGRLKETYEALLARFPNLRFAYKDPEKNWNRNCVKGL
VASLISVKDTSATTALELVAGERLYNVVVDTEVTGKKLLERGELKRRYTIIPLNKISARCIAPETLRVAQNLVGP
DNVHVALSLVEYKPELQKAMEFVFGTTFVCDNMDNAKKVAFDKRIMTRTVTLGGDVFDPHGTLSGGARSQAASIL
TKFQELKDVQDELRIKENELRALEEELAGLKNTAEKYRQLKQQWEMKTEEADLLQTKLQQSSYHKQQEELDALKK
TIEESEETLKNTKEIQRKAEEKYEVLENKMKNAEAERERELKDAQKKLDCAKTKADASSKKMKEKQQEVEAITLE
LEELKREHTSYKQQLEAVNEAIKSYESQIEVMAAEVAKNKESVNKAQEEVTKQKEVITAQDTVIKLNMQKWQNTR
SKTMILSLKIKELDHHISKHKREAEDGAAKVSKMLKDYDWINAERHLFGQPNSAYDFKTNNPKEAGQRLQKLQEM
KEKLGRNVNMRAMNVLTEAEERCNDLMKKKRIVENDKSKILTTIEDLDQKKNQALNIAWQKVNKDFGSIFSTLLP
GANAMLAPPEGQTVLDGLEFKVALGNTWKENLTELSGGQRSLVALSLILSMLLFKPAPIYILDEVDAALDLSHTQ
NIGQMLRTHFTHSQFIVVSLKEGMFNNANVLFKTKFVDGVSTVARFTQCQNGKISKEAKSKAKPPKGAHVEV

FIGURE 1316

GGAAGCAGGGCGGGGCCTCTGGTGGCGGTCGGGAACTCGGTGGGAGGCGGCAACATTGTTTCAAGTTGGCCAAAT
TGACAAGAGCGAGAGGTATACTGCGTTCCATCCCGACCCGGGGCCACGGTACTGGGCCCTGTTTCCCCCTCCTCG
GCCCCCGAGAGCCAGGGTCCGCCTTCTGCAGGGTTCCCAGGCCCCCGCTCCAGGGCCGGGCTGACCCGACTCGCT
GGCGCTTC**ATG**GAGAACTTCCAAAAGGTGGAAAAGATCGGAGAGGGCACGTACGGAGTTGTGTACAAAGCCAGAA
ACAAGTTGACGGGAGAGGTGGTGGCGCTTAAGAAAATCCGCCTGGACACTGAGACTGAGGGTGTGCCCAGTACTG
CCATCCGAGAGATCTCTCTGCTTAAGGAGCTTAACCATCCTAATATTGTCAAGCTGCTGGATGTCATTCACACAG
AAAATAAACTCTACCTGGTTTTTGAATTTCTGCACCAAGATCTCAAGAAATTCATGGATGCCTCTGCTCTCACTG
GCATTCCTCTTCCCCTCATCAAGAGCTATCTGTTCCAGCTGCTCCAGGGCCTAGCTTTCTGCCATTCTCATCGGG
TCCTCCACCGAGACCTTAAACCTCAGAATCTGCTTATTAACACAGAGGGGGCCATCAAGCTAGCAGACTTTGGAC
TAGCCAGAGCTTTTGGAGTCCCTGTTCGTACTTACACCCATGAGGTGGTGACCCTGTGGTACCGAGCTCCTGAAA
TCCTCCTGGGCTGCAAATATTATTCCACAGCTGTGGACATCTGGAGCCTGGGCTGCATCTTTGCTGAGATGGTGA
CTCGCCGGGCCCTATTCCCTGGAGATTCTGAGATTGACCAGCTCTTCCGGATCTTTCGGACTCTGGGGACCCCAG
ATGAGGTGGTGTGGCCAGGAGTTACTTCTATGCCTGATTACAAGCCAAGTTTCCCCAAGTGGGCCCGGCAAGATT
TTAGTAAAGTTGTACCTCCCCTGGATGAAGATGGACGGAGCTTGTTATCGCAAATGCTGCACTACGACCCTAACA
AGCGGATTTCGGCCAAGGCAGCCCTGGCTCACCCTTTCTTCCAGGATGTGACCAAGCCAGTACCCCATCTTCGAC
TC**TGA**TAGCCTTCTTGAAGCCCCCAGCCCTAATCTCACCCTCTCCTCCAGTGTGGGCTTGACCAGGCTTGGCCTT
GGGCTATTTGGACTCAGGTGGGCCCTCTGAACTTGCCTTAAACACTCACCTTCTAGTCTTGGCCAGCCAACTCTG
GGAATACAGGGGTGAAAGGGGGGAACCAGTGAAAATGAAAGGAAGTTTCAGTATTAGATGCACTTAAGTTAGCCT
CCACCACCCTTTCCCCCTTCTCTTAGTTATTGCTGAAGAGGGTTGGTATAAAAATAATTTTAAAAAAGCCTTCCT
ACACGTTAGATTTGCCGTACCAATCTCTGAATGCCCCATAATTATTATTTCCAGTGTTTGGGATGACCAGGATCC
CAAGCCTCCTGCTGCCACAATGTTTATAAAGGCCAAATGATAGCGGGGGCTAAGTTGGTGCTTTTGAGAACCAAG
TAAAACAAAACCACTGGGAGGAGTCTATTTTAAAGAATTCGGTTGAAAAAATAGATCCAATCAGTTTATACCCTA
GTTAGTGTTTTGCCTCACCTAATAGGCTGGGAGACTGAAGACTCAGCCCGGGTGGGGCTGCAGAAAAATGATTGG
CCCCAGTCCCCTTGTTTGTCCCTTCTACAGGCATGAGGAATCTGGGAGGCCCTGAGACAGGGATTGTGCTTCATT
CCAATCTATTGCTTCACCATGGCCTTATGAGGCAGGTGAGAGATGTTTGAATTTTTCTCTTCCTTTTAGTATTCT
TAGTTGTTCAGTTGCCAAGGATCCCTGATCCCATTTTCCTCTGACGTCCACCTCCTACCCCATAGGAGTTAGAAG
TTAGGGTTTAGGCATCATTTTGAGAATGCTGACACTTTTTCAGGGCTGTGATTGAGTGAGGGCATGGGTAAAAAT
ATTTCTTTAAAAGAAGGATGAACAATTATATTTATATTTCAGGTTATATCCAATAGTAGAGTTGGCTTTTTTTTT
TTTTTTTTTGGTCATAGTGGGTGGATTTGTTGCCATGTGCACCTTGGGGTTTTGTAATGACAGTGCTAAAAAAAA
AAAAGCATTTTTTTTTATGATTTGTCTCTGTCACCCTTGTCCTTGAGTGCTCTTGCTATTAACGTTATTTGTAAT
TTAGTTTGTAGCTCATTAAAAAAATGTGCCTAGTTTTATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAA

FIGURE 1317

MENFQKVEKIGEGTYGVVYKARNKLTGEVVALKKIRLDTETEGVPSTAIREISLLKELNHPNIVKLLDVIHTENK
LYLVFEFLHQDLKKFMDASALTGIPLPLIKSYLFQLLQGLAFCHSHRVLHRDLKPQNLLINTEGAIKLADFGLAR
AFGVPVRTYTHEVVTLWYRAPEILLGCKYYSTAVDIWSLGCIFAEMVTRRALFPGDSEIDQLFRIFRTLGTPDEV
VWPGVTSMPDYKPSFPKWARQDFSKVVPPLDEDGRSLLSQMLHYDPNKRISAKAALAHPFFQDVTKPVPHLRL

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FIGURE 1318A

GGAACAGCTTGTCCACCCGCCGGCCGGACCAGAAGCCTTTGGGTCTGAAGTGTCTGTGAGACCTCACAGAAGAGC
ACCCCTGGGCTCCACTTACCTGCCCCCTGCTCCTTCAGGGATGGAGGCAATGGCGGCCAGCACTTCCCTGCCTGA
CCCTGGAGACTTTGACCGGAACGTGCCCCGGATCTGTGGGGTGTGTGGAGACCGAGCCACTGGCTTTCACTTCAA
TGCTATGACCTGTGAAGGCTGCAAAGGCTTCTTCAGGCGAAGCATGAAGCGGAAGGCACTATTCACCTGCCCCTT
CAACGGGGACTGCCGCATCACCAAGGACAACCGACGCCACTGCCAGGCCTGCCGGCTCAAACGCTGTGTGGACAT
CGGCATGATGAAGGAGTTCATTCTGACAGATGAGGAAGTGCAGAGGAAGCGGGAGATGATCCTGAAGCGGAAGGA
GGAGGAGGCCTTGAAGGACAGTCTGCGGCCCAAGCTGTCTGAGGAGCAGCAGCGCATCATTGCCATACTGCTGGA
CGCCCACCATAAGACCTACGACCCCACCTACTCCGACTTCTGCCAGTTCCGGCCTCCAGTTCGTGTGAATGATGG
TGGAGGGAGCCATCCTTCCAGGCCCAACTCCAGACACACTCCCAGCTTCTCTGGGGACTCCTCCTCCTCCTGCTC
AGATCACTGTATCACCTCTTCAGACATGATGGACTCGTCCAGCTTCTCCAATCTGGATCTGAGTGAAGAAGATTC
AGATGACCCTTCTGTGACCCTAGAGCTGTCCCAGCTCTCCATGCTGCCCCACCTGGCTGACCTGGTCAGTTACAG
CATCCAAAAGGTCATTGGCTTTGCTAAGATGATACCAGGATTCAGAGACCTCACCTCTGAGGACCAGATCGTACT
GCTGAAGTCAAGTGCCATTGAGGTCATCATGTTGCGCTCCAATGAGTCCTTCACCATGGACGACATGTCCTGGAC
CTGTGGCAACCAAGACTACAAGTACCGCGTCAGTGACGTGACCAAAGCCGGACACAGCCTGGAGCTGATTGAGCC
CCTCATCAAGTTCCAGGTGGGACTGAAGAAGCTGAACTTGCATGAGGAGGAGCATGTCCTGCTCATGGCCATCTG
CATCGTCTCCCCAGATCGTCCTGGGGTGCAGGACGCCGCGCTGATTGAGGCCATCCAGGACCGCCTGTCCAACAC
ACTGCAGACGTACATCCGCTGCCGCCACCCGCCCCCGGGCAGCCACCTGCTCTATGCCAAGATGATCCAGAAGCT
AGCCGACCTGCGCAGCCTCAATGAGGAGCACTCCAAGCAGTACCGCTGCCTCTCCTTCCAGCCTGAGTGCAGCAT
GAAGCTAACGCCCCTTGTGCTCGAAGTGTTTGGCAATGAGATCTCCTGACTAGGACAGCCTGTGCGGTGCCTGGG
TGGGGCTGCTCCTCCAGGGCCACGTGCCAGGCCCGGGGCTGGCGGCTACTCAGCAGCCCTCCTCACCCGTCTGGG
GTTCAGCCCCTCCTCTGCCACCTCCCCTATCCACCCAGCCCATTCTCTCTCCTGTCCAACCTAACCCCTTTCCTG
CGGGCTTTTCCCCGGTCCCTTGAGACCTCAGCCATGAGGAGTTGCTGTTTGTTTGACAAAGAAACCCAAGTGGGG
GCAGAGGGCAGAGGCTGGAGGCAGGCCTTGCCCAGAGATGCCTCCACCGCTGCCTAAGTGGCTGCTGACTGATGT
TGAGGGAACAGACAGGAGAAATGCATCCATTCCTCAGGGACAGAGACACCTGCACCTCCCCCCACTGCAGGCCCC
GCTTGTCCAGCGCCTAGTGGGGTCTCCCTCTCCTGCCTTACTCACGATAAATAATCGGCCCACAGCTCCCACCCC
ACCCCCTTCAGTGCCCACCAACATCCCATTGCCCTGGTTATATTCTCACGGGCAGTAGCTGTGGTGAGGTGGGTT
TTCTTCCCATCACTGGAGCACCAGGCACGAACCCACCTGCTGAGAGACCCAAGGAGGAAAAACAGACAAAAACAG
CCTCACAGAAGAATATGACAGCTGTCCCTGTCACCAAGCTCACAGTTCCTCGCCCTGGGTCTAAGGGGTTGGTTG
AGGTGGAAGCCCTCCTTCCACGGATCCATGTAGCAGGACTGAATTGTCCCCAGTTTGCAGAAAAGCACCTGCCGA
CCTCGTCCTCCCCCTGCCAGTGCCTTACCTCCTGCCCAGGAGAGCCAGCCCTCCCTGTCCTCCTCGGATCACCGA
GAGTAGCCGAGAGCCTGCTCCCCCACCCCCTCCCCAGGGGAGAGGGTCTGGAGAAGCAGTGAGCCGCATCTTCTC
CATCTGGCAGGGTGGGATGGAGGAGAAGAATTTTCAGACCCCAGCGGCTGAGTCATGATCTCCCTGCCGCCTCAA
TGTGGTTGCAAGGCCGCTGTTCACCACAGGGCTAAGAGCTAGGCTGCCGCACCCCAGAGTGTGGGAAGGGAGAGC
GGGGCAGTCTCGGGTGGCTAGTCAGAGAGAGTGTTTGGGGGTTCCGTGATGTAGGGTAAGGTGCCTTCTTATTCT
CACTCCACCACCCAAAAGTCAAAAGGTGCCTGTGAGGCAGGGGCGGAGTGATACAACTTCAAGTGCATGCTCTCT
GCAGGTCGAGCCCAGCCCAGCTGGTGGGAAGCGTCTGTCCGTTTACTCCAAGGTGGGTCTTTGTGAGAGTGAGCT
GTAGGTGTGCGGGACCGGTACAGAAAGGCGTTCTTCGAGGTGGATCACAGAGGCTTCTTCAGATCAATGCTTGAG
TTTGGAATCGGCCGCATTCCCTGAGTCACCAGGAATGTTAAAGTCAGTGGGAACGTGACTGCCCCAACTCCTGGA
AGCTGTGTCCTTGCACCTGCATCCGTAGTTCCCTGAAAACCCAGAGAGGAATCAGACTTCACACTGCAAGAGCCT
TGGTGTCCACCTGGCCCCATGTCTCTCAGAATTCTTCAGGTGGAAAAACATCTGAAAGCCACGTTCCTTACTGCA
GAATAGCATATATATCGCTTAATCTTAAATTTATTAGATATGAGTTGTTTTCAGACTCAGACTCCATTTGTATTA
TAGTCTAATATACAGGGTAGCAGGTACCACTGATTTGGAGATATTTATGGGGGGAGAACTTACATTGTGAAACTT
CTGTACATTAATTATTATTGCTGTTGTTATTTTACAAGGGTCTAGGGAGAGACCCTTGTTTGATTTTAGCTGCAG
AACTGTATTGGTCCAGCTTGCTCTTCAGTGGGAGAAAAACACTTGTAAGTTGCTAAACGAGTCAATCCCCTCATT
CAGGAAAACTGACAGAGGAGGGCGTGACTCACCCAAGCCATATATAACTAGCTAGAAGTGGGCCAGGACAGGCCG
GGCGCGGTGGCTCACGCCTGTAATCCCAGCAGTTTGGGAGGTCGAGGTAGGTGGATCACCTGAGGTCGGGAGTTC
GAGACCAACCTGACCAACATGGAGAAACCCTGTCTCTATTAAAAATACAAAAAAAAAAAAAAAAAAAAATAGCCG
GGCATGGTGGCGCAAGCCTGTAATCCCAGCTACTCAGGAGGCTGAGGCAGAAGAATTGAACCCAGGAGGTGGAGG

FIGURE 1318B

TTGCAGTGAGCTGAGATCGTGCCGTTACTCTCCAACCTGGACAACAAGAGCGAAACTCCGTCTTAGAAGTGGACC
AGGACAGGACCAGATTTTGGAGTCATGGTCCGGTGTCCTTTTCACTACACCATGTTTGAGCTCAGACCCCCACTC
TCATTCCCCAGGTGGCTGACCCAGTCCCTGGGGGGAAGCCCTGGATTTCAGAAAGAGCCAAGTCTGGATCTGGGAC
CCTTTCCTTCCTTCCCTGGCTTGTAACTCCACCAAGCCCATCAGAAGGAGAAGGAAGGAGACTCACCTCTGCCTC
AATGTGAATCAGACCCTACCCCACCACGATGTGCCCTGGCTGCTGGGCTCTCCACCTCAGGCCTTGGATAATGCT
GTTGCCTCATCTATAACATGCATTTGTCTTTGTAATGTCACCACCTTCCCAGCTCTCCCTCTGGCCCTGCTTCTT
CGGGGAACTCCTGAAATATCAGTTACTCAGCCCTGGGCCCCACCACCTAGGCCACTCCTCCAAAGGAAGTCTAGG
AGCTGGGAGGAAAAGAAAAGAGGGGAAAATGAGTTTTTATGGGGCTGAACGGGGAGAAAAGGTCATCATCGATTC
TACTTTAGAATGAGAGTGTGAAATAGACATTTGTAAATGTAAAACTTTTAAGGTATATCATTATAACTGAAGGAG
AAGGTGCCCCAAAATGCAAGATTTTCCACAAGATTCCCAGAGACAGGAAAATCCTCTGGCTGGCTAACTGGAAGC
ATGTAGGAGAATCCAAGCGAGGTCAACAGAGAAGGCAGGAATGTGTGGCAGATTTAGTGAAAGCTAGAGATATGG
CAGCGAAAGGATGTAAACAGTGCCTGCTGAATGATTTCCAAAGAGAAAAAAAGTTTGCCAGAAGTTTGTCAAGTC
AACCAATGTAGAAAGCTTTGCTTATGGTAATAAAAATGGCTCATACTTATATAGCACTTACTTTGTTTGCAAGTA
CTGCTGTAAATAAATGCTTTATGCAAACC

FIGURE 1319

MEAMAASTSLPDPGDFDRNVPRICGVCGDRATGFHFNAMTCEGCKGFFRRSMKRKALFTCPFNGDCRITKDNRRH
CQACRLKRCVDIGMMKEFILTDEEVQRKREMILKRKEEEALKDSLRPKLSEEQQRIIAILLDAHHKTYDPTYSDF
CQFRPPVRVNDGGGSHPSRPNSRHTPSFSGDSSSSCSDHCITSSDMMDSSSFSNLDLSEEDSDDPSVTLELSQLS
MLPHLADLVSYSIQKVIGFAKMIPGFRDLTSEDQIVLLKSSAIEVIMLRSNESFTMDDMSWTCGNQDYKYRVSDV
TKAGHSLELIEPLIKFQVGLKKLNLHEEEHVLLMAICIVSPDRPGVQDAALIEAIQDRLSNTLQTYIRCRHPPPG
SHLLYAKMIQKLADLRSLNEEHSKQYRCLSFQPECSMKLTPLVLEVFGNEIS

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FIGURE 1320A

GGAACAGCTTGTCCACCCGCCGGCCGGACCAGAAGCCTTTGGGTCTGAAGTGTCTGTGAGACCTCACAGAAGAGC
ACCCCTGGGCTCCACTTACCTGCCCCCTGCTCCTTCAGGGATGGAGGCAATGGCGGCCAGCACTTCCCTGCCTGA
CCCTGGAGACTTTGACCGGAACGTGCCCCGGATCTGTGGGGTGTGTGGAGACCGAGCCACTGGCTTTCACTTCAA
TGCTATGACCTGTGAAGGCTGCAAAGGCTTCTTCAGGCGAAGCATGAAGCGGAAGGCACTATTCACCTGCCCCTT
CAACGGGGACTGCCGCATCACCAAGGACAACCGACGCCACTGCCAGGCCTGCCGGCTCAAACGCTGTGTGGACAT
CGGCATGATGAAGGAGTTCATTCTGACAGATGAGGAAGTGCAGAGGAAGCGGGAGATGATCCTGAAGCGGAAGGA
GGAGGAGGCCTTGAAGGACAGTCTGCGGCCCAAGCTGTCTGAGGAGCAGCAGCGCATCATTGCCATACTGCTGGA
CGCCCACCATAAGACCTACGACCCCACCTACTCCGACTTCTGCCAGTTCCGGCCTCCAGTTCGTGTGAATGATGG
TGGAGGGAGCCATCCTTCCAGGCCCAACTCCAGACACACTCCCAGCTTCTCTGGGGACTCCTCCTCCTCCTGCTC
AGATCACTGTATCACCTCTTCAGACATGATGGACTCGTCCAGCTTCTCCAATCTGGATCTGAGTGAAGAAGATTC
AGATGACCCTTCTGTGACCCTAGAGCTGTCCCAGCTCTCCATGCTGCCCCACCTGGCTGACCTGGTCAGTTACAG
CATCCAAAAGGTCATTGGCTTTGCTAAGATGATACCAGGATTCAGAGACCTCACCTCTGAGGACCAGATCGTACT
GCTGAAGTCAAGTGCCATTGAGGTCATCATGTTGCGCTCCAATGAGTCCTTCACCATGGACGACATGTCCTGGAC
CTGTGGCAACCAAGACTACAAGTACCGCGTCAGTGACGTGACCAAAGCCGGACACAGCCTGGAGCTGATTGAGCC
CCTCATCAAGTTCCAGGTGGGACTGAAGAAGCTGAACTTGCATGAGGAGGAGCATGTCCTGCTCATGGCCATCTG
CATCGTCTCCCCAGATCGTCCTGGGGTGCAGGACGCCGCGCTGATTGAGGCCATCCAGGACCGCCTGTCCAACAC
ACTGCAGACGTACATCCGCTGCCGCCACCCGCCCCCGGGCAGCCACCTGCTCTATGCCAAGATGATCCAGAAGCT
AGCCGACCTGCGCAGCCTCAATGAGGAGCACTCCAAGCAGTACCGCTGCCTCTCCTTCCAGCCTGAGTGCAGCAT
GAAGCTAACGCCCCTTGTGCTCGAAGTGTTTGGCAATGAGATCTCCTGACTAGGACAGCCTGTGCGGTGCCTGGG
TGGGGCTGCTCCTCCAGGGCCACGTGCCAGGCCCGGGGCTGGCGGCTACTCAGCAGCCCTCCTCACCCGTCTGGG
GTTCAGCCCCTCCTCTGCCACCTCCCCTATCCACCCAGCCCATTCTCTCTCCTGTCCAACCTAACCCCTTTCCTG
CGGGCTTTTCCCCGGTCCCTTGAGACCTCAGCCATGAGGAGTTGCTGTTTGTTTGACAAAGAAACCCAAGTGGGG
GCAGAGGGCAGAGGCTGGAGGCAGGCCTTGCCCAGAGATGCCTCCACCGCTGCCTAAGTGGCTGCTGACTGATGT
TGAGGGAACAGACAGGAGAAATGCATCCATTCCTCAGGGACAGAGACACCTGCACCTCCCCCCACTGCAGGCCCC
GCTTGTCCAGCGCCTAGTGGGGTCTCCCTCTCCTGCCTTACTCACGATAAATAATCGGCCCACAGCTCCCACCCC
ACCCCCTTCAGTGCCCACCAACATCCCATTGCCCTGGTTATATTCTCACGGGCAGTAGCTGTGGTGAGGTGGGTT
TTCTTCCCATCACTGGAGCACCAGGCACGAACCCACCTGCTGAGAGACCCAAGGAGGAAAAACAGACAAAAACAG
CCTCACAGAAGAATATGACAGCTGTCCCTGTCACCAAGCTCACAGTTCCTCGCCCTGGGTCTAAGGGGTTGGTTG
AGGTGGAAGCCCTCCTTCCACGGATCCATGTAGCAGGACTGAATTGTCCCCAGTTTGCAGAAAAGCACCTGCCGA
CCTCGTCCTCCCCCTGCCAGTGCCTTACCTCCTGCCCAGGAGAGCCAGCCCTCCCTGTCCTCCTCGGATCACCGA
GAGTAGCCGAGAGCCTGCTCCCCCACCCCCTCCCCAGGGGAGAGGGTCTGGAGAAGCAGTGAGCCGCATCTTCTC
CATCTGGCAGGGTGGGATGGAGGAGAAGAATTTTCAGACCCCAGCGGCTGAGTCATGATCTCCCTGCCGCCTCAA
TGTGGTTGCAAGGCCGCTGTTCACCACAGGGCTAAGAGCTAGGCTGCCGCACCCCAGAGTGTGGGAAGGGAGAGC
GGGGCAGTCTCGGGTGGCTAGTCAGAGAGAGTGTTTGGGGGTTCCGTGATGTAGGGTAAGGTGCCTTCTTATTCT
CACTCCACCACCCAAAAGTCAAAAGGTGCCTGTGAGGCAGGGGCGGAGTGATACAACTTCAAGTGCATGCTCTCT
GCAGGTCGAGCCCAGCCCAGCTGGTGGGAAGCGTCTGTCCGTTTACTCCAAGGTGGGTCTTTGTGAGAGTGAGCT
GTAGGTGTGCGGGACCGGTACAGAAAGGCGTTCTTCGAGGTGGATCACAGAGGCTTCTTCAGATCAATGCTTGAG
TTTGGAATCGGCCGCATTCCCTGAGTCACCAGGAATGTTAAAGTCAGTGGGAACGTGACTGCCCCAACTCCTGGA
AGCTGTGTCCTTGCACCTGCATCCGTAGTTCCCTGAAAACCCAGAGAGGAATCAGACTTCACACTGCAAGAGCCT
TGGTGTCCACCTGGCCCCATGTCTCTCAGAATTCTTCAGGTGGAAAAACATCTGAAAGCCACGTTCCTTACTGCA
GAATAGCATATATATCGCTTAATCTTAAATTTATTAGATATGAGTTGTTTTCAGACTCAGACTCCATTTGTATTA
TAGTCTAATATACAGGGTAGCAGGTACCACTGATTTGGAGATATTTATGGGGGGAGAACTTACATTGTGAAACTT
CTGTACATTAATTATTATTGCTGTTGTTATTTTACAAGGGTCTAGGGAGAGACCCTTGTTTGATTTTAGCTGCAG
AACTGTATTGGTCCAGCTTGCTCTTCAGTGGGAGAAAAACACTTGTAAGTTGCTAAACGAGTCAATCCCCTCATT
CAGGAAAACTGACAGAGGAGGGCGTGACTCACCCAAGCCATATATAACTAGCTAGAAGTGGGCCAGGACAGGCCG
GGCGCGGTGGCTCACGCCTGTAATCCCAGCAGTTTGGGAGGTCGAGGTAGGTGGATCACCTGAGGTCGGGAGTTC
GAGACCAACCTGACCAACATGGAGAAACCCTGTCTCTATTAAAAATACAAAAAAAAAAAAAAAAAAAAATAGCCG
GGCATGGTGGCGCAAGCCTGTAATCCCAGCTACTCAGGAGGCTGAGGCAGAAGAATTGAACCCAGGAGGTGGAGG

FIGURE 1320B

TTGCAGTGAGCTGAGATCGTGCCGTTACTCTCCAACCTGGACAACAAGAGCGAAACTCCGTCTTAGAAGTGGACC
AGGACAGGACCAGATTTTGGAGTCATGGTCCGGTGTCCTTTTCACTACACCATGTTTGAGCTCAGACCCCCACTC
TCATTCCCCAGGTGGCTGACCCAGTCCCTGGGGGAAGCCCTGGATTTCAGAAAGAGCCAAGTCTGGATCTGGGAC
CCTTTCCTTCCTTCCCTGGCTTGTAACTCCACCAAGCCCATCAGAAGGAGAAGGAAGGAGACTCACCTCTGCCTC
AATGTGAATCAGACCCTACCCCACCACGATGTGCCCTGGCTGCTGGGCTCTCCACCTCAGGCCTTGGATAATGCT
GTTGCCTCATCTATAACATGCATTTGTCTTTGTAATGTCACCACCTTCCCAGCTCTCCCTCTGGCCCTGCTTCTT
CGGGGAACTCCTGAAATATCAGTTACTCAGCCCTGGGCCCCACCACCTAGGCCACTCCTCCAAAGGAAGTCTAGG
AGCTGGGAGGAAAAGAAAAGAGGGGAAAATGAGTTTTTATGGGGCTGAACGGGGAGAAAAGGTCATCATCGATTC
TACTTTAGAATGAGAGTGTGAAATAGACATTTGTAAATGTAAAACTTTTAAGGTATATCATTATAACTGAAGGAG
AAGGTGCCCCAAAATGCAAGATTTTCCACAAGATTCCCAGAGACAGGAAAATCCTCTGGCTGGCTAACTGGAAGC
ATGTAGGAGAATCCAAGCGAGGTCAACAGAGAAGGCAGGAATGTGTGGCAGATTTAGTGAAAGCTAGAGATATGG
CAGCGAAAGGATGTAAACAGTGCCTGCTGAATGATTTCCAAAGAGAAAAAAAAGTTTGCCAGAAGTTTGTCAAGTC
AACCAATGTAGAAAGCTTTGCTTATGGTAATAAAAATGGCTCATACTTATATAGCACTTACTTTGTTTGCAAGTA
CTGCTGTAAATAAATGCTTTATGCAAACC

FIGURE 1321

MEAMAASTSLPDPGDFDRNVPRICGVCGDRATGFHFNAMTCEGCKGFFRRSMKRKALFTCPFNGDCRITKDNRRH
CQACRLKRCVDIGMMKEFILTDEEVQRKREMILKRKEEEALKDSLRPKLSEEQQRIIAILLDAHHKTYDPTYSDF
CQFRPPVRVNDGGGSHPSRPNSRHTPSFSGDSSSSCSDHCITSSDMMDSSSFSNLDLSEEDSDDPSVTLELSQLS
MLPHLADLVSYSIQKVIGFAKMIPGFRDLTSEDQIVLLKSSAIEVIMLRSNESFTMDDMSWTCGNQDYKYRVSDV
TKAGHSLELIEPLIKFQVGLKKLNLHEEEHVLLMAICIVSPDRPGVQDAALIEAIQDRLSNTLQTYIRCRHPPPG
SHLLYAKMIQKLADLRSLNEEHSKQYRCLSFQPECSMKLTPLVLEVFGNEIS

FIGURE 1322A

GGAACAGCTTGTCCACCCGCCGGCCGGACCAGAAGCCTTTGGGTCTGAAGTGTCTGTGAGACCTCACAGAAGAGC
ACCCCTGGGCTCCACTTACCTGCCCCCTGCTCCTTCAGGGATGGAGGCAATGGCGGCCAGCACTTCCCTGCCTGA
CCCTGGAGACTTTGACCGGAACGTGCCCCGGATCTGTGGGGTGTGTGGAGACCGAGCCACTGGCTTTCACTTCAA
TGCTATGACCTGTGAAGGCTGCAAAGGCTTCTTCAGGCGAAGCATGAAGCGGAAGGCACTATTCACCTGCCCCTT
CAACGGGGACTGCCGCATCACCAAGGACAACCGACGCCACTGCCAGGCCTGCCGGCTCAAACGCTGTGTGGACAT
CGGCATGATGAAGGAGTTCATTCTGACAGATGAGGAAGTGCAGAGGAAGCGGGAGATGATCCTGAAGCGGAAGGA
GGAGGAGGCCTTGAAGGACAGTCTGCGGCCCAAGCTGTCTGAGGAGCAGCAGCGCATCATTGCCATACTGCTGGA
CGCCCACCATAAGACCTACGACCCCACCTACTCCGACTTCTGCCAGTTCCGGCCTCCAGTTCGTGTGAATGATGG
TGGAGGGAGCCATCCTTCCAGGCCCAACTCCAGACACACTCCCAGCTTCTCTGGGGACTCCTCCTCCTCCTGCTC
AGATCACTGTATCACCTCTTCAGACATGATGGACTCGTCCAGCTTCTCCAATCTGGATCTGAGTGAAGAAGATTC
AGATGACCCTTCTGTGACCCTAGAGCTGTCCCAGCTCTCCATGCTGCCCCACCTGGCTGACCTGGTCAGTTACAG
CATCCAAAAGGTCATTGGCTTTGCTAAGATGATACCAGGATTCAGAGACCTCACCTCTGAGGACCAGATCGTACT
GCTGAAGTCAAGTGCCATTGAGGTCATCATGTTGCGCTCCAATGAGTCCTTCACCATGGACGACATGTCCTGGAC
CTGTGGCAACCAAGACTACAAGTACCGCGTCAGTGACGTGACCAAAGCCGGACACAGCCTGGAGCTGATTGAGCC
CCTCATCAAGTTCCAGGTGGGACTGAAGAAGCTGAACTTGCATGAGGAGGAGCATGTCCTGCTCATGGCCATCTG
CATCGTCTCCCCAGATCGTCCTGGGGTGCAGGACGCCGCGCTGATTGAGGCCATCCAGGACCGCCTGTCCAACAC
ACTGCAGACGTACATCCGCTGCCGCCACCCGCCCCCGGGCAGCCACCTGCTCTATGCCAAGATGATCCAGAAGCT
AGCCGACCTGCGCAGCCTCAATGAGGAGCACTCCAAGCAGTACCGCTGCCTCTCCTTCCAGCCTGAGTGCAGCAT
GAAGCTAACGCCCCTTGTGCTCGAAGTGTTTGGCAATGAGATCTCCTGACTAGGACAGCCTGTGCGGTGCCTGGG
TGGGGCTGCTCCTCCAGGGCCACGTGCCAGGCCCGGGGCTGGCGGCTACTCAGCAGCCCTCCTCACCCGTCTGGG
GTTCAGCCCCTCCTCTGCCACCTCCCCTATCCACCCAGCCCATTCTCTCTCCTGTCCAACCTAACCCCTTTCCTG
CGGGCTTTTCCCCGGTCCCTTGAGACCTCAGCCATGAGGAGTTGCTGTTTGTTTGACAAAGAAACCCAAGTGGGG
GCAGAGGGCAGAGGCTGGAGGCAGGCCTTGCCCAGAGATGCCTCCACCGCTGCCTAAGTGGCTGCTGACTGATGT
TGAGGGAACAGACAGGAGAAATGCATCCATTCCTCAGGGACAGAGACACCTGCACCTCCCCCCACTGCAGGCCCC
GCTTGTCCAGCGCCTAGTGGGGTCTCCCTCTCCTGCCTTACTCACGATAAATAATCGGCCCACAGCTCCCACCCC
ACCCCCTTCAGTGCCCACCAACATCCCATTGCCCTGGTTATATTCTCACGGGCAGTAGCTGTGGTGAGGTGGGTT
TTCTTCCCATCACTGGAGCACCAGGCACGAACCCACCTGCTGAGAGACCCAAGGAGGAAAAACAGACAAAAACAG
CCTCACAGAAGAATATGACAGCTGTCCCTGTCACCAAGCTCACAGTTCCTCGCCCTGGGTCTAAGGGGTTGGTTG
AGGTGGAAGCCCTCCTTCCACGGATCCATGTAGCAGGACTGAATTGTCCCCAGTTTGCAGAAAAGCACCTGCCGA
CCTCGTCCTCCCCCTGCCAGTGCCTTACCTCCTGCCCAGGAGAGCCAGCCCTCCCTGTCCTCCTCGGATCACCGA
GAGTAGCCGAGAGCCTGCTCCCCCACCCCCTCCCCAGGGGAGAGGGTCTGGAGAAGCAGTGAGCCGCATCTTCTC
CATCTGGCAGGGTGGGATGGAGGAGAAGAATTTTCAGACCCCAGCGGCTGAGTCATGATCTCCCTGCCGCCTCAA
TGTGGTTGCAAGGCCGCTGTTCACCACAGGGCTAAGAGCTAGGCTGCCGCACCCCAGAGTGTGGGAAGGGAGAGC
GGGGCAGTCTCGGGTGGCTAGTCAGAGAGAGTGTTTGGGGGTTCCGTGATGTAGGGTAAGGTGCCTTCTTATTCT
CACTCCACCACCCAAAAGTCAAAAGGTGCCTGTGAGGCAGGGGCGGAGTGATACAACTTCAAGTGCATGCTCTCT
GCAGGTCGAGCCCAGCCCAGCTGGTGGGAAGCGTCTGTCCGTTTACTCCAAGGTGGGTCTTTGTGAGAGTGAGCT
GTAGGTGTGCGGGACCGGTACAGAAAGGCGTTCTTCGAGGTGGATCACAGAGGCTTCTTCAGATCAATGCTTGAG
TTTGGAATCGGCCGCATTCCCTGAGTCACCAGGAATGTTAAAGTCAGTGGGAACGTGACTGCCCCAACTCCTGGA
AGCTGTGTCCTTGCACCTGCATCCGTAGTTCCCTGAAAACCCAGAGAGGAATCAGACTTCACACTGCAAGAGCCT
TGGTGTCCACCTGGCCCCATGTCTCTCAGAATTCTTCAGGTGGAAAAACATCTGAAAGCCACGTTCCTTACTGCA
GAATAGCATATATATCGCTTAATCTTAAATTTATTAGATATGAGTTGTTTTCAGACTCAGACTCCATTTGTATTA
TAGTCTAATATACAGGGTAGCAGGTACCACTGATTTGGAGATATTTATGGGGGGAGAACTTACATTGTGAAACTT
CTGTACATTAATTATTATTGCTGTTGTTATTTTACAAGGGTCTAGGGAGAGACCCTTGTTTGATTTTAGCTGCAG
AACTGTATTGGTCCAGCTTGCTCTTCAGTGGGAGAAAAACACTTGTAAGTTGCTAAACGAGTCAATCCCCTCATT
CAGGAAAACTGACAGAGGAGGGCGTGACTCACCCAAGCCATATATAACTAGCTAGAAGTGGGCCAGGACAGGCCG
GGCGCGGTGGCTCACGCCTGTAATCCCAGCAGTTTGGGAGGTCGAGGTAGGTGGATCACCTGAGGTCGGGAGTTC
GAGACCAACCTGACCAACATGGAGAAACCCTGTCTCTATTAAAAATACAAAAAAAAAAAAAAAAAAAAATAGCCG
GGCATGGTGGCGCAAGCCTGTAATCCCAGCTACTCAGGAGGCTGAGGCAGAAGAATTGAACCCAGGAGGTGGAGG

FIGURE 1322B

TTGCAGTGAGCTGAGATCGTGCCGTTACTCTCCAACCTGGACAACAAGAGCGAAACTCCGTCTTAGAAGTGGACC
AGGACAGGACCAGATTTTGGAGTCATGGTCCGGTGTCCTTTTCACTACACCATGTTTGAGCTCAGACCCCCACTC
TCATTCCCCAGGTGGCTGACCCAGTCCCTGGGGGGAAGCCCTGGATTTCAGAAAGAGCCAAGTCTGGATCTGGGAC
CCTTTCCTTCCTTCCCTGGCTTGTAACTCCACCAAGCCCATCAGAAGGAGAAGGAAGGAGACTCACCTCTGCCTC
AATGTGAATCAGACCCTACCCCACCACGATGTGCCCTGGCTGCTGGGCTCTCCACCTCAGGCCTTGGATAATGCT
GTTGCCTCATCTATAACATGCATTTGTCTTTGTAATGTCACCACCTTCCCAGCTCTCCCTCTGGCCCTGCTTCTT
CGGGGAACTCCTGAAATATCAGTTACTCAGCCCTGGGCCCCACCACCTAGGCCACTCCTCCAAAGGAAGTCTAGG
AGCTGGGAGGAAAAGAAAAGAGGGGAAAATGAGTTTTTATGGGGCTGAACGGGGAGAAAAGGTCATCATCGATTC
TACTTTAGAATGAGAGTGTGAAATAGACATTTGTAAATGTAAAACTTTTAAGGTATATCATTATAACTGAAGGAG
AAGGTGCCCCAAAATGCAAGATTTTCCACAAGATTCCCAGAGACAGGAAAATCCTCTGGCTGGCTAACTGGAAGC
ATGTAGGAGAATCCAAGCGAGGTCAACAGAGAAGGCAGGAATGTGTGGCAGATTTAGTGAAAGCTAGAGATATGG
CAGCGAAAGGATGTAAACAGTGCCTGCTGAATGATTTCCAAAGAGAAAAAAAGTTTGCCAGAAGTTTGTCAAGTC
AACCAATGTAGAAAGCTTTGCTTATGGTAATAAAAATGGCTCATACTTATATAGCACTTACTTTGTTTGCAAGTA
CTGCTGTAAATAAATGCTTTATGCAAACC

FIGURE 1323

MEAMAASTSLPDPGDFDRNVPRICGVCGDRATGFHFNAMTCEGCKGFFRRSMKRKALFTCPFNGDCRITKDNRRH
CQACRLKRCVDIGMMKEFILTDEEVQRKREMILKRKEEEALKDSLRPKLSEEQQRIIAILLDAHHKTYDPTYSDF
CQFRPPVRVNDGGGSHPSRPNSRHTPSFSGDSSSSCSDHCITSSDMMDSSSFSNLDLSEEDSDDPSVTLELSQLS
MLPHLADLVSYSIQKVIGFAKMIPGFRDLTSEDQIVLLKSSAIEVIMLRSNESFTMDDMSWTCGNQDYKYRVSDV
TKAGHSLELIEPLIKFQVGLKKLNLHEEEHVLLMAICIVSPDRPGVQDAALIEAIQDRLSNTLQTYIRCRHPPPG
SHLLYAKMIQKLADLRSLNEEHSKQYRCLSFQPECSMKLTPLVLEVFGNEIS

FIGURE 1324

ACTAAGACCGCAAGGCATTCATTTCCTCCTACGGTGGATGCGGACGCCGGGAGGAGGAGAGCCCCAGAGAGAGGA
GCTGGGAGCGGAGGCGCAGGCAATGCTCAGCCCTGGATGTAGCTGAGAGGCTGGGAGAAGAGACGACCGCTGGAG
ACCGAGCGGCGTGGGGAAGACCTAGGGGGGTGGGTGGGGGAAGCAGACAGGAGAACACTCGAAATCAAGCGCTTT
ACAGATTATTTTATTTTGTATAGAGAACACGTAGCGACTCCGAAGATCAGCCCCA**ATG**AACATGTCAGTGTTGAC
TTTACAAGAATATGAATTCGAAAAGCAGTTCAACGAGAATGAAGCCATCCAATGGATGCAGGAAAACTGGAAGAA
ATCTTTCCTGTTTTCTGCTCTGTATGCTGCCTTTATATTCGGTGGTCGGCACCTAATGAATAAACGAGCAAAGTT
TGAACTGAGGAAGCCATTAGTGCTCTGGTCTCTGACCCTTGCAGTCTTCAGTATATTCGGTGCTCTTCGAACTGG
TGCTTATATGGTGTACATTTTGATGACCAAAGGCCTGAAGCAGTCAGTTTGTGACCAGGGTTTTTACAATGGACC
TGTCAGCAAATTCTGGGCTTATGCATTTGTGCTAAGCAAAGCACCCGAACTAGGAGATACAATATTCATTATTCT
GAGGAAGCAGAAGCTGATCTTCCTGCACTGGTATCACCACATCACTGTGCTCCTGTACTCTTGGTACTCCTACAA
AGACATGGTTGCCGGGGGAGGTTGGTTCATGACTATGAACTATGGCGTGCACGCCGTGATGTACTCTTACTATGC
CTTGCGGGCGGCAGGTTTCCGAGTCTCCCGGAAGTTTGCCATGTTCATCACCTTGTCCCAGATCACTCAGATGCT
GATGGGCTGTGTGGTTAACTACCTGGTCTTCTGCTGGATGCAGCATGACCAGTGTCACTCTCACTTTCAGAACAT
CTTCTGGTCCTCACTCATGTACCTCAGCTACCTTGTGCTCTTCTGCCATTTCTTCTTTGAGGCCTACATCGGCAA
AATGAGGAAAACAACGAAAGCTGAA**TAG**TGTTGGAACTGAGGAGGAAGCCATAGCTCAGGGTCATCAAGAAAAAT
AATAGACAAAAGAAAATGGCACAAGGAATCACACGTGGTGCAGCTAAAACAAAACAAAACATGAGCAAACACAAA
ACCCAAGGCAGCTTAGGGATAATTAGGTTGATTTAACCCAGTAAGTTTATGATCCTTTTAGGGTGAGGACTCACT
GAGTGCACCTCCATCTCCAAGCACTGCTGCTGGAAGACCCCATTCCCTCTTTATCTATCAACTCTAGGACAAGGG
AGAACAAAAGCAAGCCAGAAGCAGAGGAGACTAATCAAAGGCAAACAAAGGCTATTAACACATAGGAAAATATGT
ATTTACTAAGTGTCACATTTCTCTAAGATGAAAGATTTTTACTCTAGAAACTGTGCGAGCACAACACACACAATC
CTTTCTAACTTTATGGACACTAAACTGGAGCCAATAGAAAAGACAAAAATGAAAGAGACACAGGGTGTATATCTA
GAACGATAATGCTTTTGCAGAAACTAAAGCCTTTTTAAGAAATGCCAGCTGCTGTAGACCCCATGAGAAAAGATG
TCTTAATCATCCTTATGAAAACAGATGTAAACAACTATATTTCAACTAACTTCATCTTCACTGCATAGCCTCAGG
CTAGTGAGTTTGCCAAAACCAAAGGGGGTGAATACTTCCCCAAGATTCTTCCTGGGAGGATGGAAACAGTGCAGC
CCAGGTCCCATGGGGGCAGCTCCATCCCAGAGCATTTCTGATAGTTGAACTGTAATTTCTACTCTTAAGTGAGAT
ATGAAGTATTATCCTTTTGTTCAGTTGCCCCGGGCTTTTGAACAGAAGAGTAAATACAGAATTGAAAAAGATAAA
CACTCAACCAAACAATGTGAAAACGGGTTCTGTAGTATTTGTAAAAAGGCCCGGCCCAGGACCACTGTGAGCTGG
AAAAGGGAGAAAGGCAGTGGGAAAAGAGGTGAGCCGAAGATCAATTCGACAGACAGACGGTGTGTATGCCCCTCC
CTGTTTGACTTCACACACACTCATAACTTTCCAAATGAAACCCCACAGTATAGCGCATATTTTCGATATTTTTGT
GAATTCCAAAAGGAAATCACAGGGCTGTTCGAAATATTGGGGGAACACTGTGTTTCTGCATCATCTGCATTTGCT
CCCCAAGCAATGTAGAGGTGTTTAAAGGGCCCTCTGCTGGCTGAGTGGCAATACTACAACAAACTTCAAGGCAAG
TTTGGCTGAAAACAGTTGACAACAAAGGGCCCCCATACACTTATCCCTCAAATTTTAAGTGATATGAAATACTTG
TCATGTCTTTGGCCAAATCAGAAGATATTCATCCTGCTTCAAGTCAGCTTCAGAAATGTTTTAAAAGGGACTTTA
GCTCTGGAACTCAAAATCAATTTATTAAGAGCCATATTCTTTAAAAAAAAAAGCTGGATAATATTATCTGTAATA
TTTCAGTCCTTTACAAGCCAAATACATGTGTCAATGTTTCTAGTATTTCAAAGAAGCAATTATGTAAAGTTGTTC
AATGTGACATAATAGTATTATAATTGGTTAAGTAGCTTAATGATTAGGCAAACTAGATGAAAAGATTAGGGGCTT
CCACACTGCATAGATCACACGCACATAGCCACGCATACACACACAGACACACAGATGTGGGGTACACTGAATTTC
AAAGCCCAAATGAATAGAAACACATTTTCTGGCTAGCAGAAAAAAACAAAACAAAACTGTTGTTTCTCTTTCTTG
CTTTGAGAGTGTACAGTAAAAGGGATTTTTTCGAATTATTTTTATATTATTTTAGCTTTAATTGTGCTGTCGTTC
ATGAAACAGAGCTGCTCTGCTTTTCTGTCAGAGATGGCAAGGGCTTTTTCAGCATCTCGTTTATGTGTGGAATTT
AAAAAGAATAAAGTTTTATTCCATTCTGAAAAAAAAAAAAAAAA

FIGURE 1325

MNMSVLTLQEYEFEKQFNENEAIQWMQENWKKSFLFSALYAAFIFGGRHLMNKRAKFELRKPLVLWSLTLAVFSI
FGALRTGAYMVYILMTKGLKQSVCDQGFYNGPVSKFWAYAFVLSKAPELGDTIFIILRKQKLIFLHWYHHITVLL
YSWYSYKDMVAGGGWFMTMNYGVHAVMYSYYALRAAGFRVSRKFAMFITLSQITQMLMGCVVNYLVFCWMQHDQC
HSHFQNIFWSSLMYLSYLVLFCHFFFEAYIGKMRKTTKAE

FIGURE 1326

CCGGAGCGGGGATCACCTTAACTTGACTGTGGTCCCCCAGCCCTCCAAGAAATGCCCATAAACCAAGGAGGAGAG
GGTAAAAAAATAGAAGAATACATGGAATTGGGGAGAAGAATGGGAAAAAAGATGGGAGTGACTGCATAATGTCAGC
ATTTTGTGCTTTTGGCTCAGCATTTGGATTGGATGGAGGATTTTCATCCTGAAACCAGCCCTCCGTCGCCACCGA
CCATGGAATAATTGTCTTCCACGAAACTCTTCCCTGGTGCCAAAAAGGGTTTTATGTATATATTTGAGAGCTCCA
CATCCCTGGATCTGAATCCTCCACTTCCCACTGGAACCATGCCCCTCCCAGTCCCGTTTCTCCCCTCTAGGGGATT
GGAGGCTGAGAGACCCCAGGAAGAAGAGGATGGTGAGCAGGGCCCCCCTCAGGATGAGGAAGGCTGGCCCCCTCC
AAACTCCACCACTCGGCCTTGGCGATCTGCTCCTCCATCCCCTCCTCCTCCAGGGACCCGCCACACAGCCCTGGG
ACCCCGCTCGGCCTCCCTGCTCTCCCTGCAGACTGAACTCCTTCTGGACCTGGTGGCTGAAGCCCAGTCCCGCCG
CCTGGAGGAGCAGAGGGCCACCTTCTACACCCCCCAAAACCCCTCAAGCCTAGCCCCTGCCCCACTCCGTCCTCT
CGAGGACAGAGAACAGCTTTACAGCACTATCCTCAGTCACCAGTGCCAGCGGATGGAAGCCCAGCGGTCAGAGCC
TCCCCTCCCTCCAGGGGGGCAAGAGCTCCTGGAGTTGCTGCTGAGAGTTCAGGGTGGGGGTCGAATGGAGGAGCA
AAGGTCCCGGCCCCCCACACACACCTGCTGAGACTTGAGCCCCAACCAGCCCTTCCTTGCCACTGGTCTCAAAGC
TGGGCAGCCCATTGCATGCCCTCAACTCTTGCTTGGCAGGGGTACCAGAGACTGAAAGACACGGCACAAATCTCA
ATATTCATCTCCCACATCACCTTCCCTGGGAACTGGACAGGGTGAAAGTCCTCAAACTCTGGGAACAGGCGAGAT
GGAACAGGGATTTAACTCCCCGCCCACAGGTCCATGGGAGCTTGAGGCAGTAAGGGGGATCCCAGGCACCCATCT
CAAGGAGTGGCTGGGAGTCTTTTCCCTAACTTGTGGGGACACCACCAGTTGTCAAGCTACTAGGCAGTAGGGTCT
GAGGGCTCAGGCCTCCACCTGAGAGGTTATAACCTGAGAGACAGCTCTACCCTTCCTCCCAGTAAGAAGGGAAGG
TGGGTGGGCACCTGAGAGATTAAGACTATTCTCCCAGTCCCACTACCAGCACCCCCGATCCCTGAGACTGAGGGG
TTTACGGGCTGTGAATGGACCTTCAGCCCTGCCCACCCTCCCTCCCCACTGCTGCTGAGTCTGTCTGATGTTTTG
GTTGTGTGAATAAATATAATTCCCCTCTGGAAAAAAAAAAAAAAAAA

FIGURE 1327

MEAERPQEEEDGEQGPPQDEEGWPPPNSTTRPWRSAPPSPPPPGTRHTALGPRSASLLSLQTELLLDLVAEAQSR
RLEEQRATFYTPQNPSSLAPAPLRPLEDREQLYSTILSHQCQRMEAQRSEPPLPPGGQELLELLLRVQGGGRMEE
QRSRPPTHTC

FIGURE 1328

GAATTCCGGGCCATGAGCTGCCCCGTGCCCGCCTGCTGCGCGCTGCTGCTAGTCCTGGGGCTCTGCCGGGCGCGT
CCCCGGAACGCACTGCTGCTCCTCGCGGATGACGGAGGCTTTGAGAGTGGCGCGTACAACAACAGCGCCATCGCC
ACCCCGCACCTGGACGCCTTGGCCCGCCGCAGCCTCCTCTTTCGCAATGCCTTCACCTCGGTCAGCAGCTGCTCT
CCCAGCCGCGCCAGCCTCCTCACTGGCCTGCCCCAGCATCAGAATGGGATGTACGGGCTGCACCAGGACGTGCAC
CACTTCAACTCCTTCGACAAGGTGCGGAGCCTGCCGCTGCTGCTCAGCCAAGCTGGTGTGCGCACAGGCATCATC
GGGAAGAAGCACGTGGGGCCGGAGACCGTGTACCCGTTTGACTTTGCGTACACGGAGGAGAATGGCTCCGTCCTC
CAGGTGGGGCGGAACATCACTAGAATTAAGCTGCTCGTCCGGAAATTCCTGCAGACTCAGGATGACCGGCCTTTC
TTCCTCTACGTCGCCTTCCACGACCCCCACCGCTGTGGGCACTCCCAGCCCCAGTACGGAACCTTCTGTGAGAAG
TTTGGCAACGGAGAGAGCGGCATGGGTCGTATCCCAGACTGGACCCCCCAGGCCTACGACCCACTGGACGTGCTG
GTGCCTTACTTCGTCCCCAACACCCCGGCAGCCCGAGCCGACCTGGCCGCTCAGTACACCACCGTCGGCCGCATG
GACCAAGGAGTTGGACTGGTGCTCCAGGAGCTGCGTGACGCCGGTGTCCTGAACGACACACTGGTGATCTTCACG
TCCGACAACGGGATCCCCTTCCCCAGCGGCAGGACCAACCTGTACTGGCCGGGCACTGCTGAACCCTTACTGGTG
TCATCCCCGGAGCACCCAAAACGCTGGGGCCAAGTCAGCGAGGCCTACGTGAGCCTCCTAGACCTCACGCCCACC
ATCTTGGATTGGTTCTCGATCCCGTACCCCAGCTACGCCATCTTTGGCTCGAAGACCATCCACCTCACTGGCCGG
TCCCTCCTGCCGGCGCTGGAGGCCGAGCCCCTCTGGGCCACCGTCTTTGGCAGCCAGAGCCACCACGAGGTCACC
ATGTCCTACCCCATGCGCTCCGTGCAGCACCGGCACTTCCGCCTCGTGCACAACCTCAACTTCAAGATGCCCTTT
CCCATCGACCAGGACTTCTACGTCTCACCCACCTTCCAGGACCTCCTGAACCGCACCACAGCTGGTCAGCCCACG
GGCTGGTACAAGGACCTCCGTCATTACTACTACCGGGCGCGCTGGGAGCTCTACGACCGGAGCCGGGACCCCCAC
GAGACCCAGAACCTGGCCACCGACCCGCGCTTTGCTCAGCTTCTGGAGATGCTTCGGGACCAGCTGGCCAAGTGG
CAGTGGGAGACCCACGACCCCTGGGTGTGCGCCCCCGACGGCGTCCTGGAGGAGAAGCTCTCTCCCCAGTGCCAG
CCCCTCCACAATGAGCTGTGACCATCCCAGGAGGCCTGTGCACACATCCCAGGCATGTCCCAGACACATCCCACA
CGTGTCCGTGTGGCCGGCCAGCCTGGGGAGTAGTGGCAACAGCCCTTCCGTCCACACTCCCATCCAAGGAGGGTT
CTTCCTTCCTGTGGGGTCACTCTTGCCATTGCCTGGAGGGGGACCAGAGCATGTGACCAGAGCATGTGCCCAGCC
CCTCCACCACCAGGGGCACTGCCGTCATGGCAGGGGACACAGTTGTCCTTGTGTCTGAACCATGTCCCAGCACGG
GAATTCTAGACATACGTGGTCTGCGGACAGGGCAGCGCCCCCAGCCCATGACAAGGGAGTCTTGTTTTCTGGCTT
GGTTTGGGGACCTGCAAATGGGAGGCCTGAGGCCCTCTTCAGGCTTTGGCAGCCACAGATACTTCTGAACCCTTC
ACAGAGAGCAGGCAGGGGCTTCGGTGCCGCGTGGGCAGTACGCAGGTCCCACCGACACTCACCTGGGAGCACGGC
GCCTGGCTCTTACCAGCGTCTGGCCTAGAGGAAGCCTTTGAGCGACCTTTGGGCAGGTTTCTGCTTCTTCTGTTT
TGCCCATGGTCAAGTCCCTGTTCCCCAGGCAGGTTTCAGCTGATTGGCAGCAGGCTCCCTGAGTGATGAGCTTGA
ACCTGTGGTGTTTCTGGGCAGAAGCTTATCTTTTTTGAGAGTGTCCGAAGATGAAGGCATGGCGATGCCCGTCCT
CTGGCTTGGGTTAATTCTTCGGTGACACTGGCATTGCTGGGTGGTGATGCCCGTCCTCTGGCTTGGGTTAATTCT
TCGGTGACACTGGCGTTGCTGGGTGGCAATGCCCGTCCTCTGGCTTGGGTTAATTCTTCGGTGACACTGGCGTTG
CTGGGTGGCGATGCCCGTCCTCTGGCTTGGGTTAATTCTTGGATGACGTCGGCGTTGCTGGGAGAATGTGCCGTT
CCTGCCCTGCCTCCACCCACCTCGGGAGCAGAAGCCCGGCCTGGACACCCCTCGGCCTGGACACCCCTCGAAGGA
GAGGGCGCTTCCTTGAGTAGGTGGGCTCCCCTTGCCCTTCCCTCCCTATCACTCCATACTGGGGTGGGCTGGAGG
AGGCCACAGGCCAGCTATTGTAAAAGCTTTTT

FIGURE 1329

MSCPVPACCALLLVLGLCRARPRNALLLLADDGGFESGAYNNSAIATPHLDALARRSLLFRNAFTSVSSCSPSRA
SLLTGLPQHQNGMYGLHQDVHHFNSFDKVRSLPLLLSQAGVRTGIIGKKHVGPETVYPFDFAYTEENGSVLQVGR
NITRIKLLVRKFLQTQDDRPFFLYVAFHDPHRCGHSQPQYGTFCEKFGNGESGMGRIPDWTPQAYDPLDVLVPYF
VPNTPAARADLAAQYTTVGRMDQGVGLVLQELRDAGVLNDTLVIFTSDNGIPFPSGRTNLYWPGTAEPLLVSSPE
HPKRWGQVSEAYVSLLDLTPTILDWFSIPYPSYAIFGSKTIHLTGRSLLPALEAEPLWATVFGSQSHHEVTMSYP
MRSVQHRHFRLVHNLNFKMPFPIDQDFYVSPTFQDLLNRTTAGQPTGWYKDLRHYYYRARWELYDRSRDPHETQN
LATDPRFAQLLEMLRDQLAKWQWETHDPWVCAPDGVLEEKLSPQCQPLHNEL

FIGURE 1330

GGCACGAGGGCGGCGGCCGCGATGAGCCTTCAGCCTGCCGGGCAGGGGACGTGAACATGGATGACCCTAAGAAGG
AAGACATTCTTCTTTTGGCCGATGAAAAATTTGACTTCGATCTTTCATTGTCTTCTTCGAGTGCAAATGAAGATG
ATGAAGTCTTCTTCGGACCCTTTGGACATAAAGAAAGATGTATTGCTGCCAGCTTGGAATTAAATAATCCGGTTC
CCGAACAGCCTCCGTTGCCCACATCTGAGAGTCCCTTTGCCTGGAGCCCTCTGGCCGGGGAGAAGTTCGTGGAGG
TGTACAAAGAAGCTCACTTACTGGCTTTACACATTGAGAGCAGCAGCCGGAACCAGGCAGCCCAAGCTGCCAAGC
CTGAAGACCCTCGGAGCCAGGGCGTGGAAAGATTCATACAGGAGTCAAAATTAAAAATAAACCTCTTTGAGAAAG
AAAAGGAAATGAAGAAAAGCCCCACGTCTCTTAAAAGGGAGACATACTACCTGTCAGACAGCCCCTTGCTGGGGC
CCCCTGTGGGTGAGCCTCGGCTCTTGGCCTCCTCCCCGGCCCTGCCCAGCTCTGGTGCCCAGGCCCGCCTCACCC
GGGCGCCGGGGCCTCCGCACTCTGCTCATGCTTTGCCCAGGGAATCATGCACTGCTCATGCTGCAAGTCAGGCAG
CGACTCAGAGGAAGCCCGGGACCAAATTGCTGCTGCCTCGAGCGGCCTCTGTTAGAGGAAGAAGCATCCCTGGGG
CTGCGGAGAAGCCCAAGAAAGAGATTCCAGCTAGTCCTTCCAGGACAAAAATCCCAGCTGAGAAGGAATCCCACC
GGGATGTTCTCCCTGACAAACCTGCCCCGGGTGCTGTCAATGTGCCGGCCGCCGGAAGCCACTTGGGCCAGGGCA
AGCGGGCGATCCCTGTTCCAAACAAGTTGGGGCTGAAGAAGACCCTGTTAAAAGCACCCGGCTCTACCAGCAATC
TCGCAAGGAAGTCCTCCTCGGGGCCTGTTTGGAGCGGGGCATCCAGTGCGTGCACATCCCCAGCAGTGGGCAAAG
CTAAATCAAGTGAATTTGCAAGTATTCCTGCAAATAGCTCCCGGCCTCTGTCAAACATCAGCAAGTCAGGCAGAA
TGGGACCCGCCATGCTGCGGCCAGCTCTGCCTGCAGGCCCTGTGGGGGCATCCTCCTGGCAGGCCAAGCGGGTCG
ATGTTTCTGAGCTGGCAGCGGAGCAGCTCACGGCACCCCCCTCAGCATCCCCCACCCAACCCCAGACTCCGGAAG
GTGGCGGCCAGTGGCTGAACTCCAGTTGCGCTTGGTCAGAATCTTCTCAATTGAATAAGACTAGAAGTATCAGAC
GGCGAGATTCCTGTCTAAATTCCAAGACAAAGGTTATGCCTACTCCTACAAATCAATTTAAAATTCCTAAGTTTT
CTATTGGTGACTCCCCGGACAGCTCAACACCAAAGCTTTCGCGGGCACAGCGGCCGCAGTCGTGCACGTCAGTTG
GCAGGGTCACTGTCCACAGCACCCCGGTTAGACGCTCATCTGGGCCAGCACCACAAAGCCTGCTGAGCGCACGGC
GTGTGTCAGCCTTGCCCACACCCGCCAGCCGGCGCTGCTCTGGCCTTCCACCGATGACCCCCAAAACGATGCCCA
GGGCCGTGGGCTCTCCCCTGTGTGTGCCAGCTCGGAGACGTTCCTCTGAGCCCCGCAAGAACTCTGCAATGAGAA
CTGAACCAACAAGGGAGAGCAACAGAAAGACAGATTCCAGGCTGGTGGATGTGTCCCCTGACAGGGGTTCTCCTC
CTTCCCGTGTGCCTCAGGCACTTAACTTTTCTCCAGAGGAAAGCGATTCTACTTTCTCCAAAAGTACTGCCACAG
AAGTAGCTCGGGAGGAAGCCAAGCCGGGTGGAGATGCAGCCCCTAGTGAGGCTCTTCTTGTAGATATCAAACTGG
AACCACTCGCGGTCACTCCAGATGCTGCAAGCCAGCCCCTCATTGACCTTCCTCTCATCGACTTCTGCGATACCC
CAGAAGCACACGTGGCTGTAGGATCTGAAAGCAGGCCTCTGATCGACCTCATGACAAACACTCCAGACATGAATA
AAAATGTGGCCAAACCTTCACCGGTGGTGGGACAGCTCATAGACCTGAGCTCCCCTCTGATCCAGCTGAGCCCTG
AGGCTGACAAGGAGAACGTGGATTCCCCACTCCTCAAGTTCTAAGCCGAACCAAATCCTTTGCCTTGAAAGAACA
GCCCTAAAGTGGTTTTCAACCCTCAGAAACAAGCTTTAGGCTGGTCGCAGTGGCTTACACTTGTAACCCTAGAAC
TTGGGAGGCTGAGGTGGGCGGATTACTTGAGCCCAGGAGTTCGGGACCAGCCTGGGAAATATAGTGAAACTCCTG
TCCCTACAAAAAGTACAAAAATTAGCCGGGTGTGGTAGTGCATGCCTGTAGTCCCAGCTACTTGGGAGGCTGAAG
TGGGAGGATGGCCTGAGCTCAAGGAGATGCAGGCTGCAGTGGGCTGTGATTGTGCCACTGCACTCCAGCCTGGGC
ACCAATGTGAGAACCTGTCTTGGAAAAAAAAAAAAAAAGAAACATGTTTTAGTAGAAGTTTTATTTGAAAAAGAA
AAATAAGCATAAATATATTCCCAGTGCTGGAGAGGGTGGGCTGAGGGACTGGGGCCAGCACGGACCACCCAAGGC
CTCTGCTTCCCGCCGCCACCCTCCTCGCTGCCATTCTCTGGGCTGGAATGTGAAGCCTCAGTCACTCTAAATGAA
GAATTTTCTTTTGAATGTTTTGTATGTAAAATAGCAAGTGGCTATTTTTAAAGTTAAGTTTGTATAAATAGTTAG
ATATTCTAGATTTACATTAAATTGTAAAATAAATGGACTTATTGAAGCATAAAAAAAAAAAAAAAAA

FIGURE 1331

MDDPKKEDILLLADEKFDFDLSLSSSSANEDDEVFFGPFGHKERCIAASLELNNPVPEQPPLPTSESPFAWSPLA
GEKFVEVYKEAHLLALHIESSSRNQAAQAAKPEDPRSQGVERFIQESKLKINLFEKEKEMKKSPTSLKRETYYLS
DSPLLGPPVGEPRLLASSPALPSSGAQARLTRAPGPPHSAHALPRESCTAHAASQAATQRKPGTKLLLPRAASVR
GRSIPGAAEKPKKEIPASPSRTKIPAEKESHRDVLPDKPAPGAVNVPAAGSHLGQGKRAIPVPNKLGLKKTLLKA
PGSTSNLARKSSSGPVWSGASSACTSPAVGKAKSSEFASIPANSSRPLSNISKSGRMGPAMLRPALPAGPVGASS
WQAKRVDVSELAAEQLTAPPSASPTQPQTPEGGGQWLNSSCAWSESSQLNKTRSIRRRDSCLNSKTKVMPTPTNQ
FKIPKFSIGDSPDSSTPKLSRAQRPQSCTSVGRVTVHSTPVRRSSGPAPQSLLSARRVSALPTPASRRCSGLPPM
TPKTMPRAVGSPLCVPARRRSSEPRKNSAMRTEPTRESNRKTDSRLVDVSPDRGSPPSRVPQALNFSPEESDSTF
SKSTATEVAREEAKPGGDAAPSEALLVDIKLEPLAVTPDAASQPLIDLPLIDFCDTPEAHVAVGSESRPLIDLMT
NTPDMNKNVAKPSPVVGQLIDLSSPLIQLSPEADKENVDSPLLKF

FIGURE 1332

ACCACGCTTTTCATCTGTCCCGCTGCGTGTTTTCCTCTTGATCGGGAACTCCTGCTTCTCCTTGCCTCGAAATGG
ACCCCAACTGCTCCTGCTCGCCTGTTGGCTCCTGTGCCTGTGCCGGCTCCTGCAAATGCAAAGAGTGCAAATGCA
CCTCCTGCAAGAAGAGCTGCTGCTCCTGCTGCCCTGTCGGCTGTGCCAAGTGTGCCCAGGGCTGCATCTGCAAAG
GGACGTCAGACAAGTGCAGCTGCTGTGCCTGA

FIGURE 1333

MDPNCSCSPVGSCACAGSCKCKECKCTSCKKSCCSCCPVGCAKCAQGCICKGTSDKCSCCA

FIGURE 1334

GCTCCTCACAGGCGCGGGTTGCTTCACCCACACCGTCATGTACTACGGCCACTACAGTAACGCCACGCTGAACCA
GCCGTGTGGCAGCCCCCTGGATGGCAGCCAGTGCACACCCAGGGTGGGTGGCCTGCCCTACAACATGCCCCTGGC
CTACCTCTCCACTGTGGGCGTGAGCTTCTTTATCACCTGCATCACCCTGGTGTACAGCATGGCTCACTCTTTCGG
GGAGAGCTACCGGGTGGGCAGCACCTCTGGCATCCACGCCATCACCGTCTTCTGCTCCTGGGACTACAAGGTGAC
GCAGAAGCGGGCCTCCCGCCTCCAGCAGGACAATATTCGCACCCGGCTGAAGGAGCTGCTGGCCGAGTGGCAGCT
GCGGCACAGCCCCAGGAGCGTGTGCGGGAGGCTGCGGCAGGCGGCTGTGCTGGGGCTTGTGTGGCTGCTGTGTCT
GGGGACCGCGCTGGGCTGCGCCGTGGCCGTCCACGTCTTCTCGGAGTTCATGATCCAGAGTCCAGAGGCTGCTGG
CCAGGAGGCTGTGCTGCTGGTCCTGCCCCTGGTGGTTGGCCTCCTCAACCTGGGGGCCCCCTACCTGTGCCGTGT
CCTGGCCGCCCTGGAGCCGCATGACTCCCCGGTACTGGAGGTGTACGTGGCCATCTGCAGGAACCTCATCCTCAA
GCTGGCCATCCTGGGGACACTGTGCTACCACTGGCTGGGCCGCAGGGTGGGCGTCCTGCAGGGCCAGTGCTGGGA
GGATTTTGTGGGCCAGGAGCTGTACCGGTTCCTGGTGATGGACTTCGTCCTCATGTTGCTGGACACGCTTTTTGG
GGAACTGGTGTGGAGGATTATCTCCGAGAAGAAGCTGAAGAGGAGGCGGAAGCCGGAGTTTGACATTGCCCGGAA
TGTCCTGGAGCTGATTTATGGGCAGACTCTGACCTGGCTGGGGGTGCTCTTCTCGCCCCTCCTCCCCGCCGTGCA
GATCATCAAGCTGCTGCTCGTCTTCTATGTCAAGAAGACCAGCCTTCTGGCCAACTGCCAGGCGCCGCGCCGGCC
CTGGCTGGCCTCACACATGAGCACCGTCTTCCTCACGCTGCTCTGCTTCCCCGCCTTCCTGGGCGCCGCTGTCTT
CCTCTGCTACGCCGTCTGGCAGGTGAAGCCCTCGAGCACCTGCGGCCCCTTCCGGACCCTGGACACCATGTACGA
GGCCGGCAGGGTGTGGGTGCGCCACCTGGAGGCGGCAGGCCCCAGGGTCTCCTGGCTGCCCTGGGTGCACCGGTA
CCTGATGGAAAACACCTTCTTTGTCTTCCTGGTGTCAGCCCTGCTGCTGGCCGTGATCTACCTCAACATCCAGGT
GGTGCGGGGCCAGCGCAAGGTCATCTGCCTGCTCAAGGAGCAGATCAGCAATGAGGGTGAGGACAAAATCTTCTT
AATCAACAAGCTTCACTCCATCTACGAGAGGAAGGAGAGGGAGGAGAGGAGCAGGGTTGGGACAACCGAGGAGGC
TGCGGCACCCCCTGCCCTGCTCACAGATGAACAGGATGCCTAGGGGGACGGCGATGGGCCTCACGGGCCCGCCCA
GCACCCTGAGACCACACTGTTGCCTCCCAGTGACCCTGCTGGGACACCAGGACAAGGAAGACAGTTTCGCCTCTC
GAAAGCCGCAGCTGCGCCTAGGCTGGAGCTGGAAGGGTGGGTGAATCCGGCTTGGGCATCCCCAATGAACTCTGC
CCTGCCTGGGACTCTATTTATTCTGATTAAAGGGGTTTTGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAA

FIGURE 1335

MAHSFGESYRVGSTSGIHAITVFCSWDYKVTQKRASRLQQDNIRTRLKELLAEWQLRHSPRSVCGRLRQAAVLGL
VWLLCLGTALGCAVAVHVFSEFMIQSPEAAGQEAVLLVLPLVVGLLNLGAPYLCRVLAALEPHDSPVLEVYVAIC
RNLILKLAILGTLCYHWLGRRVGVLQGQCWEDFVGQELYRFLVMDFVLMLLDTLFGELVWRIISEKKLKRRRKPE
FDIARNVLELIYGQTLTWLGVLFSPLLPAVQIIKLLLVFYVKKTSLLANCQAPRRPWLASHMSTVFLTLLCFPAF
LGAAVFLCYAVWQVKPSSTCGPFRTLDTMYEAGRVWVRHLEAAGPRVSWLPWVHRYLMENTFFVFLVSALLLAVI
YLNIQVVRGQRKVICLLKEQISNEGEDKIFLINKLHSIYERKEREERSRVGTTEEAAAPPALLTDEQDA

FIGURE 1336

AGAGAAGCGATCGCGAGAGAAAAAAATGCAACCTCCCAAAATAAAGAGCAAAGATTGCATTAGGAGCGAACAGCG
CTGCAGAAATAGATGGCAGCTTCGTGTCAGTGAGTTTGCATCCCCCTTCCTGATCCACGAGCTGGAGTGATTAGA
GCCCTGGAAGGGAATTGTTACTCCCGTGGAGAAGTCCCCTTTTCCTGGCAGTCGTCTGCACTGTACACGCTGGAT
GCCTCTCTCCATCCACCCCACTCACTCGCTCCTCTCTCACCTCCTCTCTCCCTCTCCTGCATTGATTTTTTTTTT
TCCTTTTTAGTTGACTGAAACAAAACAAAACAAAAGGGCCACTGGATGTCTGCCTTCTTGGGGGGTGAGCCAGAC
AGACTGACAAACAAACAGCCCCAACTGTGTTCGGGGGAGGGTTTCGCCTCCCGTTTTGCCCGGCAGCAGCAGCATT
GGACGTGTTGGCTAGTTATAGTATATTCCAGGAGCTACAACTTGTCCACGACACCGGCTACTTCTCAGCTTTACC
ATCCCTGGAGGAGACCTGGCAGCAGACATGCCTTGAATTGGAACGCTACCTACAGACGGAGCCCCGGAGGATCTC
AGAGACCTTTGGTGAGGACTTGGACTGTTTCCTCCACGCTTCCCCTCCCCCGTGCATTGAGGAAAGCTTCCGTCG
CTTAGACCCCCTGCTGCTCCCCGTGGAAGCGGCCATCTGTGAGAAGAGCTCGGCAGTGGACATCTTGCTCTCTCG
GGACAAGTTGCTATCTGAGACCTGCCTCAGCCTCCAGCCGGCCAGCTCTTCTCTAGACAGCTACACAGCCGTCAA
CCAGGCCCAGCTCAACGCAGTGACCTCATTAACGCCCCCATCGTCCCCTGAGCTCAGCCGCCATCTGGTCAAAAC
CTCACAAACTCTCTCTGCCGTGGATGGCACGGTGACGTTGAAACTGGTGGCCAAGAAGGCTGCTCTCAGCTCCGT
AAAGGTGGGAGGGGTCGCAACAGCTGCAGCAGCCGTGACGGCTGCGGGGGCCGTTAAGAGTGGACAGAGCGACAG
TGACCAAGGAGGGCTAGGGGCTGAAGCATGTCCCGAAAACAAGAAGAGGGTTCACCGCTGTCAGTTTAACGGGTG
CCGGAAAGTTTATACAAAAAGCTCCCACTTAAAGGCCCACCAGAGGACTCACACAGGTGAGAAGCCTTATAAGTG
CTCATGGGAGGGATGTGAGTGGCGTTTTGCACGAAGCGATGAGCTCACGAGGCACTACAGGAAACACACAGGTGC
AAAGCCCTTCAAATGCAACCACTGCGACAGGTGTTTTTCCAGGTCTGACCATCTTGCCCTCCACATGAAGAGACA
TATCTAAAAAACCGAAAGGCCAGAGTTGCCATGGCATCGGCTAGTGTCTAAAGGAAACGCCATGAGGCAGGGGGC
TGGACTTCAGGCGGGGACCCATTGCCTCGCAGAAGAAAGTTCTCACTTATAAACCTCTGTACACACACACACACA
CACACACACACATATACACACACTCACAGACCCACACACATACACACTGTCATGCACTCAACTATATTTAAAATA
TATACGTCTATTCTTTATGCCTTGCCCTAGCCAGATGGAAGAAGATGAAGAAGGAAACCAGGTGAACTCAGCAAG
GCAGACTGGCTGCTTACTTCAGCACTATTGGAATTATTTCCCGCTGTTGCCAATGGAAATCAAAGAAAATGGATG
TGACGTCTGTGCAGGTGGACGGCAGTCCGAGGGGCTTATTTCACTTGCTTCTCAGTGCAACTTGATAGGAGAATC
CAGCATCTTAAAGTTGCATATGTGTAGCACTAATGTTTCTTTTTAAATAGTTGGGGGAAAATGACCTAGAAAACC
AAATTGCAGTTTGGTAGCCAAAATTAACTCTTGGTTTATTTGTCCTTTGTGTGTGAAAAGTCCTACTATTCCGTG
CGTCAGACTTCCTCACAGAACTGTTGACTGGTTTTGGTTCTTAGTACTATTGAGATCTTTCGCGTCGATCCCAAC
GGCCTTAGCGGCGGCAGACTGGAATAACACCTTACACCTTTCTGGCCTGCATTTCTGTAGACTTCACTCTCAAGG
GAGGAGTTTTCTTTTCTTACGTTTTGACTTTTGCACACCATATGCACTAGGGATTCTGGAAACTTCTAGCATGAC
TGCAAAGTGGCCAAGAGAATAAAGTCCTTGATGATAAATCACAGTATATCCCTTGAGCCTCACCTTATTGCCAGT
GCTAGATTTTTTCTTTTTAATCTCTCCGTTTTTGCTAACGAAAACTTGAAAAGCTTATTTGGAAGCTTAAATGTT
TTATCTTTTCTCCATGGACTAAACCTCTCCAGGACTCTCTCGGCACCTGGATGTCCAGCTCTCGAAGCAGCCAGT
CAGATGGGACATCACAGTTCTCTCATCCTCCTTGAGGCATGATGACCTCAGCTCATAGTGATCAACCGTTGTGCT
GTGTGTCATTGCTACCCCATAACCAGTTACAGCATAGATGTCGCTAGTCTCAGAGGGCAGCTGCGTATTTAATTT
AACTCTGGTTTATGACCTGACAAAAAGCCAAAAATATCACTCTTTCCAGGAGTGGGGAAAACTGAGGATGCCTCC
CAAGTCTAGTGGCTTCACAAAAGATCATCCTGTCTTCTCTGTCATGCCCACTGAGCTCCTATTCCCCTACGTGTT
ACAATACACAATTTAAAACGCCATTGTGGGAGTGAAGGGTTGACATTTAAGGAAAAGGTTGAGGTGTTTCTCTCA
TGGGCTGTCTAAAAGGAGAGACACGTTTCTTTCTTTCCTTTTTTTTTGGCTAGGCCCACCATGACTTGTGACCTA
GAACCCCCAGGATTAACAGAGGCCTCACATTTACTCTGCAAGCTGACTCCAAAGGAGTCTACAGTCCTTACTTGT
CATGCCACACTCACACATCCAGTAGTGGTCTCTATCTACCCGCATTCCTAGCTAGCTGGCACTGGCCTCAACTCC
AAAGACTGCCTTTAGGACCATCAAATGGCCTATGCAAGCAAGCGGGGTGGTTATTAGGACAGATTGTATATTTTG
TATATTCTGGGACCATCCCTTCAAGACACGTCTATAAAACAAAAATGGCGCTTGGTCCACACACGGTTGCTGCTC
CCTCCTACCAGCTGGCTCCCCTCCTGTCCTCCTTTGACTGTTTGACTCATTGACTGTTAAAATGCCACCCCATAC
ATATTTGGGATGCAAAACTGAAGTCAAAAGGAAATAATATAAGAAACACAAACACATATATGACAGCAACCTTCA
AGATCTGGGTTTTCAGCTTTCTGCAACCTTTGTTTTCACTGAAATGTTGAAACTACTCGTCTGAGGGCAAAGGAA
CCTCCTCACAAATGCTATAGCTGCCAATTGGACACTTGGGGCATTTCGAGGTCTGGCCCTAAGAATTTACTTTCT
CCTTTTCCTTTTTTCTATTTAGACCAAAAAAAACAAAAACAAAAACAAAAAAAAAACAAAATAATACAAAACGAA
AAATAAAGATAGAACACCCGTTA

FIGURE 1337

MDVLASYSIFQELQLVHDTGYFSALPSLEETWQQTCLELERYLQTEPRRISETFGEDLDCFLHASPPPCIEESFR
RLDPLLLPVEAAICEKSSAVDILLSRDKLLSETCLSLQPASSSLDSYTAVNQAQLNAVTSLTPPSSPELSRHLVK
TSQTLSAVDGTVTLKLVAKKAALSSVKVGGVATAAAAVTAAGAVKSGQSDSDQGGLGAEACPENKKRVHRCQFNG
CRKVYTKSSHLKAHQRTHTGEKPYKCSWEGCEWRFARSDELTRHYRKHTGAKPFKCNHCDRCFSRSDHLALHMKR
HI

FIGURE 1338

CGGCGCTGGGCTGAGGGGAGGGGTTGTCTTAAAAGTCTCTCCTTCCCCCTGTAGGGGCGGCCGGCGAGTCCCAGT
GAGAGCGGAGGGTGCCAGAGGTAGGGGGCCGAGAAACAAAGTTCCCGGGGCTTCCTCCGGGGCCGCGGTCGGGGC
TGCGCGTTTGACCGCCCCCCTCCTCGCGAAGCA**ATG**GCTTCCAAACTCCTGCGCGCGGTCATCCTCGGGCCGCCC
GGCTCGGGCAAGGGCACCGTGTGCCAGAGGATCGCCCAGAACTTTGGTCTCCAGCATCTCTCCAGCGGCCACTTC
TTGCGGGAGAACATCAAGGCCAGCACCGAAGTTGGTGAGATGGCAAAGCAGTATATAGAGAAAAGTCTTTTGGTT
CCAGACCATGTGATCACACGCCTAATGATGTCCGAGTTGGAGAACAGGCGTGGACAGCACTGGCTCCTTGATGGT
TTTCCTAGGACATTAGGACAAGCCGAAGCCCTGGACAAAATCTGTGAAGTGGATCTAGTGATCAGTTTGAATATT
CCATTTGAAACACTTAAAGATCGTCTCAGCCGCCGTTGGATTCACCCTCCTAGCGGAAGGGTATATAACCTGGAC
TTCAATCCACCTCATGTACATGGTATTGATGACGTCACTGGTGAACCGTTAGTCCAGCAGGAGGATGATAAACCC
GAAGCAGTTGCTGCCAGGCTAAGACAGTACAAAGACGTGGCAAAGCCAGTCATTGAATTATACAAGAGCCGAGGA
GTGCTCCACCAATTTTCCGGAACGGAGACGAACAAAATCTGGCCCTACGTTTACACACTTTTCTCAAACAAGATC
ACACCTATTCAGTCCAAAGAAGCATAT**TGA**CCCTGCCCAATGGAAGAACCAGGAAGATGTGGTCATTCATTCAAT
AGTGTGTGTAGTATTGGTGCTGTGTCCAAATTAGAAGCTAGCTGAGGTAGCTTGCAGCATCTTTTCTAGTTGAAA
TGGTGAACTGATAGGAAAACAAATGAGTAGAAAGAGTTCATGAAGAGGCCCTCCTCTGCCTTTCAAAAGGCTGGT
CACCTACACATGTTTAAGGTGTCTCTGCACATGTCTCAAGCCCATCACAAGAAAGCAAGTACAGTGTGGATTTCA
AATGGTGTGTAACTTCAGCTCCAGCTGGTTTTTGACAGCTGTTGCTGTGGTAATATTTTTGACATGTGATGGTGA
TAGTCTCTGGTTCTCCCCATCCCCACAAAGGCTGTTGAACCACAGCACCAGGAAGCCTGAGAATGAATCCTGAGG
GCTCTAGCCCAGGCTTTGTCCCAGGCTTTCTGGTGTGTGCCCTCCTGGTAACAGTGAAATTGAAGCTACTTACTC
ATAGTGGTTGTTTCTCTGGTCTTGAGTGACTGTGTCCACAGTTCATTTTTTTCCGGTAGGAATAACTCCTTTTCT
ACATCCACGCTCCATAGAGTCTCTCCTTTTCAGACATCCTGGGATGAAAGAATTTGGCTTTTTTTTTTCTTTTTT
TTTTGGACATCTGTTTTCACTCTTAGGCTTTTAAACAATAGTTATTGCTTTTATCCCTCTCAGATTCTAATAACT
GAGAGCGATGGGGCTATATTGAATCTCTGTATGCACTGAGAACTGAGCTATGAAGAGAATCTTATTAAACTGCTG
GTCTGACTTTATGGATTGACACTGTTCCTTTCTTTTATTGTGAAAAAAAAAAAAAAA

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FIGURE 1339

MASKLLRAVILGPPGSGKGTVCQRIAQNFGLQHLSSGHFLRENIKASTEVGEMAKQYIEKSLLVPDHVITRLMMS
ELENRRGQHWLLDGFPRTLGQAEALDKICEVDLVISLNIPFETLKDRLSRRWIHPPSGRVYNLDFNPPHVHGIDD
VTGEPLVQQEDDKPEAVAARLRQYKDVAKPVIELYKSRGVLHQFSGTETNKIWPYVYTLFSNKITPIQSKEAY

1501/8433

FIGURE 1340

GGCTGCAGAGGGGAAGGCGGCTACCAGTGTAAAGCCAGAGCTGAGGTTCTTGATAGTCCACAATGGGTGAACCAC
AGCAAGTGAGTGCACTTCCACCACCTCCAATGCAATATATCAAGGAATATACGGATGAAAATATTCAAGAAGGCT
TAGCTCCCAAGCCTCCCCCTCCAATAAAAGACAGTTACATGATGTTTGGCAATCAGTTCCAATGTGATGATCTTA
TCATCCGCCCTTTGGAAAGTCAGGGCATCGAACGGCTTCATCCTATGCAGTTTGATCACAAGAAAGAACTGAGAA
AACTTAATATGTCTATCCTTATTAATTTCTTGGACCTTTTAGATATTTTAATAAGGAGCCCTGGGAGTATAAAAC
GAGAAGAGAAACTAGAAGATCTTAAGCTGCTTTTTGTACACGTGCATCATCTTATAAATGAATACCGACCCCACC
AAGCAAGAGAGACCTTGAGAGTCATGATGGAGGTCCAGAAACGTCAACGGCTTGAAACAGCTGAGAGATTTCAAA
AGCACCTGGAACGAGTAATTGAAATGATTCAGAATTGCTTGGCTTCTTTGCCTGATGATTTGCCTCATTCAGAAG
CAGGAATGAGAGTAAAAACTGAACCAATGGATGCTGATGATAGCAACAATTGTACTGGACAGAATGAACATCAAA
GAGAAAATTCAGGTCATAGGAGAGATCAGATTATAGAGAAAGATGCTGCCTTGTGTGTCCTAATTGATGAGATGA
ATGAAAGACCATGAAAGATGTTTCTTTTTCTTTTTTTCCTTTTGATAATAGCATCATATATTAGTTCATTTTCTT
TTGGACAGTCTTAAGAGAAGTTTCACTAAAAATGTAAACAGCTTTAATCTTGACTCCAAATTTTTCAATTATGAG
ATGTCATAGGCAGTAATTTCGCTGTATAACAAGCATAGACAAATGAGTGTCCCTGCACTAAGAAGAATCACTTTA
AAAAGCAAAGTGTTAGCTGCTGTTGTATGGGACATTCCTATGTTTTAGAGTTGCAGTAAAACTTTGATGATAACC
TCAAIAATAGCAAAGTGGGGTATGGGCTGGGTACGGTGGCTCACACTTATAATCCTAGTGCTTTGGGAGGTTGAT
GTGAGAGGATCACTTGAGCTCAGGAATTTGAGACCAATGGGGGCAACATAGTGAGACCTTCTCTCTCTTACAATT
TAATTAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1341

MGEPQQVSALPPPPMQYIKEYTDENIQEGLAPKPPPPIKDSYMMFGNQFQCDDLIIRPLESQGIERLHPMQFDHK
KELRKLNMSILINFLDLLDILIRSPGSIKREEKLEDLKLLFVHVHHLINEYRPHQARETLRVMMEVQKRQRLETA
ERFQKHLERVIEMIQNCLASLPDDLPHSEAGMRVKTEPMDADDSNNCTGQNEHQRENSGHRRDQIIEKDAALCVL
IDEMNERP

FIGURE 1342A

CGCGCTGTGTGTGTGTGAGTGGAGAGTGAGTGCGGGACCTGAGGCTGTGTGTGTGTGAACTGTGGCCACTGGC
GGGGTCGGGGGGGGGGCAGCGGCGGAGCCGCCTCGGACGATAAGGAAATTGAGATTTGGAGAAGTTAAATAACCAA
GACTTCACAGGCAAAGCC**ATG**ACTACAGTAGTGGTACATGTGGACTCCAAAGCTGAGCTCACTACCCTGCTGGAG
CAGTGGGAAAAGGAACATGGCAGTGGGCAGGACATGGTACCTATCCTTACCAGGATGTCTCAATTGATTGAAAAA
GAAACTGAAGAGTATCGTAAAGGGGATCCAGACCCATTTGATGATCGACATCCTGGTCGAGCTGATCCAGAGTGT
ATGCTGGGCCACTTGCTGAGAATACTCTTCAAGAATGATGATTTCATGAATGCACTGGTGAATGCATATGTGATG
ACAAGCCGAGAGCCCCCTTTAAACACTGCAGCTTGCAGACTCCTATTAGACATCATGCCAGGGCTGGAAACTGCT
GTCGTCTTTCAAGAAAAGGAGGGAATTGTCGAGAATCTTTTCAAATGGGCCCGAGAGGCCGATCAACCATTGAGG
ACATATTCTACTGGACTGTTAGGAGGTGCTATGGAAAATCAAGACATTGCTGCCAACTATAGAGATGAAAATTCA
CAGCTGGTGGCAATAGTGCTTCGAAGACTGAGGGAGCTACAGCTACAGGAAGTGGCTTTGCGGCAGGAAAACAAG
CGTCCCAGTCCACGGAAGCTCTCTTCTGAACCCCTTTTGCCTCTGGATGAGGAGGCTGTGGATATGGACTATGGT
GACATGGCTGTAGATGTAGTGGATGGAGACCAAGAGGAAGCTTCTGGAGACATGGAGATCTCCTTTCATCTTGAT
TCAGGCCACAAGACTAGTAGCAGAGTGAACTCAACAACCAAACCTGAGGATGGAGGATTAAAGAAAAACAAGTCA
GCAAAACAGGGTGACAGAGAGAACTTTAGGAAAGCCAAGCAAAAGTTGGGTTTCTCATCTTCTGATCCAGATCGC
ATGTTTGTTGAGCTGTCTAATAGCAGTTGGTCAGAAATGTCTCCCTGGGTGATTGGCACCAATTATACCCTTTAT
CCTATGACTCCTGCTATCGAGCAGCGACTCATTCTCCAATATTTGACCCCTCTAGGAGAATATCAGGAGCTACTT
CCCATATTCATGCAACTTGGATCACGGGAGCTGATGATGTTCTATATTGACCTGAAGCAAACTAATGATGTCCTG
CTTACATTTGAGGCACTAAAGCACCTAGCATCTCTCCTGCTCCATAACAAATTTGCCACAGAATTTGTTGCGCAT
GGTGGAGTACAGAAATTACTGGAAATACCTCGTCCTTCTATGGCTGCAACCGGTGTGTCTATGTGTTTGTATTAC
CTATCCTACAATCAGGATGCCATGGAAAGAGTTTGCATGCATCCCCACAATGTTCTGTCTGATGTGGTGAACTAT
ACCCTGTGGTTAATGGAGTGTTCTCATGCTTCAGGATGCTGCCATGCTACCATGTTTTTTTCAATTTGCTTCTCA
TTTCGGGCCGTCTTGGAGCTCTTTGACCGCTATGATGGTCTTCGTCGTCTGGTGAACTTGATCAGTACTTTGGAG
ATTCTAAATTTGGAAGATCAGGGTGCACTTCTGAGTGATGATGAAATATTTGCTAGCCGCCAAACTGGGAAACAT
ACCTGCATGGCCTTGCGCAAATACTTTGAGGCTCACCTGGCCATTAAATTGGAACAAGTGAAGCAGTCACTTCAG
AGGACTGAGGGTGGCATTCTTGTCCACCCACAACCCCCGTACAAGGCATGCTCATATACTCATGAACAGATTGTG
GAAATGATGGAATTTTTGATAGAATATGGCCCAGCGCAGCTATATTGGGAACCAGCTGAAGTTTTCCTCAAACTT
TCTTGTGTGCAACTCTTGTTGCAGCTTATTTCTATTGCCTGCAATTGGAAGACCTATTATGCAAGGAATGACACT
GTGCGCTTTGCTTTGGATGTCCTGGCTATTCTTACTGTGGTGCCAAAAATCCAGCTCCAGTTGGCAGAATCAGTG
GACGTGTTGGATGAGGCTGGATCTACAGTCTCTACTGTAGGTATCAGCATTATTTTGGGAGTGGCTGAGGGTGAG
TTCTTCATCCATGATGCTGAAATTCAGAAGTCAGCACTTCAGATTATCATCAATTGTGTGTGTGGCCCAGATAAC
CGAATATCCAGTATTGGTAAATTTATCTCTGGTACTCCTCGGAGAAAGCTGCCTCAGAACCCTAAAAGCAGTGAG
CACACCCTGGCCAAGATGTGGAATGTGGTTCAGTCCAACAACGGCATCAAGGTGCTCCTGTCCTTACTGTCCATT
AAGATGCCCATCACAGATGCAGACCAAATCCGGGCCCTGGCCTGCAAAGCCCTAGTGGGCCTGTCTCGCAGTAGC
ACTGTCCGGCAGATCATCAGTAAACTGCCCCTTTTCAGCAGCTGCCAGATCCAGCAGCTGATGAAGGAGCCTGTG
CTGCAGGACAAGCGCAGTGACCATGTCAAGTTCTGCAAGTATGCTGCTGAACTCATTGAACGGGTGTCAGGAAAA
CCACTTCTCATTGGCACTGATGTTTCCCTAGCACGACTGCAGAAAGCAGATGTTGTTGCCCAGTCAAGGATCTCC
TTCCCTGAGAAAGAGCTGCTTTTGTTGATACGAAACCATCTTATTTCTAAAGGGCTTGGAGAAACAGCAACCGTG
CTGACAAAAGAGGCTGACCTGCCCATGACTGCTGCCTCCCATTCTTCTGCCTTTACCCCAGTCACTGCTGCTGCT
TCTCCTGTCTCTCTACCCCGAACCCCTCGTATCGCTAATGGCATTGCAACTCGTCTGGGCAGCCATGCTGCTGTG
GGTGCCTCTGCGCCTTCTGCCCCTACTGCTCATCCTCAGCCACGGCCCCCCCAGGGTCCGCTAGCTCTGCCCGGC
CCATCTTATGCAGGCAACTCCCCTTTGATTGGTAGAATCAGTTTTATCAGAGAGAGGCCATCACCCTGCAATGGC
AGGAAAATCAGAGTGTTGCGGCAGAAGTCGGACCATGGTGCCTACAGCCAAAGCCCAGCCATAAAAAAACAGCTG
GACAGACATCTTCCTTCCCCACCTACGCTGGACAGTATAATCACAGAGTATCTTAGAGAACAACATGCTCGCTGC
AAGAATCCAGTTGCCACCTGCCCACCTTTCTCCCTCTTTACTCCTCACCAATGTCCTGAGCCAAAACAGAGGCGG
CAAGCGCCAATAAACTTTACGTCAAGGCTAAACCGCAGGGCATCATTTCCAAAGTATGGAGGGGTGGATGGCGGA
TGCTTTGATAGGCACCTTATCTTTAGCAGATTCCGTCCTATTTCAGTGTTCCGGGAAGCCAATGAAGATGAGAGT
GGCTTCACCTGCTGTGCATTCTCAGCACGGGAGCGGTTCCTGATGCTTGGCACCTGCACAGGGCAGCTGAAGCTC
TATAATGTGTTTAGTGGACAGGAGGAGGCCAGCTATAACTGTCACAACTCAGCCATCACACATCTTGAACCTTCC

FIGURE 1342B

AGGGATGGGTCCTTGCTGCTGACATCTGCTACTTGGAGCCAGCCTTTGTCTGCACTTTGGGGAATGAAGTCAGTA
TTTGATATGAAGCATTCCTTCACAGAAGATCACTATGTTGAGTTCAGTAAGCACTCCCAGGATCGGGTCATCGGC
ACAAAAGGAGACATTGCCCACATTTATGATATTCAGACTGGCAACAAGCTGTTGACTCTGTTTAACCCAGATCTT
GCCAACAACTACAAGAGGAACTGTGCCACCTTTAATCCTACAGATGATCTTGTCTTAAATGATGGCGTCCTCTGG
GATGTCCGCTCTGCACAGGCCATCCACAAGTTTGACAAGTTCAATATGAACATCAGTGGTGTTTTCCATCCAAAT
GGACTGGAGGTGATCATTAATACTGAGATTTGGGACCTTCGAACTTTTCATCTTTTGCATACTGTTCCCGCTCTG
GATCAGTGTCGCGTGGTGTTCAATCACACGGGAACAGTGATGTATGGAGCTATGTTGCAGGCAGATGATGAAGAT
GACTTAATGGAAGAGAGGATGAAAAGCCCCTTTGGGTCATCCTTCCGAACATTTAATGCAACTGACTACAAACCT
ATAGCAACCATTGATGTGAAACGGAACATCTTTGACCTGTGTACAGACACCAAAGACTGCTATCTTGCTGTCATT
GAGAATCAAGGCAGCATGGATGCCCTGAACATGGACACAGTATGCAGGCTGTATGAAGTGGGCAGGCAGCGTCTG
GCAGAGGATGAGGATGAAGAGGAGGACCAGGAAGAGGAAGAACAGGAGGAAGAAGATGATGATGAAGATGATGAT
GACACCGATGATTTAGATGAGCTTGACACTGACCAGTTGCTGGAGGCGGAGTTGGAGGAGGACGACAATAATGAG
AACGCAGGGGAAGATGGGGACAATGACTTCTCTCCCTCTGATGAGGAGCTAGCAAACCTTCTAGAGGAGGGAGAG
GACGGGGAGGATGAAGACTCTGATGCAGATGAGGAGGTGGAACTGATCCTGGGGGGACACTGACAGCTCTGACAAC
TCTGATTTGGAAGATGACATCATCTTATCTCTGAATGAGTGAGGAGCCATCACTGCTTGGAAGAGATTCTTGGCA
GAGAGAAGAGGGGACAAATTTGGTTGTGAAGTAAACAAGAAACACAAGACGGCTAAAACTCTCCAGGGGCAGGTA
AAGCCCTGCTGGGCTCAGAAGCACTATAGAATTTGCTGTACACACTGAAGTGGGTCTGTGTCACACAGGTATTTC
TTGGTCCTCTGGAGAGCAGAGGACTCACTCAGCTCTTTGCTTCATGCCTCGCTTTAATGGTAGTAAACACTTAAC
CAGTGGAATAGTCTGACTGCTGGTACTGATGGCATCAGAAGAAAACAGGTTAACAATCAAGTAGTGAAAGCACTA
TATTCTAGTCATTAACTCAACGGAGCCAGTCTCAACTCTGCTGGGAGCACCCACAGGTCTCTGTGGGGGAGACAG
GGACTATAACAGGGAGGCAGAATTCAGGTTGGCTTGACAACACACCTTAGGAACATGTGCTAAGGGGCTAAGGAG
GCATCAGCTGTCTTCCTTATTCTACCAGGGCTGAAAATCGGAGTCACTTAGGAGGCAGCATGAGAACAGTGGCAC
ACCACCAGTGAGGCACATGTTGCCTTTTTGTCTTTAAGCAACACCTTAGACAGGGCCTGAACCCTGGGTGGGGGC
ACTGGATGCCTGAAGTAAGTAAGTTTTCTCAGTGGGGCAGTCTCATAAAATCACCAGGACATTGACCACCTGACC
TCCCCTAACTAGTGCTGGCCAAGGCCTGAGAGTTCACAGAACCTGCTAGGTCTTAAGAGCCAAAGGAAGGAAGTG
GTTGAGGGCCAGGAAAGAGAAGGAATGTCATGCCAGGGTGTTACTCCTCACCAAAACTTGGCAGTTCTTTTTGGG
GCCATGGGACACCTTTCTCTGAAGAGGGGTTGGATAAGGCAAAGGTTGAAGTGTCTTCTCTAGGCACGTTTTCTA
GCATGTTTCCTTTTACTTGGTTCTGTCTCACAAAGCTGGGAGGTAGATGATTCTTCCGGGTCCTGAGCACCTGCT
TCATGAAGGAAGATAGGTAGCCCAGAGAAGAAGTTTTGGACTTAACAACATACCAAGGCAGCTCTGGCCTGTGAC
TCAGGCGTTTGTTGGAGAGCTGCAGGAAAACCACTGCAGTGTGCCTGCAACAGGACAAGACCCACTCCTGTTTCT
GGCGGTACCAGCTACCCTGGAATGGTGGCGTGTCCTGCTGTACCCAACTGACTTGCTTAGGTACCTGGCAGCTGT
GACCACAGCTCAAGTAAAAAAAACAAAAACAGGCAAATAAATAAACATGCTTAACATGTC

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FIGURE 1343

MTTVVVHVDSKAELTTLLEQWEKEHGSGQDMVPILTRMSQLIEKETEEYRKGDPDPFDDRHPGRADPECMLGHLL
RILFKNDDFMNALVNAYVMTSREPPLNTAACRLLLDIMPGLETAVVFQEKEGIVENLFKWAREADQPLRTYSTGL
LGGAMENQDIAANYRDENSQLVAIVLRRLRELQLQEVALRQENKRPSPRKLSSEPLLPLDEEAVDMDYGDMAVDV
VDGDQEEASGDMEISFHLDSGHKTSSRVNSTTKPEDGGLKKNKSAKQGDRENFRKAKQKLGFSSSDPDRMFVELS
NSSWSEMSPWVIGTNYTLYPMTPAIEQRLILQYLTPLGEYQELLPIFMQLGSRELMMFYIDLKQTNDVLLTFEAL
KHLASLLLHNKFATEFVAHGGVQKLLEIPRPSMAATGVSMCLYYLSYNQDAMERVCMHPHNVLSDVVNYTLWLME
CSHASGCCHATMFFSICFSFRAVLELFDRYDGLRRLVNLISTLEILNLEDQGALLSDDEIFASRQTGKHTCMALR
KYFEAHLAIKLEQVKQSLQRTEGGILVHPQPPYKACSYTHEQIVEMMEFLIEYGPAQLYWEPAEVFLKLSCVQLL
LQLISIACNWKTYYARNDTVRFALDVLAILTVVPKIQLQLAESVDVLDEAGSTVSTVGISIILGVAEGEFFIHDA
EIQKSALQIIINCVCGPDNRISSIGKFISGTPRRKLPQNPKSSEHTLAKMWNVVQSNNGIKVLLSLLSIKMPITD
ADQIRALACKALVGLSRSSTVRQIISKLPLFSSCQIQQLMKEPVLQDKRSDHVKFCKYAAELIERVSGKPLLIGT
DVSLARLQKADVVAQSRISFPEKELLLLIRNHLISKGLGETATVLTKEADLPMTAASHSSAFTPVTAAASPVSLP
RTPRIANGIATRLGSHAAVGASAPSAPTAHPQPRPPQGPLALPGPSYAGNSPLIGRISFIRERPSPCNGRKIRVL
RQKSDHGAYSQSPAIKKQLDRHLPSPPTLDSIITEYLREQHARCKNPVATCPPFSLFTPHQCPEPKQRRQAPINF
TSRLNRRASFPKYGGVDGGCFDRHLIFSRFRPISVFREANEDESGFTCCAFSARERFLMLGTCTGQLKLYNVFSG
QEEASYNCHNSAITHLEPSRDGSLLLTSATWSQPLSALWGMKSVFDMKHSFTEDHYVEFSKHSQDRVIGTKGDIA
HIYDIQTGNKLLTLFNPDLANNYKRNCATFNPTDDLVLNDGVLWDVRSAQAIHKFDKFNMNISGVFHPNGLEVII
NTEIWDLRTFHLLHTVPALDQCRVVFNHTGTVMYGAMLQADDEDDLMEERMKSPFGSSFRTFNATDYKPIATIDV
KRNIFDLCTDTKDCYLAVIENQGSMDALNMDTVCRLYEVGRQRLAEDEDEEEDQEEEEQEEEDDDEDDDDTDDLD
ELDTDQLLEAELEEDDNNENAGEDGDNDFSPSDEELANLLEEGEDGEDEDSDADEEVELILGDTDSSDNSDLEDD
IILSLNE

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FIGURE 1344

GGAGAGAGCCGCCGAGCCGAGCCGAGCCCCAGCTCCAGCAAGAGCGCGGGCGGGTGGCCCAGGCACGCAGCGGTG
AGGACCGCGGCCACAGCTCGGCGCCAACCACCGCGGGCCTCCCAGCCAGCCCCGCGGCGGGGCAGCCGCAGGAGC
CCTGGCTGTGGTCGGGGGGCAGTGGGCC**ATG**CTGGGGGCAGTGGAAGGCCCCAGGTGGAAGCAGGCGGAGGACAT
TAGAGACATCTACGACTTCCGAGATGTTCTGGGCACGGGGGCCTTCTCGGAGGTGATCCTGGCAGAAGATAAGAG
GACGCAGAAGCTGGTGGCCATCAAATGCATTGCCAAGGAGGCCCTGGAGGGCAAGGAAGGCAGCATGGAGAATGA
GATTGCTGTCCTGCACAAGATCAAGCACCCCAACATTGTAGCCCTGGATGACATCTATGAGAGTGGGGGCCACCT
CTACCTCATCATGCAGCTGGTGTCGGGTGGGGAGCTCTTTGACCGTATTGTGGAAAAAGGCTTCTACACGGAGCG
GGACGCCAGCCGCCTCATCTTCCAGGTGCTGGATGCTGTGAAATACCTGCATGACCTGGGCATTGTACACCGGGA
TCTCAAGCCAGAGAATCTGCTGTACTACAGCCTGGATGAAGACTCCAAAATCATGATCTCCGACTTTGGCCTCTC
CAAGATGGAGGACCCGGGCAGTGTGCTCTCCACCGCCTGTGGAACTCCGGGATACGTGGCCCCTGAAGTCCTGGC
CCAGAAGCCCTACAGCAAGGCTGTGGATTGCTGGTCCATAGGTGTCATCGCCTACATCTTGCTCTGCGGTTACCC
TCCCTTCTATGACGAGAATGATGCCAAACTCTTTGAACAGATTTTGAAGGCCGAGTACGAGTTTGACTCTCCTTA
CTGGGACGACATCTCTGACTCTGCCAAAGATTTCATCCGGCACTTGATGGAGAAGGACCCAGAGAAAAGATTCAC
CTGTGAGCAGGCCTTGCAGCACCCATGGATTGCAGGAGATACAGCTCTAGATAAGAATATCCACCAGTCGGTGAG
TGAGCAGATCAAGAAGAACTTTGCCAAGAGCAAGTGGAAGCAAGCCTTCAATGCCACGGCTGTGGTGCGGCACAT
GAGGAAACTGCAGCTGGGCACCAGCCAGGAGGGGCAGGGGCAGACGGCGAGCCATGGGGAGCTGCTGACACCAGT
GGCTGGGGGGCCGGCAGCTGGCTGTTGCTGTCGAGACTGCTGCGTGGAGCCGGGCACAGAACTGTCCCCCACACT
GCCCCACCAGCTC**TAG**GGCCCTGGACCTCGGGTCATGATCCTCTGCGTGGGAGGGCTTGGGGGCAGCCTGCTCCC
CTTCCCTCCCTGAACCGGGAGTTTCTCTGCCCTGTCCCCTCCTCACCTGCTTCCCTACCACTCCTCACTGCATTT
TCCATACAAATGTTTCTATTTTATTGTTCCTTCTTGTAATAAAGGGAAGATAAAACCAAAAAAAAAAAAAAAAAA
A

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FIGURE 1345

MLGAVEGPRWKQAEDIRDIYDFRDVLGTGAFSEVILAEDKRTQKLVAIKCIAKEALEGKEGSMENEIAVLHKIKH
PNIVALDDIYESGGHLYLIMQLVSGGELFDRIVEKGFYTERDASRLIFQVLDAVKYLHDLGIVHRDLKPENLLYY
SLDEDSKIMISDFGLSKMEDPGSVLSTACGTPGYVAPEVLAQKPYSKAVDCWSIGVIAYILLCGYPPFYDENDAK
LFEQILKAEYEFDSPYWDDISDSAKDFIRHLMEKDPEKRFTCEQALQHPWIAGDTALDKNIHQSVSEQIKKNFAK
SKWKQAFNATAVVRHMRKLQLGTSQEGQGQTASHGELLTPVAGGPAAGCCCRDCCVEPGTELSPTLPHQL

FIGURE 1346

GTCCTTCGGTGTCTGGGTGTGGTGAGTAGAGGTGTGTGTCACAAAGTACAGACCATTGTGTGTGACAAAGCCCAT
CGTGTGTCTGTGTGTGTCTTTATCCACGTGGATGGACGTCTCTTTCTTGCTCTGCCCCAAGACACACCCTAGCCC
CTCCTTATTCTCAAAAGGGGGAGCTGGGGAGCCTCCCCCTACCCTGGGGCCTCCCCTGCCCCTCCCCGCCCTGCC
TGGCCGTCACCACTCCCCAGAGGGCACAGGGCTCTGCTGTGCCTCAGAGCAAAAGTCCCAGAGCCAGCAGAGCAG
GCTGACGACCTGCAAGCCACAGTGGCTGCCCTGTGCGTGCTGCGAGGTGGGGGACCCTGGGCAGGAAGCTGGCTG
AGCCCCAAGACCCCGGGGGCC**ATG**GGCGGGGATCTGGTGCTTGGCCTGGGGGCCTTGAGACGCCGAAAGCGCTTG
CTGGAGCAGGAGAAGTCTCTGGCCGGCTGGGCACTGGTGCTGGCAGGAACTGGCATTGGACTCATGGTGCTGCAT
GCAGAGATGCTGTGGTTCGGGGGGTGCTCGTGGGCGCTCTACCTGTTCCTGGTTAAATGCACGATCAGCATTTCC
ACCTTCTTACTCCTCTGCCTCATCGTGGCCTTTCATGCCAAAGAGGTCCAGCTGTTCATGACCGACAACGGGCTG
CGGGACTGGCGCGTGGCGCTGACCGGGCGGCAGGCGGCGCAGATCGTGCTGGAGCTGGTGGTGTGTGGGCTGCAC
CCGGCGCCCGTGCGGGGCCCGCCGTGCGTGCAGGATTTAGGGGCGCCGCTGACCTCCCCGCAGCCCTGGCCGGGA
TTCCTGGGCCAAGGGGAAGCGCTGCTGTCCCTGGCCATGCTGCTGCGTCTCTACCTGGTGCCCCGCGCCGTGCTC
CTGCGCAGCGGCGTCCTGCTCAACGCTTCCTACCGCAGCATCGGCGCTCTCAATCAAGTCCGCTTCCGCCACTGG
TTCGTGGCCAAGCTTTACATGAACACGCACCCTGGCCGCCTGCTGCTCGGCCTCACGCTTGGCCTCTGGCTGACC
ACCGCCTGGGTGCTGTCCGTGGCCGAGAGGCAGGCTGTTAATGCCACTGGGCACCTTTCAGACACACTTTGGCTG
ATCCCCATCACATTCCTGACCATCGGCTATGGTGACGTGGTGCCGGGCACCATGTGGGGCAAGATCGTCTGCCTG
TGCACTGGAGTCATGGGTGTCTGCTGCACAGCCCTGCTGGTGGCCGTGGTGGCCCGGAAGCTGGAGTTTAACAAG
GCAGAGAAGCACGTGCACAACTTCATGATGGATATCCAGTATACCAAAGAGATGAAGGAGTCCGCTGCCCGAGTG
CTACAAGAAGCCTGGATGTTCTACAAACATACTCGCAGGAAGGAGTCTCATGCTGCCCGCAGGCATCAGCGCAAG
CTGCTGGCCGCCATCAACGCGTTCCGCCAGGTGCGGCTGAAACACCGGAAGCTCCGGGAACAAGTGAACTCCATG
GTGGACATCTCCAAGATGCACATGATCCTGTATGACCTGCAGCAGAATCTGAGCAGCTCACACCGGGCCCTGGAG
AAACAGATTGACACGCTGGCGGGGAAGCTGGATGCCCTGACTGAGCTGCTTAGCACTGCCCTGGGGCCGAGGCAG
CTTCCAGAACCCAGCCAGCAGTCCAAG**TAG**CTGGACCCACGAGGAGGAACCAGGCTACTTTCCCCAGTACTGAGG
TGGTGGACATCGTCTCTGCCACTCCTGACCCAGCCCTGAACAAAGCACCTCAAGTGCAAGGACCAAAGGGGGCCC
TGGCTTGGAGTGGGTTGGCTTGCTGATGGCTGCTGGAGGGGACGCTGGCTAAAGTGGGTAGGCCTTGGCCCACCT
GAGGCCCCAGGTGGGAACATGGTCACCCCCACTCTGCATACCCTCATCAAAAACACTCTCACTATGCTGCTATGG
ACGACCTCCAGCTCTCAGTTACAAGTGCAGGCGACTGGAGGCAGGACTCCTGGGTCCCTGGGAAAGAGGGTACTA
GGGGCCCGGATCCAGGATTCTGGGAGGCTTCAGTTACCGCTGGCCGAGCTGAAGAACTGGGTATGAGGCTGGGGC
GGGGCTGGAGGTGGCGCCCCCTGGTGGGACAACAAAGAGGACACCATTTTTCCAGAGCTGCAGAGAGCACCTGGT
GGGGAGGAAGAAGTGTAACTCACCAGCCTCTGCTCTTATCTTTGTAATAAATGTTAAAGCCAG

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FIGURE 1347

MGGDLVLGLGALRRRKRLLEQEKSLAGWALVLAGTGIGLMVLHAEMLWFGGCSWALYLFLVKCTISISTFLLLCL
IVAFHAKEVQLFMTDNGLRDWRVALTGRQAAQIVLELVVCGLHPAPVRGPPCVQDLGAPLTSPQPWPGFLGQGEA
LLSLAMLLRLYLVPRAVLLRSGVLLNASYRSIGALNQVRFRHWFVAKLYMNTHPGRLLLGLTLGLWLTTAWVLSV
AERQAVNATGHLSDTLWLIPITFLTIGYGDVVPGTMWGKIVCLCTGVMGVCCTALLVAVVARKLEFNKAEKHVHN
FMMDIQYTKEMKESAARVLQEAWMFYKHTRRKESHAARRHQRKLLAAINAFRQVRLKHRKLREQVNSMVDISKMH
MILYDLQQNLSSSHRALEKQIDTLAGKLDALTELLSTALGPRQLPEPSQQSK

FIGURE 1348A

TTAGAAGTAAGGCAGAGGGGACCCAGCGAAATGGAAGAAGTTAGGTGTCCAGAGCACGGGACTTTCTGCTTTCTT
AAGACCGGCGTCCGCGATGGCCCGAATAAAGGAAAGAGCTTCTACGTGTGCCGGGCAGACACGTGCAGCTTCGTG
CGGGCCACCGACATTCCTGTTTCCCATTGCTTATTGCATGAGGACTTTGTGGTAGAGCTTCAGGGTTTGCCTCTG
CCACAGGACAAGAAAGAATACAGATTGTTCTTCCGATGCATTGGAAGTAAGGCAGAGGGGAAACGCTGGTGTGGA
AGTATTCCATGGCAGGATCCTGATTCCAAAGAACATTCTGTATCCAATAAGTCTCAGCATGCATCTGAGACATTT
CATCATTCTTCCAACTGGCTGAGAAACCCATTCAAGGTACTTGACAAGAATCAAGAACCAGCTCTCTGGAAACAG
CTCATCAAAGGTGAAGGTGAGGAAAAGAAGGCTGATAAGAAGCAAAGAGAAAAGGGAGATCAGCTTTTCGATCAA
AAGAAAGAACAGAAGCCTGAAATGATGGAGAAAGACCTCTCATCTGGCCTGGTACCAAAGAAAAAACAATCTGTA
GTTCAAGAGAAGAAGCAAGAAGAGGGAGCAGAGATTCAGTGTGAGGCAGAGACTGGAGGCACACACAAAAGAGAC
TTTTCTGAAATTAAATCTCAACAGTGCCAAGGTAATGAGCTTACAAGACCATCTGCATCTTCTCAGGAGAAATCA
AGTGGTAAGAGTCAAGATGTCCAAAGAGAATCAGAACCTCTGAGAGAAAAGGTTACCCAGCTTTTGCCTCAAAAT
GTTCACAGTCACAACTCAATAAGCAAGCCCCAGAAAGGGGGACCCCTCAACAAGGAGTACACGAACTGGGAGGCT
AAAGAAACAAAGGCAAAGGATGGCCCTAGCATACAGGCCACCCAGAAAAGCCTGCCTCAGGGGCATTTCCAAGAG
CGGCCGGAGACCCACAGTGTGCCTGCTCCTGGAGGACCAGCGGCTCAGGCTGCACCAGCAGCACCAGGGCTTTCC
CTGGGTGAGGGCCGTGAAGCTGCCACAAGCAGTGACGACGAGGAGGAAGATGATGTTGTTTTTGTTTCCTCTAAG
CCTGGGAGCCCCCTACTCTTTGACTCGACTCTGGACTTAGAGACGAAGGAAAACCTCCAATTCCCTGATCGAAGT
GTGCAAAGAAAGGTGTCTCCTGCCTCAGGTGTTTCCAAGAAGGTAGAACCCTCAGACCCAGTAGCCCGGCGTGTC
TACCTTACAACACAACTGAAACAAAAGAAGAGCACACTGGCATCAGTGAACATCCAGGCTCTTCCAGACAAGGGT
CAGAAGTTGATCAAACAAATCCAGGAGCTGGAGGAAGTACTCAGTGGTCTTACCCTTTCCCCAGAGCAAGGAACT
AATGAGAAGAGTAACAGTCAAGTACCACAGCAGAGTCACTTCACCAAAACTACCACTGGCCCTCCCCACCTGGTG
CCTCCCCAACCCCTTCCTCGTCGTGGTACCCAACCTGTGGGTTCTCTAGAACTAAAGTCTGCCTGCCAGGTGACT
GCTGGAGGATCCAGTCAGTGCTATCGAGGCCATACAAACCAAGATCACGTTCATGCAGTGTGGAAAATCACAAGT
GAAGCCATCGGTCAACTGCATCGCTCACTTGAGTCATGTCCTGGTGAGACGGTTGTGGCAGAAGATCCCGCCGGG
CTGAAGGTCCCTTTGCTACTACACCAGAAGCAGGCATTGGCTTGGTTACTATGGCGAGAAAGTCAGAAGCCACAA
GGAGGAATTCTGGCAGATGATATGGGCTTAGGAAAAACCCTGACAATGATTGCGCTCATCCTGACCCAGAAGAAT
CAAGAGAAAAAGGAAGAAAAGGAGAAAAGCACAGCTTTGACGTGGCTCTCCAAAGATGACTCTTGTGACTTTACT
TCCCATGGAACACTAATCATCTGTCCTGCCTCCCTGATCCATCATTGGAAAAATGAGGTGGAGAAACGGGTGAAC
AGCAACAAACTAAGAGTCTATCTCTACCATGGGCCAAACCGGGATTCACGTGCCAGAGTCCTCTCTACATATGAC
ATCGTGATCACTACCTATAGCCTCGTGGCCAAGGAGATTCCCACAAACAAGCAAGAGGCAGAGATCCCAGGTGCA
AACCTCAATGTGGAGGGCACCTCAACACCTTTGCTTCGAATAGCCTGGGCTCGAATCATATTGGATGAAGCTCAC
AATGTTAAGAATCCCCGAGTGCAGACTTCCATAGCTGTGTGTAAGCTACAAGCCTGTGCCCGTTGGGCTGTCACT
GGAACCCCCATTCAAAACAACTTATTGGATATGTATTCGCTGCTGAAGTTTCTCCGTTGCTCTCCATTTGATGAG
TTCAATCTGTGGAGGAGTCAGGTTGACAATGGCTCAAAGAAAGGAGGAGAACGGTTAAGTATTTTAACCAAGAGC
CTTTTGCTGAGGAGAACAAAAGACCAGCTGGACTCTACTGGCAGACCTTTGGTGATACTGCCCCAGCGTAAATTT
CAGTTGCACCATTTAAAGCTTTCTGAAGATGAAGAGACTGTTTACAATGTGTTTTTTGCAAGATCAAGGTCAGCT
CTGCAATCCTATCTAAAAAGACATGAAAGTAGAGGCAACCAATCTGGAAGAAGCCCTAATAATCCATTCAGTAGA
GTGGCACTGGAGTTTGGGTCTGAGGAGCCTAGACACTCGGAGGCAGCAGACTCACCGAGATCCAGCACCGTCCAC
ATACTGTCCCAGTTGCTGAGACTCCGCCAGTGTTGCTGTCATCTTTCTTTACTGAAGTCGGCCCTGGATCCAATG
GAACTGAAGGGTGAAGGTCTTGTCCTTTCCCTAGAAGAACAGCTCAGTGCTTTGACCTTGTCAGAACTCCGTGAC
TCAGAGCCATCTTCCACTGTTTCCCTTAACGGCACCTTCTTCAAGATGGAGCTTTTTGAAGGCATGCGAGAGAGC
ACCAAGATTTCATCTCTGTTGGCAGAATTGGAGGCAATTCAAAGAAATTCAGCATCCCAAAAGAGTGTCATTGTC
TCTCAGTGGACCAACATGCTGAAAGTTGTAGCATTGCACCTGAAGAAGCATGGACTGACTTATGCCACCATCGAT
GGCTCTGTCAATCCCAAGCAGAGAATGGACTTGGTAGAGGCATTTAACCACTCCAGAGGCCCTCAGGTAATGCTA
ATCTCTCTCTTGGCTGGAGGTGTTGGTCTAAACCTGACTGGAGGAAATCACCTCTTTCTTTTGGACATGCACTGG
AATCCATCACTTGAAGATCAAGCTTGTGACCGAATTTACCGAGTAGGGCAGCAGAAAGATGTTGTCATACACAGA
TTTGTTTGTGAGGGAACAGTAGAAGAAAAGATCTTACAGCTCCAAGAAAAAAAGAAAGATTTGGCCAAACAAGTT
CTATCAGGGTCTGGAGAATCTGTCACCAAGCTCACCTTGGCTCACCTCAGAGTCCTTTTTGGCATCTAACCTCCT
GTGGATAAGGGCTCAGAATAGCACCATTGCTGGTTTGTATTAGGATCTGGGAATAACAACCTAACCATGAGCCTT

FIGURE 1348B

GAACTCTGTTCTTTGCATTTCAATTTCACCGTCAAGCCTTTCACCTTCCTCAAAATGAGGCATAATCTTATCCCC
AGAATTGAGGAGGGGTTGTGTTAACCAATTAGTTAACCAATTATGTTAATAATTTATTTAATGAGTGGTATGGAA
ACCAATTGATTTTTTTAGATAAAAGAATATGTTTTAGAGTTGGATGATTTTGGAAAACAACTCTGGCAGAATTGT
ATATAAGCTTCAGTAAAGTTCAAAAAGCGGGCCAGGTGTGGTGGCTCATGCCTGTAATCCCGACACTTTGGGAGG
CCAAGGCAGGAGGATGGCTTGAAGCCAGTAGTTCAAGACCAGCCTGGGCAACATAGTAAGACCCCATCTCTATGA
AGAATAAAAAAATGAGCTAGGCGTGGTAGTGCACACCTGTAGTCCTAGCTACTTGGGAGGCTGAGGCAGGAGGAT
CCCTTGAGTCCAGGAGGTTGAGGCTGCAGTGAGCTGTGATTGTGCCACTGTTTTCCAGCCTGGGCAATACAGTGA
GACCCTGTCTCAAAAAAAGGAAAAAAAAGCTCAAAAATTCTGTGTTGCCTTTXTTTTTTTAGCTGATGATGGGAG
AACCAGTTAAXACCTTTTTTAAXACAGGXTCCATCCTATTTTTTCATTTTTTCTXGCCAGXGATGTTGCACCTGT
AACCATTTTTTTATGGGXGGAGCAGAGAGTCAATCCCTGCAGCCACCCTGCAGCCAGCCATTTTTGCAGTTTTTT
CAGTGCAGGCAGTTTTTCCTTTCAGGXTGXAGATCAAGGAGATGCTTTGTAGATGAACAGATGCAGAGTATCTGT
TATCATTGTATTGTTTAGTGTCAGTGTATCATTTAGTATTTGTATCACTGTACCATTTAGTGTTGTATATCAXTC
AGTCATTTAATATTGGTTATCACCAXACAGTTTAATATTTGTATCATTTGGTTCATTGTATCGTTTAGTATTTGT
ATTATAAGATTTCTATTTGTAGTATTTGTATAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1349

MEEVRCPEHGTFCFLKTGVRDGPNKGKSFYVCRADTCSFVRATDIPVSHCLLHEDFVVELQGLPLPQDKKEYRLF
FRCIGSKAEGKRWCGSIPWQDPDSKEHSVSNKSQHASETFHHSSNWLRNPFKVLDKNQEPALWKQLIKGEGEEKK
ADKKQREKGDQLFDQKKEQKPEMMEKDLSSGLVPKKKQSVVQEKKQEEGAEIQCEAETGGTHKRDFSEIKSQQCQ
GNELTRPSASSQEKSSGKSQDVQRESEPLREKVTQLLPQNVHSHNSISKPQKGGPLNKEYTNWEAKETKAKDGPS
IQATQKSLPQGHFQERPETHSVPAPGGPAAQAAPAAPGLSLGEGREAATSSDDEEEDDVVFVSSKPGSPLLFDST
LDLETKENLQFPDRSVQRKVSPASGVSKKVEPSDPVARRVYLTTQLKQKKSTLASVNIQALPDKGQKLIKQIQEL
EEVLSGLTLSPEQGTNEKSNSQVPQQSHFTKTTTGPPHLVPPQPLPRRGTQPVGSLELKSACQVTAGGSSQCYRG
HTNQDHVHAVWKITSEAIGQLHRSLESCPGETVVAEDPAGLKVPLLLHQKQALAWLLWRESQKPQGGILADDMGL
GKTLTMIALILTQKNQEKKEEKEKSTALTWLSKDDSCDFTSHGTLIICPASLIHHWKNEVEKRVNSNKLRVYLYH
GPNRDSRARVLSTYDIVITTYSLVAKEIPTNKQEAEIPGANLNVEGTSTPLLRIAWARIILDEAHNVKNPRVQTS
IAVCKLQACARWAVTGTPIQNNLLDMYSLLKFLRCSPFDEFNLWRSQVDNGSKKGGERLSILTKSLLLRRTKDQL
DSTGRPLVILPQRKFQLHHLKLSEDEETVYNVFFARSRSALQSYLKRHESRGNQSGRSPNNPFSRVALEFGSEEP
RHSEAADSPRSSTVHILSQLLRLRQCCCHLSLLKSALDPMELKGEGLVLSLEEQLSALTLSELRDSEPSSTVSLN
GTFFKMELFEGMRESTKISSLLAELEAIQRNSASQKSVIVSQWTNMLKVVALHLKKHGLTYATIDGSVNPKQRMD
LVEAFNHSRGPQVMLISLLAGGVGLNLTGGNHLFLLDMHWNPSLEDQACDRIYRVGQQKDVVIHRFVCEGTVEEK
ILQLQEKKKDLAKQVLSGSGESVTKLTLAHLRVLFGI

FIGURE 1350

GAACCGTTTACTCGCTGCTGTGCCCATCTATCAGCAGGCTCCGGGCTGAAGATTGCTTCTCTTCTCTCCTCCAAG
GTCTAGTGACGGAGCCCGCGCGCGGCGCCACCATGCGGCAGAAGGCGGTATCGCTTTTCTTGTGCTACCTGCTGC
TCTTCACTTGCAGTGGGGTGGAGGCAGGTGAGAATGCGGGTAAGGATGCAGGTAAGAAAAAGTGCTCGGAGAGCT
CGGACAGCGGCTCCGGGTTCTGGAAGGCCCTGACCTTCATGGCCGTCGGAGGAGGACTCGCAGTCGCCGGGCTGC
CCGCGCTGGGCTTCACCGGCGCCGGCATCGCGGCCAACTCGGTGGCTGCCTCGCTGATGAGCTGGTCTGCGATCC
TGAATGGGGGCGGCGTGCCCGCCGGGGGGCTAGTGGCCACGCTGCAGAGCCTCGGGGCTGGTGGCAGCAGCGTCG
TCATAGGTAATATTGGTGCCCTGATGGGCTACGCCACCCACAAGTATCTCGATAGTGAGGAGGATGAGGAGTAGC
CAGCAGCTCCCAGAACCTCTTCTTCCTTCTTGGCCTAACTCTTCCAGTTAGGATCTAGAACTTTGCCTTTTTTTT
TTTTTTTTTTTTTTTTTGAGATGGGTTCTCACTATATTGTCCAGGCTAGAGTGCAGTGGCTATTCACAGATGCGA
ACATAGTACACTGCAGCCTCCAACTCCTAGCCTCAAGTGATCCTCCTGTCTCAACCTCCCAAGTAGGATTACAAG
CATGCGCCGACGATGCCCAGAATCCAGAACTTTGTCTATCACTCTCCCCAACAACCTAGATGTGAAAACAGAATA
AACTTCACCCAGAAAA

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FIGURE 1351

MRQKAVSLFLCYLLLFTCSGVEAGENAGKDAGKKKCSESSDSGSGFWKALTFMAVGGGLAVAGLPALGFTGAGIA
ANSVAASLMSWSAILNGGGVPAGGLVATLQSLGAGGSSVVIGNIGALMGYATHKYLDSEEDEE

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FIGURE 1352

CCCCGCCCCGCTGAGGCCTGTCTGCAGAATCCACAGCAACCAGCACCATGCCCATGACACTGGGGTACTGGAACA
TCCGCGGGCTGGCCCATTCCATCCGCCTGCTCCTGGAATACACAGACTCAAGCTACGAGGAAAAGAAGTACACGA
TGGGGGACGCTCCTGATTATGACAGAAGCCAGTGGCTGAATGAAAAATTCAAGCTGGGCCTGGACTTTCCCAATC
TGCCCTACTTGATTGATGGGACTCACAAGATCACCCAGAGCAACGCCATCCTGCGGTACATTGCCCGCAAGCACA
ACCTGTGCGGGGAATCAGAAAAGGAGCAGATTCGCGAAGACATTTTGGAGAACCAGTTTATGGACAGCCGTATGC
AGCTGGCCAAACTCTGCTATGACCCAGATTTTGAGAAACTGAAACCAGAATACCTGCAGGCACTCCCTGAAATGC
TGAAGCTCTACTCACAGTTTCTGGGGAAGCAGCCATGGTTTCTTGGGGACAAGATCACCTTTGTGGATTTCATCG
CTTATGATGTCCTTGAGAGAAACCAAGTATTTGAGCCCAGCTGCCTGGATGCCTTCCCAAACCTGAAGGACTTCA
TCTCCCGATTTGAGGGCTTGGAGAAGATCTCTGCCTACATGAAGTCCAGCCGCTTCCTCCCAAGACCTGTGTTCA
CAAAGATGGCTGTCTGGGGCAACAAGTAGGGCCTTGAAGGCCAGGAGGTGGGAGTGAGGAGCCCATACTCAGCCT
GCTGCCCAGGCTGTGCAGCGCAGCTGGACTCTGCATCCCAGCACCTGCCTCCTCGTTCCTTTCTCCTGTTTATTC
CCATCTTTACTCCCAAGACTTCATTGTCCCTCTTCACTCCCCCTAAACCCCTGTCCCATGCAGGCCCTTTGAAGC
CTCAGCTACCCACTATCCTTCGTGAACATCCCCTCCCATCATTACCCTTCCCTGCACTAAAGCCAGCCTGACCTT
CCTTCCTGTTAGTGGTTGTGTCTGCTTTAAAGGGCCTGCCTGGCCCCTCGCCTGTGGAGCTCAGCCCCGAGCTGT
CCCCGTGTTGCATGAAGGAGCAGCATTGACTGGTTTACAGGCCCTGCTCCTGCAGCATGGTCCCTGCCTTAGGCC
TACCTGATGGAAGTAAAGCCTCAACCACAAAAAAAAAAAAA

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FIGURE 1353

MPMTLGYWNIRGLAHSIRLLLEYTDSSYEEKKYTMGDAPDYDRSQWLNEKFKLGLDFPNLPYLIDGTHKITQSNA
ILRYIARKHNLCGESEKEQIREDILENQFMDSRMQLAKLCYDPDFEKLKPEYLQALPEMLKLYSQFLGKQPWFLG
DKITFVDFIAYDVLERNQVFEPSCLDAFPNLKDFISRFEGLEKISAYMKSSRFLPRPVFTKMAVWGNK

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FIGURE 1354

CGTGGGAGCAGTGGGGTTCGACGGCGCGGCCGCGAGGCCGCCATGGCCGCTCACGGGAAGCTGCGGCGGGAGCGG
GGGCTGCAGGCTGAGTATGAGACGCAAGTCAAAGAGATGCGCTGGCAGCTGAGCGAGCAGCTGCGCTGCCTGGAG
CTGCAGGGCGAGCTGCGGCGGGAGTTGCTGCAGGAGCTGGCAGAGTTCATGCGGCGCCGCGCTGAGGTGGAGCTG
GAATACTCCCGGGGCCTGGAAAAGCTGGCCGAGCGCTTCTCCAGCCGTGGAGGCCGCCTGGGGAGCAGCCGGGAG
CACCAAAGCTTCCGGAAGGAGCCGTCCCTCCTGTCGCCCTTGCACTGCTGGGCGGTGCTGCTGCAGCACACGCGG
CAGCAGAGCCGGGAGAGCGCGGCCCTGAGTGAGGTGCTGGCCGGGCCCCTGGCCCAGCGCCTGAGTCACATTGCA
GAGGACGTGGGGCGCCTGGTCAAGAAGAGCAGGGATCTGGAGCAGCAGCTGCAGGATGAGCTCCTGGAGGTGGTC
TCAGAGCTCCAGACGGCCAAGAAGACGTACCAGGCATATCACATGGAGAGCGTGAATGCCGAGGCCAAGCTCCGG
GAGGCCGAGCGGCAGGAGGAGAAGCGGGCAGGCCGGAGTGTCCCCACCACCACCGCTGGTGCCACTGAGGCAGGG
CCCCTCCGCAAGAGCTCCCTCAAGAAGGGAGGGAGGCTGGTGGAGAAGCGGCAGGCCAAGTTCATGGAGCACAAA
CTCAAGTGCACAAAGGCGCGCAACGAGTACCTGCTTAGCCTGGCTAGTGTCAACGCTGCTGTCAGTAACTACTAC
CTGCATGACGTCTTGGACCTCATGGACTGCTGTGACACAGGGTTCCACCTGGCCCTGGGGCAGGTGCTCCGGAGC
TACACGGCCGCTGAGAGCCGCACCCAAGCCTCCCAAGTGCAGGGCCTGGGCAGCCTGGAAGAAGCTGTGGAGGCC
CTGGATCCTCCAGGGGACAAAGCCAAGGTTCTCGAGGTGCATGCTACCGTCTTCTGTCCCCCGCTGCGCTTTGAC
TACCACCCCCATGATGGGGATGAGGTGGCTGAGATCTGCGTTGAAATGGAGCTGCGGGACGAGATTCTGCCCAGA
GCCCAGAACATCCAGAGCCGCCTGGACCGACAGACCATTGAGACAGAGGAGGTGAACAAGACTCTGAAGGCGACA
CTGCAGGCCCTGCTGGAGGTGGTGGCCTCGGATGACGGGGATGTGCTTGATTCCTTCCAGACCAGCCCCTCCACC
GAGTCCCTCAAGTCCACCAGCTCAGACCCAGGCAGCCGGCAGGCGGGCCGGAGGCGCGGCCAGCAGCAGGAGACC
GAAACCTTCTACCTCACGAAGCTCCAGGAGTATCTGAGTGGACGGAGCATCCTCGCCAAGCTGCAGGCCAAGCAC
GAGAAGCTGCAGGAGGCCCTTCAGCGAGGTGACAAGGAGGAGCAGGAGGTGTCTTGGACCCAGTACACACAGAGA
AAATTCCAGAAGAGCCGCCAGCCCCGCCCCAGCTCCCAGTATAACCAGAGACTCTTTGGGGGAGACATGGAGAAG
TTTATCCAGAGCTCAGGCCAGCCTGTGCCCCTGGTGGTGGAGAGCTGCATTCGCTTCATCAACCTCAATGGCCTG
CAGCATGAAGGCATCTTCCGGGTATCGGGTGCCCAGCTCCGGGTCTCAGAGATCCGTGATGCCTTCGAGAGAGGG
GAGGACCCACTGGTGGAGGGCTGCACTGCCCATGACCTGGACTCGGTGGCCGGGGTGCTGAAGCTCTACTTCCGG
AGCCTGGAGCCCCCACTCTTCCCCCCAGACCTGTTCGGCGAGCTGCTGGCTTCTTCGGAGCTGGAGGCCACAGCG
GAGAGGGTGGAGCACGTGAGCCGCCTGCTGTGGCGGCTGCCCGCGCCGGTGCTGGTGGTTCTGCGCTACCTCTTC
ACCTTCCTCAACCACCTGGCCCAGTACAGCGATGAGAACATGATGGACCCCTACAACCTGGCCGTGTGCTTCGGG
CCCACGCTGCTACCGGTGCCCGCTGGGCAGGACCCGGTGGCGCTGCAGGGCCGGGTGAACCAGCTGGTGCAGACG
CTCATAGTGCAGCCCGATCGGGTCTTCCCGCCCCTGACCTCGCTGCCTGGCCCCGTCTACGAGAAGTGCATGGCA
CCGCCTTCCGCCAGCTGCCTGGGGGACGCCCAGCTGGAGAGCCTGGGGGCGGACAATGAGCCGGAGCTGGAAGCC
GAGATGCCCGCACAGGAGGATGACCTGGAGGGGGTCGTGGAGGCTGTGGCCTGCTTTGCCTACACGGGCCGCACA
GCCCAGGAGCTGAGCTTCCGGCGGGGGGACGTACTGCGGCTGCACGAGAGGGCCTCGAGCGACTGGTGGCGGGGG
GAGCACAACGGCATGCGGGGCCTCATCCCCCACAAGTATATCACGCTGCCCGCCGGGACGGAGAAGCAGGTGGTG
GGCGCAGGGCTGCAGACTGCAGGGGAGTCTGGGAGCAGTCCCGAGGGCCTCCTGGCATCGGAGCTGGTCCACCGG
CCAGAGCCATGCACCTCACCTGAGGCCATGGGACCCTCTGGACACAGACGACGCTGCTTGGTCCCAGCCTCCCCA
GAGCAACACGTGGAGGTGGATAAGGCTGTGGCACAGAACATGGACTCTGTGTTTAAGGAGCTCTTGGGAAAGACC
TCTGTCCGCCAGGGCCTTGGGCCAGCATCTACCACCTCTCCCAGTCCTGGGCCCCGAAGCCCAAAGGCCCCGCCC
AGCAGCCGCCTGGGCAGGAACAAAGGCTTCTCCCGGGGCCCTGGGGCCCCAGCCTCACCCTCAGCTTCCCACCCC
CAGGGCCTAGACACGACCCCCAAGCCACACTGAGGTGCCGCTGCTGGAGATGCGTGCCCCCGGCGGCTACCCGCT
GGACCGGCCACTCTCCCCAGCCCCCTTGCTTCTCTCCAGCCCTGTCCAGCAAGTGCAGGGTGCCTGCACTTCACC
CTGTGCAGAGAGGTGGGATGGGGCCGTGCACACAGGGATGCCCGCTCCACATCCTGCCTGCCCCTCAGCCCTGGC
CCAGGCCCCTTTTGGAGGCAGCTGAGGAAGGATGCTGGGGAAAGCCCTCTTCTGCAGCTTTGTGGAAGGCTGATC
AGTGGCTGCTGGGTGGCGGGTACCCTTGCTCAGATGCCTGGCAGGGCTGGGTGGCGATTCATAAAGACCTCGTGT
TGATTCCCCG

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FIGURE 1355

MAAHGKLRRERGLQAEYETQVKEMRWQLSEQLRCLELQGELRRELLQELAEFMRRRAEVELEYSRGLEKLAERFS
SRGGRLGSSREHQSFRKEPSLLSPLHCWAVLLQHTRQQSRESAALSEVLAGPLAQRLSHIAEDVGRLVKKSRDLE
QQLQDELLEVVSELQTAKKTYQAYHMESVNAEAKLREAERQEEKRAGRSVPTTTAGATEAGPLRKSSLKKGGRLV
EKRQAKFMEHKLKCTKARNEYLLSLASVNAAVSNYYLHDVLDLMDCCDTGFHLALGQVLRSYTAAESRTQASQVQ
GLGSLEEAVEALDPPGDKAKVLEVHATVFCPPLRFDYHPHDGDEVAEICVEMELRDEILPRAQNIQSRLDRQTIE
TEEVNKTLKATLQALLEVVASDDGDVLDSFQTSPSTESLKSTSSDPGSRQAGRRRGQQQETETFYLTKLQEYLSG
RSILAKLQAKHEKLQEALQRGDKEEQEVSWTQYTQRKFQKSRQPRPSSQYNQRLFGGDMEKFIQSSGQPVPLVVE
SCIRFINLNGLQHEGIFRVSGAQLRVSEIRDAFERGEDPLVEGCTAHDLDSVAGVLKLYFRSLEPPLFPPDLFGE
LLASSELEATAERVEHVSRLLWRLPAPVLVVLRYLFTFLNHLAQYSDENMMDPYNLAVCFGPTLLPVPAGQDPVA
LQGRVNQLVQTLIVQPDRVFPPLTSLPGPVYEKCMAPPSASCLGDAQLESLGADNEPELEAEMPAQEDDLEGVVE
AVACFAYTGRTAQELSFRRGDVLRLHERASSDWWRGEHNGMRGLIPHKYITLPAGTEKQVVGAGLQTAGESGSSP
EGLLASELVHRPEPCTSPEAMGPSGHRRRCLVPASPEQHVEVDKAVAQNMDSVFKELLGKTSVRQGLGPASTTSP
SPGPRSPKAPPSSRLGRNKGFSRGPGAPASPSASHPQGLDTTPKPH

FIGURE 1356

GCACGAGGAAGCCACAGATCTCTTAAGAACTTTCTGTCTCCAAACCGTGGCTGCTCGATAAATCAGACAGAACAG
TTAATCCTCAATTTAAGCCTGATCTAACCCCTAGAAACAGATATAGAACAATGGAAGTGACAACAAGATTGACAT
GGAATGATGAAAATCATCTGCGCAACTGCTTGGAAATGTTTCTTTGAGTCTTCTCTATAAGTCTAGTGTTCATGG
AGGTAGCATTGAAGATATGGTTGAAAGATGCAGCCGTCAGGGATGTACTATAACAATGGCTTACATTGATTACAA
TATGATTGTAGCCTTTATGCTTGGAAATTATATTAATTTACGTGAAAGTTCTACAGAGCCAAATGATTCCCTATG
GTTTTCACTTCAAAAGAAAAATGACACCACTGAAATAGAAACTTTACTCTTAAATACAGCACCAAAAATTATTGA
TGAGCAACTGGTGTGTCGTTTATCGAAAACGGATATTTTCATTATATGTCGAGATAATAAAATTTATCTAGATAA
AATGATAACAAGAAACTTGAAACTAAGGTTTTATGGCCACCGTCAGTATTTGGAATGTGAAGTTTTTCGAGTTGA
AGGAATTAAGGATAACCTAGACGACATAAAGAGGATAATTAAAGCCAGAGAGCACAGAAATAGGCTTCTAGCAGA
CATCAGAGACTATAGGCCCTATGCAGACTTGGTTTCAGAAATTCGTATTCTTTTGGTGGGTCCAGTTGGGTCTGG
AAAGTCCAGTTTTTTCAATTCAGTCAAGTCTATTTTTCATGGCCATGTGACTGGCCAAGCCGTAGTGGGGTCTGA
TACCACCAGCATAACCGAGCGGTATAGGATATATTCTGTTAAAGATGGAAAAAATGGAAAATCTCTGCCATTTAT
GTTGTGTGACACTATGGGGCTAGATGGGGCAGAAGGAGCAGGACTGTGCATGGATGACATTCCCCACATCTTAAA
AGGTTGTATGCCAGACAGATATCAGTTTAATTCCCGTAAACCAATTACACCTGAGCATTCTACTTTTATCACCTC
TCCATCTCTGAAGGACAGGATTCACTGTGTGGCTTATGTCTTAGACATCAACTCTATTGACAATCTCTACTCTAA
AATGTTGGCAAAAGTGAAGCAAGTTCACAAAGAAGTATTAAACTGTGGTATAGCATATGTGGCCTTGCTTACTAA
AGTGGATGATTGCAGTGAGGTTCTTCAAGACAACTTTTTAAACATGAGTAGATCTATGACTTCTCAAAGCCGGGT
CATGAATGTCCATAAAATGCTAGGCATTCCTATTTCCAATATTTTGATGGTTGGAAATTATGCTTCAGATTTGGA
ACTGGACCCCATGAAGGATATTCTCATCCTCTCTGCACTGAGGCAGATGCTGCGGGCTGCAGATGATTTTTTAGA
AGATTTGCCTCTTGAGGAAACTGGTGCAATTGAGAGAGCGTTACAGCCCTGCATTTGAGATAAGTTGCCTTGATT
CTGACATTTGGCCCAGCCTGTACTGGTGTGCCGCAATGAGAGTCAATCTCTATTGACAGCCTGCTTCAGATTTTG
CTTTTGTTCGTTTTGCCTTCTGTCCTTGGAACAGTCATATCTCAAGTTCAAAGGCCAAAACCTGAGAAGCGGTGG
GCTAAGATAGGTCCTACTGCAAACCACCCCTCCATATTTCCGTACCATTTACAATTCAGTTTCTGTGACATCTTT
TTAAACCACTGGAGGAAAAATGAGATATTCTCTAATTTATTCTTCTATAACACTCTATATAGAGCTATGTGAGTA
CTAATCACATTGAATAATAGTTATAAAATTATTGTATAGACATCTGCTTCTTAAACAGATTGTGAGTTCTTTGAG
AAACAGCGTGGATTTTACTTATCTGTGTATTCACAGAGCTTAGCACAGTGCCTGGTAATGAGCAAGCATACTTGC
CATTACTTTTCCTTCCCACTCTCTCCAACATCACATTCACTTTAAATTTTTCTGTATATAGAAAGGAAAACTAGC
CTGGGCAACATGATGAAACCCCATCTCCACTGC

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FIGURE 1357

MVERCSRQGCTITMAYIDYNMIVAFMLGNYINLRESSTEPNDSLWFSLQKKNDTTEIETLLLNTAPKIIDEQLVC
RLSKTDIFIICRDNKIYLDKMITRNLKLRFYGHRQYLECEVFRVEGIKDNLDDIKRIIKAREHRNRLLADIRDYR
PYADLVSEIRILLVGPVGSGKSSFFNSVKSIFHGHVTGQAVVGSDTTSITERYRIYSVKDGKNGKSLPFMLCDTM
GLDGAEGAGLCMDDIPHILKGCMPDRYQFNSRKPITPEHSTFITSPSLKDRIHCVAYVLDINSIDNLYSKMLAKV
KQVHKEVLNCGIAYVALLTKVDDCSEVLQDNFLNMSRSMTSQSRVMNVHKMLGIPISNILMVGNYASDLELDPMK
DILILSALRQMLRAADDFLEDLPLEETGAIERALQPCI

FIGURE 1358A

ACCTGCGTGCAGTCGGTCCTCCAGGCCACGCAGCGCCCGAGAGTACCAGGGAGACTCCGGCCCCTGTCGGCGCCA
AGCCCCTCCGCCCCTCACAGCGCCCAGGTCCGCGGCCGGGCCTTGATTTTTTGGCGGGGACCGTCATGGCGTCGC
AGCCAAATTCGTCTGCGAAGAAGAAAGAGGAGAAGGGGAAGAACATCCAGGTGGTGGTGAGATGCAGACCATTTA
ATTTGGCAGAGCGGAAAGCTAGCGCCCATTCAATAGTAGAATGTGATCCTGTACGAAAAGAAGTTAGTGTACGAA
CTGGAGGATTGGCTGACAAGAGCTCAAGGAAAACATACACTTTTGATATGGTGTTTGGAGCATCTACTAAACAGA
TTGATGTTTACCGAAGTGTTGTTTGTCCAATTCTGGATGAAGTTATTATGGGCTATAATTGCACTATCTTTGCGT
ATGGCCAAACTGGCACTGGAAAAACTTTTACAATGGAAGGTGAAAGGTCACCTAATGAAGAGTATACCTGGGAAG
AGGATCCCTTGGCTGGTATAATTCCACGTACCCTTCATCAAATTTTTGAGAAACTTACTGATAATGGTACTGAAT
TTTCAGTCAAAGTGTCTCTGTTGGAGATCTATAATGAAGAGCTTTTTGATCTTCTTAATCCATCATCTGATGTTT
CTGAGAGACTACAGATGTTTGATGATCCCCGTAACAAGAGAGGAGTGATAATTAAAGGTTTAGAAGAAATTACAG
TACACAACAAGGATGAAGTCTATCAAATTTTAGAAAAGGGGGCAGCAAAAAGGACAACTGCAGCTACTCTGATGA
ATGCATACTCTAGTCGTTCCCACTCAGTTTTCTCTGTTACAATACATATGAAAGAAACTACGATTGATGGAGAAG
AGCTTGTTAAAATCGGAAAGTTGAACTTGGTTGATCTTGCAGGAAGTGAAAACATTGGCCGTTCTGGAGCTGTTG
ATAAGAGAGCTCGGGAAGCTGGAAATATAAATCAATCCCTGTTGACTTTGGGAAGGGTCATTACTGCCCTTGTAG
AAAGAACACCTCATGTTCCTTATCGAGAATCTAAACTAACTAGAATCCTCCAGGATTCTCTTGGAGGGCGTACAA
GAACATCTATAATTGCAACAATTTCTCCTGCATCTCTCAATCTTGAGGAAACTCTGAGTACATTGGAATATGCTC
ATAGAGCAAAGAACATATTGAATAAGCCTGAAGTGAATCAGAAACTCACCAAAAAAGCTCTTATTAAGGAGTATA
CGGAGGAGATAGAACGTTTAAAACGAGATCTTGCTGCAGCCCGTGAGAAAAATGGAGTGTATATTTCTGAAGAAA
ATTTTAGAGTCATGAGTGGAAAATTAACTGTTCAAGAAGAGCAGATTGTAGAATTGATTGAAAAAATTGGTGCTG
TTGAGGAGGAGCTGAATAGGGTTACAGAGTTGTTTATGGATAATAAAAATGAACTTGACCAGTGTAAATCTGACC
TGCAAAATAAAACACAAGAACTTGAAACCACTCAAAAACATTTGCAAGAAACTAAATTACAACTTGTTAAAGAAG
AATATATCACATCAGCTTTGGAAAGTACTGAGGAGAAACTTCATGATGCTGCCAGCAAGCTGCTTAACACAGTTG
AAGAAACTACAAAAGATGTATCTGGTCTCCATTCCAAACTGGATCGTAAGAAGGCAGTTGACCAACACAATGCAG
AAGCTCAGGATATTTTTGGCAAAAACCTGAATAGTCTGTTTAATAATATGGAAGAATTAATTAAGGATGGCAGCT
CAAAGCAAAAGGCCATGCTAGAAGTACATAAGACCTTATTTGGTAATCTGCTGTCTTCCAGTGTCTCTGCATTAG
ATACCATTACTACAGTAGCACTTGGATCTCTCACATCTATTCCAGAAAATGTGTCTACTCATGTTTCTCAGATTT
TTAATATGATACTAAAAGAACAATCATTAGCAGCAGAAAGTAAAACTGTACTACAGGAATTGATTAATGTACTCA
AGACTGATCTTCTAAGTTCACTGGAAATGATTTTATCCCCAACTGTGGTGTCTATACTGAAAATCAATAGTCAAC
TAAAGCATATTTTCAAGACTTCATTGACAGTGGCCGATAAGATAGAAGATCAAAAAAAGGAACTAGATGGCTTTC
TCAGTATACTGTGTAACAATCTACATGAACTACAAGAAAATACCATTTGTTCCTTGGTTGAGTCACAAAAGCAAT
GTGGAAACCTAACTGAAGACCTGAAGACAATAAAGCAGACCCATTCCCAGGAACTTTGCAAGTTAATGAATCTTT
GGACAGAGAGATTCTGTGCTTTGGAGGAAAAGTGTGAAAATATACAGAAACCACTTAGTAGTGTCCAGGAAAATA
TACAGCAGAAATCTAAGGATATAGTCAACAAAATGACTTTTCACAGTCAAAAATTTTGTGCTGATTCTGATGGCT
TCTCACAGGAACTCAGAAATTTTAACCAAGAAGGTACAAAATTGGTTGAAGAATCTGTGAAACACTCTGATAAAC
TCAATGGCAACCTGGAAAAAATATCTCAAGAGACTGAACAGAGATGTGAATCTCTGAACACAAGAACAGTTTATT
TTTCTGAACAGTGGGTATCTTCCTTAAATGAAAGGGAACAGGAACTTCACAACTTATTGGAGGTTGTAAGCCAAT
GTTGTGAGGCTTCAAGTTCAGACATCACTGAGAAATCAGATGGACGTAAGGCAGCTCATGAGAAACAGCATAACA
TTTTTCTTGATCAGATGACTATTGATGAAGATAAATTGATAGCACAAAATCTAGAACTTAATGAAACCATAAAAA
TTGGTTTGACTAAGCTTAATTGCTTTCTGGAACAGGATCTGAAACTGGATATCCCAACAGGTACGACACCACAGA
GGAAAAGTTATTTATACCCATCAACACTGGTAAGAACTGAACCACGTGAACATCTCCTTGATCAGCTGAAAAGGA
AACAGCCTGAGCTGTTAATGATGCTAAACTGTTCAGAAAACAACAAAGAAGAGACAATTCCGGATGTGGATGTAG
AAGAGGCAGTTCTGGGGCAGTATACTGAAGAACCTCTAAGTCAAGAGCCATCTGTAGATGCTGGTGTGGATTGTT
CATCAATTGGCGGGGTTCCATTTTTCCAGCATAAAAAATCACATGGAAAAGACAAAGAAAACAGAGGCATTAACA
CACTGGAGAGGTCTAAAGTGGAAGAAACTACAGAGCACTTGGTTACAAAGAGCAGATTACCTCTGCGAGCCCAGA
TCAACCTTTAATTCACTTGGGGGTTGGCAATTTTATTTTTAAAGAAAACTTAAAAATAAAACCTGAAACCCCAGA
ACTTGAGCCTTGTGTATAGATTTTAAAAGAATATATATATCAGCCGGGCGCGGTGGCTCATGCCTGTAATCCCAG
CACTTTGGGAGGCTGAGGCGGGTGGATTGCTTGAGCCCAGGAGTTTGAGACCAGCCTGGCCAACGTGGCAAAACC
TCGTCTCTGTTAAAAATTAGCCGGGCGTGGTGGCACACTCCTGTAATCCCAGCTACTGGGGAGGCTGAGGCACGA

FIGURE 1358B

GAATCACTTGAACCCAGGAAGCGGGGTTGCAGTGAGCCAAAGGTACACCACTACACTCCAGCCTGGGCAACAGAG
CAAGACTCGGTCTCAAAAACAAAATTTAAAAAAGATATAAGGCAGTACTGTAAATTCAGTTGAATTTTGATATCT
ACCCATTTTTCTGTCATCCCTATAGTTCACTTTGTATTAAATTGGGTTTCATTTGGGATTTGCAATGTAAATACG
TATTTCTAGTTTTCATATAAAGTAGTTCTTTTATAACAAATGAAAAGTATTTTTCTTGTATATTATTAAGTAATG
AATATATAAGAACTGTACTCTTCTCAGCTTGAGCTTAACATAGGTAAATATCACCAACATCTGTCCTTAGAAAGG
ACCATCTCATGTTTTTTTTCTTGCTATGACTTGTGTATTTTCTTGCATCCTCCCTAGACTTCCCTATTTCGCTTT
CTCCTCGGCTCACTTTCTCCCTTTTTATTTTTCACCAAACCATTTGTAGAGCTACAAAACCTATCCTTTCTTATT
TTCAGTAGTCAGAATTTTATCTAGAAATCTTTTAACACCTTTTTAGTGGTTATTTCTAAAATCACTGTCAACAAT
AAATCTAACCCTAGTTGTATCCCTCCTTTAAGTATTTAAAACTTGTTGCCCCAAATGTGAAAGCATTTAATTCCT
TTAAGAGGCCTAACTCATTCACCCTGACAGAGTTCACAAAAAGCCCACTTTAGAGTATACATTGCTATTATGGGA
GACCACCCAGACATCTGACTAATGGCTCTGTGCCACACTCCAAGACCTGTGCCTTTTAGAGAAGCTCACAATGAT
TTAAGGACTGTTTGAAACTTCCAATTATGTCTATAATTTATATTCTTTTGTTTACATGATGAAACTTTTTGTTGT
TGCTTGTTTGTATATAATACAATGTGTACATGTATCTTTTTCTCGATTCAAATCTTAACCCTTAGGACTCTGGTA
TTTTTGATCTGGCAACCATATTTCTGGAAGTTGAGATGTTTCAGCTTGAAGAACCAAAACAGAAGGAATATGTAC
AAAGAATAAATTTTCTGCTCACGATGAGTTTAGTGTGTAAAGTTTAGAGACATCTGACTTTGATAGCTAAATTAA
ACCAAACCCTATTGAAGAATTGAATATATGCTACTTCAAGAAACTAAATTGATCTCGTAGAATTATCTTAATAAA
ATAATGGCTATAATTTCTCTGCAAAATCAGATGTCAGCATAAGCGATGGATAATACCTAATAAACTGCCCTCAGT
AAATCCATGGTTAATAAATGTGGTTTCTACATT

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FIGURE 1359

MASQPNSSAKKKEEKGKNIQVVVRCRPFNLAERKASAHSIVECDPVRKEVSVRTGGLADKSSRKTYTFDMVFGAS
TKQIDVYRSVVCPILDEVIMGYNCTIFAYGQTGTGKTFTMEGERSPNEEYTWEEDPLAGIIPRTLHQIFEKLTDN
GTEFSVKVSLLEIYNEELFDLLNPSSDVSERLQMFDDPRNKRGVIIKGLEEITVHNKDEVYQILEKGAAKRTTAA
TLMNAYSSRSHSVFSVTIHMKETTIDGEELVKIGKLNLVDLAGSENIGRSGAVDKRAREAGNINQSLLTLGRVIT
ALVERTPHVPYRESKLTRILQDSLGGRTRTSIIATISPASLNLEETLSTLEYAHRAKNILNKPEVNQKLTKKALI
KEYTEEIERLKRDLAAAREKNGVYISEENFRVMSGKLTVQEEQIVELIEKIGAVEEELNRVTELFMDNKNELDQC
KSDLQNKTQELETTQKHLQETKLQLVKEEYITSALESTEEKLHDAASKLLNTVEETTKDVSGLHSKLDRKKAVDQ
HNAEAQDIFGKNLNSLFNNMEELIKDGSSKQKAMLEVHKTLFGNLLSSSVSALDTITTVALGSLTSIPENVSTHV
SQIFNMILKEQSLAAESKTVLQELINVLKTDLLSSLEMILSPTVVSILKINSQLKHIFKTSLTVADKIEDQKKEL
DGFLSILCNNLHELQENTICSLVESQKQCGNLTEDLKTIKQTHSQELCKLMNLWTERFCALEEKCENIQKPLSSV
QENIQQKSKDIVNKMTFHSQKFCADSDGFSQELRNFNQEGTKLVEESVKHSDKLNGNLEKISQETEQRCESLNTR
TVYFSEQWVSSLNEREQELHNLLEVVSQCCEASSSDITEKSDGRKAAHEKQHNIFLDQMTIDEDKLIAQNLELNE
TIKIGLTKLNCFLEQDLKLDIPTGTTPQRKSYLYPSTLVRTEPREHLLDQLKRKQPELLMMLNCSENNKEETIPD
VDVEEAVLGQYTEEPLSQEPSVDAGVDCSSIGGVPFFQHKKSHGKDKENRGINTLERSKVEETTEHLVTKSRLPL
RAQINL

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FIGURE 1360

GGGCGCCGAGGCTCCCCGCCGCTCGCTGCTCCCCGGCCCGCGCCATGCCCTCCTACACGGTCACCGTGGCCACTG
GCAGCCAGTGGTTCGCCGGCACTGACGACTACATCTACCTCAGCCTCGTGGGCTCGGCGGGCTGCAGCGAGAAGC
ACCTGCTGGACAAGCCCTTCTACAACGACTTCGAGCGTGGCGCGGTGGATTCATACGACGTGACTGTGGACGAGG
AACTGGGCGAGATCCAGCTGGTCAGAATCGAGAAGCGCAAGTACTGGCTGAATGACGACTGGTACCTGAAGTACA
TCACGCTGAAGACGCCCCACGGGGACTACATCGAGTTCCCCTGCTACCGCTGGATCACCGGCGATGTCGAGGTTG
TCCTGAGGGATGGACGCGCAAAGTTGGCCCGAGATGACCAAATTCACATTCTCAAGCAACACCGACGTAAAGAAC
TGGAAACACGGCAAAAACAATATCGATGGATGGAGTGGAACCCTGGCTTCCCCTTGAGCATCGATGCCAAATGCC
ACAAGGATTTACCCCGTGATATCCAGTTTGATAGTGAAAAAGGAGTGGACTTTGTTCTGAATTACTCCAAAGCGA
TGGAGAACCTGTTCATCAACCGCTTCATGCACATGTTCCAGTCTTCTTGGAATGACTTCGCCGACTTTGAGAAAA
TCTTTGTCAAGATCAGCAACACTATTTCTGAGCGGGTCATGAATCACTGGCAGGAAGACCTGATGTTTGGCTACC
AGTTCCTGAATGGCTGCAACCCTGTGTTGATCCGGCGCTGCACAGAGCTGCCCGAGAAGCTCCCGGTGACCACGG
AGATGGTAGAGTGCAGCCTGGAGCGGCAGCTCAGCTTGGAGCAGGAGGTCCAGCAAGGGAACATTTTCATCGTGG
ACTTTGAGCTGCTGGATGGCATCGATGCCAACAAAACAGACCCCTGCACACTCCAGTTCCTGGCCGCTCCCATCT
GCTTGCTGTATAAGAACCTGGCCAACAAGATTGTCCCCATTGCCATCCAGCTCAACCAAATCCCGGGAGATGAGA
ACCCTATTTTCCTCCCTTCGGATGCAAAATACGACTGGCTTTTGGCCAAAATCTGGGTGCGTTCCAGTGACTTCC
ACGTCCACCAGACCATCACCCACCTTCTGCGAACACATCTGGTGTCTGAGGTTTTTGGCATTGCAATGTACCGCC
AGCTGCCTGCTGTGCACCCCATTTTCAAGCTGCTGGTGGCACACGTGAGATTCACCATTGCAATCAACACCAAGG
CCCGTGAGCAGCTCATCTGCGAGTGTGGCCTCTTTGACAAGGCCAACGCCACAGGGGGCGGTGGGCACGTGCAGA
TGGTGCAGAGGGCCATGAAGGACCTGACCTATGCCTCCCTGTGCTTTCCCGAGGCCATCAAGGCCCGGGGCATGG
AGAGCAAAGAAGACATCCCCTACTACTTCTACCGGGACGACGGGCTCCTGGTGTGGGAAGCCATCAGGACGTTCA
CGGCCGAGGTGGTAGACATCTACTACGAGGGCGACCAGGTGGTGGAGGAGGACCCGGAGCTGCAGGACTTCGTGA
ACGATGTCTACGTGTACGGCATGCGGGGCCGCAAGTCCTCAGGCTTCCCCAAGTCGGTCAAGAGCCGGGAGCAGC
TGTCGGAGTACCTGACCGTGGTGATCTTCACCGCCTCCGCCCAGCACGCCGCGGTCAACTTCGGCCAGTACGACT
GGTGCTCCTGGATCCCCAATGCGCCCCCAACCATGCGAGCCCCGCCACCGACTGCCAAGGGCGTGGTGACCATTG
AGCAGATCGTGGACACGCTGCCCGACCGCGGCCGCTCCTGCTGGCATCTGGGTGCAGTGTGGGCGCTGAGCCAGT
TCCAGGAAAACGAGCTGTTCCTGGGCATGTACCCAGAAGAGCATTTTATCGAGAAGCCTGTGAAGGAAGCCATGG
CCCGATTCCGCAAGAACCTCGAGGCCATTGTCAGCGTGATTGCTGAGCGCAACAAGAAGAAGCAGCTGCCATATT
ACTACTTGTCCCCAGACCGGATTCCGAACAGTGTGGCCATCTGAGCACACTGCCAGTCTCACTGTGGGAAGGCCA
GCTGCCCCAGCCAGATGGACTCCAGCCTGCCTGGCAGGCTGTCTGGCCAGGCCTCTTGGCAGTCACATCTCTTCC
TCCGAGGCCAGTACCTTTCCATTTATTCTTTGATCTTCAGGGAACTGCATAGATTGTATCAAAGTGTAAACACCA
TAGGGACCCATTCTACACAGAGCAGGACTGCACAGGCGTCCTGTCCACACCCAGCTCAGCATTTCCACACCAAGC
AGCAACAGCAAATCACGACCACTGATAGATGTCTATTCTTGTTGGAGACATGGGATGATTATTTTCTGTTCTATT
TGTGCTTAGTCCAATTCCTTGCACATAGTAGGTACCCAATTCAATTACTATTGAATGAATTAAGAATTGGTTGCC
ATAAAAATAAATCAGTTCATTT

FIGURE 1361

MPSYTVTVATGSQWFAGTDDYIYLSLVGSAGCSEKHLLDKPFYNDFERGAVDSYDVTVDEELGEIQLVRIEKRKY
WLNDDWYLKYITLKTPHGDYIEFPCYRWITGDVEVVLRDGRAKLARDDQIHILKQHRRKELETRQKQYRWMEWNP
GFPLSIDAKCHKDLPRDIQFDSEKGVDFVLNYSKAMENLFINRFMHMFQSSWNDFADFEKIFVKISNTISERVMN
HWQEDLMFGYQFLNGCNPVLIRRCTELPEKLPVTTEMVECSLERQLSLEQEVQQGNIFIVDFELLDGIDANKTDP
CTLQFLAAPICLLYKNLANKIVPIAIQLNQIPGDENPIFLPSDAKYDWLLAKIWVRSSDFHVHQTITHLLRTHLV
SEVFGIAMYRQLPAVHPIFKLLVAHVRFTIAINTKAREQLICECGLFDKANATGGGGHVQMVQRAMKDLTYASLC
FPEAIKARGMESKEDIPYYFYRDDGLLVWEAIRTFTAEVVDIYYEGDQVVEEDPELQDFVNDVYVYGMRGRKSSG
FPKSVKSREQLSEYLTVVIFTASAQHAAVNFGQYDWCSWIPNAPPTMRAPPPTAKGVVTIEQIVDTLPDRGRSCW
HLGAVWALSQFQENELFLGMYPEEHFIEKPVKEAMARFRKNLEAIVSVIAERNKKKQLPYYYLSPDRIPNSVAI

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FIGURE 1362

CGGAAGCCGACTCAACAGAGCTATGGCGGGTTTGACTGTGAGAGACCCAGCGGTGGATCGTTCTCTACGTTCTGT
GTTCGTGGGGAACATTCCTTATGAAGCTACTGAAGAGCAGTTGAAGGACATCTTTTCTGAGGTTGGACCTGTTGT
TAGTTTCAGATTGGTATACGATAGAGAGACAGGAAAGCCAAAGGGTTATGGCTTCTGTGAATACCAAGACCAAGA
GACAGCACTTAGTGCCATGCGGAACCTGAATGGGCGCGAATTCAGTGGGAGAGCACTTCGAGTGGACAATGCTGC
CAGTGAAAAGAACAAAGAAGAGCTGAAGAGCCTTGGCACTGGTGCCCCTGTCATTGAGTCACCTTATGGAGAGAC
CATCAGTCCTGAGGATGCCCCTGAGTCCATTAGCAAAGCAGTTGCCAGCCTTCCACCAGAGCAGATGTTTGAGCT
GATGAAACAAATGAAGCTCTGTGTCCAGAATAGTCCCCAGGAGGCACGGAACATGTTACTTCAGAACCCTCAACT
GGCTTATGCTTTGCTGCAAGCACAGGTAGTGATGAGAATTGTGGATCCGGAAATTGCCCTGAAAATTCTGCATCG
CCAGACAAATATCCCAACGCTGATTGCAGGCAACCCTCAGCCAGTCCATGGTGCTGGGCCTGGCTCAGGATCCAA
TGTGTCAATGAACCAGCAGAATCCTCAGGCCCCTCAGGCCCAGTCTTTGGGTGGAATGCATGTCAATGGCGCACC
TCCTCTGATGCAAGCTTCTATGCAGGGTGGAGTTCCAGCACCAGGGCAAATGCCAGCTGCTGTCACAGGACCTGG
CCCTGGTTCCTTAGCTCCTGGAGGAGGAATGCAGGCTCAGGTTGGAATGCCAGGAAGTGGACCAGTGTCCATGGA
ACGGGGGCAAGTGCCGATGCAAGACCCCAGAGCAGCTATGCAGCGGGGATCCTTGCCTGCGAATGTCCCAACCCC
TCGAGGCTTGTTAGGAGATGCTCCGAATGATCCACGGGGAGGCACTTTACTTTCTGTAACTGGAGAGGTAGAGCC
TAGAGGTTACTTGGGACCACCTCATCAGGGTCCACCCATGCACCATGTCCCTGGCCATGAGAGCCGAGGACCACC
CCCACATGAACTGAGGGGAGGGCCATTACCCGAGCCCAGACCTCTAATGGCAGAACCAAGAGGACCCATGCTAGA
TCAGAGGGGTCCACCCTTGGATGGCAGAGGTGGAAGGGATCCCCGAGGAATAGATGCACGAGGGATGGAGGCCCG
AGCCATGGAGGCAAGAGGGTTAGATGCCAGAGGATTAGAGGCCCGTGCAATGGAGGCCCGTGCGATGGAAGCTCG
TGCAATGGAGGCCCGAGCGATGGAGGCCCGTGCAATGGAAGTCCGAGGGATGGAGGCCAGAGGCATGGATACCAG
AGGCCCAGTGCCTGGCCCCAGAGGACCTATACCTAGTGGAATGCAGGGTCCCAGTCCAATTAACATGGGGGCGGT
TGTCCCCCAGGGATCCAGACAGGTCCCAGTCATGCAGGGAACAGGAATGCAAGGAGCAAGTATACAGGGTGGAAG
CCAGCCTGGCGGCTTTAGTCCCGGGCAGAACCAAGTCACTCCACAGGATCATGAGAAGGCTGCTTTGATTATGCA
GGTTCTACAACTGACTGCAGACCAGATTGCCATGTTGCCTCCTGAGCAAAGGCAGAGTATCCTGATTTTAAAGGA
ACAAATACAGAAATCCACTGGAGCACCTTGATAGGTTTTCAAAAATACCTGGCAAGAAATCTGGAAATTCTATAA
TTTTGTTGAAATATTGAAAAAAGATGACCTGCATCCTAACCCTTGAATGACTCAAATCAGTGCCAGGTGGAGGAC
TCCCATCACCTTCTCTCAGAACAAAATCACTTCATTTTATTGTCTTAGTTTGTATATTTTCTGTGACTTGAAATA
AACTTTGAACACAATTTTAGTACACTGC

FIGURE 1363

MAGLTVRDPAVDRSLRSVFVGNIPYEATEEQLKDIFSEVGPVVSFRLVYDRETGKPKGYGFCEYQDQETALSAMR
NLNGREFSGRALRVDNAASEKNKEELKSLGTGAPVIESPYGETISPEDAPESISKAVASLPPEQMFELMKQMKLC
VQNSPQEARNMLLQNPQLAYALLQAQVVMRIVDPEIALKILHRQTNIPTLIAGNPQPVHGAGPGSGSNVSMNQQN
PQAPQAQSLGGMHVNGAPPLMQASMQGGVPAPGQMPAAVTGPGPGSLAPGGGMQAQVGMPGSGPVSMERGQVPMQ
DPRAAMQRGSLPANVPTPRGLLGDAPNDPRGGTLLSVTGEVEPRGYLGPPHQGPPMHHVPGHESRGPPPHELRGG
PLPEPRPLMAEPRGPMLDQRGPPLDGRGGRDPRGIDARGMEARAMEARGLDARGLEARAMEARAMEARAMEARAM
EARAMEVRGMEARGMDTRGPVPGPRGPIPSGMQGPSPINMGAVVPQGSRQVPVMQGTGMQGASIQGGSQPGGFSP
GQNQVTPQDHEKAALIMQVLQLTADQIAMLPPEQRQSILILKEQIQKSTGAP

FIGURE 1364

CCCACGCGTCCGCCCACGCGTCCGAGCCTGCGCAGGAGGCCAATAGGCTGCCAATACTCCTTGGACTCCCCGCCA
GGGCCCTGCTGTCAGTGCGCCTGCGCGCGGGTCCGGCGCCGAGGTTCTTGACTGCTGTGCCGGACGCCAGGTGTA
GCCATGCAGCGAGCCGATTCCGAGCAGCCCTCCAAGCGTCCCCGTTGCGATGACAGCCCGAGAACCCCCTCAAAC
ACCCCTTCCGCAGAGGCAGACTGGTCCCCGGGCCTGGAACTCCATCCCGACTACAAGACATGGGGTCCGGAGCAG
GTGTGCTCCTTCCTCAGGCGCGGTGGCTTTGAAGAGCCGGTGCTGCTGAAGAACATCCGAGAAAATGAAATCACA
GGCGCATTACTGCCTTGTCTTGATGAGTCTCGTTTTGAAAATCTTGGGGTAAGTTCCTTGGGGGAGAGGAAGAAG
CTGCTTAGTTATATCCAGCGATTGGTTCAAATCCACGTTGATACAATGAAGGTAATTAATGATCCTATCCATGGC
CACATTGAGCTCCATCCTCTCCTCGTCCGAATCATTGATACACCTCAATTTCAACGTCTTCGATACATCAAACAG
CTGGGAGGTGGTTACTATGTTTTTCCAGGAGCTTCACACAATCGATTTGAGCATAGTCTAGGGGTGGGGTATCTA
GCAGGATGTCTAGTTCACGCACTGGGTGAAAAACAACCAGAGCTGCAGATAAGTGAACGAGATGTTCTCTGTGTT
CAGATTGCTGGACTTTGTCATGATCTCGGTCATGGGCCATTTTCTCACATGTTTGATGGACGATTTATTCCACTT
GCTCGCCCGGAGGTGAAATGGACGCATGAACAAGGCTCAGTTATGATGTTTGAGCACCTTATTAATTCTAATGGA
ATTAAGCCTGTCATGGAACAATATGGTCTCATCCCTGAAGAAGATATTTGCTTTATAAAGGAACAAATTGTAGGA
CCACTTGAATCACCTGTCGAAGATTCATTGTGGCCATATAAAGGGCGTCCTGAAAACAAAAGCTTCCTTTATGAG
ATAGTATCTAATAAAAGAAATGGCATTGATGTGGACAAATGGGATTATTTTGCCAGGGACTGCCATCATCTTGGG
ATCCAAAATAATTTTGATTACAAGCGCTTTATTAAGTTTGCCCGTGTCTGTGAAGTAGACAATGAGTTGCGTATT
TGTGCTAGAGATAAGGAAGTTGGAAATCTGTATGACATGTTCCACACTCGCAACTCTTTACACCGTAGAGCTTAT
CAACACAAAGTTGGCAACATTATTGATACAATGATTACAGATGCTTTCCTCAAAGCAGGTGACTACATAGAGATT
ACAGGTGCTGGAGGAAAAAAGTATCGCATTTCTACAGCAATTGACGACATGGAAGCCTATACTAAGCTGACAGAT
AACATTTTTCTGGAGATTTTATACTCTACTGATCCCAAATTGAAAGACGCACGAGAGATTTTAAAACAAATTGAA
TACCGTAATCTATTCAAGTATGTGGGTGAGACGCAGCCAACAGGACAAATAAAGATTAAAAGGGAGGACTATGAA
TCTCTTCCAAAAGAGGTTGCCAGTGCTAAACCCAAAGTATTGCTAGACGTGAAACTGGAGGCTGAAGATTTTATA
GTGGATGTTATCAACATGGATTATGGAATGCAAGAAAAGAATCCAATTGATCATGTTAGCTTCTATTGTAAGACT
GCCCCCAACAGAGCAATCAGGATTACTAAAAACCAGGTTTCACAACTTCTGCCAGAGAAATTTGCAGAGCAGCTG
ATTCGAGTATATTGTAAGAAGGTGGACAGAAAGAGTTTGTATGCCGCAAGACAATATTTTGTTCAGTGGTGTGCA
GACAGAAATTTCACCAAGCCGCAGGATGGCGATGTTATAGCCCCACTCATAACGCCTCAAAAAAAGGAATGGAAC
GACAGTACTTCAGTCCAAAATCCAACTCGCCTCCGAGAAGCATCCAAAAGCAGAGTCCAGCTTTTTAAAGATGAC
CCAATGTGAATGTCTGTAGTCAGTTGTTTACAAACTCCCTCTCCTGCACAATTCATTTAGAGGCTTCAATCATAG
AATTCTGCAAATTAATGACAACTCATGCCTTAATTTTGTATTTTGAATGTACACGCATGCTGAAGCTAAGTAACT
TTTAATCAAAGAAATAAGATGGTATTAGGCAAATCTTACTATACTATGAAAAGCATTACCTTGCCTATTTTTAAT
ATTATTAAAGCCTTTCTCCTTCGAAAAAAAAAA

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FIGURE 1365

MQRADSEQPSKRPRCDDSPRTPSNTPSAEADWSPGLELHPDYKTWGPEQVCSFLRRGGFEEPVLLKNIRENEITG
ALLPCLDESRFENLGVSSLGERKKLLSYIQRLVQIHVDTMKVINDPIHGHIELHPLLVRIIDTPQFQRLRYIKQL
GGGYYVFPGASHNRFEHSLGVGYLAGCLVHALGEKQPELQISERDVLCVQIAGLCHDLGHGPFSHMFDGRFIPLA
RPEVKWTHEQGSVMMFEHLINSNGIKPVMEQYGLIPEEDICFIKEQIVGPLESPVEDSLWPYKGRPENKSFLYEI
VSNKRNGIDVDKWDYFARDCHHLGIQNNFDYKRFIKFARVCEVDNELRICARDKEVGNLYDMFHTRNSLHRRAYQ
HKVGNIIDTMITDAFLKAGDYIEITGAGGKKYRISTAIDDMEAYTKLTDNIFLEILYSTDPKLKDAREILKQIEY
RNLFKYVGETQPTGQIKIKREDYESLPKEVASAKPKVLLDVKLEAEDFIVDVINMDYGMQEKNPIDHVSFYCKTA
PNRAIRITKNQVSQLLPEKFAEQLIRVYCKKVDRKSLYAARQYFVQWCADRNFTKPQDGDVIAPLITPQKKEWND
STSVQNPTRLREASKSRVQLFKDDPM

FIGURE 1366

AAGCTTGGATACCTGAGTAATAACGGACAACAGATAAAGCTCCGCATCCTTGCGCCACGTGCTTCGGTCCGTGGT
TTGCGTGCAGACGTTTGACCTGTATGGTGACCCTCGCGATTTGCAAATGTGCTGAGGATCTGGAATACTGAAGTG
GAAGGCACCTCTTGTTTTGGGGAGCATGTATATTTCCCTCCTGTGACGCACTGCTTCCACAGAGAGGTGCAAACG
TGCAAACGCTCAGCGACCGCAGCGCTCCTGCCCCTCCCCCACCGTAACTCCGGGGTCGCGGATCTGCCCGCCCCG
CTCTCCCGAAGCTGTTCGGGCAGTGTCCGAACGGCTTCGGAGGGGCGAGAAGCCAGCATCCGAGCCGCCTCTCCG
GAATACCAGCAGCCTGACGCACGCGTGCTGTCGGGGGAGGGATGCTGGGACAGCTGCTCCCGCACACGGCTCGCG
GTCTCGGCGCCGCGGAGATGCCCGGCCAGGGTCCGGGGTCCGACTGGACGGAGCGTAGCTCTTCTGCAGAGCCGC
CCGCTGTGGCCGGGACCGAGGGTGGCGGCGGCGGATCAGCTGGATACTCTTGTTACCAGAATTCCAAAGGTTCTG
ATAGAATCAAAGATGGATACAAAGTGAACTCACACATAGCTAAGCTGCAAGAGTTATGGAAAACTCCCCAAAATC
AAACAATCCACCTCTCTAAATCAATGATGGAGGCGTCCTTTTTCAAGCATCCAGACCTCACCACAGGCCAGAAGC
GTTACCTGTGCAGCATTGCTAAAATCTATAATGCAAACTATCTGAAGATGTTAATGAAGAGGCAGTACATGCACG
TACTTCAGCACAGCTCACAAAAGCCAGGTGTCCTCACTCATCACAGAAGCCGCCTTAGCTCCCGTTACTCACAGA
AACAGCATTACCCTTGCACTACATGGCGACATCAACTGGAGAGAGAGGACTCGGGGTCTTCTGATATCGCAGCTG
CATCTGCACCTGAAATGCTCATACAGCATTCCCTTTGGTGGCCAGTGAGAAACAAAGAAGGGATAAAAACTGGAT
ATGCATCTAAAACAAGATGTAAGTCACTGAAGATTTTTAGAAGACCAAGGAAACTGTTCATGCAAACAGTTTCTT
CAGATGATTCTGAATCACACATGAGTGAAGAAAAAAAGGAAGAAGATTTACTAAATAATTTTATGCAATCAATGT
CAATTGAAGAACAGGGAGAACATCTGATGTTAACTTGACAGTCTTGTCTCGTGTATTGAATTCGTGCCAAAGGTG
AGGGTAAGGGGTTGTGAGTTGTGTCCTGTATGTTTAGGATGGTATTGTTATTTATTAAATCATTAAGTAATTTTG
GTTTGTTCAGAAACTTAAAACAATGTAATTGGTCTGATGTAGTTCCATGTACCAATGATAGTTATGTAAGAAAAT
TTACATGTAACATATACTTGTACTTCTAGCTAGATACAATTAAAACTTTTCTTGCATTCAAAAAAAAAAAAAAAA
AAAAAA

FIGURE 1367

MLGQLLPHTARGLGAAEMPGQGPGSDWTERSSSAEPPAVAGTEGGGGGSAGYSCYQNSKGSDRIKDGYKVNSHIA
KLQELWKTPQNQTIHLSKSMMEASFFKHPDLTTGQKRYLCSIAKIYNANYLKMLMKRQYMHVLQHSSQKPGVLTH
HRSRLSSRYSQKQHYPCTTWRHQLEREDSGSSDIAAASAPEMLIQHSLWWPVRNKEGIKTGYASKTRCKSLKIFR
RPRKLFMQTVSSDDSESHMSEEKKEEDLLNNFMQSMSIEEQGEHLMLT

FIGURE 1368

CTAAAGGTCGGCGAGGCTTCTGAAGACGCAATTCCTGCGACGCCCGCGGAGGGGCCCTGGGGGGCGGCGCGAGCG
TCTGGCCTGTGTTGGCTGTAGGCAACGAAAGGAGCCCTCCCGGTCTGCGCCGGATGGCCCCGGGCGGTGACTCGG
TCCGGAGCCCTGGAACGCTACGCCCACCTGGCGGAAAGCACCACGGAAACGCATCCTTCTGTGGCCACTGTTAGG
TCTGCCATTTTACACTTTTCTGATCTCCTCCTTCCCTTCTGTGAGCTATGTCTCAGGGGTCAGTGACATTCAGAG
ATGTGGCCATAGACTTCTCCCAGGAGGAGTGGAAATGGCTTCAGCCTGCTCAAAGAGATTTGTACAGATGTGTAA
TGTTGGAGAACTATGGCCATCTGGTCTCACTGGGTCTTTCCATTTCTAAGCCAGATGTGGTTTCCTTATTGGAGC
AAGGGAAAGAACCCTGGCTGGGGAAAAGGGAAGTGAAAAGAGATCTGTTTTCAGTTTCAGAGTCAAGTGGTGAGA
TCAAAGACTTTTCACCAAAAAATGTCATTTATGATGACTCATCCCAGTATTTGATCATGGAAAGAATTCTAAGTC
AAGGCCCTGTGTATTCCAGTTTTAAAGGAGGCTGGAAATGCAAGGATCATACTGAGATGCTGCAAGAAAATCAGG
GATGTATTAGGAAAGTAACAGTCTCTCATCAAGAAGCCCTGGCTCAACATATGAATATCAGTACTGTGGAGAGGC
CCTATGGATGCCATGAATGTGGAAAAACTTTTGGTCGACGCTTTTCCCTGGTGTTACACCAGAGGACTCATACTG
GAGAGAAACCATATGCATGTAAGGAATGTGGCAAAACCTTTAGCCAGATTTCAAACCTTGTGAAACACCAAATGA
TACATACTGGAAAGAAACCCCATGAGTGTAAGGACTGTAATAAAACATTCAGTTACCTTTCATTTCTTATTGAAC
ACCAGAGAACGCACACTGGGGAGAAACCTTATGAATGTACTGAGTGTGGAAAGGCCTTTAGCCGTGCCTCCAACC
TCACTCGACATCAAAGAATTCACATAGGAAAGAAACAATATATATGTAGGAAATGTGGTAAAGCATTTAGCAGTG
GCTCAGAACTCATTCGCCACCAGATTACACATACTGGAGAGAAACCTTATGAATGCATTGAATGTGGGAAGGCAT
TTCGCCGTTTCTCACACCTTACTCGACATCAGAGCATCCATACAACCAAAACCCCGTATGAATGTAATGAATGTA
GGAAAGCTTTGCGTTGTCACTCATTCCTTATTAAACATCAGAGAATTCATGCTGGAGAAAAGCTCTATGAATGTG
ATGAATGTGGTAAAGTTTTCACTTGGCATGCATCCCTTATTCAACATACGAAGAGTCACACTGGAGAGAAACCCT
ATGCGTGTGCTGAATGTGATAAAGCCTTCAGCCGGAGCTTTTCCCTCATTCTACATCAGAGAACTCATACTGGAG
AGAAACCCTATGTATGTAAGGTATGCAACAAATCCTTCAGCTGGAGCTCAAACCTTGCTAAACATCAGAGGACAC
ACACTCTTGACAACCCCTATGAATATGAAAATTCATTTAATTACCACTCATTCCTTACTGAACACCAGTGAATTT
ACACTGCAAAGAAAAACTATGAATGTATGGAATTTTTTAAAAAGAAGTATAATGCCTTACTTCAGAGAACTCTTG
GAAAGAAGCCTTATGTGAAAGTGATGACTGTGAAGTAATATGGCCCACACTTTATTCACCACCCTGGAGAAAAAA
AAACCCAGGAATATGTGGAAAAGCCATTAATAACCACTCTTTTATTTTTTTGCAATAACAAGGTGAAATCAATAT
TGTTGAGAAGATTCTTCCATCTGGTAATGTTGAGAAGACTTCATTTGGTAGGAGTCCCTTACTTTACGTGTGTAA
ATTCCTACCAGGAAAGAATACATATCCAATAGATTGGAGAAAGCCAGAGATTAGCCCCGCATTCCGCATCTGTCA
ACCAGGACAGAAAGCATGGACAAGGGATGAGCTTTACAAAGATGATGCACTTTGGAGATCAGAAAATTCATATTT
AAGCAAAGTGATACAAACACAGTGATTTGGGAATGCCTTCATTTACAATGCAATACTTACATTTTAATACTCTTG
TAGGAGAAAAAGCAACTGTATAAATGAATGTAGAGTGACTTTCTGCAATATTTGCAACCTATATCAGAGAATTAC
ACTGTGGGAAAACTACCATTGTAATAAGTGTAGCAAAATCTCCTTAGATATCTGAAAAGTCATACTGGATGGAAT
CTGTAGGAAACGGTTCTATTTTGAGGGAAGGGGGATTCCTTTTTGTTTTTTAAGTGAATTCAGAAAATGTTATAA
ACTTTAG

FIGURE 1369

MSQGSVTFRDVAIDFSQEEWKWLQPAQRDLYRCVMLENYGHLVSLGLSISKPDVVSLLEQGKEPWLGKREVKRDL
FSVSESSGEIKDFSPKNVIYDDSSQYLIMERILSQGPVYSSFKGGWKCKDHTEMLQENQGCIRKVTVSHQEALAQ
HMNISTVERPYGCHECGKTFGRRFSLVLHQRTHTGEKPYACKECGKTFSQISNLVKHQMIHTGKKPHECKDCNKT
FSYLSFLIEHQRTHTGEKPYECTECGKAFSRASNLTRHQRIHIGKKQYICRKCGKAFSSGSELIRHQITHTGEKP
YECIECGKAFRRFSHLTRHQSIHTTKTPYECNECRKALRCHSFLIKHQRIHAGEKLYECDECGKVFTWHASLIQH
TKSHTGEKPYACAECDKAFSRSFSLILHQRTHTGEKPYVCKVCNKSFSWSSNLAKHQRTHTLDNPYEYENSFNYH
SFLTEHQ

FIGURE 1370A

AAAACTGCGACTGCGCGGCGTGAGCTCGCTGAGACTTCCTGGACCCCGCACCAGGCTGTGGGGTTTCTCAGATAA
CTGGGCCCCTGCGCTCAGGAGGCCTTCACCCTCTGCTCTGGTTCATTGGAACAGAAAGAAATGGATTTATCTGCT
CTTCGCGTTGAAGAAGTACAAAATGTCATTAATGCTATGCAGAAAATCTTAGAGTGTCCCATCTGTCTGGAGTTG
ATCAAGGAACCTGTCTCCACAAAGTGTGACCACATATTTTGCAAATTTTGCATGCTGAAACTTCTCAACCAGAAG
AAAGGGCCTTCACAGTGTCCTTTATGTAAGAATGATATAACCAAAAGGAGCCTACAAGAAAGTACGAGATTTAGT
CAACTTGTTGAAGAGCTATTGAAAATCATTTGTGCTTTTCAGCTTGACACAGGTTTGGAGTATGCAAACAGCTAT
AATTTTGCAAAAAAGGAAAATAACTCTCCTGAACATCTAAAAGATGAAGTTTCTATCATCCAAAGTATGGGCTAC
AGAAACCGTGCCAAAAGACTTCTACAGAGTGAACCCGAAAATCCTTCCTTGCAGGAAACCAGTCTCAGTGTCCAA
CTCTCTAACCTTGGAACTGTGAGAACTCTGAGGACAAAGCAGCGGATACAACCTCAAAAGACGTCTGTCTACATT
GAATTGGGATCTGATTCTTCTGAAGATACCGTTAATAAGGCAACTTATTGCAGTGTGGGAGATCAAGAATTGTTA
CAAATCACCCCTCAAGGAACCAGGGATGAAATCAGTTTGGATTCTGCAAAAAAGGCTGCTTGTGAATTTTCTGAG
ACGGATGTAACAAATACTGAACATCATCAACCCAGTAATAATGATTTGAACACCACTGAGAAGCGTGCAGCTGAG
AGGCATCCAGAAAAGTATCAGGGTAGTTCTGTTTCAAACTTGCATGTGGAGCCATGTGGCACAAATACTCATGCC
AGCTCATTACAGCATGAGAACAGCAGTTTATTACTCACTAAAGACAGAATGAATGTAGAAAAGGCTGAATTCTGT
AATAAAAGCAAACAGCCTGGCTTAGCAAGGAGCCAACATAACAGATGGGCTGGAAGTAAGGAAACATGTAATGAT
AGGCGGACTCCCAGCACAGAAAAAAAGGTAGATCTGAATGCTGATCCCCTGTGTGAGAGAAAAGAATGGAATAAG
CAGAAACTGCCATGCTCAGAGAATCCTAGAGATACTGAAGATGTTCCTTGGATAACACTAAATAGCAGCATTCAG
AAAGTTAATGAGTGGTTTTCCAGAAGTGATGAACTGTTAGGTTCTGATGACTCACATGATGGGGAGTCTGAATCA
AATGCCAAAGTAGCTGATGTATTGGACGTTCTAAATGAGGTAGATGAATATTCTGGTTCTTCAGAGAAAATAGAC
TTACTGGCCAGTGATCCTCATGAGGCTTTAATATGTAAAAGTGAAAGAGTTCACTCCAAATCAGTAGAGAGTAAT
ATTGAAGACAAAATATTTGGGAAAACCTATCGGAAGAAGGCAAGCCTCCCCAACTTAAGCCATGTAACTGAAAAT
CTAATTATAGGAGCATTTGTTACTGAGCCACAGATAATACAAGAGCGTCCCCTCACAAATAAATTAAAGCGTAAA
AGGAGACCTACATCAGGCCTTCATCCTGAGGATTTTATCAAGAAAGCAGATTTGGCAGTTCAAAAGACTCCTGAA
ATGATAAATCAGGGAACTAACCAAACGGAGCAGAATGGTCAAGTGATGAATATTACTAATAGTGGTCATGAGAAT
AAAACAAAAGGTGATTCTATTCAGAATGAGAAAAATCCTAACCCAATAGAATCACTCGAAAAAGAATCTGCTTTC
AAAACGAAAGCTGAACCTATAAGCAGCAGTATAAGCAATATGGAACTCGAATTAAATATCCACAATTCAAAAGCA
CCTAAAAAGAATAGGCTGAGGAGGAAGTCTTCTACCAGGCATATTCATGCGCTTGAACTAGTAGTCAGTAGAAAT
CTAAGCCCACCTAATTGTACTGAATTGCAAATTGATAGTTGTTCTAGCAGTGAAGAGATAAAGAAAAAAAAGTAC
AACCAAATGCCAGTCAGGCACAGCAGAAACCTACAACTCATGGAAGGTAAAGAACCTGCAACTGGAGCCAAGAAG
AGTAACAAGCCAAATGAACAGACAAGTAAAAGACATGACAGCGATACTTTCCCAGAGCTGAAGTTAACAAATGCA
CCTGGTTCTTTTACTAAGTGTTCAAATACCAGTGAACTTAAAGAATTTGTCAATCCTAGCCTTCCAAGAGAAGAA
AAAGAAGAGAAACTAGAAACAGTTAAAGTGTCTAATAATGCTGAAGACCCCAAAGATCTCATGTTAAGTGGAGAA
AGGGTTTTGCAAACTGAAAGATCTGTAGAGAGTAGCAGTATTTCATTGGTACCTGGTACTGATTATGGCACTCAG
GAAAGTATCTCGTTACTGGAAGTTAGCACTCTAGGGAAGGCAAAAACAGAACCAAATAAATGTGTGAGTCAGTGT
GCAGCATTTGAAAACCCCAAGGGACTAATTCATGGTTGTTCCAAAGATAATAGAAATGACACAGAAGGCTTTAAG
TATCCATTGGGACATGAAGTTAACCACAGTCGGGAAACAAGCATAGAAATGGAAGAAAGTGAACTTGATGCTCAG
TATTTGCAGAATACATTCAAGGTTTCAAAGCGCCAGTCATTTGCTCCGTTTTCAAATCCAGGAAATGCAGAAGAG
GAATGTGCAACATTCTCTGCCCACTCTGGGTCCTTAAAGAAACAAAGTCCAAAAGTCACTTTTGAATGTGAACAA
AAGGAAGAAAATCAAGGAAAGAATGAGTCTAATATCAAGCCTGTACAGACAGTTAATATCACTGCAGGCTTTCCT
GTGGTTGGTCAGAAAGATAAGCCAGTTGATAATGCCAAATGTAGTATCAAAGGAGGCTCTAGGTTTTGTCTATCA
TCTCAGTTCAGAGGCAACGAAACTGGACTCATTACTCCAAATAAACATGGACTTTTACAAAACCCATATCGTATA
CCACCACTTTTTCCCATCAAGTCATTTGTTAAAACTAAATGTAAGAAAAATCTGCTAGAGGAAAACTTTGAGGAA
CATTCAATGTCACCTGAAAGAGAAATGGGAAATGAGAACATTCCAAGTACAGTGAGCACAATTAGCCGTAATAAC
ATTAGAGAAAATGTTTTTAAAGAAGCCAGCTCAAGCAATATTAATGAAGTAGGTTCCAGTACTAATGAAGTGGGC
TCCAGTATTAATGAAATAGGTTCCAGTGATGAAAACATTCAAGCAGAACTAGGTAGAAACAGAGGGCCAAAATTG
AATGCTATGCTTAGATTAGGGGTTTTGCAACCTGAGGTCTATAAACAAAGTCTTCCTGGAAGTAATTGTAAGCAT
CCTGAAATAAAAAAGCAAGAATATGAAGAAGTAGTTCAGACTGTTAATACAGATTTCTCTCCATATCTGATTTCA
GATAACTTAGAACAGCCTATGGGAAGTAGTCATGCATCTCAGGTTTGTTCTGAGACACCTGATGACCTGTTAGAT

FIGURE 1370B

GATGGTGAAATAAAGGAAGATACTAGTTTTGCTGAAAATGACATTAAGGAAAGTTCTGCTGTTTTTAGCAAAAGC
GTCCAGAAAGGAGAGCTTAGCAGGAGTCCTAGCCCTTTCACCCATACACATTTGGCTCAGGGTTACCGAAGAGGG
GCCAAGAAATTAGAGTCCTCAGAAGAGAACTTATCTAGTGAGGATGAAGAGCTTCCCTGCTTCCAACACTTGTTA
TTTGGTAAAGTAAACAATATACCTTCTCAGTCTACTAGGCATAGCACCGTTGCTACCGAGTGTCTGTCTAAGAAC
ACAGAGGAGAATTTATTATCATTGAAGAATAGCTTAAATGACTGCAGTAACCAGGTAATATTGGCAAAGGCATCT
CAGGAACATCACCTTAGTGAGGAAACAAAATGTTCTGCTAGCTTGTTTTCTTCACAGTGCAGTGAATTGGAAGAC
TTGACTGCAAATACAAACACCCAGGATCCTTTCTTGATTGGTTCTTCCAAACAAATGAGGCATCAGTCTGAAAGC
CAGGGAGTTGGTCTGAGTGACAAGGAATTGGTTTCAGATGATGAAGAAAGAGGAACGGGCTTGGAAGAAAATAAT
CAAGAAGAGCAAAGCATGGATTCAAACTTAGGTGAAGCAGCATCTGGGTGTGAGAGTGAAACAAGCGTCTCTGAA
GACTGCTCAGGGCTATCCTCTCAGAGTGACATTTTAACCACTCAGCAGAGGGATACCATGCAACATAACCTGATA
AAGCTCCAGCAGGAAATGGCTGAACTAGAAGCTGTGTTAGAACAGCATGGGAGCCAGCCTTCTAACAGCTACCCT
TCCATCATAAGTGACTCTTCTGCCCTTGAGGACCTGCGAAATCCAGAACAAAGCACATCAGAAAAAGCAGTATTA
ACTTCACAGAAAAGTAGTGAATACCCTATAAGCCAGAATCCAGAAGGCCTTTCTGCTGACAAGTTTGAGGTGTCT
GCAGATAGTTCTACCAGTAAAAATAAAGAACCAGGAGTGGAAAGGTCATCCCCTTCTAAATGCCCATCATTAGAT
GATAGGTGGTACATGCACAGTTGCTCTGGGAGTCTTCAGAATAGAAACTACCCATCTCAAGAGGAGCTCATTAAG
GTTGTTGATGTGGAGGAGCAACAGCTGGAAGAGTCTGGGCCACACGATTTGACGGAAACATCTTACTTGCCAAGG
CAAGATCTAGAGGGAACCCCTTACCTGGAATCTGGAATCAGCCTCTTCTCTGATGACCCTGAATCTGATCCTTCT
GAAGACAGAGCCCCAGAGTCAGCTCGTGTTGGCAACATACCATCTTCAACCTCTGCATTGAAAGTTCCCCAATTG
AAAGTTGCAGAATCTGCCCAGAGTCCAGCTGCTGCTCATACTACTGATACTGCTGGGTATAATGCAATGGAAGAA
AGTGTGAGCAGGGAGAAGCCAGAATTGACAGCTTCAACAGAAAGGGTCAACAAAAGAATGTCCATGGTGGTGTCT
GGCCTGACCCCAGAAGAATTTATGCTCGTGTACAAGTTTGCCAGAAAACACCACATCACTTTAACTAATCTAATT
ACTGAAGAGACTACTCATGTTGTTATGAAAACAGATGCTGAGTTTGTGTGTGAACGGACACTGAAATATTTTCTA
GGAATTGCGGGAGGAAAATGGGTAGTTAGCTATTTCTGGGTGACCCAGTCTATTAAAGAAAGAAAAATGCTGAAT
GAGCATGATTTTGAAGTCAGAGGAGATGTGGTCAATGGAAGAAACCACCAAGGTCCAAAGCGAGCAAGAGAATCC
CAGGACAGAAAGATCTTCAGGGGGCTAGAAATCTGTTGCTATGGGCCCTTCACCAACATGCCCACAGATCAACTG
GAATGGATGGTACAGCTGTGTGGTGCTTCTGTGGTGAAGGAGCTTTCATCATTCACCCTTGGCACAGGTGTCCAC
CCAATTGTGGTTGTGCAGCCAGATGCCTGGACAGAGGACAATGGCTTCCATGCAATTGGGCAGATGTGTGAGGCA
CCTGTGGTGACCCGAGAGTGGGTGTTGGACAGTGTAGCACTCTACCAGTGCCAGGAGCTGGACACCTACCTGATA
CCCCAGATCCCCCACAGCCACTACTGACTGCAGCCAGCCACAGGTACAGGCCACAGGACCCCAAGAATGAGCTTA
CAAAGTGGCCTTTCCAGGCCCTGGGAGCTCCTCTCACTCTTCAGTCCTTCTACTGTCCTGGCTACTAAATATTTT
ATGTACATCAGCCTGAAAAGGACTTCTGGCTATGCAAGGGTCCCTTAAAGATTTTCTGCTTGAAGTCTCCCTTGG
AAATCTGCCATGAGCACAAAATTATGGTAATTTTTCACCTGAGAAGATTTTAAAACCATTTAAACGCCACCAATT
GAGCAAGATGCTGATTCATTATTTATCAGCCCTATTCTTTCTATTCAGGCTGTTGTTGGCTTAGGGCTGGAAGCA
CAGAGTGGCTTGGCCTCAAGAGAATAGCTGGTTTCCCTAAGTTTACTTCTCTAAAACCCTGTGTTCACAAAGGCA
GAGAGTCAGACCCTTCAATGGAAGGAGAGTGCTTGGGATCGATTATGTGACTTAAAGTCAGAATAGTCCTTGGGC
AGTTCTCAAATGTTGGAGTGGAACATTGGGGAGGAAATTCTGAGGCAGGTATTAGAAATGAAAAGGAAACTTGAA
ACCTGGGCATGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCAAGGTGGGCAGATCACTGGAGGTCAGG
AGTTCGAAACCAGCCTGGCCAACATGGTGAAACCCCATCTCTACTAAAAATACAGAAATTAGCCGGTCATGGTGG
TGGACACCTGTAATCCCAGCTACTCAGGTGGCTAAGGCAGGAGAATCACTTCAGCCCGGGAGGTGGAGGTTGCAG
TGAGCCAAGATCATACCACGGCACTCCAGCCTGGGTGACAGTGAGACTGTGGCTCAAAAAAAAAAAAAAAAAAGG
AAAATGAAACTAGGAAAGGTTTCTTAAAGTCTGAGATATATTTGCTAGATTTCTAAAGAATGTGTTCTAAAACAG
CAGAAGATTTTCAAGAACCGGTTTCCAAAGACAGTCTTCTAATTCCTCATTAGTAATAAGTAAAATGTTTATTGT
TGTAGCTCTGGTATATAATCCATTCCTCTTAAAATATAAGACCTCTGGCATGAATATTTCATATCTATAAAATGA
CAGATCCCACCAGGAAGGAAGCTGTTGCTTTCTTTGAGGTGATTTTTTTCCTTTGCTCCCTGTTGCTGAAACCAT
ACAGCTTCATAAATAATTTTGCTTGCTGAAGGAAGAAAAAGTGTTTTTCATAAACCCATTATCCAGGACTGTTTA
TAGCTGTTGGAAGGACTAGGTCTTCCCTAGCCCCCCCAGTGTGCAAGGGCAGTGAAGACTTGATTGTACAAAATA
CGTTTTGTAAATGTTGTGCTGTTAACACTGCAAATAAACTTGGTAGCAAACA

FIGURE 1371

MDLSALRVEEVQNVINAMQKILECPICLELIKEPVSTKCDHIFCKFCMLKLLNQKKGPSQCPLCKNDITKRSLQE
STRFSQLVEELLKIICAFQLDTGLEYANSYNFAKKENNSPEHLKDEVSIIQSMGYRNRAKRLLQSEPENPSLQET
SLSVQLSNLGTVRTLRTKQRIQPQKTSVYIELGSDSSEDTVNKATYCSVGDQELLQITPQGTRDEISLDSAKKAA
CEFSETDVTNTEHHQPSNNDLNTTEKRAAERHPEKYQGSSVSNLHVEPCGTNTHASSLQHENSSLLLTKDRMNVE
KAEFCNKSKQPGLARSQHNRWAGSKETCNDRRTPSTEKKVDLNADPLCERKEWNKQKLPCSENPRDTEDVPWITL
NSSIQKVNEWFSRSDELLGSDDSHDGESESNAKVADVLDVLNEVDEYSGSSEKIDLLASDPHEALICKSERVHSK
SVESNIEDKIFGKTYRKKASLPNLSHVTENLIIGAFVTEPQIIQERPLTNKLKRKRRPTSGLHPEDFIKKADLAV
QKTPEMINQGTNQTEQNGQVMNITNSGHENKTKGDSIQNEKNPNPIESLEKESAFKTKAEPISSSISNMELELNI
HNSKAPKKNRLRRKSSTRHIHALELVVSRNLSPPNCTELQIDSCSSSEEIKKKKYNQMPVRHSRNLQLMEGKEPA
TGAKKSNKPNEQTSKRHDSDTFPELKLTNAPGSFTKCSNTSELKEFVNPSLPREEKEEKLETVKVSNNAEDPKDL
MLSGERVLQTERSVESSSISLVPGTDYGTQESISLLEVSTLGKAKTEPNKCVSQCAAFENPKGLIHGCSKDNRND
TEGFKYPLGHEVNHSRETSIEMEESELDAQYLQNTFKVSKRQSFAPFSNPGNAEEECATFSAHSGSLKKQSPKVT
FECEQKEENQGKNESNIKPVQTVNITAGFPVVGQKDKPVDNAKCSIKGGSRFCLSSQFRGNETGLITPNKHGLLQ
NPYRIPPLFPIKSFVKTKCKKNLLEENFEEHSMSPEREMGNENIPSTVSTISRNNIRENVFKEASSSNINEVGSS
TNEVGSSINEIGSSDENIQAELGRNRGPKLNAMLRLGVLQPEVYKQSLPGSNCKHPEIKKQEYEEVVQTVNTDFS
PYLISDNLEQPMGSSHASQVCSETPDDLLDDGEIKEDTSFAENDIKESSAVFSKSVQKGELSRSPSPFTHTHLAQ
GYRRGAKKLESSEENLSSEDEELPCFQHLLFGKVNNIPSQSTRHSTVATECLSKNTEENLLSLKNSLNDCSNQVI
LAKASQEHHLSEETKCSASLFSSQCSELEDLTANTNTQDPFLIGSSKQMRHQSESQGVGLSDKELVSDDEERGTG
LEENNQEEQSMDSNLGEAASGCESETSVSEDCSGLSSQSDILTTQQRDTMQHNLIKLQQEMAELEAVLEQHGSQP
SNSYPSIISDSSALEDLRNPEQSTSEKAVLTSQKSSEYPISQNPEGLSADKFEVSADSSTSKNKEPGVERSSPSK
CPSLDDRWYMHSCSGSLQNRNYPSQEELIKVVDVEEQQLEESGPHDLTETSYLPRQDLEGTPYLESGISLFSDDP
ESDPSEDRAPESARVGNIPSSTSALKVPQLKVAESAQSPAAAHTTDTAGYNAMEESVSREKPELTASTERVNKRM
SMVVSGLTPEEFMLVYKFARKHHITLTNLITEETTHVVMKTDAEFVCERTLKYFLGIAGGKWVVSYFWVTQSIKE
RKMLNEHDFEVRGDVVNGRNHQGPKRARESQDRKIFRGLEICCYGPFTNMPTDQLEWMVQLCGASVVKELSSFTL
GTGVHPIVVVQPDAWTEDNGFHAIGQMCEAPVVTREWVLDSVALYQCQELDTYLIPQIPHSHY

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FIGURE 1372

GAGACATTCCTCAATTGCTTAGACATATTCTGAGCCTACAGCAGAGGAACCTCCAGTCTCAGCACCATGAATCAA
ACTGCGATTCTGATTTGCTGCCTTATCTTTCTGACTCTAAGTGGCATTCAAGGAGTACCTCTCTCTAGAACCGTA
CGCTGTACCTGCATCAGCATTAGTAATCAACCTGTTAATCCAAGGTCTTTAGAAAAACTTGAAATTATTCCTGCA
AGCCAATTTTGTCCACGTGTTGAGATCATTGCTACAATGAAAAAGAAGGGTGAGAAGAGATGTCTGAATCCAGAA
TCGAAGGCCATCAAGAATTTACTGAAAGCAGTTAGCAAGGAAATGTCTAAAAGATCTCCTTAAAACCAGAGGGGA
GCAAAATCGATGCAGTGCTTCCAAGGATGGACCACACAGAGGCTGCCTCTCCCATCACTTCCCTACATGGAGTAT
ATGTCAAGCCATAATTGTTCTTAGTTTGCAGTTACACTAAAAGGTGACCAATGATGGTCACCAAATCAGCTGCTA
CTACTCCTGTAGGAAGGTTAATGTTCATCATCCTAAGCTATTCAGTAATAACTCTACCCTGGCACTATAATGTAA
GCTCTACTGAGGTGCTATGTTCTTAGTGGATGTTCTGACCCTGCTTCAAATATTTCCCTCACCTTTCCCATCTTC
CAAGGGTACTAAGGAATCTTTCTGCTTTGGGGTTTATCAGAATTCTCAGAATCTCAAATAACTAAAAGGTATGCA
ATCAAATCTGCTTTTTAAAGAATGCTCTTTACTTCATGGACTTCCACTGCCATCCTCCCAAGGGGCCCAAATTCT
TTCAGTGGCTACCTACATACAATTCCAAACACATACAGGAAGGTAGAAATATCTGAAAATGTATGTGTAAGTATT
CTTATTTAATGAAAGACTGTACAAAGTATAAGTCTTAGATGTATATATTTCCTATATTGTTTTCAGTGTACATGG
AATAACATGTAATTAAGTACTATGTATCAATGAGTAACAGGAAAATTTTAAAAATACAGATAGATATATGCTCTG
CATGTTACATAAGATAAATGTGCTGAATGGTTTTCAAATAAAAATGAGGTACTCTCCTGGAAATATTAAGAAAGA
CTATCTAAATGTTGAAAGATCAAAAGGTTAATAAAGTAATTATAACT

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FIGURE 1373

MNQTAILICCLIFLTLSGIQGVPLSRTVRCTCISISNQPVNPRSLEKLEIIPASQFCPRVEIIATMKKKGEKRCL
NPESKAIKNLLKAVSKEMSKRSP

FIGURE 1374A

GGCGGCGGCTGGCTAGGGCTGCGGCGCGCGTGGAGGGTTCGCTGCTGGTTTGCCGCCGGGTCGGGCTCCGTGGGC
CGGGGCAGGAGGACCAGCACCTGAGGCCGGGCCCGCAGCCCGCGACTTCACAGCCAGGCGGCGGCGCTGCTGCTG
CTGCGGGGCTCTGGCGCGCAGCCCGGCGGGACAGCGGGGCGGCTGGCGCCGGGGGCCGGGGAGCGCCAGATGATG
GATTTGGACATGCTTCTATGAAGAAATGCCACATGGTCCGAGAGCAAACATGTCCAGGCTACTGCCACTTTAGTG
GACTAGGGCTCGGTGCCAGCACTTCCCGGGTAATCAGGCGTGGTCTGACCGAGGATCAAGAAGCACATCATCACC
AATGACATC**ATG**ACAGCAAGAGAGCACAGCCCTCGCCATGGTGCCAGGGCCCGTGCAATGCAGCGGGCTTCCACC
ATCGACGTGGCGGCCGACATGCTGGGCCTCTCTCTGGCAGGAAATATACAAGACCCAGATGAGCCCATTTTAGAA
TTTAGCTTAGCTTGCAGTGAGCTGCATACTCCATCGCTAGATCGAAAGCCAAATAGTTTTGTTGCGGTGAGTGTC
ACCACCCCTCCTCAGGCATTCTGGACGAAGCATGCACAGACGGAGATCATTGAGGGAACCAACAATCCTATATTT
CTAAGCAGTATTGCCTTCTTTCAAGACTCTCTTATCAATCAGATGACACAAGTCAAACTCTCCGTGTATGATGTC
AAAGATAGATCTCAGGGAACAATGTATTTACTGGGCTCTGGAACGTTCATTGTCAAAGATCTGCTCCAGGACAGG
CATCATAGGTTGCATTTAACACTAAGGTCTGCAGAGAGTGACCGAGTAGGTAACATCACCGTGATTGGCTGGCAG
ATGGAGGAGAAGTCAGACCAACGGCCCCCTGTGACCCGGTCTGTGGACACTGTCAATGGGAGGATGGTTCTTCCT
GTCGATGAGAGCTTGACGGAGGCGTTAGGAATCCGATCCAAATACGCTTCATTGCGAAAGGACACTTTGCTGAAA
TCGGTGTTCGGTGGTGCCATCTGCCGCATGGTACCGGTTTCCAACCACTGATGGTAACCATTTGCGGATCCTGGA
GCAGATGGCAGAGAGCGTGCTCTCCCTGCACGTGCCCCGGCAGTTCGTGAAGCTCCTACTAGAGGAAGATGCAGC
CAGAGTGTGTGAGCTGGAGGAGCTGGGAGAGCTGTCCCCTTGCTGGGAGAGCCTCCGGCGCCAAATTGTCACCCA
GTACCAGACCATCATCCTCACATACCAGGAGAACCTGACCGACCTCCATCAGTACAGAGGGCCCTCGTTTAAAGC
AAGCAGTTTGAAAGCAGATAAAAAGTTAGAATTTGTTCCCACAAACTTGCACATACAAAGGATGAGAGTTCAAGA
CGATGGAGGATCAGATCAGAACTACGACATCGTCACCATTGGGGCGCCAGCAGCACACTGCCAAGGTTTTAAGTC
AGGAGGTCTCCGCAAAAAGCTGCACAAATTTGAAGAGACCAAGAAACATACATCATCTGGCTGCCAGTCCATAAT
CTACATACCCCAGGATGTTGTCAGAGCCAAGGAGATCATCGCCCAGATCAACACCCTGAAAACCCAAGTGAGTTA
CTACGCAGAGCGGCTGTCAAGGGCAGCCAAGGACAGGTCTGCCACTGGCCTTGAGAGGACACTCGCCATCTTGGC
AGACAAGACACGGCAGCTGGTCACGGTCTGCGACTGCAAGCTCCTGGCCAACTCCATCCATGGGCTGAACGCTGC
ACGGCCTGACTACATTGCCTCCAAGGCCTCTCCCACTTCGACTGAGGAGGAGCAGGTGATGCTTAGAAATGACCA
GGACACCCTCATGGCCCAGGTGGACAGGGAGAAACAGCCGAGTCTTCCCTGCAGGTGGACTGGCACGAGGAGGAG
TGGGAGAAAGTGTGGCTGAACGTGGACAAGAGCCTAGAGTGCATCATTCAGCGTGTGAACAAGCTGCTGCAGAAG
GAGCAGCTGCATGGCGAGGGCTGTGAGGATGTCTTCCCCTGTGCAGGCAGCTGCACCAGCAAGAAAGGTAACCCG
GACAGCCACGCCTACTGGATCAGACCAGAAGACCCCTTCTGTGATGTCCCCTCCTCACCATGCCCCTCCACCATG
CCCTCCACTGCATGCCATCCTCATCTGACCACACATTGCAGTCCCCCTCCTGAAGAGTCCAGCCCAGGTGAATGG
AGTGAGGCCCTTTACCCGCTGCTGACCACTCTCACCGACTGCGTGGCCATGATGAGTGACAAGGCCAAGAAGGCC
ATGGTATTCCTGCTCATGCAGGACAGCGCGCCCACCATAGCCACCTACCTGAGCCTGCAGTACCGCCGTGACGTG
GTCTTCTGCCAGACGCTGACCGCCCTCATCTGCGGCTTCATCATTAAGCTGAGGAACTGCCTGCATGACGACGGC
TTCCTGCGCCAGCTCTACACCATCGGGCTGCTGGCCCAGTTCGAGAGCCTGCTGAGCACCTACGGGGAGGAGCTG
GCAATGCTGGAGGACATGAGCCTTGGGATCATGGACTTGAGGAACGTGACCTTCAAAGTCACTCAGGCCACTTCC
AGCGCCTCCGCAGACATGCTGCCCGTCATCACAGGAAATCGCGACGGGTTTAACGTGCGGGTCCCTCTGCCGGGC
CCGCTGTTTGACGCCTTGCCCCGGGAGATCCAGAGTGGCATGCTGCTGCGAGTGCAGCCCGTCCTCTTCAACTGT
GGGCATCAA**TGA**GCAGCAGACACTGGCCGAGAGGTTTGGCGATACGTCTTTACAAGAAGTCATCAACGTGGAGAG
TTTGGTTGCGGTTAAATTCCTACTTTGAGCAGTTTAAGGAAGTTTTGCCTGAGGATTGGCCTGCCTCGGTCTCGC
AGTCAGACGTGCCTGCCAGAGCTGCTGCGGTTTCTGGGTCAGAACGTGCATGCCCGGAAGAATAAGAACGTCGAC
ATTCTCTGGCAAGCTGCTGAGATCTGCCGCCGCCTTAATGGGGTCCGGTTCACCAGCTGCAAGAGCGCTAAGGAC
CGTACAGCCATGTCGGTGACACTGGAGCAGTGCCTGATCCTGCAACACGAGCATGGCATGGCCCCGCAGGTCTTC
ACCCAGGCCCTGGAGTGCATGCGCAGTGAGGGTTGTCGAAGAGAAAATACAATGAAGAATGTTGGAAGTCGCAAA
TATGCATTTAATTCCCTGCAGCTGAAGGCTTTCCCCAAGCATTACAGGCCTCCCGAAGGGACTTACGGAAAAGTT
GAAACGTGAACACACGGTTTCCTCTAATTAGCTGTTACATAATAAATGTGGGTACCCTCTAGTGTCATATATGAA
TTCTTCAAGAAGACCTGAAGGATTGGTTTTTATTTTTTGTGGTTTTTTTAAAAAAAACATTTCACTAAAGAGTCT
CTGGAGCATGTTTTTTGTTTTTTGGGTTTTTTTCCCCATTGGAATCAATAGGAGGTAATGTTTGGCTCAATAGTG
TGGATAGTAACAACTGCCTATTTAAATTAAATAGCCTTTGGCTGTAACTACACAGATCTCATCAATAGTTACCTA

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FIGURE 1374B

CATGAATCAAGCTAGGTTTGTCTGAAATGCTAGAAGACTTTTTCAAATGCCTGCTTGCTCACTTACTTTTCTACA
GAGTAACTCAAAAGTAACCATTGAATTACAATCCACTTTGTAAAAATCTGAATGTAAAACAGTAAATAATAAATT
AAATAATTGGATCCTAGGCATACCAATAAATGTTATTTGGGGAAAGAAGCTAGCACTATCTCATGCAGTGAGAAT
AACGGGTTCTAGTGAATTATCCTATCTACACTACCACCTGAAGAAGTTGAAAGAAAGATTGATAAATCAACGGGA
GATAAGACTTTATTAGAAGGTAACACCTGCAAGGTACCCCACATAGTTGGGGCCACTCTTTTTTCTGTCCCTTAT
GAGTTACAGAACAGGGAGTCTGCTGGAGACACAAAGCCAGCAGTAAGGTCCCTTTAGCCTGTCTCCTGTTCTCTG
AAGCTCCCTGCCGAGGCTCCCTCACGCCCAGAGGACACATCTCCCCTTCTTCTCTAGATGTTAATGTAGGGCCTC
AGATGTGGCATGTCAACACTCCCATGGGGAATTTATGACCATAGAGATAGTAGAAACCTAAATATTTTCAGAAAA
AAATTTTTTTTGCAGGATTTCCAATTTATCTTTGAAAAGACAGTACAATCATGTTTGAATGTCTGATGAAAGTGT
CTTATTTTTAGGTTTGCAATAATTGTTACTTTCTTATTCTCATTCTTATGTAAGATGACTATTGAGAAACAGTTG
AAATTTATTCTCCTCAAATGAGATTTTGAAAGGGATTTATGGGCCATAAAACTTAGGAATTTCATAGAAAATTTT
GTCTGGTCATCTTTTATAAGATGATGATGAGTCTTATCTGCACATAGCAGAGTTTGTTTCTTAGGAGTTTATATG
TTTTATTGATTCTGTTTACGATGTTTACATGTTCTTGAAAAGGTTGTAAAAGAAATACATATGGCACATATTAAT
GATGCTGATCCTAATGATTTGTGAACCTCTTAGAAATTCTTTTGTCTAAAAGCCTAGAGATTCTTCTGGTTCCTT
TAGAAACATGTAACAAACTTGGGCCAGGGGTGCTGAGGCATGGGGAGGACTGCTTATTGGCAGGAACACAGAGGG
GGTGGGCATCAGGTAGGGTGGAACTGGATGACCTTCCAGACCCCCTCCTACTCAGAAGTCAGCATGCAAGCAGCG
CCTGCTGTCTCCCGATGCCTGCAGGGAGGAAAATGTCTGTGAAGGACACTTTAATGAAGGACGAAGCTCTCTGCT
GCTCCCTCAAAGCTGAGTTCACTGTGGCAGGCAGGAAGCAGAGAAGCTCCTGCCCGCCAAACCCACTGCACAGGT
GGCTGCTGCTGGTATCAGATTCTCCTTTTTAAGTGTCAATTTCTGTTCACAGACAGTTTGTTTTCAATATGGCTG
ATTTACCCTTTCACCTCTCCACCATCTCATTTAATTTGTAAATTTTTAGTTCTGTCTTTTCTCATTTTAACTTTT
AAAAAATCTCCTTGCTTTTTAAAAATAAATATTACCCACATAGTTTTCAGATCTTTTTTGTCTGGAGAGCATTAA
ATATCTGCACTCATCAAAGGGAATATAGCAAATGTTGATCATCTGTCAGCAGTTTTGCATGTGACACCTTTATAT
GAATTATTTTCCCAATTTTTGCTCTATGTAATGGGTCACCATAAAACTGTAAGACTTGGCAAATGCTATAGAAAA
GGTTCAGGTTTCAGTATTCTCTCTGAAGGCATCATTCCTGGGCTTCCGGCAGCATCACACGCTTCCAGTGCCTGC
AGGGTGAGGGTGTGTGGCACAGAGGCAAGCAGCTCCTCTCTTCTGTAGGAGCTTTGGGTTTTCAGAGGTGCAGGG
AAGGCAGTTTTACAGGTTACCGTAAAACAGAGGTTCCGTCCAGTGTTCCTTATGATGCCTCCCCATTTAAAAAGA
AAAGAGATCTATGGAAAACTGGGAATGTAATGTGGATTCTGTCAGAGCTCCTACAGAGCACAGTTGCCTTTAGTT
TCCTTTAAAGATGTAAAAATATTGTATAATACAGTTTTGTCCCTACACAATTGTATTTGCCAAGCTTAGTGCATT
ATGATACCTTTATTTATTTGTTTTGGGCAGTATTACTATATATATATAAACATACAGTTACTGTTTTATATATTC
TTAGGTCATTCAAAGCCATGTATGCTGTAAATGTGCTAGTCTTTAGAATGACACATAATAAATAACTGACAAGAT
ATTAAATGTGGTCTTGCCTGATTCATCCTATTAGGAGGACTAGTTCTATGTGACCAGCCTGTGACTGGACCATTG
TTCTTGGGCATTGCATTGAGTGCTCGGGTGCTGAATACATGTTTGTAAACATGGGACCATGGGAGACTTCCATTT
TATAAGCTTGTTTCTGCCTAATTTGAAGCAGAGGGGCAACAGCGTTGAGGTTAAGAGCACGGACTTTGGGAGCAC
ACAGACCAGGTCCCTAATCCTGGTTCTGCCCCTGATCTGGCTGGTGACTCTGAGCAAGTTGCTTGACCTCTCCAA
GCCNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCGCCTCAGA
AGTACGTGTTCATAAATGGTAGCCATTGTTGTTACCTTCCCGTCTGTGAACATGGATCACATCATCTCTGTGGGT
AACCCAGTCCTCGTTGTATGACTTGTCAAAATGCAGTTCCACTTGTATTAATATTGACCCTGTTCATCGTCACCA
GGACTGCATCTTGCACCACTGTGCCGTCTTCTAGGCACACACGACCCGTTATCTCCCTTGGAAAAATTCCTCTCA
CTGGAAATGTACAATTAAAGGATGATTGAAATGTTTAACTCTTGGAGTTTTTAGTATTACCAAACTCCTAGAAAT
TTAAGCTACCACCAAAAATAACATGTGCCTTTTCCCTTTATTCTCATTGATGGTAGCAGTGCACCTCGTTTCAGT
GTCCTGATTCCTTGATTACTGTGAACACTGAACATCTTTTATACCTTTATGATATTTCTATGTTTGTGACTTCAT
TGGAATGTTGATCTATTTCATATAGATTGTTTTTAATATACAATGTATTAGCCCCTGTCATATGTTGCACACTTT
TTAACCTATTTGTCAGCTGTCTTTTGGTCTGTGGTAGGAGTTATACAGTATTTTAAATGGTTTATGTAGTCACAT
ATACCTGTCTTTCATTTTGATGCTTGTTCTGAAATGGAGTCCTGGCTTCACCATGGAAGGTGGGACATATGGGAC
AGCCATGTCCTTGTGGGCATGGTGGTGTGGCTGCGTGCCCACGACGAGGGGCTGGACTAAAGTGCTCACTGGCAC
CTTGCTTGGTGCATGGGGCCATGCTCAGTTTAATATTATTAACAGTTTCTACCTTCACT

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FIGURE 1375

MTAREHSPRHGARARAMQRASTIDVAADMLGLSLAGNIQDPDEPILEFSLACSELHTPSLDRKPNSFVAVSVTTP
PQAFWTKHAQTEIIEGTNNPIFLSSIAFFQDSLINQMTQVKLSVYDVKDRSQGTMYLLGSGTFIVKDLLQDRHHR
LHLTLRSAESDRVGNITVIGWQMEEKSDQRPPVTRSVDTVNGRMVLPVDESLTEALGIRSKYASLRKDTLLKSVF
GGAICRMVPVSNHDGNHLRILEQMAESVLSLHVPRQFVKLLLEEDAARVCELEELGELSPCWESLRRQIVTQYQT
IILTYQENLTDLHQYRGPSFKASSLKADKKLEFVPTNLHIQRMRVQDDGGSDQNYDIVTIGAPAAHCQGFKSGGL
RKKLHKFEETKKHTSSGCQSIIYIPQDVVRAKEIIAQINTLKTQVSYYAERLSRAAKDRSATGLERTLAILADKT
RQLVTVCDCKLLANSIHGLNAARPDYIASKASPTSTEEEQVMLRNDPGHPHGPGGQGETAESSLQVDWHEEEWEK
VWLNVDKSLECIIQRVNKLLQKEQLHGEGCEDVFPCAGSCTSKKGNPDSHAYWIRPEDPFCDVPSSPCPSTMPST
ACHPHLTTHCSPPPEESSPGEWSEALYPLLTTLTDCVAMMSDKAKKAMVFLLMQDSAPTIATYLSLQYRRDVVFC
QTLTALICGFIIKLRNCLHDDGFLRQLYTIGLLAQFESLLSTYGEELAMLEDMSLGIMDLRNVTFKVTQATSSAS
ADMLPVITGNRDGFNVRVPLPGPLFDALPREIQSGMLLRVQPVLFNCGHQ

FIGURE 1376A

CGCTCGATCTTGGGACCCACCGCTGCCCTCAGCTCCGAGTCCAGGGCGAGTGCAGAGCACAGCGGGCGGAGGACC
CCGGGCGCGGGCGCGGACGGCACGCGGGGC**ATG**AACCTGGAGGGCGGCGGCCGAGGCGGAGAGTTCGGCATGAGC
GCGGTGAGCTGCGGCAACGGGAAGCTCCGCCAGTGGCTGATCGACCAGATCGACAGCGGCAAGTACCCCGGGCTG
GTGTGGGAGAACGAGGAGAAGAGCATCTTCCGCATCCCCTGGAAGCACGCGGGCAAGCAGGACTACAACCGCGAG
GAGGACGCCGCGCTCTTCAAGGCTTGGGCACTGTTTAAAGGAAAGTTCCGAGAAGGCATCGACAAGCCGGACCCT
CCCACCTGGAAGACGCGCCTGCGGTGCGCTTTGAACAAGAGCAATGACTTTGAGGAACTGGTTGAGCGGAGCCAG
CTGGACATCTCAGACCCGTACAAAGTGTACAGGATTGTTCCTGAGGGAGCCAAAAAAGGAGCCAAGCAGCTCACC
CTGGAGGACCCGCAGATGTCCATGAGCCACCCCTACACCATGACAACGCCTTACCCTTCGCTCCCAGCCCAGCAG
GTTCACAACTACATGATGCCACCCCTCGACCGAAGCTGGAGGGACTACGTCCCGGATCAGCCACACCCGGAAATC
CCGTACCAATGTCCCATGACGTTTGGACCCCGCGGCCACCACTGGCAAGGCCCAGCTTGTGAAAATGGTTGCCAG
GTGACAGGAACCTTTTATGCTTGTGCCCCACCTGAGTCCCAGGCTCCCGGAGTCCCCACAGAGCCAAGCATAAGG
TCTGCCGAAGCCTTGGCGTTCTCAGACTGCCGGCTGCACATCTGCCTGTACTACCGGGAAATCCTCGTGAAGGAG
CTGACCACGTCCAGCCCCGAGGGCTGCCGGATCTCCCATGGACATACGTATGACGCCAGCAACCTGGACCAGGTC
CTGTTCCCCTACCCAGAGGACAATGGCCACAGGAAAAACATTGAGAACCTGCTGAGCCACCTGGAGAGGGGCGTG
GTCCTCTGGATGGCCCCCGACGGGCTCTATGCGAAAAGACTGTGCCAGAGCACGATCTACTGGGACGGGCCCCTG
GCGCTGTGCAACGACCGGCCCAACAAACTGGAGAGAGACCAGACCTGCAAGCTCTTTGACACACAGCAGTTCTTG
TCAGAGCTGCAAGCGTTTGCTCACCACGGCCGCTCCCTGCCAAGATTCCAGGTGACTCTATGCTTTGGAGAGGAG
TTTCCAGACCCTCAGAGGCAAAGAAAGCTCATCACAGCTCACGTAGAACCTCTGCTAGCCAGACAACTATATTAT
TTTGCTCAACAAAACAGTGGACATTTCCTGAGGGGCTACGATTTACCAGAACACATCAGCAATCCAGAAGATTAC
CACAGATCTATCCGCCATTCCTCTATTCAAGAA**TGA**AAAATGTCAAGATGAGTGGTTTTCTTTTTCCTTTTTTTT
TTTTTTTTTTTTGATACGGAGATACGGGGTCTTGCTCTGTCTCCCAGGCTGGAGTGCAGTGACACAATCTCAGCT
CACTGTGACCTCCGCCTCCTGGGTTCAAGAGACTCTCCTGCCTCAGCCTCCCTGGTAGCTGGGATTACAGGTGTG
AGCCACTGCACCCACCCAAGACAAGTGATTTTCATTGTAAATATTTGACTTTAGTGAAAGCGTCCAATTGACTGC
CCTCTTACTGTTTTGAGGAACTCAGAAGTGGAGATTTCAGTTCAGCGGTTGAGGAGAATTGCGGCGAGACAAGCA
TGGAAAATCAGTGACATCTGATTGGCAGATGAGCTTATTTCAAAAGGAAGGGTGGCTTTGCATTTTCTTGTGTTC
TGTAGACTGCCATCATTGATGATCACTGTGAAAATTGACCAAGTGATGTGTTTACATTTACTGAAATGCGCTCTT
TAATTTGTTGTAGATTAGGTCTTGCTGGAAGACAGAGAAAACTTGCCTTTCAGTATTGACACTGACTAGAGTGAT
GACTGCTTGTAGGTATGTCTGTGCCATTTCTCAGGGAAGTAAGATGTAAATTGAAGAAGCCTCACACGTAAAAGA
AATGTATTAATGTATGTAGGAGCTGCAGTTCTTGTGGAAGACACTTGCTGAGTGAAGGAAATGAATCTTTGACTG
AAGCCGTGCCTGTAGCCTTGGGGAGGCCCATCCCCCACCTGCCAGCGGTTTCCTGGTGTGGGTCCCTCTGCCCCA
CCCTCCTTCCCATTGGCTTTCTCTCCTTGGCCTTTCCTGGAAGCCAGTTAGTAAACTTCCTATTTTCTTGAGTCA
AAAAACATGAGCGCTACTCTTGGATGGGACATTTTTGTCTGTCCTACAATCTAGTAATGTCTAAGTAATGGTTAA
GTTTTCTTGTTTCTGCATCTTTTTGACCCTCATTCTTTAGAGATGCTAAAATTCTTCGCATAAAGAAGAAGAAAT
TAAGGAACATAAATCTTAATACTTGAACTGTTGCCCTTCTGTCCAAGTACTTAACTATCTGTTCCCTTCCTCTGT
GCCACGCTCCTCTGTTTGTTTGGCTGTCCAGCGATCAGCCATGGCGACACTAAAGGAGGAGGAGCCGGGGACTCC
CAGGCTGGAGAGCACTGCCAGGACCCACCACTGGAAGCAGGATGGAGCTGACTACGGAACTGCACACTCAGTGGG
CTGTTTCTGCTTATTTCATCTGTTCTATGCTTCCTCGTGCCAATTATAGTTTGACAGGGCCTTAAAATTACTTGG
CTTTTTCCAAATGCTTCTATTTATAGAAATCCCAAAGACCTCCACTTGCTTAAGTATACCTATCACTTACATTTT
TGTGGTTTTGAGAAAGTACAGCAGTAGACTGGGGCGTCACCTCCAGGCCGTTTCTCATACTACAGGATATTTACT
ATTACTCCCAGGATTCAGCAGAAGATTGCGTTAGCTCTCAAATGTGTGTTCCTGCTTTTCTAATGGATATTTTAA
ATTCATTCAACAAGCACCTAGTAAGTGCCTGCTGTATCCCTACATTACACAGTTCAGCCTTTATCAAGCTTAGTG
AGCAGTGAGCACTGAAACATTATTTTTTAATGTTTAAAAAGTTTCTAATATTAAAGTCAGAATATTAATACAATT
AATATTAATATTAACTACAGAAAAGACAAACAGTAGAGAACAGCAAAAAAATAAAAAGGATCTCCTTTTTTCCCA
GCCCAAATTCTCCTCTCTAAAAGTGTCCACAAGAAGGGGTGTTTATTCTTCCAACACATTTCACTTTTCTGTAAA
TATACATAAACTTAAAAAGAAAACCTCATGGAGTCATCTTGCACACACTTTTCATGCAGTGCTCTTTGTAGCTAA
ACAGTGAAGATTTACCTCGTTCTGCTCAGAGGCCTTGCTGTGGAGCTCCACTGCCATGTACCCAGTAGGGTTTGA
CATTTCATTAGCCATGCAACATGGATATGTATTGGGCAGCAGACTGTGTTTCGTGAACTGCAGTGATGTATACAT
CTTATAGATGCAAAGTATTTTGGGGTATATTATCCTAAGGGAAGATAAAGATGATATTAAGAACTGCTGTTTCAC

FIGURE 1376B

GGGGCCCTTACCTGTGACCCTCTTTGCTGAAGAATATTTAACCCCACACAGCACTTCAAAGAAGCTGTCTTGGAA
GTCTGTCTCAGGAGCACCCTGTCTTCTTAATTCTCCAAGCGGATGCTCCATTTCAATTGCTTTGTGACTTCTTCT
TCTTTGTTTTTTTAAATATTATGCTGCTTTAACAGTGGAGCTGAATTTTCTGGAAAATGCTTCTTGGCTGGGGCC
ACTACCTCCTTTCCTATCTTTACATCTATGTGTATGTTGACTTTTTAAAATTCTGAGTGATCCAGGGTATGACCT
AGGGAATGAACTAGCTATGGAAATAACTCAGGGTTAGGAATCCTAGCACTTGTCTCAGGACTCTGAAAAGGAACG
GCTTCCTCATTCCTTGTCTTGATAAAGTGGAATTGGCAAACTAGAATTTAGTTTGTACTCAGTGGACAGTGCTGT
TGAAGATTTGAGGACTTGTTAAAGAGCACTGGGTCATATGGAAAAAATGTATGTGTCTCCCCAGGTGCATTTTCT
TGGTTTATGTCTTGTTCTTGAGATTTTGTATATTTAGGAAAACCTCAAGCAGTAATTAATATCTCCTGGAACACT
ATAGAGAACCAAGTGACCGACTCATTTACAACTGAAACCTAGGAAGCCCCTGAGTCCTGAGCGAAAACAGGAGAG
TTAGTCGCCCTACAGAAAACCCAGCTAGACTATTGGGTATGAACTAAAAAGAGACTGTGCCATGGTGAGAAAAAT
GTAAAATCCTACAGTGGAATGAGCAGCCCTTACAGTGTTGTTACCACCAAGGGCAGGTAGGTATTAGTGTTTGAA
AAAGCTGGTCTTTGAGCGAGGGCATAAATACAGCTAGCCCCAGGGGTGGAACAACTGTGGGAGTCTTGGGTACTC
GCACCTCTTGGCTTTGTTGATGCTCCGCCAGGAAGGCCACTTGTGTGTGCGTGTCAGTTACTTTTTTAGTAACAA
TTCAGATCCAGTGTAAACTTCCGTTCATTGCTCTCCAGTCACATGCCCCCACTTCCCCACAGGTGAAAGTTTTTC
TGAAGTGTTGGGATTGGTTAAGGTCTTTATTTGTATTACGTATCTCCCCAAGTCCTCTGTGGCCAGCTGCATCTG
TCTGAATGGTGCGTGAAGGCTCTCAGACCTTACACACCATTTTGTAAGTTATGTTTTACATGCCCCGTTTTTGAG
ACTGATCTCGATGCAGGTGGATCTCCTTGAGATCCTGATAGCCTGTTACAGGAATGAAGTAAAGGTCAGTTTTTT
TTGTATTGATTTTCACAGCTTTGAGGAACATGCATAAGAAATGTAGCTGAAGTAGAGGGGACGTGAGAGAAGGGC
CAGGCCGGCAGGCCAACCCTCCTCCAATGGAAATTCCCGTGTTGCTTCAAACTGAGACAGATGGGACTTAACAGG
CAATGGGGTCCACTTCCCCCTCTTCAGCATCCCCCGTACC

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FIGURE 1377

MNLEGGGRGGEFGMSAVSCGNGKLRQWLIDQIDSGKYPGLVWENEEKSIFRIPWKHAGKQDYNREEDAALFKAWA
LFKGKFREGIDKPDPPTWKTRLRCALNKSNDFEELVERSQLDISDPYKVYRIVPEGAKKGAKQLTLEDPQMSMSH
PYTMTTPYPSLPAQQVHNYMMPPLDRSWRDYVPDQPHPEIPYQCPMTFGPRGHHWQGPACENGCQVTGTFYACAP
PESQAPGVPTEPSIRSAEALAFSDCRLHICLYYREILVKELTTSSPEGCRISHGHTYDASNLDQVLFPYPEDNGH
RKNIENLLSHLERGVVLWMAPDGLYAKRLCQSTIYWDGPLALCNDRPNKLERDQTCKLFDTQQFLSELQAFAHHG
RSLPRFQVTLCFGEEFPDPQRQRKLITAHVEPLLARQLYYFAQQNSGHFLRGYDLPEHISNPEDYHRSIRHSSIQ
E

FIGURE 1378

GAAAGTCAGTGAGCAAATCGCGGACCACCGGGGCTGCCAGCTCGCCTGACTCCCGGCCTCTTGCGCTCCTAGGGG
CGGAGAAGGGTGCGGGCTCTTCGCCCTTTGTGTCCTCCTTCTTTCACTAACTTCTGGACTTTCCAGCTCTTCCGA
AGTTCGTTCTTGCGCAAAGCCCAAAGGCTGGAAAACCGTCCACG**ATG**ACCAGCATGACTCAGTCTCTGCGGGAGG
TGATAAAGGCCATGACCAAGGCTCGCAATTTTGAGAGAGTTTTGGGAAAGATTACTCTTGTCTCTGCTGCTCCTG
GGAAAGTGATTTGTGAAATGAAAGTAGAAGAAGAGCATACCAATGCAATAGGCACTCTCCACGGCGGTTTGACAG
CCACGTTAGTAGATAACATATCAACAATGGCTCTGCTATGCACGGAAAGGGGAGCACCCGGAGTCAGTGTCGATA
TGAACATAACGTACATGTCACCTGCAAAATTAGGAGAAGATATAGTGATTACAGCACATGTTCTGAAGCAAGGAA
AAACACTTGCATTTACCTCTGTGGATCTGACCAACAAGGCCACAGGAAAATTAATAGCACAAGGAAGACACACAA
AACACCTGGGAAAC**TGA**GAGAACAGCAGAATGACCTAAAGAAACCCAACAATGAATATCAAGTATAGATTTGACT
CAAACAATTGTAATTTTTGAAATAAACTAGCAAAACCAGAAAAAAAAAAAAAAAAAAAA

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FIGURE 1379

MTSMTQSLREVIKAMTKARNFERVLGKITLVSAAPGKVICEMKVEEEHTNAIGTLHGGLTATLVDNISTMALLCT
ERGAPGVSVDMNITYMSPAKLGEDIVITAHVLKQGKTLAFTSVDLTNKATGKLIAQGRHTKHLGN

FIGURE 1380

GAATTCCGGTTTCTTCCTAAAAAATGTCTGATGGCCGCTTTCTCGGTCGGCACCGCCATGAATGCCAGCAGTTAC
TCTGCAGAGATGACGGAGCCCAAGTCGGTGTGTGTCTCGGTGGATGAGGTGGTGTCCAGCAACATGGAGGCCACT
GAGACGGACCTGCTGAATGGACATCTGAAAAAAGTAGATAATAACCTCACGGAAGCCCAGCGCTTCTCCTCCTTG
CCTCGGAGGGCAGCTGTGAACATTGAATTCAGGGACCTTTCCTATTCGGTTCCTGAAGGACCCTGGTGGAGGAAG
AAAGGATACAAGACCCTCCTGAAAGGAATTTCCGGGAAGTTCAATAGTGGTGAGTTGGTGGCCATTATGGGTCCT
TCCGGGGCCGGGAAGTCCACGCTGATGAACATCCTGGCTGGATACAGGGAGACGGGCATGAAGGGGGCCGTCCTC
ATCAACGGCCTGCCCCGGGACCTGCGCTGCTTCCGGAAGGTGTCCTGCTACATCATGCAGGATGACATGCTGCTG
CCGCATCTCACTGTGCAGGAGGCCATGATGGTGTCGGCACATCTGAAGCTTCAGGAGAAGGATGAAGGCAGAAGG
GAAATGGTCAAGGAGATACTGACAGCGCTGGGCTTGCTGTCTTGCGCCAACACGCGGACCGGGAGCCTGTCAGGT
GGTCAGCGCAAGCGCCTGGCCATCGCGCTGGAGCTGGTGAACAACCCTCCAGTCATGTTCTTCGATGAGCCCACC
AGCGGCCTGGACAGCGCCTCCTGCTTCCAGGTGGTCTCGCTGATGAAAGGGCTCGCTCAAGGGGGTCGCTCCATC
ATTTGCACCATCCACCAGCCCAGCGCCAAACTCTTCGAGCTGTTCGACCAGCTTTACGTCCTGAGTCAAGGACAA
TGTGTGTACCGGGGAAAAGTCTGCAATCTTGTGCCATATTTGAGGGATTTGGGTCTGAACTGCCCAACCTACCAC
AACCCAGCAGATTTTGTCATGGAGGTTGCATCCGGCGAGTACGGTGATCAGAACAGTCGGCTGGTGAGAGCGGTT
CGGGAGGGCATGTGTGACTCAGACCACAAGAGAGACCTCGGGGGTGATGCCGAGGTGAACCCTTTTCTTTGGCAC
CGCCCCTCTGAAGAGGTAAAGCAGACAAAACGATTAAAGGGGTTGAGAAAGGACTCCTCGTCCATGGAAGGCTGC
CACAGCTTCTCTGCCAGCTGCCTCACGCAGTTCTGCATCCTCTTCAAGAGGACCTTCCTCAGCATCATGAGGGAC
TCGGTCCTGACACACCTGCGCATCACCTCGCACATTGGGATCGGCCTCCTCATTGGCCTGCTGTACTTGGGGATC
GGGAACGAAACCAAGAAGGTCTTGAGCAACTCCGGCTTCCTCTTCTTCTCCATGCTGTTCCTCATGTTCGCGGCC
CTCATGCCTACTGTTCTGACATTTCCCCTGGAGATGGGAGTCTTTCTTCGGGAACACCTGAACTACTGGTACAGC
CTGAAGGCCTACTACCTGGCCAAGACCATGGCAGACGTGCCCTTTCAGATCATGTTCCCAGTGGCCTACTGCAGC
ATCGTGTACTGGATGACGTCGCAGCCGTCCGACGCCGTGCGCTTTGTGCTGTTTGCCGCGCTGGGCACCATGACC
TCCCTGGTGGCACAGTCCCTGGGCCTGCTGATCGGAGCCGCCTCCACGTCCCTGCAGGTGGCCACTTTCGTGGGC
CCAGTGACAGCCATCCCGGTGCTCCTGTTCTCGGGGTTCTTCGTCAGCTTCGACACCATCCCCACGTACCTACAG
TGGATGTCCTACATCTCCTATGTCAGGTATGGGTTCGAAGGGGTCATCCTCTCCATCTATGGCTTAGACCGGGAA
GATCTGCACTGTGACATCGACGAGACGTGCCACTTCCAGAAGTCGGAGGCCATCCTGCGGGAGCTGGACGTGGAA
AATGCCAAGCTGTACCTGGACTTCATCGTACTCGGGATTTTCTTCATCTCCCTCCGCCTCATTGCCTATTTGGTC
CTCAGGTACAAAATCCGGGCAGAGAGGTAAAACACCTGAATGCCAGGAAACAGGAAGATTAGACACTGTGGCCGA
GGGCACGTCTAGAATCGAGGAGGCAAGCCTGTGCCCGACCGACGACACAGAGACTCTTCTGATCCAACCCCTAGA
ACCGCGTTGGGTTTGTGGGTGTCTCGTGCTCAGCCACTCTGCCCAGCTGGGTTGGATCTTCTCTCCATTCCCCTT
TCTAGCTTTAACTAGGAAGATGTAGGCAGATTGGTGGTTTTTTTTTTTTTTTAACATACAGAATTTTAAATACC
ACAACTGGGGCAGAATTTAAAGCTGCAACACAGCTGGTGATGAGAGGCTTCCTCAGTCCAGTCGCTCCTTAGCAC
CAGGCACCGTGGGTCCTGGATGGGGAACTGCAAGCAGCCTCTCAGCTGATGGCTGCACAGTCAGATGTCTGGTGG
CAGAGAGTCCGAGCATGGAGCGATTCCATTTTATGACTGTTGTTTTTCACATTTTCATCTTTCTAAGGTGTGTCT
CTTTTCCAATGAGAAGTCATTTTTGCAAGCCAAAAGTCGATCAATCGCATTCATTTTAAGAAATTATACCTTTTT
AGTACTTGCTGAAGAATGATTCAGGGTAAATCACATACTTTGTTTAGAGAGGCGAGGGGTTTAACCCGAGTCACC
CAGCTGGTCTCATACATAGACAGCACTTGTGAAGGATTGAATGCAGGTTCCAGGTGGAGGGAAGACGTGGACACC
ATCTCCACTGAGCCATGCAGACATTTTTAAAAGCTATACACAAAATTGTGAGAAGACATTGGCCAACTCTTTCAA
AGTCTTTCTTTTTCCACGTGCTTCTTATTTTAAGCGAAATATATTGTTTGTTTCTTCCTAAAAAAAAAAAAAAAA
AAAAA

FIGURE 1381

MAAFSVGTAMNASSYSAEMTEPKSVCVSVDEVVSSNMEATETDLLNGHLKKVDNNLTEAQRFSSLPRRAAVNIEF
RDLSYSVPEGPWWRKKGYKTLLKGISGKFNSGELVAIMGPSGAGKSTLMNILAGYRETGMKGAVLINGLPRDLRC
FRKVSCYIMQDDMLLPHLTVQEAMMVSAHLKLQEKDEGRREMVKEILTALGLLSCANTRTGSLSGGQRKRLAIAL
ELVNNPPVMFFDEPTSGLDSASCFQVVSLMKGLAQGGRSIICTIHQPSAKLFELFDQLYVLSQGQCVYRGKVCNL
VPYLRDLGLNCPTYHNPADFVMEVASGEYGDQNSRLVRAVREGMCDSDHKRDLGGDAEVNPFLWHRPSEEVKQTK
RLKGLRKDSSSMEGCHSFSASCLTQFCILFKRTFLSIMRDSVLTHLRITSHIGIGLLIGLLYLGIGNETKKVLSN
SGFLFFSMLFLMFAALMPTVLTFPLEMGVFLREHLNYWYSLKAYYLAKTMADVPFQIMFPVAYCSIVYWMTSQPS
DAVRFVLFAALGTMTSLVAQSLGLLIGAASTSLQVATFVGPVTAIPVLLFSGFFVSFDTIPTYLQWMSYISYVRY
GFEGVILSIYGLDREDLHCDIDETCHFQKSEAILRELDVENAKLYLDFIVLGIFFISLRLIAYLVLRYKIRAER

FIGURE 1382A

ATTGATAAGGGTCCGTGTCGACTTTGAGGTCAGGACAGAAATACTGAATGACTTTACACTTAGGAAAAAATAGCT
AAATAATTAAGATGCAGGCTGTAGTGTTCAAACCAATAGAGCAGGGAAAGGGAAATGTAGATACTTTATTAATTC
AGTGGAAGATAGGAAAGTTAGAAGCAAAGGAGGCTGGGCACAGTGGCTCATGCCTGTAATCCTAGCACTTTGGGA
GGCCAAGACAGGTGGATCACCTGAGGTTAGGGGTTTCACCATGTTGGCCAGGATGGTCTTGATCTCCTAACCTCT
TGATCTGCCCTCCTTGGCCTCCCAAAGTGCTGCGATTACAGGCGTGAGCCACCGCACTGGCCTAATTTCTCTTTT
CTCTGCATTGAACTAGAAAAACATCGTTCTCTTTTTCGTAATGTTCCATAGTTACAAAAGCTATAACATAAGGTC
TTTTTCTTCATTATGTTTTCTGACATATCTGAAAATAAGCAGTGATCCCAGGTAGATAATCATATTAACCATAAG
AGACCAACGTTTGTGATATTTATTACATGCTTTTTTCAGAGATGGAAAATA**ATG**TCCTGCAAGATGAGGATTGAA
CAGTTAAAACAAACAATATGTAAAGGAAATGAAGAAATGGAGAAAAATTCTGAAGGCCTTCTCAAAACCAAGGAA
AAGAATCAGAAGCTTTACAGTCGAGCACAACGGCACCAAGAGAAAAAGGAGAAGATTCAGAGGCATAATCGCAAA
CTTGGTGACCTGGTAGAAAAAAAGACCATTGACTTAAGAAGTCATTATGAGCGTCTGGCAAATCTTCGACGATCC
CATATATTAGAGCTCACCTCTGTCATTTTTCCAATCGAGGAAGTAAAGACGGGTGTGAGAGACCCCGCAGATGTG
TCTTCAGAGAGTGACAGTGCCATGACCTCCAGCACTGTGAGCAAGCTTGCTGAAGCCCGGAGGACAACTTACCTC
TCAGGACGATGGGTCTGTGACGATCACAACGGAGACACCAGCATTAGCATTACAGGGCCTTGGATTAGCCTCCCT
AACAATGGGGACTACTCTGCCTACTACAGCTGGGTGGAGGAGAAGAAAACAACCCAGGGGCCTGACATGGAGCAG
AGTAACCCTGCCTACACCATCAGTGCTGCGCTGTGCTATGCAACTCAGCTGGTCAACATTCTGTCTCATATACTT
GATGTAAATCTTCCCAAAAAGCTCTGCAACAGTGAATTTTGTGGCGAAAATCTAAGCAAGCAGAAATTTACTCGA
GCAGTGAAGAAACTGAATGCAAATATTCTTTACCTTTGTTTTTCTCAGCATGTAAATTTAGATCAATTACAACCA
CTGCATACCCTCAGGAATCTAATGTACCTGGTCAGTCCAAGCTCTGAACACCTAGGCAGGTCAGGGCCCTTTGAA
GTACGAGCAGACCTTGAGGAGTCCATGGAATTTGTGGATCCCGGAGTTGCTGGAGAATCAGATGAGAGCGGAGAT
GAGCGCGTCAGCGATGAAGAAACCGACCTGGGCACAGACTGGGAGAACTTGCCTAGTCCCCGGTTTTGTGATATC
CCTTCCCAGTCTGTGGAAGTCTCCCAGAGTCAGAGCACCCAGGCGTCCCCACCCATCGCGAGCAGCAGTGCAGGT
GGGATGATCTCCTCTGCAGCAGCCTCGGTGACCTCCTGGTTTAAAGCTTACACTGGACACCGT**TAA**CGAGCATGG
ACCAAAACATACCAAATCTGCATCAAGAAAGTTCTTCTCCCACTACACTCTAGTAAACATTTTCTGTTTAAGTTA
AGATAGTGTCTGGAACAAAGAGGTTAAAGTGTTGTTTTGTTTTGTCTTTTTAAGCAGGGAGACAAACATTTCTAT
TTGCCAAGTGGCCTGTGATGGTGACCAACATGCTTATGATAATTAAGAGAACAGGGGTCGAAGGTCTTTCTACCC
AGACCAGTGCTGGTGGAAGGAGGACCTGTGCGTGTGGCCAGTTCTGCCAAGGAAGCAGTTGATTTGGGTTCCCTC
TGGGCCCGGGCCACCGGGCCCACAGATATGGGTCAGTGTGCTGGTCCTTGCGGTGCTGAGACTGTTCCTGACACT
TTAAGTTTTAGAGGTTGGTTGAATCACAAGAGGTGATTCTTGATTATTAGGACATGAAAGATAAAAGCTCTTTAA
TAAGAGTTTTTCTGCCATTGTTTTTTGTATGAGAACCAGCAGGCAATTTAAAATTTCTAATTTGGTCCTTTGATT
TTGTTTGGGAGGGGTGAGTTACACGTATTTTATTCATGCTGCTCTGTCGTAGTTTGTCAGACATTCCTGTTTTTC
TTTCCCCCACACACCAAAGAAAATGAAAGTCTTTTTCTTTAGGACCCACATCCATAAATGGAAGAAATCCTGGCT
GCAATAATGTCTAGAGAGTTTTTAACTATTTTCTTGTATTCTGAGGGGAATTAAGCTTATTCTTACCTAGTTGAA
TTCCTGCCATCCACACTATGAGCATTTTGAAATTGAACTTATATTTTCTGGGTGAAAATAAGTCATGAAGGTCAT
TCCCTTATGTAAGCTCAATGCCTGCCTGGGCACAGGGGAAAAGCCACTTAGTTAAGTGGCCTCTGGTCATTCTTG
TGGTGTCCACTTTCTTTCTATGGGATTGAGTAGGTGGCAGGTGTTTTCAGGGGAAACCATCCTACTTGTTTCCCC
GAACTCTTTGTTGCTCTGAGGACACAGCTTTGCTCAGAAATGCAGCGCAGATCCTTACGGCTGATGCTACTCTGC
TCTGTTCTGGGGAAAGCACAATATAAAGAAAGAATTTCCCAGCCGGGCGCGGTGGCTCACGCCTGTAATCCCGGC
ACTTTGGGAGGCCGAGGCAGGCGGATCACTTGAGGTCAGGAGTTTGAGAGCAGCCTGGCTAACATGGTGAAACCC
TGTTTCTGCTAGAAGTGCAGAAAATTACCGGGTGTGGTGGCGCACGCCTGTAATCCCAGCTACTCGGGAGGCTGC
GGCGGGAGAATCGCTTGAACCGGGAGGCGGAGGTTGCAGTGAGCCGAGATTGTGCCATTGCACTCCAGCCTGGGC
AACAAGAGCGAGGCTCCGTCTCAAAAAAAAAAAGAATTTCCCTCAGCAGGAGATCATTTTCAGCTCACGTGTCTT
GTCATTCTTTTAGTGACAATCTTACAAGAAAACTATAATGAGAGAGGCATTATGTACAAATATGTAAGTAGTTTA
TTTTTAATAACTGCAAAAATATCCTATGTAACAACTACCAAAAGAAATCCTATGAAAGAGTCCTAACAGGCATTA
TTACCATATCTTATGTGATTGGCATGATAGCACCTCTGATAAATCATTCAGAGGTTTGCCATGCCCCAGCTTCTT
TTCTCATCATAATAATTGTAGTTGATACTTTGCCTCCAAGTCCGAGGTGCTATATAGCTTTTGCTAATGGTATAT
TTGGTGTTTTGTATAGTTTTGGGTAGAGTTGCAGAACGGAGTTTATTTCTATCCGGTAGTCACAAATTCCTTGGC
TCTATGAATTTTCCATGAAAGGAGGAAGTAGGCTTTTCTCGTTGTGGGTGGTCTTTTTTTTTTTTGGAGACGGAG

FIGURE 1382B

TCTCGCTCAGCTGCCCAGGCTGGAGTGTGGTGGCGCCATCTCCGCTCGCTGCAACCACCATCTCCTGGGTTCAGG
CGATTCTTCCGTCTCAGCCTCCCGAGTAGCTGGGATTATAGGCACCTGCCATCATGCCCAGCTAATTTTTGTATT
TTGGTAGAGACGGGGGTTTTCACCATGTTGGCCAGGCTGGTCTTGAACTCCTGGCTTCGGGTGATCCGCTTGCCT
TGGCCTCCTAGGGTGCTGGGATTGCAGGCCTGAGCCACCGCGCCCGGCCCCTTATGGGTTCTTCTACACTGCTGG
GATCTCTGTTTTAAGTGCTCAGCTTCATGATTGATTGCTGGGCTTCCATTTTCCCATCCAGTTCTGGAGTTCGTA
GAGAGTGAAGATGGTAGACTTGAACAGATAAATAAACTTAACGATCTTGTAAGAGTTGTCTAGCTACTTAAAACC
CTCAGAAGTAAGAGCTTAGTCTCACGAGTTGTAAGAGTGGGATTTGGAGCTTGGTGGTGGAGACTGACTTCAGCT
GAGAGATGCACAACAGTCATGGTTTTCTTAAGCCTCTTATGAAACCATGAATGAGAGATGAAGCTAAAGAATAGA
ATCCAGAGATCACAAACTCATCTAGAGTACTTCCACAAAATTTACAAAGATGTGGGAACTTTATGGATAGGATAT
ATTTTGTTTGTTGTTGTTAATATCAACTAGAGGCACTTTACATAGGGTTAAGTGATCGAACCCTTTTGTGGTTTT
GAACACCAACATACTGGCTTACACTGCTGAAATATTTTGGGTTTCATTATTTTGCACTGGATCCACCCTGTAAAT
ACTCTTAAGTATACATTTCAACCACTGTTTTTTCTACTCTTTTTGCTGCTCATTAAAATCTTTCATGTAGGTGCC
AGAACCATATGTAAACAGCTTTTTAAAAAATTGAAGCTGGTATTTTGTTTAAACAAAAAGCCATAGAACTTGGTC
ATGTTTTCCATTTTAAAATGATTTACTGAAACAAAGTAATACTAATAAAAACCCACAGGCACCAAACAGGCTGCT
TAAAATGGTCTGTTAAAGACATTTTTTGGTTATGGAATATAAGAAAAGTTTTGCACATCTGTAAGGGGGAAAAAC
AGTATATCACCATTGGGTAGAGTGGACGGGACTCATGTAAGGACTCAATTTGGGGAAGAGCATTCAGTGGCATGC
TGTTAGAGGACTAGTGTCCGAGAATCTCCTCACAGTATCATGTTGCAGGAATTCCCCATTGCTCTGCAACTTCCA
AACCAGTTTGAGTCATACAAATGTTTTCTAAACTTTTATTGTATTACTGCAATAAATCTTTTAACAGT

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FIGURE 1383

MSCKMRIEQLKQTICKGNEEMEKNSEGLLKTKEKNQKLYSRAQRHQEKKEKIQRHNRKLGDLVEKKTIDLRSHYE
RLANLRRSHILELTSVIFPIEEVKTGVRDPADVSSESDSAMTSSTVSKLAEARRTTYLSGRWVCDDHNGDTSISI
TGPWISLPNNGDYSAYYSWVEEKKTTQGPDMEQSNPAYTISAALCYATQLVNILSHILDVNLPKKLCNSEFCGEN
LSKQKFTRAVKKLNANILYLCFSQHVNLDQLQPLHTLRNLMYLVSPSSEHLGRSGPFEVRADLEESMEFVDPGVA
GESDESGDERVSDEETDLGTDWENLPSPRFCDIPSQSVEVSQSQSTQASPPIASSSAGGMISSAAASVTSWFKAY
TGHR

FIGURE 1384

GGCCCGGCCCGCGGCGGCGGCAAAGGGGCGGAGGGGTTCGCTGCCAGCAATTGCCAAGCTGCTGCGGTCGTGGCG
GGATGGTATAGCCGGGCCTGAGGGCGGGCGGCGGGGCGCGGGCGGGGGCGAGGCGGCCGGGAAGGGCCGACGCCG
CCTGACTGGCTTGGGAGCAGCGGCAGCAAGCTGAGGGGGCGTCGCCGCCGCCGGCCCCCGGCGCCGCCGCGGGAG
GCCGCGCCCGCC**ATG**GCGGCCCGGGCGGTGCTGGACGAGTTCACTGCGCCAGCTGAGAAGGCGGAGCTGCTGGAG
CAGAGCCGCGGCCGTATCGAGGGCCTGTTTGGCGTGAGCCTAGCCGTGCTCGGCGCGCTAGGGGCTGAGGAGCCG
CTGCCCGCGCGCATCTGGCTGCAGCTCTGCGGGGCGCAGGAGGCGGAGCACAGCGCCAAGGAATATATTAAAGGA
ATCTGTGAACCTGAACTAGAAGAAAGAGAATGTTACCCCAAGGACATGCACTGCATTTTTGTTGGGGCAGAGAGC
CTGTTTCTGAAAAGCTTGATTCAGGATACTTGTGCTGACCTCTGCATTCTGGACATTGGCCTTCTTGGCATCAGA
GGAAGTGCTGAGGCTGTGGTCATGGCTAGGAGTCACATTCAACAATTTGTAAAGCTCTTTGAAAATAAAGAGAAC
CTACCCAGTAGTCAGAAAGAATCAGAGGTGAAAAGGGAATTCAAACAATTTGTTGAAGCCCATGCAGACAATTAC
ACAATGGATTTGTTGATTTTGCCCACTTCCTTGAAAAAAGAACTTTTGACACTCACACAAGGTGAGGAGAATCTC
TTTGAAACAGGAGATGATGAGGTTATTGAAATGAGAGATTCTCAACAAACAGAGTTTACACAGAATGCTGCCACA
GGGCTGAATATTTCTAGAGATGAAACTGTTTTGCAGGAAGAGGCAAGAAATAAAGCTGGGACTCCTGTTTCTGAG
CTTACAAAACAAATGGACACAGTCCTTTCTAGCTCACCAGATGTGCTTTTTGATCCAATAAATGGTCTAACCCCA
GATGAAGAGGCACTTTCCAATGAGAGAATTTGTCAGAAAAGGAGATTTTCTGATTCTGAAGAAAGGCATACGAAG
AAGCAGTTTTCTTTGGAAAATGTTCAGGAGGGGGAGATTTTACACGATGCTAAGACATTGGCTGGAAATGTAATA
GCTGACCTATCTGATTCTTCTGCTGATTCTGAAAATTTAAGTCCAGATATAAAAGAAACTACTGAGGAAATGGAA
TACAACATCCTCGTAAACTTTTTTAAAACCATGGGCTACTCCCAAGAAATTGTTGAAAAGGTCATTAAGGTGTAT
GGACCATCTACTGAACCATTATTGCTCTTAGAGGAAATTGAAAAAGAAAATAAAAGATTCCAAGAAGACAGAGAA
TTTTCAGCTGGTACAGTGTATCCAGAGACCAACAAAACCAAAAATAAAGGTGTTTATAGCAGCACAAATGAGCTT
ACAACTGATTCCACTCCAAAGAAAACACAGGCTCACACACAGCAAAATATGGTAGAAAAATTTTCTCAGTTACCA
TTCAAAGTGGAAGCTAAACCATGTACCTCAAATTGTAGAATTAATACTTTCAGAACAGTGCCAATAGAACAGAAA
CATGAAGTCTGGGGTTCAAACCAGAACTACATTTGTAACACAGACCCTGAAACTGATGGCCTTTCACCTTCTGTT
GCCTCTCCAAGTCCCAAAGAAGTCAATTTTGTTTCAAGGGGAGCTTCAAGTCACCAGCCCAGAGTTCCACTTTTT
CCTGAAAATGGTTTACACCAGCAGCCAGAACCCTTGCTTCCAAATAATATGAAATCTGCCTGTGAAAAACGTTTA
GGATGTTGTAGTTCTCCTCATTCTAAGCCAAATTGCTCAACCCTTTCTCCACCAATGCCACTGCCCCAGCTGTTA
CCTTCGGTTACTGATGCAAGGTCGGCAGGACCTTCTGATCATATTGATTCCTCAGTTACTGGGGTTCAAAGGTTT
CGAGATACTCTAAAAATACCCTACAAGCTGGAATTAAAAAATGAACCAGGGAGAACGGATTTGAAACACATTGTT
ATAGATGGGAGCAATGTTGCAATTACCCATGGTCTGAAAAAGTTCTTTTCTTGTCGTGGAATTGCAATTGCAGTT
GAATATTTTTGGAAGCTTGGCAACAGAAACATCACTGTATTTGTCCCTCAGTGGAGAACAAGGCGTGATCCTAAT
GTCACAGAACAGCACTTCTTAACCCAGCTCCAGGAGCTCGGAATATTATCTTTAACTCCTGCCCGGATGGTCTTT
GGAGAAAGAATTGCTTCTCATGATGACAGGTTTCTACTACACTTAGCGGACAAAACTGGTGGCATAATTGTGACA
AATGATAATTTCAGAGAATTTGTGAATGAGTCAGTCTCTTGGAGAGAAATTATTACAAAAAGGCTGCTGCAGTAC
ACGTTCGTGGGGGACATATTTATGGTTCCCGATGATCCTCTGGGAAGAAGTGGACCTCGATTAGAGGAGTTTCTT
CAGAAGGAAGTCTGTCTTAGAGATATGCAGCCCCTACTCAGTGCCCTGCCAAATGTGGGCATGTTTGACCCCAGC
TTCAGAGTCCCTGGCACCCAGGCAGCCAGCACCAGCCACCAGCCTCCGACCCGGATTCAGGGAGCCCCTTCAAGC
CACTGGCTCCCTCAGCAGCCCCACTTCCCACTGCTGCCAGCCCTCCCCAGTCTCCAGCAGAACCTGCCCATGCCA
GCTCAGAGATCTTCTGCAGAAACCAACGAGCTGAGGGAAGCCCTTCTGAAGATCTTCCCTGACTCAGAGCAAAGA
CTGAAAATAGACCAGATCTTGGTGGCCCACCCATACATGAAAGATCTAAATGCGCTTTCTGCCATGGTGTTGGAT
TGAAGATTGTGCTGAGCGCTGAGCTTGCGCTCAGGGCTGGCTGATCAAACTCAAGCTCACACCTGTACCTGATGG
GAATGAACATAATGTGAAGAAACTTATTTCCCAGTGTAAACGCAGTTGTACAGAAAAAAAATGTTTTGGGTATAA
ATCTGGGTTTTCAAAACCAGCTTTTTTCTATATATAAATTATGCTGCTATTACAGATTTAACATTTTCTGTTAAA
GGAAAGTCTACATTTTCTGCCTGTTCAGAACTGTTTAATAGCAGTTACTCTTGAGTGTATTTACCTTTTTATGTT
TTTTAAACTATTTTCCTTAAAGCCGAAAATATTGACAAATGGATATGGTTAGCCTTTATAAATAAATAAAAAAAA
AAGTGTTGCTTTCTTAAGG

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FIGURE 1385

MAARAVLDEFTAPAEKAELLEQSRGRIEGLFGVSLAVLGALGAEEPLPARIWLQLCGAQEAEHSAKEYIKGICEP
ELEERECYPKDMHCIFVGAESLFLKSLIQDTCADLCILDIGLLGIRGSAEAVVMARSHIQQFVKLFENKENLPSS
QKESEVKREFKQFVEAHADNYTMDLLILPTSLKKELLTLTQGEENLFETGDDEVIEMRDSQQTEFTQNAATGLNI
SRDETVLQEEARNKAGTPVSELTKQMDTVLSSSPDVLFDPINGLTPDEEALSNERICQKRRFSDSEERHTKKQFS
LENVQEGEILHDAKTLAGNVIADLSDSSADSENLSPDIKETTEEMEYNILVNFFKTMGYSQEIVEKVIKVYGPST
EPLLLLEEIEKENKRFQEDREFSAGTVYPETNKTKNKGVYSSTNELTTDSTPKKTQAHTQQNMVEKFSQLPFKVE
AKPCTSNCRINTFRTVPIEQKHEVWGSNQNYICNTDPETDGLSPSVASPSPKEVNFVSRGASSHQPRVPLFPENG
LHQQPEPLLPNNMKSACEKRLGCCSSPHSKPNCSTLSPPMPLPQLLPSVTDARSAGPSDHIDSSVTGVQRFRDTL
KIPYKLELKNEPGRTDLKHIVIDGSNVAITHGLKKFFSCRGIAIAVEYFWKLGNRNITVFVPQWRTRRDPNVTEQ
HFLTQLQELGILSLTPARMVFGERIASHDDRFLLHLADKTGGIIVTNDNFREFVNESVSWREIITKRLLQYTFVG
DIFMVPDDPLGRSGPRLEEFLQKEVCLRDMQPLLSALPNVGMFDPSFRVPGTQAASTSHQPPTRIQGAPSSHWLP
QQPHFPLLPALPSLQQNLPMPAQRSSAETNELREALLKIFPDSEQRLKIDQILVAHPYMKDLNALSAMVLD

FIGURE 1386

GGGGATTTTGGGCGCCGACCAGACGCGGCATTTTCGGAAAATAGCGCCCTGTGCAGCTGAAGCGCTTTGTGTGTA
GCGGGGCCGCGTCAGCCCGGCCGGGTACGAGGCGCCTCGGGTCCCCGCACCACCTCCTGCTGCCTTCCCGTCGCC
GCTCCCGAAGCTTTTCCAGATGTCCCTGGTAGATTTGGGAAAGAAGCTTTTAGAAGCGGCACGAGCAGGTCAAGA
TGATGAAGTTCGTATTTTGATGGCAAATGGAGCTCCCTTTACTACAGACTGGCTGGGAACTTCTCCACTTCATCT
AGCAGCACAGTATGGTCATTATTCCACCACAGAGGTACTGCTGCGAGCTGGTGTGAGCAGAGATGCCAGAACCAA
AGTGGACCGAACACCATTACATATGGCAGCTTCTGAGGGCCATGCCAGCATAGTAGAGGTTTTACTTAAGCATGG
TGCTGATGTCAATGCAAAGGACATGTTAAAGATGACAGCTCTCCATTGGGCCACAGAACACAATCATCAAGAGGT
GGTGGAACTTTTAATCAAATATGGTGCTGATGTACACACGCAAAGTAAATTTTGTAAAACTGCATTTGATATTTC
AATAGACAATGGAAATGAAGATTTAGCAGAGATATTACAGATTGCTATGCAGAACCAAATCAACACAAACCCAGA
GAGTCCTGACACTGTGACAATACATGCTGCAACACCACAGTTTATCATTGGACCTGGAGGGGTGGTGAACCTAAC
AGGTCTGGTATCTTCAGAAAATTCATCCAAGGCAACAGATGAAACGGGTGTATCTGCTGTTCAGTTTGGAAACTC
TTCTACATCAGTATTAGCTACATTAGCTGCCTTAGCTGAAGCATCTGCTCCATTGTCCAATTCTTCAGAAACTCC
AGTAGTGGCCACAGAAGAAGTAGTTACTGCAGAATCTGTGGATGGTGCCATTCAGCAAGTAGTTAGTTCAGGGGG
TCAGCAAGTCATCACAATAGTTACAGATGGAATTCAGCTTGGAAATTTGCACTCTATTCCAACCAGTGGAATTGG
TCAGCCCATCATTGTGACCATGCCAGATGGACAACAAGTATTAACAGTACCAGCAACAGACATTGCTGAAGAAAC
TGTTATAAGTGAAGAACCACCAGCTAAGAGACAATGTATCGAAATAATTGAAAACCGGGTGGAATCTGCAGAAAT
AGAAGAGAGAGAAGCTCTTCAGAAACAGCTGGATGAAGCAAATCGAGAAGCACAAAAATATCGACAGCAGCTCCT
AAAGAAAGAACAGGAAGCAGAGGCCTACAGACAGAAGTTGGAAGCTATGACTCGTCTTCAGACTAATAAAGAAGC
TGTTTAATTGAAATGAACATGTAGTTTGATTTTACTTTTGGTCAAGAAAGAATACAATCTTGAACTGTACACAAC
AAAGGTACAGCCATGGGAATACAGAATGATAGAAGAGACTACAGATGGATAATTGGACTTAAGCCATGAGCTCTG
AGTTCTTGTAACATAAAACTTTACTTTAGAAGTTGTGAAATGTATTTAAAACTGAATTCTGTAAATAGTTTTTTT
TTTTTTACAGTTCCAAATGAGTTGATAAAGATTGTTGAAGAGATCCAAAACCAGAATAAGCCACTGTTTTTGTGA
ATTCTTTTTGATTTTAGTACAAACCTTAATTTCTCAGAAACGGAACAGTTTTAAGGGTGATCGTTGTTGGTTAGG
CCAAATGTTGTGTAATAATTATGGTGGACTGATGCTGGAATTACTCCTGTAGGTATAAACCTCTGTATGAAGAGA
AGATTTCTCCCAGGAAATCTTTGTACAGCTTTAAGTTGTGTCAGATTCTCTGAAAACATTTTTTAGAAAGCAAAA
TTTTTATATTTGTTCAATTTCAGCTATACCCAAGTAGATTTACATGTATATGAAGCAAATATTTTTAAAAATTTC
TGTTTGTACATATTCTGCATGTTTTATAATTTCAAAATGCATCACTTACATAGGTATTTCTCCCACAGAAATGAT
GAAAGTGACCAGAAAAAAACAAAAACAAAACCCCTTTACTCTGTAGGTCATTGAAACGAAGTAAGCTGGCAGCTG
GTTTTATTGGAATGACAGTGTTCTCGGAAGGAGCAGCCTACAAGATAACTTGAATTTGCCAATTCTGCAAAATCT
GTGCTTTTTTGAAAATTTAAGAGTGGGGACGTGAAACTGTATTCTGTGCCTTCCATCATGATTTCCACATGAAAG
CACTTTAAGGCACTGATTTTAAGATAATGTTTTTGGAAAACCCAATGCATATGGGTTTCTGAAATATTTTATGGA
CTTATTTCTCCCCAGGAAACGATTCTTACGGAAAAAAATTGCTTTTGTATGTAGAACAGGAACTTTTTGTATTAC
AGTGATGCAATAGACATGTCTAATGTAACTTCTACTTTTCCTTTTGAAAGCTCAGTGTCTGTGCTATGACTTGCT
CTCATCACAATATTGTTGAATTCCACAATGTATGGACATTAAACACTGGCAGACTGTTCACTTTTTCTTTTTTTT
TTTTTGGTAAAATATTACTTCAAACCCCTTTTTCTTGCTTTATTTTTCAGTGTTTTATTGCTTTATGAACTGTTT
AACCCTGAAATCCCTCTAGGTTATCTATACTGTATAAAAAAGCAATTACCCTTAAAACTGTACTCTGGCCTACTT
TTCTATTTTGCAATTAAATATCTTTTT

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FIGURE 1387

MSLVDLGKKLLEAARAGQDDEVRILMANGAPFTTDWLGTSPLHLAAQYGHYSTTEVLLRAGVSRDARTKVDRTPL
HMAASEGHASIVEVLLKHGADVNAKDMLKMTALHWATEHNHQEVVELLIKYGADVHTQSKFCKTAFDISIDNGNE
DLAEILQIAMQNQINTNPESPDTVTIHAATPQFIIGPGGVVNLTGLVSSENSSKATDETGVSAVQFGNSSTSVLA
TLAALAEASAPLSNSSETPVVATEEVVTAESVDGAIQQVVSSGGQQVITIVTDGIQLGNLHSIPTSGIGQPIIVT
MPDGQQVLTVPATDIAEETVISEEPPAKRQCIEIIENRVESAEIEEREALQKQLDEANREAQKYRQQLLKKEQEA
EAYRQKLEAMTRLQTNKEAV

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FIGURE 1388

GCTCGCGCACGGCTCCGCGGTCCCTTTTGCCTGTCCAGCCGGCCGCCTGTCCCTGCTCCCTCCCTCCGTGAGTGT
CCGGGTTCCCTTCGCCCAGCTCTCCCACCCCTACCCGACCCCGGCGCCCGGGCTCCCAGAGGGAACTGCACTTCG
GCAGAGTTGAATGAATGAAGAGAGACGCGGAGAACTCCTAAGGAGGAGATTGGACAGGCTGGACTCCCCATTGCT
TTTCTAAAAATCTTGGAAACTTTGTCCTTCATTGAATTACGACACTGTCCACCTTTAATTTCCTCGAAAACGCCT
GTAACTCGGCTGAAGCC**ATG**CCTTGTGTTCAGGCGCAGTATGGGTCCTCGCCTCAAGGAGCCAGCCCCGCTTCTC
AGAGCTACAGTTACCACTCTTCGGGAGAATACAGCTCCGATTTCTTAACTCCAGAGTTTGTCAAGTTTAGCATGG
ACCTCACCAACACTGAAATCACTGCCACCACTTCTCTCCCCAGCTTCAGTACCTTTATGGACAACTACAGCACAG
GCTACGACGTCAAGCCACCTTGCTTGTACCAAATGCCCCTGTCCGGACAGCAGTCCTCCATTAAGGTAGAAGACA
TTCAGATGCACAACTACCAGCAACACAGCCACCTGCCCCCCCAGTCTGAGGAGATGATGCCGCACTCCGGGTCGG
TTTACTACAAGCCCTCCTCGCCCCCGACGCCCACCACCCCGGGCTTCCAGGTGCAGCACAGCCCCATGTGGGACG
ACCCGGGATCTCTCCACAACTTCCACCAGAACTACGTGGCCACTACGCACATGATCGAGCAGAGGAAAACGCCAG
TCTCCCGCCTCTCCCTCTTCTCCTTTAAGCAATCGCCCCCTGGCACCCCGGTGTCTAGTTGCCAGATGCGCTTCG
ACGGGCCCCTGCACGTCCCCATGAACCCGGAGCCCGCCGGCAGCCACCACGTGGTGGACGGGCAGACCTTCGCTG
TGCCCAACCCCATTCGCAAGCCCGCGTCCATGGGCTTCCCGGGCCTGCAGATCGGCCACGCGTCTCAGCTGCTCG
ACACGCAGGTGCCCTCACCGCCGTCGCGGGGCTCCCCCTCCAACGAGGGGCTGTGCGCTGTGTGTGGGGACAACG
CGGCCTGCCAACACTACGGCGTGCGCACCTGTGAGGGCTGCAAAGGCTTCTTTAAGCGCACAGTGCAAAAAAATG
CAAAATACGTGTGTTTAGCAAATAAAAACTGCCCAGTGGACAAGCGTCGCCGGAATCGCTGTCAGTACTGCCGAT
TTCAGAAGTGCCTGGCTGTTGGGATGGTCAAAGAAGTGGTTCGCACAGACAGTTTAAAAGGCCGGAGAGGTCGTT
TGCCCTCGAAACCGAAGAGCCCACAGGAGCCCTCTCCCCCTTCGCCCCCGGTGAGTCTGATCAGTGCCCTCGTCA
GGGCCCATGTCGACTCCAACCCGGCTATGACCAGCCTGGACTATTCCAGGTTCCAGGCGAACCCTGACTATCAAA
TGAGTGGAGATGACACCCAGCATATCCAGCAATTCTATGATCTCCTGACTGGCTCCATGGAGATCATCCGGGGCT
GGGCAGAGAAGATCCCTGGCTTCGCAGACCTGCCCAAAGCCGACCAAGACCTGCTTTTTGAATCAGCTTTCTTAG
AACTGTTTGTCCTTCGATTAGCATACAGGTCCAACCCAGTGGAGGGTAAACTCATCTTTTGCAATGGGGTGGTCT
TGCACAGGTTGCAATGCGTTCGTGGCTTTGGGGAATGGATTGATTCCATTGTTGAATTCTCCTCCAACTTGCAGA
ATATGAACATCGACATTTCTGCCTTCTCCTGCATTGCTGCCCTGGCTATGGTCACAGAGAGACACGGGCTCAAGG
AACCCAAGAGAGTGGAAGAACTGCAAAACAAGATTGTAAATTGTCTCAAAGACCACGTGACTTTCAACAATGGGG
GGTTGAACCGCCCCAATTATTTGTCCAAACTGTTGGGGAAGCTCCCAGAACTTCGTACCCTTTGCACACAGGGGC
TACAGCGCATTTTCTACCTGAAATTGGAAGACTTGGTGCCACCGCCAGCAATAATTGACAAACTTTTCCTGGACA
CTTTACCTTTC**TAA**GACCTCCTCCCAAGCACTTCAAAGGAACTGGAATGATAATGGAAACTGTCAAGAGGGGGCA
AGTCACATGGGCAGAGATAGCCGTGTGAGCAGTCTCAGCTCAAGCTGCCCCCCATTTCTGTAACCCTCCTAGCCC
CCTTGATCCCTAAAGAAAACAAACAAACAAACAAAAACTGTTGCTATTTCCTAACCTGCAGGCAGAACCTGAAAG
GGCATTTTGGCTCCGGGGCATCCTGGATTTAGAACATGGACTACACACAATACAGTGGTATAAACTTTTTATTCT
CAGTTTAAAAATCAGTTTGTTGTTCAGAAGAAAGATTGCTATAAGGTATAATGGGAAATGTTTGGCCATGCTTGG
TTGTTGCAGTTCAGACAAATGTAACACACACACACATACACACACACACACACAGAGACACATCTTAAGGGGA
CCCACAAGTATTGCCCTTTAACAAGACTTCAAAGTTTTCTGCTGTAAAGAAAGCTGTAATATATAGTAAAACTAA
ATGTTGCGTGGGTGGCATGAGTTGAAGAAGGCAAAGGCTTGTAAATTTACCCAATGCAGTTTGGCTTTTTAAATT
ATTTTGTGCCTATTTATGAATAAATATTACAAATTCTAAAAGATAAGTGTGTTTGCAAAAAAAAAGAAAATAAAT
ACATAAAAAAGGGACAAGCATGTTGATTCTAGGTTGAAAATGTTATAGGCACTTGCTACTTCAGTAATGTCTATA
TTATATAAATAGTATTTCAGACACTATGTAGTCTGTTAGATTTTATAAAGATTGGTAGTTATCTGAGCTTAAACA
TTTTCTCAATTGTAAAATAGGTGGGCACAAGTATTACACATCAGAAAATCCTGACAAAAGGGACACATAGTGTTT
GTAACACCGTCCAACATTCCTTGTTTGTAAGTGTTGTATGTACCGTTGATGTTGATAAAAAGAAAGTTTATATCT
TGATTATTTTGTTGTCTAAAGCTAAACAAAACTTGCATGCAGCAGCTTTTGACTGTTTCCAGAGTGCTTATAATA
TACATAACTCCCTGGAAATAACTGAGCACTTTGAATTTTTTTTATGTCTAAAATTGTCAGTTAATTTATTATTTT
GTTTGAGTAAGAATTTTAATATTGCCATATTCTGTAGTATTTTTCTTTGTATATTTCTAGTATGGCACATGATAT
GAGTCACTGCCTTTTTTTCTATGGTGTATGACAGTTAGAGATGCTGATTTTTTTTCTGATAAATTCTTTCTTTGA
GAAAGACAATTTTAATGTTTACAACAATAAACCATGTAAATGAAAAAAAAAA

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FIGURE 1389

MPCVQAQYGSSPQGASPASQSYSYHSSGEYSSDFLTPEFVKFSMDLTNTEITATTSLPSFSTFMDNYSTGYDVKP
PCLYQMPLSGQQSSIKVEDIQMHNYQQHSHLPPQSEEMMPHSGSVYYKPSSPPTPTTPGFQVQHSPMWDDPGSLH
NFHQNYVATTHMIEQRKTPVSRLSLFSFKQSPPGTPVSSCQMRFDGPLHVPMNPEPAGSHHVVDGQTFAVPNPIR
KPASMGFPGLQIGHASQLLDTQVPSPPSRGSPSNEGLCAVCGDNAACQHYGVRTCEGCKGFFKRTVQKNAKYVCL
ANKNCPVDKRRRNRCQYCRFQKCLAVGMVKEVVRTDSLKGRRGRLPSKPKSPQEPSPPSPPVSLISALVRAHVDS
NPAMTSLDYSRFQANPDYQMSGDDTQHIQQFYDLLTGSMEIIRGWAEKIPGFADLPKADQDLLFESAFLELFVLR
LAYRSNPVEGKLIFCNGVVLHRLQCVRGFGEWIDSIVEFSSNLQNMNIDISAFSCIAALAMVTERHGLKEPKRVE
ELQNKIVNCLKDHVTFNNGGLNRPNYLSKLLGKLPELRTLCTQGLQRIFYLKLEDLVPPPAIIDKLFLDTLPF

FIGURE 1390

GCTCGCGCACGGCTCCGCGGTCCCTTTTGCCTGTCCAGCCGGCCGCCTGTCCCTGCTCCCTCCCTCCGTGAGTGT
CCGGGTTCCCTTCGCCCAGCTCTCCCACCCCTACCCGACCCCGGCGCCCGGGCTCCCAGAGGGAACTGCACTTCG
GCAGAGTTGAATGAATGAAGAGAGACGCGGAGAACTCCTAAGGAGGAGATTGGACAGGCTGGACTCCCCATTGCT
TTTCTAAAAATCTTGGAAACTTTGTCCTTCATTGAATTACGACACTGTCCACCTTTAATTTCCTCGAAAACGCCT
GTAACTCGGCTGAAGCC**ATG**CCTTGTGTTCAGGCGCAGTATGGGTCCTCGCCTCAAGGAGCCAGCCCCGCTTCTC
AGAGCTACAGTTACCACTCTTCGGGAGAATACAGCTCCGATTTCTTAACTCCAGAGTTTGTCAAGTTTAGCATGG
ACCTCACCAACACTGAAATCACTGCCACCACTTCTCTCCCCAGCTTCAGTACCTTTATGGACAACTACAGCACAG
GCTACGACGTCAAGCCACCTTGCTTGTACCAAATGCCCCTGTCCGGACAGCAGTCCTCCATTAAGGTAGAAGACA
TTCAGATGCACAACTACCAGCAACACAGCCACCTGCCCCCCCAGTCTGAGGAGATGATGCCGCACTCCGGGTCGG
TTTACTACAAGCCCTCCTCGCCCCCGACGCCCACCACCCCGGGCTTCCAGGTGCAGCACAGCCCCATGTGGGACG
ACCCGGGATCTCTCCACAACTTCCACCAGAACTACGTGGCCACTACGCACATGATCGAGCAGAGGAAAACGCCAG
TCTCCCGCCTCTCCCTCTTCTCCTTTAAGCAATCGCCCCCTGGCACCCCGGTGTCTAGTTGCCAGATGCGCTTCG
ACGGGCCCCTGCACGTCCCCATGAACCCGGAGCCCGCCGGCAGCCACCACGTGGTGGACGGGCAGACCTTCGCTG
TGCCCAACCCCATTCGCAAGCCCGCGTCCATGGGCTTCCCGGGCCTGCAGATCGGCCACGCGTCTCAGCTGCTCG
ACACGCAGGTGCCCTCACCGCCGTCGCGGGGCTCCCCCTCCAACGAGGGGCTGTGCGCTGTGTGTGGGGACAACG
CGGCCTGCCAACACTACGGCGTGCGCACCTGTGAGGGCTGCAAAGGCTTCTTTAAGCGCACAGTGCAAAAAAATG
CAAAATACGTGTGTTTAGCAAATAAAAACTGCCCAGTGGACAAGCGTCGCCGGAATCGCTGTCAGTACTGCCGAT
TTCAGAAGTGCCTGGCTGTTGGGATGGTCAAAGAAGTGGTTCGCACAGACAGTTTAAAAGGCCGGAGAGGTCGTT
TGCCCTCGAAACCGAAGAGCCCACAGGAGCCCTCTCCCCCTTCGCCCCCGGTGAGTCTGATCAGTGCCCTCGTCA
GGGCCCATGTCGACTCCAACCCGGCTATGACCAGCCTGGACTATTCCAGGTTCCAGGCGAACCCTGACTATCAAA
TGAGTGGAGATGACACCCAGCATATCCAGCAATTCTATGATCTCCTGACTGGCTCCATGGAGATCATCCGGGGCT
GGGCAGAGAAGATCCCTGGCTTCGCAGACCTGCCCAAAGCCGACCAAGACCTGCTTTTTGAATCAGCTTTCTTAG
AACTGTTTGTCCTTCGATTAGCATACAGGTCCAACCCAGTGGAGGGTAAACTCATCTTTTGCAATGGGGTGGTCT
TGCACAGGTTGCAATGCGTTCGTGGCTTTGGGGAATGGATTGATTCCATTGTTGAATTCTCCTCCAACTTGCAGA
ATATGAACATCGACATTTCTGCCTTCTCCTGCATTGCTGCCCTGGCTATGGTCACAGAGAGACACGGGCTCAAGG
AACCCAAGAGAGTGGAAGAACTGCAAAACAAGATTGTAAATTGTCTCAAAGACCACGTGACTTTCAACAATGGGG
GGTTGAACCGCCCCAATTATTTGTCCAAACTGTTGGGGAAGCTCCCAGAACTTCGTACCCTTTGCACACAGGGGC
TACAGCGCATTTTCTACCTGAAATTGGAAGACTTGGTGCCACCGCCAGCAATAATTGACAAACTTTTCCTGGACA
CTTTACCTTTC**TAA**GACCTCCTCCCAAGCACTTCAAAGGAACTGGAATGATAATGGAAACTGTCAAGAGGGGGCA
AGTCACATGGGCAGAGATAGCCGTGTGAGCAGTCTCAGCTCAAGCTGCCCCCCATTTCTGTAACCCTCCTAGCCC
CCTTGATCCCTAAAGAAAACAAACAAACAAACAAAAACTGTTGCTATTTCCTAACCTGCAGGCAGAACCTGAAAG
GGCATTTTGGCTCCGGGGCATCCTGGATTTAGAACATGGACTACACACAATACAGTGGTATAAACTTTTTATTCT
CAGTTTAAAAATCAGTTTGTTGTTCAGAAGAAAGATTGCTATAAGGTATAATGGGAAATGTTTGGCCATGCTTGG
TTGTTGCAGTTCAGACAAATGTAACACACACACACATACACACACACACACACAGAGACACATCTTAAGGGGA
CCCACAAGTATTGCCCTTTAACAAGACTTCAAAGTTTTCTGCTGTAAAGAAAGCTGTAATATATAGTAAAACTAA
ATGTTGCGTGGGTGGCATGAGTTGAAGAAGGCAAAGGCTTGTAAATTTACCCAATGCAGTTTGGCTTTTTAAATT
ATTTTGTGCCTATTTATGAATAAATATTACAAATTCTAAAAGATAAGTGTGTTTGCAAAAAAAAAGAAAATAAAT
ACATAAAAAAGGGACAAGCATGTTGATTCTAGGTTGAAAATGTTATAGGCACTTGCTACTTCAGTAATGTCTATA
TTATATAAATAGTATTTCAGACACTATGTAGTCTGTTAGATTTTATAAAGATTGGTAGTTATCTGAGCTTAAACA
TTTTCTCAATTGTAAAATAGGTGGGCACAAGTATTACACATCAGAAAATCCTGACAAAAGGGACACATAGTGTTT
GTAACACCGTCCAACATTCCTTGTTTGTAAGTGTTGTATGTACCGTTGATGTTGATAAAAAGAAAGTTTATATCT
TGATTATTTTGTTGTCTAAAGCTAAACAAAACTTGCATGCAGCAGCTTTTGACTGTTTCCAGAGTGCTTATAATA
TACATAACTCCCTGGAAATAACTGAGCACTTTGAATTTTTTTTATGTCTAAAATTGTCAGTTAATTTATTATTTT
GTTTGAGTAAGAATTTTAATATTGCCATATTCTGTAGTATTTTTCTTTGTATATTTCTAGTATGGCACATGATAT
GAGTCACTGCCTTTTTTTCTATGGTGTATGACAGTTAGAGATGCTGATTTTTTTTCTGATAAATTCTTTCTTTGA
GAAAGACAATTTTAATGTTTACAACAATAAACCATGTAAATGAAAAAAAAAA

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FIGURE 1391

MPCVQAQYGSSPQGASPASQSYSYHSSGEYSSDFLTPEFVKFSMDLTNTEITATTSLPSFSTFMDNYSTGYDVKP
PCLYQMPLSGQQSSIKVEDIQMHNYQQHSHLPPQSEEMMPHSGSVYYKPSSPPTPTTPGFQVQHSPMWDDPGSLH
NFHQNYVATTHMIEQRKTPVSRLSLFSFKQSPPGTPVSSCQMRFDGPLHVPMNPEPAGSHHVVDGQTFAVPNPIR
KPASMGFPGLQIGHASQLLDTQVPSPPSRGSPSNEGLCAVCGDNAACQHYGVRTCEGCKGFFKRTVQKNAKYVCL
ANKNCPVDKRRRNRCQYCRFQKCLAVGMVKEVVRTDSLKGRRGRLPSKPKSPQEPSPPSPPVSLISALVRAHVDS
NPAMTSLDYSRFQANPDYQMSGDDTQHIQQFYDLLTGSMEIIRGWAEKIPGFADLPKADQDLLFESAFLELFVLR
LAYRSNPVEGKLIFCNGVVLHRLQCVRGFGEWIDSIVEFSSNLQNMNIDISAFSCIAALAMVTERHGLKEPKRVE
ELQNKIVNCLKDHVTFNNGGLNRPNYLSKLLGKLPELRTLCTQGLQRIFYLKLEDLVPPPAIIDKLFLDTLPF

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FIGURE 1392A

AACTCATGCGGCCAGAGCGGGAAAGAGACTCGTCTTTGCGTCCGAGTTCTGGAGCCGCCGCACCCCGACTCCTGG
GGCCGCGGCAGCGGCTGCGAGGGGACGGGCGTCCGCTGTCTCCTGGGTTCCCCTCGTAGCGACCCGCGGGATCGG
AAAAAAAGGAGAAGATGGAGGAGGAGGGTGGCAGCAGCGGCGGCGCCGCGGGGACCAGCGCGGACGGCGGCGACG
GAGGAGAGCAGCTCCTCACTGTCAAGCACGAGCTGCGGACTGCTAATTTGACAGGACATGCTGAGAAGGTGGGAA
TAGAAAATTTTGAGCTCCTGAAGGTCCTAGGAACTGGAGCTTATGGAAAAGTATTTCTAGTTCGTAAAATAAGTG
GCCATGATACTGGAAAGCTGTATGCCATGAAAGTTTTGAAAAAGGCAACAATCGTTCAAAAGGCCAAAACCACAG
AGCATACAAGGACAGAACGACAAGTCCTGGAACACATTAGGCAGTCGCCATTTTTGGTAACATTACATTATGCTT
TCCAGACAGAAACCAAACTTCATCTCATTTTAGATTATATAAATGGTGGTGAACTTTTTACTCATCTTTCTCAAA
GAGAGCGTTTCACAGAGCATGAGGTGCAGATTTATGTTGGAGAGATTGTGCTTGCCCTCGAACATCTCCACAAGT
TGGGGATTATATATCGTGATATTAAGCTTGAGAATATTCTACTTGATTCTAATGGCCATGTGGTGCTGACAGATT
TTGGTCTGAGTAAGGAGTTTGTGGCTGATGAAACTGAAAGAGCATATTCCTTTTGTGGAACTATTGAATACATGG
CACCAGATATTGTCAGAGGGGGAGATTCAGGACATGACAAGGCAGTTGACTGGTGGAGTTTGGGTGTTCTAATGT
ATGAATTACTAACTGGAGCATCTCCTTTCACTGTTGATGGAGAAAAAAATTCCCAAGCTGAGATATCTAGGAGAA
TATTAAAAAGTGAGCCTCCATATCCCCAAGAAATGAGTGCTTTAGCGAAAGACCTAATTCAGCGTCTTTTGATGA
AAGATCCCAAGAAGAGATTGGGATGTGGTCCACGTGATGCAGATGAAATCAAAGAACATCTCTTCTTTCAGAAAA
TAAATTGGGATGATTTAGCCGCCAAAAAAGTGCCTGCACCATTTAAGCCAGTCATTCGAGATGAATTAGATGTGA
GTAACTTTGCAGAAGAGTTCACAGAAATGGATCCCACTTATTCTCCCGCAGCCCTGCCCCAGAGTTCTGAGAAGC
TGTTTCAGGGCTATTCCTTTGTTGCTCCTTCCATCCTATTCAAGCGTAATGCAGCTGTCATAGACCCTCTTCAGT
TTCACATGGGAGTTGAACGTCCTGGAGTGACAAATGTTGCCAGGAGTGCAATGATGAAGGACTCTCCATTCTATC
AACACTATGACCTAGATTTGAAGGACAAACCCCTGGGAGAAGGTAGTTTTTCAATTTGTCGAAAGTGTGTGCATA
AAAAAAGTAACCAAGCTTTGCAAGTCAAAATAATCAGCAAAAGGATGGAAGCCAATACTCAAAAGGAAATAACAG
CTCTGAAACTCTGTGAAGGACACCCCAATATTGTGAAGTTGCATGAAGTTTTTCATGATCAGCTTCACACGTTTC
TAGTGATGGAACTTCTGAATGGAGGAGAACTGTTTGACGCATTAAGAAAAAAGAAGCACTTCAGTGAGACGGAAG
CCAGCTACATCATGAGGAAGCTTGTTTCAGCTCTAAGCCACATGCATGATCTTGGAGTGGTGCACAGGGATCTGA
AACCTGAGAATTTATTGTTCACCGATGAAAATGACAATTTGGAAATTAAAATAATTGATTTTGGATTTGCACGGC
TAAAGCCACCGGATAATCAGCCCCTGAAGACTCCATGCTTCACCCTTCATTCATGCCGCCCAGAGCTCTTGAATC
AGAACGGCTACGATGAGTCCTGTGACCTGTGGAGCTTGGGCGTCATTTTGTACACAATGTTGTCAGGACAGGTTC
CCTTCCAATCTCATGACCGAAGTTTGACGTGTACCAGCGCGGTGGAAATCATGAAGAAAATTAAAAAGGGAGATT
TCTCCTTTGAAGGAGAAGCCTGGAAGAATGTATCCCAAGAGGCTAAAGATTTGATCCAAGGACTTCTCACAGTAG
ATCCAAACAAAAGGCTTAAAATGTCTGGCTTGAGGTACAATGAATGGCTACAAGATGGAAGTCAGCTGTCCTCCA
ATCCTCTGATGACTCCGGATATTCTAGGATCTTCCGGAGCTGCCGTGCATACCTGTGTGAAAGCAACCTTCCACG
CCTTTAACAAATACAAGAGAGAGGGGTTTTGCCTTCAGAATGTTGATAAGGCCCCTTTGGCTAAGAGAAGAAAAA
TGAAAAAGACTAGCACCAGTACCGAGACGCGCAGAGGGTCCAGTGAGAGTTCCCATTCTTCTTCCTCTCATTCTC
ACGGTAAAACTACACCCACCAAGACACTGCAGCCCAGCAATCCTGCCGACAGCAATAACCCGGAGACCCTCTTCC
AGTTCTCGGACTCAGAGCTTAGGCATGGTAGGAGTGATCAGTGATCCATTGCACCTTTATTCCCTCAGCATATGC
CTGAGTCGATCTTTTATGCTTTTAAAAATGTTTCCCGTTGGTCTCATTGGAATCTGCCTCCTAATGATTTTTTTC
AGGAAAACCTGTTTGGTTATCCTCATTCAAAAGCACTGGACAGAGAATGTTACTGTGAATAGAGCACATATTACT
CTTTTTACGAACCTAGCATGATGCCAACAAGACTATTCTTGAAAGAGCAAAGGTTCCTGTAAATTTAATTAGGGC
TAGATTTGAGCTGCTTGTAAGTCACAGGTTTTCCAGATGTCTGCCAACAAGAAATGACTCATACTGTGATGATAC
CTTTTGCTTTGCCTTGTGGACAATGTGGGTTTTTGAAATTTGCACCCTTCAAACAATGATTTATCAGAGAAAGGG
GTCTGTTTTCAAAAAAGATTCTGTAATGAATTTTATGTGTGGCATATACTTATTTCTTGAGAGAAGATTTTAACT
TATTGTTTTTATTTTATGGTTACATATGATGATAACCTGCTATTATTAAACTTTTTCTAAAAAGTGAAAAAAAAT
AAAAAAGATATAAGAACTCAAGGTCCCATACTCTGTATTCGGGATCCATCTGAGATGCATGCTAAGCTATGTGTA
TGTTTTTAATTTTGCACTGCTCTTTCCTGGCAATTTGTTTTAATGGTTATTGCAGAATATTAAGGTACATGTCTC
TCTGTTTTAAGTAATATTGCACTTTATAAAAAAGTATGAATAAAGCAAACTATTTTATAAAGTGCACTGTTTAAA
GCATTTGCACTGTATTTTTGCCATTTATTTTCATTTTCTACTTTAAATTTGTCCTCACATGCCTCTTCTACTTTG
TATGCAACAAGTAGAATGGGGCCTTGTTGTGTCATGTAGTCAGCCACTTATGCACCAATGTGAGGAAAACCTAAA
GGGAAATTAAACTAAACACTGTGCTTCATATTTGTACACTGTGTTGTACTACAGTGAGGAATTTCCTCCTGTAGT

FIGURE 1392B

CATATATTATGTACATAATATTTTAGAATCATACCTATGACTTGTTTGGAAATTTTTCTGTTGAATTTTAAATCC
AGAAAGCATATTTTATAAACTTATGCAGAGCACTTTTATTGCTCAAAAGTTCTGAATTCATACAGAAAACAAGTA
CTATGTGATGAAAACATTTCATTGAAAGATTGCGGCATTTAAAAATACAATTAATTCGTTCCCTATGCAAAAAAA
AAAAAA

FIGURE 1393

MEEEGGSSGGAAGTSADGGDGGEQLLTVKHELRTANLTGHAEKVGIENFELLKVLGTGAYGKVFLVRKISGHDTG
KLYAMKVLKKATIVQKAKTTEHTRTERQVLEHIRQSPFLVTLHYAFQTETKLHLILDYINGGELFTHLSQRERFT
EHEVQIYVGEIVLALEHLHKLGIIYRDIKLENILLDSNGHVVLTDFGLSKEFVADETERAYSFCGTIEYMAPDIV
RGGDSGHDKAVDWWSLGVLMYELLTGASPFTVDGEKNSQAEISRRILKSEPPYPQEMSALAKDLIQRLLMKDPKK
RLGCGPRDADEIKEHLFFQKINWDDLAAKKVPAPFKPVIRDELDVSNFAEEFTEMDPTYSPAALPQSSEKLFQGY
SFVAPSILFKRNAAVIDPLQFHMGVERPGVTNVARSAMMKDSPFYQHYDLDLKDKPLGEGSFSICRKCVHKKSNQ
ALQVKIISKRMEANTQKEITALKLCEGHPNIVKLHEVFHDQLHTFLVMELLNGGELFDALRKKKHFSETEASYIM
RKLVSALSHMHDLGVVHRDLKPENLLFTDENDNLEIKIIDFGFARLKPPDNQPLKTPCFTLHSCRPELLNQNGYD
ESCDLWSLGVILYTMLSGQVPFQSHDRSLTCTSAVEIMKKIKKGDFSFEGEAWKNVSQEAKDLIQGLLTVDPNKR
LKMSGLRYNEWLQDGSQLSSNPLMTPDILGSSGAAVHTCVKATFHAFNKYKREGFCLQNVDKAPLAKRRKMKKTS
TSTETRRGSSESSHSSSSHSHGKTTPTKTLQPSNPADSNNPETLFQFSDSELRHGRSDQ

FIGURE 1394

GGCACGAGTAGGGGTGGCGGGTCAGTGCTGCTCGGGGGCTTCTCCATCCAGGTCCCTGGAGTTCCTGGTCCCTGG
AGCTCCGCACTTGGCGCGCAACCTGCGTGAGGCAGCGCGACTCTGGCGACTGGCCGGCCATGCCTTCCCGGGCTG
AGGACTATGAAGTGTTGTACACCATTGGCACAGGCTCCTACGGCCGCTGCCAGAAGATCCGGAGGAAGAGTGATG
GCAAGATATTAGTTTGGAAAGAACTTGACTATGGCTCCATGACAGAAGCTGAGAAACAGATGCTTGTTTCTGAAG
TGAATTTGCTTCGTGAACTGAAACATCCAAACATCGTTCGTTACTATGATCGGATTATTGACCGGACCAATACAA
CACTGTACATTGTAATGGAATATTGTGAAGGAGGGGATCTGGCTAGTGTAATTACAAAGGGAACCAAGGAAAGGC
AATACTTAGATGAAGAGTTTGTTCTTCGAGTGATGACTCAGTTGACTCTGGCCCTGAAGGAATGCCACAGACGAA
GTGATGGTGGTCATACCGTATTGCATCGGGATCTTAAACCAGCCAATGTTTTCCTGGATGGCAAGCAAAACGTCA
AGCTTGGAGACTTTGGGCTAGCTAGAATATTAAACCATGACACGAGTTTTGCAAAAACATTTGTTGGCACACCTT
ATTACATGTCTCCTGAACAAATGAATCGCATGTCCTACAATGAGAAATCAGATATCTGGTCATTGGGCTGCTTGC
TGTATGAGTTATGTGCATTAATGCCTCCATTTACAGCTTTTAGCCAGAAAGAACTCGCTGGGAAAATCAGAGAAG
GCAAATTCAGGCGAATTCCATACCGTTACTCTGATGAATTGAATGAAATTATTACGAGGATGTTAAACTTAAAGG
ATTACCATCGACCTTCTGTTGAAGAAATTCTTGAGAACCCTTTAATAGCAGATTTGGTTGCAGACGAGCAAAGAA
GAAATCTTGAGAGAAGAGGGCGACAATTAGGAGAGCCAGAAAAATCGCAGGATTCCAGCCCTGTATTGAGTGAGC
TGAAACTGAAGGAAATTCAGTTACAGGAGCGAGAGCGAGCTCTCAAAGCAAGAGAAGAAAGATTGGAGCAGAAAG
AACAGGAGCTTTGTGTTCGTGAGAGACTAGCAGAGGACAAACTGGCTAGAGCAGAAAATCTGTTGAAGAACTACA
GCTTGCTAAAGGAACGGAAGTTCCTGTCTCTGGCAAGTAATCCAGAACTTCTTAATCTTCCATCCTCAGTAATTA
AGAAGAAAGTTCATTTCAGTGGGGAAAGTAAAGAGAACATCATGAGGAGTGAGAATTCTGAGAGTCAGCTCACAT
CTAAGTCCAAGTGCAAGGACCTGAAGAAAAGGCTTCACGCTGCCCAGCTGCGGGCTCAAGCCCTGTCAGATATTG
AGAAAAATTACCAACTGAAAAGCAGACAGATCCTGGGCATGCGCTAGCCAGGTAGAGAGACACAGAGCTGTGTAC
AGGATGTAATATTACCAACCTTTAAAGACTGATATTCAAATGCTGTAGTGTTGAATACTTGGCCCCATGAGCCAT
GCCTTTCTGTATAGTACACATGATATTTCGGAATTGGTTTTACTGTTCTTCAGCAACTATTGTACAAAATGTTCA
CATTTAATTTTTCTTTCTTCTTTTAAGAACATATTATAAAAAGAATACTTTCTTGGTTGGGCTTTTAATCCTGTG
TGTGATTACTAGTAGGAACATGAGATGTGACATTCTAAATCTTGGGAGAAAAAATAATATTAGGAAAAAAATATT
TATGCAGGAAGAGTAGCACTCACTGAATAGTTTTAAATGACTGAGTGGTATGCTTACAATTGTCATGTCTAGATT
TAAATTTTAAGTCTGAGATTTTAAATGTTTTTGAGCTTAGAAAACCCAGTTAGATGCAATTTGGTCATTAATACC
ATGACATCTTGCTTATAAATATTCCATTGCTCTGTAGTTCAAATCTGTTAGCTTTGTGAAAATTCATCACTGTGA
TGTTTGTATTCTTTTTTTTTTTCTGTTTAACAGAATATGAGCTGTCTGTCATTTACCTACTTCTTTCCCACTAAA
TAAAAGAATTCTTCAGTTA

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FIGURE 1395

MPSRAEDYEVLYTIGTGSYGRCQKIRRKSDGKILVWKELDYGSMTEAEKQMLVSEVNLLRELKHPNIVRYYDRII
DRTNTTLYIVMEYCEGGDLASVITKGTKERQYLDEEFVLRVMTQLTLALKECHRRSDGGHTVLHRDLKPANVFLD
GKQNVKLGDFGLARILNHDTSFAKTFVGTPYYMSPEQMNRMSYNEKSDIWSLGCLLYELCALMPPFTAFSQKELA
GKIREGKFRRIPYRYSDELNEIITRMLNLKDYHRPSVEEILENPLIADLVADEQRRNLERRGRQLGEPEKSQDSS
PVLSELKLKEIQLQERERALKAREERLEQKEQELCVRERLAEDKLARAENLLKNYSLLKERKFLSLASNPELLNL
PSSVIKKKVHFSGESKENIMRSENSESQLTSKSKCKDLKKRLHAAQLRAQALSDIEKNYQLKSRQILGMR

FIGURE 1396

GTCGGGGGCAGCAGCAAGATGCGAAGCGAGCCGTACAGATCCCGGGCTCTCCGAACGCAACTTCGCCCTGCTTGA
GCGAGGCTGCGGTTTCCGAGGCCCTCTCCAGCCAAGGAAAAGCTACACAAAAAGCCTGGATCACTCATCGAACCA
CCCCTGAAGCCAGTGAAGGCTCTCTCGCCTCGCCCTCTAGCGTTCGTCTGGAGTAGCGCCACCCCGGCTTCCTGG
GGACACAGGGTTGGCACC**ATG**GGGCCCACCAGCGTCCCGCTGGTCAAGGCCCACCGCAGCTCGGTCTCTGACTAC
GTCAACTATGATATCATCGTCCGGCATTACAACTACACGGGAAAGCTGAATATCAGCGCGGACAAGGAGAACAGC
ATTAAACTGACCTCGGTGGTGTTCATTCTCATCTGCTGCTTTATCATCCTGGAGAACATCTTTGTCTTGCTGACC
ATTTGGAAAACCAAGAAATTCCACCGACCCATGTACTATTTTATTGGCAATCTGGCCCTCTCAGACCTGTTGGCA
GGAGTAGCCTACACAGCTAACCTGCTCTTGTCTGGGGCCACCACCTACAAGCTCACTCCCGCCCAGTGGTTTCTG
CGGGAAGGGAGTATGTTTGTGGCCCTGTCAGCCTCCGTGTTCAGTCTCCTCGCCATCGCCATTGAGCGCTATATC
ACAATGCTGAAAATGAAACTCCACAACGGGAGCAATAACTTCCGCCTCTTCCTGCTAATCAGCGCCTGCTGGGTC
ATCTCCCTCATCCTGGGTGGCCTGCCTATCATGGGCTGGAACTGCATCAGTGCGCTGTCCAGCTGCTCCACCGTG
CTGCCGCTCTACCACAAGCACTATATCCTCTTCTGCACCACGGTCTTCACTCTGCTTCTGCTCTCCATCGTCATT
CTGTACTGCAGAATCTACTCCTTGGTCAGGACTCGGAGCCGCCGCCTGACGTTCCGCAAGAACATTTCCAAGGCC
AGCCGCAGCTCTGAGAAGTCGCTGGCGCTGCTCAAGACCGTAATTATCGTCCTGAGCGTCTTCATCGCCTGCTGG
GCACCGCTCTTCATCCTGCTCCTGCTGGATGTGGGCTGCAAGGTGAAGACCTGTGACATCCTCTTCAGAGCGGAG
TACTTCCTGGTGTTAGCTGTGCTCAACTCCGGCACCAACCCCATCATTTACACTCTGACCAACAAGGAGATGCGT
CGGGCCTTCATCCGGATCATGTCCTGCTGCAAGTGCCCGAGCGGAGACTCTGCTGGCAAATTCAAGCGACCCATC
ATCGCCGGCATGGAATTCAGCCGCAGCAAATCGGACAATTCCTCCCACCCCCAGAAAGACGAAGGGGACAACCCA
GAGACCATTATGTCTTCTGGAAACGTCAACTCTTCTTCC**TAG**AACTGGAAGCTGTCCACCCACCGGAAGCGCTCT
TTACTTGGTCGCTGGCCACCCCAGTGTTTGGAAAAAAATCTCTGGGCTTCGACTGCTGCCAGGGAGGAGCTGCTG
CAAGCCAGAGGGAGGAAGGGGGAGAATACGAACAGCCTGGTGGTGTCGGGTGTTGGTGGGTAGAGTTAGTTCCTG
TGAACAATGCACTGGGAAGGGTGGAGATCAGGTCCCGGCCTGGAATATATATTCTACCCCCCTGGAGCTTTGATT
TTGCACTGAGCCAAAGGTCTAGCATTGTCAAGCTCCTAAAGGGTTCATTTGGCCCCTCCTCAAAGACTAATGTCC
CCATGTGAAAGCGTCTCTTTGTCTGGAGCTTTGAGGAGATGTTTTCCTTCACTTTAGTTTCAAACCCAAGTGAGT
GTGTGCACTTCTGCTTCTTTAGGGATGCCCTGTACATCCCACACCCCACCCTCCCTTCCCTTCATACCCCTCCTC
AACGTTCTTTTACTTTATACTTTAACTACCTGAGAGTTATCAGAGCTGGGGTTGTGGAATGATCGATCATCTATA
GCAAATAGGCTATGTTGAGTACGTAGGCTGTGGGAAGATGAAGATGGTTTGGAGGTGTAAAACAATGTCCTTCGC
TGAGGCCAAAGTTTCCATGTAAGCGGGATCCGTTTTTTGGAATTTGGTTGAAGTCACTTTGATTTCTTTAAAAAA
CATCTTTTCAATGAAATGTGTTACCATTTCATATCCATTGAAGCCGAAATCTGCATAAGGAAGCCCACTTTATCT
AAATGATATTAGCCAGGATCCTTGGTGTCCTAGGAGAAACAGACAAGCAAAACAAAGTGAAAACCGAATGGATTA
ACTTTTGCAAACCAAGGGAGATTTCTTAGCAAATGAGTCTAACAAATATGACATCCGTCTTTCCCACTTTTGTTG
ATGTTTATTTCAGAATCTTGTGTGATTCATTTCAAGCAACAACATGTTGTATTTTGTTGTGTTAAAAGTACTTTT
CTTGATTTTTGAATGTATTTGTTTCAGGAAGAAGTCATTTTATGGATTTTTCTAACCCGTGTTAACTTTTCTAGA
ATCCACCCTCTTGTGCCCTTAAGCATTACTTTAACTGGTAGGGAACGCCAGAACTTTTAAGTCCAGCTATTCATT
AGATAGTAATTGAAGATATGTATAAATATTACAAAGAATAAAAATATATTACTGTCTCTTTAGTATGGTTTTCAG
TGCAATTAAACCGAGAGATGTCTTGTTTTTTTAAAAAGAATAGTATTTAATAGGTTTCTGACTTTTGTGGATCAT
TTTGCACATAGCTTTATCAACTTTTAAACATTAATAAACTGATTTTTTTAAAG

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FIGURE 1397

MGPTSVPLVKAHRSSVSDYVNYDIIVRHYNYTGKLNISADKENSIKLTSVVFILICCFIILENIFVLLTIWKTKK
FHRPMYYFIGNLALSDLLAGVAYTANLLLSGATTYKLTPAQWFLREGSMFVALSASVFSLLAIAIERYITMLKMK
LHNGSNNFRLFLLISACWVISLILGGLPIMGWNCISALSSCSTVLPLYHKHYILFCTTVFTLLLLSIVILYCRIY
SLVRTRSRRLTFRKNISKASRSSEKSLALLKTVIIVLSVFIACWAPLFILLLLDVGCKVKTCDILFRAEYFLVLA
VLNSGTNPIIYTLTNKEMRRAFIRIMSCCKCPSGDSAGKFKRPIIAGMEFSRSKSDNSSHPQKDEGDNPETIMSS
GNVNSSS

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FIGURE 1398

GACAGCCACGAAGATCCTACCAAAATGAAGCGCTTCCTCTTCCTCCTACTCACCATCAGCCTCCTGGTTATGGTA
CAGATACAAACTGGACTCTCAGGACAAAACGACACCAGCCAAACCAGCAGCCCCTCAGCATCCAGCAGCATGAGC
GGAGGCATTTTCCTTTTCTTCGTGGCCAATGCCATAATCCACCTCTTCTGCTTCAGTTGAGGTGACACGTCTCAG
CCTTAGCCCTGTGCCCCCTGAAACAGCTGCCACCATCACTCGCAAGAGAATCCCCTCCATCTTTGGGAGGGGTTG
ATGCCAGACATCACCAGGTTGTAGAAGTTGACAGGCAGTGCCATGGGGGCAACAGCCAAAATAGGGGGGTAATGA
TGTAGGGGCCAAGCAGTGCCCAGCTGGGGGAGAATAAAGTTACCCTTGTACTGCA

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FIGURE 1399

MKRFLFLLLTISLLVMVQIQTGLSGQNDTSQTSSPSASSSMSGGIFLFFVANAIIHLFCFS

FIGURE 1400

TATATTGGCAGTTATTGAGGGTAAAGCAATATATTGTAACAGAATGTATAAATATTTTTGATAAAACAGTCTATA
TTTTATTAAAAAATGAATTATAACCCATTTTCAGTTTTGCCTGCATCATAAGAGTGAGCACTCCATTGCTTTCTT
TCCTGGCCACACTGCTACAATCCAGCACTAACTATCCATGTCCAGGGTAAGGATCGAGATCGAGAAGCCCACACT
GCCAGTGAAAAAGCTACGTCTTTACTGCATAAATTAGAGGAAGCAATTTCGGAACAACGGAACCTTCAAACTATA
AATACTGAATTATCGAACACTTGCCAGGCACTTCAGCAGAAGACAAGGAAACTGAAGAAGCTTTTTAGATGAGGA
ATTTCCTCACTATGATTCCCTGTCCTGCGCAGATGCAATTCAACAACCTCTTCAAGAAAAATTGAAGCAGTGTTG
CCACAAACTATATGGTGGTCAAGAAGCAAGAATACATCAGACACCCCTGACCTTGAAACATACGTGCTGGTACAC
ACCTCTGCTGGATGCCTTATCTCTGGATAGTTTTACAGCAGTTCCAACCCTGGAATCAACACCTTTCTCAGGTGT
AGCCAACCAAATCCACACTCTGTGTGAAAGGCCCACATATGGAGAAGTAAAGGATGGTGCTTTGGATGTAAAAAG
ACAACACAAGTGCCCAGGCCCCACAAGTGGCCCCAGCCCAGGAACGAATCTCTCAGGCTGCATCAGGATGAATGA
TGACCCAAGTATGGAAGAGAATGGTGTTGAACGCGTGTGTCCTGAGAGCCTGCTGCAGTCCAGGGGATATTCCTC
ACTACCATTACCCAGACACACTTCATCGACAGACGGTACTATAACTTCAAGTGATCCTGGATTAGAAATTCTGAA
TATGGCTTCTTGTGACCTTGACAGAAACTCGCTCTGTAAGAAAGAGGAGGATACAAGATCAGCTTCTCCCACGAT
AGAGGCCCAAGGCACAAGTCCAGCTCATGATAATATTGCATTCCAAGACTCTACGAGTAAGGATAAAACCATATT
AAATCTGGAAGCCAAAGAGGAACCAGAAACAATAGAAGAACATAAAAAAGAACATGCTTCAGGAGACTCTGTGGT
TTCCCCTCTTCCTGTAACCACTGTGAAATCGGTTAACGTTAGACAAAGTGAGAACACTTCTGCTAATGAGAAGGA
GGTGGAGGCAGAATTTCTCAGATTATCTTTGGGATTTAAGTGTGACTGGTTTACCTTGGAGAAGAGAGTGAAGCT
TGAAGAGAGGTCCCGTGACTGGGCAGAAGAAAATTTGAAGAAAGAAATCACTAACTCTTTAAAACTATTAGAGTC
TTTAACACCTCTGTGTGAAGATGACAACCAGGCACAGGAAATCATTAAGAAGCTGGAGAAGAGTATAAAGTTTCT
TAGCCAGTGTGCAGCACGAGTGGCCAGTAGGGCTGAGATGTTGGGAGCCATCAATCAGGAAAGCCGGGTTAGTAA
AGCAGTTGAAGTGATGATTCAGCACGTAGAAAACTTGAAGAGGATGTATGCCAAAGAGCACGCTGAATTAGAAGA
ACTGAAACAGGTTCTTCTGCAGAATGAAAGGTCTTTCAATCCTCTTGAAGATGATGATGACTGCCAAATTAAAAA
ACGTTCAGCTTCTCTAAACTCCAAGCCATCTTCTCTACGAAGAGTGACTATTGCCTCTTTACCCAGAAATATTGG
AAATGCAGGAATGGTGGCTGGGATGGAAAATAATGATCGATTCAGTAGAAGGTCAAGCAGTTGGCGTATTTTGGG
GTCAAAGCAGAGTGAACACCGTCCCTCATTACCTCGATTTATTAGCACCTATTCCTGGGCAGATGCTGAAGAAGA
AAAATGTGAACTAAAAACTAAAGATGACTCAGAGCCATCTGGAGAAGAAACAGTAGAAAGGACAAGGAAGCCAAG
TCTTTCTGAAAAGAAAAATAATCCATCAAAGTGGGATGTCTCTTCAGTTTATGACACAATAGCTTCCTGGGCAAC
AAATCTCAAGTCCTCCATCAGAAAGGCTAATAAGGCCCTCTGGCTCTCTATTGCATTCATTGTACTGTTTGCAGC
TTTGATGAGCTTCCTCACAGGCCAATTATTCCAGAAGTCTGTGGATGCCGCTCCCACACAGCAAGAGGACTCATG
GACGTCTCTAGAACATATCTTGTGGCCATTTACCAGACTCCGACACAATGGGCCACCACCAGTGTGACAGCAGGA
CATCCTAATATATGGATCTTGATTTTTAAGTTTCAGTATCTGAACTTCGTAAATTAGTAACTTTTAGCTGGGAAA
GTATAGCATGAAACCAGAGGTTCTCAGAATGACCGTAAGATAGCTTACATTTCCTCTTTTTGCCTTTATCTCCCC
AACTAAAATACAATGGG

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FIGURE 1401

LESTPFSGVANQIHTLCERPTYGEVKDGALDVKRQHKCPGPTSGPSPGTNLSGCIRMNDDPSMEENGVERVCPES
LLQSRGYSSLPLPRHTSSTDGTITSSDPGLEILNMASCDLDRNSLCKKEEDTRSASPTIEAQGTSPAHDNIAFQD
STSKDKTILNLEAKEEPETIEEHKKEHASGDSVVSPLPVTTVKSVNVRQSENTSANEKEVEAEFLRLSLGFKCDW
FTLEKRVKLEERSRDWAEENLKKEITNSLKLLESLTPLCEDDNQAQEIIKKLEKSIKFLSQCAARVASRAEMLGA
INQESRVSKAVEVMIQHVENLKRMYAKEHAELEELKQVLLQNERSFNPLEDDDDCQIKKRSASLNSKPSSLRRVT
IASLPRNIGNAGMVAGMENNDRFSRRSSSWRILGSKQSEHRPSLPRFISTYSWADAEEEKCELKTKDDSEPSGEE
TVERTRKPSLSEKKNNPSKWDVSSVYDTIASWATNLKSSIRKANKALWLSIAFIVLFAALMSFLTGQLFQKSVDA
APTQQEDSWTSLEHILWPFTRLRHNGPPPV

FIGURE 1402

ATCTCCCTCCAGGCAGCCCTTGGCTGGTCCCTGCGAGCCCGTGGAGACTGCCAGAGATGTCCTCTTTCGGTTACA
GGACCCTGACTGTGGCCCTCTTCACCCTGATCTGCTGTCCAGGATCGGATGAGAAGGTATTCGAGGTACACGTGA
GGCCAAAGAAGCTGGCGGTTGAGCCCAAAGGGTCCCTCGAGGTCAACTGCAGCACCACCTGTAACCAGCCTGAAG
TGGGTGGTCTGGAGACCTCTCTAAATAAGATTCTGCTGGACGAACAGGCTCAGTGGAAACATTACTTGGTCTCAA
ACATCTCCCATGACACGGTCCTCCAATGCCACTTCACCTGCTCCGGGAAGCAGGAGTCAATGAATTCCAACGTCA
GCGTGTACCAGCCTCCAAGGCAGGTCATCCTGACACTGCAACCCACTTTGGTGGCTGTGGGCAAGTCCTTCACCA
TTGAGTGCAGGGTGCCCACCGTGGAGCCCCTGGACAGCCTCACCCTCTTCCTGTTCCGTGGCAATGAGACTCTGC
ACTATGAGACCTTCGGGAAGGCAGCCCCTGCTCCGCAGGAGGCCACAGCCACATTCAACAGCACGGCTGACAGAG
AGGATGGCCACCGCAACTTCTCCTGCCTGGCTGTGCTGGACTTGATGTCTCGCGGTGGCAACATCTTTCACAAAC
ACTCAGCCCCGAAGATGTTGGAGATCTATGAGCCTGTGTCGGACAGCCAGATGGTCATCATAGTCACGGTGGTGT
CGGTGTTGCTGTCCCTGTTCGTGACATCTGTCCTGCTCTGCTTCATCTTCGGCCAGCACTTGCGCCAGCAGCGGA
TGGGCACCTACGGGGTGCGAGCGGCTTGGAGGAGGCTGCCCCAGGCCTTCCGGCCATAGCAACCATGAGTGGCAT
GGCCACCACCACGGTGGTCACTGGAACTCAGTGTGACTCCTCAGGGTTGAGGTCCAGCCCTGGCTGAAGGACTGT
GACAGGCAGCAGAGACTTGGGACATTGCCTTTTCTAGCCCGAATACAAACACCTGGACTT

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FIGURE 1403

MSSFGYRTLTVALFTLICCPGSDEKVFEVHVRPKKLAVEPKGSLEVNCSTTCNQPEVGGLETSLNKILLDEQAQW
KHYLVSNISHDTVLQCHFTCSGKQESMNSNVSVYQPPRQVILTLQPTLVAVGKSFTIECRVPTVEPLDSLTLFLF
RGNETLHYETFGKAAPAPQEATATFNSTADREDGHRNFSCLAVLDLMSRGGNIFHKHSAPKMLEIYEPVSDSQMV
IIVTVVSVLLSLFVTSVLLCFIFGQHLRQQRMGTYGVRAAWRRLPQAFRP

FIGURE 1404

ATGGCGGCGGCCGTAGCGGCTCCACTCGCCGCCGGGGGTGAGGAGGCGGCAGCCACGACCTCCGTGCCCGGGTCT
CCAGGTCTGCCGGGGAGACGCAGTGCAGAGCGGGCCCTAGAGGACGCCGTGGCCACCGGGACCCTGAACCTGTCT
AACCGGCGCTTGAAGCACTTCCCCCGGGGCGCGGCCCGTAGCTACGACCTGTCAGACATCACCCAGGCTGACCTG
TCCCGGAACCGGTTTCCCGAGGTGCCCGAGGCGGCGTGCCAGCTGGTGTCCCTGGAGGGCCTGAGCCTCTACCAC
AATTGCCTGAGATGCCTGAACCCAGCCTTGGGGAATCTCACAGCCCTCACCTACCTCAACCTCAGCCGAAACCAG
CTGTCGCTGCTGCCACCCTACATCTGCCAGCTGCCCCTGAGGGTCCTCATCGTCAGCAACAACAAGCTGGGAGCC
CTGCCCCCTGACATCGGCACCCTGGGAAGCCTGCGACAGCTTGACGTGAGCAGCAACGAGCTCCAATCCCTGCCC
TCGGAACTGTGTGGCCTCTCTTCCCTGCGGGACCTCAATGTCCGGAGGAACCAGCTCAGTACGCTGCCCGAAGAG
CTGGGGGGACCTCCCTCTGGTCCGCCTGGATTTCTCCTGTAACCGCGTCTCCCGAATCCCAGTCTCCTTCTGCCGC
CTGAGGCACCTGCAGGTCATTCTGCTGGACAGCAACCCTCTGCAGAGTCCACCTGCCCAGGTCTGCCTGAAGGGG
AAACTTCACATCTTCAAGTATTTGTCCACAGAGGCCGGGCAGCGTGGGTCGGCCCTGGGGGACCTGGCCCCTTCT
CGGCCCCCGAGTTTCAGTCCCTGCCCTGCAGAGGATCTATTTCCGGGACATCGGTACGATGGTGGGCTGGACTCA
GGCTTCCACAGCGTTGATAGTGGCAGCAAGAGGTGGTCTGGAAATGAGTCAACAGATGAATTTTCAGAGCTGTCA
TTCCGGATCTCAGAGCTGGCCCGGGAGCCCCGGGGGCCCAGAGAACGCAAGGAGGATGGCTCAGCGGACGGAGAC
CCTGTGCAGATTGACTTCATCGACAGCCATGTCCCCGGGGAGGATGAAGAGCGAGGCACTGTGGAGGAGCAGCGA
CCACCCGAATTAAGCCCTGGGGCAGGGGACAGGGAGAGGGCACCAAACAGCAGGCGGGAGGAGCCGGCAGGGGAG
GAGCGGCGGCGCCCGGACACCTTGCAGCTGTGGCAGGAGCGGGAACGGCGGCAGCAGCAGCAGAGCGGGGCGTGG
GGGGCCCCGAGGAAGGATAGCCTCTTGAAGCCAGGGCTCAGGGCTGTTGTGGGAGGGGCCGCCGCCGTGTCCACT
CAAGCCATGCACAACGGCTCGCCTAAGTCCAGTGCCTCCCAAGCAGGGGGCTGCAGCGGGGCAGGGAGCCCCGCC
CCTGCCCCTGCCTCCCAAGAGCCCCTTCCCATAGCTGGACCAGCGACAGCACCTGCTCCACGGCCACTTGGCTCC
ATTCAGAGACCAAACAGCTTCCTCTTCCGTTCCTCCTCTCAGAGTGGCTCAGGCCCTTCCTCACCAGACTCTGTC
CTGAGACCTCGGCGGTACCCCCAGGTTCCAGATGAGAAGGACTTAATGACTCAGCTGCGCCAGGTCCTTGAGTCC
CGGCTGCAGCGGCCCCTGCCTGAGGACCTGGCCGAGGCTCTGGCCAGTGGGGTCATCCTGTGCCAGCTGGCCAAC
CAGCTACGGCCGCGCTCCGTGCCCTTCATCCATGTGCCCTCCCCTGCTGTGCCAAAACTCAGTGCCCTCAAGGCT
CGGAAGAATGTGGAGAGTTTTCTAGAAGCCTGTCGAAAAATGGGGGTGCCTGAGGCTGACCTGTGCTCGCCCTCG
GATCTCCTCCAGGGCACTGCCCGGGGGCTGCGGACCGCGCTGGAGGCCGTGAAGCGGGTGGGGGGCAAGGCCCTA
CCGCCCCTCTGGCCCCCCTCTGGTCTGGGCGGCTTCGTCGTCTTCTACGTGGTCCTCATGCTGCTGCTCTATGTC
ACCTACACTCGGCTCCTGGATCCCCGTTCCCCCCAGGTGGCCTGGGAGGTGGCCCCCTCGAGGATGACTCCACTA
GCGCCCTGGGACCCCAAGTATGAAGCCAAAGCAGGACCTCGGCCGGTGTGGGTGAGTTGGGGGCAAACCTGTGGG
ACTGGCTGGGGGTGCTCAGGGAGCTGTGCGGTGGCCTGAGGCTCCAGTGCTCTGTCCTCCTCACCCTAGGGGGCCA
ACTGTAGCTCAGGAGCCTCGTTCTCAGGCCGGACGCTGTGTCACCCCTCATTCTGGCCGCTGTATGAAGCAGCCT
CGGGCAGGGGTCTCAGGCCCGTGGCCCCTGCCACAGGGCACTGGAATGGACAGCAGGCGCCCCCAGATGCAGGGT
TCCCGGTGGTGTGCTGTGAAGATGTCTTCCTCTCGGACCCTCTGCTGCCCCGGGGGCAGCGTGTTCCCCTGTACC
TGTCCAAGGCCCCCCAGCAGATGATGGGCTCCCTGAAACTGCTGCCGCCGCCCCCCATCATGTCTGCCAGGGTGC
TCCCCCGCCCATCACCCTCCCGGGGCCCCTCCACTGCCTGGCTCAGCGGGCCGGAGCTGATCGCTCTCACTGGCC
TGCTGCAGATGAGCCAGGGGGAGCCTAGGCCCAGCTCCTCCGCGGTTGGCCCCCCAGACCATACCTCTGACCCAC
CCAGCCCCTGTGGTAGCCCCAGCAGTTCTCAGGGTGCTGACCTCTCTCTCCCACAGACCCCAGACACCCATTGTC
CATAGCCTTCTCAGGGCAGAGTGGGCTGGTTGTGTTGACAATAAAACAGTGTTGGTTTGCA

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FIGURE 1405

MAAAVAAPLAAGGEEAAATTSVPGSPGLPGRRSAERALEDAVATGTLNLSNRRLKHFPRGAARSYDLSDITQADL
SRNRFPEVPEAACQLVSLEGLSLYHNCLRCLNPALGNLTALTYLNLSRNQLSLLPPYICQLPLRVLIVSNNKLGA
LPPDIGTLGSLRQLDVSSNELQSLPSELCGLSSLRDLNVRRNQLSTLPEELGDLPLVRLDFSCNRVSRIPVSFCR
LRHLQVILLDSNPLQSPPAQVCLKGKLHIFKYLSTEAGQRGSALGDLAPSRPPSFSPCPAEDLFPGHRYDGGLDS
GFHSVDSGSKRWSGNESTDEFSELSFRISELAREPRGPRERKEDGSADGDPVQIDFIDSHVPGEDEERGTVEEQR
PPELSPGAGDRERAPNSRREEPAGEERRRPDTLQLWQERERRQQQQSGAWGAPRKDSLLKPGLRAVVGGAAAVST
QAMHNGSPKSSASQAGGCSGAGSPAPAPASQEPLPIAGPATAPAPRPLGSIQRPNSFLFRSSSQSGSGPSSPDSV
LRPRRYPQVPDEKDLMTQLRQVLESRLQRPLPEDLAEALASGVILCQLANQLRPRSVPFIHVPSPAVPKLSALKA
RKNVESFLEACRKMGVPEADLCSPSDLLQGTARGLRTALEAVKRVGGKALPPLWPPSGLGGFVVFYVVLMLLLYV
TYTRLLDPRSPQVAWEVAPSRMTPLAPWDPKYEAKAGPRPVWVSWGQTCGTGWGAQGAVRWPEAPVLCPPHPRGP
TVAQEPRSQAGRCVTPHSGRCMKQPRAGVSGPWPLPQGTGMDSRRPQMQGSRWCAVKMSSSRTLCCPGGSVFPCT
CPRPPSR

FIGURE 1406

CGAAAGGCCGGCCTTGGCTGCGACAGCCTGGGTAAGAGGTGTAGGTCGGCTTGGTTTTCTGCTACCCGGAGCTGG
GCAAGCGGGTTGGGAGAACAGCGAAGACAGCGTGAGCCTGGGCCGTTGCCTCGAGGCTCTCGCCCGGCTTCTCTT
GCCGACCCGCCACGTTTGTTTGGATTTAATCTTACAGCTGGTTGCCGGCGCCCGCCCGCCCGCTGGCCTCGCGGT
GTGAGAGGGAAGCACCCGTGCCTGTGGCTGGTGGCTGGCGCCTGGAGGGTCCGCACACCCGCCCGGCCGCGCCGC
TTTGCCCGCGGCAGCCGCGTCCCTGAACCGCGGAGTCGTGTTTGTGTTTGACCCGCGGGCGCCGGTGGCGCGCGG
CCGAGGCCGGTGTCGGCGGGGCGGGGCGGTCGCGGCGGAGGCAGAGGAAGAGGGAGCGGGAGCTCTGCGAGGCCG
GGCGCCGCC**ATG**GAACTGGGCCCGAGCCCCGCACCGCGCCGCCTGCTCTTCGCCTGCAGCCCCCCTCCCGCGTCG
CAGCCCGTCGTGAAGGCGCTATTTGGCGCTTCAGCCGCCGGGGGACTGTCGCCTGTCACCAACCTGACCGTCACT
ATGGACCAGCTGCAGGGTCTGGGCAGTGATTATGAGCAACCACTGGAGGTGAAGAACAACAGTAATCTGCAGAGA
ATGGGCTCCTCCGAGTCAACAGATTCAGGTTTCTGTCTAGATTCTCCTGGGCCATTGGACAGTAAAGAAAACCTT
GAAAATCCTATGAGAAGAATACATTCCCTACCTCAAAAGCTGTTGGGATGTAGTCCAGCTCTGAAGAGGAGCCAT
TCTGATTCTCTTGACCATGACATCTTTCAGCTCATCGACCCAGATGAGAACAAGGAAAATGAAGCCTTTGAGTTT
AAGAAGCCAGTAAGACCTGTATCTCGTGGCTGCCTGCACTCTCATGGACTCCAGGAGGGTAAAGATCTCTTCACA
CAGAGGCAGAACTCTGCCCAGCTCGGAATGCTTTCCTCAAATGAAAGAGATAGCAGTGAACCAGGGAATTTCATT
CCTCTTTTTACACCCCAGTCACCTGTGACAGCCACTTTGTCTGATGAGGATGATGGCTTCGTGGACCTTCTCGAT
GGAGAGAATCTGAAGAATGAGGAGGAGACCCCCTCGTGCATGGCAAGCCTCTGGACAGCTCCTCTCGTCATGAGA
ACTACAAACCTTGACAACCGATGCAAGCTGTTTGACTCCCCTTCCCTGTGTAGCTCCAGCACTCGGTCAGTGTTG
AAGAGACCAGAACGTTCTCAAGAGGAGTCTCCACCTGGAAGTACAAAGAGGAGGAAGAGCATGTCTGGGGCCAGC
CCCAAAGAGTCAACTAATCCAGAGAAGGCCCATGAGACTCTTCATCAGTCTTTATCCCTGGCATCTTCCCCCAAA
GGAACCATTGAGAACATTTTGGACAATGACCCAAGGGACCTTATAGGAGACTTCTCCAAGGGTTATCTCTTTCAT
ACAGTTGCTGGGAAACATCAGGATTTAAAATACATCTCTCCAGAAATTATGGCATCTGTTTTGAATGGCAAGTTT
GCCAACCTCATTAAAGAGTTTGTTATCATCGACTGTCGATACCCATATGAATACGAGGGAGGCCACATCAAGGGT
GCAGTGAACTTGCACATGGAAGAAGAGGTTGAAGACTTCTTATTGAAGAAGCCCATTGTACCTACTGATGGCAAG
CGTGTCATTGTTGTGTTTCACTGCGAGTTTTCTTCTGAGAGAGGTCCCCGCATGTGCCGGTATGTGAGAGAGAGA
GATCGCCTGGGTAATGAATACCCCAAACTCCACTACCCTGAGCTGTATGTCCTGAAGGGGGGATACAAGGAGTTC
TTTATGAAATGCCAGTCTTACTGTGAGCCCCCTAGCTACCGGCCCATGCACCACGAGGACTTTAAAGAAGACCTG
AAGAAGTTCCGCACCAAGAGCCGGACCTGGGCAGGGGAGAAGAGCAAGAGGGAGATGTACAGTCGTCTGAAGAAG
CTC**TGA**GGGCGGCAGGACCAGCCAGCAGCAGCCCAAGCTTCCCTCCATCCCCCTTTACCCTCTTTCCTGCAGAGA
AACTTAAGCAAAGGGGACAGCTGTGTGACATTTGGAGAGGGGGCCTGGGACTTCCATGCCTTAAACCTACCTCCC
ACACTCCCAAGGTTGGAGCCCAGGGCATCTTGCTGGCTACGCCTCTTCTGTCCCTGTTAGACGTCCTCCGTCCAT
ATCAGAACTGTGCCACAATGCAGTTCTGAGCACCGTGTCAAGCTGCTCTGAGCCACAGTGGGATGAACCAGCCGG
GGCCTTATCGGGCTCCAGCATCTCATGAGGGGAGAGGAGACGGAGGGGAGTAGAGAAGTTTACACAGAAATGCTG
CTGGCCAAATAGCAAAGAG

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FIGURE 1407

MELGPSPAPRRLLFACSPPPASQPVVKALFGASAAGGLSPVTNLTVTMDQLQGLGSDYEQPLEVKNNSNLQRMGS
SESTDSGFCLDSPGPLDSKENLENPMRRIHSLPQKLLGCSPALKRSHSDSLDHDIFQLIDPDENKENEAFEFKKP
VRPVSRGCLHSHGLQEGKDLFTQRQNSAQLGMLSSNERDSSEPGNFIPLFTPQSPVTATLSDEDDGFVDLLDGEN
LKNEEETPSCMASLWTAPLVMRTTNLDNRCKLFDSPSLCSSSTRSVLKRPERSQEESPPGSTKRRKSMSGASPKE
STNPEKAHETLHQSLSLASSPKGTIENILDNDPRDLIGDFSKGYLFHTVAGKHQDLKYISPEIMASVLNGKFANL
IKEFVIIDCRYPYEYEGGHIKGAVNLHMEEEVEDFLLKKPIVPTDGKRVIVVFHCEFSSERGPRMCRYVRERDRL
GNEYPKLHYPELYVLKGGYKEFFMKCQSYCEPPSYRPMHHEDFKEDLKKFRTKSRTWAGEKSKREMYSRLKKL

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FIGURE 1408

ATGAAGCACCTGAAGCGGTGGTGGTCGGCCGGCGGCGGCCTCCTGCACCTCACCCTCCTGCTGAGCTTGGCGGGG
CTCCGCGTAGACCTAGATCTTTACCTGCTGCTGCCGCCGCCCACCCTGCTGCAGGACGAGCTGCTGTTCCTGGGC
GGCCCGGCCAGCTCCGCCTACGCGCTCAGCCCCTTCTCGGCCTCGGGAGGGTGGGGGCGCGCGGGCCACTTGCAC
CCCAAGGGCCGGGAGCTGGACCCTGCCGCGCCGCCCGAGGGCCAGCTGCTCCGGGAGGTGCGCGCGCTCGGGGTC
CCCTTCGTCCCTCGCACCAGCGTGGATGCATGGCTGGTGCACAGCGTGGCTGCCGGGAGCGCGGACGAGGCCCAC
GGGCTGCTCGGCGCCGCCGCCGCCTCGTCCACCGGAGGAGCCGGCGCCAGCGTGGACGGCGGCAGCCAGGCTGTG
CAGGGGGGCGGCGGGGACCCCCGAGCGGCTCGGAGTGGCCCCTTGGACGCCGGGGAAGAGGAGAAGGCACCCGCG
GAACCGACGGCTCAGGTGCCGGACGCTGGCGGATGTGCGAGCGAGGAGAATGGGGTACTAAGAGAAAAGCACGAA
GCTGTGGATCATAGTTCCCAGCATGAGGAAAATGAAGAAAGGGTGTCAGCCCAGAAGGAGAACTCACTTCAGCAG
AATGATGATGATGAAAACAAAATAGCAGAGAAACCTGACTGGGAGGCAGAAAAGACCACTGAATCTAGAAATGAG
AGACATCTGAATGGGACAGATACTTCTTTCTCTCTGGAAGACTTATTCCAGTTGCTTTCATCACAGCCTGAAAAT
TCACTGGAGGGCATCTCATTGGGAGATATTCCTCTTCCAGGCAGTATCAGTGATGGCATGAATTCTTCAGCACAT
TATCATGTAAACTTCAGCCAGGCTATAAGTCAGGATGTGAATCTTCATGAGGCCATCTTGCTTTGTCCCAACAAT
ACATTTAGAAGAGATCCAACAGCAAGGACTTCACAGTCACAAGAACCATTTCTGCAGTTAAATTCTCATACCACC
AATCCTGAGCAAACCCTTCCTGGAACTAATTTGACAGGATTTCTTTCACCGGTTGACAATCATATGAGGAATCTA
ACAAGCCAAGACCTACTGTATGACCTTGACATAAATATATTTGATGAGATAAACTTAATGTCATTGGCCACAGAA
GACAACTTTGATCCAATCGATGTTTCTCAGCTTTTTGATGAACCAGATTCTGATTCTGGCCTTTCTTTAGATTCA
AGTCACAATAATACCTCTGTCATCAAGTCTAATTCCTCTCACTCTGTGTGTGATGAAGGTGCTATAGGTTATTGC
ACTGACCATGAATCTAGTTCCCATCATGACTTAGAAGGTGCTGTAGGTGGCTACTACCCAGAACCCAGTAAGCTT
TGTCACTTGGATCAAAGTGATTCTGATTTCCATGGAGATCTTACATTTCAACACGTATTTCATAACCACACTTAC
CACTTACAGCCAACTGCACCAGAATCTACTTCTGAACCTTTTCCGTGGCCTGGGAAGTCACAGAAGATAAGGAGT
AGATACCTTGAAGACACAGATAGAAACTTGAGCCGTGATGAACAGCGTGCTAAAGCTTTGCATATCCCTTTTTCT
GTAGATGAAATTGTCGGCATGCCTGTTGATTCTTTCAATAGCATGTTAAGTAGATATTATCTGACAGACCTACAA
GTCTCACTTATCCGTGACATCAGACGAAGAGGGAAAAATAAAGTTGCTGCGCAGAACTGTCGTAAACGCAAATTG
GACATAATTTTGAATTTAGAAGATGATGTATGTAACTTGCAAGCAAAGAAGGAAACTCTTAAGAGAGAGCAAGCA
CAATGTAACAAAGCTATTAACATAATGAAACAGAAACTGCATGACCTTTATCATGATATTTTTAGTAGATTAAGA
GATGACCAAGGTAGGCCAGTCAATCCCAACCACTATGCTCTCCAGTGTACCCATGATGGAAGTATCTTGATAGTA
CCCAAAGAACTGGTGGCCTCAGGCCACAAAAAGGAAACCCAAAAGGGAAAGAGAAAGTGAGAAGAAACTGAAGAT
GGACTCTATTATGTGAAGTAGTAATGTTCAGAAACTGATTATTTGGATCAGAAACCATTGAAACTGCTTCAAGAA
TTGTATCTTTAAGTACTGCTACTTGAATAACTCAGTTAACGCTGTTTTGAAGCTTACATGGACAAATGTTTAGGA
CTTCAAGATCACACTTGTGGGCAATCTGGGGGAGCCACAACTTTTCATGAAGTGCATTGTATACAAAATTCATAG
TTATGTCCAAAGAATAGGTTAACATGAAAACCCAGTAAGACTTTCCATCTTGGCAGCCATCCTTTTTAAGAGTAA
GTTGGTTACTTCAAAAAGAGCAAACACTGGGGATCAAATTATTTTAAGAGGTATTTCAGTTTTAAATGCAAAATA
GCCTTATTTTCATTTAGTTTGTTAGCACTATAGTGAGCTTTTCAAACACTATTTTAATCTTTATATTTAACTTAT
AAATTTTGCTTTCTATGGAAATAAATTTTGTATTTGTATTAAAAATTAACTTTTCCCTTTTATACAGA

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FIGURE 1409

MKHLKRWWSAGGGLLHLTLLLSLAGLRVDLDLYLLLPPPTLLQDELLFLGGPASSAYALSPFSASGGWGRAGHLH
PKGRELDPAAPPEGQLLREVRALGVPFVPRTSVDAWLVHSVAAGSADEAHGLLGAAAAASSTGGAGASVDGGSQAV
QGGGGDPRAARSGPLDAGEEEKAPAEPTAQVPDAGGCASEENGVLREKHEAVDHSSQHEENEERVSAQKENSLQQ
NDDDENKIAEKPDWEAEKTTESRNERHLNGTDTSFSLEDLFQLLSSQPENSLEGISLGDIPLPGSISDGMNSSAH
YHVNFSQAISQDVNLHEAILLCPNNTFRRDPTARTSQSQEPFLQLNSHTTNPEQTLPGTNLTGFLSPVDNHMRNL
TSQDLLYDLDINIFDEINLMSLATEDNFDPIDVSQLFDEPDSDSGLSLDSSHNNTSVIKSNSSHSVCDEGAIGYC
TDHESSSHHDLEGAVGGYYPEPSKLCHLDQSDSDFHGDLTFQHVFHNHTYHLQPTAPESTSEPFPWPGKSQKIRS
RYLEDTDRNLSRDEQRAKALHIPFSVDEIVGMPVDSFNSMLSRYYLTDLQVSLIRDIRRRGKNKVAAQNCRKRKL
DIILNLEDDVCNLQAKKETLKREQAQCNKAINIMKQKLHDLYHDIFSRLRDDQGRPVNPNHYALQCTHDGSILIV
PKELVASGHKKETQKGKRK

FIGURE 1410

GCAGAGCACCGCGCCTTAGCCGCGAAGTTCTAGTTCTTGCTGCCGGTCCTAACGTCCCGCAGTCTTCGCCAGCCA
GCCGTCCCGCATGCGCGTTTGGGCGGCGTGGAGCCTGCTGCC**ATG**AAGTCAGCGAGAGCTAAGACACCCCGGAAA
CCTACCGTGAAAAAAGGGTCCCAAACGAACCTTAAAGACCCAGTTGGGGTATACTGTAGGGTGCGCCCACTGGGC
TTTCCTGATCAAGAGTGTTGCATAGAAGTGATCAATAATACAACTGTTCAGCTTCATACTCCTGAGGGCTACAGA
CTCAACCGAAATGGAGACTATAAGGAGACTCAGTATTCATTTAAACAAGTATTTGGCACTCACACCACCCAGAAG
GAACTCTTTGATGTTGTGGCTAATCCCTTGGTCAATGACCTCATTCATGGCAAAAATGGTCTTCTTTTTACATAT
GGTGTGACGGGAAGTGGAAAAACTCACACAATGACTGGTTCTCCAGGGGAAGGAGGGCTGCTTCCTCGTTGTTTG
GACATGATCTTTAACAGTATAGGGTCATTTCAAGCTAAACGATATGTTTTCAAATCTAATGATAGGAATAGTATG
GATATACAGTGTGAGGTTGATGCCTTATTAGAACGTCAGAAAAGAGAAGCTATGCCCAATCCAAAGACTTCTTCT
AGCAAACGACAAGTAGATCCAGAGTTTGCAGATATGATAACTGTACAAGAATTCTGCAAAGCAGAAGAGGTTGAT
GAAGATAGTGTCTATGGTGTATTTGTCTCTTATATTGAAATATATAATAATTACATATATGATCTATTGGAAGAG
GTGCCGTTTGATCCCATAAAACCCAAACCTCCACAATCTAAATTGCTTCGTGAAGATAAGAACCATAACATGTAT
GTTGCAGGATGTACAGAAGTTGAAGTGAAATCTACTGAGGAGGCTTTTGAAGTTTTCTGGAGAGGCCAGAAAAAG
AGACGTATTGCTAATACCCATTTGAATCGTGAGTCCAGCCGTTCCCATAGCGTGTTCAACATTAAATTAGTTCAG
GCTCCCTTGGATGCAGATGGAGACAATGTCTTACAGGAAAAAGAACAAATCACTATAAGTCAGTTGTCCTTGGTA
GATCTTGCTGGAAGTGAAAGAACTAACCGGACCAGAGCAGAAGGGAACAGATTACGTGAAGCTGGTAATATTAAT
CAGTCACTAATGACGCTAAGAACATGTATGGATGTCCTAAGAGAGAACCAAATGTATGGAACTAACAAGATGGTT
CCATATCGAGATTCAAAGTTAACCCATCTGTTCAAGAACTACTTTGATGGGGAAGGAAAAGTGCGGATGATCGTG
TGTGTGAACCCCAAGGCTGAAGATTATGAAGAAAACTTGCAAGTCATGAGATTTGCGGAAGTGACTCAAGAAGTT
GAAGTAGCAAGACCTGTAGACAAGGCAATATGTGGTTTAACGCCTGGGAGGAGATACAGAAACCAGCCTCGAGGT
CCAGTTGGAAATGAACCATTGGTTACTGACGTGGTTTTGCAGAGTTTTCCACCTTTGCCGTCATGCGAAATTTTG
GATATCAACGATGAGCAGACACTTCCAAGGCTGATTGAAGCCTTAGAGAAACGACATAACTTACGACAAATGATG
ATTGATGAGTTTAACAAACAATCTAATGCTTTTAAAGCTTTGTTACAAGAATTTGACAATGCTGTTTTAAGTAAA
GAAAACCACATGCAAGGGAAACTAAATGAAAAGGAGAAGATGATCTCAGGACAGAAATTGGAAATAGAACGACTG
GAAAAGAAAAACAAAACTTTAGAATATAAGATTGAGATTTTAGAGAAAACAACTACTATCTATGAGGAAGATAAA
CGCAATTTGCAACAGGAACTTGAAACTCAGAACCAGAAACTTCAGCGACAGTTTTCTGACAAACGCAGATTAGAA
GCCAGGTTGCAAGGCATGGTGACAGAAACGACAATGAAGTGGGAGAAAGAATGTGAGCGTAGAGTGGCAGCCAAA
CAGCTGGAGATGCAGAATAAACTCTGGGTTAAAGATGAAAAGCTGAAACAACTGAAGGCTATTGTTACTGAACCT
AAAACTGAGAAGCCAGAGAGACCCTCTCGGGAGCGAGATCGAGAAAAAGTTACTCAAAGATCTGTTTCTCCATCA
CCTGTGCCTTTACTCTTTCAACCTGATCAGAACGCACCACCAATTCGTCTCCGACACAGACGATCACGCTCTGCA
GGAGACAGATGGGTAGATCATAAGCCCGCCTCTAACATGCAAACTGAAACAGTCATGCAGCCACATGTCCCTCAT
GCCATCACAGTATCTGTTGCAAATGAAAAGGCACTAGCTAAGTGTGAGAAGTACATGCTGACCCACCAGGAACTA
GCCTCCGATGGGGAGATTGAAACTAAACTAATTAAGGGTGATATTTATAAAACAAGGGGTGGTGGACAATCTGTT
CAGTTTACTGATATTGAGACTTTAAAGCAAGAATCACCAAATGGTAGTCGAAAACGAAGATCTTCCACAGTAGCA
CCTGCCCAACCAGATGGTGCAGAGTCTGAATGGACCGATGTAGAAACAAGGTGTTCTGTGGCTGTGGAGATGAGA
GCAGGATCCCAGCTGGGACCTGGATATCAGCATCACGCACAACCCAAGCGCAAAAAGCCATGAACTGACAGTCCC
AGTACTGAAAGAACATTTTCATTTGTGTGGATGATTTCTCGAAAGCCATGCCAGAAGCAGTCTTCCAGGTCATCT
TGTAGAACTCCAGCTTTGTTGAAAATCACGGACCTCAGCTACATCATACACTGACCCAGAGCAAAGCTTTCCCTA
TGGTTCCAAAGACAACTAGTATTCAACAAACCTTGTATAGTATATGTTTTGCCATATTTAATATTAATAGCAGAG
GAAGACTCCTTTTTTCATCACTGTATGAATTTTTTATAATGTTTTTTTAAAATATATTTCATGTATACTTATAAA
CTAATTCACACAAGTGTTTGTCTTAGATGATTAAGGAAGACTATATCTAGATCATGTCTGATTTTTTATTGTGAC
TTCTCCAGCCCTGGTCTGAATTTCTTAAGGTTTTATAAACAAATGCTGCTATTTATTAGCTGCAAGAATGCACTT
TAGAACTATTTGACAATTCAGACTTTCAAAATAAAGATGTAAATGACTGGCCAATAATAACCATTTTAGGAAGGT
GTTTTGAATTCTGTATGTATATATTCACTTTCTGACATTTAGATATGCCAAAAGAATTAAAATCAAAAGCACTAA
GAAATAAAAAAAAAAAAAAAAAA

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FIGURE 1411

MKSARAKTPRKPTVKKGSQTNLKDPVGVYCRVRPLGFPDQECCIEVINNTTVQLHTPEGYRLNRNGDYKETQYSF
KQVFGTHTTQKELFDVVANPLVNDLIHGKNGLLFTYGVTGSGKTHTMTGSPGEGGLLPRCLDMIFNSIGSFQAKR
YVFKSNDRNSMDIQCEVDALLERQKREAMPNPKTSSSKRQVDPEFADMITVQEFCKAEEVDEDSVYGVFVSYIEI
YNNYIYDLLEEVPFDPIKPKPPQSKLLREDKNHNMYVAGCTEVEVKSTEEAFEVFWRGQKKRRIANTHLNRESSR
SHSVFNIKLVQAPLDADGDNVLQEKEQITISQLSLVDLAGSERTNRTRAEGNRLREAGNINQSLMTLRTCMDVLR
ENQMYGTNKMVPYRDSKLTHLFKNYFDGEGKVRMIVCVNPKAEDYEENLQVMRFAEVTQEVEVARPVDKAICGLT
PGRRYRNQPRGPVGNEPLVTDVVLQSFPPLPSCEILDINDEQTLPRLIEALEKRHNLRQMMIDEFNKQSNAFKAL
LQEFDNAVLSKENHMQGKLNEKEKMISGQKLEIERLEKKNKTLEYKIEILEKTTTIYEEDKRNLQQELETQNQKL
QRQFSDKRRLEARLQGMVTETTMKWEKECERRVAAKQLEMQNKLWVKDEKLKQLKAIVTEPKTEKPERPSRERDR
EKVTQRSVSPSPVPLSSNYIAQISNGQQLMSQPQLHRRSNSCSSISVASCISEWEQKIPTYNTPLKVTSIARRRQ
QEPGQSKTCIVSDRRRGMYWTEGREVVPTFRNEIEIEEDHCGRLLFQPDQNAPPIRLRHRRSRSAGDRWVDHKPA
SNMQTETVMQPHVPHAITVSVANEKALAKCEKYMLTHQELASDGEIETKLIKGDIYKTRGGGQSVQFTDIETLKQ
ESPNGSRKRRSSTVAPAQPDGAESEWTDVETRCSVAVEMRAGSQLGPGYQHHAQPKRKKP

FIGURE 1412A

TCATTGCAGCTGGGACAGCCCGGAGTGTGGTTAGCAGCTCGGCAAGCGCTGCCCAGGTCCTGGGGTGGTGGCAGC
CAGCGGGAGCAGGAAAGGAAGCATGTTCCCAGGCTGCCCACGCCTCTGGGTCCTGGTGGTCTTGGGCACCAGCTG
GGTAGGCTGGGGGAGCCAAGGGACAGAAGCGGCACAGCTAAGGCAGTTCTACGTGGCTGCTCAGGGCATCAGTTG
GAGCTACCGACCTGAGCCCACAAACTCAAGTTTGAATCTTTCTGTAACTTCCTTTAAGAAAATTGTCTACAGAGA
GTATGAACCATATTTTAAGAAAGAAAAACCACAATCTACCATTTCAGGACTTCTTGGGCCTACTTTATATGCTGA
AGTCGGAGACATCATAAAAGTTCACTTTAAAAATAAGGCAGATAAGCCCTTGAGCATCCATCCTCAAGGAATTAG
GTACAGTAAATTATCAGAAGGTGCTTCTTACCTTGACCACACATTCCCTGCAGAGAAGATGGACGACGCTGTGGC
TCCAGGCCGAGAATACACCTATGAATGGAGTATCAGTGAGGACAGTGGACCCACCCATGATGACCCTCCATGCCT
CACACACATCTATTACTCCCATGAAAATCTGATCGAGGATTTCAACTCTGGGCTGATTGGGCCCCTGCTTATCTG
TAAAAAAGGGACCCTAACTGAGGGTGGGACACAGAAGACGTTTGACAAGCAAATCGTGCTACTATTTGCTGTGTT
TGATGAAAGCAAGAGCTGGAGCCAGTCATCATCCCTAATGTACACAGTCAATGGATATGTGAATGGGACAATGCC
AGATATAACAGTTTGTGCCCATGACCACATCAGCTGGCATCTGCTGGGAATGAGCTCGGGGCCAGAATTATTCTC
CATTCATTTCAACGGCCAGGTCCTGGAGCAGAACCATCATAAGGTCTCAGCCATCACCCTTGTCAGTGCTACATC
CACTACCGCAAATATGACTGTGGGCCCAGAGGGAAAGTGGATCATATCTTCTCTCACCCCAAAACATTTGCAAGC
TGGGATGCAGGCTTACATTGACATTAAAAACTGCCCAAAGAAAACCAGGAATCTTAAGAAAATAACTCGTGAGCA
GAGGCGGCACATGAAGAGGTGGGAATACTTCATTGCTGCAGAGGAAGTCATTTGGGACTATGCACCTGTAATACC
AGCGAATATGGACAAAAAATACAGGTCTCAGCATTTGGATAATTTCTCAAACCAAATTGGAAAACATTATAAGAA
AGTTATGTACACACAGTACGAAGATGAGTCCTTCACCAAACATACAGTGAATCCCAATATGAAAGAAGATGGGAT
TTTGGGTCCTATTATCAGAGCCCAGGTCAGAGACACACTCAAAATCGTGTTCAAAAATATGGCCAGCCGCCCCTA
TAGCATTTACCCTCATGGAGTGACCTTCTCGCCTTATGAAGATGAAGTCAACTCTTCTTTCACCTCAGGCAGGAA
CAACACCATGATCAGAGCAGTTCAACCAGGGGAAACCTATACTTATAAGTGGAACATCTTAGAGTTTGATGAACC
CACAGAAAATGATGCCCAGTGCTTAACAAGACCATACTACAGTGACGTGGACATCATGAGAGACATCGCCTCTGG
GCTAATAGGACTACTTCTAATCTGTAAGAGCAGATCCCTGGACAGGCGAGGAATACAGAGGGCAGCAGACATCGA
ACAGCAGGCTGTGTTTGCTGTGTTTGATGAGAACAAAAGCTGGTACCTTGAGGACAACATCAACAAGTTTTGTGA
AAATCCTGATGAGGTGAAACGTGATGACCCCAAGTTTTATGAATCAAACATCATGAGCACTATCAATGGCTATGT
GCCTGAGAGCATAACTACTCTTGGATTCTGCTTTGATGACACTGTCCAGTGGCACTTCTGTAGTGTGGGGACCCA
GAATGAAATTTTGACCATCCACTTCACTGGGCACTCATTCATCTATGGAAAGAGGCATGAGGACACCTTGACCCT
CTTCCCCATGCGTGGAGAATCTGTGACGGTCACAATGGATAATGTTGGAACTTGGATGTTAACTTCCATGAATTC
TAGTCCAAGAAGCAAAAAGCTGAGGCTGAAATTCAGGGATGTTAAATGTATCCCAGATGATGATGAAGACTCATA
TGAGATTTTTGAACCTCCAGAATCTACAGTCATGGCTACACGGAAAATGCATGATCGTTTAGAACCTGAAGATGA
AGAGAGTGATGCTGACTATGATTACCAGAACAGACTGGCTGCAGCATTAGGAATTAGGTCATTCCGAAACTCATC
ATTGAACCAGGAAGAAGAAGAGTTCAATCTTACTGCCCTAGCTCTGGAGAATGGCACTGAATTCGTTTCTTCGAA
CACAGATATAATTGTTGGTTCAAATTATTCTTCCCCAAGTAATATTAGTAAGTTCACTGTCAATAACCTTGCAGA
ACCTCAGAAAGCCCCTTCTCACCAACAAGCCACCACAGCTGGTTCCCCACTGAGACACCTCATTGGCAAGAACTC
AGTTCTCAATTCTTCCACAGCAGAGCATTCCAGCCCATATTCTGAAGACCCTATAGAGGATCCTCTACAGCCAGA
TGTCACAGGGATACGTCTACTTTCACTTGGTGCTGGAGAATTCAGAAGTCAAGAACATGCTAAGCGTAAGGGACC
CAAGGTAGAAAGAGATCAAGCAGCAAAGCACAGGTTCTCCTGGATGAAATTACTAGCACATAAAGTTGGGAGACA
CCTAAGCCAAGACACTGGTTCTCCTTCCGGAATGAGGCCCTGGGAGGACCTTCCTAGCCAAGACACTGGTTCTCC
TTCCAGAATGAGGCCCTGGGAGGACCCTCCTAGTGATCTGTTACTCTTAAAACAAAGTAACTCATCTAAGATTTT
GGTTGGGAGATGGCATTTGGCTTCTGAGAAAGGTAGCTATGAAATAATCCAAGATACTGATGAAGACACAGCTGT
TAACAATTGGCTGATCAGCCCCCAGAATGCCTCACGTGCTTGGGGAGAAAGCACCCCTCTTGCCAACAAGCCTGG
AAAGCAGAGTGGCCACCCAAAGTTTCCTAGAGTTAGACATAAATCTCTACAAGTAAGACAGGATGGAGGAAAGAG
TAGACTGAAGAAAAGCCAGTTTCTCATTAAGACACGAAAAAAGAAAAAAGAGAAGCACACACACCATGCTCCTTT
ATCTCCGAGGACCTTTCACCCTCTAAGAAGTGAAGCCTACAACACATTTTCAGAAAGAAGACTTAAGCATTCGTT
GGTGCTTCATAAATCCAATGAAACATCTCTTCCCACAGACCTCAATCAGACATTGCCCTCTATGGATTTTGGCTG
GATAGCCTCACTTCCTGACCATAATCAGAATTCCTCAAATGACACTGGTCAGGCAAGCTGTCCTCCAGGTCTTTA
TCAGACAGTGCCCCCAGAGGAACACTATCAAACATTCCCCATTCAAGACCCTGATCAAATGCACTCTACTTCAGA
CCCCAGTCACAGATCCTCTTCTCCAGAGCTCAGTGAAATGCTTGAGTATGACCGAAGTCACAAGTCCTTCCCCAC

FIGURE 1412B

AGATATAAGTCAAATGTCCCCTTCCTCAGAACATGAAGTCTGGCAGACAGTCATCTCTCCAGACCTCAGCCAGGT
GACCCTCTCTCCAGAACTCAGCCAGACAAACCTCTCTCCAGACCTCAGCCACACGACTCTCTCTCCAGAACTCAT
TCAGAGAAACCTTTCCCCAGCCCTCGGTCAGATGCCCATTTCTCCAGACCTCAGCCATACAACCCTTTCTCCAGA
CCTCAGCCATACAACCCTTTCTTTAGACCTCAGCCAGACAAACCTCTCTCCAGAACTCAGTCAGACAAACCTTTC
TCCAGCCCTCGGTCAGATGCCCCTTTCTCCAGACCTCAGCCATACAACCATTTCTCTAGACTTCAGCCAGACAAA
CCTCTCTCCAGAACTCAGCCATATGACTCTCTCTCCAGAACTCAGTCAGACAAACCTTTCCCCAGCCCTCGGTCA
GATGCCCATTTCTCCAGACCTCAGCCATACAACCCTTTCTCTAGACTTCAGCCAGACAAACCTCTCTCCAGAACT
CAGTCAAACAAACCTTTCCCCAGCCCTCGGTCAGATGCCCCTTTCTCCAGACCCCAGCCATACAACCCTTTCTCT
AGACCTCAGCCAGACAAACCTCTCTCCAGAACTCAGTCAGACAAACCTTTCCCCAGACCTCAGTGAGATGCCCCT
CTTTGCAGATCTCAGTCAAATTCCCCTTACCCCAGACCTCGACCAGATGACACTTTCTCCAGACCTTGGTGAGAC
AGATCTTTCCCCAAACTTTGGTCAGATGTCCCTTTCCCCAGACCTCAGCCAGGTGACTCTCTCTCCAGACATCAG
TGACACCACCCTTCTCCCGGATCTCAGCCAGATATCACCTCCTCCAGACCTTGATCAGATATTCTACCCTTCTGA
ATCTAGTCAGTCATTGCTTCTTCAAGAATTTAATGAGTCTTTTCCTTATCCAGACCTTGGTCAGATGCCATCTCC
TTCATCTCCTACTCTCAATGATACTTTTCTATCAAAGGAATTTAATCCACTGGTTATAGTGGGCCTCAGTAAAGA
TGGTACAGATTACATTGAGATCATTCCAAAGGAAGAGGTCCAGAGCAGTGAAGATGACTATGCTGAAATTGATTA
TGTGCCCTATGATGACCCCTACAAAACTGATGTTAGGACAAACATCAACTCCTCCAGAGATCCTGACAACATTGC
AGCATGGTACCTCCGCAGCAACAATGGAAACAGAAGAAATTATTACATTGCTGCTGAAGAAATATCCTGGGATTA
TTCAGAATTTGTACAAAGGGAAACAGATATTGAAGACTCTGATGATATTCCAGAAGATACCACATATAAGAAAGT
AGTTTTTCGAAAGTACCTCGACAGCACTTTTACCAAACGTGATCCTCGAGGGGAGTATGAAGAGCATCTCGGAAT
TCTTGGTCCTATTATCAGAGCTGAAGTGGATGATGTTATCCAAGTTCGTTTTAAAAATTTAGCATCCAGACCGTA
TTCTCTACATGCCCATGGACTTTCCTATGAAAAATCATCAGAGGGAAAGACTTATGAAGATGACTCTCCTGAATG
GTTTAAGGAAGATAATGCTGTTCAGCCAAATAGCAGTTATACCTACGTATGGCATGCCACTGAGCGATCAGGGCC
AGAAAGTCCTGGCTCTGCCTGTCGGGCTTGGGCCTACTACTCAGCTGTGAACCCAGAAAAAGATATTCACTCAGG
CTTGATAGGTCCCCTCCTAATCTGCCAAAAAGGAATACTACATAAGGACAGCAACATGCCTGTGGACATGAGAGA
ATTTGTCTTACTATTTATGACCTTTGATGAAAAGAAGAGCTGGTACTATGAAAAGAAGTCCCGAAGTTCTTGGAG
ACTCACATCCTCAGAAATGAAAAAATCCCATGAGTTTCACGCCATTAATGGGATGATCTACAGCTTGCCTGGCCT
GAAAATGTATGAGCAAGAGTGGGTGAGGTTACACCTGCTGAACATAGGCGGCTCCCAAGACATTCACGTGGTTCA
CTTTCACGGCCAGACCTTGCTGGAAAATGGCAATAAACAGCACCAGTTAGGGGTCTGGCCCCTTCTGCCTGGTTC
ATTTAAAACTCTTGAAATGAAGGCATCAAAACCTGGCTGGTGGCTCCTAAACACAGAGGTTGGAGAAAACCAGAG
AGCAGGGATGCAAACGCCATTTCTTATCATGGACAGAGACTGTAGGATGCCAATGGGACTAAGCACTGGTATCAT
ATCTGATTCACAGATCAAGGCTTCAGAGTTTCTGGGTTACTGGGAGCCCAGATTAGCAAGATTAAACAATGGTGG
ATCTTATAATGCTTGGAGTGTAGAAAAACTTGCAGCAGAATTTGCCTCTAAACCTTGGATCCAGGTGGACATGCA
AAAGGAAGTCATAATCACAGGGATCCAGACCCAAGGTGCCAAACACTACCTGAAGTCCTGCTATACCACAGAGTT
CTATGTAGCTTACAGTTCCAACCAGATCAACTGGCAGATCTTCAAAGGGAACAGCACAAGGAATGTGATGTATTT
TAATGGCAATTCAGATGCCTCTACAATAAAAGAGAATCAGTTTGACCCACCTATTGTGGCTAGATATATTAGGAT
CTCTCCAACTCGAGCCTATAACAGACCTACCCTTCGATTGGAACTGCAAGGTTGTGAGGTAAATGGATGTTCCAC
ACCCCTGGGTATGGAAAATGGAAAGATAGAAAACAAGCAAATCACAGCTTCTTCGTTTAAGAAATCTTGGTGGGG
AGATTACTGGGAACCCTTCCGTGCCCGTCTGAATGCCCAGGGACGTGTGAATGCCTGGCAAGCCAAGGCAAACAA
CAATAAGCAGTGGCTAGAAATTGATCTACTCAAGATCAAGAAGATAACGGCAATTATAACACAGGGCTGCAAGTC
TCTGTCCTCTGAAATGTATGTAAAGAGCTATACCATCCACTACAGTGAGCAGGGAGTGGAATGGAAACCATACAG
GCTGAAATCCTCCATGGTGGACAAGATTTTTGAAGGAAATACTAATACCAAAGGACATGTGAAGAACTTTTTCAA
CCCCCCAATCATTTCCAGGTTTATCCGTGTCATTCCTAAAACATGGAATCAAAGTATTGCACTTCGCCTGGAACT
CTTTGGCTGTGATATTTACTAGAATTGAACATTCAAAAACCCCTGGAAGAGACTCTTTAAGACCTCAAACCATTT
AGAATGGGCAATGTATTTTACGCTGTGTTAAATGTTAACAGTTTTCCACTATTTCTCTTTCTTTTCTATTAGTGA
ATAAAATTTTATAC

FIGURE 1413

MFPGCPRLWVLVVLGTSWVGWGSQGTEAAQLRQFYVAAQGISWSYRPEPTNSSLNLSVTSFKKIVYREYEPYFKK
EKPQSTISGLLGPTLYAEVGDIIKVHFKNKADKPLSIHPQGIRYSKLSEGASYLDHTFPAEKMDDAVAPGREYTY
EWSISEDSGPTHDDPPCLTHIYYSHENLIEDFNSGLIGPLLICKKGTLTEGGTQKTFDKQIVLLFAVFDESKSWS
QSSSLMYTVNGYVNGTMPDITVCAHDHISWHLLGMSSGPELFSIHFNGQVLEQNHHKVSAITLVSATSTTANMTV
GPEGKWIISSLTPKHLQAGMQAYIDIKNCPKKTRNLKKITREQRRHMKRWEYFIAAEEVIWDYAPVIPANMDKKY
RSQHLDNFSNQIGKHYKKVMYTQYEDESFTKHTVNPNMKEDGILGPIIRAQVRDTLKIVFKNMASRPYSIYPHGV
TFSPYEDEVNSSFTSGRNNTMIRAVQPGETYTYKWNILEFDEPTENDAQCLTRPYYSDVDIMRDIASGLIGLLLI
CKSRSLDRRGIQRAADIEQQAVFAVFDENKSWYLEDNINKFCENPDEVKRDDPKFYESNIMSTINGYVPESITTL
GFCFDDTVQWHFCSVGTQNEILTIHFTGHSFIYGKRHEDTLTLFPMRGESVTVTMDNVGTWMLTSMNSSPRSKKL
RLKFRDVKCIPDDDEDSYEIFEPPESTVMATRKMHDRLEPEDEESDADYDYQNRLAAALGIRSFRNSSLNQEEEE
FNLTALALENGTEFVSSNTDIIVGSNYSSPSNISKFTVNNLAEPQKAPSHQQATTAGSPLRHLIGKNSVLNSSTA
EHSSPYSEDPIEDPLQPDVTGIRLLSLGAGEFRSQEHAKRKGPKVERDQAAKHRFSWMKLLAHKVGRHLSQDTGS
PSGMRPWEDLPSQDTGSPSRMRPWEDPPSDLLLLKQSNSSKILVGRWHLASEKGSYEIIQDTDEDTAVNNWLISP
QNASRAWGESTPLANKPGKQSGHPKFPRVRHKSLQVRQDGGKSRLKKSQFLIKTRKKKEKHTHHAPLSPRTFHP
LRSEAYNTFSERRLKHSLVLHKSNETSLPTDLNQTLPSMDFGWIASLPDHNQNSSNDTGQASCPPGLYQTVPPEE
HYQTFPIQDPDQMHSTSDPSHRSSSPELSEMLEYDRSHKSFPTDISQMSPSSEHEVWQTVISPDLSQVTLSPELS
QTNLSPDLSHTTLSPELIQRNLSPALGQMPISPDLSHTTLSPDLSHTTLSLDLSQTNLSPELSQTNLSPALGQMP
LSPDLSHTTISLDFSQTNLSPELSHMTLSPELSQTNLSPALGQMPISPDLSHTTLSLDFSQTNLSPELSQTNLSP
ALGQMPLSPDPSHTTLSLDLSQTNLSPELSQTNLSPDLSEMPLFADLSQIPLTPDLDQMTLSPDLGETDLSPNFG
QMSLSPDLSQVTLSPDISDTTLLPDLSQISPPPDLDQIFYPSESSQSLLLQEFNESFPYPDLGQMPSPSSPTLND
TFLSKEFNPLVIVGLSKDGTDYIEIIPKEEVQSSEDDYAEIDYVPYDDPYKTDVRTNINSSRDPDNIAAWYLRSN
NGNRRNYYIAAEEISWDYSEFVQRETDIEDSDDIPEDTTYKKVVFRKYLDSTFTKRDPRGEYEEHLGILGPIIRA
EVDDVIQVRFKNLASRPYSLHAHGLSYEKSSEGKTYEDDSPEWFKEDNAVQPNSSYTYVWHATERSGPESPGSAC
RAWAYYSAVNPEKDIHSGLIGPLLICQKGILHKDSNMPVDMREFVLLFMTFDEKKSWYYEKKSRSSWRLTSSEMK
KSHEFHAINGMIYSLPGLKMYEQEWVRLHLLNIGGSQDIHVVHFHGQTLLENGNKQHQLGVWPLLPGSFKTLEMK
ASKPGWWLLNTEVGENQRAGMQTPFLIMDRDCRMPMGLSTGIISDSQIKASEFLGYWEPRLARLNNGGSYNAWSV
EKLAAEFASKPWIQVDMQKEVIITGIQTQGAKHYLKSCYTTEFYVAYSSN

FIGURE 1414A

TCATTGCAGCTGGGACAGCCCGGAGTGTGGTTAGCAGCTCGGCAAGCGCTGCCCAGGTCCTGGGGTGGTGGCAGC
CAGCGGGAGCAGGAAAGGAAGC**ATG**TTCCCAGGCTGCCCACGCCTCTGGGTCCTGGTGGTCTTGGGCACCAGCTG
GGTAGGCTGGGGGAGCCAAGGGACAGAAGCGGCACAGCTAAGGCAGTTCTACGTGGCTGCTCAGGGCATCAGTTG
GAGCTACCGACCTGAGCCCACAAACTCAAGTTTGAATCTTTCTGTAACTTCCTTTAAGAAAATTGTCTACAGAGA
GTATGAACCATATTTTAAGAAAGAAAAACCACAATCTACCATTTCAGGACTTCTTGGGCCTACTTTATATGCTGA
AGTCGGAGACATCATAAAAGTTCACTTTAAAAATAAGGCAGATAAGCCCTTGAGCATCCATCCTCAAGGAATTAG
GTACAGTAAATTATCAGAAGGTGCTTCTTACCTTGACCACACATTCCCTGCAGAGAAGATGGACGACGCTGTGGC
TCCAGGCCGAGAATACACCTATGAATGGAGTATCAGTGAGGACAGTGGACCCACCCATGATGACCCTCCATGCCT
CACACACATCTATTACTCCCATGAAAATCTGATCGAGGATTTCAACTCTGGGCTGATTGGGCCCCTGCTTATCTG
TAAAAAAGGGACCCTAACTGAGGGTGGGACACAGAAGACGTTTGACAAGCAAATCGTGCTACTATTTGCTGTGTT
TGATGAAAGCAAGAGCTGGAGCCAGTCATCATCCCTAATGTACACAGTCAATGGATATGTGAATGGGACAATGCC
AGATATAACAGTTTGTGCCCATGACCACATCAGCTGGCATCTGCTGGGAATGAGCTCGGGGCCAGAATTATTCTC
CATTCATTTCAACGGCCAGGTCCTGGAGCAGAACCATCATAAGGTCTCAGCCATCACCCTTGTCAGTGCTACATC
CACTACCGCAAATATGACTGTGGGCCCAGAGGGAAAGTGGATCATATCTTCTCTCACCCCAAAACATTTGCAAGC
TGGGATGCAGGCTTACATTGACATTAAAAACTGCCCAAAGAAAACCAGGAATCTTAAGAAAATAACTCGTGAGCA
GAGGCGGCACATGAAGAGGTGGGAATACTTCATTGCTGCAGAGGAAGTCATTTGGGACTATGCACCTGTAATACC
AGCGAATATGGACAAAAAATACAGGTCTCAGCATTTGGATAATTTCTCAAACCAAATTGGAAAACATTATAAGAA
AGTTATGTACACACAGTACGAAGATGAGTCCTTCACCAAACATACAGTGAATCCCAATATGAAAGAAGATGGGAT
TTTGGGTCCTATTATCAGAGCCCAGGTCAGAGACACACTCAAAATCGTGTTCAAAAATATGGCCAGCCGCCCCTA
TAGCATTTACCCTCATGGAGTGACCTTCTCGCCTTATGAAGATGAAGTCAACTCTTCTTTCACCTCAGGCAGGAA
CAACACCATGATCAGAGCAGTTCAACCAGGGGAAACCTATACTTATAAGTGGAACATCTTAGAGTTTGATGAACC
CACAGAAAATGATGCCCAGTGCTTAACAAGACCATACTACAGTGACGTGGACATCATGAGAGACATCGCCTCTGG
GCTAATAGGACTACTTCTAATCTGTAAGAGCAGATCCCTGGACAGGCGAGGAATACAGAGGGCAGCAGACATCGA
ACAGCAGGCTGTGTTTGCTGTGTTTGATGAGAACAAAAGCTGGTACCTTGAGGACAACATCAACAAGTTTTGTGA
AAATCCTGATGAGGTGAAACGTGATGACCCCAAGTTTTATGAATCAAACATCATGAGCACTATCAATGGCTATGT
GCCTGAGAGCATAACTACTCTTGGATTCTGCTTTGATGACACTGTCCAGTGGCACTTCTGTAGTGTGGGGACCCA
GAATGAAATTTTGACCATCCACTTCACTGGGCACTCATTCATCTATGGAAAGAGGCATGAGGACACCTTGACCCT
CTTCCCCATGCGTGGAGAATCTGTGACGGTCACAATGGATAATGTTGGAACTTGGATGTTAACTTCCATGAATTC
TAGTCCAAGAAGCAAAAAGCTGAGGCTGAAATTCAGGGATGTTAAATGTATCCCAGATGATGATGAAGACTCATA
TGAGATTTTTGAACCTCCAGAATCTACAGTCATGGCTACACGGAAAATGCATGATCGTTTAGAACCTGAAGATGA
AGAGAGTGATGCTGACTATGATTACCAGAACAGACTGGCTGCAGCATTAGGAATTAGGTCATTCCGAAACTCATC
ATTGAACCAGGAAGAAGAAGAGTTCAATCTTACTGCCCTAGCTCTGGAGAATGGCACTGAATTCGTTTCTTCGAA
CACAGATATAATTGTTGGTTCAAATTATTCTTCCCCAAGTAATATTAGTAAGTTCACTGTCAATAACCTTGCAGA
ACCTCAGAAAGCCCCTTCTCACCAACAAGCCACCACAGCTGGTTCCCCACTGAGACACCTCATTGGCAAGAACTC
AGTTCTCAATTCTTCCACAGCAGAGCATTCCAGCCCATATTCTGAAGACCCTATAGAGGATCCTCTACAGCCAGA
TGTCACAGGGATACGTCTACTTTCACTTGGTGCTGGAGAATTCAGAAGTCAAGAACATGCTAAGCGTAAGGGACC
CAAGGTAGAAAGAGATCAAGCAGCAAAGCACAGGTTCTCCTGGATGAAATTACTAGCACATAAAGTTGGGAGACA
CCTAAGCCAAGACACTGGTTCTCCTTCCGGAATGAGGCCCTGGGAGGACCTTCCTAGCCAAGACACTGGTTCTCC
TTCCAGAATGAGGCCCTGGGAGGACCCTCCTAGTGATCTGTTACTCTTAAAACAAAGTAACTCATCTAAGATTTT
GGTTGGGAGATGGCATTTGGCTTCTGAGAAAGGTAGCTATGAAATAATCCAAGATACTGATGAAGACACAGCTGT
TAACAATTGGCTGATCAGCCCCCAGAATGCCTCACGTGCTTGGGGAGAAAGCACCCCTCTTGCCAACAAGCCTGG
AAAGCAGAGTGGCCACCCAAAGTTTCCTAGAGTTAGACATAAATCTCTACAAGTAAGACAGGATGGAGGAAAGAG
TAGACTGAAGAAAAGCCAGTTTCTCATTAAGACACGAAAAAAGAAAAAAGAGAAGCACACACACCATGCTCCTTT
ATCTCCGAGGACCTTTCACCCTCTAAGAAGTGAAGCCTACAACACATTTTCAGAAAGAAGACTTAAGCATTCGTT
GGTGCTTCATAAATCCAATGAAACATCTCTTCCCACAGACCTCAATCAGACATTGCCCTCTATGGATTTTGGCTG
GATAGCCTCACTTCCTGACCATAATCAGAATTCCTCAAATGACACTGGTCAGGCAAGCTGTCCTCCAGGTCTTTA
TCAGACAGTGCCCCCAGAGGAACACTATCAAACATTCCCCATTCAAGACCCTGATCAAATGCACTCTACTTCAGA
CCCCAGTCACAGATCCTCTTCTCCAGAGCTCAGTGAAATGCTTGAGTATGACCGAAGTCACAAGTCCTTCCCCAC

FIGURE 1414B

AGATATAAGTCAAATGTCCCCTTCCTCAGAACATGAAGTCTGGCAGACAGTCATCTCTCCAGACCTCAGCCAGGT
GACCCTCTCTCCAGAACTCAGCCAGACAAACCTCTCTCCAGACCTCAGCCACACGACTCTCTCTCCAGAACTCAT
TCAGAGAAACCTTTCCCCAGCCCTCGGTCAGATGCCCATTTCTCCAGACCTCAGCCATACAACCCTTTCTCCAGA
CCTCAGCCATACAACCCTTTCTTTAGACCTCAGCCAGACAAACCTCTCTCCAGAACTCAGTCAGACAAACCTTTC
TCCAGCCCTCGGTCAGATGCCCCTTTCTCCAGACCTCAGCCATACAACCATTTCTCTAGACTTCAGCCAGACAAA
CCTCTCTCCAGAACTCAGCCATATGACTCTCTCTCCAGAACTCAGTCAGACAAACCTTTCCCCAGCCCTCGGTCA
GATGCCCATTTCTCCAGACCTCAGCCATACAACCCTTTCTCTAGACTTCAGCCAGACAAACCTCTCTCCAGAACT
CAGTCAAACAAACCTTTCCCCAGCCCTCGGTCAGATGCCCCTTTCTCCAGACCCCAGCCATACAACCCTTTCTCT
AGACCTCAGCCAGACAAACCTCTCTCCAGAACTCAGTCAGACAAACCTTTCCCCAGACCTCAGTGAGATGCCCCT
CTTTGCAGATCTCAGTCAAATTCCCCTTACCCCAGACCTCGACCAGATGACACTTTCTCCAGACCTTGGTGAGAC
AGATCTTTCCCCAAACTTTGGTCAGATGTCCCTTTCCCCAGACCTCAGCCAGGTGACTCTCTCTCCAGACATCAG
TGACACCACCCTTCTCCCGGATCTCAGCCAGATATCACCTCCTCCAGACCTTGATCAGATATTCTACCCTTCTGA
ATCTAGTCAGTCATTGCTTCTTCAAGAATTTAATGAGTCTTTTCCTTATCCAGACCTTGGTCAGATGCCATCTCC
TTCATCTCCTACTCTCAATGATACTTTTCTATCAAAGGAATTTAATCCACTGGTTATAGTGGGCCTCAGTAAAGA
TGGTACAGATTACATTGAGATCATTCCAAAGGAAGAGGTCCAGAGCAGTGAAGATGACTATGCTGAAATTGATTA
TGTGCCCTATGATGACCCCTACAAAACTGATGTTAGGACAAACATCAACTCCTCCAGAGATCCTGACAACATTGC
AGCATGGTACCTCCGCAGCAACAATGGAAACAGAAGAAATTATTACATTGCTGCTGAAGAAATATCCTGGGATTA
TTCAGAATTTGTACAAAGGGAAACAGATATTGAAGACTCTGATGATATTCCAGAAGATACCACATATAAGAAAGT
AGTTTTTCGAAAGTACCTCGACAGCACTTTTACCAAACGTGATCCTCGAGGGGAGTATGAAGAGCATCTCGGAAT
TCTTGGTCCTATTATCAGAGCTGAAGTGGATGATGTTATCCAAGTTCGTTTTAAAAATTTAGCATCCAGACCGTA
TTCTCTACATGCCCATGGACTTTCCTATGAAAAATCATCAGAGGGAAAGACTTATGAAGATGACTCTCCTGAATG
GTTTAAGGAAGATAATGCTGTTCAGCCAAATAGCAGTTATACCTACGTATGGCATGCCACTGAGCGATCAGGGCC
AGAAAGTCCTGGCTCTGCCTGTCGGGCTTGGGCCTACTACTCAGCTGTGAACCCAGAAAAAGATATTCACTCAGG
CTTGATAGGTCCCCTCCTAATCTGCCAAAAAGGAATACTACATAAGGACAGCAACATGCCTGTGGACATGAGAGA
ATTTGTCTTACTATTTATGACCTTTGATGAAAAGAAGAGCTGGTACTATGAAAAGAAGTCCCGAAGTTCTTGGAG
ACTCACATCCTCAGAAATGAAAAAATCCCATGAGTTTCACGCCATTAATGGGATGATCTACAGCTTGCCTGGCCT
GAAAATGTATGAGCAAGAGTGGGTGAGGTTACACCTGCTGAACATAGGCGGCTCCCAAGACATTCACGTGGTTCA
CTTTCACGGCCAGACCTTGCTGGAAAATGGCAATAAACAGCACCAGTTAGGGGTCTGGCCCCTTCTGCCTGGTTC
ATTTAAAACTCTTGAAATGAAGGCATCAAAACCTGGCTGGTGGCTCCTAAACACAGAGGTTGGAGAAAACCAGAG
AGCAGGGATGCAAACGCCATTTCTTATCATGGACAGAGACTGTAGGATGCCAATGGGACTAAGCACTGGTATCAT
ATCTGATTCACAGATCAAGGCTTCAGAGTTTCTGGGTTACTGGGAGCCCAGATTAGCAAGATTAAACAATGGTGG
ATCTTATAATGCTTGGAGTGTAGAAAAACTTGCAGCAGAATTTGCCTCTAAACCTTGGATCCAGGTGGACATGCA
AAAGGAAGTCATAATCACAGGGATCCAGACCCAAGGTGCCAAACACTACCTGAAGTCCTGCTATACCACAGAGTT
CTATGTAGCTTACAGTTCCAACCAGATCAACTGGCAGATCTTCAAAGGGAACAGCACAAGGAATGTGATGTATTT
TAATGGCAATTCAGATGCCTCTACAATAAAAGAGAATCAGTTTGACCCACCTATTGTGGCTAGATATATTAGGAT
CTCTCCAACTCGAGCCTATAACAGACCTACCCTTCGATTGGAACTGCAAGGTTGTGAGGTAAATGGATGTTCCAC
ACCCCTGGGTATGGAAAATGGAAAGATAGAAAACAAGCAAATCACAGCTTCTTCGTTTAAGAAATCTTGGTGGGG
AGATTACTGGGAACCCTTCCGTGCCCGTCTGAATGCCCAGGGACGTGTGAATGCCTGGCAAGCCAAGGCAAACAA
CAATAAGCAGTGGCTAGAAATTGATCTACTCAAGATCAAGAAGATAACGGCAATTATAACACAGGGCTGCAAGTC
TCTGTCCTCTGAAATGTATGTAAAGAGCTATACCATCCACTACAGTGAGCAGGGAGTGGAATGGAAACCATACAG
GCTGAAATCCTCCATGGTGGACAAGATTTTTGAAGGAAATACTAATACCAAAGGACATGTGAAGAACTTTTTCAA
CCCCCCAATCATTTCCAGGTTTATCCGTGTCATTCCTAAAACATGGAATCAAAGTATTGCACTTCGCCTGGAACT
CTTTGGCTGTGATATTTACTAGAATTGAACATTCAAAAACCCCTGGAAGAGACTCTTTAAGACCTCAAACCATTT
AGAATGGGCAATGTATTTTACGCTGTGTTAAATGTTAACAGTTTTCCACTATTTCTCTTTCTTTTCTATTAGTGA
ATAAAATTTTATAC

FIGURE 1415

MFPGCPRLWVLVVLGTSWVGWGSQGTEAAQLRQFYVAAQGISWSYRPEPTNSSLNLSVTSFKKIVYREYEPYFKK
EKPQSTISGLLGPTLYAEVGDIIKVHFKNKADKPLSIHPQGIRYSKLSEGASYLDHTFPAEKMDDAVAPGREYTY
EWSISEDSGPTHDDPPCLTHIYYSHENLIEDFNSGLIGPLLICKKGTLTEGGTQKTFDKQIVLLFAVFDESKSWS
QSSSLMYTVNGYVNGTMPDITVCAHDHISWHLLGMSSGPELFSIHFNGQVLEQNHHKVSAITLVSATSTTANMTV
GPEGKWIISSLTPKHLQAGMQAYIDIKNCPKKTRNLKKITREQRRHMKRWEYFIAAEEVIWDYAPVIPANMDKKY
RSQHLDNFSNQIGKHYKKVMYTQYEDESFTKHTVNPNMKEDGILGPIIRAQVRDTLKIVFKNMASRPYSIYPHGV
TFSPYEDEVNSSFTSGRNNTMIRAVQPGETYTYKWNILEFDEPTENDAQCLTRPYYSDVDIMRDIASGLIGLLLI
CKSRSLDRRGIQRAADIEQQAVFAVFDENKSWYLEDNINKFCENPDEVKRDDPKFYESNIMSTINGYVPESITTL
GFCFDDTVQWHFCSVGTQNEILTIHFTGHSFIYGKRHEDTLTLFPMRGESVTVTMDNVGTWMLTSMNSSPRSKKL
RLKFRDVKCIPDDDEDSYEIFEPPESTVMATRKMHDRLEPEDEESDADYDYQNRLAAALGIRSFRNSSLNQEEEE
FNLTALALENGTEFVSSNTDIIVGSNYSSPSNISKFTVNNLAEPQKAPSHQQATTAGSPLRHLIGKNSVLNSSTA
EHSSPYSEDPIEDPLQPDVTGIRLLSLGAGEFRSQEHAKRKGPKVERDQAAKHRFSWMKLLAHKVGRHLSQDTGS
PSGMRPWEDLPSQDTGSPSRMRPWEDPPSDLLLLKQSNSSKILVGRWHLASEKGSYEIIQDTDEDTAVNNWLISP
QNASRAWGESTPLANKPGKQSGHPKFPRVRHKSLQVRQDGGKSRLKKSQFLIKTRKKKEKHTHHAPLSPRTFHP
LRSEAYNTFSERRLKHSLVLHKSNETSLPTDLNQTLPSMDFGWIASLPDHNQNSSNDTGQASCPPGLYQTVPPEE
HYQTFPIQDPDQMHSTSDPSHRSSSPELSEMLEYDRSHKSFPTDISQMSPSSEHEVWQTVISPDLSQVTLSPELS
QTNLSPDLSHTTLSPELIQRNLSPALGQMPISPDLSHTTLSPDLSHTTLSLDLSQTNLSPELSQTNLSPALGQMP
LSPDLSHTTISLDFSQTNLSPELSHMTLSPELSQTNLSPALGQMPISPDLSHTTLSLDFSQTNLSPELSQTNLSP
ALGQMPLSPDPSHTTLSLDLSQTNLSPELSQTNLSPDLSEMPLFADLSQIPLTPDLDQMTLSPDLGETDLSPNFG
QMSLSPDLSQVTLSPDISDTTLLPDLSQISPPPDLDQIFYPSESSQSLLLQEFNESFPYPDLGQMPSPSSPTLND
TFLSKEFNPLVIVGLSKDGTDYIEIIPKEEVQSSEDDYAEIDYVPYDDPYKTDVRTNINSSRDPDNIAAWYLRSN
NGNRRNYYIAAEEISWDYSEFVQRETDIEDSDDIPEDTTYKKVVFRKYLDSTFTKRDPRGEYEEHLGILGPIIRA
EVDDVIQVRFKNLASRPYSLHAHGLSYEKSSEGKTYEDDSPEWFKEDNAVQPNSSYTYVWHATERSGPESPGSAC
RAWAYYSAVNPEKDIHSGLIGPLLICQKGILHKDSNMPVDMREFVLLFMTFDEKKSWYYEKKSRSSWRLTSSEMK
KSHEFHAINGMIYSLPGLKMYEQEWVRLHLLNIGGSQDIHVVHFHGQTLLENGNKQHQLGVWPLLPGSFKTLEMK
ASKPGWWLLNTEVGENQRAGMQTPFLIMDRDCRMPMGLSTGIISDSQIKASEFLGYWEPRLARLNNGGSYNAWSV
EKLAAEFASKPWIQVDMQKEVIITGIQTQGAKHYLKSCYTTEFYVAYSSNQINWQIFKGNSTRNVMYFNGNSDAS
TIKENQFDPPIVARYIRISPTRAYNRPTLRLELQGCEVNGCSTPLGMENGKIENKQITASSFKKSWWGDYWEPFR
ARLNAQGRVNAWQAKANNNKQWLEIDLLKIKKITAIITQGCKSLSSEMYVKSYTIHYSEQGVEWKPYRLKSSMVD
KIFEGNTNTKGHVKNFFNPPIISRFIRVIPKTWNQSIALRLELFGCDIY

FIGURE 1416A

CGGAGGGGGCGGGCCGGGCTGCGTTCGCTCCAGCCGCGGCTCTACAGCAGCGGGCGGCGGGACCCGGGACCCAGC
TTGGCGACGGCGATTCTCGACGCGGGCCCCCAGGATTCTCCCGGCGCCCCACCTCTGGAGCAGCCCCTGCCGCCA
GCGTCAGGTCCACCCCGGAATCCCAGGGACTCTCGGCGCCGAACGGACCCGGGCCGGTGCAACGGGGTCCCCGGA
CTGGAGAAGACGCGGGTGGCACCGTGCGAGCTCCAGGAGCCCCGGGTCCACTGCGAGGCCTCGGGGGGCGCAGAC
CTGCAGAGACTGCGGCCAACGGGAAGAAATAAAGGGATTATAGTCCACCCAATTCACAGACTTCTGAGACTCAGA
CACGAGGAGAGATAGAGAACCGCCAATCTCTAGATCAACAAGCAAAGGAGGTGCCAAGCCTGTTTGTCTTCATTG
TGACACTGGAGTCTAGATGCTGGGAAGTCCAAGATCAGGGTGCCGGCATGGTCAGTTCCTGGCGAAGCCTCTCTT
CTAGGTTTCAGACTGCCCTCTTCTTTGTTGTGTCCTCGAATGGCAGAAAAAGGGGTGGCTGTTGGAGGAAGGGAG
GAGAGTAAATGAAGAGAAAGAACTGGAATAACCCCTTGCAGAAAAAAAAAAAAAGGGAAGCTTAGCTGTACACCC
TGAGTCTTGCAAAAGCTGCAGCCCCACCCAGGAGCAGGGTGGTGGCTGGGGCGATGGTGGACGCCCTGAAGATGT
CCCATGGCTACTGAAGGGGCTGCCCAGTTAGGGAACAGAGTGGCGGGC**ATG**GTGTGTAGCCTATGGGTGCTGCTC
CTGGTGTCTTCAGTTCTGGCTCTGGAAGAGGTATTGCTGGACACCACCGGAGAGACATCTGAGATTGGCTGGCTC
ACCTACCCACCAGGGGGGTGGGACGAGGTGAGTGTTCTGGACGACCAGCGACGCCTGACTCGGACCTTTGAGGCA
TGTCATGTGGCAGGGGCCCCTCCAGGCACCGGGCAGGACAATTGGTTGCAGACACACTTTGTGGAGCGGCGCGGG
GCCCAGAGGGCGCACATTCGACTCCACTTCTCTGTGCGGGCATGCTCCAGCCTGGGTGTGAGCGGCGGCACCTGC
CGGGAGACCTTCACCCTTTACTACCGTCAGGCTGAGGAGCCCGACAGCCCTGACAGCGTTTCCTCCTGGCACCTC
AAACGCTGGACCAAGGTGGACACAATTGCAGCAGACGAGAGCTTTCCCTCCTCCTCCTCCTCCTCCTCCTCTTCT
TCCTCTGCAGCGTGGGCTGTGGGACCCCACGGGGCTGGGCAGCGGGCTGGACTGCAACTGAACGTCAAAGAGCGG
AGCTTTGGGCCTCTCACCCAACGCGGCTTCTACGTGGCCTTCCAGGACACGGGGGCCTGCCTGGCCCTGGTCGCT
GTCAGGCTCTTCTCCTACACCTGCCCTGCCGTGCTCCGATCCTTTGCTTCCTTTCCAGAGACGCAGGCCAGTGGG
GCTGGGGGGGCCTCCCTGGTGGCAGCTGTGGGCACCTGTGTGGCTCATGCAGAGCCAGAGGAGGATGGAGTAGGG
GGCCAGGCAGGAGGCAGCCCCCCCAGGCTGCACTGCAACGGGGAGGGCAAGTGGATGGTAGCTGTCGGGGGCTGC
CGCTGCCAGCCTGGATACCAACCAGCACGAGGAGACAAGGCCTGCCAAGCCTGCCCACGGGGGCTCTATAAGTCT
TCTGCTGGGAATGCTCCCTGCTCACCATGCCCTGCCCGCAGTCACGCTCCCAACCCAGCAGCCCCCGTTTGCCCC
TGCCTGGAGGGCTTCTACCGGGCCAGTTCCGACCCACCAGAGGCCCCCTGCACTGGTCCTCCATCGGCTCCCCAG
GAGCTTTGGTTTGAGGTGCAAGGCTCAGCACTCATGCTACACTGGCGCCTGCCTCGGGAGCTGGGGGGTCGAGGG
GACCTGCTCTTCAATGTCGTGTGCAAGGAGTGTGAAGGCCGCCAGGAACCTGCCAGCGGTGGTGGGGGCACTTGT
CACCGCTGCAGGGATGAGGTCCACTTCGACCCTCGCCAGAGAGGCCTGACTGAGAGCCGAGTGTTAGTGGGGGGA
CTCCGGGCACACGTACCCTACATCTTAGAGGTGCAGGCTGTTAATGGGGTGTCTGAGCTCAGCCCTGACCCTCCT
CAGGCTGCAGCCATCAATGTCAGCACCAGCCATGAAGTGCCCTCTGCTGTCCCTGTGGTGCACCAGGTGAGCCGG
GCATCCAACAGCATCACGGTGTCCTGGCCGCAGCCCGACCAGACCAATGGGAACATCCTGGACTATCAGCTCCGC
TACTATGACCAGGCAGAAGACGAATCCCACTCCTTCACCCTGACCAGCGAGACCAACACTGCCACCGTGACACAG
CTGAGCCCTGGCCACATCTATGGTTTCCAGGTGCGGGCCCGGACTGCTGCCGGCCACGGCCCCTACGGGGGCAAA
GTCTATTTCCAGACACTTCCTCAAGGGGAGCTGTCTTCCCAGCTTCCGGAAAGACTCTCCTTGGTGATCGGCTCC
ATCCTGGGGGCTTTGGCCTTCCTCCTGCTGGCAGCCATCACCGTGCTGGCGGTCGTCTTCCAGCGGAAGCGGCGT
GGGACTGGCTACACGGAGCAGCTGCAGCAATACAGCAGCCCAGGACTCGGGGTGAAGTATTACATCGACCCCTCC
ACCTACGAGGACCCCTGTCAGGCCATCCGAGAACTTGCCCGGGAAGTCGATCCTGCTTATATCAAGATTGAGGAG
GTCATTGGGACAGGCTCTTTTGGAGAAGTGCGCCAGGGCCGCCTGCAGCCACGGGGACGGAGGGAGCAGACTGTG
GCCATCCAGGCCCTGTGGGCCGGGGGCGCCGAAAGCCTGCAGATGACCTTCCTGGGCCGGGCCGCAGTGCTGGGT
CAGTTCCAGCACCCCAACATCCTGCGGCTGGAGGGCGTGGTCACCAAGAGCCGACCCCTCATGGTGCTGACGGAG
TTCATGGAGCTTGGCCCCCTGGACAGCTTCCTCAGGCAGCGGGAGGGCCAGTTCAGCAGCCTGCAGCTGGTGGCC
ATGCAGCGGGGAGTGGCTGCTGCCATGCAGTACCTGTCCAGCTTTGCCTTCGTCCATCGCTCGCTGTCTGCCCAC
AGCGTGCTGGTGAATAGCCACTTGGTGTGCAAGGTGGCCCGTCTTGGCCACAGTCCTCAGGGCCCAAGTTGTTTG
CTTCGCTGGGCAGCCCCAGAGGTCATTGCACATGGAAAGCATACAACATCCAGTGATGTCTGGAGCTTTGGGATA
CTCATGTGGGAAGTGATGAGTTATGGAGAACGGCCTTACTGGGACATGAGTGAGCAGGAGGTACTAAATGCAATA
GAGCAGGAGTTCCGGCTGCCCCCGCCTCCAGGCTGTCCTCCTGGATTACATCTACTTATGTTGGACACTTGGCAG
AAGGACCGTGCCCGGCGGCCTCATTTTGACCAGCTGGTGGCTGCATTTGACAAGATGATCCGCAAGCCAGATACC
CTGCAGGCTGGCGGGGACCCAGGGGAAAGGCCTTCCCAGGCCCTTCTGACCCCTGTGGCCCTGGACTTTCCTTGT

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FIGURE 1416B

CTGGACTCACCCCAGGCCTGGCTTTCAGCCATTGGACTGGAGTGCTACCAGGACAACTTCTCCAAGTTTGGCCTC
TGTACCTTCAGTGATGTGGCTCAGCTCAGCCTAGAAGACCTGCCTGCCCTGGGCATCACCCTGGCTGGCCACCAG
AAGAAGCTGCTGCACCACATCCAGCTCCTTCAGCAACACCTGAGGCAGCAGGGCTCAGTGGAGGTCTGAGAATGA
CGATACCCGTGACTCAGCCCTGGACACTGGTCCGAGAAGGGACATGTGGGACGTGAGCCGGGCTCCAACAGCCTC
TGTGAGAGATGCCCCACACCAAACCCAACCCTCCCGATGGCTGCATTCCCTGGTCCTCCGCCTCTCCACCAGCCC
CCTCCTCATTAAAGGGAAAGAAGGGAATTTGCAAA

FIGURE 1417

MVCSLWVLLLVSSVLALEEVLLDTTGETSEIGWLTYPPGGWDEVSVLDDQRRLTRTFEACHVAGAPPGTGQDNWL
QTHFVERRGAQRAHIRLHFSVRACSSLGVSGGTCRETFTLYYRQAEEPDSPDSVSSWHLKRWTKVDTIAADESFP
SSSSSSSSSSAAWAVGPHGAGQRAGLQLNVKERSFGPLTQRGFYVAFQDTGACLALVAVRLFSYTCPAVLRSFA
SFPETQASGAGGASLVAAVGTCVAHAEPEEDGVGGQAGGSPPRLHCNGEGKWMVAVGGCRCQPGYQPARGDKACQ
ACPRGLYKSSAGNAPCSPCPARSHAPNPAAPVCPCLEGFYRASSDPPEAPCTGPPSAPQELWFEVQGSALMLHWR
LPRELGGRGDLLFNVVCKECEGRQEPASGGGGTCHRCRDEVHFDPRQRGLTESRVLVGGLRAHVPYILEVQAVNG
VSELSPDPPQAAAINVSTSHEVPSAVPVVHQVSRASNSITVSWPQPDQTNGNILDYQLRYYDQAEDESHSFTLTS
ETNTATVTQLSPGHIYGFQVRARTAAGHGPYGGKVYFQTLPQGELSSQLPERLSLVIGSILGALAFLLLAAITVL
AVVFQRKRRGTGYTEQLQQYSSPGLGVKYYIDPSTYEDPCQAIRELAREVDPAYIKIEEVIGTGSFGEVRQGRLQ
PRGRREQTVAIQALWAGGAESLQMTFLGRAAVLGQFQHPNILRLEGVVTKSRPLMVLTEFMELGPLDSFLRQREG
QFSSLQLVAMQRGVAAAMQYLSSFAFVHRSLSAHSVLVNSHLVCKVARLGHSPQGPSCLLRWAAPEVIAHGKHTT
SSDVWSFGILMWEVMSYGERPYWDMSEQEVLNAIEQEFRLPPPPGCPPGLHLLMLDTWQKDRARRPHFDQLVAAF
DKMIRKPDTLQAGGDPGERPSQALLTPVALDFPCLDSPQAWLSAIGLECYQDNFSKFGLCTFSDVAQLSLEDLPA
LGITLAGHQKKLLHHIQLLQQHLRQQGSVEV

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FIGURE 1418A

GAATTCGGCACGAGGTCACCCGGATAGGTAAAGGAAAACATGCCTGCCACACGGAAGCCAATGAGATATGGGCAT
ACAGAGGGACACACGGAGGTCTGTTTTGATGATTCTGGGAGTTTTATTGTGACTTGTGGAAGTGATGGTGATGTG
AGGATTTGGGAAGACTTGGATGATGATGATCCTAAGTTCATTAATGTTGGAGAAAAGGCATATTCATGTGCTTTG
AAGAGTGGAAAACTGGTCACTGCAGTTTCTAATAATACTATTCAAGTCCACACATTTCCTGAAGGAGTTCCAGAT
GGTATATTGACTCGCTTCACTACAAATGCAAACCATGTGGTCTTTAATGGGGATGGTACTAAAATTGCTGCTGGA
TCTAGTGATTTTCTAGTCAAAATTGTGGATGTGATGGATAGCAGCCAACAGAAAACATTTCGAGGACATGATGCC
CCTGTTTTAAGTCTTTCCTTTGATCCTAAGGACATCTTTCTGGCATCAGCTAGTTGTGATGGATCTGTCAGAGTG
TGGCAAATTTCAGATCAGACATGTGCTATTAGTTGGCCACTGCTACAAAAATGCAACGATGTGATAAATGCAAAA
TCAATCTGCAGACTTGCTTGGCAGCCAAAAAGTGGGAAGTTACTGGCAATTCCTGTGGAAAAATCTGTTAAGCTA
TATAGAAGAGAATCTTGGAGTCATCAATTTGATCTTTCAGATAATTTCATCTCTCAGACCCTCAATATAGTAACC
TGGTCTCCCTGTGGGCAATATTTAGCTGCAGGTAGTATTAATGGTCTAATCATAGTTTGGAATGTGGAAACCAAA
GACTGCATGGAAAGGGTGAAACATGAGAAAGGTTATGCAATTTGTGGTCTGGCATGGCATCCTACTTGTGGTCGA
ATATCGTATACTGATGCGGAAGGAAATCTAGGGCTTCTAGAGAATGTTTGTGACCCCAGTGGAAAGACATCAAGC
AGTAAGGTATCTAGCAGAGTGGAAAAGGATTATAATGATCTTTTTGATGGAGATGATATGAGTAATGCTGGTGAT
TTTCTAAATGACAATGCAGTTGAGATCCCTTCTTTTTCAAAAGGGATTATAAATGATGATGAGGATGATGAAGAC
CTCATGATGGCTTCAGGTCGTCCTAGACAGCGAAGTCACATCCTAGAAGATGATGAAAACTCAGTTGATATTTCA
ATGCTAAAAACTGGTTCTAGTCTTCTCAAAGAGGAGGAGGAAGATGGTCAAGAAGGCAGCATTCACAATCTACCA
CTTGTAACATCCCAAAGGCCATTTTATGATGGACCCATGCCAACTCCCCGGCAAAAGCCATTTCAGTCAGGTTCT
ACACCGTTGCATCTCACTCACAGATTCATGGTGTGGAACTCTATTGGAATTATTCGCTGCTATAATGATGAGCAA
GACAATGCCATAGATGTGGAGTTCCATGATACCTCCATACACCATGCAACACACTTATCAAACACTTTGAATTAT
ACAATAGCAGATCTTTCCCACGAAGCTATTTTGTTGGCATGTGAAAGCACTGATGAACTAGCAAGCAAGCTTCAC
TGCCTGCACTTTAGTTCTTGGGATTCAAGCAAAGAGTGGATAATAGACTTGCCTCAGAATGAGGATATTGAAGCC
ATATGTCTCGGTCAAGGATGGGCTGCTGCCGCTACTAGTGCCCTGCTTCTTCGATTGTTTACTATTGGAGGGGTT
CAAAAAGAGGTATTCAGCCTTGCTGGACCTGTGGTGTCAATGGCAGGACATGGAGAACAGCTTTTCATTGTTTAT
CACAGAGGTACAGGATTTGATGGGGATCAGTGCCTTGGAGTTCAACTGCTAGAGCTGGGGAAAAAGAAAAAACAA
ATTTTGCATGGTGACCCTCTTCCTCTTACAAGGAAATCCTACCTTGCATGGATTGGGTTTTCAGCTGAAGGTACC
CCTTGTTACGTGGATTCAGAAGGAATTGTTCGAATGCTTAACAGAGGACTTGGTAATACGTGGACTCCTATATGT
AATACAAGAGAGCACTGCAAAGGAAAATCTGATCACTACTGGGTGGTTGGTATCCATGAAAATCCCCAGCAACTA
AGGTGCATTCCTTGTAAAGGTTCTCGGTTTCCCCCAACCCTTCCACGCCCTGCTGTTGCTATATTATCCTTTAAG
CTTCCTTACTGTCAGATTGCAACAGAGAAAGGACAAATGGAGGAGCAATTTTGGCGTTCAGTTATATTTCACAAC
CACCTTGATTATTTAGCTAAAAATGGTTATGAATATGAAGAGAGCACTAAAAATCAAGCAACAAAAGAGCAACAG
GAACTTTTAATGAAAATGCTTGCGCTTTCTTGTAAACTGGAGCGAGAATTCCGTTGTGTGGAACTTGCTGATCTA
ATGACTCAAAATGCTGTGAATTTAGCCATTAAATATGCTTCTCGCTCTCGGAAATTAATACTGGCTCAAAAACTA
AGTGAACTGGCTGTAGAGAAGGCAGCCGAATTGACAGCAACCCAGGTGGAAGAGGAAGAAGAAGAAGAAGATTTC
AGAAAAAAGCTGAATGCTGGTTACAGCAATACTGCTACAGAGTGGAGCCAACCAAGGTTCAGAAATCAAGTTGAA
GAAGATGCTGAGGACAGTGGAGAAGCTGATGATGAAGAAAAACCAGAAATACATAAGCCTGGACAGAACTCGTTT
TCCAAAAGTACAAATTCCTCTGATGTTTCAGCTAAGTCAGGTGCAGTTACCTTTAGCAGCCAAGGACGAGTAAAT
CCCTTTAAGGTATCAGCCAGTTCCAAAGAACCAGCCATGTCAATGAATTCAGCACGTTCAACTAATATTTTAGAC
AATATGGGCAAATCATCCAAGAAATCCACTGCACTTAGTCGAACTACAAATAATGAAAAGTCTCCCATTATAAAG
CCTCTGATTCCAAAGCCGAAGCCTAAGCAGGCATCTGCAGCATCCTATTTCCAGAAAAGAAATTCTCAAACTAAT
AAAACTGAGGAAGTGAAAGAAGAAAATCTTAAAAATGTATTATCTGAAACCCCAGCTATATGTCCTCCTCAAAAC
ACTGAAAACCAAAGGCCAAAGACCGGGTTCCAGATGTGGTTAGAAGAAAATAGAAGTAATATTTTGTCTGACAAT
CCTGACTTTTCAGATGAAGCAGACATAATAAAAGAAGGAATGATTCGATTTAGAGTATTGTCAACTGAAGAAAGA
AAGGTGTGGGCTAACAAAGCCAAAGGAGAAACGGCAAGTGAAGGAACTGAAGCAAAGAAGCGAAAACGTGTGGTT
GATGAAAGTGATGAAACAGAAAACCAGGAAGAAAAAGCAAAAGAGAACCTGAATTTGTCTAAAAAGCAGAAACCT
TTAGATTTTTCTACAAATCAGAAACTATCAGCTTTTGCATTTAAGCAGGAGTAAAGGAAGAAAGTGACCCTAGGG
AAGTAATGGATTTTTTTTACTCATCTTTGAATATAGACTCGAGTCTTTGGGAAACTCATTATATATATATTTTTT
AAAGAGTTTGAAGCAACTGTTTGTCTTTATAAGATAATGTAGTAATTATATTGGTGTAGGTAACAGGACATATGT

FIGURE 1418B

AAAAACTATCATCTTTGCAGATTACTCTGCCTCCAAATGCAGGGCCTTTCAGAGATGCATTGTGATTGTAATTAC
TGAGTTGAAGCTCCAACCAATTTGAATTTGTTTCTTAACCTTGAAAAATCATTAAAGCCAAGGTATTAAAACCTT
TGTGCATTAATACCTTCTAGGGGTTTGGTTCATTTGGTTTTTGTCATGTGCAAGGAAGGACAATAGTCCTCTTTC
CAAGTGTGTTAGCATAGACTTCTCTATATGTTTCTACTAGACCTAGGGGATGACGTCTTTTAATAATACTGGCCC
TAAACATGTAAATAATCTTGTAGGTGAGACTTTTTCTTTTGTGTTTCGGAAATTTCCTATGTGGCTTTCAGTTGT
CTGTTTGTATAGCCTGGATTTTTTTGAGGTAAATGAAACTTTCTCATTTGTAAAAAAAAAAAAAAAAAACTCGAG

FIGURE 1419

MPATRKPMRYGHTEGHTEVCFDDSGSFIVTCGSDGDVRIWEDLDDDDPKFINVGEKAYSCALKSGKLVTAVSNNT
IQVHTFPEGVPDGILTRFTTNANHVVFNGDGTKIAAGSSDFLVKIVDVMDSSQQKTFRGHDAPVLSLSFDPKDIF
LASASCDGSVRVWQISDQTCAISWPLLQKCNDVINAKSICRLAWQPKSGKLLAIPVEKSVKLYRRESWSHQFDLS
DNFISQTLNIVTWSPCGQYLAAGSINGLIIVWNVETKDCMERVKHEKGYAICGLAWHPTCGRISYTDAEGNLGLL
ENVCDPSGKTSSSKVSSRVEKDYNDLFDGDDMSNAGDFLNDNAVEIPSFSKGIINDDEDDEDLMMASGRPRQRSH
ILEDDENSVDISMLKTGSSLLKEEEEDGQEGSIHNLPLVTSQRPFYDGPMPTPRQKPFQSGSTPLHLTHRFMVWN
SIGIIRCYNDEQDNAIDVEFHDTSIHHATHLSNTLNYTIADLSHEAILLACESTDELASKLHCLHFSSWDSSKEW
IIDLPQNEDIEAICLGQGWAAAATSALLLRLFTIGGVQKEVFSLAGPVVSMAGHGEQLFIVYHRGTGFDGDQCLG
VQLLELGKKKKQILHGDPLPLTRKSYLAWIGFSAEGTPCYVDSEGIVRMLNRGLGNTWTPICNTREHCKGKSDHY
WVVGIHENPQQLRCIPCKGSRFPPTLPRPAVAILSFKLPYCQIATEKGQMEEQFWRSVIFHNHLDYLAKNGYEYE
ESTKNQATKEQQELLMKMLALSCKLEREFRCVELADLMTQNAVNLAIKYASRSRKLILAQKLSELAVEKAAELTA
TQVEEEEEEEDFRKKLNAGYSNTATEWSQPRFRNQVEEDAEDSGEADDEEKPEIHKPGQNSFSKSTNSSDVSAKS
GAVTFSSQGRVNPFKVSASSKEPAMSMNSARSTNILDNMGKSSKKSTALSRTTNNEKSPIIKPLIPKPKPKQASA
ASYFQKRNSQTNKTEEVKEENLKNVLSETPAICPPQNTENQRPKTGFQMWLEENRSNILSDNPDFSDEADIIKEG
MIRFRVLSTEERKVWANKAKGETASEGTEAKKRKRVVDESDETENQEEKAKENLNLSKKQKPLDFSTNQKLSAFA
FKQE

FIGURE 1420A

CGGACGCGTGGGCTGCTGCGGAGCCGGCAGCGCAGGCGGGCGGAGCGGAGCTGCCCCCGTGGTGGCGGGCGATGC
CCCCGTGAGCCTCCCTCGCCGCCCCTCCCCGCCCCGCGTGCCTATCCACTCGGAGTCCGCGCCAGCCTGGGGCCG
GGCCGCGCCTACTGCCGGGTTCGCGGGGCGGGGTCCCGGGGCAGCACCTGCCCCGCCTTGCGGAGCCGCCTCGGC
CTGTGGAGGCCCCCTCCCTGTCTGGACCCCGGCCCCACCTCCGGACCCTTTTATCACATCGCCTCCTCTGGGAGC
CTGCCCTGATTGCCTTCACCTCATTTCTTGAAAATTGGTGTTTTGGCAGAAGTCAATTGAAGCCTTGTGCAAATG
CCCTAGGGGTGTGCTGTTGGGAGGCAGCCCCCTGTGATGCGGAACACCAGGCTCAGATTCATCAGTTCGAGCTGC
CTGAGGCCCTGCCACCCCGGGGACC**ATG**TTTAACGGGGAGCCAGGTCCTGCCTCATCTGGGGCCTCCAGGAATGT
GGTGCGGAGCTCCAGCATTGGCGGTGAAATCTGCGGATCCCAGCAAGCCGGGGGCGGGGCTGGGACCACCACCGC
CAAGAAGCGGCGGAGCAGCCTGGGTGCCAAGATGGTGGCCATCGTGGGCCTGACTCAGTGGAGCAAGAGCACACT
CCAGCTTCCGCAGCCTGAAGGGGCCACCAAGAAGCTGCGCAGCAACATCCGCCGGAGCACGGAGACAGGCATCGC
GGTGGAGATGCGGAGCCGGGTCACACGCCAGGGCAGCCGGGAGTCCACCGATGGGAGCACCAACAGCAACAGCTC
CGACGGCACGTTCATCTTCCCCACTACCCGGCTAGGGGCTGAAAGCCAGTTCAGCGATTTCCTGGATGGGCTGGG
ACCAGCTCAGATTGTGGGGCGACAGACACTGGCAACACCACCCATGGGAGATGTGCACATTGCCATCATGGACCG
GAGTGGCCAGCTGGAGGTGGAAGTGATTGAAGCTCGGGGCCTGACCCCCAAACCAGGCTCCAAATCCCTCCCAGC
CACCTATATCAAGGTTTACCTGCTGGAGAATGGGGCCTGCTTGGCCAAGAAGAAGACAAAGATGACCAAGAAGAC
CTGTGATCCCCTGTACCAGCAGGCTCTGCTCTTTGACGAGGGACCCCAGGGCAAGGTGCTGCAGGTGATCGTCTG
GGGAGACTATGGCCGCATGGACCACAAGTGCTTCATGGGCATGGCCCAGATCATGCTGGACGAGCTGGACCTCAG
CGCCGCGGTCACCGGCTGGTACAAACTCTTCCCCACCTCCTCAGTGGCAGACTCCACACTCGGATCCCTCACCAG
GCGCCTGTCCCAGTCTTCCCTGGAGAGTGCCACCAGCCCCTCATGCTCT**TAA**GGATGTCAGGAAGAGGCCAGGAT
GGTGGTGTGGGGAGGGGTGCCTGCTGGCCCCATGTCCTCCCCTGTACATAGTCTTCGTGTCTTTCTGGACCCCTT
GTCCTGCTGCATGCCTGTTGGCTACTGGGCTCATCCCAGCTGGCAGTGGAGACTGTAGTGTGTGCGTGTGTGCGT
GCGTGTGTGTGTGTGTGTACGTGACCACGTTCTATCTGTTCATTTGTCTGGGTATAGTCACTCCTGGTGATGATA
TGGGCTGAAATGTCTCCACGTCTCTTTGTGTCTTGTTGAAAAGAAACCCAAAGGAGTGTTGTGTGGACATGACTC
ACCCTGAGGAGTCTCCAGGGATGGAGGTGGGGCATGCGGCCACTGGTCGGTGCTGCCTGGTCCTGGCCTGGGGCA
GAGCCTGTGTGTTCTTCACCTGTGCCTGCTCCTGGTGGTCTCTGCTTTGTTTTCTGTCTTGTCTTTTGTTCCACT
CTTGACTCTCCCGGCTCTGCCACTGTTTTCTGAGAAATGTAGCATCCGCTGCAGCTGGCCACACTGAGGGCCCTC
TGGGAACCCCACCCCACTGGAGCCGCTCCGGCAGCTCTTCCTGCCACTGAATGCGTTCTGCAGCATGTAGCATGC
CCACCTAGCTCCCTGGCCAGGGCCCTGGGGAGGCAGAGGGTACCCAGGGGACTGAGGGCTTAGAAATGACTTTCT
CTATGAGGCTGGAACCTCCTCCTTCTTCCAGTGAAGCACGAGGTCTTGGTTCCAGGGTTCCTGGCCAGGTGCCCC
CTTAGCATTTGTTCTTCATCTCCTGTCTCTTCAAGCCTCCCCACTCCACCGTGCCGAAGGAGCTCTGCCAGTGGG
CCTGGGCAGGCAGCCACAGAGGGCATGTTATCTGCTAAAGCAAACAGTCCTCCTGAGGCCCTGAGGGTGGCCCTG
ACCCCCTCAGGGCTCATTCCTGGTGGGCATGACTCGGTAAGGAGGTTCTGTGGGTAGGGCTGTTTGCTGGAATAA
GGAGGGCTGAGGCTGAGTTGTTCCCCGCCACTGTTGAGGATCCCATCTGACATTTGGGGATTCACTGCATGAAGT
TGTTCATTTGGGGCTCCAGTTTTTGTGCATTTCCAGACCAGGGTCCCTGTCTGGGAGCTCAGACTTAGCTGGGCT
CCAGCAGCCTGGCTCCGGACTCTCGTCTGCCACCATCACCAGCTCTGTCTAAGCAATACTTACCCCTCCGGGCTT
CCCTGCTTTCCTGTGCCCCACTGCTGCCCTCTGCAGAGCCATCTGCTCCAGGCACCCACCTGCCTCTGCTTGCTT
TCTCACCCATGTCTGGTTGGAGCTTCTCACAGCCACTCAAACCCTGACTTGATTTGACAACTGGGCCCTGTTGGT
GGAGACCAGTGCCTGAACTGGACCCTGTGAAATCTGTCCCGTGGGAATCCTGAAGTCTGACTCAGGAATGCCCAG
ACCTGTCCCTGTCCCTCCTCAGCTCTAGGGTGAAAGGCGAGAGGTTGCACAGGACATGGACAGAGCAGCCCTTGG
GTTTGTATCTGGTAGGGGAGAAAGCAGCAGGACAGTGGAGGTGTGTGGAAGGCACTCTTTCCACCTCTCTCCAGG
CATTATCCCCAGGTGCTGAAATGGCTGTGGCCCCAGCACCTGAGGCAGGGGTACGCTACCTGGGGTAGCAGTAGA
AAGGTCTTGGGGTCTGAATGACTTGGGGCCTCCATTCATAACCAAAGTTGTAGGGGCATGGAGGCAGTGGCGCCT
TATGGATAGGTCATCTCAGCCCAAAGGGCCTCCTTGGCTGGCATGGTTCTGTGTTACGTTGAAGCCAGAGTCTTA
TAACACCTCCCAAGAAAGATAGGGGAAGAAGCCAGAACCCCACCTGGCCTGCCCACAGGACAAGAAGTGGGTAAG
GGCAGGAAGGAAATGAACGGAGTTAGCTCCCAGGCTCCTATCTCTGCCTGAGCCTCTATTCTTATATTATCAGAG
AAAGGGACCATTGGGTGCATAGAGATGGGGAGGAGGCCACTGGGCTGAATTTTCTCTTTAGGCGGAAATGCTCTC
CCCAGGCCCATTGCGTTCGTCAAGTTCTTGGAAATGGACAAAGGGCTCTGTCCTCCTCGACCCTAGTGGGGGATC
AAGAAGGAAACTCCGTTGCAAAAGGGTATTTTAATCTCCTGTTTATGATATATTCACCTCTAGAGCAGTCACTGT

FIGURE 1420B

CAGGGTGTTGCGAAAATACTCTACACCTTTGGGATGATAGGGTTGTTAGTGACCCACAGGACAGTATAGATGTTT
GTGGATGTAGCACTGAGTGGTGATACCCAGACCAGCAGTCACCCCAGGAAGTGGGGGCTACCCATACCCTCATTC
CTCTGGTGGGGAGCTGCCTGCAGAGAGGCCTGCCACTGGGGGTTCCAGGCCGTGGTGACCCTTGCCTCTGGGGAA
GGGTTAGCACAGGGGAGGTTCTAGCTGGAGGAGGGGTCTGATGTGCTGGTAACTTGGGCTGACCTACCTACAGTC
CCTGGCTGCCAAAACTGCTCAGCAGTTGGGCCACTCCACTATTCCACCTCTCTAAAAGAAGGTAATTTCCTCCCC
AAATTGACCTTGGGGAATTATTCTTTTAACCCTTTGCACCAAATAAGTTACTCATCCCCACCTGGATTTTACCCC
ATGAGGGTAAAGTTGTGTGAGGCTGACACGTCTGTGTGATGCAGTGTGGCTGCACTTAAGGGTCTGTTTCTCAGC
ATCATGGATGCAGGGGCTTGTCTGAAAAGCCACTCTGGACCTAGCCTGTCCCAGAAGAGGAGAATGCACAAGTGT
AACTCCTGGTTGTTTGCTGGGGTGGGGGAGCATCTGCTGTTTGAGGACGGGGGGTGGGGAAGGAAGGAACATGAT
CCCTCCAGAAGTCTCCCACCCTGGGGCCAACTCACTGCCATGTTCAGTGTCCCGGCTCCAAATGCCCCCTTGCCC
AGATGAAACCCTGCAGTGGTTACAGGAATGGAGCTCTTTGTCATTCCACCTCCTCTGGTCAGGCGAGGTTCACTG
TGCATATGGCAGAGACAGGAGTGGCCCTGCAGTGATGTTGGGTTGTGGGCAGGGACAGTGATGGATGACTCAGAG
CGTCTGTCTTTGTATTTCTGCTCTGTTCATTCTGTCCCACTTTCTTCATAGACTCCTTTTCCCTGCAATGGGTTT
TTGGTATGAAAAAGGCTCCAGTAAATGGAGCCAAGTCTTGGTTTGACAAGGGGAACTTGATCCTTCAGGGAAGAA
TCATCTCCAAAATGACTCCCCATCTGGTTTCTTCTACCACCCAATTCTACTAGGAAAGGAGCACTTAGGAGGCTC
TTGGGATGCAGCAAGTCCCAGGCAATGCCAGCATTTCATGGGGGCTGAGGCAGAACCCAGGAGCTCCAAGAAAGG
CCACCCATAGAGCTCATCCTCTGTGGAATCACTGCCGGTTAGAACACTGAGGTCAAGCCAGTCCTCCCATGGTCA
TGCCACCCACCAGGGAAGCATGCCTGATCTCTTCTTTACTGCCAGCCTTGAGGAGAGCAGAAGCCTCCATTTTTA
AAGACAATAAAGACCTCCAAGGGTACTTCTTTGGAAATGAAATGTAGCACAATCTTAGCCTACGTTACCAGGAGC
CCTGACATGCAACCAGGGTCCCTCTTCCATGCCCTGCTGCCCAGGAGTTGCTGAGCTCCTCTTCCCCTGGGGTTC
CAGCCCTCCTAATACCTCATATTCCCCATCTTCCTCAGCCCAGAAAGCAATGGGGCTTTAGTGATGCTCCTCTTT
TGTGTCTCTCTGGTTGCCTCTAGCACTGTGCAAACTCTGCAAGAAATTGCTGCCTTTGCTTGATGTTGTAGATGA
GTTGCCCTCCACCTGGCTGGAGAGATGGCACATCATTCAGGGCCAGAAGGTTGTCCAGCAGTGTTTCTGCAGTGG
CTGCAGGGAGATGGAAAAGAAGAGCCCTGCTTCCCTGCCTCCTCCTACCTTTCTCTTCCACTCCTCAGAGTTTTC
TTCTCCAGTATCCTGACATGTAAAGAGATTCTTTAAAATGCTGCTTCTTCTACTGGACTGTCTTTCACTGAGTAG
TCAGGGAGGAGATGAAAATGTGGACACATCCCCCCGCCTTCTCCCTCAACCTTTTCACTCACGTCAGAAGAGGTT
GGGGCAAAACAAAACAAGCATGATTGAAGAGCAGGGGAAGCCCACACAATCAGGTGAGCCCTGATGGGGGCTGGA
CTGGCCTGGTCTGGCTGGGAAAGGATTCTTTTAAAAGCGTGCCTGAGCATCTCAGAGCAATGTCAGTGATGCCAA
AGAGAGCAACTTGGCCTCCTTGGGCACCAACTCTGATGGCTGAGTTGCACAAACGTGGCTCAGATGTTGGCATGC
CCGATGGTGGGACCTTGTTCTCTGATAAAGGGCTTAATCTTTCCATGTAGCAAAGCAACTTTCCCTCCCTCCCCT
CCCCCCGAACCCTGAGCTTGGGCTTGTGTGGGCCCAGCATGGCTGTGCCTGTGAGGGAAGCCACATCAGTGAGAG
AAAGTTGCATTCTCTCAGGGGCCTAGATTGGCTTGGGGCAGGTGCTTGTTGAAAAGCATGAGTGTTTCTGCTTTG
GGAAACCCTTCCAGGGCTCTGGTTGGAAACTTGGCCAGTAAGGACAGGGCCTTGGGCCTCCCAAGGAGTTCACAA
TGATGCCAGGAAGGGTCCCTGAGCCTGGGTTCCAGTCAGCTTGGCTAACAGAATGGGGCTTGGGAATTCCAGGGG
CAACTGAGCATCCACCCCATTAGCCAGTGATCTGGACAGGGACAGCTGGCTACAGGGAATCAAAGGCTGTTCTGT
ACAGTTTTACCAGAAACTGTGACCTTGGGTAAGGCTCCTCACTTTTCTGGGCCTCAACTTCCTCATCTGCAAAAT
CAGAGCATTAGCTGCTCTCCCCATGATTCCCTCCCAGTTTTAATTAAAAGTCTCTGATCTGGAGCACATGAGGGT
TGCGAGCCTGGTGCACCTGGTTCCTGTCTCCGTGGGCTGGTTTCCTTCAGCCCCTGATGCCCAGGCTGGGTGCAG
GCTCTCATCTGGTCCATGCCCAGATGCTGCCTCAGACAAGAACTCTGGGAATCCTAACAGACTCTGCTTTCCTCT
CTTCGTGGTTTGTCCTCCCTCTTTTATTCTTGTGTAATGATGAGACATAATTAAGGGTCATCTACAATGGACAAT
TTTCAAGGTGCTGATGTGATGTCACAACCTCCGCTACATCCTGAGTAAGTCAGTGTCCCCAACAGCAGATGAGGC
TGGGTCTTTCCTCATTTCTGCTTCTGGGATGACATCAGTGGGAGAGTTGAAGATCTGAGAATTCTAAAGGAAATG
TTCTCTGATGGGAGGAGAGAGGGAACTTATTTCCCTTCAAAGTAGTTTGCTTCTTAAGACCACTCCTCCCTCCAG
AATGTCTTTAACCAGACATCATTTCAGAAGGTGGGGCAGCTGCTTCCTTAGGAAGAGTGGGCCTGATAGCTCAAC
CAACTCCTTTAGCATGTAAACTCACAGAAGGCAAGAACCCCTTTTTTTAGACTTTCCAAATGCATCCTGCAAAGA
GAGAGATAGCTGATAGGGACTGACAAGCACACTGTTTAGATAAGAAGCAATTACCCTTTTATATCTGTGCTCTAT
ACATTTTCTATGTGCAGCATCTTTCCTAACTTGTTGTGGTTCCCGGGTGGCAGGTGCACAGCTGGGAGGGACTGC
CGGCTGTTTCGTACAACATTCTTGCCAATTCCCTTGAGGAGAAAATTCTTCACATGGCTTCTGCATGTACAGTAT

FIGURE 1420C

TTGGGCAGCAAAACATGATTAAAGTCAGTTTGAAAATGG

FIGURE 1421

MFNGEPGPASSGASRNVVRSSSIGGEICGSQQAGGGAGTTTAKKRRSSLGAKMVAIVGLTQWSKSTLQLPQPEGA
TKKLRSNIRRSTETGIAVEMRSRVTRQGSRESTDGSTNSNSSDGTFIFPTTRLGAESQFSDFLDGLGPAQIVGRQ
TLATPPMGDVHIAIMDRSGQLEVEVIEARGLTPKPGSKSLPATYIKVYLLENGACLAKKKTKMTKKTCDPLYQQA
LLFDEGPQGKVLQVIVWGDYGRMDHKCFMGMAQIMLDELDLSAAVTGWYKLFPTSSVADSTLGSLTRRLSQSSLE
SATSPSCS

FIGURE 1422A

TCTTTAAGATTTGTAGCTACTAAGAAAGAAAGGAGCTTTTTTTCCTTGGGCCTTCAAACTGAAAGAACCGCATGA
GCCTGACGGCGCATGGTCTTAACATCAGGCTGTGCAGGAAGAAGCTATCTGCAGATGGATGCCAGCACACACAAG
GAAGCAGAGCTCTGGCAACATTGAGTCAAAGCAAGGACACAACATCAGAGGGACGGCAGAGAATCCTTGTGTGTA
GTCTTTGGTGGCAGTTTGAAAATTGCAAGGAGGGACTTTAAGACTACTTCTGATTTGCAAAGATGGTCTGTGCTC
CGAGCAGGCTAAAGTGACTGGACGAGACGCACTGTTGGAGAAATAAAA**ATG**ACTTCCCATTATGTGATTGCCATC
TTTGCCCTGATGAGCTTCTGTTTAGCCACTGCAGGTCCAGAGCCTGGTGCACTGTGTGAACTGTCACCTGTCAGT
GCCTCCCATCCTGTCCAGGCCTTGATGGAGAGCTTCACTGTTTTGTCAGGCTGTGCCAGCAGAGGCACAACTGGG
CTGCCACAGGAGGTGCATGTCCTGAATCTCGCACTGCGCCAGGGGCCTGGCCAGCTACAGAGAGAGGTCACACTT
CACCTGAATCCCATCTCCTCAGTCCACATCCACCACAAGTCTGTTGTGTTCCTGCTCAACTCCCCACACCCCCTG
GTGTGGCATCTGAAGACAGAGAGACTTGCCACTGGGGTCTCCAGACTGTTTTTGGTGTCTGAGGGTTCTGTGGTC
CAGTTTTCATCAGCAAACTTCTCCTTGACAGCAGAAACAGAAGAAAGGAACTTCCCCCATGGAAATGAACATCTG
TTAAATTGGGCCCGAAAAGAGTATGGAGCAGTTACTTCATTCACCGAACTCAAGATAGCAAGAAACATTTATATT
AAAGTGGGGGGAAGATCAAGTGTTCCCTCCAAAGTGCAACATAGGGAAGAATTTTCTCTCACTCAATTACCTTGCT
GAGTACCTTCAACCCAAAGCAGCAGAAGGGTGTGTGATGTCCAGCCAGCCCCAGAATGAGGAAGTACACATCATC
GAGCTAATCACCCCCAACTCTAACCCCTACAGTGCTTTCCAGGTGGATATAACAATTGATATAAGACCTTCTCAA
GAGGATCTTGAAGTGGTCAAAAATCTCATCCTGATCTTGAAGTGCAAAAAGTCTGTCAACTGGGTGATCAAATCT
TTTGATGTTAAGGGAAGCCTGAAAATTATTGCTCCTAACAGTATTGGCTTTGGAAAAGAGAGTGAAAGATCTATG
ACAATGACCAAATCAATAAGAGATGACATTCCTTCAACCCAAGGGAATCTGGTGAAGTGGGCTTTGGACAATGGC
TATAGTCCAATAACTTCATACACAATGGCTCCTGTGGCAATAGTATTTCATCTTCGGCTTGAAAATAATGAGGAG
ATGGGAGATGAGGAAGTCCACACTATTCCTCCTGAGCTACGGATCCTGCTGGACCCTGGTGCCCTGCCTGCCCTG
CAGAACCCGCCCATCCGGGGAGGGGAAGGCCAAAATGGAGGCCTTCCGTTTCCTTTCCCAGATATTTCCAGGAGA
GTCTGGAATGAAGAGGGAGAAGATGGGCTCCCTCGGCCAAAGGACCCTGTCATTCCCAGCATACAACTGTTTCCT
GGTCTCAGAGAGCCAGAAGAGGTGCAAGGGAGCGTGGATATTGCCCTGTCTGTCAAATGTGACAATGAGAAGATG
ATCGTGGCTGTAGAAAAAGATTCTTTTCAGGCCAGTGGCTACTCGGGGATGGACGTCACCCTGTTGGATCCTACC
TGCAAGGCCAAGATGAATGGCACACACTTTGTTTTGGAGTCTCCTCTGAATGGCTGCGGTACTCGGCCCCGGTGG
TCAGCCCTTGATGGTGTGGTCTACTATAACTCCATTGTGATACAGGTTCCAGCCCTTGGGGACAGTAGTGGTTGG
CCAGATGGTTATGAAGATCTGGAGTCAGGTGATAATGGATTTCCGGGAGATATGGATGAAGGAGATGCTTCCCTG
TTCACCCGACCTGAAATCGTGGTGTTTAATTGCAGCCTTCAGCAGGTGAGGAACCCCAGCAGCTTCCAGGAACAG
CCCCACGGAAACATCACCTTCAACATGGAGCTATACAACACTGACCTCTTTTTGGTGCCCTCCCAGGGCGTCTTC
TCTGTGCCAGAGAATGGACACGTTTATGTTGAGGTATCTGTTACTAAGGCTGAACAAGAACTGGGATTTGCCATC
CAAACGTGCTTTATCTCTCCATATTCGAACCCTGATAGGATGTCTCATTACACCATTATTGAGAATATTTGTCCT
AAAGATGAATCTGTGAAATTCTACAGTCCCAAGAGAGTGCACTTCCCTATCCCGCAAGCTGACATGGATAAGAAG
CGATTCAGCTTTGTCTTCAAGCCTGTCTTCAACACCTCACTGCTCTTTCTACAGTGTGAGCTGACGCTGTGTACG
AAGATGGAGAAGCACCCCCAGAAGTTGCCTAAGTGTGTGCCTCCTGACGAAGCCTGCACCTCGCTGGACGCCTCG
ATAATCTGGGCCATGATGCAGAATAAGAAGACGTTCACCAAGCCCCTTGCTGTGATCCACCATGAAGCAGAATCT
AAAGAAAAAGGTCCAAGCATGAAGGAACCAAATCCAATTTCTCCACCAATTTTCCATGGTCTGGACACCCTAACC
GTGATGGGCATTGCGTTTGCAGCCTTTGTGATCGGAGCACTCCTGACGGGGGCCTTGTGGTACATCTATTCTCAC
ACAGGGGAGACAGCAGGAAGGCAGCAAGTCCCCACCTCCCCGCCAGCCTCGGAAAACAGCAGTGCTGCCCACAGC
ATCGGCAGCACGCAGAGCACGCCTTGCTCCAGCAGCAGCACGGCC**TAG**CCCAACCCAGGCCCAACCCGGCCCAAC
CCAGCCCAGCCCAGCTCAGCTCAGCTACTCCAAGGGCAGGACCAATGGCTGAGCCTCGTGTCCAGACTCAGAGGG
CTGGATTTTGGTTCCCTTGTAAAGACAGAGTGAATTTCAGTATAAAGATCACCCGTTGTATTCACCCCACACCCA
GGGCTAGTATAAACATGACCCTGGGCTTCTGTACCACACTAGAATTCATGTGAGAAAGCTAAAATGGTGGTCTTC
TCCACCAGCCCCTCACAGGCTTGGGGGTTTTCTATGTGAAACACATGCCAGTTTTTAAAATGCTGCTTTGTCCAG
GTGAGAACATCCATAATTTGGGGCCCTGAGTTTTACCCAGACTCAAGGAGTTGGTAAAGGGTTAATAGCCAGATA
GTAGAACCAGTGAGGAGATGCGGCCAAAGATTCTTTATATCTGAACCAAGATGTAAAACAAGAAATGCTTTGAGG
CTTTCTAAGCGATCCTCCTGTCTAATTTGCACCTTTGTCTGGATGCACTCTTCTGACCTTGCTGCCACAACCTGT
GGGGTCTGATGTGTCCCAAGATGGGTGCTGCCCTCAGGGACTGCACCCTGACAAGTGTTAAGGCAACATTCCTTG
CTTGTGCCCTGGGCCAAAACCAATGCTGATGACCTTATCAGCTTCCTGTTTCTTCCCATACTGCATACACCACTG

FIGURE 1422B

CAAAATGTCTTAATGCAAATTTTGTATTTCTTACAGGCCTACAGAAATTGAAAATGACCAAAATCAGGAACCACA
GATTTGTGCCCATTCCTAATATTTTGTTCTGCAAATTAATGTATAATTTGAGGTGAAATTCAGTTATAAAGTCAA
GGACGAATTTGCACAGTGATATATTTCTATGTGTATGCAAGTACAAGTATATAATATGTCACCTGGCACATTCAT
TTTCTCAGTTGAAGAAGAGAAAATTTGAAAATGTCCTTATGCTTTTAGAGTTGCAACTTAAGTATATTTGGTAGG
GTGAGTGTTTCCACTCAAAATATGTCAACTTAAAAAAAAATAGGCCCTTTCATAAAAACCAAACTGTAGCAAGAT
GCAAATGCATGGCAAATCTGTCGGTCTCCAGTTGGTTATCTGAATAGTGTCACCAATTCCACCAAGACAGTGCTG
AGATTGGAAAGGGCACTCATTTGGATTGCCTTACTTCTCTTGCCTTAAATATATCCCATATATTTAATATGTCAA
AAAGGGCTTGAGGTGAATTTCATTAAATGGAATAATATGATGCCACTTTGCAGCTAAAATAAGCTCAGTGATACC
TCCTTGTT

FIGURE 1423

MTSHYVIAIFALMSFCLATAGPEPGALCELSPVSASHPVQALMESFTVLSGCASRGTTGLPQEVHVLNLALRQGP
GQLQREVTLHLNPISSVHIHHKSVVFLLNSPHPLVWHLKTERLATGVSRLFLVSEGSVVQFSSANFSLTAETEER
NFPHGNEHLLNWARKEYGAVTSFTELKIARNIYIKVGEDQVFPPKCNIGKNFLSLNYLAEYLQPKAAEGCVMSSQ
PQNEEVHIIELITPNSNPYSAFQVDITIDIRPSQEDLEVVKNLILILKCKKSVNWVIKSFDVKGSLKIIAPNSIG
FGKESERSMTMTKSIRDDIPSTQGNLVKWALDNGYSPITSYTMAPVAIVFHLRLENNEEMGDEEVHTIPPELRIL
LDPGALPALQNPPIRGGEGQNGGLPFPFPDISRRVWNEEGEDGLPRPKDPVIPSIQLFPGLREPEEVQGSVDIAL
SVKCDNEKMIVAVEKDSFQASGYSGMDVTLLDPTCKAKMNGTHFVLESPLNGCGTRPRWSALDGVVYYNSIVIQV
PALGDSSGWPDGYEDLESGDNGFPGDMDEGDASLFTRPEIVVFNCSLQQVRNPSSFQEQPHGNITFNMELYNTDL
FLVPSQGVFSVPENGHVYVEVSVTKAEQELGFAIQTCFISPYSNPDRMSHYTIIENICPKDESVKFYSPKRVHFP
IPQADMDKKRFSFVFKPVFNTSLLFLQCELTLCTKMEKHPQKLPKCVPPDEACTSLDASIIWAMMQNKKTFTKPL
AVIHHEAESKEKGPSMKEPNPISPPIFHGLDTLTVMGIAFAAFVIGALLTGALWYIYSHTGETAGRQQVPTSPPA
SENSSAAHSIGSTQSTPCSSSSTA

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FIGURE 1424A

CGGGCAGCGTGGACCCCGGATGAGTTGCTTTTAGGCTTGCTGGCCCGCGGGGCTGTCCAGGCACGCGAGGCCCCT
CAGGTACGCCCTCTCTTCCCTGCAGGATCCGGCCCTCAAAGACGAGGGTCACGCACGCGTTACAACCCCGAAACA
GTAGCACAAGATTTAATTTTTAAAAGAGCGTGTTTCTTCGGGGCTTGCCGTTCGTTCGTTTCCAGCCTCAGGAAT
TTATGGTCGCCTTTTTGAATGAGCAACAAAATGCTTCAACAAGTTCCAGAAAACATAAATTTTCCTGCTGAAGAA
GAGAAAATCTTGGAGTTTTGGACTGAATTTAATTGTTTTCAGGAATGCTTAAAGCAATCAAAACATAAACCAAAA
TTTACCTTCTATGATGGTCCTCCTTTTGCAACTGGACTGCCTCACTATGGACATATACTTGCGGGTACAATTAAA
GATATAGTTACAAGATATGCTCACCAGAGTGGGTTTCATGTTGACAGAAGATTTGGATGGGATTGCCATGGCTTA
CCTGTGGAATATGAAATTGATAAGACACTGGGAATCAGAGGACCAGAGGATGTGGCCAAAATGGGGATTACAGAG
TATAACAATCAGTGCCGAGCAATTGTGATGAGATATTCTGCTGAGTGGAAGTCTACTGTTAGCAGACTTGGCCGA
TGGATTGACTTTGACAATGACTATAAAACTCTGTATCCACAATTCATGGAATCAGTCTGGTGGGTCTTCAAACAA
CTCTATGATAAAGGCCTTGTTTATAGAGGTGTGAAAGTCATGCCCTTCTCTACGGCATGTAACACTCCACTTTCC
AACTTCGAGTCACACCAGAATTATAAGGATGTTCAAGATCCTTCAGTATTTGTAACTTTCCCTTTGGAAGAAGAT
GAAACTGTATCTTTAGTTGCTTGGACAACCACTCCCTGGACTCTACCTAGTAACCTTGCTGTGTGTGTTAATCCA
GAAATGCAATATGTGAAAATTAAAGATGTTGCCAGAGGACGATTACTCATTTTAATGGAAGCCAGATTGTCAGCC
CTCTATAAATTGGAGAGTGACTATGAGATCCTTGAAAGATTTCCTGGTGCCTATCTTAAAGGCAAGAAGTACAGG
CCCCTGTTTGACTATTTCCTGAAGTGTAAAGAGAATGGCGCTTTCACTGTGCTTGTTGACAACTATGTGAAGGAA
GAAGAAGGCACAGGGGTTGTCCACCAAGCTCCTTACTTCGGTGCTGAGGACTATCGGGTCTGTATGGACTTTAAC
ATTATTCGGAAAGACTCACTCCCTGTTTGCCCTGTGGATGCTTCAGGCTGCTTCACAACGGAGGTGACAGATTTC
GCAGGACAGTATGTGAAGGATGCTGACAAAAGTATCATCAGGACTTTGAAGGAACAAGGCCGACTTCTGGTTGCC
ACCACCTTCACTCACAGCTACCCTTTTTGCTGGAGATCAGACACTCCTCTAATTTACAAAGCAGTGCCCAGCTGG
TTTGTGCGAGTGGAGAACATGGTGGACCAGCTCCTAAGGAACAATGACCTGTGCTACTGGGTCCCAGAGTTGGTA
CGAGAAAAACGATTTGGAAATTGGCTGAAAGATGCACGTGACTGGACAATTTCCAGAAACAGATACTGGGGCACC
CCCATCCCACTGTGGGTCAGCGATGACTTTGAGGAGGTGGTATGCATTGGGTCAGTGGCGGAACTTGAAGAACTG
TCAGGAGCAAAGATCTCAGATCTCCACAGAGAGAGTGTTGACCACCTGACCATTCCTTCACGCTGTGGGAAGGGA
TCCTTGCACCGCATCTCTGAAGTGTTTGACTGTTGGTTTGAGAGTGGCAGCATGCCCTATGCTCAGGTTCATTAC
CCGTTTGAAAACAAGAGGGAGTTTGAGGATGCTTTTCCTGCAGATTTCATTGCCGAGGGCATCGACCAAACCAGA
GGATGGTTTTATACCCTGCTGGTGCTGGCCACGGCCCTCTTTGGACAACCGCCTTTCAAGAACGTAATTGTGAAT
GGGCTTGTCCTGGCAAGTGATGGCCAAAAAATGAGCAAACGGAAAAAGAATTATCCAGATCCAGTTTCCATCATC
CAGAAGTATGGTGCTGATGCCCTCAGATTATATCTGATTAACTCCCCTGTGGTGAGAGCAGAAAACCTCCGCTTT
AAAGAAGAGGGTGTGCGGGACGTCCTTAAGGATGTACTGCTCCCATGGTACAATGCCTATCGCTTCTTAATCCAG
AACGTTCTGAGGCTCCAGAAGGAGGAAGAAATAGAATTTCTCTACAATGAGAACACGGTTAGAGAAAGCCCCAAC
ATTACAGACCGGTGGATCCTGTCCTTCATGCAGTCTCTCATTGGCTTCTTTGAGACTGAAATGGCAGCTTATAGG
CTTTATACTGTGGTGCCTCGCCTGGTCAAGTTTGTAGATATTCTGACCAATTGGTATGTTAGAATGAACCGCAGA
AGATTAAAGGGTGAAAATGGGATGGAGGATTGTGTCATGGCCCTAGAAACCTTGTTTAGTGTTCTGCTTTCTCTT
TGCAGACTTATAGCTCCCTACACACCTTTTCTCACTGAATTGATGTACCAGAATCTAAAGGTGCTGATTGACCCT
GTTTCTGTTCAGGACAAGGACACACTCAGCATTCACTACCTCATGCTGCCCCGTGTTCGAGAAGAATTGATTGAC
AAGAAAACAGAGAGTGCAGTATCTCAGATGCAGTCTGTGATTGAACTTGGAAGAGTGATCAGAGACCGAAAAACT
ATTCCCATAAAGTATCCTTTGAAAGAAATTGTGGTTATCCATCAAGATCCAGAAGCTCTTAAAGATATCAAGTCT
TTGGAGAAGTATATCATTGAGGAACTCAATGTTCGAAAAGTTACACTGTCTACAGATAAAAACAAGTATGGCATT
CGGCTAAGGGCAGAACCAGATCACATGGTCCTGGGGAAGCGTCTGAAGGGAGCCTTTAAGGCAGTGATGACGTCC
ATCAAGCAGTTGAGCAGTGAGGAGCTGGAGCAGTTCCAGAAGACTGGGACCATTGTTGTGGAAGGCCATGAATTG
CACGATGAAGACATCCGCCTCATGTACACCTTTGATCAGGCCACAGGTGGGACTGCGCAATTTGAAGCACACTCA
GATGCTCAGGCTTTGGTCCTCTTAGATGTCACTCCTGACCAGTCAATGGTAGATGAAGGAATGGCTCGGGAAGTC
ATCAATCGCATACAGAAACTTCGCAAAAAGTGCAATCTGGTTCCAACTGATGAAATCACAGTGTACTATAAAGCA
AAGTCTGAAGGAACATATCTGAATAGTGTTATTGAAAGCCACACAGAGTTCATATTTACCACCATAAAGGCTCCC
TTGAAACCATATCCAGTTTCTCCATCGGATAAAGTCCTTATTCAAGAAAAAACACAGTTGAAGGGATCTGAACTG
GAAATTACACTCACCAGAGGATCTTCCCTTCCTGGTCCTGCTTGTGCATATGTCAATCTTAACATTTGTGCAAAT
GGCAGTGAACAAGGTGGAGTATTGCTCCTGGAAAATCCAAAAGGTGACAATAGGTTGGACCTTTTAAAGCTGAAG

FIGURE 1424B

AGTGTTGTCACTAGCATTTTTGGTGTGAAAAATACAGAGCTGGCTGTCTTCCATGATGAAACAGAAATACAAAAC
CAAACTGACTTACTGAGTCTTAGTGGAAAAACACTTTGTGTGACTGCAGGATCGGCTCCCTCTCTGATCAACAGT
TCTAGTACTCTTCTTTGTCAGTATATCAACCTACAGCTCCTGAATGCAAAGCCACAAGAGTGTTTAATGGGGACA
GTGGGCACTCTCCTGCTTGAAAACCCACTTGGGCAGAATGGACTCACCCACCAAGGTCTTCTGTATGAAGCAGCC
AAGGTGTTTGGCCTTCGGAGCAGGAAGCTAAAGCTGTTTCTGAATGAGACCCAAACGCAGGAAATTACAGAAGAC
ATCCCCGTGAAGACTTTGAATATGAAGACTGTGTATGTTTCTGTGTTACCAACAACAGCAGACTTCTAGCATGTA
CTTATCAATGTTGTTCGGTCAGCCCTTCCCTAATTACACCTATCCCCTACACATACATGCACATAGACACACACA
TGAACACACTGAAGATATTTCCTTCAGGTGTGTGTAAAATATGCTGCTTGGATTGAAATTCAAATGGGATTGATT
AGTCAAGTAACTTGAGACCTCACAGTAATCTTCACACTTAACCTTAGACACCTATGCAGTCATGTTGGGAGCAGG
TTACAATGTTACTTCAGCCCACAGTTTATTTCTATTCTTGAGTTCTTAAGTACAGAAGATAGAAGTGATTTAAAT
GGCATAGTATATATATCATTTTCTGGCCTTTTAAAATTTATTTGAGACCTCTTGATGAAATGGACATATTATATA
TTTCTGCCACCTGGATTTTCCTGGATAATTTGATGGAATATTTTAAGTTTCAGTAAATCAGAACAATAAACAAAC
TCAGATAT

FIGURE 1425

MLQQVPENINFPAEEEKILEFWTEFNCFQECLKQSKHKPKFTFYDGPPFATGLPHYGHILAGTIKDIVTRYAHQS
GFHVDRRFGWDCHGLPVEYEIDKTLGIRGPEDVAKMGITEYNNQCRAIVMRYSAEWKSTVSRLGRWIDFDNDYKT
LYPQFMESVWWVFKQLYDKGLVYRGVKVMPFSTACNTPLSNFESHQNYKDVQDPSVFVTFPLEEDETVSLVAWTT
TPWTLPSNLAVCVNPEMQYVKIKDVARGRLLILMEARLSALYKLESDYEILERFPGAYLKGKKYRPLFDYFLKCK
ENGAFTVLVDNYVKEEEGTGVVHQAPYFGAEDYRVCMDFNIIRKDSLPVCPVDASGCFTTEVTDFAGQYVKDADK
SIIRTLKEQGRLLVATTFTHSYPFCWRSDTPLIYKAVPSWFVRVENMVDQLLRNNDLCYWVPELVREKRFGNWLK
DARDWTISRNRYWGTPIPLWVSDDFEEVVCIGSVAELEELSGAKISDLHRESVDHLTIPSRCGKGSLHRISEVFD
CWFESGSMPYAQVHYPFENKREFEDAFPADFIAEGIDQTRGWFYTLLVLATALFGQPPFKNVIVNGLVLASDGQK
MSKRKKNYPDPVSIIQKYGADALRLYLINSPVVRAENLRFKEEGVRDVLKDVLLPWYNAYRFLIQNVLRLQKEEE
IEFLYNENTVRESPNITDRWILSFMQSLIGFFETEMAAYRLYTVVPRLVKFVDILTNWYVRMNRRRLKGENGMED
CVMALETLFSVLLSLCRLIAPYTPFLTELMYQNLKVLIDPVSVQDKDTLSIHYLMLPRVREELIDKKTESAVSQM
QSVIELGRVIRDRKTIPIKYPLKEIVVIHQDPEALKDIKSLEKYIIEELNVRKVTLSTDKNKYGIRLRAEPDHMV
LGKRLKGAFKAVMTSIKQLSSEELEQFQKTGTIVVEGHELHDEDIRLMYTFDQATGGTAQFEAHSDAQALVLLDV
TPDQSMVDEGMAREVINRIQKLRKKCNLVPTDEITVYYKAKSEGTYLNSVIESHTEFIFTTIKAPLKPYPVSPSD
KVLIQEKTQLKGSELEITLTRGSSLPGPACAYVNLNICANGSEQGGVLLLENPKGDNRLDLLKLKSVVTSIFGVK
NTELAVFHDETEIQNQTDLLSLSGKTLCVTAGSAPSLINSSSTLLCQYINLQLLNAKPQECLMGTVGTLLLENPL
GQNGLTHQGLLYEAAKVFGLRSRKLKLFLNETQTQEITEDIPVKTLNMKTVYVSVLPTTADF

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FIGURE 1426

ACTCCGCCTTCCACGTGCACCCACTGCCTCTTCCCTTCTCGCTTGGGAACTCTAGTCTCGCCTCGGGTTGCAATG

GACCCCAACTGCTCCTGTGCCGCTGGTGTCTCCTGCACCTGCGCCAGCTCCTGCAAGTGCAAAGAGTGCAAATGC
ACCTCCTGCAAGAAGAGCTGCTGCTCCTGCTGCCCTGTGGGCTGTGCCAAGTGTGCCCAAGGCTGCATCTGCAAA
GGGGCATCGGAGAAGTGCAGCTGCTGCGCCTGATGTCGGGACAGCCCTGCTCCCAAGTACAAATAGAGTGACCCG
TAAAATCTAGGATTTTTTGTTTTTTGCTACAATCTTGACCCCTTTGCTACATTCCCTTTTTTCTGTGAAATATGT
GAATAATAATTAAACACTTAG

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FIGURE 1427

MDPNCSCAAGVSCTCASSCKCKECKCTSCKKSCCSCCPVGCAKCAQGCICKGASEKCSCCA

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FIGURE 1428

CTGAAGAACAAATCAGCCTGGTCACCAGCTTTTCGGAACAGCAGAGACACAGAGGGCAGTCATGAGTGAGGTCAC
CAAGAATTCCCTGGAGAAAATCCTTCCACAGCTGAAATGCCATTTCACCTGGAACTTATTCAAGGAAGACAGTGT
CTCAAGGGATCTAGAAGATAGAGTGTGTAACCAGATTGAATTTTTAAACACTGAGTTCAAAGCTACAATGTACAA
CTTGTTGGCCTACATAAAACACCTAGATGGTAACAACGAGGCAGCCCTGGAATGCTTACGGCAAGCTGAAGAGTT
AATCCAGCAAGAACATGCTGACCAAGCAGAAATCAGAAGTCTAGTCACTTGGGGAAACTACGCCTGGGTCTACTA
TCACTTGGGCAGACTCTCAGATGCTCAGATTTATGTAGATAAGGTGAAACAAACCTGCAAGAAATTTTCAAATCC
ATACAGTATTGAGTATTCTGAACTTGACTGTGAGGAAGGGTGGACACAACTGAAGTGTGGAAGAAATGAAAGGGC
GAAGGTGTGTTTTGAGAAGGCTCTGGAAGAAAAGCCCAACAACCCAGAATTCTCCTCTGGACTGGCAATTGCGAT
GTACCATCTGGATAATCACCCAGAGAAACAGTTCTCTACTGATGTTTTGAAGCAGGCCATTGAGCTGAGTCCTGA
TAACCAATACGTCAAGGTTCTCTTGGGCCTGAAACTGCAGAAGATGAATAAAGAAGCTGAAGGAGAGCAGTTTGT
TGAAGAAGCCTTGGAAAAGTCTCCTTGCCAAACAGATGTCCTCCGCAGTGCAGCCAAATTTTACAGAAGAAAAGG
TGACCTAGACAAAGCTATTGAACTGTTTCAACGGGTGTTGGAATCCACACCAAACAATGGCTACCTCTATCACCA
GATTGGGTGCTGCTACAAGGCAAAAGTAAGACAAATGCAGAATACAGGAGAATCTGAAGCTAGTGGAAATAAAGA
GATGATTGAAGCACTAAAGCAATATGCTATGGACTATTCGAATAAAGCTCTTGAGAAGGGACTGAATCCTCTGAA
TGCATACTCCGATCTCGCTGAGTTCCTGGAGACGGAATGTTATCAGACACCATTCAATAAGGAAGTCCCTGATGC
TGAAAAGCAACAACAATCCCATCAGCGCTACTGCAACCTTCAGAAATATAATGGGAAGTCTGAAGACACTGCTGT
GCAACATGGTTTAGAGGGTTTGTCCATAAGCAAAAAATCAACTGACAAGGAAGAGATCAAAGACCAACCACAGAA
TGTATCTGAAAATCTGCTTCCACAAAATGCACCAAATTATTGGTATCTTCAAGGATTAATTCATAAGCAGAATGG
AGATCTGCTGCAAGCCAAATGTTATGAGAAGGAACTGGGCCGCCTGCTAAGGGATGCCCCTTCAGGCATAGGCAG
TATTTTCCTGTCAGCATCTGAGCTTGAGGATGGTAGTGAGGAAATGGGCCAGGGCGCAGTCAGCTCCAGTCCCAG
AGAGCTCCTCTCTAACTCAGAGCAACTGAACTGAGACAGAGGAGGAAAACAGAGCATCAGAAGCCTGCAGTGGTG
GTTGTGACGGGTAGGAGGATAGGAAGACAGGGGGCCCAACCTGGGATTGCTGAGCAGGGAAGCTTTGCATGTTGC
TCTAAGGTACATTTTTAAAGAGTTGTTTTTTGGCCGGGCGCAGTGCTCATGCCTGTAATCCCAGAACTTTGGGAG
GCCGAGGTGGGCGGATCACGAGGTCTGGAGTTTGAGACCATCCTGGCTAACACAGTGAAATCCCGTCTCTACTAA
AAATACAAAAAATTAGCCAGGCGTGGTGGCTGGCACCTGTAGTCCCAGCTACTTGGGAGGCTGAGGCAGGAGAAT
GGCGTGAACCTGGAAGGAAGAGGTTGCAGAGAGCCAAGATTGCG

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FIGURE 1429

MSEVTKNSLEKILPQLKCHFTWNLFKEDSVSRDLEDRVCNQIEFLNTEFKATMYNLLAYIKHLDGNNEAALECLR
QAEELIQQEHADQAEIRSLVTWGNYAWVYYHLGRLSDAQIYVDKVKQTCKKFSNPYSIEYSELDCEEGWTQLKCG
RNERAKVCFEKALEEKPNNPEFSSGLAIAMYHLDNHPEKQFSTDVLKQAIELSPDNQYVKVLLGLKLQKMNKEAE
GEQFVEEALEKSPCQTDVLRSAAKFYRRKGDLDKAIELFQRVLESTPNNGYLYHQIGCCYKAKVRQMQNTGESEA
SGNKEMIEALKQYAMDYSNKALEKGLNPLNAYSDLAEFLETECYQTPFNKEVPDAEKQQQSHQRYCNLQKYNGKS
EDTAVQHGLEGLSISKKSTDKEEIKDQPQNVSENLLPQNAPNYWYLQGLIHKQNGDLLQAKCYEKELGRLLRDAP
SGIGSIFLSASELEDGSEEMGQGAVSSSPRELLSNSEQLN

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FIGURE 1430

ATTCGGCTGCGGTACATCTCGGCACTCTAGCTGCAGCCGGGAGAGGCCTTGCCGCCACCGCTGTCGCCCAAGCCT
CCACTGCCGCTGCCACCTCAGCGCCGGCCTCTGCATCCCCAGCTCCAGCTCCGCTCTGCGCCGCTGCTGCCATCG
CCGCTGCCACCTCCGCAGCCCGGGCCTCCGCCGCCGCCACTCAAGCATCCGTGAGTCATTTTCTGCCCATCTCTG
GTCGCGCGGTCTCCCTGGTAGAGTTTGTAGGCTTGCAAGATGGCAGAAGCAGATTTTAAAATGGTCTCGGAACCT
GTCGCCCATGGGGTTGCCGAAGAGGAGATGGCTAGCTCGACTAGTGATTCTGGGGAAGAATCTGACAGCAGTAGC
TCTAGCAGCAGCACTAGTGACAGCAGCAGCAGCAGCAGCACTAGTGGCAGCAGCAGCGGCAGCGGCAGCAGCAGC
AGCAGCAGCGGCAGCACTAGCAGCCGCAGCCGCTTGTATAGAAAGAAGAGGGTACCTGAGCCTTCCAGAAGGGCG
CGGCGGGCCCCGTTGGGAACAAATTTCGTGGATAGGCTGCCTCAGGCAGTTAGAAATCGTGTGCAAGCGCTTAGA
AACATTCAAGATGAATGTGACAAGGTAGATACCCTGTTCTTAAAAGCAATTCATGATCTTGAAAGAAAATATGCT
GAACTCAACAAGCCTCTGTATGATAGGCGGTTTCAAATCATCAATGCAGAATACGAGCCTACAGAAGAAGAATGT
GAATGGAATTCAGAGGATGAGGAGTTCAGCAGTGATGAGGAGGTGCAGGATAACACCCCTAGTGAAATGCCTCCC
TTAGAGGGTGAGGAAGAAGAAAACCCTAAAGAAAACCCAGAGGTGAAAGCTGAAGAGAAGGAAGTTCCTAAAGAA
ATTCCTGAGGTGAAGGATGAAGAAAAGGAAGTTCCTAAAGAAATTCCTGAGGTAAAGGCTGAAGAAAAAGCAGAT
TCTAAAGACTGTATGGAGGCAACCCCTGAAGTAAAAGAAGATCCTAAAGAAGTCCCCCAGGTAAAGGCAGATGAT
AAAGAACAGCCTAAAGCAACAGAGGCTAAGGCAAGGGCTGCAGTAAGAGAGACTCATAAAAGAGTTCCTGAGGAA
AGGCTTCAGGACAGTGTAGATCTTAAAAGAGCTAGGAAGGGAAAGCCTAAAAGAGAAGACCCTAAAGGCATTCCT
GACTATTGGCTGATTGTTTTAAAGAATGTTGACAAGCTCGGGCCTATGATTCAGAAGTATGATGAGCCCATTCTG
AAGTTCTTGTCGGATGTTAGCCTGAAGTTCTCAAAACCTGGCCAGCCTGTAAGTTACACCTTTGAATTTCATTTT
CTACCCAACCCATACTTCAGAAATGAGGTGCTGGTGAAGACATATATAATAAAGGCAAAACCAGATCACAATGAT
CCCTTCTTTTCTTGGGGATGGGAAATTGAAGATTGCAAAGGCTGCAAGATAGACTGGAGAAGAGGAAAAGATGTT
ACTGTGACAACTACCCAGAGTCGCACAACTGCTACTGGAGAAATTGAAATCCAGCCAAGAGTGGTTCCTAATGCA
TCATTCTTCAACTTCTTTAGTCCTCCTGAGATTCCTATGATTGGGAAGCTGGAACCACGAGAAGATGCTATCCTG
GATGAGGACTTTGAAATTGGGCAGATTTTACATGATAATGTCATCCTGAAATCAATCTATTACTATACTGGAGAA
GTCAATGGTACCTACTATCAATTTGGCAAACATTATGGAAACAAGAAATACAGAAAATAAGTCAATCTGAAAGAT
TTTTCAAGAATCTTAAAATCTCAAGAAGTGAAGCAGATTCATACAGCCTTGAAAAAAGTAAAACCCTGACCTGTA
ACCTGAACACTATTATTCCTTATAGTCAAGTTTTTGTGGTTTCTTGGTAGTCTATATTTTAAAAATAGTCCTAAA
AAGTGTCTAAGTGCCAGTTTATTCTATCTAGGCTGTTGTAGTATAATATTCTTCAAAATATGTAAGCTGTTGTCA
ATTATCTAAAGCATGTTAGTTTGGTGCTACACAGTGTTGATTTTTGTGATGTCCTTTGGTCATGTTTCTGTTAGA
CTGTAGCTGTGAAACTGTCAGAATTGTTAACTGAAACAAATATTTGCTTGAAAAAAAAAGTTCATGAAGTACCAA
TGCAAGTGTTTTATTTTTTTCTTTTTTCCAGCCCATAAGACTAAGGGTTTAAATCTGCTTGCACTAGCTGTGCCT
TCATTAGTTTGCTATAGAAATCCAGTACTTATAGTAAATAAAACAGTGTATTTTGAAGTTTGACTGCTTGAAAAA
GATTAGCATACATCTAATGTGAAAAGACCACATTTGATTCAACTGAGACCTTGTGTATGTGACATATAGTGGCCT
ATAAATTTAATCATAATGATGTTATTGTTTACCACTGAGGTGTTAATATAACATAGTATTTTTGAAAAAGTTTCT
TCATCTTATATTGTGTAATTGTAAACTAAAGATACCGTGTTTTCTTTGTATTGTGTTCTACCTTCCCTTTCACTG
AAAATGATCACTTCATTTGATACTGTTTTTCATGTTCTTGTATTGCAACCTAAAATAAATAAATATTAAAGTGTG
TTATACTAT

FIGURE 1431

MAEADFKMVSEPVAHGVAEEEMASSTSDSGEESDSSSSSSSTSDSSSSSSTSGSSSGSGSSSSSSGSTSSRSRLY
RKKRVPEPSRRARRAPLGTNFVDRLPQAVRNRVQALRNIQDECDKVDTLFLKAIHDLERKYAELNKPLYDRRFQI
INAEYEPTEEECEWNSEDEEFSSDEEVQDNTPSEMPPLEGEEEENPKENPEVKAEEKEVPKEIPEVKDEEKEVPK
EIPEVKAEEKADSKDCMEATPEVKEDPKEVPQVKADDKEQPKATEAKARAAVRETHKRVPEERLQDSVDLKRARK
GKPKREDPKGIPDYWLIVLKNVDKLGPMIQKYDEPILKFLSDVSLKFSKPGQPVSYTFEFHFLPNPYFRNEVLVK
TYIIKAKPDHNDPFFSWGWEIEDCKGCKIDWRRGKDVTVTTTQSRTTATGEIEIQPRVVPNASFFNFFSPPEIPM
IGKLEPREDAILDEDFEIGQILHDNVILKSIYYYTGEVNGTYYQFGKHYGNKKYRK

FIGURE 1432

CTGCGAGGAGTCACATTAACTTTGCTCTAGAAGACAACTTTACAAGGATCTAAAAGGAACAGGATTAAAGATGAC
TGAATACTGGGTTCCAGAAATTTAAAACAATCAGCTTAGCAAATCATATATTCTTCTGTGGAGCTGAGAATTGAT
GTCCGCTCTTCCCCGTGATTTGGAACTTTCCAATCCCAGAGAAAAGTTGACAAAGGGACTGCCCAGGACTGAGTC
CATATGGAAGAAGAACTTCCTCTTTTCTCTGGAGACAGTGGCAAGCCAGTACAGGCTACTCTGTCATCTTTGAAG
ATGTTAGATGTGGGAAAGTGGCCAATTTTTTCCCTTTGTTCTGAAGAAGAACTACAGTTAATTCGTCAGGCTTGT
GTCTTTGGCAGTGCTGGCAATGAAGTTTTATACACTACAGTAAATGATGAGATTTTTGTGCTTGGCACAAACTGC
TGTGGCTGTTTGGGGTTAGGTGACGTCCAGAGCACCATTGAACCTCGGAGACTGGATTCTTTAAATGGCAAAAAA
ATAGCCTGCCTCAGCTATGGGAGTGGTCCACATATTGTCCTTGCAACAACAGAAGGAGAAGTCTTTACCTGGGGT
CATAATGCTTATAGCCAGCTGGGCAATGGGACAACTAATCATGGTTTAGTGCCCTGTCATATCTCTACTAATCTG
TCAAACAAACAAGTCATTGAAGTTGCCTGTGGGTCTTACCATTCTTTGGTGCTAACATCTGATGGAGAGGTATTT
GCCTGGGGTTATAATAACTCTGGGCAGGTAGGATCTGGATCAACAGTTAATCAGCCAATCCCTCGAAGAGTCACT
GGCTGCCTACAAAATAAAGTAGTTGTGACCATAGCATGTGGGCAGATGTGCTGCATGGCAGTAGTAGACACGGGG
GAGGTCTATGTCTGGGGTTACAACGGAAACGGGCAGCTTGGACTCGGCAACAGTGGCAACCAGCCAACCCCTTGC
AGAGTGGCAGCTTTGCAAGGCATCCGTGTCCAGAGGGTCGCCTGTGGCTACGCACACACATTAGTATTAACAGAT
GAAGGCCAAGTGTATGCTTGGGGCGCCAATTCTTATGGGCAGTTGGGCACTGGCAATAAAAGCAACCAGTCCTAT
CCTACTCCTGTCACTGTGGAAAAGGACAGGATTATCGAGATTGCAGCCTGTCACTCCACACACACGTCTGCGGCC
AAGACGCAGGGTGGGCACGTGTACATGTGGGGCCAGTGCCGGGGTCAGTCCGTGATCCTCCCGCACCTCACCCAC
TTCTCCTGCACTGACGACGTGTTTGCCTGCTTTGCCACGCCCGCCGTCACGTGGCGCCTCCTCTCCGTGGAACCT
GATGACCACCTCACAGTGGCTGAGTCACTGAAGAGGGAATTTGACAACCCGGACACTGCAGACCTGAAGTTTCTA
GTTGATGGAAAGTACATTTATGCACATAAAGTCCTTCTCAAGATTCGATGTGAGCATTTTCGTTCGTCATTGGAA
GATAACGAGGATGATATTGTAGAAATGAGTGAATTTTCATATCCTGTTTACCGGGCCTTCCTGGAATACCTATAC
ACAGACAGCATCAGCCTTTCTCCTGAGGAGGCAGTAGGACTGCTAGACTTGGCTACATTTTATAGAGAAAATCGT
TTGAAAAAGCTCTGCCAACAAACTATCAAGCAAGGCATCTGCGAGGAGAATGCCATCGCTCTGCTCTCGGCTGCG
GTGAAGTATGATGCACAGGATTTAGAAGAATTCTGCTTCAGGTTTTGCATAAACCATCTGACTGTAGTAACACAA
ACATCAGGTTTTGCAGAAATGGACCATGATCTCCTGAAGAACTTTATCAGCAAAGCAAGCAGAGTTGGAGCCTTT
AAAAATTGATCCCATCTGCAGGAAAGTTTTTGAGCCTTTCCATTTCCCCTGCAAAAGCCAGAGATGAATCACTTC
TCTTTAATTAATAGTATGTATGATGAGCTATGTTTGGCTGAGTACTTGTAACTGTCAGAAGAAGGATGGTGGTGA
GTGGTCTTTGTCTGCCTAAACCCAGAGTTTATGTAGAAAGCATTGAATGTTCTGATCAGATGTGACTAAGGTCAA
GGAAAAAAAATTGAAATATCTTATTTACCATTTCCTCTTTTTGAGTCACTTAAATTGGACACCTTTGGTACCCTG
GTCTCAGTATATGCTATTCTGGCCCAAATGTTCCATTATTCAGCTGGCTGATACCACATAGATAGCTTGACAAGG
AGTGCTGTCTGTCCTTACCACATTTTCAGCACTCAGCACAGTGCCTTGTGTATAATAGGCACTCAATTTATTATA
AATCTTCAGTATGTCCTGAGAACAGCTTTAGTCATGGAATACTGGGAGAAGGAATAACTTTCACAAAATAAACTT
AAAACAGCCTGTAATTATTGAGGTTCACATTCTTCTGGTATATCATTCTGAGAAATTGTGGCTAATTTAGAACAT
TGTTTAGAATTGACAAAAGGCCCTGGCAATTAAATTGTCAAGGCCCAAGGGCTAATTTTAATTTTCTTTTTACTT
GGAGTCATTCATTAATTTCTCACATGGGATTATGGAGTATGAAGTATTATCTTTGAATGAAATTCCTGGGCTGAT
CTGCCTTACATAATCACATAAGGTCCTTTGCTTTTCTTTGTGTTAAGAGGGACTTGCCTCTGTAAATGAAAATGA
CAATGTGCTTTTCTTGTAGTTGACTTTCATGTCACTCACTATAAAATAGGTCTCTTAACCTGGCACCAGTATAAC
TATAAAGCACTAGCTGAGAAGGAACTGATACTTACATTTCATGGACAGCATTAACAAGAATGAGATAAATTTGTA
CTTTTTAGATCAAAACAAATTACCTAATTGCAAAAGAGAAACTGAAATGGAACATAGTCTCAGATTCTTCTAATG
TGTATCTCACAATGTCATGTAATGTAAAGGAAACCCTTTTGGAATTAGAATTCTTGTTCTGATGCTGAACTATTT
GGTAATAAAGTGCTTATTTGCAGATAACAG

FIGURE 1433

MEEELPLFSGDSGKPVQATLSSLKMLDVGKWPIFSLCSEEELQLIRQACVFGSAGNEVLYTTVNDEIFVLGTNCC
GCLGLGDVQSTIEPRRLDSLNGKKIACLSYGSGPHIVLATTEGEVFTWGHNAYSQLGNGTTNHGLVPCHISTNLS
NKQVIEVACGSYHSLVLTSDGEVFAWGYNNSGQVGSGSTVNQPIPRRVTGCLQNKVVVTIACGQMCCMAVVDTGE
VYVWGYNGNGQLGLGNSGNQPTPCRVAALQGIRVQRVACGYAHTLVLTDEGQVYAWGANSYGQLGTGNKSNQSYP
TPVTVEKDRIIEIAACHSTHTSAAKTQGGHVYMWGQCRGQSVILPHLTHFSCTDDVFACFATPAVTWRLLSVEPD
DHLTVAESLKREFDNPDTADLKFLVDGKYIYAHKVLLKIRCEHFRSSLEDNEDDIVEMSEFSYPVYRAFLEYLYT
DSISLSPEEAVGLLDLATFYRENRLKKLCQQTIKQGICEENAIALLSAAVKYDAQDLEEFCFRFCINHLTVVTQT
SGFAEMDHDLLKNFISKASRVGAFKN

FIGURE 1434

CCGAGGCGCTCCCTGGGATCACATGGTACCTGCTCCAGTGCCGCGTGCGGCCCGGGAACCCTGGGCTGCTGGCGC
CTGCGCAGAGCCCTCTGTCCCAGGGAAAGGCTCGGGCAAAAGGCGGCTGAGATTGGCAGAGTGAAATATTACTGC
CGAGGGAACGTAGCAGGGCACACGTCTCGCCTCTTTGCGACTCGGTGCCCCGTTTCTCCCCATCACCTACTTACT
TCCTGGTTGCAACCTCTCTTCCTCTGGGACTTTTGCACCGGGAGCTCCAGATTCGCTACCCCGCAGCGCTGCGGA
GCCGGCAGGCAGAGGCACCCCGTACACTGCAGAGACCCGACCCTCCTTGCTACCTTCTAGCCAGAACTACTGCAG
GCTGATTCCCCCTACACACTCTCTCTGCTCTTCCCATGCAAAGCAGAACTCCGTTGCCTCAACGTCCAACCCTTC
TGCAGGGCTGCAGTCCGGCCACCCCAAGACCTTGCTGCAGGGTGCTTCGGATCCTGATCGTGAGTCGCGGGGTCC
ACTCCCCGCCCTTAGCCAGTGCCCAGGGGGCAACAGCGGCGATCGCAACCTCTAGTTTGAGTCAAGGTCCAGTTT
GAATGACCGCTCTCAGCTGGTGAAGAC**ATG**ACGACCCTGGACTCCAACAACAACACAGGTGGCGTCATCACCTAC
ATTGGCTCCAGTGGCTCCTCCCCAAGCCGCACCAGCCCTGAATCCCTCTATAGTGACAACTCCAATGGCAGCTTC
CAGTCCCTGACCCAAGGCTGTCCCACCTACTTCCCACCATCCCCCACTGGCTCCCTCACCCAAGACCCGGCTCGC
TCCTTTGGGAGCATTCCACCCAGCCTGAGTGATGACGGCTCCCCTTCTTCCTCATCTTCCTCGTCGTCATCCTCC
TCCTCCTTCTATAATGGGAGCCCCCCTGGGAGTCTACAAGTGGCCATGGAGGACAGCAGCCGAGTGTCCCCCAGC
AAGAGCACCAGCAACATCACCAAGCTGAATGGCATGGTGTTACTGTGTAAAGTGTGTGGGGACGTTGCCTCGGGC
TTCCACTACGGTGTGCACGCCTGCGAGGGCTGCAAGGGCTTTTTCCGTCGGAGCATCCAGCAGAACATCCAGTAC
AAAAGGTGTCTGAAGAATGAGAATTGCTCCATCGTCCGCATCAATCGCAACCGCTGCCAGCAATGTCGCTTCAAG
AAGTGTCTCTCTGTGGGCATGTCTCGAGACGCTGTGCGTTTTGGGCGCATCCCCAAACGAGAGAAGCAGCGGATG
CTTGCTGAGATGCAGAGTGCCATGAACCTGGCCAACAACCAGTTGAGCAGCCAGTGCCCGCTGGAGACTTCACCC
ACCCAGCACCCCACCCCAGGCCCCATGGGCCCCTCGCCACCCCCTGCTCCGGTCCCCTCACCCCTGGTGGGCTTC
TCCCAGTTTCCACAACAGCTGACGCCTCCCAGATCCCCAAGCCCTGAGCCCACAGTGGAGGATGTGATATCCCAG
GTGGCCCGGGCCCATCGAGAGATCTTCACCTACGCCCATGACAAGCTGGGCAGCTCACCTGGCAACTTCAATGCC
AACCATGCATCAGGTAGCCCTCCAGCCACCACCCCACATCGCTGGGAAAATCAGGGCTGCCCACCTGCCCCCAAT
GACAACAACACCTTGGCTGCCCAGCGTCATAACGAGGCCCTAAATGGTCTGCGCCAGGCTCCCTCCTCCTACCCT
CCCACCTGGCCTCCTGGCCCTGCACACCACAGCTGCCACCAGTCCAACAGCAACGGGCACCGTCTATGCCCCACC
CACGTGTATGCAGCCCCAGAAGGCAAGGCACCTGCCAACAGTCCCCGGCAGGGCAACTCAAAGAATGTTCTGCTG
GCATGTCCTATGAACATGTACCCGCATGGACGCAGTGGGCGAACGGTGCAGGAGATCTGGGAGGATTTCTCCATG
AGCTTCACGCCCGCTGTGCGGGAGGTGGTAGAGTTTGCCAAACACATCCCGGGCTTCCGTGACCTTTCTCAGCAT
GACCAAGTCACCCTGCTTAAGGCTGGCACCTTTGAGGTGCTGATGGTGCGCTTTGCTTCGTTGTTCAACGTGAAG
GACCAGACAGTGATGTTCCTAAGCCGCACCACCTACAGCCTGCAGGAGCTTGGTGCCATGGGCATGGGAGACCTG
CTCAGTGCCATGTTCGACTTCAGCGAGAAGCTCAACTCCCTGGCGCTTACCGAGGAGGAGCTGGGCCTCTTCACC
GCGGTGGTGCTTGTCTCTGCAGACCGCTCGGGCATGGAGAATTCCGCTTCGGTGGAGCAGCTCCAGGAGACGCTG
CTGCGGGCTCTTCGGGCTCTGGTGCTGAAGAACCGGCCCTTGGAGACTTCCCGCTTCACCAAGCTGCTGCTCAAG
CTGCCGGACCTGCGGACCCTGAACAACATGCATTCCGAGAAGCTGCTGTCCTTCCGGGTGGACGCCCAG**TGA**CCC
GCCCGGCCGGCCTTCTGCCGCTGCCCCCTTGTACAGAATCGAACTCTGCACTTCTCTCTCCTTTACGAGACGAAA
AGGAAAAGCAAACCAGAATCTTATTTATATTGTTATAAAATATTCCAAGATGAGCCTCTGGCCCCCTGAGCCTTC
TTGTAAATACCTGCCTCCCTCCCCCATCACCGAACTTCCCCTCCTCCCCTATTTAAACCACTCTGTCTCCCCCAC
AACCCTCCCCTGGCCCTCTGATTTGTTCTGTTCCTGTCTCAAATCCAATAGTTCACAGCTGAGCTGGG

FIGURE 1435

MTTLDSNNNTGGVITYIGSSGSSPSRTSPESLYSDNSNGSFQSLTQGCPTYFPPSPTGSLTQDPARSFGSIPPSL
SDDGSPSSSSSSSSSSSSFYNGSPPGSLQVAMEDSSRVSPSKSTSNITKLNGMVLLCKVCGDVASGFHYGVHACE
GCKGFFRRSIQQNIQYKRCLKNENCSIVRINRNRCQQCRFKKCLSVGMSRDAVRFGRIPKREKQRMLAEMQSAMN
LANNQLSSQCPLETSPTQHPTPGPMGPSPPPAPVPSPLVGFSQFPQQLTPPRSPSPEPTVEDVISQVARAHREIF
TYAHDKLGSSPGNFNANHASGSPPATTPHRWENQGCPPAPNDNNTLAAQRHNEALNGLRQAPSSYPPTWPPGPAH
HSCHQSNSNGHRLCPTHVYAAPEGKAPANSPRQGNSKNVLLACPMNMYPHGRSGRTVQEIWEDFSMSFTPAVREV
VEFAKHIPGFRDLSQHDQVTLLKAGTFEVLMVRFASLFNVKDQTVMFLSRTTYSLQELGAMGMGDLLSAMFDFSE
KLNSLALTEEELGLFTAVVLVSADRSGMENSASVEQLQETLLRALRALVLKNRPLETSRFTKLLLKLPDLRTLNN
MHSEKLLSFRVDAQ

FIGURE 1436

GAAAAGCGCGCGCGGGGATTCCAGGAGTCGTGGTTTCTTGCCTTGATGTACTGGAGCAATCAGATCACACGGCGG
CTTGGAGAGTGAGTGCAAGGTTTT**ATG**AGTGGAATTAGCCCTCAGCAGATGGGGGAGCCAGAAGGCAGTTGGAGT
GGGAAGAACCCAGGGACCATGGGCGCCTCCAGGCTCTATACCCTGGTGCTGGTCCTGCAGCCTCAGCGAGTTCTC
CTGGGCATGAAAAAGCGAGGCTTCGGGGCCGGCCGGTGGAATGGCTTTGGGGGCAAAGTGCAAGAAGGAGAGACC
ATCGAGGATGGGGCTAGGAGGGAGCTGCAGGAGGAGAGCGGTCTGACAGTGGACGCCCTGCACAAGGTGGGCCAG
ATCGTGTTTGAGTTCGTGGGCGAGCCTGAGCTCATGGACGTGCATGTCTTCTGCACAGACAGCATCCAGGGGACC
CCCGTGGAGAGCGACGAAATGCGCCCATGCTGGTTCCAGCTGGATCAGATCCCCTTCAAGGACATGTGGCCCGAC
GACAGCTACTGGTTTCCACTCCTGCTTCAGAAGAAGAAATTCCACGGGTACTTCAAGTTCCAGGGTCAGGACACC
ATCCTGGACTACACACTCCGCGAGGTGGACACGGTC**TAG**CGGGAGCCCAGGGCAGCCCCTGGGCAGGAGACGTGG
CTGCTGAACAGCTGCAAACCATCTTCACCTGGGGGCATTGAGTGGCGCAGAGCCGGGTTTCATCTGGAATTAACT
GGATGGAAGGGAAAATAAAGCTATCTAGCGGTGAAAAA

FIGURE 1437

MSGISPQQMGEPEGSWSGKNPGTMGASRLYTLVLVLQPQRVLLGMKKRGFGAGRWNGFGGKVQEGETIEDGARRE
LQEESGLTVDALHKVGQIVFEFVGEPELMDVHVFCTDSIQGTPVESDEMRPCWFQLDQIPFKDMWPDDSYWFPLL
LQKKKFHGYFKFQGQDTILDYTLREVDTV

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FIGURE 1438

GGCACGAGGCAGGCCACCCGCCGCTAAGCTGAGAAGGGAGAGCGAGCTTAGGACCGCCTGCCCGGGGCAACCCCG
AACCAAGCTTTAGCCGCCGAGGCCGCGTGTCCCAAAGGCCAGTCATCCCTCCTCTGTGTTGCCATGGGAATTCAA
GGCCTGGCCAAACTAATTGCTGATGTGGCCCCCAGTGCCATCCGGGAGAATGACATCAAGAGCTACTTTGGCCGT
AAGGTGGCCATTGATGCCTCTATGAGCATTTATCAGTTCCTGATTGCTGTTCGCCAGGGTGGGGATGTGCTGCAG
AATGAGGAGGGTGAGACCACCAGCCACCTGATGGGCATGTTCTACCGCACCATTCGCATGATGGAGAACGGCATC
AAGCCCGTGTATGTCTTTGATGGCAAGCCGCCACAGCTCAAGTCAGGCGAGCTGGCCAAACGCAGTGAGCGGCGG
GCTGAGGCAGAGAAGCAGCTGCAGCAGGCTCAGGCTGCTGGGGCCGAGCAGGAGGTGGAAAAATTCACTAAGCGG
CTGGTGAAGGTCACTAAGCAGCACAATGATGAGTGCAAACATCTGCTGAGCCTCATGGGCATCCCTTATCTTGAT
GCACCCAGTGAGGCAGAGGCCAGCTGTGCTGCCCTGGTGAAGGCTGGCAAAGTCTATGCTGCGGCTACCGAGGAC
ATGGACTGCCTCACCTTCGGCAGCCCTGTGCTAATGCGACACCTGACTGCCAGTGAAGCCAAAAAGCTGCCAATC
CAGGAATTCCACCTGAGCCGGATTCTGCAGGAGCTGGGCCTGAACCAGGAACAGTTTGTGGATCTGTGCATCCTG
CTAGGCAGTGACTACTGTGAGAGTATCCGGGGTATTGGGCCCAAGCGGGCTGTGGACCTCATCCAGAAGCACAAG
AGCATCGAGGAGATCGTGCGGCGACTTGACCCCAACAAGTACCCTGTGCCAGAAAATTGGCTCCACAAGGAGGCT
CACCAGCTCTTCTTGGAACCTGAGGTGCTGGACCCAGAGTCTGTGGAGCTGAAGTGGAGCGAGCCAAATGAAGAA
GAGCTGATCAAGTTCATGTGTGGTGAAAAGCAGTTCTCTGAGGAGCGAATCCGCAGTGGGGTCAAGAGGCTGAGT
AAGAGCCGCCAAGGCAGCACCCAGGGCCGCCTGGATGATTTCTTCAAGGTGACCGGCTCACTCTCTTCAGCTAAG
CGCAAGGAGCCAGAACCCAAGGGATCCACTAAGAAGAAGGCAAAGACTGGGGCAGCAGGGAAGTTTAAAAGGGGA
AAATAAATGTGTTTCCCCATTATACCTCCTTCACCCCAGAATATTTGCCGTCTTGTACCCTTAAGAGCTACAGCT
AGAGAAACCTTCACGGGGTGGAGAGAGGATTCTAAGGCTTTTCTAGCGTGACCCTTTTCAGTAGTGCTAGTCCCT
TTTTTACTTGATCTTAATGGCAAGAAGGCCACAGAGGTACTTTTCCTTTTTTAGCTCAGGAAAATATGTCAGGCT
CAAACCACTTCTCAGGCAGTTTAATGGACACTAAGTCCATTGTTACATGAAAGTGATAGATAGCAACAAGTTTTG
GAGAAGAGAGAGGGAGATAAAAGGGGGAGACAAAAGATGTACAGAAATGATTTCCTGGCTGGCCAACTGGTGGCC
AGTGGGAGGTGATGGTGGACCTAGACTGTGCTTTTCTGTCTTGTTCAGCCTTGACCCACCTTGAGAGAGAGCCAC
CAGGAAGGCGCATCTTAGCAGATGGGAGGAACTGCTGAGAGAAGATGGGCAGAAAGCTGGAGCCCCTGGAGTTGG
CTGTGTCTGTGTTTGTGACTGATTACTGGCTGTGTCTTGGGTGGGCAGAAACTCGAACTTGCTATGTAATTTGTG
TCTAGTTATTCAGAGGAGTAAGATGGTGATGTTCACCTGGCAATCAGCTGAGTTGAGACTTTGGAATAAGACACT
GGTTTTCATGCGCTGTTTTTGTTTTAAAGTTATGAAGAAAAAAGTCAATAAAATTCTAAAAGTAAAAAAAAAAAA
AAAAAA

FIGURE 1439

MGIQGLAKLIADVAPSAIRENDIKSYFGRKVAIDASMSIYQFLIAVRQGGDVLQNEEGETTSHLMGMFYRTIRMM
ENGIKPVYVFDGKPPQLKSGELAKRSERRAEAEKQLQQAQAAGAEQEVEKFTKRLVKVTKQHNDECKHLLSLMGI
PYLDAPSEAEASCAALVKAGKVYAAATEDMDCLTFGSPVLMRHLTASEAKKLPIQEFHLSRILQELGLNQEQFVD
LCILLGSDYCESIRGIGPKRAVDLIQKHKSIEEIVRRLDPNKYPVPENWLHKEAHQLFLEPEVLDPESVELKWSE
PNEEELIKFMCGEKQFSEERIRSGVKRLSKSRQGSTQGRLDDFFKVTGSLSSAKRKEPEPKGSTKKKAKTGAAGK
FKRGK

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FIGURE 1440

AGTCCTGCGATTTCGGGTGTAGAGGGAGCAGGGGCCTGCGGGGACCTGGTGTGGGTGGAGTGGGGACAAGCGGTG
GAGAAGGGTACGCCAGGGTCGCTGAGAGACTCTGTTCTCCCTGGAGGGACTGGTTGCCATGAGAGCAGCCGTCTG
AGGGGACGCAGCCTGCACTACGCGCCCCAAGAGGCTGTGCGTGGCGAGCAGGTCACGTGACGGGAGCGCGGGCTT
TGGAAGGCGGCTGAACGTCAGGCCACCCGCCGCTAAGCTGAGAAGGGAGAGCGAGCTTAGGACCGCCTGCCCGGG
GCAACCCCGAACCAAGCTTTAGCCGCCGAGGCCGCGTGTCCCAAAGGCCAGTCATCCCTCCTCTGTGTTGCC**ATG**

GGAATTCAAGGCCTGGCCAAACTAATTGCTGATGTGGCCCCCAGTGCCATCCGGGAGAATGACATCAAGAGCTAC
TTTGGCCGTAAGGTGGCCATTGATGCCTCTATGAGCATTTATCAGTTCCTGATTGCTGTTCGCCAGGGTGGGGAT
GTGCTGCAGAATGAGGAGGGTGAGACCACCAGCCACCTGATGGGCATGTTCTACCGCACCATTCGCATGATGGAG
AACGGCATCAAGCCCGTGTATGTCTTTGATGGCAAGCCGCCACAGCTCAAGTCAGGCGAGCTGGCCAAACGCAGT
GAGCGGCGGGCTGAGGCAGAGAAGCAGCTGCAGCAGGCTCAGGCTGCTGGGGCCGAGCAGGAGGTGGAAAAATTC
ACTAAGCGGCTGGTGAAGGTCACTAAGCAGCACAATGATGAGTGCAAACATCTGCTGAGCCTCATGGGCATCCCT
TATCTTGATGCACCCAGTGAGGCAGAGGCCAGCTGTGCTGCCCTGGTGAAGGCTGGCAAAGTCTATGCTGCGGCT
ACCGAGGACATGGACTGCCTCACCTTCGGCAGCCCTGTGCTAATGCGACACCTGACTGCCAGTGAAGCCAAAAAG
CTGCCAATCCAGGAATTCCACCTGAGCCGGATTCTGCAGGAGCTGGGCCTGAACCAGGAACAGTTTGTGGATCTG
TGCATCCTGCTAGGCAGTGACTACTGTGAGAGTATCCGGGGTATTGGGCCCAAGCGGGCTGTGGACCTCATCCAG
AAGCACAAGAGCATCGAGGAGATCGTGCGGCGACTTGACCCCAACAAGTACCCTGTGCCAGAAAATTGGCTCCAC
AAGGAGGCTCACCAGCTCTTCTTGGAACCTGAGGTGCTGGACCCAGAGTCTGTGGAGCTGAAGTGGAGCGAGCCA
AATGAAGAAGAGCTGATCAAGTTCATGTGTGGTGAAAAGCAGTTCTCTGAGGAGCGAATCCGCAGTGGGGTCAAG
AGGCTGAGTAAGAGCCGCCAAGGCAGCACCCAGGGCCGCCTGGATGATTTCTTCAAGGTGACCGGCTCACTCTCT
TCAGCTAAGCGCAAGGAGCCAGAACCCAAGGGATCCACTAAGAAGAAGGCAAAGACTGGGGCAGCAGGGAAGTTT
AAAAGGGGAAAA**TAA**ATGTGTTTCCCCATTATACCTCCTTCACCCCAGAATATTTGCCGTCTTGTACCCTTAAGA
GCTACAGCTAGAGAAACCTTCACGGGGTGGAGAGAGGATTCTAAGGCTTTTCTAGCGTGACCCTTTTCAGTAGTG
CTAGTCCCTTTTTTACTTGATCTTAATGGCAAGAAGGCCACAGAGGTACTTTTCCTTTTTTAGCTCAGGAAAATA
TGTCAGGCTCAAACCACTTCTCAGGCAGTTTAATGGACACTAAGTCCATTGTTACATGAAAGTGATAGATAGCAA
CAAGTTTTGGAGAAGAGAGAGGGAGATAAAAGGGGGAGACAAAAGATGTACAGAAATGATTTCCTGGCTGGCCAA
CTGGTGGCCAGTGGGAGGTGATGGTGGACCTAGACTGTGCTTTTCTGTCTTGTTCAGCCTTGACCCACCTTGAGA
GAGAGCCACCAGGAAGGCGCATCTTAGCAGATGGGAGGAACTGCTGAGAGAAGATGGGCAGAAAGCTGGAGCCCC
TGGAGTTGGCTGTGTCTGTGTTTGTGACTGATTACTGGCTGTGTCTTGGGTGGGCAGAAACTCGAACTTGCTATG
TAATTTGTGTCTAGTTATTCAGAGGAGTAAGATGGTGATGTTCACCTGGCAATCAGCTGAGTTGAGACTTTGGAA
TAAGACACTGGTTTTCATGCGCTGTTTTTGTTTTAAAGTTATGAAGAAAAAAGTCAATAAAATTCTAAAAGTAAA
AAAAAAAAAAAAAAA

FIGURE 1441

MGIQGLAKLIADVAPSAIRENDIKSYFGRKVAIDASMSIYQFLIAVRQGGDVLQNEEGETTSHLMGMFYRTIRMM
ENGIKPVYVFDGKPPQLKSGELAKRSERRAEAEKQLQQAQAAGAEQEVEKFTKRLVKVTKQHNDECKHLLSLMGI
PYLDAPSEAEASCAALVKAGKVYAAATEDMDCLTFGSPVLMRHLTASEAKKLPIQEFHLSRILQELGLNQEQFVD
LCILLGSDYCESIRGIGPKRAVDLIQKHKSIEEIVRRLDPNKYPVPENWLHKEAHQLFLEPEVLDPESVELKWSE
PNEEELIKFMCGEKQFSEERIRSGVKRLSKSRQGSTQGRLDDFFKVTGSLSSAKRKEPEPKGSTKKKAKTGAAGK
FKRGK

FIGURE 1442

GGGGGCTGTAGCTGGTGAGAGGAAGTCCTAGAGGCTATGGACACTCTGCTGCTGGGATCACCGAGATGAGCAGCA
GCTGCTCAGGGCTGAGCAGGGTCCTGGTGGCCGTGGCTACAGCCCTGGTGTCTGCCTCCTCCCCCTGCCCCCAGG
CCTGGGGCCCCCCAGGGGTCCAGTATGGGCAGCCAGGCAGGTCCGTGAAGCTGTGTTGTCCTGGAGTGACTGCCG
GGGACCCAGTGTCCTGGTTTCGGGATGGGGAGCCAAAGCTGCTCCAGGGACCTGACTCTGGGCTAGGGCATGAAC
TGGTCCTGGCCCAGGCAGACAGCACTGATGAGGGCACCTACATCTGCCAGACCCTGGATGGTGCACTTGGGGGCA
CAGTGACCCTGCAGCTGGGCTACCCTCCAGCCCGCCCTGTTGTCTCCTGCCAAGCAGCCGACTATGAGAACTTCT
CTTGCACTTGGAGTCCCAGCCAGATCAGCGGTTTACCCACCCGCTACCTCACCTCCTACAGGAAGAAGACAGTCC
TAGGAGCTGATAGCCAGAGGAGGAGTCCATCCACAGGGCCCTGGCCATGCCCACAGGATCCCCTAGGGGCTGCCC
GCTGTGTTGTCCACGGGGCTGAGTTCTGGAGCCAGTACCGGATTAATGTGACTGAGGTGAACCCACTGGGTGCCA
GCACACGCCTGCTGGATGTGAGCTTGCAGAGCATCTTGCGCCCTGACCCACCCCAGGGCCTGCGGGTAGAGTCAG
TACCAGGTTACCCCCGACGCCTGCGAGCCAGCTGGACATACCCTGCCTCCTGGCCGTGCCAGCCCCACTTCCTGC
TCAAGTTCCGTTTGCAGTACCGTCCGGCGCAGCATCCAGCCTGGTCCACGGTGGAGCCAGCTGGACTGGAGGAGG
TGATCACAGATGCTGTGGCTGGGCTGCCCCATGCTGTACGAGTCAGTGCCCGGGACTTTCTAGATGCTGGCACCT
GGAGCACCTGGAGCCCGGAGGCCTGGGGAACTCCGAGCACTGGGACCATACCAAAGGAGATACCAGCATGGGGCC
AGCTACACACGCAGCCAGAGGTGGAGCCTCAGGTGGACAGCCCTGCTCCTCCAAGGCCCTCCCTCCAACCACACC
CTCGGCTACTTGATCACAGGGACTCTGTGGAGCAGGTAGCTGTGCTGGCGTCTTTGGGAATCCTTTCTTTCCTGG
GACTGGTGGCTGGGGCCCTGGCACTGGGGCTCTGGCTGAGGCTGAGACGGGGTGGGAAGGATGGATCCCCAAAGC
CTGGGTTCTTGGCCTCAGTGATTCCAGTGGACAGGCGTCCAGGAGCTCCAAACCTGTAGAGGACCCAGGAGGGCT
TCGGCAGATTCCACCTATAATTCTGTCTTGCTGGTGTGGATAGAAACCAGGCAGGACAGTAGATCCCTATGGTTG
GATCTCAGCTGGAAGTTCTGTTTGGAGCCCATTTCTGTGAGACCCTGTATTTCAAATTTGCAGCTGAAAGGTGCT
TGTACCTCTGATTTCACCCCAGAGTTGGAGTTCTGCTCAAGGAACGTGTGTAATGTGTACATCTGTGTCCATGTG
TGACCATGTGTCTGTGAGGCAGGGAACATGTATTCTCTGCATGCATGTATGTAGGTGCCTGGGGAGTGTGTGTGG
GTCCTTGGCTCTTGGCCTTTCCCCTTGCAGGGGTTGTGCAGGTGTGAATAAAGAGAATAAGGAAGTTCTTGGAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1443

MSSSCSGLSRVLVAVATALVSASSPCPQAWGPPGVQYGQPGRSVKLCCPGVTAGDPVSWFRDGEPKLLQGPDSGL
GHELVLAQADSTDEGTYICQTLDGALGGTVTLQLGYPPARPVVSCQAADYENFSCTWSPSQISGLPTRYLTSYRK
KTVLGADSQRRSPSTGPWPCPQDPLGAARCVVHGAEFWSQYRINVTEVNPLGASTRLLDVSLQSILRPDPPQGLR
VESVPGYPRRLRASWTYPASWPCQPHFLLKFRLQYRPAQHPAWSTVEPAGLEEVITDAVAGLPHAVRVSARDFLD
AGTWSTWSPEAWGTPSTGTIPKEIPAWGQLHTQPEVEPQVDSPAPPRPSLQPHPRLLDHRDSVEQVAVLASLGIL
SFLGLVAGALALGLWLRLRRGGKDGSPKPGFLASVIPVDRRPGAPNL

FIGURE 1444

AGCCCTCCCCAACCCGGGCGTTCCCCAGCGAGGCTTCCTTCCCATCCTCCTGACCACCGGGGCTTTTCGTGAGCT
CGTCTCTGATCTCGCGCAAGAGTGACACACAGGTGTTCAAAGACGCTTCTGGGGAGTGAGGGAAGCGGTTTACGA
GTGACTTGGCTGGAGCCTCAGGGGCGGGCACTGGCACGGAACACACCCTGAGGCCAGCCCTGGCTGCCCAGGCGG
AGCTGCCTCTTCTCCCGCGGGTTGGTGGACCCGCTCAGTACGGAGTTGGGGAAGCTCTTTCACTTCGGAGGATTG
CTCAACAACC**ATG**CTGGGCATCTGGACCCTCCTACCTCTGGTTCTTACGTCTGTTGCTAGATTATCGTCCAAAAG
TGTTAATGCCCAAGTGACTGACATCAACTCCAAGGGATTGGAATTGAGGAAGACTGTTACTACAGTTGAGACTCA
GAACTTGGAAGGCCTGCATCATGATGGCCAATTCTGCCATAAGCCCTGTCCTCCAGGTGAAAGGAAAGCTAGGGA
CTGCACAGTCAATGGGGATGAACCAGACTGCGTGCCCTGCCAAGAAGGGAAGGAGTACACAGACAAAGCCCATTT
TTCTTCCAAATGCAGAAGATGTAGATTGTGTGATGAAGGACATGGCTTAGAAGTGGAAATAAACTGCACCCGGAC
CCAGAATACCAAGTGCAGATGTAAACCAAACTTTTTTTGTAACTCTACTGTATGTGAACACTGTGACCCTTGCAC
CAAATGTGAACATGGAATCATCAAGGAATGCACACTCACCAGCAACACCAAGTGCAAAGAGGAAGGATCCAGATC
TAACTTGGGGTGGCTTTGTCTTCTTCTTTTGCCAATTCCACTAATTGTTTGGGTGAAGAGAAAGGAAGTACAGAA
AACATGCAGAAAGCACAGAAAGGAAAACCAAGGTTCTCATGAATCTCCAACCTTAAATCCTGAAACAGTGGCAAT
AAATTTATCTGATGTTGACTTGAGTAAATATATCACCACTATTGCTGGAGTCATGACACTAAGTCAAGTTAAAGG
CTTTGTTCGAAAGAATGGTGTCAATGAAGCCAAAATAGATGAGATCAAGAATGACAATGTCCAAGACACAGCAGA
ACAGAAAGTTCAACTGCTTCGTAATTGGCATCAACTTCATGGAAAGAAAGAAGCGTATGACACATTGATTAAAGA
TCTCAAAAAAGCCAATCTTTGTACTCTTGCAGAGAAAATTCAGACTATCATCCTCAAGGACATTACTAGTGACTC
AGAAAATTCAAACTTCAGAAATGAAATCCAAAGCTTGGTC**TAG**AGTGAAAAACAACAAATTCAGTTCTGAGTATA
TGCAATTAGTGTTTGAAAAGATTCTTAATAGCTGGCTGTAAATACTGCTTGGTTTTTTACTGGGTACATTTTATC
ATTTATTAGCGCTGAAGAGCCAACATATTTGTAGATTTTTAATATCTCATGATTCTGCCTCCAAGGATGTTTAAA
ATCTAGTTGGGAAAACAAACTTCATCAAGAGTAAATGCAGTGGCATGCTAAGTACCCAAATAGGAGTGTATGCAG
AGGATGAAAGATTAAGATTATGCTCTGGCATCTAACATATGATTCTGTAGTATGAATGTAATCAGTGTATGTTAG
TACAAATGTCTATCCACAGGCTAACCCCACTCTATGAATCAATAGAAGAAGCTATGACCTTTTGCTGAAATATCA
GTTACTGAACAGGCAGGCCACTTTGCCTCTAAATTACCTCTGATAATTCTAGAGATTTTACCATATTTCTAAACT
TTGTTTATAACTCTGAGAAGATCATATTTATGTAAAGTATATGTATTTGAGTGCAGAATTTAAATAAGGCTCTAC
CTCAAAGACCTTTGCACAGTTTATTGGTGTCATATTATACAATATTTCAATTGTGAATTCACATAGAAAACATTA
AATTATAATGTTTGACTATTATATATGTGTATGCATTTTACTGGCTCAAAACTACCTACTTCTTTCTCAGGCATC
AAAAGCATTTTGAGCAGGAGAGTATTACTAGAGCTTTGCCACCTCTCCATTTTTGCCTTGGTGCTCATCTTAATG
GCCTAATGCACCCCCAAACATGGAAATATCACCAAAAAATACTTAATAGTCCACCAAAAGGCAAGACTGCCCTTA
GAAATTCTAGCCTGGTTTGGAGATACTAACTGCTCTCAGAGAAAGTAGCTTTGTGACATGTCATGAACCCATGTT
TGCAATCAAAGATGATAAAATAGATTCTTATTTTTCCCCCACCCCCGAAAATGTTCAATAATGTCCCATGTAAAA
CCTGCTACAAATGGCAGCTTATACATAGCAATGGTAAAATCATCATCTGGATTTAGGAATTGCTCTTGTCATACC
CCCAAGTTTCTAAGATTTAAGATTCTCCTTACTACTATCCTACGTTTAAATATCTTTGAAAGTTTGTATTAAATG
TGAATTTTAAGAAATAATATTTATATTTCTGTAAATGTAAACTGTGAAGATAGTTATAAACTGAAGCAGATACCT
GGAACCACCTAAAGAACTTCCATTTATGGAGGATTTTTTTGCCCCTTGTGTTTGGAATTATAAAATATAGGTAAA
AGTACGTAATTAAATAATGTTTTTGGTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAA

FIGURE 1445

MLGIWTLLPLVLTSVARLSSKSVNAQVTDINSKGLELRKTVTTVETQNLEGLHHDGQFCHKPCPPGERKARDCTV
NGDEPDCVPCQEGKEYTDKAHFSSKCRRCRLCDEGHGLEVEINCTRTQNTKCRCKPNFFCNSTVCEHCDPCTKCE
HGIIKECTLTSNTKCKEEGSRSNLGWLCLLLLPIPLIVWVKRKEVQKTCRKHRKENQGSHESPTLNPETVAINLS
DVDLSKYITTIAGVMTLSQVKGFVRKNGVNEAKIDEIKNDNVQDTAEQKVQLLRNWHQLHGKKEAYDTLIKDLKK
ANLCTLAEKIQTIILKDITSDSENSNFRNEIQSLV

FIGURE 1446

AGCCCTCCCCAACCCGGGCGTTCCCCAGCGAGGCTTCCTTCCCATCCTCCTGACCACCGGGGCTTTTCGTGAGCT
CGTCTCTGATCTCGCGCAAGAGTGACACACAGGTGTTCAAAGACGCTTCTGGGGAGTGAGGGAAGCGGTTTACGA
GTGACTTGGCTGGAGCCTCAGGGGCGGGCACTGGCACGGAACACACCCTGAGGCCAGCCCTGGCTGCCCAGGCGG
AGCTGCCTCTTCTCCCGCGGGTTGGTGGACCCGCTCAGTACGGAGTTGGGGAAGCTCTTTCACTTCGGAGGATTG
CTCAACAACC**ATG**CTGGGCATCTGGACCCTCCTACCTCTGGTTCTTACGTCTGTTGCTAGATTATCGTCCAAAAG
TGTTAATGCCCAAGTGACTGACATCAACTCCAAGGGATTGGAATTGAGGAAGACTGTTACTACAGTTGAGACTCA
GAACTTGGAAGGCCTGCATCATGATGGCCAATTCTGCCATAAGCCCTGTCCTCCAGGTGAAAGGAAAGCTAGGGA
CTGCACAGTCAATGGGGATGAACCAGACTGCGTGCCCTGCCAAGAAGGGAAGGAGTACACAGACAAAGCCCATTT
TTCTTCCAAATGCAGAAGATGTAGATTGTGTGATGAAGGACATGGCTTAGAAGTGGAAATAAACTGCACCCGGAC
CCAGAATACCAAGTGCAGATGTAAACCAAACTTTTTTTGTAACTCTACTGTATGTGAACACTGTGACCCTTGCAC
CAAATGTGAACATGGAATCATCAAGGAATGCACACTCACCAGCAACACCAAGTGCAAAGAGGAAGGATCCAGATC
TAACTTGGGGTGGCTTTGTCTTCTTCTTTTGCCAATTCCACTAATTGTTTGGGTGAAGAGAAAGGAAGTACAGAA
AACATGCAGAAAGCACAGAAAGGAAAACCAAGGTTCTCATGAATCTCCAACCTTAAATCCTGAAACAGTGGCAAT
AAATTTATCTGATGTTGACTTGAGTAAATATATCACCACTATTGCTGGAGTCATGACACTAAGTCAAGTTAAAGG
CTTTGTTCGAAAGAATGGTGTCAATGAAGCCAAAATAGATGAGATCAAGAATGACAATGTCCAAGACACAGCAGA
ACAGAAAGTTCAACTGCTTCGTAATTGGCATCAACTTCATGGAAAGAAAGAAGCGTATGACACATTGATTAAAGA
TCTCAAAAAAGCCAATCTTTGTACTCTTGCAGAGAAAATTCAGACTATCATCCTCAAGGACATTACTAGTGACTC
AGAAAATTCAAACTTCAGAAATGAAATCCAAAGCTTGGTC**TAG**AGTGAAAAACAACAAATTCAGTTCTGAGTATA
TGCAATTAGTGTTTGAAAAGATTCTTAATAGCTGGCTGTAAATACTGCTTGGTTTTTTACTGGGTACATTTTATC
ATTTATTAGCGCTGAAGAGCCAACATATTTGTAGATTTTTAATATCTCATGATTCTGCCTCCAAGGATGTTTAAA
ATCTAGTTGGGAAAACAAACTTCATCAAGAGTAAATGCAGTGGCATGCTAAGTACCCAAATAGGAGTGTATGCAG
AGGATGAAAGATTAAGATTATGCTCTGGCATCTAACATATGATTCTGTAGTATGAATGTAATCAGTGTATGTTAG
TACAAATGTCTATCCACAGGCTAACCCCACTCTATGAATCAATAGAAGAAGCTATGACCTTTTGCTGAAATATCA
GTTACTGAACAGGCAGGCCACTTTGCCTCTAAATTACCTCTGATAATTCTAGAGATTTTACCATATTTCTAAACT
TTGTTTATAACTCTGAGAAGATCATATTTATGTAAAGTATATGTATTTGAGTGCAGAATTTAAATAAGGCTCTAC
CTCAAAGACCTTTGCACAGTTTATTGGTGTCATATTATACAATATTTCAATTGTGAATTCACATAGAAAACATTA
AATTATAATGTTTGACTATTATATATGTGTATGCATTTTACTGGCTCAAAACTACCTACTTCTTTCTCAGGCATC
AAAAGCATTTTGAGCAGGAGAGTATTACTAGAGCTTTGCCACCTCTCCATTTTTGCCTTGGTGCTCATCTTAATG
GCCTAATGCACCCCCAAACATGGAAATATCACCAAAAAATACTTAATAGTCCACCAAAAGGCAAGACTGCCCTTA
GAAATTCTAGCCTGGTTTGGAGATACTAACTGCTCTCAGAGAAAGTAGCTTTGTGACATGTCATGAACCCATGTT
TGCAATCAAAGATGATAAAATAGATTCTTATTTTTCCCCCACCCCCGAAAATGTTCAATAATGTCCCATGTAAAA
CCTGCTACAAATGGCAGCTTATACATAGCAATGGTAAAATCATCATCTGGATTTAGGAATTGCTCTTGTCATACC
CCCAAGTTTCTAAGATTTAAGATTCTCCTTACTACTATCCTACGTTTAAATATCTTTGAAAGTTTGTATTAAATG
TGAATTTTAAGAAATAATATTTATATTTCTGTAAATGTAAACTGTGAAGATAGTTATAAACTGAAGCAGATACCT
GGAACCACCTAAAGAACTTCCATTTATGGAGGATTTTTTTGCCCCTTGTGTTTGGAATTATAAAATATAGGTAAA
AGTACGTAATTAAATAATGTTTTTGGTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAA

FIGURE 1447

MLGIWTLLPLVLTSVARLSSKSVNAQVTDINSKGLELRKTVTTVETQNLEGLHHDGQFCHKPCPPGERKARDCTV
NGDEPDCVPCQEGKEYTDKAHFSSKCRRCRLCDEGHGLEVEINCTRTQNTKCRCKPNFFCNSTVCEHCDPCTKCE
HGIIKECTLTSNTKCKEEGSRSNLGWLCLLLLPIPLIVWVKRKEVQKTCRKHRKENQGSHESPTLNPETVAINLS
DVDLSKYITTIAGVMTLSQVKGFVRKNGVNEAKIDEIKNDNVQDTAEQKVQLLRNWHQLHGKKEAYDTLIKDLKK
ANLCTLAEKIQTIILKDITSDSENSNFRNEIQSLV

FIGURE 1448

GGCACGAGCGGAGAGCCGCGCAGGGCGCGGGCCGCGCGGGGTGGGGCAGCCGGAGCGCAGGCCCCCGATCCCCGG
CGGGCGCCCCCGGGCCCCCGCGCGCGCCCCGGCCTCCGGGAGACTGGCGCATGCCACGGAGCGCCCCTCGGGCCG
CCGCCGCTCCTGCCCGGGCCCCTGCTGCTGCTGCTGTCGCCTGCGCCTGCTGCCCCAACTCGGCGCCCGACTTCT
TCATGGTGTGCGGAGGTCATGTTCGCTCCTTAGCAGGCAAACGACTTTTCTCCTCGCCTCCTCGCCCCGC**ATG**TT
CAGGACCAAACGATCTGCGCTCGTCCGGCGTCTCTGGAGGAGCCGTGCGCCCGGCGGCGAGGACGAGGAGGAGGG
CGCAGGGGGAGGTGGAGGAGGAGGCGAGCTGCGGGGAGAAGGGGCGACGGACAGCCGAGCGCATGGGGCCGGTGG
CGGCGGCCCGGGCAGGGCTGGATGCTGCCTGGGCAAGGCGGTGCGAGGTGCCAAAGGTCACCACCATCCCCACCC
GCCAGCCGCGGGCGCCGGCGCGGCCGGGGGCGCCGAGGCGGATCTGAAGGCGCTCACGCACTCGGTGCTCAAGAA
ACTGAAGGAGCGGCAGCTGGAGCTGCTGCTCCAGGCCGTGGAGTCCCGCGGCGGGACGCGCACCGCGTGCCTCCT
GCTGCCCGGCCGCCTGGACTGCAGGCTGGGCCCGGGGGCGCCCGCCGGCGCGCAGCCTGCGCAGCCGCCCTCGTC
CTACTCGCTCCCCCTCCTGCTGTGCAAAGTGTTCAGGTGGCCGGATCTCAGGCATTCCTCGGAAGTCAAGAGGCT
GTGTTGCTGTGAATCTTACGGGAAGATCAACCCCGAGCTGGTGTGCTGCAACCCCCATCACCTTAGCCGACTCTG
CGAACTAGAGTCTCCCCCCCCTCCTTACTCCAGATACCCGATGGATTTTCTCAAACCAACTGCAGACTGTCCAGA
TGCTGTGCCTTCCTCCGCTGAAACAGGGGGAACGAATTATCTGGCCCCTGGGGGGCTTTCAGATTCCCAACTTCT
TCTGGAGCCTGGGGATCGGTCACACTGGTGCGTGGTGGCATACTGGGAGGAGAAGACGAGAGTGGGGAGGCTCTA
CTGTGTCCAGGAGCCCTCTCTGGATATCTTCTATGATCTACCTCAGGGGAATGGCTTTTGCCTCGGACAGCTCAA
TTCGGACAACAAGAGTCAGCTGGTGCAGAAGGTGCGGAGCAAAATCGGCTGCGGCATCCAGCTGACGCGGGAGGT
GGATGGTGTGTGGGTGTACAACCGCAGCAGTTACCCCATCTTCATCAAGTCCGCCACACTGGACAACCCGGACTC
CAGGACGCTGTTGGTACACAAGGTGTTCCCCGGTTTCTCCATCAAGGCTTTCGACTACGAGAAGGCGTACAGCCT
GCAGCGGCCCAATGACCACGAGTTTATGCAGCAGCCGTGGACGGGCTTTACCGTGCAGATCAGCTTTGTGAAGGG
CTGGGGTCAGTGCTACACCCGCCAGTTCATCAGCAGCTGCCCGTGCTGGCTAGAGGTCATCTTCAACAGCCGG**TA**
GCCGCGTGCGGAGGGGACAGAGCGTGAGCTGAGCAGGCCACACTTCAAACTACTTTGCTGCTAATATTTTCCTCC
TGAGTGCTTGCTTTTCATGCAAACTCTTTGGTCGTTTTTTTTTTGTTTGTTGGTTGGTTTTCTTCTTCTCGTCCT
CGTTTGTGTTCTGTTTTGTTTCGCTCTTTGAGAAATAGCTTATGAAAAGAATTGTTGGGGGTTTTTTTGGAAGAA
GGGGCAGGTATGATCGGCAGGACACCCTGATAGGAAGAGGGGAAGCAGAAATCCAAGCACCACCAAACACAGTGT
ATGAAGGGGGGCGGTCATCATTTCACTTGTCAGGAGTGTGTGTGAGTGTGAGTGTGCGGCTGTGTGTGCACGCGT
GTGCAGGAGCGGCAGATGGGGAGACAACGTGCTCTTTGTTTTGTGTCTCTTATGGATGTCCCCAGCAGAGAGGTT
TGCAGTCCCAAGCGGTGTCTCTCCTGCCCCTTGGACACGCTCAGTGGGGCAGAGGCAGTACCTGGGCAAGCTGGC
GGCTGGGGTCCCAGCAGCTGCCAGGAGCACGGCTCTGTCCCCAGCCTGGGAAAGCCCCTGCCCCTCCTCTCCCTC
ATCAAGGACACGGGCCTGTCCACAGGCTTCTGAGCAGCGAGCCTGCTAGTGGCCGAACCAGAACCAATTATTTTC
ATCCTTGTCTTATTCCCTTCCTGCCAGCCCCTGCCATTGTAGCGTCTTTCTTTTTTGGCCATCTGCTCCTGGATC
TCCCTGAGATGGGCTTCCCAAGGGCTGCCGGGGCAGCCCCCTCACAGTATTGCTCACCCAGTGCCCTCTCCCCTC
AGCCTCTCCCCTGCCTGCCCTGGTGACATCAGGTTTTTCCCGGACTTAGAAAACCAGCTCAGCACTGCCTGCTCC
CATCCTGTGTGTTAAGCTCTGCTATTAGGCCAGCAAGCGGGGATGTCCCTGGGAGGGACATGCTTAGCAGTCCCC
TTCCCTCCAAGAAGGATTTGGTCCGTCATAACCCAAGGTACCATCCTAGGCTGACACCTAACTCTTCTTTCATTT
CTTCTACAACTCATACACTCGTATGATACTTCGACACTGTTCTTAGCTCAATGAGCATGTTTAGACTTTAACATA
AGCTATTTTTCTAACTACAAAGGTTTAAATGAACAAGAGAAGCATTCTCATTGGAAATTTAGCATTGTAGTGCTT
TGAGAGAGAAAGGACTCCTGAAAAAAAACCTGAGATTTATTAAAGAAAAAAATGTATTTTATGTTATATATAAAT
ATATTATTACTTGTAAATATAAAGACGTTTTATAAGCATCATTATTTATGTATTGTGCAATGTGTATAAACAAGA
AAAATAAAGAAAAGATGCACTTTGCTTTAATATAAATGCAAATAACAAATGCCAAATTAAAAAAGATAAACACAA
GATTGGTGTTTTTTCCTATGGGTGTTATCACCTAGCTGAATGTTTTTCTAAAGGAGTTTATGTTCCATTAAACGA
TTTTTAAAATGTACACTTGAAAAAAAAAAAAAAAA

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FIGURE 1449

MFRTKRSALVRRLWRSRAPGGEDEEEGAGGGGGGGELRGEGATDSRAHGAGGGGPGRAGCCLGKAVRGAKGHHHP
HPPAAGAGAAGGAEADLKALTHSVLKKLKERQLELLLQAVESRGGTRTACLLLPGRLDCRLGPGAPAGAQPAQPP
SSYSLPLLLCKVFRWPDLRHSSEVKRLCCCESYGKINPELVCCNPHHLSRLCELESPPPPYSRYPMDFLKPTADC
PDAVPSSAETGGTNYLAPGGLSDSQLLLEPGDRSHWCVVAYWEEKTRVGRLYCVQEPSLDIFYDLPQGNGFCLGQ
LNSDNKSQLVQKVRSKIGCGIQLTREVDGVWVYNRSSYPIFIKSATLDNPDSRTLLVHKVFPGFSIKAFDYEKAY
SLQRPNDHEFMQQPWTGFTVQISFVKGWGQCYTRQFISSCPCWLEVIFNSR

FIGURE 1450A

TGGGAATCCAACTGAAGAGCAGCCAGAGGAGAGCTGAAGAGAGGAGGGGGAGGCCGATGACCTGGGCTCTGGGCC
TCTGAAGGTCTGGCGTATTCTGACAGGACACAGTGAGCATCTGTAGAGGAGAGGCTTGAAATAAAGGAGGAGCAC
GAATATTCCCTGGATTTCTGGAGGCCTGCTTTAAGGCTGGCCAGTTCTGCAAGAAAGGCAAGGAGGAGGAGACTG
GCTCACACCTCTGGAGGACCCCCTTCTGTCAGCTGTGGGGCTTGACACTACTTGAACAAGAAAAGGAGGGGGAAA
CTGCACCACATAAGTGAAGATCCACCTCCAGTGGCTGCTCTGCTGGTGGTGGGGTTGCTGCTGACAACCACCCTC
AACGGGTCTGCACCCATCCAGGAAATCTCTGTCTTCCTCAAGCTTGGTTGTGCCTGTTCTACACTCTATCTGTAT
TATTGAATTACTGACTGAGACTGTGTTTGGGAAGGAGGCTGAGTGACTACTGGACTGGATATTGACTCTAACTCT
TGTTTCCAAGCTTATATCCTCAATCACCTAAAGATCAGAGTGTGAAGAAACAAACCTGTGACAGATCTGTGGTTG
AGGTTTAGACTGGGGGAGGAGTATAGTACTGGACTTTCTTTGTAACTTGTACC**ATG**ACTGGGGCAGAGATTGAGT
CTGGTGCCCAGGTCAAGCCTGAAAAGAAGCCTGGGGAAGAGGTTGTAGGTGGGGCTGAGATAGAGAATGATGTCC
CTCTGGTGGTCAGACCCAAGGTTAGGACCCAGGCCCAGATAATGCCTGGGGCAAGGCCCAAGAATAAGTCCAAGG
TTATGCCTGGAGCAAGCACCAAAGTTGAGACAAGTGCAGTGGGTGGGGCACGCCCTAAGAGTAAGGCCAAGGCAA
TACCTGTTTCACGATTTAAGGAAGAAGCCCAGATGTGGGCTCAGCCCAGGTTTGGTGCTGAAAGATTGTCTAAGA
CAGAGAGAAACTCCCAGACCAATATCATAGCCTCTCCACTTGTCAGTACTGATTCTGTCTTGGTTGCTAAAACAA
AGTACCTGTCTGAGGATAGAGAACTGGTTAATACAGACACTGAGAGCTTTCCTAGAAGGAAGGCCCATTACCAAG
CAGGATTCCAGCCTTCTTTTAGGTCAAAGGAGGAGACCAATATGGGGTCCTGGTGCTGTCCTAGGCCTACATCCA
AACAAGAAGCCTCTCCTAATTCTGATTTCAAATGGGTAGACAAATCTGTGAGTTCCTTGTTCTGGAGTGGAGATG
AGGTCACTGCAAAATTTCATCCTGGGAATAGGGTAAAAGACAGTAACAGATCCATGCACATGGCCAATCAAGAGG
CTAATACCATGTCTAGGTCCCAAACTAACCAGGAGCTCTATATTGCATCTAGTTCTGGTTCTGAGGATGAGTCTG
TTAAGACACCCTGGTTCTGGGCCAGAGATAAAACCAATACCTGGTCTGGGCCCAGGGAAGATCCCAATAGCAGGT
CCAGGTTTAGGTCTAAGAAAGAAGTCTATGTTGAATCAAGTTCTGGATCTGAGCATGAAGACCATTTGGAGTCCT
GGTTTGGGGCTGGAAAGGAGGGCAAATTCAGGTCCAAAATGAGAGCTGGGAAGGAGGCCAATAACAGGGCCAGGC
ACAGGGCCAAGCGAGAAGCTTGCATTGATTTCATGCCTGGGTCTATAGATGTAATTAAAAAAGAGTCCTGTTTCT
GGCCTGAAGAAAATGCTAATACCTTTTCAAGGCCCATGATCAAGAAAGAGGCCAGGGCCAGAGCAATGACAAAGG
AAGAGGCCAAAACCAAGGCCCGAGCCAGGGCCAAGCAAGAAGCCAGGTCAGAGGAGGAAGCCCTCATTGGGACCT
GGTTCTGGGCTACAGACGAGTCCAGCATGGCAGATGAAGCCAGCATAGAGTCCAGTCTACAAGTGGAGGATGAGT
CCATAATTGGGAGTTGGTTCTGGACTGAAGAAGAGGCCAGTATGGGGACTGGGGCTAGCAGTAAATCCAGACCAA
GGACTGATGGGGAGCGTATTGGTGATTCCTTATTTGGGGCTAGGGAAAAGACCAGTATGAAAACTGGGGCTGAGG
CCACCTCTGAATCTATACTAGCAGCTGATGATGAACAGGTCATTATTGGTTCCTGGTTCTGGGCTGGTGAAGAGG
TCAACCAAGAGGCTGAGGAAGAGACCATTTTTGGGTCGTGGTTCTGGGTCATTGATGCGGCCAGTGTGGAATCTG
GTGTTGGGGTCAGCTGTGAGTCCAGGACAAGGTCTGAGGAAGAAGAGGTCATTGGTCCCTGGTTTTGGTCTGGAG
AACAAGTTGATATAGAGGCTGGAATCGGAGAAGAGGCCAGGCCAGGAGCTGAAGAAGAGACAATATTCGGGTCCT
GGTTTTGGGCTGAAAACCAGACCTATATGGATTGTAGGGCTGAAACTAGCTGTGACACCATGCAAGGGGCTGAGG
AGGAGGAGCCCATTATTGGGTCCTGGTTTTGGACCAGAGTAGAAGCTTGTGTGGAGGGTGATGTCAACAGCAAGT
CTAGCCTGGAGGACAAGGAAGAGGCCATGATACCATGTTTTGGAGCCAAAGAAGAGGTCAGTATGAAGCATGGGA
CTGGTGTCAGATGCAGATTTATGGCAGGGGCTGAGGAGACCAATAATAAGTCTTGCTTCTGGGCAGAAAAAGAAC
CCTGTATGTATCCTGCCGGTGGAGGAAGTTGGAAGTCTAGGCCAGAGGAGGAAGAGGACATTGTCAATTCGTGGT
TCTGGTCCAGAAAATACACAAAGCCAGAGGCCATTATAGGGTCCTGGTTATGGGCTACAGAAGAGAGTAATATAG
ATGGGACTGGAGAAAAGGCCAAGTTACTGACTGAAGAGGAGACCATAATCAATTCCTGGTTCTGGAAAGAAGATG
AAGCCATTTCAGAGGCTACTGACAGAGAAGAGTCCAGGCCAGAAGCTGAGGAGGGGGACATTGTTGGTTCTTGGT
TCTGGGCTGGAGAAGAGGACAGACTAGAGCCAGCTGCTGAGACTAGAGAAGAAGACAGGCTAGCAGCTGAGAAAG
AAGGTATTGTTGGGTCCTGGTTTGGGGCCAGAGAAGAGACCATTAGAAGAGAGGCTGGGTCTTGCAGCAAATCCA
GTCCTAAAGCTGAAGAGGAAGAAGTCATTATTGGGTCCTGGTTCTGGGAAGAAGAGGCCAGTCCGGAGGCAGTGG
CAGGAGTCGGCTTTGAGTCAAAGCCTGGGACTGAGGAGGAAGAAATCACTGTTGGGTCCTGGTTCTGGCCTGAAG
AAGAAGCCAGTATACAGGCTGGATCTCAGGCAGTAGAGGAAATGGAGTCAGAGACTGAAGAGGAAACCATTTTTG
GGTCCTGGTTCTGGGATGGAAAAGAAGTCAGTGAAGAAGCAGGACCATGCTGTGTATCCAAGCCAGAGGATGATG
AAGAGATGATTGTTGAGTCCTGGTTCTGGTCTAGAGACAAAGCCATTAAGGAAACTGGAACTGTGGCCACCTGTG
AGTCCAAGCCAGAAAATGAGGAAGGGGCCATTGTTGGGTCTTGGTTTGAGGCTGAAGATGAGGTAGATAACAGGA

FIGURE 1450B

CTGACAATGGAAGCAACTGTGGGTCCAGGACATTAGCTGATGAAGATGAGGCCATAGTGGGGTCCTGGTTCTGGG
CAGGAGATGAGGCCCATTTTGAATCAAATCCTAGCCCCGTGTTCAGGGCCATTTGCAGGTCCACGTGTTCAGTTG
AACAGGAGCCTGATCCTTCACGCAGGCCTCAGAGTTGGGAGGAGGTCACTGTTCAGTTCAAGCCTGGTCCATGGG
GTAGGGTCGGCTTCCCATCTATAAGCCCCTTTAGATTTCCGAAAGAGGCAGCATCTTTATTCTGTGAAATGTTTG
GGGGCAAACCCAGGAACATGGTACTTAGCCCAGAAGGGGAAGATCAGGAATCTTTGCTTCAGCCTGATCAGCCTA
GTCCTGAGTTCCCATTTCAGTATGATCCTTCCTACAGGTCAGTCCAGGAAATTCGAGAGCATCTTAGGGCCAAGG
AGAGTACAGAGCCTGAGAGTTCATCCTGTAACTGCATACAATGTGAGCTGAAAATTGGTTCTGAAGAGTTTGAAG
AACTCCTTTTATTAATGGAAAAAATTCGGGATCCTTTTATTCATGAAATATCTAAAATCGCAATGGGTATGAGAA
GTGCTTCTCAATTTACCCGAGATTTCATTCGAGATTCAGGTGTTGTCTCACTTATTGAAACCTTGCTTAATTATC
CGTCCTCCCGAGTTAGAACAAGTTTTTTGGAAAATATGATTCGCATGGCCCCACCTTATCCGAATCTAAACATAA
TTCAGACATACATATGTAAAGTGTGTGAGGAAACCCTTGCTTATAGCGTGGATTCCCCGGAACAGCTGTCTGGAA
TAAGGATGATTAGACATCTCACTACTACTACTGACTATCACACACTGGTTGCCAATTATATGTCTGGGTTTCTCT
CCTTATTAGCTACAGGCAATGCCAAAACAAGGTTTCATGTTTTGAAAATGCTACTGAATTTGTCTGAAAATCTTT
TCATGACAAAAGAACTACTCAGTGCTGAAGCAGTGTCAGAATTTATAGGCCTCTTTAACAGGGAAGAGACAAATG
ACAATATTCAAATTGTTCTTGCAATATTTGAGAATATTGGCAACAATATCAAAAAAGAAACAGTGTTCTCTGATG
ATGATTTCAATATTGAGCCGCTTATTTCTGCATTCCACAAAGTTGAGAAATTTGCTAAGGAACTGCAAGGCAAAA
CAGACAATCAAAATGACCCTGAAGGGGACCAAGAAAATTAGTAATGGTTAATTGCTGGCCTCAGATTGTCCTTAT
GTTCCTGAGTTATGATCCTTGAGTAATGCTTTGATTTTAATAGTTGGTTCTGTGTTGCAACATATATCTTTAGTG
CTGACACTAACTTTGTCCAACTCTGTCTGTAAGCTGGAGCATTTTTCTGATGCCAGCTGAATATTAGAGCTGAAA
ACACATTTGTTGATATTTGTCTTGTCCACATTGTGATGTTCAGTATTTGAGCTTATAGTGAACTGAGCAATCATA
AATAAGCCACCCTTCTGATTGTCGTTCTACTGTATATATATATATATTTGAGTGTTGTTTGTGTTTCAATAAAGT
CCTATGTTAAAGTTG

FIGURE 1451

MTGAEIESGAQVKPEKKPGEEVVGGAEIENDVPLVVRPKVRTQAQIMPGARPKNKSKVMPGASTKVETSAVGGAR
PKSKAKAIPVSRFKEEAQMWAQPRFGAERLSKTERNSQTNIIASPLVSTDSVLVAKTKYLSEDRELVNTDTESFP
RRKAHYQAGFQPSFRSKEETNMGSWCCPRPTSKQEASPNSDFKWVDKSVSSLFWSGDEVTAKFHPGNRVKDSNRS
MHMANQEANTMSRSQTNQELYIASSSGSEDESVKTPWFWARDKTNTWSGPREDPNSRSRFRSKKEVYVESSSGSE
HEDHLESWFGAGKEGKFRSKMRAGKEANNRARHRAKREACIDFMPGSIDVIKKESCFWPEENANTFSRPMIKKEA
RARAMTKEEAKTKARARAKQEARSEEEALIGTWFWATDESSMADEASIESSLQVEDESIIGSWFWTEEEASMGTG
ASSKSRPRTDGERIGDSLFGAREKTSMKTGAEATSESILAADDEQVIIGSWFWAGEEVNQEAEEETIFGSWFWVI
DAASVESGVGVSCESRTRSEEEEVIGPWFWSGEQVDIEAGIGEEARPGAEEETIFGSWFWAENQTYMDCRAETSC
DTMQGAEEEEPIIGSWFWTRVEACVEGDVNSKSSLEDKEEAMIPCFGAKEEVSMKHGTGVRCRFMAGAEETNNKS
CFWAEKEPCMYPAGGGSWKSRPEEEEDIVNSWFWSRKYTKPEAIIGSWLWATEESNIDGTGEKAKLLTEEETIIN
SWFWKEDEAISEATDREESRPEAEEGDIVGSWFWAGEEDRLEPAAETREEDRLAAEKEGIVGSWFGAREETIRRE
AGSCSKSSPKAEEEEVIIGSWFWEEEASPEAVAGVGFESKPGTEEEEITVGSWFWPEEEASIQAGSQAVEEMESE
TEEETIFGSWFWDGKEVSEEAGPCCVSKPEDDEEMIVESWFWSRDKAIKETGTVATCESKPENEEGAIVGSWFEA
EDEVDNRTDNGSNCGSRTLADEDEAIVGSWFWAGDEAHFESNPSPVFRAICRSTCSVEQEPDPSRRPQSWEEVTV
QFKPGPWGRVGFPSISPFRFPKEAASLFCEMFGGKPRNMVLSPEGEDQESLLQPDQPSPEFPFQYDPSYRSVQEI
REHLRAKESTEPESSSCNCIQCELKIGSEEFEELLLLMEKIRDPFIHEISKIAMGMRSASQFTRDFIRDSGVVSL
IETLLNYPSSRVRTSFLENMIRMAPPYPNLNIIQTYICKVCEETLAYSVDSPEQLSGIRMIRHLTTTTDYHTLVA
NYMSGFLSLLATGNAKTRFHVLKMLLNLSENLFMTKELLSAEAVSEFIGLFNREETNDNIQIVLAIFENIGNNIK
KETVFSDDDFNIEPLISAFHKVEKFAKELQGKTDNQNDPEGDQEN

FIGURE 1452

GGCGGCAGCGCCCTGCCGACGCCGGGGAGGGACGCAGGCAGGCGGCGGGCAGCGGGAGGCGGCACCCCGGTGCTC
CCCGCGGCTCTCGGCGGAGCCCCGCCGCCCGCCGCGCCATGGCCCGAAGACCCCGGCACAGCATATATAGCAGTG
ACGAGGATGATGAGGACTTTGAGATGTGTGACCATGACTATGATGGGCTGCTTCCCAAGTCTGGAAAGCGTCACT
TGGGGAAAACAAGGTGGACCCGGGAAGAGGATGAAAAACTGAAGAAGCTGGTGGAACAGAATGGAACAGATGACT
GGAAAGTTATTGCCAATTATCTCCCGAATCGAACAGATGTGCAGTGCCAGCACCGATGGCAGAAAGTACTAAACC
CTGAGCTCATCAAGGGTCCTTGGACCAAAGAAGAAGATCAGAGAGTGATAGAGCTTGTACAGAAATACGGTCCGA
AACGTTGGTCTGTTATTGCCAAGCACTTAAAGGGGAGAATTGGAAAACAATGTAGGGAGAGGTGGCATAACCACT
TGAATCCAGAAGTTAAGAAAACCTCCTGGACAGAAGAGGAAGACAGAATTATTTACCAGGCACACAAGAGACTGG
GGAACAGATGGGCAGAAATCGCAAAGCTACTGCCTGGACGAACTGATAATGCTATCAAGAACCACTGGAATTCTA
CAATGCGTCGGAAGGTCGAACAGGAAGGTTATCTGCAGGAGTCTTCAAAAGCCAGCCAGCCAGCAGTGGCCACAA
GCTTCCAGAAGAACAGTCATTTGATGGGTTTTGCTCAGGCTCCGCCTACAGCTCAACTCCCTGCCACTGGCCAGC
CCACTGTTAACAACGACTATTCCTATTACCACATTTCTGAAGCACAAAATGTCTCCAGTCATGTTCCATACCCTG
TAGCGTTACATGTAAATATAGTCAATGTCCCTCAGCCAGCTGCCGCAGCCATTCAGAGACACTATAATGATGAAG
ACCCTGAGAAGGAAAAGCGAATAAAGGAATTAGAATTGCTCCTAATGTCAACCGAGAATGAGCTAAAAGGACAGC
AGGTGCTACCAACACAGAACCACACATGCAGCTACCCCGGGTGGCACAGCACCACCATTGCCGACCACACCAGAC
CTCATGGAGACAGTGCACCTGTTTCCTGTTTGGGAGAACACCACTCCACTCCATCTCTGCCAGCGGATCCTGGCT
CCCTACCTGAAGAAAGCGCCTCGCCAGCAAGGTGCATGATCGTCCACCAGGGCACCATTCTGGATAATGTTAAGA
ACCTCTTAGAATTTGCAGAAACACTCCAATTTATAGATTCTTTCTTAAACACTTCCAGTAACCATGAAAACTCAG
ACTTGGAAATGCCTTCTTTAACTTCCACCCCCCTCATTGGTCACAAATTGACTGTTACAACACCATTTCATAGAG
ACCAGACTGTGAAAACTCAAAAGGAAAATACTGTTTTTAGAACCCCAGCTATCAAAAGGTCAATCTTAGAAAGCT
CTCCAAGAACTCCTACACCATTCAAACATGCACTTGCAGCTCAAGAAATTAAATACGGTCCCCTGAAGATGCTAC
CTCAGACACCCTCTCATCTAGTAGAAGATCTGCAGGATGTGATCAAACAGGAATCTGATGAATCTGGATTTGTTG
CTGAGTTTCAAGAAAATGGACCACCCTTACTGAAGAAAATCAAACAAGAGGTGGAATCTCCAACTGATAAATCAG
GAAACTTCTTCTGCTCACACCACTGGGAAGGGGACAGTCTGAATACCCAACTGTTCACGCAGACCTCGCCTGTGC
GAGATGCACCGAATATTCTTACAAGCTCCGTTTTAATGGCACCAGCATCAGAAGATGAAGACAATGTTCTCAAAG
CATTTACAGTACCTAAAAACAGGTCCCTGGCGAGCCCCTTGCAGCCTTGTAGCAGTACCTGGGAACCTGCATCCT
GTGGAAAGATGGAGGAGCAGATGACATCTTCCAGTCAAGCTCGTAAATACGTGAATGCATTCTCAGCCCGGACGC
TGGTCATGTGAGACATTTCCAGAAAAGCATTATGGTTTTCAGAACAGTTCAAGTTGACTTGGGATATATCATTCC
TCAACATGAAACTTTTCATGAATGGGAGAAGAACCTATTTTTGTTGTGGTACAACAGTTGAGAGCACGACCAAGT
GCATTTAGTTGAATGAAGTCTTCTTGGATTTCACCCAACTAAAAGGATTTTTAAAAATAAATAACAGTCTTACCT
AAATTATTAGGTAATGAATTGTAGCCAGTTGTTAATATCTTAATGCAGATTTTTTTAAAAAAAAAACATAAAATGA
TTTATCTGGTATTTTAAAGGATCCAACAGATCAGTATTTTTTCCTGTGATGGGTTTTTTGAAATTTGACACATTA
AAAGGTACTCCAGTATTTCACTTTTCTCGATCACTAAACATATGCATATATTTTTAAAAATCAGTAAAAGCATTA
CTCTAAGTGTAGACTTAATACCATGTGACATTTAATCCAGATTGTAAATGCTCATTTATGGTTAATGACATTGAA
GGTACATTTATTGTACCAAACCATTTTATGAGTTTTCTGTTAGCTTGCTTTAAAAATTATTACTGTAAGAAATAG
TTTTATAAAAAATTATATTTTTATTCAGTAATTTAATTTTGTAAATGCCAAATGAAAAACGTTTTTTGCTGCTAT
GGTCTTAGCCTGTAGACATGCTGCTAGTATCAGAGGGGCAGTAGAGCTTGGACAGAAAGAAAAGAAACTTGGTGT
TAGGTAATTGACTATGCACTAGTATTTCAGACTTTTTAATTTTATATATATATACATTTTTTTTCCTTCTGCAAT
ACATTTGAAAACTTGTTTGGGAGACTCTGCATTTTTTATTGTGGTTTTTTTGTTATTGTTGGTTTATACAAGCAT
GCGTTGCACTTCTTTTTTGGGAGATGTGTGTTGTTCATGTTCTATGTTTTGTTTTGTGTGTAGCCTGACTGTTTT
ATAATTTGGGAGTTCTCGATTTGATCCGCATCCCCTGTGGTTTCTAAGTGTATGGTCTCAGAACTGTTGCATGGA
TCCTGTGTTTGCAACTGGGGAGACAGAAACTGTGGTTGATAGCCAGTCACTGCCTTAAGAACATTTGATGCAAGA
TGGCCAGCACTGAACTTTTGAGATATGACGGTGTACTTACTGCCTTGTAGCAAAATAAAGATGTGCCCTTATTTT

FIGURE 1453

MARRPRHSIYSSDEDDEDFEMCDHDYDGLLPKSGKRHLGKTRWTREEDEKLKKLVEQNGTDDWKVIANYLPNRTD
VQCQHRWQKVLNPELIKGPWTKEEDQRVIELVQKYGPKRWSVIAKHLKGRIGKQCRERWHNHLNPEVKKTSWTEE
EDRIIYQAHKRLGNRWAEIAKLLPGRTDNAIKNHWNSTMRRKVEQEGYLQESSKASQPAVATSFQKNSHLMGFAQ
APPTAQLPATGQPTVNNDYSYYHISEAQNVSSHVPYPVALHVNIVNVPQPAAAAIQRHYNDEDPEKEKRIKELEL
LLMSTENELKGQQVLPTQNHTCSYPGWHSTTIADHTRPHGDSAPVSCLGEHHSTPSLPADPGSLPEESASPARCM
IVHQGTILDNVKNLLEFAETLQFIDSFLNTSSNHENSDLEMPSLTSTPLIGHKLTVTTPFHRDQTVKTQKENTVF
RTPAIKRSILESSPRTPTPFKHALAAQEIKYGPLKMLPQTPSHLVEDLQDVIKQESDESGFVAEFQENGPPLLKK
IKQEVESPTDKSGNFFCSHHWEGDSLNTQLFTQTSPVRDAPNILTSSVLMAPASEDEDNVLKAFTVPKNRSLASP
LQPCSSTWEPASCGKMEEQMTSSSQARKYVNAFSARTLVM

FIGURE 1454

GGAAACTGAAAGTGAAATAGGGAGCTGGCTACCAGCGTTGAGTTGCCCTGTAAAGCCAAACCCCCTAAAGGTCTC
CACACTGCTGTTTAACGGCACACTTGACAATGGCTTCAGCAGCACGCTTGACAATGATGTGGGAGGAGGTCACAT
GCCCTATCTGCCTGGACCCCTTCGTGGAGCCTGTGAGCATCGAGTGTGGCCACAGCTTCTGCCAGGAATGCATCT
CTCAGGTTGGGAAAGGTGGGGGCAGCGTCTGTCCTGTGTGCCGGCAGCGCTTTCTGCTCAAGAATCTCCGGCCCA
ATCGACAGCTAGCCAACATGGTGAACAACCTTAAAGAAATCAGCCAGGAGGCCAGAGAGGGCACACAGGGGGAAC
GGTGTGCAGTGCATGGAGAGAGACTTCACCTGTTCTGTGAGAAAGATGGGAAGGCCCTTTGCTGGGTATGTGCCC
AGTCTCGGAAACACCGTGACCACGCCATGGTCCCTCTTGAGGAGGCTGCACAGGAGTACCAGGAGAAGCTCCAGG
TGGCATTAGGGGAACTGAGAAGAAAGCAGGAGTTGGCTGAGAAGTTGGAAGTGGAAATTGCAATAAAGAGAGCAG
ACTGGAAGAAAACAGTGGAAACACAGAAATCTAGGATTCACGCAGAGTTTGTGCAGCAAAAAAACTTCCTGGTTG
AAGAAGAACAGAGGCAGCTGCAGGAGCTGGAGAAGGATGAGAGGGAGCAGCTGAGAATCCTGGGGGAGAAAGAGG
CCAAGCTGGCCCAGCAGAGCCAGGCCCTACAGGAGCTCATCTCAGAGCTAGATCGAAGGTGCCACAGCTCAGCAC
TGGAAGTGCTGCAGGAGGTGATAATTGTCCTGGAAAGGAGTGAGTCCTGGAACCTGAAGGACCTGGATATTACCT
CTCCAGAACTCAGGAGTGTGTGCCATGTGCCAGGGCTGAAGAAGATGCTGAGGACATGTGCAGTCCACATCACTC
TGGATCCAGACACAGCCAATCCGTGGCTGATACTTTCAGAAGATCGGAGACAAGTGAGGCTTGGAGACACCCAGC
AGAGCATACCTGGAAATGAAGAGAGATTTGATAGTTATCCTATGGTCCTGGGTGCCCAGCACTTTCACTCTGGAA
AACATTACTGGGAGGTAGATGTGACAGGAAAGGAGGCCTGGGACCTGGGTGTCTGCAGAGACTCTGTGCGCAGGA
AGGGGCACTTTTTGCTTAGTTCCAAGAGTGGCTTCTGGACAATTTGGTTGTGGAACAAACAAAAATATGAGGCTG
GCACCTACCCCCAGACTCCCCTCCACCTTCAGGTGCCTCCATGCCAAGTTGGGATTTTCCTGGACTATGAGGCTG
GCATGGTCTCCTTCTACAACATCACTGACCATGGCTCCCTCATCTACTCCTTCTCTGAATGTGCCTTTACAGGAC
CTCTGCGGCCCTTCTTCAGTCCTGGTTTCAATGATGGAGGAAAAAACACAGCCCCTCTAACCCTCTGTCCACTGA
ATATTGGATCACAAGGATCCACTGACTATTGATGGCTTTCTCTGGACACTGCCACTCTCCCCATTGGCACCGCTT
CTCAGCCACAAACCCTGCCTCTTTTCCCCATGAACTCTGAACCACCTTTGTCTCTGCAGAGGCATCCGGATCCCA
GCAAGCGAGCTTTAGCAGGGAAGTCACTTCACCATCAACATTCCTGCCCCAGATGGCTTTGTGATTCCCTCCAGT
GAAGCAGCCTCCTTATATTTGGCCCAAACTCATCTTGATCAACCAAAAACATGTTTCTGCCTTCTTTATGGGACT
TAAGTTTTTTTTTTCTCCTCTCCATCTCTAGGATGTCGTCTTTGGTGAGATCTCTATTATATCTTGTATGGTTTG
CAAAAGGGCTTCCTAAAAATAAAAAATAAAATTTAAAAAACTGTGAAAAAAAAAAAAAAAAA

FIGURE 1455

MASAARLTMMWEEVTCPICLDPFVEPVSIECGHSFCQECISQVGKGGGSVCPVCRQRFLLKNLRPNRQLANMVNN
LKEISQEAREGTQGERCAVHGERLHLFCEKDGKALCWVCAQSRKHRDHAMVPLEEAAQEYQEKLQVALGELRRKQ
ELAEKLEVEIAIKRADWKKTVETQKSRIHAEFVQQKNFLVEEEQRQLQELEKDEREQLRILGEKEAKLAQQSQAL
QELISELDRRCHSSALELLQEVIIVLERSESWNLKDLDITSPELRSVCHVPGLKKMLRTCAVHITLDPDTANPWL
ILSEDRRQVRLGDTQQSIPGNEERFDSYPMVLGAQHFHSGKHYWEVDVTGKEAWDLGVCRDSVRRKGHFLLSSKS
GFWTIWLWNKQKYEAGTYPQTPLHLQVPPCQVGIFLDYEAGMVSFYNITDHGSLIYSFSECAFTGPLRPFFSPGF
NDGGKNTAPLTLCPLNIGSQGSTDY

FIGURE 1456

GCACGCCCAGCGAGTTCCAGAGGCGCCAGTGGAAGCTGCGGCGGCGGTGTCTCGCGTTCGGCGGGATTTCTCTTC
GCTCCGGCTCGGCCTAGGTCTACGTCCCCAGCTCCAGCCGCCGGCTCGGACTCGGTCTCTGACCCCCAACTCGGT
CCCCTAGTCCGGCCCCGGCTCCGGGCCCCCCAACCCTCGCTCCGGCCCGGCCCGGCCCCCACCCCAGCCCTGCCG
CCCGGCCCCAGGCCCGGCCGCGGCCGCTCCCGCCTGGAGCCGCCGCGCGCCCCCAGCCCCCCTGCACCCCCTCGG
CCCCTCGCCTTCCTCTTCCCGGCGCGGCCCCCCGGCTTCCGCGCGCCGCCCGCCACCAATCCTCTTGCTACC**ATG**

TCCGTGGAGCTCGAGGAGGCCCTGCCAGTGACGACCGCCGAGGGAATGGCCAAGAAGGTGACCAAGGCTGGCGGC
TCGGCGGCGTTGTCCCCATCTAAGAAGAGGAAGAATAGCAAGAAGAAGAACCAGCCGGGCAAGTACAGCCAGCTG
GTGGTGGAGACCATCCGTAGGCTGGGCGAGCGCAACGGCTCGTCGCTGGCCAAGATCTACACCGAGGCCAAGAAG
GTTCCGTGGTTCGACCAGCAGAATGGGCGCACCTACCTCAAGTACTCGATCAAGGCGCTGGTGCAGAACGACACG
CTTCTGCAGGTGAAGGGCACCGGCGCCAACGGTTCCTTCAAGCTCAACCGCAAGAAGCTGGAGGGCGGCGGGGAG
CGGCGCGGAGCCCCGGCGGCCGCCACCGCCCCGGCCCCCACCGCGCACAAAGCGAAGAAGGCAGCCCCGGGCGCG
GCCGGCTCCCGGCGCGCGGACAAGAAGCCCGCCAGGGGCCAGAAGCCGGAGCAGCGCTCGCACAAGAAGGGCGCT
GGCGCCAAGAAGGACAAAGGCGGCAAGGCCAAGAAGACGGCGGCCGCCGGGGGCAAGAAGGTGAAGAAGGCGGCC
AAGCCCAGCGTCCCCAAAGTGCCCAAGGGCCGCAAG**TGA**GCGTGTCGGCCGGTCAGAGCGGCCGGCGTGGGCTTT
TCGGTGTTTTTGTTTTTCTACCCCAAGTGACGTAGATTTTGTACGGCTCACGCCGGCCGGGGCCGCGAGGCCTGG
TCTGAGCCTCAGGGAGGGGCCCCGGGTCCTCTCAGTCTTTCCCCTCCCCCAACGATGTAGCGTTTTTCGTTGTTT
GCTTTAGGTTTTTGAAACAGCCCCGGCGACGCCTCTATTGGCTCTCGGCCTTGGCAACGGCCGTCGTCATGGTTA
CTGGCCCCTAGGCGCCGATGGCCGAGGCCGCGCCTGCCCACCGGGCGGGGTCGCTGGTTGGCCGGGCCCAGGCGC
GCGGGGACGCGGAGGCCGCGCATCCTTTCCCAGCTCCCCACCCTCCTTGCCTTTGGGTGCGCGACAAACAATCGC
TCCGGGCTCAGGGCTGCGCGGCTCTTCCCTTCATTCCATGGGCCTTTTTTTGGGCACAATAAAGCGTTTAAACCT
TTC

FIGURE 1457

MSVELEEALPVTTAEGMAKKVTKAGGSAALSPSKKRKNSKKKNQPGKYSQLVVETIRRLGERNGSSLAKIYTEAK
KVPWFDQQNGRTYLKYSIKALVQNDTLLQVKGTGANGSFKLNRKKLEGGGERRGAPAAATAPAPTAHKAKKAAPG
AAGSRRADKKPARGQKPEQRSHKKGAGAKKDKGGKAKKTAAAGGKKVKKAAKPSVPKVPKGRK

FIGURE 1458A

GGCGGTTAAGTCCTGTACCTAGGAAAGAGGGCGAGCTCTGGGGCGCTCTCCGGTGTCATGAGGAGCTTCAAAAGA
GTCAACTTTGGGACTCTGCTAAGCAGCCAGAAGGAGGCTGAAGAGTTGCTGCCCGACTTGAAGGTGGGGGTGCTG
CCTGGCTCGGGATACACCTGGCTTTCCAAACTGAGCTGTTTTGTGTTTGCCTTTTGAAGAGATGGATAAGAGTTC
CTGTCCAACCCTCCAGCTGGTTTTCCCAGCAGCCGATCTGATGCTGAGAGGAGACAAGCTTGTGATGCCATCCTG
AGGGCTTGCAACCAGCAGCTGACTGCTAAGCTAGCTTGCCCTAGGCATCTGGGGAGCCTGCTGGAGCTGGCAGAG
CTGGCCTGTGATGGCTACTTAGTGTCTACCCCACAGCGTCCTCCCCTCTACCTGGAACGAATTCTCTTTGTCTTA
CTGCGGAATGCTGCTGCACAAGGAAGCCCAGAGGCCACACTCCGCCTTGCTCAGCCCCTCCATGCCTGCTTGGTG
CAGTGCTCTCGCGAGGCTGCTCCCCAGGACTATGAGGCCGTGGCTCGGGGCAGCTTTTCTCTGCTTTGGAAGGGG
GCAGAAGCCCTGTTGGAACGGCGAGCTGCATTTGCAGCTCGGCTGAAGGCCTTGAGCTTCCTAGTACTCTTGGAG
GATGAAAGTACCCCTTGTGAGGTTCCTCACTTTGCTTCTCCAACAGCCTGTCGAGCGGTAGCTGCCCATCAGCTA
TTTGATGCCAGTGGCCATGGTCTAAATGAAGCAGATGCTGATTTCCTAGATGACCTGCTCTCCAGGCACGTGATC
AGAGCCTTGGTGGGTGAGAGAGGGAGCTCTTCTGGGCTTCTTTCTCCCCAGAGGGCCCTCTGCCTCTTGGAGCTC
ACCTTGGAACACTGCCGTCGCTTTTGCTGGAGCCGCCACCATGACAAAGCCATCAGCGCAGTGGAGAAGGCTCAC
AGTTACCTAAGGAACACCAATCTAGCCCCTAGCCTTCAGCTATGTCAGCTGGGGGTTAAGCTGCTGCAGGTCGGG
GAGGAAGGACCTCAGGCAGTGGCCAAGCTTCTGATCAAGGCATCAGCTGTCCTGAGCAAGAGT**ATG**GAGGCACCA
TCACCCCCACTTCGGGCATTGTATGAGAGCTGCCAGTTCTTCCTTTCAGGCCTGGAACGAGGCACCAAGAGGCGC
TATAGACTTGATGCCATTCTGAGCCTCTTTGCTTTTCTTGGAGGGTACTGCTCTCTTCTGCAGCAGCTGCGGGAT
GATGGTGTGTATGGGGGCTCCTCCAAGCAACAGCAGTCTTTTCTTCAGATGTACTTTCAGGGACTTCACCTCTAC
ACTGTGGTGGTTTATGACTTTGCCCAAGGCTGTCAGATAGTTGATTTGGCTGACCTGACCCAACTAGTGGACAGT
TGTAAATCTACCGTTGTCTGGATGCTGGAGGCCTTAGAGGGCCTGTCGGGCCAAGAGCTGACGGACCACATGGGG
ATGACCGCTTCTTACACCAGTAATTTGGCCTACAGCTTCTATAGTCACAAGCTCTATGCCGAGGCCTGTGCCATC
TCTGAGCCGCTCTGTCAGCACCTGGGTTTGGTGAAGCCAGGCACTTATCCCGAGGTGCCTCCTGAGAAGTTGCAC
AGGTGCTTCCGGCTACAAGTAGAGAGTTTGAAGAAACTGGGTAAACAGGCCCAGGGCTGCAAGATGGTGATTTTG
TGGCTGGCAGCCCTGCAACCCTGTAGCCCTGAACACATGGCTGAGCCAGTCACTTTCTGGGTTCGGGTCAAGATG
GATGCGGCCAGGGCTGGAGACAAGGAGCTACAGCTAAAGACTCTGCGAGACAGCCTCAGTGGCTGGGACCCGGAG
ACCCTGGCCCTCCTGCTGAGGGAGGAGCTGCAGGCCTACAAGGCGGTGCGGGCCGACACTGGACAGGAACGCTTC
AACATCATCTGTGACCTCCTGGAGCTGAGCCCCGAGGAGACACCAGCCGGGGCCTGGGCACGAGCCACCCACCTG
GTAGAACTGGCTCAGGTGCTCTGCTACCACGACTTTACGCAGCAGACCAACTGCTCTGCTCTGGATGCTATCCGG
GAAGCCCTGCAGCTTCTGGACTCTGTGAGGCCTGAGGCCCAGGCCAGAGATCAGCTTCTGGACGATAAAGCACAG
GCCTTGCTGTGGCTTTACATCTGTACTCTGGAAGCCAAAATACAGGAAGGTATCGAGCGGGATCGGAGAGCCCAG
GCCCCTGGTAACTTGGAGGAATTTGAAGTCAATGACCTGAACTATGAAGATAAACTCCAGGAAGATCGTTTCCTA
TACAGTAACATTGCCTTCAACCTGGCTGCAGATGCTGCTCAGTCCAAATGCCTGGACCAAGCCCTGGCCCTGTGG
AAGGAGCTGCTTACAAAGGGGCAGGCCCCAGCTGTACGGTGTCTCCAGCAGACAGCAGCCTCACTGCAGATCCTA
GCAGCCCTCTACCAGCTGGTGGCAAAGCCCATGCAGGCTCTGGAGGTCCTCCTGCTGCTACGGATTGTCTCTGAG
AGACTGAAGGACCACTCGAAGGCAGCTGGCTCCTCCTGCCACATCACCCAGCTCCTCCTGACCCTCGGCTGTCCC
AGCTATGCCCAGTTACACCTGGAAGAGGCAGCATCGAGCCTGAAGCATCTCGATCAGACTACTGACACATACCTG
CTCCTTTCCCTGACCTGTGATCTGCTTCGAAGTCAACTCTACTGGACTCACCAGAAGGTGACCAAGGGTGTCTCT
CTGCTGCTGTCTGTGCTTCGGGATCCTGCCCTCCAGAAGTCCTCCAAGGCTTGGTACTTGCTGCGTGTCCAGGTC
CTGCAGCTGGTGGCAGCTTACCTTAGCCTCCCGTCAAACAACCTCTCACACTCCCTGTGGGAGCAGCTCTGTGCC
CAAGGCTGGCAGACACCTGAGATAGCTCTCATAGACTCCCATAAGCTCCTCCGAAGCATCATCCTCCTGCTGATG
GGCAGTGACATTCTCTCAACTCAGAAAGCAGCTGTGGAGACATCGTTTTTGGACTATGGTGAAAATCTGGTACAA
AAATGGCAGGTTCTTTCAGAGGTGCTGAGCTGCTCAGAGAAGCTGGTCTGCCACCTGGGCCGCCTGGGTAGTGTG
AGTGAAGCCAAGGCCTTTTGCTTGGAGGCCCTAAAACTTACAACAAAGCTGCAGATACCACGCCAGTGTGCCCTG
TTCCTGGTGCTGAAGGGCGAGCTGGAGCTGGCCCGCAATGACATTGATCTCTGTCAGTCGGACCTGCAGCAGGTT
CTGTTCTTGCTTGAGTCTTGCACAGAGTTTGGTGGGGTGACTCAGCACCTGGACTCTGTGAAGAAGGTCCACCTG
CAGAAGGGGAAGCAGCAGGCCCAGGTCCCCTGTCCTCCACAGCTCCCAGAGGAGGAGCTCTTCCTAAGAGGCCCT
GCTCTAGAGCTGGTGGCCACTGTGGCCAAGGAGCCTGGCCCCATAGCACCTTCTACAAACTCCTCCCCAGTCTTG
AAAACCAAGCCCCAGCCCATACCCAACTTCCTGTCCCATTCACCCACCTGTGACTGCTCGCTCTGCGCCAGCCCT

FIGURE 1458B

GTCCTCACAGCAGTCTGTCTGCGCTGGGTATTGGTCACGGCAGGGGTGAGGCTGGCCATGGGCCACCAAGCCCAG
GGTCTGGATCTGCTGCAGGTCGTGCTGAAGGGCTGTCCTGAAGCCGCTGAGCGCCTCACCCAAGCTCTCCAAGCT
TCCCTGAATCATAAAACACCCCCCTCCTTGGTTCCAAGCCTCTTGGATGAGATCTTGGCTCAAGCATACACACTG
TTGGCACTGGAGGGCCTGAACCAGCCATCAAACGAGAGCCTGCAGAAGGTTCTACAGTCAGGGCTGAAGTTTGTA
GCAGCACGGATACCCCACCTAGAGCCCTGGCGAGCCAGCCTGCTCTTGATTTGGGCCCTCACAAAACTAGGTGGC
CTCAGCTGCTGTACTACCCAACTTTTTGCAAGCTCCTGGGGCTGGCAGCCACCATTAATAAAAAGTGTCCCTGGC
TCAGAGCCCTCTAAGACTCAGGGCCAAAAACGTTCTGGACGAGGGCGCCAAAAGTTAGCCTCTGCTCCCCTGAGC
CTCAATAATACCTCTCAGAAAGGTCTGGAAGGTAGAGGACTGCCCTGCACACCTAAACCCCCAGACCGGATCAGG
CAAGCTGGCCCTCATGTCCCCTTCACGGTGTTTGAGGAAGTCTGCCCTACAGAGAGCAAGCCTGAAGTACCCCAG
GCCCCCAGGGTACAACAGAGAGTCCAGACGCGCCTCAAGGTGAACTTCAGTGATGACAGTGACTTGGAAGACCCT
GTCTCAGCTGAGGCCTGGCTGGCAGAGGAGCCTAAGAGACGGGGCACTGCTTCCCGGGGCCGGGGGCGAGCAAGG
AAGGGCCTGAGCCTAAAGACGGATGCCGTGGTTGCCCCAGGTAGTGCCCCTGGGAACCCTGGCCTGAATGGCAGG
AGCCGGAGGGCCAAGAAGGTGGCATCAAGACATTGTGAGGAGCGGCGTCCCCAGAGGGCCAGTGACCAGGCCAGG
CCTGGCCCTGAGATCATGAGGACCATCCCTGAGGAAGAACTGACTGACAACTGGAGAAAAATGAGCTTTGAGATC
CTCAGGGGCTCTGACGGGGAAGACTCAGCCTCAGGTGGGAAGACTCCAGCTCCGGGCCCTGAGGCAGCTTCTGGA
GAATGGGAGCTGCTGAGGCTGGATTCCAGCAAGAAGAAGCTGCCCAGCCCATGCCCAGACAAGGAGAGTGACAAG
GACCTTGGTCCTCGGCTCCAGCTCCCCTCAGCCCCCGTAGCCACTGGTCTTTCTACCCTGGACTCCATCTGTGAC
TCCCTGAGTGTTGCTTTCCGGGGCATTAGTCACTGTCCTCCTAGTGGGCTCTATGCCCACCTCTGCCGCTTCCTG
GCCTTGTGCCTGGGCCACCGGGATCCTTATGCCACTGCTTTCCTTGTCACCGAGTCTGTCTCCATCACCTGTCGC
CACCAGCTGCTCACCCACCTCCACAGACAGCTCAGCAAGGCCCAGAAGCACCGAGGATCACTTGAAATAGCAGAC
CAGCTGCAGGGGCTGAGCCTTCAGGAGATGCCTGGAGATGTCCCCCTGGCCCGCATCCAGCGCCTCTTTTCCTTC
AGGGCTTTGGAATCTGGCCACTTCCCCCAGCCTGAAAAGGAGAGTTTCCAGGAGCGCCTGGCTCTGATCCCCAGT
GGGGTGACTGTGTGTGTGTTGGCCCTGGCCACCCTCCAGCCCGGAACCGTGGGCAACACCCTCCTGCTGACCCGG
CTGGAAAAGGACAGTCCCCCAGTCAGTGTGCAGATTCCCACTGGCCAGAACAAGCTTCATCTGCGTTCAGTCCTG
AATGAGTTTGATGCCATCCAGAAGGCACAGAAAGAGAACAGCAGCTGTACTGACAAGCGAGAATGGTGGACAGGG
CGGCTGGCACTGGACCACAGGATGGAGGTTCTCATCGCTTCCCTAGAGAAGTCTGTGCTGGGCTGCTGGAAGGGG
CTGCTGCTGCCGTCCAGTGAGGAGCCCGGCCCTGCCCAGGAGGCCTCCCGCCTACAGGAGCTGCTACAGGACTGT
GGCTGGAAATATCCTGACCGCACTCTGCTGAAAATCATGCTCAGTGGTGCCGGTGCCCTCACCCCTCAGGACATT
CAGGCCCTGGCCTACGGGCTGTGCCCAACCCAGCCAGAGCGAGCCCAGGAGCTCCTGAATGAGGCAGTAGGACGT
CTACAGGGCCTGACAGTACCAAGCAATAGCCACCTTGTCTTGGTCCTAGACAAGGACTTGCAGAAGCTGCCGTGG
GAAAGCATGCCCAGCCTCCAAGCACTGCCTGTCACCCGGCTGCCCTCCTTCCGCTTCCTACTCAGCTACTCCATC
ATCAAAGAGTATGGGGCCTCGCCAGTGCTGAGTCAAGGGGTGGATCCACGAAGTACCTTCTATGTCCTGAACCCT
CACAATAACCTGTCAAGCACAGAGGAGCAATTTCGAGCCAATTTCAGCAGTGAAGCTGGCTGGAGAGGAGTGGTT
GGGGAGGTGCCAAGACCTGAACAGGTGCAGGAAGCCCTGACAAAGCATGATTTGTATATCTATGCAGGGCATGGG
GCTGGTGCCCGCTTCCTTGATGGGCAGGCTGTCCTGCGGCTGAGCTGTCGGGCAGTGGCCCTGCTGTTTGGCTGT
AGCAGTGCGGCCCTGGCTGTGCATGGAAACCTGGAGGGGGCTGGCATCGTGCTCAAGTACATCATGGCTGGTTGC
CCCTTGTTTCTGGGTAATCTCTGGGATGTGACTGACCGCGACATTGACCGCTACACGGAAGCTCTGCTGCAAGGC
TGGCTTGGAGCAGGCCCAGGGGCCCCCCTTCTCTACTATGTAAACCAGGCCCGCCAAGCTCCCCGACTCAAGTAT
CTTATTGGGGCTGCACCTATAGCCTATGGCTTGCCTGTCTCTCTGCGG**TAA**CCCCATGGAGCTGTCTTATTGATG
CTAGAAGCCTCATAACTGTTCTACCTCCAAGGTTAGATTTAATCCTTAGGATAACTCTTTTAAAGTGATTTTCCC
CAGTGTTTTATATGAAACATTTCCTTTTGATTTAACCTCAGTATAATAAAGATACATCATTT

FIGURE 1459

MEAPSPPLRALYESCQFFLSGLERGTKRRYRLDAILSLFAFLGGYCSLLQQLRDDGVYGGSSKQQQSFLQMYFQG
LHLYTVVVYDFAQGCQIVDLADLTQLVDSCKSTVVWMLEALEGLSGQELTDHMGMTASYTSNLAYSFYSHKLYAE
ACAISEPLCQHLGLVKPGTYPEVPPEKLHRCFRLQVESLKKLGKQAQGCKMVILWLAALQPCSPEHMAEPVTFWV
RVKMDAARAGDKELQLKTLRDSLSGWDPETLALLLREELQAYKAVRADTGQERFNIICDLLELSPEETPAGAWAR
ATHLVELAQVLCYHDFTQQTNCSALDAIREALQLLDSVRPEAQARDQLLDDKAQALLWLYICTLEAKIQEGIERD
RRAQAPGNLEEFEVNDLNYEDKLQEDRFLYSNIAFNLAADAAQSKCLDQALALWKELLTKGQAPAVRCLQQTAAS
LQILAALYQLVAKPMQALEVLLLLRIVSERLKDHSKAAGSSCHITQLLLTLGCPSYAQLHLEEAASSLKHLDQTT
DTYLLLSLTCDLLRSQLYWTHQKVTKGVSLLLSVLRDPALQKSSKAWYLLRVQVLQLVAAYLSLPSNNLSHSLWE
QLCAQGWQTPEIALIDSHKLLRSIILLLMGSDILSTQKAAVETSFLDYGENLVQKWQVLSEVLSCSEKLVCHLGR
LGSVSEAKAFCLEALKLTTKLQIPRQCALFLVLKGELELARNDIDLCQSDLQQVLFLLESCTEFGGVTQHLDSVK
KVHLQKGKQQAQVPCPPQLPEEELFLRGPALELVATVAKEPGPIAPSTNSSPVLKTKPQPIPNFLSHSPTCDCSL
CASPVLTAVCLRWVLVTAGVRLAMGHQAQGLDLLQVVLKGCPEAAERLTQALQASLNHKTPPSLVPSLLDEILAQ
AYTLLALEGLNQPSNESLQKVLQSGLKFVAARIPHLEPWRASLLLIWALTKLGGLSCCTTQLFASSWGWQPPLIK
SVPGSEPSKTQGQKRSGRGRQKLASAPLSLNNTSQKGLEGRGLPCTPKPPDRIRQAGPHVPFTVFEEVCPTESKP
EVPQAPRVQQRVQTRLKVNFSDDSDLEDPVSAEAWLAEEPKRRGTASRGRGRARKGLSLKTDAVVAPGSAPGNPG
LNGRSRRAKKVASRHCEERRPQRASDQARPGPEIMRTIPEEELTDNWRKMSFEILRGSDGEDSASGGKTPAPGPE
AASGEWELLRLDSSKKKLPSPCPDKESDKDLGPRLQLPSAPVATGLSTLDSICDSLSVAFRGISHCPPSGLYAHL
CRFLALCLGHRDPYATAFLVTESVSITCRHQLLTHLHRQLSKAQKHRGSLEIADQLQGLSLQEMPGDVPLARIQR
LFSFRALESGHFPQPEKESFQERLALIPSGVTVCVLALATLQPGTVGNTLLLTRLEKDSPPVSVQIPTGQNKLHL
RSVLNEFDAIQKAQKENSSCTDKREWWTGRLALDHRMEVLIASLEKSVLGCWKGLLLPSSEEPGPAQEASRLQEL
LQDCGWKYPDRTLLKIMLSGAGALTPQDIQALAYGLCPTQPERAQELLNEAVGRLQGLTVPSNSHLVLVLDKDLQ
KLPWESMPSLQALPVTRLPSFRFLLSYSIIKEYGASPVLSQGVDPRSTFYVLNPHNNLSSTEEQFRANFSSEAGW
RGVVGEVPRPEQVQEALTKHDLYIYAGHGAGARFLDGQAVLRLSCRAVALLFGCSSAALAVHGNLEGAGIVLKYI
MAGCPLFLGNLWDVTDRDIDRYTEALLQGWLGAGPGAPLLYYVNQARQAPRLKYLIGAAPIAYGLPVSLR

FIGURE 1460

GGCACGAGGGGAAATTCAAACGTGTTTGCGGAAAGGAGTTTGGGTTCCATCTTTTCATTTCCCCAGCGCAGCTTT
CTGTAGAAATGGAATCCGAGGATTTAAGTGGCAGAGAATTGACAATTGATTCCATAATGAACAAAGTGAGAGACA
TTAAAAATAAGTTTAAAAATGAAGACCTTACTGATGAACTAAGCTTGAATAAAATTTCTGCTGATACTACAGATA
ACTCGGGAACTGTTAACCAAATTATGATGATGGCAAACAACCCAGAGGACTGGTTGAGTTTGTTGCTCAAACTAG
AGAAAAACAGTGTTCCGCTAAGTGATGCTCTTTTAAATAAATTGATTGGTCGTTACAGTCAAGCAATTGAAGCGC
TTCCCCCAGATAAATATGGCCAAAATGAGAGTTTTGCTAGAATTCAAGTGAGATTTGCTGAATTAAAAGCTATTC
AAGAGCCAGATGATGCACGTGACTACTTTCAAATGGCCAGAGCAAACTGCAAGAAATTTGCTTTTGTTCATATAT
CTTTTGCACAATTTGAACTGTCACAAGGTAATGTCAAAAAAAGTAAACAACTTCTTCAAAAAGCTGTAGAACGTG
GAGCAGTACCACTAGAAATGCTGGAAATTGCCCTGCGGAATTTAAACCTCCAAAAAAAGCAGCTGCTTTCAGAGG
AGGAAAAGAAGAATTTATCAGCATCTACGGTATTAACTGCCCAAGAATCATTTTCCGGTTCACTTGGGCATTTAC
AGAATAGGAACAACAGTTGTGATTCCAGAGGACAGACTACTAAAGCCAGGTTTTTATATGGAGAGAACATGCCAC
CACAAGATGCAGAAATAGGTTACCGGAATTCATTGAGACAAACTAACAAAACTAAACAGTCATGCCCATTTGGAA
GAGTCCCAGTTAACCTTCTAAATAGCCCAGATTGTGATGTGAAGACAGATGATTCAGTTGTACCTTGTTTTATGA
AAAGACAAACCTCTAGATCAGAATGCCGAGATTTGGTTGTGCCTGGATCTAAACCAAGTGGAAATGATTCCTGTG
AATTAAGAAATTTAAAGTCTGTTCAAAATAGTCATTTCAAGGAACCTCTGGTGTCAGATGAAAAGAGTTCTGAAC
TTATTATTACTGATTCAATAACCCTGAAGAATAAAACGGAATCAAGTCTTCTAGCTAAATTAGAAGAAACTAAAG
AGTATCAAGAACCAGAGGTTCCAGAGAGTAACCAGAAACAGTGGCAATCTAAGAGAAAGTCAGAGTGTATTAACC
AGAATCCTGCTGCATCTTCAAATCACTGGCAGATTCCGGAGTTAGCCCGAAAAGTTAATACAGAGCAGAAACATA
CCACTTTTGAGCAACCTGTCTTTTCAGTTTCAAAACAGTCACCACCAATATCAACATCTAAATGGTTTGACCCAA
AATCTATTTGTAAGACACCAAGCAGCAATACCTTGGATGATTACATGAGCTGTTTTAGAACTCCAGTTGTAAAGA
ATGACTTTCCACCTGCTTGTCAGTTGTCAACACCTTATGGCCAACCTGCCTGTTTCCAGCAGCAACAGCATCAAA
TACTTGCCACTCCACTTCAAAATTTACAGGTTTTAGCATCTTCTTCAGCAAATGAATGCATTTCGGTTAAAGGAA
GAATTTATTCCATTTTAAAGCAGATAGGAAGTGGAGGTTCAAGCAAGGTATTTCAGGTGTTAAATGAAAAGAAAC
AGATATATGCTATAAAATATGTGAACTTAGAAGAAGCAGATAACCAAACTCTTGATAGTTACCGGAACGAAATAG
CTTATTTGAATAAACTACAACAACACAGTGATAAGATCATCCGACTTTATGATTATGAAATCACGGACCAGTACA
TCTACATGGTAATGGAGTGTGGAAATATTGATCTTAATAGTTGGCTTAAAAAGAAAAAATCCATTGATCCATGGG
AACGCAAGAGTTACTGGAAAAATATGTTAGAGGCAGTTCACACAATCCATCAACATGGCATTGTTCACAGTGATC
TTAAACCAGCTAACTTTCTGATAGTTGATGGAATGCTAAAGCTAATTGATTTTGGGATTGCAAACCAAATGCAAC
CAGATACAACAAGTGTTGTTAAAGATTCTCAGGTTGGCACAGTTAATTATATGCCACCAGAAGCAATCAAAGATA
TGTCTTCCTCCAGAGAGAATGGGAAATCTAAGTCAAAGATAAGCCCCAAAAGTGATGTTTGGTCCTTAGGATGTA
TTTTGTACTATATGACTTACGGGAAAACACCATTTCAGCAGATAATTAATCAGATTTCTAAATTACATGCCATAA
TTGATCCTAATCATGAAATTGAATTTCCCGATATTCCAGAGAAAGATCTTCAAGATGTGTTAAAGTGTTGTTTAA
AAAGGGACCCAAAACAGAGGATATCCATTCCTGAGCTCCTGGCTCATCCCTATGTTCAAATTCAAACTCATCCAG
TTAACCAAATGGCCAAGGGAACCACTGAAGAAATGAAATATGTTCTGGGCCAACTTGTTGGTCTGAATTCTCCTA
ACTCCATTTTGAAAGCTGCTAAAACTTTATATGAACACTATAGTGGTGGTGAAAGTCATAATTCTTCATCCTCCA
AGACTTTTGAAAAAAAAAGGGGAAAAAAATGATTTGCAGTTATTCGTAATGTCAAATACCACCTATAAAATATAT
TGGACTGTTATACTCTTGAATCCCTGTGGAAATCTACATTTGAAGACAACATCACTCTGAAGTGTTATCAGCAAA
AAAAATTCAGTAGATTATCTTTAAAAGAAAACTGTAAAAATAGCAACCACTTATGGTACTGTATATATTGTAGAC
TTGTTTTCTCTGTTTTATGCTCTTGTGTAATCTACTTGACATCATTTTACTCTTGGAATAGTGGGTGGATAGCAA
GTATATTCTAAAAAACTTTGTAAATAAAGTTTTGTGGCTAAAATGACACTAAAAAAAAAAAAAAAAA

FIGURE 1461

MNKVRDIKNKFKNEDLTDELSLNKISADTTDNSGTVNQIMMMANNPEDWLSLLLKLEKNSVPLSDALLNKLIGRY
SQAIEALPPDKYGQNESFARIQVRFAELKAIQEPDDARDYFQMARANCKKFAFVHISFAQFELSQGNVKKSKQLL
QKAVERGAVPLEMLEIALRNLNLQKKQLLSEEEKKNLSASTVLTAQESFSGSLGHLQNRNNSCDSRGQTTKARFL
YGENMPPQDAEIGYRNSLRQTNKTKQSCPFGRVPVNLLNSPDCDVKTDDSVVPCFMKRQTSRSECRDLVVPGSKP
SGNDSCELRNLKSVQNSHFKEPLVSDEKSSELIITDSITLKNKTESSLLAKLEETKEYQEPEVPESNQKQWQAKR
KSECINQNPAASSNHWQIPELARKVNTEQKHTTFEQPVFSVSKQSPPISTSKWFDPKSICKTPSSNTLDDYMSCF
RTPVVKNDFPPACQLSTPYGQPACFQQQQHQILATPLQNLQVLASSSANECISVKGRIYSILKQIGSGGSSKVFQ
VLNEKKQIYAIKYVNLEEADNQTLDSYRNEIAYLNKLQQHSDKIIRLYDYEITDQYIYMVMECGNIDLNSWLKKK
KSIDPWERKSYWKNMLEAVHTIHQHGIVHSDLKPANFLIVDGMLKLIDFGIANQMQPDTTSVVKDSQVGTVNYMP
PEAIKDMSSSRENGKSKSKISPKSDVWSLGCILYYMTYGKTPFQQIINQISKLHAIIDPNHEIEFPDIPEKDLQD
VLKCCLKRDPKQRISIPELLAHPYVQIQTHPVNQMAKGTTEEMKYVLGQLVGLNSPNSILKAAKTLYEHYSGGES
HNSSSSKTFEKKRGKK

FIGURE 1462

TTGGCGGGCGGAAGCGGCCACAACCCGGCGATCGAAAAGATTCTTAGGAACGCCGTACCAGCCGCGTCTCTCAGG
ACAGCAGGCCCCTGTCCTTCTGTCGGGCGCCGCTCAGCCGTGCCCTCCGCCCCTCAGGTTCTTTTTCTAATTCCA
AATAAACTTGCAAGAGGACTATGAAAGATTATGATGAACTTCTCAAATATTATGAATTACATGAAACTATTGGGA
CAGGTGGCTTTGCAAAGGTCAAACTTGCCTGCCATATCCTTACTGGAGAGATGGTAGCTATAAAAATCATGGATA
AAAACACACTAGGGAGTGATTTGCCCCGGATCAAAACGGAGATTGAGGCCTTGAAGAACCTGAGACATCAGCATA
TATGTCAACTCTACCATGTGCTAGAGACAGCCAACAAAATATTCATGGTTCTTGAGTACTGCCCTGGAGGAGAGC
TGTTTGACTATATAATTTCCCAGGATCGCCTGTCAGAAGAGGAGACCCGGGTTGTCTTCCGTCAGATAGTATCTG
CTGTTGCTTATGTGCACAGCCAGGGCTATGCTCACAGGGACCTCAAGCCAGAAAATTTGCTGTTTGATGAATATC
ATAAATTAAAGCTGATTGACTTTGGTCTCTGTGCAAAACCCAAGGGTAACAAGGATTACCATCTACAGACATGCT
GTGGGAGTCTGGCTTATGCAGCACCTGAGTTAATACAAGGCAAATCATATCTTGGATCAGAGGCAGATGTTTGGA
GCATGGGCATACTGTTATATGTTCTTATGTGTGGATTTCTACCATTTGATGATGATAATGTAATGGCTTTATACA
AGAAGATTATGAGAGGAAAATATGATGTTCCCAAGTGGCTCTCTCCCAGTAGCATTCTGCTTCTTCAACAAATGC
TGCAGGTGGACCCAAAGAAACGGATTTCTATGAAAAATCTATTGAACCATCCCTGGATCATGCAAGATTACAACT
ATCCTGTTGAGTGGCAAAGCAAGAATCCTTTTATTCACCTCGATGATGATTGCGTAACAGAACTTTCTGTACATC
ACAGAAACAACAGGCAAACAATGGAGGATTTAATTTCACTGTGGCAGTATGATCACCTCACGGCTACCTATCTTC
TGCTTCTAGCCAAGAAGGCTCGGGGAAAACCAGTTCGTTTAAGGCTTTCTTCTTTCTCCTGTGGACAAGCCAGTG
CTACCCCATTCACAGACATCAAGTCAAATAATTGGAGTCTGGAAGATGTGACCGCAAGTGATAAAAATTATGTGG
CGGGATTAATAGACTATGATTGGTGTGAAGATGATTTATCAACAGGTGCTGCTACTCCCCGAACATCACAGTTTA
CCAAGTACTGGACAGAATCAAATGGGGTGGAATCTAAATCATTAACTCCAGCCTTATGCAGAACACCTGCAAATA
AATTAAAGAACAAAGAAAATGTATATACTCCTAAGTCTGCTGTAAAGAATGAAGAGTACTTTATGTTTCCTGAGC
CAAAGACTCCAGTTAATAAGAACCAGCATAAGAGAGAAATACTCACTACGCCAAATCGTTACACTACACCCTCAA
AAGCTAGAAACCAGTGCCTGAAAGAAACTCCAATTAAAATACCAGTAAATTCAACAGGAACAGACAAGTTAATGA
CAGGTGTCATTAGCCCTGAGAGGCGGTGCCGCTCAGTGGAATTGGATCTCAACCAAGCACATATGGAGGAGACTC
CAAAAAGAAAGGGAGCCAAAGTGTTTGGGAGCCTTGAAAGGGGGTTGGATAAGGTTATCACTGTGCTCACCAGGA
GCAAAAGGAAGGGTTCTGCCAGAGACGGGCCCAGAAGACTAAAGCTTCACTATAATGTGACTACAACTAGATTAG
TGAATCCAGATCAACTGTTGAATGAAATAATGTCTATTCTTCCAAAGAAGCATGTTGACTTTGTACAAAAGGGTT
ATACACTGAAGTGTCAAACACAGTCAGATTTTGGGAAAGTGACAATGCAATTTGAATTAGAAGTGTGCCAGCTTC
AAAAACCCGATGTGGTGGGTATCAGGAGGCAGCGGCTTAAGGGCGATGCCTGGGTTTACAAAAGATTAGTGGAAG
ACATCCTATCTAGCTGCAAGGTATAATTGATGGATTCTTCCATCCTGCCGGATGAGTGTGGGTGTGATACAGCCT
ACATAAAGACTGTTATGATCGCTTTGATTTTAAAGTTCATTGGAACTACCAACTTGTTTCTAAAGAGCTATCTTA
AGACCAATATCTCTTTGTTTTTAAACAAAAGATATTATTTTGTGTATGAATCTAAATCAAGCCCATCTGTCATTA
TGTTACTGTCTTTTTTAATCATGTGGTTTTGTATATTAATAATTGTTGACTTTCTTAGATTCACTTCCATATGTG
AATGTAAGCTCTTAACTATGTCTCTTTGTAATGTGTAATTTCTTTCTGAAATAAAACCATTTGTGAATAT

FIGURE 1463

MKDYDELLKYYELHETIGTGGFAKVKLACHILTGEMVAIKIMDKNTLGSDLPRIKTEIEALKNLRHQHICQLYHV
LETANKIFMVLEYCPGGELFDYIISQDRLSEEETRVVFRQIVSAVAYVHSQGYAHRDLKPENLLFDEYHKLKLID
FGLCAKPKGNKDYHLQTCCGSLAYAAPELIQGKSYLGSEADVWSMGILLYVLMCGFLPFDDDNVMALYKKIMRGK
YDVPKWLSPSSILLLQQMLQVDPKKRISMKNLLNHPWIMQDYNYPVEWQSKNPFIHLDDDCVTELSVHHRNNRQT
MEDLISLWQYDHLTATYLLLLAKKARGKPVRLRLSSFSCGQASATPFTDIKSNNWSLEDVTASDKNYVAGLIDYD
WCEDDLSTGAATPRTSQFTKYWTESNGVESKSLTPALCRTPANKLKNKENVYTPKSAVKNEEYFMFPEPKTPVNK
NQHKREILTTPNRYTTPSKARNQCLKETPIKIPVNSTGTDKLMTGVISPERRCRSVELDLNQAHMEETPKRKGAK
VFGSLERGLDKVITVLTRSKRKGSARDGPRRLKLHYNVTTTRLVNPDQLLNEIMSILPKKHVDFVQKGYTLKCQT
QSDFGKVTMQFELEVCQLQKPDVVGIRRQRLKGDAWVYKRLVEDILSSCKV

FIGURE 1464A

GCGCTCTCAGGCGGGCTCCGGCGGCAGCGACGCGAGCGCGGCGATGGGGAGCGGCGGCGTGGTCCACTGTAGGTG
TGCCAAGTGTTTCTGTTATCCTACAAAGCGAAGAATAAGGAGGAGGCCCCGAAACCTGACCATCTTGAGTCTCCC
CGAAGATGTGCTCTTTCACATCCTGAAATGGCTTTCTGTAGAGGACATCCTGGCCGTCCGAGCTGTACACTCCCA
GCTGAAGGACCTGGTGGACAACCACGCCAGTGTGTGGGCATGTGCCAGCTTCCAGGAGCTGTGGCCGTCTCCAGG
GAACCTGAAGCTCTTTGAAAGGGCTGCTGAAAAGGGGAATTTCGAAGCTGCTGTGAAGCTGGGCATAGCCTACCT
CTACAATGAAGGCCTGTCTGTGTCTGATGAGGCCCGCGCAGAAGTGAATGGCCTGAAGGCCTCTCGCTTCTTCAG
TCTCGCTGAGCGGCTGAATGTGGGTGCCGCACCTTTCATCTGGCTCTTCATCCGCCCTCCGTGGTCGGTGAGCGG
AAGCTGCTGCAAGGCCGTGGTTCACGAGAGCCTCAGGGCAGAGTGCCAGCTGCAGAGGACTCACAAAGCATCCAT
ATTGCACTGCTTGGGCAGAGTGCTGAGTCTGTTCGAGGATGAGGAGAAGCAGCAGCAGGCCCATGACCTGTTTGA
GGAGGCTGCTCATCAGGGATGTCTGACCAGCTCCTACCTCCTCTGGGAAAGCGACAGGAGGACAGATGTGTCAGA
TCCTGGGCGATGCCTCCACAGCTTCCGAAAACTCAGGGACTACGCTCGCAAAGGCTGCTGGGAAGCGCAGCTGTC
TTTAGCCAAAGCCTGTGCAAATGCAAACCAGCTTGGACTGGAGGTGAGAGCTTCCAGTGAGATCGTCTGCCAGCT
ATTTCAGGCTTCCCAGGCTGTCAGTAAACAACAAGTCTTCTCCGTGCAGAAGGGACTCAATGACACAATGAGGTA
CATTCTGATCGACTGGCTGGTGGAAGTTGCCACCATGAATGACTTCACAAGCCTGTGCCTGCACCTGACCGTGGA
GTGTGTGGACCGGTACCTGCGGAGGAGGCTGGTGCCGCGGTACAGGCTCCAGCTGCTGGGCATCGCCTGCATGGT
CATCTGCACCCGGTTTATCAGTAAAGAGATCCTGACCATCCGGGAGGCCGTATGGCTCACGGACAACACTTACAA
GTACGAGGACCTGGTGAGAATGATGGGCGAGATCGTCTCCGCCTTGGAAGGGAAGATTCGAGTCCCCACTGTGGT
GGATTACAAGGAGGTCCTGCTGACGCTAGTCCCTGTGGAGCTGAGAACCCAGCACCTGTGCAGCTTCCTCTGCGA
GCTCTCCCTGCTGCACACCAGCCTGTCCGCCTACGCCCCAGCCCGCCTGGCTGCCGCAGCCCTGCTCCTGGCCAG
ACTGACGCACGGGCAGACACAGCCCTGGACCACTCAGCTGTGGGACCTCACCGGATTCTCCTATGAAGACCTCAT
TCCCTGCGTCTTGAGCCTCCATAAGAAGTGCTTCCATGATGACGCCCCCAAGGACTACAGGCAAGTCTCTCTGAC
CGCCGTGAAGCAGCGGTTTGAGGACAAGCGCTATGGAGAAATCAGCCAGGAAGAGGTGCTGAGCTACAGCCAGTT
GTGTGCTGCATTAGGAGTGACACAAGACAGCCCCGACCCCCCGACTTTCCTCAGCACAGGGGAGATCCACGCCTT
CCTCAGCTCTCCCTCGGGGCGGAGAACCAAACGGAAGCGGGAGAACAGCCTCCAGGAAGACAGAGGCAGCTTCGT
TACCACCCCCACTGCGGAGCTGTCCAGCCAGGAGGAGACCGTGCTGGGCAGCTTCCTCGACTGGAGCCTGGACTG
CTGCTCTGGCTATGAAGGCGACCAGGAGAGTGAGGGCGAGAAGGAGGGCGACGTGACAGCTCCCAGCGGCATCCT
CGATGTCACCGTGGTCTACCTGAACCCAGAACAGCATTGCTGCCAGGAATCCAGTGATGAGGAGGCTTGTCCAGA
GGCAAAGGGACCCCAGGACCCACAGGCACTGGCGCTGGACACCCAGATCCCTGCAACCCCTGGACCCAAACCCCT
GGTCCGCACCAGCCGGGAGCCAGGGAAGGACGTCACGACCTCAGGGTACTCCTCCGTCAGCACCGCAAGTCCCAC
AAGCTCCGTGGACGGTGGCTTGGGGGCCCTGCCCCAACCTACCTCAGTGCTGTCCCTGCACAGTGACTCGCACAC
ACAGCCCTGCCACCATCAGGCCAGGAAGTCATGTTTACAGTGTCGTCCCCCAAGTCCCCCGGAGAGCAGTGTTCC
CCAGCAACAGGTGAAGCGGATAAACCTATGCATACACAGTGAGGAGGAGGACATGAACCTGGGCCTTGTGAGGCT
GTAAGTGTGTCAGCACATTTGCCGCAGTGGATGTGTACTGAGGGGGCTGGAGGCGAAGGGTGGGAGCATAGCATA
GGAACGCTGCATAGACCATGGAGGCCTTTGCGCAGAGAGCAGAGAGGATGACTTGCGGCCACCAAGTTTCTGTCT
CCGCGGGAGTCCCGTGCAAGCCATCAGAATGTTGAAATGAGGGTGAAGAGCTCAGATCCCTCTCTTTGGAAAGTT
TAGCCTGGAAGCAGTTGGCCACACTGTGTGGAGGGCACCTCTCTGTCCCTTCCGTGTCTCACTGTCTCTGGAAGC
TTCAGCCCATGTGTGTCCTGGTGTTCCCAGCCCCACCAGAGCCCCGTGCCGGGAGCTGACAGCTTTCACGCTTAA
GGCACGTGTGACCTGGGTAGTCAGACACCACTTGAGCCCCTGCCCACATCTGCTGGTTTGGGGCTTCAGTGGGGA
GCTGACAGCTGTGAGCACACCACTGTCCCCTCATCCACCTCGGCCTGCATGGGGCACCCACTTCCTTCTGGGTGG
GGCTTCCATGGTAAGGGGGCCTGCGTCCCTGCACACTGCGAGGACTGCCTTGCCACAGGCCCACTCCCTACGACA
CGTGACTCGTTTTAGAGCTCTGTCCCAGAGGCGTTCGTATGTGACCCACAGATGGCGTCAATGTGAACACCTCTC
TTTGTGCTGAATTTCTGGGCCATTCTTTTCCTGTCTTATTTCTAAATTTCCTTCTTCCAAGATGAAAACAAAAGA
AAAACTTAAAACAGAAGGTATTAAAAAAACAAGAGATTCCCACCATTATTTAGGTTCACCTGCAAAACAAAAATC
TTACTCCAGCCCCTCAATGCCATCCTGACACACTTTATGCAAAAAGAATTTTCCCAGATAGGCTAGCCAGAAAAA
ACTTCAAGTCCTCTGTAACATCTGAGGTGACCAAGAGGCAGAAGAGCAGAGCAGTCGGGGGCCGTGTCCTGGCTG
ATCCCAACTGCAGCTCTGCTGTGGGGGCCCGTGGGAGGGAGGCAGACCCCTGGGCTTTCCTGCTGGCCACGGAGA
CTCTGCTCCTGCATGGAAAGGGAGCCTGGGAGCCAGCAGCCCACGCCTGGGGAGCCTGCCTGGGGCCATGTGACC
ATGGCCTCTCCCTGGGAACGGGCTGACCACAACACACCCTGCTGCCATCCACTTCTGTTTACTCTGCAAATGTAA

FIGURE 1464B

GAAAGAACCACTTGGCCAGAAGTGTCCCCCAGATGCTTTTTTTTTTTTTTTTTTGGAGACAGTTTTGCTCTTGTC
TCCCCGGCTGGAGTGCAGTGGCATGATCTCAACTCTCAACTCACTGTAACCTCCGCCTCCCGGATACTCCTGCCT
CAGCCTCCTGGGTAGCTGGGATTACAAGCACCCAACCACGCCCAGCTAATTTTTGTATTTTCGGTAGAGACGGGA
TTTCACCATGTTGGCCAGGCTAGTCTCGAACTCATGACCTCAAGTGATCCGCCCACTTCGGTCTCCCAAAGTGCT
GGGATTACAGGCATGAGCCACGGCGCCTGGCCCCCAAATGCTCTTGAACCGGAAACCCAGGGATGGGAGATGCTC
ACTGAGCTGCTGCTTTTATGTGTGCTGGTGCTATGTGTGTTCATGTCCGCGGCAGCTGTCTTTTTGCTACTATAA
GGGAATTCTGGCCACCCTGGGTGGGGTGTGGTCGGGGTGAGAACCCAAGCGTTGGAACTGTAGACCCGTCCTGTC
GACTGTGTGCCCCTGGGCATGTGTGAGCCTCAGTTTCCTCATCTGTAAGGGGGGCAATGATACCTACCTCACAGG
GGGTTGTGAGGATTAAATGTGAGGAGGATAGTGGCAAC

FIGURE 1465

MGSGGVVHCRCAKCFCYPTKRRIRRRPRNLTILSLPEDVLFHILKWLSVEDILAVRAVHSQLKDLVDNHASVWAC
ASFQELWPSPGNLKLFERAAEKGNFEAAVKLGIAYLYNEGLSVSDEARAEVNGLKASRFFSLAERLNVGAAPFIW
LFIRPPWSVSGSCCKAVVHESLRAECQLQRTHKASILHCLGRVLSLFEDEEKQQQAHDLFEEAAHQGCLTSSYLL
WESDRRTDVSDPGRCLHSFRKLRDYARKGCWEAQLSLAKACANANQLGLEVRASSEIVCQLFQASQAVSKQQVFS
VQKGLNDTMRYILIDWLVEVATMNDFTSLCLHLTVECVDRYLRRRLVPRYRLQLLGIACMVICTRFISKEILTIR
EAVWLTDNTYKYEDLVRMMGEIVSALEGKIRVPTVVDYKEVLLTLVPVELRTQHLCSFLCELSLLHTSLSAYAPA
RLAAAALLLARLTHGQTQPWTTQLWDLTGFSYEDLIPCVLSLHKKCFHDDAPKDYRQVSLTAVKQRFEDKRYGEI
SQEEVLSYSQLCAALGVTQDSPDPPTFLSTGEIHAFLSSPSGRRTKRKRENSLQEDRGSFVTTPTAELSSQEETV
LGSFLDWSLDCCSGYEGDQESEGEKEGDVTAPSGILDVTVVYLNPEQHCCQESSDEEACPEAKGPQDPQALALDT
QIPATPGPKPLVRTSREPGKDVTTSGYSSVSTASPTSSVDGGLGALPQPTSVLSLHSDSHTQPCHHQARKSCLQC
RPPSPPESSVPQQQVKRINLCIHSEEEDMNLGLVRL

FIGURE 1466

CGCACTCCCTGCTGGGTGAGCAGCACTGTAAAGATGAAGCTGGCTAACTGGTACTGGCTGAGCTCAGCTGTTCTT
GCCACTTACGGTTTTTTGGTTGTGGCAAACAATGAAACAGAGGAAATTAAAGATGAAAGAGCAAAGGATGTCTGC
CCAGTGAGACTAGAAAGCAGAGGGAAATGCGAAGAGGCAGGGGAGTGCCCCTACCAGGTAAGCCTGCCCCCCTTG
ACTATTCAGCTCCCGAAGCAATTCAGCAGGATCGAGGAGGTGTTCAAAGAAGTCCAAAACCTCAAGGAAATCGTA
AATAGTCTAAAGAAATCTTGCCAAGACTGCAAGCTGCAGGCTGATGACAACGGAGACCCAGGCAGAAACGGACTG
TTGTTACCCAGTACAGGAGCCCCGGGAGAGGTTGGTGATAACAGAGTTAGAGAATTAGAGAGTGAGGTTAACAAG
CTGTCCTCTGAGCTAAAGAATGCCAAAGAGGAGATCAATGTACTTCATGGTCGCCTGGAGAAGCTGAATCTTGTA
AATATGAACAACATAGAAAATTATGTTGACAGCAAAGTGGCAAATCTAACATTTGTTGTCAATAGTTTGGATGGC
AAATGTTCAAAGTGTCCCAGCCAAGAACAAATACAGTCACGTCCAGTTCAACATCTAATATATAAAGATTGCTCT
GACTACTACGCAATAGGCAAAAGAAGCAGTGAGACCTACAGAGTTACACCTGATCCCAAAAATAGTAGCTTTGAA
GTTTACTGTGACATGGAGACCATGGGGGGAGGCTGGACAGTGCTGCAGGCACGTCTCGATGGGAGCACCAACTTC
ACCAGAACATGGCAAGACTACAAAGCAGGCTTTGGAAACCTCAGAAGGGAATTTTGGCTGGGGAACGATAAAATT
CATCTTCTGACCAAGAGTAAGGAAATGATTCTGAGAATAGATCTTGAAGACTTTAATGGTGTCGAACTATATGCC
TTGTATGATCAGTTTTATGTGGCTAATGAGTTTCTCAAATATCGTTTACACGTTGGTAACTATAATGGCACAGCT
GGAGATGCATTACGTTTCAACAAACATTACAACCACGATCTGAAGTTTTTCACCACTCCAGATAAAGACAATGAT
CGATATCCTTCTGGGAACTGTGGGCTGTACTACAGTTCAGGCTGGTGGTTTGATGCATGTCTTTCTGCAAACTTA
AATGGCAAATATTATCACCAAAAATACAGAGGTGTCCGTAATGGGATTTTCTGGGGTACCTGGCCTGGTGTAAGT
GAGGCACACCCTGGTGGCTACAAGTCCTCCTTCAAAGAGGCTAAGATGATGATCAGACCCAAGCACTTTAAGCCA
TAAATCACTCTGTTCATTCCTCCAGGTATTCGTTATCTAATAGGGCAATTAATTCCTTCAGCACTTTAGAATATG
CCTTGTTTCATATTTTTCATAGCTAAAAAATGTTTGACATCCTTTGAGATATTTTATTACTAAAATCTGCC

FIGURE 1467

MKLANWYWLSSAVLATYGFLVVANNETEEIKDERAKDVCPVRLESRGKCEEAGECPYQVSLPPLTIQLPKQFSRI
EEVFKEVQNLKEIVNSLKKSCQDCKLQADDNGDPGRNGLLLPSTGAPGEVGDNRVRELESEVNKLSSELKNAKEE
INVLHGRLEKLNLVNMNNIENYVDSKVANLTFVVNSLDGKCSKCPSQEQIQSRPVQHLIYKDCSDYYAIGKRSSE
TYRVTPDPKNSSFEVYCDMETMGGGWTVLQARLDGSTNFTRTWQDYKAGFGNLRREFWLGNDKIHLLTKSKEMIL
RIDLEDFNGVELYALYDQFYVANEFLKYRLHVGNYNGTAGDALRFNKHYNHDLKFFTTPDKDNDRYPSGNCGLYY
SSGWWFDACLSANLNGKYYHQKYRGVRNGIFWGTWPGVSEAHPGGYKSSFKEAKMMIRPKHFKP

FIGURE 1468A

GGGGAGATTCGGGACCATGGCACCTGTGCACGGCGACGACTCTCTGTCAGATTCAGGGAGTTTTGTATCTTCTCG
AGCCCGGCGAGAAAAAAAATCAAAGAAGGGGCGCCAAGAAGCCCTAGAAAGACTGAAAAAGGCTAAAGCTGGTGA
GAAGTATAAATATGAAGTCGAGGACTTCACAGGTGTTTATGAAGAAGTTGATGAAGAACAGTATTCGAAGCTGGT
TCAGGCACGCCAGGATGATGACTGGATTGTGGATGATGATGGTATTGGCTATGTGGAAGATGGCCGAGAGATTTT
TGATGATGACCTTGAAGATGATGCCCTTGATGCTGATGAGAAAGGAAAAGATGGTAAAGCACGCAATAAAGACAA
GAGGAATGTAAAGAAGCTCGCAGTGACAAAACCGAACAACATTAAGTCAATGTTCATTGCTTGTGCTGGAAAGAA
AACTGCAGATAAAGCTGTAGACTTGTCCAAGGATGGTCTGCTAGGTGACATTCTACAGGATCTTAACACTGAGAC
ACCTCAAATAACTCCACCACCTGTAATGATACTGAAGAAGAAAAGATCCATTGGAGCTTCACCGAATCCTTTCTC
TGTGCACACCGCCACGGCAGTTCCTTCAGGAAAAATTGCTTCCCCTGTCTCCAGAAAGGAGCCTCCATTAACTCC
TGTTCCTCTTAAACGTGCTGAATTTGCTGGCGATGATGTACAGGTCGAGAGTACAGAAGAAGAGCAGGAGTCAGG
GGCAATGGAGTTTGAAGATGGTGACTTTGATGAGCCCATGGAAGTTGAAGAGGTGGACCTGGAGCCTATGGCTGC
CAAGGCTTGGGACAAAGAGAGTGAGCCAGCAGAGGAAGTGAAACAAGAGGCGGATTCTGGGAAAGGGACCGTGTC
CTACTTAGGAAGTTTTCTCCCGGATGTCTCTTGTTGGGACATTGATCAAGAAGGTGATAGCAGTTTCTCAGTGCA
AGAAGTTCAAGTGGATTCCAGTCACCTCCCATTGGTAAAAGGGGCAGATGAGGAACAAGTATTCCACTTTTATTG
GTTGGATGCTTATGAGGATCAGTACAACCAACCAGGTGTGGTATTTCTGTTTGGGAAAGTTTGGATTGAATCAGC
CGAGACCCATGTGAGCTGTTGTGTCATGGTGAAAAATATCGAGCGAACGCTTTACTTCCTTCCCCGTGAAATGAA
AATTGATCTAAATACGGGGAAAGAAACAGGAACTCCAATTTCAATGAAGGATGTTTATGAGGAATTTGATGAGAA
AATAGCAACAAAATATAAAATTATGAAGTTCAAGTCTAAGCCAGTGGAAAAGAACTATGCTTTTGAGATACCTGA
TGTTCCAGAAAAATCTGAGTACTTGGAAGTTAAATACTCGGCTGAAATGCCACAGCTTCCTCAAGATTTGAAAGG
AGAAACTTTTTCTCATGTATTTGGGACCAACACATCTAGCCTGGAACTGTTCTTGATGAACAGAAAGATCAAAGG
ACCTTGTTGGCTTGAAGTAAAAAAGTCCACAGCTCTTAATCAGCCAGTCAGTTGGTGTAAAGTTGAGGCAATGGC
TTTGAAACCAGACCTGGTGAATGTAATTAAGGATGTCAGTCCACCACCGCTTGTCGTGATGGCTTTCAGCATGAA
GACAATGCAGAATGCAAAGAACCATCAAAATGAGATTATTGCTATGGCAGCTTTGGTCCATCACAGTTTTGCATT
GGATAAAGCAGCCCCAAAGCCTCCCTTTCAGTCACACTTCTGTGTTGTGTCTAAACCAAAGGACTGTATTTTTCC
ATATGCTTTCAAAGAAGTCATTGAGAAAAAGAATGTGAAGGTTGAGGTTGCTGCAACAGAAAGAACACTGCTAGG
TTTTTTCCTTGCAAAAGTTCACAAAATTGATCCTGATATCATTGTGGGTCATAATATTTATGGGTTTGAACTGGA
AGTACTACTGCAGAGAATTAATGTGTGCAAAGCTCCTCACTGGTCCAAGATAGGTCGACTGAAGCGATCCAACAT
GCCAAAGCTTGGGGGCCGGAGTGGATTTGGTGAAAGAAATGCTACCTGTGGTCGAATGATCTGTGATGTGGAAAT
TTCAGCAAAGGAATTGATTCGTTGTAAAAGCTACCATCTGTCTGAACTTGTTCAGCAGATTCTAAAAACTGAAAG
GGTTGTAATCCCAATGGAAAATATACAAAATATGTACAGTGAATCTTCTCAACTGTTATACCTGTTGGAACACAC
CTGGAAAGATGCCAAGTTCATTTTGCAGATCATGTGTGAGCTAAATGTTCTTCCATTAGCATTGCAGATCACTAA
CATCGCTGGGAACATTATGTCCAGGACGCTGATGGGTGGACGATCCGAGCGTAACGAGTTCTTGTTGCTTCATGC
ATTTTACGAAAACAACTATATTGTGCCTGACAAGCAGATTTTCAGAAAGCCTCAGCAAAAACTGGGAGATGAAGA
TGAAGAAATTGATGGAGATACCAATAAATACAAGAAAGGACGTAAGAAAGGAGCTTATGCTGGAGGCTTGGTTTT
GGACCCCAAAGTTGGTTTTTATGATAAGTTCATTTTGCTTCTGGACTTCAACAGTCTATATCCTTCCATCATTCA
GGAATTTAACATTTGTTTTACAACAGTACAAAGAGTTGCTTCAGAGGCACAGAAAGTTACAGAGGATGGAGAACA
AGAACAGATCCCTGAGTTGCCAGATCCAAGCTTAGAAATGGGCATTTTGCCCAGAGAGATCCGGAAACTGGTAGA
ACGGAGAAAACAAGTCAAACAGCTAATGAAACAGCAAGACTTAAATCCAGACCTTATTCTTCAGTATGACATTCG
ACAGAAGGCTTTGAAGCTCACAGCGAACAGTATGTATGGTTGCCTGGGATTTTCCTATAGCAGATTTTACGCCAA
ACCACTGGCTGCCTTGGTGACATACAAAGGAAGGGAGATTTTGATGCATACGAAAGAGATGGTACAAAAGATGAA
TCTTGAAGTTATTTATGGAGATACAGATTCAATTATGATAAACACCAATAGCACCAATCTGGAAGAAGTATTTAA
GTTGGGAAACAAGGTAAAAAGTGAAGTGAATAAGTTGTACAAACTGCTTGAAATAGACATTGATGGGGTTTTCAA
GTCTCTGCTACTGCTGAAAAAAAAGAAGTACGCTGCTCTGGTTGTTGAGCCAACGTCGGATGGGAATTATGTCAC
CAAACAGGAGCTCAAAGGATTAGATATAGTTAGAAGAGATTGGTGTGATCTTGCTAAAGACACTGGAAACTTTGT
GATTGGCCAGATTCTTTCTGATCAAAGCCGGGACACTATAGTGGAAAACATTCAGAAGAGGCTGATAGAAATTGG
AGAAAATGTGCTAAATGGCAGTGTCCCAGTGAGCCAGTTTGAAATTAACAAGGCATTGACAAAGGATCCCCAGGA
TTACCCTGATAAAAAAAGCCTACCTCATGTACATGTTGCCCTCTGGATAAATTCTCAAGGAGGCAGAAAGGTGAA
AGCTGGAGATACTGTGTCATATGTCATCTGTCAGGATGGATCAAACCTCACTGCAAGTCAGAGGGCCTATGCGCC

FIGURE 1468B

TGAGCAGCTGCAGAAACAGGATAATCTAACCATTGACACCCAGTACTACCTGGCCCAGCAGATCCACCCAGTCGT
GGCTCGGATCTGTGAACCAATAGACGGAATTGATGCTGTCCTCATTGCAACGTGGTTGGGACTTGACCCCACCCA
ATTTAGAGTTCATCATTATCATAAAGATGAAGAGAATGATGCTCTACTTGGTGGCCCAGCACAGCTCACTGATGA
AGAGAAATACAGGGACTGTGAAAGATTCAAATGTCCATGCCCTACATGTGGAACTGAGAATATTTATGATAATGT
CTTTGATGGTTCGGGAACAGATATGGAGCCCAGCTTGTATCGTTGCAGTAACATCGATTGTAAGGCTTCACCTCT
GACCTTTACAGTACAACTGAGCAACAAATTGATCATGGACATTAGACGTTTCATTAAAAAGTACTATGATGGCTG
GTTGATATGTGAAGAGCCAACCTGTCGCAATCGAACTCGTCACCTTCCCCTTCAATTCTCCCGAACTGGGCCTCT
TTGCCCAGCCTGCATGAAAGCTACACTTCAACCAGAGTATTCTGACAAGTCCCTGTACACCCAGCTGTGCTTTTA
CCGGTACATTTTTGATGCGGAGTGTGCACTGGAGAAACTTACTACCGATCATGAGAAAGATAAATTGAAGAAGCA
ATTTTTTACCCCCAAAGTTCTGCAGGACTACAGAAAACTCAAGAACACAGCAGAGCAATTCTTGTCCCGAAGTGG
CTACTCCGAAGTGAATCTGAGCAAACTCTTCGCTGGTTGTGCCGTGAAATCCTAAGGGAATCCCAGGAGTAACCA
AGGAGGGGGTAGTTGAAAAATCCCAGCTTCCTCTGTGCCTCCACTCTGGCCCTAAATGCTCCTCCAGCATCTGTT
TCTCCCTTGGGACTGTGTCTCATGTTTGTGTGAATGTAGACCAGGAAAGGGGGCTGCAAAAATGTTGAGTCTAAT
GTTCGTAAGCATCATAGAAATTCCTGTCTTCATATTAAGATGTACTGCTTTAAAACACAACTCCAGAGCCCCTCC
CCAAGCTCCCCTCCCCAAGCTCCTGAAGACCCGGTTTCTGAGGGAGGGAAATTGCTACTTGGATTGAGAGTAGCT
GGAATGTAAGTGACCCCAGGCTTTGCTCAGGGCCTTTAGCCTATGTCCCCCCCACATAAAGAGAGCTTCTCAGAG
CCTGACTGAAGAGCTGACGTTTTGCTTTTTCATATGCCAATTAAACCCGGTCTAAATCCAAATGCTTCTCCAGCC
ATCCAGGAGTGGCTGTCCTTTTCAGTCTTGTCTTTTATATAGGTAGCTGAGGGGGAAGATTTAGAAGCCTTGCAC
TCACTAAATAGATTAAACAGAGCAGGCTTGTTTGTTGAATTGCTCCAAAGTCCAACAGACACACACTGAGCAGGT
GTTTTACACTCACATTCCCTTTTTGCCCCTTAAATAGAAAGTGCAGGTAAAGGTTTATACAACAAGAAAGCACAT
TGAAAATAATTTGATACTCTAACAATCCATTAACATGTGTAGGGGTTACGGTGAGGATCATGTGTTGTATTCGAA
AAACGGGGAGAGGGATGCTTAATTGGCCCTCGCTTGCTATTTTTTTCTCATTTCTTCACAATAGGACCGTCTTTG
GCAGCAGCAAAATGTATTTCAGTATGGCAGTCTTTCCTCTCTTACATTATTGGTAAGATTATACTAACAAAATGT
TTCCCCTTGTACAATTATGCTGTGTTTTTAAAAAACATTGACCTGTGTGTTTTTATAAAAGAAAAAGTATGTTGT
GCCTTCTTCTTAAGAATAAAGTTTTCTAAAGGG

FIGURE 1469

MAPVHGDDSLSDSGSFVSSRARREKKSKKGRQEALERLKKAKAGEKYKYEVEDFTGVYEEVDEEQYSKLVQARQD
DDWIVDDDGIGYVEDGREIFDDDLEDDALDADEKGKDGKARNKDKRNVKKLAVTKPNNIKSMFIACAGKKTADKA
VDLSKDGLLGDILQDLNTETPQITPPPVMILKKKRSIGASPNPFSVHTATAVPSGKIASPVSRKEPPLTPVPLKR
AEFAGDDVQVESTEEEQESGAMEFEDGDFDEPMEVEEVDLEPMAAKAWDKESEPAEEVKQEADSGKGTVSYLGSF
LPDVSCWDIDQEGDSSFSVQEVQVDSSHLPLVKGADEEQVFHFYWLDAYEDQYNQPGVVFLFGKVWIESAETHVS
CCVMVKNIERTLYFLPREMKIDLNTGKETGTPISMKDVYEEFDEKIATKYKIMKFKSKPVEKNYAFEIPDVPEKS
EYLEVKYSAEMPQLPQDLKGETFSHVFGTNTSSLELFLMNRKIKGPCWLEVKKSTALNQPVSWCKVEAMALKPDL
VNVIKDVSPPPLVVMAFSMKTMQNAKNHQNEIIAMAALVHHSFALDKAAPKPPFQSHFCVVSKPKDCIFPYAFKE
VIEKKNVKVEVAATERTLLGFFLAKVHKIDPDIIVGHNIYGFELEVLLQRINVCKAPHWSKIGRLKRSNMPKLGG
RSGFGERNATCGRMICDVEISAKELIRCKSYHLSELVQQILKTERVVIPMENIQNMYSESSQLLYLLEHTWKDAK
FILQIMCELNVLPLALQITNIAGNIMSRTLMGGRSERNEFLLLHAFYENNYIVPDKQIFRKPQQKLGDEDEEIDG
DTNKYKKGRKKGAYAGGLVLDPKVGFYDKFILLLDFNSLYPSIIQEFNICFTTVQRVASEAQKVTEDGEQEQIPE
LPDPSLEMGILPREIRKLVERRKQVKQLMKQQDLNPDLILQYDIRQKALKLTANSMYGCLGFSYSRFYAKPLAAL
VTYKGREILMHTKEMVQKMNLEVIYGDTDSIMINTNSTNLEEVFKLGNKVKSEVNKLYKLLEIDIDGVFKSLLLL
KKKKYAALVVEPTSDGNYVTKQELKGLDIVRRDWCDLAKDTGNFVIGQILSDQSRDTIVENIQKRLIEIGENVLN
GSVPVSQFEINKALTKDPQDYPDKKSLPHVHVALWINSQGGRKVKAGDTVSYVICQDGSNLTASQRAYAPEQLQK
QDNLTIDTQYYLAQQIHPVVARICEPIDGIDAVLIATWLGLDPTQFRVHHYHKDEENDALLGGPAQLTDEEKYRD
CERFKCPCPTCGTENIYDNVFDGSGTDMEPSLYRCSNIDCKASPLTFTVQLSNKLIMDIRRFIKKYYDGWLICEE
PTCRNRTRHLPLQFSRTGPLCPACMKATLQPEYSDKSLYTQLCFYRYIFDAECALEKLTTDHEKDKLKKQFFTPK
VLQDYRKLKNTAEQFLSRSGYSEVNLSKLFAGCAVKS

FIGURE 1470

GGCACGAGGCAAGAGGCAGCCTGGGGGCCACAGCTGCTTCAGCAGACCTCATGGCTGAGTGAGCCTCCCCTGGGC
CCAGCACCCCACCTCAGCATGGTCCAAGCCATGGGGGGCGCTCCAGAGCACAGCCGTTGACCTTGTCTTTGGGGG
CAGCCATGACCCAGCCTCCGCCTGAAAAAACGCCAGCCAAGAAGCATGTGCGACTGCAGGAGAGGCGGGGCTCCA
ATGTGGCTCTGATGCTGGACGTTCGGTCCCTGGGGGCCGTAGAACCCATCTGCTCTGTGAACACACCCCGGGAGG
TCACCCTACACTTTCTGCGCACTGCTGGACACCCCCTTACCCGCTGGGCCCTTCAGCGCCAGCCACCCAGCCCCA
AGCAACTGGAAGAAGAATTCTTGAAGATCCCTTCAAACTTTGTCAGCCCCGAAGACCTGGACATCCCTGGCCACG
CCTCCAAGGACCGATACAAGACCATCTTGCCAAATCCCCAGAGCCGTGTCTGTCTAGGCCGGGCACAGAGCCAGG
AGGACGGAGATTACATCAATGCCAACTACATCCGAGGCTATGACGGGAAGGAGAAGGTCTACATTGCCACCCAGG
GCCCCATGCCCAACACTGTGTCGGACTTCTGGGAGATGGTGTGGCAAGAGGAAGTGTCCCTCATTGTCATGCTCA
CTCAGCTCCGAGAGGGCAAGGAGAAATGTGTCCACTACTGGCCCACAGAAGAGGAAACCTATGGACCCTTCCAGA
TCCGCATCCAGGACATGAAAGAGTGCCCAGAATACACTGTGCGGCACGTCACCATCCAGTACCAGGAAGAGCGCC
GGTCAGTAAAGCACATCCTCTTTTCGGCCTGGCCAGACCATCAGACACCAGAATCAGCTGGGCCCCTGCTGCGCC
TAGTGGCAGAGGTGGAGGAGAGCCCGGAGACAGCCGCCCACCCCGGGCCTATCGTAGTCCACTGCAGTGCAGGGA
TTGGCCGGACGGGCTGCTTCATCGCCACGCGAATTGGCTGTCAACAGCTGAAAGCCCGAGGAGAAGTGGACATTC
TGGGTATTGTGTGCCAACTGCGGCTAGACAGAGGGGGGATGATCCAGACGGCAGAGCAGTACCAGTTCCTGCACC
ACACTTTGGCCCTGTATGCAGGCCAGCTGCCTGAGGAACCCAGCCCCTGACCCCTGCCACCCTCCGGTGGCCCAG
GTGCCTACCTCCCTCAAGCCTGGGAAGGTGGGTCTGGGGAAAGTGGGCCGAGTGATCTGGGGGTACCCTTGGGTT
GGTGTGGGGAAGGAGTGCCTCCTTAGTGGTGCTTGACAGTCACAGGAAGCAGCAGCAGTAAGGACAAGGGGCCGG
ATTCAGGTCTTCAACCACTGGCCACTCCTCTTGCCTTCCTCTGTTGGCCCCAGATGGACAGTAAGGGGAACCTCC
AATGTCTCTCTGAACTTAAAGACAGGAGCTGGCATTTATGACAGACAAAGAAAGAAGCCCAGGTGTCCTGGTGTT
CTCTGAGACACTCTTTGTGATCTTCAGTTTCCTGTTCTATAACATGAACATAAGTGCTTAGCTGCCATGAGGGAA
AAGTAATGAGAGAAGTTCTAGAAGCCACTCCAGCCACTCCTTCCTGGGGCTGACAAAAGGGTGATTCCAAGATCA
TCCTTCACCCGAGGTCCTGCCCAAGCACAGGCCAGATGCAAGAATGGGGAAAAGTCTGGTCCTGATCTCCAAGTC
TCAACATCCTATCAGTGACTCTGCCTCCCTGACCACACATCGGAAGGGCCTGGATGACCCAATCAAAAGAAAGAA
CAAGGACTCTGGTTACCCTTGCCTCCACCCATGTGTCATAAGAGTAGGCTACAGAGGTGACCAGGCCTGGCAGTT
GAAATCTCTGGAAGAGGGAACATGTGGGGACTACTCAGAGGCAAAGAGGAGCTGCTCCTGCCTCCATGGTTGCTG
GCCACTCCCACCAACTACTCTTAGGGAGGCTAAGCAGTCTCTGTTTTGACCTTCCATGGCTCAATAATACCTGGA
TGCAGGACCACTATACCTTGCATTTGCTGAGTACACCTAGAGAGCTTGGCTGTTTCCAAAAACAATCAGGGTCAT
AACCATCCATGCAGACATGGAGGCTCGGCTGAACCAGGACTCCTCACTGTCTACCTGAGAGAATGAGCACCCCTC
ATCCATCTCAGCATCAACACAATTTCCAGGGGACCTCAGGTCTACCTCAGGACTGAACCGCCACACCTCAGGATT
CCTCCTCCTTGAATCTGAGACTGGCTGCCCATTCTGAGATGGGGATGAAGGTAAGATGCCGCATCACCAGCACGC
CGCCCCTGACAGCTGCCTTGATACCAGCTCTCTGTGGAAACCCCCGAGGAGTTGGATCTGGAGAACAGCTGGGCC
TCCTCACTCAGGACTTCTCTCCTGAAGAACACGCAGTGCTAAAACTGAGGATGATTTCCCTAATGCTTCTGCTTG
GAGTCTCTTATGGAGGAGCTGCTCCTTCCTTACAGCTTGGGGATGGACTTCCCACACCTCCACCTCCCCTGAGCC
CTGAGCCCTGTGAGAGGACGACTGTCTATGCAATGAGGCTCGGTGGGGGGCTCTCAAGTGCCTGATCCTGCCTGG
CTCAGAGGCAGCCAGAGGGAAGCAACTGACAGCCCCACAGGCCCTCCCTGGCACTGTCCCCATCTCAGAGCTCAG
GAGGGTACAAGCTCCAGAACAGTAACCAAGTGGGAAAATAAAGACTTCTTGGATGACTG

FIGURE 1471

MTQPPPEKTPAKKHVRLQERRGSNVALMLDVRSLGAVEPICSVNTPREVTLHFLRTAGHPLTRWALQRQPPSPKQ
LEEEFLKIPSNFVSPEDLDIPGHASKDRYKTILPNPQSRVCLGRAQSQEDGDYINANYIRGYDGKEKVYIATQGP
MPNTVSDFWEMVWQEEVSLIVMLTQLREGKEKCVHYWPTEEETYGPFQIRIQDMKECPEYTVRHVTIQYQEERRS
VKHILFSAWPDHQTPESAGPLLRLVAEVEESPETAAHPGPIVVHCSAGIGRTGCFIATRIGCQQLKARGEVDILG
IVCQLRLDRGGMIQTAEQYQFLHHTLALYAGQLPEEPSP

FIGURE 1472

AGCTCGCCGGCCTTTGGTCTCCAGGACTTGTCCCAGCAGCCCCTCGAACTGAGAATTACACCATCGGACCCCTGG
CTCTGAGGCCTTCAGACTTGGACTGTGTCACACTGCCAGGCTTCCAGGGCTCCAACTTGCAGACGGCCTGTTGTG
GGACAGTCTCTGTAATCGCGAAAGCAACC**ATG**GAAGACCTGGGGGAAAACACCATGGTTTTATCCACCCTGAGAT
CTTTGAACAACTTCATCTCTCAGCGTGTGGAGGGAGGCTCTGGACTGGATATTTCTACCTCGGCCCCAGGTTCTC
TGCAGATGCAGTACCAGCAGAGCATGCAGCTGGAGGAAAGAGCAGAGCAGATCCGTTCGAAGTCCCACCTCATCC
AGGTGGAGCGGGAGAAAATGCAGATGGAGCTGAGTCACAAGAGGGCTCGAGTGGAGCTGGAGAGAGCAGCCAGCA
CCAGTGCCAGGAACTACGAGCGTGAGGTCGACCGCAACCAGGAGCTCCTGACGCGCATCCGGCAGCTTCAGGAGC
GGGAGGCCGGGGCGGAGGAGAAGATGCAGGAGCAGCTGGAGCGCAACAGGCAGTGTCAGCAGAACTTGGATGCTG
CCAGCAAGAGGCTGCGTGAGAAAGAGGACAGTCTGGCCCAGGCTGGCGAGACCATCAACGCACTGAAGGGGAGGA
TCTCGGAACTGCAGTGGAGCGTGATGGACCAGGAGATGCGGGTGAAGCGCCTGGAGTCGGAGAAGCAGGACGTGC
AGGAGCAGCTGGACCTGCAACACAAAAAATGCCAGGAAGCCAATCAGAAAATCCAGGAACTCCAGGCCAGCCAAG
AAGCAAGAGCAGACCACGAGCAGCAGATTAAGGATCTGGAGCAGAAGCTGTCCCTGCAAGAGCAGGATGCAGCGA
TTGTGAAGAACATGAAGTCTGAGCTGGTACGGCTCCCTAGGCTGGAACGGGAGCTGGAGCAGCTGCGGGAGGAGA
GCGCACTGCGGGAGATGAGAGAGACCAACGGGCTGCTCCAGGAAGAGCTGGAAGGGCTGCAGAGGAAGCTGGGGC
GCCAGGAGAAGATGCAGGAGACGCTGGTTGGCTTGGAGCTGGAGAACGAGAGGCTGCTGGCCAAGCTGCAAAGCT
GGGAGAGACTGGACCAGACCATGGGCCTGAGCATCAGGACTCCAGAAGACCTTTCCAGATTCGTGGTTGAGCTGC
AGCAGAGGGAGCTTGCCTTGAAGGACAAGAACAGCGCCGTCACCAGCAGCGCCCGGGGGCTGGAGAAGGCCAGGC
AGCAGCTGCAGGAGGAGCTCCGGCAGGTCAGCGGCCAGCTGTTGGAGGAGAGGAAGAAGCGCGAGACCCACGAGG
CGCTGGCCCGGAGGCTCCAGAAACGGGTCCTGCTGCTCACCAAGGAGCGGGACGGTATGCGGGCCATCCTGGGGT
CCTACGACAGCGAGCTGACCCCGGCCGAGTACTCACCCCAGCTGACGCGGCGCATGCGGGAGGCTGAGGATATGG
TGCAGAAGGTGCACAGCCACAGCGCCGAGATGGAGGCTCAGCTGTCGCAGGCCCTGGAGGAGCTGGGAGGCCAGA
AACAAAGAGCAGACATGCTGGAGATGGAGCTGAAGATGCTGAAGTCTCAGTCCAGCTCTGCCGAACAGAGCTTCC
TGTTCTCCAGGGAGGAGGCGGACACGCTCAGGTTGAAGGTCGAGGAGCTGGAAGGCGAGCGGAGTCGGCTGGAGG
AGGAAAAGAGGATGCTGGAGGCACAGCTGGAGCGGCGAGCTCTGCAGGGTGACTATGACCAGAGCAGGACCAAAG
TGCTGCACATGAGCCTGAACCCCACCAGTGTGGCCAGGCAGCGCCTGCGCGAGGACCACAGCCAGCTGCAGGCGG
AGTGCGAGCGACTGCGCGGGCTCCTGCGCGCCATGGAGAGAGGAGGCACCGTCCCAGCCGACCTTGAGGCTGCCG
CCGCGAGTCTGCCATCGTCCAAGGAGGTGGCAGAGCTGAAGAAGCAGGTGGAGAGTGCCGAGCTGAAGAACCAGC
GGCTCAAGGAGGTTTTCCAGACCAAGATCCAGGAGTTCCGCAAGGCCTGCTACACGCTCACCGGCTACCAGATCG
ACATCACCACGGAGAACCAGTACCGGCTGACCTCGCTGTACGCCGAGCACCCAGGCGACTGCTCATCTTCAAGGC
CACCAGCCCCTCGGGTTCCAAGATGCAGCTACTGGAGACAGAGTTCTCACACACCGTGGGCGAGCTCATCGAGGT
GCACCTGCGGCGCCAGGACAGCATCCCTGCCTTCCTCAGCTCGCTCACCCTCGAGCTCTTCAGCCGCCAGACCGT
GGCGTAGCCTGCAGGCTCGGGGGCATAGCCGGAGCCACTCTGCTTGGCCTGACCTGCAGGTCCCCTGCCCCGCCA
GCCACAGGCTGGGTGCACGTCCTGCCTCTCCAGCCCCACAGGGCAGCAGCATGACTGACAGACACGCTGGGACCT
ACGTCGGGCTTCCTGCTGGGGCGGCCAGCACCCTCTCCACGTGCAGACCCCATGCGTCCCGGAGCCTGGTGTGTG
GGCGTCGGCCACCAGCCTGGGTTCCTCACCTTGTGAAA**TAA**AATCTTCTCCCCTAAAA

FIGURE 1473

MEDLGENTMVLSTLRSLNNFISQRVEGGSGLDISTSAPGSLQMQYQQSMQLEERAEQIRSKSHLIQVEREKMQME
LSHKRARVELERAASTSARNYEREVDRNQELLTRIRQLQEREAGAEEKMQEQLERNRQCQQNLDAASKRLREKED
SLAQAGETINALKGRISELQWSVMDQEMRVKRLESEKQDVQEQLDLQHKKCQEANQKIQELQASQEARADHEQQI
KDLEQKLSLQEQDAAIVKNMKSELVRLPRLERELEQLREESALREMRETNGLLQEELEGLQRKLGRQEKMQETLV
GLELENERLLAKLQSWERLDQTMGLSIRTPEDLSRFVVELQQRELALKDKNSAVTSSARGLEKARQQLQEELRQV
SGQLLEERKKRETHEALARRLQKRVLLLTKERDGMRAILGSYDSELTPAEYSPQLTRRMREAEDMVQKVHSHSAE
MEAQLSQALEELGGQKQRADMLEMELKMLKSQSSSAEQSFLFSREEADTLRLKVEELEGERSRLEEEKRMLEAQL
ERRALQGDYDQSRTKVLHMSLNPTSVARQRLREDHSQLQAECERLRGLLRAMERGGTVPADLEAAAASLPSSKEV
AELKKQVESAELKNQRLKEVFQTKIQEFRKACYTLTGYQIDITTENQYRLTSLYAEHPGDCSSSRPPAPRVPRCS
YWRQSSHTPWASSSRCTCGARTASLPSSARSPSSSSAARPWRSLQARGHSRSHSAWPDLQVPCPASHRLGARPAS
PAPQGSSMTDRHAGTYVGLPAGAASTLSTCRPHASRSLVCGRRPPAWVPHLVK

FIGURE 1474

GCCCCGCCGCCGGCAGTGGACCGCTGTGCGCGAACCCTGAACCCTACGGTCCCGACCCGCGGGCGAGGCCGGGTA
CCTGGGCTGGGATCCGGAGCAAGCGGGCGAGGGCAGCGCCCTAAGCAGGCCCGGAGCGATGGCAGCCTTGATGAC
CCCGGGAACCGGGGCCCCACCCGCGCCTGGTGACTTCTCCGGGGAAGGGAGCCAGGGACTTCCCGACCCTTCGCC
AGAGCCCAAGCAGCTCCCGGAGCTGATCCGCATGAAGCGAGACGGAGGCCGCCTGAGCGAAGCGGACATCAGGGG
CTTCGTGGCCGCTGTGGTGAATGGGAGCGCGCAGGGCGCACAGATCGGGGCCATGCTGATGGCCATCCGACTTCG
GGGCATGGATCTGGAGGAGACCTCGGTGCTGACCCAGGCCCTGGCTCAGTCGGGACAGCAGCTGGAGTGGCCAGA
GGCCTGGCGCCAGCAGCTTGTGGACAAGCATTCCACAGGGGGTGTGGGTGACAAGGTCAGCCTGGTCCTCGCACC
TGCCCTGGCGGCATGTGGCTGCAAGGTGCCAATGATCAGCGGACGTGGTCTGGGGCACACAGGAGGCACCTTGGA
TAAGCTGGAGTCTATTCCTGGATTCAATGTCATCCAGAGCCCAGAGCAGATGCAAGTGCTGCTGGACCAGGCGGG
CTGCTGTATCGTGGGTCAGAGTGAGCAGCTGGTTCCTGCGGACGGAATCCTATATGCAGCCAGAGATGTGACAGC
CACCGTGGACAGCCTGCCACTCATCACAGCCTCCATTCTCAGTAAGAAACTCGTGGAGGGGCTGTCCGCTCTGGT
GGTGGACGTTAAGTTCGGAGGGGCCGCCGTCTTCCCCAACCAGGAGCAGGCCCGGGAGCTGGCAAAGACGCTGGT
TGGCGTGGGAGCCAGCCTAGGGCTTCGGGTCGCGGCAGCGCTGACCGCCATGGACAAGCCCCTGGGTCGCTGCGT
GGGCCACGCCCTGGAGGTGGAGGAGGCGCTGCTCTGCATGGACGGCGCAGGCCCGCCAGACTTAAGGGACCTGGT
CACCACGCTCGGGGGCGCCCTGCTCTGGCTCAGCGGACACGCGGGGACTCAGGCTCAGGGCGCTGCCCGGGTGGC
CGCGGCGCTGGACGACGGCTCGGCCCTTGGCCGCTTCGAGCGGATGCTGGCGGCGCAGGGCGTGGATCCCGGTCT
GGCCCGAGCCCTGTGCTCGGGAAGTCCCGCAGAACGCCGGCAGCTGCTGCCTCGCGCCCGGGAGCAGGAGGAGCT
GCTGGCGCCCGCAGATGGCACCGTGGAGCTGGTCCGGGCGCTGCCGCTGGCGCTGGTGCTGCACGAGCTCGGGGC
CGGGCGCAGCCGCGCTGGGGAGCCGCTCCGCCTGGGGGTGGGCGCAGAGCTGCTGGTCGACGTGGGTCAGAGGCT
GCGCCGTGGGACCCCCTGGCTCCGCGTGCACCGGGACGGCCCCGCGCTCAGCGGCCCGCAGAGCCGCGCCCTGCA
GGAGGCGCTCGTACTCTCCGACCGCGCGCCATTCGCCGCCCCCTCGCCCTTCGCAGAGCTCGTTCTGCCGCCGCA
GCAATAAAGCTCCTTTGCCGCGAAA

FIGURE 1475

MAALMTPGTGAPPAPGDFSGEGSQGLPDPSPEPKQLPELIRMKRDGGRLSEADIRGFVAAVVNGSAQGAQIGAML
MAIRLRGMDLEETSVLTQALAQSGQQLEWPEAWRQQLVDKHSTGGVGDKVSLVLAPALAACGCKVPMISGRGLGH
TGGTLDKLESIPGFNVIQSPEQMQVLLDQAGCCIVGQSEQLVPADGILYAARDVTATVDSLPLITASILSKKLVE
GLSALVVDVKFGGAAVFPNQEQARELAKTLVGVGASLGLRVAAALTAMDKPLGRCVGHALEVEEALLCMDGAGPP
DLRDLVTTLGGALLWLSGHAGTQAQGAARVAAALDDGSALGRFERMLAAQGVDPGLARALCSGSPAERRQLLPRA
REQEELLAPADGTVELVRALPLALVLHELGAGRSRAGEPLRLGVGAELLVDVGQRLRRGTPWLRVHRDGPALSGP
QSRALQEALVLSDRAPFAAPSPFAELVLPPQQ

FIGURE 1476A

GTGCGCGCACAACCCCATAGGGTCAAGCTGGCTCAGGGTGGGCCCTTGACTGTGGATCCCGGCTCAGGATTGGCA
CGAGGGTTTTCAAAATGGGAGCCCAGAGGCACCGCCCAGGCCTCGGAAGGTGTCAGGGAGAACTTTCCGTGGTTT
CAGCGTCGTCGCCTGGAGCGGCGGTTTAGAGAGCCGAGCCTGATGGGCGCCAAGGCCGGCTGGCTGCTTGGAGCG
CTGCCTCGAAGGGACTGCGTGAAGGAAGCTAATCCGGAGAACCCAGGCCAGAGCCTGGAAATATGGCGACCTGCA
TCGGGGAGAAGATCGAGGATTTTAAAGTTGGAAATCTGCTTGGTAAAGGATCATTTGCTGGTGTCTACAGAGCTG
AGTCCATTCACACTGGTTTGGAAGTTGCAATCAAAATGATAGATAAGAAAGCCATGTACAAAGCAGGAATGGTAC
AGAGAGTCCAAAATGAGGTGAAAATACATTGCCAATTGAAACATCCTTCTATCTTGGAGCTTTATAACTATTTTG
AAGATAGCAATTATGTGTATCTGGTATTAGAAATGTGCCATAATGGAGAAATGAACAGGTATCTAAAGAATAGAG
TGAAACCCTTCTCAGAAAATGAAGCTCGACACTTCATGCACCAGATCATCACAGGGATGTTGTATCTTCATTCTC
ATGGTATACTACACCGGGACCTCACACTTTCTAACCTCCTACTGACTCGTAATATGAACATCAAGATTGCTGATT
TTGGCCTGGCAACTCAACTGAAAATGCCACATGAAAAGCACTATACATTATGTGGAACTCCTAACTACATTTCAC
CAGAAATTGCCACTCGAAGTGCACATGGCCTTGAATCTGATGTTTGGTCCCTGGGCTGTATGTTTTATACATTAC
TTATCGGGAGACCACCCTTCGACACTGACACAGTCAAGAACACATTAAATAAAGTAGTATTGGCAGATTATGAAA
TGCCAACTTTTTTGTCAATAGAGGCCAAGGACCTTATTCACCAGTTACTTCGTAGAAATCCAGCAGATCGTTTAA
GTCTGTCTTCAGTATTGGACCATCCTTTTATGTCCCGAAATTCTTCAACAAAAAGTAAAGATTTAGGAACTGTGG
AAGACTCAATTGATAGTGGGCATGCCACAATTTCTACTGCAATTACAGCTTCTTCCAGTACCAGTATAAGTGGTA
GTTTATTTGACAAAAGAAGACTTTTGATTGGTCAGCCACTCCCAAATAAAATGACTGTATTTCCAAAGAATAAAA
GTTCAACTGATTTTTCTTCTTCAGGAGATGGAAACAGTTTTTATACTCAGTGGGGAAATCAAGAAACCAGTAATA
GTGGAAGGGGAAGAGTAATTCAAGATGCAGAAGAAAGGCCACATTCTCGATACCTTCGTAGAGCTTATTCCTCTG
ATAGATCTGGCACTTCTAATAGTCAGTCTCAAGCAAAAACATATACAATGGAACGATGTCACTCAGCAGAAATGC
TTTCAGTGTCCAAAAGATCAGGAGGAGGTGAAAATGAAGAGAGGTACTCACCCACAGACAACAATGCCAACATTT
TTAACTTCTTTAAAGAAAAGACATCCAGTAGTTCTGGATCTTTTGAAAGACCTGATAACAATCAAGCACTCTCCA
ATCATCTTTGTCCAGGAAAAACTCCTTTTCCATTTGCAGACCCGACACCTCAGACTGAAACCGTACAACAGTGGT
TTGGGAATCTGCAAATAAATGCTCATTTAAGAAAAACTACTGAATATGACAGCATCAGCCCAAACCGGGACTTCC
AGGGCCATCCAGATTTGCAGAAGGACACATCAAAAAATGCCTGGACTGATACAAAAGTCAAAAAGAACTCTGATG
CTTCTGATAATGCACATTCTGTAAAACAGCAAAATACCATGAAATATATGACTGCACTTCACAGTAAACCTGAGA
TAATCCAACAAGAATGTGTTTTTGGCTCAGATCCTCTTTCTGAACAGAGCAAGACTAGGGGTATGGAGCCACCAT
GGGGTTATCAGAATCGTACATTAAGAAGCATTACATCTCCGTTGGTTGCTCACAGGTTAAAACCAATCAGACAGA
AAACCAAAAAGGCTGTGGTGAGCATACTTGATTCAGAGGAGGTGTGTGTGGAGCTTGTAAAGGAGTATGCATCTC
AAGAATATGTGAAAGAAGTTCTTCAGATATCTAGTGATGGAAATACGATCACTATTTATTATCCAAATGGTGGTA
GAGGTTTTCCTCTTGCTGATAGACCACCCTCACCTACTGACAACATCAGTAGGTACAGCTTTGACAATTTACCAG
AAAAATACTGGCGAAAATATCAATATGCTTCCAGGTTTGTACAGCTTGTAAGATCTAAATCTCCCAAAATCACTT
ATTTTACAAGATATGCTAAATGCATTTTGATGGAGAATTCTCCTGGTGCTGATTTTGAGGTTTGGTTTTATGATG
GGGTAAAAATACACAAAACAGAAGATTTCATTCAGGTGATTGAAAAGACAGGGAAGTCTTACACTTTAAAAAGTG
AAAGTGAAGTTAATAGCTTGAAAGAGGAGATAAAAATGTATATGGACCATGCTAATGAGGGTCATCGTATTTGTT
TAGCACTGGAATCCATAATTTCAGAAGAGGAAAGGAAAACTAGGAGTGCTCCCTTTTTCCCAATAATCATAGGAA
GAAAACCTGGTAGTACTAGTTCACCTAAGGCCTTATCACCTCCTCCTTCTGTGGATTCAAATTACCCAACGAGAG
ATAGAGCATCTTTCAACAGAATGGTCATGCATAGTGCTGCTTCTCCAACACAGGCACCAATCCTTAATCCCTCTA
TGGTTACAAATGAAGGACTTGGTCTTACAACTACAGCTTCTGGAACAGACATCTCTTCTAATAGTCTAAAAGATT
GTCTTCCTAAATCAGCACAACTTTTGAAATCTGTTTTTGTGAAAAATGTTGGTTGGGCTACACAGTTAACTAGTG
GAGCTGTGTGGGTTCAGTTTAATGATGGGTCCCAGTTGGTTGTGCAGGCAGGAGTGTCTTCTATCAGTTATACCT
CACCAAATGGTCAAACAACTAGGTATGGAGAAAATGAAAAATTACCAGACTACATCAAACAGAAATTACAGTGTC
TGTCTTCCATCCTTTTGATGTTTTCTAATCCGACTCCTAATTTTCATTGATTAAAACTCCTTTCAGACATATAAG
TTTAATAAATAACTTTTTTGTTGACTTTCAAGTAAAGTGATTTTTTTTAATTTAACATAAAGTCTTCAGAAAGCC
TTTCTATGAAAGAATTTTAACCTATAATGTAAAGGATGTATTCTGAGAGAACAAAGCAGAATGAAACTTGAGTCA
CTTACTAAATATAGTGGATATAAAATAGAACACCTGACTTTGCTCTTAGACCATAACCCCCGAACTTACTATGTT
CATATATTTGTATTGAACAATCTTTTAAAAGCAAAAATGTAAATGATGTGTAGTTTATTTGTGCTTTTATTGTTT
TCCCTGCGTCTCAGACATGTTGAGAATCATGGACAAAACCTGCTGGAATTTTGGAATTTTTGAAGATGTAAATAA

FIGURE 1476B

TGTGTATTTATGTTATAAGTAACATATGTAAACATGTATATTTGTTTTATATTTATTTTTGTAACACCAGTGTCT
GATGAAACATTTTTGCAAATGCATTTTATAAAAAAATAAATATAGTGATAAGTTACATTATCTTTTGATTCATTT
AATTAAATACTTATTTTTAAATAACTTACCAGTAAACTCACTTTTTAAATTTTGTTGCCTGTTGAGGAGCCAATT
AAATTTTAAATATTAATTTTGCAAATGTTAAATACATTGTTTCTCTATTATCTGAAAA

FIGURE 1477

MATCIGEKIEDFKVGNLLGKGSFAGVYRAESIHTGLEVAIKMIDKKAMYKAGMVQRVQNEVKIHCQLKHPSILEL
YNYFEDSNYVYLVLEMCHNGEMNRYLKNRVKPFSENEARHFMHQIITGMLYLHSHGILHRDLTLSNLLLTRNMNI
KIADFGLATQLKMPHEKHYTLCGTPNYISPEIATRSAHGLESDVWSLGCMFYTLLIGRPPFDTDTVKNTLNKVVL
ADYEMPTFLSIEAKDLIHQLLRRNPADRLSLSSVLDHPFMSRNSSTKSKDLGTVEDSIDSGHATISTAITASSST
SISGSLFDKRRLLIGQPLPNKMTVFPKNKSSTDFSSSGDGNSFYTQWGNQETSNSGRGRVIQDAEERPHSRYLRR
AYSSDRSGTSNSQSQAKTYTMERCHSAEMLSVSKRSGGGENEERYSPTDNNANIFNFFKEKTSSSSGSFERPDNN
QALSNHLCPGKTPFPFADPTPQTETVQQWFGNLQINAHLRKTTEYDSISPNRDFQGHPDLQKDTSKNAWTDTKVK
KNSDASDNAHSVKQQNTMKYMTALHSKPEIIQQECVFGSDPLSEQSKTRGMEPPWGYQNRTLRSITSPLVAHRLK
PIRQKTKKAVVSILDSEEVCVELVKEYASQEYVKEVLQISSDGNTITIYYPNGGRGFPLADRPPSPTDNISRYSF
DNLPEKYWRKYQYASRFVQLVRSKSPKITYFTRYAKCILMENSPGADFEVWFYDGVKIHKTEDFIQVIEKTGKSY
TLKSESEVNSLKEEIKMYMDHANEGHRICLALESIISEEERKTRSAPFFPIIIGRKPGSTSSPKALSPPPSVDSN
YPTRDRASFNRMVMHSAASPTQAPILNPSMVTNEGLGLTTTASGTDISSNSLKDCLPKSAQLLKSVFVKNVGWAT
QLTSGAVWVQFNDGSQLVVQAGVSSISYTSPNGQTTRYGENEKLPDYIKQKLQCLSSILLMFSNPTPNFH

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FIGURE 1478

CAGAGGGCACCGCCCAGGCCTCGGAAGGTGTCAGGGAGAACTTTCCGTGGTTTCAGCGTCGTCGCCTGGAGCGGC
GGTTTAGAGAGCCGAGCCTGATGGGCGCCAAGGCCGGCTGGCTGCTTGGAGCGCTGCCTCGAAGGGACTGCGTAA
GGAAGCTAATCCGGAGAACCCAGGCCAGAGCCTGAAATATGGCGACCTGCATCGGGGAGAAGATCGAGGATTTTA
AAGTTGGAAATCTGCTTGGTAAAGGATCATTTGCTGGTGTCTACAGAGCTGAGTCCATTCACAGTGGTTTGGAAG
TTGCAATCAAAATGATAGATAAGAAAGCCATGTACAAAGCAGGAATGGTACAGAGAGTCCAAAATGAGGTGAAAA
TACATTGCCAATTGAAACATCCTTCTATCTTGGAGCTTTATAACTATTTTGAAGATAGCAATTATGTGTATCTGG
TATTAGAAATGTGCCATAATGGAGAAATGAACAGGTATCTAAAGAATAGAGTGAAACCCTTCTCAGAAAATGAAG
CTCGACACTTCATGCACCAGATCATCACAGGGATGTTGTATCTTCATTCTCATGGTATACTACACCGGGACCTCA
CACTTTCTAACCTCCTACTGACTCGTAATATGAACATCAAGATTGCTGATTTTGGGCTGGCAACTCAACTGAAAA
TGCCACATGAAAAGCACTATACATTATGTGGAACTCCTAACTACATTTCACCAGAAATTGCCACTCGAAGTGCAC
ATGGCCTTGAATCTGATGTTTGGTCCCTGGGCTGTATGTTTTATACATTACTTATCGGGAGACCACCCTTCGACA
CTGACACAGTCAAGAACACATTAAATAAAGTAGTATTGGCAGATTATGAAATGCCAACTTTTTTGTCAATAGAGG
CCAAGGACCTTATTCACCAGTTACTTCGTAGAAATCCAGCAGATCGTTTAAGTCTGTCTTCAGTATTGGACCATC
CTTTTATGTCCCGAAATTCTTCAACAAAAAGTAAAGATTTAGGAACTGTGGAAGACTCAATTGATAGTGGGCATG
CCACAATTTCTACTGCAATTACAGCTTCTTCCAGTACCAGTATAAGTGGTAGTTTATTTGACAAAAGAAGACTTT
TGATTGGTCAGCCACTCCCAAATAAAATGACTGTATTTCCAAAGAATAAAAGTTCAACTGATTTTTCTTCTTCAG
GAGATGGAAACAGTTTTTATACTCAGTGGGGAAATCAAGAAACCAGTAATAGTGGAAGGGGAAGAGTAATTCAAG
ATGCAGAAGAAAGGCCACATTCTCGATACCTTCGTAGAGCTTATTCCTCTGATAGATCTGGCACTTCTAATAGAC
AGTCTCAAGCAAAAACATATACAATGGAACGATGTCACTCAGCAGAAATGCTTTCAGTGTCCAAAAGATCAGGAG
GAGGTGAAAATGAAGAGAGGTACTCACCCACAGACAACAATGCCAACATTTTTAACTTCTTTAAAGAAAAGACAT
CCAGTAGTTCTGGATCTTTTGAAAGACCTGATAACAATCAAGCACTCTCCAATCATCTTTGTCCAGGAAAAACTC
CTTTTCCATTTGCAGACCCGACACCTCAGACTGAAACCGTACAACAGTGGTTTGGGAATCTGCAAATAAATGCTC
ATTTAAGAAAAACTACTGAATATGACAGCATCAGCCCAAACCGGGACTTCCAGGGCCATCCAGATTTGCAGAAGG
ACACATCAAAAAATGCCTGGACTGATACAAAAGTCAAAAAGAACTCTGATGCTTCTGATAATGCACATTCTGTAA
AACAGCAAAATACCATGAAATATATGACTGCACTTCACAGTAAACCTGAGATAATCCAACAAGAATGTGTTTTTG
GCTCAGATCCTCTTTCTGAACAGAGCAAGACTAGGGGTATGGAGCCACCATGGGGTTATCAGAATCGTACATTAA
GAAGCATTACATCTCCGTTGGTTGCTCACAGGTTAAAACCAATCAGACAGAAAACCAAAAAGGCTGTGGTGAGCA
TACTTGATTCAGAGGAGGTGTGTGTGGAGCTTGTAAAGGAGTATGCATCTCAAGAATATGTGAAAGAAGTTCTTC
AGATATCTAGTGATGGAAATACGATCACTATTTATTATCCAAATGGTGGTAGAGGTTTTCCTCTTGCTGATAGAC
CACCCTCACCTACTGACAACATCAGTAGGTACAGCTTTGACAATTTACCAGAAAAATACTGGCGAAAATATCAAT
ATGCTTCCAGGTTTGTACAGCTTCTAAGATCTAAATCTCCCAAAATCACTTATTTTACAAGATATGCTAAATGCA
TTTTGATGGAGAATTCTCCTGGTGCTGATTTTGAGGTTTGGTTTTATGATGGGGTAAAAATACACAAAACAGAAG
ATTTCATTCAGGTGATTGAAAAGACAGGGAAGTCTTACACTTTAAAAAGTGAAAGTGAAGTTAATAGCTTGAAAG
AGGAGATAAAAATGTATATGGACCATGCTAATGAGGGTCATCGTATTTGTTTAGCACTGGAATCCATAATTTCAG
AAGAGGAAAGGAAAACTAGGAGTGCTCCCTTTTTCCCAATAATCATAGGAAGAAAACCTGGTAGTACTAGTTCAC
CTAAGGCCTTATCACCTCCTCCTTCTGTGGATTCAAATTACCCAACGAGAGATAGAGCATCTTTCAACAGAATGG
TCATGCATAGTGATGCTTCTCCAACACAGGCACCAATCCTTAATCCCTCTATGGTTACAAATGAAGGACTTGGTC
TTACAACTACAGCTTCTGGAACAGACATCTCTTCTAATAGTCTAAAAGATTGTCTTCCTAAATCAGCACAACTTT
TGAAATCTGTTTTTGTGAAAAATGTTGGTTGGGCTACACAGTTAACTAGTGGAGCTGTGTGGGTTCAGTTTAATG
ATGGGTCCCAGTTGGTTGTGCAGGCAGGAGTGTCTTCTATCAGTTATACCTCACCAAATGGTCAAACAACTAGGT
ATGGAGAAAATGAAAAATTACCAGACTACATCAAACAGAAATTACAGTGTCTGTCTTCCATCCTTTTGATGTTTT
CTAATCCGACTCCTAATTTTCATTGATTAAAACTCCTTTCAGACATATAAGTTTAATAAATAACTTTTTTGTTGA
CTTTCAAGTAAAGTGATTTTTTTTAATTTAACATAAAGTCTTCAGAAAGCCTTTCTATGAAAGAATTTTAACCTA
TAATGTAAACCATGTATCTGAGATAACAAAGCAGAATGAAACTTGAGTCACTTACTAAATATAGTGGATATAAAA
TAGAACACCTGACTTTGCTCTTAGACCATAA

FIGURE 1479

MATCIGEKIEDFKVGNLLGKGSFAGVYRAESIHSGLEVAIKMIDKKAMYKAGMVQRVQNEVKIHCQLKHPSILEL
YNYFEDSNYVYLVLEMCHNGEMNRYLKNRVKPFSENEARHFMHQIITGMLYLHSHGILHRDLTLSNLLLTRNMNI
KIADFGLATQLKMPHEKHYTLCGTPNYISPEIATRSAHGLESDVWSLGCMFYTLLIGRPPFDTDTVKNTLNKVVL
ADYEMPTFLSIEAKDLIHQLLRRNPADRLSLSSVLDHPFMSRNSSTKSKDLGTVEDSIDSGHATISTAITASSST
SISGSLFDKRRLLIGQPLPNKMTVFPKNKSSTDFSSSGDGNSFYTQWGNQETSNSGRGRVIQDAEERPHSRYLRR
AYSSDRSGTSNRQSQAKTYTMERCHSAEMLSVSKRSGGGENEERYSPTDNNANIFNFFKEKTSSSSGSFERPDNN
QALSNHLCPGKTPFPFADPTPQTETVQQWFGNLQINAHLRKTTEYDSISPNRDFQGHPDLQKDTSKNAWTDTKVK
KNSDASDNAHSVKQQNTMKYMTALHSKPEIIQQECVFGSDPLSEQSKTRGMEPPWGYQNRTLRSITSPLVAHRLK
PIRQKTKKAVVSILDSEEVCVELVKEYASQEYVKEVLQISSDGNTITIYYPNGGRGFPLADRPPSPTDNISRYSF
DNLPEKYWRKYQYASRFVQLLRSKSPKITYFTRYAKCILMENSPGADFEVWFYDGVKIHKTEDFIQVIEKTGKSY
TLKSESEVNSLKEEIKMYMDHANEGHRICLALESIISEEERKTRSAPFFPIIIGRKPGSTSSPKALSPPPSVDSN
YPTRDRASFNRMVMHSDASPTQAPILNPSMVTNEGLGLTTTASGTDISSNSLKDCLPKSAQLLKSVFVKNVGWAT
QLTSGAVWVQFNDGSQLVVQAGVSSISYTSPNGQTTRYGENEKLPDYIKQKLQCLSSILLMFSNPTPNFH

FIGURE 1480

CGCCTGGACCATGTGAATGGGGCCAGAGGGCTCCCGGGCTGGGCAGGGACCATGGGCTGTGGCTGCAGCTCACAC
CCGGAAGATGACTGGATGGAAAACATCGATGTGTGTGAGAACTGCCATTATCCCATAGTCCCACTGGATGGCAAG
GGCACGCTGCTCATCCGAAATGGCTCTGAGGTGCGGGACCCACTGGTTACCTACGAAGGCTCCAATCCGCCGGCT
TCCCCACTGCAAGACAACCTGGTTATCGCTCTGCACAGCTATGAGCCCTCTCACGACGGAGATCTGGGCTTTGAG
AAGGGGGAACCACTCCGCATCCTGGAGCAGAGCGGCGAGTGGTGGAAGGCGCAGTCCCTGACCACGGGCCAGGAA
GGCTTCATCCCCTTCAATTTTGTGGCCAAAGCGAACAGCCTGGAGCCCGAACCCTGGTTCTTCAAGAACCTGAGC
CGCAAGGACGCGGAGCGGCAGCTCCTGGCGCCCGGGAACACTCACGGCTCCTTCCTCATCCGGGAGAGCGAGAGC
ACCGCCGGGTCCTTTTCACTGTCGGTCCGGGACTTCGACCAAAACCAGGGAGAGGTGGTGAAACATTACAAGATC
CGTAATCTGGACAACGGTGGCTTCTACATCTCCCCTCGAATCACTTTTCCCGGCCTGCATGAACTGGTCCGCCAT
TACACCAATGCTTCAGATGGGCTGTGCACACGGTTGAGCCGCCCCTGCCAGACCCAGAAGCCCCAGAAGCCGTGG
TGGGAGGACGAGTGGGAGGTTCCCAGGGAGACGCTGAAGCTGGTGGAGCGGCTGGGGGCTGGACAGTTCGGGGAG
GTGTGGATGGGGTACTACAACGGGCACACGAAGGTGGCGGTGAAGAGCCTGAAGCAGGGCAGCATGTCCCCGGAC
GCCTTCCTGGCCGAGGCCAACCTCATGAAGCAGCTGCAACACCAGCGGCTGGTTCGGCTCTACGCTGTGGTCACC
CAGGAGCCCATCTACATCATCACTGAATACATGGAGAATGGGAGTCTAGTGGATTTTCTCAAGACCCCTTCAGGC
ATCAAGTTGACCATCAACAAACTCCTGGACATGGCAGCCCAAATTGCAGAAGGCATGGCATTCATTGAAGAGCGG
AATTATATTCATCGTGACCTTCGGGCTGCCAACATTCTGGTGTCTGACACCCTGAGCTGCAAGATTGCAGACTTT
GGCCTAGCACGCCTCATTGAGGACAACGAGTACACAGCCAGGGAGGGGGCCAAGTTTCCCATTAAGTGGACAGCG
CCAGAAGCCATTAACTACGGGACATTCACCATCAAGTCAGATGTGTGGTCTTTTGGGATCCTGCTGACGGAAATT
GTCACCCACGGCCGCATCCCTTACCCAGGGATGACCAACCCGGAGGTGATTCAGAACCTGGAGCGAGGCTACCGC
ATGGTGCGCCCTGACAACTGTCCAGAGGAGCTGTACCAACTCATGAGGCTGTGCTGGAAGGAGCGCCCAGAGGAC
CGGCCCACCTTTGACTACCTGCGCAGTGTGCTGGAGGACTTCTTCACGGCCACAGAGGGCCAGTACCAGCCTCAG
CCTTGAGAGGAGGCCTTGAGAGGCCCTGGGGTTCTCCCCCTTTCTCTCCAGCCTGACTTGGGGAGATGGAGTTCT
TGTGCCATAGTCACATGGCCTATGCACATATGGACTCTGCACATGAATCCCACCCACATGTGACACATATGCACC
TTGTGTCTGTACACGTGTCCTGTAGTTGCGTGGACTCTGCACATGTCTTGTGCATGTGTAGCCTGTGCATGTATG
TCTTGGACACTGTACAAGGTACCCCTTTCTGGCTCTCCCATTTCCTGAGACCACCAGAGAGAGGGGAGAAGCCTG
GGATTGACAGAAGCTTCTGCCCACCTACTTTTCTTTCCTCAGATCATCCAGAAGTTCCTCAAGGGCCAGGACTTT
ATCTAATACCTCTGTGTGCTCCTCCTTGGTGCCTGGCCTGGCACACATCAGGAGTTCAATAAATGTCTGTTGATG
ACTGCCG

FIGURE 1481

MGCGCSSHPEDDWMENIDVCENCHYPIVPLDGKGTLLIRNGSEVRDPLVTYEGSNPPASPLQDNLVIALHSYEPS
HDGDLGFEKGEPLRILEQSGEWWKAQSLTTGQEGFIPFNFVAKANSLEPEPWFFKNLSRKDAERQLLAPGNTHGS
FLIRESESTAGSFSLSVRDFDQNQGEVVKHYKIRNLDNGGFYISPRITFPGLHELVRHYTNASDGLCTRLSRPCQ
TQKPQKPWWEDEWEVPRETLKLVERLGAGQFGEVWMGYYNGHTKVAVKSLKQGSMSPDAFLAEANLMKQLQHQRL
VRLYAVVTQEPIYIITEYMENGSLVDFLKTPSGIKLTINKLLDMAAQIAEGMAFIEERNYIHRDLRAANILVSDT
LSCKIADFGLARLIEDNEYTAREGAKFPIKWTAPEAINYGTFTIKSDVWSFGILLTEIVTHGRIPYPGMTNPEVI
QNLERGYRMVRPDNCPEELYQLMRLCWKERPEDRPTFDYLRSVLEDFFTATEGQYQPQP

FIGURE 1482

GAGGGCTCAGAGGGAGCACCGGTTTGGAGCTGGGACCCCCTATTTTAGCTTTTCTGTGGCTGGTGAATGGGGATC
CCAGGATCTCACAATCTCAGGGACCATGGGCTGTGGCTGCAGCTCACACCCGGAAGATGACTGGATGGAAAACAT
CGATGTGTGTGAGAACTGCCATTATCCCATAGTCCCACTGGATGGCAAGGGCACGCTGCTCATCCGAAATGGCTC
TGAGGTGCGGGACCCACTGGTTACCTACGAAGGCTCCAATCCGCCGGCTTCCCCACTGCAAGACAACCTGGTTAT
CGCTCTGCACAGCTATGAGCCCTCTCACGACGGAGATCTGGGCTTTGAGAAGGGGGAACAGCTCCGCATCCTGGA
GCAGAGCGGCGAGTGGTGGAAGGCGCAGTCCCTGACCACGGGCCAGGAAGGCTTCATCCCCTTCAATTTTGTGGC
CAAAGCGAACAGCCTGGAGCCCGAACCCTGGTTCTTCAAGAACCTGAGCCGCAAGGACGCGGAGCGGCAGCTCCT
GGCGCCCGGGAACACTCACGGCTCCTTCCTCATCCGGGAGAGCGAGAGCACCGCGGGATCGTTTTCACTGTCGGT
CCGGGACTTCGACCAGAACCAGGGAGAGGTGGTGAAACATTACAAGATCCGTAATCTGGACAACGGTGGCTTCTA
CATCTCCCCTCGAATCACTTTTCCCGGCCTGCATGAACTGGTCCGCCATTACACCAATGCTTCAGATGGGCTGTG
CACACGGTTGAGCCGCCCCTGCCAGACCCAGAAGCCCCAGAAGCCGTGGTGGGAGGACGAGTGGGAGGTTCCCAG
GGAGACGCTGAAGCTGGTGGAGCGGCTGGGGGCTGGACAGTTCGGGGAGGTGTGGATGGGGTACTACAACGGGCA
CACGAAGGTGGCGGTGAAGAGCCTGAAGCAGGGCAGCATGTCCCCGGACGCCTTCCTGGCCGAGGCCAACCTCAT
GAAGCAGCTGCAACACCAGCGGCTGGTTCGGCTCTACGCTGTGGTCACCCAGGAGCCCATCTACATCATCACTGA
ATACATGGAGAATGACACACTTCTAGACTCCCAGTTGGAGGAGAAAGGTCTGGGGGCCTCCCCCTGGGGCAACTT
GGGCCAGCAACTCTTGCTTCTGCCCACAGGGAGTCTAGTGGATTTTCTCAAGACCCCTTCAGGCATCAAGTTGAC
CATCAACAAACTCCTGGACATGGCAGCCCAAATTGCAGAAGGCATGGCATTCATTGAAGAGCGGAATTATATTCA
TCGTGACCTTCGGGCTGCCAACATTCTGGTGTCTGACACCCTGAGCTGCAAGATTGCAGACTTTGGCCTAGCACG
CCTCATTGAGGACAACGAGTACACAGCCAGGGAGGGGGCCAAGTTTCCCATTAAGTGGACAGCGCCAGAAGCCAT
TAACTACGGGACATTCACCATCAAGTCAGATGTGTGGTCTTTTGGGATCCTGCTGACGGAAATTGTCACCCACGG
CCGCATCCCTTACCCAGGGATGACCAACCCGGAGGTGATTCAGAACCTGGAGCGAGGCTACCGCATGGTGCGCCC
TGACAACTGTCCAGAGGAGCTGTACCAACTCATGAGGCTGTGCTGGAAGGAGCGCCCAGAGGACCGGCCCACCTT
TGACTACCTGCGCAGTGTGCTGGAGGACTTCTTCACGGCCACAGAGGGCCAGTACCAGCCTCAGCCTTGAGAGGC
CTTGAGAGGCCCTGGGGTTCTCCCCCTTTCTCTCCAGCCTGACTTGGGGAGATGGAGTTCTTGTGCCATAGTCAC
ATGGCCTATGCACATATGGACTCTGCACATGAATCCCACCCACATGTGACACATATGCACCTTGTGTCTGTACAC
GTGTCCTGTAGTTGCGTGGACTCTGCACATGTCTTGTACATGTGTAGCCTGTGCATGTATGTCTTGGACACTGTA
CAAGGTACCCCTTTCTGGCTCTCCCATTTCCTGAGACCACAGAGAGAGGGGAGAAGCCTGGGATTGACAGAAGCT
TCTGCCCACCTACTTTTCTTTCCTCAGATCATCCAGAAGTTCCTCAAGGGCCAGGACTTTATCTAATACCTCTGT
GTGCTCCTCCTTGGTGCCTGGCCTGGCACACATCAGGAGTTCAATAAATGTCTGTTGATGACTGTTAAAAAAAAA
AAAAAAA

FIGURE 1483

MGCGCSSHPEDDWMENIDVCENCHYPIVPLDGKGTLLIRNGSEVRDPLVTYEGSNPPASPLQDNLVIALHSYEPS
HDGDLGFEKGEQLRILEQSGEWWKAQSLTTGQEGFIPFNFVAKANSLEPEPWFFKNLSRKDAERQLLAPGNTHGS
FLIRESESTAGSFSLSVRDFDQNQGEVVKHYKIRNLDNGGFYISPRITFPGLHELVRHYTNASDGLCTRLSRPCQ
TQKPQKPWWEDEWEVPRETLKLVERLGAGQFGEVWMGYYNGHTKVAVKSLKQGSMSPDAFLAEANLMKQLQHQRL
VRLYAVVTQEPIYIITEYMENDTLLDSQLEEKGLGASPWGNLGQQLLLLPTGSLVDFLKTPSGIKLTINKLLDMA
AQIAEGMAFIEERNYIHRDLRAANILVSDTLSCKIADFGLARLIEDNEYTAREGAKFPIKWTAPEAINYGTFTIK
SDVWSFGILLTEIVTHGRIPYPGMTNPEVIQNLERGYRMVRPDNCPEELYQLMRLCWKERPEDRPTFDYLRSVLE
DFFTATEGQYQPQP

FIGURE 1484

TCGATCCACGCGTCCGCGGACGCGTGGRGTTGAAAATTCATAGTAAGATTGATATCTATAAAATAGATATAAATT
TTTAAGAGAAAGAATTTAGTATTATCAAAGGGATAAAGAAAAAAATACTATTTAAGATGTGAAAATTACAGTCCA
AAATACTGTTCTTTCCAGGCTATGTATAAAATACATAGTGAAAATTGTTTAGTGATATTACATTTATTTATCCAG
AAAACTGTGATTTCAGGAGAACCTAACATGCTGGTGAATATTTTCAACTTTTTCCCTCACTAATTGGTACTTTTA
AAAACATAACATAAATTTTTTGAAGTCTTTAATAAATAMCCCATAATTGAAGTGTATAATATAAAAAATTTTAAA
AATCTAAGCAGCTTATTGTTTCTCTGAAAGTGTGTGTAGTTTTACTTTCCTAAGGAATTACCAAGAATATCCTTT
AAAATTTAAAAGGATGGCAAGTTGCATCAGAAAGCTTTATTTTGAGATGTAAAAAGATTCCCAAACGTGGTTACA
TTAGCCATTCATGTATGTCAGAAGTGCAGAATTGGGGCACTTAATGGTCACCTTGTAACAGTTTTGTGTAACTCC
CAGTGATGCTGTACACATATTTGAAGGGTCTTTCTCAAAGAAATATTAAGCATGTTTTGTTGCTCAGTGTTTTTG
TGAATTGCTTGGTTGTAATTAAATTCTGAGCCTGATATTGATATGGTTTTAAGAAGCAGTTGTACCAAGTGAAAT
TATTTTGGAGATTATAATAAATATATACATTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAXAAGXAAAGX

FIGURE 1485

MYKIHSENCLVILHLFIQKTVISGEPNMLVNIFNFFPH

FIGURE 1486

CCCCCATGTGACAGTGACGGGGTCCCCGCTCCAGGAGACGCTCGAGTCTGCGTCCCGGCCCTCAGCACTGTCCAC
TGTTTCGGTGCCAGCAGAGACCAGCAGGCCCGGGACAGTTGGTGTTTGGCCGTGCCGCTGTCTAACTTGGTGTGC
AGAGTGAATTGCCGCTGCCGGAGCGGAGAGAGGCGGAGCGGCCAGGAGAGAGGGGATTTCTGTCAGCGCCGGCCT
CGGGAGCTCGGAGAC**ATG**AACGGCTTCACGCCTGACGAGATGAGCCGCGGCGGGGATGCGGCCGCCGCAGTGGCC
GCAGTGGTCGCTGCCGCGGCCGCCGCCGCCTCGGCGGGGAACGGGACCGGCGCGGGCACCGGGGCTGAGGTGCCG
GGCGCGGGGGCGGTCTCAGCGGCTGGGCCCCCGGGGGCGGCCGGGCCGGGCCCCGGGCAACTGTGCTGCCTGCGG
GAGGATGGTGAGCGGTGCGGCCGGGCGGCAGGCAACGCCAGCTTCAGCAAGAGGATCCAGAAGAGCATCTCCCAG
AAGAAGGTGAAGATCGAGCTGGATAAGAGCGCAAGGCATCTTTACATATGTGATTATCATAAAAACTTAATTCAG
AGTGTTCGAAACAGAAGAAAGAGAAAAGGGAGTGATGATGATGGAGGTGATTCACCTGTTCAAGATATTGATACC
CCAGAGGTTGATTTATACCAATTACAAGTAAATACACTTAGGAGATACAAAAGACACTTCAAGCTACCAACCAGA
CCAGGACTTAATAAAGCACAACTTGTTGAGATAGTTGGTTGCCACTTTAGGTCTATTCCAGTGAATGAAAAAGAC
ACCTTAACATATTTCATCTACTCAGTGAAGAATGACAAGAACAAATCAGATCTCAAGGTTGATAGTGGTGTTCAC
TAGGAGACGTGGAATTGAGACTAATAACTTGGATGTTAACACTGTTTACTGTTTTTTCACATGTAGAAATGTTCT
TTGTGTATTTTTTCTACAGAGGATTTTCTCTGATTTTATTTTCTTTGTTTCTGACTCTAATAATTAGTTGGAAAC
TCATATAAAATGAGCTTTCCTAAATTAAATCTATTTTAAATAAAGGTTATTACTATTAAAAAAAAAAAAAAAAAA

FIGURE 1487

MNGFTPDEMSRGGDAAAAVAAVVAAAAAAASAGNGTGAGTGAEVPGAGAVSAAGPPGAAGPGPGQLCCLREDGER
CGRAAGNASFSKRIQKSISQKKVKIELDKSARHLYICDYHKNLIQSVRNRRKRKGSDDDGGDSPVQDIDTPEVDL
YQLQVNTLRRYKRHFKLPTRPGLNKAQLVEIVGCHFRSIPVNEKDTLTYFIYSVKNDKNKSDLKVDSGVH

FIGURE 1488

GCGTCTGCCAGGAGCTACGGCCGGAAGATGGCGGCGGCCGCAGAGTTGTCGCTACTGGAGAAGTCCCTGGGACTG
AGTAAGGGGAATAAATACAGTGCTCAGGGCGAGCGACAGATTCCAGTTCTTCAGACAAACAATGGTCCAAGTCTA
ACAGGATTGACTACTATAGCAGCTCATCTAGTCAAGCAAGCCAACAAAGAATATTTGCTGGGGAGTACTGCAGAA
GAAAAAGCAATCGTTCAGCAGTGGTTAGAATACAGGGTCACTCAAGTAGATGGGCACTCCAGTAAAAATGACATC
CACACACTGTTGAAGGATCTTAATTCATATCTTGAAGATAAAGTCTACCTTACAGGGTATAACTTTACATTAGCA
GATATACTATTGTACTATGGACTTCATCGCTTTATAGTTGACCTGACAGTTCAAGAAAAGGAGAAATATCTTAAT
GTGTCTCGCTGGTTTTGTCACATTCAGCATTATCCAGGCATCAGGCAACATCTGTCTAGTGTTGTCTTCATCAAG
AACAGACTATATACTAATTCCCACTAGAAGCTGTCCATGCCATACAGAAGATCTATTAAAAGTGTTTTAAATGGA
AAATGTACTCTAGACCACAGGACTAATGTAAATTAATATACAGTCATTCATTATTTGTTGAAGTTGATAGAATTT
TTGAAGTGTAAACTTGTGTCTGAATGTTTTATTTGTTCTTTAGCTGAAGTTTTGCAATTTTTATGTCAAAATTCA
ATTGCTATTAAACAAGTTGAGATCCAGTTATAAATTAACCTTGTTTTTAGTAGATGACATTTATTTCAATAAAAG
TTGCAAATCGGGCTTAATCTTAAAATTGGTGGTCATTTCAATGGTTGACATATTTGGCTATTTATTAACCTCTCT
TTCATATTCTAAAATTCATTTTCCCCTTATGGATATTTATGGTAGTTTGTTAAGAACTGATAAATTGTGCCAAGG
AAGCCAAAAGGGAAGACAGATGGATTTGTTTTAAAATGTTTATGTGAGCTAGTAAATGTGGGAAAAAAAAAAAAA
AAAAAAAAAAAAAAAA

FIGURE 1489

MAAAAELSLLEKSLGLSKGNKYSAQGERQIPVLQTNNGPSLTGLTTIAAHLVKQANKEYLLGSTAEEKAIVQQWL
EYRVTQVDGHSSKNDIHTLLKDLNSYLEDKVYLTGYNFTLADILLYYGLHRFIVDLTVQEKEKYLNVSRWFCHIQ
HYPGIRQHLSSVVFIKNRLYTNSH

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FIGURE 1490

CCGTCCCCGGCGGCCCCATGCCCCGATGCCCCGCGGGGGCCATGGACGAGGGGCCCGTGGACCTGCGCACCCGGC
CCAAGGCCGCCGGACTCCCGGGCGCCGCGCTGCCGCTCCGCAAGCGCCCGCTGCGCGCGCCCTCCCCGGAGCCCG
CCGCTCCCCGCGGCGCTGCGGGCCTTGTCGTCCCCCTGGACCCTCTGCGCGGCGGCTGCGACCTGCCGGCGGTCC
CCGGGCCCCCCCACGGCCTGGCCCGGCCGGAGGCGCTTTACTACCCCGGAGCCTTACTGCCTTTGTACCCCACTC
GGGCCATGGGCTCCCCGTTTCCTCTGGTGAACCTGCCTACACCCCTATACCCCATGATGTGCCCCATGGAACACC
CCCTTTCTGCTGACATCGCCATGGCCACCCGTGCAGATGAGGACGGAGACACGCCTCTCCATATTGCTGTGGTGC
AGGGTAACCTGCCAGCTGTGCACCGGCTGGTCAACCTCTTCCAGCAGGGGGGCCGGGAGCTCGACATCTACAACA
ACCTACGGCAGACACCGCTCCACCTGGCTGTGATCACCACATTACCGTCTGTGGTCCGGCTCCTGGTGACAGCTG
GTGCCAGCCCCATGGCGCTGGACCGCCATGGCCAGACGGCCGCTCACCTGGCGTGCGAGCACCGCAGCCCGACCT
GCCTGCGAGCCCTGCTGGACAGCGCAGCTCCGGGCACGTTGGACCTGGAGGCCCGCAATTATGACGGGCTCACCG
CCCTGCACGTGGCAGTGAACACCGAGTGCCAAGAAACCGTGCAGCTCTTGCTAGAGCGCGGTGCCGACATCGACG
CAGTGGACATTAAGAGCGGCCGCTCCCCGCTCATCCACGCCGTGGAAAACAACAGCCTTAGCATGGTGCAGCTGC
TGCTGCAGCACGGCGCCAACGTGAACGCGCAAATGTACTCCGGCAGCTCCGCCCTGCACTCAGCGTCCGGCCGCG
GGCTCCTCCCGCTGGTGCGCACGCTGGTCCGCAGCGGCGCTGACAGCAGCCTCAAGAACTGCCACAACGACACGC
CGCTCATGGTGGCGCGCAGCCGCAGGGTCATCGACATCCTGAGGGGGAAGGCCACCCGGCCTGCTTCCACCTCCC
AGCCAGACCCCTCCCCTGACCGGAGCGCCAACACCTCCCCCGAGAGCAGCAGCCGCCTCAGCTCCAATGGTCTTC
TCTCCGCATCACCATCCTCCTCACCCTCCCAGTCTCCCCCCAGGGACCCCCCTGGATTCCCCATGGCTCCTCCCA
ATTTCTTCCTTCCTTCCCCATCTCCACCCGCCTTCCTGCCCTTTGCTGGGGTCCTCCGAGGCCCTGGCCGGCCGG
TGCCCCCCTCCCCAGCTCCAGGAGGCAGCTGAGGGGGATGGGGGGGCAGATCTTGGACTCATGAGGAGGGGCCCC
CCTGCCCAGAGGGGTCAACCCTTCTGGAAACTGTGAAGATCTGACTTCGCCCCCCCCCCCCCCCATCTTCGGGAC
CAGGATTTGCACAGAAGCACATGCACCTACCCATACACCCCCTCTTCTGAGCACAGATGTTCCCCCATCTCGCTC
CCTCCCAGGACTCTGACCCCAGCATTCTCAGGCACCAGTCCCTGTCCGGAATGCCACCCACATCTTCCATTTCCA
TGTCCCCTCCCAGAGCTGGTGGACCCAGGGAACAGCCACTCCCCTCCACTCTCTACCAGATAACTGAGGAGGGGA
GAGGTGGGCCGTAACGGGCACGGATCACGATGTAAATTATTAAGCATTTTGGTTGGATTTCTTTTGTAATAAACT
ATTTTTGTACCAT

FIGURE 1491

MDEGPVDLRTRPKAAGLPGAALPLRKRPLRAPSPEPAAPRGAAGLVVPLDPLRGGCDLPAVPGPPHGLARPEALY
YPGALLPLYPTRAMGSPFPLVNLPTPLYPMMCPMEHPLSADIAMATRADEDGDTPLHIAVVQGNLPAVHRLVNLF
QQGGRELDIYNNLRQTPLHLAVITTLPSVVRLLVTAGASPMALDRHGQTAAHLACEHRSPTCLRALLDSAAPGTL
DLEARNYDGLTALHVAVNTECQETVQLLLERGADIDAVDIKSGRSPLIHAVENNSLSMVQLLLQHGANVNAQMYS
GSSALHSASGRGLLPLVRTLVRSGADSSLKNCHNDTPLMVARSRRVIDILRGKATRPASTSQPDPSPDRSANTSP
ESSSRLSSNGLLSASPSSSPSQSPPRDPPGFPMAPPNFFLPSPSPPAFLPFAGVLRGPGRPVPPSPAPGGS

FIGURE 1492A

AAAGAGCTGGAGGCGCGCAGGCCGGCTCCGCTCCGGCCCCGGACGATGCGGCGCGCCCAGGATGCTGCCGTGCCT
CGTAGTGCTGCTGGCGGCGCTCCTCAGCCTCCGTCTTGGCTCAGACGCTCATGGGACAGAGCTGCCCAGCCCTCC
GTCTGTGTGGTTTGAAGCAGAATTTTTCCACCACATCCTCCACTGGACACCCATCCCAAATCAGTCTGAAAGTAC
CTGCTATGAAGTGGCGCTCCTGAGGTATGGAATAGAGTCCTGGAACTCCATCTCCAACTGTAGCCAGACCCTGTC
CTATGACCTTACCGCAGTGACCTTGGACCTGTACCACAGCAATGGCTACCGGGCCAGAGTGCGGGCTGTGGACGG
CAGCCGGCACTCCAACTGGACCGTCACCAACACCCGCTTCTCTGTGGATGAAGTGACTCTGACAGTTGGCAGTGT
GAACCTAGAGATCCACAATGGCTTCATCCTCGGGAAGATTCAGCTACCCAGGCCCAAGATGGCCCCCGCGAATGA
CACATATGAAAGCATCTTCAGTCACTTCCGAGAGTATGAGATTGCCATTCGCAAGGTGCCGGGAAACTTCACGTT
CACACACAAGAAAGTAAAACATGAAAACTTCAGCCTCCTAACCTCTGGAGAAGTGGGAGAGTTCTGTGTCCAGGT
GAAACCATCTGTCGCTTCCCGAAGTAACAAGGGGATGTGGTCTAAAGAGGAGTGCATCTCCCTCACCAGGCAGTA
TTTCACCGTGACCAACGTCATCATCTTCTTTGCCTTTGTCCTGCTGCTCTCCGGAGCCCTCGCCTACTGCCTGGC
CCTCCAGCTGTATGTGCGGCGCCGAAAGAAGCTACCCAGTGTCCTGCTCTTCAAGAAGCCCAGCCCCTTCATCTT
CATCAGCCAGCGTCCCTCCCCAGAGACCCAAGACACCATCCACCCGCTTGATGAGGAGGCCTTTTTGAAGGTGTC
CCCAGAGCTGAAGAACTTGGACCTGCACGGCAGCACAGACAGTGGCTTTGGCAGCACCAAGCCATCCCTGCAGAC
TGAAGAGCCCCAGTTCCTCCTCCCTGACCCTCACCCCCAGGCTGACAGAACGCTGGGAAACGGGGAGCCCCCTGT
GCTGGGGGACAGCTGCAGTAGTGGCAGCAGCAATAGCACAGACAGCGGGATCTGCCTGCAGGAGCCCAGCCTGAG
CCCCAGCACAGGGCCCACCTGGGAGCAACAGGTGGGGAGCAACAGCAGGGGCCAGGATGACAGTGGCATTGACTT
AGTTCAAAACTCTGAGGGCCGGGCTGGGGACACACAGGGTGGCTCGGCCTTGGGCCACCACAGTCCCCCGGAGCC
TGAGGTGCCTGGGGAAGAAGACCCAGCTGCTGTGGCATTCCAGGGTTACCTGAGGCAGACCAGATGTGCTGAAGA
GAAGGCAACCAAGACAGGCTGCCTGGAGGAAGAATCGCCCTTGACAGATGGCCTTGGCCCCAAATTCGGGAGATG
CCTGGTTGATGAGGCAGGCTTGCATCCACCAGCCCTGGCCAAGGGCTATTTGAAACAGGATCCTCTAGAAATGAC
TCTGGCTTCCTCAGGGGCCCCAACGGGACAGTGGAACCAGCCCACTGAGGAATGGTCACTCCTGGCCTTGAGCAG
CTGCAGTGACCTGGGAATATCTGACTGGAGCTTTGCCCATGACCTTGCCCCTCTAGGCTGTGTGGCAGCCCCAGG
TGGTCTCCTGGGCAGCTTTAACTCAGACCTGGTCACCCTGCCCCTCATCTCTAGCCTGCAGTCAAGTGAGTGACT
CGGGCTGAGAGGCTGCTTTTGATTTTAGCCATGCCTGCTCCTCTGCCTGGACCAGGAGGAGGGCCCTGGGGCAGA
AGTTAGGCACGAGGCAGTCTGGGCACTTTTCTGCAAGTCCACTGGGGCTGGCCCAGCCAGGCTGCAGGGCTGGTC
AGGGTGTCTGGGGCAGGAGGAGGCCAACTCACTGAACTAGTGCAGGGTATGTGGGTGGCACTGACCTGTTCTGTT
GACTGGGGCCCTGCAGACTCTGGCAGAGCTGAGAAGGGCAGGGACCTTCTCCCTCCTAGGAACTCTTTCCTGTAT
CATAAAGGATTATTTGCTCAGGGGAACCATGGGGCTTTCTGGAGTTGTGGTGAGGCCACCAGGCTGAAGTCAGCT
CAGACCCAGACCTCCCTGCTTAGGCCACTCGAGCATCAGAGCTTCCAGCAGGAGGAAGGGCTGTAGGAATGGAAG
CTTCAGGGCCTTGCTGCTGGGGTCATTTTTAGGGGAAAAAGGAGGATATGATGGTCACATGGGGAACCTCCCCTC
ATCGGGCCTCTGGGGCAGGAAGCTTGTCACTGGAAGATCTTAAGGTATATATTTTCTGGACACTCAAACACATCA
TAATGGATTCACTGAGGGGAGACAAAGGGAGCCGAGACCCTGGATGGGGCTTCCAGCTCAGAACCCATCCCTCTG
GTGGGTACCTCTGGCACCCATCTGCAAATATCTCCCTCTCTCCAACAAATGGAGTAGCATCCCCCTGGGGCACTT
GCTGAGGCCAAGCCACTCACATCCTCACTTTGCTGCCCCACCATCTTGCTGACAACTTCCAGAGAAGCCATGGTT
TTTTGTATTGGTCATAACTCAGCCCTTTGGGCGGCCTCTGGGCTTGGGCACCAGCTCATGCCAGCCCCAGAGGGT
CAGGGTTGGAGGCCTGTGCTTGTGTTTGCTGCTAATGTCCAGCTACAGACCCAGAGGATAAGCCACTGGGCACTG
GGCTGGGGTCCCTGCCTTGTTGGTGTTCAGCTGTGTGATTTTGGACTAGCCACTTGTCAGAGGGCCTCAATCTCC
CATCTGTGAAATAAGGACTCCACCTTTAGGGGACCCTCCATGTTTGCTGGGTATTAGCCAAGCTGGTCCTGGGAG
AATGCAGATACTGTCCGTGGACTACCAAGCTGGCTTGTTTCTTATGCCAGAGGCTAACAGATCCAATGGGAGTCC
ATGGTGTCATGCCAAGACAGTATCAGACACAGCCCCAGAAGGGGGCATTATGGGCCCTGCCTCCCCATAGGCCAT
TTGGACTCTGCCTTCAAACAAAGGCAGTTCAGTCCACAGGCATGGAAGCTGTGAGGGGACAGGCCTGTGCGTGCC
ATCCAGAGTCATCTCAGCCCTGCCTTTCTCTGGAGCATTCTGAAAACAGATATTCTGGCCCAGGGAATCCAGCCA
TGACCCCCACCCCTCTGCCAAAGTACTCTTAGGTGCCAGTCTGGTAACTGAACTCCCTCTGGAGGCAGGCTTGAG
GGAGGATTCCTCAGGGTTCCCTTGAAAGCTTTATTTATTTATTTTGTTCATTTATTTATTGGAGAGGCAGCATTG
CACAGTGAAAGAATTCTGGATATCTCAGGAGCCCCGAAATTCTAGCTCTGACTTTGCTGTTTCCAGTGGTATGAC
CTTGGAGAAGTCACTTATCCTCTTGGAGCCTCAGTTTCCTCATCTGCAGAATAATGACTGACTTGTCTAATTCAT
AGGGATGTGAGGTTCTGCTGAGGAAATGGGTATGAATGTGCCTTGAACACAAAGCTCTGTCAATAAGTGATACAT

FIGURE 1492B

GTTTTTTATTCCAATAAATTGTCAAGACCACA

FIGURE 1493

MLPCLVVLLAALLSLRLGSDAHGTELPSPPSVWFEAEFFHHILHWTPIPNQSESTCYEVALLRYGIESWNSISNC
SQTLSYDLTAVTLDLYHSNGYRARVRAVDGSRHSNWTVTNTRFSVDEVTLTVGSVNLEIHNGFILGKIQLPRPKM
APANDTYESIFSHFREYEIAIRKVPGNFTFTHKKVKHENFSLLTSGEVGEFCVQVKPSVASRSNKGMWSKEECIS
LTRQYFTVTNVIIFFAFVLLLSGALAYCLALQLYVRRRKKLPSVLLFKKPSPFIFISQRPSPETQDTIHPLDEEA
FLKVSPELKNLDLHGSTDSGFGSTKPSLQTEEPQFLLPDPHPQADRTLGNGEPPVLGDSCSSGSSNSTDSGICLQ
EPSLSPSTGPTWEQQVGSNSRGQDDSGIDLVQNSEGRAGDTQGGSALGHHSPPEPEVPGEEDPAAVAFQGYLRQT
RCAEEKATKTGCLEEESPLTDGLGPKFGRCLVDEAGLHPPALAKGYLKQDPLEMTLASSGAPTGQWNQPTEEWSL
LALSSCSDLGISDWSFAHDLAPLGCVAAPGGLLGSFNSDLVTLPLISSLQSSE

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FIGURE 1494

TTTGGGGCTGAGTTTAATAAGCGAGCGAGCGAGCAAGCGAGCGCGGGGGGAAAAAGGCAGAGAATGTCCGCCATC
TACCCTCCGCTCCTGGGCGCGCTCTCATTCATAGCAGCCTCTTCATGAATTACAGCTGAGGGGGGGCGGAGGAGG
GGGGGGTACCACACAACACCCCAGCAAACCTCCGGGCCCCCAGGC**ATG**GCTAGCTCGTGTTCCGTGCAGGTGAAG
CTGGAGCTGGGGCACCGCGCCCAGGTGAGGAAAAAACCCACCGTGGAGGGCTTCACCCACGACTGGATGGTGTTC
GTACGCGGTCCGGAGCACAGTAACATACAGCACTTTGTGGAGAAAGTCGTCTTCCACTTGCACGAAAGCTTTCCT
AGGCCAAAAAGAGTGTGCAAAGATCCACCTTACAAAGTAGAAGAATCTGGGTATGCTGGTTTCATTTTGCCAATT
GAAGTTTATTTTAAAAACAAGGAAGAACCTAGGAAAGTCCGCTTTGATTATGACTTATTCCTGCATCTTGAAGGC
CATCCACCAGTGAATCACCTCCGCTGTGAAAAGCTAACTTTCAACAACCCCACAGAGGACTTTAGGAGAAAGTTG
CTGAAGGCAGGAGGGGACCCTAATAGGAGTATTCATACCAGCAGCAGCAGCAGCAGCAGCAGTAGCAGCAGCAGC
AGCAGCAGCAGCAGCAGCAGCAGTAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGTAGCAGCAGCAGTAGCAGCAGC
AGCAGCAGCAGTAGTACCAGTTTTTCAAAGCCTCACAAATTAATGAAGGAGCACAAGGAAAAACCTTCTAAAGAC
TCCAGAGAACATAAAAGTGCCTTCAAAGAACCTTCCAGGGATCACAACAAATCTTCCAAAGAATCCTCTAAGAAA
CCCAAAGAAAATAAACCACTGAAAGAAGAGAAAATAGTTCCTAAGATGGCCTTCAAGGAACCTAAACCCATGTCA
AAAGAGCCAAAACCAGATAGTAACTTACTCACCATCACCAGTGGACAAGATAAGAAGGCTCCTAGTAAAAGGCCG
CCCATTTCAGATTCTGAAGAACTCTCAGCCAAAAAAAGGAAAAAGAGTAGCTCAGAGGCTTTATTTAAAAGTTTT
TCTAGCGCACCACCACTGATACTCACTTGTTCTGCTGACAAAAAACAGATAAAAGATAAATCTCATGTCAAGATG
GGAAAGGTCAAAATTGAAAGTGAGACATCAGAGAAGAAGAAATCAACGTTACCGCCATTTGATGATATTGTGGAT
CCCAATGATTCAGATGTGGAGGAGAATATATCCTCTAAATCTGATTCTGAACAACCCAGTCCTGCCAGCTCCAGC
TCCAGCTCCAGCTCCAGCTTCACACCATCCCAGACCAGGCAACAAGGTCCTTTGAGGTCTATAATGAAAGATCTG
CATTCTGATGACAATGAGGAGGAATCAGATGAAGTGGAGGATAACGACAATGACTCTGAAATGGAGAGGCCTGTA
AATAGAGGAGGCAGCCGAAGTCGCAGAGTTAGCTTAAGTGATGGCAGCGATAGTGAAAGCAGTTCTGCTTCTTCA
CCCCTACATCACGAACCTCCACCACCCTTACTAAAAACCAACAACAACCAGATTCTTGAAGTGAAAAGTCCAATA
AAGCAAAGCAAATCAGATAAGCAAATAAAGAATGGTGAATGTGACAAGGCATACCTAGATGAACTGGTAGAGCTT
CACAGAAGGTTAATGACATTGAGAGAAAGACACATTCTGCAGCAGATCGTGAACCTTATAGAAGAAACTGGACAC
TTTCATATCACAAACACAACATTTGATTTTGATCTTTGCTCGCTGGACAAAACCACAGTCCGTAAACTACAGAGT
TACCTGGAAACATCTGGAACATCC**TGA**GGATATAACAACTGGATGCATCAAGAACTATTGTGTTTTTTTTTTTTG
GTTTTTTTTTTTTTTGGTTGTGATTTTTTGTTCTTGTTGTTTATATGAAAACACTCAAAATGATGCAACCAAAAG
GGAAAAAATAAAAATCAAACAACCTTCAGCTTTATTTTTCTTTAAAGCCAGTCATCATCTCTTGATAAAGGAGAG
GTTAAAGCAAACCAGCCTCAGCGGACCACTCTTCTCTCCAAGGAAATCCCCGGGAAGAGTTAGCCTGGATAGCCT
TGAAAACAAACAAATCAAACACAACACAAGAAAACTCAAAGAATGTGTATGGTATCATGTATCTCTCTGTGGTGG
TTCATTCCACAGGACGAATGCATATTCAACACACTGCCTTATTACATAACTGATCTATTTATTATCGCATACAGA
TATTCTAAGTCGTTGAGGGAATGACACCATCAGACATTATAAGTACTTGGTCCCGTGGATGCTCTTTCAATGCAG
CACCCTTGCCATCCCAAGCCCAGTGACCTTACTCGTATACCGTGCCACTTTCCACCAACTTTTTCCAAGTCCTTT
AACTCGTTGCAGTCTGTATTTTCCACCTTTTGTTTTTCCAGTTCCAGGACACAGATTATCAACTGGGGGGGACCAA
ATAGCCACCTTGATTTTCTTCTTTGTGGTCTTTTTCCTGAAAGTTGGGGCCCAGTCCTTGGCTGTATCCATGTAA
TGATCTTGGACCATGGTAGAAAATGCACCAAATAGGATCATATGAATTGCTGTCTAGCCTTAGTCAATAAACTTG
TAGGACTTTTAAACAAAAGTGTACCTGTAAATGTCCTGAATCCAGCATTGTTGAGCTGTCATCAACATTCTTGTG
TCTGTTTTACTGTTACAATATTAGGTGAATATGGAAGTAAAGGCATTCCACAGGATCATCATTTAAAAAAAAAGA
ATTCTGGTCCTGTTTTCTAAAAAAAAAAAACTGTTGTAGAAATTCTTAATTTGGATCTATTTATTAGTCAGAGTT
TCAGCTTTCTTCAGCTGCCAGTGTGTTACTCATCTTTATCCTAAAAATCTGGAATCAGAGATTTTTGTTTGTTCA
CATATGATTCTCTTAGACACTTTTATATTTGAAAAAATTAAAATCTTTCTTTGGGGAAAAATTCTTGGTTATTCT
GCCATAACAGATTATGTATTAACTTGTAGATTCAGTGGTTCAATACCTGTTTAGTTGCTTGCTAATATTTCCAGA
AGGATTTCTTGTATTGGTGAAAGACGGTTGGGGATGGGGGGATTTTTTTGTTCTTGTTGTACCCTTGTTTTGAAA
CTAGAAATCTGTCCTGTGGCATGCAAAAGAAAGCAAATTATTTTTAAAAGAAAAAAACCAAAGTACTTTTGGTGT
CATTATTCCATCTTCTCCATAAGTGGAGAAATGAAAAGTAAGAACAGCTCATCTTCAAAGTTTTTACTAGAAATT
C

FIGURE 1495

MASSCSVQVKLELGHRAQVRKKPTVEGFTHDWMVFVRGPEHSNIQHFVEKVVFHLHESFPRPKRVCKDPPYKVEE
SGYAGFILPIEVYFKNKEEPRKVRFDYDLFLHLEGHPPVNHLRCEKLTFNNPTEDFRRKLLKAGGDPNRSIHTSS
SSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSTSFSKPHKLMKEHKEKPSKDSREHKSAFKEPSRDH
NKSSKESSKKPKENKPLKEEKIVPKMAFKEPKPMSKEPKPDSNLLTITSGQDKKAPSKRPPISDSEELSAKKRKK
SSSEALFKSFSSAPPLILTCSADKKQIKDKSHVKMGKVKIESETSEKKKSTLPPFDDIVDPNDSDVEENISSKSD
SEQPSPASSSSSSSSFTPSQTRQQGPLRSIMKDLHSDDNEEESDEVEDNDNDSEMERPVNRGGSRSRRVSLSDG
SDSESSSASSPLHHEPPPPLLKTNNNQILEVKSPIKQSKSDKQIKNGECDKAYLDELVELHRRLMTLRERHILQQ
IVNLIEETGHFHITNTTFDFDLCSLDKTTVRKLQSYLETSGTS

FIGURE 1496

CAGCTCTCTGTCAGAATGGCCACCATGGTACCATCCGTGTTGTGGCCCAGGGCCTGCTGGACTCTGCTGGTCTGC
TGTCTGCTGACCCCAGGTGTCCAGGGGCAGGAGTTCCTTTTGCGGGTGGAGCCCCAGAACCCTGTGCTCTCTGCT
GGAGGGTCCCTGTTTGTGAACTGCAGTACTGATTGTCCCAGCTCTGAGAAAATCGCCTTGGAGACGTCCCTATCA
AAGGAGCTGGTGGCCAGTGGCATGGGCTGGGCAGCCTTCAATCTCAGCAACGTGACTGGCAACAGTCGGATCCTC
TGCTCAGTGTACTGCAATGGCTCCCAGATAACAGGCTCCTCTAACATCACCGTGTACGGGCTCCCGGAGCGTGTG
GAGCTGGCACCCCTGCCTCCTTGGCAGCCGGTGGGCCAGAACTTCACCCTGCGCTGCCAAGTGGAGGGTGGGTCG
CCCCGGACCAGCCTCACGGTGGTGCTGCTTCGCTGGGAGGAGGAGCTGAGCCGGCAGCCCGCAGTGGAGGAGCCA
GCGGAGGTCACTGCCACTGTGCTGGCCAGCAGAGACGACCACGGAGCCCCTTTCTCATGCCGCACAGAACTGGAC
ATGCAGCCCCAGGGGCTGGGACTGTTCGTGAACACCTCAGCCCCCCGCCAGCTCCGAACCTTTGTCCTGCCCGTG
ACCCCCCCGCGCCTCGTGGCCCCCCGGTTCTTGGAGGTGGAAACGTCGTGGCCGGTGGACTGCACCCTAGACGGG
CTTTTTCCAGCCTCAGAGGCCCAGGTCTACCTGGCGCTGGGGGACCAGATGCTGAATGCGACAGTCATGAACCAC
GGGGACACGCTAACGGCCACAGCCACAGCCACGGCGCGCGCGGATCAGGAGGGTGCCCGGGAGATCGTCTGCAAC
GTGACCCTAGGGGGCGAGAGACGGGAGGCCCGGGAGAACTTGACGGTCTTTAGCTTCCTAGGACCCATTGTGAAC
CTCAGCGAGCCCACCGCCCATGAGGGGTCCACAGTGACCGTGAGTTGCATGGCTGGGGCTCGAGTCCAGGTCACG
CTGGACGGAGTTCCGGCCGCGGCCCCGGGGCAGCCAGCTCAACTTCAGCTAAATGCTACCGAGAGTGACGACGGA
CGCAGCTTCTTCTGCAGTGCCACTCTCGAGGTGGACGGCGAGTTCTTGCACAGGAACAGTAGCGTCCAGCTGCGA
GTCCTGTATGGTCCCAAAATTGACCGAGCCACATGCCCCCAGCACTTGAAATGGAAAGATAAAACGAGACACGTC
CTGCAGTGCCAAGCCAGGGGCAACCCGTACCCCGAGCTGCGGTGTTTGAAGGAAGGCTCCAGCCGGGAGGTGCCG
GTGGGGATCCCGTTCTTCGTCAACGTAACACATAATGGTACTTATCAGTGCCAAGCGTCCAGCTCACGAGGCAAA
TACACCCTGGTCGTGGTGATGGACATTGAGGCTGGGAGCTCCCACTTTGTCCCCGTCTTCGTGGCGGTGTTACTG
ACCCTGGGCGTGGTGACTATCGTACTGGCCTTAATGTACGTCTTCAGGGAGCACCAACGGAGCGGCAGTTACCAT
GTTAGGGAGGAGAGCACCTATCTGCCCCTCACGTCTATGCAGCCGACAGAAGCAATGGGGGAAGAACCGTCCAGA
GCTGAGTGACGCTGGGATCCGGGATCAAAGTTGGCGGGGGCTTGGCTGTGCCCTCAGATTCCGCACCAATAAAGC
CTTCAAACTCCCTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1497

MATMVPSVLWPRACWTLLVCCLLTPGVQGQEFLLRVEPQNPVLSAGGSLFVNCSTDCPSSEKIALETSLSKELVA
SGMGWAAFNLSNVTGNSRILCSVYCNGSQITGSSNITVYGLPERVELAPLPPWQPVGQNFTLRCQVEGGSPRTSL
TVVLLRWEEELSRQPAVEEPAEVTATVLASRDDHGAPFSCRTELDMQPQGLGLFVNTSAPRQLRTFVLPVTPPRL
VAPRFLEVETSWPVDCTLDGLFPASEAQVYLALGDQMLNATVMNHGDTLTATATATARADQEGAREIVCNVTLGG
ERREARENLTVFSFLGPIVNLSEPTAHEGSTVTVSCMAGARVQVTLDGVPAAAPGQPAQLQLNATESDDGRSFFC
SATLEVDGEFLHRNSSVQLRVLYGPKIDRATCPQHLKWKDKTRHVLQCQARGNPYPELRCLKEGSSREVPVGIPF
FVNVTHNGTYQCQASSSRGKYTLVVVMDIEAGSSHFVPVFVAVLLTLGVVTIVLALMYVFREHQRSGSYHVREES
TYLPLTSMQPTEAMGEEPSRAE

FIGURE 1498

CCGCCTCCGAGTGCCTTGCGCGGACCTGAGCTGGAGATGCTGGCCGGGCTACCGACGTCAGACCCCGGGCGCCTC
ATCACGGACCCGCGCAGCGGCCGCACCTACCTCAAAGGCCGCTTGTTGGGCAAGGGGGGCTTCGCCCGCTGCTAC
GAGGCCACTGACACAGAGACTGGCAGCGCCTACGCTGTCAAAGTCATCCCGCAGAGCCGCGTCGCCAAGCCGCAT
CAGCGCGAGAAGATCCTAAATGAGATTGAGCTGCACCGAGACCTGCAGCACCGCCACATCGTGCGTTTTTCGCAC
CACTTTGAGGACGCTGACAACATCTACATTTTCTTGGAGCTCTGCAGCCGAAAGTCCCTGGCCCACATCTGGAAG
GCCCGGCACACCCTGTTGGAGCCAGAAGTGCGCTACTACCTGCGGCAGATCCTTTCTGGCCTCAAGTACTTGCAC
CAGCGCGGCATCTTGCACCGGGACCTCAAGTTGGGAAATTTTTTCATCACTGAGAACATGGAACTGAAGGTGGGG
GATTTTGGGCTGGCAGCCCGGTTGGAGCCTCCGGAGCAGAGGAAGAAGACCATCTGTGGCACCCCCAACTATGTG
GCTCCAGAAGTGCTGCTGAGACAGGGCCACGGCCCTGAAGCGGATGTATGGTCACTGGGCTGTGTCATGTACACG
CTGCTCTGCGGGAGCCCTCCCTTTGAGACGGCTGACCTGAAGGAGACGTACCGCTGCATCAAGCAGGTTCACTAC
ACGCTGCCTGCCAGCCTCTCACTGCCTGCCCGGCAGCTCCTGGCCGCCATCCTTCGGGCCTCACCCCGAGACCGC
CCCTCTATTGACCAGATCCTGCGCCATGACTTCTTTACCAAGGGCTACACCCCCGATCGACTCCCTATCAGCAGC
TGCGTGACAGTCCCAGACCTGACACCCCCCAACCCAGCTAGGAGTCTGTTTGCCAAAGTTACCAAGAGCCTCTTT
GGCAGAAAGAAGAAGAGTAAGAATCATGCCCAGGAGAGGGATGAGGTCTCCGGTTTGGTGAGCGGCCTCATGCGC
ACATCCGTTGGCCATCAGGATGCCAGGCCAGAGGCTCCAGCAGCTTCTGGCCCAGCCCCTGTCAGCCTGGTAGAG
ACAGCACCTGAAGACAGCTCACCCCGTGGGACACTGGCAAGCAGTGGAGATGGATTTGAAGAAGGTCTGACTGTG
GCCACAGTAGTGGAGTCAGCCCTTTGTGCTCTGAGAAATTGTATAGCTTTCATGCCCCCAGCGGAACAGAACCCG
GCCCCCCTGGCCCAGCCAGAGCCTCTGGTGTGGGTCAGCAAGTGGGTTGACTACTCCAATAAGTTCGGCTTTGGG
TATCAACTGTCCAGCCGCCGTGTGGCTGTGCTCTTCAACGATGGCACACATATGGCCCTGTCGGCCAACAGAAAG
ACTGTGCACTACAATCCCACCAGCACAAAGCACTTCTCCTTCTCCGTGGGTGCTGTGCCCCGGGCCCTGCAGCCT
CAGCTGGGTATCCTGCGGTACTTCGCCTCCTACATGGAGCAGCACCTCATGAAGGGTGGAGATCTGCCCAGTGTG
GAAGAGGTAGAGGTACCTGCTCCGCCCTTGCTGCTGCAGTGGGTCAAGACGGATCAGGCTCTCCTCATGCTGTTT
AGTGATGGCACTGTCCAGGTGAACTTCTACGGGGACCACACCAAGCTGATTCTCAGTGGCTGGGAGCCCCTCCTT
GTGACTTTTGTGGCCCGAAATCGTAGTGCTTGTACTTACCTCGCTTCCCACCTTCGGCAGCTGGGCTGCTCTCCA
GACCTGCGGCAGCGACTCCGCTATGCTCTGCGCCTGCTCCGGGACCGCAGCCCAGCTTAGGACCCAAGCCCTGAA
GGCCTGAGGCCTGTGCCTGTCAGGCTCTGGCCCTTGCCTTTGTGGCCTTCCCCCTTCCTTTGGTGCCTCACTGGG
GGCTTTGGGCCGAATCCCCCAGGGAATCAGGGACCAGCTTTACTGGAGTTGGGGGCGGCTTGTCTTCGCTGGCTC
CTACCCCATCTCCAAGATAAGCCTGAGCCTTAGCTCCCAGCTAGGGGGCGTTATTTATGGACCACTTTTATTTAT
TGTCAGACACTTATTTATTGGGATGTGAGCCCCAGGGGGCCTCCTCCTAGGATAATAAACAATTTTGCA

FIGURE 1499

MLAGLPTSDPGRLITDPRSGRTYLKGRLLGKGGFARCYEATDTETGSAYAVKVIPQSRVAKPHQREKILNEIELH
RDLQHRHIVRFSHHFEDADNIYIFLELCSRKSLAHIWKARHTLLEPEVRYYLRQILSGLKYLHQRGILHRDLKLG
NFFITENMELKVGDFGLAARLEPPEQRKKTICGTPNYVAPEVLLRQGHGPEADVWSLGCVMYTLLCGSPPFETAD
LKETYRCIKQVHYTLPASLSLPARQLLAAILRASPRDRPSIDQILRHDFFTKGYTPDRLPISSCVTVPDLTPPNP
ARSLFAKVTKSLFGRKKKSKNHAQERDEVSGLVSGLMRTSVGHQDARPEAPAASGPAPVSLVETAPEDSSPRGTL
ASSGDGFEEGLTVATVVESALCALRNCIAFMPPAEQNPAPLAQPEPLVWVSKWVDYSNKFGFGYQLSSRRVAVLF
NDGTHMALSANRKTVHYNPTSTKHFSFSVGAVPRALQPQLGILRYFASYMEQHLMKGGDLPSVEEVEVPAPPLLL
QWVKTDQALLMLFSDGTVQVNFYGDHTKLILSGWEPLLVTFVARNRSACTYLASHLRQLGCSPDLRQRLRYALRL
LRDRSPA

FIGURE 1500

ATTGAGAGTGGCTCTAACAAGTGCCATTTTTCCTTGTTAGCTTTCATTTCTCAGCCCTTTACAAGATTAAAATAG
TCTGCAGTTTAATCTCTCCAAAGCTTTACGGACAGTGATTCTGTCCTAAACAAGACAGTGACTCCAGGATTTCTG
AAGACTATTGTGGAAGAAGCATCCATTAAGGCCAAGCTATAACATCAGAAATGGTGAATGAATACAAGAAAATTC
TTTTGCTGAAAGGATTTGAGCTCATGGATGATTATCATTTTACATCAATTAAGTCCTTACTGGCCTATGATTTAG
GACTAACTACAAAAATGCAAGAGGAATACAACAGAATTAAGATTACAGATTTGATGGAAAAAAAGTTCCAAGGCG
TTGCCTGTCTAGACAAACTAATAGAACTTGCCAAAGATATGCCATCACTTAAAAACCTTGTTAACAATCTTCGAA
AAGAGAAGTCAAAAGTTGCTAAGAAAATTAAAACACAAGAAAAAGCTCCAGTGAAAAAAATAAACCAGGAAGAAG
TGGGTCTTGCGGCACCTGCACCCACCGCAAGAAACAAACTGACATCGGAAGCAAGAGGGAGGATTCCTGTAGCTC
AGAAAAGAAAAACTCCAAACAAAGAAAAGACTGAAGCCAAAAGGAATAAGGTGTCCCAAGAGCAGAGTAAGCCCC
CAGGTCCCTCAGGAGCCAGCACATCTGCAGCTGTGGATCATCCCCCACTACCCCAGACCTCATCATCAACTCCAT
CCAACACTTCGTTTACTCCGAATCAGGAAACCCAGGCCCAACGGCAGGTGGATGCAAGAAGAAATGTTCCCCAAA
ACGACCCAGTGACAGTGGTGGTACTGAAAGCAACAGCGCCATTTAAATACGAGTCCCCAGAAAATGGGAAAAGCA
CAATGTTTCATGCTACAGTGGCCAGTAAGACTCAATATTTCCATGTGAAAGTCTTCGACATCAACTTGAAAGAGA
AATTTGTAAGGAAGAAGGTCATTACCATATCTGATTACTCTGAATGTAAAGGAGTAATGGAAATAAAGGAAGCAT
CATCTGTGTCTGACTTTAATCAAAATTTTGAGGTCCCAAACAGAATTATCGAAATAGCAAATAAAACTCCCAAGA
TCAGTCAACTTTACAAGCAAGCATCTGGAACAATGGTGTATGGGTTGTTTATGTTACAAAAGAAAAGCGTACACA
AGAAGAACACAATTTATGAAATACAGGATAATACAGGATCCATGGATGTAGTGGGGAGTGGAAAATGGCACAATA
TCAAGTGTGAGAAAGGAGATAAACTTCGACTCTTCTGCCTTCAACTGAGAACAGTTGACCGCAAGCTGAAACTGG
TGTGTGGAAGTCACAGCTTCATCAAGGTCATCAAGGCCAAGAAAAACAAGGAAGGACCAATGAATGTTAATTGAA
ATATGAAAGCTGAAATGCAACAAACAACTTCCGCTTAAAACAATTAAGTTGTTAATAACTGTGATTTTGTAAATT
TCAGTAATTCATTTAAATGATGTTTCAGTAGATATATTCTAGCATATTAAGAGCTTTTATAACTGAGTTATAGAT
TAGTTTGCTTTCTGGAATAAAATTTTCTTCTTATACTCTTCCTTTTTTTTAGATATTACATTTTGCTTTTATGAC
ATTCACGAGGCAAAAAACCG

FIGURE 1501

MVNEYKKILLLKGFELMDDYHFTSIKSLLAYDLGLTTKMQEEYNRIKITDLMEKKFQGVACLDKLIELAKDMPSL
KNLVNNLRKEKSKVAKKIKTQEKAPVKKINQEEVGLAAPAPTARNKLTSEARGRIPVAQKRKTPNKEKTEAKRNK
VSQEQSKPPGPSGASTSAAVDHPPLPQTSSSTPSNTSFTPNQETQAQRQVDARRNVPQNDPVTVVVLKATAPFKY
ESPENGKSTMFHATVASKTQYFHVKVFDINLKEKFVRKKVITISDYSECKGVMEIKEASSVSDFNQNFEVPNRII
EIANKTPKISQLYKQASGTMVYGLFMLQKKSVHKKNTIYEIQDNTGSMDVVGSGKWHNIKCEKGDKLRLFCLQLR
TVDRKLKLVCGSHSFIKVIKAKKNKEGPMNVN

FIGURE 1502

CGCGGACTTCTGCCAAGCACCGGCTCATGTGAGGCTCGCGGCACAGCGTTCTCTGGGCTCCCCAGAAGCCAGCCT
TTCGCTCCCGGACCCGGCAGCCCGAGCAGGAGCCGTGGGACCGGGCGCCAGCACCCTCTGCGGCGTGTCATGGGC
CCGCGCCGCCGGAGCCGAAAGCCCGAGGCCCCGAGGAGGCGCAGCCCGAGCCCGACCCCGACCCCCGGCCCCTCC
CGGCGGGGCCCCTCCTTAGGCGCTTCCTCCCATCAACACAGTCGGCGGAGACAAGGTTGGCTAAAGGAGATCCGA
AAGCTTCAGAAGAGCACACACCTCTTGATAAGGAAGCTGCCCTTCAGCCGCCTGGCAAGAGAAATATGTGTTAAA
TTCACTCGTGGTGTGGACTTCAATTGGCAAGCCCAGGCCCTATTGGCCCTACAAGAGGCAGCAGAAGCATTTCTA
GTTCATCTCTTTGAGGACGCCTATCTCCTCACCTTACATGCAGGCCGAGTTACTCTCTTCCCAAAGGATGTGCAA
CTGGCCCGGAGGATCCGGGGCCTTGAGGAGGGACTCGGCTGAGCTCCTGCACCCAGTGTTTCTGTCAGTCTTTCC
TGCTCAGCCAGGGGGGATGATACCGGGGACTCTCCAGAGCCATGACTAGATCCAATGGATTCTGCGATGCTGTCT
GGACTTTGCTGTCTCTGAACAGTATGTGTGTGTTGCTTTAAATATTTTTCTTTTTTTTGAGAAGGAGAAGACTGC
ATGACTTTCCTCTGTAACAGAGGTAATATATGAGACAATCAACACCGTTCCAAAGGCCTGAAAATAATTTTCAGA
TAAAGAGACTCCAAGGTTGACTTTAGTTTGTGAGTTACTCATGTGACTATTTGAGGATTTTGAAAACATCAGATT
TGCTGTGGTATGGGAGAAAAGGTTATGTACTTATTATTTTAGCTCTTTCTGTAATATTTACATTTTTTACCATAT
GTACATTTGTACTTTTATTTTACACATAAGGGAAAAAATAAGACCACTTTGAGCAGTTGCCTGGAAGGCTGGGCA
TTTCCATCATATAGACCTCTGCCCTTCAGAGTAGCCTCACCATTAGTGGCAGCATCATGTAACTGAGTGGACTGT
GCTTGTCAACGGATGTGTAGCTTTTCAGAAACTTAATTGGGGATGAATAGAAAACCTGTAAGCTTTGATGTTCTG
GTTACTTCTAGTAAATTCCTGTCAAAATCAATTCAGAAATTCTAACTTGGAGAATTTAACATTTTACTCTTGTAA
ATCATAGAAGATGTATCATAACAGTTCAGAATTTTAAAGTACATTTTCGATGCTTTTATGGGTATTTTTGTAGTT
TCTTTGTAGAGAGATAATAAAAATCAAAATATTTAATGA

FIGURE 1503

MGPRRRSRKPEAPRRRSPSPTPTPGPSRRGPSLGASSHQHSRRRQGWLKEIRKLQKSTHLLIRKLPFSRLAREIC
VKFTRGVDFNWQAQALLALQEAAEAFLVHLFEDAYLLTLHAGRVTLFPKDVQLARRIRGLEEGLG

FIGURE 1504

CGGCAGCCAGCTGAGAGCAATGGGAAATGGGGAGTCCCAGCTGTCCTCGGTGCCTGCTCAGAAGCTGGGTTGGTT
TATCCAGGAATACCTGAAGCCCTACGAAGAATGTCAGACACTGATCGACGAGATGGTGAACACCATCTGTGACGT
CTGCAGGAACCCCGAACAGTTCCCCCTGGTGCAGGGAGTGGCCATAGGTGGCTCCTATGGACGGAAAACAGTCTT
AAGAGGCAACTCCGATGGTACCCTTGTCCTTTTCTTCAGTGACTTAAAACAATTCCAGGATCAGAAGAGAAGCCA
ACGTGACATCCTCGATAAAACTGGGGATAAGCTGAAGTTCTGTCTGTTCACGAAGTGGTTGAAAAACAATTTCGA
GATCCAGAAGTCCCTTGATGGGTCCACCATCCAGGTGTTCACAAAAAATCAGAGAATCTCTTTCGAGGTGCTGGC
CGCCTTCAACGCTCTGAGCTTAAATGATAATCCCAGCCCCTGGATCTATCGAGAGCTCAAAAGATCCTTGGATAA
GACAAATGCCAGTCCTGGTGAGTTTGCAGTCTGCTTCACTGAACTCCAGCAGAAGTTTTTTGACAACCGTCCTGG
AAAACTAAAGGATTTGATCCTCTTGATAAAGCACTGGCATCAACAGTGCCAGAAAAAAATCAAGGATTTACCCTC
GCTGTCTCCGTATGCCCTGGAGCTGCTTACGGTGTATGCCTGGGAACAGGGGTGCAGAAAAGACAACTTTGACAT
TGCTGAAGGCGTCAGAACGGTTCTGGAGCTGATCAAATGCCAGGAGAAGCTGTGTATCTATTGGATGGTCAACTA
CAACTTTGAAGATGAGACCATCAGGAACATCCTGCTGCACCAGCTCCAATCAGCGAGGCCAGTAATCTTGGATCC
AGTTGACCCAACCAATAATGTGAGTGGAGATAAAATATGCTGGCAATGGCTGAAAAAAGAAGCTCAAACCTGGTT
GACTTCTCCCAACCTGGATAATGAGTTACCTGCACCATCTTGGAATGTCCTGCCTGCACCACTCTTCACGACCCC
AGGCCACCTTCTGGATAAGTTCATCAAGGAGTTTCTCCAGCCCAACAAATGCTTCCTAGAGCAGATTGACAGTGC
TGTTAACATCATCCGTACATTCCTTAAAGAAAACTGCTTCCGACAATCAACAGCCAAGATCCAGATTGTCCGGGG
AGGATCAACCGCCAAAGGCACAGCTCTGAAGACTGGCTCTGATGCCGATCTCGTCGTGTTCCATAACTCACTTAA
AAGCTACACCTCCCAAAAAAACGAGCGGCACAAAATCGTCAAGGAAATCCATGAACAGCTGAAAGCCTTTTGGAG
GGAGAAGGAGGAGGAGCTTGAAGTCAGCTTTGAGCCTCCCAAGTGGAAGGCTCCCAGGGTGCTGAGCTTCTCTCT
GAAATCCAAAGTCCTCAACGAAAGTGTCAGCTTTGATGTGCTTCCTGCCTTTAATGCACTGGGTCAGCTGAGTTC
TGGCTCCACACCCAGCCCCGAGGTTTATGCAGGGCTCATTGATCTGTATAAATCCTCGGACCTCCCGGGAGGAGA
GTTTTCTACCTGTTTCACAGTCCTGCAGCGAAACTTCATTCGCTCCCGGCCCACCAAACTAAAGGATTTAATTCG
CCTGGTGAAGCACTGGTACAAAGAGTGTGAAAGGAAACTGAAGCCAAAGGGGTCTTTGCCCCCAAAGTATGCCTT
GGAGCTGCTCACCATCTATGCCTGGGAGCAGGGGAGTGGAGTGCCGGATTTTGACACTGCAGAAGGTTTCCGGAC
AGTCCTGGAGCTGGTCACACAATATCAGCAGCTCGGCATCTTCTGGAAGGTCAATTACAACTTTGAAGATGAGAC
CGTGAGGAAGTTTCTACTGAGCCAGTTGCAGAAAACCAGGCCTGTGATCTTGGACCCAGGCGAACCCACAGGTGA
CGTGGGTGGAGGGGACCGTTGGTGTTGGCATCTTCTGGACAAAGAAGCAAAGGTTAGGTTATCCTCTCCCTGCTT
CAAGGATGGGACTGGAAACCCAATACCACCTTGGAAAGTGCCGACAATGCAGACACCAGGAAGTTGTGGAGCTAG
GATCCATCCTATTGTCAATGAGATGTTCTCATCCAGAAGCCATAGAATCCTGAATAATAATTCTAAAAGAAACTT
CTGGAGATCATCTGGCAATCGCTTTTAAAGACTCGGCTCACCGTGAGAAAGAGTCACTCACATCCATTCTTCCCT
TGATGGTCCCTATTCCTCCTTCCCTTGCCTTCTTGGACTTCTTGAAATCAATCAAGACTGCAAACCCTTTCATAA
AGCTGCCTTGCTGAACTCCTCTCTGCAGGAGCCCTGCTTAAAATAGTTGATGTCATCACTTTATGTGCATCTTAT
TTCTGTCAACTTGTATTTTTTTTTCTTGTATTTTTCCAATTAGCTCCTCCTTTTTCCTTCCAGTCTAAAAAAGGA
ATCCTCTGTGTCTTCAAAGCAAAGCTCTTTACTTTCCCCTTGGTTCTCATAACTCTGTGATCTTGCTCTCGGTGC
TTCCAACTCATCCACGTCCTGTCTGTTTCCTCTGTATACAAAACCCTTTCTGCCCCTGCTGACACAGACATCCTC
TATGCCAGCAGCCAGGCCAACCCTTTCATTAGAACTTCAAGCTCTCCAAAGGCTCAGATTATAACTGTTGTCATA
TTTATATGAGGCTGTTGTCTTTTCCTTCTGAGCCTGCCTTTATCCCCCCACCCAGGAGTATCCTCTTGCCAAAGC
AAAAGACTTTTTCCTTGGCTTTAGCCTTAAAGATACTTGAAGGTCTAGGTGCTTTAACCTCACATACCCTCACTT
AAACTTTTATCACTGTTGCATATACCAGTTGTGATACAATAAAGAATGTATCTGG

FIGURE 1505

MGNGESQLSSVPAQKLGWFIQEYLKPYEECQTLIDEMVNTICDVCRNPEQFPLVQGVAIGGSYGRKTVLRGNSDG
TLVLFFSDLKQFQDQKRSQRDILDKTGDKLKFCLFTKWLKNNFEIQKSLDGSTIQVFTKNQRISFEVLAAFNALS
LNDNPSPWIYRELKRSLDKTNASPGEFAVCFTELQQKFFDNRPGKLKDLILLIKHWHQQCQKKIKDLPSLSPYAL
ELLTVYAWEQGCRKDNFDIAEGVRTVLELIKCQEKLCIYWMVNYNFEDETIRNILLHQLQSARPVILDPVDPTNN
VSGDKICWQWLKKEAQTWLTSPNLDNELPAPSWNVLPAPLFTTPGHLLDKFIKEFLQPNKCFLEQIDSAVNIIRT
FLKENCFRQSTAKIQIVRGGSTAKGTALKTGSDADLVVFHNSLKSYTSQKNERHKIVKEIHEQLKAFWREKEEEL
EVSFEPPKWKAPRVLSFSLKSKVLNESVSFDVLPAFNALGQLSSGSTPSPEVYAGLIDLYKSSDLPGGEFSICFT
VLQRNFIRSRPTKLKDLIRLVKHWYKECERKLKPKGSLPPKYALELLTIYAWEQGSGVPDFDTAEGFRTVLELVT
QYQQLGIFWKVNYNFEDETVRKFLLSQLQKTRPVILDPGEPTGDVGGGDRWCWHLLDKEAKVRLSSPCFKDGTGN
PIPPWKVPTMQTPGSCGARIHPIVNEMFSSRSHRILNNNSKRNFWRSSGNRF

FIGURE 1506

AAGAGATGATTTCTCCATCCTGAACGTGCAGCGAGCTTGTCAGGAAGATCGGAGGTGCCAAGTAGCAGAGAAAGC
ATCCCCCAGCTCTGACAGGGAGACAGCACATGTCTAAGGCCCACAAGCCTTGGCCCTACCGGAGGAGAAGTCAAT
TTTCTTCTCGAAAATACCTGAAAAAAGAAATGAATTCCTTCCAGCAACAGCCACCGCCATTCGGCACAGTGCCAC
CACAAATGATGTTTCCTCCAAACTGGCAGGGGGCAGAGAAGGACGCTGCTTTCCTCGCCAAGGACTTCAACTTTC
TCACTTTGAACAATCAGCCACCACCAGGAAACAGGAGCCAACCAAGGGCAATGGGGCCCGAGAACAACCTGTACA
GCCAGTACGAGCAGAAGGTGCGCCCCTGCATTGACCTCATCGACTCCCTGCGGGCTCTGGGTGTGGAGCAGGACC
TGGCCCTGCCAGCCATCGCCGTCATCGGGGACCAGAGCTCGGGCAAGAGCTCTGTGCTGGAGGCACTGTCAGGAG
TCGCGCTTCCCAGAGGCAGCGGAATCGTAACCAGGTGTCCGCTGGTGCTGAAACTGAAAAAGCAGCCCTGTGAGG
CATGGGCCGGAAGGATCAGCTACCGGAACACCGAGCTAGAGCTTCAGGACCCTGGCCAGGTGGAGAAAGAGATAC
ACAAAGCCCAGAACGTCATGGCCGGGAATGGCCGGGGCATCAGCCATGAGCTCATCAGCCTGGAGATCACCTCCC
CTGAGGTTCCAGACCTGACCATCATTGACCTTCCCGGCATCACCAGGGTGGCTGTGGACAACCAGCCCCGAGACA
TCGGACTGCAGATCAAGGCTCTCATCAAGAAGTACATCCAGAGGCAGCAGACGATCAACTTGGTGGTGGTTCCCT
GTAACGTGGACATTGCCACCACGGAGGCGCTGAGCATGGCCCATGAGGTGGACCCGGAAGGGGACAGGACCATCG
GTATCCTGACCAAACCAGATCTAATGGACAGGGGCACTGAGAAAAGCGTCATGAATGTGGTGCGGAACCTCACGT
ACCCCCTCAAGAAGGGCTACATGATTGTGAAGTGCCGGGGCCAGCAGGAGATCACAAACAGGCTGAGCTTGGCAG
AGGCAACCAAGAAAGAAATTACATTCTTTCAAACACATCCATATTTCAGAGTTCTCCTGGAGGAGGGGTCAGCCA
CGGTTCCCCGACTGGCAGAAAGACTTACCACTGAACTCATCATGCATATCCAAAAATCGCTCCCGTTGTTAGAAG
GACAAATAAGGGAGAGCCACCAGAAGGCGACCGAGGAGCTGCGGCGTTGCGGGGCTGACATCCCCAGCCAGGAGG
CCGACAAGATGTTCTTTCTAATTGAGAAAATCAAGATGTTTAATCAGGACATCGAAAAGTTAGTAGAAGGAGAAG
AAGTTGTAAGGGAGAATGAGACCCGTTTATACAACAAAATCAGAGAGGATTTTAAAAACTGGGTAGGCATACTTG
CAACTAATACCCAAAAAGTTAAAAATATTATCCACGAAGAAGTTGAAAAATATGAAAAGCAGTATCGAGGCAAGG
AGCTTCTGGGATTTGTCAACTACAAGACATTTGAGATCATCGTGCATCAGTACATCCAGCAGCTGGTGGAGCCCG
CCCTTAGCATGCTCCAGAAAGCCATGGAAATTATCCAGCAAGCTTTCATTAACGTGGCCAAAAAACATTTTGGCG
AATTTTTCAACCTTAACCAAACTGTTCAGAGCACGATTGAAGACATAAAAGTGAAACACACAGCAAAGGCAGAAA
ACATGATCCAACTTCAGTTCAGAATGGAGCAGATGGTTTTTTGTCAAGATCAGATTTACAGTGTTGTTCTGAAGA
AAGTCCGAGAAGAGATTTTTAACCCTCTGGGGACGCCTTCACAGAATATGAAGTTGAACTCTCATTTTCCCAGTA
ATGAGTCTTCGGTTTCCTCCTTTACTGAAATAGGCATCCACCTGAATGCCTACTTCTTGGAAACCAGCAAACGTC
TCGCCAACCAGATCCCATTTATAATTCAGTATTTTATGCTCCGAGAGAATGGTGACTCCTTGCAGAAAGCCATGA
TGCAGATACTACAGGAAAAAAATCGCTATTCCTGGCTGCTTCAAGAGCAGAGTGAGACCGCTACCAAGAGAAGAA
TCCTTAAGGAGAGAATTTACCGGCTCACTCAGGCGCGACACGCACTCTGTCAATTCTCCAGCAAAGAGATCCACT
GAAGGGCGGCGATGCCTGTGGTTGTTTTCTTGTGCGTACTCATTCATTCTAAGGGGAGTCGGTGCAGGATGCCGC
TTCTGCTTTGGGGCCAAACTCTTCTGTCACTATCAGTGTCCATCTCTACTGTACTCCCTCAGCATCAGAGCATGC
ATCAGGGGTCCACACAGGCTCAGCTCTCTCCACCACCCAGCTCTTCCCTGACCTTCACGAAGGGATGGCTCTCCA
GTCCTTGGGTCCCGTAGCACACAGTTACAGTGTCCTAAGATACTGCTATCATTCTTCGCTAATTTGTATTTGTAT
TCCCTTCCCCCTACAAGATTATGAGACCCCAGAGGGGGAAGGTCTGGGTCAAATTCTTCTTTTGTATGTCCAGTC
TCCTGCACAGCACCTGCAGCATTGTAACTGCTTAATAAATGACATCTCACTGAACGAATGAGTGCTGTGTAAGTG
ATGGAGATACCTGAGGCTATTGCTCAAGCCCAGGCCTTGGACATTTAGTGACTGTTAGCCGGTCCCTTTCAGATC
CAGTGGCCATGCCCCCTGCTTCCCATGGTTCACTGTCATTGTGTTTCCCAGCCTCTCCACTCCCCCGCCAGAAAG
GAGCCTGAGTGATTCTCTTTTCTTCTTGTTTCCCTGATTATGATGAGCTTCCATTGTTCTGTTAAGTCTTGAAGA
GGAATTTAATAAAGCAAAGAAACTTTTTAAAAACGT

FIGURE 1507

MSKAHKPWPYRRRSQFSSRKYLKKEMNSFQQQPPPFGTVPPQMMFPPNWQGAEKDAAFLAKDFNFLTLNNQPPPG
NRSQPRAMGPENNLYSQYEQKVRPCIDLIDSLRALGVEQDLALPAIAVIGDQSSGKSSVLEALSGVALPRGSGIV
TRCPLVLKLKKQPCEAWAGRISYRNTELELQDPGQVEKEIHKAQNVMAGNGRGISHELISLEITSPEVPDLTIID
LPGITRVAVDNQPRDIGLQIKALIKKYIQRQQTINLVVVPCNVDIATTEALSMAHEVDPEGDRTIGILTKPDLMD
RGTEKSVMNVVRNLTYPLKKGYMIVKCRGQQEITNRLSLAEATKKEITFFQTHPYFRVLLEEGSATVPRLAERLT
TELIMHIQKSLPLLEGQIRESHQKATEELRRCGADIPSQEADKMFFLIEKIKMFNQDIEKLVEGEEVVRENETRL
YNKIREDFKNWVGILATNTQKVKNIIHEEVEKYEKQYRGKELLGFVNYKTFEIIVHQYIQQLVEPALSMLQKAME
IIQQAFINVAKKHFGEFFNLNQTVQSTIEDIKVKHTAKAENMIQLQFRMEQMVFCQDQIYSVVLKKVREEIFNPL
GTPSQNMKLNSHFPSNESSVSSFTEIGIHLNAYFLETSKRLANQIPFIIQYFMLRENGDSLQKAMMQILQEKNRY
SWLLQEQSETATKRRILKERIYRLTQARHALCQFSSKEIH

FIGURE 1508

CTCTGGGCACTTTTGAACTCACGAACCTTGCGCAAAACCCAGAAGATGTATTCATGAGCCACCCAGGCCACTGAC
CTCCCACTTTGGGGAACTCAAAGGACTGACCTGCCCCTGCCGCCTGTGCCCCTTGCGTGGCGCTCGCAGAGGATA
CGTGCTACACGGCCTTGTCCGGCCTGTCGACCCGTGCTAGTGGGAGCCTAGAGAATGGGGCGCTCCTGGTCGTGC
CGTGGGCTCCATGGGAGAGACATTGCGGGTTTCTGGTTGGACGGCCCTTTTCTGGCTCCTGTGTGGAGTTATTCA
CTCTCCCAGAGGCTCCTGGAGCCAGCCACCCTAACTGAGCTGCCAGTGGGGTCGTGAGGCAAGATCCCCGCCACC
CGGGGACATCTTCAATCTAGGCGAGGCGAAGCTGAGCGGGTCTAGTGGAAAGATTGTGTCTGGTCGTTTGACCAC
ACACCGCCCTGATTTGCTGTTTTCTTTTTTTAGGGAGAAGGGCTTTTCTTTAGTGGAGAAATGGAACTCGCCCCC
CTACCCCCTTGTCTGCTGCTCCCAGCCACGTTGGTGGTATTGGCCGATGAGCTGGTTTGACTCATTAATTTCTCT
CAATTTGGGTCCCAGCTAAAGAGGTGGGGTGAAGCTGGGGACAGCTTTCCTGGGTGAGTTTTTCTTTTGAATAAT
GTAGTGCAGTCACCCTGTGGCAAATGCCAGGACAGCTGCAGGTGCCCATTAGCAACGCCTGCCTTCTGGGCAAGG
TGAGGGATGCCATACCTTGAGACCAAGCCGGTGCCCACCTAAGGGCTAAGGCCTCTTGCTGGTGCACATGACATT
TGTCCTGCAGAGCTGGGGGGAAGGCGATGTGGTGACCCCACCCCCACCCGTTAATTTAAAGCTGTTTCTAAACAG
TTGAGTTTCTTCTAAAGAGGAAGCCTTGCCCAGCAAGGACCAGTGAGACAGCCGGATCTTGGAGACAATTACAAG
ACGGGGAGTGAGACTCCTGATTGCTCTGGAAGCCTGCTGATTTCTACAACTGATCATTTGCAGCTGCTGGTTTTG
GTTTCCACCTTACCCTACTGGCTGTAAAAACACAAATGTGTACTTTATTGATTTTCTTTCTAATTCTCCCGCATT
GGTGGCTTGGGACTTGGGAGAGGGAGCAAGCCTTCCTCCATGGCCCATCACTCGGCTGTGGAGAACAAAGACCAA
TGTGAAGACACTACAGAGGATTCTGTCTTCCAGGCCCAGTCCACTGGGGAGTGCTGGAATGGGGACCTGGGGTGG
GGAGGCAGAGGGTCACTTTACATAGGATTAAGTTCGAGGTGGCTACCGATTTCAGCACATGCACTACTGAAATTT
ACACAAAAAGAAAGCTGTGAAATTGAAGTCCCAATTTAAGAGTCCTGAGGCAGAACCTGGTGGCTGGAGGCATTC
CCAGAGGTGGGGAAGAGAGCCTGCCCGGCCGGAGAACATCTGCCTTGCTGCACCTGAGGCCCAGCAGAGCCGTTC
CTGGGACTGTCAGATAATCGGTGCAGCGGTGGAAGGAGCCTGCGGCTGCTGGCACAGACTTCACACAGCACCTCC
TCTCTGCTGGGTTTCCACACAGCCTGTCTTCAGATCCTGCTGCCGCGTGCGACCAGAGGTGGGAGGCCCCTGGTG
GCATGGAAGAGGGAGGGTCAGTGCCAAGTCTCAGGAGGAGGGCGCATGTGTGTATCACCCTCAGCTGGCGGAACC
TGGCTGCGAACTGTGCAGTTACGTTGCATCCACAGGATTCCAGTTGCGTGTCTGTTTCCTTCTCTTTCTCCGTAT
TTATTTTTTTATTCTTCGGAGGAGGTGGACATTTCGGAAGTGGTGGGGACTAAGGGAAGAACTCTCTAGTTCCCT
CAGTGTGAAGCCTGTCGTGTTCTCTCCCCTTGCACTGGTCATCAGTATTGTGTAAAGGAACAACTGATATACTTG
AGTGTGCAAGCAAAGAACCCATTTGCCATGCTGCTATGAAGACTACTTTTAGATCAACAATAAAAAAAAACCTAC
AAAAAAACCTTTATTCTTTAATTGTTGCTTTTACGGTGATATTGTGCATGCAAACCAGGAGCATTTTGTGTCTTA
AGAAAAATAATCTTAGAACAGATGGCTGTGAAAATTACACCCATGCACAGAACAAGCCACAGGAATAATAGTTCA
GGATTTGGTTTTTCTCTTTTTCTTGTAAACCTGGAGGGTTGATATATTCTTTCCATGCAGTTATTAGAACTTAGT
TTTGTTCCAACAGTTAAACTTGCAATGAAAAGAAAATGTGCCATTTTTTTCACTCAGAATTATTCATAGCTGTAT
ATTTGAAACTGCTAATTACACACGTGTGATGTATGTTGGTTTTTTAGTGCAATTTCTTCTGTAGCTATTCTTTGA
CCAAACTGTGGGTATTGTTAATATTAATTTATATTTGTCTCATTTTGTATGTATGTGTAGTGTGTTTGTGAGTAT
GTGTGGTTTATAATCTGACAAAGTCATGAAGCTCAGTTTGGCTGTAATTTAATTCCCCTTCCCTTATTTTTATTT
ATTTTTGTACTGTGCTGATTCAATAAAATGCACTGACCATCCAAAAAAAATCTATGTCGGGTGCGGAGAAAGAGG
TA**ATG**AATGCGGATTCGATATCAGCTTAT

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FIGURE 1509

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FIGURE 1510

CTCCGGCCCGGCCCCGAGCACCGCCTCCCCAGCCAGCGCCGCCGCGATGGCGGAGGACAGCGAGTCTGCGGCCAG
CCAGCAGAGCCTGGAACTGGACGACCAGGACACGTGCGGGATAGACGGGGACAATGAGGAGGAGACGGAGCACGC
CAAAGGAAGTCCTGGAGGGTATTTGGGAGCCAAAAAGAAAAAGAAGAAACAGAAGAGAAAAAAGGAGAAACCAAA
TTCCGGAGGCACCAAGTCAGACTCGGCATCTGATTCCCAGGAGATTAAAATTCAGCAGCCTTCGAAAAATCCCAG
TGTTCCAATGCAGAAGTTGCAGGATATCCAGAGAGCAATGGAGCTGCTATCCGCATGCCAGGGCCCAGCCAGGAA
CATTGATGAGGCTGCAAAGCACAGATACCAGTTTTGGGACACACAACCGGTACCAAAACTAGATGAAGTCATAAC
ATCTCATGGTGCAATTGAACCAGATAAAGACAACGTACGCCAAGAACCGTATTCTTTGCCACAGGGTTTTATGTG
GGACACTTTAGACTTGAGTGATGCCGAAGTGCTCAAGGAGTTATACACGTTGTTAAATGAGAATTACGTAGAAGA
TGATGACAATATGTTCCGATTTGACTATTCACCCGAGTTCCTGTTGTGGGCTCTGCGTCCACCAGGCTGGCTCCT
GCAGTGGCACTGTGGGGTCAGAGTGTCTTCAAATAAAAAACTGGTCGGGTTCATAAGTGCCATCCCAGCAAACAT
TCGGATTTATGACAGTGTGAAGAAGATGGTAGAAATCAACTTTCTTTGTGTTCATAAGAAGTTGAGATCGAAACG
GGTAGCCCCAGTGCTAATCCGAGAGATCACTAGAAGAGTGAACCTGGAAGGGATCTTCCAGGCTGTGTACACCGC
GGGAGTGGTTCTTCCTAAGCCCATAGCCACATGCAGATACTGGCATCGATCACTAAACCCCAGAAAATTGGTAGA
AGTGAAATTTTCTCACTTGAGTAGAAATATGACTTTACAGAGAACAATGAAGCTATACAGACTTCCAGATGTTAC
AAAGACTTCAGGTTTGAGACCAATGGAACCAAAAGATATCAAATCAGTTCGAGAATTAATCAACACTTACCTGAA
GCAGTTTCATCTGGCTCCAGTGATGGATGAAGAGGAAGTAGCCCACTGGTTCCTCCCCCGGGAGCACATTATTGA
CACGTTTGTAGTGGAGAGCCCCAACGGTAAACTGACTGATTTCCTGAGCTTCTATACGCTCCCCTCCACGGTGAT
GCACCACCCTGCTCACAAGAGCCTCAAAGCCGCCTACTCATTCTACAACATCCACACAGAGACGCCCCTGCTGGA
CCTCATGAGCGACGCGCTCATCCTGGCTAAATCGAAAGGATTTGATGTATTCAATGCACTGGATTTGATGGAAAA
TAAGACATTCTTGGAAAAACTCAAGTTTGGTATAGGAGATGGCAATTTGCAGTATTACCTGTACAATTGGAGGTG
TCCAGGTACAGATTCTGAAAAGGTTGGACTAGTACTACAATAGATGGATATTTTTATTTCTAGAACTCTGACATC
ATCATTTGTTAATATTTAATGATTTCTGGAACTGCCATTCCAAAGAAGAATAAAAGCACAACTCAAGTGAAATTG
AAGTAGTCGATAATCAGAAAAGATGACAAAAGTCCACATGTGACATTTGTACGTTTCTAGCTAGAATGTTAAACT
TCATCCTTTTTTTACTGTTGACCTATTTGTGGGAGGGATGAAAGGCTACAAAGAGCACATTCTTGTAATTTTCAA
ATTTTTGCCTGTCTCTTGAAGAGGTATTTTTTCACCCTTAGAAAAGGGACTGTTTTTCTATGGACTAAGTAGAAG
TTACAGAGTCATGTAAGAAAATCTTTGCTATTGTGTGGAGAGAAATTGCTGCATTTCTGTTTCTTAAGTGATGGT
ACATTTGTCCATGTAACAGAACAAAAGATCCATTTGGAAATTTTTTTTACTGGTATCACCTTACATGGTATCACT
GGGAACATTTATGGAATCAACACTTCTGTAGCTCAGTGACAGGTGGTGGTTGTTTAAGTGCAGAGCAATATTAAA
TGTACTGGTGACTAGTACATGTATTTCTCCATAAGCAGAGTTGCCGAATCAATAAACATGCAAGTTTGTACTTTG
ATCTTTACCAGGTCAGTGGATTGCTTCAAAAGCAGAGTTTTGTGCAAGCACTCACTGTGCTCTCTGAAAGAGCCT
GAGGCCGGGCGTGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCAAGGTGGGCAGATCATGAGGTCAGG
AGATCGAGACCATTCTGGCCAACATAGTGAAACCCCATCTCTACTAAAAATACAAAAATTAGCCGGGCGTGGTGG
CGTGTGCCTGTAGTCCCAGCTGCTTGGGAGGCTGAGGCAGGAGAATCGCTTGAACCTGAGAGGTGAGGTTGCAGT
GAGCCGAGATCGAGCCACTGCACTCCAGCCTGGGTGACAGAGCGTGAGACTCCGTCTCAAAAAAAAAAAAAAAAG
AAAGAGCCTGTACCCGCGACTAACTAGACTTTTCTTGCTGTTGTGCAAAGTTCAGTTTCTTCTCAGCAACATCAA
GGATATATGAAGAAAAGGAAATAAAAAACTGTAAAGTCAAAAGAGATGCCTGGTGGAACTTATTCGTGCTATCAG
GGCATTGATAGTTTGAATGTTTTTATTACTTATGCAAAATTGCACATACTCCTCTATGCTGATTTTATCATGAAA
ACTGTCATGTGTCATGCTAATGGAAAATGTCTTATTTGTAAATAAGTATTCATAATTTTGCCG

FIGURE 1511

MAEDSESAASQQSLELDDQDTCGIDGDNEEETEHAKGSPGGYLGAKKKKKKQKRKKEKPNSGGTKSDSASDSQEI
KIQQPSKNPSVPMQKLQDIQRAMELLSACQGPARNIDEAAKHRYQFWDTQPVPKLDEVITSHGAIEPDKDNVRQE
PYSLPQGFMWDTLDLSDAEVLKELYTLLNENYVEDDDNMFRFDYSPEFLLWALRPPGWLLQWHCGVRVSSNKKLV
GFISAIPANIRIYDSVKKMVEINFLCVHKKLRSKRVAPVLIREITRRVNLEGIFQAVYTAGVVLPKPIATCRYWH
RSLNPRKLVEVKFSHLSRNMTLQRTMKLYRLPDVTKTSGLRPMEPKDIKSVRELINTYLKQFHLAPVMDEEEVAH
WFLPREHIIDTFVVESPNGKLTDFLSFYTLPSTVMHHPAHKSLKAAYSFYNIHTETPLLDLMSDALILAKSKGFD
VFNALDLMENKTFLEKLKFGIGDGNLQYYLYNWRCPGTDSEKVGLVLQ

FIGURE 1512

CTCCGGCCCGGCCCCGAGCACCGCCTCCCCAGCCAGCGCCGCCGCGATGGCGGAGGACAGCGAGTCTGCGGCCAG
CCAGCAGAGCCTGGAACTGGACGACCAGGACACGTGCGGGATAGACGGGGACAATGAGGAGGAGACGGAGCACGC
CAAAGGAAGTCCTGGAGGGTATTTGGGAGCCAAAAAGAAAAAGAAGAAACAGAAGAGAAAAAAGGAGAAACCAAA
TTCCGGAGGCACCAAGTCAGACTCGGCATCTGATTCCCAGGAGATTAAAATTCAGCAGCCTTCGAAAAATCCCAG
TGTTCCAATGCAGAAGTTGCAGGATATCCAGAGAGCAATGGAGCTGCTATCCGCATGCCAGGGCCCAGCCAGGAA
CATTGATGAGGCTGCAAAGCACAGATACCAGTTTTGGGACACACAACCGGTACCAAAACTAGATGAAGTCATAAC
ATCTCATGGTGCAATTGAACCAGATAAAGACAACGTACGCCAAGAACCGTATTCTTTGCCACAGGGTTTTATGTG
GGACACTTTAGACTTGAGTGATGCCGAAGTGCTCAAGGAGTTATACACGTTGTTAAATGAGAATTACGTAGAAGA
TGATGACAATATGTTCCGATTTGACTATTCACCCGAGTTCCTGTTGTGGGCTCTGCGTCCACCAGGCTGGCTCCT
GCAGTGGCACTGTGGGGTCAGAGTGTCTTCAAATAAAAAACTGGTCGGGTTCATAAGTGCCATCCCAGCAAACAT
TCGGATTTATGACAGTGTGAAGAAGATGGTAGAAATCAACTTTCTTTGTGTTCATAAGAAGTTGAGATCGAAACG
GGTAGCCCCAGTGCTAATCCGAGAGATCACTAGAAGAGTGAACCTGGAAGGGATCTTCCAGGCTGTGTACACCGC
GGGAGTGGTTCTTCCTAAGCCCATAGCCACATGCAGATACTGGCATCGATCACTAAACCCCAGAAAATTGGTAGA
AGTGAAATTTTCTCACTTGAGTAGAAATATGACTTTACAGAGAACAATGAAGCTATACAGACTTCCAGATGTTAC
AAAGACTTCAGGTTTGAGACCAATGGAACCAAAAGATATCAAATCAGTTCGAGAATTAATCAACACTTACCTGAA
GCAGTTTCATCTGGCTCCAGTGATGGATGAAGAGGAAGTAGCCCACTGGTTCCTCCCCCGGGAGCACATTATTGA
CACGTTTGTAGTGGAGAGCCCCAACGGTAAACTGACTGATTTCCTGAGCTTCTATACGCTCCCCTCCACGGTGAT
GCACCACCCTGCTCACAAGAGCCTCAAAGCCGCCTACTCATTCTACAACATCCACACAGAGACGCCCCTGCTGGA
CCTCATGAGCGACGCGCTCATCCTGGCTAAATCGAAAGGATTTGATGTATTCAATGCACTGGATTTGATGGAAAA
TAAGACATTCTTGGAAAAACTCAAGTTTGGTATAGGAGATGGCAATTTGCAGTATTACCTGTACAATTGGAGGTG
TCCAGGTACAGATTCTGAAAAGGTTGGACTAGTACTACAATAGATGGATATTTTTATTTCTAGAACTCTGACATC
ATCATTTGTTAATATTTAATGATTTCTGGAACTGCCATTCCAAAGAAGAATAAAAGCACAACTCAAGTGAAATTG
AAGTAGTCGATAATCAGAAAAGATGACAAAAGTCCACATGTGACATTTGTACGTTTCTAGCTAGAATGTTAAACT
TCATCCTTTTTTTACTGTTGACCTATTTGTGGGAGGGATGAAAGGCTACAAAGAGCACATTCTTGTAATTTTCAA
ATTTTTGCCTGTCTCTTGAAGAGGTATTTTTTCACCCTTAGAAAAGGGACTGTTTTTCTATGGACTAAGTAGAAG
TTACAGAGTCATGTAAGAAAATCTTTGCTATTGTGTGGAGAGAAATTGCTGCATTTCTGTTTCTTAAGTGATGGT
ACATTTGTCCATGTAACAGAACAAAAGATCCATTTGGAAATTTTTTTTACTGGTATCACCTTACATGGTATCACT
GGGAACATTTATGGAATCAACACTTCTGTAGCTCAGTGACAGGTGGTGGTTGTTTAAGTGCAGAGCAATATTAAA
TGTACTGGTGACTAGTACATGTATTTCTCCATAAGCAGAGTTGCCGAATCAATAAACATGCAAGTTTGTACTTTG
ATCTTTACCAGGTCAGTGGATTGCTTCAAAAGCAGAGTTTTGTGCAAGCACTCACTGTGCTCTCTGAAAGAGCCT
GAGGCCGGGCGTGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCAAGGTGGGCAGATCATGAGGTCAGG
AGATCGAGACCATTCTGGCCAACATAGTGAAACCCCATCTCTACTAAAAATACAAAAATTAGCCGGGCGTGGTGG
CGTGTGCCTGTAGTCCCAGCTGCTTGGGAGGCTGAGGCAGGAGAATCGCTTGAACCTGAGAGGTGAGGTTGCAGT
GAGCCGAGATCGAGCCACTGCACTCCAGCCTGGGTGACAGAGCGTGAGACTCCGTCTCAAAAAAAAAAAAAAAAG
AAAGAGCCTGTACCCGCGACTAACTAGACTTTTCTTGCTGTTGTGCAAAGTTCAGTTTCTTCTCAGCAACATCAA
GGATATATGAAGAAAAGGAAATAAAAAACTGTAAAGTCAAAAGAGATGCCTGGTGGAACTTATTCGTGCTATCAG
GGCATTGATAGTTTGAATGTTTTTATTACTTATGCAAAATTGCACATACTCCTCTATGCTGATTTTATCATGAAA
ACTGTCATGTGTCATGCTAATGGAAAATGTCTTATTTGTAAATAAGTATTCATAATTTTGCCG

FIGURE 1513

MAEDSESAASQQSLELDDQDTCGIDGDNEEETEHAKGSPGGYLGAKKKKKKQKRKKEKPNSGGTKSDSASDSQEI
KIQQPSKNPSVPMQKLQDIQRAMELLSACQGPARNIDEAAKHRYQFWDTQPVPKLDEVITSHGAIEPDKDNVRQE
PYSLPQGFMWDTLDLSDAEVLKELYTLLNENYVEDDDNMFRFDYSPEFLLWALRPPGWLLQWHCGVRVSSNKKLV
GFISAIPANIRIYDSVKKMVEINFLCVHKKLRSKRVAPVLIREITRRVNLEGIFQAVYTAGVVLPKPIATCRYWH
RSLNPRKLVEVKFSHLSRNMTLQRTMKLYRLPDVTKTSGLRPMEPKDIKSVRELINTYLKQFHLAPVMDEEEVAH
WFLPREHIIDTFVVESPNGKLTDFLSFYTLPSTVMHHPAHKSLKAAYSFYNIHTETPLLDLMSDALILAKSKGFD
VFNALDLMENKTFLEKLKFGIGDGNLQYYLYNWRCPGTDSEKVGLVLQ

FIGURE 1514

GGCCACAGGCCAGCGCCACTCTGCCAGGCTCCCGGCCATCGCCCGCCTGGTGCGCCGCCCGCCAGCTCTTTGCCC
GCGCGGGGCCGCCCGCCGCGGGCTCAGGGCAGACCATGCGCCCGCCAAGTCCGCTGCCCGCCCGCTGGCTATGCG
TGCTGGCAGGCGCCCTCGCCTGGGCCCTTGGGCCGGCGGGCGGCCAGGCGGCCAGGCTGCAGGAGGAGTGTGACT
ATGTGCAGATGATCGAGGTGCAGCACAAGCAGTGCCTGGAGGAGGCCCAGCTGGAGAATGAGACAATAGGCTGCA
GCAAGATGTGGGACAACCTCACCTGCTGGCCAGCCACCCCTCGGGGCCAGGTAGTTGTCTTGGCCTGTCCCCTCA
TCTTCAAGCTCTTCTCCTCCATTCAAGGCCGCAATGTAAGCCGCAGCTGCACCGACGAAGGCTGGACGCACCTGG
AGCCTGGCCCGTACCCCATTGCCTGTGGTTTGGATGACAAGGCAGCGAGTTTGGATGAGCAGCAGACCATGTTCT
ACGGTTCTGTGAAGACCGGCTACACCATTGGCTACGGCCTGTCCCTCGCCACCCTTCTGGTCGCCACAGCTATCC
TGAGCCTGTTCAGGAAGCTCCACTGCACGCGGAACTACATCCACATGCACCTCTTCATATCCTTCATCCTGAGGG
CTGCCGCTGTCTTCATCAAAGACTTGGCCCTCTTCGACAGCGGGGAGTCGGACCAGTGCTCCGAGGGCTCGGTGG
GCTGTAAGGCAGCCATGGTCTTTTTCCAATATTGTGTCATGGCTAACTTCTTCTGGCTGCTGGTGGAGGGCCTCT
ACCTGTACACCCTGCTTGCCGTCTCCTTCTTCTCTGAGCGGAAGTACTTCTGGGGGTACATACTCATCGGCTGGG
GGGTACCCAGCACATTCACCATGGTGTGGACCATCGCCAGGATCCATTTTGAGGATTATGGGTGCTGGGACACCA
TCAACTCCTCACTGTGGTGGATCATAAAGGGCCCCATCCTCACCTCCATCTTGGTAAACTTCATCCTGTTTATTT
GCATCATCCGAATCCTGCTTCAGAAACTGCGGCCCCCAGATATCAGGAAGAGTGACAGCAGTCCATACTCAAGGC
TAGCCAGGTCCACACTCCTGCTGATCCCCCTGTTTGGAGTACACTACATCATGTTCGCCTTCTTTCCGGACAATT
TTAAGCCTGAAGTGAAGATGGTCTTTGAGCTCGTCGTGGGGTCTTTCCAGGGTTTTGTGGTGGCTATCCTCTACT
GCTTCCTCAATGGTGAGGTGCAGGCGGAGCTGAGGCGGAAGTGGCGGCGCTGGCACCTGCAGGGCGTCCTGGGCT
GGAACCCCAAATACCGGCACCCGTCGGGAGGCAGCAACGGCGCCACGTGCAGCACGCAGGTTTCCATGCTGACCC
GCGTCAGCCCAGGTGCCCGCCGCTCCTCCAGCTTCCAAGCCGAAGTCTCCCTGGTCTGACCACCAGGATCCCAGG
GGCCCAAGGCGGCCCCTCCCGCCCCTTCCCACTCACCCCGGCAGACGCCGGGGACAGAGGCCTGCCCGGGCGCGG
CCAGCCCCGGCCCTGGGCTCGGAGGCTGCCCCCGGCCCCCTGGTCTCTGGTCCGGACACTCCTAGAGAACGCAGC
CCTAGAGCCTGCCTGGAGCGTTTCTAGCAAGTGAGAGAGATGGGAGCTCCTCTCCTGGAGGATTGCAGGTGGAAC
TCAGTCATTAGACTCCTCCTCCAAAGGCCCCCTACGCCAATCAAGGGCAAAAAGTCTACATACTTTCATCCTGAC
TCTGCCCCCTGCTGGCTCTTCTGCCCAATTGGAGGAAAGCAACCGGTGGATCCTCAAACAACACTGGTGTGACCT
GAGGGCAGAAAGGTTCTGCCCGGGGAAGGTCACCAGCACCAACACCACGGTAGTGCCTGAAATTTCACCATTGCT
GTCAAGTTCCTTTGGGTTAAGCATTACCACTCAGGCATTTGACTGAAGATGCAGCTCACTACCCTATTCTCTCTT
TACGCTTAGTTATCAGCTTTTTAAAGTGGGTTATTCTGGAGTTTTTGTTTGGAGAGCACACCTATCTTAGTGGTT
CCCCACCGAAGTGGACTGGCCCCTGGGTCAGTCTGGTGGGAGGACGGTGCAACCCAAGGACTGAGGGACTCTGAA
GCCTCTGGGAAATGAGAAGGCAGCCACCAGCGAATGCTAGGTCTCGGACTAAGCCTACCTGCTCTCCAAGTCTCA
GTGGCTTCATCTGTCAAGTGGGATCTGTCACACCAGCCATACTTATCTCTCTGTGCTGTGGAAGCAACAGGAATC
AAGAGCTGCCCTCCTTGTCCACCCACCTATGTGCCAACTGTTGTAACTAGGCTCAGAGATGTGCACCCATGGGCT
CTGACAGAAAGCAGATACCTCACCCTGCTACACATACAGGATTTGAACTCAGATCTGTCTGATAGGAATGTGAAA
GCACGGACTCTTACTGCTAACTTTTGTGTATCGTAACCAGCCAGATCCTCTTGGTTATTTGTTTACCACTTGTAT
TATTAATGCCATTATCCTGAATTCCCCTTGCCACCCCACCCTCCCTGGCGTGTGGCTGAGGAGGCCTCCATCTCA
TGTATCATCTGGATAGGAGCCTGCTGGTCACAGCCTCCTCTGTCTGCCCTTCACCCCAGTGGCCACTCAGCTTCC
TACCCACACCTCTGCCAGAAGATCCCCTCAGGACTGCAACAGGCTTGTGCAACAATAAATGTTGGCTTGGA

FIGURE 1515

MRPPSPLPARWLCVLAGALAWALGPAGGQAARLQEECDYVQMIEVQHKQCLEEAQLENETIGCSKMWDNLTCWPA
TPRGQVVVLACPLIFKLFSSIQGRNVSRSCTDEGWTHLEPGPYPIACGLDDKAASLDEQQTMFYGSVKTGYTIGY
GLSLATLLVATAILSLFRKLHCTRNYIHMHLFISFILRAAAVFIKDLALFDSGESDQCSEGSVGCKAAMVFFQYC
VMANFFWLLVEGLYLYTLLAVSFFSERKYFWGYILIGWGVPSTFTMVWTIARIHFEDYGCWDTINSSLWWIIKGP
ILTSILVNFILFICIIRILLQKLRPPDIRKSDSSPYSRLARSTLLLIPLFGVHYIMFAFFPDNFKPEVKMVFELV
VGSFQGFVVAILYCFLNGEVQAELRRKWRRWHLQGVLGWNPKYRHPSGGSNGATCSTQVSMLTRVSPGARRSSSF
QAEVSLV

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FIGURE 1516

GGGAATTCTGAAAGCCGCTGGCGGACCGCGCGCAGCGGCCAGAGACCGAGCCCTAAGGAGAGTGCGGCGCTTCCC
GAGGCGTGCAGCTGGGAACTGCAACTCATCTGGGTTGTGCGCAGAAGGCTGGGGCAAGCGAGTAGAGAAGTGGAG
CGTAAGCCAGGGGCGTTGGGGGCCGTGCGGGTCGGGCGCGTGCCACGCCCGCGGGGTGAAGTCGGAGCGCGGGGC
CTGCTGGAGAGAGGAGCGCTGCGGACCGAGTA**ATG**GCAATGCAGATGCAGCTTGAAGCAAATGCAGATACTTCAG
TGGAAGAAGAAAGCTTTGGCCCACAACCCATTTCACGGTTAGAGCAGTGTGGCATAAATGCCAACGATGTGAAGA
AATTGGAAGAAGCTGGATTCCATACTGTGGAGGCTGTTGCCTATGCGCCAAAGAAGGAGCTAATAAATATTAAGG
GAATTAGTGAAGCCAAAGCTGATAAAATTCTGGCTGAGGCAGCTAAATTAGTTCCAATGGGTTTCACCACTGCAA
CTGAATTCCACCAAAGGCGGTCAGAGATCATACAGATTACTACTGGCTCCAAAGAGCTTGACAAACTACTTCAAG
GTGGAATTGAGACTGGATCTATCACAGAAATGTTTGGAGAATTCCGAACTGGGAAGACCCAGATCTGTCATACGC
TAGCTGTCACCTGCCAGCTTCCCATTGACCGGGGTGGAGGTGAAGGAAAGGCCATGTACATTGACACTGAGGGTA
CCTTTAGGCCAGAACGGCTGCTGGCAGTGGCTGAGAGGTATGGTCTCTCTGGCAGTGATGTCCTGGATAATGTAG
CATATGCTCGAGCGTTCAACACAGACCACCAGACCCAGCTCCTTTATCAAGCATCAGCCATGATGGTAGAATCTA
GGTATGCACTGCTTATTGTAGACAGTGCCACCGCCCTTTACAGAACAGACTACTCGGGTCGAGGTGAGCTTTCAG
CCAGGCAGATGCACTTGGCCAGGTTTCTGCGGATGCTTCTGCGACTCGCTGATGAGTTTGGTGTAGCAGTGGTAA
TCACTAATCAGGTGGTAGCTCAAGTGGATGGAGCAGCGATGTTTGCTGCTGATCCCAAAAAACCTATTGGAGGAA
ATATCATCGCCCATGCATCAACAACCAGATTGTATCTGAGGAAAGGAAGAGGGGAAACCAGAATCTGCAAAATCT
ACGACTCTCCCTGTCTTCCTGAAGCTGAAGCTATGTTCGCCATTAATGCAGATGGAGTGGGAGATGCCAAAGACT
GAATCATTGGGTTTTTCCTCTGTTAAAAACCTTAAGTGCTGCAGCCTAATGAGAGTGCACTGCTCCCTGGGGTTC
TCTACAGGCCTCTTCCTGTTGTGACTGCCAGGATAAAGCTTCCGGGAAAACAGCTATTATATCAGCTTTTCTGAT
GGTATAAACAGGAGACAGGTCAGTAGTCACAAACTGATCTAAAATGTTTATTCCTTCTGTAGTGTATTAATCTCT
GTGTGTTTTCTTTGGTTTTGGAGGAGGGGTATGAAGTATCTTTGACATGGTGCCTTAGGAATGACTTGGGTTTAA
CAAGCTGTCTACTGGACAATCTTATGTTTCCAAGAGAACTAAAGCTGGAGAGACCTGACCCTTCTCTCACTTCTA
AATTAATGGTAAAATAAAATGCCTCAGCTATGTAGCAAAGGGAATGGGTCTGCACAGATTCTTTTTTTCTGTCAG
TAAAACTCTCAAGCAGGTTTTTAAGTTGTCTGTCTGAATGATCTTGTGTAAGGGTTTGGTTATGGAGTCTTGTGC
CAAACCTACTAGGCCATTAGCCCTTCACCATCTACCTGCTTGGTCTTTCATTGCTAAGACTAACTCAAGATAATC
CTAGAGTCTTAAAGCATTTCAGGCCAGTGTGGTGTCTTGCGCCTGTACTCCCAGCACTTTGGGAGGCCGAGGCAG
GTGGATCGCTTGAGCCAGGAGTTTTAAGTCCAGCTTGGCCAAGATGGTGAAATCCCATCTCTACAAAAAATGCAG
AACTTAATCTGGACACACTGTTACACGTGCCTGTAGTCCCAGCTACTCTATAGCCTGAGGTGGGAGAATCACTTA
AGCCTGGAAGGTGGAAGTTGCAGTGAGTCGAGATTGCACTGCTGCATTCCAGCCAGGGTGACAGAGTGAGACCAT
GTTTCAAACAAGAAACATTTCAGAGGGCAAGTAAACAGATTTGATTGTGAGGCTTCTAATAAAGTAGTTATTAGT
AGTG

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FIGURE 1517

MAMQMQLEANADTSVEEESFGPQPISRLEQCGINANDVKKLEEAGFHTVEAVAYAPKKELINIKGISEAKADKIL
AVAERYGLSGSDVLDNVAYARAFNTDHQTQLLYQASAMMVESRYALLIVDSATALYRTDYSGRGELSARQMHLAR
FLRMLLRLADEFGVAVVITNQVVAQVDGAAMFAADPKKPIGGNIIAHASTTRLYLRKGRGETRICKIYDSPCLPE
AEAMFAINADGVGDAKD

FIGURE 1518

CGGGCGCCCAGAGGGCAAATGAGGGGCGGCGGGGTGGCGGGTCGGGGGGAGACGCGGAATTTCCCAGCGCGGGGG
CTCTGGCTTACCCTGCAACCGGGCAGTCTCTTTCTGTTTACGGAGAGAAAGGGGAAATGGAAAAGTCGGGGAGGC
GGTGGCTGGCGTCCGCTGCGCCGCCCCTGGGCAGGCTCAGACGCCGTGAGTCAGGGGCAGAGCAGGGCGGTCTGA
GCGTGCGGGCGACGCGGGTCTCACTCGTCCGCTCCGCTCTGGACTGCGCGCCACGCTCTGGGGTCCGGCGCCCTG
GTTCCTGCTTCTGCCGCTGCCGCCGCCGGATCCCAGTGGCCCGGCGTGCTCGGCTCCCACAGGCCTGCAGCCAGC
ATCGCACCGAACCTTCGGGGGGCCGCGGCTGGAGCGCTCGGCCGGCGTGGGAGCGCCAAGGCCGCAGATGCAATC
TTCTTACCGCGAAGAAGCCAGGGGAATAGGTAGCCACATCTTGTTTGCAGATAAGAAAGGAAGCTAACGCAGTAT
CTGCAAAGCCAGGAGTCTGACTCAGTACTTTTCTCACTCATGCATACAAAGCAGCTAAAAATGACACAGCTTATT
TACCATGCCCCTGACACTGCACTGAGCACTTTATGAGCTTGAACTCTGTTAATCCTCACGACCACCTCATGAGAC
TCTCCAGAAAGAGCAACAGTA**ATG**GAGTACATGAGCACTGGAAGTGACAATAAAGAAGAGATTGATTTATTAATT
AAACATTTAAATGTGTCTGATGTAATAGACATTATGGAAAATCTTTATGCAAGTGAAGAGCCAGCAGTTTATGAA
CCCAGTCTAATGACCATGTGTCAAGACAGTAATCAAAACGATGAGCGTTCTAAGTCTCTGCTGCTTAGTGGCCAA
GAGGTACCATGGTTGTCATCAGTCAGATATGGAACTGTGGAGGATTTGCTTGCTTTTGCAAACCATATATCCAAC
ACTGCAAAGCATTTTTATGGACAACGACCACAGGAATCTGGAATTTTATTAAACATGGTCATCACTCCCCAAAAT
GGACGTTACCAAATAGATTCCGATGTTCTCCTGATCCCCTGGAAGCTGACTTACAGGAATATTGGTTCTGATTTT
ATTCCTCGGGGCGCCTTTGGAAAGGTATACTTGGCACAAGATATAAAGACGAAGAAAAGAATGGCGTGTAAACTG
ATCCCAGTAGATCAATTTAAGCCATCTGATGTGGAAATCCAGGCTTGCTTCCGGCACGAGAACATCGCAGAGCTG
TATGGCGCAGTCCTGTGGGGTGAAACTGTCCATCTCTTTATGGAAGCAGGCGAGGGAGGGTCTGTTCTGGAGAAA
CTGGAGAGCTGTGGACCAATGAGAGAATTTGAAATTATTTGGGTGACAAAGCATGTTCTCAAGGGACTTGATTTT
CTACACTCAAAGAAAGTGATCCATCATGATATTAAACCTAGCAACATTGTTTTCATGTCCACAAAAGCTGTTTTG
GTGGATTTTGGCCTAAGTGTTCAAATGACCGAAGATGTCTATTTTCCTAAGGACCTCCGAGGAACAGAGATTTAC
ATGAGCCCAGAGGTCATCCTGTGCAGGGGCCATTCAACCAAAGCAGACATCTACAGCCTGGGGGCCACGCTCATC
CACATGCAGACGGGCACCCCACCCTGGGTGAAGCGCTACCCTCGCTCAGCCTATCCCTCCTACCTGTACATAATC
CACAAGCAAGCACCTCCACTGGAAGACATTGCAGATGACTGCAGTCCAGGGATGAGAGAGCTGATAGAAGCTTCC
CTGGAGAGAAACCCCAATCACCGCCCAAGAGCCGCAGACCTACTAAAACATGAGGCCCTGAACCCGCCCAGAGAG
GATCAGCCACGCTGTCAGAGTCTGGACTCTGCCCTCTTGGAGCGCAAGAGGCTGCTGAGTAGGAAGGAGCTGGAA
CTTCCTGAGAACATTGCTGATTCTTCGTGCACAGGAAGCACCGAGGAATCTGAGATGCTCAAGAGGCAACGCTCT
CTCTACATCGACCTCGGCGCTCTGGCTGGCTACTTCAATCTTGTTCGGGGACCACCAACGCTTGAATATGGC**TGA**

AGGATGCCATGTTTGCTCTAAATTAAGACAGCATTGATCTCCTGGAGGCTGGTTCTGCTGCCTCTACACAGGGGC
CCTGTACAGTGAATGGTGCCATTTTCGAAGGAGCAGTGTGACCTCCTGTGACCCATGAATGTGCCTCCAAGCGGC
CCTGTGTGTTTGACATGTGAAGCTATTTGATATGCACCAGGTCTCAAGGTTCTCATTTCTCAGGTGACGTGATTC
TAAGGCAGGAATTTGAGAGTTCACAGAAGGATCGTGTCTGCTGACTGTTTCATTCACTGTGCACTTTGCTCAAAA
TTTTAAAAATACCAATCACAAGGATAATAGAGTAGCCTAAAATTACTATTCTTGGTTCTTATTTAAGTATGGAAT
ATTCATTTTACTCAGAATAGCTGTTTTGTGTATATTGGTGTATATTATATAACTCTTTGAGCCTTTATTGGTAAA
TTCTGGTATACATTGAATTCATTATAATTTGGGTGACTAGAACAACTTGAAGATTGTAGCAATAAGCTGGACTAG
TGTCCTAAAAATGGCTAACTGATGAATTAGAAGCCATCTGACAGCAGGCCACTAGTGACAGTTTCTTTTGTGTTC
CTATGGAAACATTTTATACTGTACATGCTATGCTGAAGACATTCAAAACGTGATGTTTTGAATGTGGATAAAACT
GTGTAAACCACATAATTTTTGTACATCCCAAAGGATGAGAATGTGACCTTTAAGAAAAATGAAAACTTTTGTAAA
TTATTGATGATTTTGTAATTCTTATGACTAAATTTTCTTTTAAGCATTTGTATATTAAAATAGCATACTGTGTAT
GTTTTATATCAAATGCCTTCATGAATCTTTCATACATATATATATTTGTAACATTGTAAAGTATGTGAGTAGTCT
TATGTAAAGTATGTTTTTACATTATGCAAATAAAACCCAATACTTTTGTCCAATGTGGTTGGTCAAATCAACTGA
ATAAATTCAGTATTTTGCCTT

FIGURE 1519

MEYMSTGSDNKEEIDLLIKHLNVSDVIDIMENLYASEEPAVYEPSLMTMCQDSNQNDERSKSLLLSGQEVPWLSS
VRYGTVEDLLAFANHISNTAKHFYGQRPQESGILLNMVITPQNGRYQIDSDVLLIPWKLTYRNIGSDFIPRGAFG
KVYLAQDIKTKKRMACKLIPVDQFKPSDVEIQACFRHENIAELYGAVLWGETVHLFMEAGEGGSVLEKLESCGPM
REFEIIWVTKHVLKGLDFLHSKKVIHHDIKPSNIVFMSTKAVLVDFGLSVQMTEDVYFPKDLRGTEIYMSPEVIL
CRGHSTKADIYSLGATLIHMQTGTPPWVKRYPRSAYPSYLYIIHKQAPPLEDIADDCSPGMRELIEASLERNPNH
RPRAADLLKHEALNPPREDQPRCQSLDSALLERKRLLSRKELELPENIADSSCTGSTEESEMLKRQRSLYIDLGA
LAGYFNLVRGPPTLEYG

FIGURE 1520

CCTTGCTATAGAAGACCTGGGACAGAGGACTGCTGTCTGCCCTCTCTGGTCACCCTGCCTAGCTAGAGGATCTGT
GACCCCAGCCATGAGGACCCTCGCCATCCTTGCTGCCATTCTCCTGGTGGCCCTGCAGGCCCAGGCTGAGCCACT
CCAGGCAAGAGCTGATGAGGTTGCTGCAGCCCCGGAGCAGATTGCAGCGGACATCCCAGAAGTGGTTGTTTCCCT
TGCATGGGACGAAAGCTTGGCTCCAAAGCATCCAGGCTCAAGGAAAAACATGGACTGCTATTGCAGAATACCAGC
GTGCATTGCAGGAGAACGTCGCTATGGAACCTGCATCTACCAGGGAAGACTCTGGGCATTCTGCTGCTGAGCTTG
CAGAAAAAGAAAAATGAGCTCAAAATTTGCTTTGAGAGCTACAGGGAATTGCTATTACTCCTGTACCTTCTGCTC
AATTTCCTTTCCTCATCTCAAATAAATGCCTTGTTAC

FIGURE 1521

MRTLAILAAILLVALQAQAEPLQARADEVAAAPEQIAADIPEVVVSLAWDESLAPKHPGSRKNMDCYCRIPACIA
GERRYGTCIYQGRLWAFCC

FIGURE 1522

AGCGGGTGCGGGGCGGGACCGGCCCGGCCTATATATTGGGTTGGCGCCGGCGCCAGCTGAGCCGAGCGGTAGCTG
GTCTGGCGAGGTTTTATACACCTGAAAGAAGAGAATGTCAAGACGAAGTAGCCGTTTACAAGCTAAGCAGCAGCC
CCAGCCCAGCCAGACGGAATCCCCCCAAGAAGCCCAGATAATCCAGGCCAAGAAGAGGAAAACTACCCAGGATGT
CAAAAAAAGAAGAGAGGAGGTCACCAAGAAACATCAGTATGAAATTAGGAATTGTTGGCCACCTGTATTATCTGG
GGGGATCAGTCCTTGCATTATCATTGAAACACCTCACAAAGAAATAGGAACAAGTGATTTCTCCAGATTTACAAA
TTACAGATTTAAAAATCTTTTTATTAATCCTTCACCTTTGCCTGATTTAAGCTGGGGATGTTCAAAAGAAGTCTG
GCTAAACATGTTAAAAAAGGAGAGCAGATATGTTCATGACAAACATTTTGAAGTTCTGCATTCTGACTTGGAACC
ACAGATGAGGTCCATACTTCTAGACTGGCTTTTAGAGGTATGTGAAGTATACACACTTCATAGGGAAACATTTTA
TCTTGCACAAGACTTTTTTGATAGATTTATGTTGACACAAAAGGATATAAATAAAAATATGCTTCAACTCATTGG
AATTACCTCATTATTCATTGCTTCCAAACTTGAGGAAATCTATGCTCCTAAACTCCAAGAGTTTGCTTACGTCAC
TGATGGTGCTTGCAGTGAAGAGGATATCTTAAGGATGGAACTCATTATATTAAAGGCTTTAAAATGGGAACTTTG
TCCTGTAACAATCATCTCCTGGCTAAATCTCTTTCTCCAAGTTGATGCTCTTAAAGATGCTCCTAAAGTTCTTCT
ACCTCAGTATTCTCAGGAAACATTCATTCAAATAGCTCAGCTTTTAGATCTGTGTATTCTAGCCATTGATTCATT
AGAGTTCCAGTACAGAATACTGACTGCTGCTGCCTTGTGCCATTTTACCTCCATTGAAGTGGTTAAGAAAGCCTC
AGGTTTGGAGTGGGACAGTATTTCAGAATGTGTAGATTGGATGGTACCTTTTGTCAATGTAGTAAAAAGTACTAG
TCCAGTGAAGCTGAAGACTTTTAAGAAGATTCCTATGGAAGACAGACATAATATCCAGACACATACAAACTATTT
GGCTATGCTGGAGGAAGTAAATTACATAAACACCTTCAGAAAAGGGGGACAGTTGTCACCAGTGTGCAATGGAGG
CATTATGACACCACCGAAGAGCACTGAAAAACCACCAGGAAAACACTAAAGAAGATAACTAAGCAAACAAGTTGG
AATTCACCAAGATTGGGTAGAACTGGTATCACTGAACTACTAAAGTTTTACAGAAAGTAGTGCTGTGATTGATTG
CCCTAGCCAATTCACAAGTTACACTGCCATTCTGATTTTAAAACTTACAATTGGCACTAAAGAATACATTTAATT
ATTTCCTATGTTAGCTGTTAAAGAAACAGCAGGACTTGTTTACAAAGATGTCTTCATTCCCAAGGTTACTGGATA
GAAGCCAACCACAGTCTATACCATAGCAATGTTTTTCCTTTAATCCAGTGTTACTGTGTTTATCTTGATAAACTA
GGAATTTTGTCACTGGAGTTTTGGACTGGATAAGTGCTACCTTAAAGGGTATACTAAGTGATACAGTACTTTGAA
TCTAGTTGTTAGATTCTCAAAATTCCTACACTCTTGACTAGTGCAATTTGGTTCTTGAAAATTAAATTTAAACTT
GTTTACAAAGGTTTAGTTTTGTAATAAGGTGACTAATTTATCTATAGCTGCTATAGCAAGCTATTATAAAACTTG
AATTTCTACAAATGGTGAAATTTAATGTTTTTTAAACTAGTTTATTTGCCTTGCCATAACACATTTTTTAACTAA
TAAGGCTTAGATGAACATGGTGTTCAACCTGTGCTCTAAACAGTGGGAGTACCAAAGAAATTATAAACAAGATAA
ATGCTGTGGCTCCTTCCTAACTGGGGCTTTCTTGACATGTAGGTTGCTTGGTAATAACCTTTTTGTATATCACAA
TTTGGGTGAAAAACTTAAGTACCCTTTCAAACTATTTATATGAGGAAGTCACTTTACTACTCTAAGATATCCCTA
AGGAATTTTTTTTTTTAATTTAGTGTGACTAAGGCTTTATTTATGTTTGTGAAACTGTTAAGGTCCTTTCTAAAT
TCCTCCATTGTGAGATAAGGACAGTGTCAAAGTGATAAAGCTTAACACTTGACCTAAACTTCTATTTTCTTAAGG
AAGAAGAGTATTAAATATATACTGACTCCTAGAAATCTATTTATTAAAAAAAGACATGAAAACTTGCTGTACATA
GGCTAGCTATTTCTAAATATTTTAAATTAGCTTTTCTAAAAAAAAAATCCAGCCTCATAAAGTAGATTAGAAAAC
TAGATTGCTAGTTTATTTTGTTATCAGATATGTGAATCTCTTCTCCCTTTGAAGAAACTATACATTTATTGTTAC
GGTATGAAGTCTTCTGTATAGTTTGTTTTTAAACTAATATTTGTTTCAGTATTTTGTCTGAAAAGAAAACACCAC
TAATTGTGTACATATGTATTATATAAACTTAACCTTTTAATACTGTTTATTTTTAGCCCATTGTTTAAAAAATAA
AAGTTAAAAAAATTTAACTGCTTAAAAGTAAAAAAAAAAAAAAAAAA

FIGURE 1523

MSRRSSRLQAKQQPQPSQTESPQEAQIIQAKKRKTTQDVKKRREEVTKKHQYEIRNCWPPVLSGGISPCIIIETP
HKEIGTSDFSRFTNYRFKNLFINPSPLPDLSWGCSKEVWLNMLKKESRYVHDKHFEVLHSDLEPQMRSILLDWLL
EVCEVYTLHRETFYLAQDFFDRFMLTQKDINKNMLQLIGITSLFIASKLEEIYAPKLQEFAYVTDGACSEEDILR
MELIILKALKWELCPVTIISWLNLFLQVDALKDAPKVLLPQYSQETFIQIAQLLDLCILAIDSLEFQYRILTAAA
LCHFTSIEVVKKASGLEWDSISECVDWMVPFVNVVKSTSPVKLKTFKKIPMEDRHNIQTHTNYLAMLEEVNYINT
FRKGGQLSPVCNGGIMTPPKSTEKPPGKH

FIGURE 1524A

TAAATTTAAAGGCGGGGCGGCCTGTGAGCCCTGAAGTGCCGGCCGCGGAGGGTCCTGGCCATTTTGGTGGGACCA
GTTCAGCCTGATAGGATGGCGGAGGAAGGAGCCGTGGCCGTCTGCGTGCGAGTGCGGCCGCTGAACAGCAGAGAA
GAATCACTTGGAGAAACTGCCCAAGTTTACTGGAAAACTGACAATAATGTCATTTATCAAGTTGATGGAAGTAAA
TCCTTCAATTTTGATCGTGTCTTTCATGGTAATGAAACTACCAAAAATGTGTATGAAGAAATAGCAGCACCAATC
ATCGATTCTGCCATACAAGGCTACAATGGTACTATATTTGCCTATGGACAGACTGCTTCAGGAAAAACATATACC
ATGATGGGTTCAGAAGATCATTTGGGAGTTATACCCAGGGCAATTCATGACATTTTCCAAAAAATTAAGAAGTTT
CCTGATAGGGAATTTCTCTTACGTGTATCTTACATGGAAATATACAATGAAACCATTACAGATTTACTCTGTGGC
ACTCAAAAAATGAAACCTTTAATTATTCGAGAAGATGTCAATAGGAATGTGTATGTTGCTGATCTCACAGAAGAA
GTTGTATATACATCAGAAATGGCTTTGAAATGGATTACAAAGGGAGAAAAGAGCAGGCATTATGGAGAAACAAAA
ATGAATCAAAGAAGCAGTCGTTCTCATACCATCTTTAGGATGATTTTGGAAAGCAGAGAGAAGGGTGAACCTTCT
AATTGTGAAGGATCTGTTAAGGTATCCCATTTGAATTTGGTTGATCTTGCAGGCAGTGAAAGAGCTGCTCAAACA
GGCGCTGCAGGTGTGCGGCTCAAGGAAGGCTGTAATATAAATCGAAGCTTATTTATTTTGGGACAAGTGATCAAG
AAACTTAGTGATGGACAAGTTGGTGGTTTCATAAATTATCGAGATAGCAAGTTAACACGAATTCTTCAGAATTCC
TTGGGAGGAAATCCAAAGACACGTATTATCTGCACAATTACTCCAGTATCTTTTGATGAAACTCTTACTGCTCTC
CAGTTTGCCAGTACTGCTAAATATATGAAGAATACTCCTTATGTTAATGAGGTATCAACTGATGAAGCTCTCCTG
AAAAGGTATAGAAAAGAAATAATGGATCTTAAAAAACAATTAGAGGAGGTTTCTTTAGAGACGCGGGCTCAGGCA
ATGGAAAAAGACCAATTGGCCCAACTTTTGGAAGAAAAAGATTTGCTTCAGAAAGTACAGAATGAGAAAATTGAA
AACTTAACACGGATGCTGGTGACCTCTTCTTCCCTCACGTTGCAACAGGAATTAAAGGCTAAAAGAAAACGAAGA
GTTACTTGGTGCCTTGGCAAAATTAACAAAATGAAGAACTCAAACTATGCAGATCAATTTAATATACCAACAAAT
ATAACAACAAAAACACATAAGCTTTCTATAAATTTATTACGAGAAATTGATGAATCTGTCTGTTCAGAGTCTGAT
GTTTTCAGTAACACTCTTGATACATTAAGTGAGATAGAATGGAATCCAGCAACAAAGCTACTAAATCAGGAGAAT
ATAGAAAGTGAGTTGAACTCACTTCGTGCTGACTATGATAATCTGGTATTAGACTATGAACAACTACGAACAGAA
AAAGAAGAAATGGAATTGAAATTAAAAGAAAAGAATGATTTGGATGAATTTGAGGCTCTAGAAAGAAAAACTAAA
AAAGATCAAGAGATGCAACTAATTCATGAAATTTCGAACTTAAAGAATTTAGTTAAGCATCGAGAAGTATATAAT
CAAGATCTTGAGAATGAACTCAGTTCAAAAGTAGAGCTGCTTAGAGAAAAGGAAGACCAGATTAAGAAGCTACAG
GAATACATAGACTCTCAAAAGCTAGAAAATATAAAAATGGACTTGTCATACTCATTGGAAAGCATTGAAGACCCA
AAACAAATGAAGCAGACTCTGTTTGATGCTGAAACTGTAGCCCTTGATGCCAAGAGAGAATCAGCCTTTCTTAGA
AGTGAAAATCTGGAGTTGAAGGAGAAAATGAAAGAACTTGCAACTACATACAAGCAAATGGAAAATGATATTCAG
TTATATCAAAGCCAATTGGAGGCAAAAAAGAAAATGCAAGTTGATCTGGAGAAAGAATTACAATCTGCTTTTAAT
GAGATAACAAAACTCACCTCCCTTATAGATGGCAAAGTTCCAAAAGATTTGCTCTGTAATTTGGAATTGGAAGGA
AAGATTACTGATCTTCAGAAAGAACTAAATAAAGAAGTTGAAGAAAATGAAGCTTTGCGGGAAGAAGTCATTTTG
CTTTCAGAATTGAAATCTTTACCTTCTGAAGTAGAAAGGCTGAGGAAAGAGATACAAGACAAATCTGAAGAGCTC
CATATAATAACATCAGAAAAAGATAAATTGTTTTCTGAAGTAGTTCATAAGGAGAGTAGAGTTCAAGGTTTACTT
GAAGAAATTGGGAAAACAAAAGATGACCTAGCAACTACACAGTCGAATTATAAAAGCACTGATCAAGAATTCCAA
AATTTCAAAACCCTTCATATGGACTTTGAGCAAAAGTATAAGATGGTCCTTGAGGAGAATGAGAGAATGAATCAG
GAAATAGTTAATCTCTCTAAAGAAGCCCAAAAATTTGATTCGAGTTTGGGTGCTTTGAAGACCGAGCTTTCTTAC
AAGACCCAAGAACTTCAGGAGAAAACACGTGAGGTTCAAGAAAGACTAAATGAGATGGAACAGCTGAAGGAACAA
TTAGAAAATAGAGATTCTCCGCTGCAAACTGTAGAAAGGGAGAAAACACTGATTACTGAGAAACTGCAGCAAACT
TTAGAAGAAGTAAAAACTTTAACTCAAGAAAAAGATGATCTAAAACAACTCCAAGAAAGCTTGCAAATTGAGAGG
GACCAACTCAAAAGTGATATTCACGATACTGTTAACATGAATATAGATACTCAAGAACAATTACGAAATGCTCTT
GAGTCTCTGAAACAACATCAAGAAACAATTAATACACTAAAATCGAAAATTTCTGAGGAAGTTTCCAGGAATTTG
CATATGGAGGAAAATACAGGAGAAACTAAAGATGAATTTCAGCAAAAGATGGTTGGCATAGATAAAAAACAGGAT
TTGGAAGCTAAAAATACCCAAACACTAACTGCAGATGTTAAGGATAATGAGATAATTGAGCAACAAAGGAAGATA
TTTTCTTTAATACAGGAGAAAAATGAACTCCAACAAATGTTAGAGAGTGTTATAGCAGAAAAGGAACAATTGAAG
ACTGACCTAAAGGAAAATATTGAAATGACCATTGAAAACCAGGAAGAATTAAGACTTCTTGGGGATGAACTTAAA
AAGCAACAAGAGATAGTTGCACAAGAAAAGAACCATGCCATAAAGAAAGAAGGAGAGCTTTCTAGGACCTGTGAC
AGACTGGCAGAAGTTGAAGAAAAACTAAAGGAAAAGAGCCAGCAACTCCAAGAAAAACAGCAACAACTTCTTAAT
GTACAAGAAGAGATGAGTGAGATGCAGAAAAAGATTAATGAAATAGAGAATTTAAAGAATGAATTAAAGAACAAA

FIGURE 1524B

GAATTGACATTGGAACATATGGAAACAGAGAGGCTTGAGTTGGCTCAGAAACTTAATGAAAATTATGAGGAAGTG
AAATCTATAACCAAAGAAAGAAAAGTTCTAAAGGAATTACAGAAGTCATTTGAAACAGAGAGAGACCACCTTAGA
GGATATATAAGAGAAATTGAAGCTACAGGCCTACAAACCAAAGAAGAACTAAAAATTGCTCATATTCACCTAAAA
GAACACCAAGAAACTATTGATGAACTAAGAAGAAGCGTATCTGAGAAGACAGCTCAAATAATAAATACTCAGGAC
TTAGAAAAATCCCATACCAAATTACAAGAAGAGATCCCAGTGCTTCATGAGGAACAAGAGTTACTGCCTAATGTG
AAAAAAGTCAGTGAGACTCAGGAAACAATGAATGAACTGGAGTTATTAACAGAACAGTCCACAACCAAGGACTCA
ACAACACTGGCAAGAATAGAAATGGAAAGGCTCAGGTTGAATGAAAAATTTCAAGAAAGTCAGGAAGAGATAAAA
TCTCTAACCAAGGAAAGAGACAACCTTAAAACGATAAAAGAAGCCCTTGAAGTTAAACATGACCAGCTGAAAGAA
CATATTAGAGAAACTTTGGCTAAAATCCAGGAGTCTCAAAGCAAACAAGAACAGTCCTTAAATATGAAAGAAAAA
GACAATGAAACTACCAAAATCGTGAGTGAGATGGAGCAATTCAAACCCAAAGATTCAGCACTACTAAGGATAGAA
ATAGAAATGCTCGGATTGTCCAAAAGACTTCAAGAAAGTCATGATGAAATGAAATCTGTAGCTAAGGAGAAAGAT
GACCTACAGAGGCTGCAAGAAGTTCTTCAATCTGAAAGTGACCAGCTCAAAGAAAACATAAAAGAAATTGTAGCT
AAACACCTGGAAACTGAAGAGGAACTTAAAGTTGCTCATTGTTGCCTGAAAGAACAAGAGGAAACTATTAATGAG
TTAAGAGTGAATCTTTCAGAGAAGGAAACTGAAATATCAACCATTCAAAAGCAGTTAGAAGCAATCAATGATAAA
TTACAGAACAAGATCCAAGAGATTTATGAGAAAGAGGAACAACTTAATATAAAACAAATTAGTGAGGTTCAGGAA
AACGTGAATGAACTGAAACAATTCAAGGAGCATCGCAAAGCCAAGGATTCAGCACTACAAAGTATAGAAAGTAAG
ATGCTCGAGTTGACCAACAGACTTCAAGAAAGTCAAGAAGAAATACAAATTATGATTAAGGAAAAAGAGGAAATG
AAAAGAGTACAGGAGGCCCTTCAGATAGAGAGAGACCAACTGAAAGAAAACACTAAAGAAATTGTAGCTAAAATG
AAAGAATCTCAAGAAAAAGAATATCAGTTTCTTAAGATGACAGCTGTCAATGAGACTCAGGAGAAAATGTGTGAA
ATAGAACACTTGAAGGAGCAATTTGAGACCCAGAAGTTAAACCTGGAAAACATAGAAACGGAGAATATAAGGTTG
ACTCAGATACTACATGAAAACCTTGAAGAAATGAGATCTGTAACAAAAGAAAGAGATGACCTTAGGAGTGTGGAG
GAGACTCTCAAAGTAGAGAGAGACCAGCTCAAGGAAAACCTTAGAGAAACTATAACTAGAGACCTAGAAAAACAA
GAGGAGCTAAAAATTGTTCACATGCATCTGAAGGAGCACCAAGAAACTATTGATAAACTAAGAGGGATTGTTTCA
GAGAAAACAAATGAAATATCAAATATGCAAAAGGACTTAGAACACTCAAATGATGCCTTAAAAGCACAGGATCTG
AAAATACAAGAGGAACTAAGAATTGCTCACATGCATCTGAAAGAGCAGCAGGAAACTATTGACAAACTCAGAGGA
ATTGTTTCTGAGAAGACAGATAAACTATCAAATATGCAAAAAGATTTAGAAAATTCAAATGCTAAATTACAAGAA
AAGATTCAAGAACTTAAGGCAAATGAACATCAACTTATTACGTTAAAAAAAGATGTCAATGAGACACAGAAAAAA
GTGTCTGAAATGGAGCAACTAAAGAAACAAATAAAAGACCAAAGCTTAACTCTGAGTAAATTAGAAATAGAGAAT
TTAAATTTGGCTCAAGAACTTCATGAAAACCTTGAAGAAATGAAATCTGTAATGAAAGAAAGAGATAATCTAAGA
AGAGTAGAGGAGACACTCAAACTGGAGAGAGACCAACTCAAGGAAAGCCTGCAAGAAACCAAAGCTAGAGATCTG
GAAATACAACAGGAACTAAAAACTGCTCGTATGCTATCAAAAGAACACAAAGAAACTGTTGATAAACTTAGAGAA
AAAATTTCAGAAAAGACAATTCAAATTTCAGACATTCAAAAGGATTTAGATAAATCAAAAGATGAATTACAGAAA
AAGATCCAAGAACTTCAGAAAAAAGAACTTCAACTGCTTAGAGTGAAAGAAGATGTCAATATGAGTCATAAAAAA
ATTAATGAAATGGAACAGTTGAAGAAGCAATTTGAGCCAAACTATCTATGCAAGTGTGAGATGGATAACTTCCAG
TTGACTAAGAAACTTCATGAAAGCCTTGAAGAAATAAGAATTGTAGCTAAAGAAAGAGATGAGCTAAGGAGGATA
AAAGAATCTCTCAAAATGGAAAGGGACCAATTCATAGCAACCTTAAGGGAAATGATAGCTAGAGACCGACAGAAC
CACCAAGTAAAACCTGAAAAAAGGTTACTAAGTGATGGACAACAGCACCTTATGGAAAGCCTGAGAGAAAAGTGC
TCTAGAATAAAAGAGCTTTTGAAGAGATACTCAGAGATGGATGATCATTATGAGTGCTTGAATAGATTGTCTCTT
GACTTGGAGAAGGAAATTGAATTCCACAGAATCATGAAGAAACTGAAGTATGTGTTAAGCTATGTTACAAAAATA
AAAGAAGAACAACATGAATGCATCAATAAATTTGAAATGGATTTTATTGATGAAGTGGAAAAGCAAAAGGAATTG
CTAATTAAAATACAGCACCTTCAACAAGATTGTGATGTACCATCCAGAGAATTAAGGGATCTCAAATTGAACCAG
AATATGGATCTACATATTGAGGAAATTCTCAAAGATTTCTCAGAAAGTGAGTTCCCTAGCATAAAGACTGAATTT
CAACAAGTACTAAGTAATAGGAAAGAAATGACACAGTTTTTGGAAGAGTGGTTAAATACTCGTTTTGATATAGAA
AAGCTTAAAAATGGCATCCAGAAAGAAAATGATAGGATTTGTCAAGTGAATAACTTCTTTAATAACAGAATAATT
GCCATAATGAATGAATCAACAGAGTTTGAGGAAAGAAGTGCTACCATATCCAAAGAGTGGGAACAGGACCTGAAA
TCACTGAAAGAGAAAAATGAAAAACTATTTAAAAACTACCAAACATTGAAGACTTCCTTGGCATCTGGTGCCCAG
GTTAATCCTACCACACAAGACAATAAGAATCCTCATGTTACATCAAGAGCTACACAGTTAACCACAGAGAAAATT
CGAGAGCTGGAAAATTCACTGCATGAAGCTAAAGAAAGTGCTATGCATAAGGAAAGCAAGATTATAAAGATGCAG

FIGURE 1524C

AAAGAACTTGAGGTGACTAATGACATAATAGCAAAACTTCAAGCCAAAGTTCATGAATCAAATAAATGCCTTGAA
AAAACAAAAGAGACAATTCAAGTACTTCAGGACAAAGTTGCTTTAGGAGCTAAGCCATATAAAGAAGAAATTGAA
GATCTCAAAATGAAGCTTGTGAAAATAGACCTAGAGAAAATGAAAAATGCCAAAGAATTTGAAAAGGAAATCAGT
GCTACAAAAGCCACTGTAGAATATCAAAAGGAAGTTATAAGGCTATTGAGAGAAAATCTCAGAAGAAGTCAACAG
GCCCAAGATACCTCAGTGATATCAGAACATACTGATCCTCAGCCTTCAAATAAACCCTTAACTTGTGGAGGTGGC
AGCGGCATTGTACAAAACACAAAAGCTCTTATTTTGAAAAGTGAACATATAAGGCTAGAAAAAGAAATTTCTAAG
TTAAAGCAGCAAAATGAACAGCTAATAAAACAAAAGAATGAATTGTTAAGCAATAATCAGCATCTTTCCAATGAG
GTCAAAACTTGGAAGGAAAGAACCCTTAAAAGAGAGGCTCACAAACAAGTAACTTGTGAGAATTCTCCAAAGTCT
CCTAAAGTGACTGGAACAGCTTCTAAAAAGAAACAAATTACACCCTCTCAATGCAAGGAACGGAATTTACAAGAT
CCTGTGCCAAAGGAATCACCAAAATCTTGTTTTTTTGATAGCCGATCAAAGTCTTTACCATCACCTCATCCAGTT
CGCTATTTTGATAACTCAAGTTTAGGCCTTTGTCCAGAGGTGCAAAATGCAGGAGCAGAGAGTGTGGATTCTCAG
CCAGGTCCTTGGCACGCCTCCTCAGGCAAGGATGTGCCTGAGTGCAAAACTCAGTAGACTCCTCTTTGTCACTTC
TCTGGAGATCCAGCATTCCTTATTTGGAAATGACTTTGTTTATGTGTCTATCCCTGGTAATGATGTTGTAGTGCA
GCTTAATTTCAATTCAGTCTTTACTTTGCCACTAGAGTTGAAAGATAAGGGAACAGGAAATGAATGCATTGTGGT
AATTTAG

FIGURE 1525

MAEEGAVAVCVRVRPLNSREESLGETAQVYWKTDNNVIYQVDGSKSFNFDRVFHGNETTKNVYEEIAAPIIDSAI
QGYNGTIFAYGQTASGKTYTMMGSEDHLGVIPRAIHDIFQKIKKFPDREFLLRVSYMEIYNETITDLLCGTQKMK
PLIIREDVNRNVYVADLTEEVVYTSEMALKWITKGEKSRHYGETKMNQRSSRSHTIFRMILESREKGEPSNCEGS
VKVSHLNLVDLAGSERAAQTGAAGVRLKEGCNINRSLFILGQVIKKLSDGQVGGFINYRDSKLTRILQNSLGGNP
KTRIICTITPVSFDETLTALQFASTAKYMKNTPYVNEVSTDEALLKRYRKEIMDLKKQLEEVSLETRAQAMEKDQ
LAQLLEEKDLLQKVQNEKIENLTRMLVTSSSLTLQQELKAKRKRRVTWCLGKINKMKNSNYADQFNIPTNITTKT
HKLSINLLREIDESVCSESDVFSNTLDTLSEIEWNPATKLLNQENIESELNSLRADYDNLVLDYEQLRTEKEEME
LKLKEKNDLDEFEALERKTKKDQEMQLIHEISNLKNLVKHREVYNQDLENELSSKVELLREKEDQIKKLQEYIDS
QKLENIKMDLSYSLESIEDPKQMKQTLFDAETVALDAKRESAFLRSENLELKEKMKELATTYKQMENDIQLYQSQ
LEAKKKMQVDLEKELQSAFNEITKLTSLIDGKVPKDLLCNLELEGKITDLQKELNKEVEENEALREEVILLSELK
SLPSEVERLRKEIQDKSEELHIITSEKDKLFSEVVHKESRVQGLLEEIGKTKDDLATTQSNYKSTDQEFQNFKTL
HMDFEQKYKMVLEENERMNQEIVNLSKEAQKFDSSLGALKTELSYKTQELQEKTREVQERLNEMEQLKEQLENRD
SPLQTVEREKTLITEKLQQTLEEVKTLTQEKDDLKQLQESLQIERDQLKSDIHDTVNMNIDTQEQLRNALESLKQ
HQETINTLKSKISEEVSRNLHMEENTGETKDEFQQKMVGIDKKQDLEAKNTQTLTADVKDNEIIEQQRKIFSLIQ
EKNELQQMLESVIAEKEQLKTDLKENIEMTIENQEELRLLGDELKKQQEIVAQEKNHAIKKEGELSRTCDRLAEV
EEKLKEKSQQLQEKQQQLLNVQEEMSEMQKKINEIENLKNELKNKELTLEHMETERLELAQKLNENYEEVKSITK
ERKVLKELQKSFETERDHLRGYIREIEATGLQTKEELKIAHIHLKEHQETIDELRRSVSEKTAQIINTQDLEKSH
TKLQEEIPVLHEEQELLPNVKKVSETQETMNELELLTEQSTTKDSTTLARIEMERLRLNEKFQESQEEIKSLTKE
RDNLKTIKEALEVKHDQLKEHIRETLAKIQESQSKQEQSLNMKEKDNETTKIVSEMEQFKPKDSALLRIEIEMLG
LSKRLQESHDEMKSVAKEKDDLQRLQEVLQSESDQLKENIKEIVAKHLETEEELKVAHCCLKEQEETINELRVNL
SEKETEISTIQKQLEAINDKLQNKIQEIYEKEEQLNIKQISEVQENVNELKQFKEHRKAKDSALQSIESKMLELT
NRLQESQEEIQIMIKEKEEMKRVQEALQIERDQLKENTKEIVAKMKESQEKEYQFLKMTAVNETQEKMCEIEHLK
EQFETQKLNLENIETENIRLTQILHENLEEMRSVTKERDDLRSVEETLKVERDQLKENLRETITRDLEKQEELKI
VHMHLKEHQETIDKLRGIVSEKTNEISNMQKDLEHSNDALKAQDLKIQEELRIAHMHLKEQQETIDKLRGIVSEK
TDKLSNMQKDLENSNAKLQEKIQELKANEHQLITLKKDVNETQKKVSEMEQLKKQIKDQSLTLSKLEIENLNLAQ
ELHENLEEMKSVMKERDNLRRVEETLKLERDQLKESLQETKARDLEIQQELKTARMLSKEHKETVDKLREKISEK
TIQISDIQKDLDKSKDELQKKIQELQKKELQLLRVKEDVNMSHKKINEME

FIGURE 1526

AAACTTCCCGCACGCGTTACAGGAGCCAGGTCGGTATAAGCGCCAGCGGCCTCGCCGCCCGTCAAGCTGTCCACA
TCCCTGGCCTCAGCCCGCCACATCACCCTGACCTGCTTACGCCCAGATTTTCTTCAATCACATCTGAATAAATCA
CTTGAAGAAAGCTTATAGCTTCATTGCACCATGTGTGGCATTTGGGCGCTGTTTGGCAGTGATGATTGCCTTTCT
GTTCAGTGTCTGAGTGCTATGAAGATTGCACACAGAGGTCCAGATGCATTCCGTTTTGAGAATGTCAATGGATAC
ACCAACTGCTGCTTTGGATTTCACCGGTTGGCGGTAGTTGACCCGCTGTTTGGAATGCAGCCAATTCGAGTGAAG
AAATATCCGTATTTGTGGCTCTGTTACAATGGTGAAATCTACAACCATAAGAAGATGCAACAGCATTTTGAATTT
GAATACCAGACCAAAGTGGATGGTGAGATAATCCTTCATCTTTATGACAAAGGAGGAATTGAGCAAACAATTTGT
ATGTTGGATGGTGTGTTTGCATTTGTTTTACTGGATACTGCCAATAAGAAAGTGTTCCTGGGTAGAGATACATAT
GGAGTCAGACCTTTGTTTAAAGCAATGACAGAAGATGGATTTTTGGCTGTATGTTCAGAAGCTAAAGGTCTTGTT
ACATTGAAGCACTCCGCGACTCCCTTTTTAAAAGTGGAGCCTTTTCTTCCTGGACACTATGAAGTTTTGGATTTA
AAGCCAAATGGCAAAGTTGCATCCGTGGAAATGGTTAAATATCATCACTGTCGGGATGAACCCCTGCACGCCCTC
TATGACAATGTGGAGAAACTCTTTCCAGGTTTTGAGATAGAAACTGTGAAGAACAACCTCAGGATCCTTTTTAAT
AATGCTGTAAAGAAACGTTTGATGACAGACAGAAGGATTGGCTGCCTTTTATCAGGGGGCTTGGACTCCAGCTTG
GTTGCTGCCACTCTGTTGAAGCAGCTGAAAGAAGCCCAAGTACAGTATCCTCTCCAGACATTTGCAATTGGCATG
GAAGACAGCCCCGATTTACTGGCTGCTAGAAAGGTGGCAGATCATATTGGAAGTGAACATTATGAAGTCCTTTTT
AACTCTGAGGAAGGCATTCAGGCTCTGGATGAAGTCATATTTTCCTTGGAAACTTATGACATTACAACAGTTCGT
GCTTCAGTAGGTATGTATTTAATTTCCAAGTATATTCGGAAGAACACAGATAGCGTGGTGATCTTCTCTGGAGAA
GGATCAGATGAACTTACGCAGGGTTACATATATTTTCACAAGGCTCCTTCTCCTGAAAAAGCCGAGGAGGAGAGT
GAGAGGCTTCTGAGGGAACTCTATTTGTTTGATGTTCTCCGCGCAGATCGAACTACTGCTGCCCATGGTCTTGAA
CTGAGAGTCCCATTTCTAGATCATCGATTTTCTTCCTATTACTTGTCTCTGCCACCAGAAATGAGAATTCCAAAG
AATGGGATAGAAAAACATCTCCTGAGAGAGACGTTTGAGGATTCCAATCTGATACCCAAAGAGATTCTCTGGCGA
CCAAAAGAAGCCTTCAGTGATGGAATAACTTCAGTTAAGAATTCCTGGTTTAAGATTTTACAGGAATACGTTGAA
CATCAGGTTGATGATGCAATGATGGCAAATGCAGCCCAGAAATTTCCCTTCAATACTCCTAAAACCAAAGAAGGA
TATTACTACCGTCAAGTCTTTGAACGCCATTACCCAGGCCGGGCTGACTGGCTGAGCCATTACTGGATGCCCAAG
TGGATCAATGCCACTGACCCTTCTGCCCGCACGCTGACCCACTACAAGTCAGCTGTCAAAGCTTAGGTGGTCTTT
ATGCTGTAATGTGAAAGCAAATATTTCTTCGTGTTGGATGGGGACTGTGGGTAGATAGGGGAACAATGAGAGTCA
ACTCAGGCTAACTTGGGTGTGAAAAAAATAAAAGTCCTAAATCT

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FIGURE 1527

MCGIWALFGSDDCLSVQCLSAMKIAHRGPDAFRFENVNGYTNCCFGFHRLAVVDPLFGMQPIRVKKYPYLWLCYN
GEIYNHKKMQQHFEFEYQTKVDGEIILHLYDKGGIEQTICMLDGVFAFVLLDTANKKVFLGRDTYGVRPLFKAMT
EDGFLAVCSEAKGLVTLKHSATPFLKVEPFLPGHYEVLDLKPNGKVASVEMVKYHHCRDEPLHALYDNVEKLFPG
FEIETVKNNLRILFNNAVKKRLMTDRRIGCLLSGGLDSSLVAATLLKQLKEAQVQYPLQTFAIGMEDSPDLLAAR
KVADHIGSEHYEVLFNSEEGIQALDEVIFSLETYDITTVRASVGMYLISKYIRKNTDSVVIFSGEGSDELTQGYI
YFHKAPSPEKAEEESERLLRELYLFDVLRADRTTAAHGLELRVPFLDHRFSSYYLSLPPEMRIPKNGIEKHLLRE
TFEDSNLIPKEILWRPKEAFSDGITSVKNSWFKILQEYVEHQVDDAMMANAAQKFPFNTPKTKEGYYYRQVFERH
YPGRADWLSHYWMPKWINATDPSARTLTHYKSAVKA

FIGURE 1528

CTTACCGTGGCGAGTTCCGCGCTCAATGGAGACGTTTGACCCCACCGAGCTGCCCGAGCTGCTTAAACTTTATTA
CCGGAGGCTCTTTCCCTACTCTCAGTACTATCGCTGGCTCAACTACGGTGGAGTGATAAAGAATTACTTTCAACA
CCGTGAATTTTCATTCACACTGAAAGATGATATTTACATTCGCTACCAATCCTTCAACAACCAGAGTGATCTGGA
AAAGGAGATGCAGAAAATGAATCCATACAAGATTGATATAGGCGCAGTATATTCTCACAGACCCAATCAACACAA
TACAGTGAAGCTGGGAGCTTTCCAGGCTCAGGAAAAAGAACTGGTATTTGACATTGACATGACAGACTACGACGA
TGTGAGGAGATGTTGTAGTTCTGCAGACATATGTCCTAAGTGCTGGACCCTCATGACAATGGCCATACGCATCAT
TGACAGAGCATTGAAGGAGGACTTTGGATTTAAGCATCGTCTCTGGGTATATTCTGGAAGGAGAGGTGTTCATTG
TTGGGTCTGTGATGAATCAGTTAGAAAACTGTCTTCTGCAGTACGTTCTGGGATAGTTGAGTATTTGAGCCTTGT
AAAGGGTGGTCAAGACGTTAAAAAGAAAGTTCACCTAAGTGAAAAAATTCACCCTTTTATCAGAAAATCTATAAA
CATAATAAAAAAATACTTTGAAGAATATGCCTTGGTTAATCAAGATATTCTCGAAAATAAAGAAAGCTGGGATAA
GATTTTAGCCCTTGTTCCTGAAACAATTCATGATGAACTTCAACAAAGCTTCCAAAAGTCTCACAATTCACTTCA
GCGTTGGGAGCACTTGAAGAAAGTAGCCAGCAGATATCAGAATAACATCAAAAATGACAAATATGGACCCTGGCT
GGAGTGGGAGATTATGCTCCAGTACTGTTTTCCACGGCTGGATATCAATGTCAGCAAAGGAATCAATCATCTACT
GAAGAGCCCTTTTAGTGTTCATCCTAAAACAGGTCGCATCTCTGTGCCTATTGATTTGCAGAAAGTGGACCAGTT
TGATCCATTTACTGTTCCGACCATAAGCTTCATCTGCCGTGAATTGGATGCCATTTCCACTAATGAAGAGGAAAA
AGAGGAGAATGAAGCTGAATCTGATGTCAAACATAGAACCAGAGATTATAAGAAGACCAGTCTAGCACCTTATGT
GAAAGTTTTTGAACATTTTCTTGAAAATCTGGATAAATCCCGAAAAGGAGAACTTCTTAAGAAGAGTGATTTACA
AAAAGATTTCTGAAGACAGAGCTCCTCAAACCATTGTGGATATCTTCTGCCTTCAACCACAGATCAAATACTTCA
AGAGCCATTTAATAAATATGGCAGAACTATAAAGAAAAAAAAAAAAAGG

FIGURE 1529

METFDPTELPELLKLYYRRLFPYSQYYRWLNYGGVIKNYFQHREFSFTLKDDIYIRYQSFNNQSDLEKEMQKMNP
YKIDIGAVYSHRPNQHNTVKLGAFQAQEKELVFDIDMTDYDDVRRCCSSADICPKCWTLMTMAIRIIDRALKEDF
GFKHRLWVYSGRRGVHCWVCDESVRKLSSAVRSGIVEYLSLVKGGQDVKKKVHLSEKIHPFIRKSINIIKKYFEE
YALVNQDILENKESWDKILALVPETIHDELQQSFQKSHNSLQRWEHLKKVASRYQNNIKNDKYGPWLEWEIMLQY
CFPRLDINVSKGINHLLKSPFSVHPKTGRISVPIDLQKVDQFDPFTVPTISFICRELDAISTNEEEKEENEAESD
VKHRTRDYKKTSLAPYVKVFEHFLENLDKSRKGELLKKSDLQKDF

FIGURE 1530A

GAATTCCGGCCCCCGTGTCTGGGCGTCCGCCTCCTGGCCTCCTGGCTGAGGGGAAGCTGAGTGGGCCACGGCCCA
TGTGTCGCACTCGCCTCGGCTCCCACACAGCCGCCTCTGCTCCAGCAAGGATGTGGCTCTTCCACACTCTGCTCT
GCATAGCCAGCCTGGCCCTGCTGGCCGCTTTCAATGTGGATGTGGCCCGGCCCTGGCTCACGCCCAAGGGAGGTG
CCCCTTTCGTGCTCAGCTCCCTTCTGCACCAAGACCCCAGCACCAACCAGACCTGGCTCCTGGTCACCAGCCCCA
GAACCAAGAGGACACCAGGGCCCCTCCATCGATGTTCCCTTGTCCAGGATGAAATCCTTTGCCATCCTGTAGAGC
ATGTCCCCATCCCCAAGGGGAGGCACCGGGGAGTGACCGTTGTCCGGAGCCACCACGGTGTTTTGATATGCATTC
AAGTGCTGGTCCGGCGGCCTCACAGCCTCAGCTCAGAACTCACAGGCACCTGTAGCCTCCTGGGCCCTGACCTCC
GTCCCCAGGCTCAGGCCAACTTCTTCGACCTTGAAAATCTCCTGGATCCAGATGCACGTGTGGACACTGGAGACT
GCTACAGCAACAAAGAAGGCGGTGGAGAAGACGATGTGAACACAGCCAGGCAGCGCCGGGCTCTGGAGAAGGAGG
AGGAGGAAGACAAGGAGGAGGAGGAAGACGAGGAGGAGGAGGAAGCTGGCACCGAGATTGCCATCATCCTGGATG
GCTCAGGAAGCATTGATCCCCCAGACTTTCAGAGAGCCAAAGACTTCATCTCCAACATGATGAGGAACTTCTATG
AAAAGTGTTTTGAGTGCAACTTTGCCTTGGTGCAGTATGGAGGAGTGATCCAGACTGAGTTTGACCTTCGGGACA
GCCAGGATGTGATGGCCTCCCTCGCCAGAGTCCAGAACATCACTCAAGTGGGGAGTGTCACCAAGACTGCCTCAG
CCATGCAACACGTCTTAGACAGCATCTTCACCTCAAGCCACGGCTCCAGGAGAAAGGCATCCAAGGTCATGGTGG
TGCTCACCGATGGTGGCATATTCGAGGACCCCCTCAACCTTACGACAGTCATCAACTCCCCCAAAATGCAGGGTG
TTGAGCGCTTTGCCATTGGGGTGGGAGAAGAATTTAAGAGTGCTAGGACTGCGAGGGAACTGAACCTGATCGCCT
CAGACCCGGATGAGACCCATGCTTTCAAGGTGACCAACTACATGGCGCTGGATGGGCTGCTGAGCAAACTGCGGT
ACAACATCATCAGCATGGAAGGCACGGTTGGAGACGCCCTTCACTACCAGCTGGCACAGATTGGCTTCAGTGCTC
AGATCCTGGATGAGCGGCAGGTGCTGCTCGGCGCCGTCGGGGCCTTTGACTGGTCCGGAGGGGCGTTGCTCTACG
ACACACGCAGCCGCCGGGGCCGCTTCCTGAACCAGACAGCGGCGGCGGCGGCAGACGCGGAGGCTGCGCAGTACA
GCTACCTGGGTTACGCTGTGGCCGTGCTGCACAAGACCTGCAGCCTCTCCTACGTCGCGGGGGCTCCACAGTACA
AACATCATGGGGCCGTGTTTGAGCTCCAGAAGGAGGGCAGAGAGGCCAGCTTCCTGCCAGTGCTGGAGGGAGAGC
AGATGGGGTCCTATTTTGGCTCTGAGCTGTGCCCTGTGGACATTGACATGGATGGAAGCACGGACTTCTTGCTGG
TGGCTGCTCCATTTTACCACGTTCATGGAGAAGAAGGCAGAGTCTACGTGTACCGTCTCAGCGAGCAGGATGGTT
CTTTCTCCTTGGCACGCATACTGAGTGGGCACCCCGGGTTCACCAATGCCCGCTTTGGCTTTGCCATGGCGGCTA
TGGGGGATCTCAGTCAGGATAAGCTCACAGATGTGGCCATCGGGGCCCCCCTGGAAGGTTTTGGGGCAGATGATG
GTGCCAGCTTCGGCAGTGTGTATATCTACAATGGACACTGGGACGGCCTCTCCGCCAGCCCCTCGCAGCGGATCA
GAGCCTCCACGGTGGCCCCAGGACTCCAGTACTTCGGCATGTCCATGGCTGGTGGCTTTGATATTAGTGGCGACG
GCCTTGCCGACATCACCGTGGGCACTCTGGGCCAGGCGGTTGTGTTCCGCTCCCGGCCTGTGGTTCGCCTGAAGG
TCTCCATGGCCTTCACCCCCAGCGCACTGCCCATCGGCTTCAACGGCGTCGTGAATGTCCGTTTATGTTTTGAAA
TCAGCTCTGTAACCACAGCCTCTGAGTCAGGCCTCCGTGAGGCACTTCTCAACTTCACGCTGGATGTGGATGTGG
GGAAGCAGAGGAGACGGCTGCAGTGTTCAGACGTAAGAAGCTGTCTGGGCTGCCTGAGGGAGTGGAGCAGCGGAT
CCCAGCTTTGTGAGGACCTCCTGCTCATGCCCACAGAGGGAGAGCTCTGTGAGGAGGACTGCTTCTCCAATGCCA
GTGTCAAAGTCAGCTACCAGCTCCAGACCCCTGAGGGACAGACGGACCATCCCCAGCCCATCCTGGACCGCTACA
CTGAGCCCTTTGCCATCTTCCAGCTGCCCTATGAGAAGGCCTGCAAGAATAAGCTGTTTTGTGTCGCAGAATTAC
AGTTGGCCACCACCGTCTCTCAGCAGGAGTTGGTGGTGGGTCTCACAAAGGAGCTGACCCTGAACATTAACCTAA
CTAACTCCGGGGAAGATTCCTACATGACAAGCATGGCCTTGAATTACCCCAGAAACCTGCAGTTGAAGAGGATGC
AAAAGCCTCCCTCTCCAAACATTCAGTGTGATGACCCTCAGCCGGTTGCTTCTGTCCTGATCATGAACTGCAGGA
TTGGTCACCCCGTCCTCAAGAGGTCATCTGCTCATGTTTCAGTCGTTTGGCAGCTAGAGGAGAATGCCTTTCCAA
ACAGGACAGCAGACATCACTGTGACTGTCACCAATTCCAATGAAAGACGGTCTTTGGCCAACGAGACCCACACCC
TTCAATTCAGGCATGGCTTCGTTGCAGTTCTGTCCAAACCATCCATAATGTACGTGAACACAGGCCAGGGGCTTT
CTCACCACAAAGAATTCCTCTTCCATGTACATGGGGAGAACCTCTTTGGAGCAGAATACCAGTTGCAAATTTGCG
TCCCAACCAAATTACGAGGTCTCCAGGTTGCAGCAGTGAAGAAGCTGACGAGGACTCAGGCCTCCACGGTGTGCA
CCTGGAGTCAGGAGCGCGCTTGTGCGTACAGTTCGGTTCAGCATGTGGAAGAATGGCATTCAGTGAGCTGTGTCA
TCGCTTCAGATAAAGAAAATGTCACCGTGGCTGCAGAGATCTCCTGGGATCACTCTGAGGAGTTACTAAAAGATG
TAACTGAACTGCAGATCCTTGGTGAAATATCTTTCAACAAATCTCTATATGAGGGACTGAATGCAGAGAACCACA
GAACTAAGATCACTGTCGTCTTCCTGAAAGATGAGAAGTACCATTCTTTGCCTATCATCATTAAAGGCAGCGTTG
GTGGACTTCTGGTGTTGATCGTGATTCTGGTCATCCTGTTCAAGTGTGGCTTTTTTAAAAGAAAATATCAACAAC

FIGURE 1530B

TGAACTTGGAGAGCATCAGGAAGGCCCAGCTGAAATCAGAGAATCTGCTCGAAGAAGAGAATTAGGACCTGCTAT
CCACTGGGAGAGGCTATCAGCCAGTCCTGGGACTTGGAGACCCAGCATCCTTTGCATTACTTTTTCCTTCAGGAT
GATCTAGAGCAGCATGGAGCTGTTGGTAGAATATTAGTTTTTAACCATACATTGTCCCAAAAGTGTCTGTGCATT
GTGCAAAAAGTAAACTTAGGAAACATTTGGTATTAAATAAATTTACACTTTTCTTTGCAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1531

MWLFHTLLCIASLALLAAFNVDVARPWLTPKGGAPFVLSSLLHQDPSTNQTWLLVTSPRTKRTPGPLHRCSLVQD
EILCHPVEHVPIPKGRHRGVTVVRSHHGVLICIQVLVRRPHSLSSELTGTCSLLGPDLRPQAQANFFDLENLLDP
DARVDTGDCYSNKEGGGEDDVNTARQRRALEKEEEEDKEEEEDEEEEEAGTEIAIILDGSGSIDPPDFQRAKDFI
SNMMRNFYEKCFECNFALVQYGGVIQTEFDLRDSQDVMASLARVQNITQVGSVTKTASAMQHVLDSIFTSSHGSR
RKASKVMVVLTDGGIFEDPLNLTTVINSPKMQGVERFAIGVGEEFKSARTARELNLIASDPDETHAFKVTNYMAL
DGLLSKLRYNIISMEGTVGDALHYQLAQIGFSAQILDERQVLLGAVGAFDWSGGALLYDTRSRRGRFLNQTAAAA
ADAEAAQYSYLGYAVAVLHKTCSLSYVAGAPQYKHHGAVFELQKEGREASFLPVLEGEQMGSYFGSELCPVDIDM
DGSTDFLLVAAPFYHVHGEEGRVYVYRLSEQDGSFSLARILSGHPGFTNARFGFAMAAMGDLSQDKLTDVAIGAP
LEGFGADDGASFGSVYIYNGHWDGLSASPSQRIRASTVAPGLQYFGMSMAGGFDISGDGLADITVGTLGQAVVFR
SRPVVRLKVSMAFTPSALPIGFNGVVNVRLCFEISSVTTASESGLREALLNFTLDVDVGKQRRRLQCSDVRSCLG
CLREWSSGSQLCEDLLLMPTEGELCEEDCFSNASVKVSYQLQTPEGQTDHPQPILDRYTEPFAIFQLPYEKACKN
KLFCVAELQLATTVSQQELVVGLTKELTLNINLTNSGEDSYMTSMALNYPRNLQLKRMQKPPSPNIQCDDPQPVA
SVLIMNCRIGHPVLKRSSAHVSVVWQLEENAFPNRTADITVTVTNSNERRSLANETHTLQFRHGFVAVLSKPSIM
YVNTGQGLSHHKEFLFHVHGENLFGAEYQLQICVPTKLRGLQVAAVKKLTRTQASTVCTWSQERACAYSSVQHVE
EWHSVSCVIASDKENVTVAAEISWDHSEELLKDVTELQILGEISFNKSLYEGLNAENHRTKITVVFLKDEKYHSL
PIIIKGSVGGLLVLIVILVILFKCGFFKRKYQQLNLESIRKAQLKSENLLEEEN

FIGURE 1532

TAACGCTCCCTAAACTGCCACTTGXTCAGCTCCGCGCCTAAGGTGTCTATTAGTGCGCCTGCGCTGTGACCTAGA
ATGGGCGC**ATG**CGCCGAGCGGAACTGGCTGGTTTGAAAACCATGGCGTGGGTACCAGCGGAGTCCGCAGTGGAAG
AGTTGATGCCTCGGCTATTGCCGGTAGAGCCTTGCGACTTGACGGAAGGTTTCGATCCCTCGGTACCCCCGAGGA
CGCCTCAGGAATACCTGAGGCGGGTCCAGATCGAAGCAGCTCAATGTCCAGATGTTGTGGTAGCTCAAATTGACC
CAAAGAAGTTGAAAAGGAAGCAAAGTGTGAATATTTCTCTTTCAGGATGCCAACCCGCCCCTGAAGGTTATTCCC
CAACACTTCAATGGCAACAGCAACAAGTGGCACAGTTTTCAACTGTTCGACAGAATGTGAACAAACATAGAAGTC
ACTGGAAATCACAACAGTTGGATAGTAATGTGACAATGCCAAAATCTGAAGATGAAGAAGGCTGGAAGAAATTTT
GTCTGGGTGAAAAGTTATGTGCTGACGGGGCTGTTGGACCAGCCACAAATGAAAGTCCTGGAATAGATTATGTAC
AAATTGGTTTTCCTCCCTTGCTTAGTATTGTTAGCAGAATGAATCAGGCAACAGTAACTAGTGTCTTGGAATATC
TGAGTAATTGGTTTGGAGAAAGAGACTTTACTCCAGAATTGGGAAGATGGCTTTATGCTTTATTGGCTTGTCTTG
AAAAGCCTTTGTTACCTGAGGCTCATTCACTGATTCGGCAGCTTGCAAGAAGGTGCTCTGAAGTGAGGCTCTTAG
TGGATAGCAAAGATGATGAGAGGGTTCCTGCTTTGAATTTATTAATCTGCTTGGTTAGCAGGTATTTTGACCAAC
GTGATTTAGCTGATGAGCCATCT**TGA**TGTAGCTGATCTCTCAGGGATAGAAGATATTTCTCATGAAGGCAGCCTA
ACTCTGAGGAAAACAATGCCAATTCAAGTACAGATTTCAACACATCTTCAACACTATGTGAAGGGTTCACATCTT
AACCTGTGCAATTCAGATTGATACTCAGAATATGGGTTGATTTGAATATCTGAAATATCAATGGAAAATCCCACT
CAGTTTTTGATGAACAGTTTGAACAGTTTTCTGTAATCAAGCAGCTTGCATAGAAATTGTATGATGAAATTTTAC
ATAGGTTCTTGGTGCTGTTTTGTTCTTTTTTTGTTTTTTGTTGTTTTGTTATTTACTTATATACATATAAAATTT
TATTGAAAAT

FIGURE 1533

MRRAELAGLKTMAWVPAESAVEELMPRLLPVEPCDLTEGFDPSVPPRTPQEYLRRVQIEAAQCPDVVVAQIDPKK
LKRKQSVNISLSGCQPAPEGYSPTLQWQQQQVAQFSTVRQNVNKHRSHWKSQQLDSNVTMPKSEDEEGWKKFCLG
EKLCADGAVGPATNESPGIDYVQIGFPPLLSIVSRMNQATVTSVLEYLSNWFGERDFTPELGRWLYALLACLEKP
LLPEAHSLIRQLARRCSEVRLLVDSKDDERVPALNLLICLVSRYFDQRDLADEPS

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FIGURE 1534

CGGGATTTAGATCACGTCCCGCAGGCCGGCGGAAGTAGCTGATACTCTCATTGGTTGCAAAACCTTGATCTGTGA
AAGCGGGCGTTTTGGAAGATACCGGAAGTAGAGTCACGGAGAGTATTAAGAA**ATG**GAGAGAAAAATAAGCAGAAT
CCACCTTGTTTCTGAACCCAGTATAACTCATTTTCTACAAGTATCTTGGGAGAAAACACTGGAATCTGGTTTTGT
TATTACACTTACTGATGGTCATTCAGCATGGACTGGGACAGTTTCTGAATCAGAGATTTCCCAAGAAGCTGATGA
CATGGCAATGGAAAAAGGGAAATATGTTGGTGAACTGAGAAAAGCATTGTTGTCAGGAGCAGGACCAGCTGATGT
ATACACGTTTAATTTTTCTAAAGAGTCTTGTTATTTCTTCTTTGAGAAAAACCTGAAAGATGTCTCATTCAGACT
TGGTTCCTTCAACCTAGAGAAAGTTGAAAACCCAGCTGAAGTCATTAGAGAACTTATTTGTTATTGCTTGGACAC
CATTGCAGAAAATCAAGCCAAAAATGAGCACCTGCAGAAAGAAAATGAAAGGCTTCTGAGAGATTGGAATGATGT
TCAAGGACGATTTGAAAAATGTGTGAGTGCTAAGGAAGCTTTGGAGACTGATCTTTATAAGCGGTTTATTCTGGT
GTTGAATGAGAAGAAAACAAAAATCAGAAGTTTGCATAATAAATTATTAAATGCAGCTCAAGAACGAGAAAAGGA
CATCAAACAAGAAGGGGAAACTGCAATCTGTTCTGAAATGACTGCTGACCGAGATCCAGTCTATGATGAGAGTAC
TGATGAGGAAAGTGAAAACCAAACTGATCTCTCTGGGTTGGCTTCAGCTGCTGTAAGTAAAGATGATTCCATTAT
TTCAAGTCTTGATGTCACTGATATTGCACCAAGTAGAAAAAGGAGACAGCGAATGCAAAGAAATCTTGGGACAGA
ACCTAAAATGGCTCCTCAGGAGAATCAGCTTCAAGAAAAGGAAAATTCTAGGCCTGATTCTTCACTACCTGAGAC
GTCGAAAAAGGAGCACATCTCAGCTGAAAACATGTCTTTAGAAACTCTGAGAAACAGCAGCCCAGAAGACCTCTT
TGATGAGATT**TAA**CAGTCTCAAAAAATACTTTGATGTTCACTAGACTATGTTTTCTATTCATTTCTTTAAAATGA
AAAAGGAGAATTTCAAGTCAGCAGCCGCTATTACCGTATCTTACAATTTAATTACATACACAGTGAATTGAAACC
ATTGTGCAAAATGGATTACACATGTATACAAAGATACGATTTGATGATGACACTGGCACATTGAGTTCTAAACTA
TTCATTCAGCATGCCTATAATTACATAAATTGTATGAGACTTTTTGTTGCAAAGGACACATTTATCATATTCATT
CACACATATTATATGTGATAGCTGTCCAACATCCTGTCTGGGAAGATTTTGAAAACAGGACAAAGAAAACATCAT
TTTAAAATGTCTTCAGCTTTTTTTGAATAGACGTATTCAAACATATTCTGAACATTGATGTTTGAACATTTTAAT
TTGTGTGATGATGTAGAAAATATAATTTTAGTTTGTACATAAACATTGTGAAAATCTGATAATAAAATTTTTGAT
ACATTGAAAAAAAAA

FIGURE 1535

MERKISRIHLVSEPSITHFLQVSWEKTLESGFVITLTDGHSAWTGTVSESEISQEADDMAMEKGKYVGELRKALL
SGAGPADVYTFNFSKESCYFFFEKNLKDVSFRLGSFNLEKVENPAEVIRELICYCLDTIAENQAKNEHLQKENER
LLRDWNDVQGRFEKCVSAKEALETDLYKRFILVLNEKKTKIRSLHNKLLNAAQEREKDIKQEGETAICSEMTADR
DPVYDESTDEESENQTDLSGLASAAVSKDDSIISSLDVTDIAPSRKRRQRMQRNLGTEPKMAPQENQLQEKENSR
PDSSLPETSKKEHISAENMSLETLRNSSPEDLFDEI

FIGURE 1536

AGGAGGCAGTAGTTCCCCGCTTCCCTTCCGCGGGAGGGAGAGTTAGCTAGCCATCCAAGAAAACACC**ATG**AAAGA
TAACGATATCAAGAGACTACTGTATACCCATCTTTTATGCATATTTTCAATTATCCTAAGTGTCTTCATTCCATC
ACTCTTCTTGGAGAACTTCTCAATATTGGAAACACACTTGACATGGTTGTGCATCTGTTCTGGTTTTGTAACTGC
TGTCAATCTAGTACTATATTTAGTAGTGAAACCAAATACATCCTCTAAAAGAAGTTCATTATCACACAAGGTAAC
TGGATTTTTGAAATGCTGTATCTACTTTCTTATGTCTTGTTTCTCCTTTCATGTAATTTTTGTTCTGTATGGAGC
ACCACTGATAGAGTTGGCATTGGAAACATTTTTATTTGCAGTTATTTTGTCTACTTTTACTACTGTGCCTTGCTT
ATGTTTGTTAGGACCAAACCTCAAAGCATGGCTAAGAGTGTTCAGTAGAAATGGAGTTACATCCATATGGGAGAA
TAGTCTCCAGATCACTACAATTTCTAGCTTTGTAGGAGCATGGCTTGGAGCACTTCCTATTCCACTGGATTGGGA
AAGACCATGGCAGGTATGGCCCATCTCCTGTACGCTTGGAGCGACCTTTGGCTACGTGGCTGGCCTTGTTATTTC
ACCACTCTGGATATACTGGAATAGAAAGCAACTTACATACAAGAACAAT**TAA**CTGGAGCAAAGGGAGATATTTCT
TTGTGCAGATTCTGTAAGGGCTGGGCAGAAATGTGTATGGTCAAAGCCAAGCAGTTCCATTTACAGCTCTGTTTT
TTACGTAGTTACAACATGATGTGATTGTAGCTTTTTAAACTATGAAACCCCTGAGAGATTGTACCTTCTAGTTGA
AATAAAGTATTTATAAT

FIGURE 1537

MKDNDIKRLLYTHLLCIFSIILSVFIPSLFLENFSILETHLTWLCICSGFVTAVNLVLYLVVKPNTSSKRSSLSH
KVTGFLKCCIYFLMSCFSFHVIFVLYGAPLIELALETFLFAVILSTFTTVPCLCLLGPNLKAWLRVFSRNGVTSI
WENSLQITTISSFVGAWLGALPIPLDWERPWQVWPISCTLGATFGYVAGLVISPLWIYWNRKQLTYKNN

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FIGURE 1538

GGCACGAGGGCCCGTGCCGCCCCAGCCGCTGCCGCCTGCACCGGACCCGGAGCCGCC**ATG**CCCAAGTGTCCCAAG
TGCAACAAGGAGGTGTACTTCGCCGAGAGGGTGACCTCTCTGGGCAAGGACTGGCATCGGCCCTGCCTGAAGTGC
GAGAAATGTGGGAAGACGCTGACCTCTGGGGGCCACGCTGAGCACGAAGGCAAACCCTACTGCAACCACCCCTGC
TACGCAGCCATGTTTGGGCCTAAAGGCTTTGGGCGGGGCGGAGCCGAGAGCCACACTTTCAAG**TAA**ACCAGGTGG
TGGAGACCCCATCCTTGGCTGCTTGCAGGGCCACTGTCCAGGCAAATGCCAGGCCTTGTCCCCAGATGCCCAGGG
CTCCCTTGTTGCCCCTAATGCTCTCAGTAAACCTGAACACTTGGAAAAAAAAAAAAAAAAAAA

FIGURE 1539

MPKCPKCNKEVYFAERVTSLGKDWHRPCLKCEKCGKTLTSGGHAEHEGKPYCNHPCYAAMFGPKGFGRGGAESHT
FK

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FIGURE 1540

GCAGCGCAGGGAGCCAGGCGGGCTGCCGGCGGGTGTGAAGAAAAAA**ATG**ACACTCCAATGGGCTGCAGTGGCAAC
CTTTCTTTATGCCGAAATAGGACTCATTTTAATCTTCTGCCTACTTTTTATTCCTCCTCAGAGATGGCAGAAGAT
TTTTTCATTTAATGTCTGGGGTAAAATTGCAACTTTTTGGAACAAGGCTTTCCTTACCATTATCATCCTATTGAT
TGTTCTATTTCTAGATGCTGTGAGAGAAGTAAGGAAATATTCCTCAGTTCATACCATTGAGAAGAGCTCCACCAG
CAGACCTGATGCCTATGAACACACACAGATGAAACTTTTTAGGTCTCAAAGAAATCTTTCAATACTTTCTGGATT
CTCGTTATTTTTTTGGCTAGTGTTGAGACGTCTGGTTACGCTTATTACTCAACTGGCAAAAGAACGTTCAAACAA
AGGTGTACTTAAAACTCAAGCAGAAAATACTAACAAGGCTGCCAAAAAATTTATGGAAGAAAACGAAAAACTAAA
AAGGATTTTGAAAAGCCATGGTAAAGATGAAGAATGTGTTTTGGAAGCAGAAAATAAAAAACTAGTAGAAGACCA
GGAGAAACTGAAAACTGAATTAAGGAAGACTTCAGATGCCCTTTCTAAGGCACAAAATGATGTGATGGAAATGAA
GATGCAGTCAGAGAGACTTTCGAAAGAATATGATCAACTCCTGAAAGAACACTCTGAACTTCAGGATCGTTTAGA
AAGAGGCAACAAGAAAAGACTG**TGA**ACTTTATAAAAGACACTTGCAATATACTGTGTCAAAATGATAATTTTGTT
ATGTTAGCCTCTAGAAAATTTAAGTTCAGAAAAATGCACTATGACCGGTTCGTAATTTTTTTAATGCCACACATA
GGTTGTATTGTAATGGCATTATCAAAATATTTGATGATGTTTCAGATATATTGCAAAGTCTGTATTCCAGCTCTT
AAGAAAAATATAAGCATGTTAAATACCATATTTACATATTGATAATGTCATTGGTATATGGTGGCTGTTTACCAA
TAAAAGGAAAAAATTCAAAAAAAAAAAAAAAAAAA

FIGURE 1541

MTLQWAAVATFLYAEIGLILIFCLLFIPPQRWQKIFSFNVWGKIATFWNKAFLTIIILLIVLFLDAVREVRKYSS
VHTIEKSSTSRPDAYEHTQMKLFRSQRNLSILSGFSLFFWLVLRRLVTLITQLAKERSNKGVLKTQAENTNKAAK
KFMEENEKLKRILKSHGKDEECVLEAENKKLVEDQEKLKTELRKTSDALSKAQNDVMEMKMQSERLSKEYDQLLK
EHSELQDRLERGNKKRL

FIGURE 1542

CCGGGGCCACGCGATTGGCGCGAAGTTTTCTTTTCTCCTTCCACCTTCTTTTCATTTCTAGTGAGACACACGCTT
TGGTCCTGGCTTTCGGCCCGTAGTTGTAGAAGGAGCCCTGCTGGTGCAGGTTAGAGGTGCCGCATCCCCCGGAGC
TCTCGAAGTGGAGGCGGTAGGAAACGGAGGGCTTGCGGCTAGCCGGAGGAAGCTTTGGAGCCGGAAGCCATGGCA
CACTACCCCACAAGGCTGAAGACCAGAAAAACTTATTCATGGGTTGGCAGGCCCTTGTTGGATCGAAAACTGCAC
TACCAAACCTATAGAGAAATGTGTGTGAAAACAGAAGGTTGTTCCACCGAGATTCACATCCAGATTGGACAGTTT
GTGTTGATTGAAGGGGATGATGATGAAAACCCGTATGTTGCTAAATTGCTTGAGTTGTTCGAAGATGACTCTGAT
CCTCCTCCTAAGAAACGTGCTCGAGTACAGTGGTTTGTCCGATTCTGTGAAGTCCCTGCCTGTAAACGGCATTTG
TTGGGCCGGAAGCCTGGTGCACAGGAAATATTCTGGTATGATTACCCGGCCTGTGACAGCAACATTAATGCGGAG
ACCATCATTGGCCTTGTTCGGGTGATACCTTTAGCCCCAAAGGATGTGGTACCGACGAATCTGAAAAATGAGAAG
ACACTCTTTGTGAAACTATCCTGGAATGAGAAGAAATTCAGGCCACTTTCCTCAGAACTATTTGCGGAGTTGAAT
AAACCACAAGAGAGTGCAGCCAAGTGCCAGAAACCCGTGAGAGCCAAGAGTAAGAGTGCAGAGAGCCCTTCTTGG
ACCCCAGCAGAACATGTGGCCAAAAGGATTGAATCAAGGCACTCCGCCTCCAAATCTCGCCAAACTCCTACCCAT
CCTCTTACCCCAAGAGCCAGAAAGAGGCTGGAGCTTGGCAACTTAGGTAACCCTCAGATGTCCCAGCAGACTTCA
TGTGCCTCCTTGGATTCTCCAGGAAGAATAAAACGGAAAGTGGCCTTCTCGGAGATCACCTCACCTTCTAAGAGA
TCTCAGCCTGATAAACTTCAAACCTTGTCTCCAGCTCTGAAAGCCCCAGAGAAAACCAGAGAGACTGGACTCTCT
TATACTGAGGATGACAAGAAGGCTTCACCTGAACATCGCATAATCCTGAGAACCCGAATTGCAGCTTCGAAAACC
ATAGACATTAGAGAGGAGAGAACACTTACCCCTATCAGTGGGGGACAGAGATCTTCAGTGGTGCCATCCGTGATT
CTGAAACCAGAAAACATCAAAAAGAGGGATGCAAAAGAAGCAAAAGCCCAGAATGAAGCGACCTCTACTCCCCAT
CGTATCCGCAGAAAGAGTTCTGTCTTGACTATGAATCGGATTAGGCAGCAGCTTCGGTTTCTAGGTAATAGTAAA
AGTGACCAAGAAGAGAAAGAGATTCTGCCAGCAGCAGAGATTTCAGACTCTAGCAGTGACGAAGAAGAGGCTTCC
ACACCGCCCCTTCCAAGGAGAGCACCCAGAACTGTGTCCAGGAACCTGCGATCTTCCTTGAAGTCATCCTTACAT
ACCCTCACGAAGGTGCCAAAGAAGAGTCTCAAGCCTAGAACGCCACGTTGTGCCGCTCCTCAGATCCGTAGTCGA
AGCCTGGCTGCCCAGGAGCCAGCCAGTGTGCTGGAGGAAGCCCGACTGAGGCTGCATGTTTCTGCTGTACCTGAG
TCTCTTCCCTGTCGGGAACAGGAATTCCAAGACATCTACAATTTTGTGGAAAGCAAACTCCTTGACCATACCGGA
GGGTGCATGTACATCTCCGGTGTCCCTGGGACAGGGAAGACTGCCACTGTTCATGAAGTGATACGCTGCCTGCAG
CAGGCAGCCCAAGCCAATGATGTTCCTCCCTTTCAATACATTGAGGTCAATGGCATGAAGCTGACGGAGCCCCAC
CAAGTCTATGTGCACATCTTGCAGAAGCTAACAGGCCAAAAAGCAACAGCCAACCATGCGGCAGAACTGCTGGCA
AAGCAATTCTGCACCCGAGGGTCACCTCAGGAAACCACCGTCCTGCTTGTGGATGAGCTCGACCTTCTGTGGACT
CACAAACAAGACATAATGTACAATCTCTTTGACTGGCCCACTCATAAGGAGGCCCGGCTTGTGGTCCTGGCAATT
GCCAACACAATGGACCTGCCAGAGCGAATCATGATGAACCGGGTGTCCAGCCGACTGGGTCTTACCAGGATGTGC
TTCCAGCCCTATACATATAGCCAGCTGCAGCAGATCCTAAGGTCCCGGCTCAAGCATCTAAAGGCCTTTGAAGAT
GATGCCATCCAGCTGGTAGCCAGGAAGGTAGCAGCACTGTCTGGAGATGCACGACGGTGCCTGGACATCTGCAGG
CGTGCCACAGAGATCTGTGAGTTCTCCCAGCAGAAGCCTGACTCCCCTGGCCTGGTCACCATAGCCCACTCAATG
GAAGCTGTGGATGAGATGTTTTCATCATCATACATCACGGCCATCAAAAATTCCTCTGTTCTGGAACAGAGCTTC
CTGAGAGCCATCCTCGCAGAGTTCCGTCGATCAGGACTGGAGGAAGCCACGTTTCAACAGATATATAGTCAACAT
GTGGCACTGTGCAGAATGGAGGGACTGCCGTACCCCACCATGTCAGAGACCATGGCCGTGTGTTCTCACCTGGGC
TCCTGTCGCCTCCTGCTTGTGGAGCCCAGCAGGAACGATCTGCTCCTTCGGGTGCGGCTCAACGTCAGCCAGGAT
GATGTGCTGTATGCGCTGAAAGACGAGTAAAGGGGCTTCACAAGTTAAAAGACTGGGGTCTTGCTGGGTTTTGTT
TTTTGAGACAGGGTCTTGCTCTGTCGCCCAGGCTGGAGTGCAGTGGCACGATCATGGCTCACTGCAGCCTTGACT
TCTCAGGCTTAGGTGACCCCCCAACCTCATCCTCCCAGGTGGCTGAAACTACAGGCACATGCCACCATGCCCAGC
TGATTTTTTGTAGAGACAGGGCTTCACCATGTTGCCAAGCTAGTCTACAAAGCATCTGATTTTGGAAGTACATGG
AATTGTTGTAACAAAGTATATTGAATGGAAATGGCTCTCATGTATTTTGGAATTTTCCATTAAATAATTTGCTTT
TTA

FIGURE 1543

MAHYPTRLKTRKTYSWVGRPLLDRKLHYQTYREMCVKTEGCSTEIHIQIGQFVLIEGDDDENPYVAKLLELFEDD
SDPPPKKRARVQWFVRFCEVPACKRHLLGRKPGAQEIFWYDYPACDSNINAETIIGLVRVIPLAPKDVVPTNLKN
EKTLFVKLSWNEKKFRPLSSELFAELNKPQESAAKCQKPVRAKSKSAESPSWTPAEHVAKRIESRHSASKSRQTP
THPLTPRARKRLELGNLGNPQMSQQTSCASLDSPGRIKRKVAFSEITSPSKRSQPDKLQTLSPALKAPEKTRETG
LSYTEDDKKASPEHRIILRTRIAASKTIDIREERTLTPISGGQRSSVVPSVILKPENIKKRDAKEAKAQNEATST
PHRIRRKSSVLTMNRIRQQLRFLGNSKSDQEEKEILPAAEISDSSSDEEEASTPPLPRRAPRTVSRNLRSSLKSS
LHTLTKVPKKSLKPRTPRCAAPQIRSRSLAAQEPASVLEEARLRLHVSAVPESLPCREQEFQDIYNFVESKLLDH
TGGCMYISGVPGTGKTATVHEVIRCLQQAAQANDVPPFQYIEVNGMKLTEPHQVYVHILQKLTGQKATANHAAEL
LAKQFCTRGSPQETTVLLVDELDLLWTHKQDIMYNLFDWPTHKEARLVVLAIANTMDLPERIMMNRVSSRLGLTR
MCFQPYTYSQLQQILRSRLKHLKAFEDDAIQLVARKVAALSGDARRCLDICRRATEICEFSQQKPDSPGLVTIAH
SMEAVDEMFSSSYITAIKNSSVLEQSFLRAILAEFRRSGLEEATFQQIYSQHVALCRMEGLPYPTMSETMAVCSH
LGSCRLLLVEPSRNDLLLRVRLNVSQDDVLYALKDE

FIGURE 1544

TTGGAACCAGAGAGAAGCCGGGATGGAAACTCCAAACACCACAGAGGACTATGACACGACCACAGAGTTTGACTA
TGGGGATGCAACTCCGTGCCAGAAGGTGAACGAGAGGGCCTTTGGGGCCCAACTGCTGCCCCCTCTGTACTCCTT
GGTATTTGTCATTGGCCTGGTTGGAAACATCCTGGTGGTCCTGGTCCTTGTGCAATACAAGAGGCTAAAAAACAT
GACCAGCATCTACCTCCTGAACCTGGCCATTTCTGACCTGCTCTTCCTGTTCACGCTTCCCTTCTGGATCGACTA
CAAGTTGAAGGATGACTGGGTTTTTGGTGATGCCATGTGTAAGATCCTCTCTGGGTTTTATTACACAGGCTTGTA
CAGCGAGATCTTTTTCATCATCCTGCTGACGATTGACAGGTACCTGGCCATCGTCCACGCCGTGTTTGCCTTGCG
GGCACGGACCGTCACTTTTGGTGTCATCACCAGCATCATCATTTGGGCCCTGGCCATCTTGGCTTCCATGCCAGG
CTTATACTTTTCCAAGACCCAATGGGAATTCACTCACCACACCTGCAGCCTTCACTTTCCTCACGAAAGCCTACG
AGAGTGGAAGCTGTTTCAGGCTCTGAAACTGAACCTCTTTGGGCTGGTATTGCCTTTGTTGGTCATGATCATCTG
CTACACAGGGATTATAAAGATTCTGCTAAGACGACCAAATGAGAAGAAATCCAAAGCTGTCCGTTTGATTTTTGT
CATCATGATCATCTTTTTTCTCTTTTGGACCCCCTACAATTTGACTATACTTATTTCTGTTTTCCAAGACTTCCT
GTTCACCCATGAGTGTGAGCAGAGCAGACATTTGGACCTGGCTGTGCAAGTGACGGAGGTGATCGCCTACACGCA
CTGCTGTGTCAACCCAGTGATCTACGCCTTCGTTGGTGAGAGGTTCCGGAAGTACCTGCGGCAGTTGTTCCACAG
GCGTGTGGCTGTGCACCTGGTTAAATGGCTCCCCTTCCTCTCCGTGGACAGGCTGGACAGGGTCAGCTCCACATC
TCCCTCCACAGGGGAGCATGAACTCTCTGCTGGGTTCTGACTCAGACCATAGGAGGCCAACCCAAAATAAGCAGG
CGTGACCTGCCAGGCACACTGAGCCAGCAGCCTGGCTCTCCCAGCCAGGTTCTGACTCTTGGCACAGCATGGAGT
CACAGCCACTTGGGATAGAGAGGGAATGTAATGGTGGCCTGGGGCTTCTGAGGCTTCTGGGGCTTCAGTCTTTTC
CATGAACTTCTCCCCTGGTAGAAAGAAGATGAATGAGCAAAACCAAATATTCCAGAGACTGGGACTAATGTACCA
GAGAAGGGCTTGGACTCAAGCAAGATTTCAGATTTGTGACCATTAGCATTTGTCAACAAAGTCACCCACTTCCCA
CTATTGCTTGCACAAACCAATTAAACCCAGTAGTGGTGACTGTGGGCTCCATTCAAAGTGAGCTCCTAAGCCATG
GGAGACACTGATGTATGAGGAATTTCTGTTCTTCCATCACCTCCCCCCCCCCGCCACCCTCCCACTGCCAAAGAA
CTTGGAAATAGTGATTTCCACAGTGACTCCACTCTGAGTCCCAGAGCCAATCAGTAGCCAGCATCTGCCTCCCCT
TCACTCCCACCGCAGATTTGGGCTCTTGGAATCCTGGGGAACATAGAACTCATGACGGAAGAGTTGAGACCTAAC
GAGAAATAGAAATGGGGAACTACTGCTGGCAGTGGAACTAAGAAAGCCCTTAGGAAGAATTTTTATATCCACTAA
AATCAAACAATTCAGGGAGTGGGCTAAGCACGGGCCATATGAATAACATGGTGTGCTTCTTAAAATAGCCATAAA
GGGGAGGGACTCATCATTTCCATTTACCCTTCTTTTCTGACTATTTTTCAGAATCTCTCTTCTTTTCAAGTTGGG
TGATATGTTGGTAGATTCTAATGGCTTTATTGCAGCGGTTAATAACAGGCAAAAGGAAGCAGGGTTGGTTTCCCT
TCTTTTTGTTCTTCATCTAAGCCTTCTGGTTTTATGGGTCAGAGTTCCGACTGCCATCTTGGACTTGTCAGCAAA
AAAAAATAATAATAATAATAATAAGGCCTGCTGTGTAAGCTGACAGTATTTGTAGCTGATAGGGGGTTGGGAGGA
AGTGTCTACTAGGAGGGTGGGTGAGATCTGTGTTGATGT

FIGURE 1545

METPNTTEDYDTTTEFDYGDATPCQKVNERAFGAQLLPPLYSLVFVIGLVGNILVVLVLVQYKRLKNMTSIYLLN
LAISDLLFLFTLPFWIDYKLKDDWVFGDAMCKILSGFYYTGLYSEIFFIILLTIDRYLAIVHAVFALRARTVTFG
VITSIIIWALAILASMPGLYFSKTQWEFTHHTCSLHFPHESLREWKLFQALKLNLFGLVLPLLVMIICYTGIIKI
LLRRPNEKKSKAVRLIFVIMIIFFLFWTPYNLTILISVFQDFLFTHECEQSRHLDLAVQVTEVIAYTHCCVNPVI
YAFVGERFRKYLRQLFHRRVAVHLVKWLPFLSVDRLDRVSSTSPSTGEHELSAGF

FIGURE 1546

GGCACGAGCCCAGAAACAAAGACTTCACGGACAAAGTCCCTTGGAACCAGAGAGAAGCCGGGATGGAAACTCCAA
ACACCACAGAGGACTATGACACGACCACAGAGTTTGACTATGGGGATGCAACTCCGTGCCAGAAGGTGAACGAGA
GGGCCTTTGGGGCCCAACTGCTGCCCCCTCTGTACTCCTTGGTATTTGTCATTGGCCTGGTTGGAAACATCCTGG
TGGTCCTGGTCCTTGTGCAATACAAGAGGCTAAAAAACATGACCAGCATCTACCTCCTGAACCTGGCCATTTCTG
ACCTGCTCTTCCTGTTCACGCTTCCCTTCTGGATCGACTACAAGTTGAAGGATGACTGGGTTTTTGGTGATGCCA
TGTGTAAGATCCTCTCTGGGTTTTATTACACAGGCTTGTACAGCGAGATCTTTTTCATCATCCTGCTGACGATTG
ACAGGTACCTGGCCATCGTCCACGCCGTGTTTGCCTTGCGGGCACGGACCGTCACTTTTGGTGTCATCACCAGCA
TCATCATTTGGGCCCTGGCCATCTTGGCTTCCATGCCAGGCTTATACTTTTCCAAGACCCAATGGGAATTCACTC
ACCACACCTGCAGCCTTCACTTTCCTCACGAAAGCCTACGAGAGTGGAAGCTGTTTCAGGCTCTGAAACTGAACC
TCTTTGGGCTGGTATTGCCTTTGTTGGTCATGATCATCTGCTACACAGGGATTATAAAGATTCTGCTAAGACGAC
CAAATGAGAAGAAATCCAAAGCTGTCCGTTTGATTTTTGTCATCATGATCATCTTTTTTCTCTTTTGGACCCCCT
ACAATTTGACTATACTTATTTCTGTTTTCCAAGACTTCCTGTTCACCCATGAGTGTGAGCAGAGCAGACATTTGG
ACCTGGCTGTGCAAGTGACGGAGGTGATCGCCTACACGCACTGCTGTGTCAACCCAGTGATCTACGCCTTCGTTG
GTGAGAGGTTCCGGAAGTACCTGCGGCAGTTGTTCCACAGGCGTGTGGCTGTGCACCTGGTTAAATGGCTCCCCT
TCCTCTCCGTGGACAGGCTGGAGAGGGTCAGCTCCACATCTCCCTCCACAGGGGAGCATGAACTCTCTGCTGGGT
TCTGACTCAGACCATAGGAGGCCAACCCAAAATAAGCAGGCGTGACCTGCCAGGCACACTGAGCCAGCAGCCTGG
CTCTCCCAGCCAGGTTCTGACTCTTGGCACAGCATGGAGTCACAGCCACTTGGGATAGAGAGGGAATGTAATGGT
GGCCTGGGGCTTCTGAGGCTTCTGGGGCTTCAGTCTTTTCCATGAACTTCTCCCCTGGTAGAAAGAAGATGAATG
AGCAAAACCAAATATTCCAGAGACTGGGACTAAGTGTACCAGAGAAGGGCTTGGACTCAAGCAAGATTTCAGATT
TGTGACCATTAGCATTTGTCAACAAAGTCACCCACTTCCCACTATTGCTTGCACAAACCAATTAAACCCAGTAGT
GGTGACTGTGGGCTCCATTCAAAGTGAGCTCCTAAGCCATGGGAGACACTGATGTATGAGGAATTTCTGTTCTTC
CATCACCTCCCCCCCCCCGCCACCCTCCCACTGCCAAGAACTTGGAAATAGTGATTTCCACAGTGACTCCACTCT
GAGTCCCAGAGCCAATCAGTAGCCAGCATCTGCCTCCCCTTCACTCCCACCGCAGGATTTGGGCTCTTGGAATCC
TGGGGAACATAGAACTCATGACGGAAGAGTTGAGACCTAACGAGAAATAGAAATGGGGGAACTACTGCTGGCAGT
GGAACTAAGAAAGCCCTTAGGAAGAATTTTTATATCCACTAAAATCAAACAATTCAGGGAGTGGGCTAAGCACGG
GCCATATGAATAACATGGTGTGCTTCTTAAAATAGCCATAAAGGGGAGGGACTCATCATTTCCATTTACCCTTCT
TTTCTGACTATTTTTCAGAATCTCTCTTCTTTTCAAGTTGGGTGATATGTTGGTAGATTCTAATGGCTTTATTGC
AGCGATTAATAACAGGCAAAAGGAAGCAGGGTTGGTTTCCCTTCTTTTTGTTCTTCATCTAAGCCTTCTGGTTTT
ATGGGTCAGAGTTCCGACTGCCATCTTGGACTTGTCAGCAAAAAAAAAAAAAAAA

FIGURE 1547

METPNTTEDYDTTTEFDYGDATPCQKVNERAFGAQLLPPLYSLVFVIGLVGNILVVLVLVQYKRLKNMTSIYLLN
LAISDLLFLFTLPFWIDYKLKDDWVFGDAMCKILSGFYYTGLYSEIFFIILLTIDRYLAIVHAVFALRARTVTFG
VITSIIIWALAILASMPGLYFSKTQWEFTHHTCSLHFPHESLREWKLFQALKLNLFGLVLPLLVMIICYTGIIKI
LLRRPNEKKSKAVRLIFVIMIIFFLFWTPYNLTILISVFQDFLFTHECEQSRHLDLAVQVTEVIAYTHCCVNPVI
YAFVGERFRKYLRQLFHRRVAVHLVKWLPFLSVDRLERVSSTSPSTGEHELSAGF

FIGURE 1548

AAGGACACGGGCAGCAGACAGTGGTCAGTCCTTTCTTGGCTCTGCTGACACTCGAGCCCACATTCCGTCACCTGC
TCAGAATCATGCAGGTCTCCACTGCTGCCCTTGCTGTCCTCCTCTGCACCATGGCTCTCTGCAACCAGTTCTCTG
CATCACTTGCTGCTGACACGCCGACCGCCTGCTGCTTCAGCTACACCTCCCGGCAGATTCCACAGAATTTCATAG
CTGACTACTTTGAGACGAGCAGCCAGTGCTCCAAGCCCGGTGTCATCTTCCTAACCAAGCGAAGCCGGCAGGTCT
GTGCTGACCCCAGTGAGGAGTGGGTCCAGAAATATGTCAGCGACCTAGAGCTGAGTGCCTGAGGGGTCCAGAAGC
TTCGAGGCCCAGCGACCTCGGTGGGCCAGTGGGGAGGAGCAGGAGCCTGAGCCTTGGGAAACATGCGTGTGACCT
CCACAGCTACCTCTTCTATGGACTGGTTGTTGCCAAACAGCCACACTGTGGGACTCTTCTTAACTTAAATTTTAA
TTTATTTATACTATTTAGTTTTTGTAATTTATTTTCGATTTCACAGTGTGTTTGTGATTGTTTGCTCTGAGAGTT
CCCCTGTCCCCTCCCCCTTCCCTCACACCGCGTCTGGTGACAACCGAGTGGCTGTCATCAGCCTGTGTAGGCAGT
CATGGCACCAAAGCCACCAGACTGACAAATGTGTATCGGATGCTTTTGTTCAGGGCTGTGATCGGCCTGGGGAAA
TAATAAAGCACGCTCTTTTAAAAGGT

FIGURE 1549

MQVSTAALAVLLCTMALCNQFSASLAADTPTACCFSYTSRQIPQNFIADYFETSSQCSKPGVIFLTKRSRQVCAD
PSEEWVQKYVSDLELSA

FIGURE 1550

GCTACACTAGAGCAGAGTACGAGTCTGAGGCGGAGGGAGTAATGGCAGGACAAGCGTTTAGAAAGTTTCTTCCAC
TCTTTGACCGAGTATTGGTTGAAAGGAGTGCTGCTGAAACTGTAACCAAAGGAGGCATTATGCTTCCAGAAAAAT
CTCAAGGAAAAGTATTGCAAGCAACAGTAGTCGCTGTTGGATCGGGTTCTAAAGGAAAGGGTGGAGAGATTCAAC
CAGTTAGCGTGAAAGTTGGAGATAAAGTTCTTCTCCCAGAATATGGAGGCACCAAAGTAGTTCTAGATGACAAGG
ATTATTTCCTATTTAGAGATGGTGACATTCTTGGAAAGTACGTAGACTGAAATAAGTCACTATTGAAATGGCATC
AACATGATGCTGCCCATTCCACTGAAGTTCTGAAATCTTTCGTCATGTAAATAATTTCCATATTTCTCTTTTATA
ATAAACTAATGATAACTAATGACATCCAGTGTCTCCAAAATTGTTTCCTTGTACTGATATAAACACTTCCAAATA
AAAATATGTAAAT

FIGURE 1551

MAGQAFRKFLPLFDRVLVERSAAETVTKGGIMLPEKSQGKVLQATVVAVGSGSKGKGGEIQPVSVKVGDKVLLPE
YGGTKVVLDDKDYFLFRDGDILGKYVD

FIGURE 1552

GCCAAGGCTGGGGCAGGGGAGTCAGCAGAGGCCTCGCTCGGGCGCCCAGTGGTCCTGCCGCCTGGTCTCACCTCG
CTATGGTTCGTCTGCCTCTGCAGTGCGTCCTCTGGGGCTGCTTGCTGACCGCTGTCCATCCAGAACCACCCACTG
CATGCAGAGAAAAACAGTACCTAATAAACAGTCAGTGCTGTTCTTTGTGCCAGCCAGGACAGAAACTGGTGAGTG
ACTGCACAGAGTTCACTGAAACGGAATGCCTTCCTTGCGGTGAAAGCGAATTCCTAGACACCTGGAACAGAGAGA
CACACTGCCACCAGCACAAATACTGCGACCCCAACCTAGGGCTTCGGGTCCAGCAGAAGGGCACCTCAGAAACAG
ACACCATCTGCACCTGTGAAGAAGGCTGGCACTGTACGAGTGAGGCCTGTGAGAGCTGTGTCCTGCACCGCTCAT
GCTCGCCCGGCTTTGGGGTCAAGCAGATTGCTACAGGGGTTTCTGATACCATCTGCGAGCCCTGCCCAGTCGGCT
TCTTCTCCAATGTGTCATCTGCTTTCGAAAAATGTCACCCTTGGACAAGCTGTGAGACCAAAGACCTGGTTGTGC
AACAGGCAGGCACAAACAAGACTGATGTTGTCTGTGGTCCCCAGGATCGGCTGAGAGCCCTGGTGGTGATCCCCA
TCATCTTCGGGATCCTGTTTGCCATCCTCTTGGTGCTGGTCTTTATCAAAAAGGTGGCCAAGAAGCCAACCAATA
AGGCCCCCCACCCCAAGCAGGAACCCCAGGAGATCAATTTTCCCGACGATCTTCCTGGCTCCAACACTGCTGCTC
CAGTGCAGGAGACTTTACATGGATGCCAACCGGTCACCCAGGAGGATGGCAAAGAGAGTCGCATCTCAGTGCAGG
AGAGACAGTGAGGCTGCACCCACCCAGGAGTGTGGCCACGTGGGCAAACAGGCAGTTGGCCAGAGAGCCTGGTGC
TGCTGCTGCTGTGGCGTGAGGGTGAGGGGCTGGCACTGACTGGGCATAGCTCCCCGCTTCTGCCTGCACCCCTGC
AGTTTGAGACAGGAGACCTGGCACTGGATGCAGAAACAGTTCACCTTGAAGAACCTCTCACTTCACCCTGGAGCC
CATCCAGTCTCCCAACTTGTATTAAAGACAGAGGCAGAAAAAAAAAAAAAAA

FIGURE 1553

MVRLPLQCVLWGCLLTAVHPEPPTACREKQYLINSQCCSLCQPGQKLVSDCTEFTETECLPCGESEFLDTWNRET
HCHQHKYCDPNLGLRVQQKGTSETDTICTCEEGWHCTSEACESCVLHRSCSPGFGVKQIATGVSDTICEPCPVGF
FSNVSSAFEKCHPWTSCETKDLVVQQAGTNKTDVVCGPQDRLRALVVIPIIFGILFAILLVLVFIKKVAKKPTNK
APHPKQEPQEINFPDDLPGSNTAAPVQETLHGCQPVTQEDGKESRISVQERQ

FIGURE 1554

GGTCAACGCCTGCGGCTGTTGATATTCTTGCTCAGAGGCCGTAACTTTGGCCTTCTGCTCAGGGAAGACTCTGAG
TCCGACGTTGGCCTACCCAGTCGGAAGGCAGAGCTGCAATCTAGTTAACTACCTCCTTTCCCCTAGATTTCCTTT
CATTCTGCTCAAGTCTTCGCCTGTGTCCGATCCCTATCTACTTTCTCTCCTCTTGTAGCAAGCCTCAGACTCCAG
GCTTGAGCTAGGTTTTGTTTTTCTCCTGGTGAGAATTCGAAGACC**ATG**TCTACGGAACTCTTCTCATCCACAAGA
GAGGAAGGAAGCTCTGGCTCAGGACCCAGTTTTAGGTCTAATCAAAGGAAAATGTTAAACCTGCTCCTGGAGAGA
GACACTTCCTTTACCGTCTGTCCAGATGTCCCTAGAACTCCAGTGGGCAAATTTCTTGGTGATTCTGCAAACCTA
AGCATTTTGTCTGGGTCACCTGGATTCTTCAGGACTTCAGGAAGTGCATTTAGCTGGGATGACAATGGAAACTTG
GTGGACAGTGAAATGAAATATTTGGGCAGTCCCATTACTACTGTTCCAAAATTGGATAAAAATCCAAACCTAGGA
GAAGACCAGGCAGAAGAGATTTCAGATGAATTAATGGAGTTTTCCCTGAAAGATCAAGAAGCAAAGGTGAGCAGA
AGTGGCCTATATCGCTCCCCGTCGATGCCAGAGAACTTGAACAGGCCAAGACTGAAGCAGGTGGAAAAATTCAAG
GACAACACAATACCAGATAAAGTTAAAAAAAAGTATTTTTCTGGCCAAGGAAAGCTCAGGAAGGGCTTATGTTTA
AAGAAGACAGTCTCTCTGTGTGACATTACTATCACTCAGATGCTGGAGGAAGATTCTAACCAGGGGCACCTGATT
GGTGATTTTTCCAAGGTATGTGCGCTGCCAACCGTGTCAGGGAAACACCAAGATCTGAAGTATGTCAACCCAGAA
ACAGTGGCTGCCTTACTGTCGGGGAAGTTCCAGGGTCTGATTGAGAAGTTTTATGTCATTGATTGTCGCTATCCA
TATGAGTATCTGGGAGGACACATCCAGGGAGCCTTAAACTTATATAGTCAGGAAGAACTGTTTAACTTCTTTCTG
AAGAAGCCCATCGTCCCTTTGGACACCCAGAAGAGAATAATCATCGTGTTCCACTGTGAATTCTCCTCAGAGAGG
GGCCCCCGAATGTGCCGCTGTCTGCGTGAAGAGGACAGGTCTCTGAACCAGTATCCTGCATTGTACTACCCAGAG
CTATATATCCTTAAAGGCGGCTACAGAGACTTCTTTCCAGAATATATGGAACTGTGTGAACCACAGAGCTACTGC
CCTATGCATCATCAGGACCACAAGACTGAGTTGCTGAGGTGTCGAAGCCAGAGCAAAGTGCAGGAAGGGGAGCGG
CAGCTGCGGGAGCAGATTGCCCTTCTGGTGAAGGACATGAGCCCA**TGA**TAACATTCCAGCCACTGGCTGCTAACA
AGTCACCAAAAAGACACTGCAGAAACCCTGAGCAGAAAGAGGCCTTCTGGATGGCCAAACCCAAGATTATTAAAA
GATGTCTCTGCAAACCAACAGGCTACCAACTTGTATCCAGGCCTGGGAATGGATTAGGTTTCAGCAGAGCTGAAA
GCTGGTGGCAGAGTCCTGGAGCTGGCTCTATAAGGCAGCCTTGAGTTGCATAGAGATTTGTATTGGTTCAGGGAA
CTCTGGCATTCCTTTTCCCAACTCCTCATGTCTTCTCACAAGCCAGCCAACTCTTTCTCTCTGGGCTTCGGGCTA
TGCAAGAGCGTTGTCTACCTTCTTTCTTTGTATTTTCCTTCTTTGTTTCCCCCTCTTTCTTTTTTAAAAATGGAA
AAATAAACACTACAGAATGAG

FIGURE 1555

MSTELFSSTREEGSSGSGPSFRSNQRKMLNLLLERDTSFTVCPDVPRTPVGKFLGDSANLSILSGSPGFFRTSGS
AFSWDDNGNLVDSEMKYLGSPITTVPKLDKNPNLGEDQAEEISDELMEFSLKDQEAKVSRSGLYRSPSMPENLNR
PRLKQVEKFKDNTIPDKVKKKYFSGQGKLRKGLCLKKTVSLCDITITQMLEEDSNQGHLIGDFSKVCALPTVSGK
HQDLKYVNPETVAALLSGKFQGLIEKFYVIDCRYPYEYLGGHIQGALNLYSQEELFNFFLKKPIVPLDTQKRIII
VFHCEFSSERGPRMCRCLREEDRSLNQYPALYYPELYILKGGYRDFFPEYMELCEPQSYCPMHHQDHKTELLRCR
SQSKVQEGERQLREQIALLVKDMSP

FIGURE 1556

AAGTCGCGACCAGAGCCATTGGAGGGCGCGGGGACTGCAACCCTAATCAGAGCCCAAATGGCGCAGTGGGAAATG
CTGCAGAATCTTGACAGCCCCTTTCAGGATCAGCTGCACCAGCTTTACTCGCACAGCCTCCTGCCTGTGGACATT
CGACAGTACTTGGCTGTCTGGATTGAAGACCAGAACTGGCAGGAAGCTGCACTTGGGAGTGATGATTCCAAGGCT
ACCATGCTATTCTTCCACTTCTTGGATCAGCTGAACTATGAGTGTGGCCGTTGCAGCCAGGACCCAGAGTCCTTG
TTGCTGCAGCACAATTTGCGGAAATTCTGCCGGGACATTCAGCCCTTTTCCCAGGATCCTACCCAGTTGGCTGAG
ATGATCTTTAACCTCCTTCTGGAAGAAAAAAGAATTTTGATCCAGGCTCAGAGGGCCCAATTGGAACAAGGAGAG
CCAGTTCTCGAAACACCTGTGGAGAGCCAGCAACATGAGATTGAATCCCGGATCCTGGATTTAAGGGCTATGATG
GAGAAGCTGGTAAAATCCATCAGCCAACTGAAAGACCAGCAGGATGTCTTCTGCTTCCGATATAAGATCCAGGCC
AAAGGGAAGACACCCTCTCTGGACCCCCATCAGACCAAAGAGCAGAAGATTCTGCAGGAAACTCTCAATGAACTG
GACAAAAGGAGAAAGGAGGTGCTGGATGCCTCCAAAGCACTGCTAGGCCGATTAACTACCCTAATCGAGCTACTG
CTGCCAAAGTTGGAGGAGTGGAAGGCCCAGCAGCAAAAAGCCTGCATCAGAGCTCCCATTGACCACGGGTTGGAA
CAGCTGGAGACATGGTTCACAGCTGGAGCAAAGCTGTTGTTTCACCTGAGGCAGCTGCTGAAGGAGCTGAAGGGA
CTGAGTTGCCTGGTTAGCTATCAGGATGACCCTCTGACCAAAGGGGTGGACCTACGCAACGCCCAGGTCACAGAG
TTGCTACAGCGTCTGCTCCACAGAGCCTTTGTGGTAGAAACCCAGCCCTGCATGCCCCAAACTCCCCATCGACCC
CTCATCCTCAAGACTGGCAGCAAGTTCACCGTCCGAACAAGGCTGCTGGTGAGACTCCAGGAAGGCAATGAGTCA
CTGACTGTGGAAGTCTCCATTGACAGGAATCCTCCTCAATTACAAGGCTTCCGGAAGTTCAACATTCTGACTTCA
AACCAGAAAACTTTGACCCCCGAGAAGGGGCAGAGTCAGGGTTTGATTTGGGACTTTGGTTACCTGACTCTGGTG
GAGCAACGTTCAGGTGGTTCAGGAAAGGGCAGCAATAAGGGGCCACTAGGTGTGACAGAGGAACTGCACATCATC
AGCTTCACGGTCAAATATACCTACCAGGGTCTGAAGCAGGAGCTGAAAACGGACACCCTCCCTGTGGTGATTATT
TCCAACATGAACCAGCTCTCAATTGCCTGGGCTTCAGTTCTCTGGTTCAATTTGCTCAGCCCAAACCTTCAGAAC
CAGCAGTTCTTCTCCAACCCCCCCAAGGCCCCCTGGAGCTTGCTGGGCCCTGCTCTCAGTTGGCAGTTCTCCTCC
TATGTTGGCCGAGGCCTCAACTCAGACCAGCTGAGCATGCTGAGAAACAAGCTGTTCGGGCAGAACTGTAGGACT
GAGGATCCATTATTGTCCTGGGCTGACTTCACTAAGCGAGAGAGCCCTCCTGGCAAGTTACCATTCTGGACATGG
CTGGACAAAATTCTGGAGTTGGTACATGACCACCTGAAGGATCTCTGGAATGATGGACGCATCATGGGCTTTGTG
AGTCGGAGCCAGGAGCGCCGGCTGCTGAAGAAGACCATGTCTGGCACCTTTCTACTGCGCTTCAGTGAATCGTCA
GAAGGGGGCATTACCTGCTCCTGGGTGGAGCACCAGGATGATGACAAGGTGCTCATCTACTCTGTGCAACCGTAC
ACGAAGGAGGTGCTGCAGTCACTCCCGCTGACTGAAATCATCCGCCATTACCAGTTGCTCACTGAGGAGAATATA
CCTGAAAACCCACTGCGCTTCCTCTATCCCCGAATCCCCCGGGATGAAGCTTTTGGGTGCTACTACCAGGAGAAA
GTTAATCTCCAGGAACGGAGGAAATACCTGAAACACAGGCTCATTGTGGTCTCTAATAGACAGGTGGATGAACTG
CAACAACCGCTGGAGCTTAAGCCAGAGCCAGAGCTGGAGTCATTAGAGCTGGAACTAGGGCTGGTGCCAGAGCCA
GAGCTCAGCCTGGACTTAGAGCCACTGCTGAAGGCAGGGCTGGATCTGGGGCCAGAGCTAGAGTCTGTGCTGGAG
TCCACTCTGGAGCCTGTGATAGAGCCCACACTATGCATGGTATCACAAACAGTGCCAGAGCCAGACCAAGGACCT
GTATCACAGCCAGTGCCAGAGCCAGATTTGCCCTGTGATCTGAGACATTTGAACACTGAGCCAATGGAAATCTTC
AGAAACTGTGTAAAGATTGAAGAAATCATGCCGAATGGTGACCCACTGTTGGCTGGCCAGAACACCGTGGATGAG
GTTTACGTCTCCCGCCCCAGCCACTTCTACACTGATGGACCCTTGATGCCTTCTGACTTCTAGGAACCACATTTC
CTCTGTTCTTTTCATATCTCTTTGCCCTTCCTACTCCTCATAGCATGATATTGTTCTCCAAGGATGGGAATCAGG
CATGTGTCCCTTCCAAGCTGTGTTAACTGTTCAAACTCAGGCCTGTGTGACTCCATTGGGGTGAGAGGTGAAAGC
ATAACATGGGTACAGAGGGGACAACAATGAATCAGAACAGATGCTGAGCCATAGGTCTAAATAGGATCCTGGAGG
CTGCCTGCTGTGCTGGGAGGTATAGGGGTCCTGGGGGCAGGCCAGGGCAGTTGACAGGTACTTGGAGGGCTCAGG
GCAGTGGCTTCTTTCCAGTATGGAAGGATTTCAACATTTTAATAGTTGGTTAGGCTAAACTGGTGCATACTGGCA
TTGGCCTTGGTGGGGAGCACAGACACAGGATAGGACTCCATTTCTTTCTTCCATTCCTTCATGTCTAGGATAACT
TGCTTTCTTCTTTCCTTTACTCCTGGCTCAAGCCCTGAATTTCTTCTTTTCCTGCAGGGGTTGAGAGCTTTCTGC
CTTAGCCTACCATGTGAAACTCTACCCTGAAGAAAGGGATGGATAGGAAGTAGACCTCTTTTTCTTACCAGTCTC
CTCCCCTACTCTGCCCCCTAAGCTGGCTGTACCTGTTCCTCCCCCATAAAATGATCCTGCCAATCT

FIGURE 1557

MAQWEMLQNLDSPFQDQLHQLYSHSLLPVDIRQYLAVWIEDQNWQEAALGSDDSKATMLFFHFLDQLNYECGRCS
QDPESLLLQHNLRKFCRDIQPFSQDPTQLAEMIFNLLLEEKRILIQAQRAQLEQGEPVLETPVESQQHEIESRIL
DLRAMMEKLVKSISQLKDQQDVFCFRYKIQAKGKTPSLDPHQTKEQKILQETLNELDKRRKEVLDASKALLGRLT
TLIELLLPKLEEWKAQQQKACIRAPIDHGLEQLETWFTAGAKLLFHLRQLLKELKGLSCLVSYQDDPLTKGVDLR
NAQVTELLQRLLHRAFVVETQPCMPQTPHRPLILKTGSKFTVRTRLLVRLQEGNESLTVEVSIDRNPPQLQGFRK
FNILTSNQKTLTPEKGQSQGLIWDFGYLTLVEQRSGGSGKGSNKGPLGVTEELHIISFTVKYTYQGLKQELKTDT
LPVVIISNMNQLSIAWASVLWFNLLSPNLQNQQFFSNPPKAPWSLLGPALSWQFSSYVGRGLNSDQLSMLRNKLF
GQNCRTEDPLLSWADFTKRESPPGKLPFWTWLDKILELVHDHLKDLWNDGRIMGFVSRSQERRLLKKTMSGTFLL
RFSESSEGGITCSWVEHQDDDKVLIYSVQPYTKEVLQSLPLTEIIRHYQLLTEENIPENPLRFLYPRIPRDEAFG
CYYQEKVNLQERRKYLKHRLIVVSNRQVDELQQPLELKPEPELESLELELGLVPEPELSLDLEPLLKAGLDLGPE
LESVLESTLEPVIEPTLCMVSQTVPEPDQGPVSQPVPEPDLPCDLRHLNTEPMEIFRNCVKIEEIMPNGDPLLAG
QNTVDEVYVSRPSHFYTDGPLMPSDF

FIGURE 1558

CGACGAGCCATGGTTGCTGGGAGCGACGCGGGGCGGGCCCTGGGGGTCCTCAGCGTGGTCTGCCTGCTGCACTGC
TTTGGTTTCATCAGCTGTTTTTCCCAACAAATATATGGTGTTGTGTATGGGAATGTAACTTTCCATGTACCAAGC
AATGTGCCTTTAAAAGAGGTCCTATGGAAAAAACAAAAGGATAAAGTTGCAGAACTGGAAAATTCTGAATTCAGA
GCTTTCTCATCTTTTAAAAATAGGGTTTATTTAGACACTGTGTCAGGTAGCCTCACTATCTACAACTTAACATCA
TCAGATGAAGATGAGTATGAAATGGAATCGCCAAATATTACTGATACCATGAAGTTCTTTCTTTATGTGCTTGAG
TCTCTTCCATCTCCCACACTAACTTGTGCATTGACTAATGGAAGCATTGAAGTCCAATGCATGATACCAGAGCAT
TACAACAGCCATCGAGGACTTATAATGTACTCATGGGATTGTCCTATGGAGCAATGTAAACGTAACTCAACCAGT
ATATATTTTAAGATGGAAAATGATCTTCCACAAAAAATACAGTGTACTCTTAGCAATCCATTATTTAATACAACA
TCATCAATCATTTTGACAACCTGTATCCCAAGCAGCGGTCATTCAAGACACAGATATGCACTTATACCCATACCA
TTAGCAGTAATTACAACATGTATTGTGCTGTATATGAATGGTATTCTGAAATGTGACAGAAAACCAGACAGAACC
AACTCCAATTGATTGGTAACAGAAGATGAAGACAACAGCATAACTAAATTATTTTAAAAACTAAAAAGCCATCTG
ATTTCTCATTTGAGTATTACAATTTTTGAACAACTGTTGGAAATGTAACTTGAAGCAGCTGCTTTAAGAAGAAAT
ACCCACTAACAAAGAACAAGCATTAGTTTTGGCTGTCATCAACTTATTATATGACTAGGTGCTTGCTTTTTTTGT
CAGTAAATTGTTTTTACTGATGATGTAGATACTTTTGTAAATAAATGTAAATATGTACACAAGTG

FIGURE 1559

MVAGSDAGRALGVLSVVCLLHCFGFISCFSQQIYGVVYGNVTFHVPSNVPLKEVLWKKQKDKVAELENSEFRAFS
SFKNRVYLDTVSGSLTIYNLTSSDEDEYEMESPNITDTMKFFLYVLESLPSPTLTCALTNGSIEVQCMIPEHYNS
HRGLIMYSWDCPMEQCKRNSTSIYFKMENDLPQKIQCTLSNPLFNTTSSIILTTCIPSSGHSRHRYALIPIPLAV
ITTCIVLYMNGILKCDRKPDRTNSN

FIGURE 1560

GCTTTTCATGCCTTGGCGTTTCCTTTGGCGGATTTTCTGTTTTCGGAAGTTGCTGGGTTCGTTTTATTCAGCGGC
AGTGGTGCTTTCCCGAATCTCAGAATGCCTGTTAAAAGATCACTGAAGTTGGATGGTCTGTTAGAAGAAAATTCA
TTTGATCCTTCAAAAATCACAAGGAAGAAAAGTGTTATAACTTATTCTCCAACAACTGGAACTTGTCAAATGAGT
CTATTTGCTTCTCCCACAAGTTCTGAAGAGCAAAAGCACAGAAATGGACTATCAAATGAAAAGAGAAAAAAATTG
AATCACCCCAGTTTAACTGAAAGCAAAGAATCTACAACAAAAGACAATGATGAATTCATGATGTTGTTATCAAAA
GTTGAGAAATTGTCAGAAGAAATCATGGAGATAATGCAAAATTTAAGTAGTATACAGGCTTTGGAGGGCAGTAGA
GAGCTTGAAAATCTCATTGGAATCTCCTGTGCATCACGTTTCTTAAAAAGAGAAATGCAGAAAACCAAAGAACTA
ATGACAAAAGTGAATAAACAAAAACTGTTTGAAAAGAGTACAGGACTTCCTCACAAAGCATCACGTCATCTTGAC
AGCTATGAATTCCTTAAAGCCATTTTAAACTGAGGCATTAAGAAGAAATGCACTCACCATGAGCACCAACTTCTG
CATCTGCCTGATCATATTTAAAGGAACAGAGAAATATTTGTAATTAATCTGCCCAGTAAATACCAGCTCGTAGCA
GTTGGCAGGTGCATGTCTAGATAAAATTTCTTGCAGCTAATTTAAACTTTCTACACGCACCAGTAGATAATCTCA
ATGTAAATAATACATTTCTTCTTGGCTCTTTAATGTAAGCCAACATGGAGAGGAAGATCTTGACTTATATTCTGT
ACCACATACACTTCTGTGGACTTTTAGCATTTGTGGGTAGACTTAATAAAGCATGTATAAAAGTGGCTTAAAAAA
AAAAAAAAAAAAAAAAAAAAAA

FIGURE 1561

MPVKRSLKLDGLLEENSFDPSKITRKKSVITYSPTTGTCQMSLFASPTSSEEQKHRNGLSNEKRKKLNHPSLTES
KESTTKDNDEFMMLLSKVEKLSEEIMEIMQNLSSIQALEGSRELENLIGISCASRFLKREMQKTKELMTKVNKQK
LFEKSTGLPHKASRHLDSYEFLKAILN

FIGURE 1562

GGAATTCCCGCCCGGCCCGGCCCCGCGCCCCGCAGCCCCGGGCGCCGCGCGTCCTGCCCGGCCTGCGGCCCAGCC
CTTGCGCCGCTCGTCCGACCCGCGATCGTCCACCAGACCGTGCCTCCCGGCCGCCCGGGCCCCGCGTGC**ATG**CTT
CGGTCTGGGCCAGCCTCTGGGCCGTCCGTCCCCACTGGCCGGGCCATGCCGAGTCGCCGCGTCGCCAGACCGCCG
GCTGCGCCGGAGCTGGGGGCCTTAGGGTCCCCCGACCTCTCCTCACTCTCGCTCGCCGTTTCCAGGAGCACAGAT
GAATTGGAGATCATCGACGAGTACATCAAGGAGAACGGCTTCGGCCTGGACGGGGGACAGCCGGGCCCGGGCGAG
GGGCTGCCACGCCTGGTGTCTCGCGGGGCTGCGTCCCTGAGCACGGTCACCCTGGGCCCTGTGGCGCCCCCAGCC
ACGCCGCCGCCTTGGGGCTGCCCCCTGGGCCGACTAGTGTCCCCAGCGCCGGGCCCGGGCCCGCAGCCGCACCTG
GTCATCACGGAGCAGCCCAAGCAGCGCGGCATGCCGTTCCGCTACGAGTGCGAGGGCCGCTCGGCCGGCAGCATC
CTTGGGGAGAGCAGCACCGAGGCCAGCAAGACGCTGCCCGCCATCGAGCTCCGGGATTGTGGAGGGCTGCGGGAG
GTGGAGGTGACTGCCTGCCTGGTGTGGAAGGACTGGCCTCACCGAGTCCACCCCCACAGCCTCGTGGGGAAAGAC
TGCACCGACGGCATCTGCAGGGTGCGGCTCCGGCCTCACGTCAGCCCCCGGCACAGTTTTAACAACCTGGGCATC
CAGTGTGTGAGGAAGAAGGAGATTGAGGCTGCCATTGAGCGGAAGATTCAACTGGGCATTGACCCCTACAACGCT
GGGTCCCTGAAGAACCATCAGGAAGTAGACATGAATGTGGTGAGGATCTGCTTCCAGGCCTCATATCGGGACCAG
CAGGGACAGATGCGCCGGATGGATCCTGTGCTTTCCGAGCCCGTCTATGACAAGAAATCCACAAACACATCAGAG
CTGCGGATTTGCCGAATTAACAAGGAAAGCGGGCCGTGCACCGGTGGCGAGGAGCTCTACTTGCTCTGCGACAAG
GTGCAGAAAGAGGACATATCAGTGGTGTTCAGCAGGGCCTCCTGGGAAGGTCGGGCTGACTTCTCCCAGGCCGAC
GTGCACCGCCAGATTGCCATTGTGTTCAAGACGCCGCCCTACGAGGACCTGGAGATTGTCGAGCCCGTGACAGTC
AACGTCTTCCTGCAGCGGCTCACCGATGGGGTCTGCAGCGAGCCATTGCCTTTCACGTACCTGCCTCGCGACCAT
GACAGCTACGGCGTGGACAAGAAGGCGAAACGGGGGATGCCCGACGTCCTTGGGGAGCTGAACAGCTCTGACCCC
CATGGCATCGAGAGCAAACGGCGGAAGAAAAAGCCGGCCATCCTGGACCACTTCCTGCCCAACCACGGCTCAGGC
CCGTTCCTCCCGCCGTCAGCCCTGCTGCCAGACCCTGACTTCTTCTCTGGCACCGTGTCCCTGCCCGGCCTGGAG
CCCCCTGGCGGGCCTGACCTCCTGGACGATGGCTTTGCCTACGACCCTACGGCCCCCACACTCTTCACCATGCTG
GACCTGCTGCCCCCGGCACCGCCACACGCTAGCGCTGTTGTGTGCAGCGGAGGTGCCGGGGCCGTGGTTGGGGAG
ACCCCCGGCCCTGAACCACTGACACTGGACTCGTACCAGGCCCCGGGCCCCGGGGATGGAGGCACCGCCAGCCTT
GTGGGCAGCAACATGTTCCCCAATCATTACCGCGAGGCGGCCTTTGGGGGCGGCCTCCTATCCCCGGGGCCTGAA
GCCACG**TAG**CCCCGCGATGCCAGAGGAGGGGCACTGGGTGGGGAGGGAGGTGGAGGAGCCGTGCAATCCCAACCA
GGATGTCTAGCACCCCCATCCCCTTGGCCCTTCCTCATGCTTCTGAAGTGGACATATTCAGCCTTGGCGAGAAGC
TCCGTTGCACGGGTTTCCCCTTGAGCCCATTTTACAGATGAGGAAACTGAGTCCGGAGAGGAAAAGGGACATGGC
TCCCGTGCACTAGCTTGTTACAGCTGCCTCTGTCCCCACATGTGGGGGCACCTTCTCCAGTAGGATTCGGAAAAG
ATTGTACATATGGGAGGAGGGGGCAGATTCCTGGCCCTCCCTCCCCAGACTTGACTTGAAGGTGGGGGGTAGGTT
GGTTGTTCAGAGTCTTCCCAATAAAGATGAGTTTTTGAGCCTCAAAAAAAAAAAAAAGGAATTCC

FIGURE 1563

MLRSGPASGPSVPTGRAMPSRRVARPPAAPELGALGSPDLSSLSLAVSRSTDELEIIDEYIKENGFGLDGGQPGP
GEGLPRLVSRGAASLSTVTLGPVAPPATPPPWGCPLGRLVSPAPGPGPQPHLVITEQPKQRGMPFRYECEGRSAG
SILGESSTEASKTLPAIELRDCGGLREVEVTACLVWKDWPHRVHPHSLVGKDCTDGICRVRLRPHVSPRHSFNNL
GIQCVRKKEIEAAIERKIQLGIDPYNAGSLKNHQEVDMNVVRICFQASYRDQQGQMRRMDPVLSEPVYDKKSTNT
SELRICRINKESGPCTGGEELYLLCDKVQKEDISVVFSRASWEGRADFSQADVHRQIAIVFKTPPYEDLEIVEPV
TVNVFLQRLTDGVCSEPLPFTYLPRDHDSYGVDKKAKRGMPDVLGELNSSDPHGIESKRRKKKPAILDHFLPNHG
SGPFLPPSALLPDPDFFSGTVSLPGLEPPGGPDLLDDGFAYDPTAPTLFTMLDLLPPAPPHASAVVCSGGAGAVV
GETPGPEPLTLDSYQAPGPGDGGTASLVGSNMFPNHYREAAFGGGLLSPGPEAT

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FIGURE 1564

GGGGTGAGAGCTCCTCCTAGGACACCCCTTTCCCCTTGGGGAAAGAATTGTGCCCCCAGGCCCTTCCCCGCGGAG
GTCCCTCTCCTCCTTCCCCCTCATCTCCCCTTCCTGGGACAGAAAGTGCCTCCACCTGCATCCCCAGGGGCCCGG
CCTCCAGGGCCCGCTGGCCCCACAGCAGGCAAGCTGAGATGACGGTCAAGCTGGATTTCGAGGAGTGTCTCAAGG
ACTCACCCCGTTTCCGAGCCTCTATTGAGCTGGTGGAAGCCGAAGTGTCAGAATTGGAGACCCGTCTGGAAAAGC
TCCTGAAACTGGGCACTGGTCTCCTGGAAAGTGGGCGCCATTACCTTGCTGCCAGCCGCGCCTTCGTTGTCGGCA
TTTGTGACCTGGCCCGCCTGGGTCCACCAGAGCCCATGATGGCGGAGTGTCTGGAAAAATTCACCGTGAGCCTGA
ACCACAAGCTGGACAGCCATGCGGAGCTTCTAGATGCCACCCAACACACACTGCAGCAGCAGATCCAGACCCTGG
TCAAGGAAGGTCTGCGGGGTTTCCGAGAGGCTCGCCGGGATTTCTGGCGGGGGGCTGAGAGCCTGGAGGCTGCCC
TGACCCACAACGCAGAGGTTCCCAGGCGCCGGGCCCAGGAGGCAGAAGAGGCAGGAGCTGCTTTGAGGACGGCTC
GAGCTGGGTACCGGGGACGGGCACTGGATTATGCCCTGCAGATCAACGTGATTGAGGACAAGAGGAAGTTTGACA
TCATGGAGTTTGTGCTGCGTTTGGTGGAGGCCCAGGCTACCCATTTCCAGCAGGGCCATGAGGAGCTGAGCCGGC
TGTCCCAGTATCGAAAGGAGCTGGGCGCCCAGTTGCACCAGCTGGTCTTGAATTCAGCACGAGAGAAGAGGGACA
TGGAGCAGAGACACGTGCTGCTGAAACAGAAGGAGCTGGGTGGGGAGGAGCCAGAACCAAGCTTAAGAGAGGGGC
CTGGTGGCCTGGTGATGGAAGGACATCTCTTCAAACGGGCCAGCAACGCATTTAAGACCTGGAGCAGACGCTGGT
TCACCATTCAGAGCAACCAACTGGTTTACCAGAAGAAGTACAAGGACCCTGTGACTGTGGTGGTGGATGACCTTC
GTCTCTGCACAGTGAAACTCTGCCCTGACTCAGAAAGGCGGTTCTGCTTTGAGGTGGTGTCCACCAGCAAGTCCT
GCCTCCTCCAGGCTGACTCAGAGCGCCTCCTGCAGCTGTGGGTCAGTGCTGTGCAGAGCAGCATTGCTTCTGCCT
TCAGTCAGGCTCGCCTTGATGACAGCCCCCGGGGTCCAGGCCAGGGCTCAGGACACCTGGCCATAGGCTCTGCTG
CCACCCTGGGCTCTGGTGGAATGGCCAGGGGAAGGGAGCCTGGGGGAGTCGGGCACGTGGTGGCCCAGGTCCAGA
GTGTGGATGGCAATGCCCAGTGCTGCGACTGCCGGGAGCCAGCCCCGGAGTGGGCCAGCATCAACCTTGGTGTCA
CCCTCTGCATTCAGTGTTCCGGCATCCACAGGAGCCTTGGTGTTCACTTCTCCAAAGTCCGGTCTCTGACCCTTG
ACTCATGGGAGCCAGAACTAGTGAAGCTCATGTGTGAGCTGGGAAATGTCATCATCAACCAGATCTATGAGGCCC
GCGTGGAGGCCATGGCAGTGAAGAAACCAGGGCCCAGCTGCTCCCGGCAGGAGAAGGAGGCCTGGATTCACGCTA
AATACGTGGAGAAGAAGTTCCTGACCAAGCTGCCTGAGATTCGAGGGCGAAGAGGTGGCCGGGGGCGCCCAAGGG
GGCAGCCTCCTGTGCCCCCAAAGCCTTCCATCAGGCCCCGGCCAGGGAGCTTGAGATCCAAGCCAGAGCCCCCCT
CTGAGGACCTGGGAAGCCTGCACCCTGGGGCCCTACTGTTTCGAGCGTCTGGGCATCCTCCATCTCTTCCCACCA
TGGCTGATGCCCTTGCCCATGGAGCTGATGTCAACTGGGTCAATGGGGGCCAAGATAATGCCACACCGCTGATCC
AGGCCACAGCTGCTAATTCTCTTCTGGCCTGTGAGTTTCTCCTCCAGAACGGGGCGAACGTGAACCAAGCGGACA
GTGCGGGCCGGGGCCCGCTGCACCACGCAACCATTCTTGGCCACACGGGGCTCGCCTGCCTGTTCCTGAAACGGG
GAGCTGATCTGGGGGCTCGAGACTCTGAAGGCAGGGACCCTCTGACCATCGCCATGGAAACAGCCAACGCTGACA
TCGTCACCCTGCTACGACTGGCAAAGATGAGGGAGGCTGAAGCGGCCCAGGGGCAGGCAGGAGATGAGACGTATC
TTGACATCTTCCGCGACTTCTCCCTCATGGCGTCAGACGACCCGGAGAAGCTGAGCCGTCGCAGTCATGACCTCC
ACACGCTGTGACCCGAGGCCCACGGGGCCCGCGCCTGCCTCCCTTCCCCGCCACCGGGCCCTCTGCCATTAAAGC
CTCCGTGCTTCGCTCTTCC

FIGURE 1565

MTVKLDFEECLKDSPRFRASIELVEAEVSELETRLEKLLKLGTGLLESGRHYLAASRAFVVGICDLARLGPPEPM
MAECLEKFTVSLNHKLDSHAELLDATQHTLQQQIQTLVKEGLRGFREARRDFWRGAESLEAALTHNAEVPRRRAQ
EAEEAGAALRTARAGYRGRALDYALQINVIEDKRKFDIMEFVLRLVEAQATHFQQGHEELSRLSQYRKELGAQLH
QLVLNSAREKRDMEQRHVLLKQKELGGEEPEPSLREGPGGLVMEGHLFKRASNAFKTWSRRWFTIQSNQLVYQKK
YKDPVTVVVDDLRLCTVKLCPDSERRFCFEVVSTSKSCLLQADSERLLQLWVSAVQSSIASAFSQARLDDSPRGP
GQGSGHLAIGSAATLGSGGMARGREPGGVGHVVAQVQSVDGNAQCCDCREPAPEWASINLGVTLCIQCSGIHRSL
GVHFSKVRSLTLDSWEPELVKLMCELGNVIINQIYEARVEAMAVKKPGPSCSRQEKEAWIHAKYVEKKFLTKLPE
IRGRRGGRGRPRGQPPVPPKPSIRPRPGSLRSKPEPPSEDLGSLHPGALLFRASGHPPSLPTMADALAHGADVNW
VNGGQDNATPLIQATAANSLLACEFLLQNGANVNQADSAGRGPLHHATILGHTGLACLFLKRGADLGARDSEGRD
PLTIAMETANADIVTLLRLAKMREAEAAQGQAGDETYLDIFRDFSLMASDDPEKLSRRSHDLHTL

FIGURE 1566

CTCCGCTGCTGTCGCCAGGAGTCACTTCACGAGAAGCCAGGTCACAACCGTCGGCCCTTGTCTGGAAAAGTAAAA
GTGGATCCTGCCACGTTCGGAGCTCCCTGGCGCCTCGCCCGGCTGGAGCTAGAGAACTCGTCCTGTGGCGGCCCC
CGGCGTGGGGCGGGACAGCGGCCCCCTGGAGGGGGCAGTCCCGGGAGAACCTGCGGCGGCCGGAGCGGTAAAAAT
AAGTGACTAAAGAAGCAGACCTGGGAATCACCTAAC**ATG**TCGAGGAGGAGATTTGATTGCCGAAGTATTTCAGGC
CTACTAACTACAACTCCTCAAATTCCAATAAAAATGGAAAACTTTAATAATTTCTATATACTTACATCTAAAGAG
CTAGGGAGAGGAAAATTTGCTGTGGTTAGACAATGTATATCAAAATCTACTGGCCAAGAATATGCTGCAAAATTT
CTAAAAAAGAGAAGAAGAGGACAGGATTGTCGGGCAGAAATTTTACACGAGATTGCTGTGCTTGAATTGGCAAAG
TCTTGTCCCCGTGTTATTAATCTTCATGAGGTCTATGAAAATACAAGTGAAATCATTTTGATATTGGAATATGCT
GCAGGTGGAGAAATTTTCAGCCTGTGTTTACCTGAGTTGGCTGAAATGGTTTCTGAAAATGATGTTATCAGACTC
ATTAAACAAATACTTGAAGGAGTTTATTATCTACATCAGAATAACATTGTACACCTTGATTTAAAGCCACAGAAT
ATATTACTGAGCAGCATATACCCTCTCGGGGACATTAAAATAGTAGATTTTGGAATGTCTCGAAAAATAGGGCAT
GCGTGTGAACTTCGGGAAATCATGGGAACACCAGAATATTTAGCTCCAGAAATCCTGAACTATGATCCCATTACC
ACAGCAACAGATATGTGGAATATTGGTATAATAGCATATATGTTGTTAACTCACACATCACCATTTGTGGGAGAA
GATAATCAAGAAACATACCTCAATATTTCTCAAGTTAATGTAGATTATTCGGAAGAAACTTTTTCATCAGTTTCA
CAGCTGGCCACAGACTTTATTCAGAGCCTTTTAGTAAAAAATCCAGAGAAAAGACCAACAGCAGAGATATGCCTT
TCTCATTCTTGGCTACAGCAGTGGGACTTTGAAAACTTGTTTCACCCTGAAGAAACTTCCAGTTCCTCTCAAACT
CAGGATCATTCTGTAAGGTCCTCTGAAGACAAGACTTCTAAATCCTCCTGTAATGGAACCTGTGGTGATAGAGAA
GACAAAGAGAATATCCCAGAGGATAGCAGCATGGTTTCCAAAAGATTTCGTTTCGATGACTCATTACCCAATCCC
CATGAACTTGTTTCAGATTTGCTCTGT**TAG**CACTTTTTTCTTTGACTCATTTGGACTGAATTTGAAATTTTATAT
CCACTCCAGTGAGATTATGATTTGTAGCTTCATATATGACATGTTTATATTGTAAATGCACTTTTCCATGGAATA
ATTTAGGGAAGTGTTTTAATGTTAAATTACTAGTTGCTAGCATGTTATGATTTCATATCCTGAGATAGCTCTGCA
GATAAGAAAATATTTAAATATATGACAAAAAGTAAAATTGTACATGTGAAAG

FIGURE 1567

MSRRRFDCRSISGLLTTTPQIPIKMENFNNFYILTSKELGRGKFAVVRQCISKSTGQEYAAKFLKKRRRGQDCRA
EILHEIAVLELAKSCPRVINLHEVYENTSEIILILEYAAGGEIFSLCLPELAEMVSENDVIRLIKQILEGVYYLH
QNNIVHLDLKPQNILLSSIYPLGDIKIVDFGMSRKIGHACELREIMGTPEYLAPEILNYDPITTATDMWNIGIIA
YMLLTHTSPFVGEDNQETYLNISQVNVDYSEETFSSVSQLATDFIQSLLVKNPEKRPTAEICLSHSWLQQWDFEN
LFHPEETSSSSQTQDHSVRSSEDKTSKSSCNGTCGDREDKENIPEDSSMVSKRFRFDDSLPNPHELVSDLLC

FIGURE 1568

CAGGGAGTTGAGAAACTGTGGCACAAGGCGAGAGCTGGTTTCCTCTGCCCTGTTAGAGCTGGGGGACTCTTCAGA
GTCAAAGGCCAGAGAGC**ATG**GAGCTGAGTGGAGCCACCATGGCCCGGGGGCTCGCTGTCCTGCTAGTCTTGTTCC
TGCATATCAAGAACCTGCCTGCCCAGGCTGCGGACACATGTCCAGAGGTGAAGGTGGTGGGCCTGGAGGGCTCTG
ACAAGCTCACCATTCTCCGAGGCTGCCCGGGGCTGCCCGGGGCCCCAGGGCCAAAGGGAGAGGCAGGTGTCATTG
GAGAGAGAGGAGAACGCGGTCTCCCTGGAGCCCCTGGAAAGGCAGGACCAGTGGGGCCCAAAGGAGACCGAGGAG
AGAAGGGGATGCGTGGAGAGAAAGGAGACGCTGGGCAGTCTCAGTCGTGTGCGACAGGCCCACGCAACTGCAAGG
ACCTGCTAGACCGGGGGTATTTCCTGAGCGGCTGGCACACCATCTACCTGCCCGACTGCCGGCCCCTGACTGTGC
TCTGTGACATGGACACGGACGGAGGGGGCTGGACCGTTTTCCAGCGGAGGATGGATGGCTCTGTGGACTTCTATC
GGGACTGGGCCGCATACAAGCAGGGCTTCGGCAGTCAGCTGGGGGAGTTCTGGCTGGGGAACGACAACATCCACG
CCCTGACTGCCCAGGGAAGCAGCGAGCTCCGTGTAGACCTGGTGGACTTTGAGGGCAACCACCAGTTTGCTAAGT
ACAAATCATTCAAGGTGGCTGACGAGGCAGAGAAGTACAAGCTGGTACTGGGAGCCTTTGTCGGGGGCAGTGCGG
GTAATTCTCTAACGGGCCACAACAACAACTTCTTCTCCACCAAAGACCAAGACAATGATGTGAGTTCTTCGAATT
GTGCTGAGAAGTTCCAGGGAGCCTGGTGGTACGCCGACTGTCATGCTTCAAACCTCAATGGTCTCTACCTCATGG
GACCCCATGAGAGCTATGCCAATGGTATCAACTGGAGTGCGGCGAAGGGGTACAAATATAGCTACAAGGTGTCAG
AGATGAAGGTGCGGCCCGCC**TAG**ACGGGCCAGGACCCCTCCACATGCACCTGCTAGTGGGGAGGCCACACCCACA
AGCGCTGCGTCGTGGAAGTCACCCCATTTCCCCAGCCAGACACACTCCCATGACGCCCACAGCTGCCCCTTTGCC
CCCAGCTCAGTCAAGCCGCCACATGCCCACAACCTCACCAGAGGGAGAATTATGTTTCTAAATATGTTTACTTTG
GGACAGAAAAAAAAAAA

FIGURE 1569

MELSGATMARGLAVLLVLFLHIKNLPAQAADTCPEVKVVGLEGSDKLTILRGCPGLPGAPGPKGEAGVIGERGER
GLPGAPGKAGPVGPKGDRGEKGMRGEKGDAGQSQSCATGPRNCKDLLDRGYFLSGWHTIYLPDCRPLTVLCDMDT
DGGGWTVFQRRMDGSVDFYRDWAAYKQGFGSQLGEFWLGNDNIHALTAQGSSELRVDLVDFEGNHQFAKYKSFKV
ADEAEKYKLVLGAFVGGSAGNSLTGHNNNFFSTKDQDNDVSSSNCAEKFQGAWWYADCHASNLNGLYLMGPHESY
ANGINWSAAKGYKYSYKVSEMKVRPA

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FIGURE 1570

AGACGTTCGCACACCTGGGTGCCAGCGCCCCAGAGGTCCCGGGACAGCCCGAGGCGCCGCGCCCGCCGCCCCGAG
CTCCCCAAGCCTTCGAGAGCGGCGCACACTCCCGGTCTCCACTCGCTCTTCCAACACCCGCTCGTTTTGGCGGCA
GCTCGTGTCCCAGAGACCGAGTTGCCCCAGAGACCGAGACGCCGCCGCTGCGAAGGACCAATGAGAGCCCCGCTG
CTACCGCCGGCGCCGGTGGTGCTGTCGCTCTTGATACTCGGCTCAGGCCATTATGCTGCTGGATTGGACCTCAAT
GACACCTACTCTGGGAAGCGTGAACCATTTTCTGGGGACCACAGTGCTGATGGATTTGAGGTTACCTCAAGAAGT
GAGATGTCTTCAGGGAGTGAGATTTCCCCTGTGAGTGAAATGCCTTCTAGTAGTGAACCGTCCTCGGGAGCCGAC
TATGACTACTCAGAAGAGTATGATAACGAACCACAAATACCTGGCTATATTGTCGATGATTCAGTCAGAGTTGAA
CAGGTAGTTAAGCCCCCCCAAAACAAGACGGAAAGTGAAAATACTTCAGATAAACCCAAAAGAAAGAAAAAGGGA
GGCAAAAATGGAAAAAATAGAAGAAACAGAAAGAAGAAAAATCCATGTAATGCAGAATTTCAAAATTTCTGCATT
CACGGAGAATGCAAATATATAGAGCACCTGGAAGCAGTAACATGCAAATGTCAGCAAGAATATTTCGGTGAACGG
TGTGGGGAAAAGTCCATGAAAACTCACAGCATGATTGACAGTAGTTTATCAAAAATTGCATTAGCAGCCATAGCT
GCCTTTATGTCTGCTGTGATCCTCACAGCTGTTGCTGTTATTACAGTCCAGCTTAGAAGACAATACGTCAGGAAA
TATGAAGGAGAAGCTGAGGAACGAAAGAAACTTCGACAAGAGAATGGAAATGTACATGCTATAGCATAACTGAAG
ATAAAATTACAGGATATCACATTGGAGTCACTGCCAAGTCATAGCCATAAATGATGAGTCGGTCCTCTTTCCAGT
GGATCATAAGACAATGGACCCTTTTTGTTATGATGGTTTTAAACTTTCAATTGTCACTTTTTATGCTATTTCTGT
ATATAAAGGTGCACGAAGGTAAAAAGTATTTTTTCAAGTTGTAAATAATTTATTTAATATTTAATGGAAGTGTAT
TTATTTTACAGCTCATTAAACTTTTTTAACCAAACAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1571

MRAPLLPPAPVVLSLLILGSGHYAAGLDLNDTYSGKREPFSGDHSADGFEVTSRSEMSSGSEISPVSEMPSSSEP
SSGADYDYSEEYDNEPQIPGYIVDDSVRVEQVVKPPQNKTESENTSDKPKRKKKGGKNGKNRRNRKKKNPCNAEF
QNFCIHGECKYIEHLEAVTCKCQQEYFGERCGEKSMKTHSMIDSSLSKIALAAIAAFMSAVILTAVAVITVQLRR
QYVRKYEGEAEERKKLRQENGNVHAIA

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FIGURE 1572

GCAGAGCCCAGGGAGCTGGAGGTCGGCGCTTCCTCTCGTGCTTGGTCCACTGACGCGCGGCCCCGCCGCGAGGAG
CATCAGATCC**ATG**CTGCTGCTGACTCGGAGCCCCACAGCTTGGCACAGGCTCTCTCAGCTCAAGCCTCCGGTCCT
CCCTGGGACCCTGGGAGGCCAGGCCCTGCATCTGAGGTCCTGGCTTTTGTCAAGGCAGGGCCCTGCAGAGACAGG
TGGGCAGGGCCAGCCCCAGGGCCCTGGGCTTCGAACCCGGCTGCTGATCACAGGCCTGTTCGGGGCTGGACTCGG
TGGGGCCTGGCTGGCCCTGAGGGCTGAGAAGGAGAGGCTGCAGCAGCAAAAGCGAACAGAAGCCCTGCGCCAGGC
AGCTGTGGGCCAGGGCGACTTCCACCTGCTGGATCACAGAGGCCGGGCTCGCTGCAAGGCTGACTTCCGGGGCCA
GTGGGTGCTGATGTACTTTGGCTTCACTCACTGCCCTGACATCTGCCCAGACGAGCTGGAGAAGCTGGTGCAGGT
GGTGCGGCAGCTGGAAGCAGAGCCTGGTTTGCCTCCAGTGCAGCCTGTCTTCATCACTGTGGACCCCGAGCGGGA
CGACGTTGAAGCCATGGCCCGCTACGTCCAGGACTTCCACCCAAGACTGTTGGGTCTGACCGGCTCCACCAAACA
GGTTGCCCAGGCTAGTCACAGTTACCGCGTGTACTACAATGCCGGCCCCAAGGATGAGGACCAGGACTACATCGT
GGACCACTCCATTGCCATCTACCTGCTCAACCCTGACGGCCTCTTCACGGATTACTACGGCCGGAGCAGATCGGC
TGAGCAGATCTCAGACAGTGTGCGGCGGCACATGGCGGCTTTCCGCAGTGTCCTGTCT**TGA**GCCACTGCAGTCTG
GGCCCCATCATTAAACGGGCTGCGTTTAAAA

FIGURE 1573

MLLLTRSPTAWHRLSQLKPPVLPGTLGGQALHLRSWLLSRQGPAETGGQGQPQGPGLRTRLLITGLFGAGLGGAW
LALRAEKERLQQQKRTEALRQAAVGQGDFHLLDHRGRARCKADFRGQWVLMYFGFTHCPDICPDELEKLVQVVRQ
LEAEPGLPPVQPVFITVDPERDDVEAMARYVQDFHPRLLGLTGSTKQVAQASHSYRVYYNAGPKDEDQDYIVDHS
IAIYLLNPDGLFTDYYGRSRSAEQISDSVRRHMAAFRSVLS

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FIGURE 1574

TTCGGCACTTGGGAGAAGATGTTTGAAAAAACTGACTCTGCTAATGAGCCTGGACTCAGAGCTCAAGTCTGAACT
CTACCTCCAGACAGAATGAAGTTCATCTCGACATCTCTGCTTCTCATGCTGCTGGTCAGCAGCCTCTCTCCAGTC
CAAGGTGTTCTGGAGGTCTATTACACAAGCTTGAGGTGTAGATGTGTCCAAGAGAGCTCAGTCTTTATCCCTAGA
CGCTTCATTGATCGAATTCAAATCTTGCCCCGTGGGAATGGTTGTCCAAGAAAAGAAATCATAGTCTGGAAGAAG
AACAAGTCAATTGTGTGTGTGGACCCTCAAGCTGAATGGATACAAAGAATGATGGAAGTATTGAGAAAAAGAAGT
TCTTCAACTCTACCAGTTCCAGTGTTTAAGAGAAAGATTCCCTGATGCTGATATTTCCACTAAGAACACCTGCAT
TCTTCCCTTATCCCTGCTCTGGATTTTAGTTTTGTGCTTAGTTAAATCTTTTCCAGGGAGAAAGAACTTCCCCAT
ACAAATAAGGCATGAGGACTATGTGAAAAATAACCTTGCAGGAGCTGATGGGGCAAACTCAAGCTTCTTCACTCA
CAGCACCCTATATACACTTGGAGTTTGCATTCTTATTCATCAGGGAGGAAAGTTTCTTTGAAAATAGTTATTCAG
TTATAAGTAATACAGGATTATTTTGATTATATACTTGTTGTTTAATGTTTAAAATTTCTTAGAAAACAATGGAAT
GAGAATTTAAGCCTCAAATTTGAACATGTGGCTTGAATTAAGAAGAAAATTATGGCATATATTAAAAGCAGGCTT
CTATGAAAGACTCAAAAAGCTGCCTGGGAGGCAGATGGAACTTGAGCCTGTCAAGAGGCAAAGGAATCCATGTAG
TAGATATCCTCTGCTTAAAAACTCACTACGGAGGAGAATTAAGTCCTACTTTTAAAGAATTTCTTTATAAAATTT
ACTGTCTAAGATTAATAGCATTCGAAGATCCCCAGACTTCATAGAATACTCAGGGAAAGCATTTAAAGGGTGATG
TACACATGTATCCTTTCACACATTTGCCTTGACAAACTTCTTTCACTCACATCTTTTTCACTGACTTTTTTTGTG
GGGGCGGGGCCGGGGGGACTCTGGTATCTAATTCTTTAATGATTCCTATAAATCTAATGACATTCAATAAAGTTG
AGCAAACATTTTACTT

FIGURE 1575

MKFISTSLLLMLLVSSLSPVQGVLEVYYTSLRCRCVQESSVFIPRRFIDRIQILPRGNGCPRKEIIVWKKNKSIV
CVDPQAEWIQRMMEVLRKRSSSTLPVPVFKRKIP

FIGURE 1576

TAACTGAGCGAGGAGCAATTGATTAATAGCTCGGCGAGGGGACTCACTGACTGTTATAATAACACTACACCAGCA
ACTCCTGGCTTCCCAGCAGCCGGAACACAGACAGGAGAGAGTCAGTGGCAAATAGACATTTTTCTTATTTCTTAA
AAAACAGCAACTTGTTTGCTACTTTTATTTCTGTTGATTTTTTTTTCTTGGTGTGTGTGGTGGTTGTTTTTAAGT
GTGGAGGGCAAAAGGAGATACCATCCCAGGCTCAGTCCAACCCCTCTCCAAAACGGCTTTTCTGACACTCCAGGT
AGCGAGGGAGTTGGGTCTCCAGGTTGTGCGAGGAGCAAATGATGACCGCCAAGGCCGTAGACAAAATCCCAGTAA
CTCTCAGTGGTTTTGTGCACCAGCTGTCTGACAACATCTACCCGGTGGAGGACCTCGCCGCCACGTCGGTGACCA
TCTTTCCCAATGCCGAACTGGGAGGCCCCTTTGACCAGATGAACGGAGTGGCCGGAGATGGCATGATCAACATTG
ACATGACTGGAGAGAAGAGGTCGTTGGATCTCCCATATCCCAGCAGCTTTGCTCCCGTCTCTGCACCTAGAAACC
AGACCTTCACTTACATGGGCAAGTTCTCCATTGACCCTCAGTACCCTGGTGCCAGCTGCTACCCAGAAGGCATAA
TCAATATTGTGAGTGCAGGCATCTTGCAAGGGGTCACTTCCCCAGCTTCAACCACAGCCTCATCCAGCGTCACCT
CTGCCTCCCCCAACCCACTGGCCACAGGACCCCTGGGTGTGTGCACCATGTCCCAGACCCAGCCTGACCTGGACC
ACCTGTACTCTCCGCCACCGCCTCCTCCTCCTTATTCTGGCTGTGCAGGAGACCTCTACCAGGACCCTTCTGCGT
TCCTGTCAGCAGCCACCACCTCCACCTCTTCCTCTCTGGCCTACCCACCACCTCCTTCCTATCCATCCCCCAAGC
CAGCCACGGACCCAGGTCTCTTCCCAATGATCCCAGACTATCCTGGATTCTTTCCATCTCAGTGCCAGAGAGACC
TACATGGTACAGCTGGCCCAGACCGTAAGCCCTTTCCCTGCCCACTGGACACCCTGCGGGTGCCCCCTCCACTCA
CTCCACTCTCTACAATCCGTAACTTTACCCTGGGGGGCCCCAGTGCTGGGGTGACCGGACCAGGGGCCAGTGGAG
GCAGCGAGGGACCCCGGCTGCCTGGTAGCAGCTCAGCAGCAGCAGCAGCCGCCGCCGCCGCCGCCTATAACCCAC
ACCACCTGCCACTGCGGCCCATTCTGAGGCCTCGCAAGTACCCCAACAGACCCAGCAAGACGCCGGTGCACGAGA
GGCCCTACCCGTGCCCAGCAGAAGGCTGCGACCGGCGGTTCTCCCGCTCTGACGAGCTGACACGGCACATCCGAA
TCCACACTGGGCATAAGCCCTTCCAGTGTCGGATCTGCATGCGCAACTTCAGCCGCAGTGACCACCTCACCACCC
ATATCCGCACCCACACCGGTGAGAAGCCCTTCGCCTGTGACTACTGTGGCCGAAAGTTTGCCCGGAGTGATGAGA
GGAAGCGCCACACCAAGATCCACCTGAGACAGAAAGAGCGGAAAAGCAGTGCCCCCTCTGCATCGGTGCCAGCCC
CCTCTACAGCCTCCTGCTCTGGGGGCGTGCAGCCTGGGGGTACCCTGTGCAGCAGTAACAGCAGCAGTCTTGGCG
GAGGGCCGCTCGCCCCTTGCTCCTCTCGGACCCGGACACCTTGAGATGAGACTCAGGCTGATACACCAGCTCCCA
AAGGTCCCGGAGGCCCTTTGTCCACTGGAGCTGCACAACAAACACTACCACCCTTTCCTGTCCCTCTCTCCCTTT
GTTGGGCAAAGGGCTTTGGTGGAGCTAGCACTGCCCCCTTTCCACCTAGAAGCAGGTTCTTCCTAAAACTTAGCC
CATTCTAGTCTCTCTTAGGTGAGTTGACTATCAACCCAAGGCAAAGGGGAGGCTCAGAAGGAGGTGGTGTGGGGA
TCCCCTGGCCAAGAGGGCTGAGGTCTGACCCTGCTTTAAAGGGTTGTTTGACTAGGTTTTGCTACCCCACTTCCC
CTTATTTTGACCCATCACAGGTTTTTGACCCTGGATGTCAGAGTTGATCTAAGACGTTTTCTACAATAGGTTGGG
AGATGCTGATCCCTTCAAGTGGGGACAGCAAAAAGACAAGCAAAACTGATGTGCACTTTATGGCTTGGGACTGAT
TTGGGGGACATTGTACAGTGAGTGAAGTATAGCCTTTATGCCACACTCTGTGGCCCTAAAATGGTGAATCAGAGC
ATATCTAGTTGTCTCAACCCTTGAAGCAATATGTATTATATACTCAGAGAACAGAAGTGCAATGTGATGGGAGGA
ACGTAGCAATATCTGCTCCTTTTCGAGTTGTTTGAGAAATGTAGGCTATTTTTTCAGTGTATATCCACTCAGATT
TTGTGTATTTTTGATGTACCCACACTGTTCTCTAAATTCTGAATCTTTGGGAAAAAATGTAAAGCATTTATGATC
TCAGAGGTTAACTTATTTAAGGGGGATGTACATATTCTCTGAAACTAGGATGCATGCAATTGTGTTGGAAGTGTC
CTTGGTCGCCTTGTGTGATGTAGACAAATGTTACAAGGCTGCATGTAAATGGGTTGCCTTATTATGGAGAAAAAA
ATCACTCCCTGAGTTTAGTATGGCTGTATATTTATGCCTATTAATATTTGGAATTTTTTTTAGAAAGTATATTTT
TGTATGCTTTGTTTTGTGACTTAAAAGTGTTACCTTTGTAGTCAAATTTCAGATAAGAATGTACATAATGTTACC
GGAGCTGATTTGTTTGGTCATTAGCTCTTAATAGTTGTGAAAAAATAAATCTATTCTAACGCAAAACCACTAACT
GAAGTTCAGATATAATGGATGGTTTGTGACTATAGTGTAAATAAATACTTTTCAACAAT

FIGURE 1577

MMTAKAVDKIPVTLSGFVHQLSDNIYPVEDLAATSVTIFPNAELGGPFDQMNGVAGDGMINIDMTGEKRSLDLPY
PSSFAPVSAPRNQTFTYMGKFSIDPQYPGASCYPEGIINIVSAGILQGVTSPASTTASSSVTSASPNPLATGPLG
VCTMSQTQPDLDHLYSPPPPPPPYSGCAGDLYQDPSAFLSAATTSTSSSLAYPPPPSYPSPKPATDPGLFPMIPD
YPGFFPSQCQRDLHGTAGPDRKPFPCPLDTLRVPPPLTPLSTIRNFTLGGPSAGVTGPGASGGSEGPRLPGSSSA
AAAAAAAAAYNPHHLPLRPILRPRKYPNRPSKTPVHERPYPCPAEGCDRRFSRSDELTRHIRIHTGHKPFQCRIC
MRNFSRSDHLTTHIRTHTGEKPFACDYCGRKFARSDERKRHTKIHLRQKERKSSAPSASVPAPSTASCSGGVQPG
GTLCSSNSSSLGGGPLAPCSSRTRTP

FIGURE 1578

GCCCAGGTGACTGACTAATCCGCCGCCTTCAGGAGACAGAATTGGCCAAGGCCTGAAGGCCCCGGAGTGCACCAG
CGGCATGTACAAAGAGACCGTCTACTCCGCCTTCAATCTGCTCATGCATTACCCACCCCCCTCGGGAGCAGGGCA
GCACCCCCAGCCGCAGCCCCCGCTGCACAAGGCCAATCAGCCCCCCCACGGTGTCCCCCAACTCTCTCTCTACGA
ACATTTCAACAGCCCACATCCCACCCCTGCACCTGCGGACATCAGCCAGAAGCAAGTTCACAGGCCTCTGCAGAC
CCCTGACCTCTCTGGCTTCTACTCCCTGACCTCAGGCAGCATGGGGCAGCTCCCCCACACTGTGAGCTGGTTCAC
CCACCCATCCTTGATGCTAGGTTCTGGTGTACCTGGTCACCCAGCAGCCATCCCCCACCCGGCCATTGTGCCCCC
CTCAGGGAAGCAGGAGCTGCAGCCCTTCGACCGCAACCTGAAGACACAAGCAGAGTCCAAGGCAGAGAAGGAGGC
CAAGAAGCCAACCATCAAGAAGCCCCTCAATGCCTTCATGCTGTACATGAAGGAGATGAGAGCCAAGGTCATTGC
AGAGTGCACACTTAAGGAGAGCGCTGCCATCAACCAGATCCTGGGCCGCAGGTGGCACGCGCTGTCGCGAGAAGA
GCAGGCCAAGTACTATGAGCTGGCCCGCAAGGAGAGGCAGCTGCACATGCAGCTATACCCAGGCTGGTCAGCGCG
GGACAACTACGGGAAGAAGAAGAGGCGGTCGAGGGAAAAGCACCAAGAATCCACCACAGACCCTGGCTCGCCTAA
GAAATGCCGTGCTCGCTTTGGCCTCAACCAGCAGACGGATTGGTGTGGTCCGTGCAGATAACTCTCTTCACTATT
CCTAGGAGGAAAAAGAAATGCATTCGGTACTTACCCGGAGAAGGCCGCTGCCCCAGCCCCGTTCCTTCCGATGAC
AGTGCTCTAGGCTGCCCCGGGTCCCCAGCTCCCCAGGACTCACCCTCATACCATCTGCTGCCCCGCTTCCCCACA
GAACTGCTTACTAGCCCTGCGGAGCGGCACCTACATCCCCAGGTCTCTCCACTGCTCTCAGCCTCCCAACCCCAG
GGCCCCCACAGGCCCCCCGCAGCACCCTGCAGAGCACACAGGTACAGCAACAGGAATCTCAGAGACAGGTGGCCT
AGCAGGCACAGGACACCTGGCCGCCTCCAGGAGCCTACCCCCTGAAAATGACAGAGACCCAGATCTCATGGAAAC
TGGCAGGGGTCCTGTTAACGTCATCTCAGGGTCCAGACCCTGAAGATTTCAGAGGCTGCAGAACTTCTGCCTGAA
CCTGGGGTCATCGATTCAAACTGCTCCAAGTGGTGGGAATCAGATCTGTCTTGATGTGTCATCTAATTAAGGGAA
TCCCTTGTACCTATGACTCCGTCGATCTATTCTTTGTACCATCTGTCTTGCCAGCCAGAAGCCTCTGCCTCCCTA
GCTTTTCTGCTATAGGTCAGAGATGGGCTGAACTGAGCCTAGCTACCTTCTCTACCCATCTCCCCCATCCCCCAC
TGCCACACCCTCCCCATTCAGACACTTCATGGACCAAGAATGAGCTGGTTTGTCAAACAACATGTGAGCATGGTC
ACAAGCACAAAGCTCAAGATGACAGCTCTTCTAAGGAAATGGAGAAGCTCTGTTTATAAAAACAAAAACAAAACC
AGCTGCTACTCATAAGTTGGACCAGAGGAAGCCCCTTACTATGATCTCAGGAGCTTGCAAGAAGCAGGAAGGGGA
ATGGAATAGGTTAAGTTTAGGCCTATCAACCTAAGCAACAGAAATAATCTGACACTACCTTATCAGGCAAATTGG
GGAGGGGAGGGTGTATCTAGCTCTAGTTCAAATTATTTGGAAGTGTTCCCTGAGAAACCCACCAGCCTAAGAAGC
TCTGGCCCCAGGCTTGTCACTAGCAGCTGCAGTCAACAGTTCAAAGAAGTCATGGCCCAAATCCAGTGTGCACCC
CTCCCCATTCACAGAGCCTTTTTCACAATTCCATTTCCAGTTCATCTATGGCAGTCCAGCCAGCTTCTGGGCAGC
TTGAGAGGGCAAACCCAAAACCTCATGACAGCCAGAGCCTGTCTTTCAGCATTCAGTCGCCTGGGAAGCTCCAGT
TTCCCCATGGGGCTGCGGGACAGAGGACCATTACAACTAGATCAAGGAGCCCAGAAAACCTCCAGTAGTGGACAA
CAGGTTTTCACCATAGCCTACGTTAACCCATTTTTGAGCCAAGCTTCAACCCTCAGCCTTGAAAAACAAGTCTTT
AATTTAATTTTTGTTTTTTGCCTAAATCCAAAGAAAAAGGGCTGCCGGGCCAGGCGCGGTCGTCACGCCTGTAAT
CCCAGCACTTTGGCAGGCCGAGGCAGGTGGATCACCTGACGTCAGTAGTTTGAGACCAGCCTGGCCAACATGGTG
AAACCCTGTATCTACTAAAAATACAAAAATTAGCCGGACGTGGTGGTGCGCGCATGTAATCCCAGCTACTCGGGA
GGCTGAGGCGGAAGAATCACTTGAACCCGGGAGGCGGAGGTTCCAGTGAGCCGAGATGGCGCTATTGCACTCCAG
TCTGGGTAACAGGGAGACTGCATCTCAAAAAAAAAAAAAAAAAAAAAGGGCTGTCCATGTATTCACACACCCCTC
AAAAAAAGCCTTTAGTTCCTACTTTAGCCACTGGTTTCTCAGAATCCAAAGATCACATATTCTAGTGTAACACTG
CAAGAAGTCTTGAGAAAAAGATTATTGTAGTGTTCAAAATATTTTTGTATTGTTAATGCATCATCATAGAAAAAC
TTTTAAACATGAGAATAAAGATACTTTTTACTGGGTTTGTTTTTCAAAGCCTGAAAAAAA

FIGURE 1579

MYKETVYSAFNLLMHYPPPSGAGQHPQPQPPLHKANQPPHGVPQLSLYEHFNSPHPTPAPADISQKQVHRPLQTP
DLSGFYSLTSGSMGQLPHTVSWFTHPSLMLGSGVPGHPAAIPHPAIVPPSGKQELQPFDRNLKTQAESKAEKEAK
KPTIKKPLNAFMLYMKEMRAKVIAECTLKESAAINQILGRRWHALSREEQAKYYELARKERQLHMQLYPGWSARD
NYGKKKRRSREKHQESTTDPGSPKKCRARFGLNQQTDWCGPCR

FIGURE 1580

GCCCAGGTGACTGACTAATCCGCCGCCTTCAGGAGACAGAATTGGCCAAGGCCTGAAGGCCCCGGAGTGCACCAG
CGGCATGTACAAAGAGACCGTCTACTCCGCCTTCAATCTGCTCATGCATTACCCACCCCCCTCGGGAGCAGGGCA
GCACCCCCAGCCGCAGCCCCCGCTGCACAAGGCCAATCAGCCCCCCCACGGTGTCCCCCAACTCTCTCTCTACGA
ACATTTCAACAGCCCACATCCCACCCCTGCACCTGCGGACATCAGCCAGAAGCAAGTTCACAGGCCTCTGCAGAC
CCCTGACCTCTCTGGCTTCTACTCCCTGACCTCAGGCAGCATGGGGCAGCTCCCCCACACTGTGAGCTGGTTCAC
CCACCCATCCTTGATGCTAGGTTCTGGTGTACCTGGTCACCCAGCAGCCATCCCCCACCCGGCCATTGTGCCCCC
CTCAGGGAAGCAGGAGCTGCAGCCCTTCGACCGCAACCTGAAGACACAAGCAGAGTCCAAGGCAGAGAAGGAGGC
CAAGAAGCCAACCATCAAGAAGCCCCTCAATGCCTTCATGCTGTACATGAAGGAGATGAGAGCCAAGGTCATTGC
AGAGTGCACACTTAAGGAGAGCGCTGCCATCAACCAGATCCTGGGCCGCAGGTGGCACGCGCTGTCGCGAGAAGA
GCAGGCCAAGTACTATGAGCTGGCCCGCAAGGAGAGGCAGCTGCACATGCAGCTATACCCAGGCTGGTCAGCGCG
GGACAACTACGGGAAGAAGAAGAGGCGGTCGAGGGAAAAGCACCAAGAATCCACCACAGACCCTGGCTCGCCTAA
GAAATGCCGTGCTCGCTTTGGCCTCAACCAGCAGACGGATTGGTGTGGTCCGTGCAGATAACTCTCTTCACTATT
CCTAGGAGGAAAAAGAAATGCATTCGGTACTTACCCGGAGAAGGCCGCTGCCCCAGCCCCGTTCCTTCCGATGAC
AGTGCTCTAGGCTGCCCCGGGTCCCCAGCTCCCCAGGACTCACCCTCATACCATCTGCTGCCCCGCTTCCCCACA
GAACTGCTTACTAGCCCTGCGGAGCGGCACCTACATCCCCAGGTCTCTCCACTGCTCTCAGCCTCCCAACCCCAG
GGCCCCCACAGGCCCCCCGCAGCACCCTGCAGAGCACACAGGTACAGCAACAGGAATCTCAGAGACAGGTGGCCT
AGCAGGCACAGGACACCTGGCCGCCTCCAGGAGCCTACCCCCTGAAAATGACAGAGACCCAGATCTCATGGAAAC
TGGCAGGGGTCCTGTTAACGTCATCTCAGGGTCCAGACCCTGAAGATTTCAGAGGCTGCAGAACTTCTGCCTGAA
CCTGGGGTCATCGATTCAAACTGCTCCAAGTGGTGGGAATCAGATCTGTCTTGATGTGTCATCTAATTAAGGGAA
TCCCTTGTACCTATGACTCCGTCGATCTATTCTTTGTACCATCTGTCTTGCCAGCCAGAAGCCTCTGCCTCCCTA
GCTTTTCTGCTATAGGTCAGAGATGGGCTGAACTGAGCCTAGCTACCTTCTCTACCCATCTCCCCCATCCCCCAC
TGCCACACCCTCCCCATTCAGACACTTCATGGACCAAGAATGAGCTGGTTTGTCAAACAACATGTGAGCATGGTC
ACAAGCACAAAGCTCAAGATGACAGCTCTTCTAAGGAAATGGAGAAGCTCTGTTTATAAAAACAAAAACAAAACC
AGCTGCTACTCATAAGTTGGACCAGAGGAAGCCCCTTACTATGATCTCAGGAGCTTGCAAGAAGCAGGAAGGGGA
ATGGAATAGGTTAAGTTTAGGCCTATCAACCTAAGCAACAGAAATAATCTGACACTACCTTATCAGGCAAATTGG
GGAGGGGAGGGTGTATCTAGCTCTAGTTCAAATTATTTGGAAGTGTTCCCTGAGAAACCCACCAGCCTAAGAAGC
TCTGGCCCCAGGCTTGTCACTAGCAGCTGCAGTCAACAGTTCAAAGAAGTCATGGCCCAAATCCAGTGTGCACCC
CTCCCCATTCACAGAGCCTTTTTCACAATTCCATTTCCAGTTCATCTATGGCAGTCCAGCCAGCTTCTGGGCAGC
TTGAGAGGGCAAACCCAAAACCTCATGACAGCCAGAGCCTGTCTTTCAGCATTCAGTCGCCTGGGAAGCTCCAGT
TTCCCCATGGGGCTGCGGGACAGAGGACCATTACAACTAGATCAAGGAGCCCAGAAAACCTCCAGTAGTGGACAA
CAGGTTTTCACCATAGCCTACGTTAACCCATTTTTGAGCCAAGCTTCAACCCTCAGCCTTGAAAAACAAGTCTTT
AATTTAATTTTTGTTTTTTGCCTAAATCCAAAGAAAAAGGGCTGCCGGGCCAGGCGCGGTCGTCACGCCTGTAAT
CCCAGCACTTTGGCAGGCCGAGGCAGGTGGATCACCTGACGTCAGTAGTTTGAGACCAGCCTGGCCAACATGGTG
AAACCCTGTATCTACTAAAAATACAAAAATTAGCCGGACGTGGTGGTGCGCGCATGTAATCCCAGCTACTCGGGA
GGCTGAGGCGGAAGAATCACTTGAACCCGGGAGGCGGAGGTTCCAGTGAGCCGAGATGGCGCTATTGCACTCCAG
TCTGGGTAACAGGGAGACTGCATCTCAAAAAAAAAAAAAAAAAAAAAGGGCTGTCCATGTATTCACACACCCCTC
AAAAAAAGCCTTTAGTTCCTACTTTAGCCACTGGTTTCTCAGAATCCAAAGATCACATATTCTAGTGTAACACTG
CAAGAAGTCTTGAGAAAAAGATTATTGTAGTGTTCAAAATATTTTTGTATTGTTAATGCATCATCATAGAAAAAC
TTTTAAACATGAGAATAAAGATACTTTTTACTGGGTTTGTTTTTCAAAGCCTGAAAAAAA

FIGURE 1581

MYKETVYSAFNLLMHYPPPSGAGQHPQPQPPLHKANQPPHGVPQLSLYEHFNSPHPTPAPADISQKQVHRPLQTP
DLSGFYSLTSGSMGQLPHTVSWFTHPSLMLGSGVPGHPAAIPHPAIVPPSGKQELQPFDRNLKTQAESKAEKEAK
KPTIKKPLNAFMLYMKEMRAKVIAECTLKESAAINQILGRRWHALSREEQAKYYELARKERQLHMQLYPGWSARD
NYGKKKRRSREKHQESTTDPGSPKKCRARFGLNQQTDWCGPCR

FIGURE 1582A

CGCGGGAGCCAACTTCAGGCTGCTCAGAGGAAGCCCGTGCAGTCAGTCACCTGGGTGCAAGAGCGTTGCTGCCTC
GGGCTCTCCCGCTGCAGGGAGAGCGGCACTCGCTGGCCTGGATGTGGTTGGATTTAGGGGGGCTCCGCAGCAGGG
GTTTCGTGGCGGTGGCAAGCGCTGCAACAGGTAGACGGCGAGAGACGGACCCCGGCCGAGGCAGGGATGGAGACC
AAAGGCTACCACAGTCTCCCTGAAGGTCTAGATATGGAAAGACGGTGGGGTCAAGTTTCTCAGGCTGTGGAGCGT
TCTTCCCTGGGACCTACAGAGAGGACCGATGAGAATAACTACATGGAGATTGTCAACGTAAGCTGTGTTTCCGGT
GCTATTCCAAACAACAGTACTCAAGGAAGCAGCAAAGAAAAACAAGAACTACTCCCTTGCCTTCAGCAAGACAAT
AATCGGCCTGGGATTTTAACATCTGATATTAAAACTGAGCTGGAATCTAAGGAACTTTCAGCAACTGTAGCTGAG
TCCATGGGTTTATATATGGATTCTGTAAGAGATGCTGACTATTCCTATGAGCAGCAGAACCAACAAGGAAGCATG
AGTCCAGCTAAGATTTATCAGAATGTTGAACAGCTGGTGAAATTTTACAAAGGAAATGGCCATCGTCCTTCCACT
CTAAGTTGTGTGAACACGCCCTTGAGATCATTTATGTCTGACTCTGGGAGCTCCGTGAATGGTGGCGTCATGCGC
GCCATTGTTAAAAGCCCTATCATGTGTCATGAGAAAAGCCCGTCTGTTTGCAGCCCTCTGAACATGACATCTTCG
GTTTGCAGCCCTGCTGGAATCAACTCTGTGTCCTCCACCACAGCCAGCTTTGGCAGTTTTCCAGTGCACAGCCCA
ATCACCCAGGGAACTCCTCTGACATGCTCCCCTAATGCTGAAAATCGAGGCTCCAGGTCGCACAGCCCTGCACAT
GCTAGCAATGTGGGCTCTCCTCTCTCAAGTCCGTTAAGTAGCATGAAATCCTCAATTTCCAGCCCTCCAAGTCAC
TGCAGTGTAAAATCTCCAGTCTCCAGTCCCAATAATGTCACTCTGAGATCCTCTGTGTCTAGCCCTGCAAATATT
AACAACTCAAGGTGCTCTGTTTCCAGCCCTTCGAACACTAATAACAGATCCACGCTTTCCAGTCCGGCAGCCAGT
ACTGTGGGATCTATCTGTAGCCCTGTAAACAATGCCTTCAGCTACACTGCTTCTGGCACCTCTGCTGGATCCAGT
ACATTGCGGGATGTGGTTCCCAGTCCAGACACGCAGGAGAAAGGTGCTCAAGAGGTCCCTTTTCCTAAGACTGAG
GAAGTAGAGAGTGCCATCTCAAATGGTGTGACTGGCCAGCTTAATATTGTCCAGTACATAAAACCAGAACCAGAT
GGAGCTTTTAGCAGCTCATGTCTAGGAGGAAATAGCAAAATAAATTCGGATTCTTCATTCTCAGTACCAATAAAG
CAAGAATCAACCAAGCATTCATGTTCAGGCACCTCTTTTAAAGGGAATCCAACAGTAAACCCGTTTCCATTTATG
GATGGCTCGTATTTTTCCTTTATGGATGATAAAGACTATTATTCCCTATCAGGAATTTTAGGACCACCTGTGCCC
GGCTTTGATGGTAACTGTGAAGGCAGCGGATTCCCAGTGGGTATTAAACAAGAACCAGATGACGGGAGCTATTAC
CCAGAGGCCAGCATCCCTTCCTCTGCTATTGTTGGGGTGAATTCAGGTGGACAGTCCTTCCACTACAGGATTGGT
GCTCAAGGTACAATATCTTTATCACGATCGGCTAGAGACCAATCTTTCCAACACCTGAGTTCCTTTCCTCCTGTC
AATACTTTAGTGGAGTCATGGAAATCACACGGCGACCTGTCGTCTAGAAGAAGTGATGGGTATCCGGTCTTAGAA
TACATTCCAGAAAATGTATCAAGCTCTACTTTACGAAGTGTTTCTACTGGATCTTCAAGACCTTCAAAAATATGT
TTGGTGTGTGGGGATGAGGCTTCAGGATGCCATTATGGGGTAGTCACCTGTGGCAGCTGCAAAGTTTTCTTCAAA
AGAGCAGTGGAAGGGCAACACAACTATTTATGTGCTGGAAGAAATGATTGCATCATTGATAAGATTCGACGAAAG
AATTGTCCTGCTTGCAGACTTCAGAAATGTCTTCAAGCTGGAATGAATTTAGGAGCACGAAAGTCAAAGAAGTTG
GGAAAGTTAAAAGGGATTCACGAGGAGCAGCCACAGCAGCAGCAGCCCCCACCCCCACCCCCACCCCCGCAAAGC
CCAGAGGAAGGGACAACGTACATCGCTCCTGCAAAAGAACCCTCGGTCAACACAGCACTGGTTCCTCAGCTCTCC
ACAATCTCACGAGCGCTCACACCTTCCCCCGTTATGGTCCTTGAAAACATTGAACCTGAAATTGTATATGCAGGC
TATGACAGCTCAAAACCAGATACAGCCGAAAATCTGCTCTCCACGCTCAACCGCTTAGCAGGCAAACAGATGATC
CAAGTCGTGAAGTGGGCAAAGGTACTTCCAGGATTTAAAAACTTGCCTCTTGAGGACCAAATTACCCTAATCCAG
TATTCTTGGATGTGTCTATCATCATTTGCCTTGAGCTGGAGATCGTACAAACATACGAACAGCCAATTTCTCTAT
TTTGCACCAGACCTAGTCTTTAATGAAGAGAAGATGCATCAGTCTGCCATGTATGAACTATGCCAGGGGATGCAC
CAAATCAGCCTTCAGTTCGTTCGACTGCAGCTCACCTTTGAAGAATACACCATCATGAAAGTTTTGCTGCTACTA
AGCACAATTCCAAAGGATGGCCTCAAAAGCCAGGCTGCATTTGAAGAAATGAGGACAAATTACATCAAAGAACTG
AGGAAGATGGTAACTAAGTGTCCCAACAATTCTGGGCAGAGCTGGCAGAGGTTCTACCAACTGACCAAGCTGCTG
GACTCCATGCATGACCTGGTGAGCGACCTGCTGGAATTCTGCTTCTACACCTTCCGAGAGTCCCATGCGCTGAAG
GTAGAGTTCCCCGCAATGCTGGTGGAGATCATCAGCGACCAGCTGCCCAAGGTGGAGTCGGGGAACGCCAAGCCG
CTCTACTTCCACCGGAAGTGACTGCCCGCTGCCCAGAAGAACTTTGCCTTAAGTTTCCCTGTGTTGTTCCACACC
CAGAAGGACCCAAGAAAACCTGTTTTTAACATGTGATGGTTGATTCACACTTGTTCAACAGTTTCTCAAGTTTAA
AGTCATGTCAGAGGTTTGGAGCCGGGAAAGCTGTTTTTCCGTGGATTTGGCGAGACCAGAGCAGTCTGAAGGATT
CCCCACCTCCAATCCCCCAGCGCTTAGAAACATGTTCCTGTTCCTCGGGATGAAAAGCCATATCTAGTCAATAAC
TCTGATTTTGATATTTTCACAGATGGAAGAAGTTTTAACTATGCCGTGTAGTTTCTGGTATCGTTCGCTTGTTTT
AAAAGGGTTCAAGGACTAACGAACGTTTTAAAGCTTACCCTTGGTTTGCACATAAAACGTATAGTCAATATGGGG

FIGURE 1582B

CATTAATATTCTTTTGTTATTAAAAAAACACAAAAAAATAATAAAAAAATATATACAGATTCCTGTTGTGTAATA
ACAGAACTCGTGGCGTGGGGCAGCAGCTGCCTCTGAGCCCTCGCTCGTCCACGGTCTTCTGCATCACTGGTATAC
ACACTCGTTAGCGTCCATTTCTTATTTAATTAGAATGGATAAGATGATGTTAAATGCCTTGGTTTGATTTCTAGT
ATCTATTGTGTTGGCTTTACAAATAATTTTTTGCAGTCTTTTGCTGTGCTGTACATTACTGTATGTATAAATTAT
GAAGGACCTGAAATAAGGTATAAGGATCTTTTGTAAATGAGACACATACAAAAAAAATCTTTAATGGTTAATAGG
ATGAATGGGAAAGTATTTTTGAAAGAATTCTATTTTGCTGGAGACTATTTAAGTACTATCTTTGTCTAAACAAGG
TAATTTTTTTTTTGTAAAGTGCAATGTCCTGCATGCATAATGAACCGTTTACAGTGTATTTAAGAAAGGGAAAGCT
GTGCCTTTTTTAGCTTCATATCTAATTTACCATTATTTTACAGTCTCTGTTGTAAATAACCACACTGAAACCTCT
TCGGTTGTCTTGAAACCTTTCTACTTTTTCTGTACTTTTTGTTTTGTTCTTGGTCTCCCGCTTGGGGCATTTGTG
GGACTCCAGCACGTTTTCTGGCTTCTGCTTCATCCTGCTCCATCGGGGAATGACACACTGCGGTGTCTGCAGCTC
CTGGAAGGTGTCATTTGACAACACATGTGGGAGAGGAGGTCCTTGGAGTGCTGCAGCTTTGGGAAAGCCTGCCTC
GTTTCCCTTTTCCTCTAGAAGCAGAACCAGCTCTACGAGAGTGAGACTGGGAACTTGATGGCTCAGAGAGCATCT
TTTCCTCCCATTTTAGAAAATCAGATTTTCTCCTGTGGGAAAAAAAAAATTCCATGCACTCTCTCTCTGTTAAAGA
TCAGCTATTCCCTTCTGATCTTGGAAAGAGGTTCTGCACTCCTGGAACCGGTCACAGGAACGCACAGATCATGGC
AGGATGCGCTGGGACGGCCCATCTTGGCAAGGTTCAGTCTGAATGGCATGGAGACCGGGAGATAGAGGGGTTTTA
GATTTTTAAAAGGTAGGTTTTAAAAATAAGTTTTATACATAAACAGTTTTGGAGAAAAATTACAGATCATATAAG
CAAGACAGTGGCACTAAAATGTTTAATTCATTAATCTGTTTGTTTGGCACTGATGCAATGTATGGCTTTTCTCTT
GCCCCAAATCACAAACATATGTATCTTTGGGGAAACTAACAATATGATTGCACTAAATAAACTACTTTGAATAGA
GGCCAAATTAATCTTTTAAAAATGATGATAATCATCAGGTTTACTCAGTGAAATCATATTAATTATTTTCCAAAA
TCTAAAAGCTGTAGCTGGAGAAGCCCATGGCCACGAGGAAGCAGCAATTAATTAGATCAACACTTTTCTCCAGGG
TTCACCATGCAGGCAACATTACCTTGTCTTTCAAAAGACACCTGCCTTAGTGCAAGGGGAAACCTGTGAAAGCTG
CACTCAGAGGGAGGAGTCTTTCTTACATAATTTGCAATTTCAGGAATTTAATTTATAGGCAGATCTTTAAATACA
GTCAACTTACGGTGCACAGTAATATGAAAGCCACACTTTGAAGGTAATAAATACACAGCATGCAGACTGGGAGTT
GCTAGCAAACAAATGGCTTACTTACAAAAGCAGCTTTTAGTTCAGACTTAGTTTTTATAAAATGAGAATTCTGAC
TTACTTAACCAGGTTTGGGATGGAGATGGTCTGCATCAGCTTTTTGTATTAACAAAGTTACTGGCTCTTTGTGTG
TCTCCAGGTAACTTTGCTTGATTAAACAGCAAAGCCATATTCTAAATTCACTGTTGAATGCCTGTCCCAGTCCAA
ATTGTCTGTCTGCTCTTATTTTTGTACCATATTGCTCTTAAAAATCTTGGTTTGGTACAGTTCATAATTCACCAA
AAAGTTCATATAATTTAAAGAAACACTAAATTAGTTTAAAATGAAGCAATTTATATCTTTATGCAAAAACATATG
TCTGTCTTTGCAAAGGACTGTAAGCAGATTACAATAAATCCTTTACTTT

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FIGURE 1583

METKGYHSLPEGLDMERRWGQVSQAVERSSLGPTERTDENNYMEIVNVSCVSGAIPNNSTQGSSKEKQELLPCLQ
QDNNRPGILTSDIKTELESKELSATVAESMGLYMDSVRDADYSYEQQNQQGSMSPAKIYQNVEQLVKFYKGNGHR
PSTLSCVNTPLRSFMSDSGSSVNGGVMRAIVKSPIMCHEKSPSVCSPLNMTSSVCSPAGINSVSSTTASFGSFPV
HSPITQGTPLTCSPNAENRGSRSHSPAHASNVGSPLSSPLSSMKSSISSPPSHCSVKSPVSSPNNVTLRSSVSSP
ANINNSRCSVSSPSNTNNRSTLSSPAASTVGSICSPVNNAFSYTASGTSAGSSTLRDVVPSPDTQEKGAQEVPFP
KTEEVESAISNGVTGQLNIVQYIKPEPDGAFSSSCLGGNSKINSDSSFSVPIKQESTKHSCSGTSFKGNPTVNPF
PFMDGSYFSFMDDKDYYSLSGILGPPVPGFDGNCEGSGFPVGIKQEPDDGSYYPEASIPSSAIVGVNSGGQSFHY
RIGAQGTISLSRSARDQSFQHLSSFPPVNTLVESWKSHGDLSSRRSDGYPVLEYIPENVSSSTLRSVSTGSSRPS
KICLVCGDEASGCHYGVVTCGSCKVFFKRAVEGQHNYLCAGRNDCIIDKIRRKNCPACRLQKCLQAGMNLGARKS
KKLGKLKGIHEEQPQQQQPPPPPPPPQSPEEGTTYIAPAKEPSVNTALVPQLSTISRALTPSPVMVLENIEPEIV
YAGYDSSKPDTAENLLSTLNRLAGKQMIQVVKWAKVLPGFKNLPLEDQITLIQYSWMCLSSFALSWRSYKHTNSQ
FLYFAPDLVFNEEKMHQSAMYELCQGMHQISLQFVRLQLTFEEYTIMKVLLLLSTIPKDGLKSQAAFEEMRTNYI
KELRKMVTKCPNNSGQSWQRFYQLTKLLDSMHDLVSDLLEFCFYTFRESHALKVEFPAMLVEIISDQLPKVESGN
AKPLYFHRK

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FIGURE 1584A

TTTGCTTTCCCGTTTCTTAAACATTGGCGTTCCCAAGTTTCTCCTTGGTCCTCCTGTCATTTTTATCTACTCTCG
TAGCTTCAAATACCATCTAGTTTATAGTTTATTTAGCATGTTGTCCAAGCCACCGTCTTGGGCCCAGGGCTCTAC
CTGTAGCTTTTCATCCACACTTCTCAGGTTGCTTCTTACACAGCGCCATAGTAGTTAAAATACGGTCTGGGGATA
GTCGTCTCTTCATCAGTCTCCCCCGACGACCTGCGCAGGCGTGGCTTGAGGAAACGCCCGCTGTGGGCGGAGCCA
CCCGAAAGGCTCCGGTCGGGGGCGGGAACAGGATCGGCCCGCGGGCTGGCGTCGATAGGCTGCCGCAGAGACAGG
GCGGGCTCTGCTAAGGGACGCGCCTCGCCGTGGGGCGGTGCCTGCGCCTGAGCCTCTACGAGAGGGAAGGAACGC
TGCTCCGAGCTCCGCGTCGCGTCGCGTAGATTCGCGTCGCCGTCGACCTCAGAGGCGGGGCCGGAAGCGCTACGG
TTTGACCCCCGAGTCCCTCTGTTCCCGAAGGGGCGGCCGTCTTTCTCCCGACCCGCTCCGCCCCCTCTCCTTCTT
CCCCATTACCCGGAGGCCGAAGCCCCCAGCCAGGGCGGGGCGGCGCAGCCCGAGCTCCCGGACCCGGAAGAAGCG
CCATCTCCCGCCTCCACC**ATG**GAGCCCACCGCACCGTCCCTCACCGAGGAGGACCTCACTGAAGTGAAGAAGGAC
GCCTTAGAAAATTTACGTGTATACCTGTGTGAGAAAATCATAGCTGAGAGACATTTTGATCATCTACGTGCAAAA
AAAATACTCAGTAGAGAAGACACTGAAGAAATTTCTTGTCGAACATCAAGTAGAAAAAGGGCTGGAAAATTGTTA
GACTACTTACAGGAAAACCCAAAAGGTCTGGACACCCTTGTTGAATCTATTCGGCGAGAAAAAACACAGAACTTC
CTGATACAGAAGATTACAGATGAAGTGCTGAAACTTAGAAATATAAAACTAGAACATCTGAAAGGACTAAAATGT
AGCAGTTGTGAACCTTTTCCAGATGGAGCCACGAACAACCTCTCCAGATCAAATTCAGATGAGAGTAATTTCTCT
GAAAAACTGAGGGCATCCACTGTCATGTACCATCCAGAAGGAGAATCCAGCACGACGCCCTTTTTTTCTACTAAT
TCTTCTCTGAATTTGCCTGTTCTAGAAGTAGGCAGAACTGAAAATACCATCTTCTCTTCAACTACACTTCCCAGA
CCTGGGGACCCAGGGGCTCCTCCTTTGCCACCAGATCTACAGTTAGAAGAAGAAGGAACTTGTGCAAACTCTAGT
GAGATGTTTCTTCCCTTAAGATCACGTACTGTTTCACGACAA**TGA**CACTTTATTGCCTTTTAATTTTTAATGATG
ACAAAAAATGTTTTAAAGAATATGACTTTTTATAAAATGGCTGTAATCATTTGTTTACATTTGATGCATGTCTTT
TAAAATGCAATGTAAGCATACTTTGTAAATAGGATTTTAGAATTAAAAAAGCATACTTCTAGGATAGCTAACTG
TAAATCATGTTGATCATGTACTTTTTAGTAATTTCTTTTTTTCCTTTTTAAGGTCTTTCAGTACTTTTTTAAATA
TTTTCTATTTTAAGACTGATTTTAATAGGGAATATATCTCTATTTGAGAATAGACCCTTACTAGGAAGAACGTTT
TTTCCTCAGTGCATTTGTGCTAGAAATTTTCAAGAGTCGAATAGTCTTTGCCAGTCATTCAGCAGCAAATTTTCA
GCATTAAGCTGTTCCTGTTCAGTAATAAAACCGGTCACTGATGGGAAAACTGCCAATATAGAAAAATAAAAATCT
CTTTTCCACTCCATTGTCGTATAGGCATGTAAACAGCCTCTTTTTGATACTGGAGGAACACTTGATGGAGTGTGA
GCCACCTAAGATCTCGGTTTGCCAAAATTCATTTCTAATTAACCTTACTAATTATACTACTTTGTTAGGATTTTC
ACATTCTTGGCTTAATCATTTTCATTCCTAAAGAAAAATATCTTGGCCTAAACCTCAGTTATTACATGTAATTTG
ATGAGGTATTTTTTCCTTTTTTCTTTTTTTTTTTTTTTTTTTTTGAGACAGTCTTGCTCTATCGCCCAGGCTGGA
GTGCAGTGGCGCATTCTAGGCTCACTGCAACTTCTGCCTCCCATGCTTACGTGATCCTCTCACCTCAGCCTCTCA
AGTAATATAGCTGAGACTACAAGTGTGTGCCACCATGCCTCACTAATTTTTGTATTATTTTTGTAGAGACGGTGT
TTTGCCATGTTGGCCAGGCTGGTCTTGAACTCCTGGACTCAAGCAACCTACCCAGCGTGGCCTCCCAAAGTGCTG
GGATTACAGACACGAGCCACCTCACCTAGCCTGATGAGATTTTTAAAAAATATTTTCTCTGTACTTTTCATTCTC
TTTTAATGAGGACCAATGTACAGTTGAAATAACTGGAACAAATTATTTTTGGTGTGTGTGACAATTCTGTTTTTA
ATGCTATTTGAACAAGTGGGCCATTAGCCAGATTTGTCTTTTTGTTGTAAAACAAAATTTGACTAATTTTACATG
TTTATAAATCTTATGCTCTCACTGTTTGTTTTTATTTAAATTACAATTTTATCTGTTTCCTGACATTGTCTCCTA
TATATTTCTATTATTAATTGCAAAAACATAGAAATGGAAATTTTGCTATCAACAATAAAATTTTTTTAAAGTAGT
GAGTGCTATTTTGGAGTTCCAAATTTTCAGTAGGAAGTATCTAAAACTTTTTTTTAATACGTGCCATTATCTATA
GAAAACATTACTTCAGGTTGTGAGATTGAGTTGCATTTCTGGATGGACTGATGAATTTATCCGACATGAAGAAGA
TTGGCATATTAGCTTTAAAAATTTTTAAAGATTGGATTTTTTTTAGTATAAGCACTTTCTAAGGATTATAGAGAA
ATGTTTCACCTCCAATGCATAGCAAAAATAGTGGTGTTAGAAAGAAAATAGGTTACATTTAAGGAAGGTGCTTTA
AAAAGCAGAAGCAGACTTTAAAATTAAATTTGTGGACACCTTTTTAAAAATTGAATCAAAGATTATAATTTAGAT
ATACAATAACACCTATATATAGATAAGTTTTAACACTGAGTTTTCTTTCAGACTGTTTTCTAACTACATAGACAA
TAAAATTAAGCTTTGCATAAAGCTAGGTTTGTGGGTTTTTGACTTCTGACAAGTCATGTTGTTCTTTTTCCTTTT
AGCCCTGAAAACTAGCCACTTGCCAAAAAGTGTGTAATTTAGGATGACTTGACAGGATGCAATTTGCTTAACTAA
GTTCATTAATCGCAGCACAGAAAACAGTTACTTTTCAGGGATACCATATTATCATAATACAAAAACACGTTAGTT
CATTTTTATGTATATGTATATATTTTTAATACTTTATTCTTTGGAGCAGTTGTAGGTTTACAAAAAACGCAGAAA
ACTACAGAGTGTTTCCAAATACCCCCTTCTCCCTCAGTTTCCCATACTATCTTGCACTGATCGTGGCACATTGGT

FIGURE 1584B

TATAATTGAGTCAATGTTTTGTTTTGTTTGGGGTTTTGTTT

FIGURE 1585

MEPTAPSLTEEDLTEVKKDALENLRVYLCEKIIAERHFDHLRAKKILSREDTEEISCRTSSRKRAGKLLDYLQEN
PKGLDTLVESIRREKTQNFLIQKITDEVLKLRNIKLEHLKGLKCSSCEPFPDGATNNLSRSNSDESNFSEKLRAS
TVMYHPEGESSTTPFFSTNSSLNLPVLEVGRTENTIFSSTTLPRPGDPGAPPLPPDLQLEEEGTCANSSEMFLPL
RSRTVSRQ

FIGURE 1586A

ATGAACCTCTGAAAACTGCCGGCATCTGAGGTTTCCTCCAAGGCCCTCTGAAGTGCAGCCCATAATGAAGGTCTT
GGCGGCAGGAGTTGTGCCCCTGCTGTTGGTTCTGCACTGGAAACATGGGGCGGGGAGCCCCCTCCCCATCACCCC
TGTCAACGCCACCTGTGCCATACGCCACCCATGTCACAACAACCTCATGAACCAGATCAGGAGCCAACTGGCACA
GCTCAATGGCAGTGCCAATGCCCTCTTTATTCTCTATTACACAGCCCAGGGGGAGCCGTTCCCCAACAACCTGGA
CAAGCTATGTGGCCCCAACGTGACGGACTTCCCGCCCTTCCACGCCAACGGCACGGAGAAGGCCAAGCTGGTGGA
GCTGTACCGCATAGTCGTGTACCTTGGCACCTCCCTGGGCAACATCACCCGGGACCAGAAGATCCTCAACCCCAG
TGCCCTCAGCCTCCACAGCAAGCTCAACGCCACCGCCGACATCCTGCGAGGCCTCCTTAGCAACGTGCTGTGCCG
CCTGTGCAGCAAGTACCACGTGGGCCATGTGGACGTGACCTACGGCCCTGACACCTCGGGTAAGGATGTCTTCCA
GAAGAAGAAGCTGGGCTGTCAACTCCTGGGGAAGTATAAGCAGATCATCGCCGTGTTGGCCCAGGCCTTCTAGCA
GGAGGTCTTGAAGTGTGCTGTGAACCGAGGGATCTCAGGAGTTGGGTCCAGATGTGGGGGCCTGTCCAAGGGTGG
CTGGGGCCCAGGGCATCGCTAAACCCAAATGGGGGCTGCTGGCAGACCCCGAGGGTGCCTGGCCAGTCCACTCCA
CTCTGGGCTGGGCTGTGATGAAGCTGAGCAGAGTGGAAACTTCCATAGGGAGGGAGCTAGAAGAAGGTGCCCCTT
CCTCTGGGAGATTGTGGACTGGGGAGCGTGGGCTGGACTTCTGCCTCTACTTGTCCCTTTGGCCCCTTGCTCACT
TTGTGCAGTGAACAAACTACACAAGTCATCTACAAGAGCCCTGACCACAGGGTGAGACAGCAGGGCCCAGGGGAG
TGGACCAGCCCCCAGCAAATTATCACCATCTGTGCCTTTGCTGCCCCTTAGGTTGGGACTTAGGTGGGCCAGAGG
GGCTAGGATCCCAAAGGACTCCTTGTCCCCTAGAAGTTTGATGAGTGGAAGATAGAGAGGGGCCTCTGGGATGGA
AGGCTGTCTTCTTTTGAGGATGATCAGAGAACTTGGGCATAGGAACAATCTGGCAGAAGTTTCCAGAAGGAGGTC
ACTTGGCATTCAGGCTCTTGGGGAGGCAGAGAAGCCACCTTCAGGCCTGGGAAGGAAGACACTGGGAGGAGGAGA
GGCCTGGAAAGCTTTGGTAGGTTCTTCGTTCTCTTCCCCGTGATCTTCCCTGCAGCCTGGGATGGCCAGGGTCTG
ATGGCTGGACCTGCAGCAGGGGTTTGTGGAGGTGGGTAGGGCAGGGGCAGGTTGCTAAGTCAGGTGCAGAGGTTC
TGAGGGACCCAGGCTCTTCCTCTGGGTAAAGGTCTGTAAGAAGGGGCTGGGGTAGCTCAGAGTAGCAGCTCACAT
CTGAGGCCCTGGGAGGTCTTGTGAGGTCACACAGAGGTACTTGAGGGGGACTGGAGGCCGTCTCTGGTCCCCAGG
GCAAGGGAACAGCAGAACTTAGGGTCAGGGTCTCAGGGAACCCTGAGCTCCAAGCGTGCTGTGCGTCTGACCTGG
CATGATTTCTATTTATTATGATATCCTATTTATATTAACTTATTGGTGCTTTCAGTGGCCAAGTTAATTCCCCTT
TCCCTGGTCCCTACTCAACAAAATATGATGATGGCTCCCGACACAAGCGCCAGGGCCAGGGCTTAGCAGGGCCTG
GTCTGGAAGTCGACAATGTTACAAGTGGAATAAGCTTACGGGTGAAGCTCAGAGAAGGGTCGGATCTGAGAGAAT
GGGGAGGCCTGAGTGGGAGTGGGGGGCCTTGCTCCACCCCCATCCCCTACTGTGACTTGCTTTAGCGTGTCAGGG
TCCAGGCTGCAGGGGCTGGGCCAATTTGTGGAGAGGCCGGGTGCCTTTCTGTCTTGCTTCCAGGGGGCTGGTTCA
CACTGTTCTTGGGCGCCCCAGCATTGTGTTGTGAGGCGCACTGTTCCTGGCAGATATTGTGCCCCCTGGAGCAGT
GGGCAAGACAGTCCTTGTGGCCCACCCTGTCCTTGTTTCTGTGTCCCCATGCTGCCTCTGAAATAGCGCCCTGGA
ACAACCCTGCCCCTGCACCCAGCATGCTCCGACACAGCAGGGAAGCTCCTCCTGTGGCCCGGACACCCATAGACG
GTGCGGGGGGCCTGGCTGGGCCAGACCCCAGGAAGGTGGGGTAGACTGGGGGGATCAGCTGCCCATTGCTCCCAA
GAGGAGGAGAGGGAGGCTGCAGACGCCTGGGACTCAGACCAGGAAGCTGTGGGCCCTCCTGCTCCACCCCCATCC
CACTCCCACCCATGTCTGGGCTCCCAGGCAGGGAACCCGATCTCTTCCTTTGTGCTGGGGCCAGGCGAGTGGAGA
AACGCCCTCCAGTCTGAGAGCAGGGGAGGGAAGGAGGCAGCAGAGTTGGGGCAGCTGCTCAGAGCAGTGTTCTGG
CTTCTTCTCAAACCCTGAGCGGGCTGCCGGCCTCCAAGTTCCTCCGACAAGATGATGGTACTAATTATGGTACTT
TTCACTCACTTTGCACCTTTCCCTGTCGCTCTCTAAGCACTTTACCTGGATGGCGCGTGGGCAGTGTGCAGGCAG
GTCCTGAGGCCTGGGGTTGGGGTGGAGGGTGCGGCCCGGAGTTGTCCATCTGTCCATCCCAACAGCAAGACGAGG
ATGTGGCTGTTGAGATGTGGGCCACACTCACCCTTGTCCAGGATGCAGGGACTGCCTTCTCCTTCCTGCTTCATC
CGGCTTAGCTTGGGGCTGGCTGCATTCCCCCAGGATGGGCTTCGAGAAAGACAAACTTGTCTGGAAACCAGAGTT
GCTGATTCCACCCGGGGGGCCCGGCTGACTCGCCCATCACCTCATCTCCCTGTGGACTTGGGAGCTCTGTGCCAG
GCCCACCTTGCGGCCCTGGCTCTGAGTCGCTCTCCCACCCAGCCTGGACTTGGCCCCATGGGACCCATCCTCAGT
GCTCCCTCCAGATCCCGTCCGGCAGCTTGGCGTCCACCCTGCACAGCATCACTGAATCACAGAGCCTTTGCGTGA
AACAGCTCTGCCAGGCCGGGAGCTGGGTTTCTCTTCCCTTTTTATCTGCTGGTGTGGACCACACCTGGGCCTGGC
CGGAGGAAGAGAGAGTTTACCAAGAGAGATGTCTCCGGGCCCTTATTTATTATTTAAACATTTTTTTAAAAAGCA
CTGCTAGTTTACTTGTCTCTCCTCCCCATCGTCCCCATCGTCCTCCTTGTCCCTGACTTGGGGCACTTCCACCCT
GACCCAGCCAGTCCAGCTCTGCCTTGCCGGCTCTCCAGAGTAGACATAGTGTGTGGGGGTTGGAGCTCTGGCACCC
GGGGAGGTAGCATTTCCCTGCAGATGGTACAGATGTTCCTGCCTTAGAGTCATCTCTAGTTCCCCACCTCAATCC

FIGURE 1586B

CGGCATCCAGCCTTCAGTCCCGCCCACGTGCTAGCTCCGTGGGCCCACCGTGCGGCCTTAGAGGTTTCCCTCCTT
CCTTTCCACTGAAAAGCACATGGCCTTGGGTGACAAATTCCTCTTTGATGAATGTACCCTGTGGGGATGTTTCAT
ACTGACAGATTATTTTTATTTATTCAATGTCATATTTAAAATATTTATTTTTTATACCAAATGAATCACTTTTTT
TTTTAAGAAAAAAAAAGAGAAATGAATAAAGAATCTACTCTTCG

FIGURE 1587

MKVLAAGVVPLLLVLHWKHGAGSPLPITPVNATCAIRHPCHNNLMNQIRSQLAQLNGSANALFILYYTAQGEPFP
NNLDKLCGPNVTDFPPFHANGTEKAKLVELYRIVVYLGTSLGNITRDQKILNPSALSLHSKLNATADILRGLLSN
VLCRLCSKYHVGHVDVTYGPDTSGKDVFQKKKLGCQLLGKYKQIIAVLAQAF

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FIGURE 1588

TAGGATGGAAAGGCAGATGTAAAGTCCCTC**ATG**GCGAAATATAACACGGGGGGCAACCCGACAGAGGATGTCTCA
GTCAATAGCCGACCCTTCAGAGTCACAGGGCCAAACTCATCTTCAGGAATACAAGCAAGAAAGAACTTATTCAAC
AACCAAGGAAATGCCAGCCCTCCTGCAGGACCCAGCAATGTACCTAAGTTTGGGTCCCCAAAGCCACCTGTGGCA
GTCAAACCTTCTTCTGAGGAAAAGCCTGACAAGGAACCCAAGCCCCCGTTTCTAAAGCCCACTGGAGCAGGCCAA
AGATTCGGAACACCAGCCAGCTTGACCACCAGAGACCCCGAGGCGAAAGTGGGATTTCTGAAACCTGTAGGCCCC
AAGCCCATCAACTTGCCCAAAGAAGATTCCAAACCTACATTTCCCTGGCCTCCTGGAAACAAGCCATCTCTTCAC
AGTGTAAACCAAGACCATGACTTAAAGCCACTAGGCCCGAAATCTGGGCCTACTCCTCCAACCTCAGAAAATGAA
CAGAAGCAAGCGTTTCCCAAATTGACTGGGGTTAAAGGGAAATTTATGTCAGCATCACAAGATCTTGAACCCAAG
CCCCTCTTCCCCAAACCCGCCTTTGGCCAGAAGCCGCCCCTAAGTACCGAGAACTCCCATGAAGACGAAAGCCCC
ATGAAGAATGTGTCTTCATCAAAAGGGTCCCCAGCTCCCCTGGGAGTCAGGTCCAAAAGCGGCCCTTTAAAACCA
GCAAGGGAAGACTCAGAAAATAAAGACCATGCAGGGGAGATTTCAAGTTTGCCCTTTCCTGGAGTGGTTTTGAAA
CCTGCTGCGAGCAGGGGAGGCCTAGGTCTCTCCAAAAATGGTGAAGAAAAAAAGGAAGATAGGAAGATAGATGCT
GCTAAGAACACCTTCCAGAGCAAAATAAATCAGGAAGAGTTGGCCTCAGGGACTCCTCCTGCCAGGTTCCCTAAG
GCCCCTTCTAAGCTGACAGTGGGGGGGCCATGGGGCCAAAGTCAGGAAAAGGAAAAGGGAGACAAGAATTCAGCC
ACCCCGAAACAGAAGCCATTGCCTCCCTTGTTTACCTTGGGTCCACCTCCACCAAAACCCAACAGACCACCAAAT
GTTGACCTGACGAAATTCCACAAAACCTCTTCTGGAAACAGTACTAGCAAAGGCCAGACGTCTTACTCAACAACT
TCCCTGCCACCACCTCCACCATCCCATCCGGCCAGCCAACCACCATTGCCAGCATCTCACCCATCACAACCACCA
GTCCCAAGCCTACCTCCCAGAAACATTAAACCTCCGTTTGACCTAAAAAGCCCTGTCAATGAAGACAATCAAGAT
GGTGTCACGCACTCTGATGGTGCTGGAAATCTAGATGAGGAACAAGACAGTGAAGGAGAAACATATGAAGACATA
GAAGCATCCAAAGAAAGAGAGAAGAAAAGGGAAAAGGAAGAAAAGAAGAGGTTAGAGCTGGAGAAAAAGGAACAG
AAAGAGAAAGAAAAGAAAGAACAAGAAATAAAGAAGAAATTTAAACTAACAGGCCCTATTCAAGTCATCCATCTT
GCAAAAGCTTGTTGTGATGTCAAAGGAGGAAAGAATGAACTGAGCTTCAAGCAAGGAGAGCAAATTGAAATCATC
CGCATCACAGACAACCCAGAAGGAAAATGGTTGGGCAGAACAGCAAGGGGTTCATATGGCTATATTAAAACAACT
GCTGTAGAGATTGACTATGATTCTTTGAAACTGAAAAAAGACTCTCTTGGTGCCCCTTCAAGACCTATTGAAGAT
GACCAAGAAGTATATGATGATGTTGCAGAGCAGGATGATATTAGCAGCCACAGTCAGAGTGGAAGTGGAGGGATA
TTCCCTCCACCACCAGATGATGACATTTATGATGGGATTGAAGAGGAAGATGCTGATGATGGTTTCCCTGCTCCT
CCTAAACAATTGGACATGGGAGATGAAGTTTACGATGATGTGGATACCTCTGATTTCCCTGTTTCATCAGCAGAG
ATGAGTCAAGGAACTAATTTTGGAAAAGCTAAGACAGAAGAAAAGGACCTTAAGAAGCTAAAAAAGCAGGAAAAA
GAAGAAAAAGACTTCAGGAAAAAATTTAAATATGATGGTGAAATTAGAGTCCTATATTCAACTAAAGTTACAACT
TCCATAACTTCTAAAAAGTGGGGAACCAGAGATCTACAGGTAAAACCTGGTGAATCTCTAGAAGTTATACAAACC
ACAGATGACACAAAAGTTCTCTGCAGAAATGAAGAAGGGAAATATGGTTATGTCCTTCGGAGTTACCTAGCGGAC
AATGATGGAGAGATCTATGATGATATTGCTGATGGCTGCATCTATGACAATGAC**TAG**CACTCAACTTTGGTCATT

FIGURE 1589

MAKYNTGGNPTEDVSVNSRPFRVTGPNSSSGIQARKNLFNNQGNASPPAGPSNVPKFGSPKPPVAVKPSSEEKPD
KEPKPPFLKPTGAGQRFGTPASLTTRDPEAKVGFLKPVGPKPINLPKEDSKPTFPWPPGNKPSLHSVNQDHDLKP
LGPKSGPTPPTSENEQKQAFPKLTGVKGKFMSASQDLEPKPLFPKPAFGQKPPLSTENSHEDESPMKNVSSSKGS
PAPLGVRSKSGPLKPAREDSENKDHAGEISSLPFPGVVLKPAASRGGLGLSKNGEEKKEDRKIDAAKNTFQSKIN
QEELASGTPPARFPKAPSKLTVGGPWGQSQEKEKGDKNSATPKQKPLPPLFTLGPPPPKPNRPPNVDLTKFHKTS
SGNSTSKGQTSYSTTSLPPPPPSHPASQPPLPASHPSQPPVPSLPPRNIKPPFDLKSPVNEDNQDGVTHSDGAGN
LDEEQDSEGETYEDIEASKEREKKREKEEKKRLELEKKEQKEKEKKEQEIKKKFKLTGPIQVIHLAKACCDVKGG
KNELSFKQGEQIEIIRITDNPEGKWLGRTARGSYGYIKTTAVEIDYDSLKLKKDSLGAPSRPIEDDQEVYDDVAE
QDDISSHSQSGSGGIFPPPPDDDIYDGIEEEDADDGFPAPPKQLDMGDEVYDDVDTSDFPVSSAEMSQGTNFGKA
KTEEKDLKKLKKQEKEEKDFRKKFKYDGEIRVLYSTKVTTSITSKKWGTRDLQVKPGESLEVIQTTDDTKVLCRN
EEGKYGYVLRSYLADNDGEIYDDIADGCIYDND

FIGURE 1590A

CGAAGAGGATCCGGAGCAGCTGCTGCCAGCCCGCGGGCACTGAAGTCCTCCCGGCTGCCGCTCGAGTAGCCACGG
GCGCGATCGGGACCAGAAGTCTCCTCCTCCATGATCACTTTGGAAGCCGGGGGGGGAAGACTTTGCCCTGCCCTGA
GAGCTGGTCTGCGTTTCCCAGGCGCGGCGGCGGCGGAGCAGCAGCTGCAGCAGCCGAGTCCAAATAGGAGCGGCC
ACAGCCAGGGGCGTGTGCGCCCCGCGCGGAGCGAGCTCGGGTTCCCCTCGGAATGTCCCCGGGGGCGCCCGGCGCG
CTGACCCCGAAGCCGCCTCCGCCTTCGGCGCCTGCTGCCTCCCTCGGCCAGGCTTGTTGTTCGGGACTGTGAGCT
TCCTGGCTCCTGGGCAGTGGGGAAGCCCCCGGGGGCGAGTGACCTCAGCTGGCCACGACCCAGCCCTCCCCCGTG
CGTATCTCGCTTAAGATGGCAGCGGAGTCAGGGGAACTAATCGGGGCTTGTGAGTTCATGAAAGATCGGTTATAT
TTTGCTACTTTAAGGAATAGACCAAAAAGCACAGTAAATACCCACTATTTCTCCATCGATGAGGAGCTGGTCTAT
GAAAATTTCTATGCAGATTTTGGACCGCTGAACTTGGCAATGGTGTACAGATATTGCTGCAAACTAAACAAGAAA
CTAAAATCATACAGTTTGTCAAGAAAGAAAATAGTGCACTACACCTGTTTTGACCAACGGAAAAGAGCAAATGCA
GCATTTTTGATAGGTGCCTATGCAGTAATCTATTTAAAGAAGACACCAGAAGAAGCCTACAGAGCACTCCTGTCT
GGCTCAAACCCCCCCTATCTTCCATTCAGGGATGCTTCCTTTGGAAATTGCACTTACAATCTCACCATTCTCGAC
TGTTTGCAGGGAATCAGAAAGGGATTACAACATGGATTTTTTGACTTTGAGACATTTGATGTGGATGAATATGAA
CATTATGAGCGAGTTGAAAATGGTGACTTCAACTGGATTGTTCCAGGAAAATTTTTAGCATTTAGTGGACCACAT
CCTAAAAGCAAAATTGAGAATGGTTATCCTCTTCACGCCCCTGAAGCCTACTTTCCTTATTTCAAAAAGCATAAT
GTGACTGCAGTTGTGAGGCTAAACAAAAAGATTTATGAGGCAAAGCGCTTCACAGACGCTGGCTTCGAGCACTAT
GACCTCTTCTTCATAGATGGCAGCACACCCAGTGACAACATCGTGCGAAGGTTCCTGAACATCTGTGAGAACACC
GAAGGGGCCATCGCCGTTCACTGCAAAGCTGGTCTTGGAAGAACAGGGACATTGATAGCCTGTTATGTAATGAAA
CACTACAGGTTTACACATGCTGAAATAATTGCTTGGATTAGAATATGCCGGCCAGGCTCTATTATAGGACCCCAG
CAGCACTTCCTGGAAGAAAAACAAGCATCGTTGTGGGTCCAAGGAGACATTTTCCGATCCAAACTGAAAAATCGA
CCATCCAGTGAAGGAAGTATTAATAAAATTCTTTCTGGCCTAGATGATATGTCTATTGGTGGAAATCTTTCAAAA
ACACAAAACATGGAACGATTTGGAGAGGATAACTTAGAAGATGATGATGTGGAAATGAAAAATGGTATAACCCAG
GGAGACAAACTACGTGCCTTAAAAAGTCAGAGACAGCCACGTACCTCACCATCCTGTGCATTTAGGTCAGATGAT
ACAAAAGGACATCCAAGAGCAGTGTCCCAGCCTTTCAGATTAAGTTCATCCCTGCAAGGATCTGCAGTTACTTTG
AAGACATCAAAAATGGCACTGTCCCCTTCAGCAACGGCCAAGAGGATCAACAGAACTTCTTTGTCTTCGGGTGCC
ACTGTAAGAAGCTTTTCCATAAACTCCCGGCTAGCCAGTTCTCTAGGGAACTTGAATGCTGCAACAGATGATCCA
GAGAACAAAAAGACCTCCTCATCCTCTAAGGCAGGCTTCACAGCCAGCCCGTTTACCAACCTCTTGAATGGCAGC
TCCCAGCCAACTACCAGAAATTACCCTGAGCTCAACAATAATCAGTACAACAGAAGCAGCAACAGCAACGGGGGC
AACCTGAACAGCCCCCCAGGCCCCCACAGCGCCAAGACAGAGGAGCACACCACCATCCTCCGACCCTCCTACACC
GGGCTTTCTTCTTCTTCAGCGAGATTCCTGAGCCGTTCTATCCCTTCCCTTCAGTCTGAATATGTTCATTACTAA
GGCCTTGCCACTCCAGTGAAAGCTGTTCTTCTCTTAGACACAATTTCTTCATCTGGACGAGCAGTGGAGAGGGAA
AGCAACTTCTTGCTGGAAGAATATCTCTGCCTTCTTACCTTAAATTAAAAAGAGCACTAAGATAACACCTTCAAG
AGACTTGAAAACAGAAAACTGGTTAATGACTACTATAAATGCACTGAAACTATGTTATGGAGATTTCCATACTTT
TAAAGACAGTTTTAATGTTGAATTTGGTATTTTGAAGGGTTATTTTTAATGTATTTTGGTAATACATTTATTATT
ATATTTACATGTACAGTGTTACATTATATATGTATTGTGAACTTTAAAAGACTATTTTGATAAATTTATAAATAT
ATAAAATTATGTAAAAACTACACTATATTTTGATTTAGATTTTCCTGCTGTTTGCTACCAAAAATTTGTATTTTA
AATCTGTTTAGTTTTAGTATGGTTTTGTCTCTAATGAATAAATAATTCCTTCTTATTAAGAAGAAGTAAGGGAGA
AAGTTTTTAGAAAGTGATTTTTATGCTCGCACTATAAATATGGCAGGTCAGTTCATTCTTTTGGGAAGTCAGTTT
AGTTACACTGAGTTTATCCAAGTTTATCTCTACCAAGAGTATAATGGCATGGGATGGCTTATTTAGGACAATTCC
CTTTCCTATTGTTTTTGTTGCTGAGCCAATTTGAGTTAGTTTTGCATCCTGGGGGGCTTTAAAATACAGCATGCA
GTGAAAGATCAGAATTCACTGAATATTTCTTCTGAGAGCATGGTTTCATGGTTTTTCTCTATGAAATGACTCAAT
ATTCCAAATGTTTTTTTTTCCTTCCTCCTTTCAAAAGAGTTCTTAACCCAATTAGGATATCCTGCTTTGGGTATG
AGGTTGTTGTTGCCTGTAATCACACATGGTTTGACATCAGTTTTAAATCAATGGAGAGAAAAAACTGAAAAAGAT
GCTGCTAAGTAGTTCTCTGTATTAAAGGAGATATTTTTAAAACAGGGTACAACCCCCTGCTGCACACGCTAGCAT
ATCTGGAACCTACTATGAAAATGAAAGGACCCTTATAGGTACTCACAGCCCTTTCATGTAAGTATGATCTGATAT
TTAGGTCTTCAGAAGCCTGTAGGTTTCATTTCTATGAGGAATCGAGGAGCGTTACATCCTGATATCCTTCCAGGC
TGCTTAAGAATGGACTGCTTCGACACTGAAAGTGCTAGTTAAATGGATTCATATGAAGTGCTTTACTCCCAACCA
TTGAGTTATTTATAATGTATTTATTAGGGGAGGGTACCTTGAGTCTATTATATATGCTTCATCAAAACATCTTGT

FIGURE 1590B

TCATGTTTTATGTTTTTAAAAAAGGCATTTGAATGAATGTTTGACTCAGGTTTGTTAAATTAACTTCAGTAACTG
CAGTACCAAAAATTACACTCAACTGATGAAAAAAACGAATTGTATGATTTAGGAATCAAAAACTAAAATAAGTGG
AATTATGTATCTTTTCTAAAGTTAAAAAAGTAAAATATTTTATTATGAGTTATTATAAAAATTGGTTAATTGTAT
AGGAAGATGACAGTATTTTTTTCAAGTTATCATAAAAAGTAATTCAGATGACATTTGAGAAGTAGGGGAAAGGGA
ATCATGTTGACAGTTTTAGTTCTGTGAACACTAATTTGTGTGAAGCTATTAAAATGATTGTAAAGTTGACTACTG
TAAATTTCCCATAATTATGTGTGTATATGTGTCATATGTATGTACATGTATATGTCTAAAAATTACTTTACACAT
GTGCCTACATAGACACACCAAGAAGTGGATGTATATAATATAGAAAGTATATAGCAAAGTAATTTTACTCTGATA
ATAAAAATTGTTTGACATGTATTTTGTTATGAATAGTTTATCTTCCAAAAGATATTTTGCTCTATTTTAAAGTGT
AGAAGAATACACTGCTAATAAATAATAAAAGTTTTATTCAATTTAAAAAAAAAAAAAAAAAA

FIGURE 1591

MAAESGELIGACEFMKDRLYFATLRNRPKSTVNTHYFSIDEELVYENFYADFGPLNLAMVYRYCCKLNKKLKSYS
LSRKKIVHYTCFDQRKRANAAFLIGAYAVIYLKKTPEEAYRALLSGSNPPYLPFRDASFGNCTYNLTILDCLQGI
RKGLQHGFFDFETFDVDEYEHYERVENGDFNWIVPGKFLAFSGPHPKSKIENGYPLHAPEAYFPYFKKHNVTAVV
RLNKKIYEAKRFTDAGFEHYDLFFIDGSTPSDNIVRRFLNICENTEGAIAVHCKAGLGRTGTLIACYVMKHYRFT
HAEIIAWIRICRPGSIIGPQQHFLEEKQASLWVQGDIFRSKLKNRPSSEGSINKILSGLDDMSIGGNLSKTQNME
RFGEVSFP

FIGURE 1592A

GCAGCCAGAGCTCAGCAGGGCCCTGGAGAGATGGCCACGGTCCCAGCACCGGGGAGGACTGGAGAGCGCGCGCTG
CCACCGCCCCATGTCTCAGCCAGGGCTTCCTTCCTCGGCTCCACCCTGTGGATGTAATGGCGGCCCCTGCTCTGT
CCTGGCGTCTGCCCCTCCTCATCCTCCTCCTGCCCCTGGCTACCTCTTGGGCATCTGCAGCGGTGAATGGCACTT
CCCAGTTCACATGCTTCTACAACTCGAGAGCCAACATCTCCTGTGTCTGGAGCCAAGATGGGGCTCTGCAGGACA
CTTCCTGCCAAGTCCATGCCTGGCCGGACAGACGGCGGTGGAACCAAACCTGTGAGCTGCTCCCCGTGAGTCAAG
CATCCTGGGCCTGCAACCTGATCCTCGGAGCCCCAGATTCTCAGAAACTGACCACAGTTGACATCGTCACCCTGA
GGGTGCTGTGCCGTGAGGGGGTGCGATGGAGGGTGATGGCCATCCAGGACTTCAAGCCCTTTGAGAACCTTCGCC
TGATGGCCCCCATCTCCCTCCAAGTTGTCCACGTGGAGACCCACAGATGCAACATAAGCTGGGAAATCTCCCAAG
CCTCCCACTACTTTGAAAGACACCTGGAGTTCGAGGCCCGGACGCTGTCCCCAGGCCACACCTGGGAGGAGGCCC
CCCTGCTGACTCTCAAGCAGAAGCAGGAATGGATCTGCCTGGAGACGCTCACCCCAGACACCCAGTATGAGTTTC
AGGTGCGGGTCAAGCCTCTGCAAGGCGAGTTCACGACCTGGAGCCCCTGGAGCCAGCCCCTGGCCTTCAGGACAA
AGCCTGCAGCCCTTGGGAAGGACACCATTCCGTGGCTCGGCCACCTCCTCGTGGGCCTCAGCGGGGCTTTTGGCT
TCATCATCTTAGTGTACTTGCTGATCAACTGCAGGAACACCGGGCCATGGCTGAAGAAGGTCCTGAAGTGTAACA
CCCCAGACCCCTCGAAGTTCTTTTCCCAGCTGAGCTCAGAGCATGGAGGAGACGTCCAGAAGTGGCTCTCTTCGC
CCTTCCCCTCATCGTCCTTCAGCCCTGGCGGCCTGGCACCTGAGATCTCGCCACTAGAAGTGCTGGAGAGGGACA
AGGTGACGCAGCTGCTCCTGCAGCAGGACAAGGTGCCTGAGCCCGCATCCTTAAGCAGCAACCACTCGCTGACCA
GCTGCTTCACCAACCAGGGTTACTTCTTCTTCCACCTCCCGGATGCCTTGGAGATAGAGGCCTGCCAGGTGTACT
TTACTTACGACCCCTACTCAGAGGAAGACCCTGATGAGGGTGTGGCCGGGGCACCCACAGGGTCTTCCCCCCAAC
CCCTGCAGCCTCTGTCAGGGGAGGACGACGCCTACTGCACCTTCCCCTCCAGGGATGACCTGCTGCTCTTCTCCC
CCAGTCTCCTCGGTGGCCCCAGCCCCCCAAGCACTGCCCCTGGGGGCAGTGGGGCCGGTGAAGAGAGGATGCCCC
CTTCTTTGCAAGAAAGAGTCCCCAGAGACTGGGACCCCCAGCCCCTGGGGCCTCCCACCCCAGGAGTCCCAGACC
TGGTGGATTTTCAGCCACCCCCTGAGCTGGTGCTGCGAGAGGCTGGGGAGGAGGTCCCTGACGCTGGCCCCAGGG
AGGGAGTCAGTTTCCCCTGGTCCAGGCCTCCTGGGCAGGGGGAGTTCAGGGCCCTTAATGCTCGCCTGCCCCTGA
ACACTGATGCCTACTTGTCCCTCCAAGAACTCCAGGGTCAGGACCCAACTCACTTGGTGTAGACAGATGGCCAGG
GTGGGAGGCAGGCAGCTGCCTGCTCTGCGCCGAGCCTCAGAAGGACCCTGTTGAGGGTCCTCAGTCCACTGCTGA
GGACACTCAGTGTCCAGTTGCAGCTGGACTTCTCCACCCGGATGGCCCCCACCCAGTCCTGCACACTTGGTCCAT
CCATTTCCAAACCTCCACTGCTGCTCCCGGGTCCTGCTGCCCGAGCCAGGAACTGTGTGTGTTGCAGGGGGGCAG
TAACTCCCCAACTCCCTCGTTAATCACAGGATCCCACGAATTTAGGCTCAGAAGCATCGCTCCTCTCCAGCCCTG
CAGCTATTCACCAATATCAGTCCTCGCGGCTCTCCAGGGCTCCCTGCCCTGACCTCTTCCCTGGGTTTTCTGCCC
CAGCCTCCTCCTTCCCTCCCCTCCCCGTCCACAGGGCAGCCTGAGCGTGCTTTCCAAAACCCAAATATGGCCACG
CTCCCCCTCGGTTCAAAACCTTGCACAGGTCCCACTGCCCTCAGCCCCACTTCTCAGCCTGGTACTTGTACCTCC
GGTGTCGTGTGGGGACATCCCCTTCTGCAATCCTCCCTACCGTCCTCCTGAGCCACTCAGAGCTCCCTCACACCC
CCTCTGTTGCACATGCTATTCCCTGGGGCTGCTGTGCGCTCCCCCTCATCTAGGTGACAAACTTCCCTGACTCTT
CAAGTGCCGGTTTTGCTTCTCCTGGAGGGAAGCACTGCCTCCCTTAATCTGCCAGAAACTTCTAGCGTCAGTGCT
GGAGGGAGAAGCTGTCAGGGACCCAGGGCGCCTGGAGAAAGAGGCCCTGTTACTATTCCTTTGGGATCTCTGAGG
CCTCAGAGTGCTTGGCTGCTGTATCTTTAATGCTGGGGCCCAAGTAAGGGCACAGATCCCCCCACAAAGTGGATG
CCTGCTGCATCTTCCCACAGTGGCTTCACAGACCCACAAGAGAAGCTGATGGGGAGTAAACCCTGGAGTCCGAGG
CCCAGGCAGCAGCCCCGCCTAGTGGTGGGCCCTGATGCTGCCAGGCCTGGGACCTCCCACTGCCCCCTCCACTGG
AGGGGTCTCCTCTGCAGCTCAGGGACTGGCACACTGGCCTCCAGAAGGGCAGCTCCACAGGGCAGGGCCTCATTA
TTTTTCACTGCCCCAGACACAGTGCCCAACACCCCGTCGTATACCCTGGATGAACGAATTAATTACCTGGCACCA
CCTCGTCTGGGCTCCCTGCGCCTGACATTCACACAGAGAGGCAGAGTCCCGTGCCCATTAGGTCTGGCATGCCCC
CTCCTGCAAGGGGCTCAACCCCCTACCCCGACCCCTCCACGTATCTTTCCTAGGCAGATCACGTTGCAATGGCTC
AAACAACATTCCACCCCAGCAGGACAGTGACCCCAGTCCCAGCTAACTCTGACCTGGGAGCCCTCAGGCACCTGC
ACTTACAGGCCTTGCTCACAGCTGATTGGGCACCTGACCACACGCCCCCACAGGCTCTGACCAGCAGCCTATGAG
GGGGTTTGGCACCAAGCTCTGTCCAATCAGGTAGGCTGGGCCTGAACTAGCCAATCAGATCAACTCTGTCTTGGG
CGTTTGAACTCAGGGAGGGAGGCCCTTGGGAGCAGGTGCTTGTGGACAAGGCTCCACAAGCGTTGAGCCTTGGAA
AGGTAGACAAGCGTTGAGCCACTAAGCAGAGGACCTTGGGTTCCCAATACAAAAATACCTACTGCTGAGAGGGCT
GCTGACCATTTGGTCAGGATTCCTGTTGCCTTTATATCCAAAATAAACTCCCCTTTCTTGAGGTTGTCTGAGTCT

FIGURE 1592B

TGGGTCTATGCCTTGAAAAAAGCTGAATTATTGGACAGTCTCACCTCCTGCCATAGGGTCCTGAATGTTTCAGAC
CACAAGGGGCTCCACACCTTTGCTGTGTGTTCTGGGGCAACCTACTAATCCTCTCTGCAAGTCGGTCTCCTTATC
CCCCCAAATGGAAATTGTATTTGCCTTCTCCACTTTGGGAGGCTCCCACTTCTTGGGAGGGTTACATTTTTTAAG
TCTTAATCATTTGTGACATATGTATCTATACATCCGTATCTTTTAATGATCCGTGTGTACCATCTTTGTGATTAT
TTCCTTAATATTTTTTCTTTAAGTCAGTTCATTTTCGTTGAAATACATTTATTTAAAGAAAAATCTTTGTTACTC
TGTAAATGAAAAAACCCATTTTCGCTATAAATAAAAGGTAACTGTACAAAATAAGTACAATGCAACAAAA

FIGURE 1593

MAAPALSWRLPLLILLLPLATSWASAAVNGTSQFTCFYNSRANISCVWSQDGALQDTSCQVHAWPDRRRWNQTCE
LLPVSQASWACNLILGAPDSQKLTTVDIVTLRVLCREGVRWRVMAIQDFKPFENLRLMAPISLQVVHVETHRCNI
SWEISQASHYFERHLEFEARTLSPGHTWEEAPLLTLKQKQEWICLETLTPDTQYEFQVRVKPLQGEFTTWSPWSQ
PLAFRTKPAALGKDTIPWLGHLLVGLSGAFGFIILVYLLINCRNTGPWLKKVLKCNTPDPSKFFSQLSSEHGGDV
QKWLSSPFPSSSFSPGGLAPEISPLEVLERDKVTQLLLQQDKVPEPASLSSNHSLTSCFTNQGYFFFHLPDALEI
EACQVYFTYDPYSEEDPDEGVAGAPTGSSPQPLQPLSGEDDAYCTFPSRDDLLLFSPSLLGGPSPPSTAPGGSGA
GEERMPPSLQERVPRDWDPQPLGPPTPGVPDLVDFQPPPELVLREAGEEVPDAGPREGVSFPWSRPPGQGEFRAL
NARLPLNTDAYLSLQELQGQDPTHLV

FIGURE 1594

CAGGGGACAGGCTGCAGCCGGTGCAGTTACACGTTTTCCTCCAAGGAGCCTCGGACGTTGTCACGGGTTTGGGGT
CGGGGACAGAGCAGTGACCATGGCCAGGCTGGCGTTGTCTCCTGTGCCCAGCCACTGGATGGTGGCGTTGCTGCT
GCTGCTCTCAGCTGAGCCAGTACCAGCAGCCAGATCGGAGGACCGGTACCGGAATCCCAAAGGTAGTGCTTGTTC
GCGGATCTGGCAGAGCCCACGTTTCATAGCCAGGAAACGGGGCTTCACGGTGAAAATGCACTGCTACATGAACAG
CGCCTCCGGCAATGTGAGCTGGCTCTGGAAGCAGGAGATGGACGAGAATCCCCAGCAGCTGAAGCTGGAAAAGGG
CCGCATGGAAGAGTCCCAGAACGAATCTCTCGCCACCCTCACCATCCAAGGCATCCGGTTTGAGGACAATGGCAT
CTACTTCTGTCAGCAGAAGTGCAACAACACCTCGGAGGTCTACCAGGGCTGCGGCACAGAGCTGCGAGTCATGGG
ATTCAGCACCTTGGCACAGCTGAAGCAGAGGAACACGCTGAAGGATGGTATCATCATGATCCAGACGCTGCTGAT
CATCCTCTTCATCATCGTGCCTATCTTCCTGCTGCTGGACAAGGATGACAGCAAGGCTGGCATGGAGGAAGATCA
CACCTACGAGGGCCTGGACATTGACCAGACAGCCACCTATGAGGACATAGTGACGCTGCGGACAGGGGAAGTGAA
GTGGTCTGTAGGTGAGCACCCAGGCCAGGAGTGAGAGCCAGGTCGCCCCATGACCTGGGTGCAGGCTCCCTGGCC
TCAGTGACTGCTTCGGAGCTGCCTGGCTCATGGCCCAACCCCTTTCCTGGACCCCCCAGCTGGCCTCTGAAGCTG
GCCCACCAGAGCTGCCATTTGTCTCCAGCCCCTGGTCCCCAGCTCTTGCCAAAGGGCCTGGAGTAGAAGGACAAC
AGGGCAGCAACTTGGAGGGAGTTCTCTGGGGATGGACGGGACCCAGCCTTCTGGGGGTGCTATGAGGTGATCCGT
CCCCACACATGGGATGGGGGAGGCAGAGACTGGTCCAGAGCCCGCAAATGGACTCGGAGCCGAGGGCCTCCCAGC
AGAGCTTGGGAAGGGCCATGGACCCAACTGGGCCCCAGAAGAGCCACAGGAACATCATTCCTCTCCCGCAACCAC
TCCCACCCCAGGGAGGCCCTGGCCTCCAGTGCCTTCCCCCGTGGAATAAACGGTGTGTCCTGAGAAACCA

FIGURE 1595

MARLALSPVPSHWMVALLLLLSAEPVPAARSEDRYRNPKGSACSRIWQSPRFIARKRGFTVKMHCYMNSASGNVS
WLWKQEMDENPQQLKLEKGRMEESQNESLATLTIQGIRFEDNGIYFCQQKCNNTSEVYQGCGTELRVMGFSTLAQ
LKQRNTLKDGIIMIQTLLIILFIIVPIFLLLDKDDSKAGMEEDHTYEGLDIDQTATYEDIVTLRTGEVKWSVGEH
PGQE

FIGURE 1596A

CTCACTTAAACACGTAGTTCCCGCGACCCCAACGTCCCAGAGGCGGGGCCGGAGTCGGCGGTGGCGCTCCTTGGA
GCCGGCTCCCGCTCCTACCCTGCAAACAGACCTCAGCTCCGCGGAAGTTGCGAGACGGGGTTTCACCATGTTGGT
CGGGCTGGTCTGGAAATCCTGACTTCAGGTGATCCACCCGCCTCGGCCTCCCAAAATGCTGGGATTACAAGCGTG
AGCCACCGCCCCTGACATGAGCCATTGACTTTTAAAGCAGGAGAATAATTTGGATCAGATTTATATGGAAACACT
CTTCTAGCAGCATTATGGGGACTTTTCCATAAGTCTGGATACTGAGGATTTGGAATTAAAGAAATCATTCACCAG
ACATC**ATG**GAGCCTATATATCCTTTTGCACGGCCCCAGATGAATACCAGGTTTCCTTCAAGCAGGATGGTACCTT
TCCACTTTCCTCCATCAAAATGTGCACTTTGGAACCCAACGCCAACTGGAGATTTCATCTACTTACATCTCAGTT
ACTACAGAAATCCAAAGCTTGTGGTGACTGAGAAGACCATCCGACTTGCTTATCGTCATGCTAACGAGAATAAAA
AAAATTCGTCATGCTTTTTACTTGGTTCTCTGACAGCAGACGAAGATGAAGAAGGTGTAACATTGACAGTAGATC
GCTTTGATCCTGGTCGAGAAGTACCTGAATGCCTAGAAATAACCCCTACTGCTTCTCTTCCTGGGGACTTTTTGA
TTCCATGCAAAGTTCATACTCAAGAACTTTGTTCAAGAGAAATGATAGTTCACAGTGTAGATGACTTCAGTTCAG
CTTTAAAGGCTCTACAGTGCCATATATGTAGCAAAGATTCCTTGGACTGTGGTAAGCTGCTTTCCCTAAGAGTTC
ATATCACTTCCAGGGAGAGTTTGGACAGTGTGGAATTTGACTTGCATTGGGCAGCAGTAACTCTAGCAAATAACT
TTAAATGCACACCTGTGAAGCCCATCCCCATTATTCCAACAGCTCTGGCAAGAAACTTGAGCAGTAATCTGAATA
TTTCTCAAGTTCAAGGGACTTATAAATATGGATATCTTACCATGGATGAAACACGCAAATTGTTACTTTTGTTGG
AATCTGATCCCAAGGTTTATTCTCTACCATTGGTGGGAATTTGGCTGTCTGGAATTACACATATCTATAGTCCTC
AGGTATGGGCTTGCTGTTTGCGATACATATTCAATTCTTCTGTTCAAGAAAGGGTTTTTTCAGAATCTGGAAATT
TCATCATAGTTCTCTATTCTATGACACATAAGGAACCTGAGTTTTATGAATGCTTCCCTTGTGATGGCAAGATAC
CTGACTTTCGGTTTCAGTTGCTAACCAGTAAGGAAACATTACATCTTTTCAAAAATGTTGAACCTCCTGACAAAA
ATCCAATCCGTTGTGAACTGAGCGCTGAAAGCCAAAATGCAGAAACAGAGTTTTTCAGTAAGGCTTCCAAGAATT
TTTCAATTAAGAGGTCTTCCCAAAAGTTATCTTCTGGGAAGATGCCAATACATGATCACGACTCTGGTGTTGAAG
ATGAAGATTTTTCTCCAAGACCAATTCCTAGTCCTCATCCAGTGAGTCAGAAGATTTCTAAGATCCAACCATCAG
TTCCTGAACTTTCACTTGTGTTGGATGGCAATTTCATAGAATCAAACCCTCTGCCTACTCCATTGGAAATGGTGA
ATAATGAAAATCCTCCTTTGATTAACCACTTGGAACACTTGAAGCCATTGCAACCCCAGCTTTATGATGAGAAAC
ACAGTCCAGAAGTTGAAGCTGGAGAGCCTTCCTTGAGAGGAATACCAAATCAGTTAAACCAGGATAAACCAGCTC
TTTTGAGACACTGCAAAGTAAGACAGCCACCTGCCTATAAGAAAGGGAACCCCCATACCAGGAACAGTATTAAAC
CATCTTCTCATAATGGGCCATCTCATGATATATTTGAAAAGCTCCAAACAGTTTCTGCTGGAAATGTACAAAACG
AAGAGTATCCTATAAGACCCTCCACACTTAATTCTAGGCAGTCTTCTCTTGCCCCGCAGTCCCAACCACACGATT
TTGTTTTTTCACCCCATAATTCAGGAAGACCAATGGAACTTCAGATACCTACTCCCCCACTGCCATCTTACTGTT
CCACAAACGTTTGCAGGTGTTGTCAGCATCATAGTCATATTCAATATAGTCCGCTAAATTCTTGGCAAGGAGCAA
ACACAGTTGGATCCATTCAAGATGTCCAGTCTGAAGCCCTTCAAAAGCATTCATTATTTCACCCAAGTGGATGTC
CAGCCCTGTACTGTAATGCATTCTGTTCTTCAAGTAGTCCTATAGCCTTGAGACCTCAGGGAGATATGGGCAGTT
GTTCTCCCCACAGCAATATTGAACCATCGCCTGTGGCAAGACCGCCTTCACATATGGACTTATGTAACCCACAGC
CTTGCACAGTGTGCATGCACACACCCAAGACTGAGTCAGATAATGGAATGATGGGACTATCTCCAGATGCATATC
GGTTCCTCACAGAACAAGACAGACAGCTAAGACTACTTCAGGCACAGATTCAGCGTTTGTTGGAAGCACAGTCTC
TGATGCCCTGTTCCCCTAAGACAACTGCTGTTGAAGACACAGTGCAAGCTGGAAGACAAATGGAGTTGGTTTCTG
TGGAAGCACAGTCTTCCCCTGGCTTGCACATGAGAAAAGGTGTAAGCATTGCTGTGAGCACAGGTGCTAGCTTGT
TTTGGAATGCAGCAGGTGAGGATCAAGAGCCTGACTCTCAAATGAAGCAAGATGATACCAAAATTTCCAGTGAGG
ACATGAATTTTTCTGTCGATATTAATAATGAAGTCACAAGTCTTCCAGGTAGTGCATCTTCATTAAAAGCAGTTG
ATATTCCCAGTTTTGAAGAGAGCAACATTGCTGTGGAAGAAGAATTTAACCAGCCACTTTCTGTATCCAACTCTT
CTCTAGTTGTGAGAAAAGAACCTGATGTACCTGTGTTCTTTCCAAGTGGCCAGCTGGCAGAAAGTGTAAGCATGT
GTTTACAGACTGGACCAACAGGGGGTGCCAGTAACAATTCTGAAACATCAGAGGAACCAAAAATTGAGCATGTAA
TGCAACCCTTGCTTCATCAACCATCAGATAACCAGAAAATTTACCAGGATTTATTGGGTCAAGTAAACCACCTAT
TAAATAGTTCCTCCAAGGAAACTGAGCAGCCGTCTACCAAAGCAGTAATTATCAGTCATGAATGCACCAGAACCC
AAAACGTTTACCATACAAAGAAAAAAACACATCATTCAAGACTGGTGGACAAAGATTGTGTCCTTAATGCAACTC
TTAAGCAACTAAGAAGCCTTGGAGTAAAAATTGATTCTCCCACTAAAGTGAAGAAAAATGCACATAACGTGGATC
ACGCCAGTGTGTTGGCATGCATCAGCCCAGAAGCAGTGATCTCTGGATTAAACTGCATGTCATTTGCTAATGTTG
GCATGAGCGGCTTAAGCCCCAATGGTGTGGATTTGAGCATGGAGGCAAATGCTATAGCTCTGAAATATTTAAATG

FIGURE 1596B

AAAATCAGCTGTCACAACTGTCTGTCACTCGATCGAACCAAAATAATTGTGACCCATTCAGCCTTCTCCATATTA
ATACAGACAGAAGCACAGTGGGGCTTAGTTTAATTTCACCAAACAACATGTCATTTGCAACCAAAAAATATATGA
AGAGATATGGACTCCTACAAAGCAGTGACAATAGTGAAGATGAAGAGGAACCTCCCGACAATGCAGATAGCAAGA
GTGAATATTTATTGAATCAGAACCTTAGGTCCATACCCGAACAGCTTGGTGGTCAGAAAGAGCCTTCTAAGAATG
ACCATGAAATAATTAATTGTTCTAACTGTGAATCTGTGGGGACCAACGCAGATACGCCAGTATTGAGAAATATTA
CAAATGAAGTTTTGCAGACAAAAGCAAAACAGCAGTTGACTGAAAAGCCAGCTTTCTTAGTAAAGAACCTTAAAC
CAAGTCCTGCAGTGAACCTTCGAACCGGGAAAGCAGAGTTCACTCAACATCCTGAGAAAGAAAATGAAGGGGACA
TTACAATTTTTCCTGAAAGTTTGCAACCTTCTGAAACGCTAAAGCAGATGAATAGCATGAATTCAGTAGGCACCT
TCTTAGATGTAAAACGTCTCAGACAGTTACCAAAATTATTTTAACCTTTTAACTCCCTGCCCTTTTAATACAGGG
ACAGGGTGTCTCCTGAAGATACTTAGGGAAAACAGGAGCCTACCACAAGGCTCCTGATCATTCTGGAGTCACTGT
TTCTTGGTAGCAGCCAATTGGGAAGAGTGACTTCTGTGAGATGGCTGGCTGGTGATAGGACTAAGTTCTCATTGT
TCAAATAGAGCTGTTCAACATCACTGAAACCTTTAAGAAAAGCCCTGAGATCAGTTATTCCTACAAGTTTAAGTA
GTAGACAGATACTATCCAGCTCTAAGTCTCAACTGCTCTTTTATACTGTACTTTTTTTTTTGAGACGGAGTTTTG
CTCTTGTAGCCCAGGCTGGAGTGCAATGGCAGGATCTCAGATCACTGCAACCTCTGCCTCCTGGGTTCAAGCGAT
TTTCCTGCTTCATCTTCCCAGGTAGCTGGGATTACAGGCATGTGCCACAACGCCTGGCTAATTTTGTATTTTTAG
TAGAGACTGGTTTCTCCATGTTGGTCAGGCTGGTCTCAAACTCCCGACCTCAGGTGATCCGCCCGCCTCGGCCTC
CTAAAGTGCTGGGATTACAGGCGTGAGCCACTGCCCAGCTATACTGTATATTTAAGAAGGTCCAGCATGTTGCAT
CTCTGCATTATCCTATATCATAAAAGAAGCATAAGTTATCATGGTGTTGGGTAAATTAGCGAAATCAACCGCTTC
CTAAGTTTAAGGGAAAAGTTATTTTTAAAAACAACTTAATAAAAACTTACACTCTTATACAAGAGTGTATTTCCC
CTTAATTAGGATGCATGTTGATTAAACTCGAGATACAGCTTTTTGCAGTATGGTGGGTTGGTTTTGGTGTAACAT
CTTCAACATGTCACACTGGCTATCAAAGAATAAGAAAATTATTGAGTATGAGTGTGTTTTATAAACTTTCTGAGT
TTTTCAGATGTCTTAATATTTTT

FIGURE 1597

MEPIYPFARPQMNTRFPSSRMVPFHFPPSKCALWNPTPTGDFIYLHLSYYRNPKLVVTEKTIRLAYRHANENKKN
SSCFLLGSLTADEDEEGVTLTVDRFDPGREVPECLEITPTASLPGDFLIPCKVHTQELCSREMIVHSVDDFSSAL
KALQCHICSKDSLDCGKLLSLRVHITSRESLDSVEFDLHWAAVTLANNFKCTPVKPIPIIPTALARNLSSNLNIS
QVQGTYKYGYLTMDETRKLLLLLESDPKVYSLPLVGIWLSGITHIYSPQVWACCLRYIFNSSVQERVFSESGNFI
IVLYSMTHKEPEFYECFPCDGKIPDFRFQLLTSKETLHLFKNVEPPDKNPIRCELSAESQNAETEFFSKASKNFS
IKRSSQKLSSGKMPIHDHDSGVEDEDFSPRPIPSPHPVSQKISKIQPSVPELSLVLDGNFIESNPLPTPLEMVNN
ENPPLINHLEHLKPLQPQLYDEKHSPEVEAGEPSLRGIPNQLNQDKPALLRHCKVRQPPAYKKGNPHTRNSIKPS
SHNGPSHDIFEKLQTVSAGNVQNEEYPIRPSTLNSRQSSLAPQSQPHDFVFSPHNSGRPMELQIPTPPLPSYCST
NVCRCCQHHSHIQYSPLNSWQGANTVGSIQDVQSEALQKHSLFHPSGCPALYCNAFCSSSSPIALRPQGDMGSCS
PHSNIEPSPVARPPSHMDLCNPQPCTVCMHTPKTESDNGMMGLSPDAYRFLTEQDRQLRLLQAQIQRLLEAQSLM
PCSPKTTAVEDTVQAGRQMELVSVEAQSSPGLHMRKGVSIAVSTGASLFWNAAGEDQEPDSQMKQDDTKISSEDM
NFSVDINNEVTSLPGSASSLKAVDIPSFEESNIAVEEEFNQPLSVSNSSLVVRKEPDVPVFFPSGQLAESVSMCL
QTGPTGGASNNSETSEEPKIEHVMQPLLHQPSDNQKIYQDLLGQVNHLLNSSSKETEQPSTKAVIISHECTRTQN
VYHTKKKTHHSRLVDKDCVLNATLKQLRSLGVKIDSPTKVKKNAHNVDHASVLACISPEAVISGLNCMSFANVGM
SGLSPNGVDLSMEANAIALKYLNENQLSQLSVTRSNQNNCDPFSLLHINTDRSTVGLSLISPNNMSFATKKYMKR
YGLLQSSDNSEDEEEPPDNADSKSEYLLNQNLRSIPEQLGGQKEPSKNDHEIINCSNCESVGTNADTPVLRNITN
EVLQTKAKQQLTEKPAFLVKNLKPSPAVNLRTGKAEFTQHPEKENEGDITIFPESLQPSETLKQMNSMNSVGTFL
DVKRLRQLPKLF

FIGURE 1598

CAGCTTCCCTGTGGTTTCCCGAGGCTTCCTTGCTTCCCGCTCTGCGAGGAGCCTTTCATCCGAAGGCGGGACGATG
CCGGATAATCGGCAGCCGAGGAACCGGCAGCCGAGGATCCGCTCCGGGAACGAGCCTCGTTCCGCGCCCGCCAT
GGAACCGGATGGTCGCGGTGCCTGGGCCCACAGTCGCGCCGCGCTCGACCGCCTGGAGAAGCTGCTGCGCTGCTC
GCGTTGTACTAACATTCTGAGAGAGCCTGTGTGTTTAGGAGGATGTGAGCACATCTTCTGTAGTAATTGTGTAAG
TGACTGCATTGGAACTGGATGTCCAGTGTGTTACACCCCGGCCTGGATACAAGACTTGAAGATAAATAGACAACT
GGACAGCATGATTCAACTTTGTAGTAAGCTTCGAAATTTGCTACATGACAATGAGCTGTCAGATTTGAAAGAAGA
TAAACCTAGGAAAAGTTTGTTTAATGATGCAGGAAACAAGAAGAATTCAATTAAAATGTGGTTTAGCCCTCGAAG
TAAGAAAGTCAGATATGTTGTGAGTAAAGCTTCAGTGCAAACCCAGCCTGCAATAAAAAAAGATGCAAGTGCTCA
GCAAGACTCATATGAATTTGTTTCCCCAAGTCCTCCTGCAGATGTTTCTGAGAGGGCTAAAAAGGCTTCTGCAAG
ATCTGGAAAAAAGCAAAAAAAGAAAACTTTAGCTGAAATCAACCAAAAATGGAATTTAGAGGCAGAAAAAGAAGA
TGGTGAATTTGACTCCAAAGAGGAATCTAAGCAAAAGCTGGTATCCTTCTGTAGCCAACCATCTGTTATCTCCAG
TCCTCAGATAAATGGTGAAATAGACTTACTAGCAAGTGGCTCCTTGACAGAATCTGAATGTTTTGGAAGTTTAAC
TGAAGTCTCTTTACCATTGGCTGAGCAAATAGAGTCTCCAGACACTAAGAGCAGGAATGAAGTAGTGACTCCTGA
GAAGGTCTGCAAAAATTATCTTACATCTAAGAAATCTTTGCCATTAGAAAATAATGGAAAACGTGGCCATCACAA
TAGACTTTCCAGTCCCATTTCTAAGAGATGTAGAACCAGCATTCTGAGCACCAGTGGAGATTTTGTTAAGCAAAC
CGTGCCCTCAGAAAATATACCATTGCCTGAATGTTCTTCACCACCTTCATGCAAACGTAAAGTTGGTGGTACATC
AGGGAGGAAAAACAGTAACATGTCCGATGAATTCATTAGTCTTTCACCAGGTACACCACCTTCTACATTAAGTAG
TTCAAGTTACAGGCAAGTGATGTCTAGTCCCTCAGCAATGAAGCTGTTGCCCAATATGGCTGTGAAAAGAAATCA
TAGAGGAGAGACTTTGCTCCATATTGCTTCTATTAAGGGCGACATACCTTCTGTTGAATACCTTTTACAAAATGG
AAGTGATCCAAATGTTAAAGACCATGCTGGATGGACACCATTGCATGAAGCTTGCAATCATGGGCACCTGAAGGT
AGTGGAATTATTGCTCCAGCATAAGGCATTGGTGAACACCACCGGGTATCAAAATGACTCACCACTTCACGATGC
AGCCAAGAATGGGCACGTGGATATAGTCAAGCTGTTACTTTCCTATGGAGCCTCCAGAAATGCTGTTAATATATT
TGGTCTGCGGCCTGTCGATTATACAGATGATGAAAGTATGAAATCGCTATTGCTGCTACCAGAGAAGAATGAATC
ATCCTCAGCTAGCCACTGCTCAGTAATGAACACTGGGCAGCGTAGGGATGGACCTCTTGTACTTATAGGCAGTGG
GCTGTCTTCAGAACAACAGAAAATGCTCAGTGAGCTTGCAGTAATTCTTAAGGCTAAAAAATATACTGAGTTTGA
CAGTACAGTAACTCATGTTGTTGTTCCTGGTGATGCAGTTCAAAGTACCTTGAAGTGTATGCTTGGGATTCTCAA
TGGATGCTGGATTCTAAAATTTGAATGGGTAAAAGCATGTCTACGAAGAAAAGTATGTGAACAGGAAGAAAAGTA
TGAAATTCCTGAAGGTCCACGCAGAAGCAGGCTCAACAGAGAACAGCTGTTGCCAAAGCTGTTTGATGGATGCTA
CTTCTATTTGTGGGGAACCTTCAAACACCATCCAAAGGACAACCTTATTAAGCTCGTCACTGCAGGTGGGGGCCA
GATCCTCAGTAGAAAGCCCAAGCCAGACAGTGACGTGACTCAGACCATCAATACAGTCGCATACCATGCGAGACC
CGATTCTGATCAGCGCTTCTGCACACAGTATATCATCTATGAAGATTTGTGTAATTATCACCCAGAGAGGGTTCG
GCAGGGCAAAGTCTGGAAGGCTCCTTCGAGCTGGTTTATAGACTGTGTGATGTCCTTTGAGTTGCTTCCTCTTGA
CAGCTGAATATTATACCAGATGAACATTTCAAATTGAATTTGCACGGTTTGTGAGAGCCCAGTCATTGTACTGTT
TTTAATGTTCACATTTTTACAAATAGGTAGAGTCATTCATATTTGTCTTTGAATC

FIGURE 1599

MPDNRQPRNRQPRIRSGNEPRSAPAMEPDGRGAWAHSRAALDRLEKLLRCSRCTNILREPVCLGGCEHIFCSNCV
SDCIGTGCPVCYTPAWIQDLKINRQLDSMIQLCSKLRNLLHDNELSDLKEDKPRKSLFNDAGNKKNSIKMWFSPR
SKKVRYVVSKASVQTQPAIKKDASAQQDSYEFVSPSPPADVSERAKKASARSGKKQKKKTLAEINQKWNLEAEKE
DGEFDSKEESKQKLVSFCSQPSVISSPQINGEIDLLASGSLTESECFGSLTEVSLPLAEQIESPDTKSRNEVVTP
EKVCKNYLTSKKSLPLENNGKRGHHNRLSSPISKRCRTSILSTSGDFVKQTVPSENIPLPECSSPPSCKRKVGGT
SGRKNSNMSDEFISLSPGTPPSTLSSSSYRQVMSSPSAMKLLPNMAVKRNHRGETLLHIASIKGDIPSVEYLLQN
GSDPNVKDHAGWTPLHEACNHGHLKVVELLLQHKALVNTTGYQNDSPLHDAAKNGHVDIVKLLLSYGASRNAVNI
FGLRPVDYTDDESMKSLLLLPEKNESSSASHCSVMNTGQRRDGPLVLIGSGLSSEQQKMLSELAVILKAKKYTEF
DSTVTHVVVPGDAVQSTLKCMLGILNGCWILKFEWVKACLRRKVCEQEEKYEIPEGPRRSRLNREQLLPKLFDGC
YFYLWGTFKHHPKDNLIKLVTAGGGQILSRKPKPDSDVTQTINTVAYHARPDSDQRFCTQYIIYEDLCNYHPERV
RQGKVWKAPSSWFIDCVMSFELLPLDS

FIGURE 1600

TGTTCCCAGCACTCAAGCCTTGCCACCGCCGAGCCGGGCTTCCTGGGTGTTTCAGGCAAGGAAGTCTAGGTCCCT
GGGGGGTGACCCCCAAGGAAAAGGCAGCCTCCCTGCGCACCCGGTTGCCCGGAGCCCTCTCCAGGGCCGGCTGGG
CTGGGGGTTGCCCTGGCCAGCAGGGGCCCGGGGGCGATGCCACCCGGTGCCGACTGAGGCCACCGCACC**ATG**GCC
CGCTCGCTGACCTGGCGCTGCTGCCCCTGGTGCCTGACGGAGGATGAGAAGGCCGCCGCCCGGGTGGACCAGGAG
ATCAACAGGATCCTCTTGGAGCAGAAGAAGCAGGACCGCGGGGAGCTGAAGCTGCTGCTTTTGGGCCCAGGCGAG
AGCGGGAAGAGCACCTTCATCAAGCAGATGCGGATCATCCACGGCGCCGGCTACTCGGAGGAGGAGCGCAAGGGC
TTCCGGCCCCTGGTCTACCAGAACATCTTCGTGTCCATGCGGGCCATGATCGAGGCCATGGAGCGGCTGCAGATT
CCATTCAGCAGGCCCGAGAGCAAGCACCACGCTAGCCTGGTCATGAGCCAGGACCCCTATAAAGTGACCACGTTT
GAGAAGCGCTACGCTGCGGCCATGCAGTGGCTGTGGAGGGATGCCGGCATCCGGGCCTGCTATGAGCGTCGGCGG
GAATTCCACCTGCTCGATTCAGCCGTGTACTACCTGTCCCACCTGGAGCGCATCACCGAGGAGGGCTACGTCCCC
ACAGCTCAGGACGTGCTCCGCAGCCGCATGCCCACCACTGGCATCAACGAGTACTGCTTCTCCGTGCAGAAAACC
AACCTGCGGATCGTGGACGTCGGGGGCCAGAAGTCAGAGCGTAAGAAATGGATCCATTGTTTCGAGAACGTGATC
GCCCTCATCTACCTGGCCTCACTGAGTGAATACGACCAGTGCCTGGAGGAGAACAACCAGGAGAACCGCATGAAG
GAGAGCCTCGCATTGTTTGGGACTATCCTGGAACTACCCTGGTTCAAAAGCACATCCGTCATCCTCTTTCTCAAC
AAAACCGACATCCTGGAGGAGAAAATCCCCACCTCCCACCTGGCTACCTATTTCCCCAGTTTCCAGGGCCCTAAG
CAGGATGCTGAGGCAGCCAAGAGGTTCATCCTGGACATGTACACGAGGATGTACACCGGGTGCGTGGACGGCCCC
GAGGGCAGCAAGAAGGGCGCACGATCCCGACGCCTTTTCAGCCACTACACATGTGCCACAGACACACAGAACATC
CGCAAGGTCTTCAAGGACGTGCGGGACTCGGTGCTCGCCCGCTACCTGGACGAGATCAACCTGCTG**TGA**CCCAGG
CCCCACCTGGGGCAGGCGGCACCGGCGGGCGGGTGGGAGGTGGGAGTGGCTGCAGGGACCCTAGTGTCCTGGTCT
ATCTCTCCAGCCTCGGCCCACACGCAAGGGAGTCGGGGGACGGCCCGCTGCTGGCCGCTCTCTTCTCTGCCTCTC
ACCAGGACAGCCGCCCCCCAGGGTACTCCTGCCCTTGCTTGACTCAGTTTCCCTCCTTTGAAAGGGAAGGAGCAA
AACGGCCATTTGGGATGCCAGGGTGGATGAAAAGGTGAAGAAATCAGGGGATTGAGACTTGGGTGGGTGGGCATC
TCTCAGGAGCCCCATCTCCGGGCGTGTCACCTCCTGGGCAGGGTTCTGGGACCCTCTGTGGGTGACGCACACCCT
GGGATGGGGCTAGTAGAGCCTTCAGGCGCCTTCGGGCGTGGACTCTGGCGCACTCTAGTGGACAGGAGAAGGAAC
GCCTTCCAGGAACCTGTGGACTAGGGGTGCAGGGACTTCCCTTTGCAAGGGGTAACAGACCGCTGGAAAACACTG
TCACTTTCAGAGCTCGGTGGCTCACAGCGTGTCCTGCCCCGGTTTGCGGACGAGAGAAATCGCGGCCCACAAGCA
TCCCCCATCCCTTGCAGGCTGGGGGCTGGGCATGCTGCATCTTAACCTTTTGTATTTATTCCCTCACCTTCTGCA
GGGCTCCGTGCGGGCTGAAATTAAAGATTTCTTAG

FIGURE 1601

MARSLTWRCCPWCLTEDEKAAARVDQEINRILLEQKKQDRGELKLLLLGPGESGKSTFIKQMRIIHGAGYSEEER
KGFRPLVYQNIFVSMRAMIEAMERLQIPFSRPESKHHASLVMSQDPYKVTTFEKRYAAAMQWLWRDAGIRACYER
RREFHLLDSAVYYLSHLERITEEGYVPTAQDVLRSRMPTTGINEYCFSVQKTNLRIVDVGGQKSERKKWIHCFEN
VIALIYLASLSEYDQCLEENNQENRMKESLALFGTILELPWFKSTSVILFLNKTDILEEKIPTSHLATYFPSFQG
PKQDAEAAKRFILDMYTRMYTGCVDGPEGSKKGARSRRLFSHYTCATDTQNIRKVFKDVRDSVLARYLDEINLL

FIGURE 1602

GGGGCCAGTCGTTCGCCGGAAAGCATTTGTCTCCCACCTCATCATAACAACAATTAATTTCCTCTGGGGCCTGAG
GAGGGCAGAATTTCAACCTTCGGTGTGCTTGGGAGTGGCGATTGTGATTTACACGACAAAATGCCGAGGTGCTCG
GTGGAGTCATGGCAGTGCCCTTTGTGGAAGACTGGGACTTGGTGCAAACCCTGGGAGAAGGTGCCTATGGAGAAG
TTCAACTTGCTGTGAATAGAGTAACTGAAGAAGCAGTCGCAGTGAAGATTGTAGATATGAAGCGTGCCGTAGACT
GTCCAGAAAATATTAAGAAAGAGATCTGTATCAATAAAATGCTAAATCATGAAAATGTAGTAAAATTCTATGGTC
ACAGGAGAGAAGGCAATATCCAATATTTATTTCTGGAGTACTGTAGTGGAGGAGAGCTTTTTGACAGAATAGAGC
CAGACATAGGCATGCCTGAACCAGATGCTCAGAGATTCTTCCATCAACTCATGGCAGGGGTGGTTTATCTGCATG
GTATTGGAATAACTCACAGGGATATTAAACCAGAAAATCTTCTGTTGGATGAAAGGGATAACCTCAAAATCTCAG
ACTTTGGCTTGGCAACAGTATTTCGGTATAATAATCGTGAGCGTTTGTTGAACAAGATGTGTGGTACTTTACCAT
ATGTTGCTCCAGAACTTCTGAAGAGAAGAGAATTTCATGCAGAACCAGTTGATGTTTGGTCCTGTGGAATAGTAC
TTACTGCAATGCTCGCTGGAGAATTGCCATGGGACCAACCCAGTGACAGCTGTCAGGAGTATTCTGACTGGAAAG
AAAAAAAAACATACCTCAACCCTTGGAAAAAAATCGATTCTGCTCCTCTAGCTCTGCTGCATAAAATCTTAGTTG
AGAATCCATCAGCAAGAATTACCATTCCAGACATCAAAAAAGATAGATGGTACAACAAACCCCTCAAGAAAGGGG
CAAAAAGGCCCCGAGTCACTTCAGGTGGTGTGTCAGAGTCTCCCAGTGGATTTTCTAAGCACATTCAATCCAATT
TGGACTTCTCTCCAGTAAACAGTGCTTCTAGTGAAGAAAATGTGAAGTACTCCAGTTCTCAGCCAGAACCCCGCA
CAGGTCTTTCCTTATGGGATACCAGCCCCTCATACATTGATAAATTGGTACAAGGGATCAGCTTTTCCCAGCCCA
CATGTCCTGATCATATGCTTTTGAATAGTCAGTTACTTGGCACCCCAGGATCCTCACAGAACCCCTGGCAGCGGT
TGGTCAAAAGAATGACACGATTCTTTACCAAATTGGATGCAGACAAATCTTATCAATGCCTGAAAGAGACTTGTG
AGAAGTTGGGCTATCAATGGAAGAAAAGTTGTATGAATCAGGTTACTATATCAACAACTGATAGGAGAAACAATA
AACTCATTTTCAAAGTGAATTTGTTAGAAATGGATGATAAAATATTGGTTGACTTCCGGCTTTCTAAGGGTGATG
GATTGGAGTTCAAGAGACACTTCCTGAAGATTAAAGGGAAGCTGATTGATATTGTGAGCAGCCAGAAGGTTTGGC
TTCCTGCCACATGATCGGACCATCGGCTCTGGGGAATCCTGGTGAATATAGTGCTGCTATGTTGACATTATTCTT
CCTAGAGAAGATTATCCTGTCCTGCAAACTGCAAATAGTAGTTCCTGAAGTGTTCACTTCCCTGTTTATCCAAAC
ATCTTCCAATTTATTTTGTTTGTTCGGCATACAAATAATACCTATATCTTAATTGTAAGCAAAACTTTGGGGAAA
GGATGAATAGAATTCATTTGATTATTTCTTCATGTGTGTTTAGTATCTGAATTTGAAACTCATCTGGTGGAAACC
AAGTTTCAGGGGACATGAGTTTTCCAGCTTTTATACACACGTATCTCATTTTTATCAAAACATTTTGTTTAATTC
AAAAAGTACATATTTCTTCCATGTTGATTTAATTCTAAGATGAACCAATAAAGACATAATTCTTGCAAAAAAAAA
AAAAAAAAAAAAAAAAA

FIGURE 1603

MAVPFVEDWDLVQTLGEGAYGEVQLAVNRVTEEAVAVKIVDMKRAVDCPENIKKEICINKMLNHENVVKFYGHRR
EGNIQYLFLEYCSGGELFDRIEPDIGMPEPDAQRFFHQLMAGVVYLHGIGITHRDIKPENLLLDERDNLKISDFG
LATVFRYNNRERLLNKMCGTLPYVAPELLKRREFHAEPVDVWSCGIVLTAMLAGELPWDQPSDSCQEYSDWKEKK
TYLNPWKKIDSAPLALLHKILVENPSARITIPDIKKDRWYNKPLKKGAKRPRVTSGGVSESPSGFSKHIQSNLDF
SPVNSASSEENVKYSSSQPEPRTGLSLWDTSPSYIDKLVQGISFSQPTCPDHMLLNSQLLGTPGSSQNPWQRLVK
RMTRFFTKLDADKSYQCLKETCEKLGYQWKKSCMNQVTISTTDRRNNKLIFKVNLLEMDDKILVDFRLSKGDGLE
FKRHFLKIKGKLIDIVSSQKVWLPAT

FIGURE 1604

GGGGCCAGTCGTTCGCCGGAAAGCATTTGTCTCCCACCTCATCATAACAACAATTAATTTCCTCTGGGGCCTGAG
GAGGGCAGAATTTCAACCTTCGGTGTGCTTGGGAGTGGCGATTGTGATTTACACGACAAAATGCCGAGGTGCTCG
GTGGAGTC**ATG**GCAGTGCCCTTTGTGGAAGACTGGGACTTGGTGCAAACCCTGGGAGAAGGTGCCTATGGAGAAG
TTCAACTTGCTGTGAATAGAGTAACTGAAGAAGCAGTCGCAGTGAAGATTGTAGATATGAAGCGTGCCGTAGACT
GTCCAGAAAATATTAAGAAAGAGATCTGTATCAATAAAATGCTAAATCATGAAAATGTAGTAAAATTCTATGGTC
ACAGGAGAGAAGGCAATATCCAATATTTATTTCTGGAGTACTGTAGTGGAGGAGAGCTTTTTGACAGAATAGAGC
CAGACATAGGCATGCCTGAACCAGATGCTCAGAGATTCTTCCATCAACTCATGGCAGGGGTGGTTTATCTGCATG
GTATTGGAATAACTCACAGGGATATTAAACCAGAAAATCTTCTGTTGGATGAAAGGGATAACCTCAAAATCTCAG
ACTTTGGCTTGGCAACAGTATTTCGGTATAATAATCGTGAGCGTTTGTTGAACAAGATGTGTGGTACTTTACCAT
ATGTTGCTCCAGAACTTCTGAAGAGAAGAGAATTTCATGCAGAACCAGTTGATGTTTGGTCCTGTGGAATAGTAC
TTACTGCAATGCTCGCTGGAGAATTGCCATGGGACCAACCCAGTGACAGCTGTCAGGAGTATTCTGACTGGAAAG
AAAAAAAAACATACCTCAACCCTTGGAAAAAAATCGATTCTGCTCCTCTAGCTCTGCTGCATAAAATCTTAGTTG
AGAATCCATCAGCAAGAATTACCATTCCAGACATCAAAAAAGATAGATGGTACAACAAACCCCTCAAGAAAGGGG
CAAAAAGGCCCCGAGTCACTTCAGGTGGTGTGTCAGAGTCTCCCAGTGGATTTTCTAAGCACATTCAATCCAATT
TGGACTTCTCTCCAGTAAACAGTGCTTCTAGTGAAGAAAATGTGAAGTACTCCAGTTCTCAGCCAGAACCCCGCA
CAGGTCTTTCCTTATGGGATACCAGCCCCTCATACATTGATAAATTGGTACAAGGGATCAGCTTTTCCCAGCCCA
CATGTCCTGATCATATGCTTTTGAATAGTCAGTTACTTGGCACCCCAGGATCCTCACAGAACCCCTGGCAGCGGT
TGGTCAAAAGAATGACACGATTCTTTACCAAATTGGATGCAGACAAATCTTATCAATGCCTGAAAGAGACTTGTG
AGAAGTTGGGCTATCAATGGAAGAAAAGTTGTATGAATCAGGTTACTATATCAACAACTGATAGGAGAAACAATA
AACTCATTTTCAAAGTGAATTTGTTAGAAATGGATGATAAAATATTGGTTGACTTCCGGCTTTCTAAGGGTGATG
GATTGGAGTTCAAGAGACACTTCCTGAAGATTAAAGGGAAGCTGATTGATATTGTGAGCAGCCAGAAGGTTTGGC
TTCCTGCCACA**TGA**TCGGACCATCGGCTCTGGGGAATCCTGGTGAATATAGTGCTGCTATGTTGACATTATTCTT
CCTAGAGAAGATTATCCTGTCCTGCAAACTGCAAATAGTAGTTCCTGAAGTGTTCACTTCCCTGTTTATCCAAAC
ATCTTCCAATTTATTTTGTTTGTTCGGCATACAAATAATACCTATATCTTAATTGTAAGCAAAACTTTGGGGAAA
GGATGAATAGAATTCATTTGATTATTTCTTCATGTGTGTTTAGTATCTGAATTTGAAACTCATCTGGTGGAAACC
AAGTTTCAGGGGACATGAGTTTTCCAGCTTTTATACACACGTATCTCATTTTTATCAAAACATTTTGTTTAATTC
AAAAAGTACATATTTCTTCCATGTTGATTTAATTCTAAGATGAACCAATAAAGACATAATTCTTGCAAAAAAAAA
AAAAAAAAAAAAAAAAA

FIGURE 1605

MAVPFVEDWDLVQTLGEGAYGEVQLAVNRVTEEAVAVKIVDMKRAVDCPENIKKEICINKMLNHENVVKFYGHRR
EGNIQYLFLEYCSGGELFDRIEPDIGMPEPDAQRFFHQLMAGVVYLHGIGITHRDIKPENLLLDERDNLKISDFG
LATVFRYNNRERLLNKMCGTLPYVAPELLKRREFHAEPVDVWSCGIVLTAMLAGELPWDQPSDSCQEYSDWKEKK
TYLNPWKKIDSAPLALLHKILVENPSARITIPDIKKDRWYNKPLKKGAKRPRVTSGGVSESPSGFSKHIQSNLDF
SPVNSASSEENVKYSSSQPEPRTGLSLWDTSPSYIDKLVQGISFSQPTCPDHMLLNSQLLGTPGSSQNPWQRLVK
RMTRFFTKLDADKSYQCLKETCEKLGYQWKKSCMNQVTISTTDRRNNKLIFKVNLLEMDDKILVDFRLSKGDGLE
FKRHFLKIKGKLIDIVSSQKVWLPAT

FIGURE 1606

CCACGCGTCCGGGACGCCGTTCTCTCCCGCGGAATTCAGGTTTACGGCCCTGCGGGTTCTCAGAGAATTTCTAGA
ATTTGGAATCGAGTGCATTTTCTGACATTTGAGTACAGTACCCAGGGGTTCTTGGAGAAGAACCTGGTCCCAGAG
GAGCTTGACTGACCATAAAA**ATG**AGTACTGCAGATGCACTTGATGATGAAAACACATTTAAAATATTAGTTGCAA
CAGATATTCATCTTGGATTTATGGAGAAAGATGCAGTCAGAGGAAATGATACGTTTGTAACACTCGATGAAATTT
TAAGACTTGCCCAGGAAAATGAAGTGGATTTTATTTTGTTAGGTGGTGATCTTTTTCATGAAAATAAGCCCTCAA
GGAAAACATTACATACCTGCCTCGAGTTATTAAGAAAATATTGTATGGGTGATCGGCCTGTCCAGTTTGAAATTC
TCAGTGATCAGTCAGTCAACTTTGGTTTTAGTAAGTTTCCATGGGTGAACTATCAAGATGGCAACCTCAACATTT
CAATTCCAGTGTTTAGTATTCATGGCAATCATGACGATCCCACAGGGGCAGATGCACTTTGTGCCTTGGACATTT
TAAGTTGTGCTGGATTTGTAAATCACTTTGGACGTTCAATGTCTGTGGAGAAGATAGACATTAGTCCGGTTTTGC
TTCAAAAAGGAAGCACAAAGATTGCGCTATATGGTTTAGGATCCATTCCAGATGAAAGGCTCTATCGAATGTTTG
TCAATAAAAAAGTAACAATGTTGAGACCAAAGGAAGATGAGAACTCTTGGTTTAACTTATTTGTGATTCATCAGA
ACAGGAGTAAACATGGAAGTACTAACTTCATTCCAGAACAATTTTTGGATGACTTCATTGATCTTGTTATCTGGG
GCCATGAACATGAGTGTAAAATAGCTCCAACCAAAAATGAACAACAGCTGTTTTATATCTCACAACCTGGAAGCT
CAGTGGTTACTTCTCTTTCCCCAGGAGAAGCTGTAAAGAAACATGTTGGTTTGCTGCGTATTAAAGGGAGGAAGA
TGAATATGCATAAAATTCCTCTTCACACAGTGCGGCAGTTTTTCATGGAGGATATTGTTCTAGCTAATCATCCAG
ACATTTTTAACCCAGATAATCCTAAAGTAACCCAAGCCATACAAAGCTTCTGTTTGGAGAAGATTGAAGAAATGC
TTGAAAATGCTGAACGGGAACGTCTGGGTAATTCTCACCAGCCAGAGAAGCCTCTTGTACGACTGCGAGTGGACT
ATAGTGGAGGTTTTGAACCTTTCAGTGTTCTTCGCTTTAGCCAGAAATTTGTGGATCGGGTAGCTAATCCAAAAG
ACATTATCCATTTTTTCAGGCATAGAGAACAAAAGGAAAAAACAGGAGAAGAGATCAACTTTGGGAAACTTATCA
CAAAGCCTTCAGAAGGAACAACTTTAAGGGTAGAAGATCTTGTAAAACAGTACTTTCAAACCGCAGAGAAGAATG
TGCAGCTCTCACTGCTAACAGAAAGAGGGATGGGTGAAGCAGTACAAGAATTTGTGGACAAGGAGGAGAAAGATG
CCATTGAGGAATTAGTGAAATACCAGTTGGAAAAAACACAGCGATTTCTTAAAGAACGTCATATTGATGCCCTCG
AAGACAAAATCGATGAGGAGGTACGTCGTTTCAGAGAAACCAGACAAAAAAATACTAATGAAGAAGATGATGAAG
TCCGTGAGGCTATGACCAGGGCCAGAGCACTCAGATCTCAGTCAGAGGAGTCTGCTTCTGCCTTTAGTGCTGATG
ACCTTATGAGTATAGATTTAGCAGAACAGATGGCTAATGACTCTGATGATAGCATCTCAGCAGCAACCAACAAAG
GAAGAGGCCGAGGAAGAGGTCGAAGAGGTGGAAGAGGGCAGAATTCAGCATCGAGAGGAGGGTCTCAAAGAGGAA
GAGCAGACACTGGTCTGGAGACTTCTACCCGTAGCAGGAACTCAAAGACTGCTGTGTCAGCATCTAGAAATATGT
CTATTATAGATGCCTTTAAATCTACAAGACAGCAGCCTTCCCGAAATGTCACTACTAAGAATTATTCAGAGGTGA
TTGAGGTAGATGAATCAGATGTGGAAGAAGACATTTTTCCTACCACTTCAAAGACAGATCAAAGGTGGTCCAGCA
CATCATCCAGCAAAATCATGTCCCAGAGTCAAGTATCGAAAGGGGTTGATTTTGAATCAAGTGAGGATGATGATG
ATGATCCTTTTATGAACACTAGTTCTTTAAGAAGAAATAGAAGA**TAA**TATATTTAATGGCACTGAGAAACATGCA
AGATACAGGAAAAATGAAAATGTTACAAGCTAAGAGTTTACAGTTTAAGATTTTAAGTATTGTTTCCTGAGCATA
ACTCCATAAGTAAGAAATTTCTAGTTCACAGACATACAATAGCATTGATTCACCTTGTTTTTTTAACCTGGTTGT
TGTAGTAAGAGCTTTGTTTCAATATCACTCTTGAGTAAAGATTAAAATAAAGCTACCATTTT

FIGURE 1607

MSTADALDDENTFKILVATDIHLGFMEKDAVRGNDTFVTLDEILRLAQENEVDFILLGGDLFHENKPSRKTLHTC
LELLRKYCMGDRPVQFEILSDQSVNFGFSKFPWVNYQDGNLNISIPVFSIHGNHDDPTGADALCALDILSCAGFV
NHFGRSMSVEKIDISPVLLQKGSTKIALYGLGSIPDERLYRMFVNKKVTMLRPKEDENSWFNLFVIHQNRSKHGS
TNFIPEQFLDDFIDLVIWGHEHECKIAPTKNEQQLFYISQPGSSVVTSLSPGEAVKKHVGLLRIKGRKMNMHKIP
LHTVRQFFMEDIVLANHPDIFNPDNPKVTQAIQSFCLEKIEEMLENAERERLGNSHQPEKPLVRLRVDYSGGFEP
FSVLRFSQKFVDRVANPKDIIHFFRHREQKEKTGEEINFGKLITKPSEGTTLRVEDLVKQYFQTAEKNVQLSLLT
ERGMGEAVQEFVDKEEKDAIEELVKYQLEKTQRFLKERHIDALEDKIDEEVRRFRETRQKNTNEEDDEVREAMTR
ARALRSQSEESASAFSADDLMSIDLAEQMANDSDDSISAATNKGRGRGRGRRGGRGQNSASRGGSQRGRADTGLE
TSTRSRNSKTAVSASRNMSIIDAFKSTRQQPSRNVTTKNYSEVIEVDESDVEEDIFPTTSKTDQRWSSTSSSKIM
SQSQVSKGVDFESSEDDDDDPFMNTSSLRRNRR

1800/8433

FIGURE 1608

GCCACGTGCTGCTGGGTCTCAGTCCTCCACTTCCCGTGTCCTCTGGAAGTTGTCAGGAGCAATGTTGCGCTTGTA
CGTGTTGGTAATGGGAGTTTCTGCCTTCACCCTTCAGCCTGCGGCACACACAGGGGCTGCCAGAAGCTGCCGGTT
TCGTGGGAGGCATTACAAGCGGGAGTTCAGGCTGGAAGGGGAGCCTGTAGCCCTGAGGTGCCCCCAGGTGCCCTA
CTGGTTGTGGGCCTCTGTCAGCCCCCGCATCAACCTGACATGGCATAAAAATGACTCTGCTAGGACGGTCCCAGG
AGAAGAAGAGACACGGATGTGGGCCCAGGACGGTGCTCTGTGGCTTCTGCCAGCCTTGCAGGAGGACTCTGGCAC
CTACGTCTGCACTACTAGAAATGCTTCTTACTGTGACAAAATGTCCATTGAGCTCAGAGTTTTTGAGAATACAGA
TGCTTTCCTGCCGTTCATCTCATACCCGCAAATTTTAACCTTGTCAACCTCTGGGGTATTAGTATGCCCTGACCT
GAGTGAATTCACCCGTGACAAAACTGACGTGAAGATTCAATGGTACAAGGATTCTCTTCTTTTGGATAAAGACAA
TGAGAAATTTCTAAGTGTGAGGGGGACCACTCACTTACTCGTACACGATGTGGCCCTGGAAGATGCTGGCTATTA
CCGCTGTGTCCTGACATTTGCCCATGAAGGCCAGCAATACAACATCACTAGGAGTATTGAGCTACGCATCAAGAA
AAAAAAAGAAGAGACCATTCCTGTGATCATTTCCCCCCTCAAGACCATATCAGCTTCTCTGGGGTCAAGACTGAC
AATCCCGTGTAAGGTGTTTCTGGGAACCGGCACACCCTTAACCACCATGCTGTGGTGGACGGCCAATGACACCCA
CATAGAGAGCGCCTACCCGGGAGGCCGCGTGACCGAGGGGCCACGCCAGGAATATTCAGAAAATAATGAGAACTA
CATTGAAGTGCCATTGATTTTTGATCCTGTCACAAGAGAGGATTTGCACATGGATTTTAAATGTGTTGTCCATAA
TACCCTGAGTTTTCAGACACTACGCACCACAGTCAAGGAAGCCTCCTCCACGTTCTCCTGGGGCATTGTGCTGGC
CCCACTTTCACTGGCCTTCTTGGTTTTGGGGGGAATATGGATGCACAGACGGTGCAAACACAGAACTGGAAAAGC
AGATGGTCTGACTGTGCTATGGCCTCATCATCAAGACTTTCAATCCTATCCCAAGTGAAATAAATGGAATGAAAT
AATTCAAACAC

FIGURE 1609

MLRLYVLVMGVSAFTLQPAAHTGAARSCRFRGRHYKREFRLEGEPVALRCPQVPYWLWASVSPRINLTWHKNDSA
RTVPGEEETRMWAQDGALWLLPALQEDSGTYVCTTRNASYCDKMSIELRVFENTDAFLPFISYPQILTLSTSGVL
VCPDLSEFTRDKTDVKIQWYKDSLLLDKDNEKFLSVRGTTHLLVHDVALEDAGYYRCVLTFAHEGQQYNITRSIE
LRIKKKKEETIPVIISPLKTISASLGSRLTIPCKVFLGTGTPLTTMLWWTANDTHIESAYPGGRVTEGPRQEYSE
NNENYIEVPLIFDPVTREDLHMDFKCVVHNTLSFQTLRTTVKEASSTFSWGIVLAPLSLAFLVLGGIWMHRRCKH
RTGKADGLTVLWPHHQDFQSYPK

FIGURE 1610

GGAATTCCCTGATATACACCTGGACCACCACCAATGGATATACAAATGGCAAACAATTTTACTCCGCCCTCTGCA
ACTCCTCAGGGAAATGACTGTGACCTCTATGCACATCACAGCACGGCCAGGATAGTAATGCCTCTGCATTACAGC
CTCGTCTTCATCATTGGGCTCGTGGGAAACTTACTAGCCTTGGTCGTCATTGTTCAAAACAGGAAAAAAATCAAC
TCTACCACCCTCTATTCAACAAATTTGGTGATTTCTGATATACTTTTTACCACCGCTTTGCCTACACGAATAGCC
TACTATGCAATGGGCTTTGACTGGAGAATCGGAGATGCCTTGTGTAGGATAACTGCGCTAGTGTTTTACATCAAC
ACATATGCAGGTGTGAACTTTATGACCTGCCTGAGTATTGACCGCTTCATTGCTGTGGTGCACCCTCTACGCTAC
AACAAGATAAAAAGGATTGAACATGCAAAAGGCGTGTGCATATTTGTCTGGATTCTAGTATTTGCTCAGACACTC
CCACTCCTCATCAACCCTATGTCAAAGCAGGAGGCTGAAAGGATTACATGCATGGAGTATCCAAACTTTGAAGAA
ACTAAATCTCTTCCCTGGATTCTGCTTGGGGCATGTTTCATAGGATATGTACTTCCACTTATAATCATTCTCATC
TGCTATTCTCAGATCTGCTGCAAACTCTTCAGAACTGCCAAACAAAACCCACTCACTGAGAAATCTGGTGTAAAC
AAAAAGGCTCTCAACACAATTATTCTTATTATTGTTGTGTTTGTTCTCTGTTTCACACCTTACCATGTTGCAATT
ATTCAACATATGATTAAGAAGCTTCGTTTCTCTAATTTCCTGGAATGTAGCCAAAGACATTCGTTCCAGATTTCT
CTGCACTTTACAGTATGCCTGATGAACTTCAATTGCTGCATGGACCCTTTTATCTACTTCTTTGCATGTAAAGGG
TATAAGAGAAAGGTTATGAGGATGCTGAAACGGCAAGTCAGTGTATCGATTTCTAGTGCTGTGAAGTCAGCCCCT
GAAGAAAATTCACGTGAAATGACAGAAACGCAGATGATGATACATTCCAAGTCTTCAAATGGAAAGTGAAATGGA
TTGTATTTTGGTTTATAGTGACGTAAACTGTATGACAAACTTTGCAGGACTTCCCTTATAAAGCAAAATAATTGT
TCAGCTTCCAATTAGTATTCTTTTATATTTCTTTCATTGGGCACTTTCCCATCTCCAACTCGGAAGTAAGCCCAA
GAGAACAACATAAAGCAAACAACATAAAGCACAATAAAAATGCAAATAAATATTTTCATTTTTATTTGTAAACGA
ATACACCAAAAGGAGGCGCTCTTAATAACTCCCAATGTAAAAAGTTTTGTTTTAATAAAAAATTTAATTATTATT
TCTTGCCAACAAATGGCTAGAAAGGACTGAATAGATTATATATTGCCAGATGTTAATACTGTAACATACTTTTTA
AATAACATATTTCTTAAATCCAAATTTCTCTCAATGTTAGATTTAATTCCCTCAATAACACCAATGTTTTGTTTT
GTTTCGTTCTGGGTCATAAAACTTTGTTAAGGAACTCTTTTGGAATAAAGAGCAGGATGCTGC

FIGURE 1611

MDIQMANNFTPPSATPQGNDCDLYAHHSTARIVMPLHYSLVFIIGLVGNLLALVVIVQNRKKINSTTLYSTNLVI
SDILFTTALPTRIAYYAMGFDWRIGDALCRITALVFYINTYAGVNFMTCLSIDRFIAVVHPLRYNKIKRIEHAKG
VCIFVWILVFAQTLPLLINPMSKQEAERITCMEYPNFEETKSLPWILLGACFIGYVLPLIIILICYSQICCKLFR
TAKQNPLTEKSGVNKKALNTIILIIVVFVLCFTPYHVAIIQHMIKKLRFSNFLECSQRHSFQISLHFTVCLMNFN
CCMDPFIYFFACKGYKRKVMRMLKRQVSVSISSAVKSAPEENSREMTETQMMIHSKSSNGK

FIGURE 1612A

GATCAGCTGGCGGGCGGGCGGGAGCCGAGCGCGGCCCCGGCTCTCGCTGCAGCGCCGCCTCTTCTCTGCGTCGCA
GGCCGGCCCGGCGGCCGTGACAATGTCGCGGGGCTGGTAGCAGGGCGCCGGCCGCCGAGCCGTCTCAAGTTTAAA
CTTACACGAATCGCTTTCTGGAGGAGGAGGGGACCCGCTGCGCGATTGACACGCATATTCCTATAGGCATCCTCC
CTCAGCCCCCACCCCCACGGCCGGATTCGGGTGGCTCCTCTCCGAGGTGAAATCTGAGAAGAAATCCTTGGATCT
CTTTTCTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAATCTAGAAACCATCGGTATTTTGCTTTGCTGCTCCCT
ATTCGCAAGATGAAGAAGTTTTTCGACTCCCGGCGAGAGCAGGGCGGCTCTGGCCTGGGCTCCGGCTCCAGCGGA
GGAGGGGGCAGCACCTCGGGCCTGGGCAGTGGCTACATCGGAAGAGTCTTCGGCATCGGGCGACAGCAGGTCACA
GTGGACGAGGTGTTGGCGGAAGGTGGATTTGCTATTGTATTTCTGGTGAGGACAAGCAATGGGATGAAATGTGCC
TTGAAACGCATGTTTGTCAACAATGAGCATGATCTCCAGGTGTGCAAGAGAGAAATCCAGATAATGAGGGATCTT
TCAGGGCACAAGAATATTGTGGGTTACATTGATTCTAGTATCAACAACGTGAGTAGCGGTGATGTATGGGAAGTG
CTCATTCTGATGGACTTTTGTAGAGGTGGCCAGGTGGTAAACCTGATGAACCAGCGCCTGCAAACAGGCTTTACA
GAGAATGAAGTGCTCCAGATATTTTGTGATACCTGTGAAGCTGTTGCCCGCCTGCATCAGTGCAAAACTCCTATT
ATCCACCGGGACCTGAAGGTTGAAAACATCCTCTTGCATGACCGAGGCCACTATGTCCTGTGTGACTTTGGAAGC
GCCACCAACAAATTCCAGAATCCACAAACTGAGGGAGTCAATGCAGTAGAAGATGAGATTAAGAAATACACAACG
CTGTCCTATCGAGCACCAGAAATGGTCAACCTGTACAGTGGCAAAATCATCACTACGAAGGCAGACATTTGGGCT
CTTGGATGTTTGTTGTATAAATTATGCTACTTCACTTTGCCATTTGGGGAAAGTCAGGTGGCAATTTGTGATGGA
AACTTCACAATTCCTGATAATTCTCGATATTCTCAAGACATGCACTGCCTAATTAGGTATATGTTGGAACCAGAC
CCTGACAAAAGGCCGGATATTTACCAGGTGTCCTACTTCTCATTTAAGCTACTCAAGAAAGAGTGCCCAATTCCA
AATGTACAGAACTCTCCCATTCCTGCAAAGCTTCCTGAACCAGTGAAAGCCAGTGAGGCAGCTGCAAAAAAGACC
CAGCCAAAGGCCAGACTGACAGATCCCATTCCCACCACAGAGACTTCAATTGCACCCCGCCAGAGGCCTAAAGCT
GGGCAGACTCAGCCGAACCCAGGAATCCTTCCCATCCAGCCAGCGCTGACACCCCGGAAGAGGGCCACTGTTCAG
CCCCCACCTCAGGCTGCAGGATCCAGCAATCAGCCTGGCCTTTTAGCCAGTGTTCCCCAACCAAAACCCCAAGCC
CCACCCAGCCAGCCTCTGCCGCAAACTCAGGCCAAGCAGCCACAGGCTCCTCCCACTCCACAGCAGACGCCTTCT
ACTCAGGCCCAGGGTCTGCCCGCTCAGGCCCAGGCCACACCCCAGCACCAGCAGCAACTCTTCCTCAAGCAGCAA
CAGCAGCAGCAACAGCCACCGCCAGCACAGCAGCAGCCGGCAGGCACGTTTTACCAGCAGCAGCAGGCCCAGACT
CAGCAGTTTCAGGCAGTACATCCAGCAACCCAGCAACCAGCAATTGCTCAGTTCCCTGTGGTGTCCCAAGGAGGC
TCTCAACAGCAGCTAATGCAGAATTTCTACCAGCAGCAGCAGCAGCAGCAACAACAACAGCAACAGCAACAGCTG
GCCACAGCCCTGCATCAACAACAGCTGATGACTCAGCAGGCTGCCTTGCAGCAAAAGCCCACTATGGCAGCAGGA
CAGCAGCCCCAGCCACAGCCAGCTGCAGCCCCACAGCCAGCCCCTGCCCAGGAGCCAGCGATTCAAGCCCCAGTA
AGACAACAGCCAAAGGTTCAGACAACCCCACCTCCTGCCGTCCAGGGGCAGAAAGTTGGATCTCTCACTCCACCC
TCATCCCCCAAAACCCAACGTGCTGGGCACAGGCGTATTCTCAGTGACGTAACCCACAGTGCAGTCTTTGGGGTC
CCTGCCAGCAAATCAACCCAGCTGCTCCAGGCAGCTGCAGCTGAGGCCAGTCTCAATAAGTCCAAGTCTGCAACC
ACCACTCCATCAGGCTCTCCTCGGACCTCTCAACAAAACGTTTATAATCCTTCAGAAGGGTCTACGTGGAATCCC
TTTGATGACGATAATTTCTCCAAACTCACAGCTGAAGAACTGCTAAACAAGGACTTTGCCAAGCTTGGGGAAGGC
AAACATCCCGAGAAGCTTGGAGGCTCAGCTGAGAGTTTGATCCCAGGCTTTCAATCAACCCAAGGTGATGCTTTT
GCTACGACCTCATTTTCTGCTGGAACTGCTGAAAAAAGGAAGGGTGGGCAGACTGTGGACTCTGGCCTCCCGCTT
CTAAGCGTGTCTGATCCTTTCATTCCTCTTCAAGTACCTGATGCACCAGAAAAACTAATTGAGGGACTCAAATCT
CCTGACACTTCTCTTCTGCTCCCTGACCTCTTGCCTATGACAGATCCTTTTGGTAGCACTTCTGATGCTGTAATT
GGTAAAGTCATCATCTCTGTTTCTTCAGTCATGCATGATATGTGTGCCTGTTTCAAGAATGACAAGTACCTAGTT
AACCAATCCCTGGGGAATAGCCCTGCCACCCCAGAAGCCAAGGCTATTTAATCTCACTTGTATCACTCCAAATGA
AGTGTTTTCCTTGCTTTTCGGGGGTACAACGTCTATTTTTTGCCTTTCTTGATATCTGGAGATTTCTAGAGTGGA
TCTCTTATGAATGAGGAGGAATGTGGAAAGTTTCACATTTAGTTAGAAGAACTTTAAAAAATTGGTTTCTAACTA
GACTACCTTTACTGAACTTAATGAAATTTAGCAGATTCTTCTTTTTTTTTTTTTTGTTTGAGACAGAGTTTCACT
CTTGTTGCCTGGGCTGGAGTGCAGTGGCAAGATCTCGGCTCACTGCAGCCTCCATCTCCCGGGTTCAGGCAATTC
TCCTGCCTCAGCCTCCCGAGTAGCTGGGGTTACAGGCGTGCACCACCATGCCTGGCTAATTTTTATATTTTTAGT
AGAGATGGGGTTTCTCCATGTTGGTCAGGCTGGTCTCGAACTCCTGACCTCAGGTGATCCGCCTGCCTTGGCCTC
CCAAAGTGCTGGGATTGCAGGGGTGAGCCACCATGCCCAGCCCAGATTCTTCTTTGGAAGGCCCATGTACATCCA
GCTGCAGTGGGACGAGCCTGGGAAGCATGGGAAGACCCCATCCCTACAAAAAAAGTGTTGTTAATTGGCCAGGTG

FIGURE 1612B

TGGGGGTGCACGCCTGTGCTACCAGCTCTTTGGGAGGCTGAGACGGAAGATCACTTTGAGCCAGGGGGTTTGAGG
CTGCAGTGAGCCCTGATCATGCCACTGCCCTCCAGCTTAGGTGACAGAGACCCATCTTAAACAAAATTAAAAAAT
TTAAAAAGGTCCATGTATATACCAAGTATCAGTAACTGAGAAAACATTTTGCCCACTGGTTAAGCCCCATAAATA
GAATCCAGGGCAGGGGCTTGGTCTGCTTCCTCTCTCACATTTTCCTATGTTCCAACAGCAAGGCAGGCAAGATTT
GCAAAATGTCCAAGGCCCCTGTACTCCAGGAGGGTCCAATCATGAGGCACCTAATAATGCCTTTGGGCAGAAAGT
CCTAGAACTCAGAAGTGCCATGACCTTGCATAGGGGTAGGCCTGCAGCTGAGGGGTGTCACGTGGTGCAAAAGGC
CTCCCAGCTACATCCTGGGATGGGGTTTGAGATGGATTAATGGCCTTTGCATGGCACAGAGGATGTTTGCCCCCA
GGTTTATCCCTTAATAAAAGTGAAATTACCAGAAAAAATTAAGGTGCCTTTCAGCCCATCTCTTCTGACATGGAA
GAGGTTTGCTGAGCGGCTTATGTTCTGAATTTGTTTATGAGAACTGATCATTAGTGAGACTGGCCACAGTATTTA
ACCTTGCACATGCATGCTCAGTGAAGCCTAGACATTCAGAGCAGCAGAAATAAAGTAACTTATTTTTCTTTCCAC
CTTGCCTGAGACTGGCATTTTAGAGACCTGTTAAAAGAAAGTCTTCACATGGCTGGGTGCAGTGGCTCACACTTG
TAACCACAGGACTTTGGGAGGCCAAGGTGGGATAGATCGCTTGAGCTCAGGAGCAAGACACCATCTCAAAAAATG
AGAATT

FIGURE 1613

MKKFFDSRREQGGSGLGSGSSGGGGSTSGLGSGYIGRVFGIGRQQVTVDEVLAEGGFAIVFLVRTSNGMKCALKR
MFVNNEHDLQVCKREIQIMRDLSGHKNIVGYIDSSINNVSSGDVWEVLILMDFCRGGQVVNLMNQRLQTGFTENE
VLQIFCDTCEAVARLHQCKTPIIHRDLKVENILLHDRGHYVLCDFGSATNKFQNPQTEGVNAVEDEIKKYTTLSY
RAPEMVNLYSGKIITTKADIWALGCLLYKLCYFTLPFGESQVAICDGNFTIPDNSRYSQDMHCLIRYMLEPDPDK
RPDIYQVSYFSFKLLKKECPIPNVQNSPIPAKLPEPVKASEAAAKKTQPKARLTDPIPTTETSIAPRQRPKAGQT
QPNPGILPIQPALTPRKRATVQPPPQAAGSSNQPGLLASVPQPKPQAPPSQPLPQTQAKQPQAPPTPQQTPSTQA
QGLPAQAQATPQHQQQLFLKQQQQQQQPPPAQQQPAGTFYQQQQAQTQQFQAVHPATQQPAIAQFPVVSQGGSQQ
QLMQNFYQQQQQQQQQQQQQQLATALHQQQLMTQQAALQQKPTMAAGQQPQPQPAAAPQPAPAQEPAIQAPVRQQ
PKVQTTPPPAVQGQKVGSLTPPSSPKTQRAGHRRILSDVTHSAVFGVPASKSTQLLQAAAAEASLNKSKSATTTP
SGSPRTSQQNVYNPSEGSTWNPFDDDNFSKLTAEELLNKDFAKLGEGKHPEKLGGSAESLIPGFQSTQGDAFATT
SFSAGTAEKRKGGQTVDSGLPLLSVSDPFIPLQVPDAPEKLIEGLKSPDTSLLLPDLLPMTDPFGSTSDAVIGKV
IISVSSVMHDMCACFKNDKYLVNQSLGNSPATPEAKAI

FIGURE 1614

ACAGCAGTTACACTGCGGCGGGCGTCTGTTCTAGTGTTTGAGCCGTCGTGCTTCACCGGTCTACCTCGCTAGCATGTCGGGCCGCGGCAAGACTGGCGGCAAGGCCCGCGCCAAGGCCAAGTCGCGCTCGTCGCGCGCCGGCCTCCAGTTCCCAGTGGGCCGTGTACACCGGCTGCTGCGGAAGGGCCACTACGCCGAGCGCGTTGGCGCCGGCGCGCCAGTGTACCTGGCGGCAGTGCTGGAGTACCTCACCGCTGAGATCCTGGAGCTGGCGGGCAATGCGGCCCGCGACAACAAGAAGACGCGAATCATCCCCCGCCACCTGCAGCTGGCCATCCGCAACGACGAGGAGCTCAACAAGCTGCTGGGCGGCGTGACGATCGCCCAGGGAGGCGTCCTGCCCAACATCCAGGCCGTGCTGCTGCCCAAGAAGACCAGCGCCACCGTGGGGCCGAAGGCGCCCTCGGGCGGCAAGAAGGCCACCCAGGCCTCCCAGGAGTACTAAGAGGGCCCGCGCCGCGGCCGGCCGCCCCAGCTCCCCATGCCACCACAAAGGCCCTTTTAAGGGCCACCACCGCCCTCATGGAAAGAGCTGAGCCGCTTCAGACTGCGGGGCAAGCGGGCCGCGGCTCCCTTCCCCTCCCCTCCCCTCGCCCGCCTTCGCCGCCCGGCCTCGAGTCCCCGCCCGCCCCCGCTCCCGTCCCGCACCGCCTGCCGCGTCGGCCTCGGGCCTGCCCTGTCCGCCGTCCGCCCTCCGGTAGGGTTCGGGCCTTCCGGATGCGGCTTGGGCGCTCTTCGGGGACCTCCGTGGCGCGGAAGACCCGAGCCTGCCGGGGGGAGGCCGGCGGCGCCGCACCTGCCCGCCTCGGCGTTCGTGACTCAGCCGCCCCATCCCGAGTCGCTAAGGGGCTGCGGGGAGGCCGCAGCACCTTCTGGAAGACTTGGCCTTCCGCTCTGACGCAGGGCCGAGGTGGGCAGTCCAGGCCGAGAGCCGGCGGCCCTGAAGGTGAGTGAGGCCCTCGGCAGCTGCAGCCGGGGTGTCTGGTACCCCCCCGGCGTGGTGCTTAGCCCAGGACTTTCAGACGGCCGCTGGCCGGGAGGCTTTGGTGGGAGAGACGCGATCGCCGATTTCGGTCTGGCGCCCCTTCTGCGGCCGGGACCCAGGCCTTTCACATCAGCTCTCCCTCCATCTTCATTCATAGGTCTGCGCTGGGGCCGGGACGAAGCACTTGGTAACAGGCACATCTTCCTCCCGAGTGACTGCCTCCTAGGAGGACATTTAGGGGAGGGCAGAGGCCTGCAGTTTGGCTTCACGGCTGGCTATGTGGACAGCAAGAGTCGTTTTGCGGAACGCGACTGGCAGCCAGGCCTGTCGGGCCCCCGACGCCGCCCCATTTCCCTTCCAGCAAACTCAACTCGGCAATCCAAGCACCTAGATACCAGCACAAGTCGGTTAATCCCTGTCTGGACTGAGCCTCCGTTGGCTTCTGAACTGGAATTCTGCAGCTAACCCTTCCACGACTAGAACCTTAGGCATTGGGGAGTTTTAGATGGACTAATTTTATTAAAGGATTGTTTTTTTTTT

FIGURE 1615

MSGRGKTGGKARAKAKSRSSRAGLQFPVGRVHRLLRKGHYAERVGAGAPVYLAAVLEYLTAEILELAGNAARDNK
KTRIIPRHLQLAIRNDEELNKLLGGVTIAQGGVLPNIQAVLLPKKTSATVGPKAPSGGKKATQASQEY

FIGURE 1616

GCTTCGGGTGCCATGGGGACTCCTCCCGGCCTGCAGACCGACTGCGAGGCGCTGCTCAGCCGCTTCCAGGAGACG
GACAGTGTACGCTTCGAGGACTTCACGGAGCTCTGGAGAAACATGAAGTTCGGGACTATCTTCTGTGGCAGAATG
AGAAATTTAGAAAAGAACATGTTTACAAAAGAAGCTTTAGCTTTGGCTTGGCGATATTTTTTACCTCCATACACC
TTCCAGATCAGAGTTGGTGCTTTGTATCTGCTATATGGATTATATAATACCCAACTGTGTCAACCAAAACAAAAG
ATCAGAGTTGCCCTGAAGGATTGGGATGAAGTTTTAAAATTTCAGCAAGATTTAGTAAATGCACAGCATTTTGAT
GCAGCTTATATTTTTAGGAAGCTACGACTAGACAGAGCATTTCACTTTACAGCAATGCCCAAATTGCTGTCATAT
AGGATGAAGAAAAAAATTCACCGAGCTGAAGTTACAGAAGAATTTAAGGACCCAAGTGATCGTGTGATGAAACTT
ATCACTTCTGATGTATTAGAGGAAATGCTGAATGTTCATGATCATTATCAGAACATGAAACATGTAATTTCAGTT
GATAAGTCCAAGCCAGATAAAGCCCTCAGCTTGATAAAGGATGATTTTTTTGACAATATTAAGAACATAGTTTTG
GAGCATCAGCAGTGGCACAAAGACAGAAAGAATCCATCCTTAAAGTCAAAAACTAATGATGGAGAAGAAAAAATG
GAAGGAAATTCACAAGAAACGGAGAGATGTGAAAGGGCAGAATCATTAGCGAAAATAAAATCAAAGGCCTTTTCA
GTTGTCATACAGGCATCCAAATCAAGAAGGCATCGTCAAGTCAAACTCGACTCTTCTGACTCTGATTCTGCATCT
GGTCAAGGGCAAGTCAAAGCAACTAGGAAAAAAGAGAAGAAAGAAAGATTGAAACCAGCAGGAAGGAAGATGTCT
CTCAGAAACAAAGGCAATGTGCAGAATATACACAAGGAAGATAAACCTTTAAGTCTGAGTATGCCTGTAATTACA
GAAGAAGAAGAGAATGAAAGTTTGAGTGGAACAGAGTTCACTGCATCCAAGAAGAGGAGAAAACACTGAACAAAG
AGCCTGGTGTAGTTTTTAATTTTGAGTTTTCTGACAGAAGAAAAGATTGATATTTTGTGTATTGAACAGGAAGAC
TGCCAGTATTAAAAAAATCCTTCTGGGAATCTGTAGGTTATTTCTTGGAAATTGCAATACGTAGTTCTAGAATAA
AAGTACAAAAAATTAGAATAAGAATTCTTTAACATTTTCTTTAATGATTTGCATAAATGGAGATAAAACTTGTAT
TTAGTATGTAATAGAAAAAATTCTGTTATTCGCAGATTGTTACTATTTCCTATAAGGTTTTGTGATACTATACTG
TCCTAATACAGTCTGGTAATACTATTCTATTTTATTTAAAATATTTTTTATTGAAATATTAATGTTTATTACATG
CAAATAACTATTTTGTATCTACAGTCGGATAATGGATTTTTTATTTTGTATATTTATTCTATTTTGTATATTGTT
AAGTGCAATAAAGTTTTTGCCTTGCTTTATTTTTTAATACATAAAACTTACATTCTCATAACGTGATTGATAACT
TAGGAAGTTCACAATGTATTTTCTACTTCTGCAATTAAATATTCTTTAGTGCTTGTTTATTATTACTAAATACTA
ATTAAGTACTAACAAGTACTTAAATACTAATGTATTAAGTATTTAAGTACTTTCTAATAAAATCTTTAACAATAA
TAATGTAAATTTCAGAATGTGTCTCTGGTACAGAATAGTTGATATTAACAGAAAAAAAAAAAATCTGTAGCTTCAT
GAATATGCCACTCTGTTAATTTCTTGTTCCAGACATTTTAATAGAGATTGCTTGAGCCATGTTGTTTGAATTGCT
GCCAATAGCAGACCATATCCCTATCATGTTGTTGGCTCAACTGTTTTTTTTTTTTCCCTAATAGAGATGGAGTAT
CGCTATGTTGCTCAGGCTGGTCTTGAACTCCTGGGCTCAAGCTATCCTCCTGCCTCAGCCTCCCAAAGTACTGGG
ATTATAGGTGTGAGCTACTGTACCCAGCCTTAACCTGTTTCACAGTTGATTATACTTCATGCTGTTTTCCAGCAT
GGTATTATTAAGGGATTTAAAGTTTGGGTTGCATGCCTGTAATCCCAGCATTTTGGGAGGCCGAGGTGGGCGGAT
CACGAGGTCAGGAGATCGAGACCATCGTGACTAACACAGTGAAACCCCGTCTCTAATAAAAATACGAAAAATTAG
CCAGGCGTGGTGGCGGGCGCCTGTAATCCCAGCTACTCGGGAAGCTGAGGCAGGAGAATGGTGTGAACCCAGTGA
GCCGAGATCGTGCCACTGCACTCCAGCCTGGGCAACAGAGTGAGACTTCGTCTCAAAAAAAAAAAAAAAAGTTTG
GGTTGAAGATCAAATTCGTGATATCTCTATATCTAATCTTTAAAAATCAGAATGCTAATGCTGACGCAAATAAAA
TTTTCATTTATTAGCAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1617

MGTPPGLQTDCEALLSRFQETDSVRFEDFTELWRNMKFGTIFCGRMRNLEKNMFTKEALALAWRYFLPPYTFQIR
VGALYLLYGLYNTQLCQPKQKIRVALKDWDEVLKFQQDLVNAQHFDAAYIFRKLRLDRAFHFTAMPKLLSYRMKK
KIHRAEVTEEFKDPSDRVMKLITSDVLEEMLNVHDHYQNMKHVISVDKSKPDKALSLIKDDFFDNIKNIVLEHQQ
WHKDRKNPSLKSKTNDGEEKMEGNSQETERCERAESLAKIKSKAFSVVIQASKSRRHRQVKLDSSDSDSASGQGQ
VKATRKKEKKERLKPAGRKMSLRNKGNVQNIHKEDKPLSLSMPVITEEEENESLSGTEFTASKKRRKH

FIGURE 1618

AAAACACTAAGGGGAGCGCGCGAAGCTGAACTTGGCGCTCGATGGGGGCCGTTAGCCGCCCTAGAGCGCGCGGAG
CCGCAGAGGCGTAGCTGGACTACAACGCAGTGCATCTCGGGAGGCCAACTCGACTGGACTGGGTGAGAGGACAGA
GGTGGCTCGATGGGCGGCCCGAAGGCCGGGGATCATGGCGGGAAGGCGGGCCCAGCCAGGTTCAGCCCCGCCCCG
ACCCGCCGCTCCCCACCCCCGGCCGGCCTCGCGTGCCTTCCCGCAGCACTGCCGTCCCCGGGATGCTGAGCGCCC
ACCGTCTCCCCGCAGCCCCCTCATGCCCGGCTGCGAGCTGCCCGTGGGCACCTGCCCGGACATGTGCCCGGCCGC
CGAGCGCGCCCAGCGCGAAAGGGAGCACCGCCTGCACCGCTTGGAGGTGGTGCCGGGTTGCCGCCAGGACCCGCC
CCGCGCGGATCCGCAGCGCGCGGTGAAGGAGTACAGCCGACCCGCCGCCGGCAAGCCCCGGCCCCCGCCCAGCCA
GTTGCGTCCGCCCTCCGTGCTGCTGGCCACCGTGCGCTACCTGGCCGGTGAGGTGGCGGAGAGCGCCGACATCGC
CCGCGCCGAGGTGGCCAGCTTCGTGGCAGACCGCTTGCGAGCTGTGCGCCTGGACCTGGCGCTGCAGGGAGCGGG
CGACGCCGAGGCAGCGGTGGTGCTGGAGGCGGCGCTGGCCACGCTGCTGGCCGTAGTGGCGCGGCTCGGGCCCGA
CGCGGCGCGGGGACCCGCGGACCCGGTGCTGCTGCAGGCCCAGGTGCAGGAGGGCTTCGGCTCGCTGCGGCGCTG
CTACGCGCGGGGCGCCGGGCCGCACCCCCGCCAACCCGCCTTCCAGGGCCTCTTTCTGCTCTATAACCTGGGTGA
GTCGGGATCCTGGCGGCTGGGCAGAGCGTGGGGACAGGAGCCCACCATGACAGTGGAGGCTCGGTGGAAGCCCTG
CATGAGGTTCTACAGCTGCCTGCTGCCCTGCGCGCCTGCCCGCCCCTCCGCAAGGCCTTGGCGGTAGATGCTGCC
TTCCGAGAGGGCAATGCTGCCCGCCTGTTCCGTCTGCTCCAGACCCTGCCCTACCTGCCAAGTTGCGCTGTGCAG
TGCCATGTGGGCCATGCCCGCCGGGAAGCCCTGGCCCGCTTCGCTCGTGCCTTTAGCACCCCCAAGGGCCAGACC
TTGCCTCTGGGCTTCATGGTCAACCTCTTGGCCCTGGATGGACTCAGGGAAGCACGGGACCTGTGCCAGGCCCAC
GGGCTGCCCTTGGACGGAGAGGAGAGAGTTGTGTTCCTGAGGGGTCGCTACGTGGAGGAAGGGCTACCGCCTGCC
AGTACGTGCAAGGTGTTAGTGGAGAGCAAACTTCGAGGACGTACCCTGGAGGAGGTGGTCATGGCAGAGGAGGAA
GATGAGGGCACGGACAGACCTGGGTCCCCAGCCTGAGGAGGGAGCGTGAGCCTCCCAGAGCCCCAGGACTGGGCC
AGAGCACTTAGGTTTCTTTTTCCATGGTTTCCAGGTAATAAAAGGAACTTGTTTTGTTGGTAAAAAAAAAAAAAA
AAAA

FIGURE 1619

MAGRRAQPGSAPPRPAAPHPRPASRAFPQHCRPRDAERPPSPRSPLMPGCELPVGTCPDMCPAAERAQREREHRL
HRLEVVPGCRQDPPRADPQRAVKEYSRPAAGKPRPPPSQLRPPSVLLATVRYLAGEVAESADIARAEVASFVADR
LRAVRLDLALQGAGDAEAAVVLEAALATLLAVVARLGPDAARGPADPVLLQAQVQEGFGSLRRCYARGAGPHPRQ
PAFQGLFLLYNLGESGSWRLGRAWGQEPTMTVEARWKPCMRFYSCLLPCAPARPSARPWR

FIGURE 1620

GTAAGTCTGCTGGCCTCCGCCATCTTAGTAAAGTAACAGTCCCATGAAACAAAGATGCAGTCGGGCACTCACTGG
AGAGTTCTGGGCCTCTGCCTCTTATCAGTTGGCGTTTGGGGGCAAGATGGTAATGAAGAAATGGGTGGTATTACA
CAGACACCATATAAAGTCTCCATCTCTGGAACCACAGTAATATTGACATGCCCTCAGTATCCTGGATCTGAAATA
CTATGGCAACACAATGATAAAAACATAGGCGGTGATGAGGATGATAAAAACATAGGCAGTGATGAGGATCACCTG
TCACTGAAGGAATTTTCAGAATTGGAGCAAAGTGGTTATTATGTCTGCTACCCCAGAGGAAGCAAACCAGAAGAT
GCGAACTTTTATCTCTACCTGAGGGCAAGAGTGTGTGAGAACTGCATGGAGATGGATGTGATGTCGGTGGCCACA
ATTGTCATAGTGGACATCTGCATCACTGGGGGCTTGCTGCTGCTGGTTTACTACTGGAGCAAGAATAGAAAGGCC
AAGGCCAAGCCTGTGACACGAGGAGCGGGTGCTGGCGGCAGGCAAAGGGGACAAAACAAGGAGAGGCCACCACCT
GTTCCCAACCCAGACTATGAGCCCATCCGGAAAGGCCAGCGGGACCTGTATTCTGGCCTGAATCAGAGACGCATC
TGACCCTCTGGAGAACACTGCCTCCCGCTGGCCCAGGTCTCCTCTCCAGTCCCCCTGCGACTCCCTGTTTCCTGG
GCTAGTCTTGGACCCCACGAGAGAGAATCGTTCCTCAGCCTCATGGTGAACTCGCGCCCTCCAGCCTGATCCCCC
GCTCCCTCCTCCCTGCCTTCTCTGCTGGTACCCAGTCCTAAAATATTGCTGCTTCCTCTTCCTTTGAAGCATCAT
CAGTAGTCACACCCTCACAGCTGGCCTGCCCTCTTGCCAGGATATTTATTTGTGCTATTCACTCCCTTCCCTTTG
GATGTAACTTCTCCGTTCAGTTCCCTCCTTTTCTTGCATGTAAGTTGTCCCCCATCCCAAAGTATTCCATCTACT
TTTCTATCGCCGTCCCCTTTTGCAGCCCTCTCTGGGGATGGACTGGGTAAATGTTGACAGAGGCCCTGCCCCGTT
CACAGATCCTGGCCCTGAGCCAGCCCTGTGCTCCTCCCTCCCCCAACACTCCCTACCAACCCCCTAATCCCCTAC
TCCCTCCAACCCCCCCTCCCACTGTAGGCCACTGGATGGTCATTTGGCATCTCCGTATATGTGCTCTGGCTCCTC
AGCTGAGAGAGAAAAAAATAAACTGTATTTGGCTGC

FIGURE 1621

MQSGTHWRVLGLCLLSVGVWGQDGNEEMGGITQTPYKVSISGTTVILTCPQYPGSEILWQHNDKNIGGDEDDKNI
GSDEDHLSLKEFSELEQSGYYVCYPRGSKPEDANFYLYLRARVCENCMEMDVMSVATIVIVDICITGGLLLLVYY
WSKNRKAKAKPVTRGAGAGGRQRGQNKERPPPVPNPDYEPIRKGQRDLYSGLNQRRI

FIGURE 1622

CACTCCCAAAGAACTGGGTACTCAACACTGAGCAGATCTGTTCTTTGAGCTAAAAACCATGTGCTGTACCAAGAG
TTTGCTCCTGGCTGCTTTGATGTCAGTGCTGCTACTCCACCTCTGCGGCGAATCAGAAGCAGCAAGCAACTTTGA
CTGCTGTCTTGGATACACAGACCGTATTCTTCATCCTAAATTTATTGTGGGCTTCACACGGCAGCTGGCCAATGA
AGGCTGTGACATCAATGCTATCATCTTTCACACAAAGAAAAAGTTGTCTGTGTGCGCAAATCCAAAACAGACTTG
GGTGAAATATATTGTGCGTCTCCTCAGTAAAAAAGTCAAGAACATGTAAAAACTGTGGCTTTTCTGGAATGGAAT
TGGACATAGCCCAAGAACAGAAAGAACCTTGCTGGGGTTGGAGGTTTCACTTGCACATCATGGAGGGTTTAGTGC
TTATCTAATTTGTGCCTCACTGGACTTGTCCAATTAATGAAGTTGATTCATATTGCATCATAGTTTGCTTTGTTT
AAGCATCACATTAAAGTTAAACTGTATTTTATGTTATTTATAGCTGTAGGTTTTCTGTGTTTAGCTATTTAATAC
TAATTTTCCATAAGCTATTTTGGTTTAGTGCAAAGTATAAAATTATATTTGGGGGGGAATAAGATTATATGGACT
TTCTTGCAAGCAACAAGCTATTTTTTAAAAAAACTATTTAACATTCTTTTGTTTATATTGTTTTGTCTCCTAAAT
TGTTGTAATTGCATTATAAAATAAGAAAAACATTAATAAGACAAATATT

FIGURE 1623

MCCTKSLLLAALMSVLLLHLCGESEAASNFDCCLGYTDRILHPKFIVGFTRQLANEGCDINAIIFHTKKKLSVCA
NPKQTWVKYIVRLLSKKVKNM

FIGURE 1624

CGGCTGAGAGGCAGCGAACTCATCTTTGCCAGTACAGGAGCTTGTGCCGTGGCCCACAGCCCACAGCCCACAGCC
ATGGGCTGGGACCTGACGGTGAAGATGCTGGCGGGCAACGAATTCCAGGTGTCCCTGAGCAGCTCCATGTCGGTG
TCAGAGCTGAAGGCGCAGATCACCCAGAAGATTGGCGTGCACGCCTTCCAGCAGCGTCTGGCTGTCCACCCGAGC
GGTGTGGCGCTGCAGGACAGGGTCCCCCTTGCCAGCCAGGGCCTGGGCCCTGGCAGCACGGTCCTGCTGGTGGTG
GACAAATGCGACGAACCTCTGAGCATCCTGGTGAGGAATAACAAGGGCCGCAGCAGCACCTACGAGGTCCGGCTG
ACGCAGACCGTGGCCCACCTGAAGCAGCAAGTGAGCGGGCTGGAGGGTGTGCAGGACGACCTGTTCTGGCTGACC
TTCGAGGGGAAGCCCCTGGAGGACCAGCTCCCGCTGGGGGAGTACGGCCTCAAGCCCCTGAGCACCGTGTTCATG
AATCTGCGCCTGCGGGGAGGCGGCACAGAGCCTGGCGGGCGGAGCTAAGGGCCTCCACCAGCATCCGAGCAGGAT
CAAGGGCCGGAAATAAAGGCTGTTGTAAGAGAAT

FIGURE 1625

MGWDLTVKMLAGNEFQVSLSSSMSVSELKAQITQKIGVHAFQQRLAVHPSGVALQDRVPLASQGLGPGSTVLLVV
DKCDEPLSILVRNNKGRSSTYEVRLTQTVAHLKQQVSGLEGVQDDLFWLTFEGKPLEDQLPLGEYGLKPLSTVFM
NLRLRGGGTEPGGRS

FIGURE 1626

GCCACCACCAGTATTGGGGATGCTGAGCTGCGGGGTACGGGCCTGAGGAGGGATGGGAGTAAGAAGTGCTGTGGA
AACCGTCAGGCCATGAACCAGGCTGACCCTCGGCTCAGAGCAGTGTGCTTGTGGACTCTCACATCTGCAGCCATG
AGCAGAGGCGACAACTGCACGGATCTACTCGCACTGGGAATCCCCTCCATAACCCAGGCCTGGGGACTGTGGGTC
CTCTTAGGGGCTGTGACGCTGCTATTTCTCATCTCGCTGGCTGCACACTTGTCCCAGTGGACCAGGGGCCGGAGC
AGGAGCCATCCGGGGCAGGGACGCTCTGGAGAGTCTGTGGAAGAGGTCCCGCTGTATGGGAACCTGCATTATCTA
CAGACAGGACGGCTGTCTCAAGACCCAGAGCCAGACCAGCAGGATCCAACTCTTGGAGGCCCTGCCAGGGCTGCA
GAGGAGGTGATGTGCTATACCAGCCTGCAGCTGCGGCCTCCTCAGGGTCGGATCCCCGGTCCTGGAACCCCCGTC
AAGTACTCGGAGGTGGTGCTGGACTCTGAGCCAAAGTCCCAGGCCTCGGGCCCCGAGCCGGAGCTCTATGCCTCA
GTATGTGCCCAGACCCGCAGGGCCCGGGCCTCCTTCCCGGATCAGGCCTATGCCAACAGCCAGCCTGCAGCCAGC
TGAGATGGAGGGCCTGGCACAGCGGGGCGTGCACTGCCCCAGCCCCCCGTAGCAGGGGCATGACTGTTTCCCAAC
CAGCACCCAAAGACGGGCTGCCATTGCCAAGTCACAGGATGTGATCTACCCCGGACTTCCTATCTGAGCTTCAAG
GGAGACATCTCAGGGCAAAGCTTTCGTGATGGAGGAGGCAAAGACAGTAGCCCCCTCCTTATTTCTTTTTTCTAT
CTGTTCCTCTTAGCCCCCAAACTCCCAGGTTCTCACTTCCTTCTTCTGGAGTTTAACCAGATCCTCCCCACCCCC
GCTCCCTCATAGTCTACCCCCACGCCTCAGTGTCTCCTCAGGCACAGGAAGTGGGCGGTGGGGGAGGGGTAAGGG
CCTGACAGTGGGTGGGTGGGTATATTCCTCAGGAGTCCACAGACTGGAGTGGACCTGGAACTTAGAGACGGGAGG
GACCCGAGCCTGGCTTTTGACCTAAGAACCCTAGCAGGAGAATACAGTCTCCATCCTGCTGTCTCTGTCCTGTCC
CAAGTTTTCAAATAAAACTTTCCAAAAAAGTG

FIGURE 1627

MNQADPRLRAVCLWTLTSAAMSRGDNCTDLLALGIPSITQAWGLWVLLGAVTLLFLISLAAHLSQWTRGRSRSHP
GQGRSGESVEEVPLYGNLHYLQTGRLSQDPEPDQQDPTLGGPARAAEEVMCYTSLQLRPPQGRIPGPGTPVKYSE
VVLDSEPKSQASGPEPELYASVCAQTRRARASFPDQAYANSQPAAS

FIGURE 1628

CAGATTTTCAGGTTGATTGATGTGGGACAGCAGCCACAATGAGGAACTCCTATAGATTTCTGGCATCCTCTCTCT
CAGTTGTCGTTTCTCTCCTGCTAATTCCTGAAGATGTCTGTGAAAAAATTATTGGAGGAAATGAAGTAACTCCTC
ATTCAAGACCCTACATGGTCCTACTTAGTCTTGACAGAAAAACCATCTGTGCTGGGGCTTTGATTGCAAAAGACT
GGGTGTTGACTGCAGCTCACTGTAACTTGAACAAAAGGTCCCAGGTCATTCTTGGGGCTCACTCAATAACCAGGG
AAGAGCCAACAAAACAGATAATGCTTGTTAAGAAAGAGTTTCCCTATCCATGCTATGACCCAGCCACACGCGAAG
GTGACCTTAAACTTTTACAGCTGACGGAAAAAGCAAAAATTAACAAATATGTGACTATCCTTCATCTACCTAAAA
AGGGGGATGATGTGAAACCAGGAACCATGTGCCAAGTTGCAGGGTGGGGGAGGACTCACAATAGTGCATCTTGGT
CCGATACTCTGAGAGAAGTCAATATCACCATCATAGACAGAAAAGTCTGCAATGATCGAAATCACTATAATTTTA
ACCCTGTGATTGGAATGAATATGGTTTGTGCTGGAAGCCTCCGAGGTGGAAGAGACTCGTGCAATGGAGATTCTG
GAAGCCCTTTGTTGTGCGAGGGTGTTTTCCGAGGGGTCACTTCCTTTGGCCTTGAAAATAAATGCGGAGACCCTC
GTGGGCCTGGTGTCTATATTCTTCTCTCAAAGAAACACCTCAACTGGATAATTATGACTATCAAGGGAGCAGTTT
AAATAACCGTTTCCTTTCATTTACTGTGGCTTCTTAATCTTTTCACAAATAAA

FIGURE 1629

MRNSYRFLASSLSVVVSLLLIPEDVCEKIIGGNEVTPHSRPYMVLLSLDRKTICAGALIAKDWVLTAAHCNLNKR
SQVILGAHSITREEPTKQIMLVKKEFPYPCYDPATREGDLKLLQLTEKAKINKYVTILHLPKKGDDVKPGTMCQV
AGWGRTHNSASWSDTLREVNITIIDRKVCNDRNHYNFNPVIGMNMVCAGSLRGGRDSCNGDSGSPLLCEGVFRGV
TSFGLENKCGDPRGPGVYILLSKKHLNWIIMTIKGAV

FIGURE 1630

CCTGGGCCCTCCTGCTCCTTGCAGCCATGCTCCTGGGCAACCCAGCCCCTGCCTCCGCATCTGCGTGGTGAAGGC
CATTGGCCTCATCGGTGGATCTGCGTTTCCTCGGGCCCACACTGTCTAGGATTGTGCGGGGCTGGTGAGAGAACA
AGATCTCTTCCGTGTTCAAGGCAGACTTCCTGCCCCCTGCACCCTGCTCTCTCCCGGGCCTTGAGGTCAGTGTGA
GCCCCAAGGGCAAGAACACTTCTGGAAGGGAGAGTGGATTTGGCTGGGCCTCTGG**ATG**GAAGGTCTGGTCTTCTC
TCGTCTGAGCCCTGAGTACTACGACCCGGCAAGAGCCCACCTGCGTGATGGGGAGAAATCCTGCCCGTGCGGGCA
GGAGGGCCCCCAGGGTGACCTGTTGACCAAAACACAGGAGCTGGGCCGTGACTACAGGACCTGTCTGACGATAGT
CCAAAAACTGAAGAAGATGGTGGATAAGCCCACCCAGAGAAGTGTTTCCAATGCTGCGACCCGGGTGTGTAGGAC
GGGGAGGTCACGATGGCGCGACGTCTGCAGAAATTTCATGAGGAGGTATCAGTCTAGAGTTATCCAAGGCCTCGT
GGCCGGAGAAACTGCCCAGCAGATCTGTGAGGACCTCAGGTTGTGTATACCTTCTACAGGTCCCCTC**TGA**GCCCT
CTCACCTTGTCCTGTGGAAGAAGCACAGGCTCCTGTCCTCAGATCCCGGGAACGTCAGCAACCTCTGCCGGCTCC
TCGCTTCCTCGATCCAGAATCCACTCTCCAGTCTCCCTCCCCTGACTCCCTCTGCTGTCCTCCCCTCTCAGGGGA
ATAAAGTGTCAAGCAAGATTTTAGCCGC

FIGURE 1631

MEGLVFSRLSPEYYDPARAHLRDGEKSCPCGQEGPQGDLLTKTQELGRDYRTCLTIVQKLKKMVDKPTQRSVSNA
ATRVCRTGRSRWRDVCRNFMRRYQSRVIQGLVAGETAQQICEDLRLCIPSTGPL

FIGURE 1632

TTTAAGGCGCCGGGTTTCCGGGGCTCCTGGCCCCGCTTATTCCGCGGGGGTCGGCGGGGTCGGCCTGGGCGCCCG
CGCCGCCGCTGCGCTTTGTCCGCTGGGCACACTGCTTCTGGGAGGGGCGGGCAGACATGGTGGCGGCCGCCGCCC
CCTCCTCGGCCCTAGC**ATG**CCGCGGCCGCCTCGCGGCTACCCGGCTTGCCGGTCCCGAGCGGCAGCCCCGGGGTG
GCGATGGGGTCGCGCCGAGGCAGCGGAGGTTCTGCGGGCGACTGGAGGTTGGCAGTGGGCGGGAGAAAGAGGAAG
GCAGGCGCGGCTGGGCCTCGGCCTCTGGCGCCGCGGTACCCTTTGTCTCGGCAGCCTGACGGCCCCGCCGGGCTC
TCCGGAGAGGGGAACGGGCGGCGAGGGTGGCGGGTCCTGGGCGCCCTGTGCTGCGGGGCCGAGAGGCGCTCGGGT
CGCGGCGGGACCGGCCGGACCAGACAGGGTTAATGGAAGAGCCTGGCCAGTCCCGCGCGGGGCCCCCGCAGCGAC
AGCCTTGGCCGCGGGGACTGGAGTCCTGAGGGGGAGAAGCCTGCCGTTC**TGA**AGGCTCGGGACTTCTGCCCCAAA
GACTTCGCCGCCGAGAACTGCGGGTGCACTGCCTCAGGGAAGAAGTTGAGAATTTTGCCAGGTCATCTCTGCCAG
GGCACAGTTCATCACTGTGTGTTTAGTGTGTTTCGGTGAAGCTCTCCAAGTGTGTTGAATCAGCGTGCCTAGCCT
CAAGGGTGCATCGTGAAAACTGAAACCAAAGGAATGATACAGGCCTGCTTTGTGTGTGTCTTCCCACTTTAAGCT
TGTTTTCAGTACAAATACTCTTGCTTTAAACCTGATTGGACTGTGGCGAGCGGACATCTGTTCAAAGGAGGGGCC
GAGACCACAGTACTTCTGAAGGGGGCTTGATAATGTGGAAACATTTTAAGTTTTCTCTCCGGACTGTTTTGCTCT
CTCAATTCAGGCAAGTTACTGAAGTACGTTTTTTATCTAGAAAAAGGTTTGATGTAGTCTGTAAATGGTCCTTGT
AAAGTACATTGCCATCTCAGAATTAAAAGATCCACTCTCATTTATTATGCAGAAGTTAGTGGTCATTCTTTCCTG
TAGATAGTTTATCTCATGTAAAGACCCACCCAGCTTGGTTTAAATTTTTTTCTCACTGACGTATAACCATCAGCT
TTGATACTTCCATTTTCAGGCTCAGACTTTGAATTTAAGGAAACTAAAGATGACTTTATTTTCTTTTCTCTTGGT
TTTTTTTTCCAAAAACAAAAAATAAATCCATTACATGTTAACATAGATGATAAGAGTGACATCTTGCATTTTTGC
AAATCTTTTTAATGCCTGGTTTAATAGAAGATTCTCAGATCTACGTCAGACTGTTGTGGTTAGCACACCATGTAA
CCTCTGGAACACTCCACTGTACACTCATACTTTTTT

FIGURE 1633

MPRPPRGYPACRSRAAAPGWRWGRAEAAEVLRATGGWQWAGERGRQARLGLGLWRRGTLCLGSLTAPPGSPERGT
GGEGGGSWAPCAAGPRGARVAAGPAGPDRVNGRAWPVPRGAPAATALAAGTGVLRGRSLPF

FIGURE 1634

GCTCTCATTACCTTCTGCCCATCACTTAATAAATAGCCAGCCAATTCATCAACATTCTGGTACACTGTTGGAGAG
ATGAGACAGTCACACCAGCTGCCCCTAGTGGGGCTCTTACTGTTTTCTTTTATTCCAAGCCAACTATGCGAGATT
TGTGAGGTAAGTGAAGAAAACTACATCCGCCTAAAACCTCTGTTGAATACAATGATCCAGTCAAACTATAACAGG
GGAACCAGCGCTGTCAATGTTGTGTTGTCCCTCAAACTTGTTGGAATCCAGATCCAAACCCTGATGCAAAAGATG
ATCCAACAAATCAAATACAATGTGAAAAGCAGATTGTCAGATGTAAGCTCGGGAGAGCTTGCCTTGATTATACTG
GCTTTGGGAGTATGTCGTAACGCTGAGGAAAACTTAATATATGATTACCACCTGATCGACAAGCTAGAAAATAAA
TTCCAAGCAGAAATTGAAAATATGGAAGCACACAATGGCACTCCCCTGACTAACTACTACCAGCTCAGCCTGGAC
GTTTTGGCCTTGTGTCTGTTCAATGGGAACTACTCAACCGCCGAAGTTGTCAACCACTTCACTCCTGAAAATAAA
AACTATTATTTTGGTAGCCAGTTCTCAGTAGATACTGGTGCAATGGCTGTCCTGGCTCTGACCTGTGTGAAGAAG
AGTCTAATAAATGGGCAGATCAAAGCAGATGAAGGCAGTTTAAAGAACATCAGTATTTATACAAAGTCACTGGTA
GAAAAGATTCTGTCTGAGAAAAAAGAAAATGGTCTCATTGGAAACACATTTAGCACAGGAGAAGCCATGCAGGCC
CTCTTTGTATCATCAGACTATTATAATGAAAATGACTGGAATTGCCAACAAACTCTGAATACAGTGCTCACGGAA
ATTTCTCAAGGAGCATTCAGCAATCCAAACGCTGCAGCCCAGGTCTTACCTGCCCTGATGGGAAAGACCTTCTTG
GATATTAACAAAGACTCTTCTTGCGTCTCTGCTTCAGGTAACTTCAACATCTCCGCTGATGAGCCTATAACTGTG
ACACCTCCTGACTCACAATCATATATCTCCGTCAATTACTCTGTGAGAATCAATGAAACATATTTCACCAATGTC
ACTGTGCTAAATGGTTCTGTCTTCCTCAGTGTGATGGAGAAAGCCCAGAAAATGAATGATACTATATTTGGTTTC
ACAATGGAGGAGCGCTCATGGGGGCCCTATATCACCTGTATTCAGGGCCTATGTGCCAACAATAATGACAGAACC
TACTGGGAACTTCTGAGTGGAGGCGAACCACTGAGCCAAGGAGCTGGTAGTTACGTTGTCCGCAATGGAGAAAAC
TTGGAGGTTCGCTGGAGCAAATACTAATAAGCCCAAACTTTCCTCAGCTGCATAAAATCCATTTGCAGTGGAGTT
CCATGTTTATTGTCCTTATGCCTTCTTCTTCATTTATCCCAGTACGAGCAGGAGAGTTAATAACCTCCCCTTCTC
TCTCTACATGTTCAATAAAAGTTGTTGAAAGATTAACAACTGT

FIGURE 1635

MRQSHQLPLVGLLLFSFIPSQLCEICEVSEENYIRLKPLLNTMIQSNYNRGTSAVNVVLSLKLVGIQIQTLMQKM
IQQIKYNVKSRLSDVSSGELALIILALGVCRNAEENLIYDYHLIDKLENKFQAEIENMEAHNGTPLTNYYQLSLD
VLALCLFNGNYSTAEVVNHFTPENKNYYFGSQFSVDTGAMAVLALTCVKKSLINGQIKADEGSLKNISIYTKSLV
EKILSEKKENGLIGNTFSTGEAMQALFVSSDYYNENDWNCQQTLNTVLTEISQGAFSNPNAAAQVLPALMGKTFL
DINKDSSCVSASGNFNISADEPITVTPPDSQSYISVNYSVRINETYFTNVTVLNGSVFLSVMEKAQKMNDTIFGF
TMEERSWGPYITCIQGLCANNNDRTYWELLSGGEPLSQGAGSYVVRNGENLEVRWSKY

FIGURE 1636

ATCCTGTTGTGCCTATCACCTGTTGAAGTTGCCAGTCTTAAGGAAGGGATCAATTTCTTTCGCAATAAGAGCACT
GGCAAAGACTACGTCTTGTACAAGAATAAGAGCCGACTGAGGGCATGCAAGAATATGTGCAAGCACCAAGGAGGC
CTGTTCATAAAAGATATCGAGGATTTAGCCGGAAGTTGTTGAAATGGATGAAAACAACGGACTTTTGCTTTTAGA
ACTGAATCCTCCTAACCCTTGGGACTTACAGCCCAGATCTCCTGAAGAGTTGGCTTTTGGAGAAGTACAGATAAC
ATATCTCACTCATGCCTGCATGGACCTCAAGTTAGGAGACAAGAGAATGGTGTTTGACCCTTGGTTAATCGGTCC
TGCTTTTGCCCGTGGATGGTGGTTGCTCCATGAGCCTCCATCTGATTGGCTGGAGAGGCTGTGCCAGGCAGACCT
CGTTTACATCAGTCATCTGCACTCAGACCACCTGAGTTACCCCACACTGAAAAAGCTTGCTGGGAGAAGACCAGA
TATTCCCATTTATGTTGGAAACACAGAAAGGCCTGTATTTTGGAATCTGAATCAGAGCGGTGTCCAGTTGACTAA
TATCAATGTCGTGCCATTTGGAATATGGCAGCAGGTGGACAAAAATCTTCGATTCATGATCTTGATGGATGGTGT
TCATCCTGAGATGGACACTTGCATTATTGTGGAGTACAAAGGTCATAAAATACTCAATACAGTAGACTGCACCAG
ACCCAATGGGGGAAGGCTGCCTATGAAGGTTGCTCTAATGATGAGTGATTTTGCTGGAGGAGCATCAGGCTTTCC
AATGACTTTCAGTGGTGGAAAATTTACGGAGGAATGGAAAGCCCAATTCATTAAAACAGAAAGGAAGAAGCTCCT
GAACTACAAGGCTTGGCTGGTGAAGAACCTGCAACCCCGAATTTATTGTCCCTTTGCTGGGTATTTTGTGGAATC
TCACCCATCAGACAAGTACATCAAGGAAACAAACACCAAAAATGACCCAAATGAACTCAACAATCTTATCAAGAA
AAACTCTGATGTGATAACATGGACCCCTCGACCGGGAGCCACCCTTGATCTGGGAAGAATGCTGAAGGATCCAAC
AGACAGCAAGGGCATCATAGAGCCTCCAGAGGGGACAAAAATTTACAAGGATTCCTGGGATTTTGAACCTTATTT
GGAAATCTTGAATGCTGCTCTAGGAGATGAAATATTTCTTCACTCATCCTGGATAAAAGAATACTTCACTTGGGC
TGGATTTAAAGATTACAACCTTGTGGTCAGGATGATTGAGACAGATGAGGACTTCAATCCTTTTCCTGGAGGATA
TGACTATTTGGTTGACTTTTTAGATTTATCCTTCCCAAAAGAAAGACCACAACGAGAACATCCCTATGAGGAAAT
CCATAGCCGGGTGGATGTCATCAGACACGTGGTGAAGAATGGTCTACTCTGGGATGAGTTGTATATAGGATTCCA
AACACGGCTCCAGCGGGATCCTGACATATACCATCACCTGTTTTGGAATCATTTTCAAATAAAACTCCCCCTCAC
ACCACCCAACTGGAAGTCATTCCTGATGTGCTGTGAGCAGAATGGGCCTGCGATTTTGCAAGAATGCAAAACCAC
ATGAAAATTTCAAGAATTCACTGATCTGATGCAAAATAAAAATTTATCATTACATCTTGAACCCAGGAAGCTTAC
AGCAAAGAGACTATGCTTTATGACGTCAGCAATAGATAATTCCACGTTGCCTTTGTGATTTGTATATATAGCTTA
CATTTGTGGACCACTACATAGCCAGATTCAAAAATATTTTACTTGTTCCATCCACAGTTCTCTACAGAAAGAACC
AATGAACCCAATAGGAACAAATTCTCTGTGGAAAACAAAGCATAGCTGTAGTAGATACGAATCCAATCACAGAGG
AAACAGGAAGAGAAAAACATCCAAGACTACAGTGAAAACTGGAAATGGTCTGTTTTCGTGATATTCGTATGATTA
AGATGCAAATTTTTTCTTAGGAAAATGTGATTGTTAACTAGCATTCTGTTTTACATGTTGACATTTCTAACACAC
ACACCACTGATTTGAACTTCAAAATTTATTTTCTGATTATATATGCTAGGTCTGATTCTGAAGATACAAGAATTC
AATGGTGGAATTTGTCTCCTGAAATT

FIGURE 1637

MDENNGLLLLELNPPNPWDLQPRSPEELAFGEVQITYLTHACMDLKLGDKRMVFDPWLIGPAFARGWWLLHEPPS
DWLERLCQADLVYISHLHSDHLSYPTLKKLAGRRPDIPIYVGNTERPVFWNLNQSGVQLTNINVVPFGIWQQVDK
NLRFMILMDGVHPEMDTCIIVEYKGHKILNTVDCTRPNGGRLPMKVALMMSDFAGGASGFPMTFSGGKFTEEWKA
QFIKTERKKLLNYKAWLVKNLQPRIYCPFAGYFVESHPSDKYIKETNTKNDPNELNNLIKKNSDVITWTPRPGAT
LDLGRMLKDPTDSKGIIEPPEGTKIYKDSWDFEPYLEILNAALGDEIFLHSSWIKEYFTWAGFKDYNLVVRMIET
DEDFNPFPGGYDYLVDFLDLSFPKERPQREHPYEEIHSRVDVIRHVVKNGLLWDELYIGFQTRLQRDPDIYHHLF
WNHFQIKLPLTPPNWKSFLMCCEQNGPAILQECKTT

FIGURE 1638

AGCCGGCCGCTAAGAAGCCGAAAG**ATG**TCCAGGTCGGGCGCGGCGGCTGAGAAGGCGGACTCCAGACAGCGACCC
CAGATGAAGGTAAATGAATATAAAGAAAATCAAAACATCGCTTATGTGTCTCTGAGACCAGCACAGACTACAGTT
TTAATAAAAACAGCTAAGGTCTATCTTGCCCCCTTTTCACTCAGTAATTACCAGCTAGACCAGCTTATGTGCCCC
AAATCCCTATCAGAAAAGAATTCTAACAATGAAGTGGCGTGTAAGAAGACTAAAATAAAGAAAACTTGCAGAAGG
ATTATACCTCCAAAGATGAAAAACACATCTTCCAAGGCAGAATCCACGCTGCAAAATTCATCCTCAGCTGTTCAT
ACTGAAAGTAACAAGCTACAACCCAAGAGAACGGCAGATGCGATGAATCTCAGTGTTGATGTGGAAAGTAGTCAG
GATGGAGACAGTGATGAAGATACCACACCAGCCCTGGATTTTTCGGGATTGTCACCCTACGAAAGGAAGAGACTG
AAGAACATATCAGAAAACGCAGACTTTTTTGCTTCTCTTCAGTTGTCTGAGTCTGCTGCAAGACTCCGTGAAATG
ATAGAGAAGAGACAGCCTCCTAAATCCAAAAGAAAGAAGCCTAAGAGAGAAAATGGGATTGGATGTAGAAGGTCA
ATGCGATTACTAAAAGTTGATCCTTCGGGAGTTTCATTACCAGCAGCTCCAACACCGCCGACATTAGTAGCAGAT
GAAACTCCTTTGTTACCTCCTGGGCCTTTAGAAATGACTTCTGAAAATCAAGAAGACAACAATGAACGATTTAAA
GGATTTCTGCACACATGGGCAGGAATGAGCAAGCCAAGTAGTAAGAACACTGAGAAGGGATTATCTAGCATTAAA
AGCTACAAAGCCAATTTAAATGGCATGGTCATTAGTGAAGATACCGTTTACAAAGTTACCACAGGCCCAATATTC
TCTATGGCTCTCCATCCATCAGAAACTAGAACTTTGGTAGCAGTTGGGGCCAAATTTGGGCAAGTTGGACTTTGT
GATTTGACCCAGCAACCTAAAGAAGATGGAGTTTATGTTTTTCACCCCCATAGTCAGCCAGTTAGCTGTCTTTAC
TTCTCACCCGCCAATCCGGCCCACATACTGTCACTGAGCTATGATGGCACGTTACGCTGTGGGGATTTTTCCAGG
GCTATTTTTGAAGAGGTGTATAGAAATGAAAGAAGTAGCTTTTCCTCCTTCGACTTCTTGGCAGAAGATGCCTCC
ACTTTAATAGTAGGACACTGGGATGGAAATATGTCACTGGTGGATAGACGGACACCTGGAACTTCTTATGAGAAA
CTTACCAGTTCTTCTATGGGAAAAATAAGAACTGTTCATGTCCACCCAGTGCATAGACAGTATTTTATCACTGCC
GGATTGAGGGATACTCATATTTATGATGCAAGGCGATTGAATTCCAGGAGAAGTCAGCCTTTGATTTCTTTGACT
GAACATACAAAGAGCATTGCTTCCGCCTATTTTTCACCTCTTACTGGTAACAGAGTGGTGACCACATGTGCTGAT
TGTAATCTGAGAATTTTTGACAGCAGCTGTATATCTTCTAAGATTCCGCTCCTCACCACCATCAGGCACAACACT
TTCACTGGGCGATGGCTGACCAGGTTCCAAGCCATGTGGGATCCTAAACAAGAAGACTGTGTCATAGTTGGCAGC
ATGGCCCATCCACGACGGGTAGAAATCTTCCATGAGACAGGAAAGAGGGTGCATTCGTTTGGTGGAGAATACCTT
GTCTCTGTGTGTTCCATCAATGCCATGCACCCAACTCGGTATATTTTGGCTGGAGGTAATTCCAGCGGGAAGATA
CATGTTTTTATGAATGAAAAAAGCTGC**TGA**GTTTTTGGTTTAGGAACATCAATTTGTTCAAATTGACCACTGTCT
AAGGAGCCTAGTAATCGGCGTGCCTTAGTGTGTTTATGTGGTAATGTGTTACATTTAGCAATTATAACATTGTTT
TATTAATAAGACTATAAGAAGAGTGTACTTTTAGTAAGGGAGAAGTCTTGGAGGGTTGCTTCTGCAGGACGGGGA
GGGAATTTGAGGGGAGGCTGAGGTGCCGTCAGGACTTTTTTTTTTTTTTTTTTTTGAGATGGAGTTTTGCTCTT
GTTGCCCAGGCTGGAGTGCAATAGCGCGATCTTGGCTCACCGCAACCTCCGCCTCCCAGGTTCAAGCGATTCTCC
TGCCTCAGACTCCTAAGTAGCTGGGATTACAGGCACCTGCCACCACGCCTGGCTATTTTTTTGTATTTTTAGTAG
AGATGGGGTTTCATCATGTTGGCCAGGCTGGTCTCGAGCTCCTGACCTCAGGTGATCTGCCCGCCTCGGCCTCCA
AAAGTGCTGGAATTACAGGCGTGAGCCACCATGCCTGGCCATCAGAACTTGTAATCAAGACAGTATGTTGAGAAA
TTCTAACATTATAAATTACAAAGCTTTGACTATTAAAGTTTTTGTGATCT

FIGURE 1639

MSRSGAAAEKADSRQRPQMKVNEYKENQNIAYVSLRPAQTTVLIKTAKVYLAPFSLSNYQLDQLMCPKSLSEKNS
NNEVACKKTKIKKTCRRIIPPKMKNTSSKAESTLQNSSSAVHTESNKLQPKRTADAMNLSVDVESSQDGDSDEDT
TPALDFSGLSPYERKRLKNISENADFFASLQLSESAARLREMIEKRQPPKSKRKKPKRENGIGCRRSMRLLKVDP
SGVSLPAAPTPPTLVADETPLLPPGPLEMTSENQEDNNERFKGFLHTWAGMSKPSSKNTEKGLSSIKSYKANLNG
MVISEDTVYKVTTGPIFSMALHPSETRTLVAVGAKFGQVGLCDLTQQPKEDGVYVFHPHSQPVSCLYFSPANPAH
ILSLSYDGTLRCGDFSRAIFEEVYRNERSSFSSFDFLAEDASTLIVGHWDGNMSLVDRRTPGTSYEKLTSSSMGK
IRTVHVHPVHRQYFITAGLRDTHIYDARRLNSRRSQPLISLTEHTKSIASAYFSPLTGNRVVTTCADCNLRIFDS
SCISSKIPLLTTIRHNTFTGRWLTRFQAMWDPKQEDCVIVGSMAHPRRVEIFHETGKRVHSFGGEYLVSVCSINA
MHPTRYILAGGNSSGKIHVFMNEKSC

FIGURE 1640

TGGCGGCCGCCGGCGTCGCCGCCATGGACCTAGGACCCTTGAACATCTGTGAAGAAATGACTATTCTGCATGGAG
GCTTCTTGCTGGCCGAGCAGCTGTTCCACCCTAAGGCACTGGCAGAATTAACAAAGTCTGACTGGGAACGTGTTG
GACGGCCCATCGTGGAGGCCTTAAGGGAGATCTCCTCGGCTGCAGCACACTCCCAGCCCTTTGCCTGGAAGAAGA
AAGCCCTGATCATCATCTGGGCCAAGGTTCTGCAGCCGCACCCCGTGACCCCGTCCGACACAGAGACACGGTGGC
AGGAAGACCTGTTCTTCTCGGTGGGCAACATGATCCCCACCATCAACCACACCATCCTCTTCGAGCTGCTCAAAT
CCCTGGAAGCTTCTGGACTCTTTATCCAGCTCCTGATGGCCCTGCCCACCACCATCTGCCATGCAGAACTAGAGC
GCTTTCTGGAACATGTGACCGTTGACACTTCTGCCGAAGACGTGGCCTTCTTCCTGGACATCTGGTGGGAGGTGA
TGAAGCACAAGGGTCACCCGCAGGACCCCCTGCTCTCCCAGTTTAGTGCAATGGCCCATAAGTACCTGCCTGCCT
TAGATGAGTTCCCCCATCCTCCAAAGAGGCTTAGGTCAGACCCAGACGCGTGCCCCACCATGCCCCTGTTGGCCA
TGCTGCTCCGCGGGCTGACACAGATCCAGAGTCGGATCCTGGGCCCGGGGAGGAAGTGCTGTGCGCTGGCCAACC
TGGCTGACATGCTGACTGTGTTTGCGCTGACAGAGGACGACCCCCAGGAGGTGTCTGCAACCGTGTATCTGGACA
AACTGGCCACGGTGATCTCTGTGTGGAACTCGGACACCCAGAATCCCTACCACCAGCAGGCGCTGGCAGAGAAGG
TGAAGGAGGCAGAACGGGATGTCAGCCTGACCTCGCTGGCCAAACTCCCCAGTGAGACCATTTTCGTGGGCTGCG
AGTTCCTGCACCACCTGCTGCGGGAGTGGGGGGAGGAGTTGCAGGCCGTGCTCCGCAGCAGCCAGGGGACAAGTT
ACGACAGCTACCGGCTGTGCGACAGTCTGACTTCCTTCAGCCAGAACGCGACGCTCTACCTGAACCGCACCAGCC
TGTCCAAGGAGGACAGGCAGGTGGTCTCTGAGCTGGCGGAGTGTGTCAGGGACTTCCTGAGGAAAACGAGCACGG
TGCTGAAGAACAGGGCCTTGGAGGATATCACAGCTTCCATTGCCATGGCCGTCATCCAGCAGAAGATGGACCGCC
ATATGGAAGTGTGCTACATTTTTGCCTCTGAGAAGAAGTGGGCCTTCTCGGACGAGTGGGTAGCCTGCCTGGGGA
GTAACAGGGCCCTCTTCCGAGAGCCAGACTTGGTGTTGAGGCTGCTGGAAACAGTGATAGACGTCAGCACAGCTG
ACAGAGCCATCCCTGAGTCTCAGATCCGGCAGGTGATCCACCTGATCCTGGAATGTTACGCAGACCTCTCCCTGC
CAGGTAAAAATAAAGTCCTTGCAGGTATCCTGCGTTCCTGGGGGCGAAAGGGCCTCTCTGAAAAGTTGCTGGCTT
ATGTGGAGGGTTTTCAGGAAGACCTCAATACAACTTTTAACCAGCTCACTCAGAGTGCCTCCGAACAGGGCTTGG
CAAAAGCTGTGGCCTCCGTGGCCCGCCTGGTCATAGTGCACCCGGAAGTCACGGTGAAGAAAATGTGCAGCCTGG
CTGTGGTCAATCTCGGCACCCACAAGTTCCTGGCCCAGATTCTCACTGCCTTCCCTGCCCTTAGGTTTGTGGAAG
TGCAGGGTCCCAATTCATCTGCCACTTTCATGGTGTCATGCCTCAAAGAAACCGTCTGGATGAAGTTCTCTACAC
CCAAGGAAGAAAAGCAATTTTTAGAGCTCCTGAACTGCCTGATGAGTCCCGTGAAACCCCAAGGGATTCCAGTGG
CTGCTCTTCTTGAGCCAGACGAGGTGCTGAAGGAATTTGTCCTGCCTTTCTTGAGGTTAGATGTTGAAGAGGTAG
ACCTCAGTCTGAGGATCTTCATCCAGACTCTAGAGGCAAACGCGTGCCGAGAGGAATACTGGCTCCAGACCTGCT
CCCCGTTTCCACTCCTCTTCAGCTTGTGCCAGCTCTTGGACCGCTTTAGCAAATACTGGCCGCTTCCCAAGGAGA
AGCGGTGCCTCTCTTTGGATAGGAAGGATCTAGCGATCCATATCCTGGAGCTCCTGTGTGAGATTGTATCAGCCA
ATGCTGAGACCTTCTCCCCGGATGTCTGGATCAAGTCCCTGTCCTGGCTCCACCGCAAGTTAGAACAGCTAGACT
GGACTGTGGGCCTGAGGCTGAAGAGCTTCTTCGAGGGGCACTTCAAGTGTGAAGTGCCAGCCACACTTTTTGAGA
TCTGTAAGCTTTCAGAAGACGAGTGGACCTCCCAGGCCCACCCAGGGTACGGGGCTGGCACGGGGCTCCTGGCCT
GGATGGAGTGCTGCTGCGTCTCCAGCGGCATCTCGGAGAGGATGCTGTCTCTCTTGGTGGTGGACGTGGGCAATC
CTGAGGAGGTCAGACTGTTCAGCAAAGGCTTTCTGGTGGCCCTGGTGCAAGTCATGCCTTGGTGCAGCCCTCAGG
AGTGGCAGCGCCTTCACCAGCTGACCAGGAGACTGCTGGAGAAGCAGCTCCTCCATGTCCCTTATAGCCTGGAAT
ATATTCAGTTTGTTCCCCTGCTCAACCTGAAGCCCTTTGCCCAGGAGTTGCAACTCTCCGTCCTCTTCCTGAGGA
CTTTCCAGTTTCTCTGCAGCCATAGCTGTCGTAATTGGCTTCCTCTGGAAGGCTGGAACCACGTGGTCAAACTCC
TCTGTGGCAGTCTGACCCGCCTCCTGGACTCAGTCAGGGCGATACAGGCAGCTGGCCCTTGGGTTCAAGGACCAG
AGCAGGACCTGACCCAGGAAGCCCTGTTTGTTTACACCCAGGTGTTCTGCCATGCTCTGCACATCATGGCCATGC
TCCACCCGGAGGTCTGTGAGCCACTCTACGTTTTAGCCTTGGAAACCCTCACCTGCTATGAGACTTTGAGCAAGA
CCAACCCTTCTGTCAGCTCCTTGCTCCAGAGGGCACACGAGCAGCGCTTCTTAAAGTCCATTGCTGAGGGCATTG
GCCCTGAAGAACGGCGCCAAACCCTGTTGCAGAAGATGAGCAGCTTCTGACTTGGCGTGGGGAGCTGGGCCCCAA
CATGGCGGGTCTGCAGAAGATCAGCAGCTTCTTACCTGTGCGGGAGCGAAAAAGCTGGGCTTCAACATGGCAGGT
CTGTAGGGGTCAGACCCGAGCAGCCTGGACTTTACAGTTATGTGAAACTGTCCACAAAAAGTCATGGCAATAATG
GTGTAAAGAAAATAGTTTCTTGGGTATTTGTAACGTACAAACTATCATAAAAATTCTCCTCTTTCGCATCTCAAA
AAAAAAAAAAAAAAAAAAAAA

FIGURE 1641

MDLGPLNICEEMTILHGGFLLAEQLFHPKALAELTKSDWERVGRPIVEALREISSAAAHSQPFAWKKKALIIIWA
KVLQPHPVTPSDTETRWQEDLFFSVGNMIPTINHTILFELLKSLEASGLFIQLLMALPTTICHAELERFLEHVTV
DTSAEDVAFFLDIWWEVMKHKGHPQDPLLSQFSAMAHKYLPALDEFPHPPKRLRSDPDACPTMPLLAMLLRGLTQ
IQSRILGPGRKCCALANLADMLTVFALTEDDPQEVSATVYLDKLATVISVWNSDTQNPYHQQALAEKVKEAERDV
SLTSLAKLPSETIFVGCEFLHHLLREWGEELQAVLRSSQGTSYDSYRLCDSLTSFSQNATLYLNRTSLSKEDRQV
VSELAECVRDFLRKTSTVLKNRALEDITASIAMAVIQQKMDRHMEVCYIFASEKKWAFSDEWVACLGSNRALFRE
PDLVLRLLETVIDVSTADRAIPESQIRQVIHLILECYADLSLPGKNKVLAGILRSWGRKGLSEKLLAYVEGFQED
LNTTFNQLTQSASEQGLAKAVASVARLVIVHPEVTVKKMCSLAVVNLGTHKFLAQILTAFPALRFVEVQGPNSSA
TFMVSCLKETVWMKFSTPKEEKQFLELLNCLMSPVKPQGIPVAALLEPDEVLKEFVLPFLRLDVEEVDLSLRIFI
QTLEANACREEYWLQTCSPFPLLFSLCQLLDRFSKYWPLPKEKRCLSLDRKDLAIHILELLCEIVSANAETFSPD
VWIKSLSWLHRKLEQLDWTVGLRLKSFFEGHFKCEVPATLFEICKLSEDEWTSQAHPGYGAGTGLLAWMECCCVS
SGISERMLSLLVVDVGNPEEVRLFSKGFLVALVQVMPWCSPQEWQRLHQLTRRLLEKQLLHVPYSLEYIQFVPLL
NLKPFAQELQLSVLFLRTFQFLCSHSCRNWLPLEGWNHVVKLLCGSLTRLLDSVRAIQAAGPWVQGPEQDLTQEA
LFVYTQVFCHALHIMAMLHPEVCEPLYVLALETLTCYETLSKTNPSVSSLLQRAHEQRFLKSIAEGIGPEERRQT
LLQKMSSF

FIGURE 1642

AACGAAACCAACAGCAGTCCAAGCTCAGTCAGCAGAAGAGATAAAAGCAAACAGGTCTGGGAGGCAGTTCTGTTG
CCACTCTCTCTCCTGTCAATGATGGATCTCAGAAATACCCCAGCCAAATCTCTGGACAAGTTCATTGAAGACTAT
CTCTTGCCAGACACGTGTTTCCGCATGCAAATCAACCATGCCATTGACATCATCTGTGGGTTCCTGAAGGAAAGG
TGCTTCCGAGGTAGCTCCTACCCTGTGTGTGTGTCCAAGGTGGTAAAGGGTGGCTCCTCAGGCAAGGGCACCACC
CTCAGAGGCCGATCTGACGCTGACCTGGTTGTCTTCCTCAGTCCTCTCACCACTTTTCAGGATCAGTTAAATCGC
CGGGGAGAGTTCATCCAGGAAATTAGGAGACAGCTGGAAGCCTGTCAAAGAGAGAGAGCATTTTCCGTGAAGTTT
GAGGTCCAGGCTCCACGCTGGGGCAACCCCCGTGCGCTCAGCTTCGTACTGAGTTCGCTCCAGCTCGGGGAGGGG
GTGGAGTTCGATGTGCTGCCTGCCTTTGATGCCCTGGGTCAGTTGACTGGCAGCTATAAACCTAACCCCCAAATC
TATGTCAAGCTCATCGAGGAGTGCACCGACCTGCAGAAAGAGGGCGAGTTCTCCACCTGCTTCACAGAACTACAG
AGAGACTTCCTGAAGCAGCGCCCCACCAAGCTCAAGAGCCTCATCCGCCTAGTCAAGCACTGGTACCAAAATTGT
AAGAAGAAGCTTGGGAAGCTGCCACCTCAGTATGCCCTGGAGCTCCTGACGGTCTATGCTTGGGAGCGAGGGAGC
ATGAAAACACATTTCAACACAGCCCAGGGATTTCGGACGGTCTTGGAATTAGTCATAAACTACCAGCAACTCTGC
ATCTACTGGACAAAGTATTATGACTTTAAAAACCCCATTATTGAAAAGTACCTGAGAAGGCAGCTCACGAAACCC
ACGCCTGTGATCCTGGACCCGGCGGACCCTACAGGAAACTTGGGTGGTGGAGACCCAAAGCGTTGGAGGCAGCTG
GCACAAGAGGCTGAGGCCTGGCTGAATTACCCATGCTTTAAGAATTGGGATGGGTCCCCAGTGAGCTCCTGGATT
CTGCTGGTGAGACCTCCTGCTTCCTCCCTGCCATTCATCCCTGCCCCTCTCCATGAAGCTTGAGACATATAGCTG
GAGACCATTCTTTCCAAAGAACTTACCTCTTGCCAAAGGCCATTTATATTCATATAGTGACAGGCTGTGCTCCAT
ATTTTACAGTCATTTTGGTCACAATCGAGGGTTTCTGGAATTTTCACATCCCTTGTCCAGAATTCATTCCCCTAA
GAGTAATAATAAATAATCTCTAACACC

FIGURE 1643

MMDLRNTPAKSLDKFIEDYLLPDTCFRMQIDHAIDIICGFLKERCFRGSSYPVCVSKVVKGGSSGKGTTLRGRSD
ADLVVFLSPLTTFQDQLNRRGEFIQEIRRQLEACQRERALSVKFEVQAPRWGNPRALSFVLSSLQLGEGVEFDVL
PAFDALGQLTGSYKPNPQIYVKLIEECTDLQKEGEFSTCFTELQRDFLKQRPTKLKSLIRLVKHWYQNCKKKLGK
LPPQYALELLTVYAWERGSMKTHFNTAQGFRTVLELVINYQQLCIYWTKYYDFKNPIIEKYLRRQLTKPRPVILD
PADPTGNLGGGDPKGWRQLAQEAEAWLNYPCFKNWDGSPVSSWILLAESNSTDDETDDPRTYQKYGYIGTHEYPH
FSHRPSTLQAASTPQAEEDWTCTIL

FIGURE 1644

CGGAGGGAGCGCTGGGAGCGAGCAAGCGAGCGTTTGGAGCCCGGGCCAGCAGAGGGGGCGCCCGGTCGCTGCCTG
TACCGCTCCCGCTGGTCATCTCCGCCGCGCTCGGGGGCCCCGGGAGGAGCGAGACCGAGTCGGAGAGTCCGGGAG
CCAAGCCGGGCGAAACCCAACTGCGGAGGACGCCCGCCCCACTCAGCCTCCTCCTGCGTCCGAGCCGGGGAGCAT
CGCCGAGCGCCCCACGGGCCGGAGAGCTGGGAGCACAGGTCCCGGCAGCCCCAGGGATGGTCTAGGAGCCGGCGT
AAGGCTCGCTGCTCTGCTCCCTGCCGGGGCTAGCCGCCTCCTGCCGATCGCCCGGGGCTGCGAGCTGCGGCGGCC
CGGGGCTGCTCGCCGGGCGGCGCAGGCCGGAGAAGTTAGTTGTGCGCGCCCTTAGTGCGCGGAACCAGCCAGCGA
GCGAGGGAGCAGCGAGGCGCCGGGACC**ATG**GGCTGGGGGAGCCGCTGCTGCTGCCCGGGACGTTTGGACCTGCTG
TGCGTGCTGGCGCTGCTCGGGGGCTGCCTGCTCCCCGTGTGTCGGACGCGCGTCTACACCAACCACTGGGCAGTC
AAAATCGCCGGGGGCTTCCCGGAGGCCAACCGTATCGCCAGCAAGTACGGATTCATCAACATAGGACAGATAGGG
GCCCTGAAGGACTACTACCACTTCTACCATAGCAGGACGATTAAAAGGTCAGTTATCTCGAGCAGAGGGACCCAC
AGTTTCATTTCAATGGAACCAAAGGTGGAATGGATCCAACAGCAAGTGGTAAAAAAGCGGACAAAGAGGGATTAT
GACTTCAGTCGTGCCCAGTCTACCTATTTCAATGATCCCAAGTGGCCCAGCATGTGGTATATGCACTGCAGTGAC
AATACACATCCCTGCCAGTCTGACATGAATATCGAAGGAGCCTGGAAGAGAGGCTACACGGGAAAGAACATTGTG
GTCACTATCCTGGATGACGGAATTGAGAGAACCCATCCAGATCTGATGCAAAACTACGATGCTCTGGCAAGTTGC
GACGTGAATGGGAATGACTTGGACCCAATGCCTCGTTATGATGCAAGCAACGAGAACAAGCATGGGACTCGCTGT
GCTGGAGAAGTGGCAGCCGCTGCAAACAATTCGCACTGCACAGTCGGAATTGCTTTCAACGCCAAGATCGGAGGA
GTGCGAATGCTGGACGGAGATGTCACGGACATGGTTGAAGCAAAATCAGTTAGCTTCAACCCCCAGCACGTGCAC
ATTTACAGCGCCAGCTGGGGCCCGGATGATGATGGCAAGACTGTGGACGGACCAGCCCCCCTCACCCGGCAAGCC
TTTGAAAACGGCGTTAGAATGGGGCGGAGAGGCCTCGGCTCTGTGTTTGTTTGGGCATCTGGAAATGGTGGAAGG
AGCAAAGACCACTGCTCCTGTGATGGCTACACCAACAGCATCTACACCATCTCCATCAGCAGCACTGCAGAAAGC
GGAAAGAAACCTTGGTACCTGGAAGAGTGTTCATCCACGCTGGCCACAACCTACAGCAGCGGGGAGTCCTACGAT
AAGAAAATCATCACTACAGATCTGAGGCAGCGTTGCACGGACAACCACACTGGGACGTCAGCCTCAGCCCCCATG
GCTGCAGGCATCATTGCGCTGGCCCTGGAAGCCAATCCGTTTCTGACCTGGAGAGACGTACAGCATGTTATTGTC
AGGACTTCCCGTGCGGGACATTTGAACGCTAATGACTGGAAAACCAATGCTGCTGGTTTTAAGGTGAGCCATCTT
TATGGATTTGGACTGATGGACGCAGAAGCCATGGTGATGGAGGCAGAGAAGTGGACCACCGTTCCCCGGCAGCAC
GTGTGTGTGGAGAGCACAGACCGACAAATCAAGACAATCCGCCCTAACAGTGCAGTGCGCTCCATCTACAAAGCT
TCAGGCTGCTCGGATAACCCCAACCGCCATGTCAACTACCTGGAGCACGTCGTTGTGCGCATCACCATCACCCAC
CCCAGGAGAGGAGACCTGGCCATCTACCTGACCTCGCCCTCTGGAACTAGGTCTCAGCTTTTGGCCAACAGGCTA
TTTGATCACTCCATGGAAGGATTCAAAAACTGGGAGTTCATGACCATTCATTGCTGGGGAGAAAGAGCTGCTGGT
GACTGGGTCCTTGAAGTTTATGATACTCCCTCTCAGCTAAGGAACTTTAAGACTCCAGGTAAATTGAAAGAATGG
TCTTTGGTCCTCTACGGCACCTCCGTGCAGCCATATTCACCAACCAATGAATTTCCGAAAGTGGAACGGTTCCGC
TATAGCCGAGTTGAAGACCCCACAGACGACTATGGCACAGAGGATTATGCAGGTCCCTGCGACCCTGAGTGCAGT
GAGGTTGGCTGTGACGGGCCAGGACCAGACCACTGCAATGACTGTTTGCACTACTACTACAAGCTGAAAAACAAT
ACCAGGATCTGTGTCTCCAGCTGCCCCCCTGGCCACTACCACGCCGACAAGAAGCGCTGCAGGAAGTGTGCCCCC
AACTGTGAGTCCTGCTTTGGGAGCCATGGTGACCAATGCATGTCCTGCAAATATGGATACTTTCTGAATGAAGAA
ACCAACAGCTGTGTTACTCACTGCCCTGATGGGTCATATCAGGATACCAAGAAAAATCTTTGCCGGAAATGCAGT
GAAAACTGCAAGACATGTACTGAATTCCATAACTGTACAGAATGTAGGGATGGGTTAAGCCTGCAGGGATCCCGG
TGCTCTGTCTCCTGTGAAGATGGACGGTATTTCAACGGCCAGGACTGCCAGCCCTGCCACCGCTTCTGCGCCACT
TGTGCTGGGGCAGGAGCTGATGGGTGCATTAACTGCACAGAGGGCTACTTCATGGAGGATGGGAGATGCGTGCAG
AGCTGTAGTATCAGCTATTACTTTGACCACTCTTCAGAGAATGGATACAAATCCTGCAAAAAATGTGATATCAGT
TGTTTGACGTGCAATGGCCCAGGATTCAAGAACTGTACAAGCTGCCCTAGTGGGTATCTCTTAGACTTAGGAATG
TGTCAAATGGGAGCCATTTGCAAGGATGCAACGGAAGAGTCCTGGGCGGAAGGAGGCTTCTGTATGCTTGTGAAA
AAGAACAATCTGTGCCAACGGAAGGTTCTTCAACAACTTTGCTGCAAAACATGTACATTTCAAGGC**TGA**GCAGCC
ATCTTAGATTTCTTTGTTCCTGTAGACTTATAGATTATTCCATATTATTAAAAAGAAAAAAAAAAGCCAAAAAG

FIGURE 1645

MGWGSRCCCPGRLDLLCVLALLGGCLLPVCRTRVYTNHWAVKIAGGFPEANRIASKYGFINIGQIGALKDYYHFY
HSRTIKRSVISSRGTHSFISMEPKVEWIQQQVVKKRTKRDYDFSRAQSTYFNDPKWPSMWYMHCSDNTHPCQSDM
NIEGAWKRGYTGKNIVVTILDDGIERTHPDLMQNYDALASCDVNGNDLDPMPRYDASNENKHGTRCAGEVAAAAN
NSHCTVGIAFNAKIGGVRMLDGDVTDMVEAKSVSFNPQHVHIYSASWGPDDDGKTVDGPAPLTRQAFENGVRMGR
RGLGSVFVWASGNGGRSKDHCSCDGYTNSIYTISISSTAESGKKPWYLEECSSTLATTYSSGESYDKKIITTDLR
QRCTDNHTGTSASAPMAAGIIALALEANPFLTWRDVQHVIVRTSRAGHLNANDWKTNAAGFKVSHLYGFGLMDAE
AMVMEAEKWTTVPRQHVCVESTDRQIKTIRPNSAVRSIYKASGCSDNPNRHVNYLEHVVVRITITHPRRGDLAIY
LTSPSGTRSQLLANRLFDHSMEGFKNWEFMTIHCWGERAAGDWVLEVYDTPSQLRNFKTPGKLKEWSLVLYGTSV
QPYSPTNEFPKVERFRYSRVEDPTDDYGTEDYAGPCDPECSEVGCDGPGPDHCNDCLHYYYKLKNNTRICVSSCP
PGHYHADKKRCRKCAPNCESCFGSHGDQCMSCKYGYFLNEETNSCVTHCPDGSYQDTKKNLCRKCSENCKTCTEF
HNCTECRDGLSLQGSRCSVSCEDGRYFNGQDCQPCHRFCATCAGAGADGCINCTEGYFMEDGRCVQSCSISYYFD
HSSENGYKSCKKCDISCLTCNGPGFKNCTSCPSGYLLDLGMCQMGAICKDATEESWAEGGFCMLVKKNNLCQRKV
LQQLCCKTCTFQG

FIGURE 1646

GGCACCGATTCGGGGCCTGCCCGGACTTCGCCGCACGCTGCAGAACCTCGCCCAGCGCCCACCATGCCCCGGCAG
CTCAGCGCGGCGGCCGCGCTCTTCGCGTCCCTGGCCGTAATTTTGCACGATGGCAGTCAAATGAGAGCAAAAGCA
TTTCCAGAAACCAGAGATTATTCTCAACCTACTGCAGCAGCAACAGTACAGGACATAAAAAAACCTGTCCAGCAA
CCAGCTAAGCAAGCACCTCACCAAACTTTAGCAGCAAGATTCATGGATGGTCATATCACCTTTCAAACAGCGGCC
ACAGTAAAAATTCCAACAACTACCCCAGCAACTACAAAAAACACTGCAACCACCAGCCCAATTACCTACACCCTG
GTCACAACCCAGGCCACACCCAACAACTCACACACAGCTCCTCCAGTTACTGAAGTTACAGTCGGCCCTAGCTTA
GCCCCTTATTCACTGCCACCCACCATCACCCCACCAGCTCATACAGCTGGAACCAGTTCATCAACCGTCAGCCAC
ACAACTGGGAACACCACTCAACCCAGTAACCAGACCACCCTTCCAGCAACTTTATCGATAGCACTGCACAAAAGC
ACAACCGGTCAGAAGCCTGATCAACCCACCCATGCCCCAGGAACAACGGCAGCTGCCCACAATACCACCCGCACA
GCTGCACCTGCCTCCACGGTTCCTGGGCCCACCCTTGCACCTCAGCCATCGTCAGTCAAGACTGGAATTTATCAG
GTTCTAAACGGAAGCAGACTCTGTATAAAAGCAGAGATGGGGATACAGCTGATTGTTCAAGACAAGGAGTCGGTT
TTTTCACCTCGGAGATACTTCAACATCGACCCCAACGCAACGCAAGCCTCTGGGAACTGTGGCACCCGAAAATCC
AACCTTCTGTTGAATTTTCAGGGCGGATTTGTGAATCTCACATTTACCAAGGATGAAGAATCATATTATATCAGT
GAAGTGGGAGCCTATTTGACCGTCTCAGATCCAGAGACAGTTTACCAAGGAATCAAACATGCGGTGGTGATGTTC
CAGACAGCAGTCGGGCATTCCTTCAAGTGCGTGAGTGAACAGAGCCTCCAGTTGTCAGCCCACCTGCAGGTGAAA
ACAACCGATGTCCAACTTCAAGCCTTTGATTTTGAAGATGACCACTTTGGAAATGTGGATGAGTGCTCGTCTGAC
TACACAATTGTGCTTCCTGTGATTGGGGCCATCGTGGTTGGTCTCTGCCTTATGGGTATGGGTGTCTATAAAATC
CGCCTAAGGTGTCAATCATCTGGATACCAGAGAATCTAATTGTTGCCCGGGGGGAATGAAAATAATGGAATTTAG
AGAACTCTTTCATCCCTTCCAGGATGGATGTTGGGAAATTCCCTCAGAGTGTGGGTCCTTCAAACAATGTAAACC
ACCATCTTCTATTCAAATGAAGTGAGTCATGTGTGATTTAAGTTCAGGCAGCACATCAATTTCTAAATACTTTTT
GTTTATTTTATGAAAGATATAGTGAGCTGTTTATTTTCTAGTTTCCTTTAGAATATTTTAGCCACTCAAAGTCAA
CATTTGAGATATGTTGAATTAACATAATATATGTAAAGTAGAATAAGCCTTCAAATTATAAACCAAGGGTCAATT
GTAACTAATACTACTGTGTGTGCATTGAAGATTTTATTTTACCCTTGATCTTAACAAAGCCTTTGCTTTGTTATC
AAATGGACTTTCAGTGCTTTTACTATCTGTGTTTTATGGTTTCATGTAACATACATATTCCTGGTGTAGCACTTA
ACTCCTTTTCCACTTTAAATTTGTTTTTGTTTTTTGAGACGGAGTTTCACTCTTGTCACCCAGGCTGGAGTACAG
TGGCACGATCTCGGCTTATGGCAACCTCCGCCTCCCGGGTTCAAGTGATTCTCCTGCTTCAGCTTCCCGAGTAGC
TGGGATTACAGGCACACACTACCACGCCTGGCTAATTTTTGTATTTTTATTATAGACGGGTTTCACCATGTTGGC
CAGACTGGTCTTGAACTCTTGACCTCAGGTGATCCACCCACCTCAGCCTCCCAAAGTGCTGGGATTACAGGCATG
AGCCATTGCGCCCGGCCTTAAATGTTTTTTTTAATCATCAAAAAGAACAACATATCTCAGGTTGTCTAAGTGTTT
TTATGTAAAACCAACAAAAAGAACAAATCAGCTTATATTTTTTATCTTGATGACTCCTGCTCCAGAATTGCTAGA
CTAAGAATTAGGTGGCTACAGATGGTAGAACTAAACAATAAGCAAGAGACAATAATAATGGCCCTTAATTATTAA
CAAAGTGCCAGAGTCTAGGCTAAGCACTTTATCTATATCTCATTTCATTCTCACAACTTATAAGTGAATGAGTAA
ACTGAGACTTAAGGGAACTGAATCACTTAAATGTCACCTGGCTAACTGATGGCAGAGCCAGAGCTTGAATTCATG
TTGGTCTGACATCAAGGTCTTTGGTCTTCTCCCTACACCAAGTTACCTACAAGAACAATGACACCACACTCTGCC
TGAAGGCTCACACCTCATACCAGCATACGCTCACCTTACAGGGAAATGGGTTTATCCAGGATCATGAGACATTAG
GGTAGATGAAAGGAGAGCTTTGCAGATAACAAAATAGCCTATCCTTAATAAATCCTCCACTCTCTGGAAGGAGAC
TGAGGGGCTTTGTAAAACATTAGTCAGTTGCTCATTTTTATGGGATTGCTTAGCTGGGCTGTAAAGATGAAGGCA
TCAAATAAACTCAAAGTATTTTTAAATTTTTTTGATAATAGAGAAACTTCGCTAACCAACTGTTCTTTCTTGAGT
GTATAGCCCCATCTTGTGGTAACTTGCTGCTTCTGCACTTCATATCCATATTTCCTATTGTTCACTTTATTCTGT
AGAGCAGCCTGCCAAGAATTTTATTTCTGCTGTTTTTTTTGCTGCTAAAGAAAGGAACTAAGTCAGGATGTTAAC
AGAAAAGTCCACATAACCCTAGAATTCTTAGTCAAGGAATAATTCAAGTCAGCCTAGAGACCATGTTGACTTTCC
TCATGTGTTTCCTTATGACTCAGTAAGTTGGCAAGGTCCTGACTTTAGTCTTAATAAAACATTGAATTGTAGTAA
AGGTTTTTGCAATAAAAACTTACTTTGG

FIGURE 1647

MPRQLSAAAALFASLAVILHDGSQMRAKAFPETRDYSQPTAAATVQDIKKPVQQPAKQAPHQTLAARFMDGHITF
QTAATVKIPTTTPATTKNTATTSPITYTLVTTQATPNNSHTAPPVTEVTVGPSLAPYSLPPTITPPAHTAGTSSS
TVSHTTGNTTQPSNQTTLPATLSIALHKSTTGQKPDQPTHAPGTTAAAHNTTRTAAPASTVPGPTLAPQPSSVKT
GIYQVLNGSRLCIKAEMGIQLIVQDKESVFSPRRYFNIDPNATQASGNCGTRKSNLLLNFQGGFVNLTFTKDEES
YYISEVGAYLTVSDPETVYQGIKHAVVMFQTAVGHSFKCVSEQSLQLSAHLQVKTTDVQLQAFDFEDDHFGNVDE
CSSDYTIVLPVIGAIVVGLCLMGMGVYKIRLRCQSSGYQRI

FIGURE 1648A

GCGGGGAGCCGGCGGTTATCTGGGCGGCGGAGCGCTCACAATGTGGCAGGAGACAGAAAAGATAAGATGCTCCCA
AGTCCCTTGCAGCTCTCTTCAGAAGAAAAATCACTAGTGCTCTGCTCTTGCCATAATACCAAACCTTTTTGACTC
ATGCTTTGGTGCTGCAACACTGGAAGAATTGCACACAGTTTCCAGGAATATCTTTTTTTCATTTGAGTGATTCTT
TGTGGATGAGAAAAGATTTGAGTCTTAATAATTACCTTGTTTTAAAGCTATTTCTTTATAGTCTGAACTGTTTAA
TAAATTGGGCCACTTACCA**ATG**AGCCACACAGCCAGTTCTTGTCAGGAGCTGGTTGAAAACTGTGCTGTGCATGT
AGCAGGAATGGCACAAGAAGATAGCCGTCGTGGTCAAGTGCCATCTTCCTTTTATCATGGTGCCAACCAAGAACT
TGACCTGTCCACCAAAGTGTACAAAAGGGAATCAGGAAGTCCTTATTCTGTGTTAGTGGACACCAAGATGAGCAA
ACCGCATCTCCATGAAACAGAAGAACAGCCATATTTCAGGGAGACAAGAGCAGTGTCTGACGTGCATGCTGTTAA
GGAAGACCGGGAGAATTCTGATGACACAGAGGAGGAAGAGGAAGAAGTCTCTTACAAAAGGGAGCAGATCATAGT
GGAGGTAAACCTTAATAATCAAACATTAAATGTATCTAAAGGGGAAAAGGGTGTCTCTTCTCAGTCCAAAGAGAC
TCCTGTTCTTAAGACAAGCAGTGAGGAGGAAGAGGAAGAGAGTGAGGAAGAGGCCACAGATGACAGCAATGACTA
TGGAGAGAATGAAAAGCAGAAGAAAAAGGAGAAGATAGTAGAGAAAGTCAGCGTTACACAAAGGAGAACCAGGAG
AGCTGCCTCTGTTGCCGCAGCTACCACTTCCCCTACTCCCAGAACTACAAGAGGTCGTAGGAAGAGTGTAGAGCC
ACCTAAGCGTAAGAAGCGGGCCACAAAGGAGCCCAAAGCACCAGTCCAGAAAGCTAAGTGTGAAGAGAAAGAGAC
TCTGACCTGTGAGAAGTGCCCCAGGGTATTTAACACTCGCTGGTACCTGGAGAAGCACATGAACGTTACTCATAG
GCGCATGCAGATTTGTGATAAATGTGGCAAGAAGTTTGTCCTGGAAAGTGAGCTGTCCCTTCACCAGCAAACAGA
CTGTGAAAAAAACATTCAGTGTGTTTCCTGTAACAAATCGTTCAAGAAACTCTGGTCCCTTCATGAACATATCAA
GATCGTCCATGGATATGCAGAAAAGAAATTTTCCTGTGAAATTTGTGAGAAGAAATTCTATACCATGGCTCATGT
GCGGAAACACATGGTTGCACACACAAAAGACATGCCATTTACATGCGAAACCTGTGGAAAATCATTCAAACGCAG
TATGTCACTCAAGGTGCACTCCTTGCAGCATTCTGGAGAGAAGCCCTTTAGATGCGAGAACTGTGACGAAAGGTT
TCAGTACAAGTACCAGCTACGCTCCCACATGAGCATTCATATTGGGCACAAACAGTTCATGTGCCAGTGGTGTGG
CAAGGATTTCAACATGAAGCAGTACTTCGACGAACACATGAAAACACACACTGGAGAGAAACCCTTTATCTGTGA
AATCTGTGGCAAAAGCTTCACCAGCCGCCCCAACATGAAGAGACACCGCAGAACTCACACAGGCGAGAAGCCCTA
TCCATGTGATGTGTGTGGCCAGCGGTTCCGCTTCTCGAACATGCTTAAGGCCCACAAGGAGAAGTGCTTTCGGGT
GACCAGCCCCGTGAATGTGCCACCTGCTGTCCAGATCCCACTTACAACTTCCCCAGCCACCCCAGTTCCTTCTGT
GGTGAACACAGCCACAACCCCAACCCCTCCAATCAATATGAATCCTGTAAGCACTCTTCCCCCTCGGCCCATCCC
CCACCCCTTCTCACACCTGCACATCCACCCACACCCTCACCACCCACACCACCTTCCCATCCCTCCAGTCCCTCA
CCTCCCGCCACCTCCAGCTCTCTTTAAGAGTGAGCCTTTAAATCATAGAGGCCAGAGTGAGGACAACTTTCTGCG
GCACCTGGCAGAGAAGAACAGTTCAGCACAGCATCAT**TAA**CATCCGTCTCCTTAGTGTGTTCTCCAGGAGACACG
TCCCCATGTGTGAGCGTGCACAGAGGGAGTCGGTGAGCATTTCCTTAGTTCTCAGACTCTCCTCCGCCTCTACCA
AGAGCTTCGCCAGTGTCACTGAATCAACAGATCCAAGGGAATGAACAAGAAGACTACCTTGAGCTCACAGAGGGA
CTGTCATCTAAACCAGGGGAACCACTGAACTAAAGCCCAATTTGCTTGCATTTTCTGATGACTTTTATAAGTTTC
AAATACTCAGACTTGTGGAATTTTATAATTTCATATCAGCTGATGAGGTATGCTTGCTTTTATATCCCAGACTTC
TCCTCAAAGAGGGGATAGGCCTGGTTTCCTTTGTACTAATCGGGAAGGCTGTGAGATTAATCCAGAGCATTAATT
GTATCACTGTGTATGGTAAGGAATTCTTTTCAGCTTTTGGTGCCAGCTACAGAGTTGAGCTGGCCATGTTTCACA
GTATATCAAGCATTATAGAGAAAGACAGAAATTTTCTTCTTTGTGTAGCTCTCCTAACGCACTCTTTATTTTACT
ACAGAAATTATTTTAGAGTTTTTGTATAGACTTCTTTGGTAGTCTGTTTCTAAAATGAAATGTATTTCAATAAGC
AGTGTAATTTTTTCAGTGTAGCTGAACCTATGTTGTAAAATAGAAAAAAATTTTTATAATCATCAAAATGTGATT
CTTAAAGATGCATATAACTTCTATAATTCAAAGCTATTCTTACATCCGTACAACTCAAAAGGTGCTTCAGAGACT
AGATGTATCTGAGAGGGTCTCCAGACCAGGTTACTGCAAAAATGAGGTTTTGCTTTCAGGATTTGGCGTAAATAC
TTGGTAGTTTTGACATCTCTGCTTAACACTCAAGAGAGGCTCCCTAATGTGCTCCTGTCCTCCATGTTCTGCTTG
GCTTCGTTAGTGCATTACATGAAATGATTTGCAGGGGATGGGGCCTTTTCCAGGGAAGTCACCTAAAGCTTGCAT
GTTTTGAAAATTTGAATAAGGCTGTTTGCTGACAGGAGGAGGAAGTAGTGGAGATCATTTCATCTCAGTCACGTC
TGTTTCTCACTTCCCTTAGGAATTGTGTTGATGTTTAACTTTTATGGGATGACAAATTGAAATCGCTCATTTTGA
GGTTGCTTTATTTTTCTAGAATTGTTATAAGAAGCTAAAATAGTAAACTTAAAATCACAAACATGACATTGCTGA
TAGTGGCTGAGAAATTCAGATGAGAAGACAAATTGGTTATGAATTTTGAAATATCTATTATATGTAAAATGTGGA
TATGTTCACAACCTTGAGCTATTTTAACACAGTTTAAATATAGTGAGGGAAAACTCCTAAGTTTTACTGCCCTGT
CCTCTGCAAATTATGTAATACCAGCATTCTTAGGCGATAAAGAGAGCAGCACCTCTAGTACCTTTAGGCAGATTA

FIGURE 1648B

CTTTTTCAAGTTTGGGGAACTTCAAAAGACCATAATCAACCAGGAGCTTATTATAGGAAAGGCTGAACAGAAGGG
CTAGTGTATTGATTACACTTAACAGATCATATTTATCCAGACTCAGTATAGCTTAAAATTTTGTATTTCTTTATC
TGAGAGAACTGAGTTCCCAGGCTAAATCACTTACCTCCCACCCCCTCTCCAATTTTTTTTTTAAGAGACAAGGTC
TTGCTATGTTGCCCAGGCTAGAGTGCAGTGGCTATTCACAGGTGCAGTTATAGCACACTACAGCCTCCAACTCTT
GGGTTCAAGCAACCCTGCCTCAGCTAACCAAGTAGCTGGGACTACAGGTGCATGCTACCATGCCCAGTCCATTTT
TTAATCTTGAAATTTCTTCATTTTTCTTTCTTCGGTTTCTTAAAATCTTTGCCTGAATCAGAACGCTGGCTTTTA
TTTATTTTTTTATTTTTAATATTAAATGTGCAGATATGCTTCGAGCACTTTTCTAACTAATGAGCTCTGTGGTAA
GAAAAAATGAACTCTTTCAATTGAGATTAAGTCCATATTTTTCAAACATCACGTTCTCTATTGGCTTTTTGGTTT
AGTGTTTCTAAATTTTCTCCTTCTGATTTTGCCTGTCTTATATAATGAGCATAGGAAAATTTTGGAATGAGGCAG
AAAAGTATATCAAGACATACTTCCTGGTTTTGGATGTAAGTTTTAAAGAATGGTATTTTTAATATTTGTACACAT
TCTTTGAGCACCCAGGTACCCAAGCCAATAAGGAAAGTTAATTCCTTGCATATGACTGTTATATCTTTAGTGGTT
GTCTCCCTCTCCCTCCACAGTCTCCTTGGCATTCCATGACAAGTTTGTCAACCTACACTTTTATATAGACATGTC
ATTATTTCATGGTCAAGCCTGTAGTATTAAAATGATTTTTTTAAAAAGATGTAAACTGTGCTTAGTTAATTGGTTA
TATTTTGTTCTGTTTTTTTTTTTTTTTTTTTTTTTTTTTGAGGCAGAGTCTTGTTCTGTTGCCTGGGCTGGAGTG
CAGTGGCGTGATCTTGGCTCACTGCAACCCCCGCCCCCCGGGTTCAAGTGATTCTCCTGCCTCAGCCTCCCGAGT
AGCTGGAATTACAGGCATGCGCCAGCACGCCCGGCTAAGTTTTGTATTTTTGGCAGAGATGGGGTTTCACCATAT
TGGCCAGGCTGGTCTCAAACTCCTGACCTTGTGATCCGCCCACCTCAGCCTCCGAAAGTGCTGGGATTACAGGCG
TGAGCCACCACGTCCAACTGCCTTATTTTGTTCTGAATAAATTTACAGTATTGGGCAGCAATTCTGGATTCTAGA
CTTGAGACCACAGAATCAACCATTTCATGAGGTTGTACTGTAATTATACACTGGAATATTCAGGTAGTCATCTTT
GATTTTTCATTCAAGTAAATATAGCCATAAGAAAATATCTGCTATACAGGAAAACCAGTATTAAGCAAATACCAC
CATCCTTAACAGAAACAAAAATATATATATATATTATTTTTAAAAATTAGCATTGTCATACAGTACAATTCTTAG
TGAAGTGTATTGTGGAACAATTTAGAAACTTCCTTTTTTTCCCCTAGATTAAGGATACTTTCCTTGACTTGAGAC
TTGTGGTCTTCAGGAAAACTACTCAGAATATAATGACTCCTCATCAGTATCATATTGTATATAAATAATGAAATG
CATTAAGAATATTCACAACATTGAACCCAGGAGGCGGAGCTTGCAGTGAGCCGAGATTGCGCCACTGCGCTCCAG
CCTGGGCAACAGAGCGAGACTCCATCTC

FIGURE 1649

MSHTASSCQELVENCAVHVAGMAQEDSRRGQVPSSFYHGANQELDLSTKVYKRESGSPYSVLVDTKMSKPHLHET
EEQPYFRETRAVSDVHAVKEDRENSDDTEEEEEEVSYKREQIIVEVNLNNQTLNVSKGEKGVSSQSKETPVLKTS
SEEEEEESEEEATDDSNDYGENEKQKKKEKIVEKVSVTQRRTRRAASVAAATTSPTPRTTRGRRKSVEPPKRKKR
ATKEPKAPVQKAKCEEKETLTCEKCPRVFNTRWYLEKHMNVTHRRMQICDKCGKKFVLESELSLHQQTDCEKNIQ
CVSCNKSFKKLWSLHEHIKIVHGYAEKKFSCEICEKKFYTMAHVRKHMVAHTKDMPFTCETCGKSFKRSMSLKVH
SLQHSGEKPFRCENCDERFQYKYQLRSHMSIHIGHKQFMCQWCGKDFNMKQYFDEHMKTHTGEKPFICEICGKSF
TSRPNMKRHRRTHTGEKPYPCDVCGQRFRFSNMLKAHKEKCFRVTSPVNVPPAVQIPLTTSPATPVPSVVNTATT
PTPPINMNPVSTLPPRPIPHPFSHLHIHPHPHHPHHLPIPPVPHLPPPPALFKSEPLNHRGQSEDNFLRHLAEKN
SSAQHH

FIGURE 1650

CAGGCCAGGACTCCACAAGGCTGGTCCCCTGCCCTGGAGCAACTTAAACAGGCCCTCTGGCCAGCCTGGAACCCT
GAGATGGCCTCCAGCTCAGGCAGCAGTCCTCGCCCGGCCCCTGATGAGAATGAGTTTCCCTTTGGGTGCCCTCCC
ACCGTCTGCCAGGACCCAAAGGAGCCCAGGGCTCTCTGCTGTGCAGGCTGTCTCTCTGAGAACCCGAGGAATGGC
GAGGATCAGATCTGCCCCAAATGCAGAGGGGAAGACCTCCAGTCTATAAGCCCAGGAAGCCGTCTTCGAACTCAG
GAGAAGGCTCACCCCGAGGTGGCTGAGGCTGGAATTGGGTGCCCCTTTGCAGGTGTCGGCTGCTCCTTCAAGGGA
AGCCCACAGTCTGTGCAAGAGCATGAGGTCACCTCCCAGACCTCCCACCTAAACCTGCTGTTGGGGTTCATGAAA
CAGTGGAAGGCCCGGCTGGGCTGTGGCCTGGAGTCTGGGCCCATGGCCCTGGAGCAGAACCTGTCAGACCTGCAG
CTGCAGGCAGCCGTGGAAGTGGCGGGGGACCTGGAGGTCGATTGCTACCGGGCACCCTGCTCCGAGAGCCAGGAG
GAGCTGGCCCTGCAGCACTTCATGAAGGAGAAGCTTCTGGCTGAGCTGGAGGGGAAGCTGCGTGTGTTTGAGAAC
ATTGTTGCTGTCCTCAACAAGGAGGTGGAGGCCTCCCACCTGGCCCTGGCCACCTCTATCCACCAGAGCCAGCTG
GACCGTGAGCGCATCCTGAGCTTGGAGCAGAGGGTGGTGGAGCTTCAGCAGACCCTGGCCCAGAAAGACCAGGCC
CTGGGCAAGCTGGAGCAGAGCTTGCGCCTCATGGAGGAGGCCTCCTTCGATGGCACTTTCCTGTGGAAGATCACC
AATGTCACCAGGCGGTGCCATGAGTCGGCCTGTGGCAGGACCGTCAGCCTCTTCTCCCCAGCCTTCTACACTGCC
AAGTATGGCTACAAGTTGTGCCTGCGGCTGTACCTGAATGGAGATGGCACTGGAAAGAGAACCCATCTGTCGCTC
TTCATCGTGATCATGAGAGGGGAGTATGATGCGCTGCTGCCGTGGCCTTTCCGGAACAAGGTCACCTTCATGCTG
CTGGACCAGAACAACCGTGAGCACGCCATTGACGCCTTCCGGCCTGACCTAAGCTCAGCGTCCTTCCAGAGGCCC
CAGAGTGAAACCAACGTGGCCAGTGGATGCCCACTCTTCTTCCCCCTCAGCAAACTGCAGTCACCCAAGCACGCC
TACGTGAAGGACGACACAATGTTCCTCAAGTGCATTGTGGAGACCAGCACTTAGGGTGGGCGGGGCTCCTGAGGG
AGCTCCAACTCAGAAGGGAGCTAGCCAGAGGACTGTGATGCCCTGCCCTTGGCACCCAAGACCTCAGGGCACAAA
GATGGGTGAAGGCTGGCATGATCCAAGCAAGACTGAGGGGTCGACTTCGGGCTGGCCATCTGGTTAGGATGGCAG
GACGTGGGCTGGGCCCACAAAGGCAAAGGGTCCAGAAGGAGACAGGCAGAGCTGCTCCCCTCTGCACGGACCATG
CGACACTGGGAGGCCAGTGAGCCACTCCGGCCCCGAATGTTGAGGTGGACTCTCACCAAATGAGAAGAAAATGGA
ACCAGGCTTGGAACCGTAGGACCCAAGCAGAGAAGCTCTCGGGCTAGGAAGATCTCTGCAGGGCCGCCAGGGAGA
CCTGGACACAGGCCTGCTCTCTTTTTCTCCAGGGTCAGAAACAGGACCGGGTGGAAGGGATGGGGTGCCAGTTTG
AATGCAGTCTGTCCAGGCTCGTCATTGGAGGTGAACAAGCAAACCCAGAGGGCTCCACTAGGACTTCAAATTGGG
GGTTGGATTTGAAGACTTTTAAGTTTCCTTCCAGCCCAGAAAGTCTCTCATTCTAGGCCTCCTGGCCCAGGTGAG
TCCTAGAGCTACAGGGGTTCTGGAAACATTCAGGAGCTTCCTGTCCTCCCAGCTCCTCACTCACCTTCAGTAACC
CCCACTGGACTGACCTGGTCCACAGGGCACCTGCCACCCTGGGCCTGGCAGCTCAGCTTCCCCAACACGCAGGAG
CACACCCAGCCCCCACATCCTGTGCCTCCATCAGCTAAACACCACGTCACTTCATGCAGGTGAAACCCAGTCACT
GTGAGCTCCCAGGTGCAGCCAGAGGCACCTCAAGAAGAAGAGGGGCATAAACTTTCCTCTTCCTGCCTAGAGGCC
CCACCTTTGGTGCTTTCCAGAATCCCGTAACACCTGATTAACTGAGGCATCCACTTCTTTCAGCAGACTGATCAG
GACCTCCAAGCCACTGAGCAATGTATAACCCCAAAGAAATAATTTTTAGAATCTCTTTCGAAGTTTTCCTAAAAA
AAAAAAAAAAAA

FIGURE 1651

MASSSGSSPRPAPDENEFPFGCPPTVCQDPKEPRALCCAGCLSENPRNGEDQICPKCRGEDLQSISPGSRLRTQE
KAHPEVAEAGIGCPFAGVGCSFKGSPQSVQEHEVTSQTSHLNLLLGFMKQWKARLGCGLESGPMALEQNLSDLQL
QAAVEVAGDLEVDCYRAPCSESQEELALQHFMKEKLLAELEGKLRVFENIVAVLNKEVEASHLALATSIHQSQLD
RERILSLEQRVVELQQTLAQKDQALGKLEQSLRLMEEASFDGTFLWKITNVTRRCHESACGRTVSLFSPAFYTAK
YGYKLCLRLYLNGDGTGKRTHLSLFIVIMRGEYDALLPWPFRNKVTFMLLDQNNREHAIDAFRPDLSSASFQRPQ
SETNVASGCPLFFPLSKLQSPKHAYVKDDTMFLKCIVETST

FIGURE 1652

GGCACGAGGAGCGTTTCGTTTGGACTTCTCGACTTGAGTGCCCGCCTCCTTCGCCGCCGCCTCTGCAGTCCTCAG
CGCAGTTATGCCCAGTTCTTCCCGCTGTGGGGACACGACCACGGAGGAATCCTTGCTTCAGGGACTCGGGACCCT
GCTGGACCCCTTCCTCGGGTTTAGGGGATGTGGGGACCAGGAGAAAGTCAGGATCCCTAAGAGTCTTCCCTGCCT
GGATGGATGAGTGGCTTCTTCTCCACCTAGATTCTTTCCACAGGAGCCAGCATACTTCCTGAACATGGAGAGTGT
TGTTCGCCGCTGCCCATTCTTATCCCGAGTCCCCCAGGCCTTTCTGCAGAAAGCAGGCAAATCTCTGTTGTTCTA
TGCCCAAAACTGCCCCAAGATGATGGAAGTTGGGGCCAAGCCAGCCCCTCGGGCATTGTCCACTGCAGCAGTACA
CTACCAACAGATCAAAGAAACCCCTCCGGCCAGTGAGAAAGACAAAACTGCTAAGGCCAAGGTCCAACAGACTCC
TGATGGATCCCAGCAGAGTCCAGATGGCACACAGCTTCCGTCTGGACACCCCTTGCCTGCCACAAGCCAGGGCAC
TGCAAGCAAATGCCCTTTCCTGGCAGCACAGATGAATCAGAGAGGCAGCAGTGTCTTCTGCAAAGCCAGTCTTGA
GCTTCAGGAGGATGTGCAGGAAATGAATGCCGTGAGGAAAGAGGTTGCTGAAACCTCAGCAGGCCCCAGTGTGGT
TAGTGTGAAAACCGATGGAGGGGATCCCAGTGGACTGCTGAAGAACTTCCAGGACATTATGCAAAAGCAAAGACC
AGAAAGAGTGTCTCATCTTCTTCAAGATAACTTGCCAAAATCTGTTTCCACTTTTCAGTATGATCGTTTCTTTGA
GAAAAAAATTGATGAGAAAAAGAATGACCACACCTATCGAGTTTTTAAAACTGTGAACCGGCGAGCACACATCTT
CCCCATGGCAGATGACTATTCAGACTCCCTCATCACCAAAAAGCAAGTGTCAGTCTGGTGCAGTAATGACTACCT
AGGAATGAGTCGCCACCCACGGGTGTGTGGGGCAGTTATGGACACTTTGAAACAACATGGTGCTGGGGCAGGTGG
TACTAGAAATATTTCTGGAACTAGTAAATTCCATGTGGACTTAGAGCGGGAGCTGGCAGACCTCCATGGGAAAGA
TGCCGCACTCTTGTTTTCCTCGTGCTTTGTGGCCAATGACTCAACCCTCTTCACCCTGGCTAAGATGATGCCAGG
CTGTGAGATTTACTCTGATTCTGGGAACCATGCCTCCATGATCCAAGGGATTCGAAACAGCCGAGTGCCAAAGTA
CATCTTCCGCCACAATGATGTCAGCCACCTCAGAGAACTGCTGCAAAGATCTGACCCCTCAGTCCCCAAGATTGT
GGCATTTGAAACTGTCCATTCAATGGATGGGGCGGTGTGCCCACTGGAAGAGCTGTGTGATGTGGCCCATGAGTT
TGGAGCAATCACCTTCGTGGATGAGGTCCACGCAGTGGGGCTTTATGGGGCTCGAGGCGGAGGGATTGGGGATCG
GGATGGAGTCATGCCAAAAATGGACATCATTTCTGGAACACTTGGCAAAGCCTTTGGTTGTGTTGGAGGGTACAT
CGCCAGCACGAGTTCTCTGATTGACACCGTACGGTCCTATGCTGCTGGCTTCATCTTCACCACCTCTCTGCCACC
CATGCTGCTGGCTGGAGCCCTGGAGTCTGTGCGGATCCTGAAGAGCGCTGAGGGACGGGTGCTTCGCCGCCAGCA
CCAGCGCAACGTCAAACTCATGAGACAGATGCTAATGGATGCCGGCCTCCCTGTTGTCCACTGCCCCAGCCACAT
CATCCCTGTGCGGGTTGCAGATGCTGCTAAAAACACAGAAGTCTGTGATGAACTAATGAGCAGACATAACATCTA
CGTGCAAGCAATCAATTACCCTACGGTGCCCCGGGGAGAAGAGCTCCTACGGATTGCCCCCACCCCTCACCACAC
ACCCCAGATGATGAACTACTTCCTTGAGAATCTGCTAGTCACATGGAAGCAAGTGGGGCTGGAACTGAAGCCTCA
TTCCTCAGCTGAGTGCAACTTCTGCAGGAGGCCACTGCATTTTGAAGTGATGAGTGAAAGAGAGAAGTCCTATTT
CTCAGGCTTGAGCAAGTTGGTATCTGCTCAGGCCTGAGCATGACCTCAATTATTTCACTTAACCCCAGGCCATTA
TCATATCCAGATGGTCTTCAGAGTTGTCTTTATATGTGAATTAAGTTATATTAAATTTTAATCTATAGTAAAAAC
ATAGTCCTGGAAATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1653

MESVVRRCPFLSRVPQAFLQKAGKSLLFYAQNCPKMMEVGAKPAPRALSTAAVHYQQIKETPPASEKDKTAKAKV
QQTPDGSQQSPDGTQLPSGHPLPATSQGTASKCPFLAAQMNQRGSSVFCKASLELQEDVQEMNAVRKEVAETSAG
PSVVSVKTDGGDPSGLLKNFQDIMQKQRPERVSHLLQDNLPKSVSTFQYDRFFEKKIDEKKNDHTYRVFKTVNRR
AHIFPMADDYSDSLITKKQVSVWCSNDYLGMSRHPRVCGAVMDTLKQHGAGAGGTRNISGTSKFHVDLERELADL
HGKDAALLFSSCFVANDSTLFTLAKMMPGCEIYSDSGNHASMIQGIRNSRVPKYIFRHNDVSHLRELLQRSDPSV
PKIVAFETVHSMDGAVCPLEELCDVAHEFGAITFVDEVHAVGLYGARGGGIGDRDGVMPKMDIISGTLGKAFGCV
GGYIASTSSLIDTVRSYAAGFIFTTSLPPMLLAGALESVRILKSAEGRVLRRQHQRNVKLMRQMLMDAGLPVVHC
PSHIIPVRVADAAKNTEVCDELMSRHNIYVQAINYPTVPRGEELLRIAPTPHHTPQMMNYFLENLLVTWKQVGLE
LKPHSSAECNFCRRPLHFEVMSEREKSYFSGLSKLVSAQA

FIGURE 1654

AGACGCAAGACGCCGGGCCTACAGCGGGAGCGTGAGGAAAGCCGTGCGTTGCGTTCCAAGGCATCTGTGAGCCCG
CGGAGTATACACC**ATG**AGCAAAGCTCACCCTCCCGAGTTGAAAAAATTTATGGACAAGAAGTTATCATTGAAATT
AAATGGTGGCAGACATGTCCAAGGAATATTGCGGGGATTTGATCCCTTTATGAACCTTGTGATAGATGAATGTGT
GGAGATGGCGACTAGTGGACAACAGAACAATATTGGAATGGTGGTAATACGAGGAAATAGTATCATCATGTTAGA
AGCCTTGGAACGAGTA**TAA**ATAATGGCTGTTCAGCAGAGAAACCCATGTCCTCTCTCCATAGGGCCTGTTTTACT
ATGATGTAAAAATTAGGTCATGTACATTTTCATATTAGACTTTTTGTTAAATAAACTTTTGTAATAGTCAAAAAT
GCTTTCTCAGATGTTCTGAATATAGAATATCAGCTCTCATTCCAGTTTTTTCTAACATGAATTTTCCTGGTTGAC
ATTGATTTCAAAGGGTTTTATGCATTAAAGTGAAAGAATCTTATTAAATGCGAAAAAAAAAAAAAAAAAAAAAA
AAAAAA

FIGURE 1655

MSKAHPPELKKFMDKKLSLKLNGGRHVQGILRGFDPFMNLVIDECVEMATSGQQNNIGMVVIRGNSIIMLEALER
V

FIGURE 1656

ACAGAGATGGCACTGATGCAGGAACTGTATAGCACACCAGCCTCCAGGCTGGACTCCTTCGTGGCTCAGTGGCTG
CAGCCCCACCGGGAGTGGAAGGAAGAGGTGCTAGACGCTGTGCGGACCGTGGAGGAGTTTCTGAGGCAGGAGCAT
TTCCAGGGGAAGCGTGGGCTGGACCAGGATGTGCGGGTGCTGAAGGTAGTCAAGGTGGGCTCCTTCGGGAATGGC
ACGGTTCTCAGGAGCACCAGAGAGGTGGAGCTGGTGGCGTTTCTGAGCTGTTTCCACAGCTTCCAGGAGGCAGCC
AAGCATCACAAAGATGTTCTGAGGCTGATATGGAAAACCATGTGGCAAAGCCAGGACCTGCTGGACCTCGGGCTC
GAGGACCTGAGGATGGAGCAGAGAGTCCCCGATGCTCTTGTCTTCACCATCCAGACCAGGGGGACTGCGGAGCCC
ATCACGGTCACCATTGTGCCTGCCTACAGAGCCCTGGGGCCTTCTCTTCCCAACTCCCAGCCACCCCCTGAGGTC
TATGTGAGCCTGATCAAGGCCTGCGGTGGTCCTGGAAATTTCTGCCCATCCTTCAGCGAGCTGCAGAGAAATTTC
GTGAAACATCGGCCAACTAAGCTGAAGAGCCTCCTGCGCCTGGTGAAACACTGGTACCAGCAGTATGTGAAAGCC
AGGTCCCCCAGAGCCAATCTGCCCCCTCTCTATGCTCTTGAACTTCTAACCATCTATGCCTGGGAAATGGGTACT
GAAGAAGACGAGAATTTCATGTTGGACGAAGGCTTCACCACTGTGATGGACCTGCTCCTGGAGTATGAAGTCATC
TGTATCTACTGGACCAAGTACTACACACTCCACAATGCAATCATTGAGGATTGTGTCAGAAAACAGCTCAAAAAA
GAGAGGCCCATCATCCTGGATCCGGCCGACCCCACCCTCAACGTGGCAGAAGGGTACAGATGGGACATCGTTGCT
CAGAGGGCCTCCCAGTGCCTGAAACAGGACTGTTGCTATGACAACAGGGAGAACCCCATCTCCAGCTGGAACGTG
AAGAGGGCACGAGACATCCACTTGACAGTGGAGCAGAGGGGTTACCCAGATTTCAACCTCATCGTGAACCCTTAT
GAGCCCATAAGGAAGGTTAAAGAGAAAATCCGGAGGACCAGGGGCTACTCTGGCCTGCAGCGTCTGTCCTTCCAG
GTTCCTGGCAGTGAGAGGCAGCTTCTCAGCAGCAGGTGCTCCTTAGCCAAATATGGGATCTTCTCCCACACTCAC
ATCTATCTGCTGGAGACCATCCCCTCCGAGATCCAGGTCTTCGTGAAGAATCCTGATGGTGGGAGCTACGCCTAT
GCCATCAACCCCAACAGCTTCATCCTGGGTCTGAAGCAGCAGATTGAAGACCAGCAGGGGCTTCCTAAAAAGCAG
CAGCAGCTGGAATTCCAAGGCCAAGTCCTGCAGGACTGGTTGGGTCTGGGGATCTATGGCATCCAAGACAGTGAC
ACTCTCATCCTCTCGAAGAAGAAAGGAGAGGCTCTGTTTCCAGCCAGTTAGTTTTCTCTGGGAGACTTCTCTGTA
CATTTCTGCCATGTACTCCAGAACTCATCCTGTCAATCACTCTGTCCCATTGTCTACTGGGAAGGTCCCAGGTCT
TCACCAGTTTTACAATGAGTTATCCCAGGCCAGACGTGGTAGCTCACACCTGTAATCCCAGAACTTTGGGAGGCC
GAGGTGGGAGGAGCGCTTGAGCCGAGGAGTTCAAGACCAGCCTGGGTATCATAGGGAGACCCCGTCTCTACAAAA
TAAAAAAATAATTCACTGGG

FIGURE 1657

MALMQELYSTPASRLDSFVAQWLQPHREWKEEVLDAVRTVEEFLRQEHFQGKRGLDQDVRVLKVVKVGSFGNGTV
LRSTREVELVAFLSCFHSFQEAAKHHKDVLRLIWKTMWQSQDLLDLGLEDLRMEQRVPDALVFTIQTRGTAEPIT
VTIVPAYRALGPSLPNSQPPPEVYVSLIKACGGPGNFCPSFSELQRNFVKHRPTKLKSLLRLVKHWYQQYVKARS
PRANLPPLYALELLTIYAWEMGTEEDENFMLDEGFTTVMDLLLEYEVICIYWTKYYTLHNAIIEDCVRKQLKKER
PIILDPADPTLNVAEGYRWDIVAQRASQCLKQDCCYDNRENPISSWNVKRARDIHLTVEQRGYPDFNLIVNPYEP
IRKVKEKIRRTRGYSGLQRLSFQVPGSERQLLSSRCSLAKYGIFSHTHIYLLETIPSEIQVFVKNPDGGSYAYAI
NPNSFILGLKQQIEDQQGLPKKQQQLEFQGQVLQDWLGLGIYGIQDSDTLILSKKKGEALFPAS

FIGURE 1658

AGCCTACGCACGAAAGTGACTAGGGAGGAAGGATATTATAAAGTGATGCAAACAGAAATTCCACCAGCCTCCATG
TATCATCATGTGTCATAACTCAGTCAAGCTCAGTGAGCATTCTCAGCACATTGCCTCAACAGCTTCAAGGTGAGC
CAGCTCAAGACTTTGCTCTCCACCAGGCAGAAGATGACAGACTGTGAATTTGGATATATTTACAGGCTGGCTCAG
GACTATCTGCAGTGCGTCCTACAGATACCACAACCTGGATCAGGTCCAAGCAAAACGTCCAGAGTGCTACAAAAT
GTTGCGTTCTCAGTCCAAAAAGAAGTGGAAAAGAATCTGAAGTCATGCTTGGACAATGTTAATGTTGTGTCCGTA
GACACTGCCAGAACACTATTCAACCAAGTGATGGAAAAGGAGTTTGAAGACGGCATCATTAACTGGGGAAGAATT
GTAACCATATTTGCATTTGAAGGTATTCTCATCAAGAAACTTCTACGACAGCAAATTGCCCCGGATGTGGATACC
TATAAGGAGATTTCATATTTTGTTGCGGAGTTCATAATGAATAACACAGGAGAATGGATAAGGCAAAACGGAGGC
TGGGAAAATGGCTTTGTAAAGAAGTTTGAACCTAAATCTGGCTGGATGACTTTTCTAGAAGTTACAGGAAAGATC
TGTGAAATGCTATCTCTCCTGAAGCAATACTGTTGACCAGAAAGGACACTCCATATTGTGAAACCGGCCTAATTT
TTCTGACTGATATGGAAACGATTGCCAACACATACTTCTACTTTTAAATAAACAACTTTGATGATGTAACTTGAC
CTTCCAGAGTTATGGAAATTTTGTCCCCATGTAATGAATAAATTGTATGTATTTTTCTCT

FIGURE 1659

MTDCEFGYIYRLAQDYLQCVLQIPQPGSGPSKTSRVLQNVAFSVQKEVEKNLKSCLDNVNVVSVDTARTLFNQVM
EKEFEDGIINWGRIVTIFAFEGILIKKLLRQQIAPDVDTYKEISYFVAEFIMNNTGEWIRQNGGWENGFVKKFEP
KSGWMTFLEVTGKICEMLSLLKQYC

FIGURE 1660

CGGGAGGCGGCAGCGGCTGCAGCGTTGGTAGCATCAGCATCAGCATCAGCGGCAGCGGCAGCGGCCTCGGGCGGG
GCCGGCCGGACGGACAGGCGGACAGAAGGCGCCAGGGGCGCGCGTCCCGCCCGGGCCGGCCATGGAGGGCGCCTC
CTTCGGCGCGGGCCGCGCAGGGGCCGCCCTGGACCCCGTGAGCTTTGCGCGGCGGCCCCAGACCCTGCTCCGGGT
CGCGTCCTGGGTGTTCTCCATCGCCGTCTTCGGGCCCATCGTCAACGAGGGCTACGTGAACACCGACAGCGGCCC
CGAGCTGCGCTGCGTGTTCAACGGGAACGCGGGCGCCTGCCGCTTCGGCGTCGCGCTGGGCCTCGGAGCCTTCCT
CGCCTGCGCCGCCTTCCTGCTGCTCGATGTGCGCTTCCAGCAAATCAGCAGCGTCCGCGACCGCCGGCGCGCGGT
GTTGCTGGACCTGGGCTTCTCAGGACTCTGGTCCTTCCTGTGGTTCGTGGGCTTCTGCTTCCTCACCAATCAGTG
GCAGCGCACGGCGCCAGGGCCGGCCACGACGCAGGCGGGGGACGCGGCGCGGGCCGCCATCGCCTTCAGCTTCTT
CTCCATCCTCAGCTGGGTGGCGCTCACCGTGAAGGCCCTGCAGCGGTTCCGCCTGGGCACCGACATGTCACTCTT
CGCCACCGAACAGCTGAGCACCGGGGCGAGCCAGGCCTACCCCGGCTATCCGGTGGGCAGCGGCGTGGAGGGCAC
CGAGACCTACCAGAGCCCGCCCTTCACCGAGACCCTGGACACCAGCCCCAAAGGGTACCAGGTGCCCGCCTACTA
GCGGCTGGCAGGCACAGACCAGGGCTCCAAGGCCACCCCACCAACGCAGGCCCCAGGGTCTCCGGGACCTCCCTT
GGGTCCTTCCAGCTCAGTGCCGCGGACAGAGTAGGTGGCCGCTTTGCGCCATCCGGGGCCAAGAGGGGGTGGACC
CGCGTGTCTGGGCTGCCCCTGCCAAGTTCCCCCAGTCCCTCAGCACCTGGCCCCAGGACTGAGGTCCTGAGAAGG
GGATAGCACTGCCCAGGACGTGTGTCCCTAGCCTGGAATGGACTGGCCTGGGGAAGGCTTTCCCCTCTTGGGCCA
CACCTGCTCACTCTGGGGTTGGGGGTCCAGCTGCCCTCTACGATCAGGTGCAGGGGCTGCCCAGGACAAAGCGGG
GGCAGGGGAAAGACACCACCCTCGCCCCAAGACTGGGGATCCTGGCCACTGTTCCCATCCCATGTCCCTGTGGGT
AGTGACTGTCTCGTTTCTGTCATGGTGGTGCGTCCCGTCCGGAGCCACTCTCCACTTTCTCTCACAGGCTGCTAG
AACAGCCCAGCCCTGTCAGTGTTGTGATCATGGTCCAGTCTTCGGGTTTCACCTCCTAGTACTCCACAAGCTGCT
CCTCTCTCTGTGGCCCCGGCCCCTGCCCAGGTGTGGGTGGTTCTGGCCAGGAAGGCACAAGGTAGCTGTGGGCCA
AGACACCAGCCCTGTCCTAGCCCTTCAGTAAGACCTTGCCAGGAGAGGAGAAGGATGCCTGGGTGCCAGGCAAGA
CAAGCCCCTCAGCAGGAGAGAGGCCCAGAGGCTCCAGCTGGCCACCGTGCCCCACAAGATGGCCCCTGTGTGGTT
CCCTTTACCTTGGCTTCCTGGCCCAGTCCCTGCCTCTCCACCTGCACCCTGCTTCCTGGCCCAGTCCCAGGTTGG
AGTCCCTCTGCATAGCTGACTACTCATGCATTGCTCAAAGCTGGCTTTTCACATTAAGTCAACACCAAACGTGGT
TGCCACATTTCATCAGACAGACACCTCCCTCTGGAGATGCAGTTGAGTGACAACCTTGTTACATTGTAGCCTAGA
CCAATTCTGTGTGGATATTTAAGTGAACATGTTTACAATTTTTGTATATATCACTCTCTCCCTCTCCTGAAAGAC
CAGAGATTGTGTATTTTCAGTGTCCCATGTTCCGACTGCACCTTCTTTACAATAAAGACTGTAACTGAGCTGACT
GTGAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1661

MEGASFGAGRAGAALDPVSFARRPQTLLRVASWVFSIAVFGPIVNEGYVNTDSGPELRCVFNGNAGACRFGVALG
LGAFLACAAFLLLDVRFQQISSVRDRRRAVLLDLGFSGLWSFLWFVGFCFLTNQWQRTAPGPATTQAGDAARAAI
AFSFFSILSWVALTVKALQRFRLGTDMSLFATEQLSTGASQAYPGYPVGSGVEGTETYQSPPFTETLDTSPKGYQ
VPAY

FIGURE 1662

CTAAAGCTCTCTTGCTGCCTAGCCTCCTGCCGGCCTCATCTTCGCCCAGCCAACCCCGCCTGGAGCCCTATGGCC
AACTGCGAGTTCAGCCCGGTGTCCGGGGACAAACCCTGCTGCCGGCTCTCTAGGAGAGCCCAACTCTGTCTTGGC
GTCAGTATCCTGGTCCTGATCCTCGTCGTGGTGCTCGCGGTGGTCGTCCCGAGGTGGCGCCAGACGTGGAGCGGT
CCGGGCACCACCAAGCGCTTTCCCGAGACCGTCCTGGCGCGATGCGTCAAGTACACTGAAATTCATCCTGAGATG
AGACATGTAGACTGCCAAAGTGTATGGGATGCTTTCAAGGGTGCATTTATTTCAAAACATCCTTGCAACATTACT
GAAGAAGACTATCAGCCACTAATGAAGTTGGGAACTCAGACCGTACCTTGCAACAAGATTCTTCTTTGGAGCAGA
ATAAAAGATCTGGCCCATCAGTTCACACAGGTCCAGCGGGACATGTTCACCCTGGAGGACACGCTGCTAGGCTAC
CTTGCTGATGACCTCACATGGTGTGGTGAATTCAACACTTCCAAAATAAACTATCAATCTTGCCCAGACTGGAGA
AAGGACTGCAGCAACAACCCTGTTTCAGTATTCTGGAAAACGGTTTCCCGCAGGTTTGCAGAAGCTGCCTGTGAT
GTGGTCCATGTGATGCTCAATGGATCCCGCAGTAAAATCTTTGACAAAAACAGCACTTTTGGGAGTGTGGAAGTC
CATAATTTGCAACCAGAGAAGGTTCAGACACTAGAGGCCTGGGTGATACATGGTGGAAGAGAAGATTCCAGAGAC
TTATGCCAGGATCCCACCATAAAAGAGCTGGAATCGATTATAAGCAAAAGGAATATTCAATTTTCCTGCAAGAAT
ATCTACAGACCTGACAAGTTTCTTCAGTGTGTGAAAAATCCTGAGGATTCATCTTGCACATCTGAGATCTGAGCC
AGTCGCTGTGGTTGTTTTAGCTCCTTGACTCCTTGTGGTTTATGTCATCATACATGACTCAGCATACCTGCTGGT
GCAGAGCTGAAGATTTTGGAGGGTCCTCCACAATAAGGTCAATGCCAGAGACGGAAGCCTTTTTCCCCAAAGTCT
TAAAATAACTTATATCATCAGCATACCTTTATTGTGATCTATCAATAGTCAAGAAAAATTATTGTATAAGATTAG
AATGAAAATTGTATGTTAAGTTACTTCCTTTAG

FIGURE 1663

MANCEFSPVSGDKPCCRLSRRAQLCLGVSILVLILVVVLAVVVPRWRQTWSGPGTTKRFPETVLARCVKYTEIHP
EMRHVDCQSVWDAFKGAFISKHPCNITEEDYQPLMKLGTQTVPCNKILLWSRIKDLAHQFTQVQRDMFTLEDTLL
GYLADDLTWCGEFNTSKINYQSCPDWRKDCSNNPVSVFWKTVSRRFAEAACDVVHVMLNGSRSKIFDKNSTFGSV
EVHNLQPEKVQTLEAWVIHGGREDSRDLCQDPTIKELESIISKRNIQFSCKNIYRPDKFLQCVKNPEDSSCTSEI

FIGURE 1664

GGCTTCTGGTTCGGCCCACCTCTGAAGGTTCCAGAATCGATAGTGAATTCGTGGTTCCAAGTTTGGAGCTTTTAG
CTGCCAGCCCTGGCCCATCATGTAGCTGCAGCACAGCCTTCCCTAACGTTGCAACTGGGGGAAAAATCACTTTCC
AGTCTGTTTTGCAAGGTGTGCATTTCCATCTTGATTCCCTGAAAGTCCATCTGCTGCATCGGTCAAGAGAAACTC
CACTTGCATGAAGATTGCACGCCTGCAGCTTGCATCTTTGTTGCAAAACTAGCTACAGAAGAGAAGCAAGGCAAA
GTCTTTTGTGCTCCCCTCCCCCATCAAAGGAAAGGGGAAA**ATG**TCTCAGTCGAAAGGCAAGAAGCGAAACCCTGG
CCTTAAAATTCCAAAAGAAGCATTTGAACAACCTCAGACCAGTTCCACACCACCTCGAGATTTAGACTCCAAGGC
TTGCATTTCTATTGGAAATCAGAACTTTGAGGTGAAGGCAGATGACCTGGAGCCTATAATGGAACTGGGACGAGG
TGCGTACGGGGTGGTGGAGAAGATGCGGCACGTGCCCAGCGGGCAGATCATGGCAGTGAAGCGGATCCGAGCCAC
AGTAAATAGCCAGGAACAGAAACGGCTACTGATGGATTTGGATATTTCCATGAGGACGGTGGACTGTCCATTCAC
TGTCACCTTTTATGGCGCACTGTTTCGGGAGGGTGATGTGTGGATCTGCATGGAGCTCATGGATACATCACTAGA
TAAATTCTACAAACAAGTTATTGATAAAGGCCAGACAATTCCAGAGGACATCTTAGGGAAAATAGCAGTTTCTAT
TGTAAAAGCATTAGAACATTTACATAGTAAGCTGTCTGTCATTCACAGAGACGTCAAGCCTTCTAATGTACTCAT
CAATGCTCTCGGTCAAGTGAAGATGTGCGATTTTGGAATCAGTGGCTACTTGGTGGACTCTGTTGCTAAAACAAT
TGATGCAGGTTGCAAACCATACATGGCCCCTGAAAGAATAAACCCAGAGCTCAACCAGAAGGGATACAGTGTGAA
GTCTGACATTTGGAGTCTGGGCATCACGATGATTGAGTTGGCCATCCTTCGATTTCCCTATGATTCATGGGGAAC
TCCATTTCAGCAGCTCAAACAGGTGGTAGAGGAGCCATCGCCACAACTCCCAGCAGACAAGTTCTCTGCAGAGTT
TGTTGACTTTACCTCACAGTGCTTAAAGAAGAATTCCAAAGAACGGCCTACATACCCAGAGCTAATGCAACATCC
ATTTTTCACCCTACATGAATCCAAAGGAACAGATGTGGCATCTTTTGTAAAACTGATTCTTGGAGAC**TAA**AAAGC
AGTGGACTTAATCGGTTGACCCTACTGTGGATTGGTGGGTTTCGGGGTGAAGCAAGTTCACTACAGCATCAATAG
AAAGTCATCTTTGAGATAATTTAACCCTGCCTCTCAGAGGGTTTTCTCTCCCAATTTTCTTTTTACTCCCCCTCT
TAAGGGGGCCTTGGAATCTATAGTATAGAATGAACTGTCTAGATGGATGAATTATGATAAAGGCTTAGGACTTCA
AAAGGTGATTAAATATTTAATGATGTGTCATATGAGTCCTCAAGCTTCTCAGACTTCTCTTATTCTTTACAAAAT
GAATGCATTGGCCCTGACAAAAAGGTGCTACGGTAGTGATGAAATTATAAGTAGATTTGTAGTTTGTCCCATTTA
TTATTTTAATATTTATGTTTAAGTGCTTGGTTGAAAAGATTCCATTTTATACAAGAAGGGAGATTCAAAAAAAAA
ATATAAGGTTGGGTTAGCAATATTTATAGGGCTTTTATTTTTTAAGTTCAATTGTGTCTGTGGTCCAGAAGAAAT
TATTTAATATGCATCTTTGAGAATATTATAAAAATATCAAAAAGGAGCTCTTCTTGTGAAATGTCTGTTCCAGCT
GTTGTGACTGCTGCCATTTTTGGAAACATCTGCCCAATCCTGGGTGATCACCACATCTTTTAGGGGAAGTGACAA
GATGCTCTGGTCATACTCTTTTTCCCAACTTTGGAAAACATAAAAATCACTCATATAACAGCTCAAAGAGTAAAA
CATTTGGTTCTTCTGACACTTGTGGTATAGTATTAGTGGAAAGTGATTTGTAATATGATTTTATATCCACCTACC
TATTCATCTACCTGTGTGTATGTGTGTGTTTGTGTGTCTATTTGGCAATTCACAAGTCCTGCCAAGTGGTTTCTA
TGAGCATCTCTGTTTGGTAAGGAGGACAATTGTCAGTTTTGAGGGGGACATGTGTTAAATCACAGAAAAAAATGG
TGCCTTCTTCTGCGTTTGTCCCTCCTGCCATGTGTAAGTTGTAAGGATTGCCTTTGTAGTTAATGTACTCTTTGG
CTTTGTTTGTTTGTTTTCTTCTTCAGTGAAGCAGCCTTACTATTCATAGAAGGGCTAGAATAGGAGAAAATGAAA
GGTAGTGAGTAATTCTTTGATAAGATGAGGAAATAATGGGAAAGGTTGAATTAATTCCTGGGCATGGACTACCAG
ATGACCACAAGTTGCGTTGAGGCCGCATCTTTCTTCAGCAGCGTGCAATAGCTGGCTCCTCTATAGGAGATGAGC
TTCATTGGGAGTTCCTAGCAAGTTGACTAAACAGCAAAAGTTCTTTCTCGTGGGTAAATATACCCACAGGTTCTA
TGATTTGTAGCTCTAGGTTTCTTGATGATCAAGGAGTGAAGTAATTGACAGGGAAAATATAGACCTATGATAAAT
AACCAGGAAGCATTGCTTTTGGACAAGGAAGAACAGAGGGTTTTGATTTTAAAAAGAAGAAAAAAAAACCTTATT
TTTTCTTTCTTGGCCTCAAGTTCAATATGGAGAGGATTGCTTCCCTGAATCCTCTCTTCCTTCCCCTTTTAGAG

FIGURE 1665

MSQSKGKKRNPGLKIPKEAFEQPQTSSTPPRDLDSKACISIGNQNFEVKADDLEPIMELGRGAYGVVEKMRHVPS
GQIMAVKRIRATVNSQEQKRLLMDLDISMRTVDCPFTVTFYGALFREGDVWICMELMDTSLDKFYKQVIDKGQTI
PEDILGKIAVSIVKALEHLHSKLSVIHRDVKPSNVLINALGQVKMCDFGISGYLVDSVAKTIDAGCKPYMAPERI
NPELNQKGYSVKSDIWSLGITMIELAILRFPYDSWGTPFQQLKQVVEEPSPQLPADKFSAEFVDFTSQCLKKNSK
ERPTYPELMQHPFFTLHESKGTDVASFVKLILGD

FIGURE 1666

CGTTGCTGTCGCTCTGCACGCACCTATGTGGAAACTAAAGCCCAGAGAGAAAGTCTGACTTGCCCCACAGCCAGT
GAGTGACTGCAGCAGCACCAGAATCTGGTCTGTTTCCTGTTTGGCTCTTCTACCACTACGGCTTGGGATCTCGGG
CATGGTGGCTTTGCCAATGGTCCTTGTTTTGCTGCTGGTCCTGAGCAGAGGTGAGAGTGAATTGGACGCCAAGAT
CCCATCCACAGGGGATGCCACAGAATGGCGGAATCCTCACCTGTCCATGCTGGGGTCCTGCCAGCCAGCCCCCTC
CTGCCAGAAGTGCATCCTCTCACACCCCAGCTGTGCATGGTGCAAGCAACTGAACTTCACCGCGTCGGGAGAGGC
GGAGGCGCGGCGCTGCGCCCGACGAGAGGAGCTGCTGGCTCGAGGCTGCCCGCTGGAGGAGCTGGAGGAGCCCCG
CGGCCAGCAGGAGGTGCTGCAGGACCAGCCGCTCAGCCAGGGCGCCCGCGGAGAGGGTGCCACCCAGCTGGCGCC
GCAGCGGGTCCGGGTCACGCTGCGGCCTGGGGAGCCCCAGCAGCTCCAGGTCCGCTTCCTTCGTGCTGAGGGATA
CCCGGTGGACCTGTACTACCTTATGGACCTGAGCTACTCCATGAAGGACGACCTGGAACGCGTGCGCCAGCTCGG
GCACGCTCTGCTGGTCCGGCTGCAGGAAGTCACCCATTCTGTGCGCATTGGTTTTGGTTCCTTTGTGGACAAAAC
GGTGCTGCCCTTTGTGAGCACAGTACCCTCCAAACTGCGCCACCCCTGCCCCACCCGGCTGGAGCGCTGCCAGTC
ACCATTCAGCTTTCACCATGTGCTGTCCCTGACGGGGGACGCACAAGCCTTCGAGCGGGAGGTGGGGCGCCAGAG
TGTGTCCGGCAATCTGGACTCGCCTGAAGGTGGCTTCGATGCCATTCTGCAGGCTGCACTCTGCCAGGAGCAGAT
TGGCTGGAGAAATGTGTCCCGGCTGCTGGTGTTCACTTCAGACGACACATTCCATACAGCTGGGGACGGGAAGTT
GGGCGGCATTTTCATGCCCAGTGATGGGCACTGCCACTTGGACAGCAATGGCCTCTACAGTCGCAGCACAGAGTT
TGACTACCCTTCTGTGGGTCAGGTAGCCCAGGCCCTCTCTGCAGCAAATATCCAGCCCATCTTTGCTGTCACCAG
TGCCGCACTGCCTGTCTACCAGGAGCTGAGTAAACTGATTCCTAAGTCTGCAGTTGGGGAGCTGAGTGAGGACTC
CAGCAACGTGGTACAGCTCATCATGGATGCTTATAATAGCCTGTCTTCCACCGTGACCCTTGAACACTCTTCACT
CCCTCCTGGGGTCCACATTTCTTACGAATCCCAGTGTGAGGGTCCTGAGAAGAGGGAGGGTAAGGCTGAGGATCG
AGGACAGTGCAACCACGTCCGAATCAACCAGACGGTGACTTTCTGGGTTTCTCTCCAAGCCACCCACTGCCTCCC
AGAGCCCCATCTCCTGAGGCTCCGGGCCCTTGGCTTCTCAGAGGAGCTGATTGTGGAGTTGCACACGCTGTGTGA
CTGTAATTGCAGTGACACCCAGCCCCAGGCTCCCCACTGCAGTGATGGCCAGGGACACCTACAATGTGGTGTATG
CAGCTGTGCCCCTGGCCGCCTAGGTCGGCTCTGTGAGTGCTCTGTGGCAGAGCTGTCCTCCCCAGACCTGGAATC
TGGGTGCCGGGCTCCCAATGGCACAGGGCCCCTGTGCAGTGGAAAGGGTCACTGTCAATGTGGACGCTGCAGCTG
CAGTGGACAGAGCTCTGGGCATCTGTGCGAGTGTGACGATGCCAGCTGTGAGCGACATGAGGGCATCCTCTGCGG
AGGCTTTGGTCGCTGCCAATGTGGAGTATGTCACTGTCATGCCAACCGCACGGGCAGAGCATGCGAATGCAGTGG
GGACATGGACAGTTGCATCAGTCCCGAGGGAGGGCTCTGCAGTGGGCATGGACGCTGCAAATGCAACCGCTGCCA
GTGCTTGGACGGCTACTATGGTGCTCTATGCGACCAATGCCCAGGCTGCAAGACACCATGCGAGAGACACCGGGA
CTGTGCAGAGTGTGGGGCCTTCAGGACTGGCCCACTGGCCACCAACTGCAGTACAGCTTGTGCCCATACCAATGT
GACCCTGGCCTTGGCCCCTATCTTGGATGATGGCTGGTGCAAAGAGCGGACCCTGGACAACCAGCTGTTCTTCTT
CTTGGTGGAGGATGACGCCAGAGGCACGGTCGTGCTCAGAGTGAGACCCCAAGAAAAGGGAGCAGACCACACGCA
GGCCATTGTGCTGGGCTGCGTAGGGGGCATCGTGGCAGTGGGGCTGGGGCTGGTCCTGGCTTACCGGCTCTCGGT
GGAAATCTATGACCGCCGGGAATACAGTCGCTTTGAGAAGGAGCAGCAACAACTCAACTGGAAGCAGGACAGTAA
TCCTCTCTACAAAAGTGCCATCACGACCACCATCAATCCTCGCTTTCAAGAGGCAGACAGTCCCACTCTCTGAAG
GAGGGAGGGACACTTACCCAAGGCTCTTCTCCTTGGAGGACAGTGGGAACTGGAGGGTGAGAGGAAGGGTGGGTC
TGTAAGACCTTGGTAGGGGACTAATTCACTGGCGAGGTGCGGCCACCACCCTACTTCATTTTCAGAGTGACACCC
AAGAGGGCTGCTTCCCATGCCTGCAACCTTGCATCCATCTGGGCTACCCCACCCAAGTATACAATAAAGTCTTAC
CTCAGAAAAAAAAAAAAAAAAAA

FIGURE 1667

MVALPMVLVLLLVLSRGESELDAKIPSTGDATEWRNPHLSMLGSCQPAPSCQKCILSHPSCAWCKQLNFTASGEA
EARRCARREELLARGCPLEELEEPRGQQEVLQDQPLSQGARGEGATQLAPQRVRVTLRPGEPQQLQVRFLRAEGY
PVDLYYLMDLSYSMKDDLERVRQLGHALLVRLQEVTHSVRIGFGSFVDKTVLPFVSTVPSKLRHPCPTRLERCQS
PFSFHHVLSLTGDAQAFEREVGRQSVSGNLDSPEGGFDAILQAALCQEQIGWRNVSRLLVFTSDDTFHTAGDGKL
GGIFMPSDGHCHLDSNGLYSRSTEFDYPSVGQVAQALSAANIQPIFAVTSAALPVYQELSKLIPKSAVGELSEDS
SNVVQLIMDAYNSLSSTVTLEHSSLPPGVHISYESQCEGPEKREGKAEDRGQCNHVRINQTVTFWVSLQATHCLP
EPHLLRLRALGFSEELIVELHTLCDCNCSDTQPQAPHCSDGQGHLQCGVCSCAPGRLGRLCECSVAELSSPDLES
GCRAPNGTGPLCSGKGHCQCGRCSCSGQSSGHLCECDDASCERHEGILCGGFGRCQCGVCHCHANRTGRACECSG
DMDSCISPEGGLCSGHGRCKCNRCQCLDGYYGALCDQCPGCKTPCERHRDCAECGAFRTGPLATNCSTACAHTNV
TLALAPILDDGWCKERTLDNQLFFFLVEDDARGTVVLRVRPQEKGADHTQAIVLGCVGGIVAVGLGLVLAYRLSV
EIYDRREYSRFEKEQQQLNWKQDSNPLYKSAITTTINPRFQEADSPTL

FIGURE 1668A

GCGCGGCGGCCGTGGTTGCGGCGCGGGAAGTTTGGATCCTGGTTCCGTCCGCTAGGAGTCTGCGTGCGAGGATTA
TGGCTGCTGTTCCTCAAAATAATCTACAGGAGCAACTAGAACGTCACTCAGCCAGAACACTTAATAATAAATTAA
GTCTTTCAAAACCAAAATTTTCAGGTTTCACTTTTAAAAAGAAAACATCTTCAGATAACAATGTATCTGTAACTA
ATGTGTCAGTAGCAAAAACACCTGTATTAAGAAATAAAGATGTTAATGTTACCGAAGACTTTTCCTTCAGTGAAC
CTCTACCCAACACCACAAATCAGCAAAGGGTCAAGGACTTCTTTAAAAATGCTCCAGCAGGACAGGAAACACAGA
GAGGTGGATCAAAATCATTATTGCCAGATTTCTTGCAGACTCCGAAGGAAGTTGTATGCACTACCCAAAACACAC
CAACTGTAAAGAAATCCCGGGATACTGCTCTCAAGAAATTAGAATTTAGTTCTTCACCAGATTCTTTAAGTACCA
TCAATGATTGGGATGATATGGATGACTTTGATACTTCTGAGACTTCAAAATCATTTGTTACACCACCCCAAAGTC
ACTTTGTAAGAGTAAGCACTGCTCAGAAATCAAAAAAGGGTAAGAGAAACTTTTTTAAAGCACAGCTTTATACAA
CAAACACAGTAAAGACTGATTTGCCTCCACCCTCCTCTGAAAGCGAGCAAATAGATTTGACTGAGGAACAGAAGG
ATGACTCAGAATGGTTAAGCAGCGATGTGATTTGCATCGATGATGGCCCCATTGCTGAAGTGCATATAAATGAAG
ATGCTCAGGAAAGTGACTCTCTGAAAACTCATTTGGAAGATGAAAGAGATAATAGCGAAAAGAAGAAGAATTTGG
AAGAAGCTGAATTACATTCAACTGAGAAAGTTCCATGTATTGAATTTGATGATGATGATTATGATACGGATTTTG
TTCCACCTTCTCCAGAAGAAATTATTTCTGCTTCTTCTTCCTCTTCAAAATGCCTTAGTACGTTAAAGGACCTTG
ACACATCTGACAGAAAAGAGGATGTTCTTAGCACATCAAAAGATCTTTTGTCAAAACCTGAGAAAATGAGTATGC
AGGAGCTGAATCCAGAAACCAGCACAGACTGTGACGCTAGACAGATAAGTTTACAGCAGCAGCTTATTCATGTGA
TGGAGCACATCTGTAAATTAATTGATACTATTCCTGATGATAAACTGAAACTTTTGGATTGTGGGAACGAACTGC
TTCAGCAGCGGAACATAAGAAGGAAACTTCTAACGGAAGTAGATTTTAATAAAAGTGATGCCAGTCTTCTTGGCT
CATTGTGGAGATACAGGCCTGATTCACTTGATGGCCCTATGGAGGGTGATTCCTGCCCTACAGGGAATTCTATGA
AGGAGTTAAATTTTTCACACCTTCCCTCAAATTCTGTTTCTCCTGGGGACTGTTTACTGACTACCACCCTAGGAA
AGACAGGATTCTCTGCCACCAGGAAGAATCTTTTTGAAAGGCCTTTATTCAATACCCATTTACAGAAGTCCTTTG
TAAGTAGCAACTGGGCTGAAACACCAAGACTAGGAAAAAAAAATGAAAGCTCTTATTTCCCAGGAAATGTTCTCA
CAAGCACTGCTGTGAAAGATCAGAATAAACATACTGCTTCAATAAATGACTTAGAAAGAGAAACCCAACCTTCCT
ATGATATTGATAATTTTGACATAGATGACTTTGATGATGATGATGACTGGGAAGACATAATGCATAATTTAGCAG
CCAGCAAATCTTCCACAGCTGCCTATCAACCCATCAAGGAAGGTCGGCCAATTAAATCAGTATCAGAAAGACTTT
CCTCAGCCAAGACAGACTGTCTTCCAGTGTCATCTACTGCTCAAAATATAAACTTCTCAGAGTCAATTCAGAATT
ATACTGACAAGTCAGCACAAAATTTAGCATCCAGAAATCTGAAACATGAGCGTTTCCAAAGTCTTAGTTTTCCTC
ATACAAAGGAAATGATGAAGATTTTTCATAAAAAATTTGGCCTGCATAATTTTAGAACTAATCAGCTAGAGGCGA
TCAATGCTGCACTGCTTGGTGAAGACTGTTTTATCCTGATGCCGACTGGAGGTGGTAAGAGTTTGTGTTACCAGC
TCCCTGCCTGTGTTTCTCCTGGGGTCACTGTTGTCATTTCTCCCTTGAGATCACTTATCGTAGATCAAGTCCAAA
AGCTGACTTCCTTGGATATTCCAGCTACATATCTGACAGGTGATAAGACTGACTCAGAAGCTACAAATATTTACC
TCCAGTTATCAAAAAAAGACCCAATCATAAAACTTCTATATGTCACTCCAGAAAAGATCTGTGCAAGTAACAGAC
TCATTTCTACTCTGGAGAATCTCTATGAGAGGAAGCTCTTGGCACGTTTTGTTATTGATGAAGCACATTGTGTCA
GTCAGTGGGGACATGATTTTCGTCAAGATTACAAAAGAATGAATATGCTTCGCCAGAAGTTTCCTTCTGTTCCGG
TGATGGCTCTTACGGCCACAGCTAATCCCAGGGTACAGAAGGACATCCTGACTCAGCTGAAGATTCTCAGACCTC
AGGTGTTTAGCATGAGCTTTAACAGACATAATCTGAAATACTATGTATTACCGAAAAAGCCTAAAAAGGTGGCAT
TTGATTGCCTAGAATGGATCAGAAAGCACCACCCATATGATTCAGGGATAATTTACTGCCTCTCCAGGCGAGAAT
GTGACACCATGGCTGACACGTTACAGAGAGATGGGCTCGCTGCTCTTGCTTACCATGCTGGCCTCAGTGATTCTG
CCAGAGATGAAGTGCAGCAGAAGTGGATTAATCAGGATGGCTGTCAGGTTATCTGTGCTACAATTGCATTTGGAA
TGGGGATTGACAAACCGGACGTGCGATTTGTGATTCATGCATCTCTCCCTAAATCTGTGGAGGGTTACTACCAAG
AATCTGGCAGAGCTGGAAGAGATGGGGGAAATATCTCACTGCCTGCTTTTCTATACCTATCATGATGTGACCAGAC
TGAAAAGACTTATAATGATGGAAAAAGATGGAAACCATCATACAAGAGAAACTCACTTCAATAATTTGTATAGCA
TGGTACATTACTGTGAAAATATAACGGAATGCAGGAGAATACAGCTTTTGGCCTACTTTGGTGAAAATGGATTTA
ATCCTGATTTTTGTAAGAAACACCCAGATGTTTCTTGTGATAATTGCTGTAAAACAAAGGATTATAAAACAAGAG
ATGTGACTGACGATGTGAAAAGTATTGTAAGATTTGTTCAAGAACATAGTTCATCACAAGGAATGAGAAATATAA
AACATGTAGGTCCTTCTGGAAGATTTACTATGAATATGCTGGTCGACATTTTCTTGGGGAGTAAGAGTGCAAAAA
TCCAGTCAGGTATATTTGGAAAAGGATCTGCTTATTCACGACACAATGCCGAAAGACTTTTTAAAAAGCTGATAC
TTGACAAGATTTTGGATGAAGACTTATATATCAATGCCAATGACCAGGCGATCGCTTATGTGATGCTCGGAAATA

FIGURE 1668B

AAGCCCAAACTGTACTAAATGGCAATTTAAAGGTAGACTTTATGGAAACAGAAAATTCCAGCAGTGTGAAAAAAC
AAAAAGCGTTAGTAGCAAAAGTGTCTCAGAGGGAAGAGATGGTTAAAAAATGTCTTGGAGAACTTACAGAAGTCT
GCAAATCTCTGGGGAAAGTTTTTGGTGTCCATTACTTCAATATTTTTAATACCGTCACTCTCAAGAAGCTTGCAG
AATCTTTATCTTCTGATCCTGAGGTTTTGCTTCAAATTGATGGTGTTACTGAAGACAAACTGGAAAAATATGGTG
CGGAAGTGATTTCAGTATTACAGAAATACTCTGAATGGACATCGCCAGCTGAAGACAGTTCCCCAGGGATAAGCC
TGTCCAGCAGCAGAGGCCCCGGAAGAAGTGCCGCTGAGGAGCTTGACGAGGAAATACCCGTATCTTCCCACTACT
TTGCAAGTAAAACCAGAAATGAAAGGAAGAGGAAAAAGATGCCAGCCTCCCAAAGGTCTAAGAGGAGAAAAACTG
CTTCCAGTGGTTCCAAGGCAAAGGGGGGGTCTGCCACATGTAGAAAGATATCTTCCAAAACGAAATCCTCCAGCA
TCATTGGATCCAGTTCAGCCTCACATACTTCTCAAGCGACATCAGGAGCCAATAGCAAATTGGGGATTATGGCTC
CACCGAAGCCTATAAATAGACCGTTTCTTAAGCCTTCATATGCATTCTCATAACAACCGAATCTCAATGTACATA
GACCCTCTTTCTTGTTTGTCAGCATCTGACCATCTGTGACTATAAAGCTGTTATTCTTGTTATACCAAAAAAAAA
AAAAAAAAAAAA

FIGURE 1669

MAAVPQNNLQEQLERHSARTLNNKLSLSKPKFSGFTFKKKTSSDNNVSVTNVSVAKTPVLRNKDVNVTEDFSFSE
PLPNTTNQQRVKDFFKNAPAGQETQRGGSKSLLPDFLQTPKEVVCTTQNTPTVKKSRDTALKKLEFSSSPDSLST
INDWDDMDDFDTSETSKSFVTPPQSHFVRVSTAQKSKKGKRNFFKAQLYTTNTVKTDLPPPSSESEQIDLTEEQK
DDSEWLSSDVICIDDGPIAEVHINEDAQESDSLKTHLEDERDNSEKKKNLEEAELHSTEKVPCIEFDDDDYDTDF
VPPSPEEIISASSSSSKCLSTLKDLDTSDRKEDVLSTSKDLLSKPEKMSMQELNPETSTDCDARQISLQQQLIHV
MEHICKLIDTIPDDKLKLLDCGNELLQQRNIRRKLLTEVDFNKSDASLLGSLWRYRPDSLDGPMEGDSCPTGNSM
KELNFSHLPSNSVSPGDCLLTTTLGKTGFSATRKNLFERPLFNTHLQKSFVSSNWAETPRLGKKNESSYFPGNVL
TSTAVKDQNKHTASINDLERETQPSYDIDNFDIDDFDDDDDWEDIMHNLAASKSSTAAYQPIKEGRPIKSVSERL
SSAKTDCLPVSSTAQNINFSESIQNYTDKSAQNLASRNLKHERFQSLSFPHTKEMMKIFHKKFGLHNFRTNQLEA
INAALLGEDCFILMPTGGGKSLCYQLPACVSPGVTVVISPLRSLIVDQVQKLTSLDIPATYLTGDKTDSEATNIY
LQLSKKDPIIKLLYVTPEKICASNRLISTLENLYERKLLARFVIDEAHCVSQWGHDFRQDYKRMNMLRQKFPSVP
VMALTATANPRVQKDILTQLKILRPQVFSMSFNRHNLKYYVLPKKPKKVAFDCLEWIRKHHPYDSGIIYCLSRRE
CDTMADTLQRDGLAAALAYHAGLSDSARDEVQQKWINQDGCQVICATIAFGMGIDKPDVRFVIHASLPKSVEGYYQ
ESGRAGRDGEISHCLLFYTYHDVTRLKRLIMMEKDGNHHTRETHFNNLYSMVHYCENITECRRIQLLAYFGENGF
NPDFCKKHPDVSCDNCCKTKDYKTRDVTDDVKSIVRFVQEHSSSQGMRNIKHVGPSGRFTMNMLVDIFLGSKSAK
IQSGIFGKGSAYSRHNAERLFKKLILDKILDEDLYINANDQAIAYVMLGNKAQTVLNGNLKVDFMETENSSSVKK
QKALVAKVSQREEMVKKCLGELTEVCKSLGKVFGVHYFNIFNTVTLKKLAESLSSDPEVLLQIDGVTEDKLEKYG
AEVISVLQKYSEWTSPAEDSSPGISLSSSRGPGRSAAEELDEEIPVSSHYFASKTRNERKRKKMPASQRSKRRKT
ASSGSKAKGGSATCRKISSKTKSSSIIGSSSASHTSQATSGANSKLGIMAPPKPINRPFLKPSYAFS

FIGURE 1670

ATACGACTACACCTGCTCCGGAGCCCGCGGCGGTACCTGCAGCGGAGGAGCTCTGTCTTCCCCTTCATCTCACGC
GAGCCCGGCGTCCCGCCGCGTGCGCCCCGGCGCAGCCCGCCAGTCCGCCCGGAGCCCGCCCAGTCGCCGCGCTGC
ACGCCCGGGGTGAACCCTCTGCCCTCGCTGGGACAGAGGGCCCCGCAGCCGTC**ATG**CTTTCCGCCATCTACACAG
TCCTGGCGGGACTGCTGTTCCTGCCGCTCCTGGTGAACCTCTGCTGCCCATACTTCTTCCAGGACATAGGCTACT
TCTTGAAGGTGGCCGCCGTGGGCCGGAGGGTGCGCAGCTACGGGCAGCGGCGGCCGGCGCGCACCATCCTGCGGG
CGTTCCTGGAGAAAGCGCGCCAGACGCCACACAAGCCTTTTCTGCTCTTCCGCGACGAGACTCTCACCTACGCGC
AGGTGGACCGGCGCAGCAATCAAGTGGCCCGGGCGCTGCACGACCACCTCGGCCTGCGCCAGGGAGACTGCGTGG
CGCTCCTTATGGGTAACGAGCCGGCCTACGTGTGGCTGTGGCTGGGGCTGGTGAAGCTGGGCTGTGCCATGGCGT
GCCTCAATTACAACATCCGCGCGAAGTCCCTGCTGCACTGCTTCCAGTGCTGCGGGGCGAAGGTGCTGCTGGTGT
CGCCAGAACTACAAGCAGCTGTCGAAGAGATACTGCCAAGCCTTAAAAAAGATGATGTGTCCATCTATTATGTGA
GCAGAACTTCTAACACAGATGGGATTGACTCTTTCCTGGACAAAGTGGATGAAGTATCAACTGAACCTATCCCAG
AGTCATGGAGGTCTGAAGTCACTTTTTCCACTCCTGCCTTATACATTTATACTTCTGGAACCACAGGTCTTCCAA
AAGCAGCCATGATCACTCATCAGCGCATATGGTATGGAACTGGCCTCACTTTTGTAAGCGGATTGAAGGCAGATG
ATGTCATCTATATCACTCTGCCCTTTTACCACAGTGCTGCACTACTGATTGGCATTCACGGATGTATTGTGGCTG
GTGCTACTCTTGCCTTGCGGACTAAATTTTCAGCCAGCCAGTTTTGGGATGACTGCAGAAAATACAACGTCACTG
TCATTCAGTATATCGGTGAACTGCTTCGGTATTTATGCAACTCACCACAGAAACCAAATGACCGTGATCATAAAG
TGAGACTGGCACTGGGAAATGGCTTACGAGGAGATGTGTGGAGACAATTTGTCAAGAGATTTGGGGACATATGCA
TCTATGAGTTCTATGCTGCCACTGAAGGCAATATTGGATTTATGAATTATGCGAGAAAAGTTGGTGCTGTTGGAA
GAGTAAACTACCTACAGAAAAAAATCATAACTTATGACCTGATTAAATATGATGTGGAGAAAGATGAACCTGTCC
GTGATGAAAATGGATATTGCGTCAGAGTTCCCAAAGGTGAAGTTGGACTTCTGGTTTGCAAAATCACACAACTTA
CACCATTTAATGGCTATGCTGGAGCAAAGGCTCAGACAGAGAAGAAAAAACTGAGAGATGTCTTTAAGAAAGGAG
ACCTCTATTTCAACAGTGGAGATCTCTTAATGGTTGACCATGAAAATTTCATCTATTTCCACGACAGAGTTGGAG
ATACATTCCGGTGGAAAGGGGAAAATGTGGCCACCACTGAAGTTGCTGATACAGTTGGACTGGTTGATTTTGTCC
AAGAAGTAAATGTTTATGGAGTGCATGTGCCAGATCATGAGGGTCGCATTGGCATGGCCTCCATCAAAATGAAAG
AAAACCATGAATTTGATGGAAAGAAACTCTTTCAGCACATTGCTGATTACCTACCTAGTTATGCAAGGCCCCGGT
TTCTAAGAATACAGGACACCATTGAGATCACTGGAACTTTTAAACACCGCAAAATGACCCTGGTGGAGGAGGGCT
TTAACCCTGCTGTCATCAAAGATGCCTTGTATTTCTTGGATGACACAGCAAAAATGTATGTGCCTATGACTGAGG
ACATCTATAATGCCATAAGTGCTAAAACCCTGAAACTC**TGA**ATATTCCCAGGAGGATAACTCAACATTTCCAGAA
AGAAACTGAATGGACAGCCACTTGATATAATCCAACTTTAATTTGATTGAAGATTGTGAGGAAATTTTGTAGGAA
ATTTGCATACCCGTAAAGGGAGACTTTTTTAAATAACAGTTGAGTCTTTGCAAGTAAAAAGATTTAGAGATTATT
ATTTTTCAGTGTGCACCTACTGTTTGTATTTGCAAACTGAGCTTGTTGGAGGGAAGGCATTATTTTTTAAAATAC
TTAGTAAATTAAATGAAC

FIGURE 1671

MLSAIYTVLAGLLFLPLLVNLCCPYFFQDIGYFLKVAAVGRRVRSYGQRRPARTILRAFLEKARQTPHKPFLLFR
DETLTYAQVDRRSNQVARALHDHLGLRQGDCVALLMGNEPAYVWLWLGLVKLGCAMACLNYNIRAKSLLHCFQCC
GAKVLLVSPELQAAVEEILPSLKKDDVSIYYVSRTSNTDGIDSFLDKVDEVSTEPIPESWRSEVTFSTPALYIYT
SGTTGLPKAAMITHQRIWYGTGLTFVSGLKADDVIYITLPFYHSAALLIGIHGCIVAGATLALRTKFSASQFWDD
CRKYNVTVIQYIGELLRYLCNSPQKPNDRDHKVRLALGNGLRGDVWRQFVKRFGDICIYEFYAATEGNIGFMNYA
RKVGAVGRVNYLQKKIITYDLIKYDVEKDEPVRDENGYCVRVPKGEVGLLVCKITQLTPFNGYAGAKAQTEKKKL
RDVFKKGDLYFNSGDLLMVDHENFIYFHDRVGDTFRWKGENVATTEVADTVGLVDFVQEVNVYGVHVPDHEGRIG
MASIKMKENHEFDGKKLFQHIADYLPSYARPRFLRIQDTIEITGTFKHRKMTLVEEGFNPAVIKDALYFLDDTAK
MYVPMTEDIYNAISAKTLKL

FIGURE 1672

ATACGACTACACCTGCTCCGGAGCCCGCGGCGGTACCTGCAGCGGAGGAGCTCTGTCTTCCCCTTCATCTCACGC
GAGCCCGGCGTCCCGCCGCGTGCGCCCCGGCGCAGCCCGCCAGTCCGCCCGGAGCCCGCCCAGTCGCCGCGCTGC
ACGCCCGGGGTGAACCCTCTGCCCTCGCTGGGACAGAGGGCCCCGCAGCCGTC**ATG**CTTCCGCCATCTACACAG
TCCTGGCGGGACTGCTGTTCCTGCCGCTCCTGGTGAACCTCTGCTGCCCATACTTCTTCCAGGACATAGGCTACT
TCTTGAAGGTGGCCGCCGTGGGCCGGAGGGTGCGCAGCTACGGGCAGCGGCGGCCGGCGCGCACCATCCTGCGGG
CGTTCCTGGAGAAAGCGCGCCAGACGCCACACAAGCCTTTTCTGCTCTTCCGCGACGAGACTCTCACCTACGCGC
AGGTGGACCGGCGCAGCAATCAAGTGGCCCGGGCGCTGCACGACCACCTCGGCCTGCGCCAGGGAGACTGCGTGG
CGCTCCTTATGGGTAACGAGCCGGCCTACGTGTGGCTGTGGCTGGGGCTGGTGAAGCTGGGCTGTGCCATGGCGT
GCCTCAATTACAACATCCGCGCGAAGTCCCTGCTGCACTGCTTCCAGTGCTGCGGGGCGAAGGTGCTGCTGGTGT
CGCCAGAACTACAAGCAGCTGTCGAAGAGATACTGCCAAGCCTTAAAAAAGATGATGTGTCCATCTATTATGTGA
GCAGAACTTCTAACACAGATGGGATTGACTCTTTCCTGGACAAAGTGGATGAAGTATCAACTGAACCTATCCCAG
AGTCATGGAGGTCTGAAGTCACTTTTTCCACTCCTGCCTTATACATTTATACTTCTGGAACCACAGGTCTTCCAA
AAGCAGCCATGATCACTCATCAGCGCATATGGTATGGAACTGGCCTCACTTTTGTAAGCGGATTGAAGGCAGATG
ATGTCATCTATATCACTCTGCCCTTTTACCACAGTGCTGCACTACTGATTGGCATTCACGGATGTATTGTGGCTG
GTGCTACTCTTGCCTTGCGGACTAAATTTTCAGCCAGCCAGTTTTGGGATGACTGCAGAAAATACAACGTCACTG
TCATTCAGTATATCGGTGAACTGCTTCGGTATTTATGCAACTCACCACAGAAACCAAATGACCGTGATCATAAAG
TGAGACTGGCACTGGGAAATGGCTTACGAGGAGATGTGTGGAGACAATTTGTCAAGAGATTTGGGGACATATGCA
TCTATGAGTTCTATGCTGCCACTGAAGGCAATATTGGATTTATGAATTATGCGAGAAAAGTTGGTGCTGTTGGAA
GAGTAAACTACCTACAGAAAAAAATCATAACTTATGACCTGATTAAATATGATGTGGAGAAAGATGAACCTGTCC
GTGATGAAAATGGATATTGCGTCAGAGTTCCCAAAGGTGAAGTTGGACTTCTGGTTTGCAAAATCACACAACTTA
CACCATTTAATGGCTATGCTGGAGCAAAGGCTCAGACAGAGAAGAAAAAACTGAGAGATGTCTTTAAGAAAGGAG
ACCTCTATTTCAACAGTGGAGATCTCTTAATGGTTGACCATGAAAATTTCATCTATTTCCACGACAGAGTTGGAG
ATACATTCCGGTGGAAAGGGGAAAATGTGGCCACCACTGAAGTTGCTGATACAGTTGGACTGGTTGATTTTGTCC
AAGAAGTAAATGTTTATGGAGTGCATGTGCCAGATCATGAGGGTCGCATTGGCATGGCCTCCATCAAAATGAAAG
AAAACCATGAATTTGATGGAAAGAAACTCTTTCAGCACATTGCTGATTACCTACCTAGTTATGCAAGGCCCCGGT
TTCTAAGAATACAGGACACCATTGAGATCACTGGAACTTTTAAACACCGCAAAATGACCCTGGTGGAGGAGGGCT
TTAACCCTGCTGTCATCAAAGATGCCTTGTATTTCTTGGATGACACAGCAAAAATGTATGTGCCTATGACTGAGG
ACATCTATAATGCCATAAGTGCTAAAACCCTGAAACTC**TGA**ATATTCCCAGGAGGATAACTCAACATTTCCAGAA
AGAAACTGAATGGACAGCCACTTGATATAATCCAACTTTAATTTGATTGAAGATTGTGAGGAAATTTTGTAGGAA
ATTTGCATACCCGTAAAGGGAGACTTTTTTAAATAACAGTTGAGTCTTTGCAAGTAAAAAGATTTAGAGATTATT
ATTTTTCAGTGTGCACCTACTGTTTGTATTTGCAAACTGAGCTTGTTGGAGGGAAGGCATTATTTTTTAAAATAC
TTAGTAAATTAAATGAAC

FIGURE 1673

MLSAIYTVLAGLLFLPLLVNLCCPYFFQDIGYFLKVAAVGRRVRSYGQRRPARTILRAFLEKARQTPHKPFLLFR
DETLTYAQVDRRSNQVARALHDHLGLRQGDCVALLMGNEPAYVWLWLGLVKLGCAMACLNYNIRAKSLLHCFQCC
GAKVLLVSPELQAAVEEILPSLKKDDVSIYYVSRTSNTDGIDSFLDKVDEVSTEPIPESWRSEVTFSTPALYIYT
SGTTGLPKAAMITHQRIWYGTGLTFVSGLKADDVIYITLPFYHSAALLIGIHGCIVAGATLALRTKFSASQFWDD
CRKYNVTVIQYIGELLRYLCNSPQKPNDRDHKVRLALGNGLRGDVWRQFVKRFGDICIYEFYAATEGNIGFMNYA
RKVGAVGRVNYLQKKIITYDLIKYDVEKDEPVRDENGYCVRVPKGEVGLLVCKITQLTPFNGYAGAKAQTEKKKL
RDVFKKGDLYFNSGDLLMVDHENFIYFHDRVGDTFRWKGENVATTEVADTVGLVDFVQEVNVYGVHVPDHEGRIG
MASIKMKENHEFDGKKLFQHIADYLPSYARPRFLRIQDTIEITGTFKHRKMTLVEEGFNPAVIKDALYFLDDTAK
MYVPMTEDIYNAISAKTLKL

FIGURE 1674

GAAAAAAGAAAATGTCAGAGGAATTTGAAGCCAATACTATGGATTCTCTGGTAGACATGCCATTTGCTACTGTAG
ATATTCAGGATGACTGTGGAATCACTGATGAACCTCAAATAAATTTGAAGAGAAGTCAAGAAAATGAATGGGTCA
AGAGTGATCAAGTAAAGAAGAGGAAAAAAAAGAGAAAAGATTATCAACCCAACTATTTCCTGTCCATTCCAATCA
CCAACAAAGAGATTATAAAAGGAATTAAGATCCTGCAGAATGCAATAATACAACAAGATGAGCGACTGGCCAAAG
CAATGGTCAGTGATGGTTCCTTTCATATTACCCTGCTGGTGATGCAATTATTAAATGAAGATGAAGTAAACATTG
GTATTGATGCTCTTTTGGAATTGAAACCATTCATAGAAGAACTCCTCCAGGGAAAACATTTGACTTTGCCCTTTC
AAGGGATTGGTACTTTTGGAAATCAGGTTGGATTTGTGAAGCTGGCAGAAGGAGATCATGTAAACTCACTTTTGG
AGATAGCAGAGACTGCAAATAGGACATTTCAAGAAAAAGGCATCCTGGTAGGAGAGAGCAGAAGTTTTAAACCTC
ATTTGACCTTCATGAAGTTGTCAAAATCACCGTGGCTCCGTAAGAATGGAGTGAAAAAAATAGATCCTGATTTAT
ATGAAAAGTTTATCAGTCACAGATTTGGAGAAGAAATATTATATCGCATAGATCTTTGCTCCATGCTGAAGAAAA
AACAAAGTAATGGTTATTATCACTGTGAATCTTCCATTGTGATTGGTGAAAAGAACGGAGGGGAGCCCGATGACG
CTGAACTAGTAAGGCTCAGTAAGAGGCTGGTGGAGAACGCGGTGCTCAAGGCTGTCCAGCAGTATCTGGAGGAAA
CACAGAATAAAAACAAGCCGGGGGAGGGGAGCTCTGTGAAAACCGAAGCAGCTGATCAGAATGGCAATGACAATG
AGAACAACAGGAAATGAGCCCGGAACGCAGGCCCCCATGTCTCTGTGCAAAGCCTCCCTGCTTCCCTCTGCTGAG
TCTAGGGACTGACTTGCAGCGTGCTGTTTAAGTTAAGTTTCTCTGGTGCAATCTGTGAAGATTGCCTAATACTTT
TCATGATCGATGTGTTCGCATTGCTGAAACACAACAGAAGAAAAATGGAGTGCTGGGACTGGCAGAGGAAATTAA
TTGATGAAAGAAGAATGGCCCAAGTTTCATTCGCCCTCAGCCACGCACAAGGGAAAGGGAACTTTGGGTTATGCC
TCCTGGACGCAAATTAAAGGCCGAGAAAGAGGCCTTGCCATCAATGGAATACTGCCATTTATATTGCTTAGCAGG
GCATTTGACTACTTTATCTGAGGCCAGAACTCTCACACACAGCTATCAAGTGCTAAGTTTAAAATAATCACTGTT
GGAATTGTCATCTGTACAATTAGTCCATAATGTTTCATGTTTGTCCTAAGTGTGCTGTTGCTATGCAGTGTGATC
TTTATTTATAGTAAATTATGTTTCATGTAAATGATATATTTTTGGTGAAATGCAACCTTTTCTATAAAATGTGGG
CAACATTTTAAAGTTTTTTTAAAATCCTATTTTGATAAGTCAGTATGCCATATTTAATGAAATGTTATTATATAA
TTTTTTTTTCTTAGGCAAGAAACCTATTGGAATTCGAGACTTAATTAATGAAGCTTTGCATCGAGAAACGATGGG
TCTGAAGTCCAAAGTGAAACAGATAAAGGAACTTTTATTAAAGCCTGAGACTCAGGCCAGAATTAGGAGGGAGCT
TTTTGAAGGAAGACTTATTAACAACAGTAATTCAGCAAATGACGTTGATTTCAGCACAACTTTGACATAAGCTCT
ACATTGCGATTGTGACAACATAGCTTATGAAATCTTTTCAGCTTATTAAGTAGCTCTTTGGTAAACACCAAAGAA
GTTTCTGATAGTGTCTGCACAACAGCAAACCAACATTTGGTGAGGAATTAGCAATTTCTTGCCAAAGAAAATTGA
TTCTGCCCAATTATTTTTTGAGCTACACTTGTGTTTTAGAATATCTGTTTCTGTAATATTGAGAGTTATTTTATA
GAAATGATTTCTTAATTAGCTGTTGTGAGATATTTCTCGGGTCCTTGCAGAAAAAAACATACAGACTGTGAACAA
ATCATTCACAAACAGAATAAAACAGAGCCAACAACAGTATTTTAAGGGTCACTTGCCTCCTGTTGACACAATTGT
TGCTAAATCAAAAGAAGCGTTGTCCAGGTGTGTCTACATCTAGTGTTACTTTTAATGAGAATTTGAATGTTTATT
GAACAATAGTACTTGAATGAACATTTATAAATGTAATTATTGCGATCACTGGTTAAGAATGTTTTATATATCCTT
ATAATATTTTTCACTGATCAAAATGTTGTTCTGCTTTTTCATTTCTTAAGGAATACATGTTTGGGATTTTTATTT
TTTACGTGTCCGAAGATAAGCTCCAGGTCTTATCGTATCCCTTGCCATCTGAACTTGTTTGCACTGCTTCTGTTT
GAAAGAGCATCTTGAAAAACTTCCCCGGTATGATGATTGTTGGTAACAACTTTTTCTATAGTCATTGATGGAGTA
GATCATGATGGAGGGGAAATCACTGGAGATCAAATATGTAAAATCATTTCAAATATAAAATCCAGTTTACTCATG
GATTTTAGCTATTTTTTCACTGGGTAAATTATACTACATTTATTTACAAATGAGTTTATGCATTTTCATGGCTCT
TAATAAACATATTGTTTTCCCTTGAAAAAAAAAAAAAAAAAAAAA

FIGURE 1675

MSEEFEANTMDSLVDMPFATVDIQDDCGITDEPQINLKRSQENEWVKSDQVKKRKKKRKDYQPNYFLSIPITNKE
IIKGIKILQNAIIQQDERLAKAMVSDGSFHITLLVMQLLNEDEVNIGIDALLELKPFIEELLQGKHLTLPFQGIG
TFGNQVGFVKLAEGDHVNSLLEIAETANRTFQEKGILVGESRSFKPHLTFMKLSKSPWLRKNGVKKIDPDLYEKF
ISHRFGEEILYRIDLCSMLKKKQSNGYYHCESSIVIGEKNGGEPDDAELVRLSKRLVENAVLKAVQQYLEETQNK
NKPGEGSSVKTEAADQNGNDNENNRK

FIGURE 1676

ATGAGGTCCAGCTCGTCCCTGGCTCTCTCTCTCTCTCAGGTCCTGATGTCTTTTCCAAGTCTGGAGAGCAGCGATGCTGCTGTGCCCTGCGCAGAAAACCGTGTTCCGGCTGCAGCTAACCACCGCAGCTCAATGTCTCTGGGTGTATCTCAGAGATAAGCAGGTGGTGGTGTTCCTTGCTTATCCCACAAGGGCACCTGGCCGGAATAATGGAGTCACTTCCCTCCACTGGCCTGACCCCACTCTTTCTCTTTCCTGGACACAGGAGGCATACACGGAATACCTGAGGAGCATCCACTATATCTCCCAGGTGTTACTAGAAGAAGTGGAAACCACTAAAGAAGCTGGGGAAACTGTGCCCCCCGACACCTCCAAGATGCTGAAACTAGCACAGCAGTGTCTGGAGAGGGCCCAGTCGACGGCCGCCAAGCTTGGGAAAACACGCCTGAAGCCAACCATGCCTGCAGCTGCTCCCATCCCCCAGCCTGCCGGCCGACACCGCCGTGTATACTCCGATGAAGGAGGAAAGCTCTCTCCTTTTCTGCCACCCGAGATCTTCCAGAAGCTTCAGGGGGCAGAGTCACAAAGCTGTAAGAAAGAGCTGACGCCACTGGAGGAGGCCTCCCTGCAGAATCAGAAGCTGAAGGCTGCGTATGAGGCCCGAATGGCGCGGCTAGACCCCAGCCAGGCCATGCAGAAGACATCCCTGACCCTCTCTCTACAGCGGCAGATGATGGAGAACCTAGTGATTGCCAAAGCCCGGGAGGAGACACTCCAGAGAAAGATGGAGGAGCGCCGGCTGCGGCTCCAGGAGGCCGCCAACAGGAGGTTTTGCAGCAAGTTCGCCCTGACCCCGGAGGAACGGGAGCAGCGGGCCCTTTACGCCGCCATCCTGGAGTACGAACAGGACCATGACTGGCCGAAGCACTGGAAGGCCAAGCTCAAGAGGAATCCGGGGGACCTGTCACTCGTAACCAGCCTGGTCTCACACCTGCTCAGCCTCCCCGACCACCCGATCGCGCAGCTCCTGAGGCGGCTGCAGTGCTCCGTGTACAGCGCCCTGTATCCCGCCGTGAGCAGAGCAGCCGCGCCAGCCCCAGGCTGCTGCCCCCCGACCCCCAACCCCGGAAGCCGACGGCTGCGGCCCTCGCAGAGCCTCCATTGCATGCTGTCCCCGCCCGAGCCCAGCGCAGCCCCGCGGCCCCAGGACAGTCCCCCCACGCCCCCACTCCAACCCGGCCCGTGGGGTCTCCCTCACCCCTGGGGGACACCGCATCTGGATTGCCAGACAAGGACAGCTCGTTCGAGGACCTGGAGCAGTTCCTGGGGACGTCTGAGCCGCAGGGCCGGGGCCGTGGGGTACAGCCGGAGCCCCAGCTGCAGCAGCTGAAGACCGCGGTGGAGGAGATCCACAATGCCGTAGACAGGCTGTCTCGCTGACCCTTCTGGCCTTCGAAGGCCTAAACACAGCTGCCTCCAAGGACCGCTGCCTGGCCTGCATTGAGGAACCCTTTTTCTCCCCGCTGTGGCCTCTGCTGCTGGCCCTGTACAGGAGCGTGCACCGAGCCCGGGAGGCTGCCCTGAGCAGGAGCATGGAGCTCTACAGGAATGCACCCCCCACCGCCATTGGCATCCCCACCAAGCTCCTCCCCCAGAACCCTGAGGCCAAGGGGGCCACTGGCTACCCCTACTGCGCGGCGGCCCAGGAGCTCGGACTGCTGGTCCTGGAGAGCTGCCCCCAGAAGAAGCTGGAGTGCATAGTGCGGACCCTGCGGATCATCTGTGTCTGTGCGGAAGACTACTGCCCCACCCCAGAGGCCACACCCCAGGCCGGCCCCCGCCCATCGCTGCAGCTGCCATTGGTGCCGATGACCTGCTGCCCATCCTGTCCTTCGTGGTGCTGAGGAGCGGCCTCCCTCAGCTGGTGTCGGAGTGCGCGGCCCTGGAGGAGTTCATCCACGAGGGGTACCTGATCGGAGAGGAGGGCTACTGCCTCACATCACTGCAGAGTGCCCTGAGCTACGTGGAGCTGCTGCCCCGGGGAGGCCTGGCCAAGTAGTACAGCTAGAGCCCAGGGTCCCTGCAGGGCCTGGCCTCGCCTCCCAGGGCTGTCTCTCCTACACCTGGAGCCATGGGATCTACTGAGGACCATCCTGGAGCCTCACGCTGCTCTGCACATGGTGGGGGCTTGTCCACTGTGGTGTGCTCTCCAGCTCTTCACCTTCCTCACCTCACATCTGACCCTGGAGCTTGGGGTTGGCACCTCTGCCCCGACAGAATGGGGCTGAATCAGCTCCAGGAGGAACCAGGCCCTGCTCTCCTGTGTAGCCTCAGAGAGGCCAAGAAGGGAAGCTTTGGGCTTCGGTGGGTGCAGGCTCAGCGATGAACATCTGGCTGGGGCAGCTCCTGGGGAGCATCAGGGAAGAGGGGGCCATGAGCCGGCCAGCAGTGGAGACGGCAGTCCAGTTTCTCTCCCCTCTGACCCCTAGAAGGGGAGTTGTAGCCCCATGAACTAGTTTCTTGTCTGGGTCAGGAACAAGGGCCGGCTGGGGCCTGGGGTGCAGCTGGTGTCAGGGTATGCTGTTTGCTGATGGGCAGGGACACCCCTGCAGGGTCTCGGGCTCTGAGCCCAGGACATTCCCTGCCCCTTGCTCACCTTGGCTGTGGGCTGTGAACATTCCGGGACCCTGGGCATCTTATCTAGGTCCGTGCAGCCCAAGGGTCAGCCCTCTTGACTGTCACATGCTGCCCCCACCCAGCCTAAAATAAAGAGCTCACTGCTGTG

FIGURE 1677

MLLCPAQKTVFRLQLTTAAQCLWVYLRDKQVVVFLAYPTRAPGRNNGVTSLHWPDPTLSLSWTQEAYTEYLRSIH
YISQVLLEEVETTKEAGETVPPDTSKMLKLAQQCLERAQSTAAKLGKTRLKPTMPAAAPIPQPAGRHRRVYSDEG
GKLSPFLPPEIFQKLQGAESQSCKKELTPLEEASLQNQKLKAAYEARMARLDPSQAMQKTSLTLSLQRQMMENLV
IAKAREETLQRKMEERRLRLQEAANRRFCSKFALTPEEREQRALYAAILEYEQDHDWPKHWKAKLKRNPGDLSLV
TSLVSHLLSLPDHPIAQLLRRLQCSVYSALYPAVSRAAAPAPGCCPPTPNPGSRRLRPSQSLHCMLSPPEPSAAP
RPQDSPPTPPLQPGPWGLPHPWGTPHLDCQTRTARSRTWSSSWGRLSRRAGAVGYSRSPSCSS

FIGURE 1678A

TGGCTTCCTTGTGGTTCCTCAGTGGTGCCTGCAACCCCTGGTTCACCTCCTTCCAGGTTCTGGCTCCTTCCAGCC
ATGGCTCTCAGAGTCCTTCTGTTAACAGCCTTGACCTTATGTCATGGGTTCAACTTGGACACTGAAAACGCAATG
ACCTTCCAAGAGAACGCAAGGGGCTTCGGGCAGAGCGTGGTCCAGCTTCAGGGATCCAGGGTGGTGGTTGGAGCC
CCCCAGGAGATAGTGGCTGCCAACCAAAGGGGCAGCCTCTACCAGTGCGACTACAGCACAGGCTCATGCGAGCCC
ATCCGCCTGCAGGTCCCCGTGGAGGCCGTGAACATGTCCCTGGGCCTGTCCCTGGCAGCCACCACCAGCCCCCCT
CAGCTGCTGGCCTGTGGTCCCACCGTGCACCAGACTTGCAGTGAGAACACGTATGTGAAAGGGCTCTGCTTCCTG
TTTGGATCCAACCTACGGCAGCAGCCCCAGAAGTTCCCAGAGGCCCTCCGAGGGTGTCCTCAAGAGGATAGTGAC
ATTGCCTTCTTGATTGATGGCTCTGGTAGCATCATCCCACATGACTTTCGGCGGATGAAGGAGTTTGTCTCAACT
GTGATGGAGCAATTAAAAAAGTCCAAAACCTTGTTCTCTTTGATGCAGTACTCTGAAGAATTCCGGATTCACTTT
ACCTTCAAAGAGTTCCAGAACAACCCTAACCCAAGATCACTGGTGAAGCCAATAACGCAGCTGCTTGGGCGGACA
CACACGGCCACGGGCATCCGCAAAGTGGTACGAGAGCTGTTTAACATCACCAACGGAGCCCGAAAGAATGCCTTT
AAGATCCTAGTTGTCATCACGGATGGAGAAAAGTTTGGCGATCCCTTGGGATATGAGGATGTCATCCCTGAGGCA
GACAGAGAGGGAGTCATTCGCTACGTCATTGGGGTGGGAGATGCCTTCCGCAGTGAGAAATCCCGCCAAGAGCTT
AATACCATCGCATCCAAGCCGCCTCGTGATCACGTGTTCCAGGTGAATAACTTTGAGGCTCTGAAGACCATTCAG
AACCAGCTTCGGGAGAAGATCTTTGCGATCGAGGGTACTCAGACAGGAAGTAGCAGCTCCTTTGAGCATGAGATG
TCTCAGGAAGGCTTCAGCGCTGCCATCACCTCTAATGGCCCCTTGCTGAGCACTGTGGGGAGCTATGACTGGGCT
GGTGGAGTCTTTCTATATACATCAAAGGAGAAAAGCACCTTCATCAACATGACCAGAGTGGATTCAGACATGAAT
GATGCTTACTTGGGTTATGCTGCCGCCATCATCTTACGGAACCGGGTGCAAAGCCTGGTTCTGGGGGCACCTCGA
TATCAGCACATCGGCCTGGTAGCGATGTTCAGGCAGAACACTGGCATGTGGGAGTCCAACGCTAATGTCAAGGGC
ACCCAGATCGGCGCCTACTTCGGGGCCTCCCTCTGCTCCGTGGACGTGGACAGCAACGGCAGCACCGACCTGGTC
CTCATCGGGGCCCCCCATTACTACGAGCAGACCCGAGGGGGCCAGGTGTCCGTGTGCCCCTTGCCCAGGGGGAGG
GCTCGGTGGCAGTGTGATGCTGTTCTCTACGGGGAGCAGGGCCAACCCTGGGGCCGCTTTGGGGCAGCCCTAACA
GTGCTGGGGGACGTAAATGGGGACAAGCTGACGGACGTGGCCATTGGGGCCCCAGGAGAGGAGGACAACCGGGGT
GCTGTTTACCTGTTTCACGGAACCTCAGGATCTGGCATCAGCCCCTCCCATAGCCAGCGGATAGCAGGCTCCAAG
CTCTCTCCCAGGCTCCAGTATTTTGGTCAGTCACTGAGTGGGGGCCAGGACCTCACAATGGATGGACTGGTAGAC
CTGACTGTAGGAGCCCAGGGGCACGTGCTGCTGCTCAGGTCCCAGCCAGTACTGAGAGTCAAGGCAATCATGGAG
TTCAATCCCAGGGAAGTGGCAAGGAATGTATTTGAGTGTAATGATCAGGTGGTGAAAGGCAAGGAAGCCGGAGAG
GTCAGAGTCTGCCTCCATGTCCAGAAGAGCACACGGGATCGGCTAAGAGAAGGACAGATCCAGAGTGTTGTGACT
TATGACCTGGCTCTGGACTCCGGCCGCCCACATTCCCGCGCCGTCTTCAATGAGACAAAGAACAGCACACGCAGA
CAGACACAGGTCTTGGGGCTGACCCAGACTTGTGAGACCCTGAAACTACAGTTGCCGAATTGCATCGAGGACCCA
GTGAGCCCCATTGTGCTGCGCCTGAACTTCTCTCTGGTGGGAACGCCATTGTCTGCTTTCGGGAACCTCCGGCCA
GTGCTGGCGGAGGATGCTCAGAGACTCTTCACAGCCTTGTTTCCCTTTGAGAAGAATTGTGGCAATGACAACATC
TGCCAGGATGACCTCAGCATCACCTTCAGTTTCATGAGCCTGGACTGCCTCGTGGTGGGTGGGCCCCGGGAGTTC
AACGTGACAGTGACTGTGAGAAATGATGGTGAGGACTCCTACAGGACACAGGTCACCTTCTTCTTCCCGCTTGAC
CTGTCCTACCGGAAGGTGTCCACACTCCAGAACCAGCGCTCACAGCGATCCTGGCGCCTGGCCTGTGAGTCTGCC
TCCTCCACCGAAGTGTCTGGGGCCTTGAAGAGCACCAGCTGCAGCATAAACCACCCCATCTTCCCGGAAAACTCA
GAGGTCACCTTTAATATCACGTTTGATGTAGACTCTAAGGCTTCCCTTGGAAACAAACTGCTCCTCAAGGCCAAT
GTGACCAGTGAGAACAACATGCCCAGAACCAACAAAACCGAATTCCAACTGGAGCTGCCGGTGAAATATGCTGTC
TACATGGTGGTCACCAGCCATGGGGTCTCCACTAAATATCTCAACTTCACGGCCTCAGAGAATACCAGTCGGGTC
ATGCAGCATCAATATCAGGTCAGCAACCTGGGGCAGAGGAGCCCCCCCATCAGCCTGGTGTTCTTGGTGCCCGTC
CGGCTGAACCAGACTGTCATATGGGACCGCCCCCAGGTCACCTTCTCCGAGAACCTCTCGAGTACGTGCCACACC
AAGGAGCGCTTGCCCTCTCACTCCGACTTTCTGGCTGAGCTTCGGAAGGCCCCCGTGGTGAACTGCTCCATCGCT
GTCTGCCAGAGAATCCAGTGTGACATCCCGTTCTTTGGCATCCAGGAAGAATTCAATGCTACCCTCAAAGGCAAC
CTCTCGTTTGACTGGTACATCAAGACCTCGCATAACCACCTCCTGATCGTGAGCACAGCTGAGATCTTGTTTAAC
GATTCCGTGTTCACCCTGCTGCCGGGACAGGGGGCGTTTGTGAGGTCCCAGACGGAGACCAAAGTGGAGCCGTTC
GAGGTCCCCAACCCCCTGCCGCTCATCGTGGGCAGCTCTGTCGGGGGACTGCTGCTCCTGGCCCTCATCACCGCC
GCGCTGTACAAGCTCGGCTTCTTCAAGCGGCAATACAAGGACATGATGAGTGAAGGGGGTCCCCCGGGGGCCGAA
CCCCAGTAGCGGCTCCTTCCCGACAGAGCTGCCTCTCGGTGGCCAGCAGGACTCTGCCCAGACCACACGAGCCCC

FIGURE 1678B

CAGGCTGCTGGACACGTCGGACAGCGAAGTATCCCCGACAGGACGGGCTTGGGCTTCCATTTGTGTGTGTGCAAG
TGTGTATGTGCGTGTGTGCGAGTGTGTGCAAGTGTCTGTGTGCAAGTGTGTGCACGTGTGCGTGTGCGTGCATGT
GCACTCGCACGCCCATGTGTGAGTGTGTGCAAGTATGTGAGTGTGTCCAGTGTGTGTGCGTGTGTCCATGTGTGT
GCAGTGTGTGCATGTGTGCGAGTGTGTGCATGTGTGTGCTCAGGGGCTGTGGCTCACGTGTGTGACTCAGAGTGT
CTCTGGCGTGTGGGTAGGTGACGGCAGCGTAGCCTCTCCGGCAGAAGGGAACTGCCTGGGCTCCCTTGTGCGTGG
GTAAGCCGCTGCTGGGTTTTCCTCCGGGAGAGGGGACGGTCAATCCTGTGGGTGAAGAGAGAGGGAAACACAGCA
GCATCTCTCCACTGAAAGAAGTGGGACTTCCCGTCGCCTGCGAGCCTGCGGCCTGCTGGAGCCTGCGCAGCTTGG
ATGGATACTCCATGAGAAAAGCCGTGGGTGGAACCAGGAGCCTCCTCCACACCAGCGCTGATGCCCAATAAAGAT
GCCCACTGAGGAATCATGAAGCTTCCTTTCTGGATTCATTTATTATTTCAATGTGACTTTAATTTTTTGGATGGA
TAAGCCTGTCTATGGTACAAAAATCACAAGGCATTCAAGTGTACAGTGAAAAGTCTCCCTTTCCAGATATTCAAG
TCACCTCCTTAAAGGTAGTCAAGATTGTGTTTTGAGGTTTCCTTCAGACAGATTCCAGGCGATGTGCAAGTGTAT
GCACGTGTGCACACACCACACACATACACACACACAAGCTTTTTTACACAAATGGTAGCATACTTTATATTGGTC
TGTATCTTGCTTTTTTTCACCAATATTTCTCAGACATCGGTTCATATTAAGACATAAATTACTTTTTCATTCTTT
TATACCGCTGCATAGTATTCCATTGTGTGAGTGTACCATAATGTATTTAACCAGTCTTCTTTTGATATACTATTT
TCATCTCTTGTTATTGCATCTGCTGAGTTAATAAATCAAATATATGTCAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAT

FIGURE 1679

MALRVLLLTALTLCHGFNLDTENAMTFQENARGFGQSVVQLQGSRVVVGAPQEIVAANQRGSLYQCDYSTGSCEP
IRLQVPVEAVNMSLGLSLAATTSPPQLLACGPTVHQTCSENTYVKGLCFLFGSNLRQQPQKFPEALRGCPQEDSD
IAFLIDGSGSIIPHDFRRMKEFVSTVMEQLKKSKTLFSLMQYSEEFRIHFTFKEFQNNPNPRSLVKPITQLLGRT
HTATGIRKVVRELFNITNGARKNAFKILVVITDGEKFGDPLGYEDVIPEADREGVIRYVIGVGDAFRSEKSRQEL
NTIASKPPRDHVFQVNNFEALKTIQNQLREKIFAIEGTQTGSSSSFEHEMSQEGFSAAITSNGPLLSTVGSYDWA
GGVFLYTSKEKSTFINMTRVDSDMNDAYLGYAAAIILRNRVQSLVLGAPRYQHIGLVAMFRQNTGMWESNANVKG
TQIGAYFGASLCSVDVDSNGSTDLVLIGAPHYYEQTRGGQVSVCPLPRGRARWQCDAVLYGEQGQPWGRFGAALT
VLGDVNGDKLTDVAIGAPGEEDNRGAVYLFHGTSGSGISPSHSQRIAGSKLSPRLQYFGQSLSGGQDLTMDGLVD
LTVGAQGHVLLLRSQPVLRVKAIMEFNPREVARNVFECNDQVVKGKEAGEVRVCLHVQKSTRDRLREGQIQSVVT
YDLALDSGRPHSRAVFNETKNSTRRQTQVLGLTQTCETLKLQLPNCIEDPVSPIVLRLNFSLVGTPLSAFGNLRP
VLAEDAQRLFTALFPFEKNCGNDNICQDDLSITFSFMSLDCLVVGGPREFNVTVTVRNDGEDSYRTQVTFFFPLD
LSYRKVSTLQNQRSQRSWRLACESASSTEVSGALKSTSCSINHPIFPENSEVTFNITFDVDSKASLGNKLLLKAN
VTSENNMPRTNKTEFQLELPVKYAVYMVVTSHGVSTKYLNFTASENTSRVMQHQYQVSNLGQRSPPISLVFLVPV
RLNQTVIWDRPQVTFSENLSSTCHTKERLPSHSDFLAELRKAPVVNCSIAVCQRIQCDIPFFGIQEEFNATLKGN
LSFDWYIKTSHNHLLIVSTAEILFNDSVFTLLPGQGAFVRSQTETKVEPFEVPNPLPLIVGSSVGGLLLLALITA
ALYKLGFFKRQYKDMMSEGGPPGAEPQ

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FIGURE 1680

GTCGCCTTCCAGCCCGTCCGCCTCCCGACCAGGGCCCGCGCCCCGTCCCGCCTCTCTCCCGCCCAGCCAAATGCA
GGCCGCCGCCCTCCCTGAGGAGATCCGTTGGCTCCTGGAAGATGCTGAAGAGTTTCTGGCAGAAGGTTTGCGGAA
TGAGAACCTCAGCGCTGTTGCAAGGGATCACAGAGACCATATTCTACGGGGCTTTCAGCAAATCAAAGCCAGGTA
CTATTGGGATTTTCAGCCCCAAGGGGGAGACATTGGACAGGACAGCTCTGATGATAATCACAGCGGGACTCTTGG
CCTGTCCCTCACATCCGATGCACCCTTTTTGTCAGATTATCAGGATGAGGGAATGGAAGACATCGTAAAAGGAGC
TCAAGAACTTGATAACGTAATCAAGCAAGGATACTTGGAGAAGAAAAGCAAAGATCATAGTTTCTTTGGATCGGA
GTGGCAGAAGCGATGGTGTGTTGTCAGCAGAGGTCTCTTCTACTACTATGCTAATGAGAAGAGCAAGCAGCCCAA
AGGGACCTTCCTCATTAAGGGCTACAGTGTACGGATGGCCCCCCACCTGCGAAGAGATTCCAAGAAAGAATCCTG
CTTTGAACTGACCTCCCAGGATAGGCGCAGCTATGAGTTTACAGCTACTAGTCCAGCAGAAGCCAGAGACTGGGT
GGATCAAATAAGTTTCTTGTTAAAGGATCTGAGCTCCTTAACCATTCCATATGAAGAGGATGAGGAGGAAGAAGA
AAAAGAAGAGACATATGATGATATTGATGGTTTTGACTCCCCAAGTTGTGGTTCCCAGTGCAGACCCACTATCTT
GCCTGGGAGTGTGGGGATAAAAGAGCCTACAGAGGAGAAAGAAGAAGAAGATATTTATGAAGTCTTGCCAGATGA
AGAGCATGATCTAGAAGAGGATGAGAGTGGCACTCGACGAAAAGGAGTAGACTATGCCAGTTACTACCAGGGCCT
ATGGGATTGCCATGGTGACCAGCCAGATGAACTGTCCTTCCAACGGGGTGACCTCATCCGTATTCTGAGCAAGGA
GTATAACATGTATGGCTGGTGGGTGGGAGAACTGAACAGCCTCGTTGGGATTGTTCCAAAGGAGTATCTCACCAC
TGCCTTTGAAGTGGAAGAAAGATGAAACCCAGGAAATATATTCTTCCCTCTCTCCTGCCTTTATGAGGAAACTGA
TCATCAAAAGTTCCCACTCCCTACTTCTGCCACCCCACCAACGCCTTGGACTCCTCTCTTTGCTGAAGAGACCCA
AGTCTCTTGACACCTCAGAGTGACTGTAAGCTACCAGTAAGACAAGTGGGAAGAGGCACGTTCATCAAACCTGTT
ACTAAACCAGCCTAGTCATAGCTCATCCCCATGTGTAAATGTGTCCACACAACCACATCTGCCTTTTCCACAAGC
TTTTCACAAAGAAGGTGAGAGAGAAGGAAACCTTGGGAGGAGGACATTACTGGTTGTTCTGGCTGGTTTGAAAAG
CACAAATAAACTTGGGATGTGGTTCCTTGCC

FIGURE 1681

MQAAALPEEIRWLLEDAEEFLAEGLRNENLSAVARDHRDHILRGFQQIKARYYWDFQPQGGDIGQDSSDDNHSGT
LGLSLTSDAPFLSDYQDEGMEDIVKGAQELDNVIKQGYLEKKSKDHSFFGSEWQKRWCVVSRGLFYYYANEKSKQ
PKGTFLIKGYSVRMAPHLRRDSKKESCFELTSQDRRSYEFTATSPAEARDWVDQISFLLKDLSSLTIPYEEDEEE
EEKEETYDDIDGFDSPSCGSQCRPTILPGSVGIKEPTEEKEEEDIYEVLPDEEHDLEEDESGTRRKGVDYASYYQ
GLWDCHGDQPDELSFQRGDLIRILSKEYNMYGWWVGELNSLVGIVPKEYLTTAFEVEER

FIGURE 1682

CTCTCTCTCTATCTCTCTCAGAATGACAATTCTAGGTACAACTTTTGGCATGGTTTTTTCTTTACTTCAAGTCGT
TTCTGGAGAAAGTGGCTATGCTCAAAATGGAGACTTGGAAGATGCAGAACTGGATGACTACTCATTCTCATGCTA
TAGCCAGTTGGAAGTGAATGGATCGCAGCATTCACTGACCTGTGCTTTTGAGGACCCAGATGTCAACACCACCAA
TCTGGAATTTGAAATATGTGGGGCCCTCGTGGAGGTAAAGTGCCTGAATTTCAGGAAACTACAAGAGATATATTT
CATCGAGACAAAGAAATTCTTACTGATTGGAAAGAGCAATATATGTGTGAAGGTTGGAGAAAAGAGTCTAACCTG
CAAAAAAATAGACCTAACCACTATAGTTAAACCTGAGGCTCCTTTTGACCTGAGTGTCATCTATCGGGAAGGAGC
CAATGACTTTGTGGTGACATTTAATACATCACACTTGCAAAAGAAGTATGTAAAAGTTTTAATGCATGATGTAGC
TTACCGCCAGGAAAAGGATGAAAACAAATGGACGCATGTGAATTTATCCAGCACAAAGCTGACACTCCTGCAGAG
AAAGCTCCAACCGGCAGCAATGTATGAGATTAAAGTTCGATCCATCCCTGATCACTATTTTAAAGGCTTCTGGAG
TGAATGGAGTCCAAGTTATTACTTCAGAACTCCAGAGATCAATAATAGCTCAGGGGAGATGGATCCTATCTTACT
AACCATCAGCATTTTGAGTTTTTTCTCTGTCGCTCTGTTGGTCATCTTGGCCTGTGTGTTATGGAAAAAAAGGAT
TAAGCCTATCGTATGGCCCAGTCTCCCCGATCATAAGAAGACTCTGGAACATCTTTGTAAGAAACCAAGAAAAAA
TTTAAATGTGAGTTTCAATCCTGAAAGTTTCCTGGACTGCCAGATTCATAGGGTGGATGACATTCAAGCTAGAGA
TGAAGTGGAAGGTTTTCTGCAAGATACGTTTCCTCAGCAACTAGAAGAATCTGAGAAGCAGAGGCTTGGAGGGGA
TGTGCAGAGCCCCAACTGCCCATCTGAGGATGTAGTCGTCACTCCAGAAAGCTTTGGAAGAGATTCATCCCTCAC
ATGCCTGGCTGGGAATGTCAGTGCATGTGACGCCCCTATTCTCTCCTCTTCCAGGTCCCTAGACTGCAGGGAGAG
TGGCAAGAATGGGCCTCATGTGTACCAGGACCTCCTGCTTAGCCTTGGGACTACAAACAGCACGCTGCCCCCTCC
ATTTTCTCTCCAATCTGGAATCCTGACATTGAACCCAGTTGCTCAGGGTCAGCCCATTCTTACTTCCCTGGGATC
AAATCAAGAAGAAGCATATGTCACCATGTCCAGCTTCTACCAAAACCAGTGAAGTGTAAGAAACCCAGACTGAAC
TTACCGTGAGCGACAAAGATGATTTAAAAGGGAAGTCTAGAGTTCCTAGTCTCCCTCACAGCACAGAGAAGACAA
AATTAGCAAAACCCCACTACACAGTCTGCAAGATTCTGAAACATTGCTTTGACCACTCTTCCTGAGTTCAGTGGC
ACTCAACATGAGTCAAGAGCATCCTGCTTCTACCATGTGGATTTGGTCACAAGGTTTAAGGTGACCCAATGATTC
AGCTATTT

FIGURE 1683

MTILGTTFGMVFSLLQVVSGESGYAQNGDLEDAELDDYSFSCYSQLEVNGSQHSLTCAFEDPDVNTTNLEFEICG
ALVEVKCLNFRKLQEIYFIETKKFLLIGKSNICVKVGEKSLTCKKIDLTTIVKPEAPFDLSVIYREGANDFVVTF
NTSHLQKKYVKVLMHDVAYRQEKDENKWTHVNLSSTKLTLLQRKLQPAAMYEIKVRSIPDHYFKGFWSEWSPSYY
FRTPEINNSSGEMDPILLTISILSFFSVALLVILACVLWKKRIKPIVWPSLPDHKKTLEHLCKKPRKNLNVSFNP
ESFLDCQIHRVDDIQARDEVEGFLQDTFPQQLEESEKQRLGGDVQSPNCPSEDVVVTPESFGRDSSLTCLAGNVS
ACDAPILSSSRSLDCRESGKNGPHVYQDLLLSLGTTNSTLPPPFSLQSGILTLNPVAQGQPILTSLGSNQEEAYV
TMSSFYQNQ

FIGURE 1684A

GATACCCTTTACACTAGATTAGCAGGCAAAACTATGATGGTTTGTGATATCCATGCTTGTAGAAGTAATAAGAAG
AAAGGGAACACAGAAGCTTTATTTTATAGTGGAGTCCTGACTCTAGGCCTTAATAATTGCATGGTTTTGGAGTTT
TCTTGAAGTACAACTAAGGACAGGTCACCACTAGGCACTAACATCGCTGACTTGCATGATTATGGAGATGGTCTA
TCTGATGCTGAAAATGTCTCTAGTTTTTTGACAACGGCTAAATAACC**ATG**GGATCAAGTGGCCTTGGGAAAGCAG
CAACATTAGATGAACTGCTGTGCACTTGCATTGAGATGTTTGATGACAATGGAGAGCTGGATAATAGTTATTTGC
CAAGAATAGTTCTACTGATGCACCGATGGTATTTATCTTCCACTGAATTGGCAGAAAAACTTCTCTGCATGTATC
GAAATGCCACTGGAGAAAGCTGCAATGAATTTCGATTAAAGATCTGCTACTTCATGAGGTACTGGATTCTGAAGT
TTCCTGCAGAGTTTAATTTGGATCTTGGTTTGATTCGTATGACTGAGGAATTTCGGGAAGTAGCTAGTCAACTAG
GATATGAAAAACACGTCAGCCTCATCGACATATCCAGCATTCCTTCCTATGACTGGATGAGAAGAGTCACACAGA
GGAAAAAAGTATCCAAGAAGGGAAAAGCCTGTCTGCTGTTTGACCATCTGGAGCCCATTGAATTGGCTGAGCACC
TCACTTTTCTGGAGCATAAATCTTTTAGAAGGATCTCATTCACTGATTACCAAAGCTATGTCATCCATGGCTGCC
TGGAGAATAATCCAACCTTGGAAAGATCGATTGCTTTATTTAATGGAATCTCTAAGTGGGTCCAGTTGATGGTTC
TTAGCAAACCAACCCCCCAGCAAAGGGCAGAAGTCATCACAAAGTTTATCAATGTTGCAAAGAAGCTCCTTCAGC
TCAAAAATTTTAACACCCTGATGGCAGTGGTGGGAGGCCTCAGTCATAGTTCCATTTCACGCCTCAAAGAGACCC
ATTCTCATCTTTCTTCAGAAGTTACAAAGAACTGGAATGAAATGACAGAGTTGGTCTCCTCCAACGGCAATTACT
GCAATTACCGCAAGGCCTTTGCCGACTGCGATGGCTTCAAAATCCCCATCCTTGGAGTACACTTGAAAGACTTGA
TAGCTGTCCATGTCATTTTCCCAGACTGGACAGAGGAGAACAAAGTGAACATTGTGAAAATGCACCAGCTCTCCG
TTACCCTGAGTGAACTAGTCTCCCTGCAGAATGCCTCTCACCACTTAGAACCCAACATGGATTTGATCAACCTGC
TCACGCTTTCCCTGGACCTCTATCACACTGAAGATGATATTTACAAACTGTCACTGGTGCTGGAGCCTAGAAATT
CTAAATCGCCTACCTCCCCTACGACGCCCAACAAGCCTGTGGTACCCCTGGAGTGGGCATTAGGGGTGATGCCAA
AGCCAGACCCCACGGTCATCAACAAGCACATAAGGAAATTAGTGGAGTCTGTATTTAGAAACTATGATCACGACC
ATGATGGGTACATTTCCCAAGAGGACTTTGAAAGTATAGCTGCCAATTTTCCCTTCTTGGATTCCTTCTGTGTTC
TGGACAAAGATCAGGATGGCCTAATTAGTAAAGATGAAATGATGGCTTACTTCCTGAGAGCTAAATCCCAACTAC
ACTGTAAAATGGGACCAGGATTTATCCATAATTTTCAGGAGATGACCTATCTCAAGCCAACCTTCTGCGAACACT
GTGCGGGATTTCTCTGGGGCATAATCAAGCAAGGATACAAATGCAAAGACTGTGGAGCCAATTGTCACAAACAGT
GCAAAGACCTCCTGGTTCTGGCCTGCAGGAGATTTGCCCGGGCGCCCTCCTTGAGCAGTGGTCATGGGTCACTGC
CTGGAAGCCCCTCGCTGCCCCCAGCGCAGGATGAGGTGTTTGAGTTCCCTGGAGTCACTGCTGGACACAGGGATT
TAGACAGCAGAGCCATCACACTGGTTACAGGCTCTTCTCGCAAGATCTCTGTGAGGCTACAGAGGGCCACCACCA
GCCAGGCCACCCAGACTGAACCTGTCTGGTCAGAGGCTGGCTGGGGGGACTCGGGGTCCCACACCTTCCCTAAAA
TGAAATCCAAGTTCCATGACAAAGCAGCAAAGGACAAAGGCTTTGCCAAATGGGAAAATGAGAAGCCCAGGGTGC
ATGCTGGTGTGGATGTTGTAGACCGGGGCACGGAGTTTGAACTTGACCAGGATGAAGGAGAAGAGACCAGACAGG
ATGGTGAGGATGGC**TGA**CTTCAGGCTGCGGAAACTGAAGGCAATAATGTTGGCTTTTGGAAGGGGCAAGACGAGA
AACTCTGAAGAAAGCTCTGACTCTCAGGAAGTTATCTGGAAAGATACCTGGATGTTTACTGCCTTGGGACACTGT
GGGATCTCCATGTTTGGACTATGGGACAGAGAATTGACCCTAACTAACTATGAACTATTTATTTCCTCCTCCCCT
ACCCCTAGTTAAGTGCCACAAAGACTGTGTTATGTAGTCAGTACTTTTCTCATGTATCTTTCTCTAGACCATTTA
TATACGGGTGAAATGAAAGCTTTTTTGCATGTACTTGATACTCAGTCTGTAAACTCAGACTTTGCTTTTTTTGTG
AGACTATCCTTTCAATATTTTTATAAACTTTTGTGTGTGCTGTGGCAGGGAACAGTTAACAAGGAGTTTATTTAG
AGGGGTTTTTTTCATTTTTTGTTTTTCTTGTTTTGTTTTGTTTTGTTTTGTTCTTCTTGGTGTGCTTTTTGGATG
GGACCAGAACTTAACATTTTCCTGAGGACTAGGAAGCTCATCAGACACTGGAATGCAGTGATTCTTCTAATGATG
GTCAACTGCAAGGAGAAACTGTTTACATCCTTCCCACTACACAGTTGCTATGATATGTAACAAGTCACACATGTA
TATATCACACAAGTCTTACCAATTCTGCGTCACTAGGAAGCTATAGCATGGTCGTGAAAGCTCTCCTAATACTTA
CTTAAATAGCCATGGAAGAAAATTATGCTTGTCCCTTCTGACTGGGTTAAGCCATCTTTCTTAAGATTCCTGAAG
TAGAAATAGCAATTAAGAAATTAATTCAAGTTTTGACGGTTAACATTTAGCAGAAAAACAAACCATTGAATAAGC
TACTAGGTGAAATGCAAAACAACCATCAATTTTTTTAAACTCAATAATTTTGTGAAAAAAAAAACCACCACCAAA
CTTTTGGTTGTAAAAGAGAACCCTTGTTCCCTTCCTAAGAAACTGCCTTCCACAATTAAAGAATACTCATAGAAA
GAAAATAATCATAAATCATATTTGATTAACATTTCATTTAAGCTTTTAAAATATCAATTTTTTAAATAGCTCCCA
TTTACCCAAAATAACTAGTTATGGGTCTATTTCTTCCATGATTAGAGGAGAGAGAACTTGATTCAAGATACTGAA
AAATAGAGCTGGGACTGAGCCTGTGAATGACAGGAATGATCTATTACCAGGTGACTAGTCGGAAACTACACAGAG

FIGURE 1684B

GTGCACTGGTCTGCATTTGGGGGCTAAAGTGTATATATTCCATTTAAAATGGAATTTGTTTGTATTTGGGGCAGT
CTTCAGTAAAGCCTTTCTCCTTTCTTTTCTCCATTGAGGACAGTTCTGCTCAGCAAAATTGTTGAGTACCTGTTC
TGGGCAGGTCCCACGCTATATGCACAAAGTTAAGAAAAACTTGGTCTTAGCCCTTGGGAGCTGACAGCCCATGGG
CATTAAGGCAAAGTAGTTCCAGTGATTTAAAATACGGTTCCAAATACGCTAAAACCAACTTGTGCCAACCAGATT
TACAGATTGGAAATACTGCAGATGATGTGAAGTTATCAGTTGGAGGAGCTGTGATTAAGCTGGATAATAAGAGAA
CGTGCCATCTGTAAAGCACTCAGAAGGCAGCCATCCCTAGATGTTGGTTTCATGTATATTACACTATCTACTACT
ATCCATAAATGCAATGATATGCATGTTAACAACATTAAAAACAGCAAACAGCAATCTAAGTACAGAAAAGCTCTT
TGTGTGTTTAAAAAAATTGAAGAAAATTCAGGAAGAAACGTGTTAATAAACATTGTACTGTTCTTTTGCTTCTCA
AAGG

FIGURE 1685

MGSSGLGKAATLDELLCTCIEMFDDNGELDNSYLPRIVLLMHRWYLSSTELAEKLLCMYRNATGESCNEFRLKIC
YFMRYWILKFPAEFNLDLGLIRMTEEFREVASQLGYEKHVSLIDISSIPSYDWMRRVTQRKKVSKKGKACLLFDH
LEPIELAEHLTFLEHKSFRRISFTDYQSYVIHGCLENNPTLERSIALFNGISKWVQLMVLSKPTPQQRAEVITKF
INVAKKLLQLKNFNTLMAVVGGLSHSSISRLKETHSHLSSEVTKNWNEMTELVSSNGNYCNYRKAFADCDGFKIP
ILGVHLKDLIAVHVIFPDWTEENKVNIVKMHQLSVTLSELVSLQNASHHLEPNMDLINLLTLSLDLYHTEDDIYK
LSLVLEPRNSKSPTSPTTPNKPVVPLEWALGVMPKPDPTVINKHIRKLVESVFRNYDHDHDGYISQEDFESIAAN
FPFLDSFCVLDKDQDGLISKDEMMAYFLRAKSQLHCKMGPGFIHNFQEMTYLKPTFCEHCAGFLWGIIKQGYKCK
DCGANCHKQCKDLLVLACRRFARAPSLSSGHGSLPGSPSLPPAQDEVFEFPGVTAGHRDLDSRAITLVTGSSRKI
SVRLQRATTSQATQTEPVWSEAGWGDSGSHTFPKMKSKFHDKAAKDKGFAKWENEKPRVHAGVDVVDRGTEFELD
QDEGEETRQDGEDG

FIGURE 1686

GCCCAGACCTATGGATTGAAAGCGTGTGCTTTACCCATCTGCTGTCTTGCTCCATCTGAGACCAGAGCCAAGATC
TGCCCAGGACTGGAATGCTTTCCCGAGTGGCTTGAGTTGGAGCCTGGGACTAGGAGCAGCCTTATTGAGGTACAA
TTCATGTGCTTGTGGGTTTGGATGGCACAATCTGTGTCTGGGCTAAGGAAAGCAGACTTGGCACCAACATTAACC
CTGACAGATCCAGGCATCTATTCCAGGAACTGGAAGCCAAGCGCAACAGGTGCTTGGAGGTCATC**ATG**ATCAGCC
CAGACCCCAGGCCCTCCCCTGGCTTGGCCCGGTGGGCTGAGAGCTATGAGGCCAAGTGTGAGCGCAGGCAAGAGA
TCCGTGAAAGCCGCCGCTGCCGTCCCAATGTGACCACTTGCCGCCAGGTGGGGAAGACGCTGAGGATCCAACAGA
GAGAGCAGCTCCAGAGAGCTCGACTGCAGCAGTTCTTCAGGAGGAGGAACCTGGAGCTAGAGGAGAAGGGCAAAG
CGCAGCATCCCCAGGCCAGGGAGCAAGGGCCCTCCAGGCGGCCAGGACAGGTGACAGGCACCAGCTCTGAAGTCT
TTCCAGCCCAGCATCCTCCTCCCTCAGGCATCTGCAGGGATCTGTCTGACCACCTCTCCTCACAGGCTGGGGGCC
TTCCTCCACAGGACACTCCCATCAAGAAGCCACCCAAACACCACCGTGGTACTCAGACAAAGGCAGAAGGACCAA
CAATTAAGAACGATGCCAGTCAGCAAACCAATTACGGAGTTGCAGTTCTGGATAAGGAAATCATCCAGCTTTCTG
ATTACCTCAAAGAGGCCCTACAAAGGGAGCTGGTCCTAAAACAGAAAATGGTGATTCTCCAAGACCTACTGTCCA
CTCTGATTCAGGCCTCTGACAGCTCTTGGAAGGGACAGCTTAATGAAGACAAACTGAAGGGGAAACTGAGATCCT
TAGAAAACCAGCTATACACCTGTACCCAGAAATACTCCCCTTGGGGAATGAAAAAAGTACTACTGGAGATGGAAG
ACCAGAAAAACAGCTATGAGCAGAAGGCCAAGGAGTCACTGCAGAAAGTGCTGGAGGAGAAAATGAATGCAGAGC
AGCAACTACAGAGCACACAGCGATCCCTGGCCCTGGCAGAGCAGAAGTGTGAAGAGTGGAGGAGCCAGTATGAGG
CTCTGAAGGAGGACTGGAGGACCCTTGGGACCCAGCACAGGGAGCTGGAGAGCCAACTCCACGTGCTTCAGTCCA
AACTGCAGGGAGCAGATAGCAGGGACTTACAGATGAACCAGGCCCTGCGATTTTTGGAAAATGAGCACCAGCAAC
TGCAGGCCAAGATTGAATGCCTGCAAGGGGACAGAGACCTGTGCAGCTTGGATACCCAGGACCTACAAGATCAAC
TAAAAAGGTCAGAGGCAGAGAAACTCACCCTGGTGACCAGAGTACAGCAGTTGCAGGGTTTGCTTCAAAATCAAT
CCTTACAGCTTCAAGAACAGGAGAAACTCTTAACAAAGAAAGATCAGGCTTTGCCCGTGTGGAGTCCAAAGTCCT
TCCCTAACGAAGTGGAGCCTGAGGGTACAGGGAAGGAGAAAGACTGGGATCTCAGAGACCAGCTGCAAAAGAAGA
CTTTGCAGCTCCAGGCCAAGGAAAAGGAGTGCAGAGAACTGCATTCAGAATTAGACAACCTCAGTGACGAGTATC
TCTCCTGCCTGCGTAAGCTGCAGCACTGTCGAGAAGAGCTGAACCAGAGCCAGCAGCTGCCTCCCAGAAGGCAAT
GTGGGCGATGGCTCCCAGTGCTGATGGTGGTGATTGCTGCAGCACTGGCAGTGTTCCTGGCCAATAAAGACAACC
TGATGATC**TGA**ATAATTTGTGACAACTGCCTTGGGTGAAAATCAGAAGCAAGCAACTCAGCGAAAAACTCAGAAG
GTTTGGGTACATTACAGCTTGGGTTTTCCAACTGACTTAGGATTTCTGACTTTTTATTAATTTCTTAACCTACTG
TAAATAAACTTCACCTGACCAGATTGTTCCTCA

FIGURE 1687

MISPDPRPSPGLARWAESYEAKCERRQEIRESRRCRPNVTTCRQVGKTLRIQQREQLQRARLQQFFRRRNLELEE
KGKAQHPQAREQGPSRRPGQVTGTSSEVFPAQHPPPSGICRDLSDHLSSQAGGLPPQDTPIKKPPKHHRGTQTKA
EGPTIKNDASQQTNYGVAVLDKEIIQLSDYLKEALQRELVLKQKMVILQDLLSTLIQASDSSWKGQLNEDKLKGK
LRSLENQLYTCTQKYSPWGMKKVLLEMEDQKNSYEQKAKESLQKVLEEKMNAEQQLQSTQRSLALAEQKCEEWRS
QYEALKEDWRTLGTQHRELESQLHVLQSKLQGADSRDLQMNQALRFLENEHQQLQAKIECLQGDRDLCSLDTQDL
QDQLKRSEAEKLTLVTRVQQLQGLLQNQSLQLQEQEKLLTKKDQALPVWSPKSFPNEVEPEGTGKEKDWDLRDQL
QKKTLQLQAKEKECRELHSELDNLSDEYLSCLRKLQHCREELNQSQQLPPRRQCGRWLPVLMVVIAAALAVFLAN
KDNLMI

FIGURE 1688A

CTGCAGGAAGGAGAGAGGAAGAGGAGCAGAAGGGGGCAGCAGCGGACGCCGCTAACGGCCTCCCTCGGCGCTGAC
AGGCTGGGCCGGCGCCCGGCTCGCTTGGGTGTTCGCGTCGCCACTTCGGCTTCTCGGCCGGTCGGGCCCCTCGGC
CCGGGCTTGCGGCGCGCGTCGGGGCTGAGGGCTGCTGCGGCGCAGGGAGAGGCCTGGTCCTCGCTGCCGAGGGAT
GTGAGTGGGAGCTGAGCCCACACTGGAGGGCCCCCGAGGGCCCAGCCTGGAGGTCGTTCAGAGCCGTGCCCGCCC
CGGGGCTTCGCAGACCTTGACCCGCCGGGTAGGAGCCGCCCCTGCGGGCTCGAGGGCGCGCTCTGGTCGCCCGAT
CTGTGTAGCCGGTTTCAGAAGCAGGCAACAGGAACAAGATGTGAACTGTTTCTCTTCTGCAGAAAAAGAGGCTCT
TCCTCCTCCTCCCGCGACGGCAAATGTTCTGAAAAAGACTCTGC**ATG**GGAATGGCCTGCCTTACGATGACAGAAA
TGGAGGGAACATCCACCTCTTCTATATATCAGAATGGTGATATTTCTGGAAATGCCAATTCTATGAAGCAAATAG
ATCCAGTTCTTCAGGTGTATCTTTACCATTCCCTTGGGAAATCTGAGGCAGATTATCTGACCTTTCCATCTGGGG
AGTATGTTGCAGAAGAAATCTGTATTGCTGCTTCTAAAGCTTGTGGTATCACACCTGTGTATCATAATATGTTTG
CTTTAATGAGTGAAACAGAAAGGATCTGGTATCCACCCAACCATGTCTTCCATATAGATGAGTCAACCAGGCATA
ATGTACTCTACAGAATAAGATTTTACTTTCCTCGTTGGTATTGCAGTGGCAGCAACAGAGCCTATCGGCATGGAA
TATCTCGAGGTGCTGAAGCTCCTCTTCTTGATGACTTTGTCATGTCTTACCTCTTTGCTCAGTGGCGGCATGATT
TTGTGCACGGATGGATAAAAGTACCTGTGACTCATGAAACACAGGAAGAATGTCTTGGGATGGCAGTGTTAGATA
TGATGAGAATAGCCAAAGAAAACGATCAAACCCCACTGGCCATCTATAACTCTATCAGCTACAAGACATTCTTAC
CAAAATGTATTCGAGCAAAGATCCAAGACTATCATATTTTGACAAGGAAGCGAATAAGGTACAGATTTCGCAGAT
TTATTCAGCAATTCAGCCAATGCAAAGCCACTGCCAGAAACTTGAAACTTAAGTATCTTATAAATCTGGAAACTC
TGCAGTCTGCCTTCTACACAGAGAAATTTGAAGTAAAAGAACCTGGAAGTGGTCCTTCAGGTGAGGAGATTTTTG
CAACCATTATAATAACTGGAAACGGTGGAATTCAGTGGTCAAGAGGGAAACATAAAGAAAGTGAGACACTGACAG
AACAGGATTTACAGTTATATTGCGATTTTCCTAATATTATTGATGTCAGTATTAAGCAAGCAAACCAAGAGGGTT
CAAATGAAAGCCGAGTTGTAACTATCCATAAGCAAGATGGTAAAAATCTGGAAATTGAACTTAGCTCATTAAGGG
AAGCTTTGTCTTTCGTGTCATTAATTGATGGATATTATAGATTAACTGCAGATGCACATCATTACCTCTGTAAAG
AAGTAGCACCTCCAGCCGTGCTTGAAAATATACAAAGCAACTGTCATGGCCCAATTTCGATGGATTTTGCCATTA
GTAAACTGAAGAAAGCAGGTAATCAGACTGGACTGTATGTACTTCGATGCAGTCCTAAGGACTTTAATAAATATT
TTTTGACTTTTGCTGTCGAGCGAGAAAATGTCATTGAATATAAACACTGTTTGATTACAAAAAATGAGAATGAAG
AGTACAACCTCAGTGGGACAAAGAAGAACTTCAGCAGTCTTAAAGATCTTTTGAATTGTTACCAGATGGAAACTG
TTCGCTCAGACAATATAATTTTCCAGTTTACTAAATGCTGTCCCCCAAAGCCAAAAGATAAATCAAACCTTCTAG
TCTTCAGAACGAATGGTGTTTCTGATGTACCAACCTCACCAACATTACAGAGGCCTACTCATATGAACCAAATGG
TGTTTCACAAAATCAGAAATGAAGATTTGATATTTAATGAAAGCCTTGGCCAAGGCACTTTTACAAAGATTTTTA
AAGGCGTACGAAGAGAAGTAGGAGACTACGGTCAACTGCATGAAACAGAAGTTCTTTTAAAAGTTCTGGATAAAG
CACACAGAAACTATTCAGAGTCTTTCTTTGAAGCAGCAAGTATGATGAGCAAGCTTTCTCACAAGCATTTGGTTT
TAAATTATGGAGTATGTGTCTGTGGAGACGAGAATATTCTGGTTCAGGAGTTTGTAAAATTTGGATCACTAGATA
CATATCTGAAAAAGAATAAAAATTGTATAAATATATTATGGAAACTTGAAGTTGCTAAACAGTTGGCATGGGCCA
TGCATTTTCTAGAAGAAAACACCCTTATTCATGGGAATGTATGTGCCAAAAATATTCTGCTTATCAGAGAAGAAG
ACAGGAAGACAGGAAATCCTCCTTTCATCAAACTTAGTGATCCTGGCATTAGTATTACAGTTTTGCCAAAGGACA
TTCTTCAGGAGAGAATACCATGGGTACCACCTGAATGCATTGAAAATCCTAAAAATTTAAATTTGGCAACAGACA
AATGGAGTTTTGGTACCACTTTGTGGGAAATCTGCAGTGGAGGAGATAAACCTCTAAGTGCTCTGGATTCTCAAA
GAAAGCTACAATTTTATGAAGATAGGCATCAGCTTCCTGCACCAAAGTGGGCAGAATTAGCAAACCTTATAAATA
ATTGTATGGATTATGAACCAGATTTCAGGCCTTCTTTCAGAGCCATCATACGAGATCTTAACAGTTTGTTTACTC
CAGATTATGAACTATTAACAGAAAATGACATGTTACCAAATATGAGGATAGGTGCCCTAGGGTTTTCTGGTGCCT
TTGAAGACCGGGATCCTACACAGTTTGAAGAGAGACATTTGAAATTTCTACAGCAACTTGGCAAGGGTAATTTTG
GGAGTGTGGAGATGTGCCGGTATGACCCTCTACAGGACAACACTGGGGAGGTGGTCGCTGTAAAAAAGCTTCAGC
ATAGTACTGAAGAGCACCTAAGAGACTTTGAAAGGGAAATTGAAATCCTGAAATCCCTACAGCATGACAACATTG
TAAAGTACAAGGGAGTGTGCTACAGTGCTGGTCGGCGTAATCTAAAATTAATTATGGAATATTTACCATATGGAA
GTTTACGAGACTATCTTCAAAAACATAAAGAACGGATAGATCACATAAAACTTCTGCAGTACACATCTCAGATAT
GCAAGGGTATGGAGTATCTTGGTACAAAAAGGTATATCCACAGGGATCTGGCAACGAGAAATATATTGGTGGAGA
ACGAGAACAGAGTTAAAATTGGAGATTTTGGGTTAACCAAAGTCTTGCCACAAGACAAAGAATACTATAAAGTAA
AAGAACCTGGTGAAAGTCCCATATTCTGGTATGCTCCAGAATCACTGACAGAGAGCAAGTTTTCTGTGGCCTCAG

FIGURE 1688B

ATGTTTGGAGCTTTGGAGTGGTTCTGTATGAACTTTTCACATACATTGAGAAGAGTAAAAGTCCACCAGCGGAAT
TTATGCGTATGATTGGCAATGACAAACAAGGACAGATGATCGTGTTCCATTTGATAGAACTTTTGAAGAATAATG
GAAGATTACCAAGACCAGATGGATGCCCAGATGAGATCTATATGATCATGACAGAATGCTGGAACAATAATGTAA
ATCAACGCCCCTCCTTTAGGGATCTAGCTCTTCGAGTGGATCAAATAAGGGATAACATGGCTGGATGAAAGAAAT
GACCTTCATTCTGAGACCAAAGTAGATTTACAGAACAAAGTTTTATATTTCACATTGCTGTGGACTATTATTACA
TATATCATTATTATATAAATCATGATGCTAGCCAGCAAAGATGTGAAAATATCTGCTCAAAACTTTCAAAGTTTA
GTAAGTTTTTCTTCATGAGGCCACCAGTAAAAGACATTAATGAGAATTCCTTAGCAAGGATTTTGTAAGAAGTTT
CTTAAACATTGTCTGTTAACATCACTCTTGTCTGGCAAAAGAAAAAAAATAGACTTTTTCAACTCAGCTTTTTGA
GACCTGAAAAAATTATTATGTAAATTTTGCAATGTTAAAGATGCACAGAATATGTATGTATAGTTTTTACCACAG
TGGATGTATAATACCTTGGCATCTTGTGTGATGTTTTACACACATGAGGGCTGGTGTTCATTAATACTGTTTTCT
AATTTTTCCATAGTTAATCTATAATTAATTACTTCACTATACAAACAAATTAAGATGTTCAGATAATTGAATAAG
TACCTTTGTGTCCTTGTTCATTTATATCGCTGGCCAGCATTATAAGCAGGTGTATACTTTTAGCTTGTAGTTCCA
TGTACTGTAAATATTTTTCACATAAAGGGAACAAATGTCTAGTTTTATTTGTATAGGAAATTTCCCTGACCCTAA
ATAATACATTTTGAAATGAAACAAGCTTACAAAGATATAATCTATTTTATTATGGTTTCCCTTGTATCTATTTGT
GGTGAATGTGTTTTTTAAATGGAACTATCTCCAAATTTTTCTAAGACTACTATGAACAGTTTTCTTTTAAAATTT
TGAGATTAAGAATGCCAGGAATATTGTCATCCTTTGAGCTGCTGACTGCCAATAACATTCTTCGATCTCTGGGAT
TTATGCTCATGAACTAAATTTAAGCTTAAGCCATAAAATAGATTAGATTGTTTTTTAAAAATGGATAGCTCATTA
AGAAGTGCAGCAGGTTAAGAATTTTTTCCTAAAGACTGTATATTTGAGGGGTTTCAGAATTTTGCATTGCAGTCA
TAGAAGAGATTTATTTCCTTTTTAGAGGGGAAATGAGGTAAATAAGTAAAAAAGTATGCTTGTTAATTTTATTCA
AGAATGCCAGTAGAAAATTCATAACGTGTATCTTTAAGAAAAATGAGCATACATCTTAAATCTTTTCAATTA

FIGURE 1689

MGMACLTMTEMEGTSTSSIYQNGDISGNANSMKQIDPVLQVYLYHSLGKSEADYLTFPSGEYVAEEICIAASKAC
GITPVYHNMFALMSETERIWYPPNHVFHIDESTRHNVLYRIRFYFPRWYCSGSNRAYRHGISRGAEAPLLDDFVM
SYLFAQWRHDFVHGWIKVPVTHETQEECLGMAVLDMMRIAKENDQTPLAIYNSISYKTFLPKCIRAKIQDYHILT
RKRIRYRFRRFIQQFSQCKATARNLKLKYLINLETLQSAFYTEKFEVKEPGSGPSGEEIFATIIITGNGGIQWSR
GKHKESETLTEQDLQLYCDFPNIIDVSIKQANQEGSNESRVVTIHKQDGKNLEIELSSLREALSFVSLIDGYYRL
TADAHHYLCKEVAPPAVLENIQSNCHGPISMDFAISKLKKAGNQTGLYVLRCSPKDFNKYFLTFAVERENVIEYK
HCLITKNENEEYNLSGTKKNFSSLKDLLNCYQMETVRSDNIIFQFTKCCPPKPKDKSNLLVFRTNGVSDVPTSPT
LQRPTHMNQMVFHKIRNEDLIFNESLGQGTFTKIFKGVRREVGDYGQLHETEVLLKVLDKAHRNYSESFFEAASM
MSKLSHKHLVLNYGVCVCGDENILVQEFVKFGSLDTYLKKNKNCINILWKLEVAKQLAWAMHFLEENTLIHGNVC
AKNILLIREEDRKTGNPPFIKLSDPGISITVLPKDILQERIPWVPPECIENPKNLNLATDKWSFGTTLWEICSGG
DKPLSALDSQRKLQFYEDRHQLPAPKWAELANLINNCMDYEPDFRPSFRAIIRDLNSLFTPDYELLTENDMLPNM
RIGALGFSGAFEDRDPTQFEERHLKFLQQLGKGNFGSVEMCRYDPLQDNTGEVVAVKKLQHSTEEHLRDFEREIE
ILKSLQHDNIVKYKGVCYSAGRRNLKLIMEYLPYGSLRDYLQKHKERIDHIKLLQYTSQICKGMEYLGTKRYIHR
DLATRNILVENENRVKIGDFGLTKVLPQDKEYYKVKEPGESPIFWYAPESLTESKFSVASDVWSFGVVLYELFTY
IEKSKSPPAEFMRMIGNDKQGQMIVFHLIELLKNNGRLPRPDGCPDEIYMIMTECWNNNVNQRPSFRDLALRVDQ
IRDNMAG

FIGURE 1690A

CTGCAGGAAGGAGAGAGGAAGAGGAGCAGAAGGGGGCAGCAGCGGACGCCGCTAACGGCCTCCCTCGGCGCTGAC
AGGCTGGGCCGGCGCCCGGCTCGCTTGGGTGTTCGCGTCGCCACTTCGGCTTCTCGGCCGGTCGGGCCCCTCGGC
CCGGGCTTGCGGCGCGCGTCGGGGCTGAGGGCTGCTGCGGCGCAGGGAGAGGCCTGGTCCTCGCTGCCGAGGGAT
GTGAGTGGGAGCTGAGCCCACACTGGAGGGCCCCCGAGGGCCCAGCCTGGAGGTCGTTCAGAGCCGTGCCCGCCC
CGGGGCTTCGCAGACCTTGACCCGCCGGGTAGGAGCCGCCCCTGCGGGCTCGAGGGCGCGCTCTGGTCGCCCGAT
CTGTGTAGCCGGTTTCAGAAGCAGGCAACAGGAACAAGATGTGAACTGTTTCTCTTCTGCAGAAAAAGAGGCTCT
TCCTCCTCCTCCCGCGACGGCAAATGTTCTGAAAAAGACTCTGC**ATG**GGAATGGCCTGCCTTACGATGACAGAAA
TGGAGGGAACATCCACCTCTTCTATATATCAGAATGGTGATATTTCTGGAAATGCCAATTCTATGAAGCAAATAG
ATCCAGTTCTTCAGGTGTATCTTTACCATTCCCTTGGGAAATCTGAGGCAGATTATCTGACCTTTCCATCTGGGG
AGTATGTTGCAGAAGAAATCTGTATTGCTGCTTCTAAAGCTTGTGGTATCACACCTGTGTATCATAATATGTTTG
CTTTAATGAGTGAAACAGAAAGGATCTGGTATCCACCCAACCATGTCTTCCATATAGATGAGTCAACCAGGCATA
ATGTACTCTACAGAATAAGATTTTACTTTCCTCGTTGGTATTGCAGTGGCAGCAACAGAGCCTATCGGCATGGAA
TATCTCGAGGTGCTGAAGCTCCTCTTCTTGATGACTTTGTCATGTCTTACCTCTTTGCTCAGTGGCGGCATGATT
TTGTGCACGGATGGATAAAAGTACCTGTGACTCATGAAACACAGGAAGAATGTCTTGGGATGGCAGTGTTAGATA
TGATGAGAATAGCCAAAGAAAACGATCAAACCCCACTGGCCATCTATAACTCTATCAGCTACAAGACATTCTTAC
CAAAATGTATTCGAGCAAAGATCCAAGACTATCATATTTTGACAAGGAAGCGAATAAGGTACAGATTTCGCAGAT
TTATTCAGCAATTCAGCCAATGCAAAGCCACTGCCAGAAACTTGAAACTTAAGTATCTTATAAATCTGGAAACTC
TGCAGTCTGCCTTCTACACAGAGAAATTTGAAGTAAAAGAACCTGGAAGTGGTCCTTCAGGTGAGGAGATTTTTG
CAACCATTATAATAACTGGAAACGGTGGAATTCAGTGGTCAAGAGGGAAACATAAAGAAAGTGAGACACTGACAG
AACAGGATTTACAGTTATATTGCGATTTTCCTAATATTATTGATGTCAGTATTAAGCAAGCAAACCAAGAGGGTT
CAAATGAAAGCCGAGTTGTAACTATCCATAAGCAAGATGGTAAAAATCTGGAAATTGAACTTAGCTCATTAAGGG
AAGCTTTGTCTTTCGTGTCATTAATTGATGGATATTATAGATTAACTGCAGATGCACATCATTACCTCTGTAAAG
AAGTAGCACCTCCAGCCGTGCTTGAAAATATACAAAGCAACTGTCATGGCCCAATTTCGATGGATTTTGCCATTA
GTAAACTGAAGAAAGCAGGTAATCAGACTGGACTGTATGTACTTCGATGCAGTCCTAAGGACTTTAATAAATATT
TTTTGACTTTTGCTGTCGAGCGAGAAAATGTCATTGAATATAAACACTGTTTGATTACAAAAAATGAGAATGAAG
AGTACAACCTCAGTGGGACAAAGAAGAACTTCAGCAGTCTTAAAGATCTTTTGAATTGTTACCAGATGGAAACTG
TTCGCTCAGACAATATAATTTTCCAGTTTACTAAATGCTGTCCCCCAAAGCCAAAAGATAAATCAAACCTTCTAG
TCTTCAGAACGAATGGTGTTTCTGATGTACCAACCTCACCAACATTACAGAGGCCTACTCATATGAACCAAATGG
TGTTTCACAAAATCAGAAATGAAGATTTGATATTTAATGAAAGCCTTGGCCAAGGCACTTTTACAAAGATTTTTA
AAGGCGTACGAAGAGAAGTAGGAGACTACGGTCAACTGCATGAAACAGAAGTTCTTTTAAAAGTTCTGGATAAAG
CACACAGAAACTATTCAGAGTCTTTCTTTGAAGCAGCAAGTATGATGAGCAAGCTTTCTCACAAGCATTTGGTTT
TAAATTATGGAGTATGTGTCTGTGGAGACGAGAATATTCTGGTTCAGGAGTTTGTAAAATTTGGATCACTAGATA
CATATCTGAAAAAGAATAAAAATTGTATAAATATATTATGGAAACTTGAAGTTGCTAAACAGTTGGCATGGGCCA
TGCATTTTCTAGAAGAAAACACCCTTATTCATGGGAATGTATGTGCCAAAAATATTCTGCTTATCAGAGAAGAAG
ACAGGAAGACAGGAAATCCTCCTTTCATCAAACTTAGTGATCCTGGCATTAGTATTACAGTTTTGCCAAAGGACA
TTCTTCAGGAGAGAATACCATGGGTACCACCTGAATGCATTGAAAATCCTAAAAATTTAAATTTGGCAACAGACA
AATGGAGTTTTGGTACCACTTTGTGGGAAATCTGCAGTGGAGGAGATAAACCTCTAAGTGCTCTGGATTCTCAAA
GAAAGCTACAATTTTATGAAGATAGGCATCAGCTTCCTGCACCAAAGTGGGCAGAATTAGCAAACCTTATAAATA
ATTGTATGGATTATGAACCAGATTTCAGGCCTTCTTTCAGAGCCATCATACGAGATCTTAACAGTTTGTTTACTC
CAGATTATGAACTATTAACAGAAAATGACATGTTACCAAATATGAGGATAGGTGCCCTAGGGTTTTCTGGTGCCT
TTGAAGACCGGGATCCTACACAGTTTGAAGAGAGACATTTGAAATTTCTACAGCAACTTGGCAAGGGTAATTTTG
GGAGTGTGGAGATGTGCCGGTATGACCCTCTACAGGACAACACTGGGGAGGTGGTCGCTGTAAAAAAGCTTCAGC
ATAGTACTGAAGAGCACCTAAGAGACTTTGAAAGGGAAATTGAAATCCTGAAATCCCTACAGCATGACAACATTG
TAAAGTACAAGGGAGTGTGCTACAGTGCTGGTCGGCGTAATCTAAAATTAATTATGGAATATTTACCATATGGAA
GTTTACGAGACTATCTTCAAAAACATAAAGAACGGATAGATCACATAAAACTTCTGCAGTACACATCTCAGATAT
GCAAGGGTATGGAGTATCTTGGTACAAAAAGGTATATCCACAGGGATCTGGCAACGAGAAATATATTGGTGGAGA
ACGAGAACAGAGTTAAAATTGGAGATTTTGGGTTAACCAAAGTCTTGCCACAAGACAAAGAATACTATAAAGTAA
AAGAACCTGGTGAAAGTCCCATATTCTGGTATGCTCCAGAATCACTGACAGAGAGCAAGTTTTCTGTGGCCTCAG

FIGURE 1690B

ATGTTTGGAGCTTTGGAGTGGTTCTGTATGAACTTTTCACATACATTGAGAAGAGTAAAAGTCCACCAGCGGAAT
TTATGCGTATGATTGGCAATGACAAACAAGGACAGATGATCGTGTTCCATTTGATAGAACTTTTGAAGAATAATG
GAAGATTACCAAGACCAGATGGATGCCCAGATGAGATCTATATGATCATGACAGAATGCTGGAACAATAATGTAA
ATCAACGCCCCTCCTTTAGGGATCTAGCTCTTCGAGTGGATCAAATAAGGGATAACATGGCTGGATGAAAGAAAT
GACCTTCATTCTGAGACCAAAGTAGATTTACAGAACAAAGTTTTATATTTCACATTGCTGTGGACTATTATTACA
TATATCATTATTATATAAATCATGATGCTAGCCAGCAAAGATGTGAAAATATCTGCTCAAAACTTTCAAAGTTTA
GTAAGTTTTTCTTCATGAGGCCACCAGTAAAAGACATTAATGAGAATTCCTTAGCAAGGATTTTGTAAGAAGTTT
CTTAAACATTGTCTGTTAACATCACTCTTGTCTGGCAAAAGAAAAAAAATAGACTTTTTCAACTCAGCTTTTTGA
GACCTGAAAAAATTATTATGTAAATTTTGCAATGTTAAAGATGCACAGAATATGTATGTATAGTTTTTACCACAG
TGGATGTATAATACCTTGGCATCTTGTGTGATGTTTTACACACATGAGGGCTGGTGTTCATTAATACTGTTTTCT
AATTTTTCCATAGTTAATCTATAATTAATTACTTCACTATACAAACAAATTAAGATGTTCAGATAATTGAATAAG
TACCTTTGTGTCCTTGTTCATTTATATCGCTGGCCAGCATTATAAGCAGGTGTATACTTTTAGCTTGTAGTTCCA
TGTACTGTAAATATTTTTCACATAAAGGGAACAAATGTCTAGTTTTATTTGTATAGGAAATTTCCCTGACCCTAA
ATAATACATTTTGAAATGAAACAAGCTTACAAAGATATAATCTATTTTATTATGGTTTCCCTTGTATCTATTTGT
GGTGAATGTGTTTTTTAAATGGAACTATCTCCAAATTTTTCTAAGACTACTATGAACAGTTTTCTTTTAAAATTT
TGAGATTAAGAATGCCAGGAATATTGTCATCCTTTGAGCTGCTGACTGCCAATAACATTCTTCGATCTCTGGGAT
TTATGCTCATGAACTAAATTTAAGCTTAAGCCATAAAATAGATTAGATTGTTTTTTAAAAATGGATAGCTCATTA
AGAAGTGCAGCAGGTTAAGAATTTTTTCCTAAAGACTGTATATTTGAGGGGTTTCAGAATTTTGCATTGCAGTCA
TAGAAGAGATTTATTTCCTTTTTAGAGGGGAAATGAGGTAAATAAGTAAAAAAGTATGCTTGTTAATTTTATTCA
AGAATGCCAGTAGAAAATTCATAACGTGTATCTTTAAGAAAAATGAGCATACATCTTAAATCTTTTCAATTA

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FIGURE 1691

MGMACLTMTEMEGTSTSSIYQNGDISGNANSMKQIDPVLQVYLYHSLGKSEADYLTFPSGEYVAEEICIAASKAC
GITPVYHNMFALMSETERIWYPPNHVFHIDESTRHNVLYRIRFYFPRWYCSGSNRAYRHGISRGAEAPLLDDFVM
SYLFAQWRHDFVHGWIKVPVTHETQEECLGMAVLDMMRIAKENDQTPLAIYNSISYKTFLPKCIRAKIQDYHILT
RKRIRYRFRRFIQQFSQCKATARNLKLKYLINLETLQSAFYTEKFEVKEPGSGPSGEEIFATIIITGNGGIQWSR
GKHKESETLTEQDLQLYCDFPNIIDVSIKQANQEGSNESRVVTIHKQDGKNLEIELSSLREALSFVSLIDGYYRL
TADAHHYLCKEVAPPAVLENIQSNCHGPISMDFAISKLKKAGNQTGLYVLRCSPKDFNKYFLTFAVERENVIEYK
HCLITKNENEEYNLSGTKKNFSSLKDLLNCYQMETVRSDNIIFQFTKCCPPKPKDKSNLLVFRTNGVSDVPTSPT
LQRPTHMNQMVFHKIRNEDLIFNESLGQGTFTKIFKGVRREVGDYGQLHETEVLLKVLDKAHRNYSESFFEAASM
MSKLSHKHLVLNYGVCVCGDENILVQEFVKFGSLDTYLKKNKNCINILWKLEVAKQLAWAMHFLEENTLIHGNVC
AKNILLIREEDRKTGNPPFIKLSDPGISITVLPKDILQERIPWVPPECIENPKNLNLATDKWSFGTTLWEICSGG
DKPLSALDSQRKLQFYEDRHQLPAPKWAELANLINNCMDYEPDFRPSFRAIIRDLNSLFTPDYELLTENDMLPNM
RIGALGFSGAFEDRDPTQFEERHLKFLQQLGKGNFGSVEMCRYDPLQDNTGEVVAVKKLQHSTEEHLRDFEREIE
ILKSLQHDNIVKYKGVCYSAGRRNLKLIMEYLPYGSLRDYLQKHKERIDHIKLLQYTSQICKGMEYLGTKRYIHR
DLATRNILVENENRVKIGDFGLTKVLPQDKEYYKVKEPGESPIFWYAPESLTESKFSVASDVWSFGVVLYELFTY
IEKSKSPPAEFMRMIGNDKQGQMIVFHLIELLKNNGRLPRPDGCPDEIYMIMTECWNNNVNQRPSFRDLALRVDQ
IRDNMAG

FIGURE 1692

GCTCATCCGAGGGCTTCCTGATGTGACGGACTGTGAAGAGGCAGCCCTGGATGACCTCTGTGCCGCGGAAACCGA
TGTGGAAGACCCCGAGGTGGAGTGTGGCTGAGGCCCTGAGTGTCCAGCCACATGGTGGCACCAGCACCACTCCTT
TCCTTACCACATCAACTGATTAAAGCAGTGACCAGCAGGAACTGCCCAGAGAACTGGCTGGCCTTGTTTCCTGAG
TCTGATCTGTTTGGCGGAGTGGGAGGGGTGGAGCAGGACCCGGACCCTGAGTGGCTGGGATCCTTCTTCCTGTCC
CTGGCTGTTGCTGAGCCCGTCCCCATGGTAACTGATCTGCCTTGAGGAAGGAGCCCTGCCCTGCCTGTGGAATTG
TCCTGAGTCATTGCTTTGGGCTGGGGCCATGGGAAGAAACCATTGTGTGGCAGGGAAGGAGGTGGCTCTTGGCCC
AGGCCTAAACCAGGAAAGCCTGGGAAACTGGGACCCACAGGTGGGCATGAAAGGGCCGCAGCAGGGGCTCCCAGC
AGTGTGTAAGACCGGGAGCTGGTCTGGCACCACTGCCCTGGTCCTTCCAGCTGCCTGTCACTGGTATGATGGCCC
CGGTGCATTGTGCCACCAGCAGGCCACAGCTGTGGATCTTGGAAGGCCTCTGGGGTCCCCCGGGAGCAGGGGAGT
GGGTGTGGGGGGGAACGGATGGTGGTGAGAGGGACAGACCAGGCAGGCTGACGAGCAGGGCGGGCCTGGCTCACG
TGGGCCTGTAGGCGGGCCCACGCCAAGTTTCACTTACCGCCACTGCTGCCAGCGAGAGCCGCGGGAGAGTGTGCA
GCCGAGTCACTACTGCCTGCCTGCCTGCCTGCTACGGCTCAGCAGCAGGTACGTACCCAACC**ATG**GGCTCGCAGG
CCCTGCCCCCGGGGCCCATGCAGACCCTCATCTTTTTCGACATGGAGGCCACTGGCTTGCCCTTCTCCCAGCCCA
AGGTCACGGAGCTGTGCCTGCTGGCTGTCCACAGATGTGCCCTGGAGAGCCCCCCCACCTCTCAGGGGCCACCTC
CCACAGTTCCTCCACCACCGCGTGTGGTAGACAAGCTCTCCCTGTGTGTGGCTCCGGGGAAGGCCTGCAGCCCTG
CAGCCAGCGAGATCACAGGTCTGAGCACAGCTGTGCTGGCAGCGCATGGGCGTCAATGTTTTGATGACAACCTGG
CCAACCTGCTCCTAGCCTTCCTGCGGCGCCAGCCACAGCCCTGGTGCCTGGTGGCACACAATGGTGACCGCTACG
ACTTCCCCCTGCTCCAAGCAGAGCTGGCTATGCTGGGCCTCACCAGTGCTCTGGATGGTGCCTTCTGTGTGGATA
GCATCACTGCGCTGAAGGCCCTGGAGCGAGCAAGCAGCCCCTCAGAACACGGCCCAAGGAAGAGCTACAGCCTAG
GCAGCATCTACACTCGCCTGTATGGGCAGTCCCCTCCAGACTCGCACACGGCTGAGGGTGATGTCCTGGCCCTGC
TCAGCATCTGTCAGTGGAGACCACAGGCCCTGCTGCGGTGGGTGGATGCTCACGCCAGGCCTTTCGGCACCATCA
GGCCCATGTATGGGGTCACAGCCTCTGCTAGGACCAAGCCAAGACCATCTGCTGTCACAACCACTGCACACCTGG
CCACAACCAGGAACACTAGTCCCAGCCTTGGAGAGAGCAGGGGTACCAAGGATCTTCCTCCAGTGAAGGACCCTG
GAGCCCTATCCAGGGAGGGGCTGCTGGCCCCACTGGGTCTGCTGGCCATCCTGACCTTGGCAGTAGCCACACTGT
ATGGACTATCCCTGGCCACACCTGGGGAG**TAG**GCCAAGAAGGAAAATCTGACGAATAAAGACCCCCGCTGCCCCA
TAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1693

MGSQALPPGPMQTLIFFDMEATGLPFSQPKVTELCLLAVHRCALESPPTSQGPPPTVPPPPRVVDKLSLCVAPGK
ACSPAASEITGLSTAVLAAHGRQCFDDNLANLLLAFLRRQPQPWCLVAHNGDRYDFPLLQAELAMLGLTSALDGA
FCVDSITALKALERASSPSEHGPRKSYSLGSIYTRLYGQSPPDSHTAEGDVLALLSICQWRPQALLRWVDAHARP
FGTIRPMYGVTASARTKPRPSAVTTTAHLATTRNTSPSLGESRGTKDLPPVKDPGALSREGLLAPLGLLAILTLA
VATLYGLSLATPGE

FIGURE 1694

TGAATTCGGGAAGCGCCGCAGCGGCGGATCCGGCGGCTGCTGCAGCCCGGGCGGCTGCCGAGAAGGAGGGAGGGG
AAACACAAAGCCGGCTACGCGCTGCGAGATAACAAGAGTAATCCACAGACTTAAAACATGAGCTCAGATGCCAGC
CAAGGCGTGATTACCACTCCTCCTCCTCCCAGCATGCCTCACAAAGAGAGATATTTTGACCGCATCAATGAAAAT
GACCCAGAATACATTAGGGAGAGGAACATGTCTCCTGATCTACGACAAGACTTCAACATGATGGAGCAGAGGAAA
CGAGTTACTCAGATCCTGCAAAGTCCTGCCTTTCGGGAAGACTTGGAATGCCTTATTCAAGAACAGATGAAGAAA
GGCCACAACCCAACTGGATTACTAGCATTACAGCAGATTGCAGATTACATCATGGCCAATTCTTTCTCGGGTTTT
TCTTCACCTCCTCTCAGTCTTGGCATGGTCACACCTATCAATGACCTTCCTGGTGCAGATACATCCTCATATGTG
AAGGGAGAAAAACTTACTCGCTGTAAACTTGCCAGCCTGTACAGACTTGTAGACTTGTTTGGATGGGCACACCTG
GCAAATACCTATATCTCAGTAAGAATAAGTAAGGAGCAAGACCACATTATAATAATTCCCAGAGGCCTATCTTTT
TCTGAAGCTACAGCCTCCAATTTGGTGAAAGTCAATATAATAGGAGAAGTGGTTGACCAGGGAAGTACCAATTTG
AAAATTGACCATACAGGATTCAGTCCCCATGCTGCAATCTATTCAACACGTCCTGATGTTAAGTGTGTGATACAC
ATCCATACCCTTGCAACAGCAGCTGTATCCTCCATGAAATGTGGGATCCTTCCAATTTCTCAAGAGTCTCTTCTT
CTGGGAGATGTTGCCTATTATGACTACCAAGGGTCACTTGAAGAACAGGAGGAGAGAATTCAACTGCAGAAGGTT
CTGGGACCAAGTTGTAAGGTGCTGGTACTCAGGAATCATGGTGTGGTTGCACTTGGAGAAACATTAGAGGAGGCT
TTTCATTATATTTTTAATGTGCAACTAGCCTGTGAGATTCAGGTGCAGGCCCTAGCAGGTGCAGGTGGAGTAGAC
AATCTCCATGTACTGGACTTTCAGAAGTATAAAGCTTTCACTTACACTGTAGCAGCGTCTGGTGGAGGAGGTGTG
AATATGGGTTCCCATCCAAAATGGAAGGTTGGCGAAATTGAGTTTGAAGGGCTTATGAGGACTCTGGACAACTTG
GGGTATAGAACAGGCTATGCTTACAGGCATCCTCTCATTCGAGAGAAGCCTAGGCACAAGAGTGATGTGGAAATC
CCAGCAACTGTGACTGCTTTTTCCTTTGAAGACGATACAATGCCACTCTCTCCTCTCCAAATACATGGCACAAGA
GGCAACAAGCGTGAAAAAACAAGATGGCTGAACTCACCAAATACTTACATGAAAGTGAATGTGCCTGAGGAGTCT
CGGAACGGAGAAACCAGTCCCCGAACCAAAATCACGTGGATGAAAGCAGAAGACTCATCTAAAGTTAGTGGTGGA
ACACCTATCCAAATTGAAGATCCAAATCAGTTTGTTCCTTTAAACACAAACCCGAATGAGGTACTAGAAAAGAGA
AATAAGATTCGGGAACAAAATCGATATGACTTGAAAACAGCAGGACCACAATCTCAGTTGCTTGCTGGAATTGTT
GTGGATAAGCCACCTTCTACTATGCAATTTGAAGATGATGATCATGGCCCACCAGCTCCTCCTAACCCATTTAGT
CATCTCACAGAAGGAGAACTTGAAGAGTATAAGAGGACAATCGAACGTAAACAACAAGGCCTAGAAGAAAACCAT
GAGCTGTTTTCCAAGAGCTTCATCTCCATGGAAGTGCCTGTCATGGTAGTAAATGGCAAGGATGATATGCATGAT
GTTGAAGATGAGCTTGCTAAGCGAGTGAGTAGGTTAAGCACAAGTACAACCATAGAAAACATCGAGATTACTATT
AAGTCTCCAGAGAAAATCGAAGAAGTCCTGTCACCTGAAGGCTCCCCTTCAAAATCGCCATCCAAGAAAAAGAAG
AAATTCCGCACTCCTTCTTTTCTGAAAAAGAACAAAAAAAAGGAGAAAGTTGAGGCCTAAATAAAGTCTTTTTAT
AATTATTATTATAACAATGTGACATTGCACATCTAAATACCACATTTAAGTTGATCATTAATATGCAATGGTAGA
TCAGATTGGGGGATGTAGCAAACTGGACTTTAAGAACTGGAAAGAGGTTTTACAAAAGAAAAACTTCAAGATTCA
TCTCTCATTTTATATGTCCAGAAATGGCTTTGGAATTTTAAGCAATTACTAGTTTTAATTAGCTCTGCCCTCATG
AAGTTTATTATT

FIGURE 1695

MSSDASQGVITTPPPPSMPHKERYFDRINENDPEYIRERNMSPDLRQDFNMMEQRKRVTQILQSPAFREDLECLI
QEQMKKGHNPTGLLALQQIADYIMANSFSGFSSPPLSLGMVTPINDLPGADTSSYVKGEKLTRCKLASLYRLVDL
FGWAHLANTYISVRISKEQDHIIIIPRGLSFSEATASNLVKVNIIGEVVDQGSTNLKIDHTGFSPHAAIYSTRPD
VKCVIHIHTLATAAVSSMKCGILPISQESLLLGDVAYYDYQGSLEEQEERIQLQKVLGPSCKVLVLRNHGVVALG
ETLEEAFHYIFNVQLACEIQVQALAGAGGVDNLHVLDFQKYKAFTYTVAASGGGGVNMGSHPKWKVGEIEFEGLM
RTLDNLGYRTGYAYRHPLIREKPRHKSDVEIPATVTAFSFEDDTMPLSPLQIHGTRGNKREKTRWLNSPNTYMKV
NVPEESRNGETSPRTKITWMKAEDSSKVSGGTPIQIEDPNQFVPLNTNPNEVLEKRNKIREQNRYDLKTAGPQSQ
LLAGIVVDKPPSTMQFEDDDHGPPAPPNPFSHLTEGELEEYKRTIERKQQGLEENHELFSKSFISMEVPVMVVNG
KDDMHDVEDELAKRVSRLSTSTTIENIEITIKSPEKIEEVLSPEGSPSKSPSKKKKKFRTPSFLKKNKKKEKVEA

FIGURE 1696A

GGCAGGGCACACCTGGATTGCATTAGAATGAGACTCACTACCCAGTTCAGGTGTGTTGCGTTGTGGGTCTCCGGC
ACATTTCAGAGGCTGATTAGGACCCTGACCCCACACTGGGGTTTACACCCCTAAAAGCAGGTGTGTCCCGTGGCA
ACTGAGTGGGTGCGTGAAAAGGGGGGATCATCAATTACCAGCTGGAGCAATCGAATCGGTTAAATGTGAATCAAG
TCACAGTGCTTCCTTAACCCAACCTCTCTGTTGGGGTCAGCCACAGCCTAAACCGCCTGCCGTTCAGCCTGAGAG
GCTGCTGCTAGCCTGCTCACGCATGCAGCCCGGGCTGCAGAGGAAGTGTGGGGAGGAAGGAAGTGGGTATAGAAG
GGTGCTGAGATGTGGGTCTTGAAGAGAATAGCCATAACGTCTTTGTCACTAAAATGTTCCCCAGGGGCCTTCGGC
GAGTCTTTTTGTTTGGTTTTTTGTTTTTAATCTGTGGCTCTTGATAATTTATCTAGTGGTTGCCTACACCTGAAA
AACAAGACACAGTGTTTAACTATCAACGAAAGAACTGGACGGCTCCCCGCCGCAGTCCCACTCCCCGAGTTTGTG
GCTGGCATTTGGGCCACGCCGGGCTGGGCGGCTCACAGCGAGGGGCGCGCAGTTTGGGGTCACACAGCTCCGCTT
CTAGGCCCCAACCACCGTTAAAAGGGGAAGCCCGTGCCCCATCAGGTCCGCTCTTGCTGAGCCCAGAGCCATCCC
GCGCTCTGCGGGCTGGGAGGCCCGGGCCAGACGCGAGTCCTGCGCAGCCGAGGTTCCCCAGCGCCCCCTGCAGCC
GCGCGTAGGCAGAGACGGAGCCCGGCCCTGCGCCTCCGCACCACGCCCGGGACCCCACCCAGCGGCCCGTACCCG
GAGAAGCAGCGCGAGCACCCGAAGCTCCCGGCTCGGCGGCAGAAACCGGGAGTGGGGCCGGGCGAGTGCGCGGCA
TCCCAGGCCGGCCCGAACGTCCGCCCGCGGTGGGCCGACTTCCCCTCCTCTTCCCTCTCTCCTTCCTTTAGCCCG
CTGGCGCCGGACACGCTGCGCCTCATCTCTTGGGGCGTTCTTCCCCGTTGGCCAACCGTCGCATCCCGTGCAACT
TTGGGGTAGTGGCCGCTTAGTGTTGA**ATG**TTCCCCACCGAGAGCGCATGGCTTGGGAAGCGAGGCGCGAACCCGG
GCCCCGAAGCCGCCGTCCGGGAGACGGTGATGCTGTTGCTGTGCCTGGGGGTCCCGACCGGCCGCCCCTACAACG
TGGACACTGAGAGCGCGCTGCTTTACCAGGGCCCCCACAACACGCTGTTCGGCTACTCGGTCGTGCTGCACAGCC
ACGGGGCGAACCGATGGCTCCTAGTGGGTGCGCCCACTGCCAACTGGCTCGCCAACGCTTCAGTGATCAATCCCG
GGGCGATTTACAGATGCAGGATCGGAAAGAATCCCGGCCAGACGTGCGAACAGCTCCAGCTGGGTAGCCCTAATG
GAGAACCTTGTGGAAAGACTTGTTTGGAAGAGAGAGACAATCAGTGGTTGGGGGTCACACTTTCCAGACAGCCAG
GAGAAAATGGATCCATCGTGACTTGTGGGCATAGATGGAAAAATATATTTTACATAAAGAATGAAAATAAGCTCC
CCACTGGTGGTTGCTATGGAGTGCCCCCTGATTTACGAACAGAACTGAGTAAAAGAATAGCTCCGTGTTATCAAG
ATTATGTGAAAAAATTTGGAGAAAATTTTGCATCATGTCAAGCTGGAATATCCAGTTTTTACACAAAGGATTTAA
TTGTGATGGGGGCCCCAGGATCATCTTACTGGACTGGCTCTCTTTTTGTCTACAATATAACTACAAATAAATACA
AGGCTTTTTTAGACAAACAAAATCAAGTAAAATTTGGAAGTTATTTAGGATATTCAGTCGGAGCTGGTCATTTTC
GGAGCCAGCATACTACCGAAGTAGTCGGAGGAGCTCCTCAACATGAGCAGATTGGTAAGGCATATATATTCAGCA
TTGATGAAAAAGAACTAAATATCTTACATGAAATGAAAGGTAAAAAGCTTGGATCGTACTTTGGAGCTTCTGTCT
GTGCTGTGGACCTCAATGCAGATGGCTTCTCAGATCTGCTCGTGGGAGCACCCATGCAGAGCACCATCAGAGAGG
AAGGAAGAGTGTTTGTGTACATCAACTCTGGCTCGGGAGCAGTAATGAATGCAATGGAAACAAACCTCGTTGGAA
GTGACAAATATGCTGCAAGATTTGGGGAATCTATAGTTAATCTTGGCGACATTGACAATGATGGCTTTGAAGATG
TTGCTATCGGAGCTCCACAAGAAGATGACTTGCAAGGTGCTATTTATATTTACAATGGCCGTGCAGATGGGATCT
CGTCAACCTTCTCACAGAGAATTGAAGGACTTCAGATCAGCAAATCGTTAAGTATGTTTGGACAGTCTATATCAG
GACAAATTGATGCAGATAATAATGGCTATGTAGATGTAGCAGTTGGTGCTTTTCGGTCTGATTCTGCTGTCTTGC
TAAGGACAAGACCTGTAGTAATTGTTGACGCTTCTTTAAGCCACCCTGAGTCAGTAAATAGAACGAAATTTGACT
GTGTTGAAAATGGATGGCCTTCTGTGTGCATAGATCTAACACTTTGTTTCTCATATAAGGGCAAGGAAGTTCCAG
GTTACATTGTTTTGTTTTATAACATGAGTTTGGATGTGAACAGAAAGGCAGAGTCTCCACCAAGATTCTATTTCT
CTTCTAATGGAACTTCTGACGTGATTACAGGAAGCATACAGGTGTCCAGCAGAGAAGCTAACTGTAGAACACATC
AAGCATTTATGCGGAAAGATGTGCGGGACATCCTCACCCCAATTCAGATTGAAGCTGCTTACCACCTTGGTCCTC
ATGTCATCAGTAAACGAAGTACAGAGGAATTCCCACCACTTCAGCCAATTCTTCAGCAGAAGAAAGAAAAAGACA
TAATGAAAAAAACAATAAACTTTGCAAGGTTTTGTGCCCATGAAAATTGTTCTGCTGATTTACAGGTTTCTGCAA
AGATTGGGTTTTTGAAGCCCCATGAAAATAAAACATATCTTGCTGTTGGGAGTATGAAGACATTGATGTTGAATG
TGTCCTTGTTTAATGCTGGAGATGATGCATATGAAACGACTCTACATGTCAAACTACCCGTGGGTCTTTATTTCA
TTAAGATTTTAGAGCTGGAAGAGAAGCAAATAAACTGTGAAGTCACAGATAACTCTGGCGTGGTACAACTTGACT
GCAGTATTGGCTATATATATGTAGATCATCTCTCAAGGATAGATATTAGCTTTCTCCTGGATGTGAGCTCACTCA
GCAGAGCGGAAGAGGACCTCAGTATCACAGTGCATGCTACCTGTGAAAATGAAGAGGAAATGGACAATCTAAAGC
ACAGCAGAGTGACTGTAGCAATACCTTTAAAATATGAGGTTAAGCTGACTGTTCATGGGTTTGTAAACCCAACTT
CATTTGTGTATGGATCAAATGATGAAAATGAGCCTGAAACGTGCATGGTGGAGAAAATGAACTTAACTTTCCATG

FIGURE 1696B

TTATCAACACTGGCAATAGTATGGCTCCCAATGTTAGTGTGGAAATAATGGTACCAAATTCTTTTAGCCCCCAAA
CTGATAAGCTGTTCAACATTTTGGATGTCCAGACTACTACTGGAGAATGCCACTTTGAAAATTATCAAAGAGTGT
GTGCATTAGAGCAGCAAAAGAGTGCAATGCAGACCTTGAAAGGCATAGTCCGGTTCTTGTCCAAGACTGATAAGA
GGCTATTGTACTGCATAAAAGCTGATCCACATTGTTTAAATTTCTTGTGTAATTTTGGGAAAATGGAAAGTGGAA
AAGAAGCCAGTGTTCATATCCAACTGGAAGGCCGGCCATCCATTTTAGAAATGGATGAGACTTCAGCACTCAAGT
TTGAAATAAGAGCAACAGGTTTTCCAGAGCCAAATCCAAGAGTAATTGAACTAAACAAGGATGAGAATGTTGCGC
ATGTTCTACTGGAAGGACTACATCATCAAAGACCCAAACGTTATTTCACCATAGTGATTATTTCAAGTAGCTTGC
TACTTGGACTTATTGTACTTCTGTTGATCTCATATGTTATGTGGAAGGCTGGCTTCTTTAAAAGACAATACAAAT
CTATCCTACAAGAAGAAAACAGAAGAGACAGTTGGAGTTATATCAACAGTAAAAGCAATGATGATTAAGGACTTC
TTTCAAATTGAGAGAATGGAAAACAGACTCAGGTTGTAGTAAAGAAATTTAAAAGACACTGTTTACAAGAAAAAA
TGAATTTTGTTTGGACTTCTTTTACTCATGATCTTGTGACATATTATGTCTTCATGCAAGGGGAAAATCTCAGCA
ATGATTACTCTTTGAGATAGAAGAACTGCAAAGGTAATAATACAGCCAAAGATAATCTCTCAGCTTTTAAATGGG
TAGAGAAACACTAAAGCATTCAATTTATTCAAGAAAAGTAAGCCCTTGAAGATATCTTGAAATGAAAGTATAACT
GAGTTAAATTATACTGGAGAAGTCTTAGACTTGAAATACTACTTACCATATGTGCTTGCCTCAGTAAAATGAACC
CCACTGGGTGGGCAGAGGTTCATTTCAAATACATCTTTGATACTTGTTCAAAATATGTTCTTTAAAAATATAATT
TTTTAGAGAGCTGTTCCCAAATTTTCTAACGAGTGGACCATTATCACTTTAAAGCCCTTTATTTATAATACATTT
CCTACGGGCTGTGTTCCAACAACCATTTTTTTTCAGCAGACTATGAATATTATAGTATTATAGGCCAAACTGGCA
AACTTCAGACTGAACATGTACACTGGTTTGAGCTTAGTGAAATGACTTCCGGAATCT

FIGURE 1697

MFPTESAWLGKRGANPGPEAAVRETVMLLLCLGVPTGRPYNVDTESALLYQGPHNTLFGYSVVLHSHGANRWLLV
GAPTANWLANASVINPGAIYRCRIGKNPGQTCEQLQLGSPNGEPCGKTCLEERDNQWLGVTLSRQPGENGSIVTC
GHRWKNIFYIKNENKLPTGGCYGVPPDLRTELSKRIAPCYQDYVKKFGENFASCQAGISSFYTKDLIVMGAPGSS
YWTGSLFVYNITTNKYKAFLDKQNQVKFGSYLGYSVGAGHFRSQHTTEVVGGAPQHEQIGKAYIFSIDEKELNIL
HEMKGKKLGSYFGASVCAVDLNADGFSDLLVGAPMQSTIREEGRVFVYINSGSGAVMNAMETNLVGSDKYAARFG
ESIVNLGDIDNDGFEDVAIGAPQEDDLQGAIYIYNGRADGISSTFSQRIEGLQISKSLSMFGQSISGQIDADNNG
YVDVAVGAFRSDSAVLLRTRPVVIVDASLSHPESVNRTKFDCVENGWPSVCIDLTLCFSYKGKEVPGYIVLFYNM
SLDVNRKAESPPRFYFSSNGTSDVITGSIQVSSREANCRTHQAFMRKDVRDILTPIQIEAAYHLGPHVISKRSTE
EFPPLQPILQQKKEKDIMKKTINFARFCAHENCSADLQVSAKIGFLKPHENKTYLAVGSMKTLMLNVSLFNAGDD
AYETTLHVKLPVGLYFIKILELEEKQINCEVTDNSGVVQLDCSIGYIYVDHLSRIDISFLLDVSSLSRAEEDLSI
TVHATCENEEEMDNLKHSRVTVAIPLKYEVKLTVHGFVNPTSFVYGSNDENEPETCMVEKMNLTFHVINTGNSMA
PNVSVEIMVPNSFSPQTDKLFNILDVQTTTGECHFENYQRVCALEQQKSAMQTLKGIVRFLSKTDKRLLYCIKAD
PHCLNFLCNFGKMESGKEASVHIQLEGRPSILEMDETSALKFEIRATGFPEPNPRVIELNKDENVAHVLLEGLHH
QRPKRYFTIVIISSSLLLGLIVLLLISYVMWKAGFFKRQYKSILQEENRRDSWSYINSKSNDD

FIGURE 1698A

GGCAGGGCACACCTGGATTGCATTAGAATGAGACTCACTACCCAGTTCAGGTGTGTTGCGTTGTGGGTCTCCGGC
ACATTTCAGAGGCTGATTAGGACCCTGACCCCACACTGGGGTTTACACCCCTAAAAGCAGGTGTGTCCCGTGGCA
ACTGAGTGGGTGCGTGAAAAGGGGGGATCATCAATTACCAGCTGGAGCAATCGAATCGGTTAAATGTGAATCAAG
TCACAGTGCTTCCTTAACCCAACCTCTCTGTTGGGGTCAGCCACAGCCTAAACCGCCTGCCGTTCAGCCTGAGAG
GCTGCTGCTAGCCTGCTCACGCATGCAGCCCGGGCTGCAGAGGAAGTGTGGGGAGGAAGGAAGTGGGTATAGAAG
GGTGCTGAGATGTGGGTCTTGAAGAGAATAGCCATAACGTCTTTGTCACTAAAATGTTCCCCAGGGGCCTTCGGC
GAGTCTTTTTGTTTGGTTTTTTGTTTTTAATCTGTGGCTCTTGATAATTTATCTAGTGGTTGCCTACACCTGAAA
AACAAGACACAGTGTTTAACTATCAACGAAAGAACTGGACGGCTCCCCGCCGCAGTCCCACTCCCCGAGTTTGTG
GCTGGCATTTGGGCCACGCCGGGCTGGGCGGCTCACAGCGAGGGGCGCGCAGTTTGGGGTCACACAGCTCCGCTT
CTAGGCCCCAACCACCGTTAAAAGGGGAAGCCCGTGCCCCATCAGGTCCGCTCTTGCTGAGCCCAGAGCCATCCC
GCGCTCTGCGGGCTGGGAGGCCCGGGCCAGACGCGAGTCCTGCGCAGCCGAGGTTCCCCAGCGCCCCCTGCAGCC
GCGCGTAGGCAGAGACGGAGCCCGGCCCTGCGCCTCCGCACCACGCCCGGGACCCCACCCAGCGGCCCGTACCCG
GAGAAGCAGCGCGAGCACCCGAAGCTCCCGGCTCGGCGGCAGAAACCGGGAGTGGGGCCGGGCGAGTGCGCGGCA
TCCCAGGCCGGCCCGAACGTCCGCCCGCGGTGGGCCGACTTCCCCTCCTCTTCCCTCTCTCCTTCCTTTAGCCCG
CTGGCGCCGGACACGCTGCGCCTCATCTCTTGGGGCGTTCTTCCCCGTTGGCCAACCGTCGCATCCCGTGCAACT
TTGGGGTAGTGGCCGCTTAGTGTTGA**ATG**TTCCCCACCGAGAGCGCATGGCTTGGGAAGCGAGGCGCGAACCCGG
GCCCCGAAGCCGCCGTCCGGGAGACGGTGATGCTGTTGCTGTGCCTGGGGGTCCCGACCGGCCGCCCCTACAACG
TGGACACTGAGAGCGCGCTGCTTTACCAGGGCCCCCACAACACGCTGTTCGGCTACTCGGTCGTGCTGCACAGCC
ACGGGGCGAACCGATGGCTCCTAGTGGGTGCGCCCACTGCCAACTGGCTCGCCAACGCTTCAGTGATCAATCCCG
GGGCGATTTACAGATGCAGGATCGGAAAGAATCCCGGCCAGACGTGCGAACAGCTCCAGCTGGGTAGCCCTAATG
GAGAACCTTGTGGAAAGACTTGTTTGGAAGAGAGAGACAATCAGTGGTTGGGGGTCACACTTTCCAGACAGCCAG
GAGAAAATGGATCCATCGTGACTTGTGGGCATAGATGGAAAAATATATTTTACATAAAGAATGAAAATAAGCTCC
CCACTGGTGGTTGCTATGGAGTGCCCCCTGATTTACGAACAGAACTGAGTAAAAGAATAGCTCCGTGTTATCAAG
ATTATGTGAAAAAATTTGGAGAAAATTTTGCATCATGTCAAGCTGGAATATCCAGTTTTTACACAAAGGATTTAA
TTGTGATGGGGGCCCCAGGATCATCTTACTGGACTGGCTCTCTTTTTGTCTACAATATAACTACAAATAAATACA
AGGCTTTTTTAGACAAACAAAATCAAGTAAAATTTGGAAGTTATTTAGGATATTCAGTCGGAGCTGGTCATTTTC
GGAGCCAGCATACTACCGAAGTAGTCGGAGGAGCTCCTCAACATGAGCAGATTGGTAAGGCATATATATTCAGCA
TTGATGAAAAAGAACTAAATATCTTACATGAAATGAAAGGTAAAAAGCTTGGATCGTACTTTGGAGCTTCTGTCT
GTGCTGTGGACCTCAATGCAGATGGCTTCTCAGATCTGCTCGTGGGAGCACCCATGCAGAGCACCATCAGAGAGG
AAGGAAGAGTGTTTGTGTACATCAACTCTGGCTCGGGAGCAGTAATGAATGCAATGGAAACAAACCTCGTTGGAA
GTGACAAATATGCTGCAAGATTTGGGGAATCTATAGTTAATCTTGGCGACATTGACAATGATGGCTTTGAAGATG
TTGCTATCGGAGCTCCACAAGAAGATGACTTGCAAGGTGCTATTTATATTTACAATGGCCGTGCAGATGGGATCT
CGTCAACCTTCTCACAGAGAATTGAAGGACTTCAGATCAGCAAATCGTTAAGTATGTTTGGACAGTCTATATCAG
GACAAATTGATGCAGATAATAATGGCTATGTAGATGTAGCAGTTGGTGCTTTTCGGTCTGATTCTGCTGTCTTGC
TAAGGACAAGACCTGTAGTAATTGTTGACGCTTCTTTAAGCCACCCTGAGTCAGTAAATAGAACGAAATTTGACT
GTGTTGAAAATGGATGGCCTTCTGTGTGCATAGATCTAACACTTTGTTTCTCATATAAGGGCAAGGAAGTTCCAG
GTTACATTGTTTTGTTTTATAACATGAGTTTGGATGTGAACAGAAAGGCAGAGTCTCCACCAAGATTCTATTTCT
CTTCTAATGGAACTTCTGACGTGATTACAGGAAGCATACAGGTGTCCAGCAGAGAAGCTAACTGTAGAACACATC
AAGCATTTATGCGGAAAGATGTGCGGGACATCCTCACCCCAATTCAGATTGAAGCTGCTTACCACCTTGGTCCTC
ATGTCATCAGTAAACGAAGTACAGAGGAATTCCCACCACTTCAGCCAATTCTTCAGCAGAAGAAAGAAAAAGACA
TAATGAAAAAAACAATAAACTTTGCAAGGTTTTGTGCCCATGAAAATTGTTCTGCTGATTTACAGGTTTCTGCAA
AGATTGGGTTTTTGAAGCCCCATGAAAATAAAACATATCTTGCTGTTGGGAGTATGAAGACATTGATGTTGAATG
TGTCCTTGTTTAATGCTGGAGATGATGCATATGAAACGACTCTACATGTCAAACTACCCGTGGGTCTTTATTTCA
TTAAGATTTTAGAGCTGGAAGAGAAGCAAATAAACTGTGAAGTCACAGATAACTCTGGCGTGGTACAACTTGACT
GCAGTATTGGCTATATATATGTAGATCATCTCTCAAGGATAGATATTAGCTTTCTCCTGGATGTGAGCTCACTCA
GCAGAGCGGAAGAGGACCTCAGTATCACAGTGCATGCTACCTGTGAAAATGAAGAGGAAATGGACAATCTAAAGC
ACAGCAGAGTGACTGTAGCAATACCTTTAAAATATGAGGTTAAGCTGACTGTTCATGGGTTTGTAAACCCAACTT
CATTTGTGTATGGATCAAATGATGAAAATGAGCCTGAAACGTGCATGGTGGAGAAAATGAACTTAACTTTCCATG

FIGURE 1698B

TTATCAACACTGGCAATAGTATGGCTCCCAATGTTAGTGTGGAAATAATGGTACCAAATTCTTTTAGCCCCCAAA
CTGATAAGCTGTTCAACATTTTGGATGTCCAGACTACTACTGGAGAATGCCACTTTGAAAATTATCAAAGAGTGT
GTGCATTAGAGCAGCAAAAGAGTGCAATGCAGACCTTGAAAGGCATAGTCCGGTTCTTGTCCAAGACTGATAAGA
GGCTATTGTACTGCATAAAAGCTGATCCACATTGTTTAAATTTCTTGTGTAATTTTGGGAAAATGGAAAGTGGAA
AAGAAGCCAGTGTTCATATCCAACTGGAAGGCCGGCCATCCATTTTAGAAATGGATGAGACTTCAGCACTCAAGT
TTGAAATAAGAGCAACAGGTTTTCCAGAGCCAAATCCAAGAGTAATTGAACTAAACAAGGATGAGAATGTTGCGC
ATGTTCTACTGGAAGGACTACATCATCAAAGACCCAAACGTTATTTCACCATAGTGATTATTTCAAGTAGCTTGC
TACTTGGACTTATTGTACTTCTGTTGATCTCATATGTTATGTGGAAGGCTGGCTTCTTTAAAAGACAATACAAAT
CTATCCTACAAGAAGAAAACAGAAGAGACAGTTGGAGTTATATCAACAGTAAAAGCAATGATGATTAAGGACTTC
TTTCAAATTGAGAGAATGGAAAACAGACTCAGGTTGTAGTAAAGAAATTTAAAAGACACTGTTTACAAGAAAAAA
TGAATTTTGTTTGGACTTCTTTTACTCATGATCTTGTGACATATTATGTCTTCATGCAAGGGGAAAATCTCAGCA
ATGATTACTCTTTGAGATAGAAGAACTGCAAAGGTAATAATACAGCCAAAGATAATCTCTCAGCTTTTAAATGGG
TAGAGAAACACTAAAGCATTCAATTTATTCAAGAAAAGTAAGCCCTTGAAGATATCTTGAAATGAAAGTATAACT
GAGTTAAATTATACTGGAGAAGTCTTAGACTTGAAATACTACTTACCATATGTGCTTGCCTCAGTAAAATGAACC
CCACTGGGTGGGCAGAGGTTCATTTCAAATACATCTTTGATACTTGTTCAAAATATGTTCTTTAAAAATATAATT
TTTTAGAGAGCTGTTCCCAAATTTTCTAACGAGTGGACCATTATCACTTTAAAGCCCTTTATTTATAATACATTT
CCTACGGGCTGTGTTCCAACAACCATTTTTTTTCAGCAGACTATGAATATTATAGTATTATAGGCCAAACTGGCA
AACTTCAGACTGAACATGTACACTGGTTTGAGCTTAGTGAAATGACTTCCGGAATCT

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FIGURE 1699

MFPTESAWLGKRGANPGPEAAVRETVMLLLCLGVPTGRPYNVDTESALLYQGPHNTLFGYSVVLHSHGANRWLLV
GAPTANWLANASVINPGAIYRCRIGKNPGQTCEQLQLGSPNGEPCGKTCLEERDNQWLGVTLSRQPGENGSIVTC
GHRWKNIFYIKNENKLPTGGCYGVPPDLRTELSKRIAPCYQDYVKKFGENFASCQAGISSFYTKDLIVMGAPGSS
YWTGSLFVYNITTNKYKAFLDKQNQVKFGSYLGYSVGAGHFRSQHTTEVVGGAPQHEQIGKAYIFSIDEKELNIL
HEMKGKKLGSYFGASVCAVDLNADGFSDLLVGAPMQSTIREEGRVFVYINSGSGAVMNAMETNLVGSDKYAARFG
ESIVNLGDIDNDGFEDVAIGAPQEDDLQGAIYIYNGRADGISSTFSQRIEGLQISKSLSMFGQSISGQIDADNNG
YVDVAVGAFRSDSAVLLRTRPVVIVDASLSHPESVNRTKFDCVENGWPSVCIDLTLCFSYKGKEVPGYIVLFYNM
SLDVNRKAESPPRFYFSSNGTSDVITGSIQVSSREANCRTHQAFMRKDVRDILTPIQIEAAYHLGPHVISKRSTE
EFPPLQPILQQKKEKDIMKKTINFARFCAHENCSADLQVSAKIGFLKPHENKTYLAVGSMKTLMLNVSLFNAGDD
AYETTLHVKLPVGLYFIKILELEEKQINCEVTDNSGVVQLDCSIGYIYVDHLSRIDISFLLDVSSLSRAEEDLSI
TVHATCENEEEMDNLKHSRVTVAIPLKYEVKLTVHGFVNPTSFVYGSNDENEPETCMVEKMNLTFHVINTGNSMA
PNVSVEIMVPNSFSPQTDKLFNILDVQTTTGECHFENYQRVCALEQQKSAMQTLKGIVRFLSKTDKRLLYCIKAD
PHCLNFLCNFGKMESGKEASVHIQLEGRPSILEMDETSALKFEIRATGFPEPNPRVIELNKDENVAHVLLEGLHH
QRPKRYFTIVIISSSLLLGLIVLLLISYVMWKAGFFKRQYKSILQEENRRDSWSYINSKSNDD

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FIGURE 1700

GGCCCCTTGTCTGCAGAGATGGCTCCCAATGCTTCCTGCCTCTGTGTGCATGTCCGTTCCGAGGAATGGGATTTA
ATGACCTTTGATGCCAACCCATATGACAGCGTGAAAAAAATCAAAGAACATGTCCGGTCTAAGACCAAGGTTCCT
GTGCAGGACCAGGTTCTTTTGCTGGGCTCCAAGATCTTAAAGCCACGGAGAAGCCTCTCATCTTATGGCATTGAC
AAAGAGAAGACCATCCACCTTACCCTGAAAGTGGTGAAGCCCAGTGATGAGGAGCTGCCCTTGTTTCTTGTGGAG
TCAGGTGATGAGGCAAAGAGGCACCTCCTCCAGGTGCGAAGGTCCAGCTCAGTGGCACAAGTGAAAGCAATGATC
GAGACTAAGACGGGTATAATCCCTGAGACCCAGATTGTGACTTGCAATGGAAAGAGACTGGAAGATGGGAAGATG
ATGGCAGATTACGGCATCAGAAAGGGCAACTTACTCTTCCTGGCATCTTATTGTATTGGAGGGTGACCACCCTGG
GGATGGGGTGTTGGCAGGGGTCAAAAAGCTTATTTCTTTTAATCTCTTACTCAACGAACACATCTTCTGATGATT
TCCCAAAATTAATGAGAATGAGATGAGTAGAGTAAGATTTGGGTGGGATGGGTAGGATGAAGTATATTGCCCAAC
TCTATGTTTCTTTGATTCTAACACAATTAATTAAGTGACATGATTTTTACTAATGTATTACTGAGACTAGTAAAT
AAATTTTTAAGGCAAAATAGAGCATTC

FIGURE 1701

MAPNASCLCVHVRSEEWDLMTFDANPYDSVKKIKEHVRSKTKVPVQDQVLLLGSKILKPRRSLSSYGIDKEKTIH
LTLKVVKPSDEELPLFLVESGDEAKRHLLQVRRSSSVAQVKAMIETKTGIIPETQIVTCNGKRLEDGKMMADYGI
RKGNLLFLASYCIGG

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FIGURE 1702

GAATTCGTGGGTCGTGCTGCGTCGACAACGGTAGTGACGCGTATTGCCTGGAGGATGGCGGACGCCGGCATTCGC
CGCGTGGTTCCCAGCGACCTGTATCCCCTCGTGCTCGGCTTCCTGCGCGATAACCAACTCTCAGAGGTGGCCAAT
AAGTTCGCCAAAGCGACAGGAGCTACACAGCAGGATGCCAATGCCTCTTCCCTCTTAGACATCTATAGCTTCTGG
CTCAAGTCTGCCAAGGTCCCAGAGCGAAAGTTACAGGCAAATGGACCAGTGGCTAAGAAAGCTAAGAAGAAGGCC
TCATCCAGTGACAGTGAGGACAGCAGCGAGGAGGAGGAGGAAGTTCAAGGGCCTCCAGCAAAGAAGGCTGCTGTA
CCTGCCAAGCGAGTCGGTCTGCCTCCTGGGAAGGCTGCAGCCAAAGCATCAGAGAGTAGCAGCAGTGAAGAGTCC
AGAGATGATGATGATGAGGAGGACCAAAAGAAACAGCCTGTCCAGAAGGGAGTTAAGCCCCAAGCCAAGGCAGCC
AAAGCTCCTCCTAAGAAGGCCAAGAGCTCTGATTCTGATTCTGACTCAAGCTCCGAGGATGAGCCACCAAAGAAC
CAGAAGCCAAAGATAACACCTGTGACAGTTAAAGCTCAGACTAAAGCCCCTCCCAAACCAGCTCGAGCAGCACCT
AAAATAGCCAATGGTAAAGCAGCCAGTAGCAGCAGTAGCAGCAGCAGCAGCAGTAGCAGTGATGACTCAGAGGAG
GAGAAGGCAGCAGCCACCCCCAAGAAGACTGTACCTAAAAAGCAAGTTGTGGCCAAAGCCCCAGTGAAAGCAGCT
ACCACCCCTACCCGGAAGAGTTCTAGCAGTGAGGATTCCTCCAGTGACGAGGAAGAGGAGCAAAAAAAACCCATG
AAAAATAAACCAGGTCCCTACAGTTACGCCCCCCCGCCTTCTGCTCCCCCACCAAAGAAGTCTCTGGGAACCCAG
CCTCCCAAGAAGGCTGTGGAGAAGCAGCAGCCTGTGGAAAGCAGTGAAGACAGCAGTGATGAGTCTGATTCAAGT
TCTGAAGAAGAGAAGAAACCCCCAACTAAGGCAGTAGTCTCTAAAGCAACCACTAAACCACCTCCAGCAAAGAAA
GCAGCAGAGAGCTCTTCAGACAGCTCAGACTCTGACAGCTCTGAGGATGATGAAGCTCCTTCTAAGCCAGCTGGT
ACCACCAAGAATTCTTCAAATAAGCCAGCTGTCACCACCAAGTCACCTGCAGTGAAGCCAGCTGCAGCCCCCAAG
CAACCTGTGGGCGGTGGCCAGAAGCTTCTGACGAGAAAGGCTGACAGCAGCTCCAGCGAGGAAGAGAGCAGCTCC
AGTGAGGAGGAGAAGACAAAGAAGATGGTGGCCACCACTAAGCCCAAGGCGACTGCCAAAGCAGCTCTATCTCTG
CCTGCCAAGCAGGCTCCTCAGGGTAGTAGGGACAGCAGCTCTGATTCAGACAGCTCCAGCAGTGAGGAGGAGGAA
GAGAAGACATCTAAGTCTGCAGTTAAGAAGAAGCCACAGAAGGTAGCAGGAGGTGCAGCCCCTTCCAAGCCAGCC
TCTGCAAAGAAAGGAAAGGCTGAGAGCAGCAACAGTTCTTCTTCTGATGACTCCAGTGAGGAAGAGGAAGAGAAG
CTCAAGGGCAAGGGCTCTCCAAGACCACAAGCCCCCAAGGCCAATGGCACCTCTGCACTGACTGCCCAGAATGGA
AAAGCAGCTAAGAACAGTGAGGAGGAGGAAGAAGAAAAGAAAAAGGCGGCAGTGGTAGTTTCCAAATCAGGTTCA
TTAAAGAAGCGGAAGCAGAATGAGGCTGCCAAGGAGGCAGAGACTCCTCAGGCCAAGAAGATAAAGCTTCAGACC
CCTAACACATTTCCAAAAAGGAAGAAAGGAGAAAAAAGGGCATCATCCCCATTCCGAAGGGTCAGGGAGGAGGAA
ATTGAGGTGGATTCACGAGTTGCGGACAACTCCTTTGATGCCAAGCGAGGTGCAGCCGGAGACTGGGGAGAGCGA
GCCAATCAGGTTTTGAAGTTCACCAAAGGCAAGTCCTTTCGGCATGAGAAAACCAAGAAGAAGCGGGGCAGCTAC
CGGGGAGGCTCAATCTCTGTCCAGGTCAATTCTATTAAGTTTGACAGCGAGTGACCTGAGGCCATCTTCGGTGAA
GCAAGGGTGATGATCGGAGACTACTTACTTTCTCCAGTGGACCTGGGAACCCTCAGGTCTCTAGGTGAGGGTCTT
GATGAGGACAGAAGTTTAGAGTAGGTCCTAAGACTTTACAGTGTAACATCCTCTCTGGTCCTTTTCTGTGTTCCT
AGTTTTGTACAGACTTGTTTTTGAGTGTTGAGTAGCAGGGACAAAATAAGGGAATGTTATTTTTTAAGAAAATTC
ATTTTCATTGTTGTCTCCTTCCTTTTCTGTGAAAGTCCTCATACTGAGAAATTTGTATATTTTATATTAAATCAC
TTACTATTGAAAAAAAAAAAGGAATTC

FIGURE 1703

MADAGIRRVVPSDLYPLVLGFLRDNQLSEVANKFAKATGATQQDANASSLLDIYSFWLKSAKVPERKLQANGPVA
KKAKKKASSSDSEDSSEEEEEVQGPPAKKAAVPAKRVGLPPGKAAAKASESSSSEESRDDDDEEDQKKQPVQKGV
KPQAKAAKAPPKKAKSSDSDSDSSSEDEPPKNQKPKITPVTVKAQTKAPPKPARAAPKIANGKAASSSSSSSSSS
SSDDSEEEKAAATPKKTVPKKQVVAKAPVKAATTPTRKSSSSEDSSSDEEEEQKKPMKNKPGPYSYAPPPSAPPP
KKSLGTQPPKKAVEKQQPVESSEDSSDESDSSSEEEKKPPTKAVVSKATTKPPPAKKAAESSSDSSDSDSSEDDE
APSKPAGTTKNSSNKPAVTTKSPAVKPAAAPKQPVGGGQKLLTRKADSSSSEEESSSSEEEKTKKMVATTKPKAT
AKAALSLPAKQAPQGSRDSSSDSDSSSSEEEEEKTSKSAVKKKPQKVAGGAAPSKPASAKKGKAESSNSSSSDDS
SEEEEEKLKGKGSPRPQAPKANGTSALTAQNGKAAKNSEEEEEEKKKAAVVVSKSGSLKKRKQNEAAKEAETPQA
KKIKLQTPNTFPKRKKGEKRASSPFRRVREEEIEVDSRVADNSFDAKRGAAGDWGERANQVLKFTKGKSFRHEKT
KKKRGSYRGGSISVQVNSIKFDSE

FIGURE 1704

ACTCGTCTCTGGTAAAGTCTGAGCAGGACAGGGTGGCTGACTGGCAGATCCAGAGGTTCCCTTGGCAGTCCACGC
CAGGCCTTCACCATGGATCAGTTCCCTGAATCAGTGACAGAAAACTTTGAGTACGATGATTTGGCTGAGGCCTGT
TATATTGGGGACATCGTGGTCTTTGGGACTGTGTTCCTGTCCATATTCTACTCCGTCATCTTTGCCATTGGCCTG
GTGGGAAATTTGTTGGTAGTGTTTGCCCTCACCAACAGCAAGAAGCCCAAGAGTGTCACCGACATTTACCTCCTG
AACCTGGCCTTGTCTGATCTGCTGTTTGTAGCCACTTTGCCCTTCTGGACTCACTATTTGATAAATGAAAAGGGC
CTCCACAATGCCATGTGCAAATTCACTACCGCCTTCTTCTTCATCGGCTTTTTTGGAAGCATATTCTTCATCACC
GTCATCAGCATTGATAGGTACCTGGCCATCGTCCTGGCCGCCAACTCCATGAACAACCGGACCGTGCAGCATGGC
GTCACCATCAGCCTAGGCGTCTGGGCAGCAGCCATTTTGGTGGCAGCACCCCAGTTCATGTTCACAAAGCAGAAA
GAAAATGAATGCCTTGGTGACTACCCCGAGGTCCTCCAGGAAATCTGGCCCGTGCTCCGCAATGTGGAAACAAAT
TTTCTTGGCTTCCTACTCCCCCTGCTCATTATGAGTTATTGCTACTTCAGAATCATCCAGACGCTGTTTTCCTGC
AAGAACCACAAGAAAGCCAAAGCCATTAAACTGATCCTTCTGGTGGTCATCGTGTTTTTCCTCTTCTGGACACCC
TACAACGTTATGATTTTCCTGGAGACGCTTAAGCTCTATGACTTCTTTCCCAGTTGTGACATGAGGAAGGATCTG
AGGCTGGCCCTCAGTGTGACTGAGACGGTTGCATTTAGCCATTGTTGCCTGAATCCTCTCATCTATGCATTTGCT
GGGGAGAAGTTCAGAAGATACCTTTACCACCTGTATGGGAAATGCCTGGCTGTCCTGTGTGGGCGCTCAGTCCAC
GTTGATTTCTCCTCATCTGAATCACAAAGGAGCAGGCATGGAAGTGTTCTGAGCAGCAATTTTACTTACCACACG
AGTGATGGAGATGCATTGCTCCTTCTCTGAAGGGAATCCCAAAGCCTTGTGTCTACAGAGAACCTGGAGTTCCTG
AACCTGATGCTGACTAGTGAGGAAAGATTTTTGTTGTTATTTCTTACAGGCACAAAATGATGGACCCAATGCACA
CAAAACAACCCTAGAGTGTTGTTGAGAATTGTGCTCAAAATTTGAAGAATGAACAAATTGAACTCTTTGAATGAC
AAAGAGTAGACATTTCTCTTACTGCAAATGTCATCAGAACTTTTTGGTTTGCAGATGACAAAAATTCAACTCAGA
CTAGTTTAGTTAAATGAGGGTGGTGAATATTGTTCATATTGTGGCACAAGCAAAAGGGTGTCTGAGCCCTCAAAG
TGAGGGGAAACCAGGGCCTGAGCCAAGCTAGAATTCCCTCTCTCTGACTCTCAAATCTTTTAGTCATTATAGATC
CCCCAGACTTTACATGACACAGCTTTATCACCAGAGAGGGACTGACACCCATGTTTCTCTGGCCCCAAGGGAAAA
TTCCCAGGGAAGTGCTCTGATAGGCCAAGTTTGTATCAGGTGCCCATCCCTGGAAGGTGCTGTTATCCATGGGGA
AGGGATATATAAGATGGAAGCTTCCAGTCCAATCTCATGGAGAAGCAGAAATACATATTTCCAAGAAGTTGGATG
GGTGGGTACTATTCTGATTACACAAAACAAATGCCACACATCACCCTTACCATGTGCCTGATCCAGCCTCTCCCC
TGATTACACCAGCCTCGTCTTCATTAAGCCCTCTTCCATCATGTCCCCAAACCTGCAAGGGCTCCCCACTGCCTA
CTGCATCGAGTCAAAACTCAAATGCTTGGCTTCTCATACGTCCACCATGGGGTCCTACCAATAGATTCCCCATTG
CCTCCTCCTTCCCAAAGGACTCCACCCATCCTATCAGCCTGTCTCTTCCATATGACCTCATGCATCTCCACCTGC
TCCCAGGCCAGTAAGGGAAATAGAAAAACCCTGCCCCCAAATAAGAAGGGATGGATTCCAACCCCAACTCCAGTA
GCTTGGGACAAATCAAGCTTCAGTTTCCTGGTCTGTAGAAGAGGGATAAGGTACCTTTCACATAGAGATCATCCT
TTCCAGCATGAGGAACTAGCCACCAACTCTTGCAGGTCTCAACCCTTTTGTCTGCCTCTTAGACTTCTGCTTTCC
ACACCTGCACTGCTGTGCTGTGCCCAAGTTGTGGTGCTGACAAAGCTTGGAAGAGCCTGCAGGTGCCTTGGCCGC
GTGCATAGCCCAGACACAGAAGAGGCTGGTTCTTACGATGGCACCCAGTGAGCACTCCCAAGTCTACAGAGTGAT
AGCCTTCCGTAACCCAACTCTCCTGGACTGCCTTGAATATCCCCTCCCAGTCACCTTGTGCAAGCCCCTGCCCAT
CTGGGAAAATACCCCATCATTCATGCTACTGCCAACCTGGGGAGCCAGGGCTATGGGAGCAGCTTTTTTTCCCC
CCTAGAAACGTTTGGAACAATGTAAAACTTTAAAGCTCGAAAACAATTGTAATAATGCTAAAGAAAAAGTCATCC
AATCTAACCACATCAATATTGTCATTCCTGTATTCACCCGTCCAGACCTTGTTCACACTCTCACATGTTTAGAGT
TGCAATCGTAATGTACAGATGGTTTTATAATCTGATTTGTTTTCCTCTTAACGTTAGACCACAAATAGTGCTCGC
TTTCTATGTAGTTTGGTAATTATCATTTTAGAAGACTCTACCAGACTGTGTATTCATTGAAGTCAGATGTGGTAA
CTGTTAAATTGCTGTGTATCTGATAGCTCTTTGGCAGTCTATATGTTTGTATAATGAATGAGAGAATAAGTCATG
TTCCTTCAAGATCATGTACCCCAATTTACTTGCCATTACTCAATTGATAAACATTTAACTTGTTTCCAATGTTTA
GCAAATACATATTTTATAGAACTTC

FIGURE 1705

MDQFPESVTENFEYDDLAEACYIGDIVVFGTVFLSIFYSVIFAIGLVGNLLVVFALTNSKKPKSVTDIYLLNLAL
SDLLFVATLPFWTHYLINEKGLHNAMCKFTTAFFFIGFFGSIFFITVISIDRYLAIVLAANSMNNRTVQHGVTIS
LGVWAAAILVAAPQFMFTKQKENECLGDYPEVLQEIWPVLRNVETNFLGFLLPLLIMSYCYFRIIQTLFSCKNHK
KAKAIKLILLVVIVFFLFWTPYNVMIFLETLKLYDFFPSCDMRKDLRLALSVTETVAFSHCCLNPLIYAFAGEKF
RRYLYHLYGKCLAVLCGRSVHVDFSSSESQRSRHGSVLSSNFTYHTSDGDALLLL

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FIGURE 1706

CTTTCCGTCCCCTTGCTTCGTCTTCGCTTTTCTTTCTACTTATTCTTATCTGTGTCTTTCGCTTTGTTTGCCTCT
CCGTCTGTTTTCCCTCAGGGCCCCCTTCTTTCCTCGACCTTTTCAAATCGCAAATATGGCGCCGGAGCGGCTGCG
GAGCCGGGCGCCCTCCGCCTTCAAGTTGCGGGGCTTGCTGCTCCGTGGTGAAGCTATTAAGTACCTCACAGAAGC
TCTTCAGTCTATCAGTGAATTAGAGCTTGAAGATAAACTGGAAAAGATAATTAATGCAGTTGAGAAGCAACCCTT
GTCATCAAACATGATTGAACGATCTGTGGTGGAAGCAGCAGTCCAGGAATGCAGTCAGTCTGTTGATGAAACTAT
AGAGCACGTTTTCAATATCATAGGAGCATTTGATATTCCACGCTTTGTGTACAATTCAGAAAGAAAAAAATTTCT
TCCTCTGTTAATGACCAACCACCCTGCACCAAATTTATTTGGAACACCAAGAGATAAAGCAGAGATGTTTCGTGA
GCGATATACCATTTTGCACCAGAGGACCCACAGGCATGAATTATTTACTCCTCCGGTGATAGGTTCTCACCCTGA
TGAAAGCGGAAGCAAATTCCAGCTTAAAACAATAGAAACCTTATTGGGTAGTACAACCAAAATCGGAGATGCGAT
TGTTCTTGGAATGATAACGCAGTTAAAAGAGGGAAAATTTTTTCTGGAAGATCCTACTGGAACAGTCCAACTAGA
CCTTAGTAAAGCTCAGTTCCATAGTGGTTTATACACAGAGGCATGCTTTGTCTTAGCAGAAGGTTGGTTTGAAGA
TCAAGTGTTTCATGTCAATGCCTTTGGATTTCCACCCACTGAGCCCTCTAGTACTACTAGGGCATACTATGGAAA
TATTAATTTTTTTGGAGGTCCTTCTAATACATCTGTGAAGACTTCTGCAAAACTAAAACAGCTAGAAGAGGAGAA
TAAAGATGCTATGTTTGTGTTTTTATCTGATGTTTGGTTGGACCAGGTGGAAGTATTGGAAAAACTTCGCATAAT
GTTTGCTGGTTATTCACCAGCACCTCCAACCTGCTTTATTCTGTGTGGTAATTTTTCATCTGCACCATATGGAAA
AAATCAAGTTCAAGCTTTGAAAGATTCCCTAAAAACTTTGGCAGATATAATATGTGAATACCCAGATATTCACCA
AAGTCGTTTTGTGTTTGTACCTGGTCCAGAGGATCCTGGATTTGGTTCCATCTTACCAAGGCCACCACTTGCTGA
AAGCATCACTAATGAATTCAGACAAAGGGTACCATTTTCAGTTTTTACTACTAATCCTTGCAGAATTCAGTACTG
TACACAGGAAATTACTGTCTTCCGTGAAGACTTAGTAAATAAAATGTGCAGAAACTGCGTCCGTTTTCCTAGCAG
CAATTTGGCTATTCCTAATCACTTTGTAAAGACTATCTTATCCCAAGGACATCTGACTCCCCTACCTCTTTATGT
CTGCCCAGTGTATTGGGCATATGACTATGCTTTGAGAGTGTATCCTGTGCCCGATCTACTTGTCATTGCAGACAA
ATATGATCCTTTCACTACGACAAATACCGAATGCCTCTGCATAAACCCTGGCTCTTTTCCAAGAAGTGGATTTTC
ATTCAAAGTTTTTTATCCTTCTAATAAGACAGTAGAAGATAGCAAACTTCAAGGCTTTTGAGATTCTTAAAGATC
ATCTGAAGAAAATTCATCAGTTTTCTGCTTAACTCTATATCTTATGTGATTCTGATATTACAATAAAATTATGGT
AAACTTT

FIGURE 1707

MAPERLRSRAPSAFKLRGLLLRGEAIKYLTEALQSISELELEDKLEKIINAVEKQPLSSNMIERSVVEAAVQECS
QSVDETIEHVFNIIGAFDIPRFVYNSERKKFLPLLMTNHPAPNLFGTPRDKAEMFRERYTILHQRTHRHELFTPP
VIGSHPDESGSKFQLKTIETLLGSTTKIGDAIVLGMITQLKEGKFFLEDPTGTVQLDLSKAQFHSGLYTEACFVL
AEGWFEDQVFHVNAFGFPPTEPSSTTRAYYGNINFFGGPSNTSVKTSAKLKQLEEENKDAMFVFLSDVWLDQVEV
LEKLRIMFAGYSPAPPTCFILCGNFSSAPYGKNQVQALKDSLKTLADIICEYPDIHQSRFVFVPGPEDPGFGSIL
PRPPLAESITNEFRQRVPFSVFTTNPCRIQYCTQEITVFREDLVNKMCRNCVRFPSSNLAIPNHFVKTILSQGHL
TPLPLYVCPVYWAYDYALRVYPVPDLLVIADKYDPFTTTNTECLCINPGSFPRSGFSFKVFYPSNKTVEDSKLQG
F

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FIGURE 1708

CTACCCCTTTGTGAGCAGTCTAGGACTTTGTACACCTGTTAAGTAGGGAGAAGGCAGGGGAGGTGGCTGGTTTAA
GGGGAACTTGAGGGAAGTAGGGAAGACTCCTCTTGGGACCTTTGGAGTAGGTGACACATGAGCCCAGCCCCAGCT
CACCTGCCAATCCAGCTGAGGAGCTCACCTGCCAATCCAGCTGAGGCTGGGCAGAGGTGGGTGAGAAGAGGGAAA
ATTGCAGGGACCTCCAGTTGGGCCAGGCCAGAAGCTGCTGTAGCTTTAACCAGACAGCTCAGACCTGTCTGGAGG
CTGCCAGTGACAGGTTAGGTTTAGGGCAGAGAAGAAGCAAGACC**ATG**GTGGGGAAGATGTGGCCTGTGTTGTGGA
CACTCTGTGCAGTCAGGGTGACCGTCGATGCCATCTCTGTGGAAACTCCGCAGGACGTTCTTCGGGCTTCGCAGG
GAAAGAGTGTCACCCTGCCCTGCACCTACCACACTTCCACCTCCAGTCGAGAGGGACTTATTCAATGGGATAAGC
TCCTCCTCACTCATACGGAAAGGGTGGTCATCTGGCCGTTTTCAAACAAAAACTACATCCATGGTGAGCTTTATA
AGAATCGCGTCAGCATATCCAACAATGCTGAGCAGTCCGATGCCTCCATCACCATTGATCAGCTGACCATGGCTG
ACAACGGCACCTACGAGTGTTCTGTCTCGCTGATGTCAGACCTGGAGGGCAACACCAAGTCACGTGTCCGCCTGT
TGGTCCTCGTGCCACCCTCCAAACCAGAATGCGGCATCGAGGGAGAGACCATAATTGGGAACAACATCCAGCTGA
CCTGCCAATCAAAGGAGGGCTCACCAACCCCTCAGTACAGCTGGAAGAGGTACAACATCCTGAATCAGGAGCAGC
CCCTGGCCCAGCCAGCCTCAGGTCAGCCTGTCTCCCTGAAGAATATCTCCACAGACACATCGGGTTACTACATCT
GTACCTCCAGCAATGAGGAGGGGACGCAGTTCTGCAACATCACGGTGGCCGTCAGATCTCCCTCCATGAACGTGG
CCCTGTATGTGGGCATCGCGGTGGGCGTGGTTGCAGCCCTCATTATCATTGGCATCATCATCTACTGCTGCTGCT
GCCGAGGGAAGGACGACAACACTGAAGACAAGGAGGATGCAAGGCCGAACCGGGAAGCCTATGAGGAGCCACCAG
AGCAGCTAAGAGAACTTTCCAGAGAGAGGGAGGAGGAGGATGACTACAGGCAAGAAGAGCAGAGGAGCACTGGGC
GTGAATCCCCGGACCACCTCGACCAG**TGA**CAGGCCAGCAGCAGAGGGCGGCGGAGGAAGGGTTAGGGGTTCATTC
TCCCGCTTCCTGGCCTCCCTTCTCCTTTCTAAGCCCTGTTCTCCTGTCCCTCCATCCCAGACATTGATGGGGACA
TTTCTTCCCCAGTGTCAGCTGTGGGGAACATGGCTGGCCTGGTAAGGGGGTCCCTGTGCTGATCCTGCTGACCTC
ACTGTCCTGTGAAGTAACCCCTCCTGGCTGTGACACCTGGTGCGGGCCTGGCCCTCACTCAAGACCAGGCTGCAG
CCTCCACTTCCCTCGTAGTTGGCAGGAGCTCCTGGAAGCACAGCGCTGAGCATGGGGCGCTCCCACTCAGAACTC
TCCAGGGAGGCGATGCCAGCCTTGGGGGGTGGGGGCTGTCCTGCTCACCTGTGTGCCCAGCACCTGGAGGGGCAC
CAGGTGGAGGGTTTGCACTCCACACATCTTTCTTGAATGAATGAAAGAATAAGTGAGTATGCTTGGGCCCTGCAT
TGGCCTGGCCTCCAGCTCCCACTCCCTTTCCAACCTCACTTCCCGTAGCTGCCAGTATGTTCCAAACCCTCCTGG
GAAGGCCACCTCCCACTCCTGCTGCACAGGCCCTGGGGAGCTTTTGCCCACACACTTTCCATCTCTGCCTGTCAA
TATCGTACCTGTCCCTCCAGGCCCATCTCAAATCACAAGGATTTCTCTAACCCTATCCTAATTGTCCACATACGT
GGAAACAATCCTGTTACTCTGTCCCACGTCCAATCATGGGCCACAAGGCACAGTCTTCTGAGCGAGTGCTCTCAC
TGTATTAGAGCGCCAGCTCCTTGGGGCAGGGCCTGGGCCTCATGGCTTTTGCTTTCCCTGAAGCCCTAGTAGCTG
GCGCCCATCCTAGTGGGCACTTAAGCTTAATTGGGGAAACTGCTTTGATTGGTTGTGCCTTCCCTTCTCTGGTCT
CCTTGAGATGATCGTAGACACAGGGATGATTCCCACCCAAACCCACGTATTCATTCAGTGAGTTAAACACGAATT
GATTTAAAGTGAACACACACAAGGGAGCTTGCTTGCAGATGGTCTGAGTTCTTGTGTCCTGGTAATTCCTCTCCA
GGCCAGAATAATTGGCATGTCTCCTCAACCCACATGGGGTTCCTGGTTGTTCCTGCATCCCGATACCTCAGCCCT
GGCCCTGCCCAGCCCATTTGGGCTCTGGTTTTCTGGTGGGGCTGTCCTGCTGCCCTCCCACAGCCTCCTTCTGTT
TGTCGAGCATTTCTTCTACTCTTGAGAGCTCAGGCAGCGTTAGGGCTGCTTAGGTCTCATGGACCAGTGGCTGGT
CTCACCCAACTGCAGTTTACTATTGCTATCTTTTCTGGATGATCAGAAAAATAATTCCATAAATCTATTGTCTAC
TTGCGATTTTTTAAAAAATGTATATTTTTATATATATTGTTAAATCCTTTGCTTCATTCCAAATGCTTTCAGTAA
TAATAAAATTGTGGGTGG

FIGURE 1709

MVGKMWPVLWTLCAVRVTVDAISVETPQDVLRASQGKSVTLPCTYHTSTSSREGLIQWDKLLLTHTERVVIWPFS
NKNYIHGELYKNRVSISNNAEQSDASITIDQLTMADNGTYECSVSLMSDLEGNTKSRVRLLVLVPPSKPECGIEG
ETIIGNNIQLTCQSKEGSPTPQYSWKRYNILNQEQPLAQPASGQPVSLKNISTDTSGYYICTSSNEEGTQFCNIT
VAVRSPSMNVALYVGIAVGVVAALIIIGIIIYCCCCRGKDDNTEDKEDARPNREAYEEPPEQLRELSREREEEDD
YRQEEQRSTGRESPDHLDQ

FIGURE 1710

GGCGGTCCCCTGTTCTCCCCGCTCAGGTGCGGCGCTGTGGCAGGAAGCCACCCCCTCGGTCGGCCGGTGCGCGGG
GCTGTTGCGCCATCCGCTCCGGCTTTCGTAACCGCACCCTGGGACGGCCCAGAGACGCTCCAGCGCGAGTTCCTC
AAATGTTTTCCTGCGTTGCCAGGACCGTCCGCCGCTCTGAGTCATGTGCGAGTGGGAAGTCGCACTGACACTGAG
CCGGGCCAGAGGGAGAGGAGCCGAGCGCGGCGCGGGGCCGAGGGACTCGCAGTGTGTGTAGAGAGCCGGGCTCCT
GCGGATGGGGGCTGCCCCCGGGGCCTGAGCCCGCCTGCCCGCCCACCGCCCCGCCCCGCCCCTGCCACCCCTGCC
GCCCGGTTCCCATTAGCCTGTCCGCCTCTGCGGGACCATGGAGTGGTAGCCGAGGAGGAAGCATGCTGGCCGTCG
GCTGCGCGCTGCTGGCTGCCCTGCTGGCCGCGCCGGGAGCGGCGCTGGCCCCAAGGCGCTGCCCTGCGCAGGAGG
TGGCAAGAGGCGTGCTGACCAGTCTGCCAGGAGACAGCGTGACTCTGACCTGCCCGGGGGTAGAGCCGGAAGACA
ATGCCACTGTTCACTGGGTGCTCAGGAAGCCGGCTGCAGGCTCCCACCCCAGCAGATGGGCTGGCATGGGAAGGA
GGCTGCTGCTGAGGTCGGTGCAGCTCCACGACTCTGGAAACTATTCATGCTACCGGGCCGGCCGCCCAGCTGGGA
CTGTGCACTTGCTGGTGGATGTTCCCCCCGAGGAGCCCCAGCTCTCCTGCTTCCGGAAGAGCCCCCTCAGCAATG
TTGTTTGTGAGTGGGGTCCTCGGAGCACCCCATCCCTGACGACAAAGGCTGTGCTCTTGGTGAGGAAGTTTCAGA
ACAGTCCGGCCGAAGACTTCCAGGAGCCGTGCCAGTATTCCCAGGAGTCCCAGAAGTTCTCCTGCCAGTTAGCAG
TCCCGGAGGGAGACAGCTCTTTCTACATAGTGTCCATGTGCGTCGCCAGTAGTGTCGGGAGCAAGTTCAGCAAAA
CTCAAACCTTTCAGGGTTGTGGAATCTTGCAGCCTGATCCGCCTGCCAACATCACAGTCACTGCCGTGGCCAGAA
ACCCCCGCTGGCTCAGTGTCACCTGGCAAGACCCCCACTCCTGGAACTCATCTTTCTACAGACTACGGTTTGAGC
TCAGATATCGGGCTGAACGGTCAAAGACATTCACAACATGGATGGTCAAGGACCTCCAGCATCACTGTGTCATCC
ACGACGCCTGGAGCGGCCTGAGGCACGTGGTGCAGCTTCGTGCCCAGGAGGAGTTCGGGCAAGGCGAGTGGAGCG
AGTGGAGCCCGGAGGCCATGGGCACGCCTTGGACAGAATCCAGGAGTCCTCCAGCTGAGAACGAGGTGTCCACCC
CCATGCAGGCACTTACTACTAATAAAGACGATGATAATATTCTCTTCAGAGATTCTGCAAATGCGACAAGCCTCC
CAGTGCAAGATTCTTCTTCAGTACCACTGCCCACATTCCTGGTTGCTGGAGGGAGCCTGGCCTTCGGAACGCTCC
TCTGCATTGCCATTGTTCTGAGGTTCAAGAAGACGTGGAAGCTGCGGGCTCTGAAGGAAGGCAAGACAAGCATGC
ATCCGCCGTACTCTTTGGGGCAGCTGGTCCCGGAGAGGCCTCGACCCACCCCAGTGCTTGTTCCTCTCATCTCCC
CACCGGTGTCCCCCAGCAGCCTGGGGTCTGACAATACCTCGAGCCACAACCGACCAGATGCCAGGGACCCACGGA
GCCCTTATGACATCAGCAATACAGACTACTTCTTCCCCAGATAGCTGGCTGGGTGGCACCAGCAGCCTGGACCCT
GTGGATGACAAAACACAAACGGGCTCAGCAAAAGATGCTTCTCACTGCCATGCCAGCTTATCTCAGGGGTGTGCG
GCCTTTGGCTTCACGGAAGAGCCTTGCGGAAGGTTCTACGCCAGGGGAAAATCAGCCTGCTCCAGCTGTTCAGCT
GGTTGAGGTTTCAAACCTCCCTTTCCAAATGCCCAGCTTAAAGGGGTTAGAGTGAACTTGGGCCACTGTGAAGAG
AACCATATCAAGACTCTTTGGACACTCACACGGACACTCAAAAGCTGGGCAGGTTGGTGGGGGCCTCGGTGTGGA
GAAGCGGCTGGCAGCCCACCCCTCAACACCTCTGCACAAGCTGCACCCTCAGGCAGGTGGGATGGATTTCCAGCC
AAAGCCTCCTCCAGCCGCCATGCTCCTGGCCCACTGCATCGTTTCATCTTCCAACTCAAACTCTTAAAACCCAAG
TGCCCTTAGCAAATTCTGTTTTTCTAGGCCTGGGGACGGCTTTTACTTAAACGCCAAGGCCTGGGGGAAGAAGCT
CTCTCCTCCCTTTCTTCCCTACAGTTCAAAAACAGCTGAGGGTGAGTGGGTGAATAATACAGTATGTCAGGGCCT
GGTCGTTTTCAACAGAATTATAATTAGTTCCTCATTAGCAGTTTTGCCTAAATGTGAATGATGATCCTAGGCATT
TGCTGAATACAGAGGCAACTGCATTGGCTTTGGGTTGCAGGACCTCAGGTGAGAAGCAGAGGAAGGAGAGGAGAG
GGGCACAGGGTCTCTACCATCCCCTGTAGAGTGGGAGCTGAGTGGGGGATCACAGCCTCTGAAAACCAATGTTCT
CTCTTCTCCACCTCCCACAAAGGAGAGCTAGCAGCAGGGAGGGCTTCTGCCATTTCTGAGATCAAAACGGTTTTA
CTGCAGCTTTGTTTGTTGTCAGCTGAACCTGGGTAACTAGGGAAGATAATATTAAGGAAGACAATGTGAAAAGAA
AAATGAGCCTGGCAAGAATGCGTTTAAACTTGGTTTTTAAAAAACTGCTGACTGTTTTCTCTTGAGAGGGTGGAA
TATCCAATATTCGCTGTGTCAGCATAGAAGTAACTTACTTAGGTGTGGGGGAAGCACCATAACTTTGTTTAGCCC
AAAACCAAGTCAAGTGAAAAAGGAGGAAGAGAAAAAATATTTTCCTGCCAGGCATGGAGGCCCACGCACTTCGGG
AGGTCGAGGCAGGAGGATCACTTGAGTCCAGAAGTTTGAGATCAGCCTGGGCAATGTGATAAAACCCCATCTCTA
CAAAAAGCATAAAAATTAGCCAAGTGTGGTAGAGTGTGCCTGAAGTCCCAGATACTTGGGGGGCTGAGGTGGGAG
GATCTCTTGAGCCTGGGAGGTCAAGGCTGCAGTGAGCCGAGATTGCACCACTGCACTCCAGCCTGGGGTGACAGA
GCAAGTGAGACCCTGTCTC

FIGURE 1711

MLAVGCALLAALLAAPGAALAPRRCPAQEVARGVLTSLPGDSVTLTCPGVEPEDNATVHWVLRKPAAGSHPSRWA
GMGRRLLLRSVQLHDSGNYSCYRAGRPAGTVHLLVDVPPEEPQLSCFRKSPLSNVVCEWGPRSTPSLTTKAVLLV
RKFQNSPAEDFQEPCQYSQESQKFSCQLAVPEGDSSFYIVSMCVASSVGSKFSKTQTFQGCGILQPDPPANITVT
AVARNPRWLSVTWQDPHSWNSSFYRLRFELRYRAERSKTFTTWMVKDLQHHCVIHDAWSGLRHVVQLRAQEEFGQ
GEWSEWSPEAMGTPWTESRSPPAENEVSTPMQALTTNKDDDNILFRDSANATSLPVQDSSSVPLPTFLVAGGSLA
FGTLLCIAIVLRFKKTWKLRALKEGKTSMHPPYSLGQLVPERPRPTPVLVPLISPPVSPSSLGSDNTSSHNRPDA
RDPRSPYDISNTDYFFPR

FIGURE 1712

CAAGAGAGAGAGAGAGGTGCAAGCCCCAAAGCGAGCGACATGTCCCTTTGGGGAGCAGTCCCTCTGCACCCCAGA
GTGAGGAGGACGCAGGGGTCAGAGGTGGCTACAGGGCAGGCAGAGGAGGCACCTGTAGGGGGTGGTGGGCTGGTG
GCCCAGGAGAAGTCAGGAAGGGAGCCCAGCTGGTGACAAGAGAGCCCAGAGGTGCCTGGGGCTGAGTGTGAGAGC
CCGGAAGATTTCAGCCATGCCTCACAGCTCCGACAGCAGTGACTCCAGCTTCAGCCGCTCTCCTCCCCCTGGCAA
ACAGGACTCATCTGATGATGTGAGAAGAGTTCAGAGGAGGGAGAAAAATCGTATTGCCGCCCAGAAGAGCCGACA
GAGGCAGACACAGAAGGCCGACACCCTGCACCTGGAGAGCGAAGACCTGGAGAAACAGAACGCGGCTCTACGCAA
GGAGATCAAGCAGCTCACAGAGGAACTGAAGTACTTCACGTCGGTGCTGAACAGCCACGAGCCCCTGTGCTCGGT
GCTGGCCGCCAGCACGCCCTCGCCCCCCGAGGTGGTGTACAGCGCCCACGCATTCCACCAACCTCATGTCAGCTC
CCCGCGCTTCCAGCCCTGAGCTTCCGATGCGGGGAGAGCAGAGCCTCGGGAGGGGCACACAGACTGTGGCAGAGC
TGCGCCCATCCCGCAGAGGCCCCTGTCCACCTGGAGACCCGGAGACAGAGGCCTGGACAAGGAGTGAACACGGGA
ACTGTCACGACTGGAAGGGCGTGAGGCCTCCCAGCAGTGCCGCAGCGTTTCGAGGGGCGTGTGCTGGACCCCACC
ACTGTGGGTTGCAGGCCCAATGCAGAAGAGTATTAAGAAAGATGCTCAAGTCCCATGGCACAGAGCAAGGCGGGC
AGGGAACGGTTATTTTTCTAAATAAATGCTTTAAAAGA

FIGURE 1713

MPHSSDSSDSSFSRSPPPGKQDSSDDVRRVQRREKNRIAAQKSRQRQTQKADTLHLESEDLEKQNAALRKEIKQL
TEELKYFTSVLNSHEPLCSVLAASTPSPPEVVYSAHAFHQPHVSSPRFQP

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FIGURE 1714

CCCTCCCCTGCCTGCATTCCCGGGACGGACCCGAGGGAAGAAGCCTCAGGAGGAGGGTGTGGGCCGAGGCGCGGC
GGCGGCTGGAGCAGCGCGGTAGGGTCCTTCGCCAGAGCATCCGGTCCGAGGGCGCACACAGGCAGAAGGCTCGGG
GCTCGTCCACTCTCCTCCCTCTCTCCTCCTCTCCCTGGCTTTGTGTTGGTGCCTCCGAGCTGCAAGGAGGGTGCG
CTGGAGGAGGAGGAGGGGGGCCCGGAGTGAGAGGCACCCCCTTCACGCGCGCGCGCGCACACGGTGCCGGCGCAC
GCACACACGGGCGGACACACACACACGCGCGCACACACACACGCACAGAGCTCGCTCGCCTCGAGCGCACGAACG
TGGACGTTCTCTTTGTGTGGAGCCCTCAAGGGGGGTTGGGGCCCCGGTTCGGTCCGGGGGAG**ATG**GCGCAGCCCA
TCCTGGGCCATGGGAGCCTGCAGCCCGCCTCGGCCGCTGGCCTGGCGTCCCTGGAGCTCGACTCGTCGCTGGACC
AGTACGTGCAGATTCGCATCTTCAAAATAATCGTGATTGGGGACTCCAACGTGGGCAAGACCTGCCTGACCTTCC
GCTTCTGCGGGGGTACCTTCCCAGACAAGACTGAAGCCACCATCGGCGTGGACTTCAGGGAGAAGACCGTGGAAA
TCGAGGGCGAGAAGATCAAGGTTCAGGTGTGGGACACAGCAGGTCAGGAACGTTTCCGCAAAAGCATGGTCGAGC
ATTACTACCGCAACGTACATGCCGTGGTCTTCGTCTATGACGTCACCAAGATGACATCTTTCACCAACCTCAAAA
TGTGGATCCAAGAATGCAATGGGCATGCTGTGCCCCCACTAGTCCCCAAAGTGCTTGTGGGCAACAAGTGTGACT
TGAGGGAACAGATCCAGGTGCCCTCCAACTTAGCCCTGAAATTTGCTGATGCCCACAACATGCTCTTGTTTGAGA
CATCGGCCAAGGACCCCAAAGAGAGCCAGAACGTGGAGTCGATTTTCATGTGCTTGGCTTGCCGATTGAAGGCCC
AGAAATCCCTGCTGTATCGTGATGCTGAGAGGCAGCAGGGGAAGGTGCAGAAACTGGAGTTCCCACAGGAAGCTA
ACAGTAAAACTTCCTGTCCTTGT**TGA**AACCAAACGATATAAATACAAGATAAATTATCACTGGAGTTTTTTCTTT
CCCTTTTTTCTGTGCCTGCATAATGCTGACACCTGCTTGTTTCCATACAAATTGATATCAAAATAAAATTTGTAT
AGATTATC

FIGURE 1715

MAQPILGHGSLQPASAAGLASLELDSSLDQYVQIRIFKIIVIGDSNVGKTCLTFRFCGGTFPDKTEATIGVDFRE
KTVEIEGEKIKVQVWDTAGQERFRKSMVEHYYRNVHAVVFVYDVTKMTSFTNLKMWIQECNGHAVPPLVPKVLVG
NKCDLREQIQVPSNLALKFADAHNMLLFETSAKDPKESQNVESIFMCLACRLKAQKSLLYRDAERQQGKVQKLEF
PQEANSKTSCPC

FIGURE 1716A

CAGGTCTCGACTTCACTGCTCTGTGTCCTCTGCTCCAGGAGGCCCAGCCTGTGTGGCCCTGTGACCTGCAGGTAT
TGGAAGAGCCACAGCTAAGATGCCAGGAACCCCTGGAAGCCTAGAAATGGGACTGTTGACATTTAGGGATGTGGC
CATAGAATTCTCTCCGGAGGAGTGGCAATGTCTGGACACTGCACAGCAGAATTTATATAGGAATGTGATGTTAGA
GAACTACAGAAACCTGGCCTTCCTGGGTATTGCTCTCTCTAAGCCAGACCTGATTACTTATCTGGAGCAAGGAAA
AGAGCCCTGGAATATGAAGCAACATGAGATGGTGGATGAACCCACAGGTATATGTCCTCATTTTCCTCAAGACTT
TTGGCCAGAGCAGAGCATGGAAGATTCTTTTCAAAAAGTATTACTGAGAAAATATGAAAAATGTGGACATGAGAA
TTTACAGTTAAGAAAAGGTTGTAAAAGTGTGGATGAGTGTAAGGTGCACAAAGAAGGTTATAATAAACTTAACCA
GTGTCTCACAACTGCCCAGAGCAAAGTATTTCAATGTGGGAAATATTTGAAAGTCTTCTATAAATTTTTAAATTC
AAACAGACATACGATAAGACATACCGGAAAGAAATGCTTCAAATGTAAAAAATGTGTCAAGTCATTTTGCATCCG
TTTACACAAAACCCAACATAAATGCGTTTATATTACAGAGAAGTCCTGTAAATGTAAAGAATGTGAAAAAACCTT
TCATTGGTCCTCAACCCTTACTAATCATAAGGAAATTCATACTGAAGATAAACCCTACAAATGTGAAGAATGTGG
CAAAGCTTTTAAGCAGCTCTCAACCCTTACTACACATAAAATAATCTGTGCTAAAGAGAAAATCTACAAGTGTGA
AGAATGTGGCAAAGCATTTCTATGGTCCTCAACCCTAACTAGACATAAGAGGATACACACTGGAGAGAAACCCTA
CAAATGTGAAGAATGTGGCAAAGCTTTTAGCCATTCTTCAACCCTTGCTAAACATAAGAGAATTCATACTGGAGA
GAAACCCTACAAATGTGAAGAATGTGGCAAAGCTTTTAGCCATTCTTCAGCCCTTGCTAAACATAAGAGAATTCA
TACTGGAGAGAAACCCTACAAATGTAAAGAATGTGGCAAAGCTTTTAGCAATTCCTCAACCCTTGCTAATCATAA
GATAACTCATACTGAAGAGAAACCCTACAAATGTAAAGAATGTGACAAAACTTTTAAGCGACTCTCAACCCTTAC
TAAACATAAAATAATACATGCTGGAGAGAAACTCTACAAATGTGAAGAATGTGGCAAAGCTTTTAATCGATCTTC
AAATCTTACTATACATAAGTTTATTCATACTGGAGAGAAACCTTACAAGTGTGAAGAATGTGGCAAAGCATTTAA
CTGGTCCTCAAGCCTTACTAAACATAAAAGATTTCATACTAGAGAGAAACCCTTCAAATGTAAAGAATGTGGCAA
AGGATTTATATGGTCTTCAACCCTAACTAGACATAAGAGGATACACACTGGAGAGAAGCCCTACAAATGTGAAGA
ATGTGGCAAAGCTTTTAGGCAATCCTCAACCCTTACTAAACATAAGATAATTCATACTGGAGAGAAACCCTACAA
ATTTGAAGAATGTGGCAAAGCTTTTAGACAATCCTTAACCCTTAATAAACATAAGATAATTCATAGTAGAGAGAA
ACCCTACAAATGTAAAGAATGTGGCAAAGCTTTTAAGCAATTCTCAACCCTTACTACACATAAAATAATTCATGC
TGGAAAGAAACTCTACAAATGTGAAGAATGTGGCAAAGCTTTTAATCATTCCTCAAGTCTTTCTACACATAAGAT
AATTCATACTGGAGAGAAGTCTTACAAGTGTGAAGAATGTGGCAAAGCATTTCTATGGTCCTCAACCCTAAGAAG
ACATAAGAGGATACACACTGGAGAGAAACCCTACAAATGTGAAGAATGTGGCAAAGCTTTTAGCCATTCTTCAGC
CCTTGCTAAACATAAGAGAATTCATACTGGAGAGAAACCCTACAAATGTAAAGAATGTGGCAAAGCTTTTAGCAA
TTCCTCAACCCTTGCTAATCATAAGATAACTCATACTGAAGAGAAACCCTACAAATGTAAAGAATGTGACAAAAC
TTTTAAGCGACTCTCAACCCTTACTAAACATAAAATAATACATGCTGGAGAGAAACTCTACAAATGTGAAGAATG
TGGCAAAGCTTTTAATCGATCTTCAAATCTTACTATACATAAGTTTATTCATACTGGAGAGAAACCTTACAAGTG
TGAAGAATGTGGCAAAGCATTTAACTGGTCCTCAAGCCTTACTAAACATAAAAGAATTCATACTAGAGAGAAACC
CTTCAAATGTAAAGAATGTGGCAAAGCATTTATATGGTCTTCAACCCTAACTAGACATAAGAGGATACACACTGG
AGAGAAGCCCTACAAATGTGAAGAATGTGGCAAAGCTTTTAGCCGTTCCTCAACCCTTACTAAGCATAAGACAAT
TCATACTGGAGAGAAACCCTACAAATGTAAAGAATGTGGCAAAGCTTTTAAGCACTCCTCAGCCCTTGCTAAACA
TAAAATAATACATGCTGGAGAGAAACTCTACAAATGTGAGGAATGTGGCAAAGCTTTTAATCAATCTTCAAATCT
TACGACACATAAGATAATTCATACTAAAGAGAAACCTTCCAAGAGTGAAGAATGTGACAAAGCATTTATCTGGTC
CTCAACCCTTACTGAACATAAGAGAATTCATACCAGAGAGAAACCCTACAAATGTGAAGAATGTGGCAAAGCATT
TAGCCAGCCTTCACACCTTACTACACATAAGAGGATGCACACTGGAGAGAAACCCTACAAATGTGAAGAATGTGG
CAAAGCTTTTAGCCAATCCTCAACCCTTACTACACATAAGATAATTCATACTGGAGAGAAACCCTACAAATGTGA
AGAATGTGGCAAAGCTTTTAGGAAATCTTCAACTCTTACTGAACATAAGATAATTCATACTGGAGAGAAACCCTA
CAAATGTGAAGAATGTGGCAAAGCATTTAGCCAATCCTCAACCCTAACTAGACATACGAGGATGCACACTGGAGA
GAAACCATACAAATGTGAAGAATGTGGGAAAGCTTTTAATCGATCCTCAAAGCTTACTACACATAAGATAATTCA
TACTGGAGAGAAACCTTACAAGTGTGAAGAATGTGGCAAAGCATTTATATCATCCTCAACCCTAAATGGACATAA
GAGAATTCATACTAGAGAGAAACCCTACAAATGTGAAGAATGTGGCAAAGCATTTAGCCAATCTTCAACCCTAAC
TAGACATAAGAGGTTGCACACCGGAGAGAAACCCTACAAATGTGGAGAATGTGGCAAAGCCTTTAAAGAGTCCTC
AGCTCTTACTAAACATAAGATAATTCACACTGGAGAGAAACCCTACAAATGTGAAAAATGTTGCAAAGCCTTTAA
CCAGTCTTCAATCCTTACTAACCATAAGAAAATTCATACTATCACACCTGTAATCCCACTACTTTGGGAGGCCGA

FIGURE 1716B

GGCGGGCGGATCACGAGGTCAGGAGATGGAGACCATCCTGGCTAACACAGTGAAACCCCTTCTCTACTAAAAAAAT
ACAAAAAACTAGCCGGGCGTGGTGGCGGGCGCCTGTAGTCCCAGCTATGCGAGAGGCTGAGGCAGGAGAATGGCG
TGAACCCGGGAGGCGGAGCTTGCAGTGAGCCGAGATCACGCCACTGCACTCAAGCCTGGGCGACAGAGCGAGACT
CCGTCTCAAAAAAA

FIGURE 1717

MPGTPGSLEMGLLTFRDVAIEFSPEEWQCLDTAQQNLYRNVMLENYRNLAFLGIALSKPDLITYLEQGKEPWNMK
QHEMVDEPTGICPHFPQDFWPEQSMEDSFQKVLLRKYEKCGHENLQLRKGCKSVDECKVHKEGYNKLNQCLTTAQ
SKVFQCGKYLKVFYKFLNSNRHTIRHTGKKCFKCKKCVKSFCIRLHKTQHKCVYITEKSCKCKECEKTFHWSSTL
TNHKEIHTEDKPYKCEECGKAFKQLSTLTTHKIICAKEKIYKCEECGKAFLWSSTLTRHKRIHTGEKPYKCEECG
KAFSHSSTLAKHKRIHTGEKPYKCEECGKAFSHSSALAKHKRIHTGEKPYKCKECGKAFSNSSTLANHKITHTEE
KPYKCKECDKTFKRLSTLTKHKIIHAGEKLYKCEECGKAFNRSSNLTIHKFIHTGEKPYKCEECGKAFNWSSSLT
KHKRFHTREKPFKCKECGKGFIWSSTLTRHKRIHTGEKPYKCEECGKAFRQSSTLTKHKIIHTGEKPYKFEECGK
AFRQSLTLNKHKIIHSREKPYKCKECGKAFKQFSTLTTHKIIHAGKKLYKCEECGKAFNHSSSLSTHKIIHTGEK
SYKCEECGKAFLWSSTLRRHKRIHTGEKPYKCEECGKAFSHSSALAKHKRIHTGEKPYKCKECGKAFSNSSTLAN
HKITHTEEKPYKCKECDKTFKRLSTLTKHKIIHAGEKLYKCEECGKAFNRSSNLTIHKFIHTGEKPYKCEECGKA
FNWSSSLTKHKRIHTREKPFKCKECGKAFIWSSTLTRHKRIHTGEKPYKCEECGKAFSRSSTLTKHKTIHTGEKP
YKCKECGKAFKHSSALAKHKIIHAGEKLYKCEECGKAFNQSSNLTTHKIIHTKEKPSKSEECDKAFIWSSTLTEH
KRIHTREKPYKCEECGKAFSQPSHLTTHKRMHTGEKPYKCEECGKAFSQSSTLTTHKIIHTGEKPYKCEECGKAF
RKSSTLTEHKIIHTGEKPYKCEECGKAFSQSSTLTRHTRMHTGEKPYKCEECGKAFNRSSKLTTHKIIHTGEKPY
KCEECGKAFISSSTLNGHKRIHTREKPYKCEECGKAFSQSSTLTRHKRLHTGEKPYKCGECGKAFKESSALTKHK
IIHTGEKPYKCEKCCKAFNQSSILTNHKKIHTITPVIPLLWEAEAGGSRGQEMETILANTVKPLLY

FIGURE 1718

GTCTCGGCCATGACACACATTTGACATGCCCTCCCTCAACCTACTTATAGACTATTTTTCTTGCTCTGCAGC**ATG**

GACCAAAGAGAAATTCTGCAGAAGTTCCTGGATGAGGCCCAAAGCAAGAAAATTACTAAAGAGGAGTTTGCCAAT
GAATTTCTGAAGCTGAAAAGGCAATCTACCAAGTACAAGGCAGACAAAACCTATCCTACAACTGTGGCTGAGAAG
CCCAAGAATATCAAGAAAAACAGATATAAGGATATTTTGCCCTATGATTATAGCCGGGTAGAACTATCCCTGATA
ACCTCTGATGAGGATTCCAGCTACATCAATGCCAACTTCATTAAGGGAGTTTATGGACCCAAGGCTTATATTGCC
ACCCAGGGTCCTTTATCTACAACCCTCCTGGACTTCTGGAGGATGATTTGGGAATATAGTGTCCTTATCATTGGT
ATGGCATGCATGGAGTATGAAATGGGAAAGAAAAAGTGTGAGCGCTACTGGGCTGAGCCAGTAGAGATGCAGCTG
GAATTTGGCCCTTTCTCTGTATCCTGTGAAGCTGAAAAAAGGAAATCTGATTATATAATCAGGACTCTAAAAGTT
AAGTTCAATAGTGAAACTCGAACTATCTACCAGTTTCATTACAAGAATTGGCCAGACCATGATGTACCTTCATCT
ATAGACCCTATTCTTGAGCTCATCTGGGATGTACGTTGTTACCAAGAGGATGACAGTGTTCCCATATGCATTCAC
TGCAGTGCTGGCTGTGGAAGGACTGGTGTTATTTGTGCTATTGATTATACATGGATGTTGCTAAAAGATGGGATA
ATTCCTGAGAACTTCAGTGTTTTCAGTTTGATCCGGGAAATGCGGACACAGAGGCCTTCATTAGTTCAAACGCAG
GAACAATATGAACTGGTCTACAATGCTGTATTAGAACTATTTAAGAGACAGATGGATGTTATCAGAGATAAACAT
TCTGGAACAGAGAGTCAAGCAAAGCATTGTATTCCTGAGAAAAATCACACTCTCCAAGCAGACTCTTATTCTCCT
AATTTACCAAAAAGTACCACAAAAGCAGCAAAAATGATGAACCAACAAAGGACAAAAATGGAAATCAAAGAATCT
TCTTCCTTTGACTTTAGGACTTCTGAAATAAGTGCAAAAGAAGAGCTAGTTTTGCACCCTGCTAAATCAAGCACT
TCTTTTGACTTTCTGGAGCTAAATTACAGTTTTGACAAAAATGCTGACACAACCATGAAATGGCAGACAAAGGCA
TTTCCAATAGTTGGGGAGCCTCTTCAGAAGCATCAAAGTTTGGATTTGGGCTCTCCTTTGTTTGAGGGATGTTCT
AATTCTAAACCTGTAAATGCAGCAGGAAGATATTTTAATTCAAAGGTGCCAATAACACGGACCAAATCAACTCCT
TTTGAATTGATACAGCAGAGAGAAACCAAGGAGGTGGACAGCAAGGAAAACTTTTCTTATTTGGAATCTCAACCA
CATGATTCTTGTTTTGTAGAGATGCAGGCTCAAAAAGTAATGCATGTTTCTTCAGCAGAACTGAATTATTCACTG
CCATATGACTCTAAACACCAAATACGTAATGCCTCTAATGTAAAGCACCATGACTCTAGTGCTCTTGGTGTATAT
TCTTACATACCTTTAGTGGAAAATCCTTATTTTTCATCATGGCCTCCAAGTGGTACCAGTTCTAAGATGTCTCTT
GATTTACCTGAGAAGCAAGATGGAACTGTTTTTCCTTCTTCTCTGTTGCCAACATCCTCTACATCCCTCTTCTCT
TATTACAATTCACATGATTCTTTATCACTGAATTCTCCAACCAATATTTCCTCACTATTGAACCAGGAGTCAGCT
GTACTAGCAACTGCTCCAAGGATAGATGATGAAATCCCCCCTCCACTTCCTGTATGGACACCTGAATCATTTATT
GTGGTTGAGGAAGCTGGAGAATTCTCACCAAATGTTCCCAAATCCTTATCCTCAGCTGTGAAGGTAAAAATTGGA
ACATCACTGGAATGGGGTGGAACATCTGAACCAAAGAAATTTGATGACTCTGTGATACTTAGACCAAGCAAGAGT
GTAAAACTCCGAAGTCCTAAATCAGAACTACATCAAGATCGTTCTTCTCCCCCACCTCCTCTCCCAGAAAGAACT
CTAGAGTCCTTCTTTCTTGCCGATGAAGATTGTATGCAGGCCCAATCTATAGAAACATATTCTACTAGCTATCCT
GACACCATGGAAAATTCAACATCTTCAAAACAGACACTGAAGACTTCTGGAAAAAGTTTCACAAGGAGTAAGAGT
TTGAAAATTTTGCGAAACATGAAAAAGAGTATCTGTAATTCTTGCCCACCAAACAAGCCTGCAGAATCTGTTCAG
TCAAATAACTCCAGCTCATTTCTGAATTTTGGTTTTGCAAACCGTTTTTCAAAACCCAAAGGACCAAGGAATCCA
CCACCAACTTGGAATATT**TAA**TAAAACTCCAGATTTATAATAATATGGGCTGCAAGTACACCTGCAAATAAAACT
ACTAGAATACTGCTAGTTAAAATAAGTGCTCTATATGCATAATATCAAATATGAAGATATGCTAATGTGTTAATA
GCTTTTAAAAGAAAAGCAAAATGCCAATAAGTGCCAGTTTTGCATTTTCATATCATTTGCATTGAGTTGAAAACT
GCAAATAAAAGTTTGTCACTTGAGCTTATGTACAGAATGCTATATGAGAAACACTTTTAGAATGGATTTATTTTT
CATTTTTGCCAGTTATTTTTATTGTCTTTTACTTTTCTACATAAACATAAACTTCAAAAGGTTTGTAAGATTTGG
ATCTCAACTAATTTCTACATTGCCAGAATATACTATAAAAAGTTAAAAAAAAAAACTTACTTTGTGGGTTGCAAT
ACAAACTGCTCTTGACAATGACTATTCCCTGACAGTTATTTTTGCCTAAATGGAGTATACCTTGTAAATCTTCCC
AAATGTTGTGGAAAACTGGAATATTAAGAAAATGAGAAATTATATTTATTAGAATAAAATGTGCAAATAATGACA
ATTATTTGAATGTAACAAG

FIGURE 1719

MDQREILQKFLDEAQSKKITKEEFANEFLKLKRQSTKYKADKTYPTTVAEKPKNIKKNRYKDILPYDYSRVELSL
ITSDEDSSYINANFIKGVYGPKAYIATQGPLSTTLLDFWRMIWEYSVLIIGMACMEYEMGKKKCERYWAEPVEMQ
LEFGPFSVSCEAEKRKSDYIIRTLKVKFNSETRTIYQFHYKNWPDHDVPSSIDPILELIWDVRCYQEDDSVPICI
HCSAGCGRTGVICAIDYTWMLLKDGIIPENFSVFSLIREMRTQRPSLVQTQEQYELVYNAVLELFKRQMDVIRDK
HSGTESQAKHCIPEKNHTLQADSYSPNLPKSTTKAAKMMNQQRTKMEIKESSSFDFRTSEISAKEELVLHPAKSS
TSFDFLELNYSFDKNADTTMKWQTKAFPIVGEPLQKHQSLDLGSPLFEGCSNSKPVNAAGRYFNSKVPITRTKST
PFELIQQRETKEVDSKENFSYLESQPHDSCFVEMQAQKVMHVSSAELNYSLPYDSKHQIRNASNVKHHDSSALGV
YSYIPLVENPYFSSWPPSGTSSKMSLDLPEKQDGTVFPSSLLPTSSTSLFSYYNSHDSLSLNSPTNISSLLNQES
AVLATAPRIDDEIPPPLPVWTPESFIVVEEAGEFSPNVPKSLSSAVKVKIGTSLEWGGTSEPKKFDDSVILRPSK
SVKLRSPKSELHQDRSSPPPPLPERTLESFFLADEDCMQAQSIETYSTSYPDTMENSTSSKQTLKTSGKSFTRSK
SLKILRNMKKSICNSCPPNKPAESVQSNNSSSFLNFGFANRFSKPKGPRNPPPTWNI

FIGURE 1720

GGCCCAGACGCCAAGGTTGCGGGTCATGGAGTCCCGAACCCTCCTCCTGCTGTTCTCGGGAGCCGTGGCCCTGAT
CCAGACCTGGGCAGATTACAATTACAATCAAGGCAGAAATGATCTCATTTTTACATTACAACTCCTGGAAAAGGC
AATAGACTGAGATGCAAGTGTGCCCCCAAGTGATGGGCAGAAGGAGAGAAGGATGTTTTGGATGCATTCTAGAAC
ACAGGTAATCTAAGGAGAGTTGATYCAAGGCACGTAGGAAGAGTCCTCCAGCCACTATTAGGCCATCAAAGGAGT
CCTC**ATG**TGTCCCAGGAAATGGTCCTGCTTTGGTGTCCCTGGTGTGACCCATCACCCGCTGGAACAGCCTGAGAG
AAGTAGGGCCTCTGCACCAATGCTGCTGAGGATGTCAGAGCACAGGAACGAGGCCTTGGGAAATTACCTGGAAAT
GCGACTGAAATCTTCCTTCCTGAGGGGTCTGGGCTCTTGGAAATCAAACCCTCTCAGGTTGGGTGGCTGGACGAT
TCTCCTCACACTTACAATGGGACAAGGGGAACCAGGAGGTCCAAGGATCCCTGGGTTCCACACGAACTCCTCCTA
CCCTCATTGTGTGACAGCAGCCATGCCTCCTCCTGGGGATCAGGATCTATTACCTGTGCCTGGAGAGGAGGGGAC
TCCTCTTCTCACCCGCTGGTCTCTGGACACATACTGTCCAATTCCCCTGTGGCAGCTG**TAA**TGTGTAGTTCAATG
GGCACTCATTTGTCCCTTTTAAGGGTACCCTCCTTTAGAATCCAGGACCTTCTACCCTGCAGAGTGTGGTTTGGG
GAGAGAAGTGCAAAATCCCACGACAGGTGAGTTGAAGGAATGGGATATGGAGCCACATCCACTTCCACCCCTTGG
TATCTGGACCCACGTGTTCTTCCTACTGAGATTACAGAACTGTAGAGATGTCTTTGATTTTTAAAATGCACCATG
TCCTGAAAGATGGCACCCTCCCACCCGCAGGAGTGCTTCCTGCAAGCTGGCGTTGAGCTGTGCCTATAGAAGCTC
TTTTCAACATTCTTTATGGTCCAGGAGCCCTTGGTTGGTGCAGATGGTGATAGGACCCAGTGGGTCCCACAGCAT
GGCCACACTGCACCTCCTTCGCTGTCAAGTGGGTCCCCCACGAAGATACTGCACGGAGAGCAGTGCCAAGCCTGT
GGATCAGGAATATCAACAGCCCCCAGAGAGTGGTGCTGGCTGAGGGTCTGAGAGCAGGACAGGAAAACCCACCTA
TGGAATAGGTGCCTATCCCTGTGAAGATGAACCTCTGGCCCTTCCAGGATGGAAGGAGTGCAATGTAGTCAACTC
CTCACTTAGGGTCTGGTTGGTCACCTAAAGAAATAGAGCCCTACCAGGGAAGATCATTGGGTTCAAATGCTGATG
AGTAGGACATTTAGAGGTGGCAGTGTCTGGATCTACCTTGGTAGGAGGGAGTCAGTACTGTTGGACCCATAGGTA
GCCTCATCCCTGCCACTGTGTTTGCTCCATTTATGTACCCACCTACCCGGCCTGGGCTGACCATGGGAAGGCTGG
CTAATTTCAGTGCTTGTGCTTGGTTGTTCAGGGCCATTTCAGGTTTGGGTGTTTTCTGGGGATGTTAACATGGGA
TTCAGGCTCAACTCACAAGAAACTTTTCATCTCATGATGGATGCTGTTGGGCATGTCCAATGTATGACTTCATGA
GTTACACAGATGCTAATTCGTAGGGGCACTTGGAATCACATGGTTGTTTTGTGTCCCATGGTCAAGCATTCTATC
TTATCAGGGCCTACAGTAACATGCCAAAAGTTGCTTCCAACATATTTCTCTGCTTTGGATGGGGCATATTTCTGT
GCTGTGGATGACATGGCCTTACTCCAGAATCCCAGGCCCTCCACTGTGACTCTCCTACTGGTGCTTGGTTCAGCT
CCACCCCAAATCTTACCCCACCACTGGCACTTTCAGCACCAGGGGGTCTGAAGGATGGTGACTGCGCCATGGCCT
GGATCTGCTGCAGTGTCCTTTCCTGTGGAGGCTCCACTCAAAGCTGGCATCCTCCTATGTCACCTAGAGTGTGGG
TCAAAGCAATACACCTACATGTAGAATGTGATGTCAGAACTCAAACAGGCTCACCAGGCAGTGTGCTTCTTCCTT
GCATGAGGATGCAAGATGCAACAGTTTGTCTTCACATTGGAAGGACACCCCTGGATGCCCCTAACCACTAGACCT
GTAAAACTTCACTGCAGTGGCCACTTCTGAATCTCTGTAAGGTTTATTTATCTTCACCCCTCTGGAGAGAAGATG
TTTTACCAAAGCCTCTAGTGTACCGTCCTCCTCTTACTCATCCATCCCAGTCAACATGATGTTGTCAATGAAATA
AAGGAATTTAATATTCTATAGTATATCCAGGTTCTCCAGATCTCTTAAGACTGTACTATAGAGGCCTGGGGAATT
ATAATAGCCCTGAGGCAAACTATGAATTAAAGTGTTGTGGATCCCACATGAAAAAAAAAA

FIGURE 1721

MCPRKWSCFGVPGVTHHPLEQPERSRASAPMLLRMSEHRNEALGNYLEMRLKSSFLRGLGSWKSNPLRLGGWTIL
LTLTMGQGEPGGPRIPGFHTNSSYPHCVTAAMPPPGDQDLLPVPGEEGTPLLTRWSLDTYCPIPLWQL

FIGURE 1722

GCAGACGCTGCCGTGGAATCCTTGACTCTAGTTCTCTGAGTCGATTGTGATCATGGCTGCTGAGTCTGATGTTCT
GCATTTCCAGTTTGAACAGCAAGGAGATGTGGTCTTGCAGAAAATGAATCTTTTGAGACAGCAGAATTTATTTTG
TGATGTATCAATTTACATTAATGACACTGAGTTCCAGGGGCACAAGGTGATTTTGGCTGCTTGCTCCACTTTTAT
GAGAGATCAGTTTTTACTCACACAGTCAAAACATGTCAGAATCACCATCTTACAGAGTGCAGAAGTTGGCAGAAA
ATTGTTACTGTCTTGCTATACTGGAGCACTTGAAGTTAAAAGGAAAGAGCTTTTGAAATACTTGACTGCTGCCAG
TTACCTTCAGATGGTTCACATTGTGGAAAAGTGCACAGAAGCTTTGTCAAAGTATCTGGAAATTGATCTTTCTAT
GAAAAACAACAACCAACACACTGACCTGTGTCAGTCTTCTGATCCTGATGTTAAGAATGAAGATGAAAATTCTGA
TAAAGACTGTGAGATAATTGAAATTTCAGAAGATAGTCCTGTAAACATAGATTTCCATGTTAAAGAAGAGGAAAG
CAATGCTTTGCAGTCTACAGTAGAGAGTCTGACATCAGAGAGAAAGGAAATGAAGTCACCAGAGCTGTCTACAGT
AGACATAGGTTTTAAAGACAATGAAATTTGTATCCTTCATGTAGAATCCATCAGTACAGCTGGTGTCGAAAATGG
GCAGTTTTCACAGCCTTGTACCTCTTCAAAAGCAAGCATGTATTTCTCTGAAACACAGCATTCATTGATCAATTC
TACAGTTGAGAGCAGAGTGGCTGAAGTTCCTGGGAATCAAGATCAGGGCTTATTTTGTGAGAATACTGAAGGAAG
TTATGGTACAGTGAGTGAGATTCAGAATCTGGAGGAAGGTTATTCACTGAGGCACCAGTGCCCCAGGTGTCCTCG
AGGCTTTCTTCATGTTGAAAACTATCTGCGCCACCTTAAAATGCATAAACTATTCTTATGCTTACAGTGCGGAAA
AACATTTACACAGAAGAAAAATCTCAACCGACACATCCGAGGACACATGGGCATACGGCCCTTTCAGTGTACTGT
GTGCTTGAAGACATTTACTGCCAAAAGCACACTTCAGGACCACTTGAACATACACAGTGGGGATCGGCCATACAA
ATGCCACTGTTGTGATATGGATTTCAAGCACAAGTCTGCTCTCAAAAAGCACTTAACCTCTGTCCATGGCAGAAG
CAGTGGTGAAAAACTATCTAGGCCTGATCTCAAAAGGCAAAGTCTACTATAATTATAATCACAGACTTGTTATAT
AAMGTTTGTATTATTCTATTACGCAAGTCTTTCTGTAGAGATGCAGCATTTGTAATATTTCATCCCCCCAATCTT
TGTTTCTTATATTTTGTCGGCTTACACATAATCATTCTTTCTGAACTTCTAACAGTTCCAAAGTTATGGGAGGCA
CAGTAAAGCTGATGGGATTCTGTCTCATCTCATACCTTACATATAAGTCTCAGTAGTATCCCTAGAGAAATAGTG
TTCCTCTCTTATATATTCTTGATTCTAGTGACAAAGGATCCAGCAGTATTTGCAGATTCCGATTTGGAGTCTCTA
GGTAATTGATTTAAGTATAAAATCCAATCATATAAAAACTTTAATGAATTAGGATAACAAGAAGAGAAAATAAAG
GTAAAAACACTATTACCTGTTTCTAGTCACTTTAGAACAGATGGCACTAAAAAAATTTTTTTTTAACTTTTTACC
AGCTGTTCTTGGATTCCAAACTAAACACCAAGATACTTTTCATTTTAAAATGTATAAAGTAACAATTCAGATTCA
CTTGGGAATAGCAGAATTTTTTTATACAGGGTTAATAATCCTTAAAATACTTTTATTTCCATGCCTTATTAGTAT
ACATACTTAAGAAATGGTTCATTGGGCCCGAGTTTCTTGATTTTATTTAATACAATCGGATTTAATAATTTTGTG
GCCAGTAAAATTATACCATTGGCATGAAGCTGTGAAAAATGAGAAATTCTACCTTTACCAGGGATATCTGTTCTA
CTGTTTTAAAAGTTCCTCTCTATTTTATTTTTTATTTAACATGAAGTAAAATTGAAATTTCTTCTTGGTGTATAG
TTCTGTGAATTTTAACAGAAAGATTTGTGCACCACTACTGCAGTCGGTACAGAACAGTTCCTTCACTCCCAATAG
CTCTCTTATGCTGTCCCTTTGTAGTCAGCTCCTTCTAGCTCTAATCCTGGCAACAGTTCTCCGTCACTATTATTT
TGCCTTTTCTGGACTGTCATATAAACAGAATCTTATAGTACGTTCCCTCTTGAAATGCTTTTTCACCCAGCATAA
TGACTTTGAGGTTCATCCATGTCATTTTAAATTTTGAATTGGCAATATATATTCTAGCTGTTACTAGATGAGCAA
TTTAAAAAGGTGTAGCTATTAGTGTTGTATTTTTTCATTTACATTAATGTAATTTCCATTCACTATGTGTTGATA
AAAATCTTAACCATCCCTAGAGTTTTATATTTCCAAAAATATGCCAAAAGGAAAACTATGACTGTATGATTATTT
TAGCGAGAGTCATATTTGAGATGGTGTTCTGAGCCATAGTTCTCTAACATCTCCGTCTACATATAACACAAAACT
TTTATAAATTATTTTAACAAAGATTAAAATATACTGCAGGGCAAATAATATTCTCTAAAACACAGGAACTGCTTT
TCGTAAAGAAGACTGACTAGATGCATCTTTCTTTGAAGCTGTTCTAGTCCTCCTCTAGTTAACTTAGCTTTATGT
AGAATYTCTACTGTATTTAATTTYTATTGAAGCCCTTCTGTATTTTAAAATGTAATATACTTTGTACCATTTATA
AAAATTGTGTGATGAATGAATCACATGTTCGTTGTTATAAGTGTTAACCTTTTTTTGACAATTTTGTGGGAAAGA
CATTCTCCACTGAATTTTAACTTTCCTTGAGACTTTCAAGAATGCAGGTCTCGTTTGATGAAAAAACCGACTTCA
TAACCYAATGTTACTAGTTAGCGACATTGTGCTGAATTCTCCTTGAACTTTTTAACTTTATATGTAAAATAACTT
TGATCTTGGTCATTTGAAAGATCATTTCCAGGTCTAAAATTCCATGATTTTGTATTTAATTCTYCCTGAGAACAG
AAGAGGGGAAAGCAAGAGAGGACGGTTTTGTGTCTTTATGAACTTTGTTACTTAAGTACTCCATTGGAGACATAA
TTTTTCTAATTAGTGGATCTTTTTCCACTGGAAAGTGTGATAGCTCATTGCTAATTTTTCATTCATAGTTCATTG
CTTCCATTTGACCTAAGATTGGCCATTTGTTGGTGTGAAAATATTTTCTTTTCAGAAATAGTTTACTAGTGATTG
AAGTACTTTTCTTATTTTTGCTTCCTATTATAAAATGGCGTGGGG

FIGURE 1723

MAAESDVLHFQFEQQGDVVLQKMNLLRQQNLFCDVSIYINDTEFQGHKVILAACSTFMRDQFLLTQSKHVRITIL
QSAEVGRKLLLSCYTGALEVKRKELLKYLTAASYLQMVHIVEKCTEALSKYLEIDLSMKNNNQHTDLCQSSDPDV
KNEDENSDKDCEIIEISEDSPVNIDFHVKEEESNALQSTVESLTSERKEMKSPELSTVDIGFKDNEICILHVESI
STAGVENGQFSQPCTSSKASMYFSETQHSLINSTVESRVAEVPGNQDQGLFCENTEGSYGTVSEIQNLEEGYSLR
HQCPRCPRGFLHVENYLRHLKMHKLFLCLQCGKTFTQKKNLNRHIRGHMGIRPFQCTVCLKTFTAKSTLQDHLNI
HSGDRPYKCHCCDMDFKHKSALKKHLTSVHGRSSGEKLSRPDLKRQSLL

FIGURE 1724

GCTGCCCCTGAACCCCAGAACAACCAGCTGGATCAGTTCTCACAGGAGCTACAGGCCGGAGACTGGGAAACATGG
TTCCAAAACTGTTCACTTCCCAAATTTGTCTGCTTCTTCTGTTGGGGCTTCTGGCTGTGGAGGGCTCACTCCATG
TCAAACCTCCACAGTTTACCTGGGCTCAATGGTTTGAAACCCAGCACATCAATATGACCTCCCAGCAATGCACCA
ATGCAATGCAGGTCATTAACAATTATCAACGGCGATGCAAAAACCAAAATACTTTCCTTCTTACAACTTTTGCTA
ACGTAGTTAATGTTTGTGGTAACCCAAATATGACCTGTCCTAGTAACAAAACTCGCAAAAATTGTCACCACAGTG
GAAGCCAGGTGCCTTTAATCCACTGTAACCTCACAACTCCAAGTCCACAGAATATTTCAAACTGCAGGTATGCGC
AGACACCAGCAAACATGTTCTATATAGTTGCATGTGACAACAGAGATCAACGACGAGACCCTCCACAGTATCCGG
TGGTTCCAGTTCACCTGGATAGAATCATCTAAGCTCCTGTATCAGCACTCCTCATCATCACTCATCTGCCAAGCT
CCTCAATCATAGCCAAGATCCCATCTCTCCATATACTTTGGGTATCAGCATCTGTCCTCATCAGTCTCCATACCC
CTTCAGCTTTCCTGAGCTGAAGTGCCTTGTGAACCCTGCAATAAACTGCTTTGCAAATTC

FIGURE 1725

MVPKLFTSQICLLLLLGLLAVEGSLHVKPPQFTWAQWFETQHINMTSQQCTNAMQVINNYQRRCKNQNTFLLTTF
ANVVNVCGNPNMTCPSNKTRKNCHHSGSQVPLIHCNLTTPSPQNISNCRYAQTPANMFYIVACDNRDQRRDPPQY
PVVPVHLDRII

FIGURE 1726

AAGCGGCAGGAGCAGCGTTGGCACCGGCGAACCATGGCTGGGATTTTCTATTTCGCCCTATTTTCGTGTCTCTTC
GGGATTTGCGACGCTGTCACAGGTTCCAGGGTATACCCCGCGAATGAAGTTACCTTATTGGATTCCAGATCTGTT
CAGGGAGAACTTGGGTGGATAGCAAGCCCTCTGGAAGGAGGGTGGGAGGAAGTGAGTATCATGGATGAAAAAAAT
ACACCAATCCGAACCTACCAAGTGTGCAATGTGATGGAACCCAGCCAGAATAACTGGCTACGAACTGATTGGATC
ACCCGAGAAGGGGCTCAGAGGGTGTATATTGAGATTAAATTCACCTTGAGGGACTGCAATAGTCTTCCGGGCGTC
ATGGGGACTTGCAAGGAGACGTTTAACCTGTACTACTATGAATCAGACAACGACAAAGAGCGTTTCATCAGAGAG
AACCAGTTTGTCAAAATTGACACCATTGCTGCTGATGAGAGCTTCACCCAAGTGGACATTGGTGACAGAATCATG
AAGCTGAACACCGAGATCCGGGATGTAGGGCCATTAAGCAAAAAGGGGTTTTACCTGGCTTTTCAGGATGTGGGG
GCCTGCATCGCCCTGGTATCAGTCCGTGTGTTCTATAAAAAGTGTCCACTCACAGTCCGCAATCTGGCCCAGTTT
CCTGACACCATCACAGGGGCTGATACGTCTTCCCTGGTGGAAGTTCGAGGCTCCTGTGTCAACAACTCAGAAGAG
AAAGATGTGCCAAAAATGTACTGTGGGGCAGATGGTGAATGGCTGGTACCCATTGGCAACTGCCTATGCAACGCT
GGGCATGAGGAGCGGAGCGGAGAATGCCAAGCTTGCAAAATTGGATATTACAAGGCTCTCTCCACGGATGCCACC
TGTGCCAAGTGCCCACCCCACAGCTACTCTGTCTGGGAAGGAGCCACCTCGTGCACCTGTGACCGAGGCTTTTTC
AGAGCTGACAACGATGCTGCCTCTATGCCCTGCACCCGTCCACCATCTGCTCCCCTGAACTTGATTTCAAATGTC
AACGAGACATCTGTGAACTTGGAATGGAGTAGCCCTCAGAATACAGGTGGCCGCCAGGACATTTCCTATAATGTG
GTATGCAAGAAATGTGGAGCTGGTGACCCCAGCAAGTGCCGACCCTGTGGAAGTGGGGTCCACTACACCCCACAG
CAGAATGGCTTGAAGACCACCAAAGTCTCCATCACTGACCTCCTAGCTCATACCAATTACACCTTTGAAATCTGG
GCTGTGAATGGAGTGTCCAAATATAACCCTAACCCAGACCAATCAGTTTCTGTCACTGTGACCACCAACCAAGCA
GCACCATCATCCATTGCTTTGGTCCAGGCTAAAGAAGTCACAAGATACAGTGTGGCACTGGCTTGGCTGGAACCA
GATCGGCCCAATGGGGTAATCCTGGAATATGAAGTCAAGTATTATGAGAAGGATCAGAATGAGCGAAGCTATCGT
ATAGTTCGGACAGCTGCCAGGAACACAGATATCAAAGGCCTGAACCCTCTCACTTCCTATGTTTTCCACGTGCGA
GCCAGGACAGCAGCTGGCTATGGAGACTTCAGTGAGCCCTTGGAGGTTACAACCAACACAGTGCCTTCCCGGATC
ATTGGAGATGGGGCTAACTCCACAGTCCTTCTGGTCTCTGTCTCGGGCAGTGTGGTGCTGGTGGTAATTCTCATT
GCAGCTTTTGTCATCAGCCGGAGACGGAGTAAATACAGTAAAGCCAAACAAGAAGCGGATGAAGAGAAACATTTG
AATCAAGGTGTAAGAACATATGTGGACCCCTTTACGTACGAAGATCCCAACCAAGCAGTGCGAGAGTTTGCCAAA
GAAATTGACGCATCCTGCATTAAGATTGAAAAAGTTATAGGAGTTGGTGAATTTGGTGAGGTATGCAGTGGGCGT
CTCAAAGTGCCTGGCAAGAGAGAGATCTGTGTGGCTATCAAGACTCTGAAAGCTGGTTATACAGACAAACAGAGG
AGAGACTTCCTGAGTGAGGCCAGCATCATGGGACAGTTTGACCATCCGAACATCATTCACTTGGAAGGCGTGGTC
ACTAAATGTAAACCAGTAATGATCATAACAGAGTACATGGAGAATGGCTCCTTGGATGCATTCCTCAGGAAAAAT
GATGGCAGATTTACAGTCATTCAGCTGGTGGGCATGCTTCGTGGCATTGGGTCTGGGATGAAGTATTTATCTGAT
ATGAGCTATGTGCATCGTGATCTGGCCGCACGGAACATCCTGGTGAACAGCAACTTGGTCTGCAAAGTGTCTGAT
TTTGGCATGTCCCGAGTGCTTGAGGATGATCCGGAAGCAGCTTACACCACCAGGGGTGGCAAGATTCCTATCCGG
TGGACTGCGCCAGAAGCAATTGCCTATCGTAAATTCACATCAGCAAGTGATGTATGGAGCTATGGAATCGTTATG
TGGGAAGTGATGTCGTACGGGGAGAGGCCCTATTGGGATATGTCCAATCAAGATGTGATTAAAGCCATTGAGGAA
GGCTATCGGTTACCCCCTCCAATGGACTGCCCCATTGCGCTCCACCAGCTGATGCTAGACTGCTGGCAGAAGGAG
AGGAGCGACAGGCCTAAATTTGGGCAGATTGTCAACATGTTGGACAAACTCATCCGCAACCCCAACAGCTTGAAG
AGGACAGGGACGGAGAGCTCCAGACCTAACACTGCCTTGTTGGATCCAAGCTCCCCTGAATTCTCTGCTGTGGTA
TCAGTGGGCGATTGGCTCCAGGCCATTAAAATGGACCGGTATAAGGATAACTTCACAGCTGCTGGTTATACCACA
CTAGAGGCTGTGGTGCACGTGAACCAGGAGGACCTGGCAAGAATTGGTATCACAGCCATCACGCACCAGAATAAG
ATTTTGAGCAGTGTCCAGGCAATGCGAACCCAAATGCAGCAGATGCACGGCAGAATGGTTCCCGTCTGAGCCAGT
ACTGAATAAACTCAAAACTCTTGAAATTAGTTTACCTCATCCATGCACTTTAATTGAAGAACTGCACTTTTTTTA
CTTCGTCTTCGCCCTCTGAAATTAAAGAAATG

FIGURE 1727

MAGIFYFALFSCLFGICDAVTGSRVYPANEVTLLDSRSVQGELGWIASPLEGGWEEVSIMDEKNTPIRTYQVCNV
MEPSQNNWLRTDWITREGAQRVYIEIKFTLRDCNSLPGVMGTCKETFNLYYYESDNDKERFIRENQFVKIDTIAA
DESFTQVDIGDRIMKLNTEIRDVGPLSKKGFYLAFQDVGACIALVSVRVFYKKCPLTVRNLAQFPDTITGADTSS
LVEVRGSCVNNSEEKDVPKMYCGADGEWLVPIGNCLCNAGHEERSGECQACKIGYYKALSTDATCAKCPPHSYSV
WEGATSCTCDRGFFRADNDAASMPCTRPPSAPLNLISNVNETSVNLEWSSPQNTGGRQDISYNVVCKKCGAGDPS
KCRPCGSGVHYTPQQNGLKTTKVSITDLLAHTNYTFEIWAVNGVSKYNPNPDQSVSVTVTTNQAAPSSIALVQAK
EVTRYSVALAWLEPDRPNGVILEYEVKYYEKDQNERSYRIVRTAARNTDIKGLNPLTSYVFHVRARTAAGYGDFS
EPLEVTTNTVPSRIIGDGANSTVLLVSVSGSVVLVVILIAAFVISRRRSKYSKAKQEADEEKHLNQGVRTYVDPF
TYEDPNQAVREFAKEIDASCIKIEKVIGVGEFGEVCSGRLKVPGKREICVAIKTLKAGYTDKQRRDFLSEASIMG
QFDHPNIIHLEGVVTKCKPVMIITEYMENGSLDAFLRKNDGRFTVIQLVGMLRGIGSGMKYLSDMSYVHRDLAAR
NILVNSNLVCKVSDFGMSRVLEDDPEAAYTTRGGKIPIRWTAPEAIAYRKFTSASDVWSYGIVMWEVMSYGERPY
WDMSNQDVIKAIEEGYRLPPPMDCPIALHQLMLDCWQKERSDRPKFGQIVNMLDKLIRNPNSLKRTGTESSRPNT
ALLDPSSPEFSAVVSVGDWLQAIKMDRYKDNFTAAGYTTLEAVVHVNQEDLARIGITAITHQNKILSSVQAMRTQ
MQQMHGRMVPV

FIGURE 1728A

GATCAATACTGAGGCCGCGTCGACCCCCTTGAGCCGAGACCCCCCCCCAGCCCAGCCCCCACCCCACCCCCCGCA
CACGCCCCACCCCCCCCCACGACCCAGCCTCATACCGCACCAGCTGAGGCACCCAAGAGGATTACCCCCTGGGGCC
CTCTCCCGCCCCCCAAAAAAGAGAAGATCCCCTCTCCTGGCCCATCCCTTCCCTTCTTCCCTCCCCCCTCCCCCC
GAACTTTCCCTCTCGCATGCTTTTCCCCTGCACCACGGATCGCCTCTCGGATGCCGCTTGCCTGGAAGCTGCGTT
AGGAGCGAGCGGCGGCGGTGGCGGCGGTGGCGGCGGCGGCGGCAGCTCGGGAGTGCT**ATG**ACCGGCAAACTCGCC
GAGAAGCTGCCGGTGACCATGAGCAGTTTGCTAAACCAACTGCCTGACAATCTGTACCCCGAGGAGATCCCCAGC
GCGCTCAACCTCTTCTCCGGCAGCAGCGACTCGGTAGTCCATTACAATCAGATGGCTACAGAGAATGTAATGGAC
ATCGGTCTGACCAACGAGAAGCCCAACCCGGAACTCTCTTACTCCGGCTCCTTCCAGCCAGCCCCCGGGAACAAG
ACCGTGACCTACTTGGGAAAGTTCGCCTTCGACTCCCCTTCCAACTGGTGCCAGGACAACATCATTAGCCTCATG
AGCGCCGGCATCTTGGGGGTGCCCCCGGCTTCAGGGGCGCTAAGCACGCAGACGTCCACGGCCAGCATGGTGCAG
CCACCGCAGGGTGACGTGGAGGCCATGTATCCCGCGCTACCCCCCTACTCCAACTGCGGCGACCTCTACTCAGAG
CCCGTGTCTTTCCACGACCCCCAGGGCAATCCCGGGCTCGCCTATTCCCCCCAGGATTACCAATCGGCCAAGCCG
GCGTTGGACAGCAATCTCTTCCCCATGATTCCTGACTACAACCTCTACCACCACCCCAACGACATGGGCTCCATT
CCGGAGCACAAGCCCTTCCAGGGCATGGACCCCATCCGGGTCAACCCGCCCCCTACTACCCCTCTGGAGACCATC
AAGGCATTCAAAGACAAGCAGATCCACCCGGGCTTTGGCAGCCTGCCCCAGCCGCCGCTCACCCTCAAGCCCATC
CGGCCCCGCAAGTACCCCAACCGGCCTAGCAAGACACCGCTCCACGAACGGCCCCACGCGTGCCCGGCCGAGGGC
TGCGACCGCCGTTTCAGCCGTTCGGACGAGCTGACCCGGCACCTGCGCATCCACACGGGCCACAAGCCCTTCCAG
TGCCGGATCTGCATGCGGAGCTTCAGCCGCAGCGACCACCTCACCACTCACATCCGCACTCATACGGGCGAGAAG
CCCTTTGCCTGCGAGTTCTGCGGGCGCAAGTTTGCGCGCAGCGACGAGCGCAAGCGCCACGCCAAGATCCACCTC
AAGCAAAAGGAGAAGAAGGCGGAGAAGGGCGGTGCACCCTCTGCATCCTCGGCGCCCCCCGTGTCGCTGGCCCCC
GTGGTCACCACCTGCGCC**TGA**GGATCGGGCCCCCAGATCCCCACTTTTCCCCTCCAGTGCCTCCCGGCTGCTAGC
CTGAAAGCAGCGGGAAAGCCAGCCACGGAGGCGTAGGGGCCGCGCCCTGGCCTCTCCATGGACGTGCGGCCCCTT
GCTTCCCCTTCGATGCCCCCGGTTCCCAACCTTTCACGCCGGCCAGCGGTCAGGGGCCAGGGCTGGAGGCGCCTT
CCCCTCGCGGTCCCCCACTTAGCCAAGGCGTGGGGGCGGAAAGGTGGCGTCTAGCCCGCTTTGTTCAGTTCGGAT
CGCCTTGATCCAGGGGCCGCCGGGCCGCGCCAAGGACCTGCAAGGGACTGAAGGCGGAGCCCATCCAACCCTCGC
CCGACCCAAACACCTCATTGTTTCCCCCACGTCTCCCTCTATACCCCCTCGAAGACTCGAGAGGGGGAGGGGGTA
AGGAGCGCACCAAAGCGCAGAGCTTGCTGCCCGCCGCACGCACGCGCGCCTGCGTGCGGGGATGCGCGCGAGTGT
GTGCGTGCTCGCGTGTGTGTGTATGTGTGTGTGTGAGTGTGTGTGTGTGCGCGCGCGCAAGCGTGTGTGTTTAAG
ACTCTTGAGCTGAACTGGGCTGTGTTTACCCCAAACTCTTCCCCACCTCGGGTCCCCAAGCCGCTGGGAGATGTC
CCATGCTGGGGGTCCGCACGTGGCTGGAGGAGGTGGTCTTCCATCCGCTCTGAAATCATGTTTCTTAGAGAAATG
CCTCGGATGCCGCCGACGCGGTGCTGCTGCCGCCGCTTCGGGTTTGGCCCCTCAGAACCCCTCCTTTTCTGAGCG
CTTCCCTCTTAGGCCTCAGGGCAGTTTGATCTGTGGGGAGAAAGAGCAGCCATCGCTGAGCCTGCCTTTTAAAAT
ATATGTGTATTTCCTTAGCCCCACTCTAAGAAATCTATGTTCCTGAGTTTGCCCCCTGCCCTCCCACTCCTTCCC
CTTTTCCCCTCTAAACCTTCTCCCATCTCTTTCAAAATCTTTTCCCAGAAAGGCAGGCTTCAACCAGCCACTCCA
GCTTTGTGTCTTCTCTCAATTACATAGCAATTTCTCCTTCCCACCATCATGGGGAAGCTGGCTCTGCTTTTGCCC
TTTGTCATCACCAACACAACAGATAGAATTTAAATATAAGTATATGGTGTGCGTGTGTATGTATGTGTATGTATA
TGCATGCATGTGTATAAAGATGCACATGCGTACATATACATAACATACACACAATATGTATTCCTAGCAAAATAA
AATCTCTAAGGTACTTGGTTATCCAGTGCAGTGCACCGGAATAAAGAGAATTTGTAGGCGTATACAGCTTTAAAT
GATTTATTTTTTATGAAAATGTTAACTGATGAGATTATATCTACATACGTGTGTTATGTGTGTGGATATAGATGC
ACACATATCTGTACATATACATGTGAGTGTACATATATACACATATACACATCTATGTATGGATATGTGTGTATA
CACATATACACATCTCTGTCCAAAATTTCCTCAAAGATATGGGGATTTTTTCATGAATCCATGTGGATGAATGAG
GTGTCTCCTTTCCATACCCAGTCTCACCTTCTCCCCACCCTACCTCACCTCTTCTCAGGCACCCCTCTTCCCCAG
CTGTCCTGCCAGCCCTTCTCGTACAGGGTGGCTCCTTTGAAGTGGAGTAATAGGGAAGGTTGCTCTCTGCCACAG
CTTGCAGCATGGTCTTGACTGAATGTACTGTTCCTGTTAGCGTTACTTCTCCTGTGGTCAGTAAGTTGCCCAGAG
AGAAGGAACAAAGGTCTGGAGTTTACAGAATGTCTGTTTTTAAAGTCACTTTATGCGTTTTCCACTTTTTTCTTT
TTTAAGAAAAAGAAGTACCATTTTTGTTTTGTTTTGTTTTGATTTTTGGTGGTGGATAAATAATACTAAAAGGAC
TCTAGTGGAAAGGGGGGATATCGAAGAGCAGGGGGTTGTGAATTTCCAGGTACTTGGACTTTTTGTAGAAGTAGA
GAGAAGAAGATGAAGTTTGCCAGGAGGGCCCATATTTTTTCAGCTGAAGGGTAAAATCTTTCTTTGCAGAGACAG

FIGURE 1728B

TATTTTGCTGAATACTTTTTATAATGTGATGATTATTAAAAAAGCAAAAATTTTGGTCACTTCCAAGCTAGAAGG
AGGAATCAGATACCCTTTAATATTTTTTCCTCGCTCCTTCTGGTATATGCATGTCACTGCATGATAATTGAGTTT
TCCTTTGTTTTAATAAAACTGTTCTCAGACATTAAGCTAAACTAAGAGAAAAATAACTTTGTTGCCAAAAGGTTG
TGCTATCCAGATTTTTTATATGTCTGCATGTTTAAAAAAAAAAAAAGCAACAAAAGAAAATGCACTCTAACTTATG
TGAACTGAGAGAAAAAAATCAGGTTTTAAACAGGAAAACCTATGGGGAATGATATTTTTTGAAAGACTTTTGTAT
AAAGTTGAGTACTTAGAAAAAAGACAAACCAGATGTAATATATTTTGTGGATGTTTTTATTTCTTGGATTTATAG
TACCTTATACTAAGGTTAAAAAAATATGCTTGATATTGTGAAAAGGTGAAATTCTTCACCAACATTTCATTTGCT
CCTTTGTCATATTGTAATGCCAATATAATATAGTTAATGAAAACAGCATTTTTAAAAACCGAAATATTGAAATGG
TGTAATGTTGTACCATTTGCACTGTGAGCAAATGCTAATACAGTAAATATATTGTGTTTGCTGACAATCAAAAAA
AAAAAAAAAAAAA

FIGURE 1729

MTGKLAEKLPVTMSSLLNQLPDNLYPEEIPSALNLFSGSSDSVVHYNQMATENVMDIGLTNEKPNPELSYSGSFQ
PAPGNKTVTYLGKFAFDSPSNWCQDNIISLMSAGILGVPPASGALSTQTSTASMVQPPQGDVEAMYPALPPYSNC
GDLYSEPVSFHDPQGNPGLAYSPQDYQSAKPALDSNLFPMIPDYNLYHHPNDMGSIPEHKPFQGMDPIRVNPPPT
TPLETIKAFKDKQIHPGFGSLPQPPLTLKPIRPRKYPNRPSKTPLHERPHACPAEGCDRRFSRSDELTRHLRIHT
GHKPFQCRICMRSFSRSDHLTTHIRTHTGEKPFACEFCGRKFARSDERKRHAKIHLKQKEKKAEKGGAPSASSAP
PVSLAPVVTTCA

FIGURE 1730

ATGGAAGGAGACTTCTCGGTGTGCAGGAACTGTAAAAGACATGTAGTCTCTGCCAACTTCACCCTCCATGAGGCT
TACTGCCTGCGGTTCCTGGTCCTGTGTCCGGAGTGTGAGGAGCCTGTCCCCAAGGAAACCATGGAGGAGCACTGC
AAGCTTGAGCACCAGCAGGTTGGGTGTACGATGTGTCAGCAGAGCATGCAGAAGTCCTCGCTGGAGTTTCATAAG
GCCAATGAGTGCCAGGAGCGCCCTGTTGAGTGTAAGTTCTGCAAACTGGACATGCAGCTCAGCAAGCTGGAGCTC
CACGAGTCCTACTGTGGCAGCCGGACAGAGCTCTGCCAAGGCTGTGGCCAGTTCATCATGCACCGCATGCTCGCC
CAGCACAGAGATGTCTGTCGGAGTGAACAGGCCCAGCTCGGGAAAGGGGAAAGAATTTCAGCTCCTGAAAGGGAA
ATCTACTGTCATTATTGCAACCAAATGATTCCAGAAAATAAGTATTTCCACCATATGGGTAAATGTTGTCCAGAC
TCAGAGTTTAAGAAACACTTTCCTGTTGGAAATCCAGAAATTCTTCCTTCATCTCTTCCAAGTCAAGCTGCTGAA
AATCAAACTTCCACGATGGAGAAAGATGTTCGTCCAAAGACAAGAAGTATAAACAGATTTCCTCTTCATTCTGAA
AGTTCATCAAAGAAAGCACCAAGAAGCAAAAACAAAACCTTGGATCCACTTTTGATGTCAGAGCCCAAGCCCAGG
ACCAGCTCCCCTAGAGGAGATAAAGCAGCCTATGACATTCTGAGGAGATGTTCTCAGTGTGGCATCCTGCTTCCC
CTGCCGATCCTAAATCAACATCAGGAGAAATGCCGGTGGTTAGCTTCATCAAAAAGGAAAACAAGTGAGAAATTT
CAGCTAGATTTGGAAAAGGAAAGGTACTACAAATTCAAAAGATTTCACTTTTAACACTGGCATTCCTGCCTACTT
GCTGTGGTGGTCTTGTGAAAGGTGATGGGTTTTATTCGTTGGGCTTTAAAAGAAAAGGTTTGGCAGAACTAAAAA
CAAAACTCACGTATCATCTCAATAGATACAGAAAAGGCTTTTGATAAAATTCAACTTGACTTCATGTTAAAAACC
CTCAACAAACCAGGCGTCGAAGGAACATACCTCAAAATAATAAGAGCCATCTATGACAAAACCACAGCCAACATC
ATACTGAATGAGCAAAAGCTGGAGCATTACTCTTGAGAAGTAGAACAAGGCACTTCAGTCCTATTCAACATAGTA
CTGGAAGTCTCGCCACAGCAATCAGGCAAGAGAAAGAAGTAAAAGGCACCC

FIGURE 1731

MEGDFSVCRNCKRHVVSANFTLHEAYCLRFLVLCPECEEPVPKETMEEHCKLEHQQVGCTMCQQSMQKSSLEFHK
ANECQERPVECKFCKLDMQLSKLELHESYCGSRTELCQGCGQFIMHRMLAQHRDVCRSEQAQLGKGERISAPERE
IYCHYCNQMIPENKYFHHMGKCCPDSEFKKHFPVGNPEILPSSLPSQAAENQTSTMEKDVRPKTRSINRFPLHSE
SSSKKAPRSKNKTLDPLLMSEPKPRTSSPRGDKAAYDILRRCSQCGILLPLPILNQHQEKCRWLASSKRKTSEKF
QLDLEKERYYKFKRFHF

FIGURE 1732

GTGGAGGTTGCTGCTATGAGAGAGAAAAAAAAAAACAGCCACAATAGAGATTCTGCCTTCAAAGGTTGGCTTGCC
ACCTGAAGCAGCCACTGCCCAGGGGGTGCAAAGAAGAGACAGCAGCGCCCAGCTTGGAGGTGCTAACTCCAGAGG
CCAGCATCAGCAACTGGGCACAGAAAGGAGCCGCCTGGGCAGGGACCATGGCACGGCCACATCCCTGGTGGCTGT
GCGTTCTGGGGACCCTGGTGGGGCTCTCAGCTACTCCAGCCCCCAAGAGCTGCCCAGAGAGGCACTACTGGGCTC
AGGGAAAGCTGTGCTGCCAGATGTGTGAGCCAGGAACATTCCTCGTGAAGGACTGTGACCAGCATAGAAAGGCTG
CTCAGTGTGATCCTTGCATACCGGGGGTCTCCTTCTCTCCTGACCACCACACCCGGCCCCACTGTGAGAGCTGTC
GGCACTGTAACTCTGGTCTTCTCGTTCGCAACTGCACCATCACTGCCAATGCTGAGTGTGCCTGTCGCAATGGCT
GGCAGTGCAGGGACAAGGAGTGCACCGAGTGTGATCCTCTTCCAAACCCTTCGCTGACCGCTCGGTCGTCTCAGG
CCCTGAGCCCACACCCTCAGCCCACCCACTTACCTTATGTCAGTGAGATGCTGGAGGCCAGGACAGCTGGGCACA
TGCAGACTCTGGCTGACTTCAGGCAGCTGCCTGCCCGGACTCTCTCTACCCACTGGCCACCCCAAAGATCCCTGT
GCAGCTCCGATTTTATTCGCATCCTTGTGATCTTCTCTGGAATGTTCCTTGTTTTCACCCTGGCCGGGGCCCTGT
TCCTCCATCAACGAAGGAAATATAGATCAAACAAAGGAGAAAGTCCTGTGGAGCCTGCAGAGCCTTGTCGTTACA
GCTGCCCCAGGGAGGAGGAGGGCAGCACCATCCCCATCCAGGAGGATTACCGAAAACCGGAGCCTGCCTGCTCCC
CCTGAGCCAGCACCTGCGGTAGCTGCACTACAGCCCTGGCCTCCACCCCCACCCCGCCGACCATCCAAGGGAGAG
TGAGACCTGGCAGCCACAACTGCAGTCCCATCCTCTTGTCAGGGCCCTTTCCTGTGTACACGTGACAGAGTGCCT
TTTCGAGACTGGCAGGGACGAGGACAAATATGGATGAGGTGGAGAGTGGGAAGCAGGAGCCCAGCCAGCTGCGCC
TGCGCTGCAGGAGGGCGGGGGCTCTGGTTGTAAAACACACTTCCTGCTGCGAAAGACCCACATGCTACAAGACGG
GCAAAATAAAGTGACAGATGACCACCCTGCAAAAAAAAAAAAAAAAAA

FIGURE 1733

MARPHPWWLCVLGTLVGLSATPAPKSCPERHYWAQGKLCCQMCEPGTFLVKDCDQHRKAAQCDPCIPGVSFSPDH
HTRPHCESCRHCNSGLLVRNCTITANAECACRNGWQCRDKECTECDPLPNPSLTARSSQALSPHPQPTHLPYVSE
MLEARTAGHMQTLADFRQLPARTLSTHWPPQRSLCSSDFIRILVIFSGMFLVFTLAGALFLHQRRKYRSNKGESP
VEPAEPCRYSCPREEEGSTIPIQEDYRKPEPACSP

FIGURE 1734

GGGGATTTTGGGCGCCGACCAGACGCGGCATTTTCGGAAAATAGCGCCCTGTGCAGCTGAAGCGCTTTGTGTGTA
GCGGGGCCGCGTCAGCCCGGCCGGGTACGAGGCGCCTCGGGTCCCCGCACCACCTCCTGCTGCCTTCCCGTCGCC
GCTCCCGAAGCTTTTCCAGATGTCCCTGGTAGATTTGGGAAAGAAGCTTTTAGAAGCGGCACGAGCAGGTCAAGA
TGATGAAGTTCGTATTTTGATGGCAAATGGAGCTCCCTTTACTACAGACTGGCTGGGAACTTCTCCACTTCATCT
AGCAGCACAGTATGGTCATTATTCCACCACAGAGGTACTGCTGCGAGCTGGTGTGAGCAGAGATGCCAGAACCAA
GGTGGACCGAACACCATTACATATGGCAGCTTCTGAGGGCCATGCCAGCATAGTAGAGGTTTTACTTAAGCATGG
TGCTGATGTCAATGCAAAGGACATGTTAAAGATGACAGCTCTCCATTGGGCCACAGAACACAATCATCAAGAGGT
GGTGGAACTTTTAATCAAATATGGTGCTGATGTACACACGCAAAGTAAATTTTGTAAAACTGCATTTGATATTTC
AATAGACAATGGAAATGAAGATTTAGCAGAGATATTACAGATTGCTATGCAGAACCAAATCAACACAAACCCAGA
GAGTCCTGACACTGTGACAATACATGCTGCAACACCACAGTTTATCATTGGACCTGGAGGGGTGGTGAACCTAAC
AGATGAAACGGGTGTATCTGCTGTTCAGTTTGGAAACTCTTCTACATCAGTATTAGCTACATTAGCTGCCTTAGC
TGAAGCATCTGCTCCATTGTCCAATTCTTCAGAAACTCCAGTAGTGGCCACAGAAGAAGTAGTTACTGCAGAATC
TGTGGATGGTGCCATTCAGCAAGTAGTTAGTTCAGGGGGTCAGCAAGTCATCACAATAGTTACAGATGGAATTCA
GCTTGGAAATTTGCACTCTATTCCAACCAGTGGAATTGGTCAGCCCATCATTGTGACCATGCCAGATGGACAACA
AGTATTAACAGTACCAGCAACAGACATTGCTGAAGAAACTGTTATAAGTGAAGAACCACCAGCTAAGAGACAATG
TATCGAAATAATTGAAAACCGGGTGGAATCTGCAGAAATAGAAGTAAGGAGTCTTTTACCCGGTGTGCTTTGCCG
CAGTCATCCAAAATAAATTCAATTTTTTTTGTCTTTTATATTTATTACTGACAGTATTGTTTTGATACAGAATGA
AAGTGCGTAGTATTTTCATTTTGTTTATTTTTGCCTTATACATATAGCAAGCCCTCAATAAATAAATATTGAATG
AATGAAAAAAAAAAAAA

FIGURE 1735

MSLVDLGKKLLEAARAGQDDEVRILMANGAPFTTDWLGTSPLHLAAQYGHYSTTEVLLRAGVSRDARTKVDRTPL
HMAASEGHASIVEVLLKHGADVNAKDMLKMTALHWATEHNHQEVVELLIKYGADVHTQSKFCKTAFDISIDNGNE
DLAEILQIAMQNQINTNPESPDTVTIHAATPQFIIGPGGVVNLTGLVSSENSSKATDETGVSAVQFGNSSTSVLA
TLAALAEASAPLSNSSETPVVATEEVVTAESVDGAIQQVVSSGGQQVITIVTDGIQLGNLHSIPTSGIGQPIIVT
MPDGQQVLTVPATDIAEETVISEEPPAKRQCIEIIENRVESAEIEVRSLLPGVLCRSHPK

FIGURE 1736

GGTTCAGGAACCTGCTGGTTCTGATACATAAATCAGACAGCCTCTGCTGCATGACACGAAGCTTGCTTCTGCCTG
GCATCTGTGAGCAGCTGCCAGGCTCCGGCCAGGATCCCTTCCTTCTCCTCATTGGCTGATGGATCCCAAGGGGCT
CCTCTCCTTGACCTTCGTGCTGTTTCTCTCCCTGGCTTTTGGGGCAAGCTACGGAACAGGTGGGCGCATGATGAA
CTGCCCAAAGATTCTCCGGCAGTTGGGAAGCAAAGTGCTGCTGCCCCTGACATATGAAAGGATAAATAAGAGCAT
GAACAAAAGCATCCACATTGTCGTCACAATGGCAAAATCACTGGAGAACAGTGTCGAGAACAAAATAGTGTCTCT
TGATCCATCCGAAGCAGGCCCTCCACGTTATCTAGGAGATCGCTACAAGTTTTATCTGGAGAATCTCACCCTGGG
GATACGGGAAAGCAGGAAGGAGGATGAGGGATGGTACCTTATGACCCTGGAGAAAAATGTTTCAGTTCAGCGCTT
TTGCCTGCAGTTGAGGCTTTATGAGCAGGTCTCCACTCCAGAAATTAAAGTTTTAAACAAGACCCAGGAGAACGG
GACCTGCACCTTGATACTGGGCTGCACAGTGGAGAAGGGGGACCATGTGGCTTACAGCTGGAGTGAAAAGGCGGG
CACCCACCCACTGAACCCAGCCAACAGCTCCCACCTCCTGTCCCTCACCCTCGGCCCCCAGCATGCTGACAATAT
CTACATCTGCACCGTGAGCAACCCTATCAGCAACAATTCCCAGACCTTCAGCCCGTGGCCCGGATGCAGGACAGA
CCCCTCAGAAACAAAACCATGGGCAGTGTATGCTGGGCTGTTAGGGGGTGTCATCATGATTCTCATCATGGTGGT
AATACTACAGTTGAGAAGAAGAGGTAAAACGAACCATTACCAGACAACAGTGGAAAAAAAAAGCCTTACGATCTA
TGCCCAAGTCCAGAAACCAGGTCCTCTTCAGAAGAAACTTGACTCCTTCCCAGCTCAGGACCCTTGCACCACCAT
ATATGTTGCTGCCACAGAGCCTGTCCCAGAGTCTGTCCAGGAAACAAATTCCATCACAGTCTATGCTAGTGTGAC
ACTTCCAGAGAGCTGACACCAGAGACCAACAAAGGGACTTTCTGAAGGAAAATGGAAAAACCAAAATGAACACTG
AACTTGGCCACAGGCCCAAGTTTCCTCTGGCAGACATGCTGCACGTCTGTACCCTTCTCAGATCAACTCCCTGGT
GATGTTTCTTCCACATACATCTGTGAAATGAACAAGGAAGTGAGGCTTCCCAAGAATTTAGCTTGCTGTGCAGTG
GCTGCAGGCGCAGAACAGAGCGTTACTTGATAACAGCGTTCCATCTTTGTGTTGTAGCAGATGAAATGGACAGTA
ATGTGAGTTCAGACTTTGGGCATCTTGCTCTTGGCTGGAACTGATAATAAAAATCAGACTGAAAGCCAGGACATC
TGAGTACCTATCTCACACACTGACCACCAGTCACAAAGTCTGGAAAAGTTTACATTTTGGCTATCTTTACTTTGT
TCTGGGAGCTGATCATGATAACCTGCAGACCTGATCAAGCCTCTGTGCCTCAGTTTCTCTCTCAGGATAAAGAGT
GAATAGAGGCCGAAGGGTGAATTTCTTATTATACATAAAACACTCTGATATTATTGTATAAAGGAAGCTAAGAAT
ATTATTTTATTTGCAAAACCCAGAAGCTAAAAAGTCAATAAACAGAAAGAATGATTTTGAGAAA

FIGURE 1737

MDPKGLLSLTFVLFLSLAFGASYGTGGRMMNCPKILRQLGSKVLLPLTYERINKSMNKSIHIVVTMAKSLENSVE
NKIVSLDPSEAGPPRYLGDRYKFYLENLTLGIRESRKEDEGWYLMTLEKNVSVQRFCLQLRLYEQVSTPEIKVLN
KTQENGTCTLILGCTVEKGDHVAYSWSEKAGTHPLNPANSSHLLSLTLGPQHADNIYICTVSNPISNNSQTFSPW
PGCRTDPSETKPWAVYAGLLGGVIMILIMVVILQLRRRGKTNHYQTTVEKKSLTIYAQVQKPGPLQKKLDSFPAQ
DPCTTIYVAATEPVPESVQETNSITVYASVTLPES

FIGURE 1738

AACAAGGAAATGAGCAAAGTAAGAAGACACCAATTGAGAAATCTGATTTTGCTGCTGCTACACATCCTCGTGCTT
TTTACCTCAGTAAACCAGATGAAACTCCAAATGCTTGGATGTCTGATTCAGGAACAGGATTGACTTACTGGAAAC
TAGAGGAAAAGGATATGCACCACTCTTTGCCTGAAACTTTAGAGAAGACGTTCATATCATTGTCTTCCACAGATG
TGTCACCAAACCAGTCTAATACTAGTAATGAGATGAAGCTACCGTCACTGAAGGATATTTATTATAAAAAACAAA
GGGAAAACAAGCAGTTACCTGAGAGGAATCTCACTTCTGCTTCCAACCCAAATCATCCACCAGAGGTCCTGACTC
TAGATCCTACGTTACACATGAAGCCAAAGCAGCAGATTTCAGGGATTCAACCTCACGGCCTTCCGAATGCCCTTG
ATGACAGAATATCCTTTTCCCCGGACTCTGTTCTAGAGCCTAGTATGTCTAGTCCCTCTGACATAGACTCATTTT
CACAAGCAAGTAATGTCACTTCTCAGTTACCTGGATTTCCAAAATATCCCTCACACACAAAAGCTTCTCCGGTGG
ACTCTTGGAAAAATCAGACATTCCAAAACGAAAGTAGGACCAGTTCCACGTTTCCGTCAGTATATACCATTACTA
GTAATGATATCTCGGTCAACACTGTAGATGAAGAAAACACTGTCATGGTTGCTTCGGCCTCAGTCAGTCAGTCCC
AGCTTCCAGGTACAGCCAACAGTGTCCCAGAATGCATTTCATTGACTTCCTTGGAAGATCCTGTGATATTGTCTA
AGATTAGGCAGAATCTGAAGGAAAAGCATGCTCGACACATAGCAGATCTTCGAGCTTATTATGAATCAGAAATAA
ATAGTTTGAAACAGAAGCTGGAGGCAAAAGAAATCTCTGGAGTTGAAGATTGGAAGATAACCAATCAAATTCTTG
TAGACAGATGTGGCCAATTAGATAGTGCTTTGCATGAAGCTACTAGTCGCGTGAGAACACTTGAAAATAAGAATA
ACTTACTGGAAATTGAAGTGAATGATTTGAGAGAACGCTTCAGTGCAGCCAGCAGTGCTTCCAAAATTTTGCAGG
AACGAATTGAAGAAATGAGAACAAGCAGTAAAGAAAAAGACAATACCATCATTCGACTAAAATCTAGACTGCAAG
ATTTAGAAGAAGCATTTGAGAATGCTTACAAACTCTCAGATGATAAAGAAGCTCAACTAAAACAAGAGAACAAAA
TGTTTCAAGATCTTTTAGGAGAGTATGAGTCCCTTGGAAAAGAACACAGGAGAGTAAAGGATGCATTAAATACAA
CTGAGAATAAATTGCTTGATGCATATACTCAGATTTCTGATTTGAAAAGAATGATTTCAAAACTTGAAGCTCAGG
TCAAGCAAGTAGAACATGAAAATATGTTAAGCCTTCGTCATAATTCTAGAATTCACGTGAGACCCTCGCGTGCCA
ACACACTAGCAACTTCAGACGTCAGCAGGCGGAAATGGCTGATTCCAGGTGCAGAGTATTCCATCTTTACTGGCC
AGCCTCTGGACACCCAGGACAGTAACGTGGATAACCAGCTGGAGGAAACCTGTAGCCTAGGGCACCGTTCACCTC
TGGAAAAGGATTCTTCACCTGGAAGTTCATCAACAAGCTTGTTGATAAAAAAGCAAAGAGAGACTTCAGACACGC
CGATCATGAGAGCTTTAAAAGAACTTGATGAGGGAAAAATATTTAAAAATTGGGGGACACAGACAGAGAAAGAGG
ACACCTCAAATATAAATCCTCGGCAAACTGAAACTTCAGTTAATGCAAGTCGTTCTCCAGAAAAGTGTGCCCAAC
AGAGACAAGAGAGACTTAATTCGGCCTCACAGAGATCATCATCTTTACCACCTTCAAATCGTAAATCAAGTACTC
CAACAAAAAGAGAGATTATGCTAACACCAGTGACTGTGGCTTATAGTCCAAAGCGATCCCCTAAAGAAAACTTGT
CCCCAGGATTTAGTCATCTGCTTAGCAAAAATGAGAGCAGTCCAATTCGATTTGATATACTTTTGGATGATTTAG
ATACTGTTCCTGTGTCTACATTACAACGTACCAATCCAAGAAAGCAACTCCAGTTTCTTCCTCTAGATGACTCGG
AAGAAAAAACTTATTAATCATAGCTCTTGCCCTGAACCGGTGCCAAATGGAGTGAAGAAAGTATCTGTGAGAACA
GCCTGGGAGAAGAATAAATCAGTTAGCTATGAACAGTGTAAGCCGGTTTCAGTCACTCCACAGGGGAATGATTTT
GAATATACAGCAAAAATTCGGACCCTAGCTGAAACAGAACGATTTTTTGATGAACTTACAAAAGAAAAGGACCAG
ATTGAGGCAGCGCTAAGCAGGATGCCTTCTCCTGGAGGACGAATCACTTTACAGACAAGATTAAATCAGGAAGCC
TTGGAAGATCGTTTGGAAAGGATTAATCGAGAACTGGGTTCAGTTCGCATGACGCTAAAGAAATTCCATGTTTTG
CGCACCTCTGCAAATCTTTGAGATTTGTAGCCATTAAATTTTGAGACATTTTTGTTTGCACTAATGTATAATTAT
GCAGTCAGAAAAGGCAAACTATTTTGTACTGTTTATAAGCCTTCAAACAGTAGTTTTACAATCATGCTATTCTTA
CACTTGCTATTTTATACTTCAAATAGCCACATATTTTCAAGATATTTTTGTTATGCTCAGGAATCTCTTGTATAT
TTTACTATTTAAAAAGCATTATTTTTAAATAGTATCTGTCTCCAATTTATATCAAGAATAAGGAAATATAAACAG
AGGAAGCAGCTTGTTTCTAAACAAATAGTGTTATCCTTTTACAATTAACTGCACATCAATTTTATAGACTTGTTC
TACATTGTAAATACAATTCAGTTTTTAAAAAATAAAGCTTAATAGCTTCCAT

FIGURE 1739

MSDSGTGLTYWKLEEKDMHHSLPETLEKTFISLSSTDVSPNQSNTSNEMKLPSLKDIYYKKQRENKQLPERNLTS
ASNPNHPPEVLTLDPTLHMKPKQQISGIQPHGLPNALDDRISFSPDSVLEPSMSSPSDIDSFSQASNVTSQLPGF
PKYPSHTKASPVDSWKNQTFQNESRTSSTFPSVYTITSNDISVNTVDEENTVMVASASVSQSQLPGTANSVPECI
SLTSLEDPVILSKIRQNLKEKHARHIADLRAYYESEINSLKQKLEAKEISGVEDWKITNQILVDRCGQLDSALHE
ATSRVRTLENKNNLLEIEVNDLRERFSAASSASKILQERIEEMRTSSKEKDNTIIRLKSRLQDLEEAFENAYKLS
DDKEAQLKQENKMFQDLLGEYESLGKEHRRVKDALNTTENKLLDAYTQISDLKRMISKLEAQVKQVEHENMLSLR
HNSRIHVRPSRANTLATSDVSRRKWLIPGAEYSIFTGQPLDTQDSNVDNQLEETCSLGHRSPLEKDSSPGSSSTS
LLIKKQRETSDTPIMRALKELDEGKIFKNWGTQTEKEDTSNINPRQTETSVNASRSPEKCAQQRQERLNSASQRS
SSLPPSNRKSSTPTKREIMLTPVTVAYSPKRSPKENLSPGFSHLLSKNESSPIRFDILLDDLDTVPVSTLQRTNP
RKQLQFLPLDDSEEKTY

FIGURE 1740

ATTTAAATTCTGCAGCTCAGAGATTCACACAGAAGTCTGGACACAATTCAGAAGAGCCACCCAGAAGGAGACAAC
AATGTCCCTGCTACCCGTGCCATACACAGAGGCTGCCTCTTTGTCTACTGGTTCTACTGTGACAATCAAAGGGCG
ACCACTTGCCTGTTTCTTGAATGAACCATATCTGCAGGTGGATTTCCACACTGAGATGAAGGAGGAATCAGACAT
TGTCTTCCATTTCCAAGTGTGCTTTGGTCGTCGTGTGGTCATGAACAGCCGTGAGTATGGGGCCTGGAAGCAGCA
GGTGGAATCCAAGAATATGCCCTTTCAGGATGGCCAAGAATTTGAACTGAGCATCTCAGTGCTGCCAGATAAGTA
CCAGGTAATGGTCAATGGCCAATCCTCTTACACCTTTGACCATAGAATCAAGCCTGAGGCTGTGAAGATGGTGCA
AGTGTGGAGAGATATCTCCCTGACCAAATTTAATGTCAGCTATTTAAAGAGATAACCAGACTTCATGTTGCCAAG
GAATCCCTGTCTCTACGTGAACTTGGGATTCCAAAGCCAGCTAACAGCATGATCTTTTCTCACTTCAATCCTTAC
TCCTGCTCATTAAAACTTAATCAAACTTCAAAAAAAAAAAA

FIGURE 1741

MSLLPVPYTEAASLSTGSTVTIKGRPLACFLNEPYLQVDFHTEMKEESDIVFHFQVCFGRRVVMNSREYGAWKQQ
VESKNMPFQDGQEFELSISVLPDKYQVMVNGQSSYTFDHRIKPEAVKMVQVWRDISLTKFNVSYLKR

FIGURE 1742

CTCGGCGCGCGCTTGGGGCGAGGCTCGGCGGGCGCGGACGCGCAGCATGGCGGTGGAGGACGAGGGGCTCCGGGT
CTTCCAGAGCGTGAAGATCAAGATCGGTGAAGCCAAAAACCTTCCCTCTTACCCGGGGCCGAGCAAGATGAGGGA
TTGCTACTGCACGGTGAACCTGGACCAGGAGGAGGTTTTCAGGACCAAAATTGTGGAAAAGTCACTCTGCCCGTT
TTACGGAGAAGACTTTTACTGTGAAATTCCTCGGAGCTTTCGTCACCTGTCCTTCTACATTTTCGATAGAGACGT
TTTCCGGAGGGATTCCATCATAGGGAAGGTGGCCATCCAGAAGGAGGACTTGCAGAAGTACCACAACAGGGACAC
CTGGTTCCAGCTGCAGCACGTGGACGCTGACTCGGAAGTGCAGGGCAAAGTGCACCTGGAGCTGCGGCTGAGCGA
GGTCATCACAGACACTGGGGTCGTCTGCCACAAGCTCGCCACACGCATCGTCGAGTGCCAGGGCCTCCCCATCGT
GAATGGGCAATGTGACCCCTACGCCACCGTGACGCTGGCAGGACCCTTCAGATCAGAAGCAAAGAAGACGAAAGT
GAAGAGGAAGACCAACAATCCCCAGTTCGATGAAGTGTTTTATTTTGAGGTGACCCGGCCCTGTAGCTACAGCAA
GAAGTCCCACTTTGACTTTGAGGAGGAAGACGTGGACAAGCTCGAAATCAGAGTTGACCTCTGGAATGCCAGTAA
CCTGAAGTTTGGAGATGAATTCCTGGGAGAACTAAGGATCCCGTTGAAAGTCCTGCGGCAGTCCAGCTCCTACGA
GGCGTGGTACTTCCTCCAGCCCCGGGACAATGGTAGCAAGAGCCTAAAGCCAGACGACCTGGGCTCCCTGCGGCT
GAACGTGGTATACACGGAAGACCACGTGTTTTCTTCTGACTATTACAGCCCTCTGCGGGACCTGCTGTTGAAGTC
TGCGGATGTGGAGCCCGTGTCAGCGTCTGCGGCCCACATCCTGGGCGAGGTTTGCCGGGAGAAGCAGGAGGCGGC
CGTCCCGCTGGTGCGGCTCTTCCTACACTATGGCAGGGTGGTGCCATTCATCAGTGCCATCGCCAGCGCGGAGGT
GAAGCGGACCCAGGACCCCAACACCATCTTCCGAGGAAACTCACTGGCGTCCAAGTGCATTGACGAGACCATGAA
GCTGGCGGGGATGCATTACCTGCATGTCACCCTGAAGCCCGCCATCGAGGAGATATGCCAGAGCCACAAACCCTG
TGAAATCGACCCTGTGAAGTTGAAAGACGGAGAAAACCTTGAAAACAACATGGAGAACCTACGGCAGTATGTGGA
CCGCGTCTTCCACGCCATCACCGAGTCTGGGGTGAGCTGCCCGACCGTCATGTGTGACATCTTCTTCTCCCTCCG
GGAGGCGGCGGCCAAGCGCTTCCAGGATGACCCGGACGTCAGGTACACTGCAGTGAGCAGCTTCATCTTCCTGAG
GTTCTTTGCGCCCGCCATTCTCTCCCCCAACCTCTTCCAGCTCACGCCGCACCACACGGACCCCCAGACGTCCAG
GACGCTGACATTGATCTCCAAGACCGTTCAGACCCTCGGCAGCCTGTCCAAGTCCAAATCTGCGAGTTTTAAGGA
GTCCTACATGGCTACATTTTATGAATTCTTCAATGAGCAGAAATATGCTGATGCGGTGAAGAACTTCTTGGATCT
GATTTCGTCCTCGGGGAGAAGAGACCCCAAGAGTGTTGAGCAGCCCATCGTGCTTAAAGAAGGGTTCATGATCAA
GAGGGCCCAAGGACGGAAGCGCTTTGGGATGAAGAATTTTAAGAAGAGATGGTTTCGTTTGACCAACCATGAATT
TACCTACCACAAAAGCAAAGGGGACCAGCCTCTCTACAGCATTCCCATCGAGAACATCCTGGCAGTGGAGAAGCT
GGAGGAGGAGTCTTTCAAAATGAAAAACATGTTCCAGGTCATCCAGCCAGAGCGTGCGCTGTACATCCAGGCCAA
CAACTGCGTGGAGGCCAAGGACTGGATCGACATTCTCACCAAAGTGAGCCAGTGCAACCAGAAGCGCCTCACCGT
CTACCACCCGTCCGCCTACCTGAGCGGCCACTGGCTGTGCTGTAGGGCGCCATCCGACTCGGCTCCGGGCTGCTC
GCCCTGCACTGGCGGCCTCCCAGCCAACATCCAGCTGGACATTGATGGGGACCGTGAGACGGAGCGTATCTACTC
CCTCTTCAACTTGTACATGAGCAAGCTGGAGAAGATGCAGGAGGCCTGTGGGAGCAAATCTGTGTATGACGGCCC
GGAGCAGGAGGAGTATTCGACGTTCGTCATTGACGACCCCCAGGAGACCTACAAGACGCTAAAGCAAGTCATCCG
CTGGGTTGGGGCTTTGGAGCAGGAGCACGCCCAGTATAAGAGGGACAAGTTCAAGAAGACGAAATATGGAAGCCA
GGAGCACCCCATCGGAGACAAGAGCTTCCAGAACTACATCCGGCAGCAGTCCGAGACCTCCACTCATTCCATTTAA
AAGTCTGCGGGACGCGCCC

FIGURE 1743

MAVEDEGLRVFQSVKIKIGEAKNLPSYPGPSKMRDCYCTVNLDQEEVFRTKIVEKSLCPFYGEDFYCEIPRSFRH
LSFYIFDRDVFRRDSIIGKVAIQKEDLQKYHNRDTWFQLQHVDADSEVQGKVHLELRLSEVITDTGVVCHKLATR
IVECQGLPIVNGQCDPYATVTLAGPFRSEAKKTKVKRKTNNPQFDEVFYFEVTRPCSYSKKSHFDFEEEDVDKLE
IRVDLWNASNLKFGDEFLGELRIPLKVLRQSSSYEAWYFLQPRDNGSKSLKPDDLGSLRLNVVYTEDHVFSSDYY
SPLRDLLLKSADVEPVSASAAHILGEVCREKQEAAVPLVRLFLHYGRVVPFISAIASAEVKRTQDPNTIFRGNSL
ASKCIDETMKLAGMHYLHVTLKPAIEEICQSHKPCEIDPVKLKDGENLENNMENLRQYVDRVFHAITESGVSCPT
VMCDIFFSLREAAAKRFQDDPDVRYTAVSSFIFLRFFAPAILSPNLFQLTPHHTDPQTSRTLTLISKTVQTLGSL
SKSKSASFKESYMATFYEFFNEQKYADAVKNFLDLISSSGRRDPKSVEQPIVLKEGFMIKRAQGRKRFGMKNFKK
RWFRLTNHEFTYHKSKGDQPLYSIPIENILAVEKLEEESFKMKNMFQVIQPERALYIQANNCVEAKDWIDILTKV
SQCNQKRLTVYHPSAYLSGHWLCCRAPSDSAPGCSPCTGGLPANIQLDIDGDRETERIYSLFNLYMSKLEKMQEA
CGSKSVYDGPEQEEYSTFVIDDPQETYKTLKQVIRWVGALEQEHAQYKRDKFKKTKYGSQEHPIGDKSFQNYIRQ
QSETSTHSI

FIGURE 1744

CTCGGCGCGCGCTTGGGGCGAGGCTCGGCGGGCGCGGACGCGCAGCATGGCGGTGGAGGACGAGGGGCTCCGGGT
CTTCCAGAGCGTGAAGATCAAGATCGGTGAAGCCAAAAACCTTCCCTCTTACCCGGGGCCGAGCAAGATGAGGGA
TTGCTACTGCACGGTGAACCTGGACCAGGAGGAGGTTTTCAGGACCAAAATTGTGGAAAAGTCACTCTGCCCGTT
TTACGGAGAAGACTTTTACTGTGAAATTCCTCGGAGCTTTCGTCACCTGTCCTTCTACATTTTCGATAGAGACGT
TTTCCGGAGGGATTCCATCATAGGGAAGGTGGCCATCCAGAAGGAGGACTTGCAGAAGTACCACAACAGGGACAC
CTGGTTCCAGCTGCAGCACGTGGACGCTGACTCGGAAGTGCAGGGCAAAGTGCACCTGGAGCTGCGGCTGAGCGA
GGTCATCACAGACACTGGGGTCGTCTGCCACAAGCTCGCCACACGCATCGTCGAGTGCCAGGGCCTCCCCATCGT
GAATGGGCAATGTGACCCCTACGCCACCGTGACGCTGGCAGGACCCTTCAGATCAGAAGCAAAGAAGACGAAAGT
GAAGAGGAAGACCAACAATCCCCAGTTCGATGAAGTGTTTTATTTTGAGGTGACCCGGCCCTGTAGCTACAGCAA
GAAGTCCCACTTTGACTTTGAGGAGGAAGACGTGGACAAGCTCGAAATCAGAGTTGACCTCTGGAATGCCAGTAA
CCTGAAGTTTGGAGATGAATTCCTGGGAGAACTAAGGATCCCGTTGAAAGTCCTGCGGCAGTCCAGCTCCTACGA
GGCGTGGTACTTCCTCCAGCCCCGGGACAATGGTAGCAAGAGCCTAAAGCCAGACGACCTGGGCTCCCTGCGGCT
GAACGTGGTATACACGGAAGACCACGTGTTTTCTTCTGACTATTACAGCCCTCTGCGGGACCTGCTGTTGAAGTC
TGCGGATGTGGAGCCCGTGTCAGCGTCTGCGGCCCACATCCTGGGCGAGGTTTGCCGGGAGAAGCAGGAGGCGGC
CGTCCCGCTGGTGCGGCTCTTCCTACACTATGGCAGGGTGGTGCCATTCATCAGTGCCATCGCCAGCGCGGAGGT
GAAGCGGACCCAGGACCCCAACACCATCTTCCGAGGAAACTCACTGGCGTCCAAGTGCATTGACGAGACCATGAA
GCTGGCGGGGATGCATTACCTGCATGTCACCCTGAAGCCCGCCATCGAGGAGATATGCCAGAGCCACAAACCCTG
TGAAATCGACCCTGTGAAGTTGAAAGACGGAGAAAACCTTGAAAACAACATGGAGAACCTACGGCAGTATGTGGA
CCGCGTCTTCCACGCCATCACCGAGTCTGGGGTGAGCTGCCCGACCGTCATGTGTGACATCTTCTTCTCCCTCCG
GGAGGCGGCGGCCAAGCGCTTCCAGGATGACCCGGACGTCAGGTACACTGCAGTGAGCAGCTTCATCTTCCTGAG
GTTCTTTGCGCCCGCCATTCTCTCCCCCAACCTCTTCCAGCTCACGCCGCACCACACGGACCCCCAGACGTCCAG
GACGCTGACATTGATCTCCAAGACCGTTCAGACCCTCGGCAGCCTGTCCAAGTCCAAATCTGCGAGTTTTAAGGA
GTCCTACATGGCTACATTTTATGAATTCTTCAATGAGCAGAAATATGCTGATGCGGTGAAGAACTTCTTGGATCT
GATTTCGTCCTCGGGGAGAAGAGACCCCAAGAGTGTTGAGCAGCCCATCGTGCTTAAAGAAGGGTTCATGATCAA
GAGGGCCCAAGGACGGAAGCGCTTTGGGATGAAGAATTTTAAGAAGAGATGGTTTCGTTTGACCAACCATGAATT
TACCTACCACAAAAGCAAAGGGGACCAGCCTCTCTACAGCATTCCCATCGAGAACATCCTGGCAGTGGAGAAGCT
GGAGGAGGAGTCTTTCAAAATGAAAAACATGTTCCAGGTCATCCAGCCAGAGCGTGCGCTGTACATCCAGGCCAA
CAACTGCGTGGAGGCCAAGGACTGGATCGACATTCTCACCAAAGTGAGCCAGTGCAACCAGAAGCGCCTCACCGT
CTACCACCCGTCCGCCTACCTGAGCGGCCACTGGCTGTGCTGTAGGGCGCCATCCGACTCGGCTCCGGGCTGCTC
GCCCTGCACTGGCGGCCTCCCAGCCAACATCCAGCTGGACATTGATGGGGACCGTGAGACGGAGCGTATCTACTC
CCTCTTCAACTTGTACATGAGCAAGCTGGAGAAGATGCAGGAGGCCTGTGGGAGCAAATCTGTGTATGACGGCCC
GGAGCAGGAGGAGTATTCGACGTTCGTCATTGACGACCCCCAGGAGACCTACAAGACGCTAAAGCAAGTCATCCG
CTGGGTTGGGGCTTTGGAGCAGGAGCACGCCCAGTATAAGAGGGACAAGTTCAAGAAGACGAAATATGGAAGCCA
GGAGCACCCCATCGGAGACAAGAGCTTCCAGAACTACATCCGGCAGCAGTCCGAGACCTCCACTCATTCCATTTAA
AAGTCTGCGGGACGCGCCC

FIGURE 1745

MAVEDEGLRVFQSVKIKIGEAKNLPSYPGPSKMRDCYCTVNLDQEEVFRTKIVEKSLCPFYGEDFYCEIPRSFRH
LSFYIFDRDVFRRDSIIGKVAIQKEDLQKYHNRDTWFQLQHVDADSEVQGKVHLELRLSEVITDTGVVCHKLATR
IVECQGLPIVNGQCDPYATVTLAGPFRSEAKKTKVKRKTNNPQFDEVFYFEVTRPCSYSKKSHFDFEEEDVDKLE
IRVDLWNASNLKFGDEFLGELRIPLKVLRQSSSYEAWYFLQPRDNGSKSLKPDDLGSLRLNVVYTEDHVFSSDYY
SPLRDLLLKSADVEPVSASAAHILGEVCREKQEAAVPLVRLFLHYGRVVPFISAIASAEVKRTQDPNTIFRGNSL
ASKCIDETMKLAGMHYLHVTLKPAIEEICQSHKPCEIDPVKLKDGENLENNMENLRQYVDRVFHAITESGVSCPT
VMCDIFFSLREAAAKRFQDDPDVRYTAVSSFIFLRFFAPAILSPNLFQLTPHHTDPQTSRTLTLISKTVQTLGSL
SKSKSASFKESYMATFYEFFNEQKYADAVKNFLDLISSSGRRDPKSVEQPIVLKEGFMIKRAQGRKRFGMKNFKK
RWFRLTNHEFTYHKSKGDQPLYSIPIENILAVEKLEEESFKMKNMFQVIQPERALYIQANNCVEAKDWIDILTKV
SQCNQKRLTVYHPSAYLSGHWLCCRAPSDSAPGCSPCTGGLPANIQLDIDGDRETERIYSLFNLYMSKLEKMQEA
CGSKSVYDGPEQEEYSTFVIDDPQETYKTLKQVIRWVGALEQEHAQYKRDKFKKTKYGSQEHPIGDKSFQNYIRQ
QSETSTHSI

FIGURE 1746A

GGCATGGAACCTAAAGACTAGAGGCGGTTGTGTGAGTCAGGAAGAGGGGCCAGATATCTGAGTGTTCCTCTTTAG
TTTCTTCAATTGCAGATAATATGGTGTCTAATTTTATGTTGTTCAGGAAAGACAGTGGTTCCTGACTCAGGAAGA
CAGTCTCAGAAACATGTGGAATGATATTGAGCTGCTAACAAATGATGATACCGGAAGTGGGTACCTGAGTGTCGG
TTCAAGAAAAGAACATGGAACTGCTTTATATCAAGTAGATTTGCTAGTGAAGATCTCTTCTGAAAAGGCCTCATT
AAATCCAAAGATACAGGCATGCAGCTTAAGTGATGGGTTTATTATTGTAGCCGACCAATCAGTGATATTGCTTGA
CAGTATTTGTAGATCACTTCAATTGCATCTTGTCTTTGATACTGAAGTGGATGTAGTTGGCCTTTGTCAAGAAGG
AAAGTTTCTTTTGGTTGGCGAGAGAAGTGGCAACCTACATCTTATTCATGTAACATCAAAACAAACACTACTCAC
TAATGCATTTGTTCAGAAAGCTAACGATGAAAATCGGCGGACTTACCAGAATCTTGTCATTGAGAAGGATGGTTC
AAATGAAGGTACCTATTATATGCTACTTCTTACATACAGTGGATTTTTTTGTATTACAAACCTTCAGCTTTTAAA
AATTCAACAAGCAATTGAGAATGTAGACTTCAGTACAGCAAAAAAGTTACAAGGACAAATCAAGTCCAGTTTTAT
TTCTACTGAAAATTATCATACTCTTGGTTGTCTCAGTCTTGTGGCTGGAGATTTAGCAAGTGAAGTTCCTGTGAT
AATTGGGGGAACCGGTAATTGTGCATTCTCAAAATGGGAACCAGATTCTTCCAAGAAAGGAATGACAGTTAAGAA
CCTTATTGATGCAGAGATTATTAAAGGTGCAAAGAAGTTCCAGCTGATAGACAATCTACTTTTTGTTCTTGATAC
TGATAACGTGCTGAGTTTATGGGATATTTACACTCTAACTCCTGTATGGAACTGGCCCTCTCTTCACGTAGAAGA
GTTTCTTCTTACTACAGAAGCAGACTCTCCTTCATCAGTCACGTGGCAAGGAATTACAAATCTCAAATTAATAGC
TCTGACAGCTTCAGCTAATAAGAAGATGAAAAACCTCATGGTTTATTCATTACCTACAATGGAAATACTATATTC
TTTGGAAGTATCTAGTGTTTCTTCTCTGGTCCAAACAGGAATTAGCACAGATACCATATACCTTTTAGAAGGAGT
TTGCAAAAATGATCCAAAATTGTCTGAAGACTCAGTCTCTGTGTTAGTACTCAGATGTCTTACGGAAGCTTTACC
AGAAAACAGATTGAGTCGGTTACTTCACAAACACAGATTTGCTGAAGCTGAGAGTTTTGCCATTCAGTTTGGACT
AGATGTTGAGCTTGTTTACAAGGTCAAGTCAAATCATATATTGGAGAAACTGGCATTGAGTTCTGTGGATGCCAG
TGAACAGACCGAATGGCAACAACTTGTAGACGACGCTAAGGAAAATCTACATAAGATCCAGGATGATGAATTTGT
GGTGAATTACTGCCTGAAAGCTCAGTGGATAACCTATGAAACCACTCAAGAGATGCTGAATTATGCCAAAACCAG
GCTTTTGAAGAAAGAAGATAAAACTGCTCTCATTTATTCTGATGGCTTGAAAGAGGTGCTAAGAGCTCATGCAAA
ATTGACTACTTTTTATGGAGCATTTGGACCAGAAAAATTCAGTGGCAGTTCTTGGATTGAATTTCTAAATAATGA
AGATGATCTTAAAGATATTTTTTTACAGCTAAAAGAAGGAAACCTTGTTTGTGCACAGTATCTTTGGCTTCGACA
TCGGGCAAACTTTGAAAGCAGATTTGATGTGAAAATGCTGGAGAGCTTGCTCAACTCAATGTCTGCATCAGTCTC
TTTGCAAAAGCTGTGTCCATGGTTTAAAAATGATGTGATTCCATTTGTAAGAAGGACTGTGCCTGAAGGACAGAT
AATTCTTGCAAAATGGTTGGAACAAGCAGCCAGGAACCTTGAATTAACTGATAAGGCAAATTGGCCAGAAAATGG
ACTTCAATTGGCAGAGATATTTTTTACAGCAGAAAAAACAGACGAGTTGGGATTGGCATCTTCCTGGCATTGGAT
TTCCTTGAAAGATTATCAGAACACAGAGGAAGTATGTCAGCTAAGGACTTTGGTAAATAACTTGCGAGAGTTGAT
CACGTTGCATAGGAAGTACAACTGCAAATTAGCCCTCTCTGATTTTGAGAAGGAAAATACAACCACCATAGTGTT
CCGAATGTTTGATAAAGTGCTGGCCCCAGAGCTTATTCCCTCCATCTTAGAGAAGTTTATAAGAGTTTACATGAG
AGAACATGACTTGCAAGAGGAGGAACTTCTCTTGCTGTACATAGAGGATTTACTGAATAGATGCAGCTCAAAGTC
CACATCACTCTTTGAAACAGCATGGGAAGCAAAGGCCATGGCAGTAATAGCGTGTTTATCTGACACGGACCTCAT
ATTTGATGCCGTGCTCAAGATCATGTATGCGGCAGTGGTTCCTTGGAGTGCAGCTGTGGAGCAACTGGTGAAACA
GCACCTGGAAATGGACCATCCCAAAGTCAAGTTATTACAGGAAAGTTACAAACTAATGGAGATGAAAAAACTTTT
ACGAGGCTATGGAATAAGAGAGGTAAATCTCTTAAACAAGGAAATAATGAGAGTGGTTAGATACATTCTCAAACA
AGATGTCCCATCTTCTTTAGAAGATGCTTTAAAGGTAGCCCAAGCGTTTATGTTATCTGATGATGAGATCTACAG
TCTAAGAATTATTGACCTGATTGATAGAGAACAGGGTGAAGACTGTCTCCTTCTGTTGAAGTCTTTGCCTCCTGC
TGAAGCTGAGAAAACTGCAGAAAGAGTCATCATATGGGCACGACTGGCATTACAAGAAGAGCCAGATCATTCTAA
AGAGGGCAAGGCCTGGAGAATGTCTGTAGCGAAGACATCCGTGGACATTCTTAAGATACTATGTGACATTCAGAA
AGACAATCTGCAGAAGAAGGACGAATGTGAAGAAATGTTGAAACTATTTAAAGAGGTTGCTAGCTTACAGGAGAA
CTTTGAGGTCTTTCTTTCATTTGAAGATTATAGCAATAGTTCCCTGGTAGCAGATCTCCGTGAGCAGCACATTAA
AGCTCACGAAGTTGCACAGGCGAAACACAAACCTGGGAGCACCCCAGAGCCCATAGCTGCTGAGGTGAGGAGCCC
AAGCATGGAATCAAAGCTGCACAGACAGGCACTGGCCCTGCAGATGTCCAAACAAGAGCTGGAGGCAGAGCTGAC
CTTGAGAGCCTTAAAAGATGGGAACATCAAAACAGCACTGAAAAAATGCAGCGACTTGTTTAAGTATCACTGCAA
TGCTGACACTGGGAAATTGCTATTTCTGACATGTCAGAAGCTTTGTCAGATGTTGGCTGATAATGTCCCAGTGAC
AGTGCCTGTGGGACTGAATCTTCCTTCCATGATACATGATCTAGCAAGCCAAGCTGCCACCATTTGCAGTCCAGA

FIGURE 1746B

TTTTTTACTAGATGCTTTAGAACTATGTAAACATACTTTAATGGCTGTAGAGCTTTCCAGACAATGCCAAATGGA
TGACTGTGGAATCCTCATGAAAGCTTCTTTTGGGACACATAAAGATCCATATGAAGAGTGGTCTTACAGTGACTT
CTTCAGTGAAGATGGAATTGTTCTTGAGTCACAGATGGTGCTTCCAGTGATTTATGAACTGATTTCATCTCTTGT
GCCTCTAGCTGAAAGCAAGAGATATCCCTTGGAGTCTACCAGTTTGCCATACTGCTCCCTTAATGAAGGAGATGG
CCTTGTTTTACCTGTTATAAATTCCATCTCTGCCCTGCTTCAGAATCTTCAGGAATCTAGCCAGTGGGAGCTAGC
CCTAAGATTTGTGGTTGGTTCATTTGGTACCTGTCTTCAGCACTCTGTGTCAAACTTCATGAATGCCACTTTGAG
TGAAAAGTTATTTGGAGAGACTACATTAGTTAAATCAAGGCATGTTGTTATGGAATTGAAAGAAAAAGCTGTTAT
ATTTATCAGGGAAAATGCTACAACACTACTGCACAAAGTATTTAATTGTCGCTTGGTAGATCTTGACCTGGCGTT
GGGTTACTGCACTCTCTTACCTCAAAAAGATGTGTTTGAAAATCTCTGGAAGCTCATAGATAAAGCATGGCAGAA
TTACGACAAAATCTTGGCAATATCTCTGGTGGGCTCTGAGCTGGCAAGTCTCTATCAGGAAATAGAAATGGGGCT
TAAGTTCCGTGAACTCAGTACTGATGCCCAGTGGGGCATTCGTCTTGGTAAACTTGGTATTTCTTTTCAACCAGT
TTTCAGGCAACATTTTCTCACCAAGAAAGACCTCATTAAAGCTCTTGTGGAGAATATAGATATGGACACAAGCCT
CATTTTGGAATATTGCAGCACATTTCAGTTGGACTGCGATGCAGTTCTTCAGCTCTTCATTGAAACGCTGCTCCA
CAACACAAATGCCGGCCAAGGCCAGGGAGATGCAAGCATGGACTCTGCAAAGCGGCGGCATCCCAAACTCCTGGC
CAAAGCCCTTGAGATGGTTCCTTTACTGACGAGCACAAAAGATTTGGTCATCAGTCTTAGTGGAATACTACATAA
GTTGGATCCTTATGACTATGAAATGATTGAAGTTGTCTTGAAAGTTATAGAACGAGCTGATGAAAAGATAACCAA
TATTAATATTAATCAGGCATTGAGTATTCTGAAACATTTGAAGTCATACAGAAGAATTTCTCCTCCCGTGGATCT
AGAATATCAGTATATGTTGGAACATGTCATAACTTTGCCATCAGCTGCCCAAACTAGACTGCCTTTTCACCTGAT
ATTCTTTGGCACAGCACAGAACTTCTGGAAAATTCTCTCTACAGAACTCAGTGAAGAATCTTTCCCAACATTGCT
CTTAATTTCGAAATTAATGAAGTTCTCTCTGGACACTCTGTACGTGTCTACAGCAAAACACGTTTTCGAAAAAAA
ACTGAAGCCAAAGCTCCTGAAGTTAACACAAGCTAAATCCTCAACACTGATTAACAAGGAAATAACTAAGATCAC
GCAGACCATCGAATCCTGCTTACTCTCTATAGTCAACCCAGAGTGGGCTGTAGCTATTGCCATCAGCCTTGCCCA
GGATATCCCTGAAGGTTCCTTCAAGATATCTGCTTTGAAATTCTGCCTTTATTTAGCTGAGAGATGGCTACAGAA
TATCCCATCGCAGGACGAAAAACGTGAAAAAGCCGAGGCTTTGTTGAAGAAGCTTCATATCCAGTACCGGCGATC
GGGCACAGAAGCTGTGCTCATAGCCCACAAGCTGAACACTGAGGAATATTTAAGAGTGATCGGAAAGCCAGCACA
TCTTATTGTCAGTCTCTACGAACATCCTAGCATCAATCAAAGAATTCAGAATTCATCTGGCACAGATTATCCTGA
TATTCATGCAGCAGCTAAAGAAATAGCCGAAGTCAATGAAATTAATTTGGAAAAAGTCTGGGACATGTTGTTGGA
AAAATGGCTATGCCCTTCAACAAAACCTGGTGAAAAACCATCAGAATTATTTGAACTTCAAGAAGATGAAGCCCT
ACGAAGAGTGCAGTATCTCCTCCTGTCTCGTCCAATTGATTATAGTTCAAGAATGCTGTTTGTATTTGCAACATC
AACTACAACCACATTAGGTATGCATCAGTTAACTTTTGCCCATAGAACTCGAGCTCTTCAGTGTCTCTTCTATTT
GGCTGACAAGGAAACTATAGAATCTCTCTTTAAAAAACCCATTGAAGAAGTGAAATCTTATTTGAGATGTATAAC
TTTTCTGGCATCATTTGAGACTTTGAATATCCCCATCACATATGAATTATTTTGCAGCAGTCCTAAAGAAGGAAT
GATTAAGGGTCTGTGGAAAAACCACAGCCACGAGTCCATGGCAGTAAGATTGGTGACTGAGCTGTGTTTAGAATA
CAAAATCTATGACCTGCAGCTTTGGAATGGACTCTTGCAAAAGCTTCTGGGCTTCAATATGATTCCTTATCTAAG
GAAAGTTTTAAAAGCCATCTCCAGTATCCATTCTTTATGGCAGGTTCCCTACTTCAGCAAAGCGTGGCAGCGTGT
GATACAGATACCACTGCTTTCAGCCTCTTGTCCTTTAAGTCCTGATCAGCTGTCAGATTGTTCTGAGAGTCTCAT
CGCTGTCCTCGAATGTCCAGTCTCAGGTGATCTTGACCTGATCGGAGTCGCCAGGCAGTATATCCAGTTAGAACT
TCCGGCTTTTGCATTAGCTTGTCTGATGCTCATGCCCCACTCAGAGAAAAGACACCAGCAAATTAAGAATTTTCT
GGGTTCCTGTGACCCTCAGGTTATTTTAAAGCAATTGGAAGAGCATATGAACACGGGCCAGCTAGCAGGATTTTC
ACATCAAATTAGAAGTCTGATTTTGAATAATATCATCAATAAGAAGGAGTTTGGGATTTTGGCAAAGACCAAATA
CTTTCAAATGTTGAAGATGCATGCGATGAATACCAACAATATCACTGAGCTAGTGAACTATTTGGCAAATGACTT
AAGTTTAGATGAAGCTTCAGTCTTGATAACTGAATATTCAAAGCACTGCGGGAAACCTGTGCCTCCAGACACTGC
TCCCTGTGAAATTCTGAAGATGTTTCTTAGTGGATTATCGTAAATCACTGAACCTTTTTTTCAAGAAGGACAAGA
ATTTTGGAGTCTGCTATTAATGGACCATATTTATTACAGTTTTTAAATTGTACAATCTCTGTATTATAGCTATTT
GTCTAACATTACCCCACATGTAATAAATAAAACAATATGAGC

FIGURE 1747

MWNDIELLTNDDTGSGYLSVGSRKEHGTALYQVDLLVKISSEKASLNPKIQACSLSDGFIIVADQSVILLDSICR
SLQLHLVFDTEVDVVGLCQEGKFLLVGERSGNLHLIHVTSKQTLLTNAFVQKANDENRRTYQNLVIEKDGSNEGT
YYMLLLTYSGFFCITNLQLLKIQQAIENVDFSTAKKLQGQIKSSFISTENYHTLGCLSLVAGDLASEVPVIIGGT
GNCAFSKWEPDSSKKGMTVKNLIDAEIIKGAKKFQLIDNLLFVLDTDNVLSLWDIYTLTPVWNWPSLHVEEFLLT
TEADSPSSVTWQGITNLKLIALTASANKKMKNLMVYSLPTMEILYSLEVSSVSSLVQTGISTDTIYLLEGVCKND
PKLSEDSVSVLVLRCLTEALPENRLSRLLHKHRFAEAESFAIQFGLDVELVYKVKSNHILEKLALSSVDASEQTE
WQQLVDDAKENLHKIQDDEFVVNYCLKAQWITYETTQEMLNYAKTRLLKKEDKTALIYSDGLKEVLRAHAKLTTF
YGAFGPEKFSGSSWIEFLNNEDDLKDIFLQLKEGNLVCAQYLWLRHRANFESRFDVKMLESLLNSMSASVSLQKL
CPWFKNDVIPFVRRTVPEGQIILAKWLEQAARNLELTDKANWPENGLQLAEIFFTAEKTDELGLASSWHWISLKD
YQNTEEVCQLRTLVNNLRELITLHRKYNCKLALSDFEKENTTTIVFRMFDKVLAPELIPSILEKFIRVYMREHDL
QEEELLLLYIEDLLNRCSSKSTSLFETAWEAKAMAVIACLSDTDLIFDAVLKIMYAAVVPWSAAVEQLVKQHLEM
DHPKVKLLQESYKLMEMKKLLRGYGIREVNLLNKEIMRVVRYILKQDVPSSLEDALKVAQAFMLSDDEIYSLRII
DLIDREQGEDCLLLLKSLPPAEAEKTAERVIIWARLALQEEPDHSKEGKAWRMSVAKTSVDILKILCDIQKDNLQ
KKDECEEMLKLFKEVASLQENFEVFLSFEDYSNSSLVADLREQHIKAHEVAQAKHKPGSTPEPIAAEVRSPSMES
KLHRQALALQMSKQELEAELTLRALKDGNIKTALKKCSDLFKYHCNADTGKLLFLTCQKLCQMLADNVPVTVPVG
LNLPSMIHDLASQAATICSPDFLLDALELCKHTLMAVELSRQCQMDDCGILMKASFGTHKDPYEEWSYSDFFSED
GIVLESQMVLPVIYELISSLVPLAESKRYPLESTSLPYCSLNEGDGLVLPVINSISALLQNLQESSQWELALRFV
VGSFGTCLQHSVSNFMNATLSEKLFGETTLVKSRHVVMELKEKAVIFIRENATTLLHKVFNCRLVDLDLALGYCT
LLPQKDVFENLWKLIDKAWQNYDKILAISLVGSELASLYQEIEMGLKFRELSTDAQWGIRLGKLGISFQPVFRQH
FLTKKDLIKALVENIDMDTSLILEYCSTFQLDCDAVLQLFIETLLHNTNAGQGQGDASMDSAKRRHPKLLAKALE
MVPLLTSTKDLVISLSGILHKLDPYDYEMIEVVLKVIERADEKITNININQALSILKHLKSYRRISPPVDLEYQY
MLEHVITLPSAAQTRLPFHLIFFGTAQNFWKILSTELSEESFPTLLLISKLMKFSLDTLYVSTAKHVFEKKLKPK
LLKLTQAKSSTLINKEITKITQTIESCLLSIVNPEWAVAIAISLAQDIPEGSFKISALKFCLYLAERWLQNIPSQ
DEKREKAEALLKKLHIQYRRSGTEAVLIAHKLNTEEYLRVIGKPAHLIVSLYEHPSINQRIQNSSGTDYPDIHAA
AKEIAEVNEINLEKVWDMLLEKWLCPSTKPGEKPSELFELQEDEALRRVQYLLLSRPIDYSSRMLFVFATSTTTT
LGMHQLTFAHRTRALQCLFYLADKETIESLFKKPIEEVKSYLRCITFLASFETLNIPITYELFCSSPKEGMIKGL
WKNHSHESMAVRLVTELCLEYKIYDLQLWNGLLQKLLGFNMIPYLRKVLK

FIGURE 1748

GGGAATAGCAGAATAGGAGCAAGCCAGCACTAGTCAGCTAACTAAGTGACTCAACCAAGGCCTTTTTTCCTTGTT
ATCTTTGCAGATACTTCATTTTCTTAGCGTTTCTGGAGATTACAACATCCTGCGGTTCCGTTTCTGGGAACTTTA
CTGATTTATCTCCCCCCTCACACAAATAAGCATTGATTCCTGCATTTCTGAAGATCTCAAGATCTGGACTACTGT
TGAAAAAATTTCCAGTGAGGCTCACTTATGTCTGTAAAGATGGAAAAAAATACAAGAACATTGTTCTACTAAAA
GGATTAGAGGTCATCAATGATTATCATTTTAGAATGGTTAAGTCCTTACTGAGCAACGATTTAAAACTTAATTTA
AAAATGAGAGAAGAGTATGACAAAATTCAGATTGCTGACTTGATGGAAGAAAAGTTCCGAGGTGATGCTGGTTTG
GGCAAACTAATAAAAATTTTCGAAGATATACCAACGCTTGAAGACCTGGCTGAAACTCTTAAAAAAGAAAAGTTA
AAAGTAAAAGGACCAGCCCTATCAAGAAAGAGGAAGAAGGAAGTGCATGCTACTTCACCTGCACCCTCCACAAGC
AGCACTGTCAAAACTGAAGGAGCAGAGGCAACTCCTGGAGCTCAGAAAAGAAAAAAATCAACCAAAGAAAAGGCT
GGACCCAAAGGGAGTAAGGTGTCCGAGGAACAGACTCAGCCTCCCTCTCCTGCAGGAGCCGGCATGTCCACAGCC
ATGGGCCGTTCCCCATCTCCCAAGACCTCATTGTCAGCTCCACCCAACAGTTCTTCAACTGAGAACCCGAAAACA
GTGGCCAAATGTCAGGTAACTCCCAGAAGAAATGTTCTCCAAAAACGCCCAGTGATAGTGAAGGTACTGAGTACA
ACAAAGCCATTTGAATATGAGACCCCAGAAATGGAGAAAAAAATAATGTTTCATGCTACAGTGGCTACACAGACA
CAGTTCTTCCATGTGAAGGTTTTAAACACCAGCTTGAAGGAGAAATTCAATGGAAAGAAAATCATCATCATATCA
GATTATTTGGAATATGATAGTCTCCTAGAGGTCAATGAAGAATCTACTGTATCTGAAGCTGGTCCTAACCAAACG
TTTGAGGTTCCAAATAAAATCATCAACAGAGCAAAGGAAACTCTGAAGATTGATATTCTTCACAAACAAGCTTCA
GGAAATATTGTATATGGGGTATTTATGCTACATAAGAAAACAGTAAATCAGAAGACCACAATCTACGAAATTCAG
GATGATAGAGGAAAAATGGATGTAGTGGGGACAGGACAATGTCACAATATCCCCTGTGAAGAAGGAGATAAGCTC
CAGCTTTTCTGCTTTCGACTTAGAAAAAAGAACCAGATGTCAAAACTGATTTCAGAAATGCATAGTTTTATCCAG
ATAAAGAAAAAAACAAACCCGAGAAACAATGACCCCAAGAGCATGAAGCTACCCCAGGAACAGCGTCAGCTTCCA
TATCCTTCAGAGGCCAGCACAACCTTCCCTGAGAGCCATCTTCGGACTCCTCAGATGCCACCAACAACTCCATCC
AGCAGTTTCTTCACCAAGAAAAGTGAAGACACAATCTCCAAAATGAATGACTTCATGAGGATGCAGATACTGAAG
GAAGGGAGTCATTTTCCAGGACCGTTCATGACCAGCATAGGCCCAGCTGAGAGCCATCCCCACACTCCTCAGATG
CCTCCATCAACACCAAGCAGCAGTTTCTTAACCACGTTGAAACCAAGACTGAAGACTGAACCTGAAGAAGTTTCC
ATAGAAGACAGTGCCCAGAGTGACCTCAAAGAAGTGATGGTGCTGAACGCAACAGAATCATTTGTATATGAGCCC
AAAGAGCAGAAGAAAATGTTTCATGCCACAGTGGCAACTGAGAATGAAGTCTTCCGAGTGAAGGTTTTTAATATT
GACCTAAAGGAGAAGTTCACCCCAAAGAAGATCATTGCCATAGCAAATTATGTTTGCCGCAATGGGTTCCTGGAG
GTATATCCTTTCACACTTGTGGCTGATGTGAATGCTGACCGAAACATGGAGATCCCAAAAGGATTGATTAGAAGT
GCCAGCGTAACTCCTAAAATCAATCAGCTTTGCTCACAAACTAAAGGAAGTTTTGTGAATGGGGTGTTTGAGGTA
CATAAGAAAAATGTAAGGGGTGAATTCACTTATTATGAAATACAAGATAATACAGGGAAGATGGAAGTGGTGGTG
CATGGACGACTGAACACAATCAACTGTGAGGAAGGAGATAAACTGAAACTCACCAGCTTTGAATTGGCACCGAAA
AGTGGGAATACCGGGGAGTTGAGATCTGTAATTCATAGTCACATCAAGGTCATCAAGACCAGGAAAAACAAGAAA
GACATACTCAATCCTGATTCAAGTATGGAAACTTCACCAGACTTTTTCTTCTTAAAATCTGGATGTCATTGACGAT
AATGTTTATGGAGATAAGGTCTAAGTCCCTAAAAAAATGTACATATACCTGGTTGAAATACAACACTATACATAC
ACACCACCATATATACTAGCTGTTAATCCTATGGAATGGGGGTATTGGGAGTGCTTTTTTAATTTTTCATAGTTT
TTTTTTAATAAAATGGCATATTTTGCATCTACAACTTCTATAATAAGAAAAAATAAATAAACATTATCTTTTTTG
TGAAAAAAA

FIGURE 1749

MGKKYKNIVLLKGLEVINDYHFRMVKSLLSNDLKLNLKMREEYDKIQIADLMEEKFRGDAGLGKLIKIFEDIPTL
EDLAETLKKEKLKVKGPALSRKRKKEVHATSPAPSTSSTVKTEGAEATPGAQKRKKSTKEKAGPKGSKVSEEQTQ
PPSPAGAGMSTAMGRSPSPKTSLSAPPNSSSTENPKTVAKCQVTPRRNVLQKRPVIVKVLSTTKPFEYETPEMEK
KIMFHATVATQTQFFHVKVLNTSLKEKFNGKKIIIISDYLEYDSLLEVNEESTVSEAGPNQTFEVPNKIINRAKE
TLKIDILHKQASGNIVYGVFMLHKKTVNQKTTIYEIQDDRGKMDVVGTGQCHNIPCEEGDKLQLFCFRLRKKNQM
SKLISEMHSFIQIKKKTNPRNNDPKSMKLPQEQRQLPYPSEASTTFPESHLRTPQMPPTTPSSSFFTKKSEDTIS
KMNDFMRMQILKEGSHFPGPFMTSIGPAESHPHTPQMPPSTPSSSFLTTLKPRLKTEPEEVSIEDSAQSDLKEVM
VLNATESFVYEPKEQKKMFHATVATENEVFRVKVFNIDLKEKFTPKKIIAIANYVCRNGFLEVYPFTLVADVNAD
RNMEIPKGLIRSASVTPKINQLCSQTKGSFVNGVFEVHKKNVRGEFTYYEIQDNTGKMEVVVHGRLNTINCEEGD
KLKLTSFELAPKSGNTGELRSVIHSHIKVIKTRKNKKDILNPDSSMETSPDFFF

FIGURE 1750

GAGAGACTGGATGGACCCACAAGGGTGACAGCCCAGGCGGACCGATCTTCCCATCCCACATCCTCCGGCGCGATG
CCAAAAAGAGGCTGACGGCAACTGGGCCTTCTGCAGAGAAAGACCTCCGCTTCACTGCCCCGGCTGGTCCCAAGG
GTCAGGAAGATGGATTCATACCTGCTGATGTGGGGACTGCTCACGTTCATCATGGTGCCTGGCTGCCAGGCAGAG
CTCTGTGACGATGACCCGCCAGAGATCCCACACGCCACATTCAAAGCCATGGCCTACAAGGAAGGAACCATGTTG
AACTGTGAATGCAAGAGAGGTTTCCGCAGAATAAAAAGCGGGTCACTCTATATGCTCTGTACAGGAAACTCTAGC
CACTCGTCCTGGGACAACCAATGTCAATGCACAAGCTCTGCCACTCGGAACACAACGAAACAAGTGACACCTCAA
CCTGAAGAACAGAAAGAAAGGAAAACCACAGAAATGCAAAGTCCAATGCAGCCAGTGGACCAAGCGAGCCTTCCA
GGTCACTGCAGGGAACCTCCACCATGGGAAAATGAAGCCACAGAGAGAATTTATCATTTCGTGGTGGGGCAGATG
GTTTATTATCAGTGCGTCCAGGGATACAGGGCTCTACACAGAGGTCCTGCTGAGAGCGTCTGCAAAATGACCCAC
GGGAAGACAAGGTGGACCCAGCCCCAGCTCATATGCACAGGTGAAATGGAGACCAGTCAGTTTCCAGGTGAAGAG
AAGCCTCAGGCAAGCCCCGAAGGCCGTCCTGAGAGTGAGACTTCCTGCCTCGTCACAACAACAGATTTTCAAATA
CAGACAGAAATGGCTGCAACCATGGAGACGTCCATATTTACAACAGAGTACCAGGTAGCAGTGGCCGGCTGTGTT
TTCCTGCTGATCAGCGTCCTCCTCCTGAGTGGGCTCACCTGGCAGCGGAGACAGAGGAAGAGTAGAAGAACAATC
TAGAAAACCAAAAGAACAAGAATTTCTTGGTAAGAAGCCGGGAACAGACAACAGAAGTCATGAAGCCCAAGTGAA
ATCAAAGGTGCTAAATGGTCGCCCAGGAGACATCCGTTGTGCTTGCCTGCGTTTTGGAAGCTCTGAAGTCACATC
ACAGGACACGGGGCAGTGGCAACCTTGTCTCTATGCCAGCTCAGTCCCATCAGAGAGCGAGCGCTACCCACTTCT
AAATAGCAATTTCGCCGTTGAAGAGGAAGGGCAAAACCACTAGAACTCTCCATCTTATTTTCATGTATATGTGTT
CATTAAAGCATGAATGGTATGGAACTCTCTCCACCCTATATGTAGTATAAAGAAAAGTAGGTTTACATTCATCTC
ATTCCAACTTCCCAGTTCAGGAGTCCCAAGGAAAGCCCCAGCACTAACGTAAATACACAACACACACTCTACC
CTATACAACTGGACATTGTCTGCGTGGTTCCTTTCTCAGCCGCTTCTGACTGCTGATTCTCCCGTTCACGTTGCC
TAATAAACATCCTTCAAGAACTCTGGGCTGCTACCCAGAAATCATTTTACCCTTGGCTCAATCCTCTAAGCTAAC
CCCCTTCTACTGAGCCTTCAGTCTTGAATTTCTAAAAAACAGAGGCCATGGCAGAATAATCTTTGGGTAACTTCA
AAACGGGGCAGCCAAACCCATGAGGCAATGTCAGGAACAGAAGGATGAATGAGGTCCCAGGCAGAGAATCATACT
TAGCAAAGTTTTACCTGTGCGTTACTAATTGGCCTCTTTAAGAGTTAGTTTCTTTGGGATTGCTATGAATGATAC
CCTGAATTTGGCCTGCACTAATTTGATGTTTACAGGTGGACACACAAGGTGCAAATCAATGCGTACGTTTCCTGA
GAAGTGTCTAAAAACACCAAAAAGGGATCCGTACATTCAATGTTTATGCAAGGAAGGAAAGAAAGAAGGAAGTGA
AGAGGGAGAAGGGATGGAGGTCACACTGGTAGAACGTAACCACGGAAAAGAGCGCATCAGGCCTGGCACGGTGGC
TCAGGCCTATAACCCCAGCTCCCTAGGAGACCAAGGCGGGAGCATCTCTTGAGGCCAGGAGTTTGAGACCAGCCT
GGGCAGCATAGCAAGACACATCCCTACAAAAAATTAGAAATTGGCTGGATGTGGTGGCATACGCCTGTAGTCCTA
GCCACTCAGGAGGCTGAGGCAGGAGGATTGCTTGAGCCCAGGAGTTCGAGGCTGCAGTCAGTCATGATGGCACCA
CTGCACTCCAGCCTGGGCAACAGAGCAAGATCCTGTCTTTAAGGAAAAAAAGACAAGG

FIGURE 1751

MDSYLLMWGLLTFIMVPGCQAELCDDDPPEIPHATFKAMAYKEGTMLNCECKRGFRRIKSGSLYMLCTGNSSHSS
WDNQCQCTSSATRNTTKQVTPQPEEQKERKTTEMQSPMQPVDQASLPGHCREPPPWENEATERIYHFVVGQMVYY
QCVQGYRALHRGPAESVCKMTHGKTRWTQPQLICTGEMETSQFPGEEKPQASPEGRPESETSCLVTTTDFQIQTE
MAATMETSIFTTEYQVAVAGCVFLLISVLLLSGLTWQRRQRKSRRTI

FIGURE 1752

GTGGTGCGCCGCCCGGGCGAGGATGCGGCTGTTCCGGTGGCTGCTGAAGCAGCCGGTGCCCAAGCAGATCGAGCG
CTACTCGCGCTTTTCGCCGTCGCCGCTCTCCATCAAACAATTCCTGGACTTCGGGAGAGATAATGCATGTGAGAA
AACTTCATATATGTTTCTACGAAAGGAACTTCCTGTGCGGCTGGCTAACACAATGAGAGAAGTTAATCTTCTGCC
GGATAATTTACTTAACCGCCCTTCAGTGGGATTGGTTCAGAGTTGGTATATGCAGAGTTTTCTTGAACTTTTAGA
ATATGAAAATAAGAGCCCTGAGGATCCACAGGTCTTGGATAACTTTCTACAAGTTCTGATTAAAGTCAGAAATAG
ACACAATGATGTGGTTCCTACAATGGCACAAGGAGTGATTGAATACAAGGAGAAGTTTGGGTTTGATCCTTTCAT
TAGCACTAACATCCAATATTTTCTGGATCGGTTTTATACCAACCGCATCTCTTTCCGCATGCTTATTAATCAGCA
CACACTTCTGTTTGGGGGTGACACTAATCCTGTTCATCCTAAACACATAGGAAGTATCGATCCCACCTGTAACGT
GGCGGATGTGGTGAAAGATGCATATGAAACAGCCAAGATGCTGTGTGAACAGTATTACCTGGTAGCTCCAGAGCT
GGAAGTTGAAGAATTCAATGCCAAAGCGCCAGACAAACCTATTCAGGTGGTTTATGTGCCCTCACATCTGTTTCA
TATGCTATTTGAGTTGTTCAAGAACTCAATGAGAGCGACAGTTGAACTCTATGAAGACAGAAAAGAGGGCTACCC
TGCTGTTAAAACCCTCGTTACTTTGGGTAAAGAAGACTTATCCATTAAGATCAGTGACCTAGGTGGTGGTGTCCC
ACTTCGAAAAATAGATCGTCTTTTTAACTACATGTATTCTACTGCTCCTAGGCCCAGCCTGGAGCCTACCAGAGC
TGCCCCTTTGGCTGGATTTGGTTATGGTTTGCCAATTTCCCGTCTGTATGCTAGATATTTTCAAGGAGATCTGAA
ACTGTATTCCATGGAAGGAGTGGGTACTGATGCTGTCATTTATTTGAAGGCTCTTTCAAGTGAGTCATTTGAGAG
ACTTCCAGTTTTTAATAAGTCCGCATGGCGCCATTACAAGACCACGCCTGAAGCCGATGATTGGAGCAATCCCAG
CAGTGAACCCAGGGATGCTTCAAAATACAAAGCAAAACAGTAATATACCACCTTGATTTCCATTACAAAGTATCT
GATTTGTCTGAATAAAGGTGTCCCACTCACTGTTCCAGGAATTCTTGCAGTGTAGAGGTATTCACAACAGCAAGC
AGGGATTTGGCCTGCCATCAATTTTATTTAAAAAGCAATTAAGTTTGCAGTTTGTCCTCATAAACGTTGTAGGTT
GAAACTGAAAAATAAGTTAAAATGATCAATCAAGATAAAAGGTGATCTATCCATCCAATGGAATATTATTTGGCC
TTAAAAAGGAAGGACATCTGATATGTGCTGCAACATGGGTGAATCTTGAAGTCATTATGCTAAGTGAAATAAACC
AGACATAAAAGGACAAATACATCG

FIGURE 1753

MRLFRWLLKQPVPKQIERYSRFSPSPLSIKQFLDFGRDNACEKTSYMFLRKELPVRLANTMREVNLLPDNLLNRP
SVGLVQSWYMQSFLELLEYENKSPEDPQVLDNFLQVLIKVRNRHNDVVPTMAQGVIEYKEKFGFDPFISTNIQYF
LDRFYTNRISFRMLINQHTLLFGGDTNPVHPKHIGSIDPTCNVADVVKDAYETAKMLCEQYYLVAPELEVEEFNA
KAPDKPIQVVYVPSHLFHMLFELFKNSMRATVELYEDRKEGYPAVKTLVTLGKEDLSIKISDLGGGVPLRKIDRL
FNYMYSTAPRPSLEPTRAAPLAGFGYGLPISRLYARYFQGDLKLYSMEGVGTDAVIYLKALSSESFERLPVFNKS
AWRHYKTTPEADDWSNPSSEPRDASKYKAKQ

FIGURE 1754A

CTGGGGAGCCGGCGCTGGAGGTGGTGAGTGGCGTGGGGACTGTGTCGAGGGGGTCCCCAAGGTGCCGGACCCTGC
GGAGGGGCGAAGTTTCGGCACTGGGGAGGGCGTGCGGACGCTTTCCCTACAGGCGACCACTGCTCTGCGGGCGGG
TGGTCTTAGCTCCAGTCCCCCATTCAGTTCCTCAGCATTCCAGGTCGGCGGCGAAGGGGTCCCCGAACGAAGGGC
GCAAGGCAGCGTCTCTGCTGGGACCGGGAAGCCGGACTTCAGGGCCTCTCGGCCCGTGGGCTTCTCCCCGAGTCT
CCCCGAGTCGGTTGGCATTAAGAGTTTAGCAGATACTTTCAGAAATGGATACATAAGAAATGGCTGGAAATCAAA
TGAATGTCCAAAGAAGAGCTTAGGGTCTTAGTAACATTCTTTTTTAAAATAACTGTCTGCCAAA**ATG**TCATTACA
CAGTACTCATAATAGAAATAACAGCGGTGATATTCTTGATATTCCTTCTTCCCAAAATAGTTCATCACTGAATGC
CCTCACCCACAGTAGCCGACTTAAGCTGCATTTGAAGTCGGATATGTCAGAATGTGAAAATGATGATCCATTATT
GAGATCTGCAGGTAAAGTCAGAGACATAAATAGAACTTATGTTATTTCTGCCAGTAGAAAAACAGCAGACATGCC
CCTTACCCCTAATCCTGTAGGTAGATTGGCACTTCAGAGGAGAACTACAAGGAACAAAGAATCATCTTTGCTTGT
TAGTGAGTTGGAAGACACAACTGAAAAAACAGCAGAAACACGTCTTACATTACAACGTCGTGCTAAAACAGATTC
TGCAGAAAAGTGGAAAACAGCTGAAATAGATTCTGTCAAAATGACACTGAATGTGGGAGGTGAAACAGAAAATAA
TGGTGTTTCTAAGGAAAGTAGAACAAATGTAAGGATTGTAAATAATGCTAAAAACTCTTTTGTTGCCTCTTCTGT
ACCTTTAGATGAAGATCCACAGGTCATTGAAATGATGGCTGATAAGAAATACAAAGAAACATTTTCTGCCCCCAG
TAGAGCAAATGAAAATGTTGCACTTAAGTACTCAAGTAATAGACCACCCATTGCTTCCCTGAGTCAGACTGAAGT
TGTTAGATCAGGACACTTGACAACGAAACCTACTCAGAGCAAGTTGGATATCAAAGTGTTGGGAACAGGAAACTT
GTATCATAGAAGTATTGGGAAGGAAATTGCAAAAACTTCAAATAAATTTGGGAGCTTAGAAAAAAGAACACCTAC
AAAATGTACAACAGAACACAAACTGACAACAAAGTGCAGCCTGCCTCAGCTTAAGAGCCCAGCTCCATCAATACT
GAAGAATAGAATGTCTAACCTTCAAGTTAAACAAAGACCAAAAAGTTCCTTTCTTGCAAATAAACAGGAAAGATC
CGCAGAAAATACAATTCTTCCCGAAGAAGAAACTGTAGTTCAGAACACCTCTGCAGGAAAAGACCCCTTAAAAGT
AGAGAATAGTCAAGTGACAGTGGCAGTACGCGTAAGACCTTTCACCAAGAGAGAGAAGATTGAAAAAGCATCCCA
GGTAGTCTTCATGAGTGGGAAAGAAATAACTGTGGAACACCCTGACACGAAACAAGTTTATAATTTTATTTATGA
TGTTTCATTCTGGTCTTTTGATGAATGTCATCCTCACTACGCTAGCCAGACAACTGTCTATGAGAAGCTAGCAGC
ACCACTCCTAGAAAGAGCCTTCGAAGGCTTCAATACCTGTCTTTTTGCTTATGGTCAGACTGGCTCTGGAAAATC
ATATACGATGATGGGATTTAGTGAAGAACCAGGAATAATTCCAAGATTTTGTGAAGATCTTTTTTCTCAAGTAGC
CAGAAAACAAACCCAAGAGGTCAGCTATCACATTGAAATGAGCTTCTTTGAAGTATATAATGAAAAAATTCACGA
CCTTCTGGTTTGTAAAGATGAAAATGGGCAGAGAAAGCAACCACTGAGAGTGAGGGAACATCCTGTTTATGGACC
ATATGTTGAAGCACTGTCAATGAACATTGTCAGTTCTTACGCTGATATCCAGAGTTGGCTAGAATTGGGAAATAA
ACAAAGAGCTACTGCTGCTACTGGTATGAATGATAAAAGTTCCCGATCTCATTCAGTTTTCACCCTGGTGATGAC
CCAGACCAAGACAGAATTTGTGGAAGGGGAAGAACACGATCACAGAATAACAAGTCGAATTAACCTAATAGATCT
GGCAGGCAGTGAGCGCTGCTCTACGGCTCACACTAATGGAGATCGACTAAAGGAAGGTGTGAGTATTAATAAGTC
CTTGCTAACTTTGGGAAAAGTTATATCTGCACTTTCGGAACAAGCAAACCAAAGGAGTGTTTTTATTCCTTATCG
TGAATCTGTTCTTACATGGCTGTTAAAAGAAAGTCTGGGTGGAAATTCAAAAACTGCAATGATTGCTACGATTAG
TCCCGCTGCCAGCAACATAGAAGAAACATTAAGCACACTTAGATATGCTAACCAAGCCCGTTTAATAGTCAACAT
TGCTAAAGTAAATGAAGATATGAACGCTAAGTTAATTAGAGAATTGAAGGCAGAAATTGCAAAGCTAAAAGCTGC
TCAGAGAAACAGTCGGAATATTGACCCTGAACGATACAGGCTCTGTCGGCAAGAAATAACATCCTTAAGAATGAA
ACTGCATCAACAGGAGAGAGACATGGCAGAAATGCAAAGAGTGTGGAAAGAAAAGTTTGAACAAGCTGAAAAAAG
AAAACTTCAAGAAACAAAAGAGTTACAGAAAGCAGGAATTATGTTTCAAATGGACAATCATTTACCAAACCTTGT
TAATCTGAATGAAGATCCACAACTATCTGAGATGCTGCTATATATGATAAAAGAAGGAACAACTACAGTTGGAAA
GTATAAACCAAACTCAAGCCATGATATTCAGTTATCTGGGGTGCTGATTGCTGATGATCATTGTACTATCAAAAA
TTTTGGTGGGACAGTGAGTATTATCCCAGTTGGGGAAGCAAAGACATATGTAAATGGAAAACATATTTTGGAAAT
CACAGTATTACGTCATGGTGATCGAGTGATTCTTGGTGGAGATCATTATTTTAGATTTAATCATCCAGTAGAAGT
CCAGAAAGGAAAAAGGCCATCTGGAAGAGATACTCCTATAAGTGAGGGTCCAAAAGACTTTGAATTTGCAAAAAA
TGAGTTGCTCATGGCACAGAGATCACAACTTGAAGCAGAAATAAAAGAGGCTCAGTTGAAGGCAAAGGAAGAAAT
GATGCAAGGAATCCAGATTGCAAAAGAAATGGCTCAGCAAGAGCTTTCTTCTCAAAAAGCTGCATATGAAAGCAA
AATAAAAGCACTGGAAGCAGAACTGAGAGAAGAGTCTCAAAGGAAAAAAATGCAGGAAATAAATAACCAGAAGGC
TAATCACAAAATTGAGGAATTAGAAAAGGCAAAGCAGCATCTTGAACAGGAAATATATGTCAACAAAAAGCGATT
AGAAATGGAGACATTGGCTACAAAACAGGCTTTAGAAGACCATAGCATCCGCCATGCAAGAATTCTGGAAGCTTT

FIGURE 1754B

AGAAACTGAAAAGCAAAAAATTGCTAAAGAAGTACAAATTCTACAGCAGAATCGGAATAATAGGGATAAAACTTT
TACAGTGCAGACAACTTGGAGCTCTATGAAACTCTCAATGATGATTCAGGAAGCCAATGCTATCAGCAGCAAATT
GAAAACATACTATGTTTTTGGCAGACATGATATATCAGATAAAAGTAGTTCTGACACTTCTATTCGGGTTCGTAA
CCTGAAACTAGGAATCTCAACATTCTGGAGTCTGGAAAAGTTTGAATCTAAACTTGCAGCAATGAAAGAACTTTA
TGAGAGTAATGGTAGTAACAGGGGTGAAGATGCCTTTTGTGATCCTGAAGATGAATGGGAACCCGACATTACAGA
TGCACCAGTTTCTTCACTTTCTAGAAGGAGGAGTAGGAGTTTGATGAAGAACAGAAGAATTTCTGGTTGTTTACA
TGACATACAAGTCCATCCAATTAAGAATTTGCATTCTTCACATTCATCAGGTTTAATGGACAAATCAAGCACTAT
TTACTCAAATTCAGCAGAGTCCTTTCTTCCTGGAATTTGCAAAGAATTGATTGGTTCTTCGTTAGATTTTTTTGG
ACAGAGTTATGATGAAGAAAGAACTATAGCAGACAGCCTAATTAATAGTTTTCTTAAAATTTATAATGGGCTATT
TGCCATTTCCAAGGCTCATGAAGAACAAGATGAAGAAAGTCAAGATAACTTGTTTTCTTCTGATCGAGCAATCCA
GTCACTTACTATTCAGACTGCATGTGCTTTTGAGCAGCTAGTAGTGCTAATGAAACACTGGCTGAGTGATTTACT
GCCTTGTACCAACATAGCAAGACTTGAGGATGAGTTGAGACAAGAAGTTAAAAAACTGGGAGGCTACTTACAGTT
ATTTTTGCAGGGATGCTGTTTGGATATTTCATCAATGATAAAAGAGGCTCAAAAGAATGCAATCCAAATTGTACA
ACAAGCTGTAAAGTATGTGGGGCAGTTAGCAGTTCTGAAAGGGAGCAAGCTACATTTTCTAGAAAACGGTAACAA
TAAAGCTGCCAGTGTCCAGGAGGAATTCATGGATGCTGTTTGTGATGGTGTAGGCTTAGGAATGAAGATTTTATT
AGATTCTGGACTGGAAAAAGCAAAAGAACTTCAGCATGAACTCTTTAGGCAGTGTACAAAAAATGAGGTTACCAA
AGAAATGAAAACTAATGCCATGGGATTGATTAGATCTCTTGAAAACATCTTTGCTGAATCGAAAATTAAAAGTTT
CAGAAGGCAAGTACAAGAAGAAAACTTTGAATACCAAGATTTCAAGAGGATGGTTAATCGTGCTCCAGAATTCTT
AAAGTTAAAACATTGCTTAGAGAAAGCTATTGAAATTATTATTTCTGCACTGAAAGGATGCCATAGTGATATAAA
TCTTCTCCAGACTTGTGTTGAAAGTATTCGCAACTTGGCCAGTGATTTTTACAGTGACTTCAGTGTGCCTTCTAC
TTCTGTTGGCAGCTATGAGAGTAGAGTAACTCACATTGTCCACCAGGAACTAGAATCTCTAGCTAAGTCTCTCCT
CTTTTGTTTTGAATCTGAAGAAAGCCCTGATTTGTTGAAACCCTGGGAAACTTATAATCAAAATACCAAAGAAGA
ACACCAACAATCTAAATCAAGCGGGATTGACGGCAGTAAGAATAAAGGTGTACCAAAGCGTGTCTATGAGCTCCA
TGGCTCATCCCCAGCAGTGAGCTCAGAGGAATGCACACCCAGTAGGATTCAGTGGGTGTGAATACTGATGTGTAG
GCACTTTTATGACCACCCATGAAAGAAAAAGAACACTTGCTCGGTAATTTTCTTTATGCAGGAGAGTTTAAGAGA
AATCAGCACAGATATTTCAAAAAAGTCCATGTCTTTTTATCTTTAAAATATCTATTTATCAAAGGCCAGACACAG
TGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCGGGCAGATCACAAGGTCAGGAGTTTGAGACCGGCCTGGCC
AACATGGTGAAACCCCGTCTCTACTAAAAATACAAAAATTTGCTGGGCATGGTGGCGCGTGCCTGTAATCCCAGC
TACTAGGGGGGCTGAGGCAGGAGGATCGCTTGAACCTGAGAGGCAGAGGTTGCAGTGAGCCAAGATCATGCCACT
TTACTCCAGTCTGAGCAACAGAACGAGACTTAGTCAAAATAAATAAATAAATAAGTAAATAAATAAATAAATAAA
ATATCTTTTATCTTTAAAGTGTTTAACATTGGTATACTGTCTGTAGTTGGTTCATTAGTCGTTTATAAAGGGTTA
TTTTCTCATGAGTGGAAACCTGAACAATCAGTTACCTTTGTGCCTATGCCTTCTCTCTCCTCAGACAGCTGGGAT
GTTTATGGTGAAATGGCCTGTACAAGTTTAACTAAGACAACTTAACTTGCATTGTTAATCAAAAATTCTTTTCTC
AAAGGGTTAACTGGTTGCCATTTTGAATAGTATGTTCAAGGGTGTAGCTTCCTGTTTCTTTCCAAATTATAAGTA
GCTACCTAAATATAGTATAATTATATATTAATAATATGGCTTGCTGGCACAGTAGTTTACCCTGTTATCTGTGTT
TCATAATGGGGGCTGTATGAATATTATTTAAAACTAATAAAATGTTGCCAGAATTATACTAAACTGTTGGATGAG
ATTAGGAGATCAGAGGCTGGACCTTCTCTTGATAATGCTTGTTTTGTTAAAGGTATAATGAAATAATTTGTATAT
GATTTGATGAAGATTAAAGACCCTTATTTTCCACAGCTTTAAAAAAAAACCTTTATTTATGATCAAGTAATAAAG
ATAATATTCTACTTGTGGGATCTTACATTATGGAAATAGTTTGACGTTTTTGACCTCAAGAGTATGTATAATTTG
AAGAGATACTTTGTAACTATGCTTGGGTGATATTGAGCAGTTCCTAAAGAATAATTCATTT

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FIGURE 1755

MSLHSTHNRNNSGDILDIPSSQNSSSLNALTHSSRLKLHLKSDMSECENDDPLLRSAGKVRDINRTYVISASRKT
ADMPLTPNPVGRLALQRRTTRNKESSLLVSELEDTTEKTAETRLTLQRRAKTDSAEKWKTAEIDSVKMTLNVGGE
TENNGVSKESRTNVRIVNNAKNSFVASSVPLDEDPQVIEMMADKKYKETFSAPSRANENVALKYSSNRPPIASLS
QTEVVRSGHLTTKPTQSKLDIKVLGTGNLYHRSIGKEIAKTSNKFGSLEKRTPTKCTTEHKLTTKCSLPQLKSPA
PSILKNRMSNLQVKQRPKSSFLANKQERSAENTILPEEETVVQNTSAGKDPLKVENSQVTVAVRVRPFTKREKIE
KASQVVFMSGKEITVEHPDTKQVYNFIYDVSFWSFDECHPHYASQTTVYEKLAAPLLERAFEGFNTCLFAYGQTG
SGKSYTMMGFSEEPGIIPRFCEDLFSQVARKQTQEVSYHIEMSFFEVYNEKIHDLLVCKDENGQRKQPLRVREHP
VYGPYVEALSMNIVSSYADIQSWLELGNKQRATAATGMNDKSSRSHSVFTLVMTQTKTEFVEGEEHDHRITSRIN
LIDLAGSERCSTAHTNGDRLKEGVSINKSLLTLGKVISALSEQANQRSVFIPYRESVLTWLLKESLGGNSKTAMI
ATISPAASNIEETLSTLRYANQARLIVNIAKVNEDMNAKLIRELKAEIAKLKAAQRNSRNIDPERYRLCRQEITS
LRMKLHQQERDMAEMQRVWKEKFEQAEKRKLQETKELQKAGIMFQMDNHLPNLVNLNEDPQLSEMLLYMIKEGTT
TVGKYKPNSSHDIQLSGVLIADDHCTIKNFGGTVSIIPVGEAKTYVNGKHILEITVLRHGDRVILGGDHYFRFNH
PVEVQKGKRPSGRDTPISEGPKDFEFAKNELLMAQRSQLEAEIKEAQLKAKEEMMQGIQIAKEMAQQELSSQKAA
YESKIKALEAELREESQRKKMQEINNQKANHKIEELEKAKQHLEQEIYVNKKRLEMETLATKQALEDHSIRHARI
LEALETEKQKIAKEVQILQQNRNNRDKTFTVQTTWSSMKLSMMIQEANAISSKLKTYYVFGRHDISDKSSSDTSI
RVRNLKLGISTFWSLEKFESKLAAMKELYESNGSNRGEDAFCDPEDEWEPDITDAPVSSLSRRRSRSLMKNRRIS
GCLHDIQVHPIKNLHSSHSSGLMDKSSTIYSNSAESFLPGICKELIGSSLDFFGQSYDEERTIADSLINSFLKIY
NGLFAISKAHEEQDEESQDNLFSSDRAIQSLTIQTACAFEQLVVLMKHWLSDLLPCTNIARLEDELRQEVKKLGG
YLQLFLQGCCLDISSMIKEAQKNAIQIVQQAVKYVGQLAVLKGSKLHFLENGNNKAASVQEEFMDAVCDGVGLGM
KILLDSGLEKAKELQHELFRQCTKNEVTKEMKTNAMGLIRSLENIFAESKIKSFRRQVQEENFEYQDFKRMVNRA
PEFLKLKHCLEKAIEIIISALKGCHSDINLLQTCVESIRNLASDFYSDFSVPSTSVGSYESRVTHIVHQELESLA
KSLLFCFESEESPDLLKPWETYNQNTKEEHQQSKSSGIDGSKNKGVPKRVYELHGSSPAVSSEECTPSRIQWV

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FIGURE 1756

AGCTCAGCAGGACCTCAGCCATGAGACTTCTCATCCTGGCCCTCCTTGGCATCTGCTCTCTCACTGCATACATTG
TGGAAGGTGTAGGGAGTGAAGTCTCAGATAAGAGGACCTGTGTGAGCCTCACTACCCAGCGACTGCCGGTTAGCA
GAATCAAGACCTACACCATCACGGAAGGCTCCTTGAGAGCAGTAATTTTTATTACCAAACGTGGCCTAAAAGTCT
GTGCTGATCCACAAGCCACATGGGTGAGAGACGTGGTCAGGAGCATGGACAGGAAATCCAACACCAGAAATAACA
TGATCCAGACCAAGCCAACAGGAACCCAGCAATCGACCAATACAGCTGTGACTCTGACTGGCTAGTAGTCTCTGG
CACCCTGTCCGTCTCCAGCCAGCCAGCTCATTTCACTTTACACGCTCATGGACTGAGTTTATACTCACCTTTTAT
GAAAGCACTGCATGAATAAAATTATTCCTTTGTATTTTTACTTTTAAATGTCTTCTGTATTCACTTATATGTTCT
AATTAATAAATTATTTATTATTAAGAATAGTTCCCTAGTCTATTCATTATATTTAGGGAAAGGTAGTGTATCATT
GTTGTTTGATTTCTGACCTTGTACCTCTCTTTGATGGTAACCATAATGGAAGAGATTCTGGCTAGTGTCTATCAG
AGGTGAAAGCTATATCAATCTCTCTTAGAGTCCAGCTTGTAATGGTTCTTTACACATCAGTCACAAGTTACAGCT
GTGACAATGGCAACAATTTGAGATGTATTTCAACTTGTCTCTATAATAGAATTCTGTTTATAGAATAAGGGAGAA
AATAATCCAGTCTTCACTGGGTTCCCATTCTGAGGGTCCACTACTCAAAAATTTGCTTCACTCAATTTTTTTCAC
CTCTTTGTGTTTTATTTTGGTGTCCTATTAAAGGAATAAAATGACACAACTTGTCCCTTTTTTGTCCCATTAGCA
AAAATTAGAATTTTGGTATAAAGAAACTTTATTCAAGTAAAAATCAATACCCTTTGAATTGGACAATAATCTCAC
TACCTTATTAGGATTTCTGTATTTGCCATTACGCTAGTTATCATGCATGTTATGCTTTACTGCGAATAAGCTTTT
AATGCTCCAAATGCTGACCCATGCAATATTTCCTCATGTGATCACAATTTGCAGTAAACTTTTAATTAAATGCTC
ATCTGGTAACTCAACACCCCAG

FIGURE 1757

MRLLILALLGICSLTAYIVEGVGSEVSDKRTCVSLTTQRLPVSRIKTYTITEGSLRAVIFITKRGLKVCADPQAT
WVRDVVRSMDRKSNTRNNMIQTKPTGTQQSTNTAVTLTG

FIGURE 1758

GGGGAGCCGAGGCGAGCGCGAGCGAGGTCCAGCACCATGTGCTAGGTCACTCCCAGCGCGAGGCCACACCTGGGC
CGTCGGAGCAGCCCCTCCTCACTTCAGGGGTCACCCTCCCCAGCACCCATTGCCCCACC**ATG**GCTGGGGACCGGC
TCCCGAGGAAGGTGATGGATGCCAAGAAGCTGGCCAGCCTGCTGCGGGGCGGGCCTGGGGGGCCGCTGGTCATCG
ACAGCCGCTCCTTCGTGGAGTACAACAGCTGGCATGTGCTCAGCTCCGTCAACATCTGCTGCTCCAAGCTGGTGA
AGCGGCGGCTGCAGCAGGGCAAGGTGACCATTGCGGAGCTCATCCAGCCGGCTGCACGCAGCCAGGTGGAGGCTA
CGGAGCCACAGGACGTGGTGGTCTATGACCAGAGCACGCGGGACGCCAGCGTGCTGGCCGCAGACAGCTTCCTCT
CCATCCTGCTGAGCAAGCTGGACGGCTGCTTCGACAGCGTGGCCATCCTCACTGGGGGCTTCGCCACCTTCTCCT
CCTGCTTCCCCGGCCTCTGCGAGGGCAAGCCTGCTGCCCTGCTACCCATGAGCCTCTCCCAGCCCTGCCTGCCTG
TGCCCAGCGTGGGCCTGACCCGCATCCTGCCTCACCTCTACCTGGGCTCGCAGAAGGACGTCCTAAACAAGGATC
TGATGACGCAAAATGGAATAAGCTACGTCCTCAACGCCAGCAACTCCTGCCCCAAGCCTGACTTCATCTGCGAGA
GCCGCTTCATGCGGGTCCCCATCAACGACAACTACTGTGAAAAACTGCTGCCCTGGCTGGACAAGTCCATCGAGT
TCATCGATAAAGCCAAGCTCTCCAGCTGCCAAGTCATCGTCCACTGTCTGGCTGGCATCTCCCGCTCTGCCACCA
TCGCCATCGCCTACATCATGAAGACCATGGGCATGTCCTCCGACGACGCCTACAGGTTCGTGAAGGACAGGCGCC
CGTCCATCTCGCCCAACTTCAACTTCCTGGGCCAGCTGCTGGAGTACGAGCGCACGCTGAAGCTGCTGGCCGCCC
TGCAGGGCGACCCGGGCACCCCCTCAGGGACGCCGGAGCCTCCGCCCAGTCCTGCCGCCGGGGCCCCGCTGCCAC
GGCTGCCACCACCTACCTCAGAGAGCGCTGCCACAGGGAATGCGGCTGCCAGGGAGGGCGGCCTGAGCGCGGGCG
GGGAGCCCCCCGCGCCCCCCACGCCCCCGGCGACCAGCGCACTGCAGCAGGGCCTGCGCGGCCTGCACCTCTCCT
CGGACCGCCTGCAGGACACTAACCGCCTCAAGCGCTCCTTCTCCCTGGACATCAAGTCTGCCTACGCCCCTAGCA
GGCGGCCCGACGGCCCCGGGCCCCCCGACCCCGGCGAGGCCCCGAAGCTCTGCAAGCTGGACAGCCCGTCGGGGG
CCGCGCTGGGCCTGTCCTCGCCCAGCCCGGACAGCCCGGACGCCGCGCCTGAGGCGCGCCCACGGCCCCGCCGGC
GGCCCCGGCCCCCCGCCGGCTCCCCCGCGCGCTCCCCCGCGCACAGCCTCGGCCTGAACTTCGGCGATGCGGCCC
GGCAGACTCCGCGGCACGGCCTCTCGGCCCTGTCGGCGCCCGGGCTGCCCGGCCCTGGCCAGCCGGCCGGCCCCG
GGGCCTGGGCACCGCCGCTTGACTCCCCAGGCACGCCGTCGCCCGACGGGCCCTGGTGCTTCAGCCCCGAGGGCG
CACAGGGGGCGGGCGGGGTGCTGTTTGCGCCCTTCGGCCGGGCGGGCGCCCCGGGACCAGGCGGCGGCAGCGACC
TGCGGCGGCGGGAGGCAGCGAGGGCTGAGCCCCGGGACGCGCGGACCGGCTGGCCCGAGGAGCCGGCCCCGGAGA
CGCAGTTCAAGCGCCGCAGCTGCCAGATGGAGTTCGAGGAGGGCATGGTGGAGGGGCGCGCGCGCGGCGAGGAGC
TGGCCGCCCTGGGCAAGCAGGCGAGCTTCTCGGGCAGCGTGGAGGTCATCGAGGTGTCC**TGA**CCCCTCCGCTGCC
CTCGGCCCCGCCGCCCGCAGCCAGGCCCGTTATAAATGTATATTATATATAATGCAAAGAAAGGTAAATGGTTTT
ACTGGGATTTTTATCGAGAAGTAAATATTTCGATTTTTTATTTATTTAAGCTGTTCATTCTGGCAATGATTTGGC
AACAGTGCGGGTGGTCCTCGAGCTCTATTTTTACTGTCTGGTATTTAAACTGAAACATACGTTTCTAAGCAATAC
GAGGCCACCTTCAGTCGCAAGCTGGGTGCCAGGCCTGGGGCCCTCCCAGTTCCCCCGCCCCAGGAAACACTGCTG
ACCTTTGCAAAGGCTGCCGAGCTTTCGTGCACTTTTTACATAACAAAAAGGG

FIGURE 1759

MAGDRLPRKVMDAKKLASLLRGGPGGPLVIDSRSFVEYNSWHVLSSVNICCSKLVKRRLQQGKVTIAELIQPAAR
SQVEATEPQDVVVYDQSTRDASVLAADSFLSILLSKLDGCFDSVAILTGGFATFSSCFPGLCEGKPAALLPMSLS
QPCLPVPSVGLTRILPHLYLGSQKDVLNKDLMTQNGISYVLNASNSCPKPDFICESRFMRVPINDNYCEKLLPWL
DKSIEFIDKAKLSSCQVIVHCLAGISRSATIAIAYIMKTMGMSSDDAYRFVKDRRPSISPNFNFLGQLLEYERTL
KLLAALQGDPGTPSGTPEPPPSPAAGAPLPRLPPPTSESAATGNAAAREGGLSAGGEPPAPPTPPATSALQQGLR
GLHLSSDRLQDTNRLKRSFSLDIKSAYAPSRRPDGPGPPDPGEAPKLCKLDSPSGAALGLSSPSPDSPDAAPEAR
PRPRRRPRPPAGSPARSPAHSLGLNFGDAARQTPRHGLSALSAPGLPGPGQPAGPGAWAPPLDSPGTPSPDGPWC
FSPEGAQGAGGVLFAPFGRAGAPGPGGGSDLRRREAARAEPRDARTGWPEEPAPETQFKRRSCQMEFEEGMVEGR
ARGEELAALGKQASFSGSVEVIEVS

FIGURE 1760A

GGGACACCATCATTTGGGTTTTTAAAAGCTTCAGCTTCTCCAGCATCTTTGCATTGTGAATATCTTCCTGCTTCT
AGTCAAAGCTTTCTCTCTAGTGATTGGAATGCTGCTGTAAGCCTATTAGAGGTGCCTGAGGATATCACCTTTTAC
AAGGAAGCCGTGTGTGCTTGAGAGGATCTTTTTAAATGCATTATGGCTCATGCAGCCTCACAATTAAAGAAAAAC
AGGGATTTAGAAATCAATGCTGAAGAAGAGCCTGAGAAAAAAAGGAAACACCGCAAACGGTCCCGGGATCGGAAG
AAAAAGTCTGATGCCAATGCAAGTTACTTAAGAGCAGCTCGAGCTGGACACCTTGAAAAGGCCCTCGACTACATA
AAAAATGGAGTTGACATCAACATTTGCAATCAGAATGGGTTGAACGCTCTCCACCTTGCTTCCAAAGAAGGCCAT
GTAGAGGTTGTTTCTGAGCTGCTGCAGAGAGAAGCCAATGTGGATGCAGCTACAAAGAAAGGAAACACAGCATTG
CACATCGCATCTTTGGCTGGGCAAGCAGAGGTGGTAAAAGTCTTGGTTACAAATGGAGCCAATGTCAATGCACAA
TCTCAGAATGGTTTCACGCCATTGTATATGGCAGCCCAGGAAAATCACCTGGAAGTTGTCAAGTTTCTTCTTGAC
AATGGTGCAAGCCAGAGCCTAGCCACAGAGGATGGCTTCACACCATTGGCAGTGGCTTTGCAACAAGGTCACGAC
CAAGTCGTTTCGCTCCTGCTAGAGAATGACACCAAAGGAAAAGTGCGTCTCCCAGCTCTTCATATCGCGGCCCGC
AAAGACGACACAAAAGCCGCCGCCCTGCTGCTGCAGAATGACAACAATGCAGATGTGGAATCAAAGAGTGGCTTC
ACTCCGCTCCACATAGCTGCTCACTATGGAAATATCAATGTAGCCACGTTGCTGTTAAACCGAGCGGCTGCTGTG
GATTTCACCGCAAGGAATGACATCACTCCTTTACATGTTGCATCAAAAAGAGGAAATGCAAATATGGTAAAACTA
TTGCTCGATCGAGGAGCTAAAATCGATGCCAAAACCAGGGATGGTCTGACACCACTGCACTGTGGAGCAAGGAGT
GGCCACGAGCAGGTGGTAGAAATGTTGCTTGATCGAGCTGCCCCCATTCTTTCAAAAACCAAGAATGGATTATCT
CCATTGCACATGGCCACACAAGGGGATCATTTAAACTGCGTCCAGCTTCTCCTCCAGCATAATGTACCCGTGGAT
GATGTCACCAATGACTACCTGACTGCCCTACACGTGGCTGCCCACTGTGGCCATTACAAAGTTGCCAAGGTTCTC
TTGGATAAGAAAGCTAACCCCAATGCCAAAGCCCTGAATGGCTTTACCCCTCTTCATATCGCCTGCAAGAAGAAT
CGAATTAAAGTAATGGAACTCCTTCTGAAACACGGTGCATCCATCCAAGCTGTAACCGAGTCGGGCCTTACCCCA
ATCCATGTTGCTGCCTTCATGGGGCATGTAAATATTGTATCACAACTAATGCATCATGGAGCCTCACCAAACACC
ACCAATGTGAGAGGAGAAACAGCACTGCACATGGCAGCTCGCTCCGGCCAAGCTGAAGTTGTGCGGTATCTGGTA
CAAGACGGAGCTCAGGTAGAAGCTAAAGCTAAGGATGACCAAACACCACTCCACATTTCAGCCCGACTGGGGAAA
GCAGACATAGTACAACAGCTGTTGCAGCAAGGGGCATCTCCAAATGCAGCCACAACTTCTGGGTACACCCCACTT
CACCTTTCCGCCCGAGAGGGGCATGAGGATGTGGCCGCGTTCCTTTTGGATCATGGAGCGTCTTTATCTATAACA
ACAAAGAAAGGATTTACTCCTCTTCATGTGGCAGCAAAATATGGAAAGCTTGAAGTCGCCAATCTCCTGCTACAG
AAAAGTGCATCTCCAGATGCTGCTGGGAAGAGCGGGCTAACACCACTGCATGTAGCTGCACATTACGATAATCAG
AAAGTGGCCCTTCTGCTTTTGGACCAAGGAGCCTCACCTCACGCAGCCGCAAAGAATGGTTATACGCCACTGCAC
ATCGCTGCCAAAAAGAACCAGATGGACATAGCGACAACTCTGCTGGAATATGGTGCTGATGCCAACGCAGTTACC
CGGCAAGGAATTGCTTCCGTCCATCTCGCAGCTCAGGAAGGGCACGTGGACATGGTGTCGCTGCTCCTCGGTAGA
AATGCGAATGTGAACCTGAGCAATAAGAGCGGCCTGACCCCACTCCATTTGGCTGCTCAAGAAGATCGAGTGAAT
GTGGCAGAAGTCCTCGTAAACCAAGGGGCTCATGTGGACGCCCAGACAAAGATGGGATACACACCACTGCATGTG
GGCTGCCACTATGGAAATATCAAGATTGTTAATTTCCTGCTCCAGCATTCTGCAAAAGTTAATGCCAAAACAAAG
AATGGGTATACGCCATTACATCAAGCAGCACAGCAGGGGCATACGCATATAATAAATGTCTTACTTCAGAACAAC
GCCTCCCCCAATGAACTCACTGTGAATGGGAATACTGCCCTTGGCATTGCCCGGCGCCTCGGCTACATCTCAGTA
GTGGACACCCTGAAGATAGTGACCGAAGAAACCATGACCACAACTACTGTCACAGAGAAGCACAAAATGAATGTT
CCAGAAACGATGAATGAAGTTCTTGATATGTCTGATGATGAAGTTCGTAAAGCCAATGCCCCTGAAATGCTCAGT
GATGGCGAATATATCTCAGATGTTGAAGAAGGTGAAGATGCAATGACCGGGGACACAGACAAATATCTTGGGCCA
CAGGACCTTAAGGAATTGGGTGATGATTCCCTGCCTGCAGAGGGTTACATGGGCTTTAGTCTCGGAGCGCGTTCT
GCCAGCCTCCGCTCCTTCAGTTCGGATAGGTCTTACACCTTGAACAGAAGCTCCTATGCACGGGACAGCATGATG
ATTGAAGAACTCCTTGTGCCATCCAAAGAGCAGCATCTAACATTCACAAGGGAATTTGATTCAGATTCTCTTAGA
CATTACAGCTGGGCTGCAGACACCTTAGACAATGTCAATCTTGTTTCAAGCCCCATTCATTCTGGGTTTCTGGTT
AGCTTTATGGTGGACGCGAGAGGGGGCTCCATGAGAGGAAGCCGTCATCACGGGATGAGAATCATCATTCCTCCA
CGCAAGTGTACGGCCCCCACTCGAATCACCTGCCGTTTGGTAAAGAGACATAAACTGGCCAACCCACCCCCACAT
GGTGAAAGGAGAGGGATTAGCAGTAGGCTGGTAGAAATGGGTCCTGCAGGGGCACAATTTTTAGGCCCTGTCATA
GTGGAAATCCCTCACTTTGGGTCCATGAGAGGAAAAGAGAGAGAACTCATTGTTCTTCGAAGTGAAAATGGTGAA
ACTTGGAAGGAGCATCAGTTTGACAGCAAAAATGAAGATTTAACCGAGTTACTTAATGGCATGGATGAAGAACTT
GATAGCCCAGAAGAGTTAGGGAAAAAGCGTATCTGCAGGATTATCACGAAAGATTTCCCCCAGTATTTTGCAGTG

FIGURE 1760B

GTTTCCCGGATTAAGCAGGAAAGCAACCAGATTGGTCCTGAAGGTGGAATTCTGAGCAGCACCACAGTGCCCCTT
GTTCAAGCATCTTTCCCAGAGGGTGCCCTAACTAAAAGAATTCGAGTGGGCCTCCAGGCCCAGCCTGTTCCAGAT
GAAATTGTGAAAAAGATCCTTGGAAACAAAGCAACTTTTAGCCCAATTGTCACTGTGGAACCAAGAAGACGGAAA
TTCCATAAACCAATCACAATGACCATTCCGGTGCCCCCGCCCTCAGGAGAAGGTGTATCCAATGGATACAAAGGG
GACACTACACCCAATCTGCGTCTTCTCTGTAGCATTACAGGGGGCACTTCGCCTGCTCAGTGGGAAGACATCACA
GGAACAACTCCTTTGACGTTTATAAAAGATTGTGTCTCCTTTACAACCAATGTTTCAGCCAGATTTTGGCTTGCA
GACTGCCATCAAGTTTTAGAAACTGTGGGGTTAGCCACGCAACTGTACAGAGAATTGATATGTGTTCCATATATG
GCCAAGTTTGTTGTTTTTGCCAAAATGAATGATCCCGTAGAATCTTCCTTGCGATGTTTCTGCATGACAGATGAC
AAAGTGGACAAAACTTTAGAGCAACAAGAGAATTTTGAGGAAGTCGCAAGAAGCAAAGATATTGAGGTTCTGGAA
GGAAAACCTATTTATGTTGATTGTTATGGAAATTTGGCCCCACTTACCAAAGGAGGACAGCAACTTGTTTTTAAC
TTTTATTCTTTCAAAGAAAATAGACTGCCATTTTCCATCAAGATTAGAGACACCAGCCAAGAGCCCTGTGGTCGT
CTGTCTTTTCTGAAAGAACCAAAGACAACAAAAGGACTGCCTCAAACAGCGGTTTGCAACTTAAATATCACTCTG
CCAGCACATAAAAAGGAGACAGAGTCAGATCAAGATGATGAGATTGAGAAAACAGATAGACGACAGAGCTTCGCA
TCCTTAGCTTTACGTAAGCGCTACAGCTACTTGACTGAGCCTGGAATGATTGAACGGAGTACAGGAGCAACAAGA
TCCCTCCCCACCACTTACTCATACAAGCCATTCTTTTCTACAAGACCATACCAGTCCTGGACAACAGCTCCGATT
ACAGTGCCTGGGCCAGCCAAGTCAGGCTTCACTTCCTTATCAAGTTCTTCCTCTAATACGCCATCAGCTTCTCCG
TTAAAATCAATATGGTCTGTTTCGACACCTTCTCCAATCAAATCCACATTAGGCGCGTCAACTACATCTTCAGTT
AAATCCATTAGTGACGTGGCATCTCCAATTAGATCCTTACGGACAATGTCTTCGCCGATAAAAACTGTGGTGTCA
CAATCTCCATACAATATCCAGGTTTCCTCTGGTACCCTGGCTAGAGCTCCAGCAGTCACGGAAGCTACGCCCTTA
AAAGGGCTGGCATCCAATTCTACGTTTTCCTCTCGAACCTCTCCAGTGACTACAGCAGGGTCTCTTTTGGAGAGG
TCATCAATTACTATGACACCCCCTGCCTCCCCCAAATCAAACATTAATATGTATTCCTCAAGTTTGCCATTTAAG
TCAATTATTACATCAGCAGCACCGCTAATATCTTCACCTTTAAAGTCAGTGGTGTCTCCAGTTAAATCACGAGTT
GATGTCATTTCATCAGCCAAAATTACAATGGCATCTTCTCTCTCATCACCTGTGAAGCAGATGCCTGGACATGCA
GAGGTAGCATTAGTCAATGGATCTATTTCCCCTCTAAAATATGCATCATCCTCAACTTTAATTAATGGATGCAAA
GCCACTGCCACGTTACAGGAAAAAATTTCTTCTGCTACAAACTCTGTGAGCTCTGTGGTCAGTGCAGCCACTGAC
ACAGTTGAGAAAGTGTTTTCTACCACGACTGCAATGCCATTTTCCCCACTCAGGTCATATGTTTCTGCAGCACCA
TCAGCTTTTCAGTCTCTAAGAACTCCTTCCGCAAGTGCACTCTATACATCCCTTGGGTCGTCAATATCTGCAACT
ACCTCATCTGTAACTTCATCAATTATAACAGTGCCAGTATACTCTGTAGTCAATGTTTTGCCAGAACCAGCATTA
AAGAAACTTCCAGACTCTAATTCATTTACAAAATCAGCAGCAGCCTTGCTGTCACCCATTAAAACATTGACTACG
GAGACACATCCTCAGCCTCACTTCAGTCGAACTTCATCTCCAGTTAAGTCATCTTTGTTCCTTGCACCCTCTGCC
CTTAAGTTGTCTACACCATCTTCTTTATCTTCCAGTCAGGAGATACTAAAAGATGTAGCTGAAATGAAAGAGGAC
CTAATGCGGATGACCGCAATACTACAGACAGATGTGCCTGAGGAGAAGCCATTCCAACCTGAACTCCCAAAGGAA
GGGAGAATAGATGATGAAGAACCTTTCAAAATTGTAGAGAAAGTAAAGGAAGACTTAGTGAAAGTTAGTGAAATC
CTTAAAAAGGATGTATGTGTAGATAATAAAGGATCACCCAAATCACCAAAGAGTGACAAAGGACACTCTCCTGAA
GATGACTGGATAGAATTTAGTTCGGAAGAAATCCGGGAAGCCAGACAACAAGCTGCTGCGAGCCAGTCTCCATCT
CTGCCAGAGAGAGTGCAAGTAAAAGCAAAAGCCGCCTCCGAAAAGGATTATAACTTGACCAAAGTTATTGATTAC
CTAACAAATGATATTGGGAGTAGTTCACTGACAAACTTAAAATACAAGTTTGAGGATGCAAAGAAGGATGGTGAG
GGAGGACAGAAAAGAGTTTTAAAACCAGCAATTGCTTTGCAGGAACACAAACTCAAAATGCCTCCAGCCTCCATG
AGGACTTCCACCTCTGAGAAAGAATTGTGTAAAATGGCTGATTCCTTTTTTGGAACAGATACTATTTTAGAGTCT
CCTGATGACTTTTCTCAACACGACCAAGATAAAAGTCCCTTGTCTGACAGTGGCTTTGAAACAAGAAGTGAAAAG
ACACCTTCAGCCCCACAAAGCGCTGAAACGACTGGTCCTAAACCACTTTTTCATGAAGTTCCCATCCCTCCTGTT
ATTACAGAAACAAGAACTGAAGTGGTTCATGTTATCAGGAGCTATGATCCCTCAGCTGGGGATGTTCCCCAGACC
CAACCAGAGGAGCCTGTGTCACCTAAACCTTCACCTACTTTTATGGAATTGGAACCAAAGCCCACCACCTCTAGT
ATTAAAGAAAAGGTTAAAGCATTTCAAATGAAAGCCAGTAGTGAAGAAGATGACCACAATCGGGTTTTAAGCAAA
GGCATGCGTGTTAAAGAAGAGACTCACATAACCACAACCACCAGAATGGTTTATCATTCTCCACCAGGCGGTGAA
GGTGCATCTGAAAGAATTGAAGAAACCATGTCAGTCCATGACATCATGAAGGCCTTTCAGTCCGGGCGGGATCCT
TCCAAAGAACTGGCAGGTCTGTTTGAACATAAGTCGGCAGTGTCTCCAGATGTTCACAAGTCTGCTGCTGAAACC
TCAGCCCAGCATGCAGAGAAGGACAACCAAATGAAACCCAAACTGGAGCGTATAATAGAAGTCCACATCGAAAAA

FIGURE 1760C

GGTAACCAAGCTGAGCCCACTGAAGTCATTATTAGAGAAACCAAAAAGCATCCAGAAAAAGAAATGTATGTATAT
CAGAAAGACTTATCCCGGGGAGATATTAACCTAAAAGATTTTCTGCCAGAAAAACACGATGCTTTTCCTTGTTCA
GAGGAACAGGGTCAGCAAGAAGAAGAAGAACTTACTGCTGAAGAGTCATTGCCTTCTTATCTGGAGTCTTCCAGA
GTAAACACTCCTGTGTCCCAAGAAGAAGATAGCCGCCCTAGTTCTGCTCAACTCATATCTGATGACTCTTATAAA
ACATTGAAGCTTTTGAGTCAACACTCAATAGAATACCATGACGATGAGTTGTCAGAACTAAGAGGGGAGTCTTAC
AGGTTTGCTGAGAAAATGCTTCTGTCAGAAAAGCTAGATGTGTCTCATTCTGATACTGAGGAATCGGTTACAGAC
CATGCAGGACCCCCTAGCTCAGAGTTACAGGGGTCTGATAAGCGGTCCAGAGAAAAAATAGCCACTGCCCCCAAA
AAAGAAATTCTCTCCAAAATCTATAAAGATGTTTCTGAAAATGGTGTAGGTAAAGTGTCTAAAGATGAGCATTTT
GATAAAGTGACAGTGTTGCACTATTCTGGCAATGTTAGTAGTCCAAAACATGCCATGTGGATGCGCTTTACTGAG
GACAGATTAGACAGAGGTAGAGAGAAGTTGATATATGAAGATAGGGTGGACAGGACTGTGAAGGAGGCTGAAGAA
AAACTGACTGAAGTGTCACAGTTTTTTCGTGACAAAACTGAAAAGCTAAATGATGAACTGCAGTCCCCAGAGAAA
AAGGCACGCCCTAAAAATGGCAAAGAATATTCTTCTCAAAGCCCTACCAGTAGCAGCCCTGAGAAAGTGCTACTG
ACAGAACTGCTGGCATCCAATGATGAGTGGGTTAAGGCAAGACAGCATGGCCCTGATGGACAAGGCTTCCCCAAG
GCCGAGGAGAAGGCACCCAGTCTGCCCAGCAGCCCAGAGAAGATGGTTCTCTCCCAACAGACTGAGGACAGCAAG
TCCACAGTGGAAGCCAAAGGAAGTATTTCACAGAGCAAAGCACCAGATGGGCCCCAGTCTGGATTCCAGCTCAAA
CAATCTAAACTCAGTTCCATTAGATTAAAATTTGAACAAGGCACACACGCAAAAAGTAAGGACATGTCTCAAGAA
GACAGAAAGTCAGATGGCCAGTCCAGAATCCCAGTTAAAAAAATACAGGAGAGCAAGCTACCCGTCTACCAAGTT
TTTGCTAGAGAAAAACAGCAGAAGGCCATAGACCTCCCAGATGAAAGTGTATCTGTGCAAAAAGATTTTATGGTA
TTAAAAACCAAAGATGAGCATGCCCAAAGCAACGAAATTGTTGTAAATGATTCTGGCTCTGATAATGTGAAAAAA
CAGAGAACTGAAATGTCAAGTAAAGCAATGCCTGACTCTTTTTCTGAGCAGCAGGCTAAAGACTTGGCATGTCAT
ATAACCTCAGATTTAGCAACTAGGGGACCATGGGACAAAAAGGTCTTTAGAACATGGGAGAGTTCGGGAGCCACT
AACAATAAGTCTCAGAAAGAAAAACTTTCGCATGTACTTGTTCATGATGTAAGAGAGAATCACATTGGTCACCCT
GAGAGTAAAAGTGTTGATCAAAAGAATGAATTTATGTCTGTGACTGAGAGAGAACGCAAATTGTTAACAAACGGC
TCTCTCTCAGAAATTAAAGAAATGACTGTAAAATCTCCCTCCAAAAAAGTCTTATATAGGGAATATGTTGTGAAA
GAAGGGGACCATCCAGGCGGATTGCTTGATCAGCCTTCCAGGAGGAGCGAGAGCTCAGCAGTGTCACACATTCCC
GTCAGAGTTGCTGATGAGAGGAGAATGCTGTCTTCTAATATTCCCGATGGTTTTTGTGAACAGTCGGCATTTCCA
AAACATGAACTATCACAAAAATTGTCCCAGTCAAGCATGAGTAAAGAGACAGTTGAGACACAGCACTTTAATTCT
ATAGAAGATGAAAAAGTTACCTATTCAGAAATCAGCAAAGTTTCCAAACACCAGAGTTATGTAGGTTTATGCCCA
CCTCTCGAGGAAACCGAAACCTCCCCCACCAAATCTCCTGATTCTTTAGAGTTTAGCCCAGGAAAGGAATCTCCC
TCTAGTGATGTATTCGACCACAGTCCCATTGATGGATTGGAAAAACTCGCACCACTAGCCCAGACAGAGGGAGGG
AAAGAGATAAAAACTTTACCCGTTTATGTCAGTTTTGTACAAGTGGGGAAGCAATATGAAAAGGAGATACAACAA
GGAGGTGTAAAAAAAATCATAAGTCAGGAATGTAAGACAGTACAAGAAACCAGGGGGACCTTTTATACAACTAGA
CAGCAAAAGCAACCTCCTTCTCCCCAAGGTAGTCCAGAAGATGATACTCTAGAGCAAGTATCCTTTCTAGACAGC
TCTGGGAAAAGCCCTTTAACCCCAGAAACACCCAGTTCAGAGGAAGTGAGTTATGAATTTACATCTAAGACACCT
GACTCGCTCATAGCTTATATACCAGGCAAACCCAGCCCAATTCCCGAGGTTTCTGAGGAGTCAGAGGAGGAGGAA
CAGGCCAAGTCAACCTCCCTTAAGCAGACTACAGTGGAGGAAACAGCAGTTGAGCGTGAAATGCCTAATGACGTG
AGCAAAGACTCTAACCAAAGACCCAAAAATAACAGAGTTGCCTATATTGAATTTCCCCCTCCTCCACCACTGGAT
GCGGACCAGATTGAGTCAGATAAGAAGCATCATTATCTCCCAGAAAAAGAGGTTGACATGATTGAAGTCAATCTG
CAAGATGAGCATGACAAGTACCAGCTGGCTGAACCTGTCATTAGAGTGCAGCCACCTTCACCAGTTCCTCCCGGG
GCAGACGTCAGTGATTCAAGCGATGACGAATCTATTTATCAGCCAGTCCCAGTTAAAAAATATACCTTCAAATTA
AAGGAAGTGGACGATGAACAAAAAGAAAAACCCAAAGCTTCTGCTGAAAAGGCTTCCAACCAGAAAGAACTGGAA
AGTAATGGATCTGGAAAAGATAATGAATTTGGCCTTGGCCTTGATTCACCTCAGAATGAAATTGCCCAGAATGGG
AACAACGACCAGTCCATCACAGAGTGTTCCATTGCCACCACAGCAGAGTTTTCTCATGACACGGATGCCACAGAG
ATCGACTCTCTGGATGGCTATGACCTGCAAGATGAAGATGATGGCTTGACAGAGAGTGATTCTAAACTCCCAATT
CAAGCCATGGAAATTAAGAAAGATATCTGGAACACAGAGGGCATTCTGAAGCCAGCTGACCGCTCTTTTAGCCAA
AGTAAACTTGAAGTTATCGAGGAGGAGGGAAAGGTGGGACCAGATGAGGACAAGCCACCTTCTAAAAGTTCTTCA
TCTGAAAAGACTCCTGATAAGACTGATCAGAAGTCAGGGGCCCAGTTCTTCACACTGGAAGGCAGACATCCTGAC
AGATCAGTGTTTCCTGATACTTACTTCAGTTACAAAGTAGATGAAGAATTTGCCACTCCTTTTAAAACAGTAGCT

FIGURE 1760D

ACCAAAGGTCTAGATTTTGACCCTTGGTCTAATAACCGAGGGGATGATGAAGTTTTTGACAGTAAATCACGGGAA
GATGAAACTAAGCCATTTGGGCTGGCGGTAGAAGACCGCTCTCCAGCAACAACCCCTGATACAACGCCAGCCAGA
ACGCCAACTGATGAAAGTACCCCAACTAGTGAGCCTAACCCCTTCCCATTTCATGAAGGAAAAATGTTTGAGATG
ACTCGCAGTGGTGCAATTGACATGAGCAAGAGGGATTTTGTTGAAGAGAGGCTCCAATTTTTCCAGATTGGTGAG
CATACTTCTGAAGGGAAGTCAGGGGACCAGGGGGAAGGGGATAAAAGTATGGTCACTGCCACACCACAGCCACAG
TCAGGGGACACCACTGTAGAAACCAATCTAGAGAGAAATGTAGAGACACCTACAGTGGAACCTAACCCCAGCATC
CCGACCAGCGGAGAGTGTCAGGAAGGCACATCCAGTAGTGGCTCCCTGGAGAAATCAGCAGCAGCCACTAACACC
TCTAAAGTTGACCCCAAGTTGCGCACGCCTATAAAAATGGGAATTTCTGCATCCACCATGACCATGAAGAAAGAA
GGCCCTGGAGAAATAACAGATAAGATAGAAGCGGTGATGACCAGTTGTCAGGGATTAGAAAATGAAACTATAACA
ATGATTTCAAATACAGCCAATAGCCAGATGGGCGTTAGGCCCCATGAAAAACATGATTTTCAAAAAGATAACTTT
AATAACAACAACAATTTGGATTCTTCCACTATACAGACAGATAACATTATGAGTAATATAGTTCTGACAGAACAT
TCTGCACCCACTTGTACCACAGAGAAAGATAACCCAGTGAAAGTCTCATCAGGAAAAAAGACAGGGGTACTACAA
GGACACTGTGTAAGAGATAAGCAGAAAGTTCTTGGAGAACAGCAAAAAACAAAGGAATTGATAGGGATTAGGCAA
AAATCCAAACTTCCCATAAAGGCCACTTCACCAAAAGATACCTTCCCACCGAACCATATGTCAAACACTAAAGCA
AGTAAAATGAAGCAGGTTAGTCAATCCGAGAAAACCAAAGCCCTTACTACTTCTTCATGTGTAGATGTAAAGTCC
AGAATTCCAGTGAAAAACACACCCAGGGATAACATAATTGCAGTTAGAAAAGCATGTGCCACACAAAAGCAAGGG
CAGCCAGAGAAAGGCAAGGCCAAACAGCTTCCATCCAAGTTGCCAGTAAAGGTAAGATCCACCTGTGTCACTACC
ACCACCACCACTGCCACCACCACCACCACTACCACCACTACCACCACCACCAGCTGCACAGTTAAAGTTAGGAAA
AGTCAGCTCAAGGAAGTATGTAAACATTCCATTGAATATTTTAAGGGAATTAGTGGTGAGACCTTAAAGCTTGTG
GACCGCCTCTCTGAAGAAGAAAAAAAGATGCAGTCCGAGTTGTCCGATGAGGAAGAAAGTACCTCAAGAAACACG
TCGTTGTCCGAGACTTCCCGGGGTGGCCAGCCTTCGGTTACAACGAAGTCTGCTAGAGATAAGAAAACAGAGGCA
GCACCTTTAAAATCAAAGAGTGAAAAGGCCGGCAGTGAGAAAAGGAGCAGTAGAAGGACTGGTCCACAGAGTCCA
TGTGAACGGACAGATATCAGGATGGCAATAGTAGCCGATCACCTGGGACTTAGTTGGACAGAACTGGCAAGGGAA
CTGAATTTTTCAGTGGATGAAATCAATCAAATACGTGTGGAAAATCCAAATTCTTTAATTTCTCAGAGCTTCATG
TTATTAAAAAAATGGGTTACCAGAGACGGAAAAAATGCCACAACTGATGCCTTAACTTCGGTCTTGACAAAAATT
AATCGAATAGATATAGTGACACTGCTAGAAGGACCAATATTTGATTATGGAAATATTTCAGGCACCAGAAGTTTT
GCAGATGAGAACAATGTTTTCCATGACCCTGTTGATGGTTGGCAGAATGAGACATCAAGTGGAAACCTAGAGTCC
TGCGCTCAAGCTCGAAGAGTAACTGGTGGGTTACTAGATCGACTGGATGACAGCCCTGACCAGTGTAGAGATTCC
ATTACCTCATATCTCAAAGGAGAAGCTGGCAAATTTGAAGCAAATGGAAGCCATACAGAAATCACTCCAGAAGCA
AAGACAAAATCTTACTTTCCAGAATCCCAAAATGATGTAGGAAAACAGAGTACCAAGGAAACTCTGAAACCAAAA
ATACATGGATCTGGTCATGTTGAAGAACCAGCATCACCACTAGCAGCATATCAGAAATCTCTAGAAGAAACCAGC
AAGCTTATAATAGAAGAGACTAAACCCTGTGTGCCTGTCAGTATGAAAAAGATGAGTAGGACTTCTCCAGCAGAT
GGCAAGCCAAGGCTTAGCCTCCATGAAGAAGAGGGGTCCAGTGGGTCTGAGCAAAAGCAGGGAGAAGGTTTTAAG
GTGAAAACGAAGAAAGAAATCCGGCATGTGGAAAAGAAGAGCCACTCGTAACAGCGAACGGTCAGTCAAGGATCA
TAAGTTTTTACTGCCAGTATTGAGAAATTCGTGGAAGAAATGTCAGCAGGAAGTAAAAATTCACCGAGAAGTGTG
TGTGTGTTCGCTGCTTCCACACATTAATGGCATGATTTTTTTTATGCAAAAAGAAAAGAAAAGAAAACCACCCAC
ATTTTAATTTAGCATGAGCCAATTTACAGAGCATGGAAATCACTTTCATTTCCGGATTGGCGCGTGTGCAATTAG
CAATGCAGTGTATATACAAGAAGCCATGCTGTTAACAGTTTATCTCAAGTAATTTGGTGTCATTTACAAAAGGAA
GAAATTCTTGCCATCAGAAGGGACAGAAGGAGATGGAATGATCAAATCACAGAGAAACACTAAAATTACTAAATC
TACAACAGCTCGCCTTATTTTTCTTGGACCCAAACTGTCAGGGTATAAACACTATTTGTTTCTTTTTTAAAACAT
CGATAGTTTTGCTGTAAATAATAACACTGTATAAATTCTAACAGAAAAATAGAATAAAATGTTGATAAGGCACTG
CCTCTTAGAACACAAACAGAATATTGCAAATGCATTTAACAAATAGGGGTCTCAAGTGACTTCACCCTAGAAGAG
GAGGGAGGGATTCTGGGTGGGGGTGACTCTTCACTGATTCTTGTATATTAGCAATTATAATGTTTGTATATGCAA
AACTGCTAGCTTGATTTTAAAAAAAAACAAATCTTTAAAATCTGCTGCAAATTTAAATAATTCCCAAAATGAGGA
ATTCTGTAGTTCTGTGAAAAATTTTTTTCTTCAGAATACTAATATTTTGATGCATGTGTATCACCTTATTTTGAT
TAAATCTTTTCCAATTTTGCAAACACTACAGTATACTGCAACACAAAAGATTTTATCTGTAAACACAAAGCCCTT
CATCTAATATTTGTTGCTATTGCCAATTTTTCAATGAAATGACCTAAAAACAACAAAAAAAAATAACCTATACGG
TAGTTGCTTTAGGGGGTGGGGGGATGCTATCTGTTAGTGCTTAAAAGGGGGTAAATGCTTGCCGCTTTAGAGGTG

FIGURE 1760E

GATGGTGCTCATAAAAGGCCCCAGTCGGGGGTATTTAAAAAGGACTGAACAGAAATCCTTAGCTAGTAGAATGGC
AGCACGCTGTAAAATTATTACTGTATTGTGTACTGGCTATAAGATGTAGACACCTTTCAGTAAGCCAATCATTTG
TAACCATTCTAGCAGTGTCATATTAGGTTAATAAGGCTGCTGTGTTTTAAAGGGCATTTTTATTTGGGTTTTGGT
GAAATTCTTTAATTTGTTGATTATATTCACATAAAATCAGCATTCATTGACACATAGCTCTAATGACATATGTAT
GAAAAACCATACACTGGATGACCTAGTCGATTATTTAAGCATAAAATAAATTGTGTTAAACTCTTCACCT

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FIGURE 1761

MAHAASQLKKNRDLEINAEEEPEKKRKHRKRSRDRKKKSDANASYLRAARAGHLEKALDYIKNGVDINICNQNGL
NALHLASKEGHVEVVSELLQREANVDAATKKGNTALHIASLAGQAEVVKVLVTNGANVNAQSQNGFTPLYMAAQE
NHLEVVKFLLDNGASQSLATEDGFTPLAVALQQGHDQVVSLLLENDTKGKVRLPALHIAARKDDTKAAALLLQND
NNADVESKSGFTPLHIAAHYGNINVATLLLNRAAAVDFTARNDITPLHVASKRGNANMVKLLLDRGAKIDAKTRD
GLTPLHCGARSGHEQVVEMLLDRAAPILSKTKNGLSPLHMATQGDHLNCVQLLLQHNVPVDDVTNDYLTALHVAA
HCGHYKVAKVLLDKKANPNAKALNGFTPLHIACKKNRIKVMELLLKHGASIQAVTESGLTPIHVAAFMGHVNIVS
QLMHHGASPNTTNVRGETALHMAARSGQAEVVRYLVQDGAQVEAKAKDDQTPLHISARLGKADIVQQLLQQGASP
NAATTSGYTPLHLSAREGHEDVAAFLLDHGASLSITTKKGFTPLHVAAKYGKLEVANLLLQKSASPDAAGKSGLT
PLHVAAHYDNQKVALLLLDQGASPHAAAKNGYTPLHIAAKKNQMDIATTLLEYGADANAVTRQGIASVHLAAQEG
HVDMVSLLLGRNANVNLSNKSGLTPLHLAAQEDRVNVAEVLVNQGAHVDAQTKMGYTPLHVGCHYGNIKIVNFLL
QHSAKVNAKTKNGYTPLHQAAQQGHTHIINVLLQNNASPNELTVNGNTALGIARRLGYISVVDTLKIVTEETMTT
TTVTEKHKMNVPETMNEVLDMSDDEVRKANAPEMLSDGEYISDVEEGEDAMTGDTDKYLGPQDLKELGDDSLPAE
GYMGFSLGARSASLRSFSSDRSYTLNRSSYARDSMMIEELLVPSKEQHLTFTREFDSDSLRHYSWAADTLDNVNL
VSSPIHSGFLVSFMVDARGGSMRGSRHHGMRIIIPPRKCTAPTRITCRLVKRHKLANPPPHGERRGISSRLVEMG
PAGAQFLGPVIVEIPHFGSMRGKERELIVLRSENGETWKEHQFDSKNEDLTELLNGMDEELDSPEELGKKRICRI
ITKDFPQYFAVVSRIKQESNQIGPEGGILSSTTVPLVQASFPEGALTKRIRVGLQAQPVPDEIVKKILGNKATFS
PIVTVEPRRRKFHKPITMTIPVPPPSGEGVSNGYKGDTTPNLRLLCSITGGTSPAQWEDITGTTPLTFIKDCVSF
TTNVSARFWLADCHQVLETVGLATQLYRELICVPYMAKFVVFAKMNDPVESSLRCFCMTDDKVDKTLEQQENFEE
VARSKDIEVLEGKPIYVDCYGNLAPLTKGGQQLVFNFYSFKENRLPFSIKIRDTSQEPCGRLSFLKEPKTTKGLP
QTAVCNLNITLPAHKKETESDQDDEIEKTDRRQSFASLALRKRYSYLTEPGMIERSTGATRSLPTTYSYKPFFST
RPYQSWTTAPITVPGPAKSGFTSLSSSSSNTPSASPLKSIWSVSTPSPIKSTLGASTTSSVKSISDVASPIRSLR
TMSSPIKTVVSQSPYNIQVSSGTLARAPAVTEATPLKGLASNSTFSSRTSPVTTAGSLLERSSITMTPPASPKSN
INMYSSSLPFKSIITSAAPLISSPLKSVVSPVKSRVDVISSAKITMASSLSSPVKQMPGHAEVALVNGSISPLKY
ASSSTLINGCKATATLQEKISSATNSVSSVVSAATDTVEKVFSTTTAMPFSPLRSYVSAAPSAFQSLRTPSASAL
YTSLGSSISATTSSVTSSIITVPVYSVVNVLPEPALKKLPDSNSFTKSAAALLSPIKTLTTETHPQPHFSRTSSP
VKSSLFLAPSALKLSTPSSLSSSQEILKDVAEMKEDLMRMTAILQTDVPEEKPFQPELPKEGRIDDEEPFKIVEK
VKEDLVKVSEILKKDVCVDNKGSPKSPKSDKGHSPEDDWIEFSSEEIREA

FIGURE 1762

GTGGGCAGCCGAGGCCGCGAACTGCATCATGGAGAATTTTGTAGCCACCTTGGCTAATGGGATGAGCCTCCAGCC
GCCTCTTGAAGAAGTGTCCTGTGGCCAGGCGGAAAGCAGTGAGAAGCCCAACGCTGAGGACATGACATCCAAAGA
TTACTACTTTGACTCCTACGCACACTTTGGCATCCACGAGGAGATGCTGAAGGACGAGGTGCGCACCCTCACTTA
CCGCAACTCCATGTTTCATAACCGGCACCTCTTCAAGGACAAGGTGGTGCTGGACGTCGGCTCGGGCACCGGCAT
CCTCTGCATGTTTGCTGCCAAGGCCGGGGCCCGCAAGGTCATCGGGATCGTGTGTTCCAGTATCTCTGATTATGC
GGTGAAGATCGTCAAAGCCAACAAGTTAGACCACGTGGTGACCATCATCAAGGGGAAGGTGGAGGAGGTGGAGCT
CCCAGTGGAGAAGGTGGCATCATCATCAGCGAGTGGATGGGCTACTGCCTCTTCTACGAGTCCATGCTCAACACC
GTGCTCTATGCCCGGGACAAGTGTGGCGCCCGATGGCCTCATCTTCCCAGACCGGGCCACGCTGTATGTGACGGC
CATCGAGGACCGGCAGTACAAAGACTACAAGATCCACTGGTGGGAGAACGTGTATGGCTTCGACATGTCTTGCAT
CAAAGATGTGGCCATTAAGGAGCCCCTAGTGGATGTCGTGGACCCCAAACAGCTGGTCACCAACGCCTGCCTCAT
AAAGGAGGTGGACATCTATACCGTCAAGGTGGAAGACCTGACCTTCACCTCCCCGTTCTGCCTGCAAGTGAAGCG
GAATGACTACGTGCACGCCCTGGTGGCCTACTTCAACATCGAGTTCACACGCTGCCACAAGAGGACCGGCTTCTC
CACCAGCCCCGAGTCCCCGTACACGCACTGGAAGCAGACGGTGTTCTACATGGAGGACTACCTGACCGTGAAGAC
GGGCGAGGAGATCTTCGGCACCATCGGCATGCGGCCCAACGCCAAGAACAACCGGGACCTGGACTTCACCATCGA
CCTGGACTTCAAGGGCCAGCTGTGCGAGCTGTCCTGCTCCACCGACTACCGGATGCGCTGAGGCCCGGCTCTCCC
GCCCTGCACGAGCCCAGGGGCTGAGCGTTCCTAGGCGGTTTCGGGGCTCCCCCTTCCTCTCCCTCCCTCCCGCAG
AAGGGGGTTTTAGGGGCCTGGGCTGGGGGGATGGGGAGGGCACATCGTGACTGTGTTTTTCATAACTTATGTTTT
TATATGGTTGCATTTACGCCAATAAATCCTCAGCTGGG

FIGURE 1763

MENFVATLANGMSLQPPLEEVSCGQAESSEKPNAEDMTSKDYYFDSYAHFGIHEEMLKDEVRTLTYRNSMFHNRH
LFKDKVVLDVGSGTGILCMFAAKAGARKVIGIVCSSISDYAVKIVKANKLDHVVTIIKGKVEEVELPVEKVASSS
ASGWATASSTSPCSTPCSMPGTSVAPDGLIFPDRATLYVTAIEDRQYKDYKIHWWENVYGFDMSCIKDVAIKEPL
VDVVDPKQLVTNACLIKEVDIYTVKVEDLTFTSPFCLQVKRNDYVHALVAYFNIEFTRCHKRTGFSTSPESPYTH
WKQTVFYMEDYLTVKTGEEIFGTIGMRPNAKNNRDLDFTIDLDFKGQLCELSCSTDYRMR

FIGURE 1764A

GTTCCCCGCGGAGGTGGCAGCCCTGGGCCGCGGCGTTCCGGAACCCCCGCACCCACGGCGCGGTGCCCCACGGTG
CCCGCGAGCGCCGCCCCCGCTGGCTAGCCGCGCCTCGCTCCGCCCTGGACGCCGCCGGTCCCGGCGCGGAGGTGC
GGCGGGGAGTGGGAGCCGGCCCGGCTCAGTCTGATTTACGGCTCTGCTGAAAACCGCTTCGCTCCCGCAGCATCA
GCACCGGAGGCGGCGGCTGCAGCAGCAGCAACAAGTCGGGACTTTTAGAGTA**ATG**CAACAGAAGGCTTTTGAGGA
AAGCAGATATCCCTGGCAGGAGTCCTTTGAGAATGTTGCTGTGTGCCTGCCATTACGCTGCCCGAGGTGTGGAGA
CCATACCAGATTTAGAAGCTTGTCATCCTTGAGGGCCCATCTGGAGTTCAGTCACAGCTACGAAGAAAGAACCCT
CTTGACAAAATGCAGTCTCTTTCCATCCCTCAAAGACACAGACCTAGTCACTTCCTCAGAACTCCTGAAACCGGG
AAAATTGCAGAGCAGTGGCAACGTGGTAAAGCAGAAACCGAGCTATGTTAACTTGTACAGCATTTCACATGAACA
TTCCAAGGACAGGAAGCCATTTGAGGTGGTGGCAGAGAGGCCTGTGTCCTATGTGCAGACCTACACTGCCATGGA
CCTCCATGCAGACTCGCTGGATGGGACACGGTCGGGTCCTGGACTGCCCACCTCAGACACCAAAGCTTCTTTCGA
GGCACATGTCAGAGAAAAATTCAATCGAATGGTTGAGGCTGTGGATAGGACCATTGAGAAGAGAATTGATAAACT
CACCAAAGAGTTGGCCCAGAAAACTGCGGAACTGTTGGAAGTTCGGGCAGCTTTTGTGCAGCTGACTCAGAAAAA
GCAGGAAGTTCAGAGACGAGAGCGGGCCTTAAACAGACAGGTGGACGTGGCCGTGGAAATGATAGCTGTACTGAG
GCAACGCCTGACGGAATCTGAGGAGGAGCTTCTTAGGAAAGAAGAAGAAGTTGTCACATTCAACCATTTCCTGGA
AGCGGCAGCTGAGAAGGAGGTTCAAGGGAAAGCCCGGCTCCAGGACTTTATTGAGAATCTGTTACAGCGGGTAGA
ACTGGCGGAGAAGCAGCTTGAGTACTATCAGAGCCAGCAGGCCTCTGGCTTTGTCCGTGATCTCAGCGGGCACGT
GCTTACAGACATCTCCTCAAATAGGAAGCCCAAATGCCTAAGCCGAGGGCACCCGCATTCGGTATGTAACCACCC
TGATCTCAAGTCCCATTTCCACCCAAAGGGAAGGAACCACCTGAAAAAGGCCAAGGATGACAGAGCCAGCATGCA
GCCTGCCAAGGCCATTCACGAACAGGCTGAGTCCTCAAGAGACCTCTGCAGACCTCCAAAGAAAGGGGAGCTCCT
GGGGTTTGGCCGCAAAGGCAACATCAGGCCCAAAATGGCTAAAAAAAAGCCAACAGCCATTGTGAACATCATC**TA**
AAAGGGTGGGTGGTGCTGGACCAATCATCGCTGGGCTTTGGGGAACGTTGTTCCAGGAGCCAACAGTAATGTCTT
TCTGGAAACATTCCATAGTAAGACACATTGGAAAAGCCAAGGGCATAACACAGGCAAGCACCTCAATTAACCAGA
GCTTAGCAAATGGGAATCTTAGTGAACCAGAATTTTATTATAACCCCCTTTTAGAAGCTTGCAAATTACAGAAAG
AATAAAAAAAATTAAATCAATCTTAAAGCTCTAACTTCTAAAGTAACTGGCCCAGTCTCCAGTAATCTTGGCATCT
GGGCTTCTATGCAGTGGTCACTAATTTTCAGGACCAAGGCCACACAAAATGTCAGGCCTAGGGAGAAAATTCATC
TGTGCCCACTGCTCTCCAAAGTGCGAGGCAAGGAATGGCAGTGTAAAGTTCTGTTAATAGCAGTAAAATGAAAAT
ATTTGTGTTTGTGTATAACCTTCCCCTCAGCTAATTTGAAAGCCTCCAAAATAAGGATTCCCATTCCCCGAGTAT
TCTGGTTAATCAAGATTTCAATTTCTGGGTTGCTCAAGGGACTCGTTCAGTCAGACTTCAGTTCTCATTCCGACA
GGGTGTCTTTCAGTTCGTTTGTTTGATTGAGGTTTTTTGGTGGCCTAGATGCATGTTTATTCAGATTTTGGTACA
CCTCTGCCGTCTTCTTTGGCTGAGTATTCTGCACCCACAGACCATGCTGCCAGCCTCTATCTTAATAGCTGCTTC
TGTGGATATGGCTGGGGAGCGAAGTAAAATCCTCTTTTGATTAGCACCCAGCATGGGCTGGGTGGCTAGGTGGTT
GGAATGACAGTGGACTGCACGCTTGGTGCATCGTGCATCGTGACCATCCTGGAAGCACTGCGGGTGTCGCCAAGC
CCTTTCCTAAGACCTGCTTCCCGGCCAGTGTCAGTGGCCCTCTCTCTCTCTGCTATGGGCATGACTTTCTCTTCG
CTGGCTTAACTTTTCCACTGGGTGGTTCACTTTGCCTCCTGCTGCTTCTGTGCCCTGTTAAGGCTTCAGGTATCT
TTCAACCAAGTATCTGGAGTGTTCACTCTATGTTGCATTCTAAAGTAATTTCTGAAATAAACAATGCATGTAGGA
GCCAGAATCTGACACTGTCTTCCCCTCCTTCCCTCCCTAAAATGGCTTTAGTTTCCACAAAGAGCTGTTAAGAAT
TTCCTGCTGTATGATTTTCCTCAAGAATGAATTTCCATGTTATTTTTTCCTTAAATTTAGCAATATCATCAGGTC
TCTTGCAGAGTTTACAAGTGCTGACATTCTTCTGAAAACAGGAATAATTTTGTCCACAAATATATACATATATAC
ATATATATAACACATACAAAATATATATGTTAAGTATATTAATAATTTATTTTTAAATACTCATGGAGAAAGTGT
GTGTTTGTGGTGGGTGGTTTTTAAACTATATATGTTTGTTCATGTAAACTGAATTCTCTTATTTAAAAAATCAAA
ACTGTAACGTAATTAACATTGGCAGAATTATGATTGTTACTGCAATAAGCATCAAATTAGCAGCGCATTAAAAAT
AGGAAATAAAGCAGTTGCTTAAAATGCCAGTCAATTGAAAAGTGTAACTTATCATTATACAAACATTCTGAACCT
ACCATAATGAAAATGTTCTTGAATCTTCACTTTGACTTTCAGTTTATGGGGGGGTAGATCATTCATGTGATATAT
AAGCAGCTATCAAGTGGGCAAAAACATTGCTGTGAATAGCACTGTTTAGGCTAACATTGTAAAAATTGTAATGTT
ATAATTATTATTTATTTGGAGAATTAACTTCCCCCTCTAAAGTTATTTATTATTGATGCTTATACCATGATTGCA
CCTTAGCCTTTTACATACTAAAAACATGACTTGTTAGTTGTATTGCATGCTCTTTGTCCTGTAATGTGTGTGCAA
TGACAACTTGTTTCTGTTTTATTTAAAGTAACTGACATTTTGGATTTTCATCTAACATAGAGGGCATGGCAACTC
TCTTTGACAGTGGTACCCCATGATCTTCAGAAAGTACCATAATGTCATCCTACTCTACATTTCACAAGACGAATT

FIGURE 1764B

ATTTTGAGATTTGTTTATTATATTAAAATGTTTTTTTACGTTCCCACTAAATTTTGACCCCATATAAAGAAATGT
GTTATGTATGTTGTGCCTCCTTAGAGACATAAATTTAGTGTCAAAACATGGGAGATGGCTTACTCAGAAGCATAC
TCCACTTAACATACCATGGCCTGAGCTAAGTACCATGTCCTGTTTGTGTCTTATTTTTAAATATTTTCTTTGTCC
ACATGGGCCGTTGACCTTAGAGTTAAGGCGGTTGCTTTTTTGAAGAAATCACCAAAGTTTCTGGGAAACTATGTT
CAAGGTTGAAATGGAGAGTAGATTTAATTTTATTTGTCTTGTAGGGAAGAAATCTTCCTTTGAACCGCTTTTCTT
GCTTTTTCCCTTTTTCCCAAACTAGGTTACAGGTTCTTATCTGCAAGGTTCAAGTTGCTTAGACATTGTTTTCCA
GTATTCTGCAGGGCCAGTCAGTTGTACAGAAGTTGGAATATTCTGTTCCAGAATTAAAGAAGTTTTTAGATTATG
AAATATTATGATAATAAAGCTATATTTCTGACT

FIGURE 1765

MQQKAFEESRYPWQESFENVAVCLPLRCPRCGDHTRFRSLSSLRAHLEFSHSYEERTLLTKCSLFPSLKDTDLVT
SSELLKPGKLQSSGNVVKQKPSYVNLYSISHEHSKDRKPFEVVAERPVSYVQTYTAMDLHADSLDGTRSGPGLPT
SDTKASFEAHVREKFNRMVEAVDRTIEKRIDKLTKELAQKTAELLEVRAAFVQLTQKKQEVQRRERALNRQVDVA
VEMIAVLRQRLTESEEELLRKEEEVVTFNHFLEAAAEKEVQGKARLQDFIENLLQRVELAEKQLEYYQSQQASGF
VRDLSGHVLTDISSNRKPKCLSRGHPHSVCNHPDLKSHFHPKGRNHLKKAKDDRASMQPAKAIHEQAESSRDLCR
PPKKGELLGFGRKGNIRPKMAKKKPTAIVNII

FIGURE 1766

CTCCAGTCTCACCTCGGCTTGCAATGGACCCCAACTGCTCCTGCGAGGCTGGTGGCTCCTGCGCCTGCGCCGGCT
CCTGCAAGTGCAAAAAGTGCAAATGCACCTCCTGCAAGAAGAGCTGCTGCTCCTGTTGCCCCCTGGGCTGTGCCA
AGTGTGCCCAGGGCTGCATCTGCAAAGGGGCGTCAGAGAAGTGCAGCTGCTGTGCCTGATGTCGGGACAGCCCTG
CTGTCAGATGAAAACAGAATGACACGTAAAATCCGAGGTTTTTTTTTCTACAACTCCGACTCATTTGCTACATT
CCTTTTTTTCTGTGAAATATGTGAATAATAATTAAACACTTAGACTTGAAAAAAAAAAAAAAAAAAA

FIGURE 1767

MDPNCSCEAGGSCACAGSCKCKKCKCTSCKKSCCSCCPLGCAKCAQGCICKGASEKCSCCA

FIGURE 1768

GAGATACCCGGCCAGACACCCTCACCTGCGGTGCCCAGCTGCCCAGGCTGAGGCAAGAGAAGGCCAGAAACC**ATG**

CCCATGGGGTCTCTGCAACCGCTGGCCACCTTGTACCTGCTGGGGATGCTGGTCGCTTCCTGCCTCGGACGGCTC
AGCTGGTATGACCCAGATTTCCAGGCAAGGCTCACCCGTTCCAACTCGAAGTGCCAGGGCCAGCTGGAGGTCTAC
CTCAAGGACGGATGGCACATGGTTTGCAGCCAGAGCTGGGGCCGGAGCTCCAAGCAGTGGGAGGACCCCAGTCAA
GCGTCAAAAGTCTGCCAGCGGCTGAACTGTGGGGTGCCCTTAAGCCTTGGCCCCTTCCTTGTCACCTACACACCT
CAGAGCTCAATCATCTGCTACGGACAACTGGGCTCCTTCTCCAACTGCAGCCACAGCAGAAATGACATGTGTCAC
TCTCTGGGCCTGACCTGCTTAGAACCCCAGAAGACAACACCTCCAACGACAAGGCCCCCGCCCACCACAACTCCA
GAGCCCACAGCTCCTCCCAGGCTGCAGCTGGTGGCACAGTCTGGCGGCCAGCACTGTGCCGGCGTGGTGGAGTTC
TACAGCGGCAGCCTGGGGGGTACCATCAGCTATGAGGCCCAGGACAAGACCCAGGACCTGGAGAACTTCCTCTGC
AACAACCTCCAGTGTGGCTCCTTCTTGAAGCATCTGCCAGAGACTGAGGCAGGCAGAGCCCAAGACCCAGGGGAG
CCACGGGAACACCAGCCCTTGCCAATCCAATGGAAGATCCAGAACTCAAGCTGTACCTCCCTGGAGCATTGCTTC
AGGAAAATCAAGCCCCAGAAAAGTGGCCGAGTTCTTGCCCTCCTTTGCTCAGGTTTCCAGCCCAAGGTGCAGAGC
CGTCTGGTGGGGGGCAGCAGCATCTGTGAAGGCACCGTGGAGGTGCGCCAGGGGGCTCAGTGGGCAGCCCTGTGT
GACAGCTCTTCAGCCAGGAGCTCGCTGCGGTGGGAGGAGGTGTGCCGGGAGCAGCAGTGTGGCAGCGTCAACTCC
TATCGAGTGCTGGACGCTGGTGACCCAACATCCCGGGGGCTCTTCTGTCCCCATCAGAAGCTGTCCCAGTGCCAC
GAACTTTGGGAGAGAAATTCCTACTGCAAGAAGGTGTTTGTCACATGCCAGGATCCAAACCCCGCAGGCCTGGCC
GCAGGCACGGTGGCAAGCATCATCCTGGCCCTGGTGCTCCTGGTGGTGCTGCTGGTCGTGTGCGGCCCCCTTGCC
TACAAGAAGCTAGTGAAGAAATTCCGCCAGAAGAAGCAGCGCCAGTGGATTGGCCCAACGGGAATGAACCAAAAC
ATGTCTTTCCATCGCAACCACACGGCAACCGTCCGATCCCATGCTGAGAACCCCACAGCCTCCCACGTGGATAAC
GAATACAGCCAACCTCCCAGGAACTCCCGCCTGTCAGCTTATCCAGCTCTGGAAGGGGTTCTGCATCGCTCCTCC
ATGCAGCCTGACAACTCCTCCGACAGTGACTATGATCTGCATGGGGCTCAGAGGCTG**TAA**AGAACTGGGATCCAT
GAGCAAAAAGCCGAGAGCCAGACCTGTTTGTCCTGAGAAAACTGTCCGCTCTTCACTTGAAATCATGTCCCTATT
TCTACCCCGGCCAGAACATGGACAGAGGCCAGAAGCCTTCCGGACAGGCGCTGCTGCCCCGAGTGGCAGGCCAGC
TCACACTCTGCTGCACAACAGCTCGGCCGCCCCTCCACTTGTGGAAGCTGTGGTGGGCAGAGCCCCAAAACAAGC
AGCCTTCCAACTAGAGACTCGGGGGTGTCTGAAGGGGGCCCCCTTTCCCTGCCCGCTGGGGAGCGGCGTCTCAGT
GAAATCGGCTTTCTCCTCAGACTCTGTCCCTGGTAAGGAGTGACAAGGAAGCTCACAGCTGGGCGAGTGCATTTT
GAATAGTTTTTTGTAAGTAGTGCTTTTCCTCCTTCCTGACAAATCGAGCGCTTTGGCCTCTTCTGTGCAGCATCC
ACCCCTGCGGATCCCTCTGGGGAGGACAGGAAGGGGACTCCCGGAGACCTCTGCAGCCGTGGTGGTCAGAGGCTG
CTCACCTGAGCACAAAGACAGCTCTGCACATTCACCGCAGCTGCCAGCCAGGGGTCTGGGTGGGCACCACCCTGA
CCCACAGCGTCACCTCACTCCCTCTGTCTTATGACTCCCCTCCCCAACCCCCTCATCTAAAGACACCTTCCTTTC
CACTGGCTGTCAAGCCACAGGGCACCAGTGCCACCCAGGGCCCTGCACAAAGGGGCGCCTAGTAAACCTT

FIGURE 1769

MPMGSLQPLATLYLLGMLVASCLGRLSWYDPDFQARLTRSNSKCQGQLEVYLKDGWHMVCSQSWGRSSKQWEDPS
QASKVCQRLNCGVPLSLGPFLVTYTPQSSIICYGQLGSFSNCSHSRNDMCHSLGLTCLEPQKTTPPTTRPPPTTT
PEPTAPPRLQLVAQSGGQHCAGVVEFYSGSLGGTISYEAQDKTQDLENFLCNNLQCGSFLKHLPETEAGRAQDPG
EPREHQPLPIQWKIQNSSCTSLEHCFRKIKPQKSGRVLALLCSGFQPKVQSRLVGGSSICEGTVEVRQGAQWAAL
CDSSSARSSLRWEEVCREQQCGSVNSYRVLDAGDPTSRGLFCPHQKLSQCHELWERNSYCKKVFVTCQDPNPAGL
AAGTVASIILALVLLVVLLVVCGPLAYKKLVKKFRQKKQRQWIGPTGMNQNMSFHRNHTATVRSHAENPTASHVD
NEYSQPPRNSRLSAYPALEGVLHRSSMQPDNSSDSDYDLHGAQRL

FIGURE 1770

ACAGGGGTGAAGGCCCAGAGACCAGCAGAACGGCATCCCAGCCACGACGGCCACTTTGCTCTGTCTGCTGTCCGC
CACGGCCCTGCTCTGTTCCCTGGGACACCCCCGCCCCCACCTCCTCAGGCTGCCTGATCTGCCCAGCTTTCCAGC
TTTCCTCTGGATTCCGGCCTCTGGTCATCCCTCCCCACCCTCTCTCCAAGGCCCTCTCCTGGTCTCCCTTCTTCT
AGAACCCCTTCCTCCACCTCCCTCTCTGCAGAACTTCTCCTTTACCCCCCACCCCCCACCACTGCCCCCTTTCCT
TTTCTGACCTCCTTTTGGAGGGCTCAGCGCTGCCCAGACCATAGGAGAGATGTGGGAGGCTCAGTTCCTGGGCTT
GCTGTTTCTGCAGCCGCTTTGGGTGGCTCCAGTGAAGCCTCTCCAGCCAGGGGCTGAGGTCCCGGTGGTGTGGGC
CCAGGAGGGGGCTCCTGCCCAGCTCCCCTGCAGCCCCACAATCCCCCTCCAGGATCTCAGCCTTCTGCGAAGAGC
AGGGGTCACTTGGCAGCATCAGCCAGACAGTGGCCCGCCCGCTGCCGCCCCCGGCCATCCCCTGGCCCCCGGCCC
TCACCCGGCGGCGCCCTCCTCCTGGGGGCCCAGGCCCCGCCGCTACACGGTGCTGAGCGTGGGTCCCGGAGGCCT
GCGCAGCGGGAGGCTGCCCCTGCAGCCCCGCGTCCAGCTGGATGAGCGCGGCCGGCAGCGCGGGGACTTCTCGCT
ATGGCTGCGCCCAGCCCGGCGCGCGGACGCCGGCGAGTACCGCGCCGCGGTGCACCTCAGGGACCGCGCCCTCTC
CTGCCGCCTCCGTCTGCGCCTGGGCCAGGCCTCGATGACTGCCAGCCCCCCAGGATCTCTCAGAGCCTCCGACTG
GGTCATTTTGAACTGCTCCTTCAGCCGCCCTGACCGCCCAGCCTCTGTGCATTGGTTCCGGAACCGGGGCCAGGG
CCGAGTCCCTGTCCGGGAGTCCCCCCATCACCACTTAGCGGAAAGCTTCCTCTTCCTGCCCCAAGTCAGCCCCAT
GGACTCTGGGCCCTGGGGCTGCATCCTCACCTACAGAGATGGCTTCAACGTCTCCATCATGTATAACCTCACTGT
TCTGGGTCTGGAGCCCCCAACTCCCTTGACAGTGTACGCTGGAGCAGGTTCCAGGGTGGGGCTGCCCTGCCGCCT
GCCTGCTGGTGTGGGGACCCGGTCTTTCCTCACTGCCAAGTGGACTCCTCCTGGGGGAGGCCCTGACCTCCTGGT
GACTGGAGACAATGGCGACTTTACCCTTCGACTAGAGGATGTGAGCCAGGCCCAGGCTGGGACCTACACCTGCCA
TATCCATCTGCAGGAACAGCAGCTCAATGCCACTGTCACATTGGCAATCATCACAGTGACTCCCAAATCCTTTGG
GTCACCTGGATCCCTGGGGAAGCTGCTTTGTGAGGTGACTCCAGTATCTGGACAAGAACGCTTTGTGTGGAGCTC
TCTGGACACCCCATCCCAGAGGAGTTTCTCAGGACCTTGGCTGGAGGCACAGGAGGCCCAGCTCCTTTCCCAGCC
TTGGCAATGCCAGCTGTACCAGGGGGAGAGGCTTCTTGGAGCAGCAGTGTACTTCACAGAGCTGTCTAGCCCAGG
TGCCCAACGCTCTGGGAGAGCCCCAGGTGCCCTCCCAGCAGGCCACCTCCTGCTGTTTCTCACCCTTGGTGTCCT
TTCTCTGCTCCTTTTGGTGACTGGAGCCTTTGGCTTTCACCTTTGGAGAAGACAGTGGCGACCAAGACGATTTTC
TGCCTTAGAGCAAGGGATTCACCCTCCGCAGGCTCAGAGCAAGATAGAGGAGCTGGAGCAAGAACCGGAGCCGGA
GCCGGAGCCGGAACCGGAGCCCGAGCCCGAGCCCGAGCCGGAGCAGCTCTGACCTGGAGCTGAGGCAGCCAGCAG
ATCTCAGCAGCCCAGTCCAAATAAACGTCCTGTCTAGCAGC

FIGURE 1771

MWEAQFLGLLFLQPLWVAPVKPLQPGAEVPVVWAQEGAPAQLPCSPTIPLQDLSLLRRAGVTWQHQPDSGPPAAA
PGHPLAPGPHPAAPSSWGPRPRRYTVLSVGPGGLRSGRLPLQPRVQLDERGRQRGDFSLWLRPARRADAGEYRAA
VHLRDRALSCRLRLRLGQASMTASPPGSLRASDWVILNCSFSRPDRPASVHWFRNRGQGRVPVRESPHHHLAESF
LFLPQVSPMDSGPWGCILTYRDGFNVSIMYNLTVLGLEPPTPLTVYAGAGSRVGLPCRLPAGVGTRSFLTAKWTP
PGGGPDLLVTGDNGDFTLRLEDVSQAQAGTYTCHIHLQEQQLNATVTLAIITVTPKSFGSPGSLGKLLCEVTPVS
GQERFVWSSLDTPSQRSFSGPWLEAQEAQLLSQPWQCQLYQGERLLGAAVYFTELSSPGAQRSGRAPGALPAGHL
LLFLTLGVLSLLLLVTGAFGFHLWRRQWRPRRFSALEQGIHPPQAQSKIEELEQEPEPEPEPEPEPEPEPEPEQL

FIGURE 1772

TCCCCGCTCTGCTCTGTCCGGTCACAGGACTTTTTGCCCTCTGTTCCCGGGTCCCTCAGGCGGCCACCCAGTGGG
CACACTCCCAGGCGGCGCTCCGGCCCCGCGCTCCCTCCCTCTGCCTTTCATTCCCAGCTGTCAACATCCTGGAAG
CTTTGAAGCTCAGGAAAGAAGAGAAATCCACTGAGAACAGTCTGTAAAGGTCCGTAGTGCTATCTACATCCAGAC
GGTGGAAGGGAGAGAAAGAGAAAGAAGGTATCCTAGGAATACCTGCCTGCTTAGACCCTCTATAAAAGCTCTGTG
CATCCTGCCACTGAGGACTCCGAAGAGGTAGCAGTCTTCTGAAAGACTTCAACTGTGAGGAC**ATG**TCGTTCAGAT
TTGGCCAACATCTCATCAAGCCCTCTGTAGTGTTTCTCAAAACAGAACTGTCCTTCGCTCTTGTGAATAGGAAAC
CTGTGGTACCAGGACATGTCCTTGTGTGCCCGCTGCGGCCAGTGGAGCGCTTCCATGACCTGCGTCCTGATGAAG
TGGCCGATTTGTTTCAGACGACCCAGAGAGTCGGGACAGTGGTGGAAAAACATTTCCATGGGACCTCTCTCACCT
TTTCCATGCAGGATGGCCCCGAAGCCGGACAGACTGTGAAGCACGTTCACGTCCATGTTCTTCCCAGGAAGGCTG
GAGACTTTCACAGGAATGACAGCATCTATGAGGAGCTCCAGAAACATGACAAGGAGGACTTTCCTGCCTCTTGGA
GATCAGAGGAGGAAATGGCAGCAGAAGCCGCAGCTCTGCGGGTCTACTTTCAG**TGA**CACAGATGTTTTTCAGATC
CTGAATTCCAGCAAAAGAGCTATTGCCAACCAGTTTGAAGACCGCCCCCCCGCCTCTCCCCAAGAGGAACTGAAT
CAGCATGAAAATGCAGTTTCTTCATCTCACCATCCTGTATTCTTCAACCAGTGATCCCCCACCTCGGTCACTCCA
ACTCCCTTAAAATACCTAGACCTAAACGGCTCAGACAGGCAGATTTGAGGTTTCCCCCTGTCTCCTTATTCGGCA
GCCTTATGATTAAACTTCCTTCTCTGCTGCAAAAAAAAAAAAAAA

FIGURE 1773

MSFRFGQHLIKPSVVFLKTELSFALVNRKPVVPGHVLVCPLRPVERFHDLRPDEVADLFQTTQRVGTVVEKHFHG
TSLTFSMQDGPEAGQTVKHVHVHVLPRKAGDFHRNDSIYEELQKHDKEDFPASWRSEEEMAAEAAALRVYFQ

FIGURE 1774

TCAGCCAATTAGAGCTCCAGTTGTCACTCCTACCCACACTGGGCCTGGGGGTGAAGGGAAGTGTTTATTAGGGGT
ACATGTGAAGCCGTCCAGAAGTGTCAGAGTCTTTGTAGCTTTGAAAGTCACCTAGGTTATTTGGGCATGCTCTCC
TGAGTCCTCTGCTAGTTAAGCTCTCTGAAAAGAAGGTGGCAGACCCGGTTTGCTGATCGCCCCAGGGATCAGGAG
GCTGATCCCAAAGTTGTCAGATGGAGAGTAAATACAAGGAGATACTCTTGCTAACAGGCCTGGATAACATCACTG
ATGAGGAACTGGATAGGTTTAAGTTCTTTCTTTCAGACGAGTTTAATATTGCCACAGGCAAACTACATACTGCAA
ACAGAATACAAGTAGCTACCTTGATGATTCAAAATGCTGGGGCGGTGTCTGCAGTGATGAAGACCATTCGTATTT
TTCAGAAGTTGAATTATATGCTTTTGGCAAAACGTCTTCAGGAGGAGAAGGAGAAAGTTGATAAGCAATACAAAT
CGGTAACAAAACCAAAGCCACTAAGTCAAGCTGAAATGAGTCCTGCTGCATCTGCAGCCATCAGAAATGATGTCG
CAAAGCAACGTGCTGCACCAAAAGTCTCTCCTCATGTTAAGCCTGAACAGAAACAGATGGTGGCCCAGCAGGAAT
CTATCAGAGAAGGGTTTCAGAAGCGCTGTTTGCCAGTTATGGTACTGAAAGCAAAGAAGCCCTTCACGTTTGAGA
CCCAAGAAGGCAAGCAGGAGATGTTTCATGCTACAGTGGCTACAGAAAAGGAATTCTTCTTTGTAAAAGTTTTTA
ATACACTGCTGAAAGATAAATTCATTCCAAAGAGAATAATTATAATAGCAAGATATTATCGGCACAGTGGTTTCT
TAGAGGTAAATAGCGCCTCACGTGTGTTAGATGCTGAATCTGACCAAAAGGTTAATGTCCCGCTGAACATTATCA
GAAAAGCTGGTGAAACCCCGAAGATCAACACGCTTCAAACTCAGCCCCTTGGAACAATTGTGAATGGTTTGTTTG
TAGTCCAGAAGGTAACAGAAAAGAAGAAAAACATATTATTTGACCTAAGTGACAACACTGGGAAAATGGAAGTAC
TGGGGGTTAGAAACGAGGACACAATGAAATGTAAGGAAGGAGATAAGGTTCGACTTACATTCTTCACACTGTCAA
AAAATGGAGAAAAACTACAGCTGACATCTGGAGTTCATAGCACCATAAAGGTTATTAAGGCCAAAAAAAAAACAT
AGAGAAGTAAAAAGGACCAATTCAAGCCAACTGGTCTAAGCAGCATTTAATTGAAGAATATGTGATACAGCCTCT
TCAATCAGATTGTAAGTTACCTGAAAGCTGCAGTTCACAGGCTCCTCTCTCCACCAAATTAGGATAGAATAATTG
CTGGATAAACAAATTCAGAATATCAACAGATGATCACAATAAACATCTGTTTCTCATTCC

FIGURE 1775

MESKYKEILLLTGLDNITDEELDRFKFFLSDEFNIATGKLHTANRIQVATLMIQNAGAVSAVMKTIRIFQKLNYM
LLAKRLQEEKEKVDKQYKSVTKPKPLSQAEMSPAASAAIRNDVAKQRAAPKVSPHVKPEQKQMVAQQESIREGFQ
KRCLPVMVLKAKKPFTFETQEGKQEMFHATVATEKEFFFVKVFNTLLKDKFIPKRIIIIARYYRHSGFLEVNSAS
RVLDAESDQKVNVPLNIIRKAGETPKINTLQTQPLGTIVNGLFVVQKVTEKKKNILFDLSDNTGKMEVLGVRNED
TMKCKEGDKVRLTFFTLSKNGEKLQLTSGVHSTIKVIKAKKKT

FIGURE 1776A

TAAAGTCATCAAAACAACGTTATATCCTGTGTGAAATGCTGCAGTCAGGATGCCTTGTGGTTTGAGTGCCTTGAT
CATGTGCCCTAAGGGGATGGTGGCGGTGGTGGTGGCCGTGGATGACGGAGACTCTCAGGCCTTGGCAGGTGCGTC
TTTCAGTTCCCCTCACACTTCGGGTTCCTCGGGGAGGAGGGGCTGGAACCCTAGCCCATCGTCAGGACAAAG**ATG**

CTCAGGCTGCTCTTGGCTCTCAACTTATTCCCTTCAATTCAAGTAACAGGAAACAAGATTTTGGTGAAGCAGTCG
CCCATGCTTGTAGCGTACGACAATGCGGTCAACCTTAGCTGCAAGTATTCCTACAATCTCTTCTCAAGGGAGTTC
CGGGCATCCCTTCACAAAGGACTGGATAGTGCTGTGGAAGTCTGTGTTGTATATGGGAATTACTCCCAGCAGCTT
CAGGTTTACTCAAAAACGGGGTTCAACTGTGATGGGAAATTGGGCAATGAATCAGTGACATTCTACCTCCAGAAT
TTGTATGTTAACCAAACAGATATTTACTTCTGCAAAATTGAAGTTATGTATCCTCCTCCTTACCTAGACAATGAG
AAGAGCAATGGAACCATTATCCATGTGAAAGGGAAACACCTTTGTCCAAGTCCCCTATTTCCCGGACCTTCTAAG
CCCTTTTGGGTGCTGGTGGTGGTTGGTGGAGTCCTGGCTTGCTATAGCTTGCTAGTAACAGTGGCCTTTATTATT
TTCTGGGTGAGGAGTAAGAGGAGCAGGCTCCTGCACAGTGACTACATGAACATGACTCCCCGCCGCCCCGGGCCC
ACCCGCAAGCATTACCAGCCCTATGCCCCACCACGCGACTTCGCAGCCTATCGCTCC**TGA**CACGGACGCCTATCC
AGAAGCCAGCCGGCTGGCAGCCCCCATCTGCTCAATATCACTGCTCTGGATAGGAAATGACCGCCATCTCCAGCC
GGCCACCTCAGGCCCCTGTTGGGCCACCAATGCCAATTTTTCTCGAGTGACTAGACCAAATATCAAGATCATTTT
GAGACTCTGAAATGAAGTAAAAGAGATTTCCTGTGACAGGCCAAGTCTTACAGTGCCATGGCCCACATTCCAACT
TACCATGTACTTAGTGACTTGACTGAGAAGTTAGGGTAGAAAACAAAAAGGGAGTGGATTCTGGGAGCCTCTTCC
CTTTCTCACTCACCTGCACATCTCAGTCAAGCAAAGTGTGGTATCCACAGACATTTTAGTTGCAGAAGAAAGGCT
AGGAAATCATTCCTTTTGGTTAAATGGGTGTTTAATCTTTTGGTTAGTGGGTTAAACGGGGTAAGTTAGAGTAGG
GGGAGGGATAGGAAGACATATTTAAAAACCATTAAAACACTGTCTCCCACTCATGAAATGAGCCACGTAGTTCCT
ATTTAATGCTGTTTTCCTTTAGTTTAGAAATACATAGACATTGTCTTTTATGAATTCTGATCATATTTAGTCATT
TTGACCAAATGAGGGATTTGGTCAAATGAGGGATTCCCTCAAAGCAATATCAGGTAAACCAAGTTGCTTTCCTCA
CTCCCTGTCATGAGACTTCAGTGTTAATGTTCACAATATACTTTCGAAAGAATAAAATAGTTCTCCTACATGAAG
AAAGAATATGTCAGGAAATAAGGTCACTTTATGTCAAAATTATTTGAGTACTATGGGACCTGGCGCAGTGGCTCA
TGCTTGTAATCCCAGCACTTTGGGAGGCCGAGGTGGGCAGATCACTTGAGATCAGGACCAGCCTGGTCAAGATGG
TGAAACTCCGTCTGTACTAAAAATACAAAATTTAGCTTGGCCTGGTGGCAGGCACCTGTAATCCCAGCTGCCCAG
GAGGCTGAGGCATGAGAATCGCTTGAACCTGGCAGGCGGAGGTTGCAGTGAGCCGAGATAGTGCCACAGCTCTCC
AGCCTGGGCGACAGAGTGAGACTCCATCTCAAACAACAACAACAACAACAACAACAACAACAAACCACAAAATTA
TTTGAGTACTGTGAAGGATTATTTGTCTAACAGTTCATTCCAATCAGACCAGGTAGGAGCTTTCCTGTTTCATAT
GTTTCAGGGTTGCACAGTTGGTCTCTTTAATGTCGGTGTGGAGATCCAAAGTGGGTTGTGGAAAGAGCGTCCATA
GGAGAAGTGAGAATACTGTGAAAAGGGATGTTAGCATTCATTAGAGTATGAGGATGAGTCCCAAGAAGGTTCTTT
GGAAGGAGGACGAATAGAATGGAGTAATGAAATTCTTGCCATGTGCTGAGGAGATAGCCAGCATTAGGTGACAAT
CTTCCAGAAGTGGTCAGGCAGAAGGTGCCCTGGTGAGAGCTCCTTTACAGGGACTTTATGTGGTTTAGGGCTCAG
AGCTCCAAAACTCTGGGCTCAGCTGCTCCTGTACCTTGGAGGTCCATTCACATGGGAAAGTATTTTGGAATGTGT
CTTTTGAAGAGAGCATCAGAGTTCTTAAGGGACTGGGTAAGGCCTGACCCTGAAATGACCATGGATATTTTTCTA
CCTACAGTTTGAGTCAACTAGAATATGCCTGGGGACCTTGAAGAATGCCCTTCAGTGGCCCTCACCATTTGTTCA
TGCTTCAGTTAATTCAGGTGTTGAAGGAGCTTAGGTTTTAGAGGCACGTAGACTTGGTTCAAGTCTCGTTAGTAG
TTGAATAGCCTCAGGCAAGTCACTGCCCACCTAAGATGATGGTTCTTCAACTATAAATGGAGATAATGGTTACAA
ATGTCTCTTCCTATAGTATAATCTCCATAAGGGCATGGCCCAAGTCTGTCTTTGACTCTGCCTATCCCTGACGTT
TAGTAGCATGCCCGACATACAATGTTAGCTATTGGTATTATTGCCATATAGATAAATTATGTATAAAAATTAAAC
TGGGCAATAGCCTAAGAAGGGGGGAATATTGTAACACAAATTTAAACCCACTACGCAGGGATGAGGTGCTATAAT
ATGAGGACCTTTTAACTTCCATCATTTTCCTGTTTCTTGAAATAGTTTATCTTGTAATGAAATATAAGGCACCTC
CCACTTTTATGTATAGAAAGAGGTCTTTTAATTTTTTTTTAATGTGAGAAGGAAGGGAGGAGTAGGAATCTTGAG
ATTCCATATCGAAAATACTGTACTTTGGTTGATTTTTAAGTGGGCTTCCATTCCATGGATTTAATCAGTCCCAAG
AAGATCAAACTCAGCAGTACTTGGGTGCTGAAGAACTGTTGGATTTACCCTGGCACGTGTGCCACTTGCCCAGCT
TCTTGGGCACACAGAGTTCTTCAATCCAAGTTATCAGATTGTATTTGAAAATGACAGAGCTGGAGAGTTTTTTGA
AATGGCAGTGGCAAATAAATAAATACTTTTTTTTAAATGGAAAGACTTGATCTATGGTAATAAATGATTTTGTTT
TCTGACTGGAAAAATAGGCCTACTAAAGATGAATCACACTTGAGATGTTTCTTACTCACTCTGCACAGAAACAAA
GAAGAAATGTTATACAGGGAAGTCCGTTTTCACTATTAGTATGAACCAAGAAATGGTTCAAAAACAGTGGTAGGA

FIGURE 1776B

GCAATGCTTTCATAGTTTCAGATATGGTAGTTATGAAGAAAACAATGTCATTTGCTGCTATTATTGTAAGAGTCT
TATAATTAATGGTACTCCTATAATTTTTGATTGTGAGCTCACCTATTTGGGTTAAGCATGCCAATTTAAAGAGAC
CAAGTGTATGTACATTATGTTCTACATATTCAGTGATAAAATTACTAAACTACT

FIGURE 1777

MLRLLLALNLFPSIQVTGNKILVKQSPMLVAYDNAVNLSCKYSYNLFSREFRASLHKGLDSAVEVCVVYGNYSQQ
LQVYSKTGFNCDGKLGNESVTFYLQNLYVNQTDIYFCKIEVMYPPPYLDNEKSNGTIIHVKGKHLCPSPLFPGPS
KPFWVLVVVGGVLACYSLLVTVAFIIFWVRSKRSRLLHSDYMNMTPRRPGPTRKHYQPYAPPRDFAAYRS

FIGURE 1778A

GACTCTCGCCTGACTTCCTAATTTGCTACTTATCCCCAGCGTTGGTCCCGGCGAGGATATGCTGAGATTTATGGC
ACTGTTGGCTGCATTTTTGGAGAACAGCAAGCAGCTTCTTTTCAGATAATCCCACCGTTTCTGGCATGTCAGATA
TGGATTATCCTTTACAAGGACCTGGTTTGCTGTCCGTACCCAACCTTCCAGAGATCAGTTCCATCCGAAGAGTTC
CTCTCCCACCTGAACTTGTTGAGCAGTTTGGACATATGCAGTGTAATTGCATGATGGGTGTGTTCCCTCCTATCA
GCAGAGCTTGGCTCACAATTGACAGTGATATATTCATGTGGAACTATGAGGATGGAGGAGACCTTGCCTATTTTG
ATGGACTTAGTGAGACTATTCTTGCTGTGGGGCTTGTGAAGCCAAAAGCAGGCATCTTTCAACCTCATGTGCGAC
ACCTCCTGGTTTTGGCGACCCCTGTAGACATAGTAATTCTTGGACTCAGCTATGCTAATTTGCAAACAGGTTCTG
GAGTTCTTAATGATAGTTTGTCTGGTGGAATGCAGTTGCTTCCAGATCCTTTATATTCTCTTCCTACTGATAATA
CTTACCTTTTAACAATAACTTCCACTGATAATGGCAGAATTTTCTTGGCTGGAAAGGATGGCTGTTTATATGAAG
TAGCCTACCAGGCTGAAGCAGGGTGGTTTAGCCAAAGATGTAGGAAAATAAACCACTCAAAGAGCTCACTTTCTT
TCCTTGTTCCTTCCTTGCTACAATTCACGTTCTCAGAAGATGATCCTATTCTTCAAATTGCAATTGATAATTCTA
GAAATATTTTATATACACGATCTGAGAAAGGAGTAATACAGGTGTATGATTTGGGACAAGATGGACAAGGAATGA
GCAGAGTTGCCTCTGTGTCACAGAATGCCATTGTCTCTGCTGCTGGTAACATTGCTAGGACCATCGATCGTTCTG
TTTTTAAACCAATTGTCCAAATAGCAGTGATTGAAAATTCTGAATCACTGGACTGTCAGTTATTGGCTGTCACAC
ATGCAGGTGTTAGGTTATATTTTAGCACTTGTCCATTCAGACAGCCATTAGCACGGCCTAATACACTGACGCTGG
TTCATGTCCGCTTACCTCCTGGATTCTCAGCATCTTCAACCGTGGAAAAGCCTTCAAAAGTACATAGAGCTCTTT
ATAGTAAAGGTATTCTATTGATGGCAGCCTCAGAAAATGAGGATAATGATATTTTATGGTGTGTCAACCATGATA
CTTTTCCTTTCCAAAAGCCAATGATGGAAACCCAGATGACAGCTGGTGTTGATGGTCATTCCTGGGCTCTTTCTG
CGATAGATGAATTGAAAGTAGATAAAATAATTACACCTTTAAACAAGGATCATATTCCAATAACTGATTCACCAG
TTGTTGTACAGCAGCACATGTTACCTCCGAAGAAATTTGTTCTCCTCTCAGCACAGGGGAGCCTTATGTTTCATA
AACTTAGACCTGTAGATCAACTGAGGCATCTACTTGTGAGTAATGTGGGAGGAGATGGAGAAGAGATTGAAAGAT
TCTTTAAATTACATCAGGAAGACCAGGCTTGTGCAACTTGCCTTATTCTTGCTTGCTCCACTGCTGCCTGTGATA
GAGAAGTATCTGCCTGGGCTACTCGGGCTTTCTTTAGGTATGGTGGTGAAGCACAGATGAGATTTCCAACCACTC
TTCCGCCTCCAAGTAATGTTGGTCCCATCTTGGGGTCTCCTGTCTATTCTAGTTCTCCTGTTCCTAGTGGTAGTC
CCTATCCAAATCCATCCTTTTTGGGAACACCGTCTCATGGTATACAGCCTCCTGCCATGTCAACTCCAGTGTGTG
CTCTGGGAAACCCAGCAACTCAGGCCACAAATATGAGTTGTGTGACTGGACCAGAGATTGTGTACTCTGGAAAAC
ACAATGGTATTTGCATTTACTTTTCTCGGATCATGGGAAACATTTGGGATGCAAGCTTAGTTGTGGAGAGAATAT
TCAAGAGTGGCAACAGAGAGATCACTGCAATTGAAAGTAGTGTTCCCTGCCAACTGCTAGAGTCAGTGCTACAAG
AACTAAAGGGTTTGCAGGAATTTCTAGACAGAAACTCCCAGTTTGCAGGAGGACCATTAGGAAATCCAAATACTA
CTGCTAAAGTGCAGCAGAGGCTGATAGGATTCATGCGTCCTGAAAACGGAAATCCCCAGCAAATGCAACAGGAAC
TGCAGAGGAAGTTTCATGAGGCTCAACTAAGTGAAAAGATTTCACTTCAGGCAATTCAGCAGTTGGTTCGAAAAT
CATATCAGGCTCTGGCTTTATGGAAACTTCTTTGTGAACATCAATTCACTATCATTGTGGCAGAACTTCAGAAGG
AACTTCAAGAGCAGCTGAAGATCACCACCTTTAAAGATCTTGTAATCAGGGACAAAGAACTCACAGGGGCATTAA
TTGCTTCTCTTATCAACTGCTACATCAGAGATAATGCCGCTGTTGATGGCATTAGTTTACATTTACAGGATATCT
GCCCACTTCTATATAGCACTGATGATGCAATTTGTTCTAAGGCAAATGAGCTTCTCCAGCGTTCCCGACAAGTTC
AAAATAAGACTGAAAAAGAAAGAATGTTAAGGGAATCATTAAAGGAATATCAAAAAATTAGCAATCAAGTGGACC
TTTCCAATGTTTGTGCTCAGTATAGACAAGTGAGATTTTATGAGGGTGTGGTGGAACTTTCTCTTACGGCTGCAG
AGAAAAAAGATCCTCAAGGTCTTGGGCTTCATTTCTATAAACATGGAGAACCAGAAGAAGACATAGTTGGACTTC
AGGCCTTCCAAGAAAGATTAAACAGTTACAAATGCATTACAGACACACTTCAAGAACTGGTAAATCAAAGTAAGG
CCGCTCCTCAGTCTCCCAGTGTACCCAAAAAACCTGGTCCTCCAGTGTTGTCATCTGATCCAAATATGCTGAGTA
ATGAAGAAGCAGGACATCATTTTGAACAAATGCTTAAATTGTCACAGCGATCCAAGGATGAGCTCTTTAGTATTG
CCCTTTATAATTGGCTAATACAAGTCGACCTTGCAGATAAGCTGCTACAGGTTGCTTCTCCATTTCTGGAGCCAC
ATCTAGTCCGAATGGCCAAAGTTGATCAAAACAGAGTTCGTTATATGGATTTACTCTGGCGGTATTACGAGAAGA
ACAGAAGTTTCAGTAATGCTGCTCGTGTACTGTCCAGACTGGCTGACATGCATAGCACAGAAATTTCACTTCAGC
AGCGACTAGAGTACATTGCTCGAGCCATTCTTAGTGCCAAAAGTTCCACTGCCATTTCATCAATAGCTGCCGATG
GTGAATTTCTTCATGAATTAGAAGAAAAAATGGAGGTTGCTAGGATCCAACTTCAGATACAGGAGACACTACAAA
GGCAGTATTCCCATCATTCTTCTGTACAGGATGCAGTTTCTCAGCTGGATTCTGAGCTGATGGACATAACTAAGC
TTTATGGGGAATTTGCTGACCCATTTAAACTTGCAGAGTGCAAACTTGCAATAATTCATTGTGCCGGTTATTCAG

FIGURE 1778B

ACCCTATATTGGTGCAGACACTTTGGCAAGATATCATAGAGAAAGAATTGAGTGACAGTGTGACATTGAGCTCCT
CGGATAGAATGCATGCTCTTAGTCTCAAGATTGTTCTCCTTGGCAAAATTTATGCTGGCACACCACGCTTCTTTC
CTTTAGATTTTATTGTACAGTTTTTAGAACAGCAGGTTTGTACTTTGAACTGGGATGTGGGCTTCGTAATACAGA
CAATGAATGAAATTGGAGTACCATTGCCTAGACTACTAGAAGTTTATGATCAGTTGTTCAAATCACGGGATCCAT
TCTGGAACAGAATGAAGAAGCCACTGCACCTTTTGGATTGTATACATGTATTATTGATAAGATATGTTGAGAATC
CCAGCCAAGTTTTAAATTGTGAAAGGAGAAGATTTACAAATCTCTGCCTGGATGCTGTTTGTGGTTACCTTGTTG
AGCTCCAGTCTATGAGCTCGTCAGTAGCAGTACAAGCCATCACTGGGAATTTTAAATCTCTTCAAGCTAAATTAG
AACGGCTTCAT**TAA**TTACTGTGATATACTTTCATCCGTTTTATGATCTGTAAAATAAAAACTCAGCTGGGTCCAG

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FIGURE 1779

MSDMDYPLQGPGLLSVPNLPEISSIRRVPLPPELVEQFGHMQCNCMMGVFPPISRAWLTIDSDIFMWNYEDGGDL
AYFDGLSETILAVGLVKPKAGIFQPHVRHLLVLATPVDIVILGLSYANLQTGSGVLNDSLSGGMQLLPDPLYSLP
TDNTYLLTITSTDNGRIFLAGKDGCLYEVAYQAEAGWFSQRCRKINHSKSSLSFLVPSLLQFTFSEDDPILQIAI
DNSRNILYTRSEKGVIQVYDLGQDGQGMSRVASVSQNAIVSAAGNIARTIDRSVFKPIVQIAVIENSESLDCQLL
AVTHAGVRLYFSTCPFRQPLARPNTLTLVHVRLPPGFSASSTVEKPSKVHRALYSKGILLMAASENEDNDILWCV
NHDTFPFQKPMMETQMTAGVDGHSWALSAIDELKVDKIITPLNKDHIPITDSPVVVQQHMLPPKKFVLLSAQGSL
MFHKLRPVDQLRHLLVSNVGGDGEEIERFFKLHQEDQACATCLILACSTAACDREVSAWATRAFFRYGGEAQMRF
PTTLPPPSNVGPILGSPVYSSSPVPSGSPYPNPSFLGTPSHGIQPPAMSTPVCALGNPATQATNMSCVTGPEIVY
SGKHNGICIYFSRIMGNIWDASLVVERIFKSGNREITAIESSVPCQLLESVLQELKGLQEFLDRNSQFAGGPLGN
PNTTAKVQQRLIGFMRPENGNPQQMQQELQRKFHEAQLSEKISLQAIQQLVRKSYQALALWKLLCEHQFTIIVAE
LQKELQEQLKITTFKDLVIRDKELTGALIASLINCYIRDNAAVDGISLHLQDICPLLYSTDDAICSKANELLQRS
RQVQNKTEKERMLRESLKEYQKISNQVDLSNVCAQYRQVRFYEGVVELSLTAAEKKDPQGLGLHFYKHGEPEEDI
VGLQAFQERLNSYKCITDTLQELVNQSKAAPQSPSVPKKPGPPVLSSDPNMLSNEEAGHHFEQMLKLSQRSKDEL
FSIALYNWLIQVDLADKLLQVASPFLEPHLVRMAKVDQNRVRYMDLLWRYYEKNRSFSNAARVLSRLADMHSTEI
SLQQRLEYIARAILSAKSSTAISSIAADGEFLHELEEKMEVARIQLQIQETLQRQYSHHSSVQDAVSQLDSELMD
ITKLYGEFADPFKLAECKLAIIHCAGYSDPILVQTLWQDIIEKELSDSVTLSSSDRMHALSLKIVLLGKIYAGTP
RFFPLDFIVQFLEQQVCTLNWDVGFVIQTMNEIGVPLPRLLEVYDQLFKSRDPFWNRMKKPLHLLDCIHVLLIRY
VENPSQVLNCERRRFTNLCLDAVCGYLVELQSMSSSVAVQAITGNFKSLQAKLERLH

FIGURE 1780

CGGCAGCCAGCTGAGAGCAATGGGAAATGGGGAGTCCCAGCTGTCCTCGGTGCCTGCTCAGAAGCTGGGTTGGTT
TATCCAGGAATACCTGAAGCCCTACGAAGAATGTCAGACACTGATCGACGAGATGGTGAACACCATCTGTGACGT
CTGCAGGAACCCCGAACAGTTCCCCCTGGTGCAGGGAGTGGCCATAGGTGGCTCCTATGGACGGAAAACAGTCTT
AAGAGGCAACTCCGATGGTACCCTTGTCCTTTTCTTCAGTGACTTAAAACAATTCCAGGATCAGAAGAGAAGCCA
ACGTGACATCCTCGATAAAACTGGGGATAAGCTGAAGTTCTGTCTGTTCACGAAGTGGTTGAAAAACAATTTCGA
GATCCAGAAGTCCCTTGATGGGTCCACCATCCAGGTGTTCACAAAAAATCAGAGAATCTCTTTCGAGGTGCTGGC
CGCCTTCAACGCTCTGAGCTTAAATGATAATCCCAGCCCCTGGATCTATCGAGAGCTCAAAAGATCCTTGGATAA
GACAAATGCCAGTCCTGGTGAGTTTGCAGTCTGCTTCACTGAACTCCAGCAGAAGTTTTTTGACAACCGTCCTGG
AAAACTAAAGGATTTGATCCTCTTGATAAAGCACTGGCATCAACAGTGCCAGAAAAAAATCAAGGATTTACCCTC
GCTGTCTCCGTATGCCCTGGAGCTGCTTACGGTGTATGCCTGGGAACAGGGGTGCAGAAAAGACAACTTTGACAT
TGCTGAAGGCGTCAGAACGGTTCTGGAGCTGATCAAATGCCAGGAGAAGCTGTGTATCTATTGGATGGTCAACTA
CAACTTTGAAGATGAGACCATCAGGAACATCCTGCTGCACCAGCTCCAATCAGCGAGGCCAGTAATCTTGGATCC
AGTTGACCCAACCAATAATGTGAGTGGAGATAAAATATGCTGGCAATGGCTGAAAAAAGAAGCTCAAACCTGGTT
GACTTCTCCCAACCTGGATAATGAGTTACCTGCACCATCTTGGAATGTCCTGCCTGCACCACTCTTCACGACCCC
AGGCCACCTTCTGGATAAGTTCATCAAGGAGTTTCTCCAGCCCAACAAATGCTTCCTAGAGCAGATTGACAGTGC
TGTTAACATCATCCGTACATTCCTTAAAGAAAACTGCTTCCGACAATCAACAGCCAAGATCCAGATTGTCCGGGG
AGGATCAACCGCCAAAGGCACAGCTCTGAAGACTGGCTCTGATGCCGATCTCGTCGTGTTCCATAACTCACTTAA
AAGCTACACCTCCCAAAAAAACGAGCGGCACAAAATCGTCAAGGAAATCCATGAACAGCTGAAAGCCTTTTGGAG
GGAGAAGGAGGAGGAGCTTGAAGTCAGCTTTGAGCCTCCCAAGTGGAAGGCTCCCAGGGTGCTGAGCTTCTCTCT
GAAATCCAAAGTCCTCAACGAAAGTGTCAGCTTTGATGTGCTTCCTGCCTTTAATGCACTGGGTCAGCTGAGTTC
TGGCTCCACACCCAGCCCCGAGGTTTATGCAGGGCTCATTGATCTGTATAAATCCTCGGACCTCCCGGGAGGAGA
GTTTTCTACCTGTTTCACAGTCCTGCAGCGAAACTTCATTCGCTCCCGGCCCACCAAACTAAAGGATTTAATTCG
CCTGGTGAAGCACTGGTACAAAGAGTGTGAAAGGAAACTGAAGCCAAAGGGGTCTTTGCCCCCAAAGTATGCCTT
GGAGCTGCTCACCATCTATGCCTGGGAGCAGGGGAGTGGAGTGCCGGATTTTGACACTGCAGAAGGTTTCCGGAC
AGTCCTGGAGCTGGTCACACAATATCAGCAGCTCGGCATCTTCTGGAAGGTCAATTACAACTTTGAAGATGAGAC
CGTGAGGAAGTTTCTACTGAGCCAGTTGCAGAAAACCAGGCCTGTGATCTTGGACCCAGGCGAACCCACAGGTGA
CGTGGGTGGAGGGGACCGTTGGTGTTGGCATCTTCTGGACAAAGAAGCAAAGGTTAGGTTATCCTCTCCCTGCTT
CAAGGATGGGACTGGAAACCCAATACCACCTTGGAAAGTGCCGGTAAAAGTCATCTAAAGGAGGCGTTGTCTGGA
AATAGCCCTGTAACAGGCTTGAATCAAAGAACTTCTCCTACTGTAGCAACCTGAAATTAACTCAGACACAAATAA
AGGAAACCCAGCTCACAGGAGCTTAAACAGCTGGTCAGCCCCCCTAAGCCCCCACTACAAGTGATCCTCAGGCAG
GTAACCCCAGATTCATGCACTGTAGGGCTGGGCGCAGCATCCCTAGGTCTCTACCCAGTAGATGCCACTAGCCCT
CCTCTCCCAGTGACAACCAAAAGTCTTCACATGTTCAAACGTTCCCCTGGGTTCACAGATCTTTCTGCCTTTGGC
TTTTGGCTCCACCCTCTTTAGCTGTTAATTTGAGTACTTATGGCCCTGAAAGCGGCCACGGTGCCTCCAGATGGC
AGGTTTGCAATCCAAGCAGGAAGAAGGAAAAGATACCCAAAGGTCAAGAACACAGTGATTTTATTAGAAGTTTCA
TCCGCAAATTTTCTTCCATTTCATTGCTCAGAATGTCATGTGGTTACCTGTAACTTGAAGGTGGCTACAAAGATG
ACTGTGGAGGTGGTTGCACTTGCCACCCAAGGATGTCTGCCACACCTCTCCAAGCCCTCCTACCTACCAAGATAT
ACCTGATATATCCACCAGATATCTCCTCAGATATACTTGGTTCTCTCCACCAGGTTCTTTCTTTAAAGCAGGATT
CTCAACTTTGATACTTACTCACATTGGGCTAGACAGTTCTTTGTTTGGAGGCTCTCTTGTGCATGTAGGATGTTG
AGCAGCATGTGTGGCCTGTACCCAGTACATGCCACCCAGTTGTGACAATTAAAAGTGTCTTGAGACTTTATCATG
TGTCTTCTGCCCTAGGTGAGAACCCTTGCACTACAGGAACCCTACACCCAACCTGGGGGGAATGTAGGGAAGAGG
TGCCAAGCCAACCGTGGGGTTAGCTCTAATTATTAAGTTATGCATTATAAATAAATACCAAAAAATTG

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FIGURE 1781

MGNGESQLSSVPAQKLGWFIQEYLKPYEECQTLIDEMVNTICDVCRNPEQFPLVQGVAIGGSYGRKTVLRGNSDG
TLVLFFSDLKQFQDQKRSQRDILDKTGDKLKFCLFTKWLKNNFEIQKSLDGSTIQVFTKNQRISFEVLAAFNALS
LNDNPSPWIYRELKRSLDKTNASPGEFAVCFTELQQKFFDNRPGKLKDLILLIKHWHQQCQKKIKDLPSLSPYAL
ELLTVYAWEQGCRKDNFDIAEGVRTVLELIKCQEKLCIYWMVNYNFEDETIRNILLHQLQSARPVILDPVDPTNN
VSGDKICWQWLKKEAQTWLTSPNLDNELPAPSWNVLPAPLFTTPGHLLDKFIKEFLQPNKCFLEQIDSAVNIIRT
FLKENCFRQSTAKIQIVRGGSTAKGTALKTGSDADLVVFHNSLKSYTSQKNERHKIVKEIHEQLKAFWREKEEEL
EVSFEPPKWKAPRVLSFSLKSKVLNESVSFDVLPAFNALGQLSSGSTPSPEVYAGLIDLYKSSDLPGGEFSTCFT
VLQRNFIRSRPTKLKDLIRLVKHWYKECERKLKPKGSLPPKYALELLTIYAWEQGSGVPDFDTAEGFRTVLELVT
QYQQLGIFWKVNYNFEDETVRKFLLSQLQKTRPVILDPGEPTGDVGGGDRWCWHLLDKEAKVRLSSPCFKDGTGN
PIPPWKVPTMQTPGSCGARIHPIVNEMFSSRSHRILNNNSKRNFWRSSGNRF

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FIGURE 1782

CGATCCTGCCGGAGCCCCGCCGCCGCCGGCTTGGATTCTGAAACCTTCCTTGTATCCCTCCTGAGACATCTTTGC
TGCAAGATCGAGGCTGTCCTCTGGTGAGAAGGTGGTGAGGCTTCCCGTCATATTCCAGCTCTGAACAGCAACATG

GGGTGCAAAGTCCTGCTCAACATTGGGCAGCAGATGCTGCGGCGGAAGGTGGTGGACTGTAGCCGGGAGGAGACG
CGGCTGTCTCGCTGCCTGAACACTTTTGATCTGGTGGCCCTCGGGGTGGGCAGCACACTGGGTGCTGGTGTCTAC
GTCCTGGCTGGAGCTGTGGCCCGTGAGAATGCAGGCCCTGCCATTGTCATCTCCTTCCTGATCGCTGCGCTGGCC
TCAGTGCTGGCTGGCCTGTGCTATGGCGAGTTTGGTGCTCGGGTCCCCAAGACGGGCTCAGCTTACCTCTACAGC
TATGTCACCGTTGGAGAGCTCTGGGCCTTCATCACCGGCTGGAACTTAATCCTCTCCTACATCATCGGTACTTCA
AGCGTAGCGAGGGCCTGGAGCGCCACCTTCGACGAGCTGATAGGCAGACCCATCGGGGAGTTCTCACGGACACAC
ATGACTCTGAACGCCCCCGGCGTGCTGGCTGAAAACCCCGACATATTCGCAGTGATCATAATTCTCATCTTGACA
GGACTTTTAACTCTTGGTGTGAAAGAGTCGGCCATGGTCAACAAAATATTCACTTGTATTAACGTCCTGGTCCTG
GGCTTCATAATGGTGTCAGGATTTGTGAAAGGATCGGTTAAAAACTGGCAGCTCACGGAGGAGGATTTTGGGAAC
ACATCAGGCCGTCTCTGTTTGAACAATGACACAAAAGAAGGGAAGCCCGGTGTTGGTGGATTCATGCCCTTCGGG
TTCTCTGGTGTCCTGTCGGGGGCAGCGACTTGCTTCTATGCCTTCGTGGGCTTTGACTGCATCGCCACCACAGGT
GAAGAGGTGAAGAACCCACAGAAGGCCATCCCCGTGGGGATCGTGGCGTCCCTCTTGATCTGCTTCATCGCCTAC
TTTGGGGTGTCGGCTGCCCTCACGCTCATGATGCCCTACTTCTGCCTGGACAATAACAGCCCCCTGCCCGACGCC
TTTAAGCACGTGGGCTGGGAAGGTGCCAAGTACGCAGTGGCCGTGGGCTCCCTCTGCGCTCTTTCCGCCAGTCTT
CTAGGTTCCATGTTTCCCATGCCTCGGGTTATCTATGCCATGGCTGAGGATGGACTGCTATTTAAATTCTTAGCC
AACGTCAATGATAGGACCAAAACACCAATAATCGCCACATTAGCCTCGGGTGCCGTTGCTGCTGTGATGGCCTTC
CTCTTTGACCTGAAGGACTTGGTGGACCTCATGTCCATTGGCACTCTCCTGGCTTACTCGTTGGTGGCTGCCTGT
GTGTTGGTCTTACGGTACCAGCCAGAGCAGCCTAACCTGGTATACCAGATGGCCAGTACTTCCGACGAGTTAGAT
CCAGCAGACCAAAATGAATTGGCAAGCACCAATGATTCCCAGCTGGGGTTTTTACCAGAGGCAGAGATGTTCTCT
TTGAAAACCATACTCTCACCCAAAAACATGGAGCCTTCCAAAATCTCTGGGCTAATTGTGAACATTTCAACCAGC
CTTATAGCTGTTCTCATCATCACCTTCTGCATTGTGACCGTGCTTGGAAGGGAGGCTCTCACCAAAGGGGCGCTG
TGGGCAGTCTTTCTGCTCGCAGGGTCTGCCCTCCTCTGTGCCGTGGTCACGGGCGTCATCTGGAGGCAGCCCGAG
AGCAAGACCAAGCTCTCATTTAAGGTTCCCTTCCTGCCAGTGCTCCCCATCCTGAGCATCTTCGTGAACGTCTAT
CTCATGATGCAGCTGGACCAGGGCACCTGGGTCCGGTTTGCTGTGTGGATGCTGATAGGCTTCATCATCTACTTT
GGCTATGGCCTGTGGCACAGCGAGGAGGCGTCCCTGGATGCCGACCAAGCAAGGACTCCTGACGGCAACTTGGAC
CAGTGCAAGTGACGCACAGCCCCGCCCCCCGGAGGTGGCAGCAGCCCCGAGGGACGCCCCCAGAGGACCGGGAGG
CACCCCACCCTCCCCACCAGTGCAACAGAAACCACCTGCGTCCACACCCTCACTGCA

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FIGURE 1783

MGCKVLLNIGQQMLRRKVVDCSREETRLSRCLNTFDLVALGVGSTLGAGVYVLAGAVARENAGPAIVISFLIAAL
ASVLAGLCYGEFGARVPKTGSAYLYSYVTVGELWAFITGWNLILSYIIGTSSVARAWSATFDELIGRPIGEFSRT
HMTLNAPGVLAENPDIFAVIIILILTGLLTLGVKESAMVNKIFTCINVLVLGFIMVSGFVKGSVKNWQLTEEDFG
NTSGRLCLNNDTKEGKPGVGGFMPFGFSGVLSGAATCFYAFVGFDCIATTGEEVKNPQKAIPVGIVASLLICFIA
YFGVSAALTLMMPYFCLDNNSPLPDAFKHVGWEGAKYAVAVGSLCALSASLLGSMFPMPRVIYAMAEDGLLFKFL
ANVNDRTKTPIIATLASGAVAAVMAFLFDLKDLVDLMSIGTLLAYSLVAACVLVLRYQPEQPNLVYQMASTSDEL
DPADQNELASTNDSQLGFLPEAEMFSLKTILSPKNMEPSKISGLIVNISTSLIAVLIITFCIVTVLGREALTKGA
LWAVFLLAGSALLCAVVTGVIWRQPESKTKLSFKVPFLPVLPILSIFVNVYLMMQLDQGTWVRFAVWMLIGFIIY
FGYGLWHSEEASLDADQARTPDGNLDQCK

FIGURE 1784

GGCGGGCCGCTCCCACTTCGGCACGAGGGGCACGAGGTAAATCTTTTCTGCTTACTGAAAAGGAAGAGTCTGATG
ATTAGTTACTGATCCTCTTTGCATTTGTAAAGCTTTGGAGATATTGAATCATGTTACCATTTCTGTTTTTTTCCA
CCCTGTTTTCTTCCATATTTACTGAAGCTCAGAAGCAGTATTGGGTCTGCAACTCATCCGATGCAAGTATTTCAT
ACACCTACTGTGATAAAATGCAATACCCAATTTCAATTAATGTTAACCCCTGTATAGAATTGAAAGGATCCAAAG
GATTATTGCACATTTTCTACATTCCAAGGAGAGATTTAAAGCAATTATATTTCAATCTCTATATAACTGTCAACA
CCATGAATCTTCCAAAGCGCAAAGAAGTTATTTGCCGAGGATCTGATGACGATTACTCTTTTTGCAGAGCTCTGA
AGGGAGAGACTGTGAATACAACAATATCATTCTCCTTCAAGGGAATAAAATTTTCTAAGGGAAAATACAAATGTG
TTGTTGAAGCTATTTCTGGGAGCCCAGAAGAAATGCTCTTTTGCTTGGAGTTTGTCATCCTACACCAACCTAATT
CAAATTAGAATAAATTGAGTATTT

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FIGURE 1785

MLPFLFFSTLFSSIFTEAQKQYWVCNSSDASISYTYCDKMQYPISINVNPCIELKGSKGLLHIFYIPRRDLKQLY
FNLYITVNTMNLPKRKEVICRGSDDDYSFCRALKGETVNTTISFSFKGIKFSKGKYKCVVEAISGSPEEMLFCLE
FVILHQPNSN

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FIGURE 1786

AGATTCGCGGCCGCGTCGACGGTGCGCCCACCGGTCCCGCCGGGCGCCCGCGGGACGCGCCGCCAGGGCCCTCTC
CGCCGGGGGCTCGGCGCTCGCCCACCTCTTCCAAATTTAACCATTACCTAAATCCGAAGGGAAATGAGCAAACCT
CTCGGATTGGGTGTCAAGGTCTCCTCCGGGCTGGGGCTGAGCAAGCCCTCGGAGTGACCGTGGGTGACAGCGGCT
CCAGGGACTCTTGGGGCGCAGTGGGGAAAGTGCCGGACCACC**ATG**CCGCGCTCATTTCTCGTCAAAAGCAAGAAG
GCTCACAGCTACCACCAGCCGCGCTCCCCAGGACCAGACTATTCCCTCCGTTTAGAGAATGTACCGGCGCCTAGC
CGAGCAGACAGCACTTCAAATGCAGGCGGGGCGAAAGCGGAGCCCCGGGACCGTTTGTCCCCCGAATCGCAGCTG
ACCGAAGCCCCAGACAGAGCCTCCGCATCCCCCAGACAGCTGCGAAGCAGCGTCTGCGAACGGAGCTCGGAGTTT
GAGGACTTCTGGAGGCCCCCGTCACCCTCCGCGTCTCCAGCCTCGGAGAAGTCAATGTGCCCATCGCTGGACGAA
GCCCAGCCCTTCCCCCTGCCTTTCAAACCGTACTCATGGAGCGGCCTGGCGGGTTCTGACCTGCGGCACCTGGTG
CAGAGCTACCGACCGTGTGGGGCCCTGGAGCGTGGCGCTGGCCTGGGCCTCTTCTGTGAACCCGCCCCGGAGCCT
GGCCACCCGGCCGCGCTGTACGGCCCGAAGCGGGCTGCCGGCGGCGCGGGGGCCGGGGCGCCAGGGAACTGCATC
GCAGGGGCCGGTGCCACCGCTGGCCCTGGCCTAGGGCTCTACGGCGACTTCGGGTCTGCGGCAGCCGGGCTGTAT
GAAAAGCCCACGGCAGCGGCGGGCTTGCTGTACCCCGAGCGTGGCCACCGGCTGCACGCAAACAAAGGCGCTGGC
GTCAAGGTGGAGTCGGAGCTGCTGTGCACCCGCCTGCTGCTGGGCGGCGGCTCCTACAAGTGCATCAAGTGCAGC
AAGGTGTTTTCCACGCCGCACGGGCTCGAGGTGCACGTGCGCAGGTCCCACAGCGGTACCAGACCCTTTGCCTGC
GAGATGTGCGGCAAGACCTTCGGGCACGCGGTGAGCCTGGAGCAGCACAAAGCCGTGCACTCGCAGGAACGGAGC
TTTGACTGTAAGATCTGTGGGAAGAGCTTCAAGAGGTCATCCACACTGTCCACACACCTGCTTATCCACTCAGAC
ACTCGGCCCTACCCCTGTCAGTACTGTGGCAAGAGGTTCCACCAGAAGTCAGACATGAAGAAACACACTTTCATC
CACACTGGTGAGAAGCTTCACAAGTGCCAGGTGTGCGGCAAGGCATTCAGCCAGAGCTCCAACCTCATCACCCAC
AGCCGCAAACACACAGGCTTCAAGCCCTTCGGCTGCGACCTCTGTGGGAAGGGTTTCCAGAGGAAGGTGGACCTC
CGAAGGCACCGGGAGACGCAGCATGGGCTCAAA**TGA**GCACCCTGGCTGGCTGCAAGCAGCAGCTACACAACACTA
CAGAGGGCAGCCTCCCTGCTTGCCACCACTCTGCTCCCTGCTTGCCTCCACTCCCTTCTGACTTTCCAGACCCCA
GGTCCAGTCTGCAGATCCTACCAGGTTGCTCCTCCTTCGCCTTACCTCCTGGAGCTGCCAGAAGAAATGAGGTAC
CTTTTCAAAGTGCAGCCGAGAGTGAGAACCAAGTGACTCCCTAGGCTTCGGACACAAATAGGCTCCTCTACACCT
GAAGACAAAGGCAAAGTCAAATGGGGACCAGAATAAATCTTAGACCCCACAGTCCTTCCCATTTCCAGCCTTAAT
CTACAGACAGGAATGCCCTTCAGGTTTCTTCCTTCCCCCTTCTTGACCTACCCCAGATATTTGTGTGGAAGAGGA
GGAATCACCATTTACAAGGTGGACAAATGCTAATATTTTTATCTAGAAAGAAGAGTGAGTGTTAACTTTTATTTT
TTTCCTTCTGGGGGGTCTGTTGACTCCTTTCTTTTGGGTGCTGCCTATAAATCTTGGAGGAATCATTTCTCCTCC
TCAAAAACTGATTCAGAAACTGACTTGGGGAAGGAATTTAATACTTTGAAGTCATGAGATGCACCATCGAGGCTA
CCCCCAAGAAGAAGCAGAAGAGAAGTTGGTAATGAGAGGGGATTAGAGGTCCTCCCTTCAGTAGGGCTGTGAAAA
CCTCATCACTGGAGGTAAAAGCACAAGCAATGCCTGTGGACAAGATGTCATTCATTCACTCAGCAAATGTTCATG
GATCACCGGCTACCAAGTACCAGGCACCATGTTAGGTATTGGGGAAGAGAGACTGAAGTCACAACCCCTGACTGC
TCCTCAAAAGCTAACGGTTGCACCTCCAAGTGGCTGGGTCTGTTCTTACTCTTGGAGGGAATTCTGAGAAGACAG
CACAGAATTGTAAACCTTCCCTTTTGACCCTTTTGGATTTTATCAGGTGTAAACAAAAAGCTGAACAGTTACTTC
AAAGATATGTGTGTATATTCAGTTTTTTATTGTTAAGCTGATATTTTAAAGATTTCTGAGCTAGCAGGCATGTGG
GAAGGAAGGCTCTGTCTTCAACTCTTTGACCCTCCATGTGTACCATAGAGGGGGGAAAGGTGGTATTTTCACTTT
GATGAGGTTGGTAAATGTTTTTAGATCTTCTGGTAAGCATTATGTTTGTTAATACATATTTATTAGAGTGATGTT
TTAAGTTAATAAAGTATTAAGAGTAAAAAAAAAA

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FIGURE 1787

MPRSFLVKSKKAHSYHQPRSPGPDYSLRLENVPAPSRADSTSNAGGAKAEPRDRLSPESQLTEAPDRASASPRQL
RSSVCERSSEFEDFWRPPSPSASPASEKSMCPSLDEAQPFPLPFKPYSWSGLAGSDLRHLVQSYRPCGALERGAG
LGLFCEPAPEPGHPAALYGPKRAAGGAGAGAPGNCIAGAGATAGPGLGLYGDFGSAAAGLYEKPTAAAGLLYPER
GHRLHANKGAGVKVESELLCTRLLLGGGSYKCIKCSKVFSTPHGLEVHVRRSHSGTRPFACEMCGKTFGHAVSLE
QHKAVHSQERSFDCKICGKSFKRSSTLSTHLLIHSDTRPYPCQYCGKRFHQKSDMKKHTFIHTGEKLHKCQVCGK
AFSQSSNLITHSRKHTGFKPFGCDLCGKGFQRKVDLRRHRETQHGLK

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FIGURE 1788

GCCATTTGAAGCAGAATCCAAACC**ATG**AATTGTAGAGAATTACCCTTGACCCTTTGGGTGCTTATATCTGTAAGC
ACTGCAGAATCTTGTACTTCACGTCCCCACATTACTGTGGTTGAAGGGGAACCTTTCTATCTGAAACATTGCTCG
TGTTCACTTGCACATGAGATTGAAACAACCACCAAAAGCTGGTACAAAAGCAGTGGATCACAGGAACATGTGGAG
CTGAACCCAAGGAGTTCCTCGAGAATTGCTTTGCATGATTGTGTTTTGGAGTTTTGGCCAGTTGAGTTGAATGAC
ACAGGATCTTACTTTTTCCAAATGAAAAATTATACTCAGAAATGGAAATTAAATGTCATCAGAAGAAATAAACAC
AGCTGTTTCACTGAAAGACAAGTAACTAGTAAAATTGTGGAAGTTAAAAAATTTTTTCAGATAACCTGTGAAAAC
AGTTACTATCAAACACTGGTCAACAGCACATCATTGTATAAGAACTGTAAAAAGCTACTACTGGAGAACAATAAA
AACCCAACGATAAAGAAGAACGCCGAGTTTGAAGATCAGGGGTATTACTCCTGCGTGCATTTCCTTCATCATAAT
GGAAAACTATTTAATATCACCAAAACCTTCAATATAACAATAGTGGAAGATCGCAGTAATATAGTTCCGGTTCTT
CTTGGACCAAAGCTTAACCATGTTGCAGTGGAATTAGGAAAAAACGTAAGGCTCAACTGCTCTGCTTTGCTGAAT
GAAGAGGATGTAATTTATTGGATGTTCGGGGAAGAAAATGGATCGGATCCTAATATACATGAAGAGAAAGAAATG
AGAATTATGACTCCAGAAGGCAAATGGCATGCTTCAAAAGTATTGAGAATTGAAAATATTGGTGAAAGCAATCTA
AATGTTTTATATAATTGCACTGTGGCCAGCACGGGAGGCACAGACACCAAAAGCTTCATCTTGGTGAGAAAAGCA
GACATGGCTGATATCCCAGGCCACGTCTTCACAAGAGGAATGATCATAGCTGTTTTGATCTTGGTGGCAGTAGTG
TGCCTAGTGACTGTGTGTGTCATTTATAGAGTTGACTTGGTTCTATTTTATAGACATTTAACGAGAAGAGATGAA
ACATTAACAGATGGAAAAACATATGATGCTTTTGTGTCTTACCTAAAAGAATGCCGACCTGAAAATGGAGAGGAG
CACACCTTTGCTGTGGAGATTTTGCCCAGGGTGTTGGAGAAACATTTTGGGTATAAGTTATGCATATTTGAAAGG
GATGTAGTGCCTGGAGGAGCTGTTGTTGATGAAATCCACTCACTGATAGAGAAAAGCCGAAGACTAATCATTGTC
CTAAGTAAAAGTTATATGTCTAATGAGGTCAGGTATGAACTTGAAAGTGGACTCCATGAAGCATTGGTGGAAAGA
AAAATTAAAATAATCTTAATTGAATTTACACCTGTTACTGACTTCACATTCTTGCCCCAATCACTAAAGCTTTTG
AAATCTCACAGAGTTCTGAAGTGGAAGGCCGATAAATCTCTTTCTTATAACTCAAGGTTCTGGAAGAACCTTCTT
TACTTAATGCCTGCAAAAACAGTCAAGCCAGGTAGAGACGAACCGGAAGTCTTGCCTGTTCTTTCCGAGTCT**TAA**

TCTTCAGAAACAGTGAACGCCAAAAAGAACTCAAGATATTCTGGGGACTGAGCATATGAACCTGTTCATAACAAA
GGCTGTGACTCGAAATAATTAACTTTGTCAAAATCCTGCTCACAATTTGAAGATGAAACTTGTCATTAGGTTGGC
GGGAATGAGACTAAAGATTGCGCTGTGGGCTGTGGTCACGTGCTCCCAGAAGACCTGGAATTCAAAAGAAATGGA
GCTATTCTTTTTCTCCCTCTTTCATAACTGGATGCAGCTGCTCATACTCAATCCCATATTCAGCAAGTGTGAAGC
TGGACGTGATGCAAAATAACCGATGCCCTACAAAAAGGGCGCATCTTTAAGAGTTTTAATGCCAGTGCTTAATTC
GAATGAGGGGATTTTAAGTGTCTGAAGAGGCATTTTCTAGGGACCAGTGGGTGACTGAGTAACTGAAATGCTGCT
TTCACTCCCTAACACCATGGATCTGGTTGTGCATAGGATGTGGGAGGAGGGGCTGGCAGGGCCGCCTTCAGAGGC
TGCAGGGCCTCAGCCTCAGGATGCATTTAATGTATCCTGGCCACAGTTGCAGCCAACGGTTCTTGAAAGCTCGGT
AAGGCCCTGCAACGCAGAGCCTGCTTATGTGGATCTATTTATGGGAACTTCTTAAAAGGACCCCAGAATAGCTCT
TTATCTTTCACAAGAGACACAAATTCTAATTGAGTTAATTATCTGGGCCTTTCACTTTGGATGCTCTGAAACATT
TGTTGATTTTGTGTGAATGTTTATATCAAAATGTTTGCCAGGTTGTATTAGCCATTGAATAGCAAAAAACTGATA
GTTACTTGCTTGTTTTTTAAAAATTACATATTAAAAATGCCCTTGGCATAAGGCAGCATGGTGTGGCAGTTAAGA
GATGGGCTGTGCAGCCCATCCTGAGCTCCAGTCCTGAGTTTGCTACTTACTTCTGTGGCCTCTGGAACCTTATCC
AACCTCTTGGTGCTTCAGTTTCCTCATCTGTGAAATTAGAATTTATAATAATTGCACCTACCTCCCAGGGGTAAC
TAAATGAATAAATATAATAAAGTACTTACAGTGGTTCCTGACACAGACTCAGCACTCCGTCAGTGTTGCCATGAC
TATTTTTATTATCATTATTAATGATTACTTAGATCAATTATTTAGCAGTGGACTAATGGAAGCTACAGAGCAGGG
AAGGGAAGCAGATCTAGGGAGGAAGGCAGTTTTGATTTGAGGAGGTTTGCACATGTAGAGAAGCATACTGGAGAA
GCATATCCAGAGGGCGAAAGATATCTCTCCATTGTGCATCTGCCTCTTTTGACGTTGGAAGACACATGTCTTACT
CCCCAAAGGGAGCCCAGCACTGGGAGCCTTCTTGATGATCTCAAAAATAATAGCTATTCAAGAAAATCACCAAGT
GACTGTGAAACCGTCAGTTCGGAAGGCTGGTTAGAACATGTGGGAGCAACATGAATGTTCTACAAAAGTTTAAAG
CAGAGATTGTTTCAAATGGGTGTAGTAGATATTACTGAAAACCAAAAAAGAGTGAGATTGTCAGTGTAAGAATGT
GATTTAATGTTTGTAGTGCTTACAATTTTGTGTACCAACTGGATGACTAAAAAGAGTAAAATAACTTAATTAATA
GCTCATATTTTATGTGTGAAAACATGTTAGTGAACATATATAATCAAAATAGATTTCATTGCTATTGCATAGTCT
CTAATACATAGAATGATTTTGCTTTTCTCTTTTATTATACTTGCTTTAAAATACTTGAAATATATTTTGCATTAA
ATGCATTTCAAGTTAAATGTCTTAAATGTATACATTAGATGTGTGTTTTAAAATGCATAAAACACGTTGAAA

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FIGURE 1789

MNCRELPLTLWVLISVSTAESCTSRPHITVVEGEPFYLKHCSCSLAHEIETTTKSWYKSSGSQEHVELNPRSSSR
IALHDCVLEFWPVELNDTGSYFFQMKNYTQKWKLNVIRRNKHSCFTERQVTSKIVEVKKFFQITCENSYYQTLVN
STSLYKNCKKLLLENNKNPTIKKNAEFEDQGYYSCVHFLHHNGKLFNITKTFNITIVEDRSNIVPVLLGPKLNHV
AVELGKNVRLNCSALLNEEDVIYWMFGEENGSDPNIHEEKEMRIMTPEGKWHASKVLRIENIGESNLNVLYNCTV
ASTGGTDTKSFILVRKADMADIPGHVFTRGMIIAVLILVAVVCLVTVCVIYRVDLVLFYRHLTRRDETLTDGKTY
DAFVSYLKECRPENGEEHTFAVEILPRVLEKHFGYKLCIFERDVVPGGAVVDEIHSLIEKSRRLIIVLSKSYMSN
EVRYELESGLHEALVERKIKIILIEFTPVTDFTFLPQSLKLLKSHRVLKWKADKSLSYNSRFWKNLLYLMPAKTV
KPGRDEPEVLPVLSES

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FIGURE 1790

GGGCCGCCGTCGGCGCGCTGGGTGCGGGAAGGGGGCTCTGGATTTCGGTCCCTCCCCTTTTTCCTCTGAGTCTCG
GAACGCTCCAGCTCTCAGACCCTCTTCCTCCCAGGTAAAGGCCGGGAGAGGAGGGCGCATCTCTTTTCCAGGCAC
CCCACC**ATG**GGCAATGCCTCCAATGACTCCCAGTCTGAGGACTGCGAGACGCGACAGTGGCTTCCCCCAGGCGAA
AGCCCAGCCATCAGCTCCGTCATGTTCTCGGCCGGGGTGCTGGGGAACCTCATAGCACTGGCGCTGCTGGCGCGC
CGCTGGCGGGGGGACGTGGGGTGCAGCGCCGGCCGCAGGAGCTCCCTCTCCTTGTTCCACGTGCTGGTGACCGAG
CTGGTGTTCACCGACCTGCTCGGGACCTGCCTCATCAGCCCAGTGGTACTGGCTTCGTACGCGCGGAACCAGACC
CTGGTGGCACTGGCGCCCGAGAGCCGCGCGTGCACCTACTTCGCTTTCGCCATGACCTTCTTCAGCCTGGCCACG
ATGCTCATGCTCTTCGCCATGGCCCTGGAGCGCTACCTCTCGATCGGGCACCCCTACTTCTACCAGCGCCGCGTC
TCGGCCTCCGGGGGCCTGGCCGTGCTGCCTGTCATCTATGCAGTCTCCCTGCTCTTCTGCTCGCTGCCGCTGCTG
GACTATGGGCAGTACGTCCAGTACTGCCCCGGGACCTGGTGCTTCATCCGGCACGGGCGGACCGCTTACCTGCAG
CTGTACGCCACCCTGCTGCTGCTTCTCATTGTCTCGGTGCTCGCCTGCAACTTCAGTGTCATTCTCAACCTCATC
CGCATGCACCGCCGAAGCCGGAGAAGCCGCTGCGGACCTTCCCTGGGCAGTGGCCGGGGCGGCCCCGGGGCCCGC
AGGAGAGGGGAAAGGGTGTCCATGGCGGAGGAGACGGACCACCTCATTCTCCTGGCTATCATGACCATCACCTTC
GCCGTCTGCTCCTTGCCTTTCACGATTTTTGCATATATGAATGAAACCTCTTCCCGAAAGGAAAAATGGGACCTC
CAAGCTCTTAGGTTTTTATCAATTAATTCAATAATTGACCCTTGGGTCTTTGCCATCCTTAGGCCTCCTGTTCTG
AGACTAATGCGTTCAGTCCTCTGTTGTCGGATTTCATTAAGAACACAAGATGCAACACAAACTTCCTGTTCTACA
CAGTCAGATGCCAGTAAACAGGCTGACCTT**TGA**GGTCAGTAGTTTAAAAGTTCTTAGTTATATAGCATCTGGAAG
ATCATTTTGAAATTGTTCCCTGGAGAAATGAAAACAGTGTGTAAACAAAATGAAGCTGCCCTAATAAAAAGGAGT
ATACAAACATTTAAGCTGTGGTCAAGGCTACAGATGTGCTGACAAGGCACTTCATGTAAAGTGTCAGAAGGAGCT
ACAAAACCTACCCTCAATGAGCATGGTACTTGGCCTTTGGAGGAACAATCGGCTGCATTGAAGATCCAGCTGCCT
ATTGATTTAAGCTTTCCTGTTGAATGACAAAGTATGTGGTTTTGTAATTTGTTTGAAACCCCAAACAGTGACTGT
ACTTTCTATTTTAATCTTGCTACTACCGTTATACACATATAGTGTACAGCCAGACCAGATTAAACTTCATATGTA
ATCTCTAGGAAGTCAATATGTGGAAGCAACCAAGCCTGCTGTCTTGTGATCACTTAGCGAACCCTTTATTTGAAC
AATGAAGTTGAAAATCATAGGCACCTTTTACTGTGATGTTTGTGTATGTGGGAGTACTCTCATCACTACAGTATT
ACTCTTACAAGAGTGGACTCAGTGGGTTAACATCAGTTTTGTTTACTCATCCTCCAGGAACTGCAGGTCAAGTTG
TCAGGTTATTTATTTTATAATGTCCATATGCTAATAGTGATCAAGAAGACTTTAGGAATGGTTCTCTCAACAAGA
AATAATAGAAATGTCTCAAGGCAGTTAATTCTCATTAATACTCTTATTATCCTATTTCTGGGGGAGGATGTACGT
GGCCATGTATGAAGCCAAATATTAGGCTTAAAAACTGAAAAATCTGGTTCATTCTTCAGATATACTGGAACCCTT
TTAAAGTTGATATTGGGGCCATGAGTAAAATAGATTTTATAAGATGACTGTGTTGTACCAAAATTCATCTGTCTA
TATTTTATTTAGGGGAACATGGTTTGACTCATCTTATATGGGAAACCATGTAGCAGTGAGTCATATCTTAATATA
TTTCTAAATGTTTGGCATGTAAATGTAAACTCAGCATCAAAATATTTCAGTGAATTTGCACTGTTTAATCATAGT
TACTGTGTAAACTCATCTGAAATGTTACAAAAATAAACTATAAAACA

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FIGURE 1791

MGNASNDSQSEDCETRQWLPPGESPAISSVMFSAGVLGNLIALALLARRWRGDVGCSAGRRSSLSLFHVLVTELV
FTDLLGTCLISPVVLASYARNQTLVALAPESRACTYFAFAMTFFSLATMLMLFAMALERYLSIGHPYFYQRRVSA
SGGLAVLPVIYAVSLLFCSLPLLDYGQYVQYCPGTWCFIRHGRTAYLQLYATLLLLLIVSVLACNFSVILNLIRM
HRRSRRSRCGPSLGSGRGGPGARRRGERVSMAEETDHLILLAIMTITFAVCSLPFTIFAYMNETSSRKEKWDLQA
LRFLSINSIIDPWVFAILRPPVLRLMRSVLCCRISLRTQDATQTSCSTQSDASKQADL

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FIGURE 1792

ACAGAGCTTCAAAAAAAGAGCGGGACAGGGACAAGCGTATCTAAGAGGCTGAACATGAATCCACAGATCAGAAAT
CCGATGGAGCGGATGTATCGAGACACATTCTACGACAACTTTGAAAACGAACCCATCCTCTATGGTCGGAGCTAC
ACTTGGCTGTGCTATGAAGTGAAAATAAAGAGGGGCCGCTCAAATCTCCTTTGGGACACAGGGGTCTTTCGAGGC
CAGGTGTATTTCAAGCCTCAGTACCACGCAGAAATGTGCTTCCTCTCTTGGTTCTGTGGCAACCAGCTGCCTGCT
TACAAGTGTTTCCAGATCACCTGGTTTGTATCCTGGACCCCCTGCCCGGACTGTGTGGCGAAGCTGGCCGAATTC
CTGTCTGAGCACCCCAATGTCACCCTGACCATCTCTGCCGCCCGCCTCTACTACTACTGGGAAAGAGATTACCGA
AGGGCGCTCTGCAGGCTGAGTCAGGCAGGAGCCCGCGTGACGATCATGGACTATGAAGAATTTGCATACTGCTGG
GAAAACTTTGTGTACAATGAAGGTCAGCAATTCATGCCTTGGTACAAATTCGATGAAAATTATGCATTCCTGCAC
CGCACGCTAAAGGAGATTCTCAGATACCTGATGGATCCAGACACATTCACTTTCAACTTTAATAATGACCCTTTG
GTCCTTCGACGGCGCCAGACCTACTTGTGCTATGAGGTGGAGCGCCTGGACAATGGCACCTGGGTCCTGATGGAC
CAGCACATGGGCTTTCTATGCAACGAGGCTAAGAATCTTCTCTGTGGCTTTTACGGCCGCCATGCGGAGCTGCGC
TTCTTGGACCTGGTTCCTTCTTTGCAGTTGGACCCGGCCCAGATCTACAGGGTCACTTGGTTCATCTCCTGGAGC
CCCTGCTTCTCCTGGGGCTGTGCCGGGGAAGTGCGTGCGTTCCTTCAGGAGAACACACACGTGAGACTGCGCATC
TTCGCTGCCCGCATCTATGATTACGACCCCCTATATAAGGAGGCGCTGCAAATGCTGCGGGATGCTGGGGCCCAA
GTCTCCATCATGACCTACGATGAGTTTGAGTACTGCTGGGACACCTTTGTGTACCGCCAGGGATGTCCCTTCCAG
CCCTGGGATGGACTAGAGGAGCACAGCCAAGCCCTGAGTGGGAGGCTGCGGGCCATTCTCCAGAATCAGGGAAAC
TGAAGGATGGGCCTCAGTCTCTAAGGAAGGCAGAGACCTGGGTTGAGCAGCAGAATAAAAGATCTTCTTCCAAGA
AATGCAAACAGACCGTTCACCACCATCTCCAGCTGCTCACAGACACCAGCAAAGCAATGTGCTCCTGATCAAGTA
GATTTTTTAAAAATCAGAGTCAATTAATTTTAATTGAAAATTTCTCTTATGTTCCAAGTGTACAAGAGTAAGATT
ATGCTCAATATTCCCAGAATAGTTTTCAATGTATTAATGAAGTGATTAATTGGCTCCATATTTAGACTAATAAAA
CATTAAGAATCTTCCATAATTGTTTCCACAAACACT

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FIGURE 1793

MDYEEFAYCWENFVYNEGQQFMPWYKFDENYAFLHRTLKEILRYLMDPDTFTFNFNNDPLVLRRRQTYLCYEVER
LDNGTWVLMDQHMGFLCNEAKNLLCGFYGRHAELRFLDLVPSLQLDPAQIYRVTWFISWSPCFSWGCAGEVRAFL
QENTHVRLRIFAARIYDYDPLYKEALQMLRDAGAQVSIMTYDEFEYCWDTFVYRQGCPFQPWDGLEEHSQALSGR
LRAILQNQGN

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FIGURE 1794

GGAGGAGGAAGCAAGCGAGGGGGCTGGTTCCTGAGCTTCGCAATTCCTGTGTCGCCTTCTGGGCTCCCAGCCTGC
CGGGTCGCATGATCCCTCCGGCCGGAGCTGGTTTTTTTGCCAGCCACCGCGAGGCCGGCTGAGTTACCGGCATCC
CCGCAGCCACCTCCTCTCCCGACCTGTGATACAAAAGATCTTCCGGGGGCTGCACCTGCCTGCCTTTGCCTAAGG
CGGATTTGAATCTCTTTCTCTCCCTTCAGAATCTTATCTTGGCTTTGGATCTTAGAAGAGAATCACTAACCAGAG
ACGAGACTCAGTGAGTGAGCAGGTGTTTTGGACAATGGACTGGTTGAGCCCATCCCTATTATAAAA**ATG**TCTCAG
AGCAACCGGGAGCTGGTGGTTGACTTTCTCTCCTACAAGCTTTCCCAGAAAGGATACAGCTGGAGTCAGTTTAGT
GATGTGGAAGAGAACAGGACTGAGGCCCCAGAAGGGACTGAATCGGAGATGGAGACCCCCAGTGCCATCAATGGC
AACCCATCCTGGCACCTGGCAGACAGCCCCGCGGTGAATGGAGCCACTGGCCACAGCAGCAGTTTGGATGCCCGG
GAGGTGATCCCCATGGCAGCAGTAAAGCAAGCGCTGAGGGAGGCAGGCGACGAGTTTGAACTGCGGTACCGGCGG
GCATTCAGTGACCTGACATCCCAGCTCCACATCACCCCAGGGACAGCATATCAGAGCTTTGAACAGGATACTTTT
GTGGAACTCTATGGGAACAATGCAGCAGCCGAGAGCCGAAAGGGCCAGGAACGCTTCAACCGCTGGTTCCTGACG
GGCATGACTGTGGCCGGCGTGGTTCTGCTGGGCTCACTCTTCAGTCGGAAATGACCAGACACTGACCATCCACTC
TACCCTCCCACCCCCTTCTCTGCTCCACCACATCCTCCGTCCAGCCGCCATTGCCACCAGGAGAACCACTACATG
CAGCCCATGCCCACCTGCCCATCACAGGGTTGGGCCCAGATCTGGTCCCTTGCAGCTAGTTTTCTAGAATTTATC
ACACTTCTGTGAGACCCCCACACCTCAGTTCCCTTGGCCTCAGAATTCACAAAATTTCCACAAAATCTGTCCAAA
GGAGGCTGGCAGGTATGGAAGGGTTTGTGGCTGGGGGCAGGAGGGCCCTACCTGATTGGTGCAACCCTTACCCCT
TAGCCTCCCTGAAAATGTTTTTCTGCCAGGGAGCTTGAAAGTTTTCAGAACCTCTTCCCCAGAAAGGAGACTAGA
TTGCCTTTGTTTTGATGTTTGTGGCCTCAGAATTGATCATTTTCCCCCCACTCTCCCCACACTAACCTGGGTTCC
CTTTCCTTCCATCCCTACCCCCTAAGAGCCATTTAGGGGCCACTTTTGACTAGGGATTCAGGCTGCTTGGGATAA
AGATGCAAGGACCAGGACTCCCTCCTCACCTCTGGACTGGCTAGAGTCCTCACTCCCAGTCCAAATGTCCTCCAG
AAGCCTCTGGCTAGAGGCCAGCCCCACCCAGGAGGGAGGGGGCTATAGCTACAGGAAGCACCCCATGCCAAAGCT
AGGGTGGCCCTTGCAGTTCAGCACCACCCTAGTCCCTTCCCCTCCCTGGCTCCCATGACCATACTGAGGGACCAA
CTGGGCCCAAGACAGATGCCCCAGAGCTGTTTATGGCCTCAGCTGCCTCACTTCCTACAAGAGCAGCCTGTGGCA
TCTTTGCCTTGGGCTGCTCCTCATGGTGGGTTCAGGGGACTCAGCCCTGAGGTGAAAGGGAGCTATCAGGAACAG
CTATGGGAGCCCCAGGGTCTTCCCTACCTCAGGCAGGAAGGGCAGGAAGGAGAGCCTGCTGCATGGGGTGGGGTA
GGGCTGACTAGAAGGGCCAGTCCTGCCTGGCCAGGCAGATCTGTGCCCCATGCCTGTCCAGCCTGGGCAGCCAGG
CTGCCAAGGCCAGAGTGGCCTGGCCAGGAGCTCTTCAGGCCTCCCTCTCTCTTCTGCTCCACCCTTGGCCTGTCT
CATCCCCAGGGGTCCCAGCCACCCCGGGCTCTCTGCTGTACATATTTGAGACTAGTTTTTATTCCTTGTGAAGAT
GATATACTATTTTTGTTAAGCGTGTCTGTATTTATGTGTGAGGAGCTGCTGGCTTGCAGTGCGCGTGCACGTGGA
GAGCTGGTGCCCGGAGATTGGACGGCCTGATGCTCCCTCCCCTGCCCTGGTCCAGGGAAGCTGGCCGAGGGTCCT
GGCTCCTGAGGGGCATCTGCCCCTCCCCCAACCCCCACCCCACACTTGTTCCAGCTCTTTGAAATAGTCTGTGTG
AAGGTGAAAGTGCAGTTCAGTAATAAACTGTGTTTACTCAGTGAAAAAAAAAAAAAAAAAA

FIGURE 1795

MSQSNRELVVDFLSYKLSQKGYSWSQFSDVEENRTEAPEGTESEMETPSAINGNPSWHLADSPAVNGATGHSSSL
DAREVIPMAAVKQALREAGDEFELRYRRAFSDLTSQLHITPGTAYQSFEQVVNELFRDGVNWGRIVAFFSFGGAL
CVESVDKEMQVLVSRIAAWMATYLNDHLEPWIQENGGWDTFVELYGNNAAAESRKGQERFNRWFLTGMTVAGVVL
LGSLFSRK

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FIGURE 1796

AACACATTTCATCTGGGCTTCTTAAATCTAAATCTTTAAA**ATG**ACTAAGTTTTCTTCCTTTTCTCTGTTTTTCCT
AATAGTTGGGGCTTATATGACTCATGTGTGTTTCAATATGGAAATTATTGGAGGGAAAGAAGTGTCACCTCATTC
CAGGCCATTTATGGCCTCCATCCAGTATGGCGGACATCACGTTTGTGGAGGTGTTCTGATTGATCCACAGTGGGT
GCTGACAGCAGCCCACTGCCAATATCGGTTTACCAAAGGCCAGTCTCCCACTGTGGTTTTAGGCGCACACTCTCT
CTCAAAGAATGAGGCCTCCAAACAAACACTGGAGATCAAAAAATTTATACCATTCTCAAGAGTTACATCAGATCC
TCAATCAAATGATATCATGCTGGTTAAGCTTCAAACAGCCGCAAAACTCAATAAACATGTCAAGATGCTCCACAT
AAGATCCAAAACCTCTCTTAGATCTGGAACCAAATGCAAGGTTACTGGCTGGGGAGCCACCGATCCAGATTCATT
AAGACCTTCTGACACCCTGCGAGAAGTCACTGTTACTGTCCTAAGTCGAAAACTTTGCAACAGCCAAAGTTACTA
CAACGGCGACCCTTTTATCACCAAAGACATGGTCTGTGCAGGAGATGCCAAAGGCCAGAAGGATTCCTGTAAGGG
TGACTCAGGGGGCCCCTTGATCTGTAAAGGTGTCTTCCACGCTATAGTCTCTGGAGGTCATGAATGTGGTGTTGC
CACAAAGCCTGGAATCTACACCCTGTTAACCAAGAAATACCAGACTTGGATCAAAAGCAACCTTGTCCCGCCTCA
TACAAAT**TAA**GTTACAAATAATTTTATTGGATGCACTTGCTTCTTTTTTCCTAATATGCTCGCAGGTTAGAGTTG
GGTGTAAGTAAAGCAGAGCACATATGGGGTCCATTTTTGCACTTGTAAGTCATTTTATTAAGGAATCAAGTTCTT
TTTCACTTGTATCACTGATGTATTTCTACCATGCTGGTTTTATTCTAAATAAAATTTAGAAGACT

FIGURE 1797

MTKFSSFSLFFLIVGAYMTHVCFNMEIIGGKEVSPHSRPFMASIQYGGHHVCGGVLIDPQWVLTAAHCQYRFTKG
QSPTVVLGAHSLSKNEASKQTLEIKKFIPFSRVTSDPQSNDIMLVKLQTAAKLNKHVKMLHIRSKTSLRSGTKCK
VTGWGATDPDSLRPSDTLREVTVTVLSRKLCNSQSYYNGDPFITKDMVCAGDAKGQKDSCKGDSGGPLICKGVFH
AIVSGGHECGVATKPGIYTLLTKKYQTWIKSNLVPPHTN

FIGURE 1798

GGACAGCACAGCTGACAGCCGTGCTCAGAAAGTTTCTGGATCCCAGGCTCATCTCCACAGAGGAGAACACGCAGG
CAGCAGAGACCATGGGGCCCATCTCAGCCCCTTCCTGCAGATGGCGCATCCCCTGGCAGGGGCTCCTGCTCACAG
CCTCACTTTTCACCTTCTGGAACCCGCCCACCACTGCTCAGCTCACTATTGAAGCTGTGCCATCCAATGCTGCAG
AGGGGAAGGAGGTTCTTCTACTTGTCCACAATCTGCCCCAGGACCCTCGTGGCTACAACTGGTACAAAGGGGAAA
CAGTGGATGCCAACCGTCGAATTATAGGATATGTAATATCAAATCAACAGATTACCCCAGGGCCTGCATACAGCA
ATCGAGAGACAATATACCCCAATGCATCCCTGCTGATGCGGAACGTCACCAGAAATGACACAGGATCCTACACCC
TACAAGTCATAAAGCTAAATCTTATGAGTGAAGAAGTAACTGGCCAGTTCAGCGTACATCCGGAGACTCCCAAGC
CCTCCATCTCCAGCAACAACTCCAACCCCGTGGAGGACAAGGATGCTGTGGCCTTCACCTGTGAACCTGAGACTC
AGAACACAACCTACCTGTGGTGGGTAAATGGTCAGAGTCTCCCGGTCAGTCCCAGGCTGCAGCTGTCCAATGGCA
ACAGGACCCTCACTCTACTCAGTGTCACAAGGAATGACGTAGGACCCTATGAATGTGAAATACAGAACCCAGCGA
GTGCAAACTTCAGTGACCCAGTCACCCTGAATGTCCTCTATGGCCCAGATGCCCCCACCATTTCCCCTTCAGACA
CCTATTACCATGCAGGGGTAAATCTCAACCTCTCCTGCCATGCGGCCTCTAATCCACCCTCACAGTATTCTTGGT
CTGTCAATGGCACATTCCAGCAATACACACAAAAGCTCTTTATCCCCAACATCACTACAAAGAACAGCGGATCCT
ATGCCTGCCACACCACTAACTCAGCCACTGGCCGCAACAGGACCACAGTCAGGATGATCACAGTCTCTGATGCTG
TAGTACAAGGAAGTTCTCCTGGCCTCTCAGCTAGAGCCACTGTCAGCATCATGATTGGAGTACTGGCCAGGGTGG
CTCTGATATAGTAGCTCTGGTGTAGTTTCTGCATTTCAAGAAGACTGGCAGACAGTTGTTTTTATTCTTCCTCAA
AGCATTTGCAATCAGCTACCATTCAAAATTGCTTCTTCTTCAAGATTTATGGAAAATACTCTGACGAGTACTCTT
GAACACAAGTTCCTGATAACTTTAAGATCACGCCACTGGACTGTCTATGAACTTGCAAACAGGCTGATACCTTTG
TGAAGTTGCCCACCAAAACACAGAAGGAAAAAAAACATGAATTTCATTGAACTAAATAATAATGAGGATAATGTTT
TTAAGATTTTTTTTTTTTTTTTTTTTGAGATGGAATCTCGCTCTGTCGCCCAGGCTGGAGTGCAGTGGCACGATC
TCAACTCACTGCAACGTCCGCCTCCTGGGTTCACACCATTCTCCTGCCTCAGCCTCCTGAGTAGCTGGGACTACA
GGCGCCTGCCACAACGCCCGGCTAATTTTTTGTATTTTTAGTAGAGACGGGGTTTCACTGTGGTCTCAATCTCCT
GACTTCATGGTCCGCCTGCCTCAGCCTCCCAAAGTTCTGGGATTACAGGTGTGAGCCACCGCGCCCAGCCCGTTT
TTAAGATTTTTTATTTGAAAAATTGCCAATTCTTTAAGTGTTTTCTTTTTCAGATTTATGAATTTCTTTATCTTT
TAAGCTATCTATACCTTACTGCAATTTGGTAAAGCAGACTTTTGTGAACAAAAATTATAACATTTACTTTTGCTC
CCTACCTGACTGCCACAGAACTGGGCAACTATTCATGAGTATTCATATGTTTATGGTAATTCAGTTATTTGCACA
AGTTCAGTGAGAATCTGCTGTCTTTATAATGGGATATAGTTTAAAACATTGGTTATATTACCAAGGCTTTGATTG
GGATGTTATATTTGAGAAAATACAGAGAATGATAGATTAACGGAGTGTCTAATCTATCGTGTCAACCCCAAATTT
TTACGTATGAGATCCTTTAGTCCACCCAATGGCTGACAGTAACAGCATCTTTAACACAACTCTTTGTTCAAATGT
ACTATGGTCTCTTTTAGAGTCAGACTCCTAGACTCACTTGTTCTCACTGTCTGTTTTAATTTAACCCAGGCATGC
AATGCTAGATAATAAAATTGCTCCCTATTGGCTGATC

FIGURE 1799

MGPISAPSCRWRIPWQGLLLTASLFTFWNPPTTAQLTIEAVPSNAAEGKEVLLLVHNLPQDPRGYNWYKGETVDA
NRRIIGYVISNQQITPGPAYSNRETIYPNASLLMRNVTRNDTGSYTLQVIKLNLMSEEVTGQFSVHPETPKPSIS
SNNSNPVEDKDAVAFTCEPETQNTTYLWWVNGQSLPVSPRLQLSNGNRTLTLLSVTRNDVGPYECEIQNPASANF
SDPVTLNVLYGPDAPTISPSDTYYHAGVNLNLSCHAASNPPSQYSWSVNGTFQQYTQKLFIPNITTKNSGSYACH
TTNSATGRNRTTVRMITVSDAVVQGSSPGLSARATVSIMIGVLARVALI

FIGURE 1800

CGCAAGAATGCATACAAACTCCAGGGCTGCTCTCTCCTGGAGAGGGAGGGAGGGGATTTAAAAACCTGCAGCAAC
ATGGGGGAGGAGGCTGTTTGTCCTTCTCTCTCTGGGGAAGTAACTCGCTCAAACTGCCTTCCTTGCTGAGCTGCT
TCGCGTAGCTTTGAGGAAGGTCTAGTGAAATTGGTCTTTCCATTACATCTGGATGTACTACCAGAGAGTTCTGCT
GCTGTTGTTTTTTTTAGCTTTTCTTTCTTTGAGTCTTTAAAGGGCAATTGTCGACACTCTGCAAACATACCGATT
TGTTGTCTGCCCACTTTGGAGTCTTCAATCTGGGCAGTAACTATTTACCCTTTTTCCTGCTAGCCTGTCCCCCTC
TCTGGATTGAAGTCACCTGCTAAGACAATGGACTACCGACCAGACTCCCGGAAATCATGTTGGTAGGATCCCAGT
CTTTTTCGCCTGGAGGGCCCAATGGGATCATTAGAAGCCAGTCCTTTGCGGGTTTCAGCGGCCTCCAGGAAAGGC
GATCCAGGTGTAACTCCTTCATTGAAAATTCCTCCGCTCTCAAGAAGCCTCAGGCCAAACTGAAGAAAATGCACA
ATTTAGGCCACAAAAACAACAATCCCCCCAAAGAGCCTCAGCCTAAAAGGGTGGAAGAAGTCTACAGGGCCTTGA
AAAATGGACTTGATGAATATCTGGAGGTTCACCAGACGGAGCTGGACAAGTTGACAGCTCAGTTAAAAGATATGA
AAAGAAACTCTCGCCTGGGTGTACTGTATGACCTAGACAAGCAAATTAAAACAATTGAAAGATACATGAGACGCC
TGGAGTTTCATATAAGTAAGGTAGATGAACTCTATGAAGCTTATTGTATCCAGCGACGCCTCCAGGATGGTGCCA
GCAAAATGAAGCAAGCCTTCGCAACATCCCCTGCCAGCAAAGCTGCCCGGGAGAGTCTGACAGAGATCAATCGGA
GCTTCAAGGAGTACACAGAGAATATGTGCACCATTGAAGTGGAGCTAGAGAATCTGCTGGGAGAATTCTCCATCA
AGATGAAAGGTCTGGCTGGCTTTGCACGCCTCTGTCCTGGAGATCAATATGAAATTTTCATGAAGTATGGCCGGC
AGCGGTGGAAACTGAAAGGCAAAATAGAAGTAAATGGCAAGCAGAGCTGGGATGGAGAAGAAACAGTTTTTCTGC
CCCTGATAGTTGGGTTCATCTCCATCAAGGTCACGGAGCTCAAAGGGCTAGCAACTCACATCCTGGTAGGTAGCG
TGACCTGTGAGACCAAAGAGCTGTTTGCAGCCCGACCTCAGGTAGTGGCTGTCGACATCAATGACCTTGGTACCA
TCAAACTGAACCTGGAAATCACCTGGTATCCATTTGACGTGGAGGACATGACCGCATCCTCAGGCGCTGGGAACA
AGGCAGCAGCCCTTCAGAGGAGAATGTCCATGTACAGCCAGGGTACCCCGGAAACGCCCACCTTCAAAGACCACT
CCTTCTTTTCAAATCTACCTGATGACATCTTTGAAAATGGAAAGGCAGCCGAGGAGAAAATGCCACTGTCGCTCA
GCTTCAGTGACCTGCCCAACGGGGACTGCGCCCTCACCTCCCACTCAACAGGCTCCCCTTCCAACTCAACAAATC
CAGAAATTACCATCACCCCTGCGGAGTTTAACCTCAGCAGCTTGGCCTCCCAGAATGAGGGTATGGATGACACCA
GCTCAGCATCTTCCAGGAACTCCCTGGGAGAAGGCCAAGAGCCAAAGTCACACCTGAAGGAGGAAGACCCAGAGG
AGCCCAGAAAACCTGCCTCGGCCCCATCTGAGGCTTGCCGCCGACAGTCCTCAGGTGCTGGGGCTGAGCACCTGT
TCCTTGAGAATGATGTTGCAGAAGCACTTCTGCAAGAGTCTGAGGAGGCCTCTGAGCTCAAGCCTGTGGAACTGG
ACACTTCGGAAGGAAACATCACAAAGCAGCTGGTCAAGAGGCTCACATCTGCAGAGGTGCCAATGGCCACAGACA
GGCTGCTCTCTGAGGGTTCTGTTGGTGGAGAATCTGAAGGCTGCAGATCCTTTCTAGATGGAAGCTTAGAGGATG
CTTTTAATGGGCTTTTACTTGCATTAGAACCACATAAAGAGCAGTATAAAGAGTTTCAGGATCTGAACCAAGAAG
TCATGAATTTGGATGATATTCTAAAAAAGTAGAGAAGATCCTCTAATGGATCCCAGTGTGCCCATCCCTCAACCT
CCTCAGTGATCAACTCATGGCCAATCTTGTTTCCTATTCTTCAACCTGCTGACTTCCCTCTGGATTCTTCTGCAA
CCAGTCCCAGATATTGTGCCATTTTATCCATGGTTGTACTTCTTTTTTGGATATAAAGATTTTTAAATGCATTTT
TTAAATGCTAACAAAAAATAAAAACTTGAAACAAAAAAAAAAAAAAAAAAA

FIGURE 1801

MLVGSQSFSPGGPNGIIRSQSFAGFSGLQERRSRCNSFIENSSALKKPQAKLKKMHNLGHKNNNPPKEPQPKRVE
EVYRALKNGLDEYLEVHQTELDKLTAQLKDMKRNSRLGVLYDLDKQIKTIERYMRRLEFHISKVDELYEAYCIQR
RLQDGASKMKQAFATSPASKAARESLTEINRSFKEYTENMCTIEVELENLLGEFSIKMKGLAGFARLCPGDQYEI
FMKYGRQRWKLKGKIEVNGKQSWDGEETVFLPLIVGFISIKVTELKGLATHILVGSVTCETKELFAARPQVVAVD
INDLGTIKLNLEITWYPFDVEDMTASSGAGNKAAALQRRMSMYSQGTPETPTFKDHSFFSNLPDDIFENGKAAEE
KMPLSLSFSDLPNGDCALTSHSTGSPSNSTNPEITITPAEFNLSSLASQNEGMDDTSSASSRNSLGEGQEPKSHL
KEEDPEEPRKPASAPSEACRRQSSGAGAEHLFLENDVAEALLQESEEASELKPVELDTSEGNITKQLVKRLTSAE
VPMATDRLLSEGSVGGESEGCRSFLDGSLEDAFNGLLLALEPHKEQYKEFQDLNQEVMNLDDILKK

FIGURE 1802

GGGCGAGCGCGACGCGGGAGCCGGGGCGGCGCGGGCAGCGCGGGCCGGCCGGGCTGTGCGGGGCGAGCGGCGGCG
CGGCGGGGGCCTTCGGCCGGGGCGGCAGCTGGGCGCCGGCGGGAGCTAGCAGCGTCTGCAGCCGCGCCCGGCCAG
CCCCCTCCGGCTCGGC**ATG**GAGCTGCCAGCTGTTGGCGAGCACGTCTTCGCGGTGGAGAGCATCGAGAAGAAGCG
GATCCGCAAGGGCAGAGTGGAGTATCTGGTGAAATGGAGAGGCTGGTCGCCCAAATATAACACGTGGGAACCGGA
GGAGAACATCCTGGACCCCAGGCTGCTGATCGCCTTCCAGAACAGGGAACGGCAGGAGCAGCTGATGGGATATCG
GAAGAGAGGGCCGAAGCCCAAACCGCTAGTGGTGCAGGTGCCTACCTTTGCCCGTCGTTCCAATGTCCTGACCGG
CCTCCAGGACTCCTCCACTGACAACCGTGCCAAGCTGGATTTGGGCGCGCAGGGGAAGGGCCAGGGGCATCAGTA
CGAGCTCAACAGCAAGAAGCACCACCAGTACCAGCCGCACAGCAAGGAGGGGAAGCCCCGGCCGCCGGGCAAGAG
CGGCAAGTACTACTACCAGCTCAACAGCAAGAAGCACCACCCCTACCAGCCCGACCCCAAAATGTACGACCTGCA
GTACCAGGGCGGCCACAAGGAGGCGCCCAGCCCCACCTGCCCGGACCTGGGGGCCAAGAGCCACCCGCCCGACAA
GTGGGCGCAAGGTGCGGGGGCCAAAGGCTACCTGGGGGCGGTGAAGCCCCTGGCCGGTGCGGCGGGTGCTCCAGG
CAAAGGCTCCGAGAAGGGCCCCCCCAACGGAATGATGCCGGCCCCCAAAGAGGCTGTGACGGGCAACGGGATTGG
GGGCAAGATGAAGATAGTCAAGAACAAGAACAAGAACGGACGCATCGTGATCGTGATGAGCAAATACATGGAGAA
CGGCATGCAGGCGGTGAAGATCAAGTCCGGCGAGGTGGCAGAGGGGGAGGCTCGCTCCCCCAGCCACAAGAAGCG
GGCAGCCGACGAGCGCCACCCTCCTGCCGACAGGACTTTTAAAAAGGCGGCGGGCGCAGAGGAGAAGAAGGTGGA
GGCGCCGCCCAAGAGGAGGGAGGAGGAGGTGTCCGGGGTTAGCGATCCGCAGCCCCAGGATGCCGGCTCCCGCAA
GCTGTCCCCGACCAAGGAGGCCTTTGGAGAGCAGCCCCTGCAGCTCACCACCAAGCCCGACCTGCTTGCCTGGGA
CCCGGCCCGGAACACGCACCCGCCCTCACACCACCCGCACCCGCACCCCCATCACCACCACCACCACCACCACCA
CCACCACCACGCCGTCGGCCTGAATCTCTCCCACGTGCGCAAGCGCTGCCTCTCCGAGACCCACGGCGAGCGCGA
GCCCTGCAAGAAGCGGCTGACTGCGCGCAGCATCAGCACCCCCACCTGCCTGGGGGGCAGCCCAGCCGCTGAGCG
CCCGGCCGACCTGCCACCAGCCGCCGCCCTCCGGCAGCCCGAGGTCATCCTGCTAGACTCAGACCTGGATGAACC
CATAGACTTGCGCTCGGTCAAGAGCCGCAGCGAGGCCGGGGAGCCGCCCAGCTCCCTCCAGGTGAAGCCCGAGAC
ACCGGCGTCGGCGGCGGTGGCGGTGGCGGCGGCAGCGGCACCCACCACGACGGCGGAGAAGCCTCCAGCCGAGGC
CCAGGACGAACCTGCAGAGTCGCTGAGCGAGTTCAAGCCCTTCTTTGGGAATATAATTATCACCGACGTCACCGC
GAACTGCCTCACCGTTACTTTCAAGGAGTACGTGACGGTG**TAG**CCGGAGGGCGTCGGAAGGGGCGCC

FIGURE 1803

MELPAVGEHVFAVESIEKKRIRKGRVEYLVKWRGWSPKYNTWEPEENILDPRLLIAFQNRERQEQLMGYRKRGPK
PKPLVVQVPTFARRSNVLTGLQDSSTDNRAKLDLGAQGKGQGHQYELNSKKHHQYQPHSKEGKPRPPGKSGKYYY
QLNSKKHHPYQPDPKMYDLQYQGGHKEAPSPTCPDLGAKSHPPDKWAQGAGAKGYLGAVKPLAGAAGAPGKGSEK
GPPNGMMPAPKEAVTGNGIGGKMKIVKNKNKNGRIVIVMSKYMENGMQAVKIKSGEVAEGEARSPSHKKRAADER
HPPADRTFKKAAGAEEKKVEAPPKRREEEVSGVSDPQPQDAGSRKLSPTKEAFGEQPLQLTTKPDLLAWDPARNT
HPPSHHPHPHPHHHHHHHHHHHHAVGLNLSHVRKRCLSETHGEREPCKKRLTARSISTPTCLGGSPAAERPADLP
PAAALRQPEVILLDSDLDEPIDLRSVKSRSEAGEPPSSLQVKPETPASAAVAVAAAAAPTTTAEKPPAEAQDEPA
ESLSEFKPFFGNIIITDVTANCLTVTFKEYVTV

FIGURE 1804A

ATACGGGAGAACTAAGGCTGAAACCTCGGAGGAACAACCACTTTTGAAGTGACTTCGCGGCGTGCGTTGGGTGCG
GACTAGGTGGCCCCGGCGGGAGTGTGCTGGAGCCTGAAGTCCACGCGCGCGGCTGAGAACCGCCGGGACCGCACG
TGGGCGCCGCGCGCTTCCCCCGCTTCCCAGGTGGGCGCCGGCCGCCAGGCCACCTCACGTCCGGCCCCGGGG**ATG**

CGCGTCCTCCTCGCCGCGCTGGGACTGCTGTTCCTGGGGGCGCTACGAGCCTTCCCACAGGATCGACCCTTCGAG
GACACCTGTCATGGAAACCCCAGCCACTACTATGACAAGGCTGTCAGGAGGTGCTGTTACCGCTGCCCCATGGGG
CTGTTCCCGACACAGCAGTGCCCACAGAGGCCTACTGACTGCAGGAAGCAGTGTGAGCCTGACTACTACCTGGAT
GAGGCCGACCGCTGTACAGCCTGCGTGACTTGTTCTCGAGATGACCTCGTGGAGAAGACGCCGTGTGCATGGAAC
TCCTCCCGTGTCTGCGAATGTCGACCCGGCATGTTCTGTTCCACGTCTGCCGTCAACTCCTGTGCCCGCTGCTTC
TTCCATTCTGTCTGTCCGGCAGGGATGATTGTCAAGTTCCCAGGCACGGCGCAGAAGAACACGGTCTGTGAGCCG
GCTTCCCCAGGGGTCAGCCCTGCCTGTGCCAGCCCAGAGAACTGCAAGGAACCCTCCAGTGGCACCATCCCCCAG
GCCAAGCCCACCCCGGTGTCCCCAGCAACCTCCAGTGCCAGCACCATGCCTGTAAGAGGGGGCACCCGCCTCGCC
CAGGAAGCTGCTTCTAAACTGACGAGGGCTCCCGACTCTCCCTCCTCTGTGGGAAGGCCTAGTTCAGATCCAGGT
CTGTCCCCAACACAGCCATGCCCAGAGGGGTCTGGTGATTGCAGAAAGCAGTGTGAGCCCGACTACTACCTGGAC
GAGGCCGGCCGCTGCACAGCCTGCGTGAGCTGTTCTCGAGATGACCTTGTGGAGAAGACGCCATGTGCATGGAAC
TCCTCCCGCACCTGCGAATGTCGACCTGGCATGATCTGTGCCACATCAGCCACCAACTCCTGTGCCCGCTGTGTC
CCCTACCCAATCTGTGCAGCAGAGACGGTCACCAAGCCCCAGGATATGGCTGAGAAGGACACCACCTTTGAGGCG
CCACCCCTGGGGACCCAGCCGGACTGCAACCCCACCCCAGAGAATGGCGAGGCGCCTGCCAGCACCAGCCCCACT
CAGAGCTTGCTGGTGGACTCCCAGGCCAGTAAGACGCTGCCCATCCCAACCAGCGCTCCCGTCGCTCTCTCCTCC
ACGGGGAAGCCCGTTCTGGATGCAGGGCCAGTGCTCTTCTGGGTGATCCTGGTGTTGGTTGTGGTGGTCGGCTCC
AGCGCCTTCCTCCTGTGCCACCGGAGGGCCTGCAGGAAGCGAATTCGGCAGAAGCTCCACCTGTGCTACCCGGTC
CAGACCTCCCAGCCCAAGCTAGAGCTTGTGGATTCCAGACCCAGGAGGAGCTCAACGCAGCTGAGGAGTGGTGCG
TCGGTGACAGAACCCGTCGCGGAAGAGCGAGGGTTAATGAGCCAGCCACTGATGGAGACCTGCCACAGCGTGGGG
GCAGCCTACCTGGAGAGCCTGCCGCTGCAGGATGCCAGCCCGGCCGGGGGCCCCTCGTCCCCCAGGGACCTTCCT
GAGCCCCGGGTGTCCACGGAGCACACCAATAACAAGATTGAGAAAATCTACATCATGAAGGCTGACACCGTGATC
GTGGGGACCGTGAAGGCTGAGCTGCCGGAGGGCCGGGGCCTGGCGGGGCCAGCAGAGCCCGAGTTGGAGGAGGAG
CTGGAGGCGGACCATACCCCCCACTACCCCGAGCAGGAGACAGAACCGCCTCTGGGCAGCTGCAGCGATGTCATG
CTCTCAGTGGAAGAGGAAGGGAAAGAAGACCCCTTGCCCACAGCTGCCTCTGGAAAG**TGA**GGCCTGGGCTGGGCT
GGGGCTAGGAGGGCAGCAGGGTGGCCTCTGGGAGGCCAGGATGGCACTGTTGGCACCGAGGTTGGGGGCAGAGGC
CCATCTGGCCTGAACTGAGGCTCCAGCATCTAGTGGTGGACCGGCCGGTCACTGCAGGGGTCTGGTGGTCTCTGC
TTGCATCCCCAACTTAGCTGTCCCCTGACCCAGAGCCTAGGGGATCCGGGGCTTGTACAGAAGAGACAGTCCAAG
GGGACTGGATCCCAGCAGTGATGTTGGTTGAGGCAGCAAACAGATGGCAGGATGGGCACTGCCGAGAACAGCATT
GGTCCCAGAGCCCTGGGCATCAGACCTTAACCACCAGGCCCACAGCCCAGCGAGGGAGAGGTCGTGAGGCCAGCT
CCCGGGGCCCCTGTAACCCTACTCTCCTCTCTCCCTGGACCTCAGAGGTGACACCCATTGGGCCCTTCCGGCATG
CCCCCAGTTACTGTAAATGTGGCCCCCAGTGGGCATGGAGCCAGTGCCTGTGGTTGTTTCTCCAGAGTCAAAAGG
GAAGTCGAGGGATGGGGCGTCGTCAGCTGGCACTGTCTCTGCTGCAGCGGCCACACTGTACTCTGCACTGGTGTG
AGGGCCCCTGCCTGGACTGTGGGACCCTCCTGGTGCTGCCCACCTTCCCTGTCCTGTAGCCCCCTCGGTGGGCCC
AGGGCCTAGGGGCCCAGGATCAAGTCACTCATCTCAGAATGTCCCCACCAATCCCCGCCACAGCAGGCGCCTCGG
GTCCCAGATGTCTGCAGCCCTCAGCAGCTGCAGACCGCCCCTCACCAACCCAGAGAACCTGCTTTACTTTGCCCA
GGGACTTCCTCCCCATGTGAACATGGGGAACTTCGGGCCCTGCCTGGAGTCCTTGACCGCTCTCTGTGGGCCCCA
CCCACTCTGTCCTGGGAAATGAAGAAGCATCTTCCTTAGGTCTGCCCTGCTTGCAAATCCACTAGCACCGACCCC
ACCACCTGGTTCCGGCTCTGCACGCTTTGGGGTGTGGATGTCGAGAGGCACCACGGCCTCACCCAGGCATCTGCT
TTACTCTGGACCATAGGAAACAAGACCGTTTGGAGGTTTCATCAGGATTTTGGGTTTTTCACATTTCACGCTAAG
GAGTAGTGGCCCTGACTTCCGGTCGGCTGGCCAGCTGACTCCCTAGGGCCTTCAGACGTGTATGCAAATGAGTGA
TGGATAAGGATGAGTCTTGGAGTTGCGGGCAGCCTGGAGACTCGTGGACTTACCGCCTGGAGGCAGGCCCGGGAA
GGCTGCTGTTTACTCATCGGGCAGCCACGTGCTCTCTGGAGGAAGTGATAGTTTCTGAAACCGCTCAGATGTTTT
GGGGAAAGTTGGAGAAGCCGTGGCCTTGCGAGAGGTGGTTACACCAGAACCTGGACATTGGCCAGAAGAAGCTTA
AGTGGGCAGACACTGTTTGCCCAGTGTTTGTGCAAGGATGGAGTGGGTGTCTCTGCATCACCCACAGCCGCAGCT
GTAAGGCACGCTGGAAGGCACACGCCTGCCAGGCAGGGCAGTCTGGCGCCCATGATGGGAGGGATTGACATGTTT

FIGURE 1804B

CAACAAAATAATGCACTTCCTTAAAAAAAA

FIGURE 1805

MRVLLAALGLLFLGALRAFPQDRPFEDTCHGNPSHYYDKAVRRCCYRCPMGLFPTQQCPQRPTDCRKQCEPDYYL
DEADRCTACVTCSRDDLVEKTPCAWNSSRVCECRPGMFCSTSAVNSCARCFFHSVCPAGMIVKFPGTAQKNTVCE
PASPGVSPACASPENCKEPSSGTIPQAKPTPVSPATSSASTMPVRGGTRLAQEAASKLTRAPDSPSSVGRPSSDP
GLSPTQPCPEGSGDCRKQCEPDYYLDEAGRCTACVSCSRDDLVEKTPCAWNSSRTCECRPGMICATSATNSCARC
VPYPICAAETVTKPQDMAEKDTTFEAPPLGTQPDCNPTPENGEAPASTSPTQSLLVDSQASKTLPIPTSAPVALS
STGKPVLDAGPVLFWVILVLVVVVGSSAFLLCHRRACRKRIRQKLHLCYPVQTSQPKLELVDSRPRRSSTQLRSG
ASVTEPVAEERGLMSQPLMETCHSVGAAYLESLPLQDASPAGGPSSPRDLPEPRVSTEHTNNKIEKIYIMKADTV
IVGTVKAELPEGRGLAGPAEPELEEELEADHTPHYPEQETEPPLGSCSDVMLSVEEEGKEDPLPTAASGK

FIGURE 1806A

TCTTGAGAGTGTTCAACCATAGAAATCTAATGGTTGGTTGGTGTCTTTTCAGTCAAATGCTACATGTTTTTCACT
CCAATATTTGGCATGCATATAGAATTTTGTGCGTCAAGTTGGCCTTTTCCTTTTTCTAATTGGTTCTGGTCTTTT
TTGGAGAGGTTAGAGACACAATACAACTTTAAAAAGAGTGCATGTGTACACACAGCCACCCACCCACCCACACCC
TCTTCCCGGATTGCCCTCCACCCCCATGATTATAAAGATGCTTATGGTGCTCTTAAAATCTCTCTCATGTCAGTT
GCCATTTGCATTGAGCTCAAAAAATAATATTAAGGCTTTTGGCTTCACTAAACAAAAGCAAATACAATTTCTGCT
TGCAATTCTATCCTTTACCCACCCTGCAGTGCAGGGCCCAGTCAAGTGTGAGATAAGCAGGGGAGGTCCAGAGAG
AGGCCGGTAGAGGCACTGCACAAGCCTTGCCAGCGTCACCTCCCACCTCCTGGTCCCTTTCACTGCTAAGACATG
CAACTGCTCCATGACAGCCTTGTGCCTTTTGCCAAATGTCCAGAAATTTTGCGAATCTAAGTATTAAAAACACAC
TGATTTGGTGGTGCTAATAAGAATAGAAAAAGGTCATTTGAACAGATCTATTTTATGAATGAATACAGACCTAAA
AATCCTTAAGAAAACACAAATTTCAGAGAACAATTTCAACATTGTTCTGTCGAACGTTATACTCAGTCCTGAACC
ACATTACTTTCCTGTCTACGTTTCATTTCCTGGGGGCTTGCCAAGTGATAAACAGACTCAGGCGTGTGTGGTAGA
GTTCGGGTTTTTTAGCACGAAGTGGGTGGCTGGAGTTTGCTTGAAAACATCAATTGACTTTGTGATCATTACAGA
AATGCTGGTGTAAGGTGTTCAGAAGACA**ATG**GAGAAAAAATGGAAATACTGTGCTGTCTATTACATCATCCAGAT
ACATTTTGTCAAGGGAGTTTGGGAAAAAACAGTCAACACAGAAGAAAATGTTTATGCTACACTTGGCTCTGATGT
CAACCTGACCTGCCAAACACAGACAGTAGGCTTCTTCGTGCAGATGCAATGGTCCAAGGTCACCAATAAGATAGA
CCTGATTGCTGTCTATCATCCCCAATACGGCTTCTACTGTGCCTATGGGAGACCCTGTGAGTCACTTGTGACTTT
CACAGAAACTCCTGAGAATGGGTCAAAATGGACTCTGCACTTAAGGAATATGTCTTGTTCAGTCAGTGGAAGGTA
CGAGTGTATGCTTGTTCTGTATCCAGAGGGCATTCAGACTAAAATCTACAACCTTCTCATTCAGACACACGTTAC
AGCAGATGAATGGAACAGCAACCATACGATAGAAATAGAGATAAATCAGACTCTGGAAATACCATGCTTTCAAAA
TAGCTCCTCAAAAATTTCATCTGAGTTCACCTATGCATGGTCGGTGGAGGATAATGGAACTCAGGAAACACTTAT
CTCCCAAAATCACCTCATCAGCAATTCCACATTACTTAAAGATAGAGTCAAGCTTGGTACAGACTACAGACTCCA
CCTCTCTCCAGTCCAAATCTTCGATGATGGGCGGAAGTTCTCTTGCCACATTAGAGTCGGTCCTAACAAAATCTT
GAGGAGCTCCACCACAGTCAAGGTTTTTGCTAAACCAGAAATCCCTGTGATTGTGGAAAATAACTCCACGGATGT
CTTGGTAGAGAGAAGATTTACCTGCTTACTAAAGAATGTATTTCCCAAAGCAAATATCACATGGTTTATAGATGG
AAGTTTTCTTCATGATGAAAAAGAAGGAATATATATTACTAATGAAGAGAGAAAAGGCAAAGATGGATTTTTGGA
ACTGAAGTCTGTTTTAACAAGGGTACATAGTAATAAACCAGCCCAATCAGACAACTTGACCATTTGGTGTATGGC
TCTGTCTCCAGTCCCAGGAAATAAAGTGTGGAACATCTCATCAGAAAAGATCACTTTTCTCTTAGGTTCTGAAAT
TTCCTCAACAGACCCTCCACTGAGTGTTACAGAATCTACCCTTGACACCCAACCTTCTCCAGCCAGCAGTGTATC
TCCTGCAAGATATCCAGCTACATCTTCAGTGACCCTTGTAGATGTGAGTGCCTTGAGGCCAAACACCACTCCTCA
ACCCAGCAATTCCAGTATGACTACCCGAGGCTTCAACTATCCCTGGACCTCCAGTGGGACAGATACCAAAAAATC
AGTTTCACGGATACCTAGTGAAACATACAGTTCATCCCCCTCAGGTGCAGGCTCAACACTTCATGACAATGTCTT
TACCAGCACAGCCAGAGCATTTTCAGAAGTCCCCACAACTGCCAATGGATCTACGAAAACTAATCACGTCCATAT
CACTGGTATTGTGGTCAATAAGCCCAAAGATGGAATGTCCTGGCCAGTGATTGTAGCAGCTTTACTCTTTTGCTG
CATGATATTGTTTGGTCTTGGAGTGAGAAAATGGTGTCAGTACCAAAAAGAAATAATGGAAAGACCTCCACCTTT
CAAGCCACCACCACCTCCCATCAAGTACACTTGCATTCAAGAGCCCAACGAAAGTGATCTGCCTTATCATGAGAT
GGAGACCCTC**TAG**TCTCGTGAGACTTTGCCCCATGGCAGAACTCTGCTGGAATCCTATTGAGAAGGTAGACATTG
TGCTTTATTAATATAGTCGCTCTTCAGCCATGCCTTTGCTGCAGCTGAAATGGAAGTCAGAAGTGAGTGACCTGT
TTTCCCAGCAACTCACCCTCTTTCATCTCCAAACGCCTGAAGCTTAACCAAGAGTGAGAGGATATGTCATGTTCA
CACTCAATGCAATTCGTAGTGGTTTTCTTGCTTATTGTAAGAAGTACATATTAGTCTGCCATCTTTAAAAAAAAT
ACAGTATTTTCATTTAAATTCTCTGATGGAGGGACAACAATGGTTTCAACTGTATGCCCATGCCTGATCCTCTTA
TTTGAACATCTATCAACATTGTAAACTCTTTGCCAAAATCCTGGGGCTTTGCTGCATTCCCTAAGATAATTATAG
GAAAAAGAAAATGTAAAAGTGCTAACAAGGCTGCCAAGTAATGGAGAAGTATGGTTAGCCTTCATATTGAAATTC
TGTTGCTTATTTTCATGGAAGGAAACAGAATACTTTGCACAGGAACCACATTTTCAATCCTCCTTCACTGTCTTC
CTACCATGTTCAGCCCAGACTCCTGCCACATGGACCAGGATGAAGAGGGATCAAAGAGATAATTAGCCAAAAACC
CAGTAGCCTAGAAGATACAAAACTCCACTGGCCTCTAAAATTATATTAGCCAAGAGTGGTTTCATTTGAGTGCCT
TCGTGTGTATGTCCATCAAACTGGAACCAAACTGTTTTGTAAGTAAACAGGCAGCCTAAGCCCAACCCTACTTTC
TAATTCCGGTTATTCTCTTTTTCATCTGGGGATTTACCTGTTCATTTAATCTGCCTGTTTTGATCTGTTTTGAAA
AAGATAAAGAGCCTCAAATCAGACCAGCACTGATTAATTAACCCTGCTCCTACCAATCTTTTTTAAAGCAGTTGA

FIGURE 1806B

AGCAGAATGTATAGGTGTCAGAGAAGAAACCTAGTCAGCCAGACGTGCTCTGTATTCAGCAATAGTTTGTGAATG
AATAAATTACTAATCCTCCTTGTCGCTTGAAACCTTCCCACACTCCCTGCTCCAGGAGGGAAAAACAGATGTTGT
TGACAGATAGAGTGATAGGCAAATTCTGTGTGGACTTTAGTCCCAAAAGGAAACTTTAGTTCACTTGCAGTATGC
TTATCCTTGACTGCACATGAGAATGCCTTGTGCAGAGTTATTTGGAGATTATGTCTTTTTCTTAAACACCATGGC
TGTCACACTTCAGTTCAATTAAATCAGAATGTCTGAGGAGTGAGACACAGGCATCAACACTCTCAAATGATTCAC
ATGTTCAGCCAAAGTTGAGAACCATCGAGCCTGTGGAAGTTCTTTCTCATGGCTCAGAATCTTAGGTAGGTGCTT
AACTCTTGTGGTGGCCAGCCTCCAAGATGAGCCCCAGTGTTCTTGCCTCCTACTATTCACATCTTTATGTGGTCC
CCTCCAATGCTGAATACAGATGATTTGTGTAACCTGAGGCCAGGATTAAGGTGAGGCAATCAATGTACCTAGGGA
AAAAATTTAAGGAGGTATTCACACTCAGGGTCATGCACTTGCACAATGTTGAGAATGAGTACCACTCTCACCATT
GGTATAGCCAAAAAAAGCTTGGAAGTGACCAAGGCTAGGTCACAAAATACACTGTGGCTTCTTCTTTGATCTCTC
TTTGACCATACTGACACTGGGAAAAGCCCATTCCCATGCCATGAAGACACCAAGGCAGCCCTATTGAGAAATCTA
CCTGTCGTGGCCGGGCGCAGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGTGGGTGGATCACGAG
GTCAGGAGATCGAGACCATCCTGGCTAACACAGTGAAACCCCGTCTCTACTAAAAATACAAAAATTAGCCGGGTG
TGGTGTCGGGCACCTGTAGTCCCAGCTACTCAGGAGGCTGAGGCAGGAGAAGGGTGGGAACCCGGGAGGCAGAGC
TTGCAGTGAGCCGAGATTGTGCCACTGCACACTCCAATCTGGGTGAAAGACCGAGACTCCGCCTCAAAAAAAAAA
AAAAAAGAAAGAAAGAAAGAAAGAAAGAAATCTACCTGTCAAGGAACTAAGGTATTTTGCTAACAAGCACC
AACTTGCCAGCCATGTAAGGGAGCCATCTTGGAAGCAGATCCTCCAGCCTCCAGTCAAGTCTTCAGATAATTGCA
ACTTCAGTTGATCTTTTGACCAAGACCTCAAGAGAGCCAGAACTACCCAGCTAAGCCTTTTACTAAATTTCTGAA
CTTCTAACACTATTAGATAATAAGTGCTTATTGTTTAACACCATTAATTTTGAGTATAATTTGTTACATAGCGAC
AGATAACTATACAGCTCAACAACTAGAAAAATAAACTGTTTACCTGCCTTAATTATTTATCTTTAGTTCCTTATT
AGTTCTCAAGAAACAAATGCTAGCTTCATATGTATGGCTGTTGCTTTGCTTCATGTGTATGGCTATTTGTATTTA
ACAAGACTTAATCATCAGTAATTTGTATAC

FIGURE 1807

MEKKWKYCAVYYIIQIHFVKGVWEKTVNTEENVYATLGSDVNLTCQTQTVGFFVQMQWSKVTNKIDLIAVYHPQY
GFYCAYGRPCESLVTFTETPENGSKWTLHLRNMSCSVSGRYECMLVLYPEGIQTKIYNLLIQTHVTADEWNSNHT
IEIEINQTLEIPCFQNSSSKISSEFTYAWSVEDNGTQETLISQNHLISNSTLLKDRVKLGTDYRLHLSPVQIFDD
GRKFSCHIRVGPNKILRSSTTVKVFAKPEIPVIVENNSTDVLVERRFTCLLKNVFPKANITWFIDGSFLHDEKEG
IYITNEERKGKDGFLELKSVLTRVHSNKPAQSDNLTIWCMALSPVPGNKVWNISSEKITFLLGSEISSTDPPLSV
TESTLDTQPSPASSVSPARYPATSSVTLVDVSALRPNTTPQPSNSSMTTRGFNYPWTSSGTDTKKSVSRIPSETY
SSSPSGAGSTLHDNVFTSTARAFSEVPTTANGSTKTNHVHITGIVVNKPKDGMSWPVIVAALLFCCMILFGLGVR
KWCQYQKEIMERPPPFKPPPPPIKYTCIQEPNESDLPYHEMETL

FIGURE 1808

GCAGTTATCATAGAGCACAGTCCCTCACATCACACAGCTGCAGAGATGAGTAAACAAAGAGGAACCTTCTCAGAA
GTGAGTCTGGCCCAGGACCCAAAGCGGCAGCAAAGGAAACCTAAAGGCAATAAAAGCTCCATTTCAGGAACCGAA
CAGGAAATATTCCAAGTAGAATTAAATCTTCAAAATCCTTCCCTGAATCATCAAGGGATTGATAAAATATATGAC
TGCCAAGGTTTACTGCCACCTCCAGAGAAGCTCACTGCCGAGGTCCTAGGAATCATTTGCATTGTCCTGATGGCC
ACTGTGTTAAAAACAATAGTTCTTATTCCTTTCCTGGAGCAGAACAATTCTTCCCCGAATACAAGAACGCAGAAA
GCACGTCATTGTGGCCATTGTCCTGAGGAGTGGATTACATATTCCAACAGTTGTTATTACATTGGTAAGGAAAGA
AGAACTTGGGAAGAGAGTTTGCTGGCCTGTACTTCGAAGAACTCCAGTCTGCTTTCTATAGATAATGAAGAAGAA
ATAAAATTTCTGGCCAGCATTTTACCTTCCTCATGGATTGGTGTGTTTCGTAACAGCAGTCATCATCCATGGGTG
ACAATAAATGGTTTGGCTTTCAAACATAAGATAAAAGACTCAGATAATGCTGAACTTAACTGTGCAGTGCTACAA
GTAAATCGACTTAAATCAGCCCAGTGTGGATCTTCAATGATATATCATTGTAAGCATAAGCTTTAGAAGTAAAGC
ATTTGCGTTTACAGTGCATCAGATACATTTTATATTTCTTAAAATAGAAATATTATGATTGCATAAATCTGAAAA
TGAATTATGTTATTTGCTCTAATACAAAAATTCTAAATCAATTATTGAAATAGGATGCACACAATTACTAAAGTA
CAGACATCCTAGCATTTGTGTCGGGCTCATTTTGCTCAACATGGTATTTGTGGTTTTCAGCCTTTCTAAAAGTTG
CATGTTATGTGAGTCAGCTTATAGGAAGTACCAAGAACAGTCAAACCCATGGAGACAGAAAGTAGAATAGTGGTT
GCCAATGTCTCAGGGAGGTTGAAATAGGAGATGACCACTAATTGATAGAACGTTTCTTTGTGTCGTGATGAAAAC
TTTCTAAATTTCAGTAATGGTGATGGTTGTAACTTTGCGAATATACTAAACATCATTGATTTTTAATCATTTTAA
GTGCATGAAATGTATGCTTTGTACATGACACTTCAATAAAGCTATCCAGAAAAAAAAAAAA

FIGURE 1809

MSKQRGTFSEVSLAQDPKRQQRKPKGNKSSISGTEQEIFQVELNLQNPSLNHQGIDKIYDCQGLLPPPEKLTAEV
LGIICIVLMATVLKTIVLIPFLEQNNSSPNTRTQKARHCGHCPEEWITYSNSCYYIGKERRTWEESLLACTSKNS
SLLSIDNEEEIKFLASILPSSWIGVFRNSSHHPWVTINGLAFKHKIKDSDNAELNCAVLQVNRLKSAQCGSSMIY
HCKHKL

FIGURE 1810

GGGCTGCTCCACGCTTTTGCCGGAGACAGAGACTGACATGGAACAGGGGAAGGGCCTGGCTGTCCTCATCCTGGC
TATCATTCTTCTTCAAGGTACTTTGGCCCAGTCAATCAAAGGAAACCACTTGGTTAAGGTGTATGACTATCAAGA
AGATGGTTCGGTACTTCTGACTTGTGATGCAGAAGCCAAAAATATCACATGGTTTAAAGATGGGAAGATGATCGG
CTTCCTAACTGAAGATAAAAAAAAAATGGAATCTGGGAAGTAATGCCAAGGACCCTCGAGGGATGTATCAGTGTAA
AGGATCACAGAACAAGTCAAAACCACTCCAAGTGTATTACAGAATGTGTCAGAACTGCATTGAACTAAATGCAGC
CACCATATCTGGCTTTCTCTTTGCTGAAATCGTCAGCATTTTCGTCCTTGCTGTTGGGGTCTACTTCATTGCTGG
ACAGGATGGAGTTCGCCAGTCGAGAGCTTCAGACAAGCAGACTCTGTTGCCCAATGACCAGCTCTACCAGCCCCT
CAAGGATCGAGAAGATGACCAGTACAGCCACCTTCAAGGAAACCAGTTGAGGAGGAATTGAACTCAGGACTCAGA
GTAGTCCAGGTGTTCTCCTCCTATTCAGTTCCCAGAATCAAAGCAATGCATTTTGGAAAGCTCCTAGCAGAGAGA
CTTTCAGCCCTAAATCTAGACTCAAGGTTCCCAGAGATGACAAATGGAGAAGAAAGGCCATCAGAGCAAATTTGG
GGGTTTCTCAAATAAAATAAAAATAAAAACAAATACTGTGTTTCAGAAGCGCCACCTATTGGGGAAAATTGT

FIGURE 1811

MEQGKGLAVLILAIILLQGTLAQSIKGNHLVKVYDYQEDGSVLLTCDAEAKNITWFKDGKMIGFLTEDKKKWNLG
SNAKDPRGMYQCKGSQNKSKPLQVYYRMCQNCIELNAATISGFLFAEIVSIFVLAVGVYFIAGQDGVRQSRASDK
QTLLPNDQLYQPLKDREDDQYSHLQGNQLRRN

FIGURE 1812

ATGTGGTGGAGAGTTCTCAGCTTGCTGGCATGGTTCCCCTTGCAAGAGGCCTCTCTGACTAACCACACAGAAACC
ATCACCGTGGAGGAAGGCCAGACGCTCACTCTAAAGTGTGTCACTTCTCTGAGGAAGAACTCCTCCCTCCAGTGG
CTGACCCCCTCAGGGTTCACCATTTTTTTAAATGAGTATCCTGCTTTAAAAAATTCCAAATACCAGCTTCTTCAT
CACTCGGCCAATCAGCTCTCCATCACTGTGCCTAACGTAACCCTGCAAGATGAAGGCGTGTACAAGTGCTTACAT
TACAGCGACTCTGTAAGCACAAAGGAAGTGAAAGTGATTGTGCTGGCAACTCCTTTCAAGCCAATCCTGGAAGCT
TCAGTTATCAGAAAGCAAAATGGAGAAGAACATGTTGTACTCATGTGCTCCACCATGAGAAGCAAGCCCCCTCCG
CAGATAACCTGGCTACTTGGGAATAGCATGGAAGTGTCCGGTGGAACGCTCCATGAATTTGAAACTGATGGGAAG
AAATGTAATACTACCAGCACTCTCATAATCCACACTTATGGCAAAAATTCAACGGTGGACTGCATTATCCGACAC
AGAGGCCTGCAAGGGAGAAAACTAGTAGCACCCTTCCGGTTTGAAGATTTGGTTACTGATGAAGAGACAGCTTCA
GATGCTCTGGAGAGAAACTCTCTATCCTCTCAAGACCCACAGCAGCCCACCAGTACTGTCTCAGTAACGGAAGAT
TCTAGTACATCGGAGATTGACAAGGAAGAGAAAGAACAAACCACTCAAGATCCTGACTTGACCACCGAAGCAAAT
CCTCAGTATTTAGGACTGGCAAGAAAGAAAAGTGGCATCCTGCTGCTCACGCTGGTGTCCTTCCTCATTTTCATA
CTCTTCATCATAGTCCAGCTCTTCATCATGAAGCTGAGGAAAGCACATGTGATATGGAAGAGAGAAAACGAAGTT
TCAGAACACACACTAGAAAGTTACAGATCAAGGTCAAATAATGAAGAAACATCATCTGAAGAGAAAAATGGCCAA
TCTTCCCACCCTATGCGTTGCATGAACTACATCACAAAGTTGTACTCAGAAGCAAAAACAAAGAGGAAGGAAAAT
GTACAACATTCAAAATTAGAAGAAAAGCACATCCAAGTACCAGAGAGTATTGTGTAGTGCTCTCTGCAATGGAAC
ATGTGATTTCAGGGTTGCCGCAGTGTCACCTCAGTGGACCAGCCTGGGGGAAGGAGCTTAATTGCTGAGACATTA
ATAATGACCTCTTAGTGCAATGCAAGATGGTGTCCTCGGATAATGATCTGCCCCGGAGCTAGGGCAGCAACATGA
GGACCAAACCATGCACATAAAGCTTGTAGTTTAAAAAAGAAAAGCAAAAAAATAATTATGCCTGACACTACTTCA
GAGCAGGAGGATTCTACGAAGCCTTGGGGATCAGGGTCAGTGTGAGCAGCTAACATCCTACCTCAAATGGAACAG
GATTTTTTGATGCTTTGCTCTAATGGAACTGTTTTAAAAATTTTTTTTTCTTTTTAATATTTTCTTCTGGTCACA
AAATAAAGAAATTTGGGATGCAAAGTACCTAAAGATCTCTGATCCTAAGAAGTTACTTCTGGCCAGGCGCGGTGG
CTCATGCCTGTAATCCTAGCACTTTGGGAGGCTGAGGTAGGCAGATCACTTGAGGTCAGGAGTTGGAGACCAGCC
TGGCCAACATAGTGAAACCCCGTCTCTACTAAAAATGCAAAAATTAGCCAGGCGTAGTGGTGCGCACCTGTAGTC
TCAGATACTTGGGAGGCTGAGGGTGGAGAATCGCTTGAACCTGGGAGGTGGAGATTGCAGTGAGTCAAGATCTCA
CCACTGAACTCCAGCCTGGGCGACAGAGGGAGACTCTGTCTCAAAAAAAAAGAAGTTACTTCCAAGACAGACTTT
TAACATGTAACCAGCACAAAGCAATGTCAGGGAGGAGTGATACATGACAATAAATGAGTCAGATGAGCAAGAAGG
CCCCAGAACCCATGCCCCAAGGCACAAAGAGGAGCTCAGGGTAGGCCCAAAGATTCGAATTCCTTAGATTACTAA
ATCACATGAGCGGACCTTGTCTGTCAGATAAGATTTTTACCTGGAAATTCCATGACCAATACATGTGCAAAAGAA
AATGATGGGTTGAATTTACTGATTATTGACCTAATGGATGGCTTTTTAAAATGTTTTAATAAAAAGCAGAATAGA
TGTTTGTTTTTCTAGTGGTTATACCAAGCTATACTTCCTGTTTTCACGTGTGAAAGTAACATGGGACATGCCTTT
CTTTTCCGATCAGTTTATTTAAGCTATACAGCAAACTTTGGCATTTATGTGGAGCATTTCTCATTGTTGGAATCT
GAATAAACCAATTACAAAATAAAAA

FIGURE 1813

MWWRVLSLLAWFPLQEASLTNHTETITVEEGQTLTLKCVTSLRKNSSLQWLTPSGFTIFLNEYPALKNSKYQLLH
HSANQLSITVPNVTLQDEGVYKCLHYSDSVSTKEVKVIVLATPFKPILEASVIRKQNGEEHVVLMCSTMRSKPPP
QITWLLGNSMEVSGGTLHEFETDGKKCNTTSTLIIHTYGKNSTVDCIIRHRGLQGRKLVAPFRFEDLVTDEETAS
DALERNSLSSQDPQQPTSTVSVTEDSSTSEIDKEEKEQTTQDPDLTTEANPQYLGLARKKSGILLLTLVSFLIFI
LFIIVQLFIMKLRKAHVIWKRENEVSEHTLESYRSRSNNEETSSEEKNGQSSHPMRCMNYITKLYSEAKTKRKEN
VQHSKLEEKHIQVPESIV

FIGURE 1814

GCAGACCTTGCTTCATGAGCAAGCTCATCTCTGGAACAAACTGGCAAAGCATCTCTGCTGGTGTTCATCAGAACA
GACACCATGGCAGAGCATGATTACCATGAAGACTATGGGTTCAGCAGTTTCAATGACAGCAGCCAGGAGGAGCAT
CAAGACTTCCTGCAGTTCAGCAAGGTCTTTCTGCCCTGCATGTACCTGGTGGTGTTTGTCTGTGGTCTGGTGGGG
AACTCTCTGGTGCTGGTCATATCCATCTTCTACCATAAGTTGCAGAGCCTGACGGATGTGTTCCTGGTGAACCTA
CCCCTGGCTGACCTGGTGTTTGTCTGCACTCTGCCCTTCTGGGCCTATGCAGGCATCCATGAATGGGTGTTTGGC
CAGGTCATGTGCAAGAGCCTACTGGGCATCTACACTATTAACTTCTACACGTCCATGCTCATCCTCACCTGCATC
ACTGTGGATCGTTTCATTGTAGTGGTTAAGGCCACCAAGGCCTACAACCAGCAAGCCAAGAGGATGACCTGGGGC
AAGGTCACCAGCTTGCTCATCTGGGTGATATCCCTGCTGGTTTCCTTGCCCCAAATTATCTATGGCAATGTCTTT
AATCTCGACAAGCTCATATGTGGTTACCATGACGAGGCAATTTCCACTGTGGTTCTTGCCACCCAGATGACACTG
GGGTTCTTCTTGCCACTGCTCACCATGATTGTCTGCTATTCAGTCATAATCAAAACACTGCTTCATGCTGGAGGC
TTCCAGAAGCACAGATCTCTAAAGATCATCTTCCTGGTGATGGCTGTGTTCCTGCTGACCCAGATGCCCTTCAAC
CTCATGAAGTTCATCCGCAGCACACACTGGGAATACTATGCCATGACCAGCTTTCACTACACCATCATGGTGACA
GAGGCCATCGCATACCTGAGGGCCTGCCTTAACCCTGTGCTCTATGCCTTTGTCAGCCTGAAGTTTCGAAAGAAC
TTCTGGAAACTTGTGAAGGACATTGGTTGCCTCCCTTACCTTGGGGTCTCACATCAATGGAAATCTTCTGAGGAC
AATTCCAAGACTTTTTCTGCCTCCCACAATGTGGAGGCCACCAGCATGTTCCAGTTATAGGCCTTGCCAGGGTTT
CGAGAAGCTGCTCTGGAATTTGCAAGTCATGGCTGTGCCCTCTTGATGTGGTGAGGCAGGCTTTGTTTATAGCTT
GCGCATTCTCATGGAGAAGTTATCAGACACTCTGGCTGGTTTGGAATGCTTCTTCTCAGGCATGAACATGTACTG
TTCTCTTCTTGAACACTCATGCTGAAAGCCCAAGTAGGGGGTCTAAAATTTTTAAGGACTTTCCTTCCTCCATCT
CCAAGAATGCTGAAACCAAGGGGGATGACATGTGACTCCTATGATCTCAGGTTCTCCTTGATTGGGACTGGGGCT
GAAGGTTGAAGAGGTGAGCACGGCCAACAAAGCTGTTGATGGTAGGTGGCACACTGGGTGCCCAAGCTCAGAAGG
CTCTTCTGACTACTGGGCAAAGAGTGTAGATCAGAGCAGCAGTGAAAACAAGTGCTGGCACCACCAGGCACCTCA
CAGAAATGAGATCAGGCTCTGCCTCACCTTGGGGCTTGACTTTTGTATAGGTAGATGTTCAGATTGCTTTGATTA
ATCCAGAATAACTAGCACCAGGGACTATGAATGGGCAAAACTGAATTATAAGAGGCTGATAATTCCAGTGGTCCA
TGGAATGCTTGAAAAATGTGCAAAACAGCGTTTAAGACTGTAATGAATCTAAGCAGCATTTCTGAAGTGGACTCT
TTGGTGGCTTTGCATTTTAAAAATGAAATTTTCCAATGTCTGCCACACAAACGTATGTAAATGTATATACCCACA
CACATACACACATATGTCATATATTACTAGCATATGAGTTTCATAGCTAAGAAATAAAACTGTTAAAGTCTCCAA
ACT

FIGURE 1815

MAEHDYHEDYGFSSFNDSSQEEHQDFLQFSKVFLPCMYLVVFVCGLVGNSLVLVISIFYHKLQSLTDVFLVNLPL
ADLVFVCTLPFWAYAGIHEWVFGQVMCKSLLGIYTINFYTSMLILTCITVDRFIVVVKATKAYNQQAKRMTWGKV
TSLLIWVISLLVSLPQIIYGNVFNLDKLICGYHDEAISTVVLATQMTLGFFLPLLTMIVCYSVIIKTLLHAGGFQ
KHRSLKIIFLVMAVFLLTQMPFNLMKFIRSTHWEYYAMTSFHYTIMVTEAIAYLRACLNPVLYAFVSLKFRKNFW
KLVKDIGCLPYLGVSHQWKSSEDNSKTFSASHNVEATSMFQL

FIGURE 1816

GCCCCATCTCCTTGGGCTGCCCGTGCTTCGTGCTTTGGACTACCGCCCAGCAGTGTCCTGCCCTCTGCCTGGGCC
TCGGTCCCTCCTGCACCTGCTGCCTGGATCCCCGGCCTGCCTGGGCCTGGGCCTTGGTTCTCCCCATGACACCAC
CTGAACGTCTCTTCCTCCCAAGGGTGTGTGGCACCACCCTACACCTCCTCCTTCTGGGGCTGCTGCTGGTTCTGC
TGCCTGGGGCCCAGGGGCTCCCTGGTGTTGGCCTCACACCTTCAGCTGCCCAGACTGCCCGTCAGCACCCCAAGA
TGCATCTTGCCCACAGCACCCTCAAACCTGCTGCTCACCTCATTGGAGACCCCAGCAAGCAGAACTCACTGCTCT
GGAGAGCAAACACGGACCGTGCCTTCCTCCAGGATGGTTTCTCCTTGAGCAACAATTCTCTCCTGGTCCCCACCA
GTGGCATCTACTTCGTCTACTCCCAGGTGGTCTTCTCTGGGAAAGCCTACTCTCCCAAGGCCACCTCCTCCCCAC
TCTACCTGGCCCATGAGGTCCAGCTCTTCTCCTCCCAGTACCCCTTCCATGTGCCTCTCCTCAGCTCCCAGAAGA
TGGTGTATCCAGGGCTGCAGGAACCCTGGCTGCACTCGATGTACCACGGGGCTGCGTTCCAGCTCACCCAGGGAG
ACCAGCTATCCACCCACACAGATGGCATCCCCCACCTAGTCCTCAGCCCTAGTACTGTCTTCTTTGGAGCCTTCG
CTCTGTAGAACTTGGAAAAATCCAGAAAGAAAAAATAATTGATTTCAAGACCTTCTCCCCATTCTGCCTCCATTC
TGACCATTTCAGGGGTCGTCACCACCTCTCCTTTGGCCATTCCAACAGCTCAAGTCTTCCCTGATCAAGTCACCG
GAGCTTTCAAAGAAGGAATTCTAGGCATCCCAGGGGACCACACCTCCCTGAACCATCCCTGATGTCTGTCTGGCT
GAGGATTTCAAGCCTGCCTAGGAATTCCCAGCCCAAAGCTGTTGGTCTGTCCCACCAGCTAGGTGGGGCCTAGAT
CCACACACAGAGGAAGAGCAGGCACATGGAGGAGCTTGGGGGATGACTAGAGGCAGGGAGGGGACTATTTATGAA
GGCAAAAAAATTAAATTATTTATTTATGGAGGATGGAGAGAGGGGAATAATAGAAGAACATCCAAGGAGAAACAG
AGACAGGCCCAAGAGATGAAGAGTGAGAGGGCATGCGCACAAGGCTGACCAAGAGAGAAAGAAGTAGGCATGAGG
GATCACAGGGCCCCAGAAGGCAGGGAAAGGCTCTGAAAGCCAGCTGCCGACCAGAGCCCCACACGGAGGCATCTG
CACCCTCGATGAAGCCCAATAAACCTCTTTTCTCTG

FIGURE 1817

MTPPERLFLPRVCGTTLHLLLLGLLLVLLPGAQGLPGVGLTPSAAQTARQHPKMHLAHSTLKPAAHLIGDPSKQN
SLLWRANTDRAFLQDGFSLSNNSLLVPTSGIYFVYSQVVFSGKAYSPKATSSPLYLAHEVQLFSSQYPFHVPLLS
SQKMVYPGLQEPWLHSMYHGAAFQLTQGDQLSTHTDGIPHLVLSPSTVFFGAFAL

FIGURE 1818

GTTCAGCGCCGGCGCCGGTGTGCGAGCCGCGGCAGAGTGAGGCAGGCAACCCGAGGTGCGGAGCGACCTGCGGAG
GCTGAGCCCCGCTTTCTCCCAGGGTTTCTTATCAGCCAGCCGCCGCTGTCCCCGGGGGAGTAGGAGGCTCCTGAC
AGGCCGCGGCTGTCTGTGTGTCCTTCTGAGTGTCAGAGGAACGGCCAGACCCCGCGGGCCGGAGCAGAACGCGGC
CAGGGCAGAAAGCGGCGGCAGGAGAAGCAGGCAGGGGGCCGGAGGACGCAGACCGAGACCCGAGGCGGAGGCGGA
CCGCGAGCCGGCC**ATG**TCGGTGGTGGGGTTGGACGTGGGCTCGCAGAGCTGCTACATCGCGGTAGCCCGGGCCGG
GGGCATCGAGACCATCGCCAATGAGTTCAGCGACCGGTGCACCCCGTCAGTCATATCATTTGGATCAAAAAATAG
AACAATCGGAGTTGCAGCCAAAAATCAGCAAATCACTCATGCAAACAATACGGTGTCTAACTTCAAAAGATTTCA
TGGCCGAGCATTCAACGACCCCTTCATTCAAAAGGAGAAGGAAAACTTGAGTTACGATTTGGTTCCATTGAAAAA
TGGTGGAGTTGGAATAAAGGTAATGTACATGGGTGAAGAACATCTATTTAGTGTGGAGCAGATAACAGCCATGTT
GTTGACTAAGCTGAAGGAAACTGCTGAAAACAGCCTCAAGAAACCAGTAACAGATTGTGTTATTTCAGTCCCCTC
CTTCTTTACAGATGCTGAGAGGCGATCTGTGTTAGATGCTGCACAGATTGTTGGCCTAAACTGTTTAAGACTTAT
GAATGACATGACAGCTGTTGCTTTGAATTACGGAATTTATAAGCAGGATCTCCCAAGCCTGGATGAGAAACCTCG
GATAGTGGTTTTTGTTGATATGGGACATTCAGCTTTTCAAGTGTCTGCTTGTGCTTTTAACAAGGGAAAATTGAA
GGTACTGGGAACAGCTTTTGATCCTTTCTTAGGAGGAAAAAACTTCGATGAAAAGTTAGTGGAACATTTCTGTGC
AGAATTTAAAACTAAGTACAAGTTGGATGCAAAATCCAAAATACGAGCACTCCTACGTCTGTATCAGGAATGTGA
AAAACTGAAAAAGCTAATGAGCTCTAACAGCACAGACCTTCCACTGAATATCGAATGCTTTATGAATGATAAAGA
TGTTTCCGGAAAGATGAACAGGTCACAATTTGAAGAACTCTGTGCTGAACTTCTGCAAAAGATAGAAGTACCCCT
TTATTCACTGTTGGAACAAACTCATCTCAAAGTAGAAGATGTGAGTGCAGTTGAGATTGTTGGAGGCGCTACACG
AATTCCAGCTGTGAAGGAAAGAATTGCCAAATTCTTTGGAAAAGATATTAGCACAACACTCAATGCAGATGAAGC
AGTAGCCAGAGGATGTGCATTACAGTGTGCAATACTTTCCCCGGCATTTAAAGTTAGAGAATTTTCCGTCACAGA
TGCAGTTCCTTTTCCAATATCTCTGATCTGGAACCATGATTCAGAAGATACTGAAGGTGTTCATGAAGTCTTTAG
TCGAAACCATGCTGCTCCTTTCTCCAAAGTTCTCACCTTTCTGAGAAGGGGGCCTTTTGAGCTAGAAGCTTTCTA
TTCTGATCCCCAAGGAGTTCCATATCCAGAAGCAAAAATAGGCCGCTTTGTAGTTCAGAATGTTTCTGCACAGAA
AGATGGAGAAAAATCTAGAGTAAAAGTCAAAGTGCGAGTCAACACCCATGGCATTTTCACCATCTCTACGGCATC
TATGGTGGAGAAAGTCCCAACTGAGGAGAATGAAATGTCTTCTGAAGCTGACATGGAGTGTCTGAATCAGAGACC
ACCAGAAAACCCAGACACTGATGCAAATGAAAAAAAAGTTGACCAGCCTCCAGAAGCTAAAAAGCCCAAAATAAA
GGTGGTGAATGTTGAGCTGCCTATTGAAGCCAACTTGGTCTGGCAGTTAGGGAAAGACCTTCTTAACATGTATAT
TGAGACAGAGGGTAAGATGATAATGCAAGATAAATTGGAAAAAGAAAGGAATGATGCTAAAAATGCAGTTGAGGA
ATATGTGTATGAGTTCAGAGACAAGCTGTGTGGACCATATGAAAAATTTATATGTGAGCAGGATCATCAAAATTT
TTTGAGACTCCTCACAGAAACTGAAGACTGGCTGTATGAAGAAGGAGAGGACCAAGCTAAACAAGCATATGTTGA
CAAGTTGGAAGAATTAATGAAAATTGGCACTCCAGTTAAAGTTCGGTTTCAGGAAGCTGAAGAACGGCCAAAAAT
GTTTGAAGAACTAGGACAGAGGCTGCAGCATTATGCCAAGATAGCAGCTGACTTCAGAAATAAGGATGAGAAATA
CAACCATATTGATGAGTCTGAAATGAAAAAAGTGGAGAAGTCTGTTAATGAAGTGATGGAATGGATGAATAATGT
CATGAATGCTCAGGCTAAAAAGAGTCTTGATCAGGATCCAGTTGTACGTGCTCAGGAAATTAAAACAAAAATCAA
GGAATTGAACAACACATGTGAACCCGTTGTAACACAACCGAAACCAAAAATTGAATCACCCAAACTGGAAAGAAC
TCCAAATGGCCCAAATATTGATAAAAAGGAAGAAGATTTAGAAGACAAAAACAATTTTGGTGCTGAACCTCCACA
TCAGAATGGTGAATGTTACCCTAATGAGAAAAATTCTGTTAATATGGACTTGGAC**TAG**ATAACCTTAAATTGGCC
TATTCCTTCAATTAATAAAATATTTTTGCCATAGTATGTGACTCTACATAACATACTGAAACTATTTATATTTTC
TTTTTTAAGGATATTTAGAAATTTTGTGTATTATATGGAAAAAGAAAAAAAGCTTAAGTCTGTAGTCTTTATGAT
CCTAAAAGGGAAAATTGCCTTGGTAACTTTCAGATTCCTGTGGAATTGTGAATTCATACTAAGCTTTCTGTGCAG
TCTCACCATTTGCATCACTGAGGATGAAACTGACTTTTGTCTTTTGGAGAAAAAAAACTGTACTGTTGTTCAAGA
GGGCTGTGATTAAAATCTTTAAGCATTTGTTCCTGCCAAGGTAGTTTTCTTGCATTTTGCTCTCCATTCAGCATG
TGTGTGGGTGTGGATGTTTATAAACAAGACTAAGTCTGACTTCATAAGGGCTTTCTAAAACCATTTCTGTCCAAG
AGAAAATGACTTTTTGCTTTGATATTAAAAATTCAATGAGTAAAACAAAAGCTAGTCAAATGTGTTAGCAGCATG
CAGAACAAAAACTTTAAACTTTCTCTCTCACTATACAGTATATTGTCAATGTGAAAGTGTGGAATGGAAGAAATG
TCGATCCTGTTGTAACTGATTGTGAACACTTTTATGAGCTTTAAAATAAAGTTCATCTTATGGTGTCATTTCT

FIGURE 1819

MSVVGLDVGSQSCYIAVARAGGIETIANEFSDRCTPSVISFGSKNRTIGVAAKNQQITHANNTVSNFKRFHGRAF
NDPFIQKEKENLSYDLVPLKNGGVGIKVMYMGEEHLFSVEQITAMLLTKLKETAENSLKKPVTDCVISVPSFFTD
AERRSVLDAAQIVGLNCLRLMNDMTAVALNYGIYKQDLPSLDEKPRIVVFVDMGHSAFQVSACAFNKGKLKVLGT
AFDPFLGGKNFDEKLVEHFCAEFKTKYKLDAKSKIRALLRLYQECEKLKKLMSSNSTDLPLNIECFMNDKDVSGK
MNRSQFEELCAELLQKIEVPLYSLLEQTHLKVEDVSAVEIVGGATRIPAVKERIAKFFGKDISTTLNADEAVARG
CALQCAILSPAFKVREFSVTDAVPFPISLIWNHDSEDTEGVHEVFSRNHAAPFSKVLTFLRRGPFELEAFYSDPQ
GVPYPEAKIGRFVVQNVSAQKDGEKSRVKVKVRVNTHGIFTISTASMVEKVPTEENEMSSEADMECLNQRPPENP
DTDANEKKVDQPPEAKKPKIKVVNVELPIEANLVWQLGKDLLNMYIETEGKMIMQDKLEKERNDAKNAVEEYVYE
FRDKLCGPYEKFICEQDHQNFLRLLTETEDWLYEEGEDQAKQAYVDKLEELMKIGTPVKVRFQEAEERPKMFEEL
GQRLQHYAKIAADFRNKDEKYNHIDESEMKKVEKSVNEVMEWMNNVMNAQAKKSLDQDPVVRAQEIKTKIKELNN
TCEPVVTQPKPKIESPKLERTPNGPNIDKKEEDLEDKNNFGAEPPHQNGECYPNEKNSVNMDLD

FIGURE 1820

CAGGACTGCCTGAGACAAGCCACAAGCTGAACAGAGAAAGTGGATTGAACAAGGACGCATTTCCCCAGTACATCC
ACAACATGCTGTCCACATCTCGTTCTCGGTTTATCAGAAATACCAACGAGAGCGGTGAAGAAGTCACCACCTTTT
TTGATTATGATTACGGTGCTCCCTGTCATAAATTTGACGTGAAGCAAATTGGGGCCCAACTCCTGCCTCCGCTCT
ACTCGCTGGTGTTCATCTTTGGTTTTGTGGGCAACATGCTGGTCGTCCTCATCTTAATAAACTGCAAAAAGCTGA
AGTGCTTGACTGACATTTACCTGCTCAACCTGGCCATCTCTGATCTGCTTTTTCTTATTACTCTCCCATTGTGGG
CTCACTCTGCTGCAAATGAGTGGGTCTTTGGGAATGCAATGTGCAAATTATTCACAGGGCTGTATCACATCGGTT
ATTTTGGCGGAATCTTCTTCATCATCCTCCTGACAATCGATAGATACCTGGCTATTGTCCATGCTGTGTTTGCTT
TAAAAGCCAGGACGGTCACCTTTGGGGTGGTGACAAGTGTGATCACCTGGTTGGTGGCTGTGTTTGCTTCTGTCC
CAGGAATCATCTTTACTAAATGCCAGAAAGAAGATTCTGTTTATGTCTGTGGCCCTTATTTTCCACGAGGATGGA
ATAATTTCCACACAATAATGAGGAACATTTTGGGGCTGGTCCTGCCGCTGCTCATCATGGTCATCTGCTACTCGG
GAATCCTGAAAACCCTGCTTCGGTGTCGAAACGAGAAGAAGAGGCATAGGGCAGTGAGAGTCATCTTCACCATCA
TGATTGTTTACTTTCTCTTCTGGACTCCCTATAACATTGTCATTCTCCTGAACACCTTCCAGGAATTCTTCGGCC
TGAGTAACTGTGAAAGCACCAGTCAACTGGACCAAGCCACGCAGGTGACAGAGACTCTTGGGATGACTCACTGCT
GCATCAATCCCATCATCTATGCCTTCGTTGGGGAGAAGTTCAGAAGCCTTTTTCACATAGCTCTTGGCTGTAGGA
TTGCCCCACTCCAAAAACCAGTGTGTGGAGGTCCAGGAGTGAGACCAGGAAAGAATGTGAAAGTGACTACACAAG
GACTCCTCGATGGTCGTGGAAAAGGAAAGTCAATTGGCAGAGCCCCTGAAGCCAGTCTTCAGGACAAAGAAGGAG
CCTAGAGACAGAAATGACAGATCTCTGCTTTGGAAATCACACGTCTGGCTTCACAGATGTGTGATTCACAGTGTG
AATCTTGGTGTCTACGTTACCAGGCAGGAAGGCTGAGAGGAGAGAGACTCCAGCTGGGTTGGAAAACAGTATTTT
CCAAACTACCTTCCAGTTCCTCATTTTTGAATACAGGCATAGAGTTCAGACTTTTTTTAAATAGTAAAAATAAAA
TTAAAGCTGAAAACTGCAACTTGTAAATGTGGTAAAGAGTTAGTTTGAGTTGCTATCATGTCAAACGTGAAAATG
CTGTATTAGTCACAGAGATAATTCTAGCTTTGAGCTTAAGAATTTTGAGCAGGTGGTATGTTTGGGAGACTGCTG
AGTCAACCCAATAGTTGTTGATTGGCAGGAGTTGGAAGTGTGTGATCTGTGGGCACATTAGCCTATGTGCATGCA
GCATCTAAGTAATGATGTCGTTTGAATCACAGTATACGCTCCATCGCTGTCATCTCAGCTGGATCTCCATTCTCT
CAGGCTTGCTGCCAAAAGCCTTTTGTGTTTTGTTTTGTATCATTATGAAGTCATGCGTTTAATCACATTCGAGTG
TTTCAGTGCTTCGCAGATGTCCTTGATGCTCATATTGTTCCCTAATTTGCCAGTGGGAACTCCTAAATCAAATTG
GCTTCTAATCAAAGCTTTTAAACCCTATTGGTAAAGAATGGAAGGTGGAGAAGCTCCCTGAAGTAAGCAAAGACT
TTCCTCTTAGTCGAGCCAAGTTAAGAATGTTCTTATGTTGCCCAGTGTGTTTCTGATCTGATGCAAGCAAGAAAC
ACTGGGCTTCTAGAACCAGGCAACTTGGGAACTAGACTCCCAAGCTGGACTATGGCTCTACTTTCAGGCCACATG
GCTAAAGAAGGTTTCAGAAAGAAGTGGGGACAGAGCAGAACTTTCACCTTCATATATTTGTATGATCCTAATGAA
TGCATAAAATGTTAAGTTGATGGTGATGAAATGTAAATACTGTTTTTAACAACTATGATTTGGAAAATAAATCAA
TGCTATAACTATGTTGATAAAAG

FIGURE 1821

MLSTSRSRFIRNTNESGEEVTTFFDYDYGAPCHKFDVKQIGAQLLPPLYSLVFIFGFVGNMLVVLILINCKKLKC
LTDIYLLNLAISDLLFLITLPLWAHSAANEWVFGNAMCKLFTGLYHIGYFGGIFFIILLTIDRYLAIVHAVFALK
ARTVTFGVVTSVITWLVAVFASVPGIIFTKCQKEDSVYVCGPYFPRGWNNFHTIMRNILGLVLPLLIMVICYSGI
LKTLLRCRNEKKRHRAVRVIFTIMIVYFLFWTPYNIVILLNTFQEFFGLSNCESTSQLDQATQVTETLGMTHCCI
NPIIYAFVGEKFRRYLSVFFRKHITKRFCKQCPVFYRETVDGVTSTNTPSTGEQEVSAGL

FIGURE 1822

TGGAAAGGGCTGTCACCCGGCTTGGCCCCTTCCACACCCAACTGGGGCAAGCCTGACCCGGCGACAGGAGGCATG
AGGGGCCCCCGGCCGAAATGACAGTGCTGGCGCCAGCCTGGAGCCCAACAACCTATCTCCTCCTGCTGCTGCTGC
TGAGCTCGGGACTCAGTGGGACCCAGGACTGCTCCTTCCAACACAGCCCCATCTCCTCCGACTTCGCTGTCAAAA
TCCGTGAGCTGTCTGACTACCTGCTTCAAGATTACCCAGTCACCGTGGCCTCCAACCTGCAGGACGAGGAGCTCT
GCGGGGCGCTCTGGCGGCTGGTCCTGGCACAGCGCTGGATGGAGCGGCTCAAGACTGTCGCTGGGTCCAAGATGC
AAGGCTTGCTGGAGCGCGTGAACACGGAGATACACTTTGTCACCAAATGTGCCTTTCAGCCCCCCCCCAGCTGTC
TTCGCTTCGTCCAGACCAACATCTCCCGCCTCCTGCAGGAGACCTCCGAGCAGCTGGTGGCGCTGAAGCCCTGGA
TCACTCGCCAGAACTTCTCCCGGTGCCTGGAGCTGCAGTGTCAGCCCGACTCCTCAACCCTGCCACCCCCATGGA
GTCCCCGGCCCCTGGAGGCCACAGCCCCGACAGCCCCGCAGCCCCCTCTGCTCCTCCTACTGCTGCTGCCCGTGG
GCCTCCTGCTGCTGGCCGCTGCCTGGTGCCTGCACTGGCAGAGGACGCGGCGGAGGACACCCCGCCCTGGGGAGC
AGGTGCCCCCCGTCCCCAGTCCCCAGGACCTGCTGCTTGTGGAGCACTGACCTGGCCAAGGCCTCATCCTGGGGA
GGATACGTAGGCACACAGAGGGGAGTCACCAGCC

FIGURE 1823

MTVLAPAWSPTTYLLLLLLLSSGLSGTQDCSFQHSPISSDFAVKIRELSDYLLQDYPVTVASNLQDEELCGALWR
LVLAQRWMERLKTVAGSKMQGLLERVNTEIHFVTKCAFQPPPSCLRFVQTNISRLLQETSEQLVALKPWITRQNF
SRCLELQCQPDSSTLPPPWSPRPLEATAPTAPQPPLLLLLLLPVGLLLLAAAWCLHWQRTRRRTPRPGEQVPPVP
SPQDLLLVEH

FIGURE 1824A

CTTCAGATAGATTATATCTGGAGTGAAGGATCCTGCCACCTACGTATCTGGCATAGTATTCTGTGTAGTGGGATG
AGCAGAGAACAAAAACAAAATAATCCAGTGAGAAAAGCCCGTAAATAAACCTTCAGACCAGAGATCTATTCTCCA
GCTTATTTTAAGCTCAACTTAAAAAGAAGAACTGTTCTCTGATTCTTTTCGCCTTCAATACACTTAATGATTTAA
CTCCACCCTCCTTCAAAAGAAACAGCATTTCCTACTTTTATACTGTCTATATGATTGATTTGCACAGCTCATCTG
GCCAGAAGAGCTGAGACATCCGTTCCCCTACAAGAAACTCTCCCCGGGTGGAACAAGATGGATTATCAAGTGTCA
AGTCCAATCTATGACATCAATTATTATACATCGGAGCCCTGCCAAAAAATCAATGTGAAGCAAATCGCAGCCCGC
CTCCTGCCTCCGCTCTACTCACTGGTGTTCATCTTTGGTTTTGTGGGCAACATGCTGGTCATCCTCATCCTGATA
AACTGCAAAAGGCTGAAGAGCATGACTGACATCTACCTGCTCAACCTGGCCATCTCTGACCTGTTTTTCCTTCTT
ACTGTCCCCTTCTGGGCTCACTATGCTGCCGCCCAGTGGGACTTTGGAAATACAATGTGTCAACTCTTGACAGGG
CTCTATTTTATAGGCTTCTTCTCTGGAATCTTCTTCATCATCCTCCTGACAATCGATAGGTACCTGGCTGTCGTC
CATGCTGTGTTTGCTTTAAAAGCCAGGACGGTCACCTTTGGGGTGGTGACAAGTGTGATCACTTGGGTGGTGGCT
GTGTTTGCGTCTCTCCCAGGAATCATCTTTACCAGATCTCAAAAAGAAGGTCTTCATTACACCTGCAGCTCTCAT
TTTCCATACAGTCAGTATCAATTCTGGAAGAATTTCCAGACATTAAAGATAGTCATCTTGGGGCTGGTCCTGCCG
CTGCTTGTCATGGTCATCTGCTACTCGGGAATCCTAAAAACTCTGCTTCGGTGTCGAAATGAGAAGAAGAGGCAC
AGGGCTGTGAGGCTTATCTTCACCATCATGATTGTTTATTTTCTCTTCTGGGCTCCCTACAACATTGTCCTTCTC
CTGAACACCTTCCAGGAATTCTTTGGCCTGAATAATTGCAGTAGCTCTAACAGGTTGGACCAAGCTATGCAGGTG
ACAGAGACTCTTGGGATGACGCACTGCTGCATCAACCCCATCATCTATGCCTTTGTCGGGGAGAAGTTCAGAAAC
TACCTCTTAGTCTTCTTCCAAAAGCACATTGCCAAACGCTTCTGCAAATGCTGTTCTATTTTCCAGCAAGAGGCT
CCCGAGCGAGCAAGCTCAGTTTACACCCGATCCACTGGGGAGCAGGAAATATCTGTGGGCTTGTGACACGGACTC
AAGTGGGCTGGTGACCCAGTCAGAGTTGTGCACATGGCTTAGTTTTCATACACAGCCTGGGCTGGGGGTGGGGTG
GGAGAGGTCTTTTTTAAAAGGAAGTTACTGTTATAGAGGGTCTAAGATTCATCCATTTATTTGGCATCTGTTTAA
AGTAGATTAGATCTTTTAAGCCCATCAATTATAGAAAGCCAAATCAAAATATGTTGATGAAAAATAGCAACCTTT
TTATCTCCCCTTCACATGCATCAAGTTATTGACAAACTCTCCCTTCACTCCGAAAGTTCCTTATGTATATTTAAA
AGAAAGCCTCAGAGAATTGCTGATTCTTGAGTTTAGTGATCTGAACAGAAATACCAAAATTATTTCAGAAATGTA
CAACTTTTTACCTAGTACAAGGCAACATATAGGTTGTAAATGTGTTTAAAACAGGTCTTTGTCTTGCTATGGGGA
GAAAAGACATGAATATGATTAGTAAAGAAATGACACTTTTCATGTGTGATTTCCCCTCCAAGGTATGGTTAATAA
GTTTCACTGACTTAGAACCAGGCGAGAGACTTGTGGCCTGGGAGAGCTGGGGAAGCTTCTTAAATGAGAAGGAAT
TTGAGTTGGATCATCTATTGCTGGCAAAGACAGAAGCCTCACTGCAAGCACTGCATGGGCAAGCTTGGCTGTAGA
AGGAGACAGAGCTGGTTGGGAAGACATGGGGAGGAAGGACAAGGCTAGATCATGAAGAACCTTGACGGCATTGCT
CCGTCTAAGTCATGAGCTGAGCAGGGAGATCCTGGTTGGTGTTGCAGAAGGTTTACTCTGTGGCCAAAGGAGGGT
CAGGAAGGATGAGCATTTAGGGCAAGGAGACCACCAACAGCCCTCAGGTCAGGGTGAGGATGGCCTCTGCTAAGC
TCAAGGCGTGAGGATGGGAAGGAGGGAGGTATTCGTAAGGATGGGAAGGAGGGAGGTATTCGTGCAGCATATGAG
GATGCAGAGTCAGCAGAACTGGGGTGGATTTGGTTTGGAAGTGAGGGTCAGAGAGGAGTCAGAGAGAATCCCTAG
TCTTCAAGCAGATTGGAGAAACCCTTGAAAAGACATCAAGCACAGAAGGAGGAGGAGGAGGTTTAGGTCAAGAAG
AAGATGGATTGGTGTAAAAGGATGGGTCTGGTTTGCAGAGCTTGAACACAGTCTCACCCAGACTCCAGGCTGTCT
TTCACTGAATGCTTCTGACTTCATAGATTTCCTTCCCATCCCAGCTGAAATACTGAGGGGTCTCCAGGAGGAGAC
TAGATTTATGAATACACGAGGTATGAGGTCTAGGAACATACTTCAGCTCACACATGAGATCTAGGTGAGGATTGA
TTACCTAGTAGTCATTTCATGGGTTGTTGGGAGGATTCTATGAGGCAACCACAGGCAGCATTTAGCACATACTAC
ACATTCAATAAGCATCAAACTCTTAGTTACTCATTCAGGGATAGCACTGAGCAAAGCATTGAGCAAAGGGGTCCC
ATATAGGTGAGGGAAGCCTGAAAAACTAAGATGCTGCCTGCCCAGTGCACACAAGTGTAGGTATCATTTTCTGCA
TTTAACCGTCAATAGGCAAAGGGGGGAAGGGACATATTCATTTGGAAATAAGCTGCCTTGAGCCTTAAAACCCAC
AAAAGTACAATTTACCAGCCTCCGTATTTCAGACTGAATGGGGGTGGGGGGGGCGCCTTAGGTACTTATTCCAGA
TGCCTTCTCCAGACAAACCAGAAGCAACAGAAAAAATCGTCTCTCCCTCCCTTTGAAATGAATATACCCCTTAGT
GTTTGGGTATATTCATTTCAAAGGGAGAGAGAGAGGTTTTTTTCTGTTCTTTCTCATATGATTGTGCACATACTT
GAGACTGTTTTGAATTTGGGGGATGGCTAAAACCATCATAGTACAGGTAAGGTGAGGGAATAGTAAGTGGTGAGA
ACTACTCAGGGAATGAAGGTGTCAGAATAATAAGAGGTGCTACTGACTTTCTCAGCCTCTGAATATGAACGGTGA
GCATTGTGGCTGTCAGCAGGAAGCAACGAAGGGAAATGTCTTTCCTTTTGCTCTTAAGTTGTGGAGAGTGCAACA
GTAGCATAGGACCCTACCCTCTGGGCCAAGTCAAAGACATTCTGACATCTTAGTATTTGCATATTCTTATGTATG

FIGURE 1824B

TGAAAGTTACAAATTGCTTGAAAGAAAATATGCATCTAATAAAAAACACCTTCTA

FIGURE 1825

MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKRLKSMTDIYLLNLAIS
DLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFIILLTIDRYLAVVHAVFALKARTVTFGVVTSV
ITWVVAVFASLPGIIFTRSQKEGLHYTCSSHFPYSQYQFWKNFQTLKIVILGLVLPLLVMVICYSGILKTLLRCR
NEKKRHRAVRLIFTIMIVYFLFWAPYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFV
GEKFRNYLLVFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL

FIGURE 1826A

TGCAGAGAACAGAGAAAGGACATCTGCGAGGAAAGTTCCCTGATGGCTGTCAACAAAGTGCCACGTCTCTATGGC
TGTGTACGCTGAGCACACGATTTTATCGCGCCTATCATATCTTGGTGCATAAACGCACCTCACCTCGGTCAACCC
TTGCTCCGTCTTATGAGACAGGCTTTATTATCCGCATTTTATATGAGGGGAATCTGACGGTGGAGAGAGAATTAT
CTTGCTCAAGGCGACACAGCAGAGCCCACAGGTGGCAGAATCCCACCCGAGCCCGCTTCGACCCGCGGGGTGGAA
ACCACGGGCGCCCGCCCGGCTGCGCTTCCAGAGCTGAACTGAGAAGCGAGTCCTCTCCGCCCTGCGGCCACCGCC
CAGCCCCGACCCCCGCCCCGGCCCGATCCTCACTCGCCGCCAGCTCCCCGCGCCCACCCCGGAGTTGGTGGCGCA
GAGGCGGGAGGCGGAGGCGGGAGGGCGGGCGCTGGCACCGGGAACGCCCGAGCGCCGGCAGAGAGCGCGGAGAGC
GCGACACGTGCGGCCCAGAGCACCGGGGCCACCCGGTCCCCGCAGGCCCGGGACCGCGCCCGCTGGCAGGCGACA
CGTGGAAGAATACGGAGTTCTATACCAGAGTTGATTGTTG**ATG**GCACATACTTTTAGAGGATGCTCATTGGCATT
TATGTTTATAATCACGTGGCTGTTGATTAAAGCAAAAATAGATGCGTGCAAGAGAGGCGATGTGACTGTGAAGCC
TTCCCATGTAATTTTACTTGGATCCACTGTCAATATTACATGCTCTTTGAAGCCCAGACAAGGCTGCTTTCACTA
TTCCAGACGTAACAAGTTAATCCTGTACAAGTTTGACAGAAGAATCAATTTTCACCATGGCCACTCCCTCAATTC
TCAAGTCACAGGTCTTCCCCTTGGTACAACCTTGTTTGTCTGCAAACTGGCCTGTATCAATAGTGATGAAATTCA
AATATGTGGAGCAGAGATCTTCGTTGGTGTTGCTCCAGAACAGCCTCAAAATTTATCCTGCATACAGAAGGGAGA
ACAGGGGACTGTGGCCTGCACCTGGGAAAGAGGACGAGACACCCACTTATACACTGAGTATACTCTACAGCTAAG
TGGACCAAAAAATTTAACCTGGCAGAAGCAATGTAAAGACATTTATTGTGACTATTTGGACTTTGGAATCAACCT
CACCCCTGAATCACCTGAATCCAATTTCACAGCCAAGGTTACTGCTGTCAATAGTCTTGGAAGCTCCTCTTCACT
TCCATCCACATTCACATTCTTGGACATAGTGAGGCCTCTTCCTCCGTGGGACATTAGAATCAAATTTCAAAAGGC
TTCCGTGAGCAGATGTACCCTTTATTGGAGAGATGAGGGACTGGTACTGCTTAATCGACTCAGATATCGGCCCAG
TAACAGCAGGCTCTGGAATATGGTTAATGTTACAAAGGCCAAAGGAAGACATGATTTGCTGGATCTGAAACCATT
TACAGAATATGAATTTCAGATTTCCTCTAAGCTACATCTTTATAAGGGAAGTTGGAGTGATTGGAGTGAATCATT
GAGAGCACAAACACCAGAAGAAGAGCCTACTGGGATGTTAGATGTCTGGTACATGAAACGGCACATTGACTACAG
TAGACAACAGATTTCTCTTTTCTGGAAGAATCTGAGTGTCTCAGAGGCAAGAGGAAAAATTCTCCACTATCAGGT
GACCTTGCAGGAGCTGACAGGAGGGAAAGCCATGACACAGAACATCACAGGACACACCTCCTGGACCACAGTCAT
TCCTAGAACCGGAAATTGGGCTGTGGCTGTGTCTGCAGCAAATTCAAAAGGCAGTTCTCTGCCCACTCGTATTAA
CATAATGAACCTGTGTGAGGCAGGGTTGCTGGCTCCTCGCCAGGTCTCTGCAAACTCAGAGGGCATGGACAACAT
TCTGGTGACTTGGCAGCCTCCCAGGAAAGATCCCTCTGCTGTTCAGGAGTACGTGGTGGAATGGAGAGAGCTCCA
TCCAGGGGGTGACACACAGGTCCCTCTAAACTGGCTACGGAGTCGACCCTACAATGTGTCTGCTCTGATTTCAGA
GAACATAAAATCCTACATCTGTTATGAAATCCGTGTGTATGCACTCTCAGGGGATCAAGGAGGATGCAGCTCCAT
CCTGGGTAACTCTAAGCACAAAGCACCACTGAGTGGCCCCCACATTAATGCCATCACAGAGGAAAAGGGGAGCAT
TTTAATTTCATGGAACAGCATTCCAGTCCAGGAGCAAATGGGCTGCCTCCTCCATTATAGGATATACTGGAAGGA
ACGGGACTCCAACTCCCAGCCTCAGCTCTGTGAAATTCCCTACAGAGTCTCCCAAAATTCACATCCAATAAACAG
CCTGCAGCCCCGAGTGACATATGTCCTGTGGATGACAGCTCTGACAGCTGCTGGTGAAAGTTCCCACGGAAATGA
GAGGGAATTTTGTCTGCAAGGTAAAGCCAATTGGATGGCGTTTGTGGCACCAAGCATTTGCATTGCTATCATCAT
GGTGGGCATTTTCTCAACGCATTACTTCCAGCAAAAGGTGTTTGTTCTCCTAGCAGCCCTCAGACCTCAGTGGTG
TAGCAGAGAAATTCCAGATCCAGCAAATAGCACTTGCGCTAAGAAATATCCCATTGCAGAGGAGAAGACACAGCT
GCCCTTGGACAGGCTCCTGATAGACTGGCCCACGCCTGAAGATCCTGAACCGCTGGTCATCAGTGAAGTCCTTCA
TCAAGTGACCCCAGTTTTCAGACATCCCCCCTGCTCCAACTGGCCACAAAGGGAAAAAGGAATCCAAGGTCATCA
GGCCTCTGAGAAAGACATGATGCACAGTGCCTCAAGCCCACCACCTCCAAGAGCTCTCCAAGCTGAGAGCAGACA
ACTGGTGGATCTGTACAAGGTGCTGGAGAGCAGGGGCTCCGACCCAAAGCCAGAAAACCCAGCCTGTCCCTGGAC
GGTGCTCCCAGCAGGTGACCTTCCCACCCATGATGGCTACTTACCCTCCAACATAGATGACCTCCCCTCACATGA
GGCACCTCTCGCTGACTCTCTGGAAGAACTGGAGCCTCAGCACATCTCCCTTTCTGTTTTCCCCTCAAGTTCTCT
TCACCCACTCACCTTCTCCTGTGGTGATAAGCTGACTCTGGATCAGTTAAAGATGAGGTGTGACTCCCTCATGCT
C**TGA**GTGGTGAGGCTTCAAGCCTTAAAGTCAGTGTGCCCTCAACCAGCACAGCCTGCCCCAATTCCCCCAGCCCC
TGCTCCAGCAGCTGTCATCTCTGGGTGCCACCATCGGTCTGGCTGCAGCTAGAGGACAGGCAAGCCAGCTCTGGG
GGAGTCTTAGGAACTGGGAGTTGGTCTTCACTCAGATGCCTCATCTTGCCTTTCCCAGGGCCTTAAAATTACATC
CTTCACTGTGTGGACCTAGAGACTCCAACTTGAATTCCTAGTAACTTTCTTGGTATGCTGGCCAGAAAGGGAAAT
GAGGAGGAGAGTAGAAACCACAGCTCTTAGTAGTAATGGCATACAGTCTAGAGGACCATTCATGCAATGACTATT

FIGURE 1826B

TCTAAAGCACCTGCTACACAGCAGGCTGTACACAGCAGATCAGTACTGTTCAACAGAACTTCCTGAGATGATGGA
AATGTTCTACCTCTGCACTCACTGTCCAGTACATTAGACACTAGGCACATTGGCTGTTAATCACTTGGAATGTGT
TTAGCTTGACTGAGGAATTAAATTTTGATTGTAAATTTAAATCGCCACACATGGCTAGTGGCTACTGTATTGGAG
TGCACAGCTCTAGATGGCTCCTAGATTATTGAGAGCCTCCAAAACAAATCAACCTAGTTCTATAGATGAAGACAT
AAAAGACACTGGTAAACACCAATGTAAAAGGGCCCCCAAGGTGGTCATGACTGGTCTCATTTGCAGAAGTCTAAG
AATGTACCTTTTTCTGGCCGGGCGTGGTAGCTCATGCCTGTAATCCCAGCACTTTGGGAGGCTGA

FIGURE 1827

MAHTFRGCSLAFMFIITWLLIKAKIDACKRGDVTVKPSHVILLGSTVNITCSLKPRQGCFHYSRRNKLILYKFDR
RINFHHGHSLNSQVTGLPLGTTLFVCKLACINSDEIQICGAEIFVGVAPEQPQNLSCIQKGEQGTVACTWERGRD
THLYTEYTLQLSGPKNLTWQKQCKDIYCDYLDFGINLTPESPESNFTAKVTAVNSLGSSSSLPSTFTFLDIVRPL
PPWDIRIKFQKASVSRCTLYWRDEGLVLLNRLRYRPSNSRLWNMVNVTKAKGRHDLLDLKPFTEYEFQISSKLHL
YKGSWSDWSESLRAQTPEEEPTGMLDVWYMKRHIDYSRQQISLFWKNLSVSEARGKILHYQVTLQELTGGKAMTQ
NITGHTSWTTVIPRTGNWAVAVSAANSKGSSLPTRINIMNLCEAGLLAPRQVSANSEGMDNILVTWQPPRKDPSA
VQEYVVEWRELHPGGDTQVPLNWLRSRPYNVSALISENIKSYICYEIRVYALSGDQGGCSSILGNSKHKAPLSGP
HINAITEEKGSILISWNSIPVQEQMGCLLHYRIYWKERDSNSQPQLCEIPYRVSQNSHPINSLQPRVTYVLWMTA
LTAAGESSHGNEREFCLQGKANWMAFVAPSICIAIIMVGIFSTHYFQQKVFVLLAALRPQWCSREIPDPANSTCA
KKYPIAEEKTQLPLDRLLIDWPTPEDPEPLVISEVLHQVTPVFRHPPCSNWPQREKGIQGHQASEKDMMHSASSP
PPPRALQAESRQLVDLYKVLESRGSDPKPENPACPWTVLPAGDLPTHDGYLPSNIDDLPSHEAPLADSLEELEPQ
HISLSVFPSSSLHPLTFSCGDKLTLDQLKMRCDSLML

FIGURE 1828

GGCACGAGGCACGAGGGCCCGGGCCGCGAGCAGCCGCGGCTGTCCCGGTCGCCACCCTTAGCAGCGGTCGAGGTC
GGTGCCGAAGCGGTGTTCCCCGCCTTAGCCGCTGGCGCCTCCCAAGAGAGCGGCCGGTGGGCCCTCGTCCTGTCA
GTGGCGTCGGAGGCCGGCGCTGCGGTGGCCGCGCCCTTCTGGTGCTCGGACACCGCTGAGGAGCCGGGGCCGGGC
ACGGCTGGCTGACGGCTCCGGGCAGCTAAGGCTGCCCGAGGAGAAGGCGGCGGCCGCGGCGTAGGCGCACGTCCG
GCGGGCTCCTGGAGCCTGGAGGAGGCCGAGGGGACC**ATG**TCCGGGAGGCGCTTCCACCTCTCCACCACCGACCGC
GTCATCAAAGCTGTCCCCTTTCCTCCAACCCAACGGCTTACTTTCAAGGAAGTATTTGAGAATGGGAAACCTAAA
GTTGATGTTTTAAAAAACCATTTGGTAAAGGAAGGACGACTGGAAGAGGAAGTAGCCTTAAAGATAATCAATGAT
GGGGCTGCCATCCTGAGGCAAGAGAAGACTATGATAGAAGTAGATGCTCCAATCACAGTATGTGGTGATATTCAT
GGACAATTCTTTGACCTAATGAAGTTATTTGAAGTTGGAGGATCACCTAGTAACACACGCTACCTCTTTCTGGGT
GACTATGTGGACAGAGGCTATTTCAGTATAGAGTGTGTGCTGTATTTATGGAGTTTAAAGATTAATCATCCCAAA
ACATTGTTTCTGCTTCGGGGAAATCATGAATGCAGGCATCTTACAGACTATTTCACCTTCAAACAGGAATGTCGA
ATCAAATATTCGGAACAGGTGTATGATGCCTGTATGGAGACATTTGACTGTCTTCCTCTTGCTGCCCTCTTAAAC
CAGCAGTTTCTCTGTGTACATGGAGGAATGTCACCTGAAATTACTTCTTTAGATGACATTAGGAAATTAGACAGG
TTTACGGAACCTCCCGCCTTTGGACCTGTGTGTGACCTGCTTTGGTCTGATCCCTCAGAGGATTATGGCAATGAG
AAGACCTTGGAGCACTATACCCACAACACTGTCCGAGGGTGCTCTTATTTCTACAGTTACCCTGCAGTTTGTGAA
TTTTTGCAGAACAATAATTTACTATCAATTATCAGAGCCCATGAAGCCCAAGATGCTGGGTATCGAATGTACAGG
AAGAGCCAAGCCACAGGCTTTCCATCACTTATTACAATTTTCTCTGCCCCCAATTACCTAGATGTCTATAACAAT
AAAGCTGCTGTGTTGAAATATGAAAACAATGTCATGAATATCAGGCAGTTTAACTGTTCTCCACACCCCTACTGG
CTTCCAAACTTTATGGATGTTTTCACATGGTCTTTGCCTTTTGTTGGGGAAAAAGTCACAGAGATGCTGGTAAAT
GTGCTCAACATATGCTCTGATGACGAACTGATTTCTGATGATGAAGCAGAAGGAAGCACTACAGTTCGTAAGGAG
ATCATCAGGAATAAGATCAGAGCCATTGGGAAGATGGCACGGGTCTTTTCAATTCTTCGGCAAGAAAGTGAGAGT
GTGCTGACTCTCAAGGGCCTGACTCCCACAGGCACACTCCCTCTGGGCGTCCTCTCAGGAGGCAAGCAGACTATC
GAGACAGCCACAGTAGAAGCGGTAGAGGCCCGGGAAGCCATCAGAGGGTTCTCGCTTCAGCACAAGATCCGGAGT
TTTGAAGAAGCGCGAGGTCTGGACCGAATTAATGAGCGAATGCCACCCCGAAAGGATAGCATACACGCTGGTGGG
CCAATGAAATCTGTAACCTCAGCACACTCACATGCTGCGCACAGGAGCGACCAAGGGAAGAAAGCCCATTCA**TGA**

CTTAGAGTCCTGCCGTGGCTCAGGTGGATCTAAAACTCAAGAACAAATTCTATTTATTTATTATTGGAAAATGAA
AAGCAACTCAAAACAACTTCAACCTGGAGGTGCATTTATAATTCAGTCTGCATTTATTCTGTAAAAAGGTGACTG
TTTTATAAATTCTTTTAATTTATGTTCAATATATATAAAAAGTGCATCTGTTTTGTTTTTCCCTTTTTTCTCCAT
AATTTTAAGAAATGAATCTGATTGTTGTCAACACATTTGTGAAGTCTTGTGCTATAAAGGGGAACTTCCCCTAAT
AAAAGGGCCTTGGAAACCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1829

MSGRRFHLSTTDRVIKAVPFPPTQRLTFKEVFENGKPKVDVLKNHLVKEGRLEEEVALKIINDGAAILRQEKTMI
EVDAPITVCGDIHGQFFDLMKLFEVGGSPSNTRYLFLGDYVDRGYFSIECVLYLWSLKINHPKTLFLLRGNHECR
HLTDYFTFKQECRIKYSEQVYDACMETFDCLPLAALLNQQFLCVHGGMSPEITSLDDIRKLDRFTEPPAFGPVCD
LLWSDPSEDYGNEKTLEHYTHNTVRGCSYFYSYPAVCEFLQNNNLLSIIRAHEAQDAGYRMYRKSQATGFPSLIT
IFSAPNYLDVYNNKAAVLKYENNVMNIRQFNCSPHPYWLPNFMDVFTWSLPFVGEKVTEMLVNVLNICSDDELIS
DDEAEGSTTVRKEIIRNKIRAIGKMARVFSILRQESESVLTLKGLTPTGTLPLGVLSGGKQTIETATVEAVEARE
AIRGFSLQHKIRSFEEARGLDRINERMPPRKDSIHAGGPMKSVTSAHSHAAHRSDQGKKAHS

FIGURE 1830

GGGGGCTGGCCGAGCGCCGTGCGCGCTTGGGAGAAGGCCGGAAGCTTACCAGCCGAGAAGGAATTCCTAGCTAGC
TTCAGAGCCGGTGCCTCCGGAGCCAGCGTGGTGGCCATAGACAACAAGTTCGAACAGGCCATGGATCTGGTGAAG
AATCATCTGATGTATGCTGTGAGAGAGGAGGTGGAGATCCTGAAGGAGCAGATCCGAGAGCTGGTGGAGAAGAAC
TCCCAGCTAGAGCGTGAGAACACCCTGTTGAAGACCCTGGCAAGCCCAGAGCAGCTGGAGAAGTTCCAGTCCTGT
CTGAGCCCTGAAGAGCCAGCTCCCGAATCCCCACAAGTGCCCGAGGCCCCTGGTGGTTCTGCGGTGTAAGTCGCT
CTGTCCTCAGGGTGGGCAGAGCCACTAAACTTGTTTTACCTAGGG

FIGURE 1831

MDLVKNHLMYAVREEVEILKEQIRELVEKNSQLERENTLLKTLASPEQLEKFQSCLSPEEPAPESPQVPEAPGGS
AV

FIGURE 1832

AGGCTCAAGATAAAGACCTTAAAGATAACTTTGTGTGTCTCTCCCTTTCTAGGTATTTGCATAGGAATCAGAGGA
GTTAATCTTGTCTCTTCTCACAGGTTTGAATCTTCAGACAAACTTCTGGGAGGACTCGGTCCCTGCCTCGCAGCA
GATGTTCCCTGTCACTCAGTAGGCATATGGCTACCCATTCTCCCCAGAAATCTCACCAGTGTGCTCACTGTGAGA
AGACGTTCAACCGGAAAGACCACCTGAAAAACCACCTCCAGACCCACGACCCCAACAAAATGGCCTTTGGGTGTG
AGGAGTGTGGGAAGAAGTACAACACCATGCTGGGCTATAAGAGGCACCTGGCCCTCCATGCGGCCAGCAGTGGGG
ACCTCACCTGTGGGGTCTGTGCCCTGGAGCTAGGGAGCACCGAGGTGCTACTGGACCACCTCAAAGCCCATGCGG
AAGAGAAGCCCCCTAGCGGAACCAAGGAAAAGAAGCACCAGTGCGACCACTGTGAAAGATGCTTCTACACCCGGA
AGGATGTGCGACGCCACCTGGTGGTCCACACAGGATGCAAGGACTTCCTGTGCCAGTTCTGTGCCCAGAGATTTG
GGCGCAAGGTTCACCTCACCCGGCATACCAAGAAGACCCACTCACAGGAGCTGATGAAAGAGAGCTTGCAGACCG
GAGACCTTCTGAGCACCTTCCACACCATCTCGCCTTCATTCCAACTGAAGGCTGCTGCCTTGCCTCCTTTCCCTT
TAGGAGCTTCTGCCCAGAACGGGCTTGCAAGTAGCTTGCCAGCTGAGGTCCATAGCCTCACCCTCAGTCCCCCAG
AACAAGCCGCCCAGCCTATGCAGCCGCTGCCAGAGTCCCTGGCCTCCCTCCACCCCTCGGTATCCCCTGGCTCTC
CTCCGCCACCCCTTCCCAATCACAAGTACAACACCACTTCTACCTCATACTCCCCACTTGCAAGCCTGCCCCTCA
AAGCAGATACTAAAGGTTTTTGCAATATCAGTTTGTTTGAGGACTTGCCTCTGCAAGAGCCTCAGTCACCTCAAA
AGCTCAACCCAGGTTTTGATCTGGCTAAGGGAAATGCTGGTAAAGTAAACCTGCCCAAGGAGCTGCCTGCAGATG
CTGTGAACCTAACAATACCTGCCTCTCTGGACCTGTCCCCCCTGTTGGGCTTCTGGCAGCTGCCCCCTCCTGCTA
CCCAAAATACCTTTGGGAATAGCACTCTTGCCCTGGGGCCTGGGGAATCTTTGCCCCACAGGTTAAGCTGTCTGG
GGCAGCAGCAGCAAGAACCCCCACTTGCCATGGGCACTGTGAGCCTGGGCCAGCTCCCCCTGCCCCCCATCCCTC
ATGTGTTCTCAGCTGGCACTGGCTCTGCCATCCTGCCTCATTTCCATCATGCATTCAGATAATTGATTTTTAAAG
TGTATTTTTCCGTATTCTGGAAGATGTTTTAAGAAGCATTTTAAATGTCAGTTACAATATGAGAAAGATTTGGAA
AACGAGACTGGGACTATGGCTTATTCAGTGATGACTGGCTTGAGATGATAAGAGAATTCTCGAACTGCATGTATT
GTGCCAATCTGTCCTGAGTGTTCATGCTTTGTACCAAATTTAATGAACGCGTGTTCTGTAATCCAAACTGCAAAT
ATTGTCATAACCAACATCCAAAATGACGGCTGCTATATATAAGTGTTTGTCCATATGGGAATTTAATCCGTAAGC
CCATGGATCCATAATGTTAAACTAAATAACTTTATGGTGGCACTGCCTAGTAAGGGAACTATGGAAAGGTTTGGA
TTTCTCCAAATCTGGGAGAATTTTCAAAATAAGAAAATAACCTTTATATGATATACTATGACTAGGCTGTGTATT
TCTTTTCAGGGATTTTTCTACCTTCAGGGTTGGATGTAGTTTAGTTACTATTACCATAGCCAACCTGTAGTTTTA
CATATACATTTTCTTGTGGAGCAATAGAGTTCTCCATTTTACAGAAGCATTTTAAATGTAGTTTGAATATTTTCC
ACAAGATGCTGCAATGTGAGTTATCACTTCATTTATCTTAAAGAAAGACTAAACTGGTTGTCAGTTACATCTGAC
AGAAAAAAAAAAAAAAATCACTGTGTAACCAGGTTAAGTGGTAAAATAATCCAGGGCGTCAGTCAAAGGCATTTTG
CTGACTTTAATATTGATTATATTTTTAACAGGGAATTTAAGGAAAATATTACCTGGGAATTAAAAAATATATATA
TATTAAAACAAGAATTTTCCTTTGCCTCTGTCTAGCTTAAACCTACTACCTCAAGCTGCTTAAGTTCCTTAAGTA
TTGTTTGTAATCACCAATAAATAAGTGCATTTGTAATTCATCAGTCATTATTAGCTTTTATTAAAAGAAGATTAC
GTTTTACAATGTAACTATAATCTCTTGAATTTGGTATCTTATTAATGAGTTTTAAAGATGTAAAACCTAACCTTT
TTTAAAGCTCCATTGTCTTATGTTTTTAGAGGCTTTTCCGTAAACATATATCTTACATATAATAAACTTTTCAAA
TCTTGCAAATT

FIGURE 1833

MATFPCQLCGKTFLTLEKFTIHNYSHSRERPYKCVQPDCGKAFVSRYKLMRHMATHSPQKSHQCAHCEKTFNRKD
HLKNHFQTHDPNKMAFGCEECGKKYNTMLGYKRHLALHAASSGDLTCGVCALELGSTEVLLDHLKAHAEEKPPSG
TKEKKHQCDHCERCFYTRKDVRRHLVVHTGCKDFLCQFCAQRFGRKDHLTRHTKKTHSQELMKESLQTGDLLSTF
HTISPSFQLKAAALPPFPLGASAQNGLASSLPAEVHSLTLSPPEQAAQPMQPLPESLASLHPSVSPGSPPPPLPN
HKYNTTSTSYSPLASLPLKADTKGFCNISLFEDLPLQEPQSPQKLNPGFDLAKGNAGKVNLPKELPADAVNLTIP
ASLDLSPLLGFWQLPPPATQNTFGNSTLALGPGESLPHRLSCLGQQQQEPPLAMGTVSLGQLPLPPIPHVFSAGT
GSAILPHFHHAFR

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FIGURE 1834

TGATTGAAGACACCCCCTCGTCCAAGAATGCAAAGCACATCCAATAAAATAGCTGGATTATAACTCCTCTTCTTT
CTCTGGGGGCCGTGGGGTGGGAGCTGGGGCGAGAGGTGCCGTTGGCCCCCGTTGCTTTTCCTCTGGGAAGGATGG
CGCACGCTGGGAGAACGGGGTACGACAACCGGGAGATAGTGATGAAGTACATCCATTATAAGCTGTCGCAGAGGG
GCTACGAGTGGGATGCGGGAGATGTGGGCGCCGCGCCCCCGGGGGCCGCCCCCGCACCGGGCATCTTCTCCTCCC
AGCCCGGGCACACGCCCCATCCAGCCGCATCCCGCGACCCGGTCGCCAGGACCTCGCCGCTGCAGACCCCGGCTG
CCCCCGGCGCCGCCGCGGGGCCTGCGCTCAGCCCGGTGCCACCTGTGGTCCACCTGGCCCTCCGCCAAGCCGGCG
ACGACTTCTCCCGCCGCTACCGCGGCGACTTCGCCGAGATGTCCAGCCAGCTGCACCTGACGCCCTTCACCGCGC
GGGGACGCTTTGCCACGGTGGTGGAGGAGCTCTTCAGGGACGGGGTGAACTGGGGGAGGATTGTGGCCTTCTTTG
AGTTCGGTGGGGTCATGTGTGTGGAGAGCGTCAACCGGGAGATGTCGCCCCTGGTGGACAACATCGCCCTGTGGA
TGACTGAGTACCTGAACCGGCACCTGCACACCTGGATCCAGGATAACGGAGGCTGGGTAGGTGCATCTGGTGATG
TGAGTCTGGGCTGAGGCCACAGGTCCGAGATCGGGGGTTGGAGTGCGGGTGGGCTCCTGGGCAATGGGAGGCTGT
GGAGCCGGCGAAATAAAATCAGAGTTGTTGCTTCCCGGCGTGTCCCTACCTCCTCCTCTGGACAAAGCGTTCACT
CCCAACCTGAC

FIGURE 1835

MAHAGRTGYDNREIVMKYIHYKLSQRGYEWDAGDVGAAPPGAAPAPGIFSSQPGHTPHPAASRDPVARTSPLQTP
AAPGAAAGPALSPVPPVVHLALRQAGDDFSRRYRGDFAEMSSQLHLTPFTARGRFATVVEELFRDGVNWGRIVAF
FEFGGVMCVESVNREMSPLVDNIALWMTEYLNRHLHTWIQDNGGWVGASGDVSLG

FIGURE 1836

GGCAAATACTACAAAACCATCGATGACCTTAAAAATCAGATTCTCAACCTAACAACTGATAATGCCAACATCCTG
CTTCAGATCGACAATGCCAGGCTGGCAGCTGATGACTTCAGGCTGAAGTATGAGAATGAGGTAGCTCTGCGCCAG
AGCGTGGAGGCTGACATCAACGGCCTGCGTAGGGTGCTGGATGAGCTGACCCTGACCAAGGCTGACCTGGAGATG
CAAATTGAGAGCCTGACTGAAGAGCTGGCCTATCTGAAGAAGAACCACGAGGAGGAAATGAAAGACCTTCGAAAT
GTGTCCACTGGTGATGTGAATGTGGAAATGAATGCTGCCCCGGGTGTTGATCTGACTCAACTTCTGAATAACATG
AGAAGCCAATATGAACAACTTGCTGAACAAAACCGCAAAGATGCTGAAGCCTGGTTCAATGAAAAGAGCAAGGAA
CTGACTACAGAAATTGATAATAACATTGAACAGATATCCAGCTATAAATCTGAGATTACTGAATTGAGACGTAAT
GTACAAGCTCTGGAGATAGAACTACAGTCCCAACTGGCCTTGAAACAATCCCTGGAAGCCTCCTTGGCAGAAACA
GAAGGTCGCTACTGTGTGCAGCTCTCACAGATTCAGGCCCAGATATCCGCTCTGGAAGAACAGTTGCAACAGATT
CGAGCTGAAACCGAGTGCCAGAATACTGAATACCAACAACTCCTGGATATTAAGATCCGACTGGAGAATGAAATT
CAAACCTACCGCGGCCTGCTAGAAGGAGAGGGAAGTTCCGGAGGCGGCGGACGCGGCGGCGGAAGTTTCGGCGGC
GGCTACGGCGGCGGAAGCTCCGGCGGCGGAAGCTCCGGCGGCGGCCACGGCGGCAGTTCCGGCGGCGGCTACGGA
GGCGGAAGCTCCGGCGGCGGAAGCTCCGGCGGCGGCTACGGGGGCGGAAGCTCCAGCGGCGGCCACGGCGGCAGT
TCCAGCGGCGGCTACGGTGGTGGCAGTTCCGGCGGCGGCGGCGGCGGCTACGGGGGCGGCAGCTCCGGCGGCGGC
AGCAGCTCCGGCGGCGGATACGGCGGCGGCAGCTCCAGCGGAGGCCACAAGTCCTCCTCTTCCGGGTCCGTGGGC
GAGTCTTCATCTAAGGGACCAAGATACTAACAAAACCAGAGTAATCAAGACAATTATTGAAGAGGTGGCGCCCGA
CGGTAGAGTTCTTTCATCTATGGTTGAATCAGAAACCAAGAAACACTACTATTAAACTGCATCAAGAGGAAAGAG
TCTCCCTTCACACAGACCATTATTTACAGATGCATGGAAAACAAAGTCTCCAAGAAAACACTTCTGTCTTGATGG
TCTATGGAAATAGACCTTGAAAATAAGGTGTCTACAAGGTGTTTTGTGGTTTCTGTATTTCTTCTTTTCACTTTA
CCAGAAAGTGTTCTTTAATGGAAAGAAAAACAACTTTCTGTTCTCATTTACTAATGAATTTCAATAAACTTTCTT
ACTGATGCAAACTAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1837

GKYYKTIDDLKNQILNLTTDNANILLQIDNARLAADDFRLKYENEVALRQSVEADINGLRRVLDELTLTKADLEM
QIESLTEELAYLKKNHEEEMKDLRNVSTGDVNVEMNAAPGVDLTQLLNNMRSQYEQLAEQNRKDAEAWFNEKSKE
LTTEIDNNIEQISSYKSEITELRRNVQALEIELQSQLALKQSLEASLAETEGRYCVQLSQIQAQISALEEQLQQI
RAETECQNTEYQQLLDIKIRLENEIQTYRGLLEGEGSSGGGGRGGGSFGGGYGGGSSGGGSSGGGHGGSSGGGYG
GGSSGGGSSGGGYGGGSSSGGHGGSSSGGYGGGSSGGGGGGYGGGSSGGGSSSGGGYGGGSSSGGHKSSSSGSVG
ESSSKGPRY

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FIGURE 1838

CTCTCTGGATAGGAAGAAATATAGTAGAACCCTTTGAAAATGGATATTTTCACATATTTTCGTTCAGATACAAAA
GCTGGCAGTTACTGAAATAAGGACTTGAAGTTCCTTCCTCTTTTTTTATGTCTTAAGAGCAGGAAATAAAGAGAC
AGCTGAAGGTGTAGCCTTGACCAACTGAAAGGGAAATCTTCATCCTCTGAAAAAACATATGTGATTCTCAAAAAA
CGCATCTGGAAAATTGATAAAGAAGCGATTCTGTAGATTCTCCCAGCGCTGTTGGGCTCTCAATTCCTTCTGTGA
AGGACAACATATGGTGATGGGGAAATCAGAAGCTTTGAGACCCTCTACACCTGGATATGAATCCCCCTTCTAATA
CTTACCAGAAATGAAGGGGATACTCAGGGCAGAGTTCTGAATCTCAAAACACTCTACTCTGGCAAAGGAATGAAG
TTATTGGAGTGATGACAGGAACACGGGAGAACAATGCTCTGTTTGGGCTGGATATTTCTTTGGCTTGTTGCAGGA
GAGCGAATTAAAGGATTTAATATTTCAGGTTGTTCCACAAAAAAACTCCTTTGGACATATTCTACAAGGAGTGAA
GAGGAATTTGTCTTATTTTGTGATTTACCAGAGCCACAGAAATCACATTTCTGCCACAGAAATCGACTCTCACCA
AAACAAGTCCCTGAGCACCTGCCCTTCATGGGTAGTAACGACCTATCTGATGTCCAATGGTACCAACAACCTTCG
AATGGAGATCCATTAGAGGACATTAGGAAAAGCTATCCTCACATCATTCAGGACAAATGTACCCTTCACTTTTTG
ACCCCAGGGGTGAATAATTCTGGGTCATATATTTGTAGACCCAAGATGATTAAGAGCCCCTATGATGTAGCCTGT
TGTGTCAAGATGATTTTAGAAGTTAAGCCCCAGACAAATGCATCCTGTGAGTATTCCGCATCACATAAGCAAGAC
CTACTTCTTGGGAGCACTGGCTCTATTTCTTGCCCCAGTCTCAGCTGCCAAAGTGATGCACAAAGTCCAGCGGTA
ACCTGGTACAAGAATGGAAAACTCCTCTCTGTGGAAAGGAGCAACCGAATCGTAGTGGATGAAGTTTATGACTAT
CACCAGGGCACATATGTATGTGATTACACTCAGTCGGATACTGTGAGTTCGTGGACAGTCAGAGCTGTTGTTCAA
GTGAGAACCATTGTGGGAGACACTAAACTCAAACCAGATATTCTGGATCCTGTCGAGGACACACTGGAAGTAGAA
CTTGGAAAGCCTTTAACTATTAGCTGCAAAGCACGATTTGGCTTTGAAAGGGTCTTTAACCCTGTCATAAAATGG
TACATCAAAGATTCTGACCTAGAGTGGGAAGTCTCAGTACCTGAGGCGAAAAGTATTAAATCCACTTTAAAGGAT
GAAATCATTGAGCGTAATATCATCTTGGAAAAAGTCACTCAGCGTGATCTTCGCAGGAAGTTTGTTTGCTTTGTC
CAGAACTCCATTGGAAACACAACCCAGTCCGTCCAACTGAAAGAAAAGAGAGGAGTGGTGCTCCTGTACATCCTG
CTTGGCACCATCGGGACCCTGGTGGCCGTGCTGGCGGCGAGTGCCCTCCTCTACAGGCACTGGATTGAAATAGTG
CTGCTGTACCGGACCTACCAGAGCAAGGATCAGACGCTTGGGGATAAAAAGGATTTTGATGCTTTCGTATCCTAT
GCAAAATGGAGCTCTTTTCCAAGTGAGGCCACTTCATCTCTGAGTGAAGAACACTTGGCCCTGAGCCTATTTCCT
GATGTTTTAGAAAACAAATATGGATATAGCCTGTGTTTGCTTGAAAGAGATGTGGCTCCAGGAGGAGTGTATGCA
GAAGACATTGTGAGCATTATTAAGAGAAGCAGAAGAGGAATATTTATCTTGAGCCCCAACTATGTCAATGGACCC
AGTATCTTTGAACTACAAGCAGCAGTGAATCTTGCCTTGGATGATCAAACACTGAAACTCATTTTAATTAAGTTC
TGTTACTTCCAAGAGCCAGAGTCTCTACCTCATCTCGTGAAAAAAGCTCTCAGGGTTTTGCCCACAGTTACTTGG
AGAGGCTTAAAATCAGTTCCTCCCAATTCTAGGTTCTGGGCCAAAATGCGCTACCACATGCCTGTGAAAAACTCT
CAGGGATTCACGTGGAACCAGCTCAGAATTACCTCTAGGATTTTTCAGTGGAAAGGACTCAGTAGAACAGAAACC
ACTGGGAGGAGCTCCCAGCCTAAGGAATGGTGAAATGAGCCCTGGAGCCCCCTCCAGTCCAGTCCCTGGGATAGA
GATGTTGCTGGACAGAACTCACAGCTCTGTGTGTGTGTTCAGGCTGATAGGAAATTCAAAGAGTCTCCTGCCA
GCACCAAGCAAGCTTGATGGACAATGGAATGGGATTGAGACTGTGGTTTAGAGCCTTTGATTTCCTGGACTGGAC
AGACGGCGAGTGAATTCTCTAGACCTTGGGTACTTTCAGTACACAACACCCCTAAGATTTCCCAGTGGTCCGAGC
AGAATCAGAAAATACAGCTACTTCTGCCTTATGGCTAGGGAACTGTCATGTCTACCATGTATTGTACATATGACT
TTATGTATACTTGCAATCAAATAAATATTATTTTATTAGAAAAAAAACCGGAATTC

FIGURE 1839

MLCLGWIFLWLVAGERIKGFNISGCSTKKLLWTYSTRSEEEFVLFCDLPEPQKSHFCHRNRLSPKQVPEHLPFMG
SNDLSDVQWYQQPSNGDPLEDIRKSYPHIIQDKCTLHFLTPGVNNSGSYICRPKMIKSPYDVACCVKMILEVKPQ
TNASCEYSASHKQDLLLGSTGSISCPSLSCQSDAQSPAVTWYKNGKLLSVERSNRIVVDEVYDYHQGTYVCDYTQ
SDTVSSWTVRAVVQVRTIVGDTKLKPDILDPVEDTLEVELGKPLTISCKARFGFERVFNPVIKWYIKDSDLEWEV
SVPEAKSIKSTLKDEIIERNIILEKVTQRDLRRKFVCFVQNSIGNTTQSVQLKEKRGVVLLYILLGTIGTLVAVL
AASALLYRHWIEIVLLYRTYQSKDQTLGDKKDFDAFVSYAKWSSFPSEATSSLSEEHLALSLFPDVLENKYGYSL
CLLERDVAPGGVYAEDIVSIIKRSRRGIFILSPNYVNGPSIFELQAAVNLALDDQTLKLILIKFCYFQEPESLPH
LVKKALRVLPTVTWRGLKSVPPNSRFWAKMRYHMPVKNSQGFTWNQLRITSRIFQWKGLSRTETTGRSSQPKEW

FIGURE 1840

CTCGAGGCCAAGAATTCGGCACGAGGGAACCTGTAAACGCTCTCGGAATTATGGCGGCGGTGGATATCCGAGACA
ATCTGCTGGGAATTTCTTGGGTTGACAGCTCTTGGATCCCTATTTTGAACAGTGGTAGTGTCCTGGATTACTTTT
CAGAAAGAAGTAATCCTTTTTATGACAGAACATGTAATAATGAAGTGGTCAAAATGCAGAGGCTAACATTAGAAC
ACTTGAATCAGATGGTTGGAATCGAGTACATCCTTTTGCATGCTCAAGAGCCCATTCTTTTCATCATTCGGAAGC
AACAGCGGCAGTCCCCTGCCCAAGTTATCCCACTAGCTGATTACTATATCATTGCTGGAGTGATCTATCAGGCAC
CAGACTTGGGATCAGTTATAAACTCTAGAGTGCTTACTGCAGTGCATGGTATTCAGTCAGCTTTTGATGAAGCTA
TGTCATACTGTCGATATCATCCTTCCAAAGGGTATTGGTGGCACTTCAAAGATCATGAAGAGCAAGGTAAGTAGA
ACATCCATACCCTCCTAAAACACTTTTTGATCCTCTGAGAATGAAGCTGTTTTCTTTAGGAAAATGGCTGTTGAT
CTTTTCTAAGTGTGTTTCACTTTTTCATGGGATGATGGCTTTGTTGCAGCTGAGATTCATGTAACTAGAGTGGTA
ATAATAGTTTCACATAGGAACAGATGCAAGTTCACTCTGTTAGTTAACTGGTAGTCTTTGTTAAGGTGATTCAAG
GTTTTAAAATATTTGGGGCCAGGTGTGGTGGCTCACTCCTGTAATCCCGGCACTTTGGAATGCCAAGGCAGGTGG
ATCACCTGAGCCTAGGAGTTCAAGATCAGCCTGGGCAACATAGTGAAACCTGGTCTCTGC

FIGURE 1841

MAAVDIRDNLLGISWVDSSWIPILNSGSVLDYFSERSNPFYDRTCNNEVVKMQRLTLEHLNQMVGIEYILLHAQE
PILFIIRKQQRQSPAQVIPLADYYIIAGVIYQAPDLGSVINSRVLTAVHGIQSAFDEAMSYCRYHPSKGYWWHFK
DHEEQGK

FIGURE 1842

GCGGGGTAGTCGGCGCGAGGCGGAGCTTGGCAGTTCCGTCCACTTCAGCCGCAGCGTCCCTCGCCGGGTGTCTCG
CCGCAGCCTCCGGAGAGGAACAGACCCTCACTCTCTCTGTCAGAAAA**ATG**TCTGCTCCAGCTCAGCCACCTGCTG
AAGGGACAGAAGGGACTGCCCCAGGTGGGGGTCCCCCTGGCCCTCCTCCTAACATGACCAGTAACAGACGACTAC
AGCAAACCCAGGCACAAGTGGAGGAGGTGGTGGACATCATACGTGTGAACGTGGACAAGGTCCTGGAGAGGGACC
AGAAGCTGTCAGAGCTGGATGACCGAGCTGATGCCTTGCAGGCAGGAGCATCACAATTTGAGAGCAGTGCTGCCA
AGCTAAAGAGGAAGTATTGGTGGAAAAACTGCAAGATGATGATCATGCTGGGAGCCATCTGTGCCATCATCGTGG
TAGTTATTGTAAGGCGGGAC**TGA**AGAGCTGGAAGAAAGCAGTCAGTACCCTCCCAACGGCCCCCCTCGAAGGTCT
CCACTCTCCTCTGGGCTCCTCCTTGCCTAATGCAGGGGGTCACCGCTGGAGAAGAACCACCACTGTCCTCGATGT
GTCCCAAGCCTGGAGCGAATCCGTCCTCTTGGCTCTCCCAGCCCTATCACAGGAATCATTCCTGGGTTTCTGTCC
CTCTGAGGCTCACCAGGTGTAGTTGGCCTTGTTCTTTGGGGGTATTAGCCCTTCTACTTTCTTTCTCACCCACCC
TGTACCCTCTTCTGTGTGTCTCTGCTATCCCCCTTTCCTCCCACCACCCATGTGCATGAGCAAATGTGCAACAAA
ACCCTGGGACTTTGCAGTCAAATGAAGCTGA

FIGURE 1843

MSAPAQPPAEGTEGTAPGGGPPGPPPNMTSNRRLQQTQAQVEEVVDIIRVNVDKVLERDQKLSELDDRADALQAG
ASQFESSAAKLKRKYWWKNCKMMIMLGAICAIIVVVIVRRD

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FIGURE 1844

CACACCCTGACAAGCTGCCAGGCAGGTTCTCTTCCTCTCACATACTGACCCACGGCTCCACCCTCTCTCCCCTGG
AAAGGACACCATGAGCACTGAAAGCATGATCCGGGACGTGGAGCTGGCCGAGGAGGCGCTCCCCAAGAAGACAGG
GGGGCCCCAGGGCTCCAGGCGGTGCTTGTTCCTCAGCCTCTTCTCCTTCCTGATCGTGGCAGGCGCCACCACGCT
CTTCTGCCTGCTGCACTTTGGAGTGATCGGCCCCCAGAGGGAAGAGTCCCCCAGGGACCTCTCTCTAATCAGCCC
TCTGGCCCAGGCAGTCAGATCATCTTCTCGAACCCCGAGTGACAAGCCTGTAGCCCATGTTGTAGCAAACCCTCA
AGCTGAGGGGCAGCTCCAGTGGCTGAACCGCCGGGCCAATGCCCTCCTGGCCAATGGCGTGGAGCTGAGAGATAA
CCAGCTGGTGGTGCCATCAGAGGGCCTGTACCTCATCTACTCCCAGGTCCTCTTCAAGGGCCAAGGCTGCCCCTC
CACCCATGTGCTCCTCACCCACACCATCAGCCGCATCGCCGTCTCCTACCAGACCAAGGTCAACCTCCTCTCTGC
CATCAAGAGCCCCTGCCAGAGGGAGACCCCAGAGGGGGCTGAGGCCAAGCCCTGGTATGAGCCCATCTATCTGGG
AGGGGTCTTCCAGCTGGAGAAGGGTGACCGACTCAGCGCTGAGATCAATCGGCCCGACTATCTCGACTTTGCCGA
GTCTGGGCAGGTCTACTTTGGGATCATTGCCCTGTGAGGAGGACGAACATCCAACCTTCCCAAACGCCTCCCCTG
CCCCAATCCCTTTATTACCCCCTCCTTCAGACACCCTCAACCTCTTCTGGCTCAAAAAGAGAATTGGGGGCTTAG
GGTCGGAACCCAAGCTTAGAACTTTAAGCAACAAGACCACCACTTCGAAACCTGGGATTCAGGAATGTGTGGCCT
GCACAGTGAAGTGCTGGCAACCACTAAGAATTCAAACTGGGGCCTCCAGAACTCACTGGGGCCTACAGCTTTGAT
CCCTGACATCTGGAATCTGGAGACCAGGGAGCCTTTGGTTCTGGCCAGAATGCTGCAGGACTTGAGAAGACCTCA
CCTAGAAATTGACACAAGTGGACCTTAGGCCTTCCTCTCTCCAGATGTTTCCAGACTTCCTTGAGACACGGAGCC
CAGCCCTCCCCATGGAGCCAGCTCCCTCTATTTATGTTTGCACTTGTGATTATTTATTATTTATTTATTATTTAT
TTATTTACAGATGAATGTATTTATTTGGGAGACCGGGGTATCCTGGGGGACCCAATGTAGGAGCTGCCTTGGCTC
AGACATGTTTTCCGTGAAAACGGAGGCTGAACAATAGGCTGTTCCCATGTAGCCCCCTGGCCTCTGTGCCTTCTT
TTGATTATGTTTTTTAAAATATTATCTGATTAAGTTGTCTAAACAATGCTGATTTGGTGACCAACTGTCACTCAT
TGCTGAGGCCTCTGCTCCCCAGGGAGTTGTGTCTGTAATCGGCCTACTATTCAGTGGCGAGAAATAAAGGTTGCT
TAGGAAAGAA

FIGURE 1845

MSTESMIRDVELAEEALPKKTGGPQGSRRCLFLSLFSFLIVAGATTLFCLLHFGVIGPQREESPRDLSLISPLAQ
AVRSSSRTPSDKPVAHVVANPQAEGQLQWLNRRANALLANGVELRDNQLVVPSEGLYLIYSQVLFKGQGCPSTHV
LLTHTISRIAVSYQTKVNLLSAIKSPCQRETPEGAEAKPWYEPIYLGGVFQLEKGDRLSAEINRPDYLDFAESGQ
VYFGIIAL

FIGURE 1846

AGAGACTTCCTCTTCGTTAAGTCGGCCTTCCCAACATGGCGCAGTCTATTAACATCACGGAGCTGAATCTGCCGC
AGCTAGAAATGCTCAAGAACCAGCTGGACCAGGAAGTGGAGTTCTTGTCCACGTCCATTGCTCAGCTCAAAGTGG
TACAGACCAAGTATGTGGAAGCCAAGGACTGTCTGAACGTGCTGAACAAGAGCAACGAGGGGAAAGAATTACTCG
TCCCACTGACGAGTTCTATGTATGTCCCTGGGAAGCTGCATGATGTGGAACACGTGCTCATCGATGTGGGAACTG
GGTACTATGTAGAGAAGACAGCTGAGGATGCCAAGGACTTCTTCAAGAGGAAGATAGATTTTCTAACCAAGCAGA
TGGAGAAAATCCAACCAGCTCTTCAGGAGAAGCACGCCATGAAACAGGCCGTCATGGAAATGATGAGTCAGAAGA
TTCAGCAGCTCACAGCCCTGGGGGCAGCTCAGGCTACTGCTAAGGCCTGAGAGTTTTTGCAGAAATGGGGCAGAG
GGACACCCTTTGGGCGTGGCTTCCTGGTGATGGGAAGGGTCTTGTGTTTTAATGCCAATAAATGTGCCAGCTGGG
CAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1847

MAQSINITELNLPQLEMLKNQLDQEVEFLSTSIAQLKVVQTKYVEAKDCLNVLNKSNEGKELLVPLTSSMYVPGK
LHDVEHVLIDVGTGYYVEKTAEDAKDFFKRKIDFLTKQMEKIQPALQEKHAMKQAVMEMMSQKIQQLTALGAAQA
TAKA

FIGURE 1848

AGAAGAGCGGGCTAAGACGCCGGAGGAGGTGGCGGCGGCTGGGAGAGGCGAGGGTTCTGGCCGATTTTAGCATCG
AAACTAGGAGAAATAAGAATGGCTGTAGAGGAACTTCAGTCTATAATAAAGAGATGTCAAATCCTAGAAGAGCAA
GACTTTAAAGAAGAGGATTTTGGCCTATTTCAGTTAGCTGGGCAAAGATGCATAGAAGAAGGGCACACAGACCAG
CTATTAGAAATTATTCAAAATGAAAAGAATAAGGTCATCATCAAGAATATGGGCTGGAATCTCGTTGGTCCTGTT
GTTCGATGCCTTTTGTGTAAAGATAAAGAGGATAGTAAAAGAAAAGTTTATTTTTTGATCTTTGATTTATTGGTA
AAGTTATGCAATCCAAAGGAATTATTGTTGGGTTTGCTTGAACTGATTGAAGAGCCCTCTGGAAAACAGATATCC
CAAAGTATTCTTCTTTTGCTTCAGCCATTACAAACAGTGATTCAGAAACTTCATAACAAGGCATATTCAATTGGA
TTAGCATTGTCTACCCTTTGGAATCAGCTATCTCTTCTTCCTGTTCCATACTCAAAAGAACAAATACAAATGGAT
GACTATGGCCTTTGTCAGTGTTGCAAGGCCTTAATAGAGTTCACTAAGCCTTTTGTGGAAGAAGTCATTGATAAC
AAAGAAAACTCACTGGAAAATGAAAAGTTAAAGGATGAATTACTGAAATTTTGTTTCAAAAGCTTGAAATGCCCT
TTGCTGACAGCACAATTCTTTGAACAGTCTGAAGAAGGTGGAAATGATCCTTTCAGGTATTTTGCATCAGAAATA
ATAGGTTTTTTATCAGCAATTGGACACCCTTTCCCCAAAATGATTTTTAATCATGGAAGGAAAAAGAGAACTTGG
AATTACCTTGAATTTGAAGAAGAAGAAAATAAACAGTTAGCAGACTCAATGGCTTCTCTGGCATATCTAGTATTT
GTACAGGGCATCCATATTGATCAGCTTCCAATGGTCTTAAGCCCATTGTACCTTTTGCAGTTTAATATGGGGCAC
ATTGAAGTCTTTTTGCAAAGAACAGAAGAGTCTGTTATCTCCAAAGGATTGGAGCTGCTGGAGAATAGTTTATTG
AGAATAGAAGACAATAGTCTACTTTACCAGTACTTAGAAATCAAGAGTTTTCTTACTGTACCTCAGGGCTTAGTG
AAAGTAATGACACTTTGCCCCATTGAGACACTGAGGAAAAAGAGTTTAGCTATGCTTCAGCTGTATATTAACAAG
TTGGATTCACAAGGCAAATATACATTATTTAGGTGCTTATTGAATACAAGTAATCACTCAGGTGTGGAGGCTTTT
ATTATTCAAAATATCAAAAATCAAATTGACATGTCATTAAAGAGAACACGTAACAACAAATGGTTTACAGGACCA
CAGTTGATTTCCCTTCTTGATTTGGTACTTTTTCTCCCAGAGGGTGCAGAAACAGATTTACTGCAAAACTCAGAT
AGGATTATGGCTTCATTAAATTTATTGAGGTATTTGGTTATCAAAGATAATGAAAATGACAATCAAACTGGATTA
TGGACAGAACTTGGAAATATTGAGAATAATTTCTTAAAGCCACTTCATATAGGACTTAATATGTCAAAAGCACAT
TATGAAGCAGAAATTAAAAATAGCCAAGAGGCCCAGAAATCTAAAGATCTTTGTTCTATAACTGTAAGTGGAGAA
GAGATCCCTAATATGCCTCCTGAAATGCAGCTTAAGGTCCTGCATTCAGCTCTTTTCACATTTGATTTGATTGAA
AGTGTTCTAGCTCGAGTGGAAGAACTCATTGAAATAAAAACAAAGTCTACCTCTGAAGAAAATATTGGGATAAAG
TGAAAGTTCCATTTCCTAAATAAAAACTAATAAAATATAGTAC

FIGURE 1849

MAVEELQSIIKRCQILEEQDFKEEDFGLFQLAGQRCIEEGHTDQLLEIIQNEKNKVIIKNMGWNLVGPVVRCLLC
KDKEDSKRKVYFLIFDLLVKLCNPKELLLGLLELIEEPSGKQISQSILLLLQPLQTVIQKLHNKAYSIGLALSTL
WNQLSLLPVPYSKEQIQMDDYGLCQCCKALIEFTKPFVEEVIDNKENSLENEKLKDELLKFCFKSLKCPLLTAQF
FEQSEEGGNDPFRYFASEIIGFLSAIGHPFPKMIFNHGRKKRTWNYLEFEEEENKQLADSMASLAYLVFVQGIHI
DQLPMVLSPLYLLQFNMGHIEVFLQRTEESVISKGLELLENSLLRIEDNSLLYQYLEIKSFLTVPQGLVKVMTLC
PIETLRKKSLAMLQLYINKLDSQGKYTLFRCLLNTSNHSGVEAFIIQNIKNQIDMSLKRTRNNKWFTGPQLISLL
DLVLFLPEGAETDLLQNSDRIMASLNLLRYLVIKDNENDNQTGLWTELGNIENNFLKPLHIGLNMSKAHYEAEIK
NSQEAQKSKDLCSITVSGEEIPNMPPEMQLKVLHSALFTFDLIESVLARVEELIEIKTKSTSEENIGIK

FIGURE 1850

GCCAGTCACCTTCAGTTTCTGGAGCTGGCCGTCAACATGTCCTTTCCTAAGGCGCCCTTGAAACGATTCAATGAC
CCTTCTGGTTGTGCACCATCTCCAGGTGCTTATGATGTTAAAACTTTAGAAGTATTGAAAGGACCAGTATCCTTT
CAGAAATCACAAAGATTTAAACAACAAAAAGAATCTAAACAAAATCTTAATGTTGACAAAGATACTACCTTGCCT
GCTTCAGCTAGAAAAGTTAAGTCTTCGGAATCAAAGGAATCTCAAAAGAATGATAAAGATTTGAAGATATTAGAG
AAAGAGATTCGTGTTCTTCTACAGGAACGTGGTGCCCAGGACAGCCGGATCCAGGATCTGGAAACTGAGTTGGAA
AAGATGGAAGCAAGGCTAAATGCTGCACTAAGGGAAAAAACATCTCTCTCTGCAAATAATGCTACACTGGAAAAA
CAACTTATTGAATTGACCAGGACTAATGAACTACTAAAATCTAAGTTTTCTGAAAATGGTAACCAGAAGAATTTG
AGAATTCTAAGCTTGGAGTTGATGAAACTTAGAAACAAAAGAGAAACAAAGATGAGGGGTATGATGGCTAAGCAA
GAAGGCATGGAGATGAAGCTGCAGGTCACCCAAAGGAGTCTCGAAGAGTCTCAAGGGAAAATAGCCCAACTGGAG
GGAAAACTTGTTTCAATAGAGAAAGAAAAGATTGATGAAAAATCTGAAACAGAAAAACTCTTGGAATACATCGAA
GAAATTAGTTGTGCTTCAGATCAAGTGGAAAAATACAAGCTAGATATTGCCCAGTTAGAAGAAAATTTGAAAGAG
AAGAATGATGAAATTTTAAGCCTTAAGCAGTCTCTTGAGGAGAATATTGTTATATTATCTAAACAAGTAGAAGAT
CTAAATGTGAAATGTCAGCTGCTTGAAAAAGAAAAAGAAGACCATGTCAACAGGAATAGAGAACACAACGAAAAT
CTAAATGCAGAGATGCAAAACTTAAAACAGAAGTTTATTCTTGAACAACAGGAACGTGAAAAGCTTCAACAAAAA
GAATTACAAATTGATTCACTTCTGCAACAAGAGAAAGAATTATCTTCGAGTCTTCATCAGAAGCTCTGTTCTTTT
CAAGAGGAAATGGTTAAAGAGAAGAATCTGTTTGAGGAAGAATTAAAGCAAACACTGGATGAGCTTGATAAATTA
CAGCAAAAGGAGGAACAAGCTGAAAGGCTGGTCAAGCAATTGGAAGAGGAAGCAAAATCTAGAGCTGAAGAATTA
AAACTCCTAGAAGAAAAGCTGAAAGGGAAGGAGGCTGAACTGGAGAAAAGTAGTGCTGCTCATACCCAGGCCACC
CTGCTTTTGCAGGAAAAGTATGACAGTATGGTGCAAAGCCTTGAAGATGTTACTGCTCAATTTGAAAGCTATAAA
GCGTTAACAGCCAGTGAGATAGAAGATCTTAAGCTGGAGAACTCATCATTACAGGAAAAAGCGGCCAAGGCTGGG
AAAAATGCAGAGGATGTTCAGCATCAGATTTTGGCAACTGAGAGCTCAAATCAAGAATATGTAAGGATGCTTCTA
GATCTGCAGACCAAGTCAGCACTAAAGGAAACAGAAATTAAAGAAATCACAGTTTCTTTTCTTCAAAAAATAACT
GATTTGCAGAACCAACTCAAGCAACAGGAGGAAGACTTTAGAAAACAGCTGGAAGATGAAGAAGGAAGAAAAGCT
GAAAAAGAAAATACAACAGCAGAATTAACTGAAGAAATTAACAAGTGGCGTCTCCTCTATGAAGAACTATATAAT
AAAACAAAACCTTTTCAGCTACAACTAGATGCTTTTGAAGTAGAAAAACAGGCATTGTTGAATGAACATGGTGCA
GCTCAGGAACAGCTAAATAAAATAAGAGATTCATATGCTAAATTATTGGGTCATCAGAATTTGAAACAAAAAATC
AAGCATGTTGTGAAGTTGAAAGATGAAAATAGCCAACTCAAATCGGAAGTATCAAAACTCCGCTGTCAGCTTGCT
AAAAAAAAACAAAGTGAGACAAAACTTCAAGAGGAATTGAATAAAGTTCTAGGTATCAAACACTTTGATCCTTCA
AAGGCTTTTCATCATGAAAGTAAAGAAAATTTTGCCCTGAAGACCCCATTAAAAGAAGGCAATACAAACTGTTAC
CGAGCTCCTATGGAGTGTCAAGAATCATGGAAGTAAACATCTGAGAAACCTGTTGAAGATTATTTCATTCGTCTT
GTTGTTATTGATGTTGCTGTTATTATATTTGACATGGGTATTTTATAATGTTGTATTTAATTTTAACTGCCAATC
CTTAAATATGTGAAAGGAACATTTTTTACCAAAGTGTCTTTTGACATTTTATTTTTTCTTGCAAATACCTCCTCC
CTAATGCTCACCTTTATCACCTCATTCTGAACCCTTTCGCTGGCTTTCCAGCTTAGAATGCATCTCATCAACTTA
AAAGTCAGTATCATATTATTATCCTCCTGTTCTGAAACCTTAGTTTCAAGAGTCTAAACCCCAGATTCTTCAGCT
TGATCCTGGAGGTCTTTTCTAGTCTGAGCTTCTTTAGCTAGGCTAAAACACCTTGGCTTGTTATTGCCTCTACTT
TGATTCTGATAATGCTCACTTGGTCCTACCTATTATCCTTCTACTTGTCCAGTTCAAATAAGAAATAAGGACAAG
CCTAACTTCATAGAAACCTCTCTATTTTTAATCAGTTGTTTAATAATTTACAGGTTCTTAGGCTCCATCCTGTTT
GTATGAAATTATAATCTGTGGATTGGCCTTTAAGCCTGCATTCTTAACAAACTCTTCAGTTAATTCTTAGATACA
CTAAAAATCTGAGAAACTCTACATGTAACTATTTCTTCAGAGTTTGTCATATACTGCTTGTCATCTGCATGTCTA
CTCAGCATTTGATTAACATTTGTGTAATATGAAATAAAATTACACAGTAAGTCATTTAACCAAAAAAAAAAAAAA
AA

FIGURE 1851

MSFPKAPLKRFNDPSGCAPSPGAYDVKTLEVLKGPVSFQKSQRFKQQKESKQNLNVDKDTTLPASARKVKSSESK
ESQKNDKDLKILEKEIRVLLQERGAQDSRIQDLETELEKMEARLNAALREKTSLSANNATLEKQLIELTRTNELL
KSKFSENGNQKNLRILSLELMKLRNKRETKMRGMMAKQEGMEMKLQVTQRSLEESQGKIAQLEGKLVSIEKEKID
EKSETEKLLEYIEEISCASDQVEKYKLDIAQLEENLKEKNDEILSLKQSLEENIVILSKQVEDLNVKCQLLEKEK
EDHVNRNREHNENLNAEMQNLKQKFILEQQEREKLQQKELQIDSLLQQEKELSSSLHQKLCSFQEEMVKEKNLFE
EELKQTLDELDKLQQKEEQAERLVKQLEEEAKSRAEELKLLEEKLKGKEAELEKSSAAHTQATLLLQEKYDSMVQ
SLEDVTAQFESYKALTASEIEDLKLENSSLQEKAAKAGKNAEDVQHQILATESSNQEYVRMLLDLQTKSALKETE
IKEITVSFLQKITDLQNQLKQQEEDFRKQLEDEEGRKAEKENTTAELTEEINKWRLLYEELYNKTKPFQLQLDAF
EVEKQALLNEHGAAQEQLNKIRDSYAKLLGHQNLKQKIKHVVKLKDENSQLKSEVSKLRCQLAKKKQSETKLQEE
LNKVLGIKHFDPSKAFHHESKENFALKTPLKEGNTNCYRAPMECQESWK

FIGURE 1852

GTGGGGTAAAACAGCAGAGATCAATGAGATCAGAGCACACCCTCGGAGGAAGGGATACATGACAAATGCCTGAAC
GGAGAGAGGGAGTGAACTGTGCAAACACACAGCCAGGAGTTTTCCAAGGACAGGGAGGAGAAAGTATAAGGCCTG
CTGTACCCTCGATGCAAAACATGAGAAAGCCGACTGTGCCAGTCCCAGCCGCCCTACCGCCGTGGGAACGATGCT
GTA**ATG**GACTGTGTTGGTTGGCCTCCAGGCAGGAAGTGGCACTTGGAAAAGAACACCAGCTGCGGTGGTAGCAGT
GGGATTTGTGCTTCTTATGTTACCCAGATGGCAGATGATCAGGGCTGTATTGAAGAGCAGGGGGTTGAGGATTCA
GCAAATGAAGATTCAGTGGATGCTAAGCCAGACCGGTCCTCGTTTGTACCGTCCCTCTTCAGTAAGAAGAAGAAA
AATGTCACCATGCGATCCATCAAGACCACCCGGGACCGAGTGCCTACATATCAGTACAACATGAATTTTGAAAAG
CTGGGCAAATGCATCATAATAAACAACAAGAACTTTGATAAAGTGACAGGTATGGGCGTTCGAAACGGAACAGAC
AAAGATGCCGAGGCGCTCTTCAAGTGCTTCCGAAGCCTGGGTTTTGACGTGATTGTCTATAATGACTGCTCTTGT
GCCAAGATGCAAGATCTGCTTAAAAAAGCTTCTGAAGAGGACCATACAAATGCCGCCTGCTTCGCCTGCATCCTC
TTAAGCCATGGAGAAGAAAATGTAATTTATGGGAAAGATGGTGTCACACCAATAAAGGATTTGACAGCCCACTTT
AGGGGGGATAGATGCAAAACCCTTTTAGAGAAACCCAAACTCTTCTTCATTCAGGCTTGCCGAGGGACCGAGCTT
GATGATGGCATCCAGGCCGACTCGGGGCCCATCAATGACACAGATGCTAATCCTCGATACAAGATCCCAGTGGAA
GCTGACTTCCTCTTCGCCTATTCCACGGTTCCAGGCTATTACTCGTGGAGGAGCCCAGGAAGAGGCTCCTGGTTT
GTGCAAGCCCTCTGCTCCATCCTGGAGGAGCACGGAAAAGACCTGGAAATCATGCAGATCCTCACCAGGGTGAAT
GACAGAGTTGCCAGGCACTTTGAGTCTCAGTCTGATGACCCACACTTCCATGAGAAGAAGCAGATCCCCTGTGTG
GTCTCCATGCTCACCAAGGAACTCTACTTCAGTCAA**TAG**CCATATCAGGGGTACATTCTAGCTGAGAAGCAATGG
GTCACTCATTAATGAATCACATTTTTTTATGCTCTTGAAATATTCAGAAATTCTCCAGGATTTTAATTTCAGGAA
AATGTATTGATTCAACAGGGAAGAAACTTTCTGGTGCTGTCTTTTGTTCTCTGAATTTTCAGAGACTTTTTTTAT
AATGTTATTCATTTGGTGACTGTGTAACTTTCTCTTAAGATTAATTTTCTCTTTGTATGTCTGTTACCTTGTTAA
TAGACTTAATACATGCAACAGAAGTGACTTCTGGAGAAAGCTCATGGCTGTGTCCACTGCAATTGGTGTCAACAG
TGGTAGAGTCATGTTTGCACTTGGCAAAAAGAATCCCAATGTTTGACAAACACAGCCAAGGGGATATTTACTGCT
CTTTATTGCAGAATGTGGGTATTGAGTGTGATTTGAATGATTTTTCATTGGCTTAGGGCAGATTTTCATGCAAAA
GTTCTCATATGAGTTAGAGGAGAAAAAGCTTAATGATTCTGATATGTATCCATCAGGATCCAGTCTGGAAAACAG
AAACCATTCTAGGTGTTTCAACAGAGGGAGTTTAATACAGGAAATTGACTTACATAGATGATAAAAGAGAAGCCA
AACAGCAAGAAGCTGTTACCACACCCAGGGCTATGAGGATAATGGGAAGAGGTTTGGTTTCCTGTGTCCAGTAGT
GGGATCATCCAGAGGAGCTGGAACCATGGTGGGGGCTGCCTAGTGGGAGTTAGGACCACCAATGGATTGTGGAAA
ATGGAGCCATGACAAGAACAAAGCCACTGACTGAGATGGAGTGAGCTGAGACAGATAAGAGAATACCTTGGTCTC
ACCTATCCTGCCCTCACATCTTCCACCAGCACCTTACTGCCCAGGCCTATCTGGAAGCCACCTCACCAAGGACCT
TGGAAGAGCAAGGGACAGTGAGGCAGGAGAAGAACAAGAAATGGATGTAAGCCTGGCCCATAATGTGAACATAAG
TAATCACTAATGCTCAACAATTTATCCATTCAATCATTTATTCATTGGGTTGTCAGATAGTCTATGTATGTGTAA
AACAATCTGTTTTGGCTTTATGTGCAAAATCTGTTATAGCTTTAAAATATATCTGGAACTTTTTAGATTATTCCA
AGCCTTATTTTGAGTAAATATTTGTTACTTTTAGTTCTATAAGTGAGGAAGAGTTTATGGCAAAGATTTTTGGCA
CTTTGTTTTCAAGATGGTGTTATCTTTTGAATTCTTGATAAATGACTGTTTTTTTCTGCCTAATAGTAACTGGTT
AAAAAACAAATGTTCATATTTATTGATTAAAAATGTGGTTGCTTAATTCCT

FIGURE 1853

MDCVGWPPGRKWHLEKNTSCGGSSGICASYVTQMADDQGCIEEQGVEDSANEDSVDAKPDRSSFVPSLFSKKKKN
VTMRSIKTTRDRVPTYQYNMNFEKLGKCIIINNKNFDKVTGMGVRNGTDKDAEALFKCFRSLGFDVIVYNDCSCA
KMQDLLKKASEEDHTNAACFACILLSHGEENVIYGKDGVTPIKDLTAHFRGDRCKTLLEKPKLFFIQACRGTELD
DGIQADSGPINDTDANPRYKIPVEADFLFAYSTVPGYYSWRSPGRGSWFVQALCSILEEHGKDLEIMQILTRVND
RVARHFESQSDDPHFHEKKQIPCVVSMLTKELYFSQ

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FIGURE 1854

AATTAAGAGAAAAAAAGTGAATATGGTTTTTGCTCACAGAATGGATAACAGCAAGCCACATTTGATTATTCCTAC
ACTTCTGGTGCCCCTCCAAAACCGCAGCTGCACTGAAACAGCCACACCTCTGCCAAGCCAATACCTGATGGAATT
AAGTGAGGAGCACAGTTGGATGAGCAACCAAACAGACCTTCACTATGTGCTGAAACCCGGGGAAGTGGCCACAGC
CAGCATCTTCTTTGGGATTCTGTGGTTGTTTTCTATCTTCGGCAATTCCCTGGTTTGTTTGGTCATCCATAGGAG
TAGGAGGACTCAGTCTACCACCAACTACTTTGTGGTCTCCATGGCATGTGCTGACCTTCTCATCAGCGTTGCCAG
CACGCCTTTCGTCCTGCTCCAGTTCACCACTGGAAGGTGGACGCTGGGTAGTGCAACGTGCAAGGTTGTGCGATA
TTTTCAATATCTCACTCCAGGTGTCCAGATCTACGTTCTCCTCTCCATCTGCATAGACCGGTTCTACACCATCGT
CTATCCTCTGAGCTTCAAGGTGTCCAGAGAAAAAGCCAAGAAAATGATTGCGGCATCGTGGATCTTTGATGCAGG
CTTTGTGACCCCTGTGCTCTTTTTCTATGGCTCCAACTGGGACAGTCATTGTAACTATTTCCTCCCCTCCTCTTG
GGAAGGCACTGCCTACACTGTCATCCACTTCTTGGTGGGCTTTGTGATTCCATCTGTCCTCATAATTTTATTTTA
CCAAAAGGTCATAAAATATATTTGGAGAATAGGCACAGATGGCCGAACGGTGAGGAGGACAATGAACATTGTCCC
TCGGACAAAAGTGAAAACTATCAAGATGTTCCTCATTTTAAATCTGTTGTTTTTGCTCTCCTGGCTGCCTTTTCA
TGTAGCTCAGCTATGGCACCCCCATGAACAAGACTATAAGAAAAGTTCCCTTGTTTTCACAGCTATCACATGGAT
ATCCTTTAGTTCTTCAGCCTCTAAACCTACTCTGTATTCAATTTATAATGCCAATTTTCGGAGAGGGATGAAAGA
GACTTTTTGCATGTCCTCTATGAAATGTTACCGAAGCAATGCCTATACTATCACAACAAGTTCAAGGATGGCCAA
AAAAAACTACGTTGGCATTTCAGAAATCCCTTCCATGGCCAAAACTATTACCAAAGACTCGATCTATGACTCATT
TGACAGAGAAGCCAAGGAAAAAAAGCTTGCTTGGCCCATTAACTCAAATCCACCAAATACTTTTGTCTAAGTTCT
CATTCTTTCAATTGTTATGCACCAGAGATTAAAAAGCTTTAACTATAAAAACAGAAGCTATTTACATATTTGTTT
TCACTCAACTTTCCAAGGGAAATGTTTTATTTTGTAAAATGCATTCATTTGTTTACTGT

FIGURE 1855

MVFAHRMDNSKPHLIIPTLLVPLQNRSCTETATPLPSQYLMELSEEHSWMSNQTDLHYVLKPGEVATASIFFGIL
WLFSIFGNSLVCLVIHRSRRTQSTTNYFVVSMACADLLISVASTPFVLLQFTTGRWTLGSATCKVVRYFQYLTPG
VQIYVLLSICIDRFYTIVYPLSFKVSREKAKKMIAASWIFDAGFVTPVLFFYGSNWDSHCNYFLPSSWEGTAYTV
IHFLVGFVIPSVLIILFYQKVIKYIWRIGTDGRTVRRTMNIVPRTKVKTIKMFLILNLLFLLSWLPFHVAQLWHP
HEQDYKKSSLVFTAITWISFSSSASKPTLYSIYNANFRRGMKETFCMSSMKCYRSNAYTITTSSRMAKKNYVGIS
EIPSMAKTITKDSIYDSFDREAKEKKLAWPINSNPPNTFV

FIGURE 1856

AGACTTGGAAACCCCAAAGTGTCCGCGACCCTGCACGGCAGCTCCCTTCCAGCTTCATGGGCAAAGTGTGGAAAC
AGCAGATGTACCCTCAGTACGCCACCTACTATTACCCCCAGTATCTGCAAGCCAAGTTTGGAAGGCATTCGGGAA
TACCAAGTGAAAAGGAAGAGTGAAGAACAGAAAAATGTTAGTGGGATGGCAAACACTGTGAACATTGCTGTTTCT
AGTGGGCCAGAAAAATCAGTCTCTGGTCCCAGCCCACCCCATGGCCCCTCCCAGTCCCAGCACCACCAGCAGTAA
TAACAACAGTAGCAGCAGTAGCAACTCAGGATGGGATCAGCTCAGCAAAACGAACCTCTATATCCGAGGACTGCC
TCCCCACACCACCGACCAGGACCTGGTGAAGCTCTGTCAACCATATGGGAAAATAGTCTCCACAAAGGCAATTTT
GGATAAGACAACGAACAAATGCAAAGGTTATGGTTTTGTCGACTTTGACAGCCCTGCAGCAGCTCAAAAAGCTGT
GTCTGCCCTGAAGGCCAGTGGGGTTCAAGCTCAAATGGCAAAGCAACAGGAACAAGATCCTACCAACCTCTACAT
TTCTAATTTGCCACTCTCCATGGATGAGCAAGAACTAGAAAATATGCTCAAACCATTTGGACAAGTTATTTCTAC
AAGGATACTACGTGATTCCAGTGGTACAAGTCGTGGTGTTGGCTTTGCTAGGATGGAATCAACAGAAAAATGTGA
AGCTGTTATTGGTCATTTTAATGGAAAATTTATTAAGACACCACCAGGAGTTTCTGCCCCCACAGAACCTTTATT
GTGTAAGTTTGCTGATGGAGGACAGAAAAAGAGACAGAACCCAAACAAATACATCCCTAATGGAAGACCATGGCA
TAGAGAAGGAGAGGTGAGACTTGCTGGAATGACACTTACTTACGACCCAACTACAGCTGCTATACAGAACGGATT
TTATCCTTCACCATACAGTATTGCTACAAACCGAATGATCACTCAAACTTCTATTACACCCTATATTGCATCTCC
TGTATCTGCCTACCAGGTGGCAAAGGAAACCAGAGAAAACAAGTATCGGGGCTCTGCTATCAAGGTGCAAAGTCC
TTCGTGGATGCAACCTCAACCATATATTCTACAGCACCCTGGTGCCGTGTTAACTCCCTCAATGGAGCACACCAT
GTCACTACAGCCCGCATCAATGATCAGCCCTCTGGCCCAGCAGATGAGTCATCTGTCACTAGGCAGCACCGGAAC
ATACATGCCTGCAACGTCAGCTATGCAAGGAGCCTACTTGCCACAGTATGCACATATGCAGACGACAGCGGTTCC
TGTTGAGGAGGCAAGTGGTCAACAGCAGGTGGCTGTCGAGACGTCTAATGACCATTCTCCATATACCTTTCAACC
TAATAAGTAACTGTGAGATGTACAGAAAGGTGTTCTTACATGAAGAAGGGTGTGAAGGCTGAACAATCATGGATT
TTTCTGATCAATTGTGCTTTAGGAAATTATTGACAGTTTTGCACAGGTTCTTGAAAACGTTATTTATAATGAAAT
CAACTAAAACTATTTTTGCTATAAGTTCTATAAGGTGCATAAAACCCTTAAATTCATCTAGTAGCTGTTCCCCCG
AACAGGTTTATTTTAGTAAAAAAAAAAA

FIGURE 1857

MGKVWKQQMYPQYATYYYPQYLQAKQSLVPAHPMAPPSPSTTSSNNNSSSSSNSGWDQLSKTNLYIRGLPPHTTD
QDLVKLCQPYGKIVSTKAILDKTTNKCKGYGFVDFDSPAAAQKAVSALKASGVQAQMAKQQEQDPTNLYISNLPL
SMDEQELENMLKPFGQVISTRILRDSSGTSRGVGFARMESTEKCEAVIGHFNGKFIKTPPGVSAPTEPLLCKFAD
GGQKKRQNPNKYIPNGRPWHREGEAGMTLTYDPTTAAIQNGFYPSPYSIATNRMITQTSITPYIASPVSAYQVQS
PSWMQPQPYILQHPGAVLTPSMEHTMSLQPASMISPLAQQMSHLSLGSTGTYMPATSAMQGAYLPQYAHMQTTAV
PVEEASGQQQVAVETSNDHSPYTFQPNK

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FIGURE 1858

GTCTGCCCTCTCTGCTCGCCCTGCCTAGCTTGAGGATCTGTCACCCCAGCCATGAGGATTATCGCCCTCCTCGCT
GCTATTCTCTTGGTAGCCCTCCAGGTCCGGGCAGGCCCACTCCAGGCAAGAGGTGATGAGGCTCCAGGCCAGGAG
CAGCGTGGGCCAGAAGACCAGGACATATCTATTTCCTTTGCATGGGATAAAAGCTCTGCTCTTCAGGTTTCAGGC
TCAACAAGGGGCATGGTCTGCTCTTGCAGATTAGTATTCTGCCGGCGAACAGAACTTCGTGTTGGGAACTGCCTC
ATTGGTGGTGTGAGTTTCACATACTGCTGCACGCGTGTCGATTAACGTTCTGCTGTCCAAGAGAATGTCATGCTG
GGAACGCCATCATCGGTGGTGTTAGCTTCACATGCTTCTGCAGCTGAGCTTGCAGAATAGAGAAAAATGAGCTCA
TAATTTGCTTTGAGAGCTACAGGAAATGGTTGTTTCTCCTATACTTTGTCCTTAACATCTTTCTTGATCCTAAAT
ATATATCTCGTAACAAG

FIGURE 1859

MRIIALLAAILLVALQVRAGPLQARGDEAPGQEQRGPEDQDISISFAWDKSSALQVSGSTRGMVCSCRLVFCRRT
ELRVGNCLIGGVSFTYCCTRVD

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FIGURE 1860A

ACTTGTAGGAAAGCCTCTTTGCATTTAGACGTAATTGAACTGGAAGGAAGGAGACTGGCCAGGGAATAGGGGGAA
AGAAATTCTCCCGTTGCTCCTCCTACTGTTTATCACTTGCCTCCGGACTGTCTTCCAAACCAAGCTCAGCTGCAT
CAAGGTGGCAGCAGAATACCCTGTGCAAGTGCCAGCGTCTTCTTAGCCGCTCTGTGCATCCCAGGCTGCCCTGTT
ATCTGGCCACCGTCCCTGGCCATTGGGACTGCTTCTG**ATG**GCTCTGGCCTCTGCTGCCCCAGGGAGCATCTTCTG
TAAGCAGCTCCTTTTCTCTCTCCTGGTTTTAACATTACTTTGCGATGCTTGTCAGAAAGTTTATCTTCGAGTTCC
TTCTCATCTTCAGGCTGAAACACTTGTAGGCAAAGTGAATCTGGAGGAGTGTCTCAAGTCGGCCAGCCTAATCCG
GTCCAGTGACCCTGCCTTCAGAATTCTAGAAGATGGCTCAATTTACACAACACATGACCTCATTTTGTCTTCTGA
AAGGAAAAGTTTTTCCATTTTCCTTTCAGATGGTCAGAGACGGGAACAACAAGAGATAAAAGTTGTACTGTCAGC
AAGAGAAAACAAGTCTCCTAAGAAGAGACATACCAAAGACACAGCCCTCAAGCGCAGCAAGAGACGATGGGCTCC
TATTCCAGCTTCATTGATGGAGAACTCGTTGGGTCCATTTCCACAACACGTTCAGCAGATCCAATCTGATGCTGC
ACAGAATTACACCATCTTTTATTCCATAAGTGGGCCAGGCGTGGACAAAGAACCCTTCAATTTGTTTTACATAGA
GAAAGACACTGGGGATATCTTTTGTACAAGGAGCATTGACCGTGAGAAATACGAACAGTTTGCGTTATATGGCTA
TGCAACAACTGCAGATGGCTATGCACCAGAATATCCACTCCCTTTGATCATCAAAATTGAAGATGATAATGATAA
CGCCCCATATTTTGAACACAGAGTGACTATCTTTACTGTGCCTGAAAATTGCCGATCCGGAACTTCAGTGGGAAA
AGTGACCGCCACAGACCTTGACGAACCTGACACTCTCCATACTCGTCTGAAATATAAAATCTTACAACAAATCCC
AGATCATCCAAAGCATTTCTCCATACACCCAGATACCGGTGTCATCACCACAACTACACCTTTTCTGGATAGAGA
AAAATGTGATACTTACCAGTTAATAATGGAAGTGCGAGACATGGGTGGTCAGCCTTTCGGTTTATTTAATACAGG
AACAATTACTATTTCACTTGAGGATGAAAATGACAATCCACCATCTTTCACAGAAACTTCTTATGTTACAGAAGT
AGAAGAAAACAGAATTGACGTGGAGATTTTGCGAATGAAGGTACAGGATCAGGATTTGCCAAACACTCCTCACTC
AAAGGCTGTATACAAAATCTTACAAGGAAATGAAAATGGAAACTTCATAATTAGCACAGATCCAAATACAAATGA
AGGAGTGCTGTGTGTTGTCAAGCCATTGAACTATGAAGTCAATCGCCAAGTTATTTTGCAAGTTGGTGTCATTAA
CGAGGCACAATTCTCTAAAGCAGCGAGCTCACAAACTCCTACAATGTGCACTACAACTGTCACCGTTAAAATTAT
AGACAGTGATGAGGGCCCTGAATGCCACCCTCCAGTGAAAGTTATTCAGAGTCAAGATGGCTTCCCAGCTGGCCA
AGAACTCCTTGGATACAAAGCACTGGACCCGGAAATATCCAGTGGTGAAGGCTTAAGGTATCAGAAGTTAGGGGA
TGAAGATAACTGGTTTGAAATTAATCAACACACTGGCGACTTGAGAACTCTAAAAGTACTAGATAGAGAATCCAA
ATTTGTAAAAAACAACCAATACAATATTTCAGTTGTTGCAGTGGATGCAGTTGGCCGATCTTGCACTGGAACATT
AGTAGTTCATTTGGATGATTACAACGATCACGCACCTCAAATTGACAAAGAAGTGACCATTTGTCAGAATAATGA
GGATTTTGCTGTTCTGAAACCTGTAGATCCAGATGGACCTGAAAATGGACCACCTTTTCAATTCTTTCTGGATAA
TTCTGCCAGTAAAAACTGGAACATAGAAGAAAAGGATGGTAAAACTGCCATTCTTCGTCAACGGCAAAATCTTGA
TTATAACTATTATTCTGTGCCTATTCAAATAAAAGACAGGCATGGTTTAGTTGCAACACATATGTTAACAGTGAG
AGTATGTGACTGTTCAACTCCATCTGAGTGTAGAATGAAGGATAAAAGTACAAGAGACGTTAGACCAAATGTAAT
ACTTGGAAGATGGGCTATTCTTGCTATGGTGTTGGGTTCTGTATTGTTATTATGTATTCTGTTTACATGTTTCTG
TGTCACTGCTAAGAGAACAGTCAAGAAATGTTTTCCAGAAGACATAGCCCAGCAAAATTTAATTGTATCAAATAC
TGAAGGACCTGGAGAAGAAGTAACGGAAGCAAATATTAGACTCCCCATGCAGACATCCAACATTTGTGACACAAG
CATGTCTGTTGGTACTGTTGGTGGCCAGGGAATCAAAACACAGCAAAGTTTTGAGATGGTCAAAGGAGGCTACAC
TTTGGATTCCAACAAAGGAGGTGGACATCAGACCTTGGAGTCCGTCAAGGGAGTGGGGCAGGGAGATACTGGCAG
ATATGCGTACACGGACTGGCAGAGTTTCACCCAACCTCGGCTTGGCGAAAAGGTGTATTTGTGTGGACAAGATGA
GGAGCATAAACATTGTGAAGACTACGTTTGTTCGTATAACTATGAAGGCAAAGGTTCTCTGGCCGGCTCAGTAGG
TTGCTGCAGCGATCGGCAGGAAGAAGAGGGACTGGAGTTTCTAGATCACCTGGAACCCAAATTTAGGACATTAGC
AAAGACATGCATCAAGAAA**TAA**ATGTGCCTTTTAATAGTGTAATATCCACAGATGCATAAGTAGGAATTTATTAC
TTGCAGAATGTTAGCAGCATCTGCTAATGTTTTTGTTTATGGAGGTAAACTTTGTCATGTATAGGTAAGGGTACT
ATAAATATGAGATTCCCCTACATTCTCCTTGTCTGGTATAACTTCCATGTTCTCTAGAAATCAAGGTTTTGTTTG
TTAATTCTCTTTTATATGCATGTATATATTGCCCTTTTCACGACTGTACTGTACACCTTCTTGCACCTTTTATTT
GCAAACTGATGTTACTTTTTGTGCTGTGGAAGAGCATTTGGGAAAGCTGGGTATTATAGAGGCCAATGAAAGATG
AATTTGCATTGTAGATGTACGAATTAAATATGTTCTTCAAAATCTTGGGGAGAATTATGTTCTTAGAACATAGTT
GGTGCCAGATAATTGCATTCTCTCCACCTGAGTGGTTTAAAAAGGACTTTTAAGTATTCTTCAGTGCAATCTTCA
GTTTTGTGATTAAGTTCATTTCTCTTTTACACTTTTGTACTCCTCAGAGCAGTGCTCCCAGCATTGTTTTCTTTC
AGGATCCTTCAGAGCTCAGTCCCTGGACCTCTGCCCATGTGGATTTGTTGTTAGGTCACTCCAACTTCTAAGGTT

FIGURE 1860B

CTTGGAAAGATAAGGACCAGAACAAGCTCATAGCAAATTGAGGGGCAGAGATTTTATGAAGATTACATGAGAAGA
TTTCCATGAAAGAATTGCAGCCCTGAGGTCCATGGGTTGACTTATGCTCACAAATATGTTTCGTTTGCTCAACAT
GGTTTACTACTAACATTTTAAAAATATAAATACTTTAGCAAAAACATTCACTCTTGAGTTTGACATAGGCCTGCC
TTATCTGTGGTTGCCACCTGCCATCTCCAAGCATTTGGACAACTAGCCCTGATGCATTAGGCTGCAACTCTGATA
TACAGAGACTAGCACCTTGAATATGCCAGAAATTGAATTACCATCTGTATTAGAACTTAAGACTCAGCCTAAATT
TACAGTTACTTTAAGAAAATGGGCAGTCAGAATTAGGGACTAGAATGTATATGAGAAACCCCCACTCTACTAAAA
ATATAAGAAATTAGCCGGACATGGTGGCGAATGACTGTAATCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATCG
CTTGAATCCAGGAGGCGGAGGTTGCAGTGAGCCGAGATTGCCACTGCACTCCAGCCTGGGCAACAAGAGCGAAAC
TCCGTCTCAAAAAAAAAAAAAAAAA

FIGURE 1861

MALASAAPGSIFCKQLLFSLLVLTLLCDACQKVYLRVPSHLQAETLVGKVNLEECLKSASLIRSSDPAFRILEDG
SIYTTHDLILSSERKSFSIFLSDGQRREQQEIKVVLSARENKSPKKRHTKDTALKRSKRRWAPIPASLMENSLGP
FPQHVQQIQSDAAQNYTIFYSISGPGVDKEPFNLFYIEKDTGDIFCTRSIDREKYEQFALYGYATTADGYAPEYP
LPLIIKIEDDNDNAPYFEHRVTIFTVPENCRSGTSVGKVTATDLDEPDTLHTRLKYKILQQIPDHPKHFSIHPDT
GVITTTTPFLDREKCDTYQLIMEVRDMGGQPFGLFNTGTITISLEDENDNPPSFTETSYVTEVEENRIDVEILRM
KVQDQDLPNTPHSKAVYKILQGNENGNFIISTDPNTNEGVLCVVKPLNYEVNRQVILQVGVINEAQFSKAASSQT
PTMCTTTVTVKIIDSDEGPECHPPVKVIQSQDGFPAGQELLGYKALDPEISSGEGLRYQKLGDEDNWFEINQHTG
DLRTLKVLDRESKFVKNNQYNISVVAVDAVGRSCTGTLVVHLDDYNDHAPQIDKEVTICQNNEDFAVLKPVDPDG
PENGPPFQFFLDNSASKNWNIEEKDGKTAILRQRQNLDYNYYSVPIQIKDRHGLVATHMLTVRVCDCSTPSECRM
KDKSTRDVRPNVILGRWAILAMVLGSVLLLCILFTCFCVTAKRTVKKCFPEDIAQQNLIVSNTEGPGEEVTEANI
RLPMQTSNICDTSMSVGTVGGQGIKTQQSFEMVKGGYTLDSNKGGGHQTLESVKGVGQGDTGRYAYTDWQSFTQP
RLGEKVYLCGQDEEHKHCEDYVCSYNYEGKGSLAGSVGCCSDRQEEEGLEFLDHLEPKFRTLAKTCIKK

FIGURE 1862A

GGCGGCTCGGGACGGAGGACGCGCTAGTGTGAGTGCGGGCTTCTAGAACTACACCGACCCTCGTGTCCTCCCTTC
ATCCTGCGGGGCTGGCTGGAGCGGCCGCTCCGGTGCTGTCCAGCAGCCATAGGGAGCCGCACGGGGAGCGGGAAA
GCGGTCGCGGCCCCAGGCGGGGCGGCCGGGATGGAGCGGGGCCGCGAGCCTGTGGGGAAGGGGCTGTGGCGGCGC
CTCGAGCGGCTGCAGGTTCTTCTGTGTGGCAGTTCAGAATGATGGATCAAGCTAGATCAGCATTCTCTAACTTGT
TTGGTGGAGAACCATTGTCATATACCCGGTTCAGCCTGGCTCGGCAAGTAGATGGCGATAACAGTCATGTGGAGA
TGAAACTTGCTGTAGATGAAGAAGAAAATGCTGACAATAACACAAAGGCCAATGTCACAAAACCAAAAAGGTGTA
GTGGAAGTATCTGCTATGGGACTATTGCTGTGATCGTCTTTTTCTTGATTGGATTTATGATTGGCTACTTGGGCT
ATTGTAAAGGGGTAGAACCAAAAACTGAGTGTGAGAGACTGGCAGGAACCGAGTCTCCAGTGAGGGAGGAGCCAG
GAGAGGACTTCCCTGCAGCACGTCGCTTATATTGGGATGACCTGAAGAGAAAGTTGTCGGAGAAACTGGACAGCA
CAGACTTCACCAGCACCATCAAGCTGCTGAATGAAAATTCATATGTCCCTCGTGAGGCTGGATCTCAAAAAGATG
AAAATCTTGCGTTGTATGTTGAAAATCAATTTCGTGAATTTAAACTCAGCAAAGTCTGGCGTGATCAACATTTTG
TTAAGATTCAGGTCAAAGACAGCGCTCAAAACTCGGTGATCATAGTTGATAAGAACGGTAGACTTGTTTACCTGG
TGGAGAATCCTGGGGGTTATGTGGCGTATAGTAAGGCTGCAACAGTTACTGGTAAACTGGTCCATGCTAATTTTG
GTACTAAAAAAGATTTTGAGGATTTATACACTCCTGTGAATGGATCTATAGTGATTGTCAGAGCAGGGAAAATCA
CCTTTGCAGAAAAGGTTGCAAATGCTGAAAGCTTAAATGCAATTGGTGTGTTGATATACATGGACCAGACTAAAT
TTCCCATTGTTAACGCAGAACTTTCATTCTTTGGACATGCTCATCTGGGGACAGGTGACCCTTACACACCTGGAT
TCCCTTCCTTCAATCACACTCAGTTTCCACCATCTCGGTCATCAGGATTGCCTAATATACCTGTCCAGACAATCT
CCAGAGCTGCTGCAGAAAAGCTGTTTGGGAATATGGAAGGAGACTGTCCCTCTGACTGGAAAACAGACTCTACAT
GTAGGATGGTAACCTCAGAAAGCAAGAATGTGAAGCTCACTGTGAGCAATGTGCTGAAAGAGATAAAAATTCTTA
ACATCTTTGGAGTTATTAAAGGCTTTGTAGAACCAGATCACTATGTTGTAGTTGGGGCCCAGAGAGATGCATGGG
GCCCTGGAGCTGCAAAATCCGGTGTAGGCACAGCTCTCCTATTGAAACTTGCCCAGATGTTCTCAGATATGGTCT
TAAAAGATGGGTTTCAGCCCAGCAGAAGCATTATCTTTGCCAGTTGGAGTGCTGGAGACTTTGGATCGGTTGGTG
CCACTGAATGGCTAGAGGGATACCTTTCGTCCCTGCATTTAAAGGCTTTCACTTATATTAATCTGGATAAAGCGG
TTCTTGGTACCAGCAACTTCAAGGTTTCTGCCAGCCCACTGTTGTATACGCTTATTGAGAAAACAATGCAAAATG
TGAAGCATCCGGTTACTGGGCAATTTCTATATCAGGACAGCAACTGGGCCAGCAAAGTTGAGAAACTCACTTTAG
ACAATGCTGCTTTCCCTTTCCTTGCATATTCTGGAATCCCAGCAGTTTCTTTCTGTTTTTGCGAGGACACAGATT
ATCCTTATTTGGGTACCACCATGGACACCTATAAGGAACTGATTGAGAGGATTCCTGAGTTGAACAAAGTGGCAC
GAGCAGCTGCAGAGGTCGCTGGTCAGTTCGTGATTAAACTAACCCATGATGTTGAATTGAACCTGGACTATGAGA
GGTACAACAGCCAACTGCTTTCATTTGTGAGGGATCTGAACCAATACAGAGCAGACATAAAGGAAATGGGCCTGA
GTTTACAGTGGCTGTATTCTGCTCGTGGAGACTTCTTCCGTGCTACTTCCAGACTAACAACAGATTTCGGGAATG
CTGAGAAAACAGACAGATTTGTCATGAAGAAACTCAATGATCGTGTCATGAGAGTGGAGTATCACTTCCTCTCTC
CCTACGTATCTCCAAAAGAGTCTCCTTTCCGACATGTCTTCTGGGGCTCCGGCTCTCACACGCTGCCAGCTTTAC
TGGAGAACTTGAAACTGCGTAAACAAAATAACGGTGCTTTTAATGAAACGCTGTTCAGAAACCAGTTGGCTCTAG
CTACTTGGACTATTCAGGGAGCTGCAAATGCCCTCTCTGGTGACGTTTGGGACATTGACAATGAGTTTTAAATGT
GATACCCATAGCTTCCATGAGAACAGCAGGGTAGTCTGGTTTCTAGACTTGTGCTGATCGTGCTAAATTTTCAGT
AGGGCTACAAAACCTGATGTTAAAATTCCATCCCATCATCTTGGTACTACTAGATGTCTTTAGGCAGCAGCTTTT
AATACAGGGTAGATAACCTGTACTTCAAGTTAAAGTGAATAACCACTTAAAAAATGTCCATGATGGAATATTCCC
CTATCTCTAGAATTTTAAGTGCTTTGTAATGGGAACTGCCTCTTTCCTGTTGTTGTTAATGAAAATGTCAGAAAC
CAGTTATGTGAATGATCTCTCTGAATCCTAAGGGCTGGTCTCTGCTGAAGGTTGTAAGTGGTTCGCTTACTTTGA
GTGATCCTCCAACTTCATTTGATGCTAAATAGGAGATACCAGGTTGAAAGACCTCTCCAAATGAGATCTAAGCCT
TTCCATAAGGAATGTAGCAGGTTTCCTCATTCCTGAAAGAAACAGTTAACTTTCAGAAGAGATGGGCTTGTTTTC
TTGCCAATGAGGTCTGAAATGGAGGTCCTTCTGCTGGATAAAATGAGGTTCAACTGTTGATTGCAGGAATAAGGC
CTTAATATGTTAACCTCAGTGTCATTTATGAAAAGAGGGGACCAGAAGCCAAAGACTTAGTATATTTTCTTTTCC
TCTGTCCCTTCCCCCATAAGCCTCCATTTAGTTCTTTGTTATTTTTGTTTCTTCCAAAGCACATTGAAAGAGAAC
CAGTTTCAGGTGTTTAGTTGCAGACTCAGTTTGTCAGACTTTAAAGAATAATATGCTGCCAAATTTTGGCCAAAG
TGTTAATCTTAGGGGAGAGCTTTCTGTCCTTTTGGCACTGAGATATTTATTGTTTATTTATCAGTGACAGAGTTC
ACTATAAATGGTGTTTTTTTAATAGAATATAATTATCGGAAGCAGTGCCTTCCATAATTATGACAGTTATACTGT
CGGTTTTTTTTAAATAAAAGCAGCATCTGCTAATAAAACCCAACAGATACTGGAAGTTTTGCATTTATGGTCAAC

FIGURE 1862B

ACTTAAGGGTTTTAGAAAACAGCCGTCAGCCAAATGTAATTGAATAAAGTTGAAGCTAAGATTTAGAGATGAATT
AAATTTAATTAGGGGTTGCTAAGAAGCGAGCACTGACCAGATAAGAATGCTGGTTTTCCTAAATGCAGTGAATTG
TGACCAAGTTATAAATCAATGTCACTTAAAGGCTGTGGTAGTACTCCTGCAAAATTTTATAGCTCAGTTTATCCA
AGGTGTAACTCTAATTCCCATTTGCAAAATTTCCAGTACCTTTGTCACAATCCTAACACATTATCGGGAGCAGTG
TCTTCCATAATGTATAAAGAACAAGGTAGTTTTTACCTACCACAGTGTCTGTATCGGAGACAGTGATCTCCATAT
GTTACACTAAGGGTGTAAGTAATTATCGGGAACAGTGTTTCCCATAATTTTCTTCATGCAATGACATCTTCAAAG
CTTGAAGATCGTTAGTATCTAACATGTATCCCAACTCCTATAATTCCCTATCTTTTAGTTTTAGTTGCAGAAACA
TTTTGTGGTCATTAAGCATTGGGTGGGTAAATTCAACCACTGTAAAATGAAATTACTACAAAATTTGAAATTTAG
CTTGGGTTTTTGTTACCTTTATGGTTTCTCCAGGTCCTCTACTTAATGAGATAGCAGCATACATTTATAATGTTT
GCTATTGACAAGTCATTTTAATTTATCACATTATTTGCATGTTACCTCCTATAAACTTAGTGCGGACAAGTTTTA
ATCCAGAATTGACCTTTTGACTTAAAGCAGAGGGACTTTGTATAGAAGGTTTGGGGGCTGTGGGGAAGGAGAGTC
CCCTGAAGGTCTGACACGTCTGCCTACCCATTCGTGGTGATCAATTAAATGTAGGTATGAATAAGTTCGAAGCTC
CGTGAGTGAACCATCATATAAACGTGTAGTACAGCTGTTTGTCATAGGGCAGTTGGAAACGGCCTCCTAGGGAAA
AGTTCATAGGGTCTCTTCAGGTTCTTAGTGTCACTTACCTAGATTTACAGCCTCACTTGAATGTGTCACTACTCA
CAGTCTCTTTAATCTTCAGTTTTATCTTTAATCTCCTCTTTTATCTTGGACTGACATTTAGCGTAGCTAAGTGAA
AAGGTCATAGCTGAGATTCCTGGTTCGGGTGTTACGCACACGTACTTAAATGAAAGCATGTGGCATGTTCATCGT
ATAACACAATATGAATACAGGGCATGCATTTTGCAGCAGTGAGTCTCTTCAGAAAACCCTTTTCTACAGTTAGGG
TTGAGTTACTTCCTATCAAGCCAGTACGTGCTAACAGGCTCAATATTCCTGAATGAAATATCAGACTAGTGACAA
GCTCCTGGTCTTGAGATGTCTTCTCGTTAAGGAGTAGGGCCTTTTGGAGGTAAAGGTATA

FIGURE 1863

MMDQARSAFSNLFGGEPLSYTRFSLARQVDGDNSHVEMKLAVDEEENADNNTKANVTKPKRCSGSICYGTIAVIV
FFLIGFMIGYLGYCKGVEPKTECERLAGTESPVREEPGEDFPAARRLYWDDLKRKLSEKLDSTDFTSTIKLLNEN
SYVPREAGSQKDENLALYVENQFREFKLSKVWRDQHFVKIQVKDSAQNSVIIVDKNGRLVYLVENPGGYVAYSKA
ATVTGKLVHANFGTKKDFEDLYTPVNGSIVIVRAGKITFAEKVANAESLNAIGVLIYMDQTKFPIVNAELSFFGH
AHLGTGDPYTPGFPSFNHTQFPPSRSSGLPNIPVQTISRAAAEKLFGNMEGDCPSDWKTDSTCRMVTSESKNVKL
TVSNVLKEIKILNIFGVIKGFVEPDHYVVVGAQRDAWGPGAAKSGVGTALLLKLAQMFSDMVLKDGFQPSRSIIF
ASWSAGDFGSVGATEWLEGYLSSLHLKAFTYINLDKAVLGTSNFKVSASPLLYTLIEKTMQNVKHPVTGQFLYQD
SNWASKVEKLTLDNAAFPFLAYSGIPAVSFCFCEDTDYPYLGTTMDTYKELIERIPELNKVARAAAEVAGQFVIK
LTHDVELNLDYERYNSQLLSFVRDLNQYRADIKEMGLSLQWLYSARGDFFRATSRLTTDFGNAEKTDRFVMKKLN
DRVMRVEYHFLSPYVSPKESPFRHVFWGSGSHTLPALLENLKLRKQNNGAFNETLFRNQLALATWTIQGAANALS
GDVWDIDNEF

FIGURE 1864

CAGTCTCA**ATG**GGGGCACTGGGGCTGGAGGGCAGGGGTGGGAGGCTCCAGGGGAGGGGTTCCCTCCTGCTAGCTG
TGGCAGGAGCCACTTCTCTGGTGACCTTGTTGCTGGCGGTGCCTATCACTGTCCTGGCTGTGCTGGCCTTAGTGC
CCCAGGATCAGGGAGGACTGGTAACGGAGACGGCCGACCCCGGGGCACAGGCCCAGCAAGGACTGGGGTTTCAGA
AGCTGCCAGAGGAGGAGCCAGAAACAGATCTCAGCCCCGGGCTCCCAGCTGCCCACCTCATAGGCGCTCCGCTGA
AGGGGCAGGGGCTAGGCTGGGAGACGACGAAGGAACAGGCGTTTCTGACGAGCGGGACGCAGTTCTCGGACGCCG
AGGGGCTGGCGCTCCCGCAGGACGGCCTCTATTACCTCTACTGTCTCGTCGGCTACCGGGGCCGGGCGCCCCCTG
GCGGCGGGGACCCCCAGGGCCGCTCGGTCACGCTGCGCAGCTCTCTGTACCGGGCGGGGGGCGCCTACGGGCCGG
GCACTCCCGAGCTGCTGCTCGAGGGCGCCGAGACGGTGACTCCAGTGCTGGACCCGGCCAGGAGACAAGGGTACG
GGCCTCTCTGGTACACGAGCGTGGGGTTCGGCGGCCTGGTGCAGCTCCGGAGGGGCGAGAGGGTGTACGTCAACA
TCAGTCACCCCGATATGGTGGACTTCGCGAGAGGGAAGACCTTCTTTGGGGCCGTGATGGTGGGGTGAGGGAATA
TGAGTGCGTGGTGCGAGTGCGTGAATATTGGGGGCCCGGACGCCCAGGACCCCATGGCAGTGGGAAAAATGTAGG
AGACTGTTTGGAAATTGATTTTGAACCTGATGAAAATAAAGAATGGAAAGCTTCAGTGCTGCCGATAAA

FIGURE 1865

MGALGLEGRGGRLQGRGSLLLAVAGATSLVTLLLAVPITVLAVLALVPQDQGGLGFRSCQRRSQKQISAPGSQLP
TS

FIGURE 1866

GGAGAGATGATGAGTTGCTGAGTGTGCACACCTTTCCGGAACACATACACACACCCTGCTCTGGGATCCCTTGTG
AGGCTGCCCTCATGGAGTTCCCCCTGGCCCAGATATGTCCCCAAGGGAGTCACGAAGCCCCCATCCCAACCTTCA
GCACCTTCCAGATCACAGACATGACCCGCAGGAGCTGCCAGAACCTGGGCTACACTGCGGCATCTCCCCAGGCCC
CGGAGGCTGCCTCCAGCACAGGGAATGCTGAGAGGGCAGAGGAGGTGCCTGGAGAAGGAAGCCTGTTCCTGCAGG
CCGAGACCCGGGCTTGGTTCCAGAAGACCCAGGCCCACTGGCTCCTGCAGCACGGGGCAGCCCCTGCCTGGTTCC
ATGGCTTCATCACCCGGAGGGAGGCAGAGAGGCTGCTGGAGCCCAAGCCTCAGGGGTGCTACTTGGTGCGGTTCA
GCGAGAGCGCGGTGACCTTCGTGCTGACTTACAGGAGCCGGACTTGCTGCCGCCACTTCCTGCTGGCCCAGCTCA
GGGACGGGCGCCACGTGGTGCTGGGCGAGGACAGCGCCCACGCGCGGCTGCAGGACCTGCTGCTGCACTACACCG
CGCACCCGCTCAGCCCCTACGGGGAGACGCTCACCGAGCCCCTCGCCCGACAGACTCCTGAGCCTGCAGGACTTT
CCCTGAGGACCGAAGAATCAAACTTTGGAAGCAAAAGCCAGGACCCAAACCCCCAGTACAGCCCAATCATCAAAC
AGGGGCAAGCCCCAGTCCCGATGCAGAAAGAGGGGGCCGGGGAGAAGGAGCCCTCCCAGCTGCTCAGGCCCAAGC
CTCCCATCCCCGCCAAACCTCAGCTGCCCCCAGAAGTCTACACAATCCCTGTTCCACGACACCGCCCGGCCCCAC
GCCCCAAGCCCTCCAATCCTATCTACAATGAGCCTGATGAACCCATAGCTTTCTATGCCATGGGCCGGGGCAGCC
CTGGGGAAGCCCCCAGCAACATCTATGTGGAAGTGGAAGATGAGGGCCTACCCGCCACCCTTGGGCACCCTGTCC
TACGGAAGAGCTGGTCCAGGCCTGTCCCAGGAGGCCAGAATACAGGTGGCTCCCAGCTGCATTCTGAGAACTCTG
TGATTGGGCAAGGCCCTCCCCTGCCCCACCAGCCCCCACCCGCCTGGAGACACACCCTCCCCCACAATCTTTCTA
GACAGGTGCTTCAGGACAGAGGACAGGCATGGCTTCCCCTTGGGCCTCCTCAGTAGGCGGTCTGGCCTGACCCCC
AACAAAGAAGCCTGGAGGTCAGAGAAGCAAATGCGGAGCCTGCTCCCTCCTAAGAAGATCCCAAGAATCCAATGG
CTCAGTCCTTGGTGATCTAAGACAGCAAAGAAGTGTGCAAGGAGGGCCCTGTTAGCTCCCACTGTCCTGGTTTCT
CCTCCTGGAGTCTAATTTCCTTGGCCCTCTGAGCCTTTTGAGTCTGGGCCCTGGTCCAATGCTGCTGTTGTCTGA
GGAATGGTTTGGTGAGAACAGATGTTAGAACTTGTTTGTTGATTCTTGTCTGGCTAATAAATCATCACCAACTGC
CTTCTCCTACAGGGAAA

FIGURE 1867

MEFPLAQICPQGSHEAPIPTFSTFQITDMTRRSCQNLGYTAASPQAPEAASSTGNAERAEEVPGEGSLFLQAETR
AWFQKTQAHWLLQHGAAPAWFHGFITRREAERLLEPKPQGCYLVRFSESAVTFVLTYRSRTCCRHFLLAQLRDGR
HVVLGEDSAHARLQDLLLHYTAHPLSPYGETLTEPLARQTPEPAGLSLRTEESNFGSKSQDPNPQYSPIIKQGQA
PVPMQKEGAGEKEPSQLLRPKPPIPAKPQLPPEVYTIPVPRHRPAPRPKPSNPIYNEPDEPIAFYAMGRGSPGEA
PSNIYVEVEDEGLPATLGHPVLRKSWSRPVPGGQNTGGSQLHSENSVIGQGPPLPHQPPPAWRHTLPHNLSRQVL
QDRGQAWLPLGPPQ

FIGURE 1868

GGCGACGGGTTTGGTAAGTAGGAAAGTTTCGGTTGAGGAGTAAGAGCTGCCGCGGGAGCAGTAACCCGCGCGGGG
GAGGCCGACGTCGGTCGGAGAGGGGGTACGAGAGCTGCTGGTGGTGTTGTCGTGGCCGGAGCGGCCCGCGCCTGG
GCTGCCGGCACTTCGCGGCAGTCAGAGCACCATAACATGGTGTGGGAAGTGAAGACAAATCAGATGCCTAATGCA
GTACAGAAACTCCTGTTGGTGATGGACAAGAGAGCCTCAGGAATGAATGACTCATTGGAGTTGCTGCAGTGTAAT
GAGAATTTGCCATCTTCACCTGGATATAACTCCTGTGATGAACACATGGAGCTTGATGACCTTCCTGAACTTCAG
GCAGTTCAAAGTGATCCTACCCAATCTGGCATGTACCAGCTGAGTTCAGATGTTTCACATCAAGAATACCCAAGA
TCATCTTGGAACCAAAATACCTCAGACATACCAGAAACTACTTACCGTGAAAATGAGGTGGACTGGCTAACAGAA
TTGGCAAATATCGCGACCAGTCCACAAAGTCCACTGATGCAGTGCTCATTTTACAATAGATCATCTCCTGTACAC
ATCATAGCCACTAGCAAAAGTTTACATTCCTATGCACGCCCTCCACCAGTGTCCTCTTCTTCGAAGAGTGAACCA
GCCTTCCCTCATCACCATTGGAAGGAGGAAACACCAGTAAGACATGAAAGGGCAAATAGTGAGTCAGAATCTGGC
ATTTTCTGCATGTCCTCCCTGTCAGATGATGATGATTTGGGATGGTGCAATTCCTGGCCTTCAACTGTCTGGCAC
TGTTTTTTGAAAGGCACACGACTGTGCTTTCATAAGGGAAGCAATAAGGAATGGCAAGATGTTGAAGATTTTGCT
AGAGCTGAAGGCTGTGATAATGAGGAAGATCTTCAAATGGGCATTCACAAGGGCTATGGTTCTGATGGTCTAAAG
TTGTTATCACATGAAGAAAGTGTATCATTTGGCGAGTCTGTACTGAAGTTGACTTTTGATCCTGGTACAGTAGAA
GATGGTTTACTTACCGTAGAGTGTAAGCTGGACCACCCTTTCTATGTTAAAAATAAAGGTTGGTCATCATTTTAT
CCAAGCTTGACTGTGGTACAGCATGGCATTCCATGTTGTGAAGTTCATATTGGCGATGTATGTCTACCTCCTGGA
CACCCCGATGCCATTAATTTTGATGATTCAGGTGTTTTTGATACATTTAAAAGCTATGACTTCACACCTATGGAT
TCTTCTGCAGTTTATGTGTTAAGTAGTATGGCTCGCCAGCGTCGTGCATCTTTGTCTTGTGGAGGACCTGGTGGT
CAAGACTTTGCAAGATCTGGATTCAGTAAAAACTGTGGCTCACCTGGATCATCACAGCTCTCTTCCAATTCTTTG
TATGCTAAAGCTGTCAAAAACCACAGCTCAGGGACTGTGAGTGCCACTTCTCCTAATAAGTGCAAAAGACCAATG
AATGCCTTCATGCTTTTTGCCAAAAAATACAGAGTTGAATATACTCAGATGTATCCAGGGAAAGATAACAGAGCC
ATAAGTGTGATCCTTGGTGACAGGTGGAAGAAAATGAAGAATGAAGAGAGAAGAATGTACACATTAGAAGCAAAG
GCTTTGGCTGAAGAACAGAAACGTTTAAATCCTGACTGTTGGAAGAGGAAAAGAACCAATTCAGGCTCACAACAA
CATTAAACCAGGATGCTTATGTTCTTAAGTCTATATTTGCATATACATTGACTCTTGATGGAAAGACTTAAGAAG
ATCAAGGTCTCACCATTTGTCCTCAATTCGTGTGACCATAAGATACTGATAGCATTGAGTCTTGAAATGATTTAA
TAATATGAGTGAGGATTTGCTTTCTCCATTAGAGCATTAAGCTAAAACTATCAACATTTTAAACCAAATTGCCTT
ATTTTTCTTCCAAACTTCATATATGTCTATCAGGTAATAATAGGCTTGAAAATTGATATCCTGTGGTGCTAAAGT
ACAGTAGAAAGAGAGGAGAAGTGTATACATGTTTTATTTTAAATTGTACGAAAGGGGAATTTAAAAAATATGTAA
CTGCTGTTTATACATTGGCTCCTTACTGCTTATTAATCTGTATTGTACACATGATGAAATGAAGCAGAAGCTGGG
AGTCGGCCTTTCCTCTAGTAACCACCACATGGCTCAGCATCTGTGCCAAACATAGGCGCTCCTAGTCTGGTCAGT
GCCAAGAGGCTACCAGAACATGGGGCAGGTGGCTGGTGTTGGTGTCCCAGCCTAAGAGCCACCTGCTGCAGTTAC
CATGGCATGCTGAGTTGATGCACCAGGTGGCAGCAGCCATCCGTTATTATTTCCAATGGAGACCTAGCCCAGGCC
AAGGTAAAGTTAGTTAATAGCATTGGGATATAGTCACTGTAATGGTGCTATTAACAAACAGTCAACACCATTGTA
TTTTTTAACTTCGTGTTCTGTATCTCCTCAGCCATGTATCTTAAATATATTTTGTCATCATAATCTTTCTTTATG
GTGGGGGCAGACTTTGCACTTACTGCAGTGCAACACTTGCACTTTAATTTTCCTCCAACTGTCTAAAATTAGAGC
AAATACATTGGCAATACAGCTGCTTTTGCTCTGAGCTACAATCATGGCTTTTCATGTTACTTACCAAGTGGTGTT
TCTGGTTAGGAATCACAGCTGTAAAATTGATTTCAGTTCATCACACTTCTTCATGATGTTGCCCCTAAATTTTGC
ACACTATATTCTTGTATATTATTTCAAATAAATGGAAAAAAAAGTTGCTTATCTCTGAAAAAAAAAAAAAAAAAA
AAAAAAA

FIGURE 1869

MVWEVKTNQMPNAVQKLLLVMDKRASGMNDSLELLQCNENLPSSPGYNSCDEHMELDDLPELQAVQSDPTQSGMY
QLSSDVSHQEYPRSSWNQNTSDIPETTYRENEVDWLTELANIATSPQSPLMQCSFYNRSSPVHIIATSKSLHSYA
RPPPVSSSSKSEPAFPHHHWKEETPVRHERANSESESGIFCMSSLSDDDDLGWCNSWPSTVWHCFLKGTRLCFHK
GSNKEWQDVEDFARAEGCDNEEDLQMGIHKGYGSDGLKLLSHEESVSFGESVLKLTFDPGTVEDGLLTVECKLDH
PFYVKNKGWSSFYPSLTVVQHGIPCCEVHIGDVCLPPGHPDAINFDDSGVFDTFKSYDFTPMDSSAVYVLSSMAR
QRRASLSCGGPGGQDFARSGFSKNCGSPGSSQLSSNSLYAKAVKNHSSGTVSATSPNKCKRPMNAFMLFAKKYRV
EYTQMYPGKDNRAISVILGDRWKKMKNEERRMYTLEAKALAEEQKRLNPDCWKRKRTNSGSQQH

FIGURE 1870

CCCAGAGCAGCGCTCGCCACCTCCCCCCGGCCTGGGCAGCGCTCGCCCGGGGAGTCCAGCGGTGTCCTGTGGAGC
TGCCGCCATGGCCCCGCGGCGGGCGCGCGGCTGCCGGACCCTCGGTCTCCCGGCGCTGCTACTGCTGCTGCTGCT
CCGGCCGCCGGCGACGCGGGGCATCACGTGCCCTCCCCCCATGTCCGTGGAACACGCAGACATCTGGGTCAAGAG
CTACAGCTTGTACTCCAGGGAGCGGTACATTTGTAACTCTGGTTTCAAGCGTAAAGCCGGCACGTCCAGCCTGAC
GGAGTGCGTGTTGAACAAGGCCACGAATGTCGCCCACTGGACAACCCCCAGTCTCAAATGCATTAGAGACCCTGC
CCTGGTTCACCAAAGGCCAGCGCCACCCTCCACAGTAACGACGGCAGGGGTGACCCCACAGCCAGAGAGCCTCTC
CCCTTCTGGAAAAGAGCCCGCAGCTTCATCTCCCAGCTCAAACAACACAGCGGCCACAACAGCAGCTATTGTCCC
GGGCTCCCAGCTGATGCCTTCAAAATCACCTTCCACAGGAACCACAGAGATAAGCAGTCATGAGTCCTCCCACGG
CACCCCCTCTCAGACAACAGCCAAGAACTGGGAACTCACAGCATCCGCCTCCCACCAGCCGCCAGGTGTGTATCC
ACAGGGCCACAGCGACACCACTGTGGCTATCTCCACGTCCACTGTCCTGCTGTGTGGGCTGAGCGCTGTGTCTCT
CCTGGCATGCTACCTCAAGTCAAGGCAAACTCCCCCGCTGGCCAGCGTTGAAATGGAAGCCATGGAGGCTCTGCC
GGTGACTTGGGGGACCAGCAGCAGAGATGAAGACTTGGAAAACTGCTCTCACCACCTATGAAACTCGGGGAAACC
AGCCCAGCTAAGTCCGGAGTGAAGGAGCCTCTCTGCTTTAGCTAAAGACGACTGAGAAGAGGTGCAAGGAAGCGG
GCTCCAGGAGCAAGCTCACCAGGCCTCTCAGAAGTCCCAGCAGGATCTCACGGACTGCCGGGTCGGCGCCTCCTG
CGCGAGGGAGCAGGTTCTCCGCATTCCCATGGGCACCACCTGCCTGCCTGTCGTGCCTTGGACCCAGGGCCCAGC
TTCCCAGGAGAGACCAAAGGCTTCTGAGCAGGATTTTTATTTCATTACAGTGTGAGCTGCCTGGAATACATGTGG
TAATGAAATAAAAACCCTGCCCCGAATCTTCCGTCCCTCATCCTAACTTGCAGTTCACAGAGAAAAGTGACATAC
CCAAAGCTCTCTGTCAATTACAAGGCTTCTCCTGGCGTGGGAGACGTCTACAGGGAAGACACCAGCGTTTGGGCT
TCTAACCACCCTGTCTCCAGCTGCTCTGCACACATGGACAGGGACCTGGGAAAGGTGGGAGAGATGCTGAGCCCA
GCGAATCCTCTCCATTGAAGGATTCAGGAAGAAGAAAACTCAACTCAGTGCCATTTTACGAATATATGCGTTTAT
ATTTATACTTCCTTGTCTATTATATCTATACATTATATATTATTTGTATTTTGACATTGTACCTTGTATAAACAA
AATAAAACATCTATTTTCAATATTTTTAAAATGCA

FIGURE 1871

MAPRRARGCRTLGLPALLLLLLLRPPATRGITCPPPMSVEHADIWVKSYSLYSRERYICNSGFKRKAGTSSLTEC
VLNKATNVAHWTTPSLKCIRDPALVHQRPAPPSTVTTAGVTPQPESLSPSGKEPAASSPSSNNTAATTAAIVPGS
QLMPSKSPSTGTTEISSHESSHGTPSQTTAKNWELTASASHQPPGVYPQGHSDTTVAISTSTVLLCGLSAVSLLA
CYLKSRQTPPLASVEMEAMEALPVTWGTSSRDEDLENCSHHL

FIGURE 1872

TTGAACTCCTGGAGCCCGTCACCCAGGAAACCGGCCGCAATCGCCGGCCGACCTGAAGCTGGTTTCATGGCAGCC
TCAAAGAAGGCAGTTTTGGGGCCATTGGTGGGGGCGGTGGACCAGGGCACCAGTTCGACGCGCTTTTTGGTTTTC
AATTCAAAAACAGCTGAACTACTTAGTCATCATCAAGTAGAAATAAAACAAGAGTTCCCAAGAGAAGGATGGGTG
GAACAGGACCCTAAGGAAATTCTACATTCTGTCTATGAGTGTATAGAGAAAACATGTGAGAAACTTGGACAGCTC
AATATTGATATTTCCAACATAAAAGCTATTGGTGTCAGCAACCAGAGGGAAACCACTGTAGTCTGGGACAAGATA
ACTGGAGAGCCTCTCTACAATGCTGTGGTGTGGCTTGATCTAAGAACCCAGTCTACCGTTGAGAGTCTTAGTAAA
AGAATTCCAGGAAATAATAACTTTGTCAAGTCCAAGACAGGCCTTCCACTTAGCACTTACTTCAGTGCAGTGAAA
CTTCGTTGGCTCCTTGACAATGTGAGAAAAGTTCAAAAGGCCGTTGAAGAAAAACGAGCTCTTTTTGGGACTATT
GATTCATGGCTTATTTGGAGTTTGACAGGAGGAGTCAATGGAGGTGTCCACTGTACAGATGTAACAAATGCAAGT
AGGACTATGCTTTTCAACATTCATTCTTTGGAATGGGATAAACAACTCTGCGAATTTTTTGGAATTCCAATGGAA
ATTCTTCCAAATGTCCGGAGTTCTTCTGAGATCTATGGCCTAATGAAAGCTGGGGCCTTGGAAGGTGTGCCAATA
TCTGGGTGTTTAGGGGACCAGTCTGCTGCATTGGTGGGACAAATGTGCTTCCAGATTGGACAAGCCAAAAATACG
TATGGAACAGGATGTTTCTTACTATGTAATACAGGCCATAAGTGTGTATTTTCTGATCATGGCCTTCTCACCACA
GTGGCTTACAAACTTGGCAGAGACAAACCAGTATATTATGCTTTGGAAGGTTCTGTAGCTATAGCTGGTGCTGTT
ATTCGCTGGCTAAGAGACAATCTTGGAATTATAAAGACCTCAGAAGAAATTGAAAAACTTGCTAAAGAAGTAGGT
ACTTCTTATGGCTGCTACTTCGTCCCAGCATTTTCGGGGTTATATGCACCTTATTGGGAGCCCAGCGCAAGAGGG
ATAATCTGTGGACTCACTCAGTTCACCAATAAATGCCATATTGCTTTTGCTGCATTAGAAGCTGTTTGTTTCCAA
ACTCGAGAGATTTTGGATGCCATGAATCGAGACTGTGGAATTCCACTCAGTCATTTGCAGGTAGATGGAGGAATG
ACCAGCAACAAAATTCTTATGCAGCTACAAGCAGACATTCTGTATATACCAGTAGTGAAGCCCTCAATGCCCGAA
ACCACTGCACTGGGTGCGGCTATGGCGGCAGGGGCTGCAGAAGGAGTCGGCGTATGGAGTCTCGAACCCGAGGAT
TTGTCTGCCGTCACGATGGAGCGGTTTGAACCTCAGATTAATGCGGAGGAAAGTGAAATTCGTTATTCTACATGG
AAGAAAGCTGTGATGAAGTCAATGGGTTGGGTTACAACTCAATCTCCAGAAAGTGGTATTCCATAAAACCTACCA
ACTCATGGATTCCCAAGATGTGAGCTTTTTACATAATGAAAGAACCCAGCAATTCTGTCTCTTAATGCAATGACA
CTATTCATAGACTTTGATTTTATTTATAAGCCACTTGCTGCATGACCCTCCAAGTAGACCTGTGGCTTAAAATAA
AGAAAATGCAGCAAAAAGAATGCTATAGAAATATTTGGTGGTTTTTTTTTTTTAAACATCCACAGTTAAGGTTG
GGCCAGCTACCTTTGGGGGTGACCCCCCCCATTGCCATAACATCCTGCTCCATTCCCTCTAAGATGTAGGAAGAA
TTCGGATCCTTACCATTGGAATCTTCCATCGAACATACTCAAACACTTTTGGGCCAGGATTTGAGTCTCTGCATG
ACATATACTTGATTAAAAGGTTATTACTAACCTGTTAAAAATC

FIGURE 1873

MAASKKAVLGPLVGAVDQGTSSTRFLVFNSKTAELLSHHQVEIKQEFPREGWVEQDPKEILHSVYECIEKTCEKL
GQLNIDISNIKAIGVSNQRETTVVWDKITGEPLYNAVVWLDLRTQSTVESLSKRIPGNNNFVKSKTGLPLSTYFS
AVKLRWLLDNVRKVQKAVEEKRALFGTIDSWLIWSLTGGVNGGVHCTDVTNASRTMLFNIHSLEWDKQLCEFFGI
PMEILPNVRSSSEIYGLMKAGALEGVPISGCLGDQSAALVGQMCFQIGQAKNTYGTGCFLLCNTGHKCVFSDHGL
LTTVAYKLGRDKPVYYALEGSVAIAGAVIRWLRDNLGIIKTSEEIEKLAKEVGTSYGCYFVPAFSGLYAPYWEPS
ARGIICGLTQFTNKCHIAFAALEAVCFQTREILDAMNRDCGIPLSHLQVDGGMTSNKILMQLQADILYIPVVKPS
MPETTALGAAMAAGAAEGVGVWSLEPEDLSAVTMERFEPQINAEESEIRYSTWKKAVMKSMGWVTTQSPESGIP

FIGURE 1874A

CCCTTTTTCCTCCCGTTTTGAAGAGACAATGCTACTTCAGTTTGGAGCACAAACATATGATCAGCACATGGAAAT
GTGGTAATTCGGATGCATTCGTGATTGCAACAGATTGAAGAAATTAGACCAGACAAAGAGTGTTTTTAGAGGAGA
GAGGAGGAGGAGGAGGCTGAGAGAGGGAGGGCGACGGGGGTGAGAAAGGGGAGGCCGCCTCTGAGCGGGACGCCG
GGACTCCCGCCGCTGCTAAATATATCCGTAGAATGGAGAGGGACCGGATCTCAGCCTTGAAAAGATCTTTTGAGG
TCGAGGAGGTCGAGACACCCAACTCCACCCCACCCCGGAGGGTCCAGACTCCCCTACTCCGAGCCACTGTGGCCA
GCTCCACCCAGAAATTCCAGGACCTGGGCGTGAAGAACTCAGAACCCTCGGCCCGCCATGTGGACTCCCTAAGCC
AACGCTCCCCCAAGGCGTCCCTGCGGAGGGTGGAGCTCTCGGGCCCCAAGGCGGCCGAGCCGGTGTCCCGGCGCA
CTGAGCTGTCCATTGACATCTCGTCCAAGCAGGTGGAGAACGCCGGGGCCATCGGCCCGTCCCGGTTCGGGCTCA
AGAGGGCCGAGGTGTTGGGCCACAAGACGCCAGAACCGGCCCCTCGGAGGACGGAGATCACCATCGTCAAACCCC
AGGAGTCAGCCCACCGGAGGATGGAGCCCCCTGCCTCCAAGGTCCCCGAGGTGCCCACTGCCCCTGCCACCGACG
CAGCCCCCAAGAGGGTGGAGATCCAGATGCCCAAGCCTGCTGAGGCGCCCACCGCCCCCAGCCCAGCCCAGACCT
TGGAGAATTCAGAGCCTGCCCCTGTGTCTCAGCTGCAGAGCAGGCTGGAGCCCAAGCCCCAGCCCCCTGTGGCTG
AGGCTACACCCCGGAGCCAGGAGGCCACTGAGGCGGCTCCCAGCTGCGTTGGCGACATGGCCGACACCCCCAGAG
ATGCCGGGCTCAAGCAGGCGCCTGCATCACGGAACGAGAAGGCCCCGGTGGACTTCGGCTACGTGGGGATTGACT
CCATCCTGGAGCAGATGCGCCGGAAGGCCATGAAGCAGGGCTTCGAGTTCAACATCATGGTGGTCGGGCAGAGCG
GCTTGGGTAAATCCACCTTAATCAACACCCTCTTCAAATCCAAAATCAGCCGGAAGTCGGTGCAGCCCACCTCAG
AGGAGCGCATCCCCAAGACCATCGAGATCAAGTCCATCACGCACGATATTGAGGAGAAAGGCGTCCGGATGAAGC
TGACAGTGATTGACACACCAGGGTTCGGGGACCACATCAACAACGAGAACTGCTGGCAGCCCATCATGAAGTTCA
TCAATGACCAGTACGAGAAATACCTGCAGGAGGAGGTCAACATCAACCGCAAGAAGCGCATCCCGGACACCCGCG
TCCACTGCTGCCTCTACTTCATCCCCGCCACCGGCCACTCCCTCAGGCCCCTGGACATCGAGTTTATGAAACGCC
TGAGCAAGGTGGTCAACATCGTCCCTGTCATCGCCAAGGCGGACACACTCACCCTGGAGGAGAGGGTCCACTTCA
AACAGCGGATCACCGCAGACCTGCTGTCCAACGGCATCGACGTGTACCCCCAGAAGGAATTTGATGAGGACTCGG
AGGACCGGCTGGTGAACGAGAAGTTCCGGGAGATGATCCCATTTGCTGTGGTGGGCAGTGACCACGAGTACCAGG
TCAACGGCAAGAGGATCCTTGGGAGGAAGACCAAGTGGGGTACCATCGAAGTTGAAAACACCACACACTGTGAGT
TTGCCTACCTGCGGGACCTTCTCATCAGGACGCACATGCAGAACATCAAGGACATCACCAGCAGCATCCACTTCG
AGGCGTACCGTGTGAAGCGCCTCAACGAGGGCAGCAGCGCCATGGCCAACGGCGTGGAGGAGAAGGAGCCAGAAG
CCCCGGAGATGTAGACGCCCCCTGCCCACCCCCGGGATCCTGCCCCCAAGTCATTTCCGTCCCCCCCCCAGGCCC
TCCCACCACCCCATTTTATTTTATATGATTTTCTCCATTTGTCATCGTTCCCCACCCCTTCGACATGCTGCCAGG
AAACAAGGGAAGGGGCCTCCCTCCGAGTGAGTCAGTGATGAGGCCGCGGCCTCCCCGAGGTTGTGGGGAGGCTGC
ACTGGAGCCACAGGCAGGGGTGAGAGCACCCACTGAATTGACATGACCCTCTGTCCCCAGGCCTGGCTCCCCGAG
GGCTCAGAAGAGCAGCTTCGGTGTGCAGATCATCCGTCGTGTGGGGTTCTCAGTGCCGGAGCTTGGGGTGGGGGC
CAGGCCTCGCACTTGCAGAGGAGCCCAGTGGGCTGCACGCTCCCCTCCATCCCCATCGGCCCTGTCCCCTGGAGT
GTGTCAGAGCCCAGGGGAGAATGCAGCCCACCAGGAGCACCTGGACCCCCTGCCCGCCACATGGTGTGGCCATCA
CTCAGCCCCTACCCCTGCCCTGCTCCTAAGGGTAGAAAACTCCAGGGTCCCCTGCCACCGACTGCCCAGCCACTC
CAAGCCCCCTGGCAGCTGCCCCTCCTGGAGCAGAAAGTGCCTTTATCTCAGCCATCCGCAGACTGCTGGCCAGAT
GCGGGGACAGGCTGGAATGAGGGAGGCGTCTTCATCTCCCTGCCATCCCCCTCTCACGCCACCCCCGCCCCCACC
GGGCTGCAGGTGCTGCTGATGCGCTGGGATCTGATTGAGGATAAAAAGGAAGGAGAGATGACCCCTACCCCCTCA
TCCCCCAGTTTTGAAAAGGTCTAAGCAAGTGAGTCTGGTGGAGGAGCTGAGGGAGGGAGCCATGGAAGGTGCCAG
AAGGAAGGTTGGCGGGGGCACGTGTGGGCCGTGGCTTGGGCTGGTCAGAGTGGCGTGAGCTGCCCGGCGCCTGCC
CTGCCCAAGTGACCAGGGAAGTGTGTGTGTGTCCATGTGTATGCGTGTCCGTCTGTCTGTCTAGTGTCTGGGTTT
GGCCCAAGACTGGGCTGTAGTTACATTAATGCCCAGCCAGCCACCCCTGCCACTCACCCCTCCTGGCCCAGGCCT
TGCTGACTCTCTGAGCTGGGGAGGTGGGAGGCCAGGCGAGCCTGACTCTGTTGATCTACCCGTGCCTGGGCCCCT
CCCCTCAGAGCCCATGGTAACGAACCCCTAGAAAGGAGAGAACGGGCGTCAGGGGTGCACAGTCCACAGCTGAAG
AGCAAGGTTTCGTGGCAGCACGGCCCGGCCCCTCACCCTCTGTCCCCACGAGGGGACCCATGGGGGCTGTCTTTG
CAGGGCACAGATGACCAAAGTCCCTTCCTGCTTCCTGTTACCTGTCTTGCTCCTGGGGAGAAAGAGGGGCCTGAT
GAGACTCCACTCAGGTGCACACATCACCAGGTGCATCTGCAGGCACCGGGCTGGCTGCTTGCAGCCAGGAGAAGG
TCAGCGAGAAGGAGTGTATGAGTGTGAGTGTGTGTGCATGGAAGTTGGGGCACTGGGCGTCTGACTCCCTCCCCA
CCCAAGAGAGGAAGGACCCCTCACCACCCCCACTGGCGAGACAGTTTACTTTGCCGACTTGCCATGTTTTTGCCA

FIGURE 1874B

AAACCAAGATTTTGAAGGAAATGAGTGGCCAGCGCCAGGGCCCAGGCCATGTGGCCTGCCCAGCCTCAATGTCAC
TTGGCGGCGGGGTGGGGTGGGGGTGGGCAGCAGCATCCCAGCCTTGAGATGCTTCACTTTCCTTCTCTGTAACCA
GACTTTGAAAAATTGTTCGTTTCATCAGGCTCTGTTCCTCAATGGCCTTTTGCTACGTGCCTCCCGAGAAATTTG
TCTTTTTGTATAAATGACAAAGTGTTGAAAATGTATTTCCTGAAATAAATGTTTCAAATGCAGAAACCCAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1875

MERDRISALKRSFEVEEVETPNSTPPRRVQTPLLRATVASSTQKFQDLGVKNSEPSARHVDSLSQRSPKASLRRV
ELSGPKAAEPVSRRTELSIDISSKQVENAGAIGPSRFGLKRAEVLGHKTPEPAPRRTEITIVKPQESAHRRMEPP
ASKVPEVPTAPATDAAPKRVEIQMPKPAEAPTAPSPAQTLENSEPAPVSQLQSRLEPKPQPPVAEATPRSQEATE
AAPSCVGDMADTPRDAGLKQAPASRNEKAPVDFGYVGIDSILEQMRRKAMKQGFEFNIMVVGQSGLGKSTLINTL
FKSKISRKSVQPTSEERIPKTIEIKSITHDIEEKGVRMKLTVIDTPGFGDHINNENCWQPIMKFINDQYEKYLQE
EVNINRKKRIPDTRVHCCLYFIPATGHSLRPLDIEFMKRLSKVVNIVPVIAKADTLTLEERVHFKQRITADLLSN
GIDVYPQKEFDEDSEDRLVNEKFREMIPFAVVGSDHEYQVNGKRILGRKTKWGTIEVENTTHCEFAYLRDLLIRT
HMQNIKDITSSIHFEAYRVKRLNEGSSAMANGVEEKEPEAPEM

FIGURE 1876

AAACCACAAGACAGACTTGCAAAAGAAGGCATGCACAGCTCAGCACTGCTCTGTTGCCTGGTCCTCCTGACTGGG
GTGAGGGCCAGCCCAGGCCAGGGCACCCAGTCTGAGAACAGCTGCACCCACTTCCCAGGCAACCTGCCTAACATG
CTTCGAGATCTCCGAGATGCCTTCAGCAGAGTGAAGACTTTCTTTCAAATGAAGGATCAGCTGGACAACTTGTTG
TTAAAGGAGTCCTTGCTGGAGGACTTTAAGGGTTACCTGGGTTGCCAAGCCTTGTCTGAGATGATCCAGTTTTAC
CTGGAGGAGGTGATGCCCCAAGCTGAGAACCAAGACCCAGACATCAAGGCGCATGTGAACTCCCTGGGGGAGAAC
CTGAAGACCCTCAGGCTGAGGCTACGGCGCTGTCATCGATTTCTTCCCTGTGAAAACAAGAGCAAGGCCGTGGAG
CAGGTGAAGAATGCCTTTAATAAGCTCCAAGAGAAAGGCATCTACAAAGCCATGAGTGAGTTTGACATCTTCATC
AACTACATAGAAGCCTACATGACAATGAAGATACGAAACTGAGACATCAGGGTGGCGACTCTATAGACTCTAGGA
CATAAATTAGAGGTCTCCAAAATCGGATCTGGGGCTCTGGGATAGCTGACCCAGCCCCTTGAGAAACCTTATTGT
ACCTCTCTTATAGAATATTTATTACCTCTGATACCTCAACCCCCATTTCTATTTATTTACTGAGCTTCTCTGTGA
ACGATTTAGAAAGAAGCCCAATATTATAATTTTTTTCAATATTTATTATTTTCACCTGTTTTTAAGCTGTTTCCA
TAGGGTGACACACTATGGTATTTGAGTGTTTTAAGATAAATTATAAGTTACATAAGGGAGGAAAAAAAATGTTCT
TTGGGGAGCCAACAGAAGCTTCCATTCCAAGCCTGACCACGCTTTCTAGCTGTTGAGCTGTTTTCCCTGACCTCC
CTCTAATTTATCTTGTCTCTGGGCTTGGGGCTTCCTAACTGCTACAAATACTCTTAGGAAGAGAAACCAGGGAGC
CCCTTTGATGATTAATTCACCTTCCAGTGTCTCGGAGGGATTCCCCTAACCTCATTCCCCAACCACTTCATTCTT
GAAAGCTGTGGCCAGCTTGTTATTTATAACAACCTAAATTTGGTTCTAGGCCGGGCGCGGTGGCTCACGCCTGTA
ATCCCAGCACTTTGGGAGGCTGAGGCGGGTGGATCACTTGAGGTCAGGAGTTCCTAACCAGCCTGGTCAACATGG
TGAAACCCCGTCTCTACTAAAAATACAAAAATTAGCCGGGCATGGTGGCGCGCACCTGTAATCCCAGCTACTTGG
GAGGCTGAGGCAAGAGAATTGCTTGAACCCAGGAGATGGAAGTTGCAGTGAGCTGATATCATGCCCCTGTACTCC
AGCCTGGGTGACAGAGCAAGACTCTGTCTCAAAAAAATAAAAATAAAAATAAATTTGGTTCTAATAGAACTCAGT
TTTAACTAGAATTTATTCAATTCCTCTGGGAATGTTACATTGTTTGTCTGTCTTCATAGCAGATTTTAATTTTGA
ATAAATAAATGTATCTTATTCACATC

FIGURE 1877

MHSSALLCCLVLLTGVRASPGQGTQSENSCTHFPGNLPNMLRDLRDAFSRVKTFFQMKDQLDNLLLKESLLEDFK
GYLGCQALSEMIQFYLEEVMPQAENQDPDIKAHVNSLGENLKTLRLRLRRCHRFLPCENKSKAVEQVKNAFNKLQ
EKGIYKAMSEFDIFINYIEAYMTMKIRN

FIGURE 1878A

AAGTACTGACTGTTCAAAGCTCAGGCAAACCATGCAGATCCACGTGTTGTTGGAGGAGGCGCTCCCTTCAGGAGA
CCACAGAGGGGGAGTGACTGTGGCTGACCATGTGGGCAGAGGGGCTGGCGGGCTGGCCCCTGCGAGAGGCGGACT
CAGGGCTGCTGGATGCTCCGTCCTTGGCCGCTTTGATCTGGAGCCACGTGTCACCCAGAGCTTTGGCAAAGTGGT
CGTCCACGGAGCCCGTGATGGACACGGAGTTGGGTGCCGGCTCGGGCTCCTTGTAATTCTTGCCCAGGCTCCTGC
GGAAATGCTCCTCCACCACGGGGTCACAGGTGGTGGCAGCGCTCGGTGGCCTCCGGTAGCTGGCAGGCCCGGGCG
CGGCCTCGTGCCGAATTCGGCACGAGGGGGTTTCGGCGGCCGGGAGGGAGTTGTCGGCGCCGCGGCCGCTGCGGA
CGGACGCTCGCCTGCCGGCTGAGGAAAAAGAAGCAACTAACAAAACACTGTGATAATAAGGATTATTCAGTATGC
AGTTTGCAGGATATCCATGACGACATTGAAAATGAATTTTTTGTATTCACCAGATATTCTTATATGAGAAGATCT
ATTTTAAACAGTCTAAATATTTTTTCTTCTGTTGGACCAGC**ATG**GCAGGATTTAAGCGAGGGTATGATGGAAAGA
TTGCTGGATTATATGATCTGGATAAAACCTTGGGTCGAGGCCATTTTGCCGTGGTTAAACTTGCCAGGCATGTCT
TTACGGGTGAAAAGGTGGCAGTAAAAGTTATTGACAAGACAAAACTGGACACTCTAGCTACTGGTCATCTTTTCC
AGGAAGTGAGATGCATGAAACTAGTGCAGCATCCTAACATCGTCCGCCTTTATGAAGTTATTGACACCCAGACCA
AACTATATCTTATTCTAGAACTTGGGGATGAAGGAGATATGTTTGATTATATAATGAAACATGAGGAGGGTCTTA
ATGAAGACTTGCCCAAGAAGTATTTTGCTCAGATAGTTCATGCTATATCTTATTGCCATAAACTCCATGTGGTTC
ACAGAGACTTAAAACCAGAGAATGTAGTCTTCTTTGAAAAACAAGGTCTTGTAAAGTTGACAGACTTTGGGTTCA
GCAACAAATTTCAACCAGGGAAGAAGCTCACTACAAGCTGTGGATCTCTTGCATATTCCGCTCCAGAAATTCTGC
TTGGTGATGAGTATGATGCACCTGCAGTAGATATTTGGAGTCTGGGAGTGATCCTTTTCATGTTGGTGTGTGGGC
AGCCGCCCTTTCAAGAAGCCAATGACAGTGAAACACTGACAATGATCATGGATTGCAAATATACAGTACCATCCC
ATGTGTCTAAAGAGTGTAAAGACCTAATCACACGGATGCTACAGAGAGATCCCAAGAGAAGGGCTTCTTTAGAAG
AGATTGAAAATCATCCTTGGCTTCAGGGAGTGGACCCTTCACCAGCTACAAAGTATAACATTCCCCTTGTGTCAT
ACAAAAATCTCTCGGAAGAGGAGCACAACAGCATCATTCAGCGCATGGTGCTTGGGGACATAGCGGATCGAGACG
CCATTGTAGAAGCCCTGGAAACCAACAGGTATAACCATATCACAGCCACATACTTCCTGCTGGCTGAAAGGATCC
TGAGAGAAAAGCAAGAGAAAGAAATACAGACCAGATCTGCAAGCCCGAGCAATATCAAGGCCCAGTTTAGGCAGT
CATGGCCAACCAAAATTGATGTACCCCAGGACCTTGAGGATGACCTCACGGCCACTCCTTTGTCCCACGCGACTG
TCCCTCAGTCTCCTGCTCGGGCTGCTGACAGTGTCCTCAATGGCCACAGGAGCAAAGGCCTGTGTGACTCAGCTA
AGAAAGATGACCTCCCTGAGTTGGCTGGACCAGCACTCTCTACGGTGCCACCCGCAAGCTTAAAACCCACAGCCA
GTGGGCGGAAGTGTCTGTTCAGGGTGGAAGAAGATGAAGAGGAAGATGAGGAGGACAAGAAACCCATGTCCCTCT
CAACACAAGTGGTTTTGCGCCGGAAGCCATCTGTAACCAACCGCCTGACATCCAGGAAGAGTGCGCCCGTCCTCA
ACCAGATCTTTGAGGAAGGGGAATCTGATGATGAGTTTGACATGGATGAGAATCTGCCTCCCAAGTTGAGCAGGT
TAAAGATGAATATAGCTTCTCCAGGTACAGTTCACAAACGCTACCACCGGAGGAAAAGTCAGGGCCGGGGCTCCA
GCTGCAGTAGTTCGGAGACCAGTGATGATGATTCTGAAAGCCGGCGGCGGCTCGATAAAGATAGCGGGTTCACCT
ACTCCTGGCACCGACGGGATAGCAGCGAGGGGCCCCCTGGCAGTGAGGGGGATGGCGGGGGCCAGAGCAAGCCGA
GCAATGCCAGTGGAGGGGTGGACAAGGCCAGCCCCAGTGAGAACAATGCTGGTGGGGGCAGTCCCTCCAGCGGCT
CGGGTGGCAACCCCACCAATACATCGGGTACCACACGCCGCTGTGCCGGCCCCAGCAACTCCATGCAGCTGGCCT
CTCGCAGTGCTGGGGAGCTCGTTGAGAGCCTCAAACTCATGAGCCTCTGCCTCGGCTCCCAGCTTCATGGGAGCA
CCAAGTACATTATTGATCCACAGAATGGCTTGTCATTTTCCAGTGTGAAAGTCCAAGAGAAATCTACGTGGAAAA
TGTGCATTAGCTCCACAGGGAATGCAGGGCAGGTCCCTGCAGTGGGCGGCATAAAGTTTTTCTCTGACCACATGG
CAGATACCACCACTGAATTGGAACGGATAAAGAGCAAGAACCTGAAAAATAACGTGCTGCAGCTACCTCTGTGCG
AAAAGACCATCTCTGTGAACATCCAGCGGAACCCTAAGGAGGGGCTGCTGTGCGCATCCAGCCCAGCCAGCTGTT
GCCATGTCATC**TGA**CTGTGGCCCCATCTGGCCGCTAGCACGCTTCCTGCTCAGAGCAGTGAAGACCGGCTCACTT
CACTGTTCCATTTGGTTTTACTATTTTAAAGTGGGCGTTAGGAGCAATTATTTATTACCTTTCCATTTGTTCGCC
TGATGATGTGACAATGCATGGTCTTTGTGCATGCTGCTAGACACTTTTCTTTCCCAGCCGAAAAGCCTATTATGT
AATTTTTACATTCATAATTTTAATGTGGATGATCAGGATTAAATCAAGATATATATCTGGAACCTCTTATAAATG
GAGCACTTAGAAATTTGTTGTTCTGCACTTAACCTAGAGAGAGAAAAAATGCTTTTCTTTGTGAAAAATCTGAAT
TCCTGTCCTGACCTTCTGTGATGTGGAAACCCTAGGCTCTGAGACACACTCTCTGGTGTCTGAGACAGAACCAAA
GCAATAACGTTGTGATGCCCACAGGCCTGGAGCCAGCTAGCGACCTTGTGCCGCCCAGCTGTCCATGGCCCGTGC
AGAGCAGAGGACAGTGAGTGTCTGCACTGAGAACCTTAAACCACAGTTGAACATACCCACACCTGTTTGTCTTAA
GCTATAGTGTAAAAACAAAGTTTGGGCTCTGAAAATTTAACTGAAAAAGATTTCCTTGTTTTTGTAATAGGTGAG

FIGURE 1878B

ATAAAGTACTTAGATTTATAAGGCAGCTTCCCCTGTAGTGATAAATTACAAGCAGACAATCTTATTTTGTAATGT
GATGAAGTGATGATGTCTTAACTCTACTTAGAGAGTGTATGTCTGTCTAACAGAACAAAAAGATGCTCTGTGTAA
ATTCCTTCCTGTAGGGCACACTGCAGGATTTCCATGTAGATAGAAGAACTATAGGGCCTAGTACAGAAGGTGCAC
ACAAATGTTGGCAAAGTCAAACCCCATGAATTAAAACCTACTGGAATTTGGTTTTTAGGAGTTTGGTAATTAGAT
TATCTCTTTTGTTATTTTCATTCAGTTATATCCTTTGGCTCAGCTAGCTTTGAAATTGGCTGATGAAAAAATATA
CATAAAAGGGTAAAATTCACACATACAGCAAACAAAAATGCACAAAGCCTGCTTCGTAACTTTTTTTTCTGGAAT
TGTTTTTCACTTTGCCTTTTTCTGCCAAAACAATAATCAAAGAACTCTTGCTTTAACCTATTCCTGTACAAAGAC
TGTTTTTGACCAGATAATCATCTGTTGTGGCATTCTATCTTGTAGGACACTGTATATTGCAAATTGCTGATTATG
GAAGGGGCCAGTTGCTGTTTTTTCATGCAGTGCCCTGGGAGTCTTAAAAGCAGTGCTTAGCAACATTGGTGATAG
CATGTGGCTGGGACCCAGGGCCCTTCCCCACTCTTCAGCCCCGAGTCATGTGTCTGAGGTGACGGACTGAGACGC
ATCTGGTCCTGTAATTCAGAGAGTGGGCACATCACCAAAGAACTGCATTGCTGTGGTCACTGTTTCTTCAAGTAC
ACACTGACTCTGCTACTTTAGGATAAATATATTTTACTCAGAACTCTGAATTTCACAGTATACTTACTAAACTAA
GTAAAAATGATACTTAAAATACTTATTTTACTTTCTAGACCTAGGCTAGATGTTTTAAGCTACAGCTCTAGTTCA
TTGTGATATTTATAATTTGAAAGCTATGAGAATAGATGTGTGGGTGAAGCCATAGAACATATTTGCTTGAAATTC
TTGAGCAGGGATCTTATAAAGGGCCAGAAATAAGATGTGTGGTTCACATAGATAGTGAGCGTAACATCTGTATTA
AACATAGGAGAGAAGTTTATAAAGGGCATTGGCAATAAACTCTTTGTTGCAGCTGTTTTCCAAGCAGTGTAAATA
CTTTTTCCTGTGATTATGTATAGCCTTGGAATGGCACCTTTTAACTAACCCATATGTGTTTGGTTTCAATGGTTT
TTTATATTCAGATGTATATATGGTGCTCACTTTAGGATCAGCAGTGTTGACCATTTATGCTGCATAGCTGTATTA
TAGCCTTATTAGTTGTGTGGTTGACCCTTGGGGTATACAAATGTCAGTCTGAGTGGTGTCTTACTCCTTTGTTTA
TAAGTGAATGATTGTGCATGTTTTGTATGTCATAGTATGTCGTCACATAAAAGGGAGGGAGCGAAAAACCATTAC
ATTAAGATAATATTGGACCAAACTACTTACTTGCTCTAAACAGTTACTTGTACCCCTTAACCTGTCTTCAAAAGT
TGCATATAGTTACAGTAGTGTATAAATTAAATATTGTGGAAAAACAGTCTTGTATTTTTCTGTATGTGTGTATAT
ATATATAATTATGTACTTCTGGCAATTCTATCTGTATTTAAAGATGTGACAATCTTGACACCAATTTTAAGAATA
GCTGTGAGACCGAATTAAAGATAATCCCTACCAAGTGAAAATTGATGTGTGTTAAGAGGGTACAGAATTATCAAC
TGATTTGGTCAGTTGCTTCCAATGCTGGTTGATTTCCCTCATTGTGTAAACATTGACAGGTATGTGACAAATGGG
AAAAAAAATCCAAATAATAAAGTGACATATTGGTGTTCAGCAAT

FIGURE 1879

MAGFKRGYDGKIAGLYDLDKTLGRGHFAVVKLARHVFTGEKVAVKVIDKTKLDTLATGHLFQEVRCMKLVQHPNI
VRLYEVIDTQTKLYLILELGDEGDMFDYIMKHEEGLNEDLPKKYFAQIVHAISYCHKLHVVHRDLKPENVVFFEK
QGLVKLTDFGFSNKFQPGKKLTTSCGSLAYSAPEILLGDEYDAPAVDIWSLGVILFMLVCGQPPFQEANDSETLT
MIMDCKYTVPSHVSKECKDLITRMLQRDPKRRASLEEIENHPWLQGVDPSPATKYNIPLVSYKNLSEEEHNSIIQ
RMVLGDIADRDAIVEALETNRYNHITATYFLLAERILREKQEKEIQTRSASPSNIKAQFRQSWPTKIDVPQDLED
DLTATPLSHATVPQSPARAADSVLNGHRSKGLCDSAKKDDLPELAGPALSTVPPASLKPTASGRKCLFRVEEDEE
EDEEDKKPMSLSTQVVLRRKPSVTNRLTSRKSAPVLNQIFEEGESDDEFDMDENLPPKLSRLKMNIASPGTVHKR
YHRRKSQGRGSSCSSSETSDDDSESRRRLDKDSGFTYSWHRRDSSEGPPGSEGDGGGQSKPSNASGGVDKASPSE
NNAGGGSPSSGSGGNPTNTSGTTRRCAGPSNSMQLASRSAGELVESLKLMSLCLGSQLHGSTKYIIDPQNGLSFS
SVKVQEKSTWKMCISSTGNAGQVPAVGGIKFFSDHMADTTTELERIKSKNLKNNVLQLPLCEKTISVNIQRNPKE
GLLCASSPASCCHVI

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FIGURE 1880

AATTCCGGAATTCCCCGGCCTGGCCAGGGCGGAGCGGCGCCCAGTAGGGACCCATTCATTGTGCCGGCGCCTCAC
TGGGCACGGGGCCCAAGCTGACGGCGTGCACGGGAGCCTGCGGAGCCTGGGTGGGAAGAACAGGCCCCTGGAGGG
CACTTGACCTTAAGCCTCTTTTCCTCCGCAGAGAGGAAGCGGGAGAGGAGCCCACGTCGCCTGTCACCCAATATC
TCCAGCCGCGCAGTCCCGAAGAGTGTAAG**ATG**TTCGCCTGCGCCAAGCTCGCCTGCACCCCCTCTCTGATCCGAG
CTGGATCCAGAGTTGCATACAGACCAATTTCTGCATCAGTGTTATCTCGACCAGAGGCTAGTAGGACTGGAGAGG
GCTCTACGGTATTTAATGGGGCCCAGAATGGTGTGTCTCAGCTAATCCAAAGGGAGTTTCAGACCAGTGCAATCA
GCAGAGACATTGATACTGCTGCCAAATTTATTGGTGCAGGTGCTGCAACAGTAGGAGTGGCTGGTTCTGGTGCTG
GTATTGGAACAGTCTTTGGCAGCCTTATCATTGGTTATGCCAGAAACCCTTCGCTGAAGCAGCAGCTGTTCTCAT
ATGCTATCCTGGGATTTGCCTTGTCTGAAGCTATGGGTCTCTTTTGTTTGATGGTTGCTTTCTTGATTTTGTTTG
CCATG**TAA**CAAATTACTGCTTGACATGTTGGCATTCATATTAATTACGGATGTAATTCTGTGTATCTTACTGTGA
CTCCGAAAACTGTAGTATTGGTGTCATGGGAATGTACGTTATTTCCAAAGTCATTTCATTAAAGATGAAAACTTT
A

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FIGURE 1881

MFACAKLACTPSLIRAGSRVAYRPISASVLSRPEASRTGEGSTVFNGAQNGVSQLIQREFQTSAISRDIDTAAKF
IGAGAATVGVAGSGAGIGTVFGSLIIGYARNPSLKQQLFSYAILGFALSEAMGLFCLMVAFLILFAM

FIGURE 1882

AATTCCGGAATTCCCCGGCCTGGCCAGGGCGGAGCGGCGCCCAGTAGGGACCCATTCATTGTGCCGGCGCCTCAC
TGGGCACGGGGCCCAAGCTGACGGCGTGCACGGGAGCCTGCGGAGCCTGGGTGGGAAGAACAGGCCCCTGGAGGG
CACTTGACCTTAAGCCTCTTTTCCTCCGCAGAGAGGAAGCGGGAGAGGAGCCCACGTCGCCTGTCACCCAATATC
TCCAGCCGCGCAGTCCCGAAGAGTGTAAGATGTTCGCCTGCGCCAAGCTCGCCTGCACCCCCTCTCTGATCCGAG
CTGGATCCAGAGTTGCATACAGACCAATTTCTGCATCAGTGTTATCTCGACCAGAGGCTAGTAGGACTGGAGAGG
GCTCTACGGTATTTAATGGGGCCCAGAATGGTGTGTCTCAGCTAATCCAAAGGGAGTTTCAGACCAGTGCAATCA
GCAGAGACATTGATACTGCTGCCAAATTTATTGGTGCAGGTGCTGCAACAGTAGGAGTGGCTGGTTCTGGTGCTG
GTATTGGAACAGTCTTTGGCAGCCTTATCATTGGTTATGCCAGAAACCCTTCGCTGAAGCAGCAGCTGTTCTCAT
ATGCTATCCTGGGATTTGCCTTGTCTGAAGCTATGGGTCTCTTTTGTTTGATGGTTGCTTTCTTGATTTTGTTTG
CCATGTAACAAATTACTGCTTGACATGTTGGCATTCATATTAATTACGGATGTAATTCTGTGTATCTTACTGTGA
CTCCGAAAACTGTAGTATTGGTGTCATGGGAATGTACGTTATTTCCAAAGTCATTTCATTAAAGATGAAAACTTT
A

FIGURE 1883

MFACAKLACTPSLIRAGSRVAYRPISASVLSRPEASRTGEGSTVFNGAQNGVSQLIQREFQTSAISRDIDTAAKF
IGAGAATVGVAGSGAGIGTVFGSLIIGYARNPSLKQQLFSYAILGFALSEAMGLFCLMVAFLILFAM

FIGURE 1884A

GGCGGCATGGAGGCGGCGCATCTGCTCCCGGCCGCCGACGTGCTGCGCCACTTCTCGGTGACAGCCGAGGGCGGC
CTGAGCCCGGCGCAGGTGACCGGCGCGCGGGAGCGCTACGGCCCCAACGAGCTCCCGAGTGAGGAAGGGAAGTCC
CTGTGGGAGCTGGTGCTGGAACAGTTTGAGGACCTCCTGGTGCGCATCCTGCTGCTGGCTGCCCTTGTCTCCTTT
GTCCTGGCCTGGTTCGAGGAGGGCGAGGAGACCACGACCGCCTTCGTGGAGCCCCTGGTCATCATGCTGATCCTC
GTGGCCAACGCCATTGTGGGCGTGTGGCAGGAACGCAACGCCGAGAGTGCCATCGAGGCCCTGAAGGAGTATGAG
CCTGAGATGGGCAAGGTGATCCGCTCGGACCGCAAGGGCGTGCAGAGGATCCGTGCCCGGGACATCGTCCCAGGG
GACATTGTAGAAGTGGCAGTGGGGGACAAAGTGCCTGCTGACCTCCGCCTCATCGAGATCAAGTCCACCACGCTG
CGAGTGGACCAGTCCATCCTGACGGGTGAATCTGTGTCCGTGACCAAGCACACAGAGGCCATCCCAGACCCCAGA
GCTGTGAACCAGGACAAGAAGAACATGCTGTTTTCTGGCACCAATATCACATCGGGCAAAGCGGTGGGTGTGGCC
GTGGCCACCGGCCTGCACACGGAGCTGGGCAAGATCCGGAGCCAGATGGCGGCAGTCGAGCCCGAGCGGACGCCG
CTGCAGCGCAAGCTGGACGAGTTTGGACGGCAGCTGTCCCACGCCATCTCTGTGATCTGCGTGGCCGTGTGGGTC
ATCAACATCGGCCACTTCGCCGACCCGGCCCACGGTGGCTCCTGGCTGCGTGGCGCTGTCTACTACTTCAAGATC
GCCGTGGCCCTGGCGGTGGCGGCCATCCCCGAGGGCCTCCCGGCTGTCATCACTACATGCCTGGCACTGGGCACG
CGGCGCATGGCACGCAAGAACGCCATCGTGCGAAGCCTGCCGTCCGTGGAGACCCTGGGCTGCACCTCAGTCATC
TGCTCCGACAAGACGGGCACGCTCACCACCAATCAGATGTCTGTCTGCCGGATGTTCGTGGTAGCCGAGGCCGAT
GCGGGCTCCTGCCTTTTGCACGAGTTCACCATCTCGGGTACCACGTATACCCCCGAGGGCGAAGTGCGGCAGGGG
GATCAGCCTGTGCGCTGCGGCCAGTTCGACGGGCTGGTGGAGCTGGCGACCATCTGCGCCCTGTGCAACGACTCG
GCGCTGGACTACAACGAGGCCAAGGGTGTGTACGAGAAGGTGGGAGAGGCCACGGAGACAGCTCTGACTTGCCTG
GTGGAGAAGATGAATGTGTTCGACACCGACCTGCAGGCTCTGTCCCGGGTGGAGCGAGCTGGCGCCTGTAACACG
GTCATCAAGCAGCTGATGCGGAAGGAGTTCACCCTGGAGTTCTCCCGAGACCGGAAATCCATGTCCGTGTACTGC
ACGCCCACCCGCCCTCACCCTACCGGCCAGGGCAGCAAGATGTTTGTGAAGGGGGCTCCTGAGAGTGTGATCGAG
CGCTGTAGCTCAGTCCGCGTGGGGAGCCGCACAGCACCCCTGACCCCCACCTCCAGGGAGCAGATCCTGGCAAAG
ATCCGGGATTGGGGCTCAGGCTCAGACACGCTGCGCTGCCTGGCACTGGCCACCCGGGACGCGCCCCCAAGGAAG
GAGGACATGGAGCTGGACGACTGCAGCAAGTTTGTGCAGTACGAGACGGACCTGACCTTCGTGGGCTGCGTAGGC
ATGCTGGACCCGCCGCGACCTGAGGTGGCTGCCTGCATCACACGCTGCTACCAGGCGGGCATCCGCGTGGTCATG
ATCACGGGGGATAACAAAGGCACTGCCGTGGCCATCTGCCGCAGGCTTGGCATCTTTGGGGACACGGAAGACGTG
GCGGGCAAGGCCTACACGGGCCGCGAGTTTGATGACCTCAGCCCCGAGCAGCAGCGCCAGGCCTGCCGCACCGCC
CGCTGCTTCGCCCGCGTGGAGCCCGCACACAAGTCCCGCATCGTGGAGAACCTGCAGTCCTTTAACGAGATCACT
GCTATGACTGGCGATGGAGTGAACGACGCACCAGCCCTGAAGAAAGCAGAGATCGGCATCGCCATGGGCTCAGGC
ACGGCCGTGGCCAAGTCGGCGGCAGAGATGGTGCTGTCAGATGACAACTTTGCCTCCATCGTGGCTGCGGTGGAG
GAGGGCCGGGCCATCTACAGCAACATGAAGCAATTCATCCGCTACCTCATCTCCTCCAATGTTGGCGAGGTCGTC
TGCATCTTCCTCACGGCAATTCTGGGCCTGCCCGAAGCCCTGATCCCTGTGCAGCTGCTCTGGGTGAACCTGGTG
ACAGATGGCCTACCTGCCACGGCTCTGGGCTTCAACCCGCCAGACCTGGACATCATAGAGAAGCTGCCCCGGAGC
CCCCGAGAAGCCCTCATCAGTGGCTGGCTCTTCTTCCGATACCTGGCTATCGGAGTGTACGTAGGCCTGGCCACA
GTGGCTGCCGCCACCTGGTGGTTTGTGTATGACGCCGAGGGACCTCACATCAACTTCTACCAGCTGAGGAACTTC
CTGAAGTGCTCCGAAGACAACCCGCTCTTTGCCGGCATCGACTGTGAGGTGTTCGAGTCACGCTTCCCCACCACC
ATGGCCTTGTCCGTGCTCGTGACCATTGAAATGTGCAATGCCCTCAACAGCGTCTCGGAGAACCAGTCGCTGCTG
CGGATGCCGCCCTGGATGAACCCCTGGCTGCTGGTGGCTGTGGCCATGTCCATGGCCCTGCACTTCCTCATCCTG
CTCGTGCCGCCCCTGCCTCTCATTTTCCAGGTGACCCCACTGAGCGGGCGCCAGTGGGTGGTGGTGCTCCAGATA
TCTCTGCCTGTCATCCTGCTGGATGAGGCCCTCAAGTACCTGTCCCGGAACCACATGCACGAAGAAATGAGCCAG
AAGTGAGCGCTGGGAACAGGGTGGAGTCTCCGGTGTGTACCTCAGACTGATGGTGCCCATGTGTTCGCCTCCGCC
CCCCACCCTTGCCACCACACTCGCCCACTTGCCCACCGGGTCCCGCCGGATAAATGACAGGCCCGAGGTCAGAAT
GGCCATCCCCGGGCCCCGTCCTGGGGTCTCTGTCCCCACTTCCTTCTGGCCTGGGAGGTCTGTAATTCCTGTCTC
CTGGACTCTCCTGGGAAGTTCCCTGCTCTGCAGCTCTGGCCCAGGAGCTGCAGGCTGGGAGGGGGCAGCCAAGAA
GCCGGAGCTGGCAGCATACCCAGAGATCCGGGGCCCCCCCCACCCCCAAATCACGAGTGCAGCTGGAGCTTGCTCC
CCCTTGTTCGGAAGCTGGACGTTCACTTGGTGACTGGTGCCTCTGCACTGACGGAGGACTCTGGGGGTCCTTCTT
ACCGGCTCTGACCTCTCTCTTCGTGCCTGGTCTGGGACTGGGTCAGCCCTGGGGGATCAGAAGGGGCCATCTGGG
CCCAGCTGTGTACAGCGAGGGTGGGCAGCCCCCTCCACTCCACTCTGCTTCCACAAAGTCGGCTCCCGAGAGCTC

FIGURE 1884B

GAGGCTGCTTCTGTTTATATGTGCAGGGCCCGGGCCGGTGAAGGGTCAGAGAGACGGACACAAGGAGCCGGCAGG
AGGGCGGAGCGAGGATGTCCTTTCCCGGGAGACAAGTCGGGAAAGCCTGGCTGGACTGCCTCAGCCCCGCGCGCC
TCCTGGACTCAGGGTTCCCCGTCCTGAGCTCGGGAGATGTTCAGAGTCACACTGCCGCCCGGTCTGCCACGCAGA
GGTCCAACTTGCCACCCGCGTCCCTGGTACCTGAGACCACCGACATCCTCAGGTTCCTGACCGTGGCGCCCTTCT
ACCCAGCCCAGTGTGCGGCCGCCGCGCTGTCTGCACAGCTGGGGGCCTCTGAGCCTGGTGGGCTTCCTGGACTCT
TGGCCTCACTCCTTGCCCCCTCCCCACGACACCCATGAGCCGAAAGGATGTCACTAAGGATGGCTGATTCCCCAA
GGGCACCCGCTCTCCCTCCCTCCCTGCTGGAGGAACACGTCATATCÂGATGAGAGGAAGATGGCCTCTGATGGAC
AGAATTTTTCTCTTAACTCAGCTTTTGCTACTTTGGCAAAAACTAGCGAGGGGTAGCAGAAACCTGCACCAAGGA
TTGTCCCTATGTCTTGGCCCCTCCTAGAGCGTGTGCAGACTGATGATTTTATATGTAAATCAAGACTCACATCCC
TTTCCTAGTCCCCCACATCCAAAGCCCCTCAGCCTGCCTTGCAGACCAATGGGCTCCATGTTCTGTAGCCCCCTC
CCCTACGCCTCACCCCTCCTCCCTCTCACAGGTTCTGGGCGGCCAGTGAGAGAAACGCAGTGGGGGAGGCAGGGA
GTCTGGTGCCTGCAGAGATTCTCTGCTTCTTTCCTGGGGGGAGGTGGGGAGGTCTTAGCAGGAGCGGGCCCTGTA
CCCACCTGCTGACCTGCTGTTTGGTAGAGAAATAAAGGTTGTGTGACTGGGGG

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FIGURE 1885

MEAAHLLPAADVLRHFSVTAEGGLSPAQVTGARERYGPNELPSEEGKSLWELVLEQFEDLLVRILLLAALVSFVL
AWFEEGEETTTAFVEPLVIMLILVANAIVGVWQERNAESAIEALKEYEPEMGKVIRSDRKGVQRIRARDIVPGDI
VEVAVGDKVPADLRLIEIKSTTLRVDQSILTGESVSVTKHTEAIPDPRAVNQDKKNMLFSGTNITSGKAVGVAVA
TGLHTELGKIRSQMAAVEPERTPLQRKLDEFGRQLSHAISVICVAVWVINIGHFADPAHGGSWLRGAVYYFKIAV
ALAVAAIPEGLPAVITTCLALGTRRMARKNAIVRSLPSVETLGCTSVICSDKTGTLTTNQMSVCRMFVVAEADAG
SCLLHEFTISGTTYTPEGEVRQGDQPVRCGQFDGLVELATICALCNDSALDYNEAKGVYEKVGEATETALTCLVE
KMNVFDTDLQALSRVERAGACNTVIKQLMRKEFTLEFSRDRKSMSVYCTPTRPHPTGQGSKMFVKGAPESVIERC
SSVRVGSRTAPLTPTSREQILAKIRDWGSGSDTLRCLALATRDAPPRKEDMELDDCSKFVQYETDLTFVGCVGML
DPPRPEVAACITRCYQAGIRVVMITGDNKGTAVAICRRLGIFGDTEDVAGKAYTGREFDDLSPEQQRQACRTARC
FARVEPAHKSRIVENLQSFNEITAMTGDGVNDAPALKKAEIGIAMGSGTAVAKSAAEMVLSDDNFASIVAAVEEG
RAIYSNMKQFIRYLISSNVGEVVCIFLTAILGLPEALIPVQLLWVNLVTDGLPATALGFNPPDLDIIEKLPRSPR
EALISGWLFFRYLAIGVYVGLATVAAATWWFVYDAEGPHINFYQLRNFLKCSEDNPLFAGIDCEVFESRFPTTMA
LSVLVTIEMCNALNSVSENQSLLRMPPWMNPWLLVAVAMSMALHFLILLVPPLPLIFQVTPLSGRQWVVVLQISL
PVILLDEALKYLSRNHMHEEMSQK

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FIGURE 1886A

GGCGGCATGGAGGCGGCGCATCTGCTCCCGGCCGCCGACGTGCTGCGCCACTTCTCGGTGACAGCCGAGGGCGGC
CTGAGCCCGGCGCAGGTGACCGGCGCGCGGGAGCGCTACGGCCCCAACGAGCTCCCGAGTGAGGAAGGGAAGTCC
CTGTGGGAGCTGGTGCTGGAACAGTTTGAGGACCTCCTGGTGCGCATCCTGCTGCTGGCTGCCCTTGTCTCCTTT
GTCCTGGCCTGGTTCGAGGAGGGCGAGGAGACCACGACCGCCTTCGTGGAGCCCCTGGTCATCATGCTGATCCTC
GTGGCCAACGCCATTGTGGGCGTGTGGCAGGAACGCAACGCCGAGAGTGCCATCGAGGCCCTGAAGGAGTATGAG
CCTGAGATGGGCAAGGTGATCCGCTCGGACCGCAAGGGCGTGCAGAGGATCCGTGCCCGGGACATCGTCCCAGGG
GACATTGTAGAAGTGGCAGTGGGGGACAAAGTGCCTGCTGACCTCCGCCTCATCGAGATCAAGTCCACCACGCTG
CGAGTGGACCAGTCCATCCTGACGGGTGAATCTGTGTCCGTGACCAAGCACACAGAGGCCATCCCAGACCCCAGA
GCTGTGAACCAGGACAAGAAGAACATGCTGTTTTCTGGCACCAATATCACATCGGGCAAAGCGGTGGGTGTGGCC
GTGGCCACCGGCCTGCACACGGAGCTGGGCAAGATCCGGAGCCAGATGGCGGCAGTCGAGCCCGAGCGGACGCCG
CTGCAGCGCAAGCTGGACGAGTTTGGACGGCAGCTGTCCCACGCCATCTCTGTGATCTGCGTGGCCGTGTGGGTC
ATCAACATCGGCCACTTCGCCGACCCGGCCCACGGTGGCTCCTGGCTGCGTGGCGCTGTCTACTACTTCAAGATC
GCCGTGGCCCTGGCGGTGGCGGCCATCCCCGAGGGCCTCCCGGCTGTCATCACTACATGCCTGGCACTGGGCACG
CGGCGCATGGCACGCAAGAACGCCATCGTGCGAAGCCTGCCGTCCGTGGAGACCCTGGGCTGCACCTCAGTCATC
TGCTCCGACAAGACGGGCACGCTCACCACCAATCAGATGTCTGTCTGCCGGATGTTCGTGGTAGCCGAGGCCGAT
GCGGGCTCCTGCCTTTTGCACGAGTTCACCATCTCGGGTACCACGTATACCCCCGAGGGCGAAGTGCGGCAGGGG
GATCAGCCTGTGCGCTGCGGCCAGTTCGACGGGCTGGTGGAGCTGGCGACCATCTGCGCCCTGTGCAACGACTCG
GCGCTGGACTACAACGAGGCCAAGGGTGTGTACGAGAAGGTGGGAGAGGCCACGGAGACAGCTCTGACTTGCCTG
GTGGAGAAGATGAATGTGTTCGACACCGACCTGCAGGCTCTGTCCCGGGTGGAGCGAGCTGGCGCCTGTAACACG
GTCATCAAGCAGCTGATGCGGAAGGAGTTCACCCTGGAGTTCTCCCGAGACCGGAAATCCATGTCCGTGTACTGC
ACGCCCACCCGCCCTCACCCTACCGGCCAGGGCAGCAAGATGTTTGTGAAGGGGGCTCCTGAGAGTGTGATCGAG
CGCTGTAGCTCAGTCCGCGTGGGGAGCCGCACAGCACCCCTGACCCCCACCTCCAGGGAGCAGATCCTGGCAAAG
ATCCGGGATTGGGGCTCAGGCTCAGACACGCTGCGCTGCCTGGCACTGGCCACCCGGGACGCGCCCCCAAGGAAG
GAGGACATGGAGCTGGACGACTGCAGCAAGTTTGTGCAGTACGAGACGGACCTGACCTTCGTGGGCTGCGTAGGC
ATGCTGGACCCGCCGCGACCTGAGGTGGCTGCCTGCATCACACGCTGCTACCAGGCGGGCATCCGCGTGGTCATG
ATCACGGGGGATAACAAAGGCACTGCCGTGGCCATCTGCCGCAGGCTTGGCATCTTTGGGGACACGGAAGACGTG
GCGGGCAAGGCCTACACGGGCCGCGAGTTTGATGACCTCAGCCCCGAGCAGCAGCGCCAGGCCTGCCGCACCGCC
CGCTGCTTCGCCCGCGTGGAGCCCGCACACAAGTCCCGCATCGTGGAGAACCTGCAGTCCTTTAACGAGATCACT
GCTATGACTGGCGATGGAGTGAACGACGCACCAGCCCTGAAGAAAGCAGAGATCGGCATCGCCATGGGCTCAGGC
ACGGCCGTGGCCAAGTCGGCGGCAGAGATGGTGCTGTCAGATGACAACTTTGCCTCCATCGTGGCTGCGGTGGAG
GAGGGCCGGGCCATCTACAGCAACATGAAGCAATTCATCCGCTACCTCATCTCCTCCAATGTTGGCGAGGTCGTC
TGCATCTTCCTCACGGCAATTCTGGGCCTGCCCGAAGCCCTGATCCCTGTGCAGCTGCTCTGGGTGAACCTGGTG
ACAGATGGCCTACCTGCCACGGCTCTGGGCTTCAACCCGCCAGACCTGGACATCATAGAGAAGCTGCCCCGGAGC
CCCCGAGAAGCCCTCATCAGTGGCTGGCTCTTCTTCCGATACCTGGCTATCGGAGTGTACGTAGGCCTGGCCACA
GTGGCTGCCGCCACCTGGTGGTTTGTGTATGACGCCGAGGGACCTCACATCAACTTCTACCAGCTGAGGAACTTC
CTGAAGTGCTCCGAAGACAACCCGCTCTTTGCCGGCATCGACTGTGAGGTGTTCGAGTCACGCTTCCCCACCACC
ATGGCCTTGTCCGTGCTCGTGACCATTGAAATGTGCAATGCCCTCAACAGCGTCTCGGAGAACCAGTCGCTGCTG
CGGATGCCGCCCTGGATGAACCCCTGGCTGCTGGTGGCTGTGGCCATGTCCATGGCCCTGCACTTCCTCATCCTG
CTCGTGCCGCCCCTGCCTCTCATTTTCCAGGTGACCCCACTGAGCGGGCGCCAGTGGGTGGTGGTGCTCCAGATA
TCTCTGCCTGTCATCCTGCTGGATGAGGCCCTCAAGTACCTGTCCCGGAACCACATGCACGAAGAAATGAGCCAG
AAGTGAGCGCTGGGAACAGGGTGGAGTCTCCGGTGTGTACCTCAGACTGATGGTGCCCATGTGTTCGCCTCCGCC
CCCCACCCTTGCCACCACACTCGCCCACTTGCCCACCGGGTCCCGCCGGATAAATGACAGGCCCGAGGTCAGAAT
GGCCATCCCCGGGCCCCGTCCTGGGGTCTCTGTCCCCACTTCCTTCTGGCCTGGGAGGTCTGTAATTCCTGTCTC
CTGGACTCTCCTGGGAAGTTCCCTGCTCTGCAGCTCTGGCCCAGGAGCTGCAGGCTGGGAGGGGGCAGCCAAGAA
GCCGGAGCTGGCAGCATACCCAGAGATCCGGGGCCCCCCCACCCCCAAATCACGAGTGCAGCTGGAGCTTGCTCC
CCCTTGTTCGGAAGCTGGACGTTCACTTGGTGACTGGTGCCTCTGCACTGACGGAGGACTCTGGGGGTCCTTCTT
ACCGGCTCTGACCTCTCTCTTCGTGCCTGGTCTGGGACTGGGTCAGCCCTGGGGGATCAGAAGGGGCCATCTGGG
CCCAGCTGTGTACAGCGAGGGTGGGCAGCCCCCTCCACTCCACTCTGCTTCCACAAAGTCGGCTCCCGAGAGCTC

FIGURE 1886B

GAGGCTGCTTCTGTTTATATGTGCAGGGCCCGGGCCGGTGAAGGGTCAGAGAGACGGACACAAGGAGCCGGCAGG
AGGGCGGAGCGAGGATGTCCTTTCCCGGGAGACAAGTCGGGAAAGCCTGGCTGGACTGCCTCAGCCCCGCGCGCC
TCCTGGACTCAGGGTTCCCCGTCCTGAGCTCGGGAGATGTTCAGAGTCACACTGCCGCCCGGTCTGCCACGCAGA
GGTCCAACTTGCCACCCGCGTCCCTGGTACCTGAGACCACCGACATCCTCAGGTTCCTGACCGTGGCGCCCTTCT
ACCCAGCCCAGTGTGCGGCCGCCGCGCTGTCTGCACAGCTGGGGGCCTCTGAGCCTGGTGGGCTTCCTGGACTCT
TGGCCTCACTCCTTGCCCCCTCCCCACGACACCCATGAGCCGAAAGGATGTCACTAAGGATGGCTGATTCCCCAA
GGGCACCCGCTCTCCCTCCCTCCCTGCTGGAGGAACACGTCATATCAGATGAGAGGAAGATGGCCTCTGATGGAC
AGAATTTTTCTCTTAACTCAGCTTTTGCTACTTTGGCAAAAACTAGCGAGGGGTAGCAGAAACCTGCACCAAGGA
TTGTCCCTATGTCTTGGCCCCTCCTAGAGCGTGTGCAGACTGATGATTTTATATGTAAATCAAGACTCACATCCC
TTTCCTAGTCCCCCACATCCAAAGCCCCTCAGCCTGCCTTGCAGACCAATGGGCTCCATGTTCTGTAGCCCCCTC
CCCTACGCCTCACCCCTCCTCCCTCTCACAGGTTCTGGGCGGCCAGTGAGAGAAACGCAGTGGGGGAGGCAGGGA
GTCTGGTGCCTGCAGAGATTCTCTGCTTCTTTCCTGGGGGGAGGTGGGGAGGTCTTAGCAGGAGCGGGCCCTGTA
CCCACCTGCTGACCTGCTGTTTGGTAGAGAAATAAAGGTTGTGTGACTGGGGG

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FIGURE 1887

MEAAHLLPAADVLRHFSVTAEGGLSPAQVTGARERYGPNELPSEEGKSLWELVLEQFEDLLVRILLLAALVSFVL
AWFEEGEETTTAFVEPLVIMLILVANAIVGVWQERNAESAIEALKEYEPEMGKVIRSDRKGVQRIRARDIVPGDI
VEVAVGDKVPADLRLIEIKSTTLRVDQSILTGESVSVTKHTEAIPDPRAVNQDKKNMLFSGTNITSGKAVGVAVA
TGLHTELGKIRSQMAAVEPERTPLQRKLDEFGRQLSHAISVICVAVWVINIGHFADPAHGGSWLRGAVYYFKIAV
ALAVAAIPEGLPAVITTCLALGTRRMARKNAIVRSLPSVETLGCTSVICSDKTGTLTTNQMSVCRMFVVAEADAG
SCLLHEFTISGTTYTPEGEVRQGDQPVRCGQFDGLVELATICALCNDSALDYNEAKGVYEKVGEATETALTCLVE
KMNVFDTDLQALSRVERAGACNTVIKQLMRKEFTLEFSRDRKSMSVYCTPTRPHPTGQGSKMFVKGAPESVIERC
SSVRVGSRTAPLTPTSREQILAKIRDWGSGSDTLRCLALATRDAPPRKEDMELDDCSKFVQYETDLTFVGCVGML
DPPRPEVAACITRCYQAGIRVVMITGDNKGTAVAICRRLGIFGDTEDVAGKAYTGREFDDLSPEQQRQACRTARC
FARVEPAHKSRIVENLQSFNEITAMTGDGVNDAPALKKAEIGIAMGSGTAVAKSAAEMVLSDDNFASIVAAVEEG
RAIYSNMKQFIRYLISSNVGEVVCIFLTAILGLPEALIPVQLLWVNLVTDGLPATALGFNPPDLDIIEKLPRSPR
EALISGWLFFRYLAIGVYVGLATVAAATWWFVYDAEGPHINFYQLRNFLKCSEDNPLFAGIDCEVFESRFPTTMA
LSVLVTIEMCNALNSVSENQSLLRMPPWMNPWLLVAVAMSMALHFLILLVPPLPLIFQVTPLSGRQWVVVLQISL
PVILLDEALKYLSRNHMHEEMSQK

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FIGURE 1888

GGCACGAGGGGAGTGGAAAGTTCTCCGGCAGCCCTGAGATCTCAAGAGTGACATTTGTGAGACCAGCTAATTTGA
TTAAAATTCTCTTGGAATCAGCTTTGCTAGTATCATACCTGTGCCAGATTTCATCATGGGAAACAGCTGTTACAA
CATAGTAGCCACTCTGTTGCTGGTCCTCAACTTTGAGAGGACAAGATCATTGCAGGATCCTTGTAGTAACTGCCC
AGCTGGTACATTCTGTGATAATAACAGGAATCAGATTTGCAGTCCCTGTCCTCCAAATAGTTTCTCCAGCGCAGG
TGGACAAAGGACCTGTGACATATGCAGGCAGTGTAAAGGTGTTTTCAGGACCAGGAAGGAGTGTTCCTCCACCAG
CAATGCAGAGTGTGACTGCACTCCAGGGTTTCACTGCCTGGGGGCAGGATGCAGCATGTGTGAACAGGATTGTAA
ACAAGGTCAAGAACTGACAAAAAAAGGTTGTAAAGACTGTTGCTTTGGGACATTTAACGATCAGAAACGTGGCAT
CTGTCGACCCTGGACAAACTGTTCTTTGGATGGAAAGTCTGTGCTTGTGAATGGGACGAAGGAGAGGGACGTGGT
CTGTGGACCATCTCCAGCCGACCTCTCTCCGGGAGCATCCTCTGTGACCCCGCCTGCCCCTGCGAGAGAGCCAGG
ACACTCTCCGCAGATCATCTCCTTCTTTCTTGCGCTGACGTCGACTGCGTTGCTCTTCCTGCTGTTCTTCCTCAC
GCTCCGTTTCTCTGTTGTTAAACGGGGCAGAAAGAAACTCCTGTATATATTCAAACAACCATTTATGAGACCAGT
ACAAACTACTCAAGAGGAAGATGGCTGTAGCTGCCGATTTCCAGAAGAAGAAGAAGGAGGATGTGAACTGTGAAA
TGGAAGTCAATAGGGCTGTTGGGACTTTCTTGAAAAGAAGCAAGGAAATATGAGTCATCCGCTATCACAGCTTTC
AAAAGCAAGAACACCATCCTACATAATACCCAGGATTCCCCCAACACACGTTCTTTTCTAAATGCCAATGAGTTG
GCCTTTAAAAATGCACCACTTTTTTTTTTTTTTTGACAGGGTCTCACTCTGTCACCCAGGCTGGAGTGCAGTGGC
ACCACCATGGCTCTCTGCAGCCTTGACCTCTGGGAGCTCAAGTGATCCTCCTGCCTCAGTCTCCTGAGTAGCTGG
AACTACAAGGAAGGGCCACCACACCTGACTAACTTTTTTGTTTTTTGTTTGGTAAAGATGGCATTTCACCATGTT
GTACAGGCTGGTCTCAAACTCCTAGGTTCACTTTGGCCTCCCAAAGTGCTGGGATTACAGACATGAACTGCCAGG
CCCGGCCAAAATAATGCACCACTTTTAACAGAACAGACAGATGAGGACAGAGCTGGTGATAAAAAAAAAAAAAAA
AAAGCATTTTCTAGATACCACTTAACAGGTTTGAGCTAGTTTTTTTGAAATCCAAAGAAAATTATAGTTTAAATT
CAATTACATAGTCCAGTGGTCCAACTATAATTATAATCAAAATCAATGCAGGTTTGTTTTTTGGTGCTAATATGA
CATATGACAATAAGCCACGAGGTGCAGTAAGTACCCGACTAAAGTTTCCGTGGGTTCTGTCATGTAACACGACAT
GCTCCACCGTCAGGGGGGAGTATGAGCAGAGTGCCTGAGTTTAGGGTCAAGGACAAAAAACCTCAGGCCTGGAGG
AAGTTTTGGAAAGAGTTCAAGTGTCTGTATATCCTATGGTCTTCTCCATCCTCACACCTTCTGCCTTTGTCCTGC
TCCCTTTTAAGCCAGGTTACATTCTAAAAATTCTTAACTTTTAACATAATATTTTATACCAAAGCCAATAAATGA
ACTGCATATGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1889

MGNSCYNIVATLLLVLNFERTRSLQDPCSNCPAGTFCDNNRNQICSPCPPNSFSSAGGQRTCDICRQCKGVFRTR
KECSSTSNAECDCTPGFHCLGAGCSMCEQDCKQGQELTKKGCKDCCFGTFNDQKRGICRPWTNCSLDGKSVLVNG
TKERDVVCGPSPADLSPGASSVTPPAPAREPGHSPQIISFFLALTSTALLFLLFFLTLRFSVVKRGRKKLLYIFK
QPFMRPVQTTQEEDGCSCRFPEEEEGGCEL

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FIGURE 1890

GCGGCGCGGAGCGGGCGTGCTGAGCCCCGGCCGCCGGCCCGGCATGGGCGTCTCCCGCGGGCCCTCCGCCGGCCG
GGGCTAGGGCCGGATGGAGCCGCGGGACGGTAGCCCCGAGGCCCGGAGCAGCGACTCCGAGTCGGCTTCCGCCTC
GTCCAGCGGCTCCGAGCGCGACGCCGGTCCCGAGCCGGACAAGGCGCCGCGGCGACTCAACAAGCGGCGCTTCCC
GGGGCTGCGGCTCTTCGGGCACAGGAAAGCCATCACCAAGTCGGGCCTCCAGCACCTGGCCCCCCCTCCGCCCAC
CCCTGGGGCCCCGTGCAGCGAGTCAGAGCGGCAGATCCGGAGTACAGTGGACTGGAGCGAGTCAGCGACATATGG
GGAGCACATCTGGTTCGAGACCAACGTGTCCGGGGACTTCTGCTACGTTGGGGAGCAGTACTGTGTAGCCAGGAT
GCTGAAGTCAGTGTCTCGAAGAAAGTGCGCAGCCTGCAAGATTGTGGTGCACACGCCCTGCATCGAGCAGCTGGA
GAAGATAAATTTCCGCTGTAAGCCGTCCTTCCGTGAATCAGGCTCCAGGAATGTCCGCGAGCCAACCTTTGTACG
GCACCACTGGGTACACAGACGACGCCAGGACGGCAAGTGTCGGCACTGTGGGAAGGGATTCCAGCAGAAGTTCAC
CTTCCACAGCAAGGAGATTGTGGCCATCAGCTGCTCGTGGTGCAAGCAGGCATACCACAGCAAGGTGTCCTGCTT
CATGCTGCAGCAGATCGAGGAGCCGTGCTCGCTGGGGGTCCACGCAGCCGTGGTCATCCCGCCCACCTGGATCCT
CCGCGCCCGGAGGCCCCAGAATACTCTGAAAGCAAGCAAGAAGAAGAAGAGGGCATCCTTCAAGAGGAAGTCCAG
CAAGAAAGGGCCTGAGGAGGGCCGCTGGAGACCCTTCATCATCAGGCCCACCCCCTCCCCGCTCATGAAGCCCCT
GCTGGTGTTTGTGAACCCCAAGAGTGGGGGCAACCAGGGTGCAAAGATCATCCAGTCTTTCCTCTGGTATCTCAA
TCCCCGACAAGTCTTCGACCTGAGCCAGGGAGGGCCCAAGGAGGCGCTGGAGATGTACCGCAAAGTGCACAACCT
GCGGATCCTGGCGTGCGGGGGCGACGGCACGGTGGGCTGGATCCTCTCCACCCTGGACCAGCTACGCCTGAAGCC
GCCACCCCCTGTTGCCATCCTGCCCCTGGGTACTGGCAACGACTTGGCCCGAACCCTCAACTGGGGTGGGGGCTA
CACAGATGAGCCTGTGTCCAAGATCCTCTCCCACGTGGAGGAGGGGAACGTGGTACAGCTGGACCGCTGGGACCT
CCACGCTGAGCCCAACCCCGAGGCAGGGCCTGAGGACCGAGATGAAGGCGCCACCGACCGGTTGCCCCTGGATGT
CTTCAACAACTACTTCAGCCTGGGCTTTGACGCCCACGTCACCCTGGAGTTCCACGAGTCTCGAGAGGCCAACCC
AGAGAAATTCAACAGCCGCTTTCGGAATAAGATGTTCTACGCCGGGACAGCTTTCTCTGACTTCCTGATGGGCAG
CTCCAAGGACCTGGCCAAGCACATCCGAGTGGTGTGTGATGGAATGGACTTGACTCCCAAGATCCAGGACCTGAA
ACCCCAGTGTGTTGTTTTCCTGAACATCCCCAGGTACTGTGCGGGCACCATGCCCTGGGGCCACCCTGGGGAGCA
CCACGACTTTGAGCCCCAGCGGCATGACGACGGCTACCTCGAGGTCATTGGCTTCACCATGACGTCGTTGGCCGC
GCTGCAGGTGGGCGGACACGGCGAGCGGCTGACGCAGTGTCGCGAGGTGGTGCTCACCACATCCAAGGCCATCCC
GGTGCAGGTGGATGGCGAGCCCTGCAAGCTTGCAGCCTCACGCATCCGCATCGCCCTGCGCAACCAGGCCACCAT
GGTGCAGAAGGCCAAGCGGCGGAGCGCCGCCCCCCTGCACAGCGACCAGCAGCCGGTGCCAGAGCAGTTGCGCAT
CCAGGTGAGTCGCGTCAGCATGCACGACTATGAGGCCCTGCACTACGACAAGGAGCAGCTCAAGGAGGCCTCTGT
GCCGCTGGGCACTGTGGTGGTCCCAGGAGACAGTGACCTAGAGCTCTGCCGTGCCCACATTGAGAGACTCCAGCA
GGAGCCCGATGGTGCTGGAGCCAAGTCCCCGACATGCCAGAAACTGTCCCCCAAGTGGTGCTTCCTGGACGCCAC
CACTGCCAGCCGCTTCTACAGGATCGACCGAGCCCAGGAGCACCTCAACTATGTGACTGAGATCGCACAGGATGA
GATTTATATCCTGGACCCTGAGCTGCTGGGGGCATCGGCCCGGCCTGACCTCCCAACCCCCACTTCCCCTCTCCC
CACCTCACCCTGCTCACCCACGCCCCGGTCACTGCAAGGGGATGCTGCACCCCCTCAAGGTGAAGAGCTGATTGA
GGCTGCCAAGAGGAACGACTTCTGTAAGCTCCAGGAGCTGCACCGAGCTGGGGGCGACCTCATGCACCGAGACGA
GCAGAGTCGCACGCTCCTGCACCACGCAGTCAGCACTGGCAGCAAGGATGTGGTCCGCTACCTGCTGGACCACGC
CCCCCCAGAGATCCTTGATGCGGTGGAGGAAAACGGGGAGACCTGTTTGCACCAAGCAGCGGCCCTGGGCCAGCG
CACCATCTGCCACTACATCGTGGAGGCCGGGGCCTCGCTCATGAAGACAGACCAGCAGGGCGACACTCCCCGGCA
GCGGGCTGAGAAGGCTCAGGACACCGAGCTGGCCGCCTACCTGGAGAACCGGCAGCACTACCAGATGATCCAGCG
GGAGGACCAGGAGACGGCTGTGTAGCGGGCCGCCCACGGGCAGCAGGAGGGACAATGCGGCCAGGGGACGAGCGC
CTTCCTTGCCCACCTCACTGCCACATTCCAGTGGGACGGCCACGGGGGGACCTAGGCCCCAGGGAAAGAGCCCCA
TGCCGCCCCCTAAGGAGCCGCCCAGACCTAGGGCTGGACTCAGGAGCTGGGGGGGCCTCACCTGTTCCCCTGAGG
ACCCCGCCGGACCCGGAGGCTCACAGGGAACAAGACACGGCTGGGTTGGATATGCCTTTGCCGGGGTTCTGGGGC
AGGGCGCTCCCTGGCCGCAGCAGATGCCCTCCCAGGAGTGGAGGGGCTGGAGAGGGGGAGGCCTTCGGGAAGAGG
CTTCCTGGGCCCCCTGGTCTTCGGCCGGGTCCCCAGCCCCCGCTCCTGCCCCACCCCACCTCCTCCGGGCTTCCT
CCCGGAAACTCAGCGCCTGCTGCACTTGCCTGCCCTGCCTTGCTTGGCACCCGCTCCGGCGACCCTCCCCGCTCC
CCTGTCATTTCATCGCGGACTGTGCGGCCTGGGGGTGGGGGGCGGGACTCTCACGGTGACATGTTTACAGCTGGG
TGTGACTCAGTAAAGTGGATTTTTTTTCTTTAAAAAAAA

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FIGURE 1891

MEPRDGSPEARSSDSESASASSSGSERDAGPEPDKAPRRLNKRRFPGLRLFGHRKAITKSGLQHLAPPPPTPGAP
CSESERQIRSTVDWSESATYGEHIWFETNVSGDFCYVGEQYCVARMLKSVSRRKCAACKIVVHTPCIEQLEKINF
RCKPSFRESGSRNVREPTFVRHHWVHRRRQDGKCRHCGKGFQQKFTFHSKEIVAISCSWCKQAYHSKVSCFMLQQ
IEEPCSLGVHAAVVIPPTWILRARRPQNTLKASKKKKRASFKRKSSKKGPEEGRWRPFIIRPTPSPLMKPLLVFV
NPKSGGNQGAKIIQSFLWYLNPRQVFDLSQGGPKEALEMYRKVHNLRILACGGDGTVGWILSTLDQLRLKPPPPV
AILPLGTGNDLARTLNWGGGYTDEPVSKILSHVEEGNVVQLDRWDLHAEPNPEAGPEDRDEGATDRLPLDVFNNY
FSLGFDAHVTLEFHESREANPEKFNSRFRNKMFYAGTAFSDFLMGSSKDLAKHIRVVCDGMDLTPKIQDLKPQCV
VFLNIPRYCAGTMPWGHPGEHHDFEPQRHDDGYLEVIGFTMTSLAALQVGGHGERLTQCREVVLTTSKAIPVQVD
GEPCKLAASRIRIALRNQATMVQKAKRRSAAPLHSDQQPVPEQLRIQVSRVSMHDYEALHYDKEQLKEASVPLGT
VVVPGDSDLELCRAHIERLQQEPDGAGAKSPTCQKLSPKWCFLDATTASRFYRIDRAQEHLNYVTEIAQDEIYIL
DPELLGASARPDLPTPTSPLPTSPCSPTPRSLQGDAAPPQGEELIEAAKRNDFCKLQELHRAGGDLMHRDEQSRT
LLHHAVSTGSKDVVRYLLDHAPPEILDAVEENGETCLHQAAALGQRTICHYIVEAGASLMKTDQQGDTPRQRAEK
AQDTELAAYLENRQHYQMIQREDQETAV

FIGURE 1892

CTAGCTCTGTGGGAAGGTTTTGGGCTCTCTGGCTCGGATTTTGCAATTTCTCCCTGGGGACTGCCGTGGAGCCGC
ATCCACTGTGGATTATAATTGCAACATGACGCTGGAAGAGCTCGTGGCGTGCGACAACGCGGCGCAGAAGATGCA
GACGGTGACCGCCGCGGTGGAGGAGCTTTTGGTGGCCGCTCAGCGCCAGGATCGCCTCACAGTGGGGGTGTACGA
GTCGGCCAAGTTGATGAATGTGGACCCAGACAGCGTGGTCCTCTGCCTCTTGGCCATTGACGAGGAGGAGGAGGA
TGACATCGCCCTGCAAATCCACTTCACGCTCATCCAGTCCTTCTGCTGTGACAACGACATCAACATCGTGCGGGT
GTCGGGCAATGCGCGCCTGGCGCAGCTCCTGGGAGAGCCGGCCGAGACCCAGGGCACCACCGAGGCCCGAGACCT
CCACTGTCTTCCCTTCCTACAGAACCCTCACACGGACGCCTGGAAGAGCCACGGCTTGGTGGAGGTGGCCAGCTA
CTGCGAAGAAAGCCGGGGCAACAACCAGTGGGTCCCCTACATCTCTCTTCAGGAACGCTGAGGCCCTTCCCAGCA
GCAGAATCTGTTGAGTTGCTGCCAACAAACAAAAAATACAATAAATATTTGAACCCCCTCCCCCCCAGCACAACC
CCCCCAAAACAACCCAACCCACGAGGACCATCGGGGGCAGGTCGTTGGAGACTGAAGAGAAAGAGAGAGAGGAGA
AGGGAGTGAGGGGCCGCTGCCGCCTTCCCCATCACGGAGGGTCCAGACTGTCCACTCGGGGGTGGAGTGAGACTG
ACTGCAAGCCCCACCCTCCTTGAGACTGGAGCTGAGCGTCTGCATACGAGAGACTTGGTTGAAACTTGGTTGGTC
CTTGTCTGCACCCTCGACAAGACCACACTTTGGGACTTGGGAGCTGGGGCTGAAGTTGCTCTGTACCCATGAACT
CCCAGTTTGCGAATTAATAAGAGACAATCTATTTTGTTACTTGCACTTGTTATTCGAACCACTGAGAGCGAGATG
GGAAGCATAGATATCTATATTTTTATTTCTACTATGAGGGCCTTGTAATAAATTTCTAAAGCCTCAAAAAA

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FIGURE 1893

MTLEELVACDNAAQKMQTVTAAVEELLVAAQRQDRLTVGVYESAKLMNVDPDSVVLCLLAIDEEEEDDIALQIHF
TLIQSFCCDNDINIVRVSGNARLAQLLGEPAETQGTTEARDLHCLPFLQNPHTDAWKSHGLVEVASYCEESRGNN
QWVPYISLQER

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FIGURE 1894A

ACGGCTGCGAGAAGACGACAGAAGGGGAGAGGTGAATATTATTGAATGAAAATGGCTGACAGAAGTGGGAAGATT
ATTCCAGGACAAGTGTATATTGAGGTGGAATATGATTATGAATATGAAGCAAAGGACAGAAAGATTGTGATAAAA
CAAGGGGAGAGGTACATCTTGGTGAAAAAGACCAATGATGACTGGTGGCAAGTCAAGCCAGATGAAAACTCCAAA
GCGTTTTATGTGCCAGCCCAGTATGTGAGGGAGGTCACGCGCAAAGCTCTCATGCCACCTGTTAAGCAGGTAGCT
GGTCTGCCAAATAACTCCACGAAAATAATGCAGAGTTTGCATCTTCAGAGATCAACAGAAAATGTGAACAAATTG
CCTGAGCTTTCAAGTTTCGGAAAGCCATCGTCATCTGTTCAAGGAACAGGTCTTATTCGTGATGCCAATCAGAAT
TTTGGACCCAGTTATAATCAAGGTCAGACTGTCAACCTAAGCCTGGACCTGACCCATAATAACGGAAAGTTTAAC
AATGACTCACATTCTCCTAAAGTTTCCAGCCAGAATAGGACACGCTCATTTGGTCATTTTCCCGGTCCAGAGTTC
TTGGATGTAGAGAAAACTAGCTTCTCCCAGGAACAATCTTGTGATTCCGCAGGAGAAGGCTCTGAAAGAATACAT
CAAGATTCTGAATCTGGTGATGAACTTAGCAGCAGCTCCACTGAACAGATAAGGGCAACCACACCTCCAAATCAA
GGAAGGCCAGATTCTCCTGTCTATGCTAACCTTCAAGAACTGAAAATATCCCAGTCTGCTCTTCCCCCACTTCCT
GGGAGCCCGGCAATTCAGATTAATGGAGAATGGGAAACTCATAAAGACAGCTCAGGGCGTTGCTATTACTATAAC
AGAGGGACACAGGAAAGAACTTGGAAACCTCCTCGTTGGACCCGGGATGCAAGCATCAGCAAAGGAGATTTCCAA
AATCCAGGGGATCAAGAGTGGCTCAAGCATGTTGATGATCAAGGTAGACAATATTACTACAGTGCAGACGGATCT
CGGTCAGAATGGGAATTGCCAAAGTATAATGCTTCATCCCAGCAGCAAAGAGAAATAATTAAAAGTAGGAGCCTG
GACAGGCGGCTGCAAGAACCAATAGTATTAACAAAGTGGAGACATAGCACCATTGTATTGGACACTAATGATAAG
GAATCTCCAACTGCCTCAAAACCCTGCTTTCCTGAAAATGAGTCTTCTCCCTCCTCACCAAAGCACCAAGATACA
GATCAAGAGAAATATGGATTATTAAATGTAACAAAAATTGCTGAAAATGGGAAAAAGGTTCGAAAGAACTGGTTG
TCTTCTTGGGCGGTGTTGCAGGGTTCATCTTTACTTTTTACCAAAACTCAAGGAAGTAGCACAAGTTGGTTTGGC
AGTAATCAGTCCAAACCAGAGTTCACAGTGGACCTCAAGGGGGCAACAATTGAGATGGCTTCAAAGGATAAATCC
AGCAAAAAGAATGTATTTGAGCTGAAAACTCGTCAAGGAACAGAACTGCTAATTCAGTCTGACAATGACACTGTT
ATTAATGATTGGTTTAAAGTTCTTAGTAGTACAATCAATAATCAGGCAGTAGAAACTGATGAAGGAATTGAAGAG
GAGATACCGGATTCACCAGGAATAGAAAAGCATGATAAAGAAAAGGAACAAAAGGATCCCAAAAAGCTTCGTTCC
TTTAAAGTATCTAGCATAGATTCTTCAGAACAGAAAAAAACCAAGAAAAACTTAAAGAAGTTTCTTACACGACGC
CCCACTTTGCAAGCTGTTCGTGAAAAAGGTTATATTAAAGATCAGGTATTTGGATCCAATCTCGCTAATCTGTGT
CAGAGAGAGAATGGCACAGTACCAAAGTTTGTGAAGTTATGTATTGAACATGTTGAAGAACATGGTTTGGATATT
GATGGGATATACAGAGTAAGTGGCAACCTCGCAGTGATCCAGAAACTAAGGTTTGCAGTCAATCATGATGAGAAA
TTGGACTTGAATGACAGTAAATGGGAAGATATTCATGTCATTACTGGAGCCCTCAAAATGTTTTTTCGAGAATTA
CCAGAACCTCTTTTTACATTTAATCATTTTAATGATTTTGTTAATGCAATTAAGCAAGAACCAAGACCGCGAGTC
GCTGCTGTTAAGGACCTAATCAGACAGTTGCCAAAGCCAAACCAAGACACAATGCAGATTCTTTTCCGACATCTC
AGAAGAGTTATAGAAAATGGAGAGAAAAATCGAATGACCTATCAGAGTATAGCAATTGTTTTTGGTCCCACTCTA
TTAAAACCAGAAAAAGAGACTGGTAATATAGCAGTTCATACTGTGTACCAGAATCAGATTGTAGAATTAATTCTT
CTGGAACTGAGTTCCATCTTCGGACGTTGATTCTTACTGAAGACAACCTGTGGAATAGAAGCTGGATTCCATCAG
ATTTCAAATGTTTATACACAATGTATTTTATTTTTTGGACCAAGCAGTGACTCTTTGATTTTGCACTTTTTTTTT
GAGGGATCAGAAGGGAAGGGGAGAGTCGAGATGTGTGTTAGGCCCTCATATTTGCTGCTTTGTTGCAAGTTGATA
TAACTGCGTGTAATTATGAATTCATTTTATCCTGAATGTTTGCATTTCATACTCTGAATTTCAGTAAAAATCAAA
ACTTAAAATTCTAACCAGTCATATACACTGGATAATTTGGTAAGAAAACTGTATTTTTTTTCCCTGAAATTGGAT
AATGTACTTTCTTCTCAAGATTCATGACTTGATAGAACAATACTTTCAGTTATGTTGCAAAGGCTCTTGGGCATT
TTAAACAAAATGAAGTATATCCATTTTGAAACCTGTGTATTTCTTTTTCGGGGTTTCTGCATGCAGTGGCAGTCT
TAAGTGCCAAAATTCATTATAACCCCAAAATAACCCCTTGATGAAGGCTTGCTGTCTTTTACTGTGTTACACAGC
ATCCTTACTGGATATCTTAGTTGCTTGTTTGGGCAGCACACTAATATTACTTAAAACACTGTGATATACTGGAGT
TTTAGTTAGCGGAAGTCAGTTCAGGGCATTTTAGGGCTGTCTTGCTATACTGAATTGTAGCTAACAATCCTAATT
ATATCTAGTACCATACTGAGTTATTGGTATGACCCTGTGGAAACACACATTATTTTATGTAAATATAGGCTAAAG
ACTTAATGTCCTTTAGCTTGTGTATATAATTGTGTTGTATAGTCTCAGAGTACATTCTAACCCTACATTTCTAAT
CATTGTTATTGGTAATCTTTTCTGTGAATATTAGGTTTCCTCCAGAAATAGTCCGTTATTTGGGAAAGTTAACTG
TGTGCACTTTTAGATATTAACTACATTTACAGGCAAATCACTGTAATGAGAATGGTACTGGAAAAATACTGAATA
GACTTGCTAAATGGCACATGCACTACAAGAGGAACCTTTTGGGTTATTTAATATGTACAGAAAACATTAGAAAAA
ATTTATTACAGAATTCTAATTCCAGTATGAATAGTGGAAACCCACCTGTAAATTAGATGGATGTTGGATGGAAAA

FIGURE 1894B

TGACATTGCTAAATTTGAGAATTTCTTTTTACCTACTAATGTAGATTGCTTTGTATAATAAAACACAGGGTTTGG
AAGGTTTTGTTACAGGGAGCATGGTCTGTTGAAGATTTTTAAAATGTATTTTTCTAGATTAACTTCTGTACATGA
AATGTCTAATAAAACTCTAAGAGGCTTAGAGATTTTTCCATTGGAAATGTGCATTTTGGTTTCTAATTTTTTTGT
TTTTTCATTTACTGGCATACTGTTATACCTCATTTTTAAAAATCAACTGAATCCAATATTTCCTGTGGCAAATAA
CACTTTCCTCATTTCATACCTTTTCTCCTCTCTTCCATGCCAACATTTCTCCACCCACAACGTACACTTTTTATT
TCTCCATCAATATTTGAAAGCGAGTGATTTGTGACCAGGATTTTTTTTTCTTAGGGTTGCATTTATAATTTACAG
ATTGCCTTCCTTGGGAACAAGTATTTTTTTGTATGATCTGTCTAAAAACCTCTCACCTGAATTTTGTGGTAGAAA
GTCTGTATTTGTTGTTGTGAGCGTGTTAAATTGATAACAAACCAAACTACTTGATAGCTAAAGCAGATTGTTTCG
GGTGGGGAGAAAAAGCCCTAAATCAGAATGTTTATATTTGCCTAAAGTTGTCCTTAATAATACAATATGCTTTAG
ATCTTGCTTATTTAGTGATTGTATACCAGGAAAACAATTAGACTCAAATCAGTGATGTTCTTGTTCTTGGTGTTC
ATGAACATATATCAAAGATTAAAATTGTCCTGTGTTTCTTGTTTCAAGGTACGTGTGTGTGTGTGTGTGTGTG
TGTGTGTGTGTGTGTGTGAAGTCTTAAATGTTTTATTAGTCTACAGCTAATCAGTTTATTGTAATATTGTATGTA
CAGTGAGATTAATGTCTTGCGTTTTCATCCTTTGTGAATTAAAAATTCTCACTTGTTTTGTAATAACAAAGCTAG
TAATATTTTCCTGTCTTGACAGCTTGGTTTTATAGTAGAAAATATATTAAAAGCTGAAATAAATTATCAGTGGAA
TTTTAAAAAAGAAAAAAAAAAAAAAAA

FIGURE 1895

MKMADRSGKIIPGQVYIEVEYDYEYEAKDRKIVIKQGERYILVKKTNDDWWQVKPDENSKAFYVPAQYVREVTRK
ALMPPVKQVAGLPNNSTKIMQSLHLQRSTENVNKLPELSSFGKPSSSVQGTGLIRDANQNFGPSYNQGQTVNLSL
DLTHNNGKFNNDSHSPKVSSQNRTRSFGHFPGPEFLDVEKTSFSQEQSCDSAGEGSERIHQDSESGDELSSSSTE
QIRATTPPNQGRPDSPVYANLQELKISQSALPPLPGSPAIQINGEWETHKDSSGRCYYYNRGTQERTWKPPRWTR
DASISKGDFQNPGDQEWLKHVDDQGRQYYYSADGSRSEWELPKYNASSQQQREIIKSRSLDRRLQEPIVLTKWRH
STIVLDTNDKESPTASKPCFPENESSPSSPKHQDTDQEKYGLLNVTKIAENGKKVRKNWLSSWAVLQGSSLLFTK
TQGSSTSWFGSNQSKPEFTVDLKGATIEMASKDKSSKKNVFELKTRQGTELLIQSDNDTVINDWFKVLSSTINNQ
AVETDEGIEEEIPDSPGIEKHDKEKEQKDPKKLRSFKVSSIDSSEQKKTKKNLKKFLTRRPTLQAVREKGYIKDQ
VFGSNLANLCQRENGTVPKFVKLCIEHVEEHGLDIDGIYRVSGNLAVIQKLRFAVNHDEKLDLNDSKWEDIHVIT
GALKMFFRELPEPLFTFNHFNDFVNAIKQEPRPRVAAVKDLIRQLPKPNQDTMQILFRHLRRVIENGEKNRMTYQ
SIAIVFGPTLLKPEKETGNIAVHTVYQNQIVELILLELSSIFGR

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FIGURE 1896

CGGAGACGGGACAGCCCTGTCCCACTCACTCTTTCCCCTGCTGCTCCTGCCGGCAGCTCAGCTGGAACCATGGGA
GGCCGCGTCTTTCTCGTCTTTCTCGCATTCTGTGTCTGGCTGACTCTGCCGGGAGCTGAAACCCAGGACTCCAGG
GGCTGTGCCCGGTGGTGCCCTCAGGACTCCTCGTGTGTCAATGCCACCGCCTGTCGCTGCAATCCAGGGTTCAGC
TCTTTTTCTGAGATCATCACCACCCCCATGGAGACTTGTGACGACATCAACGAGTGTGCAACACTGTCGAAAGTG
TCATGCGGAAAATTCTCGGACTGCTGGAACACAGAGGGGAGCTACGACTGCGTGTGCAGCCCAGGATATGAGCCT
GTTTCTGGGGCAAAAACATTCAAGAATGAGAGCGAGAACACGTGTCAAGATGTGGACGAATGTCAGCAGAACCCA
AGGCTCTGTAAAAGCTACGGCACCTGCGTCAACACCCTCGGCAGCTACACGTGCCAGTGCCTGCCTGGCTTCAAG
CTCAAACCTGAGGACCCGAAGCTCTGCACAGATGTGAATGAATGCACCTCCGGACAAAACCCATGCCACAGCTCC
ACCCACTGCCTCAACAACGTGGGCAGCTATCAGTGCCGCTGCCGCCCGGGCTGGCAACCGATTCCGGGGTCCCCC
AATGGCCCAAACAATACCGTCTGTGAAGATGTGGACGAGTGCAGCTCCGGGCAGCATCAGTGTGACAGCTCCACC
GTCTGCTTCAACACCGTGGGTTCATACAGCTGCCGCTGCCGCCCAGGCTGGAAGCCCAGACACGGAATCCCGAAT
AACCAAAAGGACACTGTCTGTGAAGATATGACTTTCTCCACCTGGACCCCGCCCCCTGGAGTCCACAGCCAGACG
CTTTCCCGATTCTTCGACAAAGTCCAGGACCTGGGCAGAGACTACAAGCCAGGCTTGGCCAATAACACCATCCAG
AGCATCTTACAGGCGCTGGATGAGCTGCTGGAGGCCCCTGGGGACCTGGAGACCCTGCCCCGCTTACAGCAGCAC
TGTGTGGCCAGTCACCTGCTGGATGGCCTAGAGGATGTCCTCAGAGGCCTGAGCAAGAACCTTTCCAATGGGCTG
TTGAACTTCAGTTATCCTGCAGGCACAGAATTGTCCCTGGAGGTGCAGAAGCAAGTAGACAGGAGTGTCACCTTG
AGACAGAATCAGGCAGTGATGCAGCTCGACTGGAATCAGGCACAGAAATCTGGTGACCCAGGCCCTTCTGTGGTG
GGCCTTGTCTCCATTCCAGGGATGGGCAAGTTGCTGGCTGAGGCCCCTCTGGTCCTGGAACCTGAGAAGCAGATG
CTTCTGCATGAGACACACCAGGGCTTGCTGCAGGACGGCTCCCCCATCCTGCTCTCAGATGTGATCTCTGCCTTT
CTGAGCAACAACGACACCCAAAACCTCAGCTCCCCAGTTACCTTCACCTTCTCCCACCGTTCAGTGATCCCGAGA
CAGAAGGTGCTCTGTGTCTTCTGGGAGCATGGCCAGAATGGATGTGGTCACTGGGCCACCACAGGCTGCAGCACA
ATAGGCACCAGAGACACCAGCACCATCTGCCGTTGCACCCACCTGAGCAGCTTTGCCGTCCTCATGGCCCACTAC
GATGTGCAGGAGGAGGATCCCGTGCTGACTGTCATCACCTACATGGGGCTGAGCGTCTCTCTGCTGTGCCTCCTC
CTGGCGGCCCTCACTTTTCTCCTGTGTAAAGCCATCCAGAACACCAGCACCTCACTGCATCTGCAGCTCTCGCTC
TGCCTCTTCCTGGCCCACCTCCTCTTCCTCGTGGCAATTGATCAAACCGGACACAAGGTGCTGTGCTCCATCATC
GCCGGTACCTTGCACTATCTCTACCTGGCCACCTTCACCTGGATGCTGCTGGAGGCCCTGTACCTCTTCCTCACT
GCACGGAACCTGACGGTGGTCAACTACTCAAGCATCAACAGATTCATGAAGAAGCTCATGTTCCCTGTGGGCTAC
GGAGTCCCAGCTGTGACAGTGGCCATTTCTGCAGCCTCCAGGCCTCACCTTTATGGAACACCTTCCCGCTGCTGG
CTCCAACCAGAAAAGGGATTTATATGGGGCTTCCTTGGACCTGTCTGCGCCATCTTCTCTGTGAATTTAGTTCTC
TTTCTGGTGACTCTCTGGATTTTGAAAAACAGACTCTCCTCCCTCAATAGTGAAGTGTCCACCCTCCGGAACACA
AGGATGCTGGCATTTAAAGCGACAGCTCAGCTGTTCATCCTGGGCTGCACGTGGTGTCTGGGCATCTTGCAGGTG
GGTCCGGCTGCCCGGGTCATGGCCTACCTCTTCACCATCATCAACAGCCTGCAGGGTGTCTTCATCTTCCTGGTG
TACTGCCTCCTCAGCCAGCAGGTCCGGGAGCAATATGGGAAATGGTCCAAAGGGATCAGGAAATTGAAAACTGAG
TCTGAGATGCACACACTCTCCAGCAGTGCTAAGGCTGACACCTCCAAACCCAGCACGGTTAACTAGAAAAATCTT
CTGAATAAGATCTTCCCTCTTTGCCGGTGGAAAATCTGAACAATCTTTGAGCCATCTAGAGGGGAAAGAAAAGAC
TTTGTTCTGTGTGTTTCAAGAAATTCACCATGTCAGCAATATGAAGGATGTTATGGAAGGCGTGCTTGGCATTCA
ATTCCTGCAGAAACCGGAAATCTTCCATGCCCTGCAATGTGCTCATCAAACTCTCAGCATATGGACGGCCAGCTG
TGGCCCATATCTTGGTCACTCTGAAGCACAATATTTATGAAGCTATAGAACGTTAAGACCTCTTTCACAGCCTCT
CCTTCCTACAAAGACTCCTCCAAATCTTAAAATGAAGCAGGAAAACAAGCCTAAGAGGACTTTCATACCGACAAC
ATCTGAAAGGACTAGAATGTTCACACCACGATCTGGATTTCTTAATTTTTTGTTTTTGTTTTTGTTGTTCTCTAG
TTCTACGGGTTTGATTATTTAGTCATGTGAAAAATATTGATTACTCACACATAGATCAAGAGAGACACGGCTCCT
GCCTTCATGGAGCTTTTAGGGGAAAATGAAGTGGCTCTTGCAGCTAGAGTTGACTCAGAAGCCGAAATTCCTAGA
AATCAGGTTTCTACTGCTAGGCAATTGAAGTATAAACTATTTTATAAACACTGTCTTCTTTCATCTTCAC

FIGURE 1897

MGGRVFLVFLAFCVWLTLPGAETQDSRGCARWCPQDSSCVNATACRCNPGFSSFSEIITTPMETCDDINECATLS
KVSCGKFSDCWNTEGSYDCVCSPGYEPVSGAKTFKNESENTCQDVDECQQNPRLCKSYGTCVNTLGSYTCQCLPG
FKLKPEDPKLCTDVNECTSGQNPCHSSTHCLNNVGSYQCRCRPGWQPIPGSPNGPNNTVCEDVDECSSGQHQCDS
STVCFNTVGSYSCRCRPGWKPRHGIPNNQKDTVCEDMTFSTWTPPPGVHSQTLSRFFDKVQDLGRDYKPGLANNT
IQSILQALDELLEAPGDLETLPRLQQHCVASHLLDGLEDVLRGLSKNLSNGLLNFSYPAGTELSLEVQKQVDRSV
TLRQNQAVMQLDWNQAQKSGDPGPSVVGLVSIPGMGKLLAEAPLVLEPEKQMLLHETHQGLLQDGSPILLSDVIS
AFLSNNDTQNLSSPVTFTFSHRSVIPRQKVLCVFWEHGQNGCGHWATTGCSTIGTRDTSTICRCTHLSSFAVLMA
HYDVQEEDPVLTVITYMGLSVSLLCLLLAALTFLLCKAIQNTSTSLHLQLSLCLFLAHLLFLVAIDQTGHKVLCS
IIAGTLHYLYLATFTWMLLEALYLFLTARNLTVVNYSSINRFMKKLMFPVGYGVPAVTVAISAASRPHLYGTPSR
CWLQPEKGFIWGFLGPVCAIFSVNLVLFLVTLWILKNRLSSLNSEVSTLRNTRMLAFKATAQLFILGCTWCLGIL
QVGPAARVMAYLFTIINSLQGVFIFLVYCLLSQQVREQYGKWSKGIRKLKTESEMHTLSSSAKADTSKPSTVN

FIGURE 1898

GTTTGAGCAGCATTGTTAGAGCCTGTGGAAAACACTTTACAACTGTGTAACTGTCTTCATCTTTACAGAGGAATA
GTCTACAAAGGAAGACTTGTAACCTGGAGAAGAGACCTGTCATTTACTCCATCCTTTATAGTGATGCTACAGGAC
GAAGAGGAATGGATAAAAACATTGGCGAGCAACTCAATAAAGCGTATGAAGCCTTCCGGCAGGCATGCATGGATA
GAGATTCTGCAGTAAAAGAATTACAGCAAAAGACTGAGAACTATGAGCAGAGAATACGTGAACAACAGGAACAGC
TGTCACTTCAACAGACTATTATTGACAAGCTAAAATCTCAGTTACTTCTTGTGAATTCCACTCAAGATAACAATT
ATGGCTGTGTTCCTCTGCTTGAAGACAGTGAAACAAGAAAGAATAATTTGACTCTTGATCAGCCACAAGATAAAG
TGATTTCAGGAATAGCAAGAGAAAAACTACCAAAGGTAAGAAGACAAGAGGTTTCTTCTCCTAGAAAAGAAACTT
CAGCAAGGAGTCTTGGCAGTCCTTTGCTCCATGAAAGGGGTAATATAGAGAAGACTTTCTGGGATCTGAAAGAAG
AATTTCATAAAATATGCATGCTAGCAAAAGCACAGAAAGACCACTTAAGCAAACTTAATATACCAGACACTGCAA
CTGAAACACAGTGCTCTGTGCCTATACAGTGTACGGATAAAACAGATAAACAAGAAGCGCTGTTTAAGCCTCAGG
CTAAAGATGATATAAATAGAGGTGCACCATCCATCACATCTGTCACACCAAGAGGACTGTGCAGAGATGAGGAAG
ACACCTCTTTTGAATCACTTTCTAAATTCAATGTCAAGTTTCCACCTATGGACAATGACTCAACTTTCTTACATA
GCACTCCAGAGAGACCCGGCATCCTTAGTCCTGCCACGTCTGAGGCAGTGTGCCAAGAGAAATTTAATATGGAGT
TCAGAGACAACCCAGGGAACTTTGTTAAAACAGAAGAAACTTTATTTGAAATTCAGGGAATTGACCCCATAGCTT
CAGCTATACAAAACCTTAAAACAACTGACAAAACAAAGCCCTCAAATCTCGTAAACACTTGTATCAGGACAACTC
TGGATAGAGCTGCGTGTTTGCCACCTGGAGACCATAATGCATTATATGTAAATAGCTTCCCACTTCTGGACCCAT
CTGATGCACCTTTTCCCTCACTCGATTCCCCGGGAAAAGCAATCCGAGGACCACAGCAGCCCATTTGGAAGCCCT
TTCCTAATCAAGACAGTGACTCGGTGGTACTAAGTGGCACAGACTCAGAACTGCATATACCTCGAGTATGTGAAT
TCTGTCAAGCAGTTTTCCCACCATCCATTACATCCAGGGGGGATTTCCTTCGGCATCTTAATTCACACTTCAATG
GAGAGACTTAAGACACATTTGAAAACAGACATATCAAGTTCTATGTGATGATTTTGGGTTTTTAATACTATAAAT
ACTTGATTGTAAACTAAATTCAAGATCATTTATAGGAAAATCTAGTTTCACAGCTATTTGAATTTTTTTCTGGAT
TTACTATATAACTCTTATTTTTTAAAAGATCATTCTGTTCTTTCAAGGAGAAATAAGCCTAAAAGAAGAAAAACA
AAAAAAATTCTGTATAAAACTGTAATCCTTTGTATTCATGTTTACAGTGCTATTACTATAATTCAAAATTATGTA
TGTGACTTAGAGTTATATAATCATAATTTATGTTTATTTCAAATATCTAAGTTTATTGCTTGGATTTCTAGTGAG
AGCTGTTGAATTTGGTGATGTCAAATGTTTCTAGGGTTTTTTTAGTTTGTTTTTATTGAAAAATTTAATTATTTA
TGCTATAGGTGATATTCTCTTTGAATAAACCTATAATAGAAAATAGCAGACAACATAAACATCTTTGTAAATATC
AAACCTAATACATTTCTTGTCCAGTGATAAAACAACTGGTAGAATTATTTAAACACTTTAGATTTTTAAATAATA
TACATGGCTTTAATTTTTACTGTGTGTATAGCTACATGATGAAATTAATTAAATATTAAGAGGT

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FIGURE 1899

MDKNIGEQLNKAYEAFRQACMDRDSAVKELQQKTENYEQRIREQQEQLSLQQTIIDKLKSQLLLVNSTQDNNYGC
VPLLEDSETRKNNLTLDQPQDKVISGIAREKLPKVDIASAESSI

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FIGURE 1900

CCCAGCTCCCTGAAACAACAGTAACCTACCCCTGTGGGTCATCATCATGCCCTCCGACCTGGCCAAGAAGAAGGC
AGCCAAAAAGAAGGAGGCTGCCAAAGCTCGACAGCGGCCCAGAAAAGGACATGAAGAAAATGGAGATGTTGTCAC
AGAACCACAGGTGGCAGAGAAGAATGAGGCCAATGGCAGAGAGACCACAGAAGTAGATTTGCTGACCAAGGAGCT
AGAGGACTTTGAGATGAAGAAAGCTGCTGCTCGAGCTGTCACTGGCGTCCTGGCCTCTCACCCCAACAGTACTGA
TGTTCACATCATCAACCTCTCACTCACCTTTCATGGTCAAGAGCTGCTCAGTGACACCAAACTGGAATTAAACTC
AGGCCGTCGTTATGGCCTCATTGGTTTAAATGGAATTGGAAAGTCCATGCTGCTCTCTGCTATTGGGAAGCGTGA
AGTGCCCATCCCTGAGCACATCGACATCTACCATCTGACTCGAGAGATGCCCCCTAGTGACAAGACACCCTTGCA
TTGTGTGATGGAAGTCGACACAGAGCGGGCCATGCTGGAGAAAGAGGCAGAGCGGCTGGCTCATGAGGATGCGGA
GTGTGAGAAGCTCATGGAGCTCTACGAGCGCCTGGAGGAGCTGGATGCCGACAAGGCAGAGATGAGGGCCTCGCG
GATCTTGCATGGACTGGGTTTCACACCTGCCATGCAGCGCAAGAAGCTAAAAGACTTCAGTGGGGGCTGGAGGAT
GAGGGTTGCCCTTGCCAGAGCCCTCTTTATTCGGCCCTTCATGCTGCTCCTGGATGAGCCTACCAACCACCTGGA
CCTAGATGCTTGCGTGTGGTTGGAAGAAGAACTAAAAACTTTTAAGCGCATCTTGGTCCTCGTCTCCCATTCCCA
GGATTTTCTGAATGGTGTCTGTACCAATATCATTCACATGCACAACAAGAAACTGAAGTATTATACGGGTAATTA
TGATCAGTATGTGAAGACGCGGCTAGAGCTGGAGGAGAACCAGATGAAGAGGTTTCACTGGGAGCAAGATCAGAT
TGCACACATGAAGAACTACATTGCGAGGTTTGGTCATGGCAGTGCCAAGCTGGCCCGGCAGGCCCAGAGCAAGGA
GAAGACGCTACAGAAAATGATGGCATCAGGACTGACAGAGAGGGTCGTGAGCGATAAGACACTGTCATTTTATTT
CCCACCATGTGGCAAGATCCCTCCACCTGTCATTATGGTGCAAAATGTGAGCTTCAAGTATACAAAAGATGGGCC
TTGCATCTACAATAATCTAGAATTTGGAATTGACCTTGACACACGAGTGGCTCTGGTAGGGCCCAATGGAGCAGG
GAAGTCAACTCTTCTGAAGCTGCTAACTGGAGAGCTACTACCCACAGATGGCATGATCCGAAAACACTCTCATGT
CAAGATAGGGCGTTACCATCAGCATTTACAAGAGCAGCTGGACTTAGATCTCTCACCTTTGGAGTACATGATGAA
GTGCTACCCAGAGATCAAGGAGAAGGAAGAAATGAGGAAGATCATTGGGCGATACGGTCTCACTGGGAAACAACA
GGTGAGCCCAATCCGGAACTTGTCAGACGGGCAGAAGTGCCGAGTGTGTCTGGCCTGGCTGGCCTGGCAGAACCC
CCACATGCTCTTCCTGGATGAACCCACCAATCACCTGGATATCGAGACCATCGACGCCCTGGCAGATGCCATCAA
TGAGTTTGAGGGTGGTATGATGCTGGTCAGCCATGACTTCAGACTCATTCAGCAGGTTGCACAGGAAATTTGGGT
CTGTGAGAAGCAGACAATCACCAAGTGGCCTGGAGACATCCTGGCTTACAAGGAGCACCTCAAGTCCAAGCTGGT
GGATGAGGAGCCCCAGCTCACCAAGAGGACCCACAACGTGTGCACCCTGACATTGGCATCTCTGCCAAGGCCATG
AGCATCATGAACTCGTTTGTAAACGACGTGTTTGAGCAGCTGGCGTGTGAGGCTGCCCGGCTGGCCCAGTACTCG
GGCCGGACCACCCTGACATCCCGAGAAGTCCAGACGGCTGTGCGTCTGCTGCTGCCTGGGGAGCTGGCCAAGCAC
GCTGTGTCTGAGGGCACCAAGGCTGTCACCAAGTACACCAGCTCCAAGTGACCCAGGGCCTGACAAAAATAAAGG
GTGAACTGTTAAAAAAAAAAAA

FIGURE 1901

MPSDLAKKKAAKKKEAAKARQRPRKGHEENGDVVTEPQVAEKNEANGRETTEVDLLTKELEDFEMKKAAARAVTG
VLASHPNSTDVHIINLSLTFHGQELLSDTKLELNSGRRYGLIGLNGIGKSMLLSAIGKREVPIPEHIDIYHLTRE
MPPSDKTPLHCVMEVDTERAMLEKEAERLAHEDAECEKLMELYERLEELDADKAEMRASRILHGLGFTPAMQRKK
LKDFSGGWRMRVALARALFIRPFMLLLDEPTNHLDLDACVWLEEELKTFKRILVLVSHSQDFLNGVCTNIIHMHN
KKLKYYTGNYDQYVKTRLELEENQMKRFHWEQDQIAHMKNYIARFGHGSAKLARQAQSKEKTLQKMMASGLTERV
VSDKTLSFYFPPCGKIPPPVIMVQNVSFKYTKDGPCIYNNLEFGIDLDTRVALVGPNGAGKSTLLKLLTGELLPT
DGMIRKHSHVKIGRYHQHLQEQLDLDLSPLEYMMKCYPEIKEKEEMRKIIGRYGLTGKQQVSPIRNLSDGQKCRV
CLAWLAWQNPHMLFLDEPTNHLDIETIDALADAINEFEGGMMLVSHDFRLIQQVAQEIWVCEKQTITKWPGDILA
YKEHLKSKLVDEEPQLTKRTHNVCTLTLASLPRP

FIGURE 1902

ATGACCATGGAAACAGTTGAATCCCAGCATGATGGAAGTATAACAGCTTCTTTGACAGAGAGCAAGTCTGCTCAT
GTGCAGACTCAGACTGGGCAAATTTCAATCCCTGCTTTAGCTCAGTGCAGTGAGCTGAGATCAGGCACCAGAAGA
GGCTCCCCAGCTGTAACTCTAGTGCAGTTACCTTCGGGCCAAACTATACATGTCCAGGGAGTAATTCAGACACCA
CAGCCATGGGTTATTCAGTCATCAGAAATACACACCGTTCAGGTAGCAGCAATTGCAGAGACAGATGAATCTGCA
GAATCAGAAGGTGTAATTGATTCTCATAAACGTAGAGAAATCCTTTCACGAAGACCCTCTTATAGGAAAATACTG
AATGAACTGTCCTCTGATGTGCCTGGTGTTCCCAAGATTGAAGAAGAGAGATCAGAGGAAGAAGGAACACCACCT
AGTATTGCTACCATGGCAGTACCAACTAGCATATATCAGACTAGCACGGGGCAATACATTGCTATAGCCCAAGGT
GGAACAATCCAGATTTCTAACCCAGGATCTGATGGTGTTCAGGGACTGCAGGCATTAACAATGACAAATTCAGGA
GCTCCTCCACCAGGTGCTACAATTGTACAGTACGCAGCACAATCAGCTGATGGCACACAGCAGTTCTTTGTCCCA
GGCAGCCAGGTTGTTGTTCAAGCTGCCACTGGTGACATGCCAACTTACCAGATCCGAGCTCCTACTGCTGCTTTG
CCACAGGGAGTGGTGATGGCTGCATCGCCCGGAAGTTTGCACAGTCCCCAGCAGCTGGCAGAAGAAGCAACACGC
AAACGAGAGCTGAGGCTAATGAAAAACAGAGAAGCTGCCCGGGAGTGTCGCAGGAAGAAGAAAGAATATGTCAAA
TGTCTTGAAAATCGTGTGGCTGTGCTTGAAAACCAAAACAAGACTCTCATTGAGGAACTCAAGGCCCTCAAAGAT
CTTTATTGCCATAAAGTAGAGTAACTGTCTTTGACTTGGACCTTGTTTACTCTAATCAAGGCAGGAGATGCAGCA
GTCCTACTTATTGCCATGTGGACTTGTGGGAAGGACACGTGTGACCCTTAAGAATCCAGTTTGGATTAGTGTTTG
AAATTGAATTGGGAATGTTGTTCCAGGATGTGGAATGCAGCGTGATCACACTTACCGAGCTTACTTTGATCTGTT
TGTCAATAGCATGCAAAAAATGCTTTGTTTGCCCTTTGCTTCTGCTTTTTTTCAGGGAAGCTGCCAAAGAATGTC
GACGTCGAAAGAAAGAATATGTAAAATGCCTGGAGAGCCGAGTTGCAGTGCTGGAAGTCCAGAACAAGAAGCTTA
TAGAGGAACTTGAAACCTTGAAAGACATTTGTTCTCCCAAAACTGATTACTAGAAATATTTAACTATGAACTGAT
TACAGA

FIGURE 1903

MTMETVESQHDGSITASLTESKSAHVQTQTGQISIPALAQCSELRSGTRRGSPAVTLVQLPSGQTIHVQGVIQTP
QPWVIQSSEIHTVQVAAIAETDESAESEGVIDSHKRREILSRRPSYRKILNELSSDVPGVPKIEEERSEEEGTPP
SIATMAVPTSIYQTSTGQYIAIAQGGTIQISNPGSDGVQGLQALTMTNSGAPPPGATIVQYAAQSADGTQQFFVP
GSQVVVQAATGDMPTYQIRAPTAALPQGVVMAASPGSLHSPQQLAEEATRKRELRLMKNREAARECRRKKKEYVK
CLENRVAVLENQNKTLIEELKALKDLYCHKVE

FIGURE 1904

GAATTCGGCCAAAGAGGCCTATGCTTCTCTGAAGACTTGCAGCAAGGCTTGCTGAGGCTCACAGAAGATAGCCCC
AGTGTTTTGGAGTGGTTTTGAATGTGATTCTGAGATCAGACTGACTGAGCTGGAATCCTGGCTTTATATCTTACC
AGCTACACAACCTTGGAGTCTTAGAAATTTTTTCTTTTCAATAAGCAGTCATCCTTACTTTCCCTCAAGATGACA
AACAGTTCGTTCTTCTGCCCAGTTTATAAAGATCTGGAGCCATTCACGTATTTTTTTTATTTAGTTTTCCTTGTT
GGAATTATTGGAAGTTGTTTTGCAACCTGGGCTTTTATACAGAAGAATACGAATCACAGGTGTGTGAGCATCTAC
TTAATTAATTTGCTTACAGCCGATTTCCTGCTTACTCTGGCATTACCAGTGAAAATTGTTGTTGACTTGGGTGTG
GCACCTTGGAAGCTGAAGATATTCCACTGCCAAGTAACAGCCTGCCTCATCTATATCAATATGTATTTATCAATT
ATCTTCTTAGCATTTGTCAGCATTGACCGCTGTCTTCAGCTGACACACAGCTGCAAGATCTACCGAATACAAGAA
CCCGGATTTGCCAAAATGATATCAACCGTTGTGTGGCTAATGGTCCTTCTTATAATGGTGCCAAATATGATGATT
CCCATCAAAGACATCAAGGAAAAGTCAAATGTGGGTTGTATGGAGTTTAAAAAGGAATTTGGAAGAAATTGGCAT
TTGCTGACAAATTTCATATGTGTAGCAATATTTTTAAATTTCTCAGCCATCATTTTAATATCCAATTGCCTTGTA
ATTCGACAGCTCTACAGAAACAAAGATAATGAAAATTACCCAAATGTGAAAAAGGCTCTCATCAACATACTTTTA
GTGACCACGGGCTACATCATATGCTTTGTTCCTTACCACATTGTCCGAATCCCGTATACCCTCAGCCAGACAGAA
GTCATAACTGATTGCTCAACCAGGATTTCACTCTTCAAAGCCAAAGAGGCTACACTGCTCCTGGCTGTGTCGAAC
CTGTGCTTTGATCCTATCCTGTACTATCACCTCTCAAAAGCATTCCGCTCAAAGGTCACTGAGACTTTTGCCTCA
CCTAAAGAGACCAAGGCTCAGAAAGAAAAATTAAGATGTGAAAATAATGCATAAAAGACAGGATTTTTTGTGCTA
CCAATTCTGGCCTTACTGGACCATAAAGTTAATTATAGCTTTGAAAGATAAAAAAAAAAAAAAAAGCGGCCGC

FIGURE 1905

MTNSSFFCPVYKDLEPFTYFFYLVFLVGIIGSCFATWAFIQKNTNHRCVSIYLINLLTADFLLTLALPVKIVVDL
GVAPWKLKIFHCQVTACLIYINMYLSIIFLAFVSIDRCLQLTHSCKIYRIQEPGFAKMISTVVWLMVLLIMVPNM
MIPIKDIKEKSNVGCMEFKKEFGRNWHLLTNFICVAIFLNFSAIILISNCLVIRQLYRNKDNENYPNVKKALINI
LLVTTGYIICFVPYHIVRIPYTLSQTEVITDCSTRISLFKAKEATLLLAVSNLCFDPILYYHLSKAFRSKVTETF
ASPKETKAQKEKLRCENNA

FIGURE 1906

GAAGCAGGCCTGAGCCTCCCCAAAGGCAGCTCCTGGGGACTCCCAGGACCACAGGCTGAGACGAGACGCAGGGTG
GCTGGAGGAAGTGAGAGGTGAACTCAGCCTGGGACTGGCTGGGCGAGACTCTCCACCTGCTCCCTGGGACCATCG
CCCACCATGGCTGTGGCCCAGCAGCTGCGGGCCGAGAGTGACTTTGAACAGCTTCCGGATGATGTTGCCATCTCG
GCCAACATTGCTGACATCGAGGAGAAGAGAGGCTTCACCAGCCACTTTGTTTTCGTCATCGAGGTGAAGACAAAA
GGAGGATCCAAGTACCTCATCTACCGCCGCTACCGCCAGTTCCATGCTTTGCAGAGCAAGCTGGAGGAGCGCTTC
GGGCCAGACAGCAAGAGCAGTGCCCTGGCCTGTACCCTGCCCACACTCCCAGCCAAAGTCTACGTGGGTGTGAAA
CAGGAGATCGCCGAGATGCGGATACCTGCCCTCAACGCCTACATGAAGAGCCTGCTCAGCCTGCCGGTCTGGGTG
CTGATGGATGAGGACGTCCGGATCTTCTTTTACCAGTCGCCCTATGACTCAGAGCAGGTGCCCCAGGCACTCCGC
CGGCTCCGCCCGCGCACCCGGAAAGTCAAGAGCGTGTCCCCACAGGGCAACAGCGTTGACCGCATGGCAGCTCCG
AGAGCAGAGGCTCTATTTGACTTCACTGGAAACAGCAAACTGGAGCTGAATTTCAAAGCTGGAGATGTGATCTTC
CTCCTCAGTCGGATCAACAAAGACTGGCTGGAGGGCACTGTCCGGGGAGCCACGGGCATCTTCCCTCTCTCCTTC
GTGAAGATCCTCAAAGACTTCCCTGAGGAGGACGACCCCACCAACTGGCTGCGTTGCTACTACTACGAAGACACC
ATCAGCACCATCAAGTCTGTGGCCTGGGAGGGAGGGGCCTGTCCAGCCTTCCTGCCATCCCTACGACCACCGCCC
CTCACATCACCTTCTCATGGGTCCCTCTCCCACTCCAAAGCCCCCAGTGGCTCCCAGATGAGCCACAATGCTGTA
ACAAGCCATCAACGTCCAGGGTGGCCTGGCCAGCCTCATTCCCCTTTCCCCCACCCCACACCCCACTTCCAGCCT
GATGCCTCCTTACTCCAGCCTGTCACCCCCTTAGGGACATCGCGGTGGAGGAAGATCTCAGCAGCACTCCCCTAT
TGAAAGACCTGCTGGAGCTCACAAGGCGGGAGTTCCAGAGAGAGGACATAGCTCTGAATTACCGGGACGCTGAGG
GGGATCTGGTTCGGCTGCTGTCGGATGAGGACGTAGCGCTCATGGTGCGGCAGGCTCGTGGCCTCCCCTCCCAGA
AGCGCCTCTTCCCCTGGAAGCTGCACATCACGCAGAAGGACAACTACAGGGTCTACAACACGATGCCATGA

FIGURE 1907

MAVAQQLRAESDFEQLPDDVAISANIADIEEKRGFTSHFVFVIEVKTKGGSKYLIYRRYRQFHALQSKLEERFGP
DSKSSALACTLPTLPAKVYVGVKQEIAEMRIPALNAYMKSLLSLPVWVLMDEDVRIFFYQSPYDSEQVPQALRRL
RPRTRKVKSVSPQGNSVDRMAAPRAEALFDFTGNSKLELNFKAGDVIFLLSRINKDWLEGTVRGATGIFPLSFVK
ILKDFPEEDDPTNWLRCYYYEDTISTIKSVAWEGGACPAFLPSLRPPPLTSPSHGSLSHSKAPSGSQMSHNAVTS
HQRPGWPGQPHSPFPHPTPHFQPDASLLQPVTPLGTSRWRKISAALPY

FIGURE 1908A

GTCGACGTGGCGGCCGGCGGCGGCTGCGGGCTGAGCGGCGAGTTTCCGATTTAAAGCTGAGCTGCGAGGAAAATG
GCGGCGGGAGGATCAAAATACTTGCTGGATGGTGGACTCAGAGACCAATAAAAATAAACTGCTTGAACATCCTTT
GACTGGTTAGCCAGTTGCTGATGTATATTCAAGATGAGTGGATTAGGAGAAAACTTGGATCCACTGGCCAGTGAT
TCACGAAAACGCAAATTGCCATGTGATACTCCAGGACAAGGTCTTACCTGCAGTGGTGAAAAACGGAGACGGGAG
CAGGAAAGTAAATATATTGAAGAATTGGCTGAGCTGATATCTGCCAATCTTAGTGATATTGACAATTTCAATGTC
AAACCAGATAAATGTGCGATTTTAAAGGAAACAGTAAGACAGATACGTCAAATAAAAGAGCAAGGAAAAACTATT
TCCAATGATGATGATGTTCAAAAAGCCGATGTATCTTCTACAGGGCAGGGAGTTATTGATAAAGACTCCTTAGGA
CCGCTTTTACTTCAGGCATTGGATGGTTTCCTATTTGTGGTGAATCGAGACGGAAACATTGTATTTGTATCAGAA
AATGTCACACAATACCTGCAATATAAGCAAGAGGACCTGGTTAACACAAGTGTTTACAATATCTTACATGAAGAA
GACAGAAAGGATTTTCTTAAGAATTTACCAAAATCTACAGTTAATGGAGTTTCCTGGACAAATGAGACCCAAAGA
CAAAAAAGCCATACATTTAATTGCCGTATGTTGATGAAAACACCACATGATATTCTGGAAGACATAAACGCCAGT
CCTGAAATGCGCCAGAGATATGAAACAATGCAGTGCTTTGCCCTGTCTCAGCCACGAGCTATGATGGAGGAAGGG
GAAGATTTGCAATCTTGTATGATCTGTGTGGCACGCCGCATTACTACAGGAGAAAGAACATTTCCATCAAACCCT
GAGAGCTTTATTACCAGACATGATCTTTCAGGAAAGGTTGTCAATATAGATACAAATTCACTGAGATCCTCCATG
AGGCCTGGCTTTGAAGATATAATCCGAAGGTGTATTCAGAGATTTTTTAGTCTAAATGATGGGCAGTCATGGTCC
CAGAAACGTCACTATCAAGAAGTTACCAGTGATGGGATATTTTCCCCAACAGCTTATCTTAATGGCCATGCAGAA
ACCCCAGTATATCGATTCTCGTTGGCTGATGGAACTATAGTGACTGCACAGACAAAAAGCAAACTCTTCCGAAAT
CCTGTAACAAATGATCGACATGGCTTTGTCTCAACCCACTTCCTTCAGAGAGAACAGAATGGATATAGACCAAAC
CCAAATCCTGTTGGACAAGGGATTAGACCACCTATGGCTGGATGCAACAGTTCGGTAGGCGGCATGAGTATGTCG
CCAAACCAAGGCTTACAGATGCCGAGCAGCAGGGCCTATGGCTTGGCAGACCCTAGCACCACAGGGCAGATGAGT
GGAGCTAGGTATGGGGGTTCCAGTAACATAGCTTCATTGACCCCTGGGCCAGGCATGCAATCACCATCTTCCTAC
CAGAACAACAACTATAGGCTCAACATGAGTAGCCCCCCACATGGGAGTCCTGGTCTTGCCCCAAACCAGCAGAAT
ATCATGATTTCTCCTCGTAATCGTGGGAGTCCAAAGATAGCCTCACATCAGTTTTCTCCTGTTGCAGGTGTGCAC
TCTCCCATGGCATCTTCTGGCAATACTGGGAACCACAGCTTTTCCAGCAGCTCTCTCAGTGCCCTGCAAGCCATC
AGTGAAGGTGTGGGGACTTCCCTTTTATCTACTCTGTCATCACCAGGCCCCAAATTGGATAACTCTCCCAATATG
AATATTACCCAACCAAGTAAAGTAAGCAATCAGGATTCCAAGAGTCCTCTGGGCTTTTATTGCGACCAAAATCCA
GTGGAGAGTTCAATGTGTCAGTCAAATAGCAGAGATCACCTCAGTGACAAAGAAAGTAAGGAGAGCAGTGTTGAG
GGGGCAGAGAATCAAAGGGGTCCTTTGGAAAGCAAAGGTCATAAAAAATTACTGCAGTTACTTACCTGTTCTTCT
GATGACCGGGGTCATTCCTCCTTGACCAACTCCCCCCTAGATTCAAGTTGTAAAGAATCTTCTGTTAGTGTCACC
AGCCCCTCTGGAGTCTCCTCCTCTACATCTGGAGGAGTATCCTCTACATCCAATATGCATGGGTCACTGTTACAA
GAGAAGCACCGGATTTTGCACAAGTTGCTGCAGAATGGGAATTCACCAGCTGAGGTAGCCAAGATTACTGCAGAA
GCCACTGGGAAAGACACCAGCAGTATAACTTCTTGTGGGGACGGAAATGTTGTCAAGCAGGAGCAGCTAAGTCCT
AAGAAGAAGGAGAATAATGCACTTCTTAGATACCTGCTGGACAGGGATGATCCTAGTGATGCACTCTCTAAAGAA
CTACAGCCCCAAGTGGAAGGAGTGGATAATAAAATGAGTCAGTGCACCAGCTCCACCATTCCTAGCTCAAGTCAA
GAGAAAGACCCTAAAATTAAGACAGAGACAAGTGAAGAGGGATCTGGAGACTTGGATAATCTAGATGCTATTCTT
GGTGATCTGACTAGTTCTGACTTTTACAATAATTCCATATCCTCAAATGGTAGTCATCTGGGGACTAAGCAACAG
GTGTTTCAAGGAACTAATTCTCTGGGTTTGAAAAGTTCACAGTCTGTGCAGTCTATTCGTCCTCCATATAACCGA
GCAGTGTCTCTGGATAGCCCTGTTTCTGTTGGCTCAAGTCCTCCAGTAAAAAATATCAGTGCTTTCCCCATGTTA
CCAAAGCAACCCATGTTGGGTGGGAATCCAAGAATGATGGATAGTCAGGAAAATTATGGCTCAAGTATGGGAGAC
TGGGGCTTACCAAACTCAAAGGCCGGCAGAATGGAACCTATGAATTCAAACTCCATGGGAAGACCAGGAGGAGAT
TATAATACTTCTTTACCCAGACCTGCACTGGGTGGCTCTATTCCCACATTGCCTCTTCGGTCTAATAGCATACCA
GGTGCGAGACCAGTATTGCAACAGCAGCAGCAGATGCTTCAAATGAGGCCTGGTGAAATCCCCATGGGAATGGGG
GCTAATCCCTATGGCCAAGCAGCAGCATCTAACCAACTGGGTTCCTGGCCCGATGGCATGTTGTCCATGGAACAA
GTTTCTCATGGCACTCAAAATAGGCCTCTTCTTAGGAATTCCCTGGATGATCTTGTTGGGCCACCTTCCAACCTG
GAAGGCCAGAGTGACGAAAGAGCATTATTGGACCAGCTGCACACTCTTCTCAGCAACACAGATGCCACAGGCCTG
GAAGAAATTGACAGAGCTTTGGGCATTCCTGAACTTGTCAATCAGGGACAGGCATTAGAGCCCAAACAGGATGCT
TTCCAAGGCCAAGAAGCAGCAGTAATGATGGATCAGAAGGCAGGATTATATGGACAGACATACCCAGCACAGGGG
CCTCCAATGCAAGGAGGCTTTCATCTTCAGGGACAATCACCATCTTTTAACTCTATGATGAATCAGATGAACCAG

FIGURE 1908B

CAAGGCAATTTTCCTCTCCAAGGAATGCACCCACGAGCCAACATCATGAGACCCCGGACAAACACCCCCAAGCAA
CTTAGAATGCAGCTTCAGCAGAGGCTGCAGGGCCAGCAGTTTTTGAATCAGAGCCGACAGGCACTTGAATTGAAA
ATGGAAAACCCTACTGCTGGTGGTGCTGCGGTGATGAGGCCTATGATGCAGCCCCAGCAGGGTTTTCTTAATGCT
CAAATGGTCGCCCAACGCAGCAGAGAGCTGCTAAGTCATCACTTCCGACAACAGAGGGTGGCTATGATGATGCAG
CAGCAGCAACAGCAGCAGCAGCAGCAGCAGCAGCAGCAACAGCAACAGCAACAGCAACAGCAGCAACAGCAGCAA
ACCCAGGCCTTCAGCCCACCTCCTAATGTGACTGCTTCCCCCAGCATGGATGGGCTTTTGGCAGGACCCACAATG
CCACAAGCTCCTCCGCAACAGTTTCCATATCAACCAAATTATGGAATGGGACAACAACCAGATCCAGCCTTTGGT
CGAGTGTCTAGTCCTCCCAATGCAATGATGTCGTCAAGAATGGGTCCCTCCCAGAATCCCATGATGCAACACCCG
CAGGCTGCATCCATCTATCAGTCCTCAGAAATGAAGGGCTGGCCATCAGGAAATTTGGCCAGGAACAGCTCCTTT
TCCCAGCAGCAGTTTGCCCACCAGGGGAATCCTGCAGTGTATAGTATGGTGCACATGAATGGCAGCAGTGGTCAC
ATGGGACAGATGAACATGAACCCCATGCCCATGTCTGGCATGCCTATGGGTCCTGATCAGAAATACTGCTGACAT
CTCTGCACCAGGACCTCTTAAGGAAACCACTGTACAAATGACACTGCACTAGGATTATTGGGAAGGAATCATTGT
TCCAGGCATCCATCTTGGAAGAAAGGACCAGCTTTGAGCTCCATCAAGGGTATTTTAAGTGATGTCATTTGAGCA
GGACTGGATTTTAAGCCGAAGGGCAATATCTACGTGTTTTTCCCCCCTCCTTCTGCTGTGTATCATGGTGTTCAA
AACAGAAATGTTTTTTGGCATTCCACCTCCTAGGGATATAATTCTGGAGACATGGAGTGTTACTGATCATAAAAC
TTTTGTGTCACTTTTTTCTGCCTTGCTAGCCAAAATCTCTTAAATACACGTAGGTGGGCCAGAGAACATTGGAAG
AATCAAGAGAGATTAGAATATCTGGTTTCTCTAGTTGCAGTATTGGACAAAGAGCATAGTCCCAGCCTTCAGGTG
TAGTAGTTCTGTGTTGACCCTTTGTCCAGTGGAATTGGTGATTCTGAATTGTCCTTTACTAATGGTGTTGAGTTG
CTCTGTCCCTATTATTTGCCCTAGGCTTTCTCCTAATGAAGGTTTTCATTTGCCATTCATGTCCTGTAATACTTC
ACCTCCAGGAACTGTCATGGATGTCCAAATGGCTTTGCAGAAAGGAAATGAGATGACAGTATTTAATCGCAGCAG
TAGCAAACTTTTCACATGCTAATGTGCAGCTGAGTGCACTTTATTTAAAAAGAATGGATAAATGCAATATTCTTG
AGGTCTTGAGGGAATAGTGAAACACATTCCTGGTTTTTGCCTACACTTACGTGTTAGACAAGAACTATGATTTTT
TTTTTTAAAGTACTGGTGTCACCCTTTGCCTATATGGTAGAGCAATAATGCTTTTTAAAAATAAACTTCTGAAAA
CCCAAGGCCAGGTACTGCATTCTGAATCAGAATCTCGCAGTGTTTCTGTGAATAGATTTTTTTGTAAATATGACC
TTTAAGATATTGTATTATGTAAAATATGTATATACCTTTTTTTGTAGGTCACAACAACTCATTTTTACAGAGTTT
GTGAAGCTAAATATTTAACATTGTTGATTTCAGTAAGCTGTGTGGTGAGGCTACCAGTGGAAGAGACATCCCTTG
ACTTTTGTGGCCTGGGGGAGGGGTAGTGCACCACAGCTTTTCCTTCCCCACCCCCCAGCCTTAGATGCCTCGCTC
TTTTCAATCTCTTAATCTAAATGCTTTTTAAAGAGATTATTTGTTTAGATGTAGGCATTTTAATTTTTTAAAAAT
TCCTCTACCAGAACTAAGCACTTTGTTAATTTGGGGGGAAAGAATAGATATGGGGAAATAAACTTAAAAAAAAAT
CAGGAATTTAAAAAAAACGAGCAATTTGAAGAGAATCTTTTGGATTTTAAGCAGTCCGAAATAATAGCAATTCAT
GGGCTGTGTGTGTGTGTGTATGTGTGTGTGTGTGTGTGTATGTTTAATTATGTTACCTTTTCATCCCCTTTAGGA
GCGTTTTCAGATTTTGGTTCGTAAGACCTGAATCCCATATTGAGATCTCGAGTAGAATCCTTGGTGTGGTTTCTG
GTGTCTGCTCAGCTGTCCCCTCATTCTACTAATGTGATGCTTTCATTATGTCCCTGTGGATTAGAATAGTGTCAG
TTATTTCTTAAGTAACTCAGTACCCAGAACAGCCAGTTTTACTGTGATTCAGAGCCACAGTCTAACTGAGCACCT
TTTAAACCCCTCCCTCTTCTGCCCCCTACCACTTTTCTGCTGTTGCCTCTCTTTGACACCTGTTTTAGTCAGTTG
GGAGGAAGGGAAAAATCAAGTTTAATTCCCTTTATCTGGGTTAATTCATTTGGTTCAAATAGTTGACGGAATTGG
GTTTCTGAATGTCTGTGAATTTCAGAGGTCTCTGCTAGCCTTGGTATCATTTTCTAGCAATAACTGAGAGCCAGT
TAATTTTAAGAATTTCACACATTTAGCCAATCTTTCTAGATGTCTCTGAAGGTAAGATCATTTAATATCTTTGAT
ATGCTTACGAGTAAGTGAATCCTGATTATTTCCAGACCCACCACCAGAGTGGATCTTATTTTCAAAGCAGTATAG
ACAATTATGAGTTTGCCCTCTTTCCCCTACCAAGTTCAAAATATATCTAAGAAAGATTGTAAATCCGAAAACTTC
CATTGTAGTGGCCTGTGCTTTTCAGATAGTATACTCTCCTGTTTGGAGACAGAGGAAGAACCAGGTCAGTCTGTC
TCTTTTTCAGCTCAATTGTATCTGACCCTTCTTTAAGTTATGTGTGTGGGGAGAAATAGAATGGTGCTCTTATGT
CGAC

FIGURE 1909

MSGLGENLDPLASDSRKRKLPCDTPGQGLTCSGEKRRREQESKYIEELAELISANLSDIDNFNVKPDKCAILKET
VRQIRQIKEQGKTISNDDDVQKADVSSTGQGVIDKDSLGPLLLQALDGFLFVVNRDGNIVFVSENVTQYLQYKQE
DLVNTSVYNILHEEDRKDFLKNLPKSTVNGVSWTNETQRQKSHTFNCRMLMKTPHDILEDINASPEMRQRYETMQ
CFALSQPRAMMEEGEDLQSCMICVARRITTGERTFPSNPESFITRHDLSGKVVNIDTNSLRSSMRPGFEDIIRRC
IQRFFSLNDGQSWSQKRHYQEVTSDGIFSPTAYLNGHAETPVYRFSLADGTIVTAQTKSKLFRNPVTNDRHGFVS
THFLQREQNGYRPNPNPVGQGIRPPMAGCNSSVGGMSMSPNQGLQMPSSRAYGLADPSTTGQMSGARYGGSSNIA
SLTPGPGMQSPSSYQNNNYRLNMSSPPHGSPGLAPNQQNIMISPRNRGSPKIASHQFSPVAGVHSPMASSGNTGN
HSFSSSSLSALQAISEGVGTSLLSTLSSPGPKLDNSPNMNITQPSKVSNQDSKSPLGFYCDQNPVESSMCQSNSR
DHLSDKESKESSVEGAENQRGPLESKGHKKLLQLLTCSSDDRGHSSLTNSPLDSSCKESSVSVTSPSGVSSSTSG
GVSSTSNMHGSLLQEKHRILHKLLQNGNSPAEVAKITAEATGKDTSSITSCGDGNVVKQEQLSPKKKENNALLRY
LLDRDDPSDALSKELQPQVEGVDNKMSQCTSSTIPSSSQEKDPKIKTETSEEGSGDLDNLDAILGDLTSSDFYNN
SISSNGSHLGTKQQVFQGTNSLGLKSSQSVQSIRPPYNRAVSLDSPVSVGSSPPVKNISAFPMLPKQPMLGGNPR
MMDSQENYGSSMGDWGLPNSKAGRMEPMNSNSMGRPGGDYNTSLPRPALGGSIPTLPLRSNSIPGARPVLQQQQQ
MLQMRPGEIPMGMGANPYGQAAASNQLGSWPDGMLSMEQVSHGTQNRPLLRNSLDDLVGPPSNLEGQSDERALLD
QLHTLLSNTDATGLEEIDRALGIPELVNQGQALEPKQDAFQGQEAAVMMDQKAGLYGQTYPAQGPPMQGGFHLQG
QSPSFNSMMNQMNQQGNFPLQGMHPRANIMRPRTNTPKQLRMQLQQRLQGQQFLNQSRQALELKMENPTAGGAAV
MRPMMQPQQGFLNAQMVAQRSRELLSHHFRQQRVAMMMQQQQQQQQQQQQQQQQQQQQQQQQQQTQAFSPPPNVT
ASPSMDGLLAGPTMPQAPPQQFPYQPNYGMGQQPDPAFGRVSSPPNAMMSSRMGPSQNPMMQHPQAASIYQSSEM
KGWPSGNLARNSSFSQQQFAHQGNPAVYSMVHMNGSSGHMGQMNMNPMPMSGMPMGPDQKYC

FIGURE 1910

ACTTCTGACAGTGGGGAAAGCAGCTGTGTGTGATAGCTTGGAAGGTTTACTGCTGCCTCAAGTCCTCTTCTCTGC
AGTTGAGGTTTCAGGTTTCAATCCTCCCAATACCACAAGACAGAGCACGGGGCGGCTGCCGCCTCCGCCTCCGCG
CCTTAACCTAGGCGGCTTGCCGAAGATCTCAGCCCCGCGGCCGCGCGCTCGCCCTGCCCTAGACCAGGGTTGGGC
GCAGCGGCGGAGGTGGCTTCTGGGCTGCGCGAGCTGGGAGAGCTGGGAGGCGGCGATCGCAGCTGGGCCGGGACT
TCCTTCCTCCACCGCACGGCAACAAAACAACCCTGCGGCAGGCACTGAGTGCTTCGCAGCTGTCTGGGCGAGAGG
CACAGCG**ATG**GGCTCCGTGCTGAGCACCGACAGCGGCAAATCGGCGCCCGCCTCTGCCACCGCGCGGGCCCTGGA
GCGCAGGAGGGACCCGGAGTTGCCCGTCACGTCCTTCGACTGCGCCGTGTGCCTTGAGGTGTTACACCAGCCTGT
CCGGACCCGCTGCGGCCACGTATTCTGCCGTTCCTGTATTGCTACCAGTCTGAAGAACAACAAGTGGACCTGTCC
TTATTGCCGGGCATATCTTCCTTCAGAAGGAGTTCCAGCAACTGATGTAGCCAAAAGAATGAAATCAGAGTATAA
GAACTGCGCTGAGTGTGACACCCTGGTTTGCCTCAGTGAAATGAGGGCACATATTCGGACTTGTCAGAAGTACAT
AGATAAGTATGGACCACTACAAGAACTTGAGGAGACAGCAGCAAGGTGTGTATGTCCCTTTTGTCAGAGGGAACT
GTATGAAGACAGCTTGCTGGATCATTGTATTACTCATCACAGATCGGAACGGAGGCCTGTGTTCTGTCCACTTTG
CCGTTTAATACCCGATGAGAATCCAAGCAGCTTCAGCGGCAATTTAATAAGACATCTGCAAGTTAGTCACACTTT
GTTTTATGATGATTTCATAGATTTTAATATAATTGAGGAAGCTCTTATCCGAAGAGTCTTAGACCGGTCACTTCT
TGAATATGTGAATCACTCGAACACCACA**TAA**TTTTATTAAAACGAAGGGAAAAGGGACCACTGAATTGCACCATT
TAAGATGCTGCTTGAACAAATGGGAGGGAAGTTGTCAATGATTGATGGGCAAAAATGTACAACACAGTTATGTGT
TTGTCCATGTTTATTGTTATAGTGCATTTAAAAACTGCTTTAATTTTAATGGTTTAAATCTGTTTTACATCCTTG
AGATTCTTACACATCTAACAACAAAAAAAATTATCTACATCAGTCATTGTTACATGGAAAAGACAGGTGGTAGGC
AAGTAGGTGGAGGATCTCGGTTTGCAAATTAGATAATACTCTGTGTATAATGCTACATATCAATAACTACCATCA
TGGTTAGGCACGATAACTAATCTTTGTTCTGTGTAAAAAAATATGGAGAGTGAAACAAAGTGCAGACATTCAAAG
AAATAAGAAATCTGCTCCAATGCTCTTGTTCTAATCTCTAATAGGTTAACGTTAATAATCTTGTATGGGAGTTGG
AAAGGAAAATTTTGGAAGTCAAGAAAGTCCATTTAGGCCGGACGCGGTGGCTTACGCTTGTAGTCCCAGCACTTT
GGGAGGCTGAGGCAGGCGGATCACAGGGTCGGGAGTTCGAGACCAGCCTGGCCAACACTGGTCTCTGTGAAACTC
CGTCTCTACTGAAAATGCAAAGATTGGCTGGACGTGTTGGCGGGCATCTGTGATACCAGCTACTTGGGAGGCTGA
GGCAGAAGAATCGCTTGAGCCCGGGAGGCGGAGGTTGCAGTGAGCTGAGATCGCGCCAGTACACTCCAGCCTGGG
TAACAGAGCTAGACTCCATCTCAAAAAAAAAAAAAAAAAAA

FIGURE 1911

MGSVLSTDSGKSAPASATARALERRRDPELPVTSFDCAVCLEVLHQPVRTRCGHVFCRSCIATSLKNNKWTCPYC
RAYLPSEGVPATDVAKRMKSEYKNCAECDTLVCLSEMRAHIRTCQKYIDKYGPLQELEETAARCVCPFCQRELYE
DSLLDHCITHHRSERRPVFCPLCRLIPDENPSSFSGNLIRHLQVSHTLFYDDFIDFNIIEEALIRRVLDRSLLEY
VNHSNTT

FIGURE 1912

GAGCTGCGAAAGGGCGGGAAAGGCAGTTGGAGAAGAGGTAAGCGGTTACTCACTCCATGGCTGCAGCAAGGAGAG
GCGGCGGCGGCCTCGGCTGAAGAAAGAAGGTGGGAGCGGAGAGCGCAGGCGTGAAATCTTCCCAAGGCTGCAGAC
ACCGACGGATTTGCTTTGGGAGCCAGAGTAGCTGCCGCCACCAGAGTCCGGAGCC**ATG**AGCGGGTTTAATTTTGG
AGGCACTGGGGCCCCTACAGGCGGGTTCACGTTTGGCACTGCAAAGACGGCAACAACCACACCTGCTACAGGGTT
TTCTTTCTCCACCTCTGGCACTGGAGGGTTTAATTTTGGGGCTCCCTTCCAACCAGCCACAAGTACCCCTTCCAC
CGGCCTGTTCTCACTTGCCACCCAGACTCCGGCCACACAGACGACAGGCTTCACTTTTGGAACAGCGACTCTTGC
TTCGGGGGGAACTGGATTTTCTTTGGGGATCGGTGCTTCAAAGCTCAACTTGAGCAACACAGCTGCCACCCCAGC
CATGGCAAACCCCAGCGGCTTTGGGCTGGGCAGCAGCAACCTCACTAATGCCATATCGAGCACCGTCACCTCCAG
CCAGGGCACAGCACCCACCGGCTTTGTGTTTGGCCCCTCCACCACCTCTGTGGCTCCAGCTACCACATCTGGAGG
CTTCTCATTCACTGGTGGAAGCACGGCCCAACCCTCCGGTTTCAACATTGGCTCAGCAGGGAATTCAGCCCAGCC
CACGGCACCTGCCACGTTGCCCTTCACTCCGGCCACGCCAGCAGCCACCACAGCAGGTGCCACACAGCCAGCTGC
TCCCACACCCACAGCCACCATCACCAGTACTGGGCCCAGCCTCTTTGCGTCAATAGCAACTGCTCCAACCTCATC
TGCCACCACTGGACTCTCCCTCTGTACCCCTGTGACCACAGCGGGCGCCCCCACTGCTGGGACACAGGGCTTCAG
CTTAAAGGCACCTGGAGCAGCTTCCGGCACCTCCACAACAACATCCACCGCTGCCACCGCCACCGCCACCACCAC
CACCAGCAGCAGCACCACCGGCTTTGCCTTGAATTTAAAACCACTGGCGCCAGCCGGGATCCCCAGCAATACAGC
AGCTGCCGTGACCGCTCCACCTGGCCCTGGCGCAGCTGCAGGGGCGGCTGCCAGCTCCGCCATGACCTACGCGCA
GCTGGAGAGCCTGATCAACAAATGGAGCCTGGAGCTAGAGGACCAGGAGCGGCACTTCCTCCAGCAGGCCACCCA
GGTCAACGCCTGGGACCGCACGCTGATCGAGAATGGAGAAAAGATCACCAGCCTGCACCGCGAGGTGGAGAAGGT
GAAGCTGGACCAGAAGAGGCTGGACCAGGAGCTCGACTTCATCCTGTCCCAGCAGAAGGAGCTGGAAGACCTGCT
GAGCCCACTGGAGGAGTTGGTCAAGGAGCAGAGCGGGACCATCTACCTGCAGCACGCGGATGAGGAGCGTGAGAA
AACCTACAAGCTGGCTGAGAACATCGACGCACAGCTCAAGCGCATGGCCCAGGATCTCAAGGACATCATCGAGCA
CCTGAACACGTCCGGGGCCCCCGCCGACACCAGTGACCCACTGCAGCAGATCTGCAAGATCCTCAATGCGCACAT
GGACTCACTGCAGTGGATCGACCAGAACTCGGCCCTGCTGCAGAGGAAGGTGGAGGAGGTGACCAAGGTGTGCGA
GGGCCGGCGCAAGGAGCAGGAGCGCAGCTTCCGGATCACCTTTGAC**TGA**GCGACAGCAGCCCTGGGGCCCGCAGG
TCCCTAGGGAGTTCATGAGGGGAATGCGCCCTGTTGTCTGTAGTTTGGGGTTGTGGCAAGATACTTGTTTGTTTG
TTTCTTTCTTTCACATGACTGCCCTTGACATGATCGCTGTGTGCTTTGCGTTTTTCCATTTAGGAGGGTATTCTG
GGCCTTCTGCCCAGGCAGCAGCCTCATGGGTGTGGCTTCTGTGGCTTTCATTTGAGTATCTTTGGCCCCTTTTCA
CCTACTGCGACCACCCACCTCATCCTGGCTCAGCCTGGTGATGGAGAAGTGCTGATGGTCTTGGTCCCAGCCAGG
GTCGTGGGGGCAGCCACTCTCTCCAAAGCATAGTCATGGGTGTCATGAAAAAATACCAAATGTAAGAGAACCTCC
AAGTCAGGGCGCAGTGGCTCACCCCTGTAATCTCAGCACTTTGGGTGGCCAAGGCGGGCAGATGACTTGAGGTCA
GGAGTTCGAGACCAGCCTGGCCAACATGGTGAAACCCCGTCTCTACTAAAAATACAAAAATTAGTCAGGTGTGGT
GGACGCCTGTGATCTCAATCTCAGCTACTCGGGAGGCTGAGGCAGGAGAATCACTTGAACCCAGGAGGTGTTGCA
GTGAACCAAGATCACACCACTGCACTCCAGCCTAGGCAACAGAGACTCTGTCTCAAAAAAAAAAAAAAAAAAAAG
AAACTCCCAGGAGACAGCAGCCTAGTTTTCGAGTGTGAGCTTGTGCTTGTGAAAGCTAACCATGCTAACCACCAA
GGCAAAGCAGCACAGTGTGAATAGAACAGAGCGGGATCAAGAATTTCACAGAAGACAGGTCAGCTGAGGGGCCTG
CACACACAGGGTGTTGAGGAACCACAGATGGGCGCCGAGAGGCCTGCCTTTTGCCTGGCCCAGGCTCACCCCCAC
CTTGGGCCTCACCTCCTCTAGGAAGCCTTCCCAGCTACCCGAAGCTCAGGTGGCCTTCTTGCAGGTCCCCGTAGC
ACCCTGAGCCTGTACCTTGGGTGGCACTTGTTATGCTATCCTGTGCTAGCCGTTTGTGCCTCGTCTCGCTGTTAG
ATTGTGAGTTCCCATGGGCAGAGACCCACTGTCGTTCCCCGTGTGTCCCCAGCCCGGTCCCTGTCACATTTGTTA
AATGAAAGAACAATGAAGCCCAGTGTAACGTCAGTCCACAGAAATAGCCACAGCTTCCAGTGGTGGCCGTAGACT
TGGCTCGGAACTTAGTGGCACCAGAGTAACTCTAGTCAGTTACAGTAAAATCCACTGTGTGTGGAAGGCAGAAGC
TAGCGGTTGTATCCCAAGCATCTTTTGTATTTGTCTTTATACTTTGCTGAATTCTCTGAAATACCTATTACTGTA
TGTGGCTTTTCTAAATAAATGTATTGTGAAACTAAAAAAAAAAAAAAAAA

FIGURE 1913

MSGFNFGGTGAPTGGFTFGTAKTATTTPATGFSFSTSGTGGFNFGAPFQPATSTPSTGLFSLATQTPATQTTGFT
FGTATLASGGTGFSLGIGASKLNLSNTAATPAMANPSGFGLGSSNLTNAISSTVTSSQGTAPTGFVFGPSTTSVA
PATTSGGFSFTGGSTAQPSGFNIGSAGNSAQPTAPATLPFTPATPAATTAGATQPAAPTPTATITSTGPSLFASI
ATAPTSSATTGLSLCTPVTTAGAPTAGTQGFSLKAPGAASGTSTTTSTAATATATTTTSSSTTGFALNLKPLAPA
GIPSNTAAAVTAPPGPGAAAGAAASSAMTYAQLESLINKWSLELEDQERHFLQQATQVNAWDRTLIENGEKITSL
HREVEKVKLDQKRLDQELDFILSQQKELEDLLSPLEELVKEQSGTIYLQHADEEREKTYKLAENIDAQLKRMAQD
LKDIIEHLNTSGAPADTSDPLQQICKILNAHMDSLQWIDQNSALLQRKVEEVTKVCEGRRKEQERSFRITFD

FIGURE 1914

GTTTTTTTCCCTTCTGAGCAATGGAGCTTACCATCTTTATCCTGAGACTGGCCATTTACATCCTGACATTTCCCT
TGTACCTGCTGAACTTTCTGGGCTTGTGGAGCTGGATATGCAAAAAATGGTTCCCCTACTTCTTGGTGAGGTTCA
CTGTGATATACAACGAACAGATGGCAAGCAAGAAGCGGGAGCTCTTCAGTAACCTGCAGGAGTTTGCGGGCCCCT
CCGGGAAACTCTCCCTGCTGGAAGTGGGCTGTGGCACGGGGGCCAACTTCAAGTTCTACCCACCTGGGTGCAGGG
TGACCTGTATTGACCCCAACCCCAACTTTGAGAAGTTTTTGATCAAGAGCATTGCAGAGAACCGACACCTGCAGT
TTGAGCGCTTTGTGGTAGCTGCCGGGGAGAACATGCACCAGGTGGCTGATGGCTCTGTGGATGTGGTGGTCTGCA
CCCTGGTGCTGTGCTCTGTGAAGAACCAGGAGCGGATTCTCCGCGAGGTGTGCAGAGTGCTGAGACCGGGAGGGG
CTTTCTATTTCATGGAGCATGTGGCAGCTGAGTGTTCGACTTGGAATTACTTCTGGCAACAAGTCCTGGATCCTG
CCTGGCACCTTCTGTTTGATGGGTGCAACCTGACCAGAGAGAGCTGGAAGGCCCTGGAGCGGGCCAGCTTCTCTA
AGCTGAAGCTGCAGCACATCCAGGCCCCACTGTCCTGGGAGTTGGTGCGCCCTCATATCTATGGATATGCTGTGA
AATAGTGTGAGCTGGCAGTTAAGAGCTGAATGGCTCAAAGAATTTAAAGCTTCAGTTTTACATTTAAAATGCTAA
GTGGGAGAAGAGAAACCTTTTTTTTGGGGGGCGGTTTTTTTGGTTTGTTGTTGGTTTTTTTTTTTTTTTGGCAA
GACTCCGTCTCAAAAAAAAAAAAAAAAAAAAAAAGAAGTAGAGACAGGGAGACAGGGTCTCACTGTGTTGCCTAG
GCCGGTCTTGAACTCCTGGGCTCAAGTGATTCTCCCACCTTGACCTCCTAAATTGTTGGGATTACAGGTGTGAGA
CAGTGCACCTGGCCGAAATAGCTCAAGTTTCTGAAAAACAAATCTGAATCTATTTGTTATTCTTAGCGTCACTGG
TCTGGCTTTCAGAATTAACATACAAGGTTGCCACACCTAGTTCTGCCCAGCTTTATGTCTTTTATTCCAGTATTC
CACCAAAGTTTGTTTTCCTGCATTCCAGTTCTCAAGTCTTAAGATAAAGATTGTACTTGACAGTTTAGTATATCC
ATAAAACTATTTGAGGTGGTTAAGGTTCTTGGGTTCATTTTCCTTAATACTTTGCTGAATATTGTAGATTGTAGG
CAATGAAAAAGTCTACTAAATTAGGAAAACCTTGAATAATTAGGTATCCTAGGTAAGAGCCCCTAAACATCAAGC
AATCTGTGAGTCTGTAAAGAAATAAATATTTTTTGGATTATTCTTATCTAATTCCACCCCTGTTGGAAGATGATT
TCTTTGTTCTTTGCAACTATGGAAGCTGTGAAAATCATCACAAGTGCCTCTGAAAGCGAGTGTTAGGTTGGTTAG
AGGGTTTAATATTTTCTGCAATGGTTTGTAGGAATTTTAATAAATGTAGTATATTTTCTGAGATGATTTTGTAAA
AGTACTATTTTAAATATCAAATCAACCAATAAATTCACATTTGTGTTAGGAACAG

FIGURE 1915

MELTIFILRLAIYILTFPLYLLNFLGLWSWICKKWFPYFLVRFTVIYNEQMASKKRELFSNLQEFAGPSGKLSLL
EVGCGTGANFKFYPPGCRVTCIDPNPNFEKFLIKSIAENRHLQFERFVVAAGENMHQVADGSVDVVVCTLVLCSV
KNQERILREVCRVLRPGGAFYFMEHVAAECSTWNYFWQQVLDPAWHLLFDGCNLTRESWKALERASFSKLKLQHI
QAPLSWELVRPHIYGYAVK

FIGURE 1916A

TTGAGGTGCATTGAAATGTTCCAAGCTGTTACTTACCTTAACATGTTCTTGAGGTACCATGGCATGGATTAAAAG
GAAATTTGGTAAGTGGCCTCCACTTAAACGACTTACTAGGGAAGCTATGTGAAATTATTTAAAAGGGCGAGGGGA
TCAAATAGTACTTATCCTTCATGCAAAAGTTGTACAGAAGTCATATGGAATGAAAAAGGTTTTTTGCCCTCCCCC
TTGTGTATATCTTATGGGCAGTGGATGGAAGAAAATAAAATTACAAATGAAATGCGATGGTTGTTCTGAACAAGG
CTCTCATCCATGTGCATTTATTGGGATAGGAAATAGTGACCAAGAAATGCAGCAGCTAAACTTGGAAGGAAAGAA
CTATTGCACAGCCAAAACATTGTACATATCTGATTCAGACAAGCAAAAGCACTTCATGTTGTCTGTAAAGGTGTT
CTATGGCAACGGTGATGACATTGGTGTGTTCCTCAGCAAGTCGTCCAAACCTTCCAAAAAGAAGCAGTCATTGAA
AAATGCTGACTTATGCATTGGCTCAGGAACAAAGGTGGCTCTGTTTAATCGACTACGATCCCAGACAGTTAGTAC
CAGATACTTGCATGTAGAAGGAGGGAATTTTCATGCCAGTTCACAGCAGTGGGGAGCATTTACATTATTCTTGGA
TGATGATGGATCAGAAGGAGAAGAATTCACAGTCAGAGATGGCTACATTCATTATGGACAAACAGTCAAGCTTGT
GTGCTCAGTTACTGGCATGGCACTCCCAAGATTGATAATTAGGAAAGTTGATAAGCAGACCACATTATTGGATGC
AGATGATCCTGTGTCACAACTCCATAAATGTGCATTTGACCTTGAGGATACAGAAAGAATGTACTTATGCCTTTC
TCAAGAAAGAATAATTCAATTTCAGGCCACTCCATGCCCAACAGAACCAAATAAAGAGATGATAAATGATGGTGC
TTCCTGGGCAATCATTAGCACACATAAGGCGAAGTATACATTTTATGAGAGAATGGGCCCTGTCCTTGCCCTGGT
CATGCCTATGCCTGTCGTAGAGAGCCTTAAGTTGAATGGCGGTGGGGACGAAGCAATGCTTGAACTTACAGGACA
GAATTTCACTCCAAATTTACGAGTGTGGTTTGGGGATGTAGAAGCTGAAACTATGTACAGGTGTGGAGAGAGTAT
GCTCCGTGTTGTCCCAGACGTTCTGCATTCTGAGAAGGTTGGAGATAGTTCCCAGCAACCAGTCCAGGTTTCAGT
AACTTTGGTCCGAAATGATGGAATCATATATTCCACCAGCCTTACCTTTACCTACACACCAGAAGCAGGGCCGCG
GCCACATTGCAGTGTAGCAGGCGCAATCCTTAAGGCCAGTTCAAGCCACGTGCCCCCTAATGAATTAAACACAAA
CAGCGATGGAAGTTACACAAATGCCAGCACAAATTCAACCAGTGTCACATCATCTACACCAACAGTGGTATCCTG
AACTACCGTCTTTTTGCTAAGACTCAAACGGCTTGAGTGCAGCAAAAAGTTGACAAAAAAGGAAAAAAAAATGAA
CAGTCTTTTGTGGTTTATTGGGAAACTTTTCATACCAGGTGATACTATTCTAAAACCCCGTTGTCTCCCTGCAAG
TGCTGATTTGAAATGCAGAAGCCACAGTAAAAAAAAAAAAAAAAAAAAAAAAAAAAGAAAAAAAAATCAAAATGT
ATAAATATTGGAAATCAAGTTTTTCAGCTGTTTTGTTGGTTGGTTGGTTGGTTTTTGTTTGGTTTTGTTTAAAGG
GACAAGAAGTAAATAATGTGGCTGGAATACAAGTTGAACAAACTAGAAGACACAAATCTAACATAGTTTTTATGG
ACCAAGGAACTTGTATATTGTATAAGCTTTAGTAAAAGGTACATTTTCACCATACCTTTTTTTATATCACGGTAT
TATAGTACACCTTGTTACCAATAGGTTGTTCTCTTCCCCACCCTCCTTTGAGCTTTGCTCTAAAATACATTCTGG
TTCCAAGCCTGACCATCCTTGTTTAATCTATCATACTCTTCCAGGTTTTTTTTTTTGGTCTAAGGCTGGAACTTT
TTTCTTTTTTTTTCAGCTGAAGTCTTATGACTTTTTCATGAGTCAAAATTGTTTGGATTTCACGAAGTCAAATCT
TGCAAAGGCCTGCATATTTTTTTTAAGATTATATGAAGTCTGTGCAAAAAGCTTTAAAAAATTGCCTCTGCCTTG
CCTGCATACATGCAATGTATGTAACTTAGTCTCTCTTCTCAGACACTGTTGGGTAGTTATTTCTGTGTTTTCTTT
TTTTAAAAAAAAAATATGGACTTATTGTGGTTTATCTGAGAGGTTCTAACATTCACATGCAATTTGGTGTGGCATT
TAGCTATTATGAGTTATTGGCGCGAACTTGTTTGATATTTGAAGTGTCTCTCCCCTTTTCCCATGACGTAATACA
TAGGTGTGTTCCAGGATTTGTTCAGGTTTTTCCCCCCCTCCTAATCTTGTACATAACTTGTATTTTGTGTAAGTT
AAACATTTTATTTGAACTTGGAATGTTCCCAGTGATTTCATTCAGCAGGGTATTTTCTGCCTTGTTGGCAAGTAG
CAAAAAATATGGGAAGTATTTGCTACCAGTTGTTAGATGGTGCCCCTTATTGGTAGAATCAGGAAAATGTCCGCA
AAAGCATGTTTTATTATCTTTACTTTTTTGGGGGGGTTGGAGGGGGTAGCCTAGCCAGACATCATGTAATCTTAAA
ACATAAGATGCTTTTATTAGATGATCAACTAAAAATAGCTGGAAGACAGTACTTTAGAAACAAAATAGTTAGTAA
GATATATAATGCAAATGTAACTTATGTTTTCATTTTTTTCTCTGCCTTTTTTTTTTGTTTTTTTTCTTTTTTTCC
AGTACTGAGCATCTCCACAAATGTCTCCTACTCAGAAAATGTTTCTTTTCTTTCAGTTGAGATTTGGTGCATTCA
GGGTTGTAGGTTGGCCTTGCTTGCTAACCCGCCGGTTTTACCGTGCTTTATTCCTGAACTTTGTTTATGCCTTTG
TTTGGTTCTTCTGAAATTGCAGCAGACTCATTGGGCTACATTTAGTACAGGAACCACGTGTGTAATGTTATACAA
CACAGTCAGTAATACAATCATCCCTCTTAGAGTAAAAACTACCTCTAGATTGTGTAAGCTTTTTACTGTCCATAA
AACAGGAGCCACAGTACCTTATGAATGCAAAACTGTAACTTCCTACAGTGTTTCCCCACAGAACATTGTCTTTCT
GGTGTCTGGGCTGTTTTTGAAAAAGTTTCCATTAATAGACTTTTTAGAAATTATTATTAGTAGCATTTTTTTTCC
AGCTTTGCGTCTTCATCACTCACTCAAGTGTCAGACTATGCACTGTAAATATCTTCCTAACATCTTTAAATCGCC
TTTTCCTCAGTTTTCAAGGGGAAGGTCATTTGTAAAGCACGTTAGGTGGTTAAATCAGTTATTGCGGTTTTCTCT
TACAGCAAGCCTTTTTAATCACCCCCAGGCTGCATTTTATTCTATATCGCCTTTTTTCTTCAAATCTGCTCCAAT

FIGURE 1916B

CATCCACTTCTCTCTTATAAGCTATTCCTGCCTCACACCTAAATCTGTTTCAGTGATCAAGGGCAGAACTCATTG
TGGCCTTATCTTTCTTTGTTGTAATTGTTCACTGTCTCTTTCTTACAGACCACTTATTCTGAGTAGTAGTTATTC
CTCCCTATGGAGTCATGGCAGGAATCATTACACAGTGCTTTTGTTCAGAGCATGGACATGTTCCAGGTGCTGCTT
TGCTTTAACGGCCACAAGTTTCCTCCACTTCTCAGGTTTGGTATTTAGTAAGGAATCAATTAAATTAACCAATAA
CAAAAGAGATACTTTTGAAGAACAAACTATTCTTTACCCATTTTGTAGCTCAAAAATAATTTTTCAAGTTCATGA
CCTTATTAAAATGAACTTGTGTTTTTTTAACAAACGTCTATTTTATTTTGATAGTTTCTTTCCGAAGATAATTGA
AATATTATACTGTAACCCTTTTCTTTTCTTTTTTGAAAAGTCCAAGAATGTACTTATACAGGATTTTTCCCCACC
TATTTTTGGCCATTCTCATACCACAGACAAAAGAGTGAATGATTGTCATTGTAGCTTATTGTTTATCAGTAGTTC
TTTTGTAGCTGCTTACATTTTTTCTTTCATGGTTTGTGAATCATTTCAGTATGTAATTTATAGGAACCTTGTCCT
CTGGTATAGTAGACTGTGTGCCCTCCTCCAGGATGGCATTATTAGACATGCTGGTCATTTACCCTCAGAAAGACT
CTCTTATAGAATGGTGAGTGCTTCAGTTATAGTATGTTTGAATTTTAAAAAATTCCTGTTTAGAATGTATCTATG
CTCTCATGACTATGCAGTTTCTAACATACACATAGAAGCTGAGTCTCTGATCCAATATGTTTTTATTTGTTCCAT
TAATTTATCACATAGATTGGGAAGGCAAGCTAAAAGCCTTAAAAATGCCCTTTATATTTTGAGTGATTTCAGCGT
TGAACACAGTATACTATCTAAATTTGCTGCTCACTTTCTTAAACTGTTGCAATTAAAGGCATGTTTATACATGAC
TAATCGTGAAATGTTTGTCACTCTTACTGCACAGACTTATCTGCAATCAAACTGGTTAGTTTTTTTGTTTTGTTT
TGTTTTATTGTTTTTAATGAATCTGGTACCATCTGTGCTTTCACAAAAAACTTCCAATGCCATTTTTGAGAACTA
ACCTAACAGTCATGCTAACCAGAAAATCCACTGGGGAGGAGGTTCCTTTGAAACAAAATGCTGTTCAGTTAGTAA
CCAAGTTACTTTGATTGCAAAAGCAGCTGTGTTTCTGATAAGTACTGAACAAATGTGTGTAATTTTCTGTGCCAG
ACTTATGACTTTGTTTTCAAGCACTGTAATGTGGGATGGATGGTTAGAAACAATAATATATAGGGTTTCTGTTAA
CCCTTTCAGGACTCAACTGTATCTCCTTTTGTTAATTTTCCCCTGTGTTGTGATAAATTGTTTGCCAGCATTCAG
TACTGTGTTGGTGCAGATGAGGTTTATATCTCATTTTAGCTTATTTCTTGTACCTTTCAGCATGCCTACGCATTC
AGTCCTTAAGGGGTTTATTTTACAAACTGTGCGCCTGAAGTTTATTAGCAATAAGATAGAAAATGAGCAAGTTTA
TACCATAATTTTGAGAAAAAAAGAATCTGCTCAGTTCCATATTTCATCCGTGAAAAACTTGCAATACGAGCAGTT
TCAAGGAATAAATAAAAAGGAAATGAAACCATTGT

FIGURE 1917

MGSGWKKIKLQMKCDGCSEQGSHPCAFIGIGNSDQEMQQLNLEGKNYCTAKTLYISDSDKQKHFMLSVKVFYGNG
DDIGVFLSKSSKPSKKKQSLKNADLCIGSGTKVALFNRLRSQTVSTRYLHVEGGNFHASSQQWGAFTLFLDDDGS
EGEEFTVRDGYIHYGQTVKLVCSVTGMALPRLIIRKVDKQTTLLDADDPVSQLHKCAFDLEDTERMYLCLSQERI
IQFQATPCPTEPNKEMINDGASWAIISTHKAKYTFYERMGPVLALVMPMPVVESLKLNGGGDEAMLELTGQNFTP
NLRVWFGDVEAETMYRCGESMLRVVPDVLHSEKVGDSSQQPVQVSVTLVRNDGIIYSTSLTFTYTPEAGPRPHCS
VAGAILKASSSHVPPNELNTNSDGSYTNASTNSTSVTSSTPTVVS

FIGURE 1918

AGACAATTTTCAGCAGGAAGAAGTAGAAAGGATAAAATGGATCCTGCACCACGGGAACCTCACAGCACCTCACTT
CTTTTGGTTTTCTTTCTCTTTGGGGCACCTCTGGACTCACTCCCCAGCATGAAGGCGCTGAGCCCGGTGCGCGGC
TGCTACGAGGCGGTGTGCTGCCTGTCGGAACGCAGTCTGGCCATCGCCCGGGGCCGAGGGAAGGGCCCGGCAGCT
GAGGAGCCGCTGAGCTTGCTGGACGACATGAACCACTGCTACTCCCGCCTGCGGGAACTGGTACCCGGAGTCCCG
AGAGGCACTCAGCTTAGCCAGGTGGAAATCCTACAGCGCGTCATCGACTACATTCTCGACCTGCAGGTAGTCCTG
GCCGAGCCAGCCCCTGGACCCCCTGATGGCCCCCACCTTCCCATCCAGACAGCCGAGCTCGCTCCGGAACTTGTC
ATCTCCAACGACAAAAGGAGCTTTTGCCACTGACTCGGCCGTGTCCTGACACCTCCAGAACGCAGGTGCTGGCGC
CCGTTCTGCCTGGGACCCCGGGAACCTCTCCTGCCGGAAGCCGGACGGCAGGGATGGGCCCCAACTTCGCCCTGC
CCACTTGACTTCACCAAATCCCTTCCTGGAGACTGAACCTGGTGCTCAGGAGCGAAGGACTGTGAACTTGTGGCC
TGAAGAGCCAGAGCTAGCTCTGGCCACCAGCTGGGCGACGTCACCCTGCTCCCACCCCACCCCAAGTTCTAAGGT
CTTTTCAGAGCGTGGAGGTGTGGAAGGAGTGGCTGCTCTCCAAACTATGCCAAGGCGGCGGCAGAGCTGGTCTTC
TGGTCTCCTTGGAGAAAGGTTCTGTTGCCCTGATTTATGAACTCTATAATAGAGTATATAGGTTTTGTACCTTTT
TTACAGGAAGGTGACTTTCTGTAACAATGCGATGTATATTAAACTTTTTATAAAAGTTAACATTTTGCATAATAA
ACGATTT

FIGURE 1919

MDPAPREPHSTSLLLVFFLFGAPLDSLPSMKALSPVRGCYEAVCCLSERSLAIARGRGKGPAAEEPLSLLDDMNH
CYSRLRELVPGVPRGTQLSQVEILQRVIDYILDLQVVLAEPAPGPPDGPHLPIQTAELAPELVISNDKRSFCH

FIGURE 1920A

GAGAGGTCGTTTTCCCGTCCCCGAGAGCAAGTTTATTTACAAATGTTGGAGTAATAAAGAAGGCAGAACAAA**ATG**

AGCTGGGCTTTGGAAGAATGGAAAGAAGGGCTGCCTACAAGAGCTCTTCAGAAAATTCAAGAGCTTGAAGGACAG
CTTGACAAACTGAAGAAGGAAAAGCAGCAAAGGCAGTTTCAGCTTGACAGTCTCGAGGCTGCGCCTCAGAAGCAA
ACACAGAAGGTTGAAAATGAAAAAACCGAGGGTACAAACCTGAAAAGGGAGAATCAAAGATTGATGGAAATATGT
GAAAGTCTGGAGAAAACTAAGCAGAAGATTTCTCATGAACTTCAAGTCAAGGAGTCACAAGTGAATTTCCAGGAA
GGACAACTGAATTCAGGCAAAAAACAAATAGAAAAACTGGAACAGGAACTTAAAAGGTGTAAATCTGAGCTTGAA
AGAAGCCAACAAGCTGCGCAGTCTGCAGATGTCTCTCTGAATCCATGCAATACACCACAAAAAATTTTTACAACT
CCACTAACACCAAGTCAATATTATAGTGGTTCCAAGTATGAAGATCTAAAAGAAAAATATAATAAAGAGGTTGAA
GAACGAAAAAGATTAGAGGCAGAGGTTAAAGCCTTGCAGGCTAAAAAAGCAAGCCAGACTCTTCCACAAGCCACC
ATGAATCACCGCGACATTGCCCGGCATCAGGCTTCATCATCTGTGTTCTCATGGCAGCAAGAGAAGACCCCAAGT
CATCTTTCATCTAATTCTCAAAGAACTCCAATTAGGAGAGATTTCTCTGCATCTTACTTTTCTGGGGAACAAGAG
GTGACTCCAAGTCGATCAACTTTGCAAATAGGGAAAAGAGATGCTAATAGCAGTTTCTTTGACAATTCTAGCAGT
CCTCATCTTTTGGATCAATTAAAAGCGCAGAATCAAGAGCTAAGAAACAAGATTAATGAGTTGGAACTACGCCTG
CAAGGACATGAAAAAGAAATGAAAGGCCAAGTGAATAAGTTTCAAGAACTCCAACTCCAACTGGAGAAAGCAAAA
GTGGAATTAATTGAAAAAGAGAAAGTTTTGAACAAATGTAGGGATGAACTAGTGAGAACAACAGCACAATACGAC
CAGGCGTCAACCAAGTATACTGCATTGGAACAAAAACTGAAAAAATTGACGGAAGATTTGAGTTGTCAGCGACAA
AATGCAGAAAGTGCCAGATGTTCTCTGGAACAGAAAATTAAGGAAAAAGAAAAGGAGTTTCAAGAGGAGCTCTCC
CGTCAACAGCGTTCTTTCCAAACACTGGACCAGGAGTGCATCCAGATGAAGGCCAGACTCACCCAGGAGTTACAG
CAAGCCAAGAATATGCACAACGTCCTGCAGGCTGAACTGGATAAACTCACATCAGTAAAGCAACAGCTAGAAAAC
AATTTGGAAGAGTTTAAGCAAAAGTTGTGCAGAGCTGAACAGGCGTTCCAGGCGAGTCAGATCAAGGAGAATGAG
CTGAGGAGAAGCATGGAGGAAATGAAGAAGGAAAACAACCTCCTTAAGAGTCACTCTGAGCAAAAGGCCAGAGAA
GTCTGCCACCTGGAGGCAGAACTCAAGAACATCAAACAGTGTTTAAATCAGAGCCAGAATTTTGCAGAAGAAATG
AAAGCGAAGAATACCTCTCAGGAAACCATGTTAAGAGATCTTCAAGAAAAAATAAATCAGCAAGAAAACTCCTTG
ACTTTAGAAAAACTGAAGCTTGCTGTGGCTGATCTGGAAAAGCAGCGAGATTGTTCTCAAGACCTTTTGAAGAAA
AGAGAACATCACATTGAACAACTTAATGATAAGTTAAGCAAGACAGAGAAAGAGTCCAAAGCCTTGCTGAGTGCT
TTAGAGTTAAAAAAGAAAGAATATGAATTGAAAGAAGAGAAAACTCTGTTTTCTTGTTGGAAAAGTGAAAACGAA
AAACTTTTAACTCAGATGGAATCAGAAAAGGAAAACTTGCAGAGTAAAATTAATCACTTGGAAACTTGTCTGAAG
ACACAGCAAATAAAAAGTCATGAATACAACGAGAGAGTAAGAACGCTGGAGATGGACAGAGAAAACCTAAGTGTC
GAGATCAGAAACCTTCACAACGTGTTAGACAGTAAGTCAGTGGAGGTAGAGACCCAGAAACTAGCTTATATGGAG
CTACAGCAGAAAGCTGAGTTCTCAGATCAGAAACATCAGAAGGAAATAGAAAATATGTGTTTGAAGACTTCTCAG
CTTACTGGGCAAGTTGAAGATCTAGAACACAAGCTTCAGTTACTGTCAAATGAAATAATGGACAAAGACCGGTGT
TACCAAGACTTGCATGCCGAATATGAGAGCCTCAGGGATCTGCTAAAATCCAAAGATGCTTCTCTGGTGACAAAT
GAAGATCATCAGAGAAGTCTTTTGGCTTTTGATCAGCAGCCTGCCATGCATCATTCCTTTGCAAATATAATTGGA
GAACAAGGAAGCATGCCTTCAGAGAGGAGTGAATGTCGTTTAGAAGCAGACCAAAGTCCGAAAAATTCTGCCATC
CTACAAAATAGAGTTGATTCACTTGAATTTTCATTAGAGTCTCAAAAACAGATGAACTCAGACCTGCAAAAGCAG
TGTGAAGAGTTGGTGCAAATCAAAGGAGAAATAGAAGAAAATCTCATGAAAGCAGAACAGATGCATCAAAGTTTT
GTGGCTGAAACAAGTCAGCGCATTAGTAAGTTACAGGAAGACACTTCTGCTCACCAGAATGTTGTTGCTGAAACC
TTAAGTGCCCTTGAGAACAAGGAAAAAGAGCTGCAACTTTTAAATGATAAGGTAGAAACTGAGCAGGCAGAGATT
CAAGAATTAAAAAAGAGCAACCATCTACTTGAAGACTCTCTAAAGGAGCTACAACTTTTATCCGAAACCCTAAGC
TTGGAGAAGAAAGAAATGAGTTCCATCATTTCTCTAAATAAAAGGGAAATTGAAGAGCTGACCCAAGAGAATGGG
ACTCTTAAGGAAATTAATGCATCCTTAAATCAAGAGAAGATGAACTTAATCCAGAAAAGTGAGAGTTTTGCAAAC
TATATAGATGAAAGGGAGAAAAGCATTTCAGAGTTATCTGATCAGTACAAGCAAGAAAAACTTATTTTACTACAA
AGATGTGAAGAAACCGGAAATGCATATGAGGATCTTAGTCAAAAATACAAAGCAGCACAGGAAAAGAATTCTAAA
TTAGAATGCTTGCTAAATGAATGCACTAGTCTTTGTGAAAATAGGAAAAATGAGTTGGAACAGCTAAAGGAAGCA
TTTGCAAAGGAACACCAAGAATTCTTAACAAAATTAGCATTTGCTGAAGAAAGAAATCAGAATCTGATGCTAGAG
TTGGAGACAGTGCAGCAAGCTCTGAGATCTGAGATGACAGATAACCAAAACAATTCTAAGAGCGAGGCTGGTGGT
TTAAAGCAAGAAATCATGACTTTAAAGGAAGAACAAAACAAAATGCAAAAGGAAGTTAATGACTTATTACAAGAG
AATGAACAGCTGATGAAGGTAATGAAGACTAAACATGAATGTCAAAATCTAGAATCAGAACCAATTAGGAACTCT

FIGURE 1920B

GTGAAAGAAAGAGAGAGTGAGAGAAATCAATGTAATTTTAAACCTCAGATGGATCTTGAAGTTAAAGAAATTTCT
CTAGATAGTTATAATGCGCAGTTGGTGCAATTAGAAGCTATGCTAAGAAATAAGGAATTAAAACTTCAGGAAAGT
GAGAAGGAGAAGGAGTGCCTGCAGCATGAATTACAGACAATTAGAGGAGATCTTGAAACCAGCAATTTGCAAGAC
ATGCAGTCACAAGAAATTAGTGGCCTTAAAGACTGTGAAATAGATGCGGAAGAAAAGTATATTTCAGGGCCTCAT
GAGTTGTCAACAAGTCAAAACGACAATGCACACCTTCAGTGCTCTCTGCAAACAACAATGAACAAGCTGAATGAG
CTAGAGAAAATATGTGAAATACTGCAGGCTGAAAAGTATGAACTCGTAACTGAGCTGAATGATTCAAGGTCAGAA
TGTATCACAGCAACTAGGAAAATGGCAGAAGAGGTAGGGAAACTACTAAATGAAGTTAAAATATTAAATGATGAC
AGTGGTCTTCTCCATGGTGAGTTAGTGGAAGACATACCAGGAGGTGAATTTGGTGAACAACCAAATGAACAGCAC
CCTGTGTCTTTGGCTCCATTGGACGAGAGTAATTCCTACGAGCACTTGACATTGTCAGACAAAGAAGTTCAAATG
CACTTTGCCGAATTGCAAGAGAAATTCTTATCTTTACAAAGTGAACACAAAATTTTACATGATCAGCACTGTCAG
ATGAGCTCTAAAATGTCAGAGCTGCAGACCTATGTTGACTCATTAAAGGCCGAAAATTTGGTCTTGTCAACGAAT
CTGAGAAACTTTCAAGGTGACTTGGTGAAGGAGATGCAGCTGGGCTTGGAGGAGGGGCTCGTTCCATCCCTGTCA
TCCTCTTGTGTGCCTGACAGCTCTAGTCTTAGCAGTTTGGGAGACTCCTCCTTTTACAGAGCTCTTTTAGAACAG
ACAGGAGATATGTCTCTTTTGAGTAATTTAGAAGGGGCTGTTTCAGCAAACCAGTGCAGTGTAGATGAAGTATTT
TGCAGCAGTCTGCAGGAGGAGAATCTGACCAGGAAAGAAACCCCTTCGGCCCCAGCGAAGGGTGTTGAAGAGCTT
GAGTCCCTCTGTGAGGTGTACCGGCAGTCCCTCGAGAAGCTAGAAGAGAAAATGGAAAGTCAAGGGATTATGAAA
AATAAGGAAATTCAAGAGCTCGAGCAGTTATTAAGTTCTGAAAGGCAAGAGCTTGACTGCCTTAGGAAGCAGTAT
TTGTCAGAAAATGAACAGTGGCAACAGAAGCTGACAAGCGTGACTCTGGAGATGGAGTCCAAGTTGGCGGCAGAA
AAGAAACAGACGGAACAACTGTCACTTGAGCTGGAAGTAGCACGACTCCAGCTACAAGGTCTGGACTTAAGTTCT
CGGTCTTTGCTTGGCATCGACACAGAAGATGCTATTCAAGGCCGAAATGAGAGCTGTGACATATCAAAAGAACAT
ACTTCAGAAACTACAGAAAGAACACCAAAGCATGATGTTCATCAGATTTGTGATAAAGATGCTCAGCAGGACCTC
AATCTAGACATTGAGAAAATAACTGAGACTGGTGCATTGAAACCCACAGGAGAGTGCTCTGGGGAACAGTCCCCA
GATACCAATTATGAGCCTCCAGGGGAAGATAAAACCCAGGGCTCTTCAGAATGCATTTCTGAATTGTCATTTTCT
GGTCCTAATGCTTTGGTACCTATGGATTTCCTGGGGAATCAGGAAGATATCCATAATCTTCAACTGCGGGTAAAA
GAGACATCAAATGAGAATTTGAGATTACTTCATGTGATAGAGGACCGTGACAGAAAAGTTGAAAGTTTGCTAAAT
GAAATGAAAGAATTAGACTCAAAACTCCATTTACAGGAGGTACAACTAATGACCAAAATTGAAGCATGCATAGAA
TTGGAAAAAATAGTTGGGGAACTTAAGAAAGAAAACTCAGATTTAAGTGAAAAATTGGAATATTTTTCTTGTGAT
CACCAGGAGTTACTCCAGAGAGTAGAAACTTCTGAAGGCCTCAATTCTGATTTAGAAATGCATGCAGATAAATCA
TCACGTGAAGATATTGGAGATAATGTGGCCAAGGTGAATGACAGCTGGAAGGAGAGATTTCTTGATGTGGAAAAT
GAGCTGAGTAGGATCAGATCGGAGAAAGCTAGCATTGAGCATGAAGCCCTCTACCTGGAGGCTGACTTAGAGGTA
GTTCAAACAGAGAAGCTATGTTTAGAAAAAGACAATGAAAATAAGCAGAAGGTTATTGTCTGCCTTGAAGAAGAA
CTCTCAGTGGTCACAAGTGAGAGAAACCAGCTTCGTGGAGAATTAGATACTATGTCAAAAAAAACCACGGCACTG
GATCAGTTGTCTGAAAAAATGAAGGAGAAAACACAAGAGCTTGAGTCTCATCAAAGTGAGTGTCTCCATTGCATT
CAGGTGGCAGAGGCAGAGGTGAAGGAAAAGACGGAACTCCTTCAGACTTTGTCCTCTGATGTGAGTGAGCTGTTA
AAAGACAAAACTCATCTCCAGGAAAAGCTGCAGAGTTTGGAAAAGGACTCACAGGCACTGTCTTTGACAAAATGT
GAGCTGGAAAACCAAATTGCACAACTGAATAAAGAGAAAGAATTGCTTGTCAAGGAATCTGAAAGCCTGCAGGCC
AGACTGAGTGAATCAGATTATGAAAAGCTGAATGTCTCCAAGGCCTTGGAGGCCGCACTGGTGGAGAAAGGTGAG
TTCGCATTGAGGCTGAGCTCAACACAGGAGGAAGTGCATCAGCTGAGAAGAGGCATCGAGAAACTGAGAGTTCGC
ATTGAGGCCGATGAAAAGAAGCAGCTGCACATCGCAGAGAAACTGAAAGAACGCGAGCGGGAGAATGATTCACTT
AAGGATAAAGTTGAGAACCTTGAAAGGGAATTGCAGATGTCAGAAGAAAACCAGGAGCTAGTGATTCTTGATGCC
GAGAATTCCAAAGCAGAAGTAGAGACTCTAAAAACACAAATAGAAGAGATGGCCAGAAGCCTGAAAGTTTTTGAA
TTAGACCTTGTCACGTTAAGGTCTGAAAAAGAAAATCTGACAAAACAAATACAAGAAAAACAAGGTCAGTTGTCA
GAACTAGACAAGTTACTCTCTTCATTTAAAAGTCTGTTAGAAGAAAAGGAGCAAGCAGAGATACAGATCAAAGAA
GAATCTAAAACTGCAGTGGAGATGCTTCAGAATCAGTTAAAGGAGCTAAATGAGGCAGTAGCAGCCTTGTGTGGT
GACCAAGAAATTATGAAGGCCACAGAACAGAGTCTAGACCCACCAATAGAGGAAGAGCATCAGCTGAGAAATAGC
ATTGAAAAGCTGAGAGCCCGCCTAGAAGCTGATGAAAAGAAGCAGCTCTGTGTCTTACAACAACTGAAGGAAAGT
GAGCATCATGCAGATTTACTTAAGGGTAGAGTGGAGAACCTTGAAAGAGAGCTAGAGATAGCCAGGACAAACCAA
GAGCATGCAGCTCTTGAGGCAGAGAATTCCAAAGGAGAGGTAGAGACCCTAAAAGCAAAAATAGAAGGGATGACC

FIGURE 1920C

CAAAGTCTGAGAGGTCTGGAATTAGATGTTGTTACTATAAGGTCAGAAAAAGAAAATCTGACAAATGAATTACAA
AAAGAGCAAGAGCGAATATCTGAATTAGAAATAATAAATTCATCATTTGAAAATATTTTGCAAGAAAAAGAGCAA
GAGAAAGTACAGATGAAAGAAAAATCAAGCACTGCCATGGAGATGCTTCAAACACAATTAAAAGAGCTCAATGAG
AGAGTGGCAGCCCTGCATAATGACCAAGAAGCCTGTAAGGCCAAAGAGCAGAATCTTAGTAGTCAAGTAGAGTGT
CTTGAACTTGAGAAGGCTCAGTTGCTACAAGGCCTTGATGAGGCCAAAAATAATTATATTGTTTTGCAATCTTCA
GTGAATGGCCTCATTCAAGAAGTAGAAGATGGCAAGCAGAAACTGGAGAAGAAGGATGAAGAAATCAGTAGACTG
AAAAATCAAATTCAAGACCAAGAGCAGCTTGTCTCTAAACTGTCCCAGGTGGAAGGAGAGCACCAACTTTGGAAG
GAGCAAAACTTAGAACTGAGAAATCTGACAGTGGAATTGGAGCAGAAGATCCAAGTGCTACAATCCAAAAATGCC
TCTTTGCAGGACACATTAGAAGTGCTGCAGAGTTCTTACAAGAATCTAGAGAATGAGCTTGAATTGACAAAAATG
GACAAAATGTCCTTTGTTGAAAAAGTAAACAAAATGACTGCAAAGGAAACTGAGCTGCAGAGGGAAATGCATGAG
ATGGCACAGAAAACAGCAGAGCTGCAAGAAGAACTCAGTGGAGAGAAAAATAGGCTAGCTGGAGAGTTGCAGTTA
CTGTTGGAAGAAATAAAGAGCAGCAAAGATCAATTGAAGGAGCTCACACTAGAAAATAGTGAATTGAAGAAGAGC
CTAGATTGCATGCACAAAGACCAGGTGGAAAAGGAAGGGAAAGTGAGAGAGGAAATAGCTGAATATCAGCTACGG
CTTCATGAAGCTGAAAAGAAACACCAGGCTTTGCTTTTGGACACAAACAAACAGTATGAAGTAGAAATCCAGACA
TACCGAGAGAAATTGACTTCTAAAGAAGAATGTCTCAGTTCACAGAAGCTGGAGATAGACCTTTTAAAGTCTAGT
AAAGAAGAGCTCAATAATTCATTGAAAGCTACTACTCAGATTTTGGAAGAATTGAAGAAAACCAAGATGGACAAT
CTAAAATATGTAAATCAGTTGAAGAAGGAAAATGAACGTGCCCAGGGGAAAATGAAGTTGTTGATCAAATCCTGT
AAACAGCTGGAAGAGGAAAAGGAGATACTGCAGAAAGAACTCTCTCAACTTCAAGCTGCACAGGAGAAGCAGAAA
ACAGGTACTGTTATGGATACCAAGGTCGATGAATTAACAACTGAGATCAAAGAACTGAAAGAAACTCTTGAAGAA
AAAACCAAGGAGGCAGATGAATACTTGGATAAGTACTGTTCCTTGCTTATAAGCCATGAAAAGTTAGAGAAAGCT
AAAGAGATGTTAGAGACACAAGTGGCCCATCTGTGTTCACAGCAATCTAAACAAGATTCCCGAGGGTCTCCTTTG
CTAGGTCCAGTTGTTCCAGGACCATCTCCAATCCCTTCTGTTACTGAAAAGAGGTTATCATCTGGCCAAAATAAA
GCTTCAGGCAAGAGGCAAAGATCCAGTGGAATATGGGAGAATGGTGGAGGACCAACACCTGCTACCCCAGAGAGC
TTTTCTAAAAAAAGCAAGAAAGCAGTCATGAGTGGTATTCACCCTGCAGAAGACACGGAAGGTACTGAGTTTGAG
CCAGAGGGACTTCCAGAAGTTGTAAAGAAAGGGTTTGCTGACATCCCGACAGGAAAGACTAGCCCATATATCCTG
CGAAGAACAACCATGGCAACTCGGACCAGCCCCCGCCTGGCTGCACAGAAGTTAGCGCTATCCCCACTGAGTCTC
GGCAAAGAAAATCTTGCAGAGTCCTCCAAACCAACAGCTGGTGGCAGCAGATCACAAAAGGTCAAAGTTGCTCAG
CGGAGCCCAGTAGATTCAGGCACCATCCTCCGAGAACCCACCACGAAATCCGTCCCAGTCAATAATCTTCCTGAG
AGAAGTCCGACTGACAGCCCCAGAGAGGGCCTGAGGGTCAAGCGAGGCCGACTTGTCCCCAGCCCCAAAGCTGGA
CTGGAGTCCAAGGGCAGTGAGAACTGTAAGGTCCAGTGAAGGCACTTTGTGTGTCAGTACCCCTGGGAGGTGCCA
GTCATTGAATAGATAAGGCTGTGCCTACAGGACTTCTCTTTAGTCAGGGCATGCTTTATTAGTGAGGAGAAAACA
ATTCCTTAGAAGTCTTAAATATATTGTACTCTTTAGATCTCCCATGTGTAGGTATTGAAAAAGTTTGGAAGCACT
GATCACCTGTTAGCATTGCCATTCCTCTACTGCAATGTAAATAGTATAAAGCTATGTATATAAAGCTTTTTGGTA
ATATGTTACAATTAAAATGACAAGCACTATATCACAATCTCTGTTTGTATGTGGGTTTTACACTAAAAAAATGCA
AAACACATTTTATTCTTCTAATTAACAGCTCCTAGGAAAATGTAGACTTTTGCTTTATGATATTCTATCTGTAGT
ATGAGGCATGGAATAGTTTTGTATCGGGAATTTCTCAGAGCTGAGTAAAATGAAGGAAAAGCATGTTATGTGTTT
TTAAGGAAAATGTGCACACATATACATGTAGGAGTGTTTATCTTTCTCTTACAATCTGTTTTAGACATCTTTGCT
TATGAAACCTGTACATATGTGTGTGTGGGTATGTGTTTATTTCCAGTGAGGGCTGCAGGCTTCCTAGAGGTGTGC
TATACCATGCGTCTGTCGTTGTGCTTTTTTCTGTTTTTAGACCAATTTTTTACAGTTCTTTGGTAAGCATTGTCG
TATCTGGTGATGGATTAACATATAGCCTTTGTTTTCTAATAAAATAGTCGCCTTCGTTTTCTGTAAAAAAAAAAA
AAAAAAAAAA

FIGURE 1921

MSWALEEWKEGLPTRALQKIQELEGQLDKLKKEKQQRQFQLDSLEAAPQKQTQKVENEKTEGTNLKRENQRLMEI
CESLEKTKQKISHELQVKESQVNFQEGQLNSGKKQIEKLEQELKRCKSELERSQQAAQSADVSLNPCNTPQKIFT
TPLTPSQYYSGSKYEDLKEKYNKEVEERKRLEAEVKALQAKKASQTLPQATMNHRDIARHQASSSVFSWQQEKTP
SHLSSNSQRTPIRRDFSASYFSGEQEVTPSRSTLQIGKRDANSSFFDNSSSPHLLDQLKAQNQELRNKINELELR
LQGHEKEMKGQVNKFQELQLQLEKAKVELIEKEKVLNKCRDELVRTTAQYDQASTKYTALEQKLKKLTEDLSCQR
QNAESARCSLEQKIKEKEKEFQEELSRQQRSFQTLDQECIQMKARLTQELQQAKNMHNVLQAELDKLTSVKQQLE
NNLEEFKQKLCRAEQAFQASQIKENELRRSMEEMKKENNLLKSHSEQKAREVCHLEAELKNIKQCLNQSQNFAEE
MKAKNTSQETMLRDLQEKINQQENSLTLEKLKLAVADLEKQRDCSQDLLKKREHHIEQLNDKLSKTEKESKALLS
ALELKKKEYELKEEKTLFSCWKSENEKLLTQMESEKENLQSKINHLETCLKTQQIKSHEYNERVRTLEMDRENLS
VEIRNLHNVLDSKSVEVETQKLAYMELQQKAEFSDQKHQKEIENMCLKTSQLTGQVEDLEHKLQLLSNEIMDKDR
CYQDLHAEYESLRDLLKSKDASLVTNEDHQRSLLAFDQQPAMHHSFANIIGEQGSMPSERSECRLEADQSPKNSA
ILQNRVDSLEFSLESQKQMNSDLQKQCEELVQIKGEIEENLMKAEQMHQSFVAETSQRISKLQEDTSAHQNVVAE
TLSALENKEKELQLLNDKVETEQAEIQELKKSNHLLEDSLKELQLLSETLSLEKKEMSSIISLNKREIEELTQEN
GTLKEINASLNQEKMNLIQKSESFANYIDEREKSISELSDQYKQEKLILLQRCEETGNAYEDLSQKYKAAQEKNS
KLECLLNECTSLCENRKNELEQLKEAFAKEHQEFLTKLAFAEERNQNLMLELETVQQALRSEMTDNQNNSKSEAG
GLKQEIMTLKEEQNKMQKEVNDLLQENEQLMKVMKTKHECQNLESEPIRNSVKERESERNQCNFKPQMDLEVKEI
SLDSYNAQLVQLEAMLRNKELKLQESEKEKECLQHELQTIRGDLETSNLQDMQSQEISGLKDCEIDAEEKYISGP
HELSTSQNDNAHLQCSLQTTMNKLNELEKICEILQAEKYELVTELNDSRSECITATRKMAEEVGKLLNEVKILND
DSGLLHGELVEDIPGGEFGEQPNEQHPVSLAPLDESNSYEHLTLSDKEVQMHFAELQEKFLSLQSEHKILHDQHC
QMSSKMSELQTYVDSLKAENLVLSTNLRNFQGDLVKEMQLGLEEGLVPSLSSSCVPDSSSLSSLGDSSFYRALLE
QTGDMSLLSNLEGAVSANQCSVDEVFCSSLQEENLTRKETPSAPAKGVEELESLCEVYRQSLEKLEEKMESQGIM
KNKEIQELEQLLSSERQELDCLRKQYLSENEQWQQKLTSVTLEMESKLAAEKKQTEQLSLELEVARLQLQGLDLS
SRSLLGIDTEDAIQGRNESCDISKEHTSETTERTPKHDVHQICDKDAQQDLNLDIEKITETGALKPTGECSGEQS
PDTNYEPPGEDKTQGSSECISELSFSGPNALVPMDFLGNQEDIHNLQLRVKETSNENLRLLHVIEDRDRKVESLL
NEMKELDSKLHLQEVQLMTKIEACIELEKIVGELKKENSDLSEKLEYFSCDHQELLQRVETSEGLNSDLEMHADK
SSREDIGDNVAKVNDSWKERFLDVENELSRIRSEKASIEHEALYLEADLEVVQTEKLCLEKDNENKQKVIVCLEE
ELSVVTSERNQLRGELDTMSKKTTALDQLSEKMKEKTQELESHQSECLHC

FIGURE 1922

GACCGAAGCAAGAGCTGGTTCAGGTGGCAGCCACAGCAGCCTCAGGGACCTCAGCAACTATGGCCTCCTGCCCAG
ACTCTGATAATAGCTGGGTGCTTGCTGGCTCCGAGAGCCTGCCAGTGGAGACACTGGGCCCGGCATCCAGGATGG
ACCCAGAATCTGAGAGAGCCCTGCAGGCCCCTCACAGCCCCTCCAAGACAGATGGGAAAGAATTAGCTGGGACCA
TGGATGGAGAAGGGACGCTCTTCCAGACTGAAAGCCCTCAGTCTGGCAGCATTCTAACAGAGGAGACTGAGGTCA
AGGGCACCCTGGAAGGTGATGTTTGTGGTGTGGAGCCTCCTGGCCCAGGAGACACAGTAGTCCAGGGAGACCTGC
AGGAGACCACCGTGGTGACAGGCCTGGGACCAGACACACAGGACCTGGAAGGCCAGAGCCCTCCACAGAGCCTGC
CTTCAACCCCCAAAGCAGCTTGGATCAGGGAGGAGGGCCGCTGCTCCAGCAGTGACGATGACACCGACGTGGACA
TGGAGGGTCTGCGGAGACGGCGGGGCCGGGAGGCCGGCCCACCTCAGCCCATGGTGCCCCTGGCTGTGGAGAACC
AGGCTGGGGGTGAGGGTGCAGGCGGGGAGCTGGGCATCTCCCTCAACATGTGCCTCCTTGGGGCCCTGGTTCTGC
TTGGCCTGGGGGTCCTCCTCTTCTCAGGTGGCCTCTCAGAGTCTGAGACTGGGCCCATGGAGGAAGTGGAGCGGC
AGGTCCTCCCAGACCCCGAGGTGCTGGAAGCTGTGGGGGACAGGCAGGATGGGCTAAGGGAACAGCTGCAGGCCC
CAGTGCCTCCTGACAGTGTCCCCAGCCTGCAAAACATGGGTCTTCTGCTGGACAAGCTGGCCAAGGAGAACCAGG
ACATCCGGCTGCTGCAGGCCCAGCTGCAGGCCCAAAAGGAAGAGCTTCAGAGCCTGATGCACCAGCCCAAAGGGC
TAGAGGAGGAGAATGCCCAGCTCCGGGGGGCTCTGCAGCAGGGCGAAGCCTTCCAGCGGGCTCTGGAGTCAGAGC
TGCAGCAGCTGCGGGCCCGGCTCCAGGGGCTGGAGGCCGACTGTGTCCGGGGCCCAGATGGGGTGTGCCTCAGTG
GGGGTAGAGGCCCACAGGGTGACAAGGCCATCAGGGAGCAAGGCCCCAGGGAGCAGGAGCCAGAACTCAGCTTCC
TGAAGCAGAAGGAACAGCTGGAGGCTGAGGCACAGGCATTAAGGCAAGAGTTAGAGAGGCAGCGACGGCTGCTGG
GGTCTGTACAGCAGGATCTGGAGAGGAGCTTGCAGGATGCCAGCCGCGGGGACCCAGCTCATGCTGGCTTGGCTG
AGCTGGGCCACAGATTGGCCCAGAAACTGCAGGGCCTGGAGAACTGGGGCCAGGACCCTGGGGTCTCTGCCAATG
CCTCAAAGGCCTGGCACCAGAAGTCCCACTTCCAGAATTCTAGGGAGTGGAGTGGAAAGGAAAAGTGGTGGGATG
GGCAGAGAGACCGGAAGGCTGAGCACTGGAAACATAAGAAGGAAGAATCTGGCCGGGAAAGGAAGAAGAACTGGG
GAGGTCAGGAGGACAGGGAGCCAGCAGGAAGGTGGAAGGAGGGCAGGCCAAGGGTGGAGGAGTCGGGGAGCAAGA
AGGAGGGCAAGCGACAGGGCCCGAAGGAACCCCCAAGGAAAAGTGGTAGCTTCCACTCCTCTGGAGAAAAGCAGA
AGCAACCTCGGTGGAGGGAAGGGACTAAGGACAGCCATGACCCCCTGCCATCCTGGGCAGAGCTGTTGAGGCCCA
AGTACCGGGCACCCCAGGGCTGCTCAGGTGTGGACGAGTGTGCCCGGCAGGAGGGCCTGACTTTCTTTGGCACAG
AGCTAGCCCCAGTGCGGCAACAGGAGCTGGCCTCTCTGCTAAGAACATACTTGGCACGGCTGCCCTGGGCTGGGC
AGCTGACCAAGGAGCTACCCCTCTCACCTGCTTTCTTTGGTGAGGATGGCATCTTCCGTCATGACCGCCTCCGCT
TCCGGGATTTTGTGGATGCCCTGGAGGACAGCTTGGAGGAGGTGGCTGTGCAACAGACAGGTGATGATGATGAAG
TAGATGACTTTGAGGACTTCATCTTCAGCCACTTCTTTGGAGACAAAGCACTGAAGAAGAGGTCAGGGAAGAAGG
ACAAGCACTCACAGAGCCCAAGAGCTGCGGGGCCCAGGGAGGGGCACAGCCATAGCCACCACCACCACCACCGGG
GCTGACACCCTGCCCCACAGGGAATGGCCTTGGCCTGGCCCAGCCCAAGATCCCAGCGTTATCTAACTCCTGGAG
GGTGGACTCTGTCCTGGCTTGTTTGGTGTCCTCAGATATCTTTCACACAGTAGAGCAAAATCACCAGCCCTGCAC
TGATGTCACTTTATGTAGAAAAAGGCCTTAGCTGGACCTGCGTTGCCGTCTATGCAAATGCATGCAAATACTCCA
GGCCCTGGGATGTGGGCTTGTGTTTTGTCACTGTGAAGGGGGAGATGGGAGAGGAGCCTGTTTTGGGGTGGGGTC
TGGGGAAGGCAATCTGATTCTGAAGCTAAAGAGCTTTCATCCTCTTGAGTGTATGTCCCCATAGTGGGCCCCTTG
ACCCACATGCTGACCGGTGCCTTGGGATTTGACTAGAGTTGCTGGCTCGAGGCCCAGCACGAGGACTTACCCTGG
GGTTTTGTTAGGTTTGGAAGCAGCTGTCCCTAGGGGGTGAAGTCCCCCCCCCTTTTTTTTTTTACCCCTGCTTCTC
CCACGGCTTCACCTCCCTATGTGAACTGTAGACTCAGATCCCAATAAAGTGCTGTTGCAGCTATGATGCTAGGTG
GTTTCTAAGCACAGGGGACACCCCACACCCCCTGCCTGAATGGATGGGTCCATCCCAGGCACTGGTACTTGCCCC
CTTGTTCTGTATCCCCCTTTGCCCTTGCCTTGCCCTTCCAACAAACCCTAGGCCCTTGAGAAGCTGATACTTCTC
CTTTTGCTCACAGCTGCCTTGGCCCCACCCCTGGGAGATGTAGCAAATTGAGTGTGGGTTTTGGAGTCTGAGCCT
CAGGCTCAAATCCAGGCCAAGTGATCTTGGGCAAGTTAATCTCTGGGAACTTTGGGTTTCTTATCCTCAAAAAAG
GCGATGGAAGGGCTGGGGAAGTGATTAAATAAAAGCAACGCAAGAAAAAAAAAAAAAAAAAAA

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FIGURE 1923

MASCPDSDNSWVLAGSESLPVETLGPASRMDPESERALQAPHSPSKTDGKELAGTMDGEGTLFQTESPQSGSILT
EETEVKGTLEGDVCGVEPPGPGDTVVQGDLQETTVVTGLGPDTQDLEGQSPPQSLPSTPKAAWIREEGRCSSSDD
DTDVDMEGLRRRRGREAGPPQPMVPLAVENQAGGEGAGGELGISLNMCLLGALVLLGLGVLLFSGGLSESETGPM
EEVERQVLPDPEVLEAVGDRQDGLREQLQAPVPPDSVPSLQNMGLLLDKLAKENQDIRLLQAQLQAQKEELQSLM
HQPKGLEEENAQLRGALQQGEAFQRALESELQQLRARLQGLEADCVRGPDGVCLSGGRGPQGDKAIREQGPREQE
PELSFLKQKEQLEAEAQALRQELERQRRLLGSVQQDLERSLQDASRGDPAHAGLAELGHRLAQKLQGLENWGQDP
GVSANASKAWHQKSHFQNSREWSGKEKWWDGQRDRKAEHWKHKKEESGRERKKNWGGQEDREPAGRWKEGRPRVE
ESGSKKEGKRQGPKEPPRKSGSFHSSGEKQKQPRWREGTKDSHDPLPSWAELLRPKYRAPQGCSGVDECARQEGL
TFFGTELAPVRQQELASLLRTYLARLPWAGQLTKELPLSPAFFGEDGIFRHDRLRFRDFVDALEDSLEEVAVQQT
GDDDEVDDFEDFIFSHFFGDKALKKRSGKKDKHSQSPRAAGPREGHSHSHHHHHRG

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FIGURE 1924

CAGTCTGAGAACAAGAAAGAAGAACTTCTGTCTCGAGGGTCTCACTGTCAACCAGGCCAGAGTGCAGTGAAGATC
ATACCTCACTACATCCGTGAACTCCCGGGCTCCTCCCACCTAAGTCTCTTGAGTAGCTGGGACTTCAGGAGACTG
AAGCCAAGGATACCAGCAGAGCCAACATTTGCTTCAAGTTCCTGGGCCTGCTGACAGCGTGCAGGATGCTGTTGG
AACCCGGCAGAGGCTGCTGTGCCCTGGCCATCCTGCTGGCAATTGTGGACATCCAGTCTGGTGGATGCATTAACA
TCACCAGCTCAGCTTCCCAGGAAGGAACGCGACTAAACTTAATCTGTACTGTATGGCATAAGAAAGAAGAGGCTG
AGGGGTTTGTAGTGTTTTTGTGCAAGGACAGGTCTGGAGACTGTTCTCCTGAGACCAGTTTAAAACAGCTGAGAC
TTAAAAGGGATCCTGGGATAGATGGTGTTGGTGAAATATCATCTCAGTTGATGTTCACCATAAGCCAAGTCACAC
CGTTGCACAGTGGGACCTACCAGTGTTGTGCCAGAAGCCAGAAGTCAGGTATCCGCCTTCAGGGCCATTTTTTCT
CCATTCTATTCACAGAGACAGGGAACTACACAGTGACGGGATTGAAACAAAGACAACACCTTGAGTTCAGCCATA
ATGAAGGCACTCTCAGTTCAGGCTTCCTACAAGAAAAGGTCTGGGTAATGCTGGTCACCAGCCTTGTGGCCCTTC
AAGCTTTGTAAGCCTGTCCAAAAGAACTTTTAAAACAGCTACAGCAAGATGAGTCTGACTATGGCTTAGTATCTT
TCTCATTACAATAGGCACAGAGAAGAATGCAACAGGGCACAGGGGAAGAGATGCTAAATATACCAAGAATCTGTG
GAAATATAAGCTGGGGCAAATCAGTGTAATCCTTGACTTTGCTCCTCACCATCAGGGCAAACTTGCCTTCTTCCC
TCCTAAGCTCCAGTAAATAAACAGAACAGCTTTCACCAAAGTGGGTAGTATAGTCCTCAAATATCGGATAAATAT
ATGCGTTTTTGTACCCCAGAAAAACTTTTCCTCCCTCTTCATCAACATAGTAAAATAAGTCAAACAAAATGAGAA
CACCAAATTTTGGGGGAATAAATTTTTATTTAACACTGCAAAGGAAAGAGAGAGAAAACAAGCAAAGATAGGTAG
GACAGAAAGGAAGACAGCCAGATCCAGTGATTGACTTGGCATGAAAATGAGAAAATGCAGACAGACCTCAACATT
CAACATTCAACAACATCCATACAGCACTGCTGGAGGAAGAGGAAGATTTGTGCAGACCAAGAGCACCACAGACTA
CAACTGCCCAGCTTCATCTAAATACTTGTTAACCTCTTTGGTCATTTCTCTTTTTAAATAAATGCCCATAGCAGT

FIGURE 1925

MLLEPGRGCCALAILLAIVDIQSGGCINITSSASQEGTRLNLICTVWHKKEEAEGFVVFLCKDRSGDCSPETSLK
QLRLKRDPGIDGVGEISSQLMFTISQVTPLHSGTYQCCARSQKSGIRLQGHFFSILFTETGNYTVTGLKQRQHLE
FSHNEGTLSSGFLQEKVWVMLVTSLVALQAL

FIGURE 1926

CCGAGTGTCCACACCCTGTGCGTCTCTCTGTCCTGCCAGCACTGAGGGCTCATCCATCCGCAGAGCAGGGCAGTG
GGAGGAGACGCCATGACCCCCATCCTCACGGTCCTGATCTGTCTCGGGCTGAGTCTGGGCCCCAGGACCCACGTG
CAGGCAGGGCACCTCCCCAAGCCCACCCTCTGGGCTGAGCCAGGCTCTGTGATCATCCAGGGAAGTCCTGTGACC
CTCAGGTGTCAGGGGAGCCTTCAGGCTGAGGAGTACCATCTATATAGGGAAAACAAATCAGCATCCTGGGTTAGA
CGGATACAAGAGCCTGGGAAGAATGGCCAGTTCCCCATCCCATCCATCACCTGGGAACACGCAGGGCGGTATCAC
TGTCAGTACTACAGCCACAATCACTCATCAGAGTACAGTGACCCCCTGGAGCTGGTGGTGACAGGAGCCTACAGC
AAACCCACCCTCTCAGCTCTGCCCAGCCCTGTGGTGACCTTAGGAGGGAACGTGACCCTCCAGTGTGTCTCACAG
GTGGCATTTGACGGCTTCATTCTGTGTAAGGAAGGAGAAGATGAACACCCACAACGCCTGAACTCCCATTCCCAT
GCCCGTGGGTGGTCCTGGGCCATCTTCTCCGTGGGCCCCGTGAGCCCGAGTCGCAGGTGGTCGTACAGGTGCTAT
GCTTATGACTCGAACTCTCCCTATGTGTGGTCTCTACCCAGTGATCTCCTGGAGCTCCTGGTCCCAGGTGTTTCT
AAGAAGCCATCACTCTCAGTGCAGCCAGGTCCTATGGTGGCCCCTGGGGAGAGCCTGACCCTCCAGTGTGTCTCT
GATGTCGGCTACGACAGATTTGTTCTGTATAAGGAGGGAGAACGTGACTTCCTCCAGCGCCCTGGTTGGCAGCCC
CAGGCTGGGCTCTCCCAGGCCAACTTCACCCTGGGCCCTGTGAGCCCCTCCCACGGGGGCCAGTACAGATGCTAC
AGTGCACACAACCTCTCCTCCGAGTGGTCGGCCCCCAGTGACCCCCTGGACATCCTGATCACAGGACAGTTCTAT
GACAGACCCTCTCTCTCGGTGCAGCCGGTCCCCACAGTAGCCCCAGGAAAGAACGTGACCCTGCTGTGTCAGTCA
CGGGGGCAGTTCCACACTTTCCTTCTGACCAAGGAGGGGGCAGGCCATCCCCCACTGCATCTGAGATCAGAGCAC
CAAGCTCAGCAGAACCAGGCTGAATTCCGCATGGGTCCTGTGACCTCAGCCCACGTGGGGACCTACAGATGCTAC
AGCTCACTCAGCTCCAACCCCTACCTGCTGTCTCTCCCCAGTGACCCCCTGGAGCTCGTGGTCTCAGCATCCCTA
GGCCAACACCCCCAGGATTACACAGTGGAGAATCTCATCCGCATGGGTGTGGCTGGCTTGGTCCTGGTGGTCCTC
GGGATTCTGCTATTTGAGGCTCAGCACAGCCAGAGAAGCCTACAAGATGCAGCCGGGAGGTGAACAGCAGAGAGG
ACAATGCATACTTCAGCGTGGTGGAGCCTCAGGGACAGATCTGATGATCCCAGGAGGCTCTGGAGGACAATCTAG
GACCTACATTATCTGGACTGTATGCTGGTCATTTCTAGAGACAGCAATCAATATTTGAGTGTAAGGAAACTGTCT
GGGGTGATTCCTAGAAGATCATTAAACTGTGGTACATTTTTTTGTC

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FIGURE 1927

MTPILTVLICLGLSLGPRTHVQAGHLPKPTLWAEPGSVIIQGSPVTLRCQGSLQAEEYHLYRENKSASWVRRIQE
PGKNGQFPIPSITWEHAGRYHCQYYSHNHSSEYSDPLELVVTGAYSKPTLSALPSPVVTLGGNVTLQCVSQVAFD
GFILCKEGEDEHPQRLNSHSHARGWSWAIFSVGPVSPSRRWSYRCYAYDSNSPYVWSLPSDLLELLVPGVSKKPS
LSVQPGPMVAPGESLTLQCVSDVGYDRFVLYKEGERDFLQRPGWQPQAGLSQANFTLGPVSPSHGGQYRCYSAHN
LSSEWSAPSDPLDILITGQFYDRPSLSVQPVPTVAPGKNVTLLCQSRGQFHTFLLTKEGAGHPPLHLRSEHQAQQ
NQAEFRMGPVTSAHVGTYRCYSSLSSNPYLLSLPSDPLELVVSASLGQHPQDYTVENLIRMGVAGLVLVVLGILL
FEAQHSQRSLQDAAGR

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FIGURE 1928

CAGGACAGAGCATGGATCGCCTACAGACTGCACTCCTGGTTGTCCTCGTCCTCCTTGCTGTGGCGCTTCAAGCAA
CTGAGGCAGGCCCCTACGGCGCCAACATGGAAGACAGCGTCTGCTGCCGTGATTACGTCCGTTACCGTCTGCCCC
TGCGCGTGGTGAAACACTTCTACTGGACCTCAGACTCCTGCCCGAGGCCTGGCGTGGTGTTGCTAACCTTCAGGG
ATAAGGAGATCTGTGCCGATCCCAGAGTGCCCTGGGTGAAGATGATTCTCAATAAGCTGAGCCAATGAAGAGCCT
ACTCTGATGACCGTGGCCTTGGCTCCTCCAGGAAGGCTCAGGAGCCCTACCTCCCTGCCATTATAGCTGCTCCCC
GCCAGAAGCCTGTGCCAACTCTCTGCATTCCCTGATCTCCATCCCTGTGGCTGTCACCCTTGGTCACCTCCGTGC
TGTCACTGCCATCTCCCCCCTGACCCCTCTAACCCATCCTCTGCCTCCCTCCCTGCAGTCAGAGGGTCCTGTTCC
CATCAGCGATTCCCCTGCTTAAACCCTTCCATGACTCCCCACTGCCCTAAGCTGAGGTCAGTCTCCCAAGCCTGG
CATGTGGCCCTCTGGATCTGGGTTCCATCTCTGTCTCCAGCCTGCCCACTTCCCTTCATGAATGTTGGGTTCTAG
CTCCCTGTTCTCCAAACCCATACTACACATCCCACTTCTGGGTCTTTGCCTGGGATGTTGCTGACACCCAGAAAG
TCCCACCACCTGCACATGTGTAGCCCCACCAGCCCTCCAAGGCATTGCTCGCCCAAGCAGCTGGTAATTCCATTT
CATGTATTAGATGTCCCCTGGCCCTCTGTCCCCTCTTAATAACCCTAGTCACAGTCTCCGCAGATTCTTGGGATT
TGGGGGTTTTCTCCCCCACCTCTCCACTAGTTGGACCAAGGTTTCTAGCTAAGTTACTCTAGTCTCCAAGCCTCT
AGCATAGAGCACTGCAGACAGGCCCTGGCTCAGAATCAGAGCCCAGAAAGTGGCTGCAGACAAAATCAATAAAAC
TAATGTCCCTCCCCTCTCCCTGCCAAAAGGCAGTTACATATCAATACAGAGACTCAAGGTCACTAGAAATGGGCC
AGCTGGGTCAATGTGAAGCCCCAAATTTGCCCAGATTCACCTTTCTTCCCCCACTCCCTTTTTTTTTTTTTTTT
GAGATGGAGTTTCGCTCTTGTCACCCACGCTGGAGTGCAATGGTGTGGTCTTGGCTTATTGAAGCCTCTGCCTCC
TGGGTTCAAGTGATTCTCTTGCCTCAGCCTCCTGAGTAGCTGGGATTACAGGTTCCTGCTACCACGCCCAGCTAA
TTTTTGTATTTTTAGTAGAGACGAGGCTTCACCATGTTGGCCAGGCTGGTCTCGAACTCCTGTCCTCAGGTAATC
CGCCCACCTCAGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACAGTGCCTGGCCTCTTCCCTCTCCCCACC
CCCCCCCCAACTTTTTTTTTTTTTTATGGCAGGGTCTCACTCTGTCGCCCAGGCTGGAGTGCAGTGGCGTGATCT
CGGCTCACTACAACCTCGACCTCCTGGGTTCAAGCGATTCTCCCACCCCAGCCTCCCAAGTAGCTGGGATTACAG
GTGTGTGCCACTACGGCTGGCTAATTTTTGTATTTTTAGTAGAGACAGGTTTCACCATATTGGCCAGGCTGGTCT
TGAACTCCTGACCTCAAGTGATCCACCTTCCTTGTGCTCCCAAAGTGCTGAGATTACAGGCGTGAGCTATCACAC
CCAGCCTCCCCCTTTTTTTCCTAATAGGAGACTCCTGTACCTTTCTTCGTTTTACCTATGTGTCGTGTCTGCTTA
CATTTCCTTCTCCCCTCAGGCTTTTTTTGGGTGGTCCTCCAACCTCCAATACCCAGGCCTGGCCTCTTCAGAGTA
CCCCCCATTCCACTTTCCCTGCCTCCTTCCTTAAATAGCTGACAATCAAATTCATGCTATGGTGTGAAAGACTAC
CTTTGACTTGGTATTATAAGCTGGAGTTATATATGTATTTGAAAACAGAGTAAATACTTAAGAGGCCAAATAGAT
GAATGGAAGAATTTTAGGAACTGTGAGAGGGGGACAAGGTGGAGCTTTCCTGGCCCTGGGAGGAAGCTGGCTGTG
GTAGCGTAGCGCTCTCTCTCTCTGTCTGTGGCAGGAGGCAAAGAGTAGGGTGTAATTGAGTGAAGGAATCCTGGG
TAGAGACCATTCTCAGGTGGTTGGGCCAGGCTAAAGACTGGGATTTGGGTCTATCTATGCCTTTCTGGCTGATTT
TTGTAGAGACGGGGTTTTGCCATGTTACCCAGGCTGGTCTCAAACTCCTGGGCTCAAGCGATCCTCCTGGCTCAG
CCTCCCAAAGTGCTGGGATTACAGGCGTGAGTCACTGCGCCTGGCTTCCTCTTCCTCTTGAGAAATATTCTTTTC
ATACAGCAAGTATGGGACAGCAGTGTCCCAGGTAAAGGACATAAATGTTACAAGTGTCTGGTCCTTTCTGAGGGA
GGCTGGTGCCGCTCTGCAGGGTATTTGAACCTGTGGAATTGGAGGAGGCCATTTCACTCCCTGAACCCAGCCTGA
CAAATCACAGTGAGAATGTTCACCTTATAGGCTTGCTGTGGGGCTCAGGTTGAAAGTGTGGGGAGTGACACTGCC
TAGGCATCCAGCTCAGTGTCATCCAGGGCCTGTGTCCCTCCCGAACCCAGGGTCAACCTGCCTACCACAGGCACT
AGAAGGACGAATCTGCCTACTGCCCATGAACGGGGCCCTCAAGCGTCCTGGGATCTCCTTCTCCCTCCTGTCCTG
TCCTTGCCCCTCAGGACTGCTGGAAAATAAATCCTTTAAAATAGAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1929

MDRLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEI
CADPRVPWVKMILNKLSQ

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FIGURE 1930

GATCCAAACATGAGCCGCCTGCCCGTCCTGCTCCTGCTCCAACTCCTGGTCCGCCCCGGACTCCAAGCTCCCATG
ACCCAGACAACGTCCTTGAAGACAAGCTGGGTTAACTGCTCTAACATGATCGATGAAATTATAACACACTTAAAG
CAGCCACCTTTGCCTTTGCTGGACTTCAACAACCTCAATGGGGAAGACCAAGACATTCTGATGGAAAATAACCTT
CGAAGGCCAAACCTGGAGGCATTCAACAGGGCTGTCAAGAGTTTACAGAACGCATCAGCAATTGAGAGCATTCTT
AAAAATCTCCTGCCATGTCTGCCCCTGGCCACGGCCGCACCCACGCGACATCCAATCCATATCAAGGACGGTGAC
TGGAATGAATTCCGGAGGAAACTGACGTTCTATCTGAAAACCCTTGAGAATGCGCAGGCTCAACAGACGACTTTG
AGCCTCGCGATCTTTTAGTCCAACGTCCAGCTCGTTCTCTGGGCCTTCTCACCACAGCGCCTCGGGACATCAAAA
ACAGCAGAACTTCTGAAACCTCTGGGTCATCTCTCACACATTCCAGGACCAGAAGCATTTCACCTTTTCCTGCGG
CATCAGATGAATTGTTAATTATCTAATTTCTGAAATGTGCAGCTCCCATTTGGCCTTGTGCGGTTGTGTTCTC

FIGURE 1931

MSRLPVLLLLQLLVRPGLQAPMTQTTSLKTSWVNCSNMIDEIITHLKQPPLPLLDFNNLNGEDQDILMENNLRRP
NLEAFNRAVKSLQNASAIESILKNLLPCLPLATAAPTRHPIHIKDGDWNEFRRKLTFYLKTLENAQAQQTTLSLA
IF

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FIGURE 1932

GAGGTTGAAGGACCCAGGCGTGTCAGCCCTGCTCCAGAGACCTTGGGCATGGAGGAGAGTGTCGTACGGCCCTCA
GTGTTTGTGGTGGATGGACAGACCGACATCCCATTCACGAGGCTGGGACGAAGCCACCGGAGACAGTCGTGCAGT
GTGGCCCGGGTGGGTCTGGGTCTCTTGCTGTTGCTGATGGGGGCTGGGCTGGCCGTCCAAGGCTGGTTCCTCCTG
CAGCTGCACTGGCGTCTAGGAGAGATGGTCACCCGCCTGCCTGACGGACCTGCAGGCTCCTGGGAGCAGCTGATA
CAAGAGCGAAGGTCTCACGAGGTCAACCCAGCAGCGCATCTCACAGGGGCCAACTCCAGCTTGACCGGCAGCGGG
GGGCCGCTGTTATGGGAGACTCAGCTGGGCCTGGCCTTCCTGAGGGGCCTCAGCTACCACGATGGGGCCCTTGTG
GTCACCAAAGCTGGCTACTACTACATCTACTCCAAGGTGCAGCTGGGCGGTGTGGGCTGCCCGCTGGGCCTGGCC
AGCACCATCACCCACGGCCTCTACAAGCGCACACCCCGCTACCCCGAGGAGCTGGAGCTGTTGGTCAGCCAGCAG
TCACCCTGCGGACGGGCCACCAGCAGCTCCCGGGTCTGGTGGGACAGCAGCTTCCTGGGTGGTGTGGTACACCTG
GAGGCTGGGGAGGAGGTGGTCGTCCGTGTGCTGGATGAACGCCTGGTTCGACTGCGTGATGGTACCCGGTCTTAC
TTCGGGGCTTTCATGGTGTGAAGGAAGGAGCGTGGTGCATTGGACATGGGTCTGACACGTGGAGAACTCAGAGGG
TGCCTCAGGGGAAAGAAAACTCACGAAGCAGAGGCTGGGCGTGGTGGCTCTCGCCTGTAATCCCAGCACTTTGGG
AGGCCAAGGCAGGCGGATCACCTGAGGTCAGGAGTTCGAGACCAGCCTGGCTAACATGGCAAAACCCCATCTCTA
CTAAAAATACAAAAATTAGCCGGACGTGGTGGTGCCTGCCTGTAATCCAGCTACTCAGGAGGCTGAGGCAGGATA
ATTTTGCTTAAACCCGGGAGGCGGAGGTTGCAGTGAGCCGAGATCACACCACTGCACTCCAACCTGGGAAACGCA
GTGAGACTGTGCCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1933

MEESVVRPSVFVVDGQTDIPFTRLGRSHRRQSCSVARVGLGLLLLLMGAGLAVQGWFLLQLHWRLGEMVTRLPDG
PAGSWEQLIQERRSHEVNPAAHLTGANSSLTGSGGPLLWETQLGLAFLRGLSYHDGALVVTKAGYYYIYSKVQLG
GVGCPLGLASTITHGLYKRTPRYPEELELLVSQQSPCGRATSSSRVWWDSSFLGGVVHLEAGEEVVVRVLDERLV
RLRDGTRSYFGAFMV

FIGURE 1934

CGCAGCCCGCGGTCCCGCCGCCCCGGGGCCGGCACCTCTCGGGCTCCGGCTCCCCGCGCGCAAGATGGCTGACCC
GGCTGCGGGGCCGCCGCCGAGCGAGGGCGAGGAGAGCACCGTGCGCTTCGCCCGCAAAGGCGCCCTCAGGCAGAA
GAACGTGCATGAGGTCAAGAACCACAAATTCACCGCCCGCTTCTTCAAGCAGCCCACCTTCTGCAGCCACTGCAC
CGACTTCATCTGGGGCTTCGGGAAGCAGGGATTCCAGTGCCAAGTTTGCTGCTTTGTGGTGCACAAGCGGTGCCA
TGAATTTGTCACATTCTCCTGCCCTGGCGCTGACAAGGGTCCAGCCTCCGATGACCCCCGCAGCAAACACAAGTT
TAAGATCCACACGTACTCCAGCCCCACGTTTTGTGACCACTGTGGGTCACTGCTGTATGGACTCATCCACCAGGG
GATGAAATGTGACACCTGCATGATGAACGTGCACAAGCGCTGCGTGATGAATGTTCCCAGCCTGTGTGGCACGGA
CCACACGGAGCGCCGCGGCCGCATCTACATCCAGGCCCACATCGACAGGGACGTCCTCATTGTCCTCGTAAGAGA
TGCTAAAAACCTTGTACCTATGGACCCCAATGGCCTGTCAGATCCCTACGTAAAACTGAAACTGATTCCCGATCC
CAAAAGTGAGAGCAAACAGAAGACCAAAACCATCAAATGCTCCCTCAACCCTGAGTGGAATGAGACATTTAGATT
TCAGCTGAAAGAATCGGACAAAGACAGAAGACTGTCAGTAGAGATTTGGGATTGGGATTTGACCAGCAGGAATGA
CTTCATGGGATCTTTGTCCTTTGGGATTTCTGAACTTCAGAAAGCCAGTGTTGATGGCTGGTTTAAGTTACTGAG
CCAGGAGGAAGGCGAGTACTTCAATGTGCCTGTGCCACCAGAAGGAAGTGAGGCCAATGAAGAACTGCGGCAGAA
ATTTGAGAGGGCCAAGATCAGTCAGGGAACCAAGGTCCCGGAAGAAAAGACGACCAACACTGTCTCCAAATTTGA
CAACAATGGCAACAGAGACCGGATGAAACTGACCGATTTTAACTTCCTAATGGTGCTGGGGAAAGGCAGCTTTGG
CAAGGTCATGCTTTCAGAACGAAAAGGCACAGATGAGCTCTATGCTGTGAAGATCCTGAAGAAGGACGTTGTGAT
CCAAGATGATGACGTGGAGTGCACTATGGTGGAGAAGCGGGTGTTGGCCCTGCCCGGGAAGCCGCCCTTCCTGAC
CCAGCTCCACTCCTGCTTCCAGACCATGGACCGCCTGTACTTTGTGATGGAGTACGTGAATGGGGGCGACCTCAT
GTATCACATCCAGCAAGTCGGCCGGTTCAAGGAGCCCCATGCTGTATTTTACGCTGCAGAAATTGCCATCGGTCT
GTTCTTCTTACAGAGTAAGGGCATCATTTACCGTGACCTAAAACTTGACAACGTGATGCTCGATTCTGAGGGACA
CATCAAGATTGCCGATTTTGGCATGTGTAAGGAAAACATCTGGGATGGGGTGACAACCAAGACATTCTGTGGCAC
TCCAGACTACATCGCCCCCGAGATAATTGCTTATCAGCCCTATGGGAAGTCCGTGGATTGGTGGGCATTTGGAGT
CCTGCTGTATGAAATGTTGGCTGGGCAGGCACCCTTTGAAGGGGAGGATGAGGATGAACTCTTCCAATCCATCAT
GGAACACAACGTAGCCTATCCCAAGTCTATGTCCAAGGAAGCTGTGGCCATCTGCAAAGGGCTGATGACCAAACA
CCCAGGCAAACGTCTGGGTTGTGGACCTGAAGGTGAACGTGATATCAAAGAGCATGCATTTTTCCGGTATATTGA
TTGGGAGAAACTTGAACGCAAAGAGATTCAGCCCCCTTATAAGCCAAAAGCTTGTGGGCGAAATGCTGAAAACTT
CGACCGATTTTTCACCCGCCATCCACCAGTCCTAACACCTCCTGACCAGGAAGTCATCAGGAATATTGACCAATC
AGAATTCGAAGGATTTTCCTTTGTTAACTCTGAATTTTTAAAACCCGAAGTCAAGAGCTAAGTAGATGTGTAGAT
CTCCGTCCTTCATTTCTGTCATTCAAGCTCAACGGCTATTGTGGTGACATTTTTATGTTTTCATTGCCAAGTTGC
ATCCATGTTTGATTTTCTGATGAGACTAGAGTGACAGTGTTTCAGAACCCAAATGTCCTCAGGTAGTTTTGGAGC
ATCTCTATGAGATGGGATTATGCAGATGGCCTATGGAAAATGCAGCTGCATAATTAACACATTATCAAAGTCCTC
TTACAATTTATTTTCCGCAGCATGTCAGCTAAGTAGACCCAATGGGGAGAGAAAATGCCTGCTTTCTTTCCCTTT
TTTCTGCACTGCCATATTCACCCCCAACCATCCAATCTGTGGATAATTGGATGTTAGCGGTACTCTTCCACTTCC
GGGCCTGGAGCTTGGCTTGTATCCAAGTGTATGGTTGCTTTGCCTAAGAGGAATCCCTCTATTTCACCTGTTCTG
GAGGCACCAGACCTTGAAAAGAACATGCTCAAAATAAAATGTTATCTGTTATTTTTGTAAACTCAAAGTTAAGAT
GATCAAAGTTCTAAAATTCCAAGAATGTGCTTTTAGACGGTCTCAATCTAAAAGCACTTCAAGGGGTCAAAGGGC
AACCAGCTTGGGTGCTACCTCAGTGTTGTAGTTTCTGATACTTTATGTCTTTGCTCACCCTCATCCCCAAACTAC
TTGAAAAGGGCATTTGGCACCACTCTCTGAAACAACACAGTCACTCTAGCAAGGCCCCCAAAGGGCCCTGGTTTT
ACATTACATTTCAAACTTTATTTGCTTTGGGGTTTTGTTTCTGTTGTTGTTCAAATGCAAAAAAAAATTATTTGC
TTTGGGGTTTTATTTCTGTTGTTCAAATGC

FIGURE 1935

MADPAAGPPPSEGEESTVRFARKGALRQKNVHEVKNHKFTARFFKQPTFCSHCTDFIWGFGKQGFQCQVCCFVVH
KRCHEFVTFSCPGADKGPASDDPRSKHKFKIHTYSSPTFCDHCGSLLYGLIHQGMKCDTCMMNVHKRCVMNVPSL
CGTDHTERRGRIYIQAHIDRDVLIVLVRDAKNLVPMDPNGLSDPYVKLKLIPDPKSESKQKTKTIKCSLNPEWNE
TFRFQLKESDKDRRLSVEIWDWDLTSRNDFMGSLSFGISELQKASVDGWFKLLSQEEGEYFNVPVPPEGSEANEE
LRQKFERAKISQGTKVPEEKTTNTVSKFDNNGNRDRMKLTDFNFLMVLGKGSFGKVMLSERKGTDELYAVKILKK
DVVIQDDDVECTMVEKRVLALPGKPPFLTQLHSCFQTMDRLYFVMEYVNGGDLMYHIQQVGRFKEPHAVFYAAEI
AIGLFFLQSKGIIYRDLKLDNVMLDSEGHIKIADFGMCKENIWDGVTTKTFCGTPDYIAPEIIAYQPYGKSVDWW
AFGVLLYEMLAGQAPFEGEDEDELFQSIMEHNVAYPKSMSKEAVAICKGLMTKHPGKRLGCGPEGERDIKEHAFF
RYIDWEKLERKEIQPPYKPKACGRNAENFDRFFTRHPPVLTPPDQEVIRNIDQSEFEGFSFVNSEFLKPEVKS

FIGURE 1936A

GGCACGAGGCTCGCCGCGGACTCAAGATGGCGGCGTGTGGACGTGTACGGAGGATGTTCCGCTTGTCGGCGGCGC
TGCATCTGCTGCTGCTATTCGCGGCCGGGGGCAGAAACTCCCCGGCCAGGGCGTCCCACAGCCAGGGCCAGGGTC
CCGGGGCCAACTTTGTGTCCTTCGTAGGGCAGGCCGGAGGCGGCGGCCCGGCGGGTCAGCAGCTGCCCCAGCTGC
CTCAGTCATCGCAGCTTCAGCAGCAACAGCAGCAGCAGCAACAGCAACAGCAGCCTCAGCCGCCGCAGCCGCCTT
TCCCGGCGGGTGGGCCTCCGCGGCGGGGAGGAGCGGGGGCTGGTGGGGGCTGGAAGCTGGCGGAGGAAGAGTCCT
GCAGGGAGGACGTGACCCGCGTGTGCCCTAAGCACACCTGGAGCAACAACCTGGCGGTGCTCGAGTGCCTGCAGG
ATGTGAGGGAGCCTGAAAATGAAATTTCTTCAGACTGCAATCATTTGTTGTGGAATTATAAGCTGAACCTAACTA
CAGATCCCAAATTTGAATCTGTGGCCAGAGAGGTTTGCAAATCTACTATAACAGAGATTAAAGAATGTGCTGATG
AACCGGTTGGAAAAGGTTACATGGTTTCCTGCTTAGTGGATCACCGAGGCAACATCACTGAGTATCAGTGTCACC
AGTACATTACCAAGATGACGGCCATCATTTTTAGTGATTACCGTTTAATCTGTGGCTTCATGGATGACTGCAAAA
ATGACATCAACATTCTGAAATGTGGCAGTATTCGGCTTGGAGAAAAGGATGCACATTCACAAGGTGAGGTGGTAT
CATGCTTGGAGAAAGGCCTGGTGAAAGAAGCAGAAGAAAGAGAACCCAAGATTCAAGTTTCTGAACTCTGCAAGA
AAGCCATTCTCCGGGTGGCTGAGCTGTCATCGGATGACTTTCACTTAGACCGGCATTTATATTTTGCTTGCCGAG
ATGATCGGGAGCGTTTTTGTGAAAATACACAAGCTGGTGAGGGCAGAGTGTATAAGTGCCTCTTTAACCATAAAT
TTGAAGAATCCATGAGTGAAAAGTGTCGAGAAGCACTTACAACCCGCCAAAAGCTGATTGCCCAGGATTATAAAG
TCAGTTATTCATTGGCCAAATCCTGTAAAAGTGACTTGAAGAAATACCGGTGCAATGTGGAAAACCTTCCGCGAT
CGCGTGAAGCCAGGCTCTCCTACTTGTTAATGTGCCTGGAGTCAGCTGTACACAGAGGGCGACAAGTCAGCAGTG
AGTGCCAGGGGGAGATGCTGGATTACCGACGCATGTTGATGGAAGACTTTTCTCTGAGCCCTGAGATCATCCTAA
GCTGTCGGGGGGAGATTGAACACCATTGTTCCGGATTACATCGAAAAGGACGGACCCTACACTGTCTGATGAAGG
TAGTTCGAGGGGAGAAGGGGAACCTTGGAATGAACTGCCAGCAGGCGCTTCAAACACTGATTCAGGAGACTGACC
CTGGTGCAGATTACCGCATTGATCGAGCTTTGAATGAAGCTTGTGAATCTGTAATCCAGACAGCCTGCAAACATA
TAAGATCTGGAGACCCAATGATCTCGTCGTGCCTGATGGAACATTTATACACAGAGAAGATGGTAGAAGACTGTG
AACACCGTCTCTTAGAGCTGCAGTATTTCATCTCCCGGGATTGGAAGCTGGACCCTGTCCTGTACCGCAAGTGCC
AGGGAGACGCTTCTCGTCTTTGCCACACCCACGGTTGGAATGAGACCAGTGAATTTATGCCTCAGGGAGCTGTGT
TCTCTTGTTTATACAGACACGCCTACCGCACTGAAGAACAGGGAAGGAGGCTCTCACGGGAGTGCCGAGCTGAAG
TCCAAAGGATCCTACACCAGCGTGCCATGGATGTCAAGCTGGATCCTGCCCTCCAGGATAAGTGCCTGATTGATC
TGGGAAAATGGTGCAGTGAGAAAACAGAGACTGGACAGGAGCTGGAGTGCCTTCAGGACCATCTGGATGACTTGG
TGGTGGAGTGTAGAGATATAGTTGGCAACCTCACTGAGTTAGAATCAGAGGATATCCAAATAGAAGCCTTGCTGA
TGAGAGCCTGTGAGCCCATAATTCAGACATTCTGCCACGATGCGGATAACCAGATAGACTCTGGGGACCTGATGG
AGTGTCTGATACAGAACAAACACCAGAAGGACATGAACGAGAAGTGTGCCATCGGAGTTACCCACTTCCAGCTGG
TGCAGATGAAGGATTTTCGGTTTTCTTACAAGTTTAAAATGGCCTGCAAGGAGGACGTGTTGAAGCTTTGCCCAA
ACATAAAAAAGAAGGTGGACGTGGTGATCTGCCTGAGCACGACCGTGCGCAATGACACTCTGCAGGAAGCCAAGG
AGCACAGGGTGTCCCTGAAGTGCCGCAGGCAGCTCCGTGTGGAGGAGCTGGAGATGACGGAGGACATCCGCTTGG
AGCCAGATCTATACGAAGCCTGCAAGAGTGACATCAAAAACTTCTGTTCCGCTGTGCAATATGGCAACGCTCAGA
TTATCGAATGTCTGAAAGAAAACAAGAAGCAGCTAAGCACCCGCTGCCACCAAAAAGTATTTAAGCTGCAGGAGA
CAGAGATGATGGACCCAGAGCTAGACTACACCCTCATGAGGGTCTGCAAGCAGATGATAAAGAGGTTCTGTCCGG
AAGCAGATTCTAAAACCATGTTGCAGTGCTTGAAGCAAAATAAAAACAGTGAATTGATGGATCCCAAATGCAAAC
AGATGATAACCAAGCGCCAGATCACCCAGAACACAGATTACCGCTTAAACCCCATGTTAAGAAAAGCCTGTAAAG
CTGACATTCCTAAATTCTGTCACGGTATCCTGACTAAGGCCAAGGATGATTCAGAATTAGAAGGACAAGTCATCT
CTTGCCTGAAGCTGAGATATGCTGACCAGCGCCTGTCTTCAGACTGTGAAGACCAGATCCGAATCATTATCCAGG
AGTCCGCCCTGGACTACCGCCTGGATCCTCAGCTCCAGCTGCACTGCTCAGACGAGATCTCCAGTCTATGTGCTG
AAGAAGCAGCAGCCCAAGAGCAGACAGGTCAGGTGGAGGAGTGCCTCAAGGTCAACCTGCTCAAGATCAAAACAG
AATTGTGTAAAAAGGAAGTGCTAAACATGCTGAAGGAAAGCAAAGCAGACATCTTTGTTGACCCGGTACTTCATA
CTGCTTGTGCCCTGGACATTAAACACCACTGCGCAGCACTCACCCCTGGCCGCGGGCGTCAAATGTCCTGTCTCA
TGGAAGCACTGGAGGATAAGCGGGTGAGGTTACAGCCCGAGTGCAAAAAGCGCCTCAATGACCGGATTGAGATGT
GGAGTTACGCAGCAAAGGTGGCCCCAGCAGATGGCTTCTCTGATCTTGCCATGCAAGTAATGACGTCTCCATCTA
AGAACTACATTCTCTCTGTGATCAGTGGGAGCATCTGTATATTGTTCCTGATTGGCCTGATGTGTGGACGGATCA
CCAAGCGAGTGACACGAGAGCTCAAGGACAGGTAGAGCCACCTTGACCACCAAAGGAACTACCTATCCAGTGCCC

FIGURE 1936B

AGTTTGTACAGCCCTCTTGTATAGCATCCCCACTCACCTCGCTCTTCTCAGAAGTGACACCAACCCCGTGTTAGA
GCATTAGCAGATGTCCACTGCGTTGTCCCATCCAGCCTCCACTCGTGTCCATGGTGTCCTCCTCCTCCTCACCGT
GCAGCAGCAGCAGCTGGTCGCTGGGGTTACTGCCTTTGTTTGGCAAACTTGGGTTTACCTGCCTGTAGACAAGTC
TCTCTCATACCAACAGAACTTCCGGTACTTCCAGAACCAACTCACCTGACCTGCAACTCAAAGGCTTTTTTAAGA
AAACCACCA

FIGURE 1937

MAACGRVRRMFRLSAALHLLLLFAAGGRNSPARASHSQGQGPGANFVSFVGQAGGGGPAGQQLPQLPQSSQLQQQ
QQQQQQQQQPQPPQPPFPAGGPPRRGGAGAGGGWKLAEEESCREDVTRVCPKHTWSNNLAVLECLQDVREPENEI
SSDCNHLLWNYKLNLTTDPKFESVAREVCKSTITEIKECADEPVGKGYMVSCLVDHRGNITEYQCHQYITKMTAI
IFSDYRLICGFMDDCKNDINILKCGSIRLGEKDAHSQGEVVSCLEKGLVKEAEEREPKIQVSELCKKAILRVAEL
SSDDFHLDRHLYFACRDDRERFCENTQAGEGRVYKCLFNHKFEESMSEKCREALTTRQKLIAQDYKVSYSLAKSC
KSDLKKYRCNVENLPRSREARLSYLLMCLESAVHRGRQVSSECQGEMLDYRRMLMEDFSLSPEIILSCRGEIEHH
CSGLHRKGRTLHCLMKVVRGEKGNLGMNCQQALQTLIQETDPGADYRIDRALNEACESVIQTACKHIRSGDPMIS
SCLMEHLYTEKMVEDCEHRLLELQYFISRDWKLDPVLYRKCQGDASRLCHTHGWNETSEFMPQGAVFSCLYRHAY
RTEEQGRRLSRECRAEVQRILHQRAMDVKLDPALQDKCLIDLGKWCSEKTETGQELECLQDHLDDLVVECRDIVG
NLTELESEDIQIEALLMRACEPIIQTFCHDADNQIDSGDLMECLIQNKHQKDMNEKCAIGVTHFQLVQMKDFRFS
YKFKMACKEDVLKLCPNIKKKVDVVICLSTTVRNDTLQEAKEHRVSLKCRRQLRVEELEMTEDIRLEPDLYEACK
SDIKNFCSAVQYGNAQIIECLKENKKQLSTRCHQKVFKLQETEMMDPELDYTLMRVCKQMIKRFCPEADSKTMLQ
CLKQNKNSELMDPKCKQMITKRQITQNTDYRLNPMLRKACKADIPKFCHGILTKAKDDSELEGQVISCLKLRYAD
QRLSSDCEDQIRIIIQESALDYRLDPQLQLHCSDEISSLCAEEAAAQEQTGQVEECLKVNLLKIKTELCKKEVLN
MLKESKADIFVDPVLHTACALDIKHHCAALTPGRGRQMSCLMEALEDKRVRLQPECKKRLNDRIEMWSYAAKVAP
ADGFSDLAMQVMTSPSKNYILSVISGSICILFLIGLMCGRITKRVTRELKDR

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FIGURE 1938

TCGGGGCCAGCGCATGGGGCTGCTGAGACCGCTCCGGACGTGCGAAGCGTTCGCGGTGCGGTAGGAAGCTGAAGT
CTTCAGCAGAACCCTGACCTAGGTAGGGAGTCTCAATGGCCCTGGGTGAAGAAAAGGCAGAAGCGGAAGCATCTG
AAGACACAAAGGCCCAGTCCTATGGGAGAGGGAGCTGCAGGGAGCGGGAGCTGGACATCCCAGGGCCCATGAGTG
GGGAGCAGCCCCCACGCCTGGAAGCTGAGGGAGGGCTCATCTCCCCTGTATGGGGGGCAGAAGGGATACCTGCCC
CTACTTGCTGGATTGGGACTGACCCTGGCAGCCCCTCTAGAGCCCACCAGCCACAGGCCAGTGATGCCAACAGAG
AGCCCGTAGCTGAGAGGTCTGAGCCTGCACTCAGTGGCCTGCCTCCTGCCACCATGGGGTCTGGAGACCTTCTGC
TCTCCGGGGAAAGCCAGGTGGAGAAGACCAAGCTTTCTTCCTCCGAGGAGTTCCCTCAGACTCTGAGCCTTCCCA
GAACAACAACTATTTGCTCAGGACATGATGCTGATACCGAAGATGATCCATCCCTAGCAGATTTGCCCCAGGCAC
TGGACCTCAGCCAGCAGCCTCACAGCTCAGGTCTCTCTTGCCTGTCACAGTGGAAGTCCGTGCTGAGCCCAGGTT
CCGCAGCTCAGCCTTCCAGCTGCAGCATCTCTGCTTCCTCCACGGGCAGCAGTCTCCAGGGTCACCAGGAGAGGG
CGGAGCCTCGTGGTGGTTCTCTGGCCAAGGTCTCCTCCTCCCTGGAGCCGGTCGTCCCCCAGGAACCTTCCTCTG
TGGTGGGGCTAGGACCTCGGCCCCAGTGGTCACCACAGCCTGTGTTCTCTGGGGGTGATGCTTCTGGGCTAGGCA
GGAGACGCCTCTCCTTCCAGGCTGAGTACTGGGCCTGTGTGCTGCCAGATTCCCTGCCTCCATCACCCGACCGCC
ACTCCCCTCTCTGGAACCCAAATAAAGAGTATGAAGATCTGCTTGACTATACTTACCCACTGAGGCCCGGGCCTC
AGCTCCCAAAGCACCTTGATAGCCGTGTGCCAGCTGACCCTGTCCTGCAGGACTCCGGGGTAGACCTGGATAGCT
TCTCTGTCTCTCCAGCAAGCACCCTCAAATCACCTACTAATGTCTCCCCCAACTGCCCACCAGCAGAGGCCACTG
CCCTGCCATTTTCTGGGCCCAGAGAGCCAAGCCTTAAGCAGTGGCCCTCCAGAGTACCCCAGAAACAGGGTGGCA
TGGGCTTGGCATCTTGGAGCCAACTTGCATCTACCCCCAGAGCCCCAGGCAGTAGGGATGCTCGTTGGGAGCGCA
GAGAGCCAGCCCTGAGGGGTGCGAAGGACCGGCTGACTATAGGCAAGCACCTTGATATGGGCTCTCCCCAGCTAA
GGACACGGGACAGAGGGTGGCCCTCGCCCAGGCCAGAGAGGGAGAAGAGGACCAGCCAGAGTGCCCGGCGCCCTA
CCTGCACAGAGTCTAGGTGGAAATCAGAAGAGGAAGTGGAAAGTGATGACGAGTATCTTGCCCTCCCCGCTCGGC
TGACACAGACATTTTGCTGTCAGCTGGAAGAGCTGATCTGCTGGCTGTATAATGTTGCAGATGTTACTGACCACG
GGACTGCAGCCAGGTCCAATCTTACAAGTCTCAAGTCTTCTCTGCAGCTTTACCGGCAATTTAAGAAAGATATAG
ATGAACATCAGTCTCTGACGGAGAGTGTCTTACAGAAGGGGGAGATTCTTCTTCAGTGCCTGTTGGAGAACACCC
CAGTTTTAGAGGATGTCCTTGGGAGGATCGCAAAGCAGTCTGGTGAGCTGGAGAGCCACGCAGATCGCCTGTATG
ACTCTATCTTGGCCTCTCTGGACATGCTGGCTGGCTGCACCCTTATCCCTGACAAAAAGCCCATGGCGGCAATGG
AGCACCCATGTGAAGGGGTTTAACCTGGCATCTTCTCAGGCAGAGGTGCAACCTGTCGGCCAAACACTGGCTAGT
GAGAAAAAAAACCTTCAAGAAGTCCTTGCAAGAGCCATTCAACACTGAAGTCAAGGGGGAAACCTTCAATATACT
AGCTTTAAAATGCCTTTCTCCTCCCTGAATGGAGGGCTGAGTTACTATTTTTATTTACAATGAATCCTTCCAAAC
TAAAAAAAAAAAAAAAAAAA

FIGURE 1939

MALGEEKAEAEASEDTKAQSYGRGSCRERELDIPGPMSGEQPPRLEAEGGLISPVWGAEGIPAPTCWIGTDPGSP
SRAHQPQASDANREPVAERSEPALSGLPPATMGSGDLLLSGESQVEKTKLSSSEEFPQTLSLPRTTTICSGHDAD
TEDDPSLADLPQALDLSQQPHSSGLSCLSQWKSVLSPGSAAQPSSCSISASSTGSSLQGHQERAEPRGGSLAKVS
SSLEPVVPQEPSSVVGLGPRPQWSPQPVFSGGDASGLGRRRLSFQAEYWACVLPDSLPPSPDRHSPLWNPNKEYE
DLLDYTYPLRPGPQLPKHLDSRVPADPVLQDSGVDLDSFSVSPASTLKSPTNVSPNCPPAEATALPFSGPREPSL
KQWPSRVPQKQGGMGLASWSQLASTPRAPGSRDARWERREPALRGAKDRLTIGKHLDMGSPQLRTRDRGWPSPRP
EREKRTSQSARRPTCTESRWKSEEEVESDDEYLALPARLTQTFCCQLEELICWLYNVADVTDHGTAARSNLTSLK
SSLQLYRQFKKDIDEHQSLTESVLQKGEILLQCLLENTPVLEDVLGRIAKQSGELESHADRLYDSILASLDMLAG
CTLIPDKKPMAAMEHPCEGV

FIGURE 1940A

ATAAATGACGTGCCGAGAGAGCGAGCGAACGCGCAGCCGGGAGAGCGGAGTCTCCTGCCTCCCGCCCCCCACCCC
TCCAGCTCCTGCTCCTCCTCCGCTCCCCATACACAGACGCGCTCACACCCGCTCCCTCACTCGAACACACAGACA
CAAGCGCGCACACAGGCTCCGCACACACACACTTCGCTCTCCCGCGCGCTCACACCCCTCTTGCCCTGAGCCCTT
GCCGGTGCAGCGCGGCGCCGCAGCTGGACGCCCCTCCCGGGCTCACTTTGCAACGCTGACGGTGCCGGCAGTGGC
CGTGGAGGTGGGAACAGCGGCGGCATCCTCCCCCCTGGTCACAGCCCAAGCCAGGACGCCCGCGGAACCTCTCGG
CTGTGCTCTCCCATGAGTCGGGATCGCAGCATCCCCCACCAGCCGCTCACCGCCTCCGGGAGCCGCTGGGCTTGT
ACACCGCAGCCCTTCCGGGACAGCAGCTGTGACTCCCCCCCAGTGCAGATTTCGGGACAGCTCTCTAGAAACTCG
CTCTAAAGACGGAACCGCCACAGCACTCAAAGCCCACTGCGGAAGAGGGCAGCCCGGCAAGCCCGGGCCCTGAGC
CTGGACCCTTAGCGGTGCCGGGCAGCACTGCCGGCGCTTCGCCTCGCCGGACGTCCGCTCCTCCTACACTCTCAG
CCTCCGCTGGAGAGACCCCCAGCCCCACCATTCAGCGCGCAAGATACCCTCCAGATATGCCCTGCGTCCAAGCCC
AATATAGCCCTTCCCCTCCAGGTTCCAGTTATGCGGCGCAGACATACAGCTCGGAATACACCACGGAGATCATGA
ACCCCGACTACACCAAGCTGACCATGGACCTTGGCAGCACTGAGATCACGGCTACAGCCACCACGTCCCTGCCCA
GCATCAGTACCTTCGTGGAGGGCTACTCGAGCAACTACGAACTCAAGCCTTCCTGCGTGTACCAAATGCAGCGGC
CCTTGATCAAAGTGGAGGAGGGGCGGGCGCCCAGCTACCATCACCATCACCACCACCACCACCACCACCACCACC
ATCACCAGCAGCAGCATCAGCAGCCATCCATTCCTCCAGCCTCCAGCCCGGAGGACGAGGTGCTGCCCAGCACCT
CCATGTACTTCAAGCAGTCCCCACCGTCCACCCCCACCACGCCGGCCTTCCCCCCGCAGGCGGGGGCGTTATGGG
ACGAGGCACTGCCCTCGGCGCCCGGCTGCATCGCACCCGGCCCGCTGCTGGACCCGCCGATGAAGGCGGTCCCCA
CGGTGGCCGGCGCGCGCTTCCCGCTCTTCCACTTCAAGCCCTCGCCGCCGCATCCCCCCGCGCCCAGCCCGGCCG
GCGGCCACCACCTCGGCTACGACCCGACGGCCGCTGCCGCGCTCAGCCTGCCGCTGGGAGCCGCAGCCGCCGCGG
GCAGCCAGGCCGCCGCGCTTGAGGGCCACCCGTACGGGCTGCCGCTGGCCAAGAGGGCGGCCCCGCTGGCCTTCC
CGCCTCTCGGCCTCACGCCCTCCCCTACCGCGTCCAGCCTGCTGGGCGAGAGTCCCAGCCTGCCGTCGCCGCCCA
GCAGGAGCTCGTCGTCTGGCGAGGGCACGTGTGCCGTGTGCGGGGACAACGCCGCCTGCCAGCACTACGGCGTGC
GAACCTGCGAGGGCTGCAAGGGCTTTTTCAAGAGAACAGTGCAGAAAAATGCAAAATATGTTTGCCTGGCAAATA
AAAACTGCCCAGTAGACAAGAGACGTCGAAACCGATGTCAGTACTGTCGATTTCAGAAGTGTCTCAGTGTTGGAA
TGGTAAAAGAAGTTGTCCGTACAGATAGTCTGAAAGGGAGGAGAGGTCGTCTGCCTTCCAAACCAAAGAGCCCAT
TACAACAGGAACCTTCTCAGCCCTCTCCACCTTCTCCTCCAATCTGCATGATGAATGCTCTTGTCCGAGCTTTAA
CAGACTCAACACCCAGAGATCTTGATTATTCCAGATACTGTCCCACTGACCAGGCTGCTGCAGGCACAGATGCTG
AGCATGTGCAACAATTCTACAACCTCCTGACAGCCTCCATTGATGTATCCAGAAGCTGGGCAGAAAGGATTCCGG
GATTTACTGATCTCCCCAAAGAAGATCAGACATTACTTATTGAATCAGCCTTTTTGGAGCTGTTTGTCCTCAGAC
TTTCCATCAGGTCAAACACTGCTGAAGATAAGTTTGTGTTCTGCAATGGACTTGTCCTGCATCGACTTCAGTGCC
TTCGTGGATTTGGGGAGTGGCTCGACTCTATTAAAGACTTTTCCTTAAATTTGCAGAGCCTGAACCTTGATATCC
AAGCCTTAGCCTGCCTGTCAGCACTGAGCATGATCACAGAAAGACATGGGTTAAAAGAACCAAAGAGAGTCGAAG
AGCTATGCAACAAGATCACAAGCAGTTTAAAAGACCACCAGAGTAAGGGACAGGCTCTGGAACCCAACGAGTCCA
AGGTCCTGGTTGCCCTGGTAGAACTGAGGAAGATCTGCACCCTGGGCCTCCAGCGCATCTTCTACCTGAAGCTGG
AAGACTTGGTGTCTCCACCTTCCATCATTGACAAGCTCTTCCTGGACACCCTACCTTTCTAATCAGGAGCAGTGG
AGCAGTGAGCTGCCTCCTCTCCTAGCACCCTGCTTCTACGCAGCAAAGGGATAGGTTTGGAAACCTATCATTTCC
TGTCCTTCCTTAAGAGGAAAAGCAGCTCCTGTAGAAAGCAAAGACTTTCTTTTTTTTCTGGCTCTTTTCCTTACA
ACCTAAAGCCAGAAAACTTGCAGAGTATTGTGTTGGGGTTGTGTTTTATATTTAGGCATTGGGGGATGGGGTGGG
AGGGGGTTATAGTTCATGAGGGTTTTCTAAGAAATTGCTAACAAAGCACTTTTGGACAATGCTATCCCAGCAGGA
AAAAAAAGGATAATATAACTGTTTTAAAACTCTTTCTGGGGAATCCAATTATAGTTGCTTTGTATTTAAAAACAA
GAACAGCCAAGGGTTGTTCGCCAGGGTAGGATGTGTCTTAAAGATTGGTCCCTTGAAAATATGCTTCCTGTATCA
AAGGTACGTATGTGGTGCAAACAAGGCAGAAACTTCCTTTTAATTTCCTTCTTCCTTTATTTTAACAAATGGTGA
AAGATGGAGGATTACCTACAAATCAGACATGGCAAAACAATAATGGCTGTTTGCTTCCATAAACAAGTGCAATTT
TTTAAAGTGCTGTCTTACTAAGTCTTGTTTATTAACTCTCCTTTATTCTATATGGAAATAAAAAGGAGGCAGTCA
TGTTAGCAAATGACACGTTAATATCCCTAGCAGAGGCTGTGTTCACCTTCCCTGTCGATCCCTTCTGAGGTATGG
CCCATCCAAGACTTTTAGGCCATTCTTGATGGAACCAGATCCCTGCCCTGACTGTCCAGCTATCCTGAAAGTGGA
TCAGATTATAAACTGGATTACATGTAACTGTTTTGGTTGTGTTCTATCAACCCCACCAGAGTTCCCTAAACTTGC
TTCAGTTATAGTAACTGACTGGTATATTCATTCAGAAGCGCCATAAGTCAGTTGAGTATTTGATCCCTAGATAAG

FIGURE 1940B

AACATGCAAATCAGCAGGAACTGGTCATACAGGGTAAGCACCAGGGACAATAAGGATTTTTATAGATATAATTTA
ATTTTTGGTAATTGGGTTAAGGAGACCAATTTTGGAGAGCAAGCAAATCTTCTTTTTAAAAAATAGTATGAATGT
GAATACTAGAAAAGATTTAAGAAATAGTATGAGTGTGAGTACTAGGAAGGAT

FIGURE 1941

MPCVQAQYSPSPPGSSYAAQTYSSEYTTEIMNPDYTKLTMDLGSTEITATATTSLPSISTFVEGYSSNYELKPSC
VYQMQRPLIKVEEGRAPSYHHHHHHHHHHHHHHHQQQHQQPSIPPASSPEDEVLPSTSMYFKQSPPSTPTTPAFPP
QAGALWDEALPSAPGCIAPGPLLDPPMKAVPTVAGARFPLFHFKPSPPHPPAPSPAGGHHLGYDPTAAAALSLPL
GAAAAAGSQAAALEGHPYGLPLAKRAAPLAFPPLGLTPSPTASSLLGESPSLPSPPSRSSSSGEGTCAVCGDNAA
CQHYGVRTCEGCKGFFKRTVQKNAKYVCLANKNCPVDKRRRNRCQYCRFQKCLSVGMVKEVVRTDSLKGRRGRLP
SKPKSPLQQEPSQPSPPSPPICMMNALVRALTDSTPRDLDYSRYCPTDQAAAGTDAEHVQQFYNLLTASIDVSRS
WAERIPGFTDLPKEDQTLLIESAFLELFVLRLSIRSNTAEDKFVFCNGLVLHRLQCLRGFGEWLDSIKDFSLNLQ
SLNLDIQALACLSALSMITERHGLKEPKRVEELCNKITSSLKDHQSKGQALEPNESKVLVALVELRKICTLGLQR
IFYLKLEDLVSPPSIIDKLFLDTLPF

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FIGURE 1942

GGGCAACGGAGGGGAAATAAAAGGGAACGGCTCCGAATCTGCCCCAGCGGCCGCTGCGAGACCTCGGCGCCGACA
TCGCGACAGCGAAGCGCTTTGCACGCCAGGAAGGTCCCCTCTATGTGCTGCTGAGCCGGTCCTGGACGCGACGAG
CCCGCCCTCGGTCTTCGGAGCAGAATTCGCAAAAACGGAAGGACTGGAA**ATG**GCAGACCATATGATGGCAATGAA
CCACGGGCGCTTCCCCGACGGCACCAATGGGCTGCACCATCACCCTGCCCACCGCATGGGCATGGGGCAGTTCCC
GAGCCCCCATCACCACCAGCAGCAGCAGCCCCAGCACGCCTTCAACGCCCTAATGGGCGAGCACATACACTACGG
CGCGGGCAACATGAATGCCACGAGCGGCATCAGGCATGCGATGGGGCCGGGGACTGTGAACGGAGGGCACCCCCC
GAGCGCGCTGGCCCCCGCGGCCAGGTTTAACAACTCCCAGTTCATGGGTCCCCCGGTGGCCAGCCAGGGAGGCTC
CCTGCCGGCCAGCATGCAGCTGCAGAAGCTCAACAACCAGTATTTCAACCATCACCCCTACCCCCACAACCACTA
CATGCCGGATTTGCACCCTGCTGCAGGCCACCAGATGAACGGGACAAACCAGCACTTCCGAGATTGCAACCCCAA
GCACAGCGGCGGCAGCAGCACCCCCGGCGGCTCGGGCGGCAGCAGCACCCCCGGCGGCTCTGGCAGCAGCTCGGG
CGGCGGCGCGGGCAGCAGCAACAGCGGCGGCGGCAGCGGCAGCGGCAACATGCCCGCCTCCGTGGCCCACGTCCC
CGCTGCAATGCTGCCGCCCAATGTCATAGACACTGATTTCATCGACGAGGAAGTTCTTATGTCCTTGGTGATAGA
AATGGGTTTGGACCGCATCAAGGAGCTGCCCGAACTCTGGCTGGGGCAAAACGAGTTTGATTTTATGACGGACTT
CGTGTGCAAACAGCAGCCCAGCAGAGTGAGCTGT**TGA**CTCGATCGAAACCCCGGCGAAAGAAATCAAACCCCCAA
CTTCTTCGGCGTGAATTAAAAGAAACATTCCCTTAGACACAGTATCTCACTTTTCAGATCTTGAAAGGTTTGAGA
ACTTGGAAACAAAGTAAACTATAAACTTGTACAAATTGGTTTTAAAAAAAATTGCTGCCACTTTTTTTCCTGTTT
TTGTTTCGTTTTTGTAGCCTTGACATTCACCCACCTCCCTTATGTAGTTGAAATATCTAGCTAACTTGGTCTTTT
TCGTTGTTTGTTTTTACTCCTTTCCCTCACTTTCTCCAGTGCTCAACTGTTAGATATTAATCTTGGCAAACTGCT
TAATCTTGTGGATTTTGTAGATGGTTTCAAATGACTGAACTGCATTCAGATTTACGAGTGAAAGGAAAAATTGCA
TTAGTTGGTTGCATGAACTTCGAAGGGCAGATATTACTGCACAAACTGCCATCTCGCTTCATTTTTTTAACTATG
CATTTGAGTACAGACTAATTTTTAAAATATGCTAAACTGGAAGATTAAACAGATGTGGGCCAAACTGTTCTGGAT
CAGGAAAGTCATACTGTTCACTTTCAAGTTGGCTGTCCCCCCCGCCGCCCCCCCCACCCCCATATGTACAGATGA
TAATAGGGTGTGGAATGTCGTCAGTGGCAAACATTTCACAGATTTTTATTTTGTTTCTGTCTTCAACATTTTTGA
CACTGTGCTAATAGTTATATTCAGTACATGAAAAGATACTACTGTGTTGAAAGCTTTTTAGGAAATTTTGACAGT
ATTTTTGTACAAAACATTTTTTTGAAAAAATACTTGTTAATTTATTCTATTTTAATTTGCCAATGTCAATAAAAA
GTTAAGAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1943

MADHMMAMNHGRFPDGTNGLHHHPAHRMGMGQFPSPHHHQQQQPQHAFNALMGEHIHYGAGNMNATSGIRHAMGP
GTVNGGHPPSALAPAARFNNSQFMGPPVASQGGSLPASMQLQKLNNQYFNHHPYPHNHYMPDLHPAAGHQMNGTN
QHFRDCNPKHSGGSSTPGGSGGSSTPGGSGSSSGGGAGSSNSGGGSGSGNMPASVAHVPAAMLPPNVIDTDFIDE
EVLMSLVIEMGLDRIKELPELWLGQNEFDFMTDFVCKQQPSRVSC

FIGURE 1944A

CTCAGCTCCCTGTGGTGGGGGATGGCAGAGGCTTCCCGCTCCCCGCAGCTGGTTTGCACAGCCTCCCGACTGTGC
CGTGGTGTCTCCTTCCCTAAAGTGGGACAGTCGTTTCTGTGTCCTGCTGGCCTCTGAGGAACAGACGTGTGTGAG
AGGCCTTCAGGGCCTGATGGCTGGGGTGGTGACAGTGCCTGGAGAATGGGTGGGGACTGGAGGGGCCAGGTGGCT
AACCACTCTCCTCTTCC**ATG**GCAGCGGAGCTGGAGTTCGCCCAAATCATCATCATCGTCGTGGTGGTCACGGTGA
TGGTGGTGGTCATCGTCTGCCTGCTGAACCACTACAAAGTCTCCACGCGGTCCTTCATCAACCGCCCGAACCAGA
GCCGGAGGCGGGAGGACGGGCTGCCGCAGGAAGGGTGCCTGTGGCCTTCAGACAGCGCCGCACCGCGGCTGGGCG
CCTCGGAGATCATGCATGCCCCGCGGTCCAGGGACAGGTTCACAGCGCCGTCCTTCATCCAGAGGGATCGCTTCA
GCCGCTTCCAGCCCACCTACCCCTATGTGCAGCACGAGATTGATCTTCCTCCCACCATCTCCCTGTCCGACGGTG
AAGAGCCACCTCCTTACCAGGGGCCCTGCACCCTGCAGCTCCGGGACCCTGAACAGCAGATGGAACTCAACCGAG
AGTCCGTGAGGGCCCCACCCAACCGAACCATATTTGACAGTGATTTAATAGACATTGCTATGTATAGCGGGGGTC
CATGCCCACCCAGCAGCAACTCGGGCATCAGTGCAAGCACCTGCAGCAGTAACGGGAGGATGGAGGGGCCACCCC
CCACATACAGCGAGGTGATGGGCCACCACCCAGGCGCCTCTTTCCTCCATCACCAGCGCAGCAACGCACACAGGG
GCAGCAGACTGCAGTTTCAGCAGAACAATGCAGAGAGCACAATAGTACCCATCAAAGGCAAAGATAGGAAGCCTG
GGAACCTGGTC**TGA**TTCCTTCCAACGTGCACTTCAGCTGGAGAAAGAAACCAAGAAGGGAAGCGGCCGCTGGGCC
CCTCCTGCGCACAGTGTTGTTCAGTTTCACATGGTACAAATAAGTAAAACCAAATGAGCAAACACGGTCTTTGTT
TCTGATTCCTTTTAGGGGAATTGCATGCAAACTAGACTGAAATGATACAAACTTCCATCTGGTCTGACCGCAAAC
AGTGTTTATTTGGGGACAGGGGTTGGGATGGGGGTGTGGGCAGGGGAAAACAGAGAACGGGATGCTTTGAAGATA
CCATGAAATAAAACCCACAGAGGTATTTGATGTATTTAATTGTGAAAGGAGACTTTGCAGATAAATGAGGCCAGA
ATGGCATGTTTTATAATTAACTGAATAAAGAAGGAAGCATTATTATATATTATTGTGGGGAAGAACCAGCCAGTT
CGCTTTTTCTCCTAAGGTGTGGACTTTTATTTTGTTTTAAAAATATGAATCAAAATTCCTGTGTTGTGTGCCAAG
GTATAAAGTGGAGAAGTTAGATGAGTGCAAGGAGCTCCTTTGTGTTGTGATGATGTGTTTTAAAAGTTGCACTAT
CTTAATGTTGAAAATATTTACAAGGGAACTGTTTTACGTGAAGTTCTGTATGTTGTCTTTTCACCTGTGGATTGT
AATCAGGCCCAAGGAATATCCTGGAGTGGTCCCCAGAAGCATCCAAGAAAAGATATTTGGGGACGTAGCCTAACA
TTTTACCAACTTACGTAAATCAAAAAAGTCATTATTGTTGCAGGAGTTTGCATCAAATAGCAGTGCATCGCTGAA
GCTTTTGGAGACTTTTGGATGGAAGATAAGATAGGGAAGATTAAGTTCCAGCATTTCTGACTTGTTATTTTGAGT
TACTCTGCTACTCTTAGGCTGCATAGTTTATGAGAAAATGAACACATGCATTTATGGATCCAGTATCATGCAGTG
CTGCCCTCATCCTCCAGCAGTGCAATTTCTTCAGTAATTTAGATTTTTTTCACTATAGCATGAAATATATTCAAA
TACATACCTTATTTTATGCAATAAATTGTTTAAAATGCAAGGTGGTTATTCTGCATACTGTTGAAATATGTGACT
CCTCAGTATATTCCCATTGCCTCTCCCCCTTTCCTCGACAGCTTAGTTCAGTTCTGCAGGGCTGCTCAGTTCACA
GGAGGCTCCCAGCAGCCACCCCACATCCAGCCTACACAGAACTTTCGTGTGGGAGTGGTGTGGGTGGTGGTTTTC
TTATGCTTTGGAAGCCCCTAGAAATAATGACGGAAGAATGCCATGTTGCTGATCGTGGTAATAAGCCATTGTGGG
TTATTGTATGTCACTAGTATTAGCATAGCATTCTTAAAGGAATGCAGTGTTCAAAACCTACCCAAATTCCCCGCA
GGATTTTACCAAACCCTTCCCCAGGCCAGTTTTGTACTGAAGGCAAGAACTGGACAGTCAGAGAACAGTGGAGGG
GGCAAGTGACTGAAGAGCACCGGGTAAAAAGCACAACATGCAGTTAAAATGCAAACTAGAAAACTAATTTTAAAT
ATTGTTAGTTTTAATATTTCCTGATATTTACAAATATTCATTCTTATATACAATGAAAAAAATAACTTTCTTCTG
CAGATGTAAGCACTGGCTTTTATAAGAGCAGCAGCCAACACGTTTAGCAGACACTGCGCGTGGAGAAGGGCTTAT
CTGCAGTACACTCTGCCATGTGGAGGGTGGGCCTCTGTGGCCTCTTCACATAACAAGATGAGCTGGAATGATGAT
TCCATGACTCCCACCTATGCAGCCTTAAAGCCAAATCCGCGTGTGTGTGTTTGTGTCTGTCTGTGGGTCTCGAAG
GTGATCCGTCGGTGCGGTGGCTCTGTGCTGTAACTGGAGAGACTGTTCCAAACCCCAAGAGTTGTCTGATCCTAG
TCTGTTCCCTTCTGCTTCTTACCTCTGTAGATAGGTCACTGGTTTTTGTTTGTTTGTTTTGAGGATTGGAATTTC
CATTACATTCATCCTTTGCACACAGTAACATCCACAGAACTAGTCCAACTCTTAAAAGGAGAGAGGAAAAACACA
GGCACCAGTTGTCAGCTCATGCTTACAACCTGTGTGGAAGTATATACAGTTGAGAGTCACAGTGGAGGTTCTGAG
ACTGGATTCAGTCTTGTTCCAGTGACAGTTGGAAGGCCTCTGCTGGAGAGACACCAGCTCTCAGGGCAGAGATTG
GCTTGGGGCCAGAAGGACCCTCCCCAACCCTGGAGACACCCTGAAGGTTCACTGGCTCTCCAGATTAGCCTCTCT
TCCTCTGTCAGGCAAAGATGAGGAGCCCGTGTTCCCATCGGGCCCTGCTGGCAGGGACTTGCAGTGGATTCTTGG
TCAGGTGTGCCCACAGATGCGGAGGCGAGGTGAGTGATTCCATCATTTCAGTTCTCACCTGCAGTTTTGGTGAAG
CAGGAGATGCACCCCACAGCTCTAGCTCTCAAATGGCTTCACAGTCCTTACTTCTCTACCTGCCTCAAGAAGGGG
CTCAGAGCAGAGACTTGTGAATTCCTTAGTAACTGTGAGTATATGAATGTGTTGCACATGTCCACAGTATTGGCG

FIGURE 1944B

AGATAATTACATAATTCAGATACCTTTAATCATCTTTCAAGAAAGAGGCTCCTCCCATTCAACCACCCTAGAGAA
CTGCCTTTGTTAAATAGTTATTTAAAGACTCATACATATCAAACCATGACTTTGAAAGGTCTTCGAGGCTGGGGC
TCTGTAATGAATTAGTTTAAAAGCCAAGGTCATAACATGAATTGATGGTCAATTTCCCTTCAGCAGAAGGAAAAG
GTGATTTAGATCAGTAGCTCTTTTGAAGGTTGTGGCTGACCTGTTCATACCGTGTCGCCTCATGGCTAGTGTGGC
GTTGAAAGAGTAGCGACTGGGAAGATACAACTTACACAGTGGGGCCTATTGTTCTTTCAAGAACCCTTTTTTTAG
CTTATAGAACCCATGGGTCCAGTTTAGTAACGAGTGATTTAGGCAATCAATGATAGGTTTATAATCTTAGATTAT
TCCAGCAAAGTGTGGATTGCATTGTTAGGAAGAACATTTGGTGGGAATGAACACTCCTGGGCATACCGCTGACTT
TTGTCCCTTGTTCCCGGTGTAGGAGACCCAAGGCATCTTGAATCCCATCTATAAGAACACAATCTTCCAGCATAC
GTTTGCTTTTTCAGAAACTCTAGCATTCTCTTTAAATACTGACGCAATCCTTAATGGAAAAGAGATTTCATGAAG
CAAATTATGTATTTCAATAGTTCTTCTATTTTTAGTGTCCAAAATTTACTAATACAGAAGCTTGACAAGCATGTC
CTCACCCTCCCCACCACATAAACACATGGACACACACCCAAGCCACAAGAAATCCCAAGAGAGCAGAAGCGAATT
TTTAAAAGATTTATCGTGAGGACTGCATTTCCATTCACTAATTTTGGCTCAAACTTATGAGGCAGGAAATAGGGG
CCAACAGTAAATGGGGGAGGCCTCCTGACACCAGCAGAGGAATTTTGTACCCAGGCGAGGACTTCTTGAACTTCT
GCGTATCTCCGTTTGATCTCTTTCACCTTTATTTCATCTTCATAAGAATGAGAAAGGCTCAAAAGGAAGCACTTT
TAGAAATCTTCTCTGACCTAGAAGAATCCATCCAAATCCCTGCCTTCCTCTCTGAACCAACAGTTCCCTTCTCTG
ACAGGGGGCCATCCTCTATCTTCCATCCAGCGGCTCTTCCTTTTAGGAAGGCTCTGGTGCAGAGCACTTCAAATA
TGTCCTCAGGCCAGATACTGATTGCTAGTAGAGAGACACCCGGCACCCAGTCCGAAGCCCTCCCTCAAAGGACCG
GCTTATGGCGTTGGTCACTGGCAGGCTCAGAGACATTCTACTGTGGGCGCAGGGAGCCCGGCCCCCCATGCAGCC
ATGACTGGATGCGCCCCCATCTCGGGGGCTTGCTGCACTGCTTGTTTATTGAATTTTGCTACTTAGAATGGCAAC
ATTAACTTTGTGTACCATTCATTTTTTAAAAATTTTCCAAAGCTCGGCAGTGTATGAAAGAAAAAACTGGGAAAG
ATACTTGGTTTCTGTTAACTTTTGTGTTGCTTGCTTAAGTGATTAAAGCCAGTGCTTGGAGCCAAGCCTTCATGC
CACGAACATGCTCCACAGCCTGCCCTTTGCTCTCCTGCTCACACTGACCAAGAATGCCGCGTGCTTGGCCTACTG
AGGTGAAAGGACAATTGAATGACAGGTGGGCAAAGGGAGAACTTCCCCTTCTTGGTGCGAGGAAAGTCACAAATT
TAAAAATGTTGCTTCCAGCCCAGATCCTAAATGCTAGTTCTCAGCAGCTGCGTGGCTTACCGTTCGCCATTTCCA
CCACCGCCAGCTGCCAGCACCGCTACAGATCACAGAGATGTGAACAGACAATGGAAAGCACTCTTAGCCTTGCAG
TGGTCTACATTTTTTAGGAACCAATATTTCAGCATTCTTTATTACCCGGCACGCTGTGTCCTTTGCAGAGTTCAA
GTTTATGTTACTGCCAGGGTCAGACAGTCATTTGCTGCTGCTGCTGCTGCTGCTGCTTCTCGAACTGGATGC
ATTAGGAAGCTGCTGTCTGAGTGTAGGAATGTCTTGCTAAGAAAGCAATGTCTTCCTTCATCCTTTTCTTTCTTC
CCTCTGCGTGTCCTTGTTTTTGTGTAATGCGGGAGAGGGTTAGAGCTATAGAGATTATATATACACTATCCGTGC
ACATTATATATATGTAGATATACCCCTATCATGTCAGAGATCTGCATGTCAGTTTTTCAGCAACTAAGGTGCCTC
ATGTTCTGAGTTCAGCAGATATAGGAACCAAGCCGCCCCCTCCTGCACTTGATGCTCCCACCTTTGTTGTGCCTC
ACTTAAAATGGTGCTTTTTTCAGTTGTCTGTCTTTTCTTATGTTTTTATTTGTAAGGTGCTGTATATAAGTTGAA
TATATTATGCACATATCCTACCCAATGGGTAGAACAAAAAGTTGTTAATACTGTAATATAATGTATAGATGATAC
CAATTTTAACAGAAATGGCATAGAATTTGTGAATGCCTATGTGCTTTGTCCTCTTTTGTAAGGAAATTTGCAAAT
GGATGCATACAGATTAAAGTCTATGTAGTTTATTTTCCTATTAAATATCAATATTATAACACAAGAGAAAGAAGT
GTGAACAAACAAGCAACAGTTTATGACCAGCGTATATATAGCAATGGAAAGTTGCATCTTTGCTGTGAAAACACT
TTAAAGAAAATACTTTTTAAAAAATCCCACAGCTTTTTGGTTGCCACTAGACGCTTCTTATTTTAATCATTTTAG
TAATGCTCAGCTGGACCAGTGTTAGTTATATTTGAGTCAGAAAAATGTTGTTTTTCAACTTGCTTTATAATCTCC
TGCATCTATCTCCTGCTGTAGCATCAYGAAGGTGTCAGGCAACAGTGAAAAGTGCACATTTTTGTTGTTGCAGAA
ACTGTGTCAGAGGAATAAGTAAATCAGCCTGCAGCAGAAGACTTTGTTCAGCTCCAGAGGCATCTGTGACCGTCT
GTGTCCAAGTCTCTCTGTGCCTTTTTCTTTTACAAACTGAAGCTGTGGAGCCAATGAAGTAACAGTAGAGATTGT
AGGGAAAGAATACCTCAGGAAAAACAAATACACTTACAAGAAGACCCTGTTCTTAGAAAATGTGTTTAGTTATGG
GTTAGCACTAGAAGAGACTTGGCTGTCAGCCAGCCAAGTGAAGGACCTCTCATCCATTCCCATTCATGTCCCATC
ATAATACGGACMCAAAAAGCAAACTCGGTTTTGCCATCAGTTAGAAATTACGTTTTGGATTGTATATTGTTACAT
CTCTCTTCCAGCTTAGTTTTTAGTGTCTGATTGTGACCTCTGCATTTATCTTCAAATACCCTAATTTTAAAACAA
AAGAACAAGAAAAGTTTATAACACCATGTTCACTAAAACCACGGTTGAATCTTGGGTGTGGGCATCCTTTCGAGT
GTTGTCCATAAGAGCAGTTCGTGGAATTTTGCCCATCTGACCCATATTATCAGCTTATTCTGCCACCAGAGTAGA
GTCTAATAAATTCCAAAGTTTTTATTTGCTCCATGGTGTATGTTCTGACTTTGAAAATGTCAGATTCTATAATCA

FIGURE 1944C

TACCCCTAACATCCAGGAGACAAATGACAGATTATCTTTAAACTGAAATTGACTCTACAATGCAACCCTTAATGC
TGAATGGATTAAAAAAGTCAGCCCTTTTAGTATCTGTTTGAAAGGGCCGTAAAAAGTTGACACTTTTGTTGTTGT
GGATCCTGCGTGTCTAGACCCACGTGTTGTTTCCATCGTATACTGTAGGGTGCACCCCTTGGGATTCATCATTAA
GAACTGAGGCTCACTGTTGTCAGAAACAAAGCTCCCACCCCCCAGGTTCAACCTTGTGGGAGAACTGTTGAGCAT
GAGAATGTTCTAGACTCAGAGGTACTAAAATTTGTTACCACATCATTGCTTCCTTTCTACAGGACGAATTGAGGC
TTAAACTTTACTGTTAATGATACTGGTTCATTTTAATGTGCTTGTTGGTATGTTGCTATTTTTCATTTCATAGCT
TTCAAAAATCATGCTAATTGTATACTTGTCTAGTTTAAGGCTATTTTAAAATATGTACAATACTATTCACAGCAT
TTAGTTCGTTTAATTTTTATTATAAAGCAATCTACTAAAAAAGTACAACTGTATTTGAACTTTTCAATAGTTGTT
TGTGAGCTATGATAATCAAAAGTCATTAAAGTCTTTTTTAACAAACATTCGTGCTTACTTTTCAACATAATTCCC
AGTTATATACAGAAAAAGATTTCCACCTGTCACGTATCTGCCTCTTTTACCTGAGCAATGGTGTAGTTCTTAGAC
CTAAGGTCTGTAATTGCAATACTTTTAAAGAAAGATGTTGCTCTAAGTGCTGTTTGTTAGTTATGAAATCAGATT
TTTCTGCTTGTTCTTAATGCTGTGGTCAAACCATAGCACAAAATCATTAAAAATAATCAGCGGCATAC

FIGURE 1945

MAAELEFAQIIIIVVVVTVMVVVIVCLLNHYKVSTRSFINRPNQSRRREDGLPQEGCLWPSDSAAPRLGASEIMH
APRSRDRFTAPSFIQRDRFSRFQPTYPYVQHEIDLPPTISLSDGEEPPPYQGPCTLQLRDPEQQMELNRESVRAP
PNRTIFDSDLIDIAMYSGGPCPPSSNSGISASTCSSNGRMEGPPPTYSEVMGHHPGASFLHHQRSNAHRGSRLQF
QQNNAESTIVPIKGKDRKPGNLV

FIGURE 1946

TTTTTTTTTCCAGCCAAGCAGCAGCTTTATTAGTGGTGCTGGGTTCTTCCCATACCCTACAGCGTGCTCGGAAGC
ATTCCGCGCCGGGCCTGCCAGACACCTGCGCCCTTCTGCAGCCGCCCGCCGCATCCGCCGCCGCAGCCCCCAGCA
TGTCGGGCCCAGACGTCGAGACGCCGTCCGCCATCCAGATCTGCCGGATCATGCGGCCAGATGATGCCAACGTGG
CCGGCAATGTCCACGGGGGGACCATCCTGAAGATGATCGAGGAGGCAGGCGCCATCATCAGCACCCGGCATTGCA
ACAGCCAGAACGGGGAGCGCTGTGTGGCAGCCCTGGCTCGTGTCGAGCGCACCGACTTCCTGTCTCCCATGTGCA
TCGGTGAGGTGGCGCATGTCAGCGCGGAGATCACCTACACCTCCAAGCACTCTGTGGAGGTGCAGGTCAACGTGA
TGTCCGAAAACATCCTCACAGGTGCCAAAAAGCTGACCAATAAGGCCACCCTGTGGTATGTGCCCCTGTCGCTGA
AGAATGTGGACAAGGTCCTCGAGGTGCCTCCTGTTGTGTATTCCCGGCAGGAGCAGGAGGAGGAGGGCCGGAAGC
GGTATGAAGCCCAGAAGCTGGAGCGCATGGAGACCAAGTGGAGGAACGGGGACATCGTCCAGCCAGTCCTCAACC
CAGAGCCGAACACTGTCAGCTACAGCCAGTCCAGCTTGATCCACCTGGTGGGGCCTTCAGACTGCACCCTGCACG
GCTTTGTGCACGGAGGTGTGACCATGAAGCTCATGGATGAGGTCGCCGGGATCGTGGCTGCACGCCACTGCAAGA
CCAACATCGTCACAGCTTCCGTGGACGCCATTAATTTTCATGACAAGATCAGAAAAGGCTGCGTCATCACCATCT
CGGGACGCATGACCTTCACGAGCAATAAGTCCATGGAGATCGAGGTGTTGGTGGACGCCGACCCTGTTGTGGACA
GCTCTCAGAAGCGCTACCGGGCCGCCAGTGCCTTCTTCACCTACGTGTCGCTGAGCCAGGAAGGCAGGTCGCTGC
CTGTGCCCCAGCTGGTGCCCGAGACCGAGGACGAGAAGAAGCGCTTTGAGGAAGGCAAAGGGCGGTACCTGCAGA
TGAAGGCGACGATCAGGGCCACGCGGACGCTCAGCCCTAGACTCCCTCCTCCTGCCACTGGTGCCTCGAGTAGCC
ATGGCAACGGGCCCAGTGTCCAGTCACTTAGAAGTTCCCCCCTTGGCCAAAAACCCAATTCACATTGAGAGCTGG
TGTTGTCTGAAGTTTTCGTATCACAGTGTTAACCTGTACTCTCTCCTGCAAACCTACACACCAAAGCTTTATTTA
TATCATTCCAGTATCAATGCTACACAGTGTTGTCCCGAGCGCCGGGAGGCGTTGGGCAGAAACCCTCGGGAATGC
TTCCGAGCACGCTGTAGGGTATGGGAAGAACCCAGCACCACTAATAAAGCTGCTGCTTGGCTGGAAA

FIGURE 1947

MSGPDVETPSAIQICRIMRPDDANVAGNVHGGTILKMIEEAGAIISTRHCNSQNGERCVAALARVERTDFLSPMC
IGEVAHVSAEITYTSKHSVEVQVNVMSENILTGAKKLTNKATLWYVPLSLKNVDKVLEVPPVVYSRQEQEEEGRK
RYEAQKLERMETKWRNGDIVQPVLNPEPNTVSYSQSSLIHLVGPSDCTLHGFVHGGVTMKLMDEVAGIVAARHCK
TNIVTASVDAINFHDKIRKGCVITISGRMTFTSNKSMEIEVLVDADPVVDSSQKRYRAASAFFTYVSLSQEGRSL
PVPQLVPETEDEKKRFEEGKGRYLQMKATIRATRTLSPRLPPPATGASSSHGNGPSVQSLRSSPLGQKPNSH

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FIGURE 1948

CGGAGGCACGGAAGATGAGGAAGATGATCAGGAGGATGATGAAGGTGAAGAGGGAGATGAAGACGATGACGACGA
TGGCTCTGAGGGGACCTCAGGGGCTGCCGAGCTGGGGGGGCGCTCAAGCTGCGAGGATCCGGGCTGCCCGCGAGA
CGAGGAGCGGGCGCCAGGATGGGGTCGATGAAGTCCAAGTTCCTCCAGGTCGGAGGCAATACATTCTCAAAAACT
GAAACCAGCGCCAGCCCACACTGTCCTGTGTACGTGCCGGATCCCACATCCACCATCAAGCCGGGGCCTAATAGC
CACAACAGCAACACACCAGGAATCAGGGAGGCAGGCTCTGAGGACATCATCGTGGTTGCCCTGTATGATTACGAG
GCCATTCACCACGAAGACCTCAGCTTCCAGAAGGGGGACCAGATGGTGGTCCTAGAGGAATCCGGGGAGTGGTGG
AAGGCTCGATCCCTGGCCACCCGGAAGGAGGGCTACATCCCAAGCAACTATGTCGCCCGCGTTGACTCTCTGGAG
ACAGAGGAGTGGTTTTTCAAGGGCATCAGCCGGAAGGACGCAGAGCGCCAACTGCTGGCTCCCGGCAACATGCTG
GGCTCCTTCATGATCCGGGATAGCGAGACCACTAAAGGAAGCTACTCTTTGTCCGTGCGAGACTACGACCCTCGG
CAGGGAGATACCGTGAAACATTACAAGATCCGGACCCTGGACAACGGGGGCTTCTACATATCCCCCCGAAGCACC
TTCAGCACTCTGCAGGAGCTGGTGGACCACTACAAGAAGGGGAACGACGGGCTCTGCCAGAAACTGTCGGTGCCC
TGCATGTCTTCCAAGCCCCAGAAGCCTTGGGAGAAAGATGCCTGGGAGATCCCTCGGGAATCCCTCAAGCTGGAG
AAGAAACTTGGAGCTGGGCAGTTTGGGGAAGTCTGGATGGCCACCTACAACAAGCACACCAAGGTGGCAGTGAAG
ACGATGAAGCCAGGGAGCATGTCGGTGGAGGCCTTCCTGGCAGAGGCCAACGTGATGAAAACTCTGCAGCATGAC
AAGCTGGTCAAACTTCATGCGGTGGTCACCAAGGAGCCCATCTACATCATCACGGAGTTCATGGCCAAAGGAAGC
TTGCTGGACTTTCTGAAAAGTGATGAGGGCAGCAAGCAGCCATTGCCAAAACTCATTGACTTCTCAGCCCAGATT
GCAGAAGGCATGGCCTTCATCGAGCAGAGGAACTACATCCACCGAGACCTCCGAGCTGCCAACATCTTGGTCTCT
GCATCCCTGGTGTGTAAGATTGCTGACTTTGGCCTGGCCCGGGTCATTGAGGACAACGAGTACACGGCTCGGGAA
GGGGCCAAGTTCCCCATCAAGTGGACAGCTCCTGAAGCCATCAACTTTGGCTCCTTCACCATCAAGTCAGACGTC
TGGTCCTTTGGTATCCTGCTGATGGAGATCGTCACCTACGGCCGGATCCCTTACCCAGGGATGTCAAACCCTGAA
GTGATCCGAGCTCTGGAGCGTGGATACCGGATGCCTCGCCCAGAGAACTGCCCAGAGGAGCTCTACAACATCATG
ATGCGCTGCTGGAAAAACCGTCCGGAGGAGCGGCCGACCTTCGAATACATCCAGAGTGTGCTGGATGACTTCTAC
ACGGCCACAGAGAGCCAGTACCAACAGCAGCCATGATAGGGAGGACCAGGGCAGGGCAGGGGGTGCCCAGGTGGT
GGCTCGAAGGTGGCTCCAGCACCATCCGCCAGGGCCCACACCCCCTTCCTACTCCCAGACACCCACCCTCGCTTC
AGCCACAGTTTCCTCATCTGTCCAGTGGGTAGGTTGGACTGGAAAATCTCTTTTTGACTCTTGCAATCCACAATC
TGACATTCTCAGGAAGCCCCCAAGTTGATATTTCTATTTCCTGGAATGGTTGGATTTTAGTTACAGCTGTGATTT
GGAAGGGAAACTTTCAAAATAGTGAAATGAATATTTAAATAAAAGATATAAATGCAAGTCTTACG

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FIGURE 1949

MGSMKSKFLQVGGNTFSKTETSASPHCPVYVPDPTSTIKPGPNSHNSNTPGIREAGSEDIIVVALYDYEAIHHED
LSFQKGDQMVVLEESGEWWKARSLATRKEGYIPSNYVARVDSLETEEWFFKGISRKDAERQLLAPGNMLGSFMIR
DSETTKGSYSLSVRDYDPRQGDTVKHYKIRTLDNGGFYISPRSTFSTLQELVDHYKKGNDGLCQKLSVPCMSSKP
QKPWEKDAWEIPRESLKLEKKLGAGQFGEVWMATYNKHTKVAVKTMKPGSMSVEAFLAEANVMKTLQHDKLVKLH
AVVTKEPIYIITEFMAKGSLLDFLKSDEGSKQPLPKLIDFSAQIAEGMAFIEQRNYIHRDLRAANILVSASLVCK
IADFGLARVIEDNEYTAREGAKFPIKWTAPEAINFGSFTIKSDVWSFGILLMEIVTYGRIPYPGMSNPEVIRALE
RGYRMPRPENCPEELYNIMMRCWKNRPEERPTFEYIQSVLDDFYTATESQYQQQP

FIGURE 1950

ACACGGACCAAGGAGTCTAACACGTGCGCGAGTCGGGGGCTCGCACGAAAGCCGCCGTGGCGCAATGAAGGTGAA
GGCCGGCGCGCTCGCCGGCCGAGGTGGGATCCCGAGGCCTCTCCAGTCCGCCGAGGGCGCACCACCGGCCCGTCT
CGCCCGCCGCGCCGGGGAGGTGGAGCACGAGCGCACGTGTTAGGACCCGAAAGATGGTGAACTATGCCTGGGCAG
GGCGAAGCCAGAGGAAACTCTGGTGGAGGTCCGTAGCGGTCCTGACGTGCAAATCGGTCGTCCGACCTGGGTATA
GGGGCGGGCTCCAGGCGAGGCGGTCGACGCTCCTGAAAACTTGCGCGCGCGCTCGCGCCACTGCGCCCGGAGCGA
TGAAGATGGTCGCGCCCTGGACGCGGTTCTACTCCAACAGCTGCTGCTTGTGCTGCCATGTCCGCACCGGCACCA
TCCTGCTCGGCGTCTGGTATCTGATCATCAATGCTGTGGTACTGTTGATTTTATTGAGTGCCCTGGCTGATCCGG
ATCAGTATAACTTTTCAAGTTCTGAACTGGGAGGTGACTTTGAGTTCATGGATGATGCCAACATGTGCATTGCCA
TTGCGATTTCTCTTCTCATGATCCTGATATGTGCTATGGCTACTTACGGAGCGTACAAGCAACGCGCAGCCTGGA
TCATCCCATTCTTCTGTTACCAGATCTTTGACTTTGCCCTGAACATGTTGGTTGCAATCACTGTGCTTATTTATC
CAAACTCCATTCAGGAATACATACGGCAACTGCCTCCTAATTTTCCCTACAGAGATGATGTCATGTCAGTGAATC
CTACCTGTTTGGTCCTTATTATTCTTCTGTTTATTAGCATTATCTTGACTTTTAAGGGTTACTTGATTAGCTGTG
TTTGGAACTGCTACCGATACATCAATGGTAGGAACTCCTCTGATGTCCTGGTTTATGTTACCAGCAATGACACTA
CGGTGCTGCTACCCCCGTATGATGATGCCACTGTGAATGGTGCTGCCAAGGAGCCACCGCCACCTTACGTGTCTG
CCTAAGCCTTCAAGTGGGCGGAGCTGAGGGCAGCAGCTTGACTTTGCAGACATCTGAGCAATAGTTCTGTTATTT
CACTTTTGCCATGAGCCTCTCTGAGCTTGTTTGTTGCTGAAATGCTACTTTTTAAAATTTAGATGTTAGATTGAA
AACTGTAGTTTTCAACATATGCTTTGCTAGAACACTGTGATAGATTAACTGTAGAATTCTTCCTGTACGATTGGG
GATATAATGGGCTTCACTAACCTTCCCTAGGCATTGAAACTTCCCCCAAATCTGATGGACCTAGAAGTCTGCTTT
TGTACCTGCTGGGCCCCAAAGTTGGGCATTTTTCTCTCTGTTCCCTCTCTTTTGAAAATGTAAAATAAAACCAAA
AATAGACAACTTTTTCTTCAGCCATTCCAGCATAGAGAACAAAACCTTATGGAAACAGGAATGTCAATTGTGTAA
TCATTGTTCTAATTAGGTAAATAGAAGTCCTTATGTATGTGTTACAAGAATTTCCCCCACAACATCCTTTATGAC
TGAAGTTCAATGACAGTTTGTGTTTGGGTGGTAAAGGATTTTCTCCATGGCCTGAATTAAGACCATTAGAAAGCA
CCAGGCCGTGGGAGCAGTGACCATCTGCTGACTGTTCTTGTGGATCTTGTGTCCAGGGACATGGGGTGACATGCC
TCGTATGTGTTAGAGGGTGGAATGGATGTGTTTGGCGCTGCATGGGATCTGGTGCCCCTCTTCTCCTGGATTCAC
ATCCCCACCCAGGGCCCGCTTTTACTAAGTGTTCTGCCCTAGATTGGTTCAAGGAGGTCATCCAACTGACTTTAT
CAAGTGGAATTGGGATATATTTGATATACTTCTGCCTAACAACATGGAAAAGGGTTTTCTTTTCCCTGCAAGCTA
CATCCTACTGCTTTGAACTTCCAAGTATGTCTAGTCACCTTTTAAAATGTAAACATTTTCAGAAAAATGAGGATT
GCCTTCCTTGTATGCGCTTTTTACCTTGACTACCTGAATTGCAAGGGATTTTTATATATTCATATGTTACAAAGT
CAGCAACTCTCCTGTTGGTTCATTATTGAATGTGCTGTAAATTAAGTTGTTTGCAATTAAAACAAGGTTTGCCCA
CAAAAAAAAA

FIGURE 1951

MVNYAWAGRSQRKLWWRSVAVLTCKSVVRPGYRGGLQARRSTLLKTCARARATAPGAMKMVAPWTRFYSNSCCLC
CHVRTGTILLGVWYLIINAVVLLILLSALADPDQYNFSSSELGGDFEFMDDANMCIAIAISLLMILICAMATYGA
YKQRAAWIIPFFCYQIFDFALNMLVAITVLIYPNSIQEYIRQLPPNFPYRDDVMSVNPTCLVLIILLFISIILTF
KGYLISCVWNCYRYINGRNSSDVLVYVTSNDTTVLLPPYDDATVNGAAKEPPPPYVSA

FIGURE 1952A

GTTAAACCCATCCAGAGTAATGGCTGCGGCCTTACCCAGGACCCTGGGGGAGTTGCAGCTGTATAGAATATTACA
AAAAGCCAATCTACTTTCTTATTTTGATGCCTTTATCCAACAAGGTGGTGATGATGTCCAGCAACTCTGTGAAGC
AGGAGAAGAGGAGTTTTTGGAAATCATGGCACTCGTGGGCATGGCTAGCAAGCCCCTTCATGTTAGAAGGCTGCA
GAAGGCTTTGAGAGACTGGGTCACAAACCCTGGGCTTTTCAATCAGCCACTGACTTCCCTTCCTGTCAGTAGCAT
ACCCATCTATAAATTACCAGAGGGATCACCAACATGGCTGGGAATATCCTGCAGTAGTTATGAAAGGAGTAGCAA
TGCCCGGGAACCTCATTTAAAAATCCCCAAATGTGCTGCCACCACCTGTGTGCAGAGCTTGGGACAGGGGAAGTC
AGATGTGGTTGGGAGCCTAGCACTGCAGAGTGTTGGTGAGTCCAGACTCTGGCAAGGCCACCATGCCACTGAGAG
CGAGCACAGCCTCTCCCCAGCAGACCTGGGCTCCCCCGCGTCCCCAAAGGAGAGCAGTGAGGCGCTGGATGCTGC
TGCTGCGCTCTCTGTGGCTGAGTGTGTGGAGCGGATGGCCCCCACACTGCCAAAAAGTGACTTGAATGAAGTGAA
AGAGCTGCTAAAAACCAACAAGAAGTTGGCCAAAATGATTGGTCACATCTTTGAGATGAACGATGATGATCCACA
CAAAGAGGAGGAAATTCGGAAATACAGTGCAATATATGGCAGATTTGACTCAAAGAGGAAGGATGGGAAACATCT
CACACTTCATGAGCTCACTGTTAATGAAGCGGCTGCTCAACTCTGTGTGAAGGATAATGCCCTGCTGACAAGAAG
AGATGAGCTTTTTGCCTTGGCTCGACAGATTTCTCGAGAAGTCACCTATAAATATACTTACAGAACCACCAAGTC
AAAATGTGGAGAAAGAGATGAATTATCCCCAAAGAGAATTAAAGTGGAGGATGGGTTTCCAGATTTCCAGGATTC
TGTGCAAACACTCTTCCAGCAGGCTAGAGCTAAGAGTGAAGAACTTGCAGCTCTTAGTTCACAGCAGCCTGAAAA
GGTGATGGCAAAGCAGATGGAGTTCCTTTGCAACCAAGCTGGCTATGAGAGACTGCAGCATGCCGAGAGGAGGTT
GTCTGCAGGGCTTTACAGGCAGAGCTCAGAAGAGCACAGTCCTAACGGCTTGACTTCCGATAACTCAGATGGACA
AGGAGAAAGACCTTTGAATCTCCGAATGCCTAATTTACAGAACAGACAACCCCATCATTTTGTGGTGGATGGGGA
GCTGAGCAGACTTTACCCCAGTGAGGCAAAGTCCCACTCATCAGAGAGCCTTGGGATTTTAAAAGACTACCCTCA
TTCAGCTTTTACCTTAGAAAAGAAAGTCATCAAAACAGAGCCTGAAGATTCAAGATAGCTGTGATTTCTCTCACC
GTTCTCTGGAAATGGCATCAGATTTAAGGATAATACTCCATCATAGAAATAAGCCTTAATAACCAGTGTTGCCTC
ATTCAGCTCAAACAGATTTCATAGCCAAAGCAAAAGGACTGGTACGGTAGTCTGTGGAAACCAGGAAGATAAAAC
AACAGCCACAAAAGAGAAAATCAAGAGTGTTGCAATCTATAACAGTAATATTGATTCATTCACATTCCTGTGTTA
AGTCATTTTATATGGAAAGGCTTACAAATCAATATTGTAAGCATTCATTATTTAAGAATGTACAATGTATTTGTG
TAATTTATAGAAGTAAAATCTAGATGTTGAGACCTGTTTGGTCTAATAGATGTGGATACAGTTTATTTTACTTGA
AATTTTGTTGTCTACTTTGTGTGTTTAACGTAAATATATGTCAGAGTTTAGAATCTGCCTGCAGTTGTGAAAAAG
AAAGCTTAAGTGATGCAGTTATTGGCAAGAXTGCAATGATTATGGGAAAATAGAAAGCGAATACTCAGTTTAAGC
CAAGGAAAATATTGTGGATTTAATATTTGATAAAACTGATTTTGTTTAACAGGAAATTTTTAGCATTCAGTCATA
TAACATCTGGTTATCAATGCACGTTTACACAATAAATACTTGAGTGGAGGAAAGTTAAAAAGATGAGCAATAGAG
TAGAAAATATATCTTAAACTAGTTGACCTAGATTGTATTAATAGCTACTTAAGATGTTTCAAAGATAGGAAGCTA
TTGCTTGGACAGAGAACTTGAAATAAGTGGACCCATGTATAAAAGCTTTGACTTAAACATTGATATTTCAGAATG
TGTTAAATAGATTAAGACACAGTAAGTTAACCCTACATGTTATAAAGATGGCGACTGTTAACAAAGGCTGTAACA
GATTAAGTACTATTTTATATCCAGAAAGTCTTCTCTATGTAGAGAAGTCAGAGAGACTAGATGCTTTCACTAGGG
AATGTCTTCCCACCCAGCCATCACAAATGTGGACAATCACTGCATCCACATCTGTAGGCATATTTCTATGGAAGT
TTAATTGACAGCTATATTCATTATTTATTTTACAATTTCATTTTTCTACACCTTTGAGATTTATGAATGCAGTTT
TTTCTTAAAATTTATTTTAACTTGACAGTATGTTTTTAGTTCCCCCAATTTAATTAATGGACCATGTGCATATAT
ATGGGAGTGTGCTTACATGTTAATAATTTACTTGCATACTTATGAGAATTTCACATTGGAATTCATAATGGTAAA
ACAACATACATCTGCCAATATACGTTTTTTCTGTTGGTTTAAGAGAAGATAACTGACAGCTTTACCTACTTCCTA
CAGATGCATCTAAACCCAGATATTACTGAGAAGAGTGTATTGACTCTGAGTGTAAGAGAGTATGTGTTTTTTTGT
TTTTAGTTCTGCTCTAGATCATAATTGTAAAAAATATTAAGTCATAATCTGTTACACTAAAATTTGTCAGCCAAA
TGTTAGATGAAATGTCTGCACTGTAGTCTCAGATCACTGTCACGTATATAAATTGCTTCTTCATTTTAATTTGTA
GAAGTACTTTACAGTAGGAAACGCCAGTAAACAACTTTTATACTGTTAAAAGGCTTTTTTCCCCTTCCTAAATGT
TTTAATTGTACCATAGTGTTTTGCTCACTGAAGAAGCTTCTTATGGACCTTGCAACTTTGTTGCTAGCTTGAGGT
TGATTATTGTGGTTGTATTGTTCACTGTGTGTAGAAATAGTATGAGTACGATTTCAATAGACTGTTCAGTTTTTA
ATATTAGCCATAGCACTGGTTAGTATATCTCAGTAGTTTCATGAAACGTTTCCTGTATTCTAATCTATTTTGAAA
CATTTTGTTTTTTTTTAATTGTGTCTTACAGTCAAGTTTGTAGATTTTCATAAGCCACAATTTTAAAAGATGCAG
TAATCTTCCAACTTCCAATATTTATCCATTCGTTGTGGACCCACAGATTGCATCTTTAAATTCATAATAAGTTTC
CTTAACTATCTTATGTTTCTAGTCTTTCAAGCTTAGTGATAAGGTGGAAGCACAAGAAAAATTTCAGTAGAATAC

FIGURE 1952B

AGTTTTTATTTTGTAAACACTAATGTATTAAACTTGCTATACATTAAAGCAAATAATATATATTTTTATTTGAAT
TGTATATGTGAATTGGAAGTTATAATTAGTTGATTTTTTCATTTTGTTAGAGGTATTTTCACTGAACAAGGTCAA
TTGGTTACCTCAGTATTACAGCCAATATAGTCCAAGGGACCATTTCTCCCCGAGTCTCTTACACTTTATTGTGCG
ATGTCCACGTTTTTGTGACTCTTCAAGCTGTTGGTGAGGTGGGACGAATGCACTTGCTTCCTGTGGCAATAAAGA
TTTTCTGTGCCTCACAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 1953

MAAALPRTLGELQLYRILQKANLLSYFDAFIQQGGDDVQQLCEAGEEEFLEIMALVGMASKPLHVRRLQKALRDW
VTNPGLFNQPLTSLPVSSIPIYKLPEGSPTWLGISCSSYERSSNAREPHLKIPKCAATTCVQSLGQGKSDVVGSL
ALQSVGESRLWQGHHATESEHSLSPADLGSPASPKESSEALDAAAALSVAECVERMAPTLPKSDLNEVKELLKTN
KKLAKMIGHIFEMNDDDPHKEEEIRKYSAIYGRFDSKRKDGKHLTLHELTVNEAAAQLCVKDNALLTRRDELFAL
ARQISREVTYKYTYRTTKSKCGERDELSPKRIKVEDGFPDFQDSVQTLFQQARAKSEELAALSSQQPEKVMAKQM
EFLCNQAGYERLQHAERRLSAGLYRQSSEEHSPNGLTSDNSDGQGERPLNLRMPNLQNRQPHHFVVDGELSRLYP
SEAKSHSSESLGILKDYPHSAFTLEKKVIKTEPEDSR

FIGURE 1954

GGGTGCTCGGGCTGCCGTCCGCTCCGCCAGAAGCACCGAGCAGCCGAGCCGGGGCCCGCCGCCCTCCTCCTCCAT
GAGGCCCGAGTGAGGCGCGGCGGCTATAGCCGACCCGCGGCGCCTTCCCCCCGCGTCCTATCGCGAGCGCAGCGG
CAGCGGCCCCTGGAGGAGGAGGCGGAGGAGGAGGAGC**ATG**TCGGACGGTTTCGATCGGGCCCCAGGTGCTGGTCG
GGGCCGGAGCCGGGGCCTGGGCCGCGGAGGGGGCGGGCCTGAGGGCGGCGGTTTCCCGAACGGAGCGGGGCCTGC
TGAGCGGGCGCGGCACCAGCCGCCGCAACCCAAAGCCCCGGGCTTCCTGCAGCCACCGCCGCTGCGCCAGCCCAG
GACGACCCCGCCGCCAGGGGCCCAGTGCGAGGTCCCCGCCAGCCCCCAGCGGCCTTCCCGGCCCGGGGCGCTCCC
AGAGCAAACGAGGCCCCTGAGAGCTCCACCTAGTTCACAGGATAAAATCCCACAGCAGAACTCGGAGTCAGCAAT
GGCTAAGCCCCAGGTGGTTGTAGCTCCTGTATTAATGTCTAAGCTGTCTGTGAATGCCCCTGAATTTTACCCTTC
AGGTTATTCTTCCAGTTACACAGAATCCTATGAGGATGGTTGTGAGGATTATCCTACTCTATCAGAATATGTTCA
GGATTTTTTGAATCATCTTACAGAGCAGCCTGGCAGTTTTGAAACTGAAATTGAACAGTTTGCAGAGACCCTGAA
TGGTTGTGTTACAACAGATGATGCTTTGCAAGAACTTGTGGAACTCATCTATCAACAGGCCACATCTATCCCAAA
TTTCTCTTATATGGGAGCTCGCCTGTGTAATTACCTGTCCCATCATCTGACAATTAGCCCACAGAGTGGCAACTT
CCGCCAATTGCTACTTCAAAGATGTCGGACTGAATATGAAGTTAAAGATCAAGCTGCAAAAGGGGATGAAGTTAC
TCGAAAACGATTTCATGCATTTGTACTCTTTCTGGGAGAACTTTATCTTAACCTGGAGATCAAGGGAACAAATGG
ACAGGTTACAAGAGCAGATATTCTTCAGGTTGGTCTTCGAGAATTGCTGAATGCCCTGTTTTCTAATCCTATGGA
TGACAATTTAATTTGTGCAGTAAAATTGTTAAAGTTGACAGGATCAGTTTTGGAAGATGCTTGGAAGGAAAAAGG
AAAGATGGATATGGAAGAAATTATTCAGAGAATTGAAAACGTTGTCCTAGATGCAAACTGCAGTAGAGATGTAAA
ACAGATGCTCTTGAAGCTTGTAGAACTCCGGTCAAGTAACTGGGGCAGAGTCCATGCAACTTCAACATATAGAGA
AGCAACACCAGAAAATGATCCTAACTACTTTATGAATGAACCAACATTTTATACATCTGATGGTGTTCCTTTCAC
TGCAGCTGATCCAGATTACCAAGAGAAATACCAAGAATTACTTGAAAGAGAGGACTTTTTTCCAGATTATGAAGA
AAATGGAACAGATTTATCCGGGGCTGGTGATCCATACTTGGATGATATTGATGATGAGATGGACCCAGAGATAGA
AGAAGCTTATGAAAAGTTTTGTTTGGAATCAGAGCGTAAGCGAAAACAG**TAA**AGTTAAATTTCAGCATATCAGTT
TTATAAAGCAGTTTAGGTATGGTGATTTAGCAGAACACAAGAGAGCAAGAAAATGTGTCACATCTATACCAAATT
AAGGATGTTGAGTTATGTTACTAATGTATGCAACTTTAATTTTGTTTAACACTATCTGCCAAAATAAACTTTATT
CCCTATAACTTAAAATGTGTATATATATATAATAGTTTATTATGTACAGTTAATTCTACTGTTTTGGCTGCAATA
AAATCGATTTTGAAATAAATGAAATGTTGAAAATTTTGCTAGTTGGTTAGATGCTTATCCTTTAAATTCTACTTT
TCTTGAGGGGAAAAAGTCTTCGCCTGGAAATACATATTACTGCAAAAATGTAGCATCCTTTTTTAGGTAGGAGTA
TTATAGCTTTCATTTTAGTTTGACATTTAGTGTCCCAATGAATTGAATTTCAAATATGAATCATAATCTTGAAAA
TCTTTAGCACTAAAGTCTTGGAATATATCAACAACTGATTTACATATGCAGATGCTATTTACATATGCAGATGCT
ATTTGATACCAAGGGCTTTTTAAATGTCATGGGGGGGAAAAACCCAACTTGGTTGAACTCCCAGCTAAACAACCA
AGACTTCACTGAAGATTTATTCCAATTCTAGAATTGTTCTTTTTTTATTTTTTATTTTTTCAACTGACTAACTTC
ATTACCTTAAAGCCTAGAACATTATTCTGCTTTATTTATATGGCTTTCTCAATTTTATTTTGTAGCATGGGTTGA
ATCGAACTTTTTACTAGAGAATTTTACTAGATATTTGTCATTCAAGTTTTCATCTGCTTTATAATTGATACACCT
TGAGGGTCACTTTTCTAATACTTTTACCTATAATGTGGTACCCACCTCAGCCCCTAATAAATAATATTTTTACCC
TAATGTCAAATCTTTTTCCCAGGCTAACTAAAAACTGTGTACAAAAGGATTGCTTGTAAATATGCATGTAAATAG
TTCTGTTAATAACCCACTGTTTTACATTTGGTACATCTGTGTCTGCTAATACAGTTAGCTTTCTCACTTTTCTGC
TTGTTTGTTCAGTCTGAATTAAAATTAGACTTTGAAAATAAAGCTTAAATAGTTGTTTCCTCTA

FIGURE 1955

MSDGFDRAPGAGRGRSRGLGRGGGGPEGGGFPNGAGPAERARHQPPQPKAPGFLQPPPLRQPRTTPPPGAQCEVP
ASPQRPSRPGALPEQTRPLRAPPSSQDKIPQQNSESAMAKPQVVVAPVLMSKLSVNAPEFYPSGYSSSYTESYED
GCEDYPTLSEYVQDFLNHLTEQPGSFETEIEQFAETLNGCVTTDDALQELVELIYQQATSIPNFSYMGARLCNYL
SHHLTISPQSGNFRQLLLQRCRTEYEVKDQAAKGDEVTRKRFHAFVLFLGELYLNLEIKGTNGQVTRADILQVGL
RELLNALFSNPMDDNLICAVKLLKLTGSVLEDAWKEKGKMDMEEIIQRIENVVLDANCSRDVKQMLLKLVELRSS
NWGRVHATSTYREATPENDPNYFMNEPTFYTSDGVPFTAADPDYQEKYQELLEREDFFPDYEENGTDLSGAGDPY
LDDIDDEMDPEIEEAYEKFCLESERKRKQ

FIGURE 1956A

GAGAGACACGAATATGTTTCAGCCGCAACAGGCTGCGTTTCAGCCGGAAGAGTGAAAGGGCACCTTGAAAACGCA
AGTTTATGAATATGTTTCTGTACTTTCAGACCATCATCAAAGAGGGGATGCTGACCAAACAGAACAATTCATTCC
AGCGATCAAAAAGGAGATACTTTAAGCTTCGAGGGCGAACGCTTTACTATGCCAAAACGGCAAAGTCAATCATAT
TTGATGAGGTGGATCTGACAGATGCCAGCGTAGCTGAATCCAGTACCAAAAACGTCAACAACAGTTTTACGGTCA
TAACTCCATGCAGGAAGCTCATCTTGTGTGCTGATAACAGAAAAGAAATGGAAGATTGGATTGCAGCATTAAAGA
CTGTGCAGAACAGGGAGCACTTTGAGCCCACCCAGTACAGCATGGACCACTTCTCAGGGATGCACAATTGGTACG
CCTGTTCCCACGCGAGGCCGACCTACTGCAATGTGTGCCGTGAGGCTCTGTCTGGGGTCACGTCGCACGGGCTGT
CCTGCGAGGTGTGCAAATTTAAGGCCCACAAGCGCTGTGCTGTGCGTGCAACCAATAACTGCAAGTGGACCACAC
TGGCCTCGATCGGGAAGGACATCATTGAAGATGCAGATGGGATTGCAATGCCCCACCAGTGGTTGGAAGGAAACC
TACCTGTGAGCGCCAAGTGCACTGTGTGCGACAAGACCTGTGGCAGTGTGCTGCGCCTGCAGGACTGGCGCTGCC
TCTGGTGCAAGGCCATGGTTCACACATCGTGTAAAGAATCCTTGCTGACCAAGTGCCCACTTGGCCTGTGCAAAG
TGTCAGTCATCCCACCCACGGCTCTCAACAGCATCGACTCCGATGGGTTCTGGAAGGCCAGCTGTCCTCCTTCTT
GCACAAGCCCACTGTTGGTCTTCGTCAATTCAAAAAGTGGGGACAACCAGGGTGTGAAGTTCCTCAGAAGATTCA
AACAGCTACTAAACCCCGCCCAGGTCTTCGACCTCATGAACGGAGGCCCACACCTCGGCTTACGGTTATTCCAGA
AGTTTGACACATTCCGGATTCTGGTTTGTGGCGGGGATGGAAGTGTTGGCTGGGTCCTCTCCGAAATCGACAGCC
TCAACCTTCATAAACAGTGTCAGCTGGGAGTGCTGCCGCTCGGCACAGGGAACGACTTGGCCCGAGTACTGGGCT
GGGGCTCAGCCTGCGATGACGACACCCAGCTCCCCCAGATCTTGGAGAAGTTGGAGAGAGCCAGCACCAAGATGC
TGGACAGGTGGAGCGTCATGGCATACGAGGCCAAGCTCCCCCGGCAGGCCTCCTCCTCTACCGTCACCGAAGACT
TCAGCGAGGATTCCGAGGTACAGCAGATTCTCTTCTATGAAGACTCGGTTGCAGCCCACCTTTCTAAAATCCTCA
CCTCGGACCAGCACTCGGTGGTCATCTCCTCGGCCAAAGTGCTCTGTGAGACGCCGAAGGACTTCGTGGCACGGG
TGGGGAAGGCCTATGAGAAGACGACCGAGAGCTCGGAGGAGTCAGAGGTCATGGCCAAGAAGTGCTCTGTCCTGA
AAGAGAAGCTGGATTCCCTTCTCAAGACCTTGGACGATGAGTCCCAGGCCTCGTCCTCTCTGCCCAACCCGCCCC
CCACCATTGCCGAGGAGGCTGAAGATGGAGATGGGTCGGGCAGCATCTGCGGTTCCACCGGAGACCGCTTGGTGG
CATCAGCTTGCCCGGCCCGGCCGCAGATATTCCGGCCTCGAGAACAGCTCATGCTGAGAGCCAACAGCCTGAAGA
AAGCAATTCGTCAGATCATAGAACACACAGAAAAAGCTGTCGATGAGCAGAATGCCCAGACCCAGGAGCAGGAGG
GCTTCGTCCTGGGCCTCTCTGAGTCAGAGGAGAAGATGGACCACAGAGTGTGCCCACCACTGTCCCACAGCGAGA
GCTTCGGGGTCCCCAAGGGGAGGAGCCAGCGCAAAGTGTCGAAATCTCCGTGTGAAAAGCTGATCAGCAAAGGGA
GTCTGTCCCTAGGCAGTTCTGCTTCCCTTCCGCCCCAGCCGGGAAGCCGGGACGGCCTGCCTGCGCTCAACACCA
AGATCCTGTACCCAAATGTCCGGGCTGGAATGTCTGGTTCCTTACCCGGTGGCTCAGTCATCAGTCGCCTGTTAA
TTAATGCTGATCCCTTCAACTCTGAACCAGAAACCCTAGAGTATTACACGGAGAAATGTGTCATGAACAACTATT
TTGGCATTGGCCTGGATGCGAAGATATCCCTGGACTTTAACAACAAGCGCGATGAGCACCCAGAGAAGTGCAGGA
GCCGAACCAAGAACATGATGTGGTATGGAGTTCTTGGAACCAAAGAGTTGCTGCACAGAACCTACAAGAACCTGG
AGCAAAAGGTCTTGCTGGAGTGTGACGGCGACCCATCCCACTCCCCAGTCCTTCAGGGAATTGCTGTCCTTAACA
TTCCCAGCTATGCCGGAGGAACCAACTTCTGGGGGGGTACCAAGGAAGATGATACTTTCGCAGCTCCATCATTCG
ATGACAAGATTCTGGAGGTGGTCGCCGTGTTCGGCAGCATGCAGATGGCCGTCTCTCGAGTCATCAGGCTACAGC
ATCATCGGATCGCCCAGTGTCGCACGGTGAAGATCTCCATCCTTGGGGATGAGGGCGTGCCTGTGCAGGTGGACG
GAGAGGCCTGGGTCCAGCCGCCAGGGTACATTCGGATTGTCCACAAGAACCGGGCACAGACACTGACCAGAGACA
GGGCATTTGAGAGCACCCTGAAGTCCTGGGAAGACAAGCAGAAGTGCGAGGTGCCCCGCCCTCCATCCTGTTCCC
TGCACCCGGAGATGCTGTCCGAGGAGGAGGCCACCCAGATGGACCAGTTTGGGCAGGCAGCAGGGGTCCTCATTC
ACAGTATCCGAGAAATAGCTCAGTCTCACCGGGACATGGAGCAGGAACTGGCCCACGCCGTCAATGCCAGCTCCA
AGTCCATGGACCGTGTGTATGGCAAGCCCAGAACCACAGAGGGGCTCAACTGCAGCTTCGTCCTGGAAATGGTGA
ATAACTTCAGAGCTCTGCGCAGTGAGACGGAGCTGCTGTCTGGGAAGATGGCCCTGCAGCTGGATCCGCCTCAGA
AGGAGCAGCTGGGGAGTGCTCTTGCCGAGATGGACCGACAGCTCAGGAGGCTGGCAGACACCCCGTGGCTCTGCC
AGTCCGCAGAGCCCGGCGACGAAGAGAGTGTGATGCTGGATCTTGCCAAGCGCAGTCGCAGTGGTAAATTCCGCC
TCGTGACCAAGTTTAAAAAGGAGAAAAACAACAAGAACAAAGAAGCTCACAGTAGCCTGGGAGCCCCGGTTCACC
TCTGGGGGACAGAGGAGGTTGCTGCCTGGCTGGAGCACCTCAGTCTCTGTGAGTATAAGGACATCTTCACACGGC
ACGACATCCGGGGCTCTGAGCTCCTGCACCTGGAGCGGAGGGACCTCAAGGACCTGGGCGTGACCAAGGTGGGCC
ACATGAAGAGGATCCTGTGTGGCATCAAGGAGCTGAGCCGCAGCGCCCCCGCCGTCGAGGCCTAGCCTCTGTCCT

FIGURE 1956B

CTCAGCCTGTGGCCTCCACATCCCCGCCGCCGAGGCCTAGCCTCCGCCCTCTCAGCCTGTGGCCTCTGCGCCTCC
TGCCACTGAGGCCCTGGGCAGATGCTGCAGCCCGCCCCCTTCTCATGGTGCTACTTCCTCTGTCAGCTACAGAAA
GCCTCCGTGACACCGTCCACCAGAGCTCTGGGGTCTCGAACATAACAACACAGCTACCTTTGAAACAACACTTTC
TCCAGCTCAGAGTCACCTGGGGCACATGTGTCACGGCCACTCAGCTCTCGCCCGCCTGTGCTGTGGGCCAGGGAA
TCCAGCGGCGTCTGGCCTCCTGGGCACTGCTTGCCTGGCCTCGTGCTTGGATTGTCCCGGGGGCTCCTCTCCGTG
TGTCCTTCTGTGGCCGCACCGTGTGGCTCCGCTCCTGGCCCCCAGCCAGTTCTCAGAAACGTGGCTGGGGCCCAG
CACAGCAGCCTGCAAGGGCCCCTGTTTGTTGATGCAGCTTTTGTTGAACAAAAATCGTGCTCTTTCCTGGTTTGA
AAGTAGCATGGATGTTTCCAGTCTTGTTGATTGTAATTTGACGTGAAGAGAAAAAAACATTCCTCCTGCGTGAGC
CAAGGCAGCGGGTGCTTGTTCCCAGGCGGGAGCCCTCCCTGGGTGTCACAGGTCCTGTGCTCCTCCCTCCTCCAT
CCTCTCTCCTCCCGCTCCTCCCTCCCCCCACTGTGGGCTGGGGACGCCTGCCTTCTGTCTCCGGACGCTCTAGGC
GAGTTCAGCTTGGGGTGTGAGTGAGACAGCTTGCCAGCTGCATCCCTGCAGACAGAGGATGTGTGTCCACATGAG
TGTTTCTGTGTGGGAAATGCTTCCTGGCTCTGGGAAACTTTTTCTGCCCATTCTGTGGTTCCCAGGGAGCGTGGC
CCTGGTGCAGGGGTGGTTTGACCTCTTCAGCCCGTCCGGTGGCCTGGACGGAGGCTCTCTGAGTGTCTGCCCCTG
CGATGGCTTCTTGTCGCCTGCTGCTGGGGCTGATGTCGCTGGAGGTGCTGGCAGGGACTCTGATTTGGTGGTCCG
CGCTGCCCCTGCCCTGCCTCTGTCCTGGCTCTGAACTAGTAGATGATGGTGCCAGAGGGCAGGGAGCTCGCCTGG
GGAGAGGGCTGTGCCCCGTAGGGACAGTGCCCAGGTGAAGGATGCCCCTGGTCCTCCAGGGCACTGACTTTGCCC
TTTTTTCCCGTTGATAGTCATGGCTCAGAGGTGCTTGTAAATGTCTTGGGAAGAGGTTTCTGTAACCCCTGCCCT
GGTGTGAGGAGGAAATGGCTCTGGCCTGGCTGCCTGGCGTGGCTTCTCTTTGGCTCCCAAAGAGAAGGACAGTGT
TGGGAGTATCTGCCGTGGCTTCTCTTTGGCTCCCAAAGAGAAGGACAGTGTTGGGAGTATCTGCCGGCGCTGTCC
AGGTCCTTTAGTCAGCGTCACTCCATCTGATGTGCAGAAGCTGGGCTGCACCTGCGGGGGTGGGCATAGACCGGG
CTGGGTCTGCAGCAGCCCCTGGTCCTGAGCAGGCGGCAGTGAACAGCACTGGCCCACCTCCCACTCACAGCCCCT
CTGTCCCCTCTGCAGTGCACCCAGGTGGCCCCTCTGCGTGCCTTTGGGTGCTCCCCTCTCGTGGTCGTTCTGGCC
CGAGGCCCTTAGAGTATGGAGGCTGAGCCAGGCCTTGGGTTTCCCCAGCACAGCCTCCTGTCGCTGCATGCACGT
GTTGGGATTTTTGGATGAAGACTCTCCCACGCTCTGTTGGTGGACTTAGCTGCCTCACTGGAGATTGTGGGTGGA
AGGTGGTTGTATGTTACCTTTACCACCTCTCATTGTTTTCCCCAGAACATTGTAGATGGGGGTTGGCAGAGGGAG
AAATATGCCAGCCACGGCAGTCGCTTGGTTTCCCAGGTGGAATGGGCTAACACAGGAGATGATGGGAACCTGTCC
CGCAGTCCCTGCATGACCATTGGCCCTGCTGGCCTGGCGATGTGGGCATCCTGGGGTTCTTAGGGTCCCAGAACA
AGCCCCAGGCAAGCTGGAACTTGGGTGGGGAGGGGACATGAGGAGGATAAACAGCTGACTGTGGCTTCAAGGACA
TCAGGGCCACCCCAAGTCCTCAGTGTCCTACTCCTGGCAAGATTGGGTTTGGATCAAAAGTGTTTAAAATTAATA
TGTTGTCAGTGATTAGAACAACACTGTTTACATAAAAACCATTTTTCTAATTCTAACAAGTTAGAATGTGAGGAA
GGAATGAACATGAGTGTTTAGGAACCTGCCCTTTGGTGCTGGGCTGGCGTCCCGCACTGGGGTGTCCTCGCTGTC
TGGGGGCTGCTCTGCTTCCCCGGCCCAGGTCCCCTTGTGGTGTTGCCAGACGGGCCTCATGGTCTGCTGTGCAGA
GAGAGGCAGGAAGGATCCCTGAAGAGTCTTGGAGAAAAGGTTCTGTGCCCTCAGGTGGGGCTTACCCCCTCGTAT
TTATAATCTTAATTTATATAGTGACCACCGTGGAAACAAACGCCTCTTGTATTGTCATGTACATAGTCCATACCT
GAGTGCTGTACATAAGTTGTTCTGTGTATAAATAAAACAAGCCTGTTTTTGATCTTC

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FIGURE 1957

MNMFLYFQTIIKEGMLTKQNNSFQRSKRRYFKLRGRTLYYAKTAKSIIFDEVDLTDASVAESSTKNVNNSFTVIT
PCRKLILCADNRKEMEDWIAALKTVQNREHFEPTQYSMDHFSGMHNWYACSHARPTYCNVCREALSGVTSHGLSC
EVCKFKAHKRCAVRATNNCKWTTLASIGKDIIEDADGIAMPHQWLEGNLPVSAKCTVCDKTCGSVLRLQDWRCLW
CKAMVHTSCKESLLTKCPLGLCKVSVIPPTALNSIDSDGFWKASCPPSCTSPLLVFVNSKSGDNQGVKFLRRFKQ
LLNPAQVFDLMNGGPHLGLRLFQKFDTFRILVCGGDGSVGWVLSEIDSLNLHKQCQLGVLPLGTGNDLARVLGWG
SACDDDTQLPQILEKLERASTKMLDRWSVMAYEAKLPRQASSSTVTEDFSEDSEVQQILFYEDSVAAHLSKILTS
DQHSVVISSAKVLCETPKDFVARVGKAYEKTTESSEESEVMAKKCSVLKEKLDSLLKTLDDESQASSSLPNPPPT
IAEEAEDGDGSGSICGSTGDRLVASACPARPQIFRPREQLMLRANSLKKAIRQIIEHTEKAVDEQNAQTQEQEGF
VLGLSESEEKMDHRVCPPLSHSESFGVPKGRSQRKVSKSPCEKLISKGSLSLGSSASLPPQPGSRDGLPALNTKI
LYPNVRAGMSGSLPGGSVISRLLINADPFNSEPETLEYYTEKCVMNNYFGIGLDAKISLDFNNKRDEHPEKCRSR
TKNMMWYGVLGTKELLHRTYKNLEQKVLLECDGDPSHSPVLQGIAVLNIPSYAGGTNFWGGTKEDDTFAAPSFDD
KILEVVAVFGSMQMAVSRVIRLQHHRIAQCRTVKISILGDEGVPVQVDGEAWVQPPGYIRIVHKNRAQTLTRDRA
FESTLKSWEDKQKCEVPRPPSCSLHPEMLSEEEATQMDQFGQAAGVLIHSIREIAQSHRDMEQELAHAVNASSKS
MDRVYGKPRTTEGLNCSFVLEMVNNFRALRSETELLSGKMALQLDPPQKEQLGSALAEMDRQLRRLADTPWLCQS
AEPGDEESVMLDLAKRSRSGKFRLVTKFKKEKNNKNKEAHSSLGAPVHLWGTEEVAAWLEHLSLCEYKDIFTRHD
IRGSELLHLERRDLKDLGVTKVGHMKRILCGIKELSRSAPAVEA

FIGURE 1958A

CTGAACTAGTTGCCAGTGATCTTGAAACGTGACAGTAACCAAGAGATAAATAGGTGACAATGACAGGAAAATTAG
ATGTAGTAAAAGAGAGTGTTTGAGAGCAGAAGCTATGGCAACTAAAGACTGGATTTGAATCCTTCCTAGCTTGGT
GACATGAGCAAATTACTTGATTTAAGTGAGCATTTTCCCATCTGTACAGTGGAGATAACGATAATTGTGCCTGCT
AAGAAGAATTGCTGTGAAGATTAGTGAAATAATGCATGTAAAACATTTGGTACAGTATGTGACACATAGTACAAA
TAGTTTGCTAGGAAGATTGTTATTATTCTTCACTTGTGATATTGTGAAGTTTTCATACAGCAAATTGGACATCAT
GAGATGGATTGATTAAATAAATAGATTTGAACTTCAAGGACTGGTAGTGTTCTTGCTTTGGAAAGAAGAAACTTG
GTTTATCCTAATAATAGTAGGATAATAATGGTGAAGTGATAGGTACAAGTAATAGTGTTTATGATGCGCTGGTGA
TGATAGGAAAAGAAAGCCATTATATGGGCAAGAGCTAGAAGTAATAAAATGGTGCATTTTTCAGTGATGTTTGGC
CTATGTAGCTATTCTCTGATAACTATAAAAATCCTTATTATTGAAGATTCTTCAGGAAAAAAAAACCCTTAGTCT
GAAACTTTAGCACCAATCCCCCTTGCCCCCCATTGAAATACGTATTTTTAAAACATGGCTTTTGATAATGTGAGG
GTTTTTTCCTTTTTGCGATTTAGCAGTGCTGATTGTGTATTGCAGTAGTTGTGAGAGCATTAGAAGCAGCAGTCG
ATAGGAGGATGGAAGGTCTGGATGCCGCCTTGGGGAGTTAGGAGATTGGCAGACTTACCCTGTACCACTCTAGCC
CTACTCCTTTGCCCAAGACAGAAACACACTGAGATGGATAGGAGAATATGAGCAGTTGATAGGAAAGTTCTCAGT
GGAGTCAGGATTTAGGTTAGGCCAGGAGATTGAGAATATAACAGTTTGTGTATGATGAAATGGCATATTTCACAG
AATGCAGTAAAAGCAGGTAGGGTACAAGTGCAGCAACAGGAAGATGTCTTTTCTTCATTCAGCAAACACTTATTT
GAGAGCTTACCATGTGCTAGGCACATACAAAGATAAATAAGATGCCCTTGATGATCCTCTATTTAAAGGAGACAT
GTAAACAGGTTAACTTAGAGTAGAGATGGTGAATATGTGAACCTGAGGAAAGGAAGAAATAGATTAAATTATCTG
GAGAGAGAGGAAAAGTCAGCAGAATGGGGACGAGAATCTTTCGGAGCTCAGTGTTCTGATAGGAGTTATTTCCTT
GGGCATAGGTTCCAAGTATTTTTCTAATATACCATAGAAGCCAGGAAAACTTTCTTCTGTTATCTCAAATGATTT
AATTACTGACTTGAGTTTGTGTTGTCTCCTTAGACTTGTGCACC**ATG**GACAATTTTGCTGAGGGAGATTTCACTG
TGGCGGATTATGCCTTGTTAGAAGATTGCCCTCACGTGGATGATTGTGTCTTTGCTGCTGAATTTATGAGCAATG
ATTATGTTCGTGTGACTCAGCTTTACTGTGATGGGGTGGGTGTGCAATATAAAGATTATATCCAAAGTGAGAGGA
ATTTGGAATTTGACATCTGCAGTATATGGTGTAGTAAACCAATTTCTGTCCTGCAAGATTATTGCGATGCCATTA
AAATAAACATCTTCTGGCCACTTCTGTTTCAACATCAAAACAGTTCCGTAATATCACGATTGCATCCCTGTGTGG
ACGCCAACAATTCACGTGCTTCTGAGATAAATTTGAAGAAACTACAACATCTTGAGTTGATGGAAGATATTGTGG
ATTTGGCAAAGAAAGTTGCTAATGATTCATTCCTTATTGGAGGCTTATTGAGAATTGGTTGTAAAATAGAAAATA
AAATCTTGGCAATGGAAGAAGCTCTGAATTGGATAAAATATGCAGGCGATGTAACAATTCTAACTAAATTAGGAT
CAATTGACAATTGTTGGCCTATGTTAAGTATTTTCTTTACTGAATACAAGTACCACATAACTAAAATTGTAATGG
AAGACTGCAATTTGCTTGAAGAACTTAAAACTCAAAGTTGTATGGATTGTATAGAGGAAGGAGAACTAATGAAAA
TGAAAGGAAATGAAGAGTTTTCCAAAGAAAGATTTGATATAGCTATTATCTATTACACCAGAGCCATTGAATATA
GACCTGAAAACTACCTTCTTTATGGTAACCGAGCTCTTTGTTTTCTTCGTACTGGACAGTTTAGAAATGCACTCG
GTGATGGAAAGAGAGCCACTATTCTGAAGAACACTTGGCCAAAGGGTCATTATCGTTATTGTGATGCTCTTTCTA
TGCTGGGGGGAATATGACTGGGCCCTGCAAGCAAACATAAAAGCTCAAAAACTCTGTAAAAATGACCCTGAGGGAA
TCAAGGATCTAATTCAGCAGCATGTAAAGTTACAAAAACAAATAGAAGACCTACAAGGTCGAACAGCAAATAAGG
ATCCAATTAAAGCCTTTTATGAAAACAGGGCCTACACACCTAGGAGTTTATCAGCACCTATATTTACTACTTCAC
TTAACTTTGTGGAGAAGGAAAGAGATTTCAGAAAAATTAATCACGAAATGGCCAACGGTGGTAATCAGAATCTAA
AGGTGGCGGATGAGGCGTTGAAGGTAGATGATTGTGACTGTCATCCTGAATTTTCACCACCATCAAGTCAGCCTC
CAAAACATAAAGGAAAACAAAAATCTCGAAACAATGAATCAGAAAAGTTCAGTTCTAGTTCACCATTGACTTTAC
CAGCAGATTTGAAGAACATCTTGGAGAAACAGTTTTCTAAATCTTCCAGAGCTGCACACCAGGATTTTGCTAATA
TAATGAAAATGCTGAGAAGCTTAATTCAAGATGGCTATATGGCCTTATTGGAGCAGCGTTGCCGCAGCGCTGCAC
AGGCCTTTACAGAGTTGCTGAACGGTTTAGATCCTCAAAAAATAAAGCAATTGAACCTGGCCATGATTAACTATG
TTTTGGTCGTCTATGGACTTGCCATTTCTCTCCTTGGAATAGGACAGCCTGAGGAATTATCTGAAGCCGAAAACC
AGTTTAAGAGGATTATTGAACACTACCCCAGTGAGGGCCTTGATTGCTTGGCCTACTGTGGAATTGGAAAAGTGT
ATTTGAAAAAAAACAGATTTCTAGAAGCTCTCAATCACTTTGAGAAAGCAAGAACCTTGATTTATCGTCTTCCTG
GAGTGTTAACTTGGCCCACGAGTAATGTGATTATTGAAGAGTCTCAGCCACAAAAAATAAAGATGCTGTTAGAGA
AATTTGTTGAAGAATGCAAGTTCCCTCCAGTGCCAGATGCCATTTGTTGCTATCAGAAGTGCCATGGATATTCTA
AGATCCAGATATACATAACTGATCCAGACTTTAAGGGTTTTATACGCATCAGCTGTTGCCAGTACTGTAAAATAG
AATTTCACATGAATTGCTGGAAGAAGTTAAAAACTACAACCTTTAATGATAAAATTGACAAGGATTTTCTACAAG

FIGURE 1958B

GAATATGTCTTACCCCTGACTGTGAAGGTGTCATTTCTAAGATTATCATCTTCAGCAGTGGTGGTGAAGTTAAAT
GTGAATTTGAACACAAGGTCATAAAAGAAAAGGTTCCTCCAAGACCTATTCTGAAACAGAAATGTTCTAGCCTAG
AGAAACTAAGACTGAAAGAAGACAAAAAATTGAAGAGAAAGATCCAAAAAAAAGAAGCAAAAAAGTTAGCACAAG
AAAGAATGGAGGAGGACTTAAGAGAAAGTAATCCACCCAAAAATGAAGAGCAGAAAGAAACTGTAGACAATGTTC
AGCGTTGTCAGTTCCTTGATGACAGAATTCTACAGTGTATAAAGCAGTATGCTGACAAGATTAAATCCGGCATAC
AGAATACAGCCATGCTTCTCAAAGAATTGCTTTCTTGGAAAGTTTTGAGCACAGAAGACTATACAACCTGTTTTT
CTAGCAGAAATTTTCTAAATGAAGCAGTGGACTATGTTATTCGCCACTTGATTCAAGAAAATAACAGAGTAAAGA
CAAGAATATTTCTGCATGTTTTGAGTGAGCTTAAAGAAGTGGAGCCCAAATTAGCCGCCTGGATCCAAAAACTTA
ATAGCTTTGGCTTAGATGCCACAGGAACTTTCTTTTCTCGTTATGGAGCATCTCTTAAACTGCTTGATTTTAGTA
TCATGACTTTCCTCTGGAATGAGAAATATGGTCACAAACTAGACTCTATAGAAGGAAAGCAACTTGATTATTTCT
CTGAGCCAGCATCATTGAAGGAAGCCCGTTGTTTAATATGGCTGCTAGAAGAACACAGAGACAAGTTCCCAGCAT
TGCATAGTGCTTTAGATGAATTCTTTGATATAATGGACAGCCGCTGTACTGTGTTAAGGAAACAAGATAGTGGTG
AAGCACCGTTTAGTTCAACCAAGGTGAAAAACAAAAGCAAGAAAAAGAAGCCAAAGGATTCAAAGCCTATGTTAG
TTGGGTCTGGAACAACTTCAGTAACTTCAAATAATGAGATCATCACTTCAAGTGAAGACCATAGCAATCGAAATT
CAGATTCTGCAGGCCCATTTGCAGTGCCTGACCATCTTCGGCAAGATGTAGAAGAATTCGAAGCTCTCTATGACC
AACACAGTAACGAATATGTTGTCCGCAATAAGAAGCTATGGGACATGAACCCAAAACAAAAATGTTCAACTCTAT
ATGATTACTTCTCTCAGTTTTTGGAGGAACATGGTCCCTTGGACATGAGTAACAAGATGTTCTCTGCAGAATATG
AGTTTTTCCCAGAAGAAACTCGACAGATACTAGAAAAAGCAGGAGGTTTAAAACCTTTTCTCTTGGGATGCCCTC
GTTTTGTTGTGATTGACAACTGTATTGCACTGAAGAAGGTTGCATCACGGCTCAAGAAAAAAAGGAAGAAGAAAA
ACATTAAAACAAAAGTAGAAGAAATTTCAAAAGCAGGGGAGTATGTACGAGTTAAACTACAACTGAATCCAGCTG
CTAGGGAATTTAAACCAGATGTAAAGTCTAAACCAGTGTCAGATTCATCTTCAGCACCAGCTTTTGAAAATGTGA
AACCCAAACCTGTGTCTGCAAATTCTCCCAAGCCAGCTTGTGAAGATGTGAAGGCCAAACCAGTATCCGACAATT
CTTCTAGACAAGTTTCTGAGGATGGGCAACCCAAAGGGGTCTCTTCTAATTCTCCTAAACCAGGCTCTGAGGATG
CAAATTACAAGCGAGTCTCCTGTAATTCCCCCAAACCGGTTCTTGAGGATGTGAAACCAACTTATTGGGCTCAAT
CCCATTTGGTCACAGGATACTGTACGTATCTTCCTTTCCAGAGATTTGATATCACCCAGACACCGCCAGCATACA
TAAACGTGTTACCAGGTTTGCCCCAGTACACCAGCATATATACACCCTTGGCCAGCCTTTCTCCTGAATATCAGC
TACCAAGATCAGTACCAGTGGTGCCGTCTTTTGTAGCCAATGACAGAGCAGATAAAAATGCTGCTGCCTATTTTG
AGGGTCATCATTTGAATGCTGAGAATGTTGCTGGTCACCAGATTGCCTCTGAAACACAGATCCTTGAGGGCTCTT
TGGGAATATCTGTAAAGTCACACTGCAGCACAGGTGATGCTCATACAGTCCTGAGTGAGTCTAACAGAAATGATG
AGCACTGTGGAAATTCTAACAACAAATGTGAAGTAATTCCAGAAAGCACCAGTGCAGTAACAAACATTCCACACG
TGCAGATGGTTGCCATACAGGTATCTTGGAACATAATACACCAAGAAGTCAATACTGAGCCATATAATCCTTTTG
AGGAACGACAAGGGGAAATTTCACGGATTGAAAAGGAGCACCAAGTATTACAAGACCAACTTCAAGAAGTGTATG
AAAATTATGAGCAGATAAAACTTAAGGGCTTAGAAGAGACCAGGGACCTGGAAGAGAAGTTGAAAAGGCACTTAG
AAGAAAACAAGATCTCAAAGACGGAATTAGATTGGTTCCTTCAAGATTTGGAAAGAGAAATTAAAAAATGGCAAC
AGGAAAAAAAAGAAATCCAAGAAAGACTAAAATCACTGAAGAAGAAAATTAAAAAGGTTTCAAATGCCAGTGAAA
TGTATACCCAGAAAAATGATGGAAAGGAAAAGGAACATGAATTACATCTGGATCAGTCCCTTGAAATCAGCAACA
CACTTACAAATGAGAAAATGAAAATAGAAGAGTATATAAAGAAAGGGAAAGAGGATTATGAAGAGAGTCATCAGA
GAGCTGTGGCTGCAGAGGTATCCGTACTTGAAAACTGGAAGGAGAGTGAAGTGTATAAGCTACAGATCATGGAGT
CACAAGCAGAAGCCTTTCTGAAGAAGCTGGGGCTGATTAGCCGTGATCCTGCAGCATATCCTGACATGGAGTCTG
ATATACGTTCATGGGAATTGTTTCTTTCTAATGTTACAAAAGAAATTGAGAAAGCAAAGTCTCAGTTTGAAGAAC
AAATTAAGGCAATTAAAAATGGTTCTCGGCTCAGTGAACTTTCTAAAGTGCAGATTTCTGAGCTTTCATTTCCTG
CCTGTAACACGGTTCATCCCGAGTTACTCCCTGAGTCTTCAGGCCACGATGGCCAAGGGCTTGTGACTTCTGCAA
GCGACGTGACTGGAAACCACGCAGCACTTCACAGGGATCCTAGTGTGTTCTCTGCTGGTGATTCCCCAGGGGAGG
CTCCTTCTGCGCTGTTGCCAGGGCCACCCCCTGGTCAGCCTGAAGCCACTCAGCTGACAGGGCCAAAACGGGCTG
GCCAGGCAGCTCTGTCAGAACGAAGCCCTGTGGCTGATCGGAAGCAGCCTGTTCCTCCAGGACGTGCTGCGCGTT
CAAGCCAGTCTCCAAAAAAGCCGTTCAATAGTATTATTGAGCACCTGTCAGTGGTATTCCCATGTTACAACAGCA
CTGAGCTTGCTGGTTTTATTAAAAAAGTGCGAAGCAAAAACAAGAACTCACTCTCAGGATTGAGTATTGATGAAA
TTGTCCAAAGAGTGACAGAACACATTCTAGATGAACAGAAAAAGAAAAAGCCAAACCCAGGAAAGGACAAGAGGA

FIGURE 1958C

CTTATGAGCCCAGCTCTGCCACCCCCGTGACCAGGTCCTCCCAGGGCTCACCCTCGGTGGTTGTTGCACCATCAC
CCAAAACCAAGGGGCAGAAAGCAGAAGATGTCCCTGTGAGGATTGCACTGGGTGCAAGTTCCTGTGAAATATGCC
ACGAGGTGTTCAAATCAAAAAACGTGCGTGTGCTCAAATGTGGGCACAAGTATCACAAAGGGTGCTTTAAGCAGT
GGCTTAAAGGGCAGAGCGCTTGCCCGGCCTGCCAGGGTCGTGATCTCCTGACAGAAGAGTCACCTTCTGGAAGAG
GCTGGCCCAGTCAGAATCAGGAGCTGCCTTCCTGCTCTTCTAGGTAGTCACACTTCACTAAAGTGTCATCCACCA
GTGTGTTGAATCCGAAGAATGACAATTTTCTACCACTGGTGTAAAAAACAAACATTTGAAGACCCTTGTGCATTG
TGTGTCACAAAGCTAAATACATGGAAATCGTTAATATCGCTGATATTAAGTAATTTCCCCACTCTGAGTGAATAC
TTTGATGATTGCCAACAGTGGCTAATAAAATGACGGCTACCACACTCATGGGTCACTGGGGCTGCGCAGGGCTCT
TTGAGGTGGGTGGCTTCTTTTGGAAAGTACTATGAACGTCTCGAAGCAGTATTCTAGTGATAAGAATTCTTAACA
TAGCCAAGCGCCCCACGTTTGTTCCCCACGTTTGTTCCCCTTTTCTGTTTGAAAAACCTGTTCTGGTAGCTCCAC
AAGAGAGATGATACTGACTTTTTAAATTTTTTACAAGAGTCTGTATTCCTGATATGCCTATATTTTTCCTCAAAG
ATTCTGCATTTTAAGGATGGGCATAAGCAAACTATATTTTAATAATTTATAGTTAATGTTAAAATATTGGCTGAT
TTAGACCAAAAGATTCAAATCTCCTCTTTGTGAAATCCCATCTGCATTTGATTTTTTATTATTTTATGTTCCCCC
GTTAGATTGTTTTAAGTGTTTGCTTTTCATCTTTTATAGATGTAATCTGATTTTCAAAAATCATTAACACTTTTT
AATTAGTATCGACTAAGACTTTTTCCCCCTGGAATCGAGGCTGTGTGTCCGTCATCCCAGCCCCCGGTTGGAGCC
TGCTCTTTGAACTCCGCTGCCTTCCTTAGCAGCTTCTGTCCTCTTCTGTGAGTCAGTCAGCGAGTGCTTGGGATC
CGCATCCAGCCGTGCTGAGCACACAACAGGCTGTGTGTGGAAATGGCCACCACCATTCTCCTTCCCCACCCCACC
ACAAAAAGAGAAGCTGTGTCTTTAGACAACCCTGAGGTATCTGTGTTACAATCGTTCTGTGTTTGATATTTGTGT
AAAGTATGCATGCAGTCTTGTACTGTGACCTAAGAACAAAACTGTAACTGCATTAGAAACCATGAAAAAATTAGA
TATTGTTTTGTGACTTTTAGACAGTGGTAAATATAGAACCATGAATTCTGGTCACATTCCATTTCTCTCCAACAT
GAAGGATCAAAAAATGTTTTTCAATGTGTTCTTTGTTCCACTGGAAACTTAGAGTCATGAGTTTATGAGCTGATT
TGGTCACCTTCCTCTGCCTTTGTTCACTGTGAGTTCTGATGTCTTAGTGACTTAGTTCTTAGAAGCTCACGCCTT
AGTTTGAAACAGATTCTCCACGGTGGTCCCCAAAACACTGTCTGCATATCCATAAGAATTGAGCGCTATGGGTGT
TAACGTGCATGAGGATCAGTTTGCAGCAGCAAGTACAAAAGGAGAAGAGGAACATCCGTTGAATGAGTGTGTTTT
GTACATAACTTCAGATACTTGTGAACATGCCTTATATTTGTCCAACAACTGTCAGAATAAAGAACATTCTAAAAT
GAG

FIGURE 1959

MDNFAEGDFTVADYALLEDCPHVDDCVFAAEFMSNDYVRVTQLYCDGVGVQYKDYIQSERNLEFDICSIWCSKPI
SVLQDYCDAIKINIFWPLLFQHQNSSVISRLHPCVDANNSRASEINLKKLQHLELMEDIVDLAKKVANDSFLIGG
LLRIGCKIENKILAMEEALNWIKYAGDVTILTKLGSIDNCWPMLSIFFTEYKYHITKIVMEDCNLLEELKTQSCM
DCIEEGELMKMKGNEEFSKERFDIAIIYYTRAIEYRPENYLLYGNRALCFLRTGQFRNALGDGKRATILKNTWPK
GHYRYCDALSMLGEYDWALQANIKAQKLCKNDPEGIKDLIQQHVKLQKQIEDLQGRTANKDPIKAFYENRAYTPR
SLSAPIFTTSLNFVEKERDFRKINHEMANGGNQNLKVADEALKVDDCDCHPEFSPPSSQPPKHKGKQKSRNNESE
KFSSSSPLTLPADLKNILEKQFSKSSRAAHQDFANIMKMLRSLIQDGYMALLEQRCRSAAQAFTELLNGLDPQKI
KQLNLAMINYVLVVYGLAISLLGIGQPEELSEAENQFKRIIEHYPSEGLDCLAYCGIGKVYLKKNRFLEALNHFE
KARTLIYRLPGVLTWPTSNVIIEESQPQKIKMLLEKFVEECKFPPVPDAICCYQKCHGYSKIQIYITDPDFKGFI
RISCCQYCKIEFHMNCWKKLKTTTFNDKIDKDFLQGICLTPDCEGVISKIIIFSSGGEVKCEFEHKVIKEKVPPR
PILKQKCSSLEKLRLKEDKKLKRKIQKKEAKKLAQERMEEDLRESNPPKNEEQKETVDNVQRCQFLDDRILQCIK
QYADKIKSGIQNTAMLLKELLSWKVLSTEDYTTCFSSRNFLNEAVDYVIRHLIQENNRVKTRIFLHVLSELKEVE
PKLAAWIQKLNSFGLDATGTFFSRYGASLKLLDFSIMTFLWNEKYGHKLDSIEGKQLDYFSEPASLKEARCLIWL
LEEHRDKFPALHSALDEFFDIMDSRCTVLRKQDSGEAPFSSTKVKNKSKKKKPKDSKPMLVGSGTTSVTSNNEII
TSSEDHSNRNSDSAGPFAVPDHLRQDVEEFEALYDQHSNEYVVRNKKLWDMNPKQKCSTLYDYFSQFLEEHGPLD
MSNKMFSAEYEFFPEETRQILEKAGGLKPFLLGCPRFVVIDNCIALKKVASRLKKKRKKKNIKTKVEEISKAGEY
VRVKLQLNPAAREFKPDVKSKPVSDSSSAPAFENVKPKPVSANSPKPACEDVKAKPVSDNSSRQVSEDGQPKGVS
SNSPKPGSEDANYKRVSCNSPKPVLEDVKPTYWAQSHLVTGYCTYLPFQRFDITQTPPAYINVLPGLPQYTSIYT
PLASLSPEYQLPRSVPVVPSFVANDRADKNAAAYFEGHHLNAENVAGHQIASETQILEGSLGISVKSHCSTGDAH
TVLSESNRNDEHCGNSNNKCEVIPESTSAVTNIPHVQMVAIQVSWNIIHQEVNTEPYNPFEERQGEISRIEKEHQ
VLQDQLQEVYENYEQIKLKGLEETRDLEEKLKRHLEENKISKTELDWFLQDLEREIKKWQQEKKEIQERLKSLKK
KIKKVSNASEMYTQKNDGKEKEHELHLDQSLEISNTLTNEKMKIEEYIKKGKEDYEESHQRAVAAEVSVLENWKE
SEVYKLQIMESQAEAFLKKLGLISRDPAAYPDMESDIRSWELFLSNVTKEIEKAKSQFEEQIKAIKNGSRLSELS
KVQISELSFPACNTVHPELLPESSGHDGQGLVTSASDVTGNHAALHRDPSVFSAGDSPGEAPSALLPGPPPGQPE
ATQLTGPKRAGQAALSERSPVADRKQPVPPGRAARSSQSPKKPFNSIIEHLSVVFPCYNSTELAGFIKKVRSKNK
NSLSGLSIDEIVQRVTEHILDEQKKKKPNPGKDKRTYEPSSATPVTRSSQGSPSVVVAPSPKTKGQKAEDVPVRI
ALGASSCEICHEVFKSKNVRVLKCGHKYHKGCFKQWLKGQSACPACQGRD

FIGURE 1960A

ATCATGGCGGATGGCCCCAGGTGTAAGCGCAGAAAGCAGGCGAACCCGCGGCGCAATAACGTTACAAATTATAAT
ACTGTGGTAGAAACAAATTCAGATTCAGATGATGAAGACAAACTGCATATTGTGGAAGAAGAAAGTGTTACAGAT
GCAGCTGACTGTGAAGGTGTACCAGAGGATGACCTGCCAACAGACCAGACAGTGTTACCAGGGAGGAGCAGTGAA
AGAGAAGGGAATGCTAAGAACTGCTGGGAGGATGACAGAAAGGAAGGGCAAGAAATCCTGGGGCCTGAAGCTCAG
GCAGATGAAGCAGGATGTACAGTAAAAGATGATGAATGCGAGTCAGATGCAGAAAATGAGCAAAACCATGATCCT
AATGTTGAAGAGTTTCTACAACAACAAGACACTGCTGTCATTTTTCCTGAGGCACCTGAAGAGGACCAGAGGCAG
GGCACACCAGAAGCCAGTGGTCATGATGAAAATGGAACACCAGATGCATTTTCACAATTACTCACCTGTCCATAT
TGTGATAGAGGCTATAAACGCTTTACCTCTCTGAAAGAACACATTAAATATCGTCATGAAAAGAATGAAGATAAC
TTTAGTTGCTCCCTGTGCAGTTACACCTTTGCATACAGAACCCAACTTGAACGTCACATGACATCACATAAATCA
GGAAGAGATCAAAGACATGTGACGCAGTCTGGGTGTAATCGTAAATTCAAATGCACTGAGTGTGGAAAAGCTTTC
AAATACAAACATCACCTAAAAGAGCACTTAAGAATTCACAGTGGAGAGAAGCCATATGAATGCCCAAACTGCAAG
AAACGCTTTTCCCATTCTGGCTCCTATAGCTCACACATAAGCAGTAAGAAATGTATCAGCTTGATACCTGTGAAT
GGGCGACCAAGAACAGGACTCAAGACATCTCAGTGTTCTTCACCGTCTCTTTCAGCATCACCAGGCAGTCCCACA
CGACCACAGATACGGCAAAAGATAGAGAATAAACCCCTTCAAGAACAACTTTCTGTTAACCAAATTAAAACTGAA
CCTGTGGATTATGAATTCAAACCCATAGTGGTTGCTTCAGGAATCAACTGTTCAACCCCTTTACAAAATGGGGTT
TTCACTGGTGGTGGCCCATTACAGGCAACCAGTTCTCCTCAGGGCATGGTGCAAGCTGTTGTTCTGCCAACAGTT
GGTTTGGTGTCTCCCATAAGTATCAATTTAAGTGATATTCAGAATGTACTTAAAGTGGCGGTAGATGGTAATGTA
ATAAGGCAAGTGTTGGAGAATAATCAAGCCAATCTTGCATCCAAAGAACAAGAAACAATCAATGCTTCACCCATA
CAACAAGGTGGCCATTCTGTTATTTCAGCCATCAGTCTTCCTTTGGTTGATCAAGATGGAACAACCAAAATTATC
ATCAACTACAGTCTTGAGCAGCCTAGCCAACTTCAAGTTGTTCCTCAAAATTTAAAAAAAGAAAATCCAGTCGCT
ACAAACAGTTGTAAAAGTGAAAAGTTACCAGAAGATCTTACTGTTAAGTCTGAGAAGGACAAAAGCTTTGAAGGG
GGGGTGAATGATAGCACTTGTCTTCTGTGTGATGATTGTCCAGGAGATATTAATGCACTTCCAGAATTAAAGCAC
TATGACCTAAAGCAGCCTACTCAGCCTCCTCCACTCCCTGCAGCAGAAGCTGAGAAGCCTGAGTCCTCTGTTTCA
TCAGCTACTGGAGATGGCAATTTGTCTCCTAGTCAGCCACCTTTAAAGAACCTCTTGTCTCTCCTAAAAGCATAT
TATGCTTTGAATGCACAACCAAGTGCAGAAGAGCTCTCAAAAATTGCTGATTCAGTAAACCTACCACTGGATGTA
GTAAAAAAGTGGTTTGAAAAGATGCAAGCTGGACAGATTTCAGTGCAGTCTTCTGAACCATCTTCTCCTGAACCA
GGCAAAGTAAATATCCCTGCCAAGAACAATGATCAGCCTCAATCTGCAAATGCAAATGAACCCCAGGACAGCACA
GTAAATCTACAAAGTCCTTTGAAGATGACTAACTCCCCAGTTTTACCAGTGGGATCAACCACCAATGGTTCCAGA
AGTAGTACACCATCCCCATCACCTCTAAACCTTTCCTCATCCAGAAATACACAGGGTTACTTGTACACAGCTGAG
GGTGCACAAGAAGAGCCACAAGTAGAACCTCTTGATCTTTCACTACCAAAGCAACAGGGAGAATTATTAGAAAGG
TCAACTATCACTAGTGTTTACCAGAACAGTGTTTATTCTGTCCAGGAAGAACCCTTGAACTTGTCTTGCGCAAAA
AAGGAGCCACAAAAGGACAGTTGTGTTACAGACTCAGAACCAGTTGTAAATGTAATCCCACCAAGTGCCAACCCC
ATAAATATCGCTATACCTACAGTCACTGCCCAGTTACCCACAATCGTGGCCATTGCTGACCAGAACAGTGTTCCA
TGCTTAAGAGCGCTAGCTGCCAATAAGCAAACGATTCTGATTCCCCAGGTGGCATACACCTACTCAACTACGGTC
AGCCCTGCAGTCCAAGAACCACCCTTGAAAGTGATCCAGCCAAATGGAAATCAGGATGAAAGACAAGATACTAGC
TCAGAAGGAGTATCAAATGTAGAGGATCAGAATGACTCTGATTCTACACCGCCCAAAAAGAAAATGCGGAAGACA
GAAAATGGAATGTATGCTTGTGATTTGTGTGACAAGATATTCCAAAAGAGTAGTTCATTATTGAGACATAAATAT
GAACACACAGGTAAAAGACCTCATGAGTGTGGAATCTGTAAAAAGGCATTTAAACACAAACATCATTTGATTGAA
CACATGCGATTACATTCTGGAGAAAAGCCCTATCAATGTGACAAATGTGGAAAGCGCTTCTCACACTCTGGGTCT
TATTCTCAACACATGAATCATCGCTACTCCTACTGTAAGAGAGAAGCGGAAGAACGTGACAGCACAGAGCAGGAA
GAGGCAGGGCCTGAAATCCTCTCGAATGAGCACGTGGGTGCCAGGGCGTCTCCCTCACAGGGCGACTCGGACGAG
AGAGAGAGTTTGACAAGGGAAGAGGATGAAGACAGTGAAAAAGAGGAAGAGGAGGAGGATAAAGAGATGGAAGAA
TTGCAGGAAGAAAAAGAATGTGAAAAACCACAAGGGGATGAGGAAGAGGAGGAGGAGGAAGAAGTGGAAGAA
GAAGAGGTAGAAGAGGCAGAGAATGAGGGAGAAGAAGCAAAAACTGAAGGTCTGATGAAGGATGACAGGGCTGAA
AGTCAAGCAAGCAGCTTAGGACAAAAAGTAGGCGAGAGTAGTGAGCAAGTGTCTGAAGAAAAGACAAATGAAGCC
TAATCGTTTTTCTAGAAGGAAAATAAATTCTAATTGATAATGAATTTCGTTCAATATTATCCTTGCTTTTCATGG
AAACACAGTAACCTGTATGCTGTGATTCCTGTTCACTACTGTGTGTGTGTGCGCGTGCATTGATTACTATCCATT
TCTTTAGTCAACGCTCTCCACTTCCTGATTTCTGCTTTAAGGAAAACTGTGAACTTTCTGCTTCATGTATCAGTT

FIGURE 1960B

TTAAAGCATCCCAGGCAAAGATCATCTACAGATTCTAGGAATTCTCTCCCCTGAAATCAAAACCTGGAGACTTTT
TTTTCTTATTTTAGTTGAGAAGTTCATAAACTGCTCAAGGATTAGTTTTCCAGGACTCTGCGGAGGAACGGCAGG
AAGAACCTCAGAGAGGGCAGAGGTGACTTCAAAGTGCTGGGGACTCCGTCCTGAGGGTCACTTGGCCCTGAGCCC
CTGCGTGCCCTTGCGGAAGCCCAGAAGCTTCTTCCTGCTGCACCTCCCGTTTCCGCTGCTGCTGACGTTTATGCA
TTTCATGATGGGGTCCAACAAGAACACCTGACTTGGGTGAAGTTGTGCAATATTGGAGGCTGACTGTAGGGCTGG
GCAGCTGGGAGACAGGCTCATGGCTCATGGCTCATGGCTCAGGGCGGTGCCTGCCCTGGGCCGGGACCCCCCTCC
CCACCCCCCACCTAGGCTTTTTGGGTTTTGTTCAAGGAAGGTAAAGTGAGAGGTTTAGGTCAGTGTTTTTAAGTT
TTTGTTTTTTTTTTAAAGCAAATCCTGTATATGTATCTACATGGGAGATAGGTAGACACTACTTATTTGTTACAT
TTTGTACTATACGTTTGTGTTCCAGGTTTCAGCTTCCCTCGCTCCTGTTGTTAAGAAGCGTCCCTGTCAGCACAG
GTGTGCATTGAGGAAGGGGCCCCAGGGCCTTCGCTCCCTCAGCACTGGGGTGGAGGCGGCAGGAAGGGGCGGCCC
TTACCTGGCAGGTCTGGGCGCACCTTTAGCAGGTGGACTCCGTGGGGCTCCACCAGCCAGAAGCCTCTGGAAGGC
AACGAAGGCAATGCTGCTCCCTGAGTCCAGTCCCCGCCCCCAAACCCAGCCCAGGTGCCTTCAGCTACTTCGGCT
TCTTAAACCCTGCAGTGTTAAACAGAGGCATTGAGAAAGGGGAAAGGCGGGTATTTTTAAAAGCCAAAGATTGAC
CCAAGTTACTTGAGGGTAGGGAGGCGGGCCCAGTGCAGGAGGCTGCATCCCTGGCCTGCTGGTGCCCACCGGGGG
CTGTGCCTGTGCCGGGCCGCAGGAAGCTGGCTGCCCCCATTCCTGCTGCTGCTGCTGCTGCTGCTCTGTGGCTGT
TTCAAAGACTGGGCGAAAGGCTGTCCGGAGGGCAGACCAGGTGCCTTGCCGCAGAGAAAACACCAAAGTCTCCTG
TTCGCTCATAAAGAAGTTTTTGGGATGGGAGAGAATCCAGACCATCTTGGGGCAGCCAGGCCCTTGCCTTCATTT
TTACAGAGGTAGCACAACTGATTCCAACACAAAACCCCTTCCCCTTTTTAAAATGATTTCTGTTCTAATGCCATA
GATCAAAGGCCTCAGAAACCATTGTGTGTTTCCTCTTTGAAGCAATGACAAGCACTTTACTTTCACGGTGGTTTT
TGTTTTTTCTTATTGCTGTGGAACCTCTTTTGGAGGACGTTAAAGGCGTGTTTTACTTGTTTTTTTAAGAGTGTG
TGATGTGTGTTTTGTAGATTTCTTGACAGTGCTGTAATACAGACGGCAATGCAATAGCCTATTTAAAGAACTACG
TGATCTGATTGAGATGTACATAGTTTTTTTTTTACCATAACTGAATTATTTTATCTCTTATGTTATCATGAGAA
ATGTATGCCAAATGATTAGTTGATGTATGTTTTTTAATTTAATATTTAAATAAAATATTTGGAAGG

FIGURE 1961

MADGPRCKRRKQANPRRNNVTNYNTVVETNSDSDDEDKLHIVEEESVTDAADCEGVPEDDLPTDQTVLPGRSSER
EGNAKNCWEDDRKEGQEILGPEAQADEAGCTVKDDECESDAENEQNHDPNVEEFLQQQDTAVIFPEAPEEDQRQG
TPEASGHDENGTPDAFSQLLTCPYCDRGYKRFTSLKEHIKYRHEKNEDNFSCSLCSYTFAYRTQLERHMTSHKSG
RDQRHVTQSGCNRKFKCTECGKAFKYKHHLKEHLRIHSGEKPYECPNCKKRFSHSGSYSSHISSKKCISLIPVNG
RPRTGLKTSQCSSPSLSASPGSPTRPQIRQKIENKPLQEQLSVNQIKTEPVDYEFKPIVVASGINCSTPLQNGVF
TGGGPLQATSSPQGMVQAVVLPTVGLVSPISINLSDIQNVLKVAVDGNVIRQVLENNQANLASKEQETINASPIQ
QGGHSVISAISLPLVDQDGTTKIIINYSLEQPSQLQVVPQNLKKENPVATNSCKSEKLPEDLTVKSEKDKSFEGG
VNDSTCLLCDDCPGDINALPELKHYDLKQPTQPPPLPAAEAEKPESSVSSATGDGNLSPSQPPLKNLLSLLKAYY
ALNAQPSAEELSKIADSVNLPLDVVKKWFEKMQAGQISVQSSEPSSPEPGKVNIPAKNNDQPQSANANEPQDSTV
NLQSPLKMTNSPVLPVGSTTNGSRSSTPSPSPLNLSSSRNTQGYLYTAEGAQEEPQVEPLDLSLPKQQGELLERS
TITSVYQNSVYSVQEEPLNLSCAKKEPQKDSCVTDSEPVVNVIPPSANPINIAIPTVTAQLPTIVAIADQNSVPC
LRALAANKQTILIPQVAYTYSTTVSPAVQEPPLKVIQPNGNQDERQDTSSEGVSNVEDQNDSDSTPPKKKMRKTE
NGMYACDLCDKIFQKSSSLLRHKYEHTGKRPHECGICKKAFKHKHHLIEHMRLHSGEKPYQCDKCGKRFSHSGSY
SQHMNHRYSYCKREAEERDSTEQEEAGPEILSNEHVGARASPSQGDSDERESLTREEDEDSEKEEEEEDKEMEEL
QEEKECEKPQGDEEEEEEEEEVEEEEVEEAENEGEEAKTEGLMKDDRAESQASSLGQKVGESSEQVSEEKTNEA

FIGURE 1962

GAATTCCGGGACTGAGCTCTTGAAGACTTGGGTCCTTGGTCGCAGGTGGAGCGACGGGTCTCACTCCATTGCCCA
GGCCAGAGTGCGGGATATTTGATAAGAAACTTCAGTGAAGGCCGGGCGCGGTGCTCATGCCCGTAATCCCAGCAT
TTTCGGAGGCCGAGGCATCATGGACCGATCTAAAGAAAACTGCATTTCAGGACCTGTTAAGGCTACAGCTCCAGT
TGGAGGTCCAAAACGTGTTCTCGTGACTCAGCAATTTCCTTGTCAGAATCCATTACCTGTAAATAGTGGCCAGGC
TCAGCGGGTCTTGTGTCCTTCAAATTCTTCCCAGCGCGTTCCTTTGCAAGCACAAAAGCTTGTCTCCAGTCACAA
GCCGGTTCAGAATCAGAAGCAGAAGCAATTGCAGGCAACCAGTGTACCTCATCCTGTCTCCAGGCCACTGAATAA
CACCCAAAAGAGCAAGCAGCCCCTGCCATCGCACCTGAAAATAATCCTGAGGAGGAACTGGCATCAAAACAGAAA
AATGAAGAATCAAAAAGAGGCAGTGGCTTTGGAAGACTTTGAAATTGGTCGCCCTCTGGGTAAAGGAAAGTTTGG
TAATGTTTATTTGGCAAGAGAAAAGCAAAGCAAGTTTATTCTGGCTCTTAAAGTGTTATTTAAAGCTCAGCTGGA
GAAAGCCGGAGTGGAGCATCAGCTCAGAAGAGAAGTAGAAATACAGTCCCACCTTCGGCATCCTAATATTCTTAG
ACTGTATGGTTATTTCCATGATGCTACCAGAGTCTACCTAATTCTGGAATATGCACCACTTGGAACAGTTTATAG
AGAACTTCAGAAACTTTCAAAGTTTGATGAGCAGAGAACTGCTAACTTATATAACAGAATTGCAAATGCCCTGTC
TTACTGTCATTCGAAGAGAGTTATTCATAGAGACATTAAGCCAGAGAACTTACTTCTTGGATCAGCTGGAGAGCT
TAAAATTGCAGATTTTGGGTGGTCAGTACATGCTCCATCTTCCAGGAGGACCACTCTCTGTGGCACCCTGGACTA
CCTGCCCCCTGAAATGATTGAAGGTCGGATGCATGATGAGAAGGTGGATCTCTGGAGCCTTGGAGTTCTTTGCTA
TGAATTTTTAGTTGGGAAGCCTCCTTTTGAGGCAAACACATACCAAGAGACCTACAAAAGAATATCACGGGTTGA
ATTCACATTCCCTGACTTTGTAACAGAGGGAGCCAGGGACCTCATTTCAAGACTGTTGAAGCATAATCCCAGCCA
GAGGCCAATGCTCAGAGAAGTACTTGAACACCCCTGGATCACAGCAAATTCATCAAAACCATCAAATTGCCAAAA
CAAAGAATCAGCTAGCAAACAGTCTTAGGAATCGTGCAGGGGGAGAAATCCTTGAGCCAGGGCTGCCATATAACC
TGACAGGAACATGCTACTGAAGTTTATTTTACCATTGACTGCTGCCCTCAATCTAGAACGCTACACAAGAAATAT
TTTGTTTTTACTCAGCAGGTGTGCCTTAACCTCCCTATTCAGAAAGCTCCACATCAATAAACATGACACTCTGAA
GTGAAAGTAGCCACGAGAATTGTGCTACTTATACTGGAACATAATCTGGAGGCAAGGTTCGACTGCAGTCGAACC
TTGCCTCCAGATTATGAACCAGTATAAGTAGCACAATTCTCGTGGCTACTTTCACTTCAGAGTGTCATGTTTATT
GATGTGGAGCTTTCTGAATAGGGAGGTTAAGGCACACCTGCTGAGTAAAACAAATATTTCTTGTGTAGCGTTCTT
AGGAATCTGGTGTCTGTCCGGCCCCGGTAGGCCTGTTGGGTTTCTAGTCCTCCTTACCATCATCTCCATATGAGA
GTGTGAAAATAGGAACACGTGCTCTACCTCCATTTAGGGATTTGCTTGGGATACAGAAGAGGCCATGTGTCTCAG
AGCTGTTAAGGGCTTATTTTTTTAAAACATTGGAGTCATAGCATGTGTGTAAACTTTAAATATGCAGGCCTTCGT
GGCTCGAG

FIGURE 1963

MDRSKENCISGPVKATAPVGGPKRVLVTQQIPCQNPLPVNSGQAQRVLCPSNSSQRVPLQAQKLVSSHKPVQNQK
QKQLQATSVPHPVSRPLNNTQKSKQPLPSAPENNPEEELASKQKNEESKKRQWALEDFEIGRPLGKGKFGNVYLA
REKQSKFILALKVLFKAQLEKAGVEHQLRREVEIQSHLRHPNILRLYGYFHDATRVYLILEYAPLGTVYRELQKL
SKFDEQRTATYITELANALSYCHSKRVIHRDIKPENLLLGSAGELKIADFGWSVHAPSSRRTTLCGTLDYLPPEM
IEGRMHDEKVDLWSLGVLCYEFLVGKPPFEANTYQETYKRISRVEFTFPDFVTEGARDLISRLLKHNPSQRPMLR
EVLEHPWITANSSKPSNCQNKESASKQS

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FIGURE 1964

GTCCCAACTCTTGGACTCCATTTGCTATTCTCTTCTTTCTCCCCCACACCTATCTGGTGGTGGTAGTGGGCGTTT
ATATTTGCGTTCCTTTTCATTCATTTCTAAATCTCTTAAAAATTTTGGGTTGGGGGTATTGGGGAAGGCAGGAAA
GGGAAAAGGAGAGTAGTAGCTGAAGAGCAAGAGGAGGACATGGAGATGAAGAAGAAGATTAACCTGGAGTTAAGG
AACAGATCCCCGGAGGAGGTGACAGAGTTAGTCCTTGATAATTGCCTGTGTGTCAATGGGGAAATTGAAGGCCTG
AATGATACTTTCAAAGAACTAGAATTTCTGAGTATGGCTAATGTGGAACTAAGTTCGCTGGCCCGGCTTCCCAGC
TTAAATAAACTTCGAAAATTGGAGCTTAGTGATAATATAATTTCTGGAGGCTTGGAAGTCCTGGCAGAGAAATGT
CCAAATCTTACCTACCTCAATCTGAGTGGAAACAAAATAAAAGATCTCAGTACAGTAGAAGCTCTGCAAAATCTT
AAAAATTTGAAAAGTCTTGACCTGTTTAACTGTGAGATCACAAACCTGGAAGATTATAGAGAAAGTATTTTTGAA
CTACTGCAGCAAATCACATACTTAGATGGATTTGATCAGGAGGATAATGAAGCGCCGGACTCTGAAGAGGAGGAT
GATGAGGATGGAGATGAAGATGATGAAGAGGAAGAGGAAAATGAAGCTGGTCCACCGGAAGGATATGAGGAAGAG
GAGGAGGAAGAGGAAGAGGAGGATGAGGATGAGGATGAAGATGAAGATGAAGCAGGTTCAGAGTTGGGAGAGGGA
GAAGAGGAAGTGGGCCTCTCATACTTAATGAAAGAAGAAATTCAGGATGAAGAAGATGATGATGACTATGTTGAA
GAAGGGGAAGAAGAGGAAGAAGAGGAAGAAGGAGGTCTTCGAGGGGAGAAGAGGAAACGAGATGCTGAAGACGAT
GGAGAGGAAGAAGATGACTAGATCATTCTAAGACCAGATTCTCTAATGTTTCTGGGTGTGCAATAGAGTGATCAC
ATCTTTGTTTCTTCATGTACGATAGCTATCCCTACAGAAGATAATGTGTAACTTTTTATAGGAAAAGTGTGGTTT
TACTATTTTTGCCTTATCATTCCAAATAAGAACTAGTCTGTTAATGATCATATTGTATGTAGAGAAAAATTTTCA
TTGACTCCCATTGTGGAATTCCCTAGCAATTTATTTAGACTTAATTTTTTAAATTCAAGCTTACTGTATTAGTCA
TTTTTAGCCCATAATTAAAACATGATCACTTTTAAAAAAAAAAAAAAAAAAA

FIGURE 1965

MEMKKKINLELRNRSPEEVTELVLDNCLCVNGEIEGLNDTFKELEFLSMANVELSSLARLPSLNKLRKLELSDNI
ISGGLEVLAEKCPNLTYLNLSGNKIKDLSTVEALQNLKNLKSLDLFNCEITNLEDYRESIFELLQQITYLDGFDQ
EDNEAPDSEEEDDEDGDEDDEEEEENEAGPPEGYEEEEEEEEEDEDEDEDEDEAGSELGEGEEEVGLSYLMKEE
IQDEEDDDDYVEEGEEEEEEEEGGLRGEKRKRDAEDDGEEEDD

FIGURE 1966

TCATACTGGAGAGAAGCCCTACGTTTGTGAAGAATGTGGCAAAGCCTTTAAGTACTCCCGTATCCTTACTACACA
TAAGAGAATTCATACTGAAGAGAAACCATACAAGTGTAATAAATGTGGCAAAGCCTTTATTGCATCCTCAACCCT
TAGTAGACATGAGTTCATTCATATGGGAAAGAAACATTACAAATGTGAAGAATGTGGCAAAGCCTTCATTTGGTC
CTCAGTCCTAACTAGACATAAGAGAGTTCATACTGGAGAGAAGCCCTACAAATGTGAAGAATGTGGCAAAGCCTT
TAAGTACTCCTCTACCCTTAGTTCACATAAGAGAAGTCATACTGGAGAGAAACCCTACAAATGTGAAGAATGTGG
CAAAGCCTTTGTTGCATCCTCAACCCTTAGTAAACATGAGATCATTCATACTGGAAAGAAACCCTACAAGTGTGA
AGAATGTGGCAAAGCTTTTAACCAGTCCTCATCCCTTACTAAACATAAGAAAATTCATACTGGAGAGAAACCCTA
CAAATGTGAAGAATGTGGCAAAGCTTTTAACCAGTCCTCTTCCCTTACTAAACATAAGAAAATCCATTCTGGAGA
GAAACCATACGAGTGTGATAAATGTGGCAAAGCCTTTATTTCACCCTCAAGCCTTAGTAGACATGAGATAATTCA
TACTGGGGAGAAACCCTAGAAGTGTGAAGAATGTGGCAAAGCCTTCAAGTGGTCCTCACACCTTACTATACACTG
AGAGTTCTGAACTTACTCTGTAACCATCCCAAACTCCTCCCAGGCACAGTCTGGCAGAGGTCCTGCCATTTCGGA
GACCTGGAGGAAGTGGCCCATTTACAGCCATGTAGGCAGGCCTGCAGACCTTGGCCTTTACTACGGTACCTGAAG
TGGTTCAATGACTCAGTTTCAGTTACCTGAGCCACAGCTTAAGGTCAGTTCTGCCTATATAGAAACCCACACAGT
TAACCTGAGGAAATGCTCTCTGGTACTCACTGAAAGCCACACTCATCCACATCCTGATACAAGGCCCACCATATG
CAGACCTGACTGCCAAAACATGCCCTAGTGTCTGCCGTACAGAGTGAAGTCCTGAAGGATATTTAGTCTGTCCAA
AACTAAAATGAAGATTTCAACTCCCCAACCCCCTCTAACAAGCCAGCTAAAGGTGGACTATAGTGCAGACCCAGC
AACCTTGTGACCAAGCTAAAACCCCTCATCACTACAAATTCAGAGGGCATCTCATCACCCTAAGGGCCCAACGAA
AGATCTTTACCTTCTAACATCAGTTTATGAAAACTTGAAAAGGTGTTTGCTCCATCAAATTCAGACACCAGTACA
AAACTATATTATGCCCATTGTCTGGTTCTATTTTAATGTAGCACTGGAAGTGTGTGGCAGAAGAATTAGTCAAAG
AAATAAAAATAGCCATTGAAATTG

FIGURE 1967

MGKKHYKCEECGKAFIWSSVLTRHKRVHTGEKPYKCEECGKAFKYSSTLSSHKRSHTGEKPYKCEECGKAFVASS
TLSKHEIIHTGKKPYKCEECGKAFNQSSSLTKHKKIHTGEKPYKCEECGKAFNQSSSLTKHKKIHSGEKPYECDK
CGKAFISPSSLSRHEIIHTGEKP

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FIGURE 1968

CTACCTCTTCCTCTCCACGCGGTTGAGAAGACCGGTCGGCCTGGGCAACCTGCGCTGAAGATGCCGGGAAAACTC
CGTAGTGACGCTGGTTTGGAATCAGACACCGCAATGAAAAAAGGGGAGACACTGCGAAAGCAAACCGAGGAGAAA
GAGAAAAAAAAGAGAAGCCAAAATCTGATAAGACTGAAGAGATAGCAGAAGAGGAAGAAACTGTTTTCCCCAAAGC
TAAACAAGTTAAAAAGAAAGCAGAGCCTTCTGAAGTTGAC**ATG**AATTCTCCTAAATCCAAAAAGGCAAAAAAGAA
AGAGGAGCCATCTCAAAATGACATTTCTCCTAAAACCAAAAGTTTGAGAAAGAAAAAGGAGCCCATTGAAAAGAA
AGTGGTTTCTTCTAAAACCAAAAAAGTGACAAAAAATGAGGAGCCTTCTGAGGAAGAAATAGATGCTCCTAAGCC
CAAGAAGATGAAGAAAGAAAAGGAAATGAATGGAGAAACTAGAGAGAAAAGCCCCAAACTGAAGAATGGATTTCC
TCATCCTGAACCGGACTGTAACCCCAGTGAAGCTGCCAGTGAAGAAAGTAACAGTGAGATAGAGCAGGAAATACC
TGTGGAACAAAAAGAAGGCGCTTTCTCTAATTTTCCCATATCTGAAGAAACTATTAAACTTCTCAAAGGCCGAGG
AGTGACCTTCCTATTTCCTATACAAGCAAAGACATTCCATCATGTTTACAGCGGGAAGGACTTAATTGCACAGGC
ACGGACAGGAACTGGGAAGACATTCTCCTTTGCCATCCCTTTGATTGAGAAACTTCATGGGGAACTGCAAGACAG
GAAGAGAGGCCGTGCCCCTCAGGTACTGGTTCTTGCACCTACAAGAGAGTTGGCAAATCAAGTAAGCAAAGACTT
CAGTGACATCACAAAAAAGCTGTCAGTGGCTTGTTTTTATGGTGGAACTCCCTATGGAGGTCAATTTGAACGCAT
GAGGAATGGGATTGATATCCTGGTTGGAACACCAGGTCGTATCAAAGACCACATACAGAATGGCAAACTAGATCT
CACCAAACTTAAGCATGTTGTCCTGGATGAAGTGGACCAGATGTTGGATATGGGATTTGCTGATCAAGTGGAAGA
GATTTTAAGTGTGGCATACAAGAAAGATTCTGAAGACAATCCCCAAACATTGCTTTTTTCTGCAACTTGCCCTCA
TTGGGTATTTAATGTTGCCAAGAAATACATGAAATCTACATATGAACAGGTGGACCTGATTGGTAAAAAGACTCA
GAAAACGGCAATAACTGTGGAGCATCTGGCTATTAAGTGCCACTGGACTCAGAGGGCAGCAGTTATTGGGGATGT
CATCCGAGTATATAGTGGTCATCAAGGACGCACTATCATCTTTTGTGAAACCAAGAAAGAAGCCCAGGAGCTGTC
CCAGAATTCAGCTATAAAGCAGGATGCTCAGTCCTTGCATGGAGACATTCCACAGAAGCAAAGGGAAATCACCCT
GAAAGGTTTTAGAAATGGTAGTTTTGGAGTTTTGGTGGCAACCAATGTTGCTGCACGTGGGTTAGACATCCCTGA
GGTTGATTTGGTTATACAAAGCTCTCCACCAAAGGATGTAGAGTCCTACATTCATCGATCCGGGCGGACAGGCAG
AGCTGGAAGGACGGGGGTGTGCATCTGCTTTTATCAGCACAAGGAAGAATATCAGTTAGTACAAGTGGAGCAAAA
AGCGGGAATTAAGTTCAAACGAATAGGTGTTCCTTCTGCAACAGAAATAATAAAAGCTTCCAGCAAAGATGCCAT
CAGGCTTTTGGATTCCGTGCCTCCCACTGCCATTAGTCACTTCAAACAATCAGCTGAGAAGCTGATAGAGGAGAA
GGGAGCTGTGGAAGCTCTGGCAGCAGCACTGGCCCATATTTCAGGTGCCACGTCCGTAGACCAGCGCTCCTTGAT
CAACTCAAATGTGGGTTTTGTGACCATGATCTTGCAGTGCTCAATTGAAATGCCAAATATTAGTTATGCTTGGAA
AGAACTTAAAGAGCAGCTGGGCGAGGAGATTGATTCCAAAGTGAAGGGAATGGTTTTTCTCAAAGGAAAGCTGGG
TGTTTGCTTTGATGTACCTACCGCATCAGTAACAGAAATACAGGAGAAATGGCATGATTCACGACGCTGGCAGCT
CTCTGTGGCCACAGAGCAACCAGAACTGGAAGGACCACGGGAAGGATATGGAGGCTTCAGGGGACAGCGGGAAGG
CAGTCGAGGCTTCAGGGGACAGCGGGACGGAAACAGAAGATTCAGAGGACAGCGGGAAGGCAGTAGAGGCCCGAG
AGGACAGCGATCAGGAGGTGGCAACAAAAGTAACAGATCCCAAAACAAAGGCCAGAAGCGGAGTTTCAGTAAAGC
ATTTGGTCAA**TAA**TTAGAAATAGAAGATTTATATAGCAAAAAGAGAATGATGTTTGGCAATATAGAACTGAACAT
TATTTTTCATGCAAAGTTAAAAGCACATTGTGCCTCCTTTTGACCACTTGCCAAGTCCCTGTCTCTTTCAGACAC
AGACAAGCTTCATTTAAATTATTTCATCTGATCATTATCATTTATAACTTTATTGTTACTTCATCAGTTTTTCCT
TTTGAAAGGTGTATGAATTCATTACATTTTTATTCTAATGTATTATCTGTAGATTAGAAGATAAAATCAAGCATG
TATCTGCCTATACTTTGTGAGTTCACCTGTCTTTATACTCAAAAGTGTCCCTTAATAGTGTCCTTCCCTGAAATA
AATACCTAAGGGAGTGTAACAGTCTCTGGAGGACCACTTTGAGCCTTTGGAAGTTAAGGTTTCCTCAGCCACCTG
CCGAACAGTTTCTCATGTGGTCCTATTATTTGTCTACTGAGACTTAATACTGAGCAATGTTTTGAAACAAGATTT
CAAACTAATCTGGGTTGTAATACAGTTTATACCAGTGTATGCTCTAGACTTGGAAGATGTAGTATGTTTGATGTG
GATTACCTATACTTATGTTCGTTTTGATACATTTTTAGCTTCTCATTATAAGGTGATTCATGCTTTAGTGAATTC
TTCATAGATAGTATATATAAAAGTACATTTTAATAGAAAGCCAGGGTTTTAAGGAATTTCACATGTATAAGGTGG
CTCCATAGCTTTATTTGTAAGTAGGCTGGATAAATGGTGCTTAAATGGTAATGTACTCCACTTCTTCCTATTGGA
AGATTAACATTATTTACCAAGAAGGACTTAAGGGAGTAAGGGGCGCAGATTAGCATTGCTCAAGAGTATGTAAAA
AAAAAAAAAAAAAAAAAAA

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FIGURE 1969

MNSPKSKKAKKKEEPSQNDISPKTKSLRKKKEPIEKKVVSSKTKKVTKNEEPSEEEIDAPKPKKMKKEKEMNGET
REKSPKLKNGFPHPEPDCNPSEAASEESNSEIEQEIPVEQKEGAFSNFPISEETIKLLKGRGVTFLFPIQAKTFH
HVYSGKDLIAQARTGTGKTFSFAIPLIEKLHGELQDRKRGRAPQVLVLAPTRELANQVSKDFSDITKKLSVACFY
GGTPYGGQFERMRNGIDILVGTPGRIKDHIQNGKLDLTKLKHVVLDEVDQMLDMGFADQVEEILSVAYKKDSEDN
PQTLLFSATCPHWVFNVAKKYMKSTYEQVDLIGKKTQKTAITVEHLAIKCHWTQRAAVIGDVIRVYSGHQGRTII
FCETKKEAQELSQNSAIKQDAQSLHGDIPQKQREITLKGFRNGSFGVLVATNVAARGLDIPEVDLVIQSSPPKDV
ESYIHRSGRTGRAGRTGVCICFYQHKEEYQLVQVEQKAGIKFKRIGVPSATEIIKASSKDAIRLLDSVPPTAISH
FKQSAEKLIEEKGAVEALAAALAHISGATSVDQRSLINSNVGFVTMILQCSIEMPNISYAWKELKEQLGEEIDSK
VKGMVFLKGKLGVCFDVPTASVTEIQEKWHDSRRWQLSVATEQPELEGPREGYGGFRGQREGSRGFRGQRDGNRR
FRGQREGSRGPRGQRSGGGNKSNRSQNKGQKRSFSKAFGQ

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FIGURE 1970

CCGCTGTCAAGATGCTTCTGGCCATGGTCCTTACCTCTGCCCTGCTCCTGTGCTCCGTGGCAGGCCAGGGGTGTC
CAACCTTGGCGGGGATCCTGGACATCAACTTCCTCATCAACAAGATGCAGGAAGATCCAGCTTCCAAGTGCCACT
GCAGTGCTAATGTGACCAGTTGTCTCTGTTTGGGCATTCCCTCTGACAACTGCACCAGACCATGCTTCAGTGAGA
GACTGTCTCAGATGACCAATACCACCATGCAAACAAGATACCCACTGATTTTCAGTCGGGTGAAAAAATCAGTTG
AAGTACTAAAGAACAACAAGTGTCCATATTTTTCCTGTGAACAGCCATGCAACCAAACCACGGCAGGCAACGCGC
TGACATTTCTGAAGAGTCTTCTGGAAATTTTCCAGAAAGAAAAGATGAGAGGGATGAGAGGCAAGATATGAAGAT
GAAATATTATTTATCCTATTTATTAAATTTAAAAAGCTTTCTCTTTAAGTTGCTACAATTTAAAAATCAAGTAAG
CTACTCTAAATCAGTATCAGTTGTGATTATTTGTTTAACATTGTATGTCTTTATTTTGAAATAAAT

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FIGURE 1971

MLLAMVLTSALLLCSVAGQGCPTLAGILDINFLINKMQEDPASKCHCSANVTSCLCLGIPSDNCTRPCFSERLSQ
MTNTTMQTRYPLIFSRVKKSVEVLKNNKCPYFSCEQPCNQTTAGNALTFLKSLLEIFQKEKMRGMRGKI

FIGURE 1972A

CCTAATTACATAGTTGAAAAGCGTGAATCGGGTACAACAGCTTGGCAGCTTGTCAATTCCAGTGTCAAGCGCACT
CAAATTAAAGTCACTCATCTCACAAAATACATGGAATATTCTTTCCGTGTCAGTTCAGAGAACAGATTTGGTGTC
AGCAAACCTCTAGAATCAGCACCAATAATTGCTGAACATCCATTTGTCCCACCAAGCGCTCCTACCAGACCTGAG
GTCTACCATGTGTCTGCCAATGCCATGTCTATTCGTTGGGAAGAACCCTACCACGATGGTGGCAGTAAAATCATT
GGCTACTGGGTTGAGAAGAAAGAACGTAATACAATTCTTTGGGTGAAAGAAAACAAAGTGCCATGCTTAGAGTGC
AACTACAAAGTAACTGGTTTAGTAGAAGGACTGGAATATCAGTTCAGAACTTATGCACTCAATGCTGCAGGTGTT
AGCAAGGCCAGCGAAGCTTCAAGACCTATAATGGCTCAAAATCCAGTTGATGCACCAGGCAGACCAGGGGTGACA
GATGTCCAAAGATCAACAGTATCACTGATTTGGTCTGCCCCAGCGTATGATGGAGGCAGCAAGGTTGTGGGCTAC
ATCATAGAGCGTAAGCCAGTCAGTGAGGTAGGAGATGGTCGCTGGCTGAAGTGCAACTACACCATTGTATCTGAC
AATTTCTTCACCGTGACTGCTCTCAGTGAAGGAGACACTTATGAGTTCCGTGTGTTAGCCAAGAATGCAGCAGGC
GTAATTAGCAAAGGGTCTGAATCTACAGGCCCTGTCACTTGCCGAGATGAATACGCTCCACCCAAAGCCGAACTG
GATGCCCGATTACACGGTGATCTGGTTACCATCAGAGCAGGTTCTGATCTTGTTCTGGATGCTGCAGTTGGTGGC
AAACCTGAACCCAAAATTATCTGGACCAAAGGAGACAAGGAGCTAGATCTCTGTGAAAAAGTCTCTTTGCAGTAT
ACTGGCAAACGAGCAACTGCTGTGATCAAGTTCTGTGACAGAAGTGACAGTGGAAAATACACTTTAACAGTGAAA
AATGCCAGCGGGACCAAGGCCGTGTCTGTCATGGTCAAAGTGCTTGATTCCCCTGGCCCATGTGGAAAGCTCACC
GTCAGCAGAGTAACACAGGAGAAGTGCACTTTAGCCTGGAGCCTTCCGCAGGAAGACGGAGGAGCAGAAATCACT
CACTACATCGTGGAAAGACGCGAGACTAGCAGGCTCAACTGGGTGATTGTTGAAGGCGAATGCCCAACCCTATCC
TATGTCGTTACCAGGCTCATCAAGAACAATGAGTACATATTCCGAGTGAGGGCAGTAAACAAATATGGCCCTGGT
GTGCCTGTTGAATCAGAGCCAATTGTAGCCAGAAACTCATTCACTATTCCATCACCACCCGGCATACCTGAAGAA
GTTGGGACTGGCAAAGAGCATATCATCATTCAGTGGACAAAACCTGAATCTGATGGTGGCAATGAAATCAGCAAC
TACCTAGTAGACAAACGTGAGAAGGAGAGCCTGCGCTGGACACGTGTCAACAAAGACTATGTGGTGTATGATACC
AGGCTGAAGGTGACCAGCCTGATGGAGGGTTGTGATTACCAGTTCCGGGTGACCGCAGTGAATGCAGCTGGTAAC
AGTGAGCCCAGCGAACGTTCCAACTTCATCTCATGCAGAGAACCATCATATACCCCTGGACCACCTTCTGCTCCA
AGAGTTGTGGATACCACCAAACACAGCATTAGTTTGGCATGGACCAAACCCATGTACGATGGTGGTACTGACATT
GTAGGATATGTTCTGGAAATGCAAGAGAAGGACACTGATCAGTGGTACCGAGTGCATACCAATGCCACAATAAGA
AATACTGAATTCACTGTGCCAGACCTTAAAATGGGCCAGAAATATTCCTTCAGAGTTGCTGCCGTGAACGTGAAG
GGTATGAGCGAATACAGCGAATCAATTGCTGAAATTGAGCCCGTGGAAAGAATAGAAATACCAGATCTTGAGCTT
GCAGATGATCTAAAGAAGACTGTGACCATCAGGGCTGGGGCCTCCTTGCGCTTGATGGTGTCTGTATCTGGAAGA
CCACCTCCTGTCATAACGTGGAGCAAGCAGGGCATTGACCTTGCAAGCCGGGCAATTATTGACACCACTGAGAGC
TACTCATTGCTAATAGTGGACAAAGTTAATCGGTACGATGCTGGAAAATACACAATTGAAGCTGAAAACCAATCT
GGCAAGAAATCAGCAACAGTCCTTGTTAAAGTCTATGATACTCCTGGTCCCTGTCCTTCAGTGAAAGTTAAGGAA
GTATCAAGAGATTCTGTGACTATAACTTGGGAAATTCCCACGATTGATGGTGGAGCTCCAATCAACAATTACATC
GTTGAGAAGCGTGAAGCTGCTATGAGAGCATTCAAAACAGTAACTACCAAATGCAGCAAGACACTTTACAGAATT
TCTGGACTTGTAGAAGGAACCATGCACTATTTCAGAGTGCTGCCAGAAAATATTTATGGCATTGGAGAACCTTGT
GAAACATCTGATGCAGTACTGGTCTCAGAAGTGCCTTTGGTGCCTGCAAAGCTAGAAGTGGTCGATGTCACCAAA
TCCACTGTTACCCTTGCCTGGGAAAAACCACTCTACGATGGTGGTAGCCGACTCACTGGATATGTTCTCGAGGCC
TGCAAAGCTGGCACAGAGAGATGGATGAAGGTTGTCACCTTAAAACCCACAGTCCTAGAGCACACTGTTACTTCC
TTAAATGAAGGTGAACAATACTTATTTAGAATAAGGGCACAAAATGAGAAAGGTGTGTCAGAACCAAGAGAGACT
GTCACAGCCGTGACTGTACAAGACCTCAGAGTGTTGCCAACAATCGATCTTTCTACAATGCCTCAGAAGACCATC
CATGTCCCAGCTGGCAGACCAGTAGAGCTGGTGATACCTATTGCTGGCCGTCCACCTCCTGCTGCTTCCTGGTTC
TTTGCTGGTTCTAAACTGAGAGAATCAGAGCGTGTCACAGTTGAAACTCACACTAAAGTAGCTAAATTAACCATC
CGTGAAACCACTATCAGAGATACTGGAGAATACACACTTGAATTGAAGAATGTTACCGGAACTACTTTAGAAACC
ATTAAAGTTATCATTCTTGACAAGCCTGGTCCACCAACAGGACCTATTAAGATTGATGAAATTGATGCTACATCA
ATTACCATTTCCTGGGAACCACCTGAATTGGACGGTGGTGCTCCACTGAGTGGTTATGTGGTAGAACAACGTGAC
GCTCATCGTCCAGGATGGCTGCCCGTTTCTGAATCAGTGACTAGGTCCACGTTTAAGTTTACCAGACTCACCGAA
GGAAATGAGTATGTGTTCCGTGTGGCTGCAACAAACCGCTTCGGGATTGGCTCTTACTTGCAGTCTGAGGTCATA
GAGTGTCGCAGCAGCATCCGTATTCCTGGACCCCCAGAAACATTACAGATATTTGATGTTTCCCGTGATGGCATG
ACACTTACTTGGTACCCACCAGAGGATGACGGTGGCTCCCAAGTGACTGGATATATTGTGGAGCGCAAAGAAGTG

FIGURE 1972B

AGAGCAGATCGATGGGTCCGTGTAAATAAAGTACCTGTGACAATGACACGGTACCGCTCCACTGGCCTTACTGAA
GGCTTAGAATATGAACACCGTGTCACAGCCATTAATGCAAGAGGGTCTGGGAAACCAAGTCGTCCTTCCAAACCC
ATCGTTGCCATGGATCCAATTGCTCCTCCAGGAAAGCCACAAAACCCAAGAGTTACTGATACAACAAGGACATCA
GTCTCCCTGGCCTGGAGTGTTCCAGAAGATGAAGGAGGATCTAAAGTCACAGGCTACTTGATTGAAATGCAAAAA
GTAGATCAACATGAATGGACCAAGTGTAACACCACTCCAACCAAGATTCGAGAGTATACTCTAACACACCTACCT
CAGGGTGCAGAATACAGGTTCCGCGTCCTAGCTTGTAATGCTGGTGGACCTGGTGAGCCTGCTGAGGTACCAGGA
ACAGTCAAAGTCACTGAAATGCTTGAATATCCTGATTATGAACTTGATGAAAGATACCAAGAAGGTATCTTTGTA
AGGCAAGGTGGCGTCATCAGACTTACCATACCAATCAAAGGGAAACCATTCCCAATATGTAAATGGACCAAGGAA
GGCCAGGATATTAGTAAGCGTGCCATGATTGCAACATCTGAAACACACACTGAGCTTGTGATCAAAGAAGCAGAC
AGGGGTGATTCTGGCACTTATGACCTGGTTCTGGAAAATAAATGTGGCAAGAAGGCTGTCTACATCAAGGTCAGG
GTGATAGGAAGTCCCAACAGTCCAGAAGGGCCACTGGAATATGATGACATCCAAGTCCGCTCTGTGAGGGTCAGC
TGGAGACCTCCTGCTGATGATGGTGGTGCTGACATCTTAGGCTACATCCTCGAGAGACGAGAAGTGCCTAAAGCC
GCCTGGTATACCATTGATTCCAGAGTCCGAGGTACATCTCTGGTGGTAAAAGGCCTCAAAGAGAATGTAGAATAC
CATTTCCGTGTTTCAGCAGAAAACCAGTTTGGCATAAGCAAACCCTTGAAATCTGAGGAACCAGTCACACCAAAA
ACACCATTGAATCCTCCAGAACCTCCAAGCAATCCTCCAGAAGTACTCGATGTAACCAAGAGTTCTGTTAGCTTG
TCCTGGTCCCGGCCCAAAGATGATGGTGGTTCTAGAGTCACAGGCTACTACATCGAACGCAAAGAGACATCCACT
GACAAGGTGGTCAGACACAACAAGACTCAGATCACCACCACAATGTACACTGTCACAGGGCTTGTTCCCGATGCT
GAGTATCAGTTCCGCATCATCGCACAGAATGATGTTGGCCTGAGTGAGACCAGCCCTGCTTCTGAACCAGTTGTT
TGCAAAGATCCATTTGATAAACCAAGCCAACCAGGAGAACTTGAGATTCTTTCAATATCCAAAGATAGTGTCACT
CTACAGTGGGAGAAACCTGAATGTGATGGTGGTAAAGAAATTCTTGGATACTGGGTTGAATATAGACAGTCTGGA
GACAGTGCCTGGAAGAAGAGCAATAAGGAACGTATTAAGGACAAGCAATTCACAATAGGAGGTTTGCTGGAAGCT
ACTGAGTATGAATTCAGGGTTTTTGCTGAGAATGAGACTGGGCTGAGCAGACCTCGCAGAACTGCTATGTCTATA
AAGACTAAACTCACATCTGGAGAGGCCCCAGGAATACGCAAAGAAATGAAGGATGTTACCACAAAATTGGGTGAA
GCTGCTCAACTCTCATGCCAGATTGTTGGAAGGCCTCTTCCTGACATTAAATGGTACAGATTTGGTAAAGAGCTC
ATACAAAGCCGGAAATACAAAATGTCTTCAGATGGACGCACACACACTCTTACAGTAATGACAGAGGAACAGGAA
GATGAAGGTGTTTATACCTGCATAGCCACCAATGAGGTTGGAGAAGTAGAAACCAGTAGTAAGCTTCTCCTGCAA
GCAACACCGCAGTTCCATCCTGGTTACCCACTGAAAGAGAAATATTATGGAGCTGTGGGTTCCACACTTCGGCTT
CATGTTATGTACATTGGTCGTCCAGTACCTGCCATGACTTGGTTCCATGGTCAGAAACTTTTGCAAAACTCAGAA
AACATTACTATTGAAAACACTGAGCACTATACTCATCTTGTCATGAAGAATGTCCAACGTAAGACTCATGCTGGG
AAATACAAAGTCCAGCTCAGCAATGTTTTTGGAACAGTTGATGCCATCCTTGATGTGGAAATACAAGATAAACCA
GACAAACCTACAGGACCAATTGTGATCGAAGCTCTATTGAAGAACTCCGCAGTGATCAGCTGGAAACCACCCGCA
GATGACGGAGGCTCCTGGATCACCAACTATGTGGTGGAAAAATGTGAGGCCAAGGAGGGGGCTGAATGGCAATTG
GTGTCTTCAGCCATCTCAGTGACAACCTGTAGAATTGTGAACCTCACAGAAAATGCTGGCTATTACTTCCGGGTT
TCAGCTCAGAACACTTTCGGCATCAGTGACCCTCTAGAAGTGTCCTCAGTTGTGATCATTAAGAGTCCATTTGAA
AAGCCAGGTGCTCCTGGCAAACCAACTATTACTGCTGTCACAAAAGATTCTTGTGTTGTGGCCTGGAAGCCACCT
GCCAGTGATGGAGGTGCAAAGATTAGAAATTACTACCTTGAGAAGCGTGAGAAGAAGCAGAATAAATGGATTTCT
GTGACAACAGAAGAAATTCGAGAAACTGTCTTTTCAGTGAAAAACCTTATTGAAGGTCTTGAATACGAGTTTCGT
GTGAAATGTGAAAATCTAGGTGGGGAAAGTGAATGGAGTGAAATATCAGAACCCATCACTCCCAAATCTGATGTC
CCAATTCAGGCACCACACTTTAAAGAGGAACTGAGAAATCTAAATGTCAGATATCAGAGCAATGCTACCTTGGTC
TGCAAAGTGACTGGTCATCCAAAACCTATCGTCAAATGGTACAGACAAGGCAAAGAAATCATTGCAGATGGATTA
AAATATAGGATTCAAGAATTTAAGGGTGGCTACCACCAGCTCATCATTGCAAGTGTCACAGATGATGATGCCACA
GTTTACCAAGTCAGAGCTACCAACCAAGGGGGATCTGTGTCTGGCACTGCCTCCTTGGAAGTGGAAGTTCCAGCT
AAGATACACTTACCTAAAACTCTTGAAGGCATGGGAGCAGTTCATGCTCTCCGAGGTGAAGTGGTCAGCATCAAG
ATTCCTTTCAGTGGCAAACCAGATCCTGTGATCACCTGGCAGAAAGGACAAGATCTCATTGACAATAATGGCCAC
TACCAAGTTATTGTCACAAGATCCTTCACATCACTTGTTTTCCCCAATGGGGTAGAGAGAAAAGATGCTGGTTTC
TATGTGGTCTGTGCTAAAAACAGATTTGGAATTGATCAGAAGACAGTTGAACTGGATGTGGCTGATGTTCCTGAC
CCACCCAGAGGAGTCAAAGTTAGTGATGCCTCACGAGATTCTGTCAACTTAACATGGACTGAGCCAGCCTCTGAT
GGTGGCAGCAAAATCACCAACTACATTGTTGAAAAATGTGCAACTACTGCAGAAAGATGGCTCCGTGTAGGACAG

FIGURE 1972C

GCCCGAGAAACACGTTATACCGTGATCAACTTATTTGGAAAAACAAGTTACCAGTTCCGGGTAATAGCTGAAAAT
AAATTTGGTCTGAGCAAGCCTTCAGAGCCTTCAGAACCAACCATAACCAAAGAAGATAAGACCAGAGCTATGAAC
TATGATGAAGAGGTAGATGAAACCAGGGAAGTCTCCATGACTAAAGCATCTCACTCTTCAACCAAGGAACTCTAT
GAGAAATATATGATTGCTGAAGATCTTGGGCGTGGTGAGTTTGGAATTGTCCATCGTTGTGTTGAAACATCCTCA
AAGAAGACATACATGGCCAAATTTGTTAAAGTCAAAGGGACTGATCAGGTTTTGGTAAAGAAGGAAATTTCCATT
CTGAATATTGCTAGGCATAGAAACATCTTACACCTCCATGAATCATTTGAAAGCATGGAAGAATTAGTTATGATC
TTTGAGTTTATATCAGGACTTGACATATTTGAGCGCATTAACACAAGTGCTTTTGAACTTAATGAAAGAGAAATT
GTAAGTTATGTTCACCAGGTCTGTGAAGCACTTCAGTTTTTACACAGTCATAATATTGGACACTTTGACATTAGA
CCAGAAAATATCATTTACCAAACCAGAAGAAGCTCTACCATTAAAATCATAGAATTTGGTCAAGCCCGTCAGCTG
AAACCAGGGGACAACTTCAGGCTTCTATTCACTGCCCCAGAATACTATGCACCTGAAGTCCACCAGCATGATGTT
GTCAGCACAGCCACAGACATGTGGTCACTTGGAACACTGGTATATGTGCTATTGAGTGGTATCAACCCATTCCTG
GCTGAAACTAACCAACAGATCATTGAGAATATCATGAATGCTGAATATACTTTCGATGAGGAAGCATTCAAAGAG
ATTAGCATTGAAGCCATGGATTTTGTTGACCGGTTGTTAGTGAAAGAGAGGAAATCTCGCATGACAGCATCGGAG
GCTCTCCAGCACCCATGGTTGAAGCAGAAGATAGAAAGAGTCAGTACTAAAGTTATCAGAACATTAAAACACCGG
CGTTATTACCACACCCTGATCAAGAAAGACCTCAACATGGTTGTGTCAGCAGCCCGGATCTCCTGTGGTGGTGCA
ATTCGATCTCAGAAGGGAGTGAGTGTTGCTAAAGTTAAAGTGGCATCCATTGAAATTGGCCCAGTTTCTGGGCAG
ATAATGCATGCAGTTGGTGAAGAAGGAGGACATGTCAAATATGTATGCAAAATTGAAAATTATGATCAGTCTACC
CAAGTGACTTGGTACTTTGGTGTCCGACAGCTGGAGAACAGTGAGAAATACGAAATCACCTACGAAGATGGAGTG
GCCATCCTCTATGTCAAAGACATTACCAAATTAGATGATGGTACCTACAGATGCAAAGTAGTCAATGACTATGGT
GAAGACAGTTCTTATGCAGAGCTATTTGTTAAAGGTGTGAGAGAAGTCTATGACTATTACTGCCGTAGAACCATG
AAGAAAATTAAGCGCAGAACAGACACAATGAGACTCCTGGAAAGGCCACCAGAATTTACCCTGCCTCTCTATAAT
AAGACAGCTTATGTAGGTGAAAATGTCCGGTTTGGAGTAACTATAACTGTCCACCCAGAGCCTCATGTAACATGG
TATAAATCAGGTCAGAAAATCAAACCAGGTGACAATGACAAGAAGTACACATTTGAGTCAGACAAGGGTCTTTAC
CAATTAACAATCAACAGTGTCACTACAGATGATGACGCTGAATATACTGTTGTGGCAAGGAACAAATATGGTGAA
GACAGCTGTAAAGCAAAGCTGACAGTAACCCTACACCCACCTCCAACAGATAGTACCTTAAGACCCATGTTCAAA
AGGTTACTGGCAAATGCAGAATGCCAAGAAGGCCAAAGTGTCTGCTTTGAGATCAGAGTGTCTGGCATCCCCCCA
CCAACATTAAAATGGGAGAAAGATGGTCAGCCACTGTCCCTCGGGCCTAACATTGAAATTATCCATGAAGGCTTG
GATTATTATGCTCTGCACATCAGGGACACTTTGCCTGAAGACACGGGTTATTATAGAGTCACAGCCACTAACACA
GCTGGGTCCACCAGCTGCCAGGCTCACCTACAAGTGGAACGCCTGAGGTACAAGAAACAGGAATTCAAGAGTAAG
GAGGAGCATGAGCGACACGTACAAAAACAAATTGACAAAACCCTCAGAATGGCTGAAATTCTTTCTGGAACTGAA
AGTGTACCACTGACACAGGTAGCTAAAGAGGCTCTGAGAGAAGCTGCTGTCCTTTATAAACCGGCTGTAAGCACC
AAGACTGTAAAAGGGGAATTCAGACTTGAGATAGAAGAAAAGAAGGAGGAGAGAAAACTCCGGATGCCTTATGAT
GTACCAGAGCCACGCAAGTATAAGCAGACTACCATAGAAGAAGACCAACGCATCAAGCAGTTCGTGCCCATGTCT
GACATGAAGTGGTATAAAAAGATACGTGATCAGTATGAAATGCCTGGGAAACTTGACAGAGTTGTACAGAAACGA
CCCAAGCGCATCCGCCTTTCAAGATGGGAACAGTTCTATGTGATGCCTCTTCCACGCATTACAGATCAATACAGA
CCTAAATGGCGTATTCCTAAACTGTCCCAAGATGATCTTGAGATAGTGAGACCAGCCCGCCGGCGTACACCTTCT
CCTGATTATGACTTTTACTACCGACCTAGAAGACGTTCTCTTGGGGACATCTCTGATGAAGAATTACTCCTCCCC
ATTGATGACTACTTAGCAATGAAAAGAACAGAGGAAGAGAGGCTGCGTCTTGAAGAAGAGCTTGAGTTAGGTTTT
TCAGCTTCACCCCCAAGTCGAAGCCCTCCACACTTTGAGCTTTCTAGCCTACGTTACTCTTCACCACAAGCTCAT
GTCAAGGTGGAGGAAACAAGAAAAAACTTCAGGTATTCAACCTATCACATCCCAACGAAGGCTGAAGCTAGTACA
AGTTATGCAGAACTGAGGGAACGGCATGCCCAGGCTGCGTACAGACAGCCAAAGCAACGGCAAAGAATCATGGCT
GAGAGGGAGGATGAAGAGTTGCTTCGCCCAGTTACGACCACCCAGCATCTCTCAGAATACAAAAGCGAACTTGAC
TTCATGTCAAAGGAGGAAAAGTCTAGAAAGAAATCAAGGCGACAAAGAGAAGTGACAGAAATAACAGAAATTGAG
GAAGAATACGAAATCTCAAAACATGCTCAAAGAGAATCATCCTCATCTGCGTCTAGACTACTGAGACGACGGCGC
TCCCTGTCTCCAACTTATATTGAGTTAATGAGGCCAGTGTCTGAGCTGATCCGGTCACGTCCACAACCGGCTGAG
GAATACGAAGATGACACAGAAAGAAGGTCACCTACTCCAGAGAGAACTCGCCCACGATCCCCCAGCCCTGTGTCT
AGTGAGAGATCACTCTCGAGATTTGAGAGGTCTGCAAGATTTGATATCTTTTCCAGGTATGAGTCCATGAAAGCT
GCTTTAAAAACTCAGAAGACATCAGAAAGGAAGTATGAAGTTTTGAGTCAGCAGCCTTTCACACTGGACCATGCC

FIGURE 1972D

CCTCGAATCACACTGAGAATGCGCTCGCACAGGGTACCATGTGGCCAAAATACACGTTTTATTTTAAATGTTCAG
TCTAAGCCAACTGCCGAAGTTAAATGGTACCACAATGGTGTGGAACTCCAAGAAAGCAGTAAGATTCATTACACC
AACACGAGTGGAGTTCTCACCCTGGAAATTCTGGACTGTCATACTGATGACAGTGGAACCTACCGTGCTGTGTGC
ACCAACTACAAGGGCGAACGTTCTGACTATGCAACGTTGGACGTGACAGGAGGGGATTATACCACCTATGCTTCC
CAACGCAGAGATGAAGAGGTCCCCAGATCTGTTTTCCCTGAGCTGACAAGAACAGAGGCGTATGCTGTTCCATCA
TTTAAGAAAACATCTGAGATGGAAGCTTCGTCTTCTGTCAGGGAAGTGAAATCACAGATGACGGAGACAAGGGAA
AGTCTCTCCTCATATGAACACTCTGCATCTGCAGAAATGAAAAGTGCTGCATTAGAAGAAAAGTCACTGGAAGAA
AAATCCACAACCAGAAAGATCAAGACGACTTTGGCGGCAAGAATTCTAACAAAGCCACGGTCCATGACCGTCTAC
GAGGGCGAGTCTGCAAGGTTTTCTTGTGACACCGATGGTGAGCCGGTACCAACTGTGACCTGGCTGCGTAAAGGA
CGAGTGCTAAGTACTTCTGCCCGCCACCAAGTGACCACCACAAAGTACAAATCAACCTTTGAGATCTCTTCAGTC
CAGGCTTCCGATGAGGGCAATTACAGCGTGGTGGTAGAAAACAGTGAAGGGAAACAAGAAGCAGAGTTCACTCTG
ACTATTCAAAAGGCCAGGGTAACTGAAAAGGCTGTGACATCACCACCAAGAGTCAAATCCCCAGAGCCTCGGGTG
AAATCCCCAGAAGCAGTTAAGTCTCCAAAACGAGTGAAATCTCCAGAACCTTCTCACCCGAAAGCCGTATCACCC
ACAGAGACAAAACCAACACCAATAGAGAAAGTTCAGCACCTCCCAGTCTCTGCCCCACCAAAGATTACTCAGTTC
CTGAAAGCAGAAGCTTCTAAAGAGATTGCAAAACTGACCTGTGTGGTTGAAAGCAGTGTATTAAGGGCAAAAGAG
GTCACCTGGTATAAAGATGGCAAGAAACTGAAGGAAAATGGGCATTTCCAGTTTCATTATTCAGCAGATGGTACC
TATGAGCTCAAAATCAATAACCTCACTGAATCTGATCAAGGAGAATATGTTTGTGAGATTTCTGGTGAAGGTGGA
ACGTCTAAAACCAACTTACAATTTATGGGGCAAGCCTTTAAGAGTATCCATGAGAAGGTATCAAAAATATCAGAA
ACTAAGAAATCAGATCAGAAAACCACTGAGTCAACAGTAACCAGAAAAACTGAACCAAAAGCTCCTGAACCAATT
TCCTCAAAACCAGTAATTGTTACTGGGTTGCAGGATACAACTGTTTCTTCAGACAGTGTTGCTAAATTTGCAGTT
AAGGCTACTGGAGAACCCCGGCCAACTGCCATCTGGACAAAAGATGGAAAGGCCATTACACAAGGAGGTAAATAT
AAACTCTCTGAAGACAAGGGAGGGTTCTTCTTAGAAATTCATAAGACTGATACTTCTGACAGTGGACTTTATACT
TGTACAGTAAAAAATTCAGCTGGATCTGTGTCCTCTAGCTGCAAATTAACAATAAAAGCTATAAAAGATACTGAG
GCACAGAAAGTCTCTACACAAAAGACTTCTGAAATTACACCTCAGAAGAAAGCTGTTGTCCAAGAGGAAATTTCC
CAAAAAGCCCTAAGGTCTGAAGAAATTAAGATGTCAGAGGCAAAATCTCAAGAAAAGTTAGCCCTCAAAGAGGAA
GCTTCAAAGGTTCTGATTTCTGAAGAAGTCAAGAAATCAGCAGCAACCTCCCTGGAAAAATCCATTGTCCATGAG
GAAATCACTAAAACATCACAGGCATCAGAAGAAGTCAGAACTCATGCTGAGATTAAAGCATTTTCTACTCAGATG
AGCATAAACGAAGGTCAAAGACTGGTTTTAAAAGCCAACATTGCTGGTGCCACTGATGTGAAATGGGTACTGAAT
GGCGTAGAGCTTACCAACTCTGAGGAGTACCGATATGGTGTCTCAGGCAGCGATCAGACCCTAACCATCAAGCAA
GCCAGTCACAGAGATGAAGGAATCCTCACCTGCATAAGCAAAACCAAGGAAGGAATCGTCAAGTGTCAGTATGAT
TTGACACTGAGCAAAGAACTCTCAGATGCTCCAGCCTTCATCTCACAGCCTAGATCTCAAAATATTAATGAAGGA
CAAAATGTTCTCTTTACTCGTGAAATCAGTGGCGAGCCATCCCCTGAAATCGAATGGTTTAAAAACAACCTGCCA
ATTTCTATTTCTTCAAATGTCAGCATAAGCCGCTCCAGAAATGTATACTCCCTTGAAATCCGAAATGCATCAGTC
AGCGACAGTGGAAAGTACACAATTAAGGCCAAAAATTTCCGTGGCCAGTGTTCAGCTACAGCTTCCTTAATGGTC
CTTCCTCTAGTTGAAGAACCTTCCAGAGAGGTAGTATTGAGAACAAGTGGTGACACAAGCTTGCAAGGAAGCTTC
TCGTCTCAGTCAGTCCAAATGTCTGCCTCCAAGCAGGAGGCCTCCTTCAGCAGTTTCAGCAGCAGCAGTGCTAGC
AGCATGACTGAGATGAAATTTGCAAGCATGTCTGCCCAAAGCATGTCCTCCATGCAAGAGTCCTTTGTAGAAATG
AGTTCCAGCAGCTTTATGGGAATATCTAATATGACACAACTGGAAAGCTCAACTAGTAAAATGCTTAAAGCAGGC
ATAAGAGGAATTCCGCCTAAAATTGAAGCTCTTCCATCTGATATCAGCATTGATGAAGGCAAAGTTCTAACAGTA
GCCTGTGCTTTCACGGGTGAGCCTACCCCAGAAGTAACATGGTCCTGTGGTGGAAGAAAAATCCACAGTCAAGAA
CAGGGGAGGTTCCACATTGAAAACACAGATGACCTGACAACCCTGATCATCATGGACGTACAGAAACAAGATGGT
GGACTTTATACCCTGAGTTTAGGGAATGAATTTGGATCTGACTCTGCCACTGTGAATATACATATTCGATCCATT
TAAGAGGGCCTGTGCCTTATACTCTACACTCATTCTTAACTTTTCGCAAACGTTTCACACGGACTAATCTTTCTG
AACTGTAAATATTTAAAGAAAAAAAGTAGTTTTGTATCAACCTAAATGAGTCAAAGTTCAAAAATATTCATTTCA
ATCTTTTCATAATTGTTGACCTAAGAATATAATACATTTGCTAGTGACATGTACATACTGTATATAGCCGGATTA
ACGGTTATAAAGTTTTGTACCATTTATTTTATGACATTTTACAATGTAAGTTTTGAAACTAACTGTTGGTAGGAG
AAAGTTTCTTATGGAACGAATACCCTGCTCAACATTTAATCAATCTTTGTGCCTCAACATACTGTTGATGTCTAA
GTATGCCTCAGTGGGTTGAGAAAATCCCCATTGAAGATGTCCTGTCCACCTAAAAGAGAATGATGCTGTGCATAT

FIGURE 1972E

CACTTGATATGTGCACCAATACCTACTGAATCAGAAATGTAAGGCATTGGTGATGTTTGCATTTACCCTCCTGTA
AGCAACACTTTAACGTCTTACATTTTCTCTGATGATGTCACACAAAATTATCATGACAAATATTACCAGAGCAAA
GTGTAACGGCCAACACTTTGTTCGCTCATTTTACGCTGTCTCTGACATAAGGAGTGCCTGAATAGCTTGGAAAAG
TAACATCTCCTGGCCATCCCTTCATTTAACCAAGCTATTCAAGTATTCCTATGCCAGAGCAGTGCCAACTCTTGG
AGGTCCCAGAGTGCAGCCAATGCCTTTGTGTGGTAGTTCTAAATTTTAATTGCACCTGAAAAACCTGGGCACCTA
AGCAATGAGCCACAGCAAAAAGTAAAGAACAACAACAAAATAAAGCTGTTGTTAAATTTTAAACAATATTACTAA
TTGCCCAAAATGTCAATTTGATGTAGTTCTTTTCATGCAAGTATAAATTCAATTGTTAGTTATAATTGTTGGACC
TCCTTGAGATAGTAACAACAAAATAAAGCAAGCTATCTGCACCTCAAAAAAAAAAAAAAA

FIGURE 1973

CGATTTCATTCCTCGCTCCCCACAGGTCCCTCTCCCCAAAATATTCCCATCTTGTCCTAGCCCATCCCCCAGACT
ATCTCAAGGACCAGCTGTCCCCACGCCCCCGACCTCCACTAGGCCTGTGCCACCCGCTGCCTGCAGGAAGACGCC
CGGTCCCGGGCCGGGTTAGCCCCATGGGAACGCAGCGCCTGTGTGGCCGCGGGACTCAAGGCTGGCCTGGCTCAA
GTGAACAGCACGTCCAGGAGGCGACCTCGTCCGCGGGTTTGCATTCTGGGGTGGACGAGCTGGGGGTTCGGTCCG
AGCCCGGTGGGAGGCTCCCGGAGCGCAGCCTGGGCCCAGCCCACCCCGCGCCGGCGGCCATGGCAGGCACCCTGG
ACCTGGACAAGGGCTGCACGGTGGAGGAGCTGCTCCGCGGGTGCATCGAAGCCTTCGATGACTCCGGGAAGGTGC
GGGACCCGCAGCTGGTGCGCATGTTCCTCATGATGCACCCCTGGTACATCCCCTCCTCTCAGCTGGCGGCCAAGC
TGCTCCACATCTACCAACAATCCCGGAAGGACAACTCCAATTCCCTGCAGGTGAAAACGTGCCACCTGGTCAGGT
ACTGGATCTCCGCCTTCCCAGCGGAGTTTGACTTGAACCCGGAGTTGGCTGAGCAGATCAAGGAGCTGAAGGCTC
TGCTAGACCAAGAAGGGAACCGACGGCACAGCAGCCTAATCGACATAGACAGCGTCCCTACCTACAAGTGGAAGC
GGCAGGTGACTCAGCGGAACCCTGTGGGACAGAAAAAGCGCAAGATGTCCCTGTTGTTTGACCACCTGGAGCCCA
TGGAGCTGGCGGAGCATCTCACCTACTTGGAGTATCGCTCCTTCTGCAAGATCCTGTTTCAGGACTATCACAGTT
TCGTGACTCATGGCTGCACTGTGGACAACCCCGTCCTGGAGCGGTTCATCTCCCTCTTCAACAGCGTCTCACAGT
GGGTGCAGCTCATGATCCTCAGCAAACCCACAGCCCCGCAGCGGGCCCTGGTCATCACACACTTTGTCCACGTGG
CGGAGAAGCTGCTACAGCTGCAGAACTTCAACACGCTGATGGCAGTGGTCGGGGGCCTGAGCCACAGCTCCATCT
CCCGCCTCAAGGAGACCCACAGCCACGTTAGCCCTGAGACCATCAAGCTCTGGGAGGGTCTCACGGAACTAGTGA
CGGCGACAGGCAACTATGGCAACTACCGGCGTCGGCTGGCAGCCTGTGTGGGCTTCCGCTTCCCGATCCTGGGTG
TGCACCTCAAGGACCTGGTGGCCCTGCAGCTGGCACTGCCTGACTGGCTGGACCCAGCCCGGACCCGGCTCAACG
GGGCCAAGATGAAGCAGCTCTTTAGCATCCTGGAGGAGCTGGCCATGGTGACCAGCCTGCGGCCACCAGTACAGG
CCAACCCCGACCTGCTGAGCCTGCTCACGGTGTCTCTGGATCAGTATCAGACGGAGGATGAGCTGTACCAGCTGT
CCCTGCAGCGGGAGCCGCGCTCCAAGTCCTCGCCAACCAGCCCCACGAGTTGCACCCCACCACCCCGGCCCCCGG
TACTGGAGGAGTGGACCTCGGCTGCCAAACCCAAGCTGGATCAGGCCCTCGTGGTGGAGCACATCGAGAAGATGG
TGGAGTCTGTGTTCCGGAACTTTGACGTCGATGGGGATGGCCACATCTCACAGGAAGAATTCCAGATCATCCGTG
GGAACTTCCCTTACCTCAGCGCCTTTGGGGACCTCGACCAGAACCAGGATGGCTGCATCAGCAGGGAGGAGATGG
TTTCCTATTTCCTGCGCTCCAGCTCTGTGTTGGGGGGGCGCATGGGCTTCGTACACAACTTCCAGGAGAGCAACT
CCTTGCGCCCCGTCGCCTGCCGCCACTGCAAAGCCCTGATCCTGGGCATCTACAAGCAGGGCCTCAAATGCCGAG
CCTGTGGAGTGAACTGCCACAAGCAGTGCAAGGATCGCCTGTCAGTTGAGTGTCGGCGCAGGGCCCAGAGTGTGA
GCCTGGAGGGGTCTGCACCCTCACCCTCACCCATGCACAGCCACCATCACCGCGCCTTCAGCTTCTCTCTGCCCC
GCCCTGGCAGGCGAGGCTCCAGGCCTCCAGAGATCCGTGAGGAGGAGGTACAGACGGTGGAGGATGGGGTGTTTG
ACATCCACTTGTAATAGATGCTGTGGTTGGATCAAGGACTCATTCCTGCCTTGGAGAAAATACTTCAACCAGAGC
AGGGAGCCTGGGGGTGTCGGGGCAGGAGGCTGGGGATGGGGGTGGGATATGAGGGTGGCATGCAGCTGAGGGCAG
GGCCAGGGCTGGTGTCCCTAAGGTTGTACAGACTCTTGTGAATATTTGTATTTTCCAGATGGAATAAAAAGGCCC
GTGTAATTAACCTTCA

FIGURE 1974

MGTQRLCGRGTQGWPGSSEQHVQEATSSAGLHSGVDELGVRSEPGGRLPERSLGPAHPAPAAMAGTLDLDKGCTV
EELLRGCIEAFDDSGKVRDPQLVRMFLMMHPWYIPSSQLAAKLLHIYQQSRKDNSNSLQVKTCHLVRYWISAFPA
EFDLNPELAEQIKELKALLDQEGNRRHSSLIDIDSVPTYKWKRQVTQRNPVGQKKRKMSLLFDHLEPMELAEHLT
YLEYRSFCKILFQDYHSFVTHGCTVDNPVLERFISLFNSVSQWVQLMILSKPTAPQRALVITHFVHVAEKLLQLQ
NFNTLMAVVGGLSHSSISRLKETHSHVSPETIKLWEGLTELVTATGNYGNYRRRLAACVGFRFPILGVHLKDLVA
LQLALPDWLDPARTRLNGAKMKQLFSILEELAMVTSLRPPVQANPDLLSLLTVSLDQYQTEDELYQLSLQREPRS
KSSPTSPTSCTPPPRPPVLEEWTSAAKPKLDQALVVEHIEKMVESVFRNFDVDGDGHISQEEFQIIRGNFPYLSA
FGDLDQNQDGCISREEMVSYFLRSSSVLGGRMGFVHNFQESNSLRPVACRHCKALILGIYKQGLKCRACGVNCHK
QCKDRLSVECRRRAQSVSLEGSAPSPSPMHSHHHRAFSFSLPRPGRRGSRPPEIREEEVQTVEDGVFDIHL

FIGURE 1975

GCCATAAAGGCCGCCGCGCGCCCACGCGCCTCGCTTGCTGCGCGCTGCCGGCGCTCCTTCCTCCTCGGCTCGCGT
CTCACTCAGTGTACCTTCTAGTCCCGCC**ATG**GCCGCTCTCACCCGGGACCCCCAGTTCCAGAAGCTGCAGCAATG
GTACCGCGAGCACCGCTCCGAGCTGAACCTGCGCCGCCTCTTCGATGCCAACAAGGACCGCTTCAACCACTTCAG
CTTGACCCTCAACACCAACCATGGGCATATCCTGGTGGATTACTCCAAGAACCTGGTGACGGAGGACGTGATGCG
GATGCTGGTGGACTTGGCCAAGTCCAGGGGCGTGGAGGCCGCCCGGGAGCGGATGTTCAATGGTGAGAAGATCAA
CTACACCGAGGGTCGAGCCGTGCTGCACGTGGCTCTGCGGAACCGGTCAAACACACCCATCCTGGTAGACGGCAA
GGATGTGATGCCAGAGGTCAACAAGGTTCTGGACAAGATGAAGTCTTTCTGCCAGCGTGTCCGGAGCGGTGACTG
GAAGGGGTACACAGGCAAGACCATCACGGACGTCATCAACATTGGCATTGGCGGCTCCGACCTGGGACCCCTCAT
GGTGACTGAAGCCCTTAAGCCATACTCTTCAGGAGGTCCCCGCGTCTGGTATGTCTCCAACATTGATGGAACTCA
CATTGCCAAAACCCTGGCCCAGCTGAACCCCGAGTCCTCCCTGTTCATCATTGCCTCCAAGACCTTTACTACCCA
GGAGACCATCACGAATGCAGAGACGGCGAAGGAGTGGTTTCTCCAGGCGGCCAAGGATCCTTCTGCAGTGGCGAA
GCACTTTGTTGCCCTGTCTACTAACACAACCAAAGTGAAGGAGTTTGGAATTGACCCTCAAAACATGTTCGAGTT
CTGGGATTGGGTGGGAGGACGCTACTCGCTGTGGTCGGCCATCGGACTCTCCATTGCCCTGCACGTGGGTTTTGA
CAACTTCGAGCAGCTGCTCTCGGGGGCTCACTGGATGGACCAGCACTTCCGCACGACGCCCCTGGAGAAGAACGC
CCCCGTCTTGCTGGCCCTGCTGGGTATCTGGTACATCAACTGCTTTGGGTGTGAGACACACGCCATGCTGCCCTA
TGACCAGTACCTGCACCGCTTTGCTGCGTACTTCCAGCAGGGCGACATGGAGTCCAATGGGAAATACATCACCAA
ATCTGGAACCCGTGTGGACCACCAGACAGGCCCCATTGTGTGGGGGGAGCCAGGGACCAATGGCCAGCATGCTTT
TTACCAGCTCATCCACCAAGGCACCAAGATGATACCCTGTGACTTCCTCATCCCGGTCCAGACCCAGCACCCCAT
ACGGAAGGGTCTGCATCACAAGATCCTCCTGGCCAACTTCTTGGCCCAGACAGAGGCCCTGATGAGGGGAAAATC
GACGGAGGAGGCCCGAAAGGAGCTCCAGGCTGCGGGCAAGAGTCCAGAGGACCTTGAGAGGCTGCTGCCACATAA
GGTCTTTGAAGGAAATCGCCCAACCAACTCTATTGTGTTCACCAAGCTCACACCATTCATGCTTGGAGCCTTGGT
CGCCATGTATGAGCACAAGATCTTCGTTCAGGGCATCATCTGGGACATCAACAGCTTTGACCAGTGGGGAGTGGA
GCTGGGAAAGCAGCTGGCTAAGAAAATAGAGCCTGAGCTTGATGGCAGTGCTCAAGTGACCTCTCACGACGCTTC
TACCAATGGGCTCATCAACTTCATCAAGCAGCAGCGCGAGGCCAGAGTCCAA**TAA**ACTCGTGCTCATCTGCAGCC
TCCTCTGTGACTCCCCTTTCTCTTCTCGTCCCTCCTCCCCGGAGCCGGCACTGCATGTTCCTGGACACCACCCAG
AGCACCCTCTGGTTGTGGGCTTGGACCACGAGCCCTTAGCAGGGAAGGCTGGTCTCCCCCAGCCTAACCCCCAGC
CCCTCCATGTCTATGCTCCCTCTGTGTTAGAATTGGCTGAAGTGTTTTTGTGCAGCTGACTTTTCTGACCCATGT
TCACGTTGTTCACATCCCATGTAGAAAAATAAAGATGCCACGGAGGAGGT

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FIGURE 1976

MAALTRDPQFQKLQQWYREHRSELNLRRLFDANKDRFNHFSLTLNTNHGHILVDYSKNLVTEDVMRMLVDLAKSR
GVEAARERMFNGEKINYTEGRAVLHVALRNRSNTPILVDGKDVMPEVNKVLDKMKSFCQRVRSGDWKGYTGKTIT
DVINIGIGGSDLGPLMVTEALKPYSSGGPRVWYVSNIDGTHIAKTLAQLNPESSLFIIASKTFTTQETITNAETA
KEWFLQAAKDPSAVAKHFVALSTNTTKVKEFGIDPQNMFEFWDWVGGRYSLWSAIGLSIALHVGFDNFEQLLSGA
HWMDQHFRTTPLEKNAPVLLALLGIWYINCFGCETHAMLPYDQYLHRFAAYFQQGDMESNGKYITKSGTRVDHQT
GPIVWGEPGTNGQHAFYQLIHQGTKMIPCDFLIPVQTQHPIRKGLHHKILLANFLAQTEALMRGKSTEEARKELQ
AAGKSPEDLERLLPHKVFEGNRPTNSIVFTKLTPFMLGALVAMYEHKIFVQGIIWDINSFDQWGVELGKQLAKKI
EPELDGSAQVTSHDASTNGLINFIKQQREARVQ

FIGURE 1977A

GGTGGCGCGAGCTTCTGAAACTAGGCGGCAGAGGCGGAGCCGCTGTGGCACTGCTGCGCCTCTGCTGCGCCTCGG
GTGTCTTTTGCGGCGGTGGGTCGCCGCCGGGAGAAGCGTGAGGGGACAGATTTGTGACCGGCGCGGTTTTTGTCA
GCTTACTCCGGCCAAAAAAGAACTGCACCTCTGGAGCGGACTTATTTACCAAGCATTGGAGGAATATCGTAGGTA
AAAATGCCTATTGGATCCAAAGAGAGGCCAACATTTTTTGAAATTTTTAAGACACGCTGCAACAAAGCAGATTTA
GGACCAATAAGTCTTAATTGGTTTGAAGAACTTTCTTCAGAAGCTCCACCCTATAATTCTGAACCTGCAGAAGAA
TCTGAACATAAAAACAACAATTACGAACCAAACCTATTTAAAACTCCACAAAGGAAACCATCTTATAATCAGCTG
GCTTCAACTCCAATAATATTCAAAGAGCAAGGGCTGACTCTGCCGCTGTACCAATCTCCTGTAAAAGAATTAGAT
AAATTCAAATTAGACTTAGGAAGGAATGTTCCCAATAGTAGACATAAAAGTCTTCGCACAGTGAAAACTAAAATG
GATCAAGCAGATGATGTTTCCTGTCCACTTCTAAATTCTTGTCTTAGTGAAAGTCCTGTTGTTCTACAATGTACA
CATGTAACACCACAAAGAGATAAGTCAGTGGTATGTGGGAGTTTGTTTCATACACCAAAGTTTGTGAAGGGTCGT
CAGACACCAAAACATATTTCTGAAAGTCTAGGAGCTGAGGTGGATCCTGATATGTCTTGGTCAAGTTCTTTAGCT
ACACCACCCACCCTTAGTTCTACTGTGCTCATAGTCAGAAATGAAGAAGCATCTGAAACTGTATTTCCTCATGAT
ACTACTGCTAATGTGAAAAGCTATTTTTCCAATCATGATGAAAGTCTGAAGAAAAATGATAGATTTATCGCTTCT
GTGACAGACAGTGAAAACACAAATCAAAGAGAAGCTGCAAGTCATGGATTTGGAAAAACATCAGGGAATTCATTT
AAAGTAAATAGCTGCAAAGACCACATTGGAAAGTCAATGCCAAATGTCCTAGAAGATGAAGTATATGAAACAGTT
GTAGATACCTCTGAAGAAGATAGTTTTTCATTATGTTTTTCTAAATGTAGAACAAAAAATCTACAAAAAGTAAGA
ACTAGCAAGACTAGGAAAAAAATTTTCCATGAAGCAAACGCTGATGAATGTGAAAAATCTAAAAACCAAGTGAAA
GAAAAATACTCATTTGTATCTGAAGTGGAACCAAATGATACTGATCCATTAGATTCAAATGTAGCACATCAGAAG
CCCTTTGAGAGTGGAAGTGACAAAATCTCCAAGGAAGTTGTACCGTCTTTGGCCTGTGAATGGTCTCAACTAACC
CTTTCAGGTCTAAATGGAGCCCAGATGGAGAAAATACCCCTATTGCATATTTCTTCATGTGACCAAAATATTTCA
GAAAAAGACCTATTAGACACAGAGAACAAAAGAAAGAAAGATTTTCTTACTTCAGAGAATTCTTTGCCACGTATT
TCTAGCCTACCAAAATCAGAGAAGCCATTAAATGAGGAAACAGTGGTAAATAAGAGAGATGAAGAGCAGCATCTT
GAATCTCATACAGACTGCATTCTTGCAGTAAAGCAGGCAATATCTGGAACTTCTCCAGTGGCTTCTTCATTTCAG
GGTATCAAAAAGTCTATATTCAGAATAAGAGAATCACCTAAAGAGACTTTCAATGCAAGTTTTTCAGGTCATATG
ACTGATCCAAACTTTAAAAAAGAAACTGAAGCCTCTGAAAGTGGACTGGAAATACATACTGTTTGCTCACAGAAG
GAGGACTCCTTATGTCCAAATTTAATTGATAATGGAAGCTGGCCAGCCACCACCACACAGAATTCTGTAGCTTTG
AAGAATGCAGGTTTAATATCCACTTTGAAAAAGAAAACAAATAAGTTTATTTATGCTATACATGATGAAACATTT
TATAAAGGAAAAAAAATACCGAAAGACCAAAAATCAGAACTAATTAACTGTTCAGCCCAGTTTGAAGCAAATGCT
TTTGAAGCACCACTTACATTTGCAAATGCTGATTCAGGTTTATTGCATTCTTCTGTGAAAAGAAGCTGTTCACAG
AATGATTCTGAAGAACCAACTTTGTCCTTAACTAGCTCTTTTGGGACAATTCTGAGGAAATGTTCTAGAAATGAA
ACATGTTCTAATAATACAGTAATCTCTCAGGATCTTGATTATAAAGAAGCAAAATGTAATAAGGAAAAACTACAG
TTATTTATTACCCCAGAAGCTGATTCTCTGTCATGCCTGCAGGAAGGACAGTGTGAAAATGATCCAAAAAGCAAA
AAAGTTTCAGATATAAAAGAAGAGGTCTTGGCTGCAGCATGTCACCCAGTACAACATTCAAAAGTGGAATACAGT
GATACTGACTTTCAATCCCAGAAAAGTCTTTTATATGATCATGAAAATGCCAGCACTCTTATTTTAACTCCTACT
TCCAAGGATGTTCTGTCAAACCTAGTCATGATTTCTAGAGGCAAAGAATCATACAAAATGTCAGACAAGCTCAAA
GGTAACAATTATGAATCTGATGTTGAATTAACCAAAAATATTCCCATGGAAAAGAATCAAGATGTATGTGCTTTA
AATGAAAATTATAAAAACGTTGAGCTGTTGCCACCTGAAAAATACATGAGAGTAGCATCACCTTCAAGAAAGGTA
CAATTCAACCAAAACACAAATCTAAGAGTAATCCAAAAAAATCAAGAAGAAACTACTTCAATTTCAAAAATAACT
GTCAATCCAGACTCTGAAGAACTTTTCTCAGACAATGAGAATAATTTTGTCTTCCAAGTAGCTAATGAAAGGAAT
AATCTTGCTTTAGGAAATACTAAGGAACTTCATGAAACAGACTTGACTTGTGTAAACGAACCCATTTTCAAGAAC
TCTACCATGGTTTTATATGGAGACACAGGTGATAAACAAGCAACCCAAGTGTCAATTAAAAAAGATTTGGTTTAT
GTTCTTGCAGAGGAGAACAAAAATAGTGTAAAGCAGCATATAAAAATGACTCTAGGTCAAGATTTAAAATCGGAC
ATCTCCTTGAATATAGATAAAATACCAGAAAAAAATAATGATTACATGAACAAATGGGCAGGACTCTTAGGTCCA
ATTTCAAATCACAGTTTTGGAGGTAGCTTCAGAACAGCTTCAAATAAGGAAATCAAGCTCTCTGAACATAACATT
AAGAAGAGCAAAATGTTCTTCAAAGATATTGAAGAACAATATCCTACTAGTTTAGCTTGTGTTGAAATTGTAAAT
ACCTTGGCATTAGATAATCAAAAGAAACTGAGCAAGCCTCAGTCAATTAATACTGTATCTGCACATTTACAGAGT
AGTGTAGTTGTTTCTGATTGTAAAAATAGTCATATAACCCCTCAGATGTTATTTTCCAAGCAGGATTTTAATTCA
AACCATAATTTAACACCTAGCCAAAAGGCAGAAATTACAGAACTTTCTACTATATTAGAAGAATCAGGAAGTCAG

FIGURE 1977B

TTTGAATTTACTCAGTTTAGAAAACCAAGCTACATATTGCAGAAGAGTACATTTGAAGTGCCTGAAAACCAGATG
ACTATCTTAAAGACCACTTCTGAGGAATGCAGAGATGCTGATCTTCATGTCATAATGAATGCCCCATCGATTGGT
CAGGTAGACAGCAGCAAGCAATTTGAAGGTACAGTTGAAATTAAACGGAAGTTTGCTGGCCTGTTGAAAAATGAC
TGTAACAAAAGTGCTTCTGGTTATTTAACAGATGAAAATGAAGTGGGGTTTAGGGGCTTTTATTCTGCTCATGGC
ACAAAACTGAATGTTTCTACTGAAGCTCTGCAAAAAGCTGTGAAACTGTTTAGTGATATTGAGAATATTAGTGAG
GAAACTTCTGCAGAGGTACATCCAATAAGTTTATCTTCAAGTAAATGTCATGATTCTGTTGTTTCAATGTTTAAG
ATAGAAAATCATAATGATAAAACTGTAAGTGAAAAAAATAATAAATGCCAACTGATATTACAAAATAATATTGAA
ATGACTACTGGCACTTTTGTTGAAGAAATTACTGAAAATTACAAGAGAAATACTGAAAATGAAGATAACAAATAT
ACTGCTGCCAGTAGAAATTCTCATAACTTAGAATTTGATGGCAGTGATTCAAGTAAAAATGATACTGTTTGTATT
CATAAAGATGAAACGGACTTGCTATTTACTGATCAGCACAACATATGTCTTAAATTATCTGGCCAGTTTATGAAG
GAGGGAAACACTCAGATTAAAGAAGATTTGTCAGATTTAACTTTTTTGGAAGTTGCGAAAGCTCAAGAAGCATGT
CATGGTAATACTTCAAATAAAGAACAGTTAACTGCTACTAAAACGGAGCAAAATATAAAAGATTTTGAGACTTCT
GATACATTTTTTCAGACTGCAAGTGGGAAAAATATTAGTGTCGCCAAAGAGTCATTTAATAAAATTGTAAATTTC
TTTGATCAGAAACCAGAAGAATTGCATAACTTTTCCTTAAATTCTGAATTACATTCTGACATAAGAAAGAACAAA
ATGGACATTCTAAGTTATGAGGAAACAGACATAGTTAAACACAAAATACTGAAAGAAAGTGTCCCAGTTGGTACT
GGAAATCAACTAGTGACCTTCCAGGGACAACCCGAACGTGATGAAAAGATCAAAGAACCTACTCTGTTGGGTTTT
CATACAGCTAGCGGGAAAAAAGTTAAAATTGCAAAGGAATCTTTGGACAAAGTGAAAAACCTTTTTGATGAAAAA
GAGCAAGGTACTAGTGAAATCACCAGTTTTAGCCATCAATGGGCAAAGACCCTAAAGTACAGAGAGGCCTGTAAA
GACCTTGAATTAGCATGTGAGACCATTGAGATCACAGCTGCCCCAAAGTGTAAAGAAATGCAGAATTCTCTCAAT
AATGATAAAAACCTTGTTTCTATTGAGACTGTGGTGCCACCTAAGCTCTTAAGTGATAATTTATGTAGACAAACT
GAAAATCTCAAAACATCAAAAAGTATCTTTTTGAAAGTTAAAGTACATGAAAATGTAGAAAAAGAAACAGCAAAA
AGTCCTGCAACTTGTTACACAAATCAGTCCCCTTATTCAGTCATTGAAAATTCAGCCTTAGCTTTTTACACAAGT
TGTAGTAGAAAAACTTCTGTGAGTCAGACTTCATTACTTGAAGCAAAAAAATGGCTTAGAGAAGGAATATTTGAT
GGTCAACCAGAAAGAATAAATACTGCAGATTATGTAGGAAATTATTTGTATGAAAATAATTCAAACAGTACTATA
GCTGAAAATGACAAAAATCATCTCTCCGAAAAACAAGATACTTATTTAAGTAACAGTAGCATGTCTAACAGCTAT
TCCTACCATTCTGATGAGGTATATAATGATTCAGGATATCTCTCAAAAAATAAACTTGATTCTGGTATTGAGCCA
GTATTGAAGAATGTTGAAGATCAAAAAAACACTAGTTTTTCCAAAGTAATATCCAATGTAAAAGATGCAAATGCA
TACCCACAAACTGTAAATGAAGATATTTGCGTTGAGGAACTTGTGACTAGCTCTTCACCCTGCAAAAATAAAAAT
GCAGCCATTAAATTGTCCATATCTAATAGTAATAATTTTGAGGTAGGGCCACCTGCATTTAGGATAGCCAGTGGT
AAAATCGTTTGTGTTTCACATGAAACAATTAAAAAAGTGAAAGACATATTTACAGACAGTTTCAGTAAAGTAATT
AAGGAAAACAACGAGAATAAATCAAAAATTTGCCAAACGAAAATTATGGCAGGTTGTTACGAGGCATTGGATGAT
TCAGAGGATATTCTTCATAACTCTCTAGATAATGATGAATGTAGCACGCATTCACATAAGGTTTTTGCTGACATT
CAGAGTGAAGAAATTTTACAACATAACCAAAATATGTCTGGATTGGAGAAAGTTTCTAAAATATCACCTTGTGAT
GTTAGTTTGGAAACTTCAGATATATGTAAATGTAGTATAGGGAAGCTTCATAAGTCAGTCTCATCTGCAAATACT
TGTGGGATTTTTAGCACAGCAAGTGGAAAATCTGTCCAGGTATCAGATGCTTCATTACAAAACGCAAGACAAGTG
TTTTCTGAAATAGAAGATAGTACCAAGCAAGTCTTTTCCAAAGTATTGTTTAAAAGTAACGAACATTCAGACCAG
CTCACAAGAGAAGAAAATACTGCTATACGTACTCCAGAACATTTAATATCCCAAAAAGGCTTTTCATATAATGTG
GTAAATTCATCTGCTTTCTCTGGATTTAGTACAGCAAGTGGAAAGCAAGTTTCCATTTTAGAAAGTTCCTTACAC
AAAGTTAAGGGAGTGTTAGAGGAATTTGATTTAATCAGAACTGAGCATAGTCTTCACTATTCACCTACGTCTAGA
CAAAATGTATCAAAAATACTTCCTCGTGTTGATAAGAGAAACCCAGAGCACTGTGTAAACTCAGAAATGGAAAAA
ACCTGCAGTAAAGAATTTAAATTATCAAATAACTTAAATGTTGAAGGTGGTTCTTCAGAAAATAATCACTCTATT
AAAGTTTCTCCATATCTCTCTCAATTTCAACAAGACAAACAACAGTTGGTATTAGGAACCAAAGTCTCACTTGTT
GAGAACATTCATGTTTTGGGAAAAGAACAGGCTTCACCTAAAAACGTAAAAATGGAAATTGGTAAAACTGAAACT
TTTTCTGATGTTCCTGTGAAAACAAATATAGAAGTTTGTTCTACTTACTCCAAAGATTCAGAAAACTACTTTGAA
ACAGAAGCAGTAGAAATTGCTAAAGCTTTTATGGAAGATGATGAACTGACAGATTCTAAACTGCCAAGTCATGCC
ACACATTCTCTTTTTACATGTCCCGAAAATGAGGAAATGGTTTTGTCAAATTCAAGAATTGGAAAAAGAAGAGGA
GAGCCCCTTATCTTAGTGGGAGAACCCTCAATCAAAAGAAACTTATTAAATGAATTTGACAGGATAATAGAAAAT
CAAGAAAAATCCTTAAAGGCTTCAAAAAGCACTCCAGATGGCACAATAAAAGATCGAAGATTGTTTATGCATCAT

FIGURE 1977C

GTTTCTTTAGAGCCGATTACCTGTGTACCCTTTCGCACAACTAAGGAACGTCAAGAGATACAGAATCCAAATTTT
ACCGCACCTGGTCAAGAATTTCTGTCTAAATCTCATTTGTATGAACATCTGACTTTGGAAAAATCTTCAAGCAAT
TTAGCAGTTTCAGGACATCCATTTTATCAAGTTTCTGCTACAAGAAATGAAAAAATGAGACACTTGATTACTACA
GGCAGACCAACCAAAGTCTTTGTTCCACCTTTTAAAACTAAATCACATTTTCACAGAGTTGAACAGTGTGTTAGG
AATATTAACTTGGAGGAAAACAGACAAAAGCAAAACATTGATGGACATGGCTCTGATGATAGTAAAAATAAGATT
AATGACAATGAGATTCATCAGTTTAACAAAAACAACTCCAATCAAGCAGCAGCTGTAACTTTCACAAAGTGTGAA
GAAGAACCTTTAGATTTAATTACAAGTCTTCAGAATGCCAGAGATATACAGGATATGCGAATTAAGAAGAAACAA
AGGCAACGCGTCTTTCCACAGCCAGGCAGTCTGTATCTTGCAAAAACATCCACTCTGCCTCGAATCTCTCTGAAA
GCAGCAGTAGGAGGCCAAGTTCCCTCTGCGTGTTCTCATAAACAGCTGTATACGTATGGCGTTTCTAAACATTGC
ATAAAAATTAACAGCAAAAATGCAGAGTCTTTTCAGTTTCACACTGAAGATTATTTTGGTAAGGAAAGTTTATGG
ACTGGAAAAGGAATACAGTTGGCTGATGGTGGATGGCTCATACCCTCCAATGATGGAAAGGCTGGAAAAGAAGAA
TTTTATAGGGCTCTGTGTGACACTCCAGGTGTGGATCCAAAGCTTATTTCTAGAATTTGGGTTTATAATCACTAT
AGATGGATCATATGGAAACTGGCAGCTATGGAATGTGCCTTTCCTAAGGAATTTGCTAATAGATGCCTAAGCCCA
GAAAGGGTGCTTCTTCAACTAAAATACAGATATGATACGGAAATTGATAGAAGCAGAAGATCGGCTATAAAAAAG
ATAATGGAAAGGGATGACACAGCTGCAAAAACACTTGTTCTCTGTGTTTCTGACATAATTTCATTGAGCGCAAAT
ATATCTGAAACTTCTAGCAATAAAACTAGTAGTGCAGATACCCAAAAAGTGGCCATTATTGAACTTACAGATGGG
TGGTATGCTGTTAAGGCCCAGTTAGATCCTCCCCTCTTAGCTGTCTTAAAGAATGGCAGACTGACAGTTGGTCAG
AAGATTATTCTTCATGGAGCAGAACTGGTGGGCTCTCCTGATGCCTGTACACCTCTTGAAGCCCCAGAATCTCTT
ATGTTAAAGATTTCTGCTAACAGTACTCGGCCTGCTCGCTGGTATACCAAACTTGGATTCTTTCCTGACCCTAGA
CCTTTTCCTCTGCCCTTATCATCGCTTTTCAGTGATGGAGGAAATGTTGGTTGTGTTGATGTAATTATTCAAAGA
GCATACCCTATACAGTGGATGGAGAAGACATCATCTGGATTATACATATTTCGCAATGAAAGAGAGGAAGAAAAG
GAAGCAGCAAAATATGTGGAGGCCCAACAAAAGAGACTAGAAGCCTTATTCACTAAAATTCAGGAGGAATTTGAA
GAACATGAAGAAAACACAACAAAACCATATTTACCATCACGTGCACTAACAAGACAGCAAGTTCGTGCTTTGCAA
GATGGTGCAGAGCTTTATGAAGCAGTGAAGAATGCAGCAGACCCAGCTTACCTTGAGGGTTATTTCAGTGAAGAG
CAGTTAAGAGCCTTGAATAATCACAGGCAAATGTTGAATGATAAGAAACAAGCTCAGATCCAGTTGGAAATTAGG
AAGGCCATGGAATCTGCTGAACAAAAGGAACAAGGTTTATCAAGGGATGTCACAACCGTGTGGAAGTTGCGTATT
GTAAGCTATTCAAAAAAAGAAAAAGATTCAGTTATACTGAGTATTTGGCGTCCATCATCAGATTTATATTCTCTG
TTAACAGAAGGAAAGAGATACAGAATTTATCATCTTGCAACTTCAAAATCTAAAAGTAAATCTGAAAGAGCTAAC
ATACAGTTAGCAGCGACAAAAAAAACTCAGTATCAACAACTACCGGTTTCAGATGAAATTTTATTTCAGATTTAC
CAGCCACGGGAGCCCCTTCACTTCAGCAAATTTTTAGATCCAGACTTTCAGCCATCTTGTTCTGAGGTGGACCTA
ATAGGATTTGTCGTTTCTGTTGTGAAAAAAACAGGACTTGCCCCTTTCGTCTATTTGTCAGACGAATGTTACAAT
TTACTGGCAATAAAGTTTTGGATAGACCTTAATGAGGACATTATTAAGCCTCATATGTTAATTGCTGCAAGCAAC
CTCCAGTGGCGACCAGAATCCAAATCAGGCCTTCTTACTTTATTTGCTGGAGATTTTTCTGTGTTTTCTGCTAGT
CCAAAAGAGGGCCACTTTCAAGAGACATTCAACAAAATGAAAAATACTGTTGAGAATATTGACATACTTTGCAAT
GAAGCAGAAAACAAGCTTATGCATATACTGCATGCAAATGATCCCAAGTGGTCCACCCCAACTAAAGACTGTACT
TCAGGGCCGTACACTGCTCAAATCATTCCTGGTACAGGAAACAAGCTTCTGATGTCTTCTCCTAATTGTGAGATA
TATTATCAAAGTCCTTTATCACTTTGTATGGCCAAAAGGAAGTCTGTTTCCACACCTGTCTCAGCCCAGATGACT
TCAAAGTCTTGTAAAGGGGAGAAAGAGATTGATGACCAAAAGAACTGCAAAAAGAGAAGAGCCTTGGATTTCTTG
AGTAGACTGCCTTTACCTCCACCTGTTAGTCCCATTTGTACATTTGTTTCTCCGGCTGCACAGAAGGCATTTCAG
CCACCAAGGAGTTGTGGCACCAAATACGAAACACCCATAAAGAAAAAAGAACTGAATTCTCCTCAGATGACTCCA
TTTAAAAAATTCAATGAAATTTCTCTTTTGGAAAGTAATTCAATAGCTGACGAAGAACTTGCATTGATAAATACC
CAAGCTCTTTTGTCTGGTTCAACAGGAGAAAAACAATTTATATCTGTCAGTGAATCCACTAGGACTGCTCCCACC
AGTTCAGAAGATTATCTCAGACTGAAACGACGTTGTACTACATCTCTGATCAAAGAACAGGAGAGTTCCCAGGCC
AGTACGGAAGAATGTGAGAAAAATAAGCAGGACACAATTACAACTAAAAAATATATCTAAGCATTTGCAAAGGCG
ACAATAAATTATTGACGCTTAACCTTTCCAGTTTATAAGACTGGAATATAATTTCAAACCACACATTAGTACTTA
TGTTGCACAATGAGAAAAGAAATTAGTTTCAAATTTACCTCAGCGTTTGTGTATCGGGCAAAAATCGTTTTGCCC
GATTCCGTATTGGTATACTTTTGCTTCAGTTGCATATCTTAAAACTAAATGTAATTTATTAACTAATCAAGAAAA
ACATCTTTGGCTGAGCTCGGTGGCTCATGCCTGTAATCCCAACACTTTGAGAAGCTGAGGTGGGAGGAGTGCTTG

FIGURE 1977D

AGGCCAGGAGTTCAAGACCAGCCTGGGCAACATAGGGAGACCCCCATCTTTACGAAGAAAAAAAAAAAGGGGAAA
AGAAAATCTTTTAAATCTTTGGATTTGATCACTACAAGTATTATTTTACAATCAACAAAATGGTCATCCAAACTC
AAACTTGAGAAAATATCTTGCTTTCAAATTGACACTA

FIGURE 1978

MPIGSKERPTFFEIFKTRCNKADLGPISLNWFEELSSEAPPYNSEPAEESEHKNNNYEPNLFKTPQRKPSYNQLA
STPIIFKEQGLTLPLYQSPVKELDKFKLDLGRNVPNSRHKSLRTVKTKMDQADDVSCPLLNSCLSESPVVLQCTH
VTPQRDKSVVCGSLFHTPKFVKGRQTPKHISESLGAEVDPDMSWSSSLATPPTLSSTVLIVRNEEASETVFPHDT
TANVKSYFSNHDESLKKNDRFIASVTDSENTNQREAASHGFGKTSGNSFKVNSCKDHIGKSMPNVLEDEVYETVV
DTSEEDSFSLCFSKCRTKNLQKVRTSKTRKKIFHEANADECEKSKNQVKEKYSFVSEVEPNDTDPLDSNVAHQKP
FESGSDKISKEVVPSLACEWSQLTLSGLNGAQMEKIPLLHISSCDQNISEKDLLDTENKRKKDFLTSENSLPRIS
SLPKSEKPLNEETVVNKRDEEQHLESHTDCILAVKQAISGTSPVASSFQGIKKSIFRIRESPKETFNASFSGHMT
DPNFKKETEASESGLEIHTVCSQKEDSLCPNLIDNGSWPATTTQNSVALKNAGLISTLKKKTNKFIYAIHDETFY
KGKKIPKDQKSELINCSAQFEANAFEAPLTFANADSGLLHSSVKRSCSQNDSEEPTLSLTSSFGTILRKCSRNET
CSNNTVISQDLDYKEAKCNKEKLQLFITPEADSLSCLQEGQCENDPKSKKVSDIKEEVLAAACHPVQHSKVEYSD
TDFQSQKSLLYDHENASTLILTPTSKDVLSNLVMISRGKESYKMSDKLKGNNYESDVELTKNIPMEKNQDVCALN
ENYKNVELLPPEKYMRVASPSRKVQFNQNTNLRVIQKNQEETTSISKITVNPDSEELFSDNENNFVFQVANERNN
LALGNTKELHETDLTCVNEPIFKNSTMVLYGDTGDKQATQVSIKKDLVYVLAEENKNSVKQHIKMTLGQDLKSDI
SLNIDKIPEKNNDYMNKWAGLLGPISNHSFGGSFRTASNKEIKLSEHNIKKSKMFFKDIEEQYPTSLACVEIVNT
LALDNQKKLSKPQSINTVSAHLQSSVVVSDCKNSHITPQMLFSKQDFNSNHNLTPSQKAEITELSTILEESGSQF
EFTQFRKPSYILQKSTFEVPENQMTILKTTSEECRDADLHVIMNAPSIGQVDSSKQFEGTVEIKRKFAGLLKNDC
NKSASGYLTDENEVGFRGFYSAHGTKLNVSTEALQKAVKLFSDIENISEETSAEVHPISLSSSKCHDSVVSMFKI
ENHNDKTVSEKNNKCQLILQNNIEMTTGTFVEEITENYKRNTENEDNKYTAASRNSHNLEFDGSDSSKNDTVCIH
KDETDLLFTDQHNICLKLSGQFMKEGNTQIKEDLSDLTFLEVAKAQEACHGNTSNKEQLTATKTEQNIKDFETSD
TFFQTASGKNISVAKESFNKIVNFFDQKPEELHNFSLNSELHSDIRKNKMDILSYEETDIVKHKILKESVPVGTG
NQLVTFQGQPERDEKIKEPTLLGFHTASGKKVKIAKESLDKVKNLFDEKEQGTSEITSFSHQWAKTLKYREACKD
LELACETIEITAAPKCKEMQNSLNNDKNLVSIETVVPPKLLSDNLCRQTENLKTSKSIFLKVKVHENVEKETAKS
PATCYTNQSPYSVIENSALAFYTSCSRKTSVSQTSLLEAKKWLREGIFDGQPERINTADYVGNYLYENNSNSTIA
ENDKNHLSEKQDTYLSNSSMSNSYSYHSDEVYNDSGYLSKNKLDSGIEPVLKNVEDQKNTSFSKVISNVKDANAY
PQTVNEDICVEELVTSSSPCKNKNAAIKLSISNSNNFEVGPPAFRIASGKIVCVSHETIKKVKDIFTDSFSKVIK
ENNENKSKICQTKIMAGCYEALDDSEDILHNSLDNDECSTHSHKVFADIQSEEILQHNQNMSGLEKVSKISPCDV
SLETSDICKCSIGKLHKSVSSANTCGIFSTASGKSVQVSDASLQNARQVF

FIGURE 1979

GTTTTGCCTGCTAGCATCTCCCTGTAACTCTCCCAATCTTGAGGAGTGATCCCTGTCCCAGCCCCTGGAAAGGGG
CAGGAACGACAAACTCAAAGTCCAGGATGTTCACCATGACAAGAGCCATGGAAGAGGCTCTTTTTCAGCACTTCA
TGCACCAGAAGCTGGGGATCGCCTATGCCATACACAAGCCATTTCCCTTCTTTGAAGGCCTCCTAGACAACTCCA
TCATCACTAAGAGAATGTACATGGAATCTCTGGAAGCCTGTAGAAATTTGATCCCTGTATCCAGAGTGGTGCACA
ACATTCTCACCCAACTGGAGAGGACTTTTAACCTGTCTCTTCTGGTGACATTGTTCAGTCAAATTAACCTGCGTG
AATATCCCAATCTGGTGACGATTTACAGAAGCTTCAAACGTGTTGGTGCTTCCTATGAACGGCAGAGCAGAGACA
CACCAATCCTACTTGAAGCCCCAACTGGCCTAGCAGAAGGAAGCTCCCTCCATACCCCACTGGCGCTGCCCCCAC
CACAACCCCCTCAACCAAGCTGTTCACCCTGTGCGCCAAGAGTCAGTGAGCCTGGAACATCCTCCCAGCAAAGCG
ATGAGATCCTGAGTGAGTCGCCCAGCCCATCTGACCCTGTCCTGCCTCTCCCTGCACTCATCCAGGAAGGAAGAA
GCACTTCAGTGACCAATGACAAGTTAACATCCAAAATGAATGCGGAAGAAGACTCAGAAGAGATGCCCAGCCTCC
TCACTAGCACTGTGCAAGTGGCCAGTGACAACCTGATCCCCCAAATAAGAGATAAAGAAGACCCTCAAGAGATGC
CCCACTCTCCCTTGGGCTCTATGCCAGAGATAAGAGATAATTCTCCAGAACCAAATGACCCAGAAGAGCCCCAGG
AGGTGTCCAGCACACCTTCAGACAAGAAAGGAAAGAAAAGAAAAAGATGTATCTGGTCAACTCCAAAAAGGAGAC
ATAAGAAAAAAAGCCTCCCAAGAGGGACAGCCTCATCTAGACACGGAATCCAAAAGAAGCTCAAAAGGGTGGATC
AGGTTCCTCAAAAGAAAGATGACTCAACTTGTAACTCCACGGTAGAGACAAGGGCCCAAAAGGCGAGAACTGAAT
GTGCCCGAAAGTCGAGATCAGAGGAGATCATTGATGGCACTTCAGAAATGAATGAAGGAAAGAGGTCCCAGAAGA
CGCCTAGTACACCACGAAGGGTCACACAAGGGGCAGCCTCACCTGGGCATGGCATCCAAGAGAAGCTCCAAGTGG
TGGATAAGGTGACTCAAAGGAAAGACGACTCAACCTGGAACTCAGAGGTCATGATGAGGGTCCAAAAGGCAAGAA
CTAAATGTGCCCGAAAGTCCAGATCGAAAGAAAAGAAAAAGGAGAAAGATATCTGTTCAAGCTCAAAAAGGAGAT
TTCAGAAAAATATTCACCGAAGAGGAAAACCCAAAAGTGACACTGTGGATTTTCACTGTTCTAAGCTCCCCGTGA
CCTGTGGTGAGGCGAAAGGGATTTTATATAAGAAGAAAATGAAACACGGATCCTCAGTGAAGTGCATTCGGAATG
AGGATGGAACTTGGTTAACACCAAATGAATTTGAAGTCGAAGGAAAAGGAAGGAACGCAAAGAACTGGAAACGGA
ATATACGTTGTGAAGGAATGACCCTAGGAGAGCTGCTGAAGCGGAAAAACTCGGATGAATGCGAGGTGTGCTGTC
AAGGGGGACAACTTCTCTGCTGCGGTACTTGTCCACGAGTCTTCCATGAGGACTGTCACATCCCCCCTGTGGAAG
CCAAGAGGATGCTGTGGAGTTGCACCTTCTGCAGGATGAAGAGGTCTTCAGGAAGCCAACAGTGCCATCATGTAT
CTAAGACCCTGGAGAGGCAGATGCAGCCTCAGGACCAGCTGAAATGTGAGTTCCTCCTCTTGAAGGCCTACTGTC
ATCCACAAAGCTCCTTTTTTACGGGCATCCCATTTAATATTCGAGATTACGGTGAGCCCTTTCAGGAAGCAATGT
GGTTGGACCTGGTTAAGGAAAGGCTGATTACGGAAATGTACACGGTGGCATGGTTTGTGCGAGACATGCGCCTGA
TGTTTCGCAACCATAAAACATTTTACAAGGCTTCTGACTTTGGCCAGGTAGGACTTGACTTAGAGGCAGAATTTG
AAAAAGATCTCAAAGACGTGCTCGGTTTTCATGAAGCCAATGACGGCGGTTTCTGGACTCTTCCTTGACCCTGTT
CTGTAAAGACTGAAGCATCCCCACCTCAGGATTCAGCTGATGGGACCCTGGCTTGGACTGTTGATTGCCAGTGAG
TCTGGGATGTAATTGGCTGCCCTCAGGACCCAAACCCAGACACTTCATAGGATTATCACACCCTCCATCTTTATT
CTTTCTTTTTACCTTTAAAAGTCTATATCTA

FIGURE 1980

MFTMTRAMEEALFQHFMHQKLGIAYAIHKPFPFFEGLLDNSIITKRMYMESLEACRNLIPVSRVVHNILTQLERT
FNLSLLVTLFSQINLREYPNLVTIYRSFKRVGASYERQSRDTPILLEAPTGLAEGSSLHTPLALPPPQPPQPSCS
PCAPRVSEPGTSSQQSDEILSESPSPSDPVLPLPALIQEGRSTSVTNDKLTSKMNAEEDSEEMPSLLTSTVQVAS
DNLIPQIRDKEDPQEMPHSPLGSMPEIRDNSPEPNDPEEPQEVSSTPSDKKGKKRKRCIWSTPKRRHKKKSLPRG
TASSRHGIQKKLKRVDQVPQKKDDSTCNSTVETRAQKARTECARKSRSEEIIDGTSEMNEGKRSQKTPSTPRRVT
QGAASPGHGIQEKLQVVDKVTQRKDDSTWNSEVMMRVQKARTKCARKSRSKEKKKEKDICSSSKRRFQKNIHRRG
KPKSDTVDFHCSKLPVTCGEAKGILYKKKMKHGSSVKCIRNEDGTWLTPNEFEVEGKGRNAKNWKRNIRCEGMTL
GELLKRKNSDECEVCCQGGQLLCCGTCPRVFHEDCHIPPVEAKRMLWSCTFCRMKRSSGSQQCHHVSKTLERQMQ
PQDQLKCEFLLLKAYCHPQSSFFTGIPFNIRDYGEPFQEAMWLDLVKERLITEMYTVAWFVRDMRLMFRNHKTFY
KASDFGQVGLDLEAEFEKDLKDVLGFHEANDGGFWTLP

FIGURE 1981A

CCAGGAGAGCGGCGTGGACGCGTGCGGGCCTAGAGGCCCACGTGATCCGCAGGGCGGCCGAGGCAGGAAGCTGTG
AGTGCGCGGTTGCGGGGTCGCATTGTGGCTACGGCTTTGCGTCCCCGGCGGGCAGCCCCAGGCTGGTCCCCGCCT
CCGCTCTCCCCACCGGCGGGGAAAGCAGCTGGTGTGGGAGGAAAGGCTCCATCCCCCGCCCCCTCTCTCCCGCTG
TTGGCTGGCAGGATCTTTTGGCAGTCCTGTGGCCTCGCTCCCCGCCCGGATCCTCCTGACCCTGAGATTCGCGGG
TCTCACGTCCCGTGCACGCCTTGCTTCGGCCTCAGTTAAGCCTTTGTGGACTCCAGGTCCCTGGTGAGATTAGAA
ACGTTTGCAAACATGTCCCGGATCGAAAAGATGAGCATTCTGGGCGTGCGGAGTTTTGGAATAGAGGACAAAGAT
AAGCAAATTATCACTTTCTTCAGCCCCCTTACAATTTTGGTTGGACCCAATGGGGCGGGAAAGACGACCATCATT
GAATGTCTAAAATATATTTGTACTGGAGATTTCCCTCCTGGAACCAAAGGAAATACATTTGTACACGATCCCAAG
GTTGCTCAAGAAACAGATGTGAGAGCCCAGATTCGTCTGCAATTTCGTGATGTCAATGGAGAACTTATAGCTGTG
CAAAGATCTATGGTGTGTACTCAGAAAAGCAAAAAGACAGAATTTAAAACTCTGGAAGGAGTCATTACTAGAACA
AAGCATGGTGAAAAGGTCAGTCTGAGCTCTAAGTGTGCAGAAATTGACCGAGAAATGATCAGTTCTCTTGGGGTT
TCCAAGGCTGTGCTAAATAATGTCATTTTCTGTCATCAAGAAGATTCTAATTGGCCTTTAAGTGAAGGAAAGGCT
TTGAAGCAAAAGTTTGATGAGATTTTTTCAGCAACAAGATACATTAAAGCCTTAGAAACACTTCGGCAGGTACGT
CAGACACAAGGTCAGAAAGTAAAAGAATATCAAATGGAACTAAAATATCTGAAGCAATATAAGGAAAAAGCTTGT
GAGATTCGTGATCAGATTACAAGTAAGGAAGCCCAGTTAACATCTTCAAAGGAAATTGTCAAATCCTATGAGAAT
GAACTTGATCCATTGAAGAATCGTCTAAAAGAAATTGAACATAATCTCTCTAAAATAATGAAACTTGACAATGAA
ATTAAAGCCTTGGATAGCCGAAAGAAGCAAATGGAGAAAGATAATAGTGAACTGGAAGAGAAAATGGAAAAGGTT
TTTCAAGGGACTGATGAGCAACTAAATGACTTATATCACAATCACCAGAGAACAGTAAGGGAGAAAGAAAGGAAA
TTGGTAGACTGTCATCGTGAACTGGAAAAACTAAATAAAGAATCTAGGCTTCTCAATCAGGAAAAATCAGAACTG
CTTGTTGAACAGGGTCGTCTACAGCTGCAAGCAGATCGCCATCAAGAACATATCCGAGCTAGAGATTCATTAATT
CAGTCTTTGGCAACACAGCTAGAATTGGATGGCTTTGAGCGTGGACCATTCAGTGAAAGACAGATTAAAAATTTT
CACAAACTTGTGAGAGAGAGACAAGAAGGGGAAGCAAAAACTGCCAACCAACTGATGAATGACTTTGCAGAAAAA
GAGACTCTGAAACAAAAACAGATAGATGAGATAAGAGATAAGAAAACTGGACTGGGAAGAATAATTGAGTTAAAA
TCAGAAATCCTAAGTAAGAAGCAGAATGAGCTGAAAAATGTGAAGTATGAATTACAGCAGTTGGAAGGATCTTCA
GACAGGATTCTTGAACTGGACCAGGAGCTCATAAAAGCTGAACGTGAGTTAAGCAAGGCTGAGAAAAACAGCAAT
GTAGAAACCTTAAAAATGGAAGTAATAAGTCTCCAAAATGAAAAAGCAGACTTAGACAGGACCCTGCGTAAACTT
GACCAGGAGATGGAGCAGTTAAACCATCATACAACAACACGTACCCAAATGGAGATGCTGACCAAAGACAAAGCT
GACAAAGATGAACAAATCAGAAAAATAAAATCTAGGCACAGTGATGAATTAACCTCACTGTTGGGATATTTTCCC
AACAAAAAACAGCTTGAAGACTGGCTACATAGTAAATCAAAAGAAATTAATCAGACCAGGGACAGACTTGCCAAA
TTGAACAAGGAACTAGCTTCATCTGAGCAGAATAAAAATCATATAAATAATGAACTAAAAAGAAAGGAAGAGCAG
TTGTCCAGTTACGAAGACAAGCTGTTTGATGTTTGTGGTAGCCAGGATTTTGAAAGTGATTTAGACAGGCTTAAA
GAGGAAATTGAAAAATCATCAAAACAGCGAGCCATGCTGGCTGGAGCCACAGCAGTTTACTCCCAGTTCATTACT
CAGCTAACAGACGAAAACCAGTCATGTTGCCCCGTTTGTCAGAGAGTTTTTCAGACAGAGGCTGAGTTACAAGAA
GTCATCAGTGATTTGCAGTCTAAACTGCGACTTGCTCCAGATAAACTCAAGTCAACAGAATCAGAGCTAAAAAAA
AAGGAAAAGCGGCGTGATGAAATGCTGGGACTTGTGCCCATGAGGCAAAGCATAATTGATTTGAAGGAGAAGGAA
ATACCAGAATTAAGAAACAAACTGCAGAATGTCAATAGAGACATACAGCGCCTAAAGAACGACATAGAAGAACAA
GAAACACTCTTGGGTACAATAATGCCTGAAGAAGAAAGTGCCAAAGTATGCCTGACAGATGTTACAATTATGGAG
AGGTTCCAGATGGAACTTAAAGATGTTGAAAGAAAAATTGCACAACAAGCAGCTAAGCTACAAGGAATAGACTTA
GATCGAACTGTCCAACAAGTCAACCAGGAGAAACAAGAGAAACAGCACAAGTTAGACACAGTTTCTAGTAAGATT
GAATTGAATCGTAAGCTTATACAGGACCAGCAGGAACAGATTCAACATCTAAAAAGTACAACAAATGAGCTAAAA
TCTGAGAAACTTCAGATATCCACTAATTTGCAACGTCGTCAGCAACTGGAGGAGCAGACTGTGGAATTATCCACT
GAAGTTCAGTCTTTGTACAGAGAGATAAAGGATGCTAAAGAGCAGGTAAGCCCTTTGGAAACAACATTGGAAAAG
TTCCAGCAAGAAAAAGAAGAATTAATCAACAAAAAAAATACAAGCAACAAAATAGCACAGGATAAACTGAATGAT
ATTAAAGAGAAGGTTAAAAATATTCATGGCTATATGAAAGACATTGAGAATTATATTCAAGATGGGAAAGACGAC
TATAAGAAGCAAAAAGAAACTGAACTTAATAAAGTAATAGCTCAACTAAGTGAATGCGAGAAACACAAAGAAAAG
ATAAATGAAGATATGAGACTCATGAGACAAGATATTGATACACAGAAGATACAAGAAAGGTGGCTACAAGATAAC
CTTACTTTAAGAAAAAGAAATGAGGAACTAAAAGAAGTTGAAGAAGAAAGAAAACAACATTTGAAGGAAATGGGT
CAAATGCAGGTTTTGCAAATGAAAAGTGAACATCAGAAGTTGGAAGAGAACATAGACAATATAAAAAGAAATCAT

FIGURE 1981B

AATTTGGCATTAGGGCGACAGAAAGGTTATGAAGAAGAAATTATTCATTTTAAGAAAGAACTTCGAGAACCACAA
TTTCGGGATGCTGAGGAAAAGTATAGAGAAATGATGATTGTTATGAGGACAACAGAACTTGTGAACAAGGATCTG
GATATTTATTATAAGACTCTTGACCAAGCAATAATGAAATTTCACAGTATGAAAATGGAAGAAATCAATAAAATT
ATACGTGACCTGTGGCGAAGTACCTATCGTGGACAAGATATTGAATACATAGAAATACGGTCTGATGCCGATGAA
AATGTATCAGCTTCTGATAAAAGGCGGAATTATAACTACCGAGTGGTGATGCTGAAGGGAGACACAGCCTTGGAT
ATGCGAGGACGATGCAGTGCTGGACAAAAGGTATTAGCCTCACTCATCATTCGCCTGGCCCTGGCTGAAACGTTC
TGCCTCAACTGTGGCATCATTGCCTTGGATGAGCCAACAACAAATCTTGACCGAGAAAACATTGAATCTCTTGCA
CATGCTCTGGTTGAGATAATAAAAAGTCGCTCACAGCAGCGTAACTTCCAGCTTCTGGTAATCACTCATGATGAA
GATTTTGTGGAGCTTTTAGGACGTTCTGAATATGTGGAGAAATTCTACAGGATTAAAAAGAACATCGATCAGTGC
TCAGAGATTGTGAAATGCAGTGTTAGCTCCCTGGGATTCAATGTTCATTAAAAATATCCAAGATTTAAATGCCAT
AGAAATGTAGGTCCTCAGAAAGTGTATAATAAGAAACTTATTTCTCATATCAACTTAGTCAATAAGAAAATATAT
TCTTTCAAAGGAACATTGTGTCTAGGATTTTGGATGTTGAGAGGTTCTAAAATCATGAAACTTGTTTCACTGAAA
ATTGGACAGATTGCCTGTTTCTGATTTGCTGCTCTTCATCCCATTCCAGGCAGCCTCTGTCAGGCCTTCAGGGTT
CAGCAGTACAGCCGAGACTCGACTCTGTGCCTCCCTCCCCAGTGCAAATGCATGCTTCTTCTCAAAGCACTGTTG
AGAAGGAGATAATTACTGCCTTGAAAATTTATGGTTTTGGTATTTTTTTAAATCATAGTTAAATGTTACCTCTGA
ATTTACTTCCTTGCATGTGGTTTGAAAAACTGAGTATTAATATCTGAGGATGACCAGAAATGGTGAGATGTATGT
TTGGCTCTGCTTTTAACTTTATAAATCCAGTGACCTCTCTCTCTGGGACTTGGTTTCCCCAACTAAAATTTGAAG
TAGTTGAATGGGGTCTCAAAGTTTGACAGGAACCTTAAGTAATCATCTAAGTCAGTACCCACCACCTTCTTCTCC
TACATATCCCTTCCAGATGGTCATCCAGACTCAGAGCTCTCTCTACAGAGAGGAAATTCTCCACTGTGCACACCC
ACCTTTGGAAAGCTCTGACCACTTGAGGCCTGATCTGCCCATCGTGAAGAAGCCTGTAACACTCCTCTGCGTCTA
TCCTGTGTAGCATACTGGCTTCACCATCAATCCTGATTCCTCTCTAAGTGGGCATTGCCATGTGGAAGGCAAGCC
AGGCTCACTCACAGAGTCAAGGCCTGCTCCCTGTAGGGTCCAACCAGACCTGGAAGAACAGGCCTCTCCATTTGC
TCTTCAGATGCCACTTCTAAGAAAAGCCTAATCACAGTTTTTCCTGGAATTGCCAGCTGACATCTTGAATCCTTC
CATTCCACACAGAATGCAACCAAGTCACACGCTTTTGAATTATGCTTTGTAGAGTTTTGTCATTCAGAGTCAGCC
AGGACCATACCGGGTCTTGATTCAGTCACATGGCATGGTTTTGTGCCATCTGTAGCTATAATGAGCATGTTTGCC
TAGACAGCTTTTCTCAACTGGGTCCAGAAGAGAATTAAGCCCTAAGGTCCTAAGGCATCTATCTGTGCTAGGTTA
AATGGTTGGCCCCCAAAGATAGACAGGTCCTGATTTCTAGAACCCGTGACTGTTACTTTATACAGCAAAGGAAAC
TTTGCAGATGTGATTAAAGCTAAGGACCTTAAGACAGAGTATCCTGGGGGTGGTGGTGGGGTGGGGGGGGGTCCT
AAATGTAATCACGAGTAAGATTAAGAGCAAATCAATTCTAGTCATATATTAAACATCCACAATAACCAAGATATT
TTTATCCCAAGAATGCAAGATTTCAGAAAATGAAAAATCTGTTGATAAATCCATCACTATAATAAAACCGAAGGT
GAAAAAAATTCTGAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1982

MISSLGVSKAVLNNVIFCHQEDSNWPLSEGKALKQKFDEIFSATRYIKALETLRQVRQTQGQKVKEYQMELKYLK
QYKEKACEIRDQITSKEAQLTSSKEIVKSYENELDPLKNRLKEIEHNLSKIMKLDNEIKALDSRKKQMEKDNSEL
EEKMEKVFQGTDEQLNDLYHNHQRTVREKERKLVDCHRELEKLNKESRLLNQEKSELLVEQGRLQLQADRHQEHI
RARDSLIQSLATQLELDGFERGPFSERQIKNFHKLVRERQEGEAKTANQLMNDFAEKETLKQKQIDEIRDKKTGL
GRIIELKSEILSKKQNELKNVKYELQQLEGSSDRILELDQELIKAERELSKAEKNSNVETLKMEVISLQNEKADL
DRTLRKLDQEMEQLNHHTTTRTQMEMLTKDKADKDEQIRKIKSRHSDELTSLLGYFPNKKQLEDWLHSKSKEINQ
TRDRLAKLNKELASSEQNKNHINNELKRKEEQLSSYEDKLFDVCGSQDFESDLDRLKEEIEKSSKQRAMLAGATA
VYSQFITQLTDENQSCCPVCQRVFQTEAELQEVISDLQSKLRLAPDKLKSTESELKKKEKRRDEMLGLVPMRQSI
IDLKEKEIPELRNKLQNVNRDIQRLKNDIEEQETLLGTIMPEEESAKVCLTDVTIMERFQMELKDVERKIAQQAA
KLQGIDLDRTVQQVNQEKQEKQHKLDTVSSKIELNRKLIQDQQEQIQHLKSTTNELKSEKLQISTNLQRRQQLEE
QTVELSTEVQSLYREIKDAKEQVSPLETTLEKFQQEKEELINKKNTSNKIAQDKLNDIKEKVKNIHGYMKDIENY
IQDGKDDYKKQKETELNKVIAQLSECEKHKEKINEDMRLMRQDIDTQKIQERWLQDNLTLRKRNEELKEVEEERK
QHLKEMGQMQVLQMKSEHQKLEENIDNIKRNHNLALGRQKGYEEEIIHFKKELREPQFRDAEEKYREMMIVMRTT
ELVNKDLDIYYKTLDQAIMKFHSMKMEEINKIIRDLWRSTYRGQDIEYIEIRSDADENVSASDKRRNYNYRVVML
KGDTALDMRGRCSAGQKVLASLIIRLALAETFCLNCGIIALDEPTTNLDRENIESLAHALVEIIKSRSQQRNFQL
LVITHDEDFVELLGRSEYVEKFYRIKKNIDQCSEIVKCSVSSLGFNVH

FIGURE 1983

ACCCAGGGTCCGGCCTGCGCCTTCCCGCCAGGCCTGGACACTGGTTCAACACCTGTGACTTCATGTGTGCGCGCC
GGCCACACCTGCAGTCACACCTGTAGCCCCCTCTGCCAAGAGATCCATACCGAGGCAGCGTCGGTGGCTACAAGC
CCTCAGTCCACACCTGTGGACACCTGTGACACCTGGCCACACGACCTGTGGCCGCGGCCTGGCGTCTGCTGCGAC
AGGAGCCCTTACCTCCCCTGTTATAACACCTGACAGCCACCTAACTGCCCCTGCAGAAGGAGCAATGGCCTTGGC
TCCTGAGAGGTAAGAGCCCGGCCCACCCTCTCCAGATGCCAGTCCCCGAGCGCCCTGCAGCCGGCCCTGACTCTC
CGCGGCCGGGCACCCGCAGGGCAGCCCCACGCGTGCTGTTCGGAGAGTGGCTCCTTGGAGAGATCAGCAGCGGCT
GCTATGAGGGGCTGCAGTGGCTGGACGAGGCCCGCACCTGTTTCCGCGTGCCCTGGAAGCACTTCGCGCGCAAGG
ACCTGAGCGAGGCCGACGCGCGCATCTTCAAGGCCTGGGCTGTGGCCCGCGGCAGGTGGCCGCCTAGCAGCAGGG
GAGGTGGCCCGCCCCCCGAGGCTGAGACTGCGGAGCGCGCCGGCTGGAAAACCAACTTCCGCTGCGCACTGCGCA
GCACGCGTCGCTTCGTGATGCTGCGAGATAACTCGGGGGACCCGGCCGACCCGCACAAGGTGTACGCGCTCAGCC
GGGAGCTGTGCTGGCGAGAAGGCCCAGGCACGGACCAGACTGAGGCAGAGGCCCCCGCAGCTGTCCCACCACCAC
AGGGTGGGCCCCCAGGGCCATTCCTGGCACACACACATGCTGGACTCCAAGCCCCAGGCCCCCTCCCTGCCCCAG
CTGGTGACGAGGGGGACCTCCTGCTCCAGGCAGTGCAACAGAGCTGCCTGGCAGACCATCTGCTGACAGCGTCAT
GGGGGGCAGATCCAGTCCCAACCAAGGCTCCTGGAGAGGGACAAGAAGGGCTTCCCCTGACTGGGGCCTGTGCTG
GAGGCCCAGGGCTCCCTGCTGGGGAGCTGTACGGGTGGGCAGTAGAGACGACCCCCAGCCCCGGGCCCCAGCCCG
CGGCACTAACGACAGGCGAGGCCGCGGCCCCAGAGTCCCCGCACCAGGCAGAGCCGTACCTGTCACCCTCCCCAA
GCGCCTGCACCGCGGTGCAAGAGCCCAGCCCAGGGGCGCTGGACGTGACCATCATGTACAAGGGCCGCACGGTGC
TGCAGAAGGTGGTGGGACACCCGAGCTGCACGTTCCTATACGGCCCCCCAGACCCAGCTGTCCGGGCCACAGACC
CCCAGCAGGTAGCATTCCCCAGCCCTGCCGAGCTCCCGGACCAGAAGCAGCTGCGCTACACGGAGGAACTGCTGC
GGCACGTGGCCCCTGGGTTGCACCTGGAGCTTCGGGGGCCACAGCTGTGGGCCCGGCGCATGGGCAAGTGCAAGG
TGTACTGGGAGGTGGGCGGCCCCCCAGGCTCCGCCAGCCCCTCCACCCCAGCCTGCCTGCTGCCTCGGAACTGTG
ACACCCCCATCTTCGACTTCAGAGTCTTCTTCCGAGAGCTGGTGGAATTCCGGGCACGGCAGCGCCGTGGCTCCC
CACGCTATACCATCTACCTGGGCTTCGGGCAGGACCTGTCAGCTGGGAGGCCCAAGGAGAAGAGCCTGGTCCTGG
TGAAGCTGGAACCCTGGCTGTGCCGAGTGCACCTAGAGGGCACGCAGCGTGAGGGTGTGTCTTCCCTGGATAGCA
GCAGCCTCAGCCTCTGCCTGTCCAGCGCCAACAGCCTCTATGACGACATCGAGTGCTTCCTTATGGAGCTGGAGC
AGCCCGCCTAGAACCCAGTCTAATGAGAACTCCAGAAAGCTGGAGCAGCCCACCTAGAGCTGGCC

FIGURE 1984

MPVPERPAAGPDSPRPGTRRAAPRVLFGEWLLGEISSGCYEGLQWLDEARTCFRVPWKHFARKDLSEADARIFKA
WAVARGRWPPSSRGGGPPPEAETAERAGWKTNFRCALRSTRRFVMLRDNSGDPADPHKVYALSRELCWREGPGTD
QTEAEAPAAVPPPQGGPPGPFLAHTHAGLQAPGPLPAPAGDEGDLLLQAVQQSCLADHLLTASWGADPVPTKAPG
EGQEGLPLTGACAGGPGLPAGELYGWAVETTPSPGPQPAALTTGEAAAPESPHQAEPYLSPSPSACTAVQEPSPG
ALDVTIMYKGRTVLQKVVGHPSCTFLYGPPDPAVRATDPQQVAFPSPAELPDQKQLRYTEELLRHVAPGLHLELR
GPQLWARRMGKCKVYWEVGGPPGSASPSTPACLLPRNCDTPIFDFRVFFRELVEFRARQRRGSPRYTIYLGFGQD
LSAGRPKEKSLVLVKLEPWLCRVHLEGTQREGVSSLDSSSLSLCLSSANSLYDDIECFLMELEQPA

FIGURE 1985

GGGAGGACCCCAATCTAGGCCCAAGAGGGAAAGGCCACGTGCCTGTATGAGCGTATGAGCATGTGCATGCGCGTG
TGTGCACAGGGTGGTGCACCTGGCAGGGGTCCTTGAGTGAGGCATGCCCCATTCTGTAGCAGGGAACCTGGA**ATG**

GGCTGTGTGTTCTGCAAGAAATTGGAGCCGGTGGCCACGGCCAAGGAGGATGCTGGCCTGGAAGGGGACTTCAGA
AGCTACGGGGCAGCAGACCACTATGGGCCTGACCCCACTAAGGCCCGGCCTGCATCCTCATTTGCCCACATCCCC
AACTACAGCAACTTCTCCTCTCAGGCCATCAACCCTGGCTTCCTTGATAGTGGCACCATCAGGGGTGTGTCAGGG
ATTGGGGTGACCCTGTTCATTGCCCTGTATGACTATGAGGCTCGAACTGAGGATGACCTCACCTTCACCAAGGGC
GAGAAGTTCCACATCCTGAACAATACTGAAGGTGACTGGTGGGAGGCTCGGTCTCTCAGCTCCGGAAAAACTGGC
TGCATTCCCAGCAACTACGTGGCCCCTGTTGACTCAATCCAAGCTGAAGAGTGGTACTTTGGAAAGATTGGGAGA
AAGGATGCAGAGAGGCAGCTGCTTTCACCAGGCAACCCCCAGGGGGCCTTTCTCATTCGGGAAAGCGAGACCACC
AAAGGTGCCTACTCCCTGTCCATCCGGGACTGGGATCAGACCAGAGGCGATCATGTGAAGCATTACAAGATCCGC
AAACTGGACATGGGCGGCTACTACATCACCACACGGGTTCAGTTCAACTCGGTGCAGGAGCTGGTGCAGCACTAC
ATGGAGGTGAATGACGGGCTGTGCAACCTGCTCATCGCGCCCTGCACCATCATGAAGCCGCAGACGCTGGGCCTG
GCCAAGGACGCCTGGGAGATCAGCCGCAGCTCCATCACGCTGGAGCGCCGGCTGGGCACCGGCTGCTTCGGGGAT
GTGTGGCTGGGCACGTGGAACGGCAGCACTAAGGTGGCGGTGAAGACGCTGAAGCCGGGCACCATGTCCCCGAAG
GCCTTCCTGGAGGAGGCGCAGGTCATGAAGCTGCTGCGGCACGACAAGCTGGTGCAGCTGTACGCCGTGGTGTCG
GAGGAGCCCATCTACATCGTGACCGAGTTCATGTGTCACGGCAGCTTGCTGGATTTTCTCAAGAACCCAGAGGGC
CAGGATTTGAGGCTGCCCCAATTGGTGGACATGGCAGCCCAGGTAGCTGAGGGCATGGCCTACATGGAACGCATG
AACTACATTCACCGCGACCTGAGGGCAGCCAACATCCTGGTTGGGGAGCGGCTGGCGTGCAAGATCGCAGACTTT
GGCTTGGCGCGTCTCATCAAGGACGATGAGTACAACCCCTGCCAAGGTTCCAAGTTCCCCATCAAGTGGACAGCC
CCAGAAGCTGCCCTCTTTGGCAGATTCACCATCAAGTCAGACGTGTGGTCCTTTGGGATCCTGCTCACTGAGCTC
ATCACCAAGGGCCGAATCCCCTACCCAGGCATGAATAAACGGGAAGTGTTGGAACAGGTGGAGCAGGGCTACCAC
ATGCCGTGCCCTCCAGGCTGCCCAGCATCCCTGTACGAGGCCATGGAACAGACCTGGCGTCTGGACCCGGAGGAG
AGGCCTACCTTCGAGTACCTGCAGTCCTTCCTGGAGGACTACTTCACCTCCGCTGAACCACAGTACCAGCCCGGG
GATCAGACA**TAG**CCTGTCCGGGCATCAACCCTCTCTGGCGGTGGCCACCAGTCCTTGCCAATCCCCAGAGCTGTT
CTTCCAAAGCCCCCAGGCTGGCTTAGAACCCCATAGAGTCCTAGCATCACCGAGGACGTGGCTGCTCTGACACCA
CCTAGGGCAACCTACTTGTTTTACAGATGGGGCAAAAGGAGGCCCAGAGCTGATCTCTCATCCGCTCTGGCCCCA
AGCACTATTTCTTCCTTTTCCACTTAGGCCCCTACATGCCTGTAGCCCTTTCTCACTCCATCCCCACCCAAAAGT
GCTCAGACCTTGTCTAGTTATTTATAAACTGTATGTACCTCCCTCACTTCTCTCCTATCACTGCTTTCCTACTCT
CCTTTTATCTCACTCTAGTCCAGGTGCCAAGAATTTCCCTTCTACCCTCTATTCTCTTGTGTCTGTAAGTTACAA
AGTCAGGAAAAGTCTTGGCTGGACCCCTTTCCTGCTGGGTGGATGCAGTGGTCCAGGACTGGGGTCTGGGCCCAG
GTTTGAGGGAGAAGTTTGCAGAGCACTTCCCACCTCTCTGAATAGTGTGTATGTGTTGATTTATTGATTCTGTAA
ATAAGTAAAATGACAATATGAATCCTCCA

FIGURE 1986

MGCVFCKKLEPVATAKEDAGLEGDFRSYGAADHYGPDPTKARPASSFAHIPNYSNFSSQAINPGFLDSGTIRGVS
GIGVTLFIALYDYEARTEDDLTFTKGEKFHILNNTEGDWWEARSLSSGKTGCIPSNYVAPVDSIQAEEWYFGKIG
RKDAERQLLSPGNPQGAFLIRESETTKGAYSLSIRDWDQTRGDHVKHYKIRKLDMGGYYITTRVQFNSVQELVQH
YMEVNDGLCNLLIAPCTIMKPQTLGLAKDAWEISRSSITLERRLGTGCFGDVWLGTWNGSTKVAVKTLKPGTMSP
KAFLEEAQVMKLLRHDKLVQLYAVVSEEPIYIVTEFMCHGSLLDFLKNPEGQDLRLPQLVDMAAQVAEGMAYMER
MNYIHRDLRAANILVGERLACKIADFGLARLIKDDEYNPCQGSKFPIKWTAPEAALFGRFTIKSDVWSFGILLTE
LITKGRIPYPGMNKREVLEQVEQGYHMPCPPGCPASLYEAMEQTWRLDPEERPTFEYLQSFLEDYFTSAEPQYQP
GDQT

FIGURE 1987A

GCGAGAGGAGTCGGGATCTGCGCTGCAGCCACCGCCGCGGTTGATACTACTTTGACCTTCCGAGTGCAGTGAGGC
ATACATCACAATTTGGAATTATGCATTGGTTTATCAATTTACTTGTTTATTGTCACCCTGCTGCCCAGATATGAC
TTCATGAGGACAGTGATGTGTGTTCTGAAATTGTGAACCATGAGTCTAGTACTTAATGATCTGCTTATCTGCTGC
CGTCAACTAGAACATGATAGAGCTACAGAACGAAAGAAAGAAGTTGAGAAATTTAAGCGCCTGATTCGAGATCCT
GAAACAATTAAACATCTAGATCGGCATTCAGATTCCAAACAAGGAAAATATTTGAATTGGGATGCTGTTTTTAGA
TTTTTACAGAAATATATTCAGAAAGAAACAGAATGTCTGAGAATAGCAAAACCAAATGTATCAGCCTCAACACAA
GCCTCCAGGCAGAAAAAGATGCAGGAAATCAGTAGTTTGGTCAAATACTTCATCAAATGTGCAAACAGAAGAGCA
CCTAGGCTAAAATGTCAAGAACTCTTAAATTATATCATGGATACAGTGAAAGATTCATCTAATGGTGCTATTTAC
GGAGCTGATTGTAGCAACATACTACTCAAAGACATTCTTTCTGTGAGAAAATACTGGTGTGAAATATCTCAGCAA
CAGTGGTTAGAATTGTTCTCTGTGTACTTCAGGCTCTATCTGAAACCTTCACAAGATGTTCATAGAGTTTTAGTG
GCTAGAATAATTCATGCTGTTACCAAAGGATGCTGTTCTCAGACTGACGGATTAAATTCCAAATTTTTGGACTTT
TTTTCCAAGGCTATTCAGTGTGCGAGACAAGAAAAGAGCTCTTCAGGTCTAAATCATATCTTAGCAGCTCTTACT
ATCTTCCTCAAGACTTTGGCTGTCAACTTTCGAATTCGAGTGTGTGAATTAGGAGATGAAATTCTTCCCACTTTG
CTTTATATTTGGACTCAACATAGGCTTAATGATTCTTTAAAAGAAGTCATTATTGAATTATTTCAACTGCAAATT
TATATCCATCATCCGAAAGGAGCCAAAACCCAAGAAAAAGGTGCTTATGAATCAACAAAATGGAGAAGTATTTTA
TACAACTTATATGATCTGCTAGTGAATGAGATAAGTCATATAGGAAGTAGAGGAAAGTATTCTTCAGGATTTCGT
AATATTGCCGTCAAAGAAAATTTGATTGAATTGATGGCAGATATCTGTCACCAGGTTTTTAATGAAGATACCAGA
TCCTTGGAGATTTCTCAATCTTACACTACTACACAAAGAGAATCTAGTGATTACAGTGTCCCTTGCAAAAGGAAG
AAAATAGAACTAGGCTGGGAAGTAATAAAAGATCACCTTCAGAAGTCACAGAATGATTTTGATCTTGTGCCTTGG
CTACAGATTGCAACCCAATTAATATCAAAGTATCCTGCAAGTTTACCTAACTGTGAGCTGTCTCCATTACTGATG
ATACTATCTCAGCTTCTACCCCAACAGCGACATGGGGAACGTACACCATATGTGTTACGATGCCTTACGGAAGTT
GCATTGTGTCAAGACAAGAGGTCAAACCTAGAAAGCTCACAAAAGTCAGATTTATTAAAACTCTGGAATAAAATT
TGGTGTATTACCTTTCGTGGTATAAGTTCTGAGCAAATACAAGCTGAAAACTTTGGCTTACTTGGAGCCATAATT
CAGGGTAGTTTAGTTGAGGTTGACAGAGAATTCTGGAAGTTATTTACTGGGTCAGCCTGCAGACCTTCATGTCCT
GCAGTATGCTGTTTGACTTTGGCACTGACCACCAGTATAGTTCCAGGAGCGGTAAAAATGGGAATAGAGCAAAAT
ATGTGTGAAGTAAATAGAAGCTTTTCTTTAAAGGAATCAATAATGAAATGGCTCTTATTCTATCAGTTAGAGGGT
GACTTAGAAAATAGCACAGAAGTGCCTCCAATTCTTCACAGTAATTTTCCTCATCTTGTACTGGAGAAAATTCTT
GTGAGTCTCACTATGAAAAACTGTAAAGCTGCAATGAATTTTTTCCAAAGCGTGCCAGAATGTGAACACCACCAA
AAAGATAAAGAAGAACTTTCATTCTCAGAAGTAGAAGAACTATTTCTTCAGACAACTTTTGACAAGATGGACTTT
TTAACCATTGTGAGAGAATGTGGTATAGAAAAGCACCAGTCCAGTATTGGCTTCTCTGTCCACCAGAATCTCAAG
GAATCACTGGATCGCTGTCTTCTGGGATTATCAGAACAGCTTCTGAATAATTACTCATCTGAGATTACAAATTCA
GAAACTCTTGTCCGGTGTTCACGTCTTTTGGTGGGTGTCCTTGGCTGCTACTGTTACATGGGTGTAATAGCTGAA
GAGGAAGCATATAAGTCAGAATTATTCCAGAAAGCCAACTCTCTAATGCAATGTGCAGGAGAAAGTATCACTCTG
TTTAAAAATAAGACAAATGAGGAATTCAGAATTGGTTCCTTGAGAAATATGATGCAGCTATGTACACGTTGCTTG
AGCAACTGTACCAAGAAGAGTCCAAATAAGATTGCATCTGGCTTTTTCCTGCGATTGTTAACATCAAAGCTAATG
AATGACATTGCAGATATTTGTAAAAGTTTAGCATCCTTCATCAAAAAGCCATTTGACCGTGGAGAAGTAGAATCA
ATGGAAGATGATACTAATGGAAATCTAATGGAGGTGGAGGATCAGTCATCCATGAATCTATTTAACGATTACCCT
GATAGTAGTGTTAGTGATGCAAACGAACCTGGAGAGAGCCAAAGTACCATAGGTGCCATTAATCCTTTAGCTGAA
GAATATCTGTCAAAGCAAGATCTACTTTTCTTAGACATGCTCAAGTTCTTGTGTTTGTGTGTAACTACTGCTCAG
ACCAATACTGTGTCCTTTAGGGCAGCTGATATTCGGAGGAAATTGTTAATGTTAATTGATTCTAGCACGCTAGAA
CCTACCAAATCCCTCCACCTGCATATGTATCTAATGCTTTTAAAGGAGCTTCCTGGAGAAGAGTACCCCTTGCCA
ATGGAAGATGTTCTTGAACTTCTGAAACCACTATCCAATGTGTGTTCTTTGTATCGTCGTGACCAAGATGTTTGT
AAAACTATTTTAAACCATGTCCTTCATGTAGTGAAAAACCTAGGTCAAAGCAATATGGACTCTGAGAACACAAGG
GATGCTCAAGGACAGTTTCTTACAGTAATTGGAGCATTTTGGCATCTAACAAAGGAGAGGAAATATATATTCTCT
GTAAGAATGGCCCTAGTAAATTGCCTTAAAACTTTGCTTGAGGCTGATCCTTATTCAAAATGGGCCATTCTTAAT
GTAATGGGAAAAGACTTTCCTGTAAATGAAGTATTTACACAATTTCTTGCTGACAATCATCACCAAGTTCGCATG
TTGGCTGCAGAGTCAATCAATAGATTGTTCCAGGACACGAAGGGAGATTCTTCCAGGTTACTGAAAGCACTTCCT
TTGAAGCTTCAGCAAACAGCTTTTGAAAATGCATACTTGAAAGCTCAGGAAGGAATGAGAGAAATGTCCCATAGT

FIGURE 1987B

GCTGAGAACCCTGAAACTTTGGATGAAATTTATAATAGAAAATCTGTTTTACTGACGTTGATAGCTGTGGTTTTA
TCCTGTAGCCCTATCTGCGAAAAACAGGCTTTGTTTGCCCTGTGTAAATCTGTGAAAGAGAATGGATTAGAACCT
CACCTTGTGAAAAAGGTTTTAGAGAAAGTTTCTGAAACTTTTGGATATAGACGTTTAGAAGACTTTATGGCATCT
CATTTAGATTATCTGGTTTTGGAATGGCTAAATCTTCAAGATACTGAATACAACTTATCTTCTTTTCCTTTTATT
TTATTAAACTACACAAATATTGAGGATTTCTATAGATCTTGTTATAAGGTTTTGATTCCACATCTGGTGATTAGA
AGTCATTTTGATGAGGTGAAGTCCATTGCTAATCAGATTCAAGAGGACTGGAAAAGTCTTCTAACAGACTGCTTT
CCAAAGATTCTTGTAAATATTCTTCCTTATTTTGCCTATGAGGGTACCAGAGACAGTGGGATGGCACAGCAAAGA
GAGACTGCTACCAAGGTCTATGATATGCTTAAAAGTGAAAACTTATTGGGAAAACAGATTGATCACTTATTCATT
AGTAATTTACCAGAGATTGTGGTGGAGTTATTGATGACGTTACATGAGCCAGCAAATTCTAGTGCCAGTCAGAGC
ACTGACCTCTGTGACTTTTCAGGGGATTTGGATCCTGCTCCTAATCCACCTCATTTTCCATCGCATGTGATTAAA
GCAACATTTGCCTATATCAGCAATTGTCATAAAACCAAGTTAAAAAGCATTTTAGAAATTCTTTCCAAAAGCCCT
GATTCCTATCAGAAAATTCTTCTTGCCATATGTGAGCAAGCAGCTGAAACAAATAATGTTTATAAGAAGCACAGA
ATTCTTAAAATATATCACCTGTTTGTTAGTTTATTACTGAAAGATATAAAAAGTGGCTTAGGAGGAGCTTGGGCC
TTTGTTCTTCGAGACGTTATTTATACTTTGATTCACTATATCAACCAAAGGCCTTCTTGTATCATGGATGTGTCA
TTACGTAGCTTCTCCCTTTGTTGTGACTTATTAAGTCAGGTTTGCCAGACAGCCGTGACTTACTGTAAGGATGCT
CTAGAAAACCATCTTCATGTTATTGTTGGTACACTTATACCCCTTGTGTATGAGCAGGTGGAGGTTCAGAAACAG
GTATTGGACTTGTTGAAATACTTAGTGATAGATAACAAGGATAATGAAAACCTCTATATCACGATTAAGCTTTTA
GATCCTTTTCCTGACCATGTTGTTTTTAAGGATTTGCGTATTACTCAGCAAAAAATCAAATACAGTAGAGGACCC
TTTTCACTCTTGGAGGAAATTAACCATTTTCTCTCAGTAAGTGTTTATGATGCACTTCCATTGACAAGACTTGAA
GGACTAAAGGATCTTCGAAGACAACTGGAACTACATAAAGATCAGATGGTGGACATTATGAGAGCTTCTCAGGAT
AATCCGCAAGATGGGATTATGGTGAAACTAGTTGTCAATTTGTTGCAGTTATCCAAGATGGCAATAAACCACACT
GGTGAAAAAGAAGTTCTAGAGGCTGTTGGAAGCTGCTTGGGAGAAGTGGGTCCTATAGATTTCTCTACCATAGCT
ATACAACATAGTAAAGATGCATCTTATACCAAGGCCCTTAAGTTATTTGAAGATAAAGAACTTCAGTGGACCTTC
ATAATGCTGACCTACCTGAATAACACACTGGTAGAAGATTGTGTCAAAGTTCGATCAGCAGCTGTTACCTGTTTG
AAAAACATTTTAGCCACAAAGACTGGACATAGTTTCTGGGAGATTTATAAGATGACAACAGATCCAATGCTGGCC
TATCTACAGCCTTTTAGAACATCAAGAAAAAAGTTTTTAGAAGTACCCAGATTTGACAAAGAAAACCCTTTTGAA
GGCCTGGATGATATAAATCTGTGGATTCCTCTAAGTGAAAATCATGACATTTGGATAAAGACACTGACTTGTGCT
TTTTTGGACAGTGGAGGCACAAAATGTGAAATTCTTCAATTATTAAAGCCAATGTGTGAAGTGAAAACTGACTTT
TGTCAGACTGTACTTCCATACTTGATTCATGATATTTTACTCCAAGATACAAATGAATCATGGAGAAATCTGCTT
TCTACACATGTTCAGGGATTTTTCACCAGCTGTCTTCGACACTTCTCGCAAACGAGCCGATCCACAACCCCTGCA
AACTTGGATTCAGAGTCAGAGCACTTTTTCCGATGCTGTTTGGATAAAAAATCACAAAGAACAATGCTTGCTGTT
GTGGACTACATGAGAAGACAAAAGAGACCTTCTTCAGGAACAATTTTTAATGATGCTTTCTGGCTGGATTTAAAT
TATCTAGAAGTTGCCAAGGTAGCTCAGTCTTGTGCTGCTCACTTTACAGCTTTACTCTATGCAGAAATCTATGCA
GATAAGAAAAGTATGGATGATCAAGAGAAAAGAAGTCTTGCATTTGAAGAAGGAAGCCAGAGTACAACTATTTCT
AGCTTGAGTGAAAAAAGTAAAGAAGAAACTGGAATAAGTTTACAGGATCTTCTCTTAGAAATCTACAGAAGTATA
GGGGAGCCAGATAGTTTGTATGGCTGTGGTGGAGGGAAGATGTTACAACCCATTACTAGACTACGAACATATGAA
CACGAAGCAATGTGGGGCAAAGCCCTAGTAACATATGACCTCGAAACAGCAATCCCCTCATCAACACGCCAGGCA
GGAATCATTCAGGCCTTGCAGAATTTGGGACTCTGCCATATTCTTTCCGTCTATTTAAAAGGATTGGATTATGAA
AATAAAGACTGGTGTCCTGAACTAGAAGAACTTCATTACCAAGCAGCATGGAGGAATATGCAGTGGGACCATTGC
ACTTCCGTCAGCAAAGAAGTAGAAGGAACCAGTTACCATGAATCATTGTACAATGCTCTACAATCTCTAAGAGAC
AGAGAATTCTCTACATTTTATGAAAGTCTCAAATATGCCAGAGTAAAAGAAGTGGAAGAGATGTGTAAGCGCAGC
CTTGAGTCTGTGTATTCGCTCTATCCCACACTTAGCAGGTTGCAGGCCATTGGAGAGCTGGAAAGCATTGGGGAG
CTTTTCTCAAGATCAGTCACACATAGACAACTCTCTGAAGTATATATTAAGTGGCAGAAACACTCCCAGCTTCTC
AAGGACAGTGATTTTAGTTTTCAGGAGCCTATCATGGCTCTACGCACAGTCATTTTGGAGATCCTGATGGAAAAG
GAAATGGACAACTCACAAAGAGAATGTATTAAGGACATTCTCACCAAACACCTTGTAGAACTCTCTATACTGGCC
AGAACTTTCAAGAACACTCAGCTCCCTGAAAGGGCAATATTTCAAATTAAACAGTACAATTCAGTTAGCTGTGGA
GTCTCTGAGTGGCAGCTGGAAGAAGCACAAGTATTCTGGGCAAAAAAGGAGCAGAGTCTTGCCCTGAGTATTCTC
AAGCAAATGATCAAGAAGTTGGATGCCAGCTGTGCAGCGAACAATCCCAGCCTAAAACTTACATACACAGAATGT

FIGURE 1987C

CTGAGGGTTTGTGGCAACTGGTTAGCAGAAACGTGCTTAGAAAATCCTGCGGTCATCATGCAGACCTATCTAGAA
AAGGCAGTAGAAGTTGCTGGAAATTATGATGGAGAAAGTAGTGATGAGCTAAGAAATGGAAAAATGAAGGCATTT
CTCTCATTAGCCCGGTTTTCAGATACTCAATACCAAAGAATTGAAAACTACATGAAATCATCGGAATTTGAAAAC
AAGCAAGCTCTCCTGAAAAGAGCCAAAGAGGAAGTAGGTCTCCTTAGGGAACATAAAATTCAGACAAACAGATAC
ACAGTAAAGGTTCAGCGAGAGCTGGAGTTGGATGAATTAGCCCTGCGTGCACTGAAAGAGGATCGTAAACGCTTC
TTATGTAAAGCAGTTGAAAATTATATCAACTGCTTATTAAGTGGAGAAGAACATGATATGTGGGTATTCCGGCTT
TGTTCCCTCTGGCTTGAAAATTCTGGAGTTTCTGAAGTCAATGGCATGATGAAGAGAGACGGAATGAAGATTCCA
ACATATAAATTTTTGCCTCTTATGTACCAATTGGCTGCTAGAATGGGGACCAAGATGATGGGAGGCCTAGGATTT
CATGAAGTCCTCAATAATCTAATCTCTAGAATTTCAATGGATCACCCCCATCACACTTTGTTTATTATACTGGCC
TTAGCAAATGCAAACAGAGATGAATTTCTGACTAAACCAGAGGTAGCCAGAAGAAGCAGAATAACTAAAAATGTG
CCTAAACAAAGCTCTCAGCTTGATGAGGATCGAACAGAGGCTGCAAATAGAATAATATGTACTATCAGAAGTAGG
AGACCTCAGATGGTCAGAAGTGTTGAGGCACTTTGTGATGCTTATATTATATTAGCAAACTTAGATGCCACTCAG
TGGAAGACTCAGAGAAAAGGCATAAATATTCCAGCAGACCAGCCAATTACTAAACTTAAGAATTTAGAAGATGTT
GTTGTCCCTACTATGGAAATTAAGGTGGACCACACAGGAGAATATGGAAATCTGGTGACTATACAGTCATTTAAA
GCAGAATTTCGCTTAGCAGGAGGTGTAAATTTACCAAAAATAATAGATTGTGTAGGTTCCGATGGCAAGGAGAGG
AGACAGCTTGTTAAGGGCCGTGATGACCTGAGACAAGATGCTGTCATGCAACAGGTCTTCCAGATGTGTAATACA
TTACTGCAGAGAAACACGGAAACTAGGAAGAGGAAATTAACTATCTGTACTTATAAGGTGGTTCCCCTCTCTCAG
CGAAGTGGTGTTCTTGAATGGTGCACAGGAACTGTCCCCATTGGTGAATTTCTTGTTAACAATGAAGATGGTGCT
CATAAAAGATACAGGCCAAATGATTTCAGTGCCTTTCAGTGCCAAAAGAAAATGATGGAGGTGCAAAAAAAGTCT
TTTGAAGAGAAATATGAAGTCTTCATGGATGTTTGCCAAAATTTTCAACCAGTTTTCCGTTACTTCTGCATGGAA
AAATTCTTGGATCCAGCTATTTGGTTTGAGAAGCGATTGGCTTATACGCGCAGTGTAGCTACTTCTTCTATTGTT
GGTTACATACTTGGACTTGGTGATAGACATGTACAGAATATCTTGATAAATGAGCAGTCAGCAGAACTTGTACAT
ATAGATCTAGGTGTTGCTTTTGAACAGGGCAAAATCCTTCCTACTCCTGAGACAGTTCCTTTTAGACTCACCAGA
GATATTGTGGATGGCATGGGCATTACGGGTGTTGAAGGTGTCTTCAGAAGATGCTGTGAGAAAACCATGGAAGTG
ATGAGAAACTCTCAGGAAACTCTGTTAACCATTGTAGAGGTCCTTCTATATGATCCACTCTTTGACTGGACCATG
AATCCTTTGAAAGCTTTGTATTTACAGCAGAGGCCGGAAGATGAAACTGAGCTTCACCCTACTCTGAATGCAGAT
GACCAAGAATGCAAACGAAATCTCAGTGATATTGACCAGAGTTTCAACAAAGTAGCTGAACGTGTCTTAATGAGA
CTACAAGAGAAACTGAAAGGAGTGGAAGAAGGCACTGTGCTCAGTGTTGGTGGACAAGTGAATTTGCTCATACAG
CAGGCCATAGACCCCAAAAATCTCAGCCGACTTTTCCCAGGATGGAAAGCTTGGGTGTGATCTTCAGTATATGAA
TTACCCTTTCATTCAGCCTTTAGAAATTATATTTTAGCCTTTATTTTTAACCTGCCAACATACTTTAAGTAGGGA
TTAATATTTAAGTGAACTATTGTGGGTTTTTTTGAATGTTGGTTTTAATACTTGATTTAATCACCACTCAAAAAT
GTTTTGATGGTCTTAAGGAACATCTCTGCTTTCACTCTTTAGAAATAATGGTCATTCGGGCTGGGCGCAGCGGCT
CACGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGTGAGCGGATCACAAGGTCAGGAGTTCGAGACCAGCCTGGC
CAAGAGACCAGCCTGGCCAGTATGGTGAAACCCTGTCTCTACTAAAAATACAAAAATTAGCCGAGCATGGTGGCG
GGCACCTGTAGTCCCAGCTACTCGAGAGGCTGAGGCAGGAGAATCTCTTGAACCTGGGAGGTGAAGGTTGCTGTG
GGCCAAAATCATGCCATTGCACTCCAGCCTGGGTGACAAGAGCGAAACTCCATCTCAAAAA

FIGURE 1988

MTLHEPANSSASQSTDLCDFSGDLDPAPNPPHFPSHVIKATFAYISNCHKTKLKSILEILSKSPDSYQKILLAIC
EQAAETNNVYKKHRILKIYHLFVSLLLKDIKSGLGGAWAFVLRDVIYTLIHYINQRPSCIMDVSLRSFSLCCDLL
SQVCQTAVTYCKDALENHLHVIVGTLIPLVYEQVEVQKQVLDLLKYLVIDNKDNENLYITIKLLDPFPDHVVFKD
LRITQQKIKYSRGPFSLLEEINHFLSVSVYDALPLTRLEGLKDLRRQLELHKDQMVDIMRASQDNPQDGIMVKLV
VNLLQLSKMAINHTGEKEVLEAVGSCLGEVGPIDFSTIAIQHSKDASYTKALKLFEDKELQWTFIMLTYLNNTLV
EDCVKVRSAAVTCLKNILATKTGHSFWEIYKMTTDPMLAYLQPFRTSRKKFLEVPRFDKENPFEGLDDINLWIPL
SENHDIWIKTLTCAFLDSGGTKCEILQLLKPMCEVKTDFCQTVLPYLIHDILLQDTNESWRNLLSTHVQGFFTSC
LRHFSQTSRSTTPANLDSESEHFFRCCLDKKSQRTMLAVVDYMRRQKRPSSGTIFNDAFWLDLNYLEVAKVAQSC
AAHFTALLYAEIYADKKSMDDQEKRSLAFEEGSQSTTISSLSEKSKEETGISLQDLLLEIYRSIGEPDSLYGCGG
GKMLQPITRLRTYEHEAMWGKALVTYDLETAIPSSTRQAGIIQALQNLGLCHILSVYLKGLDYENKDWCPELEEL
HYQAAWRNMQWDHCTSVSKEVEGTSYHESLYNALQSLRDREFSTFYESLKYARVKEVEEMCKRSLESVYSLYPTL
SRLQAIGELESIGELFSRSVTHRQLSEVYIKWQKHSQLLKDSDFSFQEPIMALRTVILEILMEKEMDNSQRECIK
DILTKHLVELSILARTFKNTQLPERAIFQIKQYNSVSCGVSEWQLEEAQVFWAKKEQSLALSILKQMIKKLDASC
AANNPSLKLTYTECLRVCGNWLAETCLENPAVIMQTYLEKAVEVAGNYDGESSDELRNGKMKAFLSLARFSDTQY
QRIENYMKSSEFENKQALLKRAKEEVGLLREHKIQTNRYTVKVQRELELDELALRALKEDRKRFLCKAVENYINC
LLSGEEHDMWVFRLCSLWLENSGVSEVNGMMKRDGMKIPTYKFLPLMYQLAARMGTKMMGGLGFHEVLNNLISRI
SMDHPHHTLFIILALANANRDEFLTKPEVARRSRITKNVPKQSSQLDEDRTEAANRIICTIRSRRPQMVRSVEAL
CDAYIILANLDATQWKTQRKGINIPADQPITKLKNLEDVVVPTMEIKVDHTGEYGNLVTIQSFKAEFRLAGGVNL
PKIIDCVGSDGKERRQLVKGRDDLRQDAVMQQVFQMCNTLLQRNTETRKRKLTICTYKVVPLSQRSGVLEWCTGT
VPIGEFLVNNEDGAHKRYRPNDFSAFQCQKKMMEVQKKSFEEKYEVFMDVCQNFQPVFRYFCMEKFLDPAIWFEK
RLAYTRSVATSSIVGYILGLGDRHVQNILINEQSAELVHIDLGVAFEQGKILPTPETVPFRLTRDIVDGMGITGV
EGVFRRCCEKTMEVMRNSQETLLTIVEVLLYDPLFDWTMNPLKALYLQQRPEDETELHPTLNADDQECKRNLSDI
DQSFNKVAERVLMRLQEKLKGVEEGTVLSVGGQVNLLIQQAIDPKNLSRLFPGWKAWV

FIGURE 1989A

TGAGGAGGAGTCGTGACTGCCGGCCGCCGGGACCGAAGCGGAGGTCGGCGGGGGGCTGCTGGGAGGCGCGGCGGT
GTGCGCGGGAACTCTGCGCCGTGGCGTTCCGCTCCATGACTGTCGCGCGGCCGCGCCGGCGGTGAGGGAGCCGGA
GTTCGCGCCGCCCTCTCACCCCTCCCTTCCCCCACCCCACCCCCGGGCGCCTGGCGCTCGCTCCGGGCCGCGGGG
CCTAGTGCTGCGCCGCGGGGCCGGCCCCAGCAGCCGCCAGTCCCACCGCCGCCGCCGCGATGGCGCCGCTCCTGG
GCCGCAAGCCCTTCCCGCTGGTGAAGCCGTTGCCCGGAGAGGAGCCGCTCTTCACCATCCCGCACACTCAGGAGG
CCTTCCGCACCCGGGAAGAGTATGAAGCCCGCTTGGAAAGGTACAGTGAGCGCATTTGGACGTGCAAGAGTACTG
GAAGCAGTCAGCTAACACACAAGGAAGCCTGGGAGGAAGAACAGGAAGTTGCTGAGCTTTTGAAGGAGGAGTTTC
CTGCCTGGTATGAGAAGCTTGTTCTGGAAATGGTTCACCATAACACAGCCTCCTTAGAGAAGTTAGTAGATACTG
CTTGGTTGGAGATCATGACCAAATATGCTGTGGGAGAAGAGTGTGACTTCGAGGTTGGGAAGGAGAAAATGCTCA
AGGTGAAGATTGTGAAGATTCATCCTTTGGAGAAAGTGGATGAAGAGGCCACTGAGAAGAAATCTGATGGTGCCT
GTGATTCTCCATCAAGTGACAAAGAGAACTCCAGTCAGATTGCTCAGGACCATCAGAAGAAGGAGACAGTTGTGA
AAGAGGATGAAGGAAGGAGAGAGAGTATTAATGACAGAGCACGTAGATCGCCACGAAAACTTCCTACTTCATTAA
AAAAAGGAGAAAGGAAATGGGCTCCTCCAAAATTTCTGCCTCACAAATATGATGTGAAACTACAAAATGAAGATA
AGATCATCAGTAACGTGCCAGCAGACAGCTTGATTCGTACAGAGCGCCCACCAAATAAGGAGATAGTTCGATACT
TTATACGGCATAATGCATTACGAGCTGGTACTGGTGAAAATGCACCTTGGGTCGTAGAAGATGAATTGGTGAAGA
AATACTCTCTGCCCAGCAAGTTCAGTGACTTTTTACTTGATCCATACAAGTATATGACTCTCAACCCTTCTACTA
AGAGGAAGAATACTGGATCCCCAGACAGGAAGCCCTCAAAGAAATCCAAGACAGACAACTCTTCTCTTAGTTCAC
CACTAAATCCTAAGTTATGGTGTCACGTACACTTGAAGAAGTCATTGAGTGGCTCGCCACTCAAAGTGAAGAACT
CAAAGAATTCCAAATCTCCTGAAGAACATCTAGAAGAAATGATGAAGATGATGTCGCCCAATAAGCTGCACACTA
ACTTTCACATTCCTAAAAAAGGCCCACCTGCCAAGAAACCAGGGAAGCACAGTGACAAGCCTTTGAAGGCAAAGG
GCAGAAGCAAAGGCATCCTGAATGGACAGAAATCCACAGGGAATTCCAAATCTCCCAAAAAAGGACTGAAGACTC
CTAAAACCAAAATGAAGCAGATGACTTTGTTGGATATGGCCAAAGGCACGCAGAAGATGACACGAGCCCCACGGA
ATTCTGGGGGTACACCTAGGACCTCTAGTAAACCTCATAAACATCTGCCTCCTGCAGCCCTACACCTCATTGCAT
ACTACAAAGAAAACAAAGACAGGGAGGACAAGAGGAGCGCCCTGTCCTGTGTTATCTCCAAAACAGCTCGTCTTC
TCTCTAGTGAAGATAGAGCTCGTCTCCCAGAAGAATTGCGAAGTCTTGTTCAAAAACGCTATGAACTTCTAGAGC
ACAAAAAGAGGTGGGCTTCTATGTCTGAAGAACAACGGAAAGAATATTTGAAAAAGAAACGGGAGGAGCTGAAAA
AGAAGTTGAAGGAAAAAGCCAAAGAACGAAGAGAGAAAGAAATGCTTGAGAGATTAGAAAAACAGAAGCGGTATG
AGGACCAAGAGTTAACTGGCAAAAACCTTCCAGCATTCAGATTGGTGGATACCCCTGAAGGGCTGCCCAACACGC
TGTTTGGGGATGTGGCCATGGTGGTGGAATTCTTGAGCTGTTATTCTGGGCTACTTTTACCAGATGCTCAGTATC
CTATTACTGCTGTGTCCCTTATGGAAGCCTTGAGTGCAGATAAGGGTGGCTTTTTATACCTTAACAGGGTGTTGG
TCATCCTCTTACAGACCCTCCTACAAGATGAGATAGCAGAAGACTATGGTGAATTGGGAATGAAGCTGTCGGAAA
TCCCCTTGACTCTGCATTCTGTTTCAGAGCTGGTGCGGCTCTGCTTGCGCAGATCTGATGTTCAGGAGGAAAGCG
AGGGCTCAGACACAGATGACAATAAAGATTCAGCTGCATTTGAGGATAATGAGGTACAAGATGAGTTCCTAGAAA
AGCTGGAGACCTCTGAATTTTTTGAGCTGACGTCAGAGGAGAAGCTACAGATCTTGACAGCACTGTGCCACCGGA
TCCTCATGACATACTCAGTGCAAGACCACATGGAGACCAGACAGCAGATGTCTGCAGAGTTGTGGAAGGAACGGC
TTGCTGTGTTGAAGGAAGAAAATGATAAGAAGAGAGCAGAGAAACAGAAACGGAAAGAAATGGAAGCCAAAAATA
AAGAAAATGGAAAAGTTGAGAATGGGTTAGGCAAAACTGATAGGAAAAAAGAAATTGTGAAGTTTGAGCCCCAAG
TAGATACAGAAGCTGAAGACATGATTAGTGCTGTGAAGAGCAGAAGGTTGCTTGCCATTCAAGCTAAGAAGGAAC
GGGAAATCCAGGAAAGAGAAATGAAAGTGAAACTGGAACGCCAAGCTGAAGAAGAACGAATACGGAAGCACAAAG
CAGCTGCTGAGAAAGCTTTCCAGGAAGGGATTGCCAAGGCCAAACTAGTCATGCGCAGGACTCCTATTGGCACAG
ATCGAAACCATAATAGATACTGGCTCTTCTCAGATGAAGTTCCAGGATTATTCATTGAAAAAGGCTGGGTACATG
ACAGCATTGACTACCGATTCAACCATCACTGCAAAGACCACACAGTCTCTGGTGATGAGGATTACTGTCCTCGCA
GTAAGAAAGCAAACTTAGGTAAAAATGCAAGCATGAACACACAACATGGAACAGCAACAGAAGTTGCTGTAGAGA
CAACCACACCCAAACAAGGACAGAACCTATGGTTTTTATGTGATAGTCAAAAGGAGCTGGATGAGTTGCTAAACT
GTCTTCACCCTCAGGGAATAAGAGAAAGTCAACTTAAAGAGAGACTAGAGAAGAGGTACCAGGACATTATTCACT
CTATTCATCTAGCACGGAAGCCAAATTTGGGTCTAAAATCTTGTGATGGCAACCAGGAGCTTTTAAACTTCCTTC
GTAGTGATCTCATTGAAGTTGCAACAAGGTTACAAAAAGGAGGACTTGGATATGTGGAAGAAACATCAGAATTTG
AAGCCCGGGTCATTTCATTAGAGAAATTGAAGGATTTTGGTGAGTGTGTGATTGCCCTTCAGGCCAGTGTCATAA

FIGURE 1989B

AGAAATTTCTCCAAGGCTTCATGGCTCCCAAGCAAAAGAGAAGAAAACTCCAAAGTGAAGATTCAGCAAAAACTG
AGGAAGTGGATGAAGAGAAGAAAATGGTAGAGGAAGCAAAGGTTGCATCTGCACTGGAGAAATGGAAGACAGCAA
TCCGGGAAGCTCAGACTTTCTCCAGGATGCACGTGCTGCTTGGGATGCTTGATGCCTGTATCAAGTGGGATATGT
CCGCAGAAAATGCTAGGTGCAAAGTTTGTCGAAAGAAAGGTGAGGATGACAAATTGATCTTATGTGATGAGTGTA
ATAAAGCCTTCCACCTGTTTTGTCTGAGGCCGGCCCTCTATGAAGTACCAGATGGTGAGTGGCAGTGCCCAGCTT
GCCAGCCCGCTACTGCCAGGCGCAACTCCCGTGGCAGGAACTATACTGAAGAGTCTGCTTCTGAGGACAGTGAAG
ATGATGAGAGTGATGAAGAGGAGGAGGAGGAAGAAGAGGAGGAGGAGGAAGAAGATTATGAGGTGGCTGGTTTGC
GATTGAGACCTCGAAAGACCATCCGGGGCAAGCACAGCGTCATCCCCCCTGCAGCAAGGTCAGGCCGGCGCCCGG
GTAAGAAGCCACACTCTACCAGGAGGTCTCAGCCCAAGGCACCACCTGTGGATGATGCTGAGGTGGATGAGCTGG
TGCTTCAGACCAAGCGGAGCTCCCGGAGGCAAAGCCTGGAGCTGCAGAAGTGTGAAGAGATCCTCCACAAGATCG
TGAAGTACCGCTTCAGCTGGCCCTTCAGGGAGCCTGTGACCAGAGATGAGGCCGAGGACTACTATGATGTGATCA
CGCACCCCATGGACTTTCAGACAGTGCAGAACAAATGTTCCTGTGGGAGCTACCGCTCTGTGCAGGAGTTTCTTA
CTGACATGAAGCAAGTGTTTACCAATGCTGAGGTTTACAACTGCCGTGGCAGCCATGTGCTAAGCTGCATGGTGA
AGACAGAACAGTGTCTAGTGGCTCTGTTGCATAAACACCTTCCTGGCCACCCATATGTCCGCAGGAAGCGCAAGA
AGTTTCCTGATAGGCTTGCTGAAGATGAAGGGGACAGTGAGCCAGAGGCCGTTGGACAGTCCAGGGGACGAAGAC
AGAAGAAGTAGAGAGGCAGGGCCGTGGTGACAGTATCAGTGAGTGCCATACAGAATTGTGTATTCACCAGCATCA
TAAAACAGTTGTGGTCTTTTGAGTTGATCTTGGCAGAGTAAAGGGACGTGTCCTGGAGCCATTCCTGAATCTCCC
CTTCTTTGTGACAGCTCCTCCCACCCCCCCAAAAAATAAAAAAACCACAAAAAACAAAAAAACAAAACTAAGGCA
CTTCACTTAGAGACTGGAGTCCTGCTTATAATCATGCATATAACCTTTACTTTGATGGATCTGGCCAGAGGGGTG
TTGGAGCCCAGCCCACCCACATACCAGTCAAGCTCTTAGGGGAGCAGAAGAAAAGCAGGAAGAATTTAAATGTTT
AATTTTTTTTTTAAATTGACTTTTCTAGTTATTAAAAGTTGCTTGTTTCAGCAGTGATATTGTATAAAGAACATC
TTGTAAGATACTCCTGACATCTTGCTTTAGCACATGTACAGTACAGTTTCTATGATAATGTGTTTGCTCTAACTT
CCCTGGCTTCTCCTTCAGCCCATCCACTCTCCTCTAGAGCAGTTGGGTTGGAGGCTCATTGAGGCAAGCAGCAAC
ATTGGAGGGGGAGCAGGGCAGTGCTGTGTCTGCTGCCTCCCATGCCCGTTCTGACCTCAGCCTTGGAACTCCTCA
AGAACCTGAAGATTCCAGTGGTCAGTGTCGGTGGGGGGTGGGAGGAGAGAGCGGCAGAGAAGCTCTGAGAGCCCC
TTCCCCCACAACAAATCTAGCTCTAGTTGTTATATTTAGGCAAAACTTTGTAGTCTTCTTTCCCTTTTATGATGG
ATTTTGATAAAAGTACAAAACAGGGTTTTTCTTTTTTATCACCTTTGAATTTGGAAATTTTGAGCACCCAAGCTC
TTCTGTACCTATTTAAAGTCCACCAAGGGGACTGCAGCTCCTAGAACATGAGAATCAAGCCTCTTAATTTTAAAC
TGCGGAATGTGGCCTCTGCTTCCTCCGTCCTCCTGCCCAAGGACGACGAGGATTGCTCCAGGGCTGCTGGGTAGT
TTACCGTCCCTTCTATAGGCATGGAGTTGGCACTGACATCACAGCTTCATAACCCCACCACCGCCAGCTTCCCCT
GCCTCCTACATCCAGTCTGTTCTTGTTCATAGTGAGAATCCTGTGTTCCCACTTCAGTGACACCTGAATTGTTTG
TTGTTGTTTTTTTTTTTTATTGTCTTCAAAGAGGAAGGGCCCCATTAAAGGGTGAACTTGTAATAAATTGGAATT
TCAAATAAACCTCATGTACTTGTGTTTATAAAGAAGAAACCAA

FIGURE 1990

MAPLLGRKPFPLVKPLPGEEPLFTIPHTQEAFRTREEYEARLERYSERIWTCKSTGSSQLTHKEAWEEEQEVAEL
LKEEFPAWYEKLVLEMVHHNTASLEKLVDTAWLEIMTKYAVGEECDFEVGKEKMLKVKIVKIHPLEKVDEEATEK
KSDGACDSPSSDKENSSQIAQDHQKKETVVKEDEGRRESINDRARRSPRKLPTSLKKGERKWAPPKFLPHKYDVK
LQNEDKIISNVPADSLIRTERPPNKEIVRYFIRHNALRAGTGENAPWVVEDELVKKYSLPSKFSDFLLDPYKYMT
LNPSTKRKNTGSPDRKPSKKSKTDNSSLSSPLNPKLWCHVHLKKSLSGSPLKVKNSKNSKSPEEHLEEMMKMMSP
NKLHTNFHIPKKGPPAKKPGKHSDKPLKAKGRSKGILNGQKSTGNSKSPKKGLKTPKTKMKQMTLLDMAKGTQKM
TRAPRNSGGTPRTSSKPHKHLPPAALHLIAYYKENKDREDKRSALSCVISKTARLLSSEDRARLPEELRSLVQKR
YELLEHKKRWASMSEEQRKEYLKKKREELKKKLKEKAKERREKEMLERLEKQKRYEDQELTGKNLPAFRLVDTPE
GLPNTLFGDVAMVVEFLSCYSGLLLPDAQYPITAVSLMEALSADKGGFLYLNRVLVILLQTLLQDEIAEDYGELG
MKLSEIPLTLHSVSELVRLCLRRSDVQEESEGSDTDDNKDSAAFEDNEVQDEFLEKLETSEFFELTSEEKLQILT
ALCHRILMTYSVQDHMETRQQMSAELWKERLAVLKEENDKKRAEKQKRKEMEAKNKENGKVENGLGKTDRKKEIV
KFEPQVDTEAEDMISAVKSRRLLAIQAKKEREIQEREMKVKLERQAEEERIRKHKAAAEKAFQEGIAKAKLVMRR
TPIGTDRNHNRYWLFSDEVPGLFIEKGWVHDSIDYRFNHHCKDHTVSGDEDYCPRSKKANLGKNASMNTQHGTAT
EVAVETTTPKQGQNLWFLCDSQKELDELLNCLHPQGIRESQLKERLEKRYQDIIHSIHLARKPNLGLKSCDGNQE
LLNFLRSDLIEVATRLQKGGLGYVEETSEFEARVISLEKLKDFGECVIALQASVIKKFLQGFMAPKQKRRKLQSE
DSAKTEEVDEEKKMVEEAKVASALEKWKTAIREAQTFSRMHVLLGMLDACIKWDMSAENARCKVCRKKGEDDKLI
LCDECNKAFHLFCLRPALYEVPDGEWQCPACQPATARRNSRGRNYTEESASEDSEDDESDEEEEEEEEEEEEEDY
EVAGLRLRPRKTIRGKHSVIPPAARSGRRPGKKPHSTRRSQPKAPPVDDAEVDELVLQTKRSSRRQSLELQKCEE
ILHKIVKYRFSWPFREPVTRDEAEDYYDVITHPMDFQTVQNKCSCGSYRSVQEFLTDMKQVFTNAEVYNCRGSHV
LSCMVKTEQCLVALLHKHLPGHPYVRRKRKKFPDRLAEDEGDSEPEAVGQSRGRRQKK

FIGURE 1991A

ACACTCTGGGCGCGGAGCACAATGATTGGTCACTCCTATTTTCGCTGAGCTTTTCCTCTTATTTCAGTTTTCTTC
GAGATCAAATCTGGTTTGTAGATGTGCTTGGGGAGAATGGGGGCCTCTTCTCCAAGAAGCCCGGAGCCTGTCGGG
CCGCCGGCGCCCGGTCTCCCCTTCTGCTGCGGAGGATCCCTGCTGGCGGTTGTGGTGCTGCTTGCGCTGCCGGTG
GCCTGGGGTCAATGCAATGCCCCAGAATGGCTTCCATTTGCCAGGCCTACCAACCTAACTGATGAATTTGAGTTT
CCCATTGGGACATATCTGAACTATGAATGCCGCCCTGGTTATTCCGGAAGACCGTTTTCTATCATCTGCCTAAAA
AACTCAGTCTGGACTGGTGCTAAGGACAGGTGCAGACGTAAATCATGTCGTAATCCTCCAGATCCTGTGAATGGC
ATGGTGCATGTGATCAAAGGCATCCAGTTCGGATCCCAAATTAAATATTCTTGTACTAAAGGATACCGACTCATT
GGTTCCTCGTCTGCCACATGCATCATCTCAGGTGATACTGTCATTTGGGATAATGAAACACCTATTTGTGACAGA
ATTCCTTGTGGGCTACCCCCCACCATCACCAATGGAGATTTCATTAGCACCAACAGAGAGAATTTTCACTATGGA
TCAGTGGTGACCTACCGCTGCAATCCTGGAAGCGGAGGGAGAAAGGTGTTTGAGCTTGTGGGTGAGCCCTCCATA
TACTGCACCAGCAATGACGATCAAGTGGGCATCTGGAGCGGCCCCGCCCCTCAGTGCATTATACCTAACAAATGC
ACGCCTCCAAATGTGGAAAATGGAATATTGGTATCTGACAACAGAAGCTTATTTTCCTTAAATGAAGTTGTGGAG
TTTAGGTGTCAGCCTGGCTTTGTCATGAAAGGACCCCGCCGTGTGAAGTGCCAGGCCCTGAACAAATGGGAGCCG
GAGCTACCAAGCTGCTCCAGGGTATGTCAGCCACCTCCAGATGTCCTGCATGCTGAGCGTACCCAAAGGGACAAG
GACAACTTTTCACCTGGGCAGGAAGTGTTCTACAGCTGTGAGCCCGGCTACGACCTCAGAGGGGCTGCGTCTATG
CGCTGCACACCCCAGGGAGACTGGAGCCCTGCAGCCCCCACATGTGAAGTGAAATCCTGTGATGACTTCATGGGC
CAACTTCTTAATGGCCGTGTGCTATTTCCAGTAAATCTCCAGCTTGGAGCAAAAGTGGATTTTGTTTGTGATGAA
GGATTTCAATTAAAAGGCAGCTCTGCTAGTTACTGTGTCTTGGCTGGAATGGAAAGCCTTTGGAATAGCAGTGTT
CCAGTGTGTGAACAAATCTTTTGTCCAAGTCCTCCAGTTATTCCTAATGGGAGACACACAGGAAAACCTCTGGAA
GTCTTTCCCTTTGGAAAAGCAGTAAATTACACATGCGACCCCCACCCAGACAGAGGGACGAGCTTCGACCTCATT
GGAGAGAGCACCATCCGCTGCACAAGTGACCCTCAAGGGAATGGGGTTTGGAGCAGCCCTGCCCCTCGCTGTGGA
ATTCTGGGTCACTGTCAAGCCCCAGATCATTTTCTGTTTGCCAAGTTGAAAACCCAAACCAATGCATCTGACTTT
CCCATTGGGACATCTTTAAAGTACGAATGCCGTCCTGAGTACTACGGGAGGCCATTCTCTATCACATGTCTAGAT
AACCTGGTCTGGTCAAGTCCCAAAGATGTCTGTAAACGTAAATCATGTAAAACTCCTCCAGATCCAGTGAATGGC
ATGGTGCATGTGATCACAGACATCCAGGTTGGATCCAGAATCAACTATTCTTGTACTACAGGGCACCGACTCATT
GGTCACTCATCTGCTGAATGTATCCTCTCGGGCAATGCTGCCCATTGGAGCACGAAGCCGCCAATTTGTCAACGA
ATTCCTTGTGGGCTACCCCCCACCATCGCCAATGGAGATTTCATTAGCACCAACAGAGAGAATTTTCACTATGGA
TCAGTGGTGACCTACCGCTGCAATCCTGGAAGCGGAGGGAGAAAGGTGTTTGAGCTTGTGGGTGAGCCCTCCATA
TACTGCACCAGCAATGACGATCAAGTGGGCATCTGGAGCGGCCCCGCCCCTCAGTGCATTATACCTAACAAATGC
ACGCCTCCAAATGTGGAAAATGGAATATTGGTATCTGACAACAGAAGCTTATTTTCCTTAAATGAAGTTGTGGAG
TTTAGGTGTCAGCCTGGCTTTGTCATGAAAGGACCCCGCCGTGTGAAGTGCCAGGCCCTGAACAAATGGGAGCCG
GAGCTACCAAGCTGCTCCAGGGTATGTCAGCCACCTCCAGATGTCCTGCATGCTGAGCGTACCCAAAGGGACAAG
GACAACTTTTCACCCGGGCAGGAAGTGTTCTACAGCTGTGAGCCCGGCTACGACCTCAGAGGGGCTGCGTCTATG
CGCTGCACACCCCAGGGAGACTGGAGCCCTGCAGCCCCCACATGTGAAGTGAAATCCTGTGATGACTTCATGGGC
CAACTTCTTAATGGCCGTGTGCTATTTCCAGTAAATCTCCAGCTTGGAGCAAAAGTGGATTTTGTTTGTGATGAA
GGATTTCAATTAAAAGGCAGCTCTGCTAGTTACTGTGTCTTGGCTGGAATGGAAAGCCTTTGGAATAGCAGTGTT
CCAGTGTGTGAACAAATCTTTTGTCCAAGTCCTCCAGTTATTCCTAATGGGAGACACACAGGAAAACCTCTGGAA
GTCTTTCCCTTTGGGAAAACAGTAAATTACACATGCGACCCCCACCCAGACAGAGGGACGAGCTTCGACCTCATT
GGAGAGAGCACCATCCGCTGCACAAGTGACCCTCAAGGGAATGGGGTTTGGAGCAGCCCTGCCCCTCGCTGTGGA
ATTCTGGGTCACTGTCAAGCCCCAGATCATTTTCTGTTTGCCAAGTTGAAAACCCAAACCAATGCATCTGACTTT
CCCATTGGGACATCTTTAAAGTACGAATGCCGTCCTGAGTACTACGGGAGGCCATTCTCTATCACATGTCTAGAT
AACCTGGTCTGGTCAAGTCCCAAAGATGTCTGTAAACGTAAATCATGTAAAACTCCTCCAGATCCAGTGAATGGC
ATGGTGCATGTGATCACAGACATCCAGGTTGGATCCAGAATCAACTATTCTTGTACTACAGGGCACCGACTCATT
GGTCACTCATCTGCTGAATGTATCCTCTCGGGCAATGCTGCCCATTGGAGCACGAAGCCGCCAATTTGTCAACGA
ATTCCTTGTGGGCTACCCCCCACCATCGCCAATGGAGATTTCATTAGCACCAACAGAGAGAATTTTCACTATGGA
TCAGTGGTGACCTACCGCTGCAATCCTGGAAGCGGAGGGAGAAAGGTGTTTGAGCTTGTGGGTGAGCCCTCCATA
TACTGCACCAGCAATGACGATCAAGTGGGCATCTGGAGCGGCCCGGCCCCTCAGTGCATTATACCTAACAAATGC
ACGCCTCCAAATGTGGAAAATGGAATATTGGTATCTGACAACAGAAGCTTATTTTCCTTAAATGAAGTTGTGGAG

FIGURE 1991B

TTTAGGTGTCAGCCTGGCTTTGTCATGAAAGGACCCCGCCGTGTGAAGTGCCAGGCCCTGAACAAATGGGAGCCG
GAGCTACCAAGCTGCTCCAGGGTATGTCAGCCACCTCCAGATGTCCTGCATGCTGAGCGTACCCAAAGGGACAAG
GACAACTTTTCACCCGGGCAGGAAGTGTTCTACAGCTGTGAGCCCGGCTATGACCTCAGAGGGGCTGCGTCTATG
CGCTGCACACCCCAGGGAGACTGGAGCCCTGCAGCCCCCACATGTGAAGTGAAATCCTGTGATGACTTCATGGGC
CAACTTCTTAATGGCCGTGTGCTATTTCCAGTAAATCTCCAGCTTGGAGCAAAAGTGGATTTTGTTTGTGATGAA
GGATTTCAATTAAAAGGCAGCTCTGCTAGTTATTGTGTCTTGGCTGGAATGGAAAGCCTTTGGAATAGCAGTGTT
CCAGTGTGTGAACAAATCTTTTGTCCAAGTCCTCCAGTTATTCCTAATGGGAGACACACAGGAAAACCTCTGGAA
GTCTTTCCCTTTGGAAAAGCAGTAAATTACACATGCGACCCCCACCCAGACAGAGGGACGAGCTTCGACCTCATT
GGAGAGAGCACCATCCGCTGCACAAGTGACCCTCAAGGGAATGGGGTTTGGAGCAGCCCTGCCCCTCGCTGTGGA
ATTCTGGGTCACTGTCAAGCCCCAGATCATTTTCTGTTTGCCAAGTTGAAAACCCAAACCAATGCATCTGACTTT
CCCATTGGGACATCTTTAAAGTACGAATGCCGTCCTGAGTACTACGGGAGGCCATTCTCTATCACATGTCTAGAT
AACCTGGTCTGGTCAAGTCCCAAAGATGTCTGTAAACGTAAATCATGTAAAACTCCTCCAGATCCAGTGAATGGC
ATGGTGCATGTGATCACAGACATCCAGGTTGGATCCAGAATCAACTATTCTTGTACTACAGGGCACCGACTCATT
GGTCACTCATCTGCTGAATGTATCCTCTCAGGCAATACTGCCCATTGGAGCACGAAGCCGCCAATTTGTCAACGA
ATTCCTTGTGGGCTACCCCCAACCATCGCCAATGGAGATTTCATTAGCACCAACAGAGAGAATTTTCACTATGGA
TCAGTGGTGACCTACCGCTGCAATCTTGGAAGCAGAGGGAGAAAGGTGTTTGAGCTTGTGGGTGAGCCCTCCATA
TACTGCACCAGCAATGACGATCAAGTGGGCATCTGGAGCGGCCCCGCCCCTCAGTGCATTATACCTAACAAATGC
ACGCCTCCAAATGTGGAAAATGGAATATTGGTATCTGACAACAGAAGCTTATTTTCCTTAAATGAAGTTGTGGAG
TTTAGGTGTCAGCCTGGCTTTGTCATGAAAGGACCCCGCCGTGTGAAGTGCCAGGCCCTGAACAAATGGGAGCCA
GAGTTACCAAGCTGCTCCAGGGTGTGTCAGCCGCCTCCAGAAATCCTGCATGGTGAGCATACCCCAAGCCATCAG
GACAACTTTTCACCTGGGCAGGAAGTGTTCTACAGCTGTGAGCCTGGCTATGACCTCAGAGGGGCTGCGTCTCTG
CACTGCACACCCCAGGGAGACTGGAGCCCTGAAGCCCCGAGATGTGCAGTGAAATCCTGTGATGACTTCTTGGGT
CAACTCCCTCATGGCCGTGTGCTATTTCCACTTAATCTCCAGCTTGGGGCAAAGGTGTCCTTTGTCTGTGATGAA
GGGTTTCGCTTAAAGGGCAGTTCCGTTAGTCATTGTGTCTTGGTTGGAATGAGAAGCCTTTGGAATAACAGTGTT
CCTGTGTGTGAACATATCTTTTGTCCAAATCCTCCAGCTATCCTTAATGGGAGACACACAGGAACTCCCTCTGGA
GATATTCCCTATGGAAAAGAAATATCTTACACATGTGACCCCCACCCAGACAGAGGGATGACCTTCAACCTCATT
GGGGAGAGCACCATCCGCTGCACAAGTGACCCTCATGGGAATGGGGTTTGGAGCAGCCCTGCCCCTCGCTGTGAA
CTTTCTGTTCGTGCTGGTCACTGTAAAACCCCAGAGCAGTTTCCATTTGCCAGTCCTACGATCCCAATTAATGAC
TTTGAGTTTCCAGTCGGGACATCTTTGAATTATGAATGCCGTCCTGGGTATTTTGGGAAAATGTTCTCTATCTCC
TGCCTAGAAAACTTGGTCTGGTCAAGTGTTGAAGACAACTGTAGACGAAAATCATGTGGACCTCCACCAGAACCC
TTCAATGGAATGGTGCATATAAACACAGATACACAGTTTGGATCAACAGTTAATTATTCTTGTAATGAAGGGTTT
CGACTCATTGGTTCCCCATCTACTACTTGTCTCGTCTCAGGCAATAATGTCACATGGGATAAGAAGGCACCTATT
TGTGAGATCATATCTTGTGAGCCACCTCCAACCATATCCAATGGAGACTTCTACAGCAACAATAGAACATCTTTT
CACAATGGAACGGTGGTAACTTACCAGTGCCACACTGGACCAGATGGAGAACAGCTGTTTGAGCTTGTGGGAGAA
CGGTCAATATATTGCACCAGCAAAGATGATCAAGTTGGTGTTTGGAGCAGCCCTCCCCCTCGGTGTATTTCTACT
AATAAATGCACAGCTCCAGAAGTTGAAAATGCAATTAGAGTACCAGGAAACAGGAGTTTCTTTTCCCTCACTGAG
ATCGTCAGATTTAGATGTCAGCCCGGGTTTGTCATGGTAGGGTCCCACACTGTGCAGTGCCAGACCAATGGCAGA
TGGGGGCCCAAGCTGCCACACTGCTCCAGGGTGTGTCAGCCGCCTCCAGAAATCCTGCATGGTGAGCATACCCTA
AGCCATCAGGACAACTTTTCACCTGGGCAGGAAGTGTTCTACAGCTGTGAGCCCAGCTATGACCTCAGAGGGGCT
GCGTCTCTGCACTGCACGCCCCAGGGAGACTGGAGCCCTGAAGCCCCTAGATGTACAGTGAAATCCTGTGATGAC
TTCCTGGGCCAACTCCCTCATGGCCGTGTGCTACTTCCACTTAATCTCCAGCTTGGGGCAAAGGTGTCCTTTGTT
TGCGATGAAGGGTTCCGATTAAAAGGCAGGTCTGCTAGTCATTGTGTCTTGGCTGGAATGAAAGCCCTTTGGAAT
AGCAGTGTTCCAGTGTGTGAACAAATCTTTTGTCCAAATCCTCCAGCTATCCTTAATGGGAGACACACAGGAACT
CCCTTTGGAGATATTCCCTATGGAAAAGAAATATCTTACGCATGCGACACCCACCCAGACAGAGGGATGACCTTC
AACCTCATTGGGGAGAGCTCCATCCGCTGCACAAGTGACCGTCAAGGGAATGGGGTTTGGAGCAGCCCTGCCCCT
CGCTGTGAACTTTCTGTTCCTGCTGCCTGCCCAGATCCACCCAAGATCCAAAACGGGCATTACATTGGAGGACAC
GTATCTCTATATCTTCCTGGGATGACAATCAGCTACATTTGTGACCCCGGCTACCTGTTAGTGGGAAAGGGCTTC
ATTTTCTGTACAGACCAGGGAATCTGGAGCCAATTGGATCATTATTGCAAAGAAGTAAATTGTAGCTTCCCACTG

FIGURE 1991C

TTTATGAATGGAATCTCGAAGGAGTTAGAAATGAAAAAAGTATATCACTATGGAGATTATGTGACTTTGAAGTGT
GAAGATGGGTATACTCTGGAAGGCAGTCCCTGGAGCCAGTGCCAGGCGGATGACAGATGGGACCCTCCTCTGGCC
AAATGTACCTCTCGTGCACATGATGCTCTCATAGTTGGCACTTTATCTGGTACGATCTTCTTTATTTTACTCATC
ATTTTCCTCTCTTGGATAATTCTAAAGCACAGAAAAGGCAATAATGCACATGAAAACCCTAAAGAAGTGGCTATC
CATTTACATTCTCAAGGAGGCAGCAGCGTTCATCCCCGAACTCTGCAAACAAATGAAGAAAATAGCAGGGTCCTT
CCTTGACAAAGTACTATACAGCTGAAGAACATCTCGAATACAGTTTTGGTGGGAAAGGAGCCAATTGATTTCAAC
AGAATCAGATCTGAGCTTCATAAAGTCTTTGAAGTGACTTCACAGAGACGCAGACATGTGCACTTGAAGATGCTG
CCCCTTCCCTGGTACCTAGCAAAGCTCCTGCCTCTTTGTGTGCGTCACTGTGAAACCCCCACCCTTCTGCCTCGT
GCTAAACGCACACAGTATCTAGTCAGGGGAAAAGACTGCATTTAGGAGATAGAAAATAGTTTGGATTACTTAAAG
GAATAAGGTGTTGCCTGGAATTTCTGGTTTGTAAGGTGGTCACTGTTCTTTTTTAAAATATTTGTAATATGGAAT
GGGCTCAGTAAGAAGAGCTTGGAAAATGCAGAAAGTTATGAAAAATAAGTCACTTATAATTATGCTACCTACTGA
TAACCACTCCTAATATTTTGATTCATTTTCTGCCTATCTTCTTTCACATATGTGTTTTTTTACATACGTCCTTTT
CCCCCCAGTTTGTTTCCTTTTATTTTATAGAGCAGAACCCTAGTCTTTTAAACCAGTTTAGAGTGAAATATATGC
TATATCAGTTTTTACTTTCTCTAGGGAGAAAAATTAATTTACTAGAAAGGCATGAAATGATCATGGGAAGAGTGG
TTAAGACTACTGAAGAGAAATATTTGGAAAATAAGATTTCGATATCTTCTTTTTTTTTGAGATGGAGTCTGGCTC
TGTCTCCCAGGCTGGAGTGCAGTGGCGTAATCTCGGCTCACTGCAAGCTCCGCCTCCTGGGTTGACACCATTTTC
CTGCCTCAGCCTCCTGAGTAGTTGGGACTACCAGTAGATGGGACTACAGGCACCTGCCAACACGCCCGGCTAATT
TTTTTGTATTTTTAGTAGAGACGGGGTTTCACCATGTTAGCCAGGATGGTCTGGATCTCCTGACCTCGTGATCCA
CCCGCCTCGGCCTCCCAAAGTGCTGCGATTACAGGCATGAGCCACCGCGCCTGGCCGCTTTCGATATTTTCTAAA
CTTTAATTCAAAAGCACTTTGTGCTGTGTTCTATATAAAAAACATAATAAAAATTGAAATGAAAGAATAATTGTT
ATTATAAAAGTACTAGCTTACTTTTGTATGGATTCAGAATATACTAAATTAACTTTTTAAAACACAACTTTTAAA
AAATGTATCAAAAATAATAAACGTGTTCTGATATTTTTA

FIGURE 1992

MGASSPRSPEPVGPPAPGLPFCCGGSLLAVVVLLALPVAWGQCNAPEWLPFARPTNLTDEFEFPIGTYLNYECRP
GYSGRPFSIICLKNSVWTGAKDRCRRKSCRNPPDPVNGMVHVIKGIQFGSQIKYSCTKGYRLIGSSSATCIISGD
TVIWDNETPICDRIPCGLPPTITNGDFISTNRENFHYGSVVTYRCNPGSGGRKVFELVGEPSIYCTSNDDQVGIW
SGPAPQCIIPNKCTPPNVENGILVSDNRSLFSLNEVVEFRCQPGFVMKGPRRVKCQALNKWEPELPSCSRVCQPP
PDVLHAERTQRDKDNFSPGQEVFYSCEPGYDLRGAASMRCTPQGDWSPAAPTCEVKSCDDFMGQLLNGRVLFPVN
LQLGAKVDFVCDEGFQLKGSSASYCVLAGMESLWNSSVPVCEQIFCPSPPVIPNGRHTGKPLEVFPFGKAVNYTC
DPHPDRGTSFDLIGESTIRCTSDPQGNGVWSSPAPRCGILGHCQAPDHFLFAKLKTQTNASDFPIGTSLKYECRP
EYYGRPFSITCLDNLVWSSPKDVCKRKSCKTPPDPVNGMVHVITDIQVGSRINYSCTTGHRLIGHSSAECILSGN
AAHWSTKPPICQRIPCGLPPTIANGDFISTNRENFHYGSVVTYRCNPGSGGRKVFELVGEPSIYCTSNDDQVGIW
SGPAPQCIIPNKCTPPNVENGILVSDNRSLFSLNEVVEFRCQPGFVMKGPRRVKCQALNKWEPELPSCSRVCQPP
PDVLHAERTQRDKDNFSPGQEVFYSCEPGYDLRGAASMRCTPQGDWSPAAPTCEVKSCDDFMGQLLNGRVLFPVN
LQLGAKVDFVCDEGFQLKGSSASYCVLAGMESLWNSSVPVCEQIFCPSPPVIPNGRHTGKPLEVFPFGKTVNYTC
DPHPDRGTSFDLIGESTIRCTSDPQGNGVWSSPAPRCGILGHCQAPDHFLFAKLKTQTNASDFPIGTSLKYECRP
EYYGRPFSITCLDNLVWSSPKDVCKRKSCKTPPDPVNGMVHVITDIQVGSRINYSCTTGHRLIGHSSAECILSGN
AAHWSTKPPICQRIPCGLPPTIANGDFISTNRENFHYGSVVTYRCNPGSGGRKVFELVGEPSIYCTSNDDQVGIW
SGPAPQCIIPNKCTPPNVENGILVSDNRSLFSLNEVVEFRCQPGFVMKGPRRVKCQALNKWEPELPSCSRVCQPP
PDVLHAERTQRDKDNFSPGQEVFYSCEPGYDLRGAASMRCTPQGDWSPAAPTCEVKSCDDFMGQLLNGRVLFPVN
LQLGAKVDFVCDEGFQLKGSSASYCVLAGMESLWNSSVPVCEQIFCPSPPVIPNGRHTGKPLEVFPFGKAVNYTC
DPHPDRGTSFDLIGESTIRCTSDPQGNGVWSSPAPRCGILGHCQAPDHFLFAKLKTQTNASDFPIGTSLKYECRP
EYYGRPFSITCLDNLVWSSPKDVCKRKSCKTPPDPVNGMVHVITDIQVGSRINYSCTTGHRLIGHSSAECILSGN
TAHWSTKPPICQRIPCGLPPTIANGDFISTNRENFHYGSVVTYRCNLGSRGRKVFELVGEPSIYCTSNDDQVGIW
SGPAPQCIIPNKCTPPNVENGILVSDNRSLFSLNEVVEFRCQPGFVMKGPRRVKCQALNKWEPELPSCSRVCQPP
PEILHGEHTPSHQDNFSPGQEVFYSCEPGYDLRGAASLHCTPQGDWSPEAPRCAVKSCDDFLGQLPHGRVLFPLN
LQLGAKVSFVCDEGFRLKGSSVSHCVLVGMRSLWNNSVPVCEHIFCPNPPAILNGRHTGTPSGDIPYGKEISYTC
DPHPDRGMTFNLIGESTIRCTSDPHGNGVWSSPAPRCELSVRAGHCKTPEQFPFASPTIPINDFEFPVGTSLNYE
CRPGYFGKMFSISCLENLVWSSVEDNCRRKSCGPPPEPFNGMVHINTDTQFGSTVNYSCNEGFRLIGSPSTTCLV
SGNNVTWDKKAPICEIISCEPPPTISNGDFYSNNRTSFHNGTVVTYQCHT

FIGURE 1993

CCGCTGCGTGTTTTCCTCTTGATCGGGAACTCCTGCTTCTCCTTGCCTCGAA**ATG**GACCCCAACTGCTCCTGCTC
GCCTGTTGGCTCCTGTGCCTGTGCCGGCTCCTGCAAATGCAAAGAGTGCAAATGCACCTCCTGCAAGAAGAGCTG
CTGCTCCTGCTGCCCTGTGGGCTGTGCMAAGTGTGCCCAGGGCTGCATCTGCAAAGGGACGTCAGACAAGTGCAG
CTGCTGTGCC**TGA**TGCCAGGACAGCTGTGCTCTCAGATGTAAATAGAGCAACCTATATAAACCTGGATTTTTTTT
TTTTTTTTTTTGTACAACCCTGACCCGTTTGCTACATCTTTTTTTCTATGAAATATGTGAATGGCAATAAATTCA
TCTAGACTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1994

MDPNCSCSPVGSCACAGSCKCKECKCTSCKKSCCSCCPVGCAKCAQGCICKGTSDKCSCCA

FIGURE 1995A

GCCGTGGCTCCGGTAGCAGCAAGTTCGAACCCCGCTCCCGCTCCGCTTCGGTTCTCGCTCCTTCGGCCCTTGGGC
CTCCAAACACCAGTCCCCGGCAGCTCGTTGCGCATTGCGCTCTCCCCGCCACCAGGATGCCGGTAACCGAGAAGG
ATCTAGCTGAGGACGCGCCTTGGAAGAAGATCCAGCAGAACACGTTCACACGCTGGTGCAACGAGCACCTCAAGT
GCGTGAACAAACGCATCGGCAACCTGCAGACCGACCTGAGCGACGGGCTGCGGCTCATCGCGCTGCTCGAGGTGC
TCAGCCAGAAGCGCATGTACCGCAAGTACCATCAGCGGCCCACCTTTCGCCAGATGCAGCTCGAGAATGTGTCCG
TGGCGCTCGAGTTCCTGGACCGTGAGAGCATCAAGCTCGTGTCCATCGATAGCAAAGCCATTGTGGATGGGAACC
TGAAGCTCATCTTGGGTCTGGTGTGGACGCTGATCCTCCACTACTCCATCTCCATGCCCGTGTGGGAGGATGAAG
GGGATGATGATGCCAAGAAGCAGACGCCAAAGCAGAGGCTGCTGGGGTGGATTCAGAACAAGATCCCCTACTTGC
CCATCACCAACTTTAACCAGAACTGGCAAGACGGCAAAGCCCTGGGAGCCCTGGTAGACAGCTGTGCTCCAGGTC
TGTGCCCAGACTGGGAATCCTGGGACCCGCAGAAGCCTGTGGATAATGCACGAGAAGCCATGCAGCAGGCAGATG
ACTGGCTGGGTGTCCCACAGGTCATCACTCCTGAAGAAATCATTCACCCGGATGTGGACGAGCACTCAGTTATGA
CTTACCTGTCCCAGTTCCCCAAAGCCAAGCTCAAGCCGGGGGCTCCTCTCAAACCCAAACTCAACCCGAAGAAAG
CCAGGGCCTATGGCAGAGGAATCGAGCCCACTGGAAACATGGTGAAGCAGCCAGCCAAGTTCACTGTGGACACCA
TCAGCGCCGGGCAAGGAGACGTGATGGTGTTTGTTGAGGACCCAGAAGGGAACAAAGAGGAGGCACAAGTGACCC
CTGACAGCGACAAGAACAAGACATACTCTGTGGAGTATCTGCCCAAGGTCACCGGGCTACACAAAGTCACAGTCC
TCTTTGCAGGACAGCACATCTCCAAGAGCCCATTTGAAGTGAGTGTTGACAAGGCCCAGGGAGATGCCAGTAAAG
TCACTGCAAAAGGTCCAGGGTTGGAAGCTGTAGGGAACATCGCCAATAAGCCCACCTACTTTGACATCTATACGG
CAGGAGCTGGTGTGGGTGACATTGGTGTGGAGGTGGAAGATCCCCAGGGGAAGAACACCGTGGAGTTGCTCGTGG
AAGACAAAGGAAACCAGGTGTATCGATGTGTGTACAAACCCATGCAGCCTGGCCCTCACGTGGTCAAGATCTTCT
TTGCTGGGGACACTATTCCTAAGAGTCCCTTCGTTGTGCAGGTTGGGGAAGCCTGCAATCCAAATGCCTGCCGGG
CCAGTGGCCGAGGCCTACAACCCAAAGGCGTCCGTATCCGGGAGACCACAGATTTCAAGGTTGACACCAAAGCTG
CAGGAAGTGGGGAGCTCGGGGTAACCATGAAGGGTCCTAAGGGTCTGGAGGAGCTGGTGAAGCAGAAAGACTTTC
TGGATGGGGTCTACGCATTCGAGTATTACCCCAGCACCCCGGGGAGATACAGCATTGCCATCACATGGGGGGGAC
ACCACATTCCAAAGAGCCCCTTTGAAGTTCAAGTTGGCCCTGAAGCGGGTATGCAGAAAGTCCGTGCTTGGGGCC
CTGGGCTCCATGGTGGGATTGTCGGGCGGTCAGCGGACTTCGTGGTAGAATCCATTGGCTCTGAAGTGGGGTCTC
TGGGGTTTGCCATTGAAGGCCCCTCTCAGGCAAAGATTGAGTACAACGACCAGAATGATGGATCGTGTGATGTCA
AATACTGGCCCAAGGAGCCTGGCGAATATGCTGTTCACATCATGTGTGACGACGAAGACATCAAGGACAGCCCGT
ACATGGCCTTCATCCACCCAGCCACGGGAGGCTACAACCCTGATCTGGTTCGAGCATACGGGCCAGGTTTGGAGA
AATCTGGATGCATTGTCAACAACCTGGCCGAGTTCACTGTGGATCCTAAGGATGCTGGAAAAGCTCCCTTAAAGA
TATTTGCTCAGGATGGGGAAGGCCAACGCATTGACATCCAGATGAAGAACCGGATGGACGGCACATATGCATGCT
CATACACCCCGGTGAAGGCCATCAAGCACACCATTGCTGTGGTCTGGGGAGGCGTGAACATCCCGCACAGCCCCT
ACAGGGTCAACATCGGGCAAGGTAGCCATCCTCAGAAGGTCAAAGTGTTTGGGCCAGGTGTGGAGAGAAGTGGTC
TGAAGGCAAATGAACCTACACACTTCACGGTGGACTGTACTGAGGCTGGGGAAGGTGATGTCAGTGTTGGCATTA
AGTGTGATGCCCGGGTGTTAAGTGAAGATGAGGAAGACGTGGATTTTGACATTATTCACAATGCCAATGATACGT
TCACAGTCAAATATGTGCCTCCTGCTGCTGGGCGATACACTATCAAAGTTCTCTTTGCATCTCAGGAAATCCCCG
CCAGCCCTTTCAGAGTCAAAGTTGACCCTTCCCACGATGCCAGCAAAGTGAAGGCAGAAGGCCCAGGGCTCAGCA
AAGCAGGTGTGGAAAATGGGAAACCGACCCACTTCACTGTCTACACCAAGGGGGCTGGGAAAGCCCCGCTCAACG
TGCAGTTCAACAGCCCTCTTCCTGGCGATGCAGTGAAGGATTTGGATATCATCGATAATTATGACTACTCTCACA
CGGTTAAATATACACCCACCCAACAGGGCAACATGCAGGTTCTGGTGACTTACGGTGGCGATCCCATCCCTAAAA
GCCCTTTCACTGTGGGTGTTGCTGCACCGCTGGATCTGAGCAAGATAAAACTCAATGGGCTGGAAAACAGGGTGG
AAGTTGGGAAGGATCAGGAGTTCACCGTTGATACCAGGGGGGCAGGAGGCCAGGGGAAGCTGGACGTGACAATCC
TCAGCCCCTCTCGGAAGGTCGTGCCATGCCTAGTGACACCTGTGACAGGCCGGGAGAACAGCACGGCCAAGTTCA
TCCCTCGGGAGGAGGGGCTGTATGCTGTAGACGTGACCTACGATGGACACCCTGTGCCCGGGAGCCCCTACACAG
TGGAGGCCTCGCTGCCACCAGATCCCAGCAAGGTGAAGGCCCACGGTCCCGGCCTCGAAGGTGGTCTCGTGGGCA
AGCCTGCCGAGTTCACCATCGATACCAAAGGAGCTGGTACTGGAGGTCTGGGCTTAACGGTGGAAGGTCCGTGCG
AGGCCAAAATCGAGTGCTCCGACAATGGTGATGGGACCTGCTCCGTCTCTTACCTTCCCACAAAACCCGGGGAGT
ACTTCGTCAACATCCTCTTTGAAGAAGTCCACATACCTGGGTCTCCCTTCAAAGCTGACATTGAAATGCCCTTTG
ACCCCTCTAAAGTCGTGGCATCGGGGCCAGGTCTCGAGCACGGGAAGGTGGGTGAAGCTGGCCTCCTTAGCGTCA

FIGURE 1995B

ACTGCTCGGAAGCGGGACCGGGGGCCCTGGGCCTGGAAGCTGTCTCGGACTCGGGAACAAAAGCCGAAGTCAGTA
TTCAGAACAACAAAGATGGCACCTACGCGGTGACCTACGTGCCCCTGACGGCCGGCATGTACACGTTGACCATGA
AGTATGGTGGCGAACTCGTGCCACACTTCCCCGCCCGGGTCAAGGTGGAGCCCGCCGTGGACACCAGCAGGATCA
AAGTCTTTGGACCAGGAATAGAAGGGAAAGATGTGTTCCGGGAAGCTACCACCGACTTTACAGTTGACTCTCGGC
CGCTGACCCAGGTTGGGGGTGACCACATCAAGGCCCACATTGCCAACCCCTCAGGGGCCTCCACCGAGTGCTTTG
TCACAGACAATGCGGATGGGACCTACCAGGTGGAATACACACCCTTTGAGAAAGGTCTCCATGTAGTGGAGGTGA
CATATGATGACGTGCCTATCCCAAACAGTCCCTTCAAGGTGGCTGTCACTGAAGGCTGCCAGCCATCTAGGGTGC
AAGCCCAAGGACCTGGATTGAAAGAGGCCTTTACCAACAAGCCCAATGTCTTCACCGTGGTTACCAGAGGCGCAG
GAATTGGTGGGCTTGGCATAACTGTTGAGGGACCATCAGAGTCGAAGATAAATTGCAGAGACAACAAGGATGGCA
GCTGCAGTGCTGAGTACATTCCTTTCGCGCCGGGGGATTACGATGTTAATATCACATATGGAGGAGCCCACATCC
CTGGCAGCCCCTTCAGGGTTCCTGTGAAGGATGTTGTGGACCCCAGCAAGGTCAAGATTGCCGGCCCCGGGCTGG
GCTCAGGCGTCCGAGCCCGTGTCCTGCAGTCCTTCACGGTGGACAGCAGCAAGGCTGGCCTGGCTCCGCTGGAAG
TGAGGGTTCTGGGCCCACGAGGCTTGGTGGAGCCAGTGAACATGGTGGACAATGGAGATGGCACACACACAGTAA
CCTACACCCCATCTCAGGAGGGACCTTACATGGTCTCAGTTAAATATGCTGATGAAGAGATTCCTCGCAGTCCCT
TCAAGGTCAAGGTCCTTCCCACATATGATGCCAGCAAAGTGACTGCCAGTGGCCCCGGCCTTAGTTCCTATGGTG
TGCCTGCCAGTCTACCTGTGGACTTTGCAATTGATGCCCGAGATGCCGGGGAAGGCCTGCTTGCTGTTCAAATAA
CGGACCAAGAAGGAAAACCCAAAAGAGCCATTGTCCATGACAATAAAGATGGCACGTATGCTGTCACCTACATCC
CCGACAAGACTGGGCGCTATATGATTGGAGTCACCTACGGGGGTGACGACATCCCACTTTCTCCTTATCGCATCC
GAGCCACACAGACGGGTGATGCCAGCAAGTGCCTGGCCACGGGTCCTGGAATCGCCTCCACTGTGAAAACTGGCG
AAGAAGTAGGCTTTGTGGTTGATGCCAAGACTGCCGGGAAGGGTAAAGTGACCTGCACGGTTCTGACCCCAGATG
GCACTGAGGCCGAGGCCGATGTCATTGAGAATGAAGATGGAACCTATGACATCTTCTACACAGCTGCCAAGCCGG
GCACATATGTGATCTATGTGCGCTTCGGTGGTGTTGATATTCCTAACAGCCCCTTCACTGTCATGGCCACAGATG
GGGAAGTCACAGCCGTGGAGGAGGCACCGGTAAATGCATGTCCCCCTGGATTCAGGCCCTGGGTGACCGAAGAGG
CCTATGTCCCAGTGAGTGACATGAACGGCCTGGGATTTAAGCCTTTTGACCTGGTCATTCCGTTTGCTGTCAGGA
AAGGAGAAATCACTGGAGAGGTCCACATGCCTTCTGGGAAGACAGCCACACCTGAGATTGTGGACAACAAGGACG
GCACGGTCACTGTTAGATATGCCCCCACTGAGGTCGGGCTCCATGAGATGCACATCAAATACATGGGCAGCCACA
TCCCTGAGAGCCCACTCCAGTTCTACGTGAACTACCCCAACAGTGGAAGTGTTTCTGCATACGGTCCAGGCCTCG
TGTATGGAGTGGCCAACAAAACTGCCACCTTCACCATCGTCACAGAGGATGCAGGAGAAGGTGGTCTGGACTTGG
CTATTGAGGGCCCCTCAAAAGCAGAAATCAGCTGCATTGACAATAAAGATGGGACATGCACAGTGACCTACCTGC
CGACTCTGCCAGGCGACTACAGCATTCTGGTCAAGTACAATGACAAGCACATCCCTGGCAGCCCCTTCACAGCCA
AGATCACAGATGACAGCAGGCGGTGCTCCCAGGTGAAGTTGGGCTCAGCCGCTGACTTCCTGCTCGACATCAGTG
AGACTGACCTCAGCAGCCTGACGGCCAGCATTAAGGCCCCATCTGGCCGAGACGAGCCCTGTCTCCTGAAGAGGC
TGCCCAACAACCACATTGGCATCTCCTTCATCCCCCGGGAAGTGGGCGAACATCTGGTCAGCATCAAGAAAAATG
GCAACCATGTGGCCAACAGCCCCGTGTCTATCATGGTGGTCCAGTCGGAGATTGGTGACGCCCGCCGAGCCAAAG
TCTATGGCCGCGGCCTGTCAGAAGGCCGGACTTTCGAGATGTCTGACTTCATCGTGGACACAAGGGATGCAGGTT
ATGGTGGCATATCCTTGGCGGTGGAAGGCCCCAGCAAAGTGGACATCCAGACGGAGGACCTGGAAGATGGCACCT
GCAAAGTCTCCTACTTCCCTACCGTGCCTGGGGTTTATATCGTCTCCACCAAATTCGCTGACGAGCACGTGCCTG
GGAGCCCATTTACCGTGAAGATCAGTGGGGAGGGAAGAGTCAAAGAGAGCATCACCCGCACCAGTCGGGCCCCGT
CCGTGGCCACTGTCGGGAGCATTTGTGACCTGAACCTGAAAATCCCAGAAATCAACAGCAGTGATATGTCGGCCC
ACGTCACCAGCCCCTCTGGCCGTGTGACTGAGGCAGAGATTGTGCCCATGGGGAAGAACTCACACTGCGTCCGGT
TTGTGCCCCAGGAGATGGGCGTGCACACGGTCAGCGTCAAGTACCGTGGGCAGCACGTCACCGGCAGCCCCTTCC
AGTTCACCGTGGGGCCACTTGGTGAAGGAGGCGCCCACAAGGTGCGGGCAGGAGGCCCTGGCCTGGAGAGAGGAG
AAGCGGGAGTCCCAGCTGAGTTCAGCATTTGGACCCGGGAAGCAGGCGCTGGAGGCCTCTCCATCGCTGTTGAGG
GCCCCAGTAAGGCCGAGATTACATTCGATGACCATAAAAATGGGTCGTGCGGTGTATCTTATATTGCCCAAGAGC
CTGGTAACTACGAGGTGTCCATCAAGTTCAATGATGAGCACATCCCGGAAAGCCCCTACCTGGTGCCGGTCATCG
CACCCTCCGACGACGCCCGCCGCCTCACTGTTATGAGCCTTCAGGAATCGGGATTAAAAGTTAACCAGCCAGCAT
CCTTTGCTATAAGGTTGAATGGCGCAAAAGGCAAGATTGATGCAAAGGTGCACAGCCCCTCTGGAGCCGTGGAGG
AGTGCCACGTGTCTGAGCTGGAGCCAGATAAGTATGCTGTTCGCTTCATCCCTCATGAGAATGGTGTCCACACCA

FIGURE 1995C

TCGATGTCAAGTTCAATGGGAGCCACGTGGTTGGAAGCCCCTTCAAAGTGCGCGTTGGGGAGCCTGGACAAGCGG
GGAACCCTGCCCTGGTGTCCGCCTATGGCACGGGACTCGAAGGGGGCACCACAGGTATCCAGTCGGAATTCTTTA
TTAACACCACCCGAGCAGGTCCAGGGACATTATCCGTCACCATCGAAGGCCCATCCAAGGTTAAAATGGATTGCC
AGGAAACACCTGAAGGGTACAAAGTCATGTACACCCCCATGGCTCCTGGTAACTACCTGATCAGTGTCAAATACG
GTGGGCCCAACCACATCGTGGGCAGTCCCTTCAAGGCCAAGGTGACAGGCCAGCGTCTAGTTAGCCCTGGCTCAG
CCAACGAGACCTCATCCATCCTGGTGGAGTCAGTGACCAGGTCGTCTACAGAGACCTGCTATAGCGCCATTCCCA
AGGCATCCTCGGACGCCAGCAAGGTGACCTCTAAGGGGGCAGGGCTCTCAAAGGCCTTTGTGGGCCAGAAGAGTT
CCTTCCTGGTGGACTGCAGCAAAGCTGGCTCCAACATGCTGCTGATCGGGGTCCATGGGCCCACCACCCCCTGCG
AGGAGGTCTCCATGAAGCATGTAGGCAACCAGCAATACAACGTCACATACGTCGTCAAGGAGAGGGGCGATTATG
TGCTGGCTGTGAAGTGGGGGGAGGAACACATCCCTGGCAGCCCTTTTCATGTCACAGTGCCTTAAAACAGTTTTC
TCAAATCCTGGAGAGAGTTCTTGTGGTTGCTTTTGTTGCTTGTTTGTAATTCATTTTATACAAAGCCCTCCAGCC
TGTTTGTGGGGCTGAAACCCCATCCCTAAAATATTGCTGTTGTAAAATGCCTTCAGAAATAAGTCCTAGACTGGA
CTCTTGAGGGACATATTGGAGAATCTTAAGAAATGCAAGCTTGTTCAGGGGGCTGAGAAGATCCTGAGTACACTA
GGTGCAAACCAGAACTCTTGGTGGAACAGACCAGCCACTGCAGCAGACAGACCAGGAACACAATGAGACTGACAT
TTCAAAAAAACAAAACTGGCTAGCCTGAGCTGCTGGTTCACTCTTCAGCATTTATGAAACAAGGCTAGGGGAAGA
TGGGCAGAGAAAAAGGGGACACCTAGTTTGGTTGTCATTTGGCAAAGGAGATGACTTAAAATCCGCTTAATCTCT
TCCAGTGTCCGTGTTAATGTATTTGGCTATTAGATCACTAGCACTGCTTTACCGCTCCTCATCGCCAACACCCCC
ATGCTCTGTGGCCTTCTTACACTTCTCAGAGGGCAGAGTGGCAGCCGGGCACCCTACAGAAACTCAGAGGGCAGA
GTGGCAGCCAGGCCCACATGTCTCTCAAGTACCTGTCCCCTCGCTCTGGTGATTATTTCTTGCAGAATCACCACA
CGAGACCATCCCGGCAGTCATGGTTTTGCTTTAGTTTTCCAAGTCCGTTTCAGTCCCTTCCTTGGTCTGAAGAAA
TTCTGCAGTGGCGAGCAGTTTCCCACTTGCCAAAGATCCCTTTTAACCAACACTAGCCCTTGTTTTTAACACACG
CTCCAGCCCTTCATCAGCCTGGGCAGTCTTACCAAAATGTTTAAAGTGATCTCAGAGGGGCCCATGGATTAACGC
CCTCATCCCAAGGTCCGTCCCATGACATAACACTCCACACCCGCCCCAGCCAACTTCATGGGTCACTTTTTCTGG
AAAATAATGATCTGTACAGACAGGACAGAATGAAACTCCTGCGGCTCTTTGGCCTGAAAGTTGGGAATGGTTGGG
GGAGAGAAGGGCAGCAGCTTATTGGTGGTCTTTTCACCATTGGCAGAAACAGTGAGAGCTGTGTGGTGCAGAAAT
CCAGAAATGAGGTGTAGGGAATTTTGCCTGCCTTCCTGCAGACCTGAGCTGGCTTTGGAATGAGGTTAAAGTGTC
AGGGACGTTGCCTGAGCCCAAATGTGTAGTGTGGTCTGGGCAGGCAGACCTTTAGGTTTTGCTGCTTAGTCCTGA
GGAAGTGGCCACTCTTGTGGCAGGTGTAGTATCTGGGGCGAGTGTTGGGGGTAAAAGCCCACCCTACAGAAAGTG
GAACAGCCCGGACCTGATGTGAAAGGACCACGGGTGTTGTAAGCTGGGACCGGAACCAAACTGGAATCAAACGCG
ACTGTAAATTGTATCTTATAACTTATTAAATAAAACATTGCTCCGTAAAAAAAAAAA

FIGURE 1996

MPVTEKDLAEDAPWKKIQQNTFTRWCNEHLKCVNKRIGNLQTDLSDGLRLIALLEVLSQKRMYRKYHQRPTFRQM
QLENVSVALEFLDRESIKLVSIDSKAIVDGNLKLILGLVWTLILHYSISMPVWEDEGDDDAKKQTPKQRLLGWIQ
NKIPYLPITNFNQNWQDGKALGALVDSCAPGLCPDWESWDPQKPVDNAREAMQQADDWLGVPQVITPEEIIHPDV
DEHSVMTYLSQFPKAKLKPGAPLKPKLNPKKARAYGRGIEPTGNMVKQPAKFTVDTISAGQGDVMVFVEDPEGNK
EEAQVTPDSDKNKTYSVEYLPKVTGLHKVTVLFAGQHISKSPFEVSVDKAQGDASKVTAKGPGLEAVGNIANKPT
YFDIYTAGAGVGDIGVEVEDPQGKNTVELLVEDKGNQVYRCVYKPMQPGPHVVKIFFAGDTIPKSPFVVQVGEAC
NPNACRASGRGLQPKGVRIRETTDFKVDTKAAGSGELGVTMKGPKGLEELVKQKDFLDGVYAFEYYPSTPGRYSI
AITWGGHHIPKSPFEVQVGPEAGMQKVRAWGPGLHGGIVGRSADFVVESIGSEVGSLGFAIEGPSQAKIEYNDQN
DGSCDVKYWPKEPGEYAVHIMCDDEDIKDSPYMAFIHPATGGYNPDLVRAYGPGLEKSGCIVNNLAEFTVDPKDA
GKAPLKIFAQDGEGQRIDIQMKNRMDGTYACSYTPVKAIKHTIAVVWGGVNIPHSPYRVNIGQGSHPQKVKVFGP
GVERSGLKANEPTHFTVDCTEAGEGDVSVGIKCDARVLSEDEEDVDFDIIHNANDTFTVKYVPPAAGRYTIKVLF
ASQEIPASPFRVKVDPSHDASKVKAEGPGLSKAGVENGKPTHFTVYTKGAGKAPLNVQFNSPLPGDAVKDLDIID
NYDYSHTVKYTPTQQGNMQVLVTYGGDPIPKSPFTVGVAAPLDLSKIKLNGLENRVEVGKDQEFTVDTRGAGGQG
KLDVTILSPSRKVVPCLVTPVTGRENSTAKFIPREEGLYAVDVTYDGHPVPGSPYTVEASLPPDPSKVKAHGPGL
EGGLVGKPAEFTIDTKGAGTGGLGLTVEGPCEAKIECSDNGDGTCSVSYLPTKPGEYFVNILFEEVHIPGSPFKA
DIEMPFDPSKVVASGPGLEHGKVGEAGLLSVNCSEAGPGALGLEAVSDSGTKAEVSIQNNKDGTYAVTYVPLTAG
MYTLTMKYGGELVPHFPARVKVEPAVDTSRIKVFGPGIEGKDVFREATTDFTVDSRPLTQVGGDHIKAHIANPSG
ASTECFVTDNADGTYQVEYTPFEKGLHVVEVTYDDVPIPNSPFKVAVTEGCQPSRVQAQGPGLKEAFTNKPNVFT
VVTRGAGIGGLGITVEGPSESKINCRDNKDGSCSAEYIPFAPGDYDVNITYGGAHIPGSPFRVPVKDVVDPSKVK
IAGPGLGSGVRARVLQSFTVDSSKAGLAPLEVRVLGPRGLVEPVNMVDNGDGTHTVTYTPSQEGPYMVSVKYADE
EIPRSPFKVKVLPTYDASKVTASGPGLSSYGVPASLPVDFAIDARDAGEGLLAVQITDQEGKPKRAIVHDNKDGT
YAVTYIPDKTGRYMIGVTYGGDDIPLSPYRIRATQTGDASKCLATGPGIASTVKTGEEVGFVVDAKTAGKGKVTC
TVLTPDGTEAEADVIENEDGTYDIFYTAAKPGTYVIYVRFGGVDIPNSPFTVMATDGEVTAVEEAPVNACPPGFR
PWVTEEAYVPVSDMNGLGFKPFDLVIPFAVRKGEITGEVHMPSGKTATPEIVDNKDGTVTVRYAPTEVGLHEMHI
KYMGSHIPESPLQFYVNYPNSGSVSAYGPGLVYGVANKTATFTIVTEDAGEGGLDLAIEGPSKAEISCIDNKDGT
CTVTYLPTLPGDYSILVKYNDKHIPGSPFTAKITDDSRRCSQVKLGSAADFLLDISETDLSSLTASIKAPSGRDE
PCLLKRLPNNHIGISFIPREVGEHLVSIKKNGNHVANSPVSIMVVQSEIG

FIGURE 1997A

AGCGGGGCTGCGCGAAGTCATCGCTGTTCCAGACAGCGATGACTCGAGAGCGGTGGGGGTGGCGGCGCGATCGGC
CGGGCTGTAACCGTCGTCTGTCCGGGAGCGGCTGGAGCGGCAGCGGCGGCCGGGCACGGCGCGAGGTGACGCCAC
AGGGCAGCGGCGGCAGCGGAGGCAGCGGCGGCAGCAGGAGACGCAGCGGCGGCCGCAGCAGCAGCAGCAAGACGG
ACTCGTGGAGACGCGCCGCCGCCGCCGCCGCCGGGCCGGGCCGGGTGTCGCGCGCCGAGGCTGGGGGGGAGTCGT
CGCCGCCGCCGCCACCGCTACCGCCGCCGCCGCCGCCGCCGAGGTGACTGAGGAGAGAGGCGCCTCCTCGCTCCC
GCCACCGCCGGACTTCAATGCCCAGTCCCCAGCTCGCCAGCGTTTTTCGTTGGAATATACGTTGCACATTTATGG
CGATTCTGAGTGTGAGGGCAGACTTCTGCCAGGCTCAGCACAGCATTTTCGCTGACAAGTGAGCTTGGAGGTTCT
ATGTGCCATAATTAACATTGCCTTGAAGACTCCTGGACACCGAGACTGGCCTCAGAAATAGTTGGCTTTTTTTTT
TTTTTAATTGCAAGCATATTTCTTTTAATGACTCCAGTAAAATTAAGCATCAAGTAAACAAGTGGAAAGTGACCT
ACACTTTTAACTTGTCTCACTAGTGCCTAAATGTAGTAAAGGCTGCTTAAGTTTTGTATGTAGTTGGATTTTTTG
GAGTCCGAATATTTCCATCTGCAGAAATTGAGGCCCAAATTGAATTTGGATTCAAGTGGATTCTAAATACTTTGC
TTATCTTGAAGAGAGAAGCTTCATAAGGAATAAACAAGTTGAATAGAGAAAACACTGATTGATAATAGGCATTTT
AGTGGTCTTTTTAATGTTTTCTGCTGTGAAACATTTCAAGATTTATTGATTTTTTTTTTTCACTTTCCCCATCAC
ACTCACACGCACGCTCACACTTTTTATTTGCCATA**ATG**AACCGTCCAGCCCCTGTGGAGATCTCCTATGAGAACA
TGCGTTTTCTGATAACTCACAACCCTACCAATGCTACTCTCAACAAGTTCACAGAGGAACTTAAGAAGTATGGAG
TGACGACTTTGGTTCGAGTTTGTGATGCTACATATGATAAAGCTCCAGTTGAAAAAGAAGGAATCCACGTTCTAG
ATTGGCCATTTGATGATGGAGCTCCACCCCCTAATCAGATAGTAGATGATTGGTTAAACCTGTTAAAAACCAAAT
TTCGTGAAGAGCCAGGTTGCTGTGTTGCAGTGCATTGTGTTGCAGGATTGGGAAGGGCACCTGTGCTGGTTGCAC
TTGCTTTGATTGAATGTGGAATGAAGTACGAAGATGCAGTTCAGTTTATAAGACAAAAAAGAAGGGGAGCGTTCA
ATTCCAAACAGCTGCTTTATTTGGAGAAATACCGACCTAAGATGCGATTACGCTTCAGAGATACCAATGGGCATT
GCTGTGTTCAG**TAG**AAGGAAATGTAAACGAAGGCTGACTTGATTGTGCCATTTAGAGGGAACTCTTGGTACCTGG
AAATGTGAATCTGGAATATTACCTGTGTCATCAAAGTAGTGATGGATTCAGTACTCCTCAACCACTCTCCTAATG
ATTGGAACAAAAGCAAACAAAAAAGAAATCTCTCTATAAAATGAATAAAATGTTTAAGAAAAGAGAAAGAGAAAA
GGAATTAATTCAGTGAAGGATGATTTTGCTCCTAGTTTTGGAGTTTGAATTTCTGCCAGGATTGAATTATTTTGA
AATCTCCTGTCTTTTTAAACTTTTTCAAAATAGGTCTCTAAGGAAAACCAGCAGAACATTAGGCCTGTGCAAAAC
CATCTGTTTGGGGAGCACACTCTTCCATTATGCTTGGCACATAGATCTCCCTGTGGTGGGATTTTTTTTTTCCCT
TTTTTTGTGGGGGAGGGTTGGTGGTATATTTTTCCCCTCTTTTTTCCTTCCTCTCCTACATCTCCCTTTTCCCCC
GATCCAAGTTGTAGATGGAATAGAAGCCCTTGTTGCTGTAGATGTGCGTGCAGTCTGGCAGCCTTAAGCCCACCT
GGGCACTTTTAGATAAAAAAAAAAAAAAACAAAAAACAACACCAAAAAAACAGCAGTGATATATATATTCCAGGT
GGTTTTTAGTCTTTACTGATGAAAGGGTGTTCATGTTAGTTTCTTCAAAACCCTATCTAATACTAGGCAAAGTAG
CCAAGAGCCTTTTGTTTTGTTTTTATTTTGATAAATTAGTGGAGAAATGGCATTTTAAGAGGAGTCTCTTCTCAA
CTTACCTGAGAGTCGAATTCTTCTCTTCCCTAACCAATGAAGCTAAGTGGTTATCCCAGAAACTTGTCTTCTAAA
AGGGAGGACTCCAGGCCATCAATAAAGATGTCCAGGCAGTGAGCGTACTTTTTACACCCTGTAGAATTGTGGGCT
GTAGCGTTACTCTGATTTTCTGTCTAGTATCAGAGAATGCTGGTAGCTTAAAATTTTTATTTTAGGACTTGTACT
CTGAATTTTCAGGAACCGTCAAAGGAGCAGCAGCAAATTCACATATTTTCGACTTGAGAAATGCTTGTGGTATGT
GTTTTCCAAACTGCCCCCTATATGTAAAGTTCAGTTTAACCACTGATTGCCTTGTTATTACTAGGTTTTTTGAGA
TTAAAAAAAAAAAAATCCCTGGTTTAAAACCAACAATGATGCCTAGTGAGTATGTGTCCACAGGCCATAACAGGGT
AGAAGAGAGACATCGTGCAACCCAATGAGTAGTGAAGGGACTGTGTTGCTTGTGAAGCGGTGTAGTAGCATTTTT
GCAGATTCTTGGCTGGGTTTAGTGTACTGATCTAGAAAAGCTGTTTTTCTGCTCCTTTGTGGAAGGCAGTTATGA
TCAGGCTGCATGGACAAAGCAGGTAGAGGGGCACCATCAGGGGCTCTTGCACTATTTTCACCTCTAAATATTACG
TACTCAGTAGTGCCCTGCTTCTAGGGCTCTGAATACGGGCTTAAAGTCATCTTGTCCTGCTGGAATTTGCTGTGC
AGAGCCATAAGCCTCCCATTTTGTTAGCGTCAGCTAGGCCAATAGGAACAGACCGGGACCTTGTCTCACACTGAT
GATACCTCACATGTTGACCGGCTATGTGAACTGCCTATTTCCTATGCTGGAGTTTTGATTTTTAACTAAACGCAA
ATCTGTAGATTCTCTCCTCTCCCATCCCAGAAAACAAAACAAAATAATGCTTTTCGAAATTGTTTCTAGGACTTT
AAAACATAATGGTATATCCAAAATTCTTTATTTCAGAATGCAACAATAGATTCCATTAATATAGACTCAAGATCA
AAACAGCATACCTGCTAAGCTAAGATAGATGGTGTTGATTCCACTGGGTTTTGATCAATACAATAACAAACCTTT
TTCCTTTGACATACTCTGAATTTTGTTGTTTGGGGGGAGGGGGTGTGTGTGTGTGTGTGTGTGTGTGTATT
GTGTGTGTGTGTGTGTGCACGCGCAGTGTCCATCAGTATCAGTGCCTGCCTGAGTTAGGAAAATTACATTCCTGG

FIGURE 1997B

TTCTGTATTGAGGAGAAGGATGTATAAAGCAACATGAAACATTAGCCCTCCTTTTATTTTAAAGACTAATGTTAA
TTGTTCTTAAAACTGGATTTTTTTTCCTTAAAGCAATTTTTTTCTTTTCGATTTAATGAAGTATTGCTAGCTGAA
GCCAGTTTGACATAGAGAGATGTCAGATTGATTTGAAAGGTGTGCAGCCTGATTTAAAACCAAACCCTGAACCCT
TTTAAAGAACAATAAAACATATTTTACACGCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1998

MNRPAPVEISYENMRFLITHNPTNATLNKFTEELKKYGVTTLVRVCDATYDKAPVEKEGIHVLDWPFDDGAPPPN
QIVDDWLNLLKTKFREEPGCCVAVHCVAGLGRAPVLVALALIECGMKYEDAVQFIRQKRRGAFNSKQLLYLEKYR
PKMRLRFRDTNGHCCVQ

FIGURE 1999A

TCTAGATGGGGGTCCTGGGCCCCAGGGTGTGCAGCCACTGACTTGGGGACTGCTGGTGGGGTAGGGATGAGGGAG
GGAGGGGCATTGTGATGTACAGGGCTGCTCTGTGAGATCAAGGGTCTCTTAAGGGTGGGAGCTGGGGCAGGGACT
ACGAGAGCAGCCAGATGGGCTGAAAGTGGAACTCAAGGGGTTTCTGGCACCTACCTACCTGCTTCCCGCTGGGGG
GTGGGGAGTTGGCCCAGAGTCTTAAGATTGGGGCAGGGTGGAGAGGTGGGCTCTTCCTGCTTCCCACTCATCTTA
TAGCTTTCTTTCCCCAGATCCGAATTCGAGATCCAAACCAAGGAGGAAAGGATATCACAGAGGAGATC**ATG**TCTG
GGGCCCGCACTGCCTCCACACCCACCCCTCCCCAGACGGGAGGCAGTCTGGAGCCTCAAGCTAATGGGGAGACGC
CCCAGGTTGCTGTCATTGTCCGGCCAGATGACCGGTCACAGGGAGCAATCATTGCTGACCGGCCAGGGCTGCCTG
GCCCAGAGCATAGCCCTTCAGAATCCCAGCCTTCGTCGCCTTCTCCGACCCCATCACCATCCCCAGTCTTGGAAC
CGGGGTCTGAGCCTAATCTCGCAGTCCTCTCTATTCCTGGGGACACTATGACAACTATACAAATGTCTGTAGAAG
AATCAACCCCCATCTCCCGTGAAACTGGGGAGCCATATCGCCTCTCTCCAGAACCCACTCCTCTCGCCGAACCCA
TACTGGAAGTAGAAGTGACACTTAGCAAACCGGTTCCAGAATCTGAGTTTTCTTCCAGTCCTCTCCAGGCTCCCA
CCCCTTTGGCATCTCACACAGTGGAAATTCATGAGCCTAATGGCATGGTCCCATCTGAAGATCTGGAACCAGAGG
TGGAGTCAAGCCCAGAGCTTGCTCCTCCCCCAGCTTGCCCCTCCGAATCCCCTGTGCCCATTGCTCCAACTGCCC
AACCTGAGGAACTGCTCAACGGAGCCCCCTCGCCACCAGCTGTGGACTTAAGCCCAGTCAGTGAGCCAGAGGAGC
AGGCCAAGGAGGTGACAGCATCAGTGGCGCCCCCCACCATCCCCTCTGCTACTCCAGCTACGGCTCCTTCAGCTA
CTTCCCCAGCTCAGGAGGAGGAAATGGAAGAAGAAGAAGATGAGGAAGAAGGAGAAGTAGGGGAAGCAGGGGAAG
GTGAGAGTGAGAAGAGAGGAGAGGAACTGCTCCCCCCAGAGAGTACCCCTATTCCAGCCAACTTGTCTCAGAATT
TGGAGGCAGCAGCAGCCACTCAAGTGGCAGTATCTGTGCCAAAGAGGAGACGGAAAATTAAGGAGCTAAATAAGA
AGGAGGCTGTTGGAGACCTTCTGGATGCCTTCAAGGAGGCGAACCCGGCAGTACCAGAGGTGGAAAATCAGCCTC
CTGCAGGCAGCAATCCAGGCCCAGAGTCTGAGGGCAGTGGTGTGCCCCCACGTCCTGAGGAAGCAGATGAGACCT
GGGACTCAAAGGAAGACAAAATTCACAATGCTGAGAACATCCAGCCCGGGGAACAGAAGTATGAATATAAGTCAG
ATCAGTGGAAGCCTCCAAACCTAGAGGAGAAAAAACGTTACGACCGTGAGTTCCTGCTTGGTTTTCAGTTCATCT
TTTGCCAGATGCAGAAGCCAGAGGGATTGCCACATATCAGTGACGTGGTGCTGGACAAGGCCAATAAAACACCAC
TGCGGCCACTGGATCCCACTAGACTACAAGGCATAAATTGTGGCCCAGACTTCACTCCATCCTTTGCCAACCTTG
GCCGGACAACCCTTAGCACCCGTGGGCCCCCAAGGGGTGGGCCAGGTGGGGAGCTCGCCCGTGGCGCGCAGGCTG
GCCTGGGACCCCGGCGCTCTCAGCAGGGACCCCGAAAAGAACCACGCAAGATCATTGCCACAGTGTTAATGACCG
AAGATATAAAACTGAACAAAGCAGAGAAAGCCTGGAAACCCAGCAGCAAGCGGACAGCGGCTGATAAGGATCGAG
GGGAAGAAGATGCTGATGGCAGCAAAACCCAGGACCTATTCCGCAGGTGGCGCTCCATCCTGAATAAACTGACAC
CCCAGATGTTCCAGCAGCTGATGAAGCAAGTGACGCAGCTGGCCATCGACACCGAGGACGCCTCAAAGGGGTCAT
TGACCTCATTTTTGAGAAGGCCATTTCAGAGCCCAACTTCTCTGTGGCCTATCCAACATGTGCCGCTGCCTCATG
GCGCTGAAAGTGCCCACTACGGAAAGCCAACAGTGACTGTGAACTTCCGAAAGCTGTTGTTGAATCGATGTCAGA
AGGAGTTTGAGAAAGACAAAGATGATGATGAGGTTTTTGAGAAGAAGCAAAAAGAGATGGATGAAGCTGCTACGG
CAGAGGAACGAGAACGCCTGAAGGAGGAGCTGGAAGAGGCTCGGGACATAGCCCGGCGCTGCTCTTTAGGGAATA
TCAAGTTTATTGGAGAGTTGTTCAAACTGAAGATGTTAACAGAGGCAATAATGCATGACTGTGTGGTCAAACTGC
TTAAGAACCATGATGAAGAGTCCCTTGAGTGCCTTTGTCGTCTGCTCACCACCATTGGCAAAGACCTGGACTTTG
AAAAAGCCAAGCCCCGAATGGATCAGTATTTCAACCAGATGGAAAAAATCATTAAAGAAAAGAAGACGTCATCCC
GCATCCGCTTTATGCTGCAGGACGTGCTGGATCTGCGAGGGAGCAATTGGGTGCCACGCCGAGGGGATCAGGGTC
CAAGACCATTGACCAGATCCATAAGGAGGCTGAGATGGAAGACATCGAGAGCACATCAAAGTGCAGCAGCTCATG
CAAGGGCAGTGACAAGCGTCGGGGCGGTCCTCCAGGCCCTCCCATCAGCCGTGGACTTCCCCTTGTGGATGATGG
TGGCTGACACAGTTCCCATCAGCAAAGGTAGCCGCCCCATTGACACCTCACGACTCACCAAGATCACCAAGCCTG
GCTCCATCGATTCTAACAACCAGCTCTTTGCACCTGGAGGGCGACTGAGCTGGGGCAAGGGCAGCAGCGGAGGGT
CAGGAGCCCAGCCCTCAGACGCAGCATCAGAAGCTGCTCGCCCAGCTACTAGTACTTTGATTCGCTTCTCAGCCC
TTCAACAAGCGGTACCCACAGAAAGCACAGATAATAGACGTGTGGTGCAGAGGAGTAGCTTGAGCCGAGAACGAG
GCGAGAAAGCTGGAGACCGAGGAGACCGCCTAGAGCGAGTGAACGGGGAGGGGACCGTGGGGACCGGCTTGATCG
TGTCGCGGACACCTGCTACCAAGCGGACGTTCAGCAAGGAAGTGGAGGAGCGGAGTAGAGAACGGCCCTCCCAGC
CTGAGGGGCTGCGCAAGGCAGCTAGCCTCACGGAGGATCGGGACCGTGGGCGGGATGCCGTGAAGCGAGAAGCTG
CCCTACCCCCAGTGAGCCCCCTGAAGGCGGCTCTCTCTGAGGAGGAGTTAGAGAAGAAATCCAAGGCTATCATTG
AGGAATATCTCCATCTCAATGACATGAAAGAGGCAGTCCAGTGCGTGCAGGAGCTGGCCTCACCCTCCTTGCTCT

FIGURE 1999B

TCATCTTTGTACGGCATGGTGTCGAGTCTACGCTGGAGCGCAGTGCCATTGCTCGTGAGCATATGGGGCAGCTGC
TGCACCAGCTGCTCTGTGCTGGGCATCTGTCTACTGCTCAGTACTACCAAGGGTTGTATGAAATCTTGGAATTGG
CTGAGGACATGGAAATTGACATCCCCCACGTGTGGCTCTACCTAGCGGAACTGGTAACACCCATTCTGCAGGAAG
GTGGGGTGCCCATGGGGGAGCTGTTCAGGGAGATTACAAAGCCTCTGAGACCGTTGGGCAAAGCTGCTTCCCTGT
TGCTGGAGATCCTGGGCCTCCTGTGCAAAAGCATGGGTCCTAAAAAGGTGGGGACGCTGTGGCGAGAAGCCGGGC
TTAGCTGGAAGGAATTTCTACCTGAAGGCCAGGACATTGGTGCATTCGTCGCTGAACAGAAGGTGGAGTATACCC
TGGGAGAGGAGTCGGAAGCCCCTGGCCAGAGGGCACTCCCCTCCGAGGAGCTGAACAGGCAGCTGGAGAAGCTGC
TGAAGGAGGGCAGCAGTAACCAGCGGGTGTTCGACTGGATAGAGGCCAACCTGAGTGAGCAGATAGTATCCAACA
CGTTAGTTCGAGCCCTCATGACGGCTGTCTGCTATTCTGCAATTATTTTTGAGACTCCCCTCCGAGTGGACGTTG
CAGTGCTGAAAGGCGACATAGTGCTGCAGAAATACCTGTGTGACGAAGCAGAAGGAGCTACAGGCGCTCTACGCC
TCCAGGCCCTTGTAGTGACCTTAGAACAGCCTCCCAACCTGCTGCGGATGTTCTTTGACGCACTGTATGACGAGG
ACGTGGTGAAGGAGGATGCCTTCTACAGTTGGGAGAGTAGCAAGGACCCCGCTGAGCAGCAGGGCAAGGGTGTGG
CCCTTAAATCTGTCACAGCCTTCTTCAAGTGGCTCCGTGAAGTCAGAGGAGGAGTC**TGA**CCACAACTGAGGGCTG
GTGGGGCCGGGGACCTGGAGCCCCATGGACACACAGATGGCTCCGGCTAGCCGCCTGGACTGCAGGGGGGCGGCA
GCAGCGGCGGTGGCAGTGGGTGCCTGTAGTGTGATGTGTCTGAACTAATAAAGTGGCTGAAGAGGCAGGATGGCT
TGGGGCTGCCTGGGCCCCCCTCCAGGATGCCGCCAGGTGTCCCTCTCCTCCCCTGGGGCACAGAGATATATTATA
TATAAAGTCTTGAAAATTTTGAAATTTGGTGTGTCTTGGGGTGGGGAGGGGCACCAACGCCTGCCCCTGGGGTCC
TTTTTTTTATTTTCTGAAAATCACTCTCGGACTGCCGTCCTCGCTGCTGGGCATATGCCCCAGCCCCTGTACCAC
CCCTGCTGTTGCCTGGGCAGGGGGAAGGGGGGGCACGGTGCCTGTAATTATTAAACATGAATTCAATT

FIGURE 2000

MSGARTASTPTPPQTGGSLEPQANGETPQVAVIVRPDDRSQGAIIADRPGLPGPEHSPSESQPSSPSPTPSPSPV
LEPGSEPNLAVLSIPGDTMTTIQMSVEESTPISRETGEPYRLSPEPTPLAEPILEVEVTLSKPVPESEFSSSPLQ
APTPLASHTVEIHEPNGMVPSEDLEPEVESSPELAPPPACPSESPVPIAPTAQPEELLNGAPSPPAVDLSPVSEP
EEQAKEVTASVAPPTIPSATPATAPSATSPAQEEEMEEEEDEEEGEVGEAGEGESEKRGEELLPPESTPIPANLS
QNLEAAAATQVAVSVPKRRRKIKELNKKEAVGDLLDAFKEANPAVPEVENQPPAGSNPGPESEGSGVPPRPEEAD
ETWDSKEDKIHNAENIQPGEQKYEYKSDQWKPPNLEEKKRYDREFLLGFQFIFCQMQKPEGLPHISDVVLDKANK
TPLRPLDPTRLQGINCGPDFTPSFANLGRTTLSTRGPPRGGPGGELARGAQAGLGPRRSQQGPRKEPRKIIATVL
MTEDIKLNKAEKAWKPSSKRTAADKDRGEEDADGSKTQDLFRRWRSILNKLTPQMFQQLMKQVTQLAIDTEDASK
GSLTSFLRRPFQSPTSLWPIQHVPLPHGAESAHYGKPTVTVNFRKLLLNRCQKEFEKDKDDDEVFEKKQKEMDEA
ATAEERERLKEELEEARDIARRCSLGNIKFIGELFKLKMLTEAIMHDCVVKLLKNHDEESLECLCRLLTTIGKDL
DFEKAKPRMDQYFNQMEKIIKEKKTSSRIRFMLQDVLDLRGSNWVPRRGDQGPRPLTRSIRRLRWKTSRAHQSAA
AHARAVTSVGAVLQALPSAVDFPLWMMVADTVPISKGSRPIDTSRLTKITKPGSIDSNNQLFAPGGRLSWGKGSS
GGSGAQPSDAASEAARPATSTLIRFSALQQAVPTESTDNRRVVQRSSLSRERGEKAGDRGDRLERVNGEGTVGTG
LIVSRTPATKRTFSKEVEERSRERPSQPEGLRKAASLTEDRDRGRDAVKREAALPPVSPLKAALSEEELEKKSKA
IIEEYLHLNDMKEAVQCVQELASPSLLFIFVRHGVESTLERSAIAREHMGQLLHQLLCAGHLSTAQYYQGLYEIL
ELAEDMEIDIPHVWLYLAELVTPILQEGGVPMGELFREITKPLRPLGKAASLLLEILGLLCKSMGPKKVGTLWRE
AGLSWKEFLPEGQDIGAFVAEQKVEYTLGEESEAPGQRALPSEELNRQLEKLLKEGSSNQRVFDWIEANLSEQIV
SNTLVRALMTAVCYSAIIFETPLRVDVAVLKGDIVLQKYLCDEAEGATGALRLQALVVTLEQPPNLLRMFFDALY
DEDVVKEDAFYSWESSKDPAEQQGKGVALKSVTAFFKWLREVRGGV

FIGURE 2001A

TCTAGATGGGGGTCCTGGGCCCCAGGGTGTGCAGCCACTGACTTGGGGACTGCTGGTGGGGTAGGGATGAGGGAG
GGAGGGGCATTGTGATGTACAGGGCTGCTCTGTGAGATCAAGGGTCTCTTAAGGGTGGGAGCTGGGGCAGGGACT
ACGAGAGCAGCCAGATGGGCTGAAAGTGGAACTCAAGGGGTTTCTGGCACCTACCTACCTGCTTCCCGCTGGGGG
GTGGGGAGTTGGCCCAGAGTCTTAAGATTGGGGCAGGGTGGAGAGGTGGGCTCTTCCTGCTTCCCACTCATCTTA
TAGCTTTCTTTCCCCAGATCCGAATTCGAGATCCAAACCAAGGAGGAAAGGATATCACAGAGGAGATC**ATG**TCTG
GGGCCCGCACTGCCTCCACACCCACCCCTCCCCAGACGGGAGGCAGTCTGGAGCCTCAAGCTAATGGGGAGACGC
CCCAGGTTGCTGTCATTGTCCGGCCAGATGACCGGTCACAGGGAGCAATCATTGCTGACCGGCCAGGGCTGCCTG
GCCCAGAGCATAGCCCTTCAGAATCCCAGCCTTCGTCGCCTTCTCCGACCCCATCACCATCCCCAGTCTTGGAAC
CGGGGTCTGAGCCTAATCTCGCAGTCCTCTCTATTCCTGGGGACACTATGACAACTATACAAATGTCTGTAGAAG
AATCAACCCCCATCTCCCGTGAAACTGGGGAGCCATATCGCCTCTCTCCAGAACCCACTCCTCTCGCCGAACCCA
TACTGGAAGTAGAAGTGACACTTAGCAAACCGGTTCCAGAATCTGAGTTTTCTTCCAGTCCTCTCCAGGCTCCCA
CCCCTTTGGCATCTCACACAGTGGAAATTCATGAGCCTAATGGCATGGTCCCATCTGAAGATCTGGAACCAGAGG
TGGAGTCAAGCCCAGAGCTTGCTCCTCCCCCAGCTTGCCCCTCCGAATCCCCTGTGCCCATTGCTCCAACTGCCC
AACCTGAGGAACTGCTCAACGGAGCCCCCTCGCCACCAGCTGTGGACTTAAGCCCAGTCAGTGAGCCAGAGGAGC
AGGCCAAGGAGGTGACAGCATCAGTGGCGCCCCCCACCATCCCCTCTGCTACTCCAGCTACGGCTCCTTCAGCTA
CTTCCCCAGCTCAGGAGGAGGAAATGGAAGAAGAAGAAGATGAGGAAGAAGGAGAAGTAGGGGAAGCAGGGGAAG
GTGAGAGTGAGAAGAGAGGAGAGGAACTGCTCCCCCCAGAGAGTACCCCTATTCCAGCCAACTTGTCTCAGAATT
TGGAGGCAGCAGCAGCCACTCAAGTGGCAGTATCTGTGCCAAAGAGGAGACGGAAAATTAAGGAGCTAAATAAGA
AGGAGGCTGTTGGAGACCTTCTGGATGCCTTCAAGGAGGCGAACCCGGCAGTACCAGAGGTGGAAAATCAGCCTC
CTGCAGGCAGCAATCCAGGCCCAGAGTCTGAGGGCAGTGGTGTGCCCCCACGTCCTGAGGAAGCAGATGAGACCT
GGGACTCAAAGGAAGACAAAATTCACAATGCTGAGAACATCCAGCCCGGGGAACAGAAGTATGAATATAAGTCAG
ATCAGTGGAAGCCTCCAAACCTAGAGGAGAAAAAACGTTACGACCGTGAGTTCCTGCTTGGTTTTCAGTTCATCT
TTTGCCAGATGCAGAAGCCAGAGGGATTGCCACATATCAGTGACGTGGTGCTGGACAAGGCCAATAAAACACCAC
TGCGGCCACTGGATCCCACTAGACTACAAGGCATAAATTGTGGCCCAGACTTCACTCCATCCTTTGCCAACCTTG
GCCGGACAACCCTTAGCACCCGTGGGCCCCCAAGGGGTGGGCCAGGTGGGGAGCTCGCCCGTGGCGCGCAGGCTG
GCCTGGGACCCCGGCGCTCTCAGCAGGGACCCCGAAAAGAACCACGCAAGATCATTGCCACAGTGTTAATGACCG
AAGATATAAAACTGAACAAAGCAGAGAAAGCCTGGAAACCCAGCAGCAAGCGGACAGCGGCTGATAAGGATCGAG
GGGAAGAAGATGCTGATGGCAGCAAAACCCAGGACCTATTCCGCAGGTGGCGCTCCATCCTGAATAAACTGACAC
CCCAGATGTTCCAGCAGCTGATGAAGCAAGTGACGCAGCTGGCCATCGACACCGAGGACGCCTCAAAGGGGTCAT
TGACCTCATTTTTGAGAAGGCCATTTCAGAGCCCAACTTCTCTGTGGCCTATCCAACATGTGCCGCTGCCTCATG
GCGCTGAAAGTGCCCACTACGGAAAGCCAACAGTGACTGTGAACTTCCGAAAGCTGTTGTTGAATCGATGTCAGA
AGGAGTTTGAGAAAGACAAAGATGATGATGAGGTTTTTGAGAAGAAGCAAAAAGAGATGGATGAAGCTGCTACGG
CAGAGGAACGAGAACGCCTGAAGGAGGAGCTGGAAGAGGCTCGGGACATAGCCCGGCGCTGCTCTTTAGGGAATA
TCAAGTTTATTGGAGAGTTGTTCAAACTGAAGATGTTAACAGAGGCAATAATGCATGACTGTGTGGTCAAACTGC
TTAAGAACCATGATGAAGAGTCCCTTGAGTGCCTTTGTCGTCTGCTCACCACCATTGGCAAAGACCTGGACTTTG
AAAAAGCCAAGCCCCGAATGGATCAGTATTTCAACCAGATGGAAAAAATCATTAAAGAAAAGAAGACGTCATCCC
GCATCCGCTTTATGCTGCAGGACGTGCTGGATCTGCGAGGGAGCAATTGGGTGCCACGCCGAGGGGATCAGGGTC
CAAGACCATTGACCAGATCCATAAGGAGGCTGAGATGGAAGACATCGAGAGCACATCAAAGTGCAGCAGCTCATG
CAAGGGCAGTGACAAGCGTCGGGGCGGTCCTCCAGGCCCTCCCATCAGCCGTGGACTTCCCCTTGTGGATGATGG
TGGCTGACACAGTTCCCATCAGCAAAGGTAGCCGCCCCATTGACACCTCACGACTCACCAAGATCACCAAGCCTG
GCTCCATCGATTCTAACAACCAGCTCTTTGCACCTGGAGGGCGACTGAGCTGGGGCAAGGGCAGCAGCGGAGGGT
CAGGAGCCCAGCCCTCAGACGCAGCATCAGAAGCTGCTCGCCCAGCTACTAGTACTTTGATTCGCTTCTCAGCCC
TTCAACAAGCGGTACCCACAGAAAGCACAGATAATAGACGTGTGGTGCAGAGGAGTAGCTTGAGCCGAGAACGAG
GCGAGAAAGCTGGAGACCGAGGAGACCGCCTAGAGCGAGTGAACGGGGAGGGGACCGTGGGGACCGGCTTGATCG
TGTCGCGGACACCTGCTACCAAGCGGACGTTCAGCAAGGAAGTGGAGGAGCGGAGTAGAGAACGGCCCTCCCAGC
CTGAGGGGCTGCGCAAGGCAGCTAGCCTCACGGAGGATCGGGACCGTGGGCGGGATGCCGTGAAGCGAGAAGCTG
CCCTACCCCCAGTGAGCCCCCTGAAGGCGGCTCTCTCTGAGGAGGAGTTAGAGAAGAAATCCAAGGCTATCATTG
AGGAATATCTCCATCTCAATGACATGAAAGAGGCAGTCCAGTGCGTGCAGGAGCTGGCCTCACCCTCCTTGCTCT

FIGURE 2001B

TCATCTTTGTACGGCATGGTGTCGAGTCTACGCTGGAGCGCAGTGCCATTGCTCGTGAGCATATGGGGCAGCTGC
TGCACCAGCTGCTCTGTGCTGGGCATCTGTCTACTGCTCAGTACTACCAAGGGTTGTATGAAATCTTGGAATTGG
CTGAGGACATGGAAATTGACATCCCCCACGTGTGGCTCTACCTAGCGGAACTGGTAACACCCATTCTGCAGGAAG
GTGGGGTGCCCATGGGGGAGCTGTTCAGGGAGATTACAAAGCCTCTGAGACCGTTGGGCAAAGCTGCTTCCCTGT
TGCTGGAGATCCTGGGCCTCCTGTGCAAAAGCATGGGTCCTAAAAAGGTGGGGACGCTGTGGCGAGAAGCCGGGC
TTAGCTGGAAGGAATTTCTACCTGAAGGCCAGGACATTGGTGCATTCGTCGCTGAACAGAAGGTGGAGTATACCC
TGGGAGAGGAGTCGGAAGCCCCTGGCCAGAGGGCACTCCCCTCCGAGGAGCTGAACAGGCAGCTGGAGAAGCTGC
TGAAGGAGGGCAGCAGTAACCAGCGGGTGTTCGACTGGATAGAGGCCAACCTGAGTGAGCAGATAGTATCCAACA
CGTTAGTTCGAGCCCTCATGACGGCTGTCTGCTATTCTGCAATTATTTTTGAGACTCCCCTCCGAGTGGACGTTG
CAGTGCTGAAAGGCGACATAGTGCTGCAGAAATACCTGTGTGACGAAGCAGAAGGAGCTACAGGCGCTCTACGCC
TCCAGGCCCTTGTAGTGACCTTAGAACAGCCTCCCAACCTGCTGCGGATGTTCTTTGACGCACTGTATGACGAGG
ACGTGGTGAAGGAGGATGCCTTCTACAGTTGGGAGAGTAGCAAGGACCCCGCTGAGCAGCAGGGCAAGGGTGTGG
CCCTTAAATCTGTCACAGCCTTCTTCAAGTGGCTCCGTGAAGTCAGAGGAGGAGTC**TGA**CCACAACTGAGGGCTG
GTGGGGCCGGGGACCTGGAGCCCCATGGACACACAGATGGCTCCGGCTAGCCGCCTGGACTGCAGGGGGGCGGCA
GCAGCGGCGGTGGCAGTGGGTGCCTGTAGTGTGATGTGTCTGAACTAATAAAGTGGCTGAAGAGGCAGGATGGCT
TGGGGCTGCCTGGGCCCCCCTCCAGGATGCCGCCAGGTGTCCCTCTCCTCCCCTGGGGCACAGAGATATATTATA
TATAAAGTCTTGAAAATTTTGAAATTTGGTGTGTCTTGGGGTGGGGAGGGGCACCAACGCCTGCCCCTGGGGTCC
TTTTTTTTATTTTCTGAAAATCACTCTCGGACTGCCGTCCTCGCTGCTGGGCATATGCCCCAGCCCCTGTACCAC
CCCTGCTGTTGCCTGGGCAGGGGGAAGGGGGGGCACGGTGCCTGTAATTATTAAACATGAATTCAATT

FIGURE 2002

MSGARTASTPTPPQTGGSLEPQANGETPQVAVIVRPDDRSQGAIIADRPGLPGPEHSPSESQPSSPSPTPSPSPV
LEPGSEPNLAVLSIPGDTMTTIQMSVEESTPISRETGEPYRLSPEPTPLAEPILEVEVTLSKPVPESEFSSSPLQ
APTPLASHTVEIHEPNGMVPSEDLEPEVESSPELAPPPACPSESPVPIAPTAQPEELLNGAPSPPAVDLSPVSEP
EEQAKEVTASVAPPTIPSATPATAPSATSPAQEEEMEEEEDEEEGEVGEAGEGESEKRGEELLPPESTPIPANLS
QNLEAAAATQVAVSVPKRRRKIKELNKKEAVGDLLDAFKEANPAVPEVENQPPAGSNPGPESEGSGVPPRPEEAD
ETWDSKEDKIHNAENIQPGEQKYEYKSDQWKPPNLEEKKRYDREFLLGFQFIFCQMQKPEGLPHISDVVLDKANK
TPLRPLDPTRLQGINCGPDFTPSFANLGRTTLSTRGPPRGGPGGELARGAQAGLGPRRSQQGPRKEPRKIIATVL
MTEDIKLNKAEKAWKPSSKRTAADKDRGEEDADGSKTQDLFRRWRSILNKLTPQMFQQLMKQVTQLAIDTEDASK
GSLTSFLRRPFQSPTSLWPIQHVPLPHGAESAHYGKPTVTVNFRKLLLNRCQKEFEKDKDDDEVFEKKQKEMDEA
ATAEERERLKEELEEARDIARRCSLGNIKFIGELFKLKMLTEAIMHDCVVKLLKNHDEESLECLCRLLTTIGKDL
DFEKAKPRMDQYFNQMEKIIKEKKTSSRIRFMLQDVLDLRGSNWVPRRGDQGPRPLTRSIRRLRWKTSRAHQSAA
AHARAVTSVGAVLQALPSAVDFPLWMMVADTVPISKGSRPIDTSRLTKITKPGSIDSNNQLFAPGGRLSWGKGSS
GGSGAQPSDAASEAARPATSTLIRFSALQQAVPTESTDNRRVVQRSSLSRERGEKAGDRGDRLERVNGEGTVGTG
LIVSRTPATKRTFSKEVEERSRERPSQPEGLRKAASLTEDRDRGRDAVKREAALPPVSPLKAALSEEELEKKSKA
IIEEYLHLNDMKEAVQCVQELASPSLLFIFVRHGVESTLERSAIAREHMGQLLHQLLCAGHLSTAQYYQGLYEIL
ELAEDMEIDIPHVWLYLAELVTPILQEGGVPMGELFREITKPLRPLGKAASLLLEILGLLCKSMGPKKVGTLWRE
AGLSWKEFLPEGQDIGAFVAEQKVEYTLGEESEAPGQRALPSEELNRQLEKLLKEGSSNQRVFDWIEANLSEQIV
SNTLVRALMTAVCYSAIIFETPLRVDVAVLKGDIVLQKYLCDEAEGATGALRLQALVVTLEQPPNLLRMFFDALY
DEDVVKEDAFYSWESSKDPAEQQGKGVALKSVTAFFKWLREVRGGV

FIGURE 2003

CGCTGTCGCCGCCAGTAGCAGCCTTCGCCAGCAGCGCCGCGGCGGAACCGGGCGCAGGGGAGCGAGCCCGGCCCC
GCCAGCCCAGCCCAGCCCAGCCCTACTCCCTCCCCACGCCAGGGCAGCAGCCGTTGCTCAGAGAGAAGGTGGAGG
AAGAAATCCAGACCCTAGCACGCGCGCACCATC**ATG**GACCATTATGATTCTCAGCAAACCAACGATTACATGCAG
CCAGAAGAGGACTGGGACCGGGACCTGCTCCTGGACCCGGCCTGGGAGAAGCAGCAGAGAAAGACATTCACGGCA
TGGTGTAACTCCCACCTCCGGAAGGCGGGGACACAGATCGAGAACATCGAAGAGGACTTCCGGGATGGCCTGAAG
CTCATGCTGCTGCTGGAGGTCATCTCAGGTGAACGCTTGGCCAAGCCAGAGCGAGGCAAGATGAGAGTGCACAAG
ATCTCCAACGTCAACAAGGCCCTGGATTTCATAGCCAGCAAAGGCGTCAAACTGGTGTCCATCGGAGCCGAAGAA
ATCGTGGATGGGAATGTGAAGATGACCCTGGGCATGATCTGGACCATCATCCTGCGCTTTGCCATCCAGGACATC
TCCGTGGAAGAGACTTCAGCCAAGGAAGGGCTGCTCCTGTGGTGTCAGAGAAAGACAGCCCCTTACAAAAATGTC
AACATCCAGAACTTCCACATAAGCTGGAAGGATGGCCTCGGCTTCTGTGCTTTGATCCACCGACACCGGCCCGAG
CTGATTGACTACGGGAAGCTGCGGAAGGATGATCCACTCACAAATCTGAATACGGCTTTTGACGTGGCAGAGAAG
TACCTGGACATCCCCAAGATGCTGGATGCCGAAGACATCGTTGGAACTGCCCGACCGGATGAGAAAGCCATCATG
ACTTACGTGTCTAGCTTCTACCACGCCTTCTCTGGAGCCCAGAAGGCGGAGACAGCAGCCAATCGCATCTGCAAG
GTGTTGGCCGTCAACCAGGAGAACGAGCAGCTTATGGAAGACTACGAGAAGCTGGCCAGTGATCTGTTGGAGTGG
ATCCGCCGCACAATCCCGTGGCTGGAGAACCGGGTGCCCGAGAACACCATGCATGCCATGCAACAGAAGCTGGAG
GACTTCCGGGACTACCGGCGCCTGCACAAGCCGCCCAAGGTGCAGGAGAAGTGCCAGCTGGAGATCAACTTCAAC
ACGCTGCAGACCAAGCTGCGGCTCAGCAACCGGCCTGCCTTCATGCCCTCTGAGGGCAGGATGGTCTCGGACATC
AACAATGCCTGGGGCTGCCTGGAGCAGGTGGAGAAGGGCTATGAGGAGTGGTTGCTGAATGAGATCCGGAGGCTG
GAGCGACTGGACCACCTGGCAGAGAAGTTCCGGCAGAAGGCCTCCATCCACGAGGCCTGGACTGACGGCAAAGAG
GCCATGCTGCGACAGAAGGACTATGAGACCGCCACCCTCTCGGAGATCAAGGCCCTGCTCAAGAAGCATGAGGCC
TTCGAGAGTGACCTGGCTGCCCACCAGGACCGTGTGGAGCAGATTGCCGCCATCGCACAGGAGCTCAATGAGCTG
GACTATTATGACTCACCCAGTGTCAACGCCCGTTGCCAAAAGATCTGTGACCAGTGGGACAATCTGGGGGCCCTA
ACTCAGAAGCGAAGGGAAGCTCTGGAGCGGACCGAGAAACTGCTGGAGACCATTGACCAGCTGTACTTGGAGTAT
GCCAAGCGGGCTGCACCCTTCAACAACTGGATGGAGGGGGCCATGGAGGACCTGCAGGACACCTTCATTGTGCAC
ACCATTGAGGAGATCCAGGGACTGACCACAGCCCATGAGCAGTTCAAGGCCACCCTCCCTGATGCCGACAAGGAG
CGCCTGGCCATCCTGGGCATCCACAATGAGGTGTCCAAGATTGTCCAGACCTACCACGTCAATATGGCGGGCACC
AACCCCTACACAACCATCACGCCTCAGGAGATCAATGGCAAATGGGACCACGTGCGGCAGCTGGTGCCTCGGAGG
GACCAAGCTCTGACGGAGGAGCATGCCCGACAGCAGCACAATGAGAGGCTACGCAAGCAGTTTGGAGCCCAGGCC
AATGTCATCGGGCCCTGGATCCAGACCAAGATGGAGGAGATCGGGAGGATCTCCATTGAGATGCATGGGACCCTG
GAGGACCAGCTCAGCCACCTGCGGCAGTATGAGAAGAGCATCGTCAACTACAAGCCAAAGATTGATCAGCTGGAG
GGCGACCACCAGCTCATCCAGGAGGCGCTCATCTTCGACAACAAGCACACCAACTACACCATGGAGCACATCCGT
GTGGGCTGGGAGCAGCTGCTCACCACCATCGCCAGGACCATCAATGAGGTAGAGAACCAGATCCTGACCCGGGAT
GCCAAGGGCATCAGCCAGGAGCAGATGAATGAGTTCCGGGCCTCCTTCAACCACTTTGACCGGGATCACTCCGGC
ACACTGGGTCCCGAGGAGTTCAAAGCCTGCCTCATCAGCTTGGGTTATGATATTGGCAACGACCCCCAGGGAGAA
GCAGAATTTGCCCGCATCATGAGCATTGTGGACCCCAACCGCCTGGGGGTAGTGACATTCCAGGCCTTCATTGAC
TTCATGTCCCGCGAGACAGCCGACACAGATACAGCAGACCAAGTCATGGCTTCCTTCAAGATCCTGGCTGGGGAC
AAGAACTACATTACCATGGACGAGCTGCGCCGCGAGCTGCCACCCGACCAGGCTGAGTACTGCATCGCGCGGATG
GCCCCCTACACCGGCCCCGACTCCGTGCCAGGTGCTCTGGACTACATGTCCTTCTCCACGGCGCTGTACGGCGAG
AGTGACCTC**TAA**TCCACCCCGCCCGGCCGCCCTCGTCTTGTGCGCCGTGCCCTGCCTTGCACCTCCGCCGTCGCC
CATCTCCTGCCTGGGTTCGGTTTCAGCTCCCAGCCTCCACCCGGGTGAGCTGGGGCCCACGTGGCATCGATCCTC
CCTGCCCGCGAAGTGACAGTTTACAAAATTATTTTCTGCAAAAAAGAAAAAAAAAGTTACGTTAAAAACCAAAAAA
CTACATATTTTATTATAGAAAAAGTATTTTTTCTCCACCAGACAAATGGAAAAAAAGAGGAAAGATTAACTATTT
GCACCGAAATGTCTTGTTTTGTTGCGACATAGGAAAATAACCAAGCACAAAGTTATATTCCATCCTTTTTACTGA
TTTTTTTTTCTTCTATCTGTTCCATCTGCTGTATTCATTTCTCCAATCTCATGTCCATTTTGGTGTGGGAGTCGG
GGTAGGGGGTACTCTTGTCAAAAGGCACATTGGTGCGTGTGTGTTTGCTAGCTCACTTGTCCATGAAAATATTTT
ATGATATTAAAGAAAATCTTTTG

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FIGURE 2004

MDHYDSQQTNDYMQPEEDWDRDLLLDPAWEKQQRKTFTAWCNSHLRKAGTQIENIEEDFRDGLKLMLLLEVISGE
RLAKPERGKMRVHKISNVNKALDFIASKGVKLVSIGAEEIVDGNVKMTLGMIWTIILRFAIQDISVEETSAKEGL
LLWCQRKTAPYKNVNIQNFHISWKDGLGFCALIHRHRPELIDYGKLRKDDPLTNLNTAFDVAEKYLDIPKMLDAE
DIVGTARPDEKAIMTYVSSFYHAFSGAQKAETAANRICKVLAVNQENEQLMEDYEKLASDLLEWIRRTIPWLENR
VPENTMHAMQQKLEDFRDYRRLHKPPKVQEKCQLEINFNTLQTKLRLSNRPAFMPSEGRMVSDINNAWGCLEQVE
KGYEEWLLNEIRRLERLDHLAEKFRQKASIHEAWTDGKEAMLRQKDYETATLSEIKALLKKHEAFESDLAAHQDR
VEQIAAIAQELNELDYYDSPSVNARCQKICDQWDNLGALTQKRREALERTEKLLETIDQLYLEYAKRAAPFNNWM
EGAMEDLQDTFIVHTIEEIQGLTTAHEQFKATLPDADKERLAILGIHNEVSKIVQTYHVNMAGTNPYTTITPQEI
NGKWDHVRQLVPRRDQALTEEHARQQHNERLRKQFGAQANVIGPWIQTKMEEIGRISIEMHGTLEDQLSHLRQYE
KSIVNYKPKIDQLEGDHQLIQEALIFDNKHTNYTMEHIRVGWEQLLTTIARTINEVENQILTRDAKGISQEQMNE
FRASFNHFDRDHSGTLGPEEFKACLISLGYDIGNDPQGEAEFARIMSIVDPNRLGVVTFQAFIDFMSRETADTDT
ADQVMASFKILAGDKNYITMDELRRELPPDQAEYCIARMAPYTGPDSVPGALDYMSFSTALYGESDL

FIGURE 2005

CGCTGTCGCCGCCAGTAGCAGCCTTCGCCAGCAGCGCCGCGGCGGAACCGGGCGCAGGGGAGCGAGCCCGGCCCC
GCCAGCCCAGCCCAGCCCAGCCCTACTCCCTCCCCACGCCAGGGCAGCAGCCGTTGCTCAGAGAGAAGGTGGAGG
AAGAAATCCAGACCCTAGCACGCGCGCACCATC**ATG**GACCATTATGATTCTCAGCAAACCAACGATTACATGCAG
CCAGAAGAGGACTGGGACCGGGACCTGCTCCTGGACCCGGCCTGGGAGAAGCAGCAGAGAAAGACATTCACGGCA
TGGTGTAACTCCCACCTCCGGAAGGCGGGGACACAGATCGAGAACATCGAAGAGGACTTCCGGGATGGCCTGAAG
CTCATGCTGCTGCTGGAGGTCATCTCAGGTGAACGCTTGGCCAAGCCAGAGCGAGGCAAGATGAGAGTGCACAAG
ATCTCCAACGTCAACAAGGCCCTGGATTTCATAGCCAGCAAAGGCGTCAAACTGGTGTCCATCGGAGCCGAAGAA
ATCGTGGATGGGAATGTGAAGATGACCCTGGGCATGATCTGGACCATCATCCTGCGCTTTGCCATCCAGGACATC
TCCGTGGAAGAGACTTCAGCCAAGGAAGGGCTGCTCCTGTGGTGTCAGAGAAAGACAGCCCCTTACAAAAATGTC
AACATCCAGAACTTCCACATAAGCTGGAAGGATGGCCTCGGCTTCTGTGCTTTGATCCACCGACACCGGCCCGAG
CTGATTGACTACGGGAAGCTGCGGAAGGATGATCCACTCACAAATCTGAATACGGCTTTTGACGTGGCAGAGAAG
TACCTGGACATCCCCAAGATGCTGGATGCCGAAGACATCGTTGGAACTGCCCGACCGGATGAGAAAGCCATCATG
ACTTACGTGTCTAGCTTCTACCACGCCTTCTCTGGAGCCCAGAAGGCGGAGACAGCAGCCAATCGCATCTGCAAG
GTGTTGGCCGTCAACCAGGAGAACGAGCAGCTTATGGAAGACTACGAGAAGCTGGCCAGTGATCTGTTGGAGTGG
ATCCGCCGCACAATCCCGTGGCTGGAGAACCGGGTGCCCGAGAACACCATGCATGCCATGCAACAGAAGCTGGAG
GACTTCCGGGACTACCGGCGCCTGCACAAGCCGCCCAAGGTGCAGGAGAAGTGCCAGCTGGAGATCAACTTCAAC
ACGCTGCAGACCAAGCTGCGGCTCAGCAACCGGCCTGCCTTCATGCCCTCTGAGGGCAGGATGGTCTCGGACATC
AACAATGCCTGGGGCTGCCTGGAGCAGGTGGAGAAGGGCTATGAGGAGTGGTTGCTGAATGAGATCCGGAGGCTG
GAGCGACTGGACCACCTGGCAGAGAAGTTCCGGCAGAAGGCCTCCATCCACGAGGCCTGGACTGACGGCAAAGAG
GCCATGCTGCGACAGAAGGACTATGAGACCGCCACCCTCTCGGAGATCAAGGCCCTGCTCAAGAAGCATGAGGCC
TTCGAGAGTGACCTGGCTGCCCACCAGGACCGTGTGGAGCAGATTGCCGCCATCGCACAGGAGCTCAATGAGCTG
GACTATTATGACTCACCCAGTGTCAACGCCCGTTGCCAAAAGATCTGTGACCAGTGGGACAATCTGGGGGCCCTA
ACTCAGAAGCGAAGGGAAGCTCTGGAGCGGACCGAGAAACTGCTGGAGACCATTGACCAGCTGTACTTGGAGTAT
GCCAAGCGGGCTGCACCCTTCAACAACTGGATGGAGGGGGCCATGGAGGACCTGCAGGACACCTTCATTGTGCAC
ACCATTGAGGAGATCCAGGGACTGACCACAGCCCATGAGCAGTTCAAGGCCACCCTCCCTGATGCCGACAAGGAG
CGCCTGGCCATCCTGGGCATCCACAATGAGGTGTCCAAGATTGTCCAGACCTACCACGTCAATATGGCGGGCACC
AACCCCTACACAACCATCACGCCTCAGGAGATCAATGGCAAATGGGACCACGTGCGGCAGCTGGTGCCTCGGAGG
GACCAAGCTCTGACGGAGGAGCATGCCCGACAGCAGCACAATGAGAGGCTACGCAAGCAGTTTGGAGCCCAGGCC
AATGTCATCGGGCCCTGGATCCAGACCAAGATGGAGGAGATCGGGAGGATCTCCATTGAGATGCATGGGACCCTG
GAGGACCAGCTCAGCCACCTGCGGCAGTATGAGAAGAGCATCGTCAACTACAAGCCAAAGATTGATCAGCTGGAG
GGCGACCACCAGCTCATCCAGGAGGCGCTCATCTTCGACAACAAGCACACCAACTACACCATGGAGCACATCCGT
GTGGGCTGGGAGCAGCTGCTCACCACCATCGCCAGGACCATCAATGAGGTAGAGAACCAGATCCTGACCCGGGAT
GCCAAGGGCATCAGCCAGGAGCAGATGAATGAGTTCCGGGCCTCCTTCAACCACTTTGACCGGGATCACTCCGGC
ACACTGGGTCCCGAGGAGTTCAAAGCCTGCCTCATCAGCTTGGGTTATGATATTGGCAACGACCCCCAGGGAGAA
GCAGAATTTGCCCGCATCATGAGCATTGTGGACCCCAACCGCCTGGGGGTAGTGACATTCCAGGCCTTCATTGAC
TTCATGTCCCGCGAGACAGCCGACACAGATACAGCAGACCAAGTCATGGCTTCCTTCAAGATCCTGGCTGGGGAC
AAGAACTACATTACCATGGACGAGCTGCGCCGCGAGCTGCCACCCGACCAGGCTGAGTACTGCATCGCGCGGATG
GCCCCCTACACCGGCCCCGACTCCGTGCCAGGTGCTCTGGACTACATGTCCTTCTCCACGGCGCTGTACGGCGAG
AGTGACCTC**TAA**TCCACCCCGCCCGGCCGCCCTCGTCTTGTGCGCCGTGCCCTGCCTTGCACCTCCGCCGTCGCC
CATCTCCTGCCTGGGTTCGGTTTCAGCTCCCAGCCTCCACCCGGGTGAGCTGGGGCCCACGTGGCATCGATCCTC
CCTGCCCGCGAAGTGACAGTTTACAAAATTATTTTCTGCAAAAAAGAAAAAAAAGTTACGTTAAAAACCAAAAAA
CTACATATTTTATTATAGAAAAAGTATTTTTTCTCCACCAGACAAATGGAAAAAAAGAGGAAAGATTAACTATTT
GCACCGAAATGTCTTGTTTTGTTGCGACATAGGAAAATAACCAAGCACAAAGTTATATTCCATCCTTTTTACTGA
TTTTTTTTTCTTCTATCTGTTCCATCTGCTGTATTCATTTCTCCAATCTCATGTCCATTTTGGTGTGGGAGTCGG
GGTAGGGGGTACTCTTGTCAAAAGGCACATTGGTGCGTGTGTGTTTGCTAGCTCACTTGTCCATGAAAATATTTT
ATGATATTAAAGAAAATCTTTTG

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FIGURE 2006

MDHYDSQQTNDYMQPEEDWDRDLLLDPAWEKQQRKTFTAWCNSHLRKAGTQIENIEEDFRDGLKLMLLLEVISGE
RLAKPERGKMRVHKISNVNKALDFIASKGVKLVSIGAEEIVDGNVKMTLGMIWTIILRFAIQDISVEETSAKEGL
LLWCQRKTAPYKNVNIQNFHISWKDGLGFCALIHRHRPELIDYGKLRKDDPLTNLNTAFDVAEKYLDIPKMLDAE
DIVGTARPDEKAIMTYVSSFYHAFSGAQKAETAANRICKVLAVNQENEQLMEDYEKLASDLLEWIRRTIPWLENR
VPENTMHAMQQKLEDFRDYRRLHKPPKVQEKCQLEINFNTLQTKLRLSNRPAFMPSEGRMVSDINNAWGCLEQVE
KGYEEWLLNEIRRLERLDHLAEKFRQKASIHEAWTDGKEAMLRQKDYETATLSEIKALLKKHEAFESDLAAHQDR
VEQIAAIAQELNELDYYDSPSVNARCQKICDQWDNLGALTQKRREALERTEKLLETIDQLYLEYAKRAAPFNNWM
EGAMEDLQDTFIVHTIEEIQGLTTAHEQFKATLPDADKERLAILGIHNEVSKIVQTYHVNMAGTNPYTTITPQEI
NGKWDHVRQLVPRRDQALTEEHARQQHNERLRKQFGAQANVIGPWIQTKMEEIGRISIEMHGTLEDQLSHLRQYE
KSIVNYKPKIDQLEGDHQLIQEALIFDNKHTNYTMEHIRVGWEQLLTTIARTINEVENQILTRDAKGISQEQMNE
FRASFNHFDRDHSGTLGPEEFKACLISLGYDIGNDPQGEAEFARIMSIVDPNRLGVVTFQAFIDFMSRETADTDT
ADQVMASFKILAGDKNYITMDELRRELPPDQAEYCIARMAPYTGPDSVPGALDYMSFSTALYGESDL

FIGURE 2007

GGTAAGAGAAGACTGGAAGCATGTCGGAGTTTTGGTTAATTTCTGCCCCTGGCGATAAGGAAAATTTGCAAGCTC
TGGAGAGGATGAATACTGTAACCTCCAAGTCCAACCTGTCTTATAATACCAAATTCGCTATTCCTGACTTCAAGG
TGGGGACCTTGGATTCCCTGGTTGGCCTCTCTGATGAGTTGGGGAAACTCGACACCTTTGCTGAAAGCCTCATAA
GGAGAATGGCTCAGAGCGTGGTGGAAGTCATGGAGGACTCAAAGGGGAAGGTCCAGGAGCACCTCCTGGCAAACG
GAGTTGACTTAACATCCTTTGTGACCCACTTTGAATGGGACATGGCCAAATATCCTGTCAAGCAGCCGCTCGTGA
GTGTGGTGGACACAATAGCCAAGCAACTGGCGCAGATCGAGATGGACCTGAAGTCCCGAACGGCCGCCTACGACA
CTCTGAAGACAAACCTGGAGAACCTGGAAAAGAAATCCATGGGGAACCTCTTCACCCGGACACTGAGTGATATTG
TGAGCAAAGAGGACTTCGTGCTGGATTCTGAATATCTCGTCACACTTCTGGTCATCGTCCCCAAACCAAACTACT
CACAATGGCAAAAAACCTACGAATCTCTCTCAGACATGGTGGTCCCTCGATCAACCAAACTCATTACTGAGGACA
AGGAAGGGGGCCTTTTCACTGTGACTCTGTTTCGAAAAGTGATTGAAGATTTCAAAACCAAGGCCAAAGAAAACA
AGTTCACTGTTCGTGAATTTTACTATGATGAGAAGGAAATTGAAAGGGAAAGGGAGGAGATGGCCAGATTGCTGT
CTGATAAGAAGCAACAGTATGGCCCCCTGCTGCGCTGGCTCAAGGTGAACTTCAGTGAAGCCTTCATTGCCTGGA
TCCACATCAAGGCCCTGAGAGTGTTTGTGGAGTCCGTGCTCAGGTATGGACTACCAGTGAACTTCCAGGCAGTGC
TCCTGCAGCCGCATAAGAAGTCATCCACCAAGCGTTTAAGAGAGGTTCTAAACTCTGTCTTCCGACATCTGGATG
AAGTAGCCGCTACAAGTATACTGGATGCATCTGTGGAGATCCCGGGACTGCAACTCAATAACCAAGACTATTTTC
CTTATGTCTACTTCCATATTGACCTTAGTCTTCTTGACTAGAAAGGCCAGCTGGCACCTCTGTCTCATGTTCGTG
CAGATTATTACAGACACCTCTTTCCTTTAGCCAGAGAATGGTTCAAATGTCTTACAGAACTAAGATCTTTTTCAG
AGAAATTGCTCACAAAAGTTAGTGACAGTTGTATTTATTTTTTTAAGTTACAATAAAATGCTCTCAAGTCCTTTG
AATGTTCCAACAAATTCAAAACTTCATTTTCTGAATGTTTTACATAAATGCGAACTACCTGTTCGCATTGGTAAC
CTGCTGCTGTATTTCATGTCTTAACGGCTATTTTGAGGTTCATTAACAACATAGAAAGCCTTGAACTGTATAACC
AGCTAGATTCCTTAATAATTAGTCACTAGAGACAGCCCAAAGACAAATATTGGGCAGGAAATCAGTTCTCACTGA
GCCCGGTTTCCATGTAAAATCTCTGTTGTGGTGGGCATAGGTGGCACCATCTAAAGAAAAGAGGTCTTGTTTTTT
GTTTAAAAAAGTTTGTGGGGAGGAAAGACATCTGTGTATCACTTCAAAATATTGATTTACTGCTAAACATCACTC
TGAATTTATGATGTGGATACTAACTTCATACATTTATCGGCATTGTCCAAAATATTTTATTCTTTAATGGAAAAA
GCCATTAATATTCAAATGAAGGGATCACATTAAAAAAAACCCATACATAAGAAACAGCCTCCAAGAACATTCAAG
CAGCAGTCAGAGAGAAAAATGTTTCGACAGCCAAGTTTTCTTCAAAATATTATGTGACAGAATACGACTCAATTC
ACCGGCTACAACAATTCATAGAATTTTTCAATGTTTTCTTGAGATGCAAAAGTTCACTGTTGCAGTGTTTTCAAA
TGACCAATCAAGTACTACTTCTTGGTTAAAAGGCCACTGGTAGAGTCATCTGAGTGTAGAGAATGTCCCTTCACT
GCTGGAAAAATCCACTGGCTCCCAAGAAAAGAAAATGGTCTGAAGCCTCTGTTGTGGCTCTCACAACTCATCTTT
CCCTAAGTCATCAAGCTCCACATCACTGAGGTCAATGTCATCCTCCACGGGAAGCTGGGAGACGACAGAAAGCCA
CTGTTAGATCTGCAGAAGGGGACACCCTGGAAGGTCAACATCTCATTTTATGGAAGAGCGACTCTCTGGAGCTAC
TCCTGCTACAATCCAGGTTCTCCTCAGTCTGACTCCTACCCTGACCTTCGTACCTATGATTATACGGATGGAAAA
GCTCAGAACTCAGGTGAAACATTTCAACATCACATCACTCACCATTTTAACACTGGAAGCCACTTGAACGTGTCC
TTTTGAGGAGGGTGGGACACAACAGTACAGAAATAAGTGCTAATTTCAAAGCTATCATTTTCTATTTTTCTAAGA
TAAAGTAAATGAATTCCAGGTTAAATGTTCACTTTAAGGTAATAATCAGGAAAGCAACCTTACTACTGAAATGTA
TCTTGGCTGTCAAGAGTATCAAATGCCATGCAGCACTTAAACTTGTGATAAGGAAGATGAAGGGTCTTCAGAGAA
GAACCTCTTAAAAGGCCCACGGGTGCACCAGGGCTGAGGTCTGATGGGAAGGACTTGACTCCAGGTGCAGAGATG
CACAGGCTCAAGAGAGTAAACCAGGACTGCTGCCCGCACAGCTTCCCTCCCGGGCACTCACCTCGCCATCCCTGC
CGTCCCAAGGCTCTCTCTCAACGATGGTAGGGAAAGCCCCGCCTCCTACAGGTGCCGTGGAGCCACGCCCAAAAG
AGAGCTCCCTTAGGGAAAAATGACCAAAACACACACACACATTTACAATGGACTGCTGGTGCAGAAGAATAAACA
ACTTTAAAAATAAAAAAAAAAAAAAAAAAAAA

FIGURE 2008

MSEFWLISAPGDKENLQALERMNTVTSKSNLSYNTKFAIPDFKVGTLDSLVGLSDELGKLDTFAESLIRRMAQSV
VEVMEDSKGKVQEHLLANGVDLTSFVTHFEWDMAKYPVKQPLVSVVDTIAKQLAQIEMDLKSRTAAYDTLKTNLE
NLEKKSMGNLFTRTLSDIVSKEDFVLDSEYLVTLLVIVPKPNYSQWQKTYESLSDMVVPRSTKLITEDKEGGLFT
VTLFRKVIEDFKTKAKENKFTVREFYYDEKEIERENEEMARLLSDKKQQYGPLLRWLKVNFSEAFIAWIHIKALR
VFVESVLRYGLPVNFQAVLLQPHKKSSTKRLREVLNSVFRHLDEVAATSILDASVEIPGLQLNNQDYFPYVYFHI
DLSLLD

FIGURE 2009

CTCCGCCCTCTCCCACTCTCTCTTTCCGGTGTGGAGTCTGGAGACGACGTGCAGAA**ATG**GCACCTCGAAAGGGGA
AGGAAAAGAAGGAAGAACAGGTCATCAGCCTCGGACCTCAGGTGGCTGAAGGAGAGAATGTATTTGGTGTCTGCC
ATATCTTTGCATCCTTCAATGACACTTTTGTCCATGTCACTGATCTTTCTGGCAAGGAAACCATCTGCCGTGTGA
CTGGTGGGATGAAGGTAAAGGCAGACCGAGATGAATCCTCACCATATGCTGCTATGTTGGCTGCCCAGGATGTGG
CCCAGAGGTGCAAGGAGCTGGGTATCACCGCCCTACACATCAAACTCCGGGCCACAGGAGGAAATAGGACCAAGA
CCCCTGGACCTGGGGCCCAGTCGGCCCTCAGAGCCCTTGCCCGCTCGGGTATGAAGATCGGGCGGATTGAGGATG
TCACCCCCATCCCCTCTGACAGCACTCGCAGGAAGGGGGGTCGCCGTGGTCGCCGTCTG**TGA**ACAAGATTCCTCA
AAATATTTTCTGTTAATAAATTGCCTTCATGTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2010

MAPRKGKEKKEEQVISLGPQVAEGENVFGVCHIFASFNDTFVHVTDLSGKETICRVTGGMKVKADRDESSPYAAM
LAAQDVAQRCKELGITALHIKLRATGGNRTKTPGPGAQSALRALARSGMKIGRIEDVTPIPSDSTRRKGGRRGRR
L

FIGURE 2011

CTGCCACTGCCACCTCGCGGATCAGGAGCCAGCGTTGTTCGCCCGACGCCTCGCTGCCGGTGGGAGGAAGCGAGA
GGGAAGCCGCTTGGGCTCTTGTCGCCGCTGCTCGCCCACCGCCTGGAAGAGCCGAGCCCCGGCCAGTCGGTCGCT
TGCCACCGCTCGTAGCCGTTACCCGCGGGCCGCCACAGCCGCCGGCGGGAGAGGCGCGCGCCATGGCTTCTGGAG
CCGATTCAAAAGGTGATGACCTATCAACAGCCATTCTCAAACAGAAGAACCGTCCCAATCGGTTAATTGTTGATG
AAGCCATCAATGAGGACAACAGTGTGGTGTCCTTGTCCCAGCCCAAGATGGATGAATTGCAGTTGTTCCGAGGTG
ACACAGTGTTGCTGAAAGGAAAGAAGAGACGAGAAGCTGTTTGCATCGTCCTTTCTGATGATACTTGTTCTGATG
AGAAGATTCGGATGAATAGAGTTGTTCGGAATAACCTTCGTGTACGCCTAGGGGATGTCATCAGCATCCAGCCAT
GCCCTGATGTGAAGTACGGCAAACGTATCCATGTGCTGCCCATTGATGACACAGTGGAAGGCATTACTGGTAATC
TCTTCGAGGTATACCTTAAGCCGTACTTCCTGGAAGCGTATCGACCCATCCGGAAAGGAGACATTTTTCTTGTCC
GTGGTGGGATGCGTGCTGTGGAGTTCAAAGTGGTGGAAACAGATCCTAGCCCTTATTGCATTGTTGCTCCAGACA
CAGTGATCCACTGCGAAGGGGAGCCTATCAAACGAGAGGATGAGGAAGAGTCCTTGAATGAAGTAGGGTATGATG
ACATTGGTGGCTGCAGGAAGCAGCTAGCTCAGATCAAAGAGATGGTGGAACTGCCCCTGAGACATCCTGCCCTCT
TTAAGGCAATTGGTGTGAAGCCTCCTAGAGGAATCCTGCTTTACGGACCTCCTGGAACAGGAAAGACCCTGATTG
CTCGAGCTGTAGCAAATGAGACTGGAGCCTTCTTCTTCTTGATCAATGGTCCTGAGATCATGAGCAAATTGGCTG
GTGAGTCTGAGAGCAACCTTCGTAAAGCCTTTGAGGAGGCTGAGAAGAATGCTCCTGCCATCATCTTCATTGATG
AGCTAGATGCCATCGCTCCCAAAAGAGAGAAAACTCATGGCGAGGTGGAGCGGCGCATTGTATCACAGTTGTTGA
CCCTCATGGATGGCCTAAAGCAGAGGGCACATGTGATTGTTATGGCAGCAACCAACAGACCCAACAGCATTGACC
CAGCTCTACGGCGATTTGGTCGCTTTGACAGGGAGGTAGATATTGGAATTCCTGATGCTACAGGACGCTTAGAGA
TTCTTCAGATCCATACCAAGAACATGAAGCTGGCAGATGATGTGGACCTGGAACAGGTAGCCAATGAGACTCACG
GGCATGTGGGTGCTGACTTAGCAGCCCTGTGCTCAGAGGCTGCTCTGCAAGCCATCCGCAAGAAGATGGATCTCA
TTGACCTAGAGGATGAGACCATTGATGCCGAGGTCATGAACTCTCTAGCAGTTACTATGGATGACTTCCGGTGGG
CCTTGAGCCAGAGTAACCCATCAGCACTGCGGGAAACCGTGGTAGAGGTGCCACAGGTAACCTGGGAAGACATCG
GGGGCCTAGAGGATGTCAAACGTGAGCTACAGGAGCTGGTCCAGTATCCTGTGGAGCACCCAGACAAATTCCTGA
AGTTTGGCATGACACCTTCCAAGGGAGTTCTGTTCTATGGACCTCCTGGCTGTGGGAAAACTTTGTTGGCCAAAG
CCATTGCTAATGAATGCCAGGCCAACTTCATCTCCATCAAGGGTCCTGAGCTGCTCACCATGTGGTTTGGGGAGT
CTGAGGCCAATGTCAGAGAAATCTTTGACAAGGCCCGCCAAGCTGCCCCCTGTGTGCTATTCTTTGATGAGCTGG
ATTCGATTGCCAAGGCTCGTGGAGGTAACATTGGAGATGGTGGTGGGGCTGCTGACCGAGTCATCAACCAGATCC
TGACAGAAATGGATGGCATGTCCACAAAAAAAAAATGTGTTCATCATTGGCGCTACCAACCGGCCTGACATCATTG
ATCCTGCCATCCTCAGACCTGGCCGTCTTGATCAGCTCATCTACATCCCACTTCCTGATGAGAAGTCCCGTGTTG
CCATCCTCAAGGCTAACCTGCGCAAGTCCCCAGTTGCCAAGGATGTGGACTTGGAGTTCCTGGCTAAAATGACTA
ATGGCTTCTCTGGAGCTGACCTGACAGAGATTTGCCAGCGTGCTTGCAAGCTGGCCATCCGTGAATCCATCGAGA
GTGAGATTAGGCGAGAACGAGAGAGGCAGACAAACCCATCAGCCATGGAGGTAGAAGAGGATGATCCAGTGCCTG
AGATCCGTCGAGATCACTTTGAAGAAGCCATGCGCTTTGCGCGCCGTTCTGTCAGTGACAATGACATTCGGAAGT
ATGAGATGTTTGCCCAGACCCTTCAGCAGAGTCGGGGCTTTGGCAGCTTCAGATTCCCTTCAGGGAACCAGGGTG
GAGCTGGCCCCAGTCAGGGCAGTGGAGGCGGCACAGGTGGCAGTGTATACACAGAAGACAATGATGATGACCTGT
ATGGCTAAGTGGTGGTGGCCAGCGTGCAGTGAGCTGGCCTGCCTGGACCTTGTTCCCTGGGGGTGGGGCGCTTGC
CCAGGAGAGGGACCAGGGGTGCGCCCACAGCCTGCTCCATTCTCCAGTCTGAACAGTTCAGCTACAGTCTGACTC
TGGACAGGGGGTTTCTGTTGCAAAAATACAAAACAAAAGCGATAAAATAAAAGCGATTTTCATTTGGTAGGCGGA
GAGTGAATTACCAACAGGGAATTGGGCCTTGGGCCTATGCCATTTCTGTTGTAGTTTGGGGCAGTGCAGGGGACC
TGTGTGGGGTGTGAACCAAGGCACTACTGCCACCTGCCACAGTAAAGCATCTGCACTTGACTCAATGCTGCCCGA
GCCCTCCCTTCCCCCTATCCAACCTGGGTAGGTGGGTAGGGGCCACAGTTGCTGGATGTTTATATAGAGAGTAGG
TTGATTTATTTTACATGCTTTTGAGTTAATGTTGGAAAACTAATCACAAGCAGTTTCTAAACCAAAAAATGACAT
GTTGTAAAAGGACAATAAACGTTGGGTCAAAATGGAAAAAAAAAAAAA

FIGURE 2012

MASGADSKGDDLSTAILKQKNRPNRLIVDEAINEDNSVVSLSQPKMDELQLFRGDTVLLKGKKRREAVCIVLSDD
TCSDEKIRMNRVVRNNLRVRLGDVISIQPCPDVKYGKRIHVLPIDDTVEGITGNLFEVYLKPYFLEAYRPIRKGD
IFLVRGGMRAVEFKVVETDPSPYCIVAPDTVIHCEGEPIKREDEEESLNEVGYDDIGGCRKQLAQIKEMVELPLR
HPALFKAIGVKPPRGILLYGPPGTGKTLIARAVANETGAFFFLINGPEIMSKLAGESESNLRKAFEEAEKNAPAI
IFIDELDAIAPKREKTHGEVERRIVSQLLTLMDGLKQRAHVIVMAATNRPNSIDPALRRFGRFDREVDIGIPDAT
GRLEILQIHTKNMKLADDVDLEQVANETHGHVGADLAALCSEAALQAIRKKMDLIDLEDETIDAEVMNSLAVTMD
DFRWALSQSNPSALRETVVEVPQVTWEDIGGLEDVKRELQELVQYPVEHPDKFLKFGMTPSKGVLFYGPPGCGKT
LLAKAIANECQANFISIKGPELLTMWFGESEANVREIFDKARQAAPCVLFFDELDSIAKARGGNIGDGGGAADRV
INQILTEMDGMSTKKNVFIIGATNRPDIIDPAILRPGRLDQLIYIPLPDEKSRVAILKANLRKSPVAKDVDLEFL
AKMTNGFSGADLTEICQRACKLAIRESIESEIRRERERQTNPSAMEVEEDDPVPEIRRDHFEEAMRFARRSVSDN
DIRKYEMFAQTLQQSRGFGSFRFPSGNQGGAGPSQGSGGGTGGSVYTEDNDDDLYG

FIGURE 2013

CGGCGCCGCAGGGGATTGAGGGGTTGACTGAGCGTTGCGAGCCTTAGCTTTCTCCCGAACGCCAGCGCTGAGGAC
ACGATGTCGCGGCTCTCCCGCTCACTGCTTTGGGCCGCCACCTGCCTGGGCGTGCTCTGCGTGCTGTCCGCGGAC
AAGAACACGACCCAGCACCCGAACGTGACGACTTTAGCGCCCATCTCCAACGTAACCTCGGCGCCGGTGACGTCC
CTCCCGCTGGTCACCACTCCGGCACCAGAAACCTGTGAAGGTCGAAACAGCTGCGTTTCCTGTTTTAATGTTAGC
GTTGTTAATACTACCTGCTTTTGGATAGAATGTAAAGATGAGAGCTATTGTTCACATAACTCAACAGTTAGTGAT
TGTCAAGTGGGGAACACGACAGACTTCTGTTCCGCTAAACCCACAGTTCAGCCCTCCCCTTCTACAACTTCCAAG
ACAGTTACTACATCAGGTACAACAAATAACACTGTGACTCCAACCTCACAACCTGTGCGAAAGTCTACCTTTGAT
GCAGCCAGTTTCATTGGAGGAATTGTCCTGGTCTTGGGTGTGCAGGCTGTAATTTTCTTTCTTTATAAATTCTGC
AAATCTAAAGAACGAAATTACCACACTCTGTAAACAGACCCATTGAATTAATAAGGACTGGTGATTCATTTGTGT
AACTCACTGAAGCCAAAATACTATCTTTTAAGATGTCCCACATGGAAGACGCTATTCCAGGATCTTTAAATTTCC
ATGGATGCATATAGGATGTTTGGGAGCATCATCCGTGAAGAAAAAATCAATTAAATCATTGTGTTCAACAGGAAT
ATTTAAAATATTCTGCATGAATCCTGTGGCTGTCTTATTTTAAATAGCTGCTGCTGTGGGATTATATTTTTTTTC
CTTAACATGCCAAATATAACTTTCTGAAAGTGATGGAAAATGTTGTCTTGTGCAGACAACATCATGGCTCTTGGC
AGTTTAAATTTAGTAATTTTAATTTAGTGAACAGAATTGAGAAGAACGTGCCAAATGAGAATCAATTAGGTGGAT
TTTTGGCTGTCATTTCAAAAGTGGAATAAATTTATTAATTTAGTAGTACTAAATGGTATCCTTAGATTAAAATTT
TGTGCTTGATAACAGCTGTTTTTTCTACATTAGAAATAAGATGCCACACAAGGAACTACATTCCAGATTTAAAGA
AATGAAAGGATACCATTAGTGTGTATAACAGATTATTGTTCATACTTGTAAAGCATCTTATGTCATTGAGAATAT
AAAGAACAGTGCCTTAGAAGACAGTGAAAGGTAAGCTCTAGCTTAATGTCTATGATTTGTTCTTTGACATTAAGG
AAGGTAAGGATTGGTCAGAGGATGTAACTTGATGTGAGCAGTAGTAAACCTGTTTTAGATATCATACTGTTAATA
TTTTATTGAAAATTTATTTCAGAGCGGAGAAACTTAAGCTAAAGTCTGTTATACAGAATTGAAAGCCTTCGTATC
TTGAACCTCCCAACATTTTTCTTATGGCTGTTGAAAAGTATAGAGCTAAATTGATTTAATTACACTTTCCTTTGT
ACTTTAAAAAAAAGTATGCTAGCACTATTGTACCTTGAAAGGATTTCCACCAGACTGTCTTGAGTAGTGACTTCT
TTGGTGAGGCAAGAAGGATATACATTATTTTAGAATCATTTACTATTTAAATGAGACAATCATATTATTTTAGAA
TCATTTATTTTAAATGAGACAATCATTTTAAGTTTTAAGATAACAGAAGTGACCAATGTAATTTCACAACACCTA
AGGATTTTTTGGTTGATCAGGTTACTGTAGATTTTTACTGATTGTCCTGGATGAATAGACTGTGCTTTTTCTTTT
TCTCTCCCTTCCTTCTTGGTTTCCCATAGTATAATAAGCATGCATACTTTAACTTCTATAGTTTTCTCCTTTAGA
GGGTCGTCTTCAGTTTTAGAGGTTTACTTCTCCCTTGCCTTTGACTCATTGGACTAGTGCAGAGGCTTTAAGTAG
TTTAAAATGGGCTTTTGCTTTTCTAGGTCATTAACGTTTTTTATTTAGTTTCTTTAGCCAATAGTGGCTGAGTTT
CGCACTTGATTTTCAATATTTTATAGTAAGAAATGACAAACTGCTTTGTTTCATTTCATAAACAAACTCTGCATT
TAGATAACTATTAAAGGTTGTTAAGATGAAGATTTACTGTTTCTTTGTTACTCGTTGGTACAGCTGTTTGTTTTA
CTTGCACATTTGTACATATACTTAATGTTTTCAAGTGCCTTAATTGTTTAAAATCTCTGGCTTCAAAGTTTCTTG
GGGAAAGGTCGGTTTACCTCACATTTTTTGTTTCCATTAGTAATATTCTAGGTACCTCACAAAATGTATTATGGT
GCCATGGCTGTTAGTTTTTAGTGAGTGCTGTAGGATTAATTCGAAAATAGGCAGAATTCCATTCCTCCCAAGGTG
GCAAAAATTAGCTATACTGATGTAATTGTCATTTACCTGGGTATGAATTCCCTGACACACATTCATGTCAACATA
TGTAGCAAATTTTGTGAAAACATAACAATTTGAAGCTTCTGTAATTTTGAGCACTGCTCTAACAACAAGCATAAT
ATAAAATTAGTTAGATTTTGCAAGTCTACAAATGAGCTCTTGCAACAGAACTCACAGCCTTTTTACTTTTTTCCC
CTAACTTTAGCAATGTAGTATCTTGAGCCATTAATTTTTGGGTTTTTTTAAAATCCAGAAGGTATATAGAAACCT
TTTCAGATTTTTCATCTGATTTGTTCTTGCAGATGTTCTTCTATCAAATACCTTATTTTACCTTACAGATATTTG
TTGCACAGGCAGATACTGCTGTATTTAGACATTTCTATTTCAGTTCATTAAAAACTGCAAAACCAATCTGTATCA
TGTACCAAACTGACTTAAAATAAATCTACATGTTTATTGAATT

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FIGURE 2014

MSRLSRSLLWAATCLGVLCVLSADKNTTQHPNVTTLAPISNVTSAPVTSLPLVTTPAPETCEGRNSCVSCFNVSV
VNTTCFWIECKDESYCSHNSTVSDCQVGNTTDFCSAKPTVQPSPSTTSKTVTTSGTTNNTVTPTSQPVRKSTFDA
ASFIGGIVLVLGVQAVIFFLYKFCKSKERNYHTL

FIGURE 2015

AGATCTGAATCCAGAGGCTCTCGGAGGAAGAGCTCAGGCCACTGAGGCGGCTCCCAGCTGCGTTGGCGACATGGC
CGACACCCCCAGAGATGCCGGGCTCAAGCAGGCGCCTGCATCACGGAACGAGAAGGCCCCGGTGGACTTCGGCTA
CGTGGGGATTGACTCCATCCTGGAGCAGATGCGCCGGAAGGCCATGAAGCAGGGCTTCGAGTTCAACATCATGGT
GGTCGGGCAGAGCGGCTTGGGTAAATCCACCTTAATCAACACCCTCTTCAAATCCAAAATCAGCCGGAAGTCGGT
GCAGCCCACCTCAGAGGAGCGCATCCCCAAGACCATCGAGATCAAGTCCATCACGCACGATATTGAGGAGAAAGG
CGTCCGGATGAAGCTGACAGTGATTGACACACCAGGGTTCGGGGACCACATCAACAACGAGAACTGCTGGCAGCC
CATCATGAAGTTCATCAATGACCAGTACGAGAAATACCTGCAGGAGGAGGTCAACATCAACCGCAAGAAGCGCAT
CCCGGACACCCGCGTCCACTGCTGCCTCTACTTCATCCCCGCCACCGGCCACTCCCTCAGGCCCCTGGAGCAGAA
AGTGCCTTTATCTCAGCCATCCGCAGACTGCTCGGCCAGATGCGGGGACAGGCTGGAATGAGGGAGGCGTCTTCA
TCTCCCTGCCATCCCCCTCTCACGCCACCCCCGCCCCCACCGGGCTGCAGGTGCTGCTGATGCGCTGGGATCTGA
TTGAGGATAAAAAGGAAGGAGAGATGACCCCTACCCCCTCATCCCCCAGTTTTGAAAAGGTCTAAGCAAGTGAGT
CTGGTGGAGGAGCTGAGGGAGGGAGCCATGGAAGGTGCCAGAAGGAAGGTTGGCGGGGGCACGTGTGGGCCGTGG
CTTGGGCTGGTCAGAGTGGCGTGAGCTGCCCGGCGCCTGCCCTGCCCAAGTGACCAGGGAAGTGTGTGTGTCC
ATGTGTATGCGTGTCCGTCTGTCTGTCTAGTGTCTGGGTTTGGCCCAAGACTGGGCTGTAGTTACATTAATGCCC
AGCCAGCCACCCCTGCCACTCACCCCTCCTGGCCCAGGCCTTGCTGACTCTCTGAGCTGGGGAGGTGGGAGGCCA
GGCGAGCCTGACTCTGTTGATCTACCCGTGCCTGGGCCCCTCCCCTCAGAGCCCATGGTAACGAACCCCTAGAAA
GGAGAGAACGGGCGTCAGGGGTGCACAGTCCACAGCTGAAGAGCAAGGTTTCGTGGCAGCACGGCCCGGCCCCTC
ACCCTCTGTCCCCACGAGGGGACCCATGGGGGCTGTCTTTGCAGGGCACAGATGACCAAAGTCCCTTCCTGCTTC
CTGTTACCTGTCTTGCTCCTGGGGAGAAAGAGGGGCCTGATGAGACTCCACTCAGGTGCACACATCACCAGGTGC
ATCTGCAGGCACCGGGCTGGCTGCTTGCAGCCAGGAGAAGGTCAGCGAGAAGGAGTGTATGAGTGTGAGTGTGTG
TGCATGGAAGTTGGGGCACTGGGCGTCTGACTCCCTCCCCACCCAAGAGAGGAAGGACCCCTCACCACCCCCACT
GGCGAGACAGTTTACTTTGCCGACTTGCCATGTTTTTGCCAAAACCAAGATTTTGAAGGAAATGAGTGGCCAGCG
CCAGGGCCCAGGCCATGTGGCCTGCCCAGCCTCAATGTCACTTGGTGGCGGGGTGGGGTGGGGGTGGGCAGCAGC
ATCCCAGCCTTGAGATGCTTCACTTTCCTTCTCTGTAACCAGACTTTGAAAAATTGTTCGTTTCATCAGGCTCTG
TTCCTCAATGGCCTTTTGCTACGTGCCTCCCGAGAAATTTGTCTTTTTGTATAAATGACAAAGTGTTGAAAATGT
ATTTCCTGAAATAAATGTTTCAAATGC

FIGURE 2016

MADTPRDAGLKQAPASRNEKAPVDFGYVGIDSILEQMRRKAMKQGFEFNIMVVGQSGLGKSTLINTLFKSKISRK
SVQPTSEERIPKTIEIKSITHDIEEKGVRMKLTVIDTPGFGDHINNENCWQPIMKFINDQYEKYLQEEVNINRKK
RIPDTRVHCCLYFIPATGHSLRPLEQKVPLSQPSADCSARCGDRLE

FIGURE 2017A

CTGAACTAGTTGCCAGTGATCTTGAAACGTGACAGTAACCAAGAGATAAATAGGTGACAATGACAGGAAAATTAG
ATGTAGTAAAAGAGAGTGTTTGAGAGCAGAAGCTATGGCAACTAAAGACTGGATTTGAATCCTTCCTAGCTTGGT
GACATGAGCAAATTACTTGATTTAAGTGAGCATTTTCCCATCTGTACAGTGGAGATAACGATAATTGTGCCTGCT
AAGAAGAATTGCTGTGAAGATTAGTGAAATAATGCATGTAAAACATTTGGTACAGTATGTGACACATAGTACAAA
TAGTTTGCTAGGAAGATTGTTATTATTCTTCACTTGTGATATTGTGAAGTTTTCATACAGCAAATTGGACATCAT
GAGATGGATTGATTAAATAAATAGATTTGAACTTCAAGGACTGGTAGTGTTCTTGCTTTGGAAAGAAGAAACTTG
GTTTATCCTAATAATAGTAGGATAATAATGGTGAAGTGATAGGTACAAGTAATAGTGTTTATGATGCGCTGGTGA
TGATAGGAAAAGAAAGCCATTATATGGGCAAGAGCTAGAAGTAATAAAATGGTGCATTTTTCAGTGATGTTTGGC
CTATGTAGCTATTCTCTGATAACTATAAAAATCCTTATTATTGAAGATTCTTCAGGAAAAAAAAACCCTTAGTCT
GAAACTTTAGCACCAATCCCCCTTGCCCCCCATTGAAATACGTATTTTTAAAACATGGCTTTTGATAATGTGAGG
GTTTTTTCCTTTTTGCGATTTAGCAGTGCTGATTGTGTATTGCAGTAGTTGTGAGAGCATTAGAAGCAGCAGTCG
ATAGGAGGATGGAAGGTCTGGATGCCGCCTTGGGGAGTTAGGAGATTGGCAGACTTACCCTGTACCACTCTAGCC
CTACTCCTTTGCCCAAGACAGAAACACACTGAGATGGATAGGAGAATATGAGCAGTTGATAGGAAAGTTCTCAGT
GGAGTCAGGATTTAGGTTAGGCCAGGAGATTGAGAATATAACAGTTTGTGTATGATGAAATGGCATATTTCACAG
AATGCAGTAAAAGCAGGTAGGGTACAAGTGCAGCAACAGGAAGATGTCTTTTCTTCATTCAGCAAACACTTATTT
GAGAGCTTACCATGTGCTAGGCACATACAAAGATAAATAAGATGCCCTTGATGATCCTCTATTTAAAGGAGACAT
GTAAACAGGTTAACTTAGAGTAGAGATGGTGAATATGTGAACCTGAGGAAAGGAAGAAATAGATTAAATTATCTG
GAGAGAGAGGAAAAGTCAGCAGAATGGGGACGAGAATCTTTCGGAGCTCAGTGTTCTGATAGGAGTTATTTCCTT
GGGCATAGGTTCCAAGTATTTTTCTAATATACCATAGAAGCCAGGAAAACTTTCTTCTGTTATCTCAAATGATTT
AATTACTGACTTGAGTTTGTGTTGTCTCCTTAGACTTGTGCACC**ATG**GACAATTTTGCTGAGGGAGATTTCACTG
TGGCGGATTATGCCTTGTTAGAAGATTGCCCTCACGTGGATGATTGTGTCTTTGCTGCTGAATTTATGAGCAATG
ATTATGTTCGTGTGACTCAGCTTTACTGTGATGGGGTGGGTGTGCAATATAAAGATTATATCCAAAGTGAGAGGA
ATTTGGAATTTGACATCTGCAGTATATGGTGTAGTAAACCAATTTCTGTCCTGCAAGATTATTGCGATGCCATTA
AAATAAACATCTTCTGGCCACTTCTGTTTCAACATCAAAACAGTTCCGTAATATCACGATTGCATCCCTGTGTGG
ACGCCAACAATTCACGTGCTTCTGAGATAAATTTGAAGAAACTACAACATCTTGAGTTGATGGAAGATATTGTGG
ATTTGGCAAAGAAAGTTGCTAATGATTCATTCCTTATTGGAGGCTTATTGAGAATTGGTTGTAAAATAGAAAATA
AAATCTTGGCAATGGAAGAAGCTCTGAATTGGATAAAATATGCAGGCGATGTAACAATTCTAACTAAATTAGGAT
CAATTGACAATTGTTGGCCTATGTTAAGTATTTTCTTTACTGAATACAAGTACCACATAACTAAAATTGTAATGG
AAGACTGCAATTTGCTTGAAGAACTTAAAACTCAAAGTTGTATGGATTGTATAGAGGAAGGAGAACTAATGAAAA
TGAAAGGAAATGAAGAGTTTTCCAAAGAAAGATTTGATATAGCTATTATCTATTACACCAGAGCCATTGAATATA
GACCTGAAAACTACCTTCTTTATGGTAACCGAGCTCTTTGTTTTCTTCGTACTGGACAGTTTAGAAATGCACTCG
GTGATGGAAAGAGAGCCACTATTCTGAAGAACACTTGGCCAAAGGGTCATTATCGTTATTGTGATGCTCTTTCTA
TGCTGGGGGAATATGACTGGGCCCTGCAAGCAAACATAAAAGCTCAAAAACTCTGTAAAAATGACCCTGAGGGAA
TCAAGGATCTAATTCAGCAGCATGTAAAGTTACAAAAACAAATAGAAGACCTACAAGGTCGAACAGCAAATAAGG
ATCCAATTAAAGCCTTTTATGAAAACAGGGCCTACACACCTAGGAGTTTATCAGCACCTATATTTACTACTTCAC
TTAACTTTGTGGAGAAGGAAAGAGATTTCAGAAAAATTAATCACGAAATGGCCAACGGTGGTAATCAGAATCTAA
AGGTGGCGGATGAGGCGTTGAAGGTAGATGATTGTGACTGTCATCCTGAATTTTCACCACCATCAAGTCAGCCTC
CAAAACATAAAGGAAAACAAAAATCTCGAAACAATGAATCAGAAAAGTTCAGTTCTAGTTCACCATTGACTTTAC
CAGCAGATTTGAAGAACATCTTGGAGAAACAGTTTTCTAAATCTTCCAGAGCTGCACACCAGGATTTTGCTAATA
TAATGAAAATGCTGAGAAGCTTAATTCAAGATGGCTATATGGCCTTATTGGAGCAGCGTTGCCGCAGCGCTGCAC
AGGCCTTTACAGAGTTGCTGAACGGTTTAGATCCTCAAAAAATAAAGCAATTGAACCTGGCCATGATTAACTATG
TTTTGGTCGTCTATGGACTTGCCATTTCTCTCCTTGGAATAGGACAGCCTGAGGAATTATCTGAAGCCGAAAACC
AGTTTAAGAGGATTATTGAACACTACCCCAGTGAGGGCCTTGATTGCTTGGCCTACTGTGGAATTGGAAAAGTGT
ATTTGAAAAAAAACAGATTTCTAGAAGCTCTCAATCACTTTGAGAAAGCAAGAACCTTGATTTATCGTCTTCCTG
GAGTGTTAACTTGGCCCACGAGTAATGTGATTATTGAAGAGTCTCAGCCACAAAAAATAAAGATGCTGTTAGAGA
AATTTGTTGAAGAATGCAAGTTCCCTCCAGTGCCAGATGCCATTTGTTGCTATCAGAAGTGCCATGGATATTCTA
AGATCCAGATATACATAACTGATCCAGACTTTAAGGGTTTTATACGCATCAGCTGTTGCCAGTACTGTAAAATAG
AATTTCACATGAATTGCTGGAAGAAGTTAAAAACTACAACCTTTAATGATAAAATTGACAAGGATTTTCTACAAG

FIGURE 2017B

GAATATGTCTTACCCCTGACTGTGAAGGTGTCATTTCTAAGATTATCATCTTCAGCAGTGGTGGTGAAGTTAAAT
GTGAATTTGAACACAAGGTCATAAAAGAAAAGGTTCCTCCAAGACCTATTGTGAAACAGAAATGTTCTAGCCTAG
AGAAACTAAGACTGAAAGAAGACAAAAAATTGAAGAGAAAGATCCAAAAAAAAGAAGCAAAAAAGTTAGCACAAG
AAAGAATGGAGGAGGACTTAAGAGAAAGTAATCCACCCAAAAATGAAGAGCAGAAAGAAACTGTAGACAATGTTC
AGCGTTGTCAGTTCCTTGATGACAGAATTCTACAGTGTATAAAGCAGTATGCTGACAAGATTAAATCCGGCATAC
AGAATACAGCCATGCTTCTCAAAGAATTGCTTTCTTGGAAAGTTTTGAGCACAGAAGACTATACAACCTGTTTTT
CTAGCAGAAATTTTCTAAATGAAGCAGTGGACTATGTTATTCGCCACTTGATTCAAGAAAATAACAGAGTAAAGA
CAAGAATATTTCTGCATGTTTTGAGTGAGCTTAAAGAAGTGGAGCCCAAATTAGCCGCCTGGATCCAAAAACTTA
ATAGCTTTGGCTTAGATGCCACAGGAACTTTCTTTTCTCGTTATGGAGCATCTCTTAAACTGCTTGATTTTAGTA
TCATGACTTTCCTCTGGAATGAGAAATATGGTCACAAACTAGACTCTATAGAAGGAAAGCAACTTGATTATTTCT
CTGAGCCAGCATCATTGAAGGAAGCCCGTTGTTTAATATGGCTGCTAGAAGAACACAGAGACAAGTTCCCAGCAT
TGCATAGTGCTTTAGATGAATTCTTTGATATAATGGACAGCCGCTGTACTGTGTTAAGGAAACAAGATAGTGGTG
AAGCACCGTTTAGTTCAACCAAGGTGAAAAACAAAAGCAAGAAAAAGAAGCCAAAGGATTCAAAGCCTATGTTAG
TTGGGTCTGGAACAACTTCAGTAACTTCAAATAATGAGATCATCACTTCAAGTGAAGACCATAGCAATCGAAATT
CAGATTCTGCAGGCCCATTTGCAGTGCCTGACCATCTTCGGCAAGATGTAGAAGAATTCGAAGCTCTCTATGACC
AACACAGTAACGAATATGTTGTCCGCAATAAGAAGCTATGGGACATGAACCCAAAACAAAAATGTTCAACTCTAT
ATGATTACTTCTCTCAGTTTTTGGAGGAACATGGTCCCTTGGACATGAGTAACAAGATGTTCTCTGCAGAATATG
AGTTTTTCCCAGAAGAAACTCGACAGATACTAGAAAAAGCAGGAGGTTTAAAACCTTTTCTCTTGGGATGCCCTC
GTTTTGTTGTGATTGACAACTGTATTGCACTGAAGAAGGTTGCATCACGGCTCAAGAAAAAAAGGAAGAAGAAAA
ACATTAAAACAAAAGTAGAAGAAATTTCAAAAGCAGGGGAGTATGTACGAGTTAAACTACAACTGAATCCAGCTG
CTAGGGAATTTAAACCAGATGTAAAGTCTAAACCAGTGTCAGATTCATCTTCAGCACCAGCTTTTGAAAATGTGA
AACCCAAACCTGTGTCTGCAAATTCTCCCAAGCCAGCTTGTGAAGATGTGAAGGCCAAACCAGTATCCGACAATT
CTTCTAGACAAGTTTCTGAGGATGGGCAACCCAAAGGGGTCTCTTCTAATTCTCCTAAACCAGGCTCTGAGGATG
CAAATTACAAGCGAGTCTCCTGTAATTCCCCCAAACCGGTTCTTGAGGATGTGAAACCAACTTATTGGGCTCAAT
CCCATTTGGTCACAGGATACTGTACGTATCTTCCTTTCCAGAGATTTGATATCACCCAGACACCGCCAGCATACA
TAAACGTGTTACCAGGTTTGCCCCAGTACACCAGCATATATACACCCTTGGCCAGCCTTTCTCCTGAATATCAGC
TACCAAGATCAGTACCAGTGGTGCCGTCTTTTGTAGCCAATGACAGAGCAGATAAAAATGCTGCTGCCTATTTTG
AGGGTCATCATTTGAATGCTGAGAATGTTGCTGGTCACCAGATTGCCTCTGAAACACAGATCCTTGAGGGCTCTT
TGGGAATATCTGTAAAGTCACACTGCAGCACAGGTGATGCTCATACAGTCCTGAGTGAGTCTAACAGAAATGATG
AGCACTGTGGAAATTCTAACAACAAATGTGAAGTAATTCCAGAAAGCACCAGTGCAGTAACAAACATTCCACACG
TGCAGATGGTTGCCATACAGGTATCTTGGAACATAATACACCAAGAAGTCAATACTGAGCCATATAATCCTTTTG
AGGAACGACAAGGGGAAATTTCACGGATTGAAAAGGAGCACCAAGTATTACAAGACCAACTTCAAGAAGTGTATG
AAAATTATGAGCAGATAAAACTTAAGGGCTTAGAAGAGACCAGGGACCTGGAAGAGAAGTTGAAAAGGCACTTAG
AAGAAAACAAGATCTCAAAGACGGAATTAGATTGGTTCCTTCAAGATTTGGAAAGAGAAATTAAAAAATGGCAAC
AGGAAAAAAAAGAAATCCAAGAAAGACTAAAATCACTGAAGAAGAAAATTAAAAAGGTTTCAAATGCCAGTGAAA
TGTATACCCAGAAAAATGATGGAAAGGAAAAGGAACATGAATTACATCTGGATCAGTCCCTTGAAATCAGCAACA
CACTTACAAATGAGAAAATGAAAATAGAAGAGTATATAAAGAAAGGGAAAGAGGATTATGAAGAGAGTCATCAGA
GAGCTGTGGCTGCAGAGGTATCCGTACTTGAAAACTGGAAGGAGAGTGAAGTGTATAAGCTACAGATCATGGAGT
CACAAGCAGAAGCCTTTCTGAAGAAGCTGGGGCTGATTAGCCGTGATCCTGCAGCATATCCTGACATGGAGTCTG
ATATACGTTCATGGGAATTGTTTCTTTCTAATGTTACAAAAGAAATTGAGAAAGCAAAGTCTCAGTTTGAAGAAC
AAATTAAGGCAATTAAAAATGGTTCTCGGCTCAGTGAACTTTCTAAAGTGCAGATTTCTGAGCTTTCATTTCCTG
CCTGTAACACGGTTCATCCCGAGTTACTCCCTGAGTCTTCAGGCCACGATGGCCAAGGGCTTGTGACTTCTGCAA
GCGACGTGACTGGAAACCACGCAGCACTTCACAGGGATCCTAGTGTGTTCTCTGCTGGTGATTCCCCAGGGGAGG
CTCCTTCTGCGCTGTTGCCAGGGCCACCCCCTGGTCAGCCTGAAGCCACTCAGCTGACAGGGCCAAAACGGGCTG
GCCAGGCAGCTCTGTCAGAACGAAGCCCTGTGGCTGATCGGAAGCAGCCTGTTCCTCCAGGACGTGCTGCGCGTT
CAAGCCAGTCTCCAAAAAAGCCGTTCAATAGTATTATTGAGCACCTGTCAGTGGTATTCCCATGTTACAACAGCA
CTGAGCTTGCTGGTTTTATTAAAAAAGTGCGAAGCAAAAACAAGAACTCACTCTCAGGATTGAGTATTGATGAAA
TTGTCCAAAGAGTGACAGAACACATTCTAGATGAACAGAAAAAGAAAAAGCCAAACCCAGGAAAGGACAAGAGGA

FIGURE 2017C

CTTATGAGCCCAGCTCTGCCACCCCCGTGACCAGGTCCTCCCAGGGCTCACCCTCGGTGGTTGTTGCACCATCAC
CCAAAACCAAGGGGCAGAAAGCAGAAGATGTCCCTGTGAGGATTGCACTGGGTGCAAGTTCCTGTGAAATATGCC
ACGAGGTGTTCAAATCAAAAAACGTGCGTGTGCTCAAATGTGGGCACAAGTATCACAAAGGGTGCTTTAAGCAGT
GGCTTAAAGGGCAGAGCGCTTGCCCGGCCTGCCAGGGTCGTGATCTCCTGACAGAAGAGTCACCTTCTGGAAGAG
GCTGGCCCAGTCAGAATCAGGAGCTGCCTTCCTGCTCTTCTAGGTAGTCACACTTCACTAAAGTGTCATCCACCA
GTGTGTTGAATCCGAAGAATGACAATTTTCTACCACTGGTGTAAAAAACAAACATTTGAAGACCCTTGTGCATTG
TGTGTCACAAAGCTAAATACATGGAAATCGTTAATATCGCTGATATTAAGTAATTTCCCCACTCTGAGTGAATAC
TTTGATGATTGCCAACAGTGGCTAATAAAATGACGGCTACCACACTCATGGGTCACTGGGGCTGCGCAGGGCTCT
TTGAGGTGGGTGGCTTCTTTTGGAAAGTACTATGAACGTCTCGAAGCAGTATTCTAGTGATAAGAATTCTTAACA
TAGCCAAGCGCCCCACGTTTGTTCCCCACGTTTGTTCCCCTTTTCTGTTTGAAAAACCTGTTCTGGTAGCTCCAC
AAGAGAGATGATACTGACTTTTTAAATTTTTTACAAGAGTCTGTATTCCTGATATGCCTATATTTTTCCTCAAAG
ATTCTGCATTTTAAGGATGGGCATAAGCAAACTATATTTTAATAATTTATAGTTAATGTTAAAATATTGGCTGAT
TTAGACCAAAAGATTCAAATCTCCTCTTTGTGAAATCCCATCTGCATTTGATTTTTTATTATTTTATGTTCCCCC
GTTAGATTGTTTTAAGTGTTTGCTTTTCATCTTTTATAGATGTAATCTGATTTTCAAAAATCATTAACACTTTTT
AATTAGTATCGACTAAGACTTTTTCCCCCTGGAATCGAGGCTGTGTGTCCGTCATCCCAGCCCCCGGTTGGAGCC
TGCTCTTTGAACTCCGCTGCCTTCCTTAGCAGCTTCTGTCCTCTTCTGTGAGTCAGTCAGCGAGTGCTTGGGATC
CGCATCCAGCCGTGCTGAGCACACAACAGGCTGTGTGTGGAAATGGCCACCACCATTCTCCTTCCCCACCCCACC
ACAAAAAGAGAAGCTGTGTCTTTAGACAACCCTGAGGTATCTGTGTTACAATCGTTCTGTGTTTGATATTTGTGT
AAAGTATGCATGCAGTCTTGTACTGTGACCTAAGAACAAAACTGTAACTGCATTAGAAACCATGAAAAAATTAGA
TATTGTTTTGTGACTTTTAGACAGTGGTAAATATAGAACCATGAATTCTGGTCACATTCCATTTCTCTCCAACAT
GAAGGATCAAAAAATGTTTTTCAATGTGTTCTTTGTTCCACTGGAAACTTAGAGTCATGAGTTTATGAGCTGATT
TGGTCACCTTCCTCTGCCTTTGTTCACTGTGAGTTCTGATGTCTTAGTGACTTAGTTCTTAGAAGCTCACGCCTT
AGTTTGAAACAGATTCTCCACGGTGGTCCCCAAAACACTGTCTGCATATCCATAAGAATTGAGCGCTATGGGTGT
TAACGTGCATGAGGATCAGTTTGCAGCAGCAAGTACAAAAGGAGAAGAGGAACATCCGTTGAATGAGTGTGTTTT
GTACATAACTTCAGATACTTGTGAACATGCCTTATATTTGTCCAACAACTGTCAGAATAAAGAACATTCTAAAAT
GAG

FIGURE 2018

MDNFAEGDFTVADYALLEDCPHVDDCVFAAEFMSNDYVRVTQLYCDGVGVQYKDYIQSERNLEFDICSIWCSKPI
SVLQDYCDAIKINIFWPLLFQHQNSSVISRLHPCVDANNSRASEINLKKLQHLELMEDIVDLAKKVANDSFLIGG
LLRIGCKIENKILAMEEALNWIKYAGDVTILTKLGSIDNCWPMLSIFFTEYKYHITKIVMEDCNLLEELKTQSCM
DCIEEGELMKMKGNEEFSKERFDIAIIYYTRAIEYRPENYLLYGNRALCFLRTGQFRNALGDGKRATILKNTWPK
GHYRYCDALSMLGEYDWALQANIKAQKLCKNDPEGIKDLIQQHVKLQKQIEDLQGRTANKDPIKAFYENRAYTPR
SLSAPIFTTSLNFVEKERDFRKINHEMANGGNQNLKVADEALKVDDCDCHPEFSPPSSQPPKHKGKQKSRNNESE
KFSSSSPLTLPADLKNILEKQFSKSSRAAHQDFANIMKMLRSLIQDGYMALLEQRCRSAAQAFTELLNGLDPQKI
KQLNLAMINYVLVVYGLAISLLGIGQPEELSEAENQFKRIIEHYPSEGLDCLAYCGIGKVYLKKNRFLEALNHFE
KARTLIYRLPGVLTWPTSNVIIEESQPQKIKMLLEKFVEECKFPPVPDAICCYQKCHGYSKIQIYITDPDFKGFI
RISCCQYCKIEFHMNCWKKLKTTTFNDKIDKDFLQGICLTPDCEGVISKIIIFSSGGEVKCEFEHKVIKEKVPPR
PILKQKCSSLEKLRLKEDKKLKRKIQKKEAKKLAQERMEEDLRESNPPKNEEQKETVDNVQRCQFLDDRILQCIK
QYADKIKSGIQNTAMLLKELLSWKVLSTEDYTTCFSSRNFLNEAVDYVIRHLIQENNRVKTRIFLHVLSELKEVE
PKLAAWIQKLNSFGLDATGTFFSRYGASLKLLDFSIMTFLWNEKYGHKLDSIEGKQLDYFSEPASLKEARCLIWL
LEEHRDKFPALHSALDEFFDIMDSRCTVLRKQDSGEAPFSSTKVKNKSKKKKPKDSKPMLVGSGTTSVTSNNEII
TSSEDHSNRNSDSAGPFAVPDHLRQDVEEFEALYDQHSNEYVVRNKKLWDMNPKQKCSTLYDYFSQFLEEHGPLD
MSNKMFSAEYEFFPEETRQILEKAGGLKPFLLGCPRFVVIDNCIALKKVASRLKKKRKKKNIKTKVEEISKAGEY
VRVKLQLNPAAREFKPDVKSKPVSDSSSAPAFENVKPKPVSANSPKPACEDVKAKPVSDNSSRQVSEDGQPKGVS
SNSPKPGSEDANYKRVSCNSPKPVLEDVKPTYWAQSHLVTGYCTYLPFQRFDITQTPPAYINVLPGLPQYTSIYT
PLASLSPEYQLPRSVPVVPSFVANDRADKNAAAYFEGHHLNAENVAGHQIASETQILEGSLGISVKSHCSTGDAH
TVLSESNRNDEHCGNSNNKCEVIPESTSAVTNIPHVQMVAIQVSWNIIHQEVNTEPYNPFEERQGEISRIEKEHQ
VLQDQLQEVYENYEQIKLKGLEETRDLEEKLKRHLEENKISKTELDWFLQDLEREIKKWQQEKKEIQERLKSLKK
KIKKVSNASEMYTQKNDGKEKEHELHLDQSLEISNTLTNEKMKIEEYIKKGKEDYEESHQRAVAAEVSVLENWKE
SEVYKLQIMESQAEAFLKKLGLISRDPAAYPDMESDIRSWELFLSNVTKEIEKAKSQFEEQIKAIKNGSRLSELS
KVQISELSFPACNTVHPELLPESSGHDGQGLVTSASDVTGNHAALHRDPSVFSAGDSPGEAPSALLPGPPPGQPE
ATQLTGPKRAGQAALSERSPVADRKQPVPPGRAARSSQSPKKPFNSIIEHLSVVFPCYNSTELAGFIKKVRSKNK
NSLSGLSIDEIVQRVTEHILDEQKKKKPNPGKDKRTYEPSSATPVTRSSQGSPSVVVAPSPKTKGQKAEDVPVRI
ALGASSCEICHEVFKSKNVRVLKCGHKYHKGCFKQWLKGQSACPACQGRDLLTEESPSGRGWPSQNQELPSCSSR

FIGURE 2019A

CTGAACTAGTTGCCAGTGATCTTGAAACGTGACAGTAACCAAGAGATAAATAGGTGACAATGACAGGAAAATTAG
ATGTAGTAAAAGAGAGTGTTTGAGAGCAGAAGCTATGGCAACTAAAGACTGGATTTGAATCCTTCCTAGCTTGGT
GACATGAGCAAATTACTTGATTTAAGTGAGCATTTTCCCATCTGTACAGTGGAGATAACGATAATTGTGCCTGCT
AAGAAGAATTGCTGTGAAGATTAGTGAAATAATGCATGTAAAACATTTGGTACAGTATGTGACACATAGTACAAA
TAGTTTGCTAGGAAGATTGTTATTATTCTTCACTTGTGATATTGTGAAGTTTTCATACAGCAAATTGGACATCAT
GAGATGGATTGATTAAATAAATAGATTTGAACTTCAAGGACTGGTAGTGTTCTTGCTTTGGAAAGAAGAAACTTG
GTTTATCCTAATAATAGTAGGATAATAATGGTGAAGTGATAGGTACAAGTAATAGTGTTTATGATGCGCTGGTGA
TGATAGGAAAAGAAAGCCATTATATGGGCAAGAGCTAGAAGTAATAAAATGGTGCATTTTTCAGTGATGTTTGGC
CTATGTAGCTATTCTCTGATAACTATAAAAATCCTTATTATTGAAGATTCTTCAGGAAAAAAAAACCCTTAGTCT
GAAACTTTAGCACCAATCCCCCTTGCCCCCCATTGAAATACGTATTTTTAAAACATGGCTTTTGATAATGTGAGG
GTTTTTTCCTTTTTGCGATTTAGCAGTGCTGATTGTGTATTGCAGTAGTTGTGAGAGCATTAGAAGCAGCAGTCG
ATAGGAGGATGGAAGGTCTGGATGCCGCCTTGGGGAGTTAGGAGATTGGCAGACTTACCCTGTACCACTCTAGCC
CTACTCCTTTGCCCAAGACAGAAACACACTGAGATGGATAGGAGAATATGAGCAGTTGATAGGAAAGTTCTCAGT
GGAGTCAGGATTTAGGTTAGGCCAGGAGATTGAGAATATAACAGTTTGTGTATGATGAAATGGCATATTTCACAG
AATGCAGTAAAAGCAGGTAGGGTACAAGTGCAGCAACAGGAAGATGTCTTTTCTTCATTCAGCAAACACTTATTT
GAGAGCTTACCATGTGCTAGGCACATACAAAGATAAATAAGATGCCCTTGATGATCCTCTATTTAAAGGAGACAT
GTAAACAGGTTAACTTAGAGTAGAGATGGTGAATATGTGAACCTGAGGAAAGGAAGAAATAGATTAAATTATCTG
GAGAGAGAGGAAAAGTCAGCAGAATGGGGACGAGAATCTTTCGGAGCTCAGTGTTCTGATAGGAGTTATTTCCTT
GGGCATAGGTTCCAAGTATTTTTCTAATATACCATAGAAGCCAGGAAAACTTTCTTCTGTTATCTCAAATGATTT
AATTACTGACTTGAGTTTGTGTTGTCTCCTTAGACTTGTGCACC**ATG**GACAATTTTGCTGAGGGAGATTTCACTG
TGGCGGATTATGCCTTGTTAGAAGATTGCCCTCACGTGGATGATTGTGTCTTTGCTGCTGAATTTATGAGCAATG
ATTATGTTCGTGTGACTCAGCTTTACTGTGATGGGGTGGGTGTGCAATATAAAGATTATATCCAAAGTGAGAGGA
ATTTGGAATTTGACATCTGCAGTATATGGTGTAGTAAACCAATTTCTGTCCTGCAAGATTATTGCGATGCCATTA
AAATAAACATCTTCTGGCCACTTCTGTTTCAACATCAAAACAGTTCCGTAATATCACGATTGCATCCCTGTGTGG
ACGCCAACAATTCACGTGCTTCTGAGATAAATTTGAAGAAACTACAACATCTTGAGTTGATGGAAGATATTGTGG
ATTTGGCAAAGAAAGTTGCTAATGATTCATTCCTTATTGGAGGCTTATTGAGAATTGGTTGTAAAATAGAAAATA
AAATCTTGGCAATGGAAGAAGCTCTGAATTGGATAAAATATGCAGGCGATGTAACAATTCTAACTAAATTAGGAT
CAATTGACAATTGTTGGCCTATGTTAAGTATTTTCTTTACTGAATACAAGTACCACATAACTAAAATTGTAATGG
AAGACTGCAATTTGCTTGAAGAACTTAAAACTCAAAGTTGTATGGATTGTATAGAGGAAGGAGAACTAATGAAAA
TGAAAGGAAATGAAGAGTTTTCCAAAGAAAGATTTGATATAGCTATTATCTATTACACCAGAGCCATTGAATATA
GACCTGAAAACTACCTTCTTTATGGTAACCGAGCTCTTTGTTTTCTTCGTACTGGACAGTTTAGAAATGCACTCG
GTGATGGAAAGAGAGCCACTATTCTGAAGAACACTTGGCCAAAGGGTCATTATCGTTATTGTGATGCTCTTTCTA
TGCTGGGGGGAATATGACTGGGCCCTGCAAGCAAACATAAAAGCTCAAAAACTCTGTAAAAATGACCCTGAGGGAA
TCAAGGATCTAATTCAGCAGCATGTAAAGTTACAAAAACAAATAGAAGACCTACAAGGTCGAACAGCAAATAAGG
ATCCAATTAAAGCCTTTTATGAAAACAGGGCCTACACACCTAGGAGTTTATCAGCACCTATATTTACTACTTCAC
TTAACTTTGTGGAGAAGGAAAGAGATTTCAGAAAAATTAATCACGAAATGGCCAACGGTGGTAATCAGAATCTAA
AGGTGGCGGATGAGGCGTTGAAGGTAGATGATTGTGACTGTCATCCTGAATTTTCACCACCATCAAGTCAGCCTC
CAAAACATAAAGGAAAACAAAAATCTCGAAACAATGAATCAGAAAAGTTCAGTTCTAGTTCACCATTGACTTTAC
CAGCAGATTTGAAGAACATCTTGGAGAAACAGTTTTCTAAATCTTCCAGAGCTGCACACCAGGATTTTGCTAATA
TAATGAAAATGCTGAGAAGCTTAATTCAAGATGGCTATATGGCCTTATTGGAGCAGCGTTGCCGCAGCGCTGCAC
AGGCCTTTACAGAGTTGCTGAACGGTTTAGATCCTCAAAAAATAAAGCAATTGAACCTGGCCATGATTAACTATG
TTTTGGTCGTCTATGGACTTGCCATTTCTCTCCTTGGAATAGGACAGCCTGAGGAATTATCTGAAGCCGAAAACC
AGTTTAAGAGGATTATTGAACACTACCCCAGTGAGGGCCTTGATTGCTTGGCCTACTGTGGAATTGGAAAAGTGT
ATTTGAAAAAAAACAGATTTCTAGAAGCTCTCAATCACTTTGAGAAAGCAAGAACCTTGATTTATCGTCTTCCTG
GAGTGTTAACTTGGCCCACGAGTAATGTGATTATTGAAGAGTCTCAGCCACAAAAAATAAAGATGCTGTTAGAGA
AATTTGTTGAAGAATGCAAGTTCCCTCCAGTGCCAGATGCCATTTGTTGCTATCAGAAGTGCCATGGATATTCTA
AGATCCAGATATACATAACTGATCCAGACTTTAAGGGTTTTATACGCATCAGCTGTTGCCAGTACTGTAAAATAG
AATTTCACATGAATTGCTGGAAGAAGTTAAAAACTACAACCTTTAATGATAAAATTGACAAGGATTTTCTACAAG

FIGURE 2019B

GAATATGTCTTACCCCTGACTGTGAAGGTGTCATTTCTAAGATTATCATCTTCAGCAGTGGTGGTGAAGTTAAAT
GTGAATTTGAACACAAGGTCATAAAAGAAAAGGTTCCTCCAAGACCTATTCTGAAACAGAAATGTTCTAGCCTAG
AGAAACTAAGACTGAAAGAAGACAAAAAATTGAAGAGAAAGATCCAAAAAAAAAGAAGCAAAAAAGTTAGCACAAG
AAAGAATGGAGGAGGACTTAAGAGAAAGTAATCCACCCAAAAATGAAGAGCAGAAAGAAACTGTAGACAATGTTC
AGCGTTGTCAGTTCCTTGATGACAGAATTCTACAGTGTATAAAGCAGTATGCTGACAAGATTAAATCCGGCATAC
AGAATACAGCCATGCTTCTCAAAGAATTGCTTTCTTGGAAAGTTTTGAGCACAGAAGACTATACAACCTGTTTTT
CTAGCAGAAATTTTCTAAATGAAGCAGTGGACTATGTTATTCGCCACTTGATTCAAGAAAATAACAGAGTAAAGA
CAAGAATATTTCTGCATGTTTTGAGTGAGCTTAAAGAAGTGGAGCCCAAATTAGCCGCCTGGATCCAAAAACTTA
ATAGCTTTGGCTTAGATGCCACAGGAACTTTCTTTTCTCGTTATGGAGCATCTCTTAAACTGCTTGATTTTAGTA
TCATGACTTTCCTCTGGAATGAGAAATATGGTCACAAACTAGACTCTATAGAAGGAAAGCAACTTGATTATTTCT
CTGAGCCAGCATCATTGAAGGAAGCCCGTTGTTTAATATGGCTGCTAGAAGAACACAGAGACAAGTTCCCAGCAT
TGCATAGTGCTTTAGATGAATTCTTTGATATAATGGACAGCCGCTGTACTGTGTTAAGGAAACAAGATAGTGGTG
AAGCACCGTTTAGTTCAACCAAGGTGAAAAACAAAAGCAAGAAAAAGAAGCCAAAGGATTCAAAGCCTATGTTAG
TTGGGTCTGGAACAACTTCAGTAACTTCAAATAATGAGATCATCACTTCAAGTGAAGACCATAGCAATCGAAATT
CAGATTCTGCAGGCCCATTTGCAGTGCCTGACCATCTTCGGCAAGATGTAGAAGAATTCGAAGCTCTCTATGACC
AACACAGTAACGAATATGTTGTCCGCAATAAGAAGCTATGGGACATGAACCCAAAACAAAAATGTTCAACTCTAT
ATGATTACTTCTCTCAGTTTTTGGAGGAACATGGTCCCTTGGACATGAGTAACAAGATGTTCTCTGCAGAATATG
AGTTTTTCCCAGAAGAAACTCGACAGATACTAGAAAAAGCAGGAGGTTTAAAACCTTTTCTCTTGGGATGCCCTC
GTTTTGTTGTGATTGACAACTGTATTGCACTGAAGAAGGTTGCATCACGGCTCAAGAAAAAAAGGAAGAAGAAAA
ACATTAAAACAAAAGTAGAAGAAATTTCAAAAGCAGGGGAGTATGTACGAGTTAAACTACAACTGAATCCAGCTG
CTAGGGAATTTAAACCAGATGTAAAGTCTAAACCAGTGTCAGATTCATCTTCAGCACCAGCTTTTGAAAATGTGA
AACCCAAACCTGTGTCTGCAAATTCTCCCAAGCCAGCTTGTGAAGATGTGAAGGCCAAACCAGTATCCGACAATT
CTTCTAGACAAGTTTCTGAGGATGGGCAACCCAAAGGGGTCTCTTCTAATTCTCCTAAACCAGGCTCTGAGGATG
CAAATTACAAGCGAGTCTCCTGTAATTCCCCCAAACCGGTTCTTGAGGATGTGAAACCAACTTATTGGGCTCAAT
CCCATTTGGTCACAGGATACTGTACGTATCTTCCTTTCCAGAGATTTGATATCACCCAGACACCGCCAGCATACA
TAAACGTGTTACCAGGTTTGCCCCAGTACACCAGCATATATACACCCTTGGCCAGCCTTTCTCCTGAATATCAGC
TACCAAGATCAGTACCAGTGGTGCCGTCTTTTGTAGCCAATGACAGAGCAGATAAAAATGCTGCTGCCTATTTTG
AGGGTCATCATTTGAATGCTGAGAATGTTGCTGGTCACCAGATTGCCTCTGAAACACAGATCCTTGAGGGCTCTT
TGGGAATATCTGTAAAGTCACACTGCAGCACAGGTGATGCTCATACAGTCCTGAGTGAGTCTAACAGAAATGATG
AGCACTGTGGAAATTCTAACAACAAATGTGAAGTAATTCCAGAAAGCACCAGTGCAGTAACAAACATTCCACACG
TGCAGATGGTTGCCATACAGGTATCTTGGAACATAATACACCAAGAAGTCAATACTGAGCCATATAATCCTTTTG
AGGAACGACAAGGGGAAATTTCACGGATTGAAAAGGAGCACCAAGTATTACAAGACCAACTTCAAGAAGTGTATG
AAAATTATGAGCAGATAAAACTTAAGGGCTTAGAAGAGACCAGGGACCTGGAAGAGAAGTTGAAAAGGCACTTAG
AAGAAAACAAGATCTCAAAGACGGAATTAGATTGGTTCCTTCAAGATTTGGAAAGAGAAATTAAAAAATGGCAAC
AGGAAAAAAAAGAAATCCAAGAAAGACTAAAATCACTGAAGAAGAAAATTAAAAAGGTTTCAAATGCCAGTGAAA
TGTATACCCAGAAAAATGATGGAAAGGAAAAGGAACATGAATTACATCTGGATCAGTCCCTTGAAATCAGCAACA
CACTTACAAATGAGAAAATGAAAATAGAAGAGTATATAAAGAAAGGGAAAGAGGATTATGAAGAGAGTCATCAGA
GAGCTGTGGCTGCAGAGGTATCCGTACTTGAAAACTGGAAGGAGAGTGAAGTGTATAAGCTACAGATCATGGAGT
CACAAGCAGAAGCCTTTCTGAAGAAGCTGGGGCTGATTAGCCGTGATCCTGCAGCATATCCTGACATGGAGTCTG
ATATACGTTCATGGGAATTGTTTCTTTCTAATGTTACAAAAGAAATTGAGAAAGCAAAGTCTCAGTTTGAAGAAC
AAATTAAGGCAATTAAAAATGGTTCTCGGCTCAGTGAACTTTCTAAAGTGCAGATTTCTGAGCTTTCATTTCCTG
CCTGTAACACGGTTCATCCCGAGTTACTCCCTGAGTCTTCAGGCCACGATGGCCAAGGGCTTGTGACTTCTGCAA
GCGACGTGACTGGAAACCACGCAGCACTTCACAGGGATCCTAGTGTGTTCTCTGCTGGTGATTCCCCAGGGGAGG
CTCCTTCTGCGCTGTTGCCAGGGCCACCCCCTGGTCAGCCTGAAGCCACTCAGCTGACAGGGCCAAAACGGGCTG
GCCAGGCAGCTCTGTCAGAACGAAGCCCTGTGGCTGATCGGAAGCAGCCTGTTCCTCCAGGACGTGCTGCGCGTT
CAAGCCAGTCTCCAAAAAAGCCGTTCAATAGTATTATTGAGCACCTGTCAGTGGTATTCCCATGTTACAACAGCA
CTGAGCTTGCTGGTTTTATTAAAAAAGTGCGAAGCAAAAACAAGAACTCACTCTCAGGATTGAGTATTGATGAAA
TTGTCCAAAGAGTGACAGAACACATTCTAGATGAACAGAAAAAGAAAAAGCCAAACCCAGGAAAGGACAAGAGGA

FIGURE 2019C

CTTATGAGCCCAGCTCTGCCACCCCCGTGACCAGGTCCTCCCAGGGCTCACCCTCGGTGGTTGTTGCACCATCAC
CCAAAACCAAGGGGCAGAAAGCAGAAGATGTCCCTGTGAGGATTGCACTGGGTGCAAGTTCCTGTGAAATATGCC
ACGAGGTGTTCAAATCAAAAAACGTGCGTGTGCTCAAATGTGGGCACAAGTATCACAAAGGGTGCTTTAAGCAGT
GGCTTAAAGGGCAGAGCGCTTGCCCGGCCTGCCAGGGTCGTGATCTCCTGACAGAAGAGTCACCTTCTGGAAGAG
GCTGGCCCAGTCAGAATCAGGAGCTGCCTTCCTGCTCTTCTAGGTAGTCACACTTCACTAAAGTGTCATCCACCA
GTGTGTTGAATCCGAAGAATGACAATTTTCTACCACTGGTGTAAAAAACAAACATTTGAAGACCCTTGTGCATTG
TGTGTCACAAAGCTAAATACATGGAAATCGTTAATATCGCTGATATTAAGTAATTTCCCCACTCTGAGTGAATAC
TTTGATGATTGCCAACAGTGGCTAATAAAATGACGGCTACCACACTCATGGGTCACTGGGGCTGCGCAGGGCTCT
TTGAGGTGGGTGGCTTCTTTTGGAAAGTACTATGAACGTCTCGAAGCAGTATTCTAGTGATAAGAATTCTTAACA
TAGCCAAGCGCCCCACGTTTGTTCCCCACGTTTGTTCCCCTTTTCTGTTTGAAAAACCTGTTCTGGTAGCTCCAC
AAGAGAGATGATACTGACTTTTTAAATTTTTTACAAGAGTCTGTATTCCTGATATGCCTATATTTTTCCTCAAAG
ATTCTGCATTTTAAGGATGGGCATAAGCAAACTATATTTTAATAATTTATAGTTAATGTTAAAATATTGGCTGAT
TTAGACCAAAAGATTCAAATCTCCTCTTTGTGAAATCCCATCTGCATTTGATTTTTTATTATTTTATGTTCCCCC
GTTAGATTGTTTTAAGTGTTTGCTTTTCATCTTTTATAGATGTAATCTGATTTTCAAAAATCATTAACACTTTTT
AATTAGTATCGACTAAGACTTTTTCCCCCTGGAATCGAGGCTGTGTGTCCGTCATCCCAGCCCCCGGTTGGAGCC
TGCTCTTTGAACTCCGCTGCCTTCCTTAGCAGCTTCTGTCCTCTTCTGTGAGTCAGTCAGCGAGTGCTTGGGATC
CGCATCCAGCCGTGCTGAGCACACAACAGGCTGTGTGTGGAAATGGCCACCACCATTCTCCTTCCCCACCCCACC
ACAAAAAGAGAAGCTGTGTCTTTAGACAACCCTGAGGTATCTGTGTTACAATCGTTCTGTGTTTGATATTTGTGT
AAAGTATGCATGCAGTCTTGTACTGTGACCTAAGAACAAAACTGTAACTGCATTAGAAACCATGAAAAAATTAGA
TATTGTTTTGTGACTTTTAGACAGTGGTAAATATAGAACCATGAATTCTGGTCACATTCCATTTCTCTCCAACAT
GAAGGATCAAAAAATGTTTTTCAATGTGTTCTTTGTTCCACTGGAAACTTAGAGTCATGAGTTTATGAGCTGATT
TGGTCACCTTCCTCTGCCTTTGTTCACTGTGAGTTCTGATGTCTTAGTGACTTAGTTCTTAGAAGCTCACGCCTT
AGTTTGAAACAGATTCTCCACGGTGGTCCCCAAAACACTGTCTGCATATCCATAAGAATTGAGCGCTATGGGTGT
TAACGTGCATGAGGATCAGTTTGCAGCAGCAAGTACAAAAGGAGAAGAGGAACATCCGTTGAATGAGTGTGTTTT
GTACATAACTTCAGATACTTGTGAACATGCCTTATATTTGTCCAACAACTGTCAGAATAAAGAACATTCTAAAAT
GAG

FIGURE 2020

MDNFAEGDFTVADYALLEDCPHVDDCVFAAEFMSNDYVRVTQLYCDGVGVQYKDYIQSERNLEFDICSIWCSKPI
SVLQDYCDAIKINIFWPLLFQHQNSSVISRLHPCVDANNSRASEINLKKLQHLELMEDIVDLAKKVANDSFLIGG
LLRIGCKIENKILAMEEALNWIKYAGDVTILTKLGSIDNCWPMLSIFFTEYKYHITKIVMEDCNLLEELKTQSCM
DCIEEGELMKMKGNEEFSKERFDIAIIYYTRAIEYRPENYLLYGNRALCFLRTGQFRNALGDGKRATILKNTWPK
GHYRYCDALSMLGEYDWALQANIKAQKLCKNDPEGIKDLIQQHVKLQKQIEDLQGRTANKDPIKAFYENRAYTPR
SLSAPIFTTSLNFVEKERDFRKINHEMANGGNQNLKVADEALKVDDCDCHPEFSPPSSQPPKHKGKQKSRNNESE
KFSSSSPLTLPADLKNILEKQFSKSSRAAHQDFANIMKMLRSLIQDGYMALLEQRCRSAAQAFTELLNGLDPQKI
KQLNLAMINYVLVVYGLAISLLGIGQPEELSEAENQFKRIIEHYPSEGLDCLAYCGIGKVYLKKNRFLEALNHFE
KARTLIYRLPGVLTWPTSNVIIEESQPQKIKMLLEKFVEECKFPPVPDAICCYQKCHGYSKIQIYITDPDFKGFI
RISCCQYCKIEFHMNCWKKLKTTTFNDKIDKDFLQGICLTPDCEGVISKIIIFSSGGEVKCEFEHKVIKEKVPPR
PILKQKCSSLEKLRLKEDKKLKRKIQKKEAKKLAQERMEEDLRESNPPKNEEQKETVDNVQRCQFLDDRILQCIK
QYADKIKSGIQNTAMLLKELLSWKVLSTEDYTTCFSSRNFLNEAVDYVIRHLIQENNRVKTRIFLHVLSELKEVE
PKLAAWIQKLNSFGLDATGTFFSRYGASLKLLDFSIMTFLWNEKYGHKLDSIEGKQLDYFSEPASLKEARCLIWL
LEEHRDKFPALHSALDEFFDIMDSRCTVLRKQDSGEAPFSSTKVKNKSKKKKPKDSKPMLVGSGTTSVTSNNEII
TSSEDHSNRNSDSAGPFAVPDHLRQDVEEFEALYDQHSNEYVVRNKKLWDMNPKQKCSTLYDYFSQFLEEHGPLD
MSNKMFSAEYEFFPEETRQILEKAGGLKPFLLGCPRFVVIDNCIALKKVASRLKKKRKKKNIKTKVEEISKAGEY
VRVKLQLNPAAREFKPDVKSKPVSDSSSAPAFENVKPKPVSANSPKPACEDVKAKPVSDNSSRQVSEDGQPKGVS
SNSPKPGSEDANYKRVSCNSPKPVLEDVKPTYWAQSHLVTGYCTYLPFQRFDITQTPPAYINVLPGLPQYTSIYT
PLASLSPEYQLPRSVPVVPSFVANDRADKNAAAYFEGHHLNAENVAGHQIASETQILEGSLGISVKSHCSTGDAH
TVLSESNRNDEHCGNSNNKCEVIPESTSAVTNIPHVQMVAIQVSWNIIHQEVNTEPYNPFEERQGEISRIEKEHQ
VLQDQLQEVYENYEQIKLKGLEETRDLEEKLKRHLEENKISKTELDWFLQDLEREIKKWQQEKKEIQERLKSLKK
KIKKVSNASEMYTQKNDGKEKEHELHLDQSLEISNTLTNEKMKIEEYIKKGKEDYEESHQRAVAAEVSVLENWKE
SEVYKLQIMESQAEAFLKKLGLISRDPAAYPDMESDIRSWELFLSNVTKEIEKAKSQFEEQIKAIKNGSRLSELS
KVQISELSFPACNTVHPELLPESSGHDGQGLVTSASDVTGNHAALHRDPSVFSAGDSPGEAPSALLPGPPPGQPE
ATQLTGPKRAGQAALSERSPVADRKQPVPPGRAARSSQSPKKPFNSIIEHLSVVFPCYNSTELAGFIKKVRSKNK
NSLSGLSIDEIVQRVTEHILDEQKKKKPNPGKDKRTYEPSSATPVTRSSQGSPSVVVAPSPKTKGQKAEDVPVRI
ALGASSCEICHEVFKSKNVRVLKCGHKYHKGCFKQWLKGQSACPACQGRDLLTEESPSGRGWPSQNQELPSCSSR

FIGURE 2021A

ATTAAAATAAACATCTTCTGGCCACTTCTGTTTCAACATCAAAACAGTTCCGTAATATCACGATTGCATCCCTGT
GTGGACGCCAACAATTCACGTGCTTCTGAGATAAATTTGAAGAAACTACAACATCTTGAGTTGATGGAAGATATT
GTGGATTTGGCAAAGAAAGTTGCTAATGATTCATTCCTTATTGGAGGCTTATTGAGAATTGGTTGTAAAATAGAA
AATAAAATCTTGGCAATGGAAGAAGCTCTGAATTGGATAAAATATGCAGGCGATGTAACAATTCTAACTAAATTA
GGATCAATTGACAATTGTTGGCCTATGTTAAGTATTTTCTTTACTGAATACAAGTACCACATAACTAAAATTGTA
ATGGAAGACTGCAATTTGCTTGAAGAACTTAAAACTCAAAGTTGTATGGATTGTATAGAGGAAGGAGAACTAATG
AAAATGAAAGGAAATGAAGAGTTTTCCAAAGAAAGATTTGATATAGCTATTATCTATTACACCAGAGCCATTGAA
TATAGACCTGAAAACTACCTTCTTTATGGTAACCGAGCTCTTTGTTTTCTTCGTACTGGACAGTTTAGAAATGCA
CTCGGTGATGGAAAGAGAGCCACTATTCTGAAGAACACTTGGCCAAAGGGTCATTATCGTTATTGTGATGCTCTT
TCTATGCTGGGGGAATATGACTGGGCCCTGCAAGCAAACATAAAAGCTCAAAAACTCTGTAAAAATGACCCTGAG
GGAATCAAGGATCTAATTCAGCAGCATGTAAAGTTACAAAAACAAATAGAAGACCTACAAGGTCGAACAGCAAAT
AAGGATCCAATTAAAGCCTTTTATGAAAACAGGGCCTACACACCTAGGAGTTTATCAGCACCTATATTTACTACT
TCACTTAACTTTGTGGAGAAGGAAAGAGATTTCAGAAAAATTAATCACGAAATGGCCAACGGTGGTAATCAGAAT
CTAAAGGTGGCGGATGAGGCGTTGAAGGTAGATGATTGTGACTGTCATCCTGAATTTTCACCACCATCAAGTCAG
CCTCCAAAACATAAAGGAAAACAAAAATCTCGAAACAATGAATCAGAAAAGTTCAGTTCTAGTTCACCATTGACT
TTACCAGCAGATTTGAAGAACATCTTGGAGAAACAGTTTTCTAAATCTTCAAGAGCTGCACACCAGGATTTTGCT
AATATAATGAAAATGCTGAGAAGCTTAATTCCAGATGGCTATATGGCCTTATTGGAGCAGCGTTGCCGCAGCGCT
GCACAGGCCTTTACAGAGTTGCTGAACGGTTTAGATCCTCAAAAAATAAAGCAATTGAACCTGGCCATGATTAAC
TATGTTTTGGTCGTCTATGGACTTGCCATTTCTCTCCTTGGAATAGGACAGCCTGAGGAATTATCTGAAGCCGAA
AACCAGTTTAAGAGGATTATTGAACACTACCCCAGTGAGGGCCTTGATTGCTTGGCCTACTGTGGAATTGGAAAA
GTATATTTGAAAAAAAACAGATTTCTAGAAGCTCTCAATCACTTTGAGAAAGCAAGAACCTTGATTTATCGTCTT
CCTGGAGTGTTAACTTGGCCCACGAGTAATGTGATTATTGAAGAGTCTCAGCCACAAAAAATAAAGATGCTGTTA
GAGAAATTTGTTGAAGAATGCAAGTTCCCTCCAGTGCCAGATGCCATTTGTTGCTATCAGAAGTGCCATGGATAT
TCTAAGATCCAGATATACATAACTGATCCAGACTTTAAGGGTTTTATACGCATCAGCTGTTGCCAGTACTGTAAA
ATAGAATTTCACATGAATTGCTGGAAGAAGTTAAAAACTACAACCTTTAATGATAAAATTGACAAGGATTTTCTA
CAAGGAATATGTCTTACCCCTGACTGTGAAGGTGTCATTTCTAAGATTATCATCTTCAGCAGTGGTGGTGAAGTT
AAATGTGAATTTGAACACAAGGTCATAAAAGAAAAGGTTCCTCCAAGACCTATTCTGAAACAGAAATGTTCTAGC
CTAGAGAAACTAAGACTGAAAGAAGACAAAAAATTGAAGAGAAAGATCCAAAAAAAAGAAGCAAAAAAGTTAGCA
CAAGAAAGAATGGAGGAGGACTTAAGAGAAAGTAATCCACCCAAAAATGAAGAGCAGAAAGAAACTGTAGACAAT
GTTCAGCGTTGTCAGTTCCTTGATGACAGAATTCTACAGTGTATAAAGCAGTATGCTGACAAGATTAAATCCGGC
ATACAGAATACAGCCACGCTTCTCAAAGAATTGCTTTCTTGGAAAGTTTTGAGCACAGAAGACTATACAACCTGT
TTTTCTAGCAGAAATTTTCTAAATGAAGCAGTGGACTATGTTATTCGCCACTTGATTCAAGAAAATAACAGAGTA
AAGACAAGAATATTTCTGCATGTTTTGAGTGAGCTTAAAGAAGTGGAGCCCAAATTAGCCGCCTGGATCCAAAAA
CTTAATAGCTTTGGCTTAGATGCCACAGGAACTTTCTTTTCTCGTTATGGAGCATCTCTTAAACTGCTTGATTTT
AGTATCATGACTTTCCTCTGGAATGAGAAATATGGTCACAAACTAGACTCTATAGAAGGAAAGCAACTTGATTAT
TTCTCTGAGCCAGCATCATTGAAGGAAGCCCGTTGTTTAATATGGCTGCTAGAAGAACACAGAGACAAGTTCCCA
GCATTGCATAGTGCTTTAGATGAATTCTTTGATATAATGGACAGCCGCTGTACTGTGTTAAGGAAACAAGATAGT
GGTGAAGCACCGTTTAGTTCAACCAAGGTGAAAAACAAAAGCAAGAAAAAGAAGCCAAAGGATTCAAAGCCTATG
TTAGTTGGGTCTGGAACAACTTCAGTAACTTCAAATAATGAGATCATCACTTCAAGTGAAGACCATAGCAATCGA
AATTCAGATTCTGCAGGCCCATTTGCAGTGCCTGACCATCTTCGGCAAGATGTAGAAGAATTCGAAGCTCTCTAT
GACCAACACAGTAACGAATATGTTGTCCGCAATAAGAAGCTATGGGACATGAACCCAAAACAAAAATGTTCAACT
CTATATGATTACTTCTCTCAGTTTTTGGAGGAACATGGTCCCTTGGACATGAGTAACAAGATGTTCTCTGCAGAA
TATGAGTTTTTCCCAGAAGAAACTCGACAGATACTAGAAAAAGCAGGAGGTTTAAAACCTTTTCTCTTGGGATGC
CCTCGTTTTGTTGTGATTGACAACTGTATTGCACTGAAGAAGGTTGCATCACGGCTCAAGAAAAAAAGGAAGAAG
AAAAACATTAAAACAAAAGTAGAAGAAATTTCAAAAGCAGGGGAGTATGTACGAGTTAAACTACAACTGAATCCA
GCTGCTAGGGAATTTAAACCAGATGTAAAGTCTAAACCAGTGTCAGATTCATCTTCAGCACCAGCTTTTGAAAAT
GTGAAACCCAAACCTGTGTCTGCAAATTCTCCCAAGCCAGCTTGTGAAGATGTGAAGGCCAAACCAGTATCCGAC
AATTCTTCTAGACAAGTTTCTGAGGATGGGCAACCCAAAGGGGTCTCTTCTAATTCTCCTAAACCAGGCTCTGAG

FIGURE 2021B

GATGCAAATTACAAGCGAGTCTCCTGTAATTCCCCCAAACCGGTTCTTGAGGATGTGAAACCAACTTATTGGGCT
CAATCCCATTTGGTCACAGGATACTGTACGTATCTTCCTTTCCAGAGATTTGATATCACCCAGACACCGCCAGCA
TACATAAACGTGTTACCAGGTTTGCCCCAGTACACCAGCATATATACACCCTTGGCCAGCCTTTCTCCTGAATAT
CAGCTACCAAGATCAGTACCAGTGGTGCCGTCTTTTGTAGCCAATGACAGAGCAGATAAAAATGCTGCTGCCTAT
TTTGAGGGTCATCATTTGAATGCTGAGAATGTTGCTGGTCACCAGATTGCCTCTGAAACACAGATCCTTGAGGGC
TCTTTGGGAATATCTGTAAAGTCACACTGCAGCACAGGTGATGCTCATACAGTCCTGAGTGAGTCTAACAGAAAT
GATGAGCACTGTGGAAATTCTAACAACAAATGTGAAGTAATTCCAGAAAGCACCAGTGCAGTAACAAACATTCCA
CACGTGCAGATGGTTGCCATACAGGTATCTTGGAACATAATACACCAAGAAGTCAATACTGAGCCATATAATCCT
TTTGAGGAACGACAAGGGGAAATTTCACGGATTGAAAAGGAGCACCAAGTATTACAAGACCAACTTCAAGAAGTG
TATGAAAATTATGAGCAGATAAAACTTAAGGGCTTAGAAGAGACCAGGGACCTGGAAGAGAAGTTGAAAAGGCAC
TTAGAAGAAAACAAGATCTCAAAGACGGAATTAGATTGGTTCCTTCAAGATTTGGAAAGAGAAATTAAAAAATGG
CAACAGGAAAAAAAAGAAATCCAAGAAAGACTAAAATCACTGAAGAAGAAAATTAAAAAGGTTTCAAATGCCAGT
GAAATGTATACCCAGAAAAATGATGGAAAGGAAAAGGAACATGAATTACATCTGGATCAGTCCCTTGAAATCAGC
AACACACTTACAAATGAGAAAATGAAAATAGAAGAGTATATAAAGAAAGGGAAAGAGGATTATGAAGAGAGTCAT
CAGAGAGCTGTGGCTGCAGAGGTATCCGTACTTGAAAACTGGAAGGAGAGTGAAGTGTATAAGCTACAGATCATG
GAGTCACAAGCAGAAGCCTTTCTGAAGAAGCTGGGGCTGATTAGCCGTGATCCTGCAGCATATCCTGACATGGAG
TCTGATATACGTTCATGGGAATTGTTTCTTTCTAATGTTACAAAAGTAATTGAGAAAGCAAAGTCTCAGTTTGAA
GAACAAATTAAGGCAATTAAAAATGGTTCTCGGCTCAGTGAACTTTCTAAAGTGCAGATTTCTGAGCTTTCATTT
CCTGCCTGTAACACGGTTCATCCCGAGTTACTCCCTGAGTCTTCAGGCGACGATGGCCAAGGGCTTGTGACTTCT
GCAAGCGACGTGACTGGAAACCACGCAGCACTTCACAGGGATCCTAGTGTGTTCTCTGCTGGTGATTCCCCAGGG
GAGGCTCCTTCTGCGCTGTTGCCAGGGCCACCCCCTGGTCAGCCTGAAGCCACTCAGCTGACAGGGCCAAAACGG
GCTGGCCAGGCAGCTCTGTCAGAACGAAGCCCTGTGACTGATCGGAAGCAGCCTGTTCCTCCAGGACGTGCTGCG
CGTTCAAGCCAGTCTCCAAAAAAGCCGTTCAATAGTATTATTGAGCACCTGTCAGTGGTATTCCCATGTTACAAC
AGCACTGAGCTTGCTGGTTTTATTAAAAAAGTGCGAAGCAAAAACAAGAACTCACTCTCAGGATTGAGTATTGAT
GAAATTGTCCAAAGAGTGACAGAACACATTCTAGATGAACAGAAAAAGAAAAAGCCAAACCCAGGAAAGGACAAG
AGGACTTATGAGCCCAGCTCTGCCACCCCCGTGACCAGGTCCTCCCAGGGCTCACCCTCGGTGGTTGTTGCACCA
TCACCCAAAACCAAGGGGCAGAAAGCAGAAGATGTCCCTGTGAGGATTGCACTGGGTGCAAGTTCCTGTGAAATA
TGCCACGAGGTGTTCAAATCAAAAAACGTGCGTGTGCTCAAATGTGGGCACAAGTATCACAAAGGGTGCTTTAAG
CAGTGGCTTAAAGGGCAGAGCGCTTGCCCGGCCTGCCAGGGTCGTGATCTCCTGACAGAAGAGTCACCTTCTGGA
AGAGGCTGGCCCAGTCAGAATCAGGAGCTGCCTTCCTGCTCTTCTAGGTAGTCACACTTCACTAAAGTGTCATCC
ACCAGTGTGTTGAATCCGAAGAATGACAATTTTCTACCACTGGTGTAAAAAACAAACATTTGAAGACCCTTGTGC
ATTGTGTGTCACAAAGCTAAATACATGGAAATCGTTAATATCGCTGATATTAAGTAATTTCCCCACTCTGAGTGA
ATACTTTGATGATTGCCAACAGTGGCTAATAAAATGACGGCTACCACACTCATGGGTCACTGGGGCTGCGCAGGG
CTCTTTGAGGTGGGTGGCTTCTTTTGGAAAGTACTATGAACGTCTCGAAGCAGTATTCTAGTGATAAGAATTCTT
AACATAGCCAAGCGCCCCACGTTTGTTCCCCACGTTTGTTCCCCTTTTCTGTTTGAAAAACCTGTTCTGGTAGCT
CCACAAGAGAGATGATACTGACTTTTTAAATTTTTTACAAGAGTCTGTATTCCTGATATGCCTATATTTTTCCTC
AAAGATTCTGCATTTTAAGGATGGGCATAAGCAAACTATATTTTAATAATTTATAGTTAATGTTAAAATATTGGC
TGATTTAGACCAAAAGATTCAAATCTCCTCTTTGTGAAATCCCATCTGCATTTGATTTTTTATTATTTTATGTTC
CCCCGTTAGATTGTTTTAAGTGTTTGCTTTTCATCTTTTATAGATGTAATCTGATTTTCAAAAATCATTAACACT
TTTTAATTAGTATCGACTAAGACTTTTTCCCCCTGGAATCGAGGCTGTGTGTCCGTCATCCCAGCCCCCGGTTGG
AGCCTGCTCTTTGAACTCCGCTGCCTTCCTTAGCAGCTTCTGTCCTCTTCTGTGAGTCAGTCAGCGAGTGCTTGG
GATCCGCATCCAGCCGTGCTGAGCACACAACAGGCTGTGTGTGGAAATGGCCACCACCATTCTCCTTCCCCACCC
CACCACAAAAAGAGAAGCTGTGTCTTTAGACAACCCTGAGGTATCTGTGTTACAATCGTTCTGTGTTTGATATTT
GTGTAAAGTATGCATGCAGTCTTGTACTGTGACCTAAGAACAAAACTGTAACTGCATTAGAAACCATGAAAAAAT
TAGATATTGTTTTGTGACTTTTAGACAGTGGTAAATATAGAACCATGAATTCTGGTCACATTCCATTTCTCTCCA
ACATGAAGGATCAAAAAATGTTTTTCAATGTGTTCTTTGTTCCACTGGAAACTTAGAGTCATGAGTTTATGAGCT
GATTTGGTCACCTTCCTCTGCCTTTGTTCACTGTGAGTTCTGATGTCTTAGTGACTTAGTTCTTAGAAGCTCACG
CCTTAGTTTGAAACAGATTCTCCACGGTGGTCCCCAAAACACTGTCTGCATATCCATAAGAATTGAGCGCTATGG

FIGURE 2021C

GTGTTAACGTGCATGAGGATCAGTTTGCAGCAGCAAGTACAAAAGGAGAAGAGGAACATCCGTTGAATGAGTGTG
TTTTGTACATAACTTCAGATACTTGTGAACATGCCTTATATTTGTCCAACAACTGTCAGAATAAAGAACATTCT

FIGURE 2022

GTTCTTGCCTGGTGTCGGTGGTTAGTTTCTGCGACTTGTGTTGGGACTGCTGATAGGAAGATGTCTTCAGGAAAT
GCTAAAATTGGGCACCCTGCCCCCAACTTCAAAGCCACAGCTGTTATGCCAGATGGTCAGTTTAAAGATATCAGC
CTGTCTGACTACAAAGGAAAATATGTTGTGTTCTTCTTTTACCCTCTTGACTTCACCTTTGTGTGCCCCACGGAG
ATCATTGCTTTCAGTGATAGGGCAGAAGAATTTAAGAAACTCAACTGCCAAGTGATTGGTGCTTCTGTGGATTCT
CACTTCTGTCATCTAGCATGGGTCAATACACCTAAGAAACAAGGAGGACTGGGACCCATGAACATTCCTTTGGTA
TCAGACCCGAAGCGCACCATTGCTCAGGATTATGGGGTCTTAAAGGCTGATGAAGGCATCTCGTTCAGGGGCCTT
TTTATCATTGATGATAAGGGTATTCTTCGGCAGATCACTGTAAATGACCTCCCTGTTGGCCGCTCTGTGGATGAG
ACTTTGAGACTAGTTCAGGCCTTCCAGTTCACTGACAAACATGGGGAAGTGTGCCCAGCTGGCTGGAAACCTGGC
AGTGATACCATCAAGCCTGATGTCCAAAAGAGCAAAGAATATTTCTCCAAGCAGAAGTGAGCGCTGGGCTGTTTT
AGTGCCAGGCTGCGGTGGGCAGCCATGAGAACAAAACCTCTTCTGTATTTTTTTTTTCCATTAGTAAAACACAAG
ACTTCAGATTCAGCCGAATTGTGGTGTCTTACAAGGCAGGCCTTTCCTACAGGGGGTGGAGAGACCAGCCTTTCT
TCCTTTGGTAGGAATGGCCTGAGTTGGCGTTGTGGGCAGGCTACTGGTTTGTATGATGTATTAGTAGAGCAACCC
ATTAATCTTTTGTAGTTTGTATTAAACTTGAACTGAG

FIGURE 2023

MSSGNAKIGHPAPNFKATAVMPDGQFKDISLSDYKGKYVVFFFYPLDFTFVCPTEIIAFSDRAEEFKKLNCQVIG
ASVDSHFCHLAWVNTPKKQGGLGPMNIPLVSDPKRTIAQDYGVLKADEGISFRGLFIIDDKGILRQITVNDLPVG
RSVDETLRLVQAFQFTDKHGEVCPAGWKPGSDTIKPDVQKSKEYFSKQK

FIGURE 2024A

CGGGTGGCGGCTCGGGACGGAGGACGCGCTAGTGTTCTTCTGTGTGGCAGTTCAGAATGATGGATCAAGCTAGAT
CAGCATTCTCTAACTTGTTTGGTGGAGAACCATTGTCATATACCCGGTTCAGCCTGGCTCGGCAAGTAGATGGCG
ATAACAGTCATGTGGAGATGAAACTTGCTGTAGATGAAGAAGAAAATGCTGACAATAACACAAAGGCCAATGTCA
CAAAACCAAAAAGGTGTAGTGGAAGTATCTGCTATGGGACTATTGCTGTGATCGTCTTTTTCTTGATTGGATTTA
TGATTGGCTACTTGGGCTATTGTAAAGGGGTAGAACCAAAAACTGAGTGTGAGAGACTGGCAGGAACCGAGTCTC
CAGTGAGGGAGGAGCCAGGAGAGGACTTCCCTGCAGCACGTCGCTTATATTGGGATGACCTGAAGAGAAAGTTGT
CGGAGAAACTGGACAGCACAGACTTCACCGGCACCATCAAGCTGCTGAATGAAAATTCATATGTCCCTCGTGAGG
CTGGATCTCAAAAAGATGAAAATCTTGCGTTGTATGTTGAAAATCAATTTCGTGAATTTAAACTCAGCAAAGTCT
GGCGTGATCAACATTTTGTTAAGATTCAGGTCAAAGACAGCGCTCAAAACTCGGTGATCATAGTTGATAAGAACG
GTAGACTTGTTTACCTGGTGGAGAATCCTGGGGGTTATGTGGCGTATAGTAAGGCTGCAACAGTTACTGGTAAAC
TGGTCCATGCTAATTTTGGTACTAAAAAAGATTTTGAGGATTTATACACTCCTGTGAATGGATCTATAGTGATTG
TCAGAGCAGGGAAAATCACCTTTGCAGAAAAGGTTGCAAATGCTGAAAGCTTAAATGCAATTGGTGTGTTGATAT
ACATGGACCAGACTAAATTTCCCATTGTTAACGCAGAACTTTCATTCTTTGGACATGCTCATCTGGGGACAGGTG
ACCCTTACACACCTGGATTCCCTTCCTTCAATCACACTCAGTTTCCACCATCTCGGTCATCAGGATTGCCTAATA
TACCTGTCCAGACAATCTCCAGAGCTGCTGCAGAAAAGCTGTTTGGGAATATGGAAGGAGACTGTCCCTCTGACT
GGAAAACAGACTCTACATGTAGGATGGTAACCTCAGAAAGCAAGAATGTGAAGCTCACTGTGAGCAATGTGCTGA
AAGAGATAAAAATTCTTAACATCTTTGGAGTTATTAAAGGCTTTGTAGAACCAGATCACTATGTTGTAGTTGGGG
CCCAGAGAGATGCATGGGGCCCTGGAGCTGCAAAATCCGGTGTAGGCACAGCTCTCCTATTGAAACTTGCCCAGA
TGTTCTCAGATATGGTCTTAAAAGATGGGTTTCAGCCCAGCAGAAGCATTATCTTTGCCAGTTGGAGTGCTGGAG
ACTTTGGATCGGTTGGTGCCACTGAATGGCTAGAGGGATACCTTTCGTCCCTGCATTTAAAGGCTTTCACTTATA
TTAATCTGGATAAAGCGGTTCTTGGTACCAGCAACTTCAAGGTTTCTGCCAGCCCACTGTTGTATACGCTTATTG
AGAAAACAATGCAAAATGTGAAGCATCCGGTTACTGGGCAATTTCTATATCAGGACAGCAACTGGGCCAGCAAAG
TTGAGAAACTCACTTTAGACAATGCTGCTTTCCCTTTCCTTGCATATTCTGGAATCCCAGCAGTTTCTTTCTGTT
TTTGCGAGGACACAGATTATCCTTATTTGGGTACCACCATGGACACCTATAAGGAACTGATTGAGAGGATTCCTG
AGTTGAACAAAGTGGCACGAGCAGCTGCAGAGGTCGCTGGTCAGTTCGTGATTAAACTAACCCATGATGTTGAAT
TGAACCTGGACTATGAGAGGTACAACAGCCAACTGCTTTCATTTGTGAGGGATCTGAACCAATACAGAGCAGACA
TAAAGGAAATGGGCCTGAGTTTACAGTGGCTGTATTCTGCTCGTGGAGACTTCTTCCGTGCTACTTCCAGACTAA
CAACAGATTTCGGGAATGCTGAGAAAACAGACAGATTTGTCATGAAGAAACTCAATGATCGTGTCATGAGAGTGG
AGTATCACTTCCTCTCTCCCTACGTATCTCCAAAAGAGTCTCCTTTCCGACATGTCTTCTGGGGCTCCGGCTCTC
ACACGCTGCCAGCTTTACTGGAGAACTTGAAACTGCGTAAACAAAATAACGGTGCTTTTAATGAAACGCTGTTCA
GAAACCAGTTGGCTCTAGCTACTTGGACTATTCAGGGAGCTGCAAATGCCCTCTCTGGTGACGTTTGGGACATTG
ACAATGAGTTTTAAATGTGATACCCATAGCTTCCATGAGAACAGCAGGGTAGTCTGGTTTCTAGACTTGTGCTGA
TCGTGCTAAATTTTCAGTAGGGCTACAAAACCTGATGTTAAAATTCCATCCCATCATCTTGGTACTACTAGATGT
CTTTAGGCAGCAGCTTTTAATACAGGGTAGATAACCTGTACTTCAAGTTAAAGTGAATAACCACTTAAAAAATGT
CCATGATGGAATATTCCCCTATCTCTAGAATTTTAAGTGCTTTGTAATGGGAACTGCCTCTTTCCTGTTGTTGTT
AATGAAAATGTCAGAAACCAGTTATGTGAATGATCTCTCTGAATCCTAAGGGCTGGTCTCTGCTGAAGGTTGTAA
GTGGTCGCTTACTTTGAGTGATCCTCCAACTTCATTTGATGCTAAATAGGAGATACCAGGTTGAAAGACCTTCTC
CAAATGAGATCTAAGCCTTTCCATAAGGAATGTAGCTGGTTTCCTCATTCCTGAAAGAAACAGTTAACTTTCAGA
AGAGATGGGCTTGTTTTCTTGCCAATGAGGTCTGAAATGGAGGTCCTTCTGCTGGATAAAATGAGGTTCAACTGT
TGATTGCAGGAATAAGGCCTTAATATGTTAACCTCAGTGTCATTTATGAAAAGAGGGGACCAGAAGCCAAAGACT
TAGTATATTTTCTTTTCCTCTGTCCCTTCCCCCATAAGCCTCCATTTAGTTCTTTGTTATTTTTGTTTCTTCCAA
AGCACATTGAAAGAGAACCAGTTTCAGGTGTTTAGTTGCAGACTCAGTTTGTCAGACTTTAAAGAATAATATGCT
GCCAAATTTTGGCCAAAGTGTTAATCTTAGGGGAGAGCTTTCTGTCCTTTTGGCACTGAGATATTTATTGTTTAT
TTATCAGTGACAGAGTTCACTATAAATGGTGTTTTTTTAATAGAATATAATTATCGGAAGCAGTGCCTTCCATAA
TTATGACAGTTATACTGTCGGTTTTTTTTAAATAAAAGCAGCATCTGCTAATAAAACCCAACAGATACTGGAAGT
TTTGCATTTATGGTCAACACTTAAGGGTTTTAGAAAACAGCCGTCAGCCAAATGTAATTGAATAAAGTTGAAGCT
AAGATTTAGAGATGAATTAAATTTAATTAGGGGTTGCTAAGAAGCGAGCACTGACCAGATAAGAATGCTGGTTTT
CCTAAATGCAGTGAATTGTGACCAAGTTATAAATCAATGTCACTTAAAGGCTGTGGTAGTACTCCTGCAAAATTT

FIGURE 2024B

TATAGCTCAGTTTATCCAAGGTGTAACTCTAATTCCCATTTTGCAAAATTTCCAGTACCTTTGTCACAATCCTAA
CACATTATCGGGAGCAGTGTCTTCCATAATGTATAAAGAACAAGGTAGTTTTTACCTACCACAGTGTCTGTATCG
GAGACAGTGATCTCCATATGTTACACTAAGGGTGTAAGTAATTATCGGGAACAGTGTTTCCCATAATTTTCTTCA
TGCAATGACATCTTCAAAGCTTGAAGATCGTTAGTATCTAACATGTATCCCAACTCCTATAATTCCCTATCTTTT
AGTTTTAGTTGCAGAAACATTTTGTGGTCATTAAGCATTGGGTGGGTAAATTCAACCACTGTAAAATGAAATTAC
TACAAAATTTGAAATTTAGCTTGGGTTTTTGTTACCTTTATGGTTTCTCCAGGTCCTCTACTTAATGAGATAGTA
GCATACATTTATAATGTTTGCTATTGACAAGTCATTTTAACTTTATCACATTATTTGCATGTTACCTCCTATAAA
CTTAGTGCGGACAAGTTTTAATCCAGAATTGACCTTTTGACTTAAAGCAGGGGGACTTTGTATAGAAGGTTTGGG
GGCTGTGGGGAAGGAGAGTCCCCTGAAGGTCTGACACGTCTGCCTACCCATTCGTGGTGATCAATTAAATGTAGG
TATGAATAAGTTCGAAGCTCCGTGAGTGAACCATCATTATAAACGTGATGATCAGCTGTTTGTCATAGGGCAGTT
GGAAACGGCCTCCTAGGGAAAAGTTCATAGGGTCTCTTCAGGTTCTTAGTGTCACTTACCTAGATTTACAGCCTC
ACTTGAATGTGTCACTACTCACAGTCTCTTTAATCTTCAGTTTTATCTTTAATCTCCTCTTTTATCTTGGACTGA
CATTTAGCGTAGCTAAGTGAAAAGGTCATAGCTGAGATTCCTGGTTCGGGTGTTACGCACACGTACTTAAATGAA
AGCATGTGGCATGTTCATCGTATAACACAATATGAATACAGGGCATGCATTTTGCAGCAGTGAGTCTCTTCAGAA
AACCCTTTTCTACAGTTAGGGTTGAGTTACTTCCTATCAAGCCAGTACGTGCTAACAGGCTCAATATTCCTGAAT
GAAATATCAGACTAGTGACAAGCTCCTGGTCTTGAGATGTCTTCTCGTTAAGGAGATGGGCCTTTTGGAGGTAAA
GGATAAAATGAATGAGTTCTGTCATGATTCACTATTCTAGAACTTGCATGACCTTTACTGTGTTAGCTCTTTGAA
TGTTCTTGAAATTTTAGACTTTCTTTGTAAACAAATAATATGTCCTTATCATTGTATAAAAGCTGTTATGTGCAA
CAGTGTGGAGATTCCTTGTCTGATTTAATAAAATACTTAAACACTGAAAAAAAAAAAAAAAAAAA

FIGURE 2025

MMDQARSAFSNLFGGEPLSYTRFSLARQVDGDNSHVEMKLAVDEEENADNNTKANVTKPKRCSGSICYGTIAVIV
FFLIGFMIGYLGYCKGVEPKTECERLAGTESPVREEPGEDFPAARRLYWDDLKRKLSEKLDSTDFTGTIKLLNEN
SYVPREAGSQKDENLALYVENQFREFKLSKVWRDQHFVKIQVKDSAQNSVIIVDKNGRLVYLVENPGGYVAYSKA
ATVTGKLVHANFGTKKDFEDLYTPVNGSIVIVRAGKITFAEKVANAESLNAIGVLIYMDQTKFPIVNAELSFFGH
AHLGTGDPYTPGFPSFNHTQFPPSRSSGLPNIPVQTISRAAAEKLFGNMEGDCPSDWKTDSTCRMVTSESKNVKL
TVSNVLKEIKILNIFGVIKGFVEPDHYVVVGAQRDAWGPGAAKSGVGTALLLKLAQMFSDMVLKDGFQPSRSIIF
ASWSAGDFGSVGATEWLEGYLSSLHLKAFTYINLDKAVLGTSNFKVSASPLLYTLIEKTMQNVKHPVTGQFLYQD
SNWASKVEKLTLDNAAFPFLAYSGIPAVSFCFCEDTDYPYLGTTMDTYKELIERIPELNKVARAAAEVAGQFVIK
LTHDVELNLDYERYNSQLLSFVRDLNQYRADIKEMGLSLQWLYSARGDFFRATSRLTTDFGNAEKTDRFVMKKLN
DRVMRVEYHFLSPYVSPKESPFRHVFWGSGSHTLPALLENLKLRKQNNGAFNETLFRNQLALATWTIQGAANALS
GDVWDIDNEF

FIGURE 2026

GTCACTCGTATAAAAACCTATGCTTTGAAGGTTCTCGTGTGTCTCGGCCTGCAGGTCTCGCTCAGAGCTGTGTCC
CTGAACATCCACCCTGCTGGGGTGGCTTGACGCACTTCTGTGCAAATCTGTTCGCTCGCAACCCTACCTACCTCT
CTCCCGAACCGGAGAAAACCTTCGGCGGGGTCCTTCCGGGTTTTGTGTCGAATCTGCGGCGGCGACCCGGCGCCG
CGTCACGCGGTGGTGAATGTGCGGCAGTACGCGCGCCGCGTCGTTTACGCGGCGATTTCATCATGCTCCGAGCCG
GCGGCGCGCGCCGCTTCCGTCGCCACCCTCTCTGGACAGCCCAGGGCCGCAGGCTCATGCCCTCTCCGCGTCCAG
TGCTGCTTAGAGGTGCTCGCGCCGCTCTGCTGCTGCTGCTGCCGCCCCGGCTCTTAGCCCGACCCTCGCTCCTCC
TCCGCCGGTCCCTCAGCGCGGCCTCCTGCGCCCCGATCTCCTTGCCCGCCGCCGCCTCCCGGAGCAGC**ATG**GACG
GCGCGGGGGCTGAGGAGGTGCTGGCACCTCTGAGGCTAGCAGTGCGCCAGCAGGGAGATCTTGTGCGAAAACTCA
AAGAAGATAAAGCACCCCAAGTAGACGTAGACAAAGCAGTGGCTGAGCTCAAAGCCCGCAAGAGGGTTCTGGAAG
CAAAGGAGCTGGCGTTACAGCCCAAAGATGATATTGTAGACCGAGCAAAAATGGAAGATACCCTGAAGAGGAGGT
TTTTCTATGATCAAGCTTTTGCTATTTATGGAGGTGTTAGTGGTCTGTATGACTTTGGGCCAGTTGGCTGTGCTT
TGAAGAACAATATTATTCAGACCTGGAGGCAGCACTTTATCCAAGAGGAACAGATCCTGGAGATCGATTGCACCA
TGCTCACCCCTGAGCCAGTTTTAAAGACCTCTGGCCATGTAGACAAATTTGCTGACTTCATGGTGAAAGACGTAA
AAAATGGAGAATGTTTTCGTGCTGACCATCTATTAAAAGCTCATTTACAGAAATTGATGTCTGATAAGAAGTGTT
CTGTCGAAAAGAAATCAGAAATGGAAAGTGTTTTGGCCCAGCTTGATAACTATGGACAGCAAGAACTTGCGGATC
TTTTTGTGAACTATAATGTAAAATCTCCCATTACTGGAAATGATCTATCCCCTCCAGTGTCTTTTAACTTAATGT
TCAAGACTTTCATTGGGCCTGGAGGAAACATGCCTGGGTACTTGAGACCAGAAACTGCACAGGGGATTTTCTTGA
ATTTCAAACGACTTTTGGAGTTCAACCAAGGAAAGTTGCCTTTTGCTGCTGCCCAGATTGGAAATTCTTTTAGAA
ATGAGATCTCCCCTCGATCTGGACTGATCAGAGTCAGAGAATTCACAATGGCAGAAATTGAGCACTTTGTAGATC
CCAGTGAGAAAGACCACCCCAAGTTCCAGAATGTGGCAGACCTTCACCTTTATTTGTATTCAGCAAAAGCCCAGG
TCAGCGGACAGTCCGCTCGGAAAATGCGCCTGGGAGATGCTGTTGAACAGGGTGTGATTAATAACACAGTATTAG
GCTATTTCATTGGCCGCATCTACCTCTACCTCACGAAGGTTGGAATATCTCCAGATAAACTCCGCTTCCGGCAGC
ACATGGAGAATGAGATGGCCCATTATGCCTGTGACTGTTGGGATGCAGAATCCAAAACATCCTACGGTTGGATTG
AGATTGTTGGATGTGCTGATCGTTCCTGTTATGACCTCTCCTGTCATGCACGAGCCACCAAAGTCCCACTTGTAG
CTGAGAAACCTCTGAAAGAACCCAAAACAGTCAATGTTGTTCAGTTTGAACCCAGTAAGGGAGCAATTGGTAAGG
CATATAAGAAGGATGCAAAACTGGTGATGGAGTATCTTGCCATTTGTGATGAGTGCTACATTACAGAAATGGAGA
TGCTGCTGAATGAGAAAGGGGAATTCACAATTGAAACTGAAGGGAAAACATTTCAGTTAACAAAAGACATGATCA
ATGTGAAGAGATTCCAGAAAACACTATATGTGGAAGAAGTTGTTCCGAATGTAATTGAACCTTCCTTCGGCCTGG
GTAGGATCATGTATACGGTATTTGAACATACATTCCATGTACGAGAAGGAGATGAACAGAGAACATTCTTCAGTT
TCCCTGCTGTAGTTGCTCCATTCAAATGTTCCGTCCTCCCACTGAGCCAAAACCAGGAGTTCATGCCATTTGTCA
AGGAATTATCGGAAGCCCTGACCAGGCATGGAGTATCTCACAAAGTAGACGATTCCTCTGGGTCAATCGGAAGGC
GCTATGCCAGGACTGATGAGATTGGCGTGGCTTTTGGTGTCACCATTGACTTTGACACAGTGAACAAGACCCCCC
ACACTGCAACTCTGAGGGACCGTGACTCAATGCGGCAGATAAGAGCAGAGATCTCTGAGCTGCCCAGCATAGTCC
AAGACCTAGCCAATGGCAACATCACATGGGCTGATGTGGAGGCCAGGTATCCTCTGTTTGAAGGGCAAGAGACTG
GTAAAAAAGAGACAATCGAGGAA**TGA**GGACAATTTTGACAACTTTTGACCACTTGCGCTAATAAAAAAAAAAAAA
CTACTCTTATGTCCACTTTACAAAAGAAAACAGCATTGTGATTACTCCCAGGGACCGTATTTTATCTTCAGTGGC
TGCCTGATTTTACCCCCACAATTAAAGTTGAAGGAATCCTGA

FIGURE 2027

MDGAGAEEVLAPLRLAVRQQGDLVRKLKEDKAPQVDVDKAVAELKARKRVLEAKELALQPKDDIVDRAKMEDTLK
RRFFYDQAFAIYGGVSGLYDFGPVGCALKNNIIQTWRQHFIQEEQILEIDCTMLTPEPVLKTSGHVDKFADFMVK
DVKNGECFRADHLLKAHLQKLMSDKKCSVEKKSEMESVLAQLDNYGQQELADLFVNYNVKSPITGNDLSPPVSFN
LMFKTFIGPGGNMPGYLRPETAQGIFLNFKRLLEFNQGKLPFAAAQIGNSFRNEISPRSGLIRVREFTMAEIEHF
VDPSEKDHPKFQNVADLHLYLYSAKAQVSGQSARKMRLGDAVEQGVINNTVLGYFIGRIYLYLTKVGISPDKLRF
RQHMENEMAHYACDCWDAESKTSYGWIEIVGCADRSCYDLSCHARATKVPLVAEKPLKEPKTVNVVQFEPSKGAI
GKAYKKDAKLVMEYLAICDECYITEMEMLLNEKGEFTIETEGKTFQLTKDMINVKRFQKTLYVEEVVPNVIEPSF
GLGRIMYTVFEHTFHVREGDEQRTFFSFPAVVAPFKCSVLPLSQNQEFMPFVKELSEALTRHGVSHKVDDSSGSI
GRRYARTDEIGVAFGVTIDFDTVNKTPHTATLRDRDSMRQIRAEISELPSIVQDLANGNITWADVEARYPLFEGQ
ETGKKETIEE

FIGURE 2028

GTAGGAGGACCTGAAATTGAGCTGATTGCCATCGCAACAGGAGGGCGGATCGTCCCCAGGTTCTCAGAGCTCACA
GCCGAGAAGCTGGGCTTTGCTGGTCTTGTACAGGAGATCTCATTTGGGACAACTAAGGATAAA**ATG**CTGGTCATC
GAGCAGTGTAAGAACTCCAGAGCTGTAACCATTTTTATTAGAGGAGGAAATAAGATGATCATTGAGGAGGCGAAA
CGATCCCTTCACGATGCTTTGTGTGTCATCCGGAACCTCATCCGCGATAATCGTGTGGTGTATGGAGGAGGGGCT
GCTGAGATATCCTGTGCCCTGGCAGTTAGCCAAGAGGCGGATAAGTGCCCCACCTTAGAACAGTATGCCATGAGA
GCGTTTGCCGACGCACTGGAGGTCATCCCCATGGCCCTCTCTGAAAACAGTGGCATGAATCCCATCCAGACTATG
ACCGAAGTCCGAGCCAGACAGGTGAAGGAGATGAACCCTGCTCTTGGCATCGACTGTTTGCACAAGGGGACAAAT
GATATGAAGCAACAGCATGTCATAGAAACCTTGATTGGCAAAAAGCAACAGATATCTCTTGCAACACAAATGGTT
AGAATGATTTTGAAGATTGATGACATTCGTAAGCCTGGAGAATCTGAAGAA**TGA**AGACATTGAGAAAACTATGTA
GCAAGATCCACTTCTGTGATTAAGTAAATGGATGTCTCGTGATGCGTCTACAGTTATTTATTGTTACATCCTTTT
CCAGACACTGTAGATGCTATAATAAAAATAGCTGTTTGGTAACCATAGTTTCACTTGTTCAAAGCCGTGTAATCG
TGGGGGTACTATCTCAACTGCTTTTGTATTCATTGTATTAAAAGAATCTGTTTAAGCAAAAAAAAAAAAAAAAAA
AAAAAAA

FIGURE 2029

MLVIEQCKNSRAVTIFIRGGNKMIIEEAKRSLHDALCVIRNLIRDNRVVYGGGAAEISCALAVSQEADKCPTLEQ
YAMRAFADALEVIPMALSENSGMNPIQTMTEVRARQVKEMNPALGIDCLHKGTNDMKQQHVIETLIGKKQQISLA
TQMVRMILKIDDIRKPGESEE

FIGURE 2030A

ACAGTTAACACTTATTTTGGCAAGAAAGCAACCAAAATCTAAAAAGCATAAACTATGTGTCCAAATGTAAAAGGC
ATTACAGAACAAACTGCAAGAGGGGAAAATTAAAGCCACACTGAACGAAAAAATACAGTATGTCTAACATTTTGG
AATTGTAATTTAAACCCTAAGGGCAAAAGCTGAAAAATCATGCTTAGGTTGCTAGTTAAGTGCACCCTTCCTTGT
TTCTCCCAAATAAAATCAGTTTATTGTTTAATTGCACCCCAAAGCAAGTTCTCTCAGTACAAAGTAACTACTACG
CACACACAAAATGCTTGTTAATGTAATAATTTCCCTGGCTCATCCAACGTGCAATGCACACGACTTCAAAGACAA
TTTGGGGCAAGTGTACATGAAATGAGAAAACAGCTCTCCAAGTTTCAAATCCTGCTCTTACATTATTTATAGGAC
ACTGAGGTCATATTTACTTCTTGGTTAAGATGTTGCACTGTCATTTCATTATCAGTCTACCTCACAATGTACATT
ACCAGATGCCAATTTGAGGAACTACAGAGATAAAACTTTAGTACTTTCTTAATGGGCTGAATAAATTAATTACAA
TTAAGTTTGCTTTACATCCTGTTGAGGACCTCTTTGCAGCCCCAGGACCTAACAATATCTGGCAGGCTCCAAGAA
TGCTCATCAGGTGAAATGATGGCAGAACATTTAAAGTAAGGAGCCAGTTACTTCAGCTTAAGTCATTCAGAGCCA
AACATCTGAAGAACGACCAAAATCAAACCTTTATTTTTATAACTGTATAAATGTGATCCAAATGTGTCCACCACT
AGTTTTTCAAAAAGAAACATGCTATAAATAAGCAAACTACATCTGCTCACTGATGTGTATGGACTCCCTAGATGT
CTCATTGGGCTTAATAACAGACCACTCACAGTAATAGATTTTTAGTGTAAAGTGTAGCATGATGTTAAGCCATTT
TAGCTTTTGCACATACATGTTGCACTTCTGGCTGATAATGGAGGAAAATTTGCAGCATTATACTGTTAAGCTAGG
TTGCATCCATCCCTTTAAATGGCATCAATATCGATGTCGTCATCCTTGTTGTCTGACTTTACAGTCTCAACTTTC
GGTACACTGGCAGCCTTCGAATACACCACCTCAATGTTCTCATCTTCATCTTCTTCTTCGCCACCAGAAGATTCT
TCCTCTGCCTCCTTCAACCATTTTATAAATGGTTCTGCTTTGACACGAATCTCTTTGGCAAGTTCTTTGGAGACA
TATTTCTTAGAGGCCTTTTCCGACCAGCTGATGATGACCTCTTCTTCTAAAAGGTCTGCATCGTACATCTCCTTC
AAGATATGTGGAATCTTGGAGATAAGCTGAGCTTGATGCATTGCTACCACACACTCCAAACCATGAAGAAGGTAC
CGTTGGGCTTTTTTGTTGTTGTGACAAAATCGTAGGAAATGGCGCCTGTATTTCTTAATCTGTTCTCTAATCTTC
TCATTAAAAAGAACTTCAGTTAGAACAAGAGGGCCCATGGCTTTTACATCCAGTCTTTCTGCTTCAGCAACGATT
TCTTTGTCAGATGAATCAATAACACCCTCTTCTTTCTTTTTCTTAACAAAATCAAAGAGGATATTGACCCTCTCC
TCAATTGTTCTTTCCAAATCATCACTGAGTGTCAGAACTTTTGC**ATG**GTCACTGATTTCATCCATTCGACGCCTT
TGAGCTTCCTCAGTTGTATCTTCTCCCCAGTCATCATCCTCCTCTTCTTCCATTGTATGTGGAGGAGGATTAATT
TCATTTGGTGGTGGTGGTGGTGGTGGTGTCTCACTGCTGGATACGGAGCCATTTTCCTTGTCTTTGCCCTTTCTG
TTTTTCTTTTCTTTTTCTTTCTTTCCTGTACCACTGTCACTATTCTCAGGTGGGTTTTTGAGAATGAATGTGCAG
AGTTTATGATGTGTGTCAAGCATGCCTCGATAGCCACAGGCTTTACAAGAATTACCTATTGTTTGCTTCTTTGGA
TTGACATGCAAATCTGTTTCAGGATTCTCACATTCAGGACAGAGAACAAATTTTTTAATGAATCCTGTACCACTG
TCACTATTCTCAGGTGGGTTTTTGAGAATGAATGTGCAGAGTTTATGATGTGTGTCAAGCATGCCTCGATAGCCA
CAGGCTTTACAAGAATTACCTATTGTTTGCTTCTTTGGATTGACATGCAAATCTGTTTCAGGATTCTCACATTCA
GGACAGAGAACAAATTTTTTAATGAATCCATCAAAGATCTCTTGCAGCTTATTCGCCTCATGAGATCCATTGACA
ATGTAACGGTCATTCTTAACATCAAACTGGGTCTGTGCTCCCAGCTCACAACCAAAATATTTGGTGGGATACGTT
GGAGGCCGATTAAGCGCCTTTGCAACGTCAACCATGTTGACTATAACTGTCTTGATTCCATTGCCTTTGCCCTCA
ACCGCAGCGTGTCAGACCAGTTCTATCGCTACAAGATGCCCCGTCTGATTGCCAAGGTTGAGGGCAAAGGCAATG
GAATCAAGACAGTTATAGTCAACATGGTTGACGTTGCAAAGGCGCTTAATCGGCCTCCAACGTATCCCACCAAAT
ATTTTGGTTGTGAGCTGGGAGCACAGACCCAGTTTGATGTTAAGAATGACCGTTACATTGTCAATGGATCTCATG
AGGCGAATAAGCTGCAAGACATGTTGGATGGATTCATTAAAAAATTTGTTCTCTGTCCTGAATGTGAGAATCCTG
AAACAGATTTGCATGTCAATCCAAAGAAGCAAACAATAGGTAATTCTTGTAAAGCCTGTGGCTATCGAGGCATGC
TTGACACACATCATAAACTCTGCACATTCATTCTCAAAAACCCACCTGAGAATAGTGACAGTGGTACAGGAAAGA
AAGAAAAAGAAAAGAAAAACAGAAAGGGCAAAGACAAGGAAAATGGCTCCGTATCCAGCAGTGAGACACCACCAC
CACACCACCACCAAATGAAATTAATCCTCCTCCACATACAATGGAAGAAGAGGAGGATGATGACTGGGGAGAAGA
TACAACTGAGGAAGCTCAAAGGCGTCGAATGGATGAAATCAGTGACCATGCAAAAGTTCTGACACTCAGTGATGA
TTTGGAAAGAACAATTGAGGAGAGGGTCAATATCCTCTTTGATTTTGTTAAGAAAAAGAAAGAAGAGGGTGTTAT
TGATTCATCTGACAAAGAAATCGTTGCTGAAGCAGAAAGACTGGATGTAAAAGCCATGGGCCCTCTTGTTCTAAC
TGAAGTTCTTTTTAATGAGAAGATTAGAGAACAGATTAAGAAATACAGGCGCCATTTCCTACGATTTTGTCACAA
CAACAAAAAAGCCCAACGGTACCTTCTTCATGGTTTGGAGTGTGTGGTAGCAATGCATCAAGCTCAGCTTATCTC
CAAGATTCCACATATCTTGAAGGAGATGTACGATGCAGACCTTTTAGAAGAAGAGGTCATCATCAGCTGGTCGGA
AAAGGCCTCTAAGAAATATGTCTCCAAAGAACTTGCCAAAGAGATTCGTGTCAAAGCAGAACCATTTATAAAATG

FIGURE 2030B

GTTGAAGGAGGCAGAGGAAGAATCTTCTGGTGGCGAAGAAGAAGATGAAGATGAGAACATTGAGGTGGTGTATTC
GAAGGCTGCCAGTGTACCGAAAGTTGAGACTGTAAAGTCAGACAACAAGGATGACGACATCGATATTGATGCCAT
TTAAAGGGATGGATGCAACCTAGCTTAACAGTATAATGCTGCAAATTTTCCTCCATTATCAGCCAGAAGTGCAAC
ATGTATGTGCAAAAGCTAAAATGGCTTAACATCATGCTACACTTTACACTAAAAATCTATTACTGTGAGTGGTCT
GTTATTAAGCCCAATGAGACATCTAGGGAGTCCATACACATCAGTGAGCAGATGTAGTTTGCTTATTTATAGCAT
GTTTCTTTTTGAAAAACTAGTGGTGGACACATTTGGATCACATTTATACAGTTATAAAAATAAAGGTTTGATTTT
GGTCGTTCTTCAGATGTTTGGCTCTGAATGACTTAAGCTGAAGTAACTGGCTCCTTACTTTAAATGTTCTGCCAT
CATTTCACCTGATGAGCATTCTTGGAGCCTGCCAGATATTGTTAGGTCCTGGGGCTGCAAAGAGGTCCTCAACAG
GATGTAAAGCAAACTTAATTGTAATTAATTTATTCAGCCCATTAAGAAAGTACTAAAGTTTTATCTCTGTAGTTC
CTCAAATTGGCATCTGGTAATGTACATTGTGAGGTAGACTGATAATGAAATGACAGTGCAACATCTTAACCAAGA
AGTAAATATGACCTCAGTGTCCTATAAATAATGTAAGAGCAGGATTTGAAACTTGGAGAGCTGTTTTCTCATTTC
ATGTACACTTGCCCCAAATTGTCTTTGAAGTCGTGTGCATTGCACGTTGGATGAGCCAGGGAAATTATTACATTA
ACAAGCATTTTGTGTGTACGTAGTAGTTACTTTGTACTGAGAGAACTTGCTTTGGGGTGCAATTAAACAATAAAC
TGATTTTATTTGGGAGAAACAAGGAAGGGTGCACTTAACTAGCAACCTAAGCATGATTTTTCAGCTTTTGCCCTT
AGGGTTTAAATTACAATTCCAAAATGTTAGACATACTGTATTTTTTCGTTCAGTGTGGCTTTAATTTTCCCCTCT
TGCAGTTTGTTCTGTAATGCCTTTTACATTTGGACACATAGTTTATGCTTTTTAGATTTTGGTTGCTTTCTTGCC
AAAATAAGTGTTAACTGTGTTTCAAACTTGATTTTCTTTCCTTTTTCTTTTTTTTTTCTTCCAGAATGTCTTATT
TAAAAAGAAAGCTAAAAGCATACTTCTAAGTCAGAGCCTCTATTTTGGTGTAAGACTTGGGATATTTTTTACTTC
ACATTGAATATAGCCAGGCACCCAAGAAGTCTGATGGCCACCTGAGTGCAGGTGACAAGGACCTGACAGAGCCCA
TGCAGGGCTTTAGATTTGGACACACAAGAGTTGATAACTTCCTCATGAACTCCTTGCCTGATCTAAACTCATATT
ATGGGTTCTGACTGTTTGAGTAATCATCTTCAAGGTTAAACCTCTTGGCAGTTACCCTTTTCACAAAGTGCACAG
TGGGAATCGAGAATCGATAGGGTTAATTTTGGAGCAGTGGCTTATACCATTCACCTCTGTTTTTTTGTGATTATT
TCACAGATAATGAGACCTTAATAACAAATAGGCGTAAAAAAAATTTTCACATTGAAATGATAGAAACATTTGATG
TAATAAAACTTGGTTGGCTTGATATTTTAAGGAATTGAAACCTAGCAATCTTATTGGAGAGACAAGAATTGGTCT
CCAGCTGCCTTTGATCAAGATTCGGGTGCAAGTGGAGCAGGAGCCATATACCTGGAGGGAATGTGCTTTGTCACA
CCAAAGAGGATTTTTTTTTCTTCAAACTTGTATGTTGCCTAGGTTTCAAATTCTTTGCCGCAAGGCTGATCTGCT
TTCATTAACTGGAATTCTGTAGGAGATACTGGTGACCTAAGCTAAGTTGCACTCAGCATACTCAGTGTCAAGCTA
ATGAGGTTCTATTATAAAGGTTCTACTTTTAATCTGAGGGAAAACATGTTCAGGGCTTCTAGAACACTAAAAAAT
TTGGCTTAAACCAGTGTTCAGTCTGGTGCCAAACTTCGAATGGAATACAAATTCACATAATCTGAACTTTGTTCA
CAGGTTATCCTAATAGAGTAATTCTTCACTTTGCTCTATTGAACTGTCTTAAGGATTTGTTTAAACAGCTAAGTT
ACTTGATTAAAATAATGATAAAATTGTATTTTGTCTTTGCTTTAATATTAAAGTTAACAAGTTTTCATTTTATAA
TGAGATCAAAGCATTGGAATCTGCCCTGTTTTGTAGCCGTTGCTTTGGATTTGTGTTGGATGTATCCTGCAGTTA
CACTTGCCAGCCCCACTCACAAAAGTTGTTCATTTCATTGGGTCACTGGCTTTATTTGCTAGTCTTGTCTGTGAA
CTGAGCATCTGCCTCAGTTTTATTACTTGAAATCTTGGCAGGTGCTTAATAGGGAACATACATACAGCTATGTAA
CTGTGAATAATTGTATATATCTCTAGTTAAGAATGAGGGAATGGGGAGGTTTGCTTTCTAAACAAGTGCATTCTG
AAATTGACTTAAAAATTTTTAGTGTGGGTCCTAAAGTTTAGAGATGGGCAAGGAGGTCTCTAATCCACCGCTTCC
CGCTTGAGAAGGGAGGGGTATCAAAATTGAGCCCCAAGCTGTTTGTTCCAGTGTACCAAGCACTGACTTTATGCC
TTTGGCCTGGAGATGGCAGAAGTGAAAGCTGGCCATCTGCAAAAAGCAGATAAGTGAGTTTGAACCTTTTGCATT
TTGTTAGCTCAGTCAGTCCTCATCGTGGTCCTGAGGCATAGGTACTGTTGTACCAAGGTCACTTATCTAACAAAA
TAACCCTTCATGTATTTTAAATTTATTTGACAAGTCTGCAGACAATCCTTATCTAACCAGCTATTTTCTTAATTG
CTACAGCTTGACCTACCAGTATTCCGGAGTAACCAGCAAATGCAAAGTTGACCTTGTTCCTGCATCATCTTTTTG
ATGGTTCAAATTTCAGCCTCCCTGACTACTACAAAGCCAGAGCAGTCTTAGTACCAGAAACAGTGTTGCACTTTC
GTTGCATGTGCTGTGTGACCCCAAGGGGACAGGGAGTCACTTTGGTCATCTCTGTCCCCAGTACAGATCTTGATT
CATAGTGACATTCCATAAGTGGGGTGACAGCAAATGACTTGCAGGTAGTCTCATTGTAGGTTTGTGCACCAGAGT
GACCCTGTGAGCCTTTGTTAATAGGTTGGGAGCTCAGGGTGTTTATGTCCACCTGTCTGGTCTAGCCAAACAGTT
TTTTTCTGGGAATCAAATTTCTGTGGTTTTTATGGCCAGAAATTTTAAGGACTTGTGTGTGCTGGGATATGAGAA
TAGAAGCTACAGAGTTCTTTTCTTGGGACCTAGACTGGGAGGTGCAATGTCAGGACCTCCAGGTGAATGGTAGGA
TCTGAGTTGACCCTGCAGTTCGGTTATGCAGTCAATTATTTCTTTTTAAGAGGAGGAGGATTCACTTGGGTGTTG

FIGURE 2030C

GGATCAAATTTGGATTCTGTCCCAGGCCTTACTGTAAAACTAGGGGATTGCCTTTCCATATCTGCTGGGGGTGGA
GACCCTTATGTGCAGCACTCAATCCCACTGGAAGCCTAATGCTGCAGTCAGAAGCAATGCCTGGCTGGGGCAGTA
GGGGAAATTCCACCCAATTTTGCTATGAGCCTAAAACCTCTTTAAAAACGGTCAGTTAACTAAAAAATAAAAATC
AAGTCTTTAGGAGAGTAGAAAACACAATTAACTAAAAAGCAGGGACATCTGAAAGAGACGTATTAAGTTAACATT
TTTAAAAATCCAAATGAAAGTAAATGGAATAAATGTATCAGGTAAAGGACAAGTTGTAAGCTTGGATTTTTAGGT
CTAGCAATACACTGTTTACAAGAGCATCACCTAAAATGTGACAAAAGATGTTGAAAGGATGAAAAAAGGTATAGT
AGACATACACTAACCAAAAATGTAGCTCTTTGAATCTCAGAAAAAAGTAGATTTTAATAAAGTGTGAAAGTTGTC
AATCAAAGCGGAGTCACTTGTGTTCAAGAAACAAAAAAACACCCGAACAATAGAGTAGGGTTTGCAGTCTTGCGA
TGGTGAAGGGTCTCAAGGAGGTCTCTAATCCACCGCTTCCCGCTTGAGAAGGGAGGGGTATCAAAATTGAGCCCC
AAGCTGTTTGTTCCAGTGTACCAAGCACTGACTTTATGCCTTTGGCCTGGAGATGGCAGAAGTGAAAGCTGGCCA
TCTGCAAAAGCAGATAAGTGAGTTTGAACCTTTTGCATTTTGTTAGCTCAGTCAGTCCTCATCGTGGTCCT

FIGURE 2031

MVTDFIHSTPLSFLSCIFSPVIILLFFHCMWRRINFIWWWWWWWCLTAGYGAIFLVFALSVFLFFFFLSCTTVTI
LRWVFENECAEFMMCVKHASIATGFTRITYCLLLWIDMQICFRILTFRTENKFFNESCTTVTILRWVFENECAEF
MMCVKHASIATGFTRITYCLLLWIDMQICFRILTFRTENKFFNESIKDLLQLIRLMRSIDNVTVILNIKLGLCSQ
LTTKIFGGIRWRPIKRLCNVNHVDYNCLDSIAFALNRSVSDQFYRYKMPRLIAKVEGKGNGIKTVIVNMVDVAKA
LNRPPTYPTKYFGCELGAQTQFDVKNDRYIVNGSHEANKLQDMLDGFIKKFVLCPECENPETDLHVNPKKQTIGN
SCKACGYRGMLDTHHKLCTFILKNPPENSDSGTGKKEKEKKNRKGKDKENGSVSSSEDTTTPPPNEINPPPHTM
EEEEDDDWGEDTTEEAQRRRMDEISDHAKVLTLSDDLERTIEERVNILFDFVKKKKEEGVIDSSDKEIVAEAERL
DVKAMGPLVLTEVLFNEKIREQIKKYRRHFLRFCHNNKKAQRYLLHGLECVVAMHQAQLISKIPHILKEMYDADL
LEEEVIISWSEKASKKYVSKELAKEIRVKAEPFIKWLKEAEEESSGGEEEDEDENIEVVYSKAASVPKVETVKSD
NKDDDIDIDAI

FIGURE 2032

CGTTGAAGACATTGTCGGGTGGTGGGAGAGGTATCGGCAGGGGCAGCGCTGCCGCCGGGGCCTGGGGCTGACCCG
TCTGACTTCCCGTCCGTGCCGAGCCCACTCGAGCCGCAGCCATGTCTGGGGACGAGATGATTTTTGATCCTACTA
TGAGCAAGAAGAAAAAGAAGAAGAAGAAGCCTTTTATGTTAGATGAGGAAGGGGATACCCAAACAGAGGAAACCC
AGCCTTCAGAAACAAAAGAAGTGGAGCCAGAGCCAACTGAGGACAAGGATTTGGAAGCTGATGAAGAGGACACTA
GGAAAAAAGATGCTTCTGATGATCTAGATGACTTGAACTTCTTTAATCAAAAGAAAAAGAAGAAAAAAACTAAAA
AGATATTTGATATTGATGAAGCTGAAGAAGGTGTAAAGGATCTTAAGATTGAAAGTGATGTTCAAGAACCAACTG
AACCAGAGGATGACCTTGACATTATGCTTGGCAATAAAAAGAAGAAAAAGAAGAATGTTAAGTTCCCAGATGAGG
ATGAAATACTAGAGAAAGATGAAGCTCTAGAAGATGAAGACAACAAAAAAGATGATGGTATCTCATTCAGTAATC
AGACAGGCCCTGCTTGGGCAGGCTCAGAAAGAGACTACACATACGAGGAGCTGCTGAATCGAGTGTTCAACATCA
TGAGGGAAAAGAATCCAGATATGGTTGCTGGGGAGAAAAGGAAATTTGTCATGAAACCTCCACAAGTCGTCCGAG
TAGGAACCAAGAAAACTTCTTTTGTCAACTTTACAGATATCTGTAAACTATTACATCGTCAGCCCAAACATCTCC
TTGCATTTTTGTTGGCTGAATTGGGTACAAGTGGTTCTATAGATGGTAATAACCAACTTGTAATCAAAGGAAGAT
TCCAACAGAAACAGATAGAAAATGTCTTGAGAAGATATATCAAGGAATATGTCACTTGTCACACATGCCGATCAC
CGGACACAATCCTGCAGAAGGACATACGACTCTATTTCCTACAGTGCGAAACTTGTCATTCTAGATGTTCTGTTG
CCAGTATCAAAACCGGCTTCCAGGCTGTCACGGGCAAGCGAGCACAGCTCCGTGCCAAAGCTAACTAATTTGCTA
ATCACTGATTTTGCAAAGCTTGTTGTGGAGATGTGGCTGGACAGGTTTGCCATCAGAGTGGATATACCGTTGTAT
TAAAAACAAGATAAAAAAGCTGCCAAGATTTTTGGCGAGTGGTTGGTCTGAAGTCCTTGCAAGACGCTGATGCTC
AAGCTGTTGACATACTCATTGCCTACTTTAACACCTGTCAGAGAAACGTGATATGGGGTAAGGAGGTGCTTTTTT
AAAATCGTTCATAGACTTCTGTAAAATGCAAGATAAATTAAAGTTATTATAACAGTGATTCTTTCA

FIGURE 2033

MSGDEMIFDPTMSKKKKKKKPFMLDEEGDTQTEETQPSETKEVEPEPTEDKDLEADEEDTRKKDASDDLDDLNF
FNQKKKKKKTKKIFDIDEAEEGVKDLKIESDVQEPTEPEDDLDIMLGNKKKKKKNVKFPDEDEILEKDEALEDED
NKKDDGISFSNQTGPAWAGSERDYTYEELLNRVFNIMREKNPDMVAGEKRKFVMKPPQVVRVGTKKTSFVNFTDI
CKLLHRQPKHLLAFLLAELGTSGSIDGNNQLVIKGRFQQKQIENVLRRYIKEYVTCHTCRSPDTILQKDIRLYFL
QCETCHSRCSVASIKTGFQAVTGKRAQLRAKAN

FIGURE 2034

GGCTGTGTCAGCTGACCCAAGGGGCCTTCGAGGTGCCTTAGGCCGCTTGCCTTGCTCTCAGAATCGCTGCCGCCA
TGGCTAGTCAGTCTCAGGGGATTCAGCAGCTGCTGCAGGCCGAGAAGCGGGCAGCCGAGAAGGTGTCCGAGGCCC
GCAAAAGAAAGAACCGGAGGCTGAAGCAGGCCAAAGAAGAAGCTCAGGCTGAAATTGAACAGTACCGCCTGCAGA
GGGAGAAAGAATTCAAGGCCAAGGAAGCTGCGGCATTGGGATCCCGTGGCAGTTGCAGCACTGAAGTGGAGAAGG
AGACCCAGGAGAAGATGACCATCCTCTAGACATACTTCCGGCAGAACAGGGATGAAGTCTTGGACAACCTCTTGG
CTTTTGTCTGTGACATTCGGCCAGAAATCCATGAAAACTACCGCATAAATGGATAGAAGAGAGAAGCACCTGTGC
TGTGGAGTGGCATTTTAGATGCCCTCACGAATATGAAGCTTAGCACAGCTCTAGTTACATTCTTATGATATGGCA
TTAAATTATTTCCATATATTATATAATAGGTCCTTCCACTTTTTGGAGAGTAGCAAATCTAGCTTTTTTGTACAG
ACTTAGAAATTATCTAAAGATTTCATCTTTTTACCTCATATTTCTTAGGAATTTAATGGTTATATGTTGTCTTTT
TTTCCTATGTCTTTTGGCTCAAGCAACATGTATATCAGTGTTGACTTTTTCTTTCTTAGATCTAGTTTAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2035

MASQSQGIQQLLQAEKRAAEKVSEARKRKNRRLKQAKEEAQAEIEQYRLQREKEFKAKEAAALGSRGSCSTEVEK
ETQEKMTIL

FIGURE 2036

CTGGGAACAGGGTTTATACTAAGTAGTGGAGGAGCGTATGGTTAAGCCCAAAGGGGCAGAACAAGAAAGCCACGG
GATTGTATGAAATCAAACATGAGTTTGTGGTGTAGACTGCTGTATGCAGTTGGAAAGGACACGTGAGAGTGAGCT
CAAGTGGCAGCAGAGGCAGTTTGGAATAAGCTGCGGCAAGTTGAAGAAGCTGTGTTGGACGAGATTGCCCCGCCT
TGATCAGGGTACCATGACATAAAAGGTTAAAGAACAGGCAACACAATGAGCACTTAAGTTTTTAACATGTGGGGA
ATAGGGCATTTTAAAGGCTGGAACCAGTTCAGAGGAAACAAGGGTTTGGGTAGAGGTAGAAAGGTTTAATTAACC
CTGGAGATCTGCAAATGGAGGGAGGGGTGAAGGAGGAATCAAGACCGAGGGAGAAGAGCCAAGGACAAGGTCAGG
TTGAATGAGTAGGAGGTGTTCACACATCCTCTTGTGTGCTAGGTAGTGGCGTGCATCTGATCTGAGAGGCAGTAA
AGCAGTGATGAAGACAGTGCAGCAGAACATTGAAGTCCTGATTGCAGCAGTGACTCTGCAACCTTGGATAAATTA
TTTCAATCTTTATTTTGTAAAACGGAGATAACGGCCTATAGGATTGTTAAGACTGAATATTTTAAAAGAGCTTAG
AATGGTGCCTGACAAATGAGAAACAATAAATACTGATTATTGGCCATAAAGTGGTATTAAAACTGGATCTCTTTT
CTTCCATGGCACTACTCTCATTTTGAAGTTTATGAACAGTACGACAGTGTATTGTAAATTCCCTTTAGTTTGTTA
CAGTAGCCAATTGAAAATGTATATCCCAAAATTTAAAAAAAAAAGTACTAGCAGCAATAAAATTGCACTAGTT

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FIGURE 2037

MNSTTVYCKFPLVCYSSQLKMYIPKFKKKSTSSNKIAL

FIGURE 2038

GTTCAGCGCCGGCGCCGGTGTGCGAGCCGCGGCAGAGTGAGGCAGGCAACCCGAGGTGCGGAGCGACCTGCGGAG
GCTGAGCCCCGCTTTCTCCCAGGGTTTCTTATCAGCCAGCCGCCGCTGTCCCCGGGGGAGTAGGAGGCTCCTGAC
AGGCCGCGGCTGTCTGTGTGTCCTTCTGAGTGTCAGAGGAACGGCCAGACCCCGCGGGCCGGAGCAGAACGCGGC
CAGGGCAGAAAGCGGCGGCAGGAGAAGCAGGCAGGGGGCCGGAGGACGCAGACCGAGACCCGAGGCGGAGGCGGA
CCGCGAGCCGGCC**ATG**TCGGTGGTGGGGTTGGACGTGGGCTCGCAGAGCTGCTACATCGCGGTAGCCCGGGCCGG
GGGCATCGAGACCATCGCCAATGAGTTCAGCGACCGGTGCACCCCGTCAGTCATATCATTTGGATCAAAAAATAG
AACAATCGGAGTTGCAGCCAAAAATCAGCAAATCACTCATGCAAACAATACGGTGTCTAACTTCAAAAGATTTCA
TGGCCGAGCATTCAACGACCCCTTCATTCAAAAGGAGAAGGAAAACTTGAGTTACGATTTGGTTCCATTGAAAAA
TGGTGGAGTTGGAATAAAGGTAATGTACATGGGTGAAGAACATCTATTTAGTGTGGAGCAGATAACAGCCATGTT
GTTGACTAAGCTGAAGGAAACTGCTGAAAACAGCCTCAAGAAACCAGTAACAGATTGTGTTATTTCAGTCCCCTC
CTTCTTTACAGATGCTGAGAGGCGATCTGTGTTAGATGCTGCACAGATTGTTGGCCTAAACTGTTTAAGACTTAT
GAATGACATGACAGCTGTTGCTTTGAATTACGGAATTTATAAGCAGGATCTCCCAAGCCTGGATGAGAAACCTCG
GATAGTGGTTTTTGTTGATATGGGACATTCAGCTTTTCAAGTGTCTGCTTGTGCTTTTAACAAGGGAAAATTGAA
GGTACTGGGAACAGCTTTTGATCCTTTCTTAGGAGGAAAAAACTTCGATGAAAAGTTAGTGGAACATTTCTGTGC
AGAATTTAAAACTAAGTACAAGTTGGATGCAAAATCCAAAATACGAGCACTCCTACGTCTGTATCAGGAATGTGA
AAAACTGAAAAAGCTAATGAGCTCTAACAGCACAGACCTTCCACTGAATATCGAATGCTTTATGAATGATAAAGA
TGTTTCCGGAAAGATGAACAGGTCACAATTTGAAGAACTCTGTGCTGAACTTCTGCAAAAGATAGAAGTACCCCT
TTATTCACTGTTGGAACAAACTCATCTCAAAGTAGAAGATGTGAGTGCAGTTGAGATTGTTGGAGGCGCTACACG
AATTCCAGCTGTGAAGGAAAGAATTGCCAAATTCTTTGGAAAAGATATTAGCACAACACTCAATGCAGATGAAGC
AGTAGCCAGAGGATGTGCATTACAGTGTGCAATACTTTCCCCGGCATTTAAAGTTAGAGAATTTTCCGTCACAGA
TGCAGTTCCTTTTCCAATATCTCTGATCTGGAACCATGATTCAGAAGATACTGAAGGTGTTCATGAAGTCTTTAG
TCGAAACCATGCTGCTCCTTTCTCCAAAGTTCTCACCTTTCTGAGAAGGGGGCCTTTTGAGCTAGAAGCTTTCTA
TTCTGATCCCCAAGGAGTTCCATATCCAGAAGCAAAAATAGGCCGCTTTGTAGTTCAGAATGTTTCTGCACAGAA
AGATGGAGAAAAATCTAGAGTAAAAGTCAAAGTGCGAGTCAACACCCATGGCATTTTCACCATCTCTACGGCATC
TATGGTGGAGAAAGTCCCAACTGAGGAGAATGAAATGTCTTCTGAAGCTGACATGGAGTGTCTGAATCAGAGACC
ACCAGAAAACCCAGACACTGATGCAAATGAAAAAAAAGTTGACCAGCCTCCAGAAGCTAAAAAGCCCAAAATAAA
GGTGGTGAATGTTGAGCTGCCTATTGAAGCCAACTTGGTCTGGCAGTTAGGGAAAGACCTTCTTAACATGTATAT
TGAGACAGAGGGTAAGATGATAATGCAAGATAAATTGGAAAAAGAAAGGAATGATGCTAAAAATGCAGTTGAGGA
ATATGTGTATGAGTTCAGAGACAAGCTGTGTGGACCATATGAAAAATTTATATGTGAGCAGGATCATCAAAATTT
TTTGAGACTCCTCACAGAAACTGAAGACTGGCTGTATGAAGAAGGAGAGGACCAAGCTAAACAAGCATATGTTGA
CAAGTTGGAAGAATTAATGAAAATTGGCACTCCAGTTAAAGTTCGGTTTCAGGAAGCTGAAGAACGGCCAAAAAT
GTTTGAAGAACTAGGACAGAGGCTGCAGCATTATGCCAAGATAGCAGCTGACTTCAGAAATAAGGATGAGAAATA
CAACCATATTGATGAGTCTGAAATGAAAAAAGTGGAGAAGTCTGTTAATGAAGTGATGGAATGGATGAATAATGT
CATGAATGCTCAGGCTAAAAAGAGTCTTGATCAGGATCCAGTTGTACGTGCTCAGGAAATTAAAACAAAAATCAA
GGAATTGAACAACACATGTGAACCCGTTGTAACACAACCGAAACCAAAAATTGAATCACCCAAACTGGAAAGAAC
TCCAAATGGCCCAAATATTGATAAAAAGGAAGAAGATTTAGAAGACAAAAACAATTTTGGTGCTGAACCTCCACA
TCAGAATGGTGAATGTTACCCTAATGAGAAAAATTCTGTTAATATGGACTTGGAC**TAG**ATAACCTTAAATTGGCC
TATTCCTTCAATTAATAAAATATTTTTGCCATAGTATGTGACTCTACATAACATACTGAAACTATTTATATTTTC
TTTTTTAAGGATATTTAGAAATTTTGTGTATTATATGGAAAAAGAAAAAAAGCTTAAGTCTGTAGTCTTTATGAT
CCTAAAAGGGAAAATTGCCTTGGTAACTTTCAGATTCCTGTGGAATTGTGAATTCATACTAAGCTTTCTGTGCAG
TCTCACCATTTGCATCACTGAGGATGAAACTGACTTTTGTCTTTTGGAGAAAAAAAACTGTACTGTTGTTCAAGA
GGGCTGTGATTAAAATCTTTAAGCATTTGTTCCTGCCAAGGTAGTTTTCTTGCATTTTGCTCTCCATTCAGCATG
TGTGTGGGTGTGGATGTTTATAAACAAGACTAAGTCTGACTTCATAAGGGCTTTCTAAAACCATTTCTGTCCAAG
AGAAAATGACTTTTTGCTTTGATATTAAAAATTCAATGAGTAAAACAAAAGCTAGTCAAATGTGTTAGCAGCATG
CAGAACAAAAACTTTAAACTTTCTCTCTCACTATACAGTATATTGTCAATGTGAAAGTGTGGAATGGAAGAAATG
TCGATCCTGTTGTAACTGATTGTGAACACTTTTATGAGCTTTAAAATAAAGTTCATCTTATGGTGTCATTTCT

FIGURE 2039

MSVVGLDVGSQSCYIAVARAGGIETIANEFSDRCTPSVISFGSKNRTIGVAAKNQQITHANNTVSNFKRFHGRAF
NDPFIQKEKENLSYDLVPLKNGGVGIKVMYMGEEHLFSVEQITAMLLTKLKETAENSLKKPVTDCVISVPSFFTD
AERRSVLDAAQIVGLNCLRLMNDMTAVALNYGIYKQDLPSLDEKPRIVVFVDMGHSAFQVSACAFNKGKLKVLGT
AFDPFLGGKNFDEKLVEHFCAEFKTKYKLDAKSKIRALLRLYQECEKLKKLMSSNSTDLPLNIECFMNDKDVSGK
MNRSQFEELCAELLQKIEVPLYSLLEQTHLKVEDVSAVEIVGGATRIPAVKERIAKFFGKDISTTLNADEAVARG
CALQCAILSPAFKVREFSVTDAVPFPISLIWNHDSEDTEGVHEVFSRNHAAPFSKVLTFLRRGPFELEAFYSDPQ
GVPYPEAKIGRFVVQNVSAQKDGEKSRVKVKVRVNTHGIFTISTASMVEKVPTEENEMSSEADMECLNQRPPENP
DTDANEKKVDQPPEAKKPKIKVVNVELPIEANLVWQLGKDLLNMYIETEGKMIMQDKLEKERNDAKNAVEEYVYE
FRDKLCGPYEKFICEQDHQNFLRLLTETEDWLYEEGEDQAKQAYVDKLEELMKIGTPVKVRFQEAEERPKMFEEL
GQRLQHYAKIAADFRNKDEKYNHIDESEMKKVEKSVNEVMEWMNNVMNAQAKKSLDQDPVVRAQEIKTKIKELNN
TCEPVVTQPKPKIESPKLERTPNGPNIDKKEEDLEDKNNFGAEPPHQNGECYPNEKNSVNMDLD

FIGURE 2040

AGCAACGGGGTGCGGCAGGGTGGGGAACGCGGGAGCGGGGCCAGCTCCCAGGAAAGCTGGTCTGCGAGCGGCCCC
TGCCCGGCTCCCAGGTCCCTGCGCGACCCCGCCCTTCCCGAGACCCCAGCCGGGCTGCCGCCCGCGTCCCGGAAG
CTCCAGCCTGAACC**ATG**TTTTTCACTTGTGGCCCAAATGAGGCCATGGTGGTCTCCGGGTTCTGCCGAAGCCCCC
CAGTCATGGTGGCTGGAGGGCGTGTCTTTGTCCTGCCCTGCATCCAACAGATCCAGAGGATCTCTCTCAACACAC
TGACCCTCAATGTCAAGAGTGAAAAGGTTTACACTCGCCATGGGGTCCCCATCTCAGTCACTGGCATTGCCCAGG
TAAAAATCCAGGGGCAGAACAAGGAGATGTTGGCGGCCGCCTGTCAGATGTTCCTGGGGAAGACGGAGGCTGAGA
TTGCCCACATTGCCCTGGAGACGTTAGAGGGCCACCAGAGGGCCATCATGGCCCACATGACTGTGGAGGAGATCT
ATAAGGACAGGCAGAAATTCTCAGAACAGGTTTTCAAAGTGGCCTCCTCAGACCTGGTCAACATGGGCATCAGTG
TGGTTAGCTACACTCTGAAGGACATTCACGATGACCAGGACTATTTGCACTCTTTGGGGAAGGCTCGAACAGCTC
AAGTCCAAAAAGATGCACGGATTGGAGAAGCAGAGGCCAAGAGAGATGCTGGGATCCGGGAAGCTAAAGCCAAGC
AGGAAAAGGTGTCTGCTCAGTACCTGAGTGAGATCGAGATGGCCAAGGCACAGAGAGATTACGAACTGAAGAAGG
CCGCCTATGACATCGAGGTCAACACCCGCCGAGCACAGGCTGACCTGGCCTATCAGCTTCAGGTGGCCAAGACTA
AGCAGCAGATTGAGGAGCAGCGGGTGCAGGTGCAGGTGGTGGAGCGGGCCCAGCAGGTGGCAGTGCAGGAGCAGG
AGATCGCCCGGCGGGAGAAGGAGCTGGAGGCCCGGGTGCGGAAGCCAGCGGAAGCGGAGCGCTACAAGCTGGAGC
GCCTAGCCGAGGCAGAGAAGTCCCAACTAATTATGCAGGCGGAGGCAGAAGCCGCGTCTGTGCGGATGCGTGGGG
AAGCTGAGGCCTTTGCCATAGGGGCCCGAGCCCGAGCCGAGGCTGAGCAGATGGCCAAGAAGGCAGAAGCCTTCC
AGCTGTACCAAGAGGCTGCTCAGCTGGACATGCTGCTAGAGAAGCTGCCCCAGGTGGCAGAGGAGATCAGTGGTC
CCTTGACTTCAGCCAATAAGATCACACTGGTGTCCAGCGGCAGTGGGACCATGGGGGCAGCCAAAGTGACTGGGG
AAGTACTGGACATTCTAACTCGCCTGCCAGAGAGTGTGGAAAGACTCACAGGCGTGAGCATCTCCCAGGTGAATC
ACAAGCCTTTGAGAACAGCC**TGA**GCCTTCAGCCCTCACAGATGCCCAGCCTCATAGCTGAAGTTGCCTGAATGAT
CCTCCTGTTGCATGTAACCCACTGGCCTCCCTGAGCATGTCCATTGACAGTGAGGTCCCACCCCTCATCTCTCCT
TGCCAAATAGTTTGTGCCTTGTCTTGAAGGGGGTTGCTCCCCTTGCCAACCTCACACTGCTATGATTGCCAACTC
CAGCGGTCCCATGTCAGCCTTCTGATGATCCCACTCCACCCCACCTCAACTTATTTAACTTCCTAATTAAATCAG
ACTGTTTGAGCCTGTTGTCTAGAATATTTTCCTGACCAAGACTGAGGGATGGGCTGGAGGTTTTCAACTTTGCTA
CCCAAATAAATTGCTGTAAGTAAGTACTAAAAAAAAAAA

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FIGURE 2041

MFFTCGPNEAMVVSGFCRSPPVMVAGGRVFVLPCIQQIQRISLNTLTLNVKSEKVYTRHGVPISVTGIAQVKIQG
QNKEMLAAACQMFLGKTEAEIAHIALETLEGHQRAIMAHMTVEEIYKDRQKFSEQVFKVASSDLVNMGISVVSYT
LKDIHDDQDYLHSLGKARTAQVQKDARIGEAEAKRDAGIREAKAKQEKVSAQYLSEIEMAKAQRDYELKKAAYDI
EVNTRRAQADLAYQLQVAKTKQQIEEQRVQVQVVERAQQVAVQEQEIARREKELEARVRKPAEAERYKLERLAEA
EKSQLIMQAEAEAASVRMRGEAEAFAIGARARAEAEQMAKKAEAFQLYQEAAQLDMLLEKLPQVAEEISGPLTSA
NKITLVSSGSGTMGAAKVTGEVLDILTRLPESVERLTGVSISQVNHKPLRTA

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FIGURE 2042

CGGCAGCCCTCCTACCTGCGCACGTGGTGCCGCTGCTGCTGCCTCCCGCTCGCCCTGAACCCAGTGCCTGCAGCC
ATGGCTCCCGGCCAGCTCGCCTTATTTAGTGTCTCTGACAAAACCGGCCTTGTGGAATTTGCAAGAAACCTGACC
GCTCTTGGTTTGAATCTGGTCGCTTCCGGAGGGACTGCAAAAGCTCTCAGGGATGCTGGTCTGGCAGTCAGAGAT
GTCTCTGAGTTGACGGGATTTCCTGAAATGTTGGGGGGACGTGTGAAAACTTTGCATCCTGCAGTCCATGCTGGA
ATCCTAGCTCGTAATATTCCAGAAGATAATGCTGACATGGCCAGACTTGATTTCAATCTTATAAGAGTTGTTGCC
TGCAATCTCTATCCCTTTGTAAAGACAGTGGCTTCTCCAGGTGTAACTGTTGAGGAGGCTGTGGAGCAAATTGAC
ATTGGTGGAGTAACCTTACTGAGAGCTGCAGCCAAAAACCACGCTCGAGTGACAGTGGTGTGTGAACCAGAGGAC
TATGTGGTGGTGTCCACGGAGATGCAGAGCTCCGAGAGTAAGGACACCTCCTTGGAGACTAGACGCCAGTTAGCC
TTGAAGGCATTCACTCATACGGCACAATATGATGAAGCAATTTCAGATTATTTCAGGAAACAGTACAGCAAAGGC
GTATCTCAGATGCCCTTGAGATATGGAATGAACCCACATCAGACCCCTGCCCAGCTGTACACACTGCAGCCCAAG
CTTCCCATCACAGTTCTAAATGGAGCCCCTGGATTTATAAACTTGTGCGATGCTTTGAACGCCTGGCAGCTGGTG
AAGGAACTCAAGGAGGCTTTAGGTATTCCAGCCGCTGCCTCTTTCAAACATGTCAGCCCAGCAGGTGCTGCTGTT
GGAATTCCACTCAGTGAAGATGAGGCCAAAGTCTGCATGGTTTATGATCTCTATAAAACCCTCACACCCATCTCA
GCGGCATATGCAAGAGCAAGAGGGGCTGATAGGATGTCTTCATTTGGTGATTTTGTTGCATTGTCCGATGTTTGT
GATGTACCAACTGCAAAAATTATTTCCAGAGAAGTATCTGATGGTATAATTGCCCCAGGATATGAAGAAGAAGCC
TTGACAATACTTTCCAAAAAGAAAAATGGAAACTATTGTGTCCTTCAGATGGACCAATCTTACAAACCAGATGAA
AATGAAGTTCGAACTCTCTTTGGTCTTCATTTAAGCCAGAAGAGAAATAATGGTGTCGTCGACAAGTCATTATTT
AGCAATGTTGTTACCAAAAATAAAGATTTGCCAGAGTCTGCCCTCCGAGACCTCATCGTAGCCACCATTGCTGTC
AAGTACACTCAGTCTAACTCTGTGTGCTACGCCAAGAACGGGCAGGTTATCGGCATTGGAGCAGGACAGCAGTCT
CGTATACACTGCACTCGCCTTGCAGGAGATAAGGCAAACTATTGGTGGCTTAGACACCATCCACAAGTGCTTTCG
ATGAAGTTTAAAACAGGAGTGAAGAGAGCAGAAATCTCCAATGCCATCGATCAATATGTGACTGGAACCATTGGC
GAGGATGAAGATTTGATAAAGTGGAAGGCACTGTTTGAGGAAGTCCCTGAGTTACTCACTGAGGCAGAGAAGAAG
GAATGGGTTGAGAAACTGACTGAAGTTTCTATCAGCTCTGATGCCTTCTTCCCTTTCCGAGATAACGTAGACAGA
GCTAAAAGGAGTGGTGTGGCGTACATTGCGGCTCCCTCCGGTTCTGCTGCTGACAAAGTTGTGATTGAGGCCTGC
GACGAACTGGGAATCATCCTCGCTCATACGAACCTTCGGCTCTTCCACCACTGATTTTACCACACACTGTTTTTT
GGCTTGCTTATGTGTAGGTGAACAGTCACGCCTGAAACTTTGAGGATAACTTTTTAAAAAAATAAAACAGTATCT
CTTAAAACAATGTTTTGATCTACATAAACATTGTAAAAATTTTCAATCACGCTTTTTAACTTTCTTACCACAAAA
AAATGATAAGTGGGTGAAGTGATGGTTATGTTAATTAGCGTGC

FIGURE 2043

MAPGQLALFSVSDKTGLVEFARNLTALGLNLVASGGTAKALRDAGLAVRDVSELTGFPEMLGGRVKTLHPAVHAG
ILARNIPEDNADMARLDFNLIRVVACNLYPFVKTVASPGVTVEEAVEQIDIGGVTLLRAAAKNHARVTVVCEPED
YVVVSTEMQSSESKDTSLETRRQLALKAFTHTAQYDEAISDYFRKQYSKGVSQMPLRYGMNPHQTPAQLYTLQPK
LPITVLNGAPGFINLCDALNAWQLVKELKEALGIPAAASFKHVSPAGAAVGIPLSEDEAKVCMVYDLYKTLTPIS
AAYARARGADRMSSFGDFVALSDVCDVPTAKIISREVSDGIIAPGYEEEALTILSKKKNGNYCVLQMDQSYKPDE
NEVRTLFGLHLSQKRNNGVVDKSLFSNVVTKNKDLPESALRDLIVATIAVKYTQSNSVCYAKNGQVIGIGAGQQS
RIHCTRLAGDKANYWWLRHHPQVLSMKFKTGVKRAEISNAIDQYVTGTIGEDEDLIKWKALFEEVPELLTEAEKK
EWVEKLTEVSISSDAFFPFRDNVDRAKRSGVAYIAAPSGSAADKVVIEACDELGIILAHTNLRLFHH

FIGURE 2044

AATTCGGGGGCCGTGGAGTTTGTGACATACGAGGTGACACCCCTCGAGTCACTTCCCTTCAACTCCAGCTGGAGC
GCCTGCTTGGCTTTGGGTTCGTTCTGCAGCCTTCGCCCCGCTCCTAGCCTCAGGGCCGGACTCCAGCGCAGAGCC
CAGCCCAGCGCAGCCTGCCAGCAGCCACCCAGCCGCCCAGCCGCCCAGCCCCGCACGAAACCCGGCCAGAGCTTC
CTAGCAGCCCGAGCC**ATG**AACACCGAAATGTATCAGACCCCCATGGAGGTGGCGGTCTACCAGCTGCACAATTTC
TCCATCTCCTTCTTCTCTTCTCTGCTTGGAGGGGATGTGGTTTCCGTTAAGCTGGACAACAGTGCCTCCGGAGCC
AGCGTGGTGGCCATAGACAACAAGATCGAACAGGCCATGGATCTGGTGAAGAATCATCTGATGTATGCTGTGAGA
GAGGAGGTGGAGATCCTGAAGGAGCAGATCCGAGAGCTGGTGGAGAAGAACTCCCAGCTAGAGCGTGAGAACACC
CTGTTGAAGACCCTGGCAAGCCCAGAGCAGCTGGAGAAGTTCCAGTCCTGTCTGAGCCCTGAAGAGCCAGCTCCC
GAATCCCCACAAGTGCCCGAGGCCCCTGGTGGTTCTGCGGTG**TAA**GTGGCTCTGTCCTCAGGGTGGGCAGAGCCA
CTAAACTTGTTTTACCTAGTTCTTTCCAGTTTGTTTTTGGCTCCCCAAGCATCATCTCACGAGGAGAACTTTACA
CCTAGCACAGCTGGTGCCAAGAGATGTCCTAAGGACATGGCCACCTGGGTCCACTCCAGCGACAGACCCCTGACA
AGAGCAGGTCTCTGGAGGCTGAGTTGCATGGGGCCTAGTAACACCAAGCCAGTGAGCCTCTAATGCTACTGCGCC
CTGGGGGCTCCCAGGGCCTGGGCAACTTAGCTGCAACTGGCAAAGGAGAAGGGTAGTTTGAGGTGTGACACCAGT
TTGCTCCAGAAAGTTTAAGGGGTCTGTTTCTCATCTCCATGGACATCTTCAACAGCTTCACCTGACAACGACTGT
TCCTATGAAGAAGCCACTTGTGTTTTAAGCAGAGGCAACCTCTCTCTTCTCCTCTGTTTCGTGAAGGCAGGGGAC
ACAGATGGGAGAGATTGAGCCAAGTCAGCCTTCTGTTGGTTAATATGGTATAATGCATGGCTTTGTGCACAGCCC
AGTGTGGGATTACAGCTTTGGGATGACCGCTTACAAAGTTCTGTTTGGTTAGTATTGGCATAGTTTTTCTATATA
GCCATAAATGCGTATATATACCCATAGGGCTAGATCTGTATCTTAGTGTAGCGATGTATACATATACACATCCAC
CTACATGTTGAAGGGCCTAACCAGCCTTGGGAGTATTGACTGGTCCCTTACCTCTTATGGCTAAGTCTTTGACTG
TGTTCATTTACCAAGTTGACCCAGTTTGTCTTTTAGGTTAAGTAAGAACTCGAGAGTAAAGGCAAGGAGGGGGGC
CAGCCTCTGAATGCGGCCACGGATGCCTTGCTGCTGCAACCCTTTCCCCAGCTGTCCACTGAAACGTGAAGTCCT
GTTTTGAATGCCAAACCCACCATTCACTGGTGCTGACTACATAGAATGGGTTGAGAGAAGATCAGTTTGGGCTTC
ACAGTGTCATTTGAAAAAGCGTTTTTGTTTTGTTTTGAATTATTGTGGAAAACTTTCAAGTGAACAGAAGGATGG
TGTCCTACTGTGGATGAGGGATGAACAAGGGGATGGCTTTGATCCAATGGAGCCTGGGAGGTGTGCCCAGAAAGC
TTGTCTGTAGCGGGTTTTGTGAGAGTGAACACTTTCCACTTTTTGACACCTTATCCTGATGTATGGTTCCAGGAT
TTGGATTTTGATTTTCCAAATGTAGCTTGAAATTTCAATAAACTTTGCTCTGTTTTTCTAAAAAATAAAAA

FIGURE 2045

MNTEMYQTPMEVAVYQLHNFSISFFSSLLGGDVVSVKLDNSASGASVVAIDNKIEQAMDLVKNHLMYAVREEVEI
LKEQIRELVEKNSQLERENTLLKTLASPEQLEKFQSCLSPEEPAPESPQVPEAPGGSAV

FIGURE 2046A

AACTCTAGAATTTGTCTTTTGGTAAATATGTTTGAGTTTGTAATGGATCTTATGAGGGTGAAATTTCCCTCAGTC
TTCATTTTTTGGTCAGAATTTTAAGAGGGTTTGCATTTTCCTCTCCCAGTGAAGCGTGACATTCAGGAAAACGAT
GAAGAGGCAGTGCAAGTCAAAGAGCAGAGCATCCTGGAACTGGGATCTCTCCTGGCAAAGACTGGACAAGCTGCA
GAGCTTGGAGGCCTCCTGAAGTATGTACGACCCTTCTTGAATTCCATCAGCAAGGCTAAAGCAGCTCGCCTGGTC
CGATCTCTTCTTGATCTGTTTCTTGATATGGAAGCAGCTACAGGGCAGGAGTTTCTCTTTGTTACAGGGCATTTG
ATACTTTGGGTCTGTTCCAAGCTTTGCTTTGTAAGTGGAGATTGTCAGTGGTCCCTGGAATCCTCATTACATCAG
GGTCACAAACTGATTCTTGTCTTTGAGGTCGAGCTGTGTTTAGAGTGCATCGAATGGGCCAAGTCAGAGAAAAGA
ACTTTCTTACGCCAAGCTTTGGAGGCAAGACTGGTGTCTTTGTACTTTGATACCAAGAGGTACCAGGAAGCATTG
CATTTGGGTTCTCAGCTGCTGCGGGAGTTGAAAAAGATGGACGACAAAGCTCTTTTGGTGGAAGTACAGCTTTTA
GAAAGCAAAACATACCATGCCCTGAGCAACCTGCCGAAAGCCCGAGCTGCCTTAACTTCTGCTCGAACCACAGCA
AATGCCATCTACTGCCCCCCTAAATTGCAGGCCACCTTGGACATGCAGTCGGGTATTATCCATGCAGCAGAAGAG
AAGGACTGGAAAACTGCGTACTCATACTTCTATGAGGCATTTGAGGGTTATGACTCCATCGACAGCCCCAAGGCC
ATCACATCTCTGAAGTACATGTTGCTGTGCAAAATCATGCTCAACACCCCAGAAGATGTCCAGGCTTTGGTGAGC
GGGAAGCTTGCACTTCGGTATGCAGGGAGGCAGACAGAAGCATTAAAATGCGTGGCTCAGGCTAGCAAGAACAGA
TCACTGGCAGATTTTGAAAAGGCTCTGACAGATTACCGGGCAGAGCTCCGGGATGACCCAATCATCAGCACACAC
TTGGCCAAGTTGTATGATAACTTACTAGAACAGAATCTGATCCGAGTCATTGAGCCTTTTTCCAGAGTACAGATT
GAACACATATCTAGTCTCATCAAACTCTCCAAGGCCGACGTGGAAAGGAAATTATCACAGATGATTCTTGACAAG
AAATTTCATGGGATTTTGGACCAGGGGGAGGGTGTCCTGATTATTTTCGATGAACCCCCAGTAGATAAAACTTAC
GAAGCTGCTCTGGAAACAATTCAGAACATGAGCAAAGTAGTGGATTCCCTCTACAACAAAGCCAAGAAACTGACA
TAGGTGAGTGCTGGCTTCAGGACCCCAGGGCTGGGCAGCTCTGTCTTCTGCGTGTCGAGACTGAAAACCTCCTCC
TGGTGTCCTCATGGCTTCCTGATTGACACTGCTCTGTCTTCTCTTGCAGAGTTGGATCTGTAGCGGTCCTTTGGA
GAGTGTGTGTGGCGGGAGAGTGAAACCTTGGGGGAAAATGCTAGGAGATTCTTTTTTCTTTTTGTTCTACTTTTC
GCTCGGAAAGTTTTTAAATCCTCATTTGGTGCATCTGTATTCCAGCCAATAGGTGTGCCAGTTTTCATGTAATCT
TTACTGGCCCAACTTGGGAGTGGGGAAATTGCTTAAAAAAAAAGAAAAAGAAAAAAAAAAAGATTATTCTAAATA
AAAGGAAAAAGGCTTACACTACCTAAAGCTGTGCTCTCTGCCTCCTGGGAGAGGGCCGCAAAGCCAGGCACCCCG
CCAACCACTGGGGGTCCTAATCCACCTGCTGGGCATCACCTCTCCTCCTCCTCAGAATTGGGTGTTTGCTGACCA
TCAAAAGCAATGACTTTTTATTCTGTTTGTACTGAACCAAAACAAACAACTGTGTATAGACTGCTGTTTTCTTTT
TTATTTGAAATGAGGCATTTTGGTGTTCTTTCCCCTACCATACGGCCTGTCTGCCCTTCCCTCCCCACATTGGCT
CCAGCAGAGTAGCCGAAGGTCCTGCCGCCGCCGCAATCACCACCACCACTGCAGCAACAACAGCAGCAGTAGCAG
CAGCGCCTGCATAGCTCCACTCTGACCTGTGAAGGAATGGGGATGAGGCCAGGAGCTAGTGTCTACCACGGCCAC
ACAGGGAGCAGTGTGGGCCCTTAGCCCCCAAGGGGCCTGCTATGCATGTGGCTTTTTTTTTTTTTTAAACACAGT
AAACTAGATTAGTCGTCAGTGTTTTAATTGCCCCTCTTCTCCTCTCCTGCATTCCTCTCCTCTCTTCTTTCCTCT
CTGTCCCTTCTCTTTCCCCTCTCAACCAGGAGACCATCATGTCTCTCTGCCTTCCTCCTCTCCCCTCCAGGGGAG
TCAGGCTGTCTGTGAAAGCCATGAGCTTCTCTCCCTCTCCCACTCCTCCTCTCCTACTTTCAGATGGATTTATTC
CTTTTTTAAACAATGAACATCGGAAATGAGACTGTGGGGTGTGGTTTCTCTCTCTCTTTTTTTTTTAATTTTCTT
TGTTGGGTTTTTGAGCAACCTCATGTCCCCTTCCCAGGGAGCTTTTTAATTTACCTCTTAGAACTCAAGTGGATG
GGAAGTAGAGCACTATGTGTCAGTATGCTTTGTTTTCTGACACGATTACACAGCGAGGCTTTAATGCCATTTGGG
TAGGTGAGCTTCTGCACTTCTGTTGTGCTGAACTGTATTTTCTTCTCTCATCTCCTCTTTGTCTTTTTCTCTTTT
CCTCTCCTTCCTGCCTTCTTCTGCTGGCCTCCTTTTCTCTTTCTTTACCTTCCTTGGATTATCCTTCCAGGTTTT
CATAATAAATTTATATTTTGTAAAAGGATTTTGTTGTACCAGGTTTTGCATCCTCACTGAATCTGACTGGCTTTT
ATTTTCCTCTCCAAAATCAGGTTTTTGTTCTCAACATCTTTCCCCATCATGTCTAGTCACTGTTTTGGTTTTGGC
ACCATCAGTATCAAATGTACAAACGGTTCTTGCTAACCAACACCAGGTATATCTGATGTTCAGATGAGTTCCAAT
AAAAATAATTTTTTTTTTTTTCAAAAGGTGTCTTTTTCTTGAGTGCTGGAGGGCTTCCAAGCAAGTCCAGACAGC
TCTGTGTAGCCCCACACTAGTCTAGCTCTCATCTGGCCAAAGCTGTTATCTCATTTGTGTAATGGGAGTCCTTAA
GGTAAATTTGGGGTCCAAACTTGGAGGGCTTTGGGGGCAAGAAAGTTGGTGTGTGAGTTCTGAGGTTGGAAATGA
GTTCAGGTGTCTTCTTCCAGGGCAGCATGGTCCAGTGAGCACATGTAAGTTTGGGCAGTAGATCCTCTGAGCCTA
CTTTCTCTTCTACTCAGTGAGGATGCTGCTTCCTTGGCAGGTGATTGTGATGTGAAGCTTAGTAAGTCATAGACG
TGCAGGTGTCTGGAGAGTCCTGACATGCAGTTGTGGTTTCGTTTCCTTTTGGAATCTTCAAAGGCAGCGATTTTC

FIGURE 2046B

ATATTGCCTCACACCCTGGCGGGGGCGGGGGGCTCTGGGACCACTGGGGGACCTGCTAAATCCTCTTCAGTCTGA
GCAGTTCAGCCATTGTCAGTTTTAGTATTGTGTCTCTGTATTTCACTTGCAGAAAGAGCTTTGCTTCTATAAAGG
ACTTTAAAAAGTACTCCAAAGAGATCTAGTTTTGGAGTAGAGGGGAGATGTTTTCTCAAACTTAGGGCAGTCCTG
AGATGCTCAGGCAGTAGCCCTTTTCTCAGTTCCCTTTGCGGGTCTTGGTCAGATGATGCCCTCTAGACCCGTGCT
GTCCAATATGTAGCCGCTAGCCATGTGCAGCTGTCAGGCCCTTGCAACGTGGCTGGTTCGAGCTGTGATACACTG
CAAGTGTAAACACAAACCAGACTTCGAAGGCTTAGTATGATAACAAAAGAAAAGGAGTGTAAAATATGTCAATAA
CTTTTTTATATATGTGTTGAAATATTTTGGGTATTGGGTTAAATAAAATATATTATTA

FIGURE 2047

NSRICLLVNMFEFVMDLMRVKFPSVFIFWSEFXEGLHFPLPVKRDIQENDEEAVQVKEQSILELGSLLAKTGQAA
ELGGLLKYVRPFLNSISKAKAARLVRSLLDLFLDMEAATGQEFLFVTGHLILWVCSKLCFVSGDCQWSLESSLHQ
GHKLILVFEVELCLECIEWAKSEKRTFLRQALEARLVSLYFDTKRYQEALHLGSQLLRELKKMDDKALLVEVQLL
ESKTYHALSNLPKARAALTSARTTANAIYCPPKLQATLDMQSGIIHAAEEKDWKTAYSYFYEAFEGYDSIDSPKA
ITSLKYMLLCKIMLNTPEDVQALVSGKLALRYAGRQTEALKCVAQASKNRSLADFEKALTDYRAELRDDPIISTH
LAKLYDNLLEQNLIRVIEPFSRVQIEHISSLIKLSKADVERKLSQMILDKKFHGILDQGEGVLIIFDEPPVDKTY
EAALETIQNMSKVVDSLYNKAKKLT

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FIGURE 2048

ATGGCGGCGGCGGCGGTGGTGGAGTTCCAGAGAGCCCAGTCTCTACTCAGCACCGACCGGGAGGCCTCCATCGAC
ATCCTCCACTCCATCGTGAAGCGTGACATTCAGGAAAACGATGAAGAGGCAGTGCAAGTCAAAGAGCAGAGCATC
CTGGAACTGGGATCTCTCCTGGCAAAGACTGGACAAGCTGCAGAGCTTGGAGGACTCCTGAAGTATGTACGACCC
TTCTTGAATTCCATCAGCAAGGCTAAAGCAGCTCGCCTGGTCCGATCTCTTCTTGATCTGTTTCTTGATATGGAA
GCAGCTACAGGGCAGGAGGTCGAGCTGTGTTTAGAGTCCATCGAATGGGCCAAGTCAGAGAAAAGAACTTTCTTA
CGCCAAGCTTTGGAGGCAAGACTGGTGTCTTTGTACTTTGATACCAAGAGGTACCAGGAAGCATTGCATTTGGGT
TCTCAGCTGCTGCGGGAGTTGAAAAAGATGGACGACAAAGCTCTTTTGGTGGAAGTACAGCTTTTAGAAAGCAAA
ACATACCATGCCCTGAGCAACCTGCCGAAAGCCCGAGCTGCCTTAACTTCTGCTCGAACCACAGCAAATGCCATC
TACTGCCCCCCTAAATTGCAGGCCACCTTGGACATGCAGTCGGGTATTATCCATGCAGCAGAAGAGAAGGACTGG
AAAACTGCGTACTCATACTTCTATGAGGCATTTGAGGGTTATGACTCCATCGACAGCCCCAAGGCCATCACATCT
CTGAAGTACATGTTGCTGTGCAAAATCATGCTCAACACCCCAGAAGATGTCCAGGCTTTGGTGAGCGGGAAGCTT
GCACTTCGGTATGCAGGGAGGCAGACAGAAGCATTAAAATGCGTGGCTCAGGCTAGCAAGAACAGATCACTGGCA
GATTTTGAAAAGGCTCTGACAGATTACCGGGCAGAGCTCCGGGATGACCCAATCATCAGCACACACTTGGCCAAG
TTGTATGATAACTTACTAGAACAGAATCTGATCCGAGTCATTGAGCCTTTTTCCAGAGTACAGATTGAACACATA
TCTAGTCTCATCAAACTCTCCAAGGCCGACGTGGAAAGGAAATTATCACAGATGATTCTTGACAAGAAATTTCAT
GGGATTTTGGACCAGGGGGAGGGTGTCCTGATTATTTTCGATGAACCCCCAGTAGATAAAACTTACGAAGCTGCT
CTGGAAACAATTCAGAACATGAGCAAAGTAGTGGATTCCCTCTACAACAAAGCCAAGAAACTGACATAG

FIGURE 2049

MAAAAVVEFQRAQSLLSTDREASIDILHSIVKRDIQENDEEAVQVKEQSILELGSLLAKTGQAAELGGLLKYVRP
FLNSISKAKAARLVRSLLDLFLDMEAATGQEVELCLESIEWAKSEKRTFLRQALEARLVSLYFDTKRYQEALHLG
SQLLRELKKMDDKALLVEVQLLESKTYHALSNLPKARAALTSARTTANAIYCPPKLQATLDMQSGIIHAAEEKDW
KTAYSYFYEAFEGYDSIDSPKAITSLKYMLLCKIMLNTPEDVQALVSGKLALRYAGRQTEALKCVAQASKNRSLA
DFEKALTDYRAELRDDPIISTHLAKLYDNLLEQNLIRVIEPFSRVQIEHISSLIKLSKADVERKLSQMILDKKFH
GILDQGEGVLIIFDEPPVDKTYEAALETIQNMSKVVDSLYNKAKKLT

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FIGURE 2050

ACGTGTATCGCTGCCGTCAAGATGGAGGGGCCTTTGTCCGTGTTCGGTGACCGCAGCACTGGGGAAACGATCCGC
TCCCAAAACGTTATGGCTGCAGCTTCGATTGCCAATATTGTAAAAAGTTCTCTTGGTCCAGTTGGCTTGGATAAA
ATGTTGGTGGATGATATTGGTGATGTAACCATTACTAACGATGGTGCAACCATCCTGAAGTTACTGGAGGTAGAA
CATCCTGCAGCTAAAGTTCTTTGTGAGCTGGCTGATCTGCAAGACAAAGAAGTTGGAGATGGAACTACTTCAGTG
GTTATTATTGCAGCAGAACTCCTAAAAAATGCAGATGAATTAGTCAAACAGAAAATTCATCCCACATCAGTTATT
AGTGGCTATCGACTTGCTTGCAAGGAAGCAGTGCGTTATATCAATGAAAACCTAATTGTTAACACAGATGAACTG
GGAAGAGATTGCCTGATTAATGCTGCTAAGACATCCATGTCTTCCAAAATCATTGGGATAAATGGTGATTTCTTT
GCTAACATGGTAGTAGATGCTGTACTTGCTATTAAATACACAGACATAAGAGGCCAGCCACGCTATCCAGTCAAC
TCTGTTAATATTTTGAAAGCCCATGGGAGAAGTCAAATGGAGAGTATGCTCATCAGTGGCTATGCACTCAACTGT
GTGGTGGGATCCCAGGGCATGCCCAAGAGAATCGTAAATGCAAAAATTGCTTGCCTTGACTTCAGCCTGCAAAAA
ACAAAAATGAAGCTTGGTGTACAGGTGGTCATTACAGACCCTGAAAAACTGGACCAAATTAGACAGAGAGAATCA
GATATCACCAAGGAGAGAATTCAGAAGATCCTGGCAACTGGTGCCAATGTTATTCTAACCACTGGTGGAATTGAT
GATATGTGTCTGAAGTATTTTGTGGAGGCTGGTGCTATGGCAGTTAGAAGAGTTTTAAAAAGGGACCTTAAACGC
ATTGCCAAAGCTTCTGGAGCAACTATTCTGTCAACCCTGGCCAATTTGGAAGGTGAAGAAACTTTTGAAGCTGCA
ATGTTGGGACAGGCAGAAGAAGTGGTACAGGAGAGAATTTGTGATGATGAGCTGATCTTAATCAAAAATACTAAG
GCTCGTACGTCTGCATCGATTATCTTACGTGGGGCAAATGATTTCATGTGTGATGAGATGGAGCGCTCTTTACAT
GATGCACTTTGTGTAGTGAAGAGAGTTTTGGAGTCAAAATCTGTGGTTCCCGGTGGGGGTGCTGTAGAAGCAGCC
CTTTCCATATACCTTGAAAACTATGCAACCAGCATGGGGTCTCGGGAACAGCTTGCGATTGCAGAGTTTGCAAGA
TCACTTCTTGTTATTCCCAATACACTAGCAGTTAATGCTGCCCAGGACTCCACAGATCTGGTTGCAAAATTAAGA
GCTTTTCATAATGAGGCCCAGGTTAACCCAGAACGTAAAAATCTAAAATGGATTGGTCTTGATTTGAGCAATGGT
AAACCTCGAGACAACAAACAAGCAGGGGTGTTTGAACCAACCATAGTTAAAGTTAAGAGTTTGAAATTTGCAACA
GAAGCTGCAATCACCATTCTTCGAATTGATGATCTTATTAAATTACATCCAGAAATCCTTCGGATTAAACATGGA
AGTTATGAAGATGCTGTTCACTCTGGAGCCCTTAATGATTGATCTGATGTTCCTTTTATTTATAACAATGTTAAA
TGCAATGTCTTGTACCTTGAGTTGAGTATTACACATTAAAGTAAAGTACAAGCTGTAAACTTGGGTTTTTGTGAT
GTAGGAAATGGTTTCCATCTGTACTTTGGTCCTCTGATTTCAGATATTGCAACCTAGTACTTTATTAGTTTAAAA
AGAAATTGAGGTTGTTCAAAGTTTAAGCAATTCATTCTCTCTGAACACACATTGCTATTCCCATCCCACCCCCAA
TGCACAGGGCTGCAACACCACGACTTCTGCCCATTCTCTCCAGTGTGTGTAACAGGGTCACAAGAATTC

FIGURE 2051

MEGPLSVFGDRSTGETIRSQNVMAAASIANIVKSSLGPVGLDKMLVDDIGDVTITNDGATILKLLEVEHPAAKVL
CELADLQDKEVGDGTTSVVIIAAELLKNADELVKQKIHPTSVISGYRLACKEAVRYINENLIVNTDELGRDCLIN
AAKTSMSSKIIGINGDFFANMVVDAVLAIKYTDIRGQPRYPVNSVNILKAHGRSQMESMLISGYALNCVVGSQGM
PKRIVNAKIACLDFSLQKTKMKLGVQVVITDPEKLDQIRQRESDITKERIQKILATGANVILTTGGIDDMCLKYF
VEAGAMAVRRVLKRDLKRIAKASGATILSTLANLEGEETFEAAMLGQAEEVVQERICDDELILIKNTKARTSASI
ILRGANDFMCDEMERSLHDALCVVKRVLESKSVVPGGGAVEAALSIYLENYATSMGSREQLAIAEFARSLLVIPN
TLAVNAAQDSTDLVAKLRAFHNEAQVNPERKNLKWIGLDLSNGKPRDNKQAGVFEPTIVKVKSLKFATEAAITIL
RIDDLIKLHPEILRIKHGSYEDAVHSGALND

FIGURE 2052

GCTTTCTTTCCGTCGCAGAGAGCATCGGCCGGCGACCGTTCCGGCGGCCATTGCGAAAACTTCCCCACGGCTACT
GCGTCCACGTGGCGGTGGCGTGGGGACTCCCTGAAAGCAGAGCGGCAGGGCGCCCGGAAGTCGTGAGTCGAGTCT
TCCCGGGCTAATCC**ATG**CCGGGTTGGAGGCTGCTGACGCAGGTCGGCGCCCAGGTGCTGGGTCGACTCGGGGACG
GCCTGGGTGCTGCCCTGGGCCCGGGGAACAGAACACACATCTGGCTTTTTGTTAGAGGTCTTCATGGAAAGAGTG
GTACATGGTGGGATGAGCATCTTTCTGAAGAAAATGTCCCATTCATTAAGCAGTTGGTCTCTGATGAAGATAAAG
CCCAATTAGCAAGTAAACTGTGTCCTCTGAAAGATGAACCATGGCCTATACATCCTTGGGAACCAGGTTCCTTTA
GAGTTGGTCTTATTGCCTTGAAGCTGGGCATGATGCCTTTATGGACCAAGGATGGTCAAAAGCATGTGGTCACAT
TACTTCAGGTACAAGACTGTCATGTCTTAAAATATACGTCAAAGGAAAACTGTAATGGAAAAATGGCAACCCTGT
CTGTAGGAGGAAAAACTGTATCACGTTTTCGTAAAGCTACATCCATATTGGAATTTTACCGGGAACTTGGATTGC
CGCCGAAACAGACAGTTAAAATCTTTAATATAACAGATAATGCTGCAATTAAACCAGGCACTCCTCTTTATGCTG
CTCACTTTCGTCCAGGACAGTATGTGGATGTCACAGCCAAAACTATTGGTAAAGGTTTTCAAGGTGTCATGAAAA
GATGGGGATTTAAAGGCCAGCCTGCTACGCATGGTCAAACGAAAACCCACAGGAGACCTGGAGCTGTTGCAACTG
GTGATATTGGCAGAGTCTGGCCTGGAACTAAAATGCCTGGAAAAATGGGAAACATATACAGGACAGAATATGGAC
TGAAAGTGTGGAGAATAAACACAAAGCACAACATAATCTATGTAAATGGCTCTGTACCTGGACATAAAAATTGCT
TAGTAAAGGTCAAAGATTCTAAACTGCCTGCATATAAGGATCTCGGTAAAAATCTACCATTCCCTACATATTTTC
CTGATGGAGATGAAGAGGAACTGCCAGAAGATTTGTATGATGAAAACGTGTGTCAGCCCGGTGCGCCTTCTATTA
CATTTGCC**TAA**CATCTTTGGACGTGGCAGAACCTTACATATTCTGTGAGCTTCGATGAGCCAGAGTGATATCATA
ACCACCAGAAATCATACTCTCCTTTCTTAGTCACAACAAAATCACACATGTCATCTTTGTCAAGGGCATAAATAT
ATCATTCATACCCCCATTAAATTTTGTTAGAAAAATTACCACATTAAATATATGAGTTAAGTAGATTGGATTTGC
TGAAATTGGTGTTGGGCATATTAGCAAAATATTCTTAATTTGTGGACTCGATTCTTTTTTACTACATATTTCCCA
AGTTATCTTAAGATGTCTGTAAATTTAACTTTTATTAAAGTTTTGTCAATCTTTGTGAAATAGTGGTTGTGGAAC
AGTAGAAAACCATATGGGGACTATAGTGCAACCTATTTGGGTAAAGAAACCATTTGCTAAAATGGAGAAAGTAAA
TAGATTTTTATTTAAATTACAGAAACATGTTAAAGGCCGGACAAAGGAAAGACAATAAAATCATAAATTATCGGT
CCTGTTTAAAAAAAAAAAAAAAAAA

FIGURE 2053

MPGWRLLTQVGAQVLGRLGDGLGAALGPGNRTHIWLFVRGLHGKSGTWWDEHLSEENVPFIKQLVSDEDKAQLAS
KLCPLKDEPWPIHPWEPGSFRVGLIALKLGMMPLWTKDGQKHVVTLLQVQDCHVLKYTSKENCNGKMATLSVGGK
TVSRFRKATSILEFYRELGLPPKQTVKIFNITDNAAIKPGTPLYAAHFRPGQYVDVTAKTIGKGFQGVMKRWGFK
GQPATHGQTKTHRRPGAVATGDIGRVWPGTKMPGKMGNIYRTEYGLKVWRINTKHNIIYVNGSVPGHKNCLVKVK
DSKLPAYKDLGKNLPFPTYFPDGDEEELPEDLYDENVCQPGAPSITFA

FIGURE 2054

GACGTTTCGCGCCAATTTCGGTTGGCCGGCCACAGTCCACCGCGCGGAGATTCTCAGCTTCCCCAGGAGCAAGAC
CTCTGAGCCCGCCAAGCGCGGCCGCACGGCCCTCGGCAGCG**ATG**GCACTGAAGGACTACGCGCTAGAGAAGGAAA
AGGTTAAGAAGTTCTTACAAGAGTTCTACCAGGATGATGAACTCGGGAAGAAGCAGTTCAAGTATGGGAACCAGT
TGGTTCGGCTGGCTCATCGGGAACAGGTGGCTCTGTATGTGGACCTGGACGACGTAGCCGAGGATGACCCCGAGT
TGGTGGACTCAATTTGTGAGAATGCCAGGCGCTACGCGAAGCTCTTTGCTGATGCCGTACAAGAGCTGCTGCCTC
AGTACAAGGAGAGGGAAGTGGTAAATAAAGATGTCCTGGACGTTTACATTGAGCATCGGCTAATGATGGAGCAGC
GGAGTCGGGACCCTGGGATGGTCCGAAGCCCCCAGAACCAGTACCCTGCTGAACTCATGCGCAGATTTGAGCTGT
ATTTTCAAGGCCCTAGCAGCAGCAAGCCTCGTGTGATCCGGGAAGTGCGGGCTGACTCTGTGGGGAAGTTGGTAA
CTGTGCGTGGAATCGTCACTCGTGTCTCTGAAGTCAAACCCAAGATGGTGGTGGCCACTTACACTTGTGACCAGT
GTGGGGCAGAGACCTACCAGCCGATCCAGTCTCCCACTTTCATGCCTCTGATCATGTGCCCAAGCCAGGAGTGCC
AAACCAACCGCTCAGGAGGGCGGCTGTATCTGCAGACACGGGGCTCCAGATTCATCAAATTCCAGGAGATGAAGA
TGCAAGAACATAGTGATCAGGTGCCTGTGGGAAATATCCCTCGTAGTATCACGGTGCTGGTAGAAGGAGAGAACA
CAAGGATTGCCCAGCCTGGAGACCACGTCAGCGTCACTGGTATTTTCTTGCCAATCCTGCGCACTGGGTTCCGAC
AGGTGGTACAGGGTTTACTCTCAGAAACCTACCTGGAAGCCCATCGGATTGTGAAGATGAACAAGAGTGAGGATG
ATGAGTCTGGGGCTGGAGAGCTCACCAGGGAGGAGCTGAGGCAAATTGCAGAGGAGGATTTCTACGAAAAGCTGG
CAGCTTCAATCGCCCCAGAAATATACGGGCATGAAGATGTGAAGAAGGCACTGCTGCTCCTGCTAGTCGGGGGTG
TGGACCAGTCTCCTCGAGGCATGAAAATCCGGGGCAACATCAACATCTGTCTGATGGGGGATCCTGGTGTGGCCA
AGTCTCAGCTCCTGTCATACATTGATCGACTGGCGCCTCGCAGCCAGTACACAACAGGCCGGGGCTCCTCAGGAG
TGGGGCTTACGGCAGCTGTGCTGAGAGACTCCGTGAGTGGAGAACTGACCTTAGAGGGTGGGGCCCTGGTGCTGG
CTGACCAGGGTGTGTGCTGCATTGATGAGTTCGACAAGATGGCTGAGGCCGACCGCACAGCCATCCACGAGGTCA
TGGAGCAGCAGACCATCTCCATTGCCAAGGCCGGCATTCTCACCACACTCAATGCCCGCTGCTCCATCCTGGCTG
CCGCCAACCCTGCCTACGGGCGCTACAACCCTCGCCGCAGCCTGGAGCAGAACATACAGCTACCTGCTGCACTGC
TCTCCCGGTTTGACCTCCTCTGGCTGATTCAGGACCGGCCCGACCGAGACAATGACCTACGGTTGGCCCAGCACA
TCACCTATGTGCACCAGCACAGCCGGCAGCCCCCCTCCCAGTTTGAACCTCTGGACATGAAGCTCATGAGGCGTT
ACATAGCCATGTGCCGCGAGAAGCAGCCCATGGTGCCAGAGTCTCTGGCTGACTACATCACAGCAGCATACGTGG
AGATGAGGCGAGAGGCTTGGGCTAGTAAGGATGCCACCTATACTTCTGCCCGGACCCTGCTGGCTATCCTGCGCC
TTTCCACTGCTCTGGCACGTCTGAGAATGGTGGATGTGGTGGAGAAAGAAGATGTGAATGAAGCCATCAGGCTAA
TGGAGATGTCAAAGGACTCTCTTCTAGGAGACAAGGGGCAGACAGCTAGGACTCAGAGACCAGCAGATGTGATAT
TTGCCACCGTCCGTGAACTGGTCTCAGGGGGCCGAAGTGTCCGGTTCTCTGAGGCAGAGCAGCGCTGTGTATCTC
GTGGCTTCACACCCGCCCAGTTCCAGGCGGCTCTGGATGAATATGAGGAGCTCAATGTCTGGCAGGTCAATGCTT
CCCGGACACGGATCACTTTTGTC**TGA**TTCCAGCCTGCTTGCAACCCTGGGGTCCTCTTGTTCCCTGCTGGCCTGC
CCCTTGGGAAGGGGCAGTGATGCCTTTGAGGGGAAGGAGGAGCCCCTCTTTCTCCCATGCTGCACTTACTCCTTT
TGCTAATAAAAGTGTTTGTAGATTGTC

FIGURE 2055

MALKDYALEKEKVKKFLQEFYQDDELGKKQFKYGNQLVRLAHREQVALYVDLDDVAEDDPELVDSICENARRYAK
LFADAVQELLPQYKEREVVNKDVLDVYIEHRLMMEQRSRDPGMVRSPQNQYPAELMRRFELYFQGPSSSKPRVIR
EVRADSVGKLVTVRGIVTRVSEVKPKMVVATYTCDQCGAETYQPIQSPTFMPLIMCPSQECQTNRSGGRLYLQTR
GSRFIKFQEMKMQEHSDQVPVGNIPRSITVLVEGENTRIAQPGDHVSVTGIFLPILRTGFRQVVQGLLSETYLEA
HRIVKMNKSEDDESGAGELTREELRQIAEEDFYEKLAASIAPEIYGHEDVKKALLLLLVGGVDQSPRGMKIRGNI
NICLMGDPGVAKSQLLSYIDRLAPRSQYTTGRGSSGVGLTAAVLRDSVSGELTLEGGALVLADQGVCCIDEFDKM
AEADRTAIHEVMEQQTISIAKAGILTTLNARCSILAAANPAYGRYNPRRSLEQNIQLPAALLSRFDLLWLIQDRP
DRDNDLRLAQHITYVHQHSRQPPSQFEPLDMKLMRRYIAMCREKQPMVPESLADYITAAYVEMRREAWASKDATY
TSARTLLAILRLSTALARLRMVDVVEKEDVNEAIRLMEMSKDSLLGDKGQTARTQRPADVIFATVRELVSGGRSV
RFSEAEQRCVSRGFTPAQFQAALDEYEELNVWQVNASRTRITFV

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FIGURE 2056

CTTTCTGCCCACACTAGACATGGCGCTTGCCAGCGTGTTGGAGAGACCGCTACCGGTGAACCAGCGCGGGTTTTT
CGGACTTGGGGGTCGTGCAGATCTGCTGGATCTAGGTCCAGGGAGTCTCAGTGATGGTCTGAGCCTGGCCGCGCC
AGGCTGGGGTGTCCCAGAAGAGCCAGGAATCGAAATGCTTCATGGAACAACCACCCTGGCCTTCAAGTTCCGCCA
TGGAGTCATAGTTGCAGCTGACTCCAGGGCTACAGCGGGTGCTTACATTGCCTCCCAGACGGTGAAGAAGGTGAT
AGAGATCAACCCATACCTGCTAGGCACCATGGCTGGGGGCGCAGCGGATTGCAGCTTCTGGGAACGGCTGTTGGC
TCGGCAATGTCGAATCTATGAGCTTCGAAATAAGGAACGCATCTCTGTAGCAGCTGCCTCCAAACTGCTTGCCAA
CATGGTGTATCAGTACAAAGGCATGGGGCTGTCCATGGGCACCATGATCTGTGGCTGGGATAAGAGAGGCCCTGG
CCTCTACTACGTGGACAGTGAAGGGAACCGGATTTCAGGGGCCACCTTCTCTGTAGGTTCTGGCTCTGTGTATGC
ATATGGGGTCATGGATCGGGGCTATTCCTATGACCTGGAAGTGGAGCAGGCCTATGATCTGGCCCGTCGAGCCAT
CTACCAAGCCACCTACAGAGATGCCTACTCAGGAGGTGCAGTCAACCTCTACCACGTGCGGGAGGATGGCTGGAT
CCGAGTCTCCAGTGACAATGTGGCTGATCTACATGAGAAGTATAGTGGCTCTACCCCCTGAAAGAGGGTGGATGC
AGCTGCTTGTGTTTCTTGGGGTGACTGTCATTGGTAATACGGACACAGTGACCCATCCTCCATCCTATTTATAGT
GGAAGGGCCTTCAATTGTATCAGTACTTTTTTTTAAGCTCTGGCACATTGACCTCTATGTGTTACCAGTCATTAA
TGAGCTGCTGCAGAGGTGACTATTTGTTTTACTTTCTTGGATGTTAAACATTACACTACTCACTACTCAATCTCA

FIGURE 2057

MALASVLERPLPVNQRGFFGLGGRADLLDLGPGSLSDGLSLAAPGWGVPEEPGIEMLHGTTTLAFKFRHGVIVAA
DSRATAGAYIASQTVKKVIEINPYLLGTMAGGAADCSFWERLLARQCRIYELRNKERISVAAASKLLANMVYQYK
GMGLSMGTMICGWDKRGPGLYYVDSEGNRISGATFSVGSGSVYAYGVMDRGYSYDLEVEQAYDLARRAIYQATYR
DAYSGGAVNLYHVREDGWIRVSSDNVADLHEKYSGSTP

FIGURE 2058

GAATATGCTTTTAAGGCTATTAACCAGGGTGGCCTTACATCAGTAGCTGTCAGAGGGAAAGACTGTGCAGTAATT
GTCACACAGAAGAAAGTACCTGATTGTTTGTTGGATTCTTCTACAGTGACTCACTTATTCAAGATAACTGAAAAC
ATTGGTTGTGTGATGACCGGAATGACAGCTGACAGCAGATCCCAGGTACAGAGGGCACGCTATGAGGCAGCTAAC
TGGAAATACAAGTATGGCTATGAGATTCCTGTGGACATGCTGTGTAAAAGAATTGCCGATATTTCTCAGGTCTAC
ACACAGAATGCTGAAATGAGGCCTCTTGGTTGTTGTATGATTTTAATTGGTATAGATGAAGAGCAAGGCCCTCAG
GTATATAAGTGTGATCCTGCAGGTTACTACTGTGGGTTTAAAGCCACTGCAGCGGGAGTTAAACAAACTGAGTCA
ACCAGCTTCCTTGAAAAAAAAGTGAAGAAGAAATTTGATTGGACATTTGAACAGACAGTGGAAACTGCAATTACA
TGCCTGTCTACTGTTCTATCAATTGATTTCAAACCTTCAGAAATAGAAGTTGGAGTAGTGACAGTTGAAAATCCT
AAATTCAGGATTCTTACAGAAGCAGAGATTGATGCTCACCTTGTTGCTCTAGCAGAGAGAGACTAAACATTGTCG
TTAGTTTACCAGATCCGTGATGCCACTTACCTGTGTGTTTGGTAACAACAAACCAACATCATGGAGGTCCTGGAT
TGAAAAGGAGCTCTCCACTCCTCTACACGAGTGTTAGGACTCTATATAATAAACATGTTGAAAAAAAAAAAA

FIGURE 2059A

AGGGCCCCAGGTCTGTGGGGCATCCTGTCTTCCTTTATGTGGGGTAACTCTCCGTTCCGTTCCCCAAGCCTTCAC
AGAGTGACACCTTCACAGATAATGGGGTGGGGGGCCTGGGGTCCTCTGGCAGAGACATCTGGGGAGAAAGCCAGG
GACCTATCCCTGCTGAAGCAGGTACAGGCCATCCTCTGGATTTGTGGGCCTGAGAGTGTGTGTGGGTGTGGGTGC
GCGCGTGCGCGCGCGTGCTTTTGAGAAGGCATATGCTGGGTGTGTCTGTCTGTGCCTATATCTTTGTTTGGGTCT
CCCATACTGCGTATAGATGAATGGGTCAGGATATCTGGAACAAAATATGGAGGTGAAGGGTGAGATCGGGAAACA
AAGGGTATGGCCCCCTAGTTCCCAAAGGGAGCAGGGAGATGGGAATAGAATTGAAGGTAGGTTTTAGGCTACTTG
GGAGGAGGAATATTTAGGTAATTGTGGAGACTTTCTCCTGTGTG**ATG**AAGGCGGCAGACACTGTGATCCTGTGGG
CAAGAAGTAAAAATGACCAGCTGAGGATTTCTTTTCCTCCAGGACTGTGTTGGGGTGACAGGATGCCTGATAAGG
ATGACATTCGGCTGCTGCCGTCAGCATTGGGTGTGAAGAAGAGAAAACGAGGACCCAAGAAGCAGAAGGAGAACA
AGCCAGGAAAACCCCGAAAACGCAAGAAGCGTGACAGTGAGGAGGAATTTGGTTCTGAGCGAGATGAGTACCGGG
AGAAGTCAGAGAGTGGGGGCAGTGAATATGGAACCGGACCGGGTCGGAAACGAAGAAGGAAGCACCGAGAAAAAA
AGGAGAAGAAGACAAAGCGGCGGAAAAAGGGGGAGGGAGATGGGGGGCAAAAGCAAGTGGAACAGAAGTCATCAG
CAACTCTGCTTCTGACCTGGGGCCTGGAGGATGTGGAGCATGTGTTCTCTGAGGAGGATTACCACACGCTCACCA
ACTACAAAGCCTTCAGCCAGTTCATGAGGCCCCTAATTGCTAAGAAGAATCCTAAGATCCCAATGTCTAAGATGA
TGACCATCCTTGGGGCCAAATGGAGAGAGTTCAGTGCCAACAACCCCTTCAAGGGGTCAGCAGCTGCTGTGGCGG
CAGGCAGCGGCAGCAGCAGCAGCTGTAGCTGAGCAGGTGTCAGCTGCTGTCTCGTCGGCCACCCCCATAGCA
CCCTCCGGACCCCCCGCCCTTCCACCACCCCCTGCTGCTGATATCCAGCCCCCACCCATCCGAAGAGCCAAAACC
AAAGAGGGCAAAGGTCCAGGCCATAAGAGGCGGAGTAAGAGCCCCCGAGTGCCTGATGGACGCAAGAAGCTTCGG
GGAAAGAAAATGGCACCACTCAAAATAAAACTAGGGCTTCTGGGTGGCAAGAGGAAGAAAGGAGGCTCGTATGTT
TTTCAGAGCGACGAAGGTCCTGAACCAGAGGCTGAGGAATCAGACCTGGACAGTGGCAGTGTCCACAGTGCCTCA
GGCCGGCCTGATGGCCCTGTCCGCACCAAGAAACTAAAGAGAGGCCGGCCAGGAAGGAAGAAGAAGAAGGTCCTG
GGCTGTCCTGCAGTGGCCGGGGAGGAGGAGGTTGATGGCTACGAGACGGATCACCAGGATTACTGTGAGGTGTGC
CAGCAGGGTGGGGAAATTATTCTGTGTGACACCTGCCCTCGTGCCTACCACCTCGTCTGCCTTGATCCTGAGCTT
GACCGGGCTCCAGAGGGCAAATGGAGCTGCCCTCACTGTGAGAAGGAGGGGGTCCAGTGGGAGGCCAAGGAGGAA
GAAGAAGAATACGAAGAGGAGGGAGAGGAAGAACGGGAGAAGGAGGAGGAGGATGATCACATGGAGTACTGCCGC
GTATGCAAGGACGGCGGGGAGCTCCTGTGCTGTGACGCGTGCATCTCCTCCTACCACATTCATTGTCTAAACCCT
CCCCTGCCTGACATTCCCAATGGTGAATGGCTGTGTCCCCGATGCACATGCCCCGTGCTGAAGGGTCGAGTGCAG
AAGATCCTACATTGGCGGTGGGGGGAGCCACCTGTAGCAGTGCCAGCCCCTCAACAGGCAGATGGAAATCCAGAT
GTCCCACCCCCCCGTCCTCTTCAAGGCAGATCAGAGCGAGAGTTCTTTGTCAAGTGGGTAGGACTATCCTACTGG
CACTGCTCCTGGGCCAAGGAGCTTCAGCTGGAAATCTTCCATTTGGTTATGTATCGAAACTACCAGCGGAAGAAT
GACATGGATGAGCCCCCACCCCTGGACTATGGCTCCGGCGAGGATGATGGGAAGAGCGACAAGCGTAAAGTGAAA
GACCCGCACTATGCTGAGATGGAGGAGAAGTACTATCGTTTTGGCATCAAGCCAGAGTGGATGACCGTCCACCGC
ATCATCAACCACAGTGTGGATAAAAAGGGGAATTACCACTATCTAGTAAAATGGAGGGACTTACCATATGACCAG
TCCACGTGGGAGGAAGATGAAATGAATATCCCTGAATACGAAGAACATAAGCAAAGCTACTGGAGACACCGAGAA
CTAATTATGGGGGAAGACCCTGCCCAGCCCCGCAAGTATAAGAAGAAGAAGAAGGAGCTACAGGGTGATGGGCCT
CCCAGTTCTCCCACTAATGATCCTACCGTGAAATATGAGACTCAGCCACGGTTTATCACAGCCACTGGAGGCACC
CTGCACATGTATCAGTTGGAAGGGCTGAACTGGCTACGCTTCTCCTGGGCCCAGGGCACTGACACCATTCTCGCT
GATGAGATGGGGCTAGGCAAGACCATACAAACCATCGTCTTCCTCTACTCACTCTACAAGGAGGGCCACACAAAA
GGTCCCTTCCTGGTGAGTGCCCCACTCTCTACCATCATTAACTGGGAGCGGGAGTTCCAGATGTGGGCACCCAAA
TTCTATGTGGTGACATACACGGGTGACAAGGACAGCCGGGCCATCATTCGTGAGAATGAATTCTCCTTTGAGGAC
AATGCCATCAAAGGGGGCAAGAAAGCTTTTAAGATGAAGAGGGAGGCACAGGTGAAGTTCCATGTTCTCCTGACA
TCGTATGAGCTGATCACCATTGATCAGGCAGCACTTGGTTCCATCCGCTGGGCCTGTCTTGTGGTAGATGAGGCC
CATCGACTCAAGAACAACCAGTCCAAGTTTTTCAGGGTTCTCAATGGTTACAAGATAGATCATAAGTTGCTGCTG
ACAGGAACCCCATTGCAGAATAATCTGGAGGAGCTCTTCCATCTCCTGAACTTCCTCACCCCAGAGAGATTTAAC
AACTTGGAGGGCTTCCTGGAGGAGTTTGCTGACATATCCAAAGAGGACCAGATCAAGAAACTGCATGATTTGCTG
GGGCCACACATGCTGCGGAGACTCAAGGCAGATGTCTTTAAGAACATGCCAGCCAAGACAGAGCTCATCGTTCGG
GTGGAGCTAAGCCCCATGCAGAAGAAATACTACAAATACATCCTGACTCGAAATTTTGAGGCCTTGAATTCACGA
GGTGGTGGGAACCAGGTGTCGCTGCTTAATATCATGATGGATCTTAAGAAGTGCTGCAACCATCCATACCTTTTT

FIGURE 2059B

CCCGTGGCTGCTATGGAGTCCCCCAAACTCCCCAGTGGGGCTTATGAGGGTGGGGCACTTATTAAGTCGTCTGGG
AAGCTCATGCTGCTCCAGAAGATGCTGCGAAAGCTGAAGGAGCAAGGACACCGAGTGCTCATCTTCTCGCAGATG
ACCAAAATGTTAGACTTGCTTGAGGACTTCTTAGACTATGAAGGCTACAAGTATGAGCGCATCGATGGTGGTATC
ACGGGTGCCCTGAGGCAGGAGGCCATCGATCGGTTTAATGCTCCTGGGGCCCAACAATTCTGCTTCCTCCTGTCC
ACCCGAGCTGGGGGCCTGGGCATCAATCTGGCCACTGCTGACACTGTCATCATCTTTGATTCTGACTGGAACCCC
CATAATGACATCCAGGCCTTTAGCCGGGCTCATCGGATTGGCCAGGCCAACAAAGTGATGATTTACCGGTTTGTG
ACTCGCGCGTCAGTGGAAGAGCGAATCACACAAGTGGCCAAGAGAAAGATGATGCTGACACACCTGGTTGTGCGG
CCTGGGCTGGGCTCCAAGGCAGGCTCCATGTCCAAGCAGGAGCTTGACGACATTCTCAAATTTGGCACTGAAGAG
CTATTCAAGGATGAAAACGAGGGGGAGAACAAGGAGGAGGACAGCAGTGTGATTCATTATGACAATGAGGCCATC
GCTCGGCTGTTGGACCGGAACCAGGATGCAACTGAGGACACTGACGTGCAGAACATGAATGAGTATCTCAGCTCC
TTCAAGGTGGCACAGTACGTCGTGCGGGAAGAAGACAAGATTGAGGAAATTGAGCGAGAGATCATCAAGCAGGAG
GAGAATGTGGACCCTGACTACTGGGAGAAGCTGCTGAGGCATCACTATGAGCAACAGCAGGAAGACCTAGCCCGG
AATCTAGGCAAGGGCAAGCGGGTTCGCAAGCAAGTTAACTACAATGATGCTGCTCAGGAAGACCAAGACAACCAG
TCAGAGTACTCGGTGGGTTCAGAGGAGGAGGATGAAGACTTCGATGAACGTCCTGAAGGGCGTAGACAGTCAAAG
AGGCAGCTCCGGAATGAGAAAGATAAGCCACTGCCTCCACTGCTGGCCCGAGTCGGGGGCAACATTGAGGTGCTG
GGCTTCAACACCCGTCAGCGGAAGGCTTTCCTCAATGCTGTGATGCGCTGGGGGATGCCACCACAGGATGCCTTC
ACCACACAGTGGCTGGTGCGGGACCTGAGGGGCAAGACTGAGAAGGAGTTTAAGGCCTATGTGTCTTTGTTCATG
CGCCATCTGTGTGAGCCTGGGGCAGACGGCTCTGAAACCTTTGCCGATGGGGTCCCTCGGGAGGGACTGAGTCGC
CAGCAGGTGTTGACCCGCATTGGAGTCATGTCTCTCGTCAAAAAGAAGGTGCAGGAGTTTGAGCACATCAATGGG
CGTTGGTCAATGCCGGAACTGATGCCTGACCCCAGCGCCGATTCTAAGCGCTCCTCCAGAGCCTCCTCTCCTACC
AAAACGTCTCCCACCACTCCTGAGGCTTCTGCTACCAACAGTCCCTGCACCTCTAAACCTGCTACTCCAGCTCCA
AGTGAGAAAGGAGAAGGCATAAGGACACCTCTTGAGAAGGAGGAAGCTGAAAACCAGGAGGAAAAGCCAGAGAAG
AACAGCAGAATTGGGGAGAAGATGGAGACAGAGGCTGATGCCCCCAGCCCAGCCCCATCACTTGGGGAGCGGCTG
GAGCCAAGGAAGATTCCTCTAGAGGATGAGGTGCCAGGGGTGCCTGGAGAGATGGAGCCTGAACCTGGGTACCGT
GGGGACAGAGAGAAGTCAGCCACAGAGTCGACGCCAGGAGAAAGGGGGGAGGAGAAGCCGTTGGATGGACAGGAA
CACAGGGAGAGGCCGGAGGGGGAAACAGGGGATTTGGGCAAGAGAGAAGATGTAAAAGGTGACCGGGAGCTTCGA
CCAGGGCCTCGAGATGAGCCACGGTCCAATGGGCGACGAGAGGAAAAGACAGAGAAGCCCCGGTTCATGTTCAAT
ATCGCCGATGGTGGCTTCACAGAGCTTCACACACTGTGGCAGAATGAGGAACGGGCAGCTATTTCCTCGGGGAAA
CTCAATGAGATCTGGCACAGAAGACATGACTATTGGCTTCTGGCTGGGATTGTCCTCCATGGCTATGCACGGTGG
CAGGACATCCAGAATGATGCTCAATTTGCCATTATCAACGAGCCATTTAAAACTGAAGCCAATAAGGGGAACTTT
CTGGAGATGAAAAATAAGTTCCTGGCCCGGAGGTTCAAGCTCCTGGAGCAGGCGCTGGTGATTGAGGAGCAGCTG
CGGCGGGCGGCCTACCTGAACCTGTCGCAGGAGCCGGCGCACCCCGCCATGGCCCTCCACGCCCGCTTCGCCGAG
GCCGAGTGCCTGGCCGAGAGCCACCAGCACCTCTCCAAGGAGTCGCTGGCGGGGAACAAGCCGGCCAACGCCGTC
CTGCACAAGGTTCTGAACCAGCTGGAGGAGTTGCTGAGCGACATGAAGGCGGACGTGACCCGCCTGCCAGCCACG
CTGTCCCGAATACCCCCCATCGCAGCCCGCCTTCAGATGTCCGAGCGCAGCATCCTCAGCCGGCTGGCCAGCAAG
GGCACGGAGCCTCACCCCACACCGGCCTACCCGCCGGGTCCCTACGCTACACCTCCGGGGTACGGGGCGGCCTTC
AGCGCCGCACCCGTAGGGGCCCTGGCCGCCGCAGGCGCCAATTACAGCCAGATGCCTGCAGGGTCCTTCATCACA
GCCGCCACCAACGGCCCTCCAGTGCTTGTGAAGAAGGAGAAGGAAATGGTGGGGGCATTGGTGTCAGACGGGCTG
GATCGGAAGGAGCCCCGAGCCGGGGAGGTGATCTGTATAGACGACTGACTGGATCCCAGGCCTGCCCTTCACCCA
GGCCCCGTCCCCGAGGCCGACCCCCAGCTCAAGCGCTGGGGCCTGCTGCCAGCCCTCCACCTTCCCCACCCCTTG
GGCCATCACTGGGCTAGGAACCCCTTTGCCCCTCTCTGCAGCTCCTCTCTTCAAGAAGGGCCCTTTGTCTTTCTC
CACTCCCACACACCTTTCCCACCAAGCCTTGAAGACTGTGCTGGTGAGAAGAAGTCTGGGTGGGAGATGGCTGGC
AGGGTCTTCCAAGTACCTTCCTCCCACACTGCCAAGTATACACAACTTCCCAGTAAATGGTTGTGGGGAGGAAAG
AGGTGGAGCCTCCCCAGCCGTTTCCCTGCAGAATCAGCTCTGTCTCATGTGGAAGTGGAGAATCAGCCTTGCCTG
GCCTTTAGGAACTTTTGTGGGGAAGAGAGCTTTGAAGAGAGGAGGGGGACTTTAGAGAGGGATGAAAATGAGCCC
TGGGAGGGAGGAAGGGACGAGGAGGGGTGGCTGCATGTTACCGTCCCCTACCTCTCCCCACGTGGAGGGTGGAGC
AGTTATGAGGGAGGAAGTCAACTGCTGTTCAGCCTCAGAATAAAGGTGCCGTTCACTGGCTCAGTTACCTCCTGT
GTACCGGCATCTTGTGTTGGGAATGTTCCCCCCTCCCTAGGGACCAAGGACCACCCCTACAAAAAGAGTAATGGT

FIGURE 2059C

TGGGTGATACTCCCTCAAGCCAAAGAGGAGCTCCCCAACCTGTTCTAGGGACCCAGGTAACCTAGAAGGGTGGGA
GAGAATACAATGGGCCAGATGTGGTGGAAGCCCAGCTCTGGGGCTCAGGTTCCTGGAAGACTTCTACTACCCTCC
CTCCTCAAGGCCTGGATACAGACTAAATTTGTATAAGTCAGGCAGGGGACCTAGTCAGGGTCTTGGGAGCTACCT
TGTCGTTGGGACCAGAGCAAAATAGTGGAGGGCAGGCTAGGGAAATGTGGGCACATCCCCCCTCCCAGGAGGGGC
CGGGGAGAGTGGCAGTTTGCATGGCGAACCCCCCACTTCCTCTTTGCTGCCCCTTCACTTTCTTGCTGCCCCTTT
CCCAGTCTCTCTTCACACCCACTCCTGGTCTGTCCTGATCCCCTCTTCTGTATCAGGTTTATTGGTTGTACATAT
AAATTATACTTTCCTTTCAAAAAAAATCTATGTCGGGTGCGGAGAAAGAGGTAATGAAATG

FIGURE 2060

MKAADTVILWARSKNDQLRISFPPGLCWGDRMPDKDDIRLLPSALGVKKRKRGPKKQKENKPGKPRKRKKRDSEE
EFGSERDEYREKSESGGSEYGTGPGRKRRRKHREKKEKKTKRRKKGEGDGGQKQVEQKSSATLLLTWGLEDVEHV
FSEEDYHTLTNYKAFSQFMRPLIAKKNPKIPMSKMMTPSLGPNGESSVPTTPSRGQQLLWRQAAAAAAAAVAEQV
SAAVSSATPIAPSGPPALPPPPAADIQPPPIRRAKTKEGKGPGHKRRSKSPRVPDGRKKLRGKKMAPLKIKLGLL
GGKRKKGGSYVFQSDEGPEPEAEESDLDSGSVHSASGRPDGPVRTKKLKRGRPGRKKKKVLGCPAVAGEEEVDGY
ETDHQDYCEVCQQGGEIILCDTCPRAYHLVCLDPELDRAPEGKWSCPHCEKEGVQWEAKEEEEEYEEEGEEEREK
EEEDDHMEYCRVCKDGGELLCCDACISSYHIHCLNPPLPDIPNGEWLCPRCTCPVLKGRVQKILHWRWGEPPVAV
PAPQQADGNPDVPPPRPLQGRSEREFFVKWVGLSYWHCSWAKELQLEIFHLVMYRNYQRKNDMDEPPPLDYGSGE
DDGKSDKRKVKDPHYAEMEEKYYRFGIKPEWMTVHRIINHSVDKKGNYHYLVKWRDLPYDQSTWEEDEMNIPEYE
EHKQSYWRHRELIMGEDPAQPRKYKKKKKELQGDGPPSSPTNDPTVKYETQPRFITATGGTLHMYQLEGLNWLRF
SWAQGTDTILADEMGLGKTIQTIVFLYSLYKEGHTKGPFLVSAPLSTIINWEREFQMWAPKFYVVTYTGDKDSRA
IIRENEFSFEDNAIKGGKKAFKMKREAQVKFHVLLTSYELITIDQAALGSIRWACLVVDEAHRLKNNQSKFFRVL
NGYKIDHKLLLTGTPLQNNLEELFHLLNFLTPERFNNLEGFLEEFADISKEDQIKKLHDLLGPHMLRRLKADVFK
NMPAKTELIVRVELSPMQKKYYKYILTRNFEALNSRGGGNQVSLLNIMMDLKKCCNHPYLFPVAAMESPKLPSGA
YEGGALIKSSGKLMLLQKMLRKLKEQGHRVLIFSQMTKMLDLLEDFLDYEGYKYERIDGGITGALRQEAIDRFNA
PGAQQFCFLLSTRAGGLGINLATADTVIIFDSDWNPHNDIQAFSRAHRIGQANKVMIYRFVTRASVEERITQVAK
RKMMLTHLVVRPGLGSKAGSMSKQELDDILKFGTEELFKDENEGENKEEDSSVIHYDNEAIARLLDRNQDATEDT
DVQNMNEYLSSFKVAQYVVREEDKIEEIEREIIKQEENVDPDYWEKLLRHHYEQQQEDLARNLGKGKRVRKQVNY
NDAAQEDQDNQSEYSVGSEEEDEDFDERPEGRRQSKRQLRNEKDKPLPPLLARVGGNIEVLGFNTRQRKAFLNAV
MRWGMPPQDAFTTQWLVRDLRGKTEKEFKAYVSLFMRHLCEPGADGSETFADGVPREGLSRQQVLTRIGVMSLVK
KKVQEFEHINGRWSMPELMPDPSADSKRSSRASSPTKTSPTTPEASATNSPCTSKPATPAPSEKGEGIRTPLEKE
EAENQEEKPEKNSRIGEKMETEADAPSPAPSLGERLEPRKIPLEDEVPGVPGEMEPEPGYRGDREKSATESTPGE
RGEEKPLDGQEHRERPEGETGDLGKREDVKGDRELRPGPRDEPRSNGRREEKTEKPRFMFNIADGGFTELHTLWQ
NEERAAISSGKLNEIWHRRHDYWLLAGIVLHGYARWQDIQNDAQFAIINEPFKTEANKGNFLEMKNKFLARRFKL
LEQALVIEEQLRRAAYLNLSQEPAHPAMALHARFAEAECLAESHQHLSKESLAGNKPANAVLHKVLNQLEELLSD
MKADVTRLPATLSRIPPIAARLQMSERSILSRLASKGTEPHPTPAYPPGPYATPPGYGAAFSAAPVGALAAAGAN
YSQMPAGSFITAATNGPPVLVKKEKEMVGALVSDGLDRKEPRAGEVICIDD

FIGURE 2061A

ATATGGAGGTGAAGGGTGAGATCGGGAAACAAAGGGTATGGCCCCCTAGTTCCCAAAGGGAGCAGGGAGATGGGA
ATAGAATTGAAGGTAGGTTTTAGGCTACTTGGGAGGAGGAATATTTAGGTAATTGTGGAGACTTTCTCCTGTGTG
ATGAAGGCGGCAGACACTGTGATCCTGTGGGCAAGAAGTAAAAATGACCAGCTGAGGATTTCTTTTCCTCCAGGA
CTGTGTTGGGGTGACAGGATGCCTGATAAGGATGACATTCGGCTGCTGCCGTCAGCATTGGGTGTGAAGAAGAGA
AAACGAGGACCCAAGAAGCAGAAGGAGAACAAGCCAGGAAAACCCCGAAAACGCAAGAAGCGTGACAGTGAGGAG
GAATTTGGTTCTGAGCGAGATGAGTACCGGGAGAAGTCAGAGAGTGGGGGCAGTGAATATGGAACCGGACCGGGT
CGGAAACGAAGAAGGAAGCACCGAGAAAAAAAGGAGAAGAAGACAAAGCGGCGGAAAAAGGGGGAGGGAGATGGG
GGGCAAAAGCAAGTGGAACAGAAGTCATCAGCAACTCTGCTTCTGACCTGGGGCCTGGAGGATGTGGAGCATGTG
TTCTCTGAGGAGGATTACCACACGCTCACCAACTACAAAGCCTTCAGCCAGTTCATGAGGCCCCTAATTGCTAAG
AAGAATCCTAAGATCCCAATGTCTAAGATGATGACCATCCTTGGGGCCAAATGGAGAGAGTTCAGTGCCAACAAC
CCCTTCAAGGGGTCAGCAGCTGCTGTGGCGGCGGCAGCGGCAGCAGCAGCAGCTGTAGCTGAGCAGGTGTCA
GCTGCTGTCTCGTCGGCCACCCCCATAGCACCCTCCGGACCCCCCGCCCTTCCACCACCCCCTGCTGCTGATATC
CAGCCCCCACCCATCCGAAGAGCCAAAACCAAAGAGGGCAAAGGTCCAGGCCATAAGAGGCGGAGTAAGAGCCCC
CGAGTGCCTGATGGACGCAAGAAGCTTCGGGGAAAGAAAATGGCACCACTCAAAATAAAACTAGGGCTTCTGGGT
GGCAAGAGGAAGAAAGGAGGCTCGTATGTTTTTCAGAGCGACGAAGGTCCTGAACCAGAGGCTGAGGAATCAGAC
CTGGACAGTGGCAGTGTCCACAGTGCCTCAGGCCGGCCTGATGGCCCTGTCCGCACCAAGAAACTAAAGAGAGGC
CGGCCAGGAAGGAAGAAGAAGAAGGTCCTGGGCTGTCCTGCAGTGGCCGGGGAGGAGGAGGTTGATGGCTACGAG
ACGGATCACCAGGATTACTGTGAGGTGTGCCAGCAGGGTGGGGAAATTATTCTGTGTGACACCTGCCCTCGTGCC
TACCACCTCGTCTGCCTTGATCCTGAGCTTGACCGGGCTCCAGAGGGCAAATGGAGCTGCCCTCACTGTGAGAAG
GAGGGGGTCCAGTGGGAGGCCAAGGAGGAAGAAGAAGAATACGAAGAGGAGGGAGAGGAAGAAGGGGAGAAGGAG
GAGGAGGATGATCACATGGAGTACTGCCGCGTATGCAAGGACGGCGGGGAGCTCCTGTGCTGTGACGCGTGCATC
TCCTCCTACCACATTCATTGTCTAAACCCTCCCCTGCCTGACATTCCCAATGGTGAATGGCTGTGTCCCCGATGC
ACATGCCCCGTGCTGAAGGGTCGAGTGCAGAAGATCCTACATTGGCGGTGGGGGGAGCCACCTGTAGCAGTGCCA
GCCCCTCAACAGGCAGATGGAAATCCAGATGTCCCACCCCCCCGTCCTCTTCAAGGCAGATCAGAGCGAGAGTTC
TTTGTCAAGTGGGTAGGACTATCCTACTGGCACTGCTCCTGGGCCAAGGAGCTTCAGCTGGAAATCTTCCATTTG
GTTATGTATCGAAACTACCAGCGGAAGAATGACATGGATGAGCCCCCACCCCTGGACTATGGCTCCGGCGAGGAT
GATGGGAAGAGCGACAAGCGTAAAGTGAAAGACCCGCACTATGCTGAGATGGAGGAGAAGTACTATCGTTTTGGC
ATCAAGCCAGAGTGGATGACCGTCCACCGCATCATCAACCACAGTGTGGATAAAAAGGGGAATTACCACTATCTA
GTAAAATGGAGGGACTTACCATATGACCAGTCCACGTGGGAGGAAGATGAAATGAATATCCCTGAATACGAAGAA
CATAAGCAAAGCTACTGGAGACACCGAGAACTAATTATGGGGGAAGACCCTGCCCAGCCCCGCAAGTATAAGAAG
AAGAAGAAGGAGCTACAGGGTGATGGGCCTCCCAGTTCTCCCACTAATGATCCTACCGTGAAATATGAGACTCAG
CCACGGTTTATCACAGCCACTGGAGGCACCCTGCACATGTATCAGTTGGAAGGGCTGAACTGGCTACGCTTCTCC
TGGGCCCAGGGCACTGACACCATTCTAGCTGATGAGATGGGGCTAGGCAAGACCATACAAACCATCGTCTTCCTC
TACTCACTCTACAAGGAGGGCCACACAAAAGGTCCCTTCCTGGTGAGTGCCCCACTCTCTACCATCATTAACTGG
GAGCGGGAGTTCCAGATGTGGGCACCCAAATTCTATGTGGTGACATACACGGGTGACAAGGACAGCCGGGCCATC
ATTCGTGAGAATGAATTCTCCTTTGAGGACAATGCCATCAAAGGGGGCAAGAAAGCTTTTAAGATGAAGAGGGAG
GCACAGGTGAAGTTCCATGTTCTCCTGACATCGTATGAGCTGATCACCATTGATCAGGCAGCACTTGGTTCCATC
CGCTGGGCCTGTCTTGTGGTAGATGAGGCCCATCGACTCAAGAACAACCAGTCCAAGTTTTTCAGGGTTCTCAAT
GGTTACAAGATAGATCATAAGTTGCTGCTGACAGGAACCCCATTGCAGAATAATCTGGAGGAGCTCTTCCATCTC
CTGAACTTCCTCACCCCAGAGAGATTTAACAACTTGGAGGGCTTCCTGGAGGAGTTTGCTGACATATCCAAAGAG
GACCAGATCAAGAAACTGCATGATTTGCTGGGGCCACACATGCTGCGGAGACTCAAGGCAGATGTCTTTAAGAAC
ATGCCAGCCAAGACAGAGCTCATCGTTCGGGTGGAGCTAAGCCCCATGCAGAAGAAATACTACAAATACATCCTG
ACTCGAAATTTTGAGGCCTTGAATTCACGAGGTGGTGGGAACCAGGTGTCGCTGCTTAATATCATGATGGATCTT
AAGAAGTGCTGCAACCATCCATACCTTTTTCCCGTGGCTGCTATGGAGTCCCCCAAACTCCCCAGTGGGGCTTAT
GAGGGTGGGGCACTTATTAAGTCGTCTGGGAAGCTCATGCTGCTCCAGAAGATGCTGCGAAAGCTGAAGGAGCAA
GGACACCGAGTGCTCATCTTCTCGCAGATGACCAAAATGTTAGACTTGCTTGAGGACTTCTTAGACTATGAAGGC
TACAAGTATGAGCGCATCGATGGTGGTATCACGGGTGCCCTGAGGCAGGAGGCCATCGATCGGTTTAATGCTCCT
GGGGCCCAACAATTCTGCTTCCTCCTGTCCACCCGAGCTGGGGGCCTGGGCATCAATCTGGCCACTGCTGACACT

FIGURE 2061B

GTCATCATCTTTGATTCTGACTGGAACCCCCATAATGACATCCAGGCCTTTAGCCGGGCTCATCGGATTGGCCAG
GCCAACAAAGTGATGATTTACCGGTTTGTGACTCGCGCGTCAGTGGAAGAGCGAATCACACAAGTGGCCAAGAGA
AAGATGATGCTGACACACCTGGTTGTGCGGCCTGGGCTGGGCTCCAAGGCAGGCTCCATGTCCAAGCAGGAGCTT
GACGACATTCTCAAATTTGGCACTGAAGAGCTATTCAAGGATGAAAACGAGGGGGAGAACAAGGAGGAGGACAGC
AGTGTGATTCATTATGACAATGAGGCCATCGCTCGGCTGTTGGACCGGAACCAGGATGCAACTGAGGACACTGAC
GTGCAGAACATGAATGAGTATCTCAGCTCCTTCAAGGTGGCACAGTACGTCGTGCGGGAAGAAGACAAGATTGAG
GAAATTGAGCGAGAGATCATCAAGCAGGAGGAGAATGTGGACCCTGACTACTGGGAGAAGCTGCTGAGGCATCAC
TATGAGCAACAGCAGGAAGACCTAGCCCGGAATCTAGGCAAGGGCAAGCGGGTTCGCAAGCAAGTTAACTACAAT
GATGCTGCTCAGGAAGACCAAGACAACCAGTCAGAGTACTCGGTGGGTTCAGAGGAGGAGGATGAAGACTTCGAT
GAACGTCCTGAAGGGCGTAGACAGTCAAAGAGGCAGCTCCGGAATGAGAAAGATAAGCCACTGCCTCCACTGCTG
GCCCGAGTCGGGGGCAACATTGAGGTGCTGGGCTTCAACACCCGTCAGCGGAAGGCTTTCCTCAATGCTGTGATG
CGCTGGGGGATGCCACCACAGGATGCCTTCACCACACAGTGGCTGGTGCGGGACCTGAGGGGCAAGACTGAGAAG
GAGTTTAAGGCCTATGTGTCTTTGTTCATGCGCCATCTGTGTGAGCCTGGGGCAGACGGCTCTGAAACCTTTGCC
GATGGGGTCCCTCGGGAGGGACTGAGTCGCCAGCAGGTGTTGACCCGCATTGGAGTCATGTCTCTCGTCAAAAAG
AAGGTGCAGGAGTTTGAGCACATCAATGGGCGTTGGTCAATGCCGGAACTGATGCCTGACCCCAGCGCCGATTCT
AAGCGCTCCTCCAGAGCCTCCTCTCCTACCAAAACGTCTCCCACCACTCCTGAGGCTTCTGCTACCAACAGTCCC
TGCACCTCTAAACCTGCTACTCCAGCTCCAAGTGAGAAAGGAGAAGGCATAAGGACACCTCTTGAGAAGGAGGAA
GCTGAAAACCAGGAGGAAAAGCCAGAGAAGAACAGCAGAATTGGGGAGAAGATGGAGACAGAGGCTGATGCCCCC
AGCCCAGCCCCATCACTTGGGGAGCGGCTGGAGCCAAGGAAGATTCCTCTAGAGGATGAGGTGCCAGGGGTGCCT
GGAGAGATGGAGCCTGAACCTGGGTACCGTGGGGACAGAGAGAAGTCAGCCACAGAGTCGACGCCAGGAGAAAGG
GGGGAGGAGAAGCCGTTGGATGGACAGGAACACAGGGAGAGGCCGGAGGGGGAAACAGGGGATTTGGGCAAGAGA
GAAGATGTAAAAGGTGACCGGGAGCTTCGACCAGGGCCTCGAGATGAGCCACGGTCCAATGGGCGACGAGAGGAA
AAGACAGAGAACCCCCGGTTCATGTTCAATATCGCCGATGGTGGCTTCACAGAGCTTCACACACTGTGGCAGAAT
GAGGAACGGGCAGCTATTTCCTCGGGGAAACTCAATGAGATCTGGCACAGAAGACATGACTATTGGCTTCTGGCT
GGGATTGTCCTCCATGGCTATGCACGGTGGCAGGACATCCAGAATGATGCTCAATTTGCCATTATCAACGAGCCA
TTTAAAACTGAAGCCAATAAGGGGAACTTTCTGGAGATGAAAAATAAGTTCCTGGCCCGGAGGTTCAAGCTCCTG
GAGCAGGCGCTGGTGATTGAGGAGCAGCTGCGGCGGGCGGCCTACCTGAACCTGTCGCAGGAGCCGGCGCACCCC
GCCATGGCCCTCCACGCCCGCTTCGCCGAGGCCGAGTGCCTGGCCGAGAGCCACCAGCACCTCTCCAAGGAGTCG
CTGGCGGGGAACAAGCCGGCCAACGCCGTCCTGCACAAGGTTCTGAACCAGCTGGAGGAGTTGCTGAGCGACATG
AAGGCGGACGTGACCCGCCTGCCAGCCACGCTGTCCCGAATACCCCCCATCGCAGCCCGCCTTCAGATGTCCGAG
CGCAGCATCCTCAGCCGGCTGGCCAGCAAGGGCACGGAGCCTCACCCCACACCGGCCTACCCGCCGGGTCCCTAC
GCTACACCTCCGGGGTACGGGGCGGCCTTCAGCGCCGCACCCGTAGGGGCCCTGGCCGCCGCAGGCGCCAATTAC
AGCCAGATGCCTGCAGGGTCCTTCATCACAGCCGCCACCAACGGCCCTCCAGTGCTTGTGAAGAAGGAGAAGGAA
ATGGTGGGGGCATTGGTGTCAGACGGGCTGGATCGGAAGGAGCCCCGAGCCGGGGAGGTGATCTGTATAGACGAC
TGACTGGATCCCAGGCCTGCCCTTCACCCAGGCCCCGTCCCCGAGGCCGACCCCCAGCTCAAGCGCTGGGGCCTG
CTGCCAGCCCTCCACCTTCCCCACCCCTTGGGCCATCACTGGGCTAGGAACCCCTTTGCCCCTCTCTGCAGCTCC
TCTCTTCAAGAAGGGCCCTTTGTCTTTCTCCACTCCCACACACCTTTCCCACCAAGCCTTGAAGACTGTGCTGGT
GAGAAGAAGTCTGGGTGGGAGATGGCTGGCAGGGTCTTCCAAGTACCTTCCTCCCACACTGCCAAGTATACACAA
CTTCCCAGTAAATGGTTGTGGGGAGGAAAGAGGTGGAGCCTCCCCAGCCGTTTCCCTGCAGAATCAGCTCTGTCT
CATGTGGAAGTGGAGAATCAGCCTTGCCTGGCCTTTAGGAACTTTTGTGGGGAAGAGAGCTTTGAAGAGAGGAGG
GGGACTTTAGAGAGGGATGAAAATGAGCCCTGGGAGGGAGGAAGGGACGAGGAGGGGTGGCTGCATGTTACCGTC
CCCTACCTCTCCCCACGTGGAGGGTGGAGCAGTTATGAGGGAGGAAGTCAACTGCTGTTCAGCCTCAGAATAAAG
GTGCCGTTCACTGGCTCAGTT

FIGURE 2062

MKAADTVILWARSKNDQLRISFPPGLCWGDRMPDKDDIRLLPSALGVKKRKRGPKKQKENKPGKPRKRKKRDSEE
EFGSERDEYREKSESGGSEYGTGPGRKRRRKHREKKEKKTKRRKKGEGDGGQKQVEQKSSATLLLTWGLEDVEHV
FSEEDYHTLTNYKAFSQFMRPLIAKKNPKIPMSKMMTILGAKWREFSANNPFKGSAAAVAAAAAAAAAAVAEQVS
AAVSSATPIAPSGPPALPPPPAADIQPPPIRRAKTKEGKGPGHKRRSKSPRVPDGRKKLRGKKMAPLKIKLGLLG
GKRKKGGSYVFQSDEGPEPEAEESDLDSGSVHSASGRPDGPVRTKKLKRGRPGRKKKKVLGCPAVAGEEEVDGYE
TDHQDYCEVCQQGGEIILCDTCPRAYHLVCLDPELDRAPEGKWSCPHCEKEGVQWEAKEEEEEYEEEGEEEGEKE
EEDDHMEYCRVCKDGGELLCCDACISSYHIHCLNPPLPDIPNGEWLCPRCTCPVLKGRVQKILHWRWGEPPVAVP
APQQADGNPDVPPPRPLQGRSEREFFVKWVGLSYWHCSWAKELQLEIFHLVMYRNYQRKNDMDEPPPLDYGSGED
DGKSDKRKVKDPHYAEMEEKYYRFGIKPEWMTVHRIINHSVDKKGNYHYLVKWRDLPYDQSTWEEDEMNIPEYEE
HKQSYWRHRELIMGEDPAQPRKYKKKKKELQGDGPPSSPTNDPTVKYETQPRFITATGGTLHMYQLEGLNWLRFS
WAQGTDTILADEMGLGKTIQTIVFLYSLYKEGHTKGPFLVSAPLSTIINWEREFQMWAPKFYVVTYTGDKDSRAI
IRENEFSFEDNAIKGGKKAFKMKREAQVKFHVLLTSYELITIDQAALGSIRWACLVVDEAHRLKNNQSKFFRVLN
GYKIDHKLLLTGTPLQNNLEELFHLLNFLTPERFNNLEGFLEEFADISKEDQIKKLHDLLGPHMLRRLKADVFKN
MPAKTELIVRVELSPMQKKYYKYILTRNFEALNSRGGGNQVSLLNIMMDLKKCCNHPYLFPVAAMESPKLPSGAY
EGGALIKSSGKLMLLQKMLRKLKEQGHRVLIFSQMTKMLDLLEDFLDYEGYKYERIDGGITGALRQEAIDRFNAP
GAQQFCFLLSTRAGGLGINLATADTVIIFDSDWNPHNDIQAFSRAHRIGQANKVMIYRFVTRASVEERITQVAKR
KMMLTHLVVRPGLGSKAGSMSKQELDDILKFGTEELFKDENEGENKEEDSSVIHYDNEAIARLLDRNQDATEDTD
VQNMNEYLSSFKVAQYVVREEDKIEEIEREIIKQEENVDPDYWEKLLRHHYEQQQEDLARNLGKGKRVRKQVNYN
DAAQEDQDNQSEYSVGSEEEDEDFDERPEGRRQSKRQLRNEKDKPLPPLLARVGGNIEVLGFNTRQRKAFLNAVM
RWGMPPQDAFTTQWLVRDLRGKTEKEFKAYVSLFMRHLCEPGADGSETFADGVPREGLSRQQVLTRIGVMSLVKK
KVQEFEHINGRWSMPELMPDPSADSKRSSRASSPTKTSPTTPEASATNSPCTSKPATPAPSEKGEGIRTPLEKEE
AENQEEKPEKNSRIGEKMETEADAPSPAPSLGERLEPRKIPLEDEVPGVPGEMEPEPGYRGDREKSATESTPGER
GEEKPLDGQEHRERPEGETGDLGKREDVKGDRELRPGPRDEPRSNGRREEKTENPRFMFNIADGGFTELHTLWQN
EERAAISSGKLNEIWHRRHDYWLLAGIVLHGYARWQDIQNDAQFAIINEPFKTEANKGNFLEMKNKFLARRFKLL
EQALVIEEQLRRAAYLNLSQEPAHPAMALHARFAEAECLAESHQHLSKESLAGNKPANAVLHKVLNQLEELLSDM
KADVTRLPATLSRIPPIAARLQMSERSILSRLASKGTEPHPTPAYPPGPYATPPGYGAAFSAAPVGALAAAGANY
SQMPAGSFITAATNGPPVLVKKEKEMVGALVSDGLDRKEPRAGEVICIDD

FIGURE 2063

GATGTGGCCCGTGGCCTAGCTCGTCAAGTTGCCGTGGCGCGGAGAACTCTGCAAAACAAGAGGCTGAGGATTGCG
TTAGAGATAAACCAGTTCACGCCGGAGCCCCGTGAGGGAAGCGTCTCCGTTGGGTCCGGCCGCTCTGCGGGACTC
TGAGGAAAAGCTCGCACCAGGTGGACGCGGATCTGTCAAC**ATG**GGTAAAGGAGACCCCAACAAGCCGCGGGGCAA
AATGTCCTCGTACGCCTTCTTCGTGCAGACCTGCCGGGAAGAGCACAAGAAGAAACACCCGGACTCTTCCGTCAA
TTTCGCGGAATTCTCCAAGAAGTGTTCGGAGAGATGGAAGACCATGTCTGCAAAGGAGAAGTCGAAGTTTGAAGA
TATGGCAAAAAGTGACAAAGCTCGCTATGACAGGGAGATGAAAAATTACGTTCCTCCCAAAGGTGATAAGAAGGG
GAAGAAAAAGGACCCCAATGCTCCTAAAAGGCCACCATCTGCCTTCTTCCTGTTTTGCTCTGAACATCGCCCAAA
GATCAAAAGTGAACACCCTGGCCTATCCATTGGGGATACTGCAAAGAAATTGGGTGAAATGTGGTCTGAGCAGTC
AGCCAAAGATAAACAACCATATGAACAGAAAGCAGCTAAGCTAAAGGAGAAATATGAAAAGGATATTGCTGCATA
TCGTGCCAAGGGCAAAAGTGAAGCAGGAAAGAAGGGCCCTGGCAGGCCAACAGGCTCAAAGAAGAAGAACGAACC
AGAAGATGAGGAGGAGGAGGAGGAAGAAGAAGATGAAGATGAGGAGGAAGAGGATGAAGATGAAGAA**TAA**ATGGC
TATCCTTTAATGATGCGTGTGGAATGTGTGTGTGTGCTCAGGCAATTATTTTGCTAAGAATGTGAATTCAAGTGC
AGCTCAATACTAGCTTCAGTATAAAAACTGTACAGATTTTTGTATAGCTGATAAGATTCTCTGTAGAGAAAATAC
TTTTAAAAAATGCAGGTTGTAGCTTTTTGATGGGCTACTCATACAGTTAGATTTTACAGCTTCTGATGTTGAATG
TTCCTAAATATTTAATGGTTTTTTTAATTTCTGTGTGTATGGTAGCACAGCAAACTTGTAGGAATTAGTATCAAT
AGTAAATTTTGGGTTTTTTAGGATGTTGCATTTCGTTTTTTTAAAAAAAATTTTGTAATAAAATTATGTATATTA
TTTCTATTGTCTTTGTCTTAATATGCTAAGTTAATTTTCACTTTAAAAAAGCCATTTGAAGACCAAAAAAAAAAA
AA

FIGURE 2064

MGKGDPNKPRGKMSSYAFFVQTCREEHKKKHPDSSVNFAEFSKKCSERWKTMSAKEKSKFEDMAKSDKARYDREM
KNYVPPKGDKKGKKKDPNAPKRPPSAFFLFCSEHRPKIKSEHPGLSIGDTAKKLGEMWSEQSAKDKQPYEQKAAK
LKEKYEKDIAAYRAKGKSEAGKKGPGRPTGSKKKNEPEDEEEEEEEDEDEEEEDEDEE

FIGURE 2065

TCTCTTGATTCCTAGTCTCTCGATATGGCACCTCCGTCAGTCTTTGCCGAGGTTCCGCAGGCCCAGCCTGTCCTG
GTCTTCAAGCTCACTGCCGACTTCAGGGAGGATCCGGACCCCCGCAAGGTCAACCTGGGAGTGGGAGCATATCGC
ACGGATGACTGCCATCCCTGGGTTTTGCCAGTAGTGAAGAAAGTGGAGCAGAAGATTGCTAATGACAATAGCCTA
AATCACGAGTATCTGCCAATCCTGGGCCTGGCTGAGTTCCGGAGCTGTGCTTCTCGTCTTGCCCTTGGGGATGAC
AGCCCAGCACTCAAGGAGAAGCGGGTAGGAGGTGTGCAATCTTTGGGGGGAACAGGTGCACTTCGAATTGGAGCT
GATTTCTTAGCGCGTTGGTACAATGGAACAAACAACAAGAACACACCTGTCTATGTGTCCTCACCAACCTGGGAG
AATCACAATGCTGTGTTTTCCGCTGCTGGTTTTAAAGACATTCGGTCCTATCGCTACTGGGATGCAGAGAAGAGA
GGATTGGACCTCCAGGGCTTCCTGAATGATCTGGAGAATGCTCCTGAGTTCTCCATTGTTGTCCTCCACGCCTGT
GCACACAACCCAACTGGGATTGACCCAACTCCGGAGCAGTGGAAGCAGATTGCTTCTGTCATGAAGCACCGGTTT
CTGTTCCCCTTCTTTGACTCAGCCTATCAGGGCTTCGCATCTGGAAACCTGGAGAGAGATGCCTGGGCCATTCGC
TATTTTGTGTCTGAAGGCTTCGAGTTCTTCTGTGCCCAGTCCTTCTCCAAGAACTTCGGGCTCTACAATGAGAGA
GTCGGGAATCTGACTGTGGTTGGAAAAGAACCTGAGAGCATCCTGCAAGTCCTTTCCCAGATGGAGAAGATCGTG
CGGATTACTTGGTCCAATCCCCCCGCCCAGGGAGCACGAATTGTGGCCAGCACCCTCTCTAACCCTGAGCTCTTT
GAGGAATGGACAGGTAATGTGAAGACAATGGCTGACCGGATTCTGACCATGAGATCTGAACTCAGGGCACGACTA
GAAGCCCTCAAAACCCCTGGGACCTGGAACCACATCACTGATCAAATTGGCATGTTCAGCTTCACTGGGTTGAAC
CCCAAGCAGGTTGAGTATCTGGTCAATGAAAAGCACATCTACCTGCTGCCAAGTGGTCGAATCAACGTGAGTGGC
TTAACCACCAAAAATCTAGATTACGTGGCCACCTCCATCCATGAAGCAGTCACCAAAATCCAGTGAAGAAACACC
ACCCGTCCAGTACCACCAAAGTAGTTCTCTGTCATGTGTGTTCCCTGCCTGCACAAACCTACATGTACATACCAT
GGATTAGAGACACTTGCAGGACTGAAAGCTGCTCTGGTGAGGCAGCCTCTGTTTAAACCGGCCCCACATGAAGAG
AACATCCCTTGAGACGAATTTGGAGACTGGGATTAGAGCCTTTGGAGGTCAAAGCAAATTAAGATTTTTATTTAA
GAATAAAAGAGTACTTTGATCATGAGACATAGGTATCTTGTCCCTCTCACTAAAAAGGAGTGTTGTGTGTGGCGG
CCACGTGCTTCTATGTGGTGTTTGACTCTGTACAAATTCTAGTCCCAAAGATCAAGTTGTCTGAAGGAGCCAAAG
TGTGAATGTGGGTGTCGGCTGCGGCATTAAATTCATCATCTCAACCCAGAGTGTCTGGTCTCCCTGCTCTTTCTG
CATGGTTGTGTCCCTAGTCCTAAGCTTTGGTTCTTTAGGGTGACTGTGGTAAGAAGGATATTTAATCATGACATG
CACGGACACGTACATATTTAACTGAAACAAGTTTTACCAAACAGTATTTACTCGTGATGTGCGTAGTGCATTCTG
ATATTTTTGAGCCATTCTATTGTGTTCTACTTCACCTAAAAAAATAAAATAAAAATGTTGATCAAG

FIGURE 2066

MAPPSVFAEVPQAQPVLVFKLTADFREDPDPRKVNLGVGAYRTDDCHPWVLPVVKKVEQKIANDNSLNHEYLPIL
GLAEFRSCASRLALGDDSPALKEKRVGGVQSLGGTGALRIGADFLARWYNGTNNKNTPVYVSSPTWENHNAVFSA
AGFKDIRSYRYWDAEKRGLDLQGFLNDLENAPEFSIVVLHACAHNPTGIDPTPEQWKQIASVMKHRFLFPFFDSA
YQGFASGNLERDAWAIRYFVSEGFEFFCAQSFSKNFGLYNERVGNLTVVGKEPESILQVLSQMEKIVRITWSNPP
AQGARIVASTLSNPELFEEWTGNVKTMADRILTMRSELRARLEALKTPGTWNHITDQIGMFSFTGLNPKQVEYLV
NEKHIYLLPSGRINVSGLTTKNLDYVATSIHEAVTKIQ

FIGURE 2067A

AAAGTAGTGAAAATGATTTTGAAGTTATTGGAAGATAAAAATGGAGAGGTACAGAATTTAGCTGTCAAATGTCTT
GGTCCTTTAGTGAGTAAAGTGAAAGAATACCAAGTAGAGACAATTGTAGATACCCTCTGCACTAACATGCTTTCT
GATAAAGAACAACTTCGAGACATTTCAAGTATTGGTCTTAAAACAGTAATTGGAGAACTTCCTCCAGCTTCCAGT
GGCTCTGCATTAGCTGCTAATGTATGTAAAAAGATTACTGGACGTCTTACAAGTGCAATAGCAAAACAGGAAGAT
GTCTCTGTTCAGCTAGAAGCCTTGGATATTATGGCTGATATGTTGAGCAGGCAAGGAGGACTTCTTGTTAATTTC
CATCCTTCAATTCTGACCTGTCTACTTCCCCAGTTGACCAGCCCTAGACTTGCAGTGAGGAAAAGAACCATTATC
GCTCTTGGCCATCTGGTTATGAGCTGTGGAAATATAGTTTTTGTAGATCTTATTGAACATCTGTTGTCAGAGTTG
TCCAAAAATGATTCTATGTCAACAACAAGAACCTACATACAATGTATTGCTGCTATTAGTAGGCAAGCTGGTCAT
AGAATAGGTGAATACCTTGAGAAGATAATTCCTTTGGTGGTAAAATTTTGCAATGTAGATGATGATGAATTAAGA
GAGTACTGTATTCAAGCCTTTGAATCATTTGTAAGAAGATGTCCTAAGGAAGTATATCCTCATGTTTCTACCATT
ATAAATATTTGTCTTAAATATCTTACCTATGATCCAAATTATAATTACGATGATGAAGATGAAGATGAAAATGCA
ATGGATGCTGATGGTGGTGATGATGATGATCAAGGGAGTGATGATGAATACAGTGATGATGATGACATGAGTTGG
AAAGTGAGACGTGCAGCTGCGAAGTGCTTGGATGCTGTAGTTAGCACAAGGCATGAAATGCTTCCAGAATTCTAC
AAGACCGTCTCTCCTGCACTAATATCCAGATTTAAAGAGCGTGAAGAGAATGTAAAGGCAGATGTTTTTCACGCA
TACCTTTCTCTTTTGAAGCAAACTCGTCCTGTACAAAGTTGGCTATGTGACCCTGATGCAATGGAGCAGGGAGAA
ACACCTTTAACAATGCTTCAGAGTCAGGTTCCCAACATTGTTAAAGCTCTTCACAAACAGATGAAAGAAAAAAGT
GTGAAGACCCGACAGTGTTGTTTTAACATGTTAACTGAGCTGGTAAATGTATTACCTGGGGCCCTAACTCAACAC
ATTCCTGTACTTGTACCAGGAATCATTTTCTCACTGAATGATAAATCAAGCTCATCGAATTTGAAGATCGATGCT
TTGTCATGTCTATACGTAATCCTCTGTAACCATTCTCCTCAAGTCTTCCATCCTCACGTTCAGGCTTTGGTTCCT
CCAGTGGTGGCTTGTGTTGGAGACCCATTTTACAAAATTACATCTGAAGCACTTCTTGTTACTCAACAGCTTGTC
AAAGTAATTCGTCCTTTAGATCAGCCTTCCTCGTTTGATGCAACTCCTTATATCAAAGATCTATTTACCTGTACC
ATTAAGAGATTAAAAGCAGCTGACATTGATCAGGAAGTCAAGGAAAGGGCTATTTCCTGTATGGGACAAATTATT
TGCAACCTTGGAGACAATTTGGGTTCTGACTTGCCTAATACACTTCAGATTTTCTTGGAGAGACTAAAGAATGAA
ATTACCAGGTTAACTACAGTAAAGGCATTGACACTGATTGCTGGGTCACCTTTGAAGATAGATTTGAGGCCTGTT
CTGGGAGAAGGGGTTCCTATCCTTGCTTCATTTCTTAGAAAAAACCAGAGAGCTTTGAAACTGGGTACTCTTTCT
GCCCTTGATATTCTAATAAAAAACTATAGTGACAGCTTGACAGCTGCCATGATTGATGCAGTTCTAGATGAGCTC
CCACCTCTTATCAGCGAAAGTGATATGCATGTTTCACAAATGGCCATCAGTTTTCTTACCACTTTGGCAAAAGTA
TATCCCTCCTCCCTTTCAAAGATAAGTGGATCCATTCTCAATGAACTTATTGGACTTGTGAGATCACCCTTATTG
CAGGGGGGAGCTCTTAGTGCCATGCTAGACTTTTTCCAAGCTCTGGTTGTCACTGGAACAAATAATTTAGGATAC
ATGGATTTGTTGCGCATGCTGACTGGTCCAGTTTACTCTCAGAGCACAGCTCTTACTCATAAGCAGTCTTATTAT
TCCATTGCCAAATGTGTAGCTGCCCTTACTCGAGCATGCCCTAAAGAGGGACCAGCTGTAGTAGGTCAGTTTATT
CAAGATGTCAAGAACTCAAGGTCTACAGATTCCATTCGTCTCTTAGCTCTACTTTCTCTTGGAGAAGTTGGGCAT
CATATTGACTTAAGTGGACAGTTGGAACTAAAATCTGTAATACTAGAAGCTTTCTCATCTCCTAGTGAAGAAGTC
AAATCAGCTGCATCCTATGCATTAGGCAGCATTAGTGTGGGCAACCTTCCTGAATATCTGCCGTTTGTCCTGCAA
GAAATAACTAGTCAACCCAAAAGGCAGTATCTTTTACTTCATTCCTTGAAGGAAATTATTAGCTCTGCATCAGTG
GTGGGCCTTAAACCATATGTTGAAAACATCTGGGCCTTATTACTAAAGCACTGTGAGTGTGCAGAGGAAGGAACC
AGAAATGTTGTTGCTGAATGTCTAGGAAAACTCACTCTAATTGATCCAGAAACTCTCCTTCCACGGCTTAAGGGG
TACTTGATATCAGGCTCATCATATGCCCGAAGCTCAGTGGTTACGGCTGTGAAATTTACAATTTCTGACCATCCA
CAACCTATTGATCCACTGTTAAAGAACTGCATAGGTGATTTCCTAAAAACTTTGGAAGACCCAGATTTGAATGTG
AGAAGAGTAGCCTTGGTCACATTTAATTCAGCAGCACATAACAAGCCATCATTAATAAGGGATCTATTGGATACT
GTTCTTCCACATCTTTACAATGAAACAAAAGTTAGAAAGGAGCTTATAAGAGAGGTAGAAATGGGTCCATTTAAA
CATACGGTTGATGATGGTCTGGATATTAGAAAGGCAGCATTTGAGTGTATGTACACACTTCTAGACAGTTGTCTT
GATAGACTTGATATCTTTGAATTTCTAAATCATGTTGAAGATGGTTTGAAGGACCATTATGATATTAAGATGCTG
ACATTTTTAATGTTGGTGAGACTGTCTACCCTTTGTCCAAGTGCAGTACTGCAGAGGTTGGACCGACTTGTTGAG
CCATTACGTGCAACATGTACAACTAAGGTAAAGGCAAACTCAGTAAAGCAGGAGTTTGAAAAACAAGATGAATTA
AAGCGATCTGCCATGAGAGCAGTAGCAGCACTACTAACCATTCCAGAAGCAGAGAAGAGTCCACTGATGAGTGAA
TTCCAGTCACAGATCAGTTCTAACCCTGAGCTGGCGGCTATCTTTGAAAGTATCCAGAAAGATTCATCATCTACT
AACTTGGAATCAATGGACACTAGTTAGATGTTTGTTCACCATGGGGACCATTACATATGACCATACAATGCACTG

FIGURE 2067B

AATTGACAGGTTAATCATAAGACATGGAAAGAGAAGTGTCTAAAAGCTTCAAAATGTTCCACTTTTTTTTCCTTC
ATGGAGACTGTTTGTTTGGCTTTCTTCCATTGTTGTTTTTGTAGCATTTATTTCAGAAATGTGTATTTCCATAAT
CCAGAGGTTGTAAAACCACTAGTGTTTTAGTGGTTACAGCAACATTTGAAATGGAAACTAAAAGTTAGGATTTTA
TGGAGTATGGAGATAGGGTCCAGTATCTATTTACCCTGTAATGTTTAGGATTAAAATGTTAAAATTTTGTGACCA
TGAATTTCTTTCTTTTATAAATTTTCTCATTTAAAAATCAAAAATCTTGCAAAACAAAAACCATGTTTCTTTTTC
TTGTATAACTTTTTGTTTTCAGCAACATAAATTGATTTTTAGCTGGCAGACAAGAATATCCATATAAGATTTGTT
AACCATTTCAGAGAGTTTGGCAATTTTTAAAAGATAATAAGGTATCATTTTTAAGTATGAAAATTAACAATATCC
CTGTTGCGCACACTAATTTTGCATGAGTAAGTTTACAAATATGTATCGTCTGTAAAGCAGCATGTGCAGATTATT
CATAATATAGAAGTTAAAATAAGTATTAGTGCAATTTTCAGATATTTATTTTTGCACAGAAAACACATTATCTGG
AGAGAAAGAAAGGAGAATTTTTGAGACTTGGGTTTTCTTAATGCCAGTGTGAATTTGCAGATGTTTTCAGAAAAT
CAAGTCACAGTAACAATTTGCCACTTTTTTCTGTTATAAATCTTCTTACTTAAATTTTGAATATTTAGTTTTTCT
CAGTTACCCATTTGTGTGTGTGTGATTCCACTTAGAAATTCTTAAAACCAGATTTTTCTTTCATTCCGTTTGGAT
GTCTACATTCCTTATCAAAGGATATAAATACTGTGTATGCTTTTGAATTTTATTTTTAGGAAAATTCTGAAGCCA
GCTATCACAGGTTTGTTAGCTAATAATAGTATTTTCTTTTAGTTGAGTTAGGTTTTTCCCCATCTCCTGTAGAGC
GAATTTACATATTGTATTGGGTAAGTGTTCACTACTTTTCCTGATTAAGGGATCTGTGCTGGGGAACAAAGCTTT
TGCAGTACCTTATATTGTAGTTAAAATTTTATTTAACATATCCTTCAGTGAGCTCATTTCACACTGTAGCCTCTT
CCTTAAAATTTGTGGTGCTCCTGTAACAGTAAGAACTAATTCTGAAATAAAAGACATCTCCTAATGCTGTGCAAA
CATAGTTTACATGTATTGAAGGAGGCAGTTGTTAAATTGAGTGACCAATTTAAGCAATCAGATATTTGAAAACTG
CACCCTTTAGTTTTGAAACTGTGAATTAGAAACACTTTTCCTGCTGTATTACTACCTGCTTTAACATCCAAATAT
ACAGTGATTTTAAATGATAACATACTGTGGTTATTAGATTAACAGCTTGATTTTGAATGTTCAGATGATAATGCA
GAAGACATCACTTCTAGTAAGGATTTTGACTAGTGCATTGATGTTGAAGTTGGTGCCATTTCAAAATGTGGCAGG
TGATAATCTTTTACCATAATTTGCATAAAACTGTAATAGAAGTTTATTTTGAGATGTTAGTATATTATGTACTAT
GCATTTCTGTGGTATAGATGTTGTGGATATATTTAAGTATTTGGTTACATGGTTTTACAATAAATTACAATACTG
CAGGCTCT

FIGURE 2068A

GGGAGCGAGTGCGGAGCGAGTGGGAGCGAGACGGCCCTGAGTGGAAGTGTCTGGCTCCCCGTAGAGGCCCTTCTG
TACGCCCCGCCGCCCATGAGCTCGTTCTCACGCGAACAGCGCCGTCGTTAGGCTGGCTCTGTAGCCTCGGCTTAC
CCCGGGACAGGCCCACGCCTCGCCAGGGAGGGGGCAGCCCGTCGAGGCGCCTCCCTAGTCAGCGTCGGCGTCGCG
CTGCGACCCTGGAAGCGGGAGCCGCCGCGAGCGAGAGGAGGAGCTCCAGTGGCGGCGGCGGCGGCGGCAGCGGCA
GCGGGCAGCAGCTCCAGCAGCGCCAGCAGGCGGGATCGAGGCCGTCAACATGGCGAGCGCCTCGTACCACATTTC
CAATTTGCTGGAAAAAATGACATCCAGCGACAAGGACTTTAGGTTTATGGCTACAAATGATTTGATGACGGAACT
GCAGAAAGATTCCATCAAGTTGGATGATGATAGTGAAAGGAAAGTAGTGAAAATGATTTTGAAGTTATTGGAAGA
TAAAAATGGAGAGGTACAGAATTTAGCTGTCAAATGTCTTGGTCCTTTAGTGAGTAAAGTGAAAGAATACCAAGT
AGAGACAATTGTAGATACCCTCTGCACTAACATGCTTTCTGATAAAGAACAACTTCGAGACATTTCAAGTATTGG
TCTTAAAACAGTAATTGGAGAACTTCCTCCAGCTTCCAGTGGCTCTGCATTAGCTGCTAATGTATGTAAAAAGAT
TACTGGACGTCTTACAAGTGCAATAGCAAAACAGGAAGATGTCTCTGTTCAGCTAGAAGCCTTGGATATTATGGC
TGATATGTTGAGCAGGCAAGGAGGACTTCTTGTTAATTTCCATCCTTCAATTCTGACCTGTCTACTTCCCCAGTT
GACCAGCCCTAGACTTGCAGTGAGGAAAAGAACCATTATCGCTCTTGGCCATCTGGTTATGAGCTGTGGAAATAT
AGTTTTTGTAGATCTTATTGAACATCTGTTGTCAGAGTTGTCCAAAAATGATTCTATGTCAACAACAAGAACCTA
CATACAATGTATTGCTGCTATTAGTAGGCAAGCTGGTCATAGAATAGGTGAATACCTTGAGAAGATAATTCCTTT
GGTGGTAAAATTTTGCAATGTAGATGATGATGAATTAAGAGAGTACTGTATTCAAGCCTTTGAATCATTTGTAAG
AAGATGTCCTAAGGAAGTATATCCTCATGTTTCTACCATTATAAATATTTGTCTTAAATATCTTACCTATGATCC
AAATTATAATTACGATGATGAAGATGAAGATGAAAATGCAATGGATGCTGATGGTGGTGATGATGATGATCAAGG
GAGTGATGATGAATACAGTGATGATGATGACATGAGTTGGAAAGTGAGACGTGCAGCTGCGAAGTGCTTGGATGC
TGTAGTTAGCACAAGGCATGAAATGCTTCCAGAATTCTACAAGACCGTCTCTCCTGCACTAATATCCAGATTTAA
AGAGCGTGAAGAGAATGTAAAGGCAGATGTTTTTCACGCATACCTTTCTCTTTTGAAGCAAACTCGTCCTGTACA
AAGTTGGCTATGTGACCCTGATGCAATGGAGCAGGGAGAAACACCTTTAACAATGCTTCAGAGTCAGGTTCCCAA
CATTGTTAAAGCTCTTCACAAACAGATGAAAGAAAAAAGTGTGAAGACCCGACAGTGTTGTTTTAACATGTTAAC
TGAGCTGGTAAATGTATTACCTGGGGCCCTAACTCAACACATTCCTGTACTTGTACCAGGAATCATTTTCTCACT
GAATGATAAATCAAGCTCATCGAATTTGAAGATCGATGCTTTGTCATGTCTATACGTAATCCTCTGTAACCATTC
TCCTCAAGTCTTCCATCCTCACGTTCAGGCTTTGGTTCCTCCAGTGGTGGCTTGTGTTGGAGACCCATTTTACAA
AATTACATCTGAAGCACTTCTTGTTACTCAACAGCTTGTCAAAGTAATTCGTCCTTTAGATCAGCCTTCCTCGTT
TGATGCAACTCCTTATATCAAAGATCTATTTACCTGTACCATTAAGAGATTAAAAGCAGCTGACATTGATCAGGA
AGTCAAGGAAAGGGCTATTTCCTGTATGGGACAAATTATTTGCAACCTTGGAGACAATTTGGGTTCTGACTTGCC
TAATACACTTCAGATTTTCTTGGAGAGACTAAAGAATGAAATTACCAGGTTAACTACAGTAAAGGCATTGACACT
GATTGCTGGGTCACCTTTGAAGATAGATTTGAGGCCTGTTCTGGGAGAAGGGGTTCCTATCCTTGCTTCATTTCT
TAGAAAAAACCAGAGAGCTTTGAAACTGGGTACTCTTTCTGCCCTTGATATTCTAATAAAAAACTATAGTGACAG
CTTGACAGCTGCCATGATTGATGCAGTTCTAGATGAGCTCCCACCTCTTATCAGCGAAAGTGATATGCATGTTTC
ACAAATGGCCATCAGTTTTCTTACCACTTTGGCAAAAGTATATCCCTCCTCCCTTTCAAAGATAAGTGGATCCAT
TCTCAATGAACTTATTGGACTTGTGAGATCACCCTTATTGCAGGGGGGAGCTCTTAGTGCCATGCTAGACTTTTT
CCAAGCTCTGGTTGTCACTGGAACAAATAATTTAGGATACATGGATTTGTTGCGCATGCTGACTGGTCCAGTTTA
CTCTCAGAGCACAGCTCTTACTCATAAGCAGTCTTATTATTCCATTGCCAAATGTGTAGCTGCCCTTACTCGAGC
ATGCCCTAAAGAGGGACCAGCTGTAGTAGGTCAGTTTATTCAAGATGTCAAGAACTCAAGGTCTACAGATTCCAT
TCGTCTCTTAGCTCTACTTTCTCTTGGAGAAGTTGGGCATCATATTGACTTAAGTGGACAGTTGGAACTAAAATC
TGTAATACTAGAAGCTTTCTCATCTCCTAGTGAAGAAGTCAAATCAGCTGCATCCTATGCATTAGGCAGCATTAG
TGTGGGCAACCTTCCTGAATATCTGCCGTTTGTCCTGCAAGAAATAACTAGTCAACCCAAAAGGCAGTATCTTTT
ACTTCATTCCTTGAAGGAAATTATTAGCTCTGCATCAGTGGTGGGCCTTAAACCATATGTTGAAAACATCTGGGC
CTTATTACTAAAGCACTGTGAGTGTGCAGAGGAAGGAACCAGAAATGTTGTTGCTGAATGTCTAGGAAAACTCAC
TCTAATTGATCCAGAAACTCTCCTTCCACGGCTTAAGGGGTACTTGATATCAGGCTCATCATATGCCCGAAGCTC
AGTGGTTACGGCTGTGAAATTTACAATTTCTGACCATCCACAACCTATTGATCCACTGTTAAAGAACTGCATAGG
TGATTTCCTAAAAACTTTGGAAGACCCAGATTTGAATGTGAGAAGAGTAGCCTTGGTCACATTTAATTCAGCAGC
ACATAACAAGCCATCATTAATAAGGGATCTATTGGATACTGTTCTTCCACATCTTTACAATGAAACAAAAGTTAG
AAAGGAGCTTATAAGAGAGGTAGAAATGGGTCCATTTAAACATACGGTTGATGATGGTCTGGATATTAGAAAGGC

FIGURE 2068B

AGCATTTGAGTGTATGTACACACTTCTAGACAGTTGTCTTGATAGACTTGATATCTTTGAATTTCTAAATCATGT
TGAAGATGGTTTGAAGGACCATTATGATATTAAGATGCTGACATTTTTAATGTTGGTGAGACTGTCTACCCTTTG
TCCAAGTGCAGTACTGCAGAGGTTGGACCGACTTGTTGAGCCATTACGTGCAACATGTACAACTAAGGTAAAGGC
AAACTCAGTAAAGCAGGAGTTTGAAAAACAAGATGAATTAAAGCGATCTGCCATGAGAGCAGTAGCAGCACTGCT
AACCATTCCAGAAGCAGAGAAGAGTCCACTGATGAGTGAATTCCAGTCACAGATCAGTTCTAACCCTGAGCTGGC
GGCTATCTTTGAAAGTATCCAGAAAGATTCATCATCTACTAACTTGGAATCAATGGACACTAGTTAGATGTTTGT
TCACCATGGGGACCATTACATATGACCATACAATGCACTGAATTGACAGGTTAATCATAAGACATGGAAAGAGAA
GTGTCTAAAAGCTTCAAAATGTTCCACTTTTTTTTCCTTCATGGAGACTGTTTGTTTGGCTTTCTTCCATTGTTG
TTTTTGTAGCATTTATTTCAGAAATGTGTATTTCCATAATCCAGAGGTTGTAAAACCACTAGTGTTTTAGTGGTT
ACAGCAACATTTGAAATGGAAACTAAAAGTTAGGATTTTATGGAGTATGGAGATAGGGTCCAGTATCTATTTACC
CTGTAATGTTTAGGATTAAAATGTTAAAATTTTGTGACCATGAATTTCTTTCTTTTATAAATTTTCTCATTTAAA
AATCAAAAATCTTGCAAAACAAAAACCATGTTTCTTTTTCTTGTATAACTTTTTGTTTTCAGCAACATAAATTGA
TTTTTAGCTGGCAGACAAGAATATCCATATAAGATTTGTTAACCATTTCAGAGAGTTTGGCAATTTTTAAAAGAT
AATAAGGTATCATTTTTAAGTATGAAAATTAACAATATCCCTGTTGCGCACACTAATTTTGCATGAGTAAGTTTA
CAAATATGTATCGTCTGTAAAGCAGCATGTGCAGATTATTCATAATATAGAAGTTAAAATAAGTATTAGTGCAAT
TTTCAGATATTTATTTTTGCACAGAAAACACATTATCTGGAGAGAAAGAAAGGAGAATTTTTGAGACTTGGGTTT
TCTTAATGCCAGTGTGAATTTGCAGATGTTTTCAGAAAATCAAGTCACAGTAACAATTTGCCACTTTTTTCTATT
ATAAATCTTCTTACTTAAATTTTGAATATTTAGTTTTTCTCAGTTACCCATTTGTGTGTGTGTGATTCCACTTAG
AAATTCTTAAAACCAGATTTTTCTTTCATTCCGTTTGGATGTCTACATTCCTTATCAAAGGATATAAATACTGTG
TATGCTTTTGAATTTTATTTTTAGGAAAATTCTGAAGCCAGCTATCACAGGTTTGTTAGCTAATAATAGTATTTT
CTTTTAGTTGAGTTAGGTTTTTCCCCATCTCCTGTAGAGCGAATTTACATATTGTATTGGGTAAGTGTTCACTAC
TTTTCCTGATTAAGGGATCTGTGCTGGGGAACAAAGCTTTTGCAGTACCTTATATTGTAGTTAAAATTTTATTTA
ACATATCCTTCAGTGAGCTCATTTCACACTGTAGCCTCTTCCTTAAAATTTGTGGTGCTCCTGTAACAGTAAGAA
CTAATTCTGAAATAAAAGACATCTCCTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2069

MASASYHISNLLEKMTSSDKDFRFMATNDLMTELQKDSIKLDDDSERKVVKMILKLLEDKNGEVQNLAVKCLGPL
VSKVKEYQVETIVDTLCTNMLSDKEQLRDISSIGLKTVIGELPPASSGSALAANVCKKITGRLTSAIAKQEDVSV
QLEALDIMADMLSRQGGLLVNFHPSILTCLLPQLTSPRLAVRKRTIIALGHLVMSCGNIVFVDLIEHLLSELSKN
DSMSTTRTYIQCIAAISRQAGHRIGEYLEKIIPLVVKFCNVDDDELREYCIQAFESFVRRCPKEVYPHVSTIINI
CLKYLTYDPNYNYDDEDEDENAMDADGGDDDDQGSDDEYSDDDDMSWKVRRAAAKCLDAVVSTRHEMLPEFYKTV
SPALISRFKEREENVKADVFHAYLSLLKQTRPVQSWLCDPDAMEQGETPLTMLQSQVPNIVKALHKQMKEKSVKT
RQCCFNMLTELVNVLPGALTQHIPVLVPGIIFSLNDKSSSSNLKIDALSCLYVILCNHSPQVFHPHVQALVPPVV
ACVGDPFYKITSEALLVTQQLVKVIRPLDQPSSFDATPYIKDLFTCTIKRLKAADIDQEVKERAISCMGQIICNL
GDNLGSDLPNTLQIFLERLKNEITRLTTVKALTLIAGSPLKIDLRPVLGEGVPILASFLRKNQRALKLGTLSALD
ILIKNYSDSLTAAMIDAVLDELPPLISESDMHVSQMAISFLTTLAKVYPSSLSKISGSILNELIGLVRSPLLQGG
ALSAMLDFFQALVVTGTNNLGYMDLLRMLTGPVYSQSTALTHKQSYYSIAKCVAALTRACPKEGPAVVGQFIQDV
KNSRSTDSIRLLALLSLGEVGHHIDLSGQLELKSVILEAFSSPSEEVKSAASYALGSISVGNLPEYLPFVLQEIT
SQPKRQYLLLHSLKEIISSASVVGLKPYVENIWALLLKHCECAEEGTRNVVAECLGKLTLIDPETLLPRLKGYLI
SGSSYARSSVVTAVKFTISDHPQPIDPLLKNCIGDFLKTLEDPDLNVRRVALVTFNSAAHNKPSLIRDLLDTVLP
HLYNETKVRKELIREVEMGPFKHTVDDGLDIRKAAFECMYTLLDSCLDRLDIFEFLNHVEDGLKDHYDIKMLTFL
MLVRLSTLCPSAVLQRLDRLVEPLRATCTTKVKANSVKQEFEKQDELKRSAMRAVAALLTIPEAEKSPLMSEFQS
QISSNPELAAIFESIQKDSSSTNLESMDTS

FIGURE 2070

GAATTCGCTTTGGATCCATTTCCATCGGTCCTTACAGCCGCTCGTCAGACTCCAGCAGCCAAGATGGTGAAGCAG
ATCGAGAGCAAGACTGCTTTTCAGGAAGCCTTGGACGCTGCAGGTGATAAACTTGTAGTAGTTGACTTCTCAGCC
ACGTGGTGTGGGCCTTGCAAAATGATCAACCCTTTCTTTCATTCCCTCTCTGAAAAGTATTCCAACGTGATATTC
CTTGAAGTAGATGTGGATGACTGTCAGGATGTTGCTTCAGAGTGTGAAGTCAAATGCACGCCAACATTCCAGTTT
TTTAAGAAGGGACAAAAGGTGGGTGAATTTTCTGGAGCCAATAAGGAAAAGCTTGAAGCCACCATTAATGAATTA
GTCTAATCATGTTTTCTGAAAACATAACCAGCCATTGGCTATTTAAACTTGTATTTTTTTATTTACAAAATATAA
ATATGAAGACATAACCAGTTGCCATCTGCGTGACAATAAACATTATGCTAA

2340/8433

FIGURE 2071

MVKQIESKTAFQEALDAAGDKLVVVDFSATWCGPCKMINPFFHSLSEKYSNVIFLEVDVDDCQDVASECEVKCTP
TFQFFKKGQKVGEFSGANKEKLEATINELV

2341/8433

FIGURE 2072

CTTGGAGGGAGGGATTAGAAGCCGCTAGACTTTTTTTCCTCCCCTCTCAGTAGCACGGAGTCCGAATTAATTGGA
TTTCATTCACTGGGGAGGAACAAAAACTATCTGGGCAGCTTCATTGAGAGAGATTCATTGACACTAAGAGCCAGC
GGCTGCAGCTGGGTGCAGAGAGAACCTCCGGCTTTACTTCTGTCTCGTCTGCCCCAACCGCTAGCCTCGGCTTGG
GTAAGGCGAGGCGGAATTAAACCCCGCTCCGAGAGCGGCAGCTTCGCGCGCGGTGCGCTCGGCCTATGCCTGCCC
CGAGGGGCGTCTGGTAGGCACCCCGCCCTCTCCCGCAGCTCGACCCCC**ATG**ATAGATACGCTCAGACCCGTGCCC
TTCGCGTCGGAAATGGCGATCAGCAAGACGGTGGCGTGGCTCAACGAGCAGCTGGAGCTGGGCAACGAGCGGCTG
CTGCTGATGGACTGCCGGCCGCAGGAGCTATACGAGTCGTCGCACATCGAGTCGGCCATCAACGTGGCCATCCCG
GGCATCATGCTGCGGCGCCTGCAGAAGGGTAACCTGCCGGTGCGCGCGCTCTTCACGCGCGGCGAGGACCGGGAC
CGCTTCACCCGGCGCTGTGGCACCGACACAGTGGTGCTCTACGACGAGAGCAGCAGCGACTGGAACGAGAATACG
GGCGGCGAGTCGTTGCTCGGGCTGCTGCTCAAGAAGCTCAAGGACGAGGGCTGCCGGGCGTTCTACCTGGAAGGT
GGCTTCAGTAAGTTCCAAGCCGAGTTCTCCCTGCATTGCGAGACCAATCTAGACGGCTCGTGTAGCAGCAGCTCG
CCGCCGTTGCCAGTGCTGGGGCTCGGGGGCCTGCGGATCAGCTCTGACTCTTCCTCGGACATCGAGTCTGACCTT
GACCGAGACCCCAATAGTGCAACAGACTCGGATGGTAGTCCGCTGTCCAACAGCCAGCCTTCCTTCCCAGTGGAG
ATCTTGCCCTTCCTCTACTTGGGCTGTGCCAAAGACTCCACCAACTTGGACGTGTTGGAGGAATTCGGCATCAAG
TACATCTTGAACGTCACCCCCAATTTGCCGAATCTCTTTGAGAACGCAGGAGAGTTTAAATACAAGCAAATCCCC
ATCTCGGATCACTGGAGCCAAAACCTGTCCCAGTTTTTCCCTGAGGCCATTTCTTTCATAGATGAAGCCCGGGGC
AAGAACTGTGGTGTCTTGGTACATTGCTTGGCTGGCATTAGCCGCTCAGTCACTGTGACTGTGGCTTACCTTATG
CAGAAGCTCAATCTGTCGATGAACGATGCCTATGACATTGTCAAAATGAAAAAATCCAACATATCCCCTAACTTC
AACTTCATGGGTCAGCTGCTGGACTTCGAGAGGACGCTGGGACTCAGCAGCCCATGTGACAACAGGGTTCCAGCA
CAGCAGCTGTATTTTACCACCCCTTCCAACCAGAATGTATACCAGGTGGACTCTCTGCAATCTACG**TGA**AAGACC
CCACATCCCTCCTTGCTGGAATGTGTCTGGCCCTTCAGCAGTTTCTCTTGGCAGCATCAGCTGGGCTGCTTTCTT
TGTGTGTGGCCCCAGGTGTCAAAATGACACCAGCTGTCTGTACTAGACAAGGTTACCAAGTGCGGAATTGGTTAA
TACTAACAGAGAGATTTGCTCCATTCTCTTTGGAATAACAGGACATGCTGTATAGATACAGGCAGTAGGTTTGCT
CTGTACCCATGTGTACAGCCTACCCATGCAGGGACTGGGATTCGAGGACTTCCAGGCGCATAGGGTAGAACCAAA
TGATAGGGTAGGAGCATGTGTTCTTTAGGGCCTTGTAAGGCTGTTTCCTTTTGCATCTGGAACTGACTATATAAT
TGTCTTCAATGAAGACTAATTCAATTTTGCATATAGAGGAGCCAAAGAGAGATTTCAGCTCTGTATTTGTGGTAT
CAGTTTGGAAAAAAAAAATCTGATACTCCATTTGATTATTGTAAATATTTGATCTTGAATCACTTGACAGTGTTTG
TTTGAATTGTGTTTGTTTTTTCCTTTGATGGGCTTAAAAGAAATTATCCAAAGGGAGAAAGAGCAGTATGCCACT
TCTTAAAACAGAACAAAACAAAAAAAGAAAATTGTGCTCTTTTCTAATCCAAAGGGTATATTTGCAGCATGCTTG
ACTTTACCAATTCTGATGACATCTTTACGGACACTATTATCACTAAGACCTTGTTATGGCGAAGTCTTTAGTCTT
TTTCATGTATTTTCCTCATGATTTTTTCTCTTTATGTAGTTTGACTATGCCTTACCTTTGTAAATATTTTTGCTT
GTGTTGTCGCAAAGGGGATAATCTGGGAAAGACACCAAATCATGGGCTCACTTTAAAAAAAGAAAGAATAAAAAA
ACCTTCAGCTGTGCTAAACAGTATATTACCTCTGTATAAAATTCTTCAGGGAGTGTCACCTCAAATGCAATACTT
TGGGTTGGTTTCTTTCCTTTAAAAAAATTTGTATAAAACTGGAAGTGTGTGTGTGTGAGCATGGGTACCCATTTG
ATAAGAGAAATGCATTTGATTGTGAAGAAGGGAGAGTTAAATTCTCCATTATGTTCGTGGTGTAAAGTTTAGAGC
TGGAATTTATTATAAGAATGTAAAACCTTAAATTATTAATAAATAACTATTTTGGCTATTGAAAAAAAAAAAAAA
AAAAAAAAA

FIGURE 2073

MIDTLRPVPFASEMAISKTVAWLNEQLELGNERLLLMDCRPQELYESSHIESAINVAIPGIMLRRLQKGNLPVRA
LFTRGEDRDRFTRRCGTDTVVLYDESSSDWNENTGGESLLGLLLKKLKDEGCRAFYLEGGFSKFQAEFSLHCETN
LDGSCSSSSPPLPVLGLGGLRISSDSSSDIESDLDRDPNSATDSDGSPLSNSQPSFPVEILPFLYLGCAKDSTNL
DVLEEFGIKYILNVTPNLPNLFENAGEFKYKQIPISDHWSQNLSQFFPEAISFIDEARGKNCGVLVHCLAGISRS
VTVTVAYLMQKLNLSMNDAYDIVKMKKSNISPNFNFMGQLLDFERTLGLSSPCDNRVPAQQLYFTTPSNQNVYQV
DSLQST

FIGURE 2074

CCAGCCTCGGAGGGAGGGATTAGAAGCCGCTAGACTTTTTTTCCTCCCCTCTCAGTAGCACGGAGTCCGAATTAA
TTGGATTTCATTCACTGGGGAGGAACAAAAACTATCTGGGCAGCTTCATTGAGAGAGATTCATTGACACTAAGAG
CCAGCGCTGCAGCTGGTGCAGAGAGAACCTCCGGCTTTGACTTCTGTCTCGTCTGCCCCAAGGCCGCTAGCCTCG
GCTTGGGAAGGCGAGGCGGAATTAAACCCCGCTCCGAGAGCGCACGTTCGCGCGCGGTGCGTCGGCCATTGCCTG
CCCCGAGGGGCGTCTGGTAGGCACCCCGCCCTCTCCCGCAGCTCGACCCCC**ATG**ATAGATACGCTCAGACCCGTG
CCCTTCGCGTCGGAAATGGCGATCAGCAAGACGGTGGCGTGGCTCAACGAGCAGCTGGAGCTGGGCAACGAGCGG
CTGCTGCTGATGGACTGCCGGCCGCAGGAGCTATACGAGTCGTCGCACATCGAGTCGGCCATCAACGTGGCCATC
CCGGGCATCATGCTGCGGCGCCTGCAGAAGGGTAACCTGCCGGTGCGCGCGCTCTTCACGCGCGGCGAGGACCGG
GACCGCTTCACCCGGCGCTGTGGCACCGACACAGTGGTGCTCTACGACGAGAGCAGCAGCGACTGGAACGAGAAT
ACGGGCGGCGAGTCGTTGCTCGGGCTGCTGCTCAAGAAGCTCAAGGACGAGGGCTGCCGGGCGTTCTACCTGGAA
GGTGGCTTCAGTAAGTTCCAAGCCGAGTTCTCCCTGCATTGCGAGACCAATCTAGACGGCTCGTGTAGCAGCAGC
TCGCCGCCGTTGCCAGTGCTGGGGCTCGGGGGCCTGCGGATCAGCTCTGACTCTTCCTCGGACATCGAGTCTGAC
CTTGACCGAGACCCCAATAGTGCAACAGACTCGGATGGTAGTCCGCTGTCCAACAGCCAGCCTTCCTTCCCAGTG
GAGATCTTGCCCTTCCTCTACTTGGGCTGTGCCAAAGACTCCACCAACTTGGACGTGTTGGAGGAATTCGGCATC
AAGTACATCTTGAACGTCACCCCCAATTTGCCGAATCTCTTTGAGAACGCAGGAGAGTTTAAATACAAGCAAATC
CCCATCTCGGATCACTGGAGCCAAAACCTGTCCCAGTTTTTCCCTGAGGCCATTTCTTTCATAGATGAAGCCCGG
GGCAAGAACTGTGGTGTCTTGGTACATTGCTTGGCTGGCATTAGCCGCTCAGTCACTGTGACTGTGGCTTACCTT
ATGCAGAAGCTCAATCTGTCGATGAACGATGCCTATGACATTGTCAAAATGAAAAAATCCAACATATCCCCTAAC
TTCAACTTCATGGGTCAGCTGCTGGACTTCGAGAGGACGCTGGGACTCAGCAGCCCATGTGACAACAGGGTTCCA
GCACAGCAGCTGTATTTTACCACCCCTTCCAACCAGAATGTATACCAGGTGGACTCTCTGCAATCTACGTGAAAG
ACCCCACACCCCTCCTTGCTGGAATGTGTCTGGCCCTTCAGCAGTTTCTCTTGGCAGCATCAGCTGGGCTGCTTT
CTTTGTGTGTGGCCCCAGGTGTCAAAATGACACCAGCTGTCTGTACTAGACAAGGTTACCAAGTGCGGAATTGGT
TAATACTAACAGAGAGATTTGCTCCATTCTCTTTGGAATAACAGGACATGCTGTATAGATACAGGCAGTAGGTTT
GCTCTGTACCCATGTGTACAGCCTACCCATGCAGGGACTGGGATTCGAGGACTTCCAGGCGCATAGGGTAGAACC
AAATGATAGGGTAGGAGCATGTGTTCTTTAGGGCCTTGTAAGGCTGTTTCCTTTTGCATCTGGAACTGACTATAT
AATTGTCTTCAAGTGAAGACTAATTCAATTTTGCATATAGAGGAGCCAAAGAGAGATTTCAGCTCTGTATTTGTG
GTATCAGTGTTGGAAAAGAGAAATCTGATACTCCATTTGGATTATTGTAAATATTTGATCTTGAATCACTTGACA
GTGTTTGTTTGAATTGTGTTTGTTTTTTCCTTTGATGGGCTTAAAAGAAATTATCCAAAGGGAGAAAGAGCAGTA
TGCCACTTCTTAAAACAGAACAAAACAAAAAAAGAAAATTGTGCTCTGTTGTAATCCAAAGGGGAGATTTGCAGC
ATGCTTGACTTTACCAATTCTGATGACATCTTTACGGACACTATTATCACTAAGACCTTGTTATGGCGAAGTCTT
TAGTCTTTTTCATGTATTTTCCTCATGATTTTTTCTCTTTATGTAGTTTGAGTATGCCTTACCTTTGTAAATATT
TTTGCTTGTGTTGTCGCAAAGGGGATAATCTGGGAAAGACACCAAATCATGGGCTCACTTTAAAA

FIGURE 2075

MIDTLRPVPFASEMAISKTVAWLNEQLELGNERLLLMDCRPQELYESSHIESAINVAIPGIMLRRLQKGNLPVRA
LFTRGEDRDRFTRRCGTDTVVLYDESSSDWNENTGGESLLGLLLKKLKDEGCRAFYLEDEARGKNCGVLVHCLAG
ISRSVTVTVAYLMQKLNLSMNDAYDIVKMKKSNISPNFNFMGQLLDFERTLGLSSPCDNRVPAQQLYFTTPSNQN
VYQVDSLQST

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FIGURE 2076

GCTGAGTCCAAGAGATAGCAAATCGAGTCTTAAATAATCCGGGGAGAAAGACGCCCGGGTAGATTTGAGGTGCAG
CCTTGGAGGGAGGGATTAGAAGCCGCTAGACTTTTTTTCCTCCCCTCTCAGTAGCACGGAGTCCGAATTAATTGG
ATTTCATTCACTGGGGAGGAACAAAAACTATCTGGGCAGCTTCATTGAGAGAGATTCATTGACACTAAGAGCCAG
CGGCTGCAGCTGGGTGCAGAGAGAACCTCCGGCTTTACTTCTGTCTCGTCTGCCCCAACCGCTAGCCTCGGCTTG
GGTAAGGCGAGGCGGAATTAAACCCCGCTCCGAGAGCGGCAGCTTCGCGCGCGGTGCGCTCGGCCTATGCCTGCC
CCGAGGGGCGTCTGGTAGGCACCCCGCCCTCTCCCGCAGCTCGACCCCCATGATAGATACGCTCAGACCCGTGCC
CTTCGCGTCGGAAATGGCGATCAGCAAGACGGTGGCGTGGCTCAACGAGCAGCTGGAGCTGGGCAACGAGCGGCT
GCTGCTGATGGACTGCCGGCCGCAGGAGCTATACGAGTCGTCGCACATCGAGTCGGCCATCAACGTGGCCATCCC
GGGCATCATGCTGCGGCGCCTGCAGAAGGGTAACCTGCCGGTGCGCGCGCTCTTCACGCGCGGCGAGGACCGGGA
CCGCTTCACCCGGCGCTGTGGCACCGACACAGTGGTGCTCTACGACGAGAGCAGCAGCGACTGGAACGAGAATAC
GGGCGGCGAGTCGGTGCTCGGGCTGCTGCTCAAGAAGCTCAAGGACGAGGGCTGCCGGGCGTTCTACCTGGAAGG
TGGCTTCAGTAAGTTCCAAGCCGAGTTCTCCCTGCATTGCGAGACCAATCTAGACGGCTCGTGTAGCAGCAGCTC
GCCGCCGTTGCCAGTGCTGGGGCTCGGGGGCCTGCGGATCAGCTCTGACTCTTCCTCGGACATCGAGTCTGACCT
TGACCGAGACCCCAATAGTGCAACAGACTCGGATGGTAGTCCGCTGTCCAACAGCCAGCCTTCCTTCCCAGTGGA
GATCTTGCCCTTCCTCTACTTGGGCTGTGCCAAAGACTCCACCAACTTGGACGTGTTGGAGGAATTCGGCATCAA
GTACATCTTGAACGTCACCCCCAATTTGCCGAATCTCTTTGAGAACGCAGGAGAGTTTAAATACAAGCAAATCCC
CATCTCGGATCACTGGAGCCAAAACCTGTCCCAGTTTTTCCCTGAGGCCATTTCTTTCATAGATGAAGCCCGGGG
CAAGAACTGTGGTGTCTTGGTACATTGCTTGGCTGGCATTAGCCGCTCAGTCACTGTGACTGTGGCTTACCTTAT
GCAGAAGCTCAATCTGTCGATGAACGATGCCTATGACATTGTCAAAATGAAAAAATCCAACATATCCCCTAACTT
CAACTTCATGGGTCAGCTGCTGGACTTCGAGAGGACGCTGGGACTCAGCAGCCCATGTGACAACAGGGTTCCAGC
ACAGCAGCTGTATTTTACCACCCCTTCCAACCAGAATGTATACCAGGTGGACTCTCTGCAATCTACGTGAAAGAC
CCCACACCCCTCCTTGCTGGAATGTGTCTGGCCCTTCAGCAGTTTCTCTTGGCAGCATCAGCTGGGCTGCTTTCT
TTGTGTGTGGCCCCAGGTGTCAAAATGACACCAGCTGTCTGTACTAGACAAGGTTACCAAGTGCGGAATTGGTTA
ATACTAACAGAGAGATTTGCTCCATTCTCTTTGGAATAACAGGACATGCTGTATAGATACAGGCAGTAGGTTTGC
TCTGTACCCATGTGTACAGCCTACCCATGCAGGGACTGGGATTCGAGGACTTCCAGGCGCATAGGGTAGAACCAA
ATGATAGGGTAGGAGCATGTGTTCTTTAGGGCCTTGTAAGGCTGTTTCCTTTTGCATCTGGAACTGACTATATAA
TTGTCTTCAATGAAGACTAATTCAATTTTGCATATAGAGGAGCCAAAGAGAGATTTCAGCTCTGTATTTGTGGTA
TCAGTTTGGAAAAAAAATCTGATACTCCATTTGATTATTGTAAATATTTGATCTTGAATCACTTGACAGTGTTTG
TTTGAATTGTGTTTGTTTTTTCCTTTGATGGGCTTAAAAGAAATTATCCAAAGGGAGAAAGAGCAGTATGCCACT
TCTTAAAACAGAACAAAACAAAAAAAAAAAAAAAAA

FIGURE 2077

MIDTLRPVPFASEMAISKTVAWLNEQLELGNERLLLMDCRPQELYESSHIESAINVAIPGIMLRRLQKGNLPVRA
LFTRGEDRDRFTRRCGTDTVVLYDESSSDWNENTGGESVLGLLLKKLKDEGCRAFYLEGGFSKFQAEFSLHCETN
LDGSCSSSSPPLPVLGLGGLRISSDSSSDIESDLDRDPNSATDSDGSPLSNSQPSFPVEILPFLYLGCAKDSTNL
DVLEEFGIKYILNVTPNLPNLFENAGEFKYKQIPISDHWSQNLSQFFPEAISFIDEARGKNCGVLVHCLAGISRS
VTVTVAYLMQKLNLSMNDAYDIVKMKKSNISPNFNFMGQLLDFERTLGLSSPCDNRVPAQQLYFTTPSNQNVYQV
DSLQST

FIGURE 2078

ATTCTTGTCTGTTCTGCCTCACTCCCGAGCTCTACTGACTCCCAAAAGAGCGCCCAAGAAGAAAATGGCCATAAG
TGGAGTCCCTGTGCTAGGATTTTTCATCATAGCTGTGCTGATGAGCGCTCAGGAATCATGGGCTATCAAAGAAGA
ACATGTGATCATCCAGGCCGAGTTCTATCTGAATCCTGACCAATCAGGCGAGTTTATGTTTGACTTTGATGGTGA
TGAGATTTTCCATGTGGATATGGCAAAGAAGGAGACGGTCTGGCGGCTTGAAGAATTTGGACGATTTGCCAGCTT
TGAGGCTCAAGGTGCATTGGCCAACATAGCTGTGGACAAAGCCAACCTGGAAATCATGACAAAGCGCTCCAACTA
TACTCCGATCACCAATGTACCTCCAGAGGTAACTGTGCTCACGAACAGCCCTGTGGAACTGAGAGAGCCCAACGT
CCTCATCTGTTTCATCGACAAGTTCACCCCACCAGTGGTCAATGTCACGTGGCTTCGAAATGGAAAACCTGTCAC
CACAGGAGTGTCAGAGACAGTCTTCCTGCCCAGGGAAGACCACCTTTTCCGCAAGTTCCACTATCTCCCCTTCCT
GCCCTCAACTGAGGACGTTTACGACTGCAGGGTGGAGCACTGGGGCTTGGATGAGCCTCTTCTCAAGCACTGGGA
GTTTGATGCTCCAAGCCCTCTCCCAGAGACTACAGAGAACGTGGTGTGTGCCCTGGGCCTGACTGTGGGTCTGGT
GGGCATCATTATTGGGACCATCTTCATCATCAAGGGAGTGCGCAAAAGCAATGCAGCAGAACGCAGGGGGCCTCT
GTAAGGCACATGGAGGTGATGATGTTTCTTAGAGAGAAGATCACTGAAGAAACTTCTGCTTTAATGACTTTACAA
AGCTGGCAATATTACAATCCTTGACCTCAGTGAAAGCAGTCATCTTCAGCGTTTTCCAGCCCTATAGCCACCCCA
AGTGTGGTTATGCCTCCTCGATTGCTCCGTACTCTAACATCTAGCTGGCTTTCCCTGTCTATTGCCTTTTCCTGT
ATCTATTTTCCTCTATTTCCTATCATTTTATTATCACCATGCAATGCCTCTGGAATAAAACATACAGGAGTCTGT
CTCTGCTATGGAATGCCCCATGGGGCTCTCTTGTGTACTTATTGTTTAAGGTTTCCTCAAACTGTGATTTTTCTG
AACACAATAAACTATTTTGATGATCTTGGGTGGAAAA

FIGURE 2079

MAISGVPVLGFFIIAVLMSAQESWAIKEEHVIIQAEFYLNPDQSGEFMFDFDGDEIFHVDMAKKETVWRLEEFGR
FASFEAQGALANIAVDKANLEIMTKRSNYTPITNVPPEVTVLTNSPVELREPNVLICFIDKFTPPVVNVTWLRNG
KPVTTGVSETVFLPREDHLFRKFHYLPFLPSTEDVYDCRVEHWGLDEPLLKHWEFDAPSPLPETTENVVCALGLT
VGLVGIIIGTIFIIKGVRKSNAAERRGPL

FIGURE 2080A

CAAATGCGAACTTAGGCTGTTACACAACTGCTGGGGTCTGTTCTCGCCGCCCGCCCGGCAGTCAGGCAGCGTCGC
CGCCGTGGTAGCAGCCTCAGCCGTTTCTGGAGTCTCGGGCCCACAGTCACCGCCGCTTACCTGCGCCTCCTCGAG
CCTCCGGAGTCCCCGTCCGCCCGCACAGGCCGGTTCGCCGTCTGCGTCTCCCCCACGCCGCCTCGCCTGCCGCCG
CGCTCGTCCCTCCGGGCCGAC**ATG**AGTGGGGACCACCTCCACAACGATTCCCAGATCGAAGCGGATTTCCGATTG
AATGATTCTCATAAACACAAAGATAAACACAAAGATCGAGAACACCGGCACAAAGAACACAAGAAGGAGAAGGAC
CGGGAAAAGTCCAAGCATAGCAACAGTGAACATAAAGATTCTGAAAAGAAACACAAAGAGAAGGAGAAGACCAAA
CACAAAGATGGAAGCTCAGAAAAGCATAAAGACAAACATAAAGACAGAGACAAGGAAAAACGAAAAGAGGAAAAG
GTTCGAGCCTCTGGGGATGCAAAAATAAAGAAGGAGAAGGAAAATGGCTTCTCTAGTCCACCACAAATTAAAGAT
GAACCTGAAGATGATGGCTATTTTGTTCCTCCTAAAGAGGATATAAAGCCATTAAAGAGACCTCGAGATGAGGAT
GATGCTGATTATAAACCTAAGAAAATTAAAACAGAAGATACCAAGAAGGAGAAGAAAAGAAAACTAGAAGAAGAA
GAGGATGGTAAATTGAAAAAACCCAAGAATAAAGATAAAGATAAAAAAGTTCCTGAGCCAGATAACAAGAAAAAG
AAGCCGAAGAAAGAAGAGGAACAGAAGTGGAAATGGTGGGAAGAAGAGCGCTATCCTGAAGGCATCAAGTGGAAA
TTCCTAGAACATAAAGGTCCAGTATTTGCCCCACCATATGAGCCTCTTCCAGAGAATGTCAAGTTTTATTATGAT
GGTAAAGTCATGAAGCTGAGCCCCAAAGCAGAGGAAGTAGCTACGTTCTTTGCAAAAATGCTCGACCATGAATAT
ACTACCAAGGAAATATTTAGGAAAAATTTCTTTAAAGACTGGAGAAAGGAAATGACTAATGAAGAGAAGAATATT
ATCACCAACCTAAGCAAATGTGATTTTACCCAGATGAGCCAGTATTTCAAAGCCCAGACGGAAGCTCGGAAACAG
ATGAGCAAGGAAGAGAAACTGAAAATCAAAGAGGAGAATGAAAAATTACTGAAAGAATATGGATTCTGTATTATG
GATAACCACAAAGAGAGGATTGCTAACTTCAAGATAGAGCCTCCTGGACTTTTCCGTGGCCGCGGCAACCACCCC
AAGATGGGCATGCTGAAGAGACGAATCATGCCCGAGGATATAATCATCAACTGTAGCAAAGATGCCAAGGTTCCT
TCTCCTCCTCCAGGACATAAGTGGAAAGAAGTCCGGCATGATAACAAGGTTACTTGGCTGGTTTCCTGGACAGAG
AACATCCAAGGTTCCATTAAATACATCATGCTTAACCCTAGTTCACGAATCAAGGGTGAGAAGGACTGGCAGAAA
TACGAGACTGCTCGGCGGCTGAAAAAATGTGTGGACAAGATCCGGAACCAGTATCGAGAAGACTGGAAGTCCAAA
GAGATGAAAGTCCGGCAGAGAGCTGTAGCCCTGTACTTCATCGACAAGCTTGCTCTGAGAGCAGGCAATGAAAAG
GAGGAAGGAGAAACAGCGGACACTGTGGGCTGCTGCTCACTTCGTGTGGAGCACATCAATCTACACCCAGAGTTG
GATGGTCAGGAATATGTGGTAGAGTTTGACTTCCTCGGGAAGGACTCCATCAGATACTATAACAAGGTCCCTGTT
GAGAAACGAGTTTTTAAGAACCTACAACTATTTATGGAGAACAAGCAGCCCGAGGATGATCTTTTTGATAGACTC
AATACTGGTATTCTGAATAAGCATCTTCAGGATCTCATGGAGGGCTTGACAGCCAAGGTATTCCGTACATACAAT
GCCTCCATCACGCTACAGCAGCAGCTAAAAGAACTGACAGCCCCGGATGAGAACATCCCAGCGAAGATCCTTTCT
TATAACCGTGCCAATCGAGCTGTTGCAATTCTTTGTAACCATCAGAGGGCACCACCAAAAACTTTTGAGAAGTCT
ATGATGAACTTGCAAACTAAGATTGATGCCAAGAAGGAACAGCTAGCAGATGCCCGGAGAGACCTGAAAAGTGCT
AAGGCTGATGCCAAGGTCATGAAGGATGCAAAGACGAAGAAGGTAGTAGAGTCAAAGAAGAAGGCTGTTCAGAGA
CTGGAGGAACAGTTGATGAAGCTGGAAGTTCAAGCCACAGACCGAGAGGAAAATAAACAGATTGCCCTGGGAACC
TCCAAACTCAATTATCTGGACCCTAGGATCACAGTGGCTTGGTGCAAGAAGTGGGGTGTCCCAATTGAGAAGATT
TACAACAAAACCCAGCGGGAGAAGTTTGCCTGGGCCATTGACATGGCTGATGAAGACTATGAGTTT**TAG**CCAGTC
TCAAGAGGCAGAGTTCTGTGAAGAGGAACAGTGTGGTTTGGGAAAGATGGATAAACTGAGCCTCACTTGCCCTCG
TGCCTGGGGGAGAGAGGCAGCAAGTCTTAACAAACCAACATCTTTGCGAAAAGATAAACCTGGAGATATTATAAG
GGAGAGCTGAGCCAGTTGTCCTATGGACAACTTATTTAAAAATATTTCAGATATCAAAATTCTAGCTGTATGATT
TGTTTTGAATTTTGTTTTTATTTTCAAGAGGGCAAGTGGATGGGAATTTGTCAGCGTTCTACCAGGCAAATTCAC
TGTTTCACTGAAATGTTTGGATTCTCTTAGCTACTGTATGCAAAGTCCGATTATATTGGTGCGTTTTTACAGTTA
GGGTTTTGCAATAACTTCTATATTTTAATAGAAATAAATTCCTAAACTCCCTTCCCTCTCTCCCATTTCAGGAAT
TTAAAATTAAGTAGAACAAAAAACCCAGCGCACCTGTTAGAGTCGTCACTCTCTATTGTCATGGGGATCAATTTT
CATTAAACTTGAAGCAGTCGTGGCTTTGGCAGTGTTTTGGTTCAGACACCTGTTCACAGAAAAAGCATGATGGGA
AAATATTTCCTGACTTGAGTGTTCCTTTTTAAATGTGAATTTTTATTTCTTTTTAATTATTTTAAAATATTTAAA
CCTTTTTCTTGATCTTAAAGATCGTGTAGATTGGGGTTGGGGAGGGATGAAGGGCGAGTGAATCTAAGGATAATG
AAATAATCAGTGACTGAAACCATTTTCCCATCATCCTTTGTTCTGAGCATTCGCTGTACCCTTTAAGATATCCAT
CTTTTTCTTTTTAACCCTAATCTTTCACTTGAAAGATTTTATTGTATAAAAAGTTTCACAGGTCAATAAACTTAG
AGGAAAATGAGTATTTGGTCCAAAAAAAGGAAAAATAATCAAGATTTTAGGGCTTTTATTTTTTCTTTTGTAATT
GTGTAAAAAATGGAAAAAAACATAAAAAGCAGAATTTTAATGTGAAGACATTTTTTGCTATAATCATTAGTTTTA

FIGURE 2080B

GAGGCATTGTTAGTTTAGTGTGTGTGCAGAGTCCATTTCCCACATCTTTCCTCAAGTATCTTCTATTTTTATCAT
GAATTCCCTTTTAATCAACTGTAGGTTATTTAAAATAAATTCCTACAACTTAATGGAAA

FIGURE 2081

MSGDHLHNDSQIEADFRLNDSHKHKDKHKDREHRHKEHKKEKDREKSKHSNSEHKDSEKKHKEKEKTKHKDGSSE
KHKDKHKDRDKEKRKEEKVRASGDAKIKKEKENGFSSPPQIKDEPEDDGYFVPPKEDIKPLKRPRDEDDADYKPK
KIKTEDTKKEKKRKLEEEEDGKLKKPKNKDKDKKVPEPDNKKKKPKKEEEQKWKWWEEERYPEGIKWKFLEHKGP
VFAPPYEPLPENVKFYYDGKVMKLSPKAEEVATFFAKMLDHEYTTKEIFRKNFFKDWRKEMTNEEKNIITNLSKC
DFTQMSQYFKAQTEARKQMSKEEKLKIKEENEKLLKEYGFCIMDNHKERIANFKIEPPGLFRGRGNHPKMGMLKR
RIMPEDIIINCSKDAKVPSPPPGHKWKEVRHDNKVTWLVSWTENIQGSIKYIMLNPSSRIKGEKDWQKYETARRL
KKCVDKIRNQYREDWKSKEMKVRQRAVALYFIDKLALRAGNEKEEGETADTVGCCSLRVEHINLHPELDGQEYVV
EFDFLGKDSIRYYNKVPVEKRVFKNLQLFMENKQPEDDLFDRLNTGILNKHLQDLMEGLTAKVFRTYNASITLQQ
QLKELTAPDENIPAKILSYNRANRAVAILCNHQRAPPKTFEKSMMNLQTKIDAKKEQLADARRDLKSAKADAKVM
KDAKTKKVVESKKKAVQRLEEQLMKLEVQATDREENKQIALGTSKLNYLDPRITVAWCKKWGVPIEKIYNKTQRE
KFAWAIDMADEDYEF

FIGURE 2082A

CAAATGCGAACTTAGGCTGTTACACAACTGCTGGGGTCTGTTCTCGCCGCCCGCCCGGCAGTCAGGCAGCGTCGC
CGCCGTGGTAGCAGCCTCAGCCGTTTCTGGAGTCTCGGGCCCACAGTCACCGCCGCTTACCTGCGCCTCCTCGAG
CCTCCGGAGTCCCCGTCCGCCCGCACAGGCCGGTTCGCCGTCTGCGTCTCCCCCACGCCGCCTCGCCTGCCGCCG
CGCTCGTCCCTCCGGGCCGACATGAGTGGGGACCACCTCCACAACGATTCCCAGATCGAAGCGGATTTCCGATTG
AATGATTCTCATAAACACAAAGATAAACACAAAGATCGAGAACACCGGCACAAAGAACACAAGAAGGAGAAGGAC
CGGGAAAAGTCCAAGCATAGCAACAGTGAACATAAAGATTCTGAAAAGAAACACAAAGAGAAGGAGAAGACCAAA
CACAAAGATGGAAGCTCAGAAAAGCATAAAGACAAACATAAAGACAGAGACAAGGAAAAACGAAAAGAGGAAAAG
GTTCGAGCCTCTGGGGATGCAAAAATAAAGAAGGAGAAGGAAAATGGCTTCTCTAGTCCACCACAAATTAAAGAT
GAACCTGAAGATGATGGCTATTTTGTTCCTCCTAAAGAGGATATAAAGCCATTAAAGAGACCTCGAGATGAGGAT
GATGCTGATTATAAACCTAAGAAAATTAAAACAGAAGATACCAAGAAGGAGAAGAAAAGAAAACTAGAAGAAGAA
GAGGATGGTAAATTGAAAAAACCCAAGAATAAAGATAAAGATAAAAAAGTTCCTGAGCCAGATAACAAGAAAAAG
AAGCCGAAGAAAGAAGAGGAACAGAAGTGGAAATGGTGGGAAGAAGAGCGCTATCCTGAAGGCATCAAGTGGAAA
TTCCTAGAACATAAAGGTCCAGTATTTGCCCCACCATATGAGCCTCTTCCAGAGAATGTCAAGTTTTATTATGAT
GGTAAAGTCATGAAGCTGAGCCCCAAAGCAGAGGAAGTAGCTACGTTCTTTGCAAAAATGCTCGACCATGAATAT
ACTACCAAGGAAATATTTAGGAAAAATTTCTTTAAAGACTGGAGAAAGGAAATGACTAATGAAGAGAAGAATATT
ATCACCAACCTAAGCAAATGTGATTTTACCCAGATGAGCCAGTATTTCAAAGCCCAGACGGAAGCTCGGAAACAG
ATGAGCAAGGAAGAGAAACTGAAAATCAAAGAGGAGAATGAAAAATTACTGAAAGAATATGGATTCTGTATTATG
GATAACCACAAAGAGAGGATTGCTAACTTCAAGATAGAGCCTCCTGGACTTTTCCGTGGCCGCGGCAACCACCCC
AAGATGGGCATGCTGAAGAGACGAATCATGCCCGAGGATATAATCATCAACTGTAGCAAAGATGCCAAGGTTCCT
TCTCCTCCTCCAGGACATAAGTGGAAAGAAGTCCGGCATGATAACAAGGTTACTTGGCTGGTTTCCTGGACAGAG
AACATCCAAGGTTCCATTAAATACATCATGCTTAACCCTAGTTCACGAATCAAGGGTGAGAAGGACTGGCAGAAA
TACGAGACTGCTCGGCGGCTGAAAAAATGTGTGGACAAGATCCGGAACCAGTATCGAGAAGACTGGAAGTCCAAA
GAGATGAAAGTCCGGCAGAGAGCTGTAGCCCTGTACTTCATCGACAAGCTTGCTCTGAGAGCAGGCAATGAAAAG
GAGGAAGGAGAAACAGCGGACACTGTGGGCTGCTGCTCACTTCGTGTGGAGCACATCAATCTACACCCAGAGTTG
GATGGTCAGGAATATGTGGTAGAGTTTGACTTCCTCGGGAAGGACTCCATCAGATACTATAACAAGGTCCCTGTT
GAGAAACGAGTTTTTAAGAACCTACAACTATTTATGGAGAACAAGCAGCCCGAGGATGATCTTTTTGATAGACTC
AATACTGGTATTCTGAATAAGCATCTTCAGGATCTCATGGAGGGCTTGACAGCCAAGGTATTCCGTACATACAAT
GCCTCCATCACGCTACAGCAGCAGCTAAAAGAACTGACAGCCCCGGATGAGAACATCCCAGCGAAGATCCTTTCT
TATAACCGTGCCAATCGAGCTGTTGCAATTCTTTGTAACCATCAGAGGGCACCACCAAAAACTTTTGAGAAGTCT
ATGATGAACTTGCAAACTAAGATTGATGCCAAGAAGGAACAGCTAGCAGATGCCCGGAGAGACCTGAAAAGTGCT
AAGGCTGATGCCAAGGTCATGAAGGATGCAAAGACGAAGAAGGTAGTAGAGTCAAAGAAGAAGGCTGTTCAGAGA
CTGGAGGAACAGTTGATGAAGCTGGAAGTTCAAGCCACAGACCGAGAGGAAAATAAACAGATTGCCCTGGGAACC
TCCAAACTCAATTATCTGGACCCTAGGATCACAGTGGCTTGGTGCAAGAAGTGGGGTGTCCCAATTGAGAAGATT
TACAACAAAACCCAGCGGGAGAAGTTTGCCTGGGCCATTGACATGGCTGATGAAGACTATGAGTTTTAGCCAGTC
TCAAGAGGCAGAGTTCTGTGAAGAGGAACAGTGTGGTTTGGGAAAGATGGATAAACTGAGCCTCACTTGCCCTCG
TGCCTGGGGGAGAGAGGCAGCAAGTCTTAACAAACCAACATCTTTGCGAAAAGATAAACCTGGAGATATTATAAG
GGAGAGCTGAGCCAGTTGTCCTATGGACAACTTATTTAAAAATATTTCAGATATCAAAATTCTAGCTGTATGATT
TGTTTTGAATTTTGTTTTTATTTTCAAGAGGGCAAGTGGATGGGAATTTGTCAGCGTTCTACCAGGCAAATTCAC
TGTTTCACTGAAATGTTTGGATTCTCTTAGCTACTGTATGCAAAGTCCGATTATATTGGTGCGTTTTTACAGTTA
GGGTTTTGCAATAACTTCTATATTTTAATAGAAATAAATTCCTAAACTCCCTTCCCTCTCTCCCATTTCAGGAAT
TTAAAATTAAGTAGAACAAAAAACCCAGCGCACCTGTTAGAGTCGTCACTCTCTATTGTCATGGGGATCAATTTT
CATTAAACTTGAAGCAGTCGTGGCTTTGGCAGTGTTTTGGTTCAGACACCTGTTCACAGAAAAAGCATGATGGGA
AAATATTTCCTGACTTGAGTGTTCCTTTTTAAATGTGAATTTTTATTTCTTTTTAATTATTTTAAAATATTTAAA
CCTTTTTCTTGATCTTAAAGATCGTGTAGATTGGGGTTGGGGAGGGATGAAGGGCGAGTGAATCTAAGGATAATG
AAATAATCAGTGACTGAAACCATTTTCCCATCATCCTTTGTTCTGAGCATTCGCTGTACCCTTTAAGATATCCAT
CTTTTTCTTTTTAACCCTAATCTTTCACTTGAAAGATTTTATTGTATAAAAAGTTTCACAGGTCAATAAACTTAG
AGGAAAATGAGTATTTGGTCCAAAAAAAGGAAAAATAATCAAGATTTTAGGGCTTTTATTTTTCTTTTGTAATT
GTGTAAAAAATGGAAAAAAACATAAAAAGCAGAATTTTAATGTGAAGACATTTTTTGCTATAATCATTAGTTTTA

FIGURE 2082B

GAGGCATTGTTAGTTTAGTGTGTGTGCAGAGTCCATTTCCCACATCTTTCCTCAAGTATCTTCTATTTTTATCAT
GAATTCCCTTTTAATCAACTGTAGGTTATTTAAAATAAATTCCTACAACTTAATGGAAA

FIGURE 2083

MSGDHLHNDSQIEADFRLNDSHKHKDKHKDREHRHKEHKKEKDREKSKHSNSEHKDSEKKHKEKEKTKHKDGSSE
KHKDKHKDRDKEKRKEEKVRASGDAKIKKEKENGFSSPPQIKDEPEDDGYFVPPKEDIKPLKRPRDEDDADYKPK
KIKTEDTKKEKKRKLEEEEDGKLKKPKNKDKDKKVPEPDNKKKKPKKEEEQKWKWWEEERYPEGIKWKFLEHKGP
VFAPPYEPLPENVKFYYDGKVMKLSPKAEEVATFFAKMLDHEYTTKEIFRKNFFKDWRKEMTNEEKNIITNLSKC
DFTQMSQYFKAQTEARKQMSKEEKLKIKEENEKLLKEYGFCIMDNHKERIANFKIEPPGLFRGRGNHPKMGMLKR
RIMPEDIIINCSKDAKVPSPPPGHKWKEVRHDNKVTWLVSWTENIQGSIKYIMLNPSSRIKGEKDWQKYETARRL
KKCVDKIRNQYREDWKSKEMKVRQRAVALYFIDKLALRAGNEKEEGETADTVGCCSLRVEHINLHPELDGQEYVV
EFDFLGKDSIRYYNKVPVEKRVFKNLQLFMENKQPEDDLFDRLNTGILNKHLQDLMEGLTAKVFRTYNASITLQQ
QLKELTAPDENIPAKILSYNRANRAVAILCNHQRAPPKTFEKSMMNLQTKIDAKKEQLADARRDLKSAKADAKVM
KDAKTKKVVESKKKAVQRLEEQLMKLEVQATDREENKQIALGTSKLNYLDPRITVAWCKKWGVPIEKIYNKTQRE
KFAWAIDMADEDYEF

FIGURE 2084

GGGGAGAGAGTGGGGACGTCCGGCTTCGGAGCGGGAGTGTTCGTTGTGCCAGCGACTAAAAAGAGAATTAAATATG
GGGTGATGTTGAGAAAGGCAAGAAGATTTTTATTATGAAGTGTTCCCAGTACCACACCGTTGAAAAGGGAGGCAA
GCACAAGACTGGGCCAAATCTCCATGGTCTCTTTGGGCGGAAGACAGGTCAGGCCCCTGGATACTCTTACACAGC
CGCCAATAAGAACAAAGGCATCATCTGGGGAGAGGATACACTGATGGAGTATTTGGAGAATCCCAAGAAGTACAT
CCCTGGAACAAAAATGATCTTTGTCGGCATTAAGAAGAAGGAAGAAAGGGCAGACTTAATAGCTTATCTCAAAAA
AGCTACTAATGAGTAATAATTGGCCACTGCCTTATTTATTACAAAACAGAAATGTCTCATGACTTTTTTATGTGT
ACCATCCTTTAATAGATCTCATACACCAGAATTCAGATCATGAATGACTGACAGAATATTTTGTTGGGCAGTCCT
GATTTAAAACTAAGACTGGCTTGTGGTTAAATGAATATGTTCAGTTTTTGAATTTTAATAGTAACTCCAATTCAG
TAAATGGTATCACTGTTTACCCCTTTTAAAGATATGATTAGACTTCGTTAGTAATGTTCAACTTTTCACAAAGAT
GGTGAGTGCCATCTTAAAACTTACTGGAGATTGGTTTTATATTTAGATTTATATAACTGGTTATGTGAATATATT
TAAATACTGGGGAAATTGCTTCACTGTCTTAGAACCAAGCAAGATTCACCTGTGTTTTGTGTTCATGTTCATTTG
CCTCTTAAAGGCAAGGGTTGAAGATAAATAAGGTAGCAATGTCTATAGTTTTGGCCTTAACTATGCCAATCTAAT
TATAATTCCCTGTATTTAAAATGGTTTCTTTTACTTATTGAAAGGCATTTTAGTGTGGTTTATGTGTAATATTAA
AGATTATTCAACACCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2085

MGDVEKGKKIFIMKCSQYHTVEKGGKHKTGPNLHGLFGRKTGQAPGYSYTAANKNKGIIWGEDTLMEYLENPKKY
IPGTKMIFVGIKKKEERADLIAYLKKATNE

FIGURE 2086

CCGGCGGCGCCTCAGGTCGCGGGGCGCCTAGGCCTGGGTTGTCCTTTGCATCTGCACGTGTTCGCAGTCGTTTCC
GCGATGCTGCCTCTGCTGCGCTGCGTGCCCCGTGTGCTGGGCTCCTCCGTCGCCGGCCTCCGCGCTGCCGCGCCC
GCCTCGCCTTTCCGGCAGCTCCTGCAGCCGGCACCCCGGCTGTGCACCCGGCCCTTCGGGCTGCTCAGCGTGCGC
GCAGGTTCCGAGCGGCGGCCGGGCCTCCTGCGGCCTCGCGGACCCTGCGCCTGTGGCTGTGGCTGCGGCTCGCTG
CACACCGACGGAGACAAAGCTTTTGTTGATTTCCTGAGTGATGAAATTAAGGAGGAAAGAAAAATTCAGAAGCAT
AAAACCCTCCCTAAGATGTCTGGAGGTTGGGAGCTGGAACTGAATGGGACAGAAGCGAAATTAGTGCGGAAAGTT
GCCGGGGAAAAAATCACGGTCACTTTCAACATTAACAACAGCATCCCACCAACATTTGATGGTGAGGAGGAACCC
TCGCAAGGGCAGAAGGTTGAAGAACAGGAGCCTGAACTGACATCAACTCCCAATTTCGTGGTTGAAGTTATAAAG
AATGATGATGGCAAGAAGGCCCTTGTGTTGGACTGTCATTATCCAGAGGATGAGGTTGGACAAGAAGACGAGGCT
GAGAGTGACATCTTCTCTATCAGGGAAGTTAGCTTTCAGTCCACTGGCGAGTCTGAATGGAAGGATACTAATTAT
ACACTCAACACAGATTCCTTGGACTGGGCCTTATATGACCACCTAATGGATTTCCTTGCCGACCGAGGGGTGGAC
AACACTTTTGCAGATGAGCTGGTGGAGCTCAGCACAGCCCTGGAGCACCAGGAGTACATTACTTTTCTTGAAGAC
CTCAAGAGTTTTGTCAAGAGCCAGTAGAGCAGACAGATGCTGAAAGCCATAGTTTCATGGCAGGCTTTGGCCAGT
GAACAAATCCTACTCTGAAGCTAGACATGTGCTTTGAAATGATTATCATCCTAATATCATGGGGGAAAAAATACC
AAATTTAAATTATATGTTTTGTGTTCTCATTTATTATCATTTTTTTCTGTACAAATCTATTATTTCTAGATTTTT
GTATAACATGATAGACATAAAATTGGTTTATCTCCTCCGCTGAGTCTTCCTAGAAGTACCTGCTGGGTTCTCAGT
TCCAGTTCCCATCCTTTGATTGATCACTCTCCCTGACATCCACCTGTATGACTTTGTCACCAAATGCTGTCTTCT
CTTTCTCCAATCAAGAAATAATAATCCCTCGAGTTTACAAAACAAAAAAAAAAAAAA

FIGURE 2087

MLPLLRCVPRVLGSSVAGLRAAAPASPFRQLLQPAPRLCTRPFGLLSVRAGSERRPGLLRPRGPCACGCGCGSLH
TDGDKAFVDFLSDEIKEERKIQKHKTLPKMSGGWELELNGTEAKLVRKVAGEKITVTFNINNSIPPTFDGEEEPS
QGQKVEEQEPELTSTPNFVVEVIKNDDGKKALVLDCHYPEDEVGQEDEAESDIFSIREVSFQSTGESEWKDTNYT
LNTDSLDWALYDHLMDFLADRGVDNTFADELVELSTALEHQEYITFLEDLKSFVKSQ

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FIGURE 2088

GGCACGAGGCTCGGGTTGTGCCACCGCTGGACTCCCGTGTCCCTCCGCGCAGGCGGGCGGCCCCGGAGCGCTGGT
GCCGGCAGAGGCGGCGACGGTGGCGCCCCTCCTCATC**ATG**AACAGAGGCTTCTCCCGAAAAAGCCACACATTCCT
GCCCAAGATCTTCTTCCGCAAGATGTCATCCTCAGGGGCCAAGGACAAGCCTGAGCTGCAGTTTCCCTTCCTTCA
GGATGAGGACACAGTGGCCACGCTGCTAGAGTGCAAGACGCTCTTCATCTTGCGCGGCCTGCCAGGAAGCGGCAA
GTCCACGCTGGCACGGGTCATCGTGGACAAGTACCGTGATGGCACCAAGATGGTGTCGGCTGACGCTTACAAGAT
CACCCCCGGCGCTCGAGGAGCCTTCTCCGAGGAGTACAAGCGGCTCGATGAGGACCTGGCTGCCTACTGCCGCCG
CCGGGACATCAGAATTCTTGTGCTTGATGACACCAACCACGAACGGGAACGGCTGGAGCAGCTCTTTGAAATGGC
CGACCAGTACCAGTACCAGGTGGTGCTGGTGGAGCCCAAGACGGCGTGGCGGCTGGACTGTGCCCAGCTCAAGGA
GAAGAACCAGTGGCAGCTGTCGGCTGATGACCTGAAGAAGCTGAAGCCTGGGCTGGAGAAGGACTTCCTGCCGCT
CTACTTCGGCTGGTTCCTGACCAAGAAGAGCTCTGAGACCCTCCGCAAAGCCGGCCAGGTCTTCCTGGAAGAGCT
GGGGAACCACAAGGCCTTCAAGAAGGAGCTGCGACAATTCGTCCCTGGGGATGAGCCCAGGGAGAAGATGGACTT
GGTCACCTACTTTGGAAAGAGACCCCCAGGCGTGCTGCATTGCACAACCAAGTTTTGTGACTACGGGAAGGCTCC
CGGGGCAGAGGAGTACGCTCAACAAGATGTGTTAAAGAAATCTTACTCCAAGGCCTTCACGCTGACCATCTCTGC
CCTCTTTGTGACACCCAAGACGACTGGGGCCCGGGTGGAGTTAAGCGAGCAGCAACTGCAGTTGTGGCCGAGTGA
TGTGGACAAGCTGTCACCCACTGACAACCTGCCGCGGGGGAGCCGCGCCCACATCACCCTCGGCTGTGCAGCTGA
CGTAGAGGCCGTGCAGACGGGCCTTGACCTCTTAGAGATTCTGCGGCAGGAGAAGGGGGGCAGCCGAGGCGAGGA
GGTGGGCGAGCTAAGCCGGGGCAAGCTCTATTCCTTGGGCAATGGGCGCTGGATGCTGACCCTGGCCAAGAACAT
GGAGGTCAGGGCCATCTTCACGGGATACTACGGGAAAGGCAAACCTGTGCCCACGCAAGGTAGCCGGAAGGGGGG
CGCCTTGCAGTCCTGCACCATCATA**TGA**GTGTTCTCACCACCACTTATGCCCCTAGAAGGGAAGGGGAGAGGGAA
ACGTGCCCTCTGTTTGATCCTTGTTTTGTGACATTTTTTTTTTTTTTTTTTTACTCAAAGTTAACCTACCTGTA
ACTTTTTAAAAACTTGTAAAATAACTGACCCTCCCTTCCTGTCCGCCCTCTTCCCCTCTAATGCTCACGCTCCCA
ACACAAGGTGGGCAGGGAGGCACCATTCAGGAACCTGGACCAAAGCTGACGAGGCTGGGCCAAGCCAGGGATGGG
GCCACAGCCAGAACCCCGAGCCCTACTTCCAGGTTCTGGTTAGCTCAGCCCCAGCCCAGCCCAGCTGCTCTGCCC
AGAGCTGGGTGAGTGGGGAGACACCTCAGAGCCCCGCAAAACCCACTGACCGGAGGCAAAAGGCAGTGGGGCTGG
GGGTAGTTTTCCATGGTCACAGAGAACTAGTGGTGGCTCTGAGAAGGGGAGGACCTCTGGGCTTTGATTCCATCT
CCTTGTCTTTTTTCTTTGTTTTTAGAGACAGGGTCCTGCTATTTCCCAAGCTGGAGTGCAGTGGTGCGATCATGG
CTCACTGCAGCCTCGAACTCCTGGGCTCAAGCAATCCTCCTGAGTGATCCCATTTCTTAATCAGTGTAGCCCCAA
GAAGGCTGGGGCTATTTACCAGGGTAGAAAAAGGAGCTTACCTCCCACCTTTGGTCCTAAGTCCCTGCCCCCTCC
CCTTCACACCATAACTAGGTAACAGTTTGATAACTAGGGAAGAAAGCAGAACAGTTAAGCAGCCGCCACATCCCC
GCTGGCTGGGGGCCTCACTCCAGGAAGGGGCTGGACTGGCTGTCCTTTCCAGTGGCCTGGCTCCGCTGTGTGGAT
GGGGAGATCGGGGCCAGAGGCAGAACCCTGGTGAGGAAGCTCCAGTCCTGCTCTCTACCCAGCCCATCTTGCCTC
CATGGTGCCTCTGGAGGCCTCTGGGCCTCCTCTAACAGGGGCTGGTGGGCACCAAGAGCCAATGGAGTAGACCCC
TGGCTGGTAAGGGCCAAGTCCCACCGGTTGCTTCTGGGAAGGGGTTTCTAACACTAGTCTGTGTGCTGTGGTTCC
TGGGGTGCCCTCCACTGCCCTCTGTTCAGTAACAGGGCCTTGCTAATCGGGTTGTCACTCAACAAAAGTGCTTTG
GATTTAAGTTACTATCCTGGCTTTGCCCAACCTCAGCAACCTGTAAGACTGATAATGAAATAAATCATGTTAATC
CTAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2089

MNRGFSRKSHTFLPKIFFRKMSSSGAKDKPELQFPFLQDEDTVATLLECKTLFILRGLPGSGKSTLARVIVDKYR
DGTKMVSADAYKITPGARGAFSEEYKRLDEDLAAYCRRRDIRILVLDDTNHERERLEQLFEMADQYQYQVVLVEP
KTAWRLDCAQLKEKNQWQLSADDLKKLKPGLEKDFLPLYFGWFLTKKSSETLRKAGQVFLEELGNHKAFKKELRQ
FVPGDEPREKMDLVTYFGKRPPGVLHCTTKFCDYGKAPGAEEYAQQDVLKKSYSKAFTLTISALFVTPKTTGARV
ELSEQQLQLWPSDVDKLSPTDNLPRGSRAHITLGCAADVEAVQTGLDLLEILRQEKGGSRGEEVGELSRGKLYSL
GNGRWMLTLAKNMEVRAIFTGYYGKGKPVPTQGSRKGGALQSCTII

FIGURE 2090A

GTTCCACAGCGAGGTGGCCAAATTTCGTTTCCTGAACGAACTGATCAAAGTGTTGTCCCCAAAGTACCTGGGGTC
CTGGGCCACAGGAAAAGTTAAAGGAAGAGTCATTGAAATACTCTTCAGTTGGACAGTCTGGTTTCCGGAAGACAT
CAAGATTCGAGACGCTTATCAGATGCTGAAGAAACAAGGAATTATAAAACAAGACCCTAAACTACCAGTGGATAA
AATCTTACCCCCACCATCTCCCTGGCCCAAGAGCTCCATCTTTGATGCTGATGAAGAAAAGTCCAAGCTTCTGAC
AAGGCTTCTAAAGAGCAACCACCCCGAGGACCTTCAGGCTGCAAACCGGTTAATCAAGAATTTGGTCAAGGAGGA
ACAAGAAAAATCGGAGAAGGTGTCCAAGAGGGTCAGTGCGGTGGAGGAAGTGCGAAGCCATGTGAAGGTGCTGCA
GGAGATGCTGAGCATGTACCGCAGGCCAGGGCAGGCCCCGCCCGACCAGGAGGCCCTGCAGGTCGTGTATGAGAG
GTGTGAAAAGCTGCGGCCCACGCTGTTCCGGTTGGCGAGTGACACCACTGATGACGATGATGCACTCGCGGAAAT
TCTCCAGGCAAATGACCTCCTCACCCAAGGAGTTCTGCTGTACAAACAGGTGATGGAGGGCCGGGTCACCTTTGG
AAACAGAGTGACCAGCTCATTGGGAGACATCCCTGTCTCCAGAGTCTTTCAGAATCCAGCAGGCTGCATGAAGAC
CTGCCCCCTGATTGACTTGGAGGTGGACAATGGACCTGCGCAGATGGGGACTGTGGTGCCATCTTTGCTTCATCA
GGACCTGGCAGCCTTGGGAATCAGTGATGCTCCTGTTACAGGCATGGTTTCTGGTCAGAATTGCTGTGAGGAAAA
GAGGAATCCCTCCTCCAGCACGCTGCCAGGCGGTGGTGTTCAGAACCCTTCTGCAGACAGGAATTTGCTGGACCT
CCTCTCAGCACAGCCAGCTCCGTGCCCTCTGAATTATGTTTCGCAGAAAAGTGTCCCCAAGGAAGTGCCACCAGG
TACTAAGTCCTCTCCAGGTTGGTCCTGGGAGGCTGGCCCGTTGGCTCCTTCCCCATCTTCACAGAATACACCTCT
GGCTCAAGTGTTTGTCCCTTTGGAGTCTGTTAAGCCCAGCAGCCTGCCGCCTCTCATTGTGTATGACCGGAATGG
ATTCAGAATTCTGCTCCACTTCTCCCAGACGGGAGCCCCTGGGCACCCAGAGGTACAGGTGCTGCTCTTGACCAT
GATGAGCACGGCTCCCCAGCCTGTCTGGGATATCATGTTTCAAGTGGCTGTGCCAAAGTCAATGAGAGTGAAGCT
GCAGCCGGCATCCAGCTCCAAGCTTCCTGCATTCAGTCCTTTGATGCCTCCAGCTGTGATATCTCAGATGCTGCT
GCTTGACAATCCACACAAAGAACCTATCCGCTTACGGTACAAGCTGACATTCAACCAAGGTGGACAGCCTTTCAG
CGAAGTAGGAGAAGTGAAAGACTTCCCAGACCTGGCTGTCTTGGGCGCAGCCTAACTTTTCACAAGATGGACCCT
TCATTTCAAGCTTAGGCTGGCGTTACTTTTGCTGTCTAGTCAGGACTAATCACGGTGTTTCAGTGCGGAGTGCCA
AGAGTCCTATCCTGACGTCAGGCTCTGGGTGTCAACCTCTGACTTATTCTGCAGATGCTCTGTGTGTGTGTGTGT
GTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTTCGGGGAGAGGGTGGTAGCACAG
GGCTTGGGATATCGGCAGTGTGGGAAATGCGAAGCATTTCTCATCATCATCATCTCTGCTACAGTCATGTTTCTG
CATGTCAGCGAGCGACACTGTCCCTGCCTCAGGTTGGAGGTTTTATCAGCCAAAGTGTTTTTTTCATGTATCGTT
CGTTCCATTCATCCACTCTGTGCCTTGTCAGCCTTTGAAAGGCTTGGTTGCTCCCAGGCTGCTGTTCTCAGGGAC
CTTAAAAGGGACCTGGTTAGTCTTGGGGCAGAGAGTATCTACTTGGGCACTCTCTTCCAAGAAAGACCTTGTCTC
CATTTTCATTAGACAATGCTTCTTGTGTGTGTTCTGGAAGATCTTCTAAATGGAATGCTTGTTGCACTGTTCCCA
GGCGAGTGGCTGCCATGAGACCTGAGGACCACACTTGGGGGACCAATCATGTCCTTCACCACTGTGCCTTAGAAT
CGCCCCTGGACAGAGTTCCTGGGCAGAGGGGAAAGCAGCTCCCAGGCCTTACTCAGGCCTCAGGTCCATGGGTTG
GGCAGCCAGTCTGGGCCCTTCTCAGGATCCTCATCTCCATCCTCATCCTCTTCCTTCACAGCATTTACTTGGAGC
TCTTTGTGACACACCATGTCAGTCATGATGAATCGGCCAACAGCCAGCCCTTGCCAGCTGACGTCACAGTCTAAG
ATGGGAAACTGGTACAGATAGACATGAAGAGAGCTTAGCAGTGATTGAGGTGGTGACTAAATATACAGTCATTGA
ATAAATACCATGTAGCAAGTGTACTTTGTGGAGTGTTGAGTAAGTGGAAAATGGAAAGCCAGTTGCATTTAGAGA
TGATAGGCCTAAAGGGAACTGTCTTCTGTCGAGAAGTAAAGGAAACTTCATGAAGGATGTAGAAGCTTAGCTGCC
TCAGAGAAGAGAGAACCTGAAGATCTGAGGCAAGCTGGACAGGAGAGGTGGATATTTGTTGATGGAAGAATTCAA
GTTTATAATCAATTCCCACTTAGCACCTACTGTGTGCTAGGAACTTGAATGTGTATGTTTGACAAGTCCTGCTTG
GCCTGATGGGTGGGAGAAGGAACCTGAGCCTGGCTGAGATGGCTAGGCGGAGGGCTTTGAAGTCCAAGCAGCTGA
ACTGGCTGGGTGGGTTTCTACCTTTGAAACTGCAAGACTTGTTTGGAGCTCTTAATTACAATATCTGATATTTTT
ACAGTCTGATCTTTTGACTTCTACATATAGTGGAAATCTGCCAATACTAATTGGTGGAGATGGGAACTGTAAAAG
ATCAAGTATGCTAATTTTAAGCAAATGTAAAAACTCATAAAACAGGTAAACAGTGGGGTGATTTCATTTGCCATA
ATTCACATAAGACGAATTTTAATCTAAAAGTACTTTCTTGCTTGTATTCTGTGTGGCTTTTTTTTGTTTTTTGAG
GCCATATCTCACTCTGTCACTCAGGCTGGAGTGCGGTGGTATAATCTCAGCCTCTCGAGTAGCTGGGACTACAGG
CGTGAGCCAGCACGCCCAGCTAATTTTTGTATTTTTAGTAGAGACAGGATTTCACCATGTTGGCCAGGCTGGTCT
CGAACTCCTGACCTCAGGTGATCCGCCTGCCTTGGCCTCCCAGAGTGCTGGGATTACAGGCGTGAGCCACCGCAC
CCGGCCTCTGTGTAGCTTTTATAGGCTCTGTTACTGTTGCGTAGTCTTGAAGAGGTACCCATCATAATGACAGCA
TCTCCCTCTGAAGGGTTTTGGTCAAAATGGGTGAATGAGACTTATACATAAAGACAGGCTTTCTCCCCTATAGTT

FIGURE 2090B

AGGAGGTGAACTCACACATGTGTACCTGAACATTCTTGCTTTTGAGGAGACAGACTCCCAGTGGTACTACTATGC
TTAGGTGTTGGACAGGATAGGGGTAGGAGGAGAGGAGGCAGGCTGCTGTCCTGAAAGTGGCTGTGGTTTATGGCA
TCACTCCCTTCTAATCAGCAAGTCCAGTGGCCACTTAGAGCCCAGCTCCTACCTCTTCATTCACTTAACAAGTAG
TTATTGGCTGTGCACAGTGGCTCACGCCTGTAGTCCCAGCATTTTGGGAGGCTGAGTGGGATGACCGCTTGAGCC
CAGGATTTCAAGTCCAGCCTGGGCTACATAGTGAGACCGTGTCTCTGTTTTTTTAAAAGCTAGTTGTTGACCAGC
TACCCTGAGCCAGGCACCACCCTGAAGGAGCTTCTTTTCCTCTGGGGAGAAGCAAATTCATGATGTGTGTGCTGG
AGATCTGGCACTCATGGCCAGTGCTTTCCAGTATCTTGAACTCTTCGGGGGTCCTGTTGACCCATTTCGTGACCT
ACCTCCGTGACTGCTCTTTTTCCTCTGTCTCTTAAGTGTGATGGTTTTCCAGAGTCCAATCCTCAGGACTTTCCC
GTCCACACACAGGCCTGGTAGTCAGGTGGCTCTAAACCATTAGGTGGGTTGTAGACCTCTCTCAAGCTGCCACCT
CCTTGCTGTCGCCAGATCGTATTTCAGTCTGTCAGGGGTTATCTGTATCTGGAGGTTCCACTGTTGCTTCAGTCT
CAGTTACTTAGAATGGAACCCAGAGTCCTGCCCCTTTCCACCTACATGCTCTTACTTGAAAGCACCTGAGACTTA
TTGGGTCCCTGATTCCTGCTTCGTCTGTATCCGCAGAGTAGTTGCATGTCATTTGGCCTGTTTTCTAAATAATCC
CACATCATGTCCTCCCTGCACTTACATTGCCACTGCTCTGATTTGGGCTTTTTTTTTTTGGGACAATGCCTCTG
TCCCAATTCTGAGTAACAGCTCTGGTTCTTGCCACTACCAGAGTTCTCTAGCAAATCTGAGCATCTGACAGGGTG
AAAAATTCTGAATGGCTTCCTGATGCCTGACTTTATGGGATCAAATTCAAGTTGCACGCTGGCACTCAGTGCCCT
TCTGGTATCATCTGCCAAGACCAGGGCCTGCTTCACCACAGCCACAATAAAGTCCTTTCAAGCCCT

FIGURE 2091

GGCACGAGGGAGCGCTTGGGAGTTAGGTTGTTTGCCGGCGTAGCGGCCAGCGCCTGAGCCCGCCGTTGATCTTCG
CTGTGGC**ATG**GCGGACGAGGGGAAGTCGTACAGCGAACACGATGATGAACGCGTTAATTTCCCTCAAAGAAAGAA
GAAAGGCCGGGGTCCCTTCCGGTGGAAATATGGTGAAGGAAACCGTAGGTCTGGAAGAGGCGGTTCTGGTATTCG
GTCTTCCCGCCTTGAGGAAGATGATGGAGATGTGGCAATGAGTGATGCCCAGGATGGTCCCCGAGTACGATACAA
CCCCTATACCACCCGACCTAACCGTCGGGGTGATACTTGGCATGATCGAGATCGCATTCATGTTACTGTGCGGAG
AGACAGAGCTCCTCCAGAGAGAGGAGGGGCTGGCACCAGCCAGGATGGGACCTCAAAGAACTGGTTCAAGATTAC
AATTCCTTATGGCAGAAAGTATGACAAGGCATGGCTCCTGAGCATGATTCAGAGCAAGTGCAGTGTGCCCTTCAC
CCCTATTGAGTTTCACTATGAGAATACACGGGCCCAGTTCTTCGTTGAAGACGCCAGTACTGCCTCTGCATTGAA
GGCTGTCAACTATAAGATTTTGGATCGGGAGAACCGAAGGATATCTATCATCATCAACTCTTCTGCTCCACCCCA
CACTATACTGAATGAACTGAAGCCAGAACAAGTAGAACAGCTAAAGCTGATCATGAGCAAACGATACGATGGCTC
CCAACAAGCCCTTGACCTCAAAGGCCTCCGTTCAGACCCAGATTTGGTGGCCCAGAACATTGACGTTGTCCTGAA
TCGCAGAAGCTGTATGGCAGCTACCCTGAGGATCATTGAAGAGAACATCCCTGAGCTATTGTCCTTGAACTTGAG
CAACAACAGGCTGTACAGGCTGGATGACATGTCTAGCATTGTTCAGAAGGCACCCAACCTGAAGATCCTAAACCT
TTCTGGAAATGAATTGAAGTCTGAGCGGGAATTGGACAAGATAAAGGGGCTGAAGCTAGAAGAGCTCTGGCTCGA
TGGAAACTCCCTGTGTGACACCTTCCGAGACCAGTCCACCTACATCAGCGCCATTCGCGAACGATTTCCCAAGTT
ACTACGCCTGGATGGCCATGAGCTACCCCCACCAATTGCCTTTGATGTTGAAGCCCCCACGACGTTACCGCCCTG
CAAGGGAAGCTATTTTGGAACAGAAAACTTGAAGAGTCTGGTCTTGCACTTCCTGCAACAGTACTATGCAATTTA
CGACTCTGGAGACCGACAAGGGCTCCTGGATGCCTACCATGATGGGGCCTGCTGTTCCCTGAGCATTCCTTTCAT
TCCTCAGAACCCTGCCCGAAGCAGCTTAGCCGAGTATTTCAAGGATAGCAGAAATGTGAAGAAGCTTAAAGACCC
TACCTTGCGGTTCCGGCTGCTGAAGCACACGCGTCTCAACGTTGTTGCCTTCCTCAATGAGTTGCCCAAAACCCA
GCACGACGTCAATTCCTTCGTGGTAGACATAAGCGCCCAGACAAGCACATTGCTGTGTTTTTCTGTCAATGGAGT
CTTCAAGGAAGTGGACGGAAAGTCCCGGGATTCTTTGCGAGCCTTCACCCGGACATTCATTGCTGTTCCTGCTAG
CAATTCAGGGCTATGTATTGTAAATGATGAGCTATTTGTGCGGAATGCCAGTTCTGAAGAGATCCAAAGAGCCTT
CGCTATGCCTGCACCCACGCCTTCCTCCAGCCCGGTGCCCACCCTCTCTCCAGAGCAGCAGGAAATGTTGCAAGC
ATTCTCTACCCAGTCTGGCATGAACCTCGAGTGGTCCCAGAAGTGCCTTCAGGACAACAACTGGGACTACACCAG
ATCTGCCCAGGCCTTCACTCATCTCAAGGCCAAGGGCGAGATCCCAGAAGTGGCATTCATGAAG**TGA**TCGTAGTC
ATGCCTCAGAAGCAGTCCCCCCTGTAAATAGTCCTTGGATATTACCGTCTGGTTGTCGTCTGTCATCTCCTCCTG
TCTGGCCCGAGGCCGCCCCGTGACTGTGACCGAGGGAGGGAGGGCTGCCTGATCCCTCTCCTCGCCTGCCTTCTG
GAAGACTTCAGAAGATTGAGCCTCACTGGTGCCAGGAAGCCAAAGCTTACTTTGTAGAACTGACACTAAACTACC
CGAAGGACTTAGGTGCTTTGTGTACTTAACCCCAGGACCTCCTTACTTTTTAATATAAAGAGTGATGTTGTAAAA
AAAAAAAAAAAAAA

FIGURE 2092

MADEGKSYSEHDDERVNFPQRKKKGRGPFRWKYGEGNRRSGRGGSGIRSSRLEEDDGDVAMSDAQDGPRVRYNPY
TTRPNRRGDTWHDRDRIHVTVRRDRAPPERGGAGTSQDGTSKNWFKITIPYGRKYDKAWLLSMIQSKCSVPFTPI
EFHYENTRAQFFVEDASTASALKAVNYKILDRENRRISIIINSSAPPHTILNELKPEQVEQLKLIMSKRYDGSQQ
ALDLKGLRSDPDLVAQNIDVVLNRRSCMAATLRIIEENIPELLSLNLSNNRLYRLDDMSSIVQKAPNLKILNLSG
NELKSERELDKIKGLKLEELWLDGNSLCDTFRDQSTYISAIRERFPKLLRLDGHELPPPIAFDVEAPTTLPPCKG
SYFGTENLKSLVLHFLQQYYAIYDSGDRQGLLDAYHDGACCSLSIPFIPQNPARSSLAEYFKDSRNVKKLKDPTL
RFRLLKHTRLNVVAFLNELPKTQHDVNSFVVDISAQTSTLLCFSVNGVFKEVDGKSRDSLRAFTRTFIAVPASNS
GLCIVNDELFVRNASSEEIQRAFAMPAPTPSSSPVPTLSPEQQEMLQAFSTQSGMNLEWSQKCLQDNNWDYTRSA
QAFTHLKAKGEIPEVAFMK

FIGURE 2093

GGGATTTTTAAAAAATCAAAATACAAATCCAACTTTTTGAGTTTTCGTTGTCATTGCTCTTATCTTTCCTGAGTC
ACTTCCCATTTTCCAAACTCAGCAACCCCAGTTTGCGAGTCTGGTTTCATGAACCTTTGTAAGGTGTTTGGTGCG
GTCACRGTGTATACTTGCCGTGTAGTATTTGACTCAGCGCGATCTGCCTTGAGTCATTTTACCGCGGCCATTTAC
TACTGCCGTTGAGCCCTGTCCACGCCTTGGGAGTGTTGATATGTTGAGAGTTTTCTGTCTGGCTGRGGAGGGATC
ATTTAGTTTTTGCGGACGTATGTTGCACTGAGGATTTAGGGAGAGAGCAAGATTTCTGTTGAGGAGGTTCAGAAG
TATAAGGAATCGGGAGAGTAGATAGGAGTGAAGCATTTGGCAGCGTAAAGAAGCTTGGCTTAGCTTTAATGGATT
AGGGAGAGATTGCTATCTAGCATTATTACATGTTATTGTTCTCTTTGCTATTTTATACACCTAGAACAACCTTTC
CCTCGGGGTTAACAAACATCTTCAACTCTGTTTTCTGTATGGCTCCTGACTCTTACCTTTGTTTTAGGAGGCTTC
CCTCTTCAGAGGAAACTGGGAGAAGCCAATTTCCACTGCTTCTTTTTCCTGTGCCTTTTTAACACTCAAACCCAG
AACACTTAATCCTCTGCAGCTCGTGCAAAAATTCAGTCTGTAATTTAAAATGTGTGCACGGTACACTGCTGACCA
TGGGCATGTCTATTGTTTGTATCTGTAATGTGTATGTCCATTTCAGTGTTGTCTGTTTTAGTATGCAGGTGATAG
ACTAGAGAACAAGACCTCTGTCTCCGTAGCATCCTGGAGCAGTCTGAATGCCAGA**ATG**GATAACCGTTTTGCTAC
AGCATTTGTAATTGCTTGTGTGCTTAGCCTCATTTCCACCATCTACATGGCAGCCTCCATTGGCACAGACTTCTG
GTATGAATATCGAAGTCCAGTTCAAGAAAATTCCAGTGATTTGAATAAAAGCATCTGGGATGAATTCATTAGTGA
TGAGGCAGATGAAAAGACTTATAATGATGCACTTTTTCGATACAATGGCACAGTGGGATTGTGGAGACGGTGTAT
CACCATACCCAAAAACATGCATTGGTATAGCCCACCAGAAAGGACAGAGTCATTTGATGTGGTCACAAAATGTGT
GAGTTTCACACTAACTGAGCAGTTCATGGAGAAATTTGTTGATCCCGGAAACCACAATAGCGGGATTGATCTCCT
TAGGACCTATCTTTGGCGTTGCCAGTTCCTTTTACCTTTTGTGAGTTTAGGTTTGATGTGCTTTGGGGCTTTGAT
CGGACTTTGTGCTTGCATTTGCCGAAGCTTATATCCCACCATTGCCACGGGCATTCTCCATCTCCTTGCAGGTCT
GTGTACACTGGGCTCAGTAAGTTGTTATGTTGCTGGAATTGAACTACTCCACCAGAAACTAGAGCTCCCTGACAA
TGTATCCGGTGAATTTGGATGGTCCTTCTGCCTGGCTTGTGTCTCTGCTCCCTTACAGTTCATGGCTTCTGCTCT
CTTCATCTGGGCTGCTCACACCAACCGGAAAGAGTACACCTTAATGAAGGCATATCGTGTGGCA**TGA**GCAAGAAA
CTGCCTGCTTTACAATTGCCATTTTTATTTTTTTAAAATAATACTGATATTTTCCCCACCTCTCAATTGTTTTTA
ATTTTTATTTGTGGATATACCATTTTATTATGAAAATCTATTTTATTTATACACATTCACCACTAAATACACACT
TAATACCACTAAAATTTATGTGGTTTACTTTAAGCGATGCCATCTTTCAAATAAACTAATCTAGGTCTAGACAGA
AAGAAATGGATAGAGACTTGACACAAATTTATGAAAGAAAATTGGGAGTAGGAATGTGACCGAAAACAAGTTGTG
CTAATGTCTGTTAGACTTTTCAGTAAAACTAAAGTAACTGTATCTGTTCAACTAAAAACTCTATATTAGTTTCTT
TGGGAAACCTCTCATCGTCAAAACTTTATGTTCACTTTGCTGTTGTAGATAGCCAGTCAACCAGCAGTATTAGTG
CTGTTTTCAAAGATTTAAGCTCTATAAAATTGGGAAATTATCTAAGATCATTTTCCCTAAGCATTGACACATAGC
TTCATCTGAGGTGAGATATGGCAGCTGTTTGTATCTGCACTGTGTCTGTCTACAAAAAGTGAAAAATACAGTGTT
TACTTGAAATTTTAACTTTGTAACTGCAAGAATTCCAGTTCAGCCGGGCGAGGATTAGTATTATTTTTAACTCTC
CGTAAGATTTTCAGTACCACCAAATTGTTTTGGATTTTTTTTCTTTCCTCTTCACATACCAGGGTTATTAAAAGT
GTGCTTTCTTTTTACATTATATTACAGTTACAAGGTAAAATTCCTCAACTGCTATTTATTTATTCCAGCCCAGTA
CTATAAAGAACGTTTCACCATAATGACCCTCCAGAGCTGGGAAACCTACCACAAGATCTAAAGTTCTGGCTGTCC
ATTAACCTCCAACTATGGTCTTTATTTCTTGTGGTAATATGATGTGCCTTTCCTTGCCTAAATCCCTTCCTGGTG
TGTATCAACATTATTTAATGTCTTCTAATTCAGTCATTTTTTTATAAGTATGTCTATAAACATTGAACTTTAAAA
AACTTATTTATTTATTCCACTACTGTAGCAATTGACAGATTAAAAAAATGTAACTTCATAATTTCTTACCATAAC
CTCAATGTCTTTTTTAAAAAATAAAATTAAAAATGAAAAGAGAAA

FIGURE 2094

MDNRFATAFVIACVLSLISTIYMAASIGTDFWYEYRSPVQENSSDLNKSIWDEFISDEADEKTYNDALFRYNGTV
GLWRRCITIPKNMHWYSPPERTESFDVVTKCVSFTLTEQFMEKFVDPGNHNSGIDLLRTYLWRCQFLLPFVSLGL
MCFGALIGLCACICRSLYPTIATGILHLLAGLCTLGSVSCYVAGIELLHQKLELPDNVSGEFGWSFCLACVSAPL
QFMASALFIWAAHTNRKEYTLMKAYRVA

FIGURE 2095

CTTTCCGCTCGGCTGTTTTCCTGCGCAGGAGCCGCAGGGCCGTAGGCAGCC**ATG**GCGCCCAGCCGGAATGGCATG
GTCTTGAAGCCCCACTTCCACAAGGACTGGCAGCGGCGCGTGGCCACGTGGTTCAACCAGCCGGCCCGTAAGATC
CGCAGACGTAAGGCCCGGCAAGCCAAGGCGCGCCGCATCGCCCCGCGCCCCGCGTCGGGTCCCATCCGGCCCATC
GTGCGCTGCCCCACGGTTCGGTACCACACGAAGGTGCGCGCCGGCCGCGGCTTCAGCCTGGAGGAGCTCAGGGTG
GCCGGCATTCACAAGAAGGTGGCCCGGACCATCGGCATTTCTGTGGATCCGAGGAGGCGGAACAAGTCCACGGAG
TCCCTGCAGGCCAACGTGCAGCGGCTGAAGGAGTACCGCTCCAAACTCATCCTCTTCCCCAGGAAGCCCTCGGCC
CCCAAGAAGGGAGACAGTTCTGCTGAAGAACTGAAACTGGCCACCCAGCTGACCGGACCGGTCATGCCCGTCCGG
AACGTCTATAAGAAGGAGAAAGCTCGAGTCATCACTGAGGAAGAGAAGAATTTCAAAGCCTTCGCTAGTCTCCGT
ATGGCCCGTGCCAACGCCCGGCTCTTCGGCATACGGGCAAAAAGAGCCAAGGAAGCCGCAGAACAGGATGTTGAA
AAGAAAAAA**TAA**AGCCCTCCTGGGGACTTGGAATCAGTCGGCAGTCATGCTGGGTCTCCACGTGGTGTGTTTCGT
GGGAACAACTGGGCCTGGGATGGGGCTTCACTGCTGTGACTTCCTCCTGCCAGGGGATTTGGGGCTTTCTTGAAA
GACAGTCCAAGCCCTGGATAATGCTTTACTTTCTGTGTTGAAGCACTGTTGGTTGTTTGGTTAGTGACTGATGTA
AAACGGTTTTCTTGTGGGGAGGTTACAGAGGCTGACTTCAGAGTGGACTTGTGTTTTTTCTTTTTAAAGAGGCAA
GGTTGGGCTGGTGCTCACAGCTGTAATCCCAGCACTTTGAGGTTGGCTGGGAGTTCAAGACCAGCCTGGCCAACA
TGTCAGAACTACTAAAAATAAAGAAATCAGCCATGAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2096

MAPSRNGMVLKPHFHKDWQRRVATWFNQPARKIRRRKARQAKARRIAPRPASGPIRPIVRCPTVRYHTKVRAGRG
FSLEELRVAGIHKKVARTIGISVDPRRRNKSTESLQANVQRLKEYRSKLILFPRKPSAPKKGDSSAEELKLATQL
TGPVMPVRNVYKKEKARVITEEEKNFKAFASLRMARANARLFGIRAKRAKEAAEQDVEKKK

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FIGURE 2097

TGGACTTGGATCCGAGGCAGACGAGGAAGCTGAGAAAACCCTGGCGTTGACCCCGTGGACCTGGGCGCCCCGGGA
AGGTCCAGCGCTTGGTCCAGGCAGGCGGGGATGTGCGGTGACCACCCTGGTCCTGAAAAGTCCAGCCCCGAATCT
CCCTCCCTCCTAGACCTGGAGGCCTGGAACAGCCAGCCGCCCACGGACGCCAGAGCCGGGAACCCTGACGGCACT
TAGCTGCTGACAAACAACCTGCTCCGTGGACGCCTGAAACACCAGTCTTTGGGGCCAGTGCCTCAGTTTCAATCC
AGGTAACCTTTAAATGAAACTTGCCTAAAATCTTAGGTCATACACAGAAGAGACTCCAATCGACAAGAAGCTGGA
AAAGAATG**ATG**TTGTCCTTAAACAACCTACAGAATATCATCTATAACCCGGTAATCCCGTATGTTGGCACCATTC
CCGATCAGCTGGATCCTGGAACTTTGATTGTGATATGTGGGCATGTTCCTAGTGACGCAGACAGATTCCAGGTGG
ATCTGCAGAATGGCAGCAGTGTGAAACCTCGAGCCGATGTGGCCTTTCATTTCAATCCTCGTTTCAAAAGGGCCG
GCTGCATTGTTTGCAATACTTTGATAAATGAAAAATGGGGACGGGAAGAGATCACCTATGACACGCCTTTCAAAA
GAGAAAAGTCTTTTGAGATCGTGATTATGGTGCTAAAGGACAAATTCCAGGTGGCTGTAAATGGAAAACATACTC
TGCTCTATGGCCACAGGATCGGCCCAGAGAAAATAGACACTCTGGGCATTTATGGCAAAGTGAATATTCACTCAA
TTGGTTTTAGCTTCAGCTCGGACTTACAAAGTACCCAAGCATCTAGTCTGGAACTGACAGAGATAAGTAGAGAAA
ATGTTCCAAAGTCTGGCACGCCCCAGCTTCAGACTGTCTCTCCCTCCTGGGATTTACAGGGTCATGGCTCTGAAA
CATTCTGTAGTGTTCTTTGGACACGAGTTTTCCTGGAGATCGCTTTCTGCAGGCCTATTGGTCTGACTGTGGCTT
CTTTTCAGAGCCTGCCATTCGCTGCAAGGTTGAACACCCCCATGGGCCCTGGACGAACTGTCGTCGTTAAAGGAG
AAGTGAATGCAAATGCCAAAAGCTTTAATGTTGACCTACTAGCAGGAAAATCAAAGGATATTGCTCTACACTTGA
ACCCACGCCTGAATATTAAAGCATTTGTAAGAAATTCTTTTCTTCAGGAGTCCTGGGGAGAAGAAGAGAGAAATA
TTACCTCTTTCCCATTTAGTCCTGGGATGTACTTTGAGATGATAATTTACTGTGATGTTAGAGAATTCAAGGTTG
CAGTAAATGGCGTACACAGCCTGGAGTACAAACACAGATTTAAAGAGCTCAGCAGTATTGACACGCTGGAAATTA
ATGGAGACATCCACTTACTGGAAGTAAGGAGCTGG**TAG**CCTACCTACACAGCTGCTACAAAAACCAAAATACAGA
ATGGCTTCTGTGATACTGGCCTTGCTGAAACGCATCTCACTGTCATTCTATTGTTTATATTGTTAAAATGAGCTT
GTGCACCATTAGATCCTGCTGGGTGTTCTCAGTCCTTGCCATGAAGTATGGTGGTGTCTAGCACTGAATGGGGAA
ACTGGGGGCAGCAACACTTATAGCCAGTTAAAGCCACTCTGCCCTCTCTCCTACTTTGGCTGACTCTTCAAGAAT
GCCATTCAACAAGTATTTATGGAGTACCTACTATAATACAGTAGCTAACATGTATTGAGCACAGATTTTTTTTGG
TAAAACTGTGAGGAGCTAGGATATATACTTGGTGAAACAAACCAGTATGTTCCCTGTTCTCTTGAGCTTCGACTC
TTCTGTGCTCTATTGCTGCGCACTGCTTTTTCTACAGGCATTACATCAACTCCTAAGGGGTCCTCTGGGATTAGT
TAAGCAGCTATTAAATCACCCGAAGACACTAATTTACAGAAGACACAACTCCTTCCCCAGTGATCACTGTCATAA
CCAGTGCTCTACCGTATCCCATCACTGAGGACTGATGTTGACTGACATCATTTTATCGTAATAAACATGTGGCTC
TATTAGCTGCAAGCTTTACCAAGTAATTGGCATGACATCTGAGCACAGAAATTAAGGCAAAAAACCAAAGCAAAA
CAAATACATGGTGCTGAAATTAACTTGATGCCAAGCCCAAGGCAGCTGATTTCTGTGTATTTGAACTTAGGGCAA
ATCAGAGTCTACACAGACGCCTACAGAAAGTTTCAGGAAGAGGCAAGATGCATTCAATTTGAAAGATATTTATGG
GCAACAAAGTAAGGTCAGGATTAGACTTCAGGCATTCATAAGGCAGGCACTATCAGAAAGTGTACGCCAACTAAG
GGACCCACAAAGCAGGCAGAGGTAATGCAGAAATCTGTTTTGTTCCCATGAAATCACCAATCAAGGCCTCCGTTC
TTCTAAAGATTAGTCCATCATCATTAGCAACTGAGATCAAAGCACTCTTCCACTTTACGTGATTAAAATCAAACC
TGTATCAGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2098

MLSLNNLQNIIYNPVIPYVGTIPDQLDPGTLIVICGHVPSDADRFQVDLQNGSSVKPRADVAFHFNPRFKRAGCI
VCNTLINEKWGREEITYDTPFKREKSFEIVIMVLKDKFQVAVNGKHTLLYGHRIGPEKIDTLGIYGKVNIHSIGF
SFSSDLQSTQASSLELTEISRENVPKSGTPQLQTVSPSWDLQGHGSETFCSVLWTRVFLEIAFCRPIGLTVASFQ
SLPFAARLNTPMGPGRTVVVKGEVNANAKSFNVDLLAGKSKDIALHLNPRLNIKAFVRNSFLQESWGEEERNITS
FPFSPGMYFEMIIYCDVREFKVAVNGVHSLEYKHRFKELSSIDTLEINGDIHLLEVRSW

FIGURE 2099

CTCGCCTTCTGGCTCTGCCATGCCCTGCTCTGAAGAGACACCCGCCATTTCACCCAGTAAGCGGGCCCGGCCTGC
GGAGGTGGGCGGCATGCAGCTCCGCTTTGCCCGGCTCTCCGAGCACGCCACGGCCCCCACCCGGGGCTCCGCGCG
CGCCGCGGGCTACGACCTGTACAGTGCCTATGATTACACAATACCACCTATGGAGAAAGCTGTTGTGAAAACGGA
CATTCAGATAGCGCTCCCTTCTGGGTGTTATGGAAGAGTGGCTCCACGGTCAGGCTTGGCTGCAAAACACTTTAT
TGATGTAGGAGCTGGTGTCATAGATGAAGATTATAGAGGAAATGTTGGTGTTGTACTGTTTAATTTTGGCAAAGA
AAAGTTTGAAGTCAAAAAAGGTGATCGAATTGCACAGCTCATTTGCGAACGGATTTTTTATCCAGAAATAGAAGA
AGTTCAAGCCTTGGATGACACCGAAAGGGGTTCAGGAGGTTTTGGTTCCACTGGAAAGAATTAAAATTTATGCCA
AGAACAGAAAACAAGAAGTCATACCTTTTTCTTAAAAAAAAAAAAAAAAGTTTTTGCTTCAAGTGTTTTGGTGTTT
TGCACTTCTGTAAACTTACTAGCTTTACCTTCTAAAAGTACTGCATTTTTTACTTTTTTTTATGATCAAGGAAAA
GATCGTTAAAAAAAAACACAAAGAAGTTTTTCTTTGTGTTTGGATCAAAAAGAAACTTTGTTTTTCCGCAATTGA
AGGTTGTATGTAAATCTGCTTTGTGGTGACCTGATGTAAACAGTGTCTTCTTAAAATCAAATGTAAATCAATTAC
AGATTAAAAAAAAAAAGCCTGTATTTAACTCATATGATCTCCCTTCAGCAACTTATTTTGCTTTAATTGCTTTAAA
TCTTAAGCAATATTTTTTATTCAGTAAACAAATTCTTTCACAAGGTACAAAATCTTGCATAAGCTGAACTAAAAT
AAAAATGAAAAGGAGAGATTAAAGGTATTCCTTGTTCTTCCCTTCTCTTCACTAGTCTAAAAACTTCTTTTTAAT
CTTAAGATTCTTTGTGATGAGGGTGAGAAAAAGAATCCTCAGTTTATTTTTCCACTATTAATCTTTCTTTTGATA
AATCCTCTATTGACTGGGTAGAGGTATGTTTGTGAAAGACATGTAACTTGGGGATTTGTTACTTTAGGTTTGTTC
CCTTGAATTTCATCTCATCAGGCAAATTGTACTAGTTGTAGTTACGAGTTTTCCCTCAGTGAAGTAGCAATAGGC
TGTAATCAAGAAAATATGCCATTTATAGAGATAAGATAAATGAAATAATACTTCAGCCACCAGGTTTTTCTGTCT
CACATACATAAGCAGCATTTCATTGCAGATATGGGACTGATTCTGTGGCTTACCTTGATTAACATCTTTTGGAAG
TTTTGCTAGTGTGCTTTCCTTTCTTTACTATGTTTCTCAGATTCCTTTGTATCAGGGTTTTGGGTGTCACTTAGG
TTTTGTCCATCAGATTCTGTGAGACACCAGGCATCGTTTTGAGGATGTGGGTTATACACATGGAGTGCTTCTGGA
ACTATCAGCCCACTTGACCACCCAGTTTGTGGAAGCACAGGCAAGAGTGTTCTTTTCTGGTGATTCTCCAGGCCA
TTTAATACCCTGCAATGTAATTGTCCCTCTGTGGCTCACATTTCATTAGTGAGCCATGAAATCAACTCAGTGGGA
CATAGCCAGCATTTTTGCATACCAGGTTGGGCTATAAAATATTTCTGTTGTCAATAAATTTTAAATGTTTTCCTG
CTAAAAAAAAAAAAAA

FIGURE 2100

MPCSEETPAISPSKRARPAEVGGMQLRFARLSEHATAPTRGSARAAGYDLYSAYDYTIPPMEKAVVKTDIQIALP
SGCYGRVAPRSGLAAKHFIDVGAGVIDEDYRGNVGVVLFNFGKEKFEVKKGDRIAQLICERIFYPEIEEVQALDD
TERGSGGFGSTGKN

FIGURE 2101

CCGAGCCTGGAGTTTGCATGAAACTTTCACCTGCGCTCCGGGGAGACTTTCGGCTCCGGCTCCCACCGCGCGCCT
CGCCGCCCTCGCAACCGCGGGCTCCGTCCAACCCGGCCCGAC**ATG**GACGTGCTCCCCATGTGCAGCATCTTCCAG
GAGCTCCAGATCGTGCACGAGACCGGCTACTTCTCGGCGCTGCCGTCTCTGGAGGAGTACTGGCAACAGACCTGC
CTAGAGCTGGAACGTTACCTCCAGAGCGAGCCCTGCTATGTTTCAGCCTCAGAAATCAAATTTGACAGCCAGGAA
GATCTGTGGACCAAAATCATTCTGGCTCGGGAGAAAAAGGAGGAATCCGAACTGAAGATATCTTCCAGTCCTCCA
GAGGACACTCTCATCAGCCCGAGCTTTTGTTACAACTTAGAGACCAACAGCCTGAACTCAGATGTCAGCAGCGAA
TCCTCTGACAGCTCCGAGGAACTTTCTCCCACGGCCAAGTTTACCTCCGACCCCATTGGCGAAGTTTTGGTCAGC
TCGGGAAAATTGAGCTCCTCTGTCACCTCCACGCCTCCATCTTCTCCGGAACTGAGCAGGGAACCTTCTCAACTG
TGGGGTTGCGTGCCCGGGGAGCTGCCCTCGCCAGGGAAGGTGCGCAGCGGGACTTCGGGGAAGCCAGGTGACAAG
GGAAATGGCGATGCCTCCCCCGACGGCAGGAGGAGGGTGCACCGGTGCCACTTTAACGGCTGCAGGAAAGTTTAC
ACCAAAAGCTCCCACTTGAAAGCACACCAGCGGACGCACACAGGAGAAAAGCCTTACAGATGCTCATGGGAAGGG
TGTGAGTGGCGTTTTGCAAGAAGTGATGAGTTAACCAGGCACTTCCGAAAGCACACCGGGGCCAAGCCTTTTAAA
TGCTCCCACTGTGACAGGTGTTTTTCCAGGTCTGACCACCTGGGCCTGCACATGAAGAGGCACCTC**TGA**GGGAGC
AAAGAGGTGGATCCTGTAGGCTAAAAGGCTTCCAGGCTGAGAGCCGGCCGTGGAAGGAGGGATGCGTGTTCCAGC
CAAAGCATGCCGTTCTGCACCTACCCAGTTGCCTCCAGGGCCTCTCCTTGGAAGGTCTTTTGAAGGCTAAAAAGG
TCCTGTAAGAAGTGGCATAGCACCCGTGGTGCATGGTATGTGGGTGACCCTGGACTCGCCACTGGTACCCGCCCT
TCCGAGCGGCGCCTAAGCCTTTGCCGTGAGCATGCACACTGAGAATGCTAATGGTTGGGTTGATTGTATGTTGAG
GATCTATTACTGACCGTATGATGAGGCCAACTTTTTTTCCTTGTGGTTAGCAAGACTGCAAGAGATGGAAAAAAA
GTAGTTTGAATGTTTTGTGTGAAAGGAGTATACCATGAGATGAGATGACCACCAATCATTTCCTTGGGGGGAGGG
GGTGTCTGCACCTTAGAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2102

MDVLPMCSIFQELQIVHETGYFSALPSLEEYWQQTCLELERYLQSEPCYVSASEIKFDSQEDLWTKIILAREKKE
ESELKISSSPPEDTLISPSFCYNLETNSLNSDVSSESSDSSEELSPTAKFTSDPIGEVLVSSGKLSSSVTSTPPS
SPELSREPSQLWGCVPGELPSPGKVRSGTSGKPGDKGNGDASPDGRRRVHRCHFNGCRKVYTKSSHLKAHQRTHT
GEKPYRCSWEGCEWRFARSDELTRHFRKHTGAKPFKCSHCDRCFSRSDHLGLHMKRHL

FIGURE 2103A

TCCACTCCTGGAGCCCGCGGACCCCGAGCACGCGCCTGACAGCCCCTGCTGGCCCGGCGCGCGGCGTCGCCAGGC
CAGCTATGGCCCCCGACCCGGTGGCCGCCGAGACCGCGGCTCAGGGACCTACCCCGCGCTACTTCACCTGGGACG
AGGTGGCCCAGCGCTCAGGGTGCGAGGAGCGGTGGCTAGTGATCGACCGTAAGGTGTACAACATCAGCGAGTTCA
CCCGCCGGCATCCAGGGGGCTCCCGGGTCATCAGCCACTACGCCGGGCAGGATGCCACGGATCCCTTTGTGGCCT
TCCACATCAACAAGGGCCTTGTGAAGAAGTATATGAACTCTCTCCTGATTGGAGAACTGTCTCCAGAGCAGCCCA
GCTTTGAGCCCACCAAGAATAAAGAGCTGACAGATGAGTTCCGGGAGCTGCGGGCCACAGTGGAGCGGATGGGGC
TCATGAAGGCCAACCATGTCTTCTTCCTGCTGTACCTGCTGCACATCTTGCTGCTGGATGGTGCAGCCTGGCTCA
CCCTTTGGGTCTTTGGGACGTCCTTTTTGCCCTTCCTCCTCTGTGCGGTGCTGCTCAGTGCAGTTCAGGCCCAGG
CTGGCTGGCTGCAGCATGACTTTGGGCACCTGTCGGTCTTCAGCACCTCAAAGTGGAACCATCTGCTACATCATT
TTGTGATTGGCCACCTGAAGGGGGCCCCCGCCAGTTGGTGGAACCACATGCACTTCCAGCACCATGCCAAGCCCA
ACTGCTTCCGCAAAGACCCAGACATCAACATGCATCCCTTCTTCTTTGCCTTGGGGAAGATCCTCTCTGTGGAGC
TTGGGAAACAGAAGAAAAAATATATGCCGTACAACCACCAGCACAAATACTTCTTCCTAATTGGGCCCCCAGCCT
TGCTGCCTCTCTACTTCCAGTGGTATATTTTCTATTTTGTTATCCAGCGAAAGAAGTGGGTGGACTTGGCCTGGA
TGATTACCTTCTACGTCCGCTTCTTCCTCACTTATGTGCCACTATTGGGGCTGAAAGCCTTCCTGGGCCTTTTCT
TCATAGTCAGGTTCCTGGAAAGCAACTGGTTTGTGTGGGTGACACAGATGAACCATATTCCCATGCACATTGATC
ATGACCGGAACATGGACTGGGTTTCCACCCAGCTCCAGGCCACATGCAATGTCCACAAGTCTGCCTTCAATGACT
GGTTCAGTGGACACCTCAACTTCCAGATTGAGCACCATCTTTTTCCCACGATGCCTCGACACAATTACCACAAAG
TGGCTCCCCTGGTGCAGTCCTTGTGTGCCAAGCATGGCATAGAGTACCAGTCCAAGCCCCTGCTGTCAGCCTTCG
CCGACATCATCCACTCACTAAAGGAGTCAGGGCAGCTCTGGCTAGATGCCTATCTTCACCAATAACAACAGCCAC
CCTGCCCAGTCTGGAAGAAGAGGAGGAAGACTCTGGAGCCAAGGCAGAGGGGAGCTTGAGGGACAATGCCACTAT
AGTTTAATACTCAGAGGGGGTTGGGTTTGGGGACATAAAGCCTCTGACTCAAACTCCTCCCTTTTATCTTCTAGC
CACAGTTCTAAGACCCAAAGTGGGGGGTGGACACAGAAGTCCCTAGGAGGGAAGGAGCTGTTGGGGCAGGGGTGT
AAATTATTTCCTTTTTCTAGTTTGGCACATGCAGGTAGTTGGTGAACAGAGAGAACCAGGAGGGTAACAGAAGAG
GAGGGACCTACTGAACCCAGAGTCAGGAAGAGATTTAACACTAAAATTCCACTCATGCCGGGCGTGGTGGCACGC
GCCTGTAATCCCAGCTACCCAGGAGGCTGAGGCAGGAGAATCGCTTGAACCGGGGAGGTGGAGGTTGCAGTGAGC
TGAGATCACGCCATTGTACTCCAGCCTGGGCGACAGAGCAAGACTCCATTTCAAAAAAAAAAAAAAAAATCCACTC
ATATAAAAGGTGAGCTCAGCTCACTGGTCCATTTCTCAGTGGCTTCTCCATCCTCATTTGCAAACCTCAGAGGGA
TAAGGCAGTTGAACCTGATGAGCAAGAATTATAACAGCAAGGAAACATTAATGCTTAGAATTCTGAGATCCAGCA
CAACTCAGTCTGTGGGAGCTCAGCTCGCTGCCCAGGGATAGGTATGACCTATGTCTGCCTTAGGCTGCTGGGAGA
TGCCATTCTCCAGTTTCAGAAGCAGGCAGGGCAAAGGTCAAGACTGTGGTATTGGGGTCTTTTGGCTCTGAAGGA
TCCTGGAACCACTGATTTTGGTTTATTCCCTCCAGGGTCTAAAGAGAACAAGAGGTGCTAGCTCTTACCAAAACA
GATGGTAGAGAGAGTTGCTGGCTATTTAAAAAGCTCTTTCATCTTTTAATTCACCTCTTCTTTTCACCTCTTTAA
CCACTCCTCAGGAACAGAACACTTCTAGGACTGGGGGTCTTTTAGCTCCATAAGCAAGTGAGCAGATGGGACAAG
TTAGTCTTTTCTCCCTAGAAACAAAGGGGATGCCCAGTGGTTTCCCTTTGCTTCCCAACCTAAAATTTCAAGTTT
AATAAAATAGCAATTAGCAGAAGTGACCAAATTGGGAGATAATTATCAGTCATGAGGAAAGACACAGATTTCGGT
CATAAAGAATGTAAGGGCTATAAGTAGAAACTTTCTATAACCTAAATGATGTTATAGAATTATTTTTGAGCAGGA
GCAGAAAGATTAAATATGATCACTTCATACTTCTAAATCAGAAATAGGAAGATTAAAACCACAGAACAGTTTGTG
ATTTCTATTGCTGTAGCTAGGTATCTTACTCTGTCCACTCTTGTTCAAGTATCTAACTCTTCTGGAAACCAAATA
GGCTTTAGAAGAGATTATCCTATATTCCTATCAGTATAATACTAAAATGTAACTTTTTAATCATCTGGTTTTTAA
AAGATAAACAGTTTAGCCCATCTCTCCAGAGAGCAAACATAGGAATATGACTCAGGAGCCTCCTAGGGCTTATCA
TCAGCCCTCACACCCGCTTCCCCCTCCAACCCACAGCCTTTGCTTCCAGGTGGCAGGATTACTACTTTGCCTCTT
CAGCAGCATCTACTCTAGGCATATTGATCATTTTAGACACTGGGAGAAGAGAACCTCAAACTAGGAGGAAAAGAC
AGAGCCTCCACTTAGTTTTGGGAGGGGATGGCAGACAGTCAAGGAGATGAGCGTCCTAAGGCATGTTGGGATAGG
GTCAGATGCACCACCCATGGAGAGGTTTGTCAACACAAAGACATGGAAGGTTAGAGGTTTGTCAACAAAAAGACA
TGGAAGGTTAGGTTTGTCAACACAAAGACATGGAAGATTAGAGGTTTGTCAACACAAAGACACAGGAAGAATGGG
CTGCAGAAGATTTAGATGTTTTCCATTTGGGCACATTTTACTTAGCTGGAGAACTAGGTTTAAAACAGCCTGGGT
AGGAAAATTAGAAGCAAGCTGGATGCAGTGGCTCATGCCTGTAATCCCAACACTTTTGGGAGGTCCAGGCAGGAG
GATCACTTGGGCCCAGGAGGTCAAGCCTGCAGCGAGCTGAGATCACACCACTGCACTCCAGCCTGGGGTGATAGA

FIGURE 2103B

ACAAGACCCTGTCTCAAAAAAAAAAAAAAACAACAAAAACTTAGAATTGAGGAGTTGTACCTCCATTGGCTTCCT
CACTCCAAAATAGGTGCTGATCCTTCCTATTCCTATTCTTTGCCACCTTTTGGGTGTGGTGTCACCAGCCTGTTT
AGCCAAGTAGCTTTGGGCATAGGCTGCCCAATCTGAGCAAACACCAGTGAGGCTCTATTGAGCCAAGACCAAGTC
CTCAAAGCACCTGAACCACTGTGGCCTTCTCAGCCTACAGCAGTGTGGTCTCTTACATGGCCACAAAGGGACACA
CAGTGACAAAAGGCTCGGAATGTTACAATGGTAAAATGAGTGATCTCAAATCCACTGACAGATATAAAATAGGCT
TAGAGAGGAAAAGCTGCCTCTGGTCAAGTAGATCATGGCAGCATGAATTCCAACTCACTTTTTTACAACTCCAAC
TTCTATGTTTATCTTTGTTACTTTCACTTTTTTACAACCTGGCCAGAGGCATTTTTTAAATCAGGCCCAATATCA
GTATTCTTTTTGTGTGTGCCAATTTTGTTATCACATCCCTATGAAGTTGAAAAATAAAGTTAATTTTGACCAAAA
AAAAAAAAAAAAG

FIGURE 2104

MAPDPVAAETAAQGPTPRYFTWDEVAQRSGCEERWLVIDRKVYNISEFTRRHPGGSRVISHYAGQDATDPFVAFH
INKGLVKKYMNSLLIGELSPEQPSFEPTKNKELTDEFRELRATVERMGLMKANHVFFLLYLLHILLLDGAAWLTL
WVFGTSFLPFLLCAVLLSAVQAQAGWLQHDFGHLSVFSTSKWNHLLHHFVIGHLKGAPASWWNHMHFQHHAKPNC
FRKDPDINMHPFFFALGKILSVELGKQKKKYMPYNHQHKYFFLIGPPALLPLYFQWYIFYFVIQRKKWVDLAWMI
TFYVRFFLTYVPLLGLKAFLGLFFIVRFLESNWFVWVTQMNHIPMHIDHDRNMDWVSTQLQATCNVHKSAFNDWF
SGHLNFQIEHHLFPTMPRHNYHKVAPLVQSLCAKHGIEYQSKPLLSAFADIIHSLKESGQLWLDAYLHQ

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FIGURE 2105

GGGAATAGCAGAATAGGAGCAAGCCAGCACTAGTCAGCTAACTAAGTGACTCAACCAAGGCCTTTTTTCCTTGTT
ATCTTTGCAGATACTTCATTTTCTTAGCGTTTCTGGAGATTACAACATCCTGCGGTTCCGTTTCTGGGAACTTTA
CTGATTTATCTCCCCCCTCACACAAATAAGCATTGATTCCTGCATTTCTGAAGATCTCAAGATCTGGACTACTGT
TGAAAAAATTTCCAGTGAGGCTCACTTATGTCTGTAAAG**ATG**GGAAAAAAATACAAGAACATTGTTCTACTAAAA
GGATTAGAGGTCATCAATGATTATCATTTTAGAATGGTTAAGTCCTTACTGAGCAACGATTTAAAACTTAATTTA
AAAATGAGAGAAGAGTATGACAAAATTCAGATTGCTGACTTGATGGAAGAAAAGTTCCGAGGTGATGCTGGTTTG
GGCAAACTAATAAAAATTTTCGAAGATATACCAACGCTTGAAGACCTGGCTGAAACTCTTAAAAAAGAAAAGTTA
AAAGTAAAAGGACCAGCCCTATCAAGAAAGAGGAAGAAGGAAGTGCATGCTACTTCACCTGCACCCTCCACAAGC
AGCACTGTCAAAACTGAAGGAGCAGAGGCAACTCCTGGAGCTCAGAAAAGAAAAAAATCAACCAAAGAAAAGGCT
GGACCCAAAGGGAGTAAGGTGTCCGAGGAACAGACTCAGCCTCCCTCTCCTGCAGGAGCCGGCATGTCCACAGCC
ATGGGCCGTTCCCCATCTCCCAAGACCTCATTGTCAGCTCCACCCAACAGTTCTTCAACTGAGAACCCGAAAACA
GTGGCCAAATGTCAGGTAACTCCCAGAAGAAATGTTCTCCAAAAACGCCCAGTGATAGTGAAGGTACTGAGTACA
ACAAAGCCATTTGAATATGAGACCCCAGAAATGGAGAAAAAAATAATGTTTCATGCTACAGTGGCTACACAGACA
CAGTTCTTCCATGTGAAGGTTTTAAACACCAGCTTGAAGGAGAAATTCAATGGAAAGAAAATCATCATCATATCA
GATTATTTGGAATATGATAGTCTCCTAGAGGTCAATGAAGAATCTACTGTATCTGAAGCTGGTCCTAACCAAACG
TTTGAGGTTCCAAATAAAATCATCAACAGAGCAAAGGAAACTCTGAAGATTGATATTCTTCACAAACAAGCTTCA
GGAAATATTGTATATGGGGTATTTATGCTACATAAGAAAACAGTAAATCAGAAGACCACAATCTACGAAATTCAG
GATGATAGAGGAAAAATGGATGTAGTGGGGACAGGACAATGTCACAATATCCCCTGTGAAGAAGGAGATAAGCTC
CAGCTTTTCTGCTTTCGACTTAGAAAAAAGAACCAGATGTCAAAACTGATTTCAGAAATGCATAGTTTTATCCAG
ATAAAGAAAAAAACAAACCCGAGAAACAATGACCCCAAGAGCATGAAGCTACCCCAGGAACAGCGTCAGCTTCCA
TATCCTTCAGAGGCCAGCACAACCTTCCCTGAGAGCCATCTTCGGACTCCTCAGATGCCACCAACAACTCCATCC
AGCAGTTTCTTCACCAAGAAAAGTGAAGACACAATCTCCAAAATGAATGACTTCATGAGGATGCAGATACTGAAG
GAAGGGAGTCATTTTCCAGGACCGTTCATGACCAGCATAGGCCCAGCTGAGAGCCATCCCCACACTCCTCAGATG
CCTCCATCAACACCAAGCAGCAGTTTCTTAACCACGTTGAAACCAAGACTGAAGACTGAACCTGAAGAAGTTTCC
ATAGAAGACAGTGCCCAGAGTGACCTCAAAGAAGTGATGGTGCTGAACGCAACAGAATCATTTGTATATGAGCCC
AAAGAGCAGAAGAAAATGTTTCATGCCACAGTGGCAACTGAGAATGAAGTCTTCCGAGTGAAGGTTTTTAATATT
GACCTAAAGGAGAAGTTCACCCCAAAGAAGATCATTGCCATAGCAAATTATGTTTGCCGCAATGGGTTCCTGGAG
GTATATCCTTTCACACTTGTGGCTGATGTGAATGCTGACCGAAACATGGAGATCCCAAAAGGATTGATTAGAAGT
GCCAGCGTAACTCCTAAAATCAATCAGCTTTGCTCACAAACTAAAGGAAGTTTTGTGAATGGGGTGTTTGAGGTA
CATAAGAAAAATGTAAGGGGTGAATTCACTTATTATGAAATACAAGATAATACAGGGAAGATGGAAGTGGTGGTG
CATGGACGACTGAACACAATCAACTGTGAGGAAGGAGATAAACTGAAACTCACCAGCTTTGAATTGGCACCGAAA
AGTGGGAATACCGGGGAGTTGAGATCTGTAATTCATAGTCACATCAAGGTCATCAAGACCAGGAAAAACAAGAAA
GACATACTCAATCCTGATTCAAGTATGGAAACTTCACCAGACTTTTTCTTC**TAA**AATCTGGATGTCATTGACGAT
AATGTTTATGGAGATAAGGTCTAAGTCCCTAAAAAAATGTACATATACCTGGTTGAAATACAACACTATACATAC
ACACCACCATATATACTAGCTGTTAATCCTATGGAATGGGGGTATTGGGAGTGCTTTTTTAATTTTTCATAGTTT
TTTTTTAATAAAATGGCATATTTTGCATCTACAACTTCTATAATAAGAAAAAATAAATAAACATTATCTTTTTTG
TGAAAAAAA

FIGURE 2106

MGKKYKNIVLLKGLEVINDYHFRMVKSLLSNDLKLNLKMREEYDKIQIADLMEEKFRGDAGLGKLIKIFEDIPTL
EDLAETLKKEKLKVKGPALSRKRKKEVHATSPAPSTSSTVKTEGAEATPGAQKRKKSTKEKAGPKGSKVSEEQTQ
PPSPAGAGMSTAMGRSPSPKTSLSAPPNSSSTENPKTVAKCQVTPRRNVLQKRPVIVKVLSTTKPFEYETPEMEK
KIMFHATVATQTQFFHVKVLNTSLKEKFNGKKIIIISDYLEYDSLLEVNEESTVSEAGPNQTFEVPNKIINRAKE
TLKIDILHKQASGNIVYGVFMLHKKTVNQKTTIYEIQDDRGKMDVVGTGQCHNIPCEEGDKLQLFCFRLRKKNQM
SKLISEMHSFIQIKKKTNPRNNDPKSMKLPQEQRQLPYPSEASTTFPESHLRTPQMPPTTPSSSFFTKKSEDTIS
KMNDFMRMQILKEGSHFPGPFMTSIGPAESHPHTPQMPPSTPSSSFLTTLKPRLKTEPEEVSIEDSAQSDLKEVM
VLNATESFVYEPKEQKKMFHATVATENEVFRVKVFNIDLKEKFTPKKIIAIANYVCRNGFLEVYPFTLVADVNAD
RNMEIPKGLIRSASVTPKINQLCSQTKGSFVNGVFEVHKKNVRGEFTYYEIQDNTGKMEVVVHGRLNTINCEEGD
KLKLTSFELAPKSGNTGELRSVIHSHIKVIKTRKNKKDILNPDSSMETSPDFFF

FIGURE 2107A

GGGAATAGCAGAATAGGAGCAAGCCAGCACTAGTCAGCTAACTAAGTGACTCAACCAAGGCCTTTTTTCCTTGTT
ATCTTTGCAGATACTTCATTTTCTTAGCGTTTCTGGAGATTACAACATCCTGCGGTTCCGTTTCTGGGAACTTTA
CTGATTTATCTCCCCCCTCACACAAATAAGCATTGATTCCTGCATTTCTGAAGATCTCAAGATCTGGACTACTGT
TGAAAAAATTTCCAGTGAGGCTCACTTATGTCTGTAAAG**ATG**GGAAAAAAATACAAGAACATTGTTCTACTAAAA
GGATTAGAGGTCATCAATGATTATCATTTTAGAATGGTTAAGTCCTTACTGAGCAACGATTTAAAACTTAATTTA
AAAATGAGAGAAGAGTATGACAAAATTCAGATTGCTGACTTGATGGAAGAAAAGTTCCGAGGTGATGCTGGTTTG
GGCAAACTAATAAAAATTTTCGAAGATATACCAACGCTTGAAGACCTGGCTGAAACTCTTAAAAAAGAAAAGTTA
AAAGTAAAAGGACCAGCCCTATCAAGAAAGAGGAAGAAGGAAGTGCATGCTACTTCACCTGCACCCTCCACAAGC
AGCACTGTCAAAACTGAAGGAGCAGAGGCAACTCCTGGAGCTCAGAAAAGAAAAAAATCAACCAAAGAAAAGGCT
GGACCCAAAGGGAGTAAGGTGTCCGAGGAACAGACTCAGCCTCCCTCTCCTGCAGGAGCCGGCATGTCCACAGCC
ATGGGCCGTTCCCCATCTCCCAAGACCTCATTGTCAGCTCCACCCAACAGTTCTTCAACTGAGAACCCGAAAACA
GTGGCCAAATGTCAGGTAACTCCCAGAAGAAATGTTCTCCAAAAACGCCCAGTGATAGTGAAGGTACTGAGTACA
ACAAAGCCATTTGAATATGAGACCCCAGAAATGGAGAAAAAAATAATGTTTCATGCTACAGTGGCTACACAGACA
CAGTTCTTCCATGTGAAGGTTTTAAACACCAGCTTGAAGGAGAAATTCAATGGAAAGAAAATCATCATCATATCA
GATTATTTGGAATATGATAGTCTCCTAGAGGTCAATGAAGAATCTACTGTATCTGAAGCTGGTCCTAACCAAACG
TTTGAGGTTCCAAATAAAATCATCAACAGAGCAAAGGAAACTCTGAAGATTGATATTCTTCACAAACAAGCTTCA
GGAAATATTGTATATGGGGTATTTATGCTACATAAGAAAACAGTAAATCAGAAGACCACAATCTACGAAATTCAG
GATGATAGAGGAAAAATGGATGTAGTGGGGACAGGACAATGTCACAATATCCCCTGTGAAGAAGGAGATAAGCTC
CAGCTTTTCTGCTTTCGACTTAGAAAAAAGAACCAGATGTCAAAACTGATTTCAGAAATGCATAGTTTTATCCAG
ATAAAGAAAAAAACAAACCCGAGAAACAATGACCCCAAGAGCATGAAGCTACCCCAGGAACAGCGTCAGCTTCCA
TATCCTTCAGAGGCCAGCACAACCTTCCCTGAGAGCCATCTTCGGACTCCTCAGATGCCACCAACAACTCCATCC
AGCAGTTTCTTCACCAAGAAAAGTGAAGACACAATCTCCAAAATGAATGACTTCATGAGGATGCAGATACTGAAG
GAAGGGAGTCATTTTCCAGGACCGTTCATGACCAGCATAGGCCCAGCTGAGAGCCATCCCCACACTCCTCAGATG
CCTCCATCAACACCAAGCAGCAGTTTCTTAACCACGTTGAAACCAAGACTGAAGACTGAACCTGAAGAAGTTTCC
ATAGAAGACAGTGCCCAGAGTGACCTCAAAGAAGTGATGGTGCTGAACGCAACAGAATCATTTGTATATGAGCCC
AAAGAGCAGAAGAAAATGTTTCATGCCACAGTGGCAACTGAGAATGAAGTCTTCCGAGTGAAGGTTTTTAATATT
GACCTAAAGGAGAAGTTCACCCCAAAGAAGATCATTGCCATAGCAAATTATGTTTGCCGCAATGGGTTCCTGGAG
GTATATCCTTTCACACTTGTGGCTGATGTGAATGCTGACCGAAACATGGAGATCCCAAAAGGATTGATTAGAAGT
GCCAGCGTAACTCCTAAAATCAATCAGCTTTGCTCACAAACTAAAGGAAGTTTTGTGAATGGGGTGTTTGAGGTA
CATAAGGTAAGCCCACACCATTGTTTTATAAAATTTCTCCTGCAACCTCCAATTTTTAAAGTCTTAACTTGTCAA
CTGGAGTTTGGTCAACTTACTCAACACAGAAAATCAACCCCTTCACCCTTCCCCCAGCAC**TAG**AGATAATTGAAT
AGAGTTCATTTCAGGATATGGGGTACGTTATATTGTAACATTCCTCTTCTTAAGGTATCATCATGCAAGTTATTT
AGACAGTCACTAGGAAACTTGGCATTTTATTAGTTTTGATGATCTATTCAGAGCCACCCTTGTCCAGGACAGTGC
AGAGTTTATATCAACACACATATCCTTAGGATTTTGTTTCTTTGAGTTCTTCTCCATCTGTATCAATGACAACTT
AATTTAATTGTGAATAAAAGAGTTGCTCTCCCAAGCCTGAATCCTGATTGTGACAACCAGAGTAAGAAATAAAAT
AGACTACTCTGCTTTAGAATGCAGCTATGTCTAACAGTTAGCTAGAATTCTGATCATTTGGACTCCAAAGTTTCT
TGCCTCTTCTCATTCATTAATTCATCAGGAGACTGTAGAGCAACTAACTTCTGCATTAAATAATAAGAGAAATAC
GAAGCAAAAAAGACTAAAAAAGTCACGTAGCTTAACTGCTCAATTTATAAATGGGGCAATAAAATGCAAAAAAAAA
GAAAAAAAGCTTGGTGAATTCTTAGGCTTACAGTGTGCCTTTCAGTCTCTACACATCATGTAAATATTATGCTTA
GCTGATTTAACTTCTTGTTTGAAGTACTGTTTCATACTCCATTATACATGTCTTCTAGGGTGGCTTACTTTTAAT
TGTGCTGTTTTCTCTACACTCAGTTTAAATGACTGTACATATATATGTGGTTGGAGAGTTAATGAATAATGAGCT
ACAAACCAGAACAATGTGACTAGATAGATAGGATGATCTAGAATTGAGAACTGGCAGATTGGGAAAAGAGTGGCT
ATATGGAGAAAGAAAGAAAGTAGTTCCATATTGAAATAACAGTCTACTTAATGAGGACCGTTGCAACATTCTTTC
TCAAACTTACAAAGTGCCATAAAAAGCCTCTATTCTCTGCTCTTGGGCAGGTGTGAAAGAAACCTACCAAATTAA
TCAGATTTTTCTGTATCCAGGCTCCTTAAAAAATCCCAGCTGTGCTGATGTGGAAACAGGAAGAATTAGGAAAGT
AATCAATTTTTTTTCCTAGAAAAAATCCAGCAGACAAAGAACTTCAACAAAAGAGGCTCAAGGGAGGAGTTGAAA
GGCAGGATTCAAAGACCAAGTATCTTAAGCTATTTGGTACCTGTTATTCAGGACCTACAGCTCTGTTTACTCTAT
CAAAGACCAAAAGTTTCCAGAAACACCCTGTATTTCTCATAGATTTGAAAATTATTGATCCAGTTTCAGAAGATA

FIGURE 2107B

AGTGTTAATTTTCTTTTGCAGAAAAATGTAAGGGGTGAATTCACTTATTATGAAATACAAGATAATACAGGGAAG
ATGGAAGTGGTGGTGCATGGACGACTGACCACAATCAACTGTGAGGAAGGAGATAAACTGAAACTCACCTGCTTT
GAATTGGCACCGAAAAGTGGGAATACCGGGGAGTTGAGATCTGTAATTCATAGTCACATCAAGGTCATCAAGACC
AGGAAAAACAAGAAAGACATACTCAATCCTGATTCCAAGTATGGAAACTTCACCAGACTTTTTCTTCTAAAATCT
GGATGTCATTGACGATAATGTTTATGGAGATAAGGTCTAAGTGCCTAAAAAAATGTACATATACCTGGTTGAAAT
ACAACACTATACATACACACCACCATATATACTAGCTGTTAATCCTATGGAATGGGGTATTGGGAGTGCTTTTTT
AATTTTTCATAGTTTTTTTTTAATAAAATGGCATATTTTGCATCTACAACTTCTATAATTTGAAAAAATAAATAA
ACATTATCTTTTTTGTGAAAAAAAAA

FIGURE 2108

MGKKYKNIVLLKGLEVINDYHFRMVKSLLSNDLKLNLKMREEYDKIQIADLMEEKFRGDAGLGKLIKIFEDIPTL
EDLAETLKKEKLKVKGPALSRKRKKEVHATSPAPSTSSTVKTEGAEATPGAQKRKKSTKEKAGPKGSKVSEEQTQ
PPSPAGAGMSTAMGRSPSPKTSLSAPPNSSSTENPKTVAKCQVTPRRNVLQKRPVIVKVLSTTKPFEYETPEMEK
KIMFHATVATQTQFFHVKVLNTSLKEKFNGKKIIIISDYLEYDSLLEVNEESTVSEAGPNQTFEVPNKIINRAKE
TLKIDILHKQASGNIVYGVFMLHKKTVNQKTTIYEIQDDRGKMDVVGTGQCHNIPCEEGDKLQLFCFRLRKKNQM
SKLISEMHSFIQIKKKTNPRNNDPKSMKLPQEQRQLPYPSEASTTFPESHLRTPQMPPTTPSSSFFTKKSEDTIS
KMNDFMRMQILKEGSHFPGPFMTSIGPAESHPHTPQMPPSTPSSSFLTTLKPRLKTEPEEVSIEDSAQSDLKEVM
VLNATESFVYEPKEQKKMFHATVATENEVFRVKVFNIDLKEKFTPKKIIAIANYVCRNGFLEVYPFTLVADVNAD
RNMEIPKGLIRSASVTPKINQLCSQTKGSFVNGVFEVHKVSPHHCFIKFLLQPPIFKVLTCQLEFGQLTQHRKST
PSPFPQH

FIGURE 2109

TCTCCCTCCGCCTCCCGAGCACCAGCGCGCTCTGAGCTGCCCCCAGGGTCCCTCCCCCGCCGCCAGCAGCCCATT
TGGAGGGAGGAAGTAAGGGAAGAGGAGAGGAAGGGGAGCCGGACCGACTACCCAGACAGAGCCGGTGAATGGGTT
TGTGGTGACCCCCGCCCCCCACCCCACCCTCCCTTCCCACCCGACCCCCAACCCCCATCCCCAGTTCGAGCCGCC
GCCCGAAAGGCCGGGCCGTCGTCTTAGGAGGAGTCGCCGCCGCCGCCACCTCCGCC**ATG**GAGCTGATCACCATTC
TCGAGAAGACCGTGTCTCCCGATCGGCTGGAGCTGGAAGCGGCGCAGAAGTTCCTGGAGCGTGCGGCCGTGGAGA
ACCTGCCCACTTTCCTTGTGGAACTGTCCAGAGTGCTGGCAAATCCAGGAAACAGTCAGGTTGCCAGAGTTGCAG
CTGGTCTACAAATCAAGAACTCTTTGACATCTAAAGATCCAGATATCAAGGCACAATATCAGCAGAGGTGGCTTG
CTATTGATGCTAATGCTCGACGAGAAGTCAAGAACTATGTTTTGCAGACATTGGGTACAGAAACTTACCGGCCTA
GTTCTGCCTCACAGTGTGTGGCTGGTATTGCTTGTGCAGAGATCCCAGTAAACCAGTGGCCAGAACTCATTCCTC
AGCTGGTGGCCAATGTCACAAACCCCAACAGCACAGAGCACATGAAGGAGTCGACATTGGAAGCCATCGGTTATA
TTTGCCAAGATATAGACCCAGAGCAGCTACAAGATAAATCCAATGAGATTCTGACTGCCATAATCCAGGGGATGA
GGAAAGAAGAGCCTAGTAATAATGTGAAGCTAGCTGCTACGAATGCACTCCTGAACTCATTGGAGTTCACCAAAG
CAAACTTTGATAAAGAGTCTGAAAGGCACTTTATTATGCAGGTGGTCTGTGAAGCCACACAGTGTCCAGATACGA
GGGTACGAGTGGCTGCTTTACAGAATCTGGTGAAGATAATGTCCTTATATTATCAGTACATGGAGACATATATGG
GTCCTGCTCTTTTTGCAATCACAATCGAAGCAATGAAAAGTGACATTGATGAGGTGGCTTTACAAGGGATAGAAT
TCTGGTCCAATGTCTGTGATGAGGAAATGGATTTGGCCATTGAAGCTTCAGAGGCAGCAGAACAAGGACGGCCCC
CTGAGCACACCAGCAAGTTTTATGCGAAGGGAGCACTACAGTATCTGGTTCCAATCCTCACACAGACACTAACTA
AACAGGACGAAAATGATGATGACGATGACTGGAACCCCTGCAAAGCAGCAGGGGTGTGCCTCATGCTTCTGGCCA
CCTGCTGTGAAGATGACATTGTCCCACATGTCCTCCCCTTCATTAAAGAACACATCAAGAACCCAGATTGGCGGT
ACCGGGATGCAGCAGTGATGGCTTTTGGTTGTATCTTGGAAGGACCAGAGCCCAGTCAGCTCAAACCACTAGTTA
TACAGGCTATGCCCACCCTAATAGAATTAATGAAAGACCCCAGTGTAGTTGTTCGAGATACAGCTGCATGGACTG
TAGGCAGAATTTGTGAGCTGCTTCCTGAAGCTGCCATCAATGATGTCTACTTGGCTCCCCTGCTACAGTGTCTGA
TTGAGGGTCTCAGTGCTGAACCCAGAGTGGCTTCAAATGTGTGCTGGGCTTTCTCCAGTCTGGCTGAAGCTGCTT
ATGAAGCTGCAGACGTTGCTGATGATCAGGAAGAACCAGCTACTTACTGCTTATCTTCTTCATTTGAACTCATAG
TTCAGAAGCTCCTAGAGACTACAGACAGACCTGATGGACACCAGAACAACCTGAGGAGTTCTGCATATGAATCTC
TGATGGAAATTGTGAAAAACAGTGCCAAGGATTGTTATCCTGCTGTCCAGAAAACGACTTTGGTCATCATGGAAC
GACTGCAACAGGTTCTTCAGATGGAGTCACATATCCAGAGCACATCCGATAGAATCCAGTTCAATGACCTTCAGT
CTTTACTCTGTGCAACTCTTCAGAATGTTCTTCGGAAAGTGCAACATCAAGATGCTTTGCAGATCTCTGATGTGG
TTATGGCCTCCCTGTTAAGGATGTTCCAAAGCACAGCTGGGTCTGGGGGAGTACAAGAGGATGCCCTGATGGCAG
TTAGCACACTGGTGGAAGTGTTGGGTGGTGAATTCCTCAAGTACATGGAGGCCTTTAAACCCTTCCTGGGCATTG
GATTAAAAAATTATGCTGAATACCAGGTTTGTTTGGCAGCTGTGGGCTTAGTGGGAGACTTGTGCCGTGCCCTGC
AATCCAACATCATACCTTTCTGTGACGAGGTGATGCAGCTGCTTCTGGAAAATTTGGGGAATGAGAACGTCCACA
GGTCTGTGAAGCCGCAGATTCTGTCAGTGTTTGGTGATATTGCCCTTGCTATTGGAGGAGAGTTTAAAAAATACT
TAGAGGTTGTATTGAATACTCTTCAGCAGGCCTCCCAAGCCCAGGTGGACAAGTCAGACTATGACATGGTGGATT
ATCTGAATGAGCTAAGGGAAAGCTGCTTGGAAGCCTATACTGGAATCGTCCAGGGATTAAAGGGGGATCAGGAGA
ACGTACACCCGGATGTGATGCTGGTACAACCCAGAGTAGAATTTATTCTGTCTTTCATTGACCACATTGCTGGAG
ATGAGGATCACACAGATGGAGTAGTAGCTTGTGCTGCTGGACTAATAGGGGACTTATGTACAGCATTTGGGAAGG
ATGTACTGAAATTAGTAGAAGCTAGGCCAATGATCCATGAATTGTTAACTGAAGGGCGGAGATCGAAGACTAACA
AAGCAAAAACCCTTGCTACATGGGCAACAAAAGAACTGAGGAAACTGAAGAACCAAGCT**TGA**TCTGTTACCATTG
GGATGATAACCTGAGGACCCCCACTGGAAATCTCCCATCTTTTGAAAAACCTGGAAGTGAGGAGTGTGCACGGAT
GCTGAATGTTTGGGAATGAGAGGATGAGTGAGTGAGGCTTGAAAACACACCACATTGAAAATCCTGCCACAGCAG
CAGCCGCAGCCGCCAACAGCAGCGCTGTTAGTGAGCTAAGTAAGCACTGACTTCGTAGAAAACCATAACATCGGC
CATCTTGGAAAAGAGAAAAACAATGGAGTTACTTATTTAAAAAAAAAAAAAAAAAAA

FIGURE 2110

MELITILEKTVSPDRLELEAAQKFLERAAVENLPTFLVELSRVLANPGNSQVARVAAGLQIKNSLTSKDPDIKAQ
YQQRWLAIDANARREVKNYVLQTLGTETYRPSSASQCVAGIACAEIPVNQWPELIPQLVANVTNPNSTEHMKEST
LEAIGYICQDIDPEQLQDKSNEILTAIIQGMRKEEPSNNVKLAATNALLNSLEFTKANFDKESERHFIMQVVCEA
TQCPDTRVRVAALQNLVKIMSLYYQYMETYMGPALFAITIEAMKSDIDEVALQGIEFWSNVCDEEMDLAIEASEA
AEQGRPPEHTSKFYAKGALQYLVPILTQTLTKQDENDDDDDWNPCKAAGVCLMLLATCCEDDIVPHVLPFIKEHI
KNPDWRYRDAAVMAFGCILEGPEPSQLKPLVIQAMPTLIELMKDPSVVVRDTAAWTVGRICELLPEAAINDVYLA
PLLQCLIEGLSAEPRVASNVCWAFSSLAEAAYEAADVADDQEEPATYCLSSSFELIVQKLLETTDRPDGHQNNLR
SSAYESLMEIVKNSAKDCYPAVQKTTLVIMERLQQVLQMESHIQSTSDRIQFNDLQSLLCATLQNVLRKVQHQDA
LQISDVVMASLLRMFQSTAGSGGVQEDALMAVSTLVEVLGGEFLKYMEAFKPFLGIGLKNYAEYQVCLAAVGLVG
DLCRALQSNIIPFCDEVMQLLLENLGNENVHRSVKPQILSVFGDIALAIGGEFKKYLEVVLNTLQQASQAQVDKS
DYDMVDYLNELRESCLEAYTGIVQGLKGDQENVHPDVMLVQPRVEFILSFIDHIAGDEDHTDGVVACAAGLIGDL
CTAFGKDVLKLVEARPMIHELLTEGRRSKTNKAKTLATWATKELRKLKNQA

FIGURE 2111A

CTCCCTCGCTCCCTCCCTGCGCGCCGCCTCTCACTCACAGCCTCCCTTCCTTCTTTCTCCCTCCGCCTCCCGAGC
ACCAGCGCGCTCTGAGCTGCCCCCAGGGTCCCCTCCCCCGCCGCCAGCAGCCCATTTGGAGGGAGGAAGTAAGGG
AAGAGGAGAGGAAGGGGAGCCGGACCGACTACCCAGACAGAGCCGGTGAATGGGTTTGTGGTGACCCCCGCCCCC
CACCCCACCCTCCCTTCCCACCCGACCCCCAACCCCCATCCCCAGTTCGAGCCGCCGCCCGAAAGGCCGGGCCGT
CGTCTTAGGAGGAGTCGCCGCCGCCGCCACCTCCGCCATGGAGCTGATCACCATTCTCGAGAAGACCGTGTCTCC
CGATCGGCTGGAGCTGGAAGCGGCGCAGAAGTTCCTGGAGCGTGCGGCCGTGGAGAACCTGCCCACTTTCCTTGT
GGAACTGTCCAGAGTGCTGGCAAATCCAGGAAACAGTCAGGTTGCCAGAGTTGCAGCTGGTCTACAAATCAAGAA
CTCTTTGACATCTAAAGATCCAGATATCAAGGCACAATATCAGCAGAGGTGGCTTGCTATTGATGCTAATGCTCG
ACGAGAAGTCAAGAACTATGTTTTGCAGACATTGGGTACAGAAACTTACCGGCCTAGTTCTGCCTCACAGTGTGT
GGCTGGTATTGCTTGTGCAGAGATCCCAGTAAACCAGTGGCCAGAACTCATTCCTCAGCTGGTGGCCAATGTCAC
AAACCCCAACAGCACAGAGCACATGAAGGAGTCGACATTGGAAGCCATCGGTTATATTTGCCAAGATATAGACCC
AGAGCAGCTACAAGATAAATCCAATGAGATTCTGACTGCCATAATCCAGGGGATGAGGAAAGAAGAGCCTAGTAA
TAATGTGAAGCTAGCTGCTACAAATGCACTCCTGAACTCATTGGAGTTCACCAAAGCAAACTTTGATAAAGAGTC
TGAAAGGCACTTTATTATGCAGGTGGTCTGTGAAGCCACACAGTGTCCAGATACGAGGGTACGAGTGGCTGCTTT
ACAGAATCTGGTGAAGATAATGTCCTTATATTATCAGTACATGGAGACATATATGGGTCCTGCTCTTTTTGCAAT
CACAATCGAAGCAATGAAAAGTGACATTGATGAGGTGGCTTTACAAGGGATAGAATTCTGGTCCAATGTCTGTGA
TGAGGAAATGGATTTGGCCATTGAAGCTTCAGAGGCAGCAGAACAAGGACGGCCCCCTGAGCACACCAGCAAGTT
TTATGCGAAGGGAGCACTACAGTATCTGGTTCCAATCCTCACACAGACACTAACTAAACAGGACGAAAATGATGA
TGACGATGACTGGAACCCCTGCAAAGCAGCAGGGGTGTGCCTCATGCTTCTGGCCACCTGCTGTGAAGATGACAT
TGTCCCACATGTCCTCCCCTTCATTAAAGAACACATCAAGAACCCAGATTGGCGGTACCGGGATGCAGCAGTGAT
GGCTTTTGGTTGTATCTTGGAAGGACCAGAGCCCAGTCAGCTCAAACCACTAGTTATACAGGCTATGCCCACCCT
AATAGAATTAATGAAAGACCCCAGTGTAGTTGTTCGAGATACAGCTGCATGGACTGTAGGCAGAATTTGTGAGCT
GCTTCCTGAAGCTGCCATCAATGATGTCTACTTGGCTCCCCTGCTACAGTGTCTGATTGAGGGTCTCAGTGCTGA
ACCCAGAGTGGCTTCAAATGTGTGCTGGGCTTTCTCCAGTCTGGCTGAAGCTGCTTATGAAGCTGCAGACGTTGC
TGATGATCAGGAAGAACCAGCTACTTACTGCTTATCTTCTTCATTTGAACTCATAGTTCAGAAGCTCCTAGAGAC
TACAGACAGACCTGATGGACACCAGAACAACCTGAGGAGTTCTGCATATGAATCTCTGATGGAAATTGTGAAAAA
CAGTGCCAAGGATTGTTACCCTGCTGTCCAGAAAACGACTTTGGTCATCATGGAACGACTGCAACAGGTTCTTCA
GATGGAGTCACATATCCAGAGCACATCCGATAGAATCCAGTTCAATGACCTTCAGTCTTTACTCTGTGCAACTCT
TCAGAATGTTCTTCGGAAAGTGCAACATCAAGATGCTTTGCAGATCTCTGATGTGGTTATGGCCTCCCTGTTAAG
GATGTTCCAAAGCACAGCTGGGTCTGGGGGAGTACAAGAGGATGCCCTGATGGCAGTTAGCACACTGGTGGAAGT
GTTGGGTGGTGAATTCCTCAAGTACATGGAGGCCTTTAAACCCTTCCTGGGCATTGGATTAAAAAATTATGCTGA
ATACCAGGTTTGTTTGGCAGCTGTGGGCTTAGTGGGAGACTTGTGCCGTGCCCTGCAATCCAACATCATACCTTT
CTGTGACGAGGTGATGCAGCTGCTTCTGGAAAATTTGGGGAATGAGAACGTCCACAGGTCTGTGAAGCCGCAGAT
TCTGTCAGTGTTTGGTGATATTGCCCTTGCTATTGGAGGAGAGTTTAAAAAATACTTAGAGGTTGTATTGAATAC
TCTTCAGCAGGCCTCCCAAGCCCAGGTGGACAAGTCAGACTATGACATGGTGGATTATCTGAATGAGCTAAGGGA
AAGCTGCTTGGAAGCCTATACTGGAATCGTCCAGGGATTAAAGGGGGATCAGGAGAACGTACACCCGGATGTGAT
GCTGGTACAACCCAGAGTAGAATTTATTCTGTCTTTCATTGACCACATTGCTGGAGATGAGGATCACACAGATGG
AGTAGTAGCTTGTGCTGCTGGACTAATAGGGGACTTATGTACAGCATTTGGGAAGGATGTACTGAAATTAGTAGA
AGCTAGGCCAATGATCCATGAATTGTTAACTGAAGGGCGGAGATCGAAGACTAACAAAGCAAAAACCCTTGCTAC
ATGGGCAACAAAAGAACTGAGGAAACTGAAGAACCAAGCTTGATCTGTTACCATTGGGATGATAACCTGAGGACC
CCCACTGGAAATCTCCCATCTTTTGAAAAACCTGGAAGTGAGGAGTGTGCACGGATGCTGAATGTTTGGGAATGA
GAGGATGAGTGAGTGAGGCTTGAAAACACACCACATTGAAAATCCTGCCACAGCAGCAGCCGCAGCCGCCAACAG
CAGCGCTGTTAGTGAGCTAAGTAAGCACTGACTTCGTAGAAAACCATAACATCGGCCATCTTGGAAAAGAGAAAA
ACAATGGAGTTACTTATTTAAAAAAAAAGAAAGAAAGTTATCTCTTCCCAGGAGAGGCTAGAAGTAGCTTTTCTG
TCTTTTGGCCAGTGCCGAGTGGAATGCCTGGTTTCGGGGAGGAGGAGGGACTGGGTTCAGCTGTGGTGCTTTGTT
GTAAAAGGCAGCCTGGCCTTTGCTACTGAGGAGAAAGATGGAGCCTGGGTCTCAAGCCCACCTTCGCTGTACCTT
TGCCACATGGTACTGTATGCTTGCCAGCTAGAAGGAGGGTCAGGGTTTTTTACAGTCTGAGAATGAGTGTGTGTG
AGTGAGGCGGTATCCACATTCTCAACTTCAAGTCATTGCTGTTTCTTTTTCCCAGAAAACAAGGGGTTAGATGTT

FIGURE 2111B

GCATTTCATAAAACTAACCGAAGTTCTGTCTACTGATGCAGCACAAGAGATGTAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAACACACAAAAAAACACACACACAGAGGAAAGACGCTCTTTAGGTTTTGTTTTGTTTTTTTTTTTTG
GTTTTGTTTTTTGTTTTTTTTTTTACTCTAGGGAAAACACTGACGAATGGTCAGAGCTCCTATCCTGATCTTTTC
ATCAAGGCGCCTTTCCTAATAATATGGTTCAACTGTGAATGTAGAAGTGGGGGGXXAGGGGGGGAGAAAAAGAAAAC
TCTGGCGTTAGAGGATATAAAAAAATATAAGTACAATTGTTACAAATAACGCAGACTTCAAAAACAAAAAAATCA
CAACCCAAACAAACCAAAATTTAAATGATCAGAATTGGCAGCACAAAGAAAACGCCCTCTCCTGACTTGTATTGT
GGCAGTCTGAACGCCCCCAGAAAATTGTGCCAAAGAGTTTAGAAAAATAAATATACAATAAAAGTAAACACATAC
ACACAAAACAGCAAACTTCAGGTAACTATTTTGGATTGCAAACAGGATAATTAAATGTTCAAACAATCTGATAAA
ATAACCATTTGG

FIGURE 2112

MELITILEKTVSPDRLELEAAQKFLERAAVENLPTFLVELSRVLANPGNSQVARVAAGLQIKNSLTSKDPDIKAQ
YQQRWLAIDANARREVKNYVLQTLGTETYRPSSASQCVAGIACAEIPVNQWPELIPQLVANVTNPNSTEHMKEST
LEAIGYICQDIDPEQLQDKSNEILTAIIQGMRKEEPSNNVKLAATNALLNSLEFTKANFDKESERHFIMQVVCEA
TQCPDTRVRVAALQNLVKIMSLYYQYMETYMGPALFAITIEAMKSDIDEVALQGIEFWSNVCDEEMDLAIEASEA
AEQGRPPEHTSKFYAKGALQYLVPILTQTLTKQDENDDDDDWNPCKAAGVCLMLLATCCEDDIVPHVLPFIKEHI
KNPDWRYRDAAVMAFGCILEGPEPSQLKPLVIQAMPTLIELMKDPSVVVRDTAAWTVGRICELLPEAAINDVYLA
PLLQCLIEGLSAEPRVASNVCWAFSSLAEAAYEAADVADDQEEPATYCLSSSFELIVQKLLETTDRPDGHQNNLR
SSAYESLMEIVKNSAKDCYPAVQKTTLVIMERLQQVLQMESHIQSTSDRIQFNDLQSLLCATLQNVLRKVQHQDA
LQISDVVMASLLRMFQSTAGSGGVQEDALMAVSTLVEVLGGEFLKYMEAFKPFLGIGLKNYAEYQVCLAAVGLVG
DLCRALQSNIIPFCDEVMQLLLENLGNENVHRSVKPQILSVFGDIALAIGGEFKKYLEVVLNTLQQASQAQVDKS
DYDMVDYLNELRESCLEAYTGIVQGLKGDQENVHPDVMLVQPRVEFILSFIDHIAGDEDHTDGVVACAAGLIGDL
CTAFGKDVLKLVEARPMIHELLTEGRRSKTNKAKTLATWATKELRKLKNQA

FIGURE 2113

GGCACGAGGCTGCTGTTTGTCTACTTCCTCCTGCTTCCCCGCCGCCGCCGCCGCCATCATGAGGGAAATCGTGCA
CTTGCAGGCCGGGCAGTGCGGCAACCAAATCGGCGCCAAGTTTTGGGAGGTGATCAGCGATGAGCACGGCATCGA
CCCCACGGGCACCTACCACGGGGACAGCGACCTGCAGCTGGAACGCATCAACGTGTACTACAATGAGGCCACCGG
CGGCAAGTACGTGCCCCGCGCCGTGCTCGTGGATCTGGAGCCCGGCACCATGGACTCCGTGCGCTCGGGGCCCTT
CGGGCAGATCTTCCGGCCGGACAACTTCGTTTTCGGTCAGAGTGGTGCTGGGAACAACTGGGCCAAGGGGCACTA
CACAGAAGGCGCGGAGCTGGTGGACTCGGTGCTGGATGTTGTGAGAAAGGAGGCTGAGAGCTGTGACTGCCTGCA
GGGTTTCCAGCTGACCCACTCCCTGGGTGGGGGGACTGGGTCTGGGATGGGTACCCTCCTCATCAGCAAGATCCG
GGAGGAGTACCCAGACAGGATCATGAACACGTTTAGTGTGGTGCCTTCGCCCAAAGTGTCAGACACAGTGGTGGA
GCCCTACAACGCCACCCTCTCAGTCCACCAGCTCGTAGAAAACACAGACGAGACCTACTGCATTGATAACGAAGC
TCTCTACGACATTTGCTTCAGAACCCTAAAGCTGACCACGCCCACCTATGGTGACCTGAACCACCTGGTGTCTGC
TACCATGAGTGGGGTCACCACCTGCCTGCGCTTCCCAGGCCAGCTCAATGCTGACCTGCGGAAGCTGGCTGTGAA
CATGGTCCCGTTTCCCCGGCTGCACTTCTTCATGCCCGGCTTTGCCCCACTGACCAGCCGGGGCAGCCAGCAGTA
CCGGGCGCTGACCGTGCCCGAGCTCACCCAGCAGATGTTTGATGCCAAGAACATGATGGCTGCCTGCGACCCCCG
CCATGGCCGCTACCTGACGGTTGCCGCCGTGTTCAGGGGCCGCATGTCCATGAAGGAGGTGGATGAGCAAATGCT
TAATGTCCAAAACAAAAACAGCAGCTATTTTGTTGAGTGGATCCCCAACAATGTGAAAACGGCTGTCTGTGACAT
CCCACCTCGGGGGCTAAAAATGTCCGCCACCTTCATTGGCAACAGCACGGCCATCCAGGAGCTGTTCAAGCGCAT
CTCCGAGCAGTTCACGGCCATGTTCCGGCGCAAGGCCTTCCTGCACTGGTACACGGGCGAGGGCATGGACGAGAT
GGAGTTCACCGAGGCCGAGAGCAACATGAATGACCTGGTGTCCGAGTACCAGCAGTACCAGGATGCCACAGCCGA
GGAGGAGGGCGAGTTCGAGGAGGAGGCTGAGGAGGAGGTGGCCTAGAGCCTTCAGTCACTGGGGAAAGCAGGGAA
GCAGTGTGAACTCTTTATTCACTCCCAGCCTGTCCTGTGGCCTGTCCCACTGTGTGCACTTGCTGTTTTCCCTGT
CCACATCCATGCTGTACAGACACCACCATTAAAGCATTTTCATAGTGAAAAAAAAAAAAAAAAAAAAAAAAAAA
AA

FIGURE 2114

MREIVHLQAGQCGNQIGAKFWEVISDEHGIDPTGTYHGDSDLQLERINVYYNEATGGKYVPRAVLVDLEPGTMDS
VRSGPFGQIFRPDNFVFGQSGAGNNWAKGHYTEGAELVDSVLDVVRKEAESCDCLQGFQLTHSLGGGTGSGMGTL
LISKIREEYPDRIMNTFSVVPSPKVSDTVVEPYNATLSVHQLVENTDETYCIDNEALYDICFRTLKLTTPTYGDL
NHLVSATMSGVTTCLRFPGQLNADLRKLAVNMVPFPRLHFFMPGFAPLTSRGSQQYRALTVPELTQQMFDAKNMM
AACDPRHGRYLTVAAVFRGRMSMKEVDEQMLNVQNKNSSYFVEWIPNNVKTAVCDIPPRGLKMSATFIGNSTAIQ
ELFKRISEQFTAMFRRKAFLHWYTGEGMDEMEFTEAESNMNDLVSEYQQYQDATAEEEGEFEEEAEEEVA

FIGURE 2115

CTATCAATCTCCAGAGCTTTTTCTTTTTAAGTGTGAGCGAGTTTATTAGAGAAGTAAAGAGACCCAAGAGTGCCT
ACTCCATAGACAGAGCAGCCACTGTGACACTGTACCCATTAAACACTAACTCTCCATTGCCCCTCCAGCAACCCC
TAGCACCCACTGTCTACTTTCTGTCTCTATGTGGTTGTCTATTTGAGGGACATCACATAAGTGGAGTCATATATT
TGTCCTTTCATGTCTCCCTTATTTCATTTAGCATAACGTTTTCAAGGGTTTCCTGTGTTGTGAATATATCAGAAT
TTCATTCTCTTTTTAAGGTAGAATCATATCATTTTAAAACATTTCAGTTGGACCATCTAAGTTCAGTCCTTCATT
TTCAACAATTAAAAAACAGCCCTCAACCGGGTGCATCTCACGTTAGCTAGAGACAGAACTGGAGCTAGAAGTCAG
ATCTCTTACCAAAGTTGCCTTTCTTCTTCTGTGGGTAAGTGGGGCACCCTTGGGACGCTGTGCTGGGCGTACATG
GGTGCTTGATGAAGTTACTTGGTGGACTGATGTGATTGATGTCCAACATGTATGCAGGGACAGAGGCTATGGTCC
CTACAGAGCAGGCATGGAGAGAAGGAGAAATACATACGGGCAGGAGCCAGGAGAGGGAGGGTGTAGTGAGCAGAG
ACCGCGCCACTGCACTCCAGCCTGAGTGACAGAGTGAGAATCCATCTAAAAAATTGCTTACTAAAGAAGTGGTCT
CCTGAGGTCTTAAGACGTTCCTGGCAATGTCTTGAGTGGGTGGGAGAGAGCCTCCAGTCATTGAGCTGTGGAATT
TCAGAGGTGAGAACCACACCTAACCCCCAATTACTTTCCCCTGTTTGCCTCAGTGACACAGCTGCAGGAACCCTG
GTGGGTGTTGTATTAAGTAAATTTGACCTTTATTCTTTGCAGATCTGTGAAATGTTGTCTTCTGAGGGGCCACGT
GTATCTGTAGTGCTGAGGACTCCTTGGGGCCTCTGAAGTCACAGAGAGAACCTGCAGGGTGGGGGACCAGTGTGT
GACAGCCCTGCTTTGCATTTTCTTTGAGAAGTGCTGTCATTTTGCATTTCTCTCCACCAGGGGAATCTTCAATCT
TGAGAGGTGTGATCATAACTTGCCTTGTTTCTTGTCGCTACAGAGAACGGAAGGCTCCCTTGATGGAACTTAGAC
AGCAAGGCCAGATGCACATCCCTGGAAGGACATCCATGTTCCGAGAAGAACAGATGATCCCTGTATTTCAAGACC
TCTGTGCACTTATTTATGAACCTGCCCTGCTCCCACAGAACACAGCAATTCCTCAGGCTAAGCTGCCGGTTCTTA
AATCCATCCTGCTAAGTTAATGTTGGGTAGAAAGAGATACAGAGGGGCTGTTGAATTTCCCACATACCCTCCTTC
CACCAAGTTGGAACATCCTTGGAAATTGGGAAGAGCACAAGAGGAGATCCAGGGCAAGGCCATTGGGATATTCTG
AAACTTGAATATTTTGTTTTGTGCAGAGATAAAGACCTTTTCCATGCACCCTCATACACAGAAACCAATTTTCTT
TTTTATACTCAATCATTTCTAGCGCATGGCCTGGTTAGAGGCTGGTTTTTTCTCTTTTCCTTTGGTCCTTCAAAG
GCTTGTAGTTTTGGGTAGTCCTTGTTCTTTGGAAATACACAGTGCTGACCAGACAGCCTCCCCCTGTCCCCTCTA
TGACCTCGCCCTCCACAAATGGGAAAACCAGACTACTTGGGAGCACCGCCTGTGAAATACCAACCTGAAGACACG
GTTCATTCAGGCAACGCACAAAACAGAAAATGAAGGTGGAACAAGCACATATGTTCTTCAACTGTTTTTGTCTAC
ACTCTTTCTCTTTTCCTCTACATGCTGAAGGCTGAAAGACAGGAAAGATGGTGCCATCAGCAAATATTATTCTTA
ATTGAAAACTTGAAATGTGTATGTTTCTTACTAATTTTTAAAAATGTATTCCTTGCCAGGGCAGGCAAGGTCGTC
ACGCCTGTAATCCCAGCACTTCAGGAGGCTGAGGTGGGCGGATC

FIGURE 2116

ATCTCACGTTAGCTAGAGACAGAACTGGAGCTAGCAGTCAGATCTCTTACAAAGTTGCCTTTCTTCTTCTGTGGG
TAAGTGGGGCACCCTTGGGACGCTGTGCTGGGCGTACATGGGTGCTTGATGAAGTTACTTGGTGGACTGATGTGA
TTGATGTCCAACATGTATGCAGGGACAGAGGCTATGGTCCCTACAGAGCAGGCATGGAGAGAAGGAGAAATACAT
ACGGNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNTTGCTTGCTAAAGAAGTGGTCTCCTGAGGTCTTAAGACGTTCCTGACAATGTCTT
GAGTGGGTGGGAGAGAGGCTGCAGTCATTGTGCTGTGGAATTTCAGAGGTGAGAACCACACCTAACCAAAATTAC
TTTCCCTGTTTGCCTCAGTGACACAGCTGCAGGAACCCTGGTGGGTGTTGTATTAAGTAAATTTGACCTTTATTC
TTTGCAGATCTGTGAAATGTTGTCTTCTGAGGGGCCACGTGTATCTGTAGTGCTGAGGACTCCTTGGGCCTCTGA
AGTCACAGAGAGAACCCTGCAGGGTGGGGGACCAGTGTGTGACAGCCCTGCTTTGCATTTTCTTTGAGAAGTGCT
GTCATTTTGCATTTCTCTCCACCAGGGCAATCTTCAATCTTGAGAGGTGTGATCATAACTTGCCTTGTTTCTTGT
CGCTACAGAGAACGGAAGGCTCCCTTGATGGAACTTAGACAGCAAGGCCAGATGCACATCCCTGGAAGGACATCC
ATGTTCCGAGAAGAACAGATGATCCCTGTATTTCAAGACCTCTGTGCACTTATTTATGAACCTGCCCTGCTCCCA
CAGAACACAGCAATTCCTCAGGCTAAGCTGCCGGTTCTTAAATCCATCCTGCTAAGTTAATGTTGGGTAGAAAGA
GATACAGAGGGGCTGTTGAATTTCCCACATACCCTCCTTCCACCAAGTTGGAACATCCTTGGAAATTGGAAGAGC
ACAAGAGGAGATCCAGGGCAAGGCCATTGGGATATTCTGAAACTTGAATATTTTGTTTTGTGCAGAGATAAAGAC
CTTTTCCATGCACCCTCATACACAGAAACCAATTTTCTTTTTTATACTCAATCATTTCTAGCGCATGGCCTGGTT
AGAGGCTGGTTTTTTCTCTTTTCCTTTGGTCCTTCAAAGGCTTGTAGTTTTGGGTAGTCCTTGTTCTTTGGAAAT
ACACAGTGCTGACCAGACAGCCTCCCCCTGTCCCCTCTATGACCTCGCCCTCCACAAATGGGAAAACCAGACTAC
TTGGGAGCACCGCCTGTGAAATACCAACCTGAAGACACCGTTCATTCAGGCAACGCACAAAACAGAAAATGAAGG
TGGAACAAGCACAGATGTTCTTCAACTGTTTTTGTCTACACTCTTTCTCTTTTCCTCTACCATGCTGAAGGCTGA
AAGACAGGAAGATGGTGCCATCAGCAAATATTATTCTTAATTGAAAACTTGAAATGTGTATGTTTCTTACTAATT
TTTAAAAATGTATTCCTTGCCAGGCCTAGACAAGGATCGCTCACGCCTGTATATCCCAGCACTTCAGGTAGAGCT
GAGGTGGGCGGTATCGACCTGAGGTCAGGTAGCTTTGAGACCAGCCTGATGAAACNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNTAGGTTGTAGTGTAGCGGACCTCGCGCCACTGGCACTCCTAGCTCTGAGTGACTA
GAGTGAGAATCCATCTCAAAAAAACAAATAAACAAAATTGCTTGCTAAAGAAGTGGTCTCCTGAGGTCTTAAGAC
ATTCCTGACAGTGTCTTGAGTGGGTGGGAGAGAGGCTGCTGTCATTGCGCTGTGGAATTTCACAGATGAGAACCA
CGCCTAGCCAAAATCACTTTTCCTGTTTGCCTCAGTGACACAGCTGCAGGGACCCTCGTGGATGTTGTATTAAAT
AAATTTGACCTTTGCTCTTTGCAGATCTGTGAAATGTTGTCTTCTGAGGGGCCACATGCATCTATAGTGCTGAGG
ACTCCTTGGGCCTCTGAAGTCACAGAGAGAACCGAGCAGGTCTATGTTTTTGT

FIGURE 2117

LTLARDRTGASSQISYKVAFLLLWVSGAPLGRCAGRTWVLDEVTWWTDVIDVQHVCRDRGYGPYRAGMERRRNTY
GXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXLLAKEVVS

FIGURE 2118

CTCCGCCGTGCTAACTCCTCGCTAGCTCTCCCTCTCACACACGCTCACACCCGGCTCGAGATGGCGGCGGCGGCG
GCGGCGGCGGGGGGACTCGGACTCCTGGGACGCCGACGCTTTCTCCGTGGAAGACCCAGTGCGGAAGGTGGGGGGC
GGCGGCACTGCCGGCGGGGACCGCTGGGGAGGCGAGGACGAGGACGAGGACGTCAAGGATAACTGGGATGACGAT
GATGATGAAAAAAAAGAGGAAGCAGAAGTAAAACCAGAGGTAAAAATTTCAGAAAAGAAAAAAATAGCAGAGAAG
ATAAAAGAGAAAGAACGGCAACAGAAGAAAAGGCAAGAAGAAATTAAAAAGAGGTTAGAAGAACCCGAAGAACCT
AAAGTGCTAACACCAGAAGAACAATTAGCAGATAAACTGCGGCTAAAGAAATTACAGGAAGAGTCAGACCTCGAA
TTAGCAAAGGAAACTTTTGGTGTTAATAATGCAGTTTATGGAATAGATGCTATGAACCCATCTTCAAGAGATGAC
TTTACAGAGTTTGGAAAGTTACTAAAAGATAAAATTACACAATATGAAAAGTCACTATATTATGCCAGTTTTTTG
GAAGTCTTAGTTCGAGATGTGTGTATTTCATTGGAAATTGATGACTTGAAAAAAATTACCAATTCACTGACTGTG
CTTTGCAGTGAAAAACAGAAGCAAGAAAAGCAAAGCAAAGCCAAAAAGAAGAAGAAAGGTGTGGTTCCTGGAGGG
GGATTAAAAGCCACCATGAAAGATGATCTGGCAGATTATGGTGGTTATGATGGAGGATATGTACAAGACTATGAA
GACTTCATGTGACATTTTATCTTTTCTTGGTGTCATCTTTATGTTGCCCACAATCCCTTGAACATGTAGCACAAC
TTCCTTTCCTTTCAGTTCTGCCAAATGCTACAATCAGAAGTGCAGTATCTTTTGTGCTGGTTAAAATTGGGAACC
TAAGTTGCTACTAAATCATAGTTCAAAACCTAATAATGTTGTCGTTGTTGCTATCTGATTTCATAGCAGCAGTCA
CTAAATTGGAAACAAAAGGTTGCAACGTGACAAAAAAAATTGTGTAGTATTTACCAGCACCATTCAGTAATACAG
CCTTAACCATACCTCCTTGAACTACTTCATAACTTGTCAAGAAAAGCAGTTTGCAGCAAGGGCATGTGGTGTGCA
CCTAGTATTAAAATTGCTTTGTCTTAAAATTGAACATGAGGATATTAAAAATACATTGTGAAGAATACTGCTTAT
CTCAGAGTGAAGATACTGCGGCTGAAAAGCACTAGTTTGATATAAAATTAAAATGACCAAAACCCTCCAACTTTG
AAGCTAAAGAAGGTAAACCTTTCCATTATTGCATTACATGTTGTGGAATCTCTCGAGTGCAAAGACTGTCTAGTT
ATTTATCAGGCTATTTCTACTGATGAACTGCTTCAGGTGGGGGAGGGAAACTTATTTTTATTTGCCTGATTTAAG
TGTCTGAGAAACAAATCTTTGTTCTCTTAGGCTGCAATGGAACAACTTTACCAGGGTTTTGGCATTTCCTTTCCT
TTCCTTTATAAAACATGCTCAGCAAACTGCACCAGTTAACTACAGTTTGGTAAATTGTTATGTTAACAATTATGA
CATCTGCAATGTTTTATAAAGCAACTAATTTAATAAAATCACTGTTGTGAGGACTTAAATTTTGTGTTACCTCCC
AATATATACTTTTTGAGAGTATAGAACACAGCTCTTGGGAGTACAGTTCTCTACGTTCTCTACTAAATCTTAATA
AATGCTTGGACATAGTTACAGCTTTAAAACATGAGTGATTTGCCAGGTCCTTATGTTGTCACCATAGAGCAACAA
AGGTATAGGGCTGCCTTCCTCTTATTTATTTGGGGACATTATTTTGTTATTTAGATACCAAGGCCTAATTAATTA
AGTACCTATAAGAACTATTTATTTGGAGTAACTGAGCCTGTAACTCAGGTTTATGGCTGTTAAGTATAGATTGGG
GAATCTTTATTATGTCTTCTCCTAAGCAGTTTAACCAAATGTGTGGTTAGTGTTTTTTTATTCCCCTAAGACAGA
AAGAACAAAAAATGTTTTAAATTTCTCTTATATAGGAAATAATAGGAACGTCAAAGCTCTGTATACCTACTAAGT
GGAAAACAAGACCATCATCTAAGTGATTTGAGAAATTAACAAAAGTAGTGACTACACAGCAATAATTACAGTAAA
TTAAATAAAGATTCCTTTAAGGCAGACAAGGGCTAAGATTTCCTTAGCAGTAATAATGACATACACTGAATTGAA
AATCTATTTTATTACAGAAAGATCAGTTTCTAACAAATGAAAATGTATCACCTGTTCCTTAACTGTGTAAATAAT
AATTAAATTTCTTTGAAACTGGAAAAAAAAAAAAAAAAAAAA

FIGURE 2119

MAAAAAAAGDSDSWDADAFSVEDPVRKVGGGGTAGGDRWGGEDEDEDVKDNWDDDDDEKKEEAEVKPEVKISEKK
KIAEKIKEKERQQKKRQEEIKKRLEEPEEPKVLTPEEQLADKLRLKKLQEESDLELAKETFGVNNAVYGIDAMNP
SSRDDFTEFGKLLKDKITQYEKSLYYASFLEVLVRDVCISLEIDDLKKITNSLTVLCSEKQKQEKQSKAKKKKKG
VVPGGGLKATMKDDLADYGGYDGGYVQDYEDFM

FIGURE 2120

GGTTTCCGGAGCTGCGGCGGCGCAGACTGGGAGGGGGAGCCGGGGGTTCCGACGTCGCAGCCGAGGGAACAAGCC
CCAACCGGATCCTGGACAGGCACCCCGGCTTGGCGCTGTCTCTCCCCCTCGGCTCGGAGAGGCCCTTCGGCCTGA
GGGAGCCTCGCCGCCCGTCCCCGGCACACGCGCAGCCCCGGCCTCTCGGCCTCTGCCGGAGAAACAGGATGGCCC
AATGGAATCAGCTACAGCAGCTTGACACACGGTACCTGGAGCAGCTCCATCAGCTCTACAGTGACAGCTTCCCAA
TGGAGCTGCGGCAGTTTCTGGCCCCTTGGATTGAGAGTCAAGATTGGGCATATGCGGCCAGCAAAGAATCACATG
CCACTTTGGTGTTTCATAATCTCCTGGGAGAGATTGACCAGCAGTATAGCCGCTTCCTGCAAGAGTCGAATGTTC
TCTATCAGCACAATCTACGAAGAATCAAGCAGTTTCTTCAGAGCAGGTATCTTGAGAAGCCAATGGAGATTGCCC
GGATTGTGGCCCGGTGCCTGTGGGAAGAATCACGCCTTCTACAGACTGCAGCCACTGCGGCCCAGCAAGGGGGCC
AGGCCAACCACCCCACAGCAGCCGTGGTGACGGAGAAGCAGCAGATGCTGGAGCAGCACCTTCAGGATGTCCGGA
AGAGAGTGCAGGATCTAGAACAGAAAATGAAAGTGGTAGAGAATCTCCAGGATGACTTTGATTTCAACTATAAAA
CCCTCAAGAGTCAAGGAGACATGCAAGATCTGAATGGAAACAACCAGTCAGTGACCAGGCAGAAGATGCAGCAGC
TGGAACAGATGCTCACTGCGCTGGACCAGATGCGGAGAAGCATCGTGAGTGAGCTGGCGGGGCTTTTGTCAGCGA
TGGAGTACGTGCAGAAAACTCTCACGGACGAGGAGCTGGCTGACTGGAAGAGGCGGCAACAGATTGCCTGCATTG
GAGGCCCGCCCAACATCTGCCTAGATCGGCTAGAAAACTGGATAACGTCATTAGCAGAATCTCAACTTCAGACCC
GTCAACAAATTAAGAAACTGGAGGAGTTGCAGCAAAAAGTTTCCTACAAAGGGGACCCCATTGTACAGCACCGGC
CGATGCTGGAGGAGAGAATCGTGGAGCTGTTTAGAAACTTAATGAAAAGTGCCTTTGTGGTGGAGCGGCAGCCCT
GCATGCCCATGCATCCTGACCGGCCCCTCGTCATCAAGACCGGCGTCCAGTTCACTACTAAAGTCAGGTTGCTGG
TCAAATTCCCTGAGTTGAATTATCAGCTTAAAATTAAAGTGTGCATTGACAAAGACTCTGGGGACGTTGCAGCTC
TCAGAGGATCCCGGAAATTTAACATTCTGGGCACAAACACAAAAGTGATGAACATGGAAGAATCCAACAACGGCA
GCCTCTCTGCAGAATTCAAACACTTGACCCTGAGGGAGCAGAGATGTGGGAATGGGGGCCGAGCCAATTGTGATG
CTTCCCTGATTGTGACTGAGGAGCTGCACCTGATCACCTTTGAGACCGAGGTGTATCACCAAGGCCTCAAGATTG
ACCTAGAGACCCACTCCTTGCCAGTTGTGGTGATCTCCAACATCTGTCAGATGCCAAATGCCTGGGCGTCCATCC
TGTGGTACAACATGCTGACCAACAATCCCAAGAATGTAAACTTTTTTACCAAGCCCCCAATTGGAACCTGGGATC
AAGTGGCCGAGGTCCTGAGCTGGCAGTTCTCCTCCACCACCAAGCGAGGACTGAGCATCGAGCAGCTGACTACAC
TGGCAGAGAAACTCTTGGGACCTGGTGTGAATTATTCAGGGTGTCAGATCACATGGGCTAAATTTTGCAAAGAAA
ACATGGCTGGCAAGGGCTTCTCCTTCTGGGTCTGGCTGGACAATATCATTGACCTTGTGAAAAAGTACATCCTGG
CCCTTTGGAACGAAGGGTACATCATGGGCTTTATCAGTAAGGAGCGGGAGCGGGCCATCTTGAGCACTAAGCCTC
CAGGCACCTTCCTGCTAAGATTCAGTGAAAGCAGCAAAGAAGGAGGCGTCACTTTCACTTGGGTGGAGAAGGACA
TCAGCGGTAAGACCCAGATCCAGTCCGTGGAACCATACACAAAGCAGCAGCTGAACAACATGTCATTTGCTGAAA
TCATCATGGGCTATAAGATCATGGATGCTACCAATATCCTGGTGTCTCCACTGGTCTATCTCTATCCTGACATTC
CCAAGGAGGAGGCATTCGGAAAGTATTGTCGGCCAGAGAGCCAGGAGCATCCTGAAGCTGACCCAGGCGCTGCCC
CATACCTGAAGACCAAGTTTATCTGTGTGACACCAACGACCTGCAGCAATACCATTGACCTGCCGATGTCCCCCC
GCACTTTAGATTCATTGATGCAGTTTGGAAATAATGGTGAAGGTGCTGAACCCTCAGCAGGAGGGCAGTTTGAGT
CCCTCACCTTTGACATGGAGTTGACCTCGGAGTGCGCTACCTCCCCCATGTGAGGAGCTGAGAACGGAAGCTGCA
GAAAGATACGACTGAGGCGCCTACCTGCATTCTGCCACCCCTCACACAGCCAAACCCCAGATCATCTGAAACTAC
TAACTTTGTGGTTCCAGATTTTTTTTAATCTCCTACTTCTGCTATCTTTGAGCAATCTGGGCACTTTTAAAAATA
GAGAAATGAGTGAATGTGGGTGATCTGCTTTTATCTAAATGCAAATAAGGATGTGTTCTCTGAGACCCATGATCA
GGGGATGTGGCGGGGGGTGGCTAGAGGGAGAAAAAGGAAATGTCTTGTGTTGTTTTGTTCCCCTGCCCTCCTTTC
TCAGCAGCTTTTTGTTATTGTTGTTGTTCTTAGACAAGTGCCTCCTGGTGCCTGCGGCATCCTTCTGCCTGT
TTCTGTAAGCAAATGCCACAGGCCACCTATAGCTACATACTCCTGGCATTGCACTTTTTAACCTTGCTGACATCC
AAATAGAAGATAGGACTATCTAAGCCCTAGGTTTCTTTTTAAATTAAGAAATAATAACAATTAAAGGGCAAAAAA
CACTGTATCAGCATAGCCTTTCTGTATTTAAGAAACTTAAGCAGCCGGGCATGGTGGCTCACGCCTGTAATCCCA
GCACTTTGGGAGGCCGAGGCGGATCATAAGGTCAGGAGATCAAGACCATCCTGGCTAACACGGTGAAACCCCGTC
TCTACTAAAAGTACAAAAAATTAGCTGGGTGTGGTGGTGGGCGCCTGTAGTCCCAGCTACTCGGGAGGCTGAGGC
AGGAGAATCGCTTGAACCTGAGAGGCGGAGGTTGCAGTGAGCCAAAATTGCACCACTGCACACTGCACTCCATCC
TGGGCGACAGTCTGAGACTCTGTCTCAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2121

MAQWNQLQQLDTRYLEQLHQLYSDSFPMELRQFLAPWIESQDWAYAASKESHATLVFHNLLGEIDQQYSRFLQES
NVLYQHNLRRIKQFLQSRYLEKPMEIARIVARCLWEESRLLQTAATAAQQGGQANHPTAAVVTEKQQMLEQHLQD
VRKRVQDLEQKMKVVENLQDDFDFNYKTLKSQGDMQDLNGNNQSVTRQKMQQLEQMLTALDQMRRSIVSELAGLL
SAMEYVQKTLTDEELADWKRRQQIACIGGPPNICLDRLENWITSLAESQLQTRQQIKKLEELQQKVSYKGDPIVQ
HRPMLEERIVELFRNLMKSAFVVERQPCMPMHPDRPLVIKTGVQFTTKVRLLVKFPELNYQLKIKVCIDKDSGDV
AALRGSRKFNILGTNTKVMNMEESNNGSLSAEFKHLTLREQRCGNGGRANCDASLIVTEELHLITFETEVYHQGL
KIDLETHSLPVVVISNICQMPNAWASILWYNMLTNNPKNVNFFTKPPIGTWDQVAEVLSWQFSSTTKRGLSIEQL
TTLAEKLLGPGVNYSGCQITWAKFCKENMAGKGFSFWVWLDNIIDLVKKYILALWNEGYIMGFISKERERAILST
KPPGTFLLRFSESSKEGGVTFTWVEKDISGKTQIQSVEPYTKQQLNNMSFAEIIMGYKIMDATNILVSPLVYLYP
DIPKEEAFGKYCRPESQEHPEADPGSAAPYLKTKFICVTPTTCSNTIDLPMSPRTLDSLMQFGNNGEGAEPSAGG
QFESLTFDMELTSECATSPM

FIGURE 2122

CACTGCGAAGCCCAGCTGCGCGCGCCTTGGGATTGACTGTCCACGCTCGCCCGGCTCGTCCGACGCGCCCTCCGC
CAGCCGACAGACACAGCCGCACGCACTGCCGTGTTCTCCCTGCGGCTCGGACACATAGTATGACCATTAGGTGTT
TCGTCTCCCACCCATTTTCTATGGAAAACCAAGGGGATCGGGCCATGATAGCCACTGGCAGCTTTGAAGAACGGG
ACACCTTTAGAGAAGCTTGATCTTGGAGGCCTCACCGTGAGACCTTACAAAGCCGGATTCCGGCAGAGTTCCTCT
ATCTCGTCTTGTTGCTGATTAAAGGTGCCCCTGTCTCCAGTTTTTCTCCATCTCCTGGGACGTAGCAGGAAATCA
GCATCATGGTTGGGTTCAAGGCCACAGATGTGCCCCCTACTGCCACTGTGAAGTTTCTTGGGGCTGGCACAGCTG
CCTGCATCGCAGATCTCATCACCTTTCCTCTGGATACTGCTAAAGTCCGGTTACAGATCCAAGGAGAAAGTCAGG
GGCCAGTGCGCGCTACAGCCAGCGCCCAGTACCGCGGTGTGATGGGCACCATTCTGACCATGGTGCGTACTGAGG
GCCCCCGAAGCCTCTACAATGGGCTGGTTGCCGGCCTGCAGCGCCAAATGAGCTTTGCCTCTGTCCGCATCGGCC
TGTATGATTCTGTCAAACAGTTCTACACCAAGGGCTCTGAGCATGCCAGCATTGGGAGCCGCCTCCTAGCAGGCA
GCACCACAGGTGCCCTGGCTGTGGCTGTGGCCCAGCCCACGGATGTGGTAAAGGTCCGATTCCAAGCTCAGGCCC
GGGCTGGAGGTGGTCGGAGATACCAAAGCACCGTCAATGCCTACAAGACCATTGCCCGAGAGGAAGGGTTCCGGG
GCCTCTGGAAAGGGACCTCTCCCAATGTTGCTCGTAATGCCATTGTCAACTGTGCTGAGCTGGTGACCTATGACC
TCATCAAGGATGCCCTCCTGAAAGCCAACCTCATGACAGATGACCTCCCTTGCCACTTCACTTCTGCCTTTGGGG
CAGGCTTCTGCACCACTGTCATCGCCTCCCCTGTAGACGTGGTCAAGACGAGATACATGAACTCTGCCCTGGGCC
AGTACAGTAGCGCTGGCCACTGTGCCCTTACCATGCTCCAGAAGGAGGGGCCCCGAGCCTTCTACAAAGGGTTCA
TGCCCTCCTTTCTCCGCTTGGGTTCCTGGAACGTGGTGATGTTCGTCACCTATGAGCAGCTGAAACGAGCCCTCA
TGGCTGCCTGCACTTCCCGAGAGGCTCCCTTCTGAGCCTCTCCTGCTGCTGACCTGATCACCTCTGGCTTTGTCT
CTAGCCGGGCCATGCTTTCCTTTTCTTCCTTCTTTCTCTTCCCTCCTTCCCTTCTCTCCTTCCCTCTTTCCCCAC
CTCTTCCTTCCGCTCCTTTACCTACCACCTTCCCTCTTTCTACATTCTCATCTACTCATTGTCTCAGTGCTGGTG
GAGTTGACATTTGACAGTGTGGGAGGCCTCGTACCAGCCAGGATCCCAAGCGTCCCGTCCCTTGGAAAGTTCAGC
CAGAATCTTCGTCCTGCCCCCGACAGCCCAGCCTAGCCCACTTGTCATCCATAAAGCAAGCTCAACCTTGG

FIGURE 2123

MVGFKATDVPPTATVKFLGAGTAACIADLITFPLDTAKVRLQIQGESQGPVRATASAQYRGVMGTILTMVRTEGP
RSLYNGLVAGLQRQMSFASVRIGLYDSVKQFYTKGSEHASIGSRLLAGSTTGALAVAVAQPTDVVKVRFQAQARA
GGGRRYQSTVNAYKTIAREEGFRGLWKGTSPNVARNAIVNCAELVTYDLIKDALLKANLMTDDLPCHFTSAFGAG
FCTTVIASPVDVVKTRYMNSALGQYSSAGHCALTMLQKEGPRAFYKGFMPSFLRLGSWNVVMFVTYEQLKRALMA
ACTSREAPF

FIGURE 2124

CACTGCGAAGCCCAGCTGCGCGCGCCTTGGGATTGACTGTCCACGCTCGCCCGGCTCGTCCGACGCGCCCTCCGC
CAGCCGACAGACACAGCCGCACGCACTGCCGTGTTCTCCCTGCGGCTCGGACACATAGTATGACCATTAGGTGTT
TCGTCTCCCACCCATTTTCTATGGAAAACCAAGGGGATCGGGCCATGATAGCCACTGGCAGCTTTGAAGAACGGG
ACACCTTTAGAGAAGCTTGATCTTGGAGGCCTCACCGTGAGACCTTACAAAGCCGGATTCCGGCAGAGTTCCTCT
ATCTCGTCTTGTTGCTGATTAAAGGTGCCCCTGTCTCCAGTTTTTCTCCATCTCCTGGGACGTAGCAGGAAATCA
GCATC**ATG**GTTGGGTTCAAGGCCACAGATGTGCCCCCTACTGCCACTGTGAAGTTTCTTGGGGCTGGCACAGCTG
CCTGCATCGCAGATCTCATCACCTTTCCTCTGGATACTGCTAAAGTCCGGTTACAGATCCAAGGAGAAAGTCAGG
GGCCAGTGCGCGCTACAGCCAGCGCCCAGTACCGCGGTGTGATGGGCACCATTCTGACCATGGTGCGTACTGAGG
GCCCCCGAAGCCTCTACAATGGGCTGGTTGCCGGCCTGCAGCGCCAAATGAGCTTTGCCTCTGTCCGCATCGGCC
TGTATGATTCTGTCAAACAGTTCTACACCAAGGGCTCTGAGCATGCCAGCATTGGGAGCCGCCTCCTAGCAGGCA
GCACCACAGGTGCCCTGGCTGTGGCTGTGGCCCAGCCCACGGATGTGGTAAAGGTCCGATTCCAAGCTCAGGCCC
GGGCTGGAGGTGGTCGGAGATACCAAAGCACCGTCAATGCCTACAAGACCATTGCCCGAGAGGAAGGGTTCCGGG
GCCTCTGGAAAGGGACCTCTCCCAATGTTGCTCGTAATGCCATTGTCAACTGTGCTGAGCTGGTGACCTATGACC
TCATCAAGGATGCCCTCCTGAAAGCCAACCTCATGACAGATGACCTCCCTTGCCACTTCACTTCTGCCTTTGGGG
CAGGCTTCTGCACCACTGTCATCGCCTCCCCTGTAGACGTGGTCAAGACGAGATACATGAACTCTGCCCTGGGCC
AGTACAGTAGCGCTGGCCACTGTGCCCTTACCATGCTCCAGAAGGAGGGGCCCCGAGCCTTCTACAAAGGGTTCA
TGCCCTCCTTTCTCCGCTTGGGTTCCTGGAACGTGGTGATGTTCGTCACCTATGAGCAGCTGAAACGAGCCCTCA
TGGCTGCCTGCACTTCCCGAGAGGCTCCCTTC**TGA**GCCTCTCCTGCTGCTGACCTGATCACCTCTGGCTTTGTCT
CTAGCCGGGCCATGCTTTCCTTTTCTTCCTTCTTTCTCTTCCCTCCTTCCCTTCTCTCCTTCCCTCTTTCCCCAC
CTCTTCCTTCCGCTCCTTTACCTACCACCTTCCCTCTTTCTACATTCTCATCTACTCATTGTCTCAGTGCTGGTG
GAGTTGACATTTGACAGTGTGGGAGGCCTCGTACCAGCCAGGATCCCAAGCGTCCCGTCCCTTGGAAAGTTCAGC
CAGAATCTTCGTCCTGCCCCCGACAGCCCAGCCTAGCCCACTTGTCATCCATAAAGCAAGCTCAACCTTGG

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FIGURE 2125

MVGFKATDVPPTATVKFLGAGTAACIADLITFPLDTAKVRLQIQGESQGPVRATASAQYRGVMGTILTMVRTEGP
RSLYNGLVAGLQRQMSFASVRIGLYDSVKQFYTKGSEHASIGSRLLAGSTTGALAVAVAQPTDVVKVRFQAQARA
GGGRRYQSTVNAYKTIAREEGFRGLWKGTSPNVARNAIVNCAELVTYDLIKDALLKANLMTDDLPCHFTSAFGAG
FCTTVIASPVDVVKTRYMNSALGQYSSAGHCALTMLQKEGPRAFYKGFMPSFLRLGSWNVVMFVTYEQLKRALMA
ACTSREAPF

FIGURE 2126

GCGGGCGCATGCGCAAGGGGGCGCGCCGCCTCTGCCCCGCGGCGAGGGTGTCTATGGAGAGGCGGCGGCCGCGGC
TGCTGAGGCGGAGGCTGAGGCAGTGGCGATGGCGCCCTTTCCTGAAGAAGTGGACGTCTTCACCGCCCCACACTG
GCGGATGAAGCAGCTGGTGGGGCTCTACTGCGACAAGCTTTCTAAAACCAATTTTTCCAACAACAACGATTTCCG
TGCTCTTCTGCAGTCTTTGTATGCTACTTTCAAGGAGTTCAAAATGCATGAGCAGATTGAAAATGAATACATTAT
TGGTTTGCTTCAACAACGCAGCCAGACCATTTATAATGTACATTCTGACAATAAACTCTCCGAGATGCTTAGCCT
CTTTGAAAAGGGACTGAAGAATGTTAAGAATGAATATGAACAGTTAAATTATGCAAAACAACTGAAAGAGAGATT
GGAGGCTTTTACAAGAGATTTTCTTCCTCACATGAAAGAGGAAGAGGAGGTTTTTCAGCCCATGTTAATGGAATA
TTTTACCTATGAAGAGCTTAAGGATATTAAAAAGAAAGTGATTGCACAACACTGCTCTCAGAAGGATACTGCAGA
ACTCCTTAGAGGTCTTAGCCTATGGAATCATGCTGAAGAGCGACAGAAGTTTTTTAAATATTCCGTGGATGAAAA
GTCAGATAAAGAAGCAGAAGTGTCAGAACACTCCACAGGTATAACCCATCTTCCTCCTGAGGTAATGCTGTCAAT
TTTCAGCTATCTTAATCCTCAAGAGTTATGTCGATGCAGTCAAGTAAGCATGAAATGGTCTCAGCTGACAAAAAC
GGGATCGCTTTGGAAACATCTTTACCCTGTTCATTGGGCCAGAGGTGACTGGTATAGTGGTCCCGCAACTGAACT
TGATACTGAACCTGATGATGAATGGGTGAAAAATAGGAAAGATGAAAGTCGTGCTTTTCATGAGTGGGATGAAGA
TGCTGACATTGATGAATCTGAAGAGTCTGCGGAGGAATCAATTGCTATCAGCATTGCACAAATGGAAAAACGTTT
ACTCCATGGCTTAATTCATAACGTTCTACCATATGTTGGTACTTCTGTAAAAACCTTAGTATTAGCATACAGCTC
TGCAGTTTCCAGCAAAATGGTTAGGCAGATTTTAGAGCTTTGTCCTAACCTGGAGCATCTGGATCTTACCCAGAC
TGACATTTCAGATTCTGCATTTGACAGTTGGTCTTGGCTTGGTTGCTGCCAGAGTCTTCGGCATCTTGATCTGTC
TGGTTGTGAGAAAATCACAGATGTGGCCCTAGAGAAGATTTCCAGAGCTCTTGGAATTCTGACATCTCATCAAAG
TGGCTTTTTGAAAACATCTACAAGCAAAATTACTTCAACTGCGTGGAAAAATAAAGACATTACCATGCAGTCCAC
CAAGCAGTATGCCTGTTTGCACGATTTAACTAACAAGGGCATTGGAGAAGAAATAGATAATGAACACCCCTGGAC
TAAGCCTGTTTCTTCTGAGAATTTCACTTCTCCTTATGTGTGGATGTTAGATGCTGAAGATTTGGCTGATATTGA
AGATACTGTGGAATGGAGACATAGAAATGTTGAAAGTCTTTGTGTAATGGAAACAGCATCCAACTTTAGTTGTTC
CACCTCTGGTTGTTTTAGTAAGGACATTGTTGGACTAAGGACTAGTGTCTGTTGGCAGCAGCATTGTGCTTCTCC
AGCCTTTGCGTATTGTGGTCACTCATTTTGTTGTACAGGAACAGCTTTAAGAACTATGTCATCACTCCCAGAATC
TTCTGCAATGTGTAGAAAAGCAGCAAGGACTAGATTGCCTAGGGGAAAAGACTTAATTTACTTTGGGAGTGAAAA
ATCTGATCAAGAGACTGGACGTGTACTTCTGTTTCTCAGTTTATCTGGATGTTATCAGATCACAGACCATGGTCT
CAGGGTTTTGACTCTGGGAGGAGGGCTGCCTTATTTGGAGCACCTTAATCTCTCTGGTTGTCTTACTATAACTGG
TGCAGGCCTGCAGGATTTGGTTTCAGCATGTCCTTCTCTGAATGATGAATACTTTTACTACTGTGACAACATTAA
CGGTCCTCATGCTGATACCGCCAGTGGATGCCAGAATTTGCAGTGTGGTTTTCGAGCCTGCTGCCGCTCTGGCGA
ATGACCCTTGACTTCTGATCTTTGTCTACTTCATTTAGCTGAGCAGGCTTTCTTTCATGCACTTTACTCATAGCA
CATTTCTTGTGTTAACCATCCCTTTTTGAGCGTGACTTGTTTTGGCCCCATTTCTTACAACTTCAGAAATCTTAA
TTTACCAGTGAATTGTAATGTTGTTTCTCTTGCAAATTATACTTTTGGTTTAGAAAGGGATTAGGTCTTTTCAAA
AGGGTGAGAACAGTCTTACATTTTTCTTTTAAATGAAATGCTTTAAAGAATGTTGGTAATGCCATGTCATTTAAA
GTATTTCATAGATAATTTTGAGTTTTAAAGTCCATGGAGGTGATTGGTTCTCTTTACACATTAACACTGTACCAA
GCTTTGCAGATCTTTTCCGACACACATGTCTGAAGACTTATTTTCAAAGACAGCACATTTTTGGAAACTAATCTC
TTTTCCGTAATATTTCCTTTATTTCAATGATTCTCAGAAGGCCAATTCAAACAAACCCACATTTAAGGTTCTTTA
GGATTATAGAATAAATTGGCTTCTGAGTGTTAGCTCAGTGAGCTAGGAAAGCACCAATCGATATTTGTTTCCTTT
AGGGATACTTTGTTCTCACCACTGTCCCTATGTCATCAAATTTGGGAGAGATTTTTTAAAATACCACAATCATTT
GAAGAAATGTATAAATAAAATCTACTTTGAGGACTTTACCAAGTAATACTGTTGTGTTGTGATTTTTATTATAAA
TCTCAATCCAGGTTTACTTTAGTATAGAATAGGACTACATACTTTGTCTTTGGACCTCCCATGAACTTATTACCC
TGACAAATAGTTTTAGACAGATACTGAATTTTATTGAGCTGAATTTTCTTTTTGAAATGAGTTATTCAGTAGTCA
AAATTTGAATCCGTAAGTATATCTACTTTGCTTTGTTAAAACATCATGAGAGTGGAGGCCTGCCACCCAGAAAGG
CACATACTAGTGCCTTTTAGTACAATTTTATGTCATGTAGAAGAAAATGGCAATGTTCCTCCTATTGATACAGAT
ACAGGCATATGTCATCTTATTGCGTTTTGCTTTATTGCACTTTGCAAATAATGCATTTTTTACAAATGGAAGGTT
TATGGCAACTCTGCGTTGAGCCAGTCTATTGGTGCCATGTTTCCAATAAAACTTCTCCTTTCATGTCTCGT

FIGURE 2127

MAPFPEEVDVFTAPHWRMKQLVGLYCDKLSKTNFSNNNDFRALLQSLYATFKEFKMHEQIENEYIIGLLQQRSQT
IYNVHSDNKLSEMLSLFEKGLKNVKNEYEQLNYAKQLKERLEAFTRDFLPHMKEEEEVFQPMLMEYFTYEELKDI
KKKVIAQHCSQKDTAELLRGLSLWNHAEERQKFFKYSVDEKSDKEAEVSEHSTGITHLPPEVMLSIFSYLNPQEL
CRCSQVSMKWSQLTKTGSLWKHLYPVHWARGDWYSGPATELDTEPDDEWVKNRKDESRAFHEWDEDADIDESEES
AEESIAISIAQMEKRLLHGLIHNVLPYVGTSVKTLVLAYSSAVSSKMVRQILELCPNLEHLDLTQTDISDSAFDS
WSWLGCCQSLRHLDLSGCEKITDVALEKISRALGILTSHQSGFLKTSTSKITSTAWKNKDITMQSTKQYACLHDL
TNKGIGEEIDNEHPWTKPVSSENFTSPYVWMLDAEDLADIEDTVEWRHRNVESLCVMETASNFSCSTSGCFSKDI
VGLRTSVCWQQHCASPAFAYCGHSFCCTGTALRTMSSLPESSAMCRKAARTRLPRGKDLIYFGSEKSDQETGRVL
LFLSLSGCYQITDHGLRVLTLGGGLPYLEHLNLSGCLTITGAGLQDLVSACPSLNDEYFYYCDNINGPHADTASG
CQNLQCGFRACCRSGE

FIGURE 2128

GCGGGCGCATGCGCAAGGGGGCGCGCCGCCTCTGCCCCGCGGCGAGGGTGTCTATGGAGAGGCGGCGGCCGCGGC
TGCTGAGGCGGAGGCTGAGGCAGTGGCGATGGCGCCCTTTCCTGAAGAAGTGGACGTCTTCACCGCCCCACACTG
GCGGATGAAGCAGCTGGTGGGGCTCTACTGCGACAAGCTTTCTAAAACCAATTTTTCCAACAACAACGATTTCCG
TGCTCTTCTGCAGTCTTTGTATGCTACTTTCAAGGAGTTCAAAATGCATGAGCAGATTGAAAATGAATACATTAT
TGGTTTGCTTCAACAACGCAGCCAGACCATTTATAATGTACATTCTGACAATAAACTCTCCGAGATGCTTAGCCT
CTTTGAAAAGGGACTGAAGAATGTTAAGCCTACTACTGTTGACTGGAAGCCTTACCAATAACATAAAACAATCGA
ATAACAATTATTTCATGTATTATATGTAAAATATATATACTGGATTCTTACAGTAAGAATGAATATGAACAGTTA
AATTATGCAAAACAACTGAAAGAGAGATTGGAGGCTTTTACAAGAGATTTTCTTCCTCACATGAAAGAGGAAGAG
GAGGTTTTTCAGCCCATGTTAATGGAATATTTTACCTATGAAGAGCTTAAGGATATTAAAAAGAAAGTGATTGCA
CAACACTGCTCTCAGAAGGATACTGCAGAACTCCTTAGAGGTCTTAGCCTATGGAATCATGCTGAAGAGCGACAG
AAGTTTTTTAAATATTCCGTGGATGAAAAGTCAGATAAAGAAGCAGAAGTGTCAGAACACTCCACAGGTATAACC
CATCTTCCTCCTGAGGTAATGCTGTCAATTTTCAGCTATCTTAATCCTCAAGAGTTATGTCGATGCAGTCAAGTA
AGCATGAAATGGTCTCAGCTGACAAAAACGGGATCGCTTTGGAAACATCTTTACCCTGTTCATTGGGCCAGAGGT
GACTGGTATAGTGGTCCCGCAACTGAACTTGATACTGAACCTGATGATGAATGGGTGAAAAATAGGAAAGATGAA
AGTCGTGCTTTTCATGAGTGGGATGAAGATGCTGACATTGATGAATCTGAAGAGTCTGCGGAGGAATCAATTGCT
ATCAGCATTGCACAAATGGAAAAACGTTTACTCCATGGCTTAATTCATAACGTTCTACCATATGTTGGTACTTCT
GTAAAAACCTTAGTATTAGCATACAGCTCTGCAGTTTCCAGCAAAATGGTTAGGCAGATTTTAGAGCTTTGTCCT
AACCTGGAGCATCTGGATCTTACCCAGACTGACATTTCAGATTCTGCATTTGACAGTTGGTCTTGGCTTGGTTGC
TGCCAGAGTCTTCGGCATCTTGATCTGTCTGGTTGTGAGAAAATCACAGATGTGGCCCTAGAGAAGATTTCCAGA
GCTCTTGGAATTCTGACATCTCATCAAAGTGGCTTTTTGAAAACATCTACAAGCAAAATTACTTCAACTGCGTGG
AAAAATAAAGACATTACCATGCAGTCCACCAAGCAGTATGCCTGTTTGCACGATTTAACTAACAAGGGCATTGGA
GAAGAAATAGATAATGAACACCCCTGGACTAAGCCTGTTTCTTCTGAGAATTTCACTTCTCCTTATGTGTGGATG
TTAGATGCTGAAGATTTGGCTGATATTGAAGATACTGTGGAATGGAGACATAGAAATGTTGAAAGTCTTTGTGTA
ATGGAAACAGCATCCAACTTTAGTTGTTCCACCTCTGGTTGTTTTAGTAAGGACATTGTTGGACTAAGGACTAGT
GTCTGTTGGCAGCAGCATTGTGCTTCTCCAGCCTTTGCGTATTGTGGTCACTCATTTTGTTGTACAGGAACAGCT
TTAAGAACTATGTCATCACTCCCAGAATCTTCTGCAATGTGTAGAAAAGCAGCAAGGACTAGATTGCCTAGGGGA
AAAGACTTAATTTACTTTGGGAGTGAAAAATCTGATCAAGAGACTGGACGTGTACTTCTGTTTCTCAGTTTATCT
GGATGTTATCAGATCACAGACCATGGTCTCAGGGTTTTGACTCTGGGAGGAGGGCTGCCTTATTTGGAGCACCTT
AATCTCTCTGGTTGTCTTACTATAACTGGTGCAGGCCTGCAGGATTTGGTTTCAGCATGTCCTTCTCTGAATGAT
GAATACTTTTACTACTGTGACAACATTAACGGTCCTCATGCTGATACCGCCAGTGGATGCCAGAATTTGCAGTGT
GGTTTTCGAGCCTGCTGCCGCTCTGGCGAATGACCCTTGACTTCTGATCTTTGTCTACTTCATTTAGCTGAGCAG
GCTTTCTTTCATGCACTTTACTCATAGCACATTTCTTGTGTTAACCATCCCTTTTTGAGCGTGACTTGTTTTGGC
CCCATTTCTTACAACTTCAGAAATCTTAATTTACCAGTGAATTGTAATGTTGTTTCTCTTGCAAATTATACTTTT
GGTTTAGAAAGGGATTAGGTCTTTTCAAAAGGGTGAGAACAGTCTTACATTTTTCTTTTAAATGAAATGCTTTAA
AGAATGTTGGTAATGCCATGTCATTTAAAGTATTTCATAGATAATTTTGAGTTTTAAAGTCCATGGAGGTGATTG
GTTCTCTTTACACATTAACACTGTACCAAGCTTTGCAGATCTTTTCCGACACACATGTCTGAAGACTTATTTTCA
AAGACAGCACATTTTTGGAAACTAATCTCTTTTCCGTAATATTTCCTTTATTTCAATGATTCTCAGAAGGCCAAT
TCAAACAAACCCACATTTAAGGTTCTTTAGGATTATAGAATAAATTGGCTTCTGAGTGTTAGCTCAGTGAGCTAG
GAAAGCACCAATCGATATTTGTTTCCTTTAGGGATACTTTGTTCTCACCACTGTCCCTATGTCATCAAATTTGGG
AGAGATTTTTTAAAATACCACAATCATTTGAAGAAATGTATAAATAAAATCTACTTTGAGGACTTTACCAAGTAA
TACTGTTGTGTTGTGATTTTTATTATAAATCTCAATCCAGGTTTACTTTAGTATAGAATAGGACTACATACTTTG
TCTTTGGACCTCCCATGAACTTATTACCCTGACAAATAGTTTTAGACAGATACTGAATTTTATTGAGCTGAATTT
TCTTTTTGAAATGAGTTATTCAGTAGTCAAAATTTGAATCCGTAAGTATATCTACTTTGCTTTGTTAAAACATCA
TGAGAGTGGAGGCCTGCCACCCAGAAAGGCACATACTAGTGCCTTTTAGTACAATTTTATGTCATGTAGAAGAAA
ATGGCAATGTTCCTCCTATTGATACAGATACAGGCATATGTCATCTTATTGCGTTTTGCTTTATTGCACTTTGCA
AATAATGCATTTTTTACAAATGGAAGGTTTATGGCAACTCTGCGTTGAGCCAGTCTATTGGTGCCATGTTTCCAA
TAAAACTTCTCCTTTCATGTCTCGT

FIGURE 2129

MKEEEEVFQPMLMEYFTYEELKDIKKKVIAQHCSQKDTAELLRGLSLWNHAEERQKFFKYSVDEKSDKEAEVSEH
STGITHLPPEVMLSIFSYLNPQELCRCSQVSMKWSQLTKTGSLWKHLYPVHWARGDWYSGPATELDTEPDDEWVK
NRKDESRAFHEWDEDADIDESEESAEESIAISIAQMEKRLLHGLIHNVLPYVGTSVKTLVLAYSSAVSSKMVRQI
LELCPNLEHLDLTQTDISDSAFDSWSWLGCCQSLRHLDLSGCEKITDVALEKISRALGILTSHQSGFLKTSTSKI
TSTAWKNKDITMQSTKQYACLHDLTNKGIGEEIDNEHPWTKPVSSENFTSPYVWMLDAEDLADIEDTVEWRHRNV
ESLCVMETASNFSCSTSGCFSKDIVGLRTSVCWQQHCASPAFAYCGHSFCCTGTALRTMSSLPESSAMCRKAART
RLPRGKDLIYFGSEKSDQETGRVLLFLSLSGCYQITDHGLRVLTLGGGLPYLEHLNLSGCLTITGAGLQDLVSAC
PSLNDEYFYYCDNINGPHADTASGCQNLQCGFRACCRSGE

FIGURE 2130

AGTGCGCATCCGGACGTAGGAGGTGGAGGTTGTGGAATTCGCCGTTCGAAAGCAGGGACTAAAAGCCCCACTTCG
TCTTACGTTCCGAAAGGAAGGCGTCTGTTGAGCCTTTCTCTCAGTCGTGAGGGAGGCGTCGACGGCGTGCGGAAG
TCCTGAGTTGAGGCTTGCGGGATCCTTTCCGGAGAAAGCGCAGGCTAAAGCCGCAGGTGAAGATGTCCAACTACG
TGAACGACATGTGGCCGGGCTCGCCGCAGGAGAAGGATTCGCCCTCGACCTCGCGGTCGGGCGGGTCCAGCCGGC
TGTCGTCGCGGTCTAGGAGCCGCTCTTTTTCCAGAAGCTCTCGGTCCCATTCCCGCGTCTCGAGCCGGTTTTCGT
CCAGGAGTCGGAGGAGCAAGTCCAGGTCCCGTTCCCGAAGGCGCCACCAGCGGAAGTACAGGCGCTACTCGCGGT
CATACTCGCGGAGCCGGTCGCGATCCCGCAGCCGCCGTTACCGAGAGAGGCGCTACGGGTTCACCAGGAGATACT
ACCGGTCTCCTTCGCGGTACCGGTCCCGGTCCCGTAGCAGGTCGCGCTCTCGGGGAAGGTCGTACTGCGGAAGGG
CGTACGCGATCGCGCGGGGACAGCGCTACTACGGCTTTGGTCGCACAGTGTACCCGGAGGAGCACAGCAGATGGA
GGGACAGATCCAGGACGAGGTCGCGGAGCAGAACCCCCTTTCGCTTAAGTGAAAAAGATCGAATGGAGCTGTTAG
AAATAGCAAAAACCAATGCAGCGAAAGCTCTAGGAACAACCAACATTGACTTGCCAGCTAGTCTCAGAACTGTTC
CTTCAGCCAAAGAAACAAGCCGTGGAATAGGTGTATCAAGTAATGGTGCAAAGCCTGAAGTAAGTATTCTAGGTT
TGTCGGAACAAAACTTTCAGAAAGCCAACTGTCAAATCTGATTAGCCACTTATATCTTAGACTATACTTTTTGGG
AAGTCTAGAGATGTATATAATGTGCTAAATTCAAAGTAGCAAATCTGAAGATAGGCAATGTCAAACCCATGAAAA
TGGGAGATTAATGAGCTTTATTTGGCCGTGCATGGTGCCTCATGCCTGTAATGAGGCAGATGGCTTGAGTCCAGG
AGTTCAAGACTAGCCTGGGCAATGTGGCAAAACCGCGTGTTTACAAAAAATACAAAAATTAGCCAGGCATGGTGG
TGCATGCCTGTAGTCCCAGCTGTTTGGGAGGCTGAGGCAGGAGGATCTTTGAGCCTAGGATGCTAAGGTTGCAGT
GAGCCAAGATGGCACCATTGCACTCTAGCCTGGGCAGCAGAGCGAGACCCTGTCTCAAAAAATACATTTATTTTT
TTCATTTTCAGTTAACAGTGTACTCTTATAACACCGTTATTAGCTGGTACTTTGGTGATTTCTATTACTAGTTTT
TCTAAGCTATTTACAGAGTGTTTGTAGCTTTCATTTGCAGCATTATGTTCCCACAAATTCTGTACTCAGCATATA
CAGTATAGTTTATCTGCTCTATTTCTGTCTTATAGAAATCATGAATGTGGTCTGCAGACATTGATGAAGAAAATC
TGTTGGTAATTGATACATGGGCTAAAGCATCAGAGGTTTAATTTGAAGTTTATGTTCACACACTGAAAACTTAGT
TTTTTTGTTGGTAGATCCATGTGCATGCTAGAATTTGGGACAGGCACTATTTGCATAAAGTATTAAAGTCAATTT
TTAAACTAAGCAAAGGTACACGTTGTAACGGTGGGGCATCTGTGAAAAAGATGTCCCTTTCATAATATATGCAAT
ATATTCCAGATGTTTTGAGAGATTACAGAAGAGGAGGCCTGCTTCACTTGCAGATAAGTTTATTATAATTCTCCA
GAAATGTGCAGGATGTGCATTAGCAAATTGCACTGTACTTTTCACTCCAGCCTGGGTGACAGAGCAAGACTCCCG
TCTCGGGGGCTT

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FIGURE 2131

MSNYVNDMWPGSPQEKDSPSTSRSGGSSRLSSRSRSRSFSRSSRSHSRVSSRFSSRSRRSKSRSRSRRRHQRKYR
RYSRSYSRSRSRSRSRRYRERRYGFTRRYYRSPSRYRSRSRSRSRSRGRSYCGRAYAIARGQRYYGFGRTVYPEE
HSRWRDRSRTRSRSRTPFRLSEKDRMELLEIAKTNAAKALGTTNIDLPASLRTVPSAKETSRGIGVSSNGAKPEV
SILGLSEQNFQKANCQI

FIGURE 2132

GGCACGAGGGAGAAAGGAGAGAAAGGAAAGCGCGAGGAGCCGCCGCCACCACCAGCGCAGCAGTCCTGGAGCTGT
GAGGAGATTCGGGCCGTCACCCTGCCTCCCCTGCGTCCCGCCACCGGCCGCTTCTGTCCTCGGACCCATTCCAAC
AATCTCGTAAAACATGGTGGATTACTATGAAGTTCTAGGCGTGCAGAGACATGCCTCACCCGAGGATATTAAAAA
GGCATATCGGAAACTGGCACTGAAGTGGCATCCAGATAAAAATCCTGAGAATAAAGAAGAAGCAGAGAGAAAATT
CAAGCAAGTAGCGGAGGCATATGAAGTGCTGTCGGATGCTAAGAAACGGGACATCTATGACAAATATGGCAAAGA
AGGATTAAATGGTGGAGGAGGAGGTGGAAGTCATTTTGACAGTCCATTTGAATTTGGCTTCACATTCCGTAACCC
AGATGATGTCTTCAGGGAATTTTTTGGTGGAAGGGACCCATTTTCATTTGACTTCTTTGAAGACCCTTTTGAGGA
CTTCTTTGGGAATCGAAGGGGTCCCCGAGGAAGCAGAAGCCGAGGGACGGGGTCGTTTTTCTCTGCGTTCAGTGG
ATTTCCGTCTTTTGGAAGTGGATTTTCTTCTTTTGATACAGGATTTACTTCATTTGGGTCACTAGGTCACGGGGG
CCTCACTTCATTCTCTTCCACGTCATTTGGTGGTAGTGGCATGGGCAACTTCAAATCGATATCAACTTCAACTAA
AATGGTTAATGGCAGAAAAATCACTACAAAGAGAATTGTCGAGAACGGTCAAGAAAGAGTAGAAGTTGAAGAAGA
TGGCCAGTTAAAGTCCTTAACAATAAATGGTGTGGCCGACGACGATGCCCTCGCTGAGGAGCGCATGCGGAGAGG
CCAGAACGCCCTGCCAGCCCAGCCTGCCGGCCTCCGCCCGCCGAAGCCGCCCCGGCCTGCCTCGCTGCTGAGACA
CGCGCCTCACTGTCTCTCTGAGGAGGAGGGCGAGCAGGACCGACCTCGGGCACCCGGGCCCTGGGACCCCCTCGC
GTCCGCAGCAGGATTGAAAGAAGGTGGCAAGAGGAAGAAGCAGAAGCAGAGAGAGGAGTCGAAGAAGAAGAAGTC
GACCAAAGGCAATCACTAGACCGGACTTGAGGCACGCGGTGCACCCCCAGACGCTGGCGCTCCACCGTGCTCGGC
ATGCGGTCGTGCACACGCGCTAGGTAGCAGCGTCGGTCAGGACTGTCTCGAGGCCACACTCGCTCGGCAGGATTA
TGCGATCACGGATCAGTCAGAGCAGGGTCAGGAGACGGGGCTGACGGCACGGGTGGCGGGGACAGACGTTTGGGA
CTTGGCCGCGACTCTCTGCTTCTCTCCAGCTCTCAATCTGCTGCATTTTCCTCTAGTGCTTCCGGATCCTCTTCA
TTCTTTTCGGCTACTCAACCACTCCGCATGCTGCTGGAATATTTCTGGCTTTAGAAGTACAGGAGGGCGCAGATG
GCTAACTGAGTAACATTCATGAAATGAGGCTTTCTGTGGCGGCGTAGTGTTTGGAATTAGAAGGTAATTCAGTAG
AGTGTAACTTAGAGAATATTGCAAGTGACACATTGAATCCTGCCCGTCAGGGCACCTTTTCCTCAGAGCAATCCG
GCCACACGAATAGAAGGCTGTCGTGAATCACATCAGATGTAAAATCATTCCTTCTGTTTACTCTTTTAATTTTCA
TCCTTTGCAGGTAGTGCAAATTCAACTTCAAATATGGTGTAGGTTTTGCTAGATTCCATATTTTTTTCTTGGATT
TTTGCTAATTATTTTTAGCAAAAAATTTTTGCTCAGTGGCACCCTCCCTAGTGTCCATGGGTTAGGGCCATGCTG
GGGAAAACGGGCCGGTATTTACACACGCGCAAAACACCCAGAGACGGCACAAGGAGGTTGAACTCATGTTTCAGT
TCGCGAACATTGACTCCTTACGAAAGTCACTTCATTCTAACTAGATGCGCCCACTTCCGGTCATTATTTCGTTTG
CATGATGTATTGCTTCTTCACGTTTTGTTTTTATTGAGCACGGAGTAGAATTCCAGGGCTGCCTTGACTTCTTCC
CTGCATGCTCCCTCCCAGTGACTTTCCTTCCCTTTCACATGAGGATCTGCCGTTCATGTTGCTTTCTCCTTTGTC
CTCTTGGACTTGAGGGCATTGTGAAAAGCTTTGCTGTGATTTAAAAATGCCAGCAATTTTAATCTAGCAGTGTTG
AAGCTGGGAATTTTTTGGCGCAATCCATGTAGCAGTGACCCAGGCTTGGGAGCCAGAAACAAGTGTGACCTGGGA
TTTTATTTAACACAACTGTTGCCAAAGAGTTGGCTTTGTTTATTTGGTTTTGGCGGGGAGAGGAGTGGTATTTGA
TGCTTTCTGTGGACAATGTAACCCTAAACACATCATGTATTTTAAATGCCACCTACATAAATAAAACATAAGCAT
ATTGAATACAAAAAAAAAAAAAAAAAA

FIGURE 2133

MVDYYEVLGVQRHASPEDIKKAYRKLALKWHPDKNPENKEEAERKFKQVAEAYEVLSDAKKRDIYDKYGKEGLNG
GGGGGSHFDSPFEFGFTFRNPDDVFREFFGGRDPFSFDFFEDPFEDFFGNRRGPRGSRSRGTGSFFSAFSGFPSF
GSGFSSFDTGFTSFGSLGHGGLTSFSSTSFGGSGMGNFKSISTSTKMVNGRKITTKRIVENGQERVEVEEDGQLK
SLTINGKEQLLRLDNK

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FIGURE 2134

GCGAGTTGTGTGAGCCGCCAGTATGGCCGGGCTATGGCGGCGAGCACTGGCTACGTGCGACTGTGGGGAGCGGCG
CGGTGCTGGGTGCTGCGGCGGCCGATGCTGGCCGCCGCCGGGGGGCGGGTTCCCACTGCAGCAGGAGCGTGGTTG
CTCCGAGGCCAGCGGACCTGCGACGCCTCTCCTCCTTGGGCACTGTGGGGCCGAGGCCCGGCAATTGGGGGCCAA
TGGCGGGGGTTTTGGGAAGCGAGCAGCCGCGGCGGAGGCGCATTCTCGGGGGGCGAGGACGCCTCCGAGGGCGGC
GCGGAGGAAGGAGCCGGCGGCGCGGGGGGCAGCGCGGGCGCCGGGGAAGGCCCGGTCATAACGGCGCTCACGCCC
ATGACGATCCCCGATGTGTTTCCGCACCTGCCGCTCATCGCCATCACCCGCAACCCGGTGTTCCCGCGCTTTATC
AAGATTATCGAGGTTAAAAATAAGAAGTTGGTTGAGCTGCTGAGAAGGAAAGTTCGTCTCGCCCAGCCTTATGTC
GGCGTCTTTCTAAAGAGAGATGACAGCAATGAGTCGGATGTGGTCGAGAGCCTGGATGAAATCTACCACACGGGG
ACGTTTGCCCAGATCCATGAGATGCAGGACCTTGGGGACAAGCTGCGCATGATCGTCATGGGACACAGAAGAGTC
CATATCAGCAGACAGCTGGAGGTGGAGCCCGAGGAGCCGGAGGCGGAGAACAAGCACAAGCCCCGCAGGAAGTCA
AAGCGGGGCAAGAAGGAGGCGGAGGACGAGCTGAGCGCCAGGCACCCGGCGGAGCTGGCGATGGAGCCCACCCCT
GAGCTCCCGGCTGAGGTGCTCATGGTGGAGGTAGAGAACGTTGTCCACGAGGACTTCCAGGTCACGGAGGAGGTG
AAAGCCCTGACTGCAGAGATCGTGAAGACCATCCGGGACATCATTGCCTTGAACCCTCTCTACAGGGAGTCAGTG
CTGCAGATGATGCAGGCTGGCCAGCGGGTGGTGGACAACCCCATCTACCTGAGCGACATGGGCGCCGCGCTCACC
GGGGCCGAGTCCCATGAGCTGCAGGACGTCCTGGAAGAGACCAATATTCCTAAGCGGCTGTACAAGGCCCTCTCC
CTGCTGAAGAAGGAATTTGAACTGAGCAAGCTGCAGCAGCGCCTGGGGCGGGAGGTGGAGGAGAAGATCAAGCAG
ACCCACCGTAAGTACCTGCTGCAGGAGCAGCTAAAGATCATCAAGAAGGAGCTGGGCCTGGAGAAGGACGACAAG
GATGCCATCGAGGAGAAGTTCCGGGAGCGCCTGAAGGAGCTCGTGGTCCCCAAGCACGTCATGGATGTTGTGGAC
GAGGAGCTGAGCAAGCTGGGCCTGCTGGACAACCACTCCTCGGAGTTCAATGTCACCCGCAACTACCTAGACTGG
CTCACGTCCATCCCTTGGGGCAAGTACAGCAACGAGAACCTGGACCTGGCGCGGGCACAGGCAGTGCTGGAGGAA
GACCACTACGGCATGGAGGACGTCAAGAAACGCATCCTGGAGTTCATTGCCGTTAGCCAGCTCCGCGGCTCCACC
CAGGGCAAGATCCTCTGCTTCTATGGCCCCCCTGGCGTGGGTAAGACCAGCATTGCTCGCTCCATCGCCCGCGCC
CTGAACCGAGAGTACTTCCGCTTCAGCGTCGGGGGCATGACTGACGTGGCTGAGATCAAGGGCCACAGGCGGACC
TACGTGGGCGCCATGCCCGGGAAGATCATCCAGTGTTTGAAGAAGACCAAGACGGAGAACCCCCTGATCCTCATC
GACGAGGTGGACAAGATCGGCCGAGGCTACCAGGGGGACCCGTCGTCGGCACTGCTGGAGCTGCTGGACCCAGAG
CAGAATGCCAACTTCCTGGACCACTACCTGGACGTGCCCGTGGACTTGTCCAAGGTGCTGTTCATCTGCACGGCC
AACGTCACGGACACCATCCCCGAGCCGCTGCGAGACCGTATGGAGATGATCAACGTGTCGGGCTACGTGGCCCAG
GAGAAGCTGGCCATTGCGGAGCGCTACCTGGTGCCCCAGGCTCGCGCCCTGTGTGGCTTGGATGAGAGCAAGGCC
AAGCTGTCATCGGACGTGCTGACGCTGCTCATCAAGCAGTACTGCCGCGAGAGCGGTGTCCGCAACCTGCAGAAG
CAAGTGGAGAAGGTGTTACGGAAATCGGCCTACAAGATTGTCAGCGGCGAGGCCGAGTCCGTGGAGGTGACGCCC
GAGAACCTGCAGGACTTCGTGGGGAAGCCCGTGTTCACCGTGGAGCGCATGTATGACGTGACACCGCCCGGCGTG
GTCATGGGGCTGGCCTGGACCGCAATGGGAGGCTCCACGCTGTTTGTGGAGACATCCCTGAGACGGCCACAGGAC
AAGGATGCCAAGGGTGACAAGGATGGCAGCCTGGAGGTGACAGGCCAGCTGGGGGAGGTGATGAAGGAGAGCGCC
CGCATAGCCTACACCTTCGCCAGAGCCTTCCTCATGCAGCACGCCCCCGCCAATGACTACCTGGTGACCTCACAC
ATCCACCTGCATGTGCCCGAGGGCGCCACCCCCAAGGACGGCCCAAGCGCAGGCTGCACCATCGTCACGGCCCTG
CTGTCCCTGGCCATGGGCAGGCCTGTCCGGCAGAATCTGGCCATGACTGGCGAAGTCTCCCTCACGGGCAAGATC
CTGCCTGTTGGTGGCATCAAGGAGAAGACCATTGCGGCCAAGCGCGCAGGGGTGACGTGCATCGTCCTGCCAGCC
GAGAACAAGAAGGACTTCTACGACCTGGCAGCCTTCATCACCGAGGGCCTGGAGGTGCACTTCGTGGAACACTAC
CGGGAGATCTTCGACATCGCCTTCCCGGACGAGCAGGCAGAGGCGCTGGCCGTGGAACGGTGACGGCCACCCCGG
GACTGCAGGCGGCGGATGTCAGGCCCTGTCTGGGCCAGAACTGAGCGCTGTGGGGAGCGCGCCCGGACCTGGCAG
TGGAGCCACCGAGCGAGCAGCTCGGTCCAGTGACCCAGATCCCAGGGACCTCAGTCGGCTTAATCAGAGTGTGGC
ATAGAAGCTATTTAATGATTAAAGTCATTTGCAGTA

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FIGURE 2135

MAASTGYVRLWGAARCWVLRRPMLAAAGGRVPTAAGAWLLRGQRTCDASPPWALWGRGPAIGGQWRGFWEASSRG
GGAFSGGEDASEGGAEEGAGGAGGSAGAGEGPVITALTPMTIPDVFPHLPLIAITRNPVFPRFIKIIEVKNKKLV
ELLRRKVRLAQPYVGVFLKRDDSNESDVVESLDEIYHTGTFAQIHEMQDLGDKLRMIVMGHRRVHISRQLEVEPE
EPEAENKHKPRRKSKRGKKEAEDELSARHPAELAMEPTPELPAEVLMVEVENVVHEDFQVTEEVKALTAEIVKTI
RDIIALNPLYRESVLQMMQAGQRVVDNPIYLSDMGAALTGAESHELQDVLEETNIPKRLYKALSLLKKEFELSKL
QQRLGREVEEKIKQTHRKYLLQEQLKIIKKELGLEKDDKDAIEEKFRERLKELVVPKHVMDVVDEELSKLGLLDN
HSSEFNVTRNYLDWLTSIPWGKYSNENLDLARAQAVLEEDHYGMEDVKKRILEFIAVSQLRGSTQGKILCFYGPP
GVGKTSIARSIARALNREYFRFSVGGMTDVAEIKGHRRTYVGAMPGKIIQCLKKTKTENPLILIDEVDKIGRGYQ
GDPSSALLELLDPEQNANFLDHYLDVPVDLSKVLFICTANVTDTIPEPLRDRMEMINVSGYVAQEKLAIAERYLV
PQARALCGLDESKAKLSSDVLTLLIKQYCRESGVRNLQKQVEKVLRKSAYKIVSGEAESVEVTPENLQDFVGKPV
FTVERMYDVTPPGVVMGLAWTAMGGSTLFVETSLRRPQDKDAKGDKDGSLEVTGQLGEVMKESARIAYTFARAFL
MQHAPANDYLVTSHIHLHVPEGATPKDGPSAGCTIVTALLSLAMGRPVRQNLAMTGEVSLTGKILPVGGIKEKTI
AAKRAGVTCIVLPAENKKDFYDLAAFITEGLEVHFVEHYREIFDIAFPDEQAEALAVER

FIGURE 2136

CTAGTTCTAGATCGCGAGCGGACGCCCTTTTTTTTTTTTTTGTTACATTCCAAACGAGCAGGAGTTATTTTATT
TTGCGTGCCTGCAGTCCCCCACGCAGGGTGGCTTCCTGTCCGAGGACGGAGCAGGCTTGGCCGTGGTCCACTCCA
ATCAGTCTATCTTCACAGCAGCATAGATCTTGCGAACAAACATGTAGGCTGCATAGAAGCCGATGGTACCCGTTA
GCAGCCAGAAGGACAAGACCATGAGGGCCGTGTAGCCAAAGTAGAGGAGAGAGGGGATGAACTCCACGATGTCCA
GGTTGTTAACGAAATAAAAGATGGCAACAGGAACATCGATAAGTAGTGTAAAAACTTGCACA**ATG**AAATCCGAAG
CCAAGGATGGAGAGGAGGAGAGTCTACAGACTGCTTTCAAAAAATTAAGAGTGGATGCATCAGGGTCTGTAGCAT
CTCTGTCTGTTGGAGAAGGCACAGGTGTCAGAGCACCAGTCAGAACAGCAACAGATGATACCAAACCTAAAACCA
CATGTGCATCTAAAGACAGTTGGCACGGGTCTACAAGGAAGTCTTCACGAGGAGCAGTGAGAACTCAGCGTCGTC
GACGTTCTAAGTCTCCTGTCCTTCATCCTCCAAAGTTTATACATTGCAGTACAATAGCGTCTTCTTCCAGCAGTC
AACTCAAGCACAAAAGCCAGACTGACTCACCTGATGGCAGCAGTGGGCTGGGAATTTCATCCCCTAAAGAGTTCA
GTGCAGGAGAAAGCTCTACTTCTCTCGATGCTAATCACACAGGGGCAGTCGTTGAGCCTTTGAGAACTTCTGTTC
CAAGGCTCCCATCAGAGAGTAAGAAGGAAGACTCCTCTGACGCTACCCAAGTCCCCCAAGCAAGTCTCAAAGCCA
GTGATCTCTCTGACTTTCAATCAGTTTCCAAGCTAAACCAGGGCAAGCCATGCACATGCATAGGCAAGGAATGCC
AGTGTAAGAGATGGCATGATATGGAAGTGTATTCCTTTTCAGGCCTGCAGAGTGTCCCTCCCTTGGCTCCAGAAC
GAAGATCCACACTTGAGGACTACTCTCAGTCGCTGCACGCCAGAACTCTGTCTGGCTCTCCCCGATCCTGTTCTG
AGCAAGCTCGAGTCTTCGTGGATGATGTGACCATTGAGGACCTGTCAGGCTACATGGAGTATTACTTGTATATTC
CCAAGAAAATGTCCCACATGGCAGAAATGATGTACACC**TGA**TAGCAAGAAGCTAATTCATATGCTTTAAACCAAT
GAAGGCTTGTCAAAGAGATTTAGTTAATGGCAGACCTTGTGGCCACTTTGTGTGAGAAGACATCTCTTTCTGCTC
ACTGTGCTTGCAATAAAAACTTTTCTTGGCAAAAAAAAAAAAAAAAAA

FIGURE 2137

MKSEAKDGEEESLQTAFKKLRVDASGSVASLSVGEGTGVRAPVRTATDDTKPKTTCASKDSWHGSTRKSSRGAVR
TQRRRRSKSPVLHPPKFIHCSTIASSSSSQLKHKSQTDSPDGSSGLGISSPKEFSAGESSTSLDANHTGAVVEPL
RTSVPRLPSESKKEDSSDATQVPQASLKASDLSDFQSVSKLNQGKPCTCIGKECQCKRWHDMEVYSFSGLQSVPP
LAPERRSTLEDYSQSLHARTLSGSPRSCSEQARVFVDDVTIEDLSGYMEYYLYIPKKMSHMAEMMYT

FIGURE 2138

GTGGGGCTGGGCCCAGCCGGACGCGACCTCAGCCTGCGGCGGCTAACTGCCGGTAGGCGTCTGTGTGCGCCGCCA
AGTCGGTGGGGCGGGGACGCGAGGTGTGGATGGGGGGTCGCCTTGACCTCTGCCTCAGCCAGTAGCGCAGTCTCG
GCCTCGCCGTTACGGAGATGGTGCCCTGGGTGCGGACG**ATG**GGGCAGAAGCTGAAGCAGCGGCTGCGACTGGACG
TGGGACGCGAGATCTGCCGCCAGTACCCGCTGTTCTGCTTCCTGCTGCTCTGTCTCAGCGCCGCCTCCCTGCTTC
TTAACAGGTATATTCATATTTTAATGATCTTCTGGTCATTTGTTGCTGGAGTTGTCACATTCTACTGCTCACTAG
GACCTGATTCTCTCTTACCAAATATATTCTTCACAATAAAATACAAACCCAAGCAGTTAGGACTTCAGGAATTAT
TTCCTCAAGGTCATAGCTGTGCTGTTTGTGGTAAAGTGAAATGTAAACGACATAGGCCTTCTTTGCTACTTGAAA
ACTACCAGCCATGGCTAGACCTGAAAATTTCTTCCAAGGTTGATGCATCTCTCTCAGAGGTGGATATTCCATCTA
TTATAACCAAGAAACTATTAAAAGCAGCAATGAAGCATATAGAAGTGATAGTTAAAGCCAGACAGAAAGTAAAAA
ATACAGAGTTTTTACAGCAAGCTGCTTTAGAAGAATATGGTCCAGAGCTTCATGTTGCTTTGAGAAGTCGAAGAG
ATGAATTGCACTATTTAAGGAAACTTACTGAACTGCTTTTTCCTTATATTTTGCCTCCTAAAGCAACAGACTGCA
GATCTCTGACCTTACTTATAAGAGAGATTCTGTCTGGCTCTGTGTTCCTTCCTTCTTTGGATTTCCTAGCTGATC
CAGATACTGTGAATCATTTGCTTATCATCTTCATAGATGACAGTCCACCTGAAAAAGCAACTGAACCGGCTTCTC
CTTTGGTTCCATTCTTGCAGAAATTTGCAGAACCTAGAAATAAAAAGCCATCTGTGCTGAAGTTAGAATTGAAGC
AAATCAGAGAGCAACAAGATCTTTTATTTCGTTTTATGAACTTTCTGAAACAAGAAGGCGCAGTGCACGTGTTGC
AGTTTTGTTTGACTGTGGAGGAATTTAATGATAGAATTTTACGACCAGAATTATCAAATGATGAAATGCTGTCTC
TTCATGAAGAATTGCAGAAGATTTATAAAACATACTGTTTGGATGAAAGTATTGACAAAATTAGATTTGATCCCT
TCATTGTAGAAGAGATTCAAAGAATTGCTGAAGGCCCATACATAGATGTTGTGAAACTTCAAACTATGAGATGTC
TTTTTGAAGCATATGAACATGTTCTTTCCCTTTTGGAGAATGTATTTACTCCTATGTTCTGCCATAGTGATGAGT
ATTTCAGACAACTTTTAAGAGGTGCAGAATCACCAACACGCAATTCAAAATTGAACAGGAACACACAGAAAAGGG
GAGAATCATTTGGAATCAGCAGAATAGGTAGCAAAATTAAAGGAGTATTCAAAAGTACCACAATGGAGGGAGCTA
TGTTGCCTAATTATGGTGTAGCTGAAGGTGAAGATGATTTTATTGAAGAAGGTATTGTTGTAATGGAAGATGATT
CTCCAGTGGAGGCTGTGAGCACACCTAATACTCCCCGAAACCTTGCTGCATGGAAAATTAGCATTCCATATGTAG
ACTTTTTTGAGGATCCCTCCTCTGAAAGGAAGGAGAAAAAAGAAAGAATTCCTGTGTTTTGTATTGATGTTGAAA
GAAATGATAGAAGAGCAGTTGGACACGAGCCTGAACATTGGTCTGTCTATAGAAGATATCTTGAATTCTATGTAC
TTGAATCAAAACTAACAGAATTTCATGGTGCATTTCCTGATGCCCAGCTTCCTTCTAAGAGGATCATTGGCCCCA
AAAATTATGAATTCTTAAAGTCAAAGAGGGAAGAGTTCCAAGAATATCTACAGAAACTTCTGCAGCATCCAGAAC
TGAGTAATAGTCAACTTCTGGCAGACTTTCTTTCCCCTAATGGTGGGGAAACACAATTTCTTGATAAGATACTAC
CAGATGTAAATCTTGGGAAAATTATAAAATCTGTTCCTGGAAAACTAATGAAAGAGAAAGGTCAGCATTTGGAAC
CTTTTATCATGAATTTCATTAATTCTTGTGAGTCTCCAAAGCCTAAACCAAGTAGACCAGAACTGACCATTCTCA
GCCCTACTTCAGAAAACAACAAGAAGCTTTTCAATGATCTGTTTAAAAATAATGCAAACCGTGCTGAAAATACAG
AGAGAAAGCAAAATCAGAATTATTTTATGGAGGTGATGACTGTAGAAGGAGTCTATGATTACCTGATGTATGTAG
GACGGGTAGTTTTCCAGGTTCCTGACTGGCTTCATCATCTCTTAATGGGAACTCGAATCCTCTTTAAAAACACCC
TGGAAATGTATACTGATTACTATCTTCAGTGTAAACTAGAACAGCTATTTCAGGAGCACCGTTTGGTCTCACTCA
TAACACTTCTCAGAGATGCTATATTCTGTGAAAACACTGAACCTCGCTCTCTCCAAGATAAGCAAAAAGGAGCAA
AACAGACTTTTGAAGAAATGATGAATTACATTCCAGATCTGTTAGTCAAGTGTATTGGTGAAGAAACCAAGTATG
AAAGCATCAGACTTCTGTTTGATGGCTTACAGCAACCAGTACTCAACAAGCAGCTGACTTATGTTTTATTGGACA
TTGTGATACAGGAACTGTTTCCAGAGCTCAATAAGGTACAAAAGGAAGTTACCTCTGTGACATCTTGGATG**TAA**A
CACTTGGATTTGGTATAGAATAACCCATTGAAATTTCTGCTGTGCGAGGGTGGTAGAAATTTACTTTTTTGGGTA
TATTCTTATATATATTATGTACATCGCTGTCTGAAATTTTAGTTATTTTTTGTTTTTAATAAAGACTAACACAAA
CTTAATGATTAAAAGTGAAAAAAAAAAAAAAAAAAAA

FIGURE 2139

MGQKLKQRLRLDVGREICRQYPLFCFLLLCLSAASLLLNRYIHILMIFWSFVAGVVTFYCSLGPDSLLPNIFFTI
KYKPKQLGLQELFPQGHSCAVCGKVKCKRHRPSLLLENYQPWLDLKISSKVDASLSEVDIPSIITKKLLKAAMKH
IEVIVKARQKVKNTEFLQQAALEEYGPELHVALRSRRDELHYLRKLTELLFPYILPPKATDCRSLTLLIREILSG
SVFLPSLDFLADPDTVNHLLIIFIDDSPPEKATEPASPLVPFLQKFAEPRNKKPSVLKLELKQIREQQDLLFRFM
NFLKQEGAVHVLQFCLTVEEFNDRILRPELSNDEMLSLHEELQKIYKTYCLDESIDKIRFDPFIVEEIQRIAEGP
YIDVVKLQTMRCLFEAYEHVLSLLENVFTPMFCHSDEYFRQLLRGAESPTRNSKLNRNTQKRGESFGISRIGSKI
KGVFKSTTMEGAMLPNYGVAEGEDDFIEEGIVVMEDDSPVEAVSTPNTPRNLAAWKISIPYVDFFEDPSSERKEK
KERIPVFCIDVERNDRRAVGHEPEHWSVYRRYLEFYVLESKLTEFHGAFPDAQLPSKRIIGPKNYEFLKSKREEF
QEYLQKLLQHPELSNSQLLADFLSPNGGETQFLDKILPDVNLGKIIKSVPGKLMKEKGQHLEPFIMNFINSCESP
KPKPSRPELTILSPTSENNKKLFNDLFKNNANRAENTERKQNQNYFMEVMTVEGVYDYLMYVGRVVFQVPDWLHH
LLMGTRILFKNTLEMYTDYYLQCKLEQLFQEHRLVSLITLLRDAIFCENTEPRSLQDKQKGAKQTFEEMMNYIPD
LLVKCIGEETKYESIRLLFDGLQQPVLNKQLTYVLLDIVIQELFPELNKVQKEVTSVTSWM

FIGURE 2140

CTTTTTCTCCATCTCAGAACCTTCCTGCCGTCGCGTTTGCACCTCGCTGCTCCAGCCTCTGGGGCGCATTCCAAC
CTTCCAGCCTGCGACCTGCGGAGAAAAAAAATTACTTATTTTCTTGCCCCATACATACCTTGAGGCGAGCAAAAA
AATTAAATTTTAACC**ATG**AGGGAAATCGTGCACATCCAGGCTGGTCAGTGTGGCAACCAGATCGGTGCCAAGTTC
TGGGAGGTGATCAGTGATGAACATGGCATCGACCCCACCGGCACCTACCACGGGGACAGCGACCTGCAGCTGGAC
CGCATCTCTGTGTACTACAATGAAGCCACAGGTGGCAAATATGTTCCTCGTGCCATCCTGGTGGATCTAGAACCT
GGGACCATGGACTCTGTTCGCTCAGGTCCTTTTGGCCAGATCTTTAGACCAGACAACTTTGTATTTGGTCAGTCT
GGGGCAGGTAACAACTGGGCCAAAGGCCACTACACAGAGGGCGCCGAGCTGGTTGATTCTGTCCTGGATGTGGTA
CGGAAGGAGGCAGAGAGCTGTGACTGCCTGCAGGGCTTCCAGCTGACCCACTCACTGGGCGGGGGCACAGGCTCT
GGAATGGGCACTCTCCTTATCAGCAAGATCCGAGAAGAATACCCTGATCGCATCATGAATACCTTCAGTGTGGTG
CCTTCACCCAAAGTGTCTGACACCGTGGTCGAGCCCTACAATGCCACCCTCTCCGTCCATCAGTTGGTAGAGAAT
ACTGATGAGACCTATTGCATTGACAACGAGGCCCTCTATGATATCTGCTTCCGCACTCTGAAGCTGACCACACCA
ACCTACGGGGATCTGAACCACCTTGTCTCAGCCACCATGAGTGGTGTCACCACCTGCCTCCGTTTCCCTGGCCAG
CTCAATGCTGACCTCCGCAAGTTGGCAGTCAACATGGTCCCCTTCCCACGTCTCCATTTCTTTATGCCTGGCTTT
GCCCCTCTCACCAGCCGTGGAAGCCAGCAGTATCGAGCTCTCACAGTGCCGGAACTCACCCAGCAGGTCTTCGAT
GCCAAGGACATGATGGCTGCCTGTGACCCCCGCCACGGCCGATACCTCACCGTGGCTGCTGTCTTCCGTGGTCGG
ATGTCCATGAAGGAGGTCGATGAGCAGATGCTTAACGTGCAGAACAAGAACAGCAGCTACTTTGTGGAATGGATC
CCCAACAATGTCAAGACAGCCGTCTGTGACATCCCACCTCGTGGCCTCAAGATGGCAGTCACCTTCATTGGCAAT
AGCACAGCCATCCAGGAGCTCTTCAAGCGCATCTCGGAGCAGTTCACTGCCATGTTCCGCCGGAAGGCCTTCCTC
CACTGGTACACAGGCGAGGGCATGGACGAGATGGAGTTCACCGAGGCTGAGAGCAACATGAACGACCTCGTCTCT
GAGTATCAGCAGTACCAGGATGCCACCGCAGAAGAGGAGGAGGATTTCGGTGAGGAGGCCGAAGAGGAGGCC**TAA**

GGCAGAGCCCCCATCACCTCAGGCTTCTCAGTTCCCTTAGCCGTCTTACTCAACTGCCCCTTTCCTCTCCCTCAG
AATTTGTGTTTGCTGCCTCTATCTTGTTTTTTGTTTTTTCTTCTGGGGGGGGGGTCTAGAACAGTGCCTGGCACAT
AGTAGGCGCTCAATAAATACTTGTTTGTTGAAAAAAAAAAAAAAAA

FIGURE 2141

MREIVHIQAGQCGNQIGAKFWEVISDEHGIDPTGTYHGDSDLQLDRISVYYNEATGGKYVPRAILVDLEPGTMDS
VRSGPFGQIFRPDNFVFGQSGAGNNWAKGHYTEGAELVDSVLDVVRKEAESCDCLQGFQLTHSLGGGTGSGMGTL
LISKIREEYPDRIMNTFSVVPSPKVSDTVVEPYNATLSVHQLVENTDETYCIDNEALYDICFRTLKLTTPTYGDL
NHLVSATMSGVTTCLRFPGQLNADLRKLAVNMVPFPRLHFFMPGFAPLTSRGSQQYRALTVPELTQQVFDAKDMM
AACDPRHGRYLTVAAVFRGRMSMKEVDEQMLNVQNKNSSYFVEWIPNNVKTAVCDIPPRGLKMAVTFIGNSTAIQ
ELFKRISEQFTAMFRRKAFLHWYTGEGMDEMEFTEAESNMNDLVSEYQQYQDATAEEEEDFGEEAEEEA

FIGURE 2142

GGAGCAACGCTAGGAAGGGCGGGCAGAAAGGGCACGCTCTTGTGGGTGACTACAGGTTAGGAGACCGTTGAACCT
GGAGGGGCCCTAGGATGGACCCCGTGGAAAGATTCAGAGACTGCGCCCTCTCCCTGGCGCCGCCTTCCCCTACAC
GCGGCGGGTATATTCTGTTGCAGTTGGCCCAGGACCTGTTTCCAAGACTCTGCCCCCTCGCACTTCCGTCCCTCC
TGGTTTTGTAAAGTG**ATG**CTCATAGGAACCCCCACCCCGCGTGACACTACTCCCAGCTCCTGGCTGACTTCTAGT
CTTCTGGTTGAAGCTGCGCCTTTAGATGACACGACCCTACCCACCCCTGTTTCCAGCGGATGCCCGGGCCTGGAG
CCCACAGAATTCTTCCAGTCCCTGGGTGGGGACGGAGAAAGGAACGTTCAGATTGAGATGGCCCATGGCACCACC
ACGCTCGCCTTCAAGTTCCAGCATGGAGTGATTGCAGCAGTGGATTCTCGGGCCTCAGCTGGGTCCTACATTAGT
GCCTTACGGGTGAACAAGGTGATTGAGATTAACCCTTACCTGCTTGGCACCATGTCTGGCTGTGCAGCAGACTGT
CAGTACTGGGAGCGCCTGCTGGCCAAGGAATGCAGGCTGTACTATCTGCGAAATGGAGAACGTATTTCAGTGTCG
GCAGCCTCCAAGCTGCTGTCCAACATGATGTGCCAGTACCGGGGCATGGGCCTCTCTATGGGCAGTATGATCTGT
GGCTGGGATAAGAAGGGTCCTGGACTCTACTACGTGGATGAACATGGGACTCGGCTCTCAGGAAATATGTTCTCC
ACGGGTAGTGGGAACACTTATGCCTACGGGGTCATGGACAGTGGCTATCGGCCTAATCTTAGCCCTGAAGAGGCC
TATGACCTTGGCCGCAGGGCTATTGCTTATGCCACTCACAGAGACAGCTATTCTGGAGGCGTTGTCAATATGTAC
CACATGAAGGAAGATGGTTGGGTGAAAGTAGAAAGTACAGATGTCAGTGACCTGCTGCACCAGTACCGGGAAGCC
AATCAA**TAA**TGGTGGTGGTGGCAGCTGGGCAGGTCTCCTCTGGGAGGTCTTGGCCGACTCAGGGACCTAAGCCAC
GTTAAGTCCAAGGAGAAGAAGAGGCCTAGCCTGAGCCAAAGAGAGAGTACGGGCTCAGCAGCCAGAGGAGGCCGG
TGAAGTGCATCTTCTGCGTGTTCTCTATTTGAACAAGCATTTCCCCCAGGGAAGTTTCTGGGTGCCCCACTAAGT
AGAATAAAGAAAAACGGTTATAAATAAAAAAAAAAAAAAAAAAA

FIGURE 2143

MLIGTPTPRDTTPSSWLTSSLLVEAAPLDDTTLPTPVSSGCPGLEPTEFFQSLGGDGERNVQIEMAHGTTTLAFK
FQHGVIAAVDSRASAGSYISALRVNKVIEINPYLLGTMSGCAADCQYWERLLAKECRLYYLRNGERISVSAASKL
LSNMMCQYRGMGLSMGSMICGWDKKGPGLYYVDEHGTRLSGNMFSTGSGNTYAYGVMDSGYRPNLSPEEAYDLGR
RAIAYATHRDSYSGGVVNMYHMKEDGWVKVESTDVSDLLHQYREANQ

FIGURE 2144A

AGAGATGGGTCTCGCCATCACCATGTTGCCCAGTCTGGTCTCCAACTCCTGGGCTCAAGCGATCCTCCTGCCTTG
GTCTCCCAAAGTGCTGGGATTACAGGTGTGAGCCCCCACACCCGGCCTGAGTGAGTGGGTTCTGAATGGTGACTG
TTGTTGTCCATAGCCTTCCCCCTGCTTCTGAGAGTGGAGTCCCTCCCCTCATGTTGGAGACCTCCCAAGGTCCAT
GTGGTCCTATAGGGGCTGTTCAGCCTCCCTAGCCCCTTAACGTGTCAGGTAATACTGTATATATTCCATGAAATG
TGAATAATTAGTTATATAATTCCTAAGCACTTATTTTAAAAAACAGCAATGTGATGCTTAACTCTTCCCACCTCT
GTTCCTGTCCCCCTTAGAAAACCACTGATAACTCTTTTTTTTTTTGAGACGGAGTCTTGCCCTGTCGCCCAGGCT
GGAGTGTAGTGGCCTGATCTCGGCTCGGCTCATTGTAACCTCCGCCTCGGGTTTGAGCGATTCTCCTGCCTCAGC
CTCCTGAGTAGCTGGGATTATAGGCGTGCACCACCACGCCTGGCTAATTTTTTGTATCTTTAGTAGGGACGGGTT
TCACCATGTTGGCCAGAGTGGTCTTGAACTCCTGACCTTGTGATCCGCTCGCCTCAGCCTCCCAAAGTGCTGGGA
TTACAGGCATGAGCCACCGTGCCTGTCCTAGAACCACTGGTAACTCTTAACTGXXXAGTGTTCTAAGAACGGAAG
CATCTGGGCTGGATGGAATTTAGCATCAAGCAGAGTCCCCTTTCTGTTCAGAGTGTTGTAAAGTGCATAAAGATG
AAGCAGGCACCAGAAATCCTCGGCAGTGCCAACGGGAAGACTCCGAGCTGCGAGGTGAACCGCGAGTGTTCTGTG
TTCCTCAGCAAAGCCCAGCTCTCCAGTAGCCTGCAGGAGGGGGTCATGCAGAAGTTTAACGGCCACGACGCCCTG
CCCTTTATTCCAGCCGACAAGCTGAAAGATCTTACTTCCCGGGTGTTTAATGGAGAACCCGGCGCACACGATGCC
AAACTGCGTTTTGAGTCCCAGGAAATGAAAGGGATTGGGACACCCCCTAACACTACCCCTATCAAAAATGGCTCT
CCAGAAATTAAGCTGAAAATCACCAAAACATACATGAATGGGAAGCCTCTCTTTGAATCTTCCATTTGTGGTGAC
AGTGCTGCTGATGTGTCTCAGTCAGAAGAAAATGGACAAAAACCAGAAAACAAGGCGAGAAGGAACAGGAAGAGG
AGCATAAAATATGACTCCTTGCTGGAGCAGGGCCTTGTCGAAGCAGCTCTTGTGTCTAAGATCTCAAGTCCTTCA
GATAAAAAGATTCCAGCTAAGAAAGAGTCTTGTCCAAACACTGGAAGAGACAAAGACCACCTGTTGAAATACAAC
GTTGGTGATTTGGTGTGGTCCAAAGTGTCGGGTTACCCTTGGTGGCCTTGCATGGTTTCTGCAGATCCACTCCTT
CACAGCTATACCAAACTTAAAGGTCAGAAAAAGAGTGCACGCCAGTATCACGTACAGTTCTTTGGTGACGCCCCA
GAAAGAGCTTGGATATTTGAGAAGAGCCTCGTAGCTTTTGAAGGAGAAGGACAGTTTGAAAAATTATGCCAGGAA
AGTGCCAAGCAGGCACCCACGAAAGCTGAGAAAATTAAGCTATTGAAACCAATTTCAGGGAAATTGAGGGCCCAG
TGGGAAATGGGCATTGTTCAAGCAGAAGAAGCTGCAAGCATGTCAGTGGAGGAGCGGAAAGCCAAGTTCACCTTT
CTCTATGTGGGGGACCAGCTTCATCTCAACCCTCAAGTAGCCAAGGAGGCTGGCATTGCTGCAGAGTCTTTGGGA
GAAATGGCAGAATCCTCAGGAGTCAGTGAAGAAGCTGCTGAAAACCCCAAGTCTGTGAGAGAAGAGTGCATTCCC
ATGAAGAGAAGGCGGAGGGCCAAACTGTGTAGCTCTGCAGAGACCCTGGAGAGTCACCCCGACATAGGGAAGAGT
ACTCCTCAAAAGACGGCAGAGGCTGACCCCAGAAGAGGAGTAGGGTCTCCTCCTGGGAGGAAGAAGACCACAGTC
TCCATGCCACGAAGCAGGAAGGGAGATGCAGCATCCCAGTTTTTGGTCTTCTGTCAAAAACACAGGGATGAGGTG
GTAGCTGAGCACCCAGATGCTTCAGGTGAGGAGATTGAAGAGCTGCTCAGGTCACAGTGGAGTCTGCTGAGTGAG
AAGCAGAGAGCACGCTACAACACCAAGTTTGCCCTGGTGGCCCCTGTCCAGGCTGAAGAAGACTCTGGTAATGTA
AATGGGAAAAAAAGAAACCACACAAAGAGGATACAGGACCCTACAGAAGATGCTGAAGCTGAGGACACACCCAGG
AAAAGACTCAGGACGGACAAGCACAGTCTTCGGAAGAGAGACACAATCACTGACAAAACGGCCAGAACAAGCTCT
TACAAGGCCATGGAGGCAGCCTCCTCGCTCAAGAGCCAGGCAGCAACGAAAAATCTGTCTGATGCATGTAAACCA
CTGAAGAAGCGAAATCGGGCTTCCACGGCAGCATCTTCAGCTCTTGGGTTTAGCAAAAGTTCATCTCCTTCTGCA
TCCTTAACTGAGAATGAGGTCTCGGACAGCCCGGGAGACGAGCCCTCGGAGTCCCCATACGAAAGTGCAGACGAA
ACACAAACTGAAGTATCTGTCTCATCCAAAAAGTCTGAGCGAGGAGTGACTGCCAAAAAGGAGTATGTGTGCCAG
CTGTGTGAGAAGCCGGGCAGCCTCCTGCTCTGTGAAGGACCCTGCTGCGGAGCTTTCCACCTCGCCTGCCTTGGG
CTTTCCCGGAGGCCAGAAGGGAGGTTCACCTGCAGCGAGTGTGCCTCAGGGATTCACTCATGTTTCGTGTGTAAA
GAGAGCAAGACAGATGTTAAGCGCTGTGTGGTAACTCAGTGTGGAAAATTTTACCATGAGGCTTGTGTGAAAAAA
TACCCTCTGACTGTATTTGAGAGCCGAGGTTTCCGCTGCCCCCTCCACAGCTGTGTGAGCTGCCATGCTTCCAAC
CCTTCAAACCCAAGGCCGTCAAAAGGTAAAATGATGCGGTGTGTCCGCTGCCCCGTTGCCTATCACAGCGGGGAT
GCTTGTCTGGCAGCAGGATGCTCAGTGATCGCCTCCAACAGCATCATCTGCACTGCCCACTTCACTGCTCGGAAG
GGGAAGCGACACCACGCCCACGTCAACGTGAGCTGGTGCTTCGTGTGCTCCAAAGGGGGGAGCCTTCTGTGCTGT
GAGTCCTGCCCAGCGGCCTTCCACCCTGACTGCCTGAACATCGAGATGCCTGACGGCAGCTGGTTCTGCAATGAC
TGCAGGGCTGGGAAGAAGCTGCACTTCCAGGATATCATTTGGGTGAAACTTGGGAACTACAGATGGTGGCCGGCA
GAAGTTTGCCATCCCAAAAATGTTCCCCCAAATATTCAGAAAATGAAGCACGAGATTGGAGAATTCCCTGTGTTT
TTCTTTGGGTCTAAAGATTATTACTGGACGCATCAGGCGCGAGTGTTCCCGTACATGGAGGGGGACCGGGGCAGC

FIGURE 2144B

CGCTACCAGGGGGTCAGAGGGATCGGAAGAGTCTTCAAAAACGCACTGCAAGAAGCTGAAGCTCGTTTTCGTGAA
ATTAAGCTTCAGAGGGAAGCCCGAGAAACACAGGAGAGCGAGCGCAAGCCCCCACCATACAAGCACATCAAGGTG
AATAAGCCTTACGGGAAAGTCCAGATCTACACAGCGGATATTTCAGAAATCCCTAAGTGCAACTGCAAGCCCACA
GATGAGAATCCTTGTGGCTTTGATTCGGAGTGTCTGAACAGGATGCTGATGTTTGAGTGCCACCCGCAGGTGTGT
CCCGCGGGCGAGTTCTGCCAGAACCAGTGCTTCACCAAGCGCCAGTACCCAGAGACCAAGATCATCAAGACAGAT
GGCAAAGGGTGGGGCCTGGTCGCCAAGAGGGACATCAGAAAGGGAGAATTTGTTAACGAGTACGTTGGGGAGCTG
ATCGACGAGGAGGAGTGCATGGCGAGAATCAAGCACGCACACGAGAACGACATCACCCACTTCTACATGCTCACT
ATAGACAAGGACCGTATAATAGACGCTGGCCCCAAAGGAAACTACTCTCGATTTATGAATCACAGCTGCCAGCCC
AACTGTGAGACCCTCAAGTGGACAGTGAATGGGGACACTCGTGTGGGCCTGTTTGCCGTCTGTGACATTCCTGCA
GGGACGGAGCTGACTTTTAACTACAACCTCGATTGTCTGGGCAATGAAAAAACGGTCTGCCGGTGTGGAGCCTCC
AATTGCAGTGGATTCCTCGGGGATAGACCAAAGACCTCGACGACCCTTTCATCAGAGGAAAAGGGCAAAAAGACC
AAGAAGAAAACGAGGCGGCGCAGAGCAAAAGGGGAAGGGAAGAGGCAGTCAGAGGACGAGTGCTTCCGCTGCGGT
GATGGCGGGCAGCTGGTGCTGTGTGACCGCAAGTTCTGCACCAAGGCCTACCACCTGTCCTGCCTGGGCCTTGGC
AAGCGGCCCTTCGGGAAGTGGGAATGTCCTTGGCATCATTGTGACGTGTGTGGCAAACCTTCGACTTCATTTTGC
CACCTCTGCCCCAATTCGTTCTGTAAGGAGCACCAGGACGGGACAGCCTTCAGCTGCACCCCGGACGGGCGGTCC
TACTGCTGTGAGCATGACTTAGGGGCGGCATCGGTCAGAAGCACCAAGACTGAGAAGCCCCCCCCAGAGCCAGGG
AAGCCGAAGGGGAAGAGGCGGCGGCGGAGGGGCTGGCGGAGAGTCACAGAGGGCAAA**TAG**CGCCAGGCGGCCGCT
TGGCCGGATCCAGGGGCGGTGCAGGGCGGCCGGCCCTGCCTGCGGGAGAGGGCGAGCATGAACTGGCCCGGAGGA
CCCAGCTCGAGCCGCCAGGACACAGACGTACAGGCCTCCTCGGGAGGGAGCGCCTCCCCACCACTGAGCCATCCT
CAGCAGCGTCCGCTGCGTCTGCACTGATGACCGTCTGAGCCCAGCTCAGCGTTCCTGGACAAACAGCCTCACTCC
TCAGCGTTACCGCCACACTTGAATTTCTCCGAATGTCAAGGTTCCCTCCCACTCTATTTTTTTAGGTTAAAGTTA
ATTGGCATATGGAATGTTTTAATCTCCTCTGAAATGTGTAGCGTAGGCTTTTCCCAAGGGTCGCTAGAAACTCGT
CTTCGCGTTGCCCCCTTTCTGGCTCTCAGCGCCGTCGCCACTCGGGAGAGGCTGGGTGAGGCCCGTGTGAGGACT
GACCCTGGATTCCTCGAAACTGCCATTGTGATCATTACTCTGCTCTTTGGTGGCTGTATCATTTTTTTGTACTAA
TGTGAATTGTTCCTCAGAAACGCTTCTTTTCCATCCTAGTGAGAAGCTGGCCCTGCAGGTGGTGGCAGCAATGGT
GTTGTAAGATTTCCTCCCGTAGTTTTTTCTCCTCATGGATTTGAATGAAATGCCAATAACACGTCCACTTTCAAC
GTGTAGTTTACGCGGAGCACTTTCGAGGCCTGGCCGGGTTGGGCCTACTTCTCACCTGGGCCTATCTTCTGAACT
CGCTAGGTTCTTATCAACATTTGGGGGATAACTTTGTATATTTTTTTCATTTGGCTTTTCTTTACCAGTTTCTGA
TTTTTATTCTCAATATATTTTTGCTAAACCTATTTCACAAATCACCACCGACTGAAGTGTGTGTTTACTGATGCG
GCCCTGAGCTCCATGGCGAAAGGAGTGACTTTGCAGGGCGTGAGACCGCAGTCTGCTTAGAGCACAGGAAGTGAC
AACTTAGGGAGCCCCGTAGGGCGCTGCAGGCCCCGGGGACCCCAGCACGTGGGTCTAAAGAGAGACGGAGTCTAG
CTCTCCTGCCACCCAGAGTGGCTTCCATCTCAGCACTCTGTGGGTCTGGTGATGGAAGATGCAGTCTCTGCTGAT
CACATGTGCCCTCTGCCAGGGCACCTACTGAGAGGTGCGGTCCTGGGGGTGGAGGCCTGCCTGGCAGGTGTGCGT
GCCTCGTACGTGTGTTATGGGCACTGGTCTAGGCCAGGTATGACACCCACTCTCCTGTGAGATTTCACTTTAGTT
TTTAAAAGGTCCAGTTCTACAGAGTGAGACCTATCTATCTGAGTACTACATATGTTTTAAGACTTGGTTCTTTTT
TTGAGGGATCCTTGACCCTGGGAAGTCTGGAGCACCCTGAGAAGGGGGCACCATGTGTGCCTTTGCCCACGTGTC
CTGAGGGGCTGCTTGTCTGGGAGGGAGGGAGAGAACATTCAGCAGCAGGTGCTTTTTTATGGCCTTTTCTTAAAA
TAACCTAAGGGGGACACATCCATCTTGCAGAGAAGTTTACAGAACTCCCCTTGAAAACTGCTGCTGAGGCTCCTG
TTAAATTTTCTGTGGCATCTTTTATGCCTTGGTAAAAACTGCAGTGTCTTTGGACCTGAGAGTGGCTACTCCGTG
GTTTTGTGACCTGTAAGCGTGGGGTTCAGGGGTGTGTGGCCCTGCAGGGTCCCACGCCTCCCTGAGCACTGACTG
GAAGTTTCACTGGCTGGTGGCTGTCCCTTCTCCCATCAGGGTCCCCAGCAAAGTTAACTACACAGAGGACCCAGG
GGAAACGAGCTGTGTAGCCACTGACTTGCTCGCGCGGCCGTGGCCTCTGAGGGGCACTCGCCGGTTAAGACAGGG
TGGGAGTAGTGCTTTCCAGTTCAGACTCTAACTTCTCCCAAAGTGTCCTAAGAAAATACTGGATCGGCTCATAGA
TTTATGCTCCTTATGATGCCCTAACTTGGAAGGTTGTTCTAGGGACAGGCCGGGCAGTGTCCCCACACACACCTT
AGAGTCGAAGGCCCCAGGGCCCCGCTGTCACTTGCCCAAAAGATCCCTTCCGGCAGGTAAGGGACTACCAATGCT
TACGTCAAAACAGCAGAATCGGCTTTGCAGTGCACTTTGGGGAGCAGATATTAACTTATTTTTGTGTTGGACAGT
AGTGAAATCTTGTGATTTTTAATCGCTTTGATAATACTTCCAAATTTTATGATTTTTCTGAAGGAAATAATGCAA
ACATTTTAAATATGTTTCTCCCCCTTTCCAAAAACTGTTAAACTAATGAGCAAGTAACACTAACTTTGAATGTCT

FIGURE 2144C

CTACAATACCCGTTGATAACTCAGTGGAGCCAGGCTTTGGGGTAGCGGCCCTGAGCTTGCAGGGTTTCTCGCCAC
TGGGGCTGACCACGCCCCCAGCTGTGACCGTGGGTGTGGCTGGCTCTCGGCCCTGCCCAGCTTTGTTCTGAGGAC
GTGGTGACTTCCTGAACATCAGCTTCAATCCTCCATCATTAATGTGAAGCAAAACACAAAAACCGCCCCAATCCC
TCAGGATTCCTTGGCATCCGAAACCAGCATCTGCACCTAAACCCATACCCACCCGTGTGCGCCCACAGGGGGATG
TGTCCGAATGGGCAGCTTAAAATGTGGTCACCTGTGGGGGAAACTCTTCAGGCACCTGAAGTGAGAACCCAGCTG
TCCGTCCTCAGGCCGGCCTTTCTTCCGGCGACACCCGTCCATGGCTGGCTGGGTCCCCTTCGCAGTGTTTGTCTG
TCTTGACATCTAAACCCCGGCGTGTGCAGTGCCCATCTTCCAGGACTACCTTATTTTCCAGAATTAAACCTGTTT
TATAATTCAAGTTAATGCAAATGACTGTCAGTTGCCAAATATCTTGATCCTGTGAGTGTAGTTGATGACTGTTTG
TTAGTCAGTAGAGTAAAATGCTGTGTCCACGGGGTGTCACAGCCTCACCATACCCTGTTGAGGTGTGAAATGCCC
CGTCAGAAATTAAATACAAACTTAAATGTGCCTATTGGTGTCTAAACTTCATACAATGTAAGGTCAGATTCCTTT
TAGGAATACTGGGTGCTGTCACCAGGTTTGATAGTTAGACTTAAAAACTTGAAATTCACTTTTTGGGGGGAGGGA
TATACTGAAATAGAGAGTTGAGACTTGCCAGTTGGGGGAAAATAGCATTTAAAATGGAAAGCTGTGTTTGGAAAA
TTGTGTATGAGTATTTTTGTATTAAAAACATTTTAAA

FIGURE 2145

MEFSIKQSPLSVQSVVKCIKMKQAPEILGSANGKTPSCEVNRECSVFLSKAQLSSSLQEGVMQKFNGHDALPFIP
ADKLKDLTSRVFNGEPGAHDAKLRFESQEMKGIGTPPNTTPIKNGSPEIKLKITKTYMNGKPLFESSICGDSAAD
VSQSEENGQKPENKARRNRKRSIKYDSLLEQGLVEAALVSKISSPSDKKIPAKKESCPNTGRDKDHLLKYNVGDL
VWSKVSGYPWWPCMVSADPLLHSYTKLKGQKKSARQYHVQFFGDAPERAWIFEKSLVAFEGEGQFEKLCQESAKQ
APTKAEKIKLLKPISGKLRAQWEMGIVQAEEAASMSVEERKAKFTFLYVGDQLHLNPQVAKEAGIAAESLGEMAE
SSGVSEEAAENPKSVREECIPMKRRRRAKLCSSAETLESHPDIGKSTPQKTAEADPRRGVGSPPGRKKTTVSMPR
SRKGDAASQFLVFCQKHRDEVVAEHPDASGEEIEELLRSQWSLLSEKQRARYNTKFALVAPVQAEEDSGNVNGKK
RNHTKRIQDPTEDAEAEDTPRKRLRTDKHSLRKRDTITDKTARTSSYKAMEAASSLKSQAATKNLSDACKPLKKR
NRASTAASSALGFSKSSSPSASLTENEVSDSPGDEPSESPYESADETQTEVSVSSKKSERGVTAKKEYVCQLCEK
PGSLLLCEGPCCGAFHLACLGLSRRPEGRFTCSECASGIHSCFVCKESKTDVKRCVVTQCGKFYHEACVKKYPLT
VFESRGFRCPLHSCVSCHASNPSNPRPSKGKMMRCVRCPVAYHSGDACLAAGCSVIASNSIICTAHFTARKGKRH
HAHVNVSWCFVCSKGGSLLCCESCPAAFHPDCLNIEMPDGSWFCNDCRAGKKLHFQDIIWVKLGNYRWWPAEVCH
PKNVPPNIQKMKHEIGEFPVFFFGSKDYYWTHQARVFPYMEGDRGSRYQGVRGIGRVFKNALQEAEARFREIKLQ
REARETQESERKPPPYKHIKVNKPYGKVQIYTADISEIPKCNCKPTDENPCGFDSECLNRMLMFECHPQVCPAGE
FCQNQCFTKRQYPETKIIKTDGKGWGLVAKRDIRKGEFVNEYVGELIDEEECMARIKHAHENDITHFYMLTIDKD
RIIDAGPKGNYSRFMNHSCQPNCETLKWTVNGDTRVGLFAVCDIPAGTELTFNYNLDCLGNEKTVCRCGASNCSG
FLGDRPKTSTTLSSEEKGKKTKKKTRRRRAKGEGKRQSEDECFRCGDGGQLVLCDRKFCTKAYHLSCLGLGKRPF
GKWECPWHHCDVCGKPSTSFCHLCPNSFCKEHQDGTAFSCTPDGRSYCCEHDLGAASVRSTKTEKPPPEPGKPKG
KRRRRRGWRRVTEGK

FIGURE 2146A

GAGTAGCATTGTGGTTATATGTAAGACTTTATGTTTAGAGATTTGTGCTAAACTTCTTATGGATGAAATGATATG
TCTGGGATTTGCTTCAGAATAATCTGGCAGGGGGACGTGGAACCAGGTATGGATAGAGCCACGCTGGCCCCAGGT
TGATGTTTTTGGGGGCCAAGTAGCGAGGACATGGGGTTCATTGTACAGTTTGTCTGCTTTTGTTTATGTTCAGAT
TTTTCCATGATAGAAAGTTAAGCCAGAAGGACAAAGGAATTCAGAAGATTCATCTTTAGAACTTCACTTATTTGA
GGGGTAATTTTTAAGCAGTAAAAAGATCAAGGGTTTATGATTTGAAACTTTACAAACCAAAATTATTTTACAGCA
ACGAAAAATCTGTCTGATGCATGTAAACCACTGAAGAAGCGAAATCGGGCTTCCACGGCAGCATCTTCAGCTCTT
GGGTTTAGCAAAAGTTCATCTCCTTCTGCATCCTTAACTGAGAATGAGGTCTCGGACAGCCCGGGAGACGAGCCC
TCGGAGTCCCCATACGAAAGTGCAGACGAAACACAAACTGAAGTATCTGTCTCATCCAAAAAGTCTGAGCGAGGA
GTGACTGCCAAAAAGGAGTATGTGTGCCAGCTGTGTGAGAAGCCGGGCAGCCTCCTGCTCTGTGAAGGACCCTGC
TGCGGAGCTTTCCACCTCGCCTGCCTTGGGCTTTCCCGGAGGCCAGAAGGGAGGTTCACCTGCAGCGAGTGTGCC
TCAGGGATTCACTCATGTTTCGTGTGTAAAGAGAGCAAGACAGATGTTAAGCGCTGTGTGGTAACTCAGTGTGGA
AAATTTTACCATGAGGCTTGTGTGAAAAAATACCCTCTGACTGTATTTGAGAGCCGAGGTTTCCGCTGCCCCCTC
CACAGCTGTGTGAGCTGCCATGCTTCCAACCCTTCAAACCCAAGGCCGTCAAAAGGTAAA**ATG**ATGCGGTGTGTC
CGCTGCCCCGTTGCCTATCACAGCGGGGATGCTTGTCTGGCAGCAGGATGCTCAGTGATCGCCTCCAACAGCATC
ATCTGCACTGCCCACTTCACTGCTCGGAAGGGGAAGCGACACCACGCCCACGTCAACGTGAGCTGGTGCTTCGTG
TGCTCCAAAGGGGGGAGCCTTCTGTGCTGTGAGTCCTGCCCAGCGGCCTTCCACCCTGACTGCCTGAACATCGAG
ATGCCTGACGGCAGCTGGTTCTGCAATGACTGCAGGGCTGGGAAGAAGTTGCACTTCCAGGATATCATTTGGGTG
AAACTTGGGAACTACAGATGGTGGCCGGCAGAAGTTTGCCATCCCAAAAATGTTCCCCCAAATATTCAGAAAATG
AAGCACGAGATTGGAGAATTCCCTGTGTTTTTCTTTGGGTCTAAAGATTATTACTGGACGCATCAGGCGCGAGTG
TTCCCGTACATGGAGGGGGACCGGGGCAGCCGCTACCAGGGGGTCAGAGGGATCGGAAGAGTCTTCAAAAACGCA
CTGCAAGAAGCTGAAGCTCGTTTTCGTGAAATTAAGCTTCAGAGGGAAGCCCGAGAAACACAGGAGAGCGAGCGC
AAGCCCCCACCATACAAGCACATCAAGGTGAATAAGCCTTACGGGAAAGTCCAGATCTACACAGCGGATATTTCA
GAAATCCCTAAGTGCAACTGCAAGCCCACAGATGAGAATCCTTGTGGCTTTGATTCGGAGTGTCTGAACAGGATG
CTGATGTTTGAGTGCCACCCGCAGGTGTGTCCCGCGGGCGAGTTCTGCCAGAACCAGTGCTTCACCAAGCGCCAG
TACCCAGAGACCAAGATCATCAAGACAGATGGCAAAGGGTGGGGCCTGGTCGCCAAGAGGGACATCAGAAAGGGA
GAATTTGTTAACGAGTACGTTGGGGAGCTGATCGACGAGGAGGAGTGCATGGCGAGAATCAAGCACGCACACGAG
AACGACATCACCCACTTCTACATGCTCACTATAGACAAGGACCGTATAATAGACGCTGGCCCCAAAGGAAACTAC
TCTCGATTTATGAATCACAGCTGCCAGCCCAACTGTGAGACCCTCAAGTGGACAGTGAATGGGGACACTCGTGTG
GGCCTGTTTGCCGTCTGTGACATTCCTGCAGGGACGGAGCTGACTTTTAACTACAACCTCGATTGCCTGGGCAAT
GAAAAAACGGTCTGCCGGTGTGGAGCCTCCAATTGCAGTGGATTCCTCGGGGATAGACCAAAGACCTCGACGACC
CTTTCATCAGAGGAAAAGGGCAAAAAGACCAAGAAGAAAACGAGGCGGCGCAGAGCAAAAGGGGAAGGGAAGAGG
CAGTCAGAGGACGAGTGCTTCCGCTGCGGTGATGGCGGGCAGCTGGTGCTGTGTGACCGCAAGTTCTGCACCAAG
GCCTACCACCTGTCCTGCCTGGGCCTTGGCAAGCGGCCCTTCGGGAAGTGGGAATGTCCTTGGCATCATTGTGAC
GTGTGTGGCAAACCTTCGACTTCATTTTGCCACCTCTGCCCCAATTCGTTCTGTAAGGAGCACCAGGACGGGACA
GCCTTCAGCTGCACCCCGGACGGGCGGTCCTACTGCTGTGAGCATGACTTAGGGGCGGCATCGGTCAGAAGCACC
AAGACTGAGAAGCCCCCCCCAGAGCCAGGGAAGCCGAAGGGGAAGAGGCGGCGGCGGAGGGGCTGGCGGAGAGTC
ACAGAGGGCAAA**TAG**CGCCAGGCGGCCGCTTGGCCGGATCCAGGGGCGGTGCAGGGCGGCCGGCCCTGCCTGCGG
GAGAGGGCGAGCATGAACTGGCCCGGAGGACCCAGCTCGAGCCGCCAGGACACAGACGTACAGGCCTCCTCGGGA
GGGAGCGCCTCCCCACCACTGAGCCATCCTCAGCAGCGTCCGCTGCGTCTGCACTGATGACCGTCTGAGCCCAGC
TCAGCGTTCCTGGACAAACAGCCTCACTCCTCAGCGTTACCGCCACACTTGAATTTCTCCGAATGTCAAGGTTCC
CTCCCACTCTATTTTTTTAGGTTAAAGTTAATTGGCATATGGAATGTTTTAATCTCCTCTGAAATGTGTAGCGTA
GGCTTTTCCCAAGGGTCGCTAGAAACTCGTCTTCGCGTTGCCCCCTTTCTGGCTCTCAGCGCCGTCGCCACTCGG
GAGAGGCTGGGTGAGGCCCGTGTGAGGACTGACCCTGGATTCCTCGAAACTGCCATTGTGATCATTACTCTGCTC
TTTGGAAATGGCTGTATCATTTTTTTGTACTAATGTGAATTGTTCCTCAGAAACGCTTCTTTTCCATCCTAGTGA
GAAGCTGGCCCTGCAGGTGGTGGCAGCAATGGTGTTGTAAGATTTCCTCCCGTAGTTTTTTCTCCTCATGGATTT
GAATGAAATGCCAATAACACGTCCACTTTCAACGTGTAGTTTACGCGGAGCACTTTCGAGGCCTGGCCGGGTTGG
GCCTACTTCTCACCTGGGCCTATCTTCTGAACTCGCTAGGTTCTTATCAACATTTGGGGGATAACTTTGTATATT
TTTTTCATTTGGCTTTTCTTTACCAGTTTCTGATTTTTATTCTCAATATATTTTTGCTAAACCTATTTCACAAAT

FIGURE 2146B

CAAAAAAAAAAAAAAAAA

FIGURE 2147

MMRCVRCPVAYHSGDACLAAGCSVIASNSIICTAHFTARKGKRHHAHVNVSWCFVCSKGGSLLCCESCPAAFHPD
CLNIEMPDGSWFCNDCRAGKKLHFQDIIWVKLGNYRWWPAEVCHPKNVPPNIQKMKHEIGEFPVFFFGSKDYYWT
HQARVFPYMEGDRGSRYQGVRGIGRVFKNALQEAEARFREIKLQREARETQESERKPPPYKHIKVNKPYGKVQIY
TADISEIPKCNCKPTDENPCGFDSECLNRMLMFECHPQVCPAGEFCQNQCFTKRQYPETKIIKTDGKGWGLVAKR
DIRKGEFVNEYVGELIDEEECMARIKHAHENDITHFYMLTIDKDRIIDAGPKGNYSRFMNHSCQPNCETLKWTVN
GDTRVGLFAVCDIPAGTELTFNYNLDCLGNEKTVCRCGASNCSGFLGDRPKTSTTLSSEEKGKKTKKKTRRRRAK
GEGKRQSEDECFRCGDGGQLVLCDRKFCTKAYHLSCLGLGKRPFGKWECPWHHCDVCGKPSTSFCHLCPNSFCKE
HQDGTAFSCTPDGRSYCCEHDLGAASVRSTKTEKPPPEPGKPKGKRRRRRGWRRVTEGK

FIGURE 2148A

GTCGACGTGGCGGCCGGCGGCGGCTGCGGGCTGAGCGGCGAGTTTCCGATTTAAAGCTGAGCTGCGAGGAAAATG
GCGGCGGGAGGATCAAAATACTTGCTGGATGGTGGACTCAGAGACCAATAAAAATAAACTGCTTGAACATCCTTT
GACTGGTTAGCCAGTTGCTGATGTATATTCAAGATGAGTGGATTAGGAGAAAACTTGGATCCACTGGCCAGTGAT
TCACGAAAACGCAAATTGCCATGTGATACTCCAGGACAAGGTCTTACCTGCAGTGGTGAAAAACGGAGACGGGAG
CAGGAAAGTAAATATATTGAAGAATTGGCTGAGCTGATATCTGCCAATCTTAGTGATATTGACAATTTCAATGTC
AAACCAGATAAATGTGCGATTTTAAAGGAAACAGTAAGACAGATACGTCAAATAAAAGAGCAAGGAAAAACTATT
TCCAATGATGATGATGTTCAAAAAGCCGATGTATCTTCTACAGGGCAGGGAGTTATTGATAAAGACTCCTTAGGA
CCGCTTTTACTTCAGGCATTGGATGGTTTCCTATTTGTGGTGAATCGAGACGGAAACATTGTATTTGTATCAGAA
AATGTCACACAATACCTGCAATATAAGCAAGAGGACCTGGTTAACACAAGTGTTTACAATATCTTACATGAAGAA
GACAGAAAGGATTTTCTTAAGAATTTACCAAAATCTACAGTTAATGGAGTTTCCTGGACAAATGAGACCCAAAGA
CAAAAAAGCCATACATTTAATTGCCGTATGTTGATGAAAACACCACATGATATTCTGGAAGACATAAACGCCAGT
CCTGAAATGCGCCAGAGATATGAAACAATGCAGTGCTTTGCCCTGTCTCAGCCACGAGCTATGATGGAGGAAGGG
GAAGATTTGCAATCTTGTATGATCTGTGTGGCACGCCGCATTACTACAGGAGAAAGAACATTTCCATCAAACCCT
GAGAGCTTTATTACCAGACATGATCTTTCAGGAAAGGTTGTCAATATAGATACAAATTCACTGAGATCCTCCATG
AGGCCTGGCTTTGAAGATATAATCCGAAGGTGTATTCAGAGATTTTTTAGTCTAAATGATGGGCAGTCATGGTCC
CAGAAACGTCACTATCAAGAAGTTACCAGTGATGGGATATTTTCCCCAACAGCTTATCTTAATGGCCATGCAGAA
ACCCCAGTATATCGATTCTCGTTGGCTGATGGAACTATAGTGACTGCACAGACAAAAAGCAAACTCTTCCGAAAT
CCTGTAACAAATGATCGACATGGCTTTGTCTCAACCCACTTCCTTCAGAGAGAACAGAATGGATATAGACCAAAC
CCAAATCCTGTTGGACAAGGGATTAGACCACCTATGGCTGGATGCAACAGTTCGGTAGGCGGCATGAGTATGTCG
CCAAACCAAGGCTTACAGATGCCGAGCAGCAGGGCCTATGGCTTGGCAGACCCTAGCACCACAGGGCAGATGAGT
GGAGCTAGGTATGGGGGTTCCAGTAACATAGCTTCATTGACCCCTGGGCCAGGCATGCAATCACCATCTTCCTAC
CAGAACAACAACTATAGGCTCAACATGAGTAGCCCCCCACATGGGAGTCCTGGTCTTGCCCCAAACCAGCAGAAT
ATCATGATTTCTCCTCGTAATCGTGGGAGTCCAAAGATAGCCTCACATCAGTTTTCTCCTGTTGCAGGTGTGCAC
TCTCCCATGGCATCTTCTGGCAATACTGGGAACCACAGCTTTTCCAGCAGCTCTCTCAGTGCCCTGCAAGCCATC
AGTGAAGGTGTGGGGACTTCCCTTTTATCTACTCTGTCATCACCAGGCCCCAAATTGGATAACTCTCCCAATATG
AATATTACCCAACCAAGTAAAGTAAGCAATCAGGATTCCAAGAGTCCTCTGGGCTTTTATTGCGACCAAAATCCA
GTGGAGAGTTCAATGTGTCAGTCAAATAGCAGAGATCACCTCAGTGACAAAGAAAGTAAGGAGAGCAGTGTTGAG
GGGGCAGAGAATCAAAGGGGTCCTTTGGAAAGCAAAGGTCATAAAAAATTACTGCAGTTACTTACCTGTTCTTCT
GATGACCGGGGTCATTCCTCCTTGACCAACTCCCCCCTAGATTCAAGTTGTAAAGAATCTTCTGTTAGTGTCACC
AGCCCCTCTGGAGTCTCCTCCTCTACATCTGGAGGAGTATCCTCTACATCCAATATGCATGGGTCACTGTTACAA
GAGAAGCACCGGATTTTGCACAAGTTGCTGCAGAATGGGAATTCACCAGCTGAGGTAGCCAAGATTACTGCAGAA
GCCACTGGGAAAGACACCAGCAGTATAACTTCTTGTGGGGACGGAAATGTTGTCAAGCAGGAGCAGCTAAGTCCT
AAGAAGAAGGAGAATAATGCACTTCTTAGATACCTGCTGGACAGGGATGATCCTAGTGATGCACTCTCTAAAGAA
CTACAGCCCCAAGTGGAAGGAGTGGATAATAAAATGAGTCAGTGCACCAGCTCCACCATTCCTAGCTCAAGTCAA
GAGAAAGACCCTAAAATTAAGACAGAGACAAGTGAAGAGGGATCTGGAGACTTGGATAATCTAGATGCTATTCTT
GGTGATCTGACTAGTTCTGACTTTTACAATAATTCCATATCCTCAAATGGTAGTCATCTGGGGACTAAGCAACAG
GTGTTTCAAGGAACTAATTCTCTGGGTTTGAAAAGTTCACAGTCTGTGCAGTCTATTCGTCCTCCATATAACCGA
GCAGTGTCTCTGGATAGCCCTGTTTCTGTTGGCTCAAGTCCTCCAGTAAAAAATATCAGTGCTTTCCCCATGTTA
CCAAAGCAACCCATGTTGGGTGGGAATCCAAGAATGATGGATAGTCAGGAAAATTATGGCTCAAGTATGGGAGAC
TGGGGCTTACCAAACTCAAAGGCCGGCAGAATGGAACCTATGAATTCAAACTCCATGGGAAGACCAGGAGGAGAT
TATAATACTTCTTTACCCAGACCTGCACTGGGTGGCTCTATTCCCACATTGCCTCTTCGGTCTAATAGCATACCA
GGTGCGAGACCAGTATTGCAACAGCAGCAGCAGATGCTTCAAATGAGGCCTGGTGAAATCCCCATGGGAATGGGG
GCTAATCCCTATGGCCAAGCAGCAGCATCTAACCAACTGGGTTCCTGGCCCGATGGCATGTTGTCCATGGAACAA
GTTTCTCATGGCACTCAAAATAGGCCTCTTCTTAGGAATTCCCTGGATGATCTTGTTGGGCCACCTTCCAACCTG
GAAGGCCAGAGTGACGAAAGAGCATTATTGGACCAGCTGCACACTCTTCTCAGCAACACAGATGCCACAGGCCTG
GAAGAAATTGACAGAGCTTTGGGCATTCCTGAACTTGTCAATCAGGGACAGGCATTAGAGCCCAAACAGGATGCT
TTCCAAGGCCAAGAAGCAGCAGTAATGATGGATCAGAAGGCAGGATTATATGGACAGACATACCCAGCACAGGGG
CCTCCAATGCAAGGAGGCTTTCATCTTCAGGGACAATCACCATCTTTTAACTCTATGATGAATCAGATGAACCAG

FIGURE 2148B

CAAGGCAATTTTCCTCTCCAAGGAATGCACCCACGAGCCAACATCATGAGACCCCGGACAAACACCCCCAAGCAA
CTTAGAATGCAGCTTCAGCAGAGGCTGCAGGGCCAGCAGTTTTTGAATCAGAGCCGACAGGCACTTGAATTGAAA
ATGGAAAACCCTACTGCTGGTGGTGCTGCGGTGATGAGGCCTATGATGCAGCCCCAGCAGGGTTTTCTTAATGCT
CAAATGGTCGCCCAACGCAGCAGAGAGCTGCTAAGTCATCACTTCCGACAACAGAGGGTGGCTATGATGATGCAG
CAGCAGCAACAGCAGCAGCAGCAGCAGCAGCAGCAGCAACAGCAACAGCAACAGCAACAGCAGCAACAGCAGCAA
ACCCAGGCCTTCAGCCCACCTCCTAATGTGACTGCTTCCCCCAGCATGGATGGGCTTTTGGCAGGACCCACAATG
CCACAAGCTCCTCCGCAACAGTTTCCATATCAACCAAATTATGGAATGGGACAACAACCAGATCCAGCCTTTGGT
CGAGTGTCTAGTCCTCCCAATGCAATGATGTCGTCAAGAATGGGTCCCTCCCAGAATCCCATGATGCAACACCCG
CAGGCTGCATCCATCTATCAGTCCTCAGAAATGAAGGGCTGGCCATCAGGAAATTTGGCCAGGAACAGCTCCTTT
TCCCAGCAGCAGTTTGCCCACCAGGGGAATCCTGCAGTGTATAGTATGGTGCACATGAATGGCAGCAGTGGTCAC
ATGGGACAGATGAACATGAACCCCATGCCCATGTCTGGCATGCCTATGGGTCCTGATCAGAAATACTGCTGACAT
CTCTGCACCAGGACCTCTTAAGGAAACCACTGTACAAATGACACTGCACTAGGATTATTGGGAAGGAATCATTGT
TCCAGGCATCCATCTTGGAAGAAAGGACCAGCTTTGAGCTCCATCAAGGGTATTTTAAGTGATGTCATTTGAGCA
GGACTGGATTTTAAGCCGAAGGGCAATATCTACGTGTTTTTCCCCCCTCCTTCTGCTGTGTATCATGGTGTTCAA
AACAGAAATGTTTTTTGGCATTCCACCTCCTAGGGATATAATTCTGGAGACATGGAGTGTTACTGATCATAAAAC
TTTTGTGTCACTTTTTTCTGCCTTGCTAGCCAAAATCTCTTAAATACACGTAGGTGGGCCAGAGAACATTGGAAG
AATCAAGAGAGATTAGAATATCTGGTTTCTCTAGTTGCAGTATTGGACAAAGAGCATAGTCCCAGCCTTCAGGTG
TAGTAGTTCTGTGTTGACCCTTTGTCCAGTGGAATTGGTGATTCTGAATTGTCCTTTACTAATGGTGTTGAGTTG
CTCTGTCCCTATTATTTGCCCTAGGCTTTCTCCTAATGAAGGTTTTCATTTGCCATTCATGTCCTGTAATACTTC
ACCTCCAGGAACTGTCATGGATGTCCAAATGGCTTTGCAGAAAGGAAATGAGATGACAGTATTTAATCGCAGCAG
TAGCAAACTTTTCACATGCTAATGTGCAGCTGAGTGCACTTTATTTAAAAAGAATGGATAAATGCAATATTCTTG
AGGTCTTGAGGGAATAGTGAAACACATTCCTGGTTTTTGCCTACACTTACGTGTTAGACAAGAACTATGATTTTT
TTTTTTAAAGTACTGGTGTCACCCTTTGCCTATATGGTAGAGCAATAATGCTTTTTAAAAATAAACTTCTGAAAA
CCCAAGGCCAGGTACTGCATTCTGAATCAGAATCTCGCAGTGTTTCTGTGAATAGATTTTTTTGTAAATATGACC
TTTAAGATATTGTATTATGTAAAATATGTATATACCTTTTTTTGTAGGTCACAACAACTCATTTTTACAGAGTTT
GTGAAGCTAAATATTTAACATTGTTGATTTCAGTAAGCTGTGTGGTGAGGCTACCAGTGGAAGAGACATCCCTTG
ACTTTTGTGGCCTGGGGGAGGGGTAGTGCACCACAGCTTTTCCTTCCCCACCCCCCAGCCTTAGATGCCTCGCTC
TTTTCAATCTCTTAATCTAAATGCTTTTTAAAGAGATTATTTGTTTAGATGTAGGCATTTTAATTTTTTAAAAAT
TCCTCTACCAGAACTAAGCACTTTGTTAATTTGGGGGGAAAGAATAGATATGGGGAAATAAACTTAAAAAAAAAT
CAGGAATTTAAAAAAAAACGAGCAATTTGAAGAGAATCTTTTGGATTTTAAGCAGTCCGAAATAATAGCAATTCAT
GGGCTGTGTGTGTGTGTGTATGTGTGTGTGTGTGTGTATGTTTAATTATGTTACCTTTTCATCCCCTTTAGGA
GCGTTTTCAGATTTTGGTTCGTAAGACCTGAATCCCATATTGAGATCTCGAGTAGAATCCTTGGTGTGGTTTCTG
GTGTCTGCTCAGCTGTCCCCTCATTCTACTAATGTGATGCTTTCATTATGTCCCTGTGGATTAGAATAGTGTCAG
TTATTTCTTAAGTAACTCAGTACCCAGAACAGCCAGTTTTACTGTGATTCAGAGCCACAGTCTAACTGAGCACCT
TTTAAACCCCTCCCTCTTCTGCCCCCTACCACTTTTCTGCTGTTGCCTCTCTTTGACACCTGTTTTAGTCAGTTG
GGAGGAAGGGAAAAATCAAGTTTAATTCCCTTTATCTGGGTTAATTCATTTGGTTCAAATAGTTGACGGAATTGG
GTTTCTGAATGTCTGTGAATTTCAGAGGTCTCTGCTAGCCTTGGTATCATTTTCTAGCAATAACTGAGAGCCAGT
TAATTTTAAGAATTTCACACATTTAGCCAATCTTTCTAGATGTCTCTGAAGGTAAGATCATTTAATATCTTTGAT
ATGCTTACGAGTAAGTGAATCCTGATTATTTCCAGACCCACCACCAGAGTGGATCTTATTTTCAAAGCAGTATAG
ACAATTATGAGTTTGCCCTCTTTCCCCTACCAAGTTCAAAATATATCTAAGAAAGATTGTAAATCCGAAAACTTC
CATTGTAGTGGCCTGTGCTTTTCAGATAGTATACTCTCCTGTTTGGAGACAGAGGAAGAACCAGGTCAGTCTGTC
TCTTTTTCAGCTCAATTGTATCTGACCCTTCTTTAAGTTATGTGTGTGGGGAGAAATAGAATGGTGCTCTTATGT
CGAC

FIGURE 2149

MSGLGENLDPLASDSRKRKLPCDTPGQGLTCSGEKRRREQESKYIEELAELISANLSDIDNFNVKPDKCAILKET
VRQIRQIKEQGKTISNDDDVQKADVSSTGQGVIDKDSLGPLLLQALDGFLFVVNRDGNIVFVSENVTQYLQYKQE
DLVNTSVYNILHEEDRKDFLKNLPKSTVNGVSWTNETQRQKSHTFNCRMLMKTPHDILEDINASPEMRQRYETMQ
CFALSQPRAMMEEGEDLQSCMICVARRITTGERTFPSNPESFITRHDLSGKVVNIDTNSLRSSMRPGFEDIIRRC
IQRFFSLNDGQSWSQKRHYQEVTSDGIFSPTAYLNGHAETPVYRFSLADGTIVTAQTKSKLFRNPVTNDRHGFVS
THFLQREQNGYRPNPNPVGQGIRPPMAGCNSSVGGMSMSPNQGLQMPSSRAYGLADPSTTGQMSGARYGGSSNIA
SLTPGPGMQSPSSYQNNNYRLNMSSPPHGSPGLAPNQQNIMISPRNRGSPKIASHQFSPVAGVHSPMASSGNTGN
HSFSSSSLSALQAISEGVGTSLLSTLSSPGPKLDNSPNMNITQPSKVSNQDSKSPLGFYCDQNPVESSMCQSNSR
DHLSDKESKESSVEGAENQRGPLESKGHKKLLQLLTCSSDDRGHSSLTNSPLDSSCKESSVSVTSPSGVSSSTSG
GVSSTSNMHGSLLQEKHRILHKLLQNGNSPAEVAKITAEATGKDTSSITSCGDGNVVKQEQLSPKKKENNALLRY
LLDRDDPSDALSKELQPQVEGVDNKMSQCTSSTIPSSSQEKDPKIKTETSEEGSGDLDNLDAILGDLTSSDFYNN
SISSNGSHLGTKQQVFQGTNSLGLKSSQSVQSIRPPYNRAVSLDSPVSVGSSPPVKNISAFPMLPKQPMLGGNPR
MMDSQENYGSSMGDWGLPNSKAGRMEPMNSNSMGRPGGDYNTSLPRPALGGSIPTLPLRSNSIPGARPVLQQQQQ
MLQMRPGEIPMGMGANPYGQAAASNQLGSWPDGMLSMEQVSHGTQNRPLLRNSLDDLVGPPSNLEGQSDERALLD
QLHTLLSNTDATGLEEIDRALGIPELVNQGQALEPKQDAFQGQEAAVMMDQKAGLYGQTYPAQGPPMQGGFHLQG
QSPSFNSMMNQMNQQGNFPLQGMHPRANIMRPRTNTPKQLRMQLQQRLQGQQFLNQSRQALELKMENPTAGGAAV
MRPMMQPQQGFLNAQMVAQRSRELLSHHFRQQRVAMMMQQQQQQQQQQQQQQQQQQQQQQQQQQTQAFSPPPNVT
ASPSMDGLLAGPTMPQAPPQQFPYQPNYGMGQQPDPAFGRVSSPPNAMMSSRMGPSQNPMMQHPQAASIYQSSEM
KGWPSGNLARNSSFSQQQFAHQGNPAVYSMVHMNGSSGHMGQMNMNPMPMSGMPMGPDQKYC

FIGURE 2150

GAGCGGCGGGTGCTCGGGCTGCCGTCCGCTCCGCCAGAAGCACCGAGCAGCCGAGCCGGGGCCCGCCGCCCTCCT
CCTCCATGAGGCCCGAGTGAGGCGCGGCGGCTATAGCCGACCCGCGGCGCCTTCCCCCCGCGTCCTATCGCGAGC
GCAGCGGCAGCGGCCCCTGGAGGAGGAGGCGGAGGAGGAGGAGC**ATG**TCGGACGGTTTCGATCGGGCCCCAGGTG
CTGGTCGGGGCCGGAGCCGGGGCCTGGGCCGCGGAGGGGGCGGGCCTGAGGGCGGCGGTTTCCCGAACGGAGCGG
GGCCTGCTGAGCGGGCGCGGCACCAGCCGCCGCAACCCAAAGCCCCGGGCTTCCTGCAGCCACCGCCGCTGCGCC
AGCCCAGGACGACCCCGCCGCCAGGGGCCCAGTGCGAGGTCCCCGCCAGCCCCCAGCGGCCTTCCCGGCCCGGGG
CGCTCCCAGAGCAAACGAGGCCCCTGAGAGCTCCACCTAGTTCACAGGATAAAATCCCACAGCAGAACTCGGAGT
CAGCAATGGCTAAGCCCCAGGTGGTTGTAGCTCCTGTATTAATGTCTAAGCTGTCTGTGAATGCCCCTGAATTTT
ACCCTTCAGGTTATTCTTCCAGTTACACAGAATCCTATGAGGATGGTTGTGAGGATTATCCTACTCTATCAGAAT
ATGTTCAGGATTTTTTGAATCATCTTACAGAGCAGCCTGGCAGTTTTGAAACTGAAATTGAACAGTTTGCAGAGA
CCCTGAATGGTTGTGTTACAACAGATGATGCTTTGCAAGAACTTGTGGAACTCATCTATCAACAGGCCACATCTA
TCCCAAATTTCTCTTATATGGGAGCTCGCCTGTGTAATTACCTGTCCCATCATCTGACAATTAGCCCACAGAGTG
GCAACTTCCGCCAATTGCTACTTCAAAGATGTCGGACTGAATATGAAGTTAAAGATCAAGCTGCAAAAGGGGATG
AAGTTACTCGAAAACGATTTCATGCATTTGTACTCTTTCTGGGAGAACTTTATCTTAACCTGGAGATCAAGGGAA
CAAATGGACAGGTTACAAGAGCAGATATTCTTCAGGTTGGTCTTCGAGAATTGCTGAATGCCCTGTTTTCTAATC
CTATGGATGACAATTTAATTTGTGCAGTAAAATTGTTAAAGTTGACAGGATCAGTTTTGGAAGATGCTTGGAAGG
AAAAAGGAAAGATGGATATGGAAGAAATTATTCAGAGAATTGAAAACGTTGTCCTAGATGCAAACTGCAGTAGAG
ATGTAAAACAGATGCTCTTGAAGCTTGTAGAACTCCGGTCAAGTAACTGGGGCAGAGTCCATGCAACTTCAACAT
ATAGAGAAGCAACACCAGAAAATGATCCTAACTACTTTATGAATGAACCAACATTTTATACATCTGATGGTGTTC
CTTTCACTGCAGCTGATCCAGATTACCAAGAGAAATACCAAGAATTACTTGAAAGAGAGGACTTTTTTCCAGATT
ATGAAGAAAATGGAACAGATTTATCCGGGGCTGGTGATCCATACTTGGATGATATTGATGATGAGATGGACCCAG
AGATAGAAGAAGCTTATGAAAAGTTTTGTTTGGAATCAGAGCGTAAGCGAAAACAG**TAA**AGTTAAATTTCAGCAT
ATCAGTTTTATAAAGCAGTTTAGGTATGGTGATTTAGCAGAACACAAGAGAGCAAGAAAATGTGTCACATCTATA
CCAAATTAAGGATGTTGAGTTATGTTACTAATGTATGCAACTTTAATTTTGTTTAACACTATCTGCCAAAATAAA
CTTTATTCCCTATAACTTAAAATGTGTATATATATATAATAGTTTATTATGTACAGTTAATTCTACTGTTTTGGC
TGCAATAAAATCGATTTTGAAATAAATGAAATGTTGAAAATTTTGCTAGTTGGTTAGATGCTTATCCTTTAAATT
CTACTTTTCTTGAGGGGAAAAAGTCTTCGTCTGGAAATACATATTACTGCAAAAATGTAGCATCCTTTTTTAGGT
AGGAGTATTATAGCTTTCATTTTAGTTTGACATTTAGTGTCCCAATGAATTGAATTTCAAATATGAATCATAATC
TTGAAAATCTTTAGCACTAAAGTCTTGGAATATATCAACAACTGATTTACATATGCAGATGCTATTTGATACCAA
GGGCTTTTTAAATGTCATGGGGGGGAAAAACCCAACTTGGTGAACTCCCAGCTAAACAACCAAGACTTCACTGAA
GATTTATTCCAATTCTAGAATTGTTCTTTTTTATTTTTATTTTTTCAACTGACTAACTTCATTACCTTAAAGCCT
AGAACATTATTCTGCTTTATTTATATGGCTTTCTCACTTTTATTTTGTAGCATGGGTTGCATCGACTTTTTTACT
AGAGAATTTTACTAGATATTTGTCATTCAAGTTTTCATCTGCTTTATAATTGATACACCTTGAGGGTCACTTTTC
TAATACTTTTACTATAATGTGGTACCACCTCAGCCCTAATAAATAATATTTTTACCTAATGTCAAATCTTTTTCC
AGCTAACTAAAAACTGTGTACAAAAGGATTGCTTGTAAATATGCATGTAAATAGTTCTGTTAATAACCCACTGTT
TTACATTTGGTACATCTGTGTCTGCTAATACAGTTAGCTTTCTCACTTTTCTGCTTGTTTGTTCAGTCTGAATTA
AAATTAGACTTTGAAAATAAAGCTTAAATAGTTGTTTCCTCTAAAAAAAAAAAAAAAAAGG

FIGURE 2151

MSDGFDRAPGAGRGRSRGLGRGGGGPEGGGFPNGAGPAERARHQPPQPKAPGFLQPPPLRQPRTTPPPGAQCEVP
ASPQRPSRPGALPEQTRPLRAPPSSQDKIPQQNSESAMAKPQVVVAPVLMSKLSVNAPEFYPSGYSSSYTESYED
GCEDYPTLSEYVQDFLNHLTEQPGSFETEIEQFAETLNGCVTTDDALQELVELIYQQATSIPNFSYMGARLCNYL
SHHLTISPQSGNFRQLLLQRCRTEYEVKDQAAKGDEVTRKRFHAFVLFLGELYLNLEIKGTNGQVTRADILQVGL
RELLNALFSNPMDDNLICAVKLLKLTGSVLEDAWKEKGKMDMEEIIQRIENVVLDANCSRDVKQMLLKLVELRSS
NWGRVHATSTYREATPENDPNYFMNEPTFYTSDGVPFTAADPDYQEKYQELLEREDFFPDYEENGTDLSGAGDPY
LDDIDDEMDPEIEEAYEKFCLESERKRKQ

FIGURE 2152

CAGCTTGTCCTCTATGACTTACCCAGAAGGCAACGCTTCTCTTTCTGGTCAAAATGGCTGGTAAGCAGGCCGTTT
CAGCATCAGGCAAGTGGCTGGATGGTATTCGAAAATGGTATTACAATGCTGCAGGATTCAATAAACTGGGGTTAA
TGCGAGATGATACAATATACGAGGATGAAGATGTAAAAGAAGCCATAAGAAGACTTCCTGAGAACCTTTATAATG
ACAGGATGTTTCGCATTAAGAGGGCACTGGACCTGAACTTGAAGCATCAGATCTTGCCTAAAGAGCAGTGGACCA
AATATGAAGAGGAAAATTTCTACCTTGAACCGTATCTGAAAGAGGTTATTCGGGAAAGAAAAGAAAGAGAAGAAT
GGGCAAAGAAGTAATCATGTAGTTGAAGTCTGTGGATGCAGCTGTTATGAAGATGGTTAAACTTGAAACAAACAA
TTTTAAGAATTATTTGGTCTGAAGATGTTTTACTTTAAATAAATGTCTATTGTAATGGCTGGAGTTTTTGAATTC
CAAACCTTATACTGAATAACTACTGAATCCCTTTACTGTTAAATTTTTTTCCAAACTTTCAAGATATATTTAGTT
GTGTTTAACTGCTACTTGGAGCTCAGAAGCCACTTTATCAGTTTTCCTCACTGGTTGGATAGCCTATCAGTTTAT
GGAAGGATATAACTTCCGTAAGTTACATCCTTATGGAAGCTACTGAATAAAAGAAGGGGGTATGCACCCCCTAGT
TTGCCAAGATTGAGAAATAGCCTCTTCACTGGTATGCAAACAGATTTGATTTTGCATCCTATCATTTAAAAAGAA
ATTATGTCTGCACCCCAACATAGGCATACTTAAGTAATATACATACTCCTGTGCTAACATGTATACTAGAAAACA
AAAAGATGTTAGAAAAATAAAAGTATAAAGACAAATCAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2153

MAGKQAVSASGKWLDGIRKWYYNAAGFNKLGLMRDDTIYEDEDVKEAIRRLPENLYNDRMFRIKRALDLNLKHQI
LPKEQWTKYEEENFYLEPYLKEVIRERKEREEWAKK

FIGURE 2154

GTCATCTGGCCAGCCCCCGCCCCTCCTCCCGGCGTCAGCCCGCCAGAGGCCGCGCGGGGCCCGGGCTTCGGCCGA
TCAGCCCGGGAGGCCCCGCCGCGCCCCCTTGGCCCGCGCGCCCGTGGTCACAGTGGAAGAGGCGCCCGCGCTGCG
CTGCCCGGAGGAGCCGTCGCGCGCCCGCTTCCTGTTCGGCTGGTTCCTGCCAGCTCGAGGACAAAACACGCGTGC
GCGCGGCGGGCGAGCGCGCTCGCCGCCTCAGTCGCCAGCGCCGGGCGCAGTCCGCCTTTTTCCGGAGCAGACTGG
CCGCGGTGCTAGTCGGTAGCAGCGGCCGCCGCAGCGGCTCCGCACTGGCGAACCGAGGGCAGAAAAAGGCGGGGT
TGACGGCTTTTTGGTAGGAGTGGGCTGGACCGGACGCCAGAGACAAAGGCTCCCAAGGCAAGAGGGACTGTGGCC
CTGCGTCGGCTCTGCTCGGAACTGCTGACCCCAGGAATTTACGCCCCTTCGTTTTTCTCTTCTGATTCTTCTCTT
CTCCCAAGCCCGCGTCCCCTCACGCGTGGCCTCTCTCCTTGCCGGGAGGGCCGCG**ATG**GAGGTCCCGCCCAGGCT
TTCCCATGTGCCGCCGCCATTGTTCCCCTCCGCTCCCGCTACTTTAGCCTCCCGCAGCCTCTCCCATTGGCGGCC
GCGGCCGCCGCGGCAGCTAGCCCCGCTCCTCCCTTCGCTCGCTCCCAGCTCCGCCCGGCAGGGGGCGCGCCGGGC
CCAGCGCCACGTCACCGCCCAGCAGCCCTCCCGATTGGCGGGCGGGGCGGCTATAAAGGGAGGGCGCAGGCGGCG
CCCGGATCTCTTCCGCCGCCATTTTAAATCCAGCTCCATACAACGCTCCGCCGCCGCTGCTGCCGCGACCCGGAC
TGCGCGCCAGCACCCCCCTGCCGACAGCTCCGTCACTATGGAGGATATGAACGAGTACAGCAATATAGAGGAATT
CGCAGAGGGATCCAAGATCAACGCGAGCAAGAATCAGCAGGATGACGGTAAAATGTTTATTGGAGGCTTGAGCTG
GGATACAAGCAAAAAAGATCTGACAGAGTACTTGTCTCGATTTGGGGAAGTTGTAGACTGCACAATTAAAACAGA
TCCAGTCACTGGGAGATCAAGAGGATTTGGATTTGTGCTTTTCAAAGATGCTGCTAGTGTTGATAAGGTTTTGGA
ACTGAAAGAACACAAACTGGATGGCAAATTGATAGATCCCAAAAGGGCCAAAGCTTTAAAAGGGAAAGAACCTCC
CAAAAAGGTTTTTGTGGGTGGATTGAGCCCGGATACTTCTGAAGAACAAATTAAAGAATATTTTGGAGCCTTTGG
AGAGATTGAAAATATTGAACTTCCCATGGATACAAAAACAAATGAAAGAAGAGGATTTTGTTTTATCACATATAC
TGATGAAGAGCCAGTAAAAAAATTGTTAGAAAGCAGATACCATCAAATTGGTTCTGGGAAGTGTGAAATCAAAGT
TGCACAACCCAAAGAGGTATATAGGCAGCAACAGCAACAACAAAAAGGTGGAAGAGGTGCTGCAGCTGGTGGACG
AGGTGGTACGAGGGGTCGTGGCCGAGGTCAGGGCCAAAACTGGAACCAAGGATTTAATAACTATTATGATCAAGG
ATATGGAAATTACAATAGTGCCTATGGTGGTGATCAAAACTATAGTGGCTATGGCGGATATGATTATACTGGGTA
TAACTATGGGAACTATGGATATGGACAGGGATATGCAGACTACAGTGGCCAACAGAGCACTTATGGCAAGGCATC
TCGAGGGGGTGGCAATCACCAAAACAATTACCAGCCATAC**TAA**AGGAGAACATTGGAGAAAACAGGAGGAGATGT
TAAAGTAACCCATCTTGCAGGACGACATTGAAGATTGGTCTTCTGTTGATCTAAGATGATTATTTTGTAAAAGAC
TTTCTAGTGTACAAGACACCATTGTGTCCAACTGTATATAGCTGCCAATTAGTTTTCTTTGTTTTTACTTTGTCC
TTTGCTATCTGTGTTATGACTCAATGTGGATTTGTTTATACACATTTTATTTGTATCATTTCATGTTAAACCTCA
AATAAATGCTTCCTTATGTGATTGCTTTTCTGCGTCAGGTACTACATAGCTCTGTAAAAAATGTAATTTAAAATA
AGCAATAATTAAGGCACAGTTGATTTTGTAGAGTATTGGTCCATACAGAGAAACTGTGGTCCTTTATAAATAGCC
AGCCAGCGTCACCCTCTTCTCCAATTTGTAGGTGTATTTTATGCTCTTAAGGCTTCATCTTCTCCCTGTAACTGA
GATTTCTACCACACCTTTGAACAATGTTCTTTCCCTTCTGGTTATCTGAAGACTGTCCTGAAAGGAAGACATAAG
TGTTGTGATTAGTAGAAGCTTTGTAATCATAACACAATGAGTAATTCTTGTATAAAAGTTCAGATACAAAAGGAG
CACTGTAAAACTGGTAGGAGCTATGGTTTAAGAGCATTGGAAGTAGTTACAACTCAAGGATTTTGGTAGAAAGGT
ATGAGTTTGGTCGAAAAATTAAAATAGTGGCAAAATAAGATTTAGTTGTGTTTTCTCAGAGCCGCCACAAGATTG
AACAAAATGTTTTCTGTTTGGGCATCCTGAGGAAGTTGTATTAGCTGTTAATGCTCTGTGAGTTTAGAGAAAAGT
CTTGATAGTAAATCTAGTTTTTGACACAGTGCATGAACTAAGTAGTTAAATATTTACATATTCAGAAAGGAATAG
TGGAAAAGGTATCTTGGTTATGACAAAGTCATTACAAATGTGACTAAGTCATTACAAATGTGACTGAGTCATTAC
AGTGGACCCTCTGGGTGCATTGAAAAGAATCCGTTTTATATCCAGGTTTCAGAGGACCTGGAATAATAATAAGCT
TTGGATTTTGCATTCAGTGTAGTTGGATTTTGGGACCTTGGCCTCAGTGTTATTTACTGGGATTGGCATACGTGT
TCACAGGCAGAGTAGTTGATCTCACACAACGGGTGATCTCACAAAACTGGTAAGTTTCTTATGCTCATGAGCCCT
CCCTTTTTTTTTTTAATTTGGTGCCTGCAACTTTCTTAACAATGATTCTACTTCCTGGGCTATCACATTATAATG
CTCTTGGCCTCTTTTTTGCTGCTGTTTTGCTATTCTTAAACTTAGGCCAAGTACCAATGTTGGCTGTTAGAAGGG
ATTCTGTTCATTCAACATGCAACTTTAGGGAATGGAAGTAAGTTCATTTTTAAGTTGTGTGGTCAGTAGGTGCGG
TGTCTAGGGTAGTGAATCCTGTAAGTTCAAATTTATGATTAGGTGACGAGTTGACATTGAGATTGTCCTTTTCCC
CTGATCAAAAAAATGAATAAAGCCTTTTTAAACG

FIGURE 2155

MEVPPRLSHVPPPLFPSAPATLASRSLSHWRPRPPRQLAPLLPSLAPSSARQGARRAQRHVTAQQPSRLAGGAAI
KGGRRRRPDLFRRHFKSSSIQRSAAAAAATRTARQHPPADSSVTMEDMNEYSNIEEFAEGSKINASKNQQDDGKM
FIGGLSWDTSKKDLTEYLSRFGEVVDCTIKTDPVTGRSRGFGFVLFKDAASVDKVLELKEHKLDGKLIDPKRAKA
LKGKEPPKKVFVGGLSPDTSEEQIKEYFGAFGEIENIELPMDTKTNERRGFCFITYTDEEPVKKLLESRYHQIGS
GKCEIKVAQPKEVYRQQQQQQKGGRGAAAGGRGGTRGRGRGQGQNWNQGFNNYYDQGYGNYNSAYGGDQNYSGYG
GYDYTGYNYGNYGYGQGYADYSGQQSTYGKASRGGGNHQNNYQPY

FIGURE 2156A

AGCTCCAGCCGCACTGCCCCG**ATG**GCTCCCTACCCCTGTGGCTGCCACATCCTGCTGCTGCTCTTCTGCTGCCTG
GCGGCTGCCCGGGCCAACCTGCTGAACCTGAACTGGCTTTGGTTCAATAATGAGGACACCAGCCACGCAGCTACC
ACGATCCCTGAGCCCCAGGGGCCCCTGCCTGTGCAGCCCACAGCAGATACCACCACACACGTGACCCCCCGGAAT
GGTTCCACAGAGCCAGCGACAGCCCCTGGCAGCCCTGAGCCACCCTCAGAGCTGCTGGAAGATGGCCAGGACACC
CCCACTTCTGCCGAGAGCCCGGACGCGCCAGAGGAGAACATTGCCGGTGTCGGAGCCGAGATCCTGAACGTGGCC
AAAGGCATCCGGAGCTTCGTCCAGCTGTGGAATGACACTGTCCCCACTGAGAGCTTGGCCAGGGCGGAAACCCTG
GTCCTGGAGACTCCTGTGGGCCCCCTTGCCCTCGCTGGGCCTTCCAGCACCCCCCAGGAGAATGGGACCACTCTC
TGGCCCAGCCGTGGCATTCCTAGCTCTCCGGGCGCCCACACAACCGAGGCTGGCACCTTGCCTGCACCCACCCCA
TCGCCTCCGTCCCTGGGCAGGCCCTGGGCACCACTCACGGGGCCCTCAGTGCCACCACCATCTTCAGAGCGCATC
AGCGAGGAGGTGGGGCTGCTGCAGCTCCTTGGGGACCCCCCGCCCCAGCAGGTCACCCAGACGGATGACCCCGAC
GTCGGGCTGGCCTACGTCTTTGGGCCAGATGCCAACAGTGGCCAAGTGGCCCGGTACCACTTCCCCAGCCTCTTC
TTCCGTGACTTCTCACTGCTGTTCCACATCCGGCCAGCCACAGAGGGCCCAGGGGTGCTGTTCGCCATCACGGAC
TCGGCGCAGGCCATGGTCTTGCTGGGCGTGAAGCTCTCTGGGGTGCAGGACGGGCACCAGGACATCTCCCTGCTC
TACACAGAACCTGGTGCAGGCCAGACCCACACAGCCGCCAGCTTCCGGCTCCCCGCCTTCGTCGGCCAGTGGACA
CACTTAGCCCTCAGTGTGGCAGGTGGCTTTGTGGCCCTCTACGTGGACTGTGAGGAGTTCCAGAGAATGCCGCTT
GCTCGGTCCTCACGGGGCCTGGAGCTGGAGCCTGGCGCCGGGCTCTTCGTGGCTCAGGCGGGGGGAGCGGACCCT
GACAAGTTCCAGGGGGTGATCGCTGAGCTGAAGGTGCGCAGGGACCCCCAGGTGAGCCCCATGCACTGCCTGGAC
GAGGAAGGCGATGACTCAGATGGGGCATTCGGAGACTCTGGCAGCGGGCTCGGGGACGCCCGGGAGCTTCTCAGG
GAGGAGACGGGCGCGGCCCTAAAACCCAGGCTCCCCGCGCCACCCCCCGTCACCACGCCACCCTTGGCTGGAGGC
AGCAGCACGGAAGATTCCAGAAGTGAAGAAGTCGAGGAGCAGACCACGGTGGCTTCGTTAGGAGCTCAGACACTT
CCTGGCTCAGATTCTGTCTCCACGTGGGACGGGAGTGTCCGGACCCCTGGGGGCCGCGTGAAAGAGGGCGGCCTG
AAGGGGCAGAAAGGGGAGCCAGGTGTTCCGGGCCCACCTGGCCGGGCAGGCCCCCCAGGATCCCCATGCCTACCT
GGTCCCCCGGGTCTCCCGTGCCCAGTGAGTCCCCTGGGTCCTGCAGGCCCAGCGTTGCAAACTGTCCCCGGACCA
CAAGGACCCCCAGGGCCTCCGGGGAGGGACGGCACCCCTGGAAGGGACGGCGAGCCGGGCGACCCCGGTGAAGAC
GGAAAGCCGGGCGACACCGGGCCACAAGGCTTCCCTGGGACTCCAGGGGATGTAGGTCCCAAGGGAGACAAGGGA
GACCCTGGGGGTTGGAGAGAGAGGGCCCCCAGGACCCCAAGGGCCTCCAGGGCCCCCAGGACCCTCCTTCAGACAC
GACAAGCTGACCTTCATTGACATGGAGGGATCTGGCTTTGGGGGCGATCTGGAGGCCCTGCGGGGTCCTCGAGGC
TTCCCTGGACCTCCCGGACCCCCCGGTGTCCCAGGCCTGCCCGGCGAGCCAGGCCGCTTTGGGGTGAACAGCTCC
GACGTCCCAGGACCCGCCGGCCTTCCTGGTGTGCCTGGGCGCGAGGGTCCCCCCGGGTTTCCTGGCCTCCCGGGA
CCCCCAGGCCCTCCGGGAAGAGAGGGGCCCCCAGGAAGGACTGGGCAGAAAGGCAGCCTGGGTGAAGCAGGCGCC
CCAGGACATAAGGGGAGCAAGGGAGCCCCCGGTCCTGCTGGTGCTCGTGGGGAGAGCGGCCTGGCAGGAGCCCCC
GGACCTGCTGGACCACCAGGCCCCCCTGGGCCCCCTGGGCCCCCAGGACCAGGACTCCCCGCTGGATTTGATGAC
ATGGAAGGCTCCGGGGGGCCCTTCTGGTCAACAGCCCGAAGCGCTGATGGGCCACAGGGACCTCCCGGCCTGCCG
GGACTTAAGGGGGATCCTGGCGTGCCTGGGCTGCCGGGGGCGAAGGGAGAAGTTGGAGCAGATGGAATCCCCGGG
TTCCCCGGCCTCCCTGGCAGAGAGGGCATTGCTGGGCCCCAGGGGCCAAAGGGAGACAGAGGCAGCCGGGGAGAA
AAGGGAGATCCAGGGAAGGACGGAGTCGGGCAGCCGGGCCTCCCTGGCCCCCCCGGACCCCCGGGACCTGTGGTC
TACGTGTCGGAGCAGGACGGATCCGTCCTGAGCGTGCCGGGACCTGAGGGCCGGCCGGGTTTCGCAGGCTTTCCC
GGACCTGCAGGACCCAAGGGCAACCTGGGCTCTAAGGGCGAACGAGGCTCCCCGGGACCCAAGGGTGAGAAGGGT
GAACCGGGCAGCATCTTCAGCCCCGACGGCGGTGCCCTGGGCCCTGCCCAGAAAGGAGCCAAGGGAGAGCCGGGC
TTCCGAGGACCCCCGGGTCCATACGGACGGCCGGGGTACAAGGGAGAGATTGGCTTTCCTGGACGGCCGGGTCGC
CCCGGGATGAACGGATTGAAAGGAGAGAAAGGGGAGCCGGGAGATGCCAGCCTTGGATTTGGCATGAGGGGAATG
CCCGGCCCCCCAGGACCTCCAGGGCCCCCAGGCCCTCCAGGGACTCCTGTTTACGACAGCAATGTGTTTGCTGAG
TCCAGCCGCCCCGGGCCTCCAGGATTGCCAGGGAATCAGGGCCCTCCAGGACCCAAGGGCGCCAAAGGAGAAGTG
GGCCCCCCCGGACCACCAGGGCAGTTTCCGTTTGACTTTCTTCAGTTGGAGGCTGAAATGAAGGGGGAGAAGGGA
GACCGAGGTGATGCAGGACAGAAAGGCGAAAGGGGGGAGCCCGGGGGCGGCGGTTTCTTCGGCTCCAGCCTGCCC
GGCCCCCCCGGCCCCCCAGGCCCACGTGGCTACCCTGGGATTCCAGGTCCCAAGGGAGAGAGCATCCGGGGCCAG
CCCGGCCCACCTGGACCTCAGGGACCCCCCGGCATCGGCTACGAGGGGCGCCAGGGCCCTCCCGGCCCCCCAGGC
CCCCCAGGGCCCCCTTCATTTCCTGGCCCTCACAGGCAGACTATCAGCGTTCCCGGCCCTCCGGGCCCCCCTGGG

FIGURE 2156B

CCCCCTGGGCCCCCTGGAACCATGGGCGCCTCCTCAGGGGTGAGGCTCTGGGCTACACGCCAGGCCATGCTGGGC
CAGGTGCACGAGGTTCCCGAGGGCTGGCTCATCTTCGTGGCCGAGCAGGAGGAGCTCTACGTCCGCGTGCAGAAC
GGGTTCCGGAAGGTCCAGCTGGAGGCCCGGACACCACTCCCACGAGGGACGGACAATGAAGTGGCCGCCTTGCAG
CCCCCCGTGGTGCAGCTGCACGACAGCAACCCCTACCCGCGGCGGGAGCACCCCCACCCCACCGCGCGGCCCTGG
CGGGCAGATGACATCCTGGCCAGCCCCCCTCGCCTGCCCGAGCCCCAGCCCTACCCCGGAGCCCCGCACCACAGC
TCCTACGTGCACCTGCGGCCGGCGCGACCCACAAGCCCACCCGCCCACAGCCACCGCGACTTCCAGCCGGTGCTC
CACCTGGTTGCGCTCAACAGCCCCCTGTCAGGCGGCATGCGGGGCATCCGCGGGGCCGACTTCCAGTGCTTCCAG
CAGGCGCGGGCCGTGGGGCTGGCGGGCACCTTCCGCGCCTTCCTGTCCTCGCGCCTGCAGGACCTGTACAGCATC
GTGCGCCGTGCCGACCGCGCAGCCGTGCCCATCGTCAACCTCAAGGACGAGCTGCTGTTTCCCAGCTGGGAGGCT
CTGTTCTCAGGCTCTGAGGGTCCGCTGAAGCCCGGGGCACGCATCTTCTCCTTTGACGGCAAGGACGTCCTGAGG
CACCCCACCTGGCCCCAGAAGAGCGTGTGGCATGGCTCGGACCCCAACGGGCGCAGGCTGACCGAGAGCTACTGT
GAGACGTGGCGGACGGAGGCTCCCTCGGCCACGGGCCAGGCCTCCTCGCTGCTGGGGGGCAGGCTCCTGGGGCAG
AGTGCCGCGAGCTGCCATCACGCCTACATCGTGCTCTGCATTGAGAACAGCTTCATGACTGCCTCCAAGTAGCCA
CCGCCTGGATGCGGATGGCCGGAGAGGACCGGCGGCTCGGAGGAAGCCCCCACCGTGGGCAGGGAGCGGCCGGCC
AGCCCCTGGCCCCAGGACCTGGCTGCCATACTTTCCTGTATAGTTCACGTTTCATGTAATCCTCAAGAAATAAAA
GGAAGCCAAAGAGTGTATTTTTTTAAAAGTTTAAAACAGAAGCCTGATGCTGACATTCACCTGCCCCAACTCTCC
CCTGACCTGTGAGCCCAGCTGGGTCAGGCAGGGTGCAGTATCATGCCCTGTGCAACCTCTTGGCCTGATCAGACC
ACGGCTCGATTTCTCCAGGATTTCCTGCTTTGGGAAGCCGTGCTCGCCCCAGCAGGTGCTGACTTCATCTCCCAC
CTAGCAGCACCGTTCTGTGCACAAAACCCAGACCTGTTAGCAGACAGGCCCCGTGAGGCAATGGGAGCTGAGGCC
ACACTCAGCACAAGGCCATCTGGGCTCCTCCAGGGTGTGTGCTCGCCCTGCGGTAGATGGGAGGGAGGCTCAGGT
CCCTGGGGCTAGGGGGAGCCCCTTCTGCTCAGCTCTGGGCCATTCTCCACAGCAACCCCAGGCTGAAGCAGGTTC
CCAAGCTCAGAGGCGCACTGTGACCCCCAGCTCCGGCCTGTCCTCCAACACCAAGCACAGCAGCCTGGGGCTGGC
CTCCCAAATGAGCCATGAGATGATACATCCAAAGCAGACAGCTCCACCCTGGCCGAGTCCAAGCTGGGAGATTCA
AGGGACCCATGAGTTGGGGTCTGGCAGCCTCCCATCCAGGGCCCCCATCTCATGCCCCTGGCTGGGACGTGGCTC
AGCCAGCACTTGTCCAGCTGAGCGCCAGGATGGAACACGGCCACATCAAAGAGGCTGAGGCTGGCACAGGACATG
CGGTAGCCAGCACACAGGGCAGTGAGGGAGGGCTGTCATCTGTGCACTGCCCATGGACAGGCTGGCTCCAGATGC
AGGGCAGTCATTGGCTGTCTCCTAGGAAACCCATATCCTTACCCTCCTTGGGACTGAAGGGGAACCCCGGGGTGC
CCACAGGCCGCCCTGCGGGTGAACAAAGCAGCCACGAGGTGCAACAAGGTCCTCTGTCAGTCACAGCCACCCCTG
AGATCCGGCAACATCAACCCGAGTCATTCGTTCTGTGGAGGGACAAGTGGACTCAGGGCAGCGCCAGGCTGACCA
CAGCACAGCCAACACGCACCTGCCTCAGGACTGCGACGAAACCGGTGGGGCTGGTTCTGTAATTGTGTGTGATGT
GAAGCCAATTCAGACAGGCAAATAAAAGTGACCTTTTACACTGAAAAAAAAAAAAAAAAA

FIGURE 2157

MAPYPCGCHILLLLFCCLAAARANLLNLNWLWFNNEDTSHAATTIPEPQGPLPVQPTADTTTHVTPRNGSTEPAT
APGSPEPPSELLEDGQDTPTSAESPDAPEENIAGVGAEILNVAKGIRSFVQLWNDTVPTESLARAETLVLETPVG
PLALAGPSSTPQENGTTLWPSRGIPSSPGAHTTEAGTLPAPTPSPPSLGRPWAPLTGPSVPPPSSERISEEVGLL
QLLGDPPPQQVTQTDDPDVGLAYVFGPDANSGQVARYHFPSLFFRDFSLLFHIRPATEGPGVLFAITDSAQAMVL
LGVKLSGVQDGHQDISLLYTEPGAGQTHTAASFRLPAFVGQWTHLALSVAGGFVALYVDCEEFQRMPLARSSRGL
ELEPGAGLFVAQAGGADPDKFQGVIAELKVRRDPQVSPMHCLDEEGDDSDGAFGDSGSGLGDARELLREETGAAL
KPRLPAPPPVTTPPLAGGSSTEDSRSEEVEEQTTVASLGAQTLPGSDSVSTWDGSVRTPGGRVKEGGLKGQKGEP
GVPGPPGRAGPPGSPCLPGPPGLPCPVSPLGPAGPALQTVPGPQGPPGPPGRDGTPGRDGEPGDPGEDGKPGDTG
PQGFPGTPGDVGPKGDKGDPGVGERGPPGPQGPPGPPGPSFRHDKLTFIDMEGSGFGGDLEALRGPRGFPGPPGP
PGVPGLPGEPGRFGVNSSDVPGPAGLPGVPGREGPPGFPGLPGPPGPPGREGPPGRTGQKGSLGEAGAPGHKGSK
GAPGPAGARGESGLAGAPGPAGPPGPPGPPGPPGPPGPGLPAGFDDMEGSGGPFWSTARSADGPQGPPGLPGLKGDPG
VPGLPGAKGEVGADGIPGFPGLPGREGIAGPQGPKGDRGSRGEKGDPGKDGVGQPGLPGPPGPPGPPGPVVYVSEQDG
SVLSVPGPEGRPGFAGFPGPAGPKGNLGSKGERGSPGPKGEKGEPGSIFSPDGGALGPAQKGAKGEPGFRGPPGP
YGRPGYKGEIGFPGRPGRPGMNGLKGEKGEPGDASLGFGMRGMPGPPGPPGPPGPPGPPGTPVYDSNVFAESSRPGPP
GLPGNQGPPGPKGAKGEVGPPGPPGQFPFDFLQLEAEMKGEKGDRGDAGQKGERGEPGGGGFFGSSLPGPPGPPG
PRGYPGIPGPKGESIRGQPGPPGPQGPPGIGYEGRQGPPGPPGPPGPPSFPGPHRQTISVPGPPGPPGPPGPPGT
MGASSGVRLWATRQAMLGQVHEVPEGWLIFVAEQEELYVRVQNGFRKVQLEARTPLPRGTDNEVAALQPPVVQLH
DSNPYPRREHPHPTARPWRADDILASPPRLPEPQPYPGAPHHSSYVHLRPARPTSPPAHSHRDFQPVLHLVALNS
PLSGGMRGIRGADFQCFQQARAVGLAGTFRAFLSSRLQDLYSIVRRADRAAVPIVNLKDELLFPSWEALFSGSEG
PLKPGARIFSFDGKDVLRHPTWPQKSVWHGSDPNGRRLTESYCETWRTEAPSATGQASSLLGGRLLGQSAASCHH
AYIVLCIENSFMTASK

FIGURE 2158

CGGCCCTGCGCCCCAGCCCGGCCGCGGCACCTCCGCCTCGCCGCCGCTAGGTCGGCCGGCTCCGCCCGGCTGCCG
CCTAGGATGAATATCATGGACTTCAACGTGAAGAAGCTGGCGGCCGACGCAGGCACCTTCCTCAGTCGCGCCGTG
CAGTTCACAGAAGAAAAGCTTGGCCAGGCTGAGAAGACAGAATTGGATGCTCACTTAGAGAACCTCCTTAGCAAA
GCTGAATGTACCAAAATATGGACAGAAAAAATAATGAAACAAACTGAAGTGTTATTGCAGCCAAATCCAAATGCC
AGGATAGAAGAATTTGTTTATGAGAAACTGGATAGAAAAGCTCCAAGTCGTATAAACAACCCAGAACTTTTGGGA
CAATATATGATTGATGCAGGGACTGAGTTTGGCCCAGGAACAGCTTATGGTAATGCCCTTATTAAATGTGGAGAA
ACCCAAAAAAAGAATTGGAACAGCAGACAGAGAACTGATTCAAACGTCAGCCTTAAATTTTCTTACTCCTTTAAGA
AACTTTATAGAAGGAGATTACAAAACAATTGCTAAAGAAAGGAAACTATTGCAAAATAAGAGACTGGATTTGGAT
GCTGCAAAAACGAGACTAAAAAAGGCAAAAGCTGCAGAAACTAGAAATTCATCTGAACAGGAATTAAGAATAACT
CAAAGTGAATTTGATCGTCAAGCAGAGATTACCAGACTTCTGCTAGAGGGAATCAGCAGTACACATGCCCATCAC
CTTCGCTGTCTGAATGACTTTGTAGAAGCCCAGATGACTTACTATGCACAGTGTTACCAGTATATGTTGGACCTC
CAGAAACAACTGGGAAGTTTTCCATCCAATTATCTTAGTAACAACAATCAGACTTCTGTGACACCTGTACCATCA
GTTTTACCAAATGCGATTGGTTCTTCTGCCATGGCTTCAACAAGTGGCCTAGTAATCACCTCTCCTTCCAACCTC
AGTGACCTTAAGGAGTGTAGTGGCAGCAGAAAGGCCAGGGTTCTCTATGATTATGATGCAGCAAACAGTACTGAA
TTATCACTTCTGGCAGATGAGGTGATCACTGTGTTCAGTGTTGTTGGAATGGATTCAGACTGGCTAATGGGGGAA
AGGGGAAACCAGAAGGGCAAGGTGCCAATTACCTACTTAGAACTGCTCAATTAAGTAGGTGGACTATGGAAAGGT
TGCCCATCATGACTTTGTATTTATATACAATTAACTCTAAATAAAGCAGGTTAAGTATCTTCCATGTTAATGTGT
TAAGAGACTGAAAATACCAGCCATCAGAAACTGGCCTTTCTGCCAATAAAGTTGCATGGTAAATATTTCATTACA
GAATTTATGTTAGAGCTTTCATGCCAAGAATGTTTTCTTACAAAATTCTCTTTTTATTGAGGTTTCACTAATAAG
CAGCTTCTACTTTTGAGCCTCAACTTAAAGCAGAACTGTTTTCTACTGGATTTTTCATTAACAGCAAGCTTTTTC
TTTTATGTAAAATAAATCTATTGTGAATTGAAAAAAAAATAAAAAGAGAATTTTGTAAGAA

FIGURE 2159

MNIMDFNVKKLAADAGTFLSRAVQFTEEKLGQAEKTELDAHLENLLSKAECTKIWTEKIMKQTEVLLQPNPNARI
EEFVYEKLDRKAPSRINNPELLGQYMIDAGTEFGPGTAYGNALIKCGETQKRIGTADRELIQTSALNFLTPLRNF
IEGDYKTIAKERKLLQNKRLDLDAAKTRLKKAKAAETRNSSEQELRITQSEFDRQAEITRLLLEGISSTHAHHLR
CLNDFVEAQMTYYAQCYQYMLDLQKQLGSFPSNYLSNNNQTSVTPVPSVLPNAIGSSAMASTSGLVITSPSNLSD
LKECSGSRKARVLYDYDAANSTELSLLADEVITVFSVVGMDSDWLMGERGNQKGKVPITYLELLN

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FIGURE 2160

GGCACGAGGATGACCTGGAAGTGATGCCTAAAGCTGTGGACCGCGTGGGCTCGCCTCCCTGGGACTAGGTTTCAG
CGGCCGCTGCGATGACCAAAATAAAGGCAGATCCCGAGGGGCCCGAGGCTCAGGCGGAGGCGTGTTCCGGGGAGC
GCACCTACCAGGAGCTGCTGGTCAACCAGAACCCCATCGCGCAGCCCCTGGCTTCTCGCCGCCTCACGCGGAAGC
TCTACAAATGCATCAAGAAAGCGGTGAAGCAGAAGCAGATTCGGCGCGGGGTGAAAGAGGTTCAGAAATTTGTCA
ACAAAGGAGAAAAAGGGATCATGGTTTTGGCAGGAGACACACTGCCCATTGAGGTATACTGCCATCTCCCAGTCA
TGTGTGAGGACCGAAATTTGCCCTATGTCTATATCCCCTCTAAGACGGACCTGGGTGCAGCCGCAGGCTCCAAGC
GCCCCACCTGTGTGATAATGGTCAAGCCCCATGAGGAGTACCAGGAGGCTTACGATGAGTGCCTGGAGGAGGTGC
AGTCCCTGCCCCTACCCCTATGAGGGGCTCCGGTAGCACCTGGGCACCTGCCGCTGGAAGCTATTGGGCTGGCAG
CAGGACGACTGGCTGTCCTCCTGCCCACCCACACTGACGGCATCTTCCCAGTTCCCCAAGGCACGCCTTCTTCCC
AGGCAGCTCTAACAGCCCTTTCATGAAGGTAATGCTAGTCTTCTGTCCATCAGTGCCATTTCCTGTAGAACTAAA
GGCTGTTCCAAGAATGTGGGGTGGGGAAAGTAAATGCTAAGACTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2161

MTKIKADPDGPEAQAEACSGERTYQELLVNQNPIAQPLASRRLTRKLYKCIKKAVKQKQIRRGVKEVQKFVNKGE
KGIMVLAGDTLPIEVYCHLPVMCEDRNLPYVYIPSKTDLGAAAGSKRPTCVIMVKPHEEYQEAYDECLEEVQSLP
LPL

FIGURE 2162

ACGGAAAAGCCGGGGAGGGGACTCGGTCCGGGGCCGGAGACCGACGGCAACAGCGGCTCAGGACCCACGCTGCCC
CCACCCCTCCCGAGCAGGCGCCCCCATGGCCCGACCCCGCTGATTCCTTCACTCGGCCATGCTCCCGCGGCCCCT
GCGGCTGCTTTTGGACACGAGCCCCCCCGGGGGAGTCGTACTGAGCAGCTTCCGAAGCCGGGACCCCGAAGAGGG
TGGGGGCCCAGGTGGCCTGGTCGTGGGCGGGGGGCAGGAGGAAGAGGAGGAGGAAGAAGAAGAGGCCCCTGTGTC
CGTCTGGGATGAGGAGGAGGATGGTGCCGTGTTTACCGTCACAAGCCGCCAATATCGACCTCTTGATCCCTTGGT
CCCTATGCCTCCCCCACGTTCCTCCCGACGGCTCCGAGCTGGCACTCTGGAGGCCCTGGTCAGACACCTACTGGA
TACCCGGACATCAGGGACTGATGTGAGCTTCATGTCAGCCTTCCTGGCTACCCACCGGGCCTTCACCTCCACGCC
TGCCTTGCTAGGGCTTATGGCTGACAGGCTGGAAGCCCTTGAATCTCATCCTACCGACGAACTAGAGAGGACAAC
AGAGGTAGCCATCTCTGTACTGTCAACCTGGCTGGCCTCTCACCCTGAGGATTTTGGCTCTGAGGCCAAGGGTCA
GCTTGACCGGCTTGAGAGCTTCTTACTTCAGACAGGGTATGCAGCAGGGAAGGGTGTTGGGGGGGGCAGCGCTGA
CCTCATCCGCAATCTCCGGTCCCGGGTGGACCCCCAGGCCCCCGACCTTCCTAAGCCCCTGGCCCTCCCCGGCGA
TCCCCCTGCTGACCCCACGGATGTCCTGGTGTTCCTCGCTGACCACTTGGCCGAACAGCTGACCCTGCTAGATGC
GGAACTTTTTCTCAATTTGATCCCCTCTCAGTGCCTGGGAGGCCTGTGGGGTCACAGAGACCGGCCAGGACATTC
TCACCTCTGCCCATCTGTCCGAGCTACTGTCACACAGTTTAACAAGGTGGCAGGGGCAGTGGTTAGTTCTGTCCT
GGGGGCTACTTCCACTGGAGAGGGACCTGGGGAGGTGACCATACGGCCACTCCGTCCCCCACAGAGGGCCCGGCT
CCTGGAGAAGTGGATCCGCGTGGCAGAGGAGTGCCGGCTGCTCCGAAACTTCTCTTCAGTTTATGCCGTGGTGTC
AGCCCTGCAGTCCAGCCCCATCCACAGGCTTCGGGCAGCCTGGGGGGAAGCAACCAGGGACAGCCTCAGAGTCTT
TTCCAGCCTCTGCCAGATTTTCTCCGAGGAGGATAATTATTCCCAGAGTCGGGAGCTGCTCGTGCAGGAGGTGAA
GCTGCAGTCTCCTCTGGAGCCACACTCCAAGAAGGCCCCGAGGTCTGGCTCCCGGGGTGGGGGTGTGGTCCCATA
CCTTGGCACCTTCCTGAAGGACCTTGTGATGCTGGATGCAGCCTCCAAGGATGAGTTGGAGAATGGATACATCAA
TTTTGACAAGCGGAGGAAGGAGTTTGCAGTCCTTTCTGAGTTGCGACGGCTCCAGAATGAATGTCGTGGCTATAA
CCTCCAACCTGACCATGATATCCAGAGGTGGCTACAGGGGCTCCGGCCACTGACAGAGGCTCAGAGCCATCGTGT
ATCCTGTGAGGTGGAGCCACCTGGTTCCAGTGACCCTCCTGCCCCACGGGTGCTTCGGCCAACATTGGTCATCTC
GCAGTGGACAGAGGTTTTGGGCTCTGTTGGGGTCCCTACCCCGCTTGTGTCCTGTGACCGGCCCAGTACTGGGGG
AGATGAGGCGCCTACAACTCCTGCTCCTCTGCTGACTCGGCTGGCCCAGCACATGAAGTGGCCATCTGTCTCGTC
ACTAGACTCTGCCTTGGAAAGCAGTCCATCCCTGCACAGTCCAGCTGACCCCAGCCACCTCTCCCCACCAGCCTC
CTCCCCTAGGCCTTCTCGAGGTCACCGCCGCTCAGCCTCCTGTGGCTCCCCGCTGAGTGGGGGTGCAGAAGAGGC
CTCCGGGGGGACTGGATATGGGGGAGAGGGATCTGGGCCAGGGGCCTCTGATTGCCGTATCATCCGAGTCCAGAT
GGAGTTGGGGGAAGATGGCAGTGTCTATAAGAGCATTTTGGTGACAAGCCAGGACAAGGCTCCAAGTGTCATCAG
TCGTGTCCTTAAGAAAAACAATCGTGACTCTGCAGTGGCTTCAGAGTATGAGCTGGTACAGCTGCTACCAGGGGA
GCGAGAGCTGACTATCCCAGCCTCGGCTAATGTATTCTACGCCATGGATGGAGCTTCACACGATTTCCTCCTGCG
GCAGCGGCGAAGGTCCTCTACTGCTACACCTGGCGTCACCAGTGGCCCGTCTGCCTCAGGAACTCCTCCGAGTGA
GGGAGGAGGGGGCTCCTTTCCCAGGATCAAGGCCACAGGGAGGAAGATTGCACGGGCACTGTTCTGAGGAGGAAG
CCCCGTTGGCTTACAGAAGTCATGGTGTTCATACCAGATGTGGGTAGCCATCCTGAATGGTGGCAATTATATCAC
ATTGAGACAGAAATTCAGAAAGGGAGCCAGCCACCCTGGGGCAGTGAAGTGCCACTGGTTTACCAGACAGCTGAG
AAATCCAGCCCTGTGGGAACTGGTGTCTTATAACCAAGTTGGATACCTGTGTATAGCTTCCCACCTTCCATGAGT
GCAGCACACAGGTAGTGCTGGAAAAACGCATCAGTTTCTGATTCTTGGCCATATCCTAACATGCAAGGGCCAAGC
AAAGGCTTCAAGGCTCTGAGCCCCAGGGCAGAGGGGAATGGCAAAATGTAGGTCCTCGCAGGAGCTCTTCTTCCC
ACTCTGGGGGTTTCTATCACTGTGACAACACTAAGATAATAAACCAAAACACTACCTGAAAAAAAAAA

FIGURE 2163

MLPRPLRLLLDTSPPGGVVLSSFRSRDPEEGGGPGGLVVGGGQEEEEEEEEEAPVSVWDEEEDGAVFTVTSRQYR
PLDPLVPMPPPRSSRRLRAGTLEALVRHLLDTRTSGTDVSFMSAFLATHRAFTSTPALLGLMADRLEALESHPTD
ELERTTEVAISVLSTWLASHPEDFGSEAKGQLDRLESFLLQTGYAAGKGVGGGSADLIRNLRSRVDPQAPDLPKP
LALPGDPPADPTDVLVFLADHLAEQLTLLDAELFLNLIPSQCLGGLWGHRDRPGHSHLCPSVRATVTQFNKVAGA
VVSSVLGATSTGEGPGEVTIRPLRPPQRARLLEKWIRVAEECRLLRNFSSVYAVVSALQSSPIHRLRAAWGEATR
DSLRVFSSLCQIFSEEDNYSQSRELLVQEVKLQSPLEPHSKKAPRSGSRGGGVVPYLGTFLKDLVMLDAASKDEL
ENGYINFDKRRKEFAVLSELRRLQNECRGYNLQPDHDIQRWLQGLRPLTEAQSHRVSCEVEPPGSSDPPAPRVLR
PTLVISQWTEVLGSVGVPTPLVSCDRPSTGGDEAPTTPAPLLTRLAQHMKWPSVSSLDSALESSPSLHSPADPSH
LSPPASSPRPSRGHRRSASCGSPLSGGAEEASGGTGYGGEGSGPGASDCRIIRVQMELGEDGSVYKSILVTSQDK
APSVISRVLKKNNRDSAVASEYELVQLLPGERELTIPASANVFYAMDGASHDFLLRQRRRSSTATPGVTSGPSAS
GTPPSEGGGGSFPRIKATGRKIARALF

FIGURE 2164

ACATTTGCTTCTGACACAACTGTGTTCACTAGCAACCTCAAACAGACACCATGGTGCACCTGACTCCTGAGGAGA
AGTCTGCCGTTACTGCCCTGTGGGGCAAGGTGAACGTGGATGAAGTTGGTGGTGAGGCCCTGGGCAGGCTGCTGG
TGGTCTACCCTTGGACCCAGAGGTTCTTTGAGTCCTTTGGGGATCTGTCCACTCCTGATGCTGTTATGGGCAACC
CTAAGGTGAAGGCTCATGGCAAGAAAGTGCTCGGTGCCTTTAGTGATGGCCTGGCTCACCTGGACAACCTCAAGG
GCACCTTTGCCACACTGAGTGAGCTGCACTGTGACAAGCTGCACGTGGATCCTGAGAACTTCAGGCTCCTGGGCA
ACGTGCTGGTCTGTGTGCTGGCCCATCACTTTGGCAAAGAATTCACCCCACCAGTGCAGGCTGCCTATCAGAAAG
TGGTGGCTGGTGTGGCTAATGCCCTGGCCCACAAGTATCACTAAGCTCGCTTTCTTGCTGTCCAATTTCTATTAA
AGGTTCCTTTGTTCCCTAAGTCCAACTACTAAACTGGGGGATATTATGAAGGGCCTTGAGCATCTGGATTCTGCC
TAATAAAAAACATTTATTTTCATTGC

FIGURE 2165

MVHLTPEEKSAVTALWGKVNVDEVGGEALGRLLVVYPWTQRFFESFGDLSTPDAVMGNPKVKAHGKKVLGAFSDG
LAHLDNLKGTFATLSELHCDKLHVDPENFRLLGNVLVCVLAHHFGKEFTPPVQAAYQKVVAGVANALAHKYH

FIGURE 2166

AGGTTCTCTTACATCGACCGCCTAAGAGTCGCGCTGTAAGAAGCAACAACCTCTCCTCTTCGTCTCCGCCATCAG
CTCGGCAGTCGCGAAGCAGCAACC**ATG**CGTGAGTGCATCTCCATCCACGTTGGCCAGGCTGGTGTCCAGATTGGC
AATGCCTGCTGGGAGCTCTACTGCCTGGAACACGGCATCCAGCCCGATGGCCAGATGCCAAGTGACAAGACCATT
GGGGGAGGAGATGATTCCTTCAACACCTTCTTCAGTGAGACGGGGGCTGGCAAGCATGTGCCCCGGGCAGTGTTT
GTAGACTTGGAACCCACAGTCATTGATGAAGTTCGCACTGGCACCTACCGCCAGCTCTTCCACCCTGAGCAACTT
ATCACAGGCAAAGAAGATGCTGCCAATAACTATGCCCGAGGGCACTACACCATTGGCAAGGAGATCATTGACCTC
GTGTTGGACCGAATTCGCAAGCTGGCCGACCAGTGCACGGGTCTCCAGGGCTTCTTGGTTTTCCACAGCTTTGGT
GGGGGAACTGGTTCTGGGTTCACCTCGCTGCTCATGGAACGTCTCTCAGTTGATTATGGCAAGAAGTCCAAGCTG
GAGTTCTCTATTTACCCGGCGCCCCAGGTTTCCACAGCTGTAGTTGAGCCCTACAACTCCATCCTCACCACCCAC
ACCACCCTGGAGCACTCTGATTGTGCCTTCATGGTAGACAATGAGGCCATCTATGACATCTGTCGTAGAAACCTC
GATATTGAGCGTCCAACCTATACTAACCTGAATAGGTTAATAGGTCAAATTGTGTCCTCCATCACTGCTTCCCTG
AGATTTGATGGAGCCCTGAATGTTGACCTGACAGAATTCCAGACCAACCTGGTGCCCTATCCCCGCATCCACTTC
CCTCTGGCCACATATGCCCCTGTCATCTCTGCTGAGAAAGCCTACCATGAACAGCTTTCTGTAGCAGAGATCACC
AATGCTTGCTTTGAGCCAGCCAACCAGATGGTGAAATGTGACCCTCGCCATGGTAAATACATGGCTTGCTGCCTG
TTGTACCGTGGTGACGTGGTTCCCAAAGATGTCAATGCTGCCATTGCCACCATCAAGACCAAGCGTACCATCCAG
TTTGTGGATTGGTGCCCCACTGGCTTCAAGGTTGGCATCAACTACCAGCCTCCCACTGTGGTGCCTGGTGGAGAC
CTGGCCAAGGTACAGAGAGCTGTGTGCATGCTGAGCAACACCACAGCCATTGCTGAGGCCTGGGCTCGCCTGGAC
CACAAGTTTGACCTGATGTATGCCAAACGTGCCTTTGTTCACTGGTACGTTGGGGAGGGGATGGAGGAAGGTGAG
TTTTCAGAGGCCCGTGAGGACATGGCTGCCCTTGAGAAGGATTATGAGGAGGTTGGTGTGGATTCTGTTGAAGGA
GAGGGTGAGGAAGAAGGAGAGGAATAC**TAA**AGTTAAAACGTCACAAAGGTGCTGCTTTTACAGGGAAGCTTATTC
TGTTTTAAACATTGAAAAGTTGTGGTCTGATCAGTTAATTTGTATGTAGCAGTGTATGCTCTCATATACAATTAC
TGACCTATGCTCTAAAACATGAATGCTTTGTTACAGACCCAAGCTGTCCATTTCTGTGATGGGTTTTGAATAAAG
TATTCCCTGTCTTAAAAAAAAAAAAAA

FIGURE 2167

MRECISIHVGQAGVQIGNACWELYCLEHGIQPDGQMPSDKTIGGGDDSFNTFFSETGAGKHVPRAVFVDLEPTVI
DEVRTGTYRQLFHPEQLITGKEDAANNYARGHYTIGKEIIDLVLDRIRKLADQCTGLQGFLVFHSFGGGTGSGFT
SLLMERLSVDYGKKSKLEFSIYPAPQVSTAVVEPYNSILTTHTTLEHSDCAFMVDNEAIYDICRRNLDIERPTYT
NLNRLIGQIVSSITASLRFDGALNVDLTEFQTNLVPYPRIHFPLATYAPVISAEKAYHEQLSVAEITNACFEPAN
QMVKCDPRHGKYMACCLLYRGDVVPKDVNAAIATIKTKRTIQFVDWCPTGFKVGINYQPPTVVPGGDLAKVQRAV
CMLSNTTAIAEAWARLDHKFDLMYAKRAFVHWYVGEGMEEGEFSEAREDMAALEKDYEEVGVDSVEGEGEEEGEE
Y

FIGURE 2168

ATGGCATCCGTTGCAGTTGATCCACAACCGAGTGTGGTGACTCGGGTGGTCAACCTGCCCTTGGTGAGCTCCACG
TATGACCTCATGTCCTCAGCCTATCTCAGTACAAAGGACCAGTATCCCTACCTGAAGTCTGTGTGTGAGATGGCA
GAGAACGGTGTGAAGACCATCACCTCCGTGGCCATGACCAGTGCTCTGCCCATCATCCAGAAGCTAGAGCCGCAA
ATTGCAGTTGCCAATACCTATGCCTGTAAGGGGCTAGACAGGATTGAGGAGAGACTGCCTATTCTGAATCAGCCA
TCAACTCAGATTGTTGCCAATGCCAAAGGCGCTGTGACTGGGGCAAAAGATGCTGTGACGACTACTGTGACTGGG
GCCAAGGATTCTGTGGCCAGCACGATCACAGGGGTGATGGACAAGACCAAAGGGGCAGTGACTGGCAGTGTGGAG
AAGACCAAGTCTGTGGTCAGTGGCAGCATTAACACAGTCTTGGGGAGTCGGATGATGCAGCTCGTGAGCAGTGGC
GTAGAAAATGCACTCACCAAATCAGAGCTGTTGGTAGAACAGTACCTCCCTCTCACTGAGGAAGAACTAGAAAAA
GAAGCAAAAAAAGTTGAAGGATTTGATCTGGTTCAGAAGCCAAGTTATTATGTTAGACTGGGATCCCTGTCTACC
AAGCTTCACTCCCGTGCCTACCAGCAGGCTCTCAGCAGGGTTAAAGAAGCTAAGCAAAAAAGCCAACAGACCATT
TCTCAGCTCCATTCTACTGTTCACCTGATTGAATTTGCCAGGAAGAATGTGTATAGTGCCAATCAGAAAATTCAG
GATGCTCAGGATAAGCTCTACCTCTCATGGGTAGAGTGGAAAAGGAGCATTGGATATGATGATACTGATGAGTCC
CACTGTGCTGAGCAATTTGAGTCACGTACTCTTGCAATTGCCCGCAACCTGACTCAGCAGCTCCAGACCACGTGC
CACACCCTCCTGTCCAACATCCAAGGTGTACCACAGAACATCCAAGATCAAGCCAAGCACATGGGGGTGATGGCA
GGCGACATCTACTCAGTGTTCCGCAATGCTGCCTCCTTTAAAGAAGTGTCTGACAGCCTCCTCACTTCTAGCAAG
GGGCAGCTGCAGAAAATGAAGGAATCTTTAGATGACGTGATGGATTATCTTGTTAACAACACGCCCCTCAACTGG
CTGGTAGGTCCCTTTTATCCTCAGCTGACTGAGTCTCAGAATGCTCAGGACCAAGGTGCAGAGATGGACAAGAGC
AGCCAGGAGACCCAGCGATCTGAGCATAAAACTCATTAA

FIGURE 2169

MASVAVDPQPSVVTRVVNLPLVSSTYDLMSSAYLSTKDQYPYLKSVCEMAENGVKTITSVAMTSALPIIQKLEPQ
IAVANTYACKGLDRIEERLPILNQPSTQIVANAKGAVTGAKDAVTTTVTGAKDSVASTITGVMDKTKGAVTGSVE
KTKSVVSGSINTVLGSRMMQLVSSGVENALTKSELLVEQYLPLTEEELEKEAKKVEGFDLVQKPSYYVRLGSLST
KLHSRAYQQALSRVKEAKQKSQQTISQLHSTVHLIEFARKNVYSANQKIQDAQDKLYLSWVEWKRSIGYDDTDES
HCAEQFESRTLAIARNLTQQLQTTCHTLLSNIQGVPQNIQDQAKHMGVMAGDIYSVFRNAASFKEVSDSLLTSSK
GQLQKMKESLDDVMDYLVNNTPLNWLVGPFYPQLTESQNAQDQGAEMDKSSQETQRSEHKTH

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FIGURE 2170

GGGGGGGGTCACAAGAGGCAGCGCTCTCGGGACGTCTCCACC**ATG**GCCTGGGCTCTGCTGCTCCTCACTCTCCTC
ACTCAGGACACAGGGTCCTGGGCCCAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCG
ATCACCATCTCCTGCACTGGAACCAGCACTGATGTTGGGAGTCATAGCCTTGTCTCCTGGTACCAACAGCACCCA
GGCAAAGCCCCCAAATTTCTTATTTTCGAGGGCAGTAAGCGGCCCTCAGGGGTTTCGAATCGCTTCTCTGGCTCC
AAGTCTGGCAACACGGCCTCCCTGACAATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCTGTTCA
TATGTTGGTAGTGGCACTGTGGTTTTCGGCGGAGGGACGAAGCTGACCGTCCTAGGTCAGCCCAAGGCTGCCCCC
TCGGTCACTCTGTTCCCGCCCTCCTCTGAGGAGCTTCAAGCCAACAAGGCCACACTGGTGTGTCTCATAAGTGAC
TTCTACCCGGGAGCCGTGACAGTGGCCTGGAAGGCAGATAGCAGCCCCGTCAAGGCGGGAGTGGAGACCACCACA
CCCTCCAAACAAAGCAACAACAAGTACGCGGCCAGCAGCTATCTGAGCCTGACGCCTGAGCAGTGGAAGTCCCAC
AGAAGCTACAGCTGCCAGGTCACGCATGAAGGGAGCACCGTGGAGAAGACAGTGGCCCCTACAGAATGTTCA**TAG**

GTTCTCAACCCTCACCCCCACCACGGGAGACTAGAGCTGCAGGATCCCAGGGGAGGGGTCTCTCCTCCCACCCCA
AGGCATCAAGCCCTTCTCCCTGCACTCAATAAACCCTCAATAAATATTCTCATTGTCAAGCAAAAAAAAAAAAAA
AAAAAAAAAAAAAAA

FIGURE 2171

MAWALLLLTLLTQDTGSWAQSALTQPASVSGSPGQSITISCTGTSTDVGSHSLVSWYQQHPGKAPKFLIFEGSKR
PSGVSNRFSGSKSGNTASLTISGLQAEDEADYYCCSYVGSGTVVFGGGTKLTVLGQPKAAPSVTLFPPSSEELQA
NKATLVCLISDFYPGAVTVAWKADSSPVKAGVETTTPSKQSNNKYAASSYLSLTPEQWKSHRSYSCQVTHEGSTV
EKTVAPTECS

FIGURE 2172

AGGCTGTCTGCAGAGATTTGAAAAATGGCAACAAATGAAAGTGTCAGCATCTTTAGTTCAGCATCCTTGGCTGTG
GAATATGTAGATTCACTTTTACCTGAGAATCCTCTGCAAGAACCATTTAAAAATGCTTGGAACTATATGTTGAAT
AATTATACAAAGTTCCAGATTGCAACATGGGGATCCCTTATAGTTCATGAAGCCCTTTATTTCTTATTCTGTTTA
CCTGGATTTTTATTTCAATTTATACCTTATATGAAAAAATACAAAATTCAAAAGGATAAGCCAGAGACATGGGAA
AACCAATGGAAGTGTTTCAAAGTTCTTCTCTTTAATCACTTCTGTATCCAGCTGCCTTTGATTTGTGGAACCTAT
TATTTTACAGAGTATTTCAATATTCCTTATGATTGGGAAAGAATGCCAAGATGGTATTTTCTTTTGGCAAGATGC
TTTGGTTGTGCAGTCATTGAAGATACTTGGCACTATTTTCTGCATAGACTCTTACACCACAAAAGAATATACAAG
TATATTCATAAAGTTCATCATGAGTTTCAGGCTCCATTTGGAATGGAAGCTGAATATGCACATCCTTTGGAGACT
CTAATTCTTGGAACTGGATTTTTCATTGGAATCGTGCTTTTGTGTGATCATGTAATTCTTCTTTGGGCATGGGTG
ACCATTCGTTTATTAGAAACTATTGATGTCCATAGTGGTTATGATATTCCTCTCAACCCTTTAAATCTGATCCCT
TTCTATGCTGGTTCTCGGCATCATGATTTCCACCACATGAACTTCATTGGAAACTATGCTTCAACATTTACATGG
TGGGATCGAATTTTTGGAACAGACTCTCAGTATAATGCCTATAATGAAAAGAGGAAGAAGTTTGAGAAAAAGACT
GAATAAATATCTCACGTAAACCTTCCTGAAAGATAAACGTTTTCCTGAATTCAGAAACTAGTAGCTAACATTGCT
TCTGGAGAGCAGAAATAAGCATGTCTTCTGGCTACTAAGTGATAAAAAGAACATTAACAACCTTTAATTACCTTC
CTAGTGGGAACTTTTTCTACTTTACCTACAAGTTCTATATATGTAGAAATGAATAAATATATATTTAAGTACAGT
TTTCATGAGGAAGTTTTAAAAGACCATGTTCCTAAGCTTCCAAGAAGGTTTTGGATACTAGAAGTATTAATCTAT
GGCTTTTCTCCCAGTAAAACCATAGGCCTGAAGTTCACATTGGGTCTTTAAATCTTTTAGATATATACTGGTCAT
TTCAGAAAATTCTTCATAGTGGTATTGGCCTTATATTTAACTTTTTTTTTATTTTTTTTTTGAGACAAAGCCACA
CTCTGTCTCCTTGGCTGGAGTGTGGTGGCACAGTCTCAGCTCACTGCAACCTCTGCCTCCCAGTTCAAGCAATTC
TTCTGCCTCAGCCTCCCAAGTAGCTGGGATTACAGGCACCCGCCACCACGCCCAGCTAATTTTTGTATTTTTGTA
GAGATGGGGTTTCACGATGTTGGCCAGGCTGGTCTCAAACTTCTGACCTCAAGTGATCTGCCCACCTTGGCCTCC
CAAAGTGCTGGGATTACAGGTGTAAGCCACTGCGCCCGGCCTTTTTAACTTTAAACATGTTTTAGAATTCACCTA
AAGATCAAAATATCATGGATTGAACCTCATCAATTGATAGCAGTGAGTGACTGAAGCTTCCAAATCAAGAAAAGC
CGGCACCAAGAACTTCCATTCTAATCTAGAGCTGACCAGTTTGAGCTGATTCTCTCTTTGAAGAGTCCTTCTTGA
TTGCAGTGCAGTACTGGCATTTCTGAATGGATGTAAGTGGAGTATTTTAGTCTAAAGGCTTTTCAAATTACTTGA
ATTTTTTTAAAAATTGAGGAGCTTTATTTCTATTTACCCTTCCATTTTTGTGTGAAAAAAAAAAAAAAA

FIGURE 2173

MATNESVSIFSSASLAVEYVDSLLPENPLQEPFKNAWNYMLNNYTKFQIATWGSLIVHEALYFLFCLPGFLFQFI
PYMKKYKIQKDKPETWENQWKCFKVLLFNHFCIQLPLICGTYYFTEYFNIPYDWERMPRWYFLLARCFGCAVIED
TWHYFLHRLLHHKRIYKYIHKVHHEFQAPFGMEAEYAHPLETLILGTGFFIGIVLLCDHVILLWAWVTIRLLETI
DVHSGYDIPLNPLNLIPFYAGSRHHDFHHMNFIGNYASTFTWWDRIFGTDSQYNAYNEKRKKFEKKTE

FIGURE 2174

CTCTGAGGAGAAGCAGCAGCAAACATTTGCTAGTCAGACAAGTGACAGGGA**ATG**GATTCCAAACAGCAGTGTGTA
AAGCTAAATGATGGCCACTTCATGCCTGTATTGGGATTTGGCACCTATGCACCTCCAGAGGTTCCGAGAAGTAAA
GCTTTGGAGGTCACAAAATTAGCAATAGAAGCTGGGTTCCGCCATATAGATTCTGCTCATTTATACAATAATGAG
GAGCAGGTTGGACTGGCCATCCGAAGCAAGATTGCAGATGGCAGTGTGAAGAGAGAAGACATATTCTACACTTCA
AAGCTTTGGTCCACTTTTCATCGACCAGAGTTGGTCCGACCAGCCTTGGAAAACTCACTGAAAAAAGCTCAATTG
GACTATGTTGACCTCTATCTTATTCATTCTCCAATGTCTCTAAAGCCAGGTGAGGAACTTTCACCAACAGATGAA
AATGGAAAAGTAATATTTGACATAGTGGATCTCTGTACCACCTGGGAGGCCATGGAGAAGTGTAAGGATGCAGGA
TTGGCCAAGTCCATTGGGGTGTCAAACTTCAACCGCAGGCAGCTGGAGATGATCCTCAACAAGCCAGGACTCAAG
TACAAGCCTGTCTGCAACCAGGTAGAATGTCATCCGTATTTCAACCGGAGTAAATTGCTAGATTTCTGCAAGTCG
AAAGATATTGTTCTGGTTGCCTATAGTGCTCTGGGATCTCAACGAGACAAACGATGGGTGGACCCGAACTCCCCG
GTGCTCTTGGAGGACCCAGTCCTTTGTGCCTTGGCAAAAAAGCACAAGCGAACCCCAGCCCTGATTGCCCTGCGC
TACCAGCTGCAGCGTGGGGTTGTGGTCCTGGCCAAGAGCTACAATGAGCAGCGCATCAGACAGAACGTGCAGGTT
TTTGAGTTCCAGTTGACTGCAGAGGACATGAAAGCCATAGATGGCCTAGACAGAAATCTCCACTATTTTAACAGT
GATAGTTTTGCTAGCCACCCTAATTATCCATATTCAGATGAATAT**TAA**CATGGAGAGCTTTGCCTGATGTCTACC
AGAAGCCCTGTGTGTGGATGGTGACGCAGAGGACGTCTCTATGCCGGTGACTGGACATATCACCTCTACTTAAAT
CCGTCCTGTTTAGCGACTTCAGTCAACTACAGCTGAGTCCATAGGCCAGAAAGACAATAAATTTTTATCATTTTG
AAAT

FIGURE 2175

MDSKQQCVKLNDGHFMPVLGFGTYAPPEVPRSKALEVTKLAIEAGFRHIDSAHLYNNEEQVGLAIRSKIADGSVK
REDIFYTSKLWSTFHRPELVRPALENSLKKAQLDYVDLYLIHSPMSLKPGEELSPTDENGKVIFDIVDLCTTWEA
MEKCKDAGLAKSIGVSNFNRRQLEMILNKPGLKYKPVCNQVECHPYFNRSKLLDFCKSKDIVLVAYSALGSQRDK
RWVDPNSPVLLEDPVLCALAKKHKRTPALIALRYQLQRGVVVLAKSYNEQRIRQNVQVFEFQLTAEDMKAIDGLD
RNLHYFNSDSFASHPNYPYSDEY

FIGURE 2176

GGCACGAGGGAAAGGGAGTGTTCGGGTTTCGCTGGGGCCTCGCGGCTCCAGAGCCCAGCATGGCTTCCTCGCGAG
CCTCTTCCACGCAGGCAACCAAAACTAAAGCACCCGACGACTTAGTTGCTCCGGTCGTGAAGAAACCACACATCT
ATTATGGAAGTTTGGAAGAGAAGGAGAGGGAGCGTCTGGCCAAAGGAGAGTCTGGGATTTTGGGGAAAGACGGAC
TTAAAGCAGGGATCGAAGCTGGAAATATTAATATAACCTCTGGAGAAGTGTTTGAAATTGAAGAGCATATCAGCG
AGCGACAGGCAGAAGTATTGGCTGAGTTTGAGAGAAGGAAGCGAGCCCGGCAGATCAATGTTTCCACAGATGACT
CAGAGGTCAAAGCTTGCCTTAGAGCCTTGGGGGAACCCATCACACTTTTTGGAGAGGGTCCTGCTGAAAGAAGAG
AAAGGTTAAGAAATATCCTCTCAGTTGTCGGTACTGATGCCTTGAAAAAGACCAAAAAGGATGATGAGAAGTCTA
AAAAGTCCAAAGAAGAGTATCAGCAAACCTGGTATCATGAAGGACCAAATAGCTTGAAGGTGGCAAGACTATGGA
TTGCTAATTATTCGTTGCCCAGGGCAATGAAACGCTTGGAAGAGGCCCGACTCCATAAGGAGATTCCTGAGACAA
CAAGGACCTCCCAGATGCAAGAGCTGCACAAGTCTCTCCGGTCTTTGAATAATTTTTGCAGTCAGATTGGGGATG
ATCGGCCTATCTCCTACTGTCACTTTAGTCCCAATTCCAAGATGCTGGCCACAGCTTGTTGGAGTGGGCTTTGCA
AGCTCTGGTCTGTTCCTGATTGCAACCTCCTTCACACTCTTCGAGGGCATAACACAAATGTAGGAGCAATTGTAT
TCCATCCCAAATCCACTGTCTCCTTGGACCCAAAAGATGTCAACCTGGCCTCTTGTGCGGCTGATGGCTCTGTGA
AGCTTTGGAGTCTCGACAGTGATGAACCAGTGGCAGATATTGAAGGCCATACAGTGCGTGTGGCGCGGGTAATGT
GGCATCCTTCAGGACGTTTCCTGGGCACCACCTGCTATGACCGTTCATGGCGCTTATGGGATTTGGAGGCTCAAG
AGGAGATCCTGCATCAGGAAGGCCATAGCATGGGTGTGTATGACATTGCCTTCCATCAAGATGGCTCTTTGGCTG
GCACTGGGGGACTGGATGCATTTGGTCGAGTTTGGGACCTACGCACAGGACGTTGTATCATGTTCTTAGAAGGCC
ACCTGAAAGAAATCTATGGAATAAATTTCTCCCCCAATGGCTATCACATTGCAACCGGCAGTGGTGACAACACCT
GCAAAGTGTGGGACCTCCGACAGCGGCGTTGCGTCTACACCATCCCTGCTCATCAGAACTTAGTGACTGGTGTCA
AGTTTGAGCCTATCCATGGGAACTTCTTGCTTACTGGTGCCTATGATAACACAGCCAAGATCTGGACGCACCCAG
GCTGGTCCCCGCTGAAGACTCTGGCTGGCCACGAAGGCAAAGTGATGGGCCTAGATATTTCTTCCGATGGGCAGC
TCATAGCCACTTGCTCATATGACAGGACCTTCAAGCTGTGGATGGCTGAATAGATGACAATGGGAAAAGGACTTG
AACCTCAAGCTCTCTCTAAGGAGCTGTTTTCCTCAAACGAGAAGAATTGAAGTGTTTAGTTCTATCATGTTTTCT
GCCAATTACCATGCATAGACCCTCAGTAGAATTGGATTTCCATGTCAGCCCCCACTCCAGGAAGGCAGCCCAATC
CCTAGGTGATGGGGAACCCCTCTCACGGTTGAAAATTTATTACCTTTTTACGCCCTGCCACGAACTGTGTAGACA
TTGTTTTTATTAATCTTTTGTTTGGCCGGGCGTGGTGGCTCACGCCTGTAATCCTAGCACTTTGGGAGGCCGAGG
TGGGTAGATCGCTTGAGCTCAGGAGTTCAAGACGAGCCTGGGCAACATGGCAAATGCCGTCTCTGCAAAAAAATA
CTAAAATTAGCTGGTCGCGGTGGCTTCTGCCTGTGATTCCGGCTACTTGGGAGGCTGAGGTGGGAGGGATTGCTT
AAGCCTGGGAGGCAGAGGTTGCAGTGAGCCGAGATTGCGCCATTGCACTCTAGCCTGTGTGACAGAGCAAGACCC
TGTCTCAAAAAAAAAAAAAATTTGTTCGAATGCCTTATAGCCTTCCTCACAGCACCCAGGATTGTGACTGACTCT
GCATTTTTAATTCTTGAAACTTGGCTTTCCATAACATGGTACATGCTTCAGGACTACATATGACCCAGAGAGCAA
GGTGGCTGAACTATAGTCTGGAAGCCCTCAGGTAAAGAGGCACATCTCACCACTCATTGGTTAAACAATGCATCA
TAGCGAGCACTTTTCCTTTCCCTGGAGAATGGGATGTGAAGCAGTAGACCGCAGCCACGCCGATGGTTATACAGT
GAAGAAGACTTCACCTCTTCCTATTGAGTTTGCTTGGAATGCTGACAGCATCAGGCAACTCTGAACTGAACATTT
GCTTTGTCAGAAAATATCTTTTTTTTTACTTTGAAGTTTGGCAACCTTCATGTTACCCCAAAGCAAAACCATTGT
GTCAGGAGTCAAACAAATGTTTAGAAAGCAAACATGACGTCTCTATTGTACAACCTCCTTTCTCTTGGCTGTTTA
AAGGATGTACTTCGTGTATTAAAGGGTACTTTATGTTGAAGTAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2177

MASSRASSTQATKTKAPDDLVAPVVKKPHIYYGSLEEKERERLAKGESGILGKDGLKAGIEAGNINITSGEVFEI
EEHISERQAEVLAEFERRKRARQINVSTDDSEVKACLRALGEPITLFGEGPAERRERLRNILSVVGTDALKKTKK
DDEKSKKSKEEYQQTWYHEGPNSLKVARLWIANYSLPRAMKRLEEARLHKEIPETTRTSQMQELHKSLRSLNNFC
SQIGDDRPISYCHFSPNSKMLATACWSGLCKLWSVPDCNLLHTLRGHNTNVGAIVFHPKSTVSLDPKDVNLASCA
ADGSVKLWSLDSDEPVADIEGHTVRVARVMWHPSGRFLGTTCYDRSWRLWDLEAQEEILHQEGHSMGVYDIAFHQ
DGSLAGTGGLDAFGRVWDLRTGRCIMFLEGHLKEIYGINFSPNGYHIATGSGDNTCKVWDLRQRRCVYTIPAHQN
LVTGVKFEPIHGNFLLTGAYDNTAKIWTHPGWSPLKTLAGHEGKVMGLDISSDGQLIATCSYDRTFKLWMAE

FIGURE 2178

TGGACGGTCTGAAAGGGAGTGTTCGGGTTTCGCTGGGGCCTCGCGGCTCCAGAGCCCAGCATGGCTTCCTCGCGA
GCCTCTTCCACGCAGGCAACCAAAACTAAAGCACCCGACGACTTAGTTGCTCCGGTCGTGAAGAAACCACACATC
TATTATGGAAGTTTGGAAGAGAAGGAGAGGGAGCGTCTGGCCAAAGGAGAGTCTGGGATTTTGGGGAAAGACGGA
CTTAAAGCAGGGATCGAAGCTGGAAATATTAATATAACCTCTGGAGAAGTGTTTGAAATTGAAGAGCGTATCAGC
GAGCGACAGGCAGAAGTATTGGCTGAGTTTGAGAGAAGGAAGCGAGCCCGGCAGATCAATGTTTCCACAGATGAC
TCAGAGGTCAAAGCTTGCCTTAGAGCCTTGGGGGAACCCATCACACTTTTTGGAGAGGGTCCTGCTGAAAGAAGA
GAAAGGTTAAGAAATATCCTCTCAGTTGTCGGTACTGATGCCTTGAAAAAGACCAAAAAGGATGATGAGAAGTCT
AAAAAGTCCAAAGAAGAGTATCAGCAAACCTGGTATCATGAAGGACCAAATAGCTTGAAGGTGGCAAGACTATGG
ATTGCTAATTATTCGTTGCCCAGGGCAATGAAACGCTTGGAAGAGGCCCGACTCCATAAGGAGATTCCTGAGACA
ACAAGGACCTCCCAGATGCAAGAGCTGCACAAGTCTCTCCGGTCTTTGAATAATTTTTGCAGTCAGATTGGGGAT
GATCGGCCTATCTCCTACTGTCACTTTAGTCCCAATTCCAAGATGCTGGCCACAGCTTGTTGGAGTGGGCTTTGC
AAGCTCTGGTCTGTTCCTGATTGCAACCTCCTTCACACTCTTCGAGGGCATAACACAAATGTAGGAGCAATTGTA
TTCCATCCCAAATCCACTGTCTCCTTGGACCCAAAAGATGTCAACCTGGCCTCTTGTGCGGCTGATGGCTCTGTG
AAGCTTTGGAGTCTCGACAGTGATGAACCAGTGGCAGATATTGAAGGCCATACAGTGCGTGTGGCGCGGGTAATG
TGGCATCCTTCAGGACGTTTCCTGGGCACCACCTGCTATGACCGTTCATGGCGCTTATGGGATTTGGAGGCTCAA
GAGGAGATCCTGCATCAGGAAGGCCATAGCATGGGTGTGTATGACATTGCCTTCCATCAAGATGGCTCTTTGGCT
GGCACTGGGGGACTGGATGCATTTGGTCGAGTTTGGGACCTACGCACAGGACGTTGTATCATGTTCTTAGAAGGC
CACCTGAAAGAAATCTATGGAATAAATTTCTCCCCCAATGGCTATCACATTGCAACCGGCAGTGGTGACAACACC
TGCAAAGTGTGGGACCTCCGACAGCGGCGTTGCGTCTACACCATCCCTGCTCATCAGAACTTAGTGACTGGTGTC
AAGTTTGAGCCTATCCATGGGAACTTCTTGCTTACTGGTGCCTATGATAACACAGCCAAGATCTGGACGCACCCA
GGCTGGTCCCCGCTGAAGACTCTGGCTGGCCACGAAGGCAAAGTGATGGGCCTAGATATTTCTTCCGATGGGCAG
CTCATAGCCACTTGCTCATATGACAGGACCTTCAAGCTGTGGATGGCTGAATAGATGACAATGGGAAAAGGACTT
GAACCTCAAGCTCTCTCTAAGGAGCTGTTTTCCTCAAACGAGAAGAATTGAAGTGTTTAGTTCTATCATGTTTTC
TGCCAATTACCATGCATAGACCCTCAGTAGAATTGGATTTCCATGTCAGCCCCCACTCCAGGAAGGCAGCCCAAT
CCCTAGGTGATGGGGAACCCCTCTCACGGTTGAAAATTTATTACCTTTTTACGCCCTGCCACGAACTGTGTAGAC
ATTGTTTTTATTAATCTTTTGTTTGGCCGGGCGTGGTGGCTCACGCCTGTAATCCTAGCACTTTGGGAGGCCGAG
GTGGGTAGATCGCTTGAGCTCAGGAGTTCAAGACGAGCCTGGGCAACATGGCAAATGCCGTCTCTGCAAAAAAAT
ACTAAAATTAGCTGGTCGCGGTGGCTTCTGCCTGTGATTCCGGCTACTTGGGAGGCTGAGGTGGGAGGGATTGCT
TAAGCCTGGGAGGCAGAGGTTGCAGTGAGCCGAGATTGCGCCATTGCACTCTAGCCTGTGTGACAGAGCAAGACC
CTGTCTCAAAAA

FIGURE 2179

MASSRASSTQATKTKAPDDLVAPVVKKPHIYYGSLEEKERERLAKGESGILGKDGLKAGIEAGNINITSGEVFEI
EERISERQAEVLAEFERRKRARQINVSTDDSEVKACLRALGEPITLFGEGPAERRERLRNILSVVGTDALKKTKK
DDEKSKKSKEEYQQTWYHEGPNSLKVARLWIANYSLPRAMKRLEEARLHKEIPETTRTSQMQELHKSLRSLNNFC
SQIGDDRPISYCHFSPNSKMLATACWSGLCKLWSVPDCNLLHTLRGHNTNVGAIVFHPKSTVSLDPKDVNLASCA
ADGSVKLWSLDSDEPVADIEGHTVRVARVMWHPSGRFLGTTCYDRSWRLWDLEAQEEILHQEGHSMGVYDIAFHQ
DGSLAGTGGLDAFGRVWDLRTGRCIMFLEGHLKEIYGINFSPNGYHIATGSGDNTCKVWDLRQRRCVYTIPAHQN
LVTGVKFEPIHGNFLLTGAYDNTAKIWTHPGWSPLKTLAGHEGKVMGLDISSDGQLIATCSYDRTFKLWMAE

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FIGURE 2180

GGGGGGTTAGGGCGGGGCGTGCTTCCGCGTCTAGCCGGAGAAACTTGAGCCGGCTGCCCCGCCCACGGTGCCCGA
AGCCCCAAAGGCTGGAATTAGGGGCTAGAAGTCTGGCACCCACCGCCTGGCCAGGTGTTCGGGACGCGACCAGGG
CCCCGCGGCGAGGGCATCGGCTCTCGCCGGCGGATGACGAGCTGTATCAGCGGACGCGCATCTCTCTGCTGCAAC
GCGAGGCCGCTCAGGCAATGTACATCGACAGCTACAACAGCCGCGGCTTCATGATAAACGGAAACCGCGTGCTCG
GCCCCTGCGCTCTGCTCCCGCACTCGGTGGTGCAGTGGAACGTGGGATCCCACCAGGACATCACCGAAGACAGCT
TTTCCCTCTTCTGGTTGCTGGAGCCCCGGATAGAGATCGTGGTGGTGGGGACTGGAGACCGGACCGAGAGGCTGC
AGTCCCAGGTGCTTCAAGCCATGAGGCAGCGGGGCATTGCTGTGGAAGTGCAGGACACGCCCAATGCCTGTGCCA
CCTTCAACTTCCTGTGTCATGAAGGCCGAGTAACTGGAGCTGCTCTCATCCCTCCACCAGGAGGGACTTCACATA
CATCTTTGGGCCAAGCTGCTCAA**TGA**ACCGCCAGGAACTGACCTGCTGACTGCACTCTGCCAGGCTTCCCAATGC
TTTCACTCTTATCTACCCTTTGGCACTTATCTTGCTTATCAACATAATAATTTATACACTTCTCCCAAAAAAAAA
AAAAAAAAAAA

FIGURE 2181

GVRAGRASASSRRNLSRLPRPRCPKPQRLELGARSLAPTAWPGVRDATRAPRRGHRLSPADDELYQRTRISLLQR
EAAQAMYIDSYNSRGFMINGNRVLGPCALLPHSVVQWNVGSHQDITEDSFSLFWLLEPRIEIVVVGTGDRTERLQ
SQVLQAMRQRGIAVEVQDTPNACATFNFLCHEGRVTGAALIPPPGGTSHTSLGQAAQ

FIGURE 2182A

GCGGGGACCGCGACGAGCCCGGGTCGCCGTTGGCAGCAGCAGCAGCAACACCAGCAGCAGCAGCAGCCCCGGCGG
CGGCGCGGAACCCCGAGCGCCCGGGCGCACCCCGGCTTCCCGGAGCGCGACGCGGCGGCAGCAGCCCCGGTGCGG
CCGCGCGCGCCTTAGGCTCGGCCCCGCGGCTCGGGGACCCCGACTCCCGGCCCAGCGAGCGCGTCCCCCGGCGCC
GCCCGAGAGCCCGAGGAGGCAGCGGCCGCAGAGCCCGGGGGAGGGGGGCGGCCACCGCCCGCGCCGGGCATCCTC
AGGAGCCCCAGAGCGCGGAGGGCGCGGCGCCGCCGAGCGGTGCTGGCCCCCGCGGGCTCCCCGGACCTTCCCCAC
CGCCTGGGCCCGAGGGACGCGTGATCGGGCGGGCGGCCGGGCGCAAGGGTGGGAGGGAGCCGCCCCCGCCCGCGC
CCCCTCCGCCCCTCGCCCCAAACCCCTGGGCGCCGGGCCCGGGCCGCGCGGCCTGAAGCGCCCGCG**ATG**GCGAGC
CCGCCGCGGCACGGGCCGCCCGGGCCGGCGAGCGGAGACGGCCCCAACCTCAACAACAACAACAACAACAACAAC
AACCACAGCGTGCGCAAGTGCGGCTACCTGCGCAACGAAGAGCATGGCCACAAGCGCTTCTTCGTGCTGCGCGGA
CCCGGCGCGGGCGGCGACGAGGCGACGGCGGGCGGGGGGTCGGCGCCGCAACCGCCGCGGCTCGAGTACTACGAG
AGCGAGAAAAAGTGGCGGAGCAAGGCAGGCGCGCCGAAACGGGTGATCGCTCTCGACTGCTGCCTGAACATCAAC
AAGCGCGCCGACGCCAAGCACAAGTACCTGATCGCCCTCTACACCAAGGACGAGTACTTCGCCGTGGCCGCCGAG
AACGAGCAGGAGCAGGAGGGCTGGTACCGCGCGCTCACCGACCTGGTCAGCGAGGGCCGCGCGGCCGCCGGAGAC
GCGCCCCCCGCCGCCGCGCCCGCCGCGTCCTGCAGCGCCTCCCTGCCCGGCGCCCTGGGCGGCTCTGCCGGCGCC
GCCGGGGCCGAGGACAGCTACGGGCTGGTGGCTCCCGCCACGGCCGCCTACCGTGAGGTGTGGCAGGTGAACCTG
AAGCCCAAGGGTCTGGGCCAGAGCAAGAACCTGACGGGGGTGTACCGTCTGTGCCTGTCTGCGCGCACCATCGGC
TTCGTGAAGCTCAACTGCGAGCAGCCGTCGGTGACGCTGCAGCTCATGAACATCCGCCGCTGCGGCCACTCGGAC
AGCTTCTTCTTCATCGAGGTGGGCCGCTCGGCCGTCACAGGCCCCGGCGAGCTGTGGATGCAGGCGGACGACTCG
GTGGTGGCGCAGAACATCCACGAGACCATCCTGGAGGCCATGAAGGCGCTCAAGGAGCTCTTCGAGTTCCGGCCG
CGCAGTAAGAGCCAATCGTCGGGGTCGTCGGCCACGCACCCCATCAGCGTCCCCGGCGCGCGCCGCCACCACCAC
CTGGTCAACCTGCCCCCCAGCCAGACGGGCCTGGTGCGCCGCTCGCGCACCGACAGCCTGGCCGCCACCCCGCCG
GCGGCCAAGTGCAGCTCGTGCCGGGTGCGCACCGCCAGCGAGGGCGACGGCGGCCGGGCTGCGGGAGCGGCGGCC
GCGGCGCAGAGGCTGGTGTCGGTGGCTGGGAGCCCCCTGAGCCCCGGGCCGGTGCGCGCGCCCCTGAGCCGCTCG
CACACCCTGAGCGGCGGCTGCGGCGGCCGCGGGAGCAAGGTGGCGCTGCTGCCGGCAGGGGGCGCGCTGCAACAC
AGCCGCTCCATGTCCATGCCCGTGGCGCACTCGCCGCCCGCCGCCACCAGCCCCGGCTCCCTGTCGTCCAGCAGC
GGCCACGGCTCGGGCTCCTACCCGCCGCCGCCCGGCCCGCACCCGCCTCTGCCGCATCCGCTGCACCACGGCCCC
GGCCAGCGGCCCTCCAGCGGCAGCGCCTCCGCCTCGGGCTCCCCCAGCGACCCCGGCTTCATGTCCCTGGACGAG
TACGGCTCCAGCCCAGGCGACCTGCGCGCCTTCTGCAGCCACCGAAGCAACACGCCCGAGTCCATCGCGGAGACG
CCCCCGGCCCGAGACGGCGGCGGCGGCGGTGAGTTCTACGGGTACATGACCATGGACAGGCCCCTGAGCCACTGT
GGCCGCTCCTACCGCCGGGTCTCGGGGGACGCGGCCCAGGACCTGGACCGAGGGCTGCGCAAGAGGACCTACTCC
CTGACCACGCCAGCCCGGCAGCGGCCGGTGCCCCAGCCCTCCTCTGCCTCGCTGGATGAATACACCCTGATGCGG
GCCACCTTCTCGGGCAGCGCGGGCCGCCTCTGCCCGTCCTGCCCCGCGTCCTCTCCCAAGGTGGCCTACCACCCC
TACCCAGAGGACTACGGAGACATCGAGATCGGCTCCCACAGGAGCTCCAGCAGCAACCTGGGGGCAGACGACGGC
TACATGCCCATGACGCCCGGCGCGGCCTTCGCGGGCAGTGGGAGCGGCAGCTGCAGGAGCGACGACTACATGCCC
ATGAGCCCCGCCAGCGTGTCCGCCCCCAAGCAGATCTTGCAGCCCAGGGCCGCCGCCGCCGCCGCCGCCGCCGTG
CCTTCTGCGGGGCCTGCGGGGCCAGCACCCACCTCTGCGGCGGGCAGGACATTCCCGGCGAGCGGGGGCGGCTAC
AAGGCCAGCTCGCCCGCCGAGAGCTCCCCCGAGGACAGTGGGTACATGCGCATGTGGTGCGGTTCCAAGCTGTCC
ATGGAGCATGCAGATGGCAAGCTGCTGCCCAACGGGGACTACCTCAACGTGTCCCCCAGCGACGCGGTCACCACG
GGCACCCCGCCCGACTTCTTCTCCGCAGCCCTGCACCCCGGCGGGGAGCCGCTCAGGGGCGTTCCCGGCTGCTGC
TACAGCTCCTTGCCCCGCTCCTACAAGGCCCCCTACACCTGTGGCGGGGACAGCGACCAGTACGTGCTCATGAGC
TCCCCCGTGGGGCGCATCCTGGAGGAGGAGCGTCTGGAGCCTCAGGCCACGCCAGGGCCCAGCCAGGCGGCCAGC
GCCTTCGGGGCCGGCCCCACGCAGCCCCCTCACCCTGTAGTGCCTTCGCCCGTGCGGCGTAGCGGCCGCCGGTCA
GGTTTCTTGGGCCAGCGCGGCCGGGCGGTGAGGCCCACGCGCCTGTCCCTGGAGGGGCTGCCCAGCCTGCCCAGC
ATGCACGAGTACCCACTGCCACCGGAGCCCAAGAGCCCCGGCGAGTACATCAACATCGACTTTGGCGAGCCCGGG
GCCCGCCTGTCGCCGCCCGCGCCTCCCCTGCTGGCGTCGGCGGCCTCGTCCTCCTCGCTCTTGTCCGCCAGCAGC
CCGGCCTCGTCGCTGGGCTCAGGCACCCCGGGCACCAGCAGCGACAGCCGGCAGCGGTCTCCGCTCTCCGACTAC
ATGAACCTCGACTTCAGCTCCCCCAAGTCTCCTAAGCCGGGCGCCCCGAGCGGCCACCCCGTGGGCTCCTTGGAC
GGCCTCCTGTCCCCCGAGGCCTCCTCCCCGTATCCGCCGTTGCCCCCGCGTCCGTCCGCGTCCCCGTCGTCGTCT

FIGURE 2182B

CTGCAGCCGCCGCCACCGCCGCCGGCCCCGGGGGAGCTGTACCGCCTGCCCCCCGCCTCGGCCGTTGCCACCGCC
CAGGGCCCGGGCGCCGCCTCATCGTTGTCCTCGGACACCGGGGACAATGGTGACTACACCGAGATGGCTTTTGGT
GTGGCCGCCACCCCGCCGCAACCTATCGCGGCCCCCCCCGAAGCCAGAAGCTGCCCGCGTGGCCAGCCCGACGTCG
GGCGTGAAGAGGCTGAGCCTCATGGAGCAGGTGTCGGGAGTCGAGGCCTTCCTGCAGGCCAGCCAGCCCCCGGAC
CCCCACCGCGGCGCCAAGGTCATCCGCGCAGACCCGCAGGGGGGCCGCCGCCGCCACAGTTCCGAGACCTTCTCC
TCCACCACGACGGTCACCCCCGTGTCCCCGTCCTTCGCCCACAACCCCAAGCGCCACAACTCGGCCTCCGTGGAA
AATGTCTCTCTCAGGAAAAGCAGCGAGGGCGGCGTGGGTGTCGGCCCTGGAGGGGGCGACGAGCCGCCCACCTCC
CCACGACAGTTGCAGCCGGCGCCCCCTTTGGCACCGCAGGGCCGGCCGTGGACCCCGGGTCAGCCCGGGGGCTTG
GTCGGTTGTCCTGGGAGCGGTGGATCGCCCATGCGCAGAGAGACCTCTGCCGGCTTCCAGAATGGTCTCAACTAC
ATCGCCATCGACGTGAGGGAGGAGCCCGGGCTGCCACCCCAGCCGCAGCCGCCGCCGCCGCCGCTTCCTCAGCCG
GGAGACAAGAGCTCCTGGGGCCGGACCCGAAGCCTCGGGGGTCTCATCAGCGCTGTGGGCGTCGGCAGCACCGGC
GGCGGGTGCGGGGGGCCGGGTCCCGGTGCCCTGCCCCCTGCCAACACCTACGCCAGCATTGACTTCTTGTCCCAC
CACTTGAAGGAGGCCACCATCGTGAAAGAGTGAAGATCTGTCTGGCTTTATCACCAGGATGTCACATGTCAGAGA
ATATCATTAAAAGAAGACGCTCAGCGCTGTTTCAGCCCGAAGCTGCTTGCAGTTTTCTTTTGGATCTGAGCAATG
ACTGTGTTTGGAAACATCTGTGGACTCTGATAGATGGGGCACAACAAGGCAAGGTCACCTGCCTCTTTCCCTTGT
TCCCGGATGGGCATTCATCATTGTGCTGTTTGCGTTTTGTTTTGTTTTGTTTTAACAAAATTAGCTGAAGAAGTT
ATTCTCAAGAAAATTGGATGTTTTCATTGGCCTTCTTAAATTGTGGCCAGTGTCTTTTAATTTCTTCTTCTTTTC
CTTTTGGCAAAGCAGATATAACCCTCAGCATGCTAGGAGAGTGCACCCGTACCTATGGAAGTGGTAAAATCTGGT
ATTTACTGGCTTACACTCAAAACGACCACAGTCCTACCTCAGTTCAAGGTAAAGCCGGATTTCCGTGGCGGGGGT
CCACAGGACCTCCTGTAGTAGCCCCTGCGCTGTGTGTCTGGAGCGCGTCCTCGCCTTATTTAAATGGTCCAGTAG
ACAGCTGCTTGTTGGATTCCAGTGCAGGTACCTGCGATGTTTACGTCCACACCGAGCCCAGTGTGGGACTGACAT
TTCTCAATGGAAGTGAAATTTGGGATTGGACTTTGAAGACGATTACTAAATAATAATTATTATATGTAACTGAAG
CAACCTACTTTTGAAAATCAACTGTATTGGGTAGTGGGAGGTGGGAGGGAAGGGCTTTGGGAAGGGGATGAATAT
CTCTTTTTACCTTTAACAGACTTGTTTAATCTTCTCGATGTAGATGTTTATGTAGGTACTTCACATTGCAAACGC
CTTTTATTCTATTTACAAGCTCAGATGTCTCTGCTCTCCTGAATCTTGGGCATGCCTTTCTGTAACCAAAAATCC
CTGTAGGCGTGCTAGCAATTCCAGGGTGGTCCGGGTTTGGCAGATTTGATTTTTAAAAAATGTATTATCTTTAAT
AAAAATGTTATTATGTCAACCAGTGAGGCTGCCCTGAACAAAAAAAAACAAAAAGAAAAAAAAAAAAAGGAAAGA
AAGAAACTGATAAAAAGAGGCATCCAGCCCCTATGTTATTGATGGAAAAAGAAAAAGAAGAAAAGCAATCTCGCA
GTACATGTTACTTGTCGAAAAAATTCCGGACAAGACTACCCTTGTTTTATGTTTTCAGTATTCTGAAAATACCAG
TGTGTGGCAGTTCTCGCAGATGTTACCTAAAACTGCTGAACTTGACCGGCAGAATGTTCTGCCGTTTTCTGCTCC
CTCGACACTTGATTGGAGGGCTGTCGACCTCTCCTCCCGTGGGGGCTTCCCCAGTGCCTATCTTCTCTGATAGTC
ATGGAGAGGTTACACTAATTCATTGGAGATGTAAGTTGTTGGTTTTGTTTTGTTTTGTTTTTAGAAAAATATATA
TAAATATATAATAGATATCTATCGCTATAGAATAATGCATTAATAAAATGAGGCTTTTTTAGAGGAAGACCAAAA
AATTCAATGTCTTAAAAATATATTTAATGGCAATGCAAAAGTCTTCCTGCTTCCGTGCTGAACTTTAGAACAGAG
GATTGTATTGCAAGACAAAGTTGAATGTAAAGTGATCTCCCTGAACATTTTTAAGGTTTTACTTTTCTGAAATTA
TACATCACAGCAGTGCATAGGCCATATAATGTTAGCTGGAAGGTCAATTTCAGTGTATGATATACTTTATTAAGA
TGTATAAAACATCCTGAAGTTTTTATTTAGTTTTGGGAATAGGCATCAGTGGGTGGTATTTGCTTTGTAACTCCC
CCCAGGTACGATAGGGACTGAATATGGACCCTGCTGAAAGCAGTGTATTGACGCATATTTAACTCGCCCTCTATC
CGTAGAGTAGTCATGACACTATACAGATGGTTCGTGTTCATACTGCAGCTTAAAACAAGCAAAATACACAGATGA
TAATATGCTAAATTTTCCTCTATCCTGTACATTTCACAAAAAGGCATATGCAATATTTACATTTTTAATTTAGTT
TACAGAATGGAACCAAAATGTATAAATGTTATGTTTGCTAAAACTTCACAATGTATATTGGGTCTTTGTACATTT
TGCCTGACTTACCTTAAATTTAAAATATTTTTTGCTATATAAACTTTAACAGTTATTAAACAGTGTTTTCCTTTT
GGGTACGTATTGTTTCTGGATATCAAGATGTTAAATATATTTCTTGCTATTGTGATATGACAAGAGACTTAACTT
ATCTTGCTCTGTCTTCCACTGTACACGCTGTATATAGGGGTCAATGTGATGCTGCTGGAGACGAGAATAAACTGG
ACTAGAATAGTGCATTGTATTTAGTCTGTATTGATCATGGATGCCCTCCTTAATAGCCATATGCAATAAAATAAA
GTACATTATTTATGAAATGAA

FIGURE 2183

MASPPRHGPPGPASGDGPNLNNNNNNNNNNHSVRKCGYLRNEEHGHKRFFVLRGPGAGGDEATAGGGSAPQPPRLE
YYESEKKWRSKAGAPKRVIALDCCLNINKRADAKHKYLIALYTKDEYFAVAAENEQEQEGWYRALTDLVSEGRAA
AGDAPPAAAPAASCSASLPGALGGSAGAAGAEDSYGLVAPATAAYREVWQVNLKPKGLGQSKNLTGVYRLCLSAR
TIGFVKLNCEQPSVTLQLMNIRRCGHSDSFFFIEVGRSAVTGPGELWMQADDSVVAQNIHETILEAMKALKELFE
FRPRSKSQSSGSSATHPISVPGARRHHHLVNLPPSQTGLVRRSRTDSLAATPPAAKCSSCRVRTASEGDGGRAAG
AAAAAQRLVSVAGSPLSPGPVRAPLSRSHTLSGGCGGRGSKVALLPAGGALQHSRSMSMPVAHSPPAATSPGSLS
SSSGHGSGSYPPPPGPHPPLPHPLHHGPGQRPSSGSASASGSPSDPGFMSLDEYGSSPGDLRAFCSHRSNTPESI
AETPPARDGGGGGEFYGYMTMDRPLSHCGRSYRRVSGDAAQDLDRGLRKRTYSLTTPARQRPVPQPSSASLDEYT
LMRATFSGSAGRLCPSCPASSPKVAYHPYPEDYGDIEIGSHRSSSSNLGADDGYMPMTPGAAFAGSGSGSCRSDD
YMPMSPASVSAPKQILQPRAAAAAAAAVPSAGPAGPAPTSAAGRTFPASGGGYKASSPAESSPEDSGYMRMWCGS
KLSMEHADGKLLPNGDYLNVSPSDAVTTGTPPDFFSAALHPGGEPLRGVPGCCYSSLPRSYKAPYTCGGDSDQYV
LMSSPVGRILEEERLEPQATPGPSQAASAFGAGPTQPPHPVVPSPVRRSGRRSGFLGQRGRAVRPTRLSLEGLPS
LPSMHEYPLPPEPKSPGEYINIDFGEPGARLSPPAPPLLASAASSSSLLSASSPASSLGSGTPGTSSDSRQRSPL
SDYMNLDFSSPKSPKPGAPSGHPVGSLDGLLSPEASSPYPPLPPRPSASPSSSLQPPPPPPAPGELYRLPPASAV
ATAQGPGAASSLSSDTGDNGDYTEMAFGVAATPPQPIAAPPKPEAARVASPTSGVKRLSLMEQVSGVEAFLQASQ
PPDPHRGAKVIRADPQGGRRRHSSETFSSTTTVTPVSPSFAHNPKRHNSASVENVSLRKSSEGGVGVGPGGGDEP
PTSPRQLQPAPPLAPQGRPWTPGQPGGLVGCPGSGGSPMRRETSAGFQNGLNYIAIDVREEPGLPPQPQPPPPPL
PQPGDKSSWGRTRSLGGLISAVGVGSTGGGCGGPGPGALPPANTYASIDFLSHHLKEATIVKE

FIGURE 2184

GTCAACCAGTGAGGCTGCCCTGAACAAAAAAAAACAAAAAGAAAAAAAAAAAAAAAGGAAAGAAAGAAACTGATAA
AAAGAGGCATTCCAGCCCCTATGTTATTGATGGAAAAAGAAAAAGAAGAAAAGCAATCTCGCAGTACATGTTACT
TGTGAAAAAATTCCGGACAAGACTACCCTTGTTTTATGTTTTCAGTATTCTGAAAATACCAGTGTGTGGCAGTTC
TCGCAGATGTTACCTAAAACTGCTGAACTTGACCGGCAGAATGTTCTGCCGTTTTCTGCTCCCTCGACACTTGAT
TGGAGGGCTGTCGACCTCTCCTCCCGTGGGGGCTTCCCCAGTGCCTATCTTCTCTGATAGTCATGGAGAGGTTAC
ACTAATTCATTGGAGATGTAAGTTGTTGGTTTTGTTTTGTTTTGTTTTTAGAAAAATATATATAAATATATAATA
GATATCTATCGCTATAGAATAATGCATTAATAAAATGAGGCTTTTTTAGAGGAAGACCAAAAAATTCAATGTCTT
AAAAATATATTTAATGGCAATGCAAAAGTCTTCCTGCTTCCGTGCTGAACTTTAGAACAGAGGATTGTATTGCAA
GACAAAGTTGAATGTAAAGTGATCTCCCTGAACATTTTTAAGGTTTTACTTTTCTGAAATTATACATCACAGCAG
TGCATAGGCCATATAATGTTAGCTGGAAGGTCAATTTCAGTGTATGATATACTTTATTAAGATGTATAAAACATC
CTGAAGTTTTTATTTAGTTTTGGGAATAGGCATCAATGGGTGGTATTTGCTTTGTAACTCCCCCCAGGTACGATA
GGGACTGAATATGGACCCTGCTGAAAAGCAGTGTATTGACGCATATTTAACTCGCCCTCTATCCGTAGAGTAGTC
ATGACACTATACAGATGGTTCGTGTTCATACTGCAGCTTAAAACAAGCAAAATACACAGATGATAATATGCTAAA
TTTTCCTCTATCCTGTACATTTCACAAAAAGGCATATGCAATATTTACATTTTTAATTTAGTTTACAGAATGGAA
CCAAAATGTATAAATGTTATGTTTGCTAAAACTTCACAATGTATATTGGGTCTTTGTACATTTTGCCCTGACTTA
CCTTAAATTTAAAATATTTTTTGCTATATAAACTTTAACAGTTATTAAACAGTGTTTTCTTTTTGGGTACGTATT
GTTTCTGGATATCAAGATGTTAAATATATTTCTTGCTATTGTGATATGACAAGAGACTTAACTTATCTTGCTCTG
TCTTCCACTGTACACGCTGTATATAGGGGTCAATGTGATGCTGCTGGAGACGAGAATAAACTGGACTAGAATAGT
GCATTGTATTTAGTCTGTATTGATCATGGATGCCCTCCTTAATAGCCATATGCAATAAAATAAAGTACATTATTT
ATGAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2185A

GGGTGATTCAGCGCCCGGCGAGGCGGAACGGGCCGCAAGAGGAGGAGGGGAGAGCCCGTCCGCGCCTGGGCTCCC
GGGGTGGCACGAGCCCGCGGCCGGAGTGCGAGGCGGAGGCGAGGAGGCCGCGGGGACGGGAGGCGAGGCCGGCCG
GGCCCCCGAAGCC**ATG**GAGAACGCGCACACCAAGACGGTGGAGGAGGTGCTGGGCCACTTCGGCGTCAACGAGAG
TACGGGGCTGAGCCTGGAACAGGTCAAGAAGCTTAAGGAGAGATGGGGCTCCAACGAGTTACCGGCTGAAGAAGG
AAAAACCTTGCTGGAACTTGTGATTGAGCAGTTTGAAGACTTGCTAGTTAGGATTTTATTACTGGCAGCATGTAT
ATCTTTTGTTTTGGCTTGGTTTGAAGAAGGTGAAGAAACAATTACAGCCTTTGTAGAACCTTTTGTAATTTTACT
CATATTAGTAGCCAATGCAATTGTGGGTGTATGGCAGGAAAGAAATGCTGAAAATGCCATCGAAGCCCTTAAGGA
ATATGAGCCTGAAATGGGCAAAGTGTATCGACAGGACAGAAAGAGTGTGCAGCGGATTAAAGCTAAAGACATAGT
TCCTGGTGATATTGTAGAAATTGCTGTTGGTGACAAAGTTCCTGCTGATATAAGGTTAACTTCCATCAAATCTAC
CACACTAAGAGTTGACCAGTCAATTCTCACAGGTGAATCTGTCTCTGTCATCAAGCACACTGATCCCGTCCCTGA
CCCACGAGCTGTCAACCAAGATAAAAAGAACATGCTGTTTTCTGGTACAAACATTGCTGCTGGGAAAGCTATGGG
AGTGGTGGTAGCAACTGGAGTTAACACCGAAATTGGCAAGATCCGGGATGAAATGGTGGCAACAGAACAGGAGAG
AACACCCCTTCAGCAAAAACTAGATGAATTTGGGGAACAGCTTTCCAAAGTCATCTCCCTTATTTGCATTGCAGT
CTGGATCATAAATATTGGGCACTTCAATGACCCGGTTCATGGAGGGTCCTGGATCAGAGGTGCTATTTACTACTT
TAAAATTGCAGTGGCCCTGGCTGTAGCAGCCATTCCTGAAGGTCTGCCTGCAGTCATCACCACCTGCCTGGCTCT
TGGAACTCGCAGAATGGCAAAGAAAAATGCCATTGTTCGAAGCCTCCCGTCTGTGGAAACCCTTGGTTGTACTTC
TGTTATCTGCTCAGACAAGACTGGTACACTTACAACAAACCAGATGTCAGTCTGCAGGATGTTCATTCTGGACAG
AGTGGAAGGTGATACTTGTTCCCTTAATGAGTTTACCATAACTGGATCAACTTATGCACCTATTGGAGAAGTGCA
TAAAGATGATAAACCAGTGAATTGTCACCAGTATGATGGTCTGGTAGAATTAGCAACAATTTGTGCTCTTTGTAA
TGACTCTGCTTTGGATTACAATGAGGCAAAGGGTGTGTATGAAAAAGTTGGAGAAGCTACAGAGACTGCTCTCAC
TTGCCTAGTAGAGAAGATGAATGTATTTGATACCGAATTGAAGGGTCTTTCTAAAATAGAACGTGCAAATGCCTG
CAACTCAGTCATTAAACAGCTGATGAAAAAGGAATTCACTCTAGAGTTTTCACGTGACAGAAAGTCAATGTCGGT
TTACTGTACACCAAATAAACCAAGCAGGACATCAATGAGCAAGATGTTTGTGAAGGGTGCTCCTGAAGGTGTCAT
TGACAGGTGCACCCACATTCGAGTTGGAAGTACTAAGGTTCCTATGACCTCTGGAGTCAAACAGAAGATCATGTC
TGTCATTCGAGAGTGGGGTAGTGGCAGCGACACACTGCGATGCCTGGCCCTGGCCACTCATGACAACCCACTGAG
AAGAGAAGAAATGCACCTTGAGGACTCTGCCAACTTTATTAAATATGAGACCAATCTGACCTTCGTTGGCTGCGT
GGGCATGCTGGATCCTCCGAGAATCGAGGTGGCCTCCTCCGTGAAGCTGTGCCGGCAAGCAGGCATCCGGGTCAT
CATGATCACTGGGGACAACAAGGGCACTGCTGTGGCCATCTGTCGCCGCATCGGCATCTTCGGGCAGGATGAGGA
CGTGACGTCAAAAGCTTTCACAGGCCGGGAGTTTGATGAACTCAACCCCTCCGCCCAGCGAGACGCCTGCCTGAA
CGCCCGCTGTTTTGCTCGAGTTGAACCCTCCCACAAGTCTAAAATCGTAGAATTTCTTCAGTCTTTTGATGAGAT
TACAGCTATGACTGGCGATGGCGTGAACGATGCTCCTGCTCTGAAGAAAGCCGAGATTGGCATTGCTATGGGCTC
TGGCACTGCGGTGGCTAAAACCGCCTCTGAGATGGTCCTGGCGGATGACAACTTCTCCACCATTGTGGCTGCCGT
TGAGGAGGGGCGGGCAATCTACAACAACATGAAACAGTTCATCCGCTACCTCATCTCGTCCAACGTCGGGGAAGT
TGTCTGTATTTTCCTGACAGCAGCCCTTGGATTTCCCGAGGCTTTGATTCCTGTTCAGCTGCTCTGGGTCAATCT
GGTGACAGATGGCCTGCCTGCCACTGCACTGGGGTTCAACCCTCCTGATCTGGACATCATGAATAAACCTCCCCG
GAACCCAAAGGAACCATTGATCAGCGGGTGGCTCTTTTTCCGTTACTTGGCTATTGGCTGTTACGTCGGCGCTGC
TACCGTGGGTGCTGCTGCATGGTGGTTCATTGCTGCTGACGGTGGTCCAAGAGTGTCCTTCTACCAGCTGAGTCA
TTTCCTACAGTGTAAAGAGGACAACCCGGACTTTGAAGGCGTGGATTGTGCAATCTTTGAATCCCCATACCCGAT
GACAATGGCGCTCTCTGTTCTAGTAACTATAGAAATGTGTAACGCCCTCAACAGCTTGTCCGAAAACCAGTCCTT
GCTGAGGATGCCCCCCTGGGAGAACATCTGGCTCGTGGGCTCCATCTGCCTGTCCATGTCACTCCACTTCCTGAT
CCTCTATGTCGAACCCTTGCCACTCATCTTCCAGATCACACCGCTGAACGTGACCCAGTGGCTGATGGTGCTGAA
AATCTCCTTGCCCGTGATTCTCATGGATGAGACGCTCAAGTTTGTGGCCCGCAACTACCTGGAACCTGGTAAAGA
GTGTGTGCAGCCTGCCACCAAATCCTGCTCGTTCTCGGCATGCACCGATGGGATTTCCTGGCCGTTTGTGCTGCT
CATAATGCCCCTGGTGATCTGGGTCTATAGCACAGACACTAACTTTAGCGATATGTTCTGGTCT**TGA**CTGACAGT
TTTCCATAAAGAAGATGTTTAACTTAATCAATTAATTTTTTTATTGTTTAAAGCAACTGTCTATTTCTGCTGAAT
TTTCACATGAACATACTGGCTGGTGATGGAGGTTTCATACTCTAGATTTTGTTTTGCTTTTTCTGACTCCAGTGG
GGCAAGATTTTCCTTTTTTATACACATAATTAAAGTGTCCATTGACATGTACAGAGAACTAACACTATTTTATGC
AAATATTTTTTTGTAGATGAAAAAGCATGTACAGTGTTCTGTTTAATACTCATCCTTGTATAAAAAAAATAGTTG

FIGURE 2185B

AGCCAGCAGACATTGTCAGCAAATTAATTGGCAGCAGATTTTAGGAAATGAATGTGTGTGGTTTTTTTTCTAAAA
CTAAATAGCATGTATTGTGTCTTTTGCATGATGATCCGGATTTAATTTGATATCACAGTCTAATTTTTATTCATA
AGCCAATTTTTCTGCACTGAGCAGAGTCTTGCTACCTCAGTCAGTATTGTTTTGGTTTGCTACTTCCCTCACCCA
CTTTGGCCTCCGTTCACCCCACCCCACCCCACCTCTCCCCACCTTACCCCCGCCCCGCTTGGCTTCTTCTTTAGG
ATTGTGATGGTTCGTTCTGTTTACATCAGTTTTAACGAGAGGTATGCCTGTACTCGCTTGTGCAGAAAACATTGT
TCCAGATTCAATCGACTGGGTTTATGTCCCTTCACATAGTTTTTAAGGTTATTTATTTAAATGTCTAATGTATTT
TATTGTAACAGACATTGTTTTGCCAACATTGCCTATTTCAGTGGCACGTCATCTAGTTTTAAAAAAATAAAACAT
TTTAAAAAG

FIGURE 2186

MENAHTKTVEEVLGHFGVNESTGLSLEQVKKLKERWGSNELPAEEGKTLLELVIEQFEDLLVRILLLAACISFVL
AWFEEGEETITAFVEPFVILLILVANAIVGVWQERNAENAIEALKEYEPEMGKVYRQDRKSVQRIKAKDIVPGDI
VEIAVGDKVPADIRLTSIKSTTLRVDQSILTGESVSVIKHTDPVPDPRAVNQDKKNMLFSGTNIAAGKAMGVVVA
TGVNTEIGKIRDEMVATEQERTPLQQKLDEFGEQLSKVISLICIAVWIINIGHFNDPVHGGSWIRGAIYYFKIAV
ALAVAAIPEGLPAVITTCLALGTRRMAKKNAIVRSLPSVETLGCTSVICSDKTGTLTTNQMSVCRMFILDRVEGD
TCSLNEFTITGSTYAPIGEVHKDDKPVNCHQYDGLVELATICALCNDSALDYNEAKGVYEKVGEATETALTCLVE
KMNVFDTELKGLSKIERANACNSVIKQLMKKEFTLEFSRDRKSMSVYCTPNKPSRTSMSKMFVKGAPEGVIDRCT
HIRVGSTKVPMTSGVKQKIMSVIREWGSGSDTLRCLALATHDNPLRREEMHLEDSANFIKYETNLTFVGCVGMLD
PPRIEVASSVKLCRQAGIRVIMITGDNKGTAVAICRRIGIFGQDEDVTSKAFTGREFDELNPSAQRDACLNARCF
ARVEPSHKSKIVEFLQSFDEITAMTGDGVNDAPALKKAEIGIAMGSGTAVAKTASEMVLADDNFSTIVAAVEEGR
AIYNNMKQFIRYLISSNVGEVVCIFLTAALGFPEALIPVQLLWVNLVTDGLPATALGFNPPDLDIMNKPPRNPKE
PLISGWLFFRYLAIGCYVGAATVGAAAWWFIAADGGPRVSFYQLSHFLQCKEDNPDFEGVDCAIFESPYPMTMAL
SVLVTIEMCNALNSLSENQSLLRMPPWENIWLVGSICLSMSLHFLILYVEPLPLIFQITPLNVTQWLMVLKISLP
VILMDETLKFVARNYLEPGKECVQPATKSCSFSACTDGISWPFVLLIMPLVIWVYSTDTNFSDMFWS

FIGURE 2187

AACCGCATCTGCAGCGAGCAACTGAGAAGCCAAGACTGAGCCGGCGGCCGCGGCGCAGCGAACGAGCAGTGACCG
TGCTCCTACCCAGCTCTGCTTCACAGCGCCCACCTGTCTCCGCCCCTCGGCCCCTCGCCCGGCTTTGCCTAACCG
CCACGATGATGTTCTCGGGCTTCAACGCAGACTACGAGGCGTCATCCTCCCGCTGCAGCAGCGCGTCCCCGGCCG
GGGATAGCCTCTCTTACTACCACTCACCCGCAGACTCCTTCTCCAGCATGGGCTCGCCTGTCAACGCGCAGGACT
TCTGCACGGACCTGGCCGTCTCCAGTGCCAACTTCATTCCCACGGTCACTGCCATCTCGACCAGTCCGGACCTGC
AGTGGCTGGTGCAGCCCGCCCTCGTCTCCTCTGTGGCCCCATCGCAGACCAGAGCCCCTCACCCTTTCGGAGTCC
CCGCCCCCTCCGCTGGGGCTTACTCCAGGGCTGGCGTTGTGAAGACCATGACAGGAGGCCGAGCGCAGAGCATTG
GCAGGAGGGGCAAGGTGGAACAGTTATCTCCAGAAGAAGAAGAGAAAAGGAGAATCCGAAGGGAAAGGAATAAGA
TGGCTGCAGCCAAATGCCGCAACCGGAGGAGGGAGCTGACTGATACACTCCAAGCGGAGACAGACCAACTAGAAG
ATGAGAAGTCTGCTTTGCAGACCGAGATTGCCAACCTGCTGAAGGAGAAGGAAAAACTAGAGTTCATCCTGGCAG
CTCACCGACCTGCCTGCAAGATCCCTGATGACCTGGGCTTCCCAGAAGAGATGTCTGTGGCTTCCCTTGATCTGA
CTGGGGGCCTGCCAGAGGTTGCCACCCCGGAGTCTGAGGAGGCCTTCACCCTGCCTCTCCTCAATGACCCTGAGC
CCAAGCCCTCAGTGGAACCTGTCAAGAGCATCAGCAGCATGGAGCTGAAGACCGAGCCCTTTGATGACTTCCTGT
TCCCAGCATCATCCAGGCCCAGTGGCTCTGAGACAGCCCGCTCCGTGCCAGACATGGACCTATCTGGGTCCTTCT
ATGCAGCAGACTGGGAGCCTCTGCACAGTGGCTCCCTGGGGATGGGGCCCATGGCCACAGAGCTGGAGCCCCTGT
GCACTCCGGTGGTCACCTGTACTCCCAGCTGCACTGCTTACACGTCTTCCTTCGTCTTCACCTACCCCGAGGCTG
ACTCCTTCCCCAGCTGTGCAGCTGCCCACCGCAAGGGCAGCAGCAGCAATGAGCCTTCCTCTGACTCGCTCAGCT
CACCCACGCTGCTGGCCCTGTGAGGGGGCAGGGAAGGGGAGGCAGCCGGCACCCACAAGTGCCACTGCCCGAGCT
GGTGCATTACAGAGAGGAGAAACACATCTTCCCTAGAGGGTTCCTGTAGACCTAGGGAGGACCTTATCTGTGCGT
GAAACACACCAGGCTGTGGGCCTCAAGGACTTGAAAGCATCCATGTGTGGACTCAAGTCCTTACCTCTTCCGGAG
ATGTAGCAAAACGCATGGAGTGTGTATTGTTCCCAGTGACACTTCAGAGAGCTGGTAGTTAGTAGCATGTTGAGC
CAGGCCTGGGTCTGTGTCTCTTTTCTCTTTCTCCTTAGTCTTCTCATAGCATTAACTAATCTATTGGGTTCATTA
TTGGAATTAACCTGGTGCTGGATATTTTCAAATTGTATCTAGTGCAGCTGATTTTAACAATAACTACTGTGTTCC
TGGCAATAGTGTGTTCTGATTAGAAATGACCAATATTATACTAAGAAAAGATACGACTTTATTTTCTGGTAGATA
GAAATAAATAGCTATATCCATGTACTGTAGTTTTTCTTCAACATCAATGTTCATTGTAATGTTACTGATCATGCA
TTGTTGAGGTGGTCTGAATGTTCTGACATTAACAGTTTTCCATGAAAACGTTTTATTGTGTTTTTAATTTATTTA
TTAAGATGGATTCTCAGATATTTATATTTTTATTTTATTTTTTTCTACCTTGAGGTCTTTTGACATGTGGAAAGT
GAATTTGAATGAAAAATTTAAGCATTGTTTGCTTATTGTTCCAAGACATTGTCAATAAA

FIGURE 2188

MMFSGFNADYEASSSRCSSASPAGDSLSYYHSPADSFSSMGSPVNAQDFCTDLAVSSANFIPTVTAISTSPDLQW
LVQPALVSSVAPSQTRAPHPFGVPAPSAGAYSRAGVVKTMTGGRAQSIGRRGKVEQLSPEEEEKRRIRRERNKMA
AAKCRNRRRELTDTLQAETDQLEDEKSALQTEIANLLKEKEKLEFILAAHRPACKIPDDLGFPEEMSVASLDLTG
GLPEVATPESEEAFTLPLLNDPEPKPSVEPVKSISSMELKTEPFDDFLFPASSRPSGSETARSVPDMDLSGSFYA
ADWEPLHSGSLGMGPMATELEPLCTPVVTCTPSCTAYTSSFVFTYPEADSFPSCAAAHRKGSSSNEPSSDSLSSP
TLLAL

FIGURE 2189

GGCACGAGGGCTGAGAAGAGTTTTGCACGTGGATCGCCGTTCGGGTGGGCGAGATGGAGACAGCCCCCAAGCCGG
GCAAGGATGTCCCGCCCAAGAAAGACAAACTTCAGACCAAGAGAAAGAAACCGCGGCGATACTGGGAGGAAGAGA
CCGTTCCGACCACAGCCGGAGCCTCTCCAGGGCCTCCTCGTAACAAGAAGAATCGGGAGCTCCGTCCTCAGAGAC
CAAAAAATGCTTACATCTTAAAGAAGTCTCGGATCTCTAAGAAGCCTCAGGTCCCGAAGAAACCCCGAGAATGGA
AGAACCCGGAGTCCCAGCGCGGCTTGTCCGGGGCCCAAGATCCATTCCCAGGCCCCGCCCCCGTCCCTGTGGAAG
TGGTCCAGAAGTTCTGTCGCATTGACAAATCCCGAAAGCTACCACATTCTAAAGCCAAAACTCGAAGCCGACTTG
AGGTGGCTGAAGCTGAGGAAGAGGAAACAAGTATCAAAGCTGCTCGTTCTGAGCTGCTGCTTGCTGAAGAACCTG
GGTTTCTGGAAGGGGAGGATGGGGAAGACACAGCAAAGATATGCCAGGCTGACATTGTGGAGGCTGTGGACATTG
CAAGTGCAGCCAAGCACTTTGACTTGAATCTGCGGCAGTTTGGACCCTACAGACTAAACTACTCTCGAACTGGAA
GACACCTGGCTTTTGGAGGGCGCCGAGGTCATGTGGCTGCCCTTGATTGGGTAACAAAGAAGCTTATGTGCGAGA
TCAACGTCATGGAGGCGGTGCGGGACATCCGGTTTCTCCATTCTGAGGCACTGCTTGCTGTTGCTCAGAACCGCT
GGCTCCACATCTATGACAATCAGGGCATTGAGCTCCACTGTATCCGCCGCTGTGACCGAGTAACACGGCTTGAGT
TCCTGCCCTTCCACTTCCTCCTGGCTACAGCTTCAGAAACAGGGTTTCTAACCTACCTGGATGTGTCAGTGGGGA
AGATTGTGGCAGCTCTGAATGCTCGAGCTGGGCGGCTCGATGTTATGAGTCAGAACCCTTACAATGCCGTCATCC
ATCTCGGACACAGCAATGGTACTGTGTCTTTATGGAGTCCAGCTATGAAGGAGCCACTGGCAAAGATTCTCTGTC
ATCGTGGTGGGGTCCGGGCTGTGGCAGTAGATTCTACAGGCACGTACATGGCCACCTCTGGCCTAGACCACCAGC
TGAAGATCTTTGACTTGCGAGGGACGTACCAGCCTCTGAGCACTCGGACCCTGCCCCATGGAGCAGGGCACCTGG
CCTTCTCCCAGAGGGGACTGCTGGTGGCGGGAATGGGTGACGTTGTCAACATCTGGGCAGGGCAGGGCAAGGCCA
GCCCACCCTCCCTTGAACAGCCCTACCTCACCCACCGGCTCTCAGGCCCTGTGCATGGCCTTCAGTTCTGCCCCT
TTGAAGATGTGCTGGGGGTGGGGCACACTGGGGGCATCACCAGCATGCTGGTCCCTGGGGCCGGTGAGCCCAACT
TCGATGGCCTGGAGAGTAATCCATACAGAAGCCGGAAGCAGCGCCAGGAGTGGGAGGTGAAGGCCCTGCTAGAGA
AGGTACCTGCAGAGCTTATTTGTCTGGACCCACGAGCCCTGGCCGAGGTGGATGTCATCTCCCTGGAGCAGGGAA
AGAAGGAGCAGATAGAGAGGCTGGGCTATGACCCGCAGGCTAAGGCTCCCTTCCAGCCAAAGCCAAAGCAGAAGG
GCCGCAGCTCCACGGCAAGCCTGGTGAAGAGGAAGAGGAAGGTCATGGATGAGGAACACAGGGACAAGGTCCGGC
AGAGCCTTCAGCAGCAGCATCATAAGGAGGCGAAGGCCAAGCCCACGGGGGCCCGGCCATCTGCCCTGGACAGAT
TTGTGCGCTGAGCCAGACTCCAGGGTTGCCTGGGAACAGTCTCTCCCCAAGATCACCTGTAGGGAAATGAGTGTT
CCCTGGAACAAGGAGGTGGGGGCAGTGTGGCCCCTTCCCCAACTGGGGGTGGACAGCTGTCTCCTGGGGTGGGTT
GGTATTAAAGAGGAAAGCGATTTTTTGGAAAAAAAAAAAAAAAAAAA

FIGURE 2190

METAPKPGKDVPPKKDKLQTKRKKPRRYWEEETVPTTAGASPGPPRNKKNRELRPQRPKNAYILKKSRISKKPQV
PKKPREWKNPESQRGLSGAQDPFPGPAPVPVEVVQKFCRIDKSRKLPHSKAKTRSRLEVAEAEEEETSIKAARSE
LLLAEEPGFLEGEDGEDTAKICQADIVEAVDIASAAKHFDLNLRQFGPYRLNYSRTGRHLAFGGRRGHVAALDWV
TKKLMCEINVMEAVRDIRFLHSEALLAVAQNRWLHIYDNQGIELHCIRRCDRVTRLEFLPFHFLLATASETGFLT
YLDVSVGKIVAALNARAGRLDVMSQNPYNAVIHLGHSNGTVSLWSPAMKEPLAKILCHRGGVRAVAVDSTGTYMA
TSGLDHQLKIFDLRGTYQPLSTRTLPHGAGHLAFSQRGLLVAGMGDVVNIWAGQGKASPPSLEQPYLTHRLSGPV
HGLQFCPFEDVLGVGHTGGITSMLVPGAGEPNFDGLESNPYRSRKQRQEWEVKALLEKVPAELICLDPRALAEVD
VISLEQGKKEQIERLGYDPQAKAPFQPKPKQKGRSSTASLVKRKRKVMDEEHRDKVRQSLQQQHHKEAKAKPTGA
RPSALDRFVR

FIGURE 2191

GTTTGTTGGCTGCGGCAGCAGGTAGCAAAGTGACGCCGAGGGCCTGAGTGCTCCAGTAGCCACCGCATCTGGAGA
ACCAGCGGTTACCATGGAGGGGATCAGTATATACACTTCAGATAACTACACCGAGGAAATGGGCTCAGGGGACTA
TGACTCCATGAAGGAACCCTGTTTCCGTGAAGAAAATGCTAATTTCAATAAAATCTTCCTGCCCACCATCTACTC
CATCATCTTCTTAACTGGCATTGTGGGCAATGGATTGGTCATCCTGGTCATGGGTTACCAGAAGAAACTGAGAAG
CATGACGGACAAGTACAGGCTGCACCTGTCAGTGGCCGACCTCCTCTTTGTCATCACGCTTCCCTTCTGGGCAGT
TGATGCCGTGGCAAACTGGTACTTTGGGAACTTCCTATGCAAGGCAGTCCATGTCATCTACACAGTCAACCTCTA
CAGCAGTGTCCTCATCCTGGCCTTCATCAGTCTGGACCGCTACCTGGCCATCGTCCACGCCACCAACAGTCAGAG
GCCAAGGAAGCTGTTGGCTGAAAAGGTGGTCTATGTTGGCGTCTGGATCCCTGCCCTCCTGCTGACTATTCCCGA
CTTCATCTTTGCCAACGTCAGTGAGGCAGATGACAGATATATCTGTGACCGCTTCTACCCCAATGACTTGTGGGT
GGTTGTGTTCCAGTTTCAGCACATCATGGTTGGCCTTATCCTGCCTGGTATTGTCATCCTGTCCTGCTATTGCAT
TATCATCTCCAAGCTGTCACACTCCAAGGGCCACCAGAAGCGCAAGGCCCTCAAGACCACAGTCATCCTCATCCT
GGCTTTCTTCGCCTGTTGGCTGCCTTACTACATTGGGATCAGCATCGACTCCTTCATCCTCCTGGAAATCATCAA
GCAAGGGTGTGAGTTTGAGAACACTGTGCACAAGTGGATTTCCATCACCGAGGCCCTAGCTTTCTTCCACTGTTG
TCTGAACCCCATCCTCTATGCTTTCCTTGGAGCCAAATTTAAAACCTCTGCCCAGCACGCACTCACCTCTGTGAG
CAGAGGGTCCAGCCTCAAGATCCTCTCCAAAGGAAAGCGAGGTGGACATTCATCTGTTTCCACTGAGTCTGAGTC
TTCAAGTTTTCACTCCAGCTAACACAGATGTAAAAGACTTTTTTTTATACGATAAATAACTTTTTTTTAAGTTAC
ACATTTTTCAGATATAAAAGACTGACCAATATTGTACAGTTTTTATTGCTTGTTGGATTTTTGTCTTGTGTTTCT
TTAGTTTTTGTGAAGTTTAATTGACTTATTTATATAAATTTTTTTTGTTTCATATTGATGTGTGTCTAGGCAGGA
CCTGTGGCCAAGTTCTTAGTTGCTGTATGTCTCGTGGTAGGACTGTAGAAAAGGGAACTGAACATTCCAGAGCGT
GTAGTGAATCACGTAAAGCTAGAAATGATCCCCAGCTGTTTATGCATAGATAATCTCTCCATTCCCGTGGAACGT
TTTTCCTGTTCTTAAGACGTGATTTTGCTGTAGAAGATGGCACTTATAACCAAAGCCCAAAGTGGTATAGAAATG
CTGGTTTTTCAGTTTTCAGGAGTGGGTTGATTTCAGCACCTACAGTGTACAGTCTTGTATTAAGTTGTTAATAAA
AGTACATGTTAAACTTACTTAGTGTTATG

FIGURE 2192

MEGISIYTSDNYTEEMGSGDYDSMKEPCFREENANFNKIFLPTIYSIIFLTGIVGNGLVILVMGYQKKLRSMTDK
YRLHLSVADLLFVITLPFWAVDAVANWYFGNFLCKAVHVIYTVNLYSSVLILAFISLDRYLAIVHATNSQRPRKL
LAEKVVYVGVWIPALLLTIPDFIFANVSEADDRYICDRFYPNDLWVVVFQFQHIMVGLILPGIVILSCYCIIISK
LSHSKGHQKRKALKTTVILILAFFACWLPYYIGISIDSFILLEIIKQGCEFENTVHKWISITEALAFFHCCLNPI
LYAFLGAKFKTSAQHALTSVSRGSSLKILSKGKRGGHSSVSTESESSSFHSS

FIGURE 2193

GAGCTAGCTTTGCAATATGGCGGCCGAGGCGGACGGACCGCTTAAACGGCTGCTCGTGCCGATTCTTTTACCTGA
GAAATGCTACGACCAACTTTTCGTTCAGTGGGACTTGCTTCACGTCCCCTGCCTCAAGATTCTCCTCAGCAAAGG
CCTGGGGCTGGGCATTGTGGCTGGCTCACTTCTAGTAAAGCTGCCCCAGGTGTTTAAAATCCGGGGAGCCAAGAG
TGCTGAAGGGTTGAGTCTCCAGTCTGTAATGCTGGAGCTAGTGGCATTGACTGGGACCATGGTCTACAGCATCAC
TAACAACTTCCCATTCAGCTCTTGGGGTGAAGCCTTATTCCTGATGCTCCAGACGATCACCATCTGCTTCCTGGT
CATGCACTACAGAGGACAGACTGTGAAAGGTGTCGCTTTCCTCGCTTGCTACGGCCTGGTCCTGCTGGTGCTTCT
CTCACCTCTGACGCCCTTGACTGTAGTCACCCTGCTCCAGGCCTCCAATGTGCCTGCTGTGGTGGTGGGGAGGCT
TCTCCAGGCAGCCACCAACTACCACAACGGGTACACAGGCCAGCTCTCAGCCATCACAGTCTTCCTGCTGTTTGG
GGGCTCCCTGGCCCGAATCTTCACTTCCATTCAGGAAACCGGAGATCCCCTGATGGCTGGGACCTTTGTGGTCTC
CTCTCTCTGCAACGGCCTCATCGCCGCCCAGCTGCTCTTCTACTGGAATGCAAAGCCTCCCCACAAGCAGAAAAA
GGCGCAGTAGAGCCAGCTACTGGAGTCATTCCGTTTCCACTCATTCACCCAACCTCAGGGTTCTCCCCATCTGAG
CCAGCCTGCTGGTGTGACTTACTCATCCTCCATTCCTCTGCACTTGCAGACTTTCTGAGCCAGGGTTTTCTTTTA
GTGGAAACAAATGGTTGATGGATCCAGATCCTTAGAAAAGGAGAGGATGGGGGTAGAGTCTCCCAAGCCAAAATT
TTGACATTTGAGTGCTTTCGTAAGCCCTGTACATGTACTATTAATTCAGTCATTCAGCCAAGCCTCCTCCTCTAG
CAGCAATTTCCAGCTGTTTAACACTATCCTGGGCAAATGTTTTACCCTGTCCTCCAGCCTCCCTGCTTCCCTTCT
GGCCCTGGAAGACTGAGTCTGGACGGCAGAGTGGAGGGACTGGGAGGCTGTGGCTGCCTCCCTCCCTCAGCCCGG
CTGGGACTGTCTCCCGGACCCCAGTGCTGGGGTGGGGGAAGGGGGACGGAGAATGACTCAGGCAGGGCCCCAGGG
TGGGGTGAGGAGGTTCCTGCTCTGGCAGGTCTAGGCGGAAGGGAGTGGAGATGGGGCTGGTTGCTGCTGCAGTGA
GGGGAACAGATGGGACAATAAAGACTGGAGACTCAGTTGAATAATGCAAAAAAAAAAAAA

FIGURE 2194

MAAEADGPLKRLLVPILLPEKCYDQLFVQWDLLHVPCLKILLSKGLGLGIVAGSLLVKLPQVFKIRGAKSAEGLS
LQSVMLELVALTGTMVYSITNNFPFSSWGEALFLMLQTITICFLVMHYRGQTVKGVAFLACYGLVLLVLLSPLTP
LTVVTLLQASNVPAVVVGRLLQAATNYHNGYTGQLSAITVFLLFGGSLARIFTSIQETGDPLMAGTFVVSSLCNG
LIAAQLLFYWNAKPPHKQKKAQ

FIGURE 2195

CAGACTCGAGCAGTCTCTGGAACACGCTGCGGGGCTCCCGGGCCTGAGCCAGGTCTGTTCTCCACGCAGGTGTTC
CGCGCGCCCCGTTCAGCC**ATG**TCGTCCGGCATCCATGTAGCGCTGGTGACTGGAGGCAACAAGGGCATCGGCTTG
GCCATCGTGCGCGACCTGTGCCGGCTGTTCTCGGGGGACGTGGTGCTCACGGCGCGGGACGTGACGCGGGGCCAG
GCGGCCGTACAGCAGCTGCAGGCGGAGGGCCTGAGCCCGCGCTTCCACCAGCTGGACATCGACGATCTGCAGAGC
ATCCGCGCCCTGCGCGACTTCCTGCGCAAGGAGTACGGGGGCCTGGACGTGCTGGTCAACAACGCGGGCATCGCC
TTCAAGGTTGCTGATCCCACACCCTTTCATATTCAAGCTGAAGTGACGATGAAAACAAATTTCTTTGGTACCCGA
GATGTGTGCACAGAATTACTCCCTCTAATAAAACCCCAAGGGAGAGTGGTGAACGTATCTAGCATCATGAGCGTC
AGAGCCCTTAAAAGCTGCAGCCCAGAGCTGCAGCAGAAGTTCCGCAGTGAGACCATCACTGAGGAGGAGCTGGTG
GGGCTCATGAACAAGTTTGTGGAGGATACAAAGAAGGGAGTGCACCAGAAGGAGGGCTGGCCCAGCAGCGCATAC
GGGGTGACGAAGATTGGCGTCACCGTTCTGTCCAGGATCCACGCCAGGAAACTGAGTGAGCAGAGGAAAGGGGAC
AAGATCCTCCTGAATGCCTGCTGCCCAGGGTGGGTGAGAACTGACATGGCGGGACCCAAGGCCACCAAGAGCCCA
GAAGAAGGTGCAGAGACCCCTGTGTACTTGGCCCTTTTGCCCCCAGATGCTGAGGGTCCCCATGGACAATTTGTT
TCAGAGAAGAGAGTTGAACAGTGG**TGA**GCTGGGCTCACAGCTCCATCCATGGGCCCCATTTTGTACCTTGTCCTG
AGTTGGTCCAAAGGGCATTTACAATGTCATAAATATCCTTATATAAGAAAAAAAAATGATCTCTTATCAATTAGCA
CTCACTAATGTACTACTAATTGAGCAACCTACGCACTCAGTTGACTACGTAAATCTGTCAGGTCTTTTGTGATTT
CCTCTGATGCAGGAGAGGAAAAATTGTAATTGATGAAAATAATGAATGAAAATCAACAGATGAATAAATGGTTCT
TTATAAGTG

FIGURE 2196

MSSGIHVALVTGGNKGIGLAIVRDLCRLFSGDVVLTARDVTRGQAAVQQLQAEGLSPRFHQLDIDDLQSIRALRD
FLRKEYGGLDVLVNNAGIAFKVADPTPFHIQAEVTMKTNFFGTRDVCTELLPLIKPQGRVVNVSSIMSVRALKSC
SPELQQKFRSETITEEELVGLMNKFVEDTKKGVHQKEGWPSSAYGVTKIGVTVLSRIHARKLSEQRKGDKILLNA
CCPGWVRTDMAGPKATKSPEEGAETPVYLALLPPDAEGPHGQFVSEKRVEQW

FIGURE 2197

ACGCCCTATACAACTTGGCTTCACATACTTTTACACTAACTTTATATGATTTTTAAAAACTGGTCTGATCGGACT
TCTCGTCCTGGGACACTGTTTACTGGAGTCTGGCCGGCTCTCCGTGCTCCTCTTGGTACCTCATTTTGGGGAGAA
CCTTAAACCCACTCGAGCAGATAATCTCCGCCTTGACCGGTGCCACCAAAGAAGGGTTGGAACCATGTGGACTTT
TCTGGGCATTGCCACTTTCACCTATTTTTATAAGAAGTTCGGGGACTTCATCACTTTGGCCAACAGGGAGGTCCT
GTTGTGCGTGCTGGTGTTCCTCTCGCTGGGCCTGGTGCTCTCCTACCGCTGTCGCCACCGAAACGGGGGTCTCCT
CGGGCGCCAGCGGAGCGGCTCCCAGTTCGCCCTCTTCTCGGATATTCTCTCAGGCCTGCCTTTCATTGGCTTCTT
CTGGGCCAAATCCCCCCCTGAATCAGAAAATAAGGAGCAGCTCGGGGCCAGGAGGCGCAGAAAAGGAACCAATAT
TTCAGAAACAAGCTTAATAGGAACAGCTGCCTGTACATCAACATCTTCTCAGAATGACCCAGAAGTTATCATCGT
GGGAGCTGGCGTGCTTGGCTCTGCTTTGGTAGCTGTGCTTTCCAGAGATGGAAGAAAGGTGACAGTCATTGAGAG
AGACTTAAAAGAGCCTGACAGAATAGTTGGAGAATTCCTGCAGCCGGGTGGTTATCATGTTCTCAAAGACCTTGG
TCTTGGAGATACAGTGGAAGGTCTTGATGCCCAGGTTGTAAATGGTTACATGATTCATGATCAGGAAAGCAAATC
AGAGGTTCAGATTCCTTACCCTCTGTCAGAAAACAATCAAGTGCAGAGTGGAAGAGCTTTCCATCACGGAAGATT
CATCATGAGTCTCCGGAAAGCAGCTATGGCAGAGCCCAATGCAAAGTTTATTGAAGGTGTTGTGTTACAGTTATT
AGAGGAAGATGATGTTGTGATGGGAGTTCAGTACAAGGATAAAGAGACTGGAGATATCAAGGAACTCCATGCTCC
ACTGACTGTTGTTGCAGATGGGCTTTTCTCCAAGTTCAGGAAAAGCCTGGTCTCCAATAAAGTTTCTGTATCATC
TCATTTTGTTGGCTTTCTTATGAAGAATGCACCACAGTTTAAAGCAAATCATGCTGAACTTATTTTAGCTAACCC
GAGTCCAGTTCTCATCTACCGGATTTCATCCAGTGAAACTCGAGTACTTGTTGACATTAGAGGAGAAATGCCAAG
GAATTTAAGAGAATACATGGTTGAAAAAATTTACCCACAAATACCTGATCACCTGAAAGAACCATTCTTAGAAGC
CACTGACAATTCTCATCTGAGGTCCATGCTAGCAAGCTTCCTTCCTCCTTCATCAGTGAAGAAACGAGGTGTTCT
TCTTTTGGGAGACGCATATAATATGAGGCATCCACTTACTGGTGGAGGAATGACTGTTGCTTTTAAAGATATAAA
ACTATGGAGAAAACTGCTAAAGGGTATCCCTGACCTTTATGATGATGCAGCTATTTTCGAGGCCAACAAATCATT
TTACTGGGCAAGAAAAACATCTCATTCCTTTGTCGTGAATATCCTTGCTCAGGCTCTTTATGAATTATTTTCTGC
CACAGATGATTCCCTGCATCAACTAAGAAAAGCCTGTTTTCTTTATTTCAAACTTGGTGGCGAATGTGTTGCGGG
TCCTGTTGGGCTGCTTTCTGTATTGTCTCCTAACCCTCTAGCTTTAATTGGACACTTCTTTGCTGTTGCAATCTA
TGCCGTGTATTTTTGCTTTAAGTCAGAACCTTGGATTACAAAACCTCGAGCCCTTCTCAGTAGTAGTGCTGTATT
GTACAAAGCGTGTTCTGTAATATTTCCTCTAATTTACTCAGAAATGAAGTATATGGTTCATTAAGCTTAAAGGGG
AACCATTTGTGAATGAATATTTGGAACTTACCAAGTCCTAAGAGACTTTTGGAAGAGGATATATATAGCATAGTA
CCATACCACTTATAAAGTGGAAACTCTTGGACCAAGATTTGGATTAATTTGTTTTTGAAGTTTTTTGTATATAAA
TATGTAAATACATGCTTTAATTTGCAATTTAAAATGAAGGGGTTAAATAAGTTAGACATTTGAAAGAAATGATTG
TTACCATAAATTAGTGCTAATGCTGAGGAGAACTACAGTTTTTCTTTTGAATTTAGTATTTGAGATGAGTTGTTG
GGACATGCAAATAAAATGAAGAATGAC

FIGURE 2198

MWTFLGIATFTYFYKKFGDFITLANREVLLCVLVFLSLGLVLSYRCRHRNGGLLGRQRSGSQFALFSDILSGLPF
IGFFWAKSPPESENKEQLGARRRRKGTNISETSLIGTAACTSTSSQNDPEVIIVGAGVLGSALVAVLSRDGRKVT
VIERDLKEPDRIVGEFLQPGGYHVLKDLGLGDTVEGLDAQVVNGYMIHDQESKSEVQIPYPLSENNQVQSGRAFH
HGRFIMSLRKAAMAEPNAKFIEGVVLQLLEEDDVVMGVQYKDKETGDIKELHAPLTVVADGLFSKFRKSLVSNKV
SVSSHFVGFLMKNAPQFKANHAELILANPSPVLIYRISSSETRVLVDIRGEMPRNLREYMVEKIYPQIPDHLKEP
FLEATDNSHLRSMLASFLPPSSVKKRGVLLLGDAYNMRHPLTGGGMTVAFKDIKLWRKLLKGIPDLYDDAAIFEA
NKSFYWARKTSHSFVVNILAQALYELFSATDDSLHQLRKACFLYFKLGGECVAGPVGLLSVLSPNPLALIGHFFA
VAIYAVYFCFKSEPWITKPRALLSSSAVLYKACSVIFPLIYSEMKYMVH

FIGURE 2199

GGCACGAGGCCAGTGATGGATTCAAGCCTCGTGAACGAAGCGGTGGGGAGCAGGCACAGGACTGGGATGCTCTGC
CACCCAAGCGGCCCCGACTAGGGGCAGGAAACAAGATCGGAGGCCGTAGGCTTATTGTGGTGCTGGAAGGGGCCA
GTCTGGAGACAGTCAAGGTAGGGAAGACATATGAGCTACTCAACTGTGACAAGCACAAGTCTATATTGTTGAAGA
ATGGACGGGACCCTGGGGAAGCGCGGCCAGATATCACCCACCAGAGTTTGCTGATGCTGATGGATAGTCCCCTGA
ACCGAGCTGGCTTGCTACAGGTTTATATCCATACACAGAAGAATGTTCTGATTGAAGTGAATCCCCAGACCCGAA
TTCCCAGAACCTTTGACCGCTTTTGTGGCCTCATGGTTCAACTTTTACACAAGCTCAGTGTTCGAGCAGCTGATG
GCCCCCAGAAGCTTTTGAAGGTAATTAAGAATCCAGTATCAGATCACTTTCCAGTTGGATGTATGAAAGTTGGCA
CTTCTTTTTCCATCCCGGTTGTCAGTGATGTGCGTGAGCTGGTGCCCAGCAGTGATCCTATTGTTTTTGTGGTAG
GGGCCTTTGCCCATGGCAAGGTCAGTGTGGAGTATACAGAGAAGATGGTGTCCATCAGTAACTACCCCCTTTCTG
CTGCCCTCACCTGTGCAAAACTTACCACAGCCTTTGAGGAAGTATGGGGGGTCATTTGACAGTAGTAGAACCTGT
TCTGAAACCAGAAACTGTTGATGTCACATCCTTTGACCCTGGTCTGAGCTGACTGCTGGAAGATGATCTTTCTGC
ACTGAGACTGTGGAGTTTGGGGAAGCCAAGGCTGTACATTTGCTATTTGTTTATCCTATGAATACTGTTCTTGCA
AACCTGGTTGTTTTGGGGTTCCTAAAGTATCCAGTGGTGTAAAACTGTTTGTTCCCCGGGACTTCAGGGACAGAT
AGGAGGTTACAGAGTTTGCAGTTTGGTTCCATGCTTTGAAGGCAGGCTTTAGCTCCCAGATTCCCATGTGCTAAA
GGAGAGAACCCTGATGATGGAGAAGAACTGTGAAAGAGAGCAGTCAGGAATGCTAGTGGTGAAAAACTGAACAAA
CAGAAGTGATTTTATCTAATACAGTTCCAAGGTAGAAAAAGTGGAGCAGGCAGGGCCTTGCACCCCTCTCCACCC
CCCCATGGGGGGGGTGGTGGTAGCGGCACATACACAATCATAGTAAATTGGCAGAAGAAAAACACAATAGATTCC
TGGCTAGATGGGGAGAGATAAGGCAATGTGCATGGGGGAATCAGAGGGGAGATGTGAGCCCCTCTGCTCCTCCCA
CAAGAGTTTCCCCTTTGGGCCGGGCACGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCGGAGGCGGGTG
GATCACTTGCGGTCAGGAGTTCGAGACCAGCCTGGCCAACGTGGTGAAATCCCGTTTCTACTGAAAATACAAAAA
TTAGCTGGGCATGGTGGCGTGCCTGTATTCCCAAAGTGCTGGGATTACAGGCATCACTGGCCCAGGCAGAGCCAA
TTCTGTATAATAAATCTGTCTCTCTCTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2200

MLMDSPLNRAGLLQVYIHTQKNVLIEVNPQTRIPRTFDRFCGLMVQLLHKLSVRAADGPQKLLKVIKNPVSDHFP
VGCMKVGTSFSIPVVSDVRELVPSSDPIVFVVGAFAHGKVSVEYTEKMVSISNYPLSAALTCAKLTTAFEEVWGV
I

FIGURE 2201

ATGCGTGAGTGCATCTCCATCCACGTTGGCCAGGCTGGTGTCCAGATTGGCAATGCCTGCTGGGAGCTCTACTGC
CTGGAACACGGCATCCAGCCCGATGGCCAGATGCCAAGTGACAAGACCATTGGGGGAGGAGATGATTCCTTCAAC
ACCTTCTTCAGTGAAACGGGTGCTGGCAAGCATGTGCCCCGGGCAGTGTTTGTAGACTTGGAACCCACAGTCATT
GATGAAGTTCGCACTGGCACTTACCGCCAGCTCTTCCACCCTGAGCAACTCATCACAGGCAAGGAAGATGCTGCC
AATAACTATGCCCGAGGGCACTACACCATTGGCAAGGAGATCATTGACCTCGTGTTGGACCGAATTCGCAAGCTG
GCTGACCAGTGCACCGGTCTTCAGGGCTTCTTGGTTTTCCACAGCTTTGGTGGGGGAACTGGTTCTGGGTTCACC
TCGCTGCTCATGGAACGTCTCTCAGTTGATTATGGCAAGAAGTCCAAGCTGGAGTTCTCCATTTACCCGGCGCCC
CAGGTTTCCACAGCTGTAGTTGAGCCCTACAACTCCATCCTCACCACCCACACCACCCTGGAGCACTCTGATTGT
GCCTTCATGGTAGACAATGAGGCCATCTATGACATCTGTCGTAGAAACCTCGATATCGAGCGCCCAACCTACACT
AACCTTAACCGCCTTATTAGCCAGATTGTGTCCTCCATCACTGCTTCCCTGAGATTTGATGGAGCCCTGAATGTT
GACCTGACAGAATTCCAGACCAACCTGGTGCCCTACCCCCGCATCCACTTCCCTCTGGCCACATATGCCCCTGTC
ATCTCTGCTGAGAAAGCCTACCATGAACAGCTTACTGTAGCAGAGATCACCAATGCTTGCTTTGAGCCAGCCAAC
CAGATGGTGAAATGTGACCCTCGCCATGGTAAATACATGGCTTGCTGCCTGTTATACCGTGGTGACGTGGTTCCC
AAAGATGTCAATGCTGCCATTGCCACCATCAAAACCAAGCGTACCATCCAGTTTGTGGATTGGTGCCCCACTGGC
TTCAAGGTTGGCATTAATTACCAGCCTCCCACTGTGGTGCCTGGCGGAGACCTGGCCAAGGTACAGAGAGCTGTG
TGCATGCTGAGCAATACCACAGCTGTTGCCGAGGCCTGGGCTCGCCTGGACCACAAGTTTGACCTGATGTATGCC
AAGCGTGCCTTTGTTCACTGGTACGTGGGTGAGGGGATGGAGGAAGGCGAGTTTTCAGAGGCCCGTGAGGACATG
GCTGCCCTTGAGAAGGATTATGAGGAGGTTGGAGCAGATAGTGCTGACGGAGAGGATGAGGGTGAAGAGTATTAA

FIGURE 2202

MRECISIHVGQAGVQIGNACWELYCLEHGIQPDGQMPSDKTIGGGDDSFNTFFSETGAGKHVPRAVFVDLEPTVI
DEVRTGTYRQLFHPEQLITGKEDAANNYARGHYTIGKEIIDLVLDRIRKLADQCTGLQGFLVFHSFGGGTGSGFT
SLLMERLSVDYGKKSKLEFSIYPAPQVSTAVVEPYNSILTTHTTLEHSDCAFMVDNEAIYDICRRNLDIERPTYT
NLNRLISQIVSSITASLRFDGALNVDLTEFQTNLVPYPRIHFPLATYAPVISAEKAYHEQLTVAEITNACFEPAN
QMVKCDPRHGKYMACCLLYRGDVVPKDVNAAIATIKTKRTIQFVDWCPTGFKVGINYQPPTVVPGGDLAKVQRAV
CMLSNTTAVAEAWARLDHKFDLMYAKRAFVHWYVGEGMEEGEFSEAREDMAALEKDYEEVGADSADGEDEGEEY

FIGURE 2203

AGTGTGGTTTTAGTTTTTCCTAAGAAGTGGCGTGGTTTGGGGCTTTATATCCGGGAGGAGCATATGTACGCAAAT
CCTGGGGCGTTTGCAAACCCGGATCCGGGGCGTCTGGCCCCATGCCCGGCCGGGCGTTTGAGGGCTACTGCCACG
CAGCGTTTCTGGAGCCTGCCGGCTGGTGCCCTGGTGGCCTTTATCTCTGTCCCCCTTTGTCCTCTTTATCTCAGG
CTCTCCAGGAGGCCGGGGGGCCCACTCCGCCTATCGCTCCCCTCGGCTACGCTGCCACTCCAATGCCCCGCAGGT
CGCGAGCTGCTGTTCTTTCGAAGGCGCCGGAGAACCAGGGGCGTCCCGCGCCACCTCTGACTCGGAGCAGCGCCG
AGCACTGACGCTCCCGCCCTTGGGCAAGGACGCCAGTGCGCCCGCGCGCGTCCCTCTGCGCGGCAGCCCGTCGCG
GGCCCTCAAGGGGAAGCCCAGGCCAGGATGGCCCCGGGTCGCGCGGTGGCCGGGCTCCTGTTGCTGGCGGCCGCC
GGCCTCGGAGGAGTGGCGGAGGGGCCAGGGCTAGCCTTCAGCGAGGATGTGCTGAGCGTGTTCGGCGCGAATCTG
AGCCTGTCGGCGGCGCAGCTCCAGCACTTGCTGGAGCAGATGGGAGCCGCCTCCCGCGTGGGCGTCCCGGAGCCT
GGCCAGCTGCACTTCAACCAGTGTTTAACTGCTGAAGAGATCTTTTCCCTTCATGGCTTTTCAAATGCTACCCAA
ATAACCAGCTCCAAATTCTCTGTCATCTGTCCAGCAGTCTTACAGCAATTGAACTTTCACCCATGTGAGGATCGG
CCCAAGCACAAAACAAGACCAAGTCATTCAGAAGTTTGGGGATATGGATTCCTGTCAGTGACGATTATTAATCTG
GCATCTCTCCTCGGATTGATTTTGACTCCACTGATAAAGAAATCTTATTTCCCAAAGATTTTGACCTTTTTTGTG
GGGCTGGCTATTGGGACTCTTTTTTCAAATGCAATTTTCCAACTTATTCCAGAGGCATTTGGATTTGATCCCAAA
GTCGACAGTTATGTTGAGAAGGCAGTTGCTGTGTTTGGTGGATTTTACCTACTTTTCTTTTTTGAAAGAATGCTA
AAGATGTTATTAAAGACATATGGTCAGAATGGTCATACCCACTTTGGAAATGATAACTTTGGTCCTCAAGAAAAA
ACTCATCAACCTAAAGCATTACCTGCCATCAATGGTGTGACATGCTATGCAAATCCTGCTGTCACAGAAGCTAAT
GGACATATCCATTTTGATAATGTCAGTGTGGTATCTCTACAGGATGGAAAAAAAGAGCCAAGTTCATGTACCTGT
TTGAAGGGGCCCAAACTGTCAGAAATAGGGACGATTGCCTGGATGATAACGCTCTGCGATGCCCTCCACAATTTC
ATCGATGGCCTGGCGATTGGGGCTTCCTGCACCTTGTCTCTCCTTCAGGGACTCAGTACTTCCATAGCAATCCTA
TGTGAGGAGTTTCCCCACGAGTTAGGAGACTTTGTGATCCTACTCAATGCAGGGATGAGCACTCGACAAGCCTTG
CTATTCAACTTCCTTTCTGCATGTTCCTGCTATGTTGGGCTAGCTTTTGGCATTTTGGTGGGCAACAATTTCGCT
CCAAATATTATATTTGCACTTGCTGGAGGCATGTTCCTCTATATTTCTCTGGCAGATATGTTTCCAGAGATGAAT
GATATGCTGAGAGAAAAGGTAACTGGAAGAAAAACCGATTTCACCTTCTTCATGATTCAGAATGCTGGAATGTTA
ACTGGATTCACAGCCATTCTACTCATTACCTTGTATGCAGGAGAAATCGAATTGGAGTAATAGAAAATGGAAGAT
GGTGTTGTTAATAAAGGCATTTAATAGATAAAAACATCTCCAAAAAGGATTTTGAAGCTGATCCTATTTAGTTAA
AAAGATAATTTTGCTTTCAACTGTAGGTCCAGAAAACTAATTATTGGCATCAGTCTGTGAAATAGTCCATTATTT
GTTGTTAAAAATGCTTCAAAAGGTTTTCAGTGTCAGTCTGAGATGCCTGGTATATAGGAGCCTTTGGGAAATACT
TATTTTTCAGTATTCCATGCATATTAGATATCACCATGAAGCAAGAGACATGCATTCTATAATCATGTAGACACT
CAGACTCAGGGGAAAATACAAGTTATATCCTGAAAGCCTTTAAAACTCTATGGTAGGATCAAAGATTCAAATGGT
TTCAGAGAGGTTTTATTTCAATTAATTTGTTCTAGTGCTTTCAAGAGCAAGTACATCAAAATGTAGAAGGTAAAA
TGTATGCAACACTAATATAAATTATTCCAAGTCTTTAAGGAGCCAAAGAAAAAAAAGATTTCTCACAGCTTTTTG
TTCTGTTTTGTATTTCAATTAGGAACTTGCAGTATTATTTTGAAAACCATTCTAAAATAATAGGAGTTAGGAAAT
AAATAAAGTTTTGCTAGCCCTGCTAAGTTCAGGCTTAGAGGCTTATCGCTAAGTXTAAACTTCACCAGATTCCAC
GAAAAGCTGGATAGCTTTTTTTCTGACTTATGTTGTGGTTGCACCCCTCACAAATGGCAGAACAGTATGTAAAGC
TGGTAACACCTCGGTTTCAGTGCACCATGTGTTTGCTTTGTGAAGGTGAAGAATATGTTGGTTTAGAGAAAGAAA
TTGGATGTAATTTTATGCAATTTACTTTTAAAGACAAACATAACTATTTAGCAGAGAATATTTTAATAAATGCAA
AACAACAGCTGGACTGCTGTACATCAAGGACAGATTAACTGGAAAACATATGTTCCTTATGTGTGATTGAGAGCC
ATTCAGAAAAGACTTCCTTTGTGTTCAGCCTATACTTTTCCATATGGTATACCTTGAAAAAAATTAGCACACCAT
GGTTATTTTTCTACCTTTTATAAAAGACAGAGCCTGTTTACTCATTTAGAAGATAGAGAAAATTGGTCTAAAATT
GAACATCCTAGATTCACACTCCCAAGTCACTTAAGGTGATTTGATGGTGAGGAAAATGATTGACAAAGCCCAACA
ATGATCTCAGGAATTACATTTTCCAACAGACCAAAAAATGTTTTCATGTAGCAGCAATGCAGATTTGGTGAATAT
TTAATATATATTTTAGTATGTATTTCACTTTATGACTGACAATTAAAAAATATTGTTTGGCCAAATAGTAAACAC
CCTTTTGAAACCATGAAAAAA

FIGURE 2204

MAPGRAVAGLLLLAAAGLGGVAEGPGLAFSEDVLSVFGANLSLSAAQLQHLLEQMGAASRVGVPEPGQLHFNQCL
TAEEIFSLHGFSNATQITSSKFSVICPAVLQQLNFHPCEDRPKHKTRPSHSEVWGYGFLSVTIINLASLLGLILT
PLIKKSYFPKILTFFVGLAIGTLFSNAIFQLIPEAFGFDPKVDSYVEKAVAVFGGFYLLFFFERMLKMLLKTYGQ
NGHTHFGNDNFGPQEKTHQPKALPAINGVTCYANPAVTEANGHIHFDNVSVVSLQDGKKEPSSCTCLKGPKLSEI
GTIAWMITLCDALHNFIDGLAIGASCTLSLLQGLSTSIAILCEEFPHELGDFVILLNAGMSTRQALLFNFLSACS
CYVGLAFGILVGNNFAPNIIFALAGGMFLYISLADMFPEMNDMLREKVTGRKTDFTFFMIQNAGMLTGFTAILLI
TLYAGEIELE

FIGURE 2205A

GTTAAACCCATCCAGAGTAATGGCTGCGGCCTTACCCAGGACCCTGGGGGAGTTGCAGCTGTATAGAATATTACA
AAAAGCCAATCTACTTTCTTATTTTGATGCCTTTATCCAACAAGGTGGTGATGATGTCCAGCAACTCTGTGAAGC
AGGAGAAGAGGAGTTTTTGGAAATCATGGCACTCGTGGGCATGGCTAGCAAGCCCCTTCATGTTAGAAGGCTGCA
GAAGGCTTTGAGAGACTGGGTCACAAACCCTGGGCTTTTCAATCAGCCACTGACTTCCCTTCCTGTCAGTAGCAT
ACCCATCTATAAATTACCAGAGGGATCACCAACATGGCTGGGAATATCCTGCAGTAGTTATGAAAGGAGTAGCAA
TGCCCGGGAACCTCATTTAAAAATCCCCAAATGTGCTGCCACCACCTGTGTGCAGAGCTTGGGACAGGGGAAGTC
AGATGTGGTTGGGAGCCTAGCACTGCAGAGTGTTGGTGAGTCCAGACTCTGGCAAGGCCACCATGCCACTGAGAG
CGAGCACAGCCTCTCCCCAGCAGACCTGGGCTCCCCCGCGTCCCCAAAGGAGAGCAGTGAGGCGCTGGATGCTGC
TGCTGCGCTCTCTGTGGCTGAGTGTGTGGAGCGGATGGCCCCCACACTGCCAAAAAGTGACTTGAATGAAGTGAA
AGAGCTGCTAAAAACCAACAAGAAGTTGGCCAAAATGATTGGTCACATCTTTGAGATGAACGATGATGATCCACA
CAAAGAGGAGGAAATTCGGAAATACAGTGCAATATATGGCAGATTTGACTCAAAGAGGAAGGATGGGAAACATCT
CACACTTCATGAGCTCACTGTTAATGAAGCGGCTGCTCAACTCTGTGTGAAGGATAATGCCCTGCTGACAAGAAG
AGATGAGCTTTTTGCCTTGGCTCGACAGATTTCTCGAGAAGTCACCTATAAATATACTTACAGAACCACCAAGTC
AAAATGTGGAGAAAGAGATGAATTATCCCCAAAGAGAATTAAAGTGGAGGATGGGTTTCCAGATTTCCAGGATTC
TGTGCAAACACTCTTCCAGCAGGCTAGAGCTAAGAGTGAAGAACTTGCAGCTCTTAGTTCACAGCAGCCTGAAAA
GGTGATGGCAAAGCAGATGGAGTTCCTTTGCAACCAAGCTGGCTATGAGAGACTGCAGCATGCCGAGAGGAGGTT
GTCTGCAGGGCTTTACAGGCAGAGCTCAGAAGAGCACAGTCCTAACGGCTTGACTTCCGATAACTCAGATGGACA
AGGAGAAAGACCTTTGAATCTCCGAATGCCTAATTTACAGAACAGACAACCCCATCATTTTGTGGTGGATGGGGA
GCTGAGCAGACTTTACCCCAGTGAGGCAAAGTCCCACTCATCAGAGAGCCTTGGGATTTTAAAAGACTACCCTCA
TTCAGCTTTTACCTTAGAAAAGAAAGTCATCAAAACAGAGCCTGAAGATTCAAGATAGCTGTGATTTCTCTCACC
GTTCTCTGGAAATGGCATCAGATTTAAGGATAATACTCCATCATAGAAATAAGCCTTAATAACCAGTGTTGCCTC
ATTCAGCTCAAACAGATTTCATAGCCAAAGCAAAAGGACTGGTACGGTAGTCTGTGGAAACCAGGAAGATAAAAC
AACAGCCACAAAAGAGAAAATCAAGAGTGTTGCAATCTATAACAGTAATATTGATTCATTCACATTCCTGTGTTA
AGTCATTTTATATGGAAAGGCTTACAAATCAATATTGTAAGCATTCATTATTTAAGAATGTACAATGTATTTGTG
TAATTTATAGAAGTAAAATCTAGATGTTGAGACCTGTTTGGTCTAATAGATGTGGATACAGTTTATTTTACTTGA
AATTTTGTTGTCTACTTTGTGTGTTTAACGTAAATATATGTCAGAGTTTAGAATCTGCCTGCAGTTGTGAAAAAG
AAAGCTTAAGTGATGCAGTTATTGGCAAGAXTGCAATGATTATGGGAAAATAGAAAGCGAATACTCAGTTTAAGC
CAAGGAAAATATTGTGGATTTAATATTTGATAAAACTGATTTTGTTTAACAGGAAATTTTTAGCATTCAGTCATA
TAACATCTGGTTATCAATGCACGTTTACACAATAAATACTTGAGTGGAGGAAAGTTAAAAAGATGAGCAATAGAG
TAGAAAATATATCTTAAACTAGTTGACCTAGATTGTATTAATAGCTACTTAAGATGTTTCAAAGATAGGAAGCTA
TTGCTTGGACAGAGAACTTGAAATAAGTGGACCCATGTATAAAAGCTTTGACTTAAACATTGATATTTCAGAATG
TGTTAAATAGATTAAGACACAGTAAGTTAACCCTACATGTTATAAAGATGGCGACTGTTAACAAAGGCTGTAACA
GATTAAGTACTATTTTATATCCAGAAAGTCTTCTCTATGTAGAGAAGTCAGAGAGACTAGATGCTTTCACTAGGG
AATGTCTTCCCACCCAGCCATCACAAATGTGGACAATCACTGCATCCACATCTGTAGGCATATTTCTATGGAAGT
TTAATTGACAGCTATATTCATTATTTATTTTACAATTTCATTTTTCTACACCTTTGAGATTTATGAATGCAGTTT
TTTCTTAAAATTTATTTTAACTTGACAGTATGTTTTTAGTTCCCCCAATTTAATTAATGGACCATGTGCATATAT
ATGGGAGTGTGCTTACATGTTAATAATTTACTTGCATACTTATGAGAATTTCACATTGGAATTCATAATGGTAAA
ACAACATACATCTGCCAATATACGTTTTTTCTGTTGGTTTAAGAGAAGATAACTGACAGCTTTACCTACTTCCTA
CAGATGCATCTAAACCCAGATATTACTGAGAAGAGTGTATTGACTCTGAGTGTAAGAGAGTATGTGTTTTTTTGT
TTTTAGTTCTGCTCTAGATCATAATTGTAAAAAATATTAAGTCATAATCTGTTACACTAAAATTTGTCAGCCAAA
TGTTAGATGAAATGTCTGCACTGTAGTCTCAGATCACTGTCACGTATATAAATTGCTTCTTCATTTTAATTTGTA
GAAGTACTTTACAGTAGGAAACGCCAGTAAACAACTTTTATACTGTTAAAAGGCTTTTTTCCCCTTCCTAAATGT
TTTAATTGTACCATAGTGTTTTGCTCACTGAAGAAGCTTCTTATGGACCTTGCAACTTTGTTGCTAGCTTGAGGT
TGATTATTGTGGTTGTATTGTTCACTGTGTGTAGAAATAGTATGAGTACGATTTCAATAGACTGTTCAGTTTTTA
ATATTAGCCATAGCACTGGTTAGTATATCTCAGTAGTTTCATGAAACGTTTCCTGTATTCTAATCTATTTTGAAA
CATTTTGTTTTTTTTTAATTGTGTCTTACAGTCAAGTTTGTAGATTTTCATAAGCCACAATTTTAAAAGATGCAG
TAATCTTCCAACTTCCAATATTTATCCATTCGTTGTGGACCCACAGATTGCATCTTTAAATTCATAATAAGTTTC
CTTAACTATCTTATGTTTCTAGTCTTTCAAGCTTAGTGATAAGGTGGAAGCACAAGAAAAATTTCAGTAGAATAC

FIGURE 2205B

AGTTTTTATTTTGTAAACACTAATGTATTAAACTTGCTATACATTAAAGCAAATAATATATATTTTTATTTGAAT
TGTATATGTGAATTGGAAGTTATAATTAGTTGATTTTTTCATTTTGTTAGAGGTATTTTCACTGAACAAGGTCAA
TTGGTTACCTCAGTATTACAGCCAATATAGTCCAAGGGACCATTTCTCCCCGAGTCTCTTACACTTTATTGTGCG
ATGTCCACGTTTTTGTGACTCTTCAAGCTGTTGGTGAGGTGGGACGAATGCACTTGCTTCCTGTGGCAATAAAGA
TTTTCTGTGCCTCACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2206

MAAALPRTLGELQLYRILQKANLLSYFDAFIQQGGDDVQQLCEAGEEEFLEIMALVGMASKPLHVRRLQKALRDW
VTNPGLFNQPLTSLPVSSIPIYKLPEGSPTWLGISCSSYERSSNAREPHLKIPKCAATTCVQSLGQGKSDVVGSL
ALQSVGESRLWQGHHATESEHSLSPADLGSPASPKESSEALDAAAALSVAECVERMAPTLPKSDLNEVKELLKTN
KKLAKMIGHIFEMNDDDPHKEEEIRKYSAIYGRFDSKRKDGKHLTLHELTVNEAAAQLCVKDNALLTRRDELFAL
ARQISREVTYKYTYRTTKSKCGERDELSPKRIKVEDGFPDFQDSVQTLFQQARAKSEELAALSSQQPEKVMAKQM
EFLCNQAGYERLQHAERRLSAGLYRQSSEEHSPNGLTSDNSDGQGERPLNLRMPNLQNRQPHHFVVDGELSRLYP
SEAKSHSSESLGILKDYPHSAFTLEKKVIKTEPEDSR

FIGURE 2207A

GGCCAAAGGTCAAGATACTTCTCTGGGAAATGTTGCTGCTGATGCTGCTTTACAAAGTCATACAATGAGTGTTTG
GTTTAAGAAAGATTTTCATACTTAAAAGATTTTCATCTTGGAAATACATCAAGTGAAAATTAAATTCTTTTGGGA
AACATTTTCCTTCTGATATATTATACTTGTAATGGGCGACATGGCAAACAACTCAGTTGCTTACAGTGGTGTGAA
AAACTCTTTGAAGGAAGCTAATCATGATGGAGACTTTGGAATTACGCTCGCAGAGCTGCGGGCTCTCATGGAGCT
CAGGTCCACAGATGCATTACGAAAAATACAGGAAAGCTATGGAGATGTCTATGGAATTTGCACCAAATTGAAAAC
ATCTCCCAATGAAGGTTTAAGTGGAAACCCTGCAGATTTAGAAAGAAGAGAAGCAGTGTTTGGAAAGAATTTTAT
ACCTCCTAAAAAGCCAAAAACCTTTCTTCAATTAGTATGGGAAGCATTACAAGATGTCACTTTAATTATATTAGA
AATTGCAGCCATAGTATCATTGGGCCTTTCTTTTTATCAGCCTCCAGAAGGGGATAATGCACTTTGTGGAGAAGT
TTCTGTTGGGGAGGAAGAAGGTGAAGGTGAAACTGGGTGGATTGAAGGAGCTGCAATCCTCTTGTCTGTAGTGTG
TGTGGTGTTAGTAACAGCTTTCAATGACTGGAGTAAGGAGAAACAGTTTAGAGGTTTGCAGAGCCGAATTGAACA
AGAACAGAAGTTCACTGTCATCAGGGGTGGTCAGGTCATTCAGATACCTGTAGCTGACATTACTGTTGGAGATAT
TGCTCAAGTGAAATATGGTGATCTTCTTCCAGCTGACGGCATACTTATTCAAGGCAACGATCTTAAAATTGATGA
AAGCTCATTGACTGGTGAATCAGATCATGTTAAAAAGTCTTTAGATAAGGATCCCTTACTTCTATCAGGTACTCA
TGTAAGGGAAGGCTCTGGAAGAATGGTAGTTACAGCTGTAGGTGTAAATTCTCAAACTGGAATTATCTTTACCTT
ACTTGGAGCTGGAGGTGAAGAGGAAGAGAAGAAAGATGAGAAGAAAAAGGAAAAGAAAAATAAGAAACAAGATGG
AGCTATTGAGAATCGCAACAAAGCAAAAGCCCAGGATGGTGCAGCCATGGAAATGCAGCCATTGAAGAGTGAAGA
AGGTGGAGATGGTGATGAAAAAGATAAAAAGAAAGCAAATTTGCCAAAAAAGGAAAAATCTGTTTTACAAGGGAA
ACTTACAAAACTGGCTGTTCAGATTGGCAAAGCAGGTCTGTTGATGTCTGCCATCACAGTTATCATTCTAGTATT
ATATTTTGTCATTGACACCTTCTGGGTTCAGAAAAGACCATGGCTTGCTGAGTGCACACCAATTTATATACAATA
CTTTGTGAAGTTCTTCATTATTGGAGTTACAGTTTTAGTGGTCGCAGTGCCAGAAGGTCTTCCACTTGCAGTCAC
GATCTCACTGGCTTATTCAGTCAAAAAAATGATGAAAGATAATAACTTAGTAAGGCATCTGGATGCTTGTGAAAC
CATGGGAAATGCTACAGCTATTTGTTCAGATAAAACAGGAACTTTGACAATGAACAGAATGACAGTCGTTCAAGC
TTACATAAATGAAAAACATTATAAAAAGGTTCCTGAACCAGAAGCTATTCCACCAAATATTTTGTCCTATCTTGT
AACAGGAATTTCTGTGAATTGTGCTTATACATCAAAAATATTGCCACCAGAGAAAGAGGGTGGATTACCTCGTCA
CGTTGGTAATAAAACTGAATGTGCCTTGTTGGGACTTCTTTTGGATTTAAAACGGGATTATCAGGATGTTAGAAA
TGAAATACCAGAAGAAGCACTGTACAAAGTCTACACCTTCAATTCTGTTAGGAAGTCCATGAGTACTGTCCTGAA
AAATTCAGATGGAAGTTATCGAATATTCAGCAAGGGTGCATCTGAGATAATTCTGAAAAAGTGTTTCAAAATCTT
GAGTGCTAATGGTGAGGCAAAAGTATTCAGACCAAGGGACCGTGATGATATTGTAAAAACTGTGATTGAACCGAT
GGCATCAGAAGGCTTGAGAACCATATGTCTTGCATTCAGAGATTTTCCAGCAGGAGAACCAGAACCAGAGTGGGA
TAATGAAAATGATATTGTCACCGGCCTTACATGCATTGCTGTTGTGGGGATTGAAGATCCTGTGAGACCTGAGGT
GCCAGATGCAATTAAAAAGTGTCAGAGGGCTGGAATTACTGTGCGGATGGTCACTGGTGATAATATTAATACTGC
TCGGGCCATTGCTACCAAATGTGGTATTTTACATCCTGGGGAAGATTTTCTGTGCCTAGAAGGTAAAGATTTTAA
CAGAAGAATACGAAATGAAAAAGGAGAGATTGAGCAAGAGAGGATAGACAAGATTTGGCCAAAACTTCGAGTACT
TGCAAGATCATCTCCTACTGATAAGCATACACTGGTTAAAGGTATAATTGACAGCACTGTCTCAGACCAACGCCA
GGTTGTAGCTGTAACTGGTGATGGTACAAATGATGGCCCAGCACTAAAGAAAGCAGATGTTGGATTTGCAATGGG
TATTGCTGGAACTGATGTAGCTAAAGAAGCATCCGATATTATTCTCACAGATGACAACTTTACAAGCATTGTTAA
AGCAGTTATGTGGGGACGAAATGTCTATGACAGCATCTCAAAATTCCTTCAGTTCCAACTTACTGTTAATGTAGT
AGCAGTGATTGTTGCTTTTACGGGCGCCTGCATTACTCAAGACTCACCGCTTAAGGCTGTGCAGATGCTGTGGGT
AAACCTCATAATGGATACACTCGCTTCCCTGGCTCTGGCAACGGAACCACCCACTGAGTCTCTCTTGCTTCGGAA
ACCTTATGGTAGAAATAAGCCTCTCATCTCACGTACAATGATGAAGAATATTTTGGGTCATGCATTCTATCAACT
TGTAGTAGTCTTTACACTCTTATTTGCTGGAGAAAAGTTTTTTGACATTGATAGTGGAAGAAATGCTCCTTTGCA
TGCTCCTCCTTCAGAACATTATACTATTGTTTTTAATACCTTTGTGCTGATGCAACTTTTCAACGAAATAAATGC
CCGGAAAATTCATGGTGAAAGAAATGTATTCGAAGGAATCTTTAACAATGCCATCTTCTGCACAATTGTTTTAGG
CACTTTTGTGGTACAGATAATAATTGTGCAGTTTGGTGGAAAACCTTTCAGTTGTTCAGAACTTTCAATAGAACA
GTGGCTATGGTCAATATTCCTAGGAATGGGAACATTACTCTGGGGCCAGCTTATTTCAACAATTCCAACTAGCCG
TTTAAAATTCCTCAAAGAAGCTGGTCATGGAACACAAAAGGAAGAAATACCTGAGGAGGAATTAGCAGAGGATGT
TGAAGAGATTGATCACGCTGAAAGGGAGTTGCGGCGTGGCCAAATCTTGTGGTTTAGAGGTCTGAACAGAATCCA
AACACAGATTCGAGTGGTGAATGCATTTCGTAGTTCTTTATATGAAGGGTTAGAAAAACCGGAATCAAGAAGTTC

FIGURE 2207B

GATTCACAACTTTATGACACATCCTGAGTTTAGGATAGAAGATTCAGAGCCTCATATCCCCCTTATTGATGACAC
TGATGCCGAAGATGATGCTCCTACAAAACGTAACTCCAGTCCTCCACCCTCTCCCAACAAAAATAACAATGCTGT
TGACAGTGGAATTCACCTTACAATAGAAATGAACAAGTCTGCTACCTCTTCATCCCCAGGAAGCCCACTACATAG
TTTGGAAACATCACTCTGATTGTAAGCTGAATGTTAACACACTAGCTGCATTGTAAAGAAACAAATTGAAACTGG
GTCTTTTCACATATTGTGATGGACAAGCTAGTATTCTTGTCTTTGGACTTCAACAGAAGACACACTTGTACGAAT
GTAGATTTATTTTTTTAAAAAAAAAAAAGCAAAGCTTTCTGCCAGACTGAGGGTGCTTTTTGGGGGGTGGGAGAA
ATGAACTGACAGATAAACAGTAACTCAGCGTAAGTGACCTGTGGATCATCAGTAGTACCCAAGCATGGTCCTGAA
CAGTGTATTAGCAGAGCTTTAGTTTATCTCAGTCCTGGATGGGAGAGAGAGGGAGGAGTAAAACTGGGCAAGACA
AAGAGCCCTGGATCGTTGAATTGATAGTTTAATTTCTGCTGTTGGCTGTTAATAATTTGGATTATTTATGTTTAT
AAATGATACAGATCTGTTTACAAGGTTTGTAGATACTTTTTTTGTTCCTGTTCATAGATGGGAAGCTTCCTTATA
ACTGATGCAGAGAAAAATTAGTCCTTCAAATACTGCTGTATTTTCAGG

FIGURE 2208

MGDMANNSVAYSGVKNSLKEANHDGDFGITLAELRALMELRSTDALRKIQESYGDVYGICTKLKTSPNEGLSGNP
ADLERREAVFGKNFIPPKKPKTFLQLVWEALQDVTLIILEIAAIVSLGLSFYQPPEGDNALCGEVSVGEEEGEGE
TGWIEGAAILLSVVCVVLVTAFNDWSKEKQFRGLQSRIEQEQKFTVIRGGQVIQIPVADITVGDIAQVKYGDLLP
ADGILIQGNDLKIDESSLTGESDHVKKSLDKDPLLLSGTHVREGSGRMVVTAVGVNSQTGIIFTLLGAGGEEEEK
KDEKKKEKKNKKQDGAIENRNKAKAQDGAAMEMQPLKSEEGGDGDEKDKKKANLPKKEKSVLQGKLTKLAVQIGK
AGLLMSAITVIILVLYFVIDTFWVQKRPWLAECTPIYIQYFVKFFIIGVTVLVVAVPEGLPLAVTISLAYSVKKM
MKDNNLVRHLDACETMGNATAICSDKTGTLTMNRMTVVQAYINEKHYKKVPEPEAIPPNILSYLVTGISVNCAYT
SKILPPEKEGGLPRHVGNKTECALLGLLLDLKRDYQDVRNEIPEEALYKVYTFNSVRKSMSTVLKNSDGSYRIFS
KGASEIILKKCFKILSANGEAKVFRPRDRDDIVKTVIEPMASEGLRTICLAFRDFPAGEPEPEWDNENDIVTGLT
CIAVVGIEDPVRPEVPDAIKKCQRAGITVRMVTGDNINTARAIATKCGILHPGEDFLCLEGKDFNRRIRNEKGEI
EQERIDKIWPKLRVLARSSPTDKHTLVKGIIDSTVSDQRQVVAVTGDGTNDGPALKKADVGFAMGIAGTDVAKEA
SDIILTDDNFTSIVKAVMWGRNVYDSISKFLQFQLTVNVVAVIVAFTGACITQDSPLKAVQMLWVNLIMDTLASL
ALATEPPTESLLLRKPYGRNKPLISRTMMKNILGHAFYQLVVVFTLLFAGEKFFDIDSGRNAPLHAPPSEHYTIV
FNTFVLMQLFNEINARKIHGERNVFEGIFNNAIFCTIVLGTFVVQIIIVQFGGKPFSCSELSIEQWLWSIFLGMG
TLLWGQLISTIPTSRLKFLKEAGHGTQKEEIPEEELAEDVEEIDHAERELRRGQILWFRGLNRIQTQIRVVNAFR
SSLYEGLEKPESRSSIHNFMTHPEFRIEDSEPHIPLIDDTDAEDDAPTKRNSSPPPSPNKNNNAVDSGIHLTIEM
NKSATSSSPGSPLHSLETSL

FIGURE 2209

CTAGCTCTGTGGGAAGGTTTTGGGCTCTCTGGCTCGGATTTTGCAATTTCTCCCTGGGGACTGCCGTGGAGCCGC
ATCCACTGTGGATTATAATTGCAACATGACGCTGGAAGAGCTCGTGGCGTGCGACAACGCGGCGCAGAAGATGCA
GACGGTGACCGCCGCGGTGGAGGAGCTTTTGGTGGCCGCTCAGCGCCAGGATCGCCTCACAGTGGGGGTGTACGA
GTCGGCCAAGTTGATGAATGTGGACCCAGACAGCGTGGTCCTCTGCCTCTTGGCCATTGACGAGGAGGAGGAGGA
TGACATCGCCCTGCAAATCCACTTCACGCTCATCCAGTCCTTCTGCTGTGACAACGACATCAACATCGTGCGGGT
GTCGGGCAATGCGCGCCTGGCGCAGCTCCTGGGAGAGCCGGCCGAGACCCAGGGCACCACCGAGGCCCGAGACCT
CCACTGTCTTCCCTTCCTACAGAACCCTCACACGGACGCCTGGAAGAGCCACGGCTTGGTGGAGGTGGCCAGCTA
CTGCGAAGAAAGCCGGGGCAACAACCAGTGGGTCCCCTACATCTCTCTTCAGGAACGCTGAGGCCCTTCCCAGCA
GCAGAATCTGTTGAGTTGCTGCCAACAAACAAAAAATACAATAAATATTTGAACCCCCTCCCCCCCAGCACAACC
CCCCCAAAACAACCCAACCCACGAGGACCATCGGGGGCAGGTCGTTGGAGACTGAAGAGAAAGAGAGAGAGGAGA
AGGGAGTGAGGGGCCGCTGCCGCCTTCCCCATCACGGAGGGTCCAGACTGTCCACTCGGGGGTGGAGTGAGACTG
ACTGCAAGCCCCACCCTCCTTGAGACTGGAGCTGAGCGTCTGCATACGAGAGACTTGGTTGAAACTTGGTTGGTC
CTTGTCTGCACCCTCGACAAGACCACACTTTGGGACTTGGGAGCTGGGGCTGAAGTTGCTCTGTACCCATGAACT
CCCAGTTTGCGAATTAATAAGAGACAATCTATTTTGTTACTTGCACTTGTTATTCGAACCACTGAGAGCGAGATG
GGAAGCATAGATATCTATATTTTTATTTCTACTATGAGGGCCTTGTAATAAATTTCTAAAGCCTCAAAAAA

FIGURE 2210

MTLEELVACDNAAQKMQTVTAAVEELLVAAQRQDRLTVGVYESAKLMNVDPDSVVLCLLAIDEEEEDDIALQIHF
TLIQSFCCDNDINIVRVSGNARLAQLLGEPAETQGTTEARDLHCLPFLQNPHTDAWKSHGLVEVASYCEESRGNN
QWVPYISLQER

FIGURE 2211

AGCGTCGGACTACCGTTGGTTTCCGCAACTTCCTGGATTATCCTCGCCAAGGACTTTGCAATATATTTTTCCGCC
TTTTCTGGAAGGATTTCGCTGCTTCCCGAAGTCTTGGACGAGCGCTCTAGCTCTGTGGGAAGGTTTTGGGCTCTC
TGGCTCGGATTTTGCAATTTCTCCCTGGGGACTGCCGTGGAGCCGCATCCACTGTGGATTATAATTGCAACATGA
CGCTGGAAGAGCTCGTGGCGTGCGACAACGCGGCGCAGAAGATGCAGACGGTGACCGCCGCGGTGGAGGAGCTTT
TGGTGGCCGCTCAGCGCCAGGATCGCCTCACAGTGGGGGTGTACGAGTCGGCCAAGTTGATGAATGTGGACCCAG
ACAGCGTGGTCCTCTGCCTCTTGGCCATTGACGAGGAGGAGGAGGATGACATCGCCCTGCAAATCCACTTCACGC
TCATCCAGTCCTTCTGCTGTGACAACGACATCAACATCGTGCGGGTGTCGGGCATGCAGCGCCTGGCGCAGCTCC
TGGGAGAGCCGGCCGAGACCCAGGGCACCACCGAGGCCCGAGACCTGCATTGTCTCCTGGTCACGAACCCTCACA
CGGACGCCTGGAAGAGCCACGGCTTGGTGGAGGTGGCCAGCTACTGCGAAGAAAGCCGGGGCAACAACCAGTGGG
TCCCCTACATCTCTCTTCAGGAACGCTGAGGCCCTTCCCAGCAGCAGAATCTGTTGAGTTGCTGCCACAAACAAA
AAATACAATAAATATTTGAACCCCCTCCCCCCCAGCACAACCCCCCCAAAACAACCCAACCCACGAGGACCATCG
GGGGCAGAGTCGTTGGAGACTGAAGAGGAAGAGGAGGAGGAGAAGGGGAGTGAGCGGTCCGCCCCCAGGGACGCT
CTCCAGGAGCTGGCGGCCGCCGATCAGATGGAGAAGGGGGGACCCAGGCCAGCAGGAGACAGGACCCCCGAAGCT
GAGGCCTTGGGATGGAGCAGAAGCCGGAGTGGCGGGGCACGCTGCCGCCTTCCCCATCACGGAGGGTCCAGACTG
TCCACTCGGGGGGTGGAGTGAGACTGACTGCAAGCCCCACCCTCCTTGAGACTGGAGCTGGCGTCTGCATACGAGA
GACTTGGTTGAACTTGGTTGGTCCTTGTCTGCACCCTCGACAAGACCACACTTTGGGACTTGGGAGCTGGGGCTG
AAGTTGCTCTGTACCCATGAACTCCCAGTTTGCGAATTATAGAGACAATCTATTTTGTTACTTGCACTTGTTATT
CGAACCACTGAGAGCGAGATGGGAAGCATAGATATCTATATTTTTATTTCTACTATGAGGGCCTTGTAATAAATT
TCTAAAGCCTCTGAAAAAAAAAAAAAAA

FIGURE 2212

MTLEELVACDNAAQKMQTVTAAVEELLVAAQRQDRLTVGVYESAKLMNVDPDSVVLCLLAIDEEEEDDIALQIHF
TLIQSFCCDNDINIVRVSGMQRLAQLLGEPAETQGTTEARDLHCLLVTNPHTDAWKSHGLVEVASYCEESRGNNQ
WVPYISLQER

FIGURE 2213

TGATTCTGAGGCATTGCCGTCGCGCGGTGCATAGCTAAAGACGTCGCGCTTGCGCAGGCGCTCGGCGCAGAGGCC
TGCGGGAAGCCAAGATGGCGCATAGGGGTTCTCCAGGCTGCAGTTGGCGCCTTATCAGTATCTAAGCGGAGTGTT
TTGGAAGGAGTTAAGGGGCTGTGGCAAACGCCCTCTCCGCCGTCATGGCCCGGCATCGGAATGTTCGAGGCTATA
ACTACGATGAAGATTTTGAAGATGATGATCTCTACGGCCAGTCTGTAGAGGATGATTATTGTATTTCGCCGTCAA
CAGCTGCTCAGTTTATTTATTCACGGCGTGACAAACCTTCCGTTGAGCCTGTGGAAGAATATGATTATGAAGATC
TGAAAGAATCTTCCAATTCTGTTTCAAACCATCAGCTCAGTGGATTTGATCAAGCTCGTCTTTATTCATGCCTTG
ATCACATGAGAGAGGTACTTGGAGATGCTGTGCCAGATGAAATATTAATTGAAGCAGTTCTGAAGAACAAGTTTG
ATGTGCAGAAGGCTTTGTCAGGGGTTCTGGAACAAGATAGAGTGCAGAGTTTGAAGGACAAGAATGAGGCAACAG
TATCTACAGGAAAGATAGCAAAAGGAAAACCAGTAGATTCCCAGACATCGCGAAGTGAATCTGAAATTGTGCCAA
AAGTTGCTAAAATGACTGTATCTGGAAAGAAGCAAACTATGGGATTTGAAGTGCCTGGAGTATCTTCTGAAGAAA
ATGGTCATAGTTTCCACACACCTCAAAAAGGACCGCCCATTGAAGATGCCATTGCTTCTTCCGATGTTCTTGAGA
CTGCTTCTAAATCTGCTAATCCACCCCACACGATTCAAGCATCAGAAGAGCAGAGTTCAACCCCAGCACCGGTGA
AAAAGTCTGGCAAGCTGAGGCAGCAAATAGATGTGAAGGCGGAACTGGAGAAGCGGCAAGGAGGGAAGCAGCTAC
TCAACTTAGTGGTCATTGGTCATGTTGATGCTGGGAAAAGTACTCTGATGGGCCATATGCTTTATCTTCTGGGTA
ATATAAACAAAAGAACTATGCATAAGTATGAACAGGAGTCTAAAAAGGCTGGCAAAGCTTCGTTTGCATATGCAT
GGGTCTTGGATGAAACTGGCGAAGAAAGGGAAAGGGGAGTAACCATGGATGTTGGTATGACAAAGTTTGAAACCA
CAACCAAAGTTATTACATTAATGGATGCTCCAGGCCATAAGGACTTCATTCCAAATATGATTACAGGAGCAGCCC
AGGCGGATGTAGCTGTTTTAGTTGTAGATGCCAGCAGGGGAGAGTTTGAAGCTGGATTTGAGACTGGAGGACAAA
CACGAGAGCATGGACTCTTGGTCCGTTCTCTGGGAGTGACGCAGCTTGCAGTTGCAGTTAATAAAATGGATCAGG
TTAATTGGCAACAAGAAAGGTTTCAAGAGATTACTGGAAAACTTGGGCACTTTCTTAAGCAAGCAGGTTTTAAGG
AGAGTGATGTAGGTTTTATTCCTACAAGTGGTCTCAGTGGTGAAAATCTAATCACAAGATCTCAGTCAAGTGAAC
TCACAAAATGGTATAAAGGACTATGTTTATTAGAACAAATTGATTCCTTTAAGCCTCCCCAGCGATCTATTGACA
AACCTTTTAGATTATGTGTGTCCGATGTTTTCAAAGATCAAGGATCTGGATTTTGCATAACTGGTAAAATAGAAG
CTGGTTATATCCAAACTGGTGACCGACTACTGGCAATGCCTCCTAATGAAACTTGTACCGTGAAAGGAATCACTC
TGCATGATGAACCTGTCGACTGGGCGGCAGCAGGCGATCATGTTAGTCTTACTTTGGTTGGGATGGATATCATCA
AAATCAATGTTGGCTGCATATTTTGTGGCCCCAAAGTACCCATTAAAGCTTGCACTCGTTTCAGAGCCCGAATCC
TCATCTTTAATATTGAAATTCCTATCACTAAAGGATTTCCTGTGCTGTTACACTACCAAACTGTCAGTGAACCCG
CCGTTATTAAACGATTGATTAGTGTCTTAAACAAAAGCACGGGTGAAGTCACAAAGAAAAAGCCTAAGTTTTTGA
CTAAAGGCCAGAATGCATTGGTAGAGCTACAGACACAAAGACCAATAGCTCTTGAGCTATATAAAGACTTTAAAG
AGCTGGGGAGGTTCATGCTACGTTACGGTGGTTCTACAATAGCTGCTGGTGTTGTCACTGAGATAAAAGAATGAT
GGGTCAGAATTTCTACCACGTTTCTGGATACAGTGAAATAGCTAACCTCTGTTTCAAGAATGCAGTTATTAAGTC
AAAGGAACAATGTGCAATTGATATGTTTTTAGATGAGAGAGAAAAATTAAAGCTAAAATTAGCTGCAAAGAAGTA
TTAATAATCACCTCTGCAAAAATTCTAAGTTGCCAACTGGCAAAGAAAGTCTAATGTTAAAAACAACTTTGCCTT
TGAAACGTTAATAAATGGATTTACTTTGCTAAGAAAAAAAA

FIGURE 2214

MARHRNVRGYNYDEDFEDDDLYGQSVEDDYCISPSTAAQFIYSRRDKPSVEPVEEYDYEDLKESSNSVSNHQLSG
FDQARLYSCLDHMREVLGDAVPDEILIEAVLKNKFDVQKALSGVLEQDRVQSLKDKNEATVSTGKIAKGKPVDSQ
TSRSESEIVPKVAKMTVSGKKQTMGFEVPGVSSEENGHSFHTPQKGPPIEDAIASSDVLETASKSANPPHTIQAS
EEQSSTPAPVKKSGKLRQQIDVKAELEKRQGGKQLLNLVVIGHVDAGKSTLMGHMLYLLGNINKRTMHKYEQESK
KAGKASFAYAWVLDETGEERERGVTMDVGMTKFETTTKVITLMDAPGHKDFIPNMITGAAQADVAVLVVDASRGE
FEAGFETGGQTREHGLLVRSLGVTQLAVAVNKMDQVNWQQERFQEITGKLGHFLKQAGFKESDVGFIPTSGLSGE
NLITRSQSSELTKWYKGLCLLEQIDSFKPPQRSIDKPFRLCVSDVFKDQGSGFCITGKIEAGYIQTGDRLLAMPP
NETCTVKGITLHDEPVDWAAAGDHVSLTLVGMDIIKINVGCIFCGPKVPIKACTRFRARILIFNIEIPITKGFPV
LLHYQTVSEPAVIKRLISVLNKSTGEVTKKKPKFLTKGQNALVELQTQRPIALELYKDFKELGRFMLRYGGSTIA
AGVVTEIKE

FIGURE 2215

GGGGATTGTGGAAGGGTAGGGGAAGGAGATTTCTCTCTCCCCAGGCCACTAGATAAAAGGCCATGTTTGTCCACA
TTGGGAGGCTGATGGGAAGAAAGGATGCCAGACCAGTTGGCCTGTCCCTGGGGCTTGTCTCAGGACCTCCAGGAA
GTGTTTCTGAACTGCAGGCTCTCGTGTGTGTCTCCCATTTGTCAAAACTTTGACCTGATCTTTTCAGAATCCACC
TTGTGAGGCCCCAGCCTTGGAAGCCACTGCCCATTGCCAGAACACGGGGAGTAGAGCAGTGAGCACTGAGTGGGC
CTGAGGCTGCCTTTCTTCCCTGGCACACGTCCTGAGGAGGGGAGGTTGTGGCGGCACCAGGCAGAAGCTATGCCA
CTGCTGCGCTGGGTCTCCCTCCCCAGAAGCCCTCATTCTTGATTTGCTCAAGCTGTTCCTGCTTATCAACAAACA
CCTTAATTTATCAAACACAGCAAAGCTAGTGACAGCTGAGAGGTCCATGTCTGGGTAGAACCAGGCCCACGATGC
TGCCTCTCCCGTGTTCTGGAGTTCAGCTGCAGGGATTCTGCTGATGTGCCCAGCACCATCGTTCTGTTTGTGCTT
AAATGGCACAGCATTTGGTCAGCACATCTGAAAAGGAAGGTGTGAGAAGCAAAGCCC**ATG**GCCACGTTCCCCTGC
CAGTTATGTGGCAAGACGTTCCTCACCCTGGAGAAGTTCACGATTCACAATTATTCCCACTCCAGGGAGCGGCCG
TACAAGTGTGTGCAGCCTGACTGTGGCAAAGCCTTTGTTTCCAGATATAAATTGATGAGGCATATGGCTACCCAT
TCTCCCCAGAAATCTCACCAGTGTGCTCACTGTGAGAAGACGTTCAACCGGAAAGACCACCTGAAAAACCACTTC
CAGACCCACGACCCCAACAAAATGGCCTTTGGGTGTGAGGAGTGTGGGAAGAAGTACAACACCATGCTGGGCTAT
AAGAGGCACCTGGCCCTCCATGCGGCCAGCAGTGGGGACCTCACCTGTGGGGTCTGTGCCCTGGAGCTAGGGAGC
ACCGAGGTGCTACTGGACCACCTCAAAGCCCATGCGGAAGAGAAGCCCCCTAGCGGAACCAAGGAAAAGAAGCAC
CAGTGCGACCACTGTGAAAGATGCTTCTACACCCGGAAGGATGTGCGACGCCACCTGGTGGTCCACACAGGATGC
AAGGACTTCCTGTGCCAGTTCTGTGCCCAGAGATTTGGGCGCAAGGATCACCTCACCCGGCATACCAAGAAGACC
CACTCACAGGAGCTGATGAAAGAGAGCTTGCAGACCGGAGACCTTCTGAGCACCTTCCACACCATCTCGCCTTCA
TTCCAACTGAAGGCTGCTGCCTTGCCTCCTTTCCCTTTAGGAGCTTCTGCCCAGAACGGGCTTGCAAGTAGCTTG
CCAGCTGAGGTCCATAGCCTCACCCTCAGTCCCCCAGAACAAGCCGCCCAGCCTATGCAGCCGCTGCCAGAGTCC
CTGGCCTCCCTCCACCCCTCGGTATCCCCTGGCTCTCCTCCGCCACCCCTTCCCAATCACAAGTACAACACCACT
TCTACCTCATACTCCCCACTTGCAAGCCTGCCCCTCAAAGCAGATACTAAAGGTTTTTGCAATATCAGTTTGTTT
GAGGACTTGCCTCTGCAAGAGCCTCAGTCACCTCAAAAGCTCAACCCAGGTTTTGATCTGGCTAAGGGAAATGCT
GGTAAAGTAAACCTGCCCAAGGAGCTGCCTGCAGATGCTGTGAACCTAACAATACCTGCCTCTCTGGACCTGTCC
CCCCTGTTGGGCTTCTGGCAGCTGCCCCCTCCTGCTACCCAAAATACCTTTGGGAATAGCACTCTTGCCCTGGGG
CCTGGGGAATCTTTGCCCCACAGGTTAAGCTGTCTGGGGCAGCAGCAGCAAGAACCCCCACTTGCCATGGGCACT
GTGAGCCTGGGCCAGCTCCCCCTGCCCCCCATCCCTCATGTGTTCTCAGCTGGCACTGGCTCTGCCATCCTGCCT
CATTTCCATCATGCATTCAGA**TAA**TTGATTTTTAAAGGGTATTTTTCGTATTCTGGAAGATGTTTTAAGAAGCAT
TTTAAATGTCAGTTACAATATGAGAAAGATTTGGAAAACGAGACTGGGACTATGGCTTATTCAGTGATGACTGGC
TTGAGATGATAAGAGAATTCTCGAACTGCATGTATTGTGCCAATCTGTCCTGAGTGTTCATGCTTTGTACCAAAT
TTAATGAACGCGTGTTCTGTAATCAAACTGCAAATATTGTCATAACCAACATCCAAAATGACGGCTGCTATATAT
AAGTGTTTGTCATATGGAATTTAATCGTAAGCCATGATCATAATGTTAACTAAATAACTTTATGTGGCACTGCCT
AGTAAGGGAACTATGGAAAGGTTTGGATTTCTCCAAATCTGGGAGAATTTTCAAAATAAGAAAATAACCTTTATA
TGATATACTATGACTAGGCTGTGTATTTCTTTTCAGGGATTTTTCTACCTTCAGGGTTGGATGTAGTTTAGTTAC
TATTACCATAGCCAACCTGTAGTTTTACATATACATTTTCTTGTGGAGCAATAGAGTTCTCCATTTTACAGAAGC
ATTTTAAATGTAGTTTGAATATTTTCCACAAGATGCTGCAATGTGAGTTATCACTTCATTTATCTTAAAGAAAGA
CTAAACTGGTTGTCAGTTACATCTGACAGAAAAAAAAAAAAAAATCACTGTGTAACCAGGGTTAAGTGGTTAAAA
TAATCCAGGGCGTCAGTCAAAGGCATTTTGCTGACTTTAATATTGATTATATTTTTAACAGGGAATTTAAGGAAA
ATATTACCGGGGAATTAAAAAATATATATATATTAAAACAAGAATTTTCCTTTGCCCCTGTCCAGCCTAAACCTA
CCTACCTCAAGGCTGCCTAAGTTCCTAAGTATTGTTTGTAATCACCCAATAAATAAGTGCATTTGTAATTCATCA
GTCATTATTAGCTTTTATTAAAAGAAGATTACGTTTTACAATGTAACTATAATCTCTTGAATTTGGTATCTTATT
AATGAGTTTTAAAGATGTAAAACCTAACCTTTTTTAAAGCTCCATTGTCTTATGTTTTTAGAGGCTTTTCCGTAA
ACATATATCTTACATATAATAAACTTTTCAAATCTTGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2216

MATFPCQLCGKTFLTLEKFTIHNYSHSRERPYKCVQPDCGKAFVSRYKLMRHMATHSPQKSHQCAHCEKTFNRKD
HLKNHFQTHDPNKMAFGCEECGKKYNTMLGYKRHLALHAASSGDLTCGVCALELGSTEVLLDHLKAHAEEKPPSG
TKEKKHQCDHCERCFYTRKDVRRHLVVHTGCKDFLCQFCAQRFGRKDHLTRHTKKTHSQELMKESLQTGDLLSTF
HTISPSFQLKAAALPPFPLGASAQNGLASSLPAEVHSLTLSPPEQAAQPMQPLPESLASLHPSVSPGSPPPPLPN
HKYNTTSTSYSPLASLPLKADTKGFCNISLFEDLPLQEPQSPQKLNPGFDLAKGNAGKVNLPKELPADAVNLTIP
ASLDLSPLLGFWQLPPPATQNTFGNSTLALGPGESLPHRLSCLGQQQQEPPLAMGTVSLGQLPLPPIPHVFSAGT
GSAILPHFHHAFR

FIGURE 2217

CCCCGCGGGCTGCAGCGAGCCAGGCATGCTCACTGGCGCAGGCCCGGCCCGCAGCCCGAGCAGGAAGCGCCGGCG
TAGGCGGCCCCCTGCGCTGCCAGCTGGAGCCGGGCGGAGCCAGCGCCCCGGCGCAGGGTGGCTCTGCCAGTCCCC
GCGCGCCTGGGCGGCCGCACACGTGTCCAGGCGTCACGTCCGCGCGCGCCCCCGGGGCTTGCGTCAGCGGCTGTT
CCAGAAGCGGGTGGGCCAGGGCTCTGCGCACCGCTGGGGTTCGGGGCCCGGGACGCCGCCGGGAGGAGGGCACCG
CGCGGGGTCCGACGCGGAGGCGTGCTCGGAACGCCGGGGGCTGCGGAGTGCATCAGCGCGGTCCAGCCCTCCGCC
TGCCGGGCGCCGAGCGTCTCCGCCGCCCGGACCTGGGCTGGGCGCCGTGGCGTTGCCTCGGAGCTCGCTGCCCGC
GGGGCGCGCACCGCCTTGACCCGGGCGGCCCCGCGGCAGGCAGGCGCCCGCAGTTCCATGGTTGGTTCGGAGCGC
G**ATG**AGCCGCCCGTCCTCCACCGGCCCCAGCGCTAATAAACCCTGCAGCAAGCAGCCGCCGCCGCAGCCCCAGCA
CACTCCGTCCCCGGCTGCGCCCCCGGCCGCCGCCACCATCTCGGCTGCGGGCCCCGGCTCGTCCGCGGTGCCCGC
CGCGGCGGCGGTGATCTCGGGCCCCGGCGGCGGCGGCGGGGCCGGCCCGGTGTCCCCGCAGCACCACGAGCTGAC
CTCGCTCTTCGAGTGTCCGGTCTGCTTTGACTATGTCCTGCCTCCTATTCTGCAGTGCCAGGCCGGGCACCTGGT
GTGTAACCAATGCCGCCAGAAGTTGAGCTGCTGCCCGACGTGCAGGGGCGCCCTGACGCCCAGCATCAGGAACCT
GGCTATGGAGAAGGTGGCCTCGGCAGTCCTGTTTCCCTGTAAGTATGCCACCACGGGCTGTTCCCTGACCCTGCA
CCATACGGAGAAACCAGAACATGAAGACATATGTGAATACCGCCCCTACTCCTGCCCATGTCCTGGTGCTTCCTG
CAAGTGGCAGGGGTCCCTGGAAGCTGTGATGTCCCATCTCATGCACGCCCACAAGAGCATTACCACCCTTCAGGA
AGAAGACATCGTCTTTCTAGCTACAGACATTAACTTGCCAGGGGCTGTCGACTGGGTGATGATGCAGTCATGTTT
TGGCCATCACTTCATGCTGGTGCTGGAGAAACAAGAGAAGTACGAAGGCCACCAGCAGTTTTTTGCCATCGTCCT
GCTCATTGGCACCCGCAAGCAAGCCGAGAACTTTGCCTACAGACTGGAGTTGAATGGGAACCGGCGGAGATTGAC
CTGGGAGGCCACGCCCCGCTCGATTCATGACGGTGTGGCTGCGGCCATCATGAACAGCGACTGCCTTGTTTTCGA
CACAGCCATAGCACATCTTTTTGCAGATAATGGGAACCTTGGAATCAATGTTACTATTTCTACATGTTGTCCA**TG**
ATGTGACTTCCGTAAACCTTCAAAATTATTTGGGCATACTGCTCTATGTTTAATAAAGGTTTTTATAGATGTTTT
ATTCCATATGTCTTCACAAGTCAGGACCCACAATTACCCGTGTTTTGTTTGAACAGCAGTGTCCCATCTGGCTTC
GACCCAACAAAGTTCATTAACCTGGGATGAATGGGGTTGGCCTGTTGGTGATTTGGATGCTGTTCTGTGATCTAA
AACAACTCTTATTGAATTGTATTTACTCCCTAAACAACACTTGACAGGCTGTTGCACAGGGCTTCTATAGATCAG
TGTGTTAGGAATGGGAGGCCCCTTCCTGCCTGCCTTCCCATATTGGTCCCTTGACATTGACAAAAGCACAGTGAC
TGTCAGCAGATTCCTTTACTTTTGTTTGTGGGAGGTAGGAATTGTTTTAATGCATTTTAAACAGTGTTTCTGAAA
TTGGATGGCTGGCTAATAGACACTGAATCACCCGGAGTGCTTATCTTAAAATTGCAGATTTAGGGAGCCTGCCAA
TTTAACAGTCTCATCAGTGATCTTTCAACAGTAATGTTTGAGAATTACTGGGTTAAATTGTGGAAAGGGTCCAGA
TTTTAAAGGTGCTTTAAGGTTGCCCTCTGCCGATACTGTTTGTCTTTCTACTGTTTCATCCCCTAACTTCCCCCA
ACCCTCAAATTAAAACTAGAACTATAGATCCACATGAACGCACGCCTGAGATTTGGCCACTCACC

FIGURE 2218

MSRPSSTGPSANKPCSKQPPPQPQHTPSPAAPPAAATISAAGPGSSAVPAAAAVISGPGGGGGAGPVSPQHHELT
SLFECPVCFDYVLPPILQCQAGHLVCNQCRQKLSCCPTCRGALTPSIRNLAMEKVASAVLFPCKYATTGCSLTLH
HTEKPEHEDICEYRPYSCPCPGASCKWQGSLEAVMSHLMHAHKSITTLQEEDIVFLATDINLPGAVDWVMMQSCF
GHHFMLVLEKQEKYEGHQQFFAIVLLIGTRKQAENFAYRLELNGNRRRLTWEATPRSIHDGVAAAIMNSDCLVFD
TAIAHLFADNGNLGINVTISTCCP

FIGURE 2219

GAGCCCAGCCGAGCGTCCGCCGCTGCCCGTGCGCCTCTGCGCTCCGCGCCATGGCCGGCCTCAACTCCCTGGAGG
CGGTGAAACGCAAGATCCAGGCCCTGCAGCAGCAGGCGGACGAGGCGGAAGACCGCGCGCAGGGCCTGCAGCGGG
AGCTGGACGGCGAGCGCGAGCGGCGCGAGAAAGCTGAAGGTGATGTGGCCGCCCTCAACCGACGCATCCAGCTCG
TTGAGGAGGAGTTGGACAGGGCTCAGGAACGACTGGCCACGGCCCTGCAGAAGCTGGAGGAGGCAGAAAAAGCTG
CAGATGAGAGTGAGAGAGGAATGAAGGTGATAGAAAACCGGGCCATGAAGGATGAGGAGAAGATGGAGATTCAGG
AGATGCAGCTCAAAGAGGCCAAGCACATTGCGGAAGAGGCTGACCGCAAATACGAGGAGGTAGCTCGTAAGCTGG
TCATCCTGGAGGGTGAGCTGGAGAGGGCAGAGGAGCGTGCGGAGGTGTCTGAACTAAAATGTGGTGACCTGGAAG
AAGAACTCAAGAATGTTACTAACAATCTGAAATCTCTGGAGGCTGCATCTGAAAAGTATTCTGAAAAGGAGGACA
AATATGAAGAAGAAATTAAACTTCTGTCTGACAAACTGAAAGAGGCTGAGACCCGTGCTGAATTTGCAGAGAGAA
CGGTTGCAAAACTGGAAAAGACAATTGATGACCTGGAAGAGAAACTTGCCCAGGCCAAAGAAGAGAACGTGGGCT
TACATCAGACACTGGATCAGACACTAAACGAACTTAACTGTATATAAGCAAAACAGAAGAGTCTTGTTCCAACAG
AAACTCTGGAGCTCCGTGGGTCTTTCTCTTCTCTTGTAAGAAGTTCCTTTTGTTATTGCCATCTTCGCTTTGCTG
GAAATGTCAAGCAAATTATGAATACATGACCAAATATTTTGTATCGGAGAAGCTTTGAGCACCAGTTAAATCTCA
TTCCTTCCCTTTTTTTTTCAAATGGCACCAGCTTTTTCAGCTCTCTTATTTTTTCCTTAAGTAGCATTTATTCCT
AAGGTAGGCAGGGTATTTCCTAGTAAGCATACTTTCTTAAGACGGAGGCCATTTGGTTCCTGGGAGAATAGGCAG
CCCCACACTTTGAAGAATACAGACCCCAGTATCTAGTCGTGGATATAATTAAAACGCTGAAGACCATAACCTTTT
GGGTCAACTGTTGGTCAAACTATAGGAGAGACCAGGGACCATCACATGGGTAGGGATTTTCCATCCAGAGCCAAT
AAAAGGACTGGTGGGGGCCGGGGGTGGCTATTGTGGGAAGTCATAACCCACAGATAGATCAACCTAAGAATCCTG
GCCCTTCTCCACTCTCCACCATGCAGGACAAACATCTTCTCAAGCAGTCAACGTAGAATGCTTGGGAAATAGTCA
TAATTACCCACATATAGTAATTAATAGATGGTAATTAATTGATCCTTGATGTGATGTTCTTTTGCATATTTCCTT
CATTCTAAAGTTGTTCCCTGGCCGGGAGCGTTTGCTTTCGCCTGTAATCCCAACACTTTGGGAGGCCAGGACAGA
TCACTTGAGGTCAGGAGTTCGAGACCAGCCCAGCCAACATGGCGAAACCATGTCTCTACTAAAAATACAAAAATT
ATGGTGACGCCTGCCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCAGGAGGATCGCTTGAACCCAGGAAGTGGAG
ACTGCAGTGAGCCGATATCGCACCACAGCGCTCCAGCCTGGTCGACAGAGTGAGACTCCATCTCAAGAAAAAATA
AAAATAAAGTTGTTCTCTGAAGAGCAAATGTCTCATTCCAGTAATGACCCACTCAGCAGGAATATGGTGGAGTTC
AGTCCAATTCAGGTCAGCCATATCCAAAAGACCACAAGTCATTACTAAGTTGAGCAAAAGAGTTTTTATCTATTA
GCAGAAAGGGCCTCTCTGGCAGCAGAGATTAAAAACTGGCCCAACTTCATTTCCATACTTCAGGGAACAGCAAAT
TGAGGATTTACTTATCTAGGACTT

FIGURE 2220

MAGLNSLEAVKRKIQALQQQADEAEDRAQGLQRELDGERERREKAEGDVAALNRRIQLVEEELDRAQERLATALQ
KLEEAEKAADESERGMKVIENRAMKDEEKMEIQEMQLKEAKHIAEEADRKYEEVARKLVILEGELERAEERAEVS
ELKCGDLEEELKNVTNNLKSLEAASEKYSEKEDKYEEEIKLLSDKLKEAETRAEFAERTVAKLEKTIDDLEEKLA
QAKEENVGLHQTLDQTLNELNCI

FIGURE 2221A

ATCTTTTTTCATCTTCTAGCTGTAGCTCGGGCTGCTTGTCGGCTTGGCTCCCCCTCCCCCCTTTGCTCTCTGCCT
CGTCTTTCCCCAGGACTTCGCTATTTTGCTTTTTTAAAAAAAGGCAAGAAAGAACTAAACTCCCCCCTCCCTCTC
CTCCAGTCGGGCTGCACCTCTGCCTTGCACTTTGCACAGAGGTAGAGAGCGCGCGAGGGAGAGAGAGGAAAGAAA
AAAAATAATAAAGAGAGCCAAGCAGAAGAGGAGGCGAGAAGCATGAAGTGTTAACTCCCCCGTGCCAAGGCCCGC
GCCGCCCGGACAGACGCCCGCCGCGCCTTCCAGCCCCGAGCGGACGCCGCGCGCCGCCCTGCCTGCAGCCCGGGC
CGGCGACGGCGAGCCCTTCCTTATGCAAAGCGCGCCAGCAGCGCGAAGGCGGGACGCCGCGCACCGGGCCGGGCT
CCTCCAGCTTCGCCGCCGCAGCCACCACCGCCGCCACCGCAGCTCGCGGAGGATCTTCCCGAGCCTGAAGCCGCC
GGCTCGGCGCGCAAGGAGGCGAGCGCAAGGAGGGGCCGGGGCGAGCGAGGGAGCACATTGGCGTGAGCAGGGGGG
AGGGAGGGCGGGCGCGGGGGGCGCGGGCAGGGCGGGGGGGTGTGTGTGTGAGCGCGCTTGGAGGTTTCGGGCCAG
CCACCGCCGCGCAAGCTAGAAGCGCCCCAGCCCGGCAAGCTGGCTCACCCGCTGGCCACCCAGCACAGCCCGCTG
GCCCCTCTCCTGCAGCCCATCTGGCGGAGCGGCGGCGGCGGCGGCGGCAGGAGA**ATG**GCATCAGAACTGGCA
ATGAGCAACTCCGACCTGCCCACCAGTCCCCTGGCCATGGAATATGTTAATGACTTCGATCTGATGAAGTTTGAA
GTGAAAAAGGAACCGGTGGAGACCGACCGCATCATCAGCCAGTGCGGCCGTCTCATCGCCGGGGGCTCGCTGTCC
TCCACCCCCATGAGCACGCCGTGCAGCTCGGTGCCCCCTTCCCCCAGCTTCTCGGCGCCCAGCCCGGGCTCGGGC
AGCGAGCAGAAGGCGCACCTGGAAGACTACTACTGGATGACCGGCTACCCGCAGCAGCTGAACCCCGAGGCGCTG
GGCTTCAGCCCCGAGGACGCGGTCGAGGCGCTCATCAGCAACAGCCACCAGCTCCAGGGCGGCTTCGATGGCTAC
GCGCGCGGGGCGCAGCAGCTGGCCGCGGCGGCCGGGGCCGGTGCCGGCGCCTCCTTGGGCGGCAGCGGCGAGGAG
ATGGGCCCCGCGGCCGCCGTGGTGTCCGCCGTGATCGCCGCGGCCGCCGCGCAGAGCGGCGCGGGCCCGCACTAC
CACCACCACCACCACCACGCCGCCGGCCACCACCACCACCCGACGGCCGGCGCGCCCGGCGCCGCGGGCAGCGCG
GCCGCCTCGGCCGGTGGCGCTGGGGGCGCGGGCGGCGGTGGCCCGGCCAGCGCTGGGGGCGGCGGCGGCGGCGGC
GGCGGCGGAGGCGGCGGGGGCGCGGCGGGGGCGGGGGGCGCCCTGCACCCGCACCACGCCGCCGGCGGCCTGCAC
TTCGACGACCGCTTCTCCGACGAGCAGCTGGTGACCATGTCTGTGCGCGAGCTGAACCGGCAGCTGCGCGGGGTC
AGCAAGGAGGAGGTGATCCGGCTGAAGCAGAAGAGGCGGACCCTGAAAAACCGCGGCTATGCCCAGTCCTGCCGC
TTCAAGAGGGTGCAGCAGAGACACGTCCTGGAGTCGGAGAAGAACCAGCTGCTGCAGCAAGTCGACCACCTCAAG
CAGGAGATCTCCAGGCTGGTGCGCGAGAGGGACGCGTACAAGGAGAAATACGAGAAGTTGGTGAGCAGCGGCTTC
CGAGAAAACGGCTCGAGCAGCGACAACCCGTCCTCTCCCGAGTTTTTCATG**TGA**GTCTGACACGCGATTCCAGCT
AGCCACCCTGATAAGTGCTCCGCGGGGGTCCGGCTCGGGTGTGGGCTTGCTAGTTCTAGAGCCATGCTCGCCACC
ACCTCACCACCCCCACCCCCACCGAGTTTGGCCCCCTTGGCCCCCTACACACACACAAACCCGCACGCACACACC
ACACACACACACACACACACACACACACACACCCCACACCCTGCTCGAGTTTGTGGTGGTGGTGGCTGTTTTAAACT
GGGGAGGGAATGGGTGTCTGGCTCATGGATTGCCAATCTGAAATTCTCCATAACTTGCTAGCTTGTTTTTTTTTT
TTTTTTTTACACCCCCCCGCCCCACCCCCCGGACTTGCACAATGTTCAATGATCTCAGCAGAGTTCTTCATGTGA
AACGTTGATCACCTTTGAAGCCTGCATCATTCACATATTTTTTCTTCTTCTTCCCCTTCAGTTCATGAACTGGTG
TTCATTTTCTGTGTGTGTGTGTGTTTTATTTTGTTTGGATTTTTTTTTTTAATTTTACTTTTAGAGCTTGCTGTG
CTTGCCCACCTCTTTTCCAACCTCCACCCTCACTCCTTCTCAACCCATCTCTTCCGAGATGAAAGAAAAAAAAAA
GCAAAGTTTTTTTTTCTTCTCCTGAGTTCTTCAGTGAGATTGAGCTTGCAAAGGAAAAAAAAATGTGAAATGTTA
TAGACTTGCAGCGTGCCGAGTTCCATCGGGTTTTTTTTTTAGCATTGTTATGCTAAAATAGAGAAAAAAATCCTC
ATGAACCTTCCACAATCAAGCCTGCATCAACCTTCTGGGTGTGACTTGTGAGTTTTGGCCTTGTGATGCCAAATC
TGAGAGTTTAGTCTGCCATTAAAAAAACTCATTCTCATCTCATGCATTATTATGCTTGCTACTTTGTCTTAGCAA
CAATGAACTATAACTGTTTCAAAGACTTTATGGAAAAGAGACATTATATTAATAAAAAAAAAAGCCTGCATGCTG
GACATATATGGTATAATTATTTTTTCCTTTTTTTTTCCTTTTGGCTTGGAAATGGACGTTCGAAGACTTATAGCA
TGGCATTCATACTTTTGTTTTATTGCCTCATGACTTTTTTGAGTTTAGAACAAAACAGTGCAACCGTAGAGCCTT
CTTCCCATGAAATTTTGCATCTGCTCCAAAACTGCTTTGAGTTACTCAGAACTTCAACCTCCCAATGCACTGAAG
GCATTCCTTGTCAAAGATACCAGAATGGGTTACACATTTAACCTGGCAAACATTGAAGAACTCTTAATGTTTTCT
TTTTAATAAGAATGACGCCCACTTTGGGGACTAAAATTGTGCTATTGCCGAGAAGCAGTCTAAAATTTATTTTTX
AAAAAGAGAAACTGCCCCATTATTTTTGGTTTGTTTTATTTTTATTTTATATTTTTTGGCTTTTGGTCATTGTCA
AATGTGGAATGCTCTGGGTTTCTAGTATATAATTTAATTCTAGTGTTTATAATCTGTTAGCCCAGTTAAAATGTA
TGCTACAGATAAAGGAATGTTATAGATAAATTTGAAAGAGTTAGGTCTGTTTAGCTGTAGATTTTTTAAACGATT
GATGCACTAAATTGTTTACTATTGTGATGTTAAGGGGGGTAGAGTTTGCAAGGGGACTGTTTAAAAAAAGTAGCT

FIGURE 2221B

TATACAGCATGTGCTTGCAACTTAAATATAAGTTGGGTATGTGTAGTCTTTGCTATACCACTGACTGTATTGAAA
ACCAAAGTATTAAGAGGGGAAACGCCCCTGTTTATATCTGTAGGGGTATTTTACATTCAAAAATGTATGTTTTTT
TTTCTTTTCAAAATTAAAGTATTTGGGACTGAATTGCACTAAGATATAACCTGCAAGCATATAATACAAAAAAAA
ATTGCAAAACTGTTTAGAACGCTAATAAAATTTATGCAGTTATAAAAATGGCATTACTGCACAGTTTTAAGATGA
TGCAGATTTTTTTACAGTTGTATTGTGGTGCAGAACTGGATTTTCTGTAACTTAAAAAAAATCCACAGTTTTAAA
GGCAATAATCAGTAAATGTTATTTTCAGGGACTACATCCTGTCTTTAAAAAGAAATGAAAAGTAAATCTTACCAC
AATAAATATAAAAAAATCTTGTCAGTTACTTTTCTTTTACATATTTTGCTGTGCAAAATTGTTTTATATCTTGAG
TTACTAACTAACCACGCGTGTTGTTCCTATGTGCTTTTCTTTCATTTTCAATTCTGGTTATATCAAGAAAAGATA
ATCTACAATAATAAACGGCATTTTTTTTTGATTCTGTAAAAAAAAA

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FIGURE 2222

MASELAMSNSDLPTSPLAMEYVNDFDLMKFEVKKEPVETDRIISQCGRLIAGGSLSSTPMSTPCSSVPPSPSFSA
PSPGSGSEQKAHLEDYYWMTGYPQQLNPEALGFSPEDAVEALISNSHQLQGGFDGYARGAQQLAAAAGAGAGASL
GGSGEEMGPAAAVVSAVIAAAAAQSGAGPHYHHHHHHAAGHHHHPTAGAPGAAGSAAASAGGAGGAGGGGPASAG
GGGGGGGGGGGGGAAGAGGALHPHHAAGGLHFDDRFSDEQLVTMSVRELNRQLRGVSKEEVIRLKQKRRTLKNRG
YAQSCRFKRVQQRHVLESEKNQLLQQVDHLKQEISRLVRERDAYKEKYEKLVSSGFRENGSSSDNPSSPEFFM

FIGURE 2223

GTCCTGCCGAGCTGTGAGGGCAACGGAGGGGAAATAAAAGGGAACGGCTCCGAATCTGCCCCAGCGGCCGCTGCG
AGACCTCGGCGCCGACATCGCGACAGCGAAGCGCTTTGCACGCCAGGAAGGTCCCCTCTATGTGCTGCTGAGCCG
GTCCTGGACGCGACGAGCCCGCCCTCGGTCTTCGGAGCAGAAATCGCAAAAACGGAAGGACTGGAAATGGCAGAC
CATATGATGGCCATGAACCACGGGCGCTTCCCCGACGGCACCAATGGGCTGCACCATCACCCTGCCCACCGCATG
GGCATGGGGCAGTTCCCGAGCCCCCATCACCACCAGCAGCAGCAGCCCCAGCACGCCTTCAACGCCCTAATGGGC
GAGCACATACACTACGGCGCGGGCAACATGAATGCCACGAGCGGCATCAGGCATGCGATGGGGCCGGGGACTGTG
AACGGAGGGCACCCCCCGAGCGCGCTGGCCCCCGCGGCCAGGTTTAACAACTCCCAGTTCATGGGTCCCCCGGTG
GCCAGCCAGGGAGGCTCCCTGCCGGCCAGCATGCAGCTGCAGAAGCTCAACAACCAGTATTTCAACCATCACCCC
TACCCCCACAACCACTACATGCCGGATTTGCACCCTGCTGCAGGCCACCAGATGAACGGGACAAACCAGCACTTC
CGAGATTGCAACCCCAAGCACAGCGGCGGCAGCAGCACCCCCGGCGGCTCGGGCGGCAGCAGCACCCCCGGCGGC
TCTGGCAGCAGCTCGGGCGGCGGCGCGGGCAGCAGCAACAGCGGCGGCGGCAGCGGCAGCGGCAACATGCCCGCC
TCCGTGGCCCACGTCCCCGCTGCAATGCTGCCGCCCAATGTCATAGACACTGATTTCATCGACGAGGAAGTTCTT
ATGTCCTTGGTGATAGAAATGGGTTTGGACCGCATCAAGGAGCTGCCCGAACTCTGGCTGGGGCAAAACGAGTTT
GATTTTATGACGGACTTCGTGTGCAAACAGCAGCCCAGCAGAGTGAGCTGTTGACTCGATCGAAACCCCGGCGAA
AGAAATCAAACCCCCAACTTCTTCGGCGTGAATTAAAAGAAACATTCCCTTAGACACAGTATCTCACTTTTCAGA
TCTTGAAAGGTTTGAGAACTTGGAAACAAAGTAAACTATAAACTTGTACAAATTGGTTTTAAAAAAAATTGCTGC
CACTTTTTTTTCCTGTTTTTGTTTCGTTTTTGTAGCCTTGACATTCACCCACCTCCCTTATGTAGTTGAAATATC
TAGCTAACTTGGTCTTTTTCGTTGTTTGTTTTTACTCCTTTCCCTCACTTTCTCCAGTGCTCAACTGTTAGATAT
TAATCTTGGCAAACTGCTTAATCTTGTGGATTTTGTAGATGGTTTCAAATGACTGAACTGCATTCAGATTTACGA
GTGAAAGGAAAAATTGCATTAGTTGGTTGCATGAACTTTGAAGGGCAGATATTACTGCACAAACTGCCATCTCGC
TTCATTTTTTTAACTATGCATTTGAGTACAGACTAATTTTTAAAATATGCTAAACTGGAAGATTAAACAGATGTG
GCCCAAACTGTTCTGGATCAGGAAAGTCATACTGTTCACTTTCAAGTTGGCTGTCCCCCCCGCCGCCCCCCCCCA
CCCCCATATGTACAGATGATAATAGGGTGTGGAATGTCGTCAGTGGCAAACATTTCACAGATTATTTTGTTTCTG
TCTTCAACATTTTTGACACTGTGCTAATAGTTATATTCAGTACATGAAAAGATACTACTGTGTTGAAAGCCTTTT
AGGAAATTTTGACAGTATTTTTGTACAAAACATTTTTTTGAAAAAATACTTGTTAATTTATTCTATTTTAATTTG
CCAATGTCAATAAAAAGTTAAGAAATAAAAAAAAAAAAAAAAAA

FIGURE 2224

MADHMMAMNHGRFPDGTNGLHHHPAHRMGMGQFPSPHHHQQQQPQHAFNALMGEHIHYGAGNMNATSGIRHAMGP
GTVNGGHPPSALAPAARFNNSQFMGPPVASQGGSLPASMQLQKLNNQYFNHHPYPHNHYMPDLHPAAGHQMNGTN
QHFRDCNPKHSGGSSTPGGSGGSSTPGGSGSSSGGGAGSSNSGGGSGSGNMPASVAHVPAAMLPPNVIDTDFIDE
EVLMSLVIEMGLDRIKELPELWLGQNEFDFMTDFVCKQQPSRVSC

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FIGURE 2225

GGCACGAGCTCTCTCTCTCTCTCTCTCTCTCTCGCCGCCATGACGCTGCGCGGCGCCGTCTTCGACCTTGACG
GGGTGCTGGCGCTGCCAGCGGTGTTCGGCGTCCTCGGCCGCACGGAGGAGGCCCTGGCGCTGCCCAGAGGACTTC
TGAATGATGCTTTCCAGAAAGGGGGACCAGAGGGTGCCACTACCCGGCTTATGAAAGGAGAGATCACACTTTCCC
AGTGGATACCACTCATGGAAGAAAACTGCAGGAAGTGCTCCGAGACCGCTAAAGTCTGCCTCCCCAAGAATTTCT
CCATAAAAGAAATCTTTGACAAGGCGATTTCAGCCAGAAAGATCAACCGCCCCATGCTCCAGGCAGCTCTCATGC
TCAGGAAGAAAGGATTCACTACTGCCATCCTCACCAACACCTGGCTGGACGACCGTGCTGAGAGAGATGGCCTGG
CCCAGCTGATGTGTGAGCTGAAGATGCACTTTGACTTCCTGATAGAGTCGTGTCAGGTGGGAATGGTCAAACCTG
AACCTCAGATCTACAAGTTTCTGCTGGACACCCTGAAGGCCAGCCCCAGTGAGGTCGTTTTTTTGGATGACATCG
GGGCTAATCTGAAGCCAGCCCGTGACTTGGGAATGGTCACCATCCTGGTCCAGGACACTGACACGGCCCTGAAAG
AACTGGAGAAAGTGACCGGAATCCAGCTTCTCAATACCCCGGCCCCTCTGCCGACCTCTTGCAATCCAAGTGACA
TGAGCCATGGGTACGTGACAGTAAAGCCCAGGGTCCGTCTGCATTTTGTGGAGCTGGGCTGGCCTGCTGTGTGCC
TCTGCCATGGATTTCCCGAGAGTTGGTATTCTTGGAGGTACCAGATCCCTGCTCTGGCCCAGGCAGGTTACCGGG
TCCTAGCTATGGACATGAAAGGCTATGGAGAGTCATCTGCTCCTCCCGAAATAGAAGAATATTGCATGGAAGTGT
TATGTAAGGAGATGGTAACCTTCCTGGATAAACTGGGCCTCTCTCAAGCAGTGTTCATTGGCCATGACTGGGGTG
GCATGCTGGTGTGGTACATGGCTCTCTTCTACCCCGAGAGAGTGAGGGCGGTGGCCAGTTTGAATACTCCCTTCA
TACCAGCAAATCCCAACATGTCCCCTTTGGAGAGTATCAAAGCCAACCCAGTATTTGATTACCAGCTCTACTTCC
AAGAACCAGGAGTGGCTGAGGCTGAACTGGAACAGAACCTGAGTCGGACTTTCAAAAGCCTCTTCAGAGCAAGCG
ATGAGAGTGTTTTATCCATGCATAAAGTCTGTGAAGCGGGAGGACTTTTTGTAAATAGCCCAGAAGAGCCCAGCC
TCAGCAGGATGGTCACTGAGGAGGAAATCCAGTTCTATGTGCAGCAGTTCAAGAAGTCTGGTTTCAGAGGTCCTC
TAAACTGGTACCGAAACATGGAAAGGAACTGGAAGTGGGCTTGCAAAAGCTTGGGACGGAAGATCCTGATTCCGG
CCCTGATGGTCACGGCGGAGAAGGACTTCGTGCTCGTTCCTCAGATGTCCCAGCACATGGAGGACTGGATTCCCC
ACCTGAAAAGGGGACACATTGAGGACTGTGGGCACTGGACACAGATGGACAAGCCAACCGAGGTGAATCAGATCC
TCATTAAGTGGCTGGATTCTGATGCCCGGAACCCACCGGTGGTCTCAAAGATGTAGAACGCAGCGTAGTGCCCAC
GCTCAGCAGGTGTGCCATCCTTCCACCTGCTGGGGCACCATTCTTAGTATACAGAGGTGGCCTTACACACATCTT
GCATGGATGGCAGCATTGTTCTGAAGGGGTTTGCAGAAAAAAAAGATTTTCTTTACATAAAGTGAATCAAATTTG
ACATTATTTTAGATCCCAGAGAAATCAGGTGTGATTAGTTCTCCAGGCATGAATGCATCGTCCCTTTATCTGTAA
GAACCCTTAGTGTCCTGTAGGGGGACAGAATGGGGTGGCCAGGTGGTGATTTCTCTTTGACCAATGCATAGTTTG
GCAGAAAAATCAGCCGTTCATTTAGAAGAATCTTAGCAGAGATTGGGATGCCTTACTCAATAAAGCTAAGATGAC

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FIGURE 2226

MTLRGAVFDLDGVLALPAVFGVLGRTEEALALPRGLLNDAFQKGGPEGATTRLMKGEITLSQWIPLMEENCRKCS
ETAKVCLPKNFSIKEIFDKAISARKINRPMLQAALMLRKKGFTTAILTNTWLDDRAERDGLAQLMCELKMHFDFL
IESCQVGMVKPEPQIYKFLLDTLKASPSEVVFLDDIGANLKPARDLGMVTILVQDTDTALKELEKVTGIQLLNTP
APLPTSCNPSDMSHGYVTVKPRVRLHFVELGWPAVCLCHGFPESWYSWRYQIPALAQAGYRVLAMDMKGYGESSA
PPEIEEYCMEVLCKEMVTFLDKLGLSQAVFIGHDWGGMLVWYMALFYPERVRAVASLNTPFIPANPNMSPLESIK
ANPVFDYQLYFQEPGVAEAELEQNLSRTFKSLFRASDESVLSMHKVCEAGGLFVNSPEEPSLSRMVTEEEIQFYV
QQFKKSGFRGPLNWYRNMERNWKWACKSLGRKILIPALMVTAEKDFVLVPQMSQHMEDWIPHLKRGHIEDCGHWT
QMDKPTEVNQILIKWLDSDARNPPVVSKM

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FIGURE 2227

GCTCTAGAACTAGTGGATCCCCCGGGCTGCAGGAATTCTCTAAAGAAGCCCCTGGGAGCACAGCTCATCACC**ATG**

GACTGGACCTGGAGGTTCCTCTTTGTGGTGGCAGCAGCTACAGGTGTCCAGTCCCAGGTGCAGCTGGTGCAGTCT
GGGGCTGAGGTGAAGAAGCCTGGGTCCTCGGTGAAGGTCTCCTGCAAGGCTTCTGGAGGCACCTTCAGCAGCTAT
GCTATCAGCTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGAGGGATCATCCCTATCTTTGGTACA
GCAAACTACGCACAGAAGTTCCAGGGCAGAGTCACGATTACCGCGGACGAATCCACGAGCACAGCCTACATGGAG
CTGAGCAGCCTGAGATCTGAGGACACGGCCGTGTATTACTGTGCGAAAACCGGGATCCTGGGGCCGTATAGCAGT
GGCTGGTACCCGAACTCGGACTACTACTACTACGGTATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCC
TCAGGGAGTGCATCCGCCCCAACCCTTTTCCCCCTCGTCTCCTGTGAGAATTCCCCGTCGGATACGAGCAGCGTG
GCCGTTGGCTGCCTCGCACAGGACTTCCTTCCCGACTCCATCACTTTCTCCTGGAAATACAAGAACAACTCTGAC
ATCAGCAGCACCCGGGGCTTCCCATCAGTCCTGAGAGGGGGCAAGTACGCAGCCACCTCACAGGTGCTGCTGCCT
TCCAAGGACGTCATGCAGGGCACAGACGAACACGTGGTGTGCAAAGTCCAGCACCCCAACGGCAACAAAGAAAAG
AACGTGCCTCTTCCAGTGATTGCTGAGCTGCCTCCCAAAGTGAGCGTCTTCGTCCCACCCCGCGACGGCTTCTTC
GGCAACCCCCGCAGCAAGTCCAAGCTCATCTGCCAGGCCACGGGTTTCAGTCCCCGGCAGATTCAGGTGTCCTGG
CTGCGCGAGGGGAAGCAGGTGGGGTCTGGCGTCACCACGGACCAGGTGCAGGCTGAGGCCAAAGAGTCTGGGCCC
ACGACCTACAAGGTGACCAGCACACTGACCATCAAAGAGAGCGACTGGCTCAGCCAGAGCATGTTCACCTGCCGC
GTGGATCACAGGGGCCTGACCTTCCAGCAGAATGCGTCCTCCATGTGTGTCCCCGATCAAGACACAGCCATCCGG
GTCTTCGCCATCCCCCCATCCTTTGCCAGCATCTTCCTCACCAAGTCCACCAAGTTGACCTGCCTGGTCACAGAC
CTGACCACCTATGACAGCGTGACCATCTCCTGGACCCGCCAGAATGGCGAAGCTGTGAAAACCCACACCAACATC
TCCGAGAGCCACCCCAATGCCACTTTCAGCGCCGTGGGTGAGGCCAGCATCTGCGAGGATGACTGGAATTCCGGG
GAGAGGTTCACGTGCACCGTGACCCACACAGACCTGCCCTCGCCACTGAAGCAGACCATCTCCCGGCCCAAGGGG
GTGGCCCTGCACAGGCCCGATGTCTACTTGCTGCCACCAGCCCGGGAGCAGCTGAACCTGCGGGAGTCGGCCACC
ATCACGTGCCTGGTGACGGGCTTCTCTCCCGCGGACGTCTTCGTGCAGTGGATGCAGAGGGGGCAGCCCTTGTCC
CCGGAGAAGTATGTGACCAGCGCCCCAATGCCTGAGCCCCAGGCCCCAGGCCGGTACTTCGCCCACAGCATCCTG
ACCGTGTCCGAAGAGGAATGGAACACGGGGGAGACCTACACCTGCGTGGTGGCCCATGAGGCCCTGCCCAACAGG
GTCACCGAGAGGACCGTGGACAAGTCCACCGAGGGGGAGGTGAGCGCCGACGAGGAGGGCTTTGAGAACCTGTGG
GCCACCGCCTCCACCTTCATCGTCCTCTTCCTCCTGAGCCTCTTCTACAGTACCACCGTCACCTTGTTCAAGGTG
AAA**TGA**TCCCAACAGAAGAACATCGGAGACCAGAGAGAGGAACTCAAAGGGGCGCTGCCTCCGGGTCTGGGGTCC
TGGCCTGCGTGGCCTGTTGGCACGTGTTTCTCTTCCCGCCCGGCCTCCAGTTGTGTGCTCTCACACAGGCTTCCT
TCTCGACCGGCAGGGGCTGGCTGGCTTGCAGGCCACGAGGTGGGCTCTACCCCACACTGCTTTGCTGTGTATACG
CTTGTTGCCCTGAAATAAATATGCACATTTTATCCATG

FIGURE 2228

MDWTWRFLFVVAAATGVQSQVQLVQSGAEVKKPGSSVKVSCKASGGTFSSYAISWVRQAPGQGLEWMGGIIPIFG
TANYAQKFQGRVTITADESTSTAYMELSSLRSEDTAVYYCAKTGILGPYSSGWYPNSDYYYYGMDVWGQGTTVTV
SSGSASAPTLFPLVSCENSPSDTSSVAVGCLAQDFLPDSITFSWKYKNNSDISSTRGFPSVLRGGKYAATSQVLL
PSKDVMQGTDEHVVCKVQHPNGNKEKNVPLPVIAELPPKVSVFVPPRDGFFGNPRSKSKLICQATGFSPRQIQVS
WLREGKQVGSGVTTDQVQAEAKESGPTTYKVTSTLTIKESDWLSQSMFTCRVDHRGLTFQQNASSMCVPDQDTAI
RVFAIPPSFASIFLTKSTKLTCLVTDLTTYDSVTISWTRQNGEAVKTHTNISESHPNATFSAVGEASICEDDWNS
GERFTCTVTHTDLPSPLKQTISRPKGVALHRPDVYLLPPAREQLNLRESATITCLVTGFSPADVFVQWMQRGQPL
SPEKYVTSAPMPEPQAPGRYFAHSILTVSEEEWNTGETYTCVVAHEALPNRVTERTVDKSTEGEVSADEEGFENL
WATASTFIVLFLLSLFYSTTVTLFKVK

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FIGURE 2229

CGGACGCGTGGGGTCGTGCCCTGCGCGTGAGCAGCTGCAGCGGCAGAGGCAGCATCCAGCGGCGGCGCCAGCAGT
TCCAGTCCGTTGCTTTACTTTTTGCTTCACCGACATAGTCATTATGCCGAAGAGAAAGTCTCCAGAGAATACAGA
GGGCAAAGATGGATCCAAAGTAACTAAACAGGAGCCCACAAGACGGTCTGCCAGATTGTCAGCGAAACCTGCTCC
ACCAAAACCTGAACCCAAACCAAGAAAAACATCTGCTAAGAAAGAACCTGGAGCAAAGATTAGCAGAGGTGCTAA
AGGGAAGAAGGAGGAAAAGCAGGAAGCTGGAAAGGAAGGCACAGAAAACTGAATCTGTAGATAACGAGGGAGAAT
GAATTGTCATGAAAAATTGGGGTTGATTTTATGTATCTCTTGGGACAACTTTTAAAAGCTATTTTTACCAAGTAT
TTTGTAAATGCTAATTTTTTAGGACTCTACTAGTTGGCATACGAAAATATATAAGGATGGACATTTTATCGTCTC
ATAGTCATGCTTTTTGGAAATTTACATCATCCTCAAGTAAAATAAATATCAGTTAAATATTGGAAGCTGTGTGTA
AGATTGATTCAGCATTCCATGCACTTGCTTTAAAATTTAGTCCTGTGCATACTGTGGTGTTTTTACTGTGCATAT
TTGAATTTTTCATGCAGTTTTTCTAGAGCAATAATCAGTGGTGCTTTTGTACCTAGGTTTTATGTGATTTTAATG
AAACATGGATAGTTGTGGCCACCTGCTGACTATTTGTGGTTTAAAATAAAAGGTTTACTTGTCTGCAAAAAAAAA
AAAAAA

FIGURE 2230

MPKRKSPENTEGKDGSKVTKQEPTRRSARLSAKPAPPKPEPKPRKTSAKKEPGAKISRGAKGKKEEKQEAGKEGT
EN

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FIGURE 2231

CGTGAAGGCAAAGAGAACACGCTGCAAAAGGCTTCCAAGAATCCTCGACATGGCAAGGAGGAGCTCGTTCCAGTC
GTGTCAGATAATATCCCTGTTCACTTTTGCCGTTGGAGTCAGTATCTGCTTAGGATTCACTGCACATCGAATTAA
GAGAGCAGAAGGATGGGAGGAAGGTCCTCCTACAGTGCTATCAGACTCCCCCTGGACCAACATCTCCGGATCTTG
CAAGGGCAGGTGCTTTGAACTTCAAGAGGCTGGACCTCCTGATTGTCGCTGTGACAACTTGTGTAAGAGCTATAC
CAGTTGCTGCCATGACTTTGATGAGCTGTGTTTGAAGACAGCCCGTGGCTGGGAGTGTACTAAGGACAGATGTGG
AGAAGTCAGAAATGAAGAAAATGCCTGTCACTGCTCAGAGGACTGCTTGGCCAGGGGAGACTGCTGTACCAATTA
CCAAGTGGTTTGCAAAGGAGAGTCGCATTGGGTTGATGATGACTGTGAGGAAATAAAGGCCGCAGAATGCCCTGC
AGGGTTTGTTCGCCCTCCATTAATCATCTTCTCCGTGGATGGCTTCCGTGCATCATACATGAAGAAAGGCAGCAA
AGTCATGCCTAATATTGAAAAACTAAGGTCTTGTGGCACACACTCTCCCTACATGAGGCCGGTGTACCCAACTAA
AACCTTTCCTAACTTATACACTTTGGCCACTGGGCTATATCCAGAATCACATGGAATTGTTGGCAATTCAATGTA
TGATCCTGTATTTGATGCCACTTTTCATCTGCGAGGGCGAGAGAAATTTAATCATAGATGGTGGGGAGGTCAACC
GCTATGGATTACAGCCACCAAGCAAGGGGTGAAAGCTGGAACATTCTTTTGGTCTGTTGTCATCCCTCACGAGCG
GAGAATATTAACCATATTGCGGTGGCTCACCCTGCCAGATCATGAGAGGCCTTCGGTCTATGCCTTCTATTCTGA
GCAACCTGATTTCTCTGGACACAAATATGGCCCTTTCGGCCCTGAGGAGAGTAGTTATGGCTCACCTTTTACTCC
GGCTAAGAGACCTAAGAGGAAAGTTGCCCCTAAGAGGAGACAGGAAAGACCAGTTGCTCCTCCAAAGAAAAGAAG
AAGAAAAATACATAGGATGGATCATTATGCTGCGGAAACTCGTCAGGACAAAATGACAAATCCTCTGAGGGAAAT
CGACAAAATTGTGGGGCAATTAATGGATGGACTGAAACAACTAAAACTGCGTCGGTGTGTCAACGTCATCTTTGT
CGGAGACCATGGAATGGAAGATGTCACATGTGATAGAACTGAGTTCTTGAGTAATTACCTAACTAATGTGGATGA
TATTACTTTAGTGCCTGGAACTCTAGGAAGAATTCGATCCAAATTTAGCAACAATGCTAAATATGACCCCAAAGC
CATTATTGCCAATCTCACGTGTAAAAAACCAGATCAGCACTTTAAGCCTTACTTGAAACAGCACCTTCCCAAACG
TTTGCACTATGCCAACAACAGAAGAATTGAGGATATCCATTTATTGGTGGAACGCAGATGGCATGTTGCAAGGAA
ACCTTTGGATGTTTATAAGAAACCATCAGGAAAATGCTTTTTCCAGGGAGACCACGGATTTGATAACAAGGTCAA
CAGCATGCAGACTGTTTTTGTAGGTTATGGCCCAACATTTAAGTACAAGACTAAAGTGCCTCCATTTGAAAACAT
TGAACTTTACAATGTTATGTGTGATCTCCTGGGATTGAAGCCAGCTCCTAATAATGGGACCCATGGAAGTTTGAA
TCATCTCCTGCGCACTAATACCTTCAGGCCAACCATGCCAGAGGAAGTTACCAGACCCAATTATCCAGGGATTAT
GTACCTTCAGTCTGATTTTGACCTGGGCTGCACTTGTGATGATAAGGTAGAGCCAAAGAACAAGTTGGATGAACT
CAACAAACGGCTTCATACAAAAGGGTCTACAGAAGAGAGACACCTCCTCTATGGGCGACCTGCAGTGCTTTATCG
GACTAGATATGATATCTTATATCACACTGACTTTGAAAGTGGTTATAGTGAAATATTCCTAATGCTACTCTGGAC
ATCATATACTGTTTCCAAACAGGCTGAGGTTTCCAGCGTTCCTGACCATCTGACCAGTTGCGTCCGGCCTGATGT
CCGTGTTTCTCCGAGTTTCAGTCAGAACTGTTTGGCCTACAAAAATGATAAGCAGATGTCCTACGGATTCCTCTT
TCCTCCTTATCTGAGCTCTTCACCAGAGGCTAAATATGATGCATTCCTTGTAACCAATATGGTTCCAATGTATCC
TGCTTTCAAACGGGTCTGGAATTATTTCCAAAGGGTATTGGTGAAGAAATATGCTTCGGAAAGAAATGGAGTTAA
CGTGATAAGTGGACCAATCTTCGACTATGACTATGATGGCTTACATGACACAGAAGACAAAATAAAACAGTACGT
GGAAGGCAGTTCCATTCCTGTTCCAACTCACTACTACAGCATCATCACCAGCTGTCTGGATTTCACTCAGCCTGC
CGACAAGTGTGACGGCCCTCTCTCTGTGTCCTCCTTCATCCTGCCTCACCGGCCTGACAACGAGGAGAGCTGCAA
TAGCTCAGAGGACGAATCAAAATGGGTAGAAGAACTCATGAAGATGCACACAGCTAGGGTGCGTGACATTGAACA
TCTCACCAGCCTGGACTTCTTCCGAAAGACCAGCCGCAGCTACCCAGAAATCCTGACACTCAAGACATACCTGCA
TACATATGAGAGCGAGATTTAACTTTCTGAGCATCTGCAGTACAGTCTTATCAACTGGTTGTATATTTTTATATT
GTTTTTGTATTTATTAATTTGAAACCAGGACATTAAAAATGTTAGTATTTTAATCCTGTACCAAATCTGACATAT
TATGCCTGAATGACTCCACTGTTTTTCTCTAATGCTTGATTTAGGTAGCCTTGTGTTCTGAGTAGAGCTTGTAAT
AAATACTGCAGCTTGAGAAAAAGTGGAAGCTTCTAAATGGTGCTGCAGATTTGATATTTGCATTGAGGAAATATT
AATTTTCCAATGCACAGTTGCCACATTTAGTCCTGTACTGTATGGAAACACTGATTTTGTAAAGTTGCCTTTATT
TGCTGTTAACTGTTAACTATGACAGATATATTTAAGCCTTATAAACCAATCTTAAACATAATAAATCACACATTC
AGTTTT

FIGURE 2232

MARRSSFQSCQIISLFTFAVGVSICLGFTAHRIKRAEGWEEGPPTVLSDSPWTNISGSCKGRCFELQEAGPPDCR
CDNLCKSYTSCCHDFDELCLKTARGWECTKDRCGEVRNEENACHCSEDCLARGDCCTNYQVVCKGESHWVDDDCE
EIKAAECPAGFVRPPLIIFSVDGFRASYMKKGSKVMPNIEKLRSCGTHSPYMRPVYPTKTFPNLYTLATGLYPES
HGIVGNSMYDPVFDATFHLRGREKFNHRWWGGQPLWITATKQGVKAGTFFWSVVIPHERRILTILRWLTLPDHER
PSVYAFYSEQPDFSGHKYGPFGPEESSYGSPFTPAKRPKRKVAPKRRQERPVAPPKKRRRKIHRMDHYAAETRQD
KMTNPLREIDKIVGQLMDGLKQLKLRRCVNVIFVGDHGMEDVTCDRTEFLSNYLTNVDDITLVPGTLGRIRSKFS
NNAKYDPKAIIANLTCKKPDQHFKPYLKQHLPKRLHYANNRRIEDIHLLVERRWHVARKPLDVYKKPSGKCFFQG
DHGFDNKVNSMQTVFVGYGPTFKYKTKVPPFENIELYNVMCDLLGLKPAPNNGTHGSLNHLLRTNTFRPTMPEEV
TRPNYPGIMYLQSDFDLGCTCDDKVEPKNKLDELNKRLHTKGSTEERHLLYGRPAVLYRTRYDILYHTDFESGYS
EIFLMLLWTSYTVSKQAEVSSVPDHLTSCVRPDVRVSPSFSQNCLAYKNDKQMSYGFLFPPYLSSSPEAKYDAFL
VTNMVPMYPAFKRVWNYFQRVLVKKYASERNGVNVISGPIFDYDYDGLHDTEDKIKQYVEGSSIPVPTHYYSIIT
SCLDFTQPADKCDGPLSVSSFILPHRPDNEESCNSSEDESKWVEELMKMHTARVRDIEHLTSLDFFRKTSRSYPE
ILTLKTYLHTYESEI

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FIGURE 2233

CCCAGGCTGCAACGGAGGCAGAGCCAACGCCTCGCGGGCTTCCACGTACGCACTCCAACGCGTGTTCCCGGAGAA
GAACGCATCCGGGTCACGGGAGCCGGTGTCTCAGGCTCCGCCCCTTCACCCCCCGAAATGCTAATCCCCACTTCC
GACCCTCTCAGGCCTTTTCCGCTTCTCTTTTACCTCCCCAGGTCCGCCCGTCTGCGCCCCTCACAGGAAGCCGGA
GGGTCGCTCTGATCCCGAATCTCCCACAGGCGTGAACCTGCTCTGCTGTGTATCTTTGCGGGGTGGCCTGCGCTG
AGGCCTGCCGCGCGCGGTGAGTCCGCGCAGACCTGACCCTGCGTCTCGCAGCTCGGTTGAGGCCGCCGCCGCCTT
CTCGGG**ATG**CCGCGGCCGGGGTCCGCGCAGCGCTGGGCGGCCGTCGCGGGCCGTTGGGGGTGCAGGCTGCTCGCA
CTGCTGCTACTGGTGCCTGGACCCGGCGGCGCCTCTGAGATCACCTTCGAGCTTCCTGACAACGCCAAGCAGTGC
TTCTACGAGGACATCGCTCAGGGCACCAAGTGCACCCTGGAGTTCCAGGTGATTACTGGTGGTCACTATGATGTA
GATTGTCGATTAGAAGATCCTGATGGTAAAGTGTTATACAAAGAGATGAAGAAACAGTATGATAGTTTTACCTTC
ACAGCCTCCAAAAATGGGACATACAAATTTTGCTTCAGCAATGAATTTTCTACTTTCACACATAAAACTGTATAT
TTTGATTTTCAAGTTGGAGAAGACCCACCTTTGTTTCCTAGTGAGAACCGAGTCAGTGCTCTTACCCAGATGGAA
TCTGCCTGTGTTTCAATTCACGAAGCTCTGAAGTCTGTCATCGATTATCAGACTCATTTCCGTTTAAGAGAAGCT
CAAGGCCGAAGCCGAGCAGAGGATCTAAATACAAGAGTGGCCTATTGGTCAGTAGGAGAAGCCCTCATTCTTCTG
GTGGTTAGCATAGGGCAGGTATTTCTTTTGAAAAGCTTTTTCCCAGATAAAAGAACCACCACAACTCGTGTTGGA
TCA**TAA**CTACGTTTTGAGAATTGATGCACCATTGCCACTGTAATATTGCTGTCCTCTAATTAATTTTAGGTACTG
AAGAACTTAATATTGGCAACATTTTTAAATCCTTACTCATACACTTGTTGGGAGGGATGTACAATGCATATTCCC
AAACTGTGGGAAGGACACCTTTTTTTATTTGTAAAGGTGGAAAAACTTTGGAACTCATTTTGGGCTATTCATGTT
AAATATTCAACACCAATGATCTACTCTGTTCGCAGTTGTTTATATCTACTCTTCGCACACTAAACTTTGGTATTT
TGATTCCTTTTAACCATTTAAGACTACTTTTCTTATAGGTAGTTGATATTTTAAAAACTTTAGATTTAATGTCTA
CATGTGTTAGGGAGGAAGAAAATTGCCTTTTAATTGTTAATAAGAAAACCAAATGTGATGAACTGTAGCCCAAGC
CCTATTCTGCACTGTTCAGTTTTATGGAGGAAAAATAAATCTACCATAGGAATGTTAGTTAATATTG

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FIGURE 2234

MPRPGSAQRWAAVAGRWGCRLLALLLLVPGPGGASEITFELPDNAKQCFYEDIAQGTKCTLEFQVITGGHYDVDC
RLEDPDGKVLYKEMKKQYDSFTFTASKNGTYKFCFSNEFSTFTHKTVYFDFQVGEDPPLFPSENRVSALTQMESA
CVSIHEALKSVIDYQTHFRLREAQGRSRAEDLNTRVAYWSVGEALILLVVSIGQVFLLKSFFPDKRTTTTRVGS

FIGURE 2235

GCGAAATTGAGGTTTCTTGGTATTGCGCGTTTCTCTTCCTTGCTGACTCTCCGAATGGCCATGGACTCGTCGCTT
CAGGCCCGCCTGTTTCCCGGTCTCGCTATCAAGATCCAACGCAGTAATGGTTTAATTCACAGTGCCAATGTAAGG
ACTGTGAACTTGGAGAAATCCTGTGTTTCAGTGGAATGGGCAGAAGGAGGTGCCACAAAGGGCAAAGAGATTGAT
TTTGATGATGTGGCTGCAATAAACCCAGAACTCTTACAGCTTCTTCCCTTACATCCGAAGGACAATCTGCCCTTG
CAGGAAAATGTAACAATCCAGAAACAAAAACGGAGATCCGTCAACTCCAAAATTCCTGCTCCAAAAGAAAGTCTT
CGAAGCCGCTCCACTCGCATGTCCACTGTCTCAGAGCTTCGCATCACGGCTCAGGAGAATGACATGGAGGTGGAG
CTGCCTGCAGCTGCAAACTCCCGCAAGCAGTTTTCAGTTCCTCCTGCCCCCACTAGGCCTTCCTGCCCTGCAGTG
GCTGAAATACCATTGAGGATGGTCAGCGAGGAGATGGAAGAGCAAGTCCATTCCATCCGTGGCAGCTCTTCTGCA
AACCCTGTGAACTCAGTTCGGAGGAAATCATGTCTTGTGAAGGAAGTGGAAAAAATGAAGAACAAGCGAGAAGAG
AAGAAGGCCCAGAACTCTGAAATGAGAATGAAGAGAGCTCAGGAGTATGACAGTAGTTTTCCAAACTGGGAATTT
GCCCGAATGATTAAAGAATTTCGGGCTACTTTGGAATGTCATCCACTTACTATGACTGATCCTATCGAAGAGCAC
AGAATATGTGTCTGTGTTAGGAAACGCCCACTGAATAAGCAAGAATTGGCCAAGAAAGAAATTGATGTGATTTCC
ATTCCTAGCAAGTGTCTCCTCTTGGTACATGAACCCAAGTTGAAAGTGGACTTAACAAAGTATCTGGAGAACCAA
GCATTCTGCTTTGACTTTGCATTTGATGAAACAGCTTCGAATGAAGTTGTCTACAGGTTCACAGCAAGGCCACTG
GTACAGACAATCTTTGAAGGTGGAAAAGCAACTTGTTTTGCATATGGCCAGACAGGAAGTGGCAAGACACATACT
ATGGGCGGAGACCTCTCTGGGAAAGCCCAGAATGCATCCAAAGGGATCTATGCCATGGCCTCCCGGGACGTCTTC
CTCCTGAAGAATCAACCCTGCTACCGGAAGTTGGGCCTGGAAGTCTATGTGACATTCTTCGAGATCTACAATGGG
AAGCTGTTTGACCTGCTCAACAAGAAGGCCAAGCTGCGCGTGCTGGAGGACGGCAAGCAACAGGTGCAAGTGGTG
GGGCTGCAGGAGCATCTGGTTAACTCTGCTGATGATGTCATCAAGATGCTCGACATGGGCAGCGCCTGCAGAACC
TCTGGGCAGACATTTGCCAACTCCAATTCCTCCCGCTCCCACGCGTGCTTCCAAATTATTCTTCGAGCTAAAGGG
AGAATGCATGGCAAGTTCTCTTTGGTAGATCTGGCAGGGAATGAGCGAGGCGCAGACACTTCCAGTGCTGACCGG
CAGACCCGCATGGAGGGCGCAGAAATCAACAAGAGTCTCTTAGCCCTGAAGGAGTGCATCAGGGCCCTGGGACAG
AACAAGGCTCACACCCCGTTCCGTGAGAGCAAGCTGACACAGGTGCTGAGGGACTCCTTCATTGGGGAGAACTCT
AGGACTTGCATGATTGCCACGATCTCACCAGGCATAAGCTCCTGTGAATATACTTTAAACACCCTGAGATATGCA
GACAGGGTCAAGGAGCTGAGCCCCCACAGTGGGCCCAGTGGAGAGCAGTTGATTCAAATGGAAACAGAAGAGATG
GAAGCCTGCTCTAACGGGGCGCTGATTCCAGGCAATTTATCCAAGGAAGAGGAGGAACTGTCTTCCCAGATGTCC
AGCTTTAACGAAGCCATGACTCAGATCAGGGAGCTGGAGGAGAAGGCTATGGAAGAGCTCAAGGAGATCATACAG
CAAGGACCAGACTGGCTTGAGCTCTCTGAGATGACCGAGCAGCCAGACTATGACCTGGAGACCTTTGTGAACAAA
GCGGAATCTGCTCTGGCCCAGCAAGCCAAGCATTTCTCAGCCCTGCGAGATGTCATCAAGGCCTTACGCCTGGCC
ATGCAGCTGGAAGAGCAGGCTAGCAGACAAATAAGCAGCAAGAAACGGCCCCAGTGACGACTGCAAATAAAAATC
TGTTTGGTTTGACACCCAGCCTCTTCCCTGGCCCTCCCCAGAGAACTTTGGGTACCTGGTGGGTCTAGGCAGGGT
CTGAGCTGGGACAGGTTCTGGTAAATGCCAAGTATGGGGGCATCTGGGCCCAGGGCAGCTGGGGAGGGGGTCAGA
GTGACATGGGACACTCCTTTTCTGTTCCTCAGTTGTCGCCCTCACGAGAGGAAGGAGCTCTTAGTTACCCTTTTG
TGTTGCCCTTCTTTCCATCAAGGGGAATGTTCTCAGCATAGAGCTTTCTCCGCAGCATCCTGCCTGCGTGGACTG
GCTGCTAATGGAGAGCTCCCTGGGGTTGTCCTGGCTCTGGGGAGAGAGACGGAGCCTTTAGTACAGCTATCTGCT
GGCTCTAAACCTTCTACGCCTTTGGGCCGAGCACTGAATGTCTTGTACTTTAAAAAAATGTTTCTGAGACCTCTT
TCTACTTTACTGTCTCCCTAGAGTCCTAGAGGATCCCTACTGTTTTCTGTTTTATGTGTTTATACATTGTATGTA
ACAATAAAGAGAAAAAATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2236

MAMDSSLQARLFPGLAIKIQRSNGLIHSANVRTVNLEKSCVSVEWAEGGATKGKEIDFDDVAAINPELLQLLPLH
PKDNLPLQENVTIQKQKRRSVNSKIPAPKESLRSRSTRMSTVSELRITAQENDMEVELPAAANSRKQFSVPPAPT
RPSCPAVAEIPLRMVSEEMEEQVHSIRGSSSANPVNSVRRKSCLVKEVEKMKNKREEKKAQNSEMRMKRAQEYDS
SFPNWEFARMIKEFRATLECHPLTMTDPIEEHRICVCVRKRPLNKQELAKKEIDVISIPSKCLLLVHEPKLKVDL
TKYLENQAFCFDFAFDETASNEVVYRFTARPLVQTIFEGGKATCFAYGQTGSGKTHTMGGDLSGKAQNASKGIYA
MASRDVFLLKNQPCYRKLGLEVYVTFFEIYNGKLFDLLNKKAKLRVLEDGKQQVQVVGLQEHLVNSADDVIKMLD
MGSACRTSGQTFANSNSSRSHACFQIILRAKGRMHGKFSLVDLAGNERGADTSSADRQTRMEGAEINKSLLALKE
CIRALGQNKAHTPFRESKLTQVLRDSFIGENSRTCMIATISPGISSCEYTLNTLRYADRVKELSPHSGPSGEQLI
QMETEEMEACSNGALIPGNLSKEEEELSSQMSSFNEAMTQIRELEEKAMEELKEIIQQGPDWLELSEMTEQPDYD
LETFVNKAESALAQQAKHFSALRDVIKALRLAMQLEEQASRQISSKKRPQ

FIGURE 2237A

GCAGCGGGCGGCAGCTGCGGCGCAACCGGCTCCGGAGCTGCCTGGCGCGGCCGGGCGGGCGGCGCCGCTCAGGCT
CGGGCTCCGGCTGGGCCCGGCGCGGCCTCGGGGCTGCCCATCGCGCGCGGCGGGCCGGGCCGGTGACGCCGGACG
CCCATGGACGCCTCTGAGGAGCCGCTGCCGCCGGTGATCTACACCATGGAGAACAAGCCCATCGTCACCTGTGCT
GGAGATCAGAATTTATTTACCTCTGTTTATCCAACGCTCTCTCAGCAGCTTCCAAGAGAACCAATGGAATGGAGA
AGGTCCTATGGCCGGGCTCCGAAGATGATTCACCTAGAGTCTAACTTTGTTCAATTCAAAGAGGAGCTGCTGCCC
AAAGAAGGAAACAAAGCTCTGCTCACGTTTCCCTTCCTCCATATTTACTGGACAGAGTGCTGTGATACCGAAGTG
TATAAAGCTACAGTAAAAGATGACCTCACCAAGTGGCAGAATGTTCTGAAGGCTCATAGCTCTGTGGACTGGTTA
ATAGTGATAGTTGAAAATGATGCCAAGAAAAAAAACAAAACCAACATCCTTCCCCGAACCTCTATTGTGGACAAA
ATAAGAAATGATTTTTGTAATAAACAGAGTGACAGGTGTGTTGTGCTCTCCGACCCCTTGAAGGACTCTTCTCGA
ACTCAGGAATCCTGGAATGCCTTCCTGACCAAACTCAGGACATTGCTTCTTATGTCTTTTACCAAAAACCTAGGC
AAGTTTGAGGATGACATGAGAACCTTGAGGGAGAAGAGGACTGAGCCAGGCTGGAGCTTTTGTGAATATTTCATG
GTTCAGGAGGAGCTTGCCTTTGTTTTCGAGATGCTGCAGCAGTTCGAGGACGCCCTGGTGCAGTACGACGAACTG
GACGCCCTCTTCTCTCAGTATGTGGTCAACTTCGGGGCCGGGGATGGTGCCAACTGGCTGACTTTTTTCTGCCAG
CCAGTGAAGAGCTGGAACGGATTGATCCTCCGAAAACCCATAGATATGGAGAAGCGGGAATCGATCCAGAGGCGA
GAAGCCACCCTGTTAGATCTGCGCAGTTACCTGTTCTCTCGCCAGTGCACCTTGCTGCTCTTCCTGCAGAGGCCG
TGGGAGGTGGCCCAGCGCGCCCTAGAGCTGCTGCACAACTGCGTGCAGGAACTGAAGCTCTTAGAAGTCTCTGTC
CCACCTGGTGCTCTGGACTGCTGGGTGTTTCTGAGCTGTCTGGAGGTGTTGCAGAGGATAGAAGGCTGCTGTGAC
CGGGCACAGATCGACTCAAACATTGCCCACACTGTGGGGCTATGGAGCTATGCCACAGAAAAGTTAAAGTCCTTG
GGCTATCTATGTGGACTTGTGTCAGAGAAAGGACCTAACTCAGAAGATCTCAACAGGACAGTTGACCTTTTGGCA
GGTTTGGGAGCTGAGCGACCAGAAACAGCCAACACAGCTCAGAGTCCTTATAAGAAACTGAAAGAAGCATTATCG
TCAGTGGAAGCTTTTGAAAAACACTACTTAGATTTGTCCCATGCCACCATTGAAATGTATACAAGCATTGGGAGG
ATTCGATCTGCTAAGTTTGTTGGAAAAGATCTGGCAGAGTTTTACATGAGGAAAAAGGCTCCACAAAAGGCAGAA
ATCTATCTTCAAGGAGCACTGAAAAACTACCTGGCTGAGGGCTGGGCACTCCCCATCACACACACAAGGAAGCAG
CTGGCCGAATGTCAAAAGCACCTTGGACAAATTGAAAACTACCTGCAGACCAGCAGCCTCTTAGCCAGTGACCAC
CACCTCACTGAAGAGGAGCGCAAGCACTTCTGCCAGGAGATACTTGACTTTGCCAGCCAGCCGTCAGACAGCCCA
GGTCATAAGATAGTGCTACCCATGCATTCCTTTGCACAACTGCGAGATCTCCATTTTGATCCCTCCAATGCCGTG
GTCCACGTGGGCGGCGTTTTGTGCGTTGAGATAACCATGTACAGCCAGATGCCTGTGCCTGTTCACGTGGAGCAG
ATTGTGGTCAATGTCCACTTCAGCATTGAGAAAAACAGCTACCGGAAGACTGCGGAGTGGCTTACCAAGCACAAG
ACGTCCAATGGGATCATTAACTTTCCACCCGAGACCGCACCTTTCCCTGTATCCCAAAACAGTTTGCCCGCGCTG
GAGTTGTATGAAATGTTTGAGAGAAGCCCATCTGATAACTCCTTGAACACGACTGGGATTATCTGCAGAAACGTC
CACATGCTCCTGAGAAGGCAGGAGAGCAGCTCCTCTCTAGAGATGCCCTCAGGGGTGGCTCTGGAGGAGGGTGCC
CACGTGCTGAGGTGCAGCCACGTGACCCTGGAACCAGGGGCCAACCAGATAACATTCAGGACTCAGGCCAAGGAA
CCTGGAACGTATACACTCAGGCAGCTGTGCGCCTCGGTGGGCTCCGTGTGGTTCGTCCTCCCTCACATCTACCCC
ATTGTGCAGTACGACGTGTACTCACAGGAGCCCCAGCTGCACGTGGAGCCGCTGGCTGATAGCCTTCTGGCAGGC
ATTCCTCAGAGAGTCAAGTTCACTGTCACTACCGGCCATTATACGATAAAGAATGGAGACAGCCTGCAGCTTAGC
AATGCCGAAGCCATGCTCATCCTGTGCCAGGCGGAGAGCAGGGCCGTGGTCTACTCCAACACGAGAGAACAGTCT
TCTGAGGCCGCGCTCCGGATTCAGTCCTCCGACAAGGTCACGAGCATCAGTCTGCCTGTTGCGCCTGCGTACCAC
GTGATCGAATTTGAACTGGAAGTTCTCTCTTTACCTTCAGCCCCAGCACTCGGAGGGGAGAGTGACATGCTGGGG
ATGGCAGAGCCCCACAGGAAGCATAAGGACCAACAGAGAACTGGCCGCTGCATGGTTACCACAGACCACAAAGTG
TCGATTGACTGCCCGTGGTCCATCTACTCCACAGTCATCGCACTGACCTTCAGCGTACCCTTCAGGACCACACAC
AGCCTCCTGTCCTCAGGAACACGGAAATATGTTCAAGTTTGTGTCCAGAATTTGTCAGAACTTGACTTTCAGCTG
TCAGATAGTTATCTTGTAGATACCGGTGATAGTACCGACCTGCAACTAGTACCACTGAACACGCAGTCCCAGCAG
CCCATCTACAGCAAGCAGTCGGTGTTCTTCGTCTGGGAACTCAAGTGGACAGAAGAGCCTCCCCCTTCTCTGCAT
TGCCGGTTCTCTGTTGGATTTTCCCCAGCTTCTGAGGAACAGCTGTCTATCTCCTTAAAGCCGTATACTTATGAA
TTTAAAGTGGAAAATTTTTTTACATTATACAACGTGAAGGCTGAGATCTTTCCCCCTTCGGGAATGGAGTATTGC
AGAACAGGCTCCCTCTGCTCCCTGGAGGTTTTGATCACGAGGCTCTCAGACCTCTTGGAGGTGGATAAAGATGAA
GCACTGACTGAATCTGATGAGCATTTTTCGACAAAGCTTATGTATGAAGTTGTCGACAACAGTAGCAACTGGGCA
GTGTGTGGGAAAAGCTGCGGTGTCATCTCCATGCCAGTGGCTGCTCGGGCCACTCACAGGGTCCACATGGAAGTG

FIGURE 2237B

ATGCCGCTCTTCGCCGGGTATCTCCCCCTGCCCGACGTCAGGCTGTTCAAGTACCTCCCCCATCATTCTGCACAC
TCCTCCCAACTGGACGCTGACAGCTGGATAGAAAACGACAGCCTGTCAGTAGACAAGCACGGGGACGACCAGCCG
GACAGCAGCAGCCTCAAGAGCAGGGGCAGCGTGCATTCGGCCTGCAGCAGCGAGCACAAAGGCCTACCCATGCCC
CGGCTGCAGGCACTGCCGGCCGGCCAGGTCTTCAACTCCAGCTCGGGCACACAAGTCCTGGTCATCCCCAGCCAA
GATGACCACGTCCTGGAAGTCAGTGTAACA**TGA**CAACGCCAGGGTGAACACACGCCACTTCCCAGCTAGGAGTGC
ACTTTATGGGACTGTGACTGGACTCTTCCGTTCTGGCTCCAGCCAGACCTTCAGTGGTCCTGCCTGGCCGTGGGG
ACATCAGAGAGTGTCATCACGCAGCTGGCCAGCTGAGTTCTGTTGTTGTTTTCATGCCGCCTGTGATCTCAGATT
CCTGCTTTTCTCACCCCGTCCCCATGCTGGTGTCCGACGCCGCTTACTCAGAGCCCTGGCCTCCCTCCCCCTACC
TCACACGCTGCTCATGAAAGTTTCCACCCACGCTGTCTCCACGGAACAGCCTCCGTCTGCTGGCTCTTCGTGGAA
GGCCATTTGTCTTTCAGGTAGACACTCAGCAGCCCTCACGGTCTTAGTGACGTGTGTGCCTTTCTGGTCACACAG
CTGCCCAGTTTCCTGATCGGGGTGGATTTGTGTCCCCTAAGGGGTAAAACAGCCGTTTACCGCAGATCCTCTCAT
TGTGCTTTTCTAGAATAACACCCTTCTAGGGGAGGCGGGTGGGGGAGGGAGGGATCATAACCCCTTCTGTGCCTT
GGGATGCCGGAGCTGGGGGACCTGGAGGCCCATCAGCCGGAGCCACGTGAAAGGTACTGAAGAAAGCTGAGACCC
GGCTGTGAGGAGCGCCTCAGCGGTGAGGTGGTTTAGGGATAAATGTTTCTGGAACCCTGTGGTCCCCCATAATGT
TGATAGAATATCATATGCACTGGGAGTTAAATATATTTAATTTAATGATCATTATATATGTGGGGGTTAATATGT
TGTTTTTCTGTCCCTTTAAAGTCTTTACATGTAATTGTAGCTGTATAATCGTTATTTTTCTTTTGCATCTTAAGT
CTTAGAAATTAAGATATTCCATCGTGAGGATGAGAGAGGTCCTCAGTGTGTTTTTGGTCTGGTTGTAGGGAAGGA
CTCAAGTCCTGGAATGTCCTCCACTGGTCTACTGAGTTGCAGTCACACTGTTCCAATGGATTATTTGCTTTCGGT
TGTAAATTTAATTGTACATATGGTTGATTTATTATTTTTAAAAATACAGACTAACTGATGTAATGTTTATGTATA
AGTTGCACCAAAAATCAAGGACAAAAATAAGTGTGTTTGTTTTTACAGGTGTGAAAGTCACAGCTTGTAAATAAG
TGTTGTATGTATTAAACCTTTTCCAGTTCTCCAAAGCGATGTATTTTTGTACACTTGAAATAGAGTACTCTTAAT
TTACTGGGCAAATGTGCTTGGAATTGAACTTGACAAGATTAGCTCAAGCAGATAGAGTCGGGTCCAGCAGTGGGT
GGCCCTCGTGTGAATCCCCGTGGATGTGCAAGTTGTGGAGAGAAGGAGCACCGGGTTCCTGCCCAGCACTGTGCT
TGCGGGAGGCGGTGGGGCATGGGAGGAAGGAGGCACAGACCGGGGAAATATGACAGCCGTCATTTCCAGTATTCT
CTGTGTTGTCTTTTAGCTCATTCAATAAATAAAGGTGGTGTGATTTTTTTTTCCTCCTGTCTTTTTCATTTGTAG
AAACTGGAGACGTGTAAAGAAGATAAATAATTGTGTAATTAAACTTTCCAGAAATTTATCTTCCTCATGTGCAGT
TTAACAAACTTGGTCAAACTAGTTAGCAAATTAGAACTTCAGAATCTAATGATAGTTTAGGGTTTCTAAAATAAG
GTTTTTTATTGTAAAAATTGACGATTGCCCTGCATTTCTACCAAGTCCTGTGAATAAAGAGATGGGAGATTTGAT
TCCGTCAGAAGAGACTGTAATCCGTGTCGTCAGCCTGGGAGCCTTCCCCAGTGTAATGTAGCTTTCTCTCTTACC
TTCTGGAAGAGGGAATGTTTCATTTATTACTGTTTGATTTTCTTGTATCTGGTTCTACTCCCAGGATGAAATTAT
CCAACTACATATATATTTAGAGGAAGAAAGTGAAGGGGAAATTTAAAATGTTTACGGCGCTTAATTGCCTGGAAA
TGAAATGAAATCAAATTTATCAGTTTTTTTCCCCCTAATTACCCAAAAGATCTTTTGGCAAACTATGTTACATGA
ATGCTTCTGCCTCTTTAAGACAAAGAAGAATGTCACCCAAAATTGTCATTTTTTTCTTAATGTTCATCATAAAAG
TCCTAAAAGAGTAACTGTAATTGGATGTTTATTGTTTTTATCTAAAGTAAGGTGTATGTGTTTGAGACAAGCAGG
TTTTGTTGATAAAGAGATGTTAAATAATTGTGAAGCCAGATATGCAATGTGTATCTAAAAAGCAAGGAATTTGCA
GCCGTTTTACAAATATCTGTGGAACATGTAAATACTGTCAAATGGAAAATAAAATAAGTTATAATTTTTTGTGAA
TTTCATGGGATGTCCTATGATTGGGAAAAATTATAACTCTTCTGATTCTAATGTGGAAATTGTTGTATTTAATCT
GAAAATGACTTTACCTACAACAGTTCCATTGTCAGCACAGCCTAGGAGGGTCAGATTCCTGTATTAATTACTCTT
AGTGGAGATGCCAGATATCCCATACAGAATTAGCAGAGAAAATACACACAGGCTTCTATTCAAATTTTCTTTAGT
GCTTAAAATTAAGTTTTAAAATGAAATCAGACACTGCAGGTTTGTATATAAAATGAAAAGCTATACTACTTTTTA
TAAAAGGGCAAACTGGGCTGATGTAAATGTTTTACTTTCAACTGTGTTCTTTAAAATAAAT

FIGURE 2238

MDASEEPLPPVIYTMENKPIVTCAGDQNLFTSVYPTLSQQLPREPMEWRRSYGRAPKMIHLESNFVQFKEELLPK
EGNKALLTFPFLHIYWTECCDTEVYKATVKDDLTKWQNVLKAHSSVDWLIVIVENDAKKKNKTNILPRTSIVDKI
RNDFCNKQSDRCVVLSDPLKDSSRTQESWNAFLTKLRTLLLMSFTKNLGKFEDDMRTLREKRTEPGWSFCEYFMV
QEELAFVFEMLQQFEDALVQYDELDALFSQYVVNFGAGDGANWLTFFCQPVKSWNGLILRKPIDMEKRESIQRRE
ATLLDLRSYLFSRQCTLLLFLQRPWEVAQRALELLHNCVQELKLLEVSVPPGALDCWVFLSCLEVLQRIEGCCDR
AQIDSNIAHTVGLWSYATEKLKSLGYLCGLVSEKGPNSEDLNRTVDLLAGLGAERPETANTAQSPYKKLKEALSS
VEAFEKHYLDLSHATIEMYTSIGRIRSAKFVGKDLAEFYMRKKAPQKAEIYLQGALKNYLAEGWALPITHTRKQL
AECQKHLGQIENYLQTSSLLASDHHLTEEERKHFCQEILDFASQPSDSPGHKIVLPMHSFAQLRDLHFDPSNAVV
HVGGVLCVEITMYSQMPVPVHVEQIVVNVHFSIEKNSYRKTAEWLTKHKTSNGIINFPPETAPFPVSQNSLPALE
LYEMFERSPSDNSLNTTGIICRNVHMLLRRQESSSSLEMPSGVALEEGAHVLRCSHVTLEPGANQITFRTQAKEP
GTYTLRQLCASVGSVWFVLPHIYPIVQYDVYSQEPQLHVEPLADSLLAGIPQRVKFTVTTGHYTIKNGDSLQLSN
AEAMLILCQAESRAVVYSNTREQSSEAALRIQSSDKVTSISLPVAPAYHVIEFELEVLSLPSAPALGGESDMLGM
AEPHRKHKDQQRTGRCMVTTDHKVSIDCPWSIYSTVIALTFSVPFRTTHSLLSSGTRKYVQVCVQNLSELDFQLS
DSYLVDTGDSTDLQLVPLNTQSQQPIYSKQSVFFVWELKWTEEPPPSLHCRFSVGFSPASEEQLSISLKPYTYEF
KVENFFTLYNVKAEIFPPSGMEYCRTGSLCSLEVLITRLSDLLEVDKDEALTESDEHFSTKLMYEVVDNSSNWAV
CGKSCGVISMPVAARATHRVHMEVMPLFAGYLPLPDVRLFKYLPHHSAHSSQLDADSWIENDSLSVDKHGDDQPD
SSSLKSRGSVHSACSSEHKGLPMPRLQALPAGQVFNSSSGTQVLVIPSQDDHVLEVSVT

FIGURE 2239

ATGTCAGCCCCACTGGATGCCGCCCTCCACGCCCTTCAGGAGGAGCAGGCCAGACCGCCCTCCACGCCCTTCAGG
AGGAGCAGGCCAGACTCAAGATGAGGCTGTGGGACCTGCAGCAGCTGAGAAAGGAGCTCGGGGACTCCCCCAAAG
ACAAGGTCCCATTTTCAGTGCCCAAGATCCCCCTGGTATTCCGAGGACACACCCAGCAGGACCCGGAAGTGCCTA
AGTCTTTAGTTTCCAATTTGCGGATCCACTGCCCTCTGCTTGCGGGCTCTGCTCTGATCACCTTTGATGACCCCA
AAGTGGCTGAGCAGGTGCTGCAACAAAAGGAGCACACGATCAACATGGAGGAGTGCCGGCTGCGGGTGCAGGTCC
AGCCCTTGGAGCTGCCCATGGTCACCACCATCCAGGTGATGGTGTCCAGCCAGTTGAGTGGCCGGAGGGTGTTGG
TCACTGGATTTCCTGCCAGCCTCAGGCTGAGTGAGGAGGAGCTGCTGGACAAGCTAGAGATCTTCTTTGGCAAGA
CTAGGAACGGAGGTGGCGATGTGGACGTTCGGGAGCTACTGCCAGGGAGTGTCATGCTGGGGTTTGCTAGGGATG
GAGTGGCTCAGCGTCTGTGCCAAATCGGCCAGTTCACAGTGCCACTGGGTGGGCAGCAAGTCCCTCTGAGAGTCT
CTCCGTATGTGAATGGGGAGATCCAGAAGGCTGAGATCAGGTCGCAGCCAGTTCCCCGCTCGGTACTGGTGCTCA
ACATTCCTGATATCTTGGATGGCCCGGAGCTGCATGACGTCCTGGAGATCCACTTCCAGAAGCCCACCCGCGGGG
GCGGGGAGGTAGAGGCCCTGACAGTCGTACCCCAAGGACAGCAGGGCCTAGCAGTCTTCACCTCTGAGTCAGGCT
AGGGGCCTCCCCTTCTCATCCTCCCCACCCCCCCGCCAAGGTTCTCACACTGGCCTGGGCTTGGGTGCCCATATA
GGAGGTCTGTATGTTCACCAACAGTGCGGAGGGGTCACACATTGCAAAACACTGCCCAGAACAGTAAAAAGAGCC
TGCATGCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2240

VSPTGCRPPRPSGGAGQTALHALQEEQARLKMRLWDLQQLRKELGDSPKDKVPFSVPKIPLVFRGHTQQDPEVPK
SLVSNLRIHCPLLAGSALITFDDPKVAEQVLQQKEHTINMEECRLRVQVQPLELPMVTTIQVMVSSQLSGRRVLV
TGFPASLRLSEEELLDKLEIFFGKTRNGGGDVDVRELLPGSVMLGFARDGVAQRLCQIGQFTVPLGGQQVPLRVS
PYVNGEIQKAEIRSQPVPRSVLVLNIPDILDGPELHDVLEIHFQKPTRGGGEVEALTVVPQGQQGLAVFTSESG

FIGURE 2241

ATGCCCCGCTACGGAGCGTCACTCCGCCAGAGCTGCCCCAGGTCCGGCCGGGAGCAGGGACAAGACGGGACCGCC
GGAGCCCCCGGACTCCTTTGGATGGGCCTGGCGCTGGCGCTGGCGCTGGCGCTGGCGCTGGCTCTGTCTGACTCT
CGGGTTCTCTGGGCTCCGGCAGAGGCTCACCCTCTTTCTCCCCAAGGCCATCCTGCCAGGTTACATCGCATAGTG
CCCCGGCTCCGAGATGTCTTTGGGTGGGGGAACCTCACCTGCCCAATCTGCAAAGGTCTATTCACCGCCATCAAC
CTCGGGCTGAAGAAGGAACCCAATGTGGCTCGCGTGGGCTCCGTGGCCATCAAGCTGTGCAATCTGCTGAAGATA
GCACCACCTGCCGTGTGCCAATCCATTGTCCACCTCTTTGAGGATGACATGGTGGAGGTGTGGAGACGCTCAGTG
CTGAGCCCATCTGAGGCCTGTGGCCTGCTCCTGGGCTCCACCTGTGGGCACTGGGACATTTTCTCATCTTGGAAC
ATCTCTTTGCCTACTGTGCCGAAGCCGCCCCCCAAACCCCCTAGCCCCCCAGCCCCAGGTGCCCCTGTCAGCCGC
ATCCTCTTCCTCACTGACCTGCACTGGGATCATGACTACCTGGAGGGCACGGACCCTGACTGTGCAGACCCACTG
TGCTGCCGCCGGGGTTCTGGCCTGCCGCCCGCATCCCGGCCAGGTGCCGGATACTGGGGCGAATACAGCAAGTGT
GACCTGCCCCTGAGGACCCTGGAGAGCCTGTTGAGTGGGCTGGGCCCAGCCGGCCCTTTTGATATGGTGTACTGG
ACAGGAGACATCCCCGCACATGATGTCTGGCACCAGACTCGTCAGGACCAACTGCGGGCCCTGACCACCGTCACA
GCACTTGTGAGGAAGTTCCTGGGGCCAGTGCCAGTGTACCCTGCTGTGGGTAACCATGAAAGCACACCTGTCAAT
AGCTTCCCTCCCCCCTTCATTGAGGGCAACCACTCCTCCCGCTGGCTCTATGAAGCGATGGCCAAGGCTTGGGAG
CCCTGGCTGCCTGCCGAAGCCCTGCGCACCCTCAGAATTGGGGGGTTCTATGCTCTTTCCCCATACCCCGGTCTC
CGCCTCATCTCTCTCAATATGAATTTTTGTTCCCGTGAGAACTTCTGGCTCTTGATCAACTCCACGGATCCCGCA
GGACAGCTCCAGTGGCTGGTGGGGGAGCTTCAGGCTGCTGAGGATCGAGGAGACAAAGTGCATATAATTGGCCAC
ATTCCCCCAGGGCACTGTCTGAAGAGCTGGAGCTGGAATTATTACCGAATTGTAGCCAGGTATGAGAACACCCTG
GCTGCTCAGTTCTTTGGCCACACTCATGTGGATGAATTTGAGGTCTTCTATGATGAAGAGACTCTGAGCCGGCCG
CTGGCTGTAGCCTTCCTGGCACCCAGTGCAACTACCTACATCGGCCTTAATCCTGGTTACCGTGTGTACCAAATA
GATGGAAACTACTCCGGGAGCTCTCACGTGGTCCTGGACCATGAGACCTACATCCTGAATCTGACCCAGGCAAAC
ATACCGGGAGCCATACCGCACTGGCAGCTTCTCTACAGGGCTCGAGAAACCTATGGGCTGCCCAACACACTGCCT
ACCGCCTGGCACAACCTGGTATATCGCATGCGGGGCGACATGCAACTTTTCCAGACCTTCTGGTTTCTCTACCAT
AAGGGCCACCCACCCTCGGAGCCCTGTGGCACGCCCTGCCGTCTGGCTACTCTTTGTGCCCAGCTCTCTGCCCGT
GCTGACAGCCCTGCTCTGTGCCGCCACCTGATGCCAGATGGGAGCCTCCCAGAGGCCCAGAGCCTGTGGCCAAGG
CCACTGTTTTGCTAG

FIGURE 2242

MPRYGASLRQSCPRSGREQGQDGTAGAPGLLWMGLALALALALALALSDSRVLWAPAEAHPLSPQGHPARLHRIV
PRLRDVFGWGNLTCPICKGLFTAINLGLKKEPNVARVGSVAIKLCNLLKIAPPAVCQSIVHLFEDDMVEVWRRSV
LSPSEACGLLLGSTCGHWDIFSSWNISLPTVPKPPPKPPSPPAPGAPVSRILFLTDLHWDHDYLEGTDPDCADPL
CCRRGSGLPPASRPGAGYWGEYSKCDLPLRTLESLLSGLGPAGPFDMVYWTGDIPAHDVWHQTRQDQLRALTTVT
ALVRKFLGPVPVYPAVGNHESTPVNSFPPPFIEGNHSSRWLYEAMAKAWEPWLPAEALRTLRIGGFYALSPYPGL
RLISLNMNFCSRENFWLLINSTDPAGQLQWLVGELQAAEDRGDKVHIIGHIPPGHCLKSWSWNYYRIVARYENTL
AAQFFGHTHVDEFEVFYDEETLSRPLAVAFLAPSATTYIGLNPGYRVYQIDGNYSGSSHVVLDHETYILNLTQAN
IPGAIPHWQLLYRARETYGLPNTLPTAWHNLVYRMRGDMQLFQTFWFLYHKGHPPSEPCGTPCRLATLCAQLSAR
ADSPALCRHLMPDGSLPEAQSLWPRPLFC

FIGURE 2243

CAAGCCTGGAAGAACTCGTCATGCTCTTTGTAGCGTGGTGCTTCTGTTGCTCACAGGACAACTTGCCTTTGATGA
TTTTCAAGAGAGTTGTGCTATGATGTGGCAAAAGTATGCAGGAAGCAGGCGGTCAATGCCTCTGGGAGCAAGGAT
CCTTTTCCACGGTGTGTTCTATGCCGGGGGCTTTGCCATTGTGTATTACCTCATTCAAAAGTTTCATTCCAGGGC
TTTATATTACAAGTTGGCAGTGGAGCAGCTGCAGAGCCATCCCGAGGCACAGGAAGCTCTGGGCCCTCCTCTCAA
CATCCATTATCTCAAGCTCATCGACAGGGAAAACTTCGTGGACATTGTTGATGCCAAGTTGAAGATTCCTGTCTC
TGGATCCAAATCAGAGGGCCTTCTCTACGTCCACTCATCCAGAGGTGGCCCCTTTCAGAGGTGGCACCTTGACGA
GGTCTTTTTAGAGCTCAAGGATGGTCAGCAGATTCCTGTGTTCAAGCTCAGTGGGGAAAACGGTGATGAAGTGAA
AAAGGAGTAGAGACGACCCAGAAGACCCAGCTTGCTTCTAGTCCATCCTTCCCTCATCTCTACCATATGGCCACT
GGGGTGGTGGCCCATCTCAGTGACAGACACTCCTGCAACCCAGTTTTCCAGCCACCAGTGGGATGATGGTATGTG
CCAGCACATGGTAATTTTGGTGTAATTCTAACTTGGGCACAACAAATGCTATTTGTCATTTTTAAACTGAATCCG
AAAGAAACTCCTATTATAAATTTAAGATAATGTAATGTATTTGAAAGTGCTTTGTATAAAAAAGCACATGATAAA
AGGAATCAGAATTAATAAAATGTTTGTTGATCTTTAAAAAAAAAAAAAAAAAAAACTCGAGACTAGTTCTGTCTCT
CCCTCGTGCCGAATTCGGCACGAGGCAGAGCCTCTTCTCGTCTGTAGGAACACCGCCAGGGAGGTCATGGCAGGG
CAGGACCAAAGGGTCCTGTGGCTCTTTTTTTTTCTCCTGTTCTGCATTCCTGCCCACACCCCCACCCCTCCATTT
CCTTCTGCTCTGGAGGCATCCTCCTTCATTGGACACCACACAGTTTATTTCACTTCTGACTTCAAGGTTGTGAAT
TCTTCCCATGGCTTAAGTCCTGGGATACTTCTGCAGTGAAAGGAGGTCTTGTACCTCTTCCTCAGAGTCAGAAGT
TCTGAGTACCTTTGCCCTATTCTGAAAAGGGCTAGGGGCTCCTGCTCCCAGCTGCCCTCTTCCTTTGGCTTCCAA
TTCAGTTCCCTCTGCCCCGCATCCTGCAGACAGGCGCTCCCGCAGGGGGCCCTTGTGGACCTGCACTGGAGTCTG
TTGCCTTCACTGAGCTGCCTGTGCTGGCCTTGCATGGTGCCTGTAGGGGGATTTGCTTTGCTGTGCCATTGGGGT
ACAGCTGCTGCTCTTACTCTAGACCAAAAAGTCGGGTTGAGTGACTGGTGGCAGGGCCACAGATAGAGACAGCGG
GGAGGGTGGCTGACCCTGGCGGCCCTGGACTGAGCGTCTGGAGGAGTCGTGGAGGCTCTTTCCCTTCTTTCTCCT
CTGAGAGCTCGTTCTTCAGGCTCTTCCAGCTTGTCATGTCGAGTGCCTGGCCACTGCTCAGGGTTGGAGGCTCAG
TCCCTTTGCCCTGTCTGTTCCAGCTCTGGAGCTAACTCAGGGATCCCTGATCAGGGTTACATAGGTTTGGTAAAA
TGAGTGCTGGAAATTAACTTTCTCCCAGTAGTCTTAGGTCATGCTCAGTGAACTTAAACTTTATCCAGATATGGT
TTTCCTTCAGCCTTTCTATTCCCTTTCTAGCCAGTGAAAGACCCGCTGCCCTTTGACCTCAGCCCCTCCAAGCCC
CCAAGTTTAAAACGCCACCCCCTGCCGGCCCTGGACTGAGCGTCTGGAGGAGTCGTGGAGGCTCTTTCCCTTCTT
TCTCCTCTGAGAGCTCGTTCTTCAGGCTCTTCCAGCTTGTCATGTCGAGTGCCTGGCCACTGCTCAGGGTTGGAG
GCTCAGTCCCTTTGCCCTGTCTGTTCCAGCTCTGGAGCTAACTCAGGGATCCCTGATCAGGGTTACATAGGTTTG
GTAAAATGAGTGCTGGAAATTAACTTTCTCCCAGTAGTCTTAGGTCATGCTCAGTGAACTTAAACTTTATCCAGA
TATGGTTTTCCTTCAGCCTTTCTATTCCCTTTCTAGCCAGTGAAAGACCCGCTGCCCTTTGACCTCAGCCCCTCC
AAGCCCCCAAGTTTAAAACGCCACCCCCTGCCACCAGAAAAAACAGAAAAAAAAAAAAAAAAAAAACTAAAACAC
CCATCTGGTCTGGGCATCTTCCTTTCCTTTTTCACTATGTATCCTGTTACTGGGCTTAAACAGCTTTCAGAGAAG
AGATGTCATTTCTATTAAATGCTCTTTCAGTAGCGAACTGAGTTCACACTTGACTAAGGATATTTTCCGGACTGT
CTGTCATCAGCATCCTTAGTGGGTTTCCCCATATTTAAATTGGTAGAGGCCAGGGATGGTGGCTCACACCTGTAA
TCTCAGTACTTTGGGAGGCCAAGGTAGGTGGATTGCTTGAGCTCAGAAGACCAGCCTGGGCAACCTGGTGAAACC
CTGTCTCTACTAAAAATTCAAGTTAGCTAGCTGGGCATGGTGATGCACTTCTGTAGTCCCAGCTACTTGGAGAGG
GGGTGGTGCTGGGGCAGCAGGATCGCTTGAACCCAGGAGGTTGAGGTTGCAGTGAGCCAAGATGGTACCAGCCTA
GGTGACAAAGTGACACCCTGTCTCAAAAAAGAAACCAAACAAACATAAAAAAAAAAAAAAAAAA

FIGURE 2244

MMWQKYAGSRRSMPLGARILFHGVFYAGGFAIVYYLIQKFHSRALYYKLAVEQLQSHPEAQEALGPPLNIHYLKL
IDRENFVDIVDAKLKIPVSGSKSEGLLYVHSSRGGPFQRWHLDEVFLELKDGQQIPVFKLSGENGDEVKKE

FIGURE 2245

GTTTGAGCAGCATTGTTAGAGCCTGTGGAAAACACTTTACAACTGTGTAACTGTCTTCATCTTTACAGAGGAATA
GTCTACAAAGGAAGACTTGTAACCTGGAGAAGAGACCTGTCATTTACTCCATCCTTTATAGTGATGCTACAGGAC
GAAGAGGAATGGATAAAAACATTGGCGAGCAACTCAATAAAGCGTATGAAGCCTTCCGGCAGGCATGCATGGATA
GAGATTCTGCAGTAAAAGAATTACAGCAAAAGACTGAGAACTATGAGCAGAGAATACGTGAACAACAGGAACAGC
TGTCACTCCAACAGACTATTATTGACAAGCTAAAATCTCAGTTACTTCTTGTGAATTCCACTCAAGATAACAATT
ATGGCTGTGTCCCTCTGCTTGAAGACAGTGACACAAGAAAGAATACTTTGACTCTTGCTCAGCCACAAGATAAAG
TGATTTCAGGAATAGCAAGAGAAAAACTACCAAAGGTAAGAAGACAAGAGGTTTCTTCTCCTAGAAAAGAAACTT
CAGCAAGGAGTCTTGGCAGTCCTTTGCTCCATGAAAGGGGTAATATAGAGAAGACTTCCTGGGATCTGAAAGAAG
AATTTCATAAAATATGCATGCTAGCAAAAGCACAGAAAGACCACTTAAGCAAACTTAATATACCAGACACTGCAA
CTGAAACACAGTGCTCTGTGCCTATACAGTGTACGGATAAAACAGATAAACAAGAAGCGCTGTTTACGCCTCAGG
CTAAAGATGATATAAATAGAGGTGCACCATCCATCACATCTGTCACACCAAGAGGACTGTGCAGAGATGAGGAAG
ACACCTCTTTGGAATCACTTTCTAAATTCAATGTCAAGTTTCCACCTATGGACAATGACTCAACTTTCTTACATA
GCACTCCAGAGAGACCCGGCATCCTTAGTCCTGCCACGTCTGAGGCAGTGTGCCAAGAGAAATTTAATATGGAGT
TCAGAGACAACCCAGGGAACTTTGTTAAAACAGAAGAAACTTTATTTGAAATTCAGGGAATTGACCCCATAGCTT
CAGCTATACAAAACCTTAAAACAACTGACAAAACAAAGCCCTCAAATCTCGTAAACACTTGTATCAGGACAACTC
TGGATAGAGCTGCGTGTTTGCCACCTGGAGACCATAATGCATTATATGTAAATAGCTTCCCACTTCTGGACCCAT
CTGATGCACCTTTTCCCTCACTCGATTCCCCGGGAAAAGCAATCCGAGGACCACAGCAGCCCATTTGGAAGCCCT
TTCCTAATCAAGACAGTGACTCGGTGGTACTAAGTGGCACAGACTCAGAACTGCATATACCTCGAGTATGTGAAT
TCTGTCAAGCAGTTTTCCCACCATCCATTACATCCAGGGGGGATTTCCTTCGGCATCTTAATTCACACTTCAATG
GAGAGACTTAAGACACATTTGAAAACAGACATATCAAGTTCTATGTGATGATTTTGGGTTTTTAATACTATAAAT
ACTTGATTGTAAACTAAATTCAAGATCATTTATAGGAAAATCTAGTTTCACAGCTATTTGAATTTTTTTCTGGAT
TTACTATATAACTCTTATTTTTTAAAAGATCATTCTGTTCTTTCAAGGAGAAATAAGCCTAAAAGAAGAAAAACA
AAAAAAATTCTGTATAAAACTGTAATCCTTTGTATTCATGTTTACAGTGCTATTACTATAATTCAAAATTATGTA
TGTGACTTAGAGTTATATAATCATAATTTATGTTTATTTCAAATATCTAAGTTTATTGCTTGGATTTCTAGTGAG
AGCTGTTGAATTTGGTGATGTCAAATGTTTCTAGGGTTTTTTAGTTTGTTTTTATTGAGAAAATTGATTATTTAT
GCTATAGGTGATATTCTCTTTGAATAAACCTATAATAGGAAATAGCAGACCACATAAACATCTTTGTAAATATCA
AACCTAATACATTTCTTGTCCAGTGATAAAACAACTGGTAGAATTATTTAAACACTTTAGATTTTTAAATAATAA
ACATGGCTTTAATTTTTACTGTGTGTATAGCTACATGATGAAATTAATTAAATATTAAGAGGT

FIGURE 2246

MDKNIGEQLNKAYEAFRQACMDRDSAVKELQQKTENYEQRIREQQEQLSLQQTIIDKLKSQLLLVNSTQDNNYGC
VPLLEDSDTRKNTLTLAQPQDKVISGIAREKLPKVRRQEVSSPRKETSARSLGSPLLHERGNIEKTSWDLKEEFH
KICMLAKAQKDHLSKLNIPDTATETQCSVPIQCTDKTDKQEALFTPQAKDDINRGAPSITSVTPRGLCRDEEDTS
LESLSKFNVKFPPMDNDSTFLHSTPERPGILSPATSEAVCQEKFNMEFRDNPGNFVKTEETLFEIQGIDPIASAI
QNLKTTDKTKPSNLVNTCIRTTLDRAACLPPGDHNALYVNSFPLLDPSDAPFPSLDSPGKAIRGPQQPIWKPFPN
QDSDSVVLSGTDSELHIPRVCEFCQAVFPPSITSRGDFLRHLNSHFNGET

FIGURE 2247

ACTCTTCTGGTCCCCACAGACTCAGAGAGAACCCACC**ATG**GTGCTGTCTCCTGCCGACAAGACCAACGTCAAGGC
CGCCTGGGGTAAGGTCGGCGCGCACGCTGGCGAGTATGGTGCGGAGGCCCTGGAGAGGATGTTCCTGTCCTTCCC
CACCACCAAGACCTACTTCCCGCACTTCGACCTGAGCCACGGCTCTGCCCAGGTTAAGGGCCACGGCAAGAAGGT
GGCCGACGCGCTGACCAACGCCGTGGCGCACGTGGACGACATGCCCAACGCGCTGTCCGCCCTGAGCGACCTGCA
CGCGCACAAGCTTCGGGTGGACCCGGTCAACTTCAAGCTCCTAAGCCACTGCCTGCTGGTGACCCTGGCCGCCCA
CCTCCCCGCCGAGTTCACCCCTGCGGTGCACGCCTCCCTGGACAAGTTCCTGGCTTCTGTGAGCACCGTGCTGAC
CTCCAAATACCGT**TAA**GCTGGAGCCTCGGTAGCCGTTCCTCCTGCCCGCTGGGCCTCCCAACGGGCCCTCCTCCC
CTCCTTGCACCGGCCCTTCCTGGTCTTTGAATAAAGTCTGAGTGGGCGGC

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FIGURE 2248

MVLSPADKTNVKAAWGKVGAHAGEYGAEALERMFLSFPTTKTYFPHFDLSHGSAQVKGHGKKVADALTNAVAHVD
DMPNALSALSDLHAHKLRVDPVNFKLLSHCLLVTLAAHLPAEFTPAVHASLDKFLASVSTVLTSKYR

FIGURE 2249

GGCACGAGGGGGAAGGCAAGATGGCGGCGCCCATGGAGGTGGCCGTGTGTACGGACTCGGCGGCCCCGATGTGGA
GCTGCATCGTGTGGGAACTTCACTCGGGCGCCAACCTGCTCACCTACCGCGGCGGCCAGGCGGGACCCCGCGGCC
TGGCGCTGCTCAATGGCGAGTATCTGCTGGCGGCGCAGCTGGGCAAGAACTACATCAGCGCCTGGGAGCTGCAGC
GGAAGGACCAGCTCCAGCAGAAGATCATGTGCCCCGGGCCTGTCACCTGTCTGACTGCATCACCCAATGGTCTCT
ACGTCCTGGCAGGAGTTGCAGAAAGCATCCACCTGTGGGAGGTCTCCACCGGGAACCTTCTGGTCATCCTGAGTC
GACACTACCAGGACGTCTCCTGCCTTCAGTTCACAGGGGACAGCAGCCACTTCATCTCAGGGGGCAAGGACTGCC
TGGTGCTGGTTTGGAGCCTCTGCAGCGTGCTGCAGGCCGACCCCTCCAGGATTCCGGCGCCCAGGCACGTCTGGT
CTCACCACACGCTCCCCATCACGGACCTGCACTGCGGCTTTGGGGGCCCCCTGGCCCGGGTGGCCACCTCCTCAC
TGGACCAGACGGTGAAGCTATGGGAGGTCTCCTCGGGGGAGCTGCTGCTCTCCGTCCTCTTTGACGTGTCCATCA
TGGCAGTGACCATGGACCTGGCTGAGCACCATATGTTCTGCGGGGGCAGTGAGGGCTCCATCTTCCAGGTCGACC
TCTTCACCTGGCCCGGACAGAGGGAGAGGAGCTTCCACCCAGAGCAGGACGCCGGGAAGGTCTTCAAAGGGCACA
GGAACCAGGTGACTTGCCTGTCAGTGTCCACTGACGGCAGCGTGCTGCTCTCAGGCTCCCACGACGAGACCGTGC
GCCTCTGGGACGTGCAGAGCAAGCAGTGCATCCGGACGGTGGCCCTCAAAGGCCCAGTCACCAATGCCGCCATCC
TGCTGGCGCCCGTCAGCATGCTGAGCTCAGACTTCAGGCCCAGCCTGCCGCTGCCCCACTTCAACAAGCACCTGC
TGGGCGCCGAGCACGGGGACGAGCCGCGCCACGGGGGCCTCACTCTGCGCCTGGGCCTCCACCAGCAGGGCTCGG
AGCCCAGCTACCTGGACCGCACGGAGCAGCTGCAGGCCGTCCTGTGCAGCACCATGGAGAAGAGCGTGCTCGGCG
GCCAGGACCAGCTGCGCGTCCGTGTGACGGAGCTGGAGGACGAGGTGCGCAACCTGCGCAAGATCAATCGGGACC
TGTTCGACTTCTCCACGCGCTTCATCACGCGGCCGGCCAAGTGAGGCCCGGAGACCCCGGCCCGAGGCGCCCAGG
CCTGAGCCCCATGCCTCCCAGCAACCAGGGCCCGCGGGTGTGGCCCCCACCAGCCCAGGCCTGGACTCTCCTCAG
TTCTGTGTCGTGTTCGGGTTTTTCCTCTGTGACTGGGCCGTCTTGGTGTCTCGTGGCACGCGTCACAGTGGTGCT
AGTCTGTTTTTAACAAAAGAGGATGAAAAGCCAAAAAAAAAAAAAAAAAA

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FIGURE 2250

HEGEGKMAAPMEVAVCTDSAAPMWSCIVWELHSGANLLTYRGGQAGPRGLALLNGEYLLAAQLGKNYISAWELQR
KDQLQQKIMCPGPVTCLTASPNGLYVLAGVAESIHLWEVSTGNLLVILSRHYQDVSCLQFTGDSSHFISGGKDCL
VLVWSLCSVLQADPSRIPAPRHVWSHHTLPITDLHCGFGGPLARVATSSLDQTVKLWEVSSGELLLSVLFDVSIM
AVTMDLAEHHMFCGGSEGSIFQVDLFTWPGQRERSFHPEQDAGKVFKGHRNQVTCLSVSTDGSVLLSGSHDETVR
LWDVQSKQCIRTVALKGPVTNAAILLAPVSMLSSDFRPSLPLPHFNKHLLGAEHGDEPRHGGLTLRLGLHQQGSE
PSYLDRTEQLQAVLCSTMEKSVLGGQDQLRVRVTELEDEVRNLRKINRDLFDFSTRFITRPAK

FIGURE 2251

GGCCGGGAGAGTAGCAGTGCCTTGGACCCCAGCTCTCCTCCCCCTTTCTCTCTAAGGATGGCCCAGAAGGAGAAC
TCCTACCCCTGGCCCTACGGCCGACAGACGGCTCCATCTGGCCTGAGCACCCTGCCCCAGCGAGTCCTCCGGAAA
GAGCCTGTCACCCCATCTGCACTTGTCCTCATGAGCCGCTCCAATGTCCAGCCCACAGCTGCCCCTGGCCAGAAG
GTGATGGAGAATAGCAGTGGGACACCCGACATCTTAACGCGGCACTTCACAATTGATGACTTTGAGATTGGGCGT
CCTCTGGGCAAAGGCAAGTTTGGAAACGTGTACTTGGCTCGGGAGAAGAAAAGCCATTTCATCGTGGCGCTCAAG
GTCCTCTTCAAGTCCCAGATAGAGAAGGAGGGCGTGGAGCATCAGCTGCGCAGAGAGATCGAAATCCAGGCCCAC
CTGCACCATCCCAACATCCTGCGTCTCTACAACTATTTTTATGACCGGAGGAGGATCTACTTGATTCTAGAGTAT
GCCCCCCGCGGGGAGCTCTACAAGGAGCTGCAGAAGAGCTGCACATTTGACGAGCAGCGAACAGCCACGATCATG
GAGGAGTTGGCAGATGCTCTAATGTACTGCCATGGGAAGAAGGTGATTCACAGAGACATAAAGCCAGAAAATCTG
CTCTTAGGGCTCAAGGGAGAGCTGAAGATTGCTGACTTCGGCTGGTCTGTGCATGCGCCCTCCCTGAGGAGGAAG
ACAATGTGTGGCACCCTGGACTACCTGCCCCCAGAGATGATTGAGGGGCGCATGCACAATGAGAAGGTGGATCTG
TGGTGCATTGGAGTGCTTTGCTATGAGCTGCTGGTGGGGAACCCACCCTTTGAGAGTGCATCACACAACGAGACC
TATCGCCGCATCGTCAAGGTGGACCTAAAGTTCCCCGCTTCTGTGCCCACGGGAGCCCAGGACCTCATCTCCAAA
CTGCTCAGGCATAACCCCTCGGAACGGCTGCCCCTGGCCCAGGTCTCAGCCCACCCTTGGGTCCGGGCCAACTCT
CGGAGGGTGCTGCCTCCCTCTGCCCTTCAATCTGTCGCCTGATGGTCCCTGTCATTCACTCGGGTGCGTGTGTTT
GTATGTCTGTGTATGTATAGGGGAAAGAAGGGATCCCTAACTGTTCCCTTATCTGTTTTCTACCTCCTCCTTTGT
TTAATAAAGGCTGAAGCTTTTTGT

FIGURE 2252

MAQKENSYPWPYGRQTAPSGLSTLPQRVLRKEPVTPSALVLMSRSNVQPTAAPGQKVMENSSGTPDILTRHFTID
DFEIGRPLGKGKFGNVYLAREKKSHFIVALKVLFKSQIEKEGVEHQLRREIEIQAHLHHPNILRLYNYFYDRRRI
YLILEYAPRGELYKELQKSCTFDEQRTATIMEELADALMYCHGKKVIHRDIKPENLLLGLKGELKIADFGWSVHA
PSLRRKTMCGTLDYLPPEMIEGRMHNEKVDLWCIGVLCYELLVGNPPFESASHNETYRRIVKVDLKFPASVPTGA
QDLISKLLRHNPSERLPLAQVSAHPWVRANSRRVLPPSALQSVA

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FIGURE 2253

CAGCCGTGCTCGAAGCGTTCCTGGAGCCCAAGCTCTCCTCCACAGGTGAAGACAGGGCCAGCAGGAGACACC**ATG**

GGGCACCTCTCAGCCCCACTTCACAGAGTGCGTGTACCCTGGCAGGGGCTTCTGCTCACAGCCTCACTTCTAACC
TTCTGGAACCCGCCCACCACTGCCCAGCTCACTACTGAATCCATGCCATTCAATGTTGCAGAGGGGAAGGAGGTT
CTTCTCCTTGTCCACAATCTGCCCCAGCAACTTTTTGGCTACAGCTGGTACAAAGGGGAAAGAGTGGATGGCAAC
CGTCAAATTGTAGGATATGCAATAGGAACTCAACAAGCTACCCCAGGGCCCGCAAACAGCGGTCGAGAGACAATA
TACCCCAATGCATCCCTGCTGATCCAGAACGTCACCCAGAATGACACAGGATTCTACACCCTACAAGTCATAAAG
TCAGATCTTGTGAATGAAGAAGCAACTGGACAGTTCCATGTATACCCGGAGCTGCCCAAGCCCTCCATCTCCAGC
AACAACTCCAACCCTGTGGAGGACAAGGATGCTGTGGCCTTCACCTGTGAACCTGAGACTCAGGACACAACCTAC
CTGTGGTGGATAAACAATCAGAGCCTCCCGGTCAGTCCCAGGCTGCAGCTGTCCAATGGCAACAGGACCCTCACT
CTACTCAGTGTCACAAGGAATGACACAGGACCCTATGAGTGTGAAATACAGAACCCAGTGAGTGCGAACCGCAGT
GACCCAGTCACCTTGAATGTCACCTATGGCCCGGACACCCCCACCATTTCCCCTTCAGACACCTATTACCGTCCA
GGGGCAAACCTCAGCCTCTCCTGCTATGCAGCCTCTAACCCACCTGCACAGTACTCCTGGCTTATCAATGGAACA
TTCCAGCAAAGCACACAAGAGCTCTTTATCCCTAACATCACTGTGAATAATAGTGGATCCTATACCTGCCACGCC
AATAACTCAGTCACTGGCTGCAACAGGACCACAGTCAAGACGATCATAGTCACTGATAATGCTCTACCACAAGAA
AATGGCCTCTCACCTGGGGCCATTGCTGGCATTGTGATTGGAGTAGTGGCCCTGGTTGCTCTGATAGCAGTAGCC
CTGGCATGTTTTCTGCATTTCGGGAAGACCGGCAGGGCAAGCGACCAGCGTGATCTCACAGAGCACAAACCCTCA
GTCTCCAACCACACTCAGGACCACTCCAATGACCCACCTAACAAGATGAATGAAGTTACTTATTCTACCCTGAAC
TTTGAAGCCCAGCAACCCACACAACCAACTTCAGCCTCCCCATCCCTAACAGCCACAGAAATAATTTATTCAGAA
GTAAAAAAGCAG**TAA**TGAAACCTGTCCTGCTCACTGCAGTGCTGATGTATTTCAAGTCTCTCACCCTCATCACTA
GGAGATTCCTTTCCCCTGTAGGGTAGAGGGGTGGGGACAGAAACAACTTTCTCCTACTCTTCCTTCCTAATAGGC
ATCTCCAGGCTGCCTGGTCACTGCCCCTCTCTCAGTGTCAATAGATGAAAGTACATTGGGAGTCTGTAGGAAACC
CAACCTTCTTGTCATTGAAATTTGGCAAAGCTGACTTTGGGAAAGAGGGACCAGAACTTCCCCTCCCTTCCCCTT
TTCCCAACCTGGACTTGTTTTAAACTTGCCTGTTCAGAGCACTCATTCCTTCCCACCCCCAGTCCTGTCCTATCA
CTCTAATTCGGATTTGCCATAGCCTTGAGGTTATGTCCTTTTCCATTAAGTACATGTGCCAGGAAACAGCGAGAG
AGAGAAAGTAAACGGCAGTAATGCTTCTCCTATTTCTCCAAAGCCTTGTGTGAACTAGCAAAGAGAAGAAAATCA
AATATATAACCAATAGTGAAATGCCACAGGTTTGTCCACTGTCAGGGTTGTCTACCTGTAGGATCAGGGTCTAAG
CACCTTGGTGCTTAGCTAGAATACCACCTAATCCTTCTGGCAAGCCTGTCTTCAGAGAACCCACTAGAAGCAACT
AGGAAAAATCACTTGCCAAAATCCAAGGCAATTCCTGATGGAAAATGCAAAAGCACATATATGTTTTAATATCTT
TATGGGCTCTGTTCAAGGCAGTGCTGAGAGGGAGGGGTTATAGCTTCAGGAGGGAACCAGCTTCTGATAAACACA
ATCTGCTAGGAACTTGGGAAAGGAATCAGAGAGCTGCCCTTCAGCGATTATTTAAATTGTTAAAGAATACACAAT
TTGGGGTATTGGGATTTTTCTCCTTTTCTCTGAGACATTCCACCATTTTAATTTTTGTAACTGCTTATTTATGTG
AAAAGGGTTATTTTTACTTAGCTTAGCTATGTCAGCCAATCCGATTGCCTTAGGTGAAAGAAACCACCGAAATCC
CTCAGGTCCCTTGGTCAGGAGCCTCTCAAGATTTTTTTTGTCAGAGGCTCCAAATAGAAAATAAGAAAAGGTTTT
CTTCATTCATGGCTAGAGCTAGATTTAACTCAGTTTCTAGGCACCTCAGACCAATCATCAACTACCATTCTATTC
CATGTTTGCACCTGTGCATTTTCTGTTTGCCCCCATTCACTTTGTCAGGAAACCTTGGCCTCTGCTAAGGTGTAT
TTGGTCCTTGAGAAGTGGGAGCACCCTACAGGGACACTATCACTCATGCTGGTGGCATTGTTTACAGCTAGAAAG
CTGCACTGGTGCTAATGCCCCTTGGGAAATGGGGCTGTGAGGAGGAGGATTATAACTTAGGCCTAGCCTCTTTTA
ACAGCCTCTGAAATTTATCTTTTCTTCTATGGGGTCTATAAATGTATCTTATAATAAAAAGGAAGGACAGGAGGA
AGACAGGCAAATGTACTTCTCACCCAGTCTTCTACACAGATGGAATCTCTTTGGGGCTAAGAGAAAGGTTTTATT
CTATATTGCTTACCTGATCTCATGTTAGGCCTAAGAGGCTTTCTCCAGGAGGATTAGCTTGGAGTTCTCTATACT
CAGGTACCTCTTTCAGGGTTTTCTAACCCTGACACGGACTGTGCATACTTTCCCTCATCCATGCTGTGCTGTGTT
ATTTAATTTTTCCTGGCTAAGATCATGTCTGAATTATGTATGAAAATTATTCTATGTTTTTATAATAAAAATAAT
ATATCAGACATCGAAAAAAAAAA

FIGURE 2254

MGHLSAPLHRVRVPWQGLLLTASLLTFWNPPTTAQLTTESMPFNVAEGKEVLLLVHNLPQQLFGYSWYKGERVDG
NRQIVGYAIGTQQATPGPANSGRETIYPNASLLIQNVTQNDTGFYTLQVIKSDLVNEEATGQFHVYPELPKPSIS
SNNSNPVEDKDAVAFTCEPETQDTTYLWWINNQSLPVSPRLQLSNGNRTLTLLSVTRNDTGPYECEIQNPVSANR
SDPVTLNVTYGPDTPTISPSDTYYRPGANLSLSCYAASNPPAQYSWLINGTFQQSTQELFIPNITVNNSGSYTCH
ANNSVTGCNRTTVKTIIVTDNALPQENGLSPGAIAGIVIGVVALVALIAVALACFLHFGKTGRASDQRDLTEHKP
SVSNHTQDHSNDPPNKMNEVTYSTLNFEAQQPTQPTSASPSLTATEIIYSEVKKQ

FIGURE 2255

AAGAGAGGAAGGCTTAAAGAGCCAGACTGCGCAGCCAGGACTGGGGTATGGGCGCTGTCCTGCAGGCCAAAGAAT
GAAGATGTAGCCCCGCCCCCAACCTAGGAGGAGGACCAGCCCGGTTCCTGTCCTGCCCCCGCAACCTCGCCCCGA
TTCCACTCCGGGAACCTCGGCGATGCTGAGCCAAGACCACTTCTGAATCAGGGATGACTTGTCTAGTGAACGTAG
GGTCAGAGCCATCAGTTGGAAAGGCTGGGAGGAGCCTGGAGAAAGAGGCGACCTTCCTTGGGATCTGTGCGCTCC
CTCCTTGCCTCCCCCTCCAGCCTCCCACTTGGTAGCACCTTCCTGATCCCCTTATCTCTAAGGCGCTCAGGGAAA
TGCCCCGCTGCGGGAGCCTTCTGGGAAATGCTGCCCTGGCCACCCAGGAACC**ATG**AGCCCTGCAGCCCCGGTCCC
GCCTGACTCCGCTCTGGAAAGTCCTTTTGAAGAAATGGCCCTGGTGAGGGGCGGCTGGCTGTGGAGACAGAGCTC
CATCCTCCGCCGCTGGAAGCGGAACTGGTTTGCCCTGTGGCTGGACGGGACCCTGGGATACTACCACGATGAGAC
AGCGCAGGACGAGGAGGACCGTGTGCTCATCCACTTCAATGTCCGTGACATAAAGATCGGCCCAGAGTGCCATGA
TGTGCAGCCCCCAGAGGGCCGGAGCCGAGATGGCCTGCTGACTGTGAACCTACGGGAAGGCGGCCGCCTGCACCT
CTGTGCGGAGACCAAGGATGATGCCCTAGCATGGAAGACAGCACTGCTGGAGGCAAACTCCACCCCGGCCCCAGC
TGGAGCCACCGTCCCTCCCAGGAGCCGCCGGGTTTGCTCCAAGGTCAGGTGTGTGACCCGCTCGTGGAGCCCCTG
TAAGGTTGAGAGGCGGATCTGGGTGCGCGTCTACAGCCCGTACCAAGACTACTACGAGGTGGTGCCCCCCAATGC
ACACGAGGCCACGTATGTCCGCAGCTACTACGGACCGCCCTACGCAGGCCCTGGCGTGACGCACGTGATAGTGCG
GGAGGATCCCTGCTACAGCGCCGGCGCCCCTCTGGCCATGGGCATGCTTGCGGGAGCCGCCACTGGGGCGGCGCT
GGGCTCGCTCATGTGGTCGCCCTGCTGGTTC**TGA**GCCCTGGGACTCGGAGCACTGACCCCTGCGCTTGGATTGCT
AGACTCCTCTTCCTCCTGGACCCCATCCTCTACCATCCAAGCCCTGTCCCACTTTGGCCCTATCCTCTCCATTAG
CTCCTTCCGGGTTTGGACCATTCCCCCCACTCCCTACCCTTAATCCCCACATGGGAAGAAGCTATCATCACAGGT
ACAAACATCGCTTGAAGTCTTCACATCTACCACTAGACACCCCCAAAATCTGTTATAGACATTTATGGATACATT
TCCTCTAAACACAACAGGGCACAGCAAATACGACTTCATTTGGCTTCGAGTTCCCCAGGCGCTGTAGACACAACA
TGAATCGGGCTCTCTGCTCTCTCCTTAGGGAGCTCGAGTCCTGGTGGGGAGAACAGGAGTAAACAAGGACTTGAC
AAAGCTGAAGAGTTATCAGTCCTTTGACAAGGACAGGTGGGGCAGGGAGCAAGACAGGTAGGCTGGAAGAACAGT
TATTGGCAAGTATGCAGAGCCGTGAACGTCATGGCATGTCCAAGGAATTAAATGGGAGTTCATTTGGGCTGGGGT
GGAGGCTGGGATCAGACCGTGGTGGGCCTTCAAGCTAAGGAGCTTCCTAGGTGAAAGGGGAGATGTGAGCCTTCT
CTGGAGGGAAGTTTCATGATTGCATCTATAATGAATATATTGCCTGTTTTGTGAATACTGACACATGTCCATACC
TAAAACACTCCTGAGTTAAGTCCCATCCTTCCCACAAACAGCTTCCTGGCTGGTACCCATGATAACAATTGAGCT
GAACCTGGGGACCCCTGGTTGGGGAACAGGTGAGTTCTATTTGAGACTTCCAGCCCTAGAAAGCTGCCTCCGTCC
AGAAATGCCTCTCACACCAGGAGCTCGGCCCTCTCTTTATAGCTGTGACTGTCACCCTCTCAGGCTTTGTCTCAT
CCTTCATTCTGAATAAGATGGCAGTGTTCTCCTCTGGGGCCTGATCCACCTCTACACCAGCCCAGGAAGCCCCAT
CTGTGCCTGCCCTCAGGTGGTCCACCAGTCTCCCCCTTTGGTTCCCTTCCAGTCTCTTCCCCCTTTCTATCCCAA
TCACCAATAGAAATGCTAACATCCCTGCCTGGTAGCCAGACTAGCCCACTAAAGCTCCCCTGTAAATGGGGGCTC
CATTAGTTCTGCTGCCGAGACTAATAAAGATTTGGTTGGTTCTAGCAGTAAAAAAAAAAAAAAAAAAAAAAAAA
AA

FIGURE 2256

MSPAAPVPPDSALESPFEEMALVRGGWLWRQSSILRRWKRNWFALWLDGTLGYYHDETAQDEEDRVLIHFNVRDI
KIGPECHDVQPPEGRSRDGLLTVNLREGGRLHLCAETKDDALAWKTALLEANSTPAPAGATVPPRSRRVCSKVRC
VTRSWSPCKVERRIWVRVYSPYQDYYEVVPPNAHEATYVRSYYGPPYAGPGVTHVIVREDPCYSAGAPLAMGMLA
GAATGAALGSLMWSPCWF

FIGURE 2257

GGCACGAGGAAGCTACTCAGATAAGAGGCTCCAAGAGGACATTTTTGGATGTGAAAAACAATGAGAAGGAGGACA
ACACACATTTACAATCGTCTTAATTTTGTACTCAGAAAAAGGATGTGAAGACAATGCACAGGGAATACAATAGTT
TCAGATCTGTGTACAGTTTCCTTTTGCTTCATCTCCTGCAACAATGTAATGAAGACACCATGATATCATTAACAT
TTCACACAAAAGGAAAATGAGGCTGAAATGGTGTGGGCAAGGCCCAGGAATCTGGAGCATCCCTAACCAAGCAGC
AGAGCACCTGGGATAGAGAAAGTGCTCAAGAATGTTCACTTACTGATTACTACAATCAAAAAAAGATACGACACT
AATTTACCACATTCTTCTTACTTATTTTATGAGATACTATTCTTCCAAGGTGGAGAAAGTGGAGAAAGTAGAGTG
ACGCAGCTAAGGGAGTAAATCGACCCTCAGCCAACAAGTGGCAAAAGCCTGAAGAAAGTGATCAAGATCACTGAT
GACCCCGCGGCCCATCTCCAAGGGGGCGGGTATCACAACCCCGACGCCACACCACGTATCATTCCGCAAAACTCC
CGCGCCTCCCACGCAGAACTGGCAAGAGGGAAGGCGAGACAGCAGTGAACAGCTGGTACGCAGCACCCACAGCAC
CGCGGCAGCAGCTAGTGCCGACTCCCGCCTAGCTCTTTTGACTCTGTTCGCGGGAAGAATGGGGAAACAGTAAGG
TTGCGGCGCCTCCCGCGAGACGAGGTACCTGAGGCTGGCCCCGCAGTCCCCCGCCGCACCAGCACCGGAGCTTCA
CACCCCACTTCCGGGGTCAAGTCACCGCCGGGAATCCTGTGATCGCAGAAAGGTAGTCTCAGGTTCCGCCCCTAT
CCAAGTCCCGCCTCCACTGCCTCTCGCCCTGTATCTGTCAACTTCCGGGACGCCGCGCGTCACTAAGCAGCCAAT
CTCCACTTCCGGACTCATCCAGCCCCTTCTCCACCCCTTTCAGAGACAGCGCGATTGCGATTTAGGTTTCCGCGC
ATTTAATTGGCGAAGCTGGAGCGCTAGTCTTCGCTGATTGGTGCCGAGAAATCTGCCCCATAGACACCCGCGGGG
CGCACAGTTTCAGTCGTCCGTGGGTTTCCCGCCAGCCGCAGTCTTGGACCATAATC**ATG**GTGGACATGATGGACT
TGCCCAGGTCGCGCATCAACGCCGGCATGCTAGCTCAATTCATCGACAAGCCTGTCTGCTTCGTAGGGAGGCTGG
AAAAGATTCATCCCACCGGAAAAATGTTTATTCTTTCAGATGGAGAAGGAAAAAATGGAACCATCGAGTTGATGG
AACCCCTTGATGAAGAAATCTCTGGAATTGTGGAAGTGGTTGGAAGAGTAACCGCCAAGGCCACCATCTTGTGTA
CATCTTATGTCCAGTTTAAAGAAGATAGCCATCCTTTTGATCTTGGACTTTACAATGAAGCTGTGAAAATTATCC
ATGACTTCCCTCAGTTTTATCCTTTAGGGATTGTGCAACATGAT**TGA**TCTTGATGGATTTTCATACGATTGTAAA
TGAGCTATATTAAAGTCTATTAAAGGAAAAAAAAAAAAAAAAAAA

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FIGURE 2258

MVDMMDLPRSRINAGMLAQFIDKPVCFVGRLEKIHPTGKMFILSDGEGKNGTIELMEPLDEEISGIVEVVGRVTA
KATILCTSYVQFKEDSHPFDLGLYNEAVKIIHDFPQFYPLGIVQHD

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FIGURE 2259

GCCGCCGCCGCCGCCCTCTCGGCCATCGCTGCCTCCGCCGCCTGCTCCACCTCGAGGGACGCGAGCGGGCGGCGG
GGCTGGCCGTGAGAGAGACAGGAGAGGAAGGAGGGCAGGGGCGGAGTTGCCCGCCTTAGCCCCCGCCCCCGGCCG
CGGCCCCGGGCCCTGCCCCGCGCGGCCCTGCCCGGCCCACCGAGCCCTGGTGTGGCAGCGGCTC**ATG**GCGGCCGT
GGGGCCCCCGCAGCAGCAGGTGCGGATGGCCCATCAGCAGGTCTGGGCGGCGCTCGAAGTGGCGCTCCGGGTGCC
CTGCCTTTACATCATCGACGCCATCTTCAACTCCTACCCGGATTCCAGCCAAAGCCGGTTCTGCATCGTGCTCCA
GATCTTCCTCCGGCTCTTTGGTGTATTTGCATCCAGTATTGTTCTGATCTTGTCACAACGATCACTTTTCAAGTT
TTACACGTACAGCTCAGCCTTTCTGTTAGCTGCAACTTCAGTGTTGGTGAATTATTATGCTTCTTTGCACATTGA
CTTCTATGGTGCCTACAACACGTCAGCTTTTGGAATTGAGCTGCTTCCTCGAAAAGGTCCCTCGCTGTGGATGGC
ACTTATCGTTCTACAGCTAACATTTGGAATTGGATACGTTACACTACTCCAGATTCATTCCATCTATTCACAATT
AATTATTTTGGATCTCTTGGTTCCTGTAATAGGCTTAATCACAGAGCTACCATTACACATCAGAGAGACTTTACT
GTTTACTTCTTCCTTGATTCTCACATTAAATACAGTGTTTGTCCTGGCAGTGAAACTGAAGTGGTTTTATTATTC
CACACGATATGTTTATCTTTTGGTGAGGCACATGTATCGAATTTATGGATTACAGTTATTGATGGAGGACACATG
GAAGAGGATTCGTTTCCCAGACATACTACGAGTCTTTTGGCTAACAAGAGTTACAGCTCAGGCTACAGTGTTAAT
GTACATCTTAAGGATGGCAAATGAAACTGATTCCTTCTTTATTTCTTGGGATGATTTTTGGGACCTCATTTGCAA
TCTTATAATTAGTGGGTGCGATTCTACACTAACTGTACTGGGCATGAGTGCTGTAATTTCCTCAGTAGCCCATTA
TTTGGGGCTTGGAATATTGGCCTTTATTGGATCAACTGAGGAAGATGACAGGCGTCTTGGCTTTGTTGCACCTGT
TTTATTTTTTATTTTGGCTCTTCAGACTGGGTTAAGTGGGCTAAGACCAGAAGAGAGACTTATTCGCTTAAGTAG
AAACATGTGCCTTTTATTAACTGCAGTCCTGCATTTTATCCATGGAATGACAGACCCTGTATTAATGTCTCTCAG
TGCCTCTCATGTGTCATCTTTTCGTAGACATTTTCCTGTGCTGTTTGTCTCTGCTTGCCTGTTTATTCTTCCTGT
CTTACTCAGTTATGTTCTTTGGCATCACTATGCACTAAATACATGGTTGTTTGCAGTTACAGCATTTTGTGTGGA
ACTGTGCTTAAAAGTAATTGTTTCTCTCACTGTTTATACGTTATTCATGATTGATGGCTACTATAATGTCCTCTG
GGAAAAGCTTGACGATTATGTCTACTACGTTCGTTCAACAGGCAGTATTATTGAATTTATATTTGGAGTTGTAAT
GTTTGGAAATGGGGCTTACACTATGATGTTTGAGTCGGGAAGTAAAATTCGGGCTTTTATGATGTGCCTACATGC
ATATTTTAACATCTACTTACAAGCCAAAAATGGCTGGAAGACATTTATGAATCGTAGGACTGCTGTGAAGAAAAT
TAATTCACTTCCTGAAATAAAAGGGAGCCGCTTACAAGAAATAAATGATGTATGTGCAATCTGCTATCATGAGTT
TACAACATCTGCTCGTATTACACCGTGTAATCATTATTTCCATGCACTTTGCCTTCGGAAATGGCTGTACATTCA
AGATACTTGTCCAATGTGCCATCAGAAAGTATACATCGAAGATGATATCAAGGATAATTCAAATGTATCTAACAA
CAATGGATTTATTCCACCCAATGAAACTCCAGAGGAAGCTGTAAGAGAAGCTGCTGCTGAATCTGACAGGGAATT
GAACGAAGATGACAGTACAGATTGTGATGATGATGTTCAAAGAGAAAGAAATGGAGTGATTCAGCACACAGGCGC
AGCAGCTGAAGAATTTAATGATGATACTGAC**TGA**TGAAAATAGCATTTATTAATGATTGAGGTATTTGTTTAAAA
TTCAGTTCATCCAAAATGGAGTAATATCCTTCACCTTCAGTGTGTAACCAAGCACAAAAACAGTATCAATGTTGA
ATCTGTGAATGGTTTTCCGTTTACTGTGATGTGCTACTGTAAATATACCTCTTTAATTACTTCTGGTCTCTTTGG
TGACCTGTTTAAATTTGTGTACATTATTGTACATAGAATAAAATGTTTTCACATTTTTATGACAAAAAAAAAAAA
AAAAAA

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FIGURE 2260

MAAVGPPQQQVRMAHQQVWAALEVALRVPCLYIIDAIFNSYPDSSQSRFCIVLQIFLRLFGVFASSIVLILSQRS
LFKFYTYSSAFLLAATSVLVNYYASLHIDFYGAYNTSAFGIELLPRKGPSLWMALIVLQLTFGIGYVTLLQIHSI
YSQLIILDLLVPVIGLITELPLHIRETLLFTSSLILTLNTVFVLAVKLKWFYYSTRYVYLLVRHMYRIYGLQLLM
EDTWKRIRFPDILRVFWLTRVTAQATVLMYILRMANETDSFFISWDDFWDLICNLIISGCDSTLTVLGMSAVISS
VAHYLGLGILAFIGSTEEDDRRLGFVAPVLFFILALQTGLSGLRPEERLIRLSRNMCLLLTAVLHFIHGMTDPVL
MSLSASHVSSFRRHFPVLFVSACLFILPVLLSYVLWHHYALNTWLFAVTAFCVELCLKVIVSLTVYTLFMIDGYY
NVLWEKLDDYVYYVRSTGSIIEFIFGVVMFGNGAYTMMFESGSKIRAFMMCLHAYFNIYLQAKNGWKTFMNRRTA
VKKINSLPEIKGSRLQEINDVCAICYHEFTTSARITPCNHYFHALCLRKWLYIQDTCPMCHQKVYIEDDIKDNSN
VSNNNGFIPPNETPEEAVREAAAESDRELNEDDSTDCDDDVQRERNGVIQHTGAAAEEFNDDTD

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FIGURE 2261

GTTTTGAAAGTTGATGGAGCGAACTGCTTTTCCAAAGACTCTTTTGAAAAACTTTTTAAGTAGGCCATTCTGACT
TTAACATTTCTCTTTGTCTTAACATTAGACAAAAAGTAACCTTCCTGAAGAGGACATGTGATTGGAAGTTGTCAA
TTGTTGAAGCATTGGTAACTCCAGTCTCTAACGTTTTAGAAAATCATAACAAGCGGTTCTCTACCCTGTAAAGGT
GAACTACTGAGTTCTTCATTATGTCTGATGGAGATTATGATTACCTCATCAAGTTTTTAGCTTTGGGAGACTCTG
GTGTAGGGAAGACCAGTGTACTTTACCAATATACAGATGGTAAATTTAACTCCAAATTTATCACAACAGTGGGCA
TTGATTTCAGGGAAAAAAGAGTGGTGTACAGAGCCAGTGGGCCGGATGGAGCCACTGGCAGAGGCCAGAGAATCC
ACCTGCAGTTATGGGACACAGCAGGGCAGGAGAGGTTTCGTAGCTTAACGACAGCGTTCTTCAGAGATGCTATGG
GTTTTCTTCTACTTTTTGATCTGACAAATGAGCAAAGTTTCCTCAATGTCAGAAACTGGATAAGCCAGCTACAGA
TGCATGCATATTGTGAAAACCCAGATATAGTGCTGTGTGGAAACAAGAGTGATCTGGAGGACCAGAGAGTAGTGA
AAGAGGAGGAAGCCATAGCACTCGCAGAGAAATATGGAATCCCCTACTTTGAAACTAGTGCTGCCAATGGGACAA
ACATAAGCCAAGCAATTGAGATGCTTCTGGACCTGATAATGAAGCGAATGGAACGGTGTGTGGACAAGTCCTGGA
TTCCTGAAGGAGTGGTGCGATCAAATGGTCATGCCTCTACGGATCAGTTAAGTGAAGAAAAGGAGAAAGGGGCAT
GTGGCTGTTGAGAAGTCAAGTAAGTGACATAGTAGTTCAGGTGGCCCATGCCTGGGATCTTCTCTATGATTGATA
CATGGCACAGTGAGAGATTAATGGGCATTGTGTACAAATTGCTTCTCACCATCCCCATTAGACCTACGAATAAAG
CATCCGGTTCTAAAATTAATTTGTTGCAGCTTTGTAAATATTTCTTTAAGATTCAGCCTGAGAGTTAGGAGAAAT
ATTTCAGAGCCAAAAGTGCCTTATACAACCTTAGCCTATTATAGTAAATCATTCAAGGATTCAGAATTTTGCAGT
CACAGAAGAGTGTATTTATTATGTAGAATGAATGAGGGTACTGTCACCTGCCTTAATGTAGGTAGGCCCAGAGTC
TTACATTTAAGATCTTACATGCAGTTATAAAACCGCCACAGTCTTCAATCCAGATTTGAAGACTCATGCCATAGG
TGACATTCTAAAATACCATTAAAGCCACTTAAATGTTAAATAAGAATATACATGCACATCAGCTCAATGTCTTTG
AGTATTAATTTTATGTAAGCATTCTATTTAACATGAATATAGGACAAATCATGGCTATATCTATAGACCTTGGAT
AAACTGGATTGACCAATTATACACTCACGGTGACTTTTTTATTGGTGGGAAGGGGATTGGGGTGGGGCAGGCTGG
CTTAATGTAATATGAGCAACCAAAGTGGGACTTCTGTCTCCCCGCTATATTCCCATTGCTCTGAATGGTTGATTG
AAGGGTCAGGGAACTAGATTTTATGGCTTTAGTTCACTGTGATTGTACATTTATACTTGGCCTATGTGCTGGCCG
CACCTGAACATAGCTGGTGCTTATGCCGAGTTATTTGTGATGAGTAAATATTTAGTTTCTTTTTCTTCATATTTA
TAATGTTGATCTGGCATCCTCAGGCTGCAGCTTTATTAGCTTATAAATTACTCATCTCTGTCTTTACCAGCAGGC
TCTGTATTGTTGATATTTGCAACTTGTTTTGCTTTTCCATTGGTGGAATTGAAATAATTAGTTTTTAATTACATA
AGATGCCTGTTTGCTATTTGGTGGAAGATAGATGTTCATATTGAAGCAGTCACATTTGTACTGTAGTTCAATAAA
AGAAAAATGAAGTATTCTGTAGCCTATATTTTTCATAGAGCTCATGAGCATTTACTGTACTTGCTGGGTCTTGCC
AAGATCATTTATTCCGCTGCATTGCCAAAGTGTCTTCATACCAAATTAAAGGTGGTTTTAATATATGTTTCATGG
AAGTTGTTTATAAAATTCAAAGGTATTTCATTTAGGTGAAAAGTCTTATTTATTAAAGTGGTTTGAATAAAGTAG
ATCAAAACTTCCAGAGATCTTAATGGCTATATAGGAAGAAATATCACTCACCATAATTTAAATAAAGAATAAAAA
TACATGTATTTTATGGTGGCAAATGTTTGGTAGAACTGTAATTAGAAAAATACAAGTATATTTGCGTGATGGTTA
CACTAGAAGCCCAGACTTTACGACTACACAATATATTCATGTATCTAAACTGTACTTGTACCCCCTAAATTTATT
TTTAAAAAAAAAAAAAAAAA

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FIGURE 2262

MSDGDYDYLIKFLALGDSGVGKTSVLYQYTDGKFNSKFITTVGIDFREKRVVYRASGPDGATGRGQRIHLQLWDT
AGQERFRSLTTAFFRDAMGFLLLFDLTNEQSFLNVRNWISQLQMHAYCENPDIVLCGNKSDLEDQRVVKEEEAIA
LAEKYGIPYFETSAANGTNISQAIEMLLDLIMKRMERCVDKSWIPEGVVRSNGHASTDQLSEEKEKGACGC

FIGURE 2263

GTTTTGAAAGTTGATGGAGCGAACTGCTTTTCCAAAGACTCTTTTGAAAAACTTTTTAAGTAGGCCATTCTGACT
TTAACATTTCTCTTTGTCTTAACATTAGACAAAAAGTAACCTTCCTGAAGAGGACATGTGATTGGAAGTTGTCAA
TTGTTGAAGCATTGGTAACTCCAGTCTCTAACGTTTTAGAAAATCATAACAAGCGGTTCTCTACCCTGTAAAGGT
GAACTACTGAGTTCTTCATTATGTCTGATGGAGATTATGATTACCTCATCAAGTTTTTAGCTTTGGGAGACTCTG
GTGTAGGGAAGACCAGTGTACTTTACCAATATACAGATGGTAAATTTAACTCCAAATTTATCACAACAGTGGGCA
TTGATTTCAGGGAAAAAAGAGTGGTGTACAGAGCCAGTGGGCCGGATGGAGCCACTGGCAGAGGCCAGAGAATCC
ACCTGCAGTTATGGGACACAGCAGGGCAGGAGAGGTTTCGTAGCTTAACGACAGCGTTCTTCAGAGATGCTATGG
GTTTTCTTCTACTTTTTGATCTGACAAATGAGCAAAGTTTCCTCAATGTCAGAAACTGGATAAGCCAGCTACAGA
TGCATGCATATTGTGAAAACCCAGATATAGTGCTGTGTGGAAACAAGAGTGATCTGGAGGACCAGAGAGTAGTGA
AAGAGGAGGAAGCCATAGCACTCGCAGAGAAATATGGAATCCCCTACTTTGAAACTAGTGCTGCCAATGGGACAA
ACATAAGCCAAGCAATTGAGATGCTTCTGGACCTGATAATGAAGCGAATGGAACGGTGTGTGGACAAGTCCTGGA
TTCCTGAAGGAGTGGTGCGATCAAATGGTCATGCCTCTACGGATCAGTTAAGTGAAGAAAAGGAGAAAGGGGCAT
GTGGCTGTTGAGAAGTCAAGTAAGTGACATAGTAGTTCAGGTGGCCCATGCCTGGGATCTTCTCTATGATTGATA
CATGGCACAGTGAGAGATTAATGGGCATTGTGTACAAATTGCTTCTCACCATCCCCATTAGACCTACGAATAAAG
CATCCGGTTCTAAAATTAATTTGTTGCAGCTTTGTAAATATTTCTTTAAGATTCAGCCTGAGAGTTAGGAGAAAT
ATTTCAGAGCCAAAAGTGCCTTATACAACCTTAGCCTATTATAGTAAATCATTCAAGGATTCAGAATTTTGCAGT
CACAGAAGAGTGTATTTATTATGTAGAATGAATGAGGGTACTGTCACCTGCCTTAATGTAGGTAGGCCCAGAGTC
TTACATTTAAGATCTTACATGCAGTTATAAAACCGCCACAGTCTTCAATCCAGATTTGAAGACTCATGCCATAGG
TGACATTCTAAAATACCATTAAAGCCACTTAAATGTTAAATAAGAATATACATGCACATCAGCTCAATGTCTTTG
AGTATTAATTTTATGTAAGCATTCTATTTAACATGAATATAGGACAAATCATGGCTATATCTATAGACCTTGGAT
AAACTGGATTGACCAATTATACACTCACGGTGACTTTTTTATTGGTGGGAAGGGGATTGGGGTGGGGCAGGCTGG
CTTAATGTAATATGAGCAACCAAAGTGGGACTTCTGTCTCCCCGCTATATTCCCATTGCTCTGAATGGTTGATTG
AAGGGTCAGGGAACTAGATTTTATGGCTTTAGTTCACTGTGATTGTACATTTATACTTGGCCTATGTGCTGGCCG
CACCTGAACATAGCTGGTGCTTATGCCGAGTTATTTGTGATGAGTAAATATTTAGTTTCTTTTTCTTCATATTTA
TAATGTTGATCTGGCATCCTCAGGCTGCAGCTTTATTAGCTTATAAATTACTCATCTCTGTCTTTACCAGCAGGC
TCTGTATTGTTGATATTTGCAACTTGTTTTGCTTTTCCATTGGTGGAATTGAAATAATTAGTTTTTAATTACATA
AGATGCCTGTTTGCTATTTGGTGGAAGATAGATGTTCATATTGAAGCAGTCACATTTGTACTGTAGTTCAATAAA
AGAAAAATGAAGTATTCTGTAGCCTATATTTTTCATAGAGCTCATGAGCATTTACTGTACTTGCTGGGTCTTGCC
AAGATCATTTATTCCGCTGCATTGCCAAAGTGTCTTCATACCAAATTAAAGGTGGTTTTAATATATGTTTCATGG
AAGTTGTTTATAAAATTCAAAGGTATTTCATTTAGGTGAAAAGTCTTATTTATTAAAGTGGTTTGAATAAAGTAG
ATCAAAACTTCCAGAGATCTTAATGGCTATATAGGAAGAAATATCACTCACCATAATTTAAATAAAGAATAAAAA
TACATGTATTTTATGGTGGCAAATGTTTGGTAGAACTGTAATTAGAAAAATACAAGTATATTTGCGTGATGGTTA
CACTAGAAGCCCAGACTTTACGACTACACAATATATTCATGTATCTAAACTGTACTTGTACCCCCTAAATTTATT
TTTAAAAAAAAAAAAAAAAAA

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FIGURE 2264

MSDGDYDYLIKFLALGDSGVGKTSVLYQYTDGKFNSKFITTVGIDFREKRVVYRASGPDGATGRGQRIHLQLWDT
AGQERFRSLTTAFFRDAMGFLLLFDLTNEQSFLNVRNWISQLQMHAYCENPDIVLCGNKSDLEDQRVVKEEEAIA
LAEKYGIPYFETSAANGTNISQAIEMLLDLIMKRMERCVDKSWIPEGVVRSNGHASTDQLSEEKEKGACGC

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FIGURE 2265

CCTCGGTTCCGCGGCGCACCGGAGGGCAGC**ATG**TCGCGGCGGCGGCACAGCGACGAGAACGACGGTGGGCAGCCT
CACAAAAGGAGAAAGACCTCTGATGCAAATGAAACTGAAGATCATTTGGAATCTTTAATATGTAAAGTAGGAGAA
AAGAGTGCCTGCTCTTTGGAGAGCAACCTAGAAGGCTTGGCTGGTGTTTTGGAAGCTGATCTTCCTAACTACAAG
AGCAAGATCTTAAGGCTTCTTTGTACAGTTGCACGCCTATTACCTGAGAAGCTGACAATTTATACAACATTAGTT
GGACTACTGAATGCCAGGAATTACAATTTTGGTGGAGAATTTGTAGAAGCCATGATTCGTCAACTTAAAGAATCA
TTGAAAGCAAACAATTATAATGAAGCCGTGTATTTGGTCCGTTTTTTATCTGATCTTGTGAATTGTCATGTGATT
GCCGCCCCATCAATGGTTGCTATGTTTGAAAATTTTGTAAGCGTAACTCAGGAAGAAGATGTACCTCAGGTGCGA
CGAGATTGGTATGTGTATGCATTTCTGTCATCTTTGCCCTGGGTTGGAAAGGAGTTGTACGAAAAGAAAGATGCA
GAGATGGACCGCATCTTTGCCAACACTGAAAGCTATCTTAAAAGACGCCAAAAGACTCATGTACCCATGTTACAG
GTATGGACTGCTGATAAACCACATCCACAAGAAGAGTATTTAGATTGCCTGTGGGCCCAGATTCAGAAATTGAAA
AAGGATCGCTGGCAGGAACGGCACATCCTAAGACCTTATCTTGCCTTTGACAGCATCCTGTGTGAAGCACTGCAG
CACAATCTGCCTCCTTTTACACCACCTCCTCACACTGAAGATTCAGTGTACCCAATGCCAAGGGTCATCTTCAGA
ATGTTTGATTACACAGATGATCCCGAGGGTCCTGTCATGCCAGGGAGTCATTCAGTGGAAAGATTTGTAATAGAA
GAGAATCTTCACTGCATCATTAAGTCCCACTGGAAGGAAAGGAAGACTTGTGCTGCACAGTTAGTGAGCTATCCA
GGGAAGAACAAGATCCCCTTGAACTACCACATAGTTGAGGTGATCTTTGCAGAGCTGTTTCAACTTCCAGCACCC
CCTCACATTGATGTGATGTACACAACACTCCTCATTGAACTGTGCAAACTTCAACCTGGCTCTCTACCCCAAGTT
CTTGCACAGGCAACTGAAATGCTATACATGCGTTTGGACACAATGAACACTACCTGTGTAGACAGGTTTATTAAT
TGGTTTTCTCATCATCTAAGTAACTTCCAGTTCCGTTGGAGCTGGGAAGATTGGTCAGATTGTCTTAGTCAAGAT
CCTGAAAGTCCCAAACCGAAGTTTGTAAGAGAAGTTCTAGAAAAATGTATGAGGTTGTCTTACCATCAGCGTATA
TTAGATATTGTTCCTCCTACCTTCTCAGCTCTGTGTCCTGCAAACCCAACCTGCATTTACAAGTATGGAGATGAA
AGTAGCAATTCTCTTCCTGGACATTCTGTTGCCCTCTGTTTAGCTGTTGCCTTTAAAAGTAAGGCAACCAATGAT
GAAATCTTCAGCATTCTGAAAGATGTACCAAATCCTAACCAGGATGATGACGACGATGAAGGATTCAGTTTTAAC
CCATTGAAAATAGAAGTCTTTGTACAGACTCTGCTACACTTGGCAGCCAAATCATTCAGCCACTCCTTCAGTGCT
CTTGCAAAGTTTCATGAAGTCTTCAAAACCCTAGCTGAAAGTGATGAAGGAAAGTTACATGTGCTAAGAGTTATG
TTTGAGGTCTGGAGGAACCATCCACAGATGATTGCTGTACTAGTGGATAAGATGATTCGTACACAAATAGTTGAT
TGTGCTGCCGTAGCAAATTGGATCTTCTCTTCAGAACTATCTCGTGACTTTACCAGATTGTTTGTTTGGGAAATT
TTGCACTCTACAATTCGTAAGATGAACAAACATGTCCTGAAGATCCAGAAAGAGCTGGAAGAAGCTAAAGAGAAA
CTTGCTAGGCAACACAAACGGCGAAGTGATGATGACGACAGAAGCAGTGACAGGAAAGACGGGGTTCTTGAGGAA
CAAATAGAACGACTTCAGGAAAAAGTGGAATCTGCTCAGAGTGAACAAAAGAATCTTTTCCTCGTTATATTTCAG
CGGTTTATCATGATCTTGACCGAGCACCTAGTACGATGCGAAACTGATGGGACCAGTGTATTAACACCATGGTAT
AAGAACTGTATAGAGAGGCTGCAGCAGATCTTCCTACAGCATCACCAAATAATCCAGCAGTACATGGTGACCCTG
GAGAACCTTCTCTTCACTGCTGAATTAGACCCTCATATCTTGGCCGTGTTCCAGCAGTTCTGTGCCCTGCAGGCC
TAAGGGTCATTTTTTCCTCATGTCAAGGTTTTTTTTGATATCTTAAAATAATTTGTCTTATTTTTTGATGGTTTG
AATGCTTGCTTTCTTGTAGTATCCTTTCACTTCTTAAAGGAAACAAAGGGGAAGAGGACAGTGAATGAACATGGC
ATTACTTTTAATTGCCCTGAAAAGCAAATACTTCCTAACGGCAGTAATGTGACTATGACCATGATATATTATATA
TGTGACAGATACAAATTCTCTGTGATCAGTTTGTTATTTTTTTTCTCCTTAAGGCAACAAAATAATTGGTTTGAG
GTATGTGAAACACTAGAGGTCAACCTTACATAGTATATAGAACTGATGGGTTTACCCAGCTACCCAGTAGCATAA
CTTTTCACAGCTCGGGGATGAATTAACATGGCTGAAATAAAACTAAAAGTATG

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FIGURE 2266

MSRRRHSDENDGGQPHKRRKTSDANETEDHLESLICKVGEKSACSLESNLEGLAGVLEADLPNYKSKILRLLCTV
ARLLPEKLTIYTTLVGLLNARNYNFGGEFVEAMIRQLKESLKANNYNEAVYLVRFLSDLVNCHVIAAPSMVAMFE
NFVSVTQEEDVPQVRRDWYVYAFLSSLPWVGKELYEKKDAEMDRIFANTESYLKRRQKTHVPMLQVWTADKPHPQ
EEYLDCLWAQIQKLKKDRWQERHILRPYLAFDSILCEALQHNLPPFTPPPHTEDSVYPMPRVIFRMFDYTDDPEG
PVMPGSHSVERFVIEENLHCIIKSHWKERKTCAAQLVSYPGKNKIPLNYHIVEVIFAELFQLPAPPHIDVMYTTL
LIELCKLQPGSLPQVLAQATEMLYMRLDTMNTTCVDRFINWFSHHLSNFQFRWSWEDWSDCLSQDPESPKPKFVR
EVLEKCMRLSYHQRILDIVPPTFSALCPANPTCIYKYGDESSNSLPGHSVALCLAVAFKSKATNDEIFSILKDVP
NPNQDDDDDEGFSFNPLKIEVFVQTLLHLAAKSFSHSFSALAKFHEVFKTLAESDEGKLHVLRVMFEVWRNHPQM
IAVLVDKMIRTQIVDCAAVANWIFSSELSRDFTRLFVWEILHSTIRKMNKHVLKIQKELEEAKEKLARQHKRRSD
DDDRSSDRKDGVLEEQIERLQEKVESAQSEQKNLFLVIFQRFIMILTEHLVRCETDGTSVLTPWYKNCIERLQQI
FLQHHQIIQQYMVTLENLLFTAELDPHILAVFQQFCALQA

FIGURE 2267

GATCTAATTAGGAAAATGTGTTTTGTAGTTCTGGATAAACTATTTCATCCGCTGTTTCCTCCCCAAAACACACAC
ACAGAGCAAACTCCCTTTCATAAAAGCCCTCATATCCACTGGCAGTCCCCGTTCGCATCATGGTCTCCATGTGTA
CCGCCAAAGTCAATTATGTTTGAAAGCCTTTGGTGGATGTTATGGGGCAAAGTTATGATTTACACAGAAGCAACT
GCCAAATCTGTGGTGCAACCACTATCTCCAGTGAAATATTGTATAACACCATTTGGAACTACTGAAAAGACAGTG
GCTTTTCTACAGTACTCTTCCTTATTGCACCATTTTTGTATTAACGTAGAAACTAAGCATCAGAATTTATGAACA
AAGAATATGTTATTTTTCCTTTTGCTCTAAAATACTGAGATTTGGGGAAGCAATTCTTTTTTAAAAAAATTTTGA
ATAACTATCTTTTGATAACACATTCGGCGGTTACGATGTTGGAATTTAGCAGAACTATCAAATCCAAAATTATTT
TCAAATCAAGATGTTTAAATTATAAGTTTTTTTGTTTTGTTTTCCAGTAAGTATAAATGAAAATATTCATATGTA
AAATATGTTTTGCTTAATGTGGACAATTTACACACCCAACACATACTGTTTCCAAAATTATTTCTATATGACACA
AAGTATGATACCTTTAAAAAGGTGAGCTTATATATTGTTTATTAACCTGGAAATAGACAATTTGGCTCTCATACC
ATAAGCATTTAAAAACATATGAAATATTTTGATTTCTTTATATGGTGGTGTGTTTTTATTTCTGAATTTTCCATG
TGCTTTAATATTTGTTTAAGAATATTTTTTATATCTGTTCAATTTTTATCATTCCCCTTATCATTAGAAAGTTTG
ACAAAAATACTTGAATCTTGGACCTCTAAATATACTTTTAGTTGTGTTTAACTTGTTTAATAAATAACTTTTTAA
GTTGAAAAAAAAAAAAAAAAAAAA

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FIGURE 2268

AGCCGCCGCCTCGCCGCTTCCCCTCGTCGGAGCGGCCGCTCGTCCGCCCGGCTTGAGGCCCGCGGGGAGCGCGGC
GCAATTCGTCGGCCCGCGGGGGGGCGGCCTCCCGGCATCTTCGCGGCGACCAAGGACTACCAGGAAGGGGAGCGG
CTGGGATGGCGCGTCCGCGGCCCCGCGAGTACAAAGCGGGCGACCTGGTCTTCGCCAAGATGAAGGGCTACCCGC
ACTGGCCGGCCCGGATTGATGAACTCCCAGAGGGCGCTGTGAAGCCTCCAGCAAACAAGTATCCTATCTTCTTTT
TTGGCACCCATGAAACTGCATTTCTAGGTCCCAAAGACCTTTTTCCATATAAGGAGTACAAAGACAAGTTTGGAA
AGTCAAACAAACGGAAAGGATTTAACGAAGGATTGTGGGAAATAGAAAATAACCCAGGAGTAAAGTTTACTGGCT
ACCAGGCAATTCAGCAACAGAGCTCTTCAGAAACTGAGGGAGAAGGTGGAAATACTGCAGATGCAAGCAGTGAGG
AAGAAGGTGATAGAGTAGAAGAAGATGGAAAAGGCAAAAGAAAGAATGAAAAAGCAGGCTCAAAACGGAAAAAGT
CATATACTTCAAAGAAATCCTCTAAACAGTCCCGGAAATCTCCAGGAGATGAAGATGACAAAGACTGCAAAGAAG
AGGAAAACAAAAGCAGCTCTGAGGGTGGAGATGCGGGCAACGACACAAGAAACACAACTTCAGACTTGCAGAAAA
CCAGTGAAGGGACCTAACTACCATAATGAATGCTGCATATTAAGAGAAACCACAAGAAGGTTATATGTTTGGTTG
TCTAATATTCTTGGATTTGATATGAACCAACACATAGTCCTTGTTGTCATTGACAGAACCCCAGTTTGTATGTAC
ATTATTCATATTCCTCTCTGTTGTGTTTCGGGGGGAAAAGACATTTTAGCCTTTTTTAAAAGTTACTGATTTAAT
TTCATGTTATTTGGTTGCATGAAGTTGCCCTTAACCACTAAGGATTATCAAGATTTTTGCGCAGACTTATACATG
TCTAGGATCCTTTTATCAAGGCAGTTATGATCATCGTTTTCCTGCCTTGACCCCACCATCATCAAACACTCAGTT
AAATATAAATTAACATTTTTTAGATGACCACTCAACATAATGCTTAAGAATGGAATTTCCTCTCTGTGACAGAAC
CCAGGAATTAATTCCTAAATACATAACGTTGGTATATTGAAGACGAAATTAAAATTGTCCTTCAGTTTTGAGGCC
ATGTGTAAAGTTTAACCATATTGTAAAATATCTATTCCGTATTAGAAATAGCTAGTTGACAGCTTATACTTCTCA
AAATTCATATTGTTATGTACACAAACTAAGTTTCTATATGTGAAGTTAGTGAGTCTTTTTGTGTTACTCCAAAAT
AAAGGCAATGATTTATTTTTTTCCCAGTGCCAATACAATTTTGAGCTAAGCACTCAAGGTGGATACTTTACATTT
TAAAGCTGGAATCAGCAACAGCCCTATGGGAAACCAGACAAAGCATTGACTTTTAAATGTAGACTTTTAAAATAA
ACTGTTTTCTTTTGGAACTACAATTAGAATAGTTAATATTCATCCTTAAACCATTATTATGTGTACATTATTGTT
GCTATTGTGATAATAGAGAATTTTATTTATTTTTATGCCAGCTTATATTGTGAGAACACATTTAGTCAGTTTGGG
TTTTATCAATCCTGTTAATGCTTGTCCTTGGAACATCTTTCGCGTATTCACGGTTTGTAGTTGAAAAGTTTACTG
TAAAAAAATCAAAAACAAAAAAATGTATTGTTTTTACAGAATAAATTTATTGGGATGTGTACTGGGAGTAAGATT
TGAGGTTGTAAGCAAACTAAGTTAGTGTAATTTGGCTTCATATATGTAACGTGAGGTATTAATGTAATTCATATA
TTAAAGCAAAAATTGTTCGCAGC

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FIGURE 2269

MARPRPREYKAGDLVFAKMKGYPHWPARIDELPEGAVKPPANKYPIFFFGTHETAFLGPKDLFPYKEYKDKFGKS
NKRKGFNEGLWEIENNPGVKFTGYQAIQQQSSSETEGEGGNTADASSEEEGDRVEEDGKGKRKNEKAGSKRKKSY
TSKKSSKQSRKSPGDEDDKDCKEEENKSSSEGGDAGNDTRNTTSDLQKTSEGT

FIGURE 2270

AGACAGTCCAAACAGGAGCTTTACAGAAATGCACTGTATGAGTGGCCATTCCAATTTTGTATCTTGTGTATGCAT
CATACCCTCAAGTGACATCTACCCTCATGGCCTAATTGCCACCGGTGGAAATGACCACAATATATGCATTTTCTC
ACTGGACAGTCCAATGCCACTTTATATTCTAAAAGGCCACAAAAATACTGTTTGTAGTCTATCATCTGGAAAATT
TGGGACATTACTTAGTGGTTCATGGGACACCACTGCTAAAGTCTGGCTGAATGACAAGTGCATGATGACCTTGCA
GGGTCATACAGCTGCAGTGTGGGCGGTAAAGATCTTACCTGAACAGGGCTTAATGTTGACTGGATCAGCAGACAA
GACTGTTAAACTGTGGAAGGCTGGAAGATGTGAGAGGACTTTTTCAGGGCATGAAGACTGTGTAAGAGGTTTGGC
AATTTTGAGTGAAACAGAATTTCTTTCCTGTGCAAATGATGCTAGTATTAGAAGGTGGCAAATCACTGGCGAGTG
TCTTGAAGTATATTATGGACATACAAATTATATTTATAGCATATCCGTTTTTCCAAATTGTAGAGACTTTGTGAC
AACAGCAGAGGACAGATCTCTGAGAATCTGGAAACATGGGGAATGTGCTCAAACTATCCGACTTCCAGCTCAGTC
TATATGGTGCTGCTGTGTGCTCGACAATGGTGACATTGTGGTTGGTGCGAGTGATGGCATTATTAGAGTGTTTAC
AGAATCAGAAGATCGAACAGCAAGTGCTGAAGAAATCAAGGCTTTTGAAAAAGAACTGTCTCACGCAACCATTGA
TTCTAAAACTGGCGATTTAGGGGACATCAATGCTGAGCAGCTTCCTGGGAGGGAACATCTTAATGAACCTGGTAC
TAGAGAAGGACAGACTCGTCTAATCAGAGATGGGGAGAAAGTCGAAGCCTATCAGTGGAGTGTTAGTGAAGGGAG
GTGGATAAAAATTGGTGATGTTGTTGGCTCATCTGGTGCTAATCAGCAAACATCTGGAAAAGTTTTATATGAAGG
GAAAGAATTTGATTATGTTTTCTCAATTGATGTCAATGAAGGTGGACCATCATATAAATTGCCATATAATACCAG
TGATGACCCTTGGTTAACTGCATACAACTTCTTACAGAAGAATGATTTGAATCCTATGTTTCTGGATCAAGTAGC
TAAATTTATTATTGATAACACAAAAGGTCAAATGTTGGGACTTGGGAATCCCAGCTTTTCAGATCCATTTACAGG
TGGTGGTCGGTATGTTCCGGGCTCTTCGGGATCTTCTAACACACTACCCACAGCAGATCCTTTTACAGGTGCTGG
TCGTTATGTACCAGGTTCTGCAAGTATGGGAACTACCATGGCCGGAGTTGATCCATTTACAGGGAATAGTGCCTA
CCGATCAGCTGCATCTAAAACAATGAATATTTATTTCCCTAAAAAAGAGGCTGTCACATTTGACCAAGCAAACCC
TACACAAATATTAGGTAAACTGAAGGAACTTAATGGAACTGCACCTGAAGAGAAGAAGTTAACTGAGGATGACTT
GATACTTCTTGAGAAGATACTGTCTCTAATATGTAATAGTTCTTCAGAAAAACCCACAGTCCAGCAACTTCAGAT
TTTGTGGAAAGCTATTAACTGTCCTGAAGATATTGTCTTTCCTGCACTTGACATTCTTCGGTTGTCAATTAAACA
CCCCAGTGTGAATGAGAACTTCTGCAATGAAAAGGAAGGGGCTCAGTTCAGCAGTCATCTTATCAATCTTCTGAA
CCCTAAAGGAAAGCCAGCAAACCAGCTGCTTGCTCTCAGGACTTTTTGCAATTGTTTTGTTGGCCAGGCAGGACA
AAAACTCATGATGTCCCAGAGGGAATCACTGATGTCCCATGCAATAGAACTGAAATCAGGGAGCAATAAGAACAT
TCACATTGCTCTGGCTACATTGGCCCTGAACTATTCTGTTTGTTTTCATAAAGACCATAACATTGAAGGGAAAGC
CCAATGTTTGTCACTAATTAGCACAATCTTGGAAGTAGTACAAGACCTAGAAGCCACTTTTAGACTTCTTGTGGC
TCTTGGAACACTTATCAGTGATGATTCAAATGCTGTACAATTAGCCAAGTCTTTAGGTGTTGATTCTCAAATAAA
AAAGTATTCCTCAGTATCAGAACCAGCTAAAGTAAGTGAATGCTGTAGATTTATCCTAAATTTGCTGTAGCAGTG
GGGAAGAGGGACGGATATTTTTAATTGATTAGTGTTTTTTTCCTCACATTTGACATGACTGATAACAGATAATTA
AAAAAAGAGAATACGGTGGATTAAGTAAAATTTTACATCTTGTAAAGTGGTGGGGAGGGGAAACAGAAATAAAAT
TTTTGCACTGCTGAACTGTGAGATTTTCCTGTGTAATTTGGGTAGATTTTCAAGAGTGTGAACACAAATTTAAAA
TAAGCTATAATCAGCAACAACACAATGACAATGACATCTTCCCCTTACCTTAGCCACTAAGAAGACAAGGGCTGT
TACTCATATAACTTGCTTTTCTTACTTAATGTACACCAAACTGTTGTTGTCAATTATCTTTTATTTAACTTCTCC
ACCTTCATTGCTAGATCCTTCGAACAGCACTGATACATTTCAAGGTCTTGTTTTAGGATAACTACTTTAAAATTT
TTTAAATTATATTAAATTTATAAAATAATTTATAAATTCATATATTAAAACAATATAAGATAATTTCTTGATTTG
TCATTTATAAATCCCTAAAGTATATTTGTTTAATGGCCTATTTTTGGATGAAGAAAAAGCCAGTTGGTAAGCTGT
GTTAGTCATGTATCAGTTCAGACAGACGGAGGTCTCAATTTAACTCCAGGCTTAGATCCCAGTTTCCTTTTGCCC
TTCACTATTTGAGGTAACTTCATTTTTCATTCTAGTTTTGATATTTGGCTGTTTATTTTTGTCATTTTCCATTAT
TTCAAAGGGAATTTGGAACATGTTGAATTTTATCAGGTGGTTACATAAGCAAGAGTACATCAAACTGTATTATTT
GAAAGTCTAGAACCTGTCATGTGAAATTACTATTTTTGAGCCCTCTATGTGGTCCAGGCAGAATAGTAGACACAC
TGATATTTAATCCTTAAAACCCCTTTAAATGAGGGCCAGTATTATCTCTGCTTTCAGAAGTAGACATAATAGGAT
GAATCATATAACAGA

FIGURE 2271

MHCMSGHSNFVSCVCIIPSSDIYPHGLIATGGNDHNICIFSLDSPMPLYILKGHKNTVCSLSSGKFGTLLSGSWD
TTAKVWLNDKCMMTLQGHTAAVWAVKILPEQGLMLTGSADKTVKLWKAGRCERTFSGHEDCVRGLAILSETEFLS
CANDASIRRWQITGECLEVYYGHTNYIYSISVFPNCRDFVTTAEDRSLRIWKHGECAQTIRLPAQSIWCCCVLDN
GDIVVGASDGIIRVFTESEDRTASAEEIKAFEKELSHATIDSKTGDLGDINAEQLPGREHLNEPGTREGQTRLIR
DGEKVEAYQWSVSEGRWIKIGDVVGSSGANQQTSGKVLYEGKEFDYVFSIDVNEGGPSYKLPYNTSDDPWLTAYN
FLQKNDLNPMFLDQVAKFIIDNTKGQMLGLGNPSFSDPFTGGGRYVPGSSGSSNTLPTADPFTGAGRYVPGSASM
GTTMAGVDPFTGNSAYRSAASKTMNIYFPKKEAVTFDQANPTQILGKLKELNGTAPEEKKLTEDDLILLEKILSL
ICNSSSEKPTVQQLQILWKAINCPEDIVFPALDILRLSIKHPSVNENFCNEKEGAQFSSHLINLLNPKGKPANQL
LALRTFCNCFVGQAGQKLMMSQRESLMSHAIELKSGSNKNIHIALATLALNYSVCFHKDHNIEGKAQCLSLISTI
LEVVQDLEATFRLLVALGTLISDDSNAVQLAKSLGVDSQIKKYSSVSEPAKVSECCRFILNLL

FIGURE 2272

AACAAGCCCATGATCCTGCTGGTGGGCCAGTACAGCACCGGCAAGACCACCTTCATCAGATACCTACTGGAGCAG
GATTTCCCAGGCATGAGGATTGGTCCGGAGCCCACCACAGACTCCTTCATCGCCGTGATGTATGGAGAGACTGAG
GGCAGCACCCCAGGGAATGCTTTAGTCGTGGACCCCAAAAAGCCGTTTAGAAAGCTCAGTCGCTTTGGAAACGCT
TTCCTGAATCGATTCATGTGCTCACAGCTCCCCAATCAGGTCCTGAAGAGCATCAGCGTCATCGACAGCCCCGGC
ATCCTTTCTGGGGAGAAGCAGCGCATCAGCCGAGGCTATGACTTCTGCCAGGTCCTGCAGTGGTTTGCCGAGAGG
GTGGACAGGATCATCCTGCTCTTTGACGCTCACAAGCTGGACATCTCAGATGAATTCTCAGAGGCCATCAAGGCC
TTCCGGGGCCAGGACGACAAGATCCGTGTCGTGCTGAACAAGGCCGACCAAGTGGACACGCAGCAGCTGATGCGG
GTCTACGGGGCCCTCATGTGGTCCCTAGGCAAGGTCATCAACACGCCCGAGGTACTGCGCGTCTACATTGGCTCC
TTCTGGGCGCAGCCCCTGCAGAACACGGACAACCGCCGGCTCTTCGAGGCTGAGGCCCAGGACCTCTTCAGAGAC
ATCCAGAGCCTCCCCCAGAAGGCAGCGGTGCGCAAGCTCAACGACCTCATCAAGCGAGCGAGGCTGGCCAAGGTG
CATGCCTACATCATCAGCTACCTGAAGAAGGAGATGCCAAGTGTATTTGGAAAGGAAAACAAGAAGAGAGAGCTT
ATCAGCAGGCTACCGGAAATCTACATTCAGCTACAGCGAGAATACCAGATTTCTGCAGGAGACTTCCCTGAGGTC
AAGGCTATGCAGGAACAGCTTGAGAACTATGACTTCACCAAATTCCACTCGCTGAAGCCCAAGCTGATCGAGGCA
GTGGACAACATGCTGAGCAACAAGATCTCGCCCCTCATGAACCTCATCAGCCAGGAGGAGACGAGCACGCCCACG
CAGCTGGTGCAGGGCGGCGCCTTCGATGGCACCACCGAGGGCCCCTTCAACCAGGGCTACGGGGAGGGTGCCAAG
GAGGGCGCCGACGAGGAGGAGTGGGTCGTGGCCAAAGACAAGCCCGTCTACGACGAGCTCTTCTACACTCTGTCG
CCCATCAATGGCAAGATATCAGGTGTCAACGCCAAGAAGGAGATGGTGACCTCCAAGCTGCCCAACAGCGTCCTG
GGCAAGATCTGGAAGCTGGCCGACTGCGACTGCGACGGCATGCTTGATGAGGAGGAGTTCGCGCTGGCCAAGCAC
CTCATCAAGATCAAGCTCGACGGCTACGAGCTGCCCAGCAGCCTGCCCCCCCACCTCGTGCCCCCCTCGCACAGG
AAGTCCCTGCCCAAGGCCGACTGAGGGGTGGGCTGCAGAACGGGGTGGGAACTGGGGAACCTGGGCCTCAGGCCT
GCTCCACCACTGACTCACCGAATGACCTTGGGCAAGGCACTGCCCTCTCTGTGCCTTGGTTTCCCCATCTGTAGA
ATGGGGAGGGTGGACACTGGAAACTAGATGACTTCTTTCACCTCAAAATTCCCTTAGTTTCTATGAAAATATTGG
GGGTAGGGGGGTGGATTAGGAGATTGAAGGGTTGAGAAGAAAGAGAAATTGTCCAAAGAGTCCTCAGAACCTGCC
TGGAGAAATGCGCATGGGGGTGGGCCTGGTAAGTCCCAGGAACCACAGGAAGTGAGCTAAGGCTCACCCAGAGCA
GCTGGGTCTCCAGGCTGCCTGGGCTTTTTGTCCTCATGAACAACTCTGGAGCAGCTGTCTGTCCCTCAGAGGGCA
CCTGGAGGCAGCAAAGATTATCTTATTTATTTTATTTTGTTXTCTGCTATATTTAGAGGGCAAAAAAATAGAGCA
GAGGGTTTCTGCTGTCTCCAGACTGTCTACCAAAGAGAAGGCGAAAGATGCCTCCTGGGTTTGGAAGGGGGATGC
ACTGTGGATCTGCCATCCATTCTGCAGTCTCCAGCAGAGCAGGCAGTCAGGCCCCAGCGTGCCTCCATCCCAGTG
CCCCGATGACCATCTGGTCAGCCCTCCCAACCTCCCTTCCAGGGGGCTTACCAGCAAAGCCATATTCGGCTAGGA
ATTTGGAATTCACAACCTTTATTAACCCCTGGCAAAACTTCCCGTTTGCATGTCAAATCACATTGAAGCCTGAAG
ATTAGCTTTTCTTACTGGTTTTTCCAATAAGTAATAGCAAAGCCCACTTATCATACTTAAACTACAGTAAAGAAA
AGAGGTGGTTCTCTGCAGTGATCGTTTAGTGTGGCCCTCAAACATTAAATATCCCCAGGTCTCCTTGGTGGGTGG
CAGGATTTAAATTCAATCAAATCCTGTCCTAGTGTGTGCAGTGTCTTCGGCCCTGTGGACACAGGTGAATGAGGG
ACCAGCCCTGCCCTGGGCTGTTGAGAAGAG

FIGURE 2273

TAATCCTTTAACCTTTCCTTGTGCAGGAATGAGGCAGATGAGCTCCGTAAAGCTCTGGACAACCTTGCAAGACAA
ATGATCATGAAAGACAAAAACTGGCACGATAAAGGCCAGCAGTACAGAAACTGGTTTCTGAAAGAGTTTCCTCGG
TTGAAAAGTAAGCTTGAGGATAACATAAGAAGGCTCCGTGCCCTTGCAGATGGGGTTCAGAAGGTCCACAAAGGC
ACCACCATCGCCAATGTGGTGTCTGGCTCTCTCAGCATTTCCTCTGGCATCCTGACCCTCGTCGGCATGGGTCTG
GCACCCTTCACAGAGGGAGGCAGCCTTGTACTCTTGGAACCTGGGATGGAGTTGGGAATCACAGCCGCTTTGACC
GGGATTACCAGCAGTACCATAGACTACGGAAAGAAGTGGTGGACACAAGCCCAAGCCCACGACCTGGTCATCAAA
AGCCTTGACAAATTGAAGGAGGTGAAGGAGTTTTTGGGTGAGAACATATCCAACTTTCTTTCCTTAGCTGGCAAT
ACTTACCAACTCACACGAGGCATTGGGAAGGACATCCGTGCCCTCAGACGAGCCAGAGCCAATCTTCAGTCAGTA
CCGCATGCCTCAGCCTCACGCCCCCGGGTCACTGAGCCAATCTCAGCTGAAAGCGGTGAACAGGTGGAGAGGGTT
AATGAACCCAGCATCCTGGAAATGAGCAGAGGAGTCAAGCTCACGGATGTGGCCCCTGTAAGCTTCTTTCTTGTG
CTGGATGTAGTCTACCTCGTGTACGAATCAAAGCACTTACATGAGGGGGCAAAGTCAGAGACAGCTGAGGAGCTG
AAGAAGGTGGCTCAGGAGCTGGAGGAGAAGCTAAACATTCTCAACAATAATTATAAGATTCTGCAGGCGGACCAA
GAACTGTGACCACAGGGCAGGGCAGCCACCAGGAGAGATATGCCTGGCAGGGGCCAGGACAAAATGCAAACTTTT
TTTTTTTTCTGAGACAGAGTCTTGCTCTGTCGCCAAGTTGGAGTGCAATGGTGCGATCTCAGCTCACTGCAAGCT
CTGCCTCCCGTGTTCAAGCGATTCTCCTGCCTTGGCCTCCCAAGTAGCTGGGACTACAGGCGCCTACCACCATGC
CCAGCTAATTTTTGTATTTTTAATAGAGATGGGGTTTCACCATGTTGGCCAGGATGGTCTCGATCTCCTGACCTC
TTGATCTGCCCACCTTGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCATCGCTTTTGACCCAAATGCAAAC
ATTTTATTAGGGGGATAAAGAGGGTGAGGTAAAGTTTATGGAACTGAGTGTTAGGGACTTTGGCATTTCCATAGC
TGAGCACAGCAGGGGAGGGGTTAATGCAGATGGCAGTGCAGCAAGGAGAAGGCAGGAACATTGGAGCCTGCAATA
AGGGAAAAATGGGAACTGGAGAGTGTGGGGAATGGGAAGAAGCAGTTTACTTTAGACTAAAGAATATATTGGGGG
GCCGGGTGTAGTGGCTCATGCCTGTAATCCGAGCACTTTGGGAGGCCAAGGCGGGCGGATCACGAGGTCAGGAGA
TCAAGACCATCCTGGCTAACACAGTGAAACCCCGTCTCTACTAAAAATACAAAAAATTAGCCGGGCATGGTGCGG
GCGCCTGTAGTTCCAGCTAACTGGGCGGCTGAGGCAGGAGAATGGCGTGAACCTGGGAGGTGGAGCTTGCAGTGA
GCCGAGATATCGCCACTGCACTCCAGCCTGGGTGACAGAGCGAGACTCCATCTCAAAAAAAAAAAAAAAAAGAAT
ATATTGACGGAAGAATAGAGAGGAGGCTTGAAGGAACCAGCAATGAGAAGGCCAGGAAAAGAAAGAGCTGAAAAT
GGAGAAAGCCCAAGAGTTAGAACAGTTGGATACAGGAGAAGAAACAGCGGCTCCACTACAGACCCAGCCCCAGGT
TCAATGTCCTCCGAAGAATGAAGTCTTTCCCTGGTGATGGTCCCCTGCCCTGTCTTTCCAGCATCCACTCTCCCT
TGTCCTCCTGGGGGCATATCTCAGTCAGGCAGCGGCTTCCTGATGATGGTCGTTGGGGTGGTTGTCATGTGATGG
GTCCCTCCAGGTTACTAAAGGGTGCATGTCCCCTGCTTGAACACTGAAGGGCAGGTGGTGGGCCATGGCCATGGT
CCCCAGCTGAGGAGCAGGTGTCCCTGAGAACCCAAACTTCCCAGAGAGTATGTGAGAACCAACCAATGAAAACAG
TCCCATCGCTCTTACCCGGTAAGTAAACAGTCAGAAAATTAGCATGAAAGCAGTTTAGCATTGGGAGGAAGCTCA
GATCTCTAGAGCTGTCTTGTCGCCGCCCAGGATTGACCTGTGTGTAAGTCCCAATAAACTCACCTACTCA

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FIGURE 2274

GGCACGAGGAGAAGACTTTGGTGGGGTAGTCTCGGGGCAGCTCAGCGGCCCGCTGTGCCCGTTTCTGGCCTCGCT
CGCAGCTTGCACGTCGAGACTCGTAGGCCGCACCGTAGGGCGAGCGTGCGGGTCGCCGCCGCGGCCGCCTCGGGG
TCTGGGCCCAGCCGCAGCCTCTTCTACCGCGGCCGGTTGGGAGTCGCCGCGAGATGCAGCCTCCGGGCCCGCCCC
CGGCCTATGCCCCCACTAACGGGGACTTCACCTTTGTCTCCTCAGCAGACGCGGAAGATCTCAGTGGTTCAATAG
CATCCCCAGATGTCAAATTAAATCTTGGTGGAGATTTTATCAAAGAATCTACAGCTACTACATTTCTGAGACAAA
GAGGTTATGGCTGGCTTCTGGAAGTTGAAGATGATGATCCTGAAGATAACAAGCCACTCTTGGAAGAATTGGACA
TTGATCTAAAGGATATTTACTACAAAATCCGATGTGTTTTGATGCCAATGCCATCACTTGGTTTTAATAGACAAG
TGGTGAGAGACAATCCTGACTTTTGGGGTCCTCTGGCTGTTGTTCTTTTCTTTTCCATGATATCATTATATGGAC
AGTTTAGGGTGGTCTCATGGATTATAACCATTTGGATATTTGGTTCACTAACAATTTTCTTACTGGCCAGAGTTC
TTGGTGGAGAAGTTGCATATGGCCAAGTCCTTGGAGTTATAGGATATTCATTACTTCCTCTCATTGTAATAGCCC
CTGTACTTTTGGTGGTTGGATCATTTGAAGTGGTGTCTACACTTATAAAACTGTTTGGTGTGTTTTGGGCTGCCT
ACAGTGCTGCTTCATTGTTAGTGGGTGAAGAATTCAAGACCAAAAAGCCTCTTCTGATTTATCCAATCTTTTTAT
TATACATTTATTTTTTGTCGTTATATACTGGTGTGTGATCCAAGTTATACATGAATAGAAAAAGATGGTGTTAAA
TTTGTGTGTAGGCTGGGAATTCTTGCTGAAGGAATTGGAGAAAACCTGTTGCTGCAAAATTTTACATGTTCCAGA
TGGAAAGGGAAGTCTAAGCGCTTTTTAAAACAATTTTTTTTTGTATTTAATTAAGCAATTGCAGTTATCTGGGAT
TTTTGGGTCAGAATTTTAAATTCTGTTTGATTCTCCATATTCCAGTGAATAAAATACAAAAGCATTGTGTTTTTA
AGATTGTGTCGATATTCACCTAAAAACTTGTGCCAAAAGCACCTGGATTGGTAATTATATTTCACTTAAAGGGTA
AATTTGACAATATCTTGATAATCAAAAGTGCAATTTTTTTCTTCAAAATGTTTTCTCCAGCATCACAGATCCTGC
AGATATATATTTATATTTATACATATATATTTATGAAATAATTCTTACTCACAAAATATATTTCTGATAAACATT
AAGATATTAAATCTGATGCACAAACTTTAATTTGGCCATTAATCTTTTTTATTTAAAAATTTAAATTTGTTTTTA
AAATTGTATATAGTTTTTAAAATCTCACACATGCTTCGATACTTCCTTGTTAAGAATTCTTAATAACTACTAAAA
CTGATTTTTAATAGTTGCTGATATATATTTGGTTTGTTTGGGTATACTTTTCAAAACCATTTTTGAATGTCCAAA
CATCTGATTTAAAGTTTCTGTTTATCTTTCTGACCAAAGGAGCAAGAGGTATAATGGATATGGCATTCATTAAAA
TCTTTACTATGTACAAAAACAGTAATATTTACAGCATCAGTAAATATTTTTAAGTGGTACTTCTAAATCATAAAA
GTTGGGGAAAGAGACCTTTAAAATCTTGTGGTGTTGAACAATGTTATATGAAGTAGAAAAAATAAAATACTTCCC
AGTTGTGAAAAAAAAAAAAAAAAAA

FIGURE 2275

MQPPGPPPAYAPTNGDFTFVSSADAEDLSGSIASPDVKLNLGGDFIKESTATTFLRQRGYGWLLEVEDDDPEDNK
PLLEELDIDLKDIYYKIRCVLMPMPSLGFNRQVVRDNPDFWGPLAVVLFFSMISLYGQFRVVSWIITIWIFGSLT
IFLLARVLGGEVAYGQVLGVIGYSLLPLIVIAPVLLVVGSFEVVSTLIKLFGVFWAAYSAASLLVGEEFKTKKPL
LIYPIFLLYIYFLSLYTGV

FIGURE 2276

GTGGGAGTGGAGGAGGAAGAGGCGGTAGGGGGTACGGGGGCTGGTCCCAGAAGATGGCGGAGGCGGGGGATTTCT
GGTAGGTCCTACTTTAGGACAAGATGTGGTACCGTTGAAGCGTCAGTCTTTGATTCACAGACAGTTGAGCTTTTC
AGCTGGGAAGCCTTTCCATTTTTTTTTTTTTAACGGCTTTCTGAACCTATGAAACC**ATG**GCAGAAGGAGAGACAG
AGTCACCTGGGCCCAAAAAGTGTGGCCCATATATTTCATCTGTCACTAGCCAGAGTGTGAACTTGATGATTCGAG
GAGTAGTGCTATTTTTTATTGGAGTATTTCTTGCATTAGTGTTAAATTTACTTCAGATTCAGAGAAATGTGACGC
TCTTTCCACCTGATGTGATTGCAAGCATCTTTTCTTCTGCATGGTGGGTACCCCCATGCTGTGGCACGGCTTCAG
CTGTGATTGGGTTATTATACCCCTGCATTGACAGACATCTAGGAGAACCACATAAATTTAAAAGAGAGTGGTCCA
GTGTAATGCGGTGTGTAGCAGTCTTTGTTGGTATAAATCATGCCAGTGCTAAAGTGGATTTCGATAACAACATAC
AGTTGTCTCTCACACTGGCTGCACTATCCATTGGACTGTGGTGGACTTTTGATAGATCTAGAAGTGGTTTTGGCC
TTGGAGTAGGAATTGCCTTCTTGGCAACTGTGGTCACTCAACTGCTAGTATATAATGGTGTTTACCAATATACAT
CTCCAGATTTCCTCTATGTTCGTTCTTGGTTACCATGTATATTTTTTGCTGGAGGCATAACAATGGGAAACATTG
GTCGACAACTGGCAATGTACGAATGTAAAGTTATCGCAGAAAAATCTCATCAGGAA**TGA**AGAAGGCAAAAAATAT
CTTTTGTACAGAAAAGCAAGATGAAAAGGATGTGAAATGGTAGATATACCAACAAAACTTCAGACTGTAAAATTG
CCAGGATGCAGTTTTCCCCTTGATTGGCGTGTGTGTATATATGGATAAATATATATATACACACACACATATTAC
TGCAATCTGTGATTGCTTCATCTGTAAATCAGTTGTAAACCTTTACATATTTGACTTAAATAACTGTAAGATATA
TATGTACTACATTAAAAAGTGTTGATTAATAGATGAAATTTTTAAATTAATTTTTTAAAACATGCCATACATTGT
ATCACAATGTTAATGTGCCAAGATATTGTTCCTGTCATGCAGAGTATAAGAATGCTTTGAACAATTTGTAGACTT
AGTGAAATAAAATAAGAGGAAAGCCAAAAACAAACAAACAAAAAGCATATGGGGAGCTGGTATTTTCTCTTTAGC
TTACTGTTGTGCCTTTTTATTTTTCTAATCACAGCAGTATGAGTTATGAGTGCCCTAATTTGTGGTTAGTTTCTA
ATTTAATGTTGTTTCATAGAGTTTGGAGTGTTTTGATACAGGGTGAAAATGAACTTCTGGTTTCAAACCTGCATT
ACTGGAGACAGCCCAAAGAGTAATTTTCTGTTTTGACAGGTTTTACTGGAAGTATATGTGATGAGCAGAAGAGGT
TATCAGCATTAAATTGTTTTGGTTCTAAATTTGGAACAGTATATATAATTAAAAGTAAGGAACATTAGAGGATTT
AATTAGAATAAATACATGTTTTGGAAATACAGTGACCTCTTGCAGTGTCACAAAAGTGCAAAGTGATATTAGCTG
TCATCTGCAATACAGAATCTCATTGCTTTTGCACATGGAGCATATAGGAAACTCCAAACAGATCACAATGAGGTT
TCTAAATCTGTTGGGTTCTGTCTTCTATTGGGTTCTGTGAAGCAAACCACTGTAGCTTTAGCTGGGTTCAGTCAT
ATGACTCGTTGGTGGAATGCCTAGGTTTTTCATCTTACATGCAGTCTTGGGGGTGGATGAATACATAATTTCTTA
TGTATTCGTGTATCCATTAGTGAATAGTTCAAGTCTGTTTAAGAGTGTATTGAGATGGCATTCTCTGCATGTTAA
AGATCTTAATGGCAACCAGCACCTCTTAAGTATGGTTTAAACATATTCTTAGCTAATTTTTTCCATTAGTTTTTG
AAATTGGTGGCAGTTGTCTGATCCACAAGGGCAAGATCTTCTGAGTACTCTGGGGTGTGAGTATGTGTGCACACG
TGTGTGTTGGAGTGAGTGAGAGAATGTGTCTGTGCATGTGGCCATGCTTTCCTAGAATGTCAAGTAGATATTTTT
ACACTTTGAGTTTTAAAGCAATTACTATCAGACTGAGATCTTGTATGCCAAACTTTAATCTGCTTTTATGTTTTC
AGGCTGAAGGTGTGAAAATCCTAAGAGGATTTCATATTGAATATGTGTACACAATCTTAACTATCGTGGTGGAAA
ACATACTACTATAATTTATTATTATATCTCCCAGATAATGTTATTCACTTAGAACAAATAAGGTATATTTTTTAG
AATCAACTTTGTAAGCACTATAAAATCTTTAATAAGTTATAAGGTCTATGATGTGTTTACTTTAAAAATTGCTGT
TAAAAGCAACACGTATTAAATATGTAATTACCAAAAAAAAAAAAAAA

FIGURE 2277

MAEGETESPGPKKCGPYISSVTSQSVNLMIRGVVLFFIGVFLALVLNLLQIQRNVTLFPPDVIASIFSSAWWVPP
CCGTASAVIGLLYPCIDRHLGEPHKFKREWSSVMRCVAVFVGINHASAKVDFDNNIQLSLTLAALSIGLWWTFDR
SRSGFGLGVGIAFLATVVTQLLVYNGVYQYTSPDFLYVRSWLPCIFFAGGITMGNIGRQLAMYECKVIAEKSHQE

FIGURE 2278

ATGGTGAAGTTGGGGAACAATTTCGCAGAGAAGGGCACCAAGCAGCCGCTGCTGGAGGATGGCTTCGACACCATT
CCCCTGATGACGCCCCTCGATGTCAATCAGCTGCAGTTCCCGCCCCCGGATAAGGTGGTCGTGAAAACTAAGACC
GAGTATGAACCTGACCGCAAGAAAGGGAAAGCACGTCCTCCCCAAATTGCTGAGTTCACCGTCAGCATCACGGAG
GGTGTCACCGAGAGGTTTAAGGTCTCCGTGTTGGTCCTCTTCGCCCTGGCCTTCCTCACCTGCGTCGTCTTCCTG
GTTGTCTACAAGGTGTACAAGTATGACCGCGCCTGCCCCGATGGGTTCGTCCTCAAGAACACCCAGTGCATCCCA
GAAGGCTTGGAGAGCTACTACGCGGAGCAAGACTCCAGTGCCCGGGAGAAATTTTACACAGTCATAAACCACTAC
AACCTGGCCAAGCAGAGCATCACGCGCTCCGTATCGCCCTGGATGTCAGTTCTGTCAGAAGAGAAGCTGTCCGAG
CAGGAGACTGAAGCGGCTGAGAAGTCAGCTTAG

FIGURE 2279

MVKLGNNFAEKGTKQPLLEDGFDTIPLMTPLDVNQLQFPPPDKVVVKTKTEYEPDRKKGKARPPQIAEFTVSITE
GVTERFKVSVLVLFALAFLTCVVFLVVYKVYKYDRACPDGFVLKNTQCIPEGLESYYAEQDSSAREKFYTVINHY
NLAKQSITRSVSPWMSVLSEEKLSEQETEAAEKSA

FIGURE 2280

GGGAGCGGCCGTGGAGCCCAATCGTTCGCTCCCCTTCCCGGGTCCGCGCGCGGCGCCGCCTCCGCCATTGCTGCG
AGCAGGAGCAGGAGACGCGGAGCTCGGAGCGCTGAGCTGACCTGCCGGAGCCGGGCGTGGGCTGCAGCCTCGGAG
CTCCCGGAACGATGGTGAAGTTGGGGAACAATTTCGCAGAGAAGGGCACCAAGCAGCCGCTGCTGGAGGATGGCT
TCGACACCATTCCCCTGATGACGCCCCTCGATGTCAATCAGCTGCAGTTCCCGCCCCCGGATAAGGTGGTCGTGA
AAACTAAGACCGAGTATGAACCTGACCGCAAGAAAGGGAAAGCACGTCCTCCCCAAATTGCTGAGTTCACCGTCA
GCATCACGGAGGGTGTCACCGAGAGGTTTAAGGTCTCCGTGTTGGTCCTCTTCGCCCTGGCCTTCCTCACCTGCG
TCGTCTTCCTGGTTGTCTACAAGGTGTACAAGTATGACCGCGCCTGCCCCGATGGGTTCGTCCTCAAGAACACCC
AGTGCATCCCAGAAGGCTTGGAGAGCTACTACGCGGAGCAAGACTCCAGTGCCCGGGAGAAATTTTACACAGTCA
TAAACCACTACAACCTGGCCAAGCAGAGCATCACGCGCTCCGTATCGCCCTGGATGTCAGTTCTGTCAGAAGAGA
AGCTGTCCGAGCAGGAGACTGAAGCGGCTGAGAAGTCAGCTTAGCGGGATGGGCAAGTTCCTTACAATGTGTCAC
TTGCAAATAACAAAGGGACTTTGAGGGACATTTCATTAAATATAATTACTGATACTTTAGAGGTTACTCATTTAC
GGTGCAATTGCTTCTGTTTGCTAATGCTGCTTTGCAAATAAAACTTGCTGCCGACCACCCACGGGCATAAAATCA
AGTGCATTTCAGCATTGCCTAAAGAGCTCTGACACCACTTTTCATGTTAAGATCTTCATTTAGCTCCTTTACTGG
GATTTATTGGATGCTGTAAAAAAATAAATTTACACTGGATATGCGAAGGGTTTGGATCTCAGATAAATGCATTTT
GTGGAATTGATTTTCTGAACCGACCCTGCTGTCTGCAAACCTTCCTCCATAGCCATATCTAGAGTGATCTCTCGC
TGTGCTAAGAGCAAGCCTACTTCGCATTTCTTCCTCGGCCATCAGCGGGTAACAGTGCTGACTGCTGCCAAGGTG
CACTGTAGTAAGGTGTCTGGAGACACAGACCGTGACCTTGGCGCAGCGGTGTGCATCAGAGGCGTGTGCTGAGAA
GGGTGGTGTTAAGCTGTGGAAAATGACTCAAGAGCAATAAATCAGTGCCAAAGCTTCCCTGCGCATCTGAATAGA
CACAAGTGAAGCCCGTGTGCGCACAGTGCAGAGGCCGAGCCTGTATTTCCAGGTAGACGTGGACTTTATTGACTG
TGAATTCATTTACCTGTAACTTCTGACATTTCACTCTGTGCAAATAAAGAACATGAGGATAAAAAAAAAAAAAAA
AAA

FIGURE 2281

MVKLGNNFAEKGTKQPLLEDGFDTIPLMTPLDVNQLQFPPPDKVVVKTKTEYEPDRKKGKARPPQIAEFTVSITE
GVTERFKVSVLVLFALAFLTCVVFLVVYKVYKYDRACPDGFVLKNTQCIPEGLESYYAEQDSSAREKFYTVINHY
NLAKQSITRSVSPWMSVLSEEKLSEQETEAAEKSA

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FIGURE 2282

GAGGGAAGTGTCGACTGCGCCGGCGGGAACAGACATGCCTGCGGCCAAGAAGCAGAAGCTGAGCAGTGACGAGAA
CAGCAATCCAGAACTCTCTGGAGACGAGAATGATGACGCTGTCAGTATAGAAAGTGGTACAAACACTGAACGCCC
TGATACACCTACAAACACGCCAAATGCACCTGGAAGGAAAAGTTGGGGAAAGGGAAAATGGAAGTCAAAGAAATG
CAAATATTCTTTCAAATGTGTAAATAGTCTCAAGGAAGATCATAACCAACCATTGTTTGGAGTTCAGTTTAACTG
GCACAGTAAAGAAGGAGATCCATTAGTGTTTGCAACTGTAGGAAGCAACAGAGTTACCTTGTATGAATGTCATTC
ACAAGGAGAAATCCGGTTGTTGCAATCTTACGTGGATGCTGATGCTGATGAAAACTTTTACACTTGTGCATGGAC
CTATGATAGCAATACGAGCCATCCTCTGCTGGCTGTAGCTGGATCTAGAGGCATAATTAGGATAATAAATCCTAT
AACAATGCAGTGTATAAAGCACTATGTTGGCCATGGAAATGCTATCAATGAGCTGAAATTCCATCCAAGAGATCC
AAATCTTCTCCTGTCAGTAAGTAAAGATCATGCTTTACGATTATGGAATATCCAGACGGACACTCTGGTGGCAAT
ATTTGGAGGCGTAGAAGGGCACAGAGATGAAGTTCTAAGTGCTGATTATGATCTTTTGGGTGAAAAAATAATGTC
CTGTGGTATGGATCATTCTCTTAAACTTTGGAGGATCAATTCAAAGAGAATGATGAATGCAATTAAGGAATCTTA
TGATTATAATCCAAATAAAACTAACAGGCCATTTATTTCTCAGAAAATCCATTTTCCTGATTTTTCTACCAGAGA
CATACATAGGAATTATGTTGATTGTGTGCGATGGTTAGGCGATTTGATACTTTCTAAGTCTTGTGAAAATGCCAT
TGTGTGCTGGAAACCTGGCAAGATGGAAGATGATATAGATAAAATTAAACCCAGTGAATCTAATGTGACTATTCT
TGGGCGATTTGATTACAGCCAGTGTGACATTTGGTACATGAGGTTTTCTATGGATTTCTGGCAAAAGATGCTTGC
ATTGGGCAATCAAGTTGGCAAACTTTATGTTTGGGATTTAGAAGTAGAAGATCCTCATAAAGCCAAATGTACAAC
ACTGACTCATCATAAATGTGGTGCTGCTATTCGACAAACCAGTTTTAGCAGGGATAGCAGCATTCTTATAGCTGT
TTGTGATGATGCCAGTATTTGGCGCTGGGATCGACTTCGATAAAATACTTTTGCCTAATCAAAATTAAAATGTGT
TTGTTGTCTGTGTAAAATAAAATTAATGTATCTTGCTAGTAAGGGCACGTAGAGCATTTAGAGTTGTCTTTCAGC
ATTCAATCAGGCTGAGCTGAATGTAGTGATGTTTACATTGTTTACATTCTTTGTACTGTCTTCCTGCTCAGACTC
TACTGCTTTTAATAAAAATTTATTTTTG

FIGURE 2283

MPAAKKQKLSSDENSNPELSGDENDDAVSIESGTNTERPDTPTNTPNAPGRKSWGKGKWKSKKCKYSFKCVNSLK
EDHNQPLFGVQFNWHSKEGDPLVFATVGSNRVTLYECHSQGEIRLLQSYVDADADENFYTCAWTYDSNTSHPLLA
VAGSRGIIRIINPITMQCIKHYVGHGNAINELKFHPRDPNLLLSVSKDHALRLWNIQTDTLVAIFGGVEGHRDEV
LSADYDLLGEKIMSCGMDHSLKLWRINSKRMMNAIKESYDYNPNKTNRPFISQKIHFPDFSTRDIHRNYVDCVRW
LGDLILSKSCENAIVCWKPGKMEDDIDKIKPSESNVTILGRFDYSQCDIWYMRFSMDFWQKMLALGNQVGKLYVW
DLEVEDPHKAKCTTLTHHKCGAAIRQTSFSRDSSILIAVCDDASIWRWDRLR

FIGURE 2284

GGAGCTCCAGGCGCACATCCGCAGTCAGCCACCTCGCGCGCGCCTCCAGGAGCAAGGATGGAGAGGCTGGTGATC
AGGATGCCCTTCTGTCATCTGTCTACCTACAGCCTGGTTTGGGTCATGGCAGCAGTGGTGCTGTGCACAGCACAA
GTGCAAGTGGTGACCCAGGATGAAAGAGAGCAGCTGTACACACCTGCTTCCTTAAAATGCTCTCTGCAAAATGCC
CAGGAAGCCCTCATTGTGACATGGCAGAAAAAGAAAGCTGTAAGCCCAGAAAACATGGTCACCTTCAGCGAGAAC
CATGGGGTGGTGATCCAGCCTGCCTATAAGGACAAGATAAACATTACCCAGCTGGGACTCCAAAACTCAACCATC
ACCTTCTGGAATATCACCCTGGAGGATGAAGGGTGTTACATGTGTCTCTTCAATACCTTTGGTTTTGGGAAGATC
TCAGGAACGGCCTGCCTCACCGTCTATGTACAGCCCATAGTATCCCTTCACTACAAATTCTCTGAAGACCACCTA
AATATCACTTGCTCTGCCACTGCCCGCCCAGCCCCCATGGTCTTCTGGAAGGTCCCTCGGTCAGGGATTGAAAAT
AGTACAGTGACTCTGTCTCACCCAAATGGGACCACGTCTGTTACCAGCATCCTCCATATCAAAGACCCTAAGAAT
CAGGTGGGGAAGGAGGTGATCTGCCAGGTGCTGCACCTGGGGACTGTGACCGACTTTAAGCAAACCGTCAACAAA
GGCTATTGGTTTTCAGTTCCGCTATTGCTAAGCATTGTTTCCCTGGTAATTCTTCTCGTCCTAATCTCAATCTTA
CTGTACTGGAAACGTCACCGGAATCAGGACCGAGAGCCCTAACTAAGTCACACAGCACCCTGAAAGTGATTCCCT
GGTCTACTTGAATTTGACACAAGAGAAAAGCAGGAGGAAAAGGGGCCATTCTCCAAAGGACCTGAAAGAGCAAAA
GAGGTGGGAGCGAAAGCCTTAAGGATCCCACGACTTTTTACTGCCATCTGAGCTACTCAGTGTTTGAATCCCAAG
AGGAAGTCAGTTTACCTCTCAGGTCTGTTGTAGGACTTGATTTTGTAAAGCAATGCCATGTTATGTGGTTGAAAG
GGCACTGGACTTAGTATCAGGAGCACTGAGCTCACAGACTGACTTGGGCTCCTACTGGTGGGGACCTCTGTTAGT
CACTTTACCTCATCCAAAGTATAAAGGAATTGGACCAAATAATTTACCACATAGCTCTAAAACTTAATTTAAAAT
GTAATTCCAGAAAAAAAAAAGGGAATAAGCAAAGGGGGAAGAATTGAAAGAGAGAGAGAAGAAAGAATACAGAGAG
CTTACCTTTTGCCTTTCTGTTGATGTTACATCTCTTCTTCCTATGTTCTTAGGTCTATGAGTCTGTTTCCCCATC
ATTTGGTATCTAGTCCAGTTCCTGCTTACTGCTTTGCTAATAGCTGGCCTTGCTAGAATCCTTGGTTCACTGCTG
TTCTTCATGTGCTTCTATGAGATTTACTCCAACACAAATAGGACTGAATTTATTGTGAAGTAACATTGGCAATCT
TAACTTATTCATTTAACTTATTTTTATAGCTAGATAAATATTGTTAGTCTTAGACAATAGCTCACATTTTTTGAG
AAGCATGCCCTCCCTGTCCATTTGTCTTATAACATGACCCAGCCCTATTTTACGTCATTCTAAATTCAGCCTCAT
ATAATGAAAATACATTATGAAAACAGATGTTTAGGAGATTTCCTGTATAGCAGTCAGCCAATTCATATGCTTTGT
CTCTGCTGGCTTCTTTTTCCATGCGTTAACTTTTCCCAATAGCAGAGGAGGCAAATATGAGCATACAATCCCTTT
GTTCTAAAGATATTGTTCCAGCTAGTGGAATGATGTTGAATCTTTAATAACCATAATTAGTTGCTTTTTCAGTAT
CTTCTGCTTTGTCTGTGTCTATCCAGTGGCCTAGGAATTAAAGTGTAAGTTGTTTTTGCTGTTAAATTGGATATT
TATATATATATATATAGCAAGATTTTCATGTGTTATTTAATTCTGTATTGTTTCTTATATTTGTAGTAAAATATT
GAACAATTAAAAGTGTTGACTCCAAAAAAAAAAAAAAAA

FIGURE 2285

MERLVIRMPFCHLSTYSLVWVMAAVVLCTAQVQVVTQDEREQLYTPASLKCSLQNAQEALIVTWQKKKAVSPENM
VTFSENHGVVIQPAYKDKINITQLGLQNSTITFWNITLEDEGCYMCLFNTFGFGKISGTACLTVYVQPIVSLHYK
FSEDHLNITCSATARPAPMVFWKVPRSGIENSTVTLSHPNGTTSVTSILHIKDPKNQVGKEVICQVLHLGTVTDF
KQTVNKGYWFSVPLLLSIVSLVILLVLISILLYWKRHRNQDREP

FIGURE 2286

CTCCACTGACCGTCCCGACGATGCTACGCGCGCCCGGCTGCCTCCTCCGGACCTCCGTAGCGCCTGCCGCGGCCC
TGGCTGCGGCGCTGCTCTCGTCGCTTGCGCGCTGCTCTCTTCTAGAGCCGAGGGACCCGGTGGCCTCGTCGCTCA
GCCCCTATTTCGGCACCAAGACTCGCTACGAGGATGTCAACCCCGTGCTATTGTCGGGCCCCGAGGCTCCGTGGC
GGGACCCTGAGCTGCTGGAGGGGACCTGCACCCCGGTGCAGCTGGTCGCCCTCATTCGCCACGGCACCCGCTACC
CCACGGTCAAACAGATCCGCAAGCTGAGGCAGCTGCACGGGTTGCTGCAGGCCCGCGGGTCCAGGGATGGCGGGG
CTAGTAGTACCGGCAGCCGCGACCTGGGTGCAGCGCTGGCCGACTGGCCTTTGTGGTACGCGGACTGGATGGACG
GGCAGCTAGTAGAAAAGGGACGGCAGGATATGCGACAGCTGGCGCTGCGTCTGGCCTCGCTCTTCCCGGCCCTTT
TCAGCCGTGAGAACTACGGCCGCCTGCGGCTCATCACCAGTTCCAAGCACCGCTGCATGGATAGCAGCGCCGCCT
TCCTGCAGGGGCTGTGGCAGCACTACCACCCTGGCTTGCCGCCGCCGGACGTCGCAGATATGGAGTTTGGACCTC
CAACAGTTAATGATAAACTAATGAGATTTTTTGATCACTGTGAGAAGTTTTTAACTGAAGTAGAAAAAAATGCTA
CAGCTCTTTATCACGTGGAAGCCTTCAAAACTGGACCAGAAATGCAGAACATTTTAAAAAAAGTTGCAGCTACTT
TGCAAGTGCCAGTAAATGATTTAAATGCAGATTTAATTCAAGTAGCCTTTTTCACCTGTTCATTTGACCTGGCAA
TTAAAGGTGTTAAATCTCCTTGGTGTGATGTTTTTGACATAGATGATGCAAAGGTATTAGAATATTTAAATGATC
TGAAACAATATTGGAAAAGAGGATATGGGTATACTATTAACAGTCGATCCAGCTGCACCTTGTTTCAGGATATCT
TTCAGCACTTGGACAAAGCAGTTGAACAGAAACAAAGGTCTCAGCCAATTTCTTCTCCAGTCATCCTCCAGTTTG
GTCATGCAGAGACTCTTCTTCCACTGCTTTCTCTCATGGGCTACTTCAAAGACAAGGAACCCCTAACAGCGTACA
ATTACAAAAAACAAATGCATCGGAAGTTCCGAAGTGGTCTCATTGTACCTTATGCCTCGAACCTGATATTTGTGC
TTTACCACTGTGAAAATGCTAAGACTCCTAAAGAACAATTCCGAGTGCAGATGTTATTAAATGAAAAGGTGTTAC
CTTTGGCTTACTCACAAGAAACTGTTTCATTTTATGAAGATCTGAAGAACCACTACAAGGACATCCTTCAGAGTT
GTCAAACCAGTGAAGAATGTGAATTAGCAAGGGCTAACAGTACATCTGATGAACTATGAGTAACTGAAGAACATT
TTTAATTCTTTAGGAATCTGCAATGAGTGATTACATGCTTGTAATAGGTAGGCAATTCCTTGATTACAGGAAGCT
TTTATATTACTTGAGTATTTCTGTCTTTTCACAGAAAAACATTGGGTTTCTCTCTGGGTTTGGACATGAAATGTA
AGAAAAGATTTTTCACTGGAGCAGCTCTCTTAAGGAGAAACAAATCTATTTAGAGAAACAGCTGGCCCTGCAAAT
GTTTACAGAAATGAAATTCTTCCTACTTATATAAGAAATCTCACACTGAGATAGAATTGTGATTTCATAATAACA
CTTGAAAAGTGCTGGAGTAACAAAATATCTCAGTTGGACCATCCTTAACTTGATTGAACTGTCTAGGAACTTTAC
AGATTGTTCTGCAGTTCTCTCTTCTTTTCCTCAGGTAGGACAGCTCTAGCATTTTCTTAATCAGGAATATTGTGG
TAAGCTGGGAGTATCACTCTGGAAGAAAGTAACATCTCCAGATGAGAATTTGAAACAAGAAACAGAGTGTTGTAA
AAGGACACCTTCACTGAAGCAAGTCGGAAAGTACAATGAAAATAAATATTTTTGGTATTTATTTATGAAATATTT
GAACATTTTTTCAATAATTCCTTTTTACTTCTAGGAAGTCTCAAAAGACCATCTTAAATTATTATATGTTTGGAC
AATTAGCAACAAGTCAGATAGTTAGAATCGAAGTTTTTCAAATCCATTGCTTAGCTAACTTTTTCATTCTGTCAC
TTGGCTTCGATTTTTATATTTTCCTATTATATGAAATGTATCTTTTGGTTGTTTGATTTTTCTTTCTTTCTTTGT
AAATAGTTCTGAGTTCTGTCAAATGCCGTGAAAGTATTTGCTATAATAAAGAAAATTCTTGTGACTTTAAAAAAA
AAAAAAAAAAAA

FIGURE 2287

MLRAPGCLLRTSVAPAAALAAALLSSLARCSLLEPRDPVASSLSPYFGTKTRYEDVNPVLLSGPEAPWRDPELLE
GTCTPVQLVALIRHGTRYPTVKQIRKLRQLHGLLQARGSRDGGASSTGSRDLGAALADWPLWYADWMDGQLVEKG
RQDMRQLALRLASLFPALFSRENYGRLRLITSSKHRCMDSSAAFLQGLWQHYHPGLPPPDVADMEFGPPTVNDKL
MRFFDHCEKFLTEVEKNATALYHVEAFKTGPEMQNILKKVAATLQVPVNDLNADLIQVAFFTCSFDLAIKGVKSP
WCDVFDIDDAKVLEYLNDLKQYWKRGYGYTINSRSSCTLFQDIFQHLDKAVEQKQRSQPISSPVILQFGHAETLL
PLLSLMGYFKDKEPLTAYNYKKQMHRKFRSGLIVPYASNLIFVLYHCENAKTPKEQFRVQMLLNEKVLPLAYSQE
TVSFYEDLKNHYKDILQSCQTSEECELARANSTSDEL

FIGURE 2288

TCCCAGCCTTCCCATCCCCCCACCGAAAGCAAATCATTCAACGACCCCCGACCCTCCGACGGCAGGAGCCCCCCG
ACCTCCCAGGCGGACCGCCCTTCCCTCCCCGCGCGGGTTCCGGGCCCGGCGAGAGGGCGCGACGACAGCCGAGGC
CATGGAGGTGACGGCGGACCAGCCGCGCTGGGTGAGCCACCACCACCCCGCCGTGCTCAACGGGCAGCACCCGGA
CACGCACCACCCGGGCCTCAGCCACTCCTACATGGACGCGGCGCAGTACCCGCTGCCGGAGGAGGTGGATGTGCT
TTTTAACATCGACGGTCAAGGCAACCACGTCCCGCCCTACTACGGAAACTCGGTCAGGGCCACGGTGCAGAGGTA
CCCTCCGACCCACCACGGGAGCCAGGTGTGCCGCCCGCCTCTGCTTCATGGATCCCTACCCTGGCTGGACGGCGG
CAAAGCCCTGGGCAGCCACCACACCGCCTCCCCCTGGAATCTCAGCCCCTTCTCCAAGACGTCCATCCACCACGG
CTCCCCGGGGCCCCTCTCCGTCTACCCCCCGGCCTCGTCCTCCTCCTTGTCGGGGGGCCACGCCAGCCCGCACCT
CTTCACCTTCCCGCCCACCCCGCCGAAGGACGTCTCCCCGGACCCATCGCTGTCCACCCCAGGCTCGGCCGGCTC
GGCCCGGCAGGACGAGAAAGAGTGCCTCAAGTACCAGGTGCCCCTGCCCGACAGCATGAAGCTGGAGTCGTCCCA
CTCCCGTGGCAGCATGACCGCCCTGGGTGGAGCCTCCTCGTCGACCCACCACCCCATCACCACCTACCCGCCCTA
CGTGCCCGAGTACAGCTCCGGACTCTTCCCCCCCAGCAGCCTGCTGGGCGGCTCCCCCACCGGCTTCGGATGCAA
GTCCAGGCCCAAGGCCCGGTCCAGCACAGGCAGGGAGTGTGTGAACTGTGGGGCAACCTCGACCCCACTGTGGCG
GCGAGATGGCACGGGACACTACCTGTGCAACGCCTGCGGGCTCTATCACAAAATGAACGGACAGAACCGGCCCCT
CATTAAGCCCAAGCGAAGGCTGTCTGCAGCCAGGAGAGCAGGGACGTCCTGTGCGAACTGTCAGACCACCACAAC
CACACTCTGGAGGAGGAATGCCAATGGGGACCCTGTCTGCAATGCCTGTGGGCTCTACTACAAGCTTCACAATAT
TAACAGACCCCTGACTATGAAGAAGGAAGGCATCCAGACCAGAAACCGAAAAATGTCTAGCAAATCCAAAAAGTG
CAAAAAAGTGCATGACTCACTGGAGGACTTCCCCAAGAACAGCTCGTTTAACCCGGCCGCCCTCTCCAGACACAT
GTCCTCCCTGAGCCACATCTCGCCCTTCAGCCACTCCAGCCACATGCTGACCACGCCCACGCCGATGCACCCGCC
ATCCAGCCTGTCCTTTGGACCACACCACCCCTCCAGCATGGTCACCGCCATGGGTTAGAGCCCTGCTCGATGCTC
ACAGGGCCCCCAGCGAGAGTCCCTGCAGTCCCTTTCGACTTGCATTTTTGCAGGAGCAGTATCATGAAGCCTAAA
CGCGATGGATATATGTTTTTGAAGGCAGAAAGCAAAATTATGTTTGCCACTTTGCAAAGGAGCTCACTGTGGTGT
CTGTGTTCCAACCACTGAATCTGGACCCCATCTGTGAATAAGCCATTCTGACTCATATCCCCTATTTAACAGGGT
CTCTAGTGCTGTGAAAAAAAAAAATCCTGAACATTGCATATAACTTATATTGTAAGAAATACTGTACAATGACTT
TATTGCATCTGGGTAGCTGTAAGGCATGAAGGATGCCAAGAAGTTTAAGGAATATGGGAGAAATAGTGTGGAAAT
TAAGAAGAAACTAGGTCTGATATTCAAATGGACAAACTGCCAGTTTTGTTTCCTTTCACTGGCCACAGTTGTTTG
ATGCATTAAAAGAAAATAAAAAAAAGAAAAAAGAGAAAAGAAAAAAAAAGAAAAAAGTTGTAGGCGAATCATTTG
TTCAAAGCTGTTGGCCCTCTGCAAAGGAAATACCAGTTCTGGGCAATCAGTGTTACCGTTCACCAGTTGCCATTG
AGGGTTTCAGAGAGCCTTTTTCTAGGCCTACATGCTTTGTGAACAAGTCCCTGTAATTGTTGTTTGTATGTATAA
TTCAAAGCACCAAAATAAGAAAAGATGTAGATTTATTTCATCATATTATACAGACCGAACTGTTGTATAAATTTA
TTTACTGCTAGTCTTAAGAACTGCTTTCTTTCGTTTGTTTGTTTCAATATTTTCCTTCTCTCTCAATTTTCGGTT
GAATAAACTAGATTACATTCAGTTGGCAAAAAAAAAAAAA

FIGURE 2289

MEVTADQPRWVSHHHPAVLNGQHPDTHHPGLSHSYMDAAQYPLPEEVDVLFNIDGQGNHVPPYYGNSVRATVQRY
PPTHHGSQVCRPPLLHGSLPWLDGGKALGSHHTASPWNLSPFSKTSIHHGSPGPLSVYPPASSSSLSGGHASPHL
FTFPPTPPKDVSPDPSLSTPGSAGSARQDEKECLKYQVPLPDSMKLESSHSRGSMTALGGASSSTHHPITTYPPY
VPEYSSGLFPPSSLLGGSPTGFGCKSRPKARSSTGRECVNCGATSTPLWRRDGTGHYLCNACGLYHKMNGQNRPL
IKPKRRLSAARRAGTSCANCQTTTTTLWRRNANGDPVCNACGLYYKLHNINRPLTMKKEGIQTRNRKMSSKSKKC
KKVHDSLEDFPKNSSFNPAALSRHMSSLSHISPFSHSSHMLTTPTPMHPPSSLSFGPHHPSSMVTAMG

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FIGURE 2290

GCACGAGGCGAGCTGGAGTGATCTTTATTCACAATGTCTTTACAAAGGCTCCTGCAACACAGCAGCAATGGCAAT
TTGGCGGACTTCTGCGCTGGGCCAGCGTATAGCTCTTACTCCACACTCACCGGCAGCCTTACGATGAACGATAAT
AGAAGGATTCAAATGCTAGCAGACACGGTGGCTACTCTGCCTCGGGGACGAAAGCAGCTTGCTTTGACCAGATCA
AGTTCTTTAAGTGACTTTTCCTGGTCTCAAAGAAAGCTTGTTACTGTGGAGAAGCAGGATAATGAAACATTTGGA
TTTGAAATTCAGTCTTACAGGCCCCAGAATCAGAATGCCTGCTCCTCGGAAATGTTCACTTTGATATGCAAAATA
CAGGAGGACAGCCCAGCTCACTGTGCTGGCCTGCAAGCTGGTGATGTCCTTGCAAATATCAATGGTGTGAGCACA
GAAGGTTTTACCTACAAACAAGTCGTTGACCTGATCAGATCGTCCGGAAACCTGCTAACGATAGAGACTCTTAAT
GGAACAATGATTCTGAAAAGAACGGAGCTTGAAGCAAAGCTGCAGGTTTTAAAGCAAACTTTGAAACAAAAATGG
GTGGAGTACAGATCTCTGCAGTTACAGGAACATCGTCTGCTTCATGGTGATGCAGCTAATTGCCCCAGTTTGGAA
AACATGGACTTGGATGAATTGTCTTTGTTTGGACCCCTGCCTGGGCCAGGCCCAGCCCTTGTGGACCGGAATCGA
TTATCCAGTGAGAGCAGCTGTAAGAGCTGGCTGAGCTCCATGACGATGGACAGTGAAGATGGCTACCAGACGTGT
GTGTCTGAGGACTCCAGCAGGGGTGCCTTCAGTCGGCAGACGAGTACAGATGATGAGTGCTTTATCCCCAAGGAG
GGGGATGATTTTCTGAGGAGGTCATCTTCAAGGAGGAACCGGAGCATCAGTAACACCAGCAGCGGATCCATGTCT
CCCTTGTGGGAGGGCAACTTATCAAGCATGTTTGGGACCCTGCCCCGGAAGAGCAGAAAGGGAAGTGTCCGAAAG
CAACTCTTGAAATTTATCCCTGGCCTTCATCGTGCTGTGGAAGAGGAAGAAAGTCGCTTTTGACGGATTGTGGTG
TCCTTTCAAATTAGCTTATTTCACAAATATCTCTAGACTCACCCAGATCCCAGCTTGGTGGGAAAGTGCAGAAGA
ATTGCAAAACTGACATCCCATTTCACAGCAATAGTGACCTTTATTTAAATTGTTGTGTTATAGTTTATGCTTCTT
AAATCATTTTTCAACCTAAACAGCCAATTTCTAAGCAGACAGGAAAACTAAATAATAAGTTAATTAATATAACAA
AGATGCAGGTTCCTGCTCATTCCAGTAATGTCTTTGAAAGCAAAACTAATATTTATTTTCTAGATTATCCCTGTG
AATAATTGAGAACTTTTTGGAGTCAAGTATGAATAAAGGTGTGGCAGAATATAATAATCTGGACTATTTTCTATA
GGATAATTGCTGGGTTATAAAATCTTAGGTTTGCTTATGCCCAGTAGCTCCTGCGGAGGCTTAATAATAGGCAAT
TTTGAATTTGTTCAAACCTGTAATGGCTTGTAAACAAAGATGACCATCAGCTGTTTCTCACATCTATAGTGACAA
TAAAGCGGGAAGTATAAGATTTAATAGGAGGGGTTAAGGTTCATGAGAACCATGGAAAGATGTGGTCTGAGATGG
GTGCTGCAAAGATCATAATAAAGTCATTTTTATAGACAGTCTAAACAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2291

MSLQRLLQHSSNGNLADFCAGPAYSSYSTLTGSLTMNDNRRIQMLADTVATLPRGRKQLALTRSSSLSDFSWSQR
KLVTVEKQDNETFGFEIQSYRPQNQNACSSEMFTLICKIQEDSPAHCAGLQAGDVLANINGVSTEGFTYKQVVDL
IRSSGNLLTIETLNGTMILKRTELEAKLQVLKQTLKQKWVEYRSLQLQEHRLLHGDAANCPSLENMDLDELSLFG
PLPGPGPALVDRNRLSSESSCKSWLSSMTMDSEDGYQTCVSEDSSRGAFSRQTSTDDECFIPKEGDDFLRRSSSR
RNRSISNTSSGSMSPLWEGNLSSMFGTLPRKSRKGSVRKQLLKFIPGLHRAVEEEESRF

FIGURE 2292A

CCGTTCACGCGTTCGGTCCTCCTTGGCTGACTCACCGCCCTCGCCGCCGCACCATGGACGCCCCCAGGCAGGTGG
TCAACTTTGGGCCTGGTCCCGCCAAGCTGCCGCACTCAGTGTTGTTAGAGATACAAAAGGAATTATTAGACTACA
AAGGAGTTGGCATTAGTGTTCTTGAAATGAGTCACAGGTCATCAGATTTTGCCAAGATTATTAACAATACAGAGA
ATCTTGTGCGGGAATTGCTAGCTGTTCCAGACAACTATAAGGTGATTTTTCTGCAAGGAGGTGGGTGCGGCCAGT
TCAGTGCTGTCCCCTTAAACCTCATTGGCTTGAAAGCAGGAAGGTGTGCTGACTATGTGGTGACAGGAGCTTGGT
CAGCTAAGGCCGCAGAAGAAGCCAAGAAGTTTGGGACTATAAATATCGTTCACCCTAAACTTGGGAGTTATACAA
AAATTCCAGATCCAAGCACCTGGAACCTCAACCCAGATGCCTCCTACGTGTATTATTGCGCAAATGAGACGGTGC
ATGGTGTGGAGTTTGACTTTATACCCGATGTCAAGGGAGCAGTACTGGTTTGTGACATGTCCTCAAACTTCCTGT
CCAAGCCAGTGGATGTTTCCAAGTTTGGTGTGATTTTTGCTGGTGCCCAGAAGAATGTTGGCTCTGCTGGGGTCA
CCGTGGTGATTGTCCGTGATGACCTGCTGGGGTTTGCCCTCCGAGAGTGCCCCTCGGTCCTGGAATACAAGGTGC
AGGCTGGAAACAGCTCCTTGTACAACACGCCTCCATGTTTCAGCATCTACGTCATGGGCTTGGTTCTGGAGTGGA
TTAAAAACAATGGAGGTGCCGCGGCCATGGAGAAGCTTAGCTCCATCAAATCTCAAACAATTTATGAGATTATTG
ATAATTCTCAAGGATTCTACGTTTGTCCAGTGGAGCCCCAAAATAGAAGCAAGATGAATATTCCATTCCGCATTG
GCAATGCCAAAGGAGATGATGCTTTAGAAAAAAGATTTCTTGATAAAGCTCTTGAACTCAATATGTTGTCCTTGA
AAGGGCATAGGTCTGTGGGAGGCATCCGGGCCTCTCTGTATAATGCTGTCACAATTGAAGACGTTCAGAAGCTGG
CCGCCTTCATGAAAAAATTTTTGGAGATGCATCAGCTATGAACACATCCTAACCAGGATATACTCTGTTCTTGAA
CAACATACAAAGTTTAAAGTAACTTGGGGATGGCTACAAAAAGTTAACACAGTATTTTTCTCAAATGAACATGTT
TATTGCAGATTCTTCTTTTTTGAAAGAACAACAGCAAAACATCCACAACTCTGTAAAGCTGGTGGGACCTAATGT
CACCTTAATTCTGACTTGAACTGGAAGCATTTTAAGAAATCTTGTTGCTTTTCTAACAAATTCCCGCGTATTTTG
CCTTTGCTGCTACTTTTTCTAGTTAGATTTCAAACTTGCCTGTGGACTTAATAATGCAAGTTGCGATTAATTATT
TCTGGAGTCATGGGAACACACAGCACAGAGGGTAGGGGGGCCCTCTAGGTGCTGAATCTACACATCTGTGGGGTC
TCCTGGGTTCAGTGGCTGTTGATTCAAGGTCAACATTGACCATTGGAGGAGTGGTTTAAGAGTGCCAGGCGAAGG
GCAAACTGTAGATCGATCTTTATGCTGTTATTACAGGAGAAGTGACATACTTTATATATGTTTATATTAGCAAGG
TCTGTTTTTAATACCATATACTTTATATTTCTATACATTTATATTTCTAATAATACAGTTATCACTGATATATGT
AGACACTTTTAGAATTTATTAAATCCTTGACCTTGTGCATTATAGCATTCCATTAGCAAGAGTTGTACCCCCTCC
CCAGTCTTCGCCTTCCTCTTTTTAAGCTGTTTTATGAAAAAGACCTAGAAGTTCTTGATTCATTTTTACCATTCT
TTCCATAGGTAGAAGAGAAAGTTGATTGGTTGGTTGTTTTTCAATTATGCCATTAAACTAAACATTTCTGTTAAA
TTACCCTATCCTTTGTTCTCTACTGTTTTCTTTGTAATGTATGACTACGAGAGTGATACTTTGCTGAAAAGTCTT
TCCCCTATTGTTTATCTATTGTCAGTATTTTATGTTGAATATGTAAAGAACATTAAAGTCCTAAACACGGTTCTA
AGCTAAGTGAAGGGGAAGATCTGAGAGCGTGCTGTTTGTGGCTGTTGATGCATATTCGTGATGTAACAGGTCCTG
GGGCCTCACTTTACCCCATTTGTAAAATGGGGCTAATGTCACCTGCCTCTTACCTACCTCAGAGGGATTTGGTGA
AGCAAACTGTTAATCTTCGAAAACGACCATTTCACTTCTTGGATATCAAGTGCTAACCCAGTATGTTCTTCTTTT
TTATGTAAGGGACAGCTTTCTCCACAGAGTCCTTTCTGCTGGTGAGGACAGCATTTCTGAGCAGGGCTTTGTTCT
CTATGTGCATTAGGACTTTTATCATGCCCTTGTTCTGTGTGTAGTTACTTGACAGCATCAAATGCCGCCTCTTCC
TAATGTCCTTCAAGTTTTCATGAACTAGCAACCCCACCTTCCACCATGGTTCTGGGCGCCTGATTTTGCTGTGAC
TCCCAGACCCAGCCACTGTTTCTGCCACCCTGTAACAGGCCATTAAAGCTCCCCAGTGTTCAGCCTCCTTCACTC
CCTTGTTTTCCCTGTTGCTATGTGTCACCTGGGCCCTACAGACAGGGGCACACGCTTATGGATGTGTGTACCATT
GAGATGAGAATGGGTAGATGGAACGGAGACCATCAAGCCACACCCCCTTCTTAAAACTGGGGACATGAGCCTGAG
CAGAAAGGGTGAAGAAGAGCCATGGGACACAGAGTTGACCCAGCCAGGGGGAAAGCCCAGCTCTCTTTAAACCAG
CTAAGCCATTCCAGTCTCCTGTGAAGCCAAAAGGGACCAGGAACCGTGCAAAGGAAACTGGAAACTTTTCCCCGC
TGGGTAGAGCATGTTGCTGATACTCTTCTGTTTTCAAGGGAAACAATCACATTGTTTGATTCCAAATGGTAAATG
AACACTCACTATTCTTCAGGCTTCAGTAAATCTTTTTTTCTTCCTTCATATATATATACACAACACACACACACA
TATGTATATCTATACACACATGTGTGTTGTGTATATGCATGTGTGTGTGTGCGTGTGTGTATAGTTTTAGCTCCA
AGCCAAGCAAGTTTGTGTTTGGATAGAGGGGAACTTAACTATTAACTACAAGTTGTATGTCTGTGGTATCTTGAT
TTTCCCATTTCTAAAGATGAATTTCACAAAGCCATAAAGCGTGAAATTAGAGCTGGACTTAAGACTCATTGGCCG
ACCATCCTGTGTCCTGGCCTGGCCCTGCAGTAAGAAGCGTGTCTGGGTCTGGAGAAGGGTGCTTCCGAGAGTGTG
CAGGTGGCCCTTCCCCTTGGAGGCGAGAAGAGAGAATGTGCTGTCTATCTTCCTGGTTTTCAGTCCACAGAGTCG
GTAGACCAGGGGTTACGTGACTGGGGAAAATCTCACATCTCCTTGTCTGAAAACATTTCCCCTGCTGTTCTCTTT

FIGURE 2292B

CTAACATGTTGTGGTAAATCTGTTCAGATACTGCTCATCTGACTGTTTTGTACATGTGACAATTGCCTTAAAACC
TAGCACAGTCCTCAGAAATGAATACCGTGTTTCCACTGGAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2293

MDAPRQVVNFGPGPAKLPHSVLLEIQKELLDYKGVGISVLEMSHRSSDFAKIINNTENLVRELLAVPDNYKVIFL
QGGGCGQFSAVPLNLIGLKAGRCADYVVTGAWSAKAAEEAKKFGTINIVHPKLGSYTKIPDPSTWNLNPDASYVY
YCANETVHGVEFDFIPDVKGAVLVCDMSSNFLSKPVDVSKFGVIFAGAQKNVGSAGVTVVIVRDDLLGFALRECP
SVLEYKVQAGNSSLYNTPPCFSIYVMGLVLEWIKNNGGAAAMEKLSSIKSQTIYEIIDNSQGFYVCPVEPQNRSK
MNIPFRIGNAKGDDALEKRFLDKALELNMLSLKGHRSVGGIRASLYNAVTIEDVQKLAAFMKKFLEMHQL

FIGURE 2294

AGGACCTGAGCTCAGCTTCCGCCCCAGCCAGGGAAGCGGCAGGGGAAAGCACCGGCTCCAGGCCAGCGTGGGCCG
CTCTCTCGCTCGGTGCCCGCCGCCATGTGGGCCGTCCTGAGGTTAGCCCTGCGGCCGTGTGCCCGCGCCTCTCCC
GCCGGGCCGCGCGCCTATCACGGGGACTCGGTGGCCTCGCTGGGCACCCAGCCGGACTTGGGCTCTGCCCTCTAC
CAGGAGAACTACAAGCAGATGAAAGCACTAGTAAATCAGCTCCATGAACGAGTGGAGCATATAAAACTAGGAGGT
GGTGAGAAAGCCCGAGCACTTCACATATCAAGAGGAAAACTATTGCCCAGAGAAAGAATTGACAATCTCATAGAC
CCAGGGTCTCCATTTCTGGAATTATCCCAGTTTGCAGGTTACCAGTTATATGACAATGAGGAGGTGCCAGGAGGT
GGCATTATTACAGGCATTGGAAGAGTATCAGGAGTAGAATGCATGATTATTGCCAATGATGCCACCGTCAAAGGA
GGTGCCTACTACCCAGTGACTGTGAAAAAACAATTACGGGCCCAAGAAATTGCCATGCAAAACAGGCTCCCCTGC
ATCTACTTAGTTGATTCGGGAGGAGCATACTTACCTCGACAAGCAGATGTGTTTCCAGATCGAGACCACTTTGGC
CGTACATTCTATAATCAGGCAATTATGTCTTCTAAAAATATTGCACAGATCGCAGTGGTCATGGGCTCCTGCACC
GCAGGAGGAGCCTATGTGCCTGCCATGGCTGATGAAAACATCATTGTACGCAAGCAGGGTACCATTTTCTTGGCA
GGACCCCCCTTGGTTAAAGCGGCAACTGGGGAAGAAGTATCTGCTGAGGATCTTGGAGGTGCTGATCTTCATTGC
AGAAAGTCTGGAGTAAGTGACCACTGGGCTTTGGATGATCATCATGCCCTTCACTTAACTAGGAAGGTTGTGAGG
AATCTAAATTATCAGAAGAAATTGGATGTCACCATTGAACCTTCTGAAGAGCCTTTATTTCCTGCTGATGAATTG
TATGGAATAGTTGGTGCTAACCTTAAGAGGAGCTTTGATGTCCGAGAGGTCATTGCTAGAATCGTGGATGGAAGC
AGATTCACTGAGTTCAAAGCCTTTTATGGAGACACATTAGTTACAGGATTTGCTCGAATATTTGGGTACCCAGTA
GGTATCGTTGGAAACAACGGAGTTCTCTTTTCTGAATCTGCAAAAAAGGGTACTCACTTTGTCCAGTTATGCTGC
CAAAGAAATATTCCTCTGCTGTTCCTTCAAAACATTACTGGATTTATGGTTGGTAGAGAGTATGAAGCTGAAGGA
ATTGCCAAGGATGGTGCCAAGATGGTGGCCGCTGTGGCCTGTGCCCAAGTGCCTAAGATAACCCTCATCATTGGG
GGCTCCTATGGAGCCGGAAACTATGGGATGTGTGGCAGAGCGTATAGCCCAAGATTTCTCTACATTTGGCCAAAT
GCTCGTATCTCAGTGATGGGAGGAGAGCAGGCAGCCAATGTGTTGGCCACGATAACAAAGGACCAAAGAGCCCGG
GAAGGAAAGCAGTTCTCCAGTGCTGATGAAGCGGCTTTAAAAGAGCCCATCATTAAGAAGTTTGAAGAGGAAGGA
AACCCTTACTATTCCAGCGCAAGGGTATGGGATGATGGGATCATTGATCCAGCAGACACCAGACTGGTCTTGGGT
CTCAGTTTTAGTGCAGCCCTCAACGCACCAATAGAGAAGACTGACTTCGGTATCTTCAGGATGTAACTGGAATAA
AGGATGTTTTCTGTTGGACATGTACTGAAAATTAACACATGTAGTAGCCTTAAAATTTTAGACTTCTCGAACATG
AGGCTGTTACAGTAATTTTTTTAACACTGTGCATTGTACTTTTCTACCTTAAAAAAATCAGTGAGGATATTTATT
TAATGAACATCAATTCCTTTTAAATTTTCTTAGAGAAATTTCTCTGTGGCTCAGTTTTACCACCCATAAAGCGGA
GACAGTAATTTATGGTTATCCTTTCTGACCCACAAAGTATGAAAAGTTCTGTAATCTGTAAACTCAGTTCTGTAA
TCTGTATTATTGAGATGATTAATATAAAGTTGTATTTTCACTGAAATGATTGTTTTGCTGGTTATGCTTGGTGAT
ATTTTAGCGGGCTTATTTTTGAAAGGCATCTGTTACTTCAGTTGCATAAAGTGCCCTCACACTGCTGTGCAGCCA
TTACCACCATTCATCTCCAGAATTTGTTCTCAGTCCCAAACTGAAACTATACCATTCAAACAACAGCGCTCCCCA
TTTC

FIGURE 2295

MWAVLRLALRPCARASPAGPRAYHGDSVASLGTQPDLGSALYQENYKQMKALVNQLHERVEHIKLGGGEKARALH
ISRGKLLPRERIDNLIDPGSPFLELSQFAGYQLYDNEEVPGGGIITGIGRVSGVECMIIANDATVKGGAYYPVTV
KKQLRAQEIAMQNRLPCIYLVDSGGAYLPRQADVFPDRDHFGRTFYNQAIMSSKNIAQIAVVMGSCTAGGAYVPA
MADENIIVRKQGTIFLAGPPLVKAATGEEVSAEDLGGADLHCRKSGVSDHWALDDHHALHLTRKVVRNLNYQKKL
DVTIEPSEEPLFPADELYGIVGANLKRSFDVREVIARIVDGSRFTEFKAFYGDTLVTGFARIFGYPVGIVGNNGV
LFSESAKKGTHFVQLCCQRNIPLLFLQNITGFMVGREYEAEGIAKDGAKMVAAVACAQVPKITLIIGGSYGAGNY
GMCGRAYSPRFLYIWPNARISVMGGEQAANVLATITKDQRAREGKQFSSADEAALKEPIIKKFEEEGNPYYSSAR
VWDDGIIDPADTRLVLGLSFSAALNAPIEKTDFGIFRM

FIGURE 2296

ACTTTCCTGCCCCTTCCCCGGCCAAGCCCAACTCCGGATCTCGCTCTCCACCGGATCTCACCCGCCACACCCGGA
CAGGCGGCTGGAGGAGGCGGGCGTCTAAAATTCTGGGAAGCAGAACCTGGCCGGAGCCACTAGACAGAGCCGGGC
CTAGCCCAGAGACATGGAGAGTTGCTACAACCCAGGTCTGGATGGTATTATTGAATATGATGATTTCAAATTGAA
CTCCTCCATTGTGGAACCCAAGGAGCCAGCCCCAGAAACAGCTGATGGCCCCTACCTGGTGATCGTGGAACAGCC
TAAGCAGAGAGGCTTCCGATTTCGATATGGCTGTGAAGGCCCCTCCCATGGAGGACTGCCCGGTGCCTCCAGTGA
GAAGGGCCGAAAGACCTATCCCACTGTCAAGATCTGTAACTACGAGGGACCAGCCAAGATCGAGGTGGACCTGGT
AACACACAGTGACCCACCTCGTGCTCATGCCCACAGTCTGGTGGGCAAGCAATGCTCGGAGCTGGGGATCTGCGC
CGTTTCTGTGGGGCCCAAGGACATGACTGCCCAATTTAACAACCTGGGTGTCCTGCATGTGACTAAGAAGAACAT
GATGGGGACTATGATACAAAAACTTCAGAGGCAGCGGCTCCGCTCTAGGCCCCAGGGCCTTACGGAGGCCGAGCA
GCGGGAGCTGGAGCAAGAGGCCAAAGAACTGAAGAAGGTGATGGATCTGAGTATAGTGCGGCTGCGCTTCTCTGC
CTTCCTTAGAGCCAGTGATGGCTCCTTCTCCCTGCCCCTGAAGCCAGTCACCTCCCAGCCCATCCATGATAGCAA
ATCTCCGGGGGCATCAAACCTGAAGATTTCTCGAATGGACAAGACAGCAGGCTCTGTGCGGGGTGGAGATGAAGT
TTATCTGCTTTGTGACAAGGTGCAGAAAGATGACATTGAGGTTCGGTTCTATGAGGATGATGAGAATGGATGGCA
GGCCTTTGGGGACTTCTCTCCCACAGATGTGCATAAACAGTATGCCATTGTGTTCCGGACACCCCCCTATCACAA
GATGAAGATTGAGCGGCCTGTAACAGTGTTTCTGCAACTGAAACGCAAGCGAGGAGGGGACGTGTCTGATTCCAA
ACAGTTCACCTATTACCCTCTGGTGGAAGACAAGGAAGAGGTGCAGCGGAAGCGGAGGAAGGCCTTGCCCACCTT
CTCCCAGCCCTTCGGGGGTGGCTCCCACATGGGTGGAGGCTCTGGGGGTGCAGCCGGGGGCTACGGAGGAGCTGG
AGGAGGTGGCAGCCTCGGTTTCTTCCCCTCCTCCCTGGCCTACAGCCCCTACCAGTCCGGCGCGGGCCCCATGCG
GTGCTACCCGGGAGGCGGGGGCGGGGCGCAGATGGCCGCCACGGTGCCCAGCAGGGACTCCGGGGAGGAAGCCGC
GGAGCCGAGCGCCCCCTCCAGGACCCCCCAGTGCGAGCCGCAGGCCCCGGAGATGCTGCAGCGAGCTCGAGAGTA
CAACGCGCGCCTGTTCGGCCTGGCGCACGCAGCCCCGAGCCCTACTCGACTACTGCGTCACCGCGGACGCCGCGC
GCTGCTGGCGGGACAGCGCCACCTGCTGACGGCGCAGGACGAGAACGGAGACACACCACTGCACCTAGCCATCAT
CCACGGGCAGACCAGTGTCATTGAGCAGATAGTCTATGTCATCCACCACGCCCAGGACCTCGGCGTTGTCAACCT
CACCAACCACCTGCACCAGACGCCCCTGCACCTGGCGGTGATCACGGGGCAGACGAGTGTGGTGAGCTTTCTGCT
GCGGGTAGGTGCAGACCCAGCTCTGCTGGATCGGCATGGAGACTCAGCCATGCATCTGGCGCTGCGGGCAGGCGC
TGGTGCTCCTGAGCTGCTGCGTGCACTGCTTCAGAGTGGAGCTCCTGCTGTGCCCCAGCTGTTGCATATGCCTGA
CTTTGAGGGACTGTATCCAGTACACCTGGCGGTCCGAGCCCGAAGCCCTGAGTGCCTGGATCTGCTGGTGGACAG
TGGGGCTGAAGTGGAGGCCACAGAGCGGCAGGGGGGACGAACAGCCTTGCATCTAGCCACAGAGATGGAGGAGCT
GGGGTTGGTCACCCATCTGGTCACCAAGCTCCGGGCCAACGTGAACGCTCGCACCTTTGCGGGAAACACACCCCT
GCACCTGGCAGCTGGACTGGGGTACCCGACCCTCACCCGCCTCCTTCTGAAGGCTGGTGCTGACATCCATGCTGA
AAACGAGGAGCCCCTGTGCCCACTGCCTTCACCCCCTACCTCTGATAGCGACTCGGACTCTGAAGGGCCTGAGAA
GGACACCCGAAGCAGCTTCCGGGGCCACACGCCTCTTGACCTCACTTGCAGCACCTTGGTGAAGACCTTGCTGCT
AAATGCTGCTCAGAACACCATGGAGCCACCCCTGACCCCGCCCAGCCCAGCAGGGCCGGGACTGTCACTTGGTGA
TACAGCTCTGCAGAACCTGGAGCAGCTGCTAGACGGGCCAGAAGCCCAGGGCAGCTGGGCAGAGCTGGCAGAGCG
TCTGGGGCTGCGCAGCCTGGTAGACACGTACCGACAGACAACCTCACCCAGTGGCAGCCTCCTGCGCAGCTACGA
GCTGGCTGGCGGGGACCTGGCAGGTCTACTGGAGGCCCTGTCTGACATGGGCCTAGAGGAGGGAGTGAGGCTGCT
GAGGGGTCCAGAAACCCGAGACAAGCTGCCCAGCACAGAGGTGAAGGAAGACAGTGCGTACGGGAGCCAGTCAGT
GGAGCAGGAGGCAGAGAAGCTGGGCCCACCCCCTGAGCCACCAGGAGGGCTCTCGCACGGGCACCCCCAGCCTCA
GGTGACTGACCTGCTGCCTGCCCCCAGCCCCCTTCCCGGACCCCCTGTACAGCGTCCCCACCTATTTCAAATCTT
ATTTAACACCCCACACCCACCCCTCAGTTGGGACAAATAAAGGATTCTCATGGGAAGGGGAGGACCCCGAATTCC
T

FIGURE 2297

MESCYNPGLDGIIEYDDFKLNSSIVEPKEPAPETADGPYLVIVEQPKQRGFRFRYGCEGPSHGGLPGASSEKGRK
TYPTVKICNYEGPAKIEVDLVTHSDPPRAHAHSLVGKQCSELGICAVSVGPKDMTAQFNNLGVLHVTKKNMMGTM
IQKLQRQRLRSRPQGLTEAEQRELEQEAKELKKVMDLSIVRLRFSAFLRASDGSFSLPLKPVTSQPIHDSKSPGA
SNLKISRMDKTAGSVRGGDEVYLLCDKVQKDDIEVRFYEDDENGWQAFGDFSPTDVHKQYAIVFRTPPYHKMKIE
RPVTVFLQLKRKRGGDVSDSKQFTYYPLVEDKEEVQRKRRKALPTFSQPFGGGSHMGGGSGGAAGGYGGAGGGGS
LGFFPSSLAYSPYQSGAGPMRCYPGGGGGAQMAATVPSRDSGEEAAEPSAPSRTPQCEPQAPEMLQRAREYNARL
FGLAHAAPSPTRLLRHRGRRALLAGQRHLLTAQDENGDTPLHLAIIHGQTSVIEQIVYVIHHAQDLGVVNLTNHL
HQTPLHLAVITGQTSVVSFLLRVGADPALLDRHGDSAMHLALRAGAGAPELLRALLQSGAPAVPQLLHMPDFEGL
YPVHLAVRARSPECLDLLVDSGAEVEATERQGGRTALHLATEMEELGLVTHLVTKLRANVNARTFAGNTPLHLAA
GLGYPTLTRLLLKAGADIHAENEEPLCPLPSPPTSDSDSDSEGPEKDTRSSFRGHTPLDLTCSTLVKTLLLNAAQ
NTMEPPLTPPSPAGPGLSLGDTALQNLEQLLDGPEAQGSWAELAERLGLRSLVDTYRQTTSPSGSLLRSYELAGG
DLAGLLEALSDMGLEEGVRLLRGPETRDKLPSTEVKEDSAYGSQSVEQEAEKLGPPPEPPGGLSHGHPQPQVTDL
LPAPSPLPGPPVQRPHLFQILFNTPHPPLSWDK

FIGURE 2298

TTCTAGTTTGCGGTTCAGGTTTGCCGCTGCCGGCCAGCGTCCTCTGGCCATGGACACCCCGGAAAATGTCCTTCA
GATGCTTGAAGCCCACATGCAGAGCTACAAGGGCAATGACCCTCTTGGTGAATGGGAAAGATACATACAGTGGGT
AGAAGAGAATTTTCCTGAGAATAAAGAATACTTGATAACTTTACTAGAACATTTAATGAAGGAATTTTTAGATAA
GAAGAAATACCACAATGACCCAAGATTCATCAGTTATTGTTTAAAATTTGCTGAGTACAACAGTGACCTCCATCA
ATTTTTTGAGTTTCTGTACAACCATGGGATTGGAACCCTGTCATCCCCTCTGTACATTGCCTGGGCGGGGCATCT
GGAAGCCCAAGGAGAGCTGCAGCATGCCAGTGCTGTCCTTCAGAGAGGAATTCAAAACCAGGCTGAACCCAGAGA
GTTCCTGCAACAACAATACAGGTTATTTCAGACACGCCTCACTGAAACCCATTTGCCAGCTCAAGCTAGAACCTC
AGAACCTCTGCATAATGTTCAGGTTTTAAATCAAATGATAACATCAAAATCAAATCCAGGAAATAACATGGCCTG
CATTTCTAAGAATCAGGGTTCAGAGCTTTCTGGAGTGATATCTTCAGCTTGTGATAAAGAGTCAAATATGGAACG
AAGAGTGATCACGATTTCTAAATCAGAATATTCTGTGCACTCATCTTTGGCATCCAAAGTTGATGTTGAGCAGGT
TGTTATGTATTGCAAGGAGAAGCTTATTCGTGGGGAATCAGAATTTTCCTTTGAAGAATTGAGAGCCCAGAAATA
CAATCAACGGAGAAAGCATGAGCAATGGGTAAATGAAGACAGACATTATATGAAAAGGAAAGAAGCAAATGCTTT
TGAAGAACAGCTATTAAAACAGAAAATGGATGAACTTCATAAGAAGTTGCATCAGGTGGTGGAGACATCCCATGA
GGATCTGCCCGCTTCCCAGGAAAGGTCCGAGGTTAATCCAGCACGTATGGGGCCAAGTGTAGGCTCCCAGCAGGA
ACTGAGAGCGCCATGTCTTCCAGTAACCTATCAGCAGACACCAGTGAACATGGAAAAGAACCCAAGAGAGGCACC
TCCTGTTGTTCCTCCTTTGGCAAATGCTATTTCTGCAGCTTTGGTGTCCCCAGCCACCAGCCAGAGCATTGCTCC
TCCTGTTCCTTTGAAAGCCCAGACAGTAACAGACTCCATGTTTGCAGTGGCCAGCAAAGATGCTGGATGTGTGAA
TAAGAGTACTCATGAATTCAAGCCACAGAGTGGAGCAGAGATCAAAGAAGGGTGTGAAACACATAAGGTTGCCAA
CACAAGTTCTTTTCACACAACTCCAAACACATCACTGGGAATGGTTCAGGCAACGCCATCCAAAGTGCAGCCATC
ACCCACCGTGCACACAAAAGAAGCATTAGGTTTCATCATGAATATGTTTCAGGCTCCTACACTTCCTGATATTTC
TGATGACAAAGATGAATGGCAATCTCTAGATCAAAATGAAGATGCATTTGAAGCCCAGTTTCAAAAAAATGTAAG
GTCATCTGGGGCTTGGGGAGTCAATAAGATCATCTCTTCTTTGTCATCTGCTTTTCATGTGTTTGAAGATGGAAA
CAAAGAAAATTATGGATTACCACAGCCTAAAAATAAACCCACAGGAGCCAGGACCTTTGGAGAACGCTCTGTCAG
CAGACTTCCTTCAAAACCAAAGGAGGAAGTGCCTCATGCTGAAGAGTTTTTGGATGACTCAACTGTATGGGGTAT
TCGCTGCAACAAAACCCTGGCACCCAGTCCTAAGAGCCCAGGAGACTTCACATCTGCTGCACAACTTGCGTCTAC
ACCATTCCACAAGCTTCCAGTGGAGTCAGTGCACATTTTAGAAGATAAAGAAAATGTGGTAGCAAAACAGTGTAC
CCAGGCGACTTTGGATTCTTGTGAGGAAAACATGGTGGTGCCTTCAAGGGATGGAAAATTCAGTCCAATTCAAGA
GAAAAGCCCAAAACAGGCCTTGTCGTCTCACATGTATTCAGCATCCTTACTTCGTCTGAGCCAGCCTGCTGCAGG
TGGGGTACTTACCTGTGAGGCAGAGTTGGGCGTTGAGGCTTGCAGACTCACAGACACTGACGCTGCCATTGCAGA
AGATCCACCAGATGCTATTGCTGGGCTCCAAGCAGAATGGATGCAGATGAGTTCACTTGGGACTGTTGATGCTCC
AAACTTCATTGTTGGGAACCCATGGGATGATAAGCTGATTTTCAAACTTTTATCTGGGCTTTCTAAACCAGTGAG
TTCCTATCCAAATACTTTTGAATGGCAATGTAAACTTCCAGCCATCAAGCCCAAGACTGAATTTCAATTGGGTTC
TAAGCTGGTCTATGTCCATCACCTTCTTGGAGAAGGAGCCTTTGCCCAGGTGTACGAAGCTACCCAGGGAGATCT
GAATGATGCTAAAAATAAACAGAAATTTGTTTTAAAGGTCCAAAAGCCTGCCAACCCCTGGGAATTCTACATTGG
GACCCAGTTGATGGAAAGACTAAAGCCATCTATGCAGCACATGTTTATGAAGTTCTATTCTGCCCACTTATTCCA
GAATGGCAGTGTATTAGTAGGAGAGCTCTACAGCTATGGAACATTATTAAATGCCATTAACCTCTATAAAAATAC
CCCTGAAAAAGTGATGCCTCAAGGTCTTGTCATCTCTTTTGCTATGAGAATGCTTTACATGATTGAGCAAGTGCA
TGACTGTGAAATCATTCATGGAGACATTAAACCAGACAATTTCATACTTGGAAACGGATTTTTGGAACAGGATGA
TGAAGATGATTTATCTGCTGGCTTGGCACTGATTGACCTGGGTCAGAGTATAGATATGAAACTTTTTCCAAAAGG
AACTATATTCACAGCAAAGTGTGAAACATCTGGTTTTCAGTGTGTTGAGATGCTCAGCAACAAACCATGGAACTA
CCAGATCGATTACTTTGGGGTTGCTGCAACAGTATATTGCATGCTCTTTGGCACTTACATGAAAGTGAAAAATGA
AGGAGGAGAGTGTAAGCCTGAAGGTCTTTTTAGAAGGCTTCCTCATTTGGATATGTGGAATGAATTTTTTCATGT
TATGTTGAATATTCCAGATTGTCATCATCTTCCATCTTTGGATTTGTTAAGGCAAAAGCTGAAGAAAGTATTTCA
ACAACACTATACTAACAAGATTAGGGCCCTACGTAATAGGCTAATTGTACTGCTCTTAGAATGTAAGCGTTCACG
AAAATAAAATTTGGATATAGACAGTCCTTAAAAATCACACTGTAAATATGAATCTGCTCACTTTAAACCTGTTTT
TTTTTCATTTATTGTTTATGTAAATGTTTGTTAAAAATAAATCCCATGGAATATTTCCATGTAAAAAAAAA

FIGURE 2299

MDTPENVLQMLEAHMQSYKGNDPLGEWERYIQWVEENFPENKEYLITLLEHLMKEFLDKKKYHNDPRFISYCLKF
AEYNSDLHQFFEFLYNHGIGTLSSPLYIAWAGHLEAQGELQHASAVLQRGIQNQAEPREFLQQQYRLFQTRLTET
HLPAQARTSEPLHNVQVLNQMITSKSNPGNNMACISKNQGSELSGVISSACDKESNMERRVITISKSEYSVHSSL
ASKVDVEQVVMYCKEKLIRGESEFSFEELRAQKYNQRRKHEQWVNEDRHYMKRKEANAFEEQLLKQKMDELHKKL
HQVVETSHEDLPASQERSEVNPARMGPSVGSQQELRAPCLPVTYQQTPVNMEKNPREAPPVVPPLANAISAALVS
PATSQSIAPPVPLKAQTVTDSMFAVASKDAGCVNKSTHEFKPQSGAEIKEGCETHKVANTSSFHTTPNTSLGMVQ
ATPSKVQPSPTVHTKEALGFIMNMFQAPTLPDISDDKDEWQSLDQNEDAFEAQFQKNVRSSGAWGVNKIISSLSS
AFHVFEDGNKENYGLPQPKNKPTGARTFGERSVSRLPSKPKEEVPHAEEFLDDSTVWGIRCNKTLAPSPKSPGDF
TSAAQLASTPFHKLPVESVHILEDKENVVAKQCTQATLDSCEENMVVPSRDGKFSPIQEKSPKQALSSHMYSASL
LRLSQPAAGGVLTCEAELGVEACRLTDTDAAIAEDPPDAIAGLQAEWMQMSSLGTVDAPNFIVGNPWDDKLIFKL
LSGLSKPVSSYPNTFEWQCKLPAIKPKTEFQLGSKLVYVHHLLGEGAFAQVYEATQGDLNDAKNKQKFVLKVQKP
ANPWEFYIGTQLMERLKPSMQHMFMKFYSAHLFQNGSVLVGELYSYGTLLNAINLYKNTPEKVMPQGLVISFAMR
MLYMIEQVHDCEIIHGDIKPDNFILGNGFLEQDDEDDLSAGLALIDLGQSIDMKLFPKGTIFTAKCETSGFQCVE
MLSNKPWNYQIDYFGVAATVYCMLFGTYMKVKNEGGECKPEGLFRRLPHLDMWNEFFHVMLNIPDCHHLPSLDLL
RQKLKKVFQQHYTNKIRALRNRLIVLLLECKRSRK

FIGURE 2300A

GGGGGAGGCCGAAGCGGAGCGGTCTAGGGAGCCGCGGCCGCGGGTCACCCGGCGGGTAGCAGTTGCTGAGTGTCA
GCTAGACAGCAGCGACTAGGGCTCGGGCGCCGGCGAGATGCCCTTGTTCACCGCCAACCCCTTCGAGCAAGACGT
GGAAAAAGCCACGAATGAGTACAACACTACAGAAGATTGGAGTCTTATTATGGACATATGTGACAAAGTTGGAAG
TACTCCTAATGGAGCGAAAGATTGCCTAAAAGCCATAATGAAAAGGGTAAATCATAAGGTTCCACATGTTGCTCT
GCAAGCACTAACTCTTCTTGGGGCTTGTGTGGCAAACTGTGGAAAGATATTTCGTTTAGGAGTATGTTCCCGTGA
TTTTGCAACAGAAGTACGTGCTGTGATTAAAAATAAGGCACATCCTAAAGTATGTGAAAAACTGAAATCTTTAAT
GGTGGAGTGGTCAGAAGAATTTCAGAAGGACCCTCAGTTTAGTCTGATATCTGCAACTATTAAATCTATGAAAGA
AGAAGGAATTACTTTTCCTCCAGCAGGTTCTCAGACTGTCTCAGCTGCTGCCAAGAATGGTACGTCATCGAACAA
AAACAAAGAGGATGAAGACATAGCTAAAGCTATTGAATTATCGCTGCAAGAACAGAAACAGCAACACACAGAAAC
AAAATCCTTATATCCATCTTCAGAAATTCAGTTAAATAATAAGGTTGCACGGAAAGTGAGAGCTTTATATGATTT
TGAAGCTGTTGAGGACAATGAACTCACCTTTAAACATGGTGAAATAATTATTGTTTTGGATGACAGTGATGCCAA
TTGGTGGAAAGGAGAAAATCACAGAGGAATAGGACTTTTCCCATCCGATTTTGTAACAACTAATTTAAACATAGA
GACTGAGGTAGCGGCTGTGGACAAATTGAATGTAATTGATGATGATGTGGAGGAAATTAAGAAATCAGAGCCTGA
GCCTGTTTATATAGATGAGGATAAGATGGATAGAGCCCTGCAGGTACTTCAGAGTATAGATCCAACAGATTCAAA
ACCAGACTCCCAAGACCTTTTGGATTTAGAAGATATCTGCCAACAGATGGGTCCAATGATAGATGAAAAACTTGA
AGAAATTGATAGGAAGCATTCAGAATTGTCTGAATTGAATGTTAAAGTCCTGGAAGCTCTGGAACTATATAACAA
ATTGGTGAATGAAGCACCAGTGTACTCAGTCTATTCAAAGCTCCACCCTCCAGCACATTACCCACCTGCATCATC
TGGGGTTCCAATGCAGACATATCCAGTTCAATCACATGGTGGAAACTATATGGGTCAGAGCATTCACCAAGTAAC
TGTTGCCCAAAGCTATAGCCTAGGACCCGATCAAATTGGTCCACTGAGATCTCTGCCTCCAAATGTGAATTCCTC
AGTGACAGCACAGCCTGCTCAAACTTCATATTTAAGCACTGGACAAGACACTGTTTCCAATCCTACTTATATGAA
CCAGAACTCTAACCTACAGTCAGCTACTGGTACAACTGCTTACACACAGCAAATGGGGATGTCTGTGGATATGTC
ATCTTATCAGAACACTACTTCCAATTTGCCTCAACTGGCAGGCTTTCCGGTGACAGTTCCAGCTCATCCAGTTGC
ACAGCAGCACACAAATTACCATCAGCAGCCTCTCCTTTAGAAACAAATCAAGCATTTTCTTGAAAGCCTTCATAA
GTGTATTATTCAGTCCTTGTGATACCAACCTGAAAATATTAAAACTTTTTTCCCTCTCAACTCAAAAGGACCATG
AATAAATAAAGCACAAAAACCTCTCTTATTCTACAAGGCCATAAAAGGTTTTTTTTTTTTTTTTTTTCAGTCC
AGTTTGTTTGAAGTCAATCTTTTCATCAGAGGCAGCTTAAAGATGCTTTCAGTTAGTTTTGTCTTACTTTCAGAT
TTCTCTACATAAATCTAGATACTCATTAAGTAGCCTTATGACAAACAGTATGAGATACTTATGACAAACTCGCTC
TGTCACCCAGGCTGGAGTGCAGTAGCATGATCGACAGAGTGAGTTTGTCAAAAGTATCTCATACTTATAAACAAT
ATGAGATAGGAGGATTAAAATATTATTTTAAAGAAACCACTGTTTCCCCCTAAAATGTCATAAGAGCACTGAAGA
ACTTGAAATATTTTTTTCAGAGTTTCTCACACACTTTAAAAGTCTAACTTTTTTGTGTGTAAGCATTTAGCTTGC
CAGCATATTTCTTTTTGGCTCCTTAAATTGCGGTTGTGTTTGCAGTATTGTCACTTTTGCTCTCACTGTTATGTT
GAATAATAATTAGCATATAATTGTCTACAGAAGCAAGAGCAATCTGGAAGGAACAAAAATGTTTTCTGTGATTAA
CAGTGAAGACCTTGTAAATGCAGATGTGTGATAAAGCATTTAGTCAGTCCCCCAAACAGTCATGCCAACTGTGAA
GGAATGTCCCACAAAACATTTCCATTCCCTGAGGAAAAACATTTTCTTTCCTACATGTATCTCTGGTATTTAGAA
TTGTCACTAATAACCTTTTCAAGTGATTTTGGCTATTCTCTAATGAAGATATGGTCCATTTGTTTTTCTTCCTGC
AATGTGGTGTGCAGAGATGCTGCATATCCTTTTTATGGGATTGCGTGTGAATTTGAACCATGAGACATTCCTAAT
AATTTGTTGTGAGATATACCAAGCATGGATGATAAGTGTGTTTTTAGTGGTGTGTTGTTTTTTTAAAGAGGTGAT
TCAAGTACCGTTGCTAAGCTGTCAACATACCAAGCTGTTGAAAAAATTGACCATTTCTTTCAGAAGTAATTCTCA
GCCTGTAGAATAATAGCAGGTGAAGACTTCATAGAAGGCGACAGATAGATAGGGAGGCTATTGAAGCAGTTTTTC
TGAAGCCTGCATTTTGAGTTAGTTTATAGTGCTAATAGATTCTATATAACTGTGAGAGTTTGGTAGTAAACCAGT
AGGGATTGTTTTCTCTCCTAAAAATTTGCACACTACTTCATTGTCTACCAACTTTTTACATATTGGAAAATAGAA
ATTGCGAATACATACATGTATGGAAACATATTCAGATTGGGAAAAACAATGGACATTAGTTTTTAAAAAGTTACG
TGGAAGCAAGATTTCTATATTTGTTTTTTTAAAGGAAGCAGTCATTCTTTCTACTAAATCCATTTCAAGCTAGTT
CTCTGAAAATTTTGCCATTTATCTACAGAAATTTGATTATAAATATGTTCCTTTTTCAAAGAAACTTTATTCTAG
AACAAAATAGTCTATATGGTACTTGATCTACATTTAAGTGGAAAAATTAGCAGTATTTGAAAGCTCAGTTTATGT
CATTGTCTTAACTTCAGATACAAATAACTGAACAGAAAGTTTTAACCTTTAATATCTCATGTTCTGTTTTTTATT
CAGTATTTTCCTTTATGCTAATTCAATTATATACTTCTGAATGGCACCTTACTTTTTGGAAACAAATCTTCTGTT
ATTTACAAAATAATAATTTTTAAAAAACATTTAAAAAAAATCCAAAGCTGCTCTCGATAATAGTCAACATTTGCA

FIGURE 2300B

TATATATGGAATTTCTTACTTTTTTTCTCCCAAACTCTATTTAATAAACTTATTTTAATGTTTGTGAAAAAAAAA
AAAAAAAA

FIGURE 2301

MPLFTANPFEQDVEKATNEYNTTEDWSLIMDICDKVGSTPNGAKDCLKAIMKRVNHKVPHVALQALTLLGACVAN
CGKIFRLGVCSRDFATEVRAVIKNKAHPKVCEKLKSLMVEWSEEFQKDPQFSLISATIKSMKEEGITFPPAGSQT
VSAAAKNGTSSNKNKEDEDIAKAIELSLQEQKQQHTETKSLYPSSEIQLNNKVARKVRALYDFEAVEDNELTFKH
GEIIIVLDDSDANWWKGENHRGIGLFPSDFVTTNLNIETEVAAVDKLNVIDDDVEEIKKSEPEPVYIDEDKMDRA
LQVLQSIDPTDSKPDSQDLLDLEDICQQMGPMIDEKLEEIDRKHSELSELNVKVLEALELYNKLVNEAPVYSVYS
KLHPPAHYPPASSGVPMQTYPVQSHGGNYMGQSIHQVTVAQSYSLGPDQIGPLRSLPPNVNSSVTAQPAQTSYLS
TGQDTVSNPTYMNQNSNLQSATGTTAYTQQMGMSVDMSSYQNTTSNLPQLAGFPVTVPAHPVAQQHTNYHQQPLL

FIGURE 2302

ATGAGTTTAGCTCTGAGAAGTGAGCTTCTAGTGGACAAAACAAAGAGGAAAAAAAGAAGAGAACTGTCTGAGGAA
CAGAAACAAGAAATTAAAGATGCTTTTGAACTATTTGATACAGACAAAGATGAAGCAATAGATTATCATGAATTA
AAGGTGGCAATGAGAGCCTTGGGGTTTGATGTAAAAAAAGCTGATGTACTGAAGATTCTTAAAGATTATGACAGA
GAAGCCACAGGGAAAATCACCTTTGAAGATTTTAATGAAGTTGTGACAGACTGGATATTGGAAAGAGATCCCCAT
GAAGAAATACTCAAGGCATTTAAACTATTTGATGATGATGATTCAGGTAAAATAAGCTTGAGGAATTTGCGACGT
GTTGCTAGAGAATTGGGTGAAAACATGAGTGATGAAGAACTTCGAGCTATGATAGAAGAATTTGACAAAGATGGT
GATGGAGAAATAAACCAAGAGGAGTTCATTGCTATTATGACTGGTGACATTTAA

FIGURE 2303

MSLALRSELLVDKTKRKKRRELSEEQKQEIKDAFELFDTDKDEAIDYHELKVAMRALGFDVKKADVLKILKDYDR
EATGKITFEDFNEVVTDWILERDPHEEILKAFKLFDDDDSGKISLRNLRRVARELGENMSDEELRAMIEEFDKDG
DGEINQEEFIAIMTGDI

FIGURE 2304

GGGGGTGGGAAGAGCTGAAGCAGGCGCTCTTGGCTCGGCGCGGCCCGCTGCAATCCGTGGAGGAACGCGCCGCCG
AGCCACCATC**ATG**CCTGGGCACTTACAGGAAGGCTTCGGCTGCGTGGTCACCAACCGATTCGACCAGTTATTTGA
CGACGAATCGGACCCCTTCGAGGTGCTGAAGGCAGCAGAGAACAAGAAAAAAGAAGCCGGCGGGGGCGGCGTTGG
GGGCCCTGGGGCCAAGAGCGCAGCTCAGGCCGCGGCCCAGACCAACTCCAACGCGGCAGGCAAACAGCTGCGCAA
GGAGTCCCAGAAAGACCGCAAGAACCCGCTGCCCCCCAGCGTTGGCGTGGTTGACAAGAAAGAGGAGACGCAGCC
GCCCGTGGCGCTTAAGAAAGAAGGAATAAGACGAGTTGGAAGAAGACCTGATCAACAACTTCAGGGTGAAGGGAA
AATAATTGATAGAAGACCAGAAAGGCGACCACCTCGTGAACGAAGATTCGAAAAGCCACTTGAAGAAAAGGGTGA
AGGAGGCGAATTTTCAGTTGATAGACCGATTATTGACCGACCTATTCGAGGTCGTGGTGGTCTTGGAAGAGGTCG
AGGGGGCCGTGGACGTGGAATGGGCCGAGGAGATGGATTTGATTCTCGTGGCAAACGTGAATTTGATAGGCATAG
TGGAAGTGATAGATCTGGCCTGAAGCACGAGGACAAACGTGGAGGTAGCGGATCTCACAACTGGGGAACTGTCAA
AGACGAATTAACTGACTTGGATCAATCAAATGTGACTGAGGAAACACCTGAAGGTGAAGAACATCATCCAGTGGC
AGACACTGAAAATAAGGAGAATGAAGTTGAAGAGGTAAAAGAGGAGGGTCCAAAAGAGATGACTTTGGATGAGTG
GAAGGCTATTCAAAATAAGGACCGGGCAAAAGTAGAATTTAATATCCGAAAACCAAATGAAGGTGCTGATGGGCA
GTGGAAGAAGGGATTTGTTCTTCATAAATCAAAGAGTGAAGAGGCTCATGCTGAAGATTCGGTTATGGACCATCA
TTTCCGGAAGCCAGCAAATGATATAACGTCTCAGCTGGAGATCAATTTTGGAGACCTTGGCCGCCCAGGACGTGG
CGGCAGGGGAGGACGAGGTGGACGTGGGCGTGGTGGGCGCCCAAACCGTGGCAGCAGGACCGACAAGTCAAGTGC
TTCTGCTCCTGATGTGGATGACCCAGAGGCATTCCCAGCTCTGGCT**TAA**CTGGATGCCATAAGACAACCCTGGTT
CCTTTGTGAACCCTTCTGTTCAAAGCTTTTGCATGCTTAAGGATTCCAAACGACTAAGAAATTAAAAAAAAAAAG
ACTGTCATTCATACCATTCACACCTAAAGACTGAATTTTATCTGTTTTAAAAATGAACTTCTCCCGCTACACAGA
AGTAACAAATATGGTAGTCAGTTTTGTATTTAGAAATGTATTGGTAGCAGGGATGTTTTCATAATTTTCAGAGAT
TATGCATTCTTCATGAATACTTTTGTATTGCTGCTTGCAAATATGCATTTCCAAACTTGAAATATAGGTGTGAAC
AGTGTGTACCAGTTTAAAGCTTTCACTTCATTTGTGTTTTTTAATTAAGGACTTAGAAGTTCCCCCAATTACAAA
CTGGTTTTAAATATTGGACATACTGGTTTTAATACCTGCTTTGCATATTCACACATGGTCAACTGGGACATGTTA
AACTTTGATTTGTCAAATTTTATGCTGTGTGGAATACTAACTATATGTATTTTAACTTAGTTTTAATATTTTCAT
TTTGGGGGAAAAATCTTTTTTCACTTCTCATGATAGCTGTTATATATATATGCTAAATCTTTATATACAGAAATA
TCAGTACTTGAACAAATTCAAAGCACATTTGGTTTATTAACCCTTGCTCCTTGCATGGCTCATTAGGTTCAAATT
ATAACTAATTTACATTTTCAGCTATATTTACTTTTTAAATGCTTGAGTTTCCCATTTTAAAATCTAAACTAGACA
TCTTAATTGGTGAAAGTTGTTTAAACTACTTATTGTTGGTAGGCACATCGTGTCAAGTGAAGTAGTTTTATAGGT
ATGGGTTTTTTCTCCCCCTTCACCAGGGTGGGTGGAATAAGTTGATTTGGCCAATGTGTAATATTTAAACTGTTC
TGTAAAATAAAAAAAAAAAAAAAAAA

FIGURE 2305

MPGHLQEGFGCVVTNRFDQLFDDESDPFEVLKAAENKKKEAGGGGVGGPGAKSAAQAAAQTNSNAAGKQLRKESQ
KDRKNPLPPSVGVVDKKEETQPPVALKKEGIRRVGRRPDQQLQGEGKIIDRRPERRPPRERRFEKPLEEKGEGGE
FSVDRPIIDRPIRGRGGLGRGRGGRGRGMGRGDGFDSRGKREFDRHSGSDRSGLKHEDKRGGSGSHNWGTVKDEL
TDLDQSNVTEETPEGEEHHPVADTENKENEVEEVKEEGPKEMTLDEWKAIQNKDRAKVEFNIRKPNEGADGQWKK
GFVLHKSKSEEAHAEDSVMDHHFRKPANDITSQLEINFGDLGRPGRGGRGGRGGRGRGGRPNRGSRTDKSSASAP
DVDDPEAFPALA

2594/8433

FIGURE 2306

GGCACGAGGTCAAAAGTGGCGGGTGTGGCGCGGGGCTGGTAGCGGCCGGAGCCGTGCGAGTTCTCTACCCTGCTT
CGCGAGCGGGCGAGAGAACGCGAGTCCCAGGATCCCCGGCACCCAGTTCTCTTCCACTGCATTCCCCCGGCGCGT
GTGGGACCGAGGTGGACATGGATCCGCAGAGGTCCCCCCTATTGGAAGTAAAGGGGAACATAGAACTGAAGAGAC
CTCTGATTAAGGCCCCTTCCCAGCTGCCTCTCTCAGGAAGCAGACTCAAGAGGAGGCCTGACCAGATGGAAGATG
GCCTGGAGCCTGAGAAGAAACGGACAAGAGGCCTGGGTGCAACGACCAAAATTACCACATCCCACCCAAGAGTTC
CATCCCTCACTACAGTGCCACAGACACAAGGCCAGACCACAGCTCAAAAAGTTTCCAAGAAGACAGGACCCCGGT
GTTCCACAGCTATTGCCACAGGGTTGAAGAACCAGAAGCCAGTTCCTGCTGTTCCTGTCCAGAAGTCTGGCACAT
CAGGTGTTCCTCCCATGGCAGGAGGGAAGAAACCCAGCAAACGTCCAGCCTGGGACTTAAAGGGTCAGTTATGTG
ACCTAAATGCAGAACTAAAACGGTGCCGTGAGAGGACTCAAACGTTGGACCAAGAGAACCAGCAGCTTCAGGACC
AGCTCAGAGATGCCCAGCAGCAGGTCAAGGCCCTGGGGACAGAGCGCACAACACTGGAGGGGCATTTAGCCAAGG
TACAGGCCCAGGCTGAGCAGGGCCAACAGGAGCTGAAGAACTTGCGTGCTTGTGTCCTGGAGCTGGAAGAGCGGC
TGAGCACGCAGGAGGGCTTGGTGCAAGAGCTTCAGAAAAAACAGGTGGAATTGCAGGAAGAACGGAGGGGACTGA
TGTCCCAACTAGAGGAGAAGGAGAGGAGGCTGCAGACATCAGAAGCAGCCCTGTCAAGCAGCCAAGCAGAGGTGG
CATCTCTGCGGCAGGAGACTGTGGCCCAGGCAGCCTTACTGACTGAGCGGGAAGAACGTCTTCATGGGCTAGAAA
TGGAGCGCCGGCGACTGCACAACCAGCTGCAGGAACTCAAGGGCAACATCCGTGTATTCTGCCGGGTCCGCCCTG
TCCTGCCGGGGGAGCCCACTCCACCCCCTGGCCTCCTCCTGTTTCCCTCTGGCCCTGGTGGGCCCTCTGATCCTC
CAACCCGCCTTAGCCTCTCCCGGTCTGACGAGCGGCGTGGGACCCTGAGTGGGGCACCAGCTCCCCCACCTCGCC
ATGATTTTTCCTTTGACCGGGTATTCCCACCAGGAAGTGGACAGGATGAAGTGTTTGAAGAGATTGCCATGCTTG
TCCAGTCAGCCCTGGATGGCTATCCAGTATGCATCTTTGCCTATGGCCAGACAGGCAGTGGCAAGACCTTCACAA
TGGAGGGTGGGCCTGGGGGAGACCCCCAGTTGGAGGGGCTGATCCCTCGGGCCCTGCGGCACCTCTTCTCTGTGG
CTCAGGAGCTGAGTGGTCAGGGCTGGACCTACAGCTTTGTAGCAAGCTACGTAGAGATCTACAATGAGACTGTCC
GGGACCTGCTGGCCACTGGAACCCGGAAGGGTCAAGGGGGCGAGTGTGAGATTCGCCGTGCAGGGCCAGGGAGTG
AGGAGCTCACTGTCACCAATGCTCGATATGTCCCTGTCTCCTGTGAGAAAGAAGTGGACGCCCTGCTTCATCTGG
CCCGCCAGAATCGGGCTGTGGCCCGCACAGCCCAGAATGAACGGTCATCACGCAGCCACAGTGTATTCCAGCTAC
AGATTTCTGGGGAGCACTCCAGCCGAGGCCTGCAGTGTGGGGCCCCCCTCAGTCTTGTGGACCTGGCCGGGAGTG
AGCGACTTGACCCCGGCTTAGCCCTCGGCCCCGGGGAGCGGGAACGCCTTCGGGAAACACAGGCCATTAACAGCA
GCCTGTCCACGCTGGGGCTGGTTATCATGGCCCTGAGCAACAAGGAGTCCCACGTGCCTTACCGGAACAGCAAAC
TGACCTACCTGCTGCAGAACTCTCTGGGTGGTAGTGCTAAGATGCTCATGTTTGTGAACATTTCTCCACTGGAAG
AGAACGTCTCCGAGTCCCTCAACTCTCTACGCTTTGCCTCCAAGGTGAACCAGTGTGTTATTGGTACTGCTCAGG
CCAACAGGAAGTGAAGACGGATCCAGATCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG
TGTGTGTCCCTATGTCTATGTATCGGGTGAGGGGTGGGAGGGTTGCTGGAGGGTGCTTTATTGGGTGGAGGGCAC
CATGTCCCAGGGCTATCAAATAAAGAATAGTTTGGTTTTTTTTTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2307

MDPQRSPLLEVKGNIELKRPLIKAPSQLPLSGSRLKRRPDQMEDGLEPEKKRTRGLGATTKITTSHPRVPSLTTV
PQTQGQTTAQKVSKKTGPRCSTAIATGLKNQKPVPAVPVQKSGTSGVPPMAGGKKPSKRPAWDLKGQLCDLNAEL
KRCRERTQTLDQENQQLQDQLRDAQQQVKALGTERTTLEGHLAKVQAQAEQGQQELKNLRACVLELEERLSTQEG
LVQELQKKQVELQEERRGLMSQLEEKERRLQTSEAALSSSQAEVASLRQETVAQAALLTEREERLHGLEMERRRL
HNQLQELKGNIRVFCRVRPVLPGEPTPPPGLLLFPSGPGGPSDPPTRLSLSRSDERRGTLSGAPAPPPRHDFSFD
RVFPPGSGQDEVFEEIAMLVQSALDGYPVCIFAYGQTGSGKTFTMEGGPGGDPQLEGLIPRALRHLFSVAQELSG
QGWTYSFVASYVEIYNETVRDLLATGTRKGQGGECEIRRAGPGSEELTVTNARYVPVSCEKEVDALLHLARQNRA
VARTAQNERSSRSHSVFQLQISGEHSSRGLQCGAPLSLVDLAGSERLDPGLALGPGERERLRETQAINSSLSTLG
LVIMALSNKESHVPYRNSKLTYLLQNSLGGSAKMLMFVNISPLEENVSESLNSLRFASKVNQCVIGTAQANRK

FIGURE 2308

GGCGTCACTCGCGGTTACAAGTGCCTGACCCTCACTCCAGTTGGCGGAGGAGGAGAAGGAAGGGGCCGGGCCGGG
TCCCCTCCCCTCGCGCCCCGG**ATG**GATGTGCCCGGCCCGGTGTCTCGGCGGGCGGCGGCGGCGGCGGCCACTGTG
CTCCTGCGGACCGCTCGGGTCCGTCGCGAATGCTGGTTCTTGCCGACCGCGCTGCTCTGCGCCTACGGCTTCTTC
GCCAGCCTCAGGCCGTCCGAGCCCTTCCTGACCCCGTACCTGCTGGGGCCGGACAAGAACCTGACCGAGAGGGAG
GTCTTCAATGAAATTTATCCAGTATGGACTTACTCTTACCTGGTGCTACTGTTTCCTGTGTTCCTTGCCACAGAC
TACCTCCGTTATAAACCTGTTGTTCTACTGCAGGGGCTCAGCCTTATTGTTACATGGTTTATGCTGCTCTATGCC
CAGGGACTGCTGGCCATTCAATTTCTAGAATTTTTTTATGGCATCGCCACAGCCACTGAAATTGCCTATTACTCT
TATATCTACAGTGTGGTGGACCTGGGCATGTACCAGAAAGTCACAAGTTACTGTCGAAGTGCCACTTTGGTGGGC
TTTACAGTGGGCTCTGTCCTAGGGCAAATCCTTGTCTCAGTGGCAGGCTGGTCGCTGTTCAGCCTGAATGTCATC
TCTCTTACCTGTGTTTCAGTGGCTTTTGCTGTGGCCTGGTTTTTACCTATGCCACAGAAGAGCCTCTTCTTTCAC
CACATTCCTTCTACCTGCCAGAGAGTGAATGGCATCAAGGTACAAAATGGTGGCATTGTTACTGACACCCCAGCT
TCTAACCACCTTCCTGGCTGGGAGGACATTGAGTCAAAAATCCCTCTAAATATGGAGGAGCCTCCCGTGGAGGAA
CCGGAACCCAAGCCAGACCGTCTCCTTGTATTGAAAGTACTATGGAATGATTTCCTGATGTGCTACTCCTCTCGC
CCTCTTCTCTGCTGGTCTGTGTGGTGGGCCCTCTCTACCTGTGGCTATTTTCAAGTTGTGAACTACACACAGGGC
CTGTGGGAGAAAGTGATGCCTTCTCGCTATGCTGCTATCTATAATGGTGGCGTGGAGGCCGTTTCAACCTTACTG
GGTGCTGTTGCTGTGTTTGCAGTTGGTTATATAAAAATATCCTGGTCAACTTGGGGAGAAATGACATTATCTCTC
TTTTCTCTCCTGATTGCTGCTGCAGTGTATATCATGGACACTGTGGGTAACATTTGGGTGTGCTATGCATCCTAT
GTTGTCTTCAGAATCATCTACATGTTACTCATCACGATAGCAACTTTTCAAATTGCTGCAAACCTCAGCATGGAA
CGCTATGCCCTAGTATTTGGTGTAAATACCTTCATTGCCCTGGCACTGCAGACGCTGCTCACTCTAATTGTGGTA
GATGCCAGTGGCCTTGGATTAGAAATTACCACTCAGTTTTTGATCTATGCCAGTTATTTTGCACTCATCGCTGTG
GTTTTCCTGGCCAGTGGTGCAGTCAGTGTTATGAAGAAATGTAGAAAGCTGGAAGATCCACAATCAAGTTCTCAA
GTAACCACTTCA**TAA**TATACTGCTGAAGGGCTTCTTCTTATAGCAAGAACTCTGCACAGCAACTGCCTGGATGTA
TTTGATTTTTTAAAGCGTAGACATATATTTATGAATGTGCATTTCTTGACTTCACAGCAGCCACTTGACTAATAC
CTTGTGTTCCGGGAATAACATGATACTATTCAGAGGAGCCAGAAGTAAAGTTTATTTCATGGATTATTTATGAGA
GCTAATTTAAGGATGACTTTTTTTCTGATTCAAAAGTGAACTTGATTTTAAAAACCAGTCAAGAGCAATCAAAGC
AGCACATGGTGTTGTATACTTCATTAGCAAGTGAGTTTGGTGTTTTATAGGTCACATATGTCTGTATCTACTTAG
CCAGATGCTTGGCCTGGTGGGACCAGGGCTCCACAGAGGCCACAAAATGTTGCAAGTCATGATGGATGGAAATAT
GTTCTAACAGCATCTGCCTCTATTCAATTTAATTCTTATTTCTGTGTTACTCATGTACATTGGTCTTTCTACATA
GTTATTCTATCACTGGCAATATTTGTTCTGGTTTAGTGTTCTGTATTTTAAGGTGTACGTATCATTTCTAATTTT
AAGTTATTTTAAAAAAATTCATCATATGAATGTTCTTGGTTCCCATTGTGACGATTATTTATTTCTGTAAAATTT
GTTTAGAAGTACGTTTTTGCATTATTCATATGCTTCCCAGAGAAGCTCATTTAGTTAGAAAATAAGGCAAGTTTT
GAAGCCTGCTAAATGAAGAGACTTAAGAAAGCTTAAGGTACGCTTGCTTGTCTTTAAATCTTCAATATGAAGGAC
TATTAATTCCAAGATTAAAAGTTCATATATAGGCTAAAGATGTAACTAGGCCATTTGTATTTGTATTCCCTTTTA
TTTCCAAAATAAAATGAAAAATCTTTTTTTAATAATTTCATCCCTATTTATAGTTTTTATATTAATTTGTTTTTC
TTATCCGAGTAAAGATGTCAATAGGAATTGCATTAGGCCAAGGCCTTTTTCATAAACTGAGCCTCTTTTCAATTA
TTTCAATGGGACAGGAACTAGGATAGATGTGATTCCTGCATTTTTTTACCTTAAATCTGCCTTTGTTTCTAAAGG
TAGATCATCTTGAATATTTGCTTAAAATTGCTAGTGATTTCATTACCAAGTTACTTGAAAAAATGTTCTATATGC
ATTTAATTCTGAAATCAGTCTACCAAGGGGCTGCTAGTATATGTCAGACATGAAAACTATTTTAAAGCTGACTTT
GTTGCCTTATCTTGAAAAGAATCTAGATAGGTGCTTTTAACTGGGGTATTAACTTTTTTAGAATGACACAGCTGA
ACAGTGTTAATAATAGTGTGTCAAGATTGCAAAGTCGACATACTCATTTGGTTTAAGCAGGAATCCTAGAAGCAA
ATGGATGGGGATAAGAATAGGTCATTTTCTATTCACCATCCTTTACTATTAAGGGAAAGGAAAAGAACACTAGCT
AAGGAAGGGAAAGGGAAGTGATATCATAAAAGTAGCAACCTTCATTTTACATTCTGTCTGTTTTTCTTTTTTTGC
TTTGTTTTGTTTGTGCTAATTTGGGAATTGTGTACTCCGAAACAAGTAGAAAAGTGCTGTTTGAGGGATTTTATT
AAATCTTTTTTTAATGGAATGTGGTACAAATTGTTCATGTTACCAAAGCAATATTTCCCTGGAATTTAATTCAAA
GTTTGTGGCATACAACCTGAGCCTTTTCTTATATAAGACAAGAATATGTTCACATCTTGGTATGTGGCCATATTT
ATAGAATGCTGAACTCAATGTGCAAGTTGTACTGTATGCAGTTTTGTAAATAAGTGAAAATAATTTGTTGTACTT
TTTATTCAATTCTGTATAGATTATAAAATTATTTTTATTAAATAAATATTTTACAGTATAAAAAAAAAAAAAAAA
AAAAA

FIGURE 2309

MDVPGPVSRRAAAAAAATVLLRTARVRRECWFLPTALLCAYGFFASLRPSEPFLTPYLLGPDKNLTEREVFNEIYP
VWTYSYLVLLFPVFLATDYLRYKPVVLLQGLSLIVTWFMLLYAQGLLAIQFLEFFYGIATATEIAYYSYIYSVVD
LGMYQKVTSYCRSATLVGFTVGSVLGQILVSVAGWSLFSLNVISLTCVSVAFAVAWFLPMPQKSLFFHHIPSTCQ
RVNGIKVQNGGIVTDTPASNHLPGWEDIESKIPLNMEEPPVEEPEPKPDRLLVLKVLWNDFLMCYSSRPLLCWSV
WWALSTCGYFQVVNYTQGLWEKVMPSRYAAIYNGGVEAVSTLLGAVAVFAVGYIKISWSTWGEMTLSLFSLLIAA
AVYIMDTVGNIWVCYASYVVFRIIYMLLITIATFQIAANLSMERYALVFGVNTFIALALQTLLTLIVVDASGLGL
EITTQFLIYASYFALIAVVFLASGAVSVMKKCRKLEDPQSSSQVTTS

FIGURE 2310A

CTGGGTCCTGTGTGTGCCACAGGGGTGGGGTGTCCAGCGAGCGGTCTCCTCCTCCTGCTAGTGCTGCTGCGGCGT
CCCGCGGCCTCCCCGAGTCGGGCGGGAGGGGAGAGCGGGTGTGGATTTGTCTTGACGGTAATTGTTGCGTTTCCA
CGTCTCGGAGGCCTGCGCGCTGGGTTGCTCCTTCTTCGGGAGCGAGCTGTTCTCAGCGATCCCACTCCCAGCCGG
GGCTCCCCACACACACTGGGCTGCGTGCGTGTGGAGTGGGACCCGCGCACACGCGTGTCTCTGGACAGCTACGGC
GCCGAAAGAACTAAAATTCCAGATGGCAAACTCAATGAATGGCAGAAACCCTGGTGGTCGAGGAGGAAATCCCCG
AAAAGGTCGAATTTTGGGTATTATTGATGCTATTCAGGATGCAGTTGGACCCCCTAAGCAAGCTGCCGCAGATCG
CAGGACCGTGGAGAAGACTTGGAAGCTCATGGACAAAGTGGTAAGACTGTGCCAAAATCCCAAACTTCAGTTGAA
AAATAGCCCACCATATATACTTGATATTTTGCCTGATACATATCAGCATTTACGACTTATATTGAGTAAATATGA
TGACAACCAGAAACTTGCCCAACTCAGTGAGAATGAGTACTTTAAAATCTACATTGATAGCCTTATGAAAAAGTC
AAAACGGGCAATAAGACTCTTTAAAGAAGGCAAGGAGAGAATGTATGAAGAACAGTCACAGGACAGACGAAATCT
CACAAAACTGTCCCTTATCTTCAGTCACATGCTGGCAGAAATCAAAGCAATCTTTCCCAATGGTCAATTCCAGGG
AGATAACTTTCGTATCACAAAAGCAGATGCTGCTGAATTCTGGAGAAAGTTTTTTGGAGACAAAACTATCGTACC
ATGGAAAGTATTCAGACAGTGCCTTCATGAGGTCCACCAGATTAGCTCTAGCCTGGAAGCAATGGCTCTAAAATC
AACAATTGATTTAACTTGCAATGATTACATTTCAGTTTTTGAATTTGATATTTTTACCAGGCTGTTTCAGCCTTG
GGGCTCTATTTTGCGGAATTGGAATTTCTTAGCTGTGACACATCCAGGTTACATGGCATTTCTCACATATGATGA
AGTTAAAGCACGACTACAGAAATATAGCACCAAACCCGGAAGCTATATTTTCCGGTTAAGTTGCACTCGATTGGG
ACAGTGGGCCATTGGCTATGTGACTGGGGATGGGAATATCTTACAGACCATACCTCATAACAAGCCCTTATTTCA
AGCCCTGATTGATGGCAGCAGGGAAGGATTTTATCTTTATCCTGATGGGAGGAGTTATAATCCTGATTTAACTGG
ATTATGTGAACCTACACCTCATGACCATATAAAAGTTACACAGGAACAATATGAATTATATTGTGAAATGGGCTC
CACTTTTCAGCTCTGTAAGATTTGTGCAGAGAATGACAAAGATGTCAAGATTGAGCCTTGTGGGCATTTGATGTG
CACCTCTTGCCTTACGGCATGGCAGGAGTCGGATGGTCAGGGCTGCCCTTTCTGTCGTTGTGAAATAAAAGGAAC
TGAGCCCATAATCGTGGACCCCTTTGATCCAAGAGATGAAGGCTCCAGGTGTTGCAGCATCATTGACCCCTTTGG
CATGCCGATGCTAGACTTGGACGACGATGATGATCGTGAGGAGTCCTTGATGATGAATCGGTTGGCAAACGTCCG
AAAGTGCACTGACAGGCAGAACTCACCAGTCACATCACCAGGATCCTCTCCCCTTGCCCAGAGAAGAAAGCCACA
GCCTGACCCACTCCAGATCCCACATCTAAGCCTGCCACCCGTGCCTCCTCGCCTGGATCTAATTCAGAAAGGCAT
AGTTAGATCTCCCTGTGGCAGCCCAACAGGTTCACCAAAGTCTTCTCCTTGCATGGTGAGAAAACAAGATAAACC
ACTCCCAGCACCACCTCCTCCCTTAAGAGATCCTCCTCCACCGCCACCTGAAAGACCTCCACCAATCCCACCAGA
CAATAGACTGAGTAGACACATCCATCATGTGGAAAGCGTGCCTTCCAGAGACCCGCCAATGCCTCTTGAAGCATG
GTGCCCTCGGGATGTGTTTGGGACTAATCAGCTTGTGGGATGTCGACTCCTAGGGGAGGGCTCTCCAAAACCTGG
AATCACAGCGAGTTCAAATGTCAATGGAAGGCACAGTAGAGTGGGCTCTGACCCAGTGCTTATGCGGAAACACAG
ACGCCATGATTTGCCTTTAGAAGGAGCTAAGGTCTTTTCCAATGGTCACCTTGGAAGTGAAGAATATGATGTTCC
TCCCCGGCTTTCTCCTCCTCCTCCAGTTACCACCCTCCTCCCTAGCATAAAGTGTACTGGTCCGTTAGCAAATTC
TCTTTCAGAGAAAACAAGAGACCCAGTAGAGGAAGATGATGATGAATACAAGATTCCTTCATCCCACCCTGTTTC
CCTGAATTCACAACCATCTCATTGTCATAATGTAAAACCTCCTGTTCGGTCCTGTGATAATGGTCACTGTATGCT
GAATGGAACACATGGTCCATCTTCAGAGAAGAAATCAAACATCCCTGACTTAAGCATATATTTAAAGGGAGATGT
TTTTGATTCAGCCTCTGATCCCGTGCCATTACCACCTGCCAGGCCTCCAACTCGGGACAATCCAAAGCATGGTTC
TTCACTCAACAGGACGCCCTCTGATTATGATCTTCTCATCCCTCCATTAGGTGAAGATGCTTTTGATGCCCTCCC
TCCATCTCTCCCACCTCCCCCACCTCCTGCAAGGCATAGTCTCATTGAACATTCAAAACCTCCTGGCTCCAGTAG
CCGGCCATCCTCAGGACAGGATCTTTTTCTTCTTCCTTCAGATCCCTTTGTTGATCTAGCAAGTGGCCAAGTTCC
TTTGCCTCCTGCTAGAAGGTTACCAGGTGAAAATGTCAAAACTAACAGAACATCACAGGACTATGATCAGCTTCC
TTCATGTTCAGATGGTTCACAGGCACCAGCCAGACCCCCTAAACCACGACCGCGCAGGACTGCACCAGAAATTCA
CCACAGAAAACCCCATGGGCCTGAGGCGGCATTGGAAAATGTCGATGCAAAAATTGCAAAACTCATGGGAGAGGG
TTATGCCTTTGAAGAGGTGAAGAGAGCCTTAGAGATAGCCCAGAATAATGTCGAAGTTGCCCGGAGCATCCTCCG
AGAATTTGCCTTCCCTCCTCCAGTATCCCCACGTCTAAATCTATAGCAGCCAGAACTGTAGACACCAAAATGGAA
AGCAATCGATGTATTCCAAGAGTGTGGAAATAAAGAGAACTGAGATGGAATTCAAGAGAGAAGTGTCTCCTCCTC
GTGTAGCAGCTTGAGAAGAGGCTTGGGAGTGCAGCTTCTCAAAGGAGACCGATGCTTGCTCAGGATGTCGACAGC
TGTGGCTTCCTTGTTTTTGCTAGCCATATTTTTAAATCAGGGTTGAACTGACAAAAATAATTTAAAGACGTTTAC
TTCCCTTGAACTTTGAACCTGTGAAATGCTTTACCTTGTTTACAATTTGGCAAAGTTGCAGTTTGTTCTTGTTTT

FIGURE 2310B

TAGTTTAGTTTTGTTTTGGTGTTTTGATACCTGTACTGTGTTCTTCACAGACCCTTTGTAGCGTGGTCAGGTCTG
CTGTAACATTTCCCACCAACTCTCTTGCTGTCCACATCAACAGCTAAATCATTTATTCATATGGATCTCTACCAT
CCCCATGCCTTGCCCAGGTCCAGTTCCATTTCTCTCATTCACAAGATGCTTTGAAGGTTCTGATTTTCAACTGAT
CAAACTAATGCAAAAAAAAAAAGTATGTATTCTTCACTACTGAGTTTCTTCTTTGGAAACCATCACTATTGAGAG
ATGGGAAAAACCTGAATGTATAAAGCATTTATTTGTCAATAAACTGCCTTTTGTAAGGGGTTTTCACATAAAAAA
AAAAAAA

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FIGURE 2311

MANSMNGRNPGGRGGNPRKGRILGIIDAIQDAVGPPKQAAADRRTVEKTWKLMDKVVRLCQNPKLQLKNSPPYIL
DILPDTYQHLRLILSKYDDNQKLAQLSENEYFKIYIDSLMKKSKRAIRLFKEGKERMYEEQSQDRRNLTKLSLIF
SHMLAEIKAIFPNGQFQGDNFRITKADAAEFWRKFFGDKTIVPWKVFRQCLHEVHQISSSLEAMALKSTIDLTCN
DYISVFEFDIFTRLFQPWGSILRNWNFLAVTHPGYMAFLTYDEVKARLQKYSTKPGSYIFRLSCTRLGQWAIGYV
TGDGNILQTIPHNKPLFQALIDGSREGFYLYPDGRSYNPDLTGLCEPTPHDHIKVTQEQYELYCEMGSTFQLCKI
CAENDKDVKIEPCGHLMCTSCLTAWQESDGQGCPFCRCEIKGTEPIIVDPFDPRDEGSRCCSIIDPFGMPMLDLD
DDDDREESLMMNRLANVRKCTDRQNSPVTSPGSSPLAQRRKPQPDPLQIPHLSLPPVPPRLDLIQKGIVRSPCGS
PTGSPKSSPCMVRKQDKPLPAPPPPLRDPPPPPPERPPPIPPDNRLSRHIHHVESVPSRDPPMPLEAWCPRDVFG
TNQLVGCRLLGEGSPKPGITASSNVNGRHSRVGSDPVLMRKHRRHDLPLEGAKVFSNGHLGSEEYDVPPRLSPPP
PVTTLLPSIKCTGPLANSLSEKTRDPVEEDDDEYKIPSSHPVSLNSQPSHCHNVKPPVRSCDNGHCMLNGTHGPS
SEKKSNIPDLSIYLKGDVFDSASDPVPLPPARPPTRDNPKHGSSLNRTPSDYDLLIPPLGEDAFDALPPSLPPPP
PPARHSLIEHSKPPGSSSRPSSGQDLFLLPSDPFVDLASGQVPLPPARRLPGENVKTNRTSQDYDQLPSCSDGSQ
APARPPKPRPRRTAPEIHHRKPHGPEAALENVDAKIAKLMGEGYAFEEVKRALEIAQNNVEVARSILREFAFPPP
VSPRLNL

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FIGURE 2312

CGCAGCCCGCGGTCCCGCCGCCCCGGGGCCGGCACCTCTCGGGCTCCGGCTCCCCGCGCGCAAGATGGCTGACCC
GGCTGCGGGGCCGCCGCCGAGCGAGGGCGAGGAGAGCACCGTGCGCTTCGCCCGCAAAGGCGCCCTCAGGCAGAA
GAACGTGCATGAGGTCAAGAACCACAAATTCACCGCCCGCTTCTTCAAGCAGCCCACCTTCTGCAGCCACTGCAC
CGACTTCATCTGGGGCTTCGGGAAGCAGGGATTCCAGTGCCAAGTTTGCTGCTTTGTGGTGCACAAGCGGTGCCA
TGAATTTGTCACATTCTCCTGCCCTGGCGCTGACAAGGGTCCAGCCTCCGATGACCCCCGCAGCAAACACAAGTT
TAAGATCCACACGTACTCCAGCCCCACGTTTTGTGACCACTGTGGGTCACTGCTGTATGGACTCATCCACCAGGG
GATGAAATGTGACACCTGCATGATGAACGTGCACAAGCGCTGCGTGATGAATGTTCCCAGCCTGTGTGGCACGGA
CCACACGGAGCGCCGCGGCCGCATCTACATCCAGGCCCACATCGACAGGGACGTCCTCATTGTCCTCGTAAGAGA
TGCTAAAAACCTTGTACCTATGGACCCCAATGGCCTGTCAGATCCCTACGTAAAACTGAAACTGATTCCCGATCC
CAAAAGTGAGAGCAAACAGAAGACCAAAACCATCAAATGCTCCCTCAACCCTGAGTGGAATGAGACATTTAGATT
TCAGCTGAAAGAATCGGACAAAGACAGAAGACTGTCAGTAGAGATTTGGGATTGGGATTTGACCAGCAGGAATGA
CTTCATGGGATCTTTGTCCTTTGGGATTTCTGAACTTCAGAAAGCCAGTGTTGATGGCTGGTTTAAGTTACTGAG
CCAGGAGGAAGGCGAGTACTTCAATGTGCCTGTGCCACCAGAAGGAAGTGAGGCCAATGAAGAACTGCGGCAGAA
ATTTGAGAGGGCCAAGATCAGTCAGGGAACCAAGGTCCCGGAAGAAAAGACGACCAACACTGTCTCCAAATTTGA
CAACAATGGCAACAGAGACCGGATGAAACTGACCGATTTTAACTTCCTAATGGTGCTGGGGAAAGGCAGCTTTGG
CAAGGTCATGCTTTCAGAACGAAAAGGCACAGATGAGCTCTATGCTGTGAAGATCCTGAAGAAGGACGTTGTGAT
CCAAGATGATGACGTGGAGTGCACTATGGTGGAGAAGCGGGTGTTGGCCCTGCCCGGGAAGCCGCCCTTCCTGAC
CCAGCTCCACTCCTGCTTCCAGACCATGGACCGCCTGTACTTTGTGATGGAGTACGTGAATGGGGGCGACCTCAT
GTATCACATCCAGCAAGTCGGCCGGTTCAAGGAGCCCCATGCTGTATTTTACGCTGCAGAAATTGCCATCGGTCT
GTTCTTCTTACAGAGTAAGGGCATCATTTACCGTGACCTAAAACTTGACAACGTGATGCTCGATTCTGAGGGACA
CATCAAGATTGCCGATTTTGGCATGTGTAAGGAAAACATCTGGGATGGGGTGACAACCAAGACATTCTGTGGCAC
TCCAGACTACATCGCCCCCGAGATAATTGCTTATCAGCCCTATGGGAAGTCCGTGGATTGGTGGGCATTTGGAGT
CCTGCTGTATGAAATGTTGGCTGGGCAGGCACCCTTTGAAGGGGAGGATGAGGATGAACTCTTCCAATCCATCAT
GGAACACAACGTAGCCTATCCCAAGTCTATGTCCAAGGAAGCTGTGGCCATCTGCAAAGGGCTGATGACCAAACA
CCCAGGCAAACGTCTGGGTTGTGGACCTGAAGGTGAACGTGATATCAAAGAGCATGCATTTTTCCGGTATATTGA
TTGGGAGAAACTTGAACGCAAAGAGATTCAGCCCCCTTATAAGCCAAAAGCTTGTGGGCGAAATGCTGAAAACTT
CGACCGATTTTTCACCCGCCATCCACCAGTCCTAACACCTCCTGACCAGGAAGTCATCAGGAATATTGACCAATC
AGAATTCGAAGGATTTTCCTTTGTTAACTCTGAATTTTTAAAACCCGAAGTCAAGAGCTAAGTAGATGTGTAGAT
CTCCGTCCTTCATTTCTGTCATTCAAGCTCAACGGCTATTGTGGTGACATTTTTATGTTTTCATTGCCAAGTTGC
ATCCATGTTTGATTTTCTGATGAGACTAGAGTGACAGTGTTTCAGAACCCAAATGTCCTCAGGTAGTTTTGGAGC
ATCTCTATGAGATGGGATTATGCAGATGGCCTATGGAAAATGCAGCTGCATAATTAACACATTATCAAAGTCCTC
TTACAATTTATTTTCCGCAGCATGTCAGCTAAGTAGACCCAATGGGGAGAGAAAATGCCTGCTTTCTTTCCCTTT
TTTCTGCACTGCCATATTCACCCCCAACCATCCAATCTGTGGATAATTGGATGTTAGCGGTACTCTTCCACTTCC
GGGCCTGGAGCTTGGCTTGTATCCAAGTGTATGGTTGCTTTGCCTAAGAGGAATCCCTCTATTTCACCTGTTCTG
GAGGCACCAGACCTTGAAAAGAACATGCTCAAAATAAAATGTTATCTGTTATTTTTGTAAACTCAAAGTTAAGAT
GATCAAAGTTCTAAAATTCCAAGAATGTGCTTTTAGACGGTCTCAATCTAAAAGCACTTCAAGGGGTCAAAGGGC
AACCAGCTTGGGTGCTACCTCAGTGTTGTAGTTTCTGATACTTTATGTCTTTGCTCACCCTCATCCCCAAACTAC
TTGAAAAGGGCATTTGGCACCACTCTCTGAAACAACACAGTCACTCTAGCAAGGCCCCCAAAGGGCCCTGGTTTT
ACATTACATTTCAAACTTTATTTGCTTTGGGGTTTTGTTTCTGTTGTTGTTCAAATGCAAAAAAAAATTATTTGC
TTTGGGGTTTTATTTCTGTTGTTCAAATGC

FIGURE 2313

MADPAAGPPPSEGEESTVRFARKGALRQKNVHEVKNHKFTARFFKQPTFCSHCTDFIWGFGKQGFQCQVCCFVVH
KRCHEFVTFSCPGADKGPASDDPRSKHKFKIHTYSSPTFCDHCGSLLYGLIHQGMKCDTCMMNVHKRCVMNVPSL
CGTDHTERRGRIYIQAHIDRDVLIVLVRDAKNLVPMDPNGLSDPYVKLKLIPDPKSESKQKTKTIKCSLNPEWNE
TFRFQLKESDKDRRLSVEIWDWDLTSRNDFMGSLSFGISELQKASVDGWFKLLSQEEGEYFNVPVPPEGSEANEE
LRQKFERAKISQGTKVPEEKTTNTVSKFDNNGNRDRMKLTDFNFLMVLGKGSFGKVMLSERKGTDELYAVKILKK
DVVIQDDDVECTMVEKRVLALPGKPPFLTQLHSCFQTMDRLYFVMEYVNGGDLMYHIQQVGRFKEPHAVFYAAEI
AIGLFFLQSKGIIYRDLKLDNVMLDSEGHIKIADFGMCKENIWDGVTTKTFCGTPDYIAPEIIAYQPYGKSVDWW
AFGVLLYEMLAGQAPFEGEDEDELFQSIMEHNVAYPKSMSKEAVAICKGLMTKHPGKRLGCGPEGERDIKEHAFF
RYIDWEKLERKEIQPPYKPKACGRNAENFDRFFTRHPPVLTPPDQEVIRNIDQSEFEGFSFVNSEFLKPEVKS

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FIGURE 2314

GCCAGTCACCTTCAGTTTCTGGAGCTGGCCGTCAACATGTCCTTTCCTAAGGCGCCCTTGAAACGATTCAATGAC
CCTTCTGGTTGTGCACCATCTCCAGGTGCTTATGATGTTAAAACTTTAGAAGTATTGAAAGGACCAGTATCCTTT
CAGAAATCACAAAGATTTAAACAACAAAAAGAATCTAAACAAAATCTTAATGTTGACAAAGATACTACCTTGCCT
GCTTCAGCTAGAAAAGTTAAGTCTTCGGAATCAAAGATTCGTGTTCTTCTACAGGAACGTGGTGCCCAGGACAGC
CGGATCCAGGATCTGGAAACTGAGTTGGAAAAGATGGAAGCAAGGCTAAATGCTGCACTAAGGGAAAAAACATCT
CTCTCTGCAAATAATGCTACACTGGAAAAACAACTTATTGAATTGACCAGGACTAATGAACTACTAAAATCTAAG
TTTTCTGAAAATGGTAACCAGAAGAATTTGAGAATTCTAAGCTTGGAGTTGATGAAACTTAGAAACAAAAGAGAA
ACAAAGATGAGGGGTATGATGGCTAAGCAAGAAGGCATGGAGATGAAGCTGCAGGTCACCCAAAGGAGTCTCGAA
GAGTCTCAAGGGAAAATAGCCCAACTGGAGGGAAAACTTGTTTCAATAGAGAAAGAAAAGATTGATGAAAAATCT
GAAACAGAAAAACTCTTGGAATACATCGAAGAAATTAGTTGTGCTTCAGATCAAGTGGAAAAATACAAGCTAGAT
ATTGCCCAGTTAGAAGAAAATTTGAAAGAGAAGAATGATGAAATTTTAAGCCTTAAGCAGTCTCTTGAGGAGAAT
ATTGTTATATTATCTAAACAAGTAGAAGATCTAAATGTGAAATGTCAGCTGCTTGAAAAAGAAAAAGAAGACCAT
GTCAACAGGAATAGAGAACACAACGAAAATCTAAATGCAGAGATGCAAAACTTAAAACAGAAGTTTATTCTTGAA
CAACAGGAACGTGAAAAGCTTCAACAAAAAGAATTACAAATTGATTCACTTCTGCAACAAGAGAAAGAATTATCT
TCGAGTCTTCATCAGAAGCTCTGTTCTTTTCAAGAGGAAATGGTTAAAGAGAAGAATCTGTTTGAGGAAGAATTA
AAGCAAACACTGGATGAGCTTGATAAATTACAGCAAAAGGAGGAACAAGCTGAAAGGCTGGTCAAGCAATTGGAA
GAGGAAGCAAAATCTAGAGCTGAAGAATTAAAACTCCTAGAAGAAAAGCTGAAAGGGAAGGAGGCTGAACTGGAG
AAAAGTAGTGCTGCTCATACCCAGGCCACCCTGCTTTTGCAGGAAAAGTATGACAGTATGGTGCAAAGCCTTGAA
GATGTTACTGCTCAATTTGAAAGCTATAAAGCGTTAACAGCCAGTGAGATAGAAGATCTTAAGCTGGAGAACTCA
TCATTACAGGAAAAAGCGGCCAAGGCTGGGAAAAATGCAGAGGATGTTCAGCATCAGATTTTGGCAACTGAGAGC
TCAAATCAAGAATATGTAAGGATGCTTCTAGATCTGCAGACCAAGTCAGCACTAAAGGAAACAGAAATTAAAGAA
ATCACAGTTTCTTTTCTTCAAAAAATAACTGATTTGCAGAACCAACTCAAGCAACAGGAGGAAGACTTTAGAAAA
CAGCTGGAAGATGAAGAAGGAAGAAAAGCTGAAAAAGAAAATACAACAGCAGAATTAACTGAAGAAATTAACAAG
TGGCGTCTCCTCTATGAAGAACTATATAATAAAACAAAACCTTTTCAGCTACAACTAGATGCTTTTGAAGTAGAA
AAACAGGCATTGTTGAATGAACATGGTGCAGCTCAGGAACAGCTAAATAAAATAAGAGATTCATATGCTAAATTA
TTGGGTCATCAGAATTTGAAACAAAAAATCAAGCATGTTGTGAAGTTGAAAGATGAAAATAGCCAACTCAAATCG
GAAGTATCAAAACTCCGCTGTCAGCTTGCTAAAAAAAAACAAAGTGAGACAAAACTTCAAGAGGAATTGAATAAA
GTTCTAGGTATCAAACACTTTGATCCTTCAAAGGCTTTTCATCATGAAAGTAAAGAAAATTTTGCCCTGAAGACC
CCATTAAAAGAAGGCAATACAAACTGTTACCGAGCTCCTATGGAGTGTCAAGAATCATGGAAGTAAACATCTGAG
AAACCTGTTGAAGATTATTTCATTCGTCTTGTTGTTATTGATGTTGCTGTTATTATATTTGACATGGGTATTTTA
TAATGTTGTATTTAATTTTAACTGCCAATCCTTAAATATGTGAAAGGAACATTTTTTACCAAAGTGTCTTTTGAC
ATTTTATTTTTTCTTGCAAATACCTCCTCCCTAATGCTCACCTTTATCACCTCATTCTGAACCCTTTCGCTGGCT
TTCCAGCTTAGAATGCATCTCATCAACTTAAAAGTCAGTATCATATTATTATCCTCCTGTTCTGAAACCTTAGTT
TCAAGAGTCTAAACCCCAGATTCTTCAGCTTGATCCTGGAGGTCTTTTCTAGTCTGAGCTTCTTTAGCTAGGCTA
AAACACCTTGGCTTGTTATTGCCTCTACTTTGATTCTGATAATGCTCACTTGGTCCTACCTATTATCCTTCTACT
TGTCCAGTTCAAATAAGAAATAAGGACAAGCCTAACTTCATAGAAACCTCTCTATTTTTAATCAGTTGTTTAATA
ATTTACAGGTTCTTAGGCTCCATCCTGTTTGTATGAAATTATAATCTGTGGATTGGCCTTTAAGCCTGCATTCTT
AACAAACTCTTCAGTTAATTCTTAGATACACTAAAAATCTGAGAAACTCTACATGTAACTATTTCTTCAGAGTTT
GTCATATACTGCTTGTCATCTGCATGTCTACTCAGCATTTGATTAACATTTGTGTAATATGAAATAAAATTACAC
AGTAAGTCATTTAACCAAAAAAAAAAAAAAA

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FIGURE 2315

MSFPKAPLKRFNDPSGCAPSPGAYDVKTLEVLKGPVSFQKSQRFKQQKESKQNLNVDKDTTLPASARKVKSSESK
IRVLLQERGAQDSRIQDLETELEKMEARLNAALREKTSLSANNATLEKQLIELTRTNELLKSKFSENGNQKNLRI
LSLELMKLRNKRETKMRGMMAKQEGMEMKLQVTQRSLEESQGKIAQLEGKLVSIEKEKIDEKSETEKLLEYIEEI
SCASDQVEKYKLDIAQLEENLKEKNDEILSLKQSLEENIVILSKQVEDLNVKCQLLEKEKEDHVNRNREHNENLN
AEMQNLKQKFILEQQEREKLQQKELQIDSLLQQEKELSSSLHQKLCSFQEEMVKEKNLFEEELKQTLDELDKLQQ
KEEQAERLVKQLEEEAKSRAEELKLLEEKLKGKEAELEKSSAAHTQATLLLQEKYDSMVQSLEDVTAQFESYKAL
TASEIEDLKLENSSLQEKAAKAGKNAEDVQHQILATESSNQEYVRMLLDLQTKSALKETEIKEITVSFLQKITDL
QNQLKQQEEDFRKQLEDEEGRKAEKENTTAELTEEINKWRLLYEELYNKTKPFQLQLDAFEVEKQALLNEHGAAQ
EQLNKIRDSYAKLLGHQNLKQKIKHVVKLKDENSQLKSEVSKLRCQLAKKKQSETKLQEELNKVLGIKHFDPSKA
FHHESKENFALKTPLKEGNTNCYRAPMECQESWK

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FIGURE 2316

CCGGTGAGTCGCCGGCGCTGCAGAGGGAGGCGGCACTGGTCTCGACGTGGGGCGGCCAGCGATGAAGCCGCCCAG
TTCAATACAAACAAGTGAGTTTGACTCATCAGATGAAGAGCCTATTGAAGATGAACAGACTCCAATTCATATATC
ATGGCTATCTTTGTCACGAGTGAATTGTTCTCAGTTTCTCGGTTTATGTGCTCTTCCAGGTTGTAAATTTAAAGA
TGTTAGAAGAAATGTCCAAAAAGATACAGAAGAACTAAAGAGCTGTGGTATACAAGACATATTTGTTTTCTGCAC
CAGAGGGGAACTGTCAAAATATAGAGTCCCAAACCTTCTGGATCTCTACCAGCAATGTGGAATTATCACCCATCA
TCATCCAATCGCAGATGGAGGGACTCCTGACATAGCCAGCTGCTGTGAAATAATGGAAGAGCTTACAACCTGCCT
TAAAAATTACCGAAAAACCTTAATACACTGCTATGGAGGACTTGGGAGATCTTGTCTTGTAGCTGCTTGTCTCCT
ACTATACCTGTCTGACACAATATCACCAGAGCAAGCCATAGACAGCCTGCGAGACCTAAGAGGATCCGGGGCAAT
ACAGACCATCAAGCAATACAATTATCTTCATGAGTTTCGGGACAAATTAGCTGCACATCTATCATCAAGAGATTC
ACAATCAAGATCTGTATCAAGATAAAGGAATTCAAATAGCATATATATGACCATGTCTGAAATGTCAGTTCTCTA
GCATAATTTGTATTGAAATGAAACCACCAGTGTTATCAACTTGAATGTAAATGTACATGTGCAGATATTCCTAAA
GTTTTATTGAC

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FIGURE 2317

MKPPSSIQTSEFDSSDEEPIEDEQTPIHISWLSLSRVNCSQFLGLCALPGCKFKDVRRNVQKDTEELKSCGIQDI
FVFCTRGELSKYRVPNLLDLYQQCGIITHHHPIADGGTPDIASCCEIMEELTTCLKNYRKTLIHCYGGLGRSCLV
AACLLLYLSDTISPEQAIDSLRDLRGSGAIQTIKQYNYLHEFRDKLAAHLSSRDSQSRSVSR

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FIGURE 2318

GCGCAGAAGCGGCGGCGGTGGTGGCTTGTGGTGCGGCCTCACCATACAGGAACAGGGCAGACGTTAGCGTGAGTG
ATCACTCTCAATCCCGGGGACCTGGTGGCCTTAGTCTTTCAGGTGGAACGGTGTGCGACATGGGAAAGAAAACCA
AGCGGACAGCTGACAGTTCTTCTTCAGAGGATGAGGAGGAGTATGTTGTGGAGAAGGTGCTAGACAGGCGCGTGG
TTAAGGGACAAGTGGAATATCTACTGAAGTGGAAAGGCTTTTCTGAGGAGCACAATACTTGGGAACCTGAGAAAA
ACTTGGATTGCCCTGAGCTAATTTCTGAATTTATGAAAAAGTATAAGAAGATGAAGGAGGGTGAAAATAATAAAC
CCAGGGAGAAGTCAGAAAGTAACAAGAGGAAATCCAATTTCTCAAACAGTGCCGATGACATCAAATCTAAAAAAA
AGAGAGAGCAGAGCAATGATATCGCTCGGGGCTTTGAGAGAGGACTGGAACCAGAAAAGATCATTGGGGCAACAG
ATTCCTGTGGTGATTTAATGTTCCTAATGAAATGGAAAGACACAGATGAAGCTGACCTGGTTCTTGCAAAAGAAG
CTAATGTGAAATGTCCACAAATTGTGATAGCATTTTATGAAGAGAGACTGACATGGCATGCATATCCTGAGGATG
CGGAAAACAAAGAGAAAGAAACAGCAAAGAGCTAAAGGAGGGGATGGTCTCTGTCATTTCTCTTTGTACATAATA
CATTCACCTCCCTGCCTCCTCTCCTTTCTACCCACCCCTTTCTATCCTAAACACATCCATAAAAAATGTGCTTAT
CACTGTGCTCCACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2319

MGKKTKRTADSSSSEDEEEYVVEKVLDRRVVKGQVEYLLKWKGFSEEHNTWEPEKNLDCPELISEFMKKYKKMKE
GENNKPREKSESNKRKSNFSNSADDIKSKKKREQSNDIARGFERGLEPEKIIGATDSCGDLMFLMKWKDTDEADL
VLAKEANVKCPQIVIAFYEERLTWHAYPEDAENKEKETAKS

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FIGURE 2320A

TTCTGCTTATCATGGTTACCAACAAAATGACTGCTGCCTTTAGAAACCCTAGTGGGAAACAGGTGGCGACAGACA
AAGTTGCAGAAAAGCTGAGCTCTACTCTCTCATGGGTGAAGAACACAGTATCGCATACAGTCAGTCAGATGGCCA
GTCAGGTGGCAAGTCCATCTACTTCATTACATACCACATCCTCATCTACCACACTATCAACACCAGCCCTTTCAC
CATCTTCCCCATCACAGTTGAGTCCAGACGTCTTAGAACTCCTGGCTAAACTGGAAGAACAGAATATATTGTTAG
AAACGGATAGTAAGTCTTTAAGATCTGTAAATGGGTCAAGAAGAAACAGTGGCTCTTCTCTTGTGTCGAGTTCAT
CAGCCTCTAGCAACCTCAGTCACCTTGAAGAAGATTCTTGGATTCTTTGGGGAAGAATTGTTAATGAATGGGAAG
ATGTACGCAAAAAGAAGGAAAAGCAAGTTAAGGAACTTGTTCATAAAGGGATACCCCATCACTTTAGAGCAATAG
TTTGGCAACTTTTATGCAGTGCACAAAGTATGCCAATTAAGGATCAGTATTCAGAACTCCTGAAAATGACCTCGC
CTTGTGAAAAATTGATCCGAAGGGACATTGCTAGAACTTACCCTGAACACAACTTTTTTAAGGAAAAAGATAGCC
TTGGACAGGAGGTTTTATTTAATGTAATGAAGGCTTACTCTTTAGTAGATCGTGAGGTTGGTTACTGTCAAGGAA
GTGCTTTTATAGTTGGATTGTTGCTTATGCAGATGCCAGAAGAAGAAGCTTTCTGTGTATTTGTTAAATTAATGC
AAGATTATAGACTTCGTGAACTTTTTAAACCAAGTATGGCAGAATTGGGCCTTTGTATGTACCAGTTTGAATGTA
TGATACAGGAGCATCTTCCAGAGCTCTTTGTACATTTTCAATCTCAGAGTTTTCATACCTCAATGTATGCATCAT
CCTGGTTTCTGACTATCTTTCTTACAACTTTTCCACTACCAGTTGCAACAAGGATATTTGATATCTTTATGTCTG
AGGGTTTAGAAATAGTGTTTCGTGTAGGATTAGCACTTCTTCAGATGAATCAGGCAGAACTGATGCAACTTGACA
TGGAAGGGATGTTACAGCACTTTCAAAAGGTCATTCCACATCAGTTTGATGGTGTCCCAGACAAGCTAATCCAAG
CAGCTTACCAAGTCCAATACAATTCAAAAAAAATGAAAAAGCTTGAAAAGGAATACACTACAATAAAAACGAAAG
AAATGGAAGAGCAAGTTGAAATTAAAAGGTTACGCACAGAAAATAGACTTTTAAAACAGCGCATCGAGACATTAG
AAAAACATAAATGCAGTTCCAACTACAACGAAGATTTTGTGCTACAGCTAGAGAAGGAATTGGTCCAAGCCCGAC
TGAGTGAAGCTGAGTCTCAGTGTGCATTAAAAGAGATGCAGGATAAAGTCTTGGATATAGAGAAGAGGAATAACT
CCCTTCCTGATGAGAATAATATTGCAAGGCTTCAGGAAGAACTCATTGCTGTGAAACTTAGAGAAGCAGAAGCCA
TTATGGGTTTGAAAGAACTTAGACAGCAAGTCAAGGATTTAGAGGAACACTGGCAGCGCCACTTAGCTCGTACTA
CTGGGAGATGGAAAGACCCACCCAAGAAAAATGCTATGAATGAGTTACAGGATGAACTGATGACCATTCGACTTA
GAGAAGCTGAAACACAAGCAGAAATAAGAGAAATAAAACAAAGGATGATGGAAATGGAAACACAGAACCAGATCA
ATAGTAACCATCTTCGAAGAGCAGAACAAGAGGTGATTAGCCTACAGGAGAAAGTGCAGTATCTTTCTGCACAGA
ACAAAGGACTCCTTACTCAATTAAGTGAAGCAAAGCGTAAACAAGCAGAGATTGAATGCAAGAATAAGGAAGAAG
TGATGGCTGTGAGGCTTCGGGAAGCAGATAGCATAGCTGCTGTGGCTGAACTACGACAACACATTGCTGAGCTTG
AAATCCAGAAAGAAGAAGGAAAGCTTCAAGGACAGCTTAACAAGTCTGATTCTAACCAGTATATTGGGGAACTGA
AAGATCAGATAGCAGAGCTGAATCATGAGCTCAGGTGCCTAAAAGGCCAGAAGGGCTTCTCAGGCCAACCTCCTT
TTGATGGAATCCACATTGTCAACCATTTAATAGGAGATGATGAATCATTCCATTCCTCCGATGAAGATTTTATAG
ATAATTCCTTACAGGAAACTGGTGTTGGTTTTCCTTTGCACGGAAAATCTGGCTCGATGTCTTTGGACCCCGCAG
TGGCAGATGGTAGTGAGAGCGAAACAGAAGACAGTGTGCTGGAGACCAGAGAGAGCAACCAAGTGGTTCAAAAGG
AGCGGCCCCCGAGAAGAAGAGAGTCGTATTCAACCACTGTCTGACCATCACTGTGACCTAGACTATGGATTTATT
TAAGGGATCAGTTATCATATGATTAGGGCTTTTTGGAAATAATTTGTTTTCATATGTATATATATATATATATAT
ATATATTTTACAGTCTTATCTGCCTTTTTATCTTTGCCAAATCTTTACCACTGATTTACCATTGCCATAAAGTAG
ACTGGTATATGGTTAATGTGTAAAACAAGGTTCTAACAGTATTACTGAATATTAATGTTTCTTGTTTAGAAAATG
CAACTATATCTATATGTGGGAACCATTTCTGAAGTTCAAAACTATGGAAAATTGAATTTTCTTCAAACAAAACTG
CTCTTGTGCAATATTTTATGCTCAGTGAGCAAATTGTGTATTTATGTTTATCAATTTGTTCCCCAGGTGGCTGTC
TACAAACATTTGACCAAAACATACATTTGAATTACCTTGGGTTTTTTTTTATTGGTGTTTTTTTTTTAAGACAGA
GATTCAGTTTGTCACCCAGGCTGGAGTGCTGTGGTGTGATTTTAGTTCACTGCAACTTCCGCTTCCCAGGTTCAA
GCAATTTTCCTGCTTCAGCTTCCCGAGTACCTGGGACTATATGTGCGCACCACCACGCCTGGCTAATTTTTTGTA
TTTTTAGTAGAGATGGGGTTTCACCATGTTGGCTGGGCTGGTCTCGAACTCCTAACCTCAAGTGATCCACCCGCC
TCAGCCTCCCAAAGTGCTGGGATTACAGGTGTGAGCCACTGCACCCAGCCTACCTTGTCTGTTTGTGTCTGGGAG
GTTTTTTTTTTCTATTTTTATTTTTTCATGAAAATTATTGGTGGGCCACTGAAAGTCCCCACACACAAAGCCTTT
ATTCTATATAATTTTATAAACACAAATTCATGATTATCTGTTTTGAGAGTTTTAAGTTTTGTTTTAATGTTTAAC
TTTTATGTGCATATGATGCTTTCCATGTGTTGGTTACTAGAGTAGTAGGTTAACTACAGACATACTGTTTTGTTT
GTACATATTTATAAATCTGTACCACCTAACATTGAACATCATTTTATATGAAGAACATACATGTTGCAAAATGAC
TGCTTTCAGCATCTAACAGGACTTCTGTAAATAATAGGTTAAAAGTTAAAAATAAAACACTAATGTTTTAAGAGC

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FIGURE 2320B

TTTAGTATTTTGCTTAGCATTCAATACTAGCAGATTCATAACTGATGCCTGTTCAAAAACACTGTTGGTGGAATC
TTTTATTTCATGTGTATGTAACTACTAAATTTTTCATGACTGAAGAGGTTATAGCACATATTAGTTAGTGCTAAT
ATTCTACTGAATATAATTTAAGCAATGGGCTAAGGTCCAAGAAACATAGCAATTATATCTACAAATAATCTATTA
ACATGATCTTCAGAATCTCTAGTTTTTGTTCTATAGATAAAGCCATAAGAATCCTTTCCTACCAGTTTTTCCTAT
ATCATTTAGATATTATTTCCTAGAAAACAGGATGCCTGTCACTGATAAGTTAGAGAAAACACCCAAATTATACTT
GCACTATGGAAAGACGACATGGATTTGTTGTCTGGGTACTTTCTACTCTCATTTTTGTTAGCCTATGAAAAAAAA
AAACATTTTGTTAACCTATGGAAAAAGCCTTGGAAGAGAAAAGTAGAATTCAGTATGTATGGAGGCACAGTTTTG
CACAGTATGTTGCATGCGGCAAAAAAAAAAATATGAAATAGAGTAGAAGAGATAAAAGTAGTTTTCTGTCAAAAA
CTAGGAGTTAAGCCTTCAGGTACGTTGTGGACTAGGCTTTCCAGCAAGGTTTTTGTAGCTATTTGCTTGCCTGAG
AAATGAAATTGAAAACATACCCCTGCGTGTCTGTCCTTAACACCAGGCTAAATTCTGGTGGTTAAATAACTTACC
TGTGGTTACAAGCTAGTAAGTAGCAGAGCCAAGATTTTTTTTAATATAGAGACAGGTGTCTCACTGTGTTGTCCA
GGCTGGTCTTGAACTCCTGGCCTCAAGTGGTCCTCCTGCCTCAGCCTCCCAAAGTGTGGGGATTACAGGTGCGAG
CTACTGCTCCCAGCAAGAGCCAAGATTTTAACCTAGATCTCCCTAACACCAAAGCTTTTGAAAGGGTTTCAGCTG
AAGAATTTCTTCAATTCTTCTGTTTTGTTTTTATTTTTGTTTTTTGAGATGAAGTCTCACTGCACTCAGGCTGGA
GTGCAGTGGTACGATCTTGGCTCACTGCAACTTCCACTTCCCGGGTTCAAGCGATTCTCCTGCCTCAGCTCCCAA
GTAGCTGGGACTACAGGTGCACGCCACCACAACTGGCTAATTTTTGTATTTTTAGTAGAGATGGGGTTTCGCTAT
GTTGGCCAGGCTGATCTCAAACTTCTGACCTCAGGTGATCCACCCACTTTGACCTCCCAAAGTGCTGGGATTACT
AGACGTAAGCCACCACACCTGGCAATTCCCTGCTTTTTTGACAACATAATTTAAATGAATTTGATTTAAATGTTT
CCTGAATATATATACAGATAGATAGATGAGTATCAACACTTACAAGCTCTACACAGTCTGTGAGTGTAGATACTA
CTTACTTGTAGGATTGTCTTGTGCTTTGGGGATTTTTGTTCGGAGTTCTATACTATCAGCCCAGAAAGCTATCAA
TGTCCAAGTGAAGTGAGATGATGCATGCCACATTATTGCTTTGACCTTCACATCAAGAAATCTGAATGATCTGGA
CCAGGGTCAGCAAAGTGCAGCCTACAAGTTATTGCAGTCAGCTGCCAGTTTTTACTTTTTTAAATAGTTGGGAAA
AAAATTCCAAAGACTGATATTTTGTGTCACATGAAAATTATATGAAATTCAAATTGCAGTGTCCATAAGTAAAGT
TTTATTGGGGCACACCCATGCTCACCCTTTTAAATATTGTGTATGGCCGCTTTGTGCTACAGTAGCAGAGTTGAG
TCATTGCAAGGGAGACCATATGGCCCAGGTAGCCTAAATATTTATCTGATCCTTTACAGAAAAAGTTTGCTAACC
CTTGATAACAGATACTCTAAAATGCAGGTTTTTCTTCTTCAGTTTAGCTCAGTGGTAGGTCAATTGTTTGCTTTT
GCTATTAAGCTTATGATTTGGAAACGTAAAATTTTCATGGTGGATCTTATAATCAGAACTATTCAAAAGGGAAAA
CATGCCAGCCATTTTATATGATGAAGTCTCTTATTCCATAGAAAACTGTAGAAAGGTATCTGTATCTTTGGAGAA
GGAGAAAGAAAGGAAAGAACTCCAGAATCCCATCACTGTTCTTTAAAGCATGCATCACAGACCTTTAAGAGTATG
CTTTATTGAGTAAAGGTTATAGTTTGACTTTAAGATAAGAAATTTTCTAGAATCATGTTTGAATTCTAAACGTTG
ATATTCTTAAGTACCATTTCTGATTAGGAATTAGGTGTTAAAAGAATCATGGTAAGGAAACCTTAATCCGTTGAA
ACTCTTGTAATTTGGACAACAAAAAACTAGAAATAACACTCTTTTCTTTGAAGATCTGATTCAAATACACCTTAG
AAGAGTTTAAAATCTCCCAGGCCTTTAGGATGCAATAGGATATTATGCCTTGGTTTGACTCCTTTTCATTCAAAT
TAATGTAAGTATGTTGTTCAAGACTTTGAAGCATTGAACAATGTTCTCGACGAATTTTATTTAATTACTGACATT
TTGTGATATTTGAATGTTATTAAGTTAAACACTTAGAGTTGAGTATATTCAGGGGAGAAAAGTGAATGAAATGAC
TCATAATAAGAAAGCTTGCTCCCTTGGGACAGTTACCTTCCTGGTGTCATTGCCATCCTGGGTTGACAAGCTGAG
AGTAGAGGATACAAGTGATGTGAATAAAATGGAAATTGCATTGAGTTAATGAAACATACACTTTTAGATCAAGAT
AACATTCAACAGCCTTTTTAGAAATTGCACACTCCTATAGTCCCACTTACTCAAGGAGGTGGGGGCAGGGAGGAT
CACTGGAGTACAGGAGTTTGGGGCTGTAGTGTGTAATGATCAACACCTGTGAAAGAATAACCACTGCACTCCAAC
CTGGGCAACATGGCAAGACCCTGTCTCTTTAAAAAAAAAAAAAAAATCCTGGGAAAAGAAGTCAAAGATGTAATTT
TACACAATTTCTGCCCCCACCGTCTTTTTTGTTTGTTTGTTTGTTTGTTTGTTTTTTGGCTAGATACTAGGTATT
CAGTGTTTGCTGAGATGACAGGTTTCTACTAATCAGCCAGTTATTTGGGAAGGAGAAAAACTTTTTCTCAATTCT
GAACATGATGCAGCTTGTTAACTCTCCAGATAGTGCCTTTGATTGAAAATAAGGTCTACACCTTTTTAAGTATAT
TATTTCTGACATCGTAAGAAATAATTTAGTTCCTTATTCTCATTTATCTTTTATATAATGTACTGTAATATTCAG
GTTTAAAGTAAAATAAGTATATGGAATTATATTTTGGTAAAACTGTTTCATGACCAGCTTGATTAATGTATATTA
ACATACCAGACATTGACAGCGAACATTTCATGAAATCAGTTATTTACTTACTAAAACAATGAGTTTTAGCTTGAA
AGTTACTGCTGCTCTATTATTAACAAAACTAAGTTTTAAAAATTAATTTTAATTCTACTGAAGTTTAATTTCTGG
TTAAAGGTATAGTGGATGCTATTTATGATCCAAGTTTTTACATCACATCCATTGATCTGCCTATCCCTTCTTTTT

FIGURE 2320C

ACTCCAAAGAGGAGATGATAGAATAATACATTCAGTATACTACCAAGAAGCAAAGTTATAATGTGTTTCATTTTG
CTATTGGAATTTTTTATTGTAACATTGTATGATAACCTGAAATGTTTACTTGTGCCTTTTCTTTAAACAATTAAA
GTTTTCCATTTTATAAGAAACAAAAAAAAAAAA

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FIGURE 2321

MVTNKMTAAFRNPSGKQVATDKVAEKLSSTLSWVKNTVSHTVSQMASQVASPSTSLHTTSSSTTLSTPALSPSSP
SQLSPDVLELLAKLEEQNILLETDSKSLRSVNGSRRNSGSSLVSSSSASSNLSHLEEDSWILWGRIVNEWEDVRK
KKEKQVKELVHKGIPHHFRAIVWQLLCSAQSMPIKDQYSELLKMTSPCEKLIRRDIARTYPEHNFFKEKDSLGQE
VLFNVMKAYSLVDREVGYCQGSAFIVGLLLMQMPEEEAFCVFVKLMQDYRLRELFKPSMAELGLCMYQFECMIQE
HLPELFVHFQSQSFHTSMYASSWFLTIFLTTFPLPVATRIFDIFMSEGLEIVFRVGLALLQMNQAELMQLDMEGM
LQHFQKVIPHQFDGVPDKLIQAAYQVQYNSKKMKKLEKEYTTIKTKEMEEQVEIKRLRTENRLLKQRIETLEKHK
CSSNYNEDFVLQLEKELVQARLSEAESQCALKEMQDKVLDIEKRNNSLPDENNIARLQEELIAVKLREAEAIMGL
KELRQQVKDLEEHWQRHLARTTGRWKDPPKKNAMNELQDELMTIRLREAETQAEIREIKQRMMEMETQNQINSNH
LRRAEQEVISLQEKVQYLSAQNKGLLTQLSEAKRKQAEIECKNKEEVMAVRLREADSIAAVAELRQHIAELEIQK
EEGKLQGQLNKSDSNQYIGELKDQIAELNHELRCLKGQKGFSGQPPFDGIHIVNHLIGDDESFHSSDEDFIDNSL
QETGVGFPLHGKSGSMSLDPAVADGSESETEDSVLETRESNQVVQKERPPRRRESYSTTV

FIGURE 2322A

ATTTTTGTCCCCTAAAGGAAACATCAAAATCAATCAACATTTATTTCCTCCCTCTATCCATCATTGCCTTCCTCC
CTCCTGTCACGCACACATACACATGCAACCATGACACAGATAATGGGAAGAGCTTTATTGGATTGGCAGAGATTT
ACAGACAAGATTGCACAAGAGATGCTGTTGCTGGATAGAAAATTGATCAGGTAGAAGTGATGCTACCTACTTGAG
GATGGCCATCTGAATTGTTAAAAATTCTGTCATAGACTATTAAAAAAAAAGTTTTACTACTCCCAAGTACACACA
GTTATGAGAATTAGGCTTTTAAAAAGTTGCACAGTGAAGGCTCTTTAGGAACCTACTTTACTTAATCAGTAAAAA
TTGAGTATTATTGATGCACCAACTATTCCCATATAAATGTACTTGCTTTTTCAGATAAAACACTTCTGAAGTGCT
CAAGAATGTCTGAAAACAGTTTGTTTTCTTAAATAGGATAAATAATCATTCCTTTTGCAATCTTGTTTACAGTAT
TCATTCTCTTAGCCAATCCCTCCACGCAAATGGAGACAAACTTCATCCCAGTCCTAACCAGTATAGTTGAAGGGA
ATGGAGCCTTGTAGTCTATGATTTTTTTTTTTAAATTTCCATCGAAGGGATTGGGGATGTCAGAGAGCCAGAGCT
TTCCCCTTTCCAGGAGCTAAGTTGGCTTCGGAAGTCTTCTGGGATTTGTGAAAATATTACTGTTGTAAAATTACA
AAGTGGTAGCCATAACAACTCCCTCAGATTGGAGACTTGAAATGTCAAAACTCCCCTCTTCCTTTCCCCTAGTTT
GGTGGATGCTCATTTATTAATTCATTCAATAAACTATTAGATGCCAGGTACCAAACTACTGCCATGGGAGTGCAC
ATATTAACAAAATGCTCTACCTGCTGCCAAATGGCTTACTATTCTGTGGAAGAAACAAAGTATATAATCCTCCCC
AATAACAGTTATGTATTGTTTGTTCACTTAATGTGGAAGGCAAGACTGATGCAGACACACAAGGAAGGCTCAAAA
ATATAAATCTAGCAGCAATGTCATCTTTTTTGATTTTAAATACCATATGTGCTTACTGCTAATCAGGAAATGAAC
AACCTCAGTAAAATTCATCAGTGCTGGTAAATAGTTTGCTGTAGTGGAAAGCTCATAACCTTTGGATTCAAATGA
TCCTAGTTTCTGTACCATTTATTAGCGTTGTGACCTAGGACAAGTACCTCACTTCTCTGAGCCTGTTTCCTCCTC
TGTAAAATAATGTCTACTTCACAAGGCTGTTTCAAAGGTTAAAAAAGATAGCATATGTAAACTGTCTTAGCTCAG
CGCTTGACATTTCCTAAGTGTGCCATAAATATTAATCTCTTTCCTTACTCCCAGCTCCAATACAGCGTAACAGTG
CTTTAAAATGTATGTCCTTCATTTCTCCTTCATTTCTCAGTCACCTTTGTCTCTTCCCTAGGGCATATCCCCAAA
TTCTTAAACAAAAAAAAATGATTTTTTTCCCCTTCATCAAACTTTTCACTGGCTCCCTTAGCACCCAGTAGAAGG
TCCCAACTCCTTACAGAGTCTGGGTTTTCATGTCCCTGTTGGCTTACACAGCTTAATCTTTTGCCACTTTCCCCC
TCACATTGATTACGGTAGCCAAGTTTAACTATTTACACAACTATTCACCACAAGTTATTCTCTGGGCCTGCAGCA
GAAACATGATTAACAATTTTAATGCCCAGAGTAAACAACAGAAATTTTTCTTAAATTAACAGGAATAGTGTGAAA
ATGCTGTAAGTACAGAAAATGCAACCTCCATTCCAGTAGAACAATTTCCTTTGCCTTGTCCTTGGCTCTCCAAAA
CTGTTCATTTATTGTGGTGTCTTTTAGATTTTAGTGCCCTGGGACAAAGATCTAATTTCCCCACCCTACTTTTGA
CTCTATCCTGGACTACCTTTCCTCACCTCTATCTCTCTCAACCAGACTAACTCTTTATTCCTTAGACTTGATGAT
GCATCCCTCTTTAGAGATCCAAAGACACCCCAAGCATCCCCCTCTCTCAGCAATAATCACATTGTATAGCAGTGT
TTTTCAAAGTGTGGTCCTCACACCGCCTGTGTTAGAATCACCTTTAGTGTTTGTTAAAAGAATTGATTTTGGGTT
CCCACTCCTGACCTAACCAGAATATCTGAGAACATAGGCAGGAATTTACATTTTTGACAAGCTCCTCATGATTCT
GATGCACCAAAAATTTTAATGAATAATCATCTTCCCTACTAGACTGAACACCTTGAGAGGAAGGACTGTGTCTTT
TATTGTTGTTATATTGTTAATACCTGGCACAGTGCTTGGAACATTAGCTTGGCTAATGTTTATTGAATGAATGTA
TGAATGAAAAAATGCATTATGAAAGTTTCCTCTTGTACTCTCATGTTCGTAGTGATGTTTGTTACTTCCTGGGCA
GAAAAGCTTGGTTACTACTCCATTTGAGCTGTATTAATTCTATTTTGCAGAGATATCAAGGCTCCTACATAATAA
ATGATCATTGTCCTCCTCAAAAACTCTTTGGCAGTTATCTTGGGGAAATGTCTTTGGAGCATATGGCACCATTGT
TTTCAGTAACATTTCAGTCTTGTCAAACTTTGTTGTTTGAAGGTGGATTTACATTTCGGTTATAGCCAAAAATCA
CTCAAAGCTAAGCCTACTTAAAAAAGTGGGGAATTAAACTGGGTTTGGAGTAAGCAATGAAGTTTGACTCTGAAG
TCCCAAATTCTGAGTCAAACAGTGAAAAATGACTTCTAAGATACAACATGGTGACAAAGTACTTAGTGGGGGTGC
GATGGGCCCCAGATATTTACTTCAGTTAACTTGGCTTTTATAGAATCCTGGGCAATGCCATGGACCTTAAGAGAA
GTAATTGGCTACCTCTAGCTAAACCCAGCTGGACAAAGAGAATAGGACTTGTATTTAACATTTTCAAAGAAGGTG
ACTGCATAAGCTTTTGTTGTTGTTGCTCTACTCAACCTGTTCTCCACAACTGTTTCTACCAGAAGATTATTTTAT
GTCTGCAATTTATGCTTGTTTCCACTTTTTATATTGTCTTATTGAAGAAAGCACAAAAATAATCAAAAATAAAGT
AAAACCTGTTTTGAGAGTATGAAAGAAATTTTAATGCCACATTGAGGTTCTGGCTACTTGTAAGTAAGAGTAACT
GCATCTGGATGTGTTTTTATTATACAATTCTATGTGTATCTTTAGATGCAGTGAAATTCAGATTGCAGCAAAATC
ACTTATCTGTTCTTTTCGGCTAAAACACTCTAGGTGAATTTTCTAAACTTCCATGGTTTACATATTTATATATGA
CTACCAAGATGGAGCAATCCACGGATGGACTTTTGAATAAACTCAAATATTTGATACTGCTTCCTCCAAGGAATG
GAGAGTGTCAGGCAGGTAGGTAAGAACCACTCCTACACTTATTTCTAGCTCCTGAAGCCAACTGCAGCCTTGGAG
CCAATGGCTGTATTTGGCTGTGTGTTACAGGTTGGCCAAACTGATTGCCATCAGGTCAGACAAAACTGCCTTTTA

FIGURE 2322B

TGGTGTAGTCTGCCAGCTTCAGACATATGCTGTATTGTTGTTATTGGCTAGACTATTTATTAGACTATTGTTGGA
CTATTTTTTATCAAATGCTTTACCCCACGCCTGTTTGTATTGGGAGCTCTGGACCAATAGTGTCTCTCCTAGTGA
CAGAAATATGAGCATCTGTGGATTACACAGCCTCATCCCTCTCTACAATATTCCAGCCCATCCAAAATGCTATAT
TATGAATTAAATAAATATATATGTATTCATGAAAAAAAAAAAAAAGGG

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FIGURE 2323

FCPLKETSKSINIYFLPLSIIAFLPPVTHTYTCNHDTDNGKSFIGLAEIYRQDCTRDAVAG

FIGURE 2324

GCCTTTCTGGGAAATCATTTCAGTCCACACCAACCATATTATTCAGGGTTCCTGCCATATGTGTGGGGTATCCTA
CTGATACACACGTATTCAAAGTTTATGGGTACAACAAAGACATAGTACATGTACATAATATGTATGTGAATATAG
TTAAATATATTTCTTCACAATATTTTAAACTGTGAAGAACTTTATCATACAGGAAACTTAAAACAAGAGGTGTCA
AAAGACCCAAATTAGGTGCATTTTACTTGTTTATGATGGCATAACCATTGCTTTAAAATGTTTAGACAGTAGAAT
ATTGAATTTATGCTCTATTTTTGTTTATTTAAGCAACACTTAATGTAAAAGTGCAACAGGCAATTGAATCCAAAT
TTCAACGACAAAAAAAAAACATGTATTTTAGAGTTCATCTTTGGCAAAATCTTTGGTTCAGGGTACTAGTTGTTT
AAAAGTTGATTCATATTCTTACCTTGTGCTGAGAAAGGTTGCATTGCTGCCCCTTATACACATGCTGCAGCTTGA
TGTTAAAGAATTTTTATTCTTTCTGAAGAACTAATTAATGTTTAAAGCAACTGTTTAATATGATGGCATGTGTGT
GTGTGCGTGCGTGTGTATGTTCTGAGTCCACTTCTTTTTTCCTAAATAACACTACAGGGATTTTGTCATATTAGA
TTTAATTTATAATTTGAAAAATCATCTAGTGTGTGACCTACAGGCTTAGAAATGGTATAGTCAAAGACATTTTAT
CCACATTTCTAATAGTGGACTTGATTAAGTAGATAAGATCAGCATCTGTTTATGGTAGTAGGAGAAATAGCCAAA
GTTGAGGATTTTATGTATGTTTTCCTGTTTACCTGGAAAATAGCAATTAATTGGATTTTTTGGTAAAGATTGCCT
TCTGTATAATGTTTGGATTATATAAAATTGCAAAAATGATAACAGCCCGCTTTACTGTACTAAGCCTGTTACTTT
CATGACGTGTGAGCAGAATGCCTTATTTTGTAATCTTGTTTAACTTGTTGCTACTGGGACTTGATTTACTGTGGC
ACTAGTTAAGTAAGTTAAAAAAAAGTTAAACCCTCTCATTATTAAAGAGGAAAGGCGATGGTGATGTCTGTAGTA
CAATATAAACCATAATTGTGATTTACCTTAAGTAGGTATAACTCTTATGGGATATACAGTATAGTTTTTGTGAAT
CTTTACATGATAGCATTATCTTTTTATAATTTTTTTTCCTAAGATAAACAAATGCATAGTTTTCTTCTATGGGTG
ATAGAAACAGCTTTTTGAAGTAATGAAAACCTCAAAAGATCATGTTGATTCTTAATTTTTGCCTTTTGCATAAGC
CTCTTTATAACATGTATCTTTAAAACAATTAAGTCTTTAGGAATGTGTAACCAGAACTATGTTAGTATTGCTTAT
AAAACTTTAGTTAGGTTCAATATATACATATATACATCTCTATATAGGTATATAGATTTGCATTTTGTCTTGTAA
AATTTTATTTGAATAAATTCTTCCTGTAGGTAATGGGAAACAAAATTAATAGTTCATATGTCACTCATAGCATTT
CTATATTTGAAAGTAGCCCAATATAAAACTTTTGATTCTAAAATTAAACCAGCAGCCTATTACAAGCACATTCTT
TGATTGAGTCATTGGTTATAAACTTACTAAATGCAGAGAAAGCAGCCAATTTAGGAAACTTCTGAGTTGGTGGGA
CACTGTTGATTAATAATGTACTGTATGAATTAAGTGATGCTTTAACTTTGATTTTACATTTTAAAGTTAAAATGT
GGGCATTATGTCAGCAAACTTAAGGGCATTATGTCAGCAAGCTAAAACATTTTTTTTCCTGTGCTTTTAATGTAT
CTCTTTACATGATCTGAGAGAGGATTCAAGTTGATAGAAATAGCTGAGGGGAAAAGGGGGAACATCTTGGGATGA
AGCTTGTCCTTATGGTGATGGTTTAATTACAGATTAAAAAATTAGAAGGAAATTTCAGTGGATTAAGTGTATAGC
TTTCATATCTACATTTCAAGAAATTACCATTGTAACTTGATAAGAGATGATTTATTTTATGTAAACATCTTTGCA
AAGCAAGGTGTAGCAGCTCAGCTAGATTTATTACTGTGCACGAAAGTAAATACCTATCTCAATTATTCTTTTTCT
TTTCCAATATAAAGTTTGCTGAATGTACAAGAAGAGTTTATCACTTAGGATATAGAATTTTTTTAGGGGTTGGGG
GAGGGGATCTGTTAGGAAACTGTTACCTATAAACAAAGATTGACTGGATTCGATCCAAAAGATAAAACTTGAAGC
TATTCTGGAACTAACATGGAAAAATGAAATGGCTATTGTTTAAAAAAATGATAGAAATACATTGTTGATGGGATA
TGAGTTAAGTTTATTTTCTACAAACTGTAATTGATGAGGACATGGATAATATCTTCATGTTTCTGAGAAGTAATC
TGTATGTGGGGGGAGGGGATAATAAATATTTCTACCCCCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAA

FIGURE 2325

GGTTGGTGCGAGCTTCCAGCTTGGCCGCAGTTGGTTCGTAGTTCGGCTCTGGGGTCTTTTGTGTCCGGGTCTGGC
TTGGCTTTGTGTCCGCGAGTTTTTGTTCCGCTCCGCAGCGCTCTTCCCGGGCAGGAGCCGTGAGGCTCGGAGGCG
GCAGCGCGGTCCCCGGCCAGGAGCAAGCGCGCCGGCGTGAGCGGCGGCGGCAAAGGCTGTGGGGAGGGGGCTTCG
CAGATCCCCGAGATGCCGGAGTTCCTGGAAGACCCCTCGGTCCTGACAAAAGACAAGTTGAAGAGTGAGTTGGTC
GCCAACAATGTGACGCTGCCGGCCGGGGAGCAGCGCAAAGACGTGTACGTCCAGCTCTACCTGCAGCACCTCACG
GCTCGCAACCGGCCGCCGCTCCCCGCCGGCACCAACAGCAAGGGGCCCCCGGACTTCTCCAGTGACGAAGAGCGC
GAGCCCACCCCGGTCCTCGGCTCTGGGGCCGCCGCCGCGGGCCGGAGCCGAGCAGCCGTCGGCAGGAAAGCCACA
AAAAAAACTGATAAACCCAGACAAGAAGATAAAGATGATCTAGATGTAACAGAGCTCACTAATGAAGATCTTTTG
GATCAGCTTGTGAAATACGGAGTGAATCCTGGTCCTATTGTGGGAACAACCAGGAAGCTATATGAGAAAAAGCTT
TTGAAACTGAGGGAACAAGGAACAGAATCAAGATCTTCTACTCCTCTGCCAACAATTTCTTCTTCAGCAGAAAAT
ACAAGGCAGAATGGAAGTAATGATTCTGACAGATACAGTGACAATGAAGAAGACTCTAAAATAGAGCTCAAGCTT
GAGAAGAGAGAACCACTAAAGGGCAGAGCAAAGACTCCAGTAACACTCAAGCAAAGAAGAGTTGAGCACAATCAG
AGCTATTCTCAAGCTGGAATAACTGAGACTGAATGGACAAGTGGATCTTCAAAAGGCGGACCTCTGCAGGCATTA
ACTAGGGAATCTACAAGAGGGTCAAGAAGAACTCCAAGGAAAAGGGTGGAAACTTCAGAACATTTTCGTATAGAT
GGTCCAGTAATTTCAGAGAGTACTCCCATAGCTGAAACTATAATGGCTTCAAGCAACGAATCCTTAGTTGTCAAT
AGGGTGACTGGAAATTTCAAGCATGCATCTCCTATTCTGCCAATCACTGAATTCTCAGACATACCCAGAAGAGCA
CCAAAGAAACCATTGACAAGAGCTGAAGTGGGAGAAAAAACAGAGGAAAGAAGAGTAGAAAGGGATATTCTTAAG
GAAATGTTCCCCTATGAAGCATCTACACCAACAGGAATTAGTGCTAGTTGCCGCAGACCAATCAAAGGGGCTGCA
GGCCGGCCATTAGAACTCAGTGATTTCAGGATGGAGGAGTCTTTTTCATCTAAATATGTTCCTAAGTATGTTCCC
TTGGCAGATGTCAAGTCAGAAAAGACAAAAAAGGGACGCTCCATTCCCGTATGGATAAAAATTTTGCTGTTTGTT
GTTGTGGCAGTTTTTTTGTTTTTGGTCTATCAAGCTATGGAAACCAACCAAGTAAATCCCTTCTCTAATTTTCTT
CATGTTGACCCTAGAAAATCCAACTGAATGGTATCTCTTTGGCACGTTCAACTTGGTCTCCTATTTTCAATAACT
GTTGAAAAACATTTGTGTACACTTGTTGACTCCAAGAACTAAAAATAATGTGATTTCGCCTCAATAAATGTAGTA
TTTCATTGAAAAGCAAACAAAATATATATAAATGGACTTCATTAAAATGTTTTTGAACTTTGGACTAGTAGGAGA
TCACTTTGTGCCATATGAATAATCTTTTTTAGCTCTGGAACTTTTTGTAGGCTTTATTTTTTTAATGTGGGCATC
TTATTTCATTTTTGAAAAAATGTATATGTTTTTTGTGTATTTGGGAAACGAAGGGTGAAACATGGTAGTATAATG
TGAAGCTACACATTTAAATACTTAGAATTCTTACAGAAAAGATTTTAAGAATTATTCTCTGCTGAATAAAAACTG
CAAATATGTGAAACATAATGAAATTCAGTAAGAGGAAAAGTAACTTGGTTGTACTTTTTGTAACTGCAACAAAGT
TTGATGGTGTTTATGAGGAAAAGTACAGCAATAATCTCTTCTGTAACCTTTATTAATAGTAATGTTGTTGTAGCC
CTATCATACTCACTTTTTAAGACACAGTATCATGAAAGTCCTATTTCAGTAAGACCCATTTACATACAGTAGATT
TTTAGCAGAGATCTTTTAGTGTAACATACATATTTTAGAGAATTGTTGGCTAGCTGTACATGTTTTGAAAAGCTG
TTTAGCTAGCTATAAGGCTATAATTGGAAATTTGTATTTTTTATTTACAGCAAAACATTTATTCAGTCATCCAGT
TTGCTACCAAAATATGTTTTAGATAAGTGTGTGTATGTTTGTTTAGAAGTTAGAAATTGTAAACACTGGTCTTAT
GTTTCATTTGGATTCATTATTGCATTGTCTTGTTACCAGAAACAAATTTTGCCGAGCTTTTTTTGCCCTATATTT
CCCAGCATAATTTGATTAGAAAGTACAAAAAGGGCCGGGCGCGGTGGCTTACGCCTGTAATCCCAGCACTTTGGG
AGGCCAGGGCGGGTGGATCACGAGGTCAGGAGATCGGGACCATCCTGGCCAACATGGTGAAACCCCGTCTCTACT
A

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FIGURE 2326

MPEFLEDPSVLTKDKLKSELVANNVTLPAGEQRKDVYVQLYLQHLTARNRPPLPAGTNSKGPPDFSSDEEREPTP
VLGSGAAAAGRSRAAVGRKATKKTDKPRQEDKDDLDVTELTNEDLLDQLVKYGVNPGPIVGTTRKLYEKKLLKLR
EQGTESRSSTPLPTISSSAENTRQNGSNDSDRYSDNEEDSKIELKLEKREPLKGRAKTPVTLKQRRVEHNQSYSQ
AGITETEWTSGSSKGGPLQALTRESTRGSRRTPRKRVETSEHFRIDGPVISESTPIAETIMASSNESLVVNRVTG
NFKHASPILPITEFSDIPRRAPKKPLTRAEVGEKTEERRVERDILKEMFPYEASTPTGISASCRRPIKGAAGRPL
ELSDFRMEESFSSKYVPKYVPLADVKSEKTKKGRSIPVWIKILLFVVVAVFLFLVYQAMETNQVNPFSNFLHVDP
RKSN

FIGURE 2327

CCCAGGCGCAGCCAATGGGAAGGGTCGGAGGCATGGCACAGCCAATGGGAAGGGCCGGGGCACCAAAGCCAATGG
GAAGGGCCGGGAGCGCGCGGCGCGGGAGATTTAAAGGCTGCTGGAGTGAGGGGTCGCCCGTGCACCCTGTCCCAG
CCGTCCTGTCCTGGCTGCTCGCTCTGCTTCGCTGCGCCTCCACT**ATG**CTCTCCCTCCGTGTCCCGCTCGCGCCCA
TCACGGACCCGCAGCAGCTGCAGCTCTCGCCGCTGAAGGGGCTCAGCTTGGTCGACAAGGAGAACACGCCGCCGG
CCCTGAGCGGGACCCGCGTCCTGGCCAGCAAGACCGCGAGGAGGATCTTCCAGGAGCCCACGGAGCCGAAAACTA
AAGCAGCTGCCCCCGGCGTGGAGGATGAGCCGCTGCTGAGAGAAAACCCCCGCCGCTTTGTCATCTTCCCCATCG
AGTACCATGATATCTGGCAGATGTATAAGAAGGCAGAGGCTTCCTTTTGGACCGCCGAGGAGGTTGACCTCTCCA
AGGACATTCAGCACTGGGAATCCCTGAAACCCGAGGAGAGATATTTTATATCCCATGTTCTGGCTTTCTTTGCAG
CAAGCGATGGCATAGTAAATGAAAACTTGGTGGAGCGATTTAGCCAAGAAGTTCAGATTACAGAAGCCCGCTGTT
TCTATGGCTTCCAAATTGCCATGGAAAACATACATTCTGAAATGTATAGTCTTCTTATTGACACTTACATAAAAG
ATCCCAAAGAAAGGGAATTTCTCTTCAATGCCATTGAAACGATGCCTTGTGTCAAGAAGAAGGCAGACTGGGCCT
TGCGCTGGATTGGGGACAAAGAGGCTACCTATGGTGAACGTGTTGTAGCCTTTGCTGCAGTGGAAGGCATTTTCT
TTTCCGGTTCTTTTGCGTCGATATTCTGGCTCAAGAAACGAGGACTGATGCCTGGCCTCACATTTTCTAATGAAC
TTATTAGCAGAGATGAGGGTTTACACTGTGATTTTGCTTGCCTGATGTTCAAACACCTGGTACACAAACCATCGG
AGGAGAGAGTAAGAGAAATAATTATCAATGCTGTTCGGATAGAACAGGAGTTCCTCACTGAGGCCTTGCCTGTGA
AGCTCATTGGGATGAATTGCACTCTAATGAAGCAATACATTGAGTTTGTGGCAGACAGACTTATGCTGGAACTGG
GTTTTAGCAAGGTTTTCAGAGTAGAGAACCCATTTGACTTTATGGAGAATATTTCACTGGAAGGAAAGACTAACT
TCTTTGAGAAGAGAGTAGGCGAGTATCAGAGGATGGGAGTGATGTCAAGTCCAACAGAGAATTCTTTTACCTTGG
ATGCTGACTTC**TAA**ATGAACTGAAGATGTGCCCTTACTTGGCTGATTTTTTTTTTCCATCTCATAAGAAAAATCA
GCTGAAGTGTTACCAACTAGCCACACCATGAATTGTCCGTAATGTTCATTAACAGCATCTTTAAAACTGTGTAGC
TACCTCACAACCAGTCCTGTCTGTTTATAGTGCTGGTAGTATCACCTTTTGCCAGAAGGCCTGGCTGGCTGTGAC
TTACCATAGCAGTGACAATGGCAGTCTTGGCTTTAAAGTGAGGGGTGACCCTTTAGTGAGCTTAGCACAGCGGGA
TTAAACAGTCCTTTAACCAGCACAGCCAGTTAAAAGATGCAGCCTCACTGCTTCAACGCAGATTTTAATGTTTAC
TTAAATATAAACCTGGCACTTTACAAACAAATAAACATTGTTTTGTACTCACGGCGGCGATAATAGCTTGATTTA
TTTGGTTTCTACACCAAATACATTCTCCTGACCACTAATGGGAGCCAATTCACAATTCACTAAGTGACTAAAGTA
AGTTAAACTTGTGTAGACTAAGCATGTAATTTTTAAGTTTTATTTTAATGAATTAAAATATTTGTTAACCAACTT
TAAAGTCAGTCCTGTGTATACCTAGATATTAGTCAGTTGGTGCCAGATAGAAGACAGGTTGTGTTTTTATCCTGT
GGCTTGTGTAGTGTCCTGGGATTCTCTGCCCCCTCTGAGTAGAGTGTTGTGGGATAAAGGAATCTCTCAGGGCAA
GGAGCTTCTTAAGTTAAATCACTAGAAATTTAGGGGTGATCTGGGCCTTCATATGTGTGAGAAGCCGTTTCATTT
TATTTCTCACTGTATTTTCCTCAACGTCTGGTTGATGAGAAAAAATTCTTGAAGAGTTTTCATATGTGGGAGCTA
AGGTAGTATTGTAAAATTTCAAGTCATCCTTAAACAAAATGATCCACCTAAGATCTTGCCCCTGTTAAGTGGTGA
AATCAACTAGAGGTGGTTCCTACAAGTTGTTCATTCTAGTTTTGTTTGGTGTAAGTAGGTTGTGTGAGTTAATTC
ATTTATATTTACTATGTCTGTTAAATCAGAAATTTTTTATTATCTATGTTCTTCTAGATTTTACCTGTAGTTCAT
AAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2328

MLSLRVPLAPITDPQQLQLSPLKGLSLVDKENTPPALSGTRVLASKTARRIFQEPTEPKTKAAAPGVEDEPLLRE
NPRRFVIFPIEYHDIWQMYKKAEASFWTAEEVDLSKDIQHWESLKPEERYFISHVLAFFAASDGIVNENLVERFS
QEVQITEARCFYGFQIAMENIHSEMYSLLIDTYIKDPKEREFLFNAIETMPCVKKKADWALRWIGDKEATYGERV
VAFAAVEGIFFSGSFASIFWLKKRGLMPGLTFSNELISRDEGLHCDFACLMFKHLVHKPSEERVREIIINAVRIE
QEFLTEALPVKLIGMNCTLMKQYIEFVADRLMLELGFSKVFRVENPFDFMENISLEGKTNFFEKRVGEYQRMGVM
SSPTENSFTLDADF

FIGURE 2329

CAAATCCGTGCTCCTAGATTTGCAGGTTCTGATACTGTGGTTCGAGCTACACTCGCCGCCTGGGCAGACACTCGT
CCAAACCACTGGAGTGTGCTGGTGATCGCAGCCAGCCCTTCGCCTCTCCATGAACCCGTGAGCCTGGGGCAGGTG
CCAGGCGATGGCGCGGCCTGTGAGCGACAGGACCCCGGCCCCTCTGCTGCTGGGCGGCCCGGCCGGGACACCCCC
TGGCGGGGGAGCGCTGCTTGGGTTGCGGAGCCTTCTGCAGGGGACCAGCAAGCCCAAAGAGCCGGCCAGCTGTCT
CCTGAAGGAAAAGGAGCGCAAGGCGGCCCTGCCTGCAGCCACAACCCCTGGGCCAGGCCTGGAGACTGCGGGCCC
GGCGGATGCCCCGGCTGGGGCAGTGGTGGGCGGAGGGTCCCCGCGGGGGCGCCCGGGGCCGGTGCCCGCCCCGGG
TCTGTTGGCGCCACTGCTGTGGGAGCGCACGCTGCCGTTCGGCGATGTGGAGTACGTAGACCTGGACGCCTTCCT
GCTGGAGCACGGGCTCCCGCCCAGCCCGCCGCCCCCCGGTGGCCCGTCGCCGGAGCCGTCGCCCGCGCGGACGCC
CGCACCCTCCCCAGGGCCGGGTTCGTGCGGCTCGGCTTCCCCCCGCTCCTCTCCTGGGCACGCCCCCGCCCGGGC
TGCCCTCGGGACCGCCACGGGCCACCGCGCAGGCCTGACCTCTCGGGACACACCCAGCCCTGTGGACCCAGACAC
CGTGGAGGTGTTGATGACCTTTGAACCCGACCCAGCTGATCTTGCCCTATCAAGCATTCCTGGCCACGAGACCTT
TGACCCTCGAAGACATCGCTTCTCAGAAGAGGAACTTAAGCCCCAGCCAATCATGAAGAAGGCAAGAAAAATCCA
GGTGCCGGAGGAGCAGAAGGATGAGAAATACTGGAGCCGGCGGTACAAGAACAACGAGGCAGCCAAGCGGTCCCG
TGACGCCCGGCGGCTCAAGGAGAACCAGATATCGGTGCGGGCGGCCTTCCTGGAGAAGGAGAACGCCCTGCTGCG
GCAGGAAGTTGTGGCCGTGCGCCAGGAGCTGTCCCACTACCGCGCCGTGCTGTCCCGATACCAGGCCCAGCACGG
GGCCCTGTGAGGCTGCCCCACATCCCCACCTGGCAGGCGTCTCCTCCGCTTGCTGAGACTTACGCCCTGTTCCCT
TCCTGCCCTGTGCCCACGGGCCGGCCAGCTGGGTGCCCCAGGGACGTGATAATGCAGATAAATACATTTATATTT
TTAAGAAAAAGCGAGCCTCCCCCCTCTTGCGGGGGCGGGGAGGGTTCTCTGTGTGTCCCCGGCACGTCAGGGACC
CTATCCTCCCACCGCCTCCGTTAACACGATCCTGAATAAATCTTGAGAACCCC

FIGURE 2330

MARPVSDRTPAPLLLGGPAGTPPGGGALLGLRSLLQGTSKPKEPASCLLKEKERKAALPAATTPGPGLETAGPAD
APAGAVVGGGSPRGRPGPVPAPGLLAPLLWERTLPFGDVEYVDLDAFLLEHGLPPSPPPPGGPSPEPSPARTPAP
SPGPGSCGSASPRSSPGHAPARAALGTATGHRAGLTSRDTPSPVDPDTVEVLMTFEPDPADLALSSIPGHETFDP
RRHRFSEEELKPQPIMKKARKIQVPEEQKDEKYWSRRYKNNEAAKRSRDARRLKENQISVRAAFLEKENALLRQE
VVAVRQELSHYRAVLSRYQAQHGAL

FIGURE 2331

AGACTCAACAAGAGCTCCAGCAAAGACTTTCACTGTAGCTTGACTTGACCTGAGATTAACTAGGGAATCTTGAGA
ATAAAGATGAGCTCTGAAAATTGTTTCGTAGCAGAGAACAGCTCTTTGCATCCGGAGAGTGGACAAGAAAATGAT
GCCACCAGTCCCCATTTCTCAACACGTCATGAAGGGTCCTTCCAAGTTCCTGTCCTGTGTGCTGTAATGAATGTG
GTCTTCATCACCATTTTAATCATAGCTCTCATTGCCTTATCAGTGGGCCAATACAATTGTCCAGGCCAATACACA
TTCTCAATGCCATCAGACAGCCATGTTTCTTCATGCTCTGAGGACTGGGTTGGCTACCAGAGGAAATGCTACTTT
ATTTCTACTGTGAAGAGGAGCTGGACTTCAGCCCAAAATGCTTGTTCTGAACATGGTGCTACTCTTGCTGTCATT
GATTCTGAAAAGGACATGAACTTTCTAAAACGATACGCAGGTAGAGAGGAACACTGGGTTGGACTGAAAAAGGAA
CCTGGTCACCCATGGAAGTGGTCAAATGGCAAAGAATTTAACAACTGGTTCAACGTTACAGGGTCTGACAAGTGT
GTTTTTCTGAAAAACACAGAGGTCAGCAGCATGGAATGTGAGAAGAATTTATACTGGATATGTAACAAACCTTAC
AAATAATAAGGAAACATGTTCACTTATTGACTATTATAGAATGGAACTCAAGGAAATCTGTGTCAGTGGATGCTG
CTCTGTGGTCCGAAGTCTTCCATAGAGACTTTGTGAAAAAAAATTTTATAGTGTCTTGGGAATTTTCTTCCAAAC
AGAACTATGGAAAAAAAGGAAGAAATTCCAGGAAAATCTGCACTGTGGGCTTTTATTGCCATGAGCTAGAAGCAT
CACAGGTTGACCAATAACCATGCCCAAGAATGAGAAGAATGACTATGCAACCTTTGGATGCACTTTATATTATTT
TGAATCCAGAAATAATGAAATAACTAGGCGTGGACTTACTATTTATTGCTGAATGACTACCAACAGTGAGAGCCC
TTCATGCATTTGCACTACTGGAAGGAGTTAGATGTTGGTACTAGATACTGAATGTAAACAAAGGAATTATGGCTG
GTAACATAGGTTTTTAGTCTAATTGAATCCCTTAAACTCAGGGAGCATTTATAAATGGACAAATGCTTATGAAAC
TAAGATTTGTAATATTTCTCTCTTTTTAGAGAAATTTGCCAATTTACTTTGTTATTTTTCCCCAAAAAGAATGGG
ATGATCGTGTATTTATTTTTTTACTTCCTCAGCTGTAGACAGGTCCTTTTCGATGGTACATATTTCTTTGCCTTT
ATAATCTTTTATACAGTGTCTTACAGAGAAAAGACATAAGCAAAGACTATGAGGAATATTTGCAAGACATAGAAT
AGTGTTGGAAAATGTGCAATATGTGATGTGGCAAATCTCTATTAGGAAATATTCTGTAATCTTCAGACCTAGAAT
AATACTAGTCTTATAATAGGTTTGTGACTTTCCTAAATCAATTCTATTACGTGCAATACTTCAATACTTCATTTA
AAATATTTTTATGTGCAATAAAATGTATTTGTTTGTATTTTGTGTTCAGTACAATTATAAGCTGTTTTTATATAT
GTGAAATAAAAGTAGAATAAACACAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2332

MSSENCFVAENSSLHPESGQENDATSPHFSTRHEGSFQVPVLCAVMNVVFITILIIALIALSVGQYNCPGQYTFS
MPSDSHVSSCSEDWVGYQRKCYFISTVKRSWTSAQNACSEHGATLAVIDSEKDMNFLKRYAGREEHWVGLKKEPG
HPWKWSNGKEFNNWFNVTGSDKCVFLKNTEVSSMECEKNLYWICNKPYK

FIGURE 2333

AGAGCCGGCGCCGTCACCGCCCGCATTGCCGCTCCCAGTCCCGCGCTCGGCACGACATGAAATCCCCCGACGAGG
TGCTACGCGAGGGCGAGTTGGAGAAGCGCAGCGACAGCCTCTTCCAGCTATGGAAGAAGAAGCGCGGGGTGCTCA
CCTCCGACCGCCTGAGCCTGTTCCCCGCCAGCCCCCGCGCGCGCCCCAAGGAGCTGCGCTTCCACTCCATCCTCA
AGGTGGACTGCGTGGAGCGCACGGGCAAGTACGTGTACTTCACCATCGTCACCACCGACCACAAGGAGATCGACT
TCCGCTGCGCGGGCGAGAGCTGCTGGAACGCGGCCATCGCGCTGGCGCTCATCGATTTCCAGAACCGCCGCGCCC
TGCAGGACTTTCGCAGCCGCCAGGAACGCACCGCACCCGCCGCACCCGCCGAGGACGCCGTGGCTGCCGCGGCCG
CCGCACCCTCCGAGCCCTCGGAGCCCTCCAGGCCATCCCCGCAGCCCAAACCCCGCACGCCATGAGCCCGCCGCG
GGCCATACGCTGGACGAGTCGGACCGAGGCTAGGACGTGGCCGGCGCTCTCCAGCCCTGCAGCAGAAGAACTTCC
CGTGCGCGCGGATCCTCGCTCCGTTGCACGGGCGCCTTAAGTTATTGGACTATCTAATATCTATGTATTTATTTC
GCTGGTTCTTTGTAGTCACATATTTTATAGTCTTAATATCTTGTTTTTGCATCACTGTGCCCATTGCAAATAAAT
CACTTGGCCAGTTTGCTTTTCTACCATCCGGCTGTGGCTCAGTGAGACTCCTGCTGGGAGGGTGGAGGCCCAGGA
ATGGGCGGGCAGGACACCCTCATCCAGTCCTGCGGGGCTGGTGTGAAAGGCGCTGGGAACCGGCTTTGAATGAAT
AAATGAATCGTGT

FIGURE 2334

MKSPDEVLREGELEKRSDSLFQLWKKKRGVLTSDRLSLFPASPRARPKELRFHSILKVDCVERTGKYVYFTIVTT
DHKEIDFRCAGESCWNAAIALALIDFQNRRALQDFRSRQERTAPAAPAEDAVAAAAAAPSEPSEPSRPSPQPKPR
TP

FIGURE 2335A

GGACTCTGAGGGCTTTTTGGAGCTCGCTATGCTTAACCTGGAGATGATTAAGGCCCCGCTTCCTGGCCTCCCAGC
CTCTAATGCCAAAAGATAAGGGAGAGGCTGGCGTGTGACCCCGTTTTGAGTCAGGTGGACAGAGGGCTGGCCACC
TTCGGAACCATGGGTGCAATACGGAGTCAGACCTCAATACAAGCCCACTCTTTCACATATTTGAACTTTTTTCAC
ATATCAACTTTTTTTGTTCACTGTGCAGGGATTGTTCATTGCTGCTGGAGGAAGATCATGGACTGTCGCGGGAAA
CTGAAGTGGTTGAGTATCCACTAGTCGTGGATGAGGGCAGTGACTTCGCAGTTTTTTGCGAATTACACATCTCTT
TGATTATGTTGTGACTAGTTTTGTTAGATAGTCATTTAGTGTTTGGGATACCTGTTAAGCCCTTTGTCCAGGGAC
TGTGGTTGGATTTATGAATTATTTGGACGGTTGTCCACTTGAAAGAACTGACAGTAGCTTCATAACAATGTTACA
AATCTCGTTCTAAGATTAAGCTGTTGAACCTATATTTGCCATTAGCGCTTAATTTTTGAAGTATTATTTTTATGA
ATCAAGCCCTGGAAAAGGACAAGATATTTGAATGAAATAGCACCCATAATGGAGAACTTCACAGTTGCTACTCCT
GTGATAGGTTTATCTTAGTTTCATTGTGGTATAAATGGAATAGCAGGTGTTGTCAGGTACAAGGTTTGTAGCTTG
CCAATATGTTCATTACCAACACTGCAGATTCCCATTGAGTTGGTGGGGGTTTTGTTACCTTTGTTTTTTTTCTCA
GCAAAATAATTCTATAACTTTTTGTTTGTGACAAGAAATGGACTTTCAGTTTACTTAAGATTAATACTTCTTGAA
TGATAAAATCATTTTGCC**ATG**TTAGAAGACATTTCCGAAGAAGACATTTGGGAATACAAATCTAAAAGAAAACCA
AAACGAGTTGATCCAAATAATGGCTCTAAAAATATTCTAAAATCTGTTGAAAAAGCAACAGATGGAAAATACCAG
TCAAAACGGAGTAGAAACAGAAAAAGAGCCGCAGAAGCTAAAGAGGTGAAGGACCATGAAGTGCCCCTTGGAAAT
GCAGGTTGTCAGACTTCTGTTGCTTCTAGTCAGAATTCAAGTTGTGGAGATGGTATTCAGCAGACCCAAGACAAG
GAAACTACTCCAGGAAAACTCTGTAGAACTCAAAAAAGCCAACACGTGTCCCCAAAGATACGTCCAGTTTATGAT
GGATACTGTCCAAATTGCCAGATGCCTTTTTCCTCATTGATAGGGCAGACACCTCGATGGCATGTTTTTGAATGT
TTGGATTCTCCACCACGCTCTGAAACAGAGTGTCCTGATGGTCTTCTGTGTACCTCAACCATTCCTTTTCATTAC
AAGAGATACACTCACTTCCTGCTAGCTCAAAGCAGGGCTGGTGATCATCCTTTTAGCAGCCCATCACCTGCGTCA
GGTGGCAGTTTCAGTGAGACTAAGTCAGGCGTCCTTTGTAGCCTTGAGGAAAGATGGTCTTCGTATCAGAACCAA
ACTGATAACTCGGTTTCAAATGATCCCTTATTGATGACACAGTATTTTAAAAAGTCTCCGTCTCTGACTGAAGCC
AGTGAAAAGATTTCTACTCATATCCAAACATCCCAACAAGCTCTACAATTTACAGATTTTGTTGAGAATGACAAA
CTAGTGGGAGTTGCTTTGCGTCTTGCAAACAACTCAGAACACATAAATTTGCCATTGCCAGAAAATGACTTCAGT
GACTGTGAAATCTCCTATTCTCCACTTCAAAGTGATGAAGACACTCATGATATCGATGAAAAACCGGATGATTCA
CAAGAACAACTGTTTTTTACCGAAAGCTCAAAAGATGGCAGCCTCGAAGAAGATGATGACAGCTGTGGTTTTTTT
AAAAAACGACATGGTCCCTTACTGAAGGACCAGGATGAGAGCTGCCCCAAAGTGAACAGCTTCTTAACTCGGGAT
AAGTATGATGAAGGATTGTATAGATTCAATAGTCTAAATGATTTGTCTCAACCTATTTCTCAAAATAATGAGAGT
ACTTTGCCTTATGATCTGGCATGTACTGGTGGTGATTTTGTGTTGTTTCCACCTGCATTGGCAGGGAAGCTTGCT
GCTTCTGTTCATCAGGCAACTAAAGCAAAACCTGATGAGCCAGAATTTCACTCAGCTCAATCAAATAAACAGAAA
CAGGTAATTGAAGAATCATCTGTTTACAATCAAGTTTCTCTTCCGTTAGTTAAGAGTTTAATGTTGAAACCTTTT
GAAAGTCAGGTAGAAGGGTATCTTTCTTCCCAACCAACCCAAAATACAATTAGAAAATTATCAAGTGAGAACTTG
AATGCTAAGAATAATACTAACTCAGCATGTTTCTGCAGAAAGGCATTAGAGGGTGTGCCAGTTGGTAAAGCTACA
ATTTTAAATACAGAAAACTTGTCTAGTACACCTGCTCCGAAGTATTTGAAAATATTGCCTTCTGGTCTTAAGTAT
AATGCAAGACATCCTTCTACCAAGGTAATGAAGCAAATGGATATAGGTGTGTATTTTGGACTACCTCCCAAAAGA
AAGGAAGAGAAATTGCTAGGGGAAAGTGCATTAGAAGGGATAAACTTAAATCCAGTTCCAAGTCCTAATCAAAAG
AGGTCCTCGCAGTGCAAGAGGAAAGCAGAAAAATCTTTAAGTGATTTAGAATTTGATGCAAGTACTTTACATGAG
AGTCAGCTTTCTGTGGAACTTTCTAGTGAGAGGTCACAGCGTCAAAAAAAGAGATGTAGAAAGTCAAATTCACTG
CAGGAAGGAGCGTGTCAGAAGAGATCAGATCACCTTATTAATACAGAATCTGAAGCAGTCAATTTAAGTAAAGTC
AAAGTCTTCACAAAATCAGCTCATGGTGGGCTGCAAAGGGGCAACAAGAAAATCCCAGAGTCATCTAATGTAGGA
GGATCAAGAAAAAAGACATGTCCATTCTATAAGAAAATACCTGGAACCGGCTTTACAGTTGATGCCTTTCAGTAT
GGCGTGGTTGAAGGTTGCACAGCCTATTTTCTCACACATTTTCATTCTGATCATTATGCTGGATTGTCTAAACAC
TTCACATTTCCAGTTTATTGTAGTGAGATAACTGGCAATTTGTTGAAGAACAAGCTTCATGTGCAAGAACAATAT
ATTCACCCATTGCCACTGGACACTGAATGTATTGTGAATGGTGTCAAAGTTGTTTTGCTTGATGCCAATCACTGT
CCAGGTGCTGTCATGATCCTCTTTTATCTTCCTAATGGTACTGTCATATTACACACGGGAGACTTCAGAGCAGAT
CCCAGCATGGAACGTTCTCTTCTTGCGGACCAGAAAGTCCATATGCTGTACTTAGATACCACATATTGTAGCCCA
GAATACACCTTTCCATCTCAGCAAGAGGTTATCCGGTTTGCCATCAACACTGCCTTTGAGGCTGTAACTCTAAAC
CCACATGCTCTTGTTGTCTGTGGCACTTACTCTATTGGAAAAGAGAAAGTCTTCCTAGCCATTGCTGATGTTTTA

FIGURE 2335B

GGTTCAAAAGTGGGCATGTCCCAGGAAAAATATAAAACTCTACAGTGCCTCAATATACCAGAAATTAATTCACTC
ATCACTACCGACATGTGCAGTTCATTGGTTCACCTTCTCCCAATGATGCAAATTAATTTTAAGGGCTTACAGAGT
CATTTGAAGAAGTGTGGTGGGAAATACAATCAGATTTTGGCATTTCGACCTACAGGATGGACACACTCTAACAAG
TTCACTAGAATAGCAGATGTTATTCCCCAGACCAAAGGAAACATTTCAATATATGGAATTCCTTACAGTGAACAC
AGCAGCTACCTAGAAATGAAGCGCTTTGTCCAGTGGCTGAAGCCCCAGAAAATCATACCTACTGTAAATGTGGGC
ACCTGGAAATCTAGGAGCACAATGGAGAAATATTTTAGAGAGTGGAAATTGGAAGCTGGATATTGATGATACCTC
CGAGGATTCAGTAGTAGTTAAGTTCCTTGGATGTAGCTTGTTAGTAGTTAAATCTATAGAAATGTGAAATACACT
TTGTGTGGAAAAACCTCATGAAGATTGTTCAGATACTTTATTTTCTCATTTATGTTTGAACAACATGTTCGTGGT
GCTGAATGCCTCTCAGCATCATCAAGGATAACTGAAACTGGGTCTCCCTGGGACCCTTAATTTCTTGTCCCCTGC
CCTCCATGGGCAGTTATATTCTGCATCAAGCCTTAGAAGAGGAAGCAAAGGCAGATTCAGGGACCAAAAGGATTA
ATGATAATTAATAAAGTAGTTTGAAGCATTATATATATAAGTAATTATGTGTCTTTAAAATTATGAGATGAAACT
TTTATATGACGTGTATACTTAAATAAAATTAATATAAAATTTG

FIGURE 2336

MLEDISEEDIWEYKSKRKPKRVDPNNGSKNILKSVEKATDGKYQSKRSRNRKRAAEAKEVKDHEVPLGNAGCQTS
VASSQNSSCGDGIQQTQDKETTPGKLCRTQKSQHVSPKIRPVYDGYCPNCQMPFSSLIGQTPRWHVFECLDSPPR
SETECPDGLLCTSTIPFHYKRYTHFLLAQSRAGDHPFSSPSPASGGSFSETKSGVLCSLEERWSSYQNQTDNSVS
NDPLLMTQYFKKSPSLTEASEKISTHIQTSQQALQFTDFVENDKLVGVALRLANNSEHINLPLPENDFSDCEISY
SPLQSDEDTHDIDEKPDDSQEQLFFTESSKDGSLEEDDDSCGFFKKRHGPLLKDQDESCPKVNSFLTRDKYDEGL
YRFNSLNDLSQPISQNNESTLPYDLACTGGDFVLFPPALAGKLAASVHQATKAKPDEPEFHSAQSNKQKQVIEES
SVYNQVSLPLVKSLMLKPFESQVEGYLSSQPTQNTIRKLSSENLNAKNNTNSACFCRKALEGVPVGKATILNTEN
LSSTPAPKYLKILPSGLKYNARHPSTKVMKQMDIGVYFGLPPKRKEEKLLGESALEGINLNPVPSPNQKRSSQCK
RKAEKSLSDLEFDASTLHESQLSVELSSERSQRQKKRCRKSNSLQEGACQKRSDHLINTESEAVNLSKVKVFTKS
AHGGLQRGNKKIPESSNVGGSRKKTCPFYKKIPGTGFTVDAFQYGVVEGCTAYFLTHFHSDHYAGLSKHFTFPVY
CSEITGNLLKNKLHVQEQYIHPLPLDTECIVNGVKVVLLDANHCPGAVMILFYLPNGTVILHTGDFRADPSMERS
LLADQKVHMLYLDTTYCSPEYTFPSQQEVIRFAINTAFEAVTLNPHALVVCGTYSIGKEKVFLAIADVLGSKVGM
SQEKYKTLQCLNIPEINSLITTDMCSSLVHLLPMMQINFKGLQSHLKKCGGKYNQILAFRPTGWTHSNKFTRIAD
VIPQTKGNISIYGIPYSEHSSYLEMKRFVQWLKPQKIIPTVNVGTWKSRSTMEKYFREWKLEAGY

FIGURE 2337

GGGCAAGAGTTGGGCAAAAAAATCAAGGTATTTGGTCCCGGAACAAAGCTTATCATTACAGATAAACAACTTGATG
CAGATGTTTCCCCCAAGCCCACTATTTTTCTTCCTTCAATTGCTGAAACAAAGCTCCAGAAGGCTGGAACATAC
CTTTGTCTTCTTGAGAAATTTTTCCCTGATGTTATTAAGATACATTGGCAAGAAAAGAAGAGCAACACGATTCTG
GGATCCCAGGAGGGGAACACCATGAAGACTAACGACACATACATGAAATTTAGCTGGTTAACGGTGCCAGAAAAG
TCACTGGACAAAGAACACAGATGTATCGTCAGACATGAGAATAATAAAAACGGAGTTGATCAAGAAATTATCTTT
CCTCCAATAAAGACGGATGTCATCACAATGGATCCCAAAGACAATTGTTCAAAAGATGCAAATGATACACTACTG
CTGCAGCTCACAAACACCTCTGCATATTACATGTACCTCCTCCTGCTCCTCAAGAGTGTGGTCTATTTTGCCATC
ATCACCTGCTGTCTGCTTAGAAGAACGGCTTTCTGCTGCAATGGAGAGAAATCATAACAGACGGTGGCACAAGGA
GGCCATCTTTTCCTCATCGGTTATTGTCCCTAGAAGCGTCTTCTGAGGATCTAGTTGGGCTTTCTTTCTGGGTTT
GGGCCATTTCAGTTCTCATGTGTGTACTATTCTATCATTATTGTATAACGGTTTTCAAACCAGTGGGCACACAGA
GAACCTCACTCTGTAATAACAATGAGGAATAGCCACGGCGATCTCCAGCACCAATCTCTCCATGTTTTCCACAGC
TCCTCCAGCCAACCCAAATAGCGCCTGCTATAGTGTAGACATCCTGCGGCTTCTAGCCTTGTCCCTCTCTTAGTG
TTCTTTAATCAGATAACTGCCTGGAAGCCTTTCATTTTACACGCCCTGAAGCAGTCTTCTTTGCTAGTTGAATTA
TGTGGTGTGTTTTTCCGTAATAAGCAAAATAAATTTAAAAAAATGAAAAGTT

FIGURE 2338

MQMFPPSPLFFFLQLLKQSSRRLEHTFVFLRNFSLMLLRYIGKKRRATRFWDPRRGTP

FIGURE 2339A

GCGGCCGCAGCGGCAGCAGCGCCCGCCGTGTGAGCAGCAGCAGCGGCTGGTCTGTCAACCGGAGCCCGAGCCCGA
GCAGCCTGCGGCCAGCAGCGTCCTCGCAAGCCGAGCGCCCAGGCGCGCCAGGAGCCCGCAGCAGCGGCAGCAGCG
CGCCGGGCCGCCCGGGAAGCCTCCGTCCCCGCGGCGGCAGGCGGCAGGCGGCGGTCAACATGGCCTCGGCATGGT
AACGCCGACCGAGCCCCAGGACCGCGGCGGACGGGAGGCAAGCCGGCTGTATCGGTGCCCCGGGACGGCCGGCTG
GAGGCGGGAGGCGCAGACGGACGGGGGGGCTGCGCCGTGCTGCCGCGCCGGACCGGGACTATCTGCACCGGCCCA
GCTACTGCGACGCCGCCTTCGCTCTGGAGCAGATTTCCAAGGGGAAGGCTACTGGCCGGAAAGCGCCGCTGTGGC
TGAGAGCGAAGTTTCAGAGACTCTTATTTAAACTGGGTTGTTACATTCAAAAAAACTGCGGCAAGTTCTTGGTTG
TGGGCCTCCTCATATTTGGGGCCTTCGCGGTGGGATTAAAAGCAGCGAACCTCGAGACCAACGTGGAGGAGCTGT
GGGTGGAAGTTGGAGGACGAGTAAGTCGTGAATTAAATTATACTCGCCAGAAGATTGGAGAAGAGGCTATGTTTA
ATCCTCAACTCATGATACAGACCCCTAAAGAAGAAGGTGCTAATGTCCTGACCACAGAAGCGCTCCTACAACACC
TGGACTCGGCACTCCAGGCCAGCCGTGTCCATGTATACATGTACAACAGGCAGTGGAAATTGGAACATTTGTGTT
ACAAATCAGGAGAGCTTATCACAGAAACAGGTTACATGGATCAGATAATAGAATATCTTTACCCTTGTTTGATTA
TTACACCTTTGGACTGCTTCTGGGAAGGGGCGAAATTACAGTCTGGGACAGCATACCTCCTAGGTAAACCTCCTT
TGCGGTGGACAAACTTCGACCCTTTGGAATTCCTGGAAGAGTTAAAGAAAATAAACTATCAAGTGGACAGCTGGG
AGGAAATGCTGAATAAGGCTGAGGTTGGTCATGGTTACATGGACCGCCCCTGCCTCAATCCGGCCGATCCAGACT
GCCCCGCCACAGCCCCCAACAAAAATTCAACCAAACCTCTTGATATGGCCCTTGTTTTGAATGGTGGATGTCATG
GCTTATCCAGAAAGTATATGCACTGGCAGGAGGAGTTGATTGTGGGTGGCACAGTCAAGAACAGCACTGGAAAAC
TCGTCAGCGCCCATGCCCTGCAGACCATGTTCCAGTTAATGACTCCCAAGCAAATGTACGAGCACTTCAAGGGGT
ACGAGTATGTCTCACACATCAACTGGAACGAGGACAAAGCGGCAGCCATCCTGGAGGCCTGGCAGAGGACATATG
TGGAGGTGGTTCATCAGAGTGTCGCACAGAACTCCACTCAAAAGGTGCTTTCCTTCACCACCACGACCCTGGACG
ACATCCTGAAATCCTTCTCTGACGTCAGTGTCATCCGCGTGGCCAGCGGCTACTTACTCATGCTCGCCTATGCCT
GTCTAACCATGCTGCGCTGGGACTGCTCCAAGTCCCAGGGTGCCGTGGGGCTGGCTGGCGTCCTGCTGGTTGCAC
TGTCAGTGGCTGCAGGACTGGGCCTGTGCTCATTGATCGGAATTTCCTTTAACGCTGCAACAACTCAGGTTTTGC
CATTTCTCGCTCTTGGTGTTGGTGTGGATGATGTTTTTCTTCTGGCCCACGCCTTCAGTGAAACAGGACAGAATA
AAAGAATCCCTTTTGAGGACAGGACCGGGGAGTGCCTGAAGCGCACAGGAGCCAGCGTGGCCCTCACGTCCATCA
GCAATGTCACAGCCTTCTTCATGGCCGCGTTAATCCCAATTCCCGCTCTGCGGGCGTTCTCCCTCCAGGCAGCGG
TAGTAGTGGTGTTCAATTTTGCCATGGTTCTGCTCATTTTTCCTGCAATTCTCAGCATGGATTTATATCGACGCG
AGGACAGGAGACTGGATATTTTCTGCTGTTTTACAAGCCCCTGCGTCAGCAGAGTGATTCAGGTTGAACCTCAGG
CCTACACCGACACACACGACAATACCCGCTACAGCCCCCCACCTCCCTACAGCAGCCACAGCTTTGCCCATGAAA
CGCAGATTACCATGCAGTCCACTGTCCAGCTCCGCACGGAGTACGACCCCCACACGCACGTGTACTACACCACCG
CTGAGCCGCGCTCCGAGATCTCTGTGCAGCCCGTCACCGTGACACAGGACACCCTCAGCTGCCAGAGCCCAGAGA
GCACCAGCTCCACAAGGGACCTGCTCTCCCAGTTCTCCGACTCCAGCCTCCACTGCCTCGAGCCCCCCTGTACGA
AGTGGACACTCTCATCTTTTGCTGAGAAGCACTATGCTCCTTTCCTCTTGAAACCAAAAGCCAAGGTAGTGGTGA
TCTTCCTTTTTCTGGGCTTGCTGGGGGTCAGCCTTTATGGCACCACCCGAGTGAGAGACGGGCTGGACCTTACGG
ACATTGTACCTCGGGAAACCAGAGAATATGACTTTATTGCTGCACAATTCAAATACTTTTCTTTCTACAACATGT
ATATAGTCACCCAGAAAGCAGACTACCCGAATATCCAGCACTTACTTTACGACCTACACAGGAGTTTCAGTAACG
TGAAGTATGTCATGTTGGAAGAAAACAAACAGCTTCCCAAAATGTGGCTGCACTACTTCAGAGACTGGCTTCAGG
GACTTCAGGATGCATTTGACAGTGACTGGGAAACCGGGAAAATCATGCCAAACAATTACAAGAATGGATCAGACG
ATGGAGTCCTTGCCTACAAACTCCTGGTGCAAACCGGCAGCCGCGATAAGCCCATCGACATCAGCCAGTTGACTA
AACAGCGTCTGGTGGATGCAGATGGCATCATTAATCCCAGCGCTTTCTACATCTACCTGACGGCTTGGGTCAGCA
ACGACCCCGTCGCGTATGCTGCCTCCCAGGCCAACATCCGGCCACACCGACCAGAATGGGTCCACGACAAAGCCG
ACTACATGCCTGAAACAAGGCTGAGAATCCCGGCAGCAGAGCCCATCGAGTATGCCCAGTTCCCTTTCTACCTCA
ACGGCTTGCGGGACACCTCAGACTTTGTGGAGGCAATTGAAAAAGTAAGGACCATCTGCAGCAACTATACGAGCC
TGGGGCTGTCCAGTTACCCCAACGGCTACCCCTTCCTCTTCTGGGAGCAGTACATCGGCCTCCGCCACTGGCTGC
TGCTGTTCATCAGCGTGGTGTTGGCCTGCACATTCCTCGTGTGCGCTGTCTTCCTTCTGAACCCCTGGACGGCCG
GGATCATTGTGATGGTCCTGGCGCTGATGACGGTCGAGCTGTTCGGCATGATGGGCCTCATCGGAATCAAGCTCA
GTGCCGTGCCCGTGGTCATCCTGATCGCTTCTGTTGGCATAGGAGTGGAGTTCACCGTTCACGTTGCTTTGGCCT
TTCTGACGGCCATCGGCGACAAGAACCGCAGGGCTGTGCTTGCCCTGGAGCACATGTTTGCACCCGTCCTGGATG

FIGURE 2339B

GCGCCGTGTCCACTCTGCTGGGAGTGCTGATGCTGGCGGGATCTGAGTTCGACTTCATTGTCAGGTATTTCTTTG
CTGTGCTGGCGATCCTCACCATCCTCGGCGTTCTCAATGGGCTGGTTTTGCTTCCCGTGCTTTTGTCTTTCTTTG
GACCATATCCTGAGGTGTCTCCAGCCAACGGCTTGAACCGCCTGCCCACACCCTCCCCTGAGCCACCCCCCAGCG
TGGTCCGCTTCGCCATGCCGCCCGGCCACACGCACAGCGGGTCTGATTCCTCCGACTCGGAGTATAGTTCCCAGA
CGACAGTGTCAGGCCTCAGCGAGGAGCTTCGGCACTACGAGGCCCAGCAGGGCGCGGGAGGCCCTGCCCACCAAG
TGATCGTGGAAGCCACAGAAAACCCCGTCTTCGCCCACTCCACTGTGGTCCATCCCGAATCCAGGCATCACCCAC
CCTCGAACCCGAAACAGCAGCCCCACCTGGACTCAGGGTCCCTGCCTCCCGGACGGCAAGGCCAGCAGCCCCGCA
GGGACCCCCCCAGAAAAGGCTTGTGGCCACCCCTCTACAGACCGCGCAGAGACGCTTTTGAAATTTCTACTGAAG
GGCATTCTGGCCCTAGCAATAGGGCCCGCTGGGGCCCTCGCGGGGCCCGTTCTCACAACCCTCGGAACCCAGCGT
CCACTGCCATGGGCAGCTCCGTGCCCGGCTACTGCCAGCCCATCACCACTGTGACGGCTTCTGCCTCCGTGACTG
TCGCCGTGCACCCGCCGCCTGTCCCTGGGCCTGGGCGGAACCCCCGAGGGGGACTCTGCCCAGGCTACCCTGAGA
CTGACCACGGCCTGTTTGAGGACCCCCACGTGCCTTTCCACGTCCGGTGTGAGAGGAGGGATTCGAAGGTGGAAG
TCATTGAGCTGCAGGACGTGGAATGCGAGGAGAGGCCCCGGGGAAGCAGCTCCAACTGAGGGTGATTAAAATCTG
AAGCAAAGAGGCCAAAGATTGGAAACCCCCCACCCCCACCTCTTTCCAGAACTGCTTGAAGAGAACTGGTTGGAG
TTATGGAAAAGATGCCCTGTGCCAGGACAGCAGTTCATTGTTACTGTAACCGATTGTATTATTTTGTTAAATATT
TCTATAAATATTTAAGAGATGTACACATGTGTAATATAGGAAGGAAGGATGTAAAGTGGTATGATCTGGGGCTTC
TCCACTCCTGCCCCAGAGTGTGGAGGCCACAGTGGGGCCTCTCCGTATTTGTGCATTGGGCTCCGTGCCACAACC
AAGCTTCATTAGTCTTAAATTTCAGCATATGTTGCTGCTGCTTAAATATTGTATAATTTACTTGTATAATTCTAT
GCAAATATTGCTTATGTAATAGGATTATTTTGTAAAGGTTTCTGTTTAAAATATTTTAAATTTGCATATCACAAC
CCTGTGGTAGTATGAAATGTTACTGTTAACTTTCAAACACGCTATGCGTGATAATTTTTTTGTTTAATGAGCAGA
TATGAAGAAAGCACGTTAATCCTGGTGGCTTCTCTAGGTGTCGTTGTGTGCGGTCCTCTTGTTTGGCTGTGCGTG
TGAACACGTGTGTGAGTTCACCATGTACTGTACTGTGATTTTTTTTTTGTCTTGTTTTGTTTCTCTACACTGTCT
GTAACCTGTAGTAGGCTCTGACCTAGTCAGGCTGGAAGCGTCAGGATATCTTTTCTTCGTGCTGGTGAGGGCTGG
CCCTAAACATCCACCTAATCCTTTCAAATCAGCCCGGCAAAAGCTAGACTCTCCTCGTGTCTACGGCATCTCTTA
TGATCATTGGCTGCCATCCAGGACCCCAATTTGTGCTTCAGGGGGATAATCTCCTTCTCTCGGATCATTGTGATG
GATGCTGGAACCTCAGGGTATGGAGCTCACATCAGTTCATCATGGTGGGTGTTAGAGAATTCGGTGACATGCCTA
GTGCTGAGCCTTGGCTGGGCCATGAGAGTCTGTATACTCTAAAAAGCATGCAGCATGGTGCCCCTCTTCTGACCA
ACACACACACGACCCCTCCCCCAACACCCCCAAATTCAAGAGTGGATGTGGCCCTGTCACAGGTAGAAAAACCTA
TTTAGTTAATTCTTTCTTGGCCCACAGTCTCCCAGAAATGATGTTTTGAGTCCCTATAGTTTAAACTCCCTCTCT
TAAATGGAGCAGCTGGTTGAGGCTTTCTAGATCTGTTTGCATCTTCTTTAAAACTAAGTGGTGAGCATGCATTGT
GGTGTAGAGGCAGGCATTATGTAGGATAAGAGCTCCGGGGGGATTCTTCATGCACCAGTGTTTAGGGTACGTGCT
TCCTAAGTAAATCCAAACATTGTCTCCATCCTCCCCGTCATTAGTGCTCTTTCAATGTGATGTGGGAAAGCAGGA
GGATGGACACACCCCACTGAAAGATGTAGGCAGGGGCAGGTCTCTCAACCAGGCATATTTTTAAAAGTTGCTTCT
GTACTGGTTCTCTTCTTTTGCTCTGAGGTGTGGGCTCCCTCATCTCGTAACCAGAGACCAGCACATGTCAGGGAA
GCACCCAGTGTCGGCTCCCCATCCAAATCCACACCAGCACCTTGTTACAGACAAGAAGTCAGAGGAAAGGGCGGG
GTCCCTGCAGGGCTGAAGCCTAAGCTACTGTGAGGCGCTCACGAGTGGCAGCTCCTGTTACTCCCTTTTAAATTA
CCTGGGAAATCTTAACAGAAAGGTAATGGGCCCCCAGAAATACCCACAGCATAGTGACCTCAGACCCTGATACTC
ACCACAAAACTTTTAAGATGCTGATTGGGAGCCGCTTGTGGCTGCNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNCCTCCTGCGGGGGACCCTGGCCACCCCCCTGCTGCTGTCTTGGTGCCTGTCACCCACATGGT
CTGCCATCCTAACACCCAGCTCTGCTCAGAAAACGTCCTGCGTGGAGGAGGGATGATGCAGAATTCTGAAGTCGA
CTTCCCTCTGGCTCCTGGCGTGCCCTCGCTCCCTTCCTGAGCCCAGCTCGTGTTGCGCCGGAGGCTGCGCGGCCC
CTGATTTCTGCATGGTGTAGAACTTTCTCCAATAGTCACATTGGCAAAGGGAGAACTGGGGTGGGCGGGGGGTGG
GGCTGGCAGGGAATTAGAATTTCTCTCTCTCTTTTAATAGTTTTATTTTGTCTGTCCTGTTTGTTCATTTGGATG
TTTTAATTTTTACAACACAAAAAAAACTTTTGCTGATATTTATAATTTTGTATCATAAGAATGTTTTCCTCTACA
GTATTTGTCATGCCAGTTTATAACAAAAAAAAATGCAGGGATTTTATTTCTATTGGAAACATTACAGCTATGTTT
TACTTTTGGACAGAATTTTTATTTGTATAGAGTGCTTACTAATGTTAAATAGTTCAGAGTATATAACATTTACAT
TAAGGACTCATGGTAGGTTTTAGGGTAAGGAGTTTAAAGGAAATAAATATTCAAACTGGGTCTCATTGCCAATTT
TGGTGGAAATGAGTTTGTGTCATTTCAATTACAAAGATAAAAGTATGCCATATAATTTATTTATATGAAGATTTA

FIGURE 2339C

TTTTTGTAGTGTACATAGTAGTCATCAAGTCTTTTGACAGAAGTATATTTTTAAAGAATTTATATGTGATGAATC
CATAATGTCTGGAACTTTGCTGAGACATGAGTGGGCACAGTTTTCATTGTAAATTACAGCAAGGAAAGAAAATGT
TTAACAGTGTTAAGAGAGTCAGAGCAGAGTGGATATTCATGCGATTATGAAGTGTTTATTAGTTACCATTGGCGA
CCTAGCATGCTTCTCATTTCAAACCTTGGAAGGTGAAAATGTACAAACTCTCTAAATAATTAATGTTCAAACACT
GATAGAAATTCTAACATGAATAAAAAATAATATAACTTGTTGGTTATATCTTTGTTTGTAGAATGCTTTTTTTCT
TTAAAATACTTGGGAGAGACAGTTAGTGTTGGAGCCATCAGAAACTGTTGTTTCATCTTGCTGACCTTGTGACAC
TCTTCTTTTTTGCTCTATCTGATGGAGAGAGTTTTAGGTTTTCCTCCTTTTTGTTTTGTATAAANNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNCTGACCCTATTTTTGTTTTCTCATACCAAGAAACTTCCTAAGTTA
ACCATCAAAATTAGTCCTTCTGTCATCTCTCTTAGCATACTTATTTCCCTTATGTGATGCCTAATAATGAGGGAA
CATAAATAAAGCCAAATTCAAAGATGAAACCAAAAAAATAAAGAAAAAAAAAAGGG

FIGURE 2340

RPQRQQRPPCEQQQRLVCQPEPEPEQPAASSVLASRAPRRARSPQQRQQRAGPPGKPPSPRRQAAGGGQHGLGMV
RRPSPRTAADGRQAGCIGAPGRPAGGGRRRRTGGLRRAAAPDRDYLHRPSYCDAAFALEQISKGKATGRKAPLWL
RAKFQRLLFKLGCYIQKNCGKFLVVGLLIFGAFAVGLKAANLETNVEELWVEVGGRVSRELNYTRQKIGEEAMFN
PQLMIQTPKEEGANVLTTEALLQHLDSALQASRVHVYMYNRQWKLEHLCYKSGELITETGYMDQIIEYLYPCLII
TPLDCFWEGAKLQSGTAYLLGKPPLRWTNFDPLEFLEELKKINYQVDSWEEMLNKAEVGHGYMDRPCLNPADPDC
PATAPNKNSTKPLDMALVLNGGCHGLSRKYMHWQEELIVGGTVKNSTGKLVSAHALQTMFQLMTPKQMYEHFKGY
EYVSHINWNEDKAAAILEAWQRTYVEVVHQSVAQNSTQKVLSFTTTTLDDILKSFSDVSVIRVASGYLLMLAYAC
LTMLRWDCSKSQGAVGLAGVLLVALSVAAGLGLCSLIGISFNAATTQVLPFLALGVGVDDVFLLAHAFSETGQNK
RIPFEDRTGECLKRTGASVALTSISNVTAFFMAALIPIPALRAFSLQAAVVVVFNFAMVLLIFPAILSMDLYRRE
DRRLDIFCCFTSPCVSRVIQVEPQAYTDTHDNTRYSPPPPYSSHSFAHETQITMQSTVQLRTEYDPHTHVYYTTA
EPRSEISVQPVTVTQDTLSCQSPESTSSTRDLLSQFSDSSLHCLEPPCTKWTLSSFAEKHYAPFLLKPKAKVVVI
FLFLGLLGVSLYGTTRVRDGLDLTDIVPRETREYDFIAAQFKYFSFYNMYIVTQKADYPNIQHLLYDLHRSFSNV
KYVMLEENKQLPKMWLHYFRDWLQGLQDAFDSDWETGKIMPNNYKNGSDDGVLAYKLLVQTGSRDKPIDISQLTK
QRLVDADGIINPSAFYIYLTAWVSNDPVAYAASQANIRPHRPEWVHDKADYMPETRLRIPAAEPIEYAQFPFYLN
GLRDTSDFVEAIEKVRTICSNYTSLGLSSYPNGYPFLFWEQYIGLRHWLLLFISVVLACTFLVCAVFLLNPWTAG
IIVMVLALMTVELFGMMGLIGIKLSAVPVVILIASVGIGVEFTVHVALAFLTAIGDKNRRAVLALEHMFAPVLDG
AVSTLLGVLMLAGSEFDFIVRYFFAVLAILTILGVLNGLVLLPVLLSFFGPYPEVSPANGLNRLPTPSPEPPPSV
VRFAMPPGHTHSGSDSSDSEYSSQTTVSGLSEELRHYEAQQGAGGPAHQVIVEATENPVFAHSTVVHPESRHHPP
SNPKQQPHLDSGSLPPGRQGQQPRRDPPRKGLWPPLYRPRRDAFEISTEGHSGPSNRARWGPRGARSHNPRNPAS
TAMGSSVPGYCQPITTVTASASVTVAVHPPPVPGPGRNPRGGLCPGYPETDHGLFEDPHVPFHVRCERRDSKVEV
IELQDVECEERPRGSSSN

FIGURE 2341

GGCTCCTTCGGGAAACCCAGCCCCGTCACCGGGCTCCGAGCGGCTCGCAGGCGAGCGACAGCGGCCTCAGCCCCG
GCAGCGCCCAGCGGCGGCTGCGGAAAGCGGAGGGAGTCCGACGCGGGCGCGGGCGGGGAGCGTGCGTCCGTTCGC
ACAGGCAGCGGGAGGAGGGGCGGCGCGAACCATGGCCGGGGACAGCGAGCAGACCCTGCAGAACCACCAGCAGCC
CAACGGCGGCGAGCCCTTCCTTATAGGCGTCAGCGGGGGAACAGCTAGCGGCAAGTCTTCCGTGTGTGCTAAGAT
CGTGCAGCTCCTGGGGCAGAATGAGGTGGACTATCGCCAGAAGCAGGTGGTCATCCTGAGCCAGGATAGCTTCTA
CCGTGTCCTTACCTCGGAGCAGAAGGCCAAAGCCCTGAAGGGCCAGTTCAACTTTGACCACCCGGATGCCTTTGA
CAATGAACTCATTCTCAAAACACTCAAAGAAATCACTGAAGGGAAAACAGTCCAGATCCCCGTGTATGACTTTGT
CTCCCATTCCCGGAAGGAGGAGACAGTTACTGTCTATCCCGCAGACGTGGTGCTCTTTGAAGGGATCCTGGCCTT
CTACTCCCAGGAGGTACGAGACCTGTTCCAGATGAAGCTTTTTGTGGATACAGATGCGGACACCCGGCTCTCACG
CAGAGTATTAAGGGACATCAGCGAGAGAGGCAGGGATCTTGAGCAGATTTTATCTCAGTACATTACGTTCGTCAA
GCCTGCCTTTGAGGAATTCTGCTTGCCAACAAAGAAGTATGCTGATGTGATCATCCCTAGAGGTGCAGATAATCT
GGTGGCCATCAACCTCATCGTGCAGCACATCCAGGACATCCTGAATGGAGGGCCCTCCAAACGGCAGACCAATGG
CTGTCTCAACGGCTACACCCCTTCACGCAAGAGGCAGGCATCGGAGTCCAGCAGCAGGCCGCATTGACCCGTCTC
CATCGGACCCCAGCCCCTATCTCCAAGAGACAGAGGAGGGGTCAGGAGGCACTGCTCATCTGTACATACTGTTTC
CTATGACATTACTGTATTTAAGAAAACACCATGGAGATGAAATGCCTTTGATTTTTTTTTTCTTTTTGTACTTTG
GAACGACAAAATGAAACAGAACTTGACCCTGAGCTTAAATAACAAAACTGTGCCAACTACTACTGGTGATGCCTA
ATTATGAATCCAACGTGTAACCAGTTATAAATACATATATATATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAA

FIGURE 2342

MAGDSEQTLQNHQQPNGGEPFLIGVSGGTASGKSSVCAKIVQLLGQNEVDYRQKQVVILSQDSFYRVLTSEQKAK
ALKGQFNFDHPDAFDNELILKTLKEITEGKTVQIPVYDFVSHSRKEETVTVYPADVVLFEGILAFYSQEVRDLFQ
MKLFVDTDADTRLSRRVLRDISERGRDLEQILSQYITFVKPAFEEFCLPTKKYADVIIPRGADNLVAINLIVQHI
QDILNGGPSKRQTNGCLNGYTPSRKRQASESSSRPH

FIGURE 2343

TGCTTAAAAAAACACAACAGGATTTTCGAAGAATCCTTTCTTAGAAAACAAACAAAAAAACCAAACAAAAACGTA
CTTTCTCCCCACTAGTTTACACCACAGGAAGCGAGAGAGCTGCTGCCACTGCTGCTACCACAGGAAGACACAGCA
GGGAGAAGCCCTAGTGCCTCTGCCGGCTGCCCAGGACCTGGTATCGGCCCACAGACCAAGTCCTCCACAGAGGGC
GAGCCAGGGTGGAGAAGAGCCAGCCCAGTGACCCAAACATCCCCGATAAAACACCCACTGCTTAAGAGGCAGGCT
CGGATGGACTATAGCTTTGATACCACAGCCGAAGACCCTTGGGTTAGGATTTCTGACTGCATCAAAAACTTATTT
AGCCCCATCATGAGTGAGAACCATGGCCACATGCCTCTACAGCCCAATGCCAGCCTGAATGAAGAAGAAGGGACA
CAGGGCCACCCAGATGGGACCCCACCAAAGCTGGACACCGCCAATGGCACTCCCAAAGTTTACAAGTCAGCAGAC
AGCAGCACTGTGAAGAAAGGTCCTCCTGTGGCTCCCAAGCCAGCCTGGTTTCGCCAAAGCTTGAAAGGTTTGAGG
AATCGTGCTTCAGAGCCAAGAGGGCTCCCTGATCCTGCCTTGTCCACCCAGCCAGCACCTGCTTCCAGGGAGCAC
CTAGGATCACACATCCGGGCCTCCTCCTCCTCCTCCTCCATCAGGCAGAGAATCAGCTCCTTTGAAACCTTTGGC
TCCTCTCAACTGCCTGACAAAGGAGCCCAGAGACTGAGCCTCCAGCCCTCCTCTGGGGAGGCAGCAAAACCTCTT
GGGAAGCATGAGGAAGGACGGTTTTCTGGACTCTTGGGGCGAGGGGCTGCACCCACTCTTGTGCCCCAGCAGCCT
GAGCAAGTACTGTCCTCGGGGTCCCCTGCAGCCTCCGAGGCCAGAGACCCAGGTGTGTCTGAGTCCCCTCCCCCA
GGGCGGCAGCCCAATCAGAAAACTTTCCCCCCTGGCCCGGACCCGCTCCTAAGGCTGCTGTCAACACAGGCTGAG
GAATCTCAAGGCCCAGTGCTCAAGATGCCTAGCCAGCGAGCACGGAGCTTCCCCCTGACCAGGTGCCAGTCCTGT
GAGACGAAGCTACTTGACGAAAAGACCAGCAAACTCTATTCTATCAGCAGCCAAGTGTCATCGGCTGTCATGAAA
TCCTTGCTGTGCCTTCCATCTTCTATCTCCTGTGCCCAGACTCCCTGCATCCCCAAGGCAGGGGCATCTCCAACA
TCATCATCCAACGAAGACTCAGCTGCAAATGGTTCTGCTGAAACATCTGCCTTGGACACGGGGTTCTCGCTCAAC
CTTTCAGAGCTGAGAGAATATACAGAGGGTCTCACGGAAGCCAAGGAAGACGATGATGGGGACCACAGTTCCCTT
CAGTCTGGTCAGTCCGTTATCTCCCTGCTGAGCTCAGAAGAATTAAAAAAACTCATCGAGGAGGTGAAGGTTCTG
GATGAAGCAACATTAAAGCAATTAGACGGCATCCATGTCACCATCTTACACAAGGAGGAAGGTGCTGGTCTTGGG
TTCAGCTTGGCAGGAGGAGCAGATCTAGAAAACAAGGTGATTACGGTTCACAGAGTGTTTCCAAATGGGCTGGCC
TCCCAGGAAGGGACTATTCAGAAGGGCAATGAGGTTCTTTCCATCAACGGCAAGTCTCTCAAGGGGACCACGCAC
CATGATGCCTTGGCCATCCTCCGCCAAGCTCGAGAGCCCAGGCAAGCTGTGATTGTCACAAGGAAGCTGACTCCA
GAGGCCATGCCCGACCTCAACTCCTCCACTGACTCTGCAGCCTCAGCCTCTGCAGCCAGTGATGTTTCTGTAGAA
TCTACAGCAGAGGCCACAGTCTGCACGGTGACACTGGAGAAGATGTCGGCAGGGCTGGGCTTCAGCCTGGAAGGA
GGGAAGGGCTCCCTACACGGAGACAAGCCTCTCACCATTAACAGGATTTTCAAAGGAGCAGCCTCAGAACAAAGT
GAGACAGTCCAGCCTGGAGATGAAATCTTGCAGCTGGGTGGCACTGCCATGCAGGGCCTCACACGGTTTGAAGCC
TGGAACATCATCAAGGCACTGCCTGATGGACCTGTCACGATTGTCATCAGGAGAAAAAGCCTCCAGTCCAAGGAA
ACCACAGCTGCTGGAGACTCCTAGGCAGGACATGCTGAAGCCAAAGCCAATAACACACAGCTAACACACAGCTCC
CATAACCGCTGATTCTCAGGGTCTCTGCTGCCGCCCCACCCAGATGGGGGAAAGCACAGGTGGGCTTCCCAGTGG
CTGCTGCCCAGGCCCAGACCTTCTAGGACGCCACCCAGCAAAAGGTTGTTCCTAAAATAAGGGCAGAGTCACACT
GGGGCAGCTGATACAAATTGCAGACTGTGTAAAAAGAGAGCTTAATGATAATATTGTGGTGCCACAAATAAAATG
GATTTATTAGAATTCCATATGACATTCATGCCTGGCTTCGCAAAATGTTTCAAGTACTGTAACTGTGTCATGATT
CACCCCCAAACAGTGACATTTATTTTTCTCATGAATCTGCAATGTGGGCAGAGATTGGAATGGGCAGCTCATCTC
TGTCCCACTTGGCATCAGCTGGCGTCATGCAAAGTCATGCAAAGGCTGGGACCACCTGAGATCATTCACTCATAC
ATCTGGCCGTTGATGTTGGCTGGGAACTCACCTGGGGCTGCTGGCCTGAATGCTTATAGGTGGCCTCTCCTTGTG
GCCTGGGCTCCTCACAACATGGTGTCTGGATTCCCAGGATGAGCATCCCAGGATCGCAAGAGCCACGTAGAAGCT
GCATCTTGTTTATACCTTTGCCTTGGAAGTTGCATGGCATCACCTCCACCATACTCCATCAGTTAGAGCTGACAC
AAACCTGCCTGGGTTTAAGGGGAGAGGAAATATTGCTGGGGTCATTTATGAAAAATACAGTTTGTCACATGAAAC
ATTTGCAAAATTGTTTTTGGTTGGATTGGAGAAGTAATCCTAGGGAAGGGTGGTGGAGCCAGTAAATAGAGGAGT
ACAGGTGAAGCACCAAGCTCAAAGCGTGGACAGGTGTGCCGACAGAAGGAACCAGCGTGTATATGAGGGTATCAA
ATAAAATTGCTACTACTTACCTACC

FIGURE 2344

MDYSFDTTAEDPWVRISDCIKNLFSPIMSENHGHMPLQPNASLNEEEGTQGHPDGTPPKLDTANGTPKVYKSADS
STVKKGPPVAPKPAWFRQSLKGLRNRASEPRGLPDPALSTQPAPASREHLGSHIRASSSSSSIRQRISSFETFGS
SQLPDKGAQRLSLQPSSGEAAKPLGKHEEGRFSGLLGRGAAPTLVPQQPEQVLSSGSPAASEARDPGVSESPPPG
RQPNQKTFPPGPDPLLRLLSTQAEESQGPVLKMPSQRARSFPLTRSQSCETKLLDEKTSKLYSISSQVSSAVMKS
LLCLPSSISCAQTPCIPKAGASPTSSSNEDSAANGSAETSALDTGFSLNLSELREYTEGLTEAKEDDDGDHSSLQ
SGQSVISLLSSEELKKLIEEVKVLDEATLKQLDGIHVTILHKEEGAGLGFSLAGGADLENKVITVHRVFPNGLAS
QEGTIQKGNEVLSINGKSLKGTTHHDALAILRQAREPRQAVIVTRKLTPEAMPDLNSSTDSAASASAASDVSVES
TAEATVCTVTLEKMSAGLGFSLEGGKGSLHGDKPLTINRIFKGAASEQSETVQPGDEILQLGGTAMQGLTRFEAW
NIIKALPDGPVTIVIRRKSLQSKETTAAGDS

FIGURE 2345A

CCGGGGTCCCCTTTCACCCAAGTGAGCCAGCTCAGGCTGTCTGCAAAGCCGGAGGTGCGGGCAGCTCCGGGCATT
GCATTGGTGCGGAGGCTTTTATATGCCAGAGAACCCTGAGTGTGCCCCTGACATGACAAGGAGCCGTCGTCGTTA
GGACTACCGACCAGACTCCCGGAAATC**ATG**TTGGTAGGATCCCAGTCTTTTTCGCCTGGAGGGCCCAATGGGATC
ATTAGAAGCCAGTCCTTTGCGGGTTTCAGCGGCCTCCAGGAAAGGCGATCCAGGTGTAACTCCTTCATTGAAAAT
TCCTCCGCTCTCAAGAAGCCTCAGGCCAAACTGAAGAAAATGCACAATTTAGGCCACAAAAACAACAATCCCCCC
AAAGAGCCTCAGCCTAAAAGGGTGGAAGAAGTCTACAGGGCCTTGAAAAATGGACTTGATGAATATCTGGAGGTT
CACCAGACGGAGCTGGACAAGTTGACAGCTCAGTTAAAAGATATGAAAAGAAACTCTCGCCTGGGTGTACTGTAT
GACCTAGACAAGCAAATTAAAACAATTGAAAGATACATGAGACGCCTGGAGTTTCATATAAGTAAGGTAGATGAA
CTCTATGAAGCTTATTGTATCCAGCGACGCCTCCAGGATGGTGCCAGCAAAATGAAGCAAGCCTTCGCAACATCC
CCTGCCAGCAAAGCTGCCCGGGAGAGTCTGACAGAGATCAATCGGAGCTTCAAGGAGTACACAGAGAATATGTGC
ACCATTGAAGTGGAGCTAGAGAATCTGCTGGGAGAATTCTCCATCAAGATGAAAGGTCTGGCTGGCTTTGCACGC
CTCTGTCCTGGAGATCAATATGAAATTTTCATGAAGTATGGCCGGCAGCGGTGGAAACTGAAAGGCAAAATAGAA
GTAAATGGCAAGCAGAGCTGGGATGGAGAAGAAACAGTTTTTCTGCCCCTGATAGTTGGGTTCATCTCCATCAAG
GTCACGGAGCTCAAAGGGCTAGCAACTCACATCCTGGTAGGTAGCGTGACCTGTGAGACCAAAGAGCTGTTTGCA
GCCCGACCTCAGGTAGTGGCTGTCGACATCAATGACCTTGGTACCATCAAACTGAACCTGGAAATCACCTGGTAT
CCATTTGACATGGAGGACATGACCGCATCCTCAGGCGCTGGGAACAAGGCAGCAGCCCTTCAGAGGAGAATGTCC
ATGTACAGCCAGGGTACCCCGGAAACGCCCACCTTCAAAGACCACTCCTTCTTTAGGTGGCTGCATCCTTCCCCA
GACAAGCCCAGGCGGCTGTCTGTCTTGAGTGCCTTGCAAGACACTTTCTTTGCCAAGCTGCACCGCAGCCGCTCC
TTCAGTGACCTGCCCTCCCTCAGGCCGAGTCCCAAGGCCGTGCTAGAGCTCTATTCAAATCTACCTGATGACATC
TTTGAAAATGGAAAGGCAGCCGAGGAGAAAATGCCACTGTCGCTCAGCTTCAGTGACCTGCCCAACGGGGACTGC
GCCCTCACCTCCCACTCAACAGGCTCCCCTTCCAACTCAACAAATCCAGAAATTACCATCACCCCTGCGGAGTTT
AACCTCAGCAGCTTGGCCTCCCAGAATGAGGGTATGGATGACACCAGCTCAGCATCTTCCAGGAACTCCCTGGGA
GAAGGCCAAGAGCCAAAGTCACACCTGAAGGAGGAAGACCCAGAGGAGCCCAGAAAACCTGCCTCGGCCCCATCT
GAGGCTTGCCGCCGACAGTCCTCAGGTGCTGGGGCTGAGCACCTGTTCCTTGAGAATGATGTTGCAGAAGCACTT
CTGCAAGAGTCTGAGGAGGCCTCTGAGCTCAAGCCTGTGGAACTGGACACTTCGGAAGGAAACATCACAAAGCAG
CTGGTCAAGAGGCTCACATCTGCAGAGGTGCCAATGGCCACAGACAGGCTGCTCTCTGAGGGTTCTGTTGGTGGA
GAATCTGAAGGCTGCAGATCCTTTCTAGATGGAAGCTTAGAGGATGCTTTTAATGGGCTTTTACTTGCATTAGAA
CCACATAAAGAGCAGTATAAAGAGTTTCAGGATCTGAACCAAGAAGTCATGAATTTGGATGATATTCTAAAATGC
AAGCCAGCAGTAAGCCGCAGCAGGTCTTCCAGTTTAAGTCTCACAGTTGAAAGTGCTTTAGAAAGCTTTGATTTC
CTGAACACCTCTGATTTTGACGAGGAGGAGGATGGTGATGAGGTTTGTAATGTTGGCGGAGGTGCTGACTCAGTA
TTTTCAGACACTGAGACTGAGAAACACAGTTACAGGTCGGTTCACCCAGAAGCCAGGGGGCATCTCAGTGAAGCG
CTCACTGAAGACACAGGAGTTGGGACCAGTGTGGCAGGAAGTCCTCTCCCACTGACCACAGGCAACGAGAGCCTG
GACATCACCATCGTCAGGCACCTCCAGTACTGCACCCAACTCGTGCAGCAAATTGTTTTCTCAAGCAAAACCCCA
TTTGTGGCAAGAAGTCTCTTAGAGAAGCTTTCTAGGCAGATCCAAGTGATGGAGAAACTCGCAGCTGTCAGTGAT
GAGAACATAGGAAATATCAGTTCTGTTGTGGAAGCCATACCAGAATTTCACAAAAAGCTGTCTTTGCTGTCATTC
TGGACCAAGTGCTGCAGCCCTGTTGGTGTCTACCACAGCCCAGCGGACAGAGTGATGAAGCAGCTGGAGGCCAGC
TTTGCCAGAACTGTCAACAAAGAATATCCAGGACTTGCAGACCCAGTGTTTCGAACCCTGGTGTCCCAAATTCTG
GACCAGGCTGAGCCTCTGCTTTCCTCCAGCCTGTCCTCGGAAGTCGTCACTGTTTTCCAGTATTACAGTTACTTC
ACCAGCCACGGCGTCAGTGACCTGGAGAGTTACCTGAGCCAGCTGGCCAGGCAAGTTTCCATGGTTCAGACTCTG
CAATCACTAAGAGATGAAAAACTGCTACAAACCATGAGTGACCTTGCTCCCAGCAACCTCCTGGCCCAGCAGGAA
GTACTCAGGACTCTGGCTCTGCTATTAACCAGAGAGGACAACGAAGTTAGCGAGGCTGTGACGCTTTACTTGGCA
GCAGCCTCCAAAAATCAGCATTTCAGGGAAAAGGCCTTGCTCTATTACTGTGAAGCACTAACAAAGACAAACCTC
CAGCTCCAGAAAGCAGCTTGCCTGGCTCTGAAAATCCTTGAGGCTACTGAAAGCATTAAAATGCTGGTGACATTG
TGTCAATCTGATACTGAAGAAATCAGAAATGTGGCCTCAGAAACCCTCTTGTCTCTGGGAGAAGATGGGCGGCTG
GCATATGAACAATTGGACAAATTTCCTCGAGACTGTGTTAAAGTCGGAGGTCGTCATGGAACTGAAGTTGCCACA
GCCTTT**TAA**TTACAGATTAACTGCCTAACAGCTGTCTTAATATCTGGCCCTTTTCATCAGGATGGTGCTGTGGTT
TGGGCTGGAAATTGTTTAGAGCCTGAGAGACACGACAACTGAAATAAAAATGTAGGCCAGGTGCAGTGGCTCATG
CCTGTAATCCCAGTACTTTGGGAGGCCAACGCAGGAGAATTGCTTAAGCCCAGGAGGTTCAAGACCAACCTGGGC

FIGURE 2345B

AACATAGCAAGGCCCTGTCTCTACAAAAAAAATAGTTTAATTAGTCGGGCGTGGTGGCATGCACCTGTAGTCCCA
GCTACTTGGGAGGCTAAGGTGGGAGGATTGCTTGAGCCCAGAAGATTCAGGCTGCAGTGAGCCATAATTGCCCCA
CTGCACTCCAGACTGGGTGACAGAGCAAAACCCTGTCTCAAAAAACAAAACAACAACAACAACTAAAAAAACATG
TTATAGAAAGAATTCAGAGTCTCGTTTCACAGTACCTATCTACTTTTCCTTTGGCCAATATAGAATAGGGCTATG
GTATAATTCAAATAGATTACATCGTCGATTGTGTCTAATAATACTCAGTGAAAGAGTCCATCTTATCTTAATATG
TATGAAATTTAAAAATAGCCATCTTTGTACTTTTTTGCAAGTTTCTCTATAAGCTTGAAATAGTCATGTGATACT
TCGACAAACATCATATGCCTTGCAGTTTTTCTCGGTCGTGTTCTCAGGGTTGAGTAGTCCCCTTAGCTACCTAAC
TTTACTTTCAATACAAAGCACAAAAAAGAATACTTCAAATAAAAGTTTGCCTGCAGAACCTGGCAAAATGACCCA
TTATGAGAGTTTAGATGTTTTAATTTTATGTGCTCCCAGCTACTCTGGAGTCTGAGGTGGGAGGATCACTTGAGG
CAGAGGTTGCAGTAAGCTGAGATTACACTACTGCACTCCAGCCCATGTGACAGAGGAATGAGAGCCAGTCTCAAA
AAAAAAAAACAAAAAACTCCCATAATTTATTTTGTTTCTTTTCCCCATCCTGAAAATTCCCAAATCATGTTTCCA
TTATGGAAAAATGATAAGTAAATGACTAAGAACTACATTAAGATTATGCCTATACACTTAAACAAAAAACTCAAA
GCTTATGCTTTTTTTTTTTAATTAATGAGAGCTATTTTTTATGATATTCTTACCATAGGGGTGTTTTGCTGCTAA
GACAAATCAAAACCAAAAGCTGTAGATTCACAAACCTGTGATGCTCTTTGAGGTGGAGGAACCTAGAAGTCAGAG
AAATCCTAATGGAGTAGGAGTGGAGGAACATTTAAAGTGGTCCCTCCTTCTGTAAAAATGACCGTGGGATTAGAA
AGAAGGACATCCTGAGGGGTGGTTACTGCCCCCAGGGAAATCACTCACTGGTAGGATTCCCTGGCCAAATAGTTC
AAACATCAGGTCCCATTATTGCTTCAGTATCAGAGATGCAAGTTCATTAAGCAAAGTACAAGACCATTCAGTAGC
TCTTATTAAAATATCTTTTCTTCCTCTAAAGAGTGTACAAGGTGGGGTATGCCAAGGTATCAAAACAATATATGT
GAGTGTAATTTAAACTGTGGAATATCAACTGTACTATGGACGTGTTTGTATCATTTAGATGTCATTTTAAATATT
TACATTTTAGCAAGACTTTTAAAAAGGACTCATTTCATTTCAAAGTGCAAATTGTTTGCCAGGCTTCTGGCAAAT
GGTTCTTTCAACTGTGAACTTATAGTGTACATATCTGTATATTTATAAATATTATATATATTCATACATCCTTCA
GTTTAAAGGTACATTGTACAGTCTGTAGTTAGGAGGTATAGCCTATAGCTTATGTTAAATGGTTGAAATGGTTCT
TTTTATAGAAAGTCAAACACAGATGTTACAGGATTTTGTGTTTGGTTTGTCATTTTTTTATTTTTTATTTTGACT
ATTGCATGAGTAATTAATTCCAGATCTTTTGTATTCACTTCTGTATTTTATGTTTGGTTGAGGGGTGCTTTTAGT
TGTGTGGCATTTGTATTCATTGATCTTTCAGTCATGTAAGTTAAAATAAAAATTATTTTTGAATTACTAGC

FIGURE 2346

MLVGSQSFSPGGPNGIIRSQSFAGFSGLQERRSRCNSFIENSSALKKPQAKLKKMHNLGHKNNNPPKEPQPKRVE
EVYRALKNGLDEYLEVHQTELDKLTAQLKDMKRNSRLGVLYDLDKQIKTIERYMRRLEFHISKVDELYEAYCIQR
RLQDGASKMKQAFATSPASKAARESLTEINRSFKEYTENMCTIEVELENLLGEFSIKMKGLAGFARLCPGDQYEI
FMKYGRQRWKLKGKIEVNGKQSWDGEETVFLPLIVGFISIKVTELKGLATHILVGSVTCETKELFAARPQVVAVD
INDLGTIKLNLEITWYPFDMEDMTASSGAGNKAAALQRRMSMYSQGTPETPTFKDHSFFRWLHPSPDKPRRLSVL
SALQDTFFAKLHRSRSFSDLPSLRPSPKAVLELYSNLPDDIFENGKAAEEKMPLSLSFSDLPNGDCALTSHSTGS
PSNSTNPEITITPAEFNLSSLASQNEGMDDTSSASSRNSLGEGQEPKSHLKEEDPEEPRKPASAPSEACRRQSSG
AGAEHLFLENDVAEALLQESEEASELKPVELDTSEGNITKQLVKRLTSAEVPMATDRLLSEGSVGGESEGCRSFL
DGSLEDAFNGLLLALEPHKEQYKEFQDLNQEVMNLDDILKCKPAVSRSRSSSLSLTVESALESFDFLNTSDFDEE
EDGDEVCNVGGGADSVFSDTETEKHSYRSVHPEARGHLSEALTEDTGVGTSVAGSPLPLTTGNESLDITIVRHLQ
YCTQLVQQIVFSSKTPFVARSLLEKLSRQIQVMEKLAAVSDENIGNISSVVEAIPEFHKKLSLLSFWTKCCSPVG
VYHSPADRVMKQLEASFARTVNKEYPGLADPVFRTLVSQILDQAEPLLSSSLSSEVVTVFQYYSYFTSHGVSDLE
SYLSQLARQVSMVQTLQSLRDEKLLQTMSDLAPSNLLAQQEVLRTLALLLTREDNEVSEAVTLYLAAASKNQHFR
EKALLYYCEALTKTNLQLQKAACLALKILEATESIKMLVTLCQSDTEEIRNVASETLLSLGEDGRLAYEQLDKFP
RDCVKVGGRHGTEVATAF

FIGURE 2347

CCCGCCTCTTCCTCCCTTCCTTCTTTCCTTGCTTTCGCCGCGCACTCCGCCGCCATGGAGCAGCGCCGCGTCACC
GACTTCTTCGCGCGCCGCCGCCCCGGGCCCCCCCGCATCGCGCCGCCCAAGCTGGCCTGCCGCACCCCCAGCCCC
GCCAGGCCCGCACTCCGCGCCCCGGCCTCCGCTACCAGTGGCAGCCGCAAGCGCGCCCGCCCGCCCGCCGCCCCC
GGACGCGACCAGGCCAGGCCACCGGCCCGCAGGAGACTGCGGCTGTCGGTGGACGAGGTTTCCAGCCCCAGTACC
CCCGAGGCCCCAGACATCCCAGCCTGCCCTTCTCCGGGCCAGAAGATAAAGAAATCCACCCCGGCAGCAGGTCAG
CCGCCCCACCTGACATCCGCGCAGGACCAGGACACCATCTCTGAGCTTGCGTCATGCCTGCAACGGGCCCGGGAG
CTGGGGGCAAGAGTCCGGGCGCTGAAGGCCAGTGCCCAGGATGCTGGGGAGTCCTGCACCCCAGAGGCCGAGGGC
CGCCCTGAGGAGCCATGTGGCGAGAAGGCGCCCGCCTACCAGCGCTTCCATGCCCTGGCCCAGCCCGGCCTGCCG
GGACTCGTGCTGCCCTACAAGTACCAGGTGCTGGCGGAGATGTTCCGCAGCATGGACACCATCGTGGGCATGCTC
CACAACCGCTCCGAGACGCCCACCTTTGCCAAGGTCCAGCGGGGCGTCCAGGACATGATGCGTAGGCGTTTTGAG
GAGCGCAATGTTGGCCAGATCAAAACCGTGTACCCGGCCTCCTACCGCTTCCGCCAGGAGCGCAGTGTCCCCACC
TTCAAGGATGGCGCCAGGAGGTCAGATTACCAGCTCACCATCGAGCCACTGCTGGAGCAGGAGGCTGACGGAGCA
GCCCCCCAGCTCACGGCCTCGCGCCTCCTGCAGCGACGGCAGATCTTCAGCCAGAAGCTGGTGGAGCACGTCAAG
GAGCACCACAAGGCCTTCCTGGCCTCCCTGAGCCCCGCCATGGTGGTGCCGGAGGACCAGCTGACCCGCTGGCAC
CCGCGCTTCAACGTGGATGAAGTACCCGACATCGAGCCGGCCGCGCTGCCCCAGCCACCCGCCACGGAGAAGCTC
ACCACTGCTCAGGAGGTGCTGGCCCGGGCCCGCAACCTGATTTCACCCAGGATGGAGAAGGCCTTGAGTCAATTG
GCCCTGCGCTCTGCTGCGCCCAGCAGCCCCGGGTCTCCCAGGCCAGCACTGCCGGCTACCCCACCAGCCACCCCG
CCTGCAGCCTCTCCCAGTGCTCTGAAGGGGGTGTCCCAGGATCTGCTGGAGCGGATCCGAGCCAAGGAGGCACAG
AAGCAGCTGGCACAGATGACGCGGTGCCCGGAGCAGGAGCAGCGGCTGCAGCGCTTAGAACGGCTGCCTGAGCTG
GCCCGCGTGCTGCGGAGCGTCTTTGTGTCCGAACGCAAGCCTGCGCTCAGCATGGAGGTGGCCTGTGCCAGGATG
GTGGGCAGCTGTTGTACTATCATGAGCCCTGGGGAAATGGAGAAGCACCTGCTGCTCCTCTCCGAGCTGCTGCCG
GACTGGCTCAGCCTCCACCGCATCCGCACCGACACCTACGTCAAGCTGGACAAGGCCGCGGACCTGGCCCACATC
ACTGCACGCCTGGCCCACCAGACACGTGCTGAGGAGGGGCTGTGAGCCTGGGGGCCACTGTGGACAGACGTGGGC
TTCAGAAGCTCGCTGGCCTGGGCCCACCAGCATTTTCTTTTATGAACATGATACACTTTGGCCTTCCTTTCCCCA
GCGCCCCTGAGGGCCAGAGGCAGATGTGGGCTGCAGGCTGCACAGCCCGAGGGTCTCTGGCTGCGGGCGGTGGGC
CCCTTCATGGGGCTCACCTGGTGGATTCACATTAAACCGGTTTCTGTGGGCACCTTTGTCCTTGCTGCTGGTGGG
GAAGGGAAGCCAGATCCAGCACCCCCTGGGGGGCCATCGGGAGTGTGGCTGGGGGTGAAGGGGGCTCTGTGGCAA
TATGGGGTTGGGTAGTGTGGGTGGCAGGCCATCCCCTCTAATCTTGGAACCTCTGAATATGGGACCTCCCACAGC
AAAGGGTGACTTTTGTCATTAAGAAAGACTGGGGTGGGTGTGGTGGCTCACGCCTGTAACCCCAGCACTTTGGGA
GGCCAAGGTGGGCAGATCACGAGGTCAAGAGATCGAGACCATCCTGGCGAACATGGTGAAACCCCATCTCTACTA
AAAATACAAAAAATTAGCCGGGTGTGGTGGTGGGCACCTGTCGTCCCAGCTACTAGGGAGGCTGAGGCAGGAGAA
TGGTGTGAACCCAGGAGGCACAGCTTGCAGTGAGCGAAGATCGCACCACTGCACGCACTCCAGCCTGGGTGACAG
AGCGAGACTCCGTCTCAAAAAAAAAAATTTCAAGACTGGAGAGGTGATCCTGAATTGTCCAGCTACGCCCCATGT
CATCACAGGGCCTTCATGACAGGGCCAGAGCCAGCCAGCTTTGAAGACGCGGCCCTGCCCCGACACAGGCAGCCT
GGAGAAGCTGGGCAGGACAAGTAGGACATCCCTGGAGCCTCCAGAAGGGACTGGCCTCTGCCCACACCTTGACTT
CAGTATTTCTGACCTCCTAAACTCTAATAAAGTCATGCTTACAGCCACTAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2348

MEQRRVTDFFARRRPGPPRIAPPKLACRTPSPARPALRAPASATSGSRKRARPPAAPGRDQARPPARRRLRLSVD
EVSSPSTPEAPDIPACPSPGQKIKKSTPAAGQPPHLTSAQDQDTISELASCLQRARELGARVRALKASAQDAGES
CTPEAEGRPEEPCGEKAPAYQRFHALAQPGLPGLVLPYKYQVLAEMFRSMDTIVGMLHNRSETPTFAKVQRGVQD
MMRRRFEERNVGQIKTVYPASYRFRQERSVPTFKDGARRSDYQLTIEPLLEQEADGAAPQLTASRLLQRRQIFSQ
KLVEHVKEHHKAFLASLSPAMVVPEDQLTRWHPRFNVDEVPDIEPAALPQPPATEKLTTAQEVLARARNLISPRM
EKALSQLALRSAAPSSPGSPRPALPATPPATPPAASPSALKGVSQDLLERIRAKEAQKQLAQMTRCPEQEQRLQR
LERLPELARVLRSVFVSERKPALSMEVACARMVGSCCTIMSPGEMEKHLLLLSELLPDWLSLHRIRTDTYVKLDK
AADLAHITARLAHQTRAEEGL

FIGURE 2349

AAGCAGTGGTAACAACGCAGAGTACGCGGGAAGCAGTGGTAACAACGCAGAGTACGCGGGAAGCAGTGGTAACAA
CGCAGAGTACGCGGGAAGCAGTGGTAACAACGCAGAGTACGCGGAAAGCAGTGGTAACAACGCAGAGTACGCGGG
GCCAGCGGAAGTGGCTCCTGTAAGGCAGCAAGGTAGCGTGGCCGGCGCCCGAGCTGGGGTTGTGTCCCTGCTGGG
CTGCCGTTCCAGCTGGACTGCCGCCATGGAACTCAGCGCCGAATACCTCCGCGAGAAGCTGCAGCGGGACCTGGA
GGCGGAGCATGTGGAGGTGGAGGACACGACCCTCAACCGTTGCTCCTGTAGCTTCCGAGTCCTGGTGGTGTCGGC
CAAGTTCGAGGGGAAACCGCTGCTTCAGAGACACAGGCTGGTGAACGCGTGCCTAGCAGAAGAGCTCCCGCACAT
CCATGCCTTTGAACAGAAAACCCTGACCCCAGACCAGTGGGCACGTGAGCGACAGAAATGAGGGACTGGGATCTG
CACAGCCATTAAATTATAAATCTGGACG

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FIGURE 2350

MELSAEYLREKLQRDLEAEHVEVEDTTLNRCSCSFRVLVVSAKFEGKPLLQRHRLVNACLAEELPHIHAFEQKTL
TPDQWARERQK

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FIGURE 2351

GTGCGGAGTTTGGCTGCTCCGGGGTTAGCAGGTGAGCCTGCGATGCGCGGGAAGACGTTCCGCTTTGAAATGCAG
CGGGATTTGGTGAGTTTCCCGCTGTCTCCAGCGGTGCGGGTGAAGCTGGTGTCTGCGGGGTTCCAGACTGCTGAG
GAACTCCTAGAGGTGAAACCCTCCGAGCTTAGCAAAGAAGTTGGGATATCTAAAGCAGAAGCCTTAGAAACTCTG
CAAATTATCAGAAGAGAATGTCTCACAAATAAACCAAGATATGCTGGTACATCTGAGTCACACAAGAAGTGTACA
GCACTGGAACTTCTTGAGCAGGAGCATACCCAGGGCTTCATAATCACCTTCTGTTCAGCACTAGATGATATTCTT
GGGGGTGGAGTGCCCTTAATGAAAACAACAGAAATTTGTGGTGCACCAGGTGTTGGAAAAACACAATTATGTATG
CAGTTGGCAGTAGATGTGCAGATACCAGAATGTTTTGGAGGAGTGGCAGGTGAAGCAGTTTTTATTGATACAGAG
GGAAGTTTTATGGTTGATAGAGTGGTAGACCTTGCTACTGCCTGCATTCAGCACCTTCAGCTTATAGCAGAAAAA
CACAAGGGAGAGGAACACCGAAAAGCTTTGGAGGATTTCACTCTTGATAATATTCTTTCTCATATTTATTATTTT
CGCTGTCGTGACTACACAGAGTTACTGGCACAAGTTTATCTTCTTCCAGATTTCCTTTCAGAACACTCAAAGGTT
CGACTAGTGATAGTGGATGGTATTGCTTTTCCATTTCGTCATGACCTAGATGACCTGTCTCTTCGTACTCGGTTA
TTAAATGGCCTAGCCCAGCAAATGATCAGCCTTGCAAATAATCACAGATTAGCTGTAATTTTAACCAATCAGATG
ACAACAAAGATTGATAGAAATCAGGCCTTGCTTGTTCCTGCATTAGGGGAAAGTTGGGGACATGCTGCTACAATA
CGGCTAATCTTTCATTGGGACCGAAAGCAAAGGTTGGCAACATTGTACAAGTCACCCAGCCAGAAGGAATGCACA
GTACTGTTTCAAATCAAACCTCAGGGATTTAGAGATACTGTTGTTACTTCTGCATGTTCATTGCAAACAGAAGGT
TCCTTGAGCACCCGGAAACGGTCACGAGACCCAGAGGAAGAATTATAACCCAGAAACAAATCTCAAAGTGTACAA
ATTTATTGATGTTGTGAAATCAATGTGTACAAGTGGACTTGTTACCTTAAAGTATAAATAAACACACTATGGCAT
GAATGAAAAAAAAAAAAAA

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FIGURE 2352

MRGKTFRFEMQRDLVSFPLSPAVRVKLVSAGFQTAEELLEVKPSELSKEVGISKAEALETLQIIRRECLTNKPRY
AGTSESHKKCTALELLEQEHTQGFIITFCSALDDILGGGVPLMKTTEICGAPGVGKTQLCMQLAVDVQIPECFGG
VAGEAVFIDTEGSFMVDRVVDLATACIQHLQLIAEKHKGEEHRKALEDFTLDNILSHIYYFRCRDYTELLAQVYL
LPDFLSEHSKVRLVIVDGIAFPFRHDLDDLSLRTRLLNGLAQQMISLANNHRLAVILTNQMTTKIDRNQALLVPA
LGESWGHAATIRLIFHWDRKQRLATLYKSPSQKECTVLFQIKPQGFRDTVVTSACSLQTEGSLSTRKRSRDPEEE
L

FIGURE 2353

GGCACGAGGCACCAAGCGCAGCCGCCGCTGCCGCACTTTCCACTTGTATTGATCACCTCTCAGCCCCGCGCAGCC
GGCTCGCCCGAGCGGACCGCGGCCAGCGCGCCAGCCCTTGGCAGCCCCGGAGCAGTCGGGCTCCGGGAGGAAACT
CCTTGGGAGCGCCCTGTCCGGGGTGCCCTCTGCGCTCTGCAGTGTCTTTCTTTCTGCCTGGGAGGAGGAGGAGGA
GGAGGAAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAAGAGGAGGAGGAGGAGGAGGACGTCTGGTCCCGGCTGGG
AGGTGGAGCAGCGGCAGCAGCAGCAGCCGCCGCCGCCGCCGCCGCTGCCGCCGCCGCCGGAAAGGGAGAGGCAGG
AGAGCCCGAGACTTGGAAACCCCAAAGTGTCCGCGACCCTGCACGGCAGGCTCCCTTCCAGCTTC**ATG**GGCAAAG
TGTGGAAACAGCAGATGTACCCTCAGTACGCCACCTACTATTACCCCCAGTATCTGCAAGCCAAGCAGTCTCTGG
TCCCAGCCCACCCCATGGCCCCTCCCAGTCCCAGCACCACCAGCAGTAATAACAACAGTAGCAGCAGTAGCAACT
CAGGATGGGATCAGCTCAGCAAAACGAACCTCTATATCCGAGGACTGCCTCCCCACACCACCGACCAGGACCTGG
TGAAGCTCTGTCAACCATATGGGAAAATAGTCTCCACAAAGGCAATTTTGGATAAGACAACGAACAAATGCAAAG
GTTATGGTTTTGTCGACTTTGACAGCCCTGCAGCAGCTCAAAAAGCTGTGTCTGCCCTGAAGGCCAGTGGGGTTC
AAGCTCAAATGGCAAAGCAACAGGAACAAGATCCTACCAACCTCTACATTTCTAATTTGCCACTCTCCATGGATG
AGCAAGAACTAGAAAATATGCTCAAACCATTTGGACAAGTTATTTCTACAAGGATACTACGTGATTCCAGTGGTA
CAAGTCGTGGTGTTGGCTTTGCTAGGATGGAATCAACAGAAAAATGTGAAGCTGTTATTGGTCATTTTAATGGAA
AATTTATTAAGACACCACCAGGAGTTTCTGCCCCCACAGAACCTTTATTGTGTAAGTTTGCTGATGGAGGACAGA
AAAAGAGACAGAACCCAAACAAATACATCCCTAATGGAAGACCATGGCATAGAGAAGGAGAGGTGAGACTTGCTG
GAATGACACTTACTTACGACCCAACTACAGCTGCTATACAGAACGGATTTTATCCTTCACCATACAGTATTGCTA
CAAACCGAATGATCACTCAAACTTCTATTACACCCTATATTGCATCTCCTGTATCTGCCTACCAGGTGCAAAGTC
CTTCGTGGATGCAACCTCAACCATATATTCTACAGCACCCTGGTGCCGTGTTAACTCCCTCAATGGAGCACACCA
TGTCACTACAGCCCGCATCAATGATCAGCCCTCTGGCCCAGCAGATGAGTCATCTGTCACTAGGCAGCACCGGAA
CATACATGCCTGCAACGTCAGCTATGCAAGGAGCCTACTTGCCACAGTATGCACATATGCAGACGACAGCGGTTC
CTGTTGAGGAGGCAAGTGGTCAACAGCAGGTGGCTGTCGAGACGTCTAATGACCATTCTCCATATACCTTTCAAC
CTAATAAG**TAA**CTGTGAGATGTACAGAAAGGTGTTCTTACATGAAGAAGGGTGTGAAGGCTGAACAATCATGGAT
TTTTCTGATCAATTGTGCTTTAGGAAATTATTGACAGTTTTGCACAGGTTCTTGAAAACGTTATTTATAATGAAA
TCAACTAAAACTATTTTTGCTATAAGTTCTATAAGGTGCATAAAACCCTTAAATTCATCTAGTAGCTGTTCCCCC
GAACAGGTTTATTTTAGTAAAAAAAAAAAAACAAAAAACAAAAACAAAAGATTTTTATCAAATGTTATGATGCAA
AAAAAGAAAAAGAAAAAAAAAAAGAAAAGAAAACTTCAATTTTCTGGGTATGCACAAAGACCATGAAGACTTATC
CAAGTGCATGACCGGATTTTTGTGGTTTTGTTCATTTTGTGTTTAATTTGTGTTTTTTTTTCCAGCTGTATGAA
ATGGGCTTTCTGAAGTTTAAATAGTCCGACTTCACCCATGGTGTTCTGTGCTTGCAGTGCGAGTGTTGCTGTAAT
TCAGTGTTGCCGTCAGTGTCTCTTTTCTTAGCTTTCTGTCTTTCTTTCAACGTAGTGTGAAGTGTCTTATCCTTT
TCTATGAATTCCAATTTGCCTTAACTCTTTTGATGCTGTAGCTGTTTCAGTAAAAGTTAGTTCAAACTAATGATG
TAGAATGCTTTGACCAAATGAGCTGGTCTATTATGCCTTGTAAAACAGCAGCATAGGGCTTTTAAAAGGTAGTCA
ATAAAAGTTGCTGAAATTTTGGCTTTTTTAAAAAAAAAAAAAAAAA

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FIGURE 2354

MGKVWKQQMYPQYATYYYPQYLQAKQSLVPAHPMAPPSPSTTSSNNNSSSSSNSGWDQLSKTNLYIRGLPPHTTD
QDLVKLCQPYGKIVSTKAILDKTTNKCKGYGFVDFDSPAAAQKAVSALKASGVQAQMAKQQEQDPTNLYISNLPL
SMDEQELENMLKPFGQVISTRILRDSSGTSRGVGFARMESTEKCEAVIGHFNGKFIKTPPGVSAPTEPLLCKFAD
GGQKKRQNPNKYIPNGRPWHREGEVRLAGMTLTYDPTTAAIQNGFYPSPYSIATNRMITQTSITPYIASPVSAYQ
VQSPSWMQPQPYILQHPGAVLTPSMEHTMSLQPASMISPLAQQMSHLSLGSTGTYMPATSAMQGAYLPQYAHMQT
TAVPVEEASGQQQVAVETSNDHSPYTFQPNK

FIGURE 2355A

ATTTACGCGTTGCTGAATCTCCTGTGGACAAACCACCAATAGGCCAGGACTGTCCTGTGGACAGACGGGGTGAGC
CTCTTCTTGTGTCTGGAGATTCTGAAAAGATTTGATCACCAGGAGATTTTTCGGGACATTACCAAACCACTCATT
TTAGTGGCTGCCTCCGGGTGATGATGGCTGTGTGAACGACTGCC**ATG**GCCCACCGGAAGCTTGAGAGCGTGGGGA
GCGGCATGTTGGACCATAGGGTGAGACCAGGTCCTGTCCCTCACAGCCAGGAGCCCGAGAGCGAGGACATGGAGC
TGCCCTTGGAGGGCTATGTGCCCGAGGGCCTGGAGCTGGCTGCCCTGCGGCCAGAGAGCCCCGCGCCAGAGGAAC
AGGAGTGCCACAACCACAGCCCCGATGGGGACTCCAGCTCTGACTACGTGAACAACACCTCTGAGGAGGAGGACT
ATGACGAGGGCCTCCCTGAGGAGGAGGAGGGCATCACCTACTACATCCGCTACTGCCCTGAGGACGACAGCTACC
TAGAGGGCATGGACTGCAACGGGGAGGAGTACCTGGCCCACAGTGCACACCCTGTGGACACTGATGAGTGCCAGG
AGGCGGTGGAGGAGTGGACGGACTCGGCGGGCCCGCACCCCCACGGCCACGAGGCTGAAGGCAGCCAGGACTACC
CAGACGGCCAACTGCCCATTCCGGAGGATGAGCCCTCCGTCCTTGAGGCCCATGACCAGGAAGAAGATGGTCACT
ACTGTGCCAGCAAAGAGGGCTACCAGGACTACTACCCCGAGGAGGCCAACGGGAACACCGGCGCCTCCCCCTACC
GCCTGAGGCGTGGGGATGGGGACCTGGAGGACCAGGAGGAGGACATTGACCAGATCGTGGCAGAGATCAAGATGA
GTCTGAGCATGACCAGCATCACCAGCGCCAGTGAGGCCAGCCCCGAGCATGGGCCTGAGCCAGGGCCTGAGGACT
CTGTAGAGGCCTGCCCACCCATCAAGGCCAGCTGCAGCCCCAGCAGGCACGAGGCGAGGCCCAAGTCGCTGAACC
TCCTTCCCGAGGCCAAGCACCCCGGAGACCCCCAGAGAGGCTTCAAGCCCAAGACCAGGACCCCAGAAGAGAGGC
TGAAGTGGCCCCACGAGCAGGTTTGCAATGGTCTGGAGCAGCCAAGGAAGCAGCAGCGCTCTGATCTCAATGGAC
CTGTTGACAATAACAACATTCCAGAGACAAAGAAGGTGGCATCATTTCCAAGTTTTGTGGCTGTTCCAGGGCCCT
GCGAACCAGAAGACCTCATCGACGGGATCATCTTTGCTGCCAATTACCTGGGGTCCACCCAGCTGCTATCAGAAC
GGAACCCTTCCAAAAACATCAGAATGATGCAAGCGCAGGAGGCCGTCAGCCGGGTCAAGAGGATGCAAAAGGCTG
CTAAGATCAAGAAAAAAGCGAATTCTGAGGGGGATGCCCAGACGCTGACGGAAGTGGACCTCTTCATTTCCACCC
AGAGGATCAAGGTTTTAAATGCAGACACGCAGGAAACCATGATGGACCACGCCTTGCGTACCATCTCCTACATCG
CCGACATTGGGAACATTGTAGTGCTGATGGCCAGACGCCGCATGCCCCGGTCAGCCTCTCAGGACTGCATCGAGA
CCACGCCCGGGGCCCAGGAAGGCAAGAAGCAGTATAAGATGATCTGCCATGTGTTCGAGTCGGAGGATGCCCAGC
TCATCGCCCAGTCTATCGGCCAGGCCTTCAGCGTGGCCTACCAGGAGTTCCTGCGAGCCAATGGCATCAACCCCG
AAGACTTGAGCCAGAAGGAATACAGCGACATCATCAACACCCAGGAGATGTACAACGACGACCTCATCCACTTCT
CAAACTCGGAGAACTGCAAGGAGCTGCAGCTGGAGAAGCACAAGGGCGAGATCCTGGGCGTGGTGGTGGTGGAGT
CGGGCTGGGGCTCCATCCTGCCCACGGTGATCCTGGCCAACATGATGAATGGCGGCCCGGCTGCCCGCTCGGGGA
AGCTGAGCATCGGGGACCAGATCATGTCCATCAATGGCACCAGCCTGGTGGGGCTGCCCCTCGCCACCTGCCAAG
GCATCATCAAGGGCCTGAAGAACCAGACACAGGTGAAGCTCAACATTGTCAGCTGTCCCCCGGTCACCACGGTCC
TTATCAAGCGGCCAGACCTCAAGTACCAGCTGGGCTTCAGCGTGCAGAATGGAATTATCTGCAGCCTCATGAGAG
GGGGCATTGCTGAGCGAGGGGGCGTCCGTGTGGGCCACCGCATCATCGAGATCAACGGGCAGAGCGTGGTGGCCA
CAGCCCACGAGAAGATAGTCCAAGCTCTGTCCAACTCGGTCGGAGAGATCCACATGAAGACCATGCCCGCCGCCA
TGTTCAGGCTCCTCACGGGTCAGGAGACCCCGCTGTACATC**TAG**GCCACCCCAGCCTGGCCACGCAGCCAGGACA
CCGGGCAGGGCCGCCCGGGCCCAGAGGAGCTGGGAGCCGGGCCGCAGACTTGACCCCGACGCCACAGCCCAGCCA
CGGACGCTGGCTCCCCAAAGGGTGTGCCCTCACCACCCACTTGATTTTTTTCATTTTGCCAAAAAGGGGTATGTC
TTTATCAAAGGAGAGTCACAGAACAAATGTTTGTTTGTAAAGCGTTCCAAGTATTTTGCCACGTTCTGGACTGTC
TTCTCCCTGCACAAGCCAGGGTGTGTCTCGGTAGCTGTGCGTGGTGTGGAGTGTGTGTCTTTCCTCCCTGAAGCT
GTGCGGAGCGAACTGGCGCCTCCGAGGGACGCGGCTCCCGGGGCAGGGCAGCCGTCACCCCTGCCTCCCGCCCCC
TTGGCTGGGACGTCTGGGGTCCTGTGGGGCCCCCACAATGGTCCCAAACAGCTGCCTCTGCCACTGACTGCAGGG
ACACGGGCAGCCTGGCTCCCAGGACACGACTTGTAATGAAAGTTTGGGGACATGTGATTGATTGATTGATTGATT
GTAAATAAAGGATGATGGCCACAACATGAAAACTCCATATTTATTTAGATGCTATTATTACTGTTTGGACTTTTA
TTTTGGCAGGCTTTTTTCCAGACTCTAGGGTTTTCCAATGTGACTAATGACCACACCTGCCTCTCCCGTCGTCTC
TTCTGGGCACCCTCCCACCCGGCTGCATACCCGGGCAGGGCTCCCACAGAGACAAGGAGGGCACAGGTGTCTGCC
CCCTCTTTAAAATCGATCTACACACATCCACGCACATGCGACCCCGAGGAAACGAAACCCACTCTAGAAAACGCG
ACCTTGGCCGCACCTAAAGCAGCCAGCCGTGAGTGCAGACCCCTTGGCCAGCGTGGCGCAGTGGCCCTGAGCAGT
AGTGGCATGTGTGTAGATCAAGTCGGATCTAGTCCAGCTCGGTTCATTAGCGATCCATGTAATCTGACGTCATCT
TGTCTCGAAGTCTCTTTTTTTGGCCCAGGCCTTGAAGAATACACTGTGACTTAAGAAGCCTTACCACGCAGTAAC
TAAAGCTTTAGGATGACTGTATTCGAGGAGTGCCGTGTGTTGCATGCAGCTACCCGTAGGAAGACTTCGCGCATA

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FIGURE 2355B

TCACTAATAAACCTGAAGTCGTGATGA

FIGURE 2356

MAHRKLESVGSGMLDHRVRPGPVPHSQEPESEDMELPLEGYVPEGLELAALRPESPAPEEQECHNHSPDGDSSSD
YVNNTSEEEDYDEGLPEEEEGITYYIRYCPEDDSYLEGMDCNGEEYLAHSAHPVDTDECQEAVEEWTDSAGPHPH
GHEAEGSQDYPDGQLPIPEDEPSVLEAHDQEEDGHYCASKEGYQDYYPEEANGNTGASPYRLRRGDGDLEDQEED
IDQIVAEIKMSLSMTSITSASEASPEHGPEPGPEDSVEACPPIKASCSPSRHEARPKSLNLLPEAKHPGDPQRGF
KPKTRTPEERLKWPHEQVCNGLEQPRKQQRSDLNGPVDNNNIPETKKVASFPSFVAVPGPCEPEDLIDGIIFAAN
YLGSTQLLSERNPSKNIRMMQAQEAVSRVKRMQKAAKIKKKANSEGDAQTLTEVDLFISTQRIKVLNADTQETMM
DHALRTISYIADIGNIVVLMARRRMPRSASQDCIETTPGAQEGKKQYKMICHVFESEDAQLIAQSIGQAFSVAYQ
EFLRANGINPEDLSQKEYSDIINTQEMYNDDLIHFSNSENCKELQLEKHKGEILGVVVVESGWGSILPTVILANM
MNGGPAARSGKLSIGDQIMSINGTSLVGLPLATCQGIIKGLKNQTQVKLNIVSCPPVTTVLIKRPDLKYQLGFSV
QNGIICSLMRGGIAERGGVRVGHRIIEINGQSVVATAHEKIVQALSNSVGEIHMKTMPAAMFRLLTGQETPLYI

FIGURE 2357

ATGGCTGTGTGAACGACTGCCATGGCCCACCGGAAGCTTGAGAGCGTGGGGAGCGGCATGTTGGACCATAGGGTG
AGACCAGGTCCTGTCCCTCACAGCCAGGAGCCCGAGAGCGAGGACATGGAGCTGCCCTTGGAGGGCTATGTGCCC
GAGGGCCTGGAGCTGGCTGCCCTGCGGCCAGAGAGCCCCGCGCCAGAGGAACAGGAGTGCCACAACCACAGCCCC
GATGGGGACTCCAGCTCTGACTACGTGAACAACACCTCTGAGGAGGAGGACTATGACGAGGGCCTCCCTGAGGAG
GAGGAGGGCATCACCTACTACATCCGCTACTGCCCTGAGGACGACAGCTACCTAGAGGGCATGGACTGCAACGGG
GAGGAGTACCTGGCCCACAGTGCACACCCTGTGGACACTGATGAATGCCATGAGGCGGTGGAGGAGTGGACGGAC
TCGGCGGGCCCGCACCCCCACGGCCACGAGGCTGAAGGCAGCCAGGACTACCCAGACGGCCAACTGCCCATTCCG
GAGGATGAGCCCTCCGTCCTTGAGGCCCATGACCAGGAAGAAGATGGTCACTACTGTGCCAGCAAAGAGGGCTAC
CAGGACTACTACCCAGAGGAGGCCAACGGGAACACCGGCGCCTCCCCCTACCGCCTGAGGCGTGGGGATGGGGAC
CTGGAGGACCAGGAGGAGGACATTGACCAGATCGTGGCAGAGATCAAGATGAGTCTGAGCATGACCAGCATCACC
AGCGCCAGTGAGGCCAGCCCCGAGCATGGGCCTGAGCCAGGGCCTGAGGACTCTGTAGAGGCCTGCCCACCCATC
AAGGCCAGCTGCAGCCCCAGCAGGCACGAGGCGAGGCCCAAGTCGCTGAACCTCCTTCCCGAGGCCAAGCACCCC
GGAGACCCCCAGAGAGGCTTCAAGCCCAAGACCAGGACCCCAGAAGAGAGGCTGAAGTGGCCCCACGAGCAGGTT
TGCAATGGTCTGGAGCAGCCAAGGAAGCAGCAGCGCTCTGATCTCAATGGACCTGTTGACAATAACAACATTCCA
AAAACAAAAAAGGTGGCATCATTTCCAAGTTTGGTGGCTGTTCCAGGGCCCTGCGAACCAAAAAACCTCATCGAC
GGGATCATCTTTGCTGCCAATTACCTGGGGTCCACCCAGCTGCTATCAGAACGGAACCCTTCCAAAAACATCAGA
ATGATGCAAGCGCAGGAGGCCGTCAGCCGGGTCAAGAGGATGCAAAAGGCTGCTAAGATCAAGAAAAAAGCGAAT
TCTGAGGGGGATGCCCAGACGCTGACGGAAGTGGACCTCTTCATTTCCACCCAGAGGATCAAGGTTTTAAATGCA
GACACGCAGGAAACCATGATGGACCACGCCTTGCGTACCATCTCCTACATCGCCGACATTGGGAACATTGTAGTG
CTGATGGCCAGACGCCGCATGCCCCGGTCAGCCTCTCAGGACTGCATCGAGACCACGCCCGGGGCCCAGGAAGGC
AAGAAGCAGTATAAGATGATCTGCCATGTGTTCGAGTCGGAGGATGCCCAGCTCATCGCCCAGTCTATCGGCCAG
GCCTTCAGCGTGGCCTACCAGGAGTTCCTGCGAGCCAATGGCATCAACCCCGAAGACTTGAGCCAGAAGGAATAC
AGCGACATCATCAACACCCAGGAGATGTACAACGACGACCTCATCCACTTCTCAAACTCGGAGAACTGCAAGGAG
CTGCAGCTGGAGAAGCACAAGGGCGAGATCCTGGGCGTGGTGGTGGTGGAGTCGGGCTGGGGCTCCATCCTGCCC
ACGGTGATCCTGGCCAACATGATGAATGGCGGCCCGGCTGCCCGCTCGGGGAAGCTGAGCATCGGGGACCAGATC
ATGTCCATCAATGGCACCAGCCTGGTGGGGCTGCCCCTCGCCACCTGCCAAGGCATCATCAAGGGCCTGAAGAAC
CAGACACAGGTGAAGCTCAACATTGTCAGCTGTCCCCCGGTCACCACGGTCCTTATCAAGCGGCCAGACCTCAAG
TACCAGCTGGGCTTCAGCGTGCAGAATGGAATTATCTGCAGCCTCATGAGAGGGGGCATTGCTGAGCGAGGGGGC
GTCCGTGTGGGCCACCGCATCATCGAGATCAACGGGCAGAGCGTGGTGGCCACAGCCCACGAGAAGATAGTCCAA
GCTCTGTCCAACTCGGTCGGAGAGATCCACATGAAGACCATGCCCGCCGCCATGTTCAGGCTCCTCACGGGTCAG
GAGACCCCGCTGTACATCTTAGGCCACCCCAGCCTGGCCACGCAGCCAGGACACCGGGCAGGGCCGCCCGGGCCCA
GAGGAGCTGGGAGCCGGGCCGCAGACTTGACCCCGACGCCACAGCCCAGCCACGGACGCTGGCTCCCCAAAGGGT
GTGCCCTCACCACCCACTTGATTTTTTTCATTTTGCCAAAAAGGGGTATGTCTTTATCAAAGGAGAGTCACAGAA
CAAATGTTTGTTTGTAAAGCGTTCCAAGTATTTTGCCACGTTCTGGACTGTCTTCTCCCTGCACAAGCCAGGGTG
TGTCTCGGTAGCTGTGCGTGGTGTGGAGTGTGTGTCTTTCCTCCCTGAAGCTGTGCGGAGCGAACTGGCGCCTCC
GAGGGACGCGGCTCCCGGGGCAGGGCAGCCGTCACCCCTGCCTCCCGCCCCCTTGGCTGGGACGTCTGGGGTCCT
GTGGGGCCCCCACAATGGTCCCAAACAGCTGCCTCTGCCACTGACTGCAGGGACACGGGCAGCCTGGCTCCCAGG
ACACGACTTGTAATGAAAGTTTGGGGACATGTGATTGATTGATTGATTGATTGTAAATAAAGGATGATGGCCACA
ACATGAAAACTCCATATTTATTTAGATGCTATTATTACTGTTTGGACTTTTATTTTGGCAGGCTTTTTTCCAGAC
TCTAGGGTTTTCCAATGTGACTAATGACCACACCTGCCTCTCCCGTCGTCTCTTCTGGGCACCCTCCCACCCGGC
TGCATACCCGGCCAGGGCTCCCACAGAGACAAGGAXGGCACAGGTGTCTGCCCCCTCTTTAAAATCGATCTACAC
ACATCCACGCACATGCGACCCCGAGGGAAACGAAACCCACTCTAGAAAACGCGACCTTGGCCGCACCTAAAGCAG
CCAGCCGTGAGTGCAGACCCCTTGGCCAGCGTGGCGCAGTGGCCCTGAGCAGTAGTGGCATGTGTGTAGATCAAG
TCGGATCTAGTCCAGCTCGGTTCATTAGCGATCCATGTAATCTGACGTCATCTTGTCTCGAAGTCTCTTTTTTTG
GCCCAGGCCTTGAAGAATACACTGTGACTTAAGAAGCCTTACCACGCAGTAACTAAAGCTTTAGGATGACTGTAT
TCGAGGAGTGCCGTGTGTTGCATGCAGCTACCCGTAGGAAGACTTCGCGCATATCACTAATAAACCTGAAGTCGT
GATGACC

FIGURE 2358

MAHRKLESVGSGMLDHRVRPGPVPHSQEPESEDMELPLEGYVPEGLELAALRPESPAPEEQECHNHSPDGDSSSD
YVNNTSEEEDYDEGLPEEEEGITYYIRYCPEDDSYLEGMDCNGEEYLAHSAHPVDTDECHEAVEEWTDSAGPHPH
GHEAEGSQDYPDGQLPIPEDEPSVLEAHDQEEDGHYCASKEGYQDYYPEEANGNTGASPYRLRRGDGDLEDQEED
IDQIVAEIKMSLSMTSITSASEASPEHGPEPGPEDSVEACPPIKASCSPSRHEARPKSLNLLPEAKHPGDPQRGF
KPKTRTPEERLKWPHEQVCNGLEQPRKQQRSDLNGPVDNNNIPKTKKVASFPSLVAVPGPCEPKNLIDGIIFAAN
YLGSTQLLSERNPSKNIRMMQAQEAVSRVKRMQKAAKIKKKANSEGDAQTLTEVDLFISTQRIKVLNADTQETMM
DHALRTISYIADIGNIVVLMARRRMPRSASQDCIETTPGAQEGKKQYKMICHVFESEDAQLIAQSIGQAFSVAYQ
EFLRANGINPEDLSQKEYSDIINTQEMYNDDLIHFSNSENCKELQLEKHKGEILGVVVVESGWGSILPTVILANM
MNGGPAARSGKLSIGDQIMSINGTSLVGLPLATCQGIIKGLKNQTQVKLNIVSCPPVTTVLIKRPDLKYQLGFSV
QNGIICSLMRGGIAERGGVRVGHRIIEINGQSVVATAHEKIVQALSNSVGEIHMKTMPAAMFRLLTGQETPLYI

FIGURE 2359

GTTTGAAATCGGAAAGTTGGCGGGGCTGCGGGAGCTGAGCCTAGAGTCCGGCTGTTGGCTAGAGTGGGCGCGGAT
CTGGTGTGGGGAAGGCGGCGGGACTCAGGCCTGCCTGCGAAGCATTGTCCTACATAATGGTAGAGGACGAACTGG
CACTTTTCGATAAAAGCATAAATGAATTTTGGAATAAATTCAAAAGTACGGACACCTCCTGTCAGATGGCGGGAC
TAAGAGATACCTACAAGGATTCCATCAAAGCATTTGCAGAAAAGCTGTCTGTGAAATTAAAGGAAGAAGAACGAA
TGGTTGAGATGTTTCTGGAATATCAAAATCAGATCAGCAGGCAAAATAAGCTCATTCAAGAAAAAAAGGATAACT
TGTTAAAATTGATTGCTGAAGTAAAAGGCAAAAAGCAGGAATTGGAAGTACTGACTGCAAATATCCAGGATCTTA
AGGAAGAATATTCTAGGAAGAAGGAAACTATTTCTACTGCTAATAAAGCGAATGCAGAGAGGTTGAAAAGGCTGC
AGAAATCTGCAGACTTGTATAAAGATCGACTTGGACTAGAAATTCGAAAAATTTATGGTGAGAAATTGCAGTTTA
TTTTCACTAATATTGACCCTAAGAATCCTGAGAGCCCATTTATGTTTTCCTTACATCTCAATGAAGCAAGGGACT
ATGAAGTGTCAGATAGTGCCCCTCATCTTGAGGGCCTAGCAGAATTTCAAGAGAATGTAAGGAAGACCAACAATT
TTTCAGCTTTTCTTGCCAATGTTCGGAAAGCTTTTACTGCCACGGTTTATAATTAACATACAAATAGTGTATATA
AAAACGGTTTATTTTTCTTCTCTATTACATATCTCTTTTTTTTCTTGTTTTTATTATTACTATACTTTAAGTTTT
AGGGTACATGTGCACAATGTGCAGGTTTGTTACATATGTATACATGTGCCATATTGGTGTGCTGCACCCATTAAC
TCGTCATTTCATTAGGTATATCTCCTAATGCTATCCCTCCCCCCTCCCCCAACCCACAACAGTCCCCGTTGTGTG
ATGTTCCCCTTCCTGTGTCCATGTGTTCTCATTGTTCAATTCCCACCTAGGAGTGAGAATATGTGGTGTTTGGTT
TTTTGTCCTTTCGATAGTTTGCTGAGAATGATGGTTTCCAGCTTCATCCATGTTCCTACAAAGGACATGAACTCA
TCCTTTTTTATGGCTGCATAGTATTCCATGGTGTATATGTGCCACATTTTCTTAATCCAGTCTATCATTGTTGGA
CATTTGGGTTGGTTCCAAGTCTTTGCTATTGTGAATAGTGCCGAAATAAACATACGTGTGCATGTGTCTCCAAAA
AAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2360

MVEDELALFDKSINEFWNKFKSTDTSCQMAGLRDTYKDSIKAFAEKLSVKLKEEERMVEMFLEYQNQISRQNKLI
QEKKDNLLKLIAEVKGKKQELEVLTANIQDLKEEYSRKKETISTANKANAERLKRLQKSADLYKDRLGLEIRKIY
GEKLQFIFTNIDPKNPESPFMFSLHLNEARDYEVSDSAPHLEGLAEFQENVRKTNNFSAFLANVRKAFTATVYN

FIGURE 2361

TGCGACGTGACTGGCTAGCTGCGTGGGTACTGGAACAAGCAAACGAGGCAGCGAGCGAAGGACGGGAGCCGGACC
CTGGGCCCCGTGGAACTCCAGCCTGCGCCACCACGTCACGCACACGCTCGGCGCTGCGATCCGCGCATATAACGA
TATTTGGATTTGACCTGCATTTTGGAATTTATCTACACTTAAAATGCCACCAGCAGTTGGAGGTCCAGTTGGATA
CACCCCCCCAGATGGAGGCTGGGGCTGGGCAGTGGTAATTGGAGCTTTCATTTCCATCGGCTTCTCTTATGCATT
TCCCAAATCAATTACTGTCTTCTTCAAAGAGATTGAAGGTATATTCCATGCCACCACCAGCGAAGTGTCATGGAT
ATCCTCCATAATGTTGGCTGTCATGTATGGTGGAGGTCCTATCAGCAGTATCCTGGTGAATAAATATGGAAGTCG
TATAGTCATGATTGTTGGTGGCTGCTTGTCAGGCTGTGGCTTGATTGCAGCTTCTTTCTGTAACACCGTACAGCA
ACTATACGTCTGTATTGGAGTCATTGGAGGTCTTGGGCTTGCCTTCAACTTGAATCCAGCTCTGACCATGATTGG
CAAGTATTTCTACAAGAGGCGACCATTGGCCAACGGACTGGCCATGGCAGGCAGCCCTGTGTTCCTCTGTACTCT
GGCCCCCCTCAATCAGGTTTTCTTCGGTATCTTTGGATGGAGAGGAAGCTTTCTAATTCTTGGGGGCTTGCTACT
AAACTGCTGTGTTGCTGGAGCCCTCATGCGACCAATCGGGCCCAAGCCAACCAAGGCAGGGAAAGATAAGTCTAA
AGCATCCCTTGAGAAAGCTGGAAAATCTGGTGTGAAAAAAGATCTGCATGATGCAAATACAGATCTTATTGGAAG
ACACCCTAAACAAGAGAAACGATCAGTCTTCCAAACAATTAATCAGTTCCTGGACTTAACCCTATTCACCCACAG
AGGCTTTTTGCTATACCTCTCTGGAAATGTGATCATGTTTTTTGGACTCTTTGCACCTTTGGTGTTTCTTAGTAG
TTATGGGAAGAGTCAGCATTATTCTAGTGAGAAGTCTGCCTTCCTTCTTTCCATTCTGGCTTTTGTTGACATGGT
AGCCCGACCATCTATGGGACTTGTAGCCAACACAAAGCCAATAAGACCTCGAATTCAGTATTTCTTTGCGGCTTC
CGTTGTTGCAAATGGAGTGTGTCATATGCTAGCACCTTTATCCACTACCTATGTTGGATTCTGTGTCTATGCGGG
ATTCTTTGGATTTGCCTTCGGGTGGCTCAGCTCCGTATTGTTTGAAACATTGATGGACCTTGTTGGACCCCAGAG
GTTCTCCAGCGCTGTGGGATTGGTGACCATTGTGGAATGCTGTCCTGTCCTCCTGGGGCCACCACTTTTAGGTCG
GCTCAATGACATGTATGGAGACTACAAATACACATACTGGGCATGTGGCGTCGTCCTAATTATTTCAGGTATCTA
TCTCTTCATTGGCATGGGCATCAATTATCGACTTTTGGCAAAAGAACAGAAAGCAAACGAGCAGAAAAAGGAAAG
TAAAGAGGAAGAGACCAGTATAGATGTTGCTGGGAAGCCAAATGAAGTTACCAAAGCAGCAGAATCTCCGGACCA
GAAAGACACAGAAGGAGGGCCCAAGGAGGAGGAAAGTCCAGTCTGAATCCATGGGGCTGAAGGGTAAATTGAGCA
GTTCATGACCCAGGATATCTGAAAATATTCTACTGGCCTGTAATCTACCAGTGGTGCTCAATGCAAATAGTAGAC
ATTTGTGTGGAAATCATACCAGTTGTTCATTGATGGGATTTTGTTTGACTCCTTACCAATAGCCTGAATTTGAG
GAGGGAATGATTGGTAGCAAAGGATGGGGGAAAGAAGTAGGTTCTGTTTTGTTTTGTTTTAATCTTAGCTTTTAA
TAGTGTCATAAAGATTATAATATGTGCCTTAAGTTTTAGTCTTTAGAACTCTAGAGAGCCTTAACTTCTTAAACC
ATTTTTGCTGAATTCATCTATTTCGAGTGTTGTGTTAAAAGGAAAAATAACAACTAACTTGTTTGAGGCAAATCT
AAAATTTAAAATTAATCTTGCTTCATTGTTACATGTAATATATTTCAGACATTTTCACTGGAAGATTTATGAACA
GAAATATTGGTTGAAAGTTAGAGATTTTACAAAATGCTGACAAAAATATTTTCCTAGCATCAGTAGATTTCTGGC
ATATGTTTCTGCTAGCTATATATTTAGGAAATTCAAAGCATAAAACTTTGGCAACATCTTGGCTGTTCTAGACAC
AGTGTACTTGTCAACCCCTCTCAGGTACCTTTTCTTGGGATGCTTATTAGAAGCCAAGTAAAGTGCTTAAGGTTT
GTTTTCATTAAATTAGCTATTTCTGCTCCCCTGTTCAAAGATGCATTTTGAGTGTTTATAGATCACTGCCCTTTT
TGAAATCACCTGGTATTATTTTTCTTACTGGAAAAGTTAGTATTAAAATCTACAGAACTACATATTTGTGCCTCC
TTGGTAAATACAACACATCTAATTAAATGTAGACAGATATTTCAAACATCAGCTGAATTCACTTAAGTTTTTCCA
AAACCTCAGTTAAACTGTGAAGCTATTGGAATTTTTTTTTCCTGGAATTTTTCCCCTTTGATTCACAGTGGTCCC
ATTTATATCTGCTTCTAGCTTAGTGCTATGTGTGAGATATGTGTGTGTTTGGTGTTTTTGTTTTTTTGTTTTTTT
TTTTTTAAGGTTTGCAAATTAAAAAGGGCCAGAAAAATTTGGCACCAGGCAAACGAATAAAGATAGGATTGGGAA
AGAAGTTGCTAAGTGTGCTTAGTTTTAATAAGTAATTCCTTCTCTTTTTTCAGAGAAGGCCTTACAGAAAATTGT
TGTGCTTAGAATTGCTGGATGCATTTTTACCCTCCACACAAACCTAAAAATTTTGTGACCCCTTTCACTTACCTG
AAAAGTAGAGAAATGGATTCAGTATAAGGATAAGGAGGGAAGGTGGACCAGAATGAAAACTGTAAATATTTTTTT
AACCTAATATCACTTAAATCGAGGCAGAAAGATATAGACATTCAATGAATTATATTCAATGCATTTAAAATACCA
CTGTAATTGACAGAGTAAAAGTATAGATACAAAACCTTGTGTAAGAGGCTGACTTTTCCAAATAAACATTTTTTA
AGAAAACATTTCTTCTCCCAAATGTCTATTTTCTTGAGGAAAATATTGCTGTGTCTTCATTTTCATTACCAGGTT
TCATTTTGGGCCTTGCTAAATTGATTGAATTAAATCCTCCAGCTTTTGAACCTTGAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAGAAAAAAAAAAAAAAAAG

FIGURE 2362

MPPAVGGPVGYTPPDGGWGWAVVIGAFISIGFSYAFPKSITVFFKEIEGIFHATTSEVSWISSIMLAVMYGGGPI
SSILVNKYGSRIVMIVGGCLSGCGLIAASFCNTVQQLYVCIGVIGGLGLAFNLNPALTMIGKYFYKRRPLANGLA
MAGSPVFLCTLAPLNQVFFGIFGWRGSFLILGGLLLNCCVAGALMRPIGPKPTKAGKDKSKASLEKAGKSGVKKD
LHDANTDLIGRHPKQEKRSVFQTINQFLDLTLFTHRGFLLYLSGNVIMFFGLFAPLVFLSSYGKSQHYSSEKSAF
LLSILAFVDMVARPSMGLVANTKPIRPRIQYFFAASVVANGVCHMLAPLSTTYVGFCVYAGFFGFAFGWLSSVLF
ETLMDLVGPQRFSSAVGLVTIVECCPVLLGPPLLGRLNDMYGDYKYTYWACGVVLIISGIYLFIGMGINYRLLAK
EQKANEQKKESKEEETSIDVAGKPNEVTKAAESPDQKDTEGGPKEEESPV

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FIGURE 2363

CTCGCCTTCTGGCTCTGCCATGCCCTGCTCTGAAGAGACACCCGCCATTTCACCCAGTAAGCGGGCCCGGCCTGC
GGAGGTGGGCGGCATGCAGCTCCGCTTTGCCCGGCTCTCCGAGCACGCCACGGCCCCCACCCGGGGCTCCGCGCG
CGCCGCGGGCTACGACCTGTACAGTGCCTATGATTACACAATACCACCTATGGAGAAAGCTGTTGTGAAAACGGA
CATTCAGATAGCGCTCCCTTCTGGGTGTTATGGAAGAGTGGCTCCACGGTCAGGCTTGGCTGCAAAACACTTTAT
TGATGTAGGAGCTGGTGTCATAGATGAAGATTATAGAGGAAATGTTGGTGTTGTACTGTTTAATTTTGGCAAAGA
AAAGTTTGAAGTCAAAAAAGGTGATCGAATTGCACAGCTCATTTGCGAACGGATTTTTTATCCAGAAATAGAAGA
AGTTCAAGCCTTGGATGACACCGAAAGGGGTTCAGGAGGTTTTGGTTCCACTGGAAAGAATTAAAATTTATGCCA
AGAACAGAAAACAAGAAGTCATACCTTTTTCTTAAAAAAAAAAAAAAAGTTTTTGCTTCAAGTGTTTTGGTGTTT
TGCACTTCTGTAAACTTACTAGCTTTACCTTCTAAAAGTACTGCATTTTTTACTTTTTTTTATGATCAAGGAAAA
GATCGTTAAAAAAAAACACAAAGAAGTTTTTCTTTGTGTTTGGATCAAAAAGAAACTTTGTTTTTCCGCAATTGA
AGGTTGTATGTAAATCTGCTTTGTGGTGACCTGATGTAAACAGTGTCTTCTTAAAATCAAATGTAAATCAATTAC
AGATTAAAAAAAAAAAGCCTGTATTTAACTCATATGATCTCCCTTCAGCAACTTATTTTGCTTTAATTGCTTTAAA
TCTTAAGCAATATTTTTTATTCAGTAAACAAATTCTTTCACAAGGTACAAAATCTTGCATAAGCTGAACTAAAAT
AAAAATGAAAAGGAGAGATTAAAGGTATTCCTTGTTCTTCCCTTCTCTTCACTAGTCTAAAAACTTCTTTTTAAT
CTTAAGATTCTTTGTGATGAGGGTGAGAAAAAGAATCCTCAGTTTATTTTTCCACTATTAATCTTTCTTTTGATA
AATCCTCTATTGACTGGGTAGAGGTATGTTTGTGAAAGACATGTAACTTGGGGATTTGTTACTTTAGGTTTGTTC
CCTTGAATTTCATCTCATCAGGCAAATTGTACTAGTTGTAGTTACGAGTTTTCCCTCAGTGAAGTAGCAATAGGC
TGTAATCAAGAAAATATGCCATTTATAGAGATAAGATAAATGAAATAATACTTCAGCCACCAGGTTTTTCTGTCT
CACATACATAAGCAGCATTTCATTGCAGATATGGGACTGATTCTGTGGCTTACCTTGATTAACATCTTTTGGAAG
TTTTGCTAGTGTGCTTTCCTTTCTTTACTATGTTTCTCAGATTCCTTTGTATCAGGGTTTTGGGTGTCACTTAGG
TTTTGTCCATCAGATTCTGTGAGACACCAGGCATCGTTTTGAGGATGTGGGTTATACACATGGAGTGCTTCTGGA
ACTATCAGCCCACTTGACCACCCAGTTTGTGGAAGCACAGGCAAGAGTGTTCTTTTCTGGTGATTCTCCAGGCCA
TTTAATACCCTGCAATGTAATTGTCCCTCTGTGGCTCACATTTCATTAGTGAGCCATGAAATCAACTCAGTGGGA
CATAGCCAGCATTTTTGCATACCAGGTTGGGCTATAAAATATTTCTGTTGTCAATAAATTTTAAATGTTTTCCTG
CTAAAAAAAAAAAAAA

FIGURE 2364

MPCSEETPAISPSKRARPAEVGGMQLRFARLSEHATAPTRGSARAAGYDLYSAYDYTIPPMEKAVVKTDIQIALP
SGCYGRVAPRSGLAAKHFIDVGAGVIDEDYRGNVGVVLFNFGKEKFEVKKGDRIAQLICERIFYPEIEEVQALDD
TERGSGGFGSTGKN

FIGURE 2365

CGGGGGAGGCGTGACTTTCCCCTCGGGTCCAGGTAGGGCCTGGAGCTGCTGCAAGTGCCGCCTGTGCTGGGGAAG
GGACCATGTGGCTGCCTTGGGCTCTGTTGCTTCTCTGGGTCCCAGGATGTTTTGCTCTGAGCAAATGCAGGACCG
TGGCGGGCCCGTGGGGATCCCTGAGTGTGCAGTGTCCCTATGAGAAGGAACACAGGACCCTCAACAAATACTGGT
GCAGACCACCACAGATTTTCCTATGTGACAAGATTGTGGAGACCAAAGGGTCAGCAGGAAAAAGGAACGGCCGAG
TGTCCATCAGGGACAGTCCTGCAAACCTCAGCTTCACAGTGACCCTGGAGAATCTCACAGAGGAGGATGCAGGCA
CCTACTGGTGTGGGGTGGATACACCATGGCTCCGAGACTTTCATGATCCCGTTGTCGAGGTTGAGGTGTCCGTGT
TCCCGGCATCAACGTCAATGACACCTGCAAGTATCACTGCGGCCAAGACCTCAACAATCACAACTGCATTTCCAC
CTGTATCATCCACTACCCTGTTTGCAGTGGGTGCCACCCACAGTGCCAGCATCCAGGAGGAAACTGAGGAGGTGG
TGAACTCACAGCTCCCGCTGCTCCTCTCCCTGCTGGCATTGTTGCTGCTTCTGTTGGTGGGGGCCTCCCTGCTAG
CCTGGAGGATGTTTCAGAAATGGATCAAATGGATCAAAGCTGGTGACCATTCAGAGCTGTCCCAGAACCCCAAGC
AGGCTGCCACGCAGAGTGAGCTGCACTACGCAAATCTGGAGCTGCTGATGTGGCCTCTGCAGGAAAAGCCAGCAC
CACCAAGGGAGGTGGAGGTGGAATACAGCACTGTGGCCTCCCCCAGGGAAGAACTTCACTATGCCTCGGTGGTGT
TTGATTCTAACACCAACAGGATAGCTGCTCAGAGGCCTCGGGAGGAGGAACCAGATTCAGATTACAGTGTGATAA
GGAAGACATAGGTCCTGCCTCGCCATCGGAGCTCTCATGGGCCCCAGGAAGTCAGGGACAGCTCCCTTATACCTG
GCCCACGTCCTTCTCAGCCTGCCCTCGACAACAGTGACCAACAGACAGGCAGCTGGGTTTCCAGGCCATCCCTCT
GTTGCCATCAGCTTGATTGGCTTCCCCGAGGGCCAGCAGGGCTGGGGCTCCGGAGAGCAGCAGGAAGCACTCCCA
GCCACCAGTGCCTGTCACCTCTTTCCCCTTTGCCCCTGCTTCATCCCAGCTCTGTGTGTGGAGGACAAAGCTTCT
TCCTGCGTGGCTCCAGGAAAAGATGTGGCTCACGTAGGTXGCACCTGCCAATAGCTTTGTCAATCACAGCCCCAT
AGGAACGTCTGGAATTGCTTGGGAGTTGGGGAGAACTGTCAAGAAGAGTGAAGAGAGTGCCAAAGCGGAGATCTG
TTCACCTGGGTGGAGGGGACCACTAAGATCAAGATCAAAGATTCTCCCCATCTCACAGACAAGGAAACTGAGXXA
GAGGGAGGAGAGAATTGCTCATGGCTCCAGAACTGGTGGCAAGTTTCTCTGGACTCTTAGGTTTATTTTTAATAT
GAAATATAAAAACAGTTTCAAATATCTTATTGAGGGAGAAGTAAAAACTTATTTAAACCCCG

FIGURE 2366

MWLPWALLLLWVPGCFALSKCRTVAGPWGSLSVQCPYEKEHRTLNKYWCRPPQIFLCDKIVETKGSAGKRNGRVS
IRDSPANLSFTVTLENLTEEDAGTYWCGVDTPWLRDFHDPVVEVEVSVFPASTSMTPASITAAKTSTITTAFPPV
SSTTLFAVGATHSASIQEETEEVVNSQLPLLLSLLALLLLLLVGASLLAWRMFQKWIKWIKAGDHSELSQNPKQA
ATQSELHYANLELLMWPLQEKPAPPREVEVEYSTVASPREELHYASVVFDSNTNRIAAQRPREEEPDSDYSVIRK
T

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FIGURE 2367

GGACGTCGAGGCATTACAATCGCGAAACCAAGCCATAGCATGAAACAGCGAGCTTGCAGCCTCACCGACGAGTCT
CAACTAAAAGGGACTCCCGGAGCTAGGGGTGGGGACTCGGCCTCACACAGTGAGTGCCGGCTATTGGACTTTTGT
CCAGTGACAGCTGAGACAACAAGGACCACGGGAGGAGGTGTAGGAGAGAAGCGCCGCGAACAGCGATCGCCCAGC
ACCAAGTCCGCTTCCAGGCTTTCGGTTTCTTTGCCTCCATCTTGGGTGCGCCTTCCCGGCGTCTAGGGGAGCGAA
GGCTGAGGTGGCAGCGGCAGGAGAGTCCGGCCGCGACAGGACGAACTCCCCCACTGGAAAGGATTCTGAAAGAAA
TGAAGTCAGCCCTCAGAAATGAAGTTGACTGCCTGCTGGCTTTCCTGTTGACTGGCCCGGAGCTGTACTGCAAGA
CCCTTGTGAGCTTCCCTAGTCTAAGAGTAGGATGTCTGCTGAAGTCATCCATCAGGTTGAAGAAGCACTTGATAC
AGATGAGAAGGAGATGCTGCTCTTTTTGTGCCGGGATGTTGCTATAGATGTGGTTCCACCTAATGTCAGGGACCT
TCTGGATATTTTACGGGAAAGAGGTAAGCTGTCTGTCGGGGACTTGGCTGAACTGCTCTACAGAGTGAGGCGATT
TGACCTGCTCAAACGTATCTTGAAGATGGACAGAAAAGCTGTGGAGACCCACCTGCTCAGGAACCCTCACCTTGT
TTCGGACTATAGAGTGCTGATGGCAGAGATTGGTGAGGATTTGGATAAATCTGATGTGTCCTCATTAATTTTCCT
CATGAAGGATTACATGGGCCGAGGCAAGATAAGCAAGGAGAAGAGTTTCTTGGACCTTGTGGTTGAGTTGGAGAA
ACTAAATTTGGTTGCCCCAGATCAACTGGATTTATTAGAAAAATGCCTAAAGAACATCCACAGAATAGACCTGAA
GACAAAAATCCAGAAGTACAAGCAGTCTGTTCAAGGAGCAGGGACAAGTTACAGGAATGTTCTCCAAGCAGCAAT
CCAAAAGAGTCTCAAGGATCCTTCAAATAACTTCAGGCTCCATAATGGGAGAAGTAAAGAACAAAGACTTAAGGA
ACAGCTTGGCGCTCAACAAGAACCAGTGAAGAAATCCATTCAGGAATCAGAAGCTTTTTTGCCTCAGAGCATACC
TGAAGAGAGATACAAGATGAAGAGCAAGCCCCTAGGAATCTGCCTGATAATCGATTGCATTGGCAATGAGACAGA
GCTTCTTCGAGACACCTTCACTTCCCTGGGCTATGAAGTCCAGAAATTCTTGCATCTCAGTATGCATGGTATATC
CCAGATTCTTGGCCAATTTGCCTGTATGCCCGAGCACCGAGACTACGACAGCTTTGTGTGTGTCCTGGTGAGCCG
AGGAGGCTCCCAGAGTGTGTATGGTGTGGATCAGACTCACTCAGGGCTCCCCCTGCATCACATCAGGAGGATGTT
CATGGGAGATTCATGCCCTTATCTAGCAGGGAAGCCAAAGATGTTTTTTATTCAGAACTATGTGGTGTCAGAGGG
CCAGCTGGAGAACAGCAGCCTCTTGGAGGTGGATGGGCCAGCGATGAAGAATGTGGAATTCAAGGCTCAGAAGCG
AGGGCTGTGCACAGTTCACCGAGAAGCTGACTTCTTCTGGAGCCTGTGTACTGCGGACATGTCCCTGCTGGAGCA
GTCTCACAGCTCACCGTCCCTGTACCTGCAGTGCCTCTCCCAGAAACTGAGACAAGAAAGAAAACGCCCACTCCT
GGATCTTCACATTGAACTCAATGGCTACATGTATGATTGGAACAGCAGAGTTTCTGCCAAGGAGAAATATTATGT
CTGGCTGCAGCACACTCTGAGAAAGAAACTTATCCTCTCCTACACATAAGAAACCAAAAGGCTGGGCGTAGTGGC
TCACACCTGTAATCCCAGCACTTTGGGAGGCCAAGGAGGGCAGATCACTTCAGGTCAGGAGTTCGAGACCAGCCT
GGCCAACATGGTAAACGCTGTCCCTAGTAAAAATGCAAAAATTAGCTGGGTGTGGGTGTGGGTACCTGTGTTCCC
AGTTACTTGGGAGGCTGAGGTGGGAGGATCTTTTGAACCCAGGAGTTCAGGGTCATAGCATGCTGTGATTGTGCC
TACGAATAGCCACTGCATACCAACCTGGGCAATATAGCAAGATCCCATCTCTTTAAAAAAAAAAAAAA

FIGURE 2368

MSAEVIHQVEEALDTDEKEMLLFLCRDVAIDVVPPNVRDLLDILRERGKLSVGDLAELLYRVRRFDLLKRILKMD
RKAVETHLLRNPHLVSDYRVLMAEIGEDLDKSDVSSLIFLMKDYMGRGKISKEKSFLDLVVELEKLNLVAPDQLD
LLEKCLKNIHRIDLKTKIQKYKQSVQGAGTSYRNVLQAAIQKSLKDPSNNFRLHNGRSKEQRLKEQLGAQQEPVK
KSIQESEAFLPQSIPEERYKMKSKPLGICLIIDCIGNETELLRDTFTSLGYEVQKFLHLSMHGISQILGQFACMP
EHRDYDSFVCVLVSRGGSQSVYGVDQTHSGLPLHHIRRMFMGDSCPYLAGKPKMFFIQNYVVSEGQLENSSLLEV
DGPAMKNVEFKAQKRGLCTVHREADFFWSLCTADMSLLEQSHSSPSLYLQCLSQKLRQERKRPLLDLHIELNGYM
YDWNSRVSAKEKYYVWLQHTLRKKLILSYT

FIGURE 2369

AATTCGGGACCGACTGACGGCCGGCCGGCTTCCCGGAACTGGAAGGTTACATTGATTACCCACCTAGTACAACAT
CTTACGGGAAGAGCATAGTATTTCCTAGAGGAATATGAACATAACAGGAAGGTATCATTGGCTCTGAATTAAATT
TGAACTTGTCCCCTGAATAGCTACAGGTTTTGGAAGCTGAATCA**ATG**TTATCAGATGAGTTAGAATCCAAACCAG
AGCTCCTGGTACAGTTTGTTCAGAATACGTCCATCCCATTGGGACAGGGGCTTGTAGAATCAGAAGCTAAAGATA
TTACTTGCTTGTCCCTCCTTCCCGTGACTGAAGCCTCAGAATGCAGTCGGCTAATGTTACCAGATGATACTACAA
ATCATTCTAACTCCTCCAAGGAGGTCCCTTCCTCAGCTGTTTTGAGAAGCCTTCGGGTGAATGTGGGTCCAGACG
GAGAGGAGACGAGAGCTCAGACTGTACAGAAATCCCCGGAGTTTTTGTCCACTTCAGAGTCTTCTAGCTTGTTGC
AAGATCTACAGCCAAGTGATAGCACTTCTTTTATTCTTCTTAACCTAACAAGAGCAGGTCTGGGCTCTTCAGCTG
AGCACTTAGTGTTTGTACAGGATGAGGCAGAAGATTCAGGGAATGATTTCCTCTCCAGTGAGAGCACAGACAGTA
GCATTCCATGGTTCCTCCGGGTTCAGGAGTTGGCCCATGACAGTTTGATTGCTGCTACTCGTGCACAACTGGCAA
AGAATGCAAAAACCAGCAGCAATGGAGAAAATGTCCACCTTGGTTCTGGTGATGGGCAGTCAAAAGATTCTGGGC
CCCTTCCTCAAGTGGAAAAGAAGCTCAAGTGTACAGTTGAAGGTTGTGACCGGACATTTGTATGGCCAGCTCACT
TTAAATACCACCTCAAGACTCATCGAAGGTTGTGGGAAAAGCTTCTATGTGCTGCAGAGGCTGAAGGTGCACATG
AGGACCCACAATGGAGAGAAGCCCTTTATGTGCCA**TGA**GTCTGGCTGTGGTAAGCAGTTTACTACAGCTGGAAAC
CTGAAGAACCACCGGCGCATCCACACAGGAGAGAAACCTTTCCTTTGTGAAGCCCAAGGATGTGGCCGTTCCTTT
GCTGAGTATTCTAGCCTCCGAAAACATCTGGTGGTTCACTCAGGAGAGAAGCCTCATCAGTGCCAAGTCTGTGGG
AAGACCTTCTCTCAGAGTGGAAGCAGGAATGTGCATATGAGAAAGCATCACCTGCAGCTGGGAGCAGCTGGGAGT
CAAGAGCAGGAGCAAACTGCTGAGCCACTAATGGGCAGTAGTTTGCTTGAAGAGGCTTCAGTACCCAGTAAAAAC
CTGGTGTCTATGAATTCCCAGCCCAGCCTTGGTGGAGAGTCCTTGAACCTACCAAATACCAATTCTATCCTGGGA
GTTGATGATGAGGTGCTTGCTGAAGGATCCCCACGTTCCCTGTCTTCAGTGCCTGATGTGACACATCACCTGGTG
ACCATGCAGTCAGGGAGGCAATCATATGAAGTTTCTGTCTTAACTGCAGTAAATCCACAAGAGGTGGAGTCTTGC
TATGTTGCCCAGGCTGGAGTGCAGTGGCACCATCTCGGCTCACTGCAACCTCTACCTCCCGAATTCAAGCGGTTC
TTCTGCCTCAGCCTCCTGAGTAGCTGGGACCACAGTTACTAAACCAAGGAGATTTAACTGAAAGACGGACATGAG
CGTGGGTGCTGACTCCTGGAAGAGCAACTCTATCTGATCTCAAAATGCGTATACTGGGAACAGGATGCCTTAGCC
CACAACAGAACCAGAATGAATCTTTGAAGGCACAAGACTCTGCTTTTGCCACTCTTCCTCTTTCCTGGTATAGAA
GATGGATGTAGGAGAGCTTCTTTTCTAACTACCATCTGATCAGACAAGGAATGAAGCAATGACTGTGGGCTGGGA
AACTGTACCTACCTCTCTTCCCACTGCAAATTTCTGGGATAGACCAAAAGTGAATTTGATTATGTGTTGGCTGAA
GTTCTTCATTCTGACTGTTGAGGGGAGGTTTTCCTTTGAAGAGTTTTCATCCCAGACTCAGCTGTCTTTTCACAT
GGATGAAATAATTCCTGCTACCAACAACAGAGCTTCACCAGGAAGTTGAGTTTTCAAGATGCCTTGTTGCTTTGA
AGAAGGGAGTGATGTCAATTCTCTTGTTACATTCTCCCTTTAGCAACCTGAGTAAGAGACTCTCTGCCACTGGGC
TGCAAAAAAATAAATTACTTGAATCTCCCCTTGGCCCAGGCTGAGGTACTATCTTGTCCTATACACTTCTACTTG
GTCACTTTGCTTTCTTCGTTAATGGAACATACAGTAGCATGTTAAGAGGGATTTCATGTTTTTGTTTTTTTAAAG
TTAAAAATTACATGATGCAGAGATTCAGGTTTTCCTTTAAATAAACAAAACAGCCCAGTCAAAAAAAAAAAAAAA
AAAAAAAA

FIGURE 2370

MLSDELESKPELLVQFVQNTSIPLGQGLVESEAKDITCLSLLPVTEASECSRLMLPDDTTNHSNSSKEVPSSAVL
RSLRVNVGPDGEETRAQTVQKSPEFLSTSESSSLLQDLQPSDSTSFILLNLTRAGLGSSAEHLVFVQDEAEDSGN
DFLSSESTDSSIPWFLRVQELAHDSLIAATRAQLAKNAKTSSNGENVHLGSGDGQSKDSGPLPQVEKKLKCTVEG
CDRTFVWPAHFKYHLKTHRRLWEKLLCAAEAEGAHEDPQWREALYVP

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FIGURE 2371A

CAAGATACCCTCCAGGCCCTCATCACCTTTTTTCAAGTCAAGATTTCATCCCATACATGCATGACTCAATCAGAT
TTGGAAATGTGGATATGCCCTGTCGTCCAAGCCCAATATAGCCCTTCCCCTCCAGGTTCCAGTTATGCGGTCGTC
AGACATACAGCTCGGAATACACCACGGAGATCATGAACCCCGACTACACCAAGCTGACCATGGACCTTGGCAGCA
CTGAGATCACGGCTACAGCCACCACGTCCCTGCCCAGCATCAGTACCTTTGTGGAGGGCTACTCGAGCAACTACG
AACTCAAGCCTTCCTGCGTGTACCAAATGCAGCGGCCCTTGATCAAAGTGGAGGAGGGGCGGGCGCCCAGCTACC
ATCACCATCACCACCACCACCACCACCACCACCACCATCACCAGCAGCAGCATCAGCAGCCATCCATTCCTCCAG
CCTCCAGCCCGGAGGACGAGGTGCTGCCCAGCACCTCCATGTACTTCAAGCAGTCCCCACCGTCCACCCCCACCA
CGCCGGCCTTCCCCCCGCAGGCGGGGGCGTTATGGGACGAGGCACTGCCCTCGGCGCCCGGCTGCATCGCACCCG
GCCCGCTGCTGGACCCGCCGATGAAGGCGGTCCCCACGGTGGCCGGCGCGCGCTTCCCGCTCTTCCACTTCAAGC
CCTCGCCGCCGCATCCCCCCGCGCCCAGCCCGGCCGGCGGCCACCACCTCGGCTACGACCCGACGGCCGCTGCCG
CGCTCAGCCTGCCGCTGGGAGCCGCAGCCGCCGCGGGCAGCCAGGCCGCCGCGCTTGAGGGCCACCCGTACGGGC
TGCCGCTGGCCAAGAGGGCGGCCCCGCTGGCCTTCCCGCCTCTCGGCCTCACGCCCTCCCCTACCGCGTCCAGCC
TGCTGGGCGAGAGTCCCAGCCTGCCGTCGCCGCCCAGCAGGAGCTCGTCGTCTGGCGAGGGCACGTGTGCCGTGT
GCGGGGACAACGCCGCCTGCCAGCACTACGGCGTGCGAACCTGCGAGGGCTGCAAGGGCTTTTTCAAGAGAACAG
TGCAGAAAAATGCAAAATATGTTTGCCTGGCAAATAAAAACTGCCCAGTAGACAAGAGACGTCGAAACCGATGTC
AGTACTGTCGATTTCAGAAGTGTCTCAGTGTTGGAATGGTAAAAGAAGTTGTCCGTACAGATAGTCTGAAAGGGA
GGAGAGGTCGTCTGCCTTCCAAACCAAAGAGCCCATTACAACAGGAACCTTCTCAGCCCTCTCCACCTTCTCCTC
CAATCTGCATGATGAATGCTCTTGTCCGAGCTTTAACAGACTCAACACCCAGAGATCTTGATTATTCCAGATACT
GTCCCACTGACCAGGCTGCTGCAGGCACAGATGCTGAGCATGTGCAACAATTCTACAACCTCCTGACAGCCTCCA
TTGATGTATCCAGAAGCTGGGCAGAAAAGATTCCGGGATTTACTGATCTCCCCAAAGAAGATCAGACATTACTTA
TTGAATCAGCCTTTTTGGAGCTGTTTGTCCTCAGACTTTCCATCAGGTCAAACACTGCTGAAGATAAGTTTGTGT
TCTGCAATGGACTTGTCCTGCATCGACTTCAGTGCCTTCGTGGATTTGGGGAGTGGCTCGACTCTATTAAAGACT
TTTCCTTAAATTTGCAGAGCCTGAACCTTGATATCCAAGCCTTAGCCTGCCTGTCAGCACTGAGCATGATCACAG
AAAGACATGGGTTAAAAGAACCAAAGAGAGTCGAAGAGCTATGCAACAAGATCACAAGCAGTTTAAAAGACCACC
AGAGTAAGGGACAGGCTCTGGAGCCCACCGAGTCCAAGGTCCTGGGTGCCCTGGTAGAACTGAGGAAGATCTGCA
CCCTGGGCCTCCAGCGCATCTTCTACCTGAAGCTGGAAGACTTGGTGTCTCCACCTTCCATCATTGACAAGCTCT
TCCTGGACACCCTACCTTTCTAATCAGGAGCAGTGGAGCAGTGAGCTGCCTCCTCTCCTAGCACCTGCTTGCTAC
GCAGCAAAGGGATAGGTTTGGAAACCTATCATTTCCTGTCCTTCCTTAAGAGGAAAAGCAGCTCCTGTAGAAAGC
AAAGACTTTCTTTTTTTTCTGGCTCTTTTCCTTACAACCTAAAGCCAGAAAACTTGCAGAGTATTGTGTTGGGGT
TGTGTTTTATATTTAGGCATTGGGGGATGGGGTGGGAGGGGGTTATAGTTCATGAGGGTTTTCTAAGAAATTGCT
AACAAAGCACTTTTGGACAATGCTATCCCAGCAGGAAAAAAAAGGATAATATAACTGTTTTAAAACTCTTTCTGG
GGAATCCAATTATAGTTGCTTTGTATTTAAAAACAAGAACAGCCAAGGGTTGTTCGCCAGGGTAGGATGTGTCTT
AAAGATTGGTCCCTTGAAAATATGCTTCCTGTATCAAAGGTACGTATGTGGTGCAAACAAGGCAGAAACTTCCTT
TTAATTTCCTTCTTCCTTTATTTTAACAAATGGTGAAAGATGGAGGATTACCTACAATCAGACATGGCAAAACAA
TATGGCTGTTTGCTTCATAACAGCTGCAATTTTTAAAGTGCTGTCTTACTAAGTCTTGTTATACTCTCTTATCTA
TATGCCGGAAATAAAAAGGAGGCAGTCATGTTAGCAAATGACACGTTAATATCCCTAGCAGAGGCTGTGTTCACC
TTCCCTGTCGATCCCTTCTGAGGTATGGCCCATCCAAGACTTTTAGGCCATTCTTGATGGAACCAGATCCCTGCC
CTGACTGTCCAGCTATCCTGAAAGTGGATCAGATTATAAACTGGATTACATGTAACTGTTTTGGTTGTGTTCTAT
CAACCCCACCAGAGTTCCCTAAACTTGCTTCAGTTATAGTAACTGACTGGTATATCATTCAGAAGCGCCATAAGT
CAGTTGAGTATTGATCCTAGATAAGAACATGCAATCAGAGGACTGGTCATACAGGGTAAGCACCAGGGACAATAA
GGATTTTTATAGATATAATTTAATTTTTGTTATTGGTTAAGGAGACAATTTTGGAGAGCAAGCAAATCTTCTTTT
TAAAAAATAGTATGAATGTGAATACTAGAAAAGATTTAAGAAATAGTATGAGTGTGAGTCATAGGAAGGATTAGT
GGGCTGCGTTTCAACATTCCGTGTTCGTACTCCCTTTTGTATGTTTCTACTGTTAATGCCATATTACTATGAGAT
AATTTGTTGCATAGTGTCCTTATTTGTATAAACATTTGTATGCACGTTATATTGTAATAGCTTTGCCTGTATTTA
TTGCAAGACCACCAGCTCCTGGAAGCTGAGTTACAGAGTAATTAAATGGGGTGTTCACAGTGACTTGGATACACC
AATTAGAAATTAAATAAGCAAATATATATATATATATATAAATATAGCAGGTTACATATATATATTTATAATGTG
TCTTTTTATTAACCATTTGTACAATAAATGTCACTTCCCATGCCGTTATTTTATGGTTCATTTGCAGTGACTTTT
AAGGCAGTACTGTTTAGCACTTTGATATTAAAATTTTGCTTATGTTTTGCTAAATTCGAATAATGTTTGAAGATT

FIGURE 2371B

TTTAGGTCTAAAAGTCTTTATATTATATACGCTGTATCAAGTCAAAATATCTTTGGCCATTTTGCTAAGAAACAA
ACTTTGAATGTCAAACTGATGTCACAGTAGTTTTTGTTAGCTTTAAATCATTTTTGCTTTAGTCTTTTTAAAGGA
AAATAACAAAACTATGCTGTTTATATTGCATTAATTATACAATCAAACAAATGCCAAATGAATTGCCTAATTGCG
CAAGATAACCCAGATAGGAAATCATATGTTTTTTTCCAAGAGTCATTCTAATATTTGATTATGTTATGTGTGCTT
TTATGAAAGATTGTTATTTTTATATATCAAGATGATAGAACCTGGAATGTTAGGATTTTGAAATGTTAGACTTGG
AAGGGGCCTGGTCTGTCAACTAGTCCAACCCCTTAAAATTCATAGAGGACGAAACTGGGGCCCAATTGAAGGGTG
AAGAGTTACTCAAGGTCAAACAGCTGGTAACAGAATCAAGACTAAGACCTAATTTACCTTTCCATACTCTTTTTT
TTTCTCAACTTCATCTATATAAAATCAGGCTTTTAAACATAACCACTAATATTTACCTGAAGATAACCATGAGTA
AAGTATACTTTTGCATTAATTTTTTGAGTATATGCAAACATAATAAATATTATTAAATATCAAGGAAAGCTAACA
TTTCATACAAGATAGCTTCAGACCAAATTCAAATTGAATTTGAATAAATTAGAAATACTGTGCATACATAACCTT
CTTGTGCACCATGAGTATTTGGAAAGTTAATCCTTGTTTTTGTCGTGTCTATAGAGAACAAACAAATAAAAACAG
AGCCCTAGAGAAATGGCGTTACTTTTTATTTTTACACCCATCAGATTTAAGGAAAAGACTTTTTAGCCATTATAA
TCTAGTGGTTGGAAGGAATGAAGAAGCTTTTTTAGTAATAGGTCCAGATATGAGTGCTAAAAATAAAGATGATAG
CATGTTCTTCTGTCTTCCATAGTTATTACAACTATGAGAGCCTCCCAAGTCATCTTATCAACTCAACCCCCTTTT
TTTTGTCTTAATGTTGCACATAAGTTTATACAGAGTGGATGACCACACTAGCACAGAAGAGAACAACATGTATTA
AAGCAGGTGATTCCTCCCTTGGCGGGAGAGCTCTCTCAGTGTGAACATGCCTTCTGTGGGCGGAAATCAGGAAGC
CACCAGCTGTTAATGGAGAGTGCCTTGCTTTTATTTCAGACAGCAGAGTTTTCCAAAGTTTCTCTGCTCCTCTAA
CAGCATTGCTCTTTAGTGTGTGTTAACCTGTGGTTTGAAAGAAATGCTCTTGTACATTAACAATGTAAATTTAAA
TGATTAAATTACATTTTATCAATGGCA

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FIGURE 2372

MDLGSTEITATATTSLPSISTFVEGYSSNYELKPSCVYQMQRPLIKVEEGRAPSYHHHHHHHHHHHHHHQQQHQQ
PSIPPASSPEDEVLPSTSMYFKQSPPSTPTTPAFPPQAGALWDEALPSAPGCIAPGPLLDPPMKAVPTVAGARFP
LFHFKPSPPHPPAPSPAGGHHLGYDPTAAAAALSLPLGAAAAAGSQAAALEGHPYGLPLAKRAAPLAFPPLGLTPS
PTASSLLGESPSLPSPPSRSSSSGEGTCAVCGDNAACQHYGVRTCEGCKGFFKRTVQKNAKYVCLANKNCPVDKR
RRNRCQYCRFQKCLSVGMVKEVVRTDSLKGRRGRLPSKPKSPLQQEPSQPSPPSPPICMMNALVRALTDSTPRDL
DYSRYCPTDQAAAGTDAEHVQQFYNLLTASIDVSRSWAEKIPGFTDLPKEDQTLLIESAFLELFVLRLSIRSNTA
EDKFVFCNGLVLHRLQCLRGFGEWLDSIKDFSLNLQSLNLDIQALACLSALSMITERHGLKEPKRVEELCNKITS
SLKDHQSKGQALEPTESKVLGALVELRKICTLGLQRIFYLKLEDLVSPPSIIDKLFLDTLPF

FIGURE 2373

TTTTTGCAACCAACATGGTTCTATTAAAAACTCTCTTTGACTATGGCATTCAAGGACAGCAATACAATCTTTTTT
TTTTTTAACAAAGCAACTAATATAAAAATCTGCAAATGCCATATATTCATATCTAGGCTATTCTTCTCATATAGG
CATGTCATTAGATAGACTTTCTTTCTATTCTTTCCTGAGGTATTTTTTTGTGGTTTACTTTTATTGTACTGCTGG
ATGCATTATTTTTGATCATCCTTTCCTAAAATGATTTAAAGACCTGCAAATAATTTTATTGCATAGGACACTATT
GATGACACATAGAATGGGAGCTGCAAGTATGTGGCATTGGAACAAGCCTTACAAATATTGCATTTTAAGAATACA
CACATTTTTTACAGTTTGTCTCTTTTAAAAAATTTGAAGTTATAGC

FIGURE 2374

GGCACGAGGTCGCTTTCCTGCGCAGAGTCTGCGGAGGGGCTCGGCTGCACCGGGGGGATCGCGCCTGGCAGACCC
CAGACCGAGCAGAGGCGACCCAGCGCGCTCGGGAGAGGCTGCACCGCCGCGCCCCCGCCTAGCCCTTCCGGATCC
TGCGCGCAGAAAAGTTTCATTTGCTGTATGCCATCCTCGAGAGCTGTCTAGGTTAACGTTCGCACTCTGTGTATA
TAACCTCGACAGTCTTGGCACCTAACGTGCTGTGCGTAGCTGCTCCTTTGGTTGAATCCCCAGGCCCTTGTTGGG
GCACAAGGTGGCAGG**ATG**TCTCAGTGGTACGAACTTCAGCAGCTTGACTCAAAATTCCTGGAGCAGGTTCACCAG
CTTTATGATGACAGTTTTCCCATGGAAATCAGACAGTACCTGGCACAGTGGTTAGAAAAGCAAGACTGGGAGCAC
GCTGCCAATGATGTTTCATTTGCCACCATCCGTTTTCATGACCTCCTGTCACAGCTGGATGATCAATATAGTCGC
TTTTCTTTGGAGAATAACTTCTTGCTACAGCATAACATAAGGAAAAGCAAGCGTAATCTTCAGGATAATTTTCAG
GAAGACCCAATCCAGATGTCTATGATCATTTACAGCTGTCTGAAGGAAGAAAGGAAAATTCTGGAAAACGCCCAG
AGATTTAATCAGGCTCAGTCGGGGAATATTCAGAGCACAGTGATGTTAGACAAACAGAAAGAGCTTGACAGTAAA
GTCAGAAATGTGAAGGACAAGGTTATGTGTATAGAGCATGAAATCAAGAGCCTGGAAGATTTACAAGATGAATAT
GACTTCAAATGCAAAACCTTGCAGAACAGAGAACACGAGACCAATGGTGTGGCAAAGAGTGATCAGAAACAAGAA
CAGCTGTTACTCAAGAAGATGTATTTAATGCTTGACAATAAGAGAAAGGAAGTAGTTCACAAAATAATAGAGTTG
CTGAATGTCACTGAACTTACCCAGAATGCCCTGATTAATGATGAACTAGTGGAGTGGAAGCGGAGACAGCAGAGC
GCCTGTATTGGGGGGCCGCCCAATGCTTGCTTGGATCAGCTGCAGAACTGGTTCACTATAGTTGCGGAGAGTCTG
CAGCAAGTTCGGCAGCAGCTTAAAAAGTTGGAGGAATTGGAACAGAAATACACCTACGAACATGACCCTATCACA
AAAAACAAACAAGTGTTATGGGACCGCACCTTCAGTCTTTTCCAGCAGCTCATTCAGAGCTCGTTTGTGGTGGAA
AGACAGCCCTGCATGCCAACGCACCCTCAGAGGCCGCTGGTCTTGAAGACAGGGGTCCAGTTCACTGTGAAGTTG
AGACTGTTGGTGAAATTGCAAGAGCTGAATTATAATTTGAAAGTCAAAGTCTTATTTGATAAAGATGTGAATGAG
AGAAATACAGTAAAAGGATTTAGGAAGTTCAACATTTTGGGCACGCACACAAAAGTGATGAACATGGAGGAGTCC
ACCAATGGCAGTCTGGCGGCTGAATTTCGGCACCTGCAATTGAAAGAACAGAAAAATGCTGGCACCAGAACGAAT
GAGGGTCCTCTCATCGTTACTGAAGAGCTTCACTCCCTTAGTTTTGAAACCCAATTGTGCCAGCCTGGTTTGGTA
ATTGACCTCGAGACGACCTCTCTGCCCGTTGTGGTGATCTCCAACGTCAGCCAGCTCCCGAGCGGTTGGGCCTCC
ATCCTTTGGTACAACATGCTGGTGGCGGAACCCAGGAATCTGTCCTTCTTCCTGACTCCACCATGTGCACGATGG
GCTCAGCTTTCAGAAGTGCTGAGTTGGCAGTTTTCTTCTGTCACCAAAAGAGGTCTCAATGTGGACCAGCTGAAC
ATGTTGGGAGAGAAGCTTCTTGGTCCTAACGCCAGCCCCGATGGTCTCATTCCGTGGACGAGGTTTTGTAAGGAA
AATATAAATGATAAAAATTTTCCCTTCTGGCTTTGGATTGAAAGCATCCTAGAACTCATTAAAAAACACCTGCTC
CCTCTCTGGAATGATGGGTGCATCATGGGCTTCATCAGCAAGGAGCGAGAGCGTGCCCTGTTGAAGGACCAGCAG
CCGGGGACCTTCCTGCTGCGGTTCAGTGAGAGCTCCCGGGAAGGGGCCATCACATTCACATGGGTGGAGCGGTCC
CAGAACGGAGGCGAACCTGACTTCCATGCGGTTGAACCCTACACGAAGAAAGAACTTTCTGCTGTTACTTTCCCT
GACATCATTCGCAATTACAAAGTCATGGCTGCTGAGAATATTCCTGAGAATCCCCTGAAGTATCTGTATCCAAAT
ATTGACAAAGACCATGCCTTTGGAAAGTATTACTCCAGGCCAAAGGAAGCACCAGAGCCAATGGAACTTGATGGC
CCTAAAGGAACTGGATATATCAAGACTGAGTTGATTTCTGTGTCTGAAGTG**TAA**GTGAACACAGAAGAGTGACAT
GTTTACAAACCTCAAGCCAGCCTTGCTCCTGGCTGGGGCCTGTTGAAGATGCTTGTATTTTACTTTTCCATTGTA
ATTGCTATCGCCATCACAGCTGAACTTGTTGAGATCCCCGTGTTACTGCCTATCAGCATTTTACTACTTTAAAAA
AAAAAAAAAAAA

FIGURE 2375

MSQWYELQQLDSKFLEQVHQLYDDSFPMEIRQYLAQWLEKQDWEHAANDVSFATIRFHDLLSQLDDQYSRFSLEN
NFLLQHNIRKSKRNLQDNFQEDPIQMSMIIYSCLKEERKILENAQRFNQAQSGNIQSTVMLDKQKELDSKVRNVK
DKVMCIEHEIKSLEDLQDEYDFKCKTLQNREHETNGVAKSDQKQEQLLLKKMYLMLDNKRKEVVHKIIELLNVTE
LTQNALINDELVEWKRRQQSACIGGPPNACLDQLQNWFTIVAESLQQVRQQLKKLEELEQKYTYEHDPITKNKQV
LWDRTFSLFQQLIQSSFVVERQPCMPTHPQRPLVLKTGVQFTVKLRLLVKLQELNYNLKVKVLFDKDVNERNTVK
GFRKFNILGTHTKVMNMEESTNGSLAAEFRHLQLKEQKNAGTRTNEGPLIVTEELHSLSFETQLCQPGLVIDLET
TSLPVVVISNVSQLPSGWASILWYNMLVAEPRNLSFFLTPPCARWAQLSEVLSWQFSSVTKRGLNVDQLNMLGEK
LLGPNASPDGLIPWTRFCKENINDKNFPFWLWIESILELIKKHLLPLWNDGCIMGFISKERERALLKDQQPGTFL
LRFSESSREGAITFTWVERSQNGGEPDFHAVEPYTKKELSAVTFPDIIRNYKVMAAENIPENPLKYLYPNIDKDH
AFGKYYSRPKEAPEPMELDGPKGTGYIKTELISVSEV

FIGURE 2376

CCGAACGCCCGCAGCAGGGTCAGAAGGGAGGTGGCCGGTCTCCGTCGTGACCTCTGACGGTTTCTGAGCGTTGGC
CTTTGGCACGCGCTACACCCTTTTGCTTTGGTTCTGCCATGCCGATGTACCAGGTAAAGCCCTATCACGGGGGCG
GCGCGCCTCTCCGTGTGGAGCTTCCCACCTGCATGTACCGGCTCCCCAACGTGCACGGCAGGAGCTACGGCCCAG
CGCCGGGCGCTGGCCACGTGCAGGAAGAGTCTAACCTGTCTCTGCAAGCTCTTGAGTCCCGCCAAGATGATATTT
TAAAACGTCTGTATGAGTTGAAAGCTGCAGTTGATGGCCTCTCCAAGATGATTCAAACACCAGATGCAGACTTGG
ATGTAACCAACATAATCCAAGCGGATGAGCCCACGACTTTAACCACCAATGCGCTGGACTTGAATTCAGTGCTTG
GGAAGGATTACGGGGCGCTGAAAGACATCGTGATCAACGCAAACCCGGCCTCCCCTCCCCTCTCCCTGCTTGTGC
TGCACAGGCTGCTCTGTGAGCACTTCAGGGTCCTGTCCACGGTGCACACGCACTCCTCGGTCAAGAGCGTGCCTG
AAAACCTTCTCAAGTGCTTTGGAGAACAGAATAAAAAACAGCCCCGCCAAGACTATCAGCTGGGATTCACTTTAA
TTTGGAAGAATGTGCCGAAGACGCAGATGAAATTCAGCATCCAGACGATGTGCCCCATCGAAGGCGAAGGGAACA
TTGCACGTTTCTTGTTCTCTCTGTTTGGCCAGAAGCATAATGCTGTCAACGCAACCCTTATAGATAGCTGGGTAG
ATATTGCGATTTTTCAGTTAAAAGAGGGAAGCAGTAAAGAAAAAGCCGCTGTTTTCCGCTCCATGAACTCTGCTC
TTGGGAAGAGCCCTTGGCTCGCTGGGAATGAACTCACCGTAGCAGACGTGGTGCTGTGGTCTGTACTCCAGCAGA
TCGGAGGCTGCAGTGTGACAGTGCCAGCCAATGTGCAGAGGTGGATGAGGTCTTGTGAAAACCTGGCTCCTTTTA
ACACGGCCCTCAAGCTCCTTAAGTGAATTGCCGTAACTGATTTTAAAGGGTTTAGATTTTAAGAATGGTGCTCTT
TCATGCCTATTATCAGTAAGGGGACTTGTATTAGAGTCAGAGTCTTTTTATTTAGGCCAGTTGTCAAGTGTCAAT
AAAAGCGCATCATGTAATTTA

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FIGURE 2377

MPMYQVKPYHGGGAPLRVELPTCMYRLPNVHGRSYGPAPGAGHVQEESNLSLQALESRQDDILKRLYELKAAVDG
LSKMIQTPDADLDVTNIIQADEPTTLTTNALDLNSVLGKDYGALKDIVINANPASPPLSLLVLHRLLCEHFRVLS
TVHTHSSVKSVPENLLKCFGEQNKKQPRQDYQLGFTLIWKNVPKTQMKFSIQTMCPIEGEGNIARFLFSLFGQKH
NAVNATLIDSWVDIAIFQLKEGSSKEKAAVFRSMNSALGKSPWLAGNELTVADVVLWSVLQQIGGCSVTVPANVQ
RWMRSCENLAPFNTALKLLK

FIGURE 2378

GGCAGCTGCACGGCTCCTGGCCCCGGAGCATGCGCGAGAGCCGCCCCGGAGCGCCCCGGAGCCCCCCGCCGTCCC
GCCCGCGGCGTCCCGCGCCCCGCCGCCAGCGCACCCCCGGACGCTATGGCCCACCCCTCCGGCTGGCCCCTTCTG
TAGGATGGTAGCACACAACCAGGTGGCAGCCGACAATGCAGTCTCCACAGCAGCAGAGCCCCGACGGCGGCCAGA
ACCTTCCTCCTCTTCCTCCTCCTCGCCCGCGGCCCCCGCGCGCCCGCGGCCGTGCCCCGCGGTCCCGGCCCCGGC
CCCCGGCGACACGCACTTCCGCACATTCCGTTCGCACGCCGATTACCGGCGCATCACGCGCGCCAGCGCGCTCCT
GGACGCCTGCGGATTCTACTGGGGGCCCCTGAGCGTGCACGGGGCGCACGAGCGGCTGCGCGCCGAGCCCGTGGG
CACCTTCCTGGTGCGCGACAGCCGCCAGCGGAACTGCTTTTTCGCCCTTAGCGTGAAGATGGCCTCGGGACCCAC
GAGCATCCGCGTGCACTTTCAGGCCGGCCGCTTTCACCTGGATGGCAGCCGCGAGAGCTTCGACTGCCTCTTCGA
GCTGCTGGAGCACTACGTGGCGGCGCCGCGCCGCATGCTGGGGGCCCCGCTGCGCCAGCGCCGCGTGCGGCCGCT
GCAGGAGCTGTGCCGCCAGCGCATCGTGGCCACCGTGGGCCGCGAGAACCTGGCTCGCATCCCCCTCAACCCCGT
CCTCCGCGACTACCTGAGCTCCTTCCCCTTCCAGATTTGACCGGCAGCGCCCGCCGTGCACGCAGCATTAACTGG
GATGCCGTGTTATTTTGTTATTACTTGCCTGGAACCATGTGGGTACCCTCCCCGGCCTGGGTTGGAGGGAGCGGA
TGGGTGTAGGGGCGAGGCGCCTCCCGCCCTCGGCTGGAGACGAGGCCGCAGACCCCTTCTCACCTCTTGAGGGGG
TCCTCCCCCTCCTGGTGCTCCCTCTGGGTCCCCCTGGTTGTTGTAGCAGCTTAACTGTATCTGGAGCCAGGACCT
GAACTCGCACCTCCTACCTCTTCATGTTTACATATACCCAGTATCTTTGCACAAACCAGGGGTTGGGGGAGGGTC
TCTGGCTTTATTTTTCTGCTGTGCAGAATCCTATTTTATATTTTTTAAAGTCAGTTTAGGTAATAAACTTTATTA
TGAAAGTTTTTTTTTT

FIGURE 2379

MVAHNQVAADNAVSTAAEPRRRPEPSSSSSSSPAAPARPRPCPAVPAPAPGDTHFRTFRSHADYRRITRASALLD
ACGFYWGPLSVHGAHERLRAEPVGTFLVRDSRQRNCFFALSVKMASGPTSIRVHFQAGRFHLDGSRESFDCLFEL
LEHYVAAPRRMLGAPLRQRRVRPLQELCRQRIVATVGRENLARIPLNPVLRDYLSSFPFQI

FIGURE 2380

GGCAGCTGCACGGCTCCTGGCCCCGGAGCATGCGCGAGAGCCGCCCCGGAGCGCCCCGGAGCCCCCCGCCGTCCC
GCCCGCGGCGTCCCGCGCCCCGCCGCCAGCGCACCCCCGGACGCTATGGCCCACCCCTCCGGCTGGCCCCTTCTG
TAGGATGGTAGCACACAACCAGGTGGCAGCCGACAATGCAGTCTCCACAGCAGCAGAGCCCCGACGGCGGCCAGA
ACCTTCCTCCTCTTCCTCCTCCTCGCCCGCGGCCCCCGCGCGCCCGCGGCCGTGCCCCGCGGTCCCGGCCCCGGC
CCCCGGCGACACGCACTTCCGCACATTCCGTTCGCACGCCGATTACCGGCGCATCACGCGCGCCAGCGCGCTCCT
GGACGCCTGCGGATTCTACTGGGGGCCCCTGAGCGTGCACGGGGCGCACGAGCGGCTGCGCGCCGAGCCCGTGGG
CACCTTCCTGGTGCGCGACAGCCGCCAGCGGAACTGCTTTTTCGCCCTTAGCGTGAAGATGGCCTCGGGACCCAC
GAGCATCCGCGTGCACTTTCAGGCCGGCCGCTTTCACCTGGATGGCAGCCGCGAGAGCTTCGACTGCCTCTTCGA
GCTGCTGGAGCACTACGTGGCGGCGCCGCGCCGCATGCTGGGGGCCCCGCTGCGCCAGCGCCGCGTGCGGCCGCT
GCAGGAGCTGTGCCGCCAGCGCATCGTGGCCACCGTGGGCCGCGAGAACCTGGCTCGCATCCCCCTCAACCCCGT
CCTCCGCGACTACCTGAGCTCCTTCCCCTTCCAGATTTGACCGGCAGCGCCCGCCGTGCACGCAGCATTAACTGG
GATGCCGTGTTATTTTGTTATTACTTGCCTGGAACCATGTGGGTACCCTCCCCGGCCTGGGTTGGAGGGAGCGGA
TGGGTGTAGGGGCGAGGCGCCTCCCGCCCTCGGCTGGAGACGAGGCCGCAGACCCCTTCTCACCTCTTGAGGGGG
TCCTCCCCCTCCTGGTGCTCCCTCTGGGTCCCCCTGGTTGTTGTAGCAGCTTAACTGTATCTGGAGCCAGGACCT
GAACTCGCACCTCCTACCTCTTCATGTTTACATATACCCAGTATCTTTGCACAAACCAGGGGTTGGGGGAGGGTC
TCTGGCTTTATTTTTCTGCTGTGCAGAATCCTATTTTATATTTTTTAAAGTCAGTTTAGGTAATAAACTTTATTA
TGAAAGTTTTTTTTTT

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FIGURE 2381

MVAHNQVAADNAVSTAAEPRRRPEPSSSSSSSPAAPARPRPCPAVPAPAPGDTHFRTFRSHADYRRITRASALLD
ACGFYWGPLSVHGAHERLRAEPVGTFLVRDSRQRNCFFALSVKMASGPTSIRVHFQAGRFHLDGSRESFDCLFEL
LEHYVAAPRRMLGAPLRQRRVRPLQELCRQRIVATVGRENLARIPLNPVLRDYLSSFPFQI

FIGURE 2382

ATGGTCGGGGCGCTGTGCGGCTGCTGGTTCCGCCTGGGCGGGGCCCGCCCGCTCATCCCGTTGGGCCCGACTGTG
GTACAGACCTCCATGAGCCAGTCCCAGGTAGCCCTGCTGGGCCTGAGTCTGCTGCTCATGCTCCTACTGTATGTG
GGGCTGCCAGGCCCCCCTGAGCAGACTTCCTGCCTCTGGGGAGACCCCAATGTCACAGTCCTGGCTGGTCTCACC
CCTGGCAACTCGCCCATCTTTTACCGCGAGGTGCTCCCACTCAACCAGGCACACAGGGTGGAGGTGGTGCTGCTT
CATGGAAAGGCCTTTAACTCTCACACGTGGGAGCAGCTGGGCACACTGCAGCTACTGTCACAGAGGGGCTACCGG
GCCGTGGCCCTTGACCTTCCAGGTTTTGGGAACTCGGCACCTTCAAAGGAGGCAAGCACAGAGGCAGGGCGGGCA
GCGCTGCTGGAGCGGGCGCTGCGGGACCTGGAGGTACAGAATGCCGTGTTGGTGAGCCCCTCGCTGAGTGGCCAC
TATGCCCTGCCCTTCCTGATGCGAGGCCACCACCAGCTACATGGATTTGTGCCCATCGCACCCACCTCCACCCAG
AACTACACCCAGGAGCAATTCTGGGCTGTGAAGACTCCAACCCTTATCCTGTATGGAGAGCTGGACCACATCCTG
GCTCGAGAGTCACTGCGGCAGCTCCGCCACCTGCCCAACCACTCTGTGGTGAAGCTACGCAATGCAGGCCATGCC
TGTTACCTCCACAAGCCGCAAGACTTCCACCTTGTCCTGCTTGCCTTCCTTGACCATCTACCTTGA

FIGURE 2383

MVGALCGCWFRLGGARPLIPLGPTVVQTSMSQSQVALLGLSLLLMLLLYVGLPGPPEQTSCLWGDPNVTVLAGLT
PGNSPIFYREVLPLNQAHRVEVVLLHGKAFNSHTWEQLGTLQLLSQRGYRAVALDLPGFGNSAPSKEASTEAGRA
ALLERALRDLEVQNAVLVSPSLSGHYALPFLMRGHHQLHGFVPIAPTSTQNYTQEQFWAVKTPTLILYGELDHIL
ARESLRQLRHLPNHSVVKLRNAGHACYLHKPQDFHLVLLAFLDHLP

FIGURE 2384

CCCAGAGGAGCAGACTACAAGAATGGCACACGCTATGGAAAACTCCTGGACAATCAGTAAAGAGTACCATATTGA
TGAAGAAGTGGGCTTTGCTCTGCCAAATCCACAGGAAAATCTACCTGATTTTTATAATGACTGGATGTTCATTGC
TAAACATCTGCCTGATCTCATAGAGTCTGGCCAGCTTCGAGAAAGAGTTGAGAAGTTAAACATGCTCAGCATTGA
TCATCTCACAGACCACAAGTCACAGCGCCTTGCACGTCTAGTTCTGGGATGCATCACCATGGCATATGTGTGGGG
CAAAGGTCATGGAGATGTCCGTAAGGTCTTGCCAAGAAATATTGCTGTTCCTTACTGCCAACTCTCCAAGAAACT
GGAACTGCCTCCTATTTTGGTTTATGCAGACTGTGTCTTGGCAAACTGGAAGAAAAAGGATCCTAATAAGCCCCT
GACTTATGAGAACATGGACGTTTTGTTCTCATTTCGTGATGGAGACTGCAGTAAAGGATTCTTCCTGGTCTCTCT
ATTGGTGGAAATAGCAGCTGCTTCTGCAATCAAAGTAATTCCTACTGTATTCAAGGCAATGCAAATGCAAGAACG
GGACACTTTGCTAAAGGCGCTGTTGGAAATAGCTTCTTGCTTGGAGAAAGCCCTTCAAGTGTTTCACCAAATCCA
CGATCATGTGAACCCAAAAGCATTTTTCAGTGTTCTTCGCATATATTTGTCTGGCTGGAAAGGCAACCCCCAGCT
ATCAGACGGTCTGGTGTATGAAGGGTTCTGGGAAGACCCAAAGGAGTTTGCAGGGGGCAGTGCAGGCCAAAGCAG
CGTCTTTCAGTGCTTTGACGTCCTGCTGGGCATCCAGCAGACTGCTGGTGGAGGACATGCTGCTCAGTTCCTCCA
GGACATGAGAAGATATATGCCACCAGCTCACAGGAACTTCCTGTGCTCATTAGAGTCAAATCCCTCAGTCCGTGA
GTTTGTCCTTTCAAAAGGTGATGCTGGCCTGCGGGAAGCTTATGACGCCTGTGTGAAAGCTCTGGTCTCCCTGAG
GAGCTACCATCTGCAAATCGTGACTAAGTACATCCTGATTCCTGCAAGCCAGCAGCCAAAGGAGAATAAGACCTC
TGAAGACCCTTCAAAACTGGAAGCCAAAGGAACTGGAGGCACTGATTTAATGAATTTCCTGAAGACTGTAAGAAG
TACAACTGAGAAATCCCTTTTGAAGGAAGGTTAATGTAACCCAACAAGAGCACATTTTATCATAGCAGAGACATC
TGTATGCATTCCTGTCATTACCCATTGTAACAGAGCCACAAACTAATACTATGCAATGTTTTACCAATAATGCAA
TACAAAAGACCTCAAAATACCTGTGCATTTCTTGTAGGAAAACAACAAAAGGTAATTATGTGTAATTATACTAGA
AGTTTTGTAATCTGTATCTTATCATTGGAATAAAATGACATTCAATAAAT

FIGURE 2385

MAHAMENSWTISKEYHIDEEVGFALPNPQENLPDFYNDWMFIAKHLPDLIESGQLRERVEKLNMLSIDHLTDHKS
QRLARLVLGCITMAYVWGKGHGDVRKVLPRNIAVPYCQLSKKLELPPILVYADCVLANWKKKDPNKPLTYENMDV
LFSFRDGDCSKGFFLVSLLVEIAAASAIKVIPTVFKAMQMQERDTLLKALLEIASCLEKALQVFHQIHDHVNPKA
FFSVLRIYLSGWKGNPQLSDGLVYEGFWEDPKEFAGGSAGQSSVFQCFDVLLGIQQTAGGGHAAQFLQDMRRYMP
PAHRNFLCSLESNPSVREFVLSKGDAGLREAYDACVKALVSLRSYHLQIVTKYILIPASQQPKENKTSEDPSKLE
AKGTGGTDLMNFLKTVRSTTEKSLLKEG

FIGURE 2386

CCAGCGTTAGCCCGCGGCCAGGCAGCCGGGAGGAGCGGCGCGCGCTCGGACCTCTCCCGCCCTGCTCGTTCGCTC
TCCAGCTTGGGATGGCCGGCTACCTGCGGGTCGTGCGCTCGCTCTGCAGAGCCTCAGGCTCGCGGCCGGCCTGGG
CGCCGGCGGCCCTGACAGCCCCCACCTCGCAAGAGCATCCGCGGCGCCACTATGCCGACAAAAGGATCAAGGTGG
CGAAGCCCGTGGTGGAGATGGATGGTGATGAGATGACCCGTATTATCTGGCAGTTCATCAAGGAGAAGCTCATCC
TGCCCCACGTGGACATCCAGCTAAAGTATTTTGACCTCGGGCTCCCAAACCGTGACCAGACTGATGACCAGGTCA
CCATTGACTCTGCACTGGCCACCCAGAAGTACAGTGTGGCTGTCAAGTGTGCCACCATCACCCCTGATGAGGCCC
GTGTGGAAGAGTTCAAGCTGAAGAAGATGTGGAAAAGTCCCAATGGAACTATCCGGAACATCCTGGGGGGGACTG
TCTTCCGGGAGCCCATCATCTGCAAAAACATCCCACGCCTAGTCCCTGGCTGGACCAAGCCCATCACCATTGGCA
GGCACGCCCATGGCGACCAGTACAAGGCCACAGACTTTGTGGCAGACCGGGCCGGCACTTTCAAAATGGTCTTCA
CCCCAAAAGATGGCAGTGGTGTCAAGGAGTGGGAAGTGTACAACTTTCCCGCAGGCGGCGTGGGCATGGGCATGT
ACAACACCGACGAGTCCATCTCAGGTTTTGCGCACAGCTGCTTCCAGTATGCCATCCAGAAGAAATGGCCGCTGT
ACATGAGCACCAAGAACACCATACTGAAAGCCTACGATGGGCGTTTCAAGGACATCTTCCAGGAGATCTTTGACA
AGCACTATAAGACCGACTTCGACAAGAATAAGATCTGGTATGAGCACCGGCTCATTGATGACATGGTGGCTCAGG
TCCTCAAGTCTTCGGGTGGCTTTGTGTGGGCCTGCAAGAACTATGACGGAGATGTGCAGTCAGACATCCTGGCCC
AGGGCTTTGGCTCCCTTGGCCTGATGACGTCCGTCCTGGTCTGCCCTGATGGGAAGACGATTGAGGCTGAGGCCG
CTCATGGGACCGTCACCCGCCACTATCGGGAGCACCAGAAGGGCCGGCCCACCAGCACCAACCCCATCGCCAGCA
TCTTTGCCTGGACACGTGGCCTGGAGCACCGGGGGAAGCTGGATGGGAACCAAGACCTCATCAGGTTTGCCCAGA
TGCTGGAGAAGGTGTGCGTGGAGACGGTGGAGAGTGGAGCCATGACCAAGGACCTGGCGGGCTGCATTCACGGCC
TCAGCAATGTGAAGCTGAACGAGCACTTCCTGAACACCATGGACTTCCTCGACACCATCAAGAGCAACCTGGACA
GAGCCCTGGGCAGGCAGTAGGGGGAGGCGCCACCCATGGCTGCAGTGGAGGGGCCAGGGCTGAGCCGGCGGGTCC
TCCTGAGCGCGGCAGAGGGTGAGCCTCACAGCCCCTCTCTGGAGGCCTTTCTAGGGGATGTTTTTTTATAAGCCA
GATGTTTTTAAAAGCATATGTGTGTTTCCCCTCATGGTGACGTGAGGCAGGAGCAGTGCGTTTTACCTCAGCCAG
TCAGTATGTTTTGCATACTGTAATTTATATTGCCCTTGGAACACATGGTGCCATATTTAGCTACTAAAAAGCTCT
TCACAAAAAAAAAAAACGGATTCCGCG

FIGURE 2387

MAGYLRVVRSLCRASGSRPAWAPAALTAPTSQEHPRRHYADKRIKVAKPVVEMDGDEMTRIIWQFIKEKLILPHV
DIQLKYFDLGLPNRDQTDDQVTIDSALATQKYSVAVKCATITPDEARVEEFKLKKMWKSPNGTIRNILGGTVFRE
PIICKNIPRLVPGWTKPITIGRHAHGDQYKATDFVADRAGTFKMVFTPKDGSGVKEWEVYNFPAGGVGMGMYNTD
ESISGFAHSCFQYAIQKKWPLYMSTKNTILKAYDGRFKDIFQEIFDKHYKTDFDKNKIWYEHRLIDDMVAQVLKS
SGGFVWACKNYDGDVQSDILAQGFGSLGLMTSVLVCPDGKTIEAEAAHGTVTRHYREHQKGRPTSTNPIASIFAW
TRGLEHRGKLDGNQDLIRFAQMLEKVCVETVESGAMTKDLAGCIHGLSNVKLNEHFLNTMDFLDTIKSNLDRALG
RQ

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FIGURE 2388

GGGAGCAGCTAGGGCGCGGGTCTCCCTCCTCCCGGAGTTTGGAACGGCTGAAGTTCACCTTCCAGCCCCTAGCGC
CGTTCGCGCCGCTAGGCCTGGCTTCTGAGGCGGTTGCGGTGCTCGGTCGCCGCCTAGGCGGGGCAGGGTGCGAGC
AGGGGCTTCGGGCCACGCTTCTCTTGGCGACAGGATTTTGCTGAAGTCCGTCCGGGAAACGGAGGAAAAAAAGAG
TTGCGGGAGGCTGTCGGCTAATAACGGTTCTTGATACATATTTGCCAGACTTCAAGATTTCAGAAAAGGGGTGAA
AGAGAAGATTGCAACTTTGAGTCAGACCTGTAGGCCTGATAGACTGATTAAACCACAGAAGGTGACCTGCTGAGA
AAAGTGGTACAAATACTGGGAAAAACCTGCTCTTCTGCGTTAAGTGGGAGACA**ATG**TCACAAGTTAAAAGCTCTT
ATTCCTATGATGCCCCCTCGGATTTCATCAATTTTTCATCCTTGGATGATGAAGGAGATACTCAAAACATAGATT
CATGGTTTGAGGAGAAGGCCAATTTGGAGAATAAGTTACTGGGGAAGAATGGAACTGGAGGGCTTTTTCAGGGCA
AAACTCCTTTGAGAAAGGCTAATCTTCAGCAAGCTATTGTCACACCTTTGAAACCAGTTGACAACACTTACTACA
AAGAGGCAGAAAAAGAAAATCTTGTGGAACAATCCATTCCGTCAAATGCTTGTTCTTCCCTGGAAGTTGAGGCAG
CCATATCAAGAAAAACTCCAGCCCAGCCTCAGAGAAGATCTCTTAGGCTTTCTGCTCAGAAGGATTTGGAACAGA
AAGAAAAGCATCATGTAAAAATGAAAGCCAAGAGATGTGCCACTCCTGTAATCATCGATGAAATTCTACCCTCTA
AGAAAATGAAAGTTTCTAACAACAAAAAGAAGCCAGAGGAAGAAGGCAGTGCTCATCAAGATACTGCTGAAAAGA
ATGCATCTTCCCCAGAGAAAGCCAAGGGTAGACATACTGTGCCTTGTATGCCACCTGCAAAGCAGAAGTTTCTAA
AAAGTACTGAGGAGCAAGAGCTGGAGAAGAGTATGAAAATGCAGCAAGAGGTGGTGGAGATGCGGAAAAAGAATG
AAGAATTCAAGAAACTTGCTCTGGCTGGAATAGGGCAACCTGTGAAGAAATCAGTGAGCCAGGTCACCAAATCAG
TTGACTTCCACTTCCGCACAGATGAGCGAATCAAACAACATCCTAAGAACCAGGAGGAATATAAGGAAGTGAACT
TTACATCTGAACTACGAAAGCATCCTTCATCTCCTGCCCGAGTGACTAAGGGATGTACCATTGTTAAGCCTTTCA
ACCTGTCCCAAGGAAAGAAAAGAACATTTGATGAAACAGTTTCTACATATGTGCCCCTTGCACAGCAAGTTGAAG
ACTTCCATAAACGAACCCCTAACAGATATCATTTGAGGAGCAAGAAGGATGATATTAACCTGTTACCCTCCAAAT
CTTCTGTGACCAAGATTTGCAGAGACCCACAGACTCCTGTACTGCAAACCAAACACCGTGCACGGGCTGTGACCT
GCAAAAGTACAGCAGAGCTGGAGGCTGAGGAGCTCGAGAAATTGCAACAATACAAATTCAAAGCACGTGAACTTG
ATCCCAGAATACTTGAAGGTGGGCCCATCTTGCCCAAGAAACCACCTGTGAAACCACCCACCGAGCCTATTGGCT
TTGATTTGGAAATTGAGAAAAGAATCCAGGAGCGAGAATCAAAGAAGAAAACAGAGGATGAACACTTTGAATTTC
ATTCCAGACCTTGCCCTACTAAGATTTTGGAAGATGTTGTGGGTGTTCCTGAAAAGAAGGTACTTCCAATCACCG
TCCCCAAGTCACCAGCCTTTGCATTGAAGAACAGAATTCGAATGCCCACCAAAGAAGATGAGGAAGAGGACGAAC
CGGTAGTGATAAAAGCTCAACCTGTGCCACATTATGGGGTGCCTTTTAAGCCCCAAATCCCAGAGGCAAGAACTG
TGGAAATATGCCCTTTCTCGTTTGATTCTCGAGACAAAGAACGTCAGTTACAGAAGGAGAAGAAAATAAAAGAAC
TGCAGAAAGGGGAGGTGCCCAAGTTCAAGGCACTTCCCTTGCCTCATTTTGACACCATTAACCTGCCAGAGAAGA
AGGTAAAGAATGTGACCCAGATTGAACCTTTCTGCTTGGAGACTGACAGAAGAGGTGCTCTGAAGGCACAGACTT
GGAAGCACCAGCTGGAAGAAGAACTGAGACAGCAGAAAGAAGCAGCTTGTTTCAAGGCTCGTCCAAACACCGTCA
TCTCTCAGGAGCCCTTTGTTCCCAAGAAAGAGAAGAAATCAGTTGCTGAGGGCCTTTCTGGTTCTCTAGTTCAGG
AACCTTTTCAGCTGGCTACTGAGAAGAGAGCCAAAGAGCGGCAGGAGCTGGAGAAGAGAATGGCTGAGGTAGAAG
CCCAGAAAGCCCAGCAGTTGGAGGAGGCCAGACTACAGGAGGAAGAGCAGAAAAAAGAGGAGCTGGCCAGGCTAC
GGAGAGAACTGGTGCATAAGGCAAATCCAATACGCAAGTACCAGGGTCTGGAGATAAAGTCAAGTGACCAGCCTC
TGACTGTGCCTGTATCTCCCAAATTCTCCACTCGATTCCACTGC**TAA**ACTCAGCTGTGAGCTGCGGATACCGCCC
GGCAATGGGACCTGCTCTTAACCTCAAACCTAGGACCGTCTTGCTTTGTCATTGGGCATGGAGAGAACCCATTTC
TCCAGACTTTTACCTACCCGTGCCTGAGAAAGCATACTTGACAACTGTGGACTCCAGTTTTGTTGAGAATTGTTT
TCTTACATTACTAAGGCTAATAATGAGATGTAACTCATGAATGTCTCGATTAGACTCCATGTAGTTACTTCCTTT
AAACCATCAGCCGGCCTTTTATATGGGTCTTCACTCTGACTAGAATTTAGTCTCTGTGTCAGCACAGTGTAATCT
CTATTGCTATTGCCCCTTACGACTCTCACCCTCTCCCCACTTTTTTTAAAAATTTTAACCAGAAAATAAAGATAG
TTAAATCCTAAGATAGAGATTAAGTCATGGTTTAAATGAGGAACAATCAGTAAATCAGATTCTGTCCTCTTCTCT
GCATACCGTGAATTTATAGTTAAGGATCCCTTTGCTGTGAGGGTAGAAAACCTCACCAACTGCACCAGTGAGGAA
GAAGACTGCGTGGATTCATGGGGAGCCTCACAGCAGCCACGCAGCAGGCTCTGGGTGGGGCTGCCGTTAAGGCAC
GTTCTTTCCTTACTGGTGCTGATAACAACAGGGAACCGTGCAGTGTGCATTTTAAGACCTGGCCTGGAATAAATA
CGTTTTGTCTTTCCCTCAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2389

MSQVKSSYSYDAPSDFINFSSLDDEGDTQNIDSWFEEKANLENKLLGKNGTGGLFQGKTPLRKANLQQAIVTPLK
PVDNTYYKEAEKENLVEQSIPSNACSSLEVEAAISRKTPAQPQRRSLRLSAQKDLEQKEKHHVKMKAKRCATPVI
IDEILPSKKMKVSNNKKKPEEEGSAHQDTAEKNASSPEKAKGRHTVPCMPPAKQKFLKSTEEQELEKSMKMQQEV
VEMRKKNEEFKKLALAGIGQPVKKSVSQVTKSVDFHFRTDERIKQHPKNQEEYKEVNFTSELRKHPSSPARVTKG
CTIVKPFNLSQGKKRTFDETVSTYVPLAQQVEDFHKRTPNRYHLRSKKDDINLLPSKSSVTKICRDPQTPVLQTK
HRARAVTCKSTAELEAEELEKLQQYKFKARELDPRILEGGPILPKKPPVKPPTEPIGFDLEIEKRIQERESKKKT
EDEHFEFHSRPCPTKILEDVVGVPEKKVLPITVPKSPAFALKNRIRMPTKEDEEEDEPVVIKAQPVPHYGVPFKP
QIPEARTVEICPFSFDSRDKERQLQKEKKIKELQKGEVPKFKALPLPHFDTINLPEKKVKNVTQIEPFCLETDRR
GALKAQTWKHQLEEELRQQKEAACFKARPNTVISQEPFVPKKEKKSVAEGLSGSLVQEPFQLATEKRAKERQELE
KRMAEVEAQKAQQLEEARLQEEEQKKEELARLRRELVHKANPIRKYQGLEIKSSDQPLTVPVSPKFSTRFHC

FIGURE 2390

AAACCATGAGTTGTGGAAATGAGTTTGTGGAAACATTAAAAAAAATTGGTTATCCCAAAGCTGATAATCTTAATG
GAGAAGACTTTGACTGGTTGTTTGAGGGCGTTGAAGATGAATCGTTTCTGAAGTGGTTTTGTGGGAATGTGAATG
AACAGAACGTGTTGTCTGAAAGAGAATTGGAAGCTTTTAGCATTCTTCAGAAATCAGGCAAGCCTATTCTAGAAG
GGGCGGCATTGGATGAAGCTCTTAAAACGTGTAAAACTTCTGATTTGAAGACACCTAGACTGGATGATAAAGAGC
TGGAGAAATTAGAGGATGAGGTTCAAACTCTACTGAAATTAAAGAACCTAAAAATTCAGCGACGTAATAAATGTC
AATTGATGGCTTCAGTAACTAGCCACAAATCTCTGAGGTTAAATGCTAAAGAAGAAGAAGCCACTAAAAAGCTGA
AGCAGAGTCAAGGAATTCTAAATGCAATGATCACTAAGATCAGTAATGAACTTCAGGCTCTTACTGATGAAGTTA
CACAATTGATGATGTTCTTCAGACATTCTAATTTAGGTCAAGGGACAAATCCACTGGTATTTTTATCGCAATTTT
CCTTGGAAAAATACCTAAGTCAGGAAGAGCAAAGCACAGCAGCATTAACTTTGTATACCAAAAAACAGTTCTTTC
AGGGTATACATGAAGTAGTTGAAAGTTCAAATGAAGACAATTTTCAACTTTTAGATATACAGACACCATCTATTT
GTGATAATCAAGAAATCCTTGAGGAGAGACGACTAGAGATGGCTAGACTGCAGCTCGCATACATTTGTGCTCAAC
ATCAGTTAATTCACTTAAAAGCAAGTAATTCGAGCATGAAGTCAAGTATAAAATGGGCAGAGGAGAGTCTTCACA
GCCTAACCAGCAAGGCTGTGGACAAAGAAAATTTGGATGCTAAAATTTCTAGCTTGACCAGTGAGATTATGAAAC
TTGAAAAAGAGGTCACTCAAATAAAAGACAGAAGTTTACCTGCTGTGGTAAGAGAGAATGCCCAGTTATTGAATA
TGCCAGTGGTAAAGGGAGATTTTGATCTGCAGATTGCTAAACAAGATTATTATACAGCAAGACAAGAGTTAGTTT
TAAATCAATTAATAAAACAAAAGGCATCATTTGAACTTCTACAGTTATCATATGAAATTGAATTAAGAAAGCATC
GGGACATATATCGTCAACTTGAAAATTTGGTTCAAGAACTTAGTCAAAGTAACATGATGCTCTACAAGCAATTAG
AAATGTTAACAGATCCATCAGTTTCTCAACAGATAAATCCAAGGAATACCATTGATACTAAGGATTATTCTACTC
ATAGGCTTTACCAAGTTTTGGAGGGAGAGAATAAGAAAAAAGAATTGTTTCTAACTCATGGAAACCTTGAGGAAG
TGGCTGAGAAATTGAAACAGAATATTTCTTTAGTACAAGATCAGTTGGCAGTATCTGCTCAAGAACATTCTTTCT
TTCTGTCCAAACGGAATAAGGATGTGGACATGCTTTGTGATACTTTGTATCAAGGAGGAAATCAGCTTTTGCTTA
GTGATCAGGAGTTAACAGAGCAGTTTCATAAAGTTGAATCTCAACTGAATAAGCTAAATCATCTCCTCACTGATA
TTCTTGCTGATGTGAAGACAAAAAGAAAAACTTTGGCAAATAATAAATTACATCAAATGGAAAGAGAATTCTATG
TATATTTTTTAAAAGATGAAGATTATCTGAAAGATATTGTGGAGAATTTAGAAACTCAATCAAAGATTAAGGCTG
TTAGTCTTGAAGAT**TGA**AAATTACTGAAAACTGAATCTTTATTACGTGTCCTCTTTTATTTATTAGAAGACTGTG
TATAATAAACACTACTAAATTTTTAAAA

FIGURE 2391

TMSCGNEFVETLKKIGYPKADNLNGEDFDWLFEGVEDESFLKWFCGNVNEQNVLSERELEAFSILQKSGKPILEG
AALDEALKTCKTSDLKTPRLDDKELEKLEDEVQTLLKLKNLKIQRRNKCQLMASVTSHKSLRLNAKEEEATKKLK
QSQGILNAMITKISNELQALTDEVTQLMMFFRHSNLGQGTNPLVFLSQFSLEKYLSQEEQSTAALTLYTKKQFFQ
GIHEVVESSNEDNFQLLDIQTPSICDNQEILEERRLEMARLQLAYICAQHQLIHLKASNSSMKSSIKWAEESLHS
LTSKAVDKENLDAKISSLTSEIMKLEKEVTQIKDRSLPAVVRENAQLLNMPVVKGDFDLQIAKQDYYTARQELVL
NQLIKQKASFELLQLSYEIELRKHRDIYRQLENLVQELSQSNMMLYKQLEMLTDPSVSQQINPRNTIDTKDYSTH
RLYQVLEGENKKKELFLTHGNLEEVAEKLKQNISLVQDQLAVSAQEHSFFLSKRNKDVDMLCDTLYQGGNQLLLS
DQELTEQFHKVESQLNKLNHLLTDILADVKTKRKTLANNKLHQMEREFYVYFLKDEDYLKDIVENLETQSKIKAV
SLED

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FIGURE 2392

GCGTGGAGGTCGACGACTCCGTCGCAGACTACGGACCTGTCTGGGTCTCAGCCGCCAAAGACCCCGTCCGGTAGG
TGAGTGGCTCACTTTGAGGGCAAGCCTTCTCGGATCGAGGCTTCTTCATGGCCGCTCAGATCGTGAGCGGCCGGG
GCTGCTCTCTTTGCGGAGGATGGCGTCTAATGAGCGCAGTTGATTCGAGGAAGTACTAGCCGGACATCATGAGTG
GCTGTCGGGTATTCATCGGGAGACTAAATCCAGCGGCCAGGGAGAAGGACGTGGAAAGATTCTTCAAGGGATATG
GACGGATAAGAGATATTGATCTGAAAAGAGGCTTTGGTTTTGTGGAATTTGAGGATCCAAGGGATGCAGATGATG
CTGTGTATGAGCTTGATGGAAAAGAACTCTGTAGTGAAAGGGTTACTATTGAACATGCTAGGGCTCGGTCACGAG
GTGGAAGAGGTAGAGGACGATACTCTGACCGTTTTAGTAGTCGCAGACCTCGAAATGATAGACGGTATGTGAAGG
GTGGATGGCTGCATTGAACAATTATTGTAGGGGTAGCATTTAAGATTCAGGAGTCATTAGCAGTGATGATTTTGG
GACCTGCCGTATAATCTGTTCTTCTATTCCCACGTTAGCCAATTGTTCTTGATGAATCTATATGAGTCATAGAAC
ACAAATCTATTGACGGAAGTCATTAGAATGGCTTGTGATATCTGATGGCTTGAACTTGCCCACAGTTGAACACAA
GTGCTGTCATTGCATTTCTTCCATTGTGAATACGAATTTTCTTCCTCAGAAATGCTCCACCTGTAAGAACAGAAA
ATCGTCTTATAGTTGAGAATTTATCCTCAAGAGTCAGCTGGCAGGATCTCAAAGATTTCATGAGACAAGCTGGGG
AAGTAACGTTTGCGGATGCACACCGACCTAAATTAAATGAAGGGGTGGTTGAGTTTGCCTCTTATGGTGACTTAA
AGAATGCTATTGAAAAACTTTCTGGAAAGGAAATAAATGGGAGAAAAATAAAATTAATTGAAGGCAGCAAAAGGC
ACAGGTCAAGAAGCAGGTCTCGATCCCGGACCAGAAGTTCCTCTAGGTCTCGTAGCCGATCCCGTTCCCGTAGTC
GCAAATCTTACAGCCGGTCAAGAAGCAGGAGCAGGAGCCGGAGCCGGAGCAAGTCCCGTTCTGTTAGTAGGTCTC
CCGTGCCTGAGAAGAGCCAGAAACGTGGTTCTTCAAGTAGATCTAAGTCTCCAGCATCTGTGGATCGCCAGAGGT
CCCGGTCCCGATCAAGGTCCAGATCAGTTGACAGTGGCAATTAAACTGTAAATAACTTGCCCTGGGGGCCTTTTT
TTTTAAAAAACAAAAACCACAAAAATTCCCAAACCATACTTGCTAAAAATTCTGGTAAGTATGTGCTTTTCTGTG
GGGGTGGGATTTGGAAGGGGGGTTGGGTTGGGCTGGATATCTTTGTAGATGTGGACCACCAAGGGGTTGTTGAAA
ACTAATTGTATTAAATGTCTTTTGATAAGCCTTCTGCTCACATTTTTGTGAATGTCTGAAGTATATAGTTTGTGT
ATATTGACAGAGCTCTTTTATAACTAAAGCAAATTTAATTTTTTTGTACTAGAAAAAAATTTGAACATTTTAGTT
CTTGGTTATAAAAATGTTAATTCAGAATTAGTTTAATGCCTTAATTAAACTAATTAATAGCTTTGGACACTTAAA
AGAGCTCTAAATTTGCTTGTACATAAAGGCTTAATTTGTTTTCCTTGTTAGGGTCAAGGGTGTCCTCCACTCTTT
AACAGCTGCTGGACAGACACATTAGAGCAGCTGTTTGTTATTGATAATAAAATATTATAAAACTA

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FIGURE 2393

MSGCRVFIGRLNPAAREKDVERFFKGYGRIRDIDLKRGFGFVEFEDPRDADDAVYELDGKELCSERVTIEHARAR
SRGGRGRGRYSDRFSSRRPRNDRRYVKGGWLH

FIGURE 2394

GGCACGAGGCACAGCTTCGCGCCGTGTACTGTCGCCCCATCCCTGCGCGCCCAGCCTGCCAAGCAGCGTGCCCCG
GTTGCAGGCGTCATGCAGCGGGCGCGACCCACGCTCTGGGCCGCTGCGCTGACTCTGCTGGTGCTGCTCCGCGGG
CCGCCGGTGGCGCGGGCTGGCGCGAGCTCGGGGGGCTTGGGTCCCGTGGTGCGCTGCGAGCCGTGCGACGCGCGT
GCACTGGCCCAGTGCGCGCCTCCGCCCGCCGTGTGCGCGGAGCTGGTGCGCGAGCCGGGCTGCGGCTGCTGCCTG
ACGTGCGCACTGAGCGAGGGCCAGCCGTGCGGCATCTACACCGAGCGCTGTGGCTCCGGCCTTCGCTGCCAGCCG
TCGCCCGACGAGGCGCGACCGCTGCAGGCGCTGCTGGACGGCCGCGGGCTCTGCGTCAACGCTAGTGCCGTCAGC
CGCCTGCGCGCCTACCTGCTGCCAGCGCCGCCAGCTCCAGGAAATGCTAGTGAGTCGGAGGAAGACCGCAGCGCC
GGCAGTGTGGAGAGCCCGTCCGTCTCCAGCACGCACCGGGTGTCTGATCCCAAGTTCCACCCCCTCCATTCAAAG
ATAATCATCATCAAGAAAGGGCATGCTAAAGACAGCCAGCGCTACAAAGTTGACTACGAGTCTCAGAGCACAGAT
ACCCAGAACTTCTCCTCCGAGTCCAAGCGGGAGACAGAATATGGTCCCTGCCGTAGAGAAATGGAAGACACACTG
AATCACCTGAAGTTCCTCAATGTGCTGAGTCCCAGGGGTGTACACATTCCCAACTGTGACAAGAAGGGATTTTAT
AAGAAAAAGCAGTGTCGCCCTTCCAAAGGCAGGAAGCGGGGCTTCTGCTGGTGTGTGGATAAGTATGGGCAGCCT
CTCCCAGGCTACACCACCAAGGGGAAGGAGGACGTGCACTGCTACAGCATGCAGAGCAAGTAGACGCCTGCCGCA
AGGTTAATGTGGAGCTCAAATATGCCTTATTTTGCACAAAAGACTGCCAAGGACATGACCAGCAGCTGGCTACAG
CCTCGATTTATATTTCTGTTTGTGGTGAACTGATTTTTTTTAAACCAAAGTTTAGAAAGAGGTTTTTGAAATGCC
TATGGTTTCTTTGAATGGTAAACTTGAGCATCTTTTCACTTTCCAGTAGTCAGCAAAGAGCAGTTTGAATTTTCT
TGTCGCTTCCTATCAAAATATTCAGAGACTCGAGCACAGCACCCAGACTTCATGCGCCCGTGGAATGCTCACCAC
ATGTTGGTCGAAGCGGCCGACCACTGACTTTGTGACTTAGGCGGCTGTGTTGCCTATGTAGAGAACACGCTTCAC
CCCCACTCCCCGTACAGTGCGCACAGGCTTTATCGAGAATAGGAAAACCTTTAAACCCCGGTCATCCGGACATCC
CAACGCATGCTCCTGGAGCTCACAGCCTTCTGTGGTGTCATTTCTGAAACAAGGGCGTGGATCCCTCAACCAAGA
AGAATGTTTATGTCTTCAAGTGACCTGTACTGCTTGGGGACTATTGGAGAAAATAAGGTGGAGTCCTACTTGTTT
AAAAAATATGTATCTAAGAATGTTCTAGGGCACTCTGGGAACCTATAAAGGCAGGTATTTCGGGCCCTCCTCTTC
AGGAATCTTCCTGAAGACATGGCCCAGTCGAAGGCCCAGGATGGCTTTTGCTGCGGCCCCGTGGGGTAGGAGGGA
CAGAGAGACAGGGAGAGTCAGCCTCCACATTCAGAGGCATCACAAGTAATGTCACAATTCTTCGGATGACTGCAG
AAAATAGTGTTTTGTAGTTCAACAACTCAAGACGAAGCTTATTTCTGAGGATAAGCTCTTTAAAGGCAAAGCTTT
ATTTTCATCTCTCATCTTTTGTCCTCCTTAGCACAATGTAAAAAAGAATAGTAATATCAGAACAGGAAGGAGGAA
TGGCTTGCTGGGGAGCCCATCCAGGACACTGGGAGCACATAGAGATTCACCCATGTTTGTTGAACTTAGAGTCAT
TCTCATGCTTTTCTTTATAATTCACACATATATGCAGAGAAGATATGTTCTTGTTAACATTGTATACAACATAGC
CCCAAATATAGTAAGATCTATACTAGATAATCCTAGATGAAATGTTAGAGATGCTATTTGATACAACTGTGGCCA
TGACTGAGGAAAGGAGCTCACGCCCAGAGACTGGGCTGCTCTCCCGGAGGCCAAACCCAAGAAGGTCTGGCAAAG
TCAGGCTCAGGGAGACTCTGCCCTGCTGCAGACCTCGGTGTGGACACACGCTGCATAGAGCTCTCCTTGAAAACA
GAGGGGTCTCAAGACATTCTGCCTACCTATTAGCTTTTCTTTATTTTTTTAACTTTTTGGGGGGAAAAGTATTTT
TGAGAAGTTTGTCTTGCAATGTATTTATAAATAGTAAATAAAGTTTTTACCATTAAAAAAATAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2395

MQRARPTLWAAALTLLVLLRGPPVARAGASSGGLGPVVRCEPCDARALAQCAPPPAVCAELVREPGCGCCLTCAL
SEGQPCGIYTERCGSGLRCQPSPDEARPLQALLDGRGLCVNASAVSRLRAYLLPAPPAPGNASESEEDRSAGSVE
SPSVSSTHRVSDPKFHPLHSKIIIIKKGHAKDSQRYKVDYESQSTDTQNFSSESKRETEYGPCRREMEDTLNHLK
FLNVLSPRGVHIPNCDKKGFYKKKQCRPSKGRKRGFCWCVDKYGQPLPGYTTKGKEDVHCYSMQSK

FIGURE 2396A

ATGGCTGGCGGAGCCTGGGGCCGCCTGGCCTGTTACTTGGAGTTCCTGAAGAAGGAGGAGCTGAAGGAGTTCCAG
CTTCTGCTCGCCAATAAAGCGCACTCCAGGAGCTCTTCGGGTGAGACACCCGCTCAGCCAGAGAAGACGAGTGGC
ATGGAGGTGGCCTCGTACCTGGTGGCTCAGTATGGGGAGCAGCGGGCCTGGGACCTAGCCCTCCATACCTGGGAG
CAGATGGGGCTGAGGTCACTGTGCGCCCAAGCCCAGGAAGGGGCAGGCCACTCTCCCTCATTCCCCTACAGCCCA
AGTGAACCCCACCTGGGGTCTCCCAGCCAACCCACCTCCACCGCAGTGCTAATGCCCTGGATCCATGAATTGCCG
GCGGGGTGCACCCAGGGCTCAGAGAGAAGGGTTTTGAGACAGCTGCCTGACACATCTGGACGCCGCTGGAGAGAA
ATCTCTGCCTCACTCCTCTACCAAGCTCTTCCAAGCTCCCCAGACCATGAGTCTCCAAGCCAGGAGTCACCCAAC
GCCCCCACATCCACAGCAGTGCTGGGGAGCTGGGGATCCCCACCTCAGCCCAGCCTAGCACCCAGAGAGCAGGAG
GCTCCTGGGACCCAATGGCCTCTGGATGAAACGTCAGGAATTTACTACACAGAAATCAGAGAAAGAGAGAGAGAG
AAATCAGAGAAAGGCAGGCCCCCATGGGCAGCGGTGGTAGGAACGCCCCCACAGGCGCACACCAGCCTACAGCCC
CACCACCACCCATGGGAGCCTTCTGTGAGAGAGAGCCTCTGTTCCACATGGCCCTGGAAAAATGAGGATTTTAAC
CAAAAATTCACACAGCTGCTACTTCTACAAAGACCTCACCCCAGAAGCCAAGATCCCCTGGTCAAGAGAAGCTGG
CCTGATTATGTGGAGGAGAATCGAGGACATTTAATTGAGATCAGAGACTTATTTGGCCCAGGCCTGGATACCCAA
GAACCTCGCATAGTCATACTGCAGGGGGCTGCTGGAATTGGGAAGTCAACACTGGCCAGGCAGGTGAAGGAAGCC
TGGGGGAGAGGCCAGCTGTATGGGGACCGCTTCCAGCATGTCTTCTACTTCAGCTGCAGAGAGCTGGCCCAGTCC
AAGGTGGTGAGTCTCGCTGAGCTCATCGGAAAAGATGGGACAGCCACTCCGGCTCCCATTAGACAGATCCTGTCT
AGGCCAGAGCGGCTGCTCTTCATCCTCGATGGTGTAGATGAGCCAGGATGGGTCTTGCAGGAGCCGAGTTCTGAG
CTCTGTCTGCACTGGAGCCAGCCACAGCCGGCGGATGCACTGCTGGGCAGTTTGCTGGGGAAAACTATACTTCCC
GAGGCATCCTTCCTGATCACGGCTCGGACCACAGCTCTGCAGAACCTCATTCCTTCTTTGGAGCAGGCACGTTGG
GTAGAGGTCCTGGGGTTCTCTGAGTCCAGCAGGAAGGAATATTTCTACAGATATTTCACAGATGAAAGGCAAGCA
ATTAGAGCCTTTAGGTTGGTCAAATCAAACAAAGAGCTCTGGGCCCTGTGTCTTGTGCCCTGGGTGTCCTGGCTG
GCCTGCACTTGCCTGATGCAGCAGATGAAGCGGAAGGAAAAACTCACACTGACTTCCAAGACCACCACAACCCTC
TGTCTACATTACCTTGCCCAGGCTCTCCAAGCTCAGCCATTGGGACCCCAGCTCAGAGACCTCTGCTCTCTGGCT
GCTGAGGGCATCTGGCAAAAAAAGACCCTTTTCAGTCCAGATGACCTCAGGAAGCATGGGTTAGATGGGGCCATC
ATCTCCACCTTCTTGAAGATGGGTATTCTTCAAGAGCACCCCATCCCTCTGAGCTACAGCTTCATTCACCTCTGT
TTCCAAGAGTTCTTTGCAGCAATGTCCTATGTCTTGGAGGATGAGAAGGGGAGAGGTAAACATTCTAATTGCATC
ATAGATTTGGAAAAGACGCTAGAAGCATATGGAATACATGGCCTGTTTGGGGCATCAACCACACGTTTCCTATTG
GGCCTGTTAAGTGATGAGGGGGAGAGAGAGATGGAGAACATCTTTCACTGCCGGCTGTCTCAGGGGAGGAACCTG
ATGCAGTGGGTCCCGTCCCTGCAGCTGCTGCTGCAGCCACACTCTCTGGAGTCCCTCCACTGCTTGTACGAGACT
CGGAACAAAACGTTCCTGACACAAGTGATGGCCCATTTCGAAGAAATGGGCATGTGTGTAGAAACAGACATGGAG
CTCTTAGTGTGCACTTTCTGCATTAAATTCAGCCGCCACGTGAAGAAGCTTCAGCTGATTGAGGGCAGGCAGCAC
AGATCAACATGGAGCCCCACCATGGTAGTCCTGTTCAGGTGGGTCCCAGTCACAGATGCCTATTGGCAGATTCTC
TTCTCCGTCCTCAAGGTCACCAGAAACCTGAAGGAGCTGGACCTAAGTGGAAACTCGCTGAGCCACTCTGCAGTG
AAGAGTCTTTGTAAGACCCTGAGACGCCCTCGCTGCCTCCTGGAGACCCTGCGGTTGGCTGGCTGTGGCCTCACA
GCTGAGGACTGCAAGGACCTTGCCTTTGGGCTGAGAGCCAACCAGACCCTGACCGAGCTGGACCTGAGCTTCAAT
GTGCTCACGGATGCTGGAGCCAAACACCTTTGCCAGAGACTGAGACAGCCGAGCTGCAAGCTACAGCGACTGCAG
CTGGTCAGCTGTGGCCTCACGTCTGACTGCTGCCAGGACCTGGCCTCTGTGCTTAGTGCCAGCCCCAGCCTGAAG
GAGCTAGACCTGCAGCAGAACAACCTGGATGACGTTGGCGTGCGACTGCTCTGTGAGGGGCTCAGGCATCCTGCC
TGCAAACTCATACGCCTGGGGCTGGACCAGACAACTCTGAGTGATGAGATGAGGCAGGAACTGAGGGCCCTGGAG
CAGGAGAAACCTCAGCTGCTCATCTTCAGCAGACGGAAACCAAGTGTGATGACCCCTACTGAGGGCCTGGATACG
GGAGAGATGAGTAATAGCACATCCTCACTCAAGCGGCAGAGACTCGGATCAGAGAGGGCGGCTTCCCATGTTGCT
CAGGCTAATCTCAAACTCCTGGACGTGAGCAAGATCTTCCCAATTGCTGAGATTGCAGAGGAAAGCTCCCCAGAG
GTAGTACCGGTGGAACTCTTGTGCGTGCCTTCTCCTGCCTCTCAAGGGGACCTGCATACGAAGCCTTTGGGGACT
GACGATGACTTCTGGGGCCCCACGGGGCCTGTGGCTACTGAGGTAGTTGACAAAGAAAAGAACTTGTACCGAGTT
CACTTCCCTGTAGCTGGCTCCTACCGCTGGCCCAACACGGGTCTCTGCTTTGTGATGAGAGAAGCGGTGACCGTT
GAGATTGAATTCTGTGTGTGGGACCAGTTCCTGGGTGAGATCAACCCACAGCACAGCTGGATGGTGGCAGGGCCT
CTGCTGGACATCAAGGCTGAGCCTGGAGCTGTGGAAGCTGTGCACCTCCCTCACTTTGTGGCTCTCCAAGGGGGC
CATGTGGACACATCCCTGTTCCAAATGGCCCACTTTAAAGAGGAGGGGATGCTCCTGGAGAAGCCAGCCAGGGTG

FIGURE 2396B

GAGCTGCATCACATAGTTCTGGAAAACCCCAGCTTCTCCCCCTTGGGAGTCCTCCTGAAAATGATCCATAATGCC
CTGCGCTTCATTCCCGTCACCTCTGTGGTGTTGCTTTACCACCGCGTCCATCCTGAGGAAGTCACCTTCCACCTC
TACCTGATCCCAAGTGACTGCTCCATTCGGAAGGCCATAGATGATCTAGAAATGAAATTCCAGTTTGTGCGAATC
CACAAGCCACCCCCGCTGACCCCACTTTATATGGGCTGTCGTTACACTGTGTCTGGGTCTGGTTCAGGGATGCTG
GAAATACTCCCCAAGGAACTGGAGCTCTGCTATCGAAGCCCTGGAGAAGACCAGCTGTTCTCGGAGTTCTACGTT
GGCCACTTGGGATCAGGGATCAGGCTGCAAGTGAAAGACAAGAAAGATGAGACTCTGGTGTGGGAGGCCTTGGTG
AAACCAGGAGATCTCATGCCTGCAACTACTCTGATCCCTCCAGCCCGCATAGCCGTACCTTCACCTCTGGATGCC
CCGCAGTTGCTGCACTTTGTGGACCAGTATCGAGAGCAGCTGATAGCCCGAGTGACATCGGTGGAGGTTGTCTTG
GACAAACTGCATGGACAGGTGCTGAGCCAGGAGCAGTACGAGAGGGTGCTGGCTGAGAACACGAGGCCCAGCCAG
ATGCGGAAGCTGTTCAGCTTGAGCCAGTCCTGGGACCGGAAGTGCAAAGATGGACTCTACCAAGCCCTGAAGGAG
ACCCATCCTCACCTCATTATGGAACTCTGGGAGAAGGGCAGCAAAAAGGGACTCCTGCCACTCAGCAGC**TGA**AGT
ATCAACACCAGCCCTTGACCCTTGAGTCCTGGCTTTGGCTGACCCTTCTTTGGGTCTCAGTTTCTTTCTCTGCAA
ACAAGTTGCCATCTGGTTTGCCTTCCAGCACTAAAGTAATGGAACTTTGATGATGCCTTTGCTGGGCATTATGTG
TCCATGCCAGGGATGCCACAGGGGGCCCCAGTCCAGGTGGCCTAACAGCATCTCAGGGAATGTCCATCTGGAGCT
GGCAAGACCCCTGCAGACCTCATAGAGCCTCATCTGGTGGCCACAGCAGCCAAGCCTAGAGCCCTCCGGATCCCA
TCCAGGCGCAAAGAGGAATAGGAGGGACATGGAACCATTTGCCTCTGGCTGTGTCACAGGGTGAGCCCCAAAATT
GGGGTTCAGCGTGGGAGGCCACGTGGATTCTTGGCTTTGTACAGGAAGATCTACAAGAGCAAGCCAACAGAGTAA
AGTGGAAGGAAGTTTATTCAGAAAATAAAGGAGTATCACAGCTCTTTTAGAATTTGTCTAGCAGGCTTTCCAGTT
TTTACCAGAAAACCCCTATAAATTAAAAATTTTTTACTTAAATTTAAGAATTAAAAAAATACAAAAAAGAAAAAA
TGAAAATAAAGGAATAAGAAGTTACCTACTCCAAAAAAAAAAA

FIGURE 2397

MAGGAWGRLACYLEFLKKEELKEFQLLLANKAHSRSSSGETPAQPEKTSGMEVASYLVAQYGEQRAWDLALHTWE
QMGLRSLCAQAQEGAGHSPSFPYSPSEPHLGSPSQPTSTAVLMPWIHELPAGCTQGSERRVLRQLPDTSGRRWRE
ISASLLYQALPSSPDHESPSQESPNAPTSTAVLGSWGSPPQPSLAPREQEAPGTQWPLDETSGIYYTEIRERERE
KSEKGRPPWAAVVGTPPQAHTSLQPHHHPWEPSVRESLCSTWPWKNEDFNQKFTQLLLLQRPHPRSQDPLVKRSW
PDYVEENRGHLIEIRDLFGPGLDTQEPRIVILQGAAGIGKSTLARQVKEAWGRGQLYGDRFQHVFYFSCRELAQS
KVVSLAELIGKDGTATPAPIRQILSRPERLLFILDGVDEPGWVLQEPSSELCLHWSQPQPADALLGSLLGKTILP
EASFLITARTTALQNLIPSLEQARWVEVLGFSESSRKEYFYRYFTDERQAIRAFRLVKSNKELWALCLVPWVSWL
ACTCLMQQMKRKEKLTLTSKTTTTLCLHYLAQALQAQPLGPQLRDLCSLAAEGIWQKKTLFSPDDLRKHGLDGAI
ISTFLKMGILQEHPIPLSYSFIHLCFQEFFAAMSYVLEDEKGRGKHSNCIIDLEKTLEAYGIHGLFGASTTRFLL
GLLSDEGEREMENIFHCRLSQGRNLMQWVPSLQLLLQPHSLESLHCLYETRNKTFLTQVMAHFEEMGMCVETDME
LLVCTFCIKFSRHVKKLQLIEGRQHRSTWSPTMVVLFRWVPVTDAYWQILFSVLKVTRNLKELDLSGNSLSHSAV
KSLCKTLRRPRCLLETLRLAGCGLTAEDCKDLAFGLRANQTLTELDLSFNVLTDAGAKHLCQRLRQPSCKLQRLQ
LVSCGLTSDCCQDLASVLSASPSLKELDLQQNNLDDVGVRLLCEGLRHPACKLIRLGLDQTTLSDEMRQELRALE
QEKPQLLIFSRRKPSVMTPTEGLDTGEMSNSTSSLKRQRLGSERAASHVAQANLKLLDVSKIFPIAEIAEESSPE
VVPVELLCVPSPASQGDLHTKPLGTDDDFWGPTGPVATEVVDKEKNLYRVHFPVAGSYRWPNTGLCFVMREAVTV
EIEFCVWDQFLGEINPQHSWMVAGPLLDIKAEPGAVEAVHLPHFVALQGGHVDTSLFQMAHFKEEGMLLEKPARV
ELHHIVLENPSFSPLGVLLKMIHNALRFIPVTSVVLLYHRVHPEEVTFHLYLIPSDCSIRKAIDDLEMKFQFVRI
HKPPPLTPLYMGCRYTVSGSGSGMLEILPKELELCYRSPGEDQLFSEFYVGHLGSGIRLQVKDKKDETLVWEALV
KPGDLMPATTLIPPARIAVPSPLDAPQLLHFVDQYREQLIARVTSVEVVLDKLHGQVLSQEQYERVLAENTRPSQ
MRKLFSLSQSWDRKCKDGLYQALKETHPHLIMELWEKGSKKGLLPLSS

FIGURE 2398

CCTGTGCAGCAGCTGAGGAACCGTGGATTTCATATTATAGACTAAAACCCCATTAAAACTGCTCAAAATCCTTCC
TGCAGCTGCCAGGCAACAACGAAAGAAGAGAGGTAAATCCTATTCTTTTCCAATACAACTGAAGCACTACATTTT
AGCTCTGGCTGCTTTACATTGCAGCTCAGTGTTATTAGTAGAAATATGGATACTGAGACGAGAACACAGCACTGC
ATTGTCCAGCCAGGAAAAATAGCAGATGTAAAAAGCTTCAATGCATCAACTGTCGGGAAGAGTCAACAGTGCTAC
AAGCAGAACGGGCAACTACAGCTCTTTTGTTTAACGAAAGAGAGAATATGAAAGAAAGGGAAAATTTCAGAAGAC
TAGGACCCATATGAACAAGGAGGGTAACTCGAAGACAAGCAGACAGATGGACACTTTGGATACTGTGAAAAGCAA
TCGCAGGAGGCAGACTGTTGGGGGATGTGCGCATGTTCGATAGCATCTTTTTTGCTGAAGTGATGGCGTGCCAAA
AGTATTTTCAGTGGGCATAATCCTCTTCACATAAATGGCCTGACCAAGGAGAATGACTACAAGAGAGACAATGTG
ACTGAATTAGAAAATGATTGCCAAAGAATAGTATTAAGGAGAAGAAAACATTTTTGTCACCAATCTCTCATATAC
CACTACTGGATATTTACAAC**ATG**CTTCAGTGGAGGAGAAGACACTGCTGCTTTGCAAAGATGACCTGGAATGCCA
AAAGGTCTCTGTTCCGCACTCATCTTATTGGAGTACTTTCTCTAGTGTTTCTTTTTGCTATGTTTTTGTTTTTCA
ATCATCATGACTGGCTGCCAGGCAGAGCTGGATTCAAAGAAAACCCTGTGACATACACTTTCCGAGGATTTCGGT
CAACAAAAAGTGAGACAAACCACAGCTCCCTTCGGAACATTTGGAAAGAAACAGTCCCTCAAACCCTGAGGCCTC
AAACAGCAACTAACTCTAATAACACAGACCTGTCACCACAAGGAGTTACAGGCCTGGAGAATACACTTAGTGCCA
ATGGAAGTATTTACAATGAAAAAGGTACTGGACATCCAAATTCTTACCATTTCAAATATATTATTAATGAGCCTG
AAAAATGCCAAGAGAAAAGTCCTTTTTTAATACTACTAATAGCTGCAGAGCCTGGACAAATAGAAGCTAGAAGAG
CTATTCGGCAAACTTGGGGCAATGAAAGTCTAGCACCTGGTATTCAAATCACAAGAATATTTTTGTTGGGCTTAA
GTATTAAGCTAAATGGCTACCTTCAACGTGCAATACTGGAAGAAAGCAGACAATATCATGATATAATTCAACAGG
AATACTTAGATACGTACTATAATTTGACCATTAAAACACTAATGGGCATGAACTGGGTTGCAACATACTGTCCAC
ATATTCCATATGTTATGAAAACTGACAGTGACATGTTTGTCAACACTGAATATTTAATCAATAAGTTACTGAAGC
CAGATCTGCCTCCCAGACATAACTATTTCACTGGTTACCTAATGCGAGGATATGCACCCAATCGAAACAAAGATA
GCAAGTGGTACATGCCACCAGACCTCTACCCAAGTGAGCGTTATCCTGTCTTCTGTTCTGGAACTGGTTATGTTT
TTTCTGGAGATCTGGCAGAAAAGATTTTTAAAGTTTCTTTAGGTATCCGCCGTTTGCACTTGGAAGATGTATATG
TAGGGATCTGTCTTGCCAAGTTGAGAATTGATCCTGTACCCCCTCCCAATGAGTTTGTGTTCAATCACTGGCGAG
TCTCTTATTCGAGCTGTAAATACAGCCACCTAATTACCTCTCATCAGTTCCAGCCTAGTGAACTGATAAAATACT
GGAACCATTTACAACAAAATAAGCACAATGCCTGTGCCAACGCAGCAAAAGAAAAGGCAGGCAGGTATCGCCACC
GTAAACTACAT**TAG**AAAAGACAATTTTTTTTCAATGTGCAATTTGTAAATATTGCTAAAAGCATGTATAGTTAGG
AACTGATTACATCCGTAGGACAAGTTTTAGTTAAAACTCATCACATAAAGAAATTCAAGAAGTATTTTTTTAATT
TCTGAAGAAGTTAATTCTTAAAACTATAACATTATATAACAAAAAAGGTTTCCCAAAACAATCTATTTAAAAAAC
TGTATAAGGAGATTCTGTGTATTAACATGCAATAACAAGCATGCATAAATCAATGGTTCAAGTCTTCTGTTAGGG
GGCCAATAAAATGTATCTGCATATGTTTTCCACATAAATTTTAATTCAAGAAATGACAGTCAAAAGATCCTTCAT
TTTAGATTAAGCTTTTCATTTTAATATATAATTTAATGTAAATAAAACATCACTATCAATTTTAAGGAAACTTTT
TAATTGTGCAAAGGATAAATTTTTTGACCTATTTTAGGGTTCTAAATGCAATAAGATTTAGTTGAGTTATTCCAC
AAACACATTATAAAGTTCAGATGTTTCATCAATGCAGTTCTCACGAAAGTATTTACTTTTTAAAAATAACTGAGA
TATTATTTTAAATTTCTTTTATTAATACTTTCTTTTATTAATATATGGGGGAAAATTATTTTGACATGACGTGGT
AAAATGTGAAAAACTAATGTGTCTCAGGCTCAAGTTTTTATAGTTATTAAATGTTTCAAAATAGACAAGTTTTGT
TTCCTCATTGATGTTAAGAACCAAACTCCTATTTCAATGAGTTATTGGATTAGACCAATTACTGCACTCTTAAAC
AGCACCACCATTTAATTTCATGTAATATCTAACTTCGAATATATCTGTAAAGGATAATCGAAGCAAAAGTAATCA
CTTAAAGGCACAAATAGGATGTACTGTTGAAAAAGATAAAGAGTGCAGGTGCAGTTTCATTCAACACATTTTTAA
GATGCATGTCTGCCAAAATGCAACATACGGGAAGTTTATTTCCTGACAGCAGGTGTACACATGCCAACACTTAAT
CATTTTATGGCACCTATTTCTTTCTTGGAGTGCCAAGTTTGCAAACCTGCAGTTTTTAATTTGGTAGATGACAAA
TATTCTGAATCACCAATTAAAAACCTTTTTGGGAGGGATGGGGAAAACTACAAACGTTTGACAAACACAATTCTA
GGATGAACAATGTATACAATGCACTTTTATGAAGTTTTTAAAAATAAAGGAAAACAAAAAACTTT

FIGURE 2399

MLQWRRRHCCFAKMTWNAKRSLFRTHLIGVLSLVFLFAMFLFFNHHDWLPGRAGFKENPVTYTFRGFRSTKSETN
HSSLRNIWKETVPQTLRPQTATNSNNTDLSPQGVTGLENTLSANGSIYNEKGTGHPNSYHFKYIINEPEKCQEKS
PFLILLIAAEPGQIEARRAIRQTWGNESLAPGIQITRIFLLGLSIKLNGYLQRAILEESRQYHDIIQQEYLDTYY
NLTIKTLMGMNWVATYCPHIPYVMKTDSDMFVNTEYLINKLLKPDLPPRHNYFTGYLMRGYAPNRNKDSKWYMPP
DLYPSERYPVFCSGTGYVFSGDLAEKIFKVSLGIRRLHLEDVYVGICLAKLRIDPVPPPNEFVFNHWRVSYSSCK
YSHLITSHQFQPSELIKYWNHLQQNKHNACANAAKEKAGRYRHRKLH

FIGURE 2400

TTCCTTTCATGTTCAGCATTTCTACTCCTTCCAAGAAGAGCAGCAAAGCTGAAGTAGCAGCAACAGCACCAGCAG
CAACAGCAAAAAACAAACATGAGTGTGAAGGGCATGGCTATAGCCTTGGCTGTGATATTGTGTGCTACAGTTGTT
CAAGGCTTCCCCATGTTCAAAAGAGGACGCTGTCTTTGCATAGGCCCTGGGGTAAAAGCAGTGAAAGTGGCAGAT
ATTGAGAAAGCCTCCATAATGTACCCAAGTAACAACTGTGACAAAATAGAAGTGATTATTACCCTGAAAGAAAAT
AAAGGACAACGATGCCTAAATCCCAAATCGAAGCAAGCAAGGCTTATAATCAAAAAAGTTGAAAGAAAGAATTTT
TAAAAATATCAAAACATATGAAGTCCTGGAAAAGGGCATCTGAAAAACCTAGAACAAGTTTAACTGTGACTACTG
AAATGACAAGAATTCTACAGTAGGAAACTGAGACTTTTCTATGGTTTTGTGACTTTCAACTTTTGTACAGTTATG
TGAAGGATGAAAGGTGGGTGAAAGGACCAAAAACAGAAATACAGTCTTCCTGAATGAATGACAATCAGAATTCCA
CTGCCCAAAGGAGTCCAGCAATTAAATGGATTTCTAGGAAAAGCTACCTTAAGAAAGGCTGGTTACCATCGGAGT
TTACAAAGTGCTTTCACGTTCTTACTTGTTGTATTATACATTCATGCATTTCTAGGCTAGAGAACCTTCTAGATT
TGATGCTTACAACTATTCTGTTGTGACTATGAGAACATTTCTGTCTCTAGAAGTTATCTGTCTGTATTGATCTTT
ATGCTATATTACTATCTGTGGTTACAGTGGAGACATTGACATTATTACTGGAGTCAAGCCCTTATAAGTCAAAAG
CATCTATGTGTCGTAAAGCATTCCTCAAACATTTTTTCATGCAAATACACACTTCTTTCCCCAAATATCATGTAG
CACATCAATATGTAGGGAAACATTCTTATGCATCATTTGGTTTGTTTTATAACCAATTCATTAAATGTAATTCAT
AAAATGTACTATGAAAAAAATTATACGCTATGGGATACTGGCAACAGTGCACATATTTCATAACCAAATTAGCAG
CACCGGTCTTAATTTGATGTTTTTCAACTTTTATTCATTGAGATGTTTTGAAGCAATTAGGATATGTGTGTTTAC
TGTACTTTTTGTTTTGATCCGTTTGTATAAATGATAGCAATATCTTGGACACATTTGAAATACAAAATGTTTTTG
TCTACCAAAGAAAAATGTTGAAAAATAAGCAAATGTATACCTAGCAATCACTTTTACTTTTTGTAATTCTGTCTC
TTAGAAAAATACATAATCTAATCAATTTCTTTGTTCATGCCTATATACTGTAAAATTTAGGTATACTCAAGACTA
GTTTAAAGAATCAAAGTCATTTTTTTCTCTAATAAACTACCACAACCTTTCTTTTTTAAAAAAAAAAA

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FIGURE 2401

MSVKGMAIALAVILCATVVQGFPMFKRGRCLCIGPGVKAVKVADIEKASIMYPSNNCDKIEVIITLKENKGQRCL
NPKSKQARLIIKKVERKNF

FIGURE 2402

AGCAGCTCCAACCAGGGCAGCCTTCCTGAGAAGATGCAACCAATCCTGCTTCTGCTGGCCTTCCTCCTGCTGCCC
AGGGCAGATGCAGGGGAGATCATCGGGGGACATGAGGCCAAGCCCCACTCCCGCCCCTACATGGCTTATCTTATG
ATCTGGGATCAGAAGTCTCTGAAGAGGTGCGGTGGCTTCCTGATACAAGACGACTTCGTGCTGACAGCTGCTCAC
TGTTGGGGAAGCTCCATAAATGTCACCTTGGGGGCCCACAATATCAAAGAACAGGAGCCGACCCAGCAGTTTATC
CCTGTGAAAAGACCCATCCCCCATCCAGCCTATAATCCTAAGAACTTCTCCAACGACATCATGCTACTGCAGCTG
GAGAGAAAGGCCAAGCGGACCAGAGCTGTGCAGCCCCTCAGGCTACCTAGCAACAAGGCCCAGGTGAAGCCAGGG
CAGACATGCAGTGTGGCCGGCTGGGGGCAGACGGCCCCCCTGGGAAAACACTCACACACACTACAAGAGGTGAAG
ATGACAGTGCAGGAAGATCGAAAGTGCGAATCTGACTTACGCCATTATTACGACAGTACCATTGAGTTGTGCGTG
GGGGACCCAGAGATTAAAAAGACTTCCTTTAAGGGGGACTCTGGAGGCCCTCTTGTGTGTAACAAGGTGGCCCAG
GGCATTGTCTCCTATGGACGAAACAATGGCATGCCTCCACGAGCCTGCACCAAAGTCTCAAGCTTTGTACACTGG
ATAAAGAAAACCATGAAACGCTACTAACTACAGGAAGCAAACTAAGCCCCCGCTGTAATGAAACACCTTCTCTGG
AGCCAAGTCCAGATTTACACTGGGAGAGGTGCCAGCAACTGAATAAATACCTCTCCCAGTGTAAATCTGGAGCCA
AGTCCAGATTTACACTGGGAGAGGTGCCAGCAACTGAATAAATACCTCTTAGCTGAGTGG

FIGURE 2403

MQPILLLLAFLLLPRADAGEIIGGHEAKPHSRPYMAYLMIWDQKSLKRCGGFLIQDDFVLTAAHCWGSSINVTLG
AHNIKEQEPTQQFIPVKRPIPHPAYNPKNFSNDIMLLQLERKAKRTRAVQPLRLPSNKAQVKPGQTCSVAGWGQT
APLGKHSHTLQEVKMTVQEDRKCESDLRHYYDSTIELCVGDPEIKKTSFKGDSGGPLVCNKVAQGIVSYGRNNGM
PPRACTKVSSFVHWIKKTMKRY

FIGURE 2404

CGTTGCTGTCGAAATGAAGTGCGCGCTGCGACACCTCCCAGCCCACCGAACTCCGCCGCCATTTCCTCGCTTGGC
CTAACGGTTCGGCCAATCCCAGCGCGCATCAAGAAGGACTGAGGCTCCGCCAATCGGAGGCCGCCGATTTCGACC
CTTCGCCTCGGCCCGGCCCAATCCAGGCCCCGGCCCCGCCGCCCCCGGCCCGCCCCCGCGGTGCCCTCTCTCCTC
CCTCTTTGTGCGTCTCGCGCCGCCGCCGCCCGCCGCGTGAGAGGACGGGCTCCGCGCGCTCCGGCAGCGCATTCG
GGTCCCCTCCCCCCGGGAGGCTTGCGAAGGAGAAGCCGCCGCAGAGGAAAAGCAGGTGCCGGTGCCTGTCCCCGG
GGGCGCC**ATG**GCGACCGGAGCGAACGCCACGCCGTTGGACTTCCCAAGTAAGAAGCGGAAGAGGAGCCGCTGGAA
CCAAGACACAATGGAACAGAAGACAGTGATTCCAGGAATGCCTACAGTTATTCCCCCTGGACTTACTCGAGAACA
AGAAAGAGCTTATATAGGTAAATATACGTTCTGCATCCAAATGCACTTTGAGATTGTTACGATTTATTCTGAGCA
AGATCTGCATTTTTTGAAAGTT**TGA**GATTGTAGTTATCTTTTTTGAGATGAGATACTTTCACGACTTTGGTATCA
TCTGTCAGTTTTTGCCCAGTGAGTTCTGCATTTGCAGCTCCTTGTTTTGGTCTGTTCGTAACTGCAGTGTTCTCC
ATGAGTATCAGGAAGGTAGGGTTTCACTTAGGAGTAAGAACAGTCCCCAGTCCAGCAGCCACCCTTTTCAGCTGC
TGTTCATTGCCAGTTGATGAGGTGAGTGTCATCTGCCTCTCTGGACAGGCCCCAGTGGAGAACACCGCAGGTACT
GTAAACCAAGTACTTTTCACAGCGTGGCCTTTCACCATAATTTTATATTTCTCCCCCTAAAATGTGGTCTTTTAC
TTTTTATAGGTACTTTCTG

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FIGURE 2405

MATGANATPLDFPSKKRKRSRWNQDTMEQKTVIPGMPTVIPPGLTREQERAYIGKYTFCIQMHFEIVTIYSEQDL
HFLKV

FIGURE 2406

CGCGGCGGCGCGGAGCTCGGGCGGCCGTGGAGGAACTCAGCCTCGGCCGCAGGAGGCGCCGGGAGCGGAGCCGCC
GGGAGTCGCGCAACAGGTTTCCTTCTCCATCCGTGCGCCCACAGGGGACGCGCGCCCTGCCGGGAGAGGGGCTTC
TCGGTTCGCACTCTCGCTCCCAGTCCAGGCAAAATGAAAGACCGGCTAGCAGAACTTCTGGACTTGTCCAAGCAA
TATGACCAGCAGTTCCCAGACGGGGACGATGAGTTTGACTCGCCCCACGAGGACATCGTGTTCGAGACGGACCAC
ATCCTGGAGTCCCTGTACCGAGACATCCGGGACATTCAGGATGAAAACCAGCTGCTGGTGGCCGACGTGAAGCGG
CTGGGAAAGCAGAACGCCCGCTTCCTCACGTCCATGCGGCGCCTCAGCAGCATCAAGCGCGACACCAACTCCATC
GCCAAGGCCTTCAGGGCCCGGGGCGAGGTCATCCACTGCAAGCTGCGCGCCATGAAGGAGCTGAGCGAGGCGGCT
GAGGCCCAGCACGGCCCGCACTCGGCAGTGGCGCGCATTTCGCGGGCGCAGTACAACGCGCTCACCCTCACCTTC
CAGCGCGCCATGCACGACTACAACCAGGCCGAGATGAAGCAGCGCGACAACTGCAAGATCCGCATCCAGCGCCAG
CTGGAGATCATGGGCAAGGAAGTCTCGGGCGACCAGATCGAGGACATGTTCGAGCAGGGTAAGTGGGACGTGTTT
TCCGAGAACTTGCTGGCCGACGTGAAGGGCCGCGGGCCGCCCACAACGAGATCGAGAGCCGCCACCGCGAACTGC
TGCGCCTGGAGAGCCGCCATCCGCGACGTACACGAGCTCTTCTTGCAGATGGCGGTGCTGGTGGAGAAGCAGGCC
GACACCCTGAACGTCATCGAGCTCAACGTACAAAAGACGGTCGACTACACCGGCCAGGCCAAGGCGCAGGTGCGG
AAGGCCGTGCAGTACGAGGAGAAGAACCCCTGCCGGACCCTCTGCTGCTTCTGCTGTCCCTGCCTCAAGTAGCAG
GCCGGCCCGGGCCGCCACCGCCCATCCCAGACCATGGAGCGCGCTGGGAAGGACGCACCAAAGCCGGGAGCTCTG
CCCTGCAGGGAGTTGCCCCAACCCTTTCCGGAACTCAGTCTTTAGAAAAGAAACGCCAGGTTCAAGAATTGCAAA
CCAGCCTGTGCTTGGAAAGATGGTTAGTTGATACCGTCCGATGATTCTTCAGTAAAGATAGATTCCCACCTCGTG
CCGAA

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FIGURE 2407

MKDRLAELLDLSKQYDQQFPDGDDEFDSPHEDIVFETDHILESLYRDIRDIQDENQLLVADVKRLGKQNARFLTS
MRRLSSIKRDTNSIAKAFRARGEVIHCKLRAMKELSEAAEAQHGPHSAVARISRAQYNALTLTFQRAMHDYNQAE
MKQRDNCKIRIQRQLEIMGKEVSGDQIEDMFEQGKWDVFSENLLADVKGRGPPTTRSRAATANCCAWRAAIRDVH
ELFLQMAVLVEKQADTLNVIELNVQKTVDYTGQAKAQVRKAVQYEEKNPCRTLCCFCCPCLK

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FIGURE 2408

AGTTCCCCGACATCAAGTCACGCATTGCCAAGCGGGGGCGCAAGCTGGTGGACTACGACAGTGCCCGGCACCACT
ACGAGTCCCTTCAAACTGCCAAAAAGAAGGATGAAGCCAAAATTGCCAAGCCTGTCTCGCTGCTTGAGAAAGCCG
CCCCCCAGTGGTGCCAAGGCAAACTGCAGGCTCATCTCGTAGCTCAAACTAACCTGCTCCGAAATCAGGCCGAGG
AGGAGCTCATCAAAGCCCAGAAGGTGTTTGAGGAGATGAATGTGGATCTGCAGGAGGAGCTGCCGTCCCTGTGGA
ACAGCCGCGTAGGTTTCTATGTCAACACGTTCCAGAGCATCGCGGGCCTGGAGGAAAACTTCCACAAGGAGATGA
GCAAGCTCAACCAGAACCTCAATGATGTGCTGGTCGGCCTGGAGAAGCAACACGGGAGCAACACCTTCACGGTCA
AGGCCCAGCCCAGTGACAACGCGCCTGCAAAAGGGAACAAGAGCCCTTCGCCTCCAGATGGCTCCCCTGCCGCCA
CCCCCGAGATCAGAGTCAACCACGAGCCAGAGCCGGCCGGCGGGGCCACGCCCGGGGCCACCCTCCCCAAGTCCC
CATCTCAGCTCCGGAAAGGCCCACCAGTCCCTCCGCCTCCCAAACACACCCCGTCCAAGGAAGTCAAGCAGGAGC
AGATCCTCAGCCTGTTTGAGGACACGTTTGTCCCTGAGATCAGCGTGACCACCCCCTCCCAGTTTGAGGCCCCGG
GGCCTTTCTCGGAGCAGGCCAGTCTGCTGGACCTGGACTTTGACCCCCTCCCGCCCGTGACGAGCCCTGTGAAGG
CACCCACGCCCTCTGGTCAGTCAATTCCATGGGACCTCTGGGAGCCCACAGAGAGTCCAGCCGGCAGCCTGCCTT
CCGGGGAGCCCAGCGCTGCCGAGGGCACCTTTGCTGTGTCCTGGCCCAGCCAGACGGCCGAGCCGGGGCCTGCCC
AACCAGCAGAGGCCTCGGAGGTGGCGGGTGGGACCCAACCTGCGGCTGGAGCCCAGGAGCCAGGGGAGACGGCGG
CAAGTGAAGCAGCCTCCAGCTCTCTTCCTGCTGTCGTGGTGGAGACCTTCCCAGCAACTGTGAATGGCACCGTGG
AGGGCGGCAGTGGGGCCGGGCGCTTGGACCTGCCCCCAGGTTTCATGTTCAAGGTACAGGCCCAGCACGACTACA
CGGCCACTGACACAGACGAGCTGCAGCTCAAGGCTGGTGATGTGGTGCTGGTGATCCCCTTCCAGAACCCTGAAG
AGCAGGATGAAGGCTGGCTCATGGGCGTGAAGGAGAGCGACTGGAACCAGCACAAGGAGCTGGAGAAGTGCCGTG
GCGTCTTCCCCGAGAACTTCACTGAGAGGGTCCCATGACGGCGGGGCCCAGGCAGCCTCCGGGCGTGTGAAGAAC
ACCTCCTCCCGAAAAATGTGTGGTTCTTTTTTTTGTTTTGTTTTCGTTTTTCATCTTTTGAAGAGCAAAGGGAAA
TCAAGAGGAGACCCCCAGGCAGAGGGGCGTTCTCCCAAAGATTAGGTCGTTTTCCAAAGAGCCGCGTCCCGGCAA
GTCCGGCGGAATTCACCAGTGTTCCTGAAGCTGCTGTGTCCTCTAGTTGAGTTTCTGGCGCCCCTGCCTGTGCCC
GCATGTGTGCCTGGCCGCAGGGCGGGGCTGGGGGCTGCCGAGCCACCATGCTTGCCTGAAGCTTCGGCCGCGCCA
CCCGGGCAAGGGTCCTCTTTTCCTGGCAGCTGCTGTGGGTGGGGCCCAGACACCAGCCTAGCCTGGCTCTGCCCC
GCAGACGGTCTGTGTGCTGTTTGAAAATAAATCTTAGTGTTCAAAACAAAATGAAACAAAAAAAAAATGAAAAAA
AAAAAAAAAAAAAAAAA

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FIGURE 2409

CGCGCAAGATCTCTCCCCGCGCGAGAGCGGCCCTTGCCACCGGGCGAGGCCTGCGCCGCGATGGCAGAGATGGGC
AGTAAAGGGGTGACGGCGGGAAAGATCGCCAGCAACGTGCAGAAGAAGCTCACCCGCGCGCAGGAGAAGGTTCTC
CAGAAGCTGGGGAAGGCAGATGAGACCAAGGATGAGCAGTTTGAGCAGTGCGTCCAGAATTTCAACAAGCAGCTG
ACGGAGGGCACCCGGCTGCAGAAGGATCTCCGGACCTACCTGGCCTCCGTCAAAGCCATGCACGAGGCTTCCAAG
AAGCTGAATGAGTGTCTGCAGGAGGTGTATGAGCCCGATTGGCCCGGCAGGGATGAGGCAAACAAGATCGCAGAG
AACAACGACCTGCTGTGGATGGATTACCACCAGAAGCTGGTGGACCAGGCGCTGCTGACCATGGACACGTACCTG
GGCCAGTTCCCCGACATCAAGTCACGCATTGCCAAGCGGGGGCGCAAGCTGGTGGACTACGACAGTGCCCGGCAC
CACTACGAGTCCCTTCAAACTGCCAAAAAGAAGGATGAAGCCAAAATTGCCAAGGCCGAGGAGGAGCTCATCAAA
GCCCAGAAGGTGTTTGAGGAGATGAATGTGGATCTGCAGGAGGAGCTGCCGTCCCTGTGGAACAGCCGCGTAGGT
TTCTACGTCAACACGTTCCAGAGCATCGCGGGCCTGGAGGAAAACTTCCACAAGGAGATGAGCAAGCTCAACCAG
AACCTCAATGATGTGCTGGTCGGCCTGGAGAAGCAACACGGGAGCAACACCTTCACGGTCAAGGCCCAGCCCAGA
AAGAAAAGTAAACTGTTTTCGCGGCTGCGCAGAAAGAAGAACAGTGACAACGCGCCTGCAAAAGGGAACAAGAGC
CCTTCGCCTCCAGATGGCTCCCCTGCCGCCACCCCCGAGATCAGAGTCAACCACGAGCCAGAGCCGGCCGGCGGG
GCCACGCCCGGGGCCACCCTCCCCAAGTCCCCATCTCAGCTCCGGAAAGGCCCACCAGTCCCTCCGCCTCCCAAA
CACACCCCGTCCAAGGAAGTCAAGCAGGAGCAGATCCTCAGCCTGTTTGAGGACACGTTTGTCCCTGAGATCAGC
GTGACCACCCCCTCCCAGCCAGCAGAGGCCTCGGAGGTGGCGGGTGGGACCCAACCTGCGGCTGGAGCCCAGGAG
CCAGGGGAGACTTCTGCAAGTGAAGCAGCCTCCAGCTCTCTTCCTGCTGTCGTGGTGGAGACCTTCCCAGCAACT
GTGAATGGCACCGTGGAGGGCGGCAGTGGGGCCGGGCGCTTGGACCTGCCCCCAGGTTTCATGTTCAAGGTACAG
GCCCAGCACGACTACACGGCCACTGACACAGACGAGCTGCAGCTCAAGGCTGGTGATGTGGTGCTGGTGATCCCC
TTCCAGAACCCTGAAGAGCAGGATGAAGGCTGGCTCATGGGCGTGAAGGAGAGCGACTGGAACCAGCACAAGGAG
CTGGAGAAGTGCCGTGGCGTCTTCCCCGAGAACTTCACTGAGAGGGTCCCATGACGGCGGGGCCCAGGCAGCCTC
CGGGCGTGTGAAGAACACCTCCTCCCGAAAAATGTGTGGTTCTTTTTTTTGTTTTGTTTTCGTTTTTCATCTTTT
GAAGAGCAAAGGGAAATCAAGAGGAGACCCCCAGGCAGAGGGGCGTTCTCCCAAAGTTTAGGTCGTTTTCCAAAG
AGCCGCGTCCCGGCAAGTCCGGCGGAATTCACCAGTGTTCCTGAAGCTGCTGTGTCCTCTAGTTGAGTTTCTGGC
GCCCCTGCCTGTGCCCGCATGTGTGCCTGGCCGCAGGGCGGGGCTGGGGGCTGCCGAGCCACCATACTTAACTGA
AGCTTCGGCCGCACCACCCGGGGAAGGGTCCTCTTTTCCTGGCAGCTGCTGTGGGTGGGGCCCAGACACCAGCCT
AGCCTGCTCTGCCCCGCAGACGGTCTGTGTGCTGTTTGAAAATAAATCTTAGTGTTCAAAACAAAATGAAACAAA
AAAAAAAATGATAAAAACTCTCAAAAAAACAA

FIGURE 2410

MAEMGSKGVTAGKIASNVQKKLTRAQEKVLQKLGKADETKDEQFEQCVQNFNKQLTEGTRLQKDLRTYLASVKAM
HEASKKLNECLQEVYEPDWPGRDEANKIAENNDLLWMDYHQKLVDQALLTMDTYLGQFPDIKSRIAKRGRKLVDY
DSARHHYESLQTAKKKDEAKIAKAEEELIKAQKVFEEMNVDLQEELPSLWNSRVGFYVNTFQSIAGLEENFHKEM
SKLNQNLNDVLVGLEKQHGSNTFTVKAQPRKKSKLFSRLRRKKNSDNAPAKGNKSPSPPDGSPAATPEIRVNHEP
EPAGGATPGATLPKSPSQLRKGPPVPPPPKHTPSKEVKQEQILSLFEDTFVPEISVTTPSQPAEASEVAGGTQPA
AGAQEPGETSASEAASSSLPAVVVETFPATVNGTVEGGSGAGRLDLPPGFMFKVQAQHDYTATDTDELQLKAGDV
VLVIPFQNPEEQDEGWLMGVKESDWNQHKELEKCRGVFPENFTERVP

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FIGURE 2411

CTCTATGGTTCGGCGGCTCTAAGCGCTCAGCTCCGCGGTCGTCCTCCAGGTCTGTGCCGCCTCCCTCCGGTCTCG
GTGGCGCGGCACGCGCGGCTCTCTAGGCCTCCTTCAGCTCTGTGGTGACGGTGGCCGAGGTGGAGGGCCGGTCTG
AAGAGTGGCGGGACTGGCTTCACTTCCTCCGCGGTTCCTCGGAGCCGCCTCGCTCCTCTTCAGGGACTTTGCTGA
GAAGGGCTCTCGGGCGTCCAGACCCCACCGCAAAGGTGTTTGGCGATCCGCCGAGAAGTTGTTGGCCCCAGGAGC
ATCCCTCGGGGCCGAATGCGCAGTGGACGATGCCCCTTCTGACCCAACAGATCCAAGACGAGGATGATCAGTACA
GCCTTGTGGCCAGCCTTGACAACGTTAGGAATCTCTCCACTATCTTGAAAGCTATTCATTTCCGAGAACATGCCA
CGTGTTTCGCAACTAAAAATGGTATCAAAGTAACAGTGGAAAATGCAAAGTGTGTGCAAGCAAATGCTTTTATTC
AGGCTGGAATATTTCAGGAGTTTAAAGTTCAGGAAGAGTCTGTTACTTTTCGAATTAATTTAACTGTCCTTTTAG
ACTGTTTATCTATTTTTGGATCAAGTCCTATGCCAGGGACTTTAACTGCACTTCGAATGTGTTACCAAGGTTATG
GTTACCCTTTGATGCTGTTCCTGGAAGAAGGAGGAGTGGTGACAGTCTGCAAAATCAATACACAGGAACCTGAGG
AGACCCTGGACTTTGATTTCTGCAGCACCAATGTTATTAATAAAATTATTCTGCAGTCAGAGGGGCTCCGTGAAG
CATTTTCTGAATTGGATATGACGAGTGAAGTCCTACAAATTACCATGTCTCCTGACAAGCCTTATTTCAGGTTAT
CTACTTTTGGAAATGCAGGAAGTTCCCACCTTGACTATCCCAAAGATTCTGATTTGATGGAAGCATTTCATTGTA
ATCAGACCCAAGTCAACAGATACAAGATTTCCTTACTGAAACCCTCTACAAAGGCATTAGTCCTATCTTGTAAGG
TATCTATTCGGACAGATAACAGAGGCTTCCTTTCATTACAGTATATGATTAGAAATGAAGATGGACAAATATGTT
TTGTGGAATATTACTGCTGCCCTGATGAAGAAGTTCCTGAATCTGAGTCTTGAGTATGACAATTCACTGATATTT
ATGTGTACATTTATGATAGATGAAGTTCTTATTCTGAGTACAGTACTCTTTGTCATTTCATATTGGATTTTCTAT
AGAGAAGAAGCACAATGGGGAAGATAGGAGCAAGGTCATGTACCCTAATAGTTACTATGTTTTGTAAATCCATTT
TGTAGAGGGCATGTAAATAAATGTTTTCCTGTAGTCATAGATTATTCAGGACTGTCCTTTAGTTCTGTCTTTTGA
ACTCATGGGAATAATTGTGAGTCAGCGTAACATTTCAAGAGTCTAAAGGTGGCCGGGTGTGGTGGCTTTAATCCC
AGCACTTTGGGAACCCGAGGTGGGCGGATCACCTGAGGTCAGGAGTTCGAAACCAGCCTGACCAACGTGGAGAAA
CCCCATCTCTACTAAAAATACAAAAAATTAGCCGGACGTGGTGGCACATGCCTGTAATGCCAGCTACTCGGGAGG
CTGAGGCAGGAAAATTGCTTGAACCCGGGAGGCGGAGGTTGTGGTGAGCTGAAATGACGCCATTGCACTCCAGCC
TAGGCAATAAGAGCAAAACTCTGCCTCAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2412

MPLLTQQIQDEDDQYSLVASLDNVRNLSTILKAIHFREHATCFATKNGIKVTVENAKCVQANAFIQAGIFQEFKV
QEESVTFRINLTVLLDCLSIFGSSPMPGTLTALRMCYQGYGYPLMLFLEEGGVVTVCKINTQEPEETLDFDFCST
NVINKIILQSEGLREAFSELDMTSEVLQITMSPDKPYFRLSTFGNAGSSHLDYPKDSDLMEAFHCNQTQVNRYKI
SLLKPSTKALVLSCKVSIRTDNRGFLSLQYMIRNEDGQICFVEYYCCPDEEVPESES

FIGURE 2413

CTGAGGCCCACGCAGGGCCTAGGGTGGGAAGATGGCAGGTGGGGGCGGCGACCTGAGCACCAGGAGGCTGAATGA
ATGTATTTCACCAGTAGCAAATGAGATGAACCATCTTCCTGCACACAGCCACGATTTGCAAAGGATGTTCACGGA
AGACCAGGGTGTAGATGACAGGCTGCTCTATGACATTGTATTCAAGCACTTCAAAAGAAATAAGGTGGAGATTTC
AAATGCAATAAAAAAGACATTTCCATTCCTCGAGGGCCTCCGTGATCGTGATCTCATCACAAATAAAATGTTTGA
AGATTCTCAAGATTCTTGTAGAAACCTGGTCCCTGTACAGAGAGTGGTGTACAATGTTCTTAGTGAACTGGAGAA
GACATTTAACCTGCCAGTTCTGGAAGCACTGTTCAGCGATGTCAACATGCAGGAATACCCCGATTTAATTCACAT
TTATAAAGGCTTTGAAAATGTAATCCATGACAAATTGCCTCTCCAAGAAAGTGAAGAAGAAGAGAGGGAGGAGAG
GTCTGGCCTCCAACTAAGTCTTGAACAAGGAACTGGTGAAAACTCTTTTCGAAGCCTGACTTGGCCACCTTCGGG
TTCCCCATCTCATGCTGGTACAACCCCACCTGAAAATGGACTCTCAGAGCACCCCTGTGAAACAGAACAGATAAA
TGCAAAGAGAAAAGATACAACCAGTGACAAAGATGATTCGCTAGGAAGCCAACAAACAAATGAACAATGTGCTCA
AAAGGCTGAGCCAACAGAGTCCTGCGAACAAATTGCTGTCCAAGTGAATAATGGGGATGCTGGAAGGGAGATGCC
CTGCCCGTTGCCCTGTGATGAAGAAAGCCCAGAGGCAGAGCTACACAACCATGGAATCCAAATTAATTCCTGTTC
TGTGCGACTGGTGGATATAAAAAAGGAAAAGCCATTTTCTAATTCAAAAGTTGAGTGCCAAGCCCAAGCAAGAAC
TCATCATAACCAGGCATCTGACATAATAGTCATCAGCAGTGAGGACTCTGAAGGATCCACTGACGTTGATGAGCC
CTTAGAAGTCTTCATCTCAGCACCGAGAAGTGAGCCTGTGATCAATAATGACAACCCTTTAGAATCAAATGATGA
AAAGGAGGGCCAAGAAGCCACTTGCTCACGACCCCAGATTGTACCAGAGCCCATGGATTTCAGAAAATTATCTAC
ATTCAGAGAAAGTTTTAAGAAAAGAGTGATAGGACAAGACCACGACTTTTCAGAATCCAGTGAGGAGGAGGCGCC
CGCAGAAGCCTCAAGCGGGGCACTGAGAAGCAAGCATGGTGAGAAGGCTCCTATGACTTCTAGAAGTACATCTAC
TTGGAGAATACCCAGCAGGAAGAGACGTTTCAGCAGTAGTGACTTTTCAGACCTGAGTAATGGAGAAGAGCTTCA
GGAAACCTGCAGCTCATCCCTAAGAAGAGGGTCAGGATCACAGCCACAAGAACCTGAAAATAAGAAGTGCTCCTG
TGTCATGTGTTTTCCAAAAGGTGTGCCAAGAAGCCAAGAAGCAAGGACTGAAAGTAGTCAAGCATCTGACATGAT
GGATACCATGGATGTTGAAAACAATTCTACTTTGGAAAAACACAGTGGGAAAAGAAGAAAAAAGAGAAGGCATAG
ATCTAAAGTAAATGGTCTCCAAAGAGGGAGAAAGAAAGACAGACCTAGAAAACATTTAACTCTGAATAACAAAGT
CCAAAAGAAAAGATGGCAACAAAGAGGAAGAAAAGCCAACACTAGACCTTTGAAAAGAAGAAGAAAAAGAGGTCC
AAGAATTCCCAAAGATGAAAATATTAATTTTAAACAATCTGAACTTCCTGTGACCTGTGGTGAGGTGAAGGGCAC
TCTATATAAGGAGCGATTCAAACAAGGAACCTCAAAGAAGTGTATACAGAGTGAGGATAAAAAGTGGTTCACTCC
CAGGGAATTTGAAATTGAAGGAGACCGCGGAGCATCCAAGAACTGGAAGCTAAGTATACGCTGCGGTGGATATAC
CCTGAAAGTCCTGATGGAGAACAAATTTCTGCCAGAACCACCAAGCACAAGAAAAAAGAGAATACTGGAATCTCA
CAACAATACCTTAGTTGACCCTTGTGAGGAGCATAAGAAGAAGAACCCAGATGCTTCAGTCAAGTTCTCAGAGTT
TTTAAAGAAGTGCTCAGAGACATGGAAGACCATTTTTGCTAAAGAGAAAGGAAAATTTGAAGATATGGCAAAGGC
GGACAAGGCCCATTATGAAAGAGAAATGAAAACCTATATCCCTCCTAAAGGGGAGAAAAAAAAGAAGTTCAAGGA
TCCCAATGCACCCAAGAGGCCTCCTTTGGCCTTTTTCCTGTTCTGCTCTGAGTATCGCCCAAAAATCAAAGGAGA
ACATCCTGGCCTGTCCATTGATGATGTTGTGAAGAAACTGGCAGGGATGTGGAATAACACCGCTGCAGCTGACAA
GCAGTTTTATGAAAAGAAGGCTGCAAAGCTGAAGGAAAAATACAAAAAGGATATTGCTGCATATCGAGCTAAAGG
AAAGCCTAATTCAGCAAAAAAGAGAGTTGTCAAGGCTGAAAAAAGCAAGAAAAAGAAGGAAGAGGAAGAAGATGA
AGAGGATGAACAAGAGGAGGAAAATGAAGAAGATGATGATAAATAAGTTGCTTCTAGTGCAGTTTTTTTCTTGTC
TATAAAGCATTTAAGCTGCCTGTACACAACTCACTCCTTTTAAAGAAAAAAACTTCAACGTAAGACTGTGTAAGA
TTTGTTTTTAAACCGTACACTGTGTTTTTTTGTATAGTTAACCACTACCGAATGTGTCTTCAGATAGCCCTGTCC
TGGTGGTATTTAGCCACTAACCTTTGCCTGGTACAGTATGGGGGTTGTAAATTGGCATGGAAATTTAAAGCAGGT
TCTTGTTAGTGCACAGCACAAATTAGTTGTATAGGAGGATGGTAGTTTTTTCACCTTCAGTTGTCTCTGATGTAG
CTTATACAAAACATTTGTTGTTCTGTTAACTGAATGCCACTCTGTAATTGCAAAAAAAAAAAAACAGTTGCAGCTG
TTTTGTTGACATTCTGAATGCTTCTAAGTAAATACAATTTTTAAAAAACCGTATGAGGGAACTGTGTAGACAAGG
TACCAGGTCAGTCTTCTTCCATGTTCTATTAGCTCCACAAAGCCAATCTCAATCCCTCAAAACAATCTTGTCATA
CTTGAAAATATGACACTCTAGTCAAAGCCTTGGTAAAATAATCAGTGTTTCCAATCTGTCCTGTTACAAAAGAAA
CAGATTATTATTGAACTTATGCAAATAACCATTGTCATAAGAATGTTTATGAATAGTTTCCAAATTATGGCAAAT
TCATGTAGAGAGAGAAAAGTAACTGTTTTGGTTTTGCTCACAAAAGTCTACTTTACCTAAGGGCTGTCAGATATA
AGTAACTTAAAAGAAAGAGAAGTTTTCTTGACTTTTGAAAACAAAATATGAAAAGAATCGGCAATGTTTCAAACA
AAAAGTCATAAAAGTCACTTTATTCCTCCATCAAAAAAAAAAAAAAAAAAAAA

FIGURE 2414

MAGGGGDLSTRRLNECISPVANEMNHLPAHSHDLQRMFTEDQGVDDRLLYDIVFKHFKRNKVEISNAIKKTFPFL
EGLRDRDLITNKMFEDSQDSCRNLVPVQRVVYNVLSELEKTFNLPVLEALFSDVNMQEYPDLIHIYKGFENVIHD
KLPLQESEEEEREERSGLQLSLEQGTGENSFRSLTWPPSGSPSHAGTTPPENGLSEHPCETEQINAKRKDTTSDK
DDSLGSQQTNEQCAQKAEPTESCEQIAVQVNNGDAGREMPCPLPCDEESPEAELHNHGIQINSCSVRLVDIKKEK
PFSNSKVECQAQARTHHNQASDIIVISSEDSEGSTDVDEPLEVFISAPRSEPVINNDNPLESNDEKEGQEATCSR
PQIVPEPMDFRKLSTFRESFKKRVIGQDHDFSESSEEEAPAEASSGALRSKHGEKAPMTSRSTSTWRIPSRKRRF
SSSDFSDLSNGEELQETCSSSLRRGSGSQPQEPENKKCSCVMCFPKGVPRSQEARTESSQASDMMDTMDVENNST
LEKHSGKRRKKRRHRSKVNGLQRGRKKDRPRKHLTLNNKVQKKRWQQRGRKANTRPLKRRRKRGPRIPKDENINF
KQSELPVTCGEVKGTLYKERFKQGTSKKCIQSEDKKWFTPREFEIEGDRGASKNWKLSIRCGGYTLKVLMENKFL
PEPPSTRKKRILESHNNTLVDPCEEHKKKNPDASVKFSEFLKKCSETWKTIFAKEKGKFEDMAKADKAHYEREMK
TYIPPKGEKKKKFKDPNAPKRPPLAFFLFCSEYRPKIKGEHPGLSIDDVVKKLAGMWNNTAAADKQFYEKKAAKL
KEKYKKDIAAYRAKGKPNSAKKRVVKAEKSKKKKEEEEDEEDEQEEENEEDDDK

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FIGURE 2415

GCTGGAGGATGTGGCTGCAGAGCCTGCTGCTCTTGGGCACTGTGGCCTGCAGCATCTCTGCACCCGCCCGCTCGC
CCAGCCCCAGCACGCAGCCCTGGGAGCATGTGAATGCCATCCAGGAGGCCCGGCGTCTCCTGAACCTGAGTAGAG
ACACTGCTGCTGAGATGAATGAAACAGTAGAAGTCATCTCAGAAATGTTTGACCTCCAGGAGCCGACCTGCCTAC
AGACCCGCCTGGAGCTGTACAAGCAGGGCCTGCGGGGCAGCCTCACCAAGCTCAAGGGCCCCTTGACCATGATGG
CCAGCCACTACAAGCAGCACTGCCCTCCAACCCCGGAAACTTCCTGTGCAACCCAGACTATCACCTTTGAAAGTT
TCAAAGAGAACCTGAAGGACTTTCTGCTTGTCATCCCCTTTGACTGCTGGGAGCCAGTCCAGGAGTGAGACCGGC
CAGATGAGGCTGGCCAAGCCGGGGAGCTGCTCTCTCATGAAACAAGAGCTAGAAACTCAGGATGGTCATCTTGGA
GGGACCAAGGGGTGGGCCACAGCCATGGTGGGAGTGGCCTGGACCTGCCCTGGGCCACACTGACCCTGATACAGG
CATGGCAGAAGAATGGGAATATTTTATACTGACAGAAATCAGTAATATTTATATATTTATATTTTTAAAATATTT
ATTTATTTATTTATTTAAGTTCATATTCCATATTTATTCAAGATGTTTTACCGTAATAATTATTATTAAAAATAT
GCTTCT

FIGURE 2416

MWLQSLLLLGTVACSISAPARSPSPSTQPWEHVNAIQEARRLLNLSRDTAAEMNETVEVISEMFDLQEPTCLQTR
LELYKQGLRGSLTKLKGPLTMMASHYKQHCPPTPETSCATQTITFESFKENLKDFLLVIPFDCWEPVQE

FIGURE 2417

ACTTGCGACAAGGTGGACTTGGGAGGAAAGCCGTCTGCCAAAGCCTGAAGCCTCCAAGCCATAAACAACCCCAATG
GCCTCCCACGAAGTTGATAATGCAGAGCTGGGGTCAGCCTCTGCCCATGGTACCCCAGGCAGTGAGGCGGGACC
AGAAGAGCTGAATACTTCTGTCTACCAGCCCATAGATGGATCACCAGATTATCAGAAAGCAAAATTACAAGTTCT
TGGGGCCATCCAGATCCTGAATGCAGCAATGATTCTGGCTTTGGGTGTCTTTCTGGGTTCCTTGCAATACCCATA
CCACTTCCAAAAGCACTTCTTTTTCTTCACCTTCTACACAGGCTACCCGATTTGGGGTGCTGTGTTTTTCTGTAG
TTCAGGAACCTTGTCTGTTGTAGCAGGGATAAAACCCACAAGAACATGGATACAGAACAGTTTTGGAATGAACAT
TGCCAGTGCTACAATTGCACTAGTGGGGACTGCTTTTCTCTCACTAAATATAGCAGTTAATATCCAGTCATTAAG
GAGTTGTCACTCTTCATCAGAGTCACCGGACCTATGCAATTACATGGGCTCCATATCAAATGGCATGGTGTCTCT
ACTGCTGATTCTCACCTTGCTGGAATTATGCGTAACCATCTCTACCATAGCCATGTGGTGCAATGCAAACTGCTG
TAATTCAAGAGAGGAAATTTCCTCACCTCCCAATTCTGTGTAATCAAGAATACCTCCTTAATTCTGAGAGCATGA
ATATTTGACCTTAAATCTCCAGTGACTCAGAGCTTCACCCACAAACTCAGGAGAACATAAGCCTGCTCGTAAAGC
TCAATCCTTCTATCATGGCACCAATCACAAGAACCTTGGACGTTTGACTGACTCTATCCTTTCTCTCCTAACTAT
AAATCCTATTTGTGTGTCGTGGGTATGGAAGGACAGATATATTTCTTTAGGCATTCTTGGATATCTGTAACTTCT
ATGATCATTACTCCAAAGTTGTTTCCAGAAATTGGTTCTATTTCTTCTTATCCACCTACTCCATTGCTTTATGAG
GTTTAAGGAAGGAAGGCGGTATAATCCCTATTCAATATATTTTTTCTAAAATCCAACTTCTGACCGCCCAGTAGG
AAGAAAAATGAGACATTTTTTCCATTACAGAGAAATGCTTCTTGACTTTAACATCAGCATTATAAAAAGTGTCAA
ATAAAAAATTACCATCATTATCATTAAAATAAATTTTCACTGTATTTGAGATGGGAGGGTTAAGGCTCAGGGATT
TTATTTCAGTGAACTGCTGGAACTCACACATGCCCTGATATGTAAATGATGATTTATGTTGGCGAGTCTGAGAGC
AAGCCCAAATGTGTTCTTCAAAGGACAATGGGAAACTGTAAAGTAGAGAACTAAAGAATAAGGCCTTTAGAATCT
GACACATCTGGGTTCAAATTCTGAAACTGTCACTTATTACCTGTATGAACATGGGCAAATTATCTAATCTCTCTG
ATCTATTTTTCCTCATCTGTAAAATAGGTGTAATAATAACAACTACTTTGTCGGTTGCTCTGAGGGTTAAATGAA
AATAAAAAGAAAATGTGAAACAACAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2418

MASHEVDNAELGSASAHGTPGSEAGPEELNTSVYQPIDGSPDYQKAKLQVLGAIQILNAAMILALGVFLGSLQYP
YHFQKHFFFFTFYTGYPIWGAVFFCSSGTLSVVAGIKPTRTWIQNSFGMNIASATIALVGTAFLSLNIAVNIQSL
RSCHSSSESPDLCNYMGSISNGMVSLLLILTLLELCVTISTIAMWCNANCCNSREEISSPPNSV

FIGURE 2419A

CGAAGGGGGGTGGGCCGGGGGAGGGGAGGTTCGTTCCGCGGAGCGCAGCCAGAACCGGGACCAAGAATCGCCTTC
AGCCCTGTCTGGTGCATCCTTGGCAGAAAGTGAGGAGGAAAACACCCCCATTGTTAGATGAGGTCTTAATCATGG
AACATTTGAAGTCACGTAAAGAAGGTTCTTTGGC**ATG**GACACAAGTTCAGTGGGAGGATTAGAATTGACTGATCA
GACTCCTGTTTTATTAGGGAGTACGGCCATGGCAACTAGTCTCACGAATGTAGGAAACTCATTTAGTGGTCCAGC
TAATCCTTTAGTGTCTAGATCTAATAAGTTTCAGAACTCGTCAGTGGAAGATGATGATGATGTTGTTTTTATCGA
ACCTGTACAACCTCCCCCACCTTCTGTACCAGTGGTAGCTGATCAAAGAACCATAACATTTACATCATCAAAAAA
TGAAGAACTACAAGGAAATGATTCCAAAATTACTCCTTCCTCAAAAGAGTTGGCATCTCAGAAGGGAAGTGTAAG
TGAGACAATTGTCATTGATGATGAAGAGGACATGGAAACAAATCAAGGGCAAGAGAAAAATTCCTCCAATTTTAT
TGAACGAAGACCTCCTGAGACTAAAAACAGAACCAATGATGTGGATTTCTCCACTTCCAGTTTTTCAAGAAGTAA
GGTAAATGCAGGAATGGGTAATAGTGGTATCACCACAGAACCAGACTCTGAAATTCAGATTGCTAATGTTACAAC
TTTAGAAACAGGTGTAAGCTCTGTGAATGATGGCCAATTAGAAAATACTGACGGGCGAGATATGAACTTAATGAT
TACACATGTAACATCACTGCAGAATACCAACTTGGGAGATGTCTCTAACGGACTGCAGTCAAGTAATTTTGGTGT
TAATATACAAACATACACCCCATCTTTAACTTCACAGACCAAGACTGGAGTAGGACCTTTTAATCCTGGTAGAAT
GAATGTGGCAGGAGACGTTTTTCAGAATGGAGAATCTGCAACTCATCATAATCCTGATTCTTGGATCTCCCAGTC
AGCTTCATTTCCCCGTAATCAGAAACAACCAGGGGTGGACTCTTTATCACCAGTGGCCTCACTTCCTAAACAGAT
TTTCCAGCCGTCTGTCCAACAGCAGCCTACTAAACCAGTTAAAGTCACTTGTGCAAACTGCAAAAAACCTTTACA
GAAGGGCCAGACAGCTTATCAACGAAAAGGATCAGCTCACCTCTTTTGTTCTACCACCTGCCTTTCTTCCTTCTC
CCACAAGCCTGCTCCAAAGAAACTCTGTGTTATGTGTAAAAAAGATATAACTACAATGAAAGGAACCATTGTTGC
TCAAGTGGATTCAAGTGAGTCCTTCCAGGAATTCTGTAGTACATCTTGTTTATCTCTCTATGAAGACAAACAGAA
TCCTACTAAAGGAGCTCTAAATAAATCAAGATGTACAATCTGTGGTAAACTAACTGAGATTCGCCATGAAGTCAG
CTTTAAAAATATGACTCATAAGCTGTGCAGTGACCACTGCTTTAATAGATATAGAATGGCCAATGGTTTAATAAT
GAATTGCTGTGAACAGTGTGGAGAGTACTTGCCCAGTAAAGGTGCTGGAAATAATGTTCTGGTGATTGATGGTCA
ACAGAAAAGATTTTGCTGTCAAAGTTGTGTCAGTGAATACAAACAGGTAGGTAGCCATCCAAGCTTCCTGAAGGA
GGTTCGAGATCACATGCAGGACTCTTTCTTAATGCAGCCTGAGAAATATGGAAAACTGACAACTTGTACTGGTTG
CCGAACACAGTGCAGGTTTTTTGATATGACTCAGTGTATAGGTCCTAATGGATATATGGAGCCATATTGTTCAAC
TGCTTGTATGAACAGTCACAAGACAAAATATGCAAAATCACAAAGTTTGGGAATTATTTGCCATTTTTGTAAGCG
AAACTCTTTACCTCAATACCAAGCCACAATGCCTGATGGAAAACTGTACAACTTTTGCAATTCCAGTTGTGTGGC
TAAATTTCAGGCTCTAAGTATGCAGTCATCTCCAAATGGCCAGTTTGTAGCGCCAAGTGATATTCAGTTGAAATG
CAACTACTGCAAAAATTCCTTTTGTTCAAAACCAGAAATCCTGGAATGGGAGAACAAAGTGCATCAGTTCTGCAG
CAAAACTTGTTCAGATGACTATAAGAAGTTGCATTGCATAGTTACATATTGCGAATACTGTCAAGAGGAGAAGAC
TCTTCATGAAACAGTAAATTTCTCTGGCGTTAAGAGACCTTTCTGTAGTGAAGGCTGCAAATTATTATACAAACA
GGATTTTGCCAGACGTTTAGGATTGAGATGTGTTACTTGCAACTATTGTTCTCAGCTATGTAAGAAGGGAGCAAC
TAAAGAACTCGATGGTGTTGTGAGAGATTTCTGCAGTGAAGATTGCTGTAAAAAATTTCAGGATTGGTACTACAA
GGCTGCAAGGTGTGACTGTTGTAAATCTCAAGGAACTCTTAAAGAGCGAGTTCAGTGGCGTGGGGAAATGAAACA
TTTCTGTGATCAACATTGCTTACTGCGTTTCTACTGTCAACAAAATGAGCCCAACATGACAACTCAGAAAGGACC
TGAAAACTTACATTATGATCAGGGTTGTCAGACATCTCGAACCAAAATGACAGGTTCAGCACCACCCCCTTCTCC
AACACCTAACAAAGAGATGAAGAACAAAGCAGTTCTTTGCAAACCTTTAACAATGACAAAAGCTACTTACTGTAA
ACCTCACATGCAGACCAAATCTTGTCAGACAGATGATACTTGGAGGACAGAATATGTTCCAGTGCCTATCCCTGT
GCCTGTGTATATCCCAGTTCCTATGCACATGTACAGTCAGAATATTCCTGTTCCTACTACAGTTCCTGTTCCTGT
GCCAGTTCCTGTTTTTCTGCCTGCTCCATTGGACAGCAGTGAGAAGATTCCTGCAGCAATTGAGGAGCTAAAAAG
CAAGGTTTCTTCAGATGCTCTTGATACAGAGTTGCTTACAATGACGGATATGATGAGTGAAGACGAGGGGAAAAC
AGAGACAACCAACATCAACAGTGTAATTATTGAAACAGATATAATTGGTTCAGACCTTTTGAAGAACTCTGACCC
AGAGACACAGTCCAGCATGCCTGATGTACCATATGAACCAGATTTGGATATCGAAATAGATTTTCCCAGAGCTGC
TGAGGAGCTTGATATGGAAAATGAATTTTTATTACCACCTGTTTTTGGCGAAGAATATGAGGAACAGCCCAGACC
TCGATCTAAAAAAAAGGGAGCCAAGAGAAAGGCTGTATCAGGATACCAGTCTCATGATGATAGTTCTGACAATTC
AGAATGCAGCTTTCCTTTCAAATATACGTATGGCGTAAATGCATGGAAACACTGGGTCAAAACTAGGCAACTTGA
TGAAGATCTTCTGGTATTAGATGAGTTAAAATCTTCTAAATCAGTAAAGTTAAAAGAGGATCTACTCTCTCACAC
CACAGCTGAGCTTAACTATGGGTTAGCTCATTTTGTCAATGAGATCCGACGGCCAAATGGAGAGAATTATGCACC

FIGURE 2419B

TGACAGCATCTATTACCTTTGCCTTGGAATACAGGAGTATTTGTGTGGAAGTAATCGAAAAGACAACATATTTAT
TGATCCTGGATACCAAACATTTGAGCAAGAATTGAATAAAATACTGCGAAGCTGGCAACCAAGCATACTTCCAGA
TGGGTCAATATTCTCTCGAGTTGAAGAAGACTATCTCTGGAGGATAAAACAACTAGGATCACACTCTCCAGTAGC
TCTTCTGAATACACTGTTCTACTTTAACACTAAGTATTTTGGCCTGAAAACAGTGGAACAACACTTAAGACTTTC
CTTTGGCACTGTGTTTAGGCATTGGAAAAAAAATCCTTTAACGATGGAAAACAAAGCGTGTCTTCGATACCAAGT
GTCTTCCTTGTGTGGAACAGATAATGAAGATAAAATTACTACTGGAAAAAGAAAACATGAAGATGATGAGCCAGT
ATTTGAACAAATTGAAAACACAGCCAATCCTTCCAGATGTCCTGTGAAAATGTTTGAATGCTACTTGTCTAAAAG
TCCACAGAATCTTAATCAGAGGATGGATGTTTTTTATTTGCAACCAGAATGCTCTAGTTCTACAGATAGCCCTGT
CTGGTATACGTCTACTTCACTGGACCGAAACACCTTGGAAAATATGCTTGTACGGGTTCTTCTAGTAAAAGATAT
TTATGATAAAGACAATTATGAACTGGATGAAGACACAGACTAAAAAAGGAACGTTGCAGAAGCAATCGGGATAAAA
CAGCATTAGATAGTCATGCTGCTAGATCTTTATTATGGAAAACATTTCAAGTTTACTCCTTCTGTTTTGAGTTTT
GTAGCAGTGTACCCACGCTGGGTATTACCATGTAAATAATCTGTGAGTGAAAGTTGCCATTATTCTATGTAGTGG
TTTTAGGATACTTAACAAATACATTCAAATTCTTTTTTTATTATTATTTATTTGATTAGGTATGTTTGTAACTTT
TTACATTACAGAATATGAATGAGAATGTGCCATGTATAATTTTTTTCTTGTAGTAAGAAACATCCATATTGCACA
ACTCTACTGTTGCAAAGCTTCCTTGGAAGGGGGCTCTTTTACTGGGTTCTTAACCAGATGGTTGTGTATGGGTAG
CACTACTAAAAGTTTAGAACTTGCAGTGTCTTTCGGAATTTTTAAAATAAACTGTAAACTAATAGGCTGGGGTTT
TTGTTTTGTTTTGGGGTTTTGTTTTGTTTGGTTTTACATTTTAGTTACTGAAGCCTTACAAGGTTATGTAGAGAG
ATACCATCTTCTGTACCAAAAATAGACAAGAGAATGCTGTCAATATTGGTGTACTGTAATGTGAATCTATGCTGG
TGAAAACAATTTTTTGTTCCCCTTATTAAAACCTTAGTGTCCTTTTCTCATTTGTGGCTTTCTGCATCACCCAAT
CAATAAAAAACAAATATATATATGT

FIGURE 2420

MDTSSVGGLELTDQTPVLLGSTAMATSLTNVGNSFSGPANPLVSRSNKFQNSSVEDDDDVVFIEPVQPPPPSVPV
VADQRTITFTSSKNEELQGNDSKITPSSKELASQKGSVSETIVIDDEEDMETNQGQEKNSSNFIERRPPETKNRT
NDVDFSTSSFSRSKVNAGMGNSGITTEPDSEIQIANVTTLETGVSSVNDGQLENTDGRDMNLMITHVTSLQNTNL
GDVSNGLQSSNFGVNIQTYTPSLTSQTKTGVGPFNPGRMNVAGDVFQNGESATHHNPDSWISQSASFPRNQKQPG
VDSLSPVASLPKQIFQPSVQQQPTKPVKVTCANCKKPLQKGQTAYQRKGSAHLFCSTTCLSSFSHKPAPKKLCVM
CKKDITTMKGTIVAQVDSSESFQEFCSTSCLSLYEDKQNPTKGALNKSRCTICGKLTEIRHEVSFKNMTHKLCSD
HCFNRYRMANGLIMNCCEQCGEYLPSKGAGNNVLVIDGQQKRFCCQSCVSEYKQVGSHPSFLKEVRDHMQDSFLM
QPEKYGKLTTCTGCRTQCRFFDMTQCIGPNGYMEPYCSTACMNSHKTKYAKSQSLGIICHFCKRNSLPQYQATMP
DGKLYNFCNSSCVAKFQALSMQSSPNGQFVAPSDIQLKCNYCKNSFCSKPEILEWENKVHQFCSKTCSDDYKKLH
CIVTYCEYCQEEKTLHETVNFSGVKRPFCSEGCKLLYKQDFARRLGLRCVTCNYCSQLCKKGATKELDGVVRDFC
SEDCCKKFQDWYYKAARCDCCKSQGTLKERVQWRGEMKHFCDQHCLLRFYCQQNEPNMTTQKGPENLHYDQGCQT
SRTKMTGSAPPPSPTPNKEMKNKAVLCKPLTMTKATYCKPHMQTKSCQTDDTWRTEYVPVPIPVPVYIPVPMHMY
SQNIPVPTTVPVPVPVPVFLPAPLDSSEKIPAAIEELKSKVSSDALDTELLTMTDMMSEDEGKTETTNINSVIIE
TDIIGSDLLKNSDPETQSSMPDVPYEPDLDIEIDFPRAAEELDMENEFLLPPVFGEEYEEQPRPRSKKKGAKRKA
VSGYQSHDDSSDNSECSFPPFKYTYGVNAWKHWVKTRQLDEDLLVLDELKSSKSVKLKEDLLSHTTAELNYGLAHF
VNEIRRPNGENYAPDSIYYLCLGIQEYLCGSNRKDNIFIDPGYQTFEQELNKILRSWQPSILPDGSIFSRVEEDY
LWRIKQLGSHSPVALLNTLFYFNTKYFGLKTVEQHLRLSFGTVFRHWKKNPLTMENKACLRYQVSSLCGTDNEDK
ITTGKRKHEDDEPVFEQIENTANPSRCPVKMFECYLSKSPQNLNQRMDVFYLQPECSSSTDSPVWYTSTSLDRNT
LENMLVRVLLVKDIYDKDNYELDEDTD

FIGURE 2421

GGGGAGATCTTAGCTGAAGATGACTGACAGTGTTATTTATTCCATGTTAGAGTTGCCTACGGCAACCCAAGCCCA
GAATGACTATGGACCACAGCAAAAATCTTCCTCTTCCAGGCCTTCTTGTTCTTGCCTTGTGGCAATAGCTTTGGG
GCTTCTGACTGCAGTTCTTCTGAGTGTGCTGCTATACCAGTGGATCCTGTGCCAGGGCTCCAACTACTCCACTTG
TGCCAGCTGTCCTAGCTGCCCAGACCGCTGGATGAAATATGGTAACCATTGTTATTATTTCTCAGTGGAGGAAAA
GGACTGGAATTCTAGTCTGGAATTCTGCCTAGCCAGAGACTCACACCTCCTTGTGATAACGGACAATCAGGAAAT
GAGCCTGCTCCAAGTTTTCCTCAGTGAGGCCTTTTGCTGGATTGGTCTGAGGAACAATTCTGGCTGGAGGTGGGA
AGATGGATCACCTCTAAACTTCTCAAGGATTTCTTCTAATAGCTTTGTGCAGACATGCGGTGCCATCAACAAAAA
TGGTCTTCAAGCCTCAAGCTGTGAAGTTCCTTTACACTGGGTGTGTAAGAAGTGTCCCTTTGCAGATCAAGCTTT
ATTCTGAAGAATAAACCTAGCTGGCATGCTGGTGTGTACCTGTAGTCCTAGCTATTTGGGAAGCTGAGGTGGGAG
GGTCGCTTGAGCCCAGGAGTTTGAGGCTGCAGTGAGCTATGATTGTGCCACTGTACTCCAGCCTGGGAGATAGAG
CAAGACTCCATCTCTAAAAAAAAAAAAAAAATGCTAATGTGAGAATATAAATTGTGGGAAATGAGTGAGGGCAAGG
TGGTACTTCCTCCTTCTGAGCTCTTCACACGTAATGCAAAAACCCGGTCTTAACTGATTTTGTTTTTTTTCTGAG
TATGCATATATGTGGTTGAATGAACCAATGTGTGATTGTATCTTTTCCATTATGTGACTGTTTGACCTGCATATT
AATTTCAAGATAGCAGTCAATTCGATAAGGCATTTTCATAGAGGAAAGTTTACAGAAACAGTTTATGTGGTTGGA
TCACCAAATTATCTTAGGTACTAAGGCCTCAAAAATAAGAAAAACTTTATTATTTCTCCTCAGTAGAGTTTGGAC
ATACATAAGGAGAGAAGGTACAGTGATGAAGGAGACCATAATTCTGTAGTGTTGATGATCCTGGATTATAATCTT
TTTCTCTTTATCTTTCATAGTTTTTTTAAAAACATGGACTGTATCTTATCTACCACTATATCCCAAATACCTAAG
ATAGTGCTTACGTTCAGTGACTATTAAATAAATAAATGGATGAATTAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2422

MTDSVIYSMLELPTATQAQNDYGPQQKSSSSRPSCSCLVAIALGLLTAVLLSVLLYQWILCQGSNYSTCASCPSC
PDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMSLLQVFLSEAFCWIGLRNNSGWRWEDGSPLN
FSRISSNSFVQTCGAINKNGLQASSCEVPLHWVCKKCPFADQALF

FIGURE 2423

CGCTGGCCAATCGGTTGAGAGCTGAGCTGGACTTGGCGGTGGGAGCCGGAGCCTGCTTGTTGCAGCTGTGGGTGA
GGACGGCTCTAGCTAGTTCCCTTTTAGACTATGGCGACATACCTGGAGTTCATCCAGCAGAATGAAGAACGGGAT
GGTGTGCGTTTTAGTTGGAACGTGTGGCCTTCCAGCCGGCTGGAGGCTACAAGAATGGTTGTACCCCTGGCTTGT
CTCCTTACTCCTTTGAAAGAACGTCCAGACCTACCTCCTGTACAATATGAACCTGTGCTTTGCAGCAGGCCAACT
TGTAAAGCTGTTCTCAACCCACTTTGTCAGGTTGATTATCGAGCAAAACTTTGGGCCTGTAATTTCTGTTTTCAA
AGAAATCAGTTTCCTCCAGCTTATGGAGGCATATCTGAGGTGAATCAACCTGCCGAATTGATGCCCCAGTTTTCT
ACAATTGAGTACGTGATACAGCGAGGTGCTCAGTCCCCTCTGATCTTTCTCTATGTGGTTGACACATGCCTGGAG
GAAGATGACCTTCAAGCACTCAAAGAGTCCCTGCAGATGTCCCTGAGTCTTCTTCCTCCAGATGCTCTGGTGGGT
CTGATCACATTTGGAAGGATGGTGCAGGTTCATGAGCTAAGCTGTGAAGGAATCTCCAAAAGTTATGTCTTCCGA
GGGACCAAGGATTTAACTGCAAAGCAAATACAGGATATGTTGGGCCTGACCAAGCCAGCCATGCCCATGCAGCAA
GCACGACCTGCACAACCACAGGAGCACCCTTTTGCTTCAAGCAGATTTCTGCAGCCTGTTCACAAGATTGATATG
AACCTCACTGATCTTCTTGGGGAGCTACAGAGGGACCCATGGCCAGTAACTCAGGGGAAGAGACCTTTGCGATCC
ACTGGTGTGGCTTTGTCCATTGCTGTTGGCTTGCTGGAGGGCACTTTTCCAAACACAGGAGCCAGGATCATGCTG
TTTACTGGAGGTCCCCCTACCCAAGGGCCTGGCATGGTGGTTGGAGATGAATTAAAGATTCCTATTCGTTCTTGG
CATGATATTGAGAAAGATAATGCACGATTCATGAAAAAGGCAACCAAGCACTATGAGATGCTTGCTAATCGAACA
GCTGCAAATGGTCACTGCATTGATATTTATGCTTGTGCCCTTGATCAAACTGGACTTTTGGAGATGAAGTGTTGT
GCAAATCTTACTGGAGGCTACATGGTAATGGGAGATTCTTTCAACACTTCTCTCTTCAAGCAGACATTCCAAAGA
ATCTTTACTAAAGATTTTAATGGAGATTTCCGAATGGCATTTGGTGCTACTTTGGACGTAAAGACCTCTCGGGAA
CTGAAGATTGCAGGAGCCATTGGTCCATGCGTATCTCTGAATGTGAAAGGACCGTGTGTGTCAGAAAATGAGCTT
GGTGTTGGTGGCACGAGTCAGTGGAAAATCTGTGGCCTAGATCCTACATCTACACTTGGCATCTATTTTGAAGTT
GTCAATCAGCACAACACCCCGATCCCCCAAGGAGGCAGAGGAGCCATCCAGTTTGTCACGCATTATCAGCACTCC
AGCACCCAGAGACGCATCCGCGTGACCACCATCGCCCGAAATTGGGCAGATGTACAGAGTCAGCTCAGGCACATA
GAAGCAGCATTTGACCAGGAGGCTGCGGCAGTGTTGATGGCACGGCTTGGGGTGTTCCGAGCGGAGTCAGAGGAG
GGGCCCGATGTGCTCCGGTGGCTGGACCGACAACTCATCCGACTGTGTCAAAAGTTTGGACAGTATAACAAAGAA
GACCCCACTTCTTTTAGGTTATCAGATTCCTTTTCTCTATATCCTCAGTTTATGTTCCATCTGAGAAGATCTCCA
TTTCTTCAAGTGTTTAACAACAGTCCTGATGAGTCGTCATATTACAGACATCATTTTGCCCGGCAGGACCTGACC
CAGTCCCTCATCATGATCCAGCCCATTCTCTACTCTTACTCCTTTCATGGGCCACCAGAGCCAGTACTCTTGGAT
AGCAGCAGCATTCTAGCTGACAGAATTTTGCTGATGGATACTTTCTTTCAAATTGTCATTTATCTTGGTGAGACC
ATAGCCCAGTGGCGTAAAGCTGGCTACCAGGACATGCCCGAGTATGAAAACTTCAAGCACCTTCTGCAGGCACCA
CTGGATGATGCTCAAGAAATTCTGCAAGCACGCTTCCCGATGCCACGTTACATCAACACGGAGCATGGAGGCAGT
CAGGCTCGATTCCTTTTGTCCAAAGTGAACCCATCTCAGACACACAATAACCTGTATGCTTGGGGACAGGAAACT
GGAGCACCCATCCTAACTGATGATGTTAGCCTGCAGGTGTTCATGGACCATTTGAAGAAGCTGGCTGTCTCCAGT
GCCTGTTAAGCTGAGGATACAACCAGGAAATGCAACGGTGTCAGATTGTGTTCAAAATGTCTAGAAAGGCTTGAT
AACATTCCTGTTACTTTTCTAGCAGATTTTAACAAATAATCAAGGACATTTTATATGTAACTCTTTAGATTATAA
TTTATTTGTATTCCTGTCTTTGTCCTTTTTCTTGCACTATAAAATTATAAGGTCATAAATGTTTTGGTACTTGTA
GATGTTTATGTGCTTTTTGTATCCTAACTTTTAGAATCTAAATAAAATCAGAGGTAATGTATTTTGGCAGCTTGT
TTAGGTGAGAATCTTAATGATCATAAAAGGAAATAAATCTAGATGCAGAAAGTACTGGCTAAAATATTGCTAATA
CAAATGTGATTTCCTGAAAAAAAAAAAAAAA

FIGURE 2424

MATYLEFIQQNEERDGVRFSWNVWPSSRLEATRMVVPLACLLTPLKERPDLPPVQYEPVLCSRPTCKAVLNPLCQ
VDYRAKLWACNFCFQRNQFPPAYGGISEVNQPAELMPQFSTIEYVIQRGAQSPLIFLYVVDTCLEEDDLQALKES
LQMSLSLLPPDALVGLITFGRMVQVHELSCEGISKSYVFRGTKDLTAKQIQDMLGLTKPAMPMQQARPAQPQEHP
FASSRFLQPVHKIDMNLTDLLGELQRDPWPVTQGKRPLRSTGVALSIAVGLLEGTFPNTGARIMLFTGGPPTQGP
GMVVGDELKIPIRSWHDIEKDNARFMKKATKHYEMLANRTAANGHCIDIYACALDQTGLLEMKCCANLTGGYMVM
GDSFNTSLFKQTFQRIFTKDFNGDFRMAFGATLDVKTSRELKIAGAIGPCVSLNVKGPCVSENELGVGGTSQWKI
CGLDPTSTLGIYFEVVNQHNTPIPQGGRGAIQFVTHYQHSSTQRRIRVTTIARNWADVQSQLRHIEAAFDQEAAA
VLMARLGVFRAESEEGPDVLRWLDRQLIRLCQKFGQYNKEDPTSFRLSDSFSLYPQFMFHLRRSPFLQVFNNSPD
ESSYYRHHFARQDLTQSLIMIQPILYSYSFHGPPEPVLLDSSSILADRILLMDTFFQIVIYLGETIAQWRKAGYQ
DMPEYENFKHLLQAPLDDAQEILQARFPMPRYINTEHGGSQARFLLSKVNPSQTHNNLYAWGQETGAPILTDDVS
LQVFMDHLKKLAVSSAC

FIGURE 2425

GGTACGAGGCTTCCTAGAGGGACTGGAACCTAATTCTCCTGAGGCTGAGGGAGGGTGGAGGGTCTCAAGGCAACG
CTGGCCCCACGACGGAGTGCCAGGAGCACTAACAGTACCCTTAGCTTGCTTTCCTCCTCCCTCCTTTTTATTTTC
AAGTTCCTTTTTATTTCTCCTTGCGTAACAACCTTCTTCCCTTCTGCACCACTGCCCGTACCCTTACCCGCCCCG
CCACCTCCTTGCTACCCCACTCTTGAAACCACAGCTGTTGGCAGGGTCCCCAGCTC**ATG**CCAGCCTCATCTCCTT
TCTTGCTAGCCCCCAAAGGGCCTCCAGGCAACATGGGGGGCCCAGTCAGAGAGCCGGCACTCTCAGTTGCCCTCT
GGTTGAGTTGGGGGGCAGCTCTGGGGGCCGTGGCTTGTGCCATGGCTCTGCTGACCCAACAAACAGAGCTGCAGA
GCCTCAGGAGAGAGGTGAGCCGGCTGCAGGGGACAGGAGGCCCCTCCCAGAATGGGGAAGGGTATCCCTGGCAGA
GTCTCCCGGAGCAGAGTTCCGATGCCCTGGAAGCCTGGGAGAATGGGGAGAGATCCCGGAAAAGGAGAGCAGTGC
TCACCCAAAAACAGAAGAAGCAGCACTCTGTCCTGCACCTGGTTCCCATTAACGCCACCTCCAAGGATGACTCCG
ATGTGACAGAGGTGATGTGGCAACCAGCTCTTAGGCGTGGGAGAGGCCTACAGGCCCAAGGATATGGTGTCCGAA
TCCAGGATGCTGGAGTTTATCTGCTGTATAGCCAGGTCCTGTTTCAAGACGTGACTTTCACCATGGGTCAGGTGG
TGTCTCGAGAAGGCCAAGGAAGGCAGGAGACTCTATTCCGATGTATAAGAAGTATGCCCTCCCACCCGGACCGGG
CCTACAACAGCTGCTATAGCGCAGGTGTCTTCCATTTACACCAAGGGGATATTCTGAGTGTCATAATTCCCCGGG
CAAGGGCGAAACTTAACCTCTCTCCACATGGAACCTTCCTGGGGTTTGTGAAACTG**TGA**TTGTGTTATAAAAAGT
GGCTCCCAGCTTGGAAGACCAGGGTGGGTACATACTGGAGACAGCCAAGAGCTGAGTATATAAAGGAGAGGGAAT
GTGCAGGAACAGAGGCATCTTCCTGGGTTTGGCTCCCCGTTCCTCACTTTTCCCTTTTCATTCCCACCCCCTAGA
CTTTGATTTTACGGATATCTTGCTTCTGTTCCCCATGGAGCTCCGAATTCTTGCGTGTGTGTAGATGAGGGGCGG
GGGACGGGCGCCAGGCATTGTTCAGACCTGGTCGGGGCCCACTGGAAGCATCCAGAACAGCACCACCATCTTA

FIGURE 2426

MPASSPFLLAPKGPPGNMGGPVREPALSVALWLSWGAALGAVACAMALLTQQTELQSLRREVSRLQGTGGPSQNG
EGYPWQSLPEQSSDALEAWENGERSRKRRAVLTQKQKKQHSVLHLVPINATSKDDSDVTEVMWQPALRRGRGLQA
QGYGVRIQDAGVYLLYSQVLFQDVTFTMGQVVSREGQGRQETLFRCIRSMPSHPDRAYNSCYSAGVFHLHQGDIL
SVIIPRARAKLNLSPHGTFLGFVKL

FIGURE 2427

GCGGAGCGAGAGGCTGAGAGAGTCGGAGACACTATCCGCTTCCATCCGTCGCGCAGACCCTGCCGGAGCCGCTGC
CGCTATGGATGATCGAGAGGATCTGGTGTACCAGGCGAAGCTGGCCGAGCAGGCTGAGCGATACGACGAAATGGT
GGAGTCAATGAAGAAAGTAGCAGGGATGGATGTGGAGCTGACAGTTGAAGAAAGAAACCTCCTATCTGTTGCATA
TAAGAATGTGATTGGAGCTAGAAGAGCCTCCTGGAGAATAATCAGCAGCATTGAACAGAAAGAAGAAAACAAGGG
AGGAGAAGACAAGCTAAAAATGATTCGGGAATATCGGCAAATGGTTGAGACTGAGCTAAAGTTAATCTGTTGTGA
CATTCTGGATGTACTGGACAAACACCTCATTCCAGCAGCTAACACTGGCGAGTCCAAGGTTTTCTATTATAAAAT
GAAAGGGGACTACCACAGGTATCTGGCAGAATTTGCCACAGGAAACGACAGGAAGGAGGCTGCGGAGAACAGCCT
AGTGGCTTATAAAGCTGCTAGTGATATTGCAATGACAGAACTTCCACCAACGCATCCTATTCGCTTAGGTCTTGC
TCTCAATTTTTCCGTATTCTACTACGAAATTCTTAATTCCCCTGACCGTGCCTGCAGGTTGGCAAAAGCAGCTTT
TGATGATGCAATTGCAGAACTGGATACGCTGAGTGAAGAAAGCTATAAGGACTCTACACTTATCATGCAGTTGTT
ACGTGATAATCTGACACTATGGACTTCAGACATGCAGGGTGACGGTGAAGAGCAGAATAAAGAAGCGCTGCAGGA
CGTGGAAGACGAAAATCAGTGAGACATAAGCCAACAAGAGAAACCATCTCTGACCACCCCCTCCTCCCCATCCCA
CCCTTTGGAAACTCCCCATTGTCACTGAGAACCACCAAATCTGACTTTTACATTTGGTCTCAGAATTTAGGTTCC
TGCCCTGTTGGTTTTTTTTTTTTTTTTTTTAAACAGTTTTCAAAAGTTCTTAAAGGCAAGAGTGAATTTCTGTG
GATTTTACTGGTCCCAGCTTTTAGGTTCTTTAAGACACTAACAGGACTACATAGAGGCTTTTTCAGCATTACTGT
GTCGTCTCCGTGCCAGATGTGGCAAGATCACCATTAGCAAATGGAAATTACATTTGAAAGCCATTAGACTTATAG
GTGATGCAAGCATCTAAGAGAGAGGTTAATCACACTATAGAGGCATAAGTGGTATCAGTTTTCATTTTTCTAATT
GTTTAAACTGTGTTTTATACCAGTGTTTGCAAGTAATTGGGTGTTAGCTTGAGATGGTTAAAGGTGGTTTGGGGA
GGGACTTCGTTGTAATGGTTTTGCTGTAAAAAATGTTTCCAACTCCGCTGAAATGTTGCTGAAAAGCATGGTGCT
GGTAACAGTTCAACAATCCGTGGCTGCTCATTCTTGCCTACTTTACTCTCCCACTGAAGCAGGTTAGCGTTGAAG
GTGGTATGGAAAAGCCTGCATGCCTGTTCAATTCTTTTGTTTCTTCTCCTTCCCCCTCCCCCTACCTCCTTCCCC
TCACTCCTCCCCTCCTTCGCTCGCTCAACCTCTTTTGTTCAGTATGTGTAACTTGAAGCTAATTTGTACTACTGG
ATATCTGACTGGAGCCACAGATACAGAATCTGTATTGTTCTTACTGAAACACAGCATGGAATTAACATTAAACTT
AAATAAAACAAACCTAAATTAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2428

MDDREDLVYQAKLAEQAERYDEMVESMKKVAGMDVELTVEERNLLSVAYKNVIGARRASWRIISSIEQKEENKGG
EDKLKMIREYRQMVETELKLICCDILDVLDKHLIPAANTGESKVFYYKMKGDYHRYLAEFATGNDRKEAAENSLV
AYKAASDIAMTELPPTHPIRLGLALNFSVFYYEILNSPDRACRLAKAAFDDAIAELDTLSEESYKDSTLIMQLLR
DNLTLWTSDMQGDGEEQNKEALQDVEDENQ

FIGURE 2429

AGGGGACAAGTCTAGGAGGTCTCTGAGGTTACTGTACCCATCCCTCCTTCATCTCCCTCCAGCATTTGTTTCTGG
AAGGAGTCAACACCAACAGCTCTGACCTGGGCAGCCTTCCTGAGAAAATGCAGCCATTCCTCCTCCTGTTGGCCT
TTCTTCTGACCCCTGGGGCTGGGACAGAGGAGATCATCGGGGGGCCATGAGGCCAAGCCCCACTCCCGCCCCTACA
TGGCCTTTGTTCAGTTTCTGCAAGAGAAGAGTCGGAAGAGGTGTGGCGGCATCCTAGTGAGAAAGGACTTTGTGC
TGACAGCTGCTCACTGCCAGGGAAGCTCCATAAATGTCACCTTGGGGGCCCACAATATCAAGGAACAGGAGCGGA
CCCAGCAGTTTATCCCTGTGAAAAGACCCATCCCCCATCCAGCCTATAATCCTAAGAACTTCTCCAACGACATCA
TGCTACTGCAGCTGGAGAGAAAGGCCAAGTGGACCACAGCTGTGCGGCCTCTCAGGCTACCTAGCAGCAAGGCCC
AGGTGAAGCCAGGGCAGCTGTGCAGTGTGGCTGGCTGGGGTTATGTCTCAATGAGCACTTTAGCAACCACACTGC
AGGAAGTGTTGCTGACAGTGCAGAAGGACTGCCAGTGTGAACGTCTCTTCCATGGCAATTACAGCAGAGCCACTG
AGATTTGTGTGGGGGATCCAAAGAAGACACAGACCGGTTTCAAGGGGGACTCCGGGGGGCCCCTCGTGTGTAAGG
ACGTAGCCCAAGGTATTCTCTCCTATGGAAACAAAAAAGGGACACCTCCAGGAGTCTACATCAAGGTCTCACACT
TCCTGCCCTGGATAAAGAGAACAATGAAGCGCCTCTAACAGCAGGCATGAGACTAACCTTCCTCTGGGCCTGACC
ATCTCTGGGACAGAGGCAAGAATCCCAAGGGGTGGGCAGTCGGGGTTGCAGGACTGTAATAAATGGATCTCTGGT
GTAAATATGACTG

FIGURE 2430

MQPFLLLLAFLLTPGAGTEEIIGGHEAKPHSRPYMAFVQFLQEKSRKRCGGILVRKDFVLTAAHCQGSSINVTLG
AHNIKEQERTQQFIPVKRPIPHPAYNPKNFSNDIMLLQLERKAKWTTAVRPLRLPSSKAQVKPGQLCSVAGWGYV
SMSTLATTLQEVLLTVQKDCQCERLFHGNYSRATEICVGDPKKTQTGFKGDSGGPLVCKDVAQGILSYGNKKGTP
PGVYIKVSHFLPWIKRTMKRL

FIGURE 2431A

CCCGGATTTTGCGGGGTTCGTCGGGCCTGTGGAAGAAGCCCCGCCACGGACTTCGGCAGAGGTAGAGCAGGTCTC
TCTGCAGCCATGTCGGCCAAGGCAATTTCAGAGCAGACGGGCAAAGAACTCCTTTACAAGTTCATCTGTACCACC
TCAGCCATCCAGAATCGGTTCAAGTATGCTCGGGTCACTCCTGACACAGACTGGGCCCGCTTGCTGCAGGACCAC
CCCTGGCTGCTCAGCCAGAACTTGGTAGTCAAGCCAGACCAGCTGATCAAACGTCGTGGAAAACTTGGTCTCGTT
GGGGTCGACCTCACTCTGGATGGGGTCAAGTCCTGGCTGAAGCCACGGCTGGGACAGGAAGCCACAGTTGGCAAG
GCCACAGGCTTCCTCAAGAACTTTCTGATCGAGCCCTTCGCCCCCCACAGTCAGGCTGAGGAGTTCTATGTCTGC
ATCTATGCCACCCGAGAAGGGGACTACGTCCTGTTCCACCACGAGGGGGGTGTGGACGTGGGTGATGTGGACGCC
AAGGCCCAGAAGCTGCTTGTTGGCGTGGATGAGAAACTGAATCCTGAGGACATCAAAAAACACCTGTTGGTCCAC
GCCCCTGACGACAAGAAAGAAATTCTGGCCAGTTTTATCTCCGGCCTCTTCAATTTCTACGAGGACTTGTACTTC
ACCTACCTCGAGATCAATCCCCTTGTAGTGACCAAAGATGGAGTCTATGTCCTTGACTTGGCGGCCAAGGTGGAC
GCCACTGCCGACTACATCTGCAAAGTGAAGTGGGGTGACATCGAGTTCCCTCCCCCCTTCGGGCGGGTGGCATAT
CCAGAGGAAGCCTACATTGCAGACCTCGATGCCAAAAGTGGGGCAAGCCTGAAGCTGACCTTGCTGAACCCCAAA
GGGAGGATCTGGACCATGGTGGCCGGGGGTGGCGCCTCTGTCGTGTACAGCGATACCATCTGTGATCTAGGGGGT
GTCAACGAGCTGGCAAACTATGGGGAGTACTCAGGCGCCCCCAGCGAGCAGCAGACCTATGACTATGCCAAGACT
ATCCTCTCCCTCATGACCCGAGAGAAGCACCCAGATGGCAAGATCCTCATCATTGGAGGCAGCATCGCAAACTTC
ACCAACGTGGCTGCCACGTTCAAGGGCATCGTGAGAGCAATTCGAGATTACCAGGGCCCCCTGAAGGAGCACGAA
GTCACAATCTTTGTCCGAAGAGGTGGCCCCAACTATCAGGAGGGCTTACGGGTGATGGGAGAAGTCGGGAAGACC
ACTGGGATCCCCATCCATGTCTTTGGCACAGAGACTCACATGACGGCCATTGTGGGCATGGCCTGGGCACCGGCC
ATCCCCAACCAGCCACCCACAGCGGCCCACACTGCAAACTTTCTCCTCAACGCCCAGCGGGAGACATCGACTCCA
GCCCCCAGCAGGACAGCATCTTTTTATGAGTCCATGGTCGATGAGGTCAGGGCCGATGAGGTGGCGCCTGCAAAG
AAGGCCAAGCCTGCCATGCCACAAGATTCAGTCCCAAGTCCAAGATCCCTGCAAGGAAAGAGCACCACCCTCTTC
AGCCGCCACACCAAGGCCATTGTGTGGGGCATGCAGACCCGGGCCGTGCAAGGCATGCTGGACTTTGACTATGTC
TGCTCCCGAGACGAGCCCTCAGTGGCTGCCATGGTCTATCCTTTCACTGGGGACCACAAGCAGAAGTTTTACTGG
GGGCACAAAGAGATCCTGATCCCTGTCTTCAAGAACATGGCTGATGCCATGAGGAAGCACCCGGAGGTAGATGTG
CTCATCAACTTTGCCTCTCTCCGCTCTGCCTATGACAGCACCATGGAGACCATGAACTATGCCCAGATCCGGACC
ATCGCCATCATAGCTGAAGGCATCCCTGAGGCCCTCACGAGAAAGCTGATCAAGAAGGCGGACCAGAAGGGAGTG
ACCATCATCGGACCTGCCACTGTTGGAGGCATCAAGCCTGGGTGCTTTAAGATTGGCAACACAGGTGGGATGCTG
GACAACATCCTGGCCTCCAAACTGTACCCCCAGGCAGCTGTGGCCTATGTCTCACGTTCCGGAGGCATGTCCAAC
GAGCTCAACAATATCATCTCTCGGACCACGGATGGCGTCTATGAGGGCGTGGCCATTGGTGGGGACAGGTACCCG
GGCTCCACATTCATGGATCATGTGTTACGCTATCAGGACACTCCAGGAGTCAAAATGATTGTGGTTCTTGGAGAG
ATTGGGGGCACTGAGGAATATAAGATTTCCCGGGGCATCAAGGAGGGCCGCCTCACTAAGCCCATCGTCTGCTGG
TGCATCGGGACGTGTGCCACCATGTTCTCCTCTGAGGTCCAGTTTGGCCATGCTGGAGCTTGTGCCAACCAGGCT
TCTGAAACTGCAGTAGCCAAGAACCAGGCTTTGAAGGAAGCAGGAGTGTTTGTGCCCCGGAGCTTTGATGAGCTT
GGAGAGATCATCCAGTCTGTATACGAAGATCTCGTGGCCAATGGAGTCATTGTACCTGCCCAGGAGGTGCCGCCC
CCAACCGTGCCCATGGACTACTCCTGGGCCAGGGAGCTTGGTTTGATCCGCAAACCTGCCTCGTTCATGACCAGC
ATCTGCGATGAGCGAGGACAGGAGCTCATCTACGCGGGCATGCCCATCACTGAGGTCTTCAAGGAAGAGATGGGC
ATTGGCGGGGCCCTCGGCCTCCTCTGGTTCCAGAAAAGGTTGCCTAAGTACTCTTGCCAGTTCATTGAGATGTGT
CTGATGGTGACAGCTGATCACGGGCCAGCCGTCTCTGGAGCCCACAACACCATCATTTGTGCGCGCACCGCGGTG
GAGCTGGTCTCCAGCCTCACCTCGGGGCTGCTCACCATCGGGGATCGGTTTGGGGGTGCCTTGGATGCAGCAGCC
AAGATGTTCAGTAAAGCCTTTGACAGTGGCATTATCCCCATGGAGTTTGTGAACAAGATGAAGAAGGAAGGGAAG
CTGATCATGGGCATTGGTCACCGAGTGAAGTCGATAAACAACCCAGACATGCGAGTGCAGATCCTCAAAGATTAC
GTCAGGCAGCACTTCCCTGCCACTCCTCTGCTCGATTATGCACTGGAAGTAGAGAAGATTACCACCTCGAAGAAG
CCAAATCTTATCCTGAATGTAGATGGTCTCATCGGAGTCGCATTTGTAGACATGCTTAGAAACTGTGGGTCCTTT
ACTCGGGAGGAAGCTGATGAATATATTGACATTGGAGCCCTCAATGGCATCTTTGTGCTGGGAAGGAGTATGGGG
TTCATTGGACACTATCTTGATCAGAAGAGGCTGAAGCAGGGGCTGTATCGTCATCCGTGGGATGATATTTCATAT
GTTCTTCCGGAACACATGAGCATGTAACAGAGCCAGGAACCCTACTGCAGTAAACTGAAGACAAGAACTCTTCCC
CCAAGAAAAAGTGTCAGACAGCTGGCAGTGGAGCCTGCTTTATTTAGCAGGGGCCTGGAATGTAAACAGCCACTG
GGGTACAGGCACCGAAGACCAACATCCACAGGCTAACACCCCTTCAGTCCACACAAAGAAGCTTCATATTTTTTT

FIGURE 2431B

TATAAGCATAGAAATAAAAACCAAGCCAATATTTGTGACTTTGCTCTGCTACCTGCTGTATTTATTATATGGAAG
CATCTAAGTACTGTCAGGATGGGGTCTTCCTCATTGTAGGGCGTTAGGATGTTGCTTTCTTTTTCCATTAGTTAA
ACATTTTTTTCTCCTTTGGAGGAAGGGAATGAAACATTTATGGCCTCAAGATACTATACATTTAAAGCACCCCAA
TGTCTCTCTTTTTTTTTTTTTTTACTTCCCTTGCTTCTTCCTTATATAACATGAAGAACATTGTATTAATCTGAT
TTTTAAAGACTTTTTGTATGTTACGTGTTAAGGGCTTGTTTGGTATCCCACTGAAATGTTCTGTGTTGCAGACCA
GAGTCTGTTTATGTCAGGGGGAGGGGGCCATTGCATCCTTAGCCATTGTCACAAAATATGTGGAGTAGTAACTTA
ATATGTAAAGTTGTAACATACATACATTTAAAATGGAAATGCAGAAAGCTGTGAAATGTCTTGTGTCTTATGTTC
TCTGTATTTATGCAGCTGATTTGTCTGTCTGTAACTGAAGTGTGGGTCCAAGGACTCCTAACTACTTTGCATCTG
TAATCCACAAAGATTCTGGGCAGCTGCCACCTCAGTCTCTTCTCTGTATTATCATAGTCTGGTTTAAATAAACTA
TATAGTAACAGGAATTCCTGCA

FIGURE 2432

MSAKAISEQTGKELLYKFICTTSAIQNRFKYARVTPDTDWARLLQDHPWLLSQNLVVKPDQLIKRRGKLGLVGVD
LTLDGVKSWLKPRLGQEATVGKATGFLKNFLIEPFAPHSQAEEFYVCIYATREGDYVLFHHEGGVDVGDVDAKAQ
KLLVGVDEKLNPEDIKKHLLVHAPDDKKEILASFISGLFNFYEDLYFTYLEINPLVVTKDGVYVLDLAAKVDATA
DYICKVKWGDIEFPPPFGRVAYPEEAYIADLDAKSGASLKLTLLNPKGRIWTMVAGGGASVVYSDTICDLGGVNE
LANYGEYSGAPSEQQTYDYAKTILSLMTREKHPDGKILIIGGSIANFTNVAATFKGIVRAIRDYQGPLKEHEVTI
FVRRGGPNYQEGLRVMGEVGKTTGIPIHVFGTETHMTAIVGMAWAPAIPNQPPTAAHTANFLLNAQRETSTPAPS
RTASFYESMVDEVRADEVAPAKKAKPAMPQDSVPSPRSLQGKSTTLFSRHTKAIVWGMQTRAVQGMLDFDYVCSR
DEPSVAAMVYPFTGDHKQKFYWGHKEILIPVFKNMADAMRKHPEVDVLINFASLRSAYDSTMETMNYAQIRTIAI
IAEGIPEALTRKLIKKADQKGVTIIGPATVGGIKPGCFKIGNTGGMLDNILASKLYPQAAVAYVSRSGGMSNELN
NIISRTTDGVYEGVAIGGDRYPGSTFMDHVLRYQDTPGVKMIVVLGEIGGTEEYKISRGIKEGRLTKPIVCWCIG
TCATMFSSEVQFGHAGACANQASETAVAKNQALKEAGVFVPRSFDELGEIIQSVYEDLVANGVIVPAQEVPPPTV
PMDYSWARELGLIRKPASFMTSICDERGQELIYAGMPITEVFKEEMGIGGALGLLWFQKRLPKYSCQFIEMCLMV
TADHGPAVSGAHNTIICARTAVELVSSLTSGLLTIGDRFGGALDAAAKMFSKAFDSGIIPMEFVNKMKKEGKLIM
GIGHRVKSINNPDMRVQILKDYVRQHFPATPLLDYALEVEKITTSKKPNLILNVDGLIGVAFVDMLRNCGSFTRE
EADEYIDIGALNGIFVLGRSMGFIGHYLDQKRLKQGLYRHPWDDISYVLPEHMSM

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FIGURE 2433

TGAAGATCAGCTATTAGAAGAGAAAGATCAGTTAAGTCCTTTGGACCTGATCAGCTTGATACAAGAACTACTGAT
TTCAACTTCTTTGGCTTAATTCTCTCGGAAACGATGAAATATACAAGTTATATCTTGGCTTTTCAGCTCTGCATC
GTTTTGGGTTCTCTTGGCTGTTACTGCCAGGACCCATATGTAAAAGAAGCAGAAAACCTTAAGAAATATTTTAAT
GCAGGTCATTCAGATGTAGCGGATAATGGAACTCTTTTCTTAGGCATTTTGAAGAATTGGAAAGAGGAGAGTGAC
AGAAAAATAATGCAGAGCCAAATTGTCTCCTTTTACTTCAAACTTTTTAAAAACTTTAAAGATGACCAGAGCATC
CAAAAGAGTGTGGAGACCATCAAGGAAGACATGAATGTCAAGTTTTTCAATAGCAACAAAAAGAAACGAGATGAC
TTCGAAAAGCTGACTAATTATTCGGTAACTGACTTGAATGTCCAACGCAAAGCAATACATGAACTCATCCAAGTG
ATGGCTGAACTGTCGCCAGCAGCTAAAACAGGGAAGCGAAAAAGGAGTCAGATGCTGTTTCAAGGTCGAAGAGCA
TCCCAGTAATGGTTGTCCTGCCTGCAATATTTGAATTTTAAATCTAAATCTATTTATTAATATTTAACATTATTT
ATATGGGGAATATATTTTTAGACTCATCAATCAAATAAGTATTTATAATAGCAACTTTTGTGTAATGAAAATGAA
TATCTATTAATATATGTATTATTTATAATTCCTATATCCTGTGACTGTCTCACTTAATCCTTTGTTTTCTGACTA
ATTAGGCAAGGCTATGTGATTACAAGGCTTTATCTCAGGGGCCAACTAGGCAGCCAACCTAAGCAAGATCCCATG
GGTTGTGTGTTTATTTCACTTGATGATACAATGAACACTTATAAGTGAAGTGATACTATCCAGTTACTGCCGGTT
TGAAAATATGCCTGCAATCTGAGCCAGTGCTTTAATGGCATGTCAGACAGAACTTGAATGTGTCAGGTGACCCTG
ATGAAAACATAGCATCTCAGGAGATTTCATGCCTGGTGCTTCCAAATATTGTTGACAACTGTGACTGTACCCAAA
TGGAAAGTAACTCATTTGTTAAAATTATCAATATCTAATATATATGAATAAAGTGTAAGTTCACAACT

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FIGURE 2434

MKYTSYILAFQLCIVLGSLGCYCQDPYVKEAENLKKYFNAGHSDVADNGTLFLGILKNWKEESDRKIMQSQIVSF
YFKLFKNFKDDQSIQKSVETIKEDMNVKFFNSNKKKRDDFEKLTNYSVTDLNVQRKAIHELIQVMAELSPAAKTG
KRKRSQMLFQGRRASQ

FIGURE 2435

CTACAGACCTCTCTCCTCTTCCTGCTCATGGGACTAAGAGCCTCTGGAAAGGACTCAGCCCCAACAGTGGTGTCA
GGGATCCTAGGGGGTTCCGTGACTCTCCCCCTAAACATCTCAGTAGACACAGAGATTGAGAACGTCATCTGGATT
GGTCCCAAAAATGCTCTTGCTTTCGCACGTCCCAAAGAAAATGTAACCATTATGGTCAAAAGCTACCTGGGCCGA
CTAGACATCACCAAGTGGAGTTACTCCCTGTGCATCAGCAATCTGACTCTGAATGATGCAGGATCCTACAAAGCC
CAGATAAACCAAAGGAATTTTGAAGTCACCACTGAGGAGGAATTCACCCTGTTCGTCTATGAGCAGCTGCAGGAG
CCCCAAGTCACCATGAAGTCTGTGAAGGTGTCTGAGAACTTCTCCTGTAACATCACTCTAATGTGCTCCGTGAAG
GGGGCAGAGAAAAGTGTTCTGTACAGCTGGACCCCAAGGGAACCCCATGCTTCTGAGTCCAATGGAGGCTCCATT
CTTACCGTCTCCCGAACACCATGTGACCCAGACCTGCCATACATCTGCACAGCCCAGAACCCCGTCAGCCAGAGA
AGCTCCCTCCCTGTCCATGTTGGGCAGTTCTGTACAGATCCAGGAGCCTCCAGAGGAGGAACAACGGGGGAGACT
GTGGTAGGGGTCCTGGGAGAGCCAGTCACCCTGCCACTTGCACTCCCAGCCTGCCGGGACACAGAGAAGGTTGTC
TGGTTGTTTAACACATCCATCATTAGCAAAGAGAGGGAAGAAGCAGCAACGGCAGATCCACTCATTAAATCCAGG
GATCCTTACAAGAACAGGGTGTGGGTCTCCAGCCAGGACTGCTCCCTGAAGATCAGCCAGCTGAAGATAGAGGAC
GCCGGCCCCTACCATGCCTACGTGTGCTCAGAGGCCTCCAGCGTCACCAGCATGACACATGTCACCCTGCTCATC
TACCGCAGGCTGAGGAAGCCCAAAATCACGTGGAGCCTCAGGCACAGTGAGGATGGCATCTGCAGGATCAGCCTG
ACCTGCTCCGTGGAGGACGGGGGAAACACTGTCATGTACACATGGACCCCGCTGCAGAAGGAAGCTGTTGTGTCC
CAAGGGGAATCACACCTCAATGTCTCATGGAGAAGCAGTGAAAATCACCCCAACCTCACATGCACAGCCAGCAAC
CCTGTCAGCAGGAGTTCCCACCAGTTTCTTTCTGAGAACATCTGTTCAGGACCTGAGAGAAACACAAAGCTTTGG
ATTGGGTTGTTCCTGATGGTTTGCCTTCTGTGCGTTGGGATCTTCAGCTGGTGCATTTGGAAGCGAAAAGGACGG
TGTTCAGTCCCAGCCTTCTGTTCCAGCCAAGCTGAGGCCCCAGCGGATACACCAGGATATGAGAAGCTGGACACT
CCCCTCAGGCCTGCCAGGCAACAGCCTACACCCACCTCAGACAGCAGCTCTGACAGCAACCTCACAACTGAGGAG
GATGAGGACAGGCCTGAGGTGCACAAGCCCATCAGTGGAAGATATGAGGTGTTTGACCAGGTCACTCAGGAGGGC
GCTGGACATGACCCAGCCCCTGAGGGCCAAGCAGACTATGATCCCGTCACTCCATATGTCACGGAAGTTGAGTCT
GTGGTTGGAGAGAACACCGTGTATGCACAAGTGTTCAACTTACAGGGAAAGACCCCAGTTTCTCAGAAGGAAGAG
AGCTCAGCCACAATCTACTGCTCCATACGGAAACCTCAGGTGGTGCCACCACCACAACAGAATGATCTTGAGATT
CCTGAAAGTCCTACCTATGAAAATTTCACCTGAAAGGAAAAGCAGCTGCTGCCTCTCTCCTGGGACCGTGGGGTT
GGAAAGTCAGCTGGACCTCATGGGGCCTGGGGCTCGCTGACAGAAGCACCTCAGAATTTCCTTCAGTGCCTCAGA
GATGCCTGGATGTGGCCCCTCCCCCTCCTTCTCACCCTTAAGGACTCCCAAACCCATTAATAGTTCAGACACAGG
CTCCTTCTTGGAGCCTATGGGCTTCAGATGTCTTTGCCCCATTTGTCACCTCGCACACTTATAGCGTTTCCTCCT
CGAAATTCTACCAAGACTGGTCAAATGTTGCTGAGGGGCCTGGACCAGCTGTCCTTTACACCACCTTCTCAACAC
TGCTGAAAAGAACCCCAAGAGAATTGTCACACATGACACAAGATGTACATAATATCATGCTCACGCCTGGAGTGT
TATTTAAAATAAAAGGCAGGAAATAAAAAAAAAAA

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FIGURE 2436

GGCACGAGGCTCACTGCTGTTATTGTTTTCTGACAGC**ATG**CCTGAACCAGCTAAGTCAGCTCCTGCTCCGAAGAA
GGGTTCCAAGAAGGCTGTGACCAAGGCGCAGAAGAAGGATGGCAAGAAGCGCAAGCGCAGTCGTAAGGAGAGCTA
CTCCGTGTATGTGTACAAGGTGCTAAAACAGGTTCACCCCGATACTGGCATCTCATCCAAGGCCATGGGCATCAT
GAATTCCTTCGTTAACGACATCTTCGAACGCATCGCAGGCGAGGCTTCCCGTCTGGCCCACTACAACAAGCGCTC
GACCATTACCTCCAGGGAGATCCAGACCGCCGTGCGTCTGCTGCTTCCCGGAGAGCTGGCCAAGCACGCAGTGTC
CGAAGGTACCAAGGCTGTCACCAAGTATACAAGCTCCAAG**TAA**ATGTGTGCTTAGGTGCTTTAAAACTCAAAGGC
TCTTTTCAGAGCCACTCAAGTCTCACATAAAGAGCTTTAATATTGAATTTCACCGTTTTCTAGGGAATAATTTTT
CCGATTTTGTAATCCCAGCACTTTGGGAGGCCGAGGCGTGCGGATCGAGACCAGTTTGGCTAACGTGGTTAAATC
TCGTTTCTACTAAAAATACAAATATTAGCCGGGCGTGGGGCAGTCGCGTGTCATCCCAGAGACTCGGGAGGCTGC
CGCAGGAGAATCACTTAAACCCAGCAAGCAAAGGTTGCAGTGAAAAGACATGGCGCTTTTGCATTCTAGCCTGGG
CGACAAAGGCGAGGCTTCGTCTCAAAAAAAATTGATCAGGAGATACTCCTGTTCTGTGTTGGCAAGATCCTGTAA
TCCTAGCACTTTGGGAGGTCGATGCATGAGGCTTTCTTCAGCTCAGGAGTTAACAGATTTGCCTGGGCAACATAG
AACTCGTCTCTGCAAAAAAATGAAGCTAACCAGGTGTGACGGCTTGCGTCTGTACTATCATTTACTCGGTAGGCT
GAGGTGGTAGGATAGCTTAAACTCTCGGGCTAGAGACTGCAGGAACATGTGAATACGCTAGTGCAATTCCAGCCT
GGGCAACACTGGAAAGGGTAGGAAGAGTAGTCTTTGGGTCCCTAAAGATCACCTGATAACAAGTTTGACTTTTCT
GAGCACTCTTGTGGAGTTTGTTGTGGAGGGAATACCATGGGCATTGGCAATGTAAAGTTGATCTAAAAAATCTCG
TTTTCCGCCGTGCGCGGTGGCTCACGCCTCTAATCCCATCACTTTGGGAGGCCGAGACGGGCGGATCACGAGGTC
AGGAGGTCGAGACCATCCTGGCTAACACTGTGAAACCCTGTCTCTACTAAAAAAATACAAACAAAATTAGCCGGG
CGTGGTGGCACTCACCTGTAGTTTCAGCTACTCTGGAAGCTGAGGCTGGAGAGTCACTTGAACCCGGGAGGCGGA
GGTTGCAGTGATCAGAGATCGCGCCACTGCACTCCATCCTGGGCGAAAGAGCTAGATTCCATCTCATAAAAAAAA
AAAAAAAAAAAAAAAAAAAAA

FIGURE 2437

MPEPAKSAPAPKKGSKKAVTKAQKKDGKKRKRSRKESYSVYVYKVLKQVHPDTGISSKAMGIMNSFVNDIFERIA
GEASRLAHYNKRSTITSREIQTAVRLLLPGELAKHAVSEGTKAVTKYTSSK

FIGURE 2438

CGCTCCTTTTGCAGGCTCGTGGCGGTCGGTCAGCGGGGCGTTCTCCCACCTGTAGCGACTCAGGTTACTGAAAAG
GCGGGAAAACGCTGCGATGGCGGCAGCTGGGGGAGGAGGAAGATAAGCGCGTGAGGCTGGGGTCCTGGCGCGTGG
TTGGCAGAGGCAGAGACATAAGACGTGCACGACTCGCCCCACAGGGCCTTCAGACCCCTTCTTTCCAAAGGAGCC
TCCAAGCTC**ATG**GCCTCCTTAGGAGCGAACCCAAGGAGGACACCGCAGGGACCGAGACCTGGGGCGGCCTCCTCC
GGTTTCCCCAGCCCGGCCCCAGTGCCGGGCCCCAGGGAGGCCGAGGAGGAGGAAGTCGAGGAGGAGGAGGAGCTG
GCCGAGATCCATCTGTGTGTGCTGTGGAATTCAGGATACTTGGGCATTGCCTACTATGATACTAGTGACTCCACT
ATCCACTTCATGCCAGATGCCCCAGACCACGAGAGCCTCAAGCTTCTCCAGAGAGTTCTGGATGAGATCAATCCC
CAGTCTGTTGTTACGAGTGCCAAACAGGATGAGAATATGACTCGATTTCTGGGAAAGCTTGCCTCCCAGGAGCAC
AGAGAGCCTAAAAGACCTGAAATCATATTTTTGCCAAGTGTGGATTTTGGTCTGGAGATAAGCAAACAACGCCTC
CTTTCTGGAAACTACTCCTTCATCCCAGACGCCATGACTGCCACTGAGAAAATCCTCTTCCTCTCTTCCATTATT
CCCTTTGACTGCCTCCTCACAGTTCGAGCACTTGGAGGGCTGCTGAAGTTCCTGGGTCGAAGAAGAATCGGGGTT
GAACTGGAAGACTATAATGTCAGCGTCCCCATCCTGGGCTTTAAGAAATTTATGTTGACTCATCTGGTGAACATA
GATCAAGACACTTACAGTGTTCTACAGATTTTTAAGAGTGAGTCTCACCCCTCAGTGTACAAAGTGGCCAGTGGA
CTGAAGGAGGGGCTCAGCCTCTTTGGAATCCTCAACAGATGCCACTGTAAGTGGGGAGAGAAGCTGCTCAGGCTA
TGGTTCACACGTCCGACTCATGACCTGGGGGAGCTCAGTTCTCGTCTGGACGTCATTCAGTTTTTTCTGCTGCCC
CAGAATCTGGACATGGCTCAGATGCTGCATCGGCTCCTGGGTCACATCAAGAACGTGCCTTTGATTCTGAAACGC
ATGAAGTTGTCCCACACCAAGGTCAGCGACTGGCAGGTTCTCTACAAGACTGTGTACAGTGCCCTGGGCCTGAGG
GATGCCTGCCGCTCCCTGCCGCAGTCCATCCAGCTCTTTCGGGACATTGCCCAAGAGTTCTCTGATGACCTGCAC
CATATCGCCAGCCTCATTGGGAAAGTAGTGGACTTTGAGGGCAGCCTTGCTGAAAATCGCTTCACAGTCCTCCCC
AACATAGATCCTGAAATTGATGAGAAAAAGCGAAGACTGATGGGACTTCCCAGTTTCCTTACTGAGGTTGCCCGC
AAGGAGCTGGAGAATCTGGACTCCCGTATTCCTTCATGCAGTGTCATCTACATCCCTCTGATTGGCTTCCTTCTT
TCTATTCCCCGCCTGCCTTCCATGGTAGAGGCCAGTGACTTTGAGATTAATGGACTGGACTTCATGTTTCTCTCA
GAGGAGAAGCTGCACTATCGTAGTGCCCGAACCAAGGAGCTGGATGCATTGCTGGGGGACCTGCACTGCGAGATC
CGGGACCAGGAGACGCTGCTGATGTACCAGCTACAGTGCCAGGTGCTGGCACGAGCAGCTGTCTTAACCCGAGTA
TTGGACCTTGCCTCCCGCCTGGACGTCCTGCTGGCTCTTGCCAGTGCTGCCCGGGACTATGGCTACTCAAGGCCG
CGTTACTCCCCACAAGTCCTTGGGGTACGAATCCAGAATGGCAGACATCCTCTGATGGAACTCTGTGCCCGAACC
TTTGTGCCCAACTCCACAGAATGTGGTGGGGACAAAGGGAGGGTCAAAGTCATCACTGGACCCAACTCATCAGGG
AAGAGCATATACCTCAAACAGGTAGGCTTGATCACATTCATGGCCCTGGTAGGCAGCTTTGTGCCAGCAGAGGAG
GCCGAAATTGGGGCAGTAGACGCCATCTTCACACGAATTCATAGCTGCGAATCCATCTCCCTTGGCCTCTCCACC
TTCATGATCGACCTCAACCAGGTGGCGAAAGCAGTGAACAATGCCACTGCACAGTCGCTGGTCCTTATTGATGAA
TTTGGAAAGGGAACCAACACGGTGGATGGGCTCGCGCTTCTGGCCGCTGTGCTCCGACACTGGCTGGCACGTGGA
CCCACATGCCCCCACATCTTTGTGGCCACCAACTTTCTGAGCCTTGTTCAGCTACAACTGCTGCCACAAGGGCCC
CTGGTGCAGTATTTGACCATGGAGACCTGTGAGGATGGCAACGATCTTGTCTTCTTCTATCAGGTTTGCGAAGGT
GTTGCGAAGGCCAGCCATGCCTCCCACACAGCTGCCCAGGCTGGGCTTCCTGACAAGCTTGTGGCTCGTGGCAAG
GAGGTCTCAGATTTGATCCGCAGTGGAAAACCCATCAAGCCTGTCAAGGATTTGCTAAAGAAGAACCAAATGGAA
AATTGCCAGACATTAGTGGATAAGTTTATGAAACTGGATTTGGAAGATCCTAACCTGGACTTGAACGTTTTCATG
AGCCAGGAAGTGCTGCCTGCTGCCACCAGCATCCTC**TGA**GAGTCCTTCCAGTGTCCTCCCCAGCCTCCTGAGACT
CCGGTGGGCTGCCATGCCCTCTTTGTTTCCTTATCTCCCTCAGACGCAGAGTTTTTAGTTTCTCTAGAAATTTTG
TTTCATATTAGGAATAAAGTTTATTTTGAAGAAAAAAAAAAAAAAAAAA

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FIGURE 2439

MASLGANPRRTPQGPRPGAASSGFPSPAPVPGPREAEEEEVEEEEELAEIHLCVLWNSGYLGIAYYDTSDSTIHF
MPDAPDHESLKLLQRVLDEINPQSVVTSAKQDENMTRFLGKLASQEHREPKRPEIIFLPSVDFGLEISKQRLLSG
NYSFIPDAMTATEKILFLSSIIPFDCLLTVRALGGLLKFLGRRRIGVELEDYNVSVPILGFKKFMLTHLVNIDQD
TYSVLQIFKSESHPSVYKVASGLKEGLSLFGILNRCHCKWGEKLLRLWFTRPTHDLGELSSRLDVIQFFLLPQNL
DMAQMLHRLLGHIKNVPLILKRMKLSHTKVSDWQVLYKTVYSALGLRDACRSLPQSIQLFRDIAQEFSDDLHHIA
SLIGKVVDFEGSLAENRFTVLPNIDPEIDEKKRRLMGLPSFLTEVARKELENLDSRIPSCSVIYIPLIGFLLSIP
RLPSMVEASDFEINGLDFMFLSEEKLHYRSARTKELDALLGDLHCEIRDQETLLMYQLQCQVLARAAVLTRVLDL
ASRLDVLLALASAARDYGYSRPRYSPQVLGVRIQNGRHPLMELCARTFVPNSTECGGDKGRVKVITGPNSSGKSI
YLKQVGLITFMALVGSFVPAEEAEIGAVDAIFTRIHSCESISLGLSTFMIDLNQVAKAVNNATAQSLVLIDEFGK
GTNTVDGLALLAAVLRHWLARGPTCPHIFVATNFLSLVQLQLLPQGPLVQYLTMETCEDGNDLVFFYQVCEGVAK
ASHASHTAAQAGLPDKLVARGKEVSDLIRSGKPIKPVKDLLKKNQMENCQTLVDKFMKLDLEDPNLDLNVFMSQE
VLPAATSIL

FIGURE 2440A

GGGTGGATTAATTTTTTTTTTTTGACGTTCTTAGAACAGTGCCTGACTTAATTCTACTTCATAGGGTTGATGTAA
TTTTGAGACTTAAATAAGTTGATACTAAAATACCACTTAGTGTCCCGAACACTGTTTGACATTTTAGTATCAACC
AAGTCTCAAGGTTACTTCAATCCTGTGAACTAGAGCCAAGGCACCTCCAGTGGCCTTTCAGAAGTTCCATTTCCA
CTCCCGCCTCATCTCCTAATTCTATCTCCCCGTTCTCTTTACTCGAGCCCTCCTGGCCTTGCCCTTCCTTAGGCC
TGATACGCACCTATCTGAAGACCTTTGCACTGCACTCCAGCCTGGAAGGCAGAGAGAGACTCCGTTTCAAAAAAG
AAAAGAATTCTGGGTTTGAATCCTGCCTCTCCGTCTGCTAGGGATATGATTTAGGGCAAGTTGCTTGAGCTCTTT
GGGCCTCTGTTTTCACGTCTGTATGATAGAGGTGGTATTGTTTGACTTGTATTTGTGAAGTTTCAATGAGATTGA
TAATTGTCGATTTTATGTTAATCCCTAGTACATGGCCTGCTGTCAACACCCAGGACACCCAGGATATGGTCTTTG
CTGTTTGATTTTCCTCATCCCCAGTCTCAAGGGGAAGCCAGGACAATGAGAACAGCCACTTCCCATCAGGAGTCA
CTGCAAGGCCCCCAGGGTGGGATGGTGGGGAGATAAGAACCGTGAGAGAAGTTGGCACAAAGGAGTTATGGGACA
AAGGGTCCAAGATAGGCAGAAAAGAAAATGTTGCCAGTTGATGGGGAAGAAAGGAAGTCGGAGGGCTCAGACACT
GAGGGGGACAGAACATCTCCATGTGCAGTCTCATCTCTTATAGTCAGCAACAGGTATCCACGGGGAGGGCCCTAC
ATCATCTGCTACCCTGAAGGATCTGGAGGTAGGAGGCTCTGGGCGGAGGTGCAGTGACCCCGCAGGCCAGCCCTC
CAACCTCCTCCCGCAGCGGGGACTGGGTGCCCCTCTGCCAGCTGAGACAGCCCACACACAACCCAGCCCTAATGA
TCGTTCTCTCTACCTCTCCCCCAAGTCCTCCTCCGCCTCCTCCTCTCTGCATGCGCCTCAGAGCCCGTGCCAAGA
ACAAGCAGCAGTCCTGAACTCGAGGTCCATAAAAATCAGTCGACTGAATGACACCATCAAATCTTTGAAACAACA
GAAGAAACAAGTGGAACATCAGCTGGAAGAAGAAAAGAAAGCAAACAATGAGAAACAGAAAGCTGAAAGGGAGCT
AGAGGGTCAAATCCAGAGATTGAACACAGAGAAAAAGAAACTAAATACGGACCTGTATCAC**ATG**AAACATTCTCT
CAGATACTTTGAAGAAGAGTCCAAGGATCTGGCCGGCCGCCTGCAACGTTCATCGCAGCGTATAGGAGAGTTAGA
GTGGTCTCTCTGTGCTGTCGCCGCCACACAGAAGAAGAAGCCGGATGGGTTCTCGAGCCGCAGTAAAGCACTTCT
CAAGCGGCAGTTAGAGCAGTCCATACGGGAGCAGATACTGCTGAAAGGACACGTGACACAGTTGAAGGAGTCGCT
TAAAGAAGTCCAGCTGGAGAGAGATCAATATGCTGAACAAATAAAAGGAGAGAGGGCCCAGTGGCAGCAGAGGAT
GAGGAAAATGTCGCAGGAGGTTTGCACATTGAAGGAGGAGAAGAAGCATGATACGCATCGGGTAGAGGAGCTGGA
GAGGAGCTTGTCCAGACTCAAAAACCAGATGGCTGAGCCACTGCCCCCGGATGCCCCAGCAGTGTCCTCTGAGGT
GGAGCTGCAAGACCTGAGGAAGGAGCTGGAGAGAGTGGCAGGAGAGCTCCAGGCTCAGGTGGAAAACAATCAGTG
CATCAGTCTCCTGAACCGTGGGCAAAAGGAGAGGCTTCGCGAGCAGGAGGAGAGGCTTCAGGAGCAGCAGGAGAG
GCTTCGGGAACAGGAGAAGAGGCTTCAGCAGCTGTCCGAGCCACAGAGCGACTTGGAGGAGCTGCACGAGAACAA
GAGCGCACTGCAGTTGGAGCAGCAAGTAAAGGAGCTGCAGGAGAAGCTGGGCCAGGTGACGGAGACGCTCACCTC
GGCTGAGAAGGAGCCAGAGGCAGCAGTCCCAGCCTCAGGGACTGGGGGCGAGTCTAGCGGCCTTATGGACCTCCT
GGAGGAGAAGGTGGACCTGAGGGAGCATGTGGAGAAACTGGAACTTGGATTCATCCAGTACCGGAGAGAGAGATG
CCATCAGAAAGTACATCGCCTTCTAACAGAGCCAGGGGACAGTGCCAAAGATGCGTCACCGGGAGGAGGCCATCA
TCAGGCTGGCCCAGGACGAGGAGGAGAGGAAGGTGAAGCTGTTGGAGCTGCAGGAGATGGTGTTGCGGCTTGTGG
CAGCTATAGCGAGGGGCACGGCAAATTCCTGGCCGCTGCCCGGAACCCTGCTGCTGAACCCAGTCCAGGAGCCCC
AGCCCCCCAGGAGCTCGGGGCTGCCGACAAGCATGGTGATCTTTGTGAGGCGAGCCTCACCAACAGCGTGGAGCC
TGCACAAGGAGAAGCCAGGGAGGGTTCTTCCCAGGACAACCCTACTGCACAGCCAGTCGTGCAGCTCCTTGGTGA
GATGCAGGACCACCAGGAGCACCCAGGCTTGGGCAGCAACTGCTGTGTGCCATGCTTTTGCTGGGCTTGGCTGCC
GAGAAGAAGGAGA**TAA**ACACCACCATCATCAAAGAGCTGCTCAAGAAATTTTTAAAAACGAAACAAAGTTATGGG
GTTAATCTCCTACACAATTCATTTACTTCATTTGAATGTTAGAGCTACTCATGATTATTTGTGTTTCTAATTTAT
AGTTTAAGTTTATTTGTAAAAAGTTAAAAGAGAGTGGGTCTCTGTGCCTCTCACTGATGTTCACTCTGGCATCCT
TTAGCATTTTTCTTTTTTCATTTCATAATTGTAGGTCATTAGCATGCATATCGAGTTTGCCCTTACGTGGTGGGA
GTTCAAACACACAAAGACCCACTCTTTGCACAAAACTGTTCTCGCTGGTTTGGAATAGGCTCCCGTGCTTTTTTA
ATGTTATTGCAGCATGGATGTTCATTACAGAATTCAGATAAAATTTGCTAATGTTCTGCTATGATGTTTGATCTC
ATCTTAATCACAGTGAGCTCTTCCATAGCTCAATATGCGGTTTGCCCTCAAGTGTGCACTGTTTATTACTTTGTA
ATATGCCACTATGAGTACTGACACTTAGAGCTGTTTAAAGGCCGAGAACTGGAAACAGCCTTTCCTCCATTTTCT
GTGTATTGGTGATGGGAGTGATAACCTTTTGGGGGAGCTTTCTAAATCTCGCAGAAGAGGAAAGTGGCCTGCTCT
GGCAGGTATGTGCAGGATACAGTGTGTTTCATCTGTTCCGGTGCCAAGAATGAGCACTGTACTGTGGCAGTTCCC
TTTGGATTTGTATGTGCTCTGGGCTCATGAAGATATTGCATCGTGAGCTGCAGCAGTTGCACTCTTTTTCAGTGA
CCTAAAAATGGCTTATTTCCGAGGAATGAAAGGCTGCCATCGTTGGCTGTGGATGTGGAAAACCTTTCCTAGCTT

FIGURE 2440B

AGAGCATTTGTATCTACAATACATTTTAAAGTCAGAGTTCGTGTTCCCTGTTTTAATCACATGACTACCTGTGCC
AGTACACGAAAGGGCGCTGGTTGGCATTCTTCTTAATGTATTTAGTAAAGATCATAAGACATCCTTTAAGAGTTT
AAATGTCTCTGAAACAGGCATACAGGCTCTAGTCAAGAATGAATTAGAGTGAAGGAAAGCTGTGTGACACCTGGC
ATTCCTCTCTGTTCATGGAGCTTCTTTGAGGCTTGAAGTTTGATTTTACTATCTAGACCTCTCTGGCTAATACCT
ATTCTCCAACCACCTCGGTTACTCTGACATAGGAATTTACTTCTTTTCCTTGAGTGGAAAACACTTTAGAAAATA
ATAACAAACATTATTATAAACTAATATATGTGAGAGTACTTAGTTGAAACAAAAAGGAATTTTAGTAGACAGTAT
TATATTATCTTTGAAAATCAAGGAGAAGTTTATGCAACTGAAAATGTTTACACACTGTGCTGCAATCTACTGTTT
GTGAATGTCAATGTATTATCAGGAAACATGGCTATACGATCGCAGAGTTGTATTTCCTCACAAACTTCTTTACGA
AGAGTGAAATATGTTTTTGTACCTCTCAGTTTCAGTCAGGGACATATTTTGTGCAATATTTCTGTGATTGTGCCT
ATGCGTGATGAGTGAATGCATTTCAATCATACATTGCCTAAATCATAACTTGATGATGCTTGGGAAAGAATCAAC
AGTTAAAACTTCATGAAGTTC

FIGURE 2441

MKHSLRYFEEESKDLAGRLQRSSQRIGELEWSLCAVAATQKKKPDGFSSRSKALLKRQLEQSIREQILLKGHVTQ
LKESLKEVQLERDQYAEQIKGERAQWQQRMRKMSQEVCTLKEEKKHDTHRVEELERSLSRLKNQMAEPLPPDAPA
VSSEVELQDLRKELERVAGELQAQVENNQCISLLNRGQKERLREQEERLQEQQERLREQEKRLQQLSEPQSDLEE
LHENKSALQLEQQVKELQEKLGQVTETLTSAEKEPEAAVPASGTGGESSGLMDLLEEKVDLREHVEKLELGFIQY
RRERCHQKVHRLLTEPGDSAKDASPGGGHHQAGPGRGGEEGEAVGAAGDGVAACGSYSEGHGKFLAAARNPAAEP
SPGAPAPQELGAADKHGDLCEASLTNSVEPAQGEAREGSSQDNPTAQPVVQLLGEMQDHQEHPGLGSNCCVPCFC
WAWLPRRRR

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FIGURE 2442

GGACTGTTAACTGTTTCTGGCAAACATGAAGTCAGGCCTCTGGTATTTCTTTCTCTTCTGCTTGCGCATTAAAGT
TTTAACAGGAGAAATCAATGGTTCTGCCAATTATGAGATGTTTATATTTCACAACGGAGGTGTACAAATTTTATG
CAAATATCCTGACATTGTCCAGCAATTTAAAATGCAGTTGCTGAAAGGGGGGCAAATACTCTGCGATCTCACTAA
GACAAAAGGAAGTGGAAACACAGTGTCCATTAAGAGTCTGAAATTCTGCCATTCTCAGTTATCCAACAACAGTGT
CTCTTTTTTTCTATACAACTTGGACCATTCTCATGCCAACTATTACTTCTGCAACCTATCAATTTTTGATCCTCC
TCCTTTTAAAGTAACTCTTACAGGAGGATATTTGCATATTTATGAATCACAACTTTGTTGCCAGCTGAAGTTCTG
GTTACCCATAGGATGTGCAGCCTTTGTTGTAGTCTGCATTTTGGGATGCATACTTATTTGTTGGCTTACAAAAAA
GAAGTATTCATCCAGTGTGCACGACCCTAACGGTGAATACATGTTCATGAGAGCAGTGAACACAGCCAAAAAATC
TAGACTCACAGATGTGACCCTATTAATATGGAACTCTGGCACCCAGGCATGAAGCACGTTGGCCAGTTTTCCTCAA
CTTGAAGTGCAAGATTCTCTTATTTCCGGGACCACGGAGAGTCTGACTTAACTACATACATCTTCTGCTGGTGTT
TTGTTCAATCTGGAAGAATGACTGTATCAGTCAATGGGGATTTTAACAGACTGCCTTGGTACTGCCGAGTCCTCT
CAAAACAAACACCCTCTTGCAACCAGCTTTGGAGAAAGCCCAGCTCCTGTGTGCTCACTGGGAGTGGAATCCCTG
TCTCCACATCTGCTCCTAGCAGTGCATCAGCCAGTAAAACAAACACATTTACAAGAAAAATGTTTTAAAGATGCC
AGGGGTACTGAATCTGCAAAGCAAATGAGCAGCCAAGGACCAGCATCTGTCCGCATTTCACTATCATACTACCTC
TTCTTTCTGTAGGGATGAGAATTCCTCTTTTAATCAGTCAAGGGAGATGCTTCAAAGCTGGAGCTATTTTATTTC
TGAGATGTTGATGTGAACTGTACATTAGTACATACTCAGTACTCTCCTTCAATTGCTGAACCCCAGTTGACCATT
TTACCAAGACTTTAGATGCTTTCTTGTGCCCTCAATTTTCTTTTTAAAAATACTTCTACATGACTGCTTGACAGC
CCAACAGCCACTCTCAATAGAGAGCTATGTCTTACATTCTTTCCTCTGCTGCTCAATAGTTTTATATATCTATGC
ATACATATATACACACATATGTATATAAAATTCATAATGAATATATTTGCCTATATTCTCCCTACAAGAATATTT
TTGCTCCAGAAAGACATGTTCTTTTCTCAAATTCAGTTAAAATGGTTTACTTTGTTCAAGTTAGTGGTAGGAAAC
ATTGCCCGGAATTGAAAGCAAATTTATTTTATTATCCTATTTTCTACCATTATCTATGTTTTCATGGTGCTATTA
ATTACAAGTTTAGTTCTTTTTGTAGATCATATTAAAATTGCAAACAAAATCATCTTTAATGGGCCAGCATTCTCA
TGGGGTAGAGCAGAATATTCATTTAGCCTGAAAGCTGCAGTTACTATAGGTTGCTGTCAGACTATACCCATGGTG
CCTCTGGGCTTGACAGGTCAAAATGGTCCCCATCAGCCTGGAGCAGCCCTCCAGACCTGGGTGGAATTCCAGGGT
TGAGAGACTCCCCTGAGCCAGAGGCCACTAGGTATTCTTGCTCCCAGAGGCTGAAGTCACCCTGGGAATCACAGT
GGTCTACCTGCATTCATAATTCCAGGATCTGTGAAGAGCACATATGTGTCAGGGCACAATTCCCTCTCATAAAAA
CCACACAGCCTGGAAATTGGCCCTGGCCCTTCAAGATAGCCTTCTTTAGAATATGATTTGGCTAGAAAGATTCTT
AAATATGTGGAATATGATTATTCTTAGCTGGAATATTTTCTCTACTTCCTGTCTGCATGCCCAAGGCTTCTGAAG
CAGCCAATGTCGATGCAACAACATTTGTAACTTTAGGTAAACTGGGATTATGTTGTAGTTTAACATTTTGTAACT
GTGTGCTTATAGTTTACAAGTGAGACCCGATATGTCATTATGCATACTTATATTATCTTAAGCATGTGTAATGCT
GGATGTGTACAGTACAGTACTTAACTTGTAATTTGAATCTAGTATGGTGTTCTGTTTTCAGCTGACTTGGACAAC
CTGACTGGCTTTGCACAGGTGTTCCCTGAGTTGTTTGCAGGTTTCTGTGTGTGGGGTGGGGTATGGGGAGGAGAA
CCTTCATGGTGGCCCACCTGGCCTGGTTGTCCAAGCTGTGCCTCGACACATCCTCATCCCAAGCATGGGACACCT
CAAGATGAATAATAATTCACAAAATTTCTGTGAAATCAAATCCAGTTTTAAGAGGAGCCACTTATCAAAGAGATT
TTAACAGTAGTAAGAAGGCAAAGAATAAACATTTGATATTCAGCAACTGAAAAAAAAAAA

FIGURE 2443

MKSGLWYFFLFCLRIKVLTGEINGSANYEMFIFHNGGVQILCKYPDIVQQFKMQLLKGGQILCDLTKTKGSGNTV
SIKSLKFCHSQLSNNSVSFFLYNLDHSHANYYFCNLSIFDPPPFKVTLTGGYLHIYESQLCCQLKFWLPIGCAAF
VVVCILGCILICWLTKKKYSSSVHDPNGEYMFMRAVNTAKKSRLTDVTL

FIGURE 2444

GGCACGAGGGTCCGCAAGCCCGGCTGAGAGCGCGCCATGGGGCAGGCGGGCTGCAAGGGGCTCTGCCTGTCGCTG
TTCGACTACAAGACCGAGAAGTATGTCATCGCCAAGAACAAGAAGGTGGGCCTGCTGTACCGGCTGCTGCAGGCC
TCCATCCTGGCGTACCTGGTCGTATGGGTGTTCCTGATAAAGAAGGGTTACCAAGACGTCGACACCTCCCTGCAG
AGTGCTGTCATCACCAAAGTCAAGGGCGTGGCCTTCACCAACACCTCGGATCTTGGGCAGCGGATCTGGGATGTC
GCCGACTACGTCATTCCAGCCCAGGGAGAGAACGTCTTTTTTGTGGTCACCAACCTGATTGTGACCCCCAACCAG
CGGCAGAACGTCTGTGCTGAGAATGAAGGCATTCCTGATGGCGCGTGCTCCAAGGACAGCGACTGCCACGCTGGG
GAAGCGGTTACAGCTGGAAACGGAGTGAAGACCGGCCGCTGCCTGCGGAGAGGGAACTTGGCCAGGGGCACCTGT
GAGATCTTTGCCTGGTGCCCGTTGGAGACAAGCTCCAGGCCGGAGGAGCCATTCCTGAAGGAGGCCGAAGACTTC
ACCATTTTCATAAAGAACCACATCCGTTTCCCCAAATTCAACTTCTCCAAAAACAATGTGATGGACGTCAAGGAC
AGATCTTTCCTGAAATCATGCCACTTTGGCCCCAAGAACCACTACTGCCCCATCTTCCGACTGGGCTCCATCGTC
CGCTGGGCCGGGAGCGACTTCCAGGATATAGCCCTGCGAGGTGGCGTGATAGGAATTAATATTGAATGGAACTGT
GATCTTGATAAAGCTGCCTCTGAGTGCCACCCTCACTATTCTTTTAGCCGTCTGGACAATAAACTTTCAAAGTCT
GTCTCCTCCGGGTACAACTTCAGATTTGCCAGATATTACCGAGACGCAGCCGGGGTGGAGTTCCGCACCCTGATG
AAAGCCTACGGGATCCGCTTTGACGTGATGGTGAACGGCAAGGGTGCTTTCTTCTGCGACCTGGTACTCATCTAC
CTCATCAAAAAGAGAGAGTTTTACCGTGACAAGAAGTACGAGGAAGTGAGGGGCCTAGAAGACAGTTCCCAGGAG
GCCGAGGACGAGGCATCGGGGCTGGGGCTATCTGAGCAGCTCACATCTGGGCCAGGGCTGCTGGGGATGCCGGAG
CAGCAGGAGCTGCAGGAGCCACCCGAGGCGAAGCGTGGAAGCAGCAGTCAGAAGGGGAACGGATCTGTGTGCCCA
CAGCTCCTGGAGCCCCACAGGAGCACGTGAATTGCCTCTGCTTACGTTCAGGCCCTGTCCTAAACCCAGCCGTCT
AGCACCCAGTGATCCCATGCCTTTGGGAATCCCAGGATGCTGCCCAACGGGAAATTTGTACATTGGGTGCTATCA
ATGCCACATCACAGGGACCAGCCATCACAGAGCAAAGTGACCTCCACGTCTGATGCTGGGGTCATCAGGACGGAC
CCATCATGGCTGTCTTTTTGCCCCACCCCCTGCCGTCAGTTCTTCCTTTCTCCGTGGCTGGCTTCCCGCACTAGG
GAACGGGTTGTAAATGGGGAACATGACTTCCTTCCGGAGTCCTTGAGCACCTCAGCTAAGGACCGCAGTGCCCTG
TAGAGTTCCTAGATTACCTCACTGGGAATAGCATTGTGCGTGTCCGGAAAAGGGCTCCATTTGGTTCCAGCCCAC
TCCCCTCTGCAAGTGCCACAGCTTCCCTCAGAGCATACTCTCCAGTGGATCCAAGTACTCTCTCTCCTAAAGACA
CCACCTTCCTGCCAGCTGTTTGCCCTTAGGCCAGTACACAGAATTAAAGTGGGGGAGATGGCAGACGCTTTCTGG
GACCTGCCCAAGATATGTATTCTCTGACACTCTTATTTGGTCATAAAACAATAAATGGTGTCAATTTCAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2445

MGQAGCKGLCLSLFDYKTEKYVIAKNKKVGLLYRLLQASILAYLVVWVFLIKKGYQDVDTSLQSAVITKVKGVAF
TNTSDLGQRIWDVADYVIPAQGENVFFVVTNLIVTPNQRQNVCAENEGIPDGACSKDSDCHAGEAVTAGNGVKTG
RCLRRGNLARGTCEIFAWCPLETSSRPEEPFLKEAEDFTIFIKNHIRFPKFNFSKNNVMDVKDRSFLKSCHFGPK
NHYCPIFRLGSIVRWAGSDFQDIALRGGVIGINIEWNCDLDKAASECHPHYSFSRLDNKLSKSVSSGYNFRFARY
YRDAAGVEFRTLMKAYGIRFDVMVNGKGAFFCDLVLIYLIKKREFYRDKKYEEVRGLEDSSQEAEDEASGLGLSE
QLTSGPGLLGMPEQQELQEPPEAKRGSSSQKGNGSVCPQLLEPHRST

FIGURE 2446

ATTTACTCCATCCTTTATAGTGATGCTACAGGACGAAGAGGAATGGATAAAAACATTGGCGAGCAACTCAATAAA
GCGTATGAAGCCTTCCGGCAGGCATGCATGGATAGAGATTCTGCAGTAAAAGAATTACAGCAAAAGACTGAGAAC
TATGAGCAGAGAATACGTGAACAACAGGAACAGCTGTCACTTCAACAGACTATTATTGACAAGCTAAAATCTCAG
TTACTTCTTGTGAATTCCACTCAAGATAACAATTATGGCTGTGTTCCTCTGCTTGAAGACAGTGAAACAAGAAAG
AATAATTTGACTCTTGATCAGCCACAAGATAAAGTGATTTCAGGAATAGCAAGAGAAAAACTACCAAAGGTAGAC
ATTGCTTCTGCAGAAAGCAGCATTTAAATGCTGATGCGTGACATAGCTTCCTCATTTTATTTTTCTGAAGTGATC
TGCTGGAATTCCAAACAGAAGTTCCATATATACAAATATGTGGCTTAAATATTTCTAAATAGAAGAACTATTTTC
AAGTAAAATAAAGGCTGAGGTTTTGTATTTAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2447

MDKNIGEQLNKAYEAFRQACMDRDSAVKELQQKTENYEQRIREQQEQLSLQQTIIDKLKSQLLLVNSTQDNNYGC
VPLLEDSETRKNNLTLDQPQDKVISGIAREKLPKVDIASAESSI

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FIGURE 2448

GGCACGAGGTTCGGAGAGAAGCCTGATATGTAACCCAGGCAGGTGGGAGCCTCAGTCTGTCGGGCTGAGGTCTGG
CATCTACAAAGCCTCTTGGCCGTGTTCTGAACTTGAAGCCTGGAGGAGTTCTCTGCTCAGCACAGCCAAGGAACA
GAATTAGAAGAAAAGGAACCCTGGCCTGAGGCAGGTGACAAACATTACCACCCCAGCTGTGCACGATGCAGCAGA
TGCAACCAG**ATG**TTCACAGAAGGAGAGGAAATGTATCTTCAAGGCTCCACCGTTTGGCATCCCGACTGTAAGCAA
TCTACGAAGACCGAGGAAAAGCTGCGGGCAAAAGTAGACAATGAGATCCTGGATTACAAGGATTTAGCAGCCATT
CCGAAGGTCAAGGCAATTTATGACATTGAACGTCCAGATCTTATTACCTATGAGCCTTTCTACACTTCGGGCTAT
GATGACAAACAGGAGAGACAGAGCCTTGGAGAGTCTCCGAGGACTTTGTCTCCTACTCCATCAGCAGAAGGGTAC
CAGGATGTTCGGGATCGGATGATCCATCGGTCCACGAGCCAGGGCTCCATCAACTCCCCTGTGTACAGCCGCCAC
AGCTACACTCCAACCACGTCCCGCTCTCCCCAGCATTTCCACAGACCTGATCAAGGAATCAACATTTACCGAAAG
CCACCCATCTACAAACAGCATGCTGCCTTGGCAGCCCAGAGCAAGTCCTCAGAAGATATCATCAAGTTTTCCAAG
TTCCCAGCAGCCCAGGCACCAGACCCCAGCGAGACACCAAAGATTGAGACGGACCACTGGCCTGGTCCCCCCTCA
TTTGCTGTCGTAGGACCTGACATGAAACGCAGATCTAGTGGCAGAGAGGAAGATGATGAGGAACTTCTGAGACGT
CGGCAGCTTCAAGAAGAGCAATTAATGAAGCTTAACTCAGGCCTGGGACAGTTGATCTTGAAAGAAGAGATGGAG
AAAGAGAGCCGGGAAAGGTCATCTCTGTTAGCCAGTCGCTACGATTCTCCCATCAACTCAGCTTCACATATTCCA
TCATCTAAAACTGCATCTCTCCCTGGCTATGGAAGAAATGGGCTTCACCGGCCTGTTTCTACCGACTTCGCTCAG
TATAACAGCTATGGGGATGTCAGCGGGGGAGTGCGAGATTACCAGACACTCCCAGATGGCCACATGCCTGCAATG
AGAATGGACCGAGGAGTGTCTATGCCCAACATGTTGGAACCAAAGATATTTCCATATGAAATGCTCATGGTGACC
AACAGAGGGCGAAACAAAATCCTCAGAGAGGTGGACAGAACCAGGCTGGAGCGCCACTTAGCCCCTGAAGTGTTT
CGGGAAATCTTTGGAATGTCCATACAGGAGTTTGACAGGTTACCTCTTTGGAGACGCAACGACATGAAGAAAAAA
GCAAAACTCTTC**TAA**GTCCCACTCGTGAATGGCAATTAGAGAAAGGACTGACAGTGGCGGTGCCCCATAGGATGT
CATATTGAGGCCCAAACTTGATTGGAGAATTTGCAAACTACCGTCGCTCAGCAACACCAAAAAGAGAAAGTCTGG
TTAAAACACCATGAGTCAAATGTCGGGCCAGCCAACAGTAACACTTGCCAAGAAGCATGGCGTAGAAATTTCTAT
GTTCCGAAACACAGAGTAGTGTCCACATGTGAGCTTTTCACATTACCTTATGTATACAACAGGAGCTGCGTTGTT
TTCTTCTTTTTCTTTTCCTTTATCTGTTGTCCAACAACAGTGCTGACTGTCCGGATAAGAGCTGGCAAGTGCCCT
TAGGATGCCGCATGGGAAAAATCGGTTATCATAATTTCAAAGTATAAATATATTTATTAAGTAGCGCTGCGGCTA
AGAAGGAAGAGTGAGGGGTCTGTCCATGGGGTGGCAGTGATTTCACACCCGCCTTTCTTGAATGGCTTCGTGTTA
CTCAGCCGTGCCCTGGCAGGAATGGAACTCCATCAGGGAACAGGGCAGCTCTGTTTGAATGGGGTGAAAAACAGC
AAAATTAATTCTTAGCAAGCTCCTTGTTCTCTACTGTTCACCGGGACCTGGCTGGCAAATGACTTAGCTATTAGT
ATATTTAAAAACTGTTCAAAAGCAAAAGAGAAGGAACAGGAATGAAAGGAAACCTTCCCTTAACTCTTTCTGCTT
CCCATAGCAGGTCTGGTTCCTGCTCCCCGCCTAGGACAGGAGCTGTCTGGAGCTCCACCTTTGCAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2449

MFTEGEEMYLQGSTVWHPDCKQSTKTEEKLRAKVDNEILDYKDLAAIPKVKAIYDIERPDLITYEPFYTSGYDDK
QERQSLGESPRTLSPTPSAEGYQDVRDRMIHRSTSQGSINSPVYSRHSYTPTTSRSPQHFHRPDQGINIYRKPPI
YKQHAALAAQSKSSEDIIKFSKFPAAQAPDPSETPKIETDHWPGPPSFAVVGPDMKRRSSGREEDDEELLRRRQL
QEEQLMKLNSGLGQLILKEEMEKESRERSSLLASRYDSPINSASHIPSSKTASLPGYGRNGLHRPVSTDFAQYNS
YGDVSGGVRDYQTLPDGHMPAMRMDRGVSMPNMLEPKIFPYEMLMVTNRGRNKILREVDRTRLERHLAPEVFREI
FGMSIQEFDRLPLWRRNDMKKKAKLF

FIGURE 2450

AAGAGCTCCAGAGAGAAGTCGAGGAAGAGAGAGACGGGGTCAGAGAGAGCGCGCGGGCGTGCGAGCAGCGAAAGC
GACAGGGGCAAAGTGAGTGACCTGCTTTTGGGGGTGACCGCCGGAGCGCGGCGTGAGCCCTCCCCCTTGGGATCC
CGCAGCTGACCAGTCGCGCTGACGGACAGACAGACAGACACCGCCCCCAGCCCCAGTTACCACCTCCTCCCCGGC
CGGCGGCGGACAGTGGACGCGGCGGCGAGCCGCGGGCAGGGGCCGGAGCCCGCCCCCGGAGGCGGGGTGGAGGGG
GTCGGAGCTCGCGGCGTCGCACTGAAACTTTTCGTCCAACTTCTGGGCTGTTCTCGCTTCGGAGGAGCCGTGGTC
CGCGCGGGGGAAGCCGAGCCGAGCGGAGCCGCGAGAAGTGCTAGCTCGGGCCGGGAGGAGCCGCAGCCGGAGGAG
GGGGAGGAGGAAGAAGAGAAGGAAGAGGAGAGGGGGCCGCAGTGGCGACTCGGCGCTCGGAAGCCGGGCTCATGG
ACGGGTGAGGCGGCGGTGTGCGCAGACAGTGCTCCAGCGCGCGCGCTCCCCAGCCCTGGCCCGGCCTCGGGCCGG
GAGGAAGAGTAGCTCGCCGAGGCGCCGAGGAGAGCGGGCCGCCCCACAGCCCGAGCCGGAGAGGGACGCGAGCCG
CGCGCCCCGGTCGGGCCTCCGAAACC**ATG**AACTTTCTGCTGTCTTGGGTGCATTGGAGCCTTGCCTTGCTGCTCT
ACCTCCACCATGCCAAGTGGTCCCAGGCTGCACCCATGGCAGAAGGAGGAGGGCAGAATCATCACGAAGTGGTGA
AGTTCATGGATGTCTATCAGCGCAGCTACTGCCATCCAATCGAGACCCTGGTGGACATCTTCCAGGAGTACCCTG
ATGAGATCGAGTACATCTTCAAGCCATCCTGTGTGCCCCTGATGCGATGCGGGGGCTGCTCCAATGACGAGGGCC
TGGAGTGTGTGCCCACTGAGGAGTCCAACATCACCATGCAGATTATGCGGATCAAACCTCACCAAGGCCAGCACA
TAGGAGAGATGAGCTTCCTACAGCACAACAAATGTGAATGCAGACCAAAGAAAGATAGAGCAAGACAAGAAAATC
CCTGTGGGCCTTGCTCAGAGCGGAGAAAGCATTTGTTTGTACAAGATCCGCAGACGTGTAAATGTTCCTGCAAAA
ACACACACTCGCGTTGCAAGGCGAGGCAGCTTGAGTTAAACGAACGTACTTGCAGATGTGACAAGCCGAGGCGG**TGA**GCCGGGCAGGAGGAAGGAGCCTCCCTCAGGGTTTCGGGAACCAGATCTCTCTCCAGGAAAGACTGATACAGAA
CGATCGATACAGAAACCACGCTGCCGCCACCACACCATCACCATCGACAGAACAGTCCTTAATCCAGAAACCTGA
AATGAAGGAAGAGGAGACTCTGCGCAGAGCACTTTGGGTCCGGAGGGCGAGACTCCGGCGGAAGCATTCCCGGGC
GGGTGACCCAGCACGGTCCCTCTTGGAATTGGATTCGCCATTTTATTTTTCTTGCTGCTAAATCACCGAGCCCGG
AAGATTAGAGAGTTTTATTTCTGGGATTCCTGTAGACACACCCACCCACATACATACATTTATATATATATATAT
TATATATATATATAAAAATAAATATCTCTATTTTATATATATAAAATATATATATTCTTTTTTTAAATTAACAGTGC
TAATGTTATTGGTGTCTTCACTGGATGTATTTGACTGCTGTGGACTTGAGTTGGGAGGGGAATGTTCCCACTCAG
ATCCTGACAGGGAAGAGGAGGAGATGAGAGACTCTGGCATGATCTTTTTTTTGTCCCACTTGGTGGGGCCAGGGT
CCTCTCCCCTGCCCAAGAATGTGCAAGGCCAGGGCATGGGGGCAAATATGACCCAGTTTTGGGAACACCGACAAA
CCCAGCCCTGGCGCTGAGCCTCTCTACCCCAGGTCAGACGGACAGAAAGACAAATCACAGGTTCCGGGATGAGGA
CACCGGCTCTGACCAGGAGTTTGGGGAGCTTCAGGACATTGCTGTGCTTTGGGGATTCCCTCCACATGCTGCACG
CGCATCTCGCCCCCAGGGGCACTGCCTGGAAGATTCAGGAGCCTGGGCGGCCTTCGCTTACTCTCACCTGCTTCT
GAGTTGCCCAGGAGGCCACTGGCAGATGTCCCGGCGAAGAGAAGAGACACATTGTTGGAAGAAGCAGCCCATGAC
AGCGCCCCTTCCTGGGACTCGCCCTCATCCTCTTCCTGCTCCCCTTCCTGGGGTGCAGCCTAAAAGGACCTATGT
CCTCACACCATTGAAACCACTAGTTCTGTCCCCCCAGGAAACCTGGTTGTGTGTGTGTGAGTGGTTGACCTTCCT
CCATCCCCTGGTCCTTCCCTTCCCTTCCCGAGGCACAGAGAGACAGGGCAGGATCCACGTGCCCATTGTGGAGGC
AGAGAAAAGAGAAAGTGTTTTATATACGGTACTTATTTAATATCCCTTTTTAATTAGAAATTAGAACAGTTAATT
TAATTAAAGAGTAGGGTTTTTTTTCAGTATTCTTGGTTAATATTTAATTTCAACTATTTATGAGATGTATCTTTT
GCTCTCTCTTGCTCTCTTATTTGTACCGGTTTTTGTATATAAAATTCATGTTTCCAATCTCTCTCTCCCTGATCG
GTGACAGTCACTAGCTTATCTTGAACAGATATTTAATTTTGCTAACACTCAGCTCTGCCCTCCCCGATCCCCTGG
CTCCCCAGCACACATTCCTTTGAAAGAGGGTTTCAATATACATCTACATACTATATATATATTGGGCAACTTGTA
TTTGTGTGTATATATATATATATATGTTTATGTATATATGTGATCCTGAAAAAATAAACATCGCTATTCTGTTTT
TTATATGTTCAAACCAAACAAGAAAAAATAGAGAATTCTACATACTAAATCTCTCTCCTTTTTTAATTTTAATAT
TTGTTATCATTTATTTATTGGTGCTACTGTTTATCCGTAATAATTGTGGGGAAAAGATATTAACATCACGTCTTT
GTCTCTAGTGCAGTTTTTCGAGATATTCCGTAGTACATATTTATTTTTAAACAACGACAAAGAAATACAGATATA
TCTTAAAAAAAAAAAA

FIGURE 2451

MNFLLSWVHWSLALLLYLHHAKWSQAAPMAEGGGQNHHEVVKFMDVYQRSYCHPIETLVDIFQEYPDEIEYIFKP
SCVPLMRCGGCSNDEGLECVPTEESNITMQIMRIKPHQGQHIGEMSFLQHNKCECRPKKDRARQENPCGPCSERR
KHLFVQDPQTCKCSCKNTHSRCKARQLELNERTCRCDKPRR

FIGURE 2452

GAATTCAAAATGTCTTCAGTTGTAAATCTTACCATTATTTTACGTACCTCTAAGAAATAAAAGTGCTTCTAATTA
AAATATGATGTCATTAATTATGAAATACTTCTTGATAACAGAAGTTTTAAAATAGCCATCTTAGAATCAGTGAAA
TATGGTAATGTATTATTTTCCTCCTTTGAGTTAGGTCTTGTGCTTTTTTTTCCTGGCCACTAAATTTCACAATTT
CCAAAAAGCAAAATAAACATATTCTGAATATTTTTGCTGTGAAACACTTGACAGCAGAGCTTTCCACCATGAAAA
GAAGCTTCATGAGTCACACATTACATCTTTGGGTTGATTGAATGCCACTGAAACATTCTAGTAGCCTGGAGAAGT
TGACCTACCTGTGGAGATGCCTGCCATTAAATGGCATCCTGATGGCTTAATACACATCACTCTTCTGTGAAGGGT
TTTAATTTTCAACACAGCTTACTCTGTAGCATCATGTTTACATTGTATGTATAAAGATTATACAAAGGTGCAATT
GTGTATTTCTTCCTTAAAATGTATCAGTATAGGATTTAGAATCTCCATGTTGAAACTCTAAATGCATAGAAATAA
AAATAATAAAAAATTTTTCATTTTGGCTTTTCAGCCTAGTATTAAAACTGATAAAAGCAAAGCCATGCACAAAAC
TACCTCCCTAGAGAAAGGCTAGTCCCTTTTCTTCCCCATTCATTTCATTATGAACATAGTAGAAAACAGCATATT
CTTATCAAATTTGATGAAAAGCGCCAACACGTTTGAACTGAAATACGACTTGTCATGTGAACTGTACCGAATGTC
TACGTATTCCACTTTTCCTGCTGGGGTCCCTGTCTCAGAAAGGAGTCTTGCTCGCGCTGGTTTCTATTACACTGG
TGTGAATGACAAGGTCAAATGCTTCTGTTGTGGCCTGATGCTGGATAACTGGAAAAGAGGAGACAGTCCTACTGA
AAAGCATAAAAAGTTGTATCCTAGCTGCAGATTCGTTCAGAGTCTAAATTCCGTTAACAACTTGGAAGCTACCTC
TCAGCCTACTTTTCCTTCTTCAGTAACAAATTCCACACACTCATTACTTCCGGGTACAGAAAACAGTGGATATTT
CCGTGGCTCTTATTCAAACTCTCCATCAAATCCTGTAAACTCCAGAGCAAATCAAGATTTTTCTGCCTTGATGAG
AAGTTCCTACCACTGTGCAATGAATAACGAAAATGCCAGATTACTTACTTTTCAGACATGGCCATTGACTTTTCT
GTCGCCAACAGATCTGGCAAAAGCAGGCTTTTACTACATAGGACCTGGAGACAGAGTGGCTTGCTTTGCCTGTGG
TGGAAAATTGAGCAATTGGGAACCGAAGGATAATGCTATGTCAGAACACCTGAGACATTTTCCCAAATGCCCATT
TATAGAAAATCAGCTTCAAGACACTTCAAGATACACAGTTTCTAATCTGAGCATGCAGACACATGCAGCCCGCTT
TAAAACATTCTTTAACTGGCCCTCTAGTGTTCTAGTTAATCCTGAGCAGCTTGCAAGTGCGGGTTTTTATTATGT
GGGTAACAGTGATGATGTCAAATGCTTTTGCTGTGATGGTGGACTCAGGTGTTGGGAATCTGGAGATGATCCATG
GGTTCAACATGCCAAGTGGTTTCCAAGGTGTGAGTACTTGATAAGAATTAAAGGACAGGAGTTCATCCGTCAAGT
TCAAGCCAGTTACCCTCATCTACTTGAACAGCTGCTATCCACATCAGACAGCCCAGGAGATGAAAATGCAGAGTC
ATCAATTATCCATTTTGAACCTGGAGAAGACCATTCAGAAGATGCAATCATGATGAATACTCCTGTGATTAATGC
TGCCGTGGAAATGGGCTTTAGTAGAAGCCTGGTAAAACAGACAGTTCAGAGAAAAATCCTAGCAACTGGAGAGAA
TTATAGACTAGTCAATGATCTTGTGTTAGACTTACTCAATGCAGAAGATGAAATAAGGGAAGAGGAGAGAGAAAG
AGCAACTGAGGAAAAAGAATCAAATGATTTATTATTAATCCGGAAGAATAGAATGGCACTTTTTCAACATTTGAC
TTGTGTAATTCCAATCCTGGATAGTCTACTAACTGCCGGAATTATTAATGAACAAGAACATGATGTTATTAAACA
GAAGACACAGACGTCTTTACAAGCAAGAGAACTGATTGATACGATTTTAGTAAAAGGAAATATTGCAGCCACTGT
ATTCAGAAACTCTCTGCAAGAAGCTGAAGCTGTGTTATATGAGCATTTATTTGTGCAACAGGACATAAAATATAT
TCCCACAGAAGATGTTTCAGATCTACCAGTGGAAGAACAATTGCGGAGACTACAAGAAGAAAGAACATGTAAAGT
GTGTATGGACAAAGAAGTGTCCATAGTGTTTATTCCTTGTGGTCATCTAGTAGTATGCAAAGATTGTGCTCCTTC
TTTAAGAAAGTGTCCTATTTGTAGGAGTACAATCAAGGGTACAGTTCGTACATTTCTTTCATGAAGAAGAACCAA
AACATCATCTAAACTTTAGAATTAATTTATTAAATGTATTATAACTTTAACTTTCATCCTAATTTGGTTTCCTTA
AAATTTTTATTTATTTACAACTCAACAAACATTGTTTTGTGTAACATATTTAATATATGTATCTAAACCATATGA
ACATATATTTTTTAGAAACTAAGAGAATGATAGGCTTTTGTTCTTATGAACGAAAAAGAGGTAGCACTACAAACA
CAATATTCAATCAAAATTTCAGCATTATTGAAATTGTAAGTGAAGTAAAACTTAAGATATTTGAGTTAACCTTTA
AGAATTTTAAATATTTTGGCATTGTACTAATACCGGGAACATGAAGCCAGGTGTGGTGGTATGTGCCTGTAGTCC
CAGGCTGAGGCAAGAGAATTACTTGAGCCCAGGAGTTTGAATCCATCCTGGGCAGCATACTGAGACCCTGCCTTT
AAAAACAAACAGAACAAAAACAAAACACCAGGGACACATTTCTCTGTCTTTTTTGATCAGTGTCCTATACATCGA
AGGTGTGCATATATGTTGAATGACATTTTAGGGACATGGTGTTTTTATAAAGAATTCTGTGAGAAAAAATTTAAT
AAAACCCCCCAAATT

FIGURE 2453

MNIVENSIFLSNLMKSANTFELKYDLSCELYRMSTYSTFPAGVPVSERSLARAGFYYTGVNDKVKCFCCGLMLDN
WKRGDSPTEKHKKLYPSCRFVQSLNSVNNLEATSQPTFPSSVTNSTHSLLPGTENSGYFRGSYSNSPSNPVNSRA
NQDFSALMRSSYHCAMNNENARLLTFQTWPLTFLSPTDLAKAGFYYIGPGDRVACFACGGKLSNWEPKDNAMSEH
LRHFPKCPFIENQLQDTSRYTVSNLSMQTHAARFKTFFNWPSSVLVNPEQLASAGFYYVGNSDDVKCFCCDGGLR
CWESGDDPWVQHAKWFPRCEYLIRIKGQEFIRQVQASYPHLLEQLLSTSDSPGDENAESSIIHFEPGEDHSEDAI
MMNTPVINAAVEMGFSRSLVKQTVQRKILATGENYRLVNDLVLDLLNAEDEIREEERERATEEKESNDLLLIRKN
RMALFQHLTCVIPILDSLLTAGIINEQEHDVIKQKTQTSLQARELIDTILVKGNIAATVFRNSLQEAEAVLYEHL
FVQQDIKYIPTEDVSDLPVEEQLRRLQEERTCKVCMDKEVSIVFIPCGHLVVCKDCAPSLRKCPICRSTIKGTVR
TFLS

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FIGURE 2454

GGCACGAGGGGGGCGAGCGGGAAAGCGGCAGCGGCGGCGGCGGCGGCGGCGGCGGGGGAAGGATGCAGGGGAAGA
AGCCGGGCGGTTCGTCGGGCGGCGGCCGGAGCGGCGAGCTGCAGGGGGACGAGGCGCAGAGGAACAAGAAAAAGA
AAAAGAAGGTGTCCTGCTTTTCCAACATCAAGATCTTCCTTGTGTCCGAGTGCGCCCTGATGCTGGCGCAGGGCA
CGGTGGGCGCCTACCTGGTGAGCGTCCTGACCACCCTGGAGCGTAGGTTCAACCTGCAGAGCGCTGACGTGGGTG
TGATCGCTAGCAGCTTCGAGATCGGGAACCTGGCGCTCATCCTCTTCGTGAGCTACTTCGGGGCACGCGGGCACC
GGCCGCGCCTGATCGGCTGCGGCGGCATCGTCATGGCGCTGGGCGCGCTGCTGTCGGCGCTGCCCGAGTTCCTGA
CCCACCAGTACAAGTACGAGGCGGGCGAGATCCGCTGGGGCGCCGAGGGCCGCGACGTCTGCGCAGCCAACGGCT
CGGGCGGCGACGAGGGGCCCGACCCCGACCTCATCTGCCTCAACCGGACGGCTACCAACATGATGTACTTGCTGC
TCATTGGGGCCCAGGTGCTCCTGGGCATCGGTGCTACCCCTGTGCAGCCCCTGGGCGTCTCCTACATCGACGACC
ACGTGCGGAGGAAGGACTCCTCGCTCTATATAGGAATCCTGTTCACGATGCTGGTATTTGGACCAGCCTGCGGGT
TTATCCTGGGCTCTTTCTGTACCAAAATCTACGTGGATGCAGTCTTCATTGACACAAGTAACCTGGACATCACTC
CGGACGACCCCCGCTGGATCGGAGCCTGGTGGGGTGGCTTTCTGCTCTGCGGTGCCTTACTCTTCTTCTCTTCCC
TCTTGATGTTTGGGTTTCCACAGTCCCTGCCCCCGCACTCAGACCCCGCCATGGAAAGCGAGCAGGCCATGCTCT
CCGAAAGAGAATACGAGAGACCCAAGCCCAGCAACGGGGTCCTGAGGCACCCCCTGGAGCCAGACAGCAGTGCCT
CCTGTTTCCAGCAGCTGAGAGTGATCCCGAAGGTCACCAAGCACCTGCTCTCAAACCCTGTGTTCACCTGCATCA
TCCTGGCCGCCTGCATGGAGATTGCAGTGGTGGCTGGCTTCGCTGCCTTTTTGGGGAAGTACCTGGAGCAGCAGT
TTAACCTCACCACCTCTTCTGCCAACCAGCTGCTTGGGATGACTGCGATCCCGTGTGCTTGTCTGGGTATCTTCC
TGGGAGGTCTTTTGGTGAAGAAGCTCAGCCTGTCTGCCCTGGGGGCCATTCGGATGGCCATGCTCGTCAACCTGG
TGTCCACTGCTTGCTACGTCTCCTTCCTCTTCCTGGGCTGCGACACTGGCCCTGTGGCTGGGGTTACTGTTCCCT
ATGGAAACAGCACAGCACCTGGCTCAGCCCTGGACCCCTACTCGCCCTGCAATAATAACTGTGAATGCCAAACCG
ATTCCTTCACTCCAGTGTGTGGGGCAGATGGCATCACCTACCTGTCTGCCTGCTTTGCTGGCTGCAACAGCACGA
ATCTCACGGGCTGTGCGTGCCTCACCACCGTCCCTGCTGAGAACGCAACCGTGGTTCCTGGAAAATGCCCCAGTC
CTGGGTGCCAAGAGGCCTTCCTCACTTTCCTCTGTGTGATGTGTATCTGCAGCCTGATCGGTGCCATGGCACAGA
CACCCTCAGTCATCATCCTCATCAGGACAGTCAGCCCTGAACTCAAGTCTTACGCTTTGGGAGTTCTTTTTCTCC
TCCTTCGTTTGTTGGGCTTCATCCCTCCACCCCTCATCTTCGGGGCTGGCATCGACTCCACCTGCCTGTTCTGGA
GCACGTTCTGTGGGGAGCAAGGCGCCTGCGTCCTCTACGACAATGTGGTCTACCGATACCTGTATGTCAGCATCG
CCATCGCGCTCAAATCCTTCGCCTTCATCCTGTACACCACCACGTGGCAGTGCCTGAGGAAAAACTATAAACGCT
ACATCAAAAACCACGAGGGCGGGCTGAGCACCAGCACAGAGTACCAAGACATTGAGACTGAGAAAACCTGCCCCG
AATCACATTCACCTTCAGAAGACTCCTTTGTGAGAAGCTGAGGGCCTGGCCCTCTTCCTCTTCCTGGAGAGAACA
GCCCTCCACCACCCACAGACCTCGCGGGCCTCACTTAGCGTGCTCCTCCCTGTCCGAGAACCCGAGGGTCCCCAT
GTGGATTATCCAGCCAGTGTGTGGTCCTTTGAGGCCCCAAGCGCAGGCCTGTGATGAGGACCAAAGAGGTGACTT
ATGGTCAGGAGTACTCCAAACAGCTCTCAGAGTAGGCATCTTTCCTGGGTCTCTAAAGAGTCATGCTGACCTGGT
GTGCAAATTCCCTTCCACCCATCCCTCTACCTCCTCTGGGGATGGCTTGCCGACATGCTTTAGAAACTCCCCTCT
TGGGAATGCTCCTCTGACTGAGGGCTCCAACAGCTTTAATGAAATCAGCCGAGAGGGTAAAAACCAACCTGTTGC
ATAGAATGGAGGGGGGAAAAAGCACATACTCAATAGATTTTTGAGTGTGGTACTCTGTATTTTTGCAGCGTTTAT
TTTCCAAATGAGCAGTTTAGAAATATGTGATGTAAAGTACATACTGTACGTTTGCTGAAAATTATATTAAAAGCA
CTATTTTAATTCTTAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2455

MQGKKPGGSSGGGRSGELQGDEAQRNKKKKKKVSCFSNIKIFLVSECALMLAQGTVGAYLVSVLTTLERRFNLQS
ADVGVIASSFEIGNLALILFVSYFGARGHRPRLIGCGGIVMALGALLSALPEFLTHQYKYEAGEIRWGAEGRDVC
AANGSGGDEGPDPDLICLNRTATNMMYLLLIGAQVLLGIGATPVQPLGVSYIDDHVRRKDSSLYIGILFTMLVFG
PACGFILGSFCTKIYVDAVFIDTSNLDITPDDPRWIGAWWGGFLLCGALLFFSSLLMFGFPQSLPPHSDPAMESE
QAMLSEREYERPKPSNGVLRHPLEPDSSASCFQQLRVIPKVTKHLLSNPVFTCIILAACMEIAVVAGFAAFLGKY
LEQQFNLTTSSANQLLGMTAIPCACLGIFLGGLLVKKLSLSALGAIRMAMLVNLVSTACYVSFLFLGCDTGPVAG
VTVPYGNSTAPGSALDPYSPCNNNCECQTDSFTPVCGADGITYLSACFAGCNSTNLTGCACLTTVPAENATVVPG
KCPSPGCQEAFLTFLCVMCICSLIGAMAQTPSVIILIRTVSPELKSYALGVLFLLLRLLGFIPPPLIFGAGIDST
CLFWSTFCGEQGACVLYDNVVYRYLYVSIAIALKSFAFILYTTTWQCLRKNYKRYIKNHEGGLSTSTEYQDIETE
KTCPESHSPSEDSFVRS

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FIGURE 2456

CCATTGACTAACT**ATG**GAAGATTATACCAAAATAGAGAAAATTGGAGAAGGTACCTATGGAGTTGTGTATAAGGG
TAGACACAAAACTACAGGTCAAGTGGTAGCCATGAAAAAAATCAGACTAGAAAGTGAAGAGGAAGGGGTTCCTAG
TACTGCAATTCGGGAAATTTCTCTATTAAAGGAACTTCGTCATCCAAATATAGTCAGTCTTCAGGATGTGCTTAT
GCAGGATTCCAGGTTATATCTCATCTTTGAGTTTCTTTCCATGGATCTGAAGAAATACTTGGATTCTATCCCTCC
TGGTCAGTACATGGATTCTTCACTTGTTAAGAGTTATTTATACCAAATCCTACAGGGGATTGTGTTTTGTCACTC
TAGAAGAGTTCTTCACAGAGACTTAAAACCTCAAAATCTCTTGATTGATGACAAAGGAACAATTAAACTGGCTGA
TTTTGGCCTTGCCAGAGCTTTTGGAATACCTATCAGAGTATATACACATGAGGTAGTAACACTCTGGTACAGATC
TCCAGAAGTATTGCTGGGGTCAGCTCGTTACTCAACTCCAGTTGACATTTGGAGTATAGGCACCATATTTGCTGA
ACTAGCAACTAAGAAACCACTTTTCCATGGGGATTCAGAAATTGATCAACTCTTCAGGATTTTCAGAGCTTTGGG
CACTCCCAATAATGAAGTGTGGCCAGAAGTGGAATCTTTACAGGACTATAAGAATACATTTCCCAAATGGAAACC
AGGAAGCCTAGCATCCCATGTCAAAAACTTGGATGAAAATGGCTTGGATTTGCTCTCGAAAATGTTAATCTATGA
TCCAGCCAAACGAATTTCTGGCAAAATGGCACTGAATCATCCATATTTTAATGATTTGGACAATCAGATTAAGAA
GATG**TAG**CTTTCTGACAAAAAGTTTCCATATGTTATGTCAACAGATAGTTGTGTTTTTATTGTTAACTCTTGTCT
ATTTTTGTCTTATATATATTTCTTTGTTATCAAACTTCAGCTGTACTTCGTCTTCTAATTTCAAAAATATAACTT
AAAAATGTAAATATTCTATATGAATTTAAATATAATTCTGTAAATGTGAAAAAAAAAAAAAAAAAAAAA

FIGURE 2457

MEDYTKIEKIGEGTYGVVYKGRHKTTGQVVAMKKIRLESEEEGVPSTAIREISLLKELRHPNIVSLQDVLMQDSR
LYLIFEFLSMDLKKYLDSIPPGQYMDSSLVKSYLYQILQGIVFCHSRRVLHRDLKPQNLLIDDKGTIKLADFGLA
RAFGIPIRVYTHEVVTLWYRSPEVLLGSARYSTPVDIWSIGTIFAELATKKPLFHGDSEIDQLFRIFRALGTPNN
EVWPEVESLQDYKNTFPKWKPGSLASHVKNLDENGLDLLSKMLIYDPAKRISGKMALNHPYFNDLDNQIKKM

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FIGURE 2458

CAGCACCAAGTCCGCTTCCAGGCTTTCGGTTTCTTTGCCTCCATCTTGGGTGCGCCTTCCCGGCGTCTAGGGGAG
CGAAGGTTGAGGTGGCAGCGGCAGGAGAGTCCGGCCGCGACAGGACGAACTCCCCCACTGGAAAGGATTCTGAAA
GAAATGAAGTCAGCCCTCAGAAATGAAGTTGACTGCCTGCTGGCTTTCTGTTGACTGGCCCGGAGCTGTACTGCA
AGACCCTTGTGAGCTTCCCTAGTCTAAGAGTAGGATGTCTGCTGAAGTCATCCATCAGGTTGAAGAAGCACTTGA
TACAGATGAGAAGGAGATGCTGCTCTTTTTGTGCCGGGATGTTGCTATAGATGTGGTTCCACCTAATGTCAGGGA
CCTTCTGGATATTTTACGGGAAAGAGGTAAGCTGTCTGTCGGGGACTTGGCTGAACTGCTCTACAGAGTGAGGCG
ATTTGACCTGCTCAAACGTATCTTGAAGATGGACAGAAAAGCTGTGGAGACCCACCTGCTCAGGAACCCTCACCT
TGTTTCGGACTATAGAGTGCTGATGGCAGAGATTGGTGAGGATTTGGATAAATCTGATGTGTCCTCATTAATTTT
CCTCATGAAGGATTACATGGGCCGAGGCAAGATAAGCAAGGAGAAGAGTTTCTTGGACCTTGTGGTTGAGTTGGA
GAAACTAAATCTGGTTGCCCCAGATCAACTGGATTTATTAGAAAAATGCCTAAAGAACATCCACAGAATAGACCT
GAAGACAAAAATCCAGAAGTACAAGCAGTCTGTTCAAGGAGCAGGGACAAGTTACAGGAATGTTCTCCAAGCAGC
AATCCAAAAGAGTCTCAAGGATCCTTCAAATAACTTCAGGCTCCATAATGGGAGAAGTAAAGAACAAAGACTTAA
GGAACAGCTTGGCGCTCAACAAGAACCAGTGAAGAAATCCATTCAGGAATCAGAAGCTTTTTTGCCTCAGAGCAT
ACCTGAAGAGAGATACAAGATGAAGAGCAAGCCCCTAGGAATCTGCCTGATAATCGATTGCATTGGCAATGAGAC
AGAGCTTCTTCGAGACACCTTCACTTCCCTGGGCTATGAAGTCCAGAAATTCTTGCATCTCAGTATGCATGGTAT
ATCCCAGATTCTTGGCCAATTTGCCTGTATGCCCGAGCACCGAGACTACGACAGCTTTGTGTGTGTCCTGGTGAG
CCGAGGAGGCTCCCAGAGTGTGTATGGTGTGGATCAGACTCACTCAGGGCTCCCCCTGCATCACATCAGGAGGAT
GTTCATGGGAGATTCATGCCCTTATCTAGCAGGGAAGCCAAAGATGTTTTTTATTCAGAACTATGTGGTGTCAGA
GGGCCAGCTGGAGGACAGCAGCCTCTTGGAGGTGGATGGGCCAGCGATGAAGAATGTGGAATTCAAGGCTCAGAA
GCGAGGGCTGTGCACAGTTCACCGAGAAGCTGACTTCTTCTGGAGCCTGTGTACTGCGGACATGTCCCTGCTGGA
GCAGTCTCACAGCTCACCATCCCTGTACCTGCAGTGCCTCTCCCAGAAACTGAGACAAGAAAGAAAACGCCCACT
CCTGGATCTTCACATTGAACTCAATGGCTACATGTATGATTGGAACAGCAGAGTTTCTGCCAAGGAGAAATATTA
TGTCTGGCTGCAGCACACTCTGAGAAAGAAACTTATCCTCTCCTACACATAAGAAACCAAAAGGCTGGGCGTAGT
GGCTCACACCTGTAATCCCAGCACTTTGGGAGGCCAAGGAGGGCAGATCACTTCAGGTCAGGAGTTCGAGACCAG
CCTGGCCAACATGGTAAACGCTGTCCCTAGTAAAAATACAAAAATTAGCTGGGTGTGGGTGTGGGTACCTGTATT
CCCAGTTACTTGGGAGGCTGAGGTGGGAGGATCTTTTGAACCCAGGAGTTCAGGGTCATAGCATGCTGTGATTGT
GCCTACGAATAGCCACTGCATACCAACCTGGGCAATATAGCAAGATCCCATCTCTTTAAAAAAAAAAAAAAAAAA

FIGURE 2459

MSAEVIHQVEEALDTDEKEMLLFLCRDVAIDVVPPNVRDLLDILRERGKLSVGDLAELLYRVRRFDLLKRILKMD
RKAVETHLLRNPHLVSDYRVLMAEIGEDLDKSDVSSLIFLMKDYMGRGKISKEKSFLDLVVELEKLNLVAPDQLD
LLEKCLKNIHRIDLKTKIQKYKQSVQGAGTSYRNVLQAAIQKSLKDPSNNFRLHNGRSKEQRLKEQLGAQQEPVK
KSIQESEAFLPQSIPEERYKMKSKPLGICLIIDCIGNETELLRDTFTSLGYEVQKFLHLSMHGISQILGQFACMP
EHRDYDSFVCVLVSRGGSQSVYGVDQTHSGLPLHHIRRMFMGDSCPYLAGKPKMFFIQNYVVSEGQLEDSSLLEV
DGPAMKNVEFKAQKRGLCTVHREADFFWSLCTADMSLLEQSHSSPSLYLQCLSQKLRQERKRPLLDLHIELNGYM
YDWNSRVSAKEKYYVWLQHTLRKKLILSYT

FIGURE 2460

ATGTCTGCTGAAGTCATCCATCAGGTTGAAGAAGCACTTGATACAGATGAGAAGGAGATGCTGCTCTTTTTGTGC
CGGGATGTTGCTATAGATGTGGTTCCACCTAATGTCAGGGACCTTCTGGATATTTTACGGGAAAGAGGTAAGCTG
TCTGTCGGGGACTTGGCTGAACTGCTCTACAGAGTGAGGCGATTTGACCTGCTCAAACGTATCTTGAAGATGGAC
AGAAAAGCTGTGGAGACCCACCTGCTCAGGAACCCTCACCTTGTTTCGGACTATAGAGTGCTGATGGCAGAGATT
GGTGAGGATTTGGATAAATCTGATGTGTCCTCATTAATTTTCCTCATGAAGGATTACATGGGCCGAGGCAAGATA
AGCAAGGAGAAGAGTTTCTTGGACCTTGTGGTTGAGTTGGAGAAACTAAATCTGGTTGCCCCAGATCAACTGGAT
TTATTAGAAAAATGCCTAAAGAACATCCACAGAATAGACCTGAAGACAAAAATCCAGAAGTACAAGCAGTCTGTT
CAAGGAGCAGGGACAAGTTACAGGAATGTTCTCCAAGCAGCAATCCAAAAGAGTCTCAAGGATCCTTCAAATAAC
TTCAGGCTCCATAATGGGAGAAGTAAAGAACAAAGACTTAAGGAACAGCTTGGCGCTCAACAAGAACCAGTGAAG
AAATCCATTCAGGAATCAGAAGCTTTTTTGCCTCAGAGCATACCTGAAGAGAGATACAAGATGAAGAGCAAGCCC
CTAGGAATCTGCCTGATAATCGATTGCATTGGCAATGAGACAGAAAACGCCCACTCCTGGATCTTCACATTGAAC
TCAATGGCTACATGTATGATTGGAACAGCAGAGTTTCTGCCAAGGAGAAATATTATGTTTGGCTGCAGCACACTC
TGAGAAAGAAACTTATCCTCTCCTACACATAA

FIGURE 2461

MSAEVIHQVEEALDTDEKEMLLFLCRDVAIDVVPPNVRDLLDILRERGKLSVGDLAELLYRVRRFDLLKRILKMD
RKAVETHLLRNPHLVSDYRVLMAEIGEDLDKSDVSSLIFLMKDYMGRGKISKEKSFLDLVVELEKLNLVAPDQLD
LLEKCLKNIHRIDLKTKIQKYKQSVQGAGTSYRNVLQAAIQKSLKDPSNNFRLHNGRSKEQRLKEQLGAQQEPVK
KSIQESEAFLPQSIPEERYKMKSKPLGICLIIDCIGNETENAHSWIFTLNSMATCMIGTAEFLPRRNIMFGCSTL

FIGURE 2462

GTCTACACCAGCGGTGTCGCTGCCCGAAAGTGAGAGAAGGCTGATATTGCTAGCTGGAATCCAGGCCTGGGTGCT
GCATGGTGGCGCCCCTCCCCGTGACCACCGCTGCGTTTTCTCGGGCTTTCTCTGAGGAGCTGCTCTTGTGCTGTT
TGGCCCCTGCCTACTCGGAATGGAACAAAGCATCGAACAAACAACTGAGATCCTGTTGTGCCTATCACCTGTTGA
AGTTGCCAGTCTTAAGGAAGGAATCAATTTCTTTCGCAATAAGAGCACTGGCAAAGACTACGTCTTGTACAAGAA
TAAGAGCCGACTGAGGGCATGCAAGAATATGTGCAAGCACCAAGGAGGCCTGTTCATAAAAGATATCGAGGATTT
AGCCGGAAGTTGTTGAA**ATG**GATGAAAACAACGGACTTTTGCTTTTAGAACTGAATCCTCCTAACCCTTGGGACT
TACAGCCCAGATCTCCTGAAGAGTTGGCTTTTGGAGAAGTACAGATAACATATCTCACTCATGCCTGCATGGACC
TCAAGTTAGGAGACAAGAGAATGGTGTTTGACCCTTGGTTAATCGGTCCTGCTTTTGCCCGTGGATGGTGGTTGC
TCCATGAGCCTCCATCTGATTGGCTGGAGAGGCTGTGCCAGGCAGACCTCATTTACATCAGTCATCTGCACTCAG
ACCACCTGAGTTACCCCACACTGAAAAAGCTTGCTGGGAGAAGACCAGATATTCCCATTTATGTTGGAAACACAG
AAAGGCCTGTATTTTGGAATCTGAATCAGAGCGGTGTCCAGTTGACTAATATCAATGTCGTGCCATTTGGAATAT
GGCAGCAGGTGGACAAAAATCTTCGATTCATGATCTTGATGGACGGTGTTCATCCTGAGATGGACACTTGCATTA
TTGTGGAGTACAAAGGTCATAAAATACTCAATATAGTAGACTGCACCAGACCCAATGGGGGAAGGCTGCCTATGA
AGGTTGCTCTAATGATGAGTGATTTTGCTGGAGGAGCATCAGGCTTTCCAATGACTTTCAGTGGTGGAAAATTTA
CGGAGGAATGGAAAGCCCAATTCATTAAAACAGAAAGGAAGAAGCTCCTGAACTACAAGGCTCGGCTGCTGAAGA
ACCTGCAACCCCGAATTTATTGTCCCTTTGCTGGGTATTTTGTGGAATCTCACCCATCAGACAAGTACATCAAGG
AAACAAACACCAAAAATGACCCAAATGAACTCAACAATCTTATCAAGAAAAACTCTGATGTGATAACATGGACCC
CTCGACCGGGAGCCACCCTTGATCTGGGAAGAATGCTGAAGGATCGAACAGACAGCAAGGGCATCATAGAGCCTC
CAGAGGGGACAAAAATTTACAAGGATTCCTGGGATTTTGAACCTTATTTGGAAATCTTGAATGCTGCTCTAGGAG
ATGAAATATTTCTTCACTCATCCTGGATAAAAGAATACTTCACTTGGGCTGGATTTAAAGATTACAACCTTGTGG
TCAGGATGATTGAGACAGATGAGGACTTCAATCCTTTTCCTGGAGGATATGACTATTTGGTTGACTTTTTAGATT
TATCCTTCCCAAAAGAAAGACCACAACGAGAACATCCCTATGAGGAAATCCATAGCCGGGTGGATGTCATCAGAC
ACGTGGTGAAGAATGGTCTACTCTGGGATGAGTTGTATATAGGATTCCAAACACGGCTCCAGCGGGATCCTGACA
TATACCATCACCTGTTTTGGAATCATTTTCAAATAAAACTCCCCCTCACACCACCCAACTGGAAGTCATTCCTGA
TGTGCTGTGAGCAGAATGGGCCTGCGATTTTGCAAGAATGCAAAACCACA**TGA**AAATTTCAAGAATTCACTGATC
TGATGCAAAATAAAAATTTATCATTACATCTTGAACCCAGGAAGCTTACAGCAAAGAGACTATGCTTTATGACGT
CAGCAATAGATAATTCCACGTTGCCTTTGTGATTTGTATATATAGCTTACATTTGTGGATCACTACATAGCCAGA
TTCAAAAATATTTTACTTGTTCCATCCACAGTTCTCTACAGAAAGAACCAATGAACCCAATAGGAACAAATTCTC
TGTGGAAAACAAAGCATAGCTGTAGTAGATACGAATCCAATCACAGAGGAAACAGGAAGAGAAAAACATCCAAGA
CTACAGTGAAAACTGGAAATGGTCTGTTTTCGTGATATTCGTATGATTAAGATGCAAATTTTTTCTTAGGAAAAT
GTGATTGTTAACTAGCATTCTGTTTTACATGTTGACATTTCTAACACACACACCACTGATTTGAACTTCAAAATT
TATTTTCTGATTATATATGCTAGGTCTGATTCTGAAGATACAAGAATTCAATGGTGGAATTTGTCTCCTGAAATT
TCTAGATTCATAATTAGAAGTGTTTATTACCAACTTCTCACTTAGATTAACATCAGTGATGTTTGATTATTCTGG
TTAACCGCTCACATGCATAACAATAATGCTAGAAATTCAGGAATTATAATTTTGTGATTTATACTGTGTGGTAAA
TTATTCAGTTCTCACTGCAAATAAATATAATGTATATCAATGTAATGTAGGTCAGAATGTCTATGGTGAGCAAAT
AAAAGATTATTTTAAAATATGAAAAAAAAAAAAAAAA

FIGURE 2463

MDENNGLLLLELNPPNPWDLQPRSPEELAFGEVQITYLTHACMDLKLGDKRMVFDPWLIGPAFARGWWLLHEPPS
DWLERLCQADLIYISHLHSDHLSYPTLKKLAGRRPDIPIYVGNTERPVFWNLNQSGVQLTNINVVPFGIWQQVDK
NLRFMILMDGVHPEMDTCIIVEYKGHKILNIVDCTRPNGGRLPMKVALMMSDFAGGASGFPMTFSGGKFTEEWKA
QFIKTERKKLLNYKARLVKNLQPRIYCPFAGYFVESHPSDKYIKETNTKNDPNELNNLIKKNSDVITWTPRPGAT
LDLGRMLKDRTDSKGIIEPPEGTKIYKDSWDFEPYLEILNAALGDEIFLHSSWIKEYFTWAGFKDYNLVVRMIET
DEDFNPFPGGYDYLVDFLDLSFPKERPQREHPYEEIHSRVDVIRHVVKNGLLWDELYIGFQTRLQRDPDIYHHLF
WNHFQIKLPLTPPNWKSFLMCCEQNGPAILQECKTT

FIGURE 2464

CCGGGGGGCATGAGGGTCCGAGACTTGTTCTTCTGTCCCTTCCAAGACCCGGCGACAGGAGGCATGAGGGGCCCC
CGGCCGAAATGACAGTGCTGGCGCCAGCCTGGAGCCCAACAACCTATCTCCTCCTGCTGCTGCTGCTGAGCTCGG
GACTCAGTGGGACCCAGGACTGCTCCTTCCAACACAGCCCCATCTCCTCCGACTTCGCTGTCAAAATCCGTGAGC
TGTCTGACTACCTGCTTCAAGATTACCCAGTCACCGTGGCCTCCAACCTGCAGGACGAGGAGCTCTGCGGGGGCC
TCTGGCGGCTGGTCCTGGCACAGCGCTGGATGGAGCGGCTCAAGACTGTCGCTGGGTCCAAGATGCAAGGCTTGC
TGGAGCGCGTGAACACGGAGATACACTTTGTCACCAAATGTGCCTTTCAGCCCCCCCCCAGCTGTCTTCGCTTCG
TCCAGACCAACATCTCCCGCCTCCTGCAGGAGACCTCCGAGCAGCTGGTGGCGCTGAAGCCCTGGATCACTCGCC
AGAACTTCTCCCGGTGCCTGGAGCTGCAGTGTCAGCCCGACTCCTCAACCCTGCCACCCCCATGGAGTCCCCGGC
CCCTGGAGGCCACAGCCCCGACAGCCCCGCAGCCCCCTCTGCTCCTCCTACTGCTGCTGCCCGTGGGCCTCCTGC
TGCTGGCCGCTGCCTGGTGCCTGCACTGGCAGAGGACGCGGCGGAGGACACCCCGCCCTGGGGAGCAGGTGCCCC
CCGTCCCCAGTCCCCAGGACCTGCTGCTTGTGGAGCACTGACCTGGCCAAGGCCTCATCCTGCGGAGCCTTAAAC
AACGCAGTGAGACAGACATCTATCATCCCATTTTACAGGGGAGGATACTGAGGCACACAGAGGGGAGTCACCAGC
CAGAGGATGTATAGCCTGGACACAGAGGAAGTTGGCTAGAGGCCGGTCCCTTCCTTGGGCCCCTCTCATTCCCTC
CCCAGAATGGAGGCAACGCCAGAATCCAGCACCGGCCCCATTTACCCAACTCTGAACAAAGCCCTTGCCCCCATG
AAATTGTTTATAAATCATCCTTTTCTCCCA

FIGURE 2465

MTVLAPAWSPTTYLLLLLLLSSGLSGTQDCSFQHSPISSDFAVKIRELSDYLLQDYPVTVASNLQDEELCGGLWR
LVLAQRWMERLKTVAGSKMQGLLERVNTEIHFVTKCAFQPPPSCLRFVQTNISRLLQETSEQLVALKPWITRQNF
SRCLELQCQPDSSTLPPPWSPRPLEATAPTAPQPPLLLLLLLPVGLLLLAAAWCLHWQRTRRRTPRPGEQVPPVP
SPQDLLLVEH

FIGURE 2466

ATGATATATGTATCTACGGGGGCCTGGGGCTGGGCGGGCTCCTGCTTCTGGCAGTGGTCCTTCTGTCCGCCTGCC
TGTGTTGGCTGCATCGAAGAGGAGGCCCAGGGCTCCTCAGAGCAGGAACTCCACTATGCATCTCTGCAGAGGCTG
CCAGTGCCCAGCAGTGAGGGACCTGACCTCAGGGGCAGAGACAAGAGAGGCACCAAGGAGGATCCAAGAGCTGAC
TATGCCTGCATTGCTGAGAACAAACCCACCTGA

FIGURE 2467

MIYVSTGAWGWAGSCFWQWSFCPPACVGCIEEEAQGSSEQELHYASLQRLPVPSSEGPDLRGRDKRGTKEDPRAD
YACIAENKPT

FIGURE 2468

AGGCTTTGGTGGTGGATTTGGAGGAGATGGTGGCCTTCTCTCTGGAAATGAAAAAGTAACCATGCAGAATCTGAA
TGACCGCCTGGCTTCCTACTTGGACAAAGTTCGGGCTCTGGAAGAATCAAACTATGAGCTGGAAGGCAAAATCAA
GGAGTGGTATGAAAAGCATGGCAACTCACATCAGGGGGAGCCTCGTGACTACAGCAAATACTACAAAACCATCGA
TGACCTTAAAAATCAGATTCTCAACCTAACAACTGATAATGCCAACATCCTGCTTCAGATCGACAATGCCAGGCT
GGCAGCTGATGACTTCAGGCTGAAGTATGAGAATGAGGTAGCTCTGCGCCAGAGCGTGGAGGCTGACATCAACGG
CCTGCGTAGGGTGCTGGATGAGCTGACCCTGACCAAGGCTGACCTGGAGATGCAAATTGAGAGCCTGACTGAATA
CGTGGCCTATCTGAAGAAGAACCACGAGGAGGAAATGAAAGACCTTCGAAATGTGTCCACTGGTGATGTGAATGT
GGAAATGAATGCTGCCCCGGGTATTGATCTGACTCAACTTCTGAATAACATGAGAAGCCAATATGAACAACTTGC
TGAACAAAACCGCAAAGATGCTGAAGCCTGGGTTAATGAAAAGAGCAAGGAACTGACTACAGAAATTGATAATAA
CATTGAACAGATATCCAGCTATAAATCTGAGATTACTGAATTGAGACGTAATGTACAACGTCTGGAGATAGAACT
ACAGTCCCAACTGGCCTTAAAACAATCCCTGGAAGCCTCCTTGGCAGAAACAGAAGGTCGCTACTGTGTGCAGCT
CTCACAGATTCAGGCCCAGATATCCGCTCTGGAAGAACAGTTGCAACAGATTCGAGCTGAAACCGAGTGCCAGAA
TACTGAATACCAACAACTCCTGGATATTAAGATCCGACTGGAGAATGAAATTCAAACCTACCGCAGCCTGCTAGA
AGGAGAGGGAAGTTCCCGGAGCGGCGGACGCGGCGGCGGAAGTTTCGGCGGCGGCTACGGCGGCGGAACGTCCGG
CGGCGGAACGTCCGGCGGCGGCTACGGCGGCGGCCACGGCGGCAGTTCCGGCGGCGGCTACGGAGGCGGAACGTC
CGGCGGCGGAACGTCCGGCGGCGGCCTACGGGGCGAACTCCACGGCGGCCACGCGCATTCCACCGGCGGCTACGG
TGGTGGCAATTCCGGCGGCGGCGGCGGCGGCCTACGGGGGCGGCACTCCGGCGGCGGCAGCAGCTCCGGCGGCGG
ATACGGCGGCGGCAGCTCCAGCGGAGGCCACAAGTCCTCCTCTTCCGGGTCCGTGGGCGAGTCTTCATCTAAGGG
ACCAAGATACTAACAAAACCAGAGTAATCAAGACAATTATTGAAGAGGTGGCGCCCGACGGTAGAGTTCTTTCAT
CTATGGTTGAATCAGAAACCAAGAAACACTACTATTAAACTGCATCAAGAGGAGAGAGTCTCCCTTCACACAGAC
CATTAATTTACAGATGCATGGAAAACAAAGTCTCCAAGAAAACACTTCTGTCTTGATGGTCTATGGAAATAGACC
TTGAAAATAAGGTGTCTACAAGGTGTTTTGTGGTTTCTGTATTTCTTCTTTTCACTTTACCAGAAAGTGTTCTTT
AATGGAAAGAAAAACAACTTTCTGTTCTCATTTACTAATGAATTTCAATAAACTTTCTTACTGATGCAAACGTCT
GAGATTACTGAATTGAGACGTAATGTACAACGTCTGGAGATAGAACT

FIGURE 2469

MQNLNDRLASYLDKVRALEESNYELEGKIKEWYEKHGNSHQGEPRDYSKYYKTIDDLKNQILNLTTDNANILLQI
DNARLAADDFRLKYENEVALRQSVEADINGLRRVLDELTLTKADLEMQIESLTEYVAYLKKNHEEEMKDLRNVST
GDVNVEMNAAPGIDLTQLLNNMRSQYEQLAEQNRKDAEAWVNEKSKELTTEIDNNIEQISSYKSEITELRRNVQR
LEIELQSQLALKQSLEASLAETEGRYCVQLSQIQAQISALEEQLQQIRAETECQNTEYQQLLDIKIRLENEIQTY
RSLLEGEGSSRSGGRGGGSFGGGYGGGTSGGGTSGGGYGGGHGGSSGGGYGGGTSGGGTSGGGLRGELHGGHAHS
TGGYGGGNSGGGGGGLRGRHSGGGSSSGGGYGGGSSSGGHKSSSSGSVGESSSKGPRY

FIGURE 2470

AGTTCTGTCCTTGCATTGGTGCGCCTCAGGCCAGGCTGCACTGCTGGGACCTGGGCC**ATG**TCTCCCCACCCCACC
GCCCTCCTGGGCCTAGTGCTCTGCCTGGCCCAGACCATCCACACGCAGGAGGAAGATCTGCCCAGACCCTCCATC
TCGGCTGAGCCAGGCACCGTGATCCCCCTGGGGAGCCATGTGACTTTCGTGTGCCGGGGCCCGGTTGGGGTTCAA
ACATTCCGCCTGGAGAGGGAGAGTAGATCCACATACAATGATACTGAAGATGTGTCTCAAGCTAGTCCATCTGAG
TCAGAGGCCAGATTCCGCATTGACTCAGTAAGTGAAGGAAATGCCGGGCCTTATCGCTGCATCTATTATAAGCCC
CCTAAATGGTCTGAGCAGAGTGACTACCTGGAGCTGCTGGTGAAAGGACCCACGCAGAGGCCGTCGGACAACAGT
CACAATGAGCATGCACCTGCTTCCCAAGGCCTGAAAGCTGAGCATCTGTATATTCTCATCGGGGTCTCAGTGGTC
TTCCTCTTCTGTCTCCTCCTCCTGGTCCTCTTCTGCCTCCATCGCCAGAATCAGATAAAGCAGGGGCCCCCCAGA
AGCAAGGACGAGGAGCAGAAGCCACAGCAGAGGCCTGACCTGGCTGTTGATGTTCTAGAGAGGACAGCAGACAAG
GCCACAGTCAATGGACTTCCTGAGAAGGACAGAGAGACGGACACCTCGGCCCTGGCTGCAGGGAGTTCCCAGGAG
GTGACGTATGCTCAGCTGGACCACTGGGCCCTCACACAGAGGACAGCCCGGGCTGTGTCCCCACAGTCCACAAAG
CCCATGGCCGAGTCCATCACGTATGCAGCCGTTGCCAGACACTGACCCCATACCCACCTGGCCTCTGCACCTGAG
GGTAGAAAGTCACTCTAGGAAAAGCCTGAAGCAGCCATTTGGAAGGCTTCCTGTTGGATTCCTCTTCATCTAGAA
AGCCAGCCAGGCAGCTGTCCTGGAGACAAGAGCTGGAGACTGGAGGTTTCTAACCAGCATCCAGAAGGTTCGTTA
GCCAGGTGGTCCCTTCTACAATCGAGCAGCTCCTTGGACAGACTGTTTCTCAGTTATTTCCAGAGACCCAGCTAC
AGTTCCCTGGCTGTTTCTAGAGACCCAGCTTTATTCACCTGACTGTTTCCAGAGACCCAGCTAAAGTCACCTGCC
TGTTCTAAAGGCCCAGCTACAGCCAATCAGCCGATTTCCTGAGCAGTGATGCCACCTCCAAGCTTGTCCTAGGTG
TCTGCTGTGAACCTCCAGTGACCCCAGAGACTTTGCTGTAATTATCTGCCCTGCTGACCCTAAAGACCTTCCTAG
AAGTCAAGAGCTAGCCTTGAGACTGTGCTATACACACACAGCTGAGAGCCAAGCCCAGTTCTCTGGGTTGTGCTT
TACTCCACGCATCAATAAATAATTTTGAAGGCCTCACATCTGGCAGCCCCAGGCCTGGTCCTGGGTGCATAGGTC
TCTCGGACCCACTCTCTGCCTTCACAGTTGTTCAAAGCTGAGTGAGGGAAACAGGACTTACGAAAACGTGTCAGC
GTTTTCTTTTTAAAATTTAATTGATCAGGATTGTACGT

FIGURE 2471

MSPHPTALLGLVLCLAQTIHTQEEDLPRPSISAEPGTVIPLGSHVTFVCRGPVGVQTFRLERESRSTYNDTEDVS
QASPSESEARFRIDSVSEGNAGPYRCIYYKPPKWSEQSDYLELLVKETSGGPDSPDTEPGSSAGPTQRPSDNSHN
EHAPASQGLKAEHLYILIGVSVVFLFCLLLLVLFCLHRQNQIKQGPPRSKDEEQKPQQR

FIGURE 2472A

CCTAAAGAAAAGTATTAAGTAAATAGCAGTACAGATGGCAAATGGATTGCACAATATATCCTCTGGATCCATAGT
GACCCTGCAGAGATAAACCTGTGATGGTCAAACAATGTGAAAACTGCTGTCAGAGACATGGGCAGGGTGCTCTTG
TTTACAGAGAAGAGGTGCAAAAATCAACTTGATGGTAGTGGGAAGATCAGGAAATGCTTCCTGAAATTGAGTATT
AAGAACTAATAGACATTAGGTGGTTGCAGAATAAGTTTTGTTTAGGAAGGACAAGCAGTTGGGTATGACTGGCTT
CTAGGTTGTGTGTTGTGGAGTGACTGGGGATAAAAGCAGGAGCAAGATCACAAAAGGTCTTCTATGCTTATATTA
GGGAAGTTGGACTTTATTCTCAAGCTGAAGGGAAGCTGTTGCATGGTTTTAAGCAGTAAAGTGATATGATCAGAG
TTTTAGAGGATGCCAAGATTGAAGGCAAGTCTGACCAGTTAGGAGACTGCTTGTTAAATTAGTTCAGAGGAGAAA
CAGTGAAGGCAGTGGCACTGGGCATGAAGAAGTATATGTGTGCTAATTTTAGATTTCTTAGGGAAGCAGAAATGA
CAAGAGTTAGTGGTCCATTGGACAGAAATATTGAAGGAGACTGGGGAGTCTAGGTTGACTCCCAGGGTTTAGGTT
TGGGCAGTAAAATGACATGTAGAACAATTAACTGATAAACAGCATACAGAAAGAGGAAAGAACTTCATTTCATAT
GTTTGTTTTTGAGGAAAAGATGTTTGTTTTTGAACTTCCTGATTCAGAGGGGCTTGTGGGACATCTTGGTTAAGA
TCCTGTAGTAGTTCTAGTAGGGTCTAGAAGTCAAGAGATACAACCCCGCCTGGAAGGATTTGGGAGTCTTCAGCA
TTTGGAATTTTGGAAGCCATTGTTTACTGCAGTGCATATGAGATAATTTAAACTGGTACATAGATAAACACTTGA
AAAAATTTTAATAGATAGGAATTTAATGTGTATGAGAAACATAACTTGCACATCTAACCTTTGATAATCATGGAC
ATTATCACTTAGGCCAAGTGAGCTCAATAAAAGGGAAATATTAACTAAAAATATATGTGATACATGGAAATGGCA
AAAATCACGGTGAAGCTATGCAAACGATGCAAGTTCAGAAAGTGCTGTGTTAAGTCATGGGTGTGGTGGATAAAT
TCACCCAAGGAGAGAGTAAGAGTGAGAAGAAAAGAGAGTTGACATTGGGTGGCGGGGAATGGAGAAGAAGAACCC
ATGAAGGAAACTGAGGAAGAGCAGCCAGACGAATAGGAGGAAAACCAGGAGAAGATGGTCTTTGGAGTCCAAATG
AAGAGTTCTGAGGAGGAAGTGGTCCACAGCGTCAAACTTGTGCACC**ATG**GACAATTTTGCTGAGGGAGATTTCAC
TGTGGCGGATTATGCCTTGTTAGAAGATTGCCCTCACGTGGATGATTGTGTCTTTGCTGCTGAATTTATGAGCAA
TGATTATGTTCGTGTGACTCAGCTTTACTGTGATGGGGTGGGTGTGCAATATAAAGATTATATCCAAAGTGAGAG
GAATTTGGAATTTGACATCTGCAGTATATGGTGTAGTAAACCAATTTCTGTCCTGCAAGATTATTGCGATGCCAT
TAAAATAAACATCTTCTGGCCACTTCTGTTTCAACATCAAAACAGTTCCGTAATATCACGATTGCATCCCTGTGT
GGACGCCAACAATTCACGTGCTTCTGAGATAAATTTGAAGAAACTACAACATCTTGAGTTGATGGAAGATATTGT
GGATTTGGCAAAGAAAGTTGCTAATGATTCATTCCTTATTGGAGGCTTATTGAGAATTGGTTGTAAAATAGAAAA
TAAAATCTTGGCAATGGAAGAAGCTCTGAATTGGATAAAATATGCAGGCGATGTAACAATTCTAACTAAATTAGG
ATCAATTGACAATTGTTGGCCTATGTTAAGTATTTTCTTTACTGAATACAAGTACCACATAACTAAAATTGTAAT
GGAAGACTGCAATTTGCTTGAAGAACTTAAAACTCAAAGTTGTATGGATTGTATAGAGGAAGGAGAACTAATGAA
AATGAAAGGAAATGAAGAGTTTTCCAAAGAAAGATTTGATATAGCTATTATCTATTACACCAGAGCCATTGAATA
TAGACCTGAAAACTACCTTCTTTATGGTAACCGAGCTCTTTGTTTTCTTCGTACTGGACAGTTTAGAAATGCACT
CGGTGATGGAAAGAGAGCCACTATTCTGAAGAACACTTGGCCAAAGGGTCATTATCGTTATTGTGATGCTCTTTC
TATGCTGGGGGAATATGACTGGGCCCTGCAAGCAAACATAAAAGCTCAAAAACTCTGTAAAAATGACCCTGAGGG
AATCAAGGATCTAATTCAGCAGCATGTAAAGTTACAAAAACAAATAGAAGACCTACAAGGTCGAACAGCAAATAA
GGATCCAATTAAAGCCTTTTATGAAAACAGGGCCTACACACCTAGGAGTTTATCAGCACCTATATTTACTACTTC
ACTTAACTTTGTGGAGAAGGAAAGAGATTTCAGAAAAATTAATCACGAAATGGCCAACGGTGGTAATCAGAATCT
AAAGGTGGCGGATGAGGCGTTGAAGGTAGATGATTGTGACTGTCATCCTGAATTTTCACCACCATCAAGTCAGCC
TCCAAAACATAAAGGAAAACAAAAATCTCGAAACAATGAATCAGAAAAGTTCAGTTCTAGTTCACCATTGACTTT
ACCAGCAGATTTGAAGAACATCTTGGAGAAACAGTTTTCTAAATCTTCCAGAGCTGCACACCAGGATTTTGCTAA
TATAATGAAAATGCTGAGAAGCTTAATTCAAGATGGCTATATGGCCTTATTGGAGCAGCGTTGCCGCAGCGCTGC
ACAGGCCTTTACAGAGTTGCTGAACGGTTTAGATCCTCAAAAAATAAAGCAATTGAACCTGGCCATGATTAACTA
TGTTTTGGTCGTCTATGGACTTGCCATTTCTCTCCTTGGAATAGGACAGCCTGAGGAATTATCTGAAGCCGAAAA
CCAGTTTAAGAGGATTATTGAACACTACCCCAGTGAGGGCCTTGATTGCTTGGCCTACTGTGGAATTGGAAAAGT
GTATTTGAAAAAAAACAGATTTCTAGAAGCTCTCAATCACTTTGAGAAAGCAAGAACCTTGATTTATCGTCTTCC
TGGAGTGTTAACTTGGCCCACGAGTAATGTGATTATTGAAGAGTCTCAGCCACAAAAAATAAAGATGCTGTTAGA
GAAATTTGTTGAAGAATGCAAGTTCCCTCCAGTGCCAGATGCCATTTGTTGCTATCAGAAGTGCCATGGATATTC
TAAGATCCAGATATACATAACTGATCCAGACTTTAAGGGTTTTATACGCATCAGCTGTTGCCAGTACTGTAAAAT
AGAATTTCACATGAATTGCTGGAAGAAGTTAAAAACTACAACCTTTAATGATAAAATTGACAAGGATTTTCTACA
AGGAATATGTCTTACCCCTGACTGTGAAGGTGTCATTTCTAAGATTATCATCTTCAGCAGTGGTGGTGAAGTTAA

FIGURE 2472B

ATGTGAATTTGAACACAAGGTCATAAAAGAAAAGGTTCCTCCAAGACCTATTCTGAAACAGAAATGTTCTAGCCT
AGAGAAACTAAGACTGAAAGAAGACAAAAAATTGAAGAGAAAGATCCAAAAAAAAGAAGCAAAAAAGTTAGCACA
AGAAAGAATGGAGGAGGACTTAAGAGAAAGTAATCCACCCAAAAATGAAGAGCAGAAAGAAACTGTAGACAATGT
TCAGCGTTGTCAGTTCCTTGATGACAGAATTCTACAGTGTATAAAGCAGTATGCTGACAAGATTAAATCCGGCAT
ACAGAATACAGCCATGCTTCTCAAAGAATTGCTTTCTTGGAAAGTTTTGAGCACAGAAGACTATACAACCTGTTT
TTCTAGCAGAAATTTTCTAAATGAAGCAGTGGACTATGTTATTCGCCACTTGATTCAAGAAAATAACAGAGTAAA
GACAAGAATATTTCTGCATGTTTTGAGTGAGCTTAAAGAAGTGGAGCCCAAATTAGCCGCCTGGATCCAAAAACT
TAATAGCTTTGGCTTAGATGCCACAGGAACTTTCTTTTCTCGTTATGGAGCATCTCTTAAACTGCTTGATTTTAG
TATCATGACTTTCCTCTGGAATGAGAAATATGGTCACAAACTAGACTCTATAGAAGGAAAGCAACTTGATTATTT
CTCTGAGCCAGCATCATTGAAGGAAGCCCGTTGTTTAATATGGCTGCTAGAAGAACACAGAGACAAGTTCCCAGC
ATTGCATAGTGCTTTAGATGAATTCTTTGATATAATGGACAGCCGCTGTACTGTGTTAAGGAAACAAGATAGTGG
TGAAGCACCGTTTAGTTCAACCAAGGTGAAAAACAAAAGCAAGAAAAAGAAGCCAAAGGATTCAAAGCCTATGTT
AGTTGGGTCTGGAACAACTTCAGTAACTTCAAATAATGAGATCATCACTTCAAGTGAAGACCATAGCAATCGAAA
TTCAGATTCTGCAGGCCCATTTGCAGTGCCTGACCATCTTCGGCAAGATGTAGAAGAATTCGAAGCTCTCTATGA
CCAACACAGTAACGAATATGTTGTCCGCAATAAGAAGCTATGGGACATGAACCCAAAACAAAAATGTTCAACTCT
ATATGATTACTTCTCTCAGTTTTTGGAGGAACATGGTCCCTTGGACATGAGTAACAAGATGTTCTCTGCAGAATA
TGAGTTTTTCCCAGAAGAAACTCGACAGATACTAGAAAAAGCAGGAGGTTTAAAACCTTTTCTCTTGGGATGCCC
TCGTTTTGTTGTGATTGACAACTGTATTGCACTGAAGAAGGTTGCATCACGGCTCAAGAAAAAAAGGAAGAAGAA
AAACATTAAAACAAAAGTAGAAGAAATTTCAAAAGCAGGGGAGTATGTACGAGTTAAACTACAACTGAATCCAGC
TGCTAGGGAATTTAAACCAGATGTAAAGTCTAAACCAGTGTCAGATTCATCTTCAGCACCAGCTTTTGAAAATGT
GAAACCCAAACCTGTGTCTGCAAATTCTCCCAAGCCAGCTTGTGAAGATGTGAAGGCCAAACCAGTATCCGACAA
TTCTTCTAGACAAGTTTCTGAGGATGGGCAACCCAAAGGGGTCTCTTCTAATTCTCCTAAACCAGGCTCTGAGGA
TGCAAATTACAAGCGAGTCTCCTGTAATTCCCCCAAACCGGTTCTTGAGGATGTGAAACCAACTTATTGGGCTCA
ATCCCATTTGGTCACAGGATACTGTACGTATCTTCCTTTCCAGAGATTTGATATCACCCAGACACCGCCAGCATA
CATAAACGTGTTACCAGGTTTGCCCCAGTACACCAGCATATATACACCCTTGGCCAGCCTTTCTCCTGAATATCA
GCTACCAAGATCAGTACCAGTGGTGCCGTCTTTTGTAGCCAATGACAGAGCAGATAAAAATGCTGCTGCCTATTT
TGAGGGTCATCATTTGAATGCTGAGAATGTTGCTGGTCACCAGATTGCCTCTGAAACACAGATCCTTGAGGGCTC
TTTGGGAATATCTGTAAAGTCACACTGCAGCACAGGTGATGCTCATACAGTCCTGAGTGAGTCTAACAGAAATGA
TGAGCACTGTGGAAATTCTAACAACAAATGTGAAGTAATTCCAGAAAGCACCAGTGCAGTAACAAACATTCCACA
CGTGCAGATGGTTGCCATACAGGTATCTTGGAACATAATACACCAAGAAGTCAATACTGAGCCATATAATCCTTT
TGAGGAACGACAAGGGGAAATTTCACGGATTGAAAAGGAGCACCAAGTATTACAAGACCAACTTCAAGAAGTGTA
TGAAAATTATGAGCAGATAAAACTTAAGGGCTTAGAAGAGACCAGGGACCTGGAAGAGAAGTTGAAAAGGCACTT
AGAAGAAAACAAGATCTCAAAGACGGAATTAGATTGGTTCCTTCAAGATTTGGAAAGAGAAATTAAAAAATGGCA
ACAGGAAAAAAAAGAAATCCAAGAAAGACTAAAATCACTGAAGAAGAAAATTAAAAAGGTTTCAAATGCCAGTGA
AATGTATACCCAGAAAAATGATGGAAAGGAAAAGGAACATGAATTACATCTGGATCAGTCCCTTGAAATCAGCAA
CACACTTACAAATGAGAAAATGAAAATAGAAGAGTATATAAAGAAAGGGAAAGAGGATTATGAAGAGAGTCATCA
GAGAGCTGTGGCTGCAGAGGTATCCGTACTTGAAAACTGGAAGGAGAGTGAAGTGTATAAGCTACAGATCATGGA
GTCACAAGCAGAAGCCTTTCTGAAGAAGCTGGGGCTGATTAGCCGTGATCCTGCAGCATATCCTGACATGGAGTC
TGATATACGTTCATGGGAATTGTTTCTTTCTAATGTTACAAAAGAAATTGAGAAAGCAAAGTCTCAGTTTGAAGA
ACAAATTAAGGCAATTAAAAATGGTTCTCGGCTCAGTGAACTTTCTAAAGTGCAGATTTCTGAGCTTTCATTTCC
TGCCTGTAACACGGTTCATCCCGAGTTACTCCCTGAGTCTTCAGGCCACGATGGCCAAGGGCTTGTGACTTCTGC
AAGCGACGTGACTGGAAACCACGCAGCACTTCACAGGGATCCTAGTGTGTTCTCTGCTGGTGATTCCCCAGGGGA
GGCTCCTTCTGCGCTGTTGCCAGGGCCACCCCCTGGTCAGCCTGAAGCCACTCAGCTGACAGGGCCAAAACGGGC
TGGCCAGGCAGCTCTGTCAGAACGAAGCCCTGTGGCTGATCGGAAGCAGCCTGTTCCTCCAGGACGTGCTGCGCG
TTCAAGCCAGTCTCCAAAAAAGCCGTTCAATAGTATTATTGAGCACCTGTCAGTGGTATTCCCATGTTACAACAG
CACTGAGCTTGCTGGTTTTATTAAAAAAGTGCGAAGCAAAAACAAGAACTCACTCTCAGGATTGAGTATTGATGA
AATTGTCCAAAGAGTGACAGAACACATTCTAGATGAACAGAAAAAGAAAAAGCCAAACCCAGGAAAGGACAAGAG
GACTTATGAGCCCAGCTCTGCCACCCCCGTGACCAGGTCCTCCCAGGGCTCACCCTCGGTGGTTGTTGCACCATC

FIGURE 2472C

ACCCAAAACCAAGGGGCAGAAAGCAGAAGATGTCCCTGTGAGGATTGCACTGGGTGCAAGTTCCTGTGAAATATG
CCACGAGGTGTTCAAATCAAAAAACGTGCGTGTGCTCAAATGTGGGCACAAGTATCACAAAGGGTGCTTTAAGCA
GTGGCTTAAAGGGCAGAGCGCTTGCCCGGCCTGCCAGGGTCGTGATCTCCTGACAGAAGAGTCACCTTCTGGAAG
AGGCTGGCCCAGTCAGAATCAGGAGCTGCCTTCCTGCTCTTCTAGGTAGTCACACTTCACTAAAGTGTCATCCAC
CAGTGTGTTGAATCCGAAGAATGACAATTTTCTACCACTGGTGTAAAAAACAAACATTTGAAGACCCTTGTGCAT
TGTGTGTCACAAAGCTAAATACATGGAAATCGTTAATATCGCTGATATTAAGTAATTTCCCCACTCTGAGTGAAT
ACTTTGATGATTGCCAACAGTGGCTAATAAAATGACGGCTACCACACTCATGGGTCACTGGGCTGCGCAGGGCTC
TTTGAGGTGGGTGGCTTCTTTTGGAAAGTACTATGAACGTCTCGAAGCAGTATTCTAGTGATAAGAATTCTTAAC
ATAGCCAAGCGCCCCACGTTTGTTCCCCACGTTTGTTCCCCTTTTCTGTTTGAAAAACCTGTTCTGGTAGCTCCA
CAAGAGAGATGATACTGACTTTTTAAATTTTTTACAAGAGTCTGTATTCCTGATATGCCTATATTTTTCCTCAAA
GATTCTGCATTTTAAGGATGGGCATAAGCAAACTATATTTTAATAATTTATAGTTAATGTTAAAATATTGGCTGA
TTTAGACCAAAAGATTCAAATCTCCTCTTTGTGAAATCCCATCTGCATTTGATTTTTTATTATTTTATGTTCCCC
CGTTAGATTGTTTTAAGTGTTTGCTTTTCATCTTTTATAGATGTAATCTGATTTTCAAAAATCATTAACACTTTT
TAATTAGTATCGACTAAGACTTTTTCCCCCTGGAATCGAGGCTGTGTGTCCGTCATCCCAGCCCCCGGTTGGAGC
CTGCTCTTTGAACTCCGCTGCCTTCCTTAGCAGCTTCTGTCCTCTTCTGTGAGTCAGTCAGCGAGTGCTTGGGAT
CCGCATCCAGCCGTGCTGAGCACACAACAGGCTGTGTGTGGAAATGGCCACCACCATTCTCCTTCCCCACCCCAC
CACAAAAAGAGAAGCTGTGTCTTTAGACAACCCTGAGGTATCTGTGTTACAATCGTTCTGTGTTTGATATTTGTG
TAAAGTATGCATGCAGTCTTGTACTGTGACCTAAGAACAAAACTGTAACTGCATTAGAAACCATGAAAAAATTAG
ATATTGTTTTGTGACTTTTAGACAGTGGTAAATATAGAACCATGAATTCTGGTCACATTCCATTTCTCTCCAACA
TGAAGGATCAAAAAATGTTTTTCAATGTGTTCTTTGTTCCACTGGGAAACTTAGAGTCATGAGTTTATGAGGCTG
GATTTGGGCACCTTTCCTTTGCCTTTGGTTCACTGTGAGTTCTGATGTCCTAGTGACTTAGGTCTTAGAAGCTCA
CGCCTTAGTTTGAAACAGATTCTCCACGGTGGTCCCCAAAACACTGTCTGCATATCCATAAGAATTGAACGCTAT
GGGTGTTAACGTGCATGAGGATCAGTTTGCAGCAGCAAGTACAAAAGGAGAAGAGGAACATCCGTTGAATGAGTG
TGTTTTGTACATAACTTCAGATACTTGTGAACATGCCTTATATTTGTCCAACAACTGTCAGAATAAAGAACATTC
TAAAATGAG

FIGURE 2473

MDNFAEGDFTVADYALLEDCPHVDDCVFAAEFMSNDYVRVTQLYCDGVGVQYKDYIQSERNLEFDICSIWCSKPI
SVLQDYCDAIKINIFWPLLFQHQNSSVISRLHPCVDANNSRASEINLKKLQHLELMEDIVDLAKKVANDSFLIGG
LLRIGCKIENKILAMEEALNWIKYAGDVTILTKLGSIDNCWPMLSIFFTEYKYHITKIVMEDCNLLEELKTQSCM
DCIEEGELMKMKGNEEFSKERFDIAIIYYTRAIEYRPENYLLYGNRALCFLRTGQFRNALGDGKRATILKNIWPK
GHYRYCDALSMLGEYDWALQANIKAQKLCKNDPEGIKDLIQQHVKLQKQIEDLQGRTANKDPIKAFYENRAYTPR
SLSAPIFTTSLNFVEKERDFRKINHEMANGGNQNLKVADEALKVDDCDCHPEFSPPSSQPPKHKGKQKSRNNESE
KFSSSSPLTLPADLKNILEKQFSKSSRAAHQDFANIMKMLRSLIQDGYMALLEQRCRSAAQAFTELLNGLDPQKI
KQLNLAMINYVLVVYGLAISLLGIGQPEELSEAENQFKRIIEHYPSEGLDCLAYCGIGKVYLKKNRFLEALNHFE
KARTLIYRLPGVLTWPTSNVIIEESQPQKIKMLLEKFVEECKFPPVPDAICCYQKCHGYSKIQIYITDPDFKGFI
RISCCQYCKIEFHMNCWKKLKTTTFNDKIDKDFLQGICLTPDCEGVISKIIIFSSGGEVKCEFEHKVIKEKVPPR
PILKQKCSSLEKLRLKEDKKLKRKIQKKEAKKLAQERMEEDLRESNPPKNEEQKETVDNVQRCQFLDDRILQCIK
QYADKIKSGIQNTAMLLKELLSWKVLSTEDYTTCFSSRNFLNEAVDYVIRHLIQENNRVKTRIFLHVLSELKEVE
PKLAAWIQKLNSFGLDATGTFFSRYGASLKLLDFSIMTFLWNEKYGHKLDSIEGKQLDYFSEPASLKEARCLIWL
LEEHRDKFPALHSALDEFFDIMDSRCTVLRKQDSGEAPFSSTKVKNKSKKKKPKDSKPMLVGSGTTSVTSNNEII
TSSEDHSNRNSDSAGPFAVPDHLRQDVEEFEALYDQHSNEYVVRNKKLWDMNPKQKCSTLYDYFSQFLEEHGPLD
MSNKMFSAEYEFFPEETRQILEKAGGLKPFLLGCPRFVVIDNCIALKKVASRLKKKRKKKNIKTKVEEISKAGEY
VRVKLQLNPAAREFKPDVKSKPVSDSSSAPAFENVKPKPVSANSPKPACEDVKAKPVSDNSSRQVSEDGQPKGVS
SNSPKPGSEDANYKRVSCNSPKPVLEDVKPTYWAQSHLVTGYCTYLPFQRFDITQTPPAYINVLPGLPQYTSIYT
PLASLSPEYQLPRSVPVVPSFVANDRADKNAAAYFEGHHLNAENVAGHQIASETQILEGSLGISVKSHCSTGDAH
TVLSESNRNDEHCGNSNNKCEVIPESTSAVTNIPHVQMVAIQVSWNIIHQEVNTEPYNPFEERQGEISRIEKEHQ
VLQDQLQEVYENYEQIKLKGLEETRDLEEKLKRHLEENKISKTELDWFLQDLEREIKKWQQEKKEIQERLKSLKK
KIKKVSNASEMYTQKNDGKEKEHELHLDQSLEISNTLTNEKMKIEEYIKKGKEDYEESHQRAVAAEVSVLENWKE
SEVYKLQIMESQAEAFLKKLGLISRDPAAYPDMESDIRSWELFLSNVTKEIEKAKSQFEEQIKAIKNGSRLSELS
KVQISELSFPACNTVHPELLPESSGHDGQGLVTSASDVTGNHAALHRDPSVFSAGDSPGEAPSALLPGPPPGQPE
ATQLTGPKRAGQAALSERSPVADRKQPVPPGRAARSSQSPKKPFNSIIEHLSVVFPCYNSTELAGFIKKVRSKNK
NSLSGLSIDEIVQRVTEHILDEQKKKKPNPGKDKRTYEPSSATPVTRSSQGSPSVVVAPSPKTKGQKAEDVPVRI
ALGASSCEICHEVFKSKNVRVLKCGHKYHKGCFKQWLKGQSACPACQGRDLLTEESPSGRGWPSQNQELPSCSSR

FIGURE 2474

GCAGCGCCGCGACTCGTGCGGGTAGGCGTCTGCGCTCGGTTTGAGGGCTCGGCGCGGGGTTTCCTGTTCCTCCTT
CTGCGCGGCTGCAGCTCGGGACTTCGGCCTGACCCAGCCCCCATGGCTTCAGAAGAGCTACAGAAAGATCTAGAA
GAGGTAAAGGTGTTGCTGGAAAAGGCTACTAGGAAAAGAGTACGTGATGCCCTTACAGCTGAAAAATCCAAGATT
GAGACAGAAATCAAGAACAAGATGCAACAGAAATCACAGAAGAAAGCAGAACTTCTTGATAATGAAAAACCAGCT
GCTGTGGTTGCTCCCATTACAACGGGCTATACGGTGAAAATCAGTAATTATGGATGGGATCAGTCAGATAAGTTT
GTGAAAATCTACATTACCTTAACTGGAGTTCATCAAGTTCCCACTGAGAATGTGCAGGTGCATTTCACAGAGAGG
TCATTTGATCTTTTGGTAAAGAATCTAAATGGGAAGAGTTACTCCATGATTGTGAACAATCTCTTGAAACCCATC
TCTGTGGAAGGCAGTTCAAAAAAAGTCAAGACTGATACAGTTCTTATATTGTGTAGAAAGAAAGTGGAAAACACA
AGGTGGGATTACCTGACCCAGGTTGAAAAGGAGTGCAAAGAAAAAGAGAAGCCCTCCTATGACACTGAAACAGAT
CCTAGTGAGGGATTGATGAATGTTCTAAAGAAAATTTATGAAGATGGAGACGATGATATGAAGCGAACCATTAAT
AAAGCCTGGGTGGAATCAAGAGAGAAGCAAGCCAAAGGAGACACGGAATTTTGAGACTTTAAAGTCGTTTTGGGA
ACTGTGATGTGATGTGGAAATACTGATGTTTCCAGTAAGGGAATATTGGTGAGCTGCATATATAAATTTGACAGA
TAGCTATTTACATAGCCTTCTAAGTAAAGGCAATGAATTCTCCATTTCCTACTGGAGGATTTATTTAAATAAAAT
ATGCTTATTAAACACTCCTGCAAAGATGGTTTTATTAGTACCCTGGTCATTTTGTTCAAGGAAGGGTTATATTGC
ATTCTCACGTGAAATATAAAAAGCAAGTCTTGCCCAATAAAAACGCTACATTGTGTGTATTTTTTGTTCAGCTAA
GAATTGGAAAAGTATTTGCTTGCCTTTTAAGTTACTGACATCAGCTTCCACCAGTGTAAAAATTGAGTAAAACCT
GAAGTTTTGCATAAAATGCAAATCGGTGCCTGTGCTTGAAGGTTGCTGTAGAGCATCTGACCCCTTATTACCACC
TTAAGCAATGTATATGCCATGCATTACCATGCACTAATTCAATCACAGGTGTTTCTATCTAGATTTAAATATATT
TGTCAATGAATGTGGAATAGAAAATCTAAACATGACAATAATAGACATATCTTTGTATGGTACCAGTTAGTTTTG
CCGTGGATCAGATGGTTTATAAAAGTAATAACCATAAAGCAAAAAATAATTTGAAAGCCCGTCTATTCCTATGCT
CAATAAAGTTAAGTTTTTCTTCATTAGAACAGTTTTATGATTTATTTGTCTAGGAGTATGTCAGAAAAATCAGGC
TTTTAGTAGGAATTACTCCTATTCCCCCTGAAGTCAGGACCAGTGCCTGTGATCTCCATTACTTTATTTTCCTGG
AGGTATTAGCCAACACAGTTAGATCAGAGAAAGCAATTGAAGCCAGGCATGAAGGCTGGCGCCCGTAATCCCAGC
TACTAAGGCTGGAGGATCACTTCAGCCCAGGAGTTTAAGGCTGCAGTGAGCTATGATGATGCCACTGTACTGCAG
CTTGGGTAACAGATTGAGAACCTGTCTCATTAAAAAAAAAAAAAAAAAAAAAGCCGTTAGACACACAGGAAAAAT
CCAGAAGGGTAAACTAAACTAAAGCTACAATTAATATGGGAATTTGGAAGAAGTGGTAGGATTTAAAATACAGAA
ACAGTTTATGTATAGGATAGCTATAAGTAAATACTGAAACACATTATGCCTCTGTAATTGGGGTTGACACATGAA
CAGAATAGCAGACACAATGCATATGAAAGTTACAGAATATGGTAAAAGTGGGGTAAAGATGGGTTTTTAATGATA
CTAAGATAACTGAAAATAGGCATATAGATATATTCCAAGCCGCCTGACGATCTAATTGTAAAAAGTAAAGCATAC
AAATACTAGAAGAAAATGGAGGAAAACGACATTATATGTGACTTAAAACCTAGAAGAAATAAATAAAACTATTGA
TCAATTTTAACTACATAAAAATGTTTATAGGACAAGAAAAACCCCACCATAACCCAAGGCAAACAATGTATTGAC
AGGATTCCAATAATTAAGAATACTTCATACAAAAAGAAATGTAAATGACCTTTAACATGTAAAGATGCTCACCTT
GTTCAGAAGAGAATAAACCAGTGTTTTTACCTTTC

FIGURE 2475

MASEELQKDLEEVKVLLEKATRKRVRDALTAEKSKIETEIKNKMQQKSQKKAELLDNEKPAAVVAPITTGYTVKI
SNYGWDQSDKFVKIYITLTGVHQVPTENVQVHFTERSFDLLVKNLNGKSYSMIVNNLLKPISVEGSSKKVKTDTV
LILCRKKVENTRWDYLTQVEKECKEKEKPSYDTETDPSEGLMNVLKKIYEDGDDDMKRTINKAWVESREKQAKGD
TEF

FIGURE 2476

CGGACGCGTGGGCGGACGCGTGGGCGGACGCGTGGGCTCTGGGAGTGTGAAACTGGGAGAGACGGTTAAGCTGGG
GACGGTATTCAGAATTCGAGCGCAGGAGCTCCGCTTCTCCACCTGCTCCCGGGGAGCTATTGGGATCCAGAGAAT
CACCCGCTGATGGTTTTTCCCCAGGCCTGAAACAACCAGAGAGCTACGGGAAAGGAAGGGCTTGGCTTGCCAGAG
GAATTTTCCAAGTGCTCAAACGCCAGGCTTACGGCGCCTGTGATCCGTCCAGGAGGACAAAGTGGGATTTGAAGA
TCCACTCCACTTCTGCTCATGGCGGGCCAGGGCCTGCCCCTGCACGTGGCCACACTGCTGACTGGGCTGCTGGAA
TGCCTGGGCTTTGCTGGCGTCCTCTTTGGCTGGCCTTCACTAGTGTTTGTCTTCAAGAATGAAGATTACTTTAAG
GATCTGTGTGGACCAGATGCTGGGCCGATTGGCAATGCCACAGGGCAGGCTGACTGCAAAGCCCAGGATGAGAGG
TTCTCACTCATCTTCACCCTGGGGTCCTTCATGAACAACTTCATGACATTCCCCACTGGCTACATCTTTGACCGG
TTCAAGACCACCGTGGCACGCCTCATAGCCATATTTTTCTACACCACCGCCACACTCATCATAGCCTTCACCTCT
GCAGGCTCAGCCGTGCTGCTCTTCCTGGCCATGCCAATGCTCACCATTGGGGGAATCCTGTTTCTCATCACCAAC
CTGCAGATTGGGAACCTATTTGGCCAACACCGTTCGACCATCATCACTCTGTACAATGGAGCATTTGACTCTTCC
TCGGCAGTCTTCCTTATTATTAAGCTTCTTTATGAAAAAGGCATCAGCCTCAGGGCCTCCTTCATCTTCATCTCT
GTCTGCAGTACCTGGCATGTAGCACGCACTTTCCTCCTGATGCCCCGGGGGCACATCCCATACCCACTGCCCCCC
AACTACAGCTATGGCCTGTGCCCTGGGAATGGCACCACAAAGGAAGAGAAGGAAACAGCTGAGCATGAAAACAGG
GAGCTACAGTCAAAGGAGTTCCTTTCAGCGAAGGAAGAGACCCCAGGGGCAGGGCAGAAGCAGGAACTCCGCTCC
TTCTGGAGCTACGCTTTCTCTCGGCGCTTTGCCTGGCACCTGGTGTGGCTGTCTGTGATACAGTTGTGGCACTAC
CTCTTCATTGGCACTCTCAACTCCTTGCTGACCAACATGGCCGGTGGGGACATGGCACGAGTCAGCACCTACACA
AATGCCTTTGCCTTCACTCAGTTCGGAGTGCTGTGTGCCCCCTGGAATGGCCTGCTCATGGACCGGCTTAAACAG
AAGTACCAGAAGGAAGCAAGAAAGACAGGTTCCTCCACTTTGGCGGTGGCCCTCTGCTCGACGGTGCCTTCGCTG
GCCCTGACATCCCTGCTGTGCCTGGGCTTCGCCCTCTGTGCCTCAGTCCCCATCCTCCCTCTCCAGTACCTCACC
TTCATCCTGCAAGTGATCAGCCGCTCCTTCCTCTATGGGAGCAACGCGGCCTTCCTCACCCTTGCTTTCCCTTCA
GAGCACTTTGGCAAGCTCTTTGGGCTGGTGATGGCCTTGTCGGCTGTGGTGTCTCTGCTCCAGTTCCCCATCTTC
ACCCTCATCAAAGGCTCCCTTCAGAATGACCCATTTTACGTGAATGTGATGTTCATGCTTGCCATTCTTCTGACA
TTCTTCCACCCCTTTCTGGTATATCGGGAATGCCGTACTTGGAAAGAAAGTCCCTCTGCAATTGCATAGTTCAGA
AGCCCTCACTTTTCAGCCCCGAGGATGGTTTTGTTCATCTTCCACCACCTTTGAGGACCTCGTGTCCCAAAAGAC
TTTGCCTATCCCAGCAAAACACACACACACACACACACACACACAAAATAAAGACACACAAGGACGTCTGCGCAG
CAAGAAAAGAATCTCAGTTGCCAAGCAGATTGATATCACACAGACTCAAAGCAAAGGCATGTGGAACTTCTTTAT
TTCAAAACAGAAGTGTCTCCTTGCACTTAGCCTTGGCAGACCCTTGACTCCAGGGGAGATGACCTGGGGGAGGAA
GTGTGTCAACTATTTCTTTAGGCCTGTTTGGCTCCGAAGCCTATATGTGCCTGGATCCTCTGCCACGGGTTAAAT
TTTCAGGTGAAGAGTGAGGTTGTCATGGCCTCAGCTATGCTTCCTGGCTCTCCCTCAAGAGTGCAGCCTTGGCTA
GAGAACTCACAGCTCTGGGAAAAAGAGGAGCAGACAGGGTTCCCTGGGCCCAGTCTCAGCCCAGCCACTGATGCT
GGATGACCTTGGCCTGACCCTGGTCTGGTCTCAGAATCACTTTTCCCATCTGTAAAATTGAGATGAATTTTGGTG
TTGAAAGTTCTTCCTGGAGCAGATGTCCTAGAAGGTTTTAGGAATAGTGACAGAGTCAGGCCACCCCAAGGGCCA
TGGGAGCCAGCTGACCTGCTTGACCGAAGGATTTCTGACAGACTATCTTTGGGGATGTTTTCAAGAAGGGATATA
AGTTATTTACTTTGGGCATTTAAAAGAAAATTTCTCTCGGGAATAATTTTATAGAAAAATAAAGCTTCTGTGTCT
AAGGC

FIGURE 2477

CCGGAGCAGCTGCTGCCAGCCCGCGGGCACTGAAGTCCTCCCGGCTGCCGCTCGAGTAGCCACGGGCGCGATCGG
GACCAGAAGTCTCCTCCTCCATGATCACTTTGGAAGCCGGGGGGAAGACTTTGCCCTGCCCTGAGAGCTGGTCTGC
GTTTCCCAGGCGCGGCGGCGGCGGAGCAGCAGCTGCAGCAGCCGAGTCCAAATAGGAGCGGCCACAGCCAGGGGC
GTGTGCGCCCCGCGCGGAGCGAGCTCGGGTTCCCCTCGGAATGTCCCCGGGGCGCCCGGCGCGCTGACCCCGAAG
CCGCCTCCGCCTTCGGCGCCTGCTGCCTCCCTCGGCCAGGCTTGTTGTTCGGGACTGTGAGCTTCCTGGCTCCTG
GGCAGTGGGGAAGCCCCCGGGGGCGAGTGACCTCAGCTGGCCACGACCCAGCCCTCCCCCGTGCGTATCTCGCTT
AAGATGGCAGCGGAGTCAGGGGAACTAATCGGGGCTTGTGAGTTCATGAAAGATCGGTTATATTTTGCTACTTTA
AGGAATAGACCAAAAAGCACAGTAAATACCCACTATTTCTCCATCGATGAGGAGCTGGTCTATGAAAATTTCTAT
GCAGATTTTGGACCGCTGAACTTGGCAATGGTGTACAGATATTGCTGCAAACTAAACAAGAAACTAAAATCATAC
AGTTTGTCAAGAAAGAAAATAGTGCACTACACCTGTTTTGACCAACGGAAAAGAGCAAATGCAGCATTTTTGATA
GGTGCCTATGCAGTAATCTATTTAAAGAAGACACCAGAAGAAGCCTACAGAGCACTCCTGTCTGGCTCAAACCCC
CCCTATCTTCCATTCAGGGATGCTTCCTTTGGAAATTGCACTTACAATCTCACCATTCTCGACTGTTTGCAGGGA
ATCAGAAAGGGATTACAACATGGATTTTTTGACTTTGAGACATTTGATGTGGATGAATATGAACATTATGAGCGA
GTTGAAAATGGTGACTTCAACTGGATTGTTCCAGGAAAATTTTTAGCATTTAGTGGACCACATCCTAAAAGCAAA
ATTGAGAATGGTTATCCTCTTCACGCCCCTGAAGCCTACTTTCCTTATTTCAAAAAGCATAATGTGACTGCAGTT
GTGAGGCTAAACAAAAAGATTTATGAGGCAAAGCGCTTCACAGACGCTGGCTTCGAGCACTATGACCTCTTCTTC
ATAGATGGCAGCACACCCAGTGACAACATCGTGCGAAGGTTCCTGAACATCTGTGAGAACACCGAAGGGGCCATC
GCCGTTCACTGCAAAGCTGGTCTTGGAAGAACAGGGACATTGATAGCCTGTTATGTAATGAAACACTACAGGTTT
ACACATGCTGAAATAATTGCTTGGATTAGAATATGCCGGCCAGGCTCTATTATAGGACCCCAGCAGCACTTCCTG
GAAGAAAAACAAGCATCGTTGTGGGTCCAAGGAGACATTTTCCGATCCAAACTGAAAAATCGACCATCCAGTGAA
GGAAGTATTAATAAAATTCTTTCTGGCCTAGATGATATGTCTATTGGTGGAAATCTTTCAAAAACACAAAACATG
GAACGATTTGGAGAGGTAAGTTTTCCCTAGGAGATTCTATCTTCTTAAAACTGATGTTCTGCATTTGTTTCTCAG
TTGGACCTATATAACATAGCAGTGTCTTTTCTCTGGATGCCACGAGTACCAAGTTTTTAGAAGTAGAGCCATCCG
TCTATATAGCAAGAAGCAGAGGAAAGAAACCAATTGCCCTTAAAAAAAAAAAAGCTATAATTTAAGGAGTAAATTA
TAAAGGAGGCTACTCTGGTAAGGGGTAATATTTATAGAAAGGAAACAGAAAAGCAAACTTTCTATTTGAAAAAAA
AAAAAAAAAAAAAAA

FIGURE 2478

MAAESGELIGACEFMKDRLYFATLRNRPKSTVNTHYFSIDEELVYENFYADFGPLNLAMVYRYCCKLNKKLKSYS
LSRKKIVHYTCFDQRKRANAAFLIGAYAVIYLKKTPEEAYRALLSGSNPPYLPFRDASFGNCTYNLTILDCLQGI
RKGLQHGFFDFETFDVDEYEHYERVENGDFNWIVPGKFLAFSGPHPKSKIENGYPLHAPEAYFPYFKKHNVTAVV
RLNKKIYEAKRFTDAGFEHYDLFFIDGSTPSDNIVRRFLNICENTEGAIAVHCKAGLGRTGTLIACYVMKHYRFT
HAEIIAWIRICRPGSIIGPQQHFLEEKQASLWVQGDIFRSKLKNRPSSEGSINKILSGLDDMSIGGNLSKTQNME
RFGEVSFP

FIGURE 2479

GTCGCGCCATTTTGCCGGGGTTTGAATGTGAGGCGGAGCGGCGGCAGGAGCGGATAGTGCCAGCTACGGTCCGCG
GCTGGGGTTCCCTCCTCCGTTTCTGTATCCCCACGAGATCCTATAGCAATGGAACTCAGCGATGCAAATCTGCAA
ACACTAACAGAATATTTAAAGAAAACACTTGATCCTGATCCTGCCATCCGACGTCCAGCTGAGAAATTTCTTGAA
TCTGTTGAAGGAAATCAGAATTATCCACTGTTGCTTTTGACATTACTGGAGAAGTCCCAGGATAATGTTATCAAA
GTATGTGCTTCAGTAACATTCAAAAACTATATTAAAAGGAACTGGAGAATTGTTGAAGATGAACCAAACAAAATT
TGTGAAGCCGATCGAGTGGCCATTAAAGCCAACATAGTGCACTTGATGCTTAGCAGCCCAGAGCAAATTCAGAAG
CAGTTAAGTGATGCAATTAGCATTATTGGCAGAGAAGATTTTCCACAGAAATGGCCTGACTTGCTGACAGAAATG
GTGAATCGCTTTCAGAGTGGAGATTTCCATGTTATTAATGGAGTCCTCCGTACAGCACATTCATTATTTAAAAGA
TACCGTCATGAATTTAAGTCAAACGAGTTATGGACTGAAATTAAGCTTGTTCTGGATGCCTTTGCTTTGCCTTTG
ACTAATCTTTTTAAGGCCACTATTGAACTCTGCAGTACCCATGCAAATGATGCCTCTGCCCTGAGGATTCTGTTT
TCTTCCCTGATCCTGATCTCAAAATTGTTCTATAGTTTAAACTTTCAGGATCTCCCTGAATTTTGGGAAGGTAAT
ATGGAAACTTGGATGAATAATTTCCATACTCTCTTAACATTGGATAATAAGCTTTTACAAACTGATGATGAAGAG
GAAGCCGGCTTATTGGAGCTCTTAAAATCCCAGATTTGTGATAATGCCGCACTCTATGCACAAAAGTACGATGAA
GAATTCCAGCGATACCTGCCTCGTTTTGTTACAGCCATCTGGAATTTACTAGTTACAACGGGTCAAGAGGTTAAA
TATGATTTGTTGGTAAGTAATGCAATTCAATTTCTGGCTTCAGTTTGTGAGAGACCTCATTATAAGAATCTATTT
GAGGACCAGAACACGCTGACAAGTATCTGTGAAAAGGTTATTGTGCCTAACATGGAATTTAGAGCTGCTGATGAA
GAAGCATTTGAAGATAATTCTGAGGAGTACATAAGGAGAGATTTGGAAGGATCTGATATTGATACTAGACGCAGG
GCTGCTTGTGATCTGGTACGAGGATTATGCAAGTTTTTTGAGGGACCTGTGACAGGAATCTTCTCTGGTTATGTT
AATTCCATGCTGCAGGAATACGCAAAAAATCCATCTGTCAACTGGAAACACAAAGATGCAGCCATCTACCTAGTG
ACATCTTTGGCATCAAAAGCCCAAACACAGAAGCATGGAATTACACAAGCAAATGAACTTGTAAACCTAACTGAG
TTCTTTGTGAATCACATCCTCCCTGATTTAAAATCAGCTAATGTGAATGAATTTCCTGTCCTTAAAGCTGACGGT
ATCAAATATATTATGATTTTTAGAAATCAAGTGCCAAAAGAACATCTTTTAGTCTCGATTCCTCTCTTGATTAAT
CATCTTCAAGCTGGAAGTATTGTTGTTCATACTTACGCAGCTCATGCTCTTGAACGGCTCTTTACTATGCGAGGG
CCTAACAATGCCACTCTCTTTACAGCTGCAGAAATCGCACCGTTTGTTGAGATTCTGCTAACAAACCTTTTCAAA
GCTCTCACACTTCCTGGCTCTTCAGAAAATGAATATATTATGAAAGCTATCATGAGAAGTTTTTCTCTCCTACAA
GAAGCCATAATCCCCTACATCCCTACTCTCATCACTCAGCTTACACAGAAGCTATTAGCTGTTAGTAAGAACCCA
AGCAAACCTCACTTTAATCACTACATGTTTGAAGCAATATGTTTATCCATAAGAATAACTTGCAAAGCTAACCCT
GCTGCTGTTGTAAATTTTGAGGAGGCTTTGTTTTTGGTGTTTACTGAAATCTTACAAAATGATGTGCAAGAATTT
ATTCCATACGTCTTTCAAGTGATGTCTTTGCTTCTGGAAACACACAAAAATGACATCCCGTCTTCCTATATGGCC
TTATTTCCTCATCTCCTTCAGCCAGTGCTTTGGGAAAGAACAGGAAATATTCCTGCTCTAGTGAGGCTTCTTCAA
GCATTCTTAGAACGCGGTTCAAACACAATAGCAAGTGCTGCAGCTGACAAAATTCCTGGGTTACTAGGTGTCTTT
CAGAAGCTGATTGCATCCAAAGCAAATGACCACCAAGGTTTTTATCTTCTAAACAGTATAATAGAGCACATGCCT
CCTGAATCAGTTGACCAATATAGGAAACAAATCTTCATTCTGCTATTCCAGAGACTTCAGAATTCCAAAACAACC
AAGTTTATCAAGAGTTTTTTAGTCTTTATTAATTTGTATTGCATAAAATATGGGGCACTAGCACTACAAGAAATA
TTTGATGGTATACAACCAAAAATGTTTGGAATGGTTTTGGAAAAAATTATTATTCCTGAAATTCAGAAGGTATCT
GGAAATGTAGAGAAAAAGATCTGTGCGGTTGGCATAACCAACTTACTAACAGAATGTCCCCCAATGATGGACACT
GAGTATACCAAACTGTGGACTCCATTATTACAGTCTTTGATTGGTCTTTTTGAGTTACCCGAAGATGATACCATT
CCTGATGAGGAACATTTTATTGACATAGAAGATACACCAGGATATCAGACTGCCTTCTCACAGTTGGCATTTGCT
GGGAAAAAAGAGCATGATCCTGTAGGTCAAATGGTGAATAACCCCAAAATTCACCTGGCACAGTCACTTCACATG
TTGTCTACCGCCTGTCCAGGAAGGGTTCCATCAATGGTGAGCACCAGCCTGAATGCAGAAGCGCTCCAGTATCTC
CAAGGGTACCTTCAGGCAGCCAGTGTGACACTGCTTTAAACTGCATTTTTCTAATGGGCTAAACCCAGATGGTTT
CCTAGGAAATCACAGGCTTCTGAGCACAGCTGCATTAAAACAAAGGAAGTTTTCCTTTTGAACTTGTCACGA

FIGURE 2480

MELSDANLQTLTEYLKKTLDPDPAIRRPAEKFLESVEGNQNYPLLLLTLLEKSQDNVIKVCASVTFKNYIKRNWR
IVEDEPNKICEADRVAIKANIVHLMLSSPEQIQKQLSDAISIIGREDFPQKWPDLLTEMVNRFQSGDFHVINGVL
RTAHSLFKRYRHEFKSNELWTEIKLVLDAFALPLTNLFKATIELCSTHANDASALRILFSSLILISKLFYSLNFQ
DLPEFWEGNMETWMNNFHTLLTLDNKLLQTDDEEEAGLLELLKSQICDNAALYAQKYDEEFQRYLPRFVTAIWNL
LVTTGQEVKYDLLVSNAIQFLASVCERPHYKNLFEDQNTLTSICEKVIVPNMEFRAADEEAFEDNSEEYIRRDLE
GSDIDTRRRAACDLVRGLCKFFEGPVTGIFSGYVNSMLQEYAKNPSVNWKHKDAAIYLVTSLASKAQTQKHGITQ
ANELVNLTEFFVNHILPDLKSANVNEFPVLKADGIKYIMIFRNQVPKEHLLVSIPLLINHLQAGSIVVHTYAAHA
LERLFTMRGPNNATLFTAAEIAPFVEILLTNLFKALTLPGSSENEYIMKAIMRSFSLLQEAIIPYIPTLITQLTQ
KLLAVSKNPSKPHFNHYMFEAICLSIRITCKANPAAVVNFEEALFLVFTEILQNDVQEFIPYVFQVMSLLLETHK
NDIPSSYMALFPHLLQPVLWERTGNIPALVRLLQAFLERGSNTIASAAADKIPGLLGVFQKLIASKANDHQGFYL
LNSIIEHMPPESVDQYRKQIFILLFQRLQNSKTTKFIKSFLVFINLYCIKYGALALQEIFDGIQPKMFGMVLEKI
IIPEIQKVSGNVEKKICAVGITNLLTECPPMMDTEYTKLWTPLLQSLIGLFELPEDDTIPDEEHFIDIEDTPGYQ
TAFSQLAFAGKKEHDPVGQMVNNPKIHLAQSLHMLSTACPGRVPSMVSTSLNAEALQYLQGYLQAASVTLL

FIGURE 2481A

CCGTCCCGGGGCGGACGGGCGCGGGCGGGAGGATGGAGCTGAACTCCCTGCTGATCCTGCTGGAGGCGGCCGAGT
ACCTGGAGCGCAGGGATCGAGAGGCCGAGCACGGCTACGCCTCGGTGCTGCCCTTCGACGGCGACTTCGCCAGGG
AGAAAACAAAGGCGGCCGGCCTGGTGCGCAAGGCCCCGAACAACAGGTCTTCACACAACGAGCTAGAAAAGCACA
GACGAGCCAAACTCAGGCTGTACCTTGAGCAGCTCAAGCAACTGGTGCCCCTGGGCCCCGACAGCACCCGCCACA
CCACGCTGAGCCTCCTGAAGCGGGCCAAGGTGCACATCAAGAAACTGGAGGAGCAGGACCGCCGGGCACTGAGCA
TCAAGGAGCAGCTGCAGCAGGAGCATCGTTTCCTGAAGCGGCGCCTGGAGCAGCTGTCGGTGCAGAGCGTGGAGC
GCGTGCGCACAGATAGCACGGGCTCTGCTGTCTCCACGGACGACTCAGAGCAAGAAGTGGACATAGAGGGCATGG
AGTTTGGCCCTGGTGAGCTGGACAGTGTTGGCAGCAGCAGTGACGCGGACGACCACTACAGCCTGCAGAGTGGCA
CCGGCGGCGACAGTGGCTTCGGGCCCCACTGCCGGCGGCTGGGCCGCCCCGCCCTCTCGTAGGCCCGTGCCCTCT
GCTCCTTGGCCTGCCTGCCCGCCAGCCACGCGTGTCAGCCCTCCAGTTCTCCTTCAGTTGACGCCAGCCTCTCCA
CAGGCCCACTGCTGTGCCATTCTGGAAGCTCCAGCTGCTGCTGGGCTGCCTGGCACTGCCCGCTTGCCGGTCAGG
GCCTGCCGAGCTGCCTGCCCCTTCCAGCTGGGCAGAGTCCCCTGCAAGGAGGCAGGGCCCAGCTTCCACATCCGG
AGCCCTGGTCAGCATAGCCGCCCACGGTCTGTTCTCAGATTCCTAATCATTCCAGAAGTATTAAACGTCATTGCT
GCAAACCTCGGCAGGTGCCGTGTGAGGGGCTTAATGACCACCACAGGGAGCTCAGACCCCAACCCTGGATCCCAG
GAGAAAGGAGTGGACCGAGGAAGGAAGGAAGGCAAGGCTGTCTGTCCATCCGTCCGTCTGTCCACCTACCTGTCA
GTCCACATAGGCTCCTGGCGTGGACAAGGGGTCTGTGAAGGGCGGGAACTGGGTGAGCACCTGGGGCAGGTGGGT
GGTTAAGGTCCTTCCCACTTCGCAGGTGTCAGAACCTAGGGCTGGGCTCTCGGGGCCAGGCAGGCCAGCCCAGCC
CACGCCGAGCTGGGCAGCGTCTGCTCTGGTAGGACTGTCAGACGCACACGCGCACGCACCTAGACACACCCACTC
ATGTACATGCTCACACATGCAGACACACCTGGGCGTCCCGAGGTCACATGTTCTGGGGATGATGGCCTTCAGGGG
TCATCTGGCAAACAGCCCCTGGGCTGTGCCTGGATCCCCCTCTAGCTCCTGCTCACCCACGCCCACCCAGTAGTC
CTGCCTGTCTGCACAGGAGAGGGGCTTCTCTTCCTGGCTGGGGCTGGGGTGAACTGGAGGCTGGTTAAGTTGCAG
CCGCTGGGTCCTCGGGGGCTTACTCATCTCCCTTTTTTAAACAAAAAGCAAAAAAGTAAAATGCTGCACTGCCCA
GCAGCCCGGTTAGGGCTCCTGGAGCCACCTTAGGAAAGGGCTTCTCATGAGCTCTGCTGCGGCAGCTTCAGCTGG
CAGAGAGGCTTTCCCAGAAAAAAAAAAAAAACCATTTTTAAAAAGAAGAAAGCCTAAAGACTCTCGGCCTAGGGA
CGTCCGTGTGTGCCGCCTCTGTTTCCTGTACCAGATTTTTGTATTCTATTTTCCTAGCTGTTGTTGCGTCCTTGT
TTGCTGAGGGGTGGGAGCCACCCAGCGTCTCAGGGACCTGTCCCTCCGTCACGTCGTCAAAGTGTGCCTTGTGTC
TTGTGTCAGGCCTTGCCCTTCCCACCAGCATGTCCCTCGTGGCTCAGGGTGCCCCAGGCCTGCCCAGCTAGTGCT
GTCCTCCCATCTCCTGTGGGCAGCCCCTCCCGGCAGCCAGGGCTTCCTGGAGGCGATGCAGCCAGGCCCCTGTGG
GTGGCACGGAGGGGCTGTGACCTGGTCCCCAGTGTTGCCCTCCCCAGTGGCTGGCAGGGGCCTGCTTGCTCACTA
GAGAGATGGATTCTCACCTGTCACCTGACTCGAGCCCCCTGCTTCCTGGCCTAGGCGAGGGTTCCAGGTTTCAGA
CACTGGCAGCCAATGAAGACTGTGCTCGCTGGGTGGTGCAGGCCTGGCACCAGGAGGCTTGCACCCGCCTTTCCT
TCCTGACGTCCTCTGTCCTTGGGGCTGGCCCATAGCAGTGCCTGCCGTGCCTCTGGTACATCTGTAGCCAATTCC
CATATCATGGGGAAAATTCGTGTCTATTTTCAGTCGTACGCATAGACGCCCCAGGATGGGGGGCCCACTGTGGCG
GAAGGGGGTCCCTGGAAACAACTCTGGCACAGAACCTGCCCTGCAGGCTGTAGGGGGCATGGTGCCTGGAGCTGA
GGGGCATCCGAACGCGTTGCGGGTGGTTGTGAGGAGGCCTGTCTGCATCTCCTTCCGGCCCCACTGGGGTCCAGG
GGTGCCCAGAAAGGAGCTTCCCCTGCCTGCCTGAGTCTGTCCCCCCAGGCTTCATTTCAAACACCGTGGCACCTC
CGAGCAAGGCGGGCCGTGTGTAAAAGCTTGCTTCCCCAGCCAGCACTGCAGGGCCCTGAGGTGGTCGTGTCCCTG
CCCTCAATTCTTGAAGCACCAGCTCCCTGCCCCACCCTCCAGTGCCTGAGGCAGCTAGGGGCTTCTGCTCTCATC
TCTGACCAGCAGAATCCACCCGGTGACCAGTGGTGGCCCCTCAGCCCACCCTCCCGGCAGCTCAGCCTGTGGCTC
TTGAGGCCGTGGTTCCCACGTGGACTGGGAGGCAGTCTCAGCCACCCGGGGGTGCTGTTCAGCTGCCCCTCCCTGC
CATCAGCAGGTGGGTGAGGGGTTGCCCACTGGGTGGGGGCCCGTGCTAGGAGTCACCACATGCTCCAACCTCCCA
CTGCTCCCTGTCAGGGGCCCAGGCTGCCATCACTGGAGGCTGCAGGGACCAAGAGGCCATCACCGTGTCTATAGA
GAGCAGACAGAAGCAGAACAGAGCCCGGGGCTCCTGAGCCTCTGCGTGTGCCCTCCCAGCCCACACCAGTGCTCT
CGGCCACTGAGCACCCAGACTCAGGCTTGGGTTCCCCAGCCTTATTGGAAGGCAGCTCCCGCATACCAGGATAAC
CCCCGCAAACCACATAGCAGACCCCCGCCATCCTCGCAGAGTGGGAGAGGCTGCAGCAAGGCTTTGCCTCTGCAG
ACCCCATCTTAGTGGCACGGTGCTTGGGCCTGTGTCCCCGGGTGGTGGAACCCTGTACCGGTCTGTGGCCCTAGG
GTCCCTGCTCTGTCTGCCCCGGCCCGTGCTGTCCGCTGGGTGAGGCAGGCTCCCCCGTGCCCTGCCTCCCTCTGT
CAGGGAACCTGGGACCCCCTCCCCACTGCCTGCACAGAGGACCCTGACCCTCGGCCAGCAGGGTGGCCCCAGGTC

FIGURE 2481B

CATGTTGGGCACTAGGGCAGGTTCCGTGCCAGAGTCGGGGGCCACACGAGGGCCTGGTGCCGGTGAGGGGGGCGT
GCGCTAGAGGGGGAAAGGGGCCCCCGGCCACCTGTCCACCGTGTGGGCCGTGCTGTGTCCTTATGTCATTGTAAT
ATAAATACAGATTTTTATATCTC

FIGURE 2482

MELNSLLILLEAAEYLERRDREAEHGYASVLPFDGDFAREKTKAAGLVRKAPNNRSSHNELEKHRRAKLRLYLEQ
LKQLVPLGPDSTRHTTLSLLKRAKVHIKKLEEQDRRALSIKEQLQQEHRFLKRRLEQLSVQSVERVRTDSTGSAV
STDDSEQEVDIEGMEFGPGELDSVGSSSDADDHYSLQSGTGGDSGFGPHCRRLGRPALS

2788/8433

FIGURE 2483

GAATTCCCAAACGTGCACAGGGGAGTGAGGGCAGGGCGCTCGCAGGGGGCACGCAGGGAGGGCCCAGGGCGCCAG
GGAGGCCGCGCCGGGCTAATCCGAAGGGGCTGCGAGGTCAGGCTGTAACCGGGTCAATGTGTGGAATATTGGGGG
GCTCGGCTGCAGACTTGGCCAAATGGACGGGACTATTAAGGAGGCTCTGTCGGTGGTGAGCGACGACCAGTCCCT
CTTTGACTCAGCGTACGGAGCGGCAGCCCATCTCCCCAAGGCCGACATGACTGCCTCGGGGAGTCCTGACTACGG
GCAGCCCCACAAGATCAACCCCCTCCCACCACAGCAGGAGTGGATCAATCAGCCAGTGAGGGTCAACGTCAAGCG
GGAGTATGACCACATGAATGGATCCAGGGAGTCTCCGGTGGACTGCAGCGTTAGCAAATGCAGCAAGCTGGTGGG
CGGAGGCGAGTCCAACCCCATGAACTACAACAGCTATATGGACGAGAAGAATGGCCCCCCTCCTCCCAACATGAC
CACCAACGAGAGGAGAGTCATCGTCCCCGCAGACCCCACACTGTGGACACAGGAGCATGTGAGGCAATGGCTGGA
GTGGGCCATAAAGGAGTACAGCTTGATGGAGATCGACACATCCTTTTTCCAGAACATGGATGGCAAGGAACTGTG
TAAAATGAACAAGGAGGACTTCCTCCGCGCCACCACCCTCTACAACACGGAAGTGCTGTTGTCACACCTCAGTTA
CCTCAGGGAAAGTTCACTGCTGGCCTATAATACAACCTCCCACACCGACCAATCCTCACGATTGAGTGTCAAAGA
AGACCCTTCTTATGACTCAGTCAGAAGAGGAGCTTGGGGCAATAACATGAATTCTGGCCTCAACAAAAGTCCTCC
CCTTGGAGGGGCACAAACGATCAGTAAGAATACAGAGCAACGGCCCCAGCCAGATCCGTATCAGATCCTGGGCCC
GACCAGCAGTCGCCTAGCCAACCCTGGAAGCGGGCAGATCCAGCTGTGGCAATTCCTCCTGGAGCTGCTCTCCGA
CAGCGCCAACGCCAGCTGTATCACCTGGGAGGGGACCAACGGGGAGTTCAAAATGACGGACCCCGATGAGGTGGC
CAGGCGCTGGGGCGAGCGGAAAAGCAAGCCCAACATGAATTACGACAAGCTGAGCCGGGCCCTCCGTTATTACTA
TGATAAAAACATTATGACCAAAGTGCACGGCAAAAGATATGCTTACAAATTTGACTTCCACGGCATTGCCCAGGC
TCTGCAGCCACATCCGACCGAGTCGTCCATGTACAAGTACCCTTCTGACATCTCCTACATGCCTTCCTACCATGC
CCACCAGCAGAAGGTGAACTTTGTCCCTCCCCATCCATCCTCCATGCCTGTCACTTCCTCCAGCTTCTTTGGAGC
CGCATCACAATACTGGACCTCCCCCACGGGGGGAATCTACCCCAACCCCAACGTCCCCCGCCATCCTAACACCCA
CGTGCCTTCACACTTAGGCAGCTACTACTAGAAGCTTCTTCTAGCTGAAGCCCATCCTGCACACTTACTGGATGC
TTTGGACTCAACAGGACATATGTGGCCTTGAAGGGAAGACAAAACTGGATGTTCTTTCTTGTTGGATAGAACCTT
TGTATTTGTTCTTTAAAAACATTTTTTTTAATGTTGGTAACTTTTGCTTCCTCTACCTGAACAAAGAGATGAATA
ATTCCATGGGCCAGTATGCCAGTTTGAATTCTCAGTCTCCTAGCATCTTGTGAGTTGCATATTAAGATTACTGGA
ATGGTTAAGTCATGGTTCTGAGAAAGAAGCTGTACGTTTTCTTTATGTTTTTATGACCAAAGCAGTTTCTTGTCA
ATACACGGGGTTCAGTATGACACAGAATCATGGACTTAACCCGTCATGTTCTGGTTTGAGATTTAGTGACAAATA
GAGGTGGGAAGCTTATAATCTAATTTTAGGAGGACCAAATTCAGCGGATGGCAACTGGAACATTGATTGTAAGGC
CAGTGAAGTTTTCACCCAACTGGAATTTGATGGAAAGAAGGTTTGTGTGTTTAAGACGCCAAGGGCATTGCAGAA
TCCCTCTCAGTGGACAGTATGCACTCAGCTGACCACTCTCTCTAGAAATAGTCAAGATATGAACTAAGAAATTTT
AATGCAAATACATACATTCCTGAAAGACGGGGAATTAAATTACTAATTTTTTTTTTTTAAATGATGACAGTGGTC
CCAGAACTTGGAAAAGTTGTAGGGATTTCTAAACTCAAGCAGATTCGCAAGTGCTGTGCGCTTGTCAGACCATCA
GACCAGGGCCAACCAATCAGAAGGCAACTTACTGTATAAATTATGCAGAGTTATTTTCCTATATCTCACAGTATT
AAAAAATAAATAATTAAAAATTAAGAATAAATAAACGAGTTGACCTCGGTCACAAAAGCAGTTTTACTATCGAAT
CAATCGCTGTTATTTTTTTTTAATGTAATTTGTACATCTTTTTTCAATCTGTACATTTGGGCTGTCTTGTATGTT
TTTATGCTCCTTTTTAAAAAGCATAATATGCCTATAGCTGAAAAGGAAACAGGGCTGTTTAAGTCACTGACTTAT
GAGAAAGCAAAGCACTGGTACAGTTATTTAACAGGCATACACAAGCAGGGAAAAGATAATCCATTTAGATCTTTA
ATGCTTTGGAAATGCGTGTAACAGTACTGCAATAATCACAGCTCTGGGAAAAACAACGAAACTTTCCCTTGTGGA
GAGGAGGGATTTTCCTGCTCTATATAAGCAACATATTTTTAGACATTAAAATATATATAATTTTGCAGGTAATTG
TTGACTTTTTTAACTATATTAAGTGTTAAGCTGACAACTGTCAAAGAAGACCATGTTGTAAAATAATTTGACTAA
ATAAATGGTTCCTTCTCTCAAAAAAAAAAAAA

FIGURE 2484

MDGTIKEALSVVSDDQSLFDSAYGAAAHLPKADMTASGSPDYGQPHKINPLPPQQEWINQPVRVNVKREYDHMNG
SRESPVDCSVSKCSKLVGGGESNPMNYNSYMDEKNGPPPPNMTTNERRVIVPADPTLWTQEHVRQWLEWAIKEYS
LMEIDTSFFQNMDGKELCKMNKEDFLRATTLYNTEVLLSHLSYLRESSLLAYNTTSHTDQSSRLSVKEDPSYDSV
RRGAWGNNMNSGLNKSPPLGGAQTISKNTEQRPQPDPYQILGPTSSRLANPGSGQIQLWQFLLELLSDSANASCI
TWEGTNGEFKMTDPDEVARRWGERKSKPNMNYDKLSRALRYYYDKNIMTKVHGKRYAYKFDFHGIAQALQPHPTE
SSMYKYPSDISYMPSYHAHQQKVNFVPPHPSSMPVTSSSFFGAASQYWTSPTGGIYPNPNVPRHPNTHVPSHLGS
YY

FIGURE 2485

CCACGTGGTGGCTTTCTCACGCTAGCCCTCTTTGGTCCTCCTTGACGTCCCGGGCCTGTGGGCCCGCTTTCTGCC
GAGATGCCGAAGGTCAAGTCGGGGGCCATCGGCCGCCGCCGCGGGCGGCAGGAGCAGCGCCGGGAGCTGAAGAGC
GCTGGAGGACTCATGTTCAACACGGGGATTGGGCAGCACATTTTGAAAAATCCTCTCATTATTAACAGCATTATC
GATAAGGCTGCCTTAAGACCAACTGATGTAGTGCTGGAAGTTGGACCTGGAACTGGCAACATGACTGTAAAGTTG
TTAGAAAAGGCAAAAAAGGTTGTTGCTTGTGAACTTGACCCAAGGCTAGTAGCTGAACTTCACAAAAGAGTTCAG
GGCACGCCTGTGGCCAGCAAACTTCAAGTACTGGTGGGTGATGTGCTGAAAACAGATTTGCCATTCTTTGATACT
TGTGTGGCAAATTTGCCTTATCAGATCTCTTCGCCTTTTGTCTTCAAGCTGTTGCTACATCGACCTTTTTTCAGG
TGTGCTATACTTATGTTTCAAAGAGAATTTGCCCTCCGACTGGTTGCAAAACCTGGAGATAAGTTATACTGCAGA
CTCTCAATTAATACACAGCTGTTGGCACGTGTGGACCATCTAATGAAAGTGGGAAAGAATAACTTCAGACCACCG
CCCAAGGTGGAATCCAGTGTTGTAAGGATAGAACCTAAGAATCCACCACCACCCATCAATTTTCAGGAATGGGAT
GGTCTAGTAAGGATAACCTTTGTTAGGAAAAACAAGACACTCTCTGCTGCATTTAAATCAAGTGCAGTGCAACAA
CTCTTGGAAAAAAACTACAGAATTCACTGTTCAGTCCATAATATTATAATACCAGAAGATTTCAGCATAGCAGAT
AAAATACAGCAAATCCTAACCAGCACAGGTTTTAGTGACAAACGGGCCCGTTCCATGGACATAGATGACTTCATC
AGATTGCTACATGGATTCAACGCAGAAGGTATTCATTTTTCCTAGGTATTTGGAAAACAGAAATTTTCAAGGTCA
AGAAAAGAAATGAATTTTGTATTTTTTGTATTTGAGAAGATAATGCTTTTGCTTTACTGAGACATTATTTACTTG
ACTATTTTTGGTTCAATACTACTACTGTTGTCACCATTTATGATTCTGAATTTTAAAGTTGGAAAGTTCTAAGTA
TCAAAGTTTTTAATATATAATGCTGGTCCAATCTATTCATAATAATCTTCAAGTTCAGGAGCCGCAGAGACGCAC
AACTTTACACTTATCATTTCTAACAGTTTATTGTATAAAGATGTTACTCTTCTATTTACTGTTATATACTGTAAG
GCCTTCTTTAGGCCTTTAGCTCTGTTCCTCCAGTAATAAAAAAGTTAAAATATGCTTCACTAGTCACACATTCCC
CATACCATTTCGTGTTATTCACATTCCCCGTACCATTTCTTGTTATTCACATGTACAGTAAAACAATTGTTTCTT
AAATT

FIGURE 2486

MPKVKSGAIGRRRGRQEQRRELKSAGGLMFNTGIGQHILKNPLIINSIIDKAALRPTDVVLEVGPGTGNMTVKLL
EKAKKVVACELDPRLVAELHKRVQGTPVASKLQVLVGDVLKTDLPFFDTCVANLPYQISSPFVFKLLLHRPFFRC
AILMFQREFALRLVAKPGDKLYCRLSINTQLLARVDHLMKVGKNNFRPPPKVESSVVRIEPKNPPPPINFQEWDG
LVRITFVRKNKTLSAAFKSSAVQQLLEKNYRIHCSVHNIIIPEDFSIADKIQQILTSTGFSDKRARSMDIDDFIR
LLHGFNAEGIHFS

FIGURE 2487

GGGGGAGGCTGTGATGGGTTGACAGGTGCGTGACAGTGGGAGCTGCTCTCGGCACAAGCATGTACGGCAAAGGCA
AGAGTAACAGCAGCGCCGTCCCGTCCGACAGCCAGGCCCGGGAGAAGTTAGCACTCTACGTATATGAATATCTGC
TCCATGTAGGAGCTCAGAAATCAGCTCAAACATTTTTATCAGAGATAAGATGGGAAAAAAACATCACATTGGGGG
AACCACCAGGATTCTTACATTCTTGGTGGTGTGTATTTTGGGATCTCTACTGTGCAGCTCCAGAGAGACGTGAAA
CATGTGAACACTCAAGTGAAGCAAAAGCCTTCCATGATTACAGTGCTGCAGCAGCTCCCAGTCCAGTGCTAGGAA
ACATTCCCCCAGGAGATGGCATGCCAGTAGGTCCTGTACCACCAGGGTTCTTTCAGCCTTTTATGTCACCTCGGT
ACCCTGGAGGTCCAAGGCCCCCATTGAGGATACCTAATCAGGCACTTGGAGGTGTCCCAGGAAGTCAGCCATTAC
TCCCCAGAGGAATGGATCCAACTCGACAACAAGGACATCCAAATATGGGTGGGCCAATGCAGAGAATGACTCCTC
CAAGAGGAATGGTGCCCTTAGGACCACAGAACTATGGAGGTGCAATGAGACCCCCACTGAATGCTTTAGGTGGCC
CTGGAATGCCTGGAATGAACATGGGTCCAGGTGGTGGTAGACCTTGGCCAAACCCAACAAATGCCAATTCAATAC
CATACTCCTCAGCATCTCCTGGGAATTATGTAGGTCCTCCAGGAGGTGGAGGGCCACCAGGAACACCCATCATGC
CTAGTCCAGCAGATTCAACCAACTCTGGTGATAACATGTATACTTTAATGAATGCAGTACCTCCTGGACCTAACA
GACCTAATTTTCCAATGGGCCCTGGGTCAGATGGTCCCATGGGTGGATTAGGAGGAATGGAGTCACATCACATGA
ATGGCTCTTTAGGCTCAGGAGATATGGACAGTATTTCCAAGAATTCTCCCAATAATATGAGCCTGAGTAATCAAC
CGGGCACTCCAAGGGATGATGGCGAAATGGGGGGAAATTTCTTAAATCCTTTTCAGAGTGAGAGTTACTCCCCTA
GCATGACAATGAGCGTGTGATCCATTACCAAGTCTCCTCATGAAAACCACAGTGAGTCAGCCCTTCACAGAACTA
CTACGGAAGAAAATTATTCATCACAGTGTACAGTTAAACAAAGGAATCTCAGTCACACCAAACCAACCTTTTCAT
TTCCTGCTCTCTCCCCTCTTTTGTGAAGAAAGCGGGTCCAGATGTGATTCAAACAACTGTACGGAGTGGCATATT
AGAATTGCCCTAAACTGAACTGCAAATAATTATGTGTGTATGTATATGTGTGGGAAAGAGAATGTACTGTATATG
TGTATGTTATACAGACATATACACATACATACATTGACCCACAGGACATTGTAAAATATTATCACATGACATCTT
AAGTAGAAATAAGTAGGGACTTTTATTCCATCCTTTTTTTCACGTTTACATTTTAATTATTACAAGTTGCTCCTG
CCCCCTCCCTGAACTATTTTGTGCTGTGTATATCACTGCTTTATATAAGTTATTTTTTAAGGTGAACTCAGATGT
TATGGTTTTGTATATGTCTGCAATCATGGATAGGAATAAAATCGCTTATTTGAGAGCTTTCAAAAAAAAAAAAAA
AAAAAC

FIGURE 2488

MYGKGKSNSSAVPSDSQAREKLALYVYEYLLHVGAQKSAQTFLSEIRWEKNITLGEPPGFLHSWWCVFWDLYCAA
PERRETCEHSSEAKAFHDYSAAAAPSPVLGNIPPGDGMPVGPVPPGFFQPFMSPRYPGGPRPPLRIPNQALGGVP
GSQPLLPRGMDPTRQQGHPNMGGPMQRMTPPRGMVPLGPQNYGGAMRPPLNALGGPGMPGMNMGPGGGRPWPNPT
NANSIPYSSASPGNYVGPPGGGGPPGTPIMPSPADSTNSGDNMYTLMNAVPPGPNRPNFPMGPGSDGPMGGLGGM
ESHHMNGSLGSGDMDSISKNSPNNMSLSNQPGTPRDDGEMGGNFLNPFQSESYSPSMTMSV

FIGURE 2489

GGCACGAGGAGACAAAGCAGCGCCCGTCTGCTTCGGGCCTCTGGAATTTAGCGCTCGCCCAGCTAGCCGCAGAAA
TGACTGCTGTCCATGCAGGCAACATAAACTTCAAGTGGGATCCTAAAAGTCTAGAGATCAGGACTCTGGCAGTTG
AGAGACTGTTGGAGCCTCTTGTTACACAGGTTACAACCCTTGTAAACACCAATAGTAAAGGGCCCTCTAATAAGA
AGAGAGGTCGTTCTAAGAAGGCCCATGTTTTGGCTGCATCTGTTGAACAAGCAACTGAGAATTTCTTGGAGAAGG
GGGATAAAATTGCGAAGGAGAGCCAGTTTCTCAAGGAGGAGCTTGTGGCTGCTGTAGAAGATGTTCGAAAACAAG
GTGATTTGATGAAGGCTGCTGCAGGAGAGTTCGCAGATGATCCCTGCTCTTCTGTGAAGCGAGGCAACATGGTTC
GGGCAGCTCGAGCTTTGCTCTCTGCTGTTACCCGGTTGCTGATTTTGGCTGACATGGCAGATGTCTACAAATTAC
TTGTTCAGCTGAAAGTTGTGGAAGATGGTATCTTGAAGTTGAGGAATGCTGGCAATGAACAAGACTTAGGAATCC
AGTATAAAGCCCTAAAACCTGAAGTGGATAAGCTGAACATTATGGCAGCCAAAAGACAACAGGAATTGAAAGATG
TTGGCCATCGTGATCAGATGGCTGCAGCTAGAGGAATCCTGCAGAAGAACGTTCCGATCCTCTATACTGCATCCC
AGGCATGCCTACAGCACCCTGATGTCGCAGCCTATAAGGCCAACAGGGACCTGATATACAAGCAGCTGCAGCAGG
CGGTCACAGGCATTTCCAATGCAGCCCAGGCCACTGCCTCAGACGATGCCTCACAGCACCAGGGTGGAGGAGGAG
GAGAACTGGCATATGCACTCAATAACTTTGACAAACAAATCATTGTGGACCCCTTGAGCTTCAGCGAGGAGCGCT
TTAGGCCTTCCCTGGAGGAGCGTCTGGAAAGCATCATTAGTGGGGCTGCCTTGATGGCCGACTCGTCCTGCACGC
GTGATGACCGTCGTGAGCGAATTGTGGCAGAGTGTAATGCTGTCCGCCAGGCCCTGCAGGACCTGCTTTCGGAGT
ACATGGGCAATGCTGGACGTAAAGAAAGAAGTGATGCACTCAATTCTGCAATAGATAAAATGACCAAGAAGACCA
GGGACTTGCGTAGACAGCTCCGCAAAGCTGTCATGGACCACGTTTCAGATTCTTTCCTGGAAACCAATGTTCCAC
TTTTGGTATTGATTGAAGCTGCAAAGAATGGAAATGAGAAAGAAGTTAAGGAGTATGCCCAAGTTTTCCGTGAAC
ATGCCAACAAATTGATTGAGGTTGCCAACTTGGCCTGTTCCATCTCAAATAATGAAGAAGGTGTAAAGCTTGTTC
GAATGTCTGCAAGCCAGTTAGAAGCCCTCTGTCCTCAGGTTATTAATGCTGCACTGGCTTTAGCAGCAAAACCAC
AGAGTAAACTGGCCCAAGAGAACATGGATCTTTTTAAAGAACAATGGGAAAAACAAGTCCGTGTTCTCACAGATG
CTGTCGATGACATTACTTCCATTGATGACTTCTTGGCTGTCTCAGAGAATCACATTTTGGAAGATGTGAACAAAT
GTGTCATTGCTCTCCAAGAGAAGGATGTGGATGGCCTGGACCGCACAGCTGGTGCAATTCGAGGCCGGGCAGCCC
GGGTCATTCACGTAGTCACCTCAGAGATGGACAACTATGAGCCAGGAGTCTACACAGAGAAGGTTCTGGAAGCCA
CTAAGCTGCTCTCCAACACAGTCATGCCACGTTTTACTGAGCAAGTAGAAGCAGCCGTGGAAGCCCTCAGCTCGG
ACCCTGCCCAGCCCATGGATGAGAATGAGTTTATCGATGCTTCCCGCCTGGTATATGATGGCATCCGGGACATCA
GGAAAGCAGTGCTGATGATAAGGACCCCTGAGGAGTTGGATGACTCTGACTTTGAGACAGAAGATTTTGATGTCA
GAAGCAGGACGAGCGTCCAGACAGAAGACGATCAGCTGATAGCTGGCCAGAGTGCCCGGGCGATCATGGCTCAGC
TTCCCCAGGAGCAAAAAGCGAAGATTGCGGAACAGGTGGCCAGCTTCCAGGAAGAAAAGAGCAAGCTGGATGCTG
AAGTGTCCAAATGGGACGACAGTGGCAATGACATCATTGTGCTGGCCAAGCAGATGTGCATGATTATGATGGAGA
TGACAGACTTTACCCGAGGTAAAGGACCACTCAAAAATACATCGGATGTCATCAGTGCTGCCAAGAAAATTGCTG
AGGCAGGATCCAGGATGGACAAGCTTGGCCGCACCATTGCAGACCATTGCCCCGACTCGGCTTGCAAGCAGGACC
TGCTGGCCTACCTGCAACGCATCGCCCTCTACTGCCACCAGCTGAACATCTGCAGCAAGGTCAAGGCCGAGGTGC
AGAATCTCGGCGGGGAGCTTGTTGTCTCTGGGGTGGACAGCGCCATGTCCCTGATCCAGGCAGCCAAGAACTTGA
TGAATGCTGTGGTGCAGACAGTGAAGGCATCCTACGTCGCCTCTACCAAATACCAAAAGTCACAGGGTATGGCTT
CCCTCAACCTTCCTGCTGTGTCATGGAAGATGAAGGCACCAGAGAAAAAGCCATTGGTGAAGAGAGAGAAACAGG
ATGAGACACAGACCAAGATTAAACGGGCATCTCAGAAGAAGCACGTGAACCCGGTGCAGGCCCTCAGCGAGTTCA
AAGCTATGGACAGCATCTAAGTCTGCCCAGGCCGGCCGCCCCCACCCCTCGGGGCTCCTGAATATCAGTCACTGT
TCGTCACTCAAATGAATTTGCTAAATACAACACTGATACTAGATTCCACAGGGAAATGGGCAGACTGAACCAGTC
CAGGTGGTGAATTTTCCAAGAACATAGTTTAAGTTGATTAAAAATGCTTTTAGAATGCAGGAGCCTACTTCTAGC
TGTATTTTTTGTATGCTTAAATAAAAATAAAAATTCATAACCAAAGAGAATCCCACATTAGCTTGTTAGTAATGC
TCTGACCAAGCCGAGATGCCCATTCTCTTAGTGATGGCGGCGTTAGGGTTTGAGAGAAGGGAATTTGGCTCAACT
TCAGTTGAGAGGGTGCAGTCCAGACAGCTTGACTGCTTTTAAATGACCAAAGATGACCTGTGGTAAGCAACCTGG
GCATCTTAGGAAGCAGTCCCTGGAGAAGGCATGTTCCCAGAAAGGTCTCTGGAGGGACAAACTCACTCAGTAAAA
CATAATGTATCATGAAGAAAACTGATTCTCTATGACATGAAATGAAAATTTTAATGCATTGTTATAATTACTAAT
GTACGCTGCTGCAGGACATTAATAAAGTTGCTTTTTTAGGCTAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2490

MTAVHAGNINFKWDPKSLEIRTLAVERLLEPLVTQVTTLVNTNSKGPSNKKRGRSKKAHVLAASVEQATENFLEK
GDKIAKESQFLKEELVAAVEDVRKQGDLMKAAAGEFADDPCSSVKRGNMVRAARALLSAVTRLLILADMADVYKL
LVQLKVVEDGILKLRNAGNEQDLGIQYKALKPEVDKLNIMAAKRQQELKDVGHRDQMAAARGILQKNVPILYTAS
QACLQHPDVAAYKANRDLIYKQLQQAVTGISNAAQATASDDASQHQGGGGGELAYALNNFDKQIIVDPLSFSEER
FRPSLEERLESIISGAALMADSSCTRDDRRERIVAECNAVRQALQDLLSEYMGNAGRKERSDALNSAIDKMTKKT
RDLRRQLRKAVMDHVSDSFLETNVPLLVLIEAAKNGNEKEVKEYAQVFREHANKLIEVANLACSISNNEEGVKLV
RMSASQLEALCPQVINAALALAAKPQSKLAQENMDLFKEQWEKQVRVLTDAVDDITSIDDFLAVSENHILEDVNK
CVIALQEKDVDGLDRTAGAIRGRAARVIHVVTSEMDNYEPGVYTEKVLEATKLLSNTVMPRFTEQVEAAVEALSS
DPAQPMDENEFIDASRLVYDGIRDIRKAVLMIRTPEELDDSDFETEDFDVRSRTSVQTEDDQLIAGQSARAIMAQ
LPQEQKAKIAEQVASFQEEKSKLDAEVSKWDDSGNDIIVLAKQMCMIMMEMTDFTRGKGPLKNTSDVISAAKKIA
EAGSRMDKLGRTIADHCPDSACKQDLLAYLQRIALYCHQLNICSKVKAEVQNLGGELVVSGVDSAMSLIQAAKNL
MNAVVQTVKASYVASTKYQKSQGMASLNLPAVSWKMKAPEKKPLVKREKQDETQTKIKRASQKKHVNPVQALSEF
KAMDSI

FIGURE 2491A

CATACTTTTTCCTCTTAGTCTACAGGTTGGCTGCATAGAAGAAAAAGGTAGAGTTATTTATAATCTTGTAAATCT
TGGACTTTGAGTCATCTATTTTCTTTTACAGTCATCGAATACTTTTGGAAATAAGGTAATATATGCCTTTTGAGC
TGTCTTGACGTTCACAGATATAAAATATTAAATATATTTTAATTTTGTGCCCTTGCAGATTGATCACTTATTCAT
TAGTAATTTACCAGAGATTGTGGTGGAGTTATTGATGACGTTACATGAGCCAGCAAATTCTAGTGCCAGTCAGAG
CACTGACCTCTGTGACTTTTCAGGGGATTTGGATCCTGCTCCTAATCCACCTCATTTTCCATCGCATGTGATTAA
AGCAACATTTGCCTATATCAGCAATTGTCATAAAACCAAGTTAAAAAGCATTTTAGAAATTCTTTCCAAAAGCCC
TGATTCCTATCAGAAAATTCTTCTTGCCATATGTGAGCAAGCAGCTGAAACAAATAATGTTTATAAGAAGCACAG
AATTCTTAAAATATATCACCTGTTTGTTAGTTTATTACTGAAAGATATAAAAAGTGGCTTAGGAGGAGCTTGGGC
CTTTGTTCTTCGAGACGTTATTTATACTTTGATTCACTATATCAACCAAAGGCCTTCTTGTATCATGGATGTGTC
ATTACGTAGCTTCTCCCTTTGTTGTGACTTATTAAGTCAGGTTTGCCAGACAGCCGTGACTTACTGTAAGGATGC
TCTAGAAAACCATCTTCATGTTATTGTTGGTACACTTATACCCCTTGTGTATGAGCAGGTGGAGGTTCAGAAACA
GGTATTGGACTTGTTGAAATACTTAGTGATAGATAACAAGGATAATGAAAACCTCTATATCACGATTAAGCTTTT
AGATCCTTTTCCTGACCATGTTGTTTTTAAGGATTTGCGTATTACTCAGCAAAAAATCAAATACAGTAGAGGACC
CTTTTCACTCTTGGAGGAAATTAACCATTTTCTCTCAGTAAGTGTTTATGATGCACTTCCATTGACAAGACTTGA
AGGACTAAAGGATCTTCGAAGACAACTGGAACTACATAAAGATCAGATGGTGGACATTATGAGAGCTTCTCAGGA
TAATCCGCAAGATGGGATTATGGTGAAACTAGTTGTCAATTTGTTGCAGTTATCCAAGATGGCAATAAACCACAC
TGGTGAAAAAGAAGTTCTAGAGGCTGTTGGAAGCTGCTTGGGAGAAGTGGGTCCTATAGATTTCTCTACCATAGC
TATACAACATAGTAAAGATGCATCTTATACCAAGGCCCTTAAGTTATTTGAAGATAAAGAACTTCAGTGGACCTT
CATAATGCTGACCTACCTGAATAACACACTGGTAGAAGATTGTGTCAAAGTTCGATCAGCAGCTGTTACCTGTTT
GAAAAACATTTTAGCCACAAAGACTGGACATAGTTTCTGGGAGATTTATAAGATGACAACAGATCCAATGCTGGC
CTATCTACAGCCTTTTAGAACATCAAGAAAAAAGTTTTTAGAAGTACCCAGATTTGACAAAGAAAACCCTTTTGA
AGGCCTGGATGATATAAATCTGTGGATTCCTCTAAGTGAAAATCATGACATTTGGATAAAGACACTGACTTGTGC
TTTTTTGGACAGTGGAGGCACAAAATGTGAAATTCTTCAATTATTAAAGCCAATGTGTGAAGTGAAAACTGACTT
TTGTCAGACTGTACTTCCATACTTGATTCATGATATTTTACTCCAAGATACAAATGAATCATGGAGAAATCTGCT
TTCTACACATGTTCAGGGATTTTTCACCAGCTGTCTTCGACACTTCTCGCAAACGAGCCGATCCACAACCCCTGC
AAACTTGGATTCAGAGTCAGAGCACTTTTTCCGATGCTGTTTGGATAAAAAATCACAAAGAACAATGCTTGCTGT
TGTGGACTACATGAGAAGACAAAAGAGACCTTCTTCAGGAACAATTTTTAATGATGCTTTCTGGCTGGATTTAAA
TTATCTAGAAGTTGCCAAGGTAGCTCAGTCTTGTGCTGCTCACTTTACAGCTTTACTCTATGCAGAAATCTATGC
AGATAAGAAAAGTATGGATGATCAAGAGAAAAGAAGTCTTGCATTTGAAGAAGGAAGCCAGAGTACAACTATTTC
TAGCTTGAGTGAAAAAAGTAAAGAAGAAACTGGAATAAGTTTACAGGATCTTCTCTTAGAAATCTACAGAAGTAT
AGGGGAGCCAGATAGTTTGTATGGCTGTGGTGGAGGGAAGATGTTACAACCCATTACTAGACTACGAACATATGA
ACACGAAGCAATGTGGGGCAAAGCCCTAGTAACATATGACCTCGAAACAGCAATCCCCTCATCAACACGCCAGGC
AGGAATCATTCAGGCCTTGCAGAATTTGGGACTCTGCCATATTCTTTCCGTCTATTTAAAAGGATTGGATTATGA
AAATAAAGACTGGTGTCCTGAACTAGAAGAACTTCATTACCAAGCAGCATGGAGGAATATGCAGTGGGACCATTG
CACTTCCGTCAGCAAAGAAGTAGAAGGAACCAGTTACCATGAATCATTGTACAATGCTCTACAATCTCTAAGAGA
CAGAGAATTCTCTACATTTTATGAAAGTCTCAAATATGCCAGAGTAAAAGAAGTGGAAGAGATGTGTAAGCGCAG
CCTTGAGTCTGTGTATTCGCTCTATCCCACACTTAGCAGGTTGCAGGCCATTGGAGAGCTGGAAAGCATTGGGGA
GCTTTTCTCAAGATCAGTCACACATAGACAACTCTCTGAAGTATATATTAAGTGGCAGAAACACTCCCAGCTTCT
CAAGGACAGTGATTTTAGTTTTCAGGAGCCTATCATGGCTCTACGCACAGTCATTTTGGAGATCCTGATGGAAAA
GGAAATGGACAACTCACAAAGAGAATGTATTAAGGACATTCTCACCAAACACCTTGTAGAACTCTCTATACTGGC
CAGAACTTTCAAGAACACTCAGCTCCCTGAAAGGGCAATATTTCAAATTAAACAGTACAATTCAGTTAGCTGTGG
AGTCTCTGAGTGGCAGCTGGAAGAAGCACAAGTATTCTGGGCAAAAAAGGAGCAGAGTCTTGCCCTGAGTATTCT
CAAGCAAATGATCAAGAAGTTGGATGCCAGCTGTGCAGCGAACAATCCCAGCCTAAAACTTACATACACAGAATG
TCTGAGGGTTTGTGGCAACTGGTTAGCAGAAACGTGCTTAGAAAATCCTGCGGTCATCATGCAGACCTATCTAGA
AAAGGCAGTAGAAGTTGCTGGAAATTATGATGGAGAAAGTAGTGATGAGCTAAGAAATGGAAAAATGAAGGCATT
TCTCTCATTAGCCCGGTTTTCAGATACTCAATACCAAAGAATTGAAAACTACATGAAATCATCGGAATTTGAAAA
CAAGCAAGCTCTCCTGAAAAGAGCCAAAGAGGAAGTAGGTCTCCTTAGGGAACATAAAATTCAGACAAACAGATA
CACAGTAAAGGTTCAGCGAGAGCTGGAGTTGGATGAATTAGCCCTGCGTGCACTGAAAGAGGATCGTAAACGCTT

FIGURE 2491B

CTTATGTAAAGCAGTTGAAAATTATATCAACTGCTTATTAAGTGGAGAAGAACATGATATGTGGGTATTCCGACT
TTGTTCCCTCTGGCTTGAAAATTCTGGAGTTTCTGAAGTCAATGGCATGATGAAGAGAGACGGAATGAAGATTCC
AACATATAAATTTTTGCCTCTTATGTACCAATTGGCTGCTAGAATGGGGACCAAGATGATGGGAGGCCTAGGATT
TCATGAAGTCCTCAATAATCTAATCTCTAGAATTTCAATGGATCACCCCCATCACACTTTGTTTATTATACTGGC
CTTAGCAAATGCAAACAGAGATGAATTTCTGACTAAACCAGAGGTAGCCAGAAGAAGCAGAATAACTAAAAATGT
GCCTAAACAAAGCTCTCAGCTTGATGAGGATCGAACAGAGGCTGCAAATAGAATAATATGTACTATCAGAAGTAG
GAGACCTCAGATGGTCAGAAGTGTTGAGGCACTTTGTGATGCTTATATTATATTAGCAAACTTAGATGCCACTCA
GTGGAAGACTCAGAGAAAAGGCATAAATATTCCAGCAGACCAGCCAATTACTAAACTTAAGAATTTAGAAGATGT
TGTTGTCCCTACTATGGAAATTAAGGTGGACCACACAGGAGAATATGGAAATCTGGTGACTATACAGTCATTTAA
AGCAGAATTTCGCTTAGCAGGAGGTGTAAATTTACCAAAAATAATAGATTGTGTAGGTTCCGATGGCAAGGAGAG
GAGACAGCTTGTTAAGGGCCGTGATGACCTGAGACAAGATGCTGTCATGCAACAGGTCTTCCAGATGTGTAATAC
ATTACTGCAGAGAAACACGGAAACTAGGAAGAGGAAATTAACTATCTGTACTTATAAGGTGGTTCCCCTCTCTCA
GCGAAGTGGTGTTCTTGAATGGTGCACAGGAACTGTCCCCATTGGTGAATTTCTTGTTAACAATGAAGATGGTGC
TCATAAAAGATACAGGCCAAATGATTTCAGTGCCTTTCAGTGCCAAAAGAAAATGATGGAGGTGCAAAAAAAGTC
TTTTGAAGAGAAATATGAAGTCTTCATGGATGTTTGCCAAAATTTTCAACCAGTTTTCCGTTACTTCTGCATGGA
AAAATTCTTGGATCCAGCTATTTGGTTTGAGAAGCGATTGGCTTATACGCGCAGTGTAGCTACTTCTTCTATTGT
TGGTTACATACTTGGACTTGGTGATAGACATGTACAGAATATCTTGATAAATGAGCAGTCAGCAGAACTTGTACA
TATAGATCTAGGTGTTGCTTTTGAACAGGGCAAAATCCTTCCTACTCCTGAGACAGTTCCTTTTAGACTCACCAG
AGATATTGTGGATGGCATGGGCATTACGGGTGTTGAAGGTGTCTTCAGAAGATGCTGTGAGAAAACCATGGAAGT
GATGAGAAACTCTCAGGAAACTCTGTTAACCATTGTAGAGGTCCTTCTATATGATCCACTCTTTGACTGGACCAT
GAATCCTTTGAAAGCTTTGTATTTACAGCAGAGGCCGGAAGATGAAACTGAGCTTCACCCTACTCTGAATGCAGA
TGACCAAGAATGCAAACGAAATCTCAGTGATATTGACCAGAGTTTCGACAAAGTAGCTGAACGTGTCTTAATGAG
ACTACAAGAGAAACTGAAAGGAGTGGAAGAAGGCACTGTGCTCAGTGTTGGTGGACAGGTGAATTTGCTCATACA
GCAGGCCATAGACCCCAAAAATCTCAGCCGACTTTTCCCAGGATGGAAAGCTTGGGTGTGATCTTCAGTATATGA
ATTACCCTTTCATTCAGCCTTTAGAAATTATATTTTAGCCTTTATTTTTAACCTGCCAACATACTTTAAGTAGGG
ATTAATATTTAAGTGAACTATTGTGGGTTTTTTTGAATGTTGGTTTTAATACTTGATTTAATCACCACTCAAAAA
TGTTTTGATGGTCTTAAGGAACATCTCTGCTTTCACTCTTTAGAAATAATGGTCATTCGGGCTGGGCGCAGCGGC
TCACGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGTGAGCGGATCACAAGGTCAGGAGTTCGAGACCAGCCTGG
CCAAGAGACCAGCCTGGCCAGTATGGTGAAACCCTGTCTCTACTAAAAATACAAAAATTAGCCGAGCATGGTGGC
GGGCACCTGTAGTCCCAGCTACTCGAGAGGCTGAGGCAGGAGAATCTCTTGAACCTGGGAGGTGAAGGTTGCTGT
GGGCCAAAATCATGCCATTGCACTCCAGCCTGGGTGACAAGAGCGAAACTCCATCTCAAAAA

FIGURE 2492

MTLHEPANSSASQSTDLCDFSGDLDPAPNPPHFPSHVIKATFAYISNCHKTKLKSILEILSKSPDSYQKILLAIC
EQAAETNNVYKKHRILKIYHLFVSLLLKDIKSGLGGAWAFVLRDVIYTLIHYINQRPSCIMDVSLRSFSLCCDLL
SQVCQTAVTYCKDALENHLHVIVGTLIPLVYEQVEVQKQVLDLLKYLVIDNKDNENLYITIKLLDPFPDHVVFKD
LRITQQKIKYSRGPFSLLEEINHFLSVSVYDALPLTRLEGLKDLRRQLELHKDQMVDIMRASQDNPQDGIMVKLV
VNLLQLSKMAINHTGEKEVLEAVGSCLGEVGPIDFSTIAIQHSKDASYTKALKLFEDKELQWTFIMLTYLNNTLV
EDCVKVRSAAVTCLKNILATKTGHSFWEIYKMTTDPMLAYLQPFRTSRKKFLEVPRFDKENPFEGLDDINLWIPL
SENHDIWIKTLTCAFLDSGGTKCEILQLLKPMCEVKTDFCQTVLPYLIHDILLQDTNESWRNLLSTHVQGFFTSC
LRHFSQTSRSTTPANLDSESEHFFRCCLDKKSQRTMLAVVDYMRRQKRPSSGTIFNDAFWLDLNYLEVAKVAQSC
AAHFTALLYAEIYADKKSMDDQEKRSLAFEEGSQSTTISSLSEKSKEETGISLQDLLLEIYRSIGEPDSLYGCGG
GKMLQPITRLRTYEHEAMWGKALVTYDLETAIPSSTRQAGIIQALQNLGLCHILSVYLKGLDYENKDWCPELEEL
HYQAAWRNMQWDHCTSVSKEVEGTSYHESLYNALQSLRDREFSTFYESLKYARVKEVEEMCKRSLESVYSLYPTL
SRLQAIGELESIGELFSRSVTHRQLSEVYIKWQKHSQLLKDSDFSFQEPIMALRTVILEILMEKEMDNSQRECIK
DILTKHLVELSILARTFKNTQLPERAIFQIKQYNSVSCGVSEWQLEEAQVFWAKKEQSLALSILKQMIKKLDASC
AANNPSLKLTYTECLRVCGNWLAETCLENPAVIMQTYLEKAVEVAGNYDGESSDELRNGKMKAFLSLARFSDTQY
QRIENYMKSSEFENKQALLKRAKEEVGLLREHKIQTNRYTVKVQRELELDELALRALKEDRKRFLCKAVENYINC
LLSGEEHDMWVFRLCSLWLENSGVSEVNGMMKRDGMKIPTYKFLPLMYQLAARMGTKMMGGLGFHEVLNNLISRI
SMDHPHHTLFIILALANANRDEFLTKPEVARRSRITKNVPKQSSQLDEDRTEAANRIICTIRSRRPQMVRSVEAL
CDAYIILANLDATQWKTQRKGINIPADQPITKLKNLEDVVVPTMEIKVDHTGEYGNLVTIQSFKAEFRLAGGVNL
PKIIDCVGSDGKERRQLVKGRDDLRQDAVMQQVFQMCNTLLQRNTETRKRKLTICTYKVVPLSQRSGVLEWCTGT
VPIGEFLVNNEDGAHKRYRPNDFSAFQCQKKMMEVQKKSFEEKYEVFMDVCQNFQPVFRYFCMEKFLDPAIWFEK
RLAYTRSVATSSIVGYILGLGDRHVQNILINEQSAELVHIDLGVAFEQGKILPTPETVPFRLTRDIVDGMGITGV
EGVFRRCCEKTMEVMRNSQETLLTIVEVLLYDPLFDWTMNPLKALYLQQRPEDETELHPTLNADDQECKRNLSDI
DQSFDKVAERVLMRLQEKLKGVEEGTVLSVGGQVNLLIQQAIDPKNLSRLFPGWKAWV

FIGURE 2493

GAGGTGTTTCCCTTAGCTATGGAAACTCTATAAGAGAGATCCAGCTTGCCTCCTCTTGAGCAGTCAGCAACAGGG
TCCCGTCCTTGACACCTCAGCCTCTACAGGACTGAGAAGAAGTAAAACCGTTTGCTGGGGCTGGCCTGACTCACC
AGCTGCCATGCAGCAGCCCTTCAATTACCCATATCCCCAGATCTACTGGGTGGACAGCAGTGCCAGCTCTCCCTG
GGCCCCTCCAGGCACAGTTCTTCCCTGTCCAACCTCTGTGCCCAGAAGGCCTGGTCAAAGGAGGCCACCACCACC
ACCGCCACCGCCACCACTACCACCTCCGCCGCCGCCGCCACCACTGCCTCCACTACCGCTGCCACCCCTGAAGAA
GAGAGGGAACCACAGCACAGGCCTGTGTCTCCTTGTGATGTTTTTCATGGTTCTGGTTGCCTTGGTAGGATTGGG
CCTGGGGATGTTTCAGCTCTTCCACCTACAGAAGGAGCTGGCAGAACTCCGAGAGTCTACCAGCCAGATGCACAC
AGCATCATCTTTGGAGAAGCAAATAGGCCACCCCAGTCCACCCCCTGAAAAAAAGGAGCTGAGGAAAGTGGCCCA
TTTAACAGGCAAGTCCAACTCAAGGTCCATGCCTCTGGAATGGGAAGACACCTATGGAATTGTCCTGCTTTCTGG
AGTGAAGTATAAGAAGGGTGGCCTTGTGATCAATGAAACTGGGCTGTACTTTGTATATTCCAAAGTATACTTCCG
GGGTCAATCTTGCAACAACCTGCCCCTGAGCCACAAGGTCTACATGAGGAACTCTAAGTATCCCCAGGATCTGGT
GATGATGGAGGGGAAGATGATGAGCTACTGCACTACTGGGCAGATGTGGGCCCGCAGCAGCTACCTGGGGGCAGT
GTTCAATCTTACCAGTGCTGATCATTTATATGTCAACGTATCTGAGCTCTCTCTGGTCAATTTTGAGGAATCTCA
GACGTTTTTCGGCTTATATAAGCTCTAAGAGAAGCACTTTGGGATTCTTTCCATTATGATTCTTTGTTACAGGCA
CCGAGAATGTTGTATTCAGTGAGGGTCTTCTTACATGCATTTGAGGTCAAGTAAGAAGACATGAACCAAGTGGAC
CTTGAGACCACAGGGTTCAAAATGTCTGTAGCTCCTCAACTCACCTAATGTTTATGAGCCAGACAAATGGAGGAA
TATGACGGAAGAACATAGAACTCTGGGCTGCCATGTGAAGAGGGAGAAGCATGAAAAAGCAGCTACCAGGTGTTC
TACACTCATCTTAGTGCCTGAGAGTATTTAGGCAGATTGAAAAGGACACCTTTTAACTCACCTCTCAAGGTGGGC
CTTGCTACCTCAAGGGGGACTGTCTTTCAGATACATGGTTGTGACCTGAGGATTTAAGGGATGGAAAAGGAAGAC
TAGAGGCTTGCATAATAAGCTAAAGAGGCTGAAAGAGGCCAATGCCCCACTGGCAGCATCTTCACTTCTAAATGC
ATATCCTGAGCCATCGGTGAAACTAACAGATAAGCAAGAGAGATGTTTTGGGGACTCATTTCATTCCTAACACAG
CATGTGTATTTCCAGTGCAATTGTAGGGGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTATGACTAAAGAGAGA
ATGTAGATATTGTGAAGTACATATTAGGAAAATATGGGTTGCATTTGGTCAAGATTTTGAATGCTTCCTGACAAT
CAACTCTAATAGTGCTTAAAAATCATTGATTGTCAGCTACTAATGATGTTTTCCTATAATATAATAAATATTTAT
GTAGATGTGCATTTTTGTGAAATGAAAACATGTAATAAAAAGTATATGTTAGGATACAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2494

MQQPFNYPYPQIYWVDSSASSPWAPPGTVLPCPTSVPRRPGQRRPPPPPPPPPLPPPPPPPPLPPLPLPPLKKRG
NHSTGLCLLVMFFMVLVALVGLGLGMFQLFHLQKELAELRESTSQMHTASSLEKQIGHPSPPPEKKELRKVAHLT
GKSNSRSMPLEWEDTYGIVLLSGVKYKKGGLVINETGLYFVYSKVYFRGQSCNNLPLSHKVYMRNSKYPQDLVMM
EGKMMSYCTTGQMWARSSYLGAVFNLTSADHLYVNVSELSLVNFEESQTFFGLYKL

FIGURE 2495

AGAGACTTCCTCTTCGTTAAGTCGGCCTTCCCAACATGGCGCAGTCTATTAACATCACGGAGCTGAATCTGCCGC
AGCTAGAAATGCTCAAGAACCAGCTGGACCAGGAAGTGGAGTTCTTGTCCACGTCCATTGCTCAGCTCAAAGTGG
TACAGACCAAGTATGTGGAAGCCAAGGACTGTCTGAACGTGCTGAACAAGAGCAACGAGGGGAAAGAATTACTCG
TCCCACTGACGAGTTCTATGTATGTCCCTGGGAAGCTGCATGATGTGGAACACGTGCTCATCGATGTGGGAACTG
GGTACTATGTAGAGAAGACAGCTGAGGATGCCAAGGACTTCTTCAAGAGGAAGATAGATTTTCTAACCAAGCAGA
TGGAGAAAATCCAACCAGCTCTTCAGGAGAAGCACGCCATGAAACAGGCCGTCATGGAAATGATGAGTCAGAAGA
TTCAGCAGCTCACAGCCCTGGGGGCAGCTCAGGCTACTGCTAAGGCCTGAGAGTTTTTGCAGAAATGGGGCAGAG
GGACACCCTTTGGGCGTGGCTTCCTGGTGATGGGAAGGGTCTTGTGTTTTAATGCCAATAAATGTGCCAGCTGGG
CAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2496

MAQSINITELNLPQLEMLKNQLDQMYVPGKLHDVEHVLIDVGTGYYVEKTAEDAKDFFKRKIDFLTKQMEKIQPA
LQEKHAMKQAVMEMMSQKIQQLTALGAAQATAKA

FIGURE 2497

ATGGGAATCAGGCTCCTCTGTCGTGTGGCCTTTTGTTTCCTGGCTGTAGGCCTCGTAGATGTGAAAGTAACCCAG
AGCTCGAGATATCTAGTCAAAAGGACGGGAGAGAAAGTTTTTCTGGAATGTGTCCAGGATATGGACCATGAAAAT
ATGTTCTGGTATCGACAAGACCCAGGTCTGGGGCTACGGCTGATCTATTTCTCATATGATGTTAAAATGAAAGAA
AAAGGAGATATTCCTGAGGGGTACAGTGTCTCTAGAGAGAAGAAGGAGCGCTTCTCCCTGATTCTGGAGTCCGCC
AGCACCAACCAGACATCTATGTACCTCTGTGCCAGCAGTTTGCTCCAGCGGACCACCACAGATACGCAGTATTTT
GGGCCAGGCACCCGGCTGACAGTGCTCGAGGACCTGAACAAGGTGTTCCCACCCGAGGTCGCTGTGTTTGAGCCA
TCAGAAGCAGAGATCTCCCACACCCAAAAGGCCACACTGGTGTGCCTGGCCACAGGTATCTTCCCTGACCACGTG
GAGCTGAGCTGGTGGGTGAATGGGAAGGAGGTGCACAGTGGGGTCAGCACGGACCCGCAGCCCCTCAAGGAGCAG
CCCGCCCTCAATGACTCCAGATACTGCCTGAGCAGCCGCCTGAGGGTCTCGGCCACCTTCTGGCAGAACCCCCGC
AACCACTTCCGCTGTCAAGTCCAGTTCTACGGGCTCTCGGAGAATGACGAGTGGACCCAGGATAGGGCCAAACCC
GTCACCCAGATCGTCAGCGCCGAGGCCTGGGGTAGAGCAGACTGTGGCTTTACCTCGGTGTCCTACCAGCAAGGG
GTCCTGTCTGCCACCATCCTCTATGAGATCCTGCTAGGGAAGGCCACCATGTATGCTGTGCTGGTCAGCGCCCTT
GTGTTGATGGCCATGGTCAAGAGAAAGGATTTCTGA

FIGURE 2498

MGIRLLCRVAFCFLAVGLVDVKVTQSSRYLVKRTGEKVFLECVQDMDHENMFWYRQDPGLGLRLIYFSYDVKMKE
KGDIPEGYSVSREKKERFSLILESASTNQTSMYLCASSLLQRTTTDTQYFGPGTRLTVLEDLNKVFPPEVAVFEP
SEAEISHTQKATLVCLATGIFPDHVELSWWVNGKEVHSGVSTDPQPLKEQPALNDSRYCLSSRLRVSATFWQNPR
NHFRCQVQFYGLSENDEWTQDRAKPVTQIVSAEAWGRADCGFTSVSYQQGVLSATILYEILLGKATMYAVLVSAL
VLMAMVKRKDF

FIGURE 2499

GCGGAGGGTGCGTGCGGGCCGCGGCAGCCGAACAAAGGAGCAGGGGCGCCGCCGCAGGGACCCGCCACCCACCTC
CCGGGGCCGCGCAGCGGCCTCTCGTCTACTGCCACCATGACCGCCAACGGCACAGCCGAGGCGGTGCAGATCCAG
TTCGGCCTCATCAACTGCGGCAACAAGTACCTGACGGCCGAGGCGTTCGGGTTCAAGGTGAACGCGTCCGCCAGC
AGCCTGAAGAAGAAGCAGATCTGGACGCTGGAGCAGCCCCCTGACGAGGCGGGCAGCGCGGCCGTGTGCCTGCGC
AGCCACCTGGGCCGCTACCTGGCGGCGGACAAGGACGGCAACGTGACCTGCGAGCGCGAGGTGCCCGGTCCCGAC
TGCCGTTTCCTCATCGTGGCGCACGACGACGGTCGCTGGTCGCTGCAGTCCGAGGCGCACCGGCGCTACTTCGGC
GGCACCGAGGACCGCCTGTCCTGCTTCGCGCAGACGGTGTCCCCCGCCGAGAAGTGGAGCGTGCACATCGCCATG
CACCCTCAGGTCAACATCTACAGTGTCACCCGTAAGCGCTACGCGCACCTGAGCGCGCGGCCGGCCGACGAGATC
GCCGTGGACCGCGACGTGCCCTGGGGCGTCGACTCGCTCATCACCCTCGCCTTCCAGGACCAGCGCTACAGCGTG
CAGACCGCCGACCACCGCTTCCTGCGCCACGACGGGCGCCTGGTGGCGCGCCCCGAGCCGGCCACTGGCTACACG
CTGGAGTTCCGCTCCGGCAAGGTGGCCTTCCGCGACTGCGAGGGCCGTTACCTGGCGCCGTCGGGGCCCAGCGGC
ACGCTCAAGGCGGGCAAGGCCACCAAGGTGGGCAAGGACGAGCTCTTTGCTCTGGAGCAGAGCTGCGCCCAGGTC
GTGCTGCAGGCGGCCAACGAGAGGAACGTGTCCACGCGCCAGGGTATGGACCTGTCTGCCAATCAGGACGAGGAG
ACCGACCAGGAGACCTTCCAGCTGGAGATCGACCGCGACACCAAAAAGTGTGCCTTCCGTACCCACACGGGCAAG
TACTGGACGCTGACGGCCACCGGGGGCGTGCAGTCCACCGCCTCCAGCAAGAATGCCAGCTGCTACTTTGACATC
GAGTGGCGTGACCGGCGCATCACACTGAGGGCGTCCAATGGCAAGTTTGTGACCTCCAAGAAGAATGGGCAGCTG
GCCGCCTCGGTGGAGACAGCAGGGGACTCAGAGCTCTTCCTCATGAAGCTCATCAACCGCCCCATCATCGTGTTC
CGCGGGGAGCATGGCTTCATCGGCTGCCGCAAGGTCACGGGCACCCTGGACGCCAACCGCTCCAGCTATGACGTC
TTCCAGCTGGAGTTCAACGATGGCGCCTACAACATCAAAGACTCCACAGGCAAATACTGGACGGTGGGCAGTGAC
TCCGCGGTCACCAGCAGCGGCGACACTCCTGTGGACTTCTTCTTCGAGTTCTGCGACTATAACAAGGTGGCCATC
AAGGTGGGCGGGCGCTACCTGAAGGGCGACCACGCAGGCGTCCTGAAGGCCTCGGCGGAAACCGTGGACCCCGCC
TCGCTCTGGGAGTACTAGGCCGGCCCGTCCTTCCCCGCCCCTGCCCACATGGCGGCTCCTGCCAACCCTCCCTG
CTAACCCCTTCTCCGCCAGGTGGGCTCCAGGGCGGGAGGCAAGCCCCCTTGCCTTTCAAACTGGAAACCCCAGAG
AAAACGGTGCCCCCACCTGTCGCCCCTATGGACTCCCCACTCTCCCCTCCGCCCGGGTTCCCTACTCCCCTCGGG
TCAGCGGCTGCGGCCTGGCCCTGGGAGGGATTTCAGATGCCCCTGCCCTCTTGTCTGCCACGGGGCGAGTCTGGC
ACCTCTTTCTTCTGACCTCAGACGGCTCTGAGCCTTATTTCTCTGGAAGCGGCTAAGGGACGGTTGGGGGCTGGG
AGCCCTGGGCGTGTAGTGTAACTGGAATCTTTTGCCTCTCCCAGCCACCTCCTCCCAGCCCCCCAGGAGAGCTGG
GCACATGTCCCAAGCCTGTCAGTGGCCCTCCCTGGTGCACTGTCCCCGAAACCCCTGCTTGGGAAGGGAAGCTGT
CGGGAGGGCTAGGACTGACCCTTGTGGTGTTTTTTTGGGTGGTGGCTGGAAACAGCCCCTCTCCCACGTGGGAGA
GGCTCAGCCTGGCTCCCTTCCCTGGAGCGGCAGGGCGTGACGGCCACAGGGTCTGCCCGCTGCACGTTCTGCCAA
GGTGGTGGTGGCGGGCGGGTAGGGGTGTGGGGGCCGTCTTCCTCCTGTCTCTTTCCTTTCACCCTAGCCTGACTG
GAAGCAGAAAATGACCAAATCAGTATTTTTTTTAATGAAATATTATTGCTGGAGGCGTCCCAGGCAAGCCTGGCT
GTAGTAGCGAGTGATCTGGCGGGGGGCGTCTCAGCACCCTCCCCAGGGGGTGCATCTCAGCCCCCTCTTTCCGTC
CTTCCCGTCCAGCCCCAGCCCTGGGCCTGGGCTGCCGACACCTGGGCCAGAGCCCCTGCTGTGATTGGTGCTCCC
TGGGCCTCCCGGGTGGATGAAGCCAGGCGTCGCCCCCTCCGGGAGCCCTGGGGTGAGCCGCCGGGGCCCCCCTGC
TGCCAGCCTCCCCCGTCCCCAACATGCATCTCACTCTGGGTGTCTTGGTCTTTTATTTTTTGTAAGTGTCATTTG
TATAACTCTAAACGCCCATGATAGTAGCTTCAAACTGGAAATAGCGAAATAAAATAACTCAGTCTGC

FIGURE 2500

MTANGTAEAVQIQFGLINCGNKYLTAEAFGFKVNASASSLKKKQIWTLEQPPDEAGSAAVCLRSHLGRYLAADKD
GNVTCEREVPGPDCRFLIVAHDDGRWSLQSEAHRRYFGGTEDRLSCFAQTVSPAEKWSVHIAMHPQVNIYSVTRK
RYAHLSARPADEIAVDRDVPWGVDSLITLAFQDQRYSVQTADHRFLRHDGRLVARPEPATGYTLEFRSGKVAFRD
CEGRYLAPSGPSGTLKAGKATKVGKDELFALEQSCAQVVLQAANERNVSTRQGMDLSANQDEETDQETFQLEIDR
DTKKCAFRTHTGKYWTLTATGGVQSTASSKNASCYFDIEWRDRRITLRASNGKFVTSKKNGQLAASVETAGDSEL
FLMKLINRPIIVFRGEHGFIGCRKVTGTLDANRSSYDVFQLEFNDGAYNIKDSTGKYWTVGSDSAVTSSGDTPVD
FFFEFCDYNKVAIKVGGRYLKGDHAGVLKASAETVDPASLWEY

FIGURE 2501

AAGATCTAAAAACGGACATCTCCACCGTGGGTGGCTCCTTTTTCTTTTTCTTTTTTTCCCACCCTTCAGGAAGTG
GACGTTTCGTTATCTTCTGATCCTTGCACCTTCTTTTGGGGAAACGGGGCCCTTCTGCCCAGATCCCCTCTCTTT
TCTCGGAAAACAAACTACTAAGTCGGCATCCGGGGTAACTACAGTGGAGAGGGTTTCCGCGGAGACGCGCCGCCG
GACCCTCCTCTGCACTTTGGGGAGGCGTGCTCCCTCCAGAACCGGCGTTCTCCGCGCGCAAATCCCGGCGACGCG
GGGTCGCGGGGTGGCCGCCGGGGCAGCCTCGTCTAGCGCGCGCCGCGCAGACGCCCCCGGAGTCGCCAGCTACCG
CAGCCCTCGCCGCCCAGTGCCCTTCGGCCTCGGGGCGGGCGCCTGCGTCGGTCTCCGCGAAGCGGGAAAGCGCGG
CGGCCGCCGGGATTCGGGCGCCGCGGCAGCTGCTCCGGCTGCCGGCCGGCGGCCCCGCGCTCGCCCGCCCCGCTT
CCGCCCGCTGTCCTGCTGCACGAACCCTTCCAACTCTCCTTTCCTCCCCCACCCTTGAGTTACCCCTCTGTCTTT
CCTGCTGTTGCGCGGGTGCTCCCACAGCGGAGCGGAGATTACAGAGCCGCCGGG**ATG**CCCCAACTCTCCGGAGGA
GGTGGCGGCGGCGGGGGGGACCCGGAACTCTGCGCCACGGACGAGATGATCCCCTTCAAGGACGAGGGCGATCCT
CAGAAGGAAAAGATCTTCGCCGAGATCAGTCATCCCGAAGAGGAAGGCGATTTAGCTGACATCAAGTCTTCCTTG
GTGAACGAGTCTGAAATCATCCCGGCCAGCAACGGACACGAGGTGGCCAGACAAGCACAAACCTCTCAGGAGCCC
TACCACGACAAGGCCAGAGAACACCCCGATGACGGAAAGCATCCAGATGGAGGCCTCTACAACAAGGGACCCTCC
TACTCGAGTTATTCCGGGTACATAATGATGCCAAATATGAATAACGACCCATACATGTCAAATGGATCTCTTTCT
CCACCCATCCCGAGAACATCAAATAAAGTGCCCGTGGTGCAGCCATCCCATGCGGTCCATCCTCTCACCCCCCTC
ATCACTTACAGTGACGAGCACTTTTCTCCAGGATCACACCCGTCACACATCCCATCAGATGTCAACTCCAAACAA
GGCATGTCCAGACATCCTCCAGCTCCTGATATCCCTACTTTTTATCCCTTGTCTCCGGGTGGTGTTGGACAGATC
ACCCCACCTCTTGGCTGGCAAGGTCAGCCTGTATATCCCATCACGGGTGGATTCAGGCAACCCTACCCATCCTCA
CTGTCAGTCGACACTTCCATGTCCAGGTTTTCCCATCATATGATTCCCGGTCCTCCTGGTCCCCACACAACTGGC
ATCCCTCATCCAGCTATTGTAACACCTCAGGTCAAACAGGAACATCCCCACACTGACAGTGACCTAATGCACGTG
AAGCCTCAGCATGAACAGAGAAAGGAGCAGGAGCCAAAAAGACCTCACATTAAGAAGCCTCTGAATGCTTTTATG
TTATACATGAAAGAAATGAGAGCGAATGTCGTTGCTGAGTGTACTCTAAAAGAAAGTGCAGCTATCAACCAGATT
CTTGGCAGAAGGTGGCATGCCCTCTCCCGTGAAGAGCAGGCTAAATATTATGAATTAGCACGGAAAGAAAGACAG
CTACATATGCAGCTTTATCCAGGCTGGTCTGCAAGAGACAATTATGGTAAGAAAAAGAAGAGGAAGAGAGAGAAA
CTACAGGAATCTGCATCAGGTACAGGTCCAAGAATGACAGCTGCCTACATC**TGA**AACATGGTGGAAAACGAAGCT
CATTCCCAACGTGCAAAGCCAAGGCAGCGACCCCAGGACCTCTTCTGGAGATGGAAGCTTGTTGAAAACCCAGAC
TGTCTCCACGGCCTGCCCAGTCGACGCCAAAGGAACACTGACATCAATTTTACCCTGAGGTCACTGCTAGAGACG
CTGATCCATAAAGACAATCACTGCCAACCCCTCTTTCGTCTACTGCAAGAGCCAAGTTCCAAAATAAAGCATAAA
AAGGTTTTTTAAAAGGAAATGTAAAAGCACATGAGAATGCTAGCAGGCTGTGGGGCAGCTGAGCAGCTTTTCTCC
CCCCATATCTGCGTGCACTTCCCAGAGCATCTTGCATCCAAACCTGTAACCTTTCGGCAAGGACGGTAACTTGGC
TGCATTTGCCTGTCATGCGCAACTGGAGCCAGCAACCAGCTATCCATCAGCACCCCAGTGGAGGAGTTCATGGAA
GAGTTCCCTCTTTGTTTCTGCTTCATTTTTCTTTCTTTTCTTTTCTCCTAAAGCTTTTATTTAACAGTGCAAAAG
GATCGTTTTTTTTTGCTTTTTTAAACTTGAATTTTTTTAATTTACACTTTTTAGTTTTAATTTTCTTGTATATTT
TGCTAGCTATGAGCTTTTAAATAAAATTGAAAGTTCTGGAAAAGTTTGAAATAATGACATAAAAAGAAGCCTTCT
TTTTCTGAGACAGCTTGTCTGGTAAGTGGCTTCTCTGTGAATTGCCTGTAACACATAGTGGCTTCTCCGCCCTTG
TAAGGTGTTCAGTAGAGCTAAATAAATGTAATAGCCAAACCCCACTCTGTTGGTAGCAATTGGCAGCCCTATTTC
AGTTTATTTTTTCTTCTGTTTTCTTCTTTTCTTTTTTTAAACAGTAAACCTTAACAGATGCGTTCAGCAGACTGG
TTTGCAGTGAATTTTCATTTCTTTCCTTATCACCCCCTTGTTGTAAAAAGCCCAGCACTTGAATTGTTATTACTT
TAAATGTTCTGTATTTGTATCTGTTTTTATTAGCCAATTAGTGGGATTTTATGCCAGTTGTTAAAATGAGCATTG
ATGTACCCATTTTTTAAAAAAGCAAGCACAGCCTTTGCCCAAAACTGTCATCCTAACGTTTGTCATTCCAGTTTG
AGTTAATGTGCTGAGCATTTTTTTAAAAGAAGCTTTGTAATAAAACATTTTTAAAAATTGTCATTTAAAAAAAAA
AAAAAAAAA

FIGURE 2502

MPQLSGGGGGGGGDPELCATDEMIPFKDEGDPQKEKIFAEISHPEEEGDLADIKSSLVNESEIIPASNGHEVARQ
AQTSQEPYHDKAREHPDDGKHPDGGLYNKGPSYSSYSGYIMMPNMNNDPYMSNGSLSPPIPRTSNKVPVVQPSHA
VHPLTPLITYSDEHFSPGSHPSHIPSDVNSKQGMSRHPPAPDIPTFYPLSPGGVGQITPPLGWQGQPVYPITGGF
RQPYPSSLSVDTSMSRFSHHMIPGPPGPHTTGIPHPAIVTPQVKQEHPHTDSDLMHVKPQHEQRKEQEPKRPHIK
KPLNAFMLYMKEMRANVVAECTLKESAAINQILGRRWHALSREEQAKYYELARKERQLHMQLYPGWSARDNYGKK
KKRKREKLQESASGTGPRMTAAYI

FIGURE 2503

AGACAAAAAGTAACCTTCCTGAAGAGGACATGTGATTGGAAGTTGTCAATTGTTGAAGCATTGGTAACTCCAGTC
TCTAACGTTTTAGAAAATCATAACAAGCGGTTCTGTACCCTGTAAAGAACAGAAACCTGGAAATCTAAGGCTCAA
AGACATCCAAGTAATTGGTATCTGGGAGATTTGGGATTCAAACCCAGCTCTGCTTGACTTGGTGAACTACTGAGT
TCTTCATTATGTCTGATGGAGATTATGATTACCTCATCAAGTTTTTAGCTTTGGGAGACTCTGGTGTAGGGAAGA
CCAGTGTACTTTACCAATATACAGATGGTAAATTTAACTCCAAATTTATCACAACAGTGGGCATTGATTTCAGGC
CAAAAAGAGTGGTGTACAGAGCCAGTGGGCCGGATGGACCAGTAGGTAGAGGCCAGAGAATCCACCTGCAGTTAT
GGGACACAGCAGGGCAGGAGAGGTTTCGTAGCTTAACGACAGCGTTCTTCAGAGATGCTATGGGTTTTCTTCTAC
TTTTTGATCTGACAAATGAGCAAAGTTTCCTCAATGTCAGAAACTGGATAAGCCAGCTACAGATGCATGCATATT
GTGAAAACCCAGATATAGTGCTGTGTGGAAACAAGAGTGATCTGGAGGACCAGAGAGTAGTGAAAGAGAAATATG
GAATCCCCTACTTTGAAACTAGTGCTGCCAATGGGACAAACATAAGCCAAGCAATTGAGATGCTTCTGGACCTGA
TAATGAAGCGAATGGAACGGTGTGTGGACAAGTCCTGGATTCCTGAAGGAGTGGTGCGATCAAATGGTCATGCCT
CTACGGATCAGTTAAGTGAAGAAAAGGAGAAAGGGGCATGTGGCTGTTGAGAAGTCAAGTAAGCGACATAGTAGT
TCAGGTGGCCCATGCCTGGGATCTTCTCTATGATTGATACATGGCACAGTGAGAGATTAATGGGCATTGTGTACA
AATTGCTTCTCACCATCCCCATTAGACCTACGAATAAAGCATCCGGTTCTAAAATTAATTTGTTGCAGCTTTGTA
AATATTTCTTTAAGATTCAGCCTGAGAGTTAGGAGAAATATTTCAGAGCCAAAAGTGCCTTATACAACCTTAGCC
TATTATAGTAAATCATTCAAGGGATTCAGAA

FIGURE 2504

MSDGDYDYLIKFLALGDSGVGKTSVLYQYTDGKFNSKFITTVGIDFRPKRVVYRASGPDGPVGRGQRIHLQLWDT
AGQERFRSLTTAFFRDAMGFLLLFDLTNEQSFLNVRNWISQLQMHAYCENPDIVLCGNKSDLEDQRVVKEKYGIP
YFETSAANGTNISQAIEMLLDLIMKRMERCVDKSWIPEGVVRSNGHASTDQLSEEKEKGACGC

FIGURE 2505

GGTGCAACTCACTACTGCTGTCCACCAATACTCTTCTGGTATGTGCAATACCCCAACCAAGGACTCCAGCTTCTC
CTGAAGTACACATCAGCGGCCACCCTGGTTAAAGGCATCAACGGTTTTGAGGCTGAATTTAAGAAGAGTGAAACC
TCCTTCCACCTGACGAAACCCGCAGCCCATATGAGCGACGCGGCTGAGTACTTCTGTGCTGTGAGTGATCTCGAA
CCGAACAGCAGTGCTTTCAAGATAATCTTTGGATCAGGGACCAGACTCAGCATCCGGCCAAATATCCAGAACCCT
GACCCTGCCGTGTACCAGCTGAGAGACTCTAAATCCAGTGACAAGTCTGTCTGCCTATTCACCGATTTTGATTCT
CAAACAAATGTGTCACAAAGTAAGGATTCTGATGTGTATATCACAGACAAAACTGTGCTGGACATGAGGTCTATG
GACTTCAAGAGCAACAGTGCTGTGGCCTGGAGCAACAAAACTAGCTTTGCATGTGCAAACGCCTTCAACAACAGC
ATTATTCCAGAAGACACCTTCTTCCCCAGCCCAGAAATTTCCTGTGATGTCAAGTTGGTCGAGAAAAGCTTTGAA
ACAGATCGGAACCTAAACTTTCAAAACCTGTCAGTGATTGGGTTCCGAATCCTCCTCCTGAAAGTGGCGGGGTTT
AATCTGCTCATGACGTTGCGGCTGTGGTCCAGCTGAGACTTGCAAGTTGTAAG

FIGURE 2506

GGCACGAGGCTAGAGCGATGCCGGGCCGGAGTTGCGTCGCCTTAGTCCTCCTGGCTGCCGCCGTCAGCTGTGCCG
TCGCGCAGCACGCGCCGCCGTGGACAGAGGACTGCAGAAAATCAACCTATCCTCCTTCAGGACCAACGTACAGAG
GTGCAGTTCCATGGTACACCATAAATCTTGACTTACCACCCTACAAAAGATGGCATGAATTGATGCTTGACAAGG
CACCAATGCTAAAGGTTATAGTGAATTCTCTGAAGAATATGATAAATACATTCGTGCCAAGTGGAAAAGTTATGC
AGGTGGTGGATGAAAAATTGCCTGGCCTACTTGGCAACTTTCCTGGCCCTTTTGAAGAGGAAATGAAGGGTATTG
CCGCTGTTACTGATATACCTTTAGGAGAGATTATTTCATTCAATATTTTTTATGAATTATTTACCATTTGTACTT
CAATAGTAGCAGAAGACAAAAAAGGTCATCTAATACATGGGAGAAACATGGATTTTGGAGTATTTCTTGGGTGGA
ACATAAATAATGATACCTGGGTCATAACTGAGCAACTAAAACCTTTAACAGTGAATTTGGATTTCCAAAGAAACA
ACAAAACTGTCTTCAAGGCTTCAAGCTTTGCTGGCTATGTGGGCATGTTAACAGGATTCAAACCAGGACTGTTCA
GTCTTACACTGAATGAACGTTTCAGTATAAATGGTGGTTATCTGGGTATTCTAGAATGGATTCTGGGAAAGAAAG
ATGCCATGTGGATAGGGTTCCTCACTAGAACAGTTCTGGAAAATAGCACAAGTTATGAAGAAGCCAAGAATTTAT
TGACCAAGACCAAGATATTGGCCCCAGCCTACTTTATCCTGGGAGGCAACCAGTCTGGGGAAGGTTGTGTGATTA
CACGAGACAGAAAGGAATCATTGGATGTATATGAACTCGATGCTAAGCAGGGTAGATGGTATGTGGTACAAACAA
ATTATGACCGTTGGAAACATCCCTTCTTCCTTGATGATCGCAGAACGCCTGCAAAGATGTGTCTGAACCGCACCA
GCCAAGAGAATATCTCATTTGAAACCATGTATGATGTCCTGTCAACAAAACCTGTCCTCAACAAGCTGACCGTAT
ACACAACCTTGATAGATGTTACCAAAGGTCAATTCGAAACTTACCTGCGGGACTGCCCTGACCCTTGTATAGGTT
GGTGAGCACACGTCTGGCCTACAGAATGCGGCCTCTGAGACATGAAGACACCATCTCCATGTGACCGAACACTGC
AGCTGTCTGACCTTCCAAAGACTAAGACTCGCGGCAGGTTCTCTTTGAGTCAATAGCTTGTCTTCGTCCATCTGT
TGACAAATGACAGATCTTTTTTTTTTTCCCCCTATCAGTTGATTTTTCTTATTTACAGATAACTTCTTTAGGGGA
AGTAAAACAGTCATCTAGAATTCACTGAGTTTTGTTTCACTTTGACATTTGGGGATCTGGTGGGCAGTCGAACCA
TGGTGAACTCCACCTCCGTGGAATAAATGGAGATTCAGCGTGGGTGTTGAATCCAGCACGTCTGTGTGAGTAACG
GGACAGTAAACACTCCACATTCTTCAGTTTTTCACTTCTACCTACATATTTGTATGTTTTTCTGTATAACAGCCT
TTTCCTTCTGGTTCTAACTGCTGTTAAAATTAATATATCATTATCTTTGCTGTTATTGACAGCGATATTATTTTA
TTACATATCATTAGAGGGATGAGACAGACATTCACCTGTATATTTCTTTTAATGGGCACAAAATGGGCCCTTGCC
TCTAAATAGCACTTTTTGGGGTTCAAGAAGTAATCAGTATGCAAAGCAATCTTTTATACAATAATTGAAGTGTTC
CCTTTTTCATAATTACTCTACTTCCCAGTAACCCTAAGGAAGTTGCTAACTTAAAAAACTGCATCCCACGTTCTG
TTAATTTAGTAAATAAACAAGTCAAAGACTTGTGGAAAATAGGAAGTGAACCCATATTTTAAATTCTCATAAGTA
GCATTGATGTAATAAACAGGTTTTTAGTTTGTTCTTCAGATTGATAGGGAGTTTTAAAGAAATTTTAGTAGTTAC
TAAAATTATGTTACTGTATTTTTCAGAAATCAAACTGCTTATGAAAAGTACTAATAGAACTTGTTAACCTTTCTA
ACCTTCACGATTAACTGTGAAATGTACGTCATTTGTGCAAGACCGTTTGTCCACTTCATTTTGTATAATCACAGT
TGTGTTCCTGACACTCAATAAACAGTCACTGGAAAGAGTGCCAGTCAGCAGTCATGCACGCTGATAAAAAAAAAA
AAAAAAAA

FIGURE 2507

MPGRSCVALVLLAAAVSCAVAQHAPPWTEDCRKSTYPPSGPTYRGAVPWYTINLDLPPYKRWHELMLDKAPMLKV
IVNSLKNMINTFVPSGKVMQVVDEKLPGLLGNFPGPFEEEMKGIAAVTDIPLGEIISFNIFYELFTICTSIVAED
KKGHLIHGRNMDFGVFLGWNINNDTWVITEQLKPLTVNLDFQRNNKTVFKASSFAGYVGMLTGFKPGLFSLTLNE
RFSINGGYLGILEWILGKKDAMWIGFLTRTVLENSTSYEEAKNLLTKTKILAPAYFILGGNQSGEGCVITRDRKE
SLDVYELDAKQGRWYVVQTNYDRWKHPFFLDDRRTPAKMCLNRTSQENISFETMYDVLSTKPVLNKLTVYTTLID
VTKGQFETYLRDCPDPCIGW

FIGURE 2508

CGCGGCACTCGCGCGCGATCCCGGCCGGCGGCGCGCCGGCGGGCCAGGCGGCGCCACAGCCCATGGAGCTCGAGA
ACATCGTAGCGAACACGGTGCTACTCAAGGCCCGGGAAGGTGGCGGTGGAAATCGCAAAGGCAAAAGCAAGAAAT
GGCGGCAGATGCTCCAGTTCCCTCACATCAGCCAGTGCGAAGAGCTGCGGCTCAGCCTCGAGCGTGACTATCACA
GCCTGTGCGAGCGGCACGCCATTGGGCGCCTGCTGTTCCGAGAGTTCTGTGCCACGAGGCCGGAGCTGAGCCGCT
GCGTCGCCTTCCTGGATGGGGTGGCCGAGTATGAAGTGACCCCGGATGACAAGCGGAAGGCATGTGGGCGGCACG
TAACGCAGAATTTTCTGAGCCACACGGGTCCTGACCTCATCCCTGAGGTCCCCCGGCAGCTGGTGACGAACTGCA
CCCAGCGGCTGGAGCAGGGTCCCTGCAAAGACCTTTTCCAGGAACTCACCCGGCTGACCCACGAGTACCTGAGCG
TGGCCCCTTTTGCCGACTACCTCGACAGCATCTACTTCAACCGTTTCCTGCAGTGGAAGTGGCTGGAAAGGCAGC
CAGTGACCAAAAACACCTTCAGGCAATACCGAGTCCTGGGCAAAGGTGGCTTTGGGGAGGTGTGCGCCTGCCAGG
TGCGGGCCACAGGTAAGATGTATGCCTGCAAGAAGCTAGAGAAAAAGCGGATCAAGAAGCGGAAAGGGGAGGCCA
TGGCGCTGAACGAGAAGCAGATCCTGGAGAAAGTGAACAGTAGGTTTGTAGTGAGCTTGGCCTACGCCTATGAGA
CCAAGGACGCGCTGTGCCTGGTGCTGACACTGATGAACGGGGGCGACCTCAAGTTCCACATCTACCACATGGGCC
AGGCTGGCTTCCCCGAAGCGCGGGCCGTCTTCTACGCCGCCGAGATCTGCTGTGGCCTGGAGGACCTGCACCGGG
AGCGCATCGTGTACAGGGACCTGAAGCCCGAGAACATCTTGCTGGATGACCACGGCCACATCCGCATCTCTGACC
TGGGACTAGCTGTGCATGTGCCCGAGGGCCAGACCATCAAAGGGCGTGTGGGCACCGTGGGTTACATGGCTCCGG
AGGTGGTGAAGAATGAACGGTACACGTTCAGCCCTGACTGGTGGGCGCTCGGCTGCCTCCTGTACGAGATGATCG
CAGGCCAGTCGCCCTTCCAGCAGAGGAAGAAGAAGATCAAGCGGGAGGAGGTGGAGCGGCTGGTGAAGGAGGTCC
CCGAGGAGTATTCCGAGCGCTTTTCCCCGCAGGCCCGCTCACTTTGCTCACAGCTCCTCTGCAAGGACCCTGCCG
AACGCCTGGGGTGTCGTGGGGGCAGTGCCCGCGAGGTGAAGGAGCACCCCCTCTTTAAGAAGCTGAACTTCAAGC
GGCTGGGAGCTGGCATGCTGGAGCCGCCGTTCAAGCCTGACCCCCAGGCCATTTACTGCAAGGATGTTCTGGACA
TTGAACAGTTCTCTACGGTCAAGGGCGTGGAGCTGGAGCCTACCGACCAGGACTTCTACCAGAAGTTTGCCACAG
GCAGTGTGCCCATCCCCTGGCAGAACGAGATGGTGGAGACCGAGTGCTTCCAAGAGCTGAATGTCTTTGGGCTGG
ATGGCTCAGTTCCCCCAGACCTGGACTGGAAGGGCCAGCCACCTGCACCTCCTAAAAAGGGACTGCTGCAGAGAC
TCTTCAGTCGCCAAGATTGCTGTGGAAACTGCAGCGACAGCGAGGAAGAGCTCCCCACCCGCCTCTAGCCCCCAG
CCCGAGGCCCCCACCAGCAGTTGGCGGTAGCAGCTACTCCGAGCGCCGTTTACAGTTTTGCACAGTGATCTTCCC
CATTGTCCACTCAAGTCGTGGCCTGGGGAACACAGACGGAGCTGTCCCCAGTGTCCTCCGTCCCTCAGCCCCTGG
CCTGGCTGAGTTTGGCAGGGCCTGGGCCATCCCTGGGACAAAGGTGCGTCCCTTCAGCTCTTCTCCGTGGAGCTC
GGGGCTTTCTGTATTTATGTATTTGTACGAATGTATATAGCGACCAGAGCATTCTTAATTCCCGCCGCAGACCTG
GCGCCCCCGCCTTGGCTCCTGGGGGCAGCCAGCCCTGGCTGGAGAGCGGGACGTGGCAGAGGAGCCACTGCCAAA
CTCAAGGCTCCTCTGGCCCAGCTTGGATGGCTGAGGGTGGTCACACCTGAGCCTTCAGCACTGTGCTGCCACCCC
GGCCTCTGAGTAAGACTCGTGCCTCCCCCTGCTGCCCTGGGCTCAGGCTGCTACCTCTGGGGCCCAAAGCTGTCC
CTTCTCAGTGCTTGTCAGCGCTGGGTCTGGGGCCTCTGTATGCCCTAGGCCTGTGCCAAAGTGGCCAGAGATTGG
GCTGCCTGTGATACCCATCAGCCCACTGCCCCGGCCGGCCCAGATAGGTCTGCCTCTGCCTTCCAGCTCCCACAG
CCTGGTCCCTGATACTGGGCTCTGTCCTGCAGACACCTCTTTCAGAAACGCCCAAGCCCAGCCCTAGGAGGGGGT
GGGGCATCCCTGGTCAACCCTCAAACATTCCGGACTCCCCTCATAACAATAGACACATGTGCCCAGCAATAATCC
GCCCCTTCCTGTGTGCGCCTGTGGGGTGCGTGCTCTCTGTGTGTACCTGTGTGGGTGAAGGGGATAGGGCGAGGC
TGTGCCTGTGCCCCAGGTCCCAGCCCTGGCCCTTCCCAGACTGTGATGGCCATCCTGGTCCCAGTGTTAGGGTAG
CATGGGATTACAGGGCCCTGTTTTTTCCATATTTAAAGCCAATTTTTATTACTCGTTTTGTCCAACGTAAAAG

FIGURE 2509

MELENIVANTVLLKAREGGGGNRKGKSKKWRQMLQFPHISQCEELRLSLERDYHSLCERHAIGRLLFREFCATRP
ELSRCVAFLDGVAEYEVTPDDKRKACGRHVTQNFLSHTGPDLIPEVPRQLVTNCTQRLEQGPCKDLFQELTRLTH
EYLSVAPFADYLDSIYFNRFLQWKWLERQPVTKNTFRQYRVLGKGGFGEVCACQVRATGKMYACKKLEKKRIKKR
KGEAMALNEKQILEKVNSRFVVSLAYAYETKDALCLVLTLMNGGDLKFHIYHMGQAGFPEARAVFYAAEICCGLE
DLHRERIVYRDLKPENILLDDHGHIRISDLGLAVHVPEGQTIKGRVGTVGYMAPEVVKNERYTFSPDWWALGCLL
YEMIAGQSPFQQRKKKIKREEVERLVKEVPEEYSERFSPQARSLCSQLLCKDPAERLGCRGGSAREVKEHPLFKK
LNFKRLGAGMLEPPFKPDPQAIYCKDVLDIEQFSTVKGVELEPTDQDFYQKFATGSVPIPWQNEMVETECFQELN
VFGLDGSVPPDLDWKGQPPAPPKKGLLQRLFSRQDCCGNCSDSEEELPTRL

FIGURE 2510

ATTCTTGTCTGTTCTGCCTCACTCCCGAGCTCTACTGACTCCCAAAAGAGCGCCCAAGAAGAAAATGGCCATAAG
TGGAGTCCCTGTGCTAGGATTTTTCATCATAGCTGTGCTGATGAGCGCTCAGGAATCATGGGCTATCAAAGAAGA
ACATGTGATCATCCAGGCCGAGTTCTATCTGAATCCTGACCAATCAGGCGAGTTTATGTTTGACTTTGATGGTGA
TGAGATTTTCCATGTGGATATGGCAAAGAAGGAGACGGTCTGGCGGCTTGAAGAATTTGGACGATTTGCCAGCTT
TGAGGCTCAAGGTGCATTGGCCAACATAGCTGTGGACAAAGCCAACCTGGAAATCATGACAAAGCGCTCCAACTA
TACTCCGATCACCAATGTACCTCCAGAGGTAACTGTGCTCACGAACAGCCCTGTGGAACTGAGAGAGCCCAACGT
CCTCATCTGTTTCATCGACAAGTTCACCCCACCAGTGGTCAATGTCACGTGGCTTCGAAATGGAAAACCTGTCAC
CACAGGAGTGTCAGAGACAGTCTTCCTGCCCAGGGAAGACCACCTTTTCCGCAAGTTCCACTATCTCCCCTTCCT
GCCCTCAACTGAGGACGTTTACGACTGCAGGGTGGAGCACTGGGGCTTGGATGAGCCTCTTCTCAAGCACTGGGA
GTTTGATGCTCCAAGCCCTCTCCCAGAGACTACAGAGAACGTGGTGTGTGCCCTGGGCCTGACTGTGGGTCTGGT
GGGCATCATTATTGGGACCATCTTCATCATCAAGGGAGTGCGCAAAAGCAATGCAGCAGAACGCAGGGGGCCTCT
GTAAGGCACATGGAGGTGATGATGTTTCTTAGAGAGAAGATCACTGAAGAAACTTCTGCTTTAATGACTTTACAA
AGCTGGCAATATTACAATCCTTGACCTCAGTGAAAGCAGTCATCTTCAGCGTTTTCCAGCCCTATAGCCACCCCA
AGTGTGGTTATGCCTCCTCGATTGCTCCGTACTCTAACATCTAGCTGGCTTTCCCTGTCTATTGCCTTTTCCTGT
ATCTATTTTCCTCTATTTCCTATCATTTTATTATCACCATGCAATGCCTCTGGAATAAAACATACAGGAGTCTGT
CTCTGCTATGGAATGCCCCATGGGGCTCTCTTGTGTACTTATTGTTTAAGGTTTCCTCAAACTGTGATTTTTCTG
AACACAATAAACTATTTTGATGATCTTGGGTGGAAAA

FIGURE 2511

MAISGVPVLGFFIIAVLMSAQESWAIKEEHVIIQAEFYLNPDQSGEFMFDFDGDEIFHVDMAKKETVWRLEEFGR
FASFEAQGALANIAVDKANLEIMTKRSNYTPITNVPPEVTVLTNSPVELREPNVLICFIDKFTPPVVNVTWLRNG
KPVTTGVSETVFLPREDHLFRKFHYLPFLPSTEDVYDCRVEHWGLDEPLLKHWEFDAPSPLPETTENVVCALGLT
VGLVGIIIGTIFIIKGVRKSNAAERRGPL

FIGURE 2512

GACGTTTCGCGCCAATTTCGGTTGGCCGGCCACAGTCCACCGCGCGGAGATTCTCAGCTTCCCCAGGAGCAAGAC
CTCTGAGCCCGCCAAGCGCGGCCGCACGGCCCTCGGCAGCGATGGCACTGAAGGACTACGCGCTAGAGAAGGAAA
AGGTTAAGAAGTTCTTACAAGAGTTCTACCAGGATGATGAACTCGGGAAGAAGCAGTTCAAGTATGGGAACCAGT
TGGTTCGGCTGGCTCATCGGGAACAGGTGGCTCTGTATGTGGACCTGGACGACGTAGCCGAGGATGACCCCGAGT
TGGTGGACTCAATTTGTGAGAATGCCAGGCGCTACGCGAAGCTCTTTGCTGATGCCGTACAAGAGCTGCTGCCTC
AGTACAAGGAGAGGGAAGTGGTAAATAAAGATGTCCTGGACGTTTACATTGAGCATCGGCTAATGATGGAGCAGC
GGAGTCGGGACCCTGGGATGGTCCGAAGCCCCCAGAACCAGTACCCTGCTGAACTCATGCGCAGATTTGAGCTGT
ATTTTCAAGGCCCTAGCAGCAGCAAGCCTCGTGTGATCCGGGAAGTGCGGGCTGACTCTGTGGGGAAGTTGGTAA
CTGTGCGTGGAATCGTCACTCGTGTCTCTGAAGTCAAACCCAAGATGGTGGTGGCCACTTACACTTGTGACCAGT
GTGGGGCAGAGACCTACCAGCCGATCCAGTCTCCCACTTTCATGCCTCTGATCATGTGCCCAAGCCAGGAGTGCC
AAACCAACCGCTCAGGAGGGCGGCTGTATCTGCAGACACGGGGCTCCAGATTCATCAAATTCCAGGAGATGAAGA
TGCAAGAACATAGTGATCAGGTGCCTGTGGGAAATATCCCTCGTAGTATCACGGTGCTGGTAGAAGGAGAGAACA
CAAGGATTGCCCAGCCTGGAGACCACGTCAGCGTCACTGGTATTTTCTTGCCAATCCTGCGCACTGGGTTCCGAC
AGGTGGTACAGGGTTTACTCTCAGAAACCTACCTGGAAGCCCATCGGATTGTGAAGATGAACAAGAGTGAGGATG
ATGAGTCTGGGGCTGGAGAGCTCACCAGGGAGGAGCTGAGGCAAATTGCAGAGGAGGATTTCTACGAAAAGCTGG
CAGCTTCAATCGCCCCAGAAATATACGGGCATGAAGATGTGAAGAAGGCACTGCTGCTCCTGCTAGTCGGGGGTG
TGGACCAGTCTCCTCGAGGCATGAAAATCCGGGGCAACATCAACATCTGTCTGATGGGGGATCCTGGTGTGGCCA
AGTCTCAGCTCCTGTCATACATTGATCGACTGGCGCCTCGCAGCCAGTACACAACAGGCCGGGGCTCCTCAGGAG
TGGGGCTTACGGCAGCTGTGCTGAGAGACTCCGTGAGTGGAGAACTGACCTTAGAGGGTGGGGCCCTGGTGCTGG
CTGACCAGGGTGTGTGCTGCATTGATGAGTTCGACAAGATGGCTGAGGCCGACCGCACAGCCATCCACGAGGTCA
TGGAGCAGCAGACCATCTCCATTGCCAAGGCCGGCATTCTCACCACACTCAATGCCCGCTGCTCCATCCTGGCTG
CCGCCAACCCTGCCTACGGGCGCTACAACCCTCGCCGCAGCCTGGAGCAGAACATACAGCTACCTGCTGCACTGC
TCTCCCGGTTTGACCTCCTCTGGCTGATTCAGGACCGGCCCGACCGAGACAATGACCTACGGTTGGCCCAGCACA
TCACCTATGTGCACCAGCACAGCCGGCAGCCCCCCTCCCAGTTTGAACCTCTGGACATGAAGCTCATGAGGCGTT
ACATAGCCATGTGCCGCGAGAAGCAGCCCATGGTGCCAGAGTCTCTGGCTGACTACATCACAGCAGCATACGTGG
AGATGAGGCGAGAGGCTTGGGCTAGTAAGGATGCCACCTATACTTCTGCCCGGACCCTGCTGGCTATCCTGCGCC
TTTCCACTGCTCTGGCACGTCTGAGAATGGTGGATGTGGTGGAGAAAGAAGATGTGAATGAAGCCATCAGGCTAA
TGGAGATGTCAAAGGACTCTCTTCTAGGAGACAAGGGGCAGACAGCTAGGACTCAGAGACCAGCAGATGTGATAT
TTGCCACCGTCCGTGAACTGGTCTCAGGGGGCCGAAGTGTCCGGTTCTCTGAGGCAGAGCAGCGCTGTGTATCTC
GTGGCTTCACACCCGCCCAGTTCCAGGCGGCTCTGGATGAATATGAGGAGCTCAATGTCTGGCAGGTCAATGCTT
CCCGGACACGGATCACTTTTGTCTGATTCCAGCCTGCTTGCAACCCTGGGGTCCTCTTGTTCCCTGCTGGCCTGC
CCCTTGGGAAGGGGCAGTGATGCCTTTGAGGGGAAGGAGGAGCCCCTCTTTCTCCCATGCTGCACTTACTCCTTT
TGCTAATAAAAGTGTTTGTAGATTGTC

FIGURE 2513

MALKDYALEKEKVKKFLQEFYQDDELGKKQFKYGNQLVRLAHREQVALYVDLDDVAEDDPELVDSICENARRYAK
LFADAVQELLPQYKEREVVNKDVLDVYIEHRLMMEQRSRDPGMVRSPQNQYPAELMRRFELYFQGPSSSKPRVIR
EVRADSVGKLVTVRGIVTRVSEVKPKMVVATYTCDQCGAETYQPIQSPTFMPLIMCPSQECQTNRSGGRLYLQTR
GSRFIKFQEMKMQEHSDQVPVGNIPRSITVLVEGENTRIAQPGDHVSVTGIFLPILRTGFRQVVQGLLSETYLEA
HRIVKMNKSEDDESGAGELTREELRQIAEEDFYEKLAASIAPEIYGHEDVKKALLLLLVGGVDQSPRGMKIRGNI
NICLMGDPGVAKSQLLSYIDRLAPRSQYTTGRGSSGVGLTAAVLRDSVSGELTLEGGALVLADQGVCCIDEFDKM
AEADRTAIHEVMEQQTISIAKAGILTTLNARCSILAAANPAYGRYNPRRSLEQNIQLPAALLSRFDLLWLIQDRP
DRDNDLRLAQHITYVHQHSRQPPSQFEPLDMKLMRRYIAMCREKQPMVPESLADYITAAYVEMRREAWASKDATY
TSARTLLAILRLSTALARLRMVDVVEKEDVNEAIRLMEMSKDSLLGDKGQTARTQRPADVIFATVRELVSGGRSV
RFSEAEQRCVSRGFTPAQFQAALDEYEELNVWQVNASRTRITFV

FIGURE 2514

GCGGAGCGAGAGGCTGAGAGAGTCGGAGACACTATCCGCTTCCATCCGTCGCGCAGACCCTGCCGGAGCCGCTGC
CGCTATGGATGATCGAGAGGATCTGGTGTACCAGGCGAAGCTGGCCGAGCAGGCTGAGCGATACGACGAAATGGT
GGAGTCAATGAAGAAAGTAGCAGGGATGGATGTGGAGCTGACAGTTGAAGAAAGAAACCTCCTATCTGTTGCATA
TAAGAATGTGATTGGAGCTAGAAGAGCCTCCTGGAGAATAATCAGCAGCATTGAACAGAAAGAAGAAAACAAGGG
AGGAGAAGACAAGCTAAAAATGATTCGGGAATATCGGCAAATGGTTGAGACTGAGCTAAAGTTAATCTGTTGTGA
CATTCTGGATGTACTGGACAAACACCTCATTCCAGCAGCTAACACTGGCGAGTCCAAGGTTTTCTATTATAAAAT
GAAAGGGGACTACCACAGGTATCTGGCAGAATTTGCCACAGGAAACGACAGGAAGGAGGCTGCGGAGAACAGCCT
AGTGGCTTATAAAGCTGCTAGTGATATTGCAATGACAGAACTTCCACCAACGCATCCTATTCGCTTAGGTCTTGC
TCTCAATTTTTCCGTATTCTACTACGAAATTCTTAATTCCCCTGACCGTGCCTGCAGGTTGGCAAAAGCAGCTTT
TGATGATGCAATTGCAGAACTGGATACGCTGAGTGAAGAAAGCTATAAGGACTCTACACTTATCATGCAGTTGTT
ACGTGATAATCTGACACTATGGACTTCAGACATGCAGGGTGACGGTGAAGAGCAGAATAAAGAAGCGCTGCAGGA
CGTGGAAGACGAAAATCAGTGAGACATAAGCCAACAAGAGAAACCATCTCTGACCACCCCCTCCTCCCCATCCCA
CCCTTTGGAAACTCCCCATTGTCACTGAGAACCACCAAATCTGACTTTTACATTTGGTCTCAGAATTTAGGTTCC
TGCCCTGTTGGTTTTTTTTTTTTTTTTTTTTAAACAGTTTTCAAAAGTTCTTAAAGGCAAGAGTGAATTTCTGTG
GATTTTACTGGTCCCAGCTTTTAGGTTCTTTAAGACACTAACAGGACTACATAGAGGCTTTTTCAGCATTACTGT
GTCGTCTCCGTGCCAGATGTGGCAAGATCACCATTAGCAAATGGAAATTACATTTGAAAGCCATTAGACTTATAG
GTGATGCAAGCATCTAAGAGAGAGGTTAATCACACTATAGAGGCATAAGTGGTATCAGTTTTCATTTTTCTAATT
GTTTAAACTGTGTTTTATACCAGTGTTTGCAAGTAATTGGGTGTTAGCTTGAGATGGTTAAAGGTGGTTTGGGGA
GGGACTTCGTTGTAATGGTTTTGCTGTAAAAAATGTTTCCAACTCCGCTGAAATGTTGCTGAAAAGCATGGTGCT
GGTAACAGTTCAACAATCCGTGGCTGCTCATTCTTGCCTACTTTACTCTCCCACTGAAGCAGGTTAGCGTTGAAG
GTGGTATGGAAAAGCCTGCATGCCTGTTCAATTCTTTTGTTTCTTCTCCTTCCCCCTCCCCCTACCTCCTTCCCC
TCACTCCTCCCCTCCTTCGCTCGCTCAACCTCTTTTGTTCAGTATGTGTAACTTGAAGCTAATTTGTACTACTGG
ATATCTGACTGGAGCCACAGATACAGAATCTGTATTGTTCTTACTGAAACACAGCATGGAATTAACATTAAACTT
AAATAAAACAAACCTAAATTAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2515

MDDREDLVYQAKLAEQAERYDEMVESMKKVAGMDVELTVEERNLLSVAYKNVIGARRASWRIISSIEQKEENKGG
EDKLKMIREYRQMVETELKLICCDILDVLDKHLIPAANTGESKVFYYKMKGDYHRYLAEFATGNDRKEAAENSLV
AYKAASDIAMTELPPTHPIRLGLALNFSVFYYEILNSPDRACRLAKAAFDDAIAELDTLSEESYKDSTLIMQLLR
DNLTLWTSDMQGDGEEQNKEALQDVEDENQ

FIGURE 2516A

GCTCTCCAGAGGCGGGCCCTGAGCCGGCACCTCCCCTTTCGGACAGCTCAAGGGACTCAGCCAACTGGCTCACGC
CTCCCCTTCAGCTTCTCTTCACGCACTCCAAGATCTAAACCGAGAATCGAAACTAAGCTGGGGTCCATGGAGCCT
GCACCCGCCCGATCTCCGAGGCCCCAGCAGGACCCCGCCCGGCCCCAGGAGCCCACCATGCCTCCCCCCGAGACC
CCCTCTGAAGGCCGCCAGCCCAGCCCCAGCCCCAGCCCTACAGAGCGAGCCCCCGCTTCGGAGGAGGAGTTCCAG
TTTCTGCGCTGCCAGCAATGCCAGGCGGAAGCCAAGTGCCCGAAGCTGCTGCCTTGTCTGCACACGCTGTGCTCA
GGATGCCTGGAGGCGTCGGGCATGCAGTGCCCCATCTGCCAGGCGCCCTGGCCCCTAGGTGCAGACACACCCGCC
CTGGATAACGTCTTTTTCGAGAGTCTGCAGCGGCGCCTGTCGGTGTACCGGCAGATTGTGGATGCGCAGGCTGTG
TGCACCCGCTGCAAAGAGTCGGCCGACTTCTGGTGCTTTGAGTGCGAGCAGCTCCTCTGCGCCAAGTGCTTCGAG
GCACACCAGTGGTTCCTCAAGCACGAGGCCCGGCCCCTAGCAGAGCTGCGCAACCAGTCGGTGCGTGAGTTCCTG
GACGGCACCCGCAAGACCAACAACATCTTCTGCTCCAACCCCAACCACCGCACCCCTACGCTGACCAGCATCTAC
TGCCGAGGATGTTCCAAGCCGCTGTGCTGCTCGTGCGCGCTCCTTGACAGCAGCCACAGTGAGCTCAAGTGCGAC
ATCAGCGCAGAGATCCAGCAGCGACAGGAGGAGCTGGACGCCATGACGCAGGCGCTGCAGGAGCAGGATAGTGCC
TTTGGCGCGGTTCACGCGCAGATGCACGCGGCCGTCGGCCAGCTGGGCCGCGCGCGTGCCGAGACCGAGGAGCTG
ATCCGCGAGCGCGTGCGCCAGGTGGTAGCTCACGTGCGGGCTCAGGAGCGCGAGCTGCTGGAGGCTGTGGACGCG
CGGTACCAGCGCGACTACGAGGAGATGGCCAGTCGGCTGGGCCGCCTGGATGCTGTGCTGCAGCGCATCCGCACG
GGCAGCGCGCTGGTGCAGAGGATGAAGTGCTACGCCTCGGACCAGGAGGTGCTGGACATGCACGGTTTCCTGCGC
CAGGCGCTCTGCCGCCTGCGCCAGGAGGAGCCCCAGAGCCTGCAAGCTGCCGTGCGCACCGATGGCTTCGACGAG
TTCAAGGTGCGCCTGCAGGACCTCAGCTCTTGCATCACCCAGGGGAAAGATGCAGCTGTATCCAAGAAAGCCAGC
CCAGAGGCTGCCAGCACTCCCAGGGACCCTATTGACGTTGACCTGCCCGAGGAGGCAGAGAGAGTGAAGGCCCAG
GTTCAGGCCCTGGGGCTGGCTGAAGCCCAGCCTATGGCTGTGGTACAGTCAGTGCCCGGGGCACACCCCGTGCCA
GTGTACGCCTTCTCCATCAAAGGCCCTTCCTATGGAGAGGATGTCTCCAATACAACGACAGCCCAGAAGAGGAAG
TGCAGCCAGACCCAGTGCCCCAGGAAGGTCATCAAGATGGAGTCTGAGGAGGGGAAGGAGGCAAGGTTGGCTCGG
AGCTCCCCGGAGCAGCCCAGGCCCAGCACCTCCAAGGCAGTCTCACCACCCCACCTGGATGGACCGCCTAGCCCC
AGGAGCCCCGTCATAGGAAGTGAGGTCTTCCTGCCCAACAGCAACCACGTGGCCAGTGGCGCCGGGGAGGCAGAG
GAACGCGTTGTGGTGATCAGCAGCTCGGAAGACTCAGATGCCGAAAACTCGTCCTCCCGAGAGCTGGATGACAGC
AGCAGTGAGTCCAGTGACCTCCAGCTGGAAGGCCCCAGCACCCTCAGGGTCCTGGACGAGAACCTTGCTGACCCC
CAAGCAGAAGACAGACCTCTGGTTTTCTTTGACCTCAAGATTGACAATGAAACCCAGAAGATTAGCCAGCTGGCT
GCGGTGAACCGGGAAAGCAAGTTCCGCGTGGTCATCCAGCCTGAAGCCCTCTTCAGCATCTACTCCAAGGCCGTG
TCCCTGGAGGTGGGGCTGCAGCACTTCCTCAGCTTTCTGAGCTCCATGCGCCGCCCTATCTTGGCCTGCTACAAG
CTGTGGGGGCCTGGCCTCCCAAACTTCTTCCGGGCCCTGGAGGACATTAACAGGCTGTGGGAATTCCAGGAGGCC
ATCTCGGGCTTCCTGGCTGCCCTGCCTCTCATCCGGGAGCGTGTGCCCGGGGCCAGCAGCTTCAAACTCAAGAAC
CTGGCCCAGACCTACCTGGCGAGAAACATGAGCGAGCGCAGCGCCATGGCTGCCGTGCTGGCCATGCGTGACCTG
TGCCGCCTCCTCGAGGTCTCCCCGGGCCCCCAGCTGGCCCAGCATGTCTACCCCTTCAGTAGCCTGCAGTGCTTT
GCCTCCCTGCAGCCCCTGGTGCAGGCAGCTGTGCTGCCCCGGGCTGAGGCCCGCCTCCTGGCCCTACACAACGTG
AGCTTCATGGAGCTGCTGAGTGCACACCGCCGTGACCGGCAGGGGGGCCTGAAGAAGTACAGCCGCTATCTAAGC
CTGCAGACCACCACGTTGCCCCCTGCCCAGCCTGCTTTCAACCTGCAGGCTCTGGGCACCTACTTTGAAGGCCTG
TTGGAGGGTCCGGCGCTGGCACGGGCAGAAGGAGTCTCCACCCCACTTGCTGGCCGTGGCTTGGCAGAGAGGGCC
TCCCAGCAGAGCTGAGAGGAGGGGGTGACCAGCTTGGAGTCTCTGGTGGGCAGAGAGGGATGGGGTCCCTGAGCC
AGGCCCCACCCATCACAGCATTCCCAGGTCCTGGTACCCAGCCCTCAGTTGTCATTTGGTTCAGAATCAGTTCCC
TTTCTCTGGGACCAAATTTCCCTTCTCTAAACATCCTACAGAGAAGGTTCCAAAGCTGAGCACCCATCACCCTAG
GTGTGCACCAGACTCCTATTAGCCCCTCCTTCCAGGAGCTAGAACCAGGGAGGTCCTGAGTGAGGAAGGCATGAC
CTCTGGGCTCTCTAGGTGGCCCTGGTCTTGCCCCATCCATCCCACCTGCCACTACCTTGGGTGTCCTTACAGCTC
TGCCCTGACCCCAGCCCCTGCCCCTGGACACCTGCTGACAGCTCCCACACAGAACAGTCTGAGGTGATGCTGGCT
ACAGCCCTGGCAGCCCATGGCAACTCAAAGTGCCTTCCAAACCAAACTGCCCCTCATGAGGTTAGGGTCCCCCAC
CCTCCACCTGCCCAGAGGCCAACTCTGTTCCCTTCTCCTTTCATCCCAGAGGGGCCTCATCAGCAAAGACAGAAA
CTGATGTTCCATGCATGTTCCTGCTTCCAAAGCCTGACCTTCCAAAGCTTGCTTCCTTCCTCCTGGCTGCACAGA
CACCTCTGCTTGGCCACAGCTTTGCTCTTTGGTCCTCAGGCCACCAGACCCCTCACAGCATGGCCCTTGGCTCTT
CCTGCACTGCCCTCACCCTCAGCCGTCCCAAGGAGTGCCCAGCACTACTCAGCATGTAGTCCAGGACCTGCGGCA

FIGURE 2516B

TCAGCATCCCCTGGGAGCTTCTTAGAAATGCAGACCTGTGGGCTCTACCACAGGCCTCTGGAATCAGAATCTTCA
GGGTGGGGCCCAGCAGTCTGTGTTTTAACAGGTTCTCCCGGTGATGCTGGTGCATGCTCAAGTTTGAGAACCGCT
GCTCTCATAGACTGCTCCTCCAAGGGGAAGCAGTGTGGAACAGCAGAGAAAGTCCCGTCCCTATCTCTGACTGTG
CAGTGAGTGTGGCCTAGGAACAGGTCCCTTCCTAAGCTCTAGTGTCCCCATCTGTAAAATGGGCTGATTGGCCTC
CACGGTCAGAGCGGCCATCTGGCTGTGCCATCCTGCATTTTTAGGAATGGAAAGCAGGCCTCTGAGGCAGTGGAC
AGGAAGACTTCTCATCCTTGAATTCTAGCTCCCATTCCAAACTGTTAGTCCCCAACCTTGTGGTCACATCAGAGG
TCAACAGCAGAACAGAGGCAGGTCAGGGTTGTCCGCTCTGATTAGCAGATCGACAGCCCCTTCCTCCTCCTCCCT
CCTTCCCATCCCTACTCATTAGCTCCCTCGTCCTGGGATGCTTCCCAAGCAGCCCAGGCCTCTAGCCTCCATGGC
TGATGACCTCAGCTTTCACACTGGTGAAGTCTGTGTACCCATACTGCAGCCCCATCCCATGGGGCCCCTGAAGAC
CCACTGAGGAATTCCGTAGGGTCTTGTTCCCACGACCGGAGTGCTGGCTCTCACAGTGAATTTTGATGCATTTAA
AATAAGATTCTGATGCCAGACTGTTAAAACAGGCGCTGGTTCTGAAGCACCGATGGAAACAGATTGATGCAGATG
GAAGGAGGAAGGGAGACTGGGCCCACTGATTTCCAGCCCCACCATGTGTGCTGTTTTCAGATGTGATTGAGGGGT
GTTCTGCCCTGCCTCCACTGTCACAGCCTTTAATAAAGATGTGAATCTTGAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2517

MEPAPARSPRPQQDPARPQEPTMPPPETPSEGRQPSPSPSPTERAPASEEEFQFLRCQQCQAEAKCPKLLPCLHT
LCSGCLEASGMQCPICQAPWPLGADTPALDNVFFESLQRRLSVYRQIVDAQAVCTRCKESADFWCFECEQLLCAK
CFEAHQWFLKHEARPLAELRNQSVREFLDGTRKTNNIFCSNPNHRTPTLTSIYCRGCSKPLCCSCALLDSSHSEL
KCDISAEIQQRQEELDAMTQALQEQDSAFGAVHAQMHAAVGQLGRARAETEELIRERVRQVVAHVRAQERELLEA
VDARYQRDYEEMASRLGRLDAVLQRIRTGSALVQRMKCYASDQEVLDMHGFLRQALCRLRQEEPQSLQAAVRTDG
FDEFKVRLQDLSSCITQGKDAAVSKKASPEAASTPRDPIDVDLPEEAERVKAQVQALGLAEAQPMAVVQSVPGAH
PVPVYAFSIKGPSYGEDVSNTTTAQKRKCSQTQCPRKVIKMESEEGKEARLARSSPEQPRPSTSKAVSPPHLDGP
PSPRSPVIGSEVFLPNSNHVASGAGEAEERVVVISSSEDSDAENSSSRELDDSSSESSDLQLEGPSTLRVLDENL
ADPQAEDRPLVFFDLKIDNETQKISQLAAVNRESKFRVVIQPEALFSIYSKAVSLEVGLQHFLSFLSSMRRPILA
CYKLWGPGLPNFFRALEDINRLWEFQEAISGFLAALPLIRERVPGASSFKLKNLAQTYLARNMSERSAMAAVLAM
RDLCRLLEVSPGPQLAQHVYPFSSLQCFASLQPLVQAAVLPRAEARLLALHNVSFMELLSAHRRDRQGGLKKYSR
YLSLQTTTLPPAQPAFNLQALGTYFEGLLEGPALARAEGVSTPLAGRGLAERASQQS

FIGURE 2518

GCACGAGCTGCGGCTCCGCTCTCGTCGCAACGAGATCTTTCGAGATCTTCTCCGCCCCCGCTACCGGCGCCTCCT
CTGCGGCCACTGAGCCGGAGCCGGCCTGAGCAGCGCTCTCGGTTGCAGTACCCACTGGAAGGACTTAGGCGCTCG
CGTGGACACCGCAAGCCCCTCAGTAGCCTCGGCCCAAGAGGCCTGCTTTCCACTCGCTAGCCCCGCCGGGGTCCG
TGTCCTGTCTCGGTGGCCGGACCCGGGCCCGAGCCCGAGCAGTAGCCGGCGCCATGTCGGTGGTGGGCATAGACC
TGGGCTTCCAGAGCTGCTACGTCGCTGTGGCCCGCGCCGGCGGCATCGAGACTATCGCTAATGAGTATAGCGACC
GCTGCACGCCGGCTTGCATTTCTTTTGGTCCTAAGAATCGTTCAATTGGAGCAGCAGCTAAAAGCCAGGTAATTT
CTAATGCAAAGAACACAGTCCAAGGATTTAAAAGATTCCATGGCCGAGCATTCTCTGATCCATTTGTGGAGGCAG
AAAAATCTAACCTTGCATATGATATTGTGCAGTTGCCTACAGGATTAACAGGTATAAAGGTGACATATATGGAGG
AAGAGCGAAATTTTACCACTGAGCAAGTGACTGCCATGCTTTTGTCCAAACTGAAGGAGACAGCCGAAAGTGTTC
TTAAGAAGCCTGTAGTTGACTGTGTTGTTTCGGTTCCTTGTTTCTATACTGATGCAGAAAGACGATCAGTGATGG
ATGCAACACAGATTGCTGGTCTTAATTGCTTGCGATTAATGAATGAAACCACTGCAGTTGCTCTTGCATATGGAA
TCTATAAGCAGGATCTTCCTGCCTTAGAAGAGAAACCAAGAAATGTAGTTTTTGTAGACATGGGCCACTCTGCTT
ATCAAGTTTCTGTATGTGCATTTAATAGAGGAAAACTGAAAGTTCTGGCCACTGCATTTGACACGACATTGGGAG
GTAGAAAATTTGATGAAGTGTTAGTAAATCACTTCTGTGAAGAATTTGGGAAGAAATACAAGCTAGACATTAAGT
CCAAAATCCGTGCATTATTACGACTCTCTCAGGAGTGTGAGAAACTCAAGAAATTGATGAGTGCAAATGCTTCAG
ATCTCCCTTTGAGCATTGAATGTTTTATGAATGATGTTGATGTATCTGGAACTATGAATAGAGGCAAATTTCTGG
AGATGTGCAATGATCTCTTAGCTAGAGTGGAGCCACCACTTCGTAGTGTTTTGGAACAAACCAAGTTAAAGAAAG
AAGATATTTATGCAGTGGAGATAGTTGGTGGTGCTACACGAATCCCTGCGGTAAAAGAGAAGATCAGCAAATTTT
TCGGTAAAGAACTTAGTACAACATTAAATGCTGATGAAGCTGTCACTCGAGGCTGTGCATTGCAGTGTGCCATCT
TATCGCCTGCTTTCAAAGTCAGAGAATTTTCTATCACTGATGTAGTACCATATCCAATATCTCTGAGATGGAATT
CTCCAGCTGAAGAAGGGTCAAGTGACTGTGAAGTCTTTTCCAAAAATCATGCTGCTCCTTTCTCTAAAGTTCTTA
CATTTTATAGAAAGGAACCTTTCACTCTTGAGGCCTACTACAGCTCTCCTCAGGATTTGCCCTATCCAGATCCTG
CTATAGCTCAGTTTTCAGTTCAGAAAGTCACTCCTCAGTCTGATGGCTCCAGTTCAAAAGTGAAAGTCAAAGTTC
GAGTAAATGTCCATGGCATTTTCAGTGTGTCCAGTGCATCTTTAGTGGAGGTTCACAAGTCTGAGGAAAATGAGG
AGCCAATGGAAACAGATCAGAATGCAAAGGAGGAAGAGAAGATGCAAGTGGACCAGGAGGAACCACATGTTGAAG
AGCAACAGCAGCAGACACCAGCAGAAAATAAGGCAGAGTCTGAAGAAATGGAGACCTCTCAAGCTGGATCCAAGG
ATAAAAAGATGGACCAACCACCCCAAGCCAAGAAGGCAAAAGTGAAGACCAGTACTGTGGACCTGCCAATCGAGA
ATCAGCTATTATGGCAGATAGACAGAGAGATGCTCAACTTGTACATTGAAAATGAGGGTAAGATGATCATGCAGG
ATAAACTGGAGAAGGAGCGGAATGATGCTAAGAACGCAGTGAGGGAATATGTGTATGAAATGAGAGACAAGCTTA
GTGGTGAATATGAGAAGTTTGTGAGTGAAGATGGTCGTAACAGTTTTACTTTGAAACTGGAAGATACTGAAAATT
GGTTGTATGAGGATGGAGAAGACCAGCCAAAGCAAGTTTATGTTGATAAGTTGGCTGAATTAAAAAATCTAGGTC
AACCTATTAAGATACGTTTCCAGGAATCTGAAGAACGACCAAAATTATTTGAAGAACTAGGGAAACAGATCCAAC
AGTATATGAAAATAATCAGCTCTTTCAAAAACAAGGAGGACCAGTATGATCATTTGGATGCTGCTGACATGACAA
AGGTAGAAAAAAGCACAAATGAAGCAATGGAGTGGATGAATAACAAGCTAAATCTGCAGAACAAGCAGAGTTTGA
CCATGGATCCAGTTGTCAAGTCAAAAGAGATTGAAGCTAAAATTAAGGAGCTGACAAGTACTTGTAGCCCTATAA
TTTCAAAGCCCAAACCCAAAGTGGAACCTCCAAAAGAGGAACAAAAAAATGCAGAGCAGAATGGACCAGTGGATG
GACAAGGAGACAACCCAGGCCCCCAGGCTGCTGAGCAGGGTACAGACACAGCTGTGCCTTCGGATTCAGACAAGA
AGCTTCCTGAAATGGACATTGATTGATTCCAACACTTGTTTCTATTAAAACAGACTATTATAAA

FIGURE 2519

MSVVGIDLGFQSCYVAVARAGGIETIANEYSDRCTPACISFGPKNRSIGAAAKSQVISNAKNTVQGFKRFHGRAF
SDPFVEAEKSNLAYDIVQLPTGLTGIKVTYMEEERNFTTEQVTAMLLSKLKETAESVLKKPVVDCVVSVPCFYTD
AERRSVMDATQIAGLNCLRLMNETTAVALAYGIYKQDLPALEEKPRNVVFVDMGHSAYQVSVCAFNRGKLKVLAT
AFDTTLGGRKFDEVLVNHFCEEFGKKYKLDIKSKIRALLRLSQECEKLKKLMSANASDLPLSIECFMNDVDVSGT
MNRGKFLEMCNDLLARVEPPLRSVLEQTKLKKEDIYAVEIVGGATRIPAVKEKISKFFGKELSTTLNADEAVTRG
CALQCAILSPAFKVREFSITDVVPYPISLRWNSPAEEGSSDCEVFSKNHAAPFSKVLTFYRKEPFTLEAYYSSPQ
DLPYPDPAIAQFSVQKVTPQSDGSSSKVKVKVRVNVHGIFSVSSASLVEVHKSEENEEPMETDQNAKEEEKMQVD
QEEPHVEEQQQQTPAENKAESEEMETSQAGSKDKKMDQPPQAKKAKVKTSTVDLPIENQLLWQIDREMLNLYIEN
EGKMIMQDKLEKERNDAKNAVREYVYEMRDKLSGEYEKFVSEDGRNSFTLKLEDTENWLYEDGEDQPKQVYVDKL
AELKNLGQPIKIRFQESEERPKLFEELGKQIQQYMKIISSFKNKEDQYDHLDAADMTKVEKSTNEAMEWMNNKLN
LQNKQSLTMDPVVKSKEIEAKIKELTSTCSPIISKPKPKVEPPKEEQKNAEQNGPVDGQGDNPGPQAAEQGTDTA
VPSDSDKKLPEMDID

FIGURE 2520

AGGTTCTCTTACATCGACCGCCTAAGAGTCGCGCTGTAAGAAGCAACAACCTCTCCTCTTCGTCTCCGCCATCAG
CTCGGCAGTCGCGAAGCAGCAACC**ATG**CGTGAGTGCATCTCCATCCACGTTGGCCAGGCTGGTGTCCAGATTGGC
AATGCCTGCTGGGAGCTCTACTGCCTGGAACACGGCATCCAGCCCGATGGCCAGATGCCAAGTGACAAGACCATT
GGGGGAGGAGATGATTCCTTCAACACCTTCTTCAGTGAGACGGGGGCTGGCAAGCATGTGCCCCGGGCAGTGTTT
GTAGACTTGGAACCCACAGTCATTGATGAAGTTCGCACTGGCACCTACCGCCAGCTCTTCCACCCTGAGCAACTT
ATCACAGGCAAAGAAGATGCTGCCAATAACTATGCCCGAGGGCACTACACCATTGGCAAGGAGATCATTGACCTC
GTGTTGGACCGAATTCGCAAGCTGGCCGACCAGTGCACGGGTCTCCAGGGCTTCTTGGTTTTCCACAGCTTTGGT
GGGGGAACTGGTTCTGGGTTCACCTCGCTGCTCATGGAACGTCTCTCAGTTGATTATGGCAAGAAGTCCAAGCTG
GAGTTCTCTATTTACCCGGCGCCCCAGGTTTCCACAGCTGTAGTTGAGCCCTACAACTCCATCCTCACCACCCAC
ACCACCCTGGAGCACTCTGATTGTGCCTTCATGGTAGACAATGAGGCCATCTATGACATCTGTCGTAGAAACCTC
GATATTGAGCGTCCAACCTATACTAACCTGAATAGGTTAATAGGTCAAATTGTGTCCTCCATCACTGCTTCCCTG
AGATTTGATGGAGCCCTGAATGTTGACCTGACAGAATTCCAGACCAACCTGGTGCCCTATCCCCGCATCCACTTC
CCTCTGGCCACATATGCCCCTGTCATCTCTGCTGAGAAAGCCTACCATGAACAGCTTTCTGTAGCAGAGATCACC
AATGCTTGCTTTGAGCCAGCCAACCAGATGGTGAAATGTGACCCTCGCCATGGTAAATACATGGCTTGCTGCCTG
TTGTACCGTGGTGACGTGGTTCCCAAAGATGTCAATGCTGCCATTGCCACCATCAAGACCAAGCGTACCATCCAG
TTTGTGGATTGGTGCCCCACTGGCTTCAAGGTTGGCATCAACTACCAGCCTCCCACTGTGGTGCCTGGTGGAGAC
CTGGCCAAGGTACAGAGAGCTGTGTGCATGCTGAGCAACACCACAGCCATTGCTGAGGCCTGGGCTCGCCTGGAC
CACAAGTTTGACCTGATGTATGCCAAACGTGCCTTTGTTCACTGGTACGTTGGGGAGGGGATGGAGGAAGGTGAG
TTTTCAGAGGCCCGTGAGGACATGGCTGCCCTTGAGAAGGATTATGAGGAGGTTGGTGTGGATTCTGTTGAAGGA
GAGGGTGAGGAAGAAGGAGAGGAATAC**TAA**AGTTAAAACGTCACAAAGGTGCTGCTTTTACAGGGAAGCTTATTC
TGTTTTAAACATTGAAAAGTTGTGGTCTGATCAGTTAATTTGTATGTAGCAGTGTATGCTCTCATATACAATTAC
TGACCTATGCTCTAAAACATGAATGCTTTGTTACAGACCCAAGCTGTCCATTTCTGTGATGGGTTTTGAATAAAG
TATTCCCTGTCTTAAAAAAAAAAAAAA

FIGURE 2521

MRECISIHVGQAGVQIGNACWELYCLEHGIQPDGQMPSDKTIGGGDDSFNTFFSETGAGKHVPRAVFVDLEPTVI
DEVRTGTYRQLFHPEQLITGKEDAANNYARGHYTIGKEIIDLVLDRIRKLADQCTGLQGFLVFHSFGGGTGSGFT
SLLMERLSVDYGKKSKLEFSIYPAPQVSTAVVEPYNSILTTHTTLEHSDCAFMVDNEAIYDICRRNLDIERPTYT
NLNRLIGQIVSSITASLRFDGALNVDLTEFQTNLVPYPRIHFPLATYAPVISAEKAYHEQLSVAEITNACFEPAN
QMVKCDPRHGKYMACCLLYRGDVVPKDVNAAIATIKTKRTIQFVDWCPTGFKVGINYQPPTVVPGGDLAKVQRAV
CMLSNTTAIAEAWARLDHKFDLMYAKRAFVHWYVGEGMEEGEFSEAREDMAALEKDYEEVGVDSVEGEGEEEGEE
Y

FIGURE 2522

GGGCGCGGTGTGCCGCGGGGCAGTTGCGGGTTGTCATAACGGTCCCCGCCGGAGTGAGGCGAGGCCGCGTCGCTC
AGTTCTGGCCGTCTAGGGCCCCTGTAAGGATGAGAGCGCAGAGGACGCAGGGCCGCTGGAGGCGCAGGTAACGAA
GCTAGGGTGCGGTTGGGACCGCGGCTGAGCTTTTTCCGGGACCCGTGGTGCTGAATGGAGAGGACGGAGACGAAG
CCGAGCCGCGGCTCCTAGCGGCGGCGCCGATGCTCGAGCTGTAGCTGCCAGGCGAGGATGTGTGGAGCGCAGGCG
GCGCGGGGTAAATGAGAGGTCTCGGGCCCCAGGACCCCCGGGGCCCGGGATGAGTTAGCGAGGGCAGCCGCGGGG
GCCAGTTCCGACCGTGACAGGCCAAGGCGACGGCCGCCGCCCGCCCGCCCCTTCCGTGCAGAAGCAGCTGCTCCT
TTCCGCGCCCGCCCGCCTGCGCTCCCGGCCCTGGAGACC**ATG**AGGTTCCGCATCTACAAACGGAAGGTGCTAATC
CTGACGCTCGTGGTGGCCGCCTGCGGCTTCGTCCTCTGGAGCAGCAATGGGCGACAAAGGAAGAACGAGGCCCTC
GCCCCACCGTTGCTGGACGCCGAACCCGCGCGGGGTGCCGGCGGCCGCGGTGGGGACCACCCCTCTGTGGCTGTG
GGCATCCGCAGGGTCTCCAACGTGTCGGCGGCTTCCCTGGTCCCGGCGGTCCCCCAGCCCGAGGCGGACAACCTG
ACGCTGCGGTACCGGTCCCTGGTGTACCAGCTGAACTTTGATCAGACCCTGAGGAATGTAGATAAGGCTGGCACC
TGGGCCCCCCGGGAGCTGGTGCTGGTGGTCCAGGTGCATAACCGGCCCGAATACCTCAGACTGCTGCTGGACTCA
CTTCGAAAAGCCCAGGGAATTGACAACGTCCTCGTCATCTTTAGCCATGACTTCTGGTCGACCGAGATCAATCAG
CTGATCGCCGGGGTGAATTTCTGTCCGGTTCTGCAGGTGTTCTTTCCTTTCAGCATTCAGTTGTACCCTAACGAG
TTTCCAGGTAGTGACCCTAGAGATTGTCCCAGAGACCTGCCGAAGAATGCCGCTTTGAAATTGGGGTGCATCAAT
GCTGAGTATCCCGACTCCTTCGGCCATTATAGAGAGGCCAAATTCTCCCAGACCAAACATCACTGGTGGTGGAAG
CTGCATTTTGTGTGGGAAAGAGTGAAAATTCTTCGAGATTATGCTGGCCTTATACTTTTCCTAGAAGAGGATCAC
TACTTAGCCCCAGACTTTTACCATGTCTTCAAAAAGATGTGGAAACTGAAGCAGCAAGAGTGCCCTGAATGTGAT
GTTCTCTCCCTGGGGACCTATAGTGCCAGTCGCAGTTTCTATGGCATGGCTGACAAGGTAGATGTGAAAACTTGG
AAATCCACAGAGCACAATATGGGTCTAGCCTTGACCCGGAATGCCTATCAGAAGCTGATCGAGTGCACAGACACT
TTCTGTACTTATGATGATTATAACTGGGACTGGACTCTTCAATACTTGACTGTATCTTGTCTTCCAAAATTCTGG
AAAGTGCTGGTTCCTCAAATTCCTAGGATCTTTCATGCTGGAGACTGTGGTATGCATCACAAGAAAACCTGTAGA
CCATCCACTCAGAGTGCCCAAATTGAGTCACTCTTAAATAATAACAAACAATACATGTTTCCAGAAACTCTAACT
ATCAGTGAAAAGTTTACTGTGGTAGCCATTTCCCCACCTAGAAAAAATGGAGGGTGGGGAGATATTAGGGACCAT
GAACTCTGTAAAAGTTATAGAAGACTGCAG**TGA**AAATCACAGTTACAAAAGCGACAGTCTTCTATTTTTGATATT
TGTCCAAACAGGACATACAATTGAATAAAAGAGTTTAGGAACTGGTTTCTGCTTTAATACAAAAACAAAATCTTG
TAAAAGGTGTCCAAATACATAGTAATCTTTTCCAGTTATGTCTGATTAAGATTTAAAACTGAAGGTTTCATTTTG
GGAGTAGGGTTTTAAAGCTCAATCTGTTATCTGCTAAAATTGATTATTGTTGATATGAGAGAAGAGGGGAAATTT
TATTTAAATTGCATTTATTAATCTTTTTATCTGAAACTTTGTACACTTTTCCACTTTCAAAACCTATTTTAAGTA
CAGCAAAATTTATTTAAAACTGTGATAGCAGTAAAAAGTATTACGATGAAATTGTTAGGGTATTAATGGAACAAA
CCCAGTTTCACTCTCTTGACACACTTATTAGGAAGGGATTGCTTCACTGGTTTAATAATTTAAAAGTTATGTTTG
TTAAACACCCTGTCAGAACAGTCATTTTCAGTATTAGATTCCTGTACTATTGTGTTTTGAGTGTGTTTTGGAACC
TTCATAGAACACACTTTCTTTTGGAATGTATTTGATTGATAAGAAAGTTTAAACATTGTTTTCACCTCAATGTAG
AAATACAGTGGTTTTGTTTTTTTTTTTCTTTTAGTGCTGACAAAATAAAATACTCATTTTTGCATAAAAAGGTTC
CTAATCCTTTTGCAGAATAAGTTTTGTTTACTCTTTATACCAAAATTCAGTGAAGGCATTCTACAAGTTTTGAGT
TAGCATTACATTTTAATATTTACTATTGCTACATTGTATAATTGAGTTTGAA

FIGURE 2523

MRFRIYKRKVLILTLVVAACGFVLWSSNGRQRKNEALAPPLLDAEPARGAGGRGGDHPSVAVGIRRVSNVSAASL
VPAVPQPEADNLTLRYRSLVYQLNFDQTLRNVDKAGTWAPRELVLVVQVHNRPEYLRLLLDSLRKAQGIDNVLVI
FSHDFWSTEINQLIAGVNFCPVLQVFFPFSIQLYPNEFPGSDPRDCPRDLPKNAALKLGCINAEYPDSFGHYREA
KFSQTKHHWWWKLHFVWERVKILRDYAGLILFLEEDHYLAPDFYHVFKKMWKLKQQECPECDVLSLGTYSASRSF
YGMADKVDVKTWKSTEHNMGLALTRNAYQKLIECTDTFCTYDDYNWDWTLQYLTVSCLPKFWKVLVPQIPRIFHA
GDCGMHHKKTCRPSTQSAQIESLLNNNKQYMFPETLTISEKFTVVAISPPRKNGGWGDIRDHELCKSYRRLQ

FIGURE 2524

ATGTGGGGCGACCTCTGGCTCCTCCCGCCTGCCTCTGCCAATCCGGGCACTGGGACAGAGGCTGAGTTTGAGAAA
GCTGCAGAGGAGGTTAGGCACCTTAAGACCAAGCCATCGGATGAGGAGATGCTGTTCATCTATGGCCACTACAAA
CAAGCAACTGTGGGCGACATAAATACAGAACGGCCCGGGATGTTGGACTTCACGGGCAAGGCCAAGTGGGATGCC
TGGAATGAGCTGAAAGGGACTTCCAAGGAAGATGCCATGAAAGCTTACATCAACAAAGTAGAAGAGCTAAAGAAA
AAATACGGGATATGAGAGACTGGATTTGGTTACTGTGCCATGTGTTTATCCTAAACTGAGACAATGCCTTGTTTT
TTTCTAATACCGTGGATGGTGGGAATTCGGGAAAATAACCAGTTAAACCAGCTACTCAAGGCTGCTCACCATACG
GCTCTAACAGATTAGGGGCTAAAACGATTACTGACTTTCCTTGAGTAGTTTTTATCTGAAATCAATTAAAAGTGT
ATTTGTTACTTT

FIGURE 2525

MWGDLWLLPPASANPGTGTEAEFEKAAEEVRHLKTKPSDEEMLFIYGHYKQATVGDINTERPGMLDFTGKAKWDA
WNELKGTSKEDAMKAYINKVEELKKKYGI

FIGURE 2526

AGTCAGCACGGGGGTGCTGGAAGAGATCGGGAATAATAGCGCAGACCAATGAGCCTAGGGAGATGCTTTCATCGT
CTCTCCTTCCCTCAAGTGTTCTGGAACCTATCATTTGAATTAGCCGAGTCAGGCAGGAGGGGGCGGGGAATCCTT
CCGCCCTTCTTAGGAGGGGCTGCATTGCAGGGGGAGAGTGAACTGACAGACTCAGTCACTGAAGAGGGAAAAGGA
GTGAGAAGACAAAGCCGTCAAAGCCCCAACAGCTTTGTATTTCTCCAGCCCGGCGCAGACCCCGGAGCTCCCGAG
GCACTCCCTCCATCTTTGGAACACGCCAGTAATTGATTGATAACAGGAAGCT**ATG**AGGGACCCTGTGAGTAGCCA
GTACAGTTCCTTTCTTTTCTGGAGGATGCCCATCCCAGAACTGGATCTGTCGGAGCTGGAAGGCCTGGGTCTGTC
AGATACAGCCACCTACAAGGTCAAAGACAGCAGCGTTGGCAAAATGATCGGGCAAGCAACTGCAGCAGACCAGGA
GAAAAACCCTGAAGGTGATGGCCTCCTTGAGTACAGCACCTTCAACTTCTGGAGAGCTCCCATTGCCAGCATCCA
CTCCTTCGAACTGGACTTGCTC**TAA**GGCCAAGACTTCTCTCTCCCATCACCTTGCCCTCATTGTCTTCCCTCTCA
AGCCCCTTCCTTTCCACTCCTTTCCCATTTTAATCTTGTTCTCTCCCTACTGTGTTGGTGGTGCTGATGAATCTG
CCAGAGTTGAGTTCTATGTATTTATTTATCTATCTGTCTACTCCATTTCTCTCAAAAGCCCTCAAGTCACAAAGT
AAATGGTTCAAGCAATGGAGTACTGGGTCACAGGGATTCCTCCTTTCCCCCCCAAATATTAACTCCAGAAACTAG
GCCTGACTGGGGACACCTGAGAGTAGTATAGTAGTGCAAAATGGAAGACTGATTTTTGACTCTATTATAATCAGC
TTCAGAGATTCCTTAAACCTTCCTAATTTCCTGCTCCAGGGCAGTAAACACAAATATTTCTTCAAGGGGTGATGA
AAACCTCGGAAGTTTTAATTTGAGGTTATCTGCTACGAAACAGTATTTCTAAAAGGCTAAAGTGATAAGTCTCTT
GCTTTTTTTTGATCCTGCTCTTATATTCTTTTTTTCCTCAGAGAAATCAGGAGGGTAGTTAGAGGTATAAAACA
GGAGGAAATATTATGGAAAATGAAAATAGGGAAAATAATTGAATCATTTTAGAAGTAGCTAATTTCTTTTCTCAA
AAGAGTGTCCCTTCTTCACACCTACTCACTTTACAACTTTGCTCCTAACTGTGGGTTGAAAACTCTAGCTAAAGA
AAGTTATCAAATCTTAACATGCATTCCTACTATTATGATAGTTTTTAAGGTTTCAATTCAATCTTCTGAACGGCA
TAAGTCCTATTTTAGCCTTACCTCCTGCATTTGCAATACGTAATACTGATCAGTGGGCACAGTTCTTCAGCTACA
TTGAGACCCTGAAATGAACAATTATATTCTGACTCGACATCTTGTCCCCAATCCTTCCAAAAATATTGATGGTGA
TTTGTGCTACCATTTACTCGTTTATTTAATAAAGACATTCAATCCCAGAAAAAAAAAAAAAAAAAAAAAAAAAA
AAA

FIGURE 2527

MRDPVSSQYSSFLFWRMPIPELDLSELEGLGLSDTATYKVKDSSVGKMIGQATAADQEKNPEGDGLLEYSTFNFW
RAPIASIHSFELDLL

FIGURE 2528

TGTCGGGGACGGTAACCGGGACCCGTGCTCTGCTCCTGTCGCCTTCGCCTCCTGAATCCCTAGCCATATGCGTGA
GTGCATCTCCATCCACGTTGGCCAGGCTGGTGTCCAGATTGGCAATGCCTGCTGGGAGCTCTACTGCCTGGAACA
CGGCATCCAGCCCGATGGCCAGATGCCAAGTGACAAGACCATTGGGGGAGGAGATGACTCCTTCAACACCTTCTT
CAGTGAGACGGGCGCTGGCAAGCACGTGCCCCGGGCTGTGTTTGTAGACTTGGAACCCACAGTCATTGATGAAGT
TCGCACTGGCACCTACCGCCAGCTCTTCCACCCTGAGCAGCTCATCACAGGCAAGGAAGATGCTGCCAATAACTA
TGCCCGAGGGCACTACACCATTGGCAAGGAGATCATTGACCTTGTGTTGGACCGAATTCGCAAGCTGGCTGACCA
GTGCACCCGTCTTCAGGGCTTCTTGGTTTTCCACAGCTTTGGTGGGGGAACTGGTTCTGGGTTCACCTCCCTGCT
CATGGAACGCCTGTCAGTTGATTATGGCAAGAAATCCAAGCTGGAGTTCTCCATTTACCCGGCACCCCAGGTTTC
CACAGCTGTAGTTGAGCCCTACAACTCCATCCTCACCACCCACACCACCCTGGAGCACTCTGATTGTGCCTTCAT
GGTAGACAATGAGGCCATCTATGACATCTGTCGTAGAAACCTCGATATCGAGCGCCCAACCTACACTAACCTTAA
CCGCCTTATTAGCCAGATTGTGTCCTCCATCACTGCTTCCCTGAGATTTGATGGAGCCCTGAATGTTGACCTGAC
AGAATTCCAGACCAACCTGGTCCCCTACCCCCGCATCCACTTCCCTCTGGCCACATATGCCCCTGTCATCTCTGC
TGAGAAAGCCTACCATGAACAGCTTTCTGTAGCAGACATCACCAATGCTTGCTTTGAGCCAGCCAACCAGATGGT
GAAATGTGACCCTGGCCATGGTAAATACATGGCTTGCTGCCTGTTGTACCGTGGTGACGTGGTTCCCAAAGATGT
CAATGCTGCCATTGCCACCATCAAAACCAAGCGCACGATCCAGTTTGTGGATTGGTGCCCCACTGGCTTCAAGGT
TGGCATCAACTACCAGCCTCCCACTGTGGTGCCTGGTGGAGACCTGGCCAAGGTACAGAGAGCTGTGTGCATGCT
GAGCAACACCACAGCCATTGCTGAGGCCTGGGCTCGCCTGGACCACAAGTTTGACCTGATGTATGCCAAGCGTGC
CTTTGTTCACTGGTACGTGGGTGAGGGGATGGAGGAAGGCGAGTTTTCAGAGGCCCGTGAAGATATGGCTGCCCT
TGAGAAGGATTATGAGGAGGTTGGTGTGGATTCTGTTGAAGGAGAGGGTGAGGAAGAAGGAGAGGAATACTAATT
ATCCATTCCTTTTGGCCCTGCAGCATGTCATGCTCCCAGAATTTCAGCTTCAGCTTAACTGACAGATGTTAAAGC
TTTCTGGTTAGATTGTTTTCACTTGGTGATCATGTCTTTTCCATGTGTACCTGTAATATTTTTCCATCATATCTC
AAAGTAAAGTCATTAACATCA

FIGURE 2529

MRECISIHVGQAGVQIGNACWELYCLEHGIQPDGQMPSDKTIGGGDDSFNTFFSETGAGKHVPRAVFVDLEPTVI
DEVRTGTYRQLFHPEQLITGKEDAANNYARGHYTIGKEIIDLVLDRIRKLADQCTRLQGFLVFHSFGGGTGSGFT
SLLMERLSVDYGKKSKLEFSIYPAPQVSTAVVEPYNSILTTHTTLEHSDCAFMVDNEAIYDICRRNLDIERPTYT
NLNRLISQIVSSITASLRFDGALNVDLTEFQTNLVPYPRIHFPLATYAPVISAEKAYHEQLSVADITNACFEPAN
QMVKCDPGHGKYMACCLLYRGDVVPKDVNAAIATIKTKRTIQFVDWCPTGFKVGINYQPPTVVPGGDLAKVQRAV
CMLSNTTAIAEAWARLDHKFDLMYAKRAFVHWYVGEGMEEGEFSEAREDMAALEKDYEEVGVDSVEGEGEEEGEE
Y

FIGURE 2530

GGCACGAGTAGGGGTGGCGGGTCAGTGCTGCTCGGGGGCTTCTCCATCCAGGTCCCTGGAGTTCCTGGTCCCTGG
AGCTCCGCACTTGGCGCGCAACCTGCGTGAGGCAGCGCGACTCTGGCGACTGGCCGGCC**ATG**CCTTCCCGGGCTG
AGGACTATGAAGTGTTGTACACCATTGGCACAGGCTCCTACGGCCGCTGCCAGAAGATCCGGAGGAAGAGTGATG
GCAAGATATTAGTTTGGAAAGAACTTGACTATGGCTCCATGACAGAAGCTGAGAAACAGATGCTTGTTTCTGAAG
TGAATTTGCTTCGTGAACTGAAACATCCAAACATCGTTCGTTACTATGATCGGATTATTGACCGGACCAATACAA
CACTGTACATTGTAATGGAATATTGTGAAGGAGGGGATCTGGCTAGTGTAATTACAAAGGGAACCAAGGAAAGGC
AATACTTAGATGAAGAGTTTGTTCTTCGAGTGATGACTCAGTTGACTCTGGCCCTGAAGGAATGCCACAGACGAA
GTGATGGTGGTCATACCGTATTGCATCGGGATCTTAAACCAGCCAATGTTTTCCTGGATGGCAAGCAAAACGTCA
AGCTTGGAGACTTTGGGCTAGCTAGAATATTAAACCATGACACGAGTTTTGCAAAAACATTTGTTGGCACACCTT
ATTACATGTCTCCTGAACAAATGAATCGCATGTCCTACAATGAGAAATCAGATATCTGGTCATTGGGCTGCTTGC
TGTATGAGTTATGTGCATTAATGCCTCCATTTACAGCTTTTAGCCAGAAAGAACTCGCTGGGAAAATCAGAGAAG
GCAAATTCAGGCGAATTCCATACCGTTACTCTGATGAATTGAATGAAATTATTACGAGGATGTTAAACTTAAAGG
ATTACCATCGACCTTCTGTTGAAGAAATTCTTGAGAACCCTTTAATAGCAGATTTGGTTGCAGACGAGCAAAGAA
GAAATCTTGAGAGAAGAGGGCGACAATTAGGAGAGCCAGAAAAATCGCAGGATTCCAGCCCTGTATTGAGTGAGC
TGAAACTGAAGGAAATTCAGTTACAGGAGCGAGAGCGAGCTCTCAAAGCAAGAGAAGAAAGATTGGAGCAGAAAG
AACAGGAGCTTTGTGTTCGTGAGAGACTAGCAGAGGACAAACTGGCTAGAGCAGAAAATCTGTTGAAGAACTACA
GCTTGCTAAAGGAACGGAAGTTCCTGTCTCTGGCAAGTAATCCAGAACTTCTTAATCTTCCATCCTCAGTAATTA
AGAAGAAAGTTCATTTCAGTGGGGAAAGTAAAGAGAACATCATGAGGAGTGAGAATTCTGAGAGTCAGCTCACAT
CTAAGTCCAAGTGCAAGGACCTGAAGAAAAGGCTTCACGCTGCCCAGCTGCGGGCTCAAGCCCTGTCAGATATTG
AGAAAAATTACCAACTGAAAAGCAGACAGATCCTGGGCATGCGC**TAG**CCAGGTAGAGAGACACAGAGCTGTGTAC
AGGATGTAATATTACCAACCTTTAAAGACTGATATTCAAATGCTGTAGTGTTGAATACTTGGCCCCATGAGCCAT
GCCTTTCTGTATAGTACACATGATATTTCGGAATTGGTTTTACTGTTCTTCAGCAACTATTGTACAAAATGTTCA
CATTTAATTTTTCTTTCTTCTTTTAAGAACATATTATAAAAAGAATACTTTCTTGGTTGGGCTTTTAATCCTGTG
TGTGATTACTAGTAGGAACATGAGATGTGACATTCTAAATCTTGGGAGAAAAAATAATATTAGGAAAAAAATATT
TATGCAGGAAGAGTAGCACTCACTGAATAGTTTTAAATGACTGAGTGGTATGCTTACAATTGTCATGTCTAGATT
TAAATTTTAAGTCTGAGATTTTAAATGTTTTTGAGCTTAGAAAACCCAGTTAGATGCAATTTGGTCATTAATACC
ATGACATCTTGCTTATAAATATTCCATTGCTCTGTAGTTCAAATCTGTTAGCTTTGTGAAAATTCATCACTGTGA
TGTTTGTATTCTTTTTTTTTTTCTGTTTAACAGAATATGAGCTGTCTGTCATTTACCTACTTCTTTCCCACTAAA
TAAAAGAATTCTTCAGTTA

FIGURE 2531

MPSRAEDYEVLYTIGTGSYGRCQKIRRKSDGKILVWKELDYGSMTEAEKQMLVSEVNLLRELKHPNIVRYYDRII
DRTNTTLYIVMEYCEGGDLASVITKGTKERQYLDEEFVLRVMTQLTLALKECHRRSDGGHTVLHRDLKPANVFLD
GKQNVKLGDFGLARILNHDTSFAKTFVGTPYYMSPEQMNRMSYNEKSDIWSLGCLLYELCALMPPFTAFSQKELA
GKIREGKFRRIPYRYSDELNEIITRMLNLKDYHRPSVEEILENPLIADLVADEQRRNLERRGRQLGEPEKSQDSS
PVLSELKLKEIQLQERERALKAREERLEQKEQELCVRERLAEDKLARAENLLKNYSLLKERKFLSLASNPELLNL
PSSVIKKKVHFSGESKENIMRSENSESQLTSKSKCKDLKKRLHAAQLRAQALSDIEKNYQLKSRQILGMR

FIGURE 2532

CCGCGCATCTGTTACTTGTAGCAGTGACTATATTTAAATCGGGGAGGATGGTGTGGAGGGGGCGGGGAGGAGAGG
AGAATTTTTCCAAAATCTGACGGAAAGAAAAGAAACAAATGGTTCAGATGGGACGGAGGGTGGGGGAGGGGGGGA
GGGTGAGTAGGAACCAGGAGGGCTGCCTGGGGTGGGGGAATAAATTAAAAAAAGGAACGAGTTAACAACAGCACC
AGGAAAGTTACTTCAGTCAAAAGACGCTTTTGAAAAGAATATTTCTCCGTACAAAATGAGAAATTAAACGAACGT
AAAGTCCCCCAAACCAAAGTTTGTGATGTGGGATGGTTGGCTCGGATCCCGAGGTGGGTGGGCCTATGAGGTGGT
TGCTAAGTCGACGCAAGGGCGGCGGGGGTGGTCTCAGGGATGGACAAGGGGATGGAGTAGAGT**ATG**TACAGCCCC
CGGGGCTCACAGGGGAGGGGGACGGCGGAGGCCACCGCGAATTCGCCGTCCCCCCCCATCGCCCCGTCACACAGC
CGAGTCACCTTTTCCCTTTCTACACTCCACACTCTCAGTCCCCCACCCCGCCCCTTTCCAAGCGTGTCCCGGGCC
GCAGCGCAGAAACCGCACCATCTCCACCCCCACATTCTCCTCGCGGGAAGCGCAGCAGTGCCTCCAAGGGTTCTT
AAAGCAGAGATGAATAATACGGCAGCTAGTCCAATGTCTACTGCAACTTCAAGTAGTGGAAGGAGTACAGGGAAG
TCTATAAGCTTTGCAACAGAATTACAGAGTATGATGTATTCTTTAGGTGATGCTAGAAGCCTCTTCATGAGAACA
GCAGTTTTGGTAGAAGATGTGGTACACACTCAGTTAATTAATCTGTTACAGCAAGCTGCTGAAGTTTCTCAGCTG
CGGGGAGCAAGGGTAATCACTCCTGAAGATCTTCTGTTTTTGATGCGCAAAGATAAGAAAAAACTTAGAAGACTG
CTAAAATACATGTTTATCCGAGACTACAAATCAAAGATTGTCAAAGGCATCGATGAGGATGATCTTCTCGAAGAC
AAATTGAGTGGCAGCAATAATGCGAACAAAAGACAAAAGATTGCTCAGGACTTCCTCAACTCTATTGACCAGACA
GGAGAACTTTTAGCAATGTTTGAAGATGACGAAATTGATGAAGTTAAACAAGAAAGAATGGAGAGAGCAGAAAGA
CACAACTCGATTATGGATTCAGCTCAATATGCAGAATTCTGTGAAAGTCGACAATTAAGTTTCTCCAAAAAAGCT
TCCAAATTTCGAGACTGGTTGGACTGCAGCAGTATGGAGATAAAACCCAATGTTGTCGCAATGGAAATCTTAGCA
TATTTAGCGTATGAAACTGTGGCACAGTTAGTGGATCTGGCTCTTCTTGTGAGGCAAGACATGGTAACCAAGGCA
GGGGACCCCTTCAGCCATGCCATTTCTGCAACCTTCATTCAGTATCACAACTCTGCTGAGAGCACTGCAGCCTGT
GGTGTTGAGGCTCACAGCGATGCCATCCAGCCCTGCCACATCAGAGAGGCCATTCGACGCTACAGCCACAGGATT
GGCCCACTTTCCCCATTCACAAATGCCTACCGCAGGAATGGGATGGCTTTTCTAGCCTGC**TGA**TGTGACAACTGT
GATGTGCCTGCAACAACAGGAAAGGCAATGTTATATTAAGGAGTAAACCAAGCCAATTCAGCACTTCCTGTTTAC
TTCCTTGTCATATGTACCATAGATGGTGACAGACCTGCTCTCAAAACAAGCTTCCTTCGTTTAATTCTGCATTTT
CTGCTTAGGCAACCACCCTATCAATATACTTGAACAATGAAACAATTTGGCTACGGAAGCACTGTCTCTGAATTC

FIGURE 2533

MYSPRGSQGRGTAEATANSPSPPIAPSHSRVTFSLSTLHTLSPPPRPFPSVSRAAAQKPHHLHPHILLAGSAAVP
PRVLKAEMNNTAASPMSTATSSSGRSTGKSISFATELQSMMYSLGDARSLFMRTAVLVEDVVHTQLINLLQQAAE
VSQLRGARVITPEDLLFLMRKDKKKLRRLLKYMFIRDYKSKIVKGIDEDDLLEDKLSGSNNANKRQKIAQDFLNS
IDQTGELLAMFEDDEIDEVKQERMERAERHNSIMDSAQYAEFCESRQLSFSKKASKFRDWLDCSSMEIKPNVVAM
EILAYLAYETVAQLVDLALLVRQDMVTKAGDPFSHAISATFIQYHNSAESTAACGVEAHSDAIQPCHIREAIRRY
SHRIGPLSPFTNAYRRNGMAFLAC

FIGURE 2534

TTCCTTTCATGTTCAGCATTTCTACTCCTTCCAAGAAGAGCAGCAAAGCTGAAGTAGCAGCAACAGCACCAGCAG
CAACAGCAAAAAACAAACATGAGTGTGAAGGGCATGGCTATAGCCTTGGCTGTGATATTGTGTGCTACAGTTGTT
CAAGGCTTCCCCATGTTCAAAAGAGGACGCTGTCTTTGCATAGGCCCTGGGGTAAAAGCAGTGAAAGTGGCAGAT
ATTGAGAAAGCCTCCATAATGTACCCAAGTAACAACTGTGACAAAATAGAAGTGATTATTACCCTGAAAGAAAAT
AAAGGACAACGATGCCTAAATCCCAAATCGAAGCAAGCAAGGCTTATAATCAAAAAAGTTGAAAGAAAGAATTTT
TAAAAATATCAAAACATATGAAGTCCTGGAAAAGGGCATCTGAAAAACCTAGAACAAGTTTAACTGTGACTACTG
AAATGACAAGAATTCTACAGTAGGAAACTGAGACTTTTCTATGGTTTTGTGACTTTCAACTTTTGTACAGTTATG
TGAAGGATGAAAGGTGGGTGAAAGGACCAAAAACAGAAATACAGTCTTCCTGAATGAATGACAATCAGAATTCCA
CTGCCCAAAGGAGTCCAGCAATTAAATGGATTTCTAGGAAAAGCTACCTTAAGAAAGGCTGGTTACCATCGGAGT
TTACAAAGTGCTTTCACGTTCTTACTTGTTGTATTATACATTCATGCATTTCTAGGCTAGAGAACCTTCTAGATT
TGATGCTTACAACTATTCTGTTGTGACTATGAGAACATTTCTGTCTCTAGAAGTTATCTGTCTGTATTGATCTTT
ATGCTATATTACTATCTGTGGTTACAGTGGAGACATTGACATTATTACTGGAGTCAAGCCCTTATAAGTCAAAAG
CATCTATGTGTCGTAAAGCATTCCTCAAACATTTTTTCATGCAAATACACACTTCTTTCCCCAAATATCATGTAG
CACATCAATATGTAGGGAAACATTCTTATGCATCATTTGGTTTGTTTTATAACCAATTCATTAAATGTAATTCAT
AAAATGTACTATGAAAAAAATTATACGCTATGGGATACTGGCAACAGTGCACATATTTCATAACCAAATTAGCAG
CACCGGTCTTAATTTGATGTTTTTCAACTTTTATTCATTGAGATGTTTTGAAGCAATTAGGATATGTGTGTTTAC
TGTACTTTTTGTTTTGATCCGTTTGTATAAATGATAGCAATATCTTGGACACATTTGAAATACAAAATGTTTTTG
TCTACCAAAGAAAAATGTTGAAAAATAAGCAAATGTATACCTAGCAATCACTTTTACTTTTTGTAATTCTGTCTC
TTAGAAAAATACATAATCTAATCAATTTCTTTGTTCATGCCTATATACTGTAAAATTTAGGTATACTCAAGACTA
GTTTAAAGAATCAAAGTCATTTTTTTCTCTAATAAACTACCACAACCTTTCTTTTTTAAAAAAAAAAA

FIGURE 2535

MSVKGMAIALAVILCATVVQGFPMFKRGRCLCIGPGVKAVKVADIEKASIMYPSNNCDKIEVIITLKENKGQRCL
NPKSKQARLIIKKVERKNF

FIGURE 2536

GAATCAGGAAGACCAGCTCCTCCTACTGTCTTCTGTGTTACGGGATCAGCGTTCCTTGTTGAGTGGGACCTGAGT
TTTGAGAGGGTCTTCTGCTCCTCTTGGTCTGGTCCCTTACTTCCAAGAGCCCCAGAGAGGAAGGC**ATG**CTGTTGG
CTCTAGCTCTGCTTCTAGCTTTCCTGCCTCCTGCCAGTCAGAAATCTTCCAACTTGGAAGGGAGAACAAAGTCAG
TCACCAGGCCAACTGGGTCATCAGCTGTAATCACTTGTGATCTTCCTGTAGAAAATGCCGTCTACACCCACTGGT
ACCTACACCAGGAGGGGAAGGCCCCACAGCGTCTTCTGTACTATGACTCCTACAACTCCAGGGTTGTGTTGGAAT
CAGGAATCAGTCGAGAAAAGTATCATACTTATGCAAGCACAGGGAAGAGCCTTAAATTTATACTGGAAAATCTAA
TTGAACGTGACTCTGGGGTCTATTACTGTGCCACCTGGAAGGATTATTATAAGAAACTCTTTGGCAGTGGAACAA
CACTTGTTGTCACAGATAAACAACTTGATGCAGATGTTTCCCCCAAGCCCACTATTTTTCTTCCTTCGATTGCTG
AAACAAAACTCCAGAAGGCTGGAACATATCTTTGTCTTCTTGAGAAATTTTTCCCAGATATTATTAAGATACATT
GGCAAGAAAAGAAGAGCAACACGATTCTGGGATCCCAGGAGGGGAACACCATGAAGACTAACGACACATACATGA
AATTTAGCTGGTTAACGGTGCCAGAAGAGTCACTGGACAAAGAACACAGATGTATCGTCAGACATGAGAATAATA
AAAACGGAATTGATCAAGAAATTATCTTTCCTCCAATAAAGACAGATGTCACCACAGTGGATCCCAAAGACAGTT
ATTCAAAAGATGCAAATGATGTCACCACAGTGGATCCCAAATACAATTATTCAAAGGATGCAAATGATGTCATCA
CAATGGATCCCAAAGACAATTGGTCAAAAGATGCAAATGATACACTACTGCTGCAGCTCACAAACACCTCTGCAT
ATTACATGTACCTCCTCCTGCTCCTCAAGAGTGTGGTCTATTTTGCCATCATCACCTGCTGTCTGCTTGGAAGAA
CGGCTTTCTGCTGCAATGGAGAGAAATCA**TAA**CAGACGGTGGCACAAGGAGGCCATCTTTTCCTCATCGGTTATT
GTCCCTAGAAGCGTCTTCTGAGGATCTAGTTGGGCTTTCTTTCTGGGTTTGGGCCATTTCAGTTCTCATGTGTGT
ACTATTCTATCATTATTGTATAATGGTTTTCAAACCAGTGGGCACACAGAGAACCTCAGTCTGTAATAACAATGA
GGAATAGCCATGGCGATCTCCAGCACCAATCTCTCCATGTTTTCCACAGCTCCTCCAGCCAACCCAAATAGCGCC
TGCTATAGTGTAGACAGCCTGCGGCTTCTAGCCTTGTCCCTCTCTTAGTGTTCTTTAATCAGATAACTGCCTGGA
AGCCTTTCATTTTACACGCCCTGAAGCAGTCTTCTTTGCTAGTTGAATTATGTGGTGTGTTTTTCCGTAATAAGC
AAAATAAATTT

FIGURE 2537

MLLALALLLAFLPPASQKSSNLEGRTKSVTRPTGSSAVITCDLPVENAVYTHWYLHQEGKAPQRLLYYDSYNSRV
VLESGISREKYHTYASTGKSLKFILENLIERDSGVYYCATWKDYYKKLFGSGTTLVVTDKQLDADVSPKPTIFLP
SIAETKLQKAGTYLCLLEKFFPDIIKIHWQEKKSNTILGSQEGNTMKTNDTYMKFSWLTVPEESLDKEHRCIVRH
ENNKNGIDQEIIFPPIKTDVTTVDPKDSYSKDANDVTTVDPKYNYSKDANDVITMDPKDNWSKDANDTLLLQLTN
TSAYYMYLLLLLKSVVYFAIITCCLLGRTAFCCNGEKS

FIGURE 2538

CCTCCTACACCTTCAGCACCCTGCCCAGCTACTCCTGCTGGACCAAAGGGAAGGGTGTTTGTTAGCCCTCTTGCA
AAGAAGTTGGCAGTAGAGAAAGGGATTGATCTTACACAAGTAAAAGGGACAGGACCAGATGGTAGAATCACCAAG
AAGGATATCGACTCTTTTGTGCCTAGTAAAGTTGCTCCTGCTCCGGCAGCTGTTGTGCCTCCCACAGGTCCTGGA
ATGGCACCAGTTCCTACAGGTGTCTTCACAGATATCCCAATCAGCAACATTCGTCGGGTTATTGCACAGCGATTA
ATGCAATCAAAGCAAACCATACCTCATTATTACCTTTCTATCGATGTAAATATGGGAGAAGTTTTGTTGGTACGG
AAAGAACTTAATAAGATATTAGAAGGGAGAAGCAAAATTTCTGTCAATGACTTCATCATAAAACGTTCAGCTTTG
GCATGTTTAAAAGTTCCCGAAGCAAATTCTTCTTGGATGGACACAGTTATAAGACAAAATCATGTTGTTGATGTC
AGTGTTGCGGTCAGTACTCCTGCAGGACTCATCACACCTATTGTGTTTAATGCACATATAAAAGGAGTGGAAACC
ATTGCTAATGATGTTGTTTCTTTAGCAACCAAAGCAAGAGAGGGTAAACTACAGCCACAT

FIGURE 2539A

ATAAAAGGGGGCTGAGGAAATACCGGACACGGTCACCCGTTGCCAGCTCTAGCCTTTAAATTCCCGGCTCGGGGA
CCTCCACGCACCGCGGCTAGCGCCGACAACCAGCTAGCGTGCAAGGCGCCGCGGCTCAGCGCGTACCGGCGGGCT
TCGAAACCGCAGTCCTCCGGCGACCCCGAACTCCGCTCCGGAGCCTCAGCCCCCTGGAAAGTGATCCCGGCATCC
GAGAGCCAAGATGCCGGCCCACTTGCTGCAGGACGATATCTCTAGCTCCTATACCACCACCACCACCATTACAGC
GCCTCCCTCCAGGGTCCTGCAGAATGGAGGAGATAAGTTGGAGACGATGCCCCTCTACTTGGAAGACGACATTCG
CCCTGATATAAAAGATGATATATATGACCCCACCTACAAGGATAAGGAAGGCCCAAGCCCCAAGGTTGAATATGT
CTGGAGAAACATCATCCTTATGTCTCTGCTACACTTGGGAGCCCTGTATGGGATCACTTTGATTCCTACCTGCAA
GTTCTACACCTGGCTTTGGGGGGTATTCTACTATTTTGTCAGTGCCCTGGGCATAACAGCAGGAGCTCATCGTCT
GTGGAGCCACCGCTCTTACAAAGCTCGGCTGCCCCTACGGCTCTTTCTGATCATTGCCAACACAATGGCATTCCA
GAATGATGTCTATGAATGGGCTCGTGACCACCGTGCCCACCACAAGTTTTCAGAAACACATGCTGATCCTCATAA
TTCCCGACGTGGCTTTTTCTTCTCTCACGTGGGTTGGCTGCTTGTGCGCAAACACCCAGCTGTCAAAGAGAAGGG
GAGTACGCTAGACTTGTCTGACCTAGAAGCTGAGAAACTGGTGATGTTCCAGAGGAGGTACTACAAACCTGGCTT
GCTGCTGATGTGCTTCATCCTGCCCACGCTTGTGCCCTGGTATTTCTGGGGTGAAACTTTTCAAAACAGTGTGTT
CGTTGCCACTTTCTTGCGATATGCTGTGGTGCTTAATGCCACCTGGCTGGTGAACAGTGCTGCCCACCTCTTCGG
ATATCGTCCTTATGACAAGAACATTAGCCCCCGGGAGAATATCCTGGTTTCACTTGGAGCTGTGGGTGAGGGCTT
CCACAACTACCACCACTCCTTTCCCTATGACTACTCTGCCAGTGAGTACCGCTGGCACATCAACTTCACCACATT
CTTCATTGATTGCATGGCCGCCCTCGGTCTGGCCTATGACCGGAAGAAAGTCTCCAAGGCCGCCATCTTGGCCAG
GATTAAAAGAACCGGAGATGGAAACTACAAGAGTGGCTGAGTTTGGGGTCCCTCAGGTTTCCTTTTTCAAAAACC
AGCCAGGCAGAGGTTTTAATGTCTGTTTATTAACTACTGAATAATGCTACCAGGATGCTAAAGATGATGATGTTA
ACCCATTCCAGTACAGTATTCTTTTAAAATTCAAAAGTATTGAAAGCCAACAACTCTGCCTTTATGATGCTAAGC
TGATATTATTTCTTCTCTTATCCTCTCTCTCTTCTAGGCCCATTGTCCTCCTTTTCACTTTATTGCTATCGCCCT
CCTTTCCCTTATTGCCTCCCAGGCAAGCAGCTGGTCAGTCTTTGCTCAGTGTCCAGCTTCCAAAGCCTAGACAAC
CTTTCTGTAGCCTAAAACGAATGGTCTTTGCTCCAGATAACTCTCTTTCCTTGAGCTGTTGTGAGCTTTGAAGTA
GGTGGCTTGAGCTAGAGATAAAACAGAATCTTCTGGGTAGTCCCCTGTTGATTATCTTCAGCCCAGGCTTTTGCT
AGATGGAATGGAAAAGCAACTTCATTTGACACAAAGCTTCTAAAGCAGGTAAATTGTCGGGGGAGAGAGTTAGCA
TGTATGAATGTAAGGATGAGGGAAGCGAAGCAAGAGGAACCTCTCGCCATGATCAGACATACAGCTGCCTACCTA
ATGAGGACTTCAAGCCCCACCACATAGCATGCTTCCTTTCTCTCCTGGCTCGGGGTAAAAAGTGGCTGCGGTGTT
TGGCAATGCTAATTCAATGCCGCAACATATAGTTGAGGCCGAGGATAAAGAAAAGACATTTTAAGTTTGTAGTAA
AAGTGGTCTCTGCTGGGGAAGGGTTTTCTTTTCTTTTTTTCTTTAATAACAAGGAGATTTCTTAGTTCATATATC
AAGAAGTCTTGAAGTTGGGTGTTTCCAGAATTGGTAAAAACAGCAGCTCATGGAATTTTGAGTATTCCATGAGCT
GCTCATTACAGTTCTTTCCTCTTTCTGCTCTGCCATCTTCAGGATATTGGTTCTTCCCCTCATAGTAATAAGATG
GCTGTGGCATTTCCAAACATCCAAAAAAAGGGAAGGATTTAAGGAGGTGAAGTCGGGTCAAAAATAAAATATATA
TACATATATACATTGCTTAGAACGTTAAACTATTAGAGTATTTCCCTTCCAAAGAGGGATGTTTGGAAAAAACTC
TGAAGGAGAGGAGGAATTAGTTGGGATGCCAATTTCCTCTCCACTGCTGGACATGAGATGGAGAGGCTGAGGGAC
AGGATCTATAGGCAGCTTCTAAGAGCGAACTTCACATAGGAAGGGATCTGAGAACACGTTGCCAGGGGCTTGAGA
AGGTTACTGAGTGAGTTATTGGGAGTCTTAATAAAATAAACTAGATATTAGGTCCATTCATTAATTAGTTCCAGT
TTCTCCTTGAAATGAGTAAAAACTAGAAGGCTTCTCTCCACAGTGTTGTGCCCCTTCACTCATTTTTTTTTGAGG
AGAAGGGGGTCTCTGTTAACATCTAGCCTAAAGTATACAACTGCCTGGGGGGCAGGGTTAGGAATCTCTTCACTA
CCCTGATTCTTGATTCCTGGCTCTACCCTGTCTGTCCCTTTTCTTTGACCAGATCTTTCTCTTCCCTGAACGTTT
TCTTCTTTCCCTGGACAGGCAGCCTCCTTTGTGTGTATTCAGAGGCAGTGATGACTTGCTGTCCAGGCAGCTCCC
TCCTGCACACAGAATGCTCAGGGTCACTGAACCACTGCTTCTCTTTTGAAAGTAGAGCTAGCTGCCACTTTCACG
TGGCCTCCGCAGTGTCTCCACCTACACCCCTGTGCTCCCCTGCCACACTGATGGCTCAAGACAAGGCTGGCAAAC
CCTCCCAGAAACATCTCTGGCCCAGAAAGCCTCTCTCTCCCTCCCTCTCTCATGAGGCACAGCCAAGCCAAGCGC
TCATGTTGAGCCAGTGGGCCAGCCACAGAGCAAAAGAGGGTTTATTTTCAGTCCCCTCTCTCTGGGTCAGAACCA
GAGGGCATGCTGAATGCCCCCTGCTTACTTGGTGAGGGTGCCCCGCCTGAGTCAGTGCTCTCAGCTGGCAGTGCA
ATGCTTGTAGAAGTAGGAGGAAACAGTTCTCACTGGGAAGAAGCAAGGGCAAGAACCCAAGTGCCTCACCTCGAA
AGGAGGCCCTGTTCCCTGGAGTCAGGGTGAACTGCAAAGCTTTGGCTGAGACCTGGGATTTGAGATACCACAAAC
CCTGCTGAACACAGTGTCTGTTCAGCAAACTAACCAGCATTCCCTACAGCCTAGGGCAGACAATAGTATAGAAGT

FIGURE 2539B

CTGGAAAAAAACAAAAACAGAATTTGAGAACCTTGGACCACTCCTGTCCCTGTAGCTCAGTCATCAAAGCAGAAG
TCTGGCTTTGCTCTATTAAGATTGGAAATGTACACTACCAAACACTCAGTCCACTGTTGAGCCCCAGTGCTGGAA
GGGAGGAAGGCCTTTCTTCTGTGTTAATTGCGTAGAGGCTACAGGGGTTAGCCTGGACTAAAGGCATCCTTGTCT
TTTGAGCTATTCACCTCAGTAGAAAAGGATCTAAGGGAAGATCACTGTAGTTTAGTTCTGTTGACCTGTGCACCT
ACCCCTTGGAAATGTCTGCTGGTATTTCTAATTCCACAGGTCATCAGATGCCTGCTTGATAATATATAAACAATA
AAAACAACTTTCACTTCTTCCTATTGTAATCGTGTGCCATGGATCTGATCTGTACCATGACCCTACATAAGGCTG
GATGGCACCTCAGGCTGAGGGCCCCAATGTATGTGTGGCTGTGGGTGTGGGTGGGAGTGTGTCTGCTGAGTAAGG
AACACGATTTTCAAGATTCTAAAGCTCAATTCAAGTGACACATTAATGATAAACTCAGATCTGATCAAGAGTCCG
GATTTCTAACAGTCCCTGCTTTGGGGGGTGTGCTGACAACTTAGCTCAGGTGCCTTACATCTTTTCTAATCACAG
TGTTGCATATGAGCCTGCCCTCACTCCCTCTGCAGAATCCCTTTGCACCTGAGACCCTACTGAAGTGGCTGGTAG
AAAAAGGGGCCTGAGTGGAGGATTATCAGTATCACGATTTGCAGGATTCCCTTCTGGGCTTCATTCTGGAAACTT
TTGTTAGGGCTGCTTTTCTTAAGTGCCCACATTTGATGGAGGGTGGAAATAATTTGAATGTATTTGATTTATAAG
TTTTTTTTTTTTTTTGGGTTAAAAGATGGTTGTAGCATTTAAAATGGAAAATTTTCTCCTTGGTTTGCTAGTATC
TTGGGTGTATTCTCTGTAAGTGTAGCTCAAATAGGTCATCATGAAAGGTTAAAAAAGCGAGGTGGCCATGTTATG
CTGGTGGTTAAGGCCAGGGCCTCTCCAACCACTGTGCCACTGACTTGCTGTGTGACCCTGGGCAAGTCACTTAAC
TATAAGGTGCCTCAGTTTTCCTTCTGTTAAAATGGGGATAATAATACTGACCTACCTCAAAGGGCAGTTTTGAGG
CATGACTAATGCTTTTTAGAAAGCATTTTGGGATCCTTCAGCACAGGAATTCTCAAGACCTGAGTATTTTTTATA
ATAGGAATGTCCACCATGAACTTGATACGTCCGTGTGTCCCAGATGCTGTCATTAGTCTATATGGTTCTCCAAGA
AACTGAATGAATCCATTGGAGAAGCGGTGGATAACTAGCCAGACAAAATTTGAGAATACATAAACAACGCATTGC
CACGGAAACATACAGAGGATGCCTTTTCTGTGATTGGGTGGGATTTTTTCCCTTTTTATGTGGGATATAGTAGTT
ACTTGTGACAAAAATAATTTTGGAATAATTTCTATTAATATCAACTCTGAAGCTAATTGTACTAATCTGAGATTG
TGTTTGTTCATAATAAAAGTGAAGTGAATCTAAAAAAAAAAAAAAA

FIGURE 2540

MPAHLLQDDISSSYTTTTTITAPPSRVLQNGGDKLETMPLYLEDDIRPDIKDDIYDPTYKDKEGPSPKVEYVWRN
IILMSLLHLGALYGITLIPTCKFYTWLWGVFYYFVSALGITAGAHRLWSHRSYKARLPLRLFLIIANTMAFQNDV
YEWARDHRAHHKFSETHADPHNSRRGFFFSHVGWLLVRKHPAVKEKGSTLDLSDLEAEKLVMFQRRYYKPGLLLM
CFILPTLVPWYFWGETFQNSVFVATFLRYAVVLNATWLVNSAAHLFGYRPYDKNISPRENILVSLGAVGEGFHNY
HHSFPYDYSASEYRWHINFTTFFIDCMAALGLAYDRKKVSKAAILARIKRTGDGNYKSG

FIGURE 2541

CTCTGAGCGGCACTTGCACCGGGCAGTGCCCCGCTGCTGACCACCATGCTGATCGCTTCTTCCTCTGTGTCGGGG
GGCTTCTGGGTAGAGTTTGTCCTCTCACTTCTGGAGAAGATGCAGACACAGGAGATCCTGAGGATACTGCGACTG
CCTGAGCTAGGTGACTTGGAACAGTTTTTCCGCAGCCTCTCGGCCACCACCCTCGTGAGTATGGGTGCCCTGGCT
GCCATCCTTGCCTACTGGTTCACTCAGCGGCCAAAGGCCTTGCAGCCGCCATGCAACCTCCTGATGCAGTCAGAA
GAAGTAGAGGACAGTGGCGGGGCACGGCGATCTGTGATTGGGTCTGGCCCTCAGCTACTTACCCACTACTATGAT
GATGCCCGGACCATGTACCAGGTGTTCCGCCGTGGGCTTAGCATCTCAGGGAATGGGCCCTGTCTTGGTTTCAGG
AAGCCTAAGCAGCCTTACCAGTGGCTGTCCTACCAGGAGGTGGCCGACAGGGCTGAATTTCTGGGGTCCGGACTT
CTCCAGCACAATTGTAAAGCATGCACTGATCAGTTTATTGGTGTTTTTGCACAAAATCGGCCAGAGTGGATCATT
GTGGAGCTGGCCTGCTACACATATTCCATGGTGGTGGTCCCGCTCTATGACACCCTGGGCCCTGGGGCTATCCGC
TACATCATCAATACAGCGGACATCAGCACCGTGATTGTGGACAAACCTCAGAAGGCTGTGCTTCTGCTAGAGCAT
GTGGAGAGGAAGGAGACTCCAGGCCTCAAGCTGATCATCCTCATGGACCCATTCGAAGAAGCCCTGAAAGAGAGA
GGGCAGAAGTGCGGGGTGGTCATTAAGTCCATGCAGGCCGTGGAGGACTGTGGCCAAGAGAATCACCAGGCTCCT
GTGCCCCCGCAGCCTGATGACCTCTCCATTGTGTGTTTCACAAGCGGCACGACAGGGAACCCAAAAGGTGCGATG
CTCACCCATGGGAACGTGGTGGCTGATTTCTCAGGCTTTCTGAAAGTGACAGAGAGTCAGTGGGCTCCCACTTGT
GCGGATGTGCACATTTCCTATTTGCCTTTAGCACACATGTTTGAGCGAATGGTGCAGTCTGTCGTCTATTGCCAC
GGAGGGCGTGTTGGCTTCTTCCAGGGAGATATCCGCCTTCTCTCAGATGACATGAAGGCTCTATGCCCCACCATC
TTCCCTGTGGTCCCACGACTGCTGAACCGGATGTACGACAAGATCTTCAGCCAGGCAAACACACCATTAAAGCGC
TGGCTCCTGGAGTTTGCAGCAAAGCGTAAGCAAGCCGAGGTCCGGAGTGGAATCATCAGGAATGATAGTATCTGG
GATGAACTCTTCTTTAATAAGATTCAGGCCAGTCTTGGTGGGTGTGTGCGGATGATTGTTACTGGAGCAGCCCCA
GCATCACCAACAGTTCTGGGATTTCTCCGGGCAGCTCTAGGGTGCCAGGTTTATGAAGGTTATGGCCAAACTGAG
TGCACAGCTGGATGTACCTTCACCACTCCTGGCGACTGGACCTCAGGGCACGTAGGGGCGCCACTTCCCTGCAAT
CATATCAAGCTCGTTGATGTTGAGGAACTGAACTACTGGGCCTGCAAAGGAGAGGGAGAGATATGTGTGAGAGGA
CCAAATGTGTTCAAAGGCTACTTGAAAGATCCAGACAGGACGAAGGAGGCCCTGGACAGCGATGGCTGGCTTCAC
ACTGGAGACATCGGAAAATGGCTGCCGGCAGGAACTCTTAAAATTATTGATCGGAAAAAGCATATATTTAAACTT
GCTCAGGGAGAATATGTTGCACCCGAGAAGATTGAGAACATCTACATCCGGAGCCAACCTGTGGCGCAAATCTAT
GTCCATGGGGACAGCTTAAAGGCCTTTTTGGTAGGCATTGTTGTGCCTGACCCTGAAGTTATGCCCTCCTGGGCC
CAGAAGAGAGGAATTGAAGGAACATATGCAGATCTCTGCACAAATAAGGATCTGAAGAAAGCCATTTTGGAAGAT
ATGGTGAGGTTAGGAAAAGAAAGTGGACTCCATTCTTTTGAGCAGGTTAAAGCCATTCACATCCATTCTGACATG
TTCTCAGTTCAAAATGGCTTGCTGACCCCAACACTAAAAGCTAAGAGACCTGAGCTGAGAGAGTACTTCAAAAAA
CAAATAGAAGAGCTTTACTCAATCCCCATGTGAAGTTCAAGGAAAGTTCTTCTCAGTGTAATGAACTGTCTAGCA
ATATTATAGTTATTCTTGAAAGTAATGAGTCAAAATGACACAGCTGAAAATGAATAAGCATCTGATTTTATGACT
GAGCCTTTTCCTGTCCCAAGAGGTCTTTAACAATATTTTCTCTATCATCAATGAGTATATTTTATTTTTATTATA
AAAATGATATTGTGGTGGACTGCTAAAAATATCACAAATGGCAATGTAAAAATCAAGACATTTTCTCAAGAACTT
GTACCACTAAAAGTAATATATTGTCAATGTTCACAGAACTATTAAACTAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAA

FIGURE 2542

MQTQEILRILRLPELGDLEQFFRSLSATTLVSMGALAAILAYWFTQRPKALQPPCNLLMQSEEVEDSGGARRSVI
GSGPQLLTHYYDDARTMYQVFRRGLSISGNGPCLGFRKPKQPYQWLSYQEVADRAEFLGSGLLQHNCKACTDQFI
GVFAQNRPEWIIVELACYTYSMVVVPLYDTLGPGAIRYIINTADISTVIVDKPQKAVLLLEHVERKETPGLKLII
LMDPFEEALKERGQKCGVVIKSMQAVEDCGQENHQAPVPPQPDDLSIVCFTSGTTGNPKGAMLTHGNVVADFSGF
LKVTESQWAPTCADVHISYLPLAHMFERMVQSVVYCHGGRVGFFQGDIRLLSDDMKALCPTIFPVVPRLLNRMYD
KIFSQANTPLKRWLLEFAAKRKQAEVRSGIIRNDSIWDELFFNKIQASLGGCVRMIVTGAAPASPTVLGFLRAAL
GCQVYEGYGQTECTAGCTFTTPGDWTSGHVGAPLPCNHIKLVDVEELNYWACKGEGEICVRGPNVFKGYLKDPDR
TKEALDSDGWLHTGDIGKWLPAGTLKIIDRKKHIFKLAQGEYVAPEKIENIYIRSQPVAQIYVHGDSLKAFLVGI
VVPDPEVMPSWAQKRGIEGTYADLCTNKDLKKAILEDMVRLGKESGLHSFEQVKAIHIHSDMFSVQNGLLTPTLK
AKRPELREYFKKQIEELYSIPM

FIGURE 2543

GGACAGGTGCCCCGGGAGCTTCCCGCTCGCGAAGACCCAGACGGCTGCAGGAGCCCGGGCAGCCTCGGGGTCAGC
GGCACCATGAACGTCTCGGGCTGCCCAGGGGCCGGGAACGCGAGCCAGGCGGGCGGCGGGGGAGGCTGGCACCCC
GAGGCGGTCATCGTGCCCCTGCTCTTCGCGCTCATCTTCCTCGTGGGCACCGTGGGCAACACGCTGGTGCTGGCG
GTGCTGCTGCGCGGCGGCCAGGCGGTCAGCACTACCAACCTGTTCATCCTTAACCTGGGCGTGGCCGACCTGTGT
TTCATCCTGTGCTGCGTGCCCTTCCAGGCCACCATCTACACCCTGGACGGCTGGGTGTTCGGCTCGCTGCTGTGC
AAGGCGGTGCACTTCCTCATCTTCCTCACCATGCACGCCAGCAGCTTCACGCTGGCCGCCGTCTCCCTGGACAGG
TATCTGGCCATCCGCTACCCGCTGCACTCCCGCGAGCTGCGCACGCCTCGAAACGCGCTGGCAGCCATCGGGCTC
ATCTGGGGGCTGTCGCTGCTCTTCTCCGGGCCCTACCTGAGCTACTACCGCCAGTCGCAGCTGGCCAACCTGACC
GTGTGCCATCCCGCGTGGAGCGCCCCTCGCCGCCGCGCCATGGACATCTGCACCTTCGTCTTCAGCTACCTGCTT
CCTGTGCTGGTTCTCGGCCTGACCTACGCGCGCACCTTGCGCTACCTCTGGCGCGCCGTCGACCCGGTGGCCGCG
GGCTCGGGTGCCCGGCGCGCCAAGCGCAAGGTGACACGCATGATCCTCATCGTGGCCGCGCTCTTCTGCCTCTGC
TGGATGCCCCACCACGCGCTCATCCTCTGCGTGTGGTTCGGCCAGTTCCCGCTCACGCGCGCCACTTATGCGCTT
CGCATCCTCTCGCACCTGGTCTCCTACGCCAACTCCTGCGTCAACCCCATCGTTTACGCGCTGGTCTCCAAGCAC
TTCCGCAAAGGCTTCCGCACGATCTGCGCGGGCCTGCTGGGCCGTGCCCCAGGCCGAGCCTCGGGCCGTGTGTGC
GCTGCCGCGCGGGGCACCCACAGTGGCAGCGTGTTGGAGCGCGAGTCCAGCGACCTGTTGCACATGAGCGAGGCG
GCGGGGGCCCTTCGTCCCTGCCCCGGCGCTTCCCAGCCATGCATCCTCGAGCCCTGTCCTGGCCCGTCCTGGCAG
GGCCCAAAGGCAGGCGACAGCATCCTGACGGTTGATGTGGCCTGAAAGCACTTAGCGGGCGCGCTGGGATGTCAC
AGAGTTGGAGTCATTGTTGGGGGACCGTGGGCCG

FIGURE 2544

MNVSGCPGAGNASQAGGGGGWHPEAVIVPLLFALIFLVGTVGNTLVLAVLLRGGQAVSTTNLFILNLGVADLCFI
LCCVPFQATIYTLDGWVFGSLLCKAVHFLIFLTMHASSFTLAAVSLDRYLAIRYPLHSRELRTPRNALAAIGLIW
GLSLLFSGPYLSYYRQSQLANLTVCHPAWSAPRRRAMDICTFVFSYLLPVLVLGLTYARTLRYLWRAVDPVAAGS
GARRAKRKVTRMILIVAALFCLCWMPHHALILCVWFGQFPLTRATYALRILSHLVSYANSCVNPIVYALVSKHFR
KGFRTICAGLLGRAPGRASGRVCAAARGTHSGSVLERESSDLLHMSEAAGALRPCPGASQPCILEPCPGPSWQGP
KAGDSILTVDVA

FIGURE 2545

GAGAGACTGGATGGACCCACAAGGGTGACAGCCCAGGCGGACCGATCTTCCCATCCCACATCCTCCGGCGCGATG
CCAAAAAGAGGCTGACGGCAACTGGGCCTTCTGCAGAGAAAGACCTCCGCTTCACTGCCCCGGCTGGTCCCAAGG
GTCAGGAAG**ATG**GATTCATACCTGCTGATGTGGGGACTGCTCACGTTCATCATGGTGCCTGGCTGCCAGGCAGAG
CTCTGTGACGATGACCCGCCAGAGATCCCACACGCCACATTCAAAGCCATGGCCTACAAGGAAGGAACCATGTTG
AACTGTGAATGCAAGAGAGGTTTCCGCAGAATAAAAAGCGGGTCACTCTATATGCTCTGTACAGGAAACTCTAGC
CACTCGTCCTGGGACAACCAATGTCAATGCACAAGCTCTGCCACTCGGAACACAACGAAACAAGTGACACCTCAA
CCTGAAGAACAGAAAGAAAGGAAAACCACAGAAATGCAAAGTCCAATGCAGCCAGTGGACCAAGCGAGCCTTCCA
GGTCACTGCAGGGAACCTCCACCATGGGAAAATGAAGCCACAGAGAGAATTTATCATTTCGTGGTGGGGCAGATG
GTTTATTATCAGTGCGTCCAGGGATACAGGGCTCTACACAGAGGTCCTGCTGAGAGCGTCTGCAAAATGACCCAC
GGGAAGACAAGGTGGACCCAGCCCCAGCTCATATGCACAGGTGAAATGGAGACCAGTCAGTTTCCAGGTGAAGAG
AAGCCTCAGGCAAGCCCCGAAGGCCGTCCTGAGAGTGAGACTTCCTGCCTCGTCACAACAACAGATTTTCAAATA
CAGACAGAAATGGCTGCAACCATGGAGACGTCCATATTTACAACAGAGTACCAGGTAGCAGTGGCCGGCTGTGTT
TTCCTGCTGATCAGCGTCCTCCTCCTGAGTGGGCTCACCTGGCAGCGGAGACAGAGGAAGAGTAGAAGAACAATC
TAGAAAACCAAAAGAACAAGAATTTCTTGGTAAGAAGCCGGGAACAGACAACAGAAGTCATGAAGCCCAAGTGAA
ATCAAAGGTGCTAAATGGTCGCCCAGGAGACATCCGTTGTGCTTGCCTGCGTTTTGGAAGCTCTGAAGTCACATC
ACAGGACACGGGGCAGTGGCAACCTTGTCTCTATGCCAGCTCAGTCCCATCAGAGAGCGAGCGCTACCCACTTCT
AAATAGCAATTTCGCCGTTGAAGAGGAAGGGCAAAACCACTAGAACTCTCCATCTTATTTTCATGTATATGTGTT
CATTAAAGCATGAATGGTATGGAACTCTCTCCACCCTATATGTAGTATAAAGAAAAGTAGGTTTACATTCATCTC
ATTCCAACTTCCCAGTTCAGGAGTCCCAAGGAAAGCCCCAGCACTAACGTAAATACACAACACACACACTCTACC
CTATACAACTGGACATTGTCTGCGTGGTTCCTTTCTCAGCCGCTTCTGACTGCTGATTCTCCCGTTCACGTTGCC
TAATAAACATCCTTCAAGAACTCTGGGCTGCTACCCAGAAATCATTTTACCCTTGGCTCAATCCTCTAAGCTAAC
CCCCTTCTACTGAGCCTTCAGTCTTGAATTTCTAAAAAACAGAGGCCATGGCAGAATAATCTTTGGGTAACTTCA
AAACGGGGCAGCCAAACCCATGAGGCAATGTCAGGAACAGAAGGATGAATGAGGTCCCAGGCAGAGAATCATACT
TAGCAAAGTTTTACCTGTGCGTTACTAATTGGCCTCTTTAAGAGTTAGTTTCTTTGGGATTGCTATGAATGATAC
CCTGAATTTGGCCTGCACTAATTTGATGTTTACAGGTGGACACACAAGGTGCAAATCAATGCGTACGTTTCCTGA
GAAGTGTCTAAAAACACCAAAAAGGGATCCGTACATTCAATGTTTATGCAAGGAAGGAAAGAAAGAAGGAAGTGA
AGAGGGAGAAGGGATGGAGGTCACACTGGTAGAACGTAACCACGGAAAAGAGCGCATCAGGCCTGGCACGGTGGC
TCAGGCCTATAACCCCAGCTCCCTAGGAGACCAAGGCGGGAGCATCTCTTGAGGCCAGGAGTTTGAGACCAGCCT
GGGCAGCATAGCAAGACACATCCCTACAAAAAATTAGAAATTGGCTGGATGTGGTGGCATACGCCTGTAGTCCTA
GCCACTCAGGAGGCTGAGGCAGGAGGATTGCTTGAGCCCAGGAGTTCGAGGCTGCAGTCAGTCATGATGGCACCA
CTGCACTCCAGCCTGGGCAACAGAGCAAGATCCTGTCTTTAAGGAAAAAAAGACAAGG

FIGURE 2546

MDSYLLMWGLLTFIMVPGCQAELCDDDPPEIPHATFKAMAYKEGTMLNCECKRGFRRIKSGSLYMLCTGNSSHSS
WDNQCQCTSSATRNTTKQVTPQPEEQKERKTTEMQSPMQPVDQASLPGHCREPPPWENEATERIYHFVVGQMVYY
QCVQGYRALHRGPAESVCKMTHGKTRWTQPQLICTGEMETSQFPGEEKPQASPEGRPESETSCLVTTTDFQIQTE
MAATMETSIFTTEYQVAVAGCVFLLISVLLLSGLTWQRRQRKSRRTI

FIGURE 2547

GGGGCGGTCGCAGCTGAAGCAGGCCTACCCTCTGAAGAGGTCCAAGCAACGGAAGTACTACTACGAAGCTGCCTT
TCTGGCCATCCTTGAGAAAAATAGACAGATGGCCAAGGAGAGGGGCCTAATAAGCCCCAGTGATTTTGCCCAGCT
GCAAAAATACATGGAATACTCCACCAAAAAGGTCAGTGATGTCCTAAAGCTCTTCGAGGATGGCGAGATGGCTAA
ATATGTCCAAGGAGATGCCATTGGGTACGAGGGATTCCAGCAATTCCTGAAAATCTATCTCGAAGTGGATAATGT
TCCCAGACACCTAAGCCTGGCACTGTTTCAATCCTTTGAGACTGGTCACTGCTTAAATGAGACAAATGTGACAAA
AGATGTGGTGTGTCTCAATGATGTTTCCTGCTACTTTTCCCTTCTGGAGGGTGGTCGGCCAGAAGACAAGTTAGA
ATTCACCTTCAAGCTGTACGACACGGACAGAAATGGGATCCTGGACAGCTCAGAAGTGGACAAAATTATCCTACA
GATGATGCGAGTGGCTGAATACCTGGATTGGGATGTGTCTGAGCTGAGGCCGATTCTTCAGGAGATGATGAAAGA
GATTGACTATGATGGCAGTGGCTCTGTCTCTCAAGCTGAGTGGGTCCGGGCTGGGGCCACCACCGTGCCACTGCT
AGTGCTGCTGGGTCTGGAGATGACTCTGAAGGACGACGGACAGCACATGTGGAGGCCCAAGAGGTTCCCCAGACC
AGTCTACTGCAATCTGTGCGAGTCAAGCATTGGTCTTGGCAAACAGGGACTGAGCTGTAACCTCTGTAAGTACAC
TGTTCACGACCAGTGTGCCATGAAAGCCCTGCCTTGTGAAGTCAGCACCTATGCCAAGTCTCGGAAGGACATTGG
TGTCCAATCACATGTGTGGGTGCGAGGAGGCTGTGAGTCCGGGCGCTGCGACCGCTGTCAGAAAAAGATCCGGAT
CTACCACAGTCTGACCGGGCTGCATTGTGTATGGTGCCACCTAGAGATCCACGATGACTGCCTGCAAGCGGTGGG
CCATGAGTGTGACTGTGGGCTGCTCCGGGATCACATCCTGCCTCCATCTTCCATCTATCCCAGTGTCCTGGCCTC
TGGACCGGATCGTAAAAATAGCAAAACAAGCCAGAAGACCATGGATGATTTAAATTTGAGCACCTCTGAGGCTCT
GCGGATTGACCCTGTTCCTAACACCCACCCACTTCTCGTCTTTGTCAATCCTAAGAGTGGCGGGAAGCAGGGGCA
GAGGGTGCTCTGGAAGTTCCAGTATATATTAAACCCTCGACAGGTGTTCAACCTCCTAAAGGATGGTCCTGAGAT
AGGGCTCCGATTATTCAAGGATGTTCCTGATAGCCGGATTTTGGTGTGTGGTGGAGACGGCACAGTAGGCTGGAT
TCTAGAGACCATTGACAAAGCTAACTTGCCAGTTTTGCCTCCTGTTGCTGTGTTGCCCCTGGGTACTGGAAATGA
TCTGGCTCGATGCCTAAGATGGGGAGGAGGTTATGAAGGACAGAATCTGGCAAAGATCCTCAAGGATTTAGAGAT
GAGTAAAGTGGTACATATGGATCGATGGTCTGTGGAGGTGATACCTCAACAAACTGAAGAAAAAAGTGACCCAGT
CCCCTTTCAAATCATCAATAACTACTTCTCTATTGGCGTGGATGCCTCTATTGCTCATCGATTCCACATCATGCG
AGAGAAATATCCGGAGAAGTTCAACAGCAGAATGAAGAACAAGCTATGGTACTTCGAATTTGCCACATCTGAATC
CATCTTCTCAACATGCAAAAAGCTGGAGGAGTCTTTGACAGTTGAGATCTGTGGGAAACCGCTGGATCTGAGCAA
CCTGTCCCTAGAAGGCATCGCAGTGCTAAACATCCCTAGCATGCATGGTGGCTCCAACCTCTGGGGTGATACCAG
GAGACCCCATGGGGATATCTATGGGATCAACCAGGCCTTAGGTGCTACAGCTAAAGTCATCACCGACCCTGATAT
CCTGAAAACCTGTGTACCAGACCTAAGTGACAAGAGACTGGAAGTGGTTGGGCTGGAGGGTGCAATTGAGATGGG
CCAAATCTATACCAAGCTCAAGAATGCTGGACGTCGGCTGGCCAAGTGCTCTGAGATCACCTTCCACACCACAAA
AACCCTTCCCATGCAAATTGACGTAGAACCCTGGATGCAGACGCCCTGTACAATCAAGATCACCCACAAGAACCA
GATGCCCATGCTCATGGGCCCACCCCCCCGCTCCACCAATTTCTTTGGCTTCTTGAGCTAAGGGGGACACCCTTG
GCCTCCAAGCCAGCCTTGAACCCACCTCCCTGTCCCTGGACTCTACTCCCGAGGCTCTGTACATTGCTGCCACAT
ACTCCTGCCAGCTTGGGGGAGTGTTCCTTCACCCTCACAGTATTTATTATCCTGCACCACCTCACTGTTCCCCAT
GCGCACACACATACACACACCCCAAAACACATACATTGAAAGTGCCTCATCTGAATAAAATGACTTGTGTTTCCC
TTTGGGATCTGCTG

FIGURE 2548

MAKERGLISPSDFAQLQKYMEYSTKKVSDVLKLFEDGEMAKYVQGDAIGYEGFQQFLKIYLEVDNVPRHLSLALF
QSFETGHCLNETNVTKDVVCLNDVSCYFSLLEGGRPEDKLEFTFKLYDTDRNGILDSSEVDKIILQMMRVAEYLD
WDVSELRPILQEMMKEIDYDGSGSVSQAEWVRAGATTVPLLVLLGLEMTLKDDGQHMWRPKRFPRPVYCNLCESS
IGLGKQGLSCNLCKYTVHDQCAMKALPCEVSTYAKSRKDIGVQSHVWVRGGCESGRCDRCQKKIRIYHSLTGLHC
VWCHLEIHDDCLQAVGHECDCGLLRDHILPPSSIYPSVLASGPDRKNSKTSQKTMDDLNLSTSEALRIDPVPNTH
PLLVFVNPKSGGKQGQRVLWKFQYILNPRQVFNLLKDGPEIGLRLFKDVPDSRILVCGGDGTVGWILETIDKANL
PVLPPVAVLPLGTGNDLARCLRWGGGYEGQNLAKILKDLEMSKVVHMDRWSVEVIPQQTEEKSDPVPFQIINNYF
SIGVDASIAHRFHIMREKYPEKFNSRMKNKLWYFEFATSESIFSTCKKLEESLTVEICGKPLDLSNLSLEGIAVL
NIPSMHGGSNLWGDTRRPHGDIYGINQALGATAKVITDPDILKTCVPDLSDKRLEVVGLEGAIEMGQIYTKLKNA
GRRLAKCSEITFHTTKTLPMQIDVEPWMQTPCTIKITHKNQMPMLMGPPPRSTNFFGFLS

FIGURE 2549

TGGGTGTTGGAGGCTTTAAGGTAGCTTTAAATTCGTGTTGTCCTGGGAGCTCGCCCTTTTCGGCTGGAGTCGGGC
TTTACGGCGCCGGATGGCTCTGGACGTGAAGTCTCGGGCAAAGCGTTATGAGAAGCTGGACTTCCTTGGGGAGGG
ACAGTTTGCCACCGTTTACAAGGCCAGAGATAAGAATACCAACCAAATTGTCGCCATTAAGAAAATCAAACTTGG
ACATAGATCAGAAGCTAAAGATGGTATAAATAGAACCGCCTTAAGAGAGATAAAATTATTACAGGAGCTAAGTCA
TCCAAATATAATTGGTCTCCTTGATGCTTTTGGACATAAATCTAATATTAGCCTTGTCTTTGATTTTATGGAAAC
TGATCTAGAGGTTATAATAAAGGATAATAGTCTTGTGCTGACACCATCACACATCAAAGCCTACATGTTGATGAC
TCTTCAAGGATTAGAATATTTACATCAACATTGGATCCTACATAGGGATCTGAAACCAAACAACTTGTTGCTAGA
TGAAAATGGAGTTCTAAAACTGGCAGATTTTGGCCTGGCCAAATCTTTTGGGAGCCCCAATAGAGCTTATACACA
TCAGGTTGTAACCAGGTGGTATCGGGCCCCCGAGTTACTATTTGGAGCTAGGATGTATGGTGTAGGTGTGGACAT
GTGGGCTGTTGGCTGTATATTAGCAGAGTTACTTCTAAGGGTTCCTTTTTTGCCAGGAGATTCAGACCTTGATCA
GCTAACAAGAATATTTGAAACTTTGGGCACACCAACTGAGGAACAGTGGCCGGACATGTGTAGTCTTCCAGATTA
TGTGACATTTAAGAGTTTCCCTGGAATACCTTTGCATCACATCTTCAGTGCAGCAGGAGACGACTTACTAGATCT
CATACAAGGCTTATTCTTATTTAATCCATGTGCTCGAATTACGGCCACACAGGCACTGAAAATGAAGTATTTCAG
TAATCGGCCAGGGCCAACACCTGGATGTCAGCTGCCAAGACCAAACTGTCCAGTGGAAACCTTAAAGGAGCAATC
AAATCCAGCTTTGGCAATAAAAAGGAAAAGAACAGAGGCCTTAGAACAAGGAGGATTGCCCAAGAAACTAATTTT
TTAAAGAGAACACTGGACAACATTTTACTACTGAGGGAAATAGCCAAAAAGGCAAATAATGGAAAAATAGTAAAC
ATTAAGTAAATGCTGTAGAAGTGAGTTTGTAAATATTCTACACATGTAAAATATGTAAAACTATGGGTTATTTTT
ATTAAATGTATTTTAAAATAAAAATTTAATTCTGGTTTTTCTGATTAGAGTCCCAAAGTGAGAAAAGTTCAATAC
TCTTGAAATGTAGAATTGAAAATGCATTAGGGAAAACTTAATAAAAATTATTACCAGTTATTTGGAAAAAAAAAA
AA

FIGURE 2550

MALDVKSRAKRYEKLDFLGEGQFATVYKARDKNTNQIVAIKKIKLGHRSEAKDGINRTALREIKLLQELSHPNII
GLLDAFGHKSNISLVFDFMETDLEVIIKDNSLVLTPSHIKAYMLMTLQGLEYLHQHWILHRDLKPNNLLLDENGV
LKLADFGLAKSFGSPNRAYTHQVVTRWYRAPELLFGARMYGVGVDMWAVGCILAELLLRVPFLPGDSDLDQLTRI
FETLGTPTEEQWPDMCSLPDYVTFKSFPGIPLHHIFSAAGDDLLDLIQGLFLFNPCARITATQALKMKYFSNRPG
PTPGCQLPRPNCPVETLKEQSNPALAIKRKRTEALEQGGLPKKLIF

FIGURE 2551A

GTTGCTGTCGGAGAGAGAAAGCCGCACCCGAGAGGAGGTGTGGGTGTTCCGCTTCCATCCTAACGGAACGAGCTC
CCTCTTCGCGGACATGGGATTACCCAGCGGCTGCTAACCCCTCTCCTCGCCCTGCTCCCCCAAACCGGCGTGGCT
CCCCGGGCACCAAGGAGCTGACTACAGAGGAGCAGGATTTGCACCCCTCGCTGGGCTTGCTTTGGCAACAGAGTG
CCTGACCCAGGTCAGGATTTTCAAGAAAGACATGTCTGACAAAATGTCTAGCTTCCTACATATTGGAGACATTTG
TTCTCTGTACGCGGAGGGATCGACAAATGGATTTATTAGCACCTTGGGCCTGGTTGATGATCGTTGTGTTGTACA
GCCAGAAACCGGGGACCTTAACAATCCACCTAAGAAATTCAGAGACTGCCTCTTTAAGCTATGTCCCATGAACCG
CTACTCTGCCCAAAAGCAGTTCTGGAAAGCCGCTAAGCCTGGGGCCAACAGCACCACAGACGCAGTGCTACTCAA
CAAACTGCACCACGCTGCAGACTTGGAAAAGAAGCAGAATGAGACAGAAAACAGGAAATTGCTGGGGACCGTAAT
CCAGTATGGCAATGTGATCCAGCTCCTGCATTTGAAAAGTAATAAATACCTAACAGTGAATAAGAGGCTTCCTGC
TCTGTTGGAGAAGAATGCCATGAGAGTCACATTGGACGAGGCTGGAAATGAAGGGTCCTGGTTTTATATTCAGCC
ATTCTACAAGCTGCGATCCATTGGAGACAGCGTGGTCATAGGTGACAAGGTGGTTCTGAACCCCGTCAATGCTGG
TCAGCCCCTACATGCTAGCAGCCATCAACTGGTAGATAACCCAGGCTGCAATGAGGTCAATTCCGTCAACTGCAA
TACAAGCTGGAAAATAGTCCTTTTCATGAAATGGAGTGATAACAAAGACGACATATTAAAGGGGGGTGACGTGGT
GAGGCTGTTTCATGCTGAGCAGGAGAAGTTTCTCACCTGTGACGAACACAGGAAGAAGCAGCACGTCTTCCTGAG
AACCACGGGCCGGCAGTCGGCCACATCTGCCACCAGTTCAAAAGCCCTGTGGGAGGTGGAGGTGGTCCAGCATGA
CCCATGTCGGGGCGGAGCAGGGTATTGGAACAGCCTTTTCCGTTTCAAGCATCTGGCCACGGGGCATTACTTGGC
AGCAGAGGTGGACCCTGATCAGGACGCCTCTCGAAGTAGGTTGCGGAATGCCCAAGAAAAGATGGTATACTCCCT
GGTCTCTGTGCCTGAAGGCAATGACATCTCCTCCATTTTCGAGCTAGATCCCACCACTCTGCGTGGAGGTGACAG
CCTTGTCCCAAGGAACTCTTATGTTCGGCTCAGACACCTATGTACTAATACCTGGGTTCACAGCACAAATATTCC
TATTGACAAGGAAGAAGAAAAGCCCGTGATGCTGAAAATTGGCACCTCTCCTGTGAAGGAGGATAAGGAAGCATT
TGCCATAGTTCCGGTTTCTCCTGCTGAAGTTCGGGACCTGGACTTTGCCAATGATGCCAGCAAGGTGCTGGGCTC
CATTGCTGGGAAGCTAGAGAAGGGCACCATCACCCAGAATGAAAGGAGGTCTGTAACCAAGCTGCTAGAAGATTT
GGTTTACTTCGTCACTGGTGGAACTAATTCTGGTCAAGATGTTCTCGAAGTTGTCTTCTCCAAGCCCAACAGAGA
ACGGCAGAAACTGATGAGAGAACAGAATATTCTCAAGCAGATCTTCAAGTTGTTACAAGCCCCATTCACAGACTG
CGGTGATGGCCCAATGCTTCGGCTGGAAGAGCTCGGGGACCAGCGGCACGCTCCTTTCAGACACATCTGCCGGCT
CTGCTACAGGGTGCTGAGACACTCGCAGCAAGACTACAGGAAGAACCAGGAGTATATAGCCAAGCAGTTTGGCTT
CATGCAGAAGCAGATTGGCTATGATGTGTTGGCTGAAGACACTATCACTGCCCTGCTCCACAATAATCGGAAACT
CCTGGAAAAACACATTACCGCGGCAGAGATTGACACATTTGTCAGCCTGGTGCGAAAGAACAGGGAGCCCAGATT
CTTAGATTACCTCTCCGACCTCTGTGTCTCCATGAACAAATCAATTCCAGTGACCCAGGAACTGATATGTAAAGC
TGTGCTGAACCCCACCAACGCTGACATCCTGATTGAGACCAAATTGGTTCTTTCTCGTTTTGAATTTGAAGGTGT
CTCTTCCACTGGAGAGAATGCTCTGGAGGCAGGAGAAGACGAGGAAGAGGTGTGGCTGTTTTGGAGGGACAGCAA
CAAAGAGATTCGCAGCAAGAGTGTGAGGGAATTGGCTCAGGATGCTAAAGAAGGGCAGAAGGAGGACCGAGACGT
TCTCAGCTACTACAGATATCAGCTGAACCTCTTTGCGAGGATGTGTCTGGACCGCCAATACCTGGCCATCAACGA
AATCTCAGGCCAGCTGGATGTCGATCTCATTCTCCGCTGCATGTCTGACGAGAACCTGCCCTATGACCTCAGGGC
GTCCTTCTGCCGCCTCATGCTTCACATGCATGTGGACCGAGATCCCCAGGAACAAGTCACCCCCGTGAAATATGC
CCGCCTCTGGTCGGAGATTCCCTCGGAGATCGCCATTGACGACTATGATAGTAGTGGAGCTTCCAAAGATGAAAT
TAAGGAGAGATTTGCTCAGACCATGGAGTTTGTGGAGGAGTATTTAAGAGATGTGGTTTGTCAGAGGTTCCCTTT
CTCTGATAAAGAGAAGAATAAGCTTACGTTTGAGGTTGTAAATTTAGCTAGGAATCTCATATACTTTGGTTTCTA
CAACTTCTCTGACCTTCTCCGATTAACTAAGATCCTTCTGGCCATATTGGACTGTGTACATGTGACAACAATCTT
CCCCATTAGCAAGATGGCGAAAGGAGAAGAGAATAAAGGCAGTAACGTGATGAGATCTATTCATGGCGTGGGAGA
GCTGATGACCCAGGTGGTGCTCCGGGGAGGAGGCTTTTTGCCCATGACTCCCATGGCTGCTGCCCCTGAAGGCAA
TGTGAAGCAGGCAGAGCCTGAGAAGGAGGACATCATGGTCATGGACACCAAGCTGAAGATCATTGAGATACTCCA
GTTTATTTTGAATGTGAGGTTGGATTATAGGATCTCCTGCCTCCTGTGTATATTTAAGCGAGAGTTTGATGAAAG
CAATTCCCAGACTTCAGAAACATCCTCCGGAAACAGCAGCCAAGAAGGGCCAAGTAATGTACCAGGTGCTCTTGA
CTTTGAACACATTGAAGAACAAGCAGAAGGCATCTTTGGAGGAAGTGAGGAGAACACCCCACTGGACTTGGATGA
CCACGGCGGCAGAACCTTTCTCCGTGTCCTGCTCCACTTGACGATGCATGACTACCCACCCCTGGTGTCAGGGGC
CCTGCAGCTCCTCTTCCGGCACTTCAGCCAGAGGCAGGAGGTGCTCCAGGCCTTCAAACAGGTTCAACTGCTGGT
TACCAGCCAAGATGTGGACAACTACAAACAGATCAAACAAGACTTGGATCAACTGAGGTCCATCGTGGAAAAGTC

FIGURE 2551B

AGAGCTTTGGGTGTACAAAGGGCAGGGCCCCGATGAGACTATGGATGGTGCATCTGGAGAAAATGAACATAAGAA
AACGGAGGAGGGAAATAACAAGCCACAAAAGCATGAAAGCACCAGCAGCTACAACTACAGAGTGGTCAAAGAGAT
TTTGATTCGGCTTAGCAAACTCTGTGTTCAAGAGAGTGCCTCAGTGAGAAAGAGCAGGAAGCAGCAACAGCGTCT
GCTCCGGAACATGGGCGCGCACGCCGTGGTGCTGGAGCTGCTGCAGATTCCCTATGAGAAGGCCGAAGATACCAA
GATGCAAGAGATAATGAGGTTGGCTCATGAATTTTTGCAGAATTTCTGCGCAGGCAACCAGCAGAATCAAGCTTT
GCTACATAAACACATAAACCTGTTTCTCAACCCAGGGATCCTGGAGGCAGTAACCATGCAGCACATCTTCATGAA
CAATTTCCAGCTTTGCAGTGAGATCAACGAGAGAGTTGTTCAGCACTTCGTTCACTGCATAGAGACTCACGGTCG
GAATGTCCAGTATATAAAGTTCTTACAGACAATTGTCAAGGCAGAAGGGAAATTTATTAAAAAATGCCAAGACAT
GGTTATGGCCGAGCTGGTCAATTCGGGAGAGGATGTCCTCGTGTTCTACAACGACAGAGCCTCTTTCCAGACTCT
GATCCAGATGATGCGGTCAGAACGGGATCGGATGGATGAGAACAGCCCTCTCATGTACCACATCCACTTGGTCGA
GCTCCTGGCTGTGTGCACGGAGGGTAAGAATGTCTACACAGAGATCAAGTGCAACTCCCTGCTCCCGCTGGATGA
CATCGTTCGCGTGGTGACCCACGAGGACTGCATCCCTGAGGTTAAAATTGCATACATTAACTTCCTGAATCACTG
CTATGTGGATACAGAGGTGGAAATGAAGGAGATTTATACCAGCAATCACATGTGGAAATTGTTTGAGAATTTCCT
TGTAGACATCTGCAGGGCCTGTAACAACACTAGTGACAGGAAACATGCAGACTCGATTTTGGAGAAGTATGTCAC
CGAAATCGTCATGAGTATTGTTACTACTTTCTTCAGCTCTCCCTTCTCAGACCAGAGTACGACTTTGCAGACTCG
CCAGCCTGTCTTTGTGCAACTGCTGCAAGGCGTGTTCAGGGTTTACCACTGCAACTGGTTAATGCCAAGCCAAAA
AGCCTCCGTGGAGAGCTGTATTCGGGTGCTGTCTGATGTAGCCAAGAGCCGGGCCATTGCCATTCCCGTGGACCT
GGACAGCCAAGTCAACAACCTCTTTCTCAAGTCCCACAGCATTGTGCAGAAAACAGCCATGAACTGGCGGCTCTC
AGCCCGCAATGCCGCACGCAGGGACTCTGTTCTGGCAGCTTCCAGAGACTACCGGAATATCATTGAGAGATTGCA
GGACATCGTCTCCGCGCTGGAGGACCGTCTCAGGCCCCTGGTGCAGGCAGAGTTATCTGTGCTCGTGGATGTTCT
CCACAGACCCGAGCTGCTTTTCCCAGAGAACACAGACGCCAGAAGGAAATGTGAAAGTGGCGGTTTCATTTGCAA
GTTAATAAAGCATACAAAACAGCTGCTAGAAGAAAATGAAGAGAAGCTCTGCATTAAGGTCCTACAGACCCTGAG
GGAAATGATGACCAAAGATAGAGGCTATGGAGAAAAGGGTGAGGCGCTCAGGCAAGTTCTGGTCAACCGTTACTA
TGGAAACGTCAGACCTTCGGGACGAAGAGAGAGCCTTACCAGCTTTGGCAATGGCCCACTGTCAGCAGGAGGACC
CGGCAAGCCCGGGGGAGGAGGGGGAGGTTCCGGATCCAGCTCTATGAGCAGGGGTGAGATGAGTCTGGCCGAGGT
TCAGTGTCACCTTGACAAGGAGGGGGCTTCCAATCTAGTTATCGACCTCATCATGAACGCATCCAGTGACCGAGT
GTTCCATGAAAGCATTCTCCTGGCCATTGCCCTTCTGGAAGGAGGCAACACCACCATCCAGCACTCCTTTTTCTG
TCGCTTGACAGAAGATAAGAAGTCAGAGAAATTCTTTAAGGTGTTTTATGACCGGATGAAGGTGGCCCAGCAAGA
AATCAAAGCAACAGTGACAGTGAACACCAGTGACTTGGGAAATAAAAAGAAAGACGATGAGGTAGACAGGGATGC
CCCATCACGGAAAAAAGCTAAAGAGCCCACAACACAGATAACAGAAGAGGTCCGGGATCAGCTCCTGGAGGCCTC
CGCTGCCACCAGGAAAGCCTTCACCACTTTCAGGAGGGAGGCTGATCCCGACGACCACTACCAGCCTGGAGAGGG
CACCCAGGCCACTGCCGACAAGGCCAAGGACGACCTGGAGATGAGCGCGGTCATCACCATCATGCAGCCCATCCT
CCGCTTCCTTCAGCTCCTGTGTGAAAACCACAACCGAGACCTGCAGAACTTCCTCCGTTGCCAAAATAACAAGAC
CAACTACAATTTGGTATGTGAGACCCTGCAGTTTCTGGACTGTATTTGTGGAAGCACAACTGGAGGCCTTGGTCT
TCTGGGCTTGTATATAAATGAAAAGAACGTAGCGCTTATCAACCAAACCCTGGAAAGTCTGACCGAATACTGTCA
AGGACCTTGCCATGAGAACCAGAACTGCATAGCCACCCATGAATCCAATGGCATTGACATCATCACAGCCCTGAT
CCTCAATGATATCAATCCTTTGGGAAAGAAGAGGATGGACCTTGTGTTAGAACTGAAGAACAATGCCTCGAAGTT
GCTCCTGGCCATCATGGAAAGCAGGCACGACAGTGAAAACGCAGAGAGGATACTTTATAACATGAGGCCCAAGGA
ACTGGTGGAAGTGATCAAGAAAGCCTACATGCAAGGTGAAGTGGAATTTGAGGATGGAGAAAACGGTGAGGATGG
GGCGGCGTCCCCCAGGAACGTGGGGCACAACATCTACATATTAGCCCATCAGTTGGCTCGGCATAACAAAGAACT
TCAGAGCATGCTGAAACCTGGTGGCCAAGTGGACGGAGATGAAGCCCTGGAGTTTTATGCCAAGCACACGGCGCA
GATAGAGATTGTCAGATTAGACCGAACAATGGAACAGATAGTCTTTCCCGTGCCCAGCATATGTGAATTCCTAAC
CAAGGAGTCAAAACTACGAATTTACTATACTACAGAGAGAGACGAACAAGGCAGCAAAATCAATGATTTCTTTCT
GCGGTCTGAAGACCTCTTCAATGAAATGAATTGGCAGAAGAAACTGAGAGCCCAGCCCGTGTTGTACTGGTGTGC
CCGCAACATGTCTTTCTGGAGCAGCATTTCGTTTAACCTGGCCGTCCTGATGAACCTGCTGGTGGCGTTTTTCTA
CCCGTTTAAGGGAGTCCGAGGAGGAACCCTGGAGCCCCACTGGTCGGGACTCCTGTGGACAGCCATGCTCATCTC
TCTGGCCATCGTCATTGCCCTCCCCAAGCCCCATGGCATCCGGGCCTTAATTGCCTCCACAATTCTACGACTGAT
ATTTTCAGTCGGGTTACAACCCACGTTGTTTCTTCTGGGCGCTTTCAATGTATGCAATAAAATCATCTTTCTAAT

FIGURE 2551C

GAGCTTTGTGGGCAACTGTGGGACATTCACAAGAGGCTACCGAGCCATGGTTCTGGATGTTGAGTTCCTCTATCA
TTTGTTGTATCTGGTGATCTGTGCCATGGGGCTCTTTGTCCATGAATTCTTCTACAGTCTGCTGCTTTTTGATTT
AGTGTACAGAGAAGAGACTTTGCTTAATGTCATTAAAAGTGTCACTCGCAATGGACGGTCCATCATCCTGACAGC
AGTTCTGGCTCTGATCCTCGTTTACCTGTTCTCAATAGTGGGCTATCTTTTCTTCAAGGATGACTTTATCTTGGA
AGTAGATAGGCTGCCCAATGAAACAGCTGTTCCAGAAACCGGCGAGAGTTTGGCAAGCGAGTTCCTGTTCTCCGA
TGTGTGTAGGGTGGAGAGTGGGGAGAACTGCTCCTCTCCTGCACCCAGAGAAGAGCTGGTCCCTGCAGAAGAGAC
GGAACAGGATAAAGAGCACACATGTGAGACGCTGCTGATGTGCATTGTCACCGTGCTGAGTCACGGGCTGCGGAG
CGGGGGTGGAGTAGGAGATGTACTCAGGAAACCGTCCAAAGAGGAACCCCTGTTTGCTGCTAGAGTTATTTATGA
CCTCTTGTTCTTCTTCATGGTCATCATCATTGTTCTTAACCTGATTTTTGGGGTTATCATTGACACTTTTGCTGA
CCTGAGGAGTGAGAAGCAGAAGAAGGAAGAGATCTTGAAGACCACGTGCTTTATCTGTGGCTTGGAAAGAGACAA
GTTTGACAACAAGACTGTCACCTTTGAAGAGCACATCAAGGAAGAACACAACATGTGGCACTATCTGTGCTTCAT
CGTCCTGGTGAAAGTAAAGGACTCCACCGAATATACTGGGCCTGAGAGTTACGTGGCAGAAATGATCAAGGAAAG
AAACCTTGACTGGTTCCCCAGGATGAGAGCCATGTCATTGGTCAGCAGTGATTCTGAAGGAGAACAGAATGAGCT
GAGAAACCTGCAGGAGAAGCTGGAGTCCACCATGAAACTTGTCACGAACCTTTCTGGCCAGCTGTCGGAATTAAA
GGATCAGATGACAGAACAAAGGAAGCAGAAACAAAGAATTGGTCTTCTAGGACATCCTCCTCACATGAATGTCAA
CCCACAACAACCAGCA**TAA**GCAAATGAAAGAAAGGAATTGTATTTACCTTTTATAATTATTATTAGTGTGGGTAT
GGCTAATGAGTTCTGATTCACCCACGAAGGTTACATTTATGCTGAATACATTTGTAAATACTCAGTTTTATACTG
TATGTATATGATTGCTACTCTAAAGGTTTGGATATATGTATTGTAATTAGAATTGTTGGCATGATGACATTTCAT
TTGTGCCAAAAATATTAAAAATGCCTTTTTTGGAAGGACTAACAGAAAGCACCTGATTTGCACTTGAACCAGATT
ATAGATTTAAAAGTATATGACATGTATTTTGTATTTAAAACTAGAATAGCCAGTATTTATGTTTTTTATAAAACT
GTGCAATACGAATTATGCAATCACAATACATTTGTAGCTCCCGAGTGTCCTAAAGGGAGTGCACTTCTTTGAAGC
TGGTGTGTTAATACTATGTAATAAATGGTTAACTTTCAAATGATGCTGCTGCCAAAATTATATTAATAGTGAGTT
TCAGGCCCCTGGGCATTTTGTACCATGTAATTATCCTCTGGTGATGCTGTTTCTCGTTAGTGGCAGTAGTGCCTC
CGTCTCCTAGTGATAATGCTCCAAGTCTATGAACTGTTAAATCAGCATTCATTTTAAGAAAAGCAACTTTAGTTT
CAAAGATACTTTTAAGCTTCTAAATTGATCATTTAAACTATTTCTTTAAATAAGAGAGCCAAATTAGAGGCTCAT
ACTTTAGCTTGTGAAGAAGATAATGAATTTTTTAAAGGGAACTTTCTATGCAATGTTCAGGATAAATCGATACTG
CTGGCCAATCAGTGTCATCTCCTGGGTAAATTTTGATGTCGCATTATAAAGACATGCATAATTGATGGTTTCTAG
ATTATCTAGTCCAAACAATAGAGTTTATTTTTTCTTCATCTGAACCAACATGCTACAGTAGCTAAGAAGTATTAA
AACTATATACATCCATATAAAGATGAAATATGAACTATCTCATTAGAAGTCATAGTTGACCACAGACATGTTATT
CTTCTGAAAGAGCCACATTTTGGTTTTATTTCTTGTCACATGATTTCTTTTCTTGATGGATGAAAAATATGAAAT
GAAATCTTTTATATCTGTTGCCTAGTTTTGTACATGGATCTCATTTTACAAGAGAATCTCTCTGCTA

FIGURE 2552

MSDKMSSFLHIGDICSLYAEGSTNGFISTLGLVDDRCVVQPETGDLNNPPKKFRDCLFKLCPMNRYSAQKQFWKA
AKPGANSTTDAVLLNKLHHAADLEKKQNETENRKLLGTVIQYGNVIQLLHLKSNKYLTVNKRLPALLEKNAMRVT
LDEAGNEGSWFYIQPFYKLRSIGDSVVIGDKVVLNPVNAGQPLHASSHQLVDNPGCNEVNSVNCNTSWKIVLFMK
WSDNKDDILKGGDVVRLFHAEQEKFLTCDEHRKKQHVFLRTTGRQSATSATSSKALWEVEVVQHDPCRGGAGYWN
SLFRFKHLATGHYLAAEVDPDQDASRSRLRNAQEKMVYSLVSVPEGNDISSIFELDPTTLRGGDSLVPRNSYVRL
RHLCTNTWVHSTNIPIDKEEEKPVMLKIGTSPVKEDKEAFAIVPVSPAEVRDLDFANDASKVLGSIAGKLEKGTI
TQNERRSVTKLLEDLVYFVTGGTNSGQDVLEVVFSKPNRERQKLMREQNILKQIFKLLQAPFTDCGDGPMLRLEE
LGDQRHAPFRHICRLCYRVLRHSQQDYRKNQEYIAKQFGFMQKQIGYDVLAEDTITALLHNNRKLLEKHITAAEI
DTFVSLVRKNREPRFLDYLSDLCVSMNKSIPVTQELICKAVLNPTNADILIETKLVLSRFEFEGVSSTGENALEA
GEDEEEVWLFWRDSNKEIRSKSVRELAQDAKEGQKEDRDVLSYYRYQLNLFARMCLDRQYLAINEISGQLDVDLI
LRCMSDENLPYDLRASFCRLMLHMHVDRDPQEQVTPVKYARLWSEIPSEIAIDDYDSSGASKDEIKERFAQTMEF
VEEYLRDVVCQRFPFSDKEKNKLTFEVVNLARNLIYFGFYNFSDLLRLTKILLAILDCVHVTTIFPISKMAKGEE
NKGSNVMRSIHGVGELMTQVVLRGGGFLPMTPMAAAPEGNVKQAEPEKEDIMVMDTKLKIIEILQFILNVRLDYR
ISCLLCIFKREFDESNSQTSETSSGNSSQEGPSNVPGALDFEHIEEQAEGIFGGSEENTPLDLDDHGGRTFLRVL
LHLTMHDYPPLVSGALQLLFRHFSQRQEVLQAFKQVQLLVTSQDVDNYKQIKQDLDQLRSIVEKSELWVYKGQGP
DETMDGASGENEHKKTEEGNNKPQKHESTSSYNYRVVKEILIRLSKLCVQESASVRKSRKQQQRLLRNMGAHAVV
LELLQIPYEKAEDTKMQEIMRLAHEFLQNFCAGNQQNQALLHKHINLFLNPGILEAVTMQHIFMNNFQLCSEINE
RVVQHFVHCIETHGRNVQYIKFLQTIVKAEGKFIKKCQDMVMAELVNSGEDVLVFYNDRASFQTLIQMMRSERDR
MDENSPLMYHIHLVELLAVCTEGKNVYTEIKCNSLLPLDDIVRVVTHEDCIPEVKIAYINFLNHCYVDTEVEMKE
IYTSNHMWKLFENFLVDICRACNNTSDRKHADSILEKYVTEIVMSIVTTFFSSPFSDQSTTLQTRQPVFVQLLQG
VFRVYHCNWLMPSQKASVESCIRVLSDVAKSRAIAIPVDLDSQVNNLFLKSHSIVQKTAMNWRLSARNAARRDSV
LAASRDYRNIIERLQDIVSALEDRLRPLVQAELSVLVDVLHRPELLFPENTDARRKCESGGFICKLIKHTKQLLE
ENEEKLCIKVLQTLREMMTKDRGYGEKGEALRQVLVNRYYGNVRPSGRRESLTSFGNGPLSAGGPGKPGGGGGGS
GSSSMSRGEMSLAEVQCHLDKEGASNLVIDLIMNASSDRVFHESILLAIALLEGGNTTIQHSFFCRLTEDKKSEK
FFKVFYDRMKVAQQEIKATVTVNTSDLGNKKKDDEVDRDAPSRKKAKEPTTQITEEVRDQLLEASAATRKAFTTF
RREADPDDHYQPGEGTQATADKAKDDLEMSAVITIMQPILRFLQLLCENHNRDLQNFLRCQNNKTNYNLVCETLQ
FLDCICGSTTGGLGLLGLYINEKNVALINQTLESLTEYCQGPCHENQNCIATHESNGIDIITALILNDINPLGKK
RMDLVLELKNNASKLLLAIMESRHDSENAERILYNMRPKELVEVIKKAYMQGEVEFEDGENGEDGAASPRNVGHN
IYILAHQLARHNKELQSMLKPGGQVDGDEALEFYAKHTAQIEIVRLDRTMEQIVFPVPSICEFLTKESKLRIYYT
TERDEQGSKINDFFLRSEDLFNEMNWQKKLRAQPVLYWCARNMSFWSSISFNLAVLMNLLVAFFYPFKGVRGGTL
EPHWSGLLWTAMLISLAIVIALPKPHGIRALIASTILRLIFSVGLQPTLFLLGAFNVCNKIIFLMSFVGNCGTFT
RGYRAMVLDVEFLYHLLYLVICAMGLFVHEFFYSLLLFDLVYREETLLNVIKSVTRNGRSIILTAVLALILVYLF
SIVGYLFFKDDFILEVDRLPNETAVPETGESLASEFLFSDVCRVESGENCSSPAPREELVPAEETEQDKEHTCET
LLMCIVTVLSHGLRSGGGVGDVLRKPSKEEPLFAARVIYDLLFFFMVIIIVLNLIFGVIIDTFADLRSEKQKKEE
ILKTTCFICGLERDKFDNKTVTFEEHIKEEHNMWHYLCFIVLVKVKDSTEYTGPESYVAEMIKERNLDWFPRMRA
MSLVSSDSEGEQNELRNLQEKLESTMKLVTNLSGQLSELKDQMTEQRKQKQRIGLLGHPPHMNVNPQQPA

FIGURE 2553

GAGGTGTTTCCCTTAGCTATGGAAACTCTATAAGAGAGATCCAGCTTGCCTCCTCTTGAGCAGTCAGCAACAGGG
TCCCGTCCTTGACACCTCAGCCTCTACAGGACTGAGAAGAAGTAAAACCGTTTGCTGGGGCTGGCCTGACTCACC
AGCTGCCATGCAGCAGCCCTTCAATTACCCATATCCCCAGATCTACTGGGTGGACAGCAGTGCCAGCTCTCCCTG
GGCCCCTCCAGGCACAGTTCTTCCCTGTCCAACCTCTGTGCCCAGAAGGCCTGGTCAAAGGAGGCCACCACCACC
ACCGCCACCGCCACCACTACCACCTCCGCCGCCGCCGCCACCACTGCCTCCACTACCGCTGCCACCCCTGAAGAA
GAGAGGGAACCACAGCACAGGCCTGTGTCTCCTTGTGATGTTTTTCATGGTTCTGGTTGCCTTGGTAGGATTGGG
CCTGGGGATGTTTCAGCTCTTCCACCTACAGAAGGAGCTGGCAGAACTCCGAGAGTCTACCAGCCAGATGCACAC
AGCATCATCTTTGGAGAAGCAAATAGGCCACCCCAGTCCACCCCCTGAAAAAAAGGAGCTGAGGAAAGTGGCCCA
TTTAACAGGCAAGTCCAACTCAAGGTCCATGCCTCTGGAATGGGAAGACACCTATGGAATTGTCCTGCTTTCTGG
AGTGAAGTATAAGAAGGGTGGCCTTGTGATCAATGAAACTGGGCTGTACTTTGTATATTCCAAAGTATACTTCCG
GGGTCAATCTTGCAACAACCTGCCCCTGAGCCACAAGGTCTACATGAGGAACTCTAAGTATCCCCAGGATCTGGT
GATGATGGAGGGGAAGATGATGAGCTACTGCACTACTGGGCAGATGTGGGCCCGCAGCAGCTACCTGGGGGCAGT
GTTCAATCTTACCAGTGCTGATCATTTATATGTCAACGTATCTGAGCTCTCTCTGGTCAATTTTGAGGAATCTCA
GACGTTTTTCGGCTTATATAAGCTCTAAGAGAAGCACTTTGGGATTCTTTCCATTATGATTCTTTGTTACAGGCA
CCGAGAATGTTGTATTCAGTGAGGGTCTTCTTACATGCATTTGAGGTCAAGTAAGAAGACATGAACCAAGTGGAC
CTTGAGACCACAGGGTTCAAAATGTCTGTAGCTCCTCAACTCACCTAATGTTTATGAGCCAGACAAATGGAGGAA
TATGACGGAAGAACATAGAACTCTGGGCTGCCATGTGAAGAGGGAGAAGCATGAAAAAGCAGCTACCAGGTGTTC
TACACTCATCTTAGTGCCTGAGAGTATTTAGGCAGATTGAAAAGGACACCTTTTAACTCACCTCTCAAGGTGGGC
CTTGCTACCTCAAGGGGGACTGTCTTTCAGATACATGGTTGTGACCTGAGGATTTAAGGGATGGAAAAGGAAGAC
TAGAGGCTTGCATAATAAGCTAAAGAGGCTGAAAGAGGCCAATGCCCCACTGGCAGCATCTTCACTTCTAAATGC
ATATCCTGAGCCATCGGTGAAACTAACAGATAAGCAAGAGAGATGTTTTGGGGACTCATTTCATTCCTAACACAG
CATGTGTATTTCCAGTGCAATTGTAGGGGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTATGACTAAAGAGAGA
ATGTAGATATTGTGAAGTACATATTAGGAAAATATGGGTTGCATTTGGTCAAGATTTTGAATGCTTCCTGACAAT
CAACTCTAATAGTGCTTAAAAATCATTGATTGTCAGCTACTAATGATGTTTTCCTATAATATAATAAATATTTAT
GTAGATGTGCATTTTTGTGAAATGAAAACATGTAATAAAAAGTATATGTTAGGATACAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2554

MQQPFNYPYPQIYWVDSSASSPWAPPGTVLPCPTSVPRRPGQRRPPPPPPPPPLPPPPPPPPLPPLPLPPLKKRG
NHSTGLCLLVMFFMVLVALVGLGLGMFQLFHLQKELAELRESTSQMHTASSLEKQIGHPSPPPEKKELRKVAHLT
GKSNSRSMPLEWEDTYGIVLLSGVKYKKGGLVINETGLYFVYSKVYFRGQSCNNLPLSHKVYMRNSKYPQDLVMM
EGKMMSYCTTGQMWARSSYLGAVFNLTSADHLYVNVSELSLVNFEESQTFFGLYKL

FIGURE 2555

GAATTCCTTTTTTTGACTGAGTCTCCCTCTGTCACCTAGGCTGGAGTGCAGTGGCACAATCTTGGCTCGCTGCAA
CCTTCACCCTTCACCTCCCAGGTCGAAGCGATTCTCCTGCCTCAGTCTCCCGAGTAGCTGGGATTACAGGCGTGC
GCCACCAAATCTGGCTATTTTTTTATTATTATTATTTTGAGTAGAGATGGGGTTTCACCATGTTGGCCAGACTGG
TCTTGAACTCTTGGCCTCAAATTATCTGCCCACCTCGGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACCA
TGCCCAGATGACAAGACTAATTTTTTATCCCTTTGGTTTATTGGCTACAACATCTTCTTGGAATCAGAGGTGAAT
TTTTTCTTACCTTGGGATGCCTGAGACTAGGGGAGTATAGAATTCCAATTGGTAATTAAGGCATCTTTCTGCTCC
TGATCAGAAGGGCAGGTTAGTTGGGAGAGGTCAGATGGCACAACAGAAGTCACCTTGTAAGTAAGGCAAAGACTT
GAAGGCATTAGCGTTTCTCATTACTAGGTCAATAACCTGAGGGAATCAATGGCTTTTTGCCGCTCTACCTCTTGT
GTATCTCTTTGACTTTTCTTTCTCTGTCTAGGGCATTCCTGAACTTGTCAATCAGGGACAGGCATTAGAGCCCAA
ACAGGATGCTTTCCAAGGCCAAGAAGCAGCAGTA**ATG**ATGGATCAGAAGGCAGGATTATATGGACAGACATACCC
AGCACAGGGGCCTCCAATGCAAGGAGGCTTTCATCTTCAGGGACAATCACCATCTTTTAACTCTATGATGAATCA
GATGAACCAGCAAGGCAATTTTCCTCTCCAAGGAATGCACCCACGAGCCAACATCATGAGACCCCGGACAAACAC
CCCCAAGCAACTTAGAATGCAGCTTCAGCAGAGGCTGCAGGGCCAGCAGTTTTTGAATCAGAGCCGACAGGCACT
TGAATTGAAAATGGAAAACCCTACTGCTGGTGGTGCTGCGGTGATGAGGCCTATGATGCAGCCCCAGGTGAGCTC
CCAGGAGGGTTTTCTTAATGCTCAAATGGGCGCCCAACGGAGGAGAGAGCTGCTAAGTCATCACTTCCGACAACA
GAGGGTGGCTATGATGATGCAGCAGCAGCAACAGCAGCAACAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCA
GCAACAGCAACAGCAACAGCAGCAACAGGAGCAACCCCAGGTCTTCAGCCCACCTCCTAATGTGACTGCTCCCCC
AGCATGGATGGCTTKYGGCAGGACCCACAATGCCACAAGCTCCTCCGCAACAAGTTTCCAATATCCAACCCCAAA
TTATGGGAATGGGGACCAACCAACAAAGATCCAGCCTTTGGGTCGAGTGTCTAAGTCCTCCCAATGCAATGATGT
CGTCAAGAATGGTCCCTCCCAGAATCCCATGATGCAACACCCGCAGGCTGCATCCATCTATCAGTCCTCAGAAAT
GAAGGGCTGGCCATCAGGAAATTTGGCCAGGAACAGCTCCTTTTCCCAGCAGCAGTTTGCCCACCAGGGGAATCC
TGCAGTGTATAGTATGGTGCACATGAATGGCAGCAGTGGTCACATGGGACAGATGAACATGAACCCCATGCCCAT
GTCTGGCATGCCTATGGGTCCTGATCAGAAATACTGC**TGA**CATCTCTGCACCAGGACCTCTTAAGGAAACCACTG
TACAAATGACACTGCACTAGGATTATTGGGAAGGAATCATTGTTCCCAGGCCATCCATCTTGGGAAGAAAGGACC
AGCTTTTGAGCTCCATCAAGGGTATTTTAAGTGATGTCATTTGAGCAGGACTGGATTTTAAGCCGAAGGGCAATA
TCCAACGTGTTTTTCCCCCCTCCTTCCTGCTGTGTATCATGGTGTTCAAAACAGAAATGTTTTTTGGCATTCCAC
CTCCTAGGGATATAATTCTGGAGACATGGAGTGTTACTGATCATAAAACTTTTGTGTCACTTTTTTCTGCCTTGC
TAGCCAAAATCTCTTAAATACACGTAGGTGGGCCAGAGAACATTGGAAGAATCAAGAGAGATTAGAATATCTGGT
TTCTCTAGTTGCAGTATTGGACAAAGAGCATAGTCCCAGCCTTCAGGTGTAGTAGTTCTGTGTTGACCCTTTGTC
CAGTGGAATTGGTGATTCTGAATTGTCCTTTACTAATGTTGTTGAGTTGCTCTGTCCCTATTATTTGCCCTAGCC
TTTCTCCTAATGGGGTTTTCATTTGCCATTCATGTCCCTGTAAAACTTCACCTCCAGGAACTGTCATGGATGTCC
AAATGGCTTTGCAGAAAGGAAATGAGATGACAGTATTTAATCGCAGCAGTAGCAAACTTTTCACATGCTAATGTG
CAGCTGAGTGCACTTTATTTAAAAAGAATGGATAAATGCAATATTCTTGAGGTCTTGAGGGAATAGTGAAACACA
TTCCTGGTTTTTGCCTACACTTACGTGTTAGACAAGAACTATGATTTTTTTTTTTAAAGTACTGGTGTCACCCTT
TGCCTATATGGTAGAGCAATAATGCTTTTTAAAAATAAACTTCTGAAAACCCAAGGCCAGGTACTGCATTCTGAA
TCAGAATCTCGCAGTGTTTCTGTGAATAGATTTTTTTGTAAATATGACCTTTAAGATATTGTATTATGTAAAATA
TGTATATACCTTTTTTTTGTAGGTGCACAGCGXCTCATTTTTACAGAGTTTGTGAAGCTAAATATTTAACATTGT
TGATTTCAGTAAGCTGTGTGGTGAGGCTXCCAGTGGAAGAGACATCCCTTGACTTTTGTGGCCTGGGGGAGGGGT
AGTGCTCCACAGCTTTTCCTTCCCCXCCCCCCAGCCTTAGATGCCTCGCTCTTTTCAATCTCTTAATCTAAATGC
TTTTTAAAGAGATTATTTGTTTAGATGTAGGCATTTTAATTTTTTAAAAATTCCTCTACCAGAACTAAGCACTTT
GTTAATTTGGGGGGGGAGAATAGATATGGGGAGAAAAAACTTAAAAAAAAAATCAGGAATTAAAAAAAGCGAGCA
ATTTGAAGAGAATCTTTTGGATTTTAAGCAGTCCGAAATAATAGCAATTCATGGGCTGTGTGTGTGTGTGTATGT
GTGTGTGTGTGTGTGTGAATGTTTAAGTATGTTACCTTTTCATCCCCTTTAGGAGCGTTTTCAGATTTTGGTTGC
TAAGACCTGAATCCCATATTGAGATCTCGAGTAGAATCCTTGGTGTGGTTTCTGGTGTCTGCTCAGCTGTCCCCT
CATTCTACTAATGTGATGCTTTCATTATGTCCCTGTGGATTAGAATAGTGTCAGTTATTTCTTAAGTAACTCAGT
ACCCAGAACAACCAGTTTTACTGTGATTCAGAGCCACAGTCTAACTGAGCACCTTTTAAACCCCTCCCTCTTCTG
CCCCCTACCACTTTTCTGCTGTTGCCTCTCGGAATTC

FIGURE 2556

MMDQKAGLYGQTYPAQGPPMQGGFHLQGQSPSFNSMMNQMNQQGNFPLQGMHPRANIMRPRTNTPKQLRMQLQQR
LQGQQFLNQSRQALELKMENPTAGGAAVMRPMMQPQVSSQEGFLNAQMGAQRRRELLSHHFRQQRVAMMMQQQQQ
QQQQQQQQQQQQQQQQQQQQQQQQEQPQVFSPPPNVTAPPAWMAXGRTHNATSSSATSFQYPTPNYGNGDQPTKIQ
PLGRVSKSSQCNDVVKNGPSQNPMMQHPQAASIYQSSEMKGWPSGNLARNSSFSQQQFAHQGNPAVYSMVHMNGS
SGHMGQMNMNPMPMSGMPMGPDQKYC

FIGURE 2557A

ATTTCCCGCCAGCAGGAGCCGCGCGGTAGATGCGGTGCTTTTAGGAGCTCCGTCCGACAGAACGGTTGGGCCTTG
CCGGCTGTCGGT**ATG**TCGCGACAGAGCACCCTGTACAGCTTCTTCCCCAAGTCTCCGGCGCTGAGTGATGCCAAC
AAGGCCTCGGCCAGGGCCTCACGCGAAGGCGGCCGTGCCGCCGCTGCCCCCGGGGCCTCTCCTTCCCCAGGCGGG
GATGCGGCCTGGAGCGAGGCTGGGCCTGGGCCCAGGCCCTTGGCGCGATCCGCGTCACCGCCCAAGGCGAAGAAC
CTCAACGGAGGGCTGCGGAGATCGGTAGCGCCTGCTGCCCCCACCAGTTGTGACTTCTCACCAGGAGATTTGGTT
TGGGCCAAGATGGAGGGTTACCCCTGGTGGCCTTGTCTGGTTTACAACCACCCCTTTGATGGAACATTCATCCGC
GAGAAAGGGAAATCAGTCCGTGTTCATGTACAGTTTTTTGATGACAGCCCAACAAGGGGCTGGGTTAGCAAAAGG
CTTTTAAAGCCATATACAGGTTCAAAATCAAAGGAAGCCCAGAAGGGAGGTCATTTTTACAGTGCAAAGCCTGAA
ATACTGAGAGCAATGCAACGTGCAGATGAAGCCTTAAATAAAGACAAGATTAAGAGGCTTGAATTGGCAGTTTGT
GATGAGCCCTCAGAGCCAGAAGAGGAAGAAGAGATGGAGGTAGGCACAACTTACGTAACAGATAAGAGTGAAGAA
GATAATGAAATTGAGAGTGAAGAGGAAGTACAGCCTAAGACACAAGGATCTAGGCGAAGTAGCCGCCAAATAAAA
AAACGAAGGGTCATATCAGATTCTGAGAGTGACATTGGTGGCTCTGATGTGGAATTTAAGCCAGACACTAAGGAG
GAAGGAAGCAGTGATGAAATAAGCAGTGGAGTGGGGGATAGTGAGAGTGAAGGCCTGAACAGCCCTGTCAAAGTT
GCTCGAAAGCGGAAGAGAATGGTGACTGGAAATGGCTCTCTTAAAAGGAAAAGCTCTAGGAAGGAAACGCCCTCA
GCCACCAAACAAGCAACTAGCATTTCATCAGAAACCAAGAATACTTTGAGAGCTTTCTCTGCCCCTCAAAATTCT
GAATCCCAAGCCCACGTTAGTGGAGGTGGTGATGACAGTAGTCGCCCTACTGTTTGGTATCATGAAACTTTAGAA
TGGCTTAAGGAGGAAAAGAGAAGAGATGAGCACAGGAGGAGGCCTGATCACCCCGATTTTGATGCATCTACACTC
TATGTGCCTGAGGATTTCCTCAATTCTTGTACTCCTGGGATGAGGAAGTGGTGGCAGATTAAGTCTCAGAACTTT
GATCTTGTCATCTGTTACAAGGTGGGGAAATTTTATGAGCTGTACCACATGGATGCTCTTATTGGAGTCAGTGAA
CTGGGGCTGGTATTCATGAAAGGCAACTGGGCCCATTCTGGCTTTCCTGAAATTGCATTTGGCCGTTATTCAGAT
TCCCTGGTGCAGAAGGGCTATAAAGTAGCACGAGTGGAACAGACTGAGACTCCAGAAATGATGGAGGCACGATGT
AGAAAGATGGCACATATATCCAAGTATGATAGAGTGGTGAGGAGGGAGATCTGTAGGATCATTACCAAGGGTACA
CAGACTTACAGTGTGCTGGAAGGTGATCCCTCTGAGAACTACAGTAAGTATCTTCTTAGCCTCAAAGAAAAAGAG
GAAGATTCTTCTGGCCATACTCGTGCATATGGTGTGTGCTTTGTTGATACTTCACTGGGAAAGTTTTTCATAGGT
CAGTTTTCAGATGATCGCCATTGTTCGAGATTTAGGACTCTAGTGGCACACTATCCCCCAGTACAAGTTTTATTT
GAAAAAGGAAATCTCTCAAAGGAAACTAAAACAATTCTAAAGAGTTCATTGTCCTGTTCTCTTCAGGAAGGTCTG
ATACCCGGCTCCCAGTTTTGGGATGCATCCAAAACTTTGAGAACTCTCCTTGAGGAAGAATATTTTAGGGAAAAG
CTAAGTGATGGCATTGGGGTGATGTTACCCCAGGTGCTTAAAGGTATGACTTCAGAGTCTGATTCCATTGGGTTG
ACACCAGGAGAGAAAAGTGAATTGGCCCTCTCTGCTCTAGGTGGTTGTGTCTTCTACCTCAAAAAATGCCTTATT
GATCAGGAGCTTTTATCAATGGCTAATTTTGAAGAATATATTCCCTTGGATTCTGACACAGTCAGCACTACAAGA
TCTGGTGCTATCTTCACCAAAGCCTATCAACGAATGGTGCTAGATGCAGTGACATTAAACAACTTGGAGATTTTT
CTGAATGGAACAAATGGTTCTACTGAAGGAACCCTACTAGAGAGGGTTGATACTTGCCATACTCCTTTTGGTAAG
CGGCTCCTAAAGCAATGGCTTTGTGCCCCACTCTGTAACCATTATGCTATTAATGATCGTCTAGATGCCATAGAA
GACCTCATGGTTGTGCCTGACAAAATCTCCGAAGTTGTAGAGCTTCTAAAGAAGCTTCCAGATCTTGAGAGGCTA
CTCAGTAAAATTCATAATGTTGGGTCTCCCCTGAAGAGTCAGAACCACCCAGACAGCAGGGCTATAATGTATGAA
GAAACTACATACAGCAAGAAGAAGATTATTGATTTTCTTTCTGCTCTGGAAGGATTCAAAGTAATGTGTAAAATT
ATAGGGATCATGGAAGAAGTTGCTGATGGTTTTAAGTCTAAAATCCTTAAGCAGGTCATCTCTCTGCAGACAAAA
AATCCTGAAGGTCGTTTTCCTGATTTGACTGTAGAATTGAACCGATGGGATACAGCCTTTGACCATGAAAAGGCT
CGAAAGACTGGACTTATTACTCCCAAAGCAGGCTTTGACTCTGATTATGACCAAGCTCTTGCTGACATAAGAGAA
AATGAACAGAGCCTCCTGGAATACCTAGAGAAACAGCGCAACAGAATTGGCTGTAGGACCATAGTCTATTGGGGG
ATTGGTAGGAACCGTTACCAGCTGGAAATTCCTGAGAATTTCACCACTCGCAATTTGCCAGAAGAATACGAGTTG
AAATCTACCAAGAAGGGCTGTAAACGATACTGGACCAAAACTATTGAAAAGAAGTTGGCTAATCTCATAAATGCT
GAAGAACGGAGGGATGTATCATTGAAGGACTGCATGCGGCGACTGTTCTATAACTTTGATAAAAATTACAAGGAC
TGGCAGTCTGCTGTAGAGTGTATCGCAGTGTTGGATGTTTTACTGTGCCTGGCTAACTATAGTCGAGGGGGTGAT
GGTCCTATGTGTCGCCCAGTAATTCTGTTGCCGGAAGATACCCCCCCCTTCTTAGAGCTTAAAGGATCACGCCAT
CCTTGCATTACGAAGACTTTTTTTGGAGATGATTTTATTCCTAATGACATTCTAATAGGCTGTGAGGAAGAGGAG
CAGGAAAATGGCAAAGCCTATTGTGTGCTTGTTACTGGACCAAATATGGGGGGCAAGTCTACGCTTATGAGACAG
GCTGGCTTATTAGCTGTAATGGCCCAGATGGGTTGTTACGTCCCTGCTGAAGTGTGCAGGCTCACACCAATTGAT

FIGURE 2557B

AGAGTGTTTACTAGACTTGGTGCCTCAGACAGAATAATGTCAGGTGAAAGTACATTTTTTGTTGAATTAAGTGAA
ACTGCCAGCATACTCATGCATGCAACAGCACATTCTCTGGTGCTTGTGGATGAATTAGGAAGAGGTACTGCAACA
TTTGATGGGACGGCAATAGCAAATGCAGTTGTTAAAGAACTTGCTGAGACTATAAAATGTCGTACATTATTTTCA
ACTCACTACCATTCATTAGTAGAAGATTATTCTCAAAATGTTGCTGTGCGCCTAGGACATATGGCATGCATGGTA
GAAAATGAATGTGAAGACCCCAGCCAGGAGACTATTACGTTCCTCTATAAATTCATTAAGGGAGCTTGTCCTAAA
AGCTATGGCTTTAATGCAGCAAGGCTTGCTAATCTCCCAGAGGAAGTTATTCAAAAGGGACATAGAAAAGCAAGA
GAATTTGAGAAGATGAATCAGTCACTACGATTATTTCGGGAAGTTTGCCTGGCTAGTGAAAGGTCAACTGTAGAT
GCTGAAGCTGTCCATAAATTGCTGACTTTGATTAAGGAATTA**TAG**ACTGACTACATTGGAAGCTTTGAGTTGACT
TCTGACCAAAGGTGGTAAATTCAGACAACATTATGATCTAATAAACTTTATTTTTTAAAAATGA

FIGURE 2558

MSRQSTLYSFFPKSPALSDANKASARASREGGRAAAAPGASPSPGGDAAWSEAGPGPRPLARSASPPKAKNLNGG
LRRSVAPAAPTSCDFSPGDLVWAKMEGYPWWPCLVYNHPFDGTFIREKGKSVRVHVQFFDDSPTRGWVSKRLLKP
YTGSKSKEAQKGGHFYSAKPEILRAMQRADEALNKDKIKRLELAVCDEPSEPEEEEEMEVGTTYVTDKSEEDNEI
ESEEEVQPKTQGSRRSSRQIKKRRVISDSESDIGGSDVEFKPDTKEEGSSDEISSGVGDSESEGLNSPVKVARKR
KRMVTGNGSLKRKSSRKETPSATKQATSISSETKNTLRAFSAPQNSESQAHVSGGGDDSSRPTVWYHETLEWLKE
EKRRDEHRRRPDHPDFDASTLYVPEDFLNSCTPGMRKWWQIKSQNFDLVICYKVGKFYELYHMDALIGVSELGLV
FMKGNWAHSGFPEIAFGRYSDSLVQKGYKVARVEQTETPEMMEARCRKMAHISKYDRVVRREICRIITKGTQTYS
VLEGDPSENYSKYLLSLKEKEEDSSGHTRAYGVCFVDTSLGKFFIGQFSDDRHCSRFRTLVAHYPPVQVLFEKGN
LSKETKTILKSSLSCSLQEGLIPGSQFWDASKTLRTLLEEEYFREKLSDGIGVMLPQVLKGMTSESDSIGLTPGE
KSELALSALGGCVFYLKKCLIDQELLSMANFEEYIPLDSDTVSTTRSGAIFTKAYQRMVLDAVTLNNLEIFLNGT
NGSTEGTLLERVDTCHTPFGKRLLKQWLCAPLCNHYAINDRLDAIEDLMVVPDKISEVVELLKKLPDLERLLSKI
HNVGSPLKSQNHPDSRAIMYEETTYSKKKIIDFLSALEGFKVMCKIIGIMEEVADGFKSKILKQVISLQTKNPEG
RFPDLTVELNRWDTAFDHEKARKTGLITPKAGFDSDYDQALADIRENEQSLLEYLEKQRNRIGCRTIVYWGIGRN
RYQLEIPENFTTRNLPEEYELKSTKKGCKRYWTKTIEKKLANLINAEERRDVSLKDCMRRLFYNFDKNYKDWQSA
VECIAVLDVLLCLANYSRGGDGPMCRPVILLPEDTPPFLELKGSRHPCITKTFFGDDFIPNDILIGCEEEEQENG
KAYCVLVTGPNMGGKSTLMRQAGLLAVMAQMGCYVPAEVCRLTPIDRVFTRLGASDRIMSGESTFFVELSETASI
LMHATAHSLVLVDELGRGTATFDGTAIANAVVKELAETIKCRTLFSTHYHSLVEDYSQNVAVRLGHMACMVENEC
EDPSQETITFLYKFIKGACPKSYGFNAARLANLPEEVIQKGHRKAREFEKMNQSLRLFREVCLASERSTVDAEAV
HKLLTLIKEL

FIGURE 2559

GAAAAGCCGCCGGTATTTCTCCACCTGGCTCTCCTCTACCTCCAGGCAGGCGCACCCGAGGTCCCCCTCCCACCC
CACCTTCTGCCCTCCCGCACACTTGGACCAGTGCTGTTGACCCGGAAGCGGACATTTCTGCAGCTATTCTAAGCA
CACGTCGGCGGAGGGAGCGGGACGTGGCCAGCGGTCAGCGGCGAAGGAGGCAGGCCCTGCGCGGGGATCACGGAA
GCCCTGTGATTCACCATGAAGTTCCAGTACAAGGAGGTCCATCCCTTTGAGTATCGGAAAAAGGAAGGAGAAAAG
ATCCGGAAGAAATATCCGGACAGGGTCCCCTTGATTGTAGAGAAGGCTCCAAAAGCAAGGGTGCCTGATCTGGAC
AGGAGGAAGTACCTAGTGCCCTCCGACCTTACCGATGGCCAGTTCTACCTTTTAATCCGGAAGAGAATCCACCTG
AGACCTGAGGACGCCTTATTCTTCTTTGTCAACAACACTATCCCTCCCACTAGTGCTACCATGGGCCAACTATAT
GAGGACAGTCATGAGGAAGATGATTTTCTGTATGTGGCCTACAGTAATGAGAGTGTCTATGGGAAATGAGTGGTT
GGAAGCCCAGCAGATGGAAGCACCTGGACTTAGGGGTAGGGGAGGGGTGTGTGTGTGACTTGGGGAAAGAGAGGG
CGGCTCCCACCGTGAGGAGACAGAAGGTGAAGACATATAGAAACTTTACACCGCACACACCGTCAACGCATTTTC
ACATGCTCAACTGATATTTTTTGTTGCTTCCTTGGCCCAGGGAGAAAGCATGTCAGGACAGAGCTGTTGGATTGG
CTTTGATAGAGGAATGGGGATGATGTAATTTTATGGCATTCCTGAGATTTAATTTTTGTGCAGTTTCATAGAAAG
GTCGGTCAGGAGGTGGACAAGTTGGGGTCAGAGATGATGGCAGTCCAGCAGCAACTCCCTGTGCTCCCTTCTCTT
TGGGCAGAGATTCTGTTTTTGACAGTTGCACAAGACAGGTAGGGAAAGGGGACTTGTGGTAGTGGGCCATACCTG
GGGACGAAAAGAGACCCACTGTAATTGATGCATCGTGGCCCCCGATCTTCCGTATCCCACACTTCTTTTCTCCCA
TCCCAGTTGCAATCTCACTCACAAACATCACAGTACCACCCCAGGGGCGGCAGTAGACACCAACCCAGAAATTTA
GACAGGGATCTCTTATCTTTGGAAAATAGGGGTTAGGCATGAGGGTGGTTATGATTAAGAAGATAATTTTGTTGT
TAAATAGCATTAAACTGGAATTGACAGAGTGAGTTGAGCATCTCTGTCTAACCTGCTCTTTCTCTCTGGTGCTCC
TCATCTCACCCCTACCTTGGAATTTAATAAGCTTCAGGCATTTCCAATTGCAGACTAAAACCACTTCTACCATCT
CCTCTAGTATTTTCCATGTATCAGGACAGAGATGTCTTATGTAGGGAAGGGGCAGGTATGAAGTGAGGTAGATTA
TCTATACCTCTCACTCATTCAGGATTCTCGCTCCCATGCTGCTGTCCCTTCATTCTCACACTCACAGGAATGCTA
TGTGATGGCCAGCTGCTTCCCTTCTTGGTTATCCACTGCAGCTGCTAGTTAGAAAGGTTTGCAGGGATGACTTTT
AGTAAATCATGGGGATTTTATTGATTTATTATCACTTATAGGATTTTGTGGGGTGGGAGTGGGGAGCAGGAATTG
CACTCAGACATGACATTTCAATTCATCTCTGCAAATGAAAAGGGTTCTTCCTCTTGGGGGGAAATCTGTGTGTCAG
TTCTGTCAGCTGCAAGTTCTTGTGTAATGAAGTCAATGCTGTCAGGCCAAG

FIGURE 2560

MKFQYKEVHPFEYRKKEGEKIRKKYPDRVPLIVEKAPKARVPDLDRRKYLVPSDLTDGQFYLLIRKRIHLRPEDA
LFFFVNNTIPPTSATMGQLYEDSHEEDDFLYVAYSNESVYGK

FIGURE 2561

GCAGACCTTGCTTCATGAGCAAGCTCATCTCTGGAACAAACTGGCAAAGCATCTCTGCTGGTGTTCATCAGAACA
GACACCATGGCAGAGCATGATTACCATGAAGACTATGGGTTCAGCAGTTTCAATGACAGCAGCCAGGAGGAGCAT
CAAGACTTCCTGCAGTTCAGCAAGGTCTTTCTGCCCTGCATGTACCTGGTGGTGTTTGTCTGTGGTCTGGTGGGG
AACTCTCTGGTGCTGGTCATATCCATCTTCTACCATAAGTTGCAGAGCCTGACGGATGTGTTCCTGGTGAACCTA
CCCCTGGCTGACCTGGTGTTTGTCTGCACTCTGCCCTTCTGGGCCTATGCAGGCATCCATGAATGGGTGTTTGGC
CAGGTCATGTGCAAGAGCCTACTGGGCATCTACACTATTAACTTCTACACGTCCATGCTCATCCTCACCTGCATC
ACTGTGGATCGTTTCATTGTAGTGGTTAAGGCCACCAAGGCCTACAACCAGCAAGCCAAGAGGATGACCTGGGGC
AAGGTCACCAGCTTGCTCATCTGGGTGATATCCCTGCTGGTTTCCTTGCCCCAAATTATCTATGGCAATGTCTTT
AATCTCGACAAGCTCATATGTGGTTACCATGACGAGGCAATTTCCACTGTGGTTCTTGCCACCCAGATGACACTG
GGGTTCTTCTTGCCACTGCTCACCATGATTGTCTGCTATTCAGTCATAATCAAAACACTGCTTCATGCTGGAGGC
TTCCAGAAGCACAGATCTCTAAAGATCATCTTCCTGGTGATGGCTGTGTTCCTGCTGACCCAGATGCCCTTCAAC
CTCATGAAGTTCATCCGCAGCACACACTGGGAATACTATGCCATGACCAGCTTTCACTACACCATCATGGTGACA
GAGGCCATCGCATACCTGAGGGCCTGCCTTAACCCTGTGCTCTATGCCTTTGTCAGCCTGAAGTTTCGAAAGAAC
TTCTGGAAACTTGTGAAGGACATTGGTTGCCTCCCTTACCTTGGGGTCTCACATCAATGGAAATCTTCTGAGGAC
AATTCCAAGACTTTTTCTGCCTCCCACAATGTGGAGGCCACCAGCATGTTCCAGTTATAGGCCTTGCCAGGGTTT
CGAGAAGCTGCTCTGGAATTTGCAAGTCATGGCTGTGCCCTCTTGATGTGGTGAGGCAGGCTTTGTTTATAGCTT
GCGCATTCTCATGGAGAAGTTATCAGACACTCTGGCTGGTTTGGAATGCTTCTTCTCAGGCATGAACATGTACTG
TTCTCTTCTTGAACACTCATGCTGAAAGCCCAAGTAGGGGGTCTAAAATTTTTAAGGACTTTCCTTCCTCCATCT
CCAAGAATGCTGAAACCAAGGGGGATGACATGTGACTCCTATGATCTCAGGTTCTCCTTGATTGGGACTGGGGCT
GAAGGTTGAAGAGGTGAGCACGGCCAACAAAGCTGTTGATGGTAGGTGGCACACTGGGTGCCCAAGCTCAGAAGG
CTCTTCTGACTACTGGGCAAAGAGTGTAGATCAGAGCAGCAGTGAAAACAAGTGCTGGCACCACCAGGCACCTCA
CAGAAATGAGATCAGGCTCTGCCTCACCTTGGGGCTTGACTTTTGTATAGGTAGATGTTCAGATTGCTTTGATTA
ATCCAGAATAACTAGCACCAGGGACTATGAATGGGCAAAACTGAATTATAAGAGGCTGATAATTCCAGTGGTCCA
TGGAATGCTTGAAAAATGTGCAAAACAGCGTTTAAGACTGTAATGAATCTAAGCAGCATTTCTGAAGTGGACTCT
TTGGTGGCTTTGCATTTTAAAAATGAAATTTTCCAATGTCTGCCACACAAACGTATGTAAATGTATATACCCACA
CACATACACACATATGTCATATATTACTAGCATATGAGTTTCATAGCTAAGAAATAAAACTGTTAAAGTCTCCAA
ACT

FIGURE 2562

MAEHDYHEDYGFSSFNDSSQEEHQDFLQFSKVFLPCMYLVVFVCGLVGNSLVLVISIFYHKLQSLTDVFLVNLPL
ADLVFVCTLPFWAYAGIHEWVFGQVMCKSLLGIYTINFYTSMLILTCITVDRFIVVVKATKAYNQQAKRMTWGKV
TSLLIWVISLLVSLPQIIYGNVFNLDKLICGYHDEAISTVVLATQMTLGFFLPLLTMIVCYSVIIKTLLHAGGFQ
KHRSLKIIFLVMAVFLLTQMPFNLMKFIRSTHWEYYAMTSFHYTIMVTEAIAYLRACLNPVLYAFVSLKFRKNFW
KLVKDIGCLPYLGVSHQWKSSEDNSKTFSASHNVEATSMFQL

FIGURE 2563

GCGAAATTGAGGTTTCTTGGTATTGCGCGTTTCTCTTCCTTGCTGACTCTCCGAATGGCCATGGACTCGTCGCTT
CAGGCCCGCCTGTTTCCCGGTCTCGCTATCAAGATCCAACGCAGTAATGGTTTAATTCACAGTGCCAATGTAAGG
ACTGTGAACTTGGAGAAATCCTGTGTTTCAGTGGAATGGGCAGAAGGAGGTGCCACAAAGGGCAAAGAGATTGAT
TTTGATGATGTGGCTGCAATAAACCCAGAACTCTTACAGCTTCTTCCCTTACATCCGAAGGACAATCTGCCCTTG
CAGGAAAATGTAACAATCCAGAAACAAAAACGGAGATCCGTCAACTCCAAAATTCCTGCTCCAAAAGAAAGTCTT
CGAAGCCGCTCCACTCGCATGTCCACTGTCTCAGAGCTTCGCATCACGGCTCAGGAGAATGACATGGAGGTGGAG
CTGCCTGCAGCTGCAAACTCCCGCAAGCAGTTTTCAGTTCCTCCTGCCCCCACTAGGCCTTCCTGCCCTGCAGTG
GCTGAAATACCATTGAGGATGGTCAGCGAGGAGATGGAAGAGCAAGTCCATTCCATCCGTGGCAGCTCTTCTGCA
AACCCTGTGAACTCAGTTCGGAGGAAATCATGTCTTGTGAAGGAAGTGGAAAAAATGAAGAACAAGCGAGAAGAG
AAGAAGGCCCAGAACTCTGAAATGAGAATGAAGAGAGCTCAGGAGTATGACAGTAGTTTTCCAAACTGGGAATTT
GCCCGAATGATTAAAGAATTTCGGGCTACTTTGGAATGTCATCCACTTACTATGACTGATCCTATCGAAGAGCAC
AGAATATGTGTCTGTGTTAGGAAACGCCCACTGAATAAGCAAGAATTGGCCAAGAAAGAAATTGATGTGATTTCC
ATTCCTAGCAAGTGTCTCCTCTTGGTACATGAACCCAAGTTGAAAGTGGACTTAACAAAGTATCTGGAGAACCAA
GCATTCTGCTTTGACTTTGCATTTGATGAAACAGCTTCGAATGAAGTTGTCTACAGGTTCACAGCAAGGCCACTG
GTACAGACAATCTTTGAAGGTGGAAAAGCAACTTGTTTTGCATATGGCCAGACAGGAAGTGGCAAGACACATACT
ATGGGCGGAGACCTCTCTGGGAAAGCCCAGAATGCATCCAAAGGGATCTATGCCATGGCCTCCCGGGACGTCTTC
CTCCTGAAGAATCAACCCTGCTACCGGAAGTTGGGCCTGGAAGTCTATGTGACATTCTTCGAGATCTACAATGGG
AAGCTGTTTGACCTGCTCAACAAGAAGGCCAAGCTGCGCGTGCTGGAGGACGGCAAGCAACAGGTGCAAGTGGTG
GGGCTGCAGGAGCATCTGGTTAACTCTGCTGATGATGTCATCAAGATGCTCGACATGGGCAGCGCCTGCAGAACC
TCTGGGCAGACATTTGCCAACTCCAATTCCTCCCGCTCCCACGCGTGCTTCCAAATTATTCTTCGAGCTAAAGGG
AGAATGCATGGCAAGTTCTCTTTGGTAGATCTGGCAGGGAATGAGCGAGGCGCAGACACTTCCAGTGCTGACCGG
CAGACCCGCATGGAGGGCGCAGAAATCAACAAGAGTCTCTTAGCCCTGAAGGAGTGCATCAGGGCCCTGGGACAG
AACAAGGCTCACACCCCGTTCCGTGAGAGCAAGCTGACACAGGTGCTGAGGGACTCCTTCATTGGGGAGAACTCT
AGGACTTGCATGATTGCCACGATCTCACCAGGCATAAGCTCCTGTGAATATACTTTAAACACCCTGAGATATGCA
GACAGGGTCAAGGAGCTGAGCCCCCACAGTGGGCCCAGTGGAGAGCAGTTGATTCAAATGGAAACAGAAGAGATG
GAAGCCTGCTCTAACGGGGCGCTGATTCCAGGCAATTTATCCAAGGAAGAGGAGGAACTGTCTTCCCAGATGTCC
AGCTTTAACGAAGCCATGACTCAGATCAGGGAGCTGGAGGAGAAGGCTATGGAAGAGCTCAAGGAGATCATACAG
CAAGGACCAGACTGGCTTGAGCTCTCTGAGATGACCGAGCAGCCAGACTATGACCTGGAGACCTTTGTGAACAAA
GCGGAATCTGCTCTGGCCCAGCAAGCCAAGCATTTCTCAGCCCTGCGAGATGTCATCAAGGCCTTACGCCTGGCC
ATGCAGCTGGAAGAGCAGGCTAGCAGACAAATAAGCAGCAAGAAACGGCCCCAGTGACGACTGCAAATAAAAATC
TGTTTGGTTTGACACCCAGCCTCTTCCCTGGCCCTCCCCAGAGAACTTTGGGTACCTGGTGGGTCTAGGCAGGGT
CTGAGCTGGGACAGGTTCTGGTAAATGCCAAGTATGGGGGCATCTGGGCCCAGGGCAGCTGGGGAGGGGGTCAGA
GTGACATGGGACACTCCTTTTCTGTTCCTCAGTTGTCGCCCTCACGAGAGGAAGGAGCTCTTAGTTACCCTTTTG
TGTTGCCCTTCTTTCCATCAAGGGGAATGTTCTCAGCATAGAGCTTTCTCCGCAGCATCCTGCCTGCGTGGACTG
GCTGCTAATGGAGAGCTCCCTGGGGTTGTCCTGGCTCTGGGGAGAGAGACGGAGCCTTTAGTACAGCTATCTGCT
GGCTCTAAACCTTCTACGCCTTTGGGCCGAGCACTGAATGTCTTGTACTTTAAAAAAATGTTTCTGAGACCTCTT
TCTACTTTACTGTCTCCCTAGAGTCCTAGAGGATCCCTACTGTTTTCTGTTTTATGTGTTTATACATTGTATGTA
ACAATAAAGAGAAAAAATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2564

MAMDSSLQARLFPGLAIKIQRSNGLIHSANVRTVNLEKSCVSVEWAEGGATKGKEIDFDDVAAINPELLQLLPLH
PKDNLPLQENVTIQKQKRRSVNSKIPAPKESLRSRSTRMSTVSELRITAQENDMEVELPAAANSRKQFSVPPAPT
RPSCPAVAEIPLRMVSEEMEEQVHSIRGSSSANPVNSVRRKSCLVKEVEKMKNKREEKKAQNSEMRMKRAQEYDS
SFPNWEFARMIKEFRATLECHPLTMTDPIEEHRICVCVRKRPLNKQELAKKEIDVISIPSKCLLLVHEPKLKVDL
TKYLENQAFCFDFAFDETASNEVVYRFTARPLVQTIFEGGKATCFAYGQTGSGKTHTMGGDLSGKAQNASKGIYA
MASRDVFLLKNQPCYRKLGLEVYVTFFEIYNGKLFDLLNKKAKLRVLEDGKQQVQVVGLQEHLVNSADDVIKMLD
MGSACRTSGQTFANSNSSRSHACFQIILRAKGRMHGKFSLVDLAGNERGADTSSADRQTRMEGAEINKSLLALKE
CIRALGQNKAHTPFRESKLTQVLRDSFIGENSRTCMIATISPGISSCEYTLNTLRYADRVKELSPHSGPSGEQLI
QMETEEMEACSNGALIPGNLSKEEEELSSQMSSFNEAMTQIRELEEKAMEELKEIIQQGPDWLELSEMTEQPDYD
LETFVNKAESALAQQAKHFSALRDVIKALRLAMQLEEQASRQISSKKRPQ

FIGURE 2565

CTCTCTTGCCTGCCGCCATGTGCCTTTCGCCTTCTGCCGTGATTGTGAGGCCTCCCCAGCCATATGGAAGTTCAG
GATGTCTGCCCGTGGCCCGGCTATCGGCATCGACCTGGGCACCACCTATTCGTGCGTCGGGGTCTTCCAACATGG
CAAGGTGGAGATCATCGCCAACGACCAGGGCAATCGCACCACCCCCAGCTACGTGGCCTTCACGGACACCGAGCG
CCTCATCGGCGACGCCGCCAAGAACCAGGTGGCCATGAACCCCACCAACACCATCTTCGACGCCAAGAGGCTGAT
TGGACGGAAATTCGAGGATGCCACAGTGCAGTCGGATATGAAACACTGGCCGTTCCGGGTGGTGAGCGAGGGAGG
CAAGCCCAAAGTGCAAGTAGAGTACAAGGGGGAGACCAAGACCTTCTTCCCAGAGGAGATATCCTCCATGGTCCT
CACGAAGATGAAGGAGATCGCGGAAGCCTACCTGGGGGGCAAGGTGCACAGCGCGGTCATAACGGTCCCGGCCTA
TTTCAACGACTCGCAGCGCCAGGCCACCAAGGACGCAGGCACCATCACGGGGCTCAATGTGCTGCGCATCATCAA
CGAGCCCACGGCGGCGGCCATCGCCTACGGCCTGGACAAGAAGGGCTGCGCGGGCGGCGAGAAGAACGTGCTCAT
CTTTGACCTGGGCGGTGGCACTTTCGACGTGTCCATCCTGACCATCGAGGATGGCATCTTCGAGGTGAAGTCCAC
GGCCGGCGACACCCACCTGGGCGGTGAGGACTTCGACAACCGCATGGTGAGCCACCTGGCGGAGGAGTTCAAGCG
CAAGCACAAGAAGGACATTGGGCCCAACAAGCGCGCCGTGAGGCGGCTGCGCACCGCTTGCGAGCGCGCCAAGCG
CACCCTGAGCTCGTCCACGCAGGCGAGCATCGAGATCGACTCGCTCTACGAGGGCGTGGACTTCTATACGTCCAT
CACGCGCGCCCGCTTCGAGGAGCTCAATGCCGACCTCTTTCGCGGGACCCTGGAGCCGGTGGAGAAGGCGCTGCG
CGACGCCAAGCTGGACAAGGGCCAGATCCAGGAGATCGTGCTGGTGGGCGGCTCCACTCGTATCCCCAAGATCCA
GAAGCTGCTGCAGGATTTCTTCAACGGCAAGGAGCTGAACAAGAGCATCAACCCCGACGAGGCGGTGGCCTATGG
CGCCGCGGTGCAGGCGGCCATCCTCATCGGCGACAAATCAGAGAATGTGCAGGACCTGCTGCTACTCGACGTGAC
CCCGTTGTCGCTGGGCATCGAGACAGCTGGCGGTGTCATGACCCCACTCATCAAGAGGAACACCACGATCCCCAC
CAAGCAGACGCAGACCTTCACCACCTACTCGGACAACCAGAGCAGCGTACTGGTGCAGGTATACGAGGGCGAACG
GGCCATGACCAAGGACAATAACCTGCTGGGCAAGTTCGACCTGACCGGGATTCCCCCTGCGCCTCGCGGGGTCCC
CCAAATCGAGGTTACCTTCGACATTGACGCCAATGGCATCCTTAACGTTACCGCCGCCGACAAGAGCACCGGTAA
GGAAAACAAAATCACCATCACCAATGACAAAGGTCGTCTGAGCAAGGACGACATTGACCGGATGGTGCAGGAGGC
GGAGCGGTACAAATCGGAAGATGAGGCGAATCGCGACCGAGTCGCGGCCAAAAACGCCCTGGAGTCCTATACCTA
CAACATCAAGCAGACGGTGGAAGACGAGAAACTGAGGGGCAAGATTAGCGAGCAGGACAAAAACAAGATCCTCGA
CAAGTGTCAGGAGGTGATCAACTGGCTCGACCGAAACCAGATGGCAGAGAAAGATGAGTATGAACACAAGCAGAA
AGAGCTCGAAAGAGTTTGCAACCCCATCATCAGCAAACTTTACCAAGGTGGTCCTGGCGGCGGCAGCGGCGGCGG
CGGTTCAGGAGCCTCCGGGGGACCCACCATCGAAGAAGTGGACTAAGCTTGCACTCAAGTCAGCGTAAACCTCTT
TGCCTTTCTCTCTCTCTCTTTTTTTTTGTTTGTTTCTTTGAAATGTCCTTGTGCCAAGTACGAGATCTATTGTTG
GAAGTCTTTGGTATATGCAAATGAAAGGAGAGGTGCAACAACTTAGTTTAATTATAAAAGTTCCAAAGTTTGTTT
TTTAAAAACATTATTCGAGGTTTCTCTTTAATGCATTTTGCGTGTTTGCTGACTTGAGCATTTTTGATTAGTTCG
TGCATGGAGATTTGTTTGAGATGAGAAACCTTAAGTTTGCACACCTGTTCTGTAGAAGCTTGGAAACAGTAAAAT
ATATAGGAGCTTAAATTGTTTATTTTTATGTACTACTTTAAAACTAAACTGAACATTGCAGTAATGTTAAGGACA
GGTATACTTTTTGCAAACAAATGCATAAATGCAAATGTAAAGTAAAGCTGAAATTGATCTCAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAA

FIGURE 2566

MSARGPAIGIDLGTTYSCVGVFQHGKVEIIANDQGNRTTPSYVAFTDTERLIGDAAKNQVAMNPTNTIFDAKRLI
GRKFEDATVQSDMKHWPFRVVSEGGKPKVQVEYKGETKTFFPEEISSMVLTKMKEIAEAYLGGKVHSAVITVPAY
FNDSQRQATKDAGTITGLNVLRIINEPTAAAIAYGLDKKGCAGGEKNVLIFDLGGGTFDVSILTIEDGIFEVKST
AGDTHLGGEDFDNRMVSHLAEEFKRKHKKDIGPNKRAVRRLRTACERAKRTLSSSTQASIEIDSLYEGVDFYTSI
TRARFEELNADLFRGTLEPVEKALRDAKLDKGQIQEIVLVGGSTRIPKIQKLLQDFFNGKELNKSINPDEAVAYG
AAVQAAILIGDKSENVQDLLLLDVTPLSLGIETAGGVMTPLIKRNTTIPTKQTQTFTTYSDNQSSVLVQVYEGER
AMTKDNNLLGKFDLTGIPPAPRGVPQIEVTFDIDANGILNVTAADKSTGKENKITITNDKGRLSKDDIDRMVQEA
ERYKSEDEANRDRVAAKNALESYTYNIKQTVEDEKLRGKISEQDKNKILDKCQEVINWLDRNQMAEKDEYEHKQK
ELERVCNPIISKLYQGGPGGGSGGGGSGASGGPTIEEVD

FIGURE 2567

CGCGGCACTCGCGCGCGATCCCGGCCGGCGGCGCGCCGGCGGGCCAGGCGGCGCCACAGCCCATGGAGCTCGAGA
ACATCGTAGCGAACACGGTGCTACTCAAGGCCCGGGAAGGTGGCGGTGGAAATCGCAAAGGCAAAAGCAAGAAAT
GGCGGCAGATGCTCCAGTTCCCTCACATCAGCCAGTGCGAAGAGCTGCGGCTCAGCCTCGAGCGTGACTATCACA
GCCTGTGCGAGCGGCACGCCATTGGGCGCCTGCTGTTCCGAGAGTTCTGTGCCACGAGGCCGGAGCTGAGCCGCT
GCGTCGCCTTCCTGGATGGGGTGGCCGAGTATGAAGTGACCCCGGATGACAAGCGGAAGGCATGTGGGCGGCACG
TAACGCAGAATTTTCTGAGCCACACGGGTCCTGACCTCATCCCTGAGGTCCCCCGGCAGCTGGTGACGAACTGCA
CCCAGCGGCTGGAGCAGGGTCCCTGCAAAGACCTTTTCCAGGAACTCACCCGGCTGACCCACGAGTACCTGAGCG
TGGCCCCTTTTGCCGACTACCTCGACAGCATCTACTTCAACCGTTTCCTGCAGTGGAAGTGGCTGGAAAGGCAGC
CAGTGACCAAAAACACCTTCAGGCAATACCGAGTCCTGGGCAAAGGTGGCTTTGGGGAGGTGTGCGCCTGCCAGG
TGCGGGCCACAGGTAAGATGTATGCCTGCAAGAAGCTAGAGAAAAAGCGGATCAAGAAGCGGAAAGGGGAGGCCA
TGGCGCTGAACGAGAAGCAGATCCTGGAGAAAGTGAACAGTAGGTTTGTAGTGAGCTTGGCCTACGCCTATGAGA
CCAAGGACGCGCTGTGCCTGGTGCTGACACTGATGAACGGGGGCGACCTCAAGTTCCACATCTACCACATGGGCC
AGGCTGGCTTCCCCGAAGCGCGGGCCGTCTTCTACGCCGCCGAGATCTGCTGTGGCCTGGAGGACCTGCACCGGG
AGCGCATCGTGTACAGGGACCTGAAGCCCGAGAACATCTTGCTGGATGACCACGGCCACATCCGCATCTCTGACC
TGGGACTAGCTGTGCATGTGCCCGAGGGCCAGACCATCAAAGGGCGTGTGGGCACCGTGGGTTACATGGCTCCGG
AGGTGGTGAAGAATGAACGGTACACGTTCAGCCCTGACTGGTGGGCGCTCGGCTGCCTCCTGTACGAGATGATCG
CAGGCCAGTCGCCCTTCCAGCAGAGGAAGAAGAAGATCAAGCGGGAGGAGGTGGAGCGGCTGGTGAAGGAGGTCC
CCGAGGAGTATTCCGAGCGCTTTTCCCCGCAGGCCCGCTCACTTTGCTCACAGCTCCTCTGCAAGGACCCTGCCG
AACGCCTGGGGTGTCGTGGGGGCAGTGCCCGCGAGGTGAAGGAGCACCCCCTCTTTAAGAAGCTGAACTTCAAGC
GGCTGGGAGCTGGCATGCTGGAGCCGCCGTTCAAGCCTGACCCCCAGGCCATTTACTGCAAGGATGTTCTGGACA
TTGAACAGTTCTCTACGGTCAAGGGCGTGGAGCTGGAGCCTACCGACCAGGACTTCTACCAGAAGTTTGCCACAG
GCAGTGTGCCCATCCCCTGGCAGAACGAGATGGTGGAGACCGAGTGCTTCCAAGAGCTGAATGTCTTTGGGCTGG
ATGGCTCAGTTCCCCCAGACCTGGACTGGAAGGGCCAGCCACCTGCACCTCCTAAAAAGGGACTGCTGCAGAGAC
TCTTCAGTCGCCAAGATTGCTGTGGAAACTGCAGCGACAGCGAGGAAGAGCTCCCCACCCGCCTCTAGCCCCCAG
CCCGAGGCCCCCACCAGCAGTTGGCGGTAGCAGCTACTCCGAGCGCCGTTTACAGTTTTGCACAGTGATCTTCCC
CATTGTCCACTCAAGTCGTGGCCTGGGGAACACAGACGGAGCTGTCCCCAGTGTCCTCCGTCCCTCAGCCCCTGG
CCTGGCTGAGTTTGGCAGGGCCTGGGCCATCCCTGGGACAAAGGTGCGTCCCTTCAGCTCTTCTCCGTGGAGCTC
GGGGCTTTCTGTATTTATGTATTTGTACGAATGTATATAGCGACCAGAGCATTCTTAATTCCCGCCGCAGACCTG
GCGCCCCCGCCTTGGCTCCTGGGGGCAGCCAGCCCTGGCTGGAGAGCGGGACGTGGCAGAGGAGCCACTGCCAAA
CTCAAGGCTCCTCTGGCCCAGCTTGGATGGCTGAGGGTGGTCACACCTGAGCCTTCAGCACTGTGCTGCCACCCC
GGCCTCTGAGTAAGACTCGTGCCTCCCCCTGCTGCCCTGGGCTCAGGCTGCTACCTCTGGGGCCCAAAGCTGTCC
CTTCTCAGTGCTTGTCAGCGCTGGGTCTGGGGCCTCTGTATGCCCTAGGCCTGTGCCAAAGTGGCCAGAGATTGG
GCTGCCTGTGATACCCATCAGCCCACTGCCCCGGCCGGCCCAGATAGGTCTGCCTCTGCCTTCCAGCTCCCACAG
CCTGGTCCCTGATACTGGGCTCTGTCCTGCAGACACCTCTTTCAGAAACGCCCAAGCCCAGCCCTAGGAGGGGGT
GGGGCATCCCTGGTCAACCCTCAAACATTCCGGACTCCCCTCATAACAATAGACACATGTGCCCAGCAATAATCC
GCCCCTTCCTGTGTGCGCCTGTGGGGTGCGTGCTCTCTGTGTGTACCTGTGTGGGTGAAGGGGATAGGGCGAGGC
TGTGCCTGTGCCCCAGGTCCCAGCCCTGGCCCTTCCCAGACTGTGATGGCCATCCTGGTCCCAGTGTTAGGGTAG
CATGGGATTACAGGGCCCTGTTTTTTCCATATTTAAAGCCAATTTTTATTACTCGTTTTGTCCAACGTAAAAG

FIGURE 2568

MELENIVANTVLLKAREGGGGNRKGKSKKWRQMLQFPHISQCEELRLSLERDYHSLCERHAIGRLLFREFCATRP
ELSRCVAFLDGVAEYEVTPDDKRKACGRHVTQNFLSHTGPDLIPEVPRQLVTNCTQRLEQGPCKDLFQELTRLTH
EYLSVAPFADYLDSIYFNRFLQWKWLERQPVTKNTFRQYRVLGKGGFGEVCACQVRATGKMYACKKLEKKRIKKR
KGEAMALNEKQILEKVNSRFVVSLAYAYETKDALCLVLTLMNGGDLKFHIYHMGQAGFPEARAVFYAAEICCGLE
DLHRERIVYRDLKPENILLDDHGHIRISDLGLAVHVPEGQTIKGRVGTVGYMAPEVVKNERYTFSPDWWALGCLL
YEMIAGQSPFQQRKKKIKREEVERLVKEVPEEYSERFSPQARSLCSQLLCKDPAERLGCRGGSAREVKEHPLFKK
LNFKRLGAGMLEPPFKPDPQAIYCKDVLDIEQFSTVKGVELEPTDQDFYQKFATGSVPIPWQNEMVETECFQELN
VFGLDGSVPPDLDWKGQPPAPPKKGLLQRLFSRQDCCGNCSDSEEELPTRL

FIGURE 2569

GGGCCGGGTCCGGGAGCCCCAGGGCAGCCGCCCCGCCGAGTCGCAGTGTCGGGGGCTGCGGGGTGTCTCGGGGCC
CTGGGGTGAGTGCGGGGCGCGGGCCGAGGTTTGCAGGGCCCTGTGAGCGCGCCCAGGCACGTGTTGCTTCGGGAC
GGGCCAGCCGGTGGGTGAACCCTGCCAGCCACGCGTGGGGCGGGCCCCTGGCACATCTCCAGACCATTGTCTCCT
GTGCCAGAAGCTTTGTAGGTGCAACTTCCCCTTGGAGCAGCTGTGGGTGCGGATCCAGCGGACGAATCCCGAGGC
GTCTCAGAGAGAGCCTGGACAGCCGCTGGAGCCTTTCCCGAGTGGGTCCTTCCAACACCGCTACAGCAGGAAAGC
CATCCCCCTAGGGTCCTGTCCATCGGAAACTCCTGTCCTGGGGAGTCTGCCTGCCTGGCCTCAGGACACAGGCCA
ACTAAGCTGGCCCCGAAATCCAGAATGCATCCAGAGGGAAGGCACAGTGTCACCTTCGTCCCCTCCGGAGCTGCA
CGTGGCCTGAGCAGG**ATG**GTGCCCTCCAGCCCAGCGGTGGAGAAGCAGGTGCCCGTGGAACCTGGGCCTGACCCC
GAGCTCCGGTCCTGGCGGCGCCTCGTGTGCTACCTTTGCTTCTACGGCTTCATGGCGCAGATACGGCCAGGGGAG
AGCTTCATCACCCCCTACCTCCTGGGGCCCGACAAGAACTTCACGCGGGAGCAGGTCACGAACGAGATCACGCCG
GTGCTGTCGTACTCCTACCTGGCCGTGCTGGTGCCGGTGTTCCTGCTCACCGACTACCTGCGCTACACGCCGGTG
CTGCTGCTGCAGGGGCTCAGCTTCGTGTCGGTGTGGCTGCTGCTGCTGCTGGGCCACTCGGTGGCGCACATGCAG
CTCATGGAGCTCTTCTACAGCGTCACCATGGCCGCGCGCATCGCCTATTCCTCCTACATCTTCTCTCTCGTGCGG
CCCGCGCGCTACCAGCGTGTGGCCGGCTACTCGCGCGCTGCGGTGCTGCTGGGCGTGTTCACCAGCTCCGTGCTG
GGCCAGCTGCTGGTCACTGTGGGCCGAGTCTCCTTCTCCACGCTCAACTACATCTCGCTGGCCTTCCTCACCTTC
AGCGTGGTCCTCGCCCTCTTCCTGAAGCGCCCCAAGCGCAGCCTCTTCTTCAACCGCGACGACCGGGGGCGGTGC
GAAACCTCGGCTTCGGAGCTGGAGCGCATGAATCCCGGCCCAGGCGGGAAGCTGGGACACGCCCTGCGGGTGGCC
TGTGGGGACTCAGTGCTGGCGCGGATGCTGCGGGAGCTGGGGGACAGCCTGCGGCGGCCGCAGCTGCGCCTGTGG
TCCCTCTGGTGGGTCTTCAACTCGGCCGGCTACTACCTGGTGGTCTACTACGTGCACATCCTGTGGAACGAGGTG
GACCCCACCACCAACAGTGCGCGGGTCTACAACGGCGCGGCAGATGCTGCCTCCACGCTGCTGGGCGCCATCACG
TCCTTCGCCGCGGGCTTCGTGAAGATCCGCTGGGCGCGCTGGTCCAAGCTGCTCATCGCGGGCGTCACGGCCACG
CAGGCGGGGCTGGTCTTCCTTCTGGCGCACACGCGCCACCCGAGCAGCATCTGGCTGTGCTATGCGGCCTTCGTG
CTGTTCCGCGGCTCCTACCAGTTCCTCGTGCCCATCGCCACCTTTCAGATTGCATCTTCTCTGTCTAAAGAGCTC
TGTGCCCTGGTCTTCGGGGTCAACACGTTCTTTGCCACCATCGTCAAGACCATCATCACTTTCATTGTCTCGGAC
GTGCGGGGCCTGGGCCTCCCGGTCCGCAAGCAGTTCCAGTTATACTCCGTGTACTTCCTGATCCTGTCCATCATC
TACTTCTTGGGGGCCATGCTGGATGGCCTGCGGCACTGCCAGCGGGGCCACCACCCGCGGCAGCCCCCGGCCCAG
GGCCTGAGGAGTGCCGCGGAGGAGAAGGCAGCACAGGCACTGAGCGTGCAGGACAAGGGCCTCGGAGGCCTGCAG
CCAGCCCAGAGCCCGCCGCTTTCCCCAGAAGACAGCCTGGGGGCTGTGGGGCCAGCCTCCCTGGAGCAGAGACAG
AGCGACCCATACCTGGCCCAGGCCCCGGCCCCGCAGGCAGCTGAATTCCTGAGCCCAGTGACAACCCCTTCCCCC
TGCACTCTGTCGTCCGCCCAAGCCTCAGGCCCTGAGGCTGCAGATGAGACTTGTCCCCAGCTGGCTGTCCATCCT
CCTGGTGTCAGCAAGCTGGGTTTGCAGTGTCTTCCAAGCGACGGTGTTCAGAATGTGAACCAG**TGA**CTCTCGGGC
GCCCCTGTGGTAACTTTGCAGGCGGCCCTCAGTGCATCCCCACGACCCCTGCCTCGAGGGCCGCCTGCCTTAGCA
ATGGGGGCCTCCGCTTATCCTGCTAGCAGGCCCCCTAGGATTCCCCCTGCCCTGTGCCGCACTCTGGCGGTGGCC
ACAGCGTGCTGGCGACACTCAGGGCAGCTGCCTGGCCATGCTGTCCCTGCACTGTGCCCCGCGGGCTTTGTTGCT
GGAAGAGGTGGGTGGTGGGCTTCTGCGTCCACCAGGCCTCACTGGCTCATGCCCCTTGGGGGGCTTGAGACAAAT
CCTTTCTGCCCCCCAGGGCTAGTGAAGTGGCCTCTTGGATACCAGCTCAGGGGACACTGGCCCCACAGGAGTTGT
GAGCCCTCTAGGGCAGGGTGGGAGCCGGGACCCTCAGGTGTAGCTGAGCTGTGACATTGCTGGTCATCCTTGGTG
CTCTTGCTTTTTTGAAAGATGCTTTTTTTTTTTTTAACTGACGTAGAATGAAGAACTGCATGTGGCTTCTCTGTC
TCTGTGGAAAAGCCATCTCAGGTTGGCGGCAGACACATTGTCATCAGAGGGGAGCAGCGGCTCTGGTCCTCGGAG
CTGGTTCCTCTCTCCCACCCTAAGGGCAGCCCTCCATGGTCCTGTCTGTCCTTCTGAAGTGTGTCCATCCTGACC
TGCGGGTCCTCAGCTGCTCCCACACTTGTGCCAGCCCGGAGGGGACTGGTCCCGGTCACCGCGGACGTGCTGGCC
TTGGTATGTGCCAGGCTTGCCTGGGCTGGGCAGCCTTGGGGGGGCTGCCTTTGTGGTGGGCGCTGGGGAAGTACG
TCCCAGCGGCCTCAGGGTCTAAGGAGCGCTAGTGCCTTGCCCACAGGTGCGGGACCATCTGATGTGATGTGAATA
CTCTTCCCACATACATTAAACACACTTAAGTGAG

FIGURE 2570

MVPSSPAVEKQVPVEPGPDPELRSWRRLVCYLCFYGFMAQIRPGESFITPYLLGPDKNFTREQVTNEITPVLSYS
YLAVLVPVFLLTDYLRYTPVLLLQGLSFVSVWLLLLLGHSVAHMQLMELFYSVTMAARIAYSSYIFSLVRPARYQ
RVAGYSRAAVLLGVFTSSVLGQLLVTVGRVSFSTLNYISLAFLTFSVVLALFLKRPKRSLFFNRDDRGRCETSAS
ELERMNPGPGGKLGHALRVACGDSVLARMLRELGDSLRRPQLRLWSLWWVFNSAGYYLVVYYVHILWNEVDPTTN
SARVYNGAADAASTLLGAITSFAAGFVKIRWARWSKLLIAGVTATQAGLVFLLAHTRHPSSIWLCYAAFVLFRGS
YQFLVPIATFQIASSLSKELCALVFGVNTFFATIVKTIITFIVSDVRGLGLPVRKQFQLYSVYFLILSIIYFLGA
MLDGLRHCQRGHHPRQPPAQGLRSAAEEKAAQALSVQDKGLGGLQPAQSPPLSPEDSLGAVGPASLEQRQSDPYL
AQAPAPQAAEFLSPVTTPSPCTLSSAQASGPEAADETCPQLAVHPPGVSKLGLQCLPSDGVQNVNQ

FIGURE 2571

ATGATATATGTATCTACGGGGGCCTGGGGCTGGGCGGGCTCCTGCTTCTGGCAGTGGTCCTTCTGTCCGCCTGCC
TGTGTTGGCTGCATCGAAGAGGAGGCCCAGGGCTCCTCAGAGCAGGAACTCCACTATGCATCTCTGCAGAGGCTG
CCAGTGCCCAGCAGTGAGGGACCTGACCTCAGGGGCAGAGACAAGAGAGGCACCAAGGAGGATCCAAGAGCTGAC
TATGCCTGCATTGCTGAGAACAAACCCACC**TGA**

FIGURE 2572

MIYVSTGAWGWAGSCFWQWSFCPPACVGCIEEEAQGSSEQELHYASLQRLPVPSSEGPDLRGRDKRGTKEDPRAD
YACIAENKPT

FIGURE 2573

GGAGCTCAAGCTCCTCTACAAAGAGGTGGACAGAGAAGACAGCAGAGACCATGGGACCCCCCTCAGCCCCTCCCT
GCAGATTGCATGTCCCCTGGAAGGAGGTCCTGCTCACAGCCTCACTTCTAACCTTCTGGAACCCACCCACCACTG
CCAAGCTCACTATTGAATCCACGCCATTCAATGTCGCAGAGGGGAAGGAGGTTCTTCTACTCGCCCACAACCTGC
CCCAGAATCGTATTGGTTACAGCTGGTACAAAGGCGAAAGAGTGGATGGCAACAGTCTAATTGTAGGATATGTAA
TAGGAACTCAACAAGCTACCCCAGGGCCCGCATACAGTGGTCGAGAGACAATATACCCCAATGCATCCCTGCTGA
TCCAGAACGTCACCCAGAATGACACAGGATTCTATACCCTACAAGTCATAAAGTCAGATCTTGTGAATGAAGAAG
CAACCGGACAGTTCCATGTATACCCGGAGCTGCCCAAGCCCTCCATCTCCAGCAACAACTCCAACCCCGTGGAGG
ACAAGGATGCTGTGGCCTTCACCTGTGAACCTGAGGTTCAGAACACAACCTACCTGTGGTGGGTAAATGGTCAGA
GCCTCCCGGTCAGTCCCAGGCTGCAGCTGTCCAATGGCAACATGACCCTCACTCTACTCAGCGTCAAAAGGAACG
ATGCAGGATCCTATGAATGTGAAATACAGAACCCAGCGAGTGCCAACCGCAGTGACCCAGTCACCCTGAATGTCC
TCTATGGCCCAGATGTCCCCACCATTTCCCCCTCAAAGGCCAATTACCGTCCAGGGGAAAATCTGAACCTCTCCT
GCCACGCAGCCTCTAACCCACCTGCACAGTACTCTTGGTTTATCAATGGGACGTTCCAGCAATCCACACAAGAGC
TCTTTATCCCCAACATCACTGTGAATAATAGCGGATCCTATATGTGCCAAGCCCATAACTCAGCCACTGGCCTCA
ATAGGACCACAGTCACGATGATCACAGTCTCTGGAAGTGCTCCTGTCCTCTCAGCTGTGGCCACCGTCGGCATCA
CGATTGGAGTGCTGGCCAGGGTGGCTCTGATATAGCAGCCCTGGTGTATTTTCGATATTTCAGGAAGACTGGCAG
ATTGGACCAGACCCTGAATTCTTCTAGCTCCTCCAATCCCATTTTATCCCATGGAACCACTAAAAACAAGGTCTG
CTCTGCTCCTGAAGCCCTATATGCTGGAGATGGACAACTCAATGAAAATTTAAAGGGAAAACCCTCAGGCCTGAG
GTGTGTGCCACTCAGAGACTTCACCTAACTAGAGACAGTCAAACTGCAAACCATGGTGAGAAATTGACGACTTCA
CACTATGGACAGCTTTTCCCAAGATGTCAAAACAAGACTCCTCATCATGATAAGGCTCTTACCCCCTTTTAATTT
GTCCTTGCTTATGCCTGCCTCTTTCGCTTGGCAGGATGATGCTGTCATTAGTATTTCACAAGAAGTAGCTTCAGA
GGGTAACTTAACAGAGTGTCAGATCTATCTTGTCAATCCCAACGTTTTACATAAAATAAGAGATCCTTTAGTGCA
CCCAGTGACTGACATTAGCAGCATCTTTAACACAGCCGTGTGTTCAAATGTACAGTGGTCCTTTTCAGAGTTGGA
CTTCTAGACTCACCTGTTCTCACTCCCTGTTTTAATTCAACCCAGCCATGCAATGCCAAATAATAGAATTGCTCC
CTACCAGCTGAACAGGGAGGAGTCTGTGCAGTTTCTGACACTTGTTGTTGAACATGGCTAAATACAATGGGTATC
GCTGAGACTAAGTTGTAGAAATTAACAAATGTGCTGCTTGGTTAAAATGGCTACACTCATCTGACTCATTCTTTA
TTCTATTTTAGTTGGTTTGTATCTTGCCTAAGGTGCGTAGTCCAACTCTTGGTATTACCCTCCTAATAGTCATAC
TAGTAGTCATACTCCCTGGTGTAGTGTATTCTCTAAAAGCTTTAAATGTCTGCATGCAGCCAGCCATCAAATAGT
GAATGGTCTCTCTTTGGCTGGAATTACAAAACTCAGAGAAATGTGTCATCAGGAGAACATCATAACCCATGAAGG
ATAAAAGCCCCAAATGGTGGTAACTGATAATAGCACTAATGCTTTAAGATTTGGTCACACTCTCACCTAGGTGAG
CGCATTGAGCCAGTGGTGCTAAATGCTACATACTCCAACTGAAATGTTAAGGAAGAAGATAGATCCAATTAAAAA
AAATTAAAACCAATTTAAAAAAAAAAAAGAACACAGGAGATTCCAGTCTACTTGAGTTAGCATAATACAGAAGTC
CCCTCTACTTTAACTTTTACAAAAAAGTAACCTGAACTAATCTGATGTTAACCAATGTATTTATTTCTGTGGTTC
TGTTTCCTTGTTCCAATTTGACAAAACCCACTGTTCTTGTATTGTATTGCCCAGGGGGAGCTATCACTGTACTTG
TAGAGTGGTGCTGCTTTAATTCATAAATCACAAATAAAAGCCAATTAGCTCTATAACT

FIGURE 2574

MGPPSAPPCRLHVPWKEVLLTASLLTFWNPPTTAKLTIESTPFNVAEGKEVLLLAHNLPQNRIGYSWYKGERVDG
NSLIVGYVIGTQQATPGPAYSGRETIYPNASLLIQNVTQNDTGFYTLQVIKSDLVNEEATGQFHVYPELPKPSIS
SNNSNPVEDKDAVAFTCEPEVQNTTYLWWVNGQSLPVSPRLQLSNGNMTLTLLSVKRNDAGSYECEIQNPASANR
SDPVTLNVLYGPDVPTISPSKANYRPGENLNLSCHAASNPPAQYSWFINGTFQQSTQELFIPNITVNNSGSYMCQ
AHNSATGLNRTTVTMITVSGSAPVLSAVATVGITIGVLARVALI

FIGURE 2575

ACATTTGCTTCTGACACAACTGTGTTCACTAGCAACCTCAAACAGACACCATGGTGCACCTGACTCCTGAGGAGA
AGTCTGCCGTTACTGCCCTGTGGGGCAAGGTGAACGTGGATGAAGTTGGTGGTGAGGCCCTGGGCAGGCTGCTGG
TGGTCTACCCTTGGACCCAGAGGTTCTTTGAGTCCTTTGGGGATCTGTCCACTCCTGATGCTGTTATGGGCAACC
CTAAGGTGAAGGCTCATGGCAAGAAAGTGCTCGGTGCCTTTAGTGATGGCCTGGCTCACCTGGACAACCTCAAGG
GCACCTTTGCCACACTGAGTGAGCTGCACTGTGACAAGCTGCACGTGGATCCTGAGAACTTCAGGCTCCTGGGCA
ACGTGCTGGTCTGTGTGCTGGCCCATCACTTTGGCAAAGAATTCACCCCACCAGTGCAGGCTGCCTATCAGAAAG
TGGTGGCTGGTGTGGCTAATGCCCTGGCCCACAAGTATCACTAAGCTCGCTTTCTTGCTGTCCAATTTCTATTAA
AGGTTCCTTTGTTCCCTAAGTCCAACTACTAAACTGGGGGATATTATGAAGGGCCTTGAGCATCTGGATTCTGCC
TAATAAAAAACATTTATTTTCATTGC

FIGURE 2576

MVHLTPEEKSAVTALWGKVNVDEVGGEALGRLLVVYPWTQRFFESFGDLSTPDAVMGNPKVKAHGKKVLGAFSDG
LAHLDNLKGTFATLSELHCDKLHVDPENFRLLGNVLVCVLAHHFGKEFTPPVQAAYQKVVAGVANALAHKYH

FIGURE 2577

CACTCGGAGCCCGAGCCCGAGCCGCAGCCGCCGCCTGGGGCGCTTGGGTCGGCCTCGAGGACACCGGAGAGGGGC
GCCACGCCGCCGTGGCCGCAGAAATGACCATGGTTGACACAGAGATGCCATTCTGGCCCACCAACTTTGGGATCA
GCTCCGTGGATCTCTCCGTAATGGAAGACCACTCCCACTCCTTTGATATCAAGCCCTTCACTACTGTTGACTTCT
CCAGCATTTCTACTCCACATTACGAAGACATTCCATTCACAAGAACAGATCCAGTGGTTGCAGATTACAAGTATG
ACCTGAAACTTCAAGAGTACCAAAGTGCAATCAAAGTGGAGCCTGCATCTCCACCTTATTATTCTGAGAAGACTC
AGCTCTACAATAAGCCTCATGAAGAGCCTTCCAACTCCCTCATGGCAATTGAATGTCGTGTCTGTGGAGATAAAG
CTTCTGGATTTCACTATGGAGTTCATGCTTGTGAAGGATGCAAGGGTTTCTTCCGGAGAACAATCAGATTGAAGC
TTATCTATGACAGATGTGATCTTAACTGTCGGATCCACAAAAAAAGTAGAAATAAATGTCAGTACTGTCGGTTTC
AGAAATGCCTTGCAGTGGGGATGTCTCATAATGCCATCAGGTTTGGGCGGATGCCACAGGCCGAGAAGGAGAAGC
TGTTGGCGGAGATCTCCAGTGATATCGACCAGCTGAATCCAGAGTCCGCTGACCTCCGGGCCCTGGCAAAACATT
TGTATGACTCATACATAAAGTCCTTCCCGCTGACCAAAGCAAAGGCGAGGGCGATCTTGACAGGAAAGACAACAG
ACAAATCACCATTCGTTATCTATGACATGAATTCCTTAATGATGGGAGAAGATAAAATCAAGTTCAAACACATCA
CCCCCCTGCAGGAGCAGAGCAAAGAGGTGGCCATCCGCATCTTTCAGGGCTGCCAGTTTCGCTCCGTGGAGGCTG
TGCAGGAGATCACAGAGTATGCCAAAAGCATTCCTGGTTTTGTAAATCTTGACTTGAACGACCAAGTAACTCTCC
TCAAATATGGAGTCCACGAGATCATTTACACAATGCTGGCCTCCTTGATGAATAAAGATGGGGTTCTCATATCCG
AGGGCCAAGGCTTCATGACAAGGGAGTTTCTAAAGAGCCTGCGAAAGCCTTTTGGTGACTTTATGGAGCCCAAGT
TTGAGTTTGCTGTGAAGTTCAATGCACTGGAATTAGATGACAGCGACTTGGCAATATTTATTGCTGTCATTATTC
TCAGTGGAGACCGCCCAGGTTTGCTGAATGTGAAGCCCATTGAAGACATTCAAGACAACCTGCTACAAGCCCTGG
AGCTCCAGCTGAAGCTGAACCACCCTGAGTCCTCACAGCTGTTTGCCAAGCTGCTCCAGAAAATGACAGACCTCA
GACAGATTGTCACGGAACACGTGCAGCTACTGCAGGTGATCAAGAAGACGGAGACAGACATGAGTCTTCACCCGC
TCCTGCAGGAGATCTACAAGGACTTGTACTAGCAGAGAGTCCTGAGCCACTGCCAACATTTCCCTTCTTCCAGTT
GCACTATTCTGAGGGAAAATCTGACACC**TAA**GAAATTTACTGTGAAAAAGCATTTTAAAAAGAAAAGGTTTTAGA
ATATGATCTATTTTATGCATATTGTTTATAAAGACACATTTACAATTTACTTTTAATATTAAAAATTACCATATT
ATGAAATTGC

FIGURE 2578

MVDTEMPFWPTNFGISSVDLSVMEDHSHSFDIKPFTTVDFSSISTPHYEDIPFTRTDPVVADYKYDLKLQEYQSA
IKVEPASPPYYSEKTQLYNKPHEEPSNSLMAIECRVCGDKASGFHYGVHACEGCKGFFRRTIRLKLIYDRCDLNC
RIHKKSRNKCQYCRFQKCLAVGMSHNAIRFGRMPQAEKEKLLAEISSDIDQLNPESADLRALAKHLYDSYIKSFP
LTKAKARAILTGKTTDKSPFVIYDMNSLMMGEDKIKFKHITPLQEQSKEVAIRIFQGCQFRSVEAVQEITEYAKS
IPGFVNLDLNDQVTLLKYGVHEIIYTMLASLMNKDGVLISEGQGFMTREFLKSLRKPFGDFMEPKFEFAVKFNAL
ELDDSDLAIFIAVIILSGDRPGLLNVKPIEDIQDNLLQALELQLKLNHPESSQLFAKLLQKMTDLRQIVTEHVQL
LQVIKKTETDMSLHPLLQEIYKDLY

FIGURE 2579

CTGCTTGCCTGGGAGGCAATAAGGGAAAGGAGGGCGATAGCAATAAAGTGAAAAGGAGGACAATGGGCCTAGAAG
AGAGAGAGGATAAGAGAAGAAATAATATCAGCTTAGCATCATAAAGGCAGAGTTGTTGGCTTTCAATACTTTTGA
ATTTTAAAAGAATACTGTACTGGAATGGGTTAACATCATCATCTTTAGCATCCTGGTAGCATTATTCAGTAGTTA
ATAAACAGACATTAAAACCTCTGCCTGGCTGGTTTTTGAAAAAGGAACCTGAGGGACCCCAAACTCAGCCACTCT
TGTAGTTTCCATCTCCGGTTCTTTTAATCCTGGCCAAGATGGCGGCCTTGGAGACTTTCTTCCGGTCATAGGCCA
GACCGAGGGCGGCCATGCAATCAATGAAGAATGTGGTGAAGTTGATGTGCCAGCGGTACTCACTGGCAGAGTAGT
CATAGGGAAAGGAGTGGTGGTAGTTGTGGAAGCCCTCACCCACAGCTCCAAGTGAAACCAGGATATTCTCCCGGG
GGCTAATGTTCTTGTCATAAGGACGATATCCGAAGAGGTGGGCAGCACTGTTCACCAGCCAGGTGGCATTAAGCA
CCACAGCATATCGCAAGAAAGTGGCAACGAACACACTGTTTTGAAAAGTTTCACCCCAGAAATACCAGGGCACAA
GCGTGGGCAGGATGAAGCACATCATCAGCAAGCCAGGTTTGTAGTACCTCCTCTGGAACATCACCAGTTTCTCAG
CTTCTAGGTCAGACAAGTCTAGCGTACTCCCCTTCTCTTTGACAGCTGGGTGTTTGCGCACAAGCAGCCAACCCA
CGTGAGAGAAGAAAAAGCCACGTCGGGAATTATGAGGATCAGCATGTGTTTCTGAAAACTTGTGGTGGGCACGGT
GGTCACGAGCCCATTCATAGACATCATTCTGGAATGCCATTGTGTTGGCAATGATCAGAAAGAGCCGTAGGGGCA
GCCGAGCTTTGTAAGAGCGGTGGCTCCACAGACGATGAGCTCCTGCTGTTATGCCCAGGGCACTGACAAAATAGT
AGAATACCCCCCAAAGCCAGGTGTAGAACTTGCAGGTAGGAATCAAAGTGATCCCATACAGGGCTCCCAAGTGTA
GCAGAGACATAAGGATGATGTTTCTCCAGACATATTCAACCTTGGGGCTTGGGCCTTCCTTATCCTTGTAGGTGG
GGTCATATATATCATCTTTTATATCAGGGCGAATGTCGTCTTCCAAGTAGAGGGGCATCGTCTCCAACTTATCTC
CTCCATTCTGCAGGACCCTGGAGGGAGGCGCTGTAATGGTGGTGGTGGTGGTATAGGAGCTTTTGTAGAGAAGTG
CTGCAAGGCTGACGATAAGGAGACCTGCTTTGCCGAGGAGGGTAAAAAACTTGTTGCTGCAAGTCAAGCTGCCTT
AGGCTTATAACATCACATTTAAAAGCATCTCAGCCTACCATGAGAATAAGAGAAAGAAAATGAAGATCAAAAGCT
TATTCATCTGTTTTTCTTTTTCGTTGGTGTAAAGCCAACACCCTGTCTAAAAAACATAAATTTCTTTAATCATTT
TGCCTCTTTTCTCTGTGCTTCAATTAATAAAAAATGGAAAGAATCTAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2580

CCTCCCCTCGCCCGGCGCGGTCCCGTCCGCCTCTCGCTCGCCTCCCGCCTCCCCTCGGTCTTCCGAGGCGCCCGG
GCTCCCGGCGCGGCGGCGGAGGGGGCGGGCAGGCCGGCGGGCGGTGATGTGGCAGGACTCTTTATGCGCTGCGGC
AGGATACGCGCTCGGCGCTGGGACGCGACTGCGCTCAGTTCTCTCCTCTCGGAAGCTGCAGCCATGATGGAAGTT
TGAGAGTTGAGCCGCTGTGAGGCGAGGCCGGGCTCAGGCGAGGGAGATGAGAGACGGCGGCGGCCGCGGCCCGGA
GCCCCTCTCAGCGCCTGTGAGCAGCCGCGGGGGCAGCGCCCTCGGGGAGCCGGCCGGCCTGCGGCGGCGGCAGCG
GCGGCGTTTCTCGCCTCCTCTTCGTCTTTTCTAACCGTGCAGCCTCTTCCTCGGCTTCTCCTGAAAGGGAAGGTG
GAAGCCGTGGGCTCGGGCGGGAGCCGGCTGAGGCGCGGCGGCGGCGGCGGCGGCACCTCCCGCTCCTGGAGCGGG
GGGGAGAAGCGGCGGCGGCGGCGGCCGCGGCGGCTGCAGCTCCAGGGAGGGGGTCTGAGTCGCCTGTCACCATTT
CCAGGGCTGGGAACGCCGGAGAGTTGGTCTCTCCCCTTCTACTGCCTCCAACACGGCGGCGGCGGCGGCGGCACA
TCCAGGGACCCGGGCCGGTTTTAAACCTCCCGTCCGCCGCCGCCGCACCCCCCGTGGCCCGGGCTCCGGAGGCCG
CCGGCGGAGGCAGCCGTTCGGAGGATTATTCGTCTTCTCCCCATTCCGCTGCCGCCGCTGCCAGGCCTCTGGCTG
CTGAGGAGAAGCAGGCCCAGTCGCTGCAACCATCCAGCAGCCGCCGCAGCAGCCATTACCCGGCTGCGGTCCAGA
GCCAAGCGGCGGCAGAGCGAGGGGCATCAGCTACCGCCAAGTCCAGAGCCATTTCCATCCTGCAGAAGAAGCCCC
GCCACCAGCAGCTTCTGCCATCTCTCTCCTCCTTTTTCTTCAGCCACAGGCTCCCAGACATGACAGCCATCATCA
AAGAGATCGTTAGCAGAAACAAAAGGAGATATCAAGAGGATGGATTCGACTTAGACTTGACCTATATTTATCCAA
ACATTATTGCTATGGGATTTCCTGCAGAAAGACTTGAAGGCGTATACAGGAACAATATTGATGATGTAGTAAGGT
TTTTGGATTCAAAGCATAAAAACCATTACAAGATATACAATCTTTGTGCTGAAAGACATTATGACACCGCCAAAT
TTAATTGCAGAGTTGCACAATATCCTTTTGAAGACCATAACCCACCACAGCTAGAACTTATCAAACCCTTTTGTG
AAGATCTTGACCAATGGCTAAGTGAAGATGACAATCATGTTGCAGCAATTCACTGTAAAGCTGGAAAGGGACGAA
CTGGTGTAATGATATGTGCATATTTATTACATCGGGGCAAATTTTTAAAGGCACAAGAGGCCCTAGATTTCTATG
GGGAAGTAAGGACCAGAGACAAAAAGGGAGTAACTATTCCCAGTCAGAGGCGCTATGTGTATTATTATAGCTACC
TGTTAAAGAATCATCTGGATTATAGACCAGTGGCACTGTTGTTTCACAAGATGATGTTTGAAACTATTCCAATGT
TCAGTGGCGGAACTTGCAATCCTCAGTTTGTGGTCTGCCAGCTAAAGGTGAAGATATATTCCTCCAATTCAGGAC
CCACACGACGGGAAGACAAGTTCATGTACTTTGAGTTCCCTCAGCCGTTACCTGTGTGTGGTGATATCAAAGTAG
AGTTCTTCCACAAACAGAACAAGATGCTAAAAAAGGACAAAATGTTTCACTTTTGGGTAAATACATTCTTCATAC
CAGGACCAGAGGAAACCTCAGAAAAAGTAGAAAATGGAAGTCTATGTGATCAAGAAATCGATAGCATTTGCAGTA
TAGAGCGTGCAGATAATGACAAGGAATATCTAGTACTTACTTTAACAAAAAATGATCTTGACAAAGCAAATAAAG
ACAAAGCCAACCGATACTTTTCTCCAAATTTTAAGGTGAAGCTGTACTTCACAAAAACAGTAGAGGAGCCGTCAA
ATCCAGAGGCTAGCAGTTCAACTTCTGTAACACCAGATGTTAGTGACAATGAACCTGATCATTATAGATATTCTG
ACACCACTGACTCTGATCCAGAGAATGAACCTTTTGATGAAGATCAGCATACACAAATTACAAAAGTCTGAATTT
TTTTTTATCAAGAGGGATAAAACACCATGAAAATAAACTTGAATAAACTGAAAATGGACCTTTTTTTTTTTAATG
GCAATAGGACATTGTGTCAGATTACCAGTTATAGGAACAATTCTCTTTTCCTGACCAATCTTGTTTTACCCTATA
CATCCACAGGGTTTTGACACTTGTTGTCCAGTTGAAAAAAGGTTGTGTAGCTGTGTCATGTATATACCTTTTTGT
GTCAAAAGGACATTTAAAATTCAATTAGGATTAATAAAGATGGCACTTTCCCGTTTTATTCCAGTTTTATAAAAA
GTGGAGACAGACTGATGTGTATACGTAGGAATTTTTTCCTTTTGTGTTCTGTCACCAACTGAAGTGGCTAAAGAG
CTTTGTGATATACTGGTTCACATCCTACCCCTTTGCACTTGTGGCAACAGATAAGTTTGCAGTTGGCTAAGAGAG
GTTTCCGAAAGGTTTTGCTACCATTCTAATGCATGTATTCGGGTTAGGGCAATGGAGGGGAATGCTCAGAAAGGA
AATAATTTTATGCTGGACTCTGGACCATATACCATCTCCAGCTATTTACACACACCTTTCTTTAGCATGCTACAG
TTATTAATCTGGACATTCGAGGAATTGGCCGCTGTCACTGCTTGTTGTTTGCGCATTTTTTTTTAAAGCATATTG
GTGCTAGAAAAGGCAGCTAAAGGAAGTGAATCTGTATTGGGGTACAGGAATGAACCTTCTGCAACATCTTAAGAT
CCACAAATGAAGGGATATAAAAATAATGTCATAGGTAAGAAACACAGCAACAATGACTTAACCATATAAATGTGG
AGGCTATCAACAAAGAATGGGCTTGAAACATTATAAAAATTGACAATGATTTATTAAATATGTTTTCTCAATTGT
AAAAAAAAAA

FIGURE 2581

MTAIIKEIVSRNKRRYQEDGFDLDLTYIYPNIIAMGFPAERLEGVYRNNIDDVVRFLDSKHKNHYKIYNLCAERH
YDTAKFNCRVAQYPFEDHNPPQLELIKPFCEDLDQWLSEDDNHVAAIHCKAGKGRTGVMICAYLLHRGKFLKAQE
ALDFYGEVRTRDKKGVTIPSQRRYVYYYSYLLKNHLDYRPVALLFHKMMFETIPMFSGGTCNPQFVVCQLKVKIY
SSNSGPTRREDKFMYFEFPQPLPVCGDIKVEFFHKQNKMLKKDKMFHFWVNTFFIPGPEETSEKVENGSLCDQEI
DSICSIERADNDKEYLVLTLTKNDLDKANKDKANRYFSPNFKVKLYFTKTVEEPSNPEASSSTSVTPDVSDNEPD
HYRYSDTTDSDPENEPFDEDQHTQITKV

FIGURE 2582

CACCTCGCTGCTCCAGCCTCTGGGGCGCATTCCAACCTTCCAGCCTGCGACCTGCGGAGAAAAAAAAATTACTTAT
TTTCTTGCCCCATACATACCTTGAGGCGAGCAAAAAAATTAAATTTTAACCATGAGGGAAATCGTGCACATCCAG
GCTGGTCAGTGTGGCAACCAGATCGGTGCCAAGTTCTGGGAGGTGATCAGTGATGAACATGGCATCGACCCCACC
GGCACCTACCACGGGGACAGCGACCTGCAGCTGGACCGCATCTCTGTGTACTACAATGAAGCCACAGGTGGCAAA
TATGTTCCTCGTGCCATCCTGGTGGATCTAGAACCTGGGACCATGGACTCTGTTCGCTCAGGTCCTTTTGGCCAG
ATCTTTAGACCAGACAACTTTGTATTTGGTCAGTCTGGGGCAGGTAACAACTGGGCCAAAGGCCACTACACAGAG
GGCGCCGAGCTGGTTGATTCTGTCCTGGATGTGGTACGGAAGGAGGCAGAGAGCTGTGACTGCCTGCAGGGCTTC
CAGCTGACCCACTCACTGGGCGGGGGCACAGGCTCTGGAATGGGCACTCTCCTTATCAGCAAGATCCGAGAAGAA
TACCCTGATCGCATCATGAATACCTTCAGTGTGGTGCCTTCACCCAAAGTGTCTGACACCGTGGTCGAGCCCTAC
AATGCCACCCTCTCCGTCCATCAGTTGGTAGAGAATACTGATGAGACCTATTGCATTGACAACGAGGCCCTCTAT
GATATCTGCTTCCGCACTCTGAAGCTGACCACACCAACCTACGGGGATCTGAACCACCTTGTCTCAGCCACCATG
AGTGGTGTCACCACCTGCCTCCGTTTCCCTGGCCAGCTCAATGCTGACCTCCGCAAGTTGGCAGTCAACATGGTC
CCCTTCCCACGTCTCCATTTCTTTATGCCTGGCTTTGCCCCTCTCACCAGCCGTGGAAGCCAGCAGTATCGAGCT
CTCACAGTGCCGGAACTCACCCAGCAGGTCTTCGATGCCAAGAACATGATGGCTGCCTGTGACCCCCGCCACGGC
CGATACCTCACCGTGGCTGCTGTCTTCCGTGGTCGGATGTCCATGAAGGAGGTCGATGAGCAGATGCTTAACGTG
CAGAACAAGAACAGCAGCTACTTTGTGGAATGGATCCCCAACAATGTCAAGACAGCCGTCTGTGACATCCCACCT
CGTGGCCTCAAGATGGCAGTCACCTTCATTGGCAATAGCACAGCCATCCAGGAGCTCTTCAAGCGCATCTCGGAG
CAGTTCACTGCCATGTTCCGCCGGAAGGCCTTCCTCCACTGGTACACAGGCGAGGGCATGGACGAGATGGAGTTC
ACCGAGGCTGAGAGCAACATGAACGACCTCGTCTCTGAGTATCAGCAGTACCAGGATGCCACCGCAGAAGAGGAG
GAGGATTTCGGTGAGGAGGCCGAAGAGGAGGCCTAAGGCAGAGCCCCCATCACCTCAGGCTTCTCAGTTCCCTTA
GCCGTCTTACTCAACTGCCCCTTTCCTCTCCCTCAGAATTTGTGTTTGCTGCCTCTATCTTGTTTTTTGTTTTTT
CTTCTGGGGGGGGTCTAGAACAGTGCCTGGCACATAGTAGGCGCTCAATAAATACTTGTTTGTTGAATGTCTCCT
CTCTCTTTCCACTCTGGGAAACCTAGGTTTCTGCCATTCTGGGTGACCCTGTATTTCTTTCTGGTGCCCATTCCA
TTTGTCCAGTTAATACTTCCTCTTAAAAATCTCCAAGAAGCTGGGTCTCCAGATCCCATTTAGAACCAACCAGGT
GCTGAAAACACATGTAGATAATGGCCATCATCCTAAGCCCAAAGTAGAAAATGGTAGAAGGTAGTGGGTAGAAGT
CACTATATAAGGAAGGGGATGGGATTTTCCATTCTAAAAGTTTTGGAGAGGGAAATCCAGGCTATTAAAGTCACT
AAATTTCTAAGTATGTCCATTTCCCATCTCAGCTTCAAGGGAGGTGTCAGCAGTATTATCTCCACTTTCAATCTC
CCTCCAAGCTCTACTCTGGAGGAGTCTGTCCCACTCTGTCAAGTGGAATCCTTCCCTTTCCAACTCTACCTCCCT
CACTCAGCTCCTTTCCCCTGATCAGAGAAAGGGATCAAGGGGGTTGGGAGGGGGGAAAGAGACCAGCCTTGGTCC
CTAAGCCTCCAGAAACGTCTTCTTAATCCCCACCTTTTCTTACTCCCAAAAAAGAATGAACACCCCTGACTCTGG
AGTGGTGTATACTGCCACATCAGTGTTTGAGTCAGTCCCCAGAGGAGAGGGGAACCCTCCTCCATCTTTTTTGCA
ACATCTCATTTCTTCCTTTTGCTGTTGCTTCCCCCCTCACACACTTGGTTTTGTTCTATCCTACATTTGAGATTT
CTATTTTATGTTGAACTTGCTGCTTTTTTTCATATTGAAAAGATGACATCGCCCCAAGAGCCAAAAATAAATGGG
AATTGAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2583

MREIVHIQAGQCGNQIGAKFWEVISDEHGIDPTGTYHGDSDLQLDRISVYYNEATGGKYVPRAILVDLEPGTMDS
VRSGPFGQIFRPDNFVFGQSGAGNNWAKGHYTEGAELVDSVLDVVRKEAESCDCLQGFQLTHSLGGGTGSGMGTL
LISKIREEYPDRIMNTFSVVPSPKVSDTVVEPYNATLSVHQLVENTDETYCIDNEALYDICFRTLKLTTPTYGDL
NHLVSATMSGVTTCLRFPGQLNADLRKLAVNMVPFPRLHFFMPGFAPLTSRGSQQYRALTVPELTQQVFDAKNMM
AACDPRHGRYLTVAAVFRGRMSMKEVDEQMLNVQNKNSSYFVEWIPNNVKTAVCDIPPRGLKMAVTFIGNSTAIQ
ELFKRISEQFTAMFRRKAFLHWYTGEGMDEMEFTEAESNMNDLVSEYQQYQDATAEEEEDFGEEAEEEA

FIGURE 2584

TACTAAGAGTCTCCAGCATCCTCCACCTGTCTACCACCGAGCATGGGCCTATATTTGAAGCCTTAGATCTCTCCA
GCACAGTAAGCACCAGGAGTCCATGAAGAAGATGGCTCCTGCCATGGAATCCCCTACTCTACTGTGTGTAGCCTT
ACTGTTCTTCGCTCCAGATGGCGTGTTAGCAGTCCCTCAGAAACCTAAGGTCTCCTTGAACCCTCCATGGAATAG
AATATTTAAAGGAGAGAATGTGACTCTTACATGTAATGGGAACAATTTCTTTGAAGTCAGTTCCACCAAATGGTT
CCACAATGGCAGCCTTTCAGAAGAGACAAATTCAAGTTTGAATATTGTGAATGCCAAATTTGAAGACAGTGGAGA
ATACAAATGTCAGCACCAACAAGTTAATGAGAGTGAACCTGTGTACCTGGAAGTCTTCAGTGACTGGCTGCTCCT
TCAGGCCTCTGCTGAGGTGGTGATGGAGGGCCAGCCCCTCTTCCTCAGGTGCCATGGTTGGAGGAACTGGGATGT
GTACAAGGTGATCTATTATAAGGATGGTGAAGCTCTCAAGTACTGGTATGAGAACCACAACATCTCCATTACAAA
TGCCACAGTTGAAGACAGTGGAACCTACTACTGTACGGGCAAAGTGTGGCAGCTGGACTATGAGTCTGAGCCCCT
CAACATTACTGTAATAAAAGCTCCGCGTGAGAAGTACTGGCTACAATTTTTTATCCCATTGTTGGTGGTGATTCT
GTTTGCTGTGGACACAGGATTATTTATCTCAACTCAGCAGCAGGTCACATTTCTCTTGAAGATTAAGAGAACCAG
GAAAGGCTTCAGACTTCTGAACCCACATCCTAAGCCAAACCCCAAAAACAACTGATATAATTACTCAAGAAATAT
TTGCAACATTAGTTTTTTTCCAGCATCAGCAATTGCTACTCAATTGTCAAACACAGCTTGCAATATACATAGAAA
CGTCTGTGCTCAAGGATTTATAGAAATGCTTCATTAAACTGAGTGAAACTGGTTAAGTGGCATGTAATAGTAAGT
GCTCAATTAACATTGGTTGAATAAATGAGAGAATGAATAGATTCATTTATTAGCATTTGTAAAAGAGATGTTCAA
TTTCAATAAAATAAATATAAAACCATGTAACAGAATGCTTCTGAGTAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2585

MAPAMESPTLLCVALLFFAPDGVLAVPQKPKVSLNPPWNRIFKGENVTLTCNGNNFFEVSSTKWFHNGSLSEETN
SSLNIVNAKFEDSGEYKCQHQQVNESEPVYLEVFSDWLLLQASAEVVMEGQPLFLRCHGWRNWDVYKVIYYKDGE
ALKYWYENHNISITNATVEDSGTYYCTGKVWQLDYESEPLNITVIKAPREKYWLQFFIPLLVVILFAVDTGLFIS
TQQQVTFLLKIKRTRKGFRLLNPHPKPNPKNN

FIGURE 2586

GAATTGAACCACCCATTTTCCTTTCTTAGCCAAATCACCAAAATGTCCAGTTAGAACAAGAATTTAGCATTCTGC
AAAAGAAGTTAACAGCTGAGATAACGAGGAAATATTCTGAAATGGATCCCAAATATTTCATCTTAATTTTGTTTT
GTGGACACCTGAACAATACATTTTTTTCAAAGACAGAGACAATTACAACAGAGAAGCAGTCACAGCCTACCTTAT
TCACATCATCAATGTCACAGGTATTGGCTAATTCTCAAAACACAACAGGGAATCCTTTGGGTCAACCAACACAAT
TCAGCGACACTTTTTCTGGACAATCAATATCACCTGCCAAAGTCACTGCTGGACAACCAACACCAGCTGTCTATA
CCTCTTCTGAAAAACCAGAAGCACATACTTCTGCTGGACAACCACTTGCCTACAACACCAAACAACCAACACCAA
TAGCCAACACCTCCTCCCAGCAAGCCGTGTTCACCTCTGCCAGACAACTACCATCTGCCCGTACTTCTACCACAC
AACCACCAAAGTCATTTGTCTATACTTTTACTCAACAATCATCATCTGTCCAGATCCCTTCTAGAAAACAAATAA
CTGTTCATAATCCATCCACACAACCAACATCAACTGTCAAAAATTCACCTAGGAGTACACCAGGATTTATCTTAG
ATACTACCAGTAACAAACAAACCCCACAAAAAAACAATTATAATTCAATAGCTGCCATACTAATTGGTGTACTTC
TGACTTCTATGTTGGTAGCTATAATCATCATTGTACTTTGGAAATGCTTAAGGAAACCAGTTTTAAATGATCAAA
ATTGGGCAGGTAGATCTCCATTTGCTGATGGAGAAACCCCTGACATTTGTATGGATAACATCAGAGAAAATGAAA
TATCCACAAAACGTACATCAATCATTTCACTTACACCCTGGAAACCAAGCAAAAGCACACTTTTAGCAGATGACT
TAGAAATTAAGTTGTTTGAATCAAGTGAAAACATTGAAGACTCCAACAACCCCAAAACAGAGAAAATAAAAGATC
AAGTAAATGGTACATCAGAAGATAGTGCTGATGGTTCAACAGTTGGAACTGCTGTTTCTTCTTCAGATGATGCAG
GTCTGCCTCCACCACCTCCCCTTCTGGATTTGGAAGGACAGGAAAGTAACCAATCTGACAAACCCACAATGACAA
TTGTATCTCCTCTTCCAAATGATTCTACTAGTCTCCCTCCATCTCTGGACTGTCTCAATCAAGACTGTGGAGATC
ATAAATCTGAGATAATACAATCATTTCCACCGCTTGACTCACTTAACTTGCCCCTGCCACCAGTAGATTTTATGA
AAAACCAAGAAGATTCCAACCTTGAGATCCAGTGTCAGGAGTTCTCTATTCCTCCCAACTCTGATCAAGATCTTA
ATGAATCCCTGCCACCTCCACCTGCAGAACTGTTATAAATATTACAACTTGCTTTTTAGCTGATCTTCCATCCTC
AAATGACTCTTTTTTCTTTATATGTTAACATATATAAAATGGCAACTGATAGTCAATTTTGATTTTTATTCAGGA
ACTATCTGAAATCTGCTCAGAGCCTATGTGCATAGATGAAACTTTTTTTTAAAAAAAGTTATTTAACAGTAATCT
ATTTACTAATTATAGTACCTATCTTTAAAGTATAGTACATTTTACATATGTAAATGGTATGTTTCAATAATTTAA
GAACTCTGAAACAATCTACATATACTTATTACCCAGTACAGTTTTTTTTCCCCTGAAAAGCTGTGTATAAAATTA
TGGTGAATAAACTTTTATGTTTCCATTTCAAAGACCAGGGTGGAGAGGAATAAGAGACTAAGTATATGCTTCAAG
TTTTAAATTAATACCTCAAGTATTAAATAAATATTCCAAGTTTGTGGGAATGGGAGATTAAAATGCATGTTTGAG
AGTAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2587

MDPKYFILILFCGHLNNTFFSKTETITTEKQSQPTLFTSSMSQVLANSQNTTGNPLGQPTQFSDTFSGQSISPAK
VTAGQPTPAVYTSSEKPEAHTSAGQPLAYNTKQPTPIANTSSQQAVFTSARQLPSARTSTTQPPKSFVYTFTQQS
SSVQIPSRKQITVHNPSTQPTSTVKNSPRSTPGFILDTTSNKQTPQKNNYNSIAAILIGVLLTSMLVAIIIIVLW
KCLRKPVLNDQNWAGRSPFADGETPDICMDNIRENEISTKRTSIISLTPWKPSKSTLLADDLEIKLFESSENIED
SNNPKTEKIKDQVNGTSEDSADGSTVGTAVSSSDDAGLPPPPPLLDLEGQESNQSDKPTMTIVSPLPNDSTSLPP
SLDCLNQDCGDHKSEIIQSFPPLDSLNLPLPPVDFMKNQEDSNLEIQCQEFSIPPNSDQDLNESLPPPPAELL

FIGURE 2588

CAGACTCAGAGAGAACCCACC**ATG**GTGCTGTCTCCTGCCGACAAGACCAACGTCAAGGCCGCCTGGGGTAAGGTC
GGCGCGCACGCTGGCGAGTATGGTGCGGAGGCCCTGGAGAGGATGTTCCTGTCCTTCCCCACCACCAAGACCTAC
TTCCCGCACTTCGACCTGAGCCACGGCTCTGCCCAGGTTAAGGGCCACGGCAAGAAGGTGGCCGACGCGCTGACC
AACGCCGTGGCGCACGTGGACGACATGCCCAACGCGCTGTCCGCCCTGAGCGACCTGCACGCGCACAAGCTTCGG
GTGGACCCGGTCAACTTCAAGCTCCTAAGCCACTGCCTGCTGGTGACCCTGGCCGCCCACCTCCCCGCCGAGTTC
ACCCCTGCGGTGCACGCCTCCCTGGACAAGTTCCTGGCTTCTGTGAGCACCGTGCTGACCTCCAAATACCGT**TAA**
GCTGGAGCCTCGGTGGCCATGCTTCTTGCCCCTTGGGC

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FIGURE 2589

MVLSPADKTNVKAAWGKVGAHAGEYGAEALERMFLSFPTTKTYFPHFDLSHGSAQVKGHGKKVADALTNAVAHVD
DMPNALSALSDLHAHKLRVDPVNFKLLSHCLLVTLAAHLPAEFTPAVHASLDKFLASVSTVLTSKYR

FIGURE 2590

ATGCGTGAGTGCATCTCCATCCACGTTGGCCAGGCTGGTGTCCAGATTGGCAATGCCTGCTGGGAGCTCTACTGC
CTGGAACACGGCATCCAGCCCGATGGCCAGATGCCAAGTGACAAGACCATTGGGGGAGGAGATGATTCCTTCAAC
ACCTTCTTCAGTGAAACGGGTGCTGGCAAGCATGTGCCCCGGGCAGTGTTTGTAGACTTGGAACCCACAGTCATT
GATGAAGTTCGCACTGGCACTTACCGCCAGCTCTTCCACCCTGAGCAACTCATCACAGGCAAGGAAGATGCTGCC
AATAACTATGCCCGAGGGCACTACACCATTGGCAAGGAGATCATTGACCTCGTGTTGGACCGAATTCGCAAGCTG
GCTGACCAGTGCACCGGTCTTCAGGGCTTCTTGGTTTTCCACAGCTTTGGTGGGGGAACTGGTTCTGGGTTCACC
TCGCTGCTCATGGAACGTCTCTCAGTTGATTATGGCAAGAAGTCCAAGCTGGAGTTCTCCATTTACCCGGCGCCC
CAGGTTTCCACAGCTGTAGTTGAGCCCTACAACTCCATCCTCACCACCCACACCACCCTGGAGCACTCTGATTGT
GCCTTCATGGTAGACAATGAGGCCATCTATGACATCTGTCGTAGAAACCTCGATATCGAGCGCCCAACCTACACT
AACCTTAACCGCCTTATTAGCCAGATTGTGTCCTCCATCACTGCTTCCCTGAGATTTGATGGAGCCCTGAATGTT
GACCTGACAGAATTCCAGACCAACCTGGTGCCCTACCCCCGCATCCACTTCCCTCTGGCCACATATGCCCCTGTC
ATCTCTGCTGAGAAAGCCTACCATGAACAGCTTACTGTAGCAGAGATCACCAATGCTTGCTTTGAGCCAGCCAAC
CAGATGGTGAAATGTGACCCTCGCCATGGTAAATACATGGCTTGCTGCCTGTTATACCGTGGTGACGTGGTTCCC
AAAGATGTCAATGCTGCCATTGCCACCATCAAAACCAAGCGTACCATCCAGTTTGTGGATTGGTGCCCCACTGGC
TTCAAGGTTGGCATTAATTACCAGCCTCCCACTGTGGTGCCTGGCGGAGACCTGGCCAAGGTACAGAGAGCTGTG
TGCATGCTGAGCAATACCACAGCTGTTGCCGAGGCCTGGGCTCGCCTGGACCACAAGTTTGACCTGATGTATGCC
AAGCGTGCCTTTGTTCACTGGTACGTGGGTGAGGGGATGGAGGAAGGCGAGTTTTCAGAGGCCCGTGAGGACATG
GCTGCCCTTGAGAAGGATTATGAGGAGGTTGGAGCAGATAGTGCTGACGGAGAGGATGAGGGTGAAGAGTATTAA

FIGURE 2591

MRECISIHVGQAGVQIGNACWELYCLEHGIQPDGQMPSDKTIGGGDDSFNTFFSETGAGKHVPRAVFVDLEPTVI
DEVRTGTYRQLFHPEQLITGKEDAANNYARGHYTIGKEIIDLVLDRIRKLADQCTGLQGFLVFHSFGGGTGSGFT
SLLMERLSVDYGKKSKLEFSIYPAPQVSTAVVEPYNSILTTHTTLEHSDCAFMVDNEAIYDICRRNLDIERPTYT
NLNRLISQIVSSITASLRFDGALNVDLTEFQTNLVPYPRIHFPLATYAPVISAEKAYHEQLTVAEITNACFEPAN
QMVKCDPRHGKYMACCLLYRGDVVPKDVNAAIATIKTKRTIQFVDWCPTGFKVGINYQPPTVVPGGDLAKVQRAV
CMLSNTTAVAEAWARLDHKFDLMYAKRAFVHWYVGEGMEEGEFSEAREDMAALEKDYEEVGADSADGEDEGEEY

FIGURE 2592

GCCACACGGTCTTTGAGCTGAGTCGAGGTGGACCCTTTGAACGCAGTCGCCCTACAGCCGCTGATTCCCCCCGCA
TCGCCTCCCGTGGAAGCCCAGGCCCGCTTCGCAGCTTTCTCCCTTTGTCTCATAACCATGTCCACCAACGAGAAT
GCTAATACACCAGCTGCCCGTCTTCACAGATTCAAGAACAAGGGAAAAGACAGTACAGAAATGAGGCGTCGCAGA
ATAGAGGTCAATGTGGAGCTGAGGAAAGCTAAGAAGGATGACCAGATGCTGAAGAGGAGAAATGTAAGCTCATTT
CCTGATGATGCTACTTCTCCGCTGCAGGAAAACCGCAACAACCAGGGCACTGTAAATTGGTCTGTTGATGACATT
GTCAAAGGCATAAATAGCAGCAATGTGGAAAATCAGCTCCAAGCTACTCAAGCTGCCAGGAAACTACTTTCCAGA
GAAAAACAGCCCCCCATAGACAACATAATCCGGGCTGGTTTGATTCCGAAATTTGTGTCCTTCTTGGGCAGAACT
GATTGTAGTCCCATTCAGTTTGAATCTGCTTGGGCACTCACTAACATTGCTTCTGGGACATCAGAACAAACCAAG
GCTGTGGTAGATGGAGGTGCCATCCCAGCATTCATTTCTCTGTTGGCATCTCCCCATGCTCACATCAGTGAACAA
GCTGTCTGGGCTCTAGGAAACATTGCAGGTGATGGCTCAGTGTTCCGAGACTTGGTTATTAAGTACGGTGCAGTT
GACCCACTGTTGGCTCTCCTTGCAGTTCCTGATATGTCATCTTTAGCATGTGGCTACTTACGTAATCTTACCTGG
ACACTTTCTAATCTTTGCCGCAACAAGAATCCTGCACCCCCGATAGATGCTGTTGAGCAGATTCTTCCTACCTTA
GTTCGGCTCCTGCATCATGATGATCCAGAAGTGTTAGCAGATACCTGCTGGGCTATTTCCTACCTTACTGATGGT
CCAAATGAACGAATTGGCATGGTGGTGAAAACAGGAGTTGTGCCCCAACTTGTGAAGCTTCTAGGAGCTTCTGAA
TTGCCAATTGTGACTCCTGCCCTAAGAGCCATAGGGAATATTGTCACTGGTACAGATGAACAGACTCAGGTTGTG
ATTGATGCAGGAGCACTCGCCGTCTTTCCCAGCCTGCTCACCAACCCCAAAACTAACATTCAGAAGGAAGCTACG
TGGACAATGTCAAACATCACAGCCGGCCGCCAGGACCAGATACAGCAAGTTGTGAATCATGGATTAGTCCCATTC
CTTGTCAGTGTTCTCTCTAAGGCAGATTTTAAGACACAAAAGGAAGCTGTGTGGGCCGTGACCAACTATACCAGT
GGTGGAACAGTTGAACAGATTGTGTACCTTGTTCACTGTGGCATAATAGAACCGTTGATGAACCTCTTAACTGCA
AAAGATACCAAGATTATTCTGGTTATCCTGGATGCCATTTCAAATATCTTTCAGGCTGCTGAGAAACTAGGTGAA
ACTGAGAAACTTAGTATAATGATTGAAGAATGTGGAGGCTTAGACAAAATTGAAGCTCTACAAAACCATGAAAAT
GAGTCTGTGTATAAGGCTTCGTTAAGCTTAATTGAGAAGTATTTCTCTGTAGAGGAAGAGGAAGATCAAAACGTT
GTACCAGAAACTACCTCTGAAGGCTACACTTTCCAAGTTCAGGATGGGGCTCCTGGGACCTTTAACTTTTAGATC
ATGTAGCTGAGACATAAATTTGTTGTGTACTACGTTTGGTATTTTGTCTTATTGTTTCTCTACTAAGAACTCTTT
CTTAAATGTGGTTTGTTACTGTAGCACTTTTTACACTGAAACTATACTTGAACAGTTCCAACTGTACATACATAC
TGTATGAAGCTTGTCCTCTGACTAGGTTTCTAATTTCTATGTGGAATTTCCTATCTTGCAGCATCCTGTAAATAA
ACATTCAAGTCCACCCTTAAAAAAAA

FIGURE 2593

MSTNENANTPAARLHRFKNKGKDSTEMRRRRIEVNVELRKAKKDDQMLKRRNVSSFPDDATSPLQENRNNQGTVN
WSVDDIVKGINSSNVENQLQATQAARKLLSREKQPPIDNIIRAGLIPKFVSFLGRTDCSPIQFESAWALTNIASG
TSEQTKAVVDGGAIPAFISLLASPHAHISEQAVWALGNIAGDGSVFRDLVIKYGAVDPLLALLAVPDMSSLACGY
LRNLTWTLSNLCRNKNPAPPIDAVEQILPTLVRLLHHDDPEVLADTCWAISYLTDGPNERIGMVVKTGVVPQLVK
LLGASELPIVTPALRAIGNIVTGTDEQTQVVIDAGALAVFPSLLTNPKTNIQKEATWTMSNITAGRQDQIQQVVN
HGLVPFLVSVLSKADFKTQKEAVWAVTNYTSGGTVEQIVYLVHCGIIEPLMNLLTAKDTKIILVILDAISNIFQA
AEKLGETEKLSIMIEECGGLDKIEALQNHENESVYKASLSLIEKYFSVEEEEDQNVVPETTSEGYTFQVQDGAPG
TFNF

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FIGURE 2594

GAGAGTAGCGCGGGAGCTGAGAAGTTGCAGGGTTGAGTTGGTCCCGGCAAGTCCTTGAGCAGTTTGTTCCTCTGT
CTTCCCGCTTCCTGGTGCCCCGACTGCGTCCCCACGAACGCCCCGTCCTTACCGCCGGCTGCTGTGGAGTGCCTC
GCTGTCTCCCAGGTCCCCGAGTTCCTGGTTTCAGAGAAG**ATG**ACCGAAGAAGTGGATTTCCTGGGACAGGACTCT
GATGGGGGTAGTGAGGAAGTGGTCCTAACTCCTGCAGAGCTCATTGAAAGATTGGAGCAGGCCTGGATGAATGAA
AAGTTTGCCCCTGAGCTGCTGGAGAGCAAGCCTGAGATTGTAGAATGTGTCATGGAACAGCTGGAGCACATGGAA
GAAAATCTCAGGAGAGCCAAAAGGGAGGACCTGAAGGTCAGCATCCACCAAATGGAGATGGAGAGGATCCGCTAC
GTCCTCAGCAGCTACTTGCGGTGTCGCCTCATGAAGATAGAGAAGTTTTTCCCTCATGTCCTTGAGAAGGAAAAA
ACACGTCCTGAGGGGGAGCCTTCCAGCCTCTCGCCGGAAGAGTTGGCCTTTGCCAGAGAGTTCATGGCGAACACA
GAGTCCTATCTGAAAAATGTCGCCTTGAAGCACATGCCCCCTAACTTACAGAAGGTGGACCTCTTTCGGGCAGTT
CCCAAACCAGATCTAGATTCTTACGTGTTTCTGAGAGTGAGAGAACGACAAGAAAACATACTGGTAGAACCAGAC
ACAGATGAGCAGAGGGACTACGTGATTGACCTGGAGAAGGGCTCACAGCACTTGATCCGATACAAAACCATTGCA
CCTCTGGTTGCATCTGGAGCTGTCCAGCTAATT**TAA**AACTAGGCATAAACAGCCAGGCATGGTGACTCAGGCCTG
TAATCCCAGCACTTTGGGAGGCCGAGGCGGGCGGATCATGAGGTCAGGAGTTCGAGACCAACCGACCAACATGGT
GAAACCCCATCTTTACTGAAAATACAAAATAATTAGCCGGGTGTTGGTGGTGTGCACCTGTAATCCCGGCTACTC
GGGGGGCCGGGGCAGGAGAATCGCTTGAACCTGGGAGCAGGAGGTTGCAGTGAGCCGAGGTCGTGCCATTGCACT
CCAGCCTGGGTGACAGTGAGACTTTGTCACAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2595

MTEEVDFLGQDSDGGSEEVVLTPAELIERLEQAWMNEKFAPELLESKPEIVECVMEQLEHMEENLRRAKREDLKV
SIHQMEMERIRYVLSSYLRCRLMKIEKFFPHVLEKEKTRPEGEPSSLSPEELAFAREFMANTESYLKNVALKHMP
PNLQKVDLFRAVPKPDLDSYVFLRVRERQENILVEPDTDEQRDYVIDLEKGSQHLIRYKTIAPLVASGAVQLI

FIGURE 2596A

AGTTTCCGGGCCCGGGCTGCTCTCGGAGCCATGAGCTGCGGCCGCCCCCCTCCCGACGTGGACGGCATGATCACC
CTCAAGGTGGACAACCTGACCTACCGCACCTCTCCCGACAGCTTGAGGCGCGTGTTCGAGAAGTACGGGCGCGTG
GGCGACGTGTACATCCCGCGGGAGCCCCACACCAAGGCGCCCCGGGGCTTCGCTTTCGTCCGCTTTCACGACCGG
CGCGACGCCCAAGACGCCGAGGCCGCCATGGACGGGGCGGAGCTGGACGGACGCGAGCTGCGGGTGCAGGTGGCG
CGCTATGGCCGCCGGGACCTGCCCCGCAGCCGCCAGGGAGAGCCACGCGGCAGGTCCAGAGGCGGCGGCTACGGA
CGGCGGAGCCGCAGCTACGGGCGGCGGAGCCGCAGCCCCAGGCGGCGACACCGCAGCCGATCCCGGGGTCCCAGC
TGCTCCAGGTCCCGCAGCCGATCTCGCTATAGGGGTTCTCGCTATAGCCGGTCTCCCTACAGCCGATCTCCTTAC
AGCCGGTCGCGCTACAGCCGCTCTCCCTACAGCAGATCTCGCTACAGGGAATCTCGCTACGGCGGATCTCACTAC
AGCTCATCTGGTTACAGTAACTCTCGCTACAGCCGATATCACAGCAGCCGGTCTCACTCGAAGTCTGGGTCCTCC
ACTAGCTCTCGCTCTGCATCAACCTCCAAATCGAGCTCTGCGCGACGATCCAAGTCCTCCTCGGTCTCCAGGTCT
CGCTCGCGGTCCAGGTCTTCATCTATGACCAGGAGTCCTCCCCGGGTATCCAAGAGGAAATCCAAGTCAAGGTCG
CGATCCAAGAGGCCCCCCAAGTCTCCTGAAGAGGAAGGACAGATGTCCTCTTAAGAAAATGATGCATCAGGAAGC
AACGTGATGGAGGACTTGGGGGAAAAGGATCACATACTCAGTCTATGGAAGCAACGTCCCTGGAAGAAGAGGCTG
CCTATTGAAAAGGTTGTGTCACACTTTTCTACCTTTTTGCCAGTTTGAAGCTTTGCATCAGGTGGCAAAATTCAT
TCTATGTGCCGTTTTGTTGTTATTCACATTTTATTGTAACTTAGGAGGTGAACGACCTAAGATTACGTTATTGGG
TTTGGATATTTGAGGCAAAAATTTATTTTTATTTCTATAGTGATGACTGTTTTGGTTTGAAATGAACAGATTGGT
AACCTAATTTGTGGCCTCCTGACTTTTAAGGAAACGTGTGCAGCCATTACACACAGCCTAACGCTGTCAAGACAT
TGCTTCAACATTGCCTTCATTCCTTAAAAACCTACAAAAGGTGGTGTAAATTAATATGGATAATTTTATTTACCT
CCAGGTCTAAAAGGTAGTGTGACCCAAATTTGTATAAAGATTTTTCATGTGAAAGGACTGGGGTTTTAGCAAACA
CAGGTCTAATCTCTTTTGTGTTTTTGTGCACCAGGCCCGGCTGCGTAGCAGTTGAGTGATGCTGGTTAGCTATTA
AGGTGGCCTGTTGCAGTGCAGAGTGCTGAGCTGCTTCCTGTTTTCTTCTGATTGCTCCTGGGGAAAACACGCCTT
GTCCTGAAGAACAAATGGCTGTCCAGTTTATTAAAATGCCTGTCAACTGCACTTCCAGTCACCCAGGCCTTGCAG
ATAAATAATGGAGCATGCAGTGAGCACATCTAGCTGACGATAATCACACCTTTTCCCCCGTCTTTTCTGAAAAAT
TGTAAATCTGATCATATCAACATGTATGAACTTAAAATATGGAGAATGTTATGGAAGAAATAGTTTATAAGTTTG
TTAAGTACTTATAACATGGTTTATCTTTTTGATTATTAATTTTTTACGCTAACCATTGTTTCTGTAGTTAAAATT
GTTTTCTTGGTGTTATCTTTTCTCAGAATAAAATTAGAAACTTTTGATGGAAAGTAGGTTGTTTTATTTTCTGTA
TGACTTTTGAATATTTGTACTTTTGAGAAAATTATTAGCACCAAGTGTTTCTCAAAATATAATTTTTAAAAAATC
CTTAAAAAAAAAAAAAAAAAACTCGAGACTAGTTCTCTCTCTCCCAAGGAGAAGCAGAGGATCACCACGCTATTC
TCCCCGTCATAGCAGATCTCGCTCTCGTACATAAGATGATTGGTGACACTTTTTGTAGAACCCATGTTGTATACA
GTTTTCCTTTATTCAGTACAATCTTTTCATTTTTTAATTCAAACTGTTTTGTTCAGAATGGGCTAAAGTGTTGAA
TTGCATTCTTGTAATATCCCCTTGCTCCTAACATCTACATTCCCTTCGTGTCTTTGATAAATTGTATTTTAAGTG
ATGTCATAGACAGGATTGTTTAAATTTAGTTAACTCCATACTCTTCAGACTGTGATATTGTGTAAATGTCTATCT
GCCCTGGTTTGTGTGAACTGGGATGTTGGGGGTGTTTGTGGTTATCTTACCTGGGGAAGTTCTTATGTTTATCTT
GCTTTTCATGTGTCTTTCTGTAGACATATCTGAAGAGATGGATTAAGAATGCTTTGGATTAAGGATTGTGGAGCA
CATTTCAATCATTTTAGGATTGTCAAAAGGAGGATTGAGGAGGATCAGATCAATAATGGAGGCAATGGTATGACT
CCAAGTGCTATTGTCACAGATGAAATTGGCAGTATTGACCTTATACTAAAAGGCAGGGGTTAAAAATGATTATAT
ACATTTTCCTTAAAACACTTGCAAACATTTTATTCAGTTGTCTTTAGCTACAATTGCTTTGCTTTTTAAACCTTG
GCAATTGTGGCAAAATTATATTGCCCATTTTGTAGCAACTTATTTTGCTCCCTTCCCCCCATTTTTGTTTTAATA
GGGACTAATGTGGGAAGAACTGGCTAATTTGTCACAGTGCTTAGTTACAACTGTTAATGTGTGACCTGCTGTTGG
TGTACATGTGGGTACAGGGTGTTTTTAAATCCAACAAGATAGAGTATAATATCAATACTGCTAAATCTGCATGTC
CTCTGTGTGACTGATAGAGCGTTGCTATTTCATTTTTTTAAGACAAAATGAAAGCAAAATATAGAGTTCCAATGT
ATTGGTGTAGATAATCTAGTTGGGAATACTTTTAAGTCTCACCTTCCCCTTTAAACTAATATTCATAATTGGTTC
ATATGTTTAAAAGACTTTAATTTACAAATTAAATTGCAAATGGGAGCATTAGATTTAGTTTTAGACTTAGGTGGG
TAGCAATGCCAGTAAACTTAAATTACGTAACTTCTTGCAACCACGAAACCTGTAATACGCTGTACAGTAACAAGT
GTTGGCATTATCAGTTGAACTGTAAATACAAAATGCTTCTTCCAATTAGTCTCTATGATGATTAAGTTTCTAAAA
TTTATCTGAACACCATTCAGAAACTTGTTTTGGGGAATTTGATAGTTATTGATGTGCATCTGTTAAACTGATGAC
AGACATAACTCATCATTCCCCAGAAACCTTTTTTGATTACAGTATCTAACATTTTGCCTCCTCTTTTTTGGTTTT
GCTGGTTATAAAGGTTTGGATTGGAGAGGGCTCACTGGATCCCAATCCTTGGAGCTGGATCATTGGATTCAAATC

FIGURE 2596B

ATAATGTGGATAGGATAGGGAGGATGAATTACCAGGATTCATGGAGCGGGATCAGATTACCAGGAACATAGGAGT
GGATTCCTGCCCCAACCAAACCGCATTCGTGTGGATTTTTTTATTCAACTTAATTGGCTATTCCAAAGATTTTTT
TTTTCCTATTTTTGACGATTGGAGCCCTTAAGATGCACGATGGAATTGTGTTTTGCGTTTTTTGGTAAAAGGAGC
AAAGCGAGGACCTGGAGATAAACGCTGGAGCAATCTCCTTGGAAGGATTCAGCACGAGTAGATGGTAAACATTTA
AAGGGGAAAGGGGGGGTTTGTTTAAAATAGTAAATCAGTAAGTCACTTCTAAATTTAAAGAAAACAAAATTGGAG
TTGAAGAATAAGTAGGTTTCCAATTGGCTATTGCCCGTTTTTTTTGAAAAAATAAACATTTTTTTAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2597

MSCGRPPPDVDGMITLKVDNLTYRTSPDSLRRVFEKYGRVGDVYIPREPHTKAPRGFAFVRFHDRRDAQDAEAAM
DGAELDGRELRVQVARYGRRDLPRSRQGEPRGRSRGGGYGRRSRSYGRRSRSPRRRHRSRSRGPSCSRSRSRSRY
RGSRYSRSPYSRSPYSRSRYSRSPYSRSRYRESRYGGSHYSSSGYSNSRYSRYHSSRSHSKSGSSTSSRSASTSK
SSSARRSKSSSVSRSRSRSRSSSMTRSPPRVSKRKSKSRSRSKRPPKSPEEEGQMSS

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FIGURE 2598

GGCACGAGGGGAGTGGAAAGTTCTCCGGCAGCCCTGAGATCTCAAGAGTGACATTTGTGAGACCAGCTAATTTGA
TTAAAATTCTCTTGGAATCAGCTTTGCTAGTATCATACCTGTGCCAGATTTCATCATGGGAAACAGCTGTTACAA
CATAGTAGCCACTCTGTTGCTGGTCCTCAACTTTGAGAGGACAAGATCATTGCAGGATCCTTGTAGTAACTGCCC
AGCTGGTACATTCTGTGATAATAACAGGAATCAGATTTGCAGTCCCTGTCCTCCAAATAGTTTCTCCAGCGCAGG
TGGACAAAGGACCTGTGACATATGCAGGCAGTGTAAAGGTGTTTTCAGGACCAGGAAGGAGTGTTCCTCCACCAG
CAATGCAGAGTGTGACTGCACTCCAGGGTTTCACTGCCTGGGGGCAGGATGCAGCATGTGTGAACAGGATTGTAA
ACAAGGTCAAGAACTGACAAAAAAAGGTTGTAAAGACTGTTGCTTTGGGACATTTAACGATCAGAAACGTGGCAT
CTGTCGACCCTGGACAAACTGTTCTTTGGATGGAAAGTCTGTGCTTGTGAATGGGACGAAGGAGAGGGACGTGGT
CTGTGGACCATCTCCAGCCGACCTCTCTCCGGGAGCATCCTCTGTGACCCCGCCTGCCCCTGCGAGAGAGCCAGG
ACACTCTCCGCAGATCATCTCCTTCTTTCTTGCGCTGACGTCGACTGCGTTGCTCTTCCTGCTGTTCTTCCTCAC
GCTCCGTTTCTCTGTTGTTAAACGGGGCAGAAAGAAACTCCTGTATATATTCAAACAACCATTTATGAGACCAGT
ACAAACTACTCAAGAGGAAGATGGCTGTAGCTGCCGATTTCCAGAAGAAGAAGAAGGAGGATGTGAACTGTGAAA
TGGAAGTCAATAGGGCTGTTGGGACTTTCTTGAAAAGAAGCAAGGAAATATGAGTCATCCGCTATCACAGCTTTC
AAAAGCAAGAACACCATCCTACATAATACCCAGGATTCCCCCAACACACGTTCTTTTCTAAATGCCAATGAGTTG
GCCTTTAAAAATGCACCACTTTTTTTTTTTTTTTGACAGGGTCTCACTCTGTCACCCAGGCTGGAGTGCAGTGGC
ACCACCATGGCTCTCTGCAGCCTTGACCTCTGGGAGCTCAAGTGATCCTCCTGCCTCAGTCTCCTGAGTAGCTGG
AACTACAAGGAAGGGCCACCACACCTGACTAACTTTTTTGTTTTTTGTTTGGTAAAGATGGCATTTCACCATGTT
GTACAGGCTGGTCTCAAACTCCTAGGTTCACTTTGGCCTCCCAAAGTGCTGGGATTACAGACATGAACTGCCAGG
CCCGGCCAAAATAATGCACCACTTTTAACAGAACAGACAGATGAGGACAGAGCTGGTGATAAAAAAAAAAAAAAA
AAAGCATTTTCTAGATACCACTTAACAGGTTTGAGCTAGTTTTTTTGAAATCCAAAGAAAATTATAGTTTAAATT
CAATTACATAGTCCAGTGGTCCAACTATAATTATAATCAAAATCAATGCAGGTTTGTTTTTTGGTGCTAATATGA
CATATGACAATAAGCCACGAGGTGCAGTAAGTACCCGACTAAAGTTTCCGTGGGTTCTGTCATGTAACACGACAT
GCTCCACCGTCAGGGGGGAGTATGAGCAGAGTGCCTGAGTTTAGGGTCAAGGACAAAAAACCTCAGGCCTGGAGG
AAGTTTTGGAAAGAGTTCAAGTGTCTGTATATCCTATGGTCTTCTCCATCCTCACACCTTCTGCCTTTGTCCTGC
TCCCTTTTAAGCCAGGTTACATTCTAAAAATTCTTAACTTTTAACATAATATTTTATACCAAAGCCAATAAATGA
ACTGCATATGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2599

MGNSCYNIVATLLLVLNFERTRSLQDPCSNCPAGTFCDNNRNQICSPCPPNSFSSAGGQRTCDICRQCKGVFRTR
KECSSTSNAECDCTPGFHCLGAGCSMCEQDCKQGQELTKKGCKDCCFGTFNDQKRGICRPWTNCSLDGKSVLVNG
TKERDVVCGPSPADLSPGASSVTPPAPAREPGHSPQIISFFLALTSTALLFLLFFLTLRFSVVKRGRKKLLYIFK
QPFMRPVQTTQEEDGCSCRFPEEEEGGCEL

FIGURE 2600

ATGGCGAAATATAACACGGGGGGCAACCCGACAGAGGATGTCTCAGTCAATAGCCGACCCTTCAGAGTCACAGGG
CCAAACTCATCTTCAGGAATACAAGCAAGAAAGAACTTATTCAACAACCAAGGAAATGCCAGCCCTCCTGCAGGA
CCCAGCAATGTACCTAAGTTTGGGTCCCCAAAGCCACCTGTGGCAGTCAAACCTTCTTCTGAGGAAAAGCCTGAC
AAGGAACCCAAGCCCCCGTTTCTAAAGCCCACTGGAGCAGGCCAAAGATTCGGAACACCAGCCAGCTTGACCACC
AGAGACCCCGAGGCGAAAGTGGGATTTCTGAAACCTGTAGGCCCCAAGCCCATCAACTTGCCCAAAGAAGATTCC
AAACCTACATTTCCCTGGCCTCCTGGAAACAAGCCATCTCTTCACAGTGTAAACCAAGACCATGACTTAAAGCCA
CTAGGCCCGAAATCTGGGCCTACTCCTCCAACCTCAGAAAATGAACAGAAGCAAGCGTTTCCCAAATTGACTGGG
GTTAAAGGGAAATTTATGTCAGCATCACAAGATCTTGAACCCAAGCCCCTCTTCCCCAAACCCGCCTTTGGCCAG
AAGCCGCCCCTAAGTACCGAGAACTCCCATGAAGACGAAAGCCCCATGAAGAATGTGTCTTCATCAAAAGGGTCC
CCAGCTCCCCTGGGAGTCAGGTCCAAAAGCGGCCCTTTAAAACCAGCAAGGGAAGACTCAGAAAATAAAGACCAT
GCAGGGGAGATTTCAAGTTTGCCCTTTCCTGGAGTGGTTTTGAAACCTGCTGCGAGCAGGGGAGGCCCAGGTCTC
TCCAAAAATGGTGAAGAAAAAAAGGAAGATAGGAAGATAGATGCTGCTAAGAACACCTTCCAGAGCAAAATAAAT
CAGGAAGAGTTGGCCTCAGGGACTCCTCCTGCCAGGTTCCCTAAGGCCCCTTCTAAGCTGACAGTGGGGGGGCCA
TGGGGCCAAAGTCAGGAAAAGGAAAAGGGAGACAAGAATTCAGCCACCCCGAAACAGAAGCCATTGCCTCCCTTG
TTTACCTTGGGTCCACCTCCACCAAAACCCAACAGACCACCAAATGTTGACCTGACGAAATTCCACAAAACCTCT
TCTGGAAACAGTACTAGCAAAGGCCAGACGTCTTACTCAACAACTTCCCTGCCACCACCTCCACCATCCCATCCG
GCCAGCCAACCACCATTGCCAGCATCTCACCCATCACAACCACCAGTCCCAAGCCTACCTCCCAGAAACATTAAA
CCTCCGTTTGACCTAAAAAGTCCTGTCAATGAAGACAATCAAGATGGTGTCACGCACTCTGATGGTGCTGGAAAT
CTAGATGAGGAACAAGACAGTGAAGGAGAAACATATGAAGACATAGAAGCATCCAAAGAAAGAGAGAAGAAAAGG
GAAAAGGAAGAAAAGAAGAGGTTAGAGCTGGAGAAAAAGGAACAGAAAGAGAAAGAAAAGAAAGAACAAGAAATA
AAGAAGAAATTTAAACTAACAGGCCCTATTCAAGTCATCCATCTTGCAAAAGCTTGTTGTGATGTCAAAGGAGGA
AAGAATGAACTGAGCTTCAAGCAAGGAGAGCAAATTGAAATCATCCGCATCACAGACAACCCAGAAGGAAAATGG
TTGGGCAGAACAGCAAGGGGTTCATATGGCTATATTAAAACAACTGCTGTAGAGATTGACTATGATTCTTTGAAA
CTGAAAAAAGACTCTCTTGGTGCCCCTTCAAGACCTATTGAAGATGACCAAGAAGTATATGATGATGTTGCAGAG
CAGGATGATATTAGCAGCCACAGTCAGAGTGGAAGTGGAGGGATATTCCCTCCACCACCAGATGATGACATTTAT
GATGGGATTGAAGAGGAAGATGCTGATGATGGCTCCACACTACAGGTTCAAGAGAAGAGTAATACGTGGTCCTGG
GGGATTTTGAAGATGTTAAAGGGAAAAGATGACAGAAAGAAAAGTATACGAGAGAAACCTAAAGTCTCTGACTCA
GACAATAATGAAGGTTCATCTTTCCCTGCTCCTCCTAAACAATTGGACATGGGAGATGAAGTTTACGATGATGTG
GATACCTCTGATTTCCCTGTTTCATCAGCAGAGATGAGTCAAGGAACTAATTTTGGAAAAGCTAAGACAGAAGAA
AAGGACCTTAAGAAGCTAAAAAAGCAGGAAAAAGAAGAAAAAGACTTCAGGAAAAAATTTAAATATGATGGTGAA
ATTAGAGTCCTATATTCAACTAAAGTTACAACTTCCATAACTTCTAAAAAGTGGGGAACCAGAGATCTACAGGTA
AAACCTGGTGAATCTCTAGAAGTTATACAAACCACAGATGACACAAAAGTTCTCTGCAGAAATGAAGAAGGGAAA
TATGGTTATGTCCTTCGGAGTTACCTAGCGGACAATGATGGAGAGATCTATGATGATATTGCTGATGGCTGCATC
TATGACAATGACTAG

FIGURE 2601

MAKYNTGGNPTEDVSVNSRPFRVTGPNSSSGIQARKNLFNNQGNASPPAGPSNVPKFGSPKPPVAVKPSSEEKPD
KEPKPPFLKPTGAGQRFGTPASLTTRDPEAKVGFLKPVGPKPINLPKEDSKPTFPWPPGNKPSLHSVNQDHDLKP
LGPKSGPTPPTSENEQKQAFPKLTGVKGKFMSASQDLEPKPLFPKPAFGQKPPLSTENSHEDESPMKNVSSSKGS
PAPLGVRSKSGPLKPAREDSENKDHAGEISSLPFPGVVLKPAASRGGPGLSKNGEEKKEDRKIDAAKNTFQSKIN
QEELASGTPPARFPKAPSKLTVGGPWGQSQEKEKGDKNSATPKQKPLPPLFTLGPPPPKPNRPPNVDLTKFHKTS
SGNSTSKGQTSYSTTSLPPPPPSHPASQPPLPASHPSQPPVPSLPPRNIKPPFDLKSPVNEDNQDGVTHSDGAGN
LDEEQDSEGETYEDIEASKEREKKREKEEKKRLELEKKEQKEKEKKEQEIKKKFKLTGPIQVIHLAKACCDVKGG
KNELSFKQGEQIEIIRITDNPEGKWLGRTARGSYGYIKTTAVEIDYDSLKLKKDSLGAPSRPIEDDQEVYDDVAE
QDDISSHSQSGSGGIFPPPPDDDIYDGIEEEDADDGSTLQVQEKSNTWSWGILKMLKGKDDRKKSIREKPKVSDS
DNNEGSSFPAPPKQLDMGDEVYDDVDTSDFPVSSAEMSQGTNFGKAKTEEKDLKKLKKQEKEEKDFRKKFKYDGE
IRVLYSTKVTTSITSKKWGTRDLQVKPGESLEVIQTTDDTKVLCRNEEGKYGYVLRSYLADNDGEIYDDIADGCI
YDND

FIGURE 2602

TAGGATGGAAAGGCAGATGTAAAGTCCCTC**ATG**GCGAAATATAACACGGGGGGCAACCCGACAGAGGATGTCTCA
GTCAATAGCCGACCCTTCAGAGTCACAGGGCCAAACTCATCTTCAGGAATACAAGCAAGAAAGAACTTATTCAAC
AACCAAGGAAATGCCAGCCCTCCTGCAGGACCCAGCAATGTACCTAAGTTTGGGTCCCCAAAGCCACCTGTGGCA
GTCAAACCTTCTTCTGAGGAAAAGCCTGACAAGGAACCCAAGCCCCCGTTTCTAAAGCCCACTGGAGCAGGCCAA
AGATTCGGAACACCAGCCAGCTTGACCACCAGAGACCCCGAGGCGAAAGTGGGATTTCTGAAACCTGTAGGCCCC
AAGCCCATCAACTTGCCCAAAGAAGATTCCAAACCTACATTTCCCTGGCCTCCTGGAAACAAGCCATCTCTTCAC
AGTGTAAACCAAGACCATGACTTAAAGCCACTAGGCCCGAAATCTGGGCCTACTCCTCCAACCTCAGAAAATGAA
CAGAAGCAAGCGTTTCCCAAATTGACTGGGGTTAAAGGGAAATTTATGTCAGCATCACAAGATCTTGAACCCAAG
CCCCTCTTCCCCAAACCCGCCTTTGGCCAGAAGCCGCCCCTAAGTACCGAGAACTCCCATGAAGACGAAAGCCCC
ATGAAGAATGTGTCTTCATCAAAAGGGTCCCCAGCTCCCCTGGGAGTCAGGTCCAAAAGCGGCCCTTTAAAACCA
GCAAGGGAAGACTCAGAAAATAAAGACCATGCAGGGGAGATTTCAAGTTTGCCCTTTCCTGGAGTGGTTTTGAAA
CCTGCTGCGAGCAGGGGAGGCCTAGGTCTCTCCAAAAATGGTGAAGAAAAAAAGGAAGATAGGAAGATAGATGCT
GCTAAGAACACCTTCCAGAGCAAAATAAATCAGGAAGAGTTGGCCTCAGGGACTCCTCCTGCCAGGTTCCCTAAG
GCCCCTTCTAAGCTGACAGTGGGGGGGCCATGGGGCCAAAGTCAGGAAAAGGAAAAGGGAGACAAGAATTCAGCC
ACCCCGAAACAGAAGCCATTGCCTCCCTTGTTTACCTTGGGTCCACCTCCACCAAAACCCAACAGACCACCAAAT
GTTGACCTGACGAAATTCCACAAAACCTCTTCTGGAAACAGTACTAGCAAAGGCCAGACGTCTTACTCAACAACT
TCCCTGCCACCACCTCCACCATCCCATCCGGCCAGCCAACCACCATTGCCAGCATCTCACCCATCACAACCACCA
GTCCCAAGCCTACCTCCCAGAAACATTAAACCTCCGTTTGACCTAAAAAGCCCTGTCAATGAAGACAATCAAGAT
GGTGTCACGCACTCTGATGGTGCTGGAAATCTAGATGAGGAACAAGACAGTGAAGGAGAAACATATGAAGACATA
GAAGCATCCAAAGAAAGAGAGAAGAAAAGGGAAAAGGAAGAAAAGAAGAGGTTAGAGCTGGAGAAAAAGGAACAG
AAAGAGAAAGAAAAGAAAGAACAAGAAATAAAGAAGAAATTTAAACTAACAGGCCCTATTCAAGTCATCCATCTT
GCAAAAGCTTGTTGTGATGTCAAAGGAGGAAAGAATGAACTGAGCTTCAAGCAAGGAGAGCAAATTGAAATCATC
CGCATCACAGACAACCCAGAAGGAAAATGGTTGGGCAGAACAGCAAGGGGTTCATATGGCTATATTAAAACAACT
GCTGTAGAGATTGACTATGATTCTTTGAAACTGAAAAAAGACTCTCTTGGTGCCCCTTCAAGACCTATTGAAGAT
GACCAAGAAGTATATGATGATGTTGCAGAGCAGGATGATATTAGCAGCCACAGTCAGAGTGGAAGTGGAGGGATA
TTCCCTCCACCACCAGATGATGACATTTATGATGGGATTGAAGAGGAAGATGCTGATGATGGTTTCCCTGCTCCT
CCTAAACAATTGGACATGGGAGATGAAGTTTACGATGATGTGGATACCTCTGATTTCCCTGTTTCATCAGCAGAG
ATGAGTCAAGGAACTAATTTTGGAAAAGCTAAGACAGAAGAAAAGGACCTTAAGAAGCTAAAAAAGCAGGAAAAA
GAAGAAAAAGACTTCAGGAAAAAATTTAAATATGATGGTGAAATTAGAGTCCTATATTCAACTAAAGTTACAACT
TCCATAACTTCTAAAAAGTGGGGAACCAGAGATCTACAGGTAAAACCTGGTGAATCTCTAGAAGTTATACAAACC
ACAGATGACACAAAAGTTCTCTGCAGAAATGAAGAAGGGAAATATGGTTATGTCCTTCGGAGTTACCTAGCGGAC
AATGATGGAGAGATCTATGATGATATTGCTGATGGCTGCATCTATGACAATGAC**TAG**CACTCAACTTTGGTCATT

FIGURE 2603

MAKYNTGGNPTEDVSVNSRPFRVTGPNSSSGIQARKNLFNNQGNASPPAGPSNVPKFGSPKPPVAVKPSSEEKPD
KEPKPPFLKPTGAGQRFGTPASLTTRDPEAKVGFLKPVGPKPINLPKEDSKPTFPWPPGNKPSLHSVNQDHDLKP
LGPKSGPTPPTSENEQKQAFPKLTGVKGKFMSASQDLEPKPLFPKPAFGQKPPLSTENSHEDESPMKNVSSSKGS
PAPLGVRSKSGPLKPAREDSENKDHAGEISSLPFPGVVLKPAASRGGLGLSKNGEEKKEDRKIDAAKNTFQSKIN
QEELASGTPPARFPKAPSKLTVGGPWGQSQEKEKGDKNSATPKQKPLPPLFTLGPPPPKPNRPPNVDLTKFHKTS
SGNSTSKGQTSYSTTSLPPPPPSHPASQPPLPASHPSQPPVPSLPPRNIKPPFDLKSPVNEDNQDGVTHSDGAGN
LDEEQDSEGETYEDIEASKEREKKREKEEKKRLELEKKEQKEKEKKEQEIKKKFKLTGPIQVIHLAKACCDVKGG
KNELSFKQGEQIEIIRITDNPEGKWLGRTARGSYGYIKTTAVEIDYDSLKLKKDSLGAPSRPIEDDQEVYDDVAE
QDDISSHSQSGSGGIFPPPPDDDIYDGIEEEDADDGFPAPPKQLDMGDEVYDDVDTSDFPVSSAEMSQGTNFGKA
KTEEKDLKKLKKQEKEEKDFRKKFKYDGEIRVLYSTKVTTSITSKKWGTRDLQVKPGESLEVIQTTDDTKVLCRN
EEGKYGYVLRSYLADNDGEIYDDIADGCIYDND

FIGURE 2604

ATGGCGTAGTCCCCAAAGAACGAGGACCTAGTAACATAATTGTGCTTCATTATGGTCCTTTCCCGGCCTTCTCTC
TCACACATACACAGAGCCCCTACCAGGACCAGACAGCTCTCAGAGCAACCCTAGCCCCATTACCTCTTCCCTTTC
CAGAGGACCTGAAAAACGTGTTCCCACCCGAGGTCGCTGTGTTTGAGCCATCAGAAGCAGAGATCTCCCACACCC
AAAAGGCCACACTGGTGTGCCTGGCCACAGGCTTCTACCCCGACCACGTGGAGCTGAGCTGGTGGGTGAATGGGA
AGGAGGTGCACAGTGGGGTCAGCACAGACCCGCAGCCCCTCAAGGAGCAGCCCGCCCTCAATGACTCCAGATACT
GCCTGAGCAGCCGCCTGAGGGTCTCGGCCACCTTCTGGCAGAACCCCCGCAACCACTTCCGCTGTCAAGTCCAGT
TCTACGGGCTCTCGGAGAATGACGAGTGGACCCAGGATAGGGCCAAACCTGTCACCCAGATCGTCAGCGCCGAGG
CCTGGGGTAGAGCAGGTGAGTGGGGCCTGGGGAGATGCCTGGAGGAGATTAGGTGAGACCAGCTACCAGGGAAAA
TGGAAAGATCCAGGTAGCGGACAAGACTAGATCCAGAAGAAAGCCAGAGTGGACAAGGTGGGATGATCAAGGTTC
ACAGGGTCAGCAAAGCACGGTGTGCACTTCCCCCACCAAGAAGCATAGAGGCTGAATGGAGCACCTCAAGCTCAT
TCTTCCTTCAGATCCTGACACCTTAGAGCTAAGCTTTCAAGTCTCCCTGAGGACCAGCCATACAGCTCAGCATCT
GAGTGGTGTGCATCCCATTCTCTTCTGGGGTCCTGGTTTCCTAAGATCATAGTGACCACTTCGCTGGCACTGGAG
CAGCATGAGGGAGACAGAACCAGGGCTATCAAAGGAGGCTGACTTTGTACTATCTGATATGCATGTGTTTGTGGC
CTGTGAGTCTGTGATGTAAGGCTCAATGTCCTTACAAAGCAGCATTCTCTCATCCATTTTTCTTCCCCTGTTTTC
TTTCAGACTGTGGCTTCACCTCCGGTAAGTGAGTCTCTCCTTTTTCTCTCTATCTTTCGCCGTCTCTGCTCTCGA
ACCAGGGCATGGAGAATCCACGGACACAGGGGCGTGAGGGAGGCCAGAGCCACCTGTGCACAGGTACCTACATGC
TCTGTTCTTGTCAACAGAGTCTTACCAGCAAGGGGTCCTGTCTGCCACCATCCTCTATGAGATCTTGCTAGGGAA
GGCCACCTTGTATGCCGTGCTGGTCAGTGCCCTCGTGCTGATGGCCATGGTAAGGAGGAGGGTGGGATAGGGCAG
ATGATGGGGGCAGGGGATGGAACATCACACATGGGCATAAAGGAATCTCAGAGCCAGAGCACAGCCTAATATATC
CTATCACCTCAATGAAACCATAATGAAGCCAGACTGGGGAGAAAATGCAGGGAATATCACAGAATGCATCATGGG
AGGATGGAGACAACCAGCGAGCCCTACTCAAATTAGGCCTCAGAGCCCGCCTCCCCTGCCCTACTCCTGCTGTGC
CATAGCCCCTGAAACCCTGAAAATGTTCTCTCTTCCACAGGTCAAGAGAAAGGATTCCAGAGGC**TAG**CTCCAAAA
CCATCCCAGGTCATTCTTCATCCTCACCCAGGATTCTCCTGTACCTGCTCCCAATCTGTGTTCCTAAAAGTGATT
CTCACTCTGCTTCTCATCTCCTACTTACATGAATACTTCTCTCTTTTTTCTGTTTCCCTGAAGATTGAGCTCCCA
ACCCCCAAGTACGAAATAGGCTAAACCAATAAAAAATTGTGTGTTGGGCCTGGTTGCATTTCAGGAGTGTCTGTG
GAGTTCTGCTCATCACTGACCTATCTTCTGATTTAGGGAAAGCAGCATTCGCTTGGACATCTGAAGTGACAGCCC
TCTTTCTCTCCACCCAATGCTGCTTTCTCCTGTTCATCCTGATGGAAGTCTCAACACA

FIGURE 2605

DLKNVFPPEVAVFEPSEAEISHTQKATLVCLATGFYPDHVELSWWVNGKEVHSGVSTDPQPLKEQPALNDSRYCL
SSRLRVSATFWQNPRNHFRCQVQFYGLSENDEWTQDRAKPVTQIVSAEAWGRADCGFTSESYQQGVLSATILYEI
LLGKATLYAVLVSALVLMAMVKRKDSRG

FIGURE 2606

AGCGGGTGCGGGGCGGGACCGGCCCGGCCTATATATTGGGTTGGCGCCGGCGCCAGCTGAGCCGAGCGGTAGCTG
GTCTGGCGAGGTTTTATACACCTGAAAGAAGAGAATGTCAAGACGAAGTAGCCGTTTACAAGCTAAGCAGCAGCC
CCAGCCCAGCCAGACGGAATCCCCCCAAGAAGCCCAGATAATCCAGGCCAAGAAGAGGAAAACTACCCAGGATGT
CAAAAGAAGTCTGGCTAAACATGTTAAAAAAGGAGAGCAGATATGTTCATGACAAACATTTTGAAGTTCTGCATT
CTGACTTGGAACCACAGATGAGGTCCATACTTCTAGACTGGCTTTTAGAGGTATGTGAAGTATACACACTTCATA
GGGAAACATTTTATCTTGCACAAGACTTTTTTGATAGATTTATGTTGACACAAAAGGATATAAATAAAAATATGC
TTCAACTCATTGGAATTACCTCATTATTCATTGCTTCCAAACTTGAGGAAATCTATGCTCCTAAACTCCAAGAGT
TTGCTTACGTCACTGATGGTGCTTGCAGTGAAGAGGATATCTTAAGGATGGAACTCATTATATTAAAGGCTTTAA
AATGGGAACTTTGTCCTGTAACAATCATCTCCTGGCTAAATCTCTTTCTCCAAGTTGATGCTCTTAAAGATGCTC
CTAAAGTTCTTCTACCTCAGTATTCTCAGGAAACATTCATTCAAATAGCTCAGCTTTTAGATCTGTGTATTCTAG
CCATTGATTCATTAGAGTTCCAGTACAGAATACTGACTGCTGCTGCCTTGTGCCATTTTACCTCCATTGAAGTGG
TTAAGAAAGCCTCAGGTTTGGAGTGGGACAGTATTTCAGAATGTGTAGATTGGATGGTACCTTTTGTCAATGTAG
TAAAAAGTACTAGTCCAGTGAAGCTGAAGACTTTTAAGAAGATTCCTATGGAAGACAGACATAATATCCAGACAC
ATACAAACTATTTGGCTATGCTGGAGGAAGTAAATTACATAAACACCTTCAGAAAAGGGGGACAGTTGTCACCAG
TGTGCAATGGAGGCATTATGACACCACCGAAGAGCACTGAAAAACCACCAGGAAAACACTAAAGAAGATAACTAA
GCAAACAAGTTGGAATTCACCAAGATTGGGTAGAACTGGTATCACTGAACTACTAAAGTTTTACAGAAAGTAGTG
CTGTGATTGATTGCCCTAGCCAATTCACAAGTTACACTGCCATTCTGATTTTAAAACTTACAATTGGCACTAAAG
AATACATTTAATTATTTCCTATGTTAGCTGTTAAAGAAACAGCAGGACTTGTTTACAAAGATGTCTTCATTCCCA
AGGTTACTGGATAGAAGCCAACCACAGTCTATACCATAGCAATGTTTTTCCTTTAATCCAGTGTTACTGTGTTTA
TCTTGATAAACTAGGAATTTTGTCACTGGAGTTTTGGACTGGATAAGTGCTACCTTAAAGGGTATACTAAGTGAT
ACAGTACTTTGAATCTAGTTGTTAGATTCTCAAAATTCCTACACTCTTGACTAGTGCAATTTGGTTCTTGAAAAT
TAAATTTAAACTTGTTTACAAAGGTTTAGTTTTGTAATAAGGTGACTAATTTATCTATAGCTGCTATAGCAAGCT
ATTATAAAACTTGAATTTCTACAAATGGTGAAATTTAATGTTTTTTAAACTAGTTTATTTGCCTTGCCATAACAC
ATTTTTTAACTAATAAGGCTTAGATGAACATGGTGTTCAACCTGTGCTCTAAACAGTGGGAGTACCAAAGAAATT
ATAAACAAGATAAATGCTGTGGCTCCTTCCTAACTGGGGCTTTCTTGACATGTAGGTTGCTTGGTAATAACCTTT
TTGTATATCACAATTTGGGTGAAAAACTTAAGTACCCTTTCAAACTATTTATATGAGGAAGTCACTTTACTACTC
TAAGATATCCCTAAGGAATTTTTTTTTTTAATTTAGTGTGACTAAGGCTTTATTTATGTTTGTGAAACTGTTAAG
GTCCTTTCTAAATTCCTCCATTGTGAGATAAGGACAGTGTCAAAGTGATAAAGCTTAACACTTGACCTAAACTTC
TATTTTCTTAAGGAAGAAGAGTATTAAATATATACTGACTCCTAGAAATCTATTTATTAAAAAAAGACATGAAAA
CTTGCTGTACATAGGCTAGCTATTTCTAAATATTTTAAATTAGCTTTTCTAAAAAAAAAAATCCAGCCTCATAAAG
TAGATTAGAAAACTAGATTGCTAGTTTATTTTGTTATCAGATATGTGAATCTCTTCTCCCTTTGAAGAAACTATA
CATTTATTGTTACGGTATGAAGTCTTCTGTATAGTTTGTTTTTAAACTAATATTTGTTTCAGTATTTTGTCTGAA
AAGAAAACACCACTAATTGTGTACATATGTATTATATAAACTTAACCTTTTAATACTGTTTATTTTTAGCCCATT
GTTTAAAAAATAAAAGTTAAAAAAATTTAACTGCTTAAAAGTAAAAAAAAAAAAAAAAAA

FIGURE 2607

MSRRSSRLQAKQQPQPSQTESPQEAQIIQAKKRKTTQDVKKRREEVTKKHQYEIRNCWPPVLSGGISPCIIIETP
HKEIGTSDFSRFTNYRFKNLFINPSPLPDLSWGCSKEVWLNMLKKESRYVHDKHFEVLHSDLEPQMRSILLDWLL
EVCEVYTLHRETFYLAQDFFDRFMLTQKDINKNMLQLIGITSLFIASKLEEIYAPKLQEFAYVTDGACSEEDILR
MELIILKALKWELCPVTIISWLNLFLQVDALKDAPKVLLPQYSQETFIQIAQLLDLCILAIDSLEFQYRILTAAA
LCHFTSIEVVKKASGLEWDSISECVDWMVPFVNVVKSTSPVKLKTFKKIPMEDRHNIQTHTNYLAMLEEVNYINT
FRKGGQLSPVCNGGIMTPPKSTEKPPGKH

2920/8433

FIGURE 2608A

GCCCCAGGGCCTGGAGAGGTCTGAAGAAACCTGGGAGCCAGCAGCCCGGGGCTCCACTCTGGGTTCTGAAAGCCC
ATTCCCTGCTCTGCGGCTCCTCCCACCCCACCTCTTCTCAGCCTTGCAGCTCAAGGGTTGATCTCAGGAGTCCAG
GACCCAGGAGAGGGAAGAATCTGAGGAACACAGAACAGTGAGCGTTGCCCACACCCCATCTCCCGTCACCACATC
TCCCCTCACCCTCACCCTCCCTGCCTGGCCCTGGACCCCATCCCAGGACCTCCCTATCAGCTGACTTCTTCCAGT
GTCTTGCAGGCCCCTCTGGGCTCCTCCCTCCCCTGGCTTTTCCTACCACTCCCCCTCTATCGGCGTCTATCTGTA
GGTGCCCTGGGATTTATAAAACTGGGTTCCGAATGCTGAATAAGAGACGGTAAGAGCCAAGGCAAAGGACAGCAC
TGTTCTCTGCCTGCCTGATACCCTCACCACCTGGGAACATCCCCCAGACACCCTCTTAACTCCGGGACAGAG**ATG**

GCTGGCGGAGCCTGGGGCCGCCTGGCCTGTTACTTGGAGTTCCTGAAGAAGGAGGAGCTGAAGGAGTTCCAGCTT
CTGCTCGCCAATAAAGCGCACTCCAGGAGCTCTTCGGGTGAGACACCCGCTCAGCCAGAGAAGACGAGTGGCATG
GAGGTGGCCTCGTACCTGGTGGCTCAGTATGGGGAGCAGCGGGCCTGGGACCTAGCCCTCCATACCTGGGAGCAG
ATGGGGCTGAGGTCACTGTGCGCCCAAGCCCAGGAAGGGGCAGGCCACTCTCCCTCATTCCCCTACAGCCCAAGT
GAACCCCACCTGGGGTCTCCCAGCCAACCCACCTCCACCGCAGTGCTAATGCCCTGGATCCATGAATTGCCGGCG
GGGTGCACCCAGGGCTCAGAGAGAAGGGTTTTGAGACAGCTGCCTGACACATCTGGACGCCGCTGGAGAGAAATC
TCTGCCTCACTCCTCTACCAAGCTCTTCCAAGCTCCCCAGACCATGAGTCTCCAAGCCAGGAGTCACCCAACGCC
CCCACATCCACAGCAGTGCTGGGGAGCTGGGGATCCCCACCTCAGCCCAGCCTAGCACCCAGAGAGCAGGAGGCT
CCTGGGACCCAATGGCCTCTGGATGAAACGTCAGGAATTTACTACACAGAAATCAGAGAAAGAGAGAGAGAGAAA
TCAGAGAAAGGCAGGCCCCCATGGGCAGCGGTGGTAGGAACGCCCCCACAGGCGCACACCAGCCTACAGCCCCAC
CACCACCCATGGGAGCCTTCTGTGAGAGAGAGCCTCTGTTCCACATGGCCCTGGAAAAATGAGGATTTTAACCAA
AAATTCACACAGCTGCTACTTCTACAAAGACCTCACCCCAGAAGCCAAGATCCCCTGGTCAAGAGAAGCTGGCCT
GATTATGTGGAGGAGAATCGAGGACATTTAATTGAGATCAGAGACTTATTTGGCCCAGGCCTGGATACCCAAGAA
CCTCGCATAGTCATACTGCAGGGGGCTGCTGGAATTGGGAAGTCAACACTGGCCAGGCAGGTGAAGGAAGCCTGG
GGGAGAGGCCAGCTGTATGGGGACCGCTTCCAGCATGTCTTCTACTTCAGCTGCAGAGAGCTGGCCCAGTCCAAG
GTGGTGAGTCTCGCTGAGCTCATCGGAAAAGATGGGACAGCCACTCCGGCTCCCATTAGACAGATCCTGTCTAGG
CCAGAGCGGCTGCTCTTCATCCTCGATGGTGTAGATGAGCCAGGATGGGTCTTGCAGGAGCCGAGTTCTGAGCTC
TGTCTGCACTGGAGCCAGCCACAGCCGGCGGATGCACTGCTGGGCAGTTTGCTGGGGAAAACTATACTTCCCGAG
GCATCCTTCCTGATCACGGCTCGGACCACAGCTCTGCAGAACCTCATTCCTTCTTTGGAGCAGGCACGTTGGGTA
GAGGTCCTGGGGTTCTCTGAGTCCAGCAGGAAGGAATATTTCTACAGATATTTCACAGATGAAAGGCAAGCAATT
AGAGCCTTTAGGTTGGTCAAATCAAACAAAGAGCTCTGGGCCCTGTGTCTTGTGCCCTGGGTGTCCTGGCTGGCC
TGCACTTGCCTGATGCAGCAGATGAAGCGGAAGGAAAAACTCACACTGACTTCCAAGACCACCACAACCCTCTGT
CTACATTACCTTGCCCAGGCTCTCCAAGCTCAGCCATTGGGACCCCAGCTCAGAGACCTCTGCTCTCTGGCTGCT
GAGGGCATCTGGCAAAAAAAGACCCTTTTCAGTCCAGATGACCTCAGGAAGCATGGGTTAGATGGGGCCATCATC
TCCACCTTCTTGAAGATGGGTATTCTTCAAGAGCACCCCATCCCTCTGAGCTACAGCTTCATTCACCTCTGTTTC
CAAGAGTTCTTTGCAGCAATGTCCTATGTCTTGGAGGATGAGAAGGGGAGAGGTAAACATTCTAATTGCATCATA
GATTTGGAAAAGACGCTAGAAGCATATGGAATACATGGCCTGTTTGGGGCATCAACCACACGTTTCCTATTGGGC
CTGTTAAGTGATGAGGGGGAGAGAGAGATGGAGAACATCTTTCACTGCCGGCTGTCTCAGGGGAGGAACCTGATG
CAGTGGGTCCCGTCCCTGCAGCTGCTGCTGCAGCCACACTCTCTGGAGTCCCTCCACTGCTTGTACGAGACTCGG
AACAAAACGTTCCTGACACAAGTGATGGCCCATTTCGAAGAAATGGGCATGTGTGTAGAAACAGACATGGAGCTC
TTAGTGTGCACTTTCTGCATTAAATTCAGCCGCCACGTGAAGAAGCTTCAGCTGATTGAGGGCAGGCAGCACAGA
TCAACATGGAGCCCCACCATGGTAGTCCTGTTCAGGTGGGTCCCAGTCACAGATGCCTATTGGCAGATTCTCTTC
TCCGTCCTCAAGGTCACCAGAAACCTGAAGGAGCTGGACCTAAGTGGAAACTCGCTGAGCCACTCTGCAGTGAAG
AGTCTTTGTAAGACCCTGAGACGCCCTCGCTGCCTCCTGGAGACCCTGCGGTTGGCTGGCTGTGGCCTCACAGCT
GAGGACTGCAAGGACCTTGCCTTTGGGCTGAGAGCCAACCAGACCCTGACCGAGCTGGACCTGAGCTTCAATGTG
CTCACGGATGCTGGAGCCAAACACCTTTGCCAGAGACTGAGACAGCCGAGCTGCAAGCTACAGCGACTGCAGCTG
GTCAGCTGTGGCCTCACGTCTGACTGCTGCCAGGACCTGGCCTCTGTGCTTAGTGCCAGCCCCAGCCTGAAGGAG
CTAGACCTGCAGCAGAACAACCTGGATGACGTTGGCGTGCGACTGCTCTGTGAGGGGCTCAGGCATCCTGCCTGC
AAACTCATACGCCTGGGGCTGGACCAGACAACTCTGAGTGATGAGATGAGGCAGGAACTGAGGGCCCTGGAGCAG
GAGAAACCTCAGCTGCTCATCTTCAGCAGACGGAAACCAAGTGTGATGACCCCTACTGAGGGCCTGGATACGGGA
GAGATGAGTAATAGCACATCCTCACTCAAGCGGCAGAGACTCGGATCAGAGAGGGCGGCTTCCCATGTTGCTCAG

FIGURE 2608B

GCTAATCTCAAACTCCTGGACGTGAGCAAGATCTTCCCAATTGCTGAGATTGCAGAGGAAAGCTCCCCAGAGGTA
GTACCGGTGGAACTCTTGTGCGTGCCTTCTCCTGCCTCTCAAGGGGACCTGCATACGAAGCCTTTGGGGACTGAC
GATGACTTCTGGGGCCCCACGGGGCCTGTGGCTACTGAGGTAGTTGACAAAGAAAAGAACTTGTACCGAGTTCAC
TTCCCTGTAGCTGGCTCCTACCGCTGGCCCAACACGGGTCTCTGCTTTGTGATGAGAGAAGCGGTGACCGTTGAG
ATTGAATTCTGTGTGTGGGACCAGTTCCTGGGTGAGATCAACCCACAGCACAGCTGGATGGTGGCAGGGCCTCTG
CTGGACATCAAGGCTGAGCCTGGAGCTGTGGAAGCTGTGCACCTCCCTCACTTTGTGGCTCTCCAAGGGGGCCAT
GTGGACACATCCCTGTTCCAAATGGCCCACTTTAAAGAGGAGGGGATGCTCCTGGAGAAGCCAGCCAGGGTGGAG
CTGCATCACATAGTTCTGGAAAACCCCAGCTTCTCCCCCTTGGGAGTCCTCCTGAAAATGATCCATAATGCCCTG
CGCTTCATTCCCGTCACCTCTGTGGTGTTGCTTTACCACCGCGTCCATCCTGAGGAAGTCACCTTCCACCTCTAC
CTGATCCCAAGTGACTGCTCCATTCGGAAGGAACTGGAGCTCTGCTATCGAAGCCCTGGAGAAGACCAGCTGTTC
TCGGAGTTCTACGTTGGCCACTTGGGATCAGGGATCAGGCTGCAAGTGAAAGACAAGAAAGATGAGACTCTGGTG
TGGGAGGCCTTGGTGAAACCAGGAGATCTCATGCCTGCAACTACTCTGATCCCTCCAGCCCGCATAGCCGTACCT
TCACCTCTGGATGCCCCGCAGTTGCTGCACTTTGTGGACCAGTATCGAGAGCAGCTGATAGCCCGAGTGACATCG
GTGGAGGTTGTCTTGGACAAACTGCATGGACAGGTGCTGAGCCAGGAGCAGTACGAGAGGGTGCTGGCTGAGAAC
ACGAGGCCCAGCCAGATGCGGAAGCTGTTCAGCTTGAGCCAGTCCTGGGACCGGAAGTGCAAAGATGGACTCTAC
CAAGCCCTGAAGGAGACCCATCCTCACCTCATTATGGAACTCTGGGAGAAGGGCAGCAAAAAGGGACTCCTGCCA
CTCAGCAGC**TGA**AGTATCAACACCAGCCCTTGACCCTTGAGTCCTGGCTTTGGCTGACCCTTCTTTGGGTCTCAG
TTTCTTTCTCTGCAAACAAGTTGCCATCTGGTTTGCCTTCCAGCACTAAAGTAATGGAACTTTGATGATGCCTTT
GCTGGGCATTATGTGTCCATGCCAGGGATGCCACAGGGGGCCCCAGTCCAGGTGGCCTAACAGCATCTCAGGGAA
TGTCCATCTGGAGCTGGCAAGACCCCTGCAGACCTCATAGAGCCTCATCTGGTGGCCACAGCAGCCAAGCCTAGA
GCCCTCCGGATCCCATCCAGGCGCAAAGAGGAATAGGAGGGACATGGAACCATTTGCCTCTGGCTGTGTCACAGG
GTGAGCCCCAAAATTGGGGTTCAGCGTGGGAGGCCACGTGGATTCTTGGCTTTGTACAGGAAGATCTACAAGAGC
AAGCCAACAGAGTAAAGTGGAAGGAAGTTTATTCAGAAAATAAAGGAGTATCACAGCTCTTTTAGAATTTGTCTA
GCAGGCTTTCCAGTTTTTACCAGAAAACCCCTATAAATTAAAAATTTTTTACTTAAATTTAAGAATTAAAAAAAT
ACAAAAAAGAAAAAATGAAAATAAAGGAATAAGAAGTTACCTACTCCAAAAAAAAAAA

FIGURE 2609

MAGGAWGRLACYLEFLKKEELKEFQLLLANKAHSRSSSGETPAQPEKTSGMEVASYLVAQYGEQRAWDLALHTWE
QMGLRSLCAQAQEGAGHSPSFPYSPSEPHLGSPSQPTSTAVLMPWIHELPAGCTQGSERRVLRQLPDTSGRRWRE
ISASLLYQALPSSPDHESPSQESPNAPTSTAVLGSWGSPPQPSLAPREQEAPGTQWPLDETSGIYYTEIRERERE
KSEKGRPPWAAVVGTPPQAHTSLQPHHHPWEPSVRESLCSTWPWKNEDFNQKFTQLLLLQRPHPRSQDPLVKRSW
PDYVEENRGHLIEIRDLFGPGLDTQEPRIVILQGAAGIGKSTLARQVKEAWGRGQLYGDRFQHVFYFSCRELAQS
KVVSLAELIGKDGTATPAPIRQILSRPERLLFILDGVDEPGWVLQEPSSELCLHWSQPQPADALLGSLLGKTILP
EASFLITARTTALQNLIPSLEQARWVEVLGFSESSRKEYFYRYFTDERQAIRAFRLVKSNKELWALCLVPWVSWL
ACTCLMQQMKRKEKLTLTSKTTTTLCLHYLAQALQAQPLGPQLRDLCSLAAEGIWQKKTLFSPDDLRKHGLDGAI
ISTFLKMGILQEHPIPLSYSFIHLCFQEFFAAMSYVLEDEKGRGKHSNCIIDLEKTLEAYGIHGLFGASTTRFLL
GLLSDEGEREMENIFHCRLSQGRNLMQWVPSLQLLLQPHSLESLHCLYETRNKTFLTQVMAHFEEMGMCVETDME
LLVCTFCIKFSRHVKKLQLIEGRQHRSTWSPTMVVLFRWVPVTDAYWQILFSVLKVTRNLKELDLSGNSLSHSAV
KSLCKTLRRPRCLLETLRLAGCGLTAEDCKDLAFGLRANQTLTELDLSFNVLTDAGAKHLCQRLRQPSCKLQRLQ
LVSCGLTSDCCQDLASVLSASPSLKELDLQQNNLDDVGVRLLCEGLRHPACKLIRLGLDQTTLSDEMRQELRALE
QEKPQLLIFSRRKPSVMTPTEGLDTGEMSNSTSSLKRQRLGSERAASHVAQANLKLLDVSKIFPIAEIAEESSPE
VVPVELLCVPSPASQGDLHTKPLGTDDDFWGPTGPVATEVVDKEKNLYRVHFPVAGSYRWPNTGLCFVMREAVTV
EIEFCVWDQFLGEINPQHSWMVAGPLLDIKAEPGAVEAVHLPHFVALQGGHVDTSLFQMAHFKEEGMLLEKPARV
ELHHIVLENPSFSPLGVLLKMIHNALRFIPVTSVVLLYHRVHPEEVTFHLYLIPSDCSIRKELELCYRSPGEDQL
FSEFYVGHLGSGIRLQVKDKKDETLVWEALVKPGDLMPATTLIPPARIAVPSPLDAPQLLHFVDQYREQLIARVT
SVEVVLDKLHGQVLSQEQYERVLAENTRPSQMRKLFSLSQSWDRKCKDGLYQALKETHPHLIMELWEKGSKKGLL
PLSS

FIGURE 2610

AACGTTCCTGACACAAGTGATGGCCCATTTCGAAGAAATGGGCATGTGTGTAGAAACAGACATGGAGCTCTTAGT
GTGCACTTTCTGCATTAAATTCAGCCGCCACGTGAAGAAGCTTCAGCTGATTGAGGGCAGGCAGCACAGATCAAC
ATGGAGCCCCACCATGGTAGTCCTGTTCAGGTGGGTCCCAGTCACAGATGCCTATTGGCAGATTCTCTTCTCCGT
CCTCAAGGTCACCAGAAACCTGAAGGAGCTGGACCTAAGTGGAAACTCGCTGAGCCACTCTGCAGTGAAGAGTCT
TTGTAAGACCCTGAGACGCCCTCGCTGCCTCCTGGAGACCCTGCGGTTGGCTGGCTGTGGCCTCACAGCTGAGGA
CTGCAAGGACCTTGCCTTTGGGCTGAGAGCCAACCAGACCCTGACCGAGCTGGACCTGAGCTTCAATGTGCTCAC
GGATGCTGGAGCCAAACACCTTTGCCAGAGACTGAGACAGCCGAGCTGCAAGCTACAGCGACTGCAGCTGGTCAG
CTGTGGCCTCACGTCTGACTGCTGCCAGGACCTGGCCTCTGTGCTTAGTGCCAGCCCCACCTGAAGGAGCTAGAC
CTGCAGCAGAACAACCTGGATGACGTTCGCGTGCGACTGCTCTGTGAGGGGCTCAGGCATCCTGCCTGCAAACTC
ATACGCCTGGGGCTGGACCAGACAACTCTGAGTGATGAG**ATG**AGGCAGGAACTGAGGGCCCTGGAGCAGGAGAAA
CCTCAGCTGCTCATCTTCAGCAGACGGAAACCAAGTGTGATGACCCCTACTGAGGGCCTGGATACGGGAGAGATG
AGTAATAGCACATCCTCACTCAAGCGGCAGAGACTCGGATCAGAGAGGGCGGCTTCCCATGTTGCTCAGGCTAAT
CTCAAACTCCTGGACGTGAGCAAGATCTTCCCAATTGCTGAGATTGCAGGCAAGAGCCACGAGGAAAGCTCCCCA
GAGGTAGTACCGGTGGAACTCTTGTGCGTGCCTTCTCCTGCCTCTCAAGGGGACCTGCATACGAAGCCTTTGGGG
ACTGACGATGACTTCTGGGGCCCCACGGGGCCTGTGGCTACTGAGGTAGTTGACAAAGAAAAGAACTTGTACCGA
GTTCACTTCCCTGTAGCTGGCTCCTACCGCTGGCCCAACACGGGTCTCTGCTTTGTGATGAGAGAAGCGGTGACC
GTTGAGATTGAATTCTGTGTGTGGGACCAGTTCCTGGGTGAGATCAACCCACAGCACAGCTGGATGGTGGCAGGG
CCTCTGCTGGACATCAAGGCTGAGCCTGGAGCTGTGGAAGCTGTGCACCTCCCTCACTTTGTGGCTCTCCAAGGG
GGCCATGTGGACACATCCCTGTTCCAAATGGCCCACTTTAAAGAGGAGGGGATGCTCCTGGAGAAGCCAGCCAGG
GTGGAGCTGCATCACATAGTTCTGGAAAACCCCAGCTTCTCCCCCTTGGGAGTCCTCCTGAAAATGATCCATAAT
GCCCTGCGCTTCATTCCCGTCACCTCTGTGGTGTTGCTTTACCACCGCGTCCATCCTGAGGAAGTCACCTTCCAC
CTCTACCTGATCCCAAGTGACTGCTCCATTCGGAAGGCCATAGATGATCTAGAAATGAAATTCCAGTTTGTGCGA
ATCCACAAGCCACCCCCGCTGACCCCACTTTATATGGGCTGTCGTTACACTGTGTCTGGGTCTGGTTCAGGGATG
CTGGAAATACTCCCCAAGGAACTGGAGCTCTGCTATCGAAGCCCTGGAGAAGACCAGCTGTTCTCGGAGTTCTAC
GTTGGCCACTTGGGATCAGGGATCAGGCTGCAAGTGAAAGACAAGAAAGATGAGACTCTGGTGTGGGAGGCCTTG
GTGAAACCAGGAAGGAACACCAGCCAGCCGTGGAACCTCAGGTGCAACAGAGACGCCAGGAGATAC**TAG**TGCCCA
GCAGCCTGCGGCAGTACCAATGAAGCCAGAGAGGGCTTGGTGGATGACAAGGAGGCCTGAGTAGACCGCAGGTGG
GTCTGAGAAATGGGCTTAGGTGAGGCAGGTCTTTGAAGGATTTGTTCTTAATCATATGCGAGATGCTCAAAAGGC
TGGATGCCTGCTTTTGTGGGTGAAGAGCAAGAAGAGAAAACAGGTTGTACACATACAGATGCAGATGGAGAGACA
GAGAAAAAAAAGGAAGAAGGCAGAGAAATGCACCAATTCTTGAGCTGTATTATCTCTGGACCTTGGGATTGTGGG
AGGCTTTATTTTACTACTGATTTTGCCTACACTGTTTTCTCAATTTCTAGTTTTCTACAAAGATGATGTGTTAGC
TTTTTCACGCAAAAAGATTAAAATTTAAAAAAAAAAAAAAAAAAAAA

FIGURE 2611

MRQELRALEQEKPQLLIFSRRKPSVMTPTEGLDTGEMSNSTSSLKRQRLGSERAASHVAQANLKLLDVSKIFPIA
EIAGKSHEESSPEVVPVELLCVPSPASQGDLHTKPLGTDDDFWGPTGPVATEVVDKEKNLYRVHFPVAGSYRWPN
TGLCFVMREAVTVEIEFCVWDQFLGEINPQHSWMVAGPLLDIKAEPGAVEAVHLPHFVALQGGHVDTSLFQMAHF
KEEGMLLEKPARVELHHIVLENPSFSPLGVLLKMIHNALRFIPVTSVVLLYHRVHPEEVTFHLYLIPSDCSIRKA
IDDLEMKFQFVRIHKPPPLTPLYMGCRYTVSGSGSGMLEILPKELELCYRSPGEDQLFSEFYVGHLGSGIRLQVK
DKKDETLVWEALVKPGRNTSQPWNLRCNRDARRY

FIGURE 2612

ATGGCGTCCACGGATTACAGTACCTATAGCCAAGCTGCAGCGCAGCAGGGCTACAGTGCTTACACCGCCCAGCCC
ACTCAAGGATATGCACAGACCACCCAGGCATATGGGCAACAAAGCTATGGAACCTATGGACAGCCCACTGATGTC
AGCTATACCCAGGCTCAGACCACTGCAACCTATGGGCAGACCGCCTATGCAACTTCTTATGGACAGCCTCCCACT
GGTTATACTACTCCAACTGCCCCCCAGGCATACAGCCAGCCTGTCCAGGGGTATGGCACTGGTGCTTATGATACC
ACCACTGCTACAGTCACCACCACCCAGGCCTCCTATGCAGCTCAGTCTGCATATGGCACTCAGCCTGCTTATCCA
GCCTATGGGCAGCAGCCAGCAGCCACTGCACCTACAAGACCGCAGGATGGAAACAAGCCCACTGAGACTAGTCAA
CCTCAATCTAGCACAGGGGGTTACAACCAGCCCAGCCTAGGATATGGACAGAGTAACTACAGTTATCCCCAGGTA
CCTGGGAGCTACCCCATGCAGCCAGTCACTGCACCTCCATCCTACCCTCCTACCAGCTATTCCTCTACACAGCCG
ACTAGTTATGATCAGAGCAGTTACTCTCAGCAGAACACCTATGGGCAACCGAGCAGCTATGGACAGCAGAGTAGC
TATGGTCAACAAAGCAGCTATGGGCAGCAGCCTCCCACTAGTTACCCACCCCAAACTGGATCCTACAGCCAAGCT
CCAAGTCAATATAGCCAACAGAGCAGCAGCTACGGGCAGCAGAGTCCTCCCCTTGGAGGGGCACAAACGATCAGT
AAGAATACAGAGCAACGGCCCCAGCCAGATCCGTATCAGATCCTGGGCCCGACCAGCAGTCGCCTAGCCAACCCT
GGAAGCGGGCAGATCCAGCTGTGGCAATTCCTCCTGGAGCTGCTCTCCGACAGCGCCAACGCCAGCTGTATCACC
TGGGAGGGGACCAACGGGGAGTTCAAAATGACGGACCCCGATGAGGTGGCCAGGCGCTGGGGGCAGCGGAAAAGC
AAGCCCAACATGAATTACGACAAGCTGAGCCGGGCCCTCCGTTATTACTATGATAAAAACATTATGACCAAAGTG
CACGGCAAAAGATATGCTTACAAATTTGACTTCCACGGCATTGCCCAGGCTCTGCAGCCACATCCGACCGAGTCG
TCCATGTACAAGTACCCTTCTGACATCTCCTACATGCCTTCCTACCATGCCCACCAGCAGAAGGTGAACTTTGTC
CCTCCCCATCCATCCTCCATGCCTGTCACTTCCTCCAGCTTCTTTGGAGCCGCATCACAATACTGGACCTCCCCC
ACGGGGGGAATCTACCCCAACCCCAACGTCCCCCGCCATCCTAACACCCACGTGCCTTCACACTTAGGCAGCTAC
TAC**TAG**

FIGURE 2613

MASTDYSTYSQAAAQQGYSAYTAQPTQGYAQTTQAYGQQSYGTYGQPTDVSYTQAQTTATYGQTAYATSYGQPPT
GYTTPTAPQAYSQPVQGYGTGAYDTTTATVTTTQASYAAQSAYGTQPAYPAYGQQPAATAPTRPQDGNKPTETSQ
PQSSTGGYNQPSLGYGQSNYSYPQVPGSYPMQPVTAPPSYPPTSYSSTQPTSYDQSSYSQQNTYGQPSSYGQQSS
YGQQSSYGQQPPTSYPPQTGSYSQAPSQYSQQSSSYGQQSPPLGGAQTISKNTEQRPQPDPYQILGPTSSRLANP
GSGQIQLWQFLLELLSDSANASCITWEGTNGEFKMTDPDEVARRWGQRKSKPNMNYDKLSRALRYYYDKNIMTKV
HGKRYAYKFDFHGIAQALQPHPTESSMYKYPSDISYMPSYHAHQQKVNFVPPHPSSMPVTSSSFFGAASQYWTSP
TGGIYPNPNVPRHPNTHVPSHLGSYY

FIGURE 2614A

AAAACTGCGACTGCGCGGCGTGAGCTCGCTGAGACTTCCTGGACCCCGCACCAGGCTGTGGGGTTTCTCAGATAA
CTGGGCCCCTGCGCTCAGGAGGCCTTCACCCTCTGCTCTGGGTAAAGTTCATTGGAACAGAAAGAAATGGATTTA
TCTGCTCTTCGCGTTGAAGAAGTACAAAATGTCATTAATGCTATGCAGAAAATCTTAGAGTGTCCCATCTGTCTG
GAGTTGATCAAGGAACCTGTCTCCACAAAGTGTGACCACATATTTTGCAAATTTTGCATGCTGAAACTTCTCAAC
CAGAAGAAAGGGCCTTCACAGTGTCCTTTATGTAAGAATGATATAACCAAAAGGAGCCTACAAGAAAGTACGAGA
TTTAGTCAACTTGTTGAAGAGCTATTGAAAATCATTTGTGCTTTTCAGCTTGACACAGGTTTGGAGTATGCAAAC
AGCTATAATTTTGCAAAAAAGGAAAATAACTCTCCTGAACATCTAAAAGATGAAGTTTCTATCATCCAAAGTATG
GGCTACAGAAACCGTGCCAAAAGACTTCTACAGAGTGAACCCGAAAATCCTTCCTTGCAGGAAACCAGTCTCAGT
GTCCAACTCTCTAACCTTGGAACTGTGAGAACTCTGAGGACAAAGCAGCGGATACAACCTCAAAAGACGTCTGTC
TACATTGAATTGGGATCTGATTCTTCTGAAGATACCGTTAATAAGGCAACTTATTGCAGTGTGGGAGATCAAGAA
TTGTTACAAATCACCCCTCAAGGAACCAGGGATGAAATCAGTTTGGATTCTGCAAAAAAGGCTGCTTGTGAATTT
TCTGAGACGGATGTAACAAATACTGAACATCATCAACCCAGTAATAATGATTTGAACACCACTGAGAAGCGTGCA
GCTGAGAGGCATCCAGAAAAGTATCAGGGTAGTTCTGTTTCAAACTTGCATGTGGAGCCATGTGGCACAAATACT
CATGCCAGCTCATTACAGCATGAGAACAGCAGTTTATTACTCACTAAAGACAGAATGAATGTAGAAAAGGCTGAA
TTCTGTAATAAAAGCAAACAGCCTGGCTTAGCAAGGAGCCAACATAACAGATGGGCTGGAAGTAAGGAAACATGT
AATGATAGGCGGACTCCCAGCACAGAAAAAAAGGTAGATCTGAATGCTGATCCCCTGTGTGAGAGAAAAGAATGG
AATAAGCAGAAACTGCCATGCTCAGAGAATCCTAGAGATACTGAAGATGTTCCTTGGATAACACTAAATAGCAGC
ATTCAGAAAGTTAATGAGTGGTTTTCCAGAAGTGATGAACTGTTAGGTTCTGATGACTCACATGATGGGGAGTCT
GAATCAAATGCCAAAGTAGCTGATGTATTGGACGTTCTAAATGAGGTAGATGAATATTCTGGTTCTTCAGAGAAA
ATAGACTTACTGGCCAGTGATCCTCATGAGGCTTTAATATGTAAAAGTGAAAGAGTTCACTCCAAATCAGTAGAG
AGTAATATTGAAGACAAAATATTTGGGAAAACCTATCGGAAGAAGGCAAGCCTCCCCAACTTAAGCCATGTAACT
GAAAATCTAATTATAGGAGCATTTGTTACTGAGCCACAGATAATACAAGAGCGTCCCCTCACAAATAAATTAAAG
CGTAAAAGGAGACCTACATCAGGCCTTCATCCTGAGGATTTTATCAAGAAAGCAGATTTGGCAGTTCAAAAGACT
CCTGAAATGATAAATCAGGGAACTAACCAAACGGAGCAGAATGGTCAAGTGATGAATATTACTAATAGTGGTCAT
GAGAATAAAACAAAAGGTGATTCTATTCAGAATGAGAAAAATCCTAACCCAATAGAATCACTCGAAAAAGAATCT
GCTTTCAAAACGAAAGCTGAACCTATAAGCAGCAGTATAAGCAATATGGAACTCGAATTAAATATCCACAATTCA
AAAGCACCTAAAAAGAATAGGCTGAGGAGGAAGTCTTCTACCAGGCATATTCATGCGCTTGAACTAGTAGTCAGT
AGAAATCTAAGCCCACCTAATTGTACTGAATTGCAAATTGATAGTTGTTCTAGCAGTGAAGAGATAAAGAAAAAA
AAGTACAACCAAATGCCAGTCAGGCACAGCAGAAACCTACAACTCATGGAAGGTAAAGAACCTGCAACTGGAGCC
AAGAAGAGTAACAAGCCAAATGAACAGACAAGTAAAAGACATGACAGCGATACTTTCCCAGAGCTGAAGTTAACA
AATGCACCTGGTTCTTTTACTAAGTGTTCAAATACCAGTGAACTTAAAGAATTTGTCAATCCTAGCCTTCCAAGA
GAAGAAAAAGAAGAGAAACTAGAAACAGTTAAAGTGTCTAATAATGCTGAAGACCCCAAAGATCTCATGTTAAGT
GGAGAAAGGGTTTTGCAAACTGAAAGATCTGTAGAGAGTAGCAGTATTTCATTGGTACCTGGTACTGATTATGGC
ACTCAGGAAAGTATCTCGTTACTGGAAGTTAGCACTCTAGGGAAGGCAAAAACAGAACCAAATAAATGTGTGAGT
CAGTGTGCAGCATTTGAAAACCCCAAGGGACTAATTCATGGTTGTTCCAAAGATAATAGAAATGACACAGAAGGC
TTTAAGTATCCATTGGGACATGAAGTTAACCACAGTCGGGAAACAAGCATAGAAATGGAAGAAAGTGAACTTGAT
GCTCAGTATTTGCAGAATACATTCAAGGTTTCAAAGCGCCAGTCATTTGCTCCGTTTTCAAATCCAGGAAATGCA
GAAGAGGAATGTGCAACATTCTCTGCCCACTCTGGGTCCTTAAAGAAACAAAGTCCAAAAGTCACTTTTGAATGT
GAACAAAAGGAAGAAAATCAAGGAAAGAATGAGTCTAATATCAAGCCTGTACAGACAGTTAATATCACTGCAGGC
TTTCCTGTGGTTGGTCAGAAAGATAAGCCAGTTGATAATGCCAAATGTAGTATCAAAGGAGGCTCTAGGTTTTGT
CTATCATCTCAGTTCAGAGGCAACGAAACTGGACTCATTACTCCAAATAAACATGGACTTTTACAAAACCCATAT
CGTATACCACCACTTTTTCCCATCAAGTCATTTGTTAAAACTAAATGTAAGAAAAATCTGCTAGAGGAAAACTTT
GAGGAACATTCAATGTCACCTGAAAGAGAAATGGGAAATGAGAACATTCCAAGTACAGTGAGCACAATTAGCCGT
AATAACATTAGAGAAAATGTTTTTAAAGAAGCCAGCTCAAGCAATATTAATGAAGTAGGTTCCAGTACTAATGAA
GTGGGCTCCAGTATTAATGAAATAGGTTCCAGTGATGAAAACATTCAAGCAGAACTAGGTAGAAACAGAGGGCCA
AAATTGAATGCTATGCTTAGATTAGGGGTTTTGCAACCTGAGGTCTATAAACAAAGTCTTCCTGGAAGTAATTGT
AAGCATCCTGAAATAAAAAAGCAAGAATATGAAGAAGTAGTTCAGACTGTTAATACAGATTTCTCTCCATATCTG
ATTTCAGATAACTTAGAACAGCCTATGGGAAGTAGTCATGCATCTCAGGTTTGTTCTGAGACACCTGATGACCTG

FIGURE 2614B

TTAGATGATGGTGAAATAAAGGAAGATACTAGTTTTGCTGAAAATGACATTAAGGAAAGTTCTGCTGTTTTTAGC
AAAAGCGTCCAGAAAGGAGAGCTTAGCAGGAGTCCTAGCCCTTTCACCCATACACATTTGGCTCAGGGTTACCGA
AGAGGGGCCAAGAAATTAGAGTCCTCAGAAGAGAACTTATCTAGTGAGGATGAAGAGCTTCCCTGCTTCCAACAC
TTGTTATTTGGTAAAGTAAACAATATACCTTCTCAGTCTACTAGGCATAGCACCGTTGCTACCGAGTGTCTGTCT
AAGAACACAGAGGAGAATTTATTATCATTGAAGAATAGCTTAAATGACTGCAGTAACCAGGTAATATTGGCAAAG
GCATCTCAGGAACATCACCTTAGTGAGGAAACAAAATGTTCTGCTAGCTTGTTTTCTTCACAGTGCAGTGAATTG
GAAGACTTGACTGCAAATACAAACACCCAGGATCCTTTCTTGATTGGTTCTTCCAAACAAATGAGGCATCAGTCT
GAAAGCCAGGGAGTTGGTCTGAGTGACAAGGAATTGGTTTCAGATGATGAAGAAAGAGGAACGGGCTTGGAAGAA
AATAATCAAGAAGAGCAAAGCATGGATTCAAACTTAGGTGAAGCAGCATCTGGGTGTGAGAGTGAAACAAGCGTC
TCTGAAGACTGCTCAGGGCTATCCTCTCAGAGTGACATTTTAACCACTCAGCAGAGGGATACCATGCAACATAAC
CTGATAAAGCTCCAGCAGGAAATGGCTGAACTAGAAGCTGTGTTAGAACAGCATGGGAGCCAGCCTTCTAACAGC
TACCCTTCCATCATAAGTGACTCTTCTGCCCTTGAGGACCTGCGAAATCCAGAACAAAGCACATCAGAAAAAGAT
GCTGAGTTTGTGTGTGAACGGACACTGAAATATTTTCTAGGAATTGCGGGAGGAAAATGGGTAGTTAGCTATTTC
TGGGTGACCCAGTCTATTAAAGAAAGAAAAATGCTGAATGAGCATGATTTTGAAGTCAGAGGAGATGTGGTCAAT
GGAAGAAACCACCAAGGTCCAAAGCGAGCAAGAGAATCCCAGGACAGAAAGATCTTCAGGGGGCTAGAAATCTGT
TGCTATGGGCCCTTCACCAACATGCCCACAGATCAACTGGAATGGATGGTACAGCTGTGTGGTGCTTCTGTGGTG
AAGGAGCTTTCATCATTCACCCTTGGCACAGGTGTCCACCCAATTGTGGTTGTGCAGCCAGATGCCTGGACAGAG
GACAATGGCTTCCATGCAATTGGGCAGATGTGTGAGGCACCTGTGGTGACCCGAGAGTGGGTGTTGGACAGTGTA
GCACTCTACCAGTGCCAGGAGCTGGACACCTACCTGATACCCCAGATCCCCCACAGCCACTACTGACTGCAGCCA
GCCACAGGTACAGACCACAGGACCCCAAGAATGAGCTTACAAAGTGGCCTTTCCAGGCCCTGGGAGCTCCTCTCA
CTCTTCAGTCCTTCTACTGTCCTGGCTACTAAATATTTTATGTACATCAGCCTGAAAAGGACTTCTGGCTATGCA
AGGGTCCCTTAAAGATTTTCTGCTTGAAGTCTCCCTTGGAAATCTGCCATGAGCACAAAATTATGGTAATTTTTC
ACCTGAGAAGATTTTAAAACCATTTAAACGCCACCAATTGAGCAAGATGCTGATTCATTATTTATCAGCCCTATT
CTTTCTATTCAGGCTGTTGTTGGCTTAGGGCTGGAAGCACAGAGTGGCTTGGCCTCAAGAGAATAGCTGGTTTCC
CTAAGTTTACTTCTCTAAAACCCTGTGTTCACAAAGGCAGAGAGTCAGACCCTTCAATGGAAGGAGAGTGCTTGG
GATCGATTATGTGACTTAAAGTCAGAATAGTCCTTGGGCAGTTCTCAAATGTTGGAGTGGAACATTGGGGAGGAA
ATTCTGAGGCAGGTATTAGAAATGAAAAGGAAACTTGAAACCTGGGCATGGTGGCTCACGCCTGTAATCCCAGCA
CTTTGGGAGGCCAAGGTGGGCAGATCACTGGAGGTCAGGAGTTCGAAACCAGCCTGGCCAACATGGTGAAACCCC
ATCTCTACTAAAAATACAGAAATTAGCCGGTCATGGTGGTGGACACCTGTAATCCCAGCTACTCAGGTGGCTAAG
GCAGGAGAATCACTTCAGCCCGGGAGGTGGAGGTTGCAGTGAGCCAAGATCATACCACGGCACTCCAGCCTGGGT
GACAGTGAGACTGTGGCTCAAAAAAAAAAAAAAAAAAGGAAAATGAAACTAGGAAAGGTTTCTTAAAGTCTGAGA
TATATTTGCTAGATTTCTAAAGAATGTGTTCTAAAACAGCAGAAGATTTTCAAGAACCGGTTTCCAAAGACAGTC
TTCTAATTCCTCATTAGTAATAAGTAAAATGTTTATTGTTGTAGCTCTGGTATATAATCCATTCCTCTTAAAATA
TAAGACCTCTGGCATGAATATTTCATATCTATAAAATGACAGATCCCACCAGGAAGGAAGCTGTTGCTTTCTTTG
AGGTGATTTTTTTCCTTTGCTCCCTGTTGCTGAAACCATACAGCTTCATAAATAATTTTGCTTGCTGAAGGAAGA
AAAAGTGTTTTTCATAAACCCATTATCCAGGACTGTTTATAGCTGTTGGAAGGACTAGGTCTTCCCTAGCCCCCC
CAGTGTGCAAGGGCAGTGAAGACTTGATTGTACAAAATACGTTTTGTAAATGTTGTGCTGTTAACACTGCAAATA
AACTTGGTAGCAAACA

FIGURE 2615

MDLSALRVEEVQNVINAMQKILECPICLELIKEPVSTKCDHIFCKVLLCCPSWSTVVRS

2930/8433

FIGURE 2616A

TAAAGTCATCAAAACAACGTTATATCCTGTGTGAAATGCTGCAGTCAGGATGCCTTGTGGTTTGAGTGCCTTGAT
CATGTGCCCTAAGGGGATGGTGGCGGTGGTGGTGGCCGTGGATGACGGAGACTCTCAGGCCTTGGCAGGTGCGTC
TTTCAGTTCCCCTCACACTTCGGGTTCCTCGGGGAGGAGGGGCTGGAACCCTAGCCCATCGTCAGGACAAAG**ATG**

CTCAGGCTGCTCTTGGCTCTCAACTTATTCCCTTCAATTCAAGTAACAGGAAACAAGATTTTGGTGAAGCAGTCG
CCCATGCTTGTAGCGTACGACAATGCGGTCAACCTTAGCTGCAAGTATTCCTACAATCTCTTCTCAAGGGAGTTC
CGGGCATCCCTTCACAAAGGACTGGATAGTGCTGTGGAAGTCTGTGTTGTATATGGGAATTACTCCCAGCAGCTT
CAGGTTTACTCAAAAACGGGGTTCAACTGTGATGGGAAATTGGGCAATGAATCAGTGACATTCTACCTCCAGAAT
TTGTATGTTAACCAAACAGATATTTACTTCTGCAAAATTGAAGTTATGTATCCTCCTCCTTACCTAGACAATGAG
AAGAGCAATGGAACCATTATCCATGTGAAAGGGAAACACCTTTGTCCAAGTCCCCTATTTCCCGGACCTTCTAAG
CCCTTTTGGGTGCTGGTGGTGGTTGGTGGAGTCCTGGCTTGCTATAGCTTGCTAGTAACAGTGGCCTTTATTATT
TTCTGGGTGAGGAGTAAGAGGAGCAGGCTCCTGCACAGTGACTACATGAACATGACTCCCCGCCGCCCCGGGCCC
ACCCGCAAGCATTACCAGCCCTATGCCCCACCACGCGACTTCGCAGCCTATCGCTCC**TGA**CACGGACGCCTATCC
AGAAGCCAGCCGGCTGGCAGCCCCCATCTGCTCAATATCACTGCTCTGGATAGGAAATGACCGCCATCTCCAGCC
GGCCACCTCAGGCCCCTGTTGGGCCACCAATGCCAATTTTTCTCGAGTGACTAGACCAAATATCAAGATCATTTT
GAGACTCTGAAATGAAGTAAAAGAGATTTCCTGTGACAGGCCAAGTCTTACAGTGCCATGGCCCACATTCCAACT
TACCATGTACTTAGTGACTTGACTGAGAAGTTAGGGTAGAAAACAAAAAGGGAGTGGATTCTGGGAGCCTCTTCC
CTTTCTCACTCACCTGCACATCTCAGTCAAGCAAAGTGTGGTATCCACAGACATTTTAGTTGCAGAAGAAAGGCT
AGGAAATCATTCCTTTTGGTTAAATGGGTGTTTAATCTTTTGGTTAGTGGGTTAAACGGGGTAAGTTAGAGTAGG
GGGAGGGATAGGAAGACATATTTAAAAACCATTAAAACACTGTCTCCCACTCATGAAATGAGCCACGTAGTTCCT
ATTTAATGCTGTTTTCCTTTAGTTTAGAAATACATAGACATTGTCTTTTATGAATTCTGATCATATTTAGTCATT
TTGACCAAATGAGGGATTTGGTCAAATGAGGGATTCCCTCAAAGCAATATCAGGTAAACCAAGTTGCTTTCCTCA
CTCCCTGTCATGAGACTTCAGTGTTAATGTTCACAATATACTTTCGAAAGAATAAAATAGTTCTCCTACATGAAG
AAAGAATATGTCAGGAAATAAGGTCACTTTATGTCAAAATTATTTGAGTACTATGGGACCTGGCGCAGTGGCTCA
TGCTTGTAATCCCAGCACTTTGGGAGGCCGAGGTGGGCAGATCACTTGAGATCAGGACCAGCCTGGTCAAGATGG
TGAAACTCCGTCTGTACTAAAAATACAAAATTTAGCTTGGCCTGGTGGCAGGCACCTGTAATCCCAGCTGCCCAG
GAGGCTGAGGCATGAGAATCGCTTGAACCTGGCAGGCGGAGGTTGCAGTGAGCCGAGATAGTGCCACAGCTCTCC
AGCCTGGGCGACAGAGTGAGACTCCATCTCAAACAACAACAACAACAACAACAACAACAACAAACCACAAAATTA
TTTGAGTACTGTGAAGGATTATTTGTCTAACAGTTCATTCCAATCAGACCAGGTAGGAGCTTTCCTGTTTCATAT
GTTTCAGGGTTGCACAGTTGGTCTCTTTAATGTCGGTGTGGAGATCCAAAGTGGGTTGTGGAAAGAGCGTCCATA
GGAGAAGTGAGAATACTGTGAAAAGGGATGTTAGCATTCATTAGAGTATGAGGATGAGTCCCAAGAAGGTTCTTT
GGAAGGAGGACGAATAGAATGGAGTAATGAAATTCTTGCCATGTGCTGAGGAGATAGCCAGCATTAGGTGACAAT
CTTCCAGAAGTGGTCAGGCAGAAGGTGCCCTGGTGAGAGCTCCTTTACAGGGACTTTATGTGGTTTAGGGCTCAG
AGCTCCAAAACTCTGGGCTCAGCTGCTCCTGTACCTTGGAGGTCCATTCACATGGGAAAGTATTTTGGAATGTGT
CTTTTGAAGAGAGCATCAGAGTTCTTAAGGGACTGGGTAAGGCCTGACCCTGAAATGACCATGGATATTTTTCTA
CCTACAGTTTGAGTCAACTAGAATATGCCTGGGGACCTTGAAGAATGCCCTTCAGTGGCCCTCACCATTTGTTCA
TGCTTCAGTTAATTCAGGTGTTGAAGGAGCTTAGGTTTTAGAGGCACGTAGACTTGGTTCAAGTCTCGTTAGTAG
TTGAATAGCCTCAGGCAAGTCACTGCCCACCTAAGATGATGGTTCTTCAACTATAAATGGAGATAATGGTTACAA
ATGTCTCTTCCTATAGTATAATCTCCATAAGGGCATGGCCCAAGTCTGTCTTTGACTCTGCCTATCCCTGACGTT
TAGTAGCATGCCCGACATACAATGTTAGCTATTGGTATTATTGCCATATAGATAAATTATGTATAAAAATTAAAC
TGGGCAATAGCCTAAGAAGGGGGGAATATTGTAACACAAATTTAAACCCACTACGCAGGGATGAGGTGCTATAAT
ATGAGGACCTTTTAACTTCCATCATTTTCCTGTTTCTTGAAATAGTTTATCTTGTAATGAAATATAAGGCACCTC
CCACTTTTATGTATAGAAAGAGGTCTTTTAATTTTTTTTTAATGTGAGAAGGAAGGGAGGAGTAGGAATCTTGAG
ATTCCATATCGAAAATACTGTACTTTGGTTGATTTTTAAGTGGGCTTCCATTCCATGGATTTAATCAGTCCCAAG
AAGATCAAACTCAGCAGTACTTGGGTGCTGAAGAACTGTTGGATTTACCCTGGCACGTGTGCCACTTGCCCAGCT
TCTTGGGCACACAGAGTTCTTCAATCCAAGTTATCAGATTGTATTTGAAAATGACAGAGCTGGAGAGTTTTTTGA
AATGGCAGTGGCAAATAAATAAATACTTTTTTTTAAATGGAAAGACTTGATCTATGGTAATAAATGATTTTGTTT
TCTGACTGGAAAAATAGGCCTACTAAAGATGAATCACACTTGAGATGTTTCTTACTCACTCTGCACAGAAACAAA
GAAGAAATGTTATACAGGGAAGTCCGTTTTCACTATTAGTATGAACCAAGAAATGGTTCAAAAACAGTGGTAGGA

FIGURE 2616B

GCAATGCTTTCATAGTTTCAGATATGGTAGTTATGAAGAAAACAATGTCATTTGCTGCTATTATTGTAAGAGTCT
TATAATTAATGGTACTCCTATAATTTTTGATTGTGAGCTCACCTATTTGGGTTAAGCATGCCAATTTAAAGAGAC
CAAGTGTATGTACATTATGTTCTACATATTCAGTGATAAAATTACTAAACTACT

FIGURE 2617

MLRLLLALNLFPSIQVTGNKILVKQSPMLVAYDNAVNLSCKYSYNLFSREFRASLHKGLDSAVEVCVVYGNYSQQ
LQVYSKTGFNCDGKLGNESVTFYLQNLYVNQTDIYFCKIEVMYPPPYLDNEKSNGTIIHVKGKHLCPSPLFPGPS
KPFWVLVVVGGVLACYSLLVTVAFIIFWVRSKRSRLLHSDYMNMTPRRPGPTRKHYQPYAPPRDFAAYRS

FIGURE 2618

ATGCTCAGGCTGCTCTTGGCTCTCAACTTATTCCCTTCAATTCAAGTAACAGGAAACAAGATTTTGGTGAAGCAG
TCGCCCATGCTTGTAGCGTACGACAATGCGGTCAACCTTAGCTACAATGAGAAGAGCAATGGAACCATTATCCAT
GTGAAAGGGAAACACCTTTGTCCAAGTCCCCTATTTCCCGGACCTTCTAAGCCCTATGCCCCACCACGCGACTTC
GCAGCCTATCGCTCC**TGA**

FIGURE 2619

MLRLLLALNLFPSIQVTGNKILVKQSPMLVAYDNAVNLSYNEKSNGTIIHVKGKHLCPSPLFPGPSKPYAPPRDF
AAYRS

FIGURE 2620

ATGGCATGCCCTGGCTTCCTGTGGGCACTTGTGATCTCCACCTGTCTTGAATTTAGCATGGCTCAGACAGTCACT
CAGTCTCAACCAGAGATGTCTGTGCAGGAGGCAGAGACCGTGACCCTGAGCTGCACATATGACACCAGTGAGAGT
GATTATTATTTATTCTGGTACAAGCAGCCTCCCAGCAGGCAGATGATTCTCGTTATTCGCCAAGAAGCTTATAAG
CAACAGAATGCAACAGAGAATCGTTTCTCTGTGAACTTCCAGAAAGCAGCCAAATCCTTCAGTCTCAAGATCTCA
GACTCACAGCTGGGGGATGCCGCGATGTATTTCTGTGCTTATAGGAGTGCATACTCTGGGGCTGGGAGTTACCAA
CTCACTTTCGGGAAGGGGACCAAACTCTCGGTCATACCAAATATCCAGAACCCTGACCCTGCCGTGTACCAGCTG
AGAGACTCTAAATCCAGTGACAAGTCTGTCTGCCTATTCACCGATTTTGATTCTCAAACAAATGTGTCACAAAGT
AAGGATTCTGATGTGTATATCACAGACAAAACTGTGCTAGACATGAGGTCTATGGACTTCAAGAGCAACAGTGCT
GTGGCCTGGAGCAACAAATCTGACTTTGCATGTGCAAACGCCTTCAACAACAGCATTATTCCAGAAGACACCTTC
TTCCCCAGCCCAGAAAGTTCCTGTGATGTCAAGCTGGTCGAGAAAAGCTTTGAAACAGATACGAACCTAAACTTT
CAAAACCTGTCAGTGATTGGGTTCCGAATCCTCCTCCTGAAAGTGGCCGGGTTTAATCTGCTCATGACGCTGCGG
TTGTGGTCCAGCTGA

FIGURE 2621

MACPGFLWALVISTCLEFSMAQTVTQSQPEMSVQEAETVTLSCTYDTSESDYYLFWYKQPPSRQMILVIRQEAYK
QQNATENRFSVNFQKAAKSFSLKISDSQLGDAAMYFCAYRSAYSGAGSYQLTFGKGTKLSVIPNIQNPDPAVYQL
RDSKSSDKSVCLFTDFDSQTNVSQSKDSDVYITDKTVLDMRSMDFKSNSAVAWSNKSDFACANAFNNSIIPEDTF
FPSPESSCDVKLVEKSFETDTNLNFQNLSVIGFRILLLKVAGFNLLMTLRLWSS

FIGURE 2622

GTTTGTTGGCTGCGGCAGCAGGTAGCAAAGTGACGCCGAGGGCCTGAGTGCTCCAGTAGCCACCGCATCTGGAGA
ACCAGCGGTTACCATGGAGGGGATCAGTATATACACTTCAGATAACTACACCGAGGAAATGGGCTCAGGGGACTA
TGACTCCATGAAGGAACCCTGTTTCCGTGAAGAAAATGCTAATTTCAATAAAATCTTCCTGCCCACCATCTACTC
CATCATCTTCTTAACTGGCATTGTGGGCAATGGATTGGTCATCCTGGTCATGGGTTACCAGAAGAAACTGAGAAG
CATGACGGACAAGTACAGGCTGCACCTGTCAGTGGCCGACCTCCTCTTTGTCATCACGCTTCCCTTCTGGGCAGT
TGATGCCGTGGCAAACTGGTACTTTGGGAACTTCCTATGCAAGGCAGTCCATGTCATCTACACAGTCAACCTCTA
CAGCAGTGTCCTCATCCTGGCCTTCATCAGTCTGGACCGCTACCTGGCCATCGTCCACGCCACCAACAGTCAGAG
GCCAAGGAAGCTGTTGGCTGAAAAGGTGGTCTATGTTGGCGTCTGGATCCCTGCCCTCCTGCTGACTATTCCCGA
CTTCATCTTTGCCAACGTCAGTGAGGCAGATGACAGATATATCTGTGACCGCTTCTACCCCAATGACTTGTGGGT
GGTTGTGTTCCAGTTTCAGCACATCATGGTTGGCCTTATCCTGCCTGGTATTGTCATCCTGTCCTGCTATTGCAT
TATCATCTCCAAGCTGTCACACTCCAAGGGCCACCAGAAGCGCAAGGCCCTCAAGACCACAGTCATCCTCATCCT
GGCTTTCTTCGCCTGTTGGCTGCCTTACTACATTGGGATCAGCATCGACTCCTTCATCCTCCTGGAAATCATCAA
GCAAGGGTGTGAGTTTGAGAACACTGTGCACAAGTGGATTTCCATCACCGAGGCCCTAGCTTTCTTCCACTGTTG
TCTGAACCCCATCCTCTATGCTTTCCTTGGAGCCAAATTTAAAACCTCTGCCCAGCACGCACTCACCTCTGTGAG
CAGAGGGTCCAGCCTCAAGATCCTCTCCAAAGGAAAGCGAGGTGGACATTCATCTGTTTCCACTGAGTCTGAGTC
TTCAAGTTTTCACTCCAGCTAACACAGATGTAAAAGACTTTTTTTTATACGATAAATAACTTTTTTTTAAGTTAC
ACATTTTTCAGATATAAAAGACTGACCAATATTGTACAGTTTTTATTGCTTGTTGGATTTTTGTCTTGTGTTTCT
TTAGTTTTTGTGAAGTTTAATTGACTTATTTATATAAATTTTTTTTGTTTCATATTGATGTGTGTCTAGGCAGGA
CCTGTGGCCAAGTTCTTAGTTGCTGTATGTCTCGTGGTAGGACTGTAGAAAAGGGAACTGAACATTCCAGAGCGT
GTAGTGAATCACGTAAAGCTAGAAATGATCCCCAGCTGTTTATGCATAGATAATCTCTCCATTCCCGTGGAACGT
TTTTCCTGTTCTTAAGACGTGATTTTGCTGTAGAAGATGGCACTTATAACCAAAGCCCAAAGTGGTATAGAAATG
CTGGTTTTTCAGTTTTCAGGAGTGGGTTGATTTCAGCACCTACAGTGTACAGTCTTGTATTAAGTTGTTAATAAA
AGTACATGTTAAACTTACTTAGTGTTATG

FIGURE 2623

MEGISIYTSDNYTEEMGSGDYDSMKEPCFREENANFNKIFLPTIYSIIFLTGIVGNGLVILVMGYQKKLRSMTDK
YRLHLSVADLLFVITLPFWAVDAVANWYFGNFLCKAVHVIYTVNLYSSVLILAFISLDRYLAIVHATNSQRPRKL
LAEKVVYVGVWIPALLLTIPDFIFANVSEADDRYICDRFYPNDLWVVVFQFQHIMVGLILPGIVILSCYCIIISK
LSHSKGHQKRKALKTTVILILAFFACWLPYYIGISIDSFILLEIIKQGCEFENTVHKWISITEALAFFHCCLNPI
LYAFLGAKFKTSAQHALTSVSRGSSLKILSKGKRGGHSSVSTESESSSFHSS

FIGURE 2624

TGCCTGCTGAGGGTGGAGACCCACGAGCCGAGGCCTCCTGCAGTGTTCTGCACAGCAAACCGCACGCTATGGCTG
ACAGCCGGGATCCCGCCAGCGACCAGATGCAGCACTGGAAGGAGCAGCGGGCCGCGCAGAAAGCTGATGTCCTGA
CCACTGGAGCTGGTAACCCAGTAGGAGACAAACTTAATGTTATTACAGTAGGGCCCCGTGGGCCCCTTCTTGTTC
AGGATGTGGTTTTCACTGATGAAATGGCTCATTTTGACCGAGAGAGAATTCCTGAGAGAGTTGTGCATGCTAAAG
GAGCAGGGGCCTTTGGCTACTTTGAGGTCACACATGACATTACCAAATACTCCAAGGCAAAGGTATTTGAGCATA
TTGGAAAGAAGACTCCCATCGCAGTTCGGTTCTCCACTGTTGCTGGAGAATCGGGTTCAGCTGACACAGTTCGGG
ACCCTCGTGGGTTTGCAGTGAAATTTTACACAGAAGATGGTAACTGGGATCTCGTTGGAAATAACACCCCCATTT
TCTTCATCAGGGATCCCATATTGTTTCCATCTTTTATCCACAGCCAAAAGAGAAATCCTCAGACACATCTGAAGG
ATCCGGACATGGTCTGGGACTTCTGGAGCCTACGTCCTGAGTCTCTGCATCAGGTTTCTTTCTTGTTCAGTGATC
GGGGGATTCCAGATGGACATCGCCACATGAATGGATATGGATCACATACTTTCAAGCTGGTTAATGCAAATGGGG
AGGCAGTTTATTGCAAATTCCATTATAAGACTGACCAGGGCATCAAAAACCTTTCTGTTGAAGATGCGGCGAGAC
TTTCCCAGGAAGATCCTGACTATGGCATCCGGGATCTTTTTAACGCCATTGCCACAGGAAAGTACCCCTCCTGGA
CTTTTTACATCCAGGTCATGACATTTAATCAGGCAGAAACTTTTCCATTTAATCCATTCGATCTCACCAAGGTTT
GGCCTCACAAGGACTACCCTCTCATCCCAGTTGGTAAACTGGTCTTAAACCGGAATCCAGTTAATTACTTTGCTG
AGGTTGAACAGATAGCCTTCGACCCAAGCAACATGCCACCTGGCATTGAGGCCAGTCCTGACAAAATGCTTCAGG
GCCGCCTTTTTGCCTATCCTGACACTCACCGCCATCGCCTGGGACCCAATTATCTTCATATACCTGTGAACTGTC
CCTACCGTGCTCGAGTGGCCAACTACCAGCGTGATGGCCCGATGTGCATGCAGGACAATCAGGGTGGTGCTCCAA
ATTACTACCCCAACAGCTTTGGTGCTCCGGAACAACAGCCTTCTGCCCTGGAGCACAGCATCCAATATTCTGGAG
AAGTGCGGAGATTCAACACTGCCAATGATGATAACGTTACTCAGGTGCGGGCATTCTATGTGAACGTGCTGAATG
AGGAACAGAGGAAACGTCTGTGTGAGAACATTGCCGGCCACCTGAAGGATGCACAAATTTTCATCCAGAAGAAAG
CGGTCAAGAACTTCACTGAGGTCCACCCTGACTACGGGAGCCACATCCAGGCTCTTCTGGACAAGTACAATGCTG
AGAAGCCTAAGAATGCGATTCACACCTTTGTGCAGTCCGGATCTCACTTGGCGGCAAGGGAGAAGGCAAATCTGT
GAGGCCGGGGCCCTGCACCTGTGCAGCGAAGCTTAGCGTTCATCCGTGTAACCCGCTCATCACTGGATGAAGATT
CTCCTGTGCTAGATGTGCAAATGCAAGCTAGTGGCTTCAAAATAGAGAATCCCACTTTCTATAGCAGATTGTGTA
ACAATTTTAATGCTATTTCCCCAGGGGAAAATGAAGGTTAGGATTTAACAGTCATTTAAAAAAAAAATTTGTTTT
GACGGATGATTGGATTATTCATTTAAAATGATTAGAAGGCAAGTTTCTAGCTAGAAATATGATTTTATTTGACAA
AATTTGTTGAAATTATGTATGTTTACATATCACCTCATGGCCTATTATATTAAAATATGGCTATAAATATATAAA
AAGAAAAGATAAAGATGATCTACTCAGAAATTTTTATTTTTCTAAGGTTCTCATAGGAAAAGTACATTTAATACA
GCAGTGTCATCAGAAGATAACTTGAGCACCGTCATGGCTTAATGTTTATTCCTGATAATAATTGATCAAATTCAT
TTTTTTCACTGGAGTTACATTAATGTTAATTCAGCACTGATTTCACAACAGATCAATTTGTAATTGCTTACATTT
TTACAATAAATAATCTGTACGTAAGAACA

FIGURE 2625

MADSRDPASDQMQHWKEQRAAQKADVLTTGAGNPVGDKLNVITVGPRGPLLVQDVVFTDEMAHFDRERIPERVVH
AKGAGAFGYFEVTHDITKYSKAKVFEHIGKKTPIAVRFSTVAGESGSADTVRDPRGFAVKFYTEDGNWDLVGNNT
PIFFIRDPILFPSFIHSQKRNPQTHLKDPDMVWDFWSLRPESLHQVSFLFSDRGIPDGHRHMNGYGSHTFKLVNA
NGEAVYCKFHYKTDQGIKNLSVEDAARLSQEDPDYGIRDLFNAIATGKYPSWTFYIQVMTFNQAETFPFNPFDLT
KVWPHKDYPLIPVGKLVLNRNPVNYFAEVEQIAFDPSNMPPGIEASPDKMLQGRLFAYPDTHRHRLGPNYLHIPV
NCPYRARVANYQRDGPMCMQDNQGGAPNYYPNSFGAPEQQPSALEHSIQYSGEVRRFNTANDDNVTQVRAFYVNV
LNEEQRKRLCENIAGHLKDAQIFIQKKAVKNFTEVHPDYGSHIQALLDKYNAEKPKNAIHTFVQSGSHLAAREKA
NL

FIGURE 2626

GGCACGAGGGGAGCAGGGCAACACGGAGCTGATCAACGACCGGCTGAAGAAGGCCAACCTGCAGATCGACCAGAT
CAACACCGACCTGAACCTGGAGCGCAGCCACGCCCAGAAGAACGAGAATGCTCGGCAGCAGCTGGAACGCCAGAA
CAAGGAGCTTAAGGTCAAGCTGCAGGAGATGGAGGGCACTGTCAAGTCCAAGTACAAGGCCTCCATCACCGCCCT
CGAGGCCAAGATTGCACAGCTGGAGGAGCAGCTGGACAACGAGACCAAGGAGCGCCAGGCAGCCTGCAAACAGGT
GCGTCGGACCGAGAAGAAGCTGAAGGATGTGCTGCTGCAGGTGGATGACGAGCGGAGGAACGCCGAGCAGTACAA
GGACCAGGCCGACAAGGCATCTACCCGCCTGAAGCAGCTCAAGCGGCAGCTGGAGGAGGCCGAAGAGGAGGCCCA
GCGGGCCAACGCCTCCCGCCGGAAACTGCAGCGCGAGCTGGAGGACGCCACTGAGACGGCCGATGCCATGAACCG
CGAAGTCAGCTCCCTAAAGAACAAGCTCAGGCGCGGGGACCTGCCGTTTGTCGTGCCCCGCCGAATGGCCCGGAA
AGGCGCCGGGGATGGCTCCGACGAAGAGGTAGATGGCAAAGCGGATGGGGCTGAGGCCAAACCTGCCGAATAAGC
CTCTTCTCCTGCAGCCTGAGATGGATGGACAGACAGACACCACAGCCTCCCCTTCCCAGACCCCGCAGCACGCCT
CTCCCCACCTTCTTGGGACTGCTGTGAACATGCCTCCTCCTGCCCTCCGCCCCGTCCCCCCATCCCGTTTCCCTC
CAGGTGTTGTTGAGGGCATTTGGCTTCCTCTGCTGCATCCCCTTCCAGCTCCCTCCCCTGCTCAGAATCTGATAC
CAAAGAGACAGGGCCCGGGCCCAGGCAGAGAGCGACCAGCAGGCTCCTCAGCCCTCTCTTGCCAAAAAGCACAAG
ATGTTGAGGCGAGCAGGGCAGGCCCCCGGGGAGGGGCCAGAGTTTTCTATGAATCTATTTTTCTTCAGACTGAGG
CCTTTTGGTAGTCGGAGCCCCCGCAGTCGTCAGCCTCCCTGACGTCTGCCACCAGCGCCCCCACTCCTCCTCCTT
TCTTTGCTGTTTGCAATCACACGTGGTGACCTCACACACCTCTGCCCCTTGGGCCTCCCACTCCCATGGCTCTGG
GCGGTCCAGAAGGAGCAGGCCCTGGGCCTCCACCTCTGTGCAGGGCACAGAAGGCTGGGGTGGGGGGAAGAGTGG
ATTCCTCCCCACCCTGTCCCAGGCAGCGCCACTGTCCGCTGTCTCCCTCCTGATTCTAAAATGTCTCAAGTGCAA
TGCCCCCTCCCCTCCTTTACCGAGGACAGCCTGCCTCTGCCACAGCAAGGCTGTCGGGGTCAAGCTGGAAAGGCC
AGCAGCCTTCCAGTGGCTTCTCCCAACACTCTTGGGGACCAAATATATTTAATGGTTAAGGGACTTGTCCCAAGT
CTGACAGCCAGAGCGTTAGAGGGGCCAGCGGCCCTCCCAGGCGATCTTGTGTCTACTCTAGGACTGGGCCCGAGG
GTGGTTTACCTGCACCGTTGACTCAGTATAGTTTAAAAATCTGCCACCTGCACAGGTATTTTTGAAAGCAAAATA
AGGTTTTCTTTTTTCCCCTTTCTTGTAATAAATGATAAAATTCCGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAA

FIGURE 2627

MAKRMGLRPNLPNKPLLLQPEMDGQTDTTASPSQTPQHASPHLLGTAVNMPPPALRPVPPSRFPPGVVEGIWLPL
LHPLPAPSPAQNLIPKRQGPGPGRERPAGSSALSCQKAQDVEASRAGPRGGARVFYESIFLQTEAFW

FIGURE 2628

ATGGCGGCCTCAGCAAAAAAGAAGAATAAGAAGGGGAAGACTATCTCCCTAACAGACTTTCTGGCTGAGGATGGG
GGTACTGGTGGAGGAAGCACCTATGTTTCCAAACCAGTCAGCTGGGCTGATGAAACGGATGACCTGGAAGGAGAT
GTTTCGACCACTTGGCACAGTAACGATGACGATGTGTATAGGGCGCCTCCAATTGACCGTTCCATCCTTCCCACT
GCTCCACGGGCTGCTCGGGAACCCAATATCGACCGGAGCCGTCTTCCCAAATCGCCACCCTACACTGCTTTTCTA
GGAAACCTACCCTATGATGTTACAGAAGAGTCAATTAAGGAATTCTTTCGAGGATTAAATATCAGTGCAGTGCGT
TTACCACGTGAACCCAGCAATCCAGAGAGGTTGAAAGGTTTTGGTTATGCTGAATTTGAGGACCTGGATTCCCTG
CTCAGTGCCCTGAGTCTCAATGAAGAGTCTCTAGGTAACAGGAGAATTCGAGTGGACGTTGCTGATCAAGCACAG
GATAAAGACAGGGATGATCGTTCTTTTGGCCGTGATAGAAATCGGGATTCTGACAAAACAGATACAGACTGGAGG
GCTCGTCCTGCTACAGACAGCTTTGATGACTACCCACCTAGAAGAGGTGATGATAGCTTTGGAGACAAGTATCGA
GATCGTTATGATTCAGACCGGTATCGGGATGGGTATCGGGATGGGTATCGGGATGGCCCACGCCGGGATATGGAT
CGATATGGTGGCCGGGATCGCTATGATGACCGAGGCAGCAGAGACTATGATAGAGGCTATGATTCCCGGATAGGC
AGTGGCAGAAGAGCATTTGGCAGTGGGTATCGCAGGGATGATGACTACAGAGGAGGCGGGGACCGCTATGAAGAC
CGATATGACAGACGGGATGATCGGTCGTGGAGCTCCAGAGATGATTACTCTCGGGATGATTATAGGCGTGATGAT
AGAGGTCCCCCCCCAAAGACCCAAACTGAATCTAAAGCCTCGGAGTACTCCTGAAGAAGATGATTCCTCTGCTAGT
ACCTCCCAGTCCACTCGAGCTGCTTCTATCTTTGGAGGGGCAAAGCCTGTTGACACAGCTGCTAGAGAAAGAGAA
GTAGAAGAACGGCTACAGAAGGAACAAGAGAAGTTGCAGCGTCAGTGGAATGAGCCAAAACTAGAACGACGGCCT
CGGGAGAGACACCCAAGCTGGCGAAGTGAAGAAACTCAGGAACGGGAACGGTCGAGGACAGGAAGTGAGTCATCA
CAAACTGGGACCTCCACCACATCTAGCAGAAATGCACGAAGGAGAGAGAGTGAGAAGTCTCTAGAAAATGAAACA
CTCAATAAGGAGGAAGATTGCCACTCTCCAACTTCTAAACCTCCCAAACCTGATCAGCCCCTAAAGGTAATGCCA
GCCCCTCCACCAAAGGAGAATGCTTGGGTGAAGCGAAGTTCTAACCCTCCTGCTCGATCTCAGAGCTCAGACACA
GAGCAGCAGTCCCCTACAAGTGGTGGGGGAAAAGTAGCTCCAGCTCAACCATCTGAGGAAGGACCAGGAAGGAAA
GATGAAAATAAAGTAGATGGGATGAATGCCCCAAAAGGCCAAACTGGGAACTCTAGCCGTGGTCCAGGAGACGGA
GGGAACAGAGACCACTGGAAGGAGTCAGATAGGAAAGATGGCAAAAAGGATCAAGACTCCAGATCTGCACCTGAG
CCAAAGAAACCTGAGGAAAATCCAGCTTCTAAGTTCAGTTCTGCAAGCAAGTATGCTGCTCTCTCTGTTGATGGT
GAAGATGAAAATGAGGGAGAAGATTATGCCGAATAG

FIGURE 2629

MAASAKKKNKKGKTISLTDFLAEDGGTGGGSTYVSKPVSWADETDDLEGDVSTTWHSNDDDVYRAPPIDRSILPT
APRAAREPNIDRSRLPKSPPYTAFLGNLPYDVTEESIKEFFRGLNISAVRLPREPSNPERLKGFGYAEFEDLDSL
LSALSLNEESLGNRRIRVDVADQAQDKDRDDRSFGRDRNRDSDKTDTDWRARPATDSFDDYPPRRGDDSFGDKYR
DRYDSDRYRDGYRDGYRDGPRRDMDRYGGRDRYDDRGSRDYDRGYDSRIGSGRRAFGSGYRRDDDYRGGGDRYED
RYDRRDDRSWSSRDDYSRDDYRRDDRGPPQRPKLNLKPRSTPEEDDSSASTSQSTRAASIFGGAKPVDTAARERE
VEERLQKEQEKLQRQWNEPKLERRPRERHPSWRSEETQERERSRTGSESSQTGTSTTSSRNARRRESEKSLENET
LNKEEDCHSPTSKPPKPDQPLKVMPAPPPKENAWVKRSSNPPARSQSSDTEQQSPTSGGGKVAPAQPSEEGPGRK
DENKVDGMNAPKGQTGNSSRGPGDGGNRDHWKESDRKDGKKDQDSRSAPEPKKPEENPASKFSSASKYAALSVDG
EDENEGEDYAE

FIGURE 2630

GGCATTAATCAATCCCTGTTTCTATTTTAATAGGGGGGACAAGGTAGGGGAGAGGGAAAAACAGTTTTGGATATA
ACTATTTGGAAGGAGAGTAGACATGAAGAGGGCAAACCCTAGCTTTTCATTATCTACAATCAATAGTTTGTTTTT
CTTTTTTAAAAAAGAAAGAAAAACCCTTTCAATCTTCAATACTCTTTAAAAGCCCACTTCTTAGCTACTGGCCAA
TCCACACCAATTATTTAAATTCACTTGGTACACACCTTTGTCCACTGGGTAAATTATATTCATTATGCCCACTGC
TGCAGCACGCATAAACCAACACCCCTGCATGGCTGAACAGGGCCTAATCTAGGACTGATGGGAGAAGGGCTTGCA
AACCAAGATCAAGGTGTTTCTCCGCTAATACTGTCTACCAAGCTGATCCCTACAAAAATGCATATAAAAGCAGGC
AAGTTTAGCTACTGTGTTGCAAGAGAAACCAGGACCTTGTTAAATAGTTCTCTCCATTACCATTTATTCTCTCAA
GGGAAGCTTAAAAAAACAACAACAACAAAACAACACATTGGTCTGGCCACCTCATGAATCCAACAAGCATTAGTG
TGGCATTTCAGTGGAGAAGGAAACTTGGGGGGAAAAATCCCATCAAGGTTGTAAGAAAGGCTCCCAATTTAACTG
TCCCTGTCCCTATTTATCCATCATCCAAGACCATCCATTATTCTAGAGCACTCTGATCAATAAAAGGGGTCCAAG
CATCAGGAGCAGGCAAGGAGAACCAAAAGACATCAAGAAACCGATTTGCTTGAGAAAAGCAGCGATTCTTCCTTT
CAGAGTTCTCCATGGCTGAGAAAATGCCCAAGACATCATGTATGTGACTTAGATACTGCTTTTTGGGAGGTTAAG
AGTAGCATGAAGAACTTAAGATGATGATAAGAGTCTAAATTTTTAGTTTCAAGGTTTCAATAGA**ATG**TGGATATA
TTCAAAACTTTCAAAAAGGACAGTGTTTAGAAAGGGTAAAACTAGGACACAGAAAACACTGGGAATTACCACGAC
CCCCAAGTGCTTCCGGCTCCAGGAAATAACCATTCATGTGTTTGCTGGAGGTCACACAATTTTCCCCTATTACCT
GGTGCAAAATGACTCATCACTTCCCAAAAGCTTCTTTTCAAACCACGATTTTCCCATTTATTTTGGTCCAATGCA
GTCCCATTCTTTATGGCCTATAGTCTCACTCCCAACTACCCCCCTGGGGGGT**TAA**AAAAAAAAAAAAA

FIGURE 2631

MWIYSKLSKRTVFRKGKTRTQKTLGITTTPKCFRLQEITIHVFAGGHTIFPYYLVQNDSSLPKSFFSNHDFPIYF
GPMQSHSLWPIVSLPTTPLGG

FIGURE 2632A

AGCCGCCGCCACCCGCCGCGCCCGACACCCGGGAGGCCCCGCCAGCCCGCGGGAGAGGCCCAGCGGGAGTCGCGG
AACAGCAGGCCCGAGCCCACCGCGCCGGGCCCCGGACGCCGCGCGGAAAAGATGAATTTACAACCAATTTTCTGG
ATTGGACTGATCAGTTCAGTTTGCTGTGTGTTTGCTCAAACAGATGAAAATAGATGTTTAAAAGCAAATGCCAAA
TCATGTGGAGAATGTATACAAGCAGGGCCAAATTGTGGGTGGTGCACAAATTCAACATTTTTACAGGAAGGAATG
CCTACTTCTGCACGATGTGATGATTTAGAAGCCTTAAAAAAGAAGGGTTGCCCTCCAGATGACATAGAAAATCCC
AGAGGCTCCAAAGATATAAAGAAAAATAAAAATGTAACCAACCGTAGCAAAGGAACAGCAGAGAAGCTCAAGCCA
GAGGATATTACTCAGATCCAACCACAGCAGTTGGTTTTGCGATTAAGATCAGGGGAGCCACAGACATTTACATTA
AAATTCAAGAGAGCTGAAGACTATCCCATTGACCTCTACTACCTTATGGACCTGTCTTACTCAATGAAAGACGAT
TTGGAGAATGTAAAAAGTCTTGGAACAGATCTGATGAATGAAATGAGGAGGATTACTTCGGACTTCAGAATTGGA
TTTGGCTCATTTGTGGAAAAGACTGTGATGCCTTACATTAGCACAACACCAGCTAAGCTCAGGAACCCTTGCACA
AGTGAACAGAACTGCACCAGCCCATTTAGCTACAAAAATGTGCTCAGTCTTACTAATAAAGGAGAAGTATTTAAT
GAACTTGTTGGAAAACAGCGCATATCTGGAAATTTGGATTCTCCAGAAGGTGGTTTCGATGCCATCATGCAAGTT
GCAGTTTGTGGATCACTGATTGGCTGGAGGAATGTTACACGGCTGCTGGTGTTTTCCACAGATGCCGGGTTTCAC
TTTGCTGGAGATGGGAAACTTGGTGGCATTGTTTTACCAAATGATGGACAATGTCACCTGGAAAATAATATGTAC
ACAATGAGCCATTATTATGATTATCCTTCTATTGCTCACCTTGTCCAGAAACTGAGTGAAAATAATATTCAGACA
ATTTTTGCAGTTACTGAAGAATTTCAGCCTGTTTACAAGGAGCTGAAAAACTTGATCCCTAAGTCAGCAGTAGGA
ACATTATCTGCAAATTCTAGCAATGTAATTCAGTTGATCATTGATGCATACAATTCCCTTTCCTCAGAAGTCATT
TTGGAAAACGGCAAATTGTCAGAAGGAGTAACAATAAGTTACAAATCTTACTGCAAGAACGGGGTGAATGGAACA
GGGGAAAATGGAAGAAAATGTTCCAATATTTCCATTGGAGATGAGGTTCAATTTGAAATTAGCATAACTTCAAAT
AAGTGTCCAAAAAAGGATTCTGACAGCTTTAAAATTAGGCCTCTGGGCTTTACGGAGGAAGTAGAGGTTATTCTT
CAGTACATCTGTGAATGTGAATGCCAAAGCGAAGGCATCCCTGAAAGTCCCAAGTGTCATGAAGGAAATGGGACA
TTTGAGTGTGGCGCGTGCAGGTGCAATGAAGGGCGTGTTGGTAGACATTGTGAATGCAGCACAGATGAAGTTAAC
AGTGAAGACATGGATGCTTACTGCAGGAAAGAAAACAGTTCAGAAATCTGCAGTAACAATGGAGAGTGCGTCTGC
GGACAGTGTGTTTGTAGGAAGAGGGATAATACAAATGAAATTTATTCTGGCAAATTCTGCGAGTGTGATAATTTC
AACTGTGATAGATCCAATGGCTTAATTTGTGGAGGAAATGGTGTTTGCAAGTGTCGTGTGTGTGAGTGCAACCCC
AACTACACTGGCAGTGCATGTGACTGTTCTTTGGATACTAGTACTTGTGAAGCCAGCAACGGACAGATCTGCAAT
GGCCGGGGCATCTGCGAGTGTGGTGTCTGTAAGTGTACAGATCCGAAGTTTCAAGGGCAAACGTGTGAGATGTGT
CAGACCTGCCTTGGTGTCTGTGCTGAGCATAAAGAATGTGTTCAGTGCAGAGCCTTCAATAAAGGAGAAAAGAAA
GACACATGCACACAGGAATGTTCCTATTTTAACATTACCAAGGTAGAAAGTCGGGACAAATTACCCCAGCCGGTC
CAACCTGATCCTGTGTCCCATTGTAAGGAGAAGGATGTTGACGACTGTTGGTTCTATTTTACGTATTCAGTGAAT
GGGAACAACGAGGTCATGGTTCATGTTGTGGAGAATCCAGAGTGTCCCACTGGTCCAGACATCATTCCAATTGTA
GCTGGTGTGGTTGCTGGAATTGTTCTTATTGGCCTTGCATTACTGCTGATATGGAAGCTTTTAATGATAATTCAT
GACAGAAGGGAGTTTGCTAAATTTGAAAAGGAGAAAATGAATGCCAAATGGGACACGGGTGAAAATCCTATTTAT
AAGAGTGCCGTAACAACTGTGGTCAATCCGAAGTATGAGGGAAAATGAGTACTGCCCGTGCAAATCCCACAACAC
TGAATGCAAAGTAGCAATTTCCATAGTCACAGTTAGGTAGCTTTAGGGCAATATTGCCATGGTTTTACTCATGTG
CAGGTTTTGAAAATGTACAATATGTATAATTTTTAAAATGTTTTATTATTTTGAAAATAATGTTGTAATTCATGC
CAGGGACTGACAAAAGACTTGAGACAGGATGGTTATTCTTGTCAGCTAAGGTCACATTGTGCCTTTTTGACCTTT
TCTTCCTGGACTATTGAAATCAAGCTTATTGGATTAAGTGATATTTCTATAGCGATTGAAAGGGCAATAGTTAAA
GTAATGAGCATGATGAGAGTTTCTGTTAATCATGTATTAAAACTGATTTTTAGCTTTACAAATATGTCAGTTTGC
AGTTATGCAGAATCCAAAGTAAATGTCCTGCTAGCTAGTTAAGGATTGTTTTAAATCTGTTATTTTGCTATTTGC
CTGTTAGACATGACTGATGACATATCTGAAAGACAAGTATGTTGAGAGTTGCTGGTGTAAAATACGTTTGAAATA
GTTGATCTACAAAGGCCATGGGAAAAATTCAGAGAGTTAGGAAGGAAAAACCAATAGCTTTAAAACCTGTGTGCC
ATTTTAAGAGTTACTTAATGTTTGGTAACTTTTATGCCTTCACTTTACAAATTCAAGCCTTAGATAAAAGAACCG
AGCAATTTTCTGCTAAAAAGTCCTTGATTTAGCACTATTTACATACAGGCCATACTTTACAAAGTATTTGCTGAA
TGGGGACCTTTTGAGTTGAATTTATTTTATTATTTTTATTTTGTTTAATGTCTGGTGCTTTCTATCACCTCTTCT
AATCTTTTAATGTATTTGTTTGCAATTTTGGGGTAAGACTTTTTTATGAGTACTTTTTCTTTGAAGTTTTAGCGG
TCAATTTGCCTTTTTAATGAACATGTGAAGTTATACTGTGGCTATGCAACAGCTCTCACCTACGCGAGTCTTACT
TTGAGTTAGTGCCATAACAGACCACTGTATGTTTACTTCTCACCATTTGAGTTGCCCATCTTGTTTCACACTAGT

FIGURE 2632B

CACATTCTTGTTTTAAGTGCCTTTAGTTTTAACAGTTCACTTTTTACAGTGCTATTTACTGAAGTTATTTATTAA
ATATGCCTAAAATACTTAAATCGGA

FIGURE 2633

MNLQPIFWIGLISSVCCVFAQTDENRCLKANAKSCGECIQAGPNCGWCTNSTFLQEGMPTSARCDDLEALKKKGC
PPDDIENPRGSKDIKKNKNVTNRSKGTAEKLKPEDITQIQPQQLVLRLRSGEPQTFTLKFKRAEDYPIDLYYLMD
LSYSMKDDLENVKSLGTDLMNEMRRITSDFRIGFGSFVEKTVMPYISTTPAKLRNPCTSEQNCTSPFSYKNVLSL
TNKGEVFNELVGKQRISGNLDSPEGGFDAIMQVAVCGSLIGWRNVTRLLVFSTDAGFHFAGDGKLGGIVLPNDGQ
CHLENNMYTMSHYYDYPSIAHLVQKLSENNIQTIFAVTEEFQPVYKELKNLIPKSAVGTLSANSSNVIQLIIDAY
NSLSSEVILENGKLSEGVTISYKSYCKNGVNGTGENGRKCSNISIGDEVQFEISITSNKCPKKDSDSFKIRPLGF
TEEVEVILQYICECECQSEGIPESPKCHEGNGTFECGACRCNEGRVGRHCECSTDEVNSEDMDAYCRKENSSEIC
SNNGECVCGQCVCRKRDNTNEIYSGKFCECDNFNCDRSNGLICGGNGVCKCRVCECNPNYTGSACDCSLDTSTCE
ASNGQICNGRGICECGVCKCTDPKFQGQTCEMCQTCLGVCAEHKECVQCRAFNKGEKKDTCTQECSYFNITKVES
RDKLPQPVQPDPVSHCKEKDVDDCWFYFTYSVNGNNEVMVHVVENPECPTGPDIIPIVAGVVAGIVLIGLALLLI
WKLLMIIHDRREFAKFEKEKMNAKWDTGENPIYKSAVTTVVNPKYEGK

FIGURE 2634A

CGGCCGCCGGCATTCGCCGCGTGGTTCCCAGCGACCTGTATCCCCTCGTGCTCGGCTTCCTGCGCGATAACCAAC
TCTCAGAGGTGGCCAATAAGTTCGCCAAAGCGACAGGAGCTACACAGCAGGATGCCAATGCCTCTTCCCTCTTAG
ACATCTATAGCTTCTGGCTCAAGTCTGCCAAGGTCCCAGAGCGAAAGTTACAGGCAAATGGACCAGTGGCTAAGA
AAGCTAAGAAGAAGGCCTCATCCAGTGACAGTGAGGACAGCAGCGAGGAGGAGGAGGAAGTTCAAGGGCCTCCAG
CAAAGAAGGCTGCTGTACCTGCCAAGCGAGTCGGTCTGCCTCCTGGGAAGGCTGCAGCCAAAGCATCAGAGAGTA
GCAGCAGTGAAGAGTCCAGTGATGATGATGATGAGGAGGACCAAAAGAAACAGCCTGTCCAGAAGGGAGTTAAGC
CCCAAGCCAAGGCAGCCAAAGCTCCTCCTAAGAAGGCCAAGAGCTCTGATTCTGATTCTGACTCAAGCTCCGAGG
ATGAGCCACCAAAGAACCAGAAGCCAAAGATAACACCTGTGACAGTTAAAGCTCAGACTAAAGCCCCTCCCAAAC
CAGCTCGAGCAGCACCTAAAATAGCCAATGGTAAAGCAGCCAGTAGCAGCAGTAGCAGCAGCAGCAGCAGTAGCA
GTGATGACTCAGAGGAGGAGAAGGCAGCAGCCACCCCCAAGAAGGTCTGGACCATAACTTCTGTCAGGGCAGAGA
CTGTACCTAAAAAGCAAGTTGTGGCCAAGGCCCCAGTGAAAGCAGCTACCACCCCTACCCGGAAGAGTTCTAGCA
GTGAGGATTCCTCCAGTGACGAGGAAGAGGAGCAAAAAAAACCCATGAAAAATAAACCAGGTCCCTACAGTTCAG
TCCCCCCGCCTTCTGCTCCCCCACCAAAGAAGTCTCTGGGAACCCAGCCTCCCAAGAAGGCTGTGGAGAAGCAGC
AGCCTGTGGAAAGCAGTGAAGACAGCAGTGATGAGTCTGATTCAAGTTCTGAAGAAGAGAAGAAACCCCCAACTA
AGGCAGTAGTCTCTAAAGCAACCACTAAACCACCTCCAGCAAAGAAAGCAGCAGAGAGCTCTTCAGACAGCTCAG
ACTCTGACAGCTCTGAGGATGATGAAGCTCCTTCTAAGCCAGCTGGTACCACCAAGAATTCTTCAAATAAGCCAG
CTGTCACCACCAAGTCACCTGCAGTGAAGCCAGCTGCAGCCCCCAAGCAACCTGTGGGCGGTGGCCAGAAGCTTC
TGACGAGAAAGGCTGACAGCAGCTCCAGTGAGGAAGAGAGCAGCTCCAGTGAGGAGGAGAAGACAAAGAAGATGG
TGGCCACCACTAAGCCCAAGGCGACTGCCAAAGCAGCTCTACCTCTGCCTGCCAAGCAGGCTCCTCAGGGTAGTA
GGGACAGCAGCTCTGATTCAGACAGCTCCAGCAGTGAGGAGGAGGAAGAGAAGACATCTAAGTCTGCAGTTAAGA
AGAAGCCACAGAAGGTAGCAGGAGGTGCAGCCCCTTCCAAGCCAGCCTCTGCAAAGAAAGGAAAGGCTGAGAGCA
GCAACAGTTCTTCTTCTGATGACTCCAGTGAGGAAGAGGAAGAGAAGCTCAAGGGCAAGGGCTCTCCAAGACCAC
AAGCCCCCAAGGCCAATGGCACCTCTGCACTGACTGCCCAGAATGGAAAAGCAGCTAAGAACAGTGAGGAGGAGG
AAGAAGAAAAGAAAAAGGCGGCAGTGGTAGTTTCCAAATCAGGTTCATTAAAGAAGCGGAAGCAGAATGAGGCTG
CCAAGGAGGCAGAGACTCCTCAGGCCAAGAAGATAAAGCTTCAGACCCCTAACACATTTCCAAAAAGGAAGAAAG
GAGAAAAAAGGGCATCATCCCCATTCCGAAGGGTCAGGGAGGAGGAAATTGAGGTGGATTCACGAGTTGCGGACA
ACTCCTTTGATGCCAAGCGAGGTGCAGCCGGAGACTGGGGAGAGCGAGCCAATCAGGTTTTGAAGTTCACCAAAG
GCAAGTCCTTTCGGCATGAGAAAACCAAGAAGAAGCGGGGCAGCTACCGGGGAGGCTCAATCTCTGTCCAGGTCA
ATTCTATTAAGTTTGACAGCGAGTGACCTGAGGCCATCTTCGGTGAAGCAAGGGTGATGATCGGAGACTACTTAC
TTTCTCCAGTGGACCTGGGAACCCTCAGGTCTCTAGGTGAGGGTCTTGATGAGGACAGAAGTTTAGAGTAGGTCC
TAAGACTTTACAGTGTAACATCCTCTCTGGTCCTTTTCTGTGTTCCTAGTTTTGTACAGACTTGTTTTTGAGTGT
TGAGTAGCAGGGACAAAATAAGGGAATGTTATTTTTTAAGAAAATTCATTTTCATTGTTGTCTCCTTCCTTTTCT
GTGAAAGTCCTCATACTGAGAAATTTGTATATTTTATATTAAATCACTTACTATTGATTTTTGTTGTGATTTTCA
AAGGTGGATTCCCACAGATAAAATCTTGGCTATTGCCCAAAACATAGTAAAGGGTCACGTGTGACTTTTTATAAT
AGGAAGAAAATTCTGCCTTTGTGAGTGCACATGTCCACATTTCATCCCTCCTTCCCTCAAAACCCTAGAGAGGGG
CATTAAAGAATTGTTGATGTATATGCAATGTCTGTTAAGCATGCACTATGTATTTCATCCTCATTTATTGGGTCT
GGGACTGAAGTTTTTAGCCAGCATGGACCTAACCTACTTTTTGGGATAAAATTCTCTGTTTTGTTACAGGCAAAA
TTCTGGTATGGCGTGAATGCCATGGGTCATTCTGAATATATTTTTTTCTGTAATTTTATCATTACACGATGTTTG
CAATACGTGCTTTGTTTTTTAATTTGAAAGCAAACTTTTCTACTGTTGAAAGACATTTTTTGACAACTTGACCCT
TCCTAGTATTGAGTTCTAAGTTGAGGACTGCATCTTCTCGTTTTTTACAGTATAGAGAACAAAATGACATTAGTT
TGAAAAATACATATCACTTGGTATTGCTGTCTTGGTTGCAGTGGTGATACAGAATTGGTTTCATTAATTCCTACA
TGGTTGAGAATCACTGATCAAGAAAGTGGGGGGAAAAAAAACAAACGTTAAAACCTCAATCCTCAGTAGGAAGGT
AGATTACATTAGGTGAAATTATAGGTAATCTATGTATGTGCTAATGGGGTTGGAAAGAACCTTACAGAGCATATT
ACCTGATAAACTGGAGTGGGTTTGGGAGAACAAACTAATAGGATTATTGTGTCTCCTAGTTGGTACCTGGGAGCA
ATTGACATGCCCCCTTCAGAACCTTAACTGTTAGTAGCAGTGGCTGTAACAACACAAACCAGTGACCAGAGATAA
CAGCTTTTAGGCCAAGCTGGCCTGACGGTATGGCTGCAGGAAGTGACTGAGCAGTAGCGGTACTCAGCCAGACCA
AGACGGAGAGGGAAGAGTCCACAGCTTTCTGGAAGCTAAGGCATTCTGGTGGTAGAAAAGTGTGCCCCAAGCCTT
CATGGACGAGTTATAGGTCTTAAGATTAGTCTCCTCTTGTTTGGATTCCATACTTGCTAAATAACCTGATAATAA

FIGURE 2634B

CCTGGTTTTCCATGTAACTGCCTCTAGGAAGAAAATGTACTGTTCATGCTGACACAGATATTTCAGTCTGCATGG
TAAAAGTTCTAAATCTTACTACAAAATAATAAACTGGCTGGTTTATAATGTG

FIGURE 2635

CGGCACGAGCGCCGCCGAGGATTCAGCAGCCTCCCCCTTGAGCCCCCTCGCTTCCCGACGTTCCGTTCCCCCCTG
CCCGCCTTCTCCCGCCACCGCCGCCGCCGCCTTCCGCAGGCCGTTTCCACCGAGGAAAAGGAATCGTATCGT**ATG**

TCCGCTATCCAGAACCTCCACTCTTTCGACCCCTTTGCTGATGCAAGTAAGGGTGATGACCTGCTTCCTGCTGGC
ACTGAGGATTATATCCATATAAGAATTCAACAGAGAAACGGCAGGAAGACCCTTACTACTGTCCAAGGGATCGCT
GATGATTACGATAAAAAGAAACTAGTGAAGGCGTTTAAGAAAAAGTTTGCCTGCAATGGTACTGTAATTGAGCAT
CCGGAATATGGAGAAGTAATTCAGCTACAGGGTGACCAACGCAAGAACATATGCCAGTTCCTCGTAGAGATTGGA
CTGGCTAAGGACGATCAGCTGAAGGTTCATGGGTTT**TAA**GTGCTTGTGGCTCACTGAAGCTTAAGTGAGGATTTC
CTTGCAATGAGTAGAATTTCCCTTCTCTCCCTTGTCACAGGTTTAAAAACCTCACAGCTTGTATAATGTAACCAT
TTGGGGTCCGCTTTTAACTTGGACTAGTGTAACTCCTTCATGCAATAAACTGAAAAGAGCCATGCTGTCTAGTCT
TGAAGTCCCTCATTTAAACAGAGGTCAAGCAATAGGCGCCTGGCAGTGTCAAGCCTGAAACCAAGCAATACCGTC
ATGTTTCAGCCAAGCCCAGAGCCCTAAGATTACAAACAACTATGGCCGGAACCTCCTCAGCTCTCCCTCTGCAGA
GTTCCCTACCCTAAGAGAATGTTACCACCTGAACAGTCCTCGGTGAATCTGAGAGGAGAGGATGGGGTAAGGCAG
AAGCACCAGCTGTACTACTAGAAGGGAGCTTTTGGTGGTAGATCCCCTGGTGTCTCCAACCTGACTAGGTGGACA
GAGCTCAAAGAGGCCCTCTTACCGCTAGCGAGGTGATAGGACATCTGGCTTGCCACAAAGGTCTGTTCGACCAGA
CATATCCTAGCTAAGGGATGTCCAAACATCAGAATGTGAGGCCAACCTTCTATCAGAGTTAAACTTTTGACAAGG
GAACAAATCTCAAACTGATCCATCAGTCATGTAGCTAGCTGTAGAGCTTGCAACTTAATAGCAGCAGCTGCCCAA
TGCCATGTGAAGTAACAAACTGGTTTTTGGTTTTTTTTTCCCCTTCAGTTTTAATGTTATGTGTAATGTATTTAA
ACCCTTATTTAAATAAAACTTGTTTTCAGAAAAAAAAAAAAAAAAAAA

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FIGURE 2636

MSAIQNLHSFDPFADASKGDDLLPAGTEDYIHIRIQQRNGRKTLTTVQGIADDYDKKKLVKAFKKKFACNGTVIE
HPEYGEVIQLQGDQRKNICQFLVEIGLAKDDQLKVHGF

FIGURE 2637

CAGTTGCTTCAGCGTCCCGGTGTGGCTGTGCCGTTGGTCCTGTGCGGTCACTTAGCCAAGATGCCTGAGGAAACC
CAGACCCAAGACCAACCGATGGAGGAGGAGGAGGTTGAGACGTTCGCCTTTCAGGCAGAAATTGCCCAGTTGATG
TCATTGATCATCAATACTTTCTACTCGAACAAAGAGATCTTTCTGAGAGAGCTCATTTCAAATTCATCAGATGCA
TTGGACAAAATCCGGTATGAAAGCTTGACAGATCCCAGTAAATTAGACTCTGGGAAAGAGCTGCATATTAACCTT
ATACCGAACAAACAAGATCGAACTCTCACTATTGTGGATACTGGAATTGGAATGACCAAGGCTGACTTGATCAAT
AACCTTGGTACTATCGCCAAGTCTGGGACCAAAGCGTTCATGGAAGCTTTGCAGGCTGGTGCAGATATCTCTATG
ATTGGCCAGTTCGGTGTTGGTTTTTATTCTGCTTATTTGGTTGCTGAGAAAGTAACTGTGATCACCAAACATAAC
GATGATGAGCAGTACGCTTGGGAGTCCTCAGCAGGGGGATCATTCACAGTGAGGACAGACACAGGTGAACCTATG
GGTCGTGGAACAAAAGTTATCCTACACCTGAAAGAAGACCAAACTGAGTACTTGGAGGAACGAAGAATAAAGGAG
ATTGTGAAGAAACATTCTCAGTTTATTGGATATCCCATTACTCTTTTTGTGGAGAAGGAACGTGATAAAGAAGTA
AGCGATGATGAGGCTGAAGAAAAGGAAGACAAAGAAGAAGAAAAAGAAAAAGAAGAGAAAGAGTCGGAAGACAAA
CCTGAAATTGAAGATGTTGGTTCTGATGAGGAAGAAGAAAAGAAGGATGGTGACAAGAAGAAGAAGAAGAAGATT
AAGGAAAAGTACATCGATCAAGAAGAGCTCAACAAAACAAAGCCCATCTGGACCAGAAATCCCGACGATATTACT
AATGAGGAGTACGGAGAATTCTATAAGAGCTTGACCAATGACTGGGAAGATCACTTGGCAGTGAAGCATTTTTCA
GTTGAAGGACAGTTGGAATTCAGAGCCCTTCTATTTGTCCCACGACGTGCTCCTTTTGATCTGTTTGAAAACAGA
AAGAAAAAGAACAACATCAAATTGTATGTACGCAGAGTTTTCATCATGGATAACTGTGAGGAGCTAATCCCTGAA
TATCTGAACTTCATTAGAGGGGTGGTAGACTCGGAGGATCTCCCTCTAAACATATCCCGTGAGATGTTGCAACAA
AGCAAAATTTTGAAAGTTATCAGGAAGAATTTGGTCAAAAAATGCTTAGAACTCTTTACTGAACTGGCGGAAGAT
AAAGAGAACTACAAGAAATTCTATGAGCAGTTCTCTAAAAACATAAAGCTTGGAATACACGAAGACTCTCAAAAT
CGGAAGAAGCTTTCAGAGCTGTTAAGGTACTACACATCTGCCTCTGGTGATGAGATGGTTTCTCTCAAGGACTAC
TGCACCAGAATGAAGGAGAACCAGAAACATATCTATTATATCACAGGTGAGACCAAGGACCAGGTAGCTAACTCA
GCCTTTGTGGAACGTCTTCGGAAACATGGCTTAGAAGTGATCTATATGATTGAGCCCATTGATGAGTACTGTGTC
CAACAGCTGAAGGAATTTGAGGGGAAGACTTTAGTGTCAGTCACCAAAGAAGGCCTGGAACTTCCAGAGGATGAA
GAAGAGAAAAAGAAGCAGGAAGAGAAAAAAACAAAGTTTGAGAACCTCTGCAAAATCATGAAAGACATATTGGAG
AAAAAAGTTGAAAAGGTGGTTGTGTCAAACCGATTGGTGACATCTCCATGCTGTATTGTCACAAGCACATATGGC
TGGACAGCAAACATGGAGAGAATCATGAAAGCTCAAGCCCTAAGAGACAACTCAACAATGGGTTACATGGCAGCA
AAGAAACACCTGGAGATAAACCCTGACCATTCCATTATTGAGACCTTAAGGCAAAAGGCAGAGGCTGATAAGAAC
GACAAGTCTGTGAAGGATCTGGTCATCTTGCTTTATGAAACTGCGCTCCTGTCTTCTGGCTTCAGTCTGGAAGAT
CCCCAGACACATGCTAACAGGATCTACAGGATGATCAAACTTGGTCTGGGTATTGATGAAGATGACCCTACTGCT
GATGATACCAGTGCTGCTGTAACTGAAGAAATGCCACCCCTTGAAGGAGATGACGACACATCACGCATGGAAGAA
GTAGACTAA

FIGURE 2638

MPEETQTQDQPMEEEEVETFAFQAEIAQLMSLIINTFYSNKEIFLRELISNSSDALDKIRYESLTDPSKLDSGKE
LHINLIPNKQDRTLTIVDTGIGMTKADLINNLGTIAKSGTKAFMEALQAGADISMIGQFGVGFYSAYLVAEKVTV
ITKHNDDEQYAWESSAGGSFTVRTDTGEPMGRGTKVILHLKEDQTEYLEERRIKEIVKKHSQFIGYPITLFVEKE
RDKEVSDDEAEEKEDKEEEKEKEEKESEDKPEIEDVGSDEEEEKKDGDKKKKKKIKEKYIDQEELNKTKPIWTRN
PDDITNEEYGEFYKSLTNDWEDHLAVKHFSVEGQLEFRALLFVPRRAPFDLFENRKKKNNIKLYVRRVFIMDNCE
ELIPEYLNFIRGVVDSEDLPLNISREMLQQSKILKVIRKNLVKKCLELFTELAEDKENYKKFYEQFSKNIKLGIH
EDSQNRKKLSELLRYYTSASGDEMVSLKDYCTRMKENQKHIYYITGETKDQVANSAFVERLRKHGLEVIYMIEPI
DEYCVQQLKEFEGKTLVSVTKEGLELPEDEEEKKKQEEKKTKFENLCKIMKDILEKKVEKVVVSNRLVTSPCCIV
TSTYGWTANMERIMKAQALRDNSTMGYMAAKKHLEINPDHSIIETLRQKAEADKNDKSVKDLVILLYETALLSSG
FSLEDPQTHANRIYRMIKLGLGIDEDDPTADDTSAAVTEEMPPLEGDDDTSRMEEVD

FIGURE 2639

ATCCCCTCCGGTTTTCCTCAGTCTCCACGTACGTCCCTCAAAGCGCGTCCTAAAACCCGGATAACCGGAGCGCTC
CCCATGGACCACACGGAGGGCTTGCCCGCGGAGGAGCCGCCTGCGCATGCTCCATCGCCTGGGAAATTTGGTGAG
CGGCCTCCACCTAAACGACTTACTAGGGAAGCTATGCGAAATTATTTAAAAGAGCGAGGGGATCAAACAGTACTT
ATTCTTCATGCAAAAGTTGCACAGAAGTCATATGGAAATGAAAAAAGGTTTTTTTGCCCACCTCCTTGTGTATAT
CTTATGGGCAGCGGATGGAAGAAAAAAAAAAGAACAAATGGAACGCGATGGTTGTTCTGAACAAGAGTCTCAACCG
TGTGCATTTATTGGGATAGGAAATAGTGACCAAGAAATGCAGCAGCTAAACTTGGAAGGAAAGAACTATTGCACA
GCCAAAACATTGTATATATCTGACTCAGACAAGCGAAAGCACTTCATTTTTTCTGTAAAGATGTTCTATGGCAAC
AGTGATGACATTGGTGTGTTCCTCAGCAAGCGGATAAAAGTCATCTCCAAACCTTCCAAAAAGAAGCAGTCATTG
AAAAATGCTGACTTATGCATTGCCTCAGGAACAAAGGTGGCTCTGTTTAATCGACTACGATCCCAGACAGTTAGT
ACCAGATACTTGCATGTAGAAGGAGGTAATTTTCATGCCAGTTCACAGCAGTGGGGAGCCTTTTTTATTCATCTC
TTGGATGATGATGAATCAGAAGGAGAAGAATTCACAGTCCGAGATGTCTACATCCATTATGGACAAACATGCAAA
CTTGTGTGCTCAGTTACTGGCATGGCACTCCCAAGATTGATAATTATGAAAGTTGATAAGCATACCGCATTATTG
GATGCAGATGATCCTGTGTCACAACTCCATAAATGTGCATTTTACCTTAAGGATACAGAAAGAATGTATTTGTGC
CTTTCTCAAGAAAGAATAATTCAATTTCAGGCCACTCCATGTCCAAAAGAACCAAATAAAGAGATGATAAATGAT
GGCGCTTCCTGGACAATCATTAGCACAGATAAGGCAGAGTATACATTTTATGAGGGAATGGGCCCTGTCCTTGCC
CCAGTCACTCCTGTGCCTGTGGTAGAGAGCCTTCAGTTGAATGGCGGTGGGGACGTAGCAATGCTTGAACTTACA
GGACAGAATTTCACTCCAAATTTACGAGTGTGGTTTGGGGATGTAGAAGCTGAAACTATGTACAGGTGTGGAGAG
AGTATGCTCTGTGTCGTCCCAGACATTTCTGCATTCCGAGAAGGTTGGAGATGGGTCCGGCAACCAGTCCAGGTT
CCAGTAACTTTGGTCCGAAATGATGGAATCATTTATTCCACCAGCCTTACCTTTACCTACACACCAGAACCAGGG
CCACGGCCACATTGCAGTGTAGCAGGAGCAATCCTTCCAGCCAATTCAAGCCAGGTGCCCCCTAACGAATCAAAC
ACAAACAGCGAGGGAAGTTACACAAACGCCAGCACAAATTCAACCAGTGTCACATCATCTACAGCCACAGTGGTA
TCCTA

FIGURE 2640

MDHTEGLPAEEPPAHAPSPGKFGERPPPKRLTREAMRNYLKERGDQTVLILHAKVAQKSYGNEKRFFCPPPCVYL
MGSGWKKKKEQMERDGCSEQESQPCAFIGIGNSDQEMQQLNLEGKNYCTAKTLYISDSDKRKHFIFSVKMFYGNS
DDIGVFLSKRIKVISKPSKKKQSLKNADLCIASGTKVALFNRLRSQTVSTRYLHVEGGNFHASSQQWGAFFIHLL
DDDESEGEEFTVRDVYIHYGQTCKLVCSVTGMALPRLIIMKVDKHTALLDADDPVSQLHKCAFYLKDTERMYLCL
SQERIIQFQATPCPKEPNKEMINDGASWTIISTDKAEYTFYEGMGPVLAPVTPVPVVESLQLNGGGDVAMLELTG
QNFTPNLRVWFGDVEAETMYRCGESMLCVVPDISAFREGWRWVRQPVQVPVTLVRNDGIIYSTSLTFTYTPEPGP
RPHCSVAGAILPANSSQVPPNESNTNSEGSYTNASTNSTSVTSSTATVVS

FIGURE 2641A

CGAAGGACCTGAAGGAAAGTGGAAAAGTCCAAAGTTTAAGATGCCAGAGATGCATTTTAAGACTCCAAAGATATC
CATGCCAGATATTGACCTGAATCTCACAGGTCCAAAAATAAAAGGAGATGTGGATGTTACAGGCCCTAAGGTAGA
GGGAGATCTGAAAGGTCCTGAAGTTGACCTCAAAGGCCCCAAAGTGGACATTGATGTCCCAGATGTTAATGTTCA
GGGTCCAGACTGGCACCTGAAGATGCCCAAGATGAAAATGCCTAAGTTCAGTATGCCTGGCTTCAAAGGAGAGGG
CCCAGATGGTGGATGTGAAGCTGCCCATAGGCTGACATTGATGTCTCAGGACCAAAGTGGACATTGAAGGCCCTG
ATGTTAACATTGAAGGACCAGAGGGAAAGTTGAAAGGGCCTAAGTTCAAGATGCCAGAGATGAATATCAAAGCCC
CCAAGATCTCCATGCCTGATATTGACTTAAACCTGAAAGGACCCAAGTGAAGGGTGATGTGGATGTTTCCCTTCC
TAAAGTGGAAGGTGACCTCAAGGGCCCAGAAGTTGACATCAAGGGCCCAAAAGTGGACATTGACGCACCTGATGT
TGATGTTCATGGCCCAGACTGGCACCTAAAGATGCCCAAGATGAAAATGCCCAAGTTCAGCATGCCTGGCTTCAA
AGCAGAGGGCCCTGAAGCTGGAATGTGAACCTGCCCAAGGCTGACGTTGATGTCTCAGGCCCCAAAGTGGATATT
AATGCCCCAGATGTGGGTGTTCAAGGCCCAGACTGGCACCTGAAGATGCCCAAGGTGAAAATGCCAAAGTTCAGC
ATGCCTGGCTTCAAAGGAGAGGGCCCAGATGGGGATGTGAAGCTGCCCAAGGCTGACATTGATGTCTCAGGACCC
AAAGTGGACATTGAAGGCCCTGATGTTAACATTGAAGGACCAGAGGGAAAGTTGAAAGGGCCTAAGTTCAAGATG
CCAGAGATGAATATCAAAGCCCCCAAGATCTCCATGCCTGATATTGACTTAAACCTGAAAGGACCCAAAGTGAAG
GGTGATGTGGATGTTTCCCTTCCTAAAGTGGAAGGTGACCTCAAGGGCCCAGAAGTTGACATCAAGGGCCCAAAA
GTGGACATTGACGCACCTGATGTTGATGTTCATGGCCCAGACTGGCACCTAAAGATGCCCAAGATAAAAATGCCC
AAGATCAGCATGCCTGGCTTCAAAGGAGAAGGTCCAGATGTGGACGTGAACCTGCCCAAGGCTGACATTGATGTC
TCAGGACCGAAAGTGGATGTTGAATGTCCCGATGTGAATATCGAAGGACCTGAAGGAAAGTGGAAAAGTCCAAAG
TTTAAGATGCCAGAGATGCATTTTAAGACTCCAAAGATATCCATGCCAGATATTGACCTGAATCTCACAGGTCCA
AAAATAAAAGGAGATGTGGATGTTACAGGCCCTAAGGTAGAGGGAGATCTGAAAGGTCCTGAAGTTGACCTCAAA
GGCCCCAAAGTGGACATTGATGTCCCAGATGTTAATGTTCAGGGTCCAGACTGGCACCTGAAGATGCCCAAGATG
AAAATGCCCAAGTTCAGCATGCCTGGCTTCAAAGCAGAGGGCCCTGAAGTGGATGTGAACCTGCCCAAGGCTGAC
GTTGATGTCTCAGGCCCCAAAGTGGACGTTGAAGGCCCTGATGTTAACATTGAAGGACCAGAGGGAAAGTTGAAA
GGGCCCAAGTTCAAGATGCCAGAGATGAATATCAAAGCCCCCAAGATCCCCATGCCTGACTTTGATTTGCATCTG
AAAGGTCCCAAGGTGAAGGGCGATGTGGATATTTCTCTGCCCAAAGTGGAAGGTGACCTCAAGGGCCCTGAAGTT
GACATCAGGGGTCCCAAAGTGGACATTGATGTCCCGGATGTGGGCGTTCAAGGCCCAGACTGGCACCTAAAAATG
CCCAAAGTGAAAATGCCCAAATTCAGCATGCCTGGCTTCAAAGGAGAGGGCCCAGATGTGGATGTGAACCTGCCC
AAGGCTGACCTTGATGTCTCAGGACCCAAGGTGGACATTGATGTTCCAGATGTGAATATCGAAGGCCCAGAGGGA
AAGTTGAAAGGTCCCAAATTCAAAATGCCTGAGATGAACATCAAAGCCCCCAAGATCTCCATGCCTGACATTGAT
CTTAACCTGAAAGGTCCCAAAGTGAAGGGTGACATGGATGTGTCTCTGCCAAAAGTGGAAGGTGACATGAAAGTT
CCTGACGTGGATATTAAAGGCCCCAAAGTGGATATTAATGCCCCAGATGTGGATGTTCAAGGCCCAGACTGGCAC
CTGAAGATGCCTAAAATAAAAATGCCCAAGATCAGCATGCCTGGCTTCAAAGGAGAAGGTCCAGAAGTGGACGTG
AACCTGCCCAAGGCTGACCTTGACGTCTCAGGACCCAAGGTGGACGTTGATGTTCCAGATGTGAATATTGAAGGT
CCAGATGCGAAACTGAAGGGCCCTAAATTCAAGATGCCAGAGATGAACATCAAAGCCCCCAAGATCTCCATGCCT
GACTTTGATTTGCATCTGAAAGGCCCTAAGGTGAAAGGAGATGTGGATGTTTCTCTGCCTAAGATGGAAGGTGAT
CTAAAGGGTCCTGAAGTTGACATCAAGGGCCCCAAAGTGGACATTAATGCTCCAGATGTGGATGTTCAAGGCCCA
GACTGGCACCTGAAGATGCCCAAGGTGAAAATGCCCAAGTTCAGCATGCCTGGCTTCAAAGGAGAGGGCCCAGAT
GTGGATGTGAACCTGCCCAAGGCTGACCTTGATGTCTCAGGACCCAAGGTGGACATTGATGTTCCTGATGTGGAT
ATCCGAAGGTCCAGAAGGGAAACTGAAAGGTCCCAAATTCAAGATGCCTGAGATGAGCATCCAAGCCCCCAAGAT
CTCCATGCCTGATATTGACTTAAACCTGAAAGGACCCAAAGTGAAGGGCGATGTGGATGTTACCCTTCCTAAAGT
GGAAGGTGACCTCAAGGGCCCAGAAGCTGACATCAAGGGCCCAAAAGTGGACATCAACACCCCTGATGTGGATGT
TCATGGCCCAGACTGGCACCTGAAGATGCCCAAGGTGAAAATGCCCAAATTCAGCATGCCTGGCTTCAAAGGAGA
AGGTCCAGATGTGGATGTGAACCTGCCCAAGGCTGACATTGATGTCTCAGGACCCAAAGTGGACGTTGATGTTCC
TGATGTGAATATCGAAGGTCCAGATGCGAAACTAAAGGGCCCCAAGTTCAAGATGCCTGAGATGAGCATCAAAGC
CCCCAAGATCTCCATGCCTGATATTGACTTAAACCTGAAAGGACCCAAAGTGAAGGGCGATGTGGATGTTACCCT
TCCTAAAGTGGAAGGTGACCTCAAGGGCCCAGAAGCTGACATCAAGGGCCCAAAAGTGGACATCAACACCCCTGA
TGTGGATGTTCATGGCCCAGACTGGCACCTGAAGATGCCCAAGGTGAAAATGCCCAAATTCAGCATGCCTGGCTT
CAAAGGAGAAGGTCCAGATGTGGATGTGAGCCTGCCCAAGGCCGACATCGATGTCTCGGGACCCAAGGTGGACGT

FIGURE 2641B

TGATATTCCAGATGTGAATATCGAAGGTCCAGACGCAAAACTGAAGGGCCCCAAGTTCAAGATGCCTGAAATAAA
TATCAAAGCTCCCAAGATCTCCATACCTGATGTTGACCTGGATTTGAAAGGACCCAAAGTAAAAGGAGATTTTGA
TGTGTCTGTCCCTAAGGTTGAAGGGACTTTGAAAGGCCCAGAAGTAGATCTTAAAGGTCCACGTCTGGATTTCGA
AGGCCCTGATGCCAAACTCAGTGGCCCATCTTTGAAGATGCCATCGCTGGAGATATCTGCTCCTAAAGTAACTGC
TCCTGATGTTGATTTGCATCTCAAGGCACCAAAAATTGGATTTTCAGGTCCGAAGTTAGAAGGTGGTGAAGTGGA
CCTCAAGGGACCCAAAGTTGAAGCTCCAAGCTTAGATGTACACATGGACAGCCCAGATATTAACATCGAAGGGCC
AGATGTTAAAATCCCCAAATTTAAGAAACCCAAGTTTGGATTTGGGGCAAAAAGCCCCAAAGCTGACATCAAGTC
ACCTTCACTGGATGTCACTGTTCCTGAGGCAGAGCTGAACCTTGAGACTCCTGAAATTAGTGTTGGTGGCAAGGG
CAAGAAAAGTAAGTTTAAAATGCCTAAAATTCATATGAGTGGTCCTAAGATTAAGGCCAAAAAAACAGGGATTTG
ACCTGAATGTTCCTGGGGGTGAAATTGATGCCAGCCTCAAGGCTCCGGATGTAGATGTCAACATCGCAGGGCCGG
ATGCTGCACTCAAAGTCGACGTGAAATCGCCCAAAACCAAGAAAACGATGTTTGGAAAAATGTACTTCCCAGATG
TAGAGTTTGACATTAAATCACCTAAATTTAAAGCTGAGGCCCCTCTCCCTAGCCCCAAACTGGAGGGTGAACTCC
AGGCACCTGATCTGGAACTTTCTTTGCCAGCGATTCACGTCGAAGGTCTTGACATCAAGGCGAAGGCTCCCAAGG
TCAAGATGCCAGATGTGGACATCTCAGTGCCAAAAATAGAGGGTGACCTGAAAGGCCCCAAAGTGCAGGCAAACT
TGGGTGCACCTGACATCAACATCGAAGGCCTAGATGCTAAAGTCAAAACACCGTCCTTCGGCATTTCTGCCCCTC
AAGTCTCCATCCCTGATGTGAATGTAAACTTGAAAGGACCAAAGATAAAGGGTGATGTCCCCAGCGTGGGACTGG
AAGGACCAGATGTAGATCTGCAAGGTCCAGAAGCAAAAATTAAGTTCCCCAAGTTTTCCATGCCCAAGATCGGCA
TCCCAGGTGTGAAAATGGAGGGTGGGGGAGCCGAGGTCCATGCCCAGCTACCCTCTCTTGAAGGAGACTTGAGAG
GACCAGATGTTAAGCTCGAAGGGCCCGATGTTTCTCTAAAGGGGCCAGGAGTAGACTTGCCTTCAGTGAACCTCT
CTATGCCAAAAGTCTCTGGGCCTGACCTTGATCTGAACTTGAAAGGACCAAGTTTGAAGGGAGACCTGGATGCAT
CTGTTCCCAGCATGAAGGTGCATGCTCCAGGGCTCAACCTCAGTGGTGTCGGTGGCAAAATGCAGGTGGGAGGAG
ACGGTGTGAAAGTGCCAGGGATCGATGCCACAACAAAGCTTAACGTTGGGGCACCAGATGTGACACTGAGGGGAC
CAAGCCTGCAGGGAGATCTGGCTGTCTCTGGTGACATCAAATGCCCTAAAGTATCCGTAGGAGCTCCTGATCTAA
GCTTGGAGGCATCCGAAGGCAGCATTAAACTTCCCAAAATGAAGCTGCCCCAATTTGGCATCTCTACTCCGGGGT
CCGACTTGCACGTCAATGCCAAGGGGCCACAGGTTTCTGGCGAACTGAAGGGGCCAGGTGTGGATGTGAACCTGA
AAGGGCCTCGGATTTCAGCACCGAATGTGGACTTTAACTTGGAAGGACCAAAAGTGAAAGGGAGCCTTGGGGCCA
CTGGTGAGATCAAAGGCCCCACTGTCGGAGGAGGTCTTCCAGGCATTGGTGTTCAAGGCCTAGAAGGAAACCTCC
AGATGCCTGGAATTAAGTCCTCTGGATGTGATGTGAACCTGCCAGGCGTGAATGTGAAACTCCCAACTGGGCAGA
TTTCTGGGCCTGAAATCAAAGGTGGTCTGAAAGGTTCAGAAGTAGGTTTCCATGGGGCTGCTCCTGATATCAGTG
TGAAGGGGCCTGCCTTTAATATGGCATCTCCTGAGTCAGATTTTGGCATCAACTTGAAGGGCCCAAAAATCAAAG
GAGGTGCGGATGTTTCAGGGGGTGTCAGTGCCCCAGACATCAGCCTTGGTGAAGGGCATTTGAGTGTTAAAGGTT
CCGGGGGTGAGTGGAAGGGACCCCAAGTCTCCTCTGCTCTCAACTTGGACACATCTAAGTTTGCTGGGGGCCTTC
ATTTCTCAGGACCAAAGGTGGAAGGAGGTGTGAAAGGAGGTCAGATTGGACTCCAGGCTCCTGGGCTGAGTGTGT
CTGGGCCTCAAGGTCACTTGGAAAGTGGATCTGGAAAAGTAACATTCCCTAAAATGAAGATCCCCAAATTTACCT
TCTCTGGCCGTGAGCTGGTTGGCAGAGAAATGGGGGTGGATGTTCACTTCCCTAAAGCAGAGGCCAGCATCCAAG
CTGGTGCTGGAGACGGCGAGTGGGAAGAGTCTGAAGTCAAACTGAAAAAGTCCAAGATCAAAATGCCCAAGTTTA
ATTTTTCCAAACCTAAAGGGAAAGGTGGTGTCACTGGCTCACCAGAAGCATCAATTTCTGGGTCCAAAGGTGACC
TGAAAAGTTCAAAGGCCAGCCTGGGCTCTCTGGAAGGAGAGGCAGAGGCCGAAGCCTCTTCACCGAAAGGCAAAT
TCTCCTTATTTAAAAGTAAGAAGCCACGGCACCGCTCAAATTCATTCAGTGATGAAAGAGAGTTCTCTGGACCTT
CCACCCCGACGGGGACGCTGGAGTTTGAAGGTGGGGAAGTGTCTCTGGAAGGTGGGAAAGTTAAAGGGAAACACG
GGAAGCTGAAATTCGGTACCTTTGGTGGATTGGGGTCAAAGAGCAAAGGTCATTATGAGGTGACTGGGAGCGATG
ATGAGACAGGCAAGTTACAGGGGAGTGGGGTGTCCCTGGCCTCTAAGAAGTCCCGACTGTCCTCCTCTTCTAGCA
ATGACAGTGGGAATAAGGTTGGCATCCAGCTTCCCGAGGTGGAGCTGTCAGTTTCCACAAAGAAAGAG**TAG**CAGG
CCTTTGTATGTGTGTACATATATATATATATAACAAAACATCAGCCTTGGGTGGTGTGTTCCTATATAAACTCCA
AAGGGAAACACACCGACTGCCTCAGCAATCATGCAAAGACCTTGCCTGGCCCGGTGGCAAGCGCTGAAAAACCGA
CCGCCTGTAGGCTCCTGGAACTATACAGATAGGTAAAGAGTTCCAAGTTCGTCCAGCCCATGTGCAAAGTCAACA
GTATTTGCCTTAAGATTTCATATATATATATTTTTTTGCATTGACTGCTGAGAGCTCCTGTTTACTAAGCAAGCT
TTTGTGTTTATTATCCTCATTTTTACTGAACATTGTTAGTTTTGGGGTAATGGAAACCCACTTTTTCATTGTAAT

FIGURE 2641C

GACTTTGGGGGCTTTTGTTAGTAAGGGTGGGTGGGGTGATGGGTTGCAGACGGAGGTCAGGTCTTCCTCTTTCCT
GAGACTGGATCTGTTCAAACAGCAAACGCCCACAGATGGCCCAGAGGTGGTGGTAGTCAGGGTGTGTGGGTGTTT
TTAGGGTTCTTTAGTGTTGTTTCTTTCACCCAGGGGTGGTGGTCCCAGCCAGTTTGGTGCTGACGGTGAGAGGAA
ATTAGAATCTGTTTGCAAATTGTCCAACCCACCCCCTCAACATGAGGGGCTTCCATTTTCTGTGTTTTGTAAGGG
AACTGTTTCCTTCATGCCGCCATGTTCCTGATATTAGTTCTGATTTCTTTTTAACAAATGTTATCATGATTAAGA
AAATTTCCAGCACTTTAATGGCCAATTAACTGAGAATGTAAGAAAATTGATGCTGTACAAGGCAAATAAAGCTGT
TTATTAACCTCCGAAAAAAAAATCTATGTCGGGTGCGGAGAAAGAGGTAATGAAATGGCA

FIGURE 2642

MPKVKMPKFSMPGFKGEGPDGDVKLPKADIDVSGPKVDIEGPDVNIEGPEGKLKGPKFKMPEMNIKAPKISMPDI
DLNLKGPKVKGDVDVSLPKVEGDLKGPEVDIKGPKVDIDAPDVDVHGPDWHLKMPKIKMPKISMPGFKGEGPDVD
VNLPKADIDVSGPKVDVECPDVNIEGPEGKWKSPKFKMPEMHFKTPKISMPDIDLNLTGPKIKGDVDVTGPKVEG
DLKGPEVDLKGPKVDIDVPDVNVQGPDWHLKMPKMKMPKFSMPGFKAEGPEVDVNLPKADVDVSGPKVDVEGPDV
NIEGPEGKLKGPKFKMPEMNIKAPKIPMPDFDLHLKGPKVKGDVDISLPKVEGDLKGPEVDIRGPKVDIDVPDVG
VQGPDWHLKMPKVKMPKFSMPGFKGEGPDVDVNLPKADLDVSGPKVDIDVPDVNIEGPEGKLKGPKFKMPEMNIK
APKISMPDIDLNLKGPKVKGDMDVSLPKVEGDMKVPDVDIKGPKVDINAPDVDVQGPDWHLKMPKIKMPKISMPG
FKGEGPEVDVNLPKADLDVSGPKVDVDVPDVNIEGPDAKLKGPKFKMPEMNIKAPKISMPDFDLHLKGPKVKGDV
DVSLPKMEGDLKGPEVDIKGPKVDINAPDVDVQGPDWHLKMPKVKMPKFSMPGFKGEGPDVDVNLPKADLDVSGP
KVDIDVPDVDIRRSRRETERSQIQDAEMSIQAPKISMPDIDLNLKGPKVKGDVDVTLPKVEGDLKGPEADIKGPK
VDINTPDVDVHGPDWHLKMPKVKMPKFSMPGFKGEGPDVDVNLPKADIDVSGPKVDVDVPDVNIEGPDAKLKGPK
FKMPEMSIKAPKISMPDIDLNLKGPKVKGDVDVTLPKVEGDLKGPEADIKGPKVDINTPDVDVHGPDWHLKMPKV
KMPKFSMPGFKGEGPDVDVSLPKADIDVSGPKVDVDIPDVNIEGPDAKLKGPKFKMPEINIKAPKISIPDVDLDL
KGPKVKGDFDVSVPKVEGTLKGPEVDLKGPRLDFEGPDAKLSGPSLKMPSLEISAPKVTAPDVDLHLKAPKIGFS
GPKLEGGEVDLKGPKVEAPSLDVHMDSPDINIEGPDVKIPKFKKPKFGFGAKSPKADIKSPSLDVTVPEAELNLE
TPEISVGGKGKKSKFKMPKIHMSGPKIKAKKTGIDLNVPGGEIDASLKAPDVDVNIAGPDAALKVDVKSPKTKKT
MFGKMYFPDVEFDIKSPKFKAEAPLPSPKLEGELQAPDLELSLPAIHVEGLDIKAKAPKVKMPDVDISVPKIEGD
LKGPKVQANLGAPDINIEGLDAKVKTPSFGISAPQVSIPDVNVNLKGPKIKGDVPSVGLEGPDVDLQGPEAKIKF
PKFSMPKIGIPGVKMEGGGAEVHAQLPSLEGDLRGPDVKLEGPDVSLKGPGVDLPSVNLSMPKVSGPDLDLNLKG
PSLKGDLDASVPSMKVHAPGLNLSGVGGKMQVGGDGVKVPGIDATTKLNVGAPDVTLRGPSLQGDLAVSGDIKCP
KVSVGAPDLSLEASEGSIKLPKMKLPQFGISTPGSDLHVNAKGPQVSGELKGPGVDVNLKGPRISAPNVDFNLEG
PKVKGSLGATGEIKGPTVGGGLPGIGVQGLEGNLQMPGIKSSGCDVNLPGVNVKLPTGQISGPEIKGGLKGSEVG
FHGAAPDISVKGPAFNMASPESDFGINLKGPKIKGGADVSGGVSAPDISLGEGHLSVKGSGGEWKGPQVSSALNL
DTSKFAGGLHFSGPKVEGGVKGGQIGLQAPGLSVSGPQGHLESGSGKVTFPKMKIPKFTFSGRELVGREMGVDVH
FPKAEASIQAGAGDGEWEESEVKLKKSKIKMPKFNFSKPKGKGGVTGSPEASISGSKGDLKSSKASLGSLEGEAE
AEASSPKGKFSLFKSKKPRHRSNSFSDEREFSGPSTPTGTLEFEGGEVSLEGGKVKGKHGKLKFGTFGGLGSKSK
GHYEVTGSDDETGKLQGSGVSLASKKSRLSSSSSNDSGNKVGIQLPEVELSVSTKKE

FIGURE 2643

GGCACGAGGGCTCACAGTCATCAATTATAGACCCCACAACATGCGCCCTGAAGACAGAATGTTCCATATCAGAGC
TGTGATCTTGAGAGCCCTCTCCTTGGCTTTCCTGCTGAGTCTCCGAGGAGCTGGGGCCATCAAGGCGGACCATGT
GTCAACTTATGCCGCGTTTGTACAGACCCATAGACCAACAGGGGAGTTTATGTTTGAATTTGATGAAGATGAGCA
GTTCTATGTGGATCTGGATAAAAAGGAGACCGTCTGGCATCTGGAGGAGTTTGGCCGAGCCTTTTCCTTTGAGGC
TCAGGGCGGGCTGGCTAACATTGCTATATTGAACAACAACTTGAATACCTTGATCCAGCGTTCCAACCACACTCA
GGCCGCCAATGATCCCCCTGAGGTGACCGTGTTTCCCAAGGAGCCTGTGGAGCTGGGCCAGCCCAACACCCTCAT
CTGCCACATTGACAGGTTCTTCCCACCAGTGCTCAACGTCACATGGCTGTGCAATGGGGAGCCAGTCACTGAGGG
TGTCGCTGAGAGCCTCTTCCTGCCCAGAACAGATTACAGCTTCCACAAGTTCCATTACCTGACCTTTGTGCCCTC
AGCAGAGGACGTCTATGACTGCAGGGTGGAGCACTGGGGCTTGGACCAGCCGCTCCTCAAGCACTGGGAGGCCCA
AGAGCCAATCCAGATGCCTGAGACAACGGAGACTGTGCTCTGTGCCCTGGGCCTGGTGCTGGGCCTAGTGGGCAT
CATCGTGGGCACCGTCCTCATCATAAAGTCTCTGCGTTCTGGCCATGACCCCCGGGCCCAGGGGCCCCTGTGAAA
TACTGTAAAGGTGACAAAATATCTGAACAGAAGAGGACTTAGGAGAGATCTGAACTCCAGCTGCCCTACAAACTC
CGTCACAGCTTTTCTTCTCACTTCATGTGAAAACTACCCCAGTGGCTGACTGAATTGCTGACCCTTCAAGCTCTG
TCCTTATCCGTTACCTTAAAGCAGTCATTCCTTAGTAAAGTTTCCAACAAATAGAAATTAATGAATAAATGTTGA
CACTTTGATAGCACTGATATGGAGATTATCCTTTCATTGAGCCTTTTATCCTCTGGTCTTCTTTGAAAAACCCCT
CACTGTCACCTTCCTGAGAATACTCTAAGACCAATAAATACTTCAGTATTTCAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAA

FIGURE 2644

MRPEDRMFHIRAVILRALSLAFLLSLRGAGAIKADHVSTYAAFVQTHRPTGEFMFEFDEDEQFYVDLDKKETVWH
LEEFGRAFSFEAQGGLANIAILNNNLNTLIQRSNHTQAANDPPEVTVFPKEPVELGQPNTLICHIDRFFPPVLNV
TWLCNGEPVTEGVAESLFLPRTDYSFHKFHYLTFVPSAEDVYDCRVEHWGLDQPLLKHWEAQEPIQMPETTETVL
CALGLVLGLVGIIVGTVLIIKSLRSGHDPRAQGPL

FIGURE 2645

GTTCGTTGGGCGGTGCTGGTTTTTCGCTCGTCGACTGCGGCTCTTCCTCGGGCAGCGGAAGCGGCGCGGCGGTCG
GAGAAGTGGCCTAAAACTTCGGCGTTGGGTGAAAGAAAATGGCCCGAACCAAGCAGACTGCTCGTAAGTCCACCG
GTGGGAAAGCCCCCCGCAAACAGCTGGCCACGAAAGCCGCCAGGAAAAGCGCTCCCTCTACCGGCGGGGTGAAGA
AGCCTCATCGCTACAGGCCCGGGACCGTGGCGCTTCGAGAGATTCGTCGTTATCAGAAGTCGACCGAGCTGCTCA
TCCGGAAGCTGCCCTTCCAGAGGTTGGTGAGGGAGATCGCGCAGGATTTCAAAACCGACCTGAGGTTTCAGAGCG
CAGCCATCGGTGCGCTGCAGGAGGCTAGCGAAGCGTACCTGGTGGGTCTGTTCGAAGATACCAACCTGTGTGCCA
TCCACGCTAAGAGAGTCACCATCATGCCCAAAGACATCCAGTTGGCTCGCCGGATACGGGGAGAGAGAGCTTAAG
TGAAGGCAGTTTTTATGGCGTTTTGTAGTAAATTCTGTAAAATACTTTGGTTTAATTTGTGACTTTTTTTGTAAG
AAATTGTTTATAATATGTTGCATTTGTACTTAAGTCATTCCATCTTTCACTCAGGATGAATGCGAAAAGTGACTG
TTCACAGACCTCAGTGATGTGAGCACTGTTGCTCAGGAGTGACAAGTTGCTAATATGCAGAAGGGATGGGTGATA
CTTCTTGCTTCTCATGATGCATGTTTCTGTATGTTAATGACTTGTTGGGTAGCTATTAAGGTACTAGAGTTGATA
AATGTGTACAGGGTCCTTTTGCAATAAAACTGGTTATGACTTGATCCAAGTGTTTAACAATTGGGGCTGTTAAGT
CTGACCATACATCACTGTGATAGAATGTGGGCTTTTTCAAGGGTGAAGATACAAGTCTTAACCACAGTGTAACTT
ACAGTTTCCTTTAAAAAAAAAAAAAGTAAACCTGGCAGCTATAGAATACACTATGTGCATTTATAATAGCTATTT
TATATATTGTAGTATCAACATTTTTAAATTAAATGTTTTACATTCACAAGTGGTGGGGAGTCTTGTCATTAAGGT
GTGTGTAATTTAGAGTCCAGTTGGTTTTCTTCTGACTGCACTTGTTCTCATAGTAGTAAAATGCTATGCGCATTT
ATACCTTGCATAAGTCCTCATTCTACCACGTTAACCCTCTAGCTGATAATGCAAACACTAACTGGGGGATTTTAT
TTATAAGGGCTCTAGAAAAAACGAGTTATTCACACCAGCATCATCTTAACTAACATTCTGAACTAGTTAGTGCAG
CTTTTCATTGTGTTGTGTGGTTGGTCTCATAACTAGGTTGAGTTTTTCTCCTCTGCTGAGGAAACAGTACCGAAG
TTCTTTTTCTTGTGGCATTTGTATTATAAAAACTTGTGTGGGGGAGGAGCACAAAACTCCAGCCCACTGAACCTC
TGCCAATTAAGATGGTGTTGGGTTAGGTTACATCTGGTTACTGTCCTGGGAAAATCATTTTTATAGAGATGGCCT
TCCAAGTGGTTTTAAAATTTACTGAAGTTTTTAGGTCAATTATGTATGTTGACTAAATTTACAAATAAACTTGTT
TATCCAACTAAGTGTCCAAAACCTAAAAAAAAAAAAAAAAAAA

FIGURE 2646

MARTKQTARKSTGGKAPRKQLATKAARKSAPSTGGVKKPHRYRPGTVALREIRRYQKSTELLIRKLPFQRLVREI
AQDFKTDLRFQSAAIGALQEASEAYLVGLFEDTNLCAIHAKRVTIMPKDIQLARRIRGERA

FIGURE 2647

GTGCGGTTGGGAACGCGGAGCGGACGGATTCGATTCAACGGGGTTCCGGACCGCGCTGCGCTATGGAGCAGGTCA
ATGAGCTGAAGGAGAAAGGCAACAAGGCCCTGAGCGTGGGTAACATCGATGATGCCTTACAGTGCTACTCCGAAG
CTATTAAGCTGGATCCCCACAACCACGTGCTGTACAGCAACCGTTCTGCTGCCTATGCCAAGAAAGGAGACTACC
AGAAGGCTTATGAGGATGGCTGCAAGACTGTCGACCTAAAGCCTGACTGGGGCAAGGGCTATTCACGAAAAGCAG
CAGCTCTAGAGTTCTTAAACCGCTTTGAAGAAGCCAAGCGAACCTATGAGGAGGGCTTAAAACACGAGGCAAATA
ACCCTCAACTGAAAGAGGGTTTACAGAATATGGAGGCCAGGTTGGCAGAGAGAAAATTCATGAACCCTTTCAACA
TGCCTAATCTGTATCAGAAGTTGGAGAGTGATCCCAGGACAAGGACACTACTCAGTGATCCTACCTACCGGGAGC
TGATAGAGCAGCTACGAAACAAGCCTTCTGACCTGGGCACGAAACTACAAGATCCCCGGATCATGACCACTCTCA
GCGTCCTCCTTGGGGTCGATCTGGGCAGTATGGATGAGGAGGAAGAGATTGCAACACCTCCACCACCACCCCCTC
CCAAAAAGGAGACCAAGCCAGAGCCAATGGAAGAAGATCTTCCAGAGAATAAGAAGCAGGCACTGAAAGAAAAAG
AGCTGGGGAACGATGCCTACAAGAAGAAAGACTTTGACACAGCCTTGAAGCATTACGACAAAGCCAAGGAGCTGG
ACCCCACTAACATGACTTACATTACCAATCAAGCAGCGGTATACTTTGAAAAGGGCGACTACAATAAGTGCCGGG
AGCTTTGTGAGAAGGCCATTGAAGTGGGGAGAGAAAACCGAGAAGACTATCGACAGATTGCCAAAGCATATGCTC
GAATTGGCAACTCCTACTTCAAAGAAGAAAAGTACAAGGATGCCATCCATTTCTATAACAAGTCTCTGGCAGAGC
ACCGAACCCCAGATGTGCTCAAGAAATGCCAGCAGGCAGAGAAAATCCTGAAGGAGCAAGAGCGGCTGGCCTACA
TAAACCCCGACCTGGCTTTGGAGGAGAAGAACAAAGGCAACGAGTGTTTTCAGAAAGGGGACTATCCCCAGGCCA
TGAAGCATTATACAGAAGCCATCAAAAGGAACCCGAAAGATGCCAAATTATACAGCAATCGAGCTGCCTGCTACA
CCAAACTCCTGGAGTTCCAGCTGGCACTCAAGGACTGTGAGGAATGTATCCAGCTGGAGCCGACCTTCATCAAGG
GTTATACACGGAAAGCCGCTGCGCTGGAAGCGATGAAGGACTACACCAAAGCCATGGATGTGTACCAGAAGGCGC
TAGACCTGGACTCCAGCTGTAAGGAGGCGGCAGACGGCTACCAGCGCTGTATGATGGCGCAGTACAACCGGCACG
ACAGCCCCGAAGATGTGAAGCGACGAGCCATGGCCGACCCTGAGGTGCAGCAGATCATGAGTGACCCAGCCATGC
GCCTTATCCTGGAACAGATGCAGAAGGACCCCCAGGCACTCAGCGAACACTTAAAGAATCCTGTAATAGCACAGA
AGATCCAGAAGCTGATGGATGTGGGTCTGATTGCAATTCGGTGATGACTTGTTCATCCCCCCTTCCCTTCGCCCT
CATGTGGAAAGAGGAGCTGGGACCGCGGCGAGCAGCACGGAGCGGAAGGGAGAGCAGGGGAGAGAAGGCCTCATC
TCTCTATATTTATACATAACCCCGGGGAAGACACAGAGACTCGTACCTGCGCTGTTTGTGCCGCCGCTGCCTCTG
GGCCCTCCCAGCACACGCATGGTCTCTTCACCGCTGCCCTCGAGTTCCATGTCTCTTTCCCCTGCCCCTAGTTGC
TGTCTCGGCTGCTCTCCCATAGTTGGTTTTTTTTTATTTGGGGCAGTGGGCATGTTATGGGGAGGGGAGGGGGT
TCTTCCAGCCTCAGGTCCCAGCTGTCTCACGTTGTTTATTCTGCGTCCCCTTCTCCAATAAAACAAGCCAGTTGG
GCGTGGTTATAAC

FIGURE 2648

MEQVNELKEKGNKALSVGNIDDALQCYSEAIKLDPHNHVLYSNRSAAYAKKGDYQKAYEDGCKTVDLKPDWGKGY
SRKAAALEFLNRFEEAKRTYEEGLKHEANNPQLKEGLQNMEARLAERKFMNPFNMPNLYQKLESDPRTRTLLSDP
TYRELIEQLRNKPSDLGTKLQDPRIMTTLSVLLGVDLGSMDEEEEIATPPPPPPPKKETKPEPMEEDLPENKKQA
LKEKELGNDAYKKKDFDTALKHYDKAKELDPTNMTYITNQAAVYFEKGDYNKCRELCEKAIEVGRENREDYRQIA
KAYARIGNSYFKEEKYKDAIHFYNKSLAEHRTPDVLKKCQQAEKILKEQERLAYINPDLALEEKNKGNECFQKGD
YPQAMKHYTEAIKRNPKDAKLYSNRAACYTKLLEFQLALKDCEECIQLEPTFIKGYTRKAAALEAMKDYTKAMDV
YQKALDLDSSCKEAADGYQRCMMAQYNRHDSPEDVKRRAMADPEVQQIMSDPAMRLILEQMQKDPQALSEHLKNP
VIAQKIQKLMDVGLIAIR

FIGURE 2649A

CTACCGGGCGGAGGTGAGCGCGGCGCCGGCTCCTCCTGCGGCGGACTTTGGGTGCGACTTGACGAGCGGTGGTTC
GACAAGTGGCCTTGCGGGCCGGATCGTCCCAGTGGAAGAGTTGTAAATTTGCTTCTGGCCTTCCCCTACGGATTA
TACCTGGCCTTCCCCTACGGATTATACTCAACTTACTGTTTAGAAAATGTGGCCCACGAGACGCCTGGTTACTAT
CAAAAGGAGCGGGGTCGACGGTCCCCACTTTCCCCTGAGCCTCAGCACCTGCTTGTTTGGAAGGGGTATTGAATG
TGACATCCGTATCCAGCTTCCTGTTGTGTCAAAACAACATTGCAAAATTGAAATCCATGAGCAGGAGGCAATATT
ACATAATTTCAGTTCCACAAATCCAACACAAGTAAATGGGTCTGTTATTGATGAGCCTGTACGGCTAAAACATGG
AGATGTAATAACTATTATTGATCGTTCCTTCAGGTATGAAAATGAAAGTCTTCAGAATGGAAGGAAGTCAACTGA
ATTTCCAAGAAAAATACGTGAACAGGAGCCAGCACGTCGTGTCTCAAGATCTAGCTTCTCTTCTGACCCTGATGA
GAAAGCTCAAGATTCCAAGGCCTATTCAAAAATCACTGAAGGAAAAGTTTCAGGAAATCCTCAGGTACATATCAA
GAATGTCAAAGAAGACAGTACCGCAGATGACTCAAAAGACAGTGTTGCTCAGGGAACAACTAATGTTCATTCCTC
AGAACATGCTGGACGTAATGGCAGAAATGCAGCTGATCCCATTTCTGGGGATTTTAAAGAAATTTCCAGCGTTAA
ATTAGTGAGCCGTTATGGAGAATTGAAGTCTGTTCCCACTACACAATGTCTTGACAATAGCAAAAAAAATGAATC
TCCCTTTTGGAAGCTTTATGAGTCAGTGAAGAAAGAGTTGGATGTAAAATCACAAAAAGAAAATGTCCTACAGTA
TTGTAGAAAATCTGGATTACAAACTGATTACGCAACAGAGAAAGAAAGTGCTGATGGTTTACAGGGGGAGACCCA
ACTGTTGGTCTCGCGTAAGTCAAGACCAAAATCTGGTGGGAGCGGCCACGCTGTGGCAGAGCCTGCTTCACCTGA
ACAAGAGCTTGACCAGAACAAGGGGAAGGGAAGAGACGTGGAGTCTGTTCAGACTCCCAGCAAGGCTGTGGGCGC
CAGCTTTCCTCTCTATGAGCCGGCTAAAATGAAGACCCCTGTACAATATTCACAGCAACAAAATTCTCCACAAAA
ACATAAGAACAAAGACCTGTATACTACTGGTAGAAGAGAATCTGTGAATCTGGGTAAAAGTGAAGGCTTCAAGGC
TGGTGATAAAACTCTTACTCCCAGGAAGCTTTCAACTAGAAATCGAACACCAGCTAAAGTTGAAGATGCAGCTGA
CTCTGCCACTAAGCCAGAAAATCTCTCTTCCAAAACCAGAGGAAGTATTCCTACAGATGTGGAAGTTCTGCCTAC
GGAAACTGAAATTCACAATGAGCCATTTTTAACTCTGTGGCTCACTCAAGTTGAGAGGAAGATCCAAAAGGATTC
CCTCAGCAAGCCTGAGAAATTGGGCACTACAGCTGGACAGATGTGCTCTGGGTTACCTGGTCTTAGTTCAGTTGA
TATCAACAACTTTGGTGATTCCATTAATGAGAGTGAGGGAATACCTTTGAAAAGAAGGCGTGTGTCCTTTGGTGG
GCACCTAAGACCTGAACTATTTGATGAAAACTTGCCTCCTAATACGCCTCTCAAAAGGGGAGAAGCCCCAACCAA
AAGAAAGTCTCTGGTAATGCACACTCCACCTGTCCTGAAGAAAATCATCAAGGAACAGCCTCAACCATCAGGAAA
ACAAGAGTCAGGTTCAGAAATCCATGTGGAAGTGAAGGCACAAAGCTTGGTTATAAGCCCTCCAGCTCCTAGTCC
TAGGAAAACTCCAGTTGCCAGTGATCAACGCCGTAGGTCCTGCAAAACAGCCCCTGCTTCCAGCAGCAAATCTCA
GACAGAGGTTCCTAAGAGAGGAGGAGAAAGAGTGGCAACCTGCCTTCAAAAGAGAGTGTCTATCAGCCGAAGTCA
ACATGATATTTTACAGATGATATGTTCCAAAAGAAGAAGTGGTGCTTCGGAAGCAAATCTGATTGTTGCAAAATC
ATGGGCAGATGTAGTAAAACTTGGTGCAAAACAAACACAAACTAAAGTCATAAAACATGGTCCTCAAAGGTCAAT
GAACAAAAGGCAAAGAAGACCTGCTACTCCAAAGAAGCCTGTGGGCGAAGTTCACAGTCAATTTAGTACAGGCCA
CGCAAACTCTCCTTGTACCATAATAATAGGGAAAGCTCATACTGAAAAAGTACATGTGCCTGCTCGACCCTACAG
AGTGCTCAACAACTTCATTTCCAACCAAAAAATGGACTTTAAGGAAGATCTTTCAGGAATAGCTGAAATGTTCAA
GACCCCAGTGAAGGAGCAACCGCAGTTGACAAGCACATGTCACATCGCTATTTCAAATTCAGAGAATTTGCTTGG
AAAACAGTTTCAAGGAACTGATTCAGGAGAAGAACCTCTGCTCCCCACCTCAGAGAGTTTTGGAGGAAATGTGTT
CTTCAGTGCACAGAATGCAGCAAAACAGCCATCTGATAAATGCTCTGCAAGCCCTCCCTTAAGACGGCAGTGTAT
TAGAGAAAATGGAAACGTAGCAAAAACGCCCAGGAACACCTACAAAATGACTTCTCTGGAGACAAAAACTTCAGA
TACTGAGACAGAGCCTTCAAAAACAGTATCCACTGTAAACAGGTCAGGAAGGTCTACAGAGTTCAGGAATATACA
GAAGCTACCTGTGGAAAGTAAGAGTGAAGAAACAAATACAGAAATTGTTGAGTGCATCCTAAAAAGAGGTCAGAA
GGCAACACTACTACAACAAAGGAGAGAAGGAGAGATGAAGGAAATAGAAAGACCTTTTGAGACATATAAGGAAAA
TATTGAATTAAAAGAAAACGATGAAAAGATGAAAGCAATGAAGAGATCAAGAACTTGGGGGCAGAAATGTGCACC
AATGTCTGACCTGACAGACCTCAAGAGCTTGCCTGATACAGAACTCATGAAAGACACGGCACGTGGCCAGAATCT
CCTCCAAACCCAAGATCATGCCAAGGCACCAAAGAGTGAGAAAGGCAAAATCACTAAAATGCCCTGCCAGTCATT
ACAACCAGAACCAATAAACACCCCAACACACACAAAACAACAGTTGAAGGCATCCCTGGGGAAAGTAGGTGTGAA
AGAAGAGCTCCTAGCAGTCGGCAAGTTCACACGGACGTCAGGGGAGACCACGCACACGCACAGAGAGCCAGCAGG
AGATGGCAAGAGCATCAGAACGTTTAAGGAGTCTCCAAAGCAGATCCTGGACCCAGCAGCCCGTGTAACTGGAAT
GAAGAAGTGGCCAAGAACGCCTAAGGAAGAGGCCCAGTCACTAGAAGACCTGGCTGGCTTCAAAGAGCTCTTCCA
GACACCAGGTCCCTCTGAGGAATCAATGACTGATGAGAAAACTACCAAAATAGCCTGCAAATCTCCACCACCAGA

FIGURE 2649B

ATCAGTGGACACTCCAACAAGCACAAAGCAATGGCCTAAGAGAAGTCTCAGGAAAGCAGATGTAGAGGAAGAATT
CTTAGCACTCAGGAAACTAACACCATCAGCAGGGAAAGCCATGCTTACGCCCAAACCAGCAGGAGGTGATGAGAA
AGACATTAAAGCATTTATGGGAACTCCAGTGCAGAAACTGGACCTGGCAGGAACTTTACCTGGCAGCAAAAGACA
GCTACAGACTCCTAAGGAAAAGGCCCAGGCTCTAGAAGACCTGGCTGGCTTTAAAGAGCTCTTCCAGACTCCTGG
TCACACCGAGGAATTAGTGGCTGCTGGTAAAACCACTAAAATACCCTGCGACTCTCCACAGTCAGACCCAGTGGA
CACCCCAACAAGCACAAAGCAACGACCCAAGAGAAGTATCAGGAAAGCAGATGTAGAGGGAGAACTCTTAGCGTG
CAGGAATCTAATGCCATCAGCAGGCAAAGCCATGCACACGCCTAAACCATCAGTAGGTGAAGAGAAAGACATCAT
CATATTTGTGGGAACTCCAGTGCAGAAACTGGACCTGACAGAGAACTTAACCGGCAGCAAGAGACGGCCACAAAC
TCCTAAGGAAGAGGCCCAGGCTCTGGAAGACCTGACTGGCTTTAAAGAGCTCTTCCAGACCCCTGGTCATACTGA
AGAAGCAGTGGCTGCTGGCAAAACTACTAAAATGCCCTGCGAATCTTCTCCACCAGAATCAGCAGACACCCCAAC
AAGCACAAGAAGGCAGCCCAAGACACCTTTGGAGAAAAGGGACGTACAGAAGGAGCTCTCAGCCCTGAAGAAGCT
CACACAGACATCAGGGGAAACCACACACACAGATAAAGTACCAGGAGGTGAGGATAAAAGCATCAACGCGTTTAG
GGAAACTGCAAAACAGAAACTGGACCCAGCAGCAAGTGTAACTGGTAGCAAGAGGCACCCAAAAACTAAGGAAAA
GGCCCAACCCCTAGAAGACCTGGCTGGCTGGAAAGAGCTCTTCCAGACACCAGTATGCACTGACAAGCCCACGAC
TCACGAGAAAACTACCAAAATAGCCTGCAGATCACAACCAGACCCAGTGGACACACCAACAAGCTCCAAGCCACA
GTCCAAGAGAAGTCTCAGGAAAGTGGACGTAGAAGAAGAATTCTTCGCACTCAGGAAACGAACACCATCAGCAGG
CAAAGCCATGCACACACCCAAACCAGCAGTAAGTGGTGAGAAAAACATCTACGCATTTATGGGAACTCCAGTGCA
GAAACTGGACCTGACAGAGAACTTAACTGGCAGCAAGAGACGGCTACAAACTCCTAAGGAAAAGGCCCAGGCTCT
AGAAGACCTGGCTGGCTTTAAAGAGCTCTTCCAGACACGAGGTCACACTGAGGAATCAATGACTAACGATAAAAC
TGCCAAAGTAGCCTGCAAATCTTCACAACCAGACCTAGACAAAAACCCAGCAAGCTCCAAGCGACGGCTCAAGAC
ATCCCTGGGGAAAGTGGGCGTGAAAGAAGAGCTCCTAGCAGTTGGCAAGCTCACACAGACATCAGGAGAGACTAC
ACACACACACACAGAGCCAACAGGAGATGGTAAGAGCATGAAAGCATTTATGGAGTCTCCAAAGCAGATCTTAGA
CTCAGCAGCAAGTCTAACTGGCAGCAAGAGGCAGCTGAGAACTCCTAAGGGAAAGTCTGAAGTCCCTGAAGACCT
GGCCGGCTTCATCGAGCTCTTCCAGACACCAAGTCACACTAAGGAATCAATGACTAATGAAAAAACTACCAAAGT
ATCCTACAGAGCTTCACAGCCAGACCTAGTGGACACCCCAACAAGCTCCAAGCCACAGCCCAAGAGAAGTCTCAG
GAAAGCAGACACTGAAGAAGAATTTTTAGCATTTAGGAAACAAACGCCATCAGCAGGCAAAGCCATGCACACACC
CAAACCAGCAGTAGGTGAAGAGAAAGACATCAACACGTTTTTGGGAACTCCAGTGCAGAAACTGGACCAGCCAGG
AAATTTACCTGGCAGCAATAGACGGCTACAAACTCGTAAGGAAAAGGCCCAGGCTCTAGAAGAACTGACTGGCTT
CAGAGAGCTTTTCCAGACACCATGCACTGATAACCCCACAGCTGATGAGAAAACTACCAAAAAAATACTCTGCAA
ATCTCCGCAATCAGACCCAGCGGACACCCCAACAAACACAAAGCAACGGCCCAAGAGAAGCCTCAAGAAAGCAGA
CGTAGAGGAAGAATTTTTAGCATTCAGGAAACTAACACCATCAGCAGGCAAAGCCATGCACACGCCTAAAGCAGC
AGTAGGTGAAGAGAAAGACATCAACACATTTGTGGGGACTCCAGTGGAGAAACTGGACCTGCTAGGAAATTTACC
TGGCAGCAAGAGACGGCCACAAACTCCTAAAGAAAAGGCCAAGGCTCTAGAAGATCTGGCTGGCTTCAAAGAGCT
CTTCCAGACACCAGGTCACACTGAGGAATCAATGACCGATGACAAAATCACAGAAGTATCCTGCAAATCTCCACA
ACCAGACCCAGTCAAAACCCCAACAAGCTCCAAGCAACGACTCAAGATATCCTTGGGGAAAGTAGGTGTGAAAGA
AGAGGTCCTACCAGTCGGCAAGCTCACACAGACGTCAGGGAAGACCACACAGACACACAGAGAGACAGCAGGAGA
TGGAAAGAGCATCAAAGCGTTTAAGGAATCTGCAAAGCAGATGCTGGACCCAGCAAACTATGGAACTGGGATGGA
GAGGTGGCCAAGAACACCTAAGGAAGAGGCCCAATCACTAGAAGACCTGGCCGGCTTCAAAGAGCTCTTCCAGAC
ACCAGACCACACTGAGGAATCAACAACTGATGACAAAACTACCAAAATAGCCTGCAAATCTCCACCACCAGAATC
AATGGACACTCCAACAAGCACAAGGAGGCGGCCCAAAACACCTTTGGGGAAAAGGGATATAGTGGAAGAGCTCTC
AGCCCTGAAGCAGCTCACACAGACCACACACACAGACAAAGTACCAGGAGATGAGGATAAAGGCATCAACGTGTT
CAGGGAAACTGCAAAACAGAAACTGGACCCAGCAGCAAGTGTAACTGGTAGCAAGAGGCAGCCAAGAACTCCTAA
GGGAAAAGCCCAACCCCTAGAAGACTTGGCTGGCTTGAAAGAGCTCTTCCAGACACCAGTATGCACTGACAAGCC
CACGACTCACGAGAAAACTACCAAAATAGCCTGCAGATCTCCACAACCAGACCCAGTGGGTACCCCAACAATCTT
CAAGCCACAGTCCAAGAGAAGTCTCAGGAAAGCAGACGTAGAGGAAGAATCCTTAGCACTCAGGAAACGAACACC
ATCAGTAGGGAAAGCTATGGACACACCCAAACCAGCAGGAGGTGATGAGAAAGACATGAAAGCATTTATGGGAAC
TCCAGTGCAGAAATTGGACCTGCCAGGAAATTTACCTGGCAGCAAAAGATGGCCACAAACTCCTAAGGAAAAGGC
CCAGGCTCTAGAAGACCTGGCTGGCTTCAAAGAGCTCTTCCAGACACCAGGCACTGACAAGCCCACGACTGATGA

FIGURE 2649C

GAAAACTACCAAAATAGCCTGCAAATCTCCACAACCAGACCCAGTGGACACCCCAGCAAGCACAAAGCAACGGCC
CAAGAGAAACCTCAGGAAAGCAGACGTAGAGGAAGAATTTTTAGCACTCAGGAAACGAACACCATCAGCAGGCAA
AGCCATGGACACCCCAAAACCAGCAGTAAGTGATGAGAAAAATATCAACACATTTGTGGAAACTCCAGTGCAGAA
ACTGGACCTGCTAGGAAATTTACCTGGCAGCAAGAGACAGCCACAGACTCCTAAGGAAAAGGCTGAGGCTCTAGA
GGACCTGGTTGGCTTCAAAGAACTCTTCCAGACACCAGGTCACACTGAGGAATCAATGACTGATGACAAAATCAC
AGAAGTATCCTGTAAATCTCCACAGCCAGAGTCATTCAAAACCTCAAGAAGCTCCAAGCAAAGGCTCAAGATACC
CCTGGTGAAAGTGGACATGAAAGAAGAGCCCCTAGCAGTCAGCAAGCTCACACGGACATCAGGGGAGACTACGCA
AACACACACAGAGCCAACAGGAGATAGTAAGAGCATCAAAGCGTTTAAGGAGTCTCCAAAGCAGATCCTGGACCC
AGCAGCAAGTGTAACTGGTAGCAGGAGGCAGCTGAGAACTCGTAAGGAAAAGGCCCGTGCTCTAGAAGACCTGGT
TGACTTCAAAGAGCTCTTCTCAGCACCAGGTCACACTGAAGAGTCAATGACTATTGACAAAAACACAAAAATTCC
CTGCAAATCTCCCCCACCAGAACTAACAGACACTGCCACGAGCACAAAGAGATGCCCCAAGACACGTCCCAGGAA
AGAAGTAAAAGAGGAGCTCTCAGCAGTTGAGAGGCTCACGCAAACATCAGGGCAAAGCACACACACACACAAAGA
ACCAGCAAGCGGTGATGAGGGCATCAAAGTATTGAAGCAACGTGCAAAGAAGAAACCAAACCCAGTAGAAGAGGA
ACCCAGCAGGAGAAGGCCAAGAGCACCTAAGGAAAAGGCCCAACCCCTGGAAGACCTGGCCGGCTTCACAGAGCT
CTCTGAAACATCAGGTCACACTCAGGAATCACTGACTGCTGGCAAAGCCACTAAAATACCCTGCGAATCTCCCCC
ACTAGAAGTGGTAGACACCACAGCAAGCACAAAGAGGCATCTCAGGACACGTGTGCAGAAGGTACAAGTAAAAGA
AGAGCCTTCAGCAGTCAAGTTCACACAAACATCAGGGGAAACCACGGATGCAGACAAAGAACCAGCAGGTGAAGA
TAAAGGCATCAAAGCATTGAAGGAATCTGCAAAACAGACACCGGCTCCAGCAGCAAGTGTAACTGGCAGCAGGAG
ACGGCCAAGAGCACCCAGGGAAAGTGCCCAAGCCATAGAAGACCTAGCTGGCTTCAAAGACCCAGCAGCAGGTCA
CACTGAAGAATCAATGACTGATGACAAAACCACTAAAATACCCTGCAAATCATCACCAGAACTAGAAGACACCGC
AACAAGCTCAAAGAGACGGCCCAGGACACGTGCCCAGAAAGTAGAAGTGAAGGAGGAGCTGTTAGCAGTTGGCAA
GCTCACACAAACCTCAGGGGAGACCACGCACACCGACAAAGAGCCGGTAGGTGAGGGCAAAGGCACGAAAGCATT
TAAGCAACCTGCAAAGCGGAACGTGGACGCAGAAGATGTAATTGGCAGCAGGAGACAGCCAAGAGCACCTAAGGA
AAAGGCCCAACCCCTGGAAGACCTGGCCAGCTTCCAAGAGCTCTCTCAAACACCAGGCCACACTGAGGAACTGGC
AAATGGTGCTGCTGATAGCTTTACAAGCGCTCCAAAGCAAACACCTGACAGTGGAAAACCTCTAAAAATATCCAG
AAGAGTTCTTCGGGCCCCTAAAGTAGAACCCGTGGGAGACGTGGTAAGCACCAGAGACCCTGTAAAATCACAAAG
CAAAAGCAACACTTCCCTGCCCCCACTGCCCTTCAAGAGGGGAGGTGGCAAAGATGGAAGCGTCACGGGAACCAA
GAGGCTGCGCTGCATGCCAGCACCAGAGGAAATTGTGGAGGAGCTGCCAGCCAGCAAGAAGCAGAGGGTTGCTCC
CAGGGCAAGAGGCAAATCATCCGAACCCGTGGTCATCATGAAGAGAAGTTTGAGGACTTCTGCAAAAAGAATTGA
ACCTGCGGAAGAGCTGAACAGCAACGACATGAAAACCAACAAAGAGGAACACAAATTACAAGACTCGGTCCCTGA
AAATAAGGGAATATCCCTGCGCTCCAGACGCCAAGATAAGACTGAGGCAGAACAGCAAATAACTGAGGTCTTTGT
ATTAGCAGAAAGAATAGAAATAAACAGAAATGAAAAGAAGCCCATGAAGACCTCCCCAGAGATGGACATTCAGAA
TCCAGATGATGGAGCCCGGAAACCCATACCTAGAGACAAAGTCACTGAGAACAAAAGGTGCTTGAGGTCTGCTAG
ACAGAATGAGAGCTCCCAGCCTAAGGTGGCAGAGGAGAGCGGAGGGCAGAAGAGTGCGAAGGTTCTCATGCAGAA
TCAGAAAGGGAAAGGAGAAGCAGGAAATTCAGACTCCATGTGCCTGAGATCAAGAAAGACAAAAAGCCAGCCTGC
AGCAAGCACTTTGGAGAGCAAATCTGTGCAGAGAGTAACGCGGAGTGTCAAGAGGTGTGCAGAAAATCCAAAGAA
GGCTGAGGACAATGTGTGTGTCAAGAAAATAACAACCAGAAGTCATAGGGACAGTGAAGATATT**TGA**CAGAAAAA
TCGAACTGGGAAAAATATAATAAAGTTAGTTTTGTGATAAGTTCTAGTGCAGTTTTTGTCATAAATTACAAGTGA
ATTCTGTAAGTAAGGCTGTCAGTCTGCTTAAGGGAAGAAAACTTTGGATTTGCTGGGTCTGAATCGGCTTCATAA
ACTCCACTGGGAGCACTGCTGGGCTCCTGGACTGAGAATAGTTGAACACCGGGGGCTTTGTGAAGGAGTCTGGGC
CAAGGTTTGCCCTCAGCTTTGCAGAATGAAGCCTTGAGGTCTGTCACCACCCACAGCCACCCTACAGCAGCCTTA
ACTGTGACACTTGCCACACTGTGTCGTCGTTTGTTTGCCTATGTTCTCCAGGGCACGGTGGCAGGAACAACTATC
CTCGTCTGTCCCAACACTGAGCAGGCACTCGGTAAACACGAATGAATGGATAAGCGCACGGATGAATGGAGCTTA
CAAGATCTGTCTTTCCAATGGCCGGGGGCATTTGGTCCCCAAATTAAGGCTATTGGACATCTGCACAGGACAGTC
CTATTTTTGATGTCCTTTCCTTTCTGAAAATAAAGTTTTGTGCTTTGGAGAATGACTCGTGAGCACATCTTTAGG
GACCAAGAGTGACTTTCTGTAAGGAGTGACTCGTGGCTTGCCTTGGTCTCTTGGGAATACTTTTCTAACTAGGGT
TGCTCTCACCTGAGACATTCTCCACCCGCGGAATCTCAGGGTCCCAGGCTGTGGGCCATCACGACCTCAAACTGG
CTCCTAATCTCCAGCTTTCCTGTCATTGAAAGCTTCGGAAGTTTACTGGCTCTGCTCCCGCCTGTTTTCTTTCTG

FIGURE 2649D

ACTCTATCTGGCAGCCCGATGCCACCCAGTACAGGAAGTGACACCAGTACTCTGTAAAGCATCATCATCCTTGGA
GAGACTGAGCACTCAGCACCTTCAGCCACGATTTCAGGATCGCTTCCTTGTGAGCCGCTGCCTCCGAAATCTCCT
TTGAAGCCCAGACATCTTTCTCCAGCTTCAGACTTGTAGATATAACTCGTTCATCTTCATTTACTTTCCACTTTG
CCCCCTGTCCTCTCTGTGTTCCCCAAATCAGAGAATAGCCCGCCATCCCCCAGATCACCTGTCTGGATTCCTCCC
CATTCACCCACCTTGCCAGGTGCAGGTGAGGATGGTGCACCAGACAGGGTAGCTGTCCCCCAAAATGTGCCCTGT
GCGGGCAGTGCCCTGTCTCCACGTTTGTTTCCCCAGTGTCTGGCGGGGAGCCAGGTGACATCATAAATACTTGCT
GAATGAATGCAGAAATCAGCGGTACTGACTTGTACTATATTGGCTGCCATGATAGGGTTCTCACAGCGTCATCCA
TGATCGTAAGGGAGAATGACATTCTGCTTGAGGGAGGGAATAGAAAGGGGCAGGGAGGGGACATCTGAGGGCTTC
ACAGGGCTGCAAAGGGTACAGGGATTGCACCAGGGCAGAACAGGGGAGGGTGTTCAAGGAAGAGTGGCTCTTAGC
AGAGGCACTTTGGAAGGTGTGAGGCATAAATGCTTCCTTCTACGTAGGCCAACCTCAAAACTTTCAGTAGGAATG
TTGCTATGATCAAGTTGTTCTAACACTTTAGACTTAGTAGTAATTATGAACCTCACATAGAAAAATTTCATCCAG
CCATATGCCTGTGGAGTGGAATATTCTGTTTAGTAGAAAAATCCTTTAGAGTTCAGCTCTAACCAGAAATCTTGC
TGAAGTATGTCAGCACCTTTTCTCACCCTGGTAAGTACAGTATTTCAAGAGCACGCTAAGGGTGGTTTTCATTTT
ACAGGGCTGTTGATGATGGGTTAAAAATGTTCATTTAAGGGCTACCCCCGTGTTTAATAGATGAACACCACTTCT
ACACAACCCTCCTTGGTACTGGGGGAGGGAGAGATCTGACAAATACTGCCCATTCCCCTAGGCTGACTGGATTTG
AGAACAAATACCCACCCATTTCCACCATGGTATGGTAACTTCTCTGAGCTTCAGTTTCCAAGTGAATTTCCATGT
AATAGGACATTCCCATTAAATACAAGCTGTTTTTACTTTTTCGCCTCCCAGGGCCTGTGCGATCTGGTCCCCCAG
CCTCTCTTGGGCTTTCTTACACTAACTCTGTACCTACCATCTCCTGCCTCCCTTAGGCAGGCACCTCCAACCACC
ACACACTCCCTGCTGTTTTCCCTGCCTGGAACTTTCCCACCAGCCCCACCAAGATCATTTCATCCAGTCCTGAGC
TCAGCTTAAGGGAGGCTTCTTGCCTGTGGGTTCCCTCACCCCCATGCCTGTCCTCCAGGCTGGGGCAGGTTCTTA
GTTTGCCTGGAATTGTTCTGTACCTCTTTGTAGCACGTAGTGTTGTGAAACTAAGCCACTAATTGAGTTTCTGGC
TCCCCTCCTGGGGTTGTAAGTTTTGTTCATTCATGAGGGCCGACTGTATTTCCTGGTTACTGTATCCCAGTGACC
AGCCACAGGAGATGTCCAATAAAGTATGTGATGAAATGGTCTTAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2650

MWPTRRLVTIKRSGVDGPHFPLSLSTCLFGRGIECDIRIQLPVVSKQHCKIEIHEQEAILHNFSSTNPTQVNGSV
IDEPVRLKHGDVITIIDRSFRYENESLQNGRKSTEFPRKIREQEPARRVSRSSFSSDPDEKAQDSKAYSKITEGK
VSGNPQVHIKNVKEDSTADDSKDSVAQGTTNVHSSEHAGRNGRNAADPISGDFKEISSVKLVSRYGELKSVPTTQ
CLDNSKKNESPFWKLYESVKKELDVKSQKENVLQYCRKSGLQTDYATEKESADGLQGETQLLVSRKSRPKSGGSG
HAVAEPASPEQELDQNKGKGRDVESVQTPSKAVGASFPLYEPAKMKTPVQYSQQQNSPQKHKNKDLYTTGRRESV
NLGKSEGFKAGDKTLTPRKLSTRNRTPAKVEDAADSATKPENLSSKTRGSIPTDVEVLPTETEIHNEPFLTLWLT
QVERKIQKDSLSKPEKLGTTAGQMCSGLPGLSSVDINNFGDSINESEGIPLKRRRVSFGGHLRPELFDENLPPNT
PLKRGEAPTKRKSLVMHTPPVLKKIIKEQPQPSGKQESGSEIHVEVKAQSLVISPPAPSPRKTPVASDQRRRSCK
TAPASSSKSQTEVPKRGGERVATCLQKRVSISRSQHDILQMICSKRRSGASEANLIVAKSWADVVKLGAKQTQTK
VIKHGPQRSMNKRQRRPATPKKPVGEVHSQFSTGHANSPCTIIIGKAHTEKVHVPARPYRVLNNFISNQKMDFKE
DLSGIAEMFKTPVKEQPQLTSTCHIAISNSENLLGKQFQGTDSGEEPLLPTSESFGGNVFFSAQNAAKQPSDKCS
ASPPLRRQCIRENGNVAKTPRNTYKMTSLETKTSDTETEPSKTVSTVNRSGRSTEFRNIQKLPVESKSEETNTEI
VECILKRGQKATLLQQRREGEMKEIERPFETYKENIELKENDEKMKAMKRSRTWGQKCAPMSDLTDLKSLPDTEL
MKDTARGQNLLQTQDHAKAPKSEKGKITKMPCQSLQPEPINTPTHTKQQLKASLGKVGVKEELLAVGKFTRTSGE
TTHTHREPAGDGKSIRTFKESPKQILDPAARVTGMKKWPRTPKEEAQSLEDLAGFKELFQTPGPSEESMTDEKTT
KIACKSPPPESVDTPTSTKQWPKRSLRKADVEEEFLALRKLTPSAGKAMLTPKPAGGDEKDIKAFMGTPVQKLDL
AGTLPGSKRQLQTPKEKAQALEDLAGFKELFQTPGHTEELVAAGKTTKIPCDSPQSDPVDTPTSTKQRPKRSIRK
ADVEGELLACRNLMPSAGKAMHTPKPSVGEEKDIIIFVGTPVQKLDLTENLTGSKRRPQTPKEEAQALEDLTGFK
ELFQTPGHTEEAVAAGKTTKMPCESSPPESADTPTSTRRQPKTPLEKRDVQKELSALKKLTQTSGETTHTDKVPG
GEDKSINAFRETAKQKLDPAASVTGSKRHPKTKEKAQPLEDLAGWKELFQTPVCTDKPTTHEKTTKIACRSQPDP
VDTPTSSKPQSKRSLRKVDVEEEFFALRKRTPSAGKAMHTPKPAVSGEKNIYAFMGTPVQKLDLTENLTGSKRRL
QTPKEKAQALEDLAGFKELFQTRGHTEESMTNDKTAKVACKSSQPDLDKNPASSKRRLKTSLGKVGVKEELLAVG
KLTQTSGETTHTHTEPTGDGKSMKAFMESPKQILDSAASLTGSKRQLRTPKGKSEVPEDLAGFIELFQTPSHTKE
SMTNEKTTKVSYRASQPDLVDTPTSSKPQPKRSLRKADTEEEFLAFRKQTPSAGKAMHTPKPAVGEEKDINTFLG
TPVQKLDQPGNLPGSNRRLQTRKEKAQALEELTGFRELFQTPCTDNPTADEKTTKKILCKSPQSDPADTPTNTKQ
RPKRSLKKADVEEEFLAFRKLTPSAGKAMHTPKAAVGEEKDINTFVGTPVEKLDLLGNLPGSKRRPQTPKEKAKA
LEDLAGFKELFQTPGHTEESMTDDKITEVSCKSPQPDPVKTPTSSKQRLKISLGKVGVKEEVLPVGKLTQTSGKT
TQTHRETAGDGKSIKAFKESAKQMLDPANYGTGMERWPRTPKEEAQSLEDLAGFKELFQTPDHTEESTTDDKTTK
IACKSPPPESMDTPTSTRRRPKTPLGKRDIVEELSALKQLTQTTHTDKVPGDEDKGINVFRETAKQKLDPAASVT
GSKRQPRTPKGKAQPLEDLAGLKELFQTPVCTDKPTTHEKTTKIACRSPQPDPVGTPTIFKPQSKRSLRKADVEE
ESLALRKRTPSVGKAMDTPKPAGGDEKDMKAFMGTPVQKLDLPGNLPGSKRWPQTPKEKAQALEDLAGFKELFQT
PGTDKPTTDEKTTKIACKSPQPDPVDTPASTKQRPKRNLRKADVEEEFLALRKRTPSAGKAMDTPKPAVSDEKNI
NTFVETPVQKLDLLGNLPGSKRQPQTPKEKAEALEDLVGFKELFQTPGHTEESMTDDKITEVSCKSPQPESFKTS
RSSKQRLKIPLVKVDMKEEPLAVSKLTRTSGETTQTHTEPTGDSKSIKAFKESPKQILDPAASVTGSRRQLRTRK
EKARALEDLVDFKELFSAPGHTEESMTIDKNTKIPCKSPPPELTDTATSTKRCPKTRPRKEVKEELSAVERLTQT
SGQSTHTHKEPASGDEGIKVLKQRAKKKPNPVEEEPSRRRPRAPKEKAQPLEDLAGFTELSETSGHTQESLTAGK
ATKIPCESPPLEVVDTTASTKRHLRTRVQKVQVKEEPSAVKFTQTSGETTDADKEPAGEDKGIKALKESAKQTPA
PAASVTGSRRRPRAPRESAQAIEDLAGFKDPAAGHTEESMTDDKTTKIPCKSSPELEDTATSSKRRPRTRAQKVE
VKEELLAVGKLTQTSGETTHTDKEPVGEGKGTKAFKQPAKRNVDAEDVIGSRRQPRAPKEKAQPLEDLASFQELS
QTPGHTEELANGAADSFTSAPKQTPDSGKPLKISRRVLRAPKVEPVGDVVSTRDPVKSQSKSNTSLPPLPFKRGG
GKDGSVTGTKRLRCMPAPEEIVEELPASKKQRVAPRARGKSSEPVVIMKRSLRTSAKRIEPAEELNSNDMKTNKE
EHKLQDSVPENKGISLRSRRQDKTEAEQQITEVFVLAERIEINRNEKKPMKTSPEMDIQNPDDGARKPIPRDKVT
ENKRCLRSARQNESSQPKVAEESGGQKSAKVLMQNQKGKGEAGNSDSMCLRSRKTKSQPAASTLESKSVQRVTRS
VKRCAENPKKAEDNVCVKKITTRSHRDSEDI

FIGURE 2651A

CTACCGGGCGGAGGTGAGCGCGGCGCCGGCTCCTCCTGCGGCGGACTTTGGGTGCGACTTGACGAGCGGTGGTTC
GACAAGTGGCCTTGCGGGCCGGATCGTCCCAGTGGAAGAGTTGTAAATTTGCTTCTGGCCTTCCCCTACGGATTA
TACCTGGCCTTCCCCTACGGATTATACTCAACTTACTGTTTAGAAA**ATG**TGGCCCACGAGACGCCTGGTTACTAT
CAAAAGGAGCGGGGTCGACGGTCCCCACTTTCCCCTGAGCCTCAGCACCTGCTTGTTTGGAAGGGGTATTGAATG
TGACATCCGTATCCAGCTTCCTGTTGTGTCAAAACAACATTGCAAAATTGAAATCCATGAGCAGGAGGCAATATT
ACATAATTTCAGTTCCACAAATCCAACACAAGTAAATGGGTCTGTTATTGATGAGCCTGTACGGCTAAAACATGG
AGATGTAATAACTATTATTGATCGTTCCTTCAGGTATGAAAATGAAAGTCTTCAGAATGGAAGGAAGTCAACTGA
ATTTCCAAGAAAAATACGTGAACAGGAGCCAGCACGTCGTGTCTCAAGATCTAGCTTCTCTTCTGACCCTGATGA
GAGTGAGGGAATACCTTTGAAAAGAAGGCGTGTGTCCTTTGGTGGGCACCTAAGACCTGAACTATTTGATGAAAA
CTTGCCTCCTAATACGCCTCTCAAAAGGGGAGAAGCCCCAACCAAAAGAAAGTCTCTGGTAATGCACACTCCACC
TGTCCTGAAGAAAATCATCAAGGAACAGCCTCAACCATCAGGAAAACAAGAGTCAGGTTCAGAAATCCATGTGGA
AGTGAAGGCACAAAGCTTGGTTATAAGCCCTCCAGCTCCTAGTCCTAGGAAAACTCCAGTTGCCAGTGATCAACG
CCGTAGGTCCTGCAAAACAGCCCCTGCTTCCAGCAGCAAATCTCAGACAGAGGTTCCTAAGAGAGGAGGAGAAAG
AGTGGCAACCTGCCTTCAAAAGAGAGTGTCTATCAGCCGAAGTCAACATGATATTTTACAGATGATATGTTCCAA
AAGAAGAAGTGGTGCTTCGGAAGCAAATCTGATTGTTGCAAAATCATGGGCAGATGTAGTAAAACTTGGTGCAAA
ACAAACACAAACTAAAGTCATAAAACATGGTCCTCAAAGGTCAATGAACAAAAGGCAAAGAAGACCTGCTACTCC
AAAGAAGCCTGTGGGCGAAGTTCACAGTCAATTTAGTACAGGCCACGCAAACTCTCCTTGTACCATAATAATAGG
GAAAGCTCATACTGAAAAAGTACATGTGCCTGCTCGACCCTACAGAGTGCTCAACAACTTCATTTCCAACCAAAA
AATGGACTTTAAGGAAGATCTTTCAGGAATAGCTGAAATGTTCAAGACCCCAGTGAAGGAGCAACCGCAGTTGAC
AAGCACATGTCACATCGCTATTTCAAATTCAGAGAATTTGCTTGGAAAACAGTTTCAAGGAACTGATTCAGGAGA
AGAACCTCTGCTCCCCACCTCAGAGAGTTTTGGAGGAAATGTGTTCTTCAGTGCACAGAATGCAGCAAAACAGCC
ATCTGATAAATGCTCTGCAAGCCCTCCCTTAAGACGGCAGTGTATTAGAGAAAATGGAAACGTAGCAAAAACGCC
CAGGAACACCTACAAAATGACTTCTCTGGAGACAAAAACTTCAGATACTGAGACAGAGCCTTCAAAAACAGTATC
CACTGTAAACAGGTCAGGAAGGTCTACAGAGTTCAGGAATATACAGAAGCTACCTGTGGAAAGTAAGAGTGAAGA
AACAAATACAGAAATTGTTGAGTGCATCCTAAAAAGAGGTCAGAAGGCAACACTACTACAACAAAGGAGAGAAGG
AGAGATGAAGGAAATAGAAAGACCTTTTGAGACATATAAGGAAAATATTGAATTAAAAGAAAACGATGAAAAGAT
GAAAGCAATGAAGAGATCAAGAACTTGGGGGCAGAAATGTGCACCAATGTCTGACCTGACAGACCTCAAGAGCTT
GCCTGATACAGAACTCATGAAAGACACGGCACGTGGCCAGAATCTCCTCCAAACCCAAGATCATGCCAAGGCACC
AAAGAGTGAGAAAGGCAAAATCACTAAAATGCCCTGCCAGTCATTACAACCAGAACCAATAAACACCCCAACACA
CACAAAACAACAGTTGAAGGCATCCCTGGGGAAAGTAGGTGTGAAAGAAGAGCTCCTAGCAGTCGGCAAGTTCAC
ACGGACGTCAGGGGAGACCACGCACACGCACAGAGAGCCAGCAGGAGATGGCAAGAGCATCAGAACGTTTAAGGA
GTCTCCAAAGCAGATCCTGGACCCAGCAGCCCGTGTAACTGGAATGAAGAAGTGGCCAAGAACGCCTAAGGAAGA
GGCCCAGTCACTAGAAGACCTGGCTGGCTTCAAAGAGCTCTTCCAGACACCAGGTCCCTCTGAGGAATCAATGAC
TGATGAGAAAACTACCAAAATAGCCTGCAAATCTCCACCACCAGAATCAGTGGACACTCCAACAAGCACAAAGCA
ATGGCCTAAGAGAAGTCTCAGGAAAGCAGATGTAGAGGAAGAATTCTTAGCACTCAGGAAACTAACACCATCAGC
AGGGAAAGCCATGCTTACGCCCAAACCAGCAGGAGGTGATGAGAAAGACATTAAAGCATTTATGGGAACTCCAGT
GCAGAAACTGGACCTGGCAGGAACTTTACCTGGCAGCAAAAGACAGCTACAGACTCCTAAGGAAAAGGCCCAGGC
TCTAGAAGACCTGGCTGGCTTTAAAGAGCTCTTCCAGACTCCTGGTCACACCGAGGAATTAGTGGCTGCTGGTAA
AACCACTAAAATACCCTGCGACTCTCCACAGTCAGACCCAGTGGACACCCCAACAAGCACAAAGCAACGACCCAA
GAGAAGTATCAGGAAAGCAGATGTAGAGGGAGAACTCTTAGCGTGCAGGAATCTAATGCCATCAGCAGGCAAAGC
CATGCACACGCCTAAACCATCAGTAGGTGAAGAGAAAGACATCATCATATTTGTGGGAACTCCAGTGCAGAAACT
GGACCTGACAGAGAACTTAACCGGCAGCAAGAGACGGCCACAAACTCCTAAGGAAGAGGCCCAGGCTCTGGAAGA
CCTGACTGGCTTTAAAGAGCTCTTCCAGACCCCTGGTCATACTGAAGAAGCAGTGGCTGCTGGCAAAACTACTAA
AATGCCCTGCGAATCTTCTCCACCAGAATCAGCAGACACCCCAACAAGCACAAGAAGGCAGCCCAAGACACCTTT
GGAGAAAAGGGACGTACAGAAGGAGCTCTCAGCCCTGAAGAAGCTCACACAGACATCAGGGGAAACCACACACAC
AGATAAAGTACCAGGAGGTGAGGATAAAAGCATCAACGCGTTTAGGGAAACTGCAAAACAGAAACTGGACCCAGC
AGCAAGTGTAACTGGTAGCAAGAGGCACCCAAAAACTAAGGAAAAGGCCCAACCCCTAGAAGACCTGGCTGGCTG
GAAAGAGCTCTTCCAGACACCAGTATGCACTGACAAGCCCACGACTCACGAGAAAACTACCAAAATAGCCTGCAG

FIGURE 2651B

ATCACAACCAGACCCAGTGGACACACCAACAAGCTCCAAGCCACAGTCCAAGAGAAGTCTCAGGAAAGTGGACGT
AGAAGAAGAATTCTTCGCACTCAGGAAACGAACACCATCAGCAGGCAAAGCCATGCACACACCCAAACCAGCAGT
AAGTGGTGAGAAAAACATCTACGCATTTATGGGAACTCCAGTGCAGAAACTGGACCTGACAGAGAACTTAACTGG
CAGCAAGAGACGGCTACAAACTCCTAAGGAAAAGGCCCAGGCTCTAGAAGACCTGGCTGGCTTTAAAGAGCTCTT
CCAGACACGAGGTCACACTGAGGAATCAATGACTAACGATAAAACTGCCAAAGTAGCCTGCAAATCTTCACAACC
AGACCTAGACAAAAACCCAGCAAGCTCCAAGCGACGGCTCAAGACATCCCTGGGGAAAGTGGGCGTGAAAGAAGA
GCTCCTAGCAGTTGGCAAGCTCACACAGACATCAGGAGAGACTACACACACACACACAGAGCCAACAGGAGATGG
TAAGAGCATGAAAGCATTTATGGAGTCTCCAAAGCAGATCTTAGACTCAGCAGCAAGTCTAACTGGCAGCAAGAG
GCAGCTGAGAACTCCTAAGGGAAAGTCTGAAGTCCCTGAAGACCTGGCCGGCTTCATCGAGCTCTTCCAGACACC
AAGTCACACTAAGGAATCAATGACTAATGAAAAAACTACCAAAGTATCCTACAGAGCTTCACAGCCAGACCTAGT
GGACACCCCAACAAGCTCCAAGCCACAGCCCAAGAGAAGTCTCAGGAAAGCAGACACTGAAGAAGAATTTTTAGC
ATTTAGGAAACAAACGCCATCAGCAGGCAAAGCCATGCACACACCCAAACCAGCAGTAGGTGAAGAGAAAGACAT
CAACACGTTTTTGGGAACTCCAGTGCAGAAACTGGACCAGCCAGGAAATTTACCTGGCAGCAATAGACGGCTACA
AACTCGTAAGGAAAAGGCCCAGGCTCTAGAAGAACTGACTGGCTTCAGAGAGCTTTTCCAGACACCATGCACTGA
TAACCCCACAGCTGATGAGAAAACTACCAAAAAAATACTCTGCAAATCTCCGCAATCAGACCCAGCGGACACCCC
AACAAACACAAAGCAACGGCCCAAGAGAAGCCTCAAGAAAGCAGACGTAGAGGAAGAATTTTTAGCATTCAGGAA
ACTAACACCATCAGCAGGCAAAGCCATGCACACGCCTAAAGCAGCAGTAGGTGAAGAGAAAGACATCAACACATT
TGTGGGGACTCCAGTGGAGAAACTGGACCTGCTAGGAAATTTACCTGGCAGCAAGAGACGGCCACAAACTCCTAA
AGAAAAGGCCAAGGCTCTAGAAGATCTGGCTGGCTTCAAAGAGCTCTTCCAGACACCAGGTCACACTGAGGAATC
AATGACCGATGACAAAATCACAGAAGTATCCTGCAAATCTCCACAACCAGACCCAGTCAAAACCCCAACAAGCTC
CAAGCAACGACTCAAGATATCCTTGGGGAAAGTAGGTGTGAAAGAAGAGGTCCTACCAGTCGGCAAGCTCACACA
GACGTCAGGGAAGACCACACAGACACACAGAGAGACAGCAGGAGATGGAAAGAGCATCAAAGCGTTTAAGGAATC
TGCAAAGCAGATGCTGGACCCAGCAAACTATGGAACTGGGATGGAGAGGTGGCCAAGAACACCTAAGGAAGAGGC
CCAATCACTAGAAGACCTGGCCGGCTTCAAAGAGCTCTTCCAGACACCAGACCACACTGAGGAATCAACAACTGA
TGACAAAACTACCAAAATAGCCTGCAAATCTCCACCACCAGAATCAATGGACACTCCAACAAGCACAAGGAGGCG
GCCCAAAACACCTTTGGGGAAAAGGGATATAGTGGAAGAGCTCTCAGCCCTGAAGCAGCTCACACAGACCACACA
CACAGACAAAGTACCAGGAGATGAGGATAAAGGCATCAACGTGTTCAGGGAAACTGCAAAACAGAAACTGGACCC
AGCAGCAAGTGTAACTGGTAGCAAGAGGCAGCCAAGAACTCCTAAGGGAAAAGCCCAACCCCTAGAAGACTTGGC
TGGCTTGAAAGAGCTCTTCCAGACACCAGTATGCACTGACAAGCCCACGACTCACGAGAAAACTACCAAAATAGC
CTGCAGATCTCCACAACCAGACCCAGTGGGTACCCCAACAATCTTCAAGCCACAGTCCAAGAGAAGTCTCAGGAA
AGCAGACGTAGAGGAAGAATCCTTAGCACTCAGGAAACGAACACCATCAGTAGGGAAAGCTATGGACACACCCAA
ACCAGCAGGAGGTGATGAGAAAGACATGAAAGCATTTATGGGAACTCCAGTGCAGAAATTGGACCTGCCAGGAAA
TTTACCTGGCAGCAAAAGATGGCCACAAACTCCTAAGGAAAAGGCCCAGGCTCTAGAAGACCTGGCTGGCTTCAA
AGAGCTCTTCCAGACACCAGGCACTGACAAGCCCACGACTGATGAGAAAACTACCAAAATAGCCTGCAAATCTCC
ACAACCAGACCCAGTGGACACCCCAGCAAGCACAAAGCAACGGCCCAAGAGAAACCTCAGGAAAGCAGACGTAGA
GGAAGAATTTTTAGCACTCAGGAAACGAACACCATCAGCAGGCAAAGCCATGGACACCCCAAAACCAGCAGTAAG
TGATGAGAAAAATATCAACACATTTGTGGAAACTCCAGTGCAGAAACTGGACCTGCTAGGAAATTTACCTGGCAG
CAAGAGACAGCCACAGACTCCTAAGGAAAAGGCTGAGGCTCTAGAGGACCTGGTTGGCTTCAAAGAACTCTTCCA
GACACCAGGTCACACTGAGGAATCAATGACTGATGACAAAATCACAGAAGTATCCTGTAAATCTCCACAGCCAGA
GTCATTCAAAACCTCAAGAAGCTCCAAGCAAAGGCTCAAGATACCCCTGGTGAAAGTGGACATGAAAGAAGAGCC
CCTAGCAGTCAGCAAGCTCACACGGACATCAGGGGAGACTACGCAAACACACACAGAGCCAACAGGAGATAGTAA
GAGCATCAAAGCGTTTAAGGAGTCTCCAAAGCAGATCCTGGACCCAGCAGCAAGTGTAACTGGTAGCAGGAGGCA
GCTGAGAACTCGTAAGGAAAAGGCCCGTGCTCTAGAAGACCTGGTTGACTTCAAAGAGCTCTTCTCAGCACCAGG
TCACACTGAAGAGTCAATGACTATTGACAAAAACACAAAAATTCCCTGCAAATCTCCCCCACCAGAACTAACAGA
CACTGCCACGAGCACAAAGAGATGCCCCAAGACACGTCCCAGGAAAGAAGTAAAAGAGGAGCTCTCAGCAGTTGA
GAGGCTCACGCAAACATCAGGGCAAAGCACACACACACACAAAGAACCAGCAAGCGGTGATGAGGGCATCAAAGT
ATTGAAGCAACGTGCAAAGAAGAAACCAAACCCAGTAGAAGAGGAACCCAGCAGGAGAAGGCCAAGAGCACCTAA
GGAAAAGGCCCAACCCCTGGAAGACCTGGCCGGCTTCACAGAGCTCTCTGAAACATCAGGTCACACTCAGGAATC

FIGURE 2651C

ACTGACTGCTGGCAAAGCCACTAAAATACCCTGCGAATCTCCCCCACTAGAAGTGGTAGACACCACAGCAAGCAC
AAAGAGGCATCTCAGGACACGTGTGCAGAAGGTACAAGTAAAAGAAGAGCCTTCAGCAGTCAAGTTCACACAAAC
ATCAGGGGAAACCACGGATGCAGACAAAGAACCAGCAGGTGAAGATAAAGGCATCAAAGCATTGAAGGAATCTGC
AAAACAGACACCGGCTCCAGCAGCAAGTGTAACTGGCAGCAGGAGACGGCCAAGAGCACCCAGGGAAAGTGCCCA
AGCCATAGAAGACCTAGCTGGCTTCAAAGACCCAGCAGCAGGTCACACTGAAGAATCAATGACTGATGACAAAAC
CACTAAAATACCCTGCAAATCATCACCAGAACTAGAAGACACCGCAACAAGCTCAAAGAGACGGCCCAGGACACG
TGCCCAGAAAGTAGAAGTGAAGGAGGAGCTGTTAGCAGTTGGCAAGCTCACACAAACCTCAGGGGAGACCACGCA
CACCGACAAAGAGCCGGTAGGTGAGGGCAAAGGCACGAAAGCATTTAAGCAACCTGCAAAGCGGAACGTGGACGC
AGAAGATGTAATTGGCAGCAGGAGACAGCCAAGAGCACCTAAGGAAAAGGCCCAACCCCTGGAAGACCTGGCCAG
CTTCCAAGAGCTCTCTCAAACACCAGGCCACACTGAGGAACTGGCAAATGGTGCTGCTGATAGCTTTACAAGCGC
TCCAAAGCAAACACCTGACAGTGGAAAACCTCTAAAAATATCCAGAAGAGTTCTTCGGGCCCCTAAAGTAGAACC
CGTGGGAGACGTGGTAAGCACCAGAGACCCTGTAAAATCACAAAGCAAAAGCAACACTTCCCTGCCCCCACTGCC
CTTCAAGAGGGGAGGTGGCAAAGATGGAAGCGTCACGGGAACCAAGAGGCTGCGCTGCATGCCAGCACCAGAGGA
AATTGTGGAGGAGCTGCCAGCCAGCAAGAAGCAGAGGGTTGCTCCCAGGGCAAGAGGCAAATCATCCGAACCCGT
GGTCATCATGAAGAGAAGTTTGAGGACTTCTGCAAAAAGAATTGAACCTGCGGAAGAGCTGAACAGCAACGACAT
GAAAACCAACAAAGAGGAACACAAATTACAAGACTCGGTCCCTGAAAATAAGGGAATATCCCTGCGCTCCAGACG
CCAAGATAAGACTGAGGCAGAACAGCAAATAACTGAGGTCTTTGTATTAGCAGAAAGAATAGAAATAAACAGAAA
TGAAAAGAAGCCCATGAAGACCTCCCCAGAGATGGACATTCAGAATCCAGATGATGGAGCCCGGAAACCCATACC
TAGAGACAAAGTCACTGAGAACAAAAGGTGCTTGAGGTCTGCTAGACAGAATGAGAGCTCCCAGCCTAAGGTGGC
AGAGGAGAGCGGAGGGCAGAAGAGTGCGAAGGTTCTCATGCAGAATCAGAAAGGGAAAGGAGAAGCAGGAAATTC
AGACTCCATGTGCCTGAGATCAAGAAAGACAAAAAGCCAGCCTGCAGCAAGCACTTTGGAGAGCAAATCTGTGCA
GAGAGTAACGCGGAGTGTCAAGAGGTGTGCAGAAAATCCAAAGAAGGCTGAGGACAATGTGTGTGTCAAGAAAAT
AACAACCAGAAGTCATAGGGACAGTGAAGATATTTGACAGAAAAATCGAACTGGGAAAAATATAATAAAGTTAGT
TTTGTGATAAGTTCTAGTGCAGTTTTTGTCATAAATTACAAGTGAATTCTGTAAGTAAGGCTGTCAGTCTGCTTA
AGGGAAGAAAACTTTGGATTTGCTGGGTCTGAATCGGCTTCATAAACTCCACTGGGAGCACTGCTGGGCTCCTGG
ACTGAGAATAGTTGAACACCGGGGGCTTTGTGAAGGAGTCTGGGCCAAGGTTTGCCCTCAGCTTTGCAGAATGAA
GCCTTGAGGTCTGTCACCACCCACAGCCACCCTACAGCAGCCTTAACTGTGACACTTGCCACACTGTGTCGTCGT
TTGTTTGCCTATGTTCTCCAGGGCACGGTGGCAGGAACAACTATCCTCGTCTGTCCCAACACTGAGCAGGCACTC
GGTAAACACGAATGAATGGATAAGCGCACGGATGAATGGAGCTTACAAGATCTGTCTTTCCAATGGCCGGGGGCA
TTTGGTCCCCAAATTAAGGCTATTGGACATCTGCACAGGACAGTCCTATTTTTGATGTCCTTTCCTTTCTGAAAA
TAAAGTTTTGTGCTTTGGAGAATGACTCGTGAGCACATCTTTAGGGACCAAGAGTGACTTTCTGTAAGGAGTGAC
TCGTGGCTTGCCTTGGTCTCTTGGGAATACTTTTCTAACTAGGGTTGCTCTCACCTGAGACATTCTCCACCCGCG
GAATCTCAGGGTCCCAGGCTGTGGGCCATCACGACCTCAAACTGGCTCCTAATCTCCAGCTTTCCTGTCATTGAA
AGCTTCGGAAGTTTACTGGCTCTGCTCCCGCCTGTTTTCTTTCTGACTCTATCTGGCAGCCCGATGCCACCCAGT
ACAGGAAGTGACACCAGTACTCTGTAAAGCATCATCATCCTTGGAGAGACTGAGCACTCAGCACCTTCAGCCACG
ATTTCAGGATCGCTTCCTTGTGAGCCGCTGCCTCCGAAATCTCCTTTGAAGCCCAGACATCTTTCTCCAGCTTCA
GACTTGTAGATATAACTCGTTCATCTTCATTTACTTTCCACTTTGCCCCCTGTCCTCTCTGTGTTCCCCAAATCA
GAGAATAGCCCGCCATCCCCCAGATCACCTGTCTGGATTCCTCCCCATTCACCCACCTTGCCAGGTGCAGGTGAG
GATGGTGCACCAGACAGGGTAGCTGTCCCCCAAAATGTGCCCTGTGCGGGCAGTGCCCTGTCTCCACGTTTGTTT
CCCCAGTGTCTGGCGGGGAGCCAGGTGACATCATAAATACTTGCTGAATGAATGCAGAAATCAGCGGTACTGACT
TGTACTATATTGGCTGCCATGATAGGGTTCTCACAGCGTCATCCATGATCGTAAGGGAGAATGACATTCTGCTTG
AGGGAGGGAATAGAAAGGGGCAGGGAGGGGACATCTGAGGGCTTCACAGGGCTGCAAAGGGTACAGGGATTGCAC
CAGGGCAGAACAGGGGAGGGTGTTCAAGGAAGAGTGGCTCTTAGCAGAGGCACTTTGGAAGGTGTGAGGCATAAA
TGCTTCCTTCTACGTAGGCCAACCTCAAAACTTTCAGTAGGAATGTTGCTATGATCAAGTTGTTCTAACACTTTA
GACTTAGTAGTAATTATGAACCTCACATAGAAAAATTTCATCCAGCCATATGCCTGTGGAGTGGAATATTCTGTT
TAGTAGAAAAATCCTTTAGAGTTCAGCTCTAACCAGAAATCTTGCTGAAGTATGTCAGCACCTTTTCTCACCCTG
GTAAGTACAGTATTTCAAGAGCACGCTAAGGGTGGTTTTCATTTTACAGGGCTGTTGATGATGGGTTAAAAATGT
TCATTTAAGGGCTACCCCCGTGTTTAATAGATGAACACCACTTCTACACAACCCTCCTTGGTACTGGGGGAGGGA

FIGURE 2651D

GAGATCTGACAAATACTGCCCATTCCCCTAGGCTGACTGGATTTGAGAACAAATACCCACCCATTTCCACCATGG
TATGGTAACTTCTCTGAGCTTCAGTTTCCAAGTGAATTTCCATGTAATAGGACATTCCCATTAAATACAAGCTGT
TTTTACTTTTTCGCCTCCCAGGGCCTGTGCGATCTGGTCCCCCAGCCTCTCTTGGGCTTTCTTACACTAACTCTG
TACCTACCATCTCCTGCCTCCCTTAGGCAGGCACCTCCAACCACCACACACTCCCTGCTGTTTTCCCTGCCTGGA
ACTTTCCCACCAGCCCCACCAAGATCATTTCATCCAGTCCTGAGCTCAGCTTAAGGGAGGCTTCTTGCCTGTGGG
TTCCCTCACCCCCATGCCTGTCCTCCAGGCTGGGGCAGGTTCTTAGTTTGCCTGGAATTGTTCTGTACCTCTTTG
TAGCACGTAGTGTTGTGAAACTAAGCCACTAATTGAGTTTCTGGCTCCCCTCCTGGGGTTGTAAGTTTTGTTCAT
TCATGAGGGCCGACTGTATTTCCTGGTTACTGTATCCCAGTGACCAGCCACAGGAGATGTCCAATAAAGTATGTG
ATGAAATGGTCTTAAAAAAAAAAAAAAAAAAAAA

FIGURE 2652

MWPTRRLVTIKRSGVDGPHFPLSLSTCLFGRGIECDIRIQLPVVSKQHCKIEIHEQEAILHNFSSTNPTQVNGSV
IDEPVRLKHGDVITIIDRSFRYENESLQNGRKSTEFPRKIREQEPARRVSRSSFSSDPDESEGIPLKRRRVSFGG
HLRPELFDENLPPNTPLKRGEAPTKRKSLVMHTPPVLKKIIKEQPQPSGKQESGSEIHVEVKAQSLVISPPAPSP
RKTPVASDQRRRSCKTAPASSSKSQTEVPKRGGERVATCLQKRVSISRSQHDILQMICSKRRSGASEANLIVAKS
WADVVKLGAKQTQTKVIKHGPQRSMNKRQRRPATPKKPVGEVHSQFSTGHANSPCTIIIGKAHTEKVHVPARPYR
VLNNFISNQKMDFKEDLSGIAEMFKTPVKEQPQLTSTCHIAISNSENLLGKQFQGTDSGEEPLLPTSESFGGNVF
FSAQNAAKQPSDKCSASPPLRRQCIRENGNVAKTPRNTYKMTSLETKTSDTETEPSKTVSTVNRSGRSTEFRNIQ
KLPVESKSEETNTEIVECILKRGQKATLLQQRREGEMKEIERPFETYKENIELKENDEKMKAMKRSRTWGQKCAP
MSDLTDLKSLPDTELMKDTARGQNLLQTQDHAKAPKSEKGKITKMPCQSLQPEPINTPTHTKQQLKASLGKVGVK
EELLAVGKFTRTSGETTHTHREPAGDGKSIRTFKESPKQILDPAARVTGMKKWPRTPKEEAQSLEDLAGFKELFQ
TPGPSEESMTDEKTTKIACKSPPPESVDTPTSTKQWPKRSLRKADVEEEFLALRKLTPSAGKAMLTPKPAGGDEK
DIKAFMGTPVQKLDLAGTLPGSKRQLQTPKEKAQALEDLAGFKELFQTPGHTEELVAAGKTTKIPCDSPQSDPVD
TPTSTKQRPKRSIRKADVEGELLACRNLMPSAGKAMHTPKPSVGEEKDIIIFVGTPVQKLDLTENLTGSKRRPQT
PKEEAQALEDLTGFKELFQTPGHTEEAVAAGKTTKMPCESSPPESADTPTSTRRQPKTPLEKRDVQKELSALKKL
TQTSGETTHTDKVPGGEDKSINAFRETAKQKLDPAASVTGSKRHPKTKEKAQPLEDLAGWKELFQTPVCTDKPTT
HEKTTKIACRSQPDPVDTPTSSKPQSKRSLRKVDVEEEFFALRKRTPSAGKAMHTPKPAVSGEKNIYAFMGTPVQ
KLDLTENLTGSKRRLQTPKEKAQALEDLAGFKELFQTRGHTEESMTNDKTAKVACKSSQPDLDKNPASSKRRLKT
SLGKVGVKEELLAVGKLTQTSGETTHTHTEPTGDGKSMKAFMESPKQILDSAASLTGSKRQLRTPKGKSEVPEDL
AGFIELFQTPSHTKESMTNEKTTKVSYRASQPDLVDTPTSSKPQPKRSLRKADTEEEFLAFRKQTPSAGKAMHTP
KPAVGEEKDINTFLGTPVQKLDQPGNLPGSNRRLQTRKEKAQALEELTGFRELFQTPCTDNPTADEKTTKKILCK
SPQSDPADTPTNTKQRPKRSLKKADVEEEFLAFRKLTPSAGKAMHTPKAAVGEEKDINTFVGTPVEKLDLLGNLP
GSKRRPQTPKEKAKALEDLAGFKELFQTPGHTEESMTDDKITEVSCKSPQPDPVKTPTSSKQRLKISLGKVGVKE
EVLPVGKLTQTSGKTTQTHRETAGDGKSIKAFKESAKQMLDPANYGTGMERWPRTPKEEAQSLEDLAGFKELFQT
PDHTEESTTDDKTTKIACKSPPPESMDTPTSTRRRPKTPLGKRDIVEELSALKQLTQTTHTDKVPGDEDKGINVF
RETAKQKLDPAASVTGSKRQPRTPKGKAQPLEDLAGLKELFQTPVCTDKPTTHEKTTKIACRSPQPDPVGTPTIF
KPQSKRSLRKADVEEESLALRKRTPSVGKAMDTPKPAGGDEKDMKAFMGTPVQKLDLPGNLPGSKRWPQTPKEKA
QALEDLAGFKELFQTPGTDKPTTDEKTTKIACKSPQPDPVDTPASTKQRPKRNLRKADVEEEFLALRKRTPSAGK
AMDTPKPAVSDEKNINTFVETPVQKLDLLGNLPGSKRQPQTPKEKAEALEDLVGFKELFQTPGHTEESMTDDKIT
EVSCKSPQPESFKTSRSSKQRLKIPLVKVDMKEEPLAVSKLTRTSGETTQTHTEPTGDSKSIKAFKESPKQILDP
AASVTGSRRQLRTRKEKARALEDLVDFKELFSAPGHTEESMTIDKNTKIPCKSPPPELTDTATSTKRCPKTRPRK
EVKEELSAVERLTQTSGQSTHTHKEPASGDEGIKVLKQRAKKKPNPVEEEPSRRRPRAPKEKAQPLEDLAGFTEL
SETSGHTQESLTAGKATKIPCESPPLEVVDTTASTKRHLRTRVQKVQVKEEPSAVKFTQTSGETTDADKEPAGED
KGIKALKESAKQTPAPAASVTGSRRRPRAPRESAQAIEDLAGFKDPAAGHTEESMTDDKTTKIPCKSSPELEDTA
TSSKRRPRTRAQKVEVKEELLAVGKLTQTSGETTHTDKEPVGEGKGTKAFKQPAKRNVDAEDVIGSRRQPRAPKE
KAQPLEDLASFQELSQTPGHTEELANGAADSFTSAPKQTPDSGKPLKISRRVLRAPKVEPVGDVVSTRDPVKSQS
KSNTSLPPLPFKRGGGKDGSVTGTKRLRCMPAPEEIVEELPASKKQRVAPRARGKSSEPVVIMKRSLRTSAKRIE
PAEELNSNDMKTNKEEHKLQDSVPENKGISLRSRRQDKTEAEQQITEVFVLAERIEINRNEKKPMKTSPEMDIQN
PDDGARKPIPRDKVTENKRCLRSARQNESSQPKVAEESGGQKSAKVLMQNQKGKGEAGNSDSMCLRSRKTKSQPA
ASTLESKSVQRVTRSVKRCAENPKKAEDNVCVKKITTRSHRDSEDI

FIGURE 2653A

CTACCGGGCGGAGGTGAGCGCGGCGCCGGCTCCTCCTGCGGCGGACTTTGGGTGCGACTTGACGAGCGGTGGTTC
GACAAGTGGCCTTGCGGGCCGGATCGTCCCAGTGGAAGAGTTGTAAATTTGCTTCTGGCCTTCCCCTACGGATTA
TACCTGGCCTTCCCCTACGGATTATACTCAACTTACTGTTTAGAAAATGTGGCCCACGAGACGCCTGGTTACTAT
CAAAAGGAGCGGGGTCGACGGTCCCCACTTTCCCCTGAGCCTCAGCACCTGCTTGTTTGGAAGGGGTATTGAATG
TGACATCCGTATCCAGCTTCCTGTTGTGTCAAAACAACATTGCAAAATTGAAATCCATGAGCAGGAGGCAATATT
ACATAATTTCAGTTCCACAAATCCAACACAAGTAAATGGGTCTGTTATTGATGAGCCTGTACGGCTAAAACATGG
AGATGTAATAACTATTATTGATCGTTCCTTCAGGTATGAAAATGAAAGTCTTCAGAATGGAAGGAAGTCAACTGA
ATTTCCAAGAAAAATACGTGAACAGGAGCCAGCACGTCGTGTCTCAAGATCTAGCTTCTCTTCTGACCCTGATGA
GAAAGCTCAAGATTCCAAGGCCTATTCAAAAATCACTGAAGGAAAAGTTTCAGGAAATCCTCAGGTACATATCAA
GAATGTCAAAGAAGACAGTACCGCAGATGACTCAAAAGACAGTGTTGCTCAGGGAACAACTAATGTTCATTCCTC
AGAACATGCTGGACGTAATGGCAGAAATGCAGCTGATCCCATTTCTGGGGATTTTAAAGAAATTTCCAGCGTTAA
ATTAGTGAGCCGTTATGGAGAATTGAAGTCTGTTCCCACTACACAATGTCTTGACAATAGCAAAAAAAATGAATC
TCCCTTTTGGAAGCTTTATGAGTCAGTGAAGAAAGAGTTGGATGTAAAATCACAAAAAGAAAATGTCCTACAGTA
TTGTAGAAAATCTGGATTACAAACTGATTACGCAACAGAGAAAGAAAGTGCTGATGGTTTACAGGGGGAGACCCA
ACTGTTGGTCTCGCGTAAGTCAAGACCAAAATCTGGTGGGAGCGGCCACGCTGTGGCAGAGCCTGCTTCACCTGA
ACAAGAGCTTGACCAGAACAAGGGGAAGGGAAGAGACGTGGAGTCTGTTCAGACTCCCAGCAAGGCTGTGGGCGC
CAGCTTTCCTCTCTATGAGCCGGCTAAAATGAAGACCCCTGTACAATATTCACAGCAACAAAATTCTCCACAAAA
ACATAAGAACAAAGACCTGTATACTACTGGTAGAAGAGAATCTGTGAATCTGGGTAAAAGTGAAGGCTTCAAGGC
TGGTGATAAAACTCTTACTCCCAGGAAGCTTTCAACTAGAAATCGAACACCAGCTAAAGTTGAAGATGCAGCTGA
CTCTGCCACTAAGCCAGAAAATCTCTCTTCCAAAACCAGAGGAAGTATTCCTACAGATGTGGAAGTTCTGCCTAC
GGAAACTGAAATTCACAATGAGCCATTTTTAACTCTGTGGCTCACTCAAGTTGAGAGGAAGATCCAAAAGGATTC
CCTCAGCAAGCCTGAGAAATTGGGCACTACAGCTGGACAGATGTGCTCTGGGTTACCTGGTCTTAGTTCAGTTGA
TATCAACAACTTTGGTGATTCCATTAATGAGAGTGAGGGAATACCTTTGAAAAGAAGGCGTGTGTCCTTTGGTGG
GCACCTAAGACCTGAACTATTTGATGAAAACTTGCCTCCTAATACGCCTCTCAAAAGGGGAGAAGCCCCAACCAA
AAGAAAGTCTCTGGTAATGCACACTCCACCTGTCCTGAAGAAAATCATCAAGGAACAGCCTCAACCATCAGGAAA
ACAAGAGTCAGGTTCAGAAATCCATGTGGAAGTGAAGGCACAAAGCTTGGTTATAAGCCCTCCAGCTCCTAGTCC
TAGGAAAACTCCAGTTGCCAGTGATCAACGCCGTAGGTCCTGCAAAACAGCCCCTGCTTCCAGCAGCAAATCTCA
GACAGAGGTTCCTAAGAGAGGAGGAGAAAGAGTGGCAACCTGCCTTCAAAAGAGAGTGTCTATCAGCCGAAGTCA
ACATGATATTTTACAGATGATATGTTCCAAAAGAAGAAGTGGTGCTTCGGAAGCAAATCTGATTGTTGCAAAATC
ATGGGCAGATGTAGTAAAACTTGGTGCAAAACAAACACAAACTAAAGTCATAAAACATGGTCCTCAAAGGTCAAT
GAACAAAAGGCAAAGAAGACCTGCTACTCCAAAGAAGCCTGTGGGCGAAGTTCACAGTCAATTTAGTACAGGCCA
CGCAAACTCTCCTTGTACCATAATAATAGGGAAAGCTCATACTGAAAAAGTACATGTGCCTGCTCGACCCTACAG
AGTGCTCAACAACTTCATTTCCAACCAAAAAATGGACTTTAAGGAAGATCTTTCAGGAATAGCTGAAATGTTCAA
GACCCCAGTGAAGGAGCAACCGCAGTTGACAAGCACATGTCACATCGCTATTTCAAATTCAGAGAATTTGCTTGG
AAAACAGTTTCAAGGAACTGATTCAGGAGAAGAACCTCTGCTCCCCACCTCAGAGAGTTTTGGAGGAAATGTGTT
CTTCAGTGCACAGAATGCAGCAAAACAGCCATCTGATAAATGCTCTGCAAGCCCTCCCTTAAGACGGCAGTGTAT
TAGAGAAAATGGAAACGTAGCAAAAACGCCCAGGAACACCTACAAAATGACTTCTCTGGAGACAAAAACTTCAGA
TACTGAGACAGAGCCTTCAAAAACAGTATCCACTGTAAACAGGTCAGGAAGGTCTACAGAGTTCAGGAATATACA
GAAGCTACCTGTGGAAAGTAAGAGTGAAGAAACAAATACAGAAATTGTTGAGTGCATCCTAAAAAGAGGTCAGAA
GGCAACACTACTACAACAAAGGAGAGAAGGAGAGATGAAGGAAATAGAAAGACCTTTTGAGACATATAAGGAAAA
TATTGAATTAAAAGAAAACGATGAAAAGATGAAAGCAATGAAGAGATCAAGAACTTGGGGGCAGAAATGTGCACC
AATGTCTGACCTGACAGACCTCAAGAGCTTGCCTGATACAGAACTCATGAAAGACACGGCACGTGGCCAGAATCT
CCTCCAAACCCAAGATCATGCCAAGGCACCAAAGAGTGAGAAAGGCAAAATCACTAAAATGCCCTGCCAGTCATT
ACAACCAGAACCAATAAACACCCCAACACACACAAAACAACAGTTGAAGGCATCCCTGGGGAAAGTAGGTGTGAA
AGAAGAGCTCCTAGCAGTCGGCAAGTTCACACGGACGTCAGGGGAGACCACGCACACGCACAGAGAGCCAGCAGG
AGATGGCAAGAGCATCAGAACGTTTAAGGAGTCTCCAAAGCAGATCCTGGACCCAGCAGCCCGTGTAACTGGAAT
GAAGAAGTGGCCAAGAACGCCTAAGGAAGAGGCCCAGTCACTAGAAGACCTGGCTGGCTTCAAAGAGCTCTTCCA
GACACCAGGTCCCTCTGAGGAATCAATGACTGATGAGAAAACTACCAAAATAGCCTGCAAATCTCCACCACCAGA

FIGURE 2653B

ATCAGTGGACACTCCAACAAGCACAAAGCAATGGCCTAAGAGAAGTCTCAGGAAAGCAGATGTAGAGGAAGAATT
CTTAGCACTCAGGAAACTAACACCATCAGCAGGGAAAGCCATGCTTACGCCCAAACCAGCAGGAGGTGATGAGAA
AGACATTAAAGCATTTATGGGAACTCCAGTGCAGAAACTGGACCTGGCAGGAACTTTACCTGGCAGCAAAAGACA
GCTACAGACTCCTAAGGAAAAGGCCCAGGCTCTAGAAGACCTGGCTGGCTTTAAAGAGCTCTTCCAGACTCCTGG
TCACACCGAGGAATTAGTGGCTGCTGGTAAAACCACTAAAATACCCTGCGACTCTCCACAGTCAGACCCAGTGGA
CACCCCAACAAGCACAAAGCAACGACCCAAGAGAAGTATCAGGAAAGCAGATGTAGAGGGAGAACTCTTAGCGTG
CAGGAATCTAATGCCATCAGCAGGCAAAGCCATGCACACGCCTAAACCATCAGTAGGTGAAGAGAAAGACATCAT
CATATTTGTGGGAACTCCAGTGCAGAAACTGGACCTGACAGAGAACTTAACCGGCAGCAAGAGACGGCCACAAAC
TCCTAAGGAAGAGGCCCAGGCTCTGGAAGACCTGACTGGCTTTAAAGAGCTCTTCCAGACCCCTGGTCATACTGA
AGAAGCAGTGGCTGCTGGCAAAACTACTAAAATGCCCTGCGAATCTTCTCCACCAGAATCAGCAGACACCCCAAC
AAGCACAAGAAGGCAGCCCAAGACACCTTTGGAGAAAAGGGACGTACAGAAGGAGCTCTCAGCCCTGAAGAAGCT
CACACAGACATCAGGGGAAACCACACACACAGATAAAGTACCAGGAGGTGAGGATAAAAGCATCAACGCGTTTAG
GGAAACTGCAAAACAGAAACTGGACCCAGCAGCAAGTGTAACTGGTAGCAAGAGGCACCCAAAAACTAAGGAAAA
GGCCCAACCCCTAGAAGACCTGGCTGGCTGGAAAGAGCTCTTCCAGACACCAGTATGCACTGACAAGCCCACGAC
TCACGAGAAAACTACCAAAATAGCCTGCAGATCACAACCAGACCCAGTGGACACACCAACAAGCTCCAAGCCACA
GTCCAAGAGAAGTCTCAGGAAAGTGGACGTAGAAGAAGAATTCTTCGCACTCAGGAAACGAACACCATCAGCAGG
CAAAGCCATGCACACACCCAAACCAGCAGTAAGTGGTGAGAAAAACATCTACGCATTTATGGGAACTCCAGTGCA
GAAACTGGACCTGACAGAGAACTTAACTGGCAGCAAGAGACGGCTACAAACTCCTAAGGAAAAGGCCCAGGCTCT
AGAAGACCTGGCTGGCTTTAAAGAGCTCTTCCAGACACGAGGTCACACTGAGGAATCAATGACTAACGATAAAAC
TGCCAAAGTAGCCTGCAAATCTTCACAACCAGACCTAGACAAAAACCCAGCAAGCTCCAAGCGACGGCTCAAGAC
ATCCCTGGGGAAAGTGGGCGTGAAAGAAGAGCTCCTAGCAGTTGGCAAGCTCACACAGACATCAGGAGAGACTAC
ACACACACACACAGAGCCAACAGGAGATGGTAAGAGCATGAAAGCATTTATGGAGTCTCCAAAGCAGATCTTAGA
CTCAGCAGCAAGTCTAACTGGCAGCAAGAGGCAGCTGAGAACTCCTAAGGGAAAGTCTGAAGTCCCTGAAGACCT
GGCCGGCTTCATCGAGCTCTTCCAGACACCAAGTCACACTAAGGAATCAATGACTAATGAAAAAACTACCAAAGT
ATCCTACAGAGCTTCACAGCCAGACCTAGTGGACACCCCAACAAGCTCCAAGCCACAGCCCAAGAGAAGTCTCAG
GAAAGCAGACACTGAAGAAGAATTTTTAGCATTTAGGAAACAAACGCCATCAGCAGGCAAAGCCATGCACACACC
CAAACCAGCAGTAGGTGAAGAGAAAGACATCAACACGTTTTTGGGAACTCCAGTGCAGAAACTGGACCAGCCAGG
AAATTTACCTGGCAGCAATAGACGGCTACAAACTCGTAAGGAAAAGGCCCAGGCTCTAGAAGAACTGACTGGCTT
CAGAGAGCTTTTCCAGACACCATGCACTGATAACCCCACAGCTGATGAGAAAACTACCAAAAAAATACTCTGCAA
ATCTCCGCAATCAGACCCAGCGGACACCCCAACAAACACAAAGCAACGGCCCAAGAGAAGCCTCAAGAAAGCAGA
CGTAGAGGAAGAATTTTTAGCATTCAGGAAACTAACACCATCAGCAGGCAAAGCCATGCACACGCCTAAAGCAGC
AGTAGGTGAAGAGAAAGACATCAACACATTTGTGGGGACTCCAGTGGAGAAACTGGACCTGCTAGGAAATTTACC
TGGCAGCAAGAGACGGCCACAAACTCCTAAAGAAAAGGCCAAGGCTCTAGAAGATCTGGCTGGCTTCAAAGAGCT
CTTCCAGACACCAGGTCACACTGAGGAATCAATGACCGATGACAAAATCACAGAAGTATCCTGCAAATCTCCACA
ACCAGACCCAGTCAAAACCCCAACAAGCTCCAAGCAACGACTCAAGATATCCTTGGGGAAAGTAGGTGTGAAAGA
AGAGGTCCTACCAGTCGGCAAGCTCACACAGACGTCAGGGAAGACCACACAGACACACAGAGAGACAGCAGGAGA
TGGAAAGAGCATCAAAGCGTTTAAGGAATCTGCAAAGCAGATGCTGGACCCAGCAAACTATGGAACTGGGATGGA
GAGGTGGCCAAGAACACCTAAGGAAGAGGCCCAATCACTAGAAGACCTGGCCGGCTTCAAAGAGCTCTTCCAGAC
ACCAGACCACACTGAGGAATCAACAACTGATGACAAAACTACCAAAATAGCCTGCAAATCTCCACCACCAGAATC
AATGGACACTCCAACAAGCACAAGGAGGCGGCCCAAAACACCTTTGGGGAAAAGGGATATAGTGGAAGAGCTCTC
AGCCCTGAAGCAGCTCACACAGACCACACACACAGACAAAGTACCAGGAGATGAGGATAAAGGCATCAACGTGTT
CAGGGAAACTGCAAAACAGAAACTGGACCCAGCAGCAAGTGTAACTGGTAGCAAGAGGCAGCCAAGAACTCCTAA
GGGAAAAGCCCAACCCCTAGAAGACTTGGCTGGCTTGAAAGAGCTCTTCCAGACACCAGTATGCACTGACAAGCC
CACGACTCACGAGAAAACTACCAAAATAGCCTGCAGATCTCCACAACCAGACCCAGTGGGTACCCCAACAATCTT
CAAGCCACAGTCCAAGAGAAGTCTCAGGAAAGCAGACGTAGAGGAAGAATCCTTAGCACTCAGGAAACGAACACC
ATCAGTAGGGAAAGCTATGGACACACCCAAACCAGCAGGAGGTGATGAGAAAGACATGAAAGCATTTATGGGAAC
TCCAGTGCAGAAATTGGACCTGCCAGGAAATTTACCTGGCAGCAAAAGATGGCCACAAACTCCTAAGGAAAAGGC
CCAGGCTCTAGAAGACCTGGCTGGCTTCAAAGAGCTCTTCCAGACACCAGGCACTGACAAGCCCACGACTGATGA

FIGURE 2653C

GAAAACTACCAAAATAGCCTGCAAATCTCCACAACCAGACCCAGTGGACACCCCAGCAAGCACAAAGCAACGGCC
CAAGAGAAACCTCAGGAAAGCAGACGTAGAGGAAGAATTTTTAGCACTCAGGAAACGAACACCATCAGCAGGCAA
AGCCATGGACACCCCAAAACCAGCAGTAAGTGATGAGAAAAATATCAACACATTTGTGGAAACTCCAGTGCAGAA
ACTGGACCTGCTAGGAAATTTACCTGGCAGCAAGAGACAGCCACAGACTCCTAAGGAAAAGGCTGAGGCTCTAGA
GGACCTGGTTGGCTTCAAAGAACTCTTCCAGACACCAGGTCACACTGAGGAATCAATGACTGATGACAAAATCAC
AGAAGTATCCTGTAAATCTCCACAGCCAGAGTCATTCAAAACCTCAAGAAGCTCCAAGCAAAGGCTCAAGATACC
CCTGGTGAAAGTGGACATGAAAGAAGAGCCCCTAGCAGTCAGCAAGCTCACACGGACATCAGGGGAGACTACGCA
AACACACACAGAGCCAACAGGAGATAGTAAGAGCATCAAAGCGTTTAAGGAGTCTCCAAAGCAGATCCTGGACCC
AGCAGCAAGTGTAACTGGTAGCAGGAGGCAGCTGAGAACTCGTAAGGAAAAGGCCCGTGCTCTAGAAGACCTGGT
TGACTTCAAAGAGCTCTTCTCAGCACCAGGTCACACTGAAGAGTCAATGACTATTGACAAAAACACAAAAATTCC
CTGCAAATCTCCCCCACCAGAACTAACAGACACTGCCACGAGCACAAAGAGATGCCCCAAGACACGTCCCAGGAA
AGAAGTAAAAGAGGAGCTCTCAGCAGTTGAGAGGCTCACGCAAACATCAGGGCAAAGCACACACACACACAAAGA
ACCAGCAAGCGGTGATGAGGGCATCAAAGTATTGAAGCAACGTGCAAAGAAGAAACCAAACCCAGTAGAAGAGGA
ACCCAGCAGGAGAAGGCCAAGAGCACCTAAGGAAAAGGCCCAACCCCTGGAAGACCTGGCCGGCTTCACAGAGCT
CTCTGAAACATCAGGTCACACTCAGGAATCACTGACTGCTGGCAAAGCCACTAAAATACCCTGCGAATCTCCCCC
ACTAGAAGTGGTAGACACCACAGCAAGCACAAAGAGGCATCTCAGGACACGTGTGCAGAAGGTACAAGTAAAAGA
AGAGCCTTCAGCAGTCAAGTTCACACAAACATCAGGGGAAACCACGGATGCAGACAAAGAACCAGCAGGTGAAGA
TAAAGGCATCAAAGCATTGAAGGAATCTGCAAAACAGACACCGGCTCCAGCAGCAAGTGTAACTGGCAGCAGGAG
ACGGCCAAGAGCACCCAGGGAAAGTGCCCAAGCCATAGAAGACCTAGCTGGCTTCAAAGACCCAGCAGCAGGTCA
CACTGAAGAATCAATGACTGATGACAAAACCACTAAAATACCCTGCAAATCATCACCAGAACTAGAAGACACCGC
AACAAGCTCAAAGAGACGGCCCAGGACACGTGCCCAGAAAGTAGAAGTGAAGGAGGAGCTGTTAGCAGTTGGCAA
GCTCACACAAACCTCAGGGGAGACCACGCACACCGACAAAGAGCCGGTAGGTGAGGGCAAAGGCACGAAAGCATT
TAAGCAACCTGCAAAGCGGAACGTGGACGCAGAAGATGTAATTGGCAGCAGGAGACAGCCAAGAGCACCTAAGGA
AAAGGCCCAACCCCTGGAAGACCTGGCCAGCTTCCAAGAGCTCTCTCAAACACCAGGCCACACTGAGGAACTGGC
AAATGGTGCTGCTGATAGCTTTACAAGCGCTCCAAAGCAAACACCTGACAGTGGAAAACCTCTAAAAATATCCAG
AAGAGTTCTTCGGGCCCCTAAAGTAGAACCCGTGGGAGACGTGGTAAGCACCAGAGACCCTGTAAAATCACAAAG
CAAAAGCAACACTTCCCTGCCCCCACTGCCCTTCAAGAGGGGAGGTGGCAAAGATGGAAGCGTCACGGGAACCAA
GAGGCTGCGCTGCATGCCAGCACCAGAGGAAATTGTGGAGGAGCTGCCAGCCAGCAAGAAGCAGAGGGTTGCTCC
CAGGGCAAGAGGCAAATCATCCGAACCCGTGGTCATCATGAAGAGAAGTTTGAGGACTTCTGCAAAAAGAATTGA
ACCTGCGGAAGAGCTGAACAGCAACGACATGAAAACCAACAAAGAGGAACACAAATTACAAGACTCGGTCCCTGA
AAATAAGGGAATATCCCTGCGCTCCAGACGCCAAGATAAGACTGAGGCAGAACAGCAAATAACTGAGGTCTTTGT
ATTAGCAGAAAGAATAGAAATAAACAGAAATGAAAAGAAGCCCATGAAGACCTCCCCAGAGATGGACATTCAGAA
TCCAGATGATGGAGCCCGGAAACCCATACCTAGAGACAAAGTCACTGAGAACAAAAGGTGCTTGAGGTCTGCTAG
ACAGAATGAGAGCTCCCAGCCTAAGGTGGCAGAGGAGAGCGGAGGGCAGAAGAGTGCGAAGGTTCTCATGCAGAA
TCAGAAAGGGAAAGGAGAAGCAGGAAATTCAGACTCCATGTGCCTGAGATCAAGAAAGACAAAAAGCCAGCCTGC
AGCAAGCACTTTGGAGAGCAAATCTGTGCAGAGAGTAACGCGGAGTGTCAAGAGGTGTGCAGAAAATCCAAAGAA
GGCTGAGGACAATGTGTGTGTCAAGAAAATAACAACCAGAAGTCATAGGGACAGTGAAGATATT**TGA**CAGAAAAA
TCGAACTGGGAAAAATATAATAAAGTTAGTTTTGTGATAAGTTCTAGTGCAGTTTTTGTCATAAATTACAAGTGA
ATTCTGTAAGTAAGGCTGTCAGTCTGCTTAAGGGAAGAAAACTTTGGATTTGCTGGGTCTGAATCGGCTTCATAA
ACTCCACTGGGAGCACTGCTGGGCTCCTGGACTGAGAATAGTTGAACACCGGGGGCTTTGTGAAGGAGTCTGGGC
CAAGGTTTGCCCTCAGCTTTGCAGAATGAAGCCTTGAGGTCTGTCACCACCCACAGCCACCCTACAGCAGCCTTA
ACTGTGACACTTGCCACACTGTGTCGTCGTTTGTTTGCCTATGTTCTCCAGGGCACGGTGGCAGGAACAACTATC
CTCGTCTGTCCCAACACTGAGCAGGCACTCGGTAAACACGAATGAATGGATAAGCGCACGGATGAATGGAGCTTA
CAAGATCTGTCTTTCCAATGGCCGGGGGCATTTGGTCCCCAAATTAAGGCTATTGGACATCTGCACAGGACAGTC
CTATTTTTGATGTCCTTTCCTTTCTGAAAATAAAGTTTTGTGCTTTGGAGAATGACTCGTGAGCACATCTTTAGG
GACCAAGAGTGACTTTCTGTAAGGAGTGACTCGTGGCTTGCCTTGGTCTCTTGGGAATACTTTTCTAACTAGGGT
TGCTCTCACCTGAGACATTCTCCACCCGCGGAATCTCAGGGTCCCAGGCTGTGGGCCATCACGACCTCAAACTGG
CTCCTAATCTCCAGCTTTCCTGTCATTGAAAGCTTCGGAAGTTTACTGGCTCTGCTCCCGCCTGTTTTCTTTCTG

FIGURE 2653D

ACTCTATCTGGCAGCCCGATGCCACCCAGTACAGGAAGTGACACCAGTACTCTGTAAAGCATCATCATCCTTGGA
GAGACTGAGCACTCAGCACCTTCAGCCACGATTTCAGGATCGCTTCCTTGTGAGCCGCTGCCTCCGAAATCTCCT
TTGAAGCCCAGACATCTTTCTCCAGCTTCAGACTTGTAGATATAACTCGTTCATCTTCATTTACTTTCCACTTTG
CCCCCTGTCCTCTCTGTGTTCCCCAAATCAGAGAATAGCCCGCCATCCCCCAGATCACCTGTCTGGATTCCTCCC
CATTCACCCACCTTGCCAGGTGCAGGTGAGGATGGTGCACCAGACAGGGTAGCTGTCCCCCAAAATGTGCCCTGT
GCGGGCAGTGCCCTGTCTCCACGTTTGTTTCCCCAGTGTCTGGCGGGGAGCCAGGTGACATCATAAATACTTGCT
GAATGAATGCAGAAATCAGCGGTACTGACTTGTACTATATTGGCTGCCATGATAGGGTTCTCACAGCGTCATCCA
TGATCGTAAGGGAGAATGACATTCTGCTTGAGGGAGGGAATAGAAAGGGGCAGGGAGGGGACATCTGAGGGCTTC
ACAGGGCTGCAAAGGGTACAGGGATTGCACCAGGGCAGAACAGGGGAGGGTGTTCAAGGAAGAGTGGCTCTTAGC
AGAGGCACTTTGGAAGGTGTGAGGCATAAATGCTTCCTTCTACGTAGGCCAACCTCAAAACTTTCAGTAGGAATG
TTGCTATGATCAAGTTGTTCTAACACTTTAGACTTAGTAGTAATTATGAACCTCACATAGAAAAATTTCATCCAG
CCATATGCCTGTGGAGTGGAATATTCTGTTTAGTAGAAAAATCCTTTAGAGTTCAGCTCTAACCAGAAATCTTGC
TGAAGTATGTCAGCACCTTTTCTCACCCTGGTAAGTACAGTATTTCAAGAGCACGCTAAGGGTGGTTTTCATTTT
ACAGGGCTGTTGATGATGGGTTAAAAATGTTCATTTAAGGGCTACCCCCGTGTTTAATAGATGAACACCACTTCT
ACACAACCCTCCTTGGTACTGGGGGAGGGAGAGATCTGACAAATACTGCCCATTCCCCTAGGCTGACTGGATTTG
AGAACAAATACCCACCCATTTCCACCATGGTATGGTAACTTCTCTGAGCTTCAGTTTCCAAGTGAATTTCCATGT
AATAGGACATTCCCATTAAATACAAGCTGTTTTTACTTTTTCGCCTCCCAGGGCCTGTGCGATCTGGTCCCCCAG
CCTCTCTTGGGCTTTCTTACACTAACTCTGTACCTACCATCTCCTGCCTCCCTTAGGCAGGCACCTCCAACCACC
ACACACTCCCTGCTGTTTTCCCTGCCTGGAACTTTCCCACCAGCCCCACCAAGATCATTTCATCCAGTCCTGAGC
TCAGCTTAAGGGAGGCTTCTTGCCTGTGGGTTCCCTCACCCCCATGCCTGTCCTCCAGGCTGGGGCAGGTTCTTA
GTTTGCCTGGAATTGTTCTGTACCTCTTTGTAGCACGTAGTGTTGTGAAACTAAGCCACTAATTGAGTTTCTGGC
TCCCCTCCTGGGGTTGTAAGTTTTGTTCATTCATGAGGGCCGACTGTATTTCCTGGTTACTGTATCCCAGTGACC
AGCCACAGGAGATGTCCAATAAAGTATGTGATGAAATGGTCTTAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2654

MWPTRRLVTIKRSGVDGPHFPLSLSTCLFGRGIECDIRIQLPVVSKQHCKIEIHEQEAILHNFSSTNPTQVNGSV
IDEPVRLKHGDVITIIDRSFRYENESLQNGRKSTEFPRKIREQEPARRVSRSSFSSDPDEKAQDSKAYSKITEGK
VSGNPQVHIKNVKEDSTADDSKDSVAQGTTNVHSSEHAGRNGRNAADPISGDFKEISSVKLVSRYGELKSVPTTQ
CLDNSKKNESPFWKLYESVKKELDVKSQKENVLQYCRKSGLQTDYATEKESADGLQGETQLLVSRKSRPKSGGSG
HAVAEPASPEQELDQNKGKGRDVESVQTPSKAVGASFPLYEPAKMKTPVQYSQQQNSPQKHKNKDLYTTGRRESV
NLGKSEGFKAGDKTLTPRKLSTRNRTPAKVEDAADSATKPENLSSKTRGSIPTDVEVLPTETEIHNEPFLTLWLT
QVERKIQKDSLSKPEKLGTTAGQMCSGLPGLSSVDINNFGDSINESEGIPLKRRRVSFGGHLRPELFDENLPPNT
PLKRGEAPTKRKSLVMHTPPVLKKIIKEQPQPSGKQESGSEIHVEVKAQSLVISPPAPSPRKTPVASDQRRRSCK
TAPASSSKSQTEVPKRGGERVATCLQKRVSISRSQHDILQMICSKRRSGASEANLIVAKSWADVVKLGAKQTQTK
VIKHGPQRSMNKRQRRPATPKKPVGEVHSQFSTGHANSPCTIIIGKAHTEKVHVPARPYRVLNNFISNQKMDFKE
DLSGIAEMFKTPVKEQPQLTSTCHIAISNSENLLGKQFQGTDSGEEPLLPTSESFGGNVFFSAQNAAKQPSDKCS
ASPPLRRQCIRENGNVAKTPRNTYKMTSLETKTSDTETEPSKTVSTVNRSGRSTEFRNIQKLPVESKSEETNTEI
VECILKRGQKATLLQQRREGEMKEIERPFETYKENIELKENDEKMKAMKRSRTWGQKCAPMSDLTDLKSLPDTEL
MKDTARGQNLLQTQDHAKAPKSEKGKITKMPCQSLQPEPINTPTHTKQQLKASLGKVGVKEELLAVGKFTRTSGE
TTHTHREPAGDGKSIRTFKESPKQILDPAARVTGMKKWPRTPKEEAQSLEDLAGFKELFQTPGPSEESMTDEKTT
KIACKSPPPESVDTPTSTKQWPKRSLRKADVEEEFLALRKLTPSAGKAMLTPKPAGGDEKDIKAFMGTPVQKLDL
AGTLPGSKRQLQTPKEKAQALEDLAGFKELFQTPGHTEELVAAGKTTKIPCDSPQSDPVDTPTSTKQRPKRSIRK
ADVEGELLACRNLMPSAGKAMHTPKPSVGEEKDIIIFVGTPVQKLDLTENLTGSKRRPQTPKEEAQALEDLTGFK
ELFQTPGHTEEAVAAGKTTKMPCESSPPESADTPTSTRRQPKTPLEKRDVQKELSALKKLTQTSGETTHTDKVPG
GEDKSINAFRETAKQKLDPAASVTGSKRHPKTKEKAQPLEDLAGWKELFQTPVCTDKPTTHEKTTKIACRSQPDP
VDTPTSSKPQSKRSLRKVDVEEEFFALRKRTPSAGKAMHTPKPAVSGEKNIYAFMGTPVQKLDLTENLTGSKRRL
QTPKEKAQALEDLAGFKELFQTRGHTEESMTNDKTAKVACKSSQPDLDKNPASSKRRLKTSLGKVGVKEELLAVG
KLTQTSGETTHTHTEPTGDGKSMKAFMESPKQILDSAASLTGSKRQLRTPKGKSEVPEDLAGFIELFQTPSHTKE
SMTNEKTTKVSYRASQPDLVDTPTSSKPQPKRSLRKADTEEEFLAFRKQTPSAGKAMHTPKPAVGEEKDINTFLG
TPVQKLDQPGNLPGSNRRLQTRKEKAQALEELTGFRELFQTPCTDNPTADEKTTKKILCKSPQSDPADTPTNTKQ
RPKRSLKKADVEEEFLAFRKLTPSAGKAMHTPKAAVGEEKDINTFVGTPVEKLDLLGNLPGSKRRPQTPKEKAKA
LEDLAGFKELFQTPGHTEESMTDDKITEVSCKSPQPDPVKTPTSSKQRLKISLGKVGVKEEVLPVGKLTQTSGKT
TQTHRETAGDGKSIKAFKESAKQMLDPANYGTGMERWPRTPKEEAQSLEDLAGFKELFQTPDHTEESTTDDKTTK
IACKSPPPESMDTPTSTRRRPKTPLGKRDIVEELSALKQLTQTTHTDKVPGDEDKGINVFRETAKQKLDPAASVT
GSKRQPRTPKGKAQPLEDLAGLKELFQTPVCTDKPTTHEKTTKIACRSPQPDPVGTPTIFKPQSKRSLRKADVEE
ESLALRKRTPSVGKAMDTPKPAGGDEKDMKAFMGTPVQKLDLPGNLPGSKRWPQTPKEKAQALEDLAGFKELFQT
PGTDKPTTDEKTTKIACKSPQPDPVDTPASTKQRPKRNLRKADVEEEFLALRKRTPSAGKAMDTPKPAVSDEKNI
NTFVETPVQKLDLLGNLPGSKRQPQTPKEKAEALEDLVGFKELFQTPGHTEESMTDDKITEVSCKSPQPESFKTS
RSSKQRLKIPLVKVDMKEEPLAVSKLTRTSGETTQTHTEPTGDSKSIKAFKESPKQILDPAASVTGSRRQLRTRK
EKARALEDLVDFKELFSAPGHTEESMTIDKNTKIPCKSPPPELTDTATSTKRCPKTRPRKEVKEELSAVERLTQT
SGQSTHTHKEPASGDEGIKVLKQRAKKKPNPVEEEPSRRRPRAPKEKAQPLEDLAGFTELSETSGHTQESLTAGK
ATKIPCESPPLEVVDTTASTKRHLRTRVQKVQVKEEPSAVKFTQTSGETTDADKEPAGEDKGIKALKESAKQTPA
PAASVTGSRRRPRAPRESAQAIEDLAGFKDPAAGHTEESMTDDKTTKIPCKSSPELEDTATSSKRRPRTRAQKVE
VKEELLAVGKLTQTSGETTHTDKEPVGEGKGTKAFKQPAKRNVDAEDVIGSRRQPRAPKEKAQPLEDLASFQELS
QTPGHTEELANGAADSFTSAPKQTPDSGKPLKISRRVLRAPKVEPVGDVVSTRDPVKSQSKSNTSLPPLPFKRGG
GKDGSVTGTKRLRCMPAPEEIVEELPASKKQRVAPRARGKSSEPVVIMKRSLRTSAKRIEPAEELNSNDMKTNKE
EHKLQDSVPENKGISLRSRRQDKTEAEQQITEVFVLAERIEINRNEKKPMKTSPEMDIQNPDDGARKPIPRDKVT
ENKRCLRSARQNESSQPKVAEESGGQKSAKVLMQNQKGKGEAGNSDSMCLRSRKTKSQPAASTLESKSVQRVTRS
VKRCAENPKKAEDNVCVKKITTRSHRDSEDI

FIGURE 2655A

CTACCGGGCGGAGGTGAGCGCGGCGCCGGCTCCTCCTGCGGCGGACTTTGGGTGCGACTTGACGAGCGGTGGTTC
GACAAGTGGCCTTGCGGGCCGGATCGTCCCAGTGGAAGAGTTGTAAATTTGCTTCTGGCCTTCCCCTACGGATTA
TACCTGGCCTTCCCCTACGGATTATACTCAACTTACTGTTTAGAAA**ATG**TGGCCCACGAGACGCCTGGTTACTAT
CAAAAGGAGCGGGGTCGACGGTCCCCACTTTCCCCTGAGCCTCAGCACCTGCTTGTTTGGAAGGGGTATTGAATG
TGACATCCGTATCCAGCTTCCTGTTGTGTCAAAACAACATTGCAAAATTGAAATCCATGAGCAGGAGGCAATATT
ACATAATTTCAGTTCCACAAATCCAACACAAGTAAATGGGTCTGTTATTGATGAGCCTGTACGGCTAAAACATGG
AGATGTAATAACTATTATTGATCGTTCCTTCAGGTATGAAAATGAAAGTCTTCAGAATGGAAGGAAGTCAACTGA
ATTTCCAAGAAAAATACGTGAACAGGAGCCAGCACGTCGTGTCTCAAGATCTAGCTTCTCTTCTGACCCTGATGA
GAGTGAGGGAATACCTTTGAAAAGAAGGCGTGTGTCCTTTGGTGGGCACCTAAGACCTGAACTATTTGATGAAAA
CTTGCCTCCTAATACGCCTCTCAAAAGGGGAGAAGCCCCAACCAAAAGAAAGTCTCTGGTAATGCACACTCCACC
TGTCCTGAAGAAAATCATCAAGGAACAGCCTCAACCATCAGGAAAACAAGAGTCAGGTTCAGAAATCCATGTGGA
AGTGAAGGCACAAAGCTTGGTTATAAGCCCTCCAGCTCCTAGTCCTAGGAAAACTCCAGTTGCCAGTGATCAACG
CCGTAGGTCCTGCAAAACAGCCCCTGCTTCCAGCAGCAAATCTCAGACAGAGGTTCCTAAGAGAGGAGGAGAAAG
AGTGGCAACCTGCCTTCAAAAGAGAGTGTCTATCAGCCGAAGTCAACATGATATTTTACAGATGATATGTTCCAA
AAGAAGAAGTGGTGCTTCGGAAGCAAATCTGATTGTTGCAAAATCATGGGCAGATGTAGTAAAACTTGGTGCAAA
ACAAACACAAACTAAAGTCATAAAACATGGTCCTCAAAGGTCAATGAACAAAAGGCAAAGAAGACCTGCTACTCC
AAAGAAGCCTGTGGGCGAAGTTCACAGTCAATTTAGTACAGGCCACGCAAACTCTCCTTGTACCATAATAATAGG
GAAAGCTCATACTGAAAAAGTACATGTGCCTGCTCGACCCTACAGAGTGCTCAACAACTTCATTTCCAACCAAAA
AATGGACTTTAAGGAAGATCTTTCAGGAATAGCTGAAATGTTCAAGACCCCAGTGAAGGAGCAACCGCAGTTGAC
AAGCACATGTCACATCGCTATTTCAAATTCAGAGAATTTGCTTGGAAAACAGTTTCAAGGAACTGATTCAGGAGA
AGAACCTCTGCTCCCCACCTCAGAGAGTTTTGGAGGAAATGTGTTCTTCAGTGCACAGAATGCAGCAAAACAGCC
ATCTGATAAATGCTCTGCAAGCCCTCCCTTAAGACGGCAGTGTATTAGAGAAAATGGAAACGTAGCAAAAACGCC
CAGGAACACCTACAAAATGACTTCTCTGGAGACAAAAACTTCAGATACTGAGACAGAGCCTTCAAAAACAGTATC
CACTGTAAACAGGTCAGGAAGGTCTACAGAGTTCAGGAATATACAGAAGCTACCTGTGGAAAGTAAGAGTGAAGA
AACAAATACAGAAATTGTTGAGTGCATCCTAAAAAGAGGTCAGAAGGCAACACTACTACAACAAAGGAGAGAAGG
AGAGATGAAGGAAATAGAAAGACCTTTTGAGACATATAAGGAAAATATTGAATTAAAAGAAAACGATGAAAAGAT
GAAAGCAATGAAGAGATCAAGAACTTGGGGGCAGAAATGTGCACCAATGTCTGACCTGACAGACCTCAAGAGCTT
GCCTGATACAGAACTCATGAAAGACACGGCACGTGGCCAGAATCTCCTCCAAACCCAAGATCATGCCAAGGCACC
AAAGAGTGAGAAAGGCAAAATCACTAAAATGCCCTGCCAGTCATTACAACCAGAACCAATAAACACCCCAACACA
CACAAAACAACAGTTGAAGGCATCCCTGGGGAAAGTAGGTGTGAAAGAAGAGCTCCTAGCAGTCGGCAAGTTCAC
ACGGACGTCAGGGGAGACCACGCACACGCACAGAGAGCCAGCAGGAGATGGCAAGAGCATCAGAACGTTTAAGGA
GTCTCCAAAGCAGATCCTGGACCCAGCAGCCCGTGTAACTGGAATGAAGAAGTGGCCAAGAACGCCTAAGGAAGA
GGCCCAGTCACTAGAAGACCTGGCTGGCTTCAAAGAGCTCTTCCAGACACCAGGTCCCTCTGAGGAATCAATGAC
TGATGAGAAAACTACCAAAATAGCCTGCAAATCTCCACCACCAGAATCAGTGGACACTCCAACAAGCACAAAGCA
ATGGCCTAAGAGAAGTCTCAGGAAAGCAGATGTAGAGGAAGAATTCTTAGCACTCAGGAAACTAACACCATCAGC
AGGGAAAGCCATGCTTACGCCCAAACCAGCAGGAGGTGATGAGAAAGACATTAAAGCATTTATGGGAACTCCAGT
GCAGAAACTGGACCTGGCAGGAACTTTACCTGGCAGCAAAAGACAGCTACAGACTCCTAAGGAAAAGGCCCAGGC
TCTAGAAGACCTGGCTGGCTTTAAAGAGCTCTTCCAGACTCCTGGTCACACCGAGGAATTAGTGGCTGCTGGTAA
AACCACTAAAATACCCTGCGACTCTCCACAGTCAGACCCAGTGGACACCCCAACAAGCACAAAGCAACGACCCAA
GAGAAGTATCAGGAAAGCAGATGTAGAGGGAGAACTCTTAGCGTGCAGGAATCTAATGCCATCAGCAGGCAAAGC
CATGCACACGCCTAAACCATCAGTAGGTGAAGAGAAAGACATCATCATATTTGTGGGAACTCCAGTGCAGAAACT
GGACCTGACAGAGAACTTAACCGGCAGCAAGAGACGGCCACAAACTCCTAAGGAAGAGGCCCAGGCTCTGGAAGA
CCTGACTGGCTTTAAAGAGCTCTTCCAGACCCCTGGTCATACTGAAGAAGCAGTGGCTGCTGGCAAAACTACTAA
AATGCCCTGCGAATCTTCTCCACCAGAATCAGCAGACACCCCAACAAGCACAAGAAGGCAGCCCAAGACACCTTT
GGAGAAAAGGGACGTACAGAAGGAGCTCTCAGCCCTGAAGAAGCTCACACAGACATCAGGGGAAACCACACACAC
AGATAAAGTACCAGGAGGTGAGGATAAAAGCATCAACGCGTTTAGGGAAACTGCAAAACAGAAACTGGACCCAGC
AGCAAGTGTAACTGGTAGCAAGAGGCACCCAAAAACTAAGGAAAAGGCCCAACCCCTAGAAGACCTGGCTGGCTG
GAAAGAGCTCTTCCAGACACCAGTATGCACTGACAAGCCCACGACTCACGAGAAAACTACCAAAATAGCCTGCAG

FIGURE 2655B

ATCACAACCAGACCCAGTGGACACACCAACAAGCTCCAAGCCACAGTCCAAGAGAAGTCTCAGGAAAGTGGACGT
AGAAGAAGAATTCTTCGCACTCAGGAAACGAACACCATCAGCAGGCAAAGCCATGCACACACCCAAACCAGCAGT
AAGTGGTGAGAAAAACATCTACGCATTTATGGGAACTCCAGTGCAGAAACTGGACCTGACAGAGAACTTAACTGG
CAGCAAGAGACGGCTACAAACTCCTAAGGAAAAGGCCCAGGCTCTAGAAGACCTGGCTGGCTTTAAAGAGCTCTT
CCAGACACGAGGTCACACTGAGGAATCAATGACTAACGATAAAACTGCCAAAGTAGCCTGCAAATCTTCACAACC
AGACCTAGACAAAAACCCAGCAAGCTCCAAGCGACGGCTCAAGACATCCCTGGGGAAAGTGGGCGTGAAAGAAGA
GCTCCTAGCAGTTGGCAAGCTCACACAGACATCAGGAGAGACTACACACACACACACAGAGCCAACAGGAGATGG
TAAGAGCATGAAAGCATTTATGGAGTCTCCAAAGCAGATCTTAGACTCAGCAGCAAGTCTAACTGGCAGCAAGAG
GCAGCTGAGAACTCCTAAGGGAAAGTCTGAAGTCCCTGAAGACCTGGCCGGCTTCATCGAGCTCTTCCAGACACC
AAGTCACACTAAGGAATCAATGACTAATGAAAAAACTACCAAAGTATCCTACAGAGCTTCACAGCCAGACCTAGT
GGACACCCCAACAAGCTCCAAGCCACAGCCCAAGAGAAGTCTCAGGAAAGCAGACACTGAAGAAGAATTTTTAGC
ATTTAGGAAACAAACGCCATCAGCAGGCAAAGCCATGCACACACCCAAACCAGCAGTAGGTGAAGAGAAAGACAT
CAACACGTTTTTGGGAACTCCAGTGCAGAAACTGGACCAGCCAGGAAATTTACCTGGCAGCAATAGACGGCTACA
AACTCGTAAGGAAAAGGCCCAGGCTCTAGAAGAACTGACTGGCTTCAGAGAGCTTTTCCAGACACCATGCACTGA
TAACCCCACAGCTGATGAGAAAACTACCAAAAAAATACTCTGCAAATCTCCGCAATCAGACCCAGCGGACACCCC
AACAAACACAAAGCAACGGCCCAAGAGAAGCCTCAAGAAAGCAGACGTAGAGGAAGAATTTTTAGCATTCAGGAA
ACTAACACCATCAGCAGGCAAAGCCATGCACACGCCTAAAGCAGCAGTAGGTGAAGAGAAAGACATCAACACATT
TGTGGGGACTCCAGTGGAGAAACTGGACCTGCTAGGAAATTTACCTGGCAGCAAGAGACGGCCACAAACTCCTAA
AGAAAAGGCCAAGGCTCTAGAAGATCTGGCTGGCTTCAAAGAGCTCTTCCAGACACCAGGTCACACTGAGGAATC
AATGACCGATGACAAAATCACAGAAGTATCCTGCAAATCTCCACAACCAGACCCAGTCAAAACCCCAACAAGCTC
CAAGCAACGACTCAAGATATCCTTGGGGAAAGTAGGTGTGAAAGAAGAGGTCCTACCAGTCGGCAAGCTCACACA
GACGTCAGGGAAGACCACACAGACACACAGAGAGACAGCAGGAGATGGAAAGAGCATCAAAGCGTTTAAGGAATC
TGCAAAGCAGATGCTGGACCCAGCAAACTATGGAACTGGGATGGAGAGGTGGCCAAGAACACCTAAGGAAGAGGC
CCAATCACTAGAAGACCTGGCCGGCTTCAAAGAGCTCTTCCAGACACCAGACCACACTGAGGAATCAACAACTGA
TGACAAAACTACCAAAATAGCCTGCAAATCTCCACCACCAGAATCAATGGACACTCCAACAAGCACAAGGAGGCG
GCCCAAAACACCTTTGGGGAAAAGGGATATAGTGGAAGAGCTCTCAGCCCTGAAGCAGCTCACACAGACCACACA
CACAGACAAAGTACCAGGAGATGAGGATAAAGGCATCAACGTGTTCAGGGAAACTGCAAAACAGAAACTGGACCC
AGCAGCAAGTGTAACTGGTAGCAAGAGGCAGCCAAGAACTCCTAAGGGAAAAGCCCAACCCCTAGAAGACTTGGC
TGGCTTGAAAGAGCTCTTCCAGACACCAGTATGCACTGACAAGCCCACGACTCACGAGAAAACTACCAAAATAGC
CTGCAGATCTCCACAACCAGACCCAGTGGGTACCCCAACAATCTTCAAGCCACAGTCCAAGAGAAGTCTCAGGAA
AGCAGACGTAGAGGAAGAATCCTTAGCACTCAGGAAACGAACACCATCAGTAGGGAAAGCTATGGACACACCCAA
ACCAGCAGGAGGTGATGAGAAAGACATGAAAGCATTTATGGGAACTCCAGTGCAGAAATTGGACCTGCCAGGAAA
TTTACCTGGCAGCAAAAGATGGCCACAAACTCCTAAGGAAAAGGCCCAGGCTCTAGAAGACCTGGCTGGCTTCAA
AGAGCTCTTCCAGACACCAGGCACTGACAAGCCCACGACTGATGAGAAAACTACCAAAATAGCCTGCAAATCTCC
ACAACCAGACCCAGTGGACACCCCAGCAAGCACAAAGCAACGGCCCAAGAGAAACCTCAGGAAAGCAGACGTAGA
GGAAGAATTTTTAGCACTCAGGAAACGAACACCATCAGCAGGCAAAGCCATGGACACCCCAAAACCAGCAGTAAG
TGATGAGAAAAATATCAACACATTTGTGGAAACTCCAGTGCAGAAACTGGACCTGCTAGGAAATTTACCTGGCAG
CAAGAGACAGCCACAGACTCCTAAGGAAAAGGCTGAGGCTCTAGAGGACCTGGTTGGCTTCAAAGAACTCTTCCA
GACACCAGGTCACACTGAGGAATCAATGACTGATGACAAAATCACAGAAGTATCCTGTAAATCTCCACAGCCAGA
GTCATTCAAAACCTCAAGAAGCTCCAAGCAAAGGCTCAAGATACCCCTGGTGAAAGTGGACATGAAAGAAGAGCC
CCTAGCAGTCAGCAAGCTCACACGGACATCAGGGGAGACTACGCAAACACACACAGAGCCAACAGGAGATAGTAA
GAGCATCAAAGCGTTTAAGGAGTCTCCAAAGCAGATCCTGGACCCAGCAGCAAGTGTAACTGGTAGCAGGAGGCA
GCTGAGAACTCGTAAGGAAAAGGCCCGTGCTCTAGAAGACCTGGTTGACTTCAAAGAGCTCTTCTCAGCACCAGG
TCACACTGAAGAGTCAATGACTATTGACAAAAACACAAAAATTCCCTGCAAATCTCCCCCACCAGAACTAACAGA
CACTGCCACGAGCACAAAGAGATGCCCCAAGACACGTCCCAGGAAAGAAGTAAAAGAGGAGCTCTCAGCAGTTGA
GAGGCTCACGCAAACATCAGGGCAAAGCACACACACACACAAAGAACCAGCAAGCGGTGATGAGGGCATCAAAGT
ATTGAAGCAACGTGCAAAGAAGAAACCAAACCCAGTAGAAGAGGAACCCAGCAGGAGAAGGCCAAGAGCACCTAA
GGAAAAGGCCCAACCCCTGGAAGACCTGGCCGGCTTCACAGAGCTCTCTGAAACATCAGGTCACACTCAGGAATC

FIGURE 2655C

ACTGACTGCTGGCAAAGCCACTAAAATACCCTGCGAATCTCCCCCACTAGAAGTGGTAGACACCACAGCAAGCAC
AAAGAGGCATCTCAGGACACGTGTGCAGAAGGTACAAGTAAAAGAAGAGCCTTCAGCAGTCAAGTTCACACAAAC
ATCAGGGGAAACCACGGATGCAGACAAAGAACCAGCAGGTGAAGATAAAGGCATCAAAGCATTGAAGGAATCTGC
AAAACAGACACCGGCTCCAGCAGCAAGTGTAACTGGCAGCAGGAGACGGCCAAGAGCACCCAGGGAAAGTGCCCA
AGCCATAGAAGACCTAGCTGGCTTCAAAGACCCAGCAGCAGGTCACACTGAAGAATCAATGACTGATGACAAAAC
CACTAAAATACCCTGCAAATCATCACCAGAACTAGAAGACACCGCAACAAGCTCAAAGAGACGGCCCAGGACACG
TGCCCAGAAAGTAGAAGTGAAGGAGGAGCTGTTAGCAGTTGGCAAGCTCACACAAACCTCAGGGGAGACCACGCA
CACCGACAAAGAGCCGGTAGGTGAGGGCAAAGGCACGAAAGCATTTAAGCAACCTGCAAAGCGGAACGTGGACGC
AGAAGATGTAATTGGCAGCAGGAGACAGCCAAGAGCACCTAAGGAAAAGGCCCAACCCCTGGAAGACCTGGCCAG
CTTCCAAGAGCTCTCTCAAACACCAGGCCACACTGAGGAACTGGCAAATGGTGCTGCTGATAGCTTTACAAGCGC
TCCAAAGCAAACACCTGACAGTGGAAAACCTCTAAAAATATCCAGAAGAGTTCTTCGGGCCCCTAAAGTAGAACC
CGTGGGAGACGTGGTAAGCACCAGAGACCCTGTAAAATCACAAAGCAAAAGCAACACTTCCCTGCCCCCACTGCC
CTTCAAGAGGGGAGGTGGCAAAGATGGAAGCGTCACGGGAACCAAGAGGCTGCGCTGCATGCCAGCACCAGAGGA
AATTGTGGAGGAGCTGCCAGCCAGCAAGAAGCAGAGGGTTGCTCCCAGGGCAAGAGGCAAATCATCCGAACCCGT
GGTCATCATGAAGAGAAGTTTGAGGACTTCTGCAAAAAGAATTGAACCTGCGGAAGAGCTGAACAGCAACGACAT
GAAAACCAACAAAGAGGAACACAAATTACAAGACTCGGTCCCTGAAAATAAGGGAATATCCCTGCGCTCCAGACG
CCAAGATAAGACTGAGGCAGAACAGCAAATAACTGAGGTCTTTGTATTAGCAGAAAGAATAGAAATAAACAGAAA
TGAAAAGAAGCCCATGAAGACCTCCCCAGAGATGGACATTCAGAATCCAGATGATGGAGCCCGGAAACCCATACC
TAGAGACAAAGTCACTGAGAACAAAAGGTGCTTGAGGTCTGCTAGACAGAATGAGAGCTCCCAGCCTAAGGTGGC
AGAGGAGAGCGGAGGGCAGAAGAGTGCGAAGGTTCTCATGCAGAATCAGAAAGGGAAAGGAGAAGCAGGAAATTC
AGACTCCATGTGCCTGAGATCAAGAAAGACAAAAAGCCAGCCTGCAGCAAGCACTTTGGAGAGCAAATCTGTGCA
GAGAGTAACGCGGAGTGTCAAGAGGTGTGCAGAAAATCCAAAGAAGGCTGAGGACAATGTGTGTGTCAAGAAAAT
AACAACCAGAAGTCATAGGGACAGTGAAGATATTTGACAGAAAAATCGAACTGGGAAAAATATAATAAAGTTAGT
TTTGTGATAAGTTCTAGTGCAGTTTTTGTCATAAATTACAAGTGAATTCTGTAAGTAAGGCTGTCAGTCTGCTTA
AGGGAAGAAAACTTTGGATTTGCTGGGTCTGAATCGGCTTCATAAACTCCACTGGGAGCACTGCTGGGCTCCTGG
ACTGAGAATAGTTGAACACCGGGGGCTTTGTGAAGGAGTCTGGGCCAAGGTTTGCCCTCAGCTTTGCAGAATGAA
GCCTTGAGGTCTGTCACCACCCACAGCCACCCTACAGCAGCCTTAACTGTGACACTTGCCACACTGTGTCGTCGT
TTGTTTGCCTATGTTCTCCAGGGCACGGTGGCAGGAACAACTATCCTCGTCTGTCCCAACACTGAGCAGGCACTC
GGTAAACACGAATGAATGGATAAGCGCACGGATGAATGGAGCTTACAAGATCTGTCTTTCCAATGGCCGGGGGCA
TTTGGTCCCCAAATTAAGGCTATTGGACATCTGCACAGGACAGTCCTATTTTTGATGTCCTTTCCTTTCTGAAAA
TAAAGTTTTGTGCTTTGGAGAATGACTCGTGAGCACATCTTTAGGGACCAAGAGTGACTTTCTGTAAGGAGTGAC
TCGTGGCTTGCCTTGGTCTCTTGGGAATACTTTTCTAACTAGGGTTGCTCTCACCTGAGACATTCTCCACCCGCG
GAATCTCAGGGTCCCAGGCTGTGGGCCATCACGACCTCAAACTGGCTCCTAATCTCCAGCTTTCCTGTCATTGAA
AGCTTCGGAAGTTTACTGGCTCTGCTCCCGCCTGTTTTCTTTCTGACTCTATCTGGCAGCCCGATGCCACCCAGT
ACAGGAAGTGACACCAGTACTCTGTAAAGCATCATCATCCTTGGAGAGACTGAGCACTCAGCACCTTCAGCCACG
ATTTCAGGATCGCTTCCTTGTGAGCCGCTGCCTCCGAAATCTCCTTTGAAGCCCAGACATCTTTCTCCAGCTTCA
GACTTGTAGATATAACTCGTTCATCTTCATTTACTTTCCACTTTGCCCCCTGTCCTCTCTGTGTTCCCCAAATCA
GAGAATAGCCCGCCATCCCCCAGATCACCTGTCTGGATTCCTCCCCATTCACCCACCTTGCCAGGTGCAGGTGAG
GATGGTGCACCAGACAGGGTAGCTGTCCCCCAAAATGTGCCCTGTGCGGGCAGTGCCCTGTCTCCACGTTTGTTT
CCCCAGTGTCTGGCGGGGAGCCAGGTGACATCATAAATACTTGCTGAATGAATGCAGAAATCAGCGGTACTGACT
TGTACTATATTGGCTGCCATGATAGGGTTCTCACAGCGTCATCCATGATCGTAAGGGAGAATGACATTCTGCTTG
AGGGAGGGAATAGAAAGGGGCAGGGAGGGGACATCTGAGGGCTTCACAGGGCTGCAAAGGGTACAGGGATTGCAC
CAGGGCAGAACAGGGGAGGGTGTTCAAGGAAGAGTGGCTCTTAGCAGAGGCACTTTGGAAGGTGTGAGGCATAAA
TGCTTCCTTCTACGTAGGCCAACCTCAAAACTTTCAGTAGGAATGTTGCTATGATCAAGTTGTTCTAACACTTTA
GACTTAGTAGTAATTATGAACCTCACATAGAAAAATTTCATCCAGCCATATGCCTGTGGAGTGGAATATTCTGTT
TAGTAGAAAAATCCTTTAGAGTTCAGCTCTAACCAGAAATCTTGCTGAAGTATGTCAGCACCTTTTCTCACCCTG
GTAAGTACAGTATTTCAAGAGCACGCTAAGGGTGGTTTTCATTTTACAGGGCTGTTGATGATGGGTTAAAAATGT
TCATTTAAGGGCTACCCCCGTGTTTAATAGATGAACACCACTTCTACACAACCCTCCTTGGTACTGGGGGAGGGA

FIGURE 2655D

GAGATCTGACAAATACTGCCCATTCCCCTAGGCTGACTGGATTTGAGAACAAATACCCACCCATTTCCACCATGG
TATGGTAACTTCTCTGAGCTTCAGTTTCCAAGTGAATTTCCATGTAATAGGACATTCCCATTAAATACAAGCTGT
TTTTACTTTTTCGCCTCCCAGGGCCTGTGCGATCTGGTCCCCCAGCCTCTCTTGGGCTTTCTTACACTAACTCTG
TACCTACCATCTCCTGCCTCCCTTAGGCAGGCACCTCCAACCACCACACACTCCCTGCTGTTTTCCCTGCCTGGA
ACTTTCCCACCAGCCCCACCAAGATCATTTCATCCAGTCCTGAGCTCAGCTTAAGGGAGGCTTCTTGCCTGTGGG
TTCCCTCACCCCCATGCCTGTCCTCCAGGCTGGGGCAGGTTCTTAGTTTGCCTGGAATTGTTCTGTACCTCTTTG
TAGCACGTAGTGTTGTGAAACTAAGCCACTAATTGAGTTTCTGGCTCCCCTCCTGGGGTTGTAAGTTTTGTTCAT
TCATGAGGGCCGACTGTATTTCCTGGTTACTGTATCCCAGTGACCAGCCACAGGAGATGTCCAATAAAGTATGTG
ATGAAATGGTCTTAAAAAAAAAAAAAAAAAAAAA

FIGURE 2656

MWPTRRLVTIKRSGVDGPHFPLSLSTCLFGRGIECDIRIQLPVVSKQHCKIEIHEQEAILHNFSSTNPTQVNGSV
IDEPVRLKHGDVITIIDRSFRYENESLQNGRKSTEFPRKIREQEPARRVSRSSFSSDPDESEGIPLKRRRVSFGG
HLRPELFDENLPPNTPLKRGEAPTKRKSLVMHTPPVLKKIIKEQPQPSGKQESGSEIHVEVKAQSLVISPPAPSP
RKTPVASDQRRRSCKTAPASSSKSQTEVPKRGGERVATCLQKRVSISRSQHDILQMICSKRRSGASEANLIVAKS
WADVVKLGAKQTQTKVIKHGPQRSMNKRQRRPATPKKPVGEVHSQFSTGHANSPCTIIIGKAHTEKVHVPARPYR
VLNNFISNQKMDFKEDLSGIAEMFKTPVKEQPQLTSTCHIAISNSENLLGKQFQGTDSGEEPLLPTSESFGGNVF
FSAQNAAKQPSDKCSASPPLRRQCIRENGNVAKTPRNTYKMTSLETKTSDTETEPSKTVSTVNRSGRSTEFRNIQ
KLPVESKSEETNTEIVECILKRGQKATLLQQRREGEMKEIERPFETYKENIELKENDEKMKAMKRSRTWGQKCAP
MSDLTDLKSLPDTELMKDTARGQNLLQTQDHAKAPKSEKGKITKMPCQSLQPEPINTPTHTKQQLKASLGKVGVK
EELLAVGKFTRTSGETTHTHREPAGDGKSIRTFKESPKQILDPAARVTGMKKWPRTPKEEAQSLEDLAGFKELFQ
TPGPSEESMTDEKTTKIACKSPPPESVDTPTSTKQWPKRSLRKADVEEEFLALRKLTPSAGKAMLTPKPAGGDEK
DIKAFMGTPVQKLDLAGTLPGSKRQLQTPKEKAQALEDLAGFKELFQTPGHTEELVAAGKTTKIPCDSPQSDPVD
TPTSTKQRPKRSIRKADVEGELLACRNLMPSAGKAMHTPKPSVGEEKDIIIFVGTPVQKLDLTENLTGSKRRPQT
PKEEAQALEDLTGFKELFQTPGHTEEAVAAGKTTKMPCESSPPESADTPTSTRRQPKTPLEKRDVQKELSALKKL
TQTSGETTHTDKVPGGEDKSINAFRETAKQKLDPAASVTGSKRHPKTKEKAQPLEDLAGWKELFQTPVCTDKPTT
HEKTTKIACRSQPDPVDTPTSSKPQSKRSLRKVDVEEEFFALRKRTPSAGKAMHTPKPAVSGEKNIYAFMGTPVQ
KLDLTENLTGSKRRLQTPKEKAQALEDLAGFKELFQTRGHTEESMTNDKTAKVACKSSQPDLDKNPASSKRRLKT
SLGKVGVKEELLAVGKLTQTSGETTHTHTEPTGDGKSMKAFMESPKQILDSAASLTGSKRQLRTPKGKSEVPEDL
AGFIELFQTPSHTKESMTNEKTTKVSYRASQPDLVDTPTSSKPQPKRSLRKADTEEEFLAFRKQTPSAGKAMHTP
KPAVGEEKDINTFLGTPVQKLDQPGNLPGSNRRLQTRKEKAQALEELTGFRELFQTPCTDNPTADEKTTKKILCK
SPQSDPADTPTNTKQRPKRSLKKADVEEEFLAFRKLTPSAGKAMHTPKAAVGEEKDINTFVGTPVEKLDLLGNLP
GSKRRPQTPKEKAKALEDLAGFKELFQTPGHTEESMTDDKITEVSCKSPQPDPVKTPTSSKQRLKISLGKVGVKE
EVLPVGKLTQTSGKTTQTHRETAGDGKSIKAFKESAKQMLDPANYGTGMERWPRTPKEEAQSLEDLAGFKELFQT
PDHTEESTTDDKTTKIACKSPPPESMDTPTSTRRRPKTPLGKRDIVEELSALKQLTQTTHTDKVPGDEDKGINVF
RETAKQKLDPAASVTGSKRQPRTPKGKAQPLEDLAGLKELFQTPVCTDKPTTHEKTTKIACRSPQPDPVGTPTIF
KPQSKRSLRKADVEEESLALRKRTPSVGKAMDTPKPAGGDEKDMKAFMGTPVQKLDLPGNLPGSKRWPQTPKEKA
QALEDLAGFKELFQTPGTDKPTTDEKTTKIACKSPQPDPVDTPASTKQRPKRNLRKADVEEEFLALRKRTPSAGK
AMDTPKPAVSDEKNINTFVETPVQKLDLLGNLPGSKRQPQTPKEKAEALEDLVGFKELFQTPGHTEESMTDDKIT
EVSCKSPQPESFKTSRSSKQRLKIPLVKVDMKEEPLAVSKLTRTSGETTQTHTEPTGDSKSIKAFKESPKQILDP
AASVTGSRRQLRTRKEKARALEDLVDFKELFSAPGHTEESMTIDKNTKIPCKSPPPELTDTATSTKRCPKTRPRK
EVKEELSAVERLTQTSGQSTHTHKEPASGDEGIKVLKQRAKKKPNPVEEEPSRRRPRAPKEKAQPLEDLAGFTEL
SETSGHTQESLTAGKATKIPCESPPLEVVDTTASTKRHLRTRVQKVQVKEEPSAVKFTQTSGETTDADKEPAGED
KGIKALKESAKQTPAPAASVTGSRRRPRAPRESAQAIEDLAGFKDPAAGHTEESMTDDKTTKIPCKSSPELEDTA
TSSKRRPRTRAQKVEVKEELLAVGKLTQTSGETTHTDKEPVGEGKGTKAFKQPAKRNVDAEDVIGSRRQPRAPKE
KAQPLEDLASFQELSQTPGHTEELANGAADSFTSAPKQTPDSGKPLKISRRVLRAPKVEPVGDVVSTRDPVKSQS
KSNTSLPPLPFKRGGGKDGSVTGTKRLRCMPAPEEIVEELPASKKQRVAPRARGKSSEPVVIMKRSLRTSAKRIE
PAEELNSNDMKTNKEEHKLQDSVPENKGISLRSRRQDKTEAEQQITEVFVLAERIEINRNEKKPMKTSPEMDIQN
PDDGARKPIPRDKVTENKRCLRSARQNESSQPKVAEESGGQKSAKVLMQNQKGKGEAGNSDSMCLRSRKTKSQPA
ASTLESKSVQRVTRSVKRCAENPKKAEDNVCVKKITTRSHRDSEDI

FIGURE 2657

GAATTCGGCACGAGGTCGCCGTGAGAACTTTGCAGGAACAGCTGGAAAAGGCCAAAGAGAGTCTTAAGAACGTGG
ATGAGAACATTCGCAAGCTCACCGGGCGGGATCCGAATGACGTGAGGCCCATCCAAGCCAGATTGCTGGCCCTTT
CTGGTCCTGGTGGAGGTAGAGGACGTGGTAGTTTATTACTGAGGCGTGGATTCTCAGATAGTGGAGGAGGACCCC
CAGCCAAACAGAGAGACCTTGAAGGGGCAGTCAGTAGGCTGGGCGGGGAGCGTCGGACCAGAAGAGAATCACGCC
AGGAAAGCGACCCGGAGATGATGATGTTAAAAAGCCAGCATTGCAGTCTTCAGTTGTAGCTACCTCCAAAGAGCG
CACACGTAGAGACCTTATCCAGGATCAAAAT**ATG**GATGAAAAGGGAAAGCAAAGGAACCGGCGAATATTTGGCTT
GTTGATGGGTACCCTTCAAAAATTTAAACAAGAATCCACTGTTGCTACTGAAAGGCAAAAGCGGCGCCAGGAAAT
TGAACAAAAACTTGAAGTTCAGGCAGAAGAAGAGAGAAAGCAGGTTGAAAATGAAAGGAGAGAACTGTTTGAAGA
GAGGCGTGCTAAACAGACAGAACTGCGGCTTTTGGAACAGAAAGTTGAGCTTGCGCAGCTGCAAGAAGAATGGAA
TGAACATAATGCCAAAATAATTAAATATATAAGAACTAAGACAAAGCCCCATTTGTTTTATATTCCTGGAAGAAT
GTGTCCAGCTACCCAAAAACTAATAGAAGAGTCACAGAGAAAAATGAACGCTTTATTTGAAGGTAGACGCATCGA
ATTTGCAGAACAAATAAATAAAATGGAGGCTAGGCCTAGAAGACAATCAATGAAGGAAAAAGAGCATCAGGTGGT
GCGTAATGAAGAACAGAAGGCGGAACAAGAAGAGGGTAAGGTGGCTCAGCGAGAGGAAGAGTTGGAGGAGACAGG
TAATCAGCACAATGATGTAGAAATAGAGGAAGCAGGAGAGGAAGAGGAAAAGGAAATAGCGATTGTTCATAGTGA
TGCAGAGAAAGAACAGGAGGAGGAAGAACAAAAACAGGAAATGGAGGTTAAGATGGAGGAGGAAACTGAGGTAAG
GGAAAGTGAGAAGCAGCAGGATAGTCAGCCTGAAGAAGTTATGGATGTGCTAGAGATGGTTGAGAATGTCAAACA
TGTAATTGCTGACCAGGAGGTAATGGAAACTAATCGAGTTGAAAGTGTAGAACCTTCAGAAAATGAAGCTAGCAA
AGAATTGGAACCAGAAATGGAATTTGAAATTGAGCCAGATAAAGAATGTAAATCCCTTTCTCCTGGGAAAGAGAA
TGTCAGTGCTTTAGACATGGAAAAGGAGTCTGAGGAAAAAGAAGAAAAAGAATCTGAGCCCCAACCTGAGCCTGT
GGCTCAACCTCAGCCTCAGTCTCAGCCCCAGCTTCAGCTTCAATCCCAGTCCCAACCAGTACTCCAGTCCCAGCC
TCCCTCTCAGCCTGAGGATTTGTCATTAGCTGTTTTACAGCCAACACCCCAAGTTACTCAGGAGCAAGGGCATTT
ACTACCTGAGAGGAAGGATTTTCCTGTAGAGTCTGTAAAACTCACTGAGGTACCAGTAGAGCCAGTCTTGACAGT
ACATCCAGAGAGCAAGAGCAAAACCAAAACTAGGAGCAGAAGTAGAGGTCGAGCTAGAAATAAAACAAGCAAGAG
TAGAAGTCGAAGCAGTAGCAGTAGCAGTTCTAGTAGCAGTTCAACCAGTAGCAGCAGTGGAAGTAGTTCCAGCAG
TGGAAGTAGTAGCAGTCGCAGTAGTTCCAGTAGCAGCTCCAGTACAAGTGGCAGCAGCAGCAGAGATAGTAGCAG
TAGCACTAGCACTAGTAGTAGTAGTGAGAGTAGAAGTCGGAGTAGGGGCCGGGGACATAATAGAGATAGAAAGCA
CAGAAGGAGCGTGGATCGGAAGAGAAGGGATACTTCAGGACTAGAAAGAAGTCACAAATCTTCAAAAGGTGGTGG
TAGTAGAGATACAAAAGGATCAAAGGATAAGAATTCCCGGTCCGACAGAAAGAGGTCTATATCAGAGAGTAGTCG
ATCAGGCAAAAGATCTTCAAGAAGTGAAAGAGACCGAAAATCAGACAGGAAAGACAAAAGGCGT**TAA**TGGAAGAA
GCCAGGCTTTCTTAGCCATTCTTTGCAGCAGAAGATTTCTTGATAAAAAAGGATTACCTTTCCTTGTAAAGAGGA
TGCTGCCTTAAGAATTGCATGTTGTAAAAAATCTTTTTGGAAAATACAGACTGTTTGTTTACCAGACATTCTTGT
ACTTTTTGCATAATTTTGTAAGAGTTATTTATCAAAATTATGTGAGGTTCCAAAATATGTAAAAATGATAATAAT
AAAAAAAGATTAACATCCTTGTCATCTTTTTTAAATATCCTATACTCTTCAGTAAGAATCTGTATATTTTAATAG
GCAAATCTTTAAGTCTGTTCCCTTCTAATTCTGTATCATACATTGCTTTTGTAGAAATAAATGTGTGTTTATTTC
ATTATTTTTGGGATGTCCTCGTTGACACTTGTATAATAAATATCCTCTTTATCATTTTCAGCTTTTAACACTAGA
TACTGCACGTGATTAGAATGTTTTTGAAGGTTTCCTCGTTTTTATTTGCCTTGGACAGTTTTTAGTTGTCAGAGT
CAGAGCTTTGCAGCTTTGAGGGGGAACAGTTCTCTTTAAAATCATTTGCTATTTTCTATTCTCCCTTGTTATTTT
AATCTAAGCATTTTCCCCCGTTTCTCATATTTTAACCATATGTTCGGTAGATAACTAAACAGTATGATCTGGTTG
GCATTTTCTTCCTGATGATGGGAGCGTCATTCTTTTGTCTTCATGGTTACTTGTGTGATATAACATACATCTGTT
AAAGAAAATCACTTCTTTCTAGGGGAGGGAGGTAGAAAAGTATCTTTCAAACTTGGTTTTTGAGTTTGTGTCTTG
TCTTAACTTTGTGTTGGCTCTAACTTAAACATGCTGATATGTGTTTTCAAGAATTTTGTTTAAGGAAGTATTGTA
TGGAAGTCCACAAAATGAAGGAAGTTCATCTAGGTTTTAATATGTAAGCAAGATAACACACAAGTGTACCAAGTG
ATTATTAACTTTGTTGTTTTACAAATTTGTATGAACTTGGAGTATCTGTTGGCCATTACTATACATGTGCAAATA
AATGTGGCTTAGACTTGTGTGACTGCTTAAGACTAAAAAAAAAAAAAAAAAAA

FIGURE 2658

MDEKGKQRNRRIFGLLMGTLQKFKQESTVATERQKRRQEIEQKLEVQAEEERKQVENERRELFEERRAKQTELRL
LEQKVELAQLQEEWNEHNAKIIKYIRTKTKPHLFYIPGRMCPATQKLIEESQRKMNALFEGRRIEFAEQINKMEA
RPRRQSMKEKEHQVVRNEEQKAEQEEGKVAQREEELEETGNQHNDVEIEEAGEEEEKEIAIVHSDAEKEQEEEEQ
KQEMEVKMEEETEVRESEKQQDSQPEEVMDVLEMVENVKHVIADQEVMETNRVESVEPSENEASKELEPEMEFEI
EPDKECKSLSPGKENVSALDMEKESEEKEEKESEPQPEPVAQPQPQSQPQLQLQSQSQPVLQSQPPSQPEDLSLA
VLQPTPQVTQEQGHLLPERKDFPVESVKLTEVPVEPVLTVHPESKSKTKTRSRSRGRARNKTSKSRSRSSSSSSS
SSSSTSSSSGSSSSSGSSSSRSSSSSSSSTSGSSSRDSSSSTSTSSSSESRSRSRGRGHNRDRKHRRSVDRKRRD
TSGLERSHKSSKGGGSRDTKGSKDKNSRSDRKRSISESSRSGKRSSRSERDRKSDRKDKRR

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FIGURE 2659

GCCGCTCGCTCGGCTCCGCTCCCTGGCTCGGCTCCCTGCCTCCGCGTCGCAGCCCCCGCCGTAGCCGCCTCCGAG
CCCGCCGCCACATCCTCTGAGAAGATGGCTGTGCCACCCACGTATGCCGATCTTGGCAAATCTGCCAGGGATGTC
TTCACCAAGGGCTATGGATTTGGCTTAATAAAGCTTGATTTGAAAACAAAATCTGAGAATGGATTGGAATTTACA
AGCTCAGGCTCAGCCAACACTGAGACCACCAAAGTGACGGGCAGTCTGGAAACCAAGTACAGATGGACTGAGTAC
GGCCTGACGTTTACAGAGAAATGGAATACCGACAATACACTAGGCACCGAGATTACTGTGGAAGATCAGCTTGCA
CGTGGACTGAAGCTGACCTTCGATTCATCCTTCTCACCTAACACTGGGAAAAAAAATGCTAAAATCAAGACAGGG
TACAAGCGGGAGCACATTAACCTGGGCTGCGACATGGATTTCGACATTGCTGGGCCTTCCATCCGGGGTGCTCTG
GTGCTAGGTTACGAGGGCTGGCTGGCCGGCTACCAGATGAATTTTGAGACTGCAAAATCCCGAGTGACCCAGAGC
AACTTTGCAGTTGGCTACAAGACTGATGAATTCCAGCTTCACACTAATGTGAATGACGGGACAGAGTTTGGCGGC
TCCATTTACCAGAAAGTGAACAAGAAGTTGGAGACCGCTGTCAATCTTGCCTGGACAGCAGGAAACAGTAACACG
CGCTTCGGAATAGCAGCCAAGTATCAGATTGACCCTGACGCCTGCTTCTCGGCTAAAGTGAACAACTCCAGCCTG
ATAGGTTTAGGATACACTCAGACTCTAAAGCCAGGTATTAAACTGACACTGTCAGCTCTTCTGGATGGCAAGAAC
GTCAATGCTGGTGGCCACAAGCTTGGTCTAGGACTGGAATTTCAAGCATAAATGAATACTGTACAATTGTTTAAT
TTTAAACTATTTTGCAGCATAGCTACCTTCAGAATTTAGTGTATCTTTTAATGTTGTATGTCTGGGATGCAAGTA
TTGCTAAATATGTTAGCCCTCCAGGTTAAAGTTGATTCAGCTTTAAGATGTTACCCTTCCAGAGGTACAGAAGAA
ACCTATTTCCAAAAAAGGTCCTTTCAGTGGTAGACTCGGGGAGAACTTGGTGGCCCCTTTGAGATGCCAGGTTTC
TTTTTTATCTAGAAATGGCTGCAAGTGGAAGCGGATAATATGTAGGCACTTTGTAAATTCATATTGAGTAAATGA
ATGAAATTGTGATTTCCTGAGAATCGAACCTTGGTTCCCTAACCCTAATTGATGAGAGGCTCGCTGCTTGATGGT
GTGTACAAACTCACCTGAATGGGACTTTTTTAGACAGATCTTCATGACCTGTTCCCACCCCAGTTCATCATCATC
TCTTTTACACCAAAAGGTCTGCAGGGTGTGGTAACTGTTTCTTTTGTGCCATTTTGGGGTGGAGAAGGTGGATGT
GATGAAGCCAATAATTCAGGACTTATTCCTTCTTGTGTTGTGTTTTTTTTTGGCCCTTGCACCAGAGTATGAAAT
AGCTTCCAGGAGCTCCAGCTATAAGCTTGGAAGTGTCTGTGTGATTGTAATCACATGGTGACAACACTCAGAATC
TAAATTGGACTTCTGTTGTATTCTCACCACTCAATTTGTTTTTTAGCAGTTTAATGGGTACATTTTAGAGTCTTC
CATTTTGTTGGAATTAGATCCTCCCCTTCAAATGCTGTAATTAACAACACTTAAAAAACTTGAATAAAATATTGA
AACCTC

FIGURE 2660

MAVPPTYADLGKSARDVFTKGYGFGLIKLDLKTKSENGLEFTSSGSANTETTKVTGSLETKYRWTEYGLTFTEKW
NTDNTLGTEITVEDQLARGLKLTFDSSFSPNTGKKNAKIKTGYKREHINLGCDMDFDIAGPSIRGALVLGYEGWL
AGYQMNFETAKSRVTQSNFAVGYKTDEFQLHTNVNDGTEFGGSIYQKVNKKLETAVNLAWTAGNSNTRFGIAAKY
QIDPDACFSAKVNNSSLIGLGYTQTLKPGIKLTLSALLDGKNVNAGGHKLGLGLEFQA

FIGURE 2661A

CGGACTCAAGATGGCGGCGTGTGGACGTGTACGGAGGATGTTCCGCTTGTCGGCGGCGCTGCATCTGCTGCTGCT
ATTCGCGGCCGGGGCCGAGAAACTCCCCGGCCAGGGCGTCCACAGCCAGGGCCAGGGTCCCGGGGCCAACTTTGT
GTCCTTCGTAGGGCAGGCCGGAGGCGGCGGCCCGGCGGGTCAGCAGCTGCCCCAGCTGCCTCAGTCATCGCAGCT
TCAGCAGCAACAGCAGCAGCAGCAACAGCAACAGCAGCCTCAGCCGCCGCAGCCGCCTTTCCCGGCGGGTGGGCC
TCCGGCCCGGCGGGGAGGAGCGGGGGCTGGTGGGGGCTGGAAGCTGGCGGAGGAAGAGTCCTGCAGGGAGGACGT
GACCCGCGTGTGCCCTAAGCACACCTGGAGCAACAACCTGGCGGTGCTCGAGTGCCTGCAGGATGTGAGGGAGCC
TGAAAATGAAATTTCTTCAGACTGCAATCATTTGTTGTGGAATTATAAGCTGAACCTAACTACAGATCCCAAATT
TGAATCTGTGGCCAGAGAGGTTTGCAAATCTACTATAACAGAGATTAAAGAATGTGCTGATGAACCGGTTGGAAA
AGGTTACATGGTTTCCTGCTTGGTGGATCACCGAGGCAACATCACTGAGTATCAGTGTCACCAGTACATTACCAA
GATGACGGCCATCATTTTTAGTGATTACCGTTTAATCTGTGGCTTCATGGATGACTGCAAAAATGACATCAACAT
TCTGAAATGTGGCAGTATTCGGCTTGGAGAAAAGGATGCACATTCACAAGGTGAGGTGGTATCATGCTTGGAGAA
AGGCCTGGTGAAAGAAGCAGAAGAAAGAGAACCCAAGATTCAAGTTTCTGAACTCTGCAAGAAAGCCATTCTCCG
GGTGGCTGAGCTGTCATCGGATGACTTTCACTTAGACCGGCATTTATATTTTGCTTGCCGAGATGATCGGGAGCG
TTTTTGTGAAAATACACAAGCTGGTGAGGGCAGAGTGTATAAGTGCCTCTTTAACCATAAATTTGAAGAATCCAT
GAGTGAAAAGTGTCGAGAAGCACTTACAACCCGCCAAAAGCTGATTGCCCAGGATTATAAAGTCAGTTATTCATT
GGCCAAATCCTGTAAAAGTGACTTGAAGAAATACCGGTGCAATGTGGAAAACCTTCCGCGATCGCGTGAAGCCAG
GCTCTCCTACTTGTTAATGTGCCTGGAGTCAGCTGTACACAGAGGGCGACAAGTCAGCAGTGAGTGCCAGGGGGA
GATGCTGGATTACCGACGCATGTTGATGGAAGACTTTTCTCTGAGCCCTGAGATCATCCTAAGCTGTCGGGGGGA
GATTGAACACCATTGTTCCGGATTACATCGAAAAGGGCGGACCCTACACTGTCTGATGAAAGTAGTTCGAGGGGA
GAAGGGGAACCTTGGAATGAACTGCCAGCAGGCGCTTCAAACACTGATTCAGGAGACTGACCCTGGTGCAGATTA
CCGCATTGATCGAGCTTTGAATGAAGCTTGTGAATCTGTAATCCAGACAGCCTGCAAACATATAAGATCTGGAGA
CCCAATGATCTTGTCGTGCCTGATGGAACATTTATACACAGAGAAGATGGTAGAAGACTGTGAACACCGTCTCTT
AGAGCTGCAGTATTTCATCTCCCGGGATTGGAAGCTGGACCCTGTCCTGTACCGCAAGTGCCAGGGAGACGCTTC
TCGTCTTTGCCACACCCACGGTTGGAATGAGACCAGTGAATTTATGCCTCAGGGAGCTGTGTTCTCTTGTTTATA
CAGACACGCCTACCGCACTGAGGAACAGGGAAGGAGGCTCTCACGGGAGTGCCGAGCTGAAGTCCAAAGGATCCT
ACACCAGCGTGCCATGGATGTCAAGCTGGATCCTGCCCTCCAGGATAAGTGCCTGATTGATCTGGGAAAATGGTG
CAGTGAGAAAACAGAGACTGGACAGGAGCTGGAGTGCCTTCAGGACCATCTGGATGACTTGGTGGTGGAGTGTAG
AGATATAGTTGGCAACCTCACTGAGTTAGAATCAGAGGATATTCAAATAGAAGCCTTGCTGATGAGAGCCTGTGA
GCCCATAATTCAGAACTTCTGCCACGATGTGGCAGATAACCAGATAGACTCTGGGGACCTGATGGAGTGTCTGAT
ACAGAACAAACACCAGAAGGACATGAACGAGAAGTGTGCCATCGGAGTTACCCACTTCCAGCTGGTGCAGATGAA
GGATTTTCGGTTTTCTTACAAGTTTAAAATGGCCTGCAAGGAGGACGTGTTGAAGCTTTGCCCAAACATAAAAAA
GAAGGTGGACGTGGTGATCTGCCTGAGCACGACCGTGCGCAATGACACTCTGCAGGAAGCCAAGGAGCACAGGGT
GTCCCTGAAGTGCCGCAGGCAGCTCCGTGTGGAGGAGCTGGAGATGACGGAGGACATCCGCTTGGAGCCAGATCT
ATACGAAGCCTGCAAGAGTGACATCAAAAACTTCTGTTCCGCTGTGCAATATGGCAACGCTCAGATTATCGAATG
TCTGAAAGAAAACAAGAAGCAGCTAAGCACCCGCTGCCACCAAAAAGTATTTAAGCTGCAGGAGACAGAGATGAT
GGACCCAGAGCTAGACTACACCCTCATGAGGGTCTGCAAGCAGATGATAAAGAGGTTCTGTCCGGAAGCAGATTC
TAAAACCATGTTGCAGTGCTTGAAGCAAAATAAAAACAGTGAATTGATGGATCCCAAATGCAAACAGATGATAAC
CAAGCGCCAGATCACCCAGAACACAGATTACCGCTTAAACCCCATGTTAAGAAAAGCCTGTAAAGCTGACATTCC
TAAATTCTGTCACGGTATCCTGACTAAGGCCAAGGATGATTCAGAATTAGAAGGACAAGTCATCTCTTGCCTGAA
GCTGAGATATGCTGACCAGCGCCTGTCTTCAGACTGTGAAGACCAGATCCGAATCATTATCCAGGAGTCCGCCCT
GGACTACCGCCTGGATCCTCAGCTCCAGCTGCACTGCTCAGACGAGATCTCCAGTCTATGTGCTGAAGAAGCAGC
AGCCCAAGAGCAGACAGGTCAGGTGGAGGAGTGCCTCAAGGTCAACCTGCTCAAGATCAAAACAGAATTGTGTAA
AAAGGAAGTGCTAAACATGCTGAAGGAAAGCAAAGCAGACATCTTTGTTGACCCGGTACTTCATACTGCTTGTGC
CCTGGACATTAAACACCACTGCGCAGCCATCACCCCTGGCCGCGGGCGTCAAATGTCCTGTCTCATGGAAGCACT
GGAGGATAAGCGGGTGAGGTTACAGCCCGAGTGCAAAAAGCGCCTCAATGACCGGATTGAGATGTGGAGTTACGC
AGCAAAGGTGGCCCCAGCAGATGGCTTCTCTGATCTTGCCATGCAAGTAATGACGTCTCCATCTAAGAACTACAT
TCTCTCTGTGATCAGTGGGAGCATCTGTATATTGTTCCTGATTGGCCTGATGTGTGGACGGATCACCAAGCGAGT
GACACGAGAGCTCAAGGACAGG**TAG**AGCCACCTTGACCACCAAAGGAACTACCTATCCAGTGCCCAGTTTGTACA

FIGURE 2661B

GCCCTCTTGTATAGCATCCCCACTCACCTCGCTCTTCTCAGAAGTGACACCAACCCCGTGTTAGAGCATTAGCAG
ATGTCCACTGCGTTGTCCCATCCAGCCTCCACTCGTGTCCATGGTGTCCTCCTCCTCCTCACCGTGCAGCAGCAG
CAGCTGGTCGCTGGGGTTACTGCCTTTGTTTGGCAAACTTGGGTTTACCTGCCTGTAGACAAGTCTCTCTCATAC
CAACAGAACTTCCGGTACTTCCAGAACCAACTCACCTGACCTGCAACTCAAAGGCTTTTTTAAGAAAACCACCAA
AAAAAAAAAATTTTTTTAAAGAAAAAAATGTATATAGTAACGCATCTCCTCCAGGCTTGATTTGGGCAATGGGGT
TATGTCTTTCATATGACTGTGTAAAACAAAGACAGGACTTGGAGGGGAAGCACACCACCCAGTGTGCCATGACTG
AGGTGTCTCGTTCATCTCTCAGAAGCACCTTGGGGCCTCGCCAGGGCCGTGGTCTTCACCGAGGCGTGGGTGGGC
AGCCGTTCCCCAGGCTGTGTGGGGTCCTGCTTTCTTCTGCTGAGACAGTGACGCTTTCCAGTTTCCACCCTAATC
AGCCACTGCTGGTCACAGCCCCACAGCCATGGGTATTTCTGTGGTCTCCTCGCTTCATTGAAGCAAAGCATGAGC
CTTCCTAGACAAGGGCAGCTGGGGAGGGGAAGGGACCGGAAGTTTGTGAAGTTGAACAGTCCATCCATCTGCACT
GAGAGGCTGGATCCTGAGTCCCGGGGCAGCAGGATCCCAGGAACCTTCCTCCTCCAGGGCAGCACAGGACTCAGC
CGTGTCTGGACCGGCCCTGCTGAGGCTACAGTCACTCTGGAAGCTCTGCGCTTCATCAGGAGGCAGGACTGTGGC
GGGAGGGGTCCTTGAAGATGGGTGTGGGGAGCAGTGGGTCAGGAAGTGGGAGCCAGAGGTTTGACTCACTTTGCT
TTATTTTTCAGGCTACAATACAGGTCAGAGACAATGGCTTATAAAGGTTTAGTGTGGTCTCAGGATGTGACAGGC
AGTCCAGCCTGACCTTTCTGCACACTCCAGACAAACTTCCCAGACAAGCTCCTTTGTGCCTCTACGTGGAGAGGG
TGTGGAAAGTTATCACATTAAAAGATGGAGGATTTGCTCTGTTTTTTTTCTTTCTGTCCATTTGCTGCGTGTACC
CACTCTAGTAGGCATTGGCTAAATGTTGTATTTTGGCGATTCATCAACCTTTGCAGAATATGGGCTTTATAGAAG
CAATATTCTTGGCCATCCTGCCTCATTCCTCCAGTGTGGAGATGACAAGTCTGGGTGTGAGAGGGAGGGGTCCGG
GCATCATGGTTCAGCGTGGCACTCCTTTGGTTGAGTTTGGGGCATGAGATCACAGTGGCTGCACAAGAGAGCAGT
GTGTACAGTAGGAGAGACATTTATGTAATATATATTTTATTAACCTGTTAGATGTCCACAAGGTATTATAAATCA
CGTGCCTAAAACTGTCCATGTAGACCAAGGCCTGCCCTCGGCGCCCCCCACTCTTGCCTCTGCTCTGCACAGTCC
ACGTGCACTGCAGGACCGGAGCGACACATGTCTTCCCTGAAGGGTGTTCAGTACAAGGCGTGTCAGTTTGTGGAT
CAGTTGATCCAAGTTACTCCTTGTCTAACCTGACTGACATATATTTGAATACTGTGGTTTTCTTTCTTTTTTTTC
TATTTGCTGCCCTTCCTGGAGGCAGTGGGTTCCAGAAGCCAACTGATTGTCCCCCTGCCAAGTCACCAAGGGAAG
CTGCTAAGCTGCTTAGTCCCCTCGGTCCTGCTTGTAGGGTCTTCCTGATTGTCAACAGCTGTCTGGGATGCTTCA
GTCTCCTAAAACTGGAAACGCAGGGTGCGAGCAGCACACACTGCCTCCCGCCACTGCCAGCCGGAGTGAGCGGCC
CGAGAGTCTCTGCAGGTTCCCCTGGGGGCTGGGGGCCGCTGAGGCCTAATATCAAGAGCCAGGAATGTCATGTAC
ATGGAGGTGCCTACGGACGTGTCTGGTGTGGTTTGCAGGTAGGATGGATGTTCACTGTTTGACCGGGTGGGGTAT
CCTTCCTCTCTGCAGTCTCCTTCCCAGTATGCGTAAACACCCTTATAGTTCTAATTGTGTTGATA

FIGURE 2662

GLKMAACGRVRRMFRLSAALHLLLLFAAGAEKLPGQGVHSQGQGPGANFVSFVGQAGGGGPAGQQLPQLPQSSQL
QQQQQQQQQQQQPQPPQPPFPAGGPPARRGGAGAGGGWKLAEEESCREDVTRVCPKHTWSNNLAVLECLQDVREP
ENEISSDCNHLLWNYKLNLTTDPKFESVAREVCKSTITEIKECADEPVGKGYMVSCLVDHRGNITEYQCHQYITK
MTAIIFSDYRLICGFMDDCKNDINILKCGSIRLGEKDAHSQGEVVSCLEKGLVKEAEEREPKIQVSELCKKAILR
VAELSSDDFHLDRHLYFACRDDRERFCENTQAGEGRVYKCLFNHKFEESMSEKCREALTTRQKLIAQDYKVSYSL
AKSCKSDLKKYRCNVENLPRSREARLSYLLMCLESAVHRGRQVSSECQGEMLDYRRMLMEDFSLSPEIILSCRGE
IEHHCSGLHRKGRTLHCLMKVVRGEKGNLGMNCQQALQTLIQETDPGADYRIDRALNEACESVIQTACKHIRSGD
PMILSCLMEHLYTEKMVEDCEHRLLELQYFISRDWKLDPVLYRKCQGDASRLCHTHGWNETSEFMPQGAVFSCLY
RHAYRTEEQGRRLSRECRAEVQRILHQRAMDVKLDPALQDKCLIDLGKWCSEKTETGQELECLQDHLDDLVVECR
DIVGNLTELESEDIQIEALLMRACEPIIQNFCHDVADNQIDSGDLMECLIQNKHQKDMNEKCAIGVTHFQLVQMK
DFRFSYKFKMACKEDVLKLCPNIKKKVDVVICLSTTVRNDTLQEAKEHRVSLKCRRQLRVEELEMTEDIRLEPDL
YEACKSDIKNFCSAVQYGNAQIIECLKENKKQLSTRCHQKVFKLQETEMMDPELDYTLMRVCKQMIKRFCPEADS
KTMLQCLKQNKNSELMDPKCKQMITKRQITQNTDYRLNPMLRKACKADIPKFCHGILTKAKDDSELEGQVISCLK
LRYADQRLSSDCEDQIRIIIQESALDYRLDPQLQLHCSDEISSLCAEEAAAQEQTGQVEECLKVNLLKIKTELCK
KEVLNMLKESKADIFVDPVLHTACALDIKHHCAAITPGRGRQMSCLMEALEDKRVRLQPECKKRLNDRIEMWSYA
AKVAPADGFSDLAMQVMTSPSKNYILSVISGSICILFLIGLMCGRITKRVTRELKDR

FIGURE 2663

GGCACGAGGGGGAAGCAGGGGTAGCGGAGCCATGGGGGACGCTCCCAGCCCTGAAGAGAAACTGCACCTTATCAC
CCGGAACCTGCAGGAGGTTCTGGGGGAAGAGAAGCTGAAGGAGATACTGAAGGAGCGGGAACTTAAAATTTACTG
GGGAACGGCAACCACGGGCAAACCACATGTGGCTTACTTTGTGCCCATGTCAAAGATTGCAGACTTCTTAAAGGC
AGGGTGTGAGGTAACAATTCTGTTTGCGGACCTCCACGCATACCTGGATAACATGAAAGCCCCATGGGAACTTCT
AGAACTCCGAGTCAGTTACTATGAGAATGTGATCAAAGCAATGCTGGAGAGCATTGGTGTGCCCTTGGAGAAGCT
CAAGTTCATCAAAGGCACTGATTACCAGCTCAGCAAAGAGTACACACTAGATGTGTACAGACTCTCCTCCGTGGT
CACACAGCACGATTCCAAGAAGGCTGGAGCTGAGGTGGTAAAGCAGGTGGAGCACCCTTTGCTGAGTGGCCTCTT
ATACCCCGGACTGCAGGCTTTGGATGAAGAGTATTTAAAAGTAGATGCCCAATTTGGAGGCATTGATCAGAGAAA
GATTTTCACCTTTGCAGAGAAGTACCTCCCTGCACTTGGCTATTCAAAACGGGTCCATCTGATGAATCCTATGGT
TCCAGGATTAACAGGCAGCAAAATGAGCTCTTCAGAAGAGGAGTCCAAGATTGATCTCCTTGATCGGAAGGAGGA
TGTGAAGAAAAAACTGAAGAAGGCCTTCTGTGAGCCAGGAAATGTGGAGAACAATGGGGTTCTGTCCTTCATCAA
GCATGTCCTTTTTCCCCTTAAGTCCGAGTTTGTGATCCTACGAGATGAGAAATGGGGTGGAAACAAAACCTACAC
AGCTTACGTGGACCTGGAAAAGGACTTTGCTGCTGAGGTTGTACATCCTGGAGACCTGAAGAATTCTGTTGAAGT
CGCACTGAACAAGTTGCTGGATCCAATCCGGGAAAAGTTTAATACCCCTGCCCTGAAAAAACTGGCCAGCGCTGC
CTACCCAGATCCCTCAAAGCAGAAGCCAATGGCCAAAGGCCCTGCCAAGAATTCAGAACCAGAGGAGGTCATCCC
ATCCCGGCTGGATATCCGTGTGGGGAAAATCATCACTGTGGAGAAGCACCCAGATGCAGACAGCCTGTATGTAGA
GAAGATTGACGTGGGGGAAGCTGAACCACGGACTGTGGTGAGCGGCCTGGTACAGTTCGTGCCCAAGGAGGAACT
GCAGGACAGGCTGGTAGTGGTGCTGTGCAACCTGAAACCCCAGAAGATGAGAGGAGTCGAGTCCCAAGGCATGCT
TCTGTGTGCTTCTATAGAAGGGATAAACCGCCAGGTTGAACCTCTGGACCCTCCGGCAGGCTCTGCTCCTGGTGA
GCACGTGTTTGTGAAGGGCTATGAAAAGGGCCAACCAGATGAGGAGCTCAAGCCCAAGAAGAAAGTCTTCGAGAA
GTTGCAGGCTGACTTCAAAATTTCTGAGGAGTGCATCGCACAGTGGAAGCAAACCAACTTCATGACCAAGCTGGG
CTCCATTTCCTGTAAATCGCTGAAAGGGGGGAACATTAGCTAGCCAGCCCAGCATCTTCCCCCCTTCTTCCACCA
CTGAGTCATCTGCTGTCTCTTCAGTCTGCTCCATCCATCACCCATTTACCCATCTCTCAGGACACGGAAGCAGCG
GGTTTGGACTCTTTATTCGGTGCAGAACTCGGCAAGGGGCAGCTTACCCTCCCCAGAACCCAGGATCATCCTGTC
TGGCTGCAGTGAGAGACCAACCCCTAACAAGGGCTGGGCCACAGCAGGGAGTCCAGCCCTACCTTCTTCCCTTGG
CAGCTGGAGAAATCTGGTTTCAATATAACTCATTTAAAAATTTATGCCACAGTCCTTATAATTGGAAAAATACTG
GTGCCCAGGTTTTCTTGGAGTTATCCAAGCAGCTGCGCCCCTAGCTGGGATCTGGTACCTGGACTAGGCTAATTA
CAGCTTCTCCCCAACAGGAAACTGTGGGATTTGAAAAGGAAAGGGAAGGGAAAACAGAGAACCTAGTGGTCTACC
AAGTGGTTGGCAACTTTCCCAATGTCTGCTTACTCTGAGGCTTGGCACTGGGGGCCAGGGCCTGCCCCAGGGCTC
CTGGAATTTCCCTTGATCCAGCTAGGCTGGGACACTCCCTAAATCAGCTGCGTGTTGTTAGCATCAGGCAGAATG
AATGGCAGAGAGTGATTCTGTCTTCATAGAGGGTGGGGTACTTCTCCATAAGGCATCTCAGTCAAATCCCCATCA
CTGTCATAAATTCAAATAAAATGTCTGAACAAGGGAAAAAAAAAAAAAAAAAA

FIGURE 2664

MGDAPSPEEKLHLITRNLQEVLGEEKLKEILKERELKIYWGTATTGKPHVAYFVPMSKIADFLKAGCEVTILFAD
LHAYLDNMKAPWELLELRVSYYENVIKAMLESIGVPLEKLKFIKGTDYQLSKEYTLDVYRLSSVVTQHDSKKAGA
EVVKQVEHPLLSGLLYPGLQALDEEYLKVDAQFGGIDQRKIFTFAEKYLPALGYSKRVHLMNPMVPGLTGSKMSS
SEEESKIDLLDRKEDVKKKLKKAFCEPGNVENNGVLSFIKHVLFPLKSEFVILRDEKWGGNKTYTAYVDLEKDFA
AEVVHPGDLKNSVEVALNKLLDPIREKFNTPALKKLASAAYPDPSKQKPMAKGPAKNSEPEEVIPSRLDIRVGKI
ITVEKHPDADSLYVEKIDVGEAEPRTVVSGLVQFVPKEELQDRLVVVLCNLKPQKMRGVESQGMLLCASIEGINR
QVEPLDPPAGSAPGEHVFVKGYEKGQPDEELKPKKKVFEKLQADFKISEECIAQWKQTNFMTKLGSISCKSLKGG
NIS

FIGURE 2665A

GGCGGACAAAACGCCAGGCGGATCTCAGAAGGCCAGTTCAAAGACGAGATCATCAGATGTTCATTCATCTGGATC
TTCAGATGCACATATGGATGCATCTGGACCCTCAGATAGTGATATGCCAAGTCGGACACGACCTAAGAGCCCAAG
AAAACATAATTATAGGAATGAAAGTGCCCGTGAAAGCCTTTGTGATTCTCCTCATCAGAATCTCTCAAGACCTCT
TCTGGAAAACAAACTTAAAGCATTCAGTATTGGAAAAATGAGTACAGCTAAGCGAACTTTAAGTAAAAAGGAACA
GGAAGAATTAAAGAAAAAGGAGGATGAAAAGGCAGCTGCTGAGATTTATGAGGAGTTTCTTGCTGCTTTTGAAGG
AAGTGATGGTAATAAAGTGAAAACATTTGTGCGAGGGGGTGTTGTTAATGCAGCTAAAGAAGAACATGAAACAGA
TGAAAAAAGAGGTAAAATCTATAAGCCATCTTCAAGATTTGCAGATCAAAAAAATCCTCCAAATCAGTCTTCCAA
TGAAAGACCACCATCTCTTCTTGTGATAGAAACCAAAAAACCTCCACTTAAAAAAGGAGAGAAAGAAAAGAAAAA
AAGCAATTTGGAACTCTTCAAAGAAGAATTAAAGCAAATTCAAGAGGAACGTGATGAGAGACATAAAACAAAAGG
CAGATTAAGTCGATTTGAACCTCCTCAGTCAGATTCTGATGGTCAGCGTCGTTCTATGGACGCGCCTTCAAGAAG
AAATAGATCATCTGGTGTTCTTGATGATTACGCACCTGGCTCACATGATGTAGGAGATCCAAGCACTACTAATTT
ATACCTTGGAAACATTAATCCACAGATGAATGAAGAAATGCTGTGCCAAGAATTTGGAAGATTTGGACCGTTAGC
CAGTGTGAAAATCATGTGGCCTAGAACTGATGAAGAAAGAGCCAGAGAGAGAAATTGCGGCTTTGTGGCCTTTAT
GAATAGAAGAGATGCTGAAAGAGCTTTAAAAAATTTGAATGGAAAAATGATTATGTCTTTTGAAATGAAGTTAGG
TTGGGGTAAAGCTGTACCTATTCCTCCACATCCAATATACATTCCGCCTTCTATGATGGAACATACGCTTCCCCC
ACCTCCATCCGGACTGCCTTTTAATGCGCAGCCTAGAGAGCGGTTAAAAAACCCTAATGCTCCTATGTTACCGCC
ACCTAAAAACAAAGAGGATTTTGAGAAGACTCTGTCGCAAGCCATAGTCAAAGTGGTTATCCCAACAGAAAGGAA
TTTGCTCGCCCTGATACATCGAATGATAGAGTTTGTTGTACGTGAAGGGCCAATGTTTGAAGCTATGATTATGAA
CAGAGAAATCAACAATCCTATGTTCAGGTTCTTATTTGAAAACCAGACACCAGCCCATGTTTACTATAGGTGGAA
GCTTTATTCTATTCTGCAGGGAGATTCTCCAACTAAATGGCGGACGGAAGATTTTCGTATGTTCAAAAATGGATC
TTTTTGGAGGCCACCACCATTAAATCCGTACTTGCATGGAATGTCAGAAGAGCAAGAAACAGAAGCTTTTGTAGA
GGAACCTAGTAAAAAGGGAGCACTTAAGGAAGAACAGAGGGATAAATTGGAAGAAATCTTGCGGGGATTAACTCC
AAGGAAAAATGATATTGGAGATGCAATGGTTTTCTGTCTTAATAATGCTGAAGCTGCTGAAGAAATAGTGGATTG
CATTACTGAGTCGTTGTCCATCTTAAAGACACCCCTTCCTAAAAAGATTGCCAGATTATATTTGGTTTCTGATGT
TTTGTACAACTCTTCAGCCAAAGTTGCTAATGCTTCATATTATAGAAAATTTTTTGAAACAAAGTTATGTCAGAT
ATTTTCAGACCTCAATGCCACCTATCGTACAATTCAAGGCCATTTACAATCTGAAAACTTTAAGCAACGGGTAAT
GACTTGCTTCAGAGCATGGGAAGATTGGGCAATTTATCCAGAACCATTTTTGATCAAACTACAAAATATTTTCTT
AGGACTTGTAAATATTATTGAAGAAAAGGAAACAGAGGATGTTCCAGATGACCTTGATGGTGCCCCCATCGAGGA
AGAGCTTGATGGTGCACCTCTGGAAGATGTAGATGGAATTCCTATTGATGCTACTCCCATCGATGATCTTGATGG
AGTCCCTATAAAAAGTCTTGATGATGATCTTGATGGAGTGCCTTTGGATGCAACTGAAGACTCAAAAAAGAATGA
GCCTATATTTAAAGTTGCCCCATCAAAATGGGAAGCTGTGGATGAATCTGAATTGGAAGCACAGGCTGTTACAAC
TTCTAAATGGGAATTATTTGACCAGCATGAAGAATCAGAAGAAGAAGAAAATCAAAATCAAGAAGAAGAAAGTGA
AGATGAAGAAGATACTCAAAGTTCCAAATCTGAAGAACATCATTTGTACTCTAATCCAATCAAAGAAGAAATGAC
TGAGTCTAAGTTCTCTAAGTACTCTGAAATGAGTGAGGAAAAACGAGCCAAACTTCGTGAAATTGAGCTCAAAGT
TATGAAGTTTCAGGATGAATTGGAATCTGGGAAAAGACCTAAAAAACCAGGCCAGAGTTTTCAGGAGCAAGTAGA
ACACTACAGAGATAAACTTCTTCAACGAGAGAAAGAGAAAGAGTTAGAAAGAGAACGAGAAAGAGACAAGAAAGA
TAAAGAAAAATTGGAATCTCGCTCCAAAGACAAGAAGGAAAAAGATGAGTGTACTCCGACAAGGAAGGAAAGGAA
GAGGCGACACAGTACATCCCCCAGCCCATCTCGCAGTAGCAGTGGTAGACGAGTGAAATCCCCATCACCAAAATC
GGAGCGATCAGAGCGTTCAGAAAGATCTCATAAAGAGAGCTCACGGTCCAGGTCATCTCACAAAGATTCTCCTAG
AGATGTTAGCAAAAAAGCCAAAAGATCACCATCTGGTTCAAGGACACCTAAAAGGTCTAGGCGATCACGGTCTAG
ATCTCCTAAAAAATCAGGAAAGAAGTCCAGATCCCAGTCCAGATCTCCACACAGGTCTCATAAAAAGTCAAAGAA
AAACAAACACTGACGTAAATTTTTAAGATGCTGTCACTTATTGGAAATGCGATTTGTTTTGTGCCTGAACGGTCT
GTTTTTTAAAAAAACAAAAAATCAAATGAAAGAGCATTCCTGGGGTTTTTTGTTTGTTTGTGTATGCATGTGTAA
ACTCATGAGCAACTGCATCTGTAGATCTGTCATTGTTTTATATTGTGTAAATTACTTTCATTGTGGCTATTTCTC
AAGATGAAATTTTTATTGTTCTAATGGATTTCATCAGAAATGTGTATAATGGATCTGCTGACAGTAGTAGTATTT
TGTTTTAGGATGTTGTGACTTAGCAAAAATAATACAGATGTCTTCCCCCCTTTTGTAGCTTTGACAATTTGAATT
AGATTTCAAATAAAATCTGAACAGAAAACTATAATGTTGTTTTTTTGCCCCACCGGTGATATTAAGTCCCTTAAA
GTCCTACTGAGTTTCACACTACTGTTGTGCTTCTTATACCTGATGCACTTTATAAGCCCCAGTGTTCAAGTAGCT

FIGURE 2665B

TAAGTTTTATATTTACTAAGATGACTATCCAAATTAAGGGACCTGAGACTCCTATTTGGTGGTTTGCTAACCATT
TGCTTTTGATAAGTTTCTCTTGGGTAATACTAATACCCAGATATCAAAGACTAGGTAGATATGGCATGGCGTTTT
GTTAGTGGAATGCCTGGCTAAAACATTTTTTTCACAGAAGCAATATGATTTCCATACATCCAACCCATGTTCTGA
GCAACTACTTACTTTTAGGGGGAAATTAAATATCTTTTCATTTCCTCTTCTATTATGAAAGAAGTTTATTTGTAA
AACAAATTTTCTAACAAGGTTTGGCCATAGAATTCTCTTGTATGATTGTTGACCTTTTATAATCTTCTGTAGGCT
ATCTTTCAAACACTGGCATCAGAATATTTTTTATAAGTTTGTGTTTAAACAGCTTAGTTGGTCCCCCCCCCCACT
CCCAAGAGACTTGGGTTTAGTTATAGCTTTAAGTAAAATTTAAAAATAAAATGTTTTTCAGGAAACTTCGTATCT
AATGGTTTGTAAATTCAAGGTGCAAAAAGTTGATTTAAACCATTTGCAGAGTTGAACTCTATTATGAAAATAAAT
TTGCTACGGTATGAGGAAGAAATAAAACTTGTGTAATGTTGGTCATAATACTGCTATAAATATAATAAAGGGTTA
TGTAGAATTGAACTGACACTATTATTTGTGAATCTTGATTTCAGTTTTTTATGTAGGCACTTCATACACTGGTTT
GATGGGTTTTTTTTTTCCTCCCTAAAAGAGAAAGTAGAAAACTATTCTAACAATGGATTATTTTGATTTAGCTTG
CTTTTTAAAAAAATCTTTTCAACTTGTTTTACTTAATCTTGCCTAGTCACAAAATAAGATGTGCACCCATGGTTT
GGAGAGTTCCTATATTAGCTGAGCAGTGAGATACACTATTTCCAAACGGTGCACACCTACAGTAGCTTTGGAAAT
GAGCCAATCACTGTTTTACTTAATGGTTCTTATCAGCATGCAAATATTGCTTGAAAGTTATTTCCTTATTCACTG
TTTTGTTAGTCCATTTTGTTAGGAAACATTAATTCCTAAAAATTTGTTCAGAATAATTAAAAGTGAACATTTGGT
GCTGATACTCAAAAACCTACAAATGTAGCCATTTAAAAAGTAACATGTTTTTCTCCCCTGCTCATTGCCTGGGAG
AATGGAATTTTATATAACTACCTTTCTTTGCAAAAATAACGGTCGTGTCGAGTTGGTGGTGATTTTGGCATTCCA
TCTTGCACTGGTTTCTAGTATAGGCTTAGAAATAATTGGTCAGGTAATAATCTTTCCAGTCAAGTTGCAAGGGAT
GCTTATTTCTCTTCAAAAAAAGACATCCTGCGGGATTGAGTAGAAAATTTTAGGTCAGTTTTGGGTGCTTATTTG
TAATATTTTTCCTACTACATTGGAGTTTAGCAGTTCTTTTTTTCTGGATCCAGATACAAGTGTCATGGTTTATCT
TACAGTGGGTGAAACTGACTTTCTTTTGGTTGGGTGGGTGAGGATTTCTTAGGCCTGATAGAATATATATTCTGT
GAAGTTTGTTAATGTACATATTAGATTGTATTGGATTTTTTTTTCTTGAATTGCAAATGGTATTATTAGATAGGT
TATTTCCAGTTTTACTTCATGACAAATTACCTAGAGTAAACCTACTTAATACTCCAATGGATTCTATGAAAGTTT
AATGGGATCAGAAATTGGTGACTTATAAGGGGGAAGATATTCTACCATATTTTTATAATAGCTTATTATTCATGT
TTCTTGTCTGAAGGACACTCAAGTTACAGAGCAAAATTTCTATAGGTTGACTAGAATGTTCATAAGCATGGTCTT
CCAGTTGCAGGAAAGATCATGTTCTATCTGTGGACACTTACTGTCCTCTACCACAGCTACGTGCCAGAGTTGTTT
TCCACAGTTCTTATAAAGGGCATGACTTAGGCTCTTTACCCTCCAACTTAATGTTTATACACAGGGATTGTTTAC
TAGGTTAATGACATTTAACTCCCCTCTCTTCTGTAGGTGAGAGAAAATAAGTAAGTCTTGATCTGTTTCTTACCA
AAGAGAGACAGACCTATGATGGAAAATGATCACGTCTCTGAATTTTTTCTTTAACGTTATAGTTCCTTATTACAG
ATAGTAAGCATATGGGAATTTCTGAGCTATAACATGTTGAGAAGTTAGAAATTAAAACTAACACAACAAAAGGCG
CTGAATCAAAAGATCTTTGCTTTTATTTGGCTCAGAATGTTTTTGGCTTTTCTGCTAAAGATGGCAGAAATTACT
CTACACAGACCTGATTTTTCTTTATTGCAGACCATTCTTGTGGGCTTACCCTGAGACTTTTATCCCAATTAGTGA
ATCTTGGAGGGAATACTTGCTTATTTATGACTTAGGTATTTCCCCCCAAACTTTAATATTCTTGAGCACTTGAAA
ATACTTTTGAGAAATTTTAACTGTGATTAAATTTAGGTTTATTAGAAATATTCTGTACACATTTGCCTCCATGGT
GGTGTAAGTTCTGAAAAATTATATGACCGTGACAATAGTTTATCATCATCATTATTGTTATTCAAAATAAGGGTA
AATAAATCTCTGTATTGCCAAAGTGACTTAAACTGTTCTGATGACCACACAGTGTGATTTCTTTAGCAGAGAAAG
TTGGTTTTAAAAATAAATAGTACCACTTTTCTAAGACTGTACAGTTTACAAATAAGGTTTTTTTCTTTGTTGTTT
TCCTCTTCTATTAAGTTTTAGTGAAAAGCCTAATTACAGAAAATTGTGCAGATACTAGTGAAGATACTAGTATAA
GTTTAAAGGAACATGTGACTGTAAAATCTCACATTTACAAAGTGCTTGATCTCTTCATATTTCACACGCATGTTT
TAGAATAGATTTTAGGGAGTGTTTAATTCATTATCCTTTTGACTTAAAATTTTTGTTACCAACTTCCTAGGACTT
AGATAATATATAAATAAGTACAAATCCCAGGGGAAGTGTTGTGATGCTAGACTAAAAGGTGGGAATGTGCTGCTG
TTCCGTGAGCCTTGTTCCATTGTTGAAAATTTGATGCCTCAGTGTTTATTCAGTACCACCTCATGGAGCTTCAAT
GTAAATGGATTATATGTATAATTGGTAATTTGTATAGTTTTGTAGATTGTAGATTAAATGCACTCATCATGTC

FIGURE 2666

ADKTPGGSQKASSKTRSSDVHSSGSSDAHMDASGPSDSDMPSRTRPKSPRKHNYRNESARESLCDSPHQNLSRPL
LENKLKAFSIGKMSTAKRTLSKKEQEELKKKEDEKAAAEIYEEFLAAFEGSDGNKVKTFVRGGVVNAAKEEHETD
EKRGKIYKPSSRFADQKNPPNQSSNERPPSLLVIETKKPPLKKGEKEKKKSNLELFKEELKQIQEERDERHKTKG
RLSRFEPPQSDSDGQRRSMDAPSRRNRSSGVLDDYAPGSHDVGDPSTTNLYLGNINPQMNEEMLCQEFGRFGPLA
SVKIMWPRTDEERARERNCGFVAFMNRRDAERALKNLNGKMIMSFEMKLGWGKAVPIPPHPIYIPPSMMEHTLPP
PPSGLPFNAQPRERLKNPNAPMLPPPKNKEDFEKTLSQAIVKVVIPTERNLLALIHRMIEFVVREGPMFEAMIMN
REINNPMFRFLFENQTPAHVYYRWKLYSILQGDSPTKWRTEDFRMFKNGSFWRPPPLNPYLHGMSEEQETEAFVE
EPSKKGALKEEQRDKLEEILRGLTPRKNDIGDAMVFCLNNAEAAEEIVDCITESLSILKTPLPKKIARLYLVSDV
LYNSSAKVANASYYRKFFETKLCQIFSDLNATYRTIQGHLQSENFKQRVMTCFRAWEDWAIYPEPFLIKLQNIFL
GLVNIIEEKETEDVPDDLDGAPIEEELDGAPLEDVDGIPIDATPIDDLDGVPIKSLDDDLDGVPLDATEDSKKNE
PIFKVAPSKWEAVDESELEAQAVTTSKWELFDQHEESEEEENQNQEEESEDEEDTQSSKSEEHHLYSNPIKEEMT
ESKFSKYSEMSEEKRAKLREIELKVMKFQDELESGKRPKKPGQSFQEQVEHYRDKLLQREKEKELERERERDKKD
KEKLESRSKDKKEKDECTPTRKERKRRHSTSPSPSRSSSGRRVKSPSPKSERSERSERSHKESSRSRSSHKDSPR
DVSKKAKRSPSGSRTPKRSRRSRSRSPKKSGKKSRSQSRSPHRSHKKSKKNKH

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FIGURE 2667

GCTAGATGAGACTGAAGAGTCTTCTTTACTTTAAGTGATTGATTTCATTTAGGACTCCTTGTGGGTTTTTTGTAA
AAAGCCATTAACCATTTCCCCTGCCCTGATCTCCATATCAGCCTTTATATATATTCATTGTCTCTCAACAGCCCC
AATTTTTTTATTTAACAGATGGGGAACAGAGGCTCTGAGCGGTTAACAAAGCTTTCTTTCTGTGGAAACCTAGTA
AATGGCAAAGCTGGAATATGAAACTGCAAAGCCTATGTGCTTAACTAGTAAACCCAACCACCTGGGACCACCATA
TCTTACTGTGCAGTTTGTTGCTGTGTGAGGGGATCAGAACATCTAAGAACTGCCATTCACGTTGAGGACAACATA
GGGATTTATATATTAATACATGCTGGTGTAATACAGGCCGGTGTTCTGTTAAAATTAGTATATTAGGACAGTTTG
CCATACCATAGGGGAAAAGCCACTTTATTCTAATTCACCCAAAGGTACTGTAAGTGCTGATGGCTCTGGGTCTGT
CTTTCTGTCAAGTTGCCAAGTCACATAAGTAATGAATCCGCAGCTGGAGGAGCTGCTGCTGGAGGACAGGCATGT
TTTCAGACAGGAGCATGGCCTTTAGCTCATGACCATAAGAGGGCGCTACAGCAAAGAGTACTAAATACCAATCAA
AGTGAGCTCAGAGTACAAGAGGGTAACTTGCTTTTCTCCAAAGTAAAAGAGAAGACATAGTCCTCAAACACTTGC
CCTGTGCCCTGTCCCTGAACTCTCCATGGAGGAATTTTTTCTGTTGTTTAGTGTTAGCAGAATTTAGGAAGGGCT
TGTAATAAGGAAGGTTGAGGGTTGGGTGGGGTCACACTGTGTTGTGTGAGGATCATTTTCATGTTAATGAAATGT
TTAGTTCTTTAAGGGGAATGTGGTAGAGCCTTTATCTCCCCCTGCCCTTTTTTTTAAACTGCACAGGTCCTGGCA
CAATGTTTATTGTGTCATAAATAACCAAGAAATGGGTTTCTACAAAAGATGCAAAGACTGTGCTTCTGGAATTCC
CTACCACAGCGAGGTCCCTGTGAGTTTGAAAGAAGCTGTCTGCGAAGTGGCCCTTGATTACAAAAAGAAGAAACA
CGTATTCAAGCTAAGACTAAATGATGGCAATGAGTACCTCTTCCAAGCCAAAGACGATGAGGAAATGAACACATG
GATCAAGGAAAAATTACTGCAGTTGACGGAAAAGAGGAAAGAAATGATCGGTCCTTACAGCCGCTCGTCAGACTC
CAGCAACCTGGGATGAGAGGTTCTCTGCCCTGGAAAGGCTGACTACATTGGAGTTACTGGAAGTGCGCAGACAGC
AAGAGGAAGAGGAGAGGAAGAGGCGGCCGCCTTCTCCCGAGCCGAGCACGAAGGTTTCAGAGGAAGCCGAGTCCC
AGCAGCAGTGGGATACTTCAAAAGGAGAACAAGTTTCCCCAAACGGTTTGCCAGCTGAACAGGGATCTCCACGG**A**
TGGCAGAAACGGTGGACACAAGCGAAATGGTCAACGGCGCTACAGAACAAAGGACGAGCTCTAAAGAGTCCAGCC
CCATCCCCTCCCCGACCTCTGATCGTAAAGCCAAGACTGCCCTCCCAGCCCAGAGTGCCGCCACCTTACCAGCCA
GAACCCAGGAGACACCTTCGGCCCAGATGGAAGGCTTCCTCAATCGGAAACACGAGTGGGAGGCCCACAATAAGA
AAGCCTCAAGCAGGTCCTGGCACAATGTTTATTGTGTCATAAATAACCAAGAAATGGGTTTCTACAAAGATGCAA
AGACTGCTGCTTCTGGAATTCCCTACCACAGCGAGGTCCCTGTGAGTTTGAAAGAAGCTGTCTGCGAAGTGGCCC
TTGATTACAAAAAGAAGAAACACGTATTCAAGCTAAGACTAAATGATGGCATGAGTACCTCTTCCAAGCCAAAGA
CAAAGAGAACCGGTTCAGCCTTTTTGGCCAAAAAGAAA**TGA**ACTCCTTTCCTTCACCTCCTGCCCTTCTCTTACC
CTTTCAGTGAAATTCCCGCATGCAAGCTCAGAACCCACACAGTACTCTCTGTGCCCAAAGTTCCCCAAAGTGGTT
GAANNNNNNNNNNNNNNNNNNNNAGAGCATTTCGGGGGGGGGTGGGGGAAACACACCTAAACACTTTATCTCCCA
GTTACCAAAGTTTGAGGTGCAGAGGGAAGGCCAGATTTTTTTTTTAATGAAATTATATAGATTAGATCTCAGTAT
TTAAACTGTTCCTCAATTTTGTGAGGCTGTGTTGGAAATAACCCGCCTCTAGTGCTGTTGGTATGCAAGGCAGCG
GTGCTTAATCAATATTTCCTGTGCTCACCAGAGGCCAAATGTACCAATATCCTGACACCATTCTCTCTCCATTTA
CTTCTTGGTGGTTACCCTGACTCTTGACTCTTAGAAGTGCCCGAGATGGGGCTAACCTTTATTAAACAGATCGCA
TATTATGATCTTGCTGCAGCCACAGTGCAGCTCCACATTAACTCTACAGACCAAACCATTTGTATCTGGCATCAC
TTACTAACACACGACATGCGGCTTTTCTGCATCAACTGCTATGACGGTTAAGAATGTCAGTATACAAGAAGGAAT
AGAAAACTGATACTGTTTTAAATAATCTGTAATTTCAATTTTTTTTTTTTTGCTGAAATACATTATATTGTACGT
TTGAGATAATTCTAGTACAAAGTATAATAAAACTAGATGTATAATAAACCCTTTAAATCATTGGTAAGTGTACAA
GTGGTGGAACTGAAGCATTTACTGGACAAAGTAATGTTACTCTAATGGTTACTTGCTCGTGCGTTGCCCACACTG
TGTTATAATTTGCTTCATTTCCTTGCTATTTGATACATAGTGTGCATTTCTCTGTCACTGTAACTATTGTAATGA
CAAATTTTCATCTTACTGCACAATCAAAATGACATTGATAGGAATGAACTCCAGAGGCTGGGCCTGAACAGGGAG
GTGGTCGCTCAGGCCTGGTGCTCAGTCGTACGACCTGTACCTCTCAACTTTTGCCCTATCTGTTAAATATATGCT
ATGTCATTAAATGCTTTTAAATCTAGCACGGTGACTAGTTGTTGTTCTTCCTCTGCTGCGTGTGCATGCCCAGTA
GGGAAACTGCAAAGGGAGAAATGACAAACAAGAAACATTTTACAACCAGTCTGGGCTCACTTTTGCATTTTTTAT
GCATGTCTGGTGCACAAGCTTTGAAAACTACAGCAAACAGTAATAAATGTGACTGTTTTGTAGT

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FIGURE 2668

MAETVDTSEMVNGATEQRTSSKESSPIPSPTSDRKAKTALPAQSAATLPARTQETPSAQMEGFLNRKHEWEAHNK
KASSRSWHNVYCVINNQEMGFYKDAKTAASGIPYHSEVPVSLKEAVCEVALDYKKKKHVFKLRLNDGMSTSSKPK
TKRTGSAFLAKKK

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FIGURE 2669

TTTAAATGTCATCATCATAGTCTTTTAATATTTTACATAAAAAACTGTATACACAGCTTATAGAACTTTTATGTA
AACATCATAAGCTCACCATTTTGTCATTTGTCAGTTTATTTAAAAAATAAAAAACAAGACAACAATTTAGTAGAA
GTACCACTGGGAGGGTGGGGAGGGGAAAAAAGGATATACAGGGGCAGGTGTATTCTCTGTACAGAGGTGCAGAGA
AAATTTCACATAGCTTTAGAGAATGCCTTGTGGAAAAAAAAAAAAAATAGGCCCCAATACTTGTTACTGCCCTTTA
TCAAAACTGTGTGCATGACCTGCACAAATAAAATCACAAAACAGTGTTGCCACATTCTTCAAGGAAACAAAGCAA
AATTTAGTGGGTTTCTTTTCCCTCTCCTTGTTAAAAGTCATTTTTTAAAAACATCAGAAGTAGATGAGGTTACAG
CGTACAAGTGTGGTCAGAATGCTACTGTCGTATGC

FIGURE 2670A

GGCGCCTGAGGAGCGGGATCTAACCCAGGAGCAGACAGAGAAGCTGCTGCAGTTTCAGGATCTCACTGGCATCGA
ATCTATGGATCAGTGTCGCCATACCTTGGAACAGCATAACTGGAACATAGAGGCTGCTGTACAGGACAGATTGAA
TGAGCAAGAGGGCGTACCTAGTGTTTTCAACCCACCTCCATCACGACCCCTGCAGGTTAATACAGCTGACCACAG
GATCTACAGCTATGTTGTCTCAAGACCTCAACCAAGGGGGCTGCTTGGATGGGGTTATTACTTGATAATGCTTCC
ATTCCGGTTTACCTATTACACGATACTTGATATATTTAGGTTTGCTCTTCGTTTTATACGGCCTGACCCTCGCAG
CCGGGTCACTGACCCCGTTGGGGACATTGTTTCATTTATGCACTCTTTTGAAGAGAAATATGGGAGGGCACACCC
TGTCTTCTACCAGGGAACGTACAGCCAGGCACTTAACGATGCCAAAAGGGAGCTTCGCTTTCTTTTGGTTTATCT
TCATGGAGATGATCACCAGGACTCTGATGAGTTTTGTCGCAACACACTCTGTGCACCTGAAGTTATTTCACTAAT
AAACACTAGGATGCTCTTCTGGGCATGCTCTACAAACAAACCTGAGGGATACAGGGTCTCACAGGCTTTACGAGA
GAACACCTATCCATTCCTGGCCATGATTATGCTGAAGGATCGAAGGATGACTGTGGTGGGACGGCTAGAAGGCCT
CATTCAACCTGATGACCTCATTAACCAACTGACATTTATCATGGATGCTAACCAGACTTACCTGGTGTCAGAACG
CCTAGAAAGGGAAGAAAGAAACCAGACCCAAGTGCTGAGACAACAGCAGGATGAGGCCTACCTGGCCTCTCTCAG
AGCTGACCAGGAGAAAGAAAGAAAGAAACGGGAGGAGCGGGAGCGTAAGCGGCGGAAGGAGGAGGAGGTGCAACA
GCAAAAGTTGGCAGAGGAGAGACGGCGGCAGAATTTACAGGAGGAAAAGGAAAGGAAGTTGGAATGCCTGCCCCC
TGAACCTTCCCCTGATGACCCTGAAAGTGTCAAGATCATCTTCAAATTACCTAATGATTCTCGAGTAGAGAGACG
ATTCCACTTTTCACAGTCTCTAACAGTAATCCACGACTTCTTATTCTCCTTGAAGGAAAGCCCAGAAAAGTTTCA
GATTGAAGCCAATTTTCCCAGGCGAGTGCTGCCCTGCATCCCTTCAGAGGAGTGGCCCAATCCCCCTACGCTACA
GGAGGCCGGACTCAGCCACACAGAAGTTCTTTTTGTTCAGGACCTAACTGACGAATGACATTTTTTTCTTCCTGT
CCCCTCCTACCCCAGTCCCTAAAAGAAATGGGGAAAAAAGAAAACAACAGCAAGTCAAAAAAAAAAAACAAGAGA
GAGAAATTCATATTATTATTATTATTATAATACAATATTTTTTTTAAAAGACTGCTGCATCCTTAGGAAGGATCA
GAAACCATGCTGCCCGTAAGAGTCACAACCTGTGTGTGCGCGCAAGGTTAGCAACAAACGTACCCGCTTGGCAAG
CCCACCCTTCCTGTGGCCTCTGTGCACGCACCTTCCAGTGAACAGAGACTCTTCACCTTCGACCCATCCATTGTC
CCAGCTGGGAAGGGGACATTCCCACTAGTTCTCATTCATTCTTGCTTTTATGAAAAATAAAAGTGAAAAACCTCC
ATCAACCAGCTACTTGCAGCATCTCCTGAGGACTTGCTTCTCCTGCCTCTGGGGAAGAGAGGGAAGAGAAAGCAC
AGAGCAGAGAAGCAGAGATGTTCCTTGAACTGCCCACAAGTTTTCAATAACTTTTATTTCTGTTTTGTAATGACC
AAAGGAATGAGGCTGACATAGGTATATATATATATTTTTTTCCTTTATTTGATAAAGAGCCAATTCTTTAAACCC
ATGAGTTTATGCCCTGGGCTCCTTAGCCCACAATAGTGTAATAAAAGTGCCCCGGGCTGGTTTGTGCTTATTTCT
GCCATTGTCCCTCTCACGTTCCCAGAGAGGTCATTCTTTTTGGTCCAACTCTTGCTGTCCTTTCTTACCACCTGT
GCACCCCACTTGGAGCAGTGGGAGGAAATCTGGGTTTGTGGCCCCACAAAGGCTGTATATGTAAAGATACACCTA
TGTATGTGGTGGAACTCACCTTTACACACAACTGCAGCTTTTCCTTGGAGTCTGTACCAGGTGGTGGTTATGGGG
TCTGAACCAAAGGATAGCAGCTCTTCATTCCTCTTCTGACATGTGCATGCTGCTCCCCCCAGCCCTGGGCTTTCC
TGAATTGCCAAGCCTGGTGCCTTTCCAAAGGACTAGCAGGGCCTGTGGTGGAGCCAGCAGAACCACAGGAGAGTG
CCCTGCCTGTCTCAGTGGAAGTGTATTATTGTTTTAAGGATAGAACCAGAGGCCTTGAAGGGAGCCAAGACAGAA
CTCCCAGCCTGTGTAATCTATTGGAAGGCACATTTTCATTTCTGATGCAGCCACCTTCTGGAGGCAGCTTTTATC
CTTTCTCTCTATTGCTATGTTGAAGTAATAGGGTTTTTTTTAACCTCTGGATGTCTCGTCTGTGGTTGAGTTTAT
GGTAATGGGTACATGGGTCAGGCCATGTATTAACAGATGCCAGTGCGCTCTGACAAGTATTCCAAAGTGTTCCGT
AGCTAGACTGGTGCAGGCTCGTTGTACCACTGCAACCGACTGACGTTACTGTAGTTCCTAGAATGCTGTGAGGGC
GGGGGGTTCAGATCAACATAAAGCCTAACTTGCTGGAGTTGTAGTCTCAAGGCTTTCTCTCTTGCTTAACTAAAA
CCTAAGGACCACTGTTTTTGGTAGCAATTATATGGTTACTATCCACTGCAGTCCTCAGTTGTTGGGGTAAATCCC
ACATGGCAGAGTAAGGCACCCCACAGAAATTAACTTGGAGAGCCTGAGAAATTCCCAGTGGCCTTGGCATAGCTG
TCTAGAACACCATCTCTAGGAAAATTTAATTCTGTCCCTGGCCAGCTATTGTTCTTCCACTTCGTTTTCTGCTGT
CCCAAGGCCAGATGAGTGGAATCACCATCTGACTGTTGTCAGTAAAATGTATCTGGCGTGAACAGCAGGATAACC
CATGTTCTCCACATAAGGATAACCTTACGTGAAACCTTCCTGCTGACAACCATGCAGAGGAATTTTTCCACTTAA
GTCAGAGCCTTCCTCCCCATCTGGAATTCACAGCTGTTCCCTGGCAGCACACAGGAGGGTATTAAGGACCTTTGT
GAGGCTAGGTACACTGTCCACACCTCTTTGGGGAAGTTACGATTTTTTTTTTCCATCATAATTCAGTCTCTTCTT
ATTCTACAGTGTGCACTTTATGCCTCTCGCCTTTTGATAATAGTTGTTCAGTGAAGGAAGTCAGCTGCCAGAATA
TTAAGAAGGGTCTCCCTTTATGTCAGTACAACTGTTAGGGCGGCCTTCCCATTTACTTTAGGTTTCAAGAGGATT
CACCGGAAGCACATGCCCCGGTCTAGTCCCATTTGAAACAGTTCTGCTTTACTGAGACCCTAGGCCGGTCTCCTT

FIGURE 2670B

GCTGACCCTAGCGCTGCTGCCTAGGTGCCATTTCCTTTCCTCCTCAGTCAAATACAGGCTGCACATTTTGTCACT
TAATGCCAGTACAATCTGTGTTACTCCTAAGGACTTTTGGGATTTTGATGAGACCTGCGAGGGAGAAGACACTGA
GAAGCCAGTGATCTGCAAGCATTTGCTCTTGTTTCCACATCACCTCTGGGATATTTCAGCTGTTGTTTCCAAATG
GCAAATCATCAACTAAAAGCACTTGTTTCAAGTTTTGTTCTGCACTCCCACGACTGAAGTTGTAGATTGAGCTGA
ATAACCATGGGAAGTGACCAAGCAAAGACACTCGATTGGAGTCAGTTGAATATTTGTACCCTCAGTGGAGCCCTT
CTGGTCTTTTCTTCCACTTCTGCAGAATTTCCTCTAGCAAATACTTCTTTCTCCTTGCTTGCCTCCACCATGATA
TTTGAATAAGAGATGGCCAGAGGATAACACTTGTCTCTTAAAAACTAAGCTAAAAAGAACCTAGAACCTTCAATT
GAGCAGTTGTGAAAATTGCTAATGGTGCCAAGGCCAAGCAAAGAGTTTCAGAAAATGACTGAGAAGGAGCGATAA
CCCCCAGAATGCAAAATCAGGGGCATCATTATCCGGTGCTTGAACAAGGAGCTCCGCTCTACAACTGGTTTTTTT
AGGACTTGTGAGGAACACAGCAACGGAAATCCATCCACAAAGGATGCAGTGCCCCAACTTGTACTGCGCCTGAAT
AGTCATGTGATAATTTACTGAAGAAATCTAGTGTACTTTAAATTTTTTTCATAAAAGTTTACATTGTATTGTAGG
TTAACATTAAATGTTTTATAGCAAAAACTTC

FIGURE 2671

APEERDLTQEQTEKLLQFQDLTGIESMDQCRHTLEQHNWNIEAAVQDRLNEQEGVPSVFNPPPSRPLQVNTADHR
IYSYVVSRPQPRGLLGWGYYLIMLPFRFTYYTILDIFRFALRFIRPDPRSRVTDPVGDIVSFMHSFEEKYGRAHP
VFYQGTYSQALNDAKRELRFLLVYLHGDDHQDSDEFCRNTLCAPEVISLINTRMLFWACSTNKPEGYRVSQALRE
NTYPFLAMIMLKDRRMTVVGRLEGLIQPDDLINQLTFIMDANQTYLVSERLEREERNQTQVLRQQQDEAYLASLR
ADQEKERKKREERERKRRKEEEVQQQKLAEERRRQNLQEEKERKLECLPPEPSPDDPESVKIIFKLPNDSRVERR
FHFSQSLTVIHDFLFSLKESPEKFQIEANFPRRVLPCIPSEEWPNPPTLQEAGLSHTEVLFVQDLTDE

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FIGURE 2672A

CGCGTGTCTACGCGGACGCACCGGCTAAGCTGCTTCTGCCGCCGCCGGCCGCCTGGGACCTTGCGGTGAGGCTGC
GCGGGGCCGAGGCCGCCTCCGAGCGCCAGGTTTATTCAGTCACCATGAAGCTGCTGCTGCTGCACCCGGCCTTCC
AGAGCTGCCTCCTGCTGACCCTGCTTGGCTTATGGAGAACCACCCCTGAGGCTCACGCTTCATCCCTGGGTGCAC
CAGCTATCAGCGCTGCCTCCTTCCTGCAGGATCTAATACATCGGTATGGCGAGGGTGACAGCCTCACTCTGCAGC
AGCTGAAGGCCCTGCTCAACCACCTGGATGTGGGAGTGGGCCGGGGTAATGTCACCCAGCACGTGCAAGGACACA
GGAACCTCTCCACGTGCTTTAGTTCTGGAGACCTCTTCACTGCCCACAATTTCAGCGAGCAGTCGCGGATTGGGA
GCAGCGAGCTCCAGGAGTTCTGCCCCACCATCCTCCAGCAGCTGGATTCCCGGGCCTGCACCTCGGAGAACCAGG
AAAACGAGGAGAATGAGCAGACGGAGGAGGGGCGGCCAAGCGCTGTTGAAGTGTGGGGATACGGTCTCCTCTGTG
TGACCGTCATCTCCCTCTGCTCCCTCCTGGGGGCCAGCGTGGTGCCCTTCATGAAGAAGACCTTTTACAAGAGGC
TGCTGCTCTACTTCATAGCTCTGGCGATTGGAACCCTCTACTCCAACGCCCTCTTCCAGCTCATCCCGGAGGCAT
TTGGTTTCAACCCTCTGGAAGATTATTATGTCTCCAAGTCTGCAGTGGTGTTTGGGGGCTTTTATCTTTTCTTTT
TCACAGAGAAGATCTTGAAGATTCTTCTTAAGCAGAAAAATGAGCATCATCATGGACACAGCCATTATGCCTCTG
AGTCGCTTCCCTCCAAGAAGGACCAGGAGGAGGGGGTGATGGAGAAGCTGCAGAACGGGGACCTGGACCACATGA
TTCCTCAGCACTGCAGCAGTGAGCTGGACGGCAAGGCGCCCATGGTGGACGAGAAGGTCATTGTGGGCTCGCTCT
CTGTGCAGGACCTGCAGGCTTCCCAGAGTGCTTGCTACTGGCTGAAAGGTGTCCGCTACTCTGATATCGGCACTC
TGGCCTGGATGATCACTCTGAGCGACGGCCTCCACAATTTCATCGATGGCCTGGCCATCGGTGCTTCCTTCACTG
TGTCAGTTTTCCAAGGCATCAGCACCTCGGTGGCCATCCTCTGTGAGGAGTTCCCACATGAGCTAGGAGACTTTG
TCATCCTGCTCAACGCTGGGATGAGCATCCAACAAGCTCTCTTCTTCAACTTCCTTTCTGCCTGCTGCTGCTACC
TGGGTCTGGCCTTTGGCATCCTGGCCGGCAGCCACTTCTCTGCCAACTGGATTTTTGCGCTAGCTGGAGGAATGT
TCTTGTATATTTCTCTGGCTGATATGTTCCCTGAGATGAATGAGGTCTGTCAAGAGGATGAAAGGAAGGGCAGCA
TCTTGATTCCATTTATCATCCAGAACCTGGGCCTCCTGACTGGATTCACCATCATGGTGGTCCTCACCATGTATT
CAGGACAGATCCAGATTGGG**TAG**GGCTCTGCCAAGAGCCTGTGGGACTGGAAGTCGGGCCCTGGGCTGCCCGATC
GCCAGCCCGAGGACTTACCATCCACAATGCACCACGGAAGAGGCCGTTCTATGAAAAACTGACACAGACTGTATT
CCTGCATTCAAATGTCAGCCGTTTGTAAAATGCTGTATCCTAGGAATAAGCTGCCCTGGTAACCAGTCTCTAGCT
AGTGCCTCTTGCCCTCTCCTCACCTCCTTTTCTCTCAGTGACTCTGGAACCTGAATGCAGCTTACAAGACAAGCC
TGACTTTTTTCTCTGATTACCTTGGCCTCCTCTTGGAACCAGTGCTGAAAGGTTTTGAATCCTTTACCCAACAAT
GCAAAAATAGAGCCAATGGTTATAACTTGGCTAGAAATATCAAGAGTTGAATCCATAGTGTGGGGCCCATGACTC
TAGCTGGGCACCTTGGACCTCCAGCTGGCCAATAGAAGAGACAGGAGACAGGAAGCCTTCCCATTTTTTCAAAGT
CTGTTTAATTGCCTATTACTTCTCTCAAAGAGAACCTGAAGTCAGAACACATGAGCAGGGTGAGAGGTGAGGCAA
GGTTCATCCTGAATGGGAGAGGAAGTCGAACCACTGCTGTGTGTCTTGTCAGGATGCTCACTTGTTCCTACTGAG
ATGCTGGATATTGATTTTGTAACAGCACCTGGTGTTTCACGGCTGTCCGAGTGAGCTAACGTGGCGGTGTGGCTG
CCTGGACCTCCTCTTTCAGGTTAACGCTGACAGAATGGAGGCTCAGGCTGTCTGCAAGAAAACAGTTGGTTTGGC
TGTGATTTTGACCTCCTCTTCCCCACTGCCATCTTCTAAGAGACTTTGTAGCTGCCTCCTAGAAGCACATTCTGA
GCACATTTGAGACCTCTGTGTTAGAGGGGAGACTGCACAAACTATCCTCCCCCAGGTTGAGACGTCTGCAGAGTG
GCAAGCTGACTTGTAGAAATGGGGTGCCATTTATGCTCTACTTAGACAAGGGTAATCAGAAATGGAATCAGTGCA
GGCAAAATTTAGGATTTGCCGCTTCCATAAATCAAAGCATGACTAATAGGGGGTCTCTGAAATGTAAGGGCACAA
ACTTCACTTAGGGCATCGCAGATGTTTGCAGAATGGTTGGCCTAATGATTATGCTACAGATGGGTTTTAAATGAC
CCGTCTAGGTTACTGCTTCCTTGCAAAAAAAGTCGAATCCTGCATTGAATTGAATATGAATTTCTCTAACTCTCT
CCAGAAAATGGATGGAGATAACTTGTCTTTAAAACTGTAGGCCAGCCTTAGCCACTGTGGAGCCCTTGCCTCCGA
GCTCTGGCTTCAAGGGGAGCTCTTCTCCAGGTTCACTAGGTGAATTGATTTATTATTATCATATTGATAATGTGA
GATTCTTTAGCCACTTTGGGGAGCCTGTCTCTCCAGAAGCCTTTCTTAGTGGTGCCCACAGTTGGAGCCCAGGGG
CCATGTTTGCAAACTGATTCATGTGCATGGCTGACAGGAGTACTGGTTCACTACCAATGCCTGAGCTTTTCTCTT
ACATAGAAAAACTGTCCACTCTCAGTAATCACAAGCAGCATCCGTTTTGTTTTCTCTTCTTGGGAGACATCTGTC
AAACCAGGAATATTCTTGAAAAGAACGTGAGCAGGAAAAACTGCTGGTGATACTTTTTTTAAGTTTTGTTTTTAT
CTTGCCTGTTGGCTTCAATACATTTGAGAATACGCTGAAGAGGGAAAATTTCAGTGATGGAGATTCTAGATTAAA
TATCAGGACTGATTTCCTGGTGGGATTATGGTCCAGTTTTACCAAAGAACCAATTCCTTGAATGTTGGAATCTAA
CTTTTTATATTGTCATTATTATTGTTGTTTTTAAACGGTTCTTTGTCTTTTCTGTTTTATTTTTCTCAAGCTGCT
TTCAGGAGCTAGCAGAAAATAACTCAAAGTTGAAGACTCTGGAAGATTTTGCTTTAACCTAACTCGCATTGATGT

FIGURE 2672B

ATTAAATTTATAATTTTAGCATTCCCAATAGATCCTATCATTCCTTAAACATAATACCCTTTGTCTTGGAGTAGA
ATACTAAGTTAGAGTTAGTGGATTTCTAGTTTAGGAGAGGAGCTCAAAACTATAATCTTTAACAAATTGAAAAAT
GAAATAGGGTGTTTTCCCTTTTTGTGCACACCTATATTACCTTAAGAAATTTCCTTCCATAGACAGCTGCCTCAA
AGGGAAATCCTCTTTAAACCGTAGTTGGCGCAGAGGTCAGTCCTAGTCGGAGCTTAGGAGGGGCGGAGACGCTCA
CATCGTCTGACTTGAGTCGCCACTGATTGTGGCAACAGCTTTGCCTCATGAGTCAAAAATTGGCAATTTCTTTTG
ATTTTTAGTTGTTGAATTTGCTGTTTCAAGCATTTGTACATATTAGAAGTCTAAGGAGTAGCAAGTCAGTGGGAG
GACTTTTTCACCCCTGGCATTAGCAGCTTCGACCTCATTTTCCAGATGCACCAGCTCCTATTAATAAGTTAGCAA
GGAAAGTGTATGTCACGTGCAGGAACAGTGAGGCAGGGACAGGGGTTCTGCTCCTTCTCACTTCACCACCGGCAC
ACAGCTTGCCCCTGTCTTTGCCCCCAAAGGTATTTTGTGTCTAGTGTCAAATTGGAGCTATTCTTCACTGGTCCT
TAACCTTGGGTTTTAAAAAGAAGGCTTCTCTGTTTGGGTAGCGTAAGAGCTGAGTATAGTAAGTCCTCTTCCAAA
GAGATGGCAATATGCTGGGCATCTACTTTAAAACAAAGTTGTCTGATTTTTGCAAGAGAGGTTAGGATTTTATTG
TTCTTATTTCCCTTTACAGTTCTGCAGTTCCATCACAGTATTTTTTTAAATAACTCAGGTGTATGAGCAGAAATT
AGAAAAGAAAATTAACTTATGTGGACTGTAAATGTTTTATTTGTAAGATTCTATAAATAAAGCTATATTCTGT

FIGURE 2673

RVYADAPAKLLLPPPAAWDLAVRLRGAEAASERQVYSVTMKLLLLHPAFQSCLLLTLLGLWRTTPEAHASSLGAP
AISAASFLQDLIHRYGEGDSLTLQQLKALLNHLDVGVGRGNVTQHVQGHRNLSTCFSSGDLFTAHNFSEQSRIGS
SELQEFCPTILQQLDSRACTSENQENEENEQTEEGRPSAVEVWGYGLLCVTVISLCSLLGASVVPFMKKTFYKRL
LLYFIALAIGTLYSNALFQLIPEAFGFNPLEDYYVSKSAVVFGGFYLFFFTEKILKILLKQKNEHHHGHSHYASE
SLPSKKDQEEGVMEKLQNGDLDHMIPQHCSSELDGKAPMVDEKVIVGSLSVQDLQASQSACYWLKGVRYSDIGTL
AWMITLSDGLHNFIDGLAIGASFTVSVFQGISTSVAILCEEFPHELGDFVILLNAGMSIQQALFFNFLSACCCYL
GLAFGILAGSHFSANWIFALAGGMFLYISLADMFPEMNEVCQEDERKGSILIPFIIQNLGLLTGFTIMVVLTMYS
GQIQIG

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FIGURE 2674

GGCGCGCGGCGAGCTGAGGGTGGCGGCGGTCGACATGTTCCAGGTCCCGGATAGCGAGGGCGGCCGCGCCGGCTC
CAGGGCCATGAAGCCCCCAGGAGGAGAATCGAGCAATCTTTTTGGAAGTCCAGAAGAAGCCACTCCTTCCAGCAG
GCCTAATAGGATGGCATCTAATATTTTTGGACCAACAGAAGAACCTCAGAACATACCCAAGAGGACAAATCCCCC
AGGGGGTAAAGGAAGTGGTATCTTTGACGAATCAACCCCCGTGCAGACTCGACAGCACCTGAACCCACCTGGAGG
GAAGACCAGCGACATTTTTGGGTCTCCGGTCACTGCCACTTCACGCTTGGCACACCCAAACAAACCCAAGGATCA
TGTTTTCTTATGTGAAGGAGAAGAACCAAAATCGGATCTTAAAGCTGCAAGGAGCATCCCGGCTGGAGCAGAGCC
AGGTGAGAAAGGCAGCGCCAGAAAAGCAGGCCCCGCCAAGGAGCAGGAGCCCATGCCCACAGTCGACAGCCATGA
GCCCCGGCTGGGGCCGCGGCCTCGCTCTCACAACAAGGTCCTGAACCCACCGGGAGGCAAATCCAGCATCTCCTT
CTACTAAGAGAAGCCACTGCTCCACCCGGAGCCAGACCAGAAACTCAAGAGATAGGGTAGCCATGTTTTCATTTC
CTTTTGCCCAAATGAGCGGGGTGGGAAGAGGGTTAGTCTTATGTGAGCCTGGCTGCTCAGCGTCTCCTGGCCGTC
ATGACAGCTGCTTGGAGACCCGTGCCTTCCAGATGGCTGGGAGATGCCTCTGTGGGGATGAAATGGGGCACCCCT
GGCCATCACTCATGTGTAGTCCAGGTTTGAGAGGAACTGGAAGGGGGGTGAGGGTGGGGAGGTGGGGCAGGGCAT
GGTCCTTGGATCAACAGCCCGCCAGCTGATTGGATGTCTAGGAATGACTGAAAGAAACCAAAACAGCCTGTCCAC
TGCTGCTGTGGGATGGAGGAGGCGTAAGCAGAAACACTAACAGTATATTGACCTCTTAGCAGAACCGCTTCCATT
CTGGAGATCACGGCTGCTAAATCCAGCATCCCCACTTCATTTTACCCCCAGCATATTGTTCTGTAGTCTTTTCTT
GAAACATCTTGATTGCTTTTCCTCGGCAGCTTTCAAAAAACCAAATAATAATAGTTATCCGTCTTCTACTTCATG
GAAGATTGTTTTGGTGCCCTGACCCTCTGAAGTGCCCAGTTCCTGCCATCTGAAACCTCGGCCTGATCTGATCTC
ATGTTGGAATCTGCCTGTCTTTCACACAGGGCTGGTCTTGGTCCTTTACATGCCAGTTTTGCTTGTGAATTCTTG
CTTTTTTCCTCTCATCAGCCTTAAGTTTAGGCGTTTGTTGTTCTCCAGTGATGTAGACAGTTCCCTTCACAAGTC
ACAGTTCTTCCCATAAATGAGGCCCGCTGACCTCTGCGGGACTTTAAAAATCTATTCAGATATTTCCGAGTAAGT
GGCTTGTTTAAATTCTTCCTGTGTCTTTCTTTATTCCTTAATTGGTTGGTGGAAAGAAGAGATGCTTGGGAACCT
TGGGTTCTTAGGTTTGGATTCTTTAATAATATCTAAAAAGCTAAATTTTAAATACCAGCTTTACATAAATGATTG
TTGACTCTGGTCTGTTTCTGACACCTTTCCAGAAAAAAGTCAATTGTTCAGGTACACCAAAGAGGAAGAAGAGCT
GTGGAGGCCACCCTCTACAAAGCTTTATAGAACTTCTGGATCTAACTCACAAACAAGCTTCCAGAAGAGACTAGA
GACCTTAGGCCAGGAGATGAAGGAGTTCAGTAGCAAAGTCACACCTGTCCAATTCCCTGAGCTTTGCTCACTCAG
CTAATGGGATGGCAAAGGTGGTGGTGCTTTCATCTTCAGGCAGAAGCCTCTGCCCATCCCCCTCAAGGGCTGCAG
GCCCAGTTCTCATGCTGCCCTTGGGTGGGCATCTGTTAACAGAGGAGAACGTCTGGGTGGCGGCAGCAGCTTTGC
TCTGAGTGCCTACAAAGCTAATGCTTGGTGCTAGAAACATCATCATTATTAAACTTCAGAAAAGCAGCAGCCATG
TTCAGTCAGGCTCATGCTGCCTCACTGCTTAAGTGCCTGCAGGAGCCGCCTGCCAAGCTCCCCTTCCTACACCTG
GCACACTGGGGTCTGCACAAGGCTTTGTCAACCAAAGACAGCTTCCCCCTTTTGATTGCCTGTAGACTTTGGAGC
CAAGAAACACTCTGTGTGACTCTACACACACTTCAGGTGGTTTGTGCTTCAAAGTCATTGATGCAACTTGAAAGG
AAACAGTTTAATGGTGGAAATGAACTACCATTTATAACTTCTGTTTTTTTATTGAGAAAATGATTCACGAATTCC
AAATCAGATTGCCAGGAAGAAATAGGACGTGACGGTACTGGGCCCTGTGATTCTCCCAGCCCTTGCAGTCCGCTA
GGTGAGAGGAAAAGCTCTTTACTTCCGCCCCTGGCAGGGACTTCTGGGTTATGGGAGAAACCAGAGATGGGAATG
AGGAAAATATGAACTACAGCAGAAGCCCCTGGGCAGCTGTGATGGAGCCCCTGACATTACTCTTCTTGCATCTGT
CCTGCCTTCTTTCCCTCTGCGAGGCAGTGGGGTGGGATTCAGAGTGCTTAGTCTGCTCACTGGGAGAAGAAGAGT
TCCTGCGCATGCAAGCCCTGCTGTGTGGCTGTCGTTTACATTTGGGAGGTGTCCTGTATGTCTGTACGTTGGGGA
CTGCCTGTATTTGGAAGATTTAAAAACCTAGCATCCTGTTCTCACCCTCTAAGCTGCATTGAGAAATGACTCGTC
TCTGTATTTGTATTAAGCCTTAACACTTTTCTTAAGTGCATTCGGTGCCAACATTTTTTAGAGCTGTACCAAAAC
AAAAAGCCTGTACTCACATCACAATGTCATTTTGATAGGAGCGTTTTGTTATTTTTACAAGGCAGAATGGGGTGT
AACAGTTGAATTAAACTAGCAATCACGTGCTCAGAGCTTT

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FIGURE 2675

MFQVPDSEGGRAGSRAMKPPGGESSNLFGSPEEATPSSRPNRMASNIFGPTEEPQNIPKRTNPPGGKGSGIFDES
TPVQTRQHLNPPGGKTSDIFGSPVTATSRLAHPNKPKDHVFLCEGEEPKSDLKAARSIPAGAEPGEKGSARKAGP
AKEQEPMPTVDSHEPRLGPRPRSHNKVLNPPGGKSSISFY

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FIGURE 2676

ATGGCCTCGGAAGACATTGCCAAGCTGGCAGAGACACTTGCCAAGACTCAGGTGGCCGGGGGACAGCTGAGTTTC
AAAGGCAAGAGCCTCAAACTCAACACTGCAGAAGATGCTAAAGATGTGATTAAAGAGATTGAAGACTTTGACAGC
TTGGAGGCTCTGCGTCTGGAAGGCAACACAGTGGGCGTGGAAGCAGCCAGGGTCATCGCCAAGGCCTTAGAGAAG
AAGTCGGAGTTGAAGCGCTGCCACTGGAGTGACATGTTCACGGGAAGGCTGCGGACCGAGATCCCACCAGCCCTG
ATCTCACTAGGGGAAGGACTCATCACAGCTGGGGCTCAGCTGGTGGAGCTGGACTTAAGCGACAACGCATTCGGG
CCCGACGGTGTGCAAGGCTTCGAGGCCCTGCTCAAGAGCTCAGCCTGCTTCACCCTGCAGGAACTCAAGCTCAAC
AACTGTGGCATGGGCATTGGCGGCGGCAAGATCCTGGCTGCAGCTCTGACCGAATGTCACCGGAAATCCAGTGCC
CAAGGCAAGCCTCTGGCCCTGAAGGTCTTTGTGGCTGGCAGAAACCGTCTGGAGAATGATGGCGCCACTGCCTTG
GCAGAAGCTTTTAGGGTCATCGGGACCCTGGAGGAGGTCCACATGCCACAGAATGGGATCAACCACCCTGGCATC
ACTGCCCTGGCCCAGGCTTTCGCTGTCAACCCCCTGCTGCGGGTCATCAACCTGAATGACAACACCTTCACTGAG
AAGGGCGCCGTGGCCATGGCCGAGACCTTGAAGACCTTGCGGCAGGTGGAGGTGATTAATTTTGGGGACTGCCTG
GTGCGCTCCAAGGGTGCAGTTGCCATTGCAGATGCCATCCGCGGCGGCCTGCCCAAGCTAAAGGAGCTGAACTTG
TCATTCTGTGAAATCAAGAGGGATGCTGCCCTGGCTGTTGCTGAGGCCATGGCAGACAAAGCTGAGCTGGAGAAG
CTGGACCTGAATGGCAACACCCTGGGAGAAGAAGGCTGTGAACAGCTTCAGGAGGTGCTGGAGGGCTTCAACATG
GCCAAGGTGCTGGCGTCCCTCAGTGATGACGAGGACGAGGAGGAGGAGGAGGAAGGAGAAGAGGAAGAAGAGGAA
GCAGAAGAAGAGGAGGAGGAAGATGAGGAAGAGGAGGAAGAAGAGGAGGAGGAGGAGGAAGAAGAGCCTCAGCAG
CGAGGGCAGGGAGAGAAGTCAGCCACGCCCTCACGGAAGATTCTGGACCCTAACACTGGGGAGCCAGCTCCCGTG
CTGTCCTCCCCACCTCCTGCAGACGTCTCCACCTTCCTGGCTTTTCCCTCTCCAGAGAAGCTCCTGCGCCTAGGG
CCCAAGAGCTCCGTGCTGATAGCCCAGCAGACTGACACGTCTGACCCCGAGAAGGTGGTCTCTGCCTTCCTAAAG
GTGTCATCTGTGTTCAAGGACGAAGCTACTGTGAGGATGGCAGTGCAGGATGCAGTAGATGCCCTGATGCAGAAG
GCTTTCAACTCCTCGTCCTTCAACTCCAACACCTTCCTCACCAGGCTCCTCGTGCACATGGGTCTGCTCAAGAGT
GAAGACAAGGTCAAGGCCATTGCCAACCTGTACGGCCCCCTGATGGCGCTGAACCACATGGTGCAGCAGGACTAT
TTCCCCAAGGCCCTTGCACCCCTGCTGCTGGCGTTCGTGACCAAGCCCAACAGCGCCCTGGAATCCTGCTCCTTC
GCCCGCCACAGTCTGCTGCAGACGCTGTACAAGGTCTAG

FIGURE 2677

MASEDIAKLAETLAKTQVAGGQLSFKGKSLKLNTAEDAKDVIKEIEDFDSLEALRLEGNTVGVEAARVIAKALEK
KSELKRCHWSDMFTGRLRTEIPPALISLGEGLITAGAQLVELDLSDNAFGPDGVQGFEALLKSSACFTLQELKLN
NCGMGIGGGKILAAALTECHRKSSAQGKPLALKVFVAGRNRLENDGATALAEAFRVIGTLEEVHMPQNGINHPGI
TALAQAFAVNPLLRVINLNDNTFTEKGAVAMAETLKTLRQVEVINFGDCLVRSKGAVAIADAIRGGLPKLKELNL
SFCEIKRDAALAVAEAMADKAELEKLDLNGNTLGEEGCEQLQEVLEGFNMAKVLASLSDDEDEEEEEEGEEEEEE
AEEEEEEDEEEEEEEEEEEEEPQQRGQGEKSATPSRKILDPNTGEPAPVLSSPPPADVSTFLAFPSPEKLLRLG
PKSSVLIAQQTDTSDPEKVVSAFLKVSSVFKDEATVRMAVQDAVDALMQKAFNSSSFNSNTFLTRLLVHMGLLKS
EDKVKAIANLYGPLMALNHMVQQDYFPKALAPLLLAFVTKPNSALESCSFARHSLLQTLYKV

FIGURE 2678

CAAGGTCAAGGCCATTGCCAACCTGTACGGCCCCCTGATGGCGCTGAACCACATGGTGCAGCAGGACTATTTCCC
CAAGGCCCTTGCACCCCTGCTGCTGGCGTTCGTGACCAAGCCCAACAGCGCCCTGGAATCCTGCTCCTTCGCCCG
CCACAGTCTGCTGCAGACGCTGTACAAGGTCTAGACTCAAAGCCTCTCCCATCCCTTGGCCTGGACCAGTGAGCT
GGGGAGGGACTCGGATGAACTGAGGCGCAGCCTACGCCATTGCCTTGGACAGGACTCTGGCCACAGGCAGGGCGG
GTCTGTGTCCCATGTGTCCTGTCAGTCCCCTGAGTATGTGTGTGGGTGTGGCGCATGTGCAGGTCTGTGCCTCCT
GTCGGGATTTGGGTTTTAACGTCTTCTGCTGGCCCAGCCCTGCTCTGTTGTGGGGAGTTGGCCCCCAGGGGAAAG
GGCTGTGAGCTGCTCCGCCATTAAACTCACCTCCACCTGAGGGCGCTCTGCTGATCTCCGCCTGGGCCCTGATGG
CCGTCCCCACCCACCTGCCTTCCGGCCCGGCTCCCTGGCGGAGCCAGAACCCAGGGAGTTGCCCGCGTGCTGTCC
TTCCCCTCTGTGTTGTGATTGGGTTGTTTCCTGCCCTGCCTGGGGCTGCTTCTCGTCACCAAGCCCTGGTCCTGC
GGCAGCTGTCACCCCTACCATCCATACCACTGTGCTGACCGCTCAGCCTGAAGAGCAGAGAATGCCATGGGTGGG
ACTGTGGGGGTCGGATCGTGGGGTTGTTGGCAGAGGGCAACCCTGGGCCCCACACCATGTGGACAGGCAGACACC
AGATTGTCCAGGAGCAGGAGCTGCTGGGACTGCGCTGGCCCCGGACCTAGTGGGCCTTCTCCTGGCTGCTGAGAT
GTCGTCTGTGACTGGCCTGGCTGGAGGGGGAGTGTTGACAACCCAAAGCTGTTCTCCAGTCTGGGGAGGGAGAGG
CAGGGTCCCCAATGTCCGAGCTGCATCTGGACGCTGCTCTTAAAGGACCTCCTGGGGCAGGGGAGCGGTAGGGTC
TGGACTGGGCAGATGCTGTATGACCTCCCTGAGCACCCGTGACTGCCCCATGCTTTCCCCTTTGTGCTCTGTGTG
TGTCTGGGCTGTGCCCGGGGGCTTCACAAATAAAGTCGTGTGGCAGCTAAAAAAAAAAAAAAAAAAAAAAAAAA
AA

FIGURE 2679

CGAGGATTCAGCAGCCTCCCCCTTGAGCCCCCTCGCTTCCCGACGTTCCGTTCCCCCCTGCCCGCCTTCTCCCGC
CACCGCCGCCGCCGCCTTCCGCAGGCCGTTTCCACCGAGGAAAAGGAATCGTATCGTATGTCCGCTATCCAGAAC
CTCCACTCTTTCGACCCCTTTGCTGATGCAAGTAAGGGTGATGACCTGCTTCCTGCTGGCACTGAGGATTATGTC
CATATAAGAATTCAACAGAGAAACGGCAGGAAGACCCTTACTACTGTCCAAGGGATCGCTGATGATTACGATAAA
AAGAAACTAGTGAAGCCGTTTAAGAAAAAGTTTGCCTGCAATGGTACTGTAATTGAGCATCCGGAATATGGAGAA
GTAATTCAGCTACAGGGTGACCAACGCAAGAACATATGCCAGTTCCTCGTAGAGATTGGACTGGCTAAGGACGAT
CAGCTGAAGGTTCATGGGTTTTAAGTGCTTGTGGCTCACTGAAGCTTAAGTGAGGATTTCCTTGCAATGAGTAGA
ATTTCCCTTCTCTCCCTTGTCACAGGTTTAAAAACCTCACAGCTTGTATAATGTAACCATTTGGGGTCCGCTTTT
AACTTGGACTAGTGTAACTCCTTCATGCAATAAACTGAAAAGAGCCATGCTGTCTAGTCTTGAAGTCCCTCATTT
AAACAGAGGTCAAGCAATAGGCGCCTGGCAGTGTCAAGCCTGAAACCAAGCAATACCGTCATGTTTCAGCCAAGC
CCAGAGCCCTAAGATTACAAACAACTATGGCCGGAACCTCCTCAGCTCTCCCTCTGCAGAGTTCCCTACCCTAAG
AGAATGTTACCACCTGAACAGTCCTCGGTGAATCTGAGAGGAGAGGATGGGGTAAGGCAGAAGCACCAGCTGTAC
TACTAGAAGGGAGCTTTTGGTGGTAGATCCCCTGGTGTCTCCAACCTGACTAGGTGGACAGAGCTCAAAGAGGCC
CTCTTACCGCTAGCGAGGTGATAGGACATCTGGCTTGCACAAAGGTCTGTTCGACCAGACATATCCTAGCTAAGG
GATGTCCAAACATCAGAATGTGAGGCCAACCTTCTATCAGAGTTAAACTTTTGACAAGGGAACAAATCTCAAACT
GATCCATCAGTCATGTAGCTAGCTGTAGAGCTTGCAACTTAATAGCAGCAGCTGCCCAATGCCATGTGAAGTAAC
AAACTGGTTTTTGGTTTTTTTTTCCCCTTCAGTTTTAATGTTATGTGTAATGTATTTAAACCCTTATTTAAATAA
AACTTGTTTTCAGAAATAAAAAAAAAAAAAAAAAA

FIGURE 2680

MSAIQNLHSFDPFADASKGDDLLPAGTEDYVHIRIQQRNGRKTLTTVQGIADDYDKKKLVKPFKKKFACNGTVIE
HPEYGEVIQLQGDQRKNICQFLVEIGLAKDDQLKVHGF

FIGURE 2681

AGCGGGCGTGCGGAGCGGGCGACAGTGGCGTGGGATCTGCCTCTCTGCGAGCAGCTGGGAGCGGCGGCGGCGGCG
CCATGAGCGGGGGCACCCCTTACATCGGCAGCAAGATCAGCCTCATCTCCAAGGCGGAGATCCGCTACGAGGGCA
TCCTCTACACCATCGACACCGAAAACTCCACCGTAGCCCTTGCCAAAGTTCGATCCTTTGGTACAGAAGACAGAC
CGACAGATCGTCCAATACCACCTCGAGATGAAGTCTTTGAATACATTATATTCCGTGGGAGTGACATTAAAGACC
TTACTGTTTGTGAGCCACCAAAACCACAGTGTTCTTTGCCTCAAGACCCAGCTATTGTTCAGTCCTCACTAGGCT
CATCGACTTCTTCATTCCAGTCCATGGGTTCTTATGGACCTTTCGGCAGGATGCCCACATACAGTCAGTTCAGTC
CGAGTTCCTTAGTTGGGCAGCAGTTTGGTGCTGTTGGTGTTGCTGGAAGCTCTTTGACATCCTTTGGAACAGAAA
CATCAAACAGTGGTACCTTACCCCAAAGTAGTGCGGTTGGTTCTGCCTTTACACAGGATACAAGATCTCTAAAAA
CACAGTTATCTCAAGGTCGCTCAAGCCCTCAGTTAGACCCTTTGAGAAAAAGCCCAACCATGGAACAAGCAGTGC
AGACCGCCTCAGCCCACTTACCTGCTCCAGCAGCTGTTGGGAGAAGGAGTCCTGTATCAACCAGGCCTTTGCCAT
CTGCCAGCCAAAAGGCAGGAGAGAATCAGGAGCACAGGCAAGCTGAAGTACACAAAGTTTCAAGGCCAGAAAATG
AGCAACTCAGAAATGATAACAAGAGACAAGTAGCTCCAGGTGCTCCTTCAGCTCCAAGGAGAGGGCGTGGGGGTC
ATCGGGGTGGCAGGGGAAGATTTGGTATTCGGCGAGATGGGCCAATGAAATTTGAGAAAGACTTTGACTTTGAAA
GTGCAAATGCACAATTCAACAAGGAAGAGATTGACAGAGAGTTTCATAATAAACTTAAATTAAAAGAAGATAAAC
TTGAGAAACAGGAGAAGCCTGTAAATGGTGAAGATAAAGGAGACTCAGGAGTTGATACCCAAAACAGTGAAGGAA
ATGCCGATGAAGAAGATCCACTTGGACCTAATTGCTATTATGACAAAACTAAATCCTTCTTTGATAATATTTCTT
GTGATGACAATAGAGAACGGAGACCAACCTGGGCTGAAGAAAGAAGATTAAATGCTGAAACATTTGGAATCCCAC
TTCGTCCAAACCGTGGCCGTGGGGGATACAGAGGCAGAGGAGGTCTTGGTTTCCGTGGTGGCAGAGGGCGTGGTG
GTGGCAGAGGTGGTACCTTCACTGCCCCTCGAGGATTTCGCGGTGGATTCAGAGGAGGTCGTGGGGGCCGGGAGT
TTGCGGATTTTGAATATAGGAAAGACAACAAAGTTGCTGCATAGTCTACAAACAAGTCTCTGAAAATAGGTGAAT
TTCTAGCTCTTCATGGTCCTGAACATTGATTTCAGTCTTTGCAAAGAATGAAGAAGTGAATTCGCTGTACATTTG
TCACCAGCACTGGGTTTTTGTTTTTTGTTTGTTTTTCCGCTTAATTTCAAAGATAAAATGCAGTTACTTTTGGGG
GTGGAAGGCTCATCTTAAAACATGAGCATTAAATATATTTGGAATAGCAGAAGGTTAAGTAATTTCTTATGTATA
GTTAAACTAAAGCAGTACTTCAGTGGGACTTAACAAGTATTTTTTCATCACTGAAAGGTTTTTTTTTTTTTATCA
CTAAATTGTATTTGGCAATTGCAAGTTGCCTGCAGATAGGGCCGTGATACTGTGTTTTGAGCCACAGAAGGTTGT
GTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTATGTGTGTGTCTTTTTCCTCCTTTCTTTTGGGGAA
TCCTGTAATATGAGGTAGCTTATTTCGTCAATTAATTAGGGTGCTGGATGGTAGAGAATTTTGTCAGTCAACTAT
GTACACACAGTAAATACTGTTTCTTAGGCAAAGGTAACTTTTTTATATAGTTGTAAAATTCCATTATATTCCATT
GCCAAAGAAACATTAAGAACTTTGTATAGCTGTATAAAAAGCAACTAATTTTTTAAAGAATAAACATTTTAAAGT
CAGCAAACATACTGTGTCCTTGCAGAAGTTGATGTGCTGAGCAGCAGCCTTATGGGTGGGTCTTTTTTTCTTAGT
TTTCCAGGCTTAACATTTTTGATTTTGTTTTTTAATGTTTGGAACATAAATGAAGATTTGATACATTATTTCATT
ATCTAAAAAGGATTAATTATTCATGCTCATTGTAAGAACTTCATTTTGTAGCAAATGGCATATCACAGGATCTGT
CCAGATAATCGATATTTTCAGTATACAAATGTAAATAATCACAGATGAGAATGTACTTAGCTGTATTTTCAAATA
AGTAATCTTCCCCCCTTTTGTAGGACTTTAAAACTAGGCATCAATGAACCTGTTTTTCCTATTATGCCTGGAATT
TAGTCATGATACCTTGACTCATTCCATCATATTTCAAGAGGATTCAGAGTGCTAGAAATTATTTTGGTAGCCTGT
AACACACGGCAACACTGGTCCTTGGGCCTATGATGACCCACAGATGACTCAGTATAGAGTTCATTGCTAATTATA
AATTACTAGTGAATCTTTTTGATATTTTAAGCTCTAGTGGGAAAAATCTGGCCACTTTTGTGTTTTTATGAAGGC
CATGGAATAAAAGGGTCCAAAGATTTAAATATTTTTATCTAATATTTTGATTGTTTTCTTAACTTTCTCCTTAAA
ACATTCAGTAGTGATAAAGATATAGAAACTGCACTGTAGGAGAATTGGAATATTTAAGGCTGGTTGACATTTTTT
ATTTTCATTTTATATCTTTTGTATAGCTCTACAAGGCAGTGTTTTGTAATTTGGTTTCATTATGAAGATCCAGTA
CTTGGCAGCCATAGTTTAGACAATATTGTTCAGTGCTGTTTGCTTGCATGTTAACAACAAAACCTTTTAGAGGAC
CCACAAATCATGATATTGAACACAGTTCCGAGGCATTCAGAGCATCAGAGCAAGTACCATGGCAATACATGTGTA
GACTGTTGGAGATGTCCCGGGCCAATTTCAAGAAAGAAAACTGTAAATACTAGTTCTACTTGCTCTGAAATTATG
AGTTTATGCGTTTTCCCAGCCCTCCGAATCACTGACTGGGGCGTTTTGTGCCCCAGCAATAACTGGCAGCATGGC
ATACCTGCAGTACCCCTTACAATATTAAAGCAAAGTTTTTATTCTAAAACAGAATAAAACTGTTCAATAAAAAAT
GCTCGTCAAAGTTC

FIGURE 2682

MSGGTPYIGSKISLISKAEIRYEGILYTIDTENSTVALAKVRSFGTEDRPTDRPIPPRDEVFEYIIFRGSDIKDL
TVCEPPKPQCSLPQDPAIVQSSLGSSTSSFQSMGSYGPFGRMPTYSQFSPSSLVGQQFGAVGVAGSSLTSFGTET
SNSGTLPQSSAVGSAFTQDTRSLKTQLSQGRSSPQLDPLRKSPTMEQAVQTASAHLPAPAAVGRRSPVSTRPLPS
ASQKAGENQEHRQAEVHKVSRPENEQLRNDNKRQVAPGAPSAPRRGRGGHRGGRGRFGIRRDGPMKFEKDFDFES
ANAQFNKEEIDREFHNKLKLKEDKLEKQEKPVNGEDKGDSGVDTQNSEGNADEEDPLGPNCYYDKTKSFFDNISC
DDNRERRPTWAEERRLNAETFGIPLRPNRGRGGYRGRGGLGFRGGRGRGGGRGGTFTAPRGFRGGFRGGRGGREF
ADFEYRKDNKVAA

FIGURE 2683

GAATTCGGCACGAGCGAGTCGCGACGTCGTCGGCAAGCGGCCGCCTTCCACGTAACGCGCGCCGGCGGGGGAGGG
CGTTGGCGCGGAGCCGACGGGAACGTCCGCGCTGCGGAGCAGGGCAGGGAAGCCGGGAGGCGGGCCCGGCCCGAG
CTTGTCCTTGTCGCGCAGGTACTCCGAGCACTATGTCGTCCCCGGCGTCGACCCCGAGCCGCCGCGGCAGCCGGC
GTGGAAGGGCCACCCCCGCCCAGACGCCTCGGAGTGAGGATGCCAGGTCATCTCCCTCTCAGAGACGTAGAGGCG
AGGATTCCACCTCCACGGGGGAGTTGCAGCCGATGCCAACCTCGCCTGGAGTGGACCTGCAGAGCACTGCTGCGC
AGGACGTGCTGTTTTCCAGCCCTCCCCAAATGCATTCTTCAGCTATCCCTCTTGACTTTGATGTTAGTTCACCAC
TGACATACGGCACTCCCAGCTCTCGGGTAGAGGGAACCCCAAGAAGTGGTGTTAGGGGCACACCTGTGAGACAGA
GGCCTGACCTGGGCTCTGCACAGAAGGGCCTGCAAGTGGATCTGCAGTCTGACGGGGCAGCAGCAGAAGATATAG
TGGCAAGTGAGCAGTCTCTAGGCCAAAAACTTGTGATCTGGGGAACAGATGTAAATGTGGCAGCATGCAAAGAAA
ACTTTCAGAGATTTCTTCAGCGTTTTATTGACCCTCTGGCTAAAGAAGAAGAAAATGTTGGCATAGATATTACTG
AACCTCTATACATGCAACGACTTGGGGAGATTAATGTTATTGGTGAGCAATTTTTAAATGTGAACTGTGAACACA
TCAAATCATTTGACAAAAATTTGTACAGACAACTCATCTCTTACCCACAGGAAGTTATTCCAACTTTTGACATGG
CTGTCAATGAAATCTTCTTTGACCGTTACCCTGACTCAATCTTAGAACATCAGATTCAAGTAAGACCATTCAACG
CATTGAAGACTAAGAATATGAGAAACCTGAATCCAGAAGACATTGACCAGCTCATCACCATCAGCGGCATGGTGA
TCAGGACATCCCAGCTGATTCCCGAGATGCAGGAGGCCTTCTTCCAGTGCCAAGTGTGTGCCCACACGACCCGGG
TGGAGATGGACCGCGGCCGCATTGCAGAGCCCAGTGTGTGCGGGCGCTGCCACACCACCCACAGCATGGCACTCA
TCCACAACCGCTCCCTCTTCTCTGACAAGCAGATGATCAAGCTTCAGGAGTCTCCGGAAGACATGCCTGCAGGGC
AGACACCACACACAGTTATCCTGTTTGCTCACAATGATCTCGTTGACAAGGTCCAGCCTGGGGACAGAGTGAATG
TTACAGGCATCTATCGAGCTGTGCCTATTCGAGTCAATCCAAGAGTGAGTAATGTGAAGTCTGTCTACAAAACCC
ACATTGATGTCATTCATTATCGGAAAACGGATGCAAAACGTCTGCATGGCCTTGATGAAGAAGCAGAACAGAAAC
TTTTTTCAGAGAAACGTGTGGAATTGCTTAAGGAACTTTCCAGGAAACCAGACATTTATGAGAGGCTTGCTTCAG
CCTTGGCTCCAAGCATTTATGAACATGAAGATATAAAGAAGGGAATTTTGCTTCAGCTCTTTGGCGGGACAAGGA
AGGATTTTAGTCACACTGGAAGGGGCAAATTTCGGGCTGAGATCAACATCTTGCTGTGTGGCGACCCTGGTACCA
GCAAGTCCCAGCTGCTGCAGTACGTGTACAACCTCGTCCCCAGGGGCCAGTACACGTCTGGGAAGGGCTCCAGTG
CAGTTGGCCTCACTGCGTACGTAATGAAAGACCCTGAGACAAGGCAGCTGGTCCTGCAGACAGGTGCTCTTGTCC
TGAGTGACAACGGCATCTGCTGTATCGATGAGTTCGACAAGATGAATGAAAGTACAAGATCGGTATTGCATGAAG
TCATGGAACAGCAGACTCTGTCCATTGCAAAGGCTGGGATCATCTGTCAGCTCAATGCGCGCACCTCTGTCCTGG
CAGCAGCAAATCCCATTGAGTCTCAGTGGAATCCTAAAAAAACAACCATTGAAAACATCCAGCTGCCTCATACTT
TATTATCAAGGTTTGATTTGATCTTCCTCATGCTGGACCCTCAGGACGAAGCCTATGACAGGCGTCTGGCTCACC
ACCTGGTCGCACTGTACTACCAGAGCGAGGAGCAGGCAGAGGAGGAGCTCCTGGACATGGCGGTGCTAAAGGACT
ACATTGCCTACGCGCACAGCACCATCATGCCGCGGCTAAGTGAGGAAGCCAGCCAGGCTCTCATCGAGGCTTATG
TAGACATGAGGAAGATTGGCAGTAGCCGGGGAATGGTTTCTGCATACCCTCGACAGCTAGAGTCATTAATCCGCT
TAGCAGAAGCCCATGCTAAAGTAAGATTGTCTAACAAAGTTGAAGCCATTGATGTGGAAGAGGCCAAACGCCTCC
ATCGGGAAGCTCTGAAGCAGTCTGCAACTGATCCCCGGACTGGCATCGTGGACATATCTATTCTTACTACGGGGA
TGAGTGCCACCTCTCGTAAACGGAAAGAAGAATTAGCTGAAGCATTGAAAAAGCTTATTTTATCTAAGGGCAAAA
CACCAGCTCTAAAATACCAGCAACTTTTTGAAGATATTCGGGGACAATCTGACATAGCAATTACTAAAGATATGT
TTGAAGAAGCACTGCGTGCCCTGGCAGATGATGATTTCCTGACAGTGACTGGGAAGACCGTGCGCTTGCTCTGAA
GCCTTGTGAGCAAGGAAGGCTCCCTGCATGTCATGCAATTCTGCACGCCACATGGGTGTGGTCATGCAATCATCA
GTTGGCCGCCATCAGTGTAAATAGAGCTTAAAGTCATGGTTTGGCTGCATAAAAAATTTTCTAACTTGGGTTCAA
TATTTGTAGTGAAGTATCTGTTTTCATTTTTTTCACGTTATAAATAAAAATACTATGCTGGCCGGGCGCGGTGGC
TCACACCTGTAATCCCAGCACTTTGGGAGGCCAATGTGGGTGGATCATGAGGTCAGGAGTTCAAGACCAGCCTAG
CCAAGATGGTGAAACCCCGTCTCTAGTAAAGATAACAAAAAATTAGCTGGGCTTGATGGCATGCGCCTGTAATCC
CAGCTACTCGGGAGGTTGAGGCAGGAGATCGCTTAAACCCAGGCGGCAGAGGTTGCAGTGAGCCAAGATCGCGCC
ACTGCACTCCAGCCTCAGCAATAGAGTGAGACTGTCTCAAAAAAAAAA

FIGURE 2684

IRHERVATSSASGRLPRNARRRGRALARSRRERPRCGAGQGSREAGPARACPCRAGTPSTMSSPASTPSRRGSRR
GRATPAQTPRSEDARSSPSQRRRGEDSTSTGELQPMPTSPGVDLQSTAAQDVLFSSPPQMHSSAIPLDFDVSSPL
TYGTPSSRVEGTPRSGVRGTPVRQRPDLGSAQKGLQVDLQSDGAAAEDIVASEQSLGQKLVIWGTDVNVAACKEN
FQRFLQRFIDPLAKEEENVGIDITEPLYMQRLGEINVIGEQFLNVNCEHIKSFDKNLYRQLISYPQEVIPTFDMA
VNEIFFDRYPDSILEHQIQVRPFNALKTKNMRNLNPEDIDQLITISGMVIRTSQLIPEMQEAFFQCQVCAHTTRV
EMDRGRIAEPSVCGRCHTTHSMALIHNRSLFSDKQMIKLQESPEDMPAGQTPHTVILFAHNDLVDKVQPGDRVNV
TGIYRAVPIRVNPRVSNVKSVYKTHIDVIHYRKTDAKRLHGLDEEAEQKLFSEKRVELLKELSRKPDIYERLASA
LAPSIYEHEDIKKGILLQLFGGTRKDFSHTGRGKFRAEINILLCGDPGTSKSQLLQYVYNLVPRGQYTSGKGSSA
VGLTAYVMKDPETRQLVLQTGALVLSDNGICCIDEFDKMNESTRSVLHEVMEQQTLSIAKAGIICQLNARTSVLA
AANPIESQWNPKKTTIENIQLPHTLLSRFDLIFLMLDPQDEAYDRRLAHHLVALYYQSEEQAEEELLDMAVLKDY
IAYAHSTIMPRLSEEASQALIEAYVDMRKIGSSRGMVSAYPRQLESLIRLAEAHAKVRLSNKVEAIDVEEAKRLH
REALKQSATDPRTGIVDISILTTGMSATSRKRKEELAEALKKLILSKGKTPALKYQQLFEDIRGQSDIAITKDMF
EEALRALADDDFLTVTGKTVRLL

FIGURE 2685

GAATTCGGCACGAGCGAGTCGCGACGTCGTCGGCAAGCGGCCGCCTTCCACGTAACGCGCGCCGGCGGGGGAGGG
CGTTGGCGCGGAGCCGACGGGAACGTCCGCGCTGCGGAGCAGGGCAGGGAAGCCGGGAGGCGGGCCCGGCCCGAG
CTTGTCCTTGTCGCGCAGGTACTCCGAGCACTATGTCGTCCCCGGCGTCGACCCCGAGCCGCCGCGGCAGCCGGC
GTGGAAGGGCCACCCCCGCCCAGACGCCTCGGAGTGAGGATGCCAGGTCATCTCCCTCTCAGAGACGTAGAGGCG
AGGATTCCACCTCCACGGGGGAGTTGCAGCCGATGCCAACCTCGCCTGGAGTGGACCTGCAGAGCACTGCTGCGC
AGGACGTGCTGTTTTCCAGCCCTCCCCAAATGCATTCTTCAGCTATCCCTCTTGACTTTGATGTTAGTTCACCAC
TGACATACGGCACTCCCAGCTCTCGGGTAGAGGGAACCCCAAGAAGTGGTGTTAGGGGCACACCTGTGAGACAGA
GGCCTGACCTGGGCTCTGCACAGAAGGGCCTGCAAGTGGATCTGCAGTCTGACGGGGCAGCAGCAGAAGATATAG
TGGCAAGTGAGCAGTCTCTAGGCCAAAAACTTGTGATCTGGGGAACAGATGTAAATGTGGCAGCATGCAAAGAAA
ACTTTCAGAGATTTCTTCAGCGTTTTATTGACCCTCTGGCTAAAGAAGAAGAAAATGTTGGCATAGATATTACTG
AACCTCTATACATGCAACGACTTGGGGAGATTAATGTTATTGGTGAGCAATTTTTAAATGTGAACTGTGAACACA
TCAAATCATTTGACAAAAATTTGTACAGACAACTCATCTCTTACCCACAGGAAGTTATTCCAACTTTTGACATGG
CTGTCAATGAAATCTTCTTTGACCGTTACCCTGACTCAATCTTAGAACATCAGATTCAAGTAAGACCATTCAACG
CATTGAAGACTAAGAATATGAGAAACCTGAATCCAGAAGACATTGACCAGCTCATCACCATCAGCGGCATGGTGA
TCAGGACATCCCAGCTGATTCCCGAGATGCAGGAGGCCTTCTTCCAGTGCCAAGTGTGTGCCCACACGACCCGGG
TGGAGATGGACCGCGGCCGCATTGCAGAGCCCAGTGTGTGCGGGCGCTGCCACACCACCCACAGCATGGCACTCA
TCCACAACCGCTCCCTCTTCTCTGACAAGCAGATGATCAAGCTTCAGGAGTCTCCGGAAGACATGCCTGCAGGGC
AGACACCACACACAGTTATCCTGTTTGCTCACAATGATCTCGTTGACAAGGTCCAGCCTGGGGACAGAGTGAATG
TTACAGGCATCTATCGAGCTGTGCCTATTCGAGTCAATCCAAGAGTGAGTAATGTGAAGTCTGTCTACAAAACCC
ACATTGATGTCATTCATTATCGGAAAACGGATGCAAAACGTCTGCATGGCCTTGATGAAGAAGCAGAACAGAAAC
TTTTTTCAGAGAAACGTGTGGAATTGCTTAAGGAACTTTCCAGGAAACCAGACATTTATGAGAGGCTTGCTTCAG
CCTTGGCTCCAAGCATTTATGAACATGAAGATATAAAGAAGGGAATTTTGCTTCAGCTCTTTGGCGGGACAAGGA
AGGATTTTAGTCACACTGGAAGGGGCAAATTTCGGGCTGAGATCAACATCTTGCTGTGTGGCGACCCTGGTACCA
GCAAGTCCCAGCTGCTGCAGTACGTGTACAACCTCGTCCCCAGGGGCCAGTACACGTCTGGGAAGGGCTCCAGTG
CAGTTGGCCTCACTGCGTACGTAATGAAAGACCCTGAGACAAGGCAGCTGGTCCTGCAGACAGGTGCTCTTGTCC
TGAGTGACAACGGCATCTGCTGTATCGATGAGTTCGACAAGATGAATGAAAGTACAAGATCGGTATTGCATGAAG
TCATGGAACAGCAGACTCTGTCCATTGCAAAGGCTGGGATCATCTGTCAGCTCAATGCGCGCACCTCTGTCCTGG
CAGCAGCAAATCCCATTGAGTCTCAGTGGAATCCTAAAAAAACAACCATTGAAAACATCCAGCTGCCTCATACTT
TATTATCAAGGTTTGATTTGATCTTCCTCATGCTGGACCCTCAGGACGAAGCCTATGACAGGCGTCTGGCTCACC
ACCTGGTCGCACTGTACTACCAGAGCGAGGAGCAGGCAGAGGAGGAGCTCCTGGACATGGCGGTGCTAAAGGACT
ACATTGCCTACGCGCACAGCACCATCATGCCGCGGCTAAGTGAGGAAGCCAGCCAGGCTCTCATCGAGGCTTATG
TAGACATGAGGAAGATTGGCAGTAGCCGGGGAATGGTTTCTGCATACCCTCGACAGCTAGAGTCATTAATCCGCT
TAGCAGAAGCCCATGCTAAAGTAAGATTGTCTAACAAAGTTGAAGCCATTGATGTGGAAGAGGCCAAACGCCTCC
ATCGGGAAGCTCTGAAGCAGTCTGCAACTGATCCCCGGACTGGCATCGTGGACATATCTATTCTTACTACGGGGA
TGAGTGCCACCTCTCGTAAACGGAAAGAAGAATTAGCTGAAGCATTGAAAAAGCTTATTTTATCTAAGGGCAAAA
CACCAGCTCTAAAATACCAGCAACTTTTTGAAGATATTCGGGGACAATCTGACATAGCAATTACTAAAGATATGT
TTGAAGAAGCACTGCGTGCCCTGGCAGATGATGATTTCCTGACAGTGACTGGGAAGACCGTGCGCTTGCTCTGAA
GCCTTGTGAGCAAGGAAGGCTCCCTGCATGTCATGCAATTCTGCACGCCACATGGGTGTGGTCATGCAATCATCA
GTTGGCCGCCATCAGTGTAAATAGAGCTTAAAGTCATGGTTTGGCTGCATAAAAAATTTTCTAACTTGGGTTCAA
TATTTGTAGTGAAGTATCTGTTTTCATTTTTTTCACGTTATAAATAAAAATACTATGCTGGCCGGGCGCGGTGGC
TCACACCTGTAATCCCAGCACTTTGGGAGGCCAATGTGGGTGGATCATGAGGTCAGGAGTTCAAGACCAGCCTAG
CCAAGATGGTGAAACCCCGTCTCTAGTAAAGATAACAAAAAATTAGCTGGGCTTGATGGCATGCGCCTGTAATCC
CAGCTACTCGGGAGGTTGAGGCAGGAGATCGCTTAAACCCAGGCGGCAGAGGTTGCAGTGAGCCAAGATCGCGCC
ACTGCACTCCAGCCTCAGCAATAGAGTGAGACTGTCTCAAAAAAAAAA

FIGURE 2686A

GCTAAGAGGAGTCCCTGTGTGGGCAGCTGGAGCCTTCAGATTCTCTTCAGGGGAAGAGTCCACATCCCACCTCAT
CATGTCCCGAAGAAGCCAGCGCCTCACGCGCTACTCCCAGGGTGACGATGACGGCAGCAGCAGCAGCGGAGGGAG
CTCGGTGGCTGGGAGTCAGAGCACCCTGTTTAAAGACAGTCCTCTCAGGACCTTGAAGAGGAAATCCAGCAACAT
GAAGCGCCTGTCCCCAGCGCCACAGCTGGGCCCGTCCTCTGATGCACACACCTCCTACTACAGTGAGTCGCTGGT
CCACGAGTCCTGGTTCCCACCCAGGAGCTCCCTGGAGGAACTGCATGGTGACGCCAACTGGGGTGAGGACCTGCG
GGTGCGGAGGAGGAGAGGCACGGGTGGCTCAGAGAGCAGCAGGGCCAGCGGGCTTGTGGGGCGCAAGGCCACCGA
GGACTTCCTGGGCTCTTCCTCGGGCTACTCCTCTGAGGACGACTACGTGGGCTACTCGGATGTGGACCAGCAGAG
TTCCAGCTCGCGGCTCCGAAGCGCCGTCTCACGGGCGGGCTCCTTACTCTGGATGGTGGCCACTTCGCCAGGCCG
GCTCTTCAGACTTCTCTACTGGTGGGCTGGCACCACCTGGTACCGCCTGACCACAGCTGCCTCCCTCCTTGACGT
CTTCGTTTTAACCAGGCGCTTCTCGTCCCTGAAGACGTTCCTCTGGTTCCTGCTGCCGCTGCTCTTGCTGACGTG
CCTGACGTATGGTGCTTGGTATTTCTACCCCTATGGGCTGCAGACATTCCACCCTGCTTTGGTTTCCTGGTGGGC
AGCGAAGGACAGCAGGAGGCCGGATGAGGGCTGGGAAGCCAGAGACTCATCGCCACATTTCCAGGCTGAGCAGCG
TGTTATGTCCCGGGTACACTCTCTGGAGCGGCGTCTGGAAGCTCTTGCTGCTGAATTTTCCTCCAACTGGCAGAA
GGAGGCCATGCGGCTGGAACGTCTGGAGCTGCGGCAAGGGGCTCCTGGCCAGGGAGGTGGTGGTGGCCTGAGCCA
CGAGGACACCCTGGCGCTGCTGGAGGGGCTAGTGAGCCGCCGTGAAGCTGCCCTGAAGGAGGATTTCCGCAGGGA
AACTGCTGCTCGCATCCAGGAAGAACTGTCTGCCCTGAGAGCAGAGCATCAGCAAGACTCAGAAGACCTCTTCAA
GAAGATCGTCCGGGCCTCCCAGGAGTCCGAGGCTCGCATCCAGCAGCTGAAGTCAGAGTGGCAAAGCATGACCCA
GGAGTCCTTCCAGGAGAGCTCTGTGAAGGAGCTGAGGCGGCTGGAGGACCAGCTGGCCGGCCTGCAGCAGGAGCT
GGCGGCTCTGGCACTGAAGCAGAGCTCGGTGGCGGAAGAAGTGGGCCTGCTGCCCCAGCAGATCCAGGCCGTGCG
GGACGACGTGGAATCTCAGTTCCCGGCCTGGATCAGTCAGTTCCTTGCCCGAGGTGGAGGGGGCCGCGTGGGGCT
CCTTCAGAGAGAGGAGATGCAAGCTCAGCTGCGAGAGCTGGAGAGCAAGATCCTCACCCATGTGGCAGAGATGCA
GGGCAAGTCGGCCAGGGAAGCCGCGGCCTCCCTGAGCCTGACGCTGCAGAAAGAAGGTGTGATTGGAGTGACAGA
GGAGCAGGTGCACCACATCGTGAAGCAGGCCCTGCAGCGCTACAGTGAGGACCGCATCGGGCTGGCAGACTACGC
CCTGGAGTCAGGAGGGGCCAGCGTCATCAGCACCCGATGTTCTGAGACCTACGAGACCAAGACGGCCCTCCTCAG
CCTCTTCGGCATCCCCCTGTGGTACCACTCCCAGTCACCCCGAGTCATCCTCCAGCCAGATGTGCACCCAGGCAA
CTGCTGGGCCTTCCAGGGGCCACAGGGCTTCGCCGTGGTCCGCCTCTCTGCCCGCATCCGCCCCACAGCCGTTAC
CTTAGAGCATGTGCCCAAGGCCTTGTCACCCAACAGCACTATCTCCAGTGCCCCCAAGGACTTCGCCATCTTTGG
GTTTGACGAAGACCTGCAGCAGGAGGGGACACTCCTTGGCAAGTTCACTTACGATCAGGACGGCGAGCCTATTCA
GACGTTTCACTTTCAGGCCCCTACGATGGCCACGTACCAGGTGGTGGAGCTGCGGATCCTGACTAACTGGGGCCA
CCCCGAGTACACCTGCATCTACCGCTTCAGAGTGCATGGGGAGCCCGCCCACTAGCCCTGCTTACTGGTGCCTGC
TGCCAGCCATCTGGGAGTGGGTGAACAGCACCCCGCCGCTTCCCCCACACGCTTGCTCGGCGCTCTGACTTCTAG
GAGCACAAGAGAGGAGCCTGTGGCCCCATGCAGATGAAAAGGACGGGCAGGGTCTCCTGAGCAGCAGGTGGCTCG
AGGCGGTTAGCAGGCTCCAGCAGCTCCCTTCTTCCTTCCCTCTGTGCCCGTGGCGTCTGCTTCCCATCCTGGGAG
TGTGTATATATGTAGCATATCATGGGGGACTGGGAAGTTGGGAGAGGTAGGACCTGACTGGTCTTGGCTGGGGTC
AGGGGCTGGTGCCTGGGAGCTGATGAAGCAGGTGCCAGGGCTGTGGGAGGGGCAAGCTACGGCCTGGGCTAGGTG
AGCTGCCTCTGCCCCTGGGCAAGGAAGCGAGGCCCTCTGGGAGGAGGGTGCTTAGCTCCAGAGCAGGATGGGACT
TCCCCAGGCAGGAAGCACTTGATGGAGAGCTGCCCAGCTCTCCTACAAGGTTAGTGCCCTCCACCTAGGGAAGCC
TGAACCACAGGGTCCCTGAGGGCCTTCGACAAAAGTGTGTATTTGTCCCGGGGAGGGTAGCAGTGGGCCATGGGG
CTTCTTGTGCCCTAAAGGGGACTGGCTGCTGTGATCTTCTAAGGGGCCCAGGGCCAACCCTGTAGGCTTCCCCTC
TGCTGGGGACGGTAGTTGCTTTTCTCTCTCCTGATGCTAGGTTGGGGCCCACCCTGCTCCCTGTTCCTGCTAGGG
CCTGCCAGTGCCCCTGAGCTTGCTTTCCACATTCTCCCAGGGTATGGAGACCTAGACCTGTCTTTGGGGCCATTA
GCATCTGGGGTTATAGCAAGAAGAGTGGGGAGCATGGAACTCCTGGGCTCTTGTGGGGACGTTCAGGGTATCGGG
GTGCGAGGTCTGTCTGCACCGGCCCCCACATCTAACCAGGCCCTGATGTAGGGGTCGTCCGCTCAGGCTGCCCCC
TTGGGCTCTTGCAGCTCTTGTTCAGGTAGTCGCCCTTCTGGTTTGTTCTCTGTGGGGCAGTTGGTGGGGGCTGGG
GGAAGAGGCTGGCAGAAGTTACCCTGGATAGGGAAGGGGGAGGAGGGGACTTTTAGAGCCAGCAGGCCCCACTGT
ATTATGTATATATTTTTCAAGGTCTGTTTTTCTAACTGAAAAGCTAAGGGCTTGATTCCTAGCCCCGTTCTGTGG
GGCACTGGGTGATACTCAGTTTCTTGTTCCTGGCCGTGGAGAGGGGCCTGGGGCACTGGTTCCGGCTGTGTCTGG
TGGTCCGGCTGCAGGGAAGGGGCAAGAAGGCGGGCAGGCCTTCACTGCAGCACTGAGCCTCAAATCCGCTCTGGA

FIGURE 2686B

GCATGAGGCTGGATGCAGTGGTGGTGAGGCCGCCCCGCTCCATCCCGAGGCAGCCAGGCTTTGTTTTGCGCTCTC
CTGTCACAAATGCTGCACTATTGGTTCTTAAGTTTTTTATCTCCAGATCCTAATTTATGCCTATGCAAAAAATAA
ATGACGCCCAAGAGCTG

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FIGURE 2687

GAACTGGTGGCAGTGAGAGACTTCGGCGGACATGGCTCCCAGCGTGCCAGCGGCAGAACCCGAGTATCCTAAAGG
CATCCGGGCCGTGCTGCTGGGGCCTCCCGGGGCCGGTAAAGGGACCCAGGCACCCAGATTGGCTGAAAACTTCTG
TGTCTGCCATTTAGCTACTGGGGACATGCTGAGGGCCATGGTGGCTTCTGGCTCAGAGCTAGGAAAAAAGCTGAA
GGCAACTATGGATGCTGGGAAACTGGTGAGTGATGAAATGGTAGTGGAGCTCATTGAGAAGAATTTGGAGACCCC
CTTGTGCAAAAATGGTTTTCTTCTGGATGGCTTCCCTCGGACTGTGAGGCAGGCAGAAATGCTCGATGACCTCAT
GGAGAAGAGGAAAGAGAAGCTTGATTCTGTGATTGAATTCAGCATCCCAGACTCTCTGCTGATCCGAAGAATCAC
AGGAAGGCTGATTCACCCCAAGAGTGGCCGTTCCTACCACGAGGAGTTCAACCCTCCAAAAGAGCCCATGAAAGA
TGACATCACCGGGGAACCCTTGATCCGTCGATCAGATGATAATGAAAAGGCCTTGAAAATCCGCCTGCAAGCCTA
CCACACTCAAACCACCCCACTCATAGAGTACTACAGGAAACGGGGGATCCACTCCGCCATCGATGCATCCCAGAC
CCCCGATGTCGTGTTCGCAAGCATCCTAGCAGCCTTCTCCAAAGCCACATCCTAGTATCAGAAGGCCAGGCGAGA
CTGCAACACTGCTCATCACCCCGCGGCGTGATCCCTGCTCTTAGGTGCTGGGCAGAGGGGAAGGGTGGTCAGGGT
GAGGATGGTGAGGGAGGGCTGGTGAGGGGCTCAGAGGAATACTTGGAACAACAGCAGTGTTATTGTAGTGTGGCA
GTTTCTTTTATACATAGGTGAGAGTTTTTAAAGTGTAAGGGAAAAATTAATTTTTTAAAAAACACCATGCTTGGA
GGGTGGGGGTAGAAATAGACACAATATTATTTCTAAGGAATCGGGTTTTCATTTACTCTGGACTGGTGAAAATAT
TTTTTAAAGCCAGTGCTCTAAGACCTCAGCTTTTATCTCAGAACCCCATGGGTTCCAGACCAAGAGTACAGGAAA
TCAAATTGTTGTCCTGTCTGTCTATAGCTTGGAACAGGGAGCTTTGATTACTGACTCCGGTTCCACACACTGTAA
GATCAAAAAACCATCTCCACATTTGAAAGAGATGTAAGGTGTATTCATAGGGATGGTGGCTCAACAAATCAAGCA
AACTGGAATCAAGGGGAGGGGGAAGGGAATGAAATGGAAAGGGAGGCTGATTCCCTTCCCCTGACTTACCACTAA
TTTACTAGGCTACCTACTTTCATGAGTAACCTCTCACAGCTACCCAGCACATGCCACAATCCTATCGTCTTGCCT
TCTTTTATCTGCACTGTGTGAAGGGACTCTTTTAAATAAATGAGCAAGTGTCCTAAGCTATGTCATCCAAAGATT
GTCCTTTCCATTCTCAAATCCTGTGACTGGGATCACTCAACAGCACTGTGATGTATTATTTTCAATGAGGTGCCT
TTCTTAACTGACCAAATGCTGCCTTGTTTGGCCCCTAAATCAATAAAATATGTTAAAATTTGTATCCCCTGTTGT
GGCATTTTTTTTAGATAATCTAAGCTAGAAAAATGACATTGAATTCTGGACCTGGCTGGAAGGAAAAGAAGCCCT
TTCTTGTCGCTGGCAGCTGTGTGGTAGGAGGTCCAAGTATGTGCATATGAGATAAGCCTGCAACCTCTTGACCTT
CAGCTCCTATGCAGGCTTCTCTTGAGCCCAGAGACAAGGCAGCTTGGTCTAGTGGAGATAGCACTGTGCTTGGAG
TTCAGGGGACCTAGGACAAATCCCAGCCAGTTAGTTATTCACTGTGCTCCTGTTTCCTCAGCTGAAAAAGGAAGT
TGGTTATGCCACCTTCTTGGCCTTAATGGCATTAAATGAAATTTATAGGAAGAAGGTTTTTGCTCAGTACCTGGC
ATGCAACAGACATTGGATAAATGTTAGTTGGATCCAGATATACACAGAAAGATATCTGCTTCCTGCCAGGCTGGA
TAACTGTTGAATGACACTTGTCCATAGTCTAGA

FIGURE 2688

MAPSVPAAEPEYPKGIRAVLLGPPGAGKGTQAPRLAENFCVCHLATGDMLRAMVASGSELGKKLKATMDAGKLVS
DEMVVELIEKNLETPLCKNGFLLDGFPRTVRQAEMLDDLMEKRKEKLDSVIEFSIPDSLLIRRITGRLIHPKSGR
SYHEEFNPPKEPMKDDITGEPLIRRSDDNEKALKIRLQAYHTQTTPLIEYYRKRGIHSAIDASQTPDVVFASILA
AFSKATS

FIGURE 2689

AGAACTAGTAGTACTAGTAGTACTGTCTCTAGCTCTTCATACAGTTCTAGCTCAGGTAGTAGTCGTACTTCTTCT
CGGTCTTCTTCTCCTAAAAGGAAAAAGAGACACAGTAGGAGTAGATCTCCAACAATCAAAGCTAGACGTAGCAGG
AGTAGAAGCTATTCTCGCAGAATTAAAATAGAGAGCAATAGGGCTAGGGTAAAGATTAGAGATAGAAGGAGATCT
AATAGAAATAGCATTGAAAGAGAAAGACGACGAAATCGGAGTCCTTCCCGAGAGAGACGTAGAAGTAGAAGTCGC
TCAAGGGATAGACGAACCAATCGTGCCAGTCGCAGTAGGAGTCGAGATAGGCGTAAAATTGATGATCAACGTGGA
AATCTTAGTGGGAACAGTCATAAGCATAAAGGTGAGGCTAAAGAACAAGAGAGGAAAAAGGAGAGGAGTCGAAGT
ATAGATAAAGATAGGAAAAAGAAAGACAAAGAAAGGGAACGTGAACAGGATAAAAGAAAAGAGAAACAAAAAAGG
GAAGAAAAAGATTTTAAGTTCAGTAGTCAGGATGATAGATTAAAAAGGAAACGAGAAAGTGAAAGAACATTTTCT
AGGAGTGGTTCTATATCTGTTAAAATCATAAGACATGATTCTAGACAGGATAGTAAGAAAAGTACTACCAAAGAT
AGTAAAAAACATTCAGGCTCTGATTCTAGTGGAAGGAGCAGTTCTGAGTCTCCAGGAAGTAGCAAAGAAAAGAAG
GCTAAGAAGCCTAAACATAGTCGATCGCGATCCGCGGAGAAATCTCAAAGGTCTGGTAAGAAGGCAAGCCGCAAA
CACAAGTCTAAGTCCCGATCAAGGTAGTATACTTTTTAAAGTATTTTGTCTGATTTTTAAAAAAAATTGACTGAA
TTTATTCAAAGTTGAAAGTGTCCTTTCTCTCTCTCTTTAATAAACTCAGTTTGGTACTTGATAAATAATCATAGT
CTTAAATGTTAGAAATCCTATATAATATTATTTATTTAAAATTGCAGATTTTTAATTTAAAATACATTTTTATTT
TTAAATTTTGTCTTTTCCCTTTTTTTTCAGATCAACAACCCCTCCCCGTCGTAAACGCTGAGGAATGATGTGGCA
AGAATGCCATGATGTTCTTTAAAAAAATTCCATGAGTTTTAAGGGCTTGTCTCATTATAGAGGCACATTGTGGCT
GTGTAGGTGAAACCAGAATCTTTTTTTTTTTTAATCTGTAAATAGGTGTACTTTTTCCAATGCTGCTCCAAGTTA
CTTAATAGGATTTCTTTGTATTACGTTTTTTTCAAAAAATATAGBGCATAATAAGACTATAAACATGCCATTCTC
TTTCAGCTGTAATGTTCTTAAAATTATTCTTGAATGTACTGTGATGTCAATAAAGCTCTTTAGTTCATTTTTGTT
AAAAAAAAAAAAAAAAAAAAA

FIGURE 2690

GGGGAGTAGGTCGGGAAGTTCTAGTAGTGGTAGTTCCAGTAGCAATAGCAGAACTAGTAGTACTAGTAGTACTGT
CTCTAGCTCTTCATACAGTTCTAGCTCAGGTAGTAGTCGTACTTCTTCTCGGTCTTCTTCTCCTAAAAGGAAAAA
GAGACACAGTAGGAGTAGATCTCCAACAATCAAAGCTAGACGTAGCAGGAGTAGAAGCTATTCTCGCAGAATTAA
AATAGAGAGCAATAGGGCTAGGGTAAAGATTAGAGATAGAAGGAGATCTAATAGAAATAGCATTGAAAGAGAAAG
ACGACGAAATCGGAGTCCTTCCCGAGAGAGACGTAGAAGTAGAAGTCGCTCAAGGGATAGACGAACCAATCGTGC
CAGTCGCAGTAGGAGTCGAGATAGGCGTAAAATTGATGATCAACGTGGAAATCTTAGTGGGAACAGTCATAAGCA
TAAAGGTGAGGCTAAAGAACGAGAGAGGAAAAAGGAGAGGAGTCGAAGTATAGATAAAGATAGGAAAAAGAAAGA
CAAAGAAAGGGAACGTGAACAGGATAAAAGAAAAGAGAAACAAAAAAGGGAAGAAAAAGATTTTAAGTTCAGTAG
TCAGGATGATAGATTAAAAAGGAAACGAGAAAGTGAAAGAACATTTTCTAGGAGTGGTTCTATATCTGTTAAAAT
CATAAGACATGATTCTAGACAGGATAGTAAGAAAAGTACTACCAAAGATAGTAAAAAACATTCAGGCTCTGATTC
TAGTGGAAGGAGCAGTTCTGAGTCTCCAGGAAGTAGCAAAGAAAAGAAGGCTAAGAAGCCTAAACATAGTCGATC
GCGATCCGTGGAGAAATCTCAAAGGTCTGGTAAGAAGGCAAGCCGCAAACACAAGTCTAAGTCCCGATCAAGGTA
GTATACTTTTTAAAGTATTTTGTCTGATTTTTAAAAAAAATTGACTGAATTTATTCAAAGTTGAAAGTGTCCTTT
CTCTCTCTCTTTAATAAACTCAGTTTGGTACTTGATAAATAATCATAGTCTTAAATGTTAGAAATCCTATATAAT
ATTATTTATTTAAAATTGCAGATTTTTAATTTAAAATACATTTTTATTTTTAAATTTTGTCTTTTCCCTTTTTTT
TCAGATCAACAACCCCTCCCCGTCGTAAACGCTGAGGAATGATGTGGCAAGAATGCCATGATGTTCTTTAAAAAA
ATTCCATGAGTTTTAAGGGCTTGTCTCATTATAGAGGCACATTGTGGCTGTGTAGGTGAAACCAGAATCTTTTTT
TTTTAATCTGTAAATAGGTGTACTTTTTCCAATGCTGCTCCAAGTTACTTAATAGGATTTCTTTGTATTACGTTT
TTTTCAAAAAATATAGTGCATAATAAGACTATAAACATGCCATTCTCTTTCAGCTGTAATGTTCTTAAAATTATT
CTTGAATGTACTGTGATGTCAATAAAGCTCTTTAGTTCATTTTTGTTAAACTCTTGCACCTTAATTTTATGGTTT
TAATCTAAGGAACGTACTTTTATAAAAAGGCAGCTGGAATTTTGTATAACAGGTTTTAAAGGTACCTTCTCTCAC
CTCCCCCAAAGAAAATGGTTTTTACTTAATAGTTTGTCAAAGTTTGTAAATTGTACCCATGGACTTTTGCCAGAT
TCCAACTTTAAGGGTATGAAAGAGGGCTAGAAATAGACCTTTACTTTTCATTTGGAAGTATTTGACAACTTTCTA
AACTTTTCTTCCTATTTTGGGGATTTTCAAGTAATATATTCTCTGTGTGTATAACGTGTGGTTCACTCCTGTAAA
ATGAAATTGCTGGAATCAATCAAGCCAGTGCACCAGTAGAGTTATTTGTAAGGAACGATTGTGTTTGACAGTAAT
AGTCAAGTCTGGAACTATATTCTACAGTCACCCACTTCTGTTTTAGAAGCATTTTGAAACACTTTTTGGGGTTAT
AGAAATAAGACTCATGATTCAATATATTTATTTATATTTTTAAAGTATAATATGACCTCAAATCAATGGAGGAAT
GCTGTATTATGCAGGTTTGTGTCAATTTCATGACATTAAAATTGTCTGATTTTGTCCGTTTCTTAAAATTATGAT
TAGTGAGTGGTCTAACAGTTTAAGGCATTGATAACTTACAAGTAGAGTGGGGCTCTCAAAGCATTTTAACTCAGT
TGCTTTAGGGTCCATTTTTTTATGTAATCACTTACTCAGTGATAAATGAATCTCTGAAAACAAATGCTTTTACAT
TTTAATTTAAAAAGAAAACAGGTGCAGGCCACAGAAAAGTTTTAAAGTATGCCTTCTTACCAGCAATAGTTCATT
TTAAAAATCATGCCAGATTTTTGCCAAGATCAGTGTTTCCTCAACATGAAGATAGAAATAGATTTGTATAGTGTG
CTCTTGTACCTCTACATAGATTATTATATAATTTTGAGCAGTTACACATTTATCTAAAGGAAATAAATCAACTGT
GAATAAATGCATGTTTACCAAAATGGCTGTTTACAGTGCATTCAGTTCTGATATTTATAAAGATGACATTTCACA
GAATAACTTTAAAATAGTTTGAAATTCTATATAGTTTAGACATCGATCACATCTGGAGACAAAATAAAATGTGCA
ATATTTTTTATGTAGGCGAGCTAACACAGTGTACCTAATTGCAGAATTATCTGATTAATTTGTAATAGATAAGTT
GTATAACATTTTCATATCTTAAAATGTTTTTTAGATCAATCTTGAAGTGAAATATTTTCAAAATAAAATTCTACA
GAAAAAAAAAAAAAAAAAAA

FIGURE 2691

AGGACCACGCCTCCTCCAAGTCCCAGCGAACCCGCGTGCAACCTGTCCCGACTCTAGCCGCCTCTTCAGCTCGCC
ATGGATCCCAACTGCTCCTGCGCCGCCGGTGACTCCTGCACCTGCGCCGGCTCCTGCAAATGCAAAGAGTGCAAA
TGCACCTCCTGCAAGAAAAGCTGCTGCTCCTGCTGCCCTGTGGGCTGTGCCAAGTGTGCCCAGGGCTGCATCTGC
AAAGGGGCGTCGGACAAGTGCAGCTGCTGCGCCTGATGCTGGGACAGCCCCGCTCCCAGATGTAAAGAACGCGAC
TTCCACAAACCTGGATTTTTTATGTACAACCCTGACCGTGACCGTTTGCTATATTCCTTTTTCTATGAAATAATG
TGAATGATAATAAAACAGCTTTGACTTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
A

FIGURE 2692

MDPNCSCAAGDSCTCAGSCKCKECKCTSCKKSCCSCCPVGCAKCAQGCICKGASDKCSCCA

FIGURE 2693

GGCACGAGGGCTGCCCGGGCTGCGCGGCGTCTGCAGGCGCCACCGCTGCCTCTTTCCGGCTGTGACCCTCCTCGC
CGGCGCCGCTTGGCTGCGTCCTCCGACTCCCCGCGCCGCCGAGACCAGGCTCCCGCTCCGGTTGCGGCCGCACCG
CCCTCCGCGGCCGCCCCCTGGGGATCCAGCGAGCGCGGTCGTCCTTGGTGGAAGGAACCATGAACTGGCATCTCC
CCCTCTTCCTCTTGGCCTCTGTGACGCTGCCTTCCATCTGCTCCCACTTCAATCCTCTGTCTCTCGAGGAACTAG
GCTCCAACACGGGGATCCAGGTTTTCAATCAGATTGTGAAGTCGAGGCCTCATGACAACATCGTGATCTCTCCCC
ATGGGATTGCGTCGGTCCTGGGGATGCTTCAGCTGGGGGCGGACGGCAGGACCAAGAAGCAGCTCGCCATGGTGA
TGAGATACGGCGTAAATGGAGTTGGTAAAATATTAAAGAAGATCAACAAGGCCATCGTCTCCAAGAAGAATAAAG
ACATTGTGACAGTGGCTAACGCCGTGTTTGTTAAGAATGCCTCTGAAATTGAAGTGCCTTTTGTTACAAGGAACA
AAGATGTGTTCCAGTGTGAGGTCCGGAATGTGAACTTTGAGGATCCAGCCTCTGCCTGTGATTCCATCAATGCAT
GGGTTAAAAATGAAACCAGGGATATGATTGACAATCTGCTGTCCCCAGATCTTATTGATGGTGTGCTCACCAGAC
TGGTCCTCGTCAACGCAGTGTATTTCAAGGGTCTGTGGAAATCACGGTTCCAACCCGAGAACACAAAGAAACGCA
CTTTCGTGGCAGCCGACGGGAAATCCTATCAAGTGCCAATGCTGGCCCAGCTCTCCGTGTTCCGGTGTGGGTCGA
CAAGTGCCCCCAATGATTTATGGTACAACTTCATTGAACTGCCCTACCACGGGGAAAGCATCAGCATGCTGATTG
CACTGCCGACTGAGAGCTCCACTCCGCTGTCTGCCATCATCCCACACATCAGCACCAAGACCATAGACAGCTGGA
TGAGCATCATGGTGCCCAAGAGGGTGCAGGTGATCCTGCCCAAGTTCACAGCTGTAGCACAAACAGATTTGAAGG
AGCCGCTGAAAGTTCTTGGCATTACTGACATGTTTGATTCATCAAAGGCAAATTTTGCAAAAATAACAACAGGGT
CAGAAAACCTCCATGTTTCTCATATCTTGCAAAAAGCAAAAATTGAAGTCAGTGAAGATGGAACCAAAGCTTCAG
CAGCAACAACTGCAATTCTCATTGCAAGATCATCGCCTCCCTGGTTTATAGTAGACAGACCTTTTCTGTTTTTCA
TCCGACATAATCCTACAGGTGCTGTGTTATTCATGGGGCAGATAAACAAACCCTGAAGAGTATACAAAAGAAACC
ATGCAAAGCAACGACTACTTTGCTACGAAGAAAGACTCCTTTCCTGCATCTTTCATAGTTCTGTTAAATATTTTT
GTACATCGCTTCTTTTTCAAAACTAGTTCTTAGGAACAGACTCGATGCAAGTGTTTCTGTTCTGGGAGGTATTGG
AGGGAAAAAACAGCAGGATGGCTGGAACACTGTACTGAGGAATGAATAGAAAGGCTTCCAGATGTCTAAAAGATT
CTTTAAACTACTGAACTGTTACCTAGGTTAACAACCCTGTTGAGTATTTGCTGTTTGTCCAGTTCAGGAATTTTT
GTTTTGTTTTGTCTATATGTGCGGCTTTTCAGAAGAAATTTAATCAGTGTGACAGAAAAAAAAAATGTTTTATGG
TAGCTTTTACTTTTTATGAAAAAAAAATTATTTGCCTTTTAAATTCTTTTCCCCCATCCCCCTCCAAAGTCTTGA
TAGCAAGCGTTATTTTGGGGGTAGAAACGGTGAAATCTCTAGCCTCTTTGTGTTTTTGTTGTTGTTGTTGTTGTT
GTTTTATATAATGCATGTATTCACTAAAATAAAATTTAAAAAACTCCTGTCTTGCTAGACAAGGTTGCTGTTGTG
CAGTGTGCCTGTCACTACTGGTCTGTACTCCTTGGATTTGCATTTTTGTATTTTGTACAAAGTAAAAATAAACTG
TTATGAGTAGTAAAAAAAAAAAAAAAAA

FIGURE 2694

MNWHLPLFLLASVTLPSICSHFNPLSLEELGSNTGIQVFNQIVKSRPHDNIVISPHGIASVLGMLQLGADGRTKK
QLAMVMRYGVNGVGKILKKINKAIVSKKNKDIVTVANAVFVKNASEIEVPFVTRNKDVFQCEVRNVNFEDPASAC
DSINAWVKNETRDMIDNLLSPDLIDGVLTRLVLVNAVYFKGLWKSRFQPENTKKRTFVAADGKSYQVPMLAQLSV
FRCGSTSAPNDLWYNFIELPYHGESISMLIALPTESSTPLSAIIPHISTKTIDSWMSIMVPKRVQVILPKFTAVA
QTDLKEPLKVLGITDMFDSSKANFAKITTGSENLHVSHILQKAKIEVSEDGTKASAATTAILIARSSPPWFIVDR
PFLFFIRHNPTGAVLFMGQINKP

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FIGURE 2695

CTTTCCGCTCGGCTGTTTTCCTGCGCAGGAGCCGCAGGGCCGTAGGCAGCC**ATG**GCGCCCAGCCGGAATGGCATG
GTCTTGAAGCCCCACTTCCACAAGGACTGGCAGCGGCGCGTGGCCACGTGGTTCAACCAGCCGGCCCGTAAGATC
CGCAGACGTAAGGCCCGGCAAGCCAAGGCGCGCCGCATCGCCCCGCGCCCCGCGTCGGGTCCCATCCGGCCCATC
GTGCGCTGCCCCACGGTTCGGTACCACACGAAGGTGCGCGCCGGCCGCGGCTTCAGCCTGGAGGAGCTCAGGGTG
GCCGGCATTCACAAGAAGGTGGCCCGGACCATCGGCATTTCTGTGGATCCGAGGAGGCGGAACAAGTCCACGGAG
TCCCTGCAGGCCAACGTGCAGCGGCTGAAGGAGTACCGCTCCAAACTCATCCTCTTCCCCAGGAAGCCCTCGGCC
CCCAAGAAGGGAGACAGTTCTGCTGAAGAACTGAAACTGGCCACCCAGCTGACCGGACCGGTCATGCCCGTCCGG
AACGTCTATAAGAAGGAGAAAGCTCGAGTCATCACTGAGGAAGAGAAGAATTTCAAAGCCTTCGCTAGTCTCCGT
ATGGCCCGTGCCAACGCCCGGCTCTTCGGCATACGGGCAAAAAGAGCCAAGGAAGCCGCAGAACAGGATGTTGAA
AAGAAAAAA**TAA**AGCCCTCCTGGGGACTTGGAATCAGTCGGCAGTCATGCTGGGTCTCCACGTGGTGTGTTTCGT
GGGAACAACTGGGCCTGGGATGGGGCTTCACTGCTGTGACTTCCTCCTGCCAGGGGATTTGGGGCTTTCTTGAAA
GACAGTCCAAGCCCTGGATAATGCTTTACTTTCTGTGTTGAAGCACTGTTGGTTGTTTGGTTAGTGACTGATGTA
AAACGGTTTTCTTGTGGGGAGGTTACAGAGGCTGACTTCAGAGTGGACTTGTGTTTTTTCTTTTTAAAGAGGCAA
GGTTGGGCTGGTGCTCACAGCTGTAATCCCAGCACTTTGAGGTTGGCTGGGAGTTCAAGACCAGCCTGGCCAACA
TGTCAGAACTACTAAAAATAAAGAAATCAGCCATGAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2696

MAPSRNGMVLKPHFHKDWQRRVATWFNQPARKIRRRKARQAKARRIAPRPASGPIRPIVRCPTVRYHTKVRAGRG
FSLEELRVAGIHKKVARTIGISVDPRRRNKSTESLQANVQRLKEYRSKLILFPRKPSAPKKGDSSAEELKLATQL
TGPVMPVRNVYKKEKARVITEEEKNFKAFASLRMARANARLFGIRAKRAKEAAEQDVEKKK

FIGURE 2697A

GCGCCCCGCCCCGCCGCGGGACTGGGGTGGCGCGCTACCTCTGCGGAGAAGGATCTGACAGTGTTCCGGAGCCGG
GGCGAGCAGCCAAAAGGCCCGCGGAGTCGCGCTGGGCCGCCCCGGCGCAGCTGAACCGGGGGCCGCGCCTGCCAG
GCCGACGGGTCTGGCCCAGCCTGGCGCCAAGGGGTTCGTGCGCTGTGGAGACGCGGAGGGTCGAGGCGGCGCGGC
CTGAGTGAAACCCAATGGAAAAAGCATGACATTTAGAAGTAGAAGACTTAGCTTCAAATCCCTACTCCTTCACTT
ACTAATTTTGTGATTTGGAAATATCCGCGCAAGATGTTGACGTTGCAGACTTGGCTAGTGCAAGCCTTGTTTATT
TTCCTCACCACTGAATCTACAGGTGAACTTCTAGATCCATGTGGTTATATCAGTCCTGAATCTCCAGTTGTACAA
CTTCATTCTAATTTCACTGCAGTTTGTGTGCTAAAGGAAAAATGTATGGATTATTTTCATGTAAATGCTAATTAC
ATTGTCTGGAAAACAAACCATTTTACTATTCCTAAGGAGCAATATACTATCATAAACAGAACAGCATCCAGTGTC
ACCTTTACAGATATAGCTTCATTAAATATTCAGCTCACTTGCAACATTCTTACATTCGGACAGCTTGAACAGAAT
GTTTATGGAATCACAATAATTTCAGGCTTGCCTCCAGAAAAACCTAAAAATTTGAGTTGCATTGTGAACGAGGGG
AAGAAAATGAGGTGTGAGTGGGATGGTGGAAGGGAAACACACTTGGAGACAAACTTCACTTTAAAATCTGAATGG
GCAACACACAAGTTTGCTGATTGCAAAGCAAAACGTGACACCCCCACCTCATGCACTGTTGATTATTCTACTGTG
TATTTTGTCAACATTGAAGTCTGGGTAGAAGCAGAGAATGCCCTTGGGAAGGTTACATCAGATCATATCAATTTT
GATCCTGTATATAAAGTGAAGCCCAATCCGCCACATAATTTATCAGTGATCAACTCAGAGGAACTGTCTAGTATC
TTAAAATTGACATGGACCAACCCAAGTATTAAGAGTGTTATAATACTAAAATATAACATTCAATATAGGACCAAA
GATGCCTCAACTTGGAGCCAGATTCCTCCTGAAGACACAGCATCCACCCGATCTTCATTCACTGTCCAAGACCTT
AAACCTTTTACAGAATATGTGTTTAGGATTCGCTGTATGAAGGAAGATGGTAAGGGATACTGGAGTGACTGGAGT
GAAGAAGCAAGTGGGATCACCTATGAAGATAGACCATCTAAAGCACCAAGTTTCTGGTATAAAATAGATCCATCC
CATACTCAAGGCTACAGAACTGTACAACTCGTGTGGAAGACATTGCCTCCTTTTGAAGCCAATGGAAAAATCTTG
GATTATGAAGTGACTCTCACAAGATGGAAATCACATTTACAAAATTACACAGTTAATGCCACAAAACTGACAGTA
AATCTCACAAATGATCGCTATCTAGCAACCCTAACAGTAAGAAATCTTGTTGGCAAATCAGATGCAGCTGTTTTA
ACTATCCCTGCCTGTGACTTTCAAGCTACTCACCCTGTAATGGATCTTAAAGCATTCCCCAAAGATAACATGCTT
TGGGTGGAATGGACTACTCCAAGGGAATCTGTAAAGAAATATATACTTGAGTGGTGTGTGTTATCAGATAAAGCA
CCCTGTATCACAGACTGGCAACAAGAAGATGGTACCGTGCATCGCACCTATTTAAGAGGGAACTTAGCAGAGAGC
AAATGCTATTTGATAACAGTTACTCCAGTATATGCTGATGGACCAGGAAGCCCTGAATCCATAAAGGCATACCTT
AAACAAGCTCCACCTTCCAAAGGACCTACTGTTCGGACAAAAAAAGTAGGGAAAAACGAAGCTGTCTTAGAGTGG
GACCAACTTCCTGTTGATGTTCAGAATGGATTTATCAGAAATTATACTATATTTTATAGAACCATCATTGGAAAT
GAAACTGCTGTGAATGTGGATTCTTCCCACACAGAATATACATTGTCCTCTTTGACTAGTGACACATTGTACATG
GTACGAATGGCAGCATACACAGATGAAGGTGGGAAGGATGGTCCAGAATTCACTTTTACTACCCCAAAGTTTGCT
CAAGGAGAAATTGAAGCCATAGTCGTGCCTGTTTGCTTAGCATTCCTATTGACAACTCTTCTGGGAGTGCTGTTC
TGCTTTAATAAGCGAGACCTAATTAAAAAACACATCTGGCCTAATGTTCCAGATCCTTCAAAGAGTCATATTGCC
CAGTGGTCACCTCACACTCCTCCAAGGCACAATTTTAATTCAAAAGATCAAATGTATTCAGATGGCAATTTCACT
GATGTAAGTGTTGTGGAAATAGAAGCAAATGACAAAAAGCCTTTTCCAGAAGATCTGAAATCATTGGACCTGTTC
AAAAAGGAAAAAATTAATACTGAAGGACACAGCAGTGGTATTGGGGGGTCTTCATGCATGTCATCTTCTAGGCCA
AGCATTTCTAGCAGTGATGAAAATGAATCTTCACAAAACACTTCGAGCACTGTCCAGTATTCTACCGTGGTACAC
AGTGGCTACAGACACCAAGTTCCGTCAGTCCAAGTCTTCTCAAGATCCGAGTCTACCCAGCCCTTGTTAGATTCA
GAGGAGCGGCCAGAAGATCTACAATTAGTAGATCATGTAGATGGCGGTGATGGTATTTTGCCCAGGCAACAGTAC
TTCAAACAGAACTGCAGTCAGCATGAATCCAGTCCAGATATTTCACATTTTGAAAGGTCAAAGCAAGTTTCATCA
GTCAATGAGGAAGATTTTGTTAGACTTAAACAGCAGATTTCAGATCATATTTCACAATCCTGTGGATCTGGGCAA
ATGAAAATGTTTCAGGAAGTTTCTGCAGCAGATGCTTTTGGTCCAGGTACTGAGGGACAAGTAGAAAGATTTGAA
ACAGTTGGCATGGAGGCTGCGACTGATGAAGGCATGCCTAAAAGTTACTTACCACAGACTGTACGGCAAGGCGGC
TACATGCCTCAGTGAAGGACTAGTAGTTCCTGCTACAACTTCAGCAGTACCTATAAAGTAAAGCTAAAATGATTT
TATCTGTGAATTCAGATTTTAAAAAGTCTTCACTCTCTGAAGATGATCATTTGCCCTTAAGGACAAAAATGAACT
GAAGTTTCACATGAGCTATTTCCATTCCAGAATATCTGGGATTCTACTTTAAGCACTACATAAACTGACTTTATC
CTCAGACTAGCTGAATGATTTTGTGCTGTTTCAGGATGTTTGCACTGAAGAAAAACAGAAAGCTTATCTGAAATT
TATAAAACTTTTTGTTTTGCTACATAGAAAACAGAAGGTATTTGAATAATAAGCAGTGATATGCTTAGTGAGCAC
AGCTATACTGATTTTGATTAGAATAGTCATCAGAGTGGCTTAGGGACAGTTAATATAAAAGAGGAGCAAGGTGTA
GACCATCATCTACTTCTGCTAAAATAACTTAAAAAGAGGTCCATAGGCCATAACTACATGAGCCCAGCTTTTGTA

FIGURE 2697B

ATCTGACAAAAAAATGAGGAGCAGCTTCGTGTATATCAGTGTACACGGTATTCCTTAGGTCCCTTCCATTGGTAG
TGATGCTGCGAGTTATTACTGGAGAAAAGGAATTCTAGAGCTTTAACTTGGCAGATTAAAAGTACTCATTTTTTA
TTCATCAATAATTAGTAATCTCACTAGTTTTCAAAAATTTGCATATTATTGACAACCTCTTTGAAGATGCATTTC
ACAAACTCAACAGAGTGCCATGATAAGAGCTAGGGATCCCCCAAACTATCTCAAGCATCTAAAAAATTGCCATTT
TTAAAGGCTTAAATTGTAGTAGTAAAGGGGAAAACAGGAAGTAGTAGTAAAGGGGAAAAAAAACCAATAAAGCAT
CTAAAAAATTGGCATGTTAAAAGGCTTAAATTGCTANNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNA
CACACACATATCATTGACTTTTCTTAAGACTTCAGAGTACTGGGTAGATGAACACTTTATACAGTATATATCTTC
AGCTTAAATTTGTTTTGAGTATTTTTTTTATTTTTAAATAAGTAGGCAAAGATTTAAATTTTTTTATTTTTAGTA
AATGTTTGAGGCACACTAAGACAACTTGGGGCAATATTTGCCAAAACAAAACAGAACCCCAAAAAATGTACATCT
TGTTCTTAGCAAATATCATTATTGTAGAGACACTTAATAAAGAGATGGTATTTTAATGTCTGCAGTTCTGAGGTA
GGGTGGAACTTAGTTCTACATTGTGATTTAGGAATTTTTAAAACCTTTTTTCTTCAAGGGAGAAGTGACCCAGGC
CTCGAGTTTAGTGCTAAAGCCGCTAGTGTACTTATGCTGTCCCCTAACCACCACGTGCGATATGGAAGCAGATGC
TAAATATAGGGGTTTTCTTAGAAAGTAAGAGGAAATTAGCAAGCGTTATTAGTGATTGACTACTGCTATCAAGTG
AATTCAAAGGAAACAGGTTTTTATGCCATATTTAAGTTACAGAAACCAGGCATGCTTAGAATAGTTTCTAGAGGT
TATTGGAGAATAGAAAGCTAAGAAAACTTGGTATACATTTACAATGGAAATATAATTACACTTTTTACTCTCAGA
ATATTGTTCACATTAGACTTCCTGTTTATCTTTTATATTCTTGCATTTATATAATGCCTCATCCTTTCAAAGTTC
TTTCACATATTATATGATCTTCTTTATGAAAAAAATAGATGTTTCATTCTGATATATTCAGTTTCCCACTTTAGG
CAAAAGTAGATTAATAGAATGACGAATTCAAAGTAGATGAGGAAAATCAGGCACAGAGAAGTAAAGGTAGGGATA
GACCCAAATTTACACAACAAGATAATGACATCTCCAGCTTTTAAGTTGATCATCAAAGGCTGGGCTGGATTTGTC
TTGCTGTATGTGTCAGGAAATTTATACCTATTACATTTTCCATTTTCTCAAAATTTAAGTCACATGACTAATATT
TAGCTGCAACTTTCCTCATAACAAATAGTGTCATGAAGAATGTTGTAGTGTGAAGTTTGTACATTTCAGGGTCAG
ATATACAATATGAACTCTTAATCTACAGGAATGAGAATGGAGGATCATTGAAGGCCATGATATAAACAAATTTGC
ATGTTGAAGCCTGTATAAAACATGGTACAGTGAGTGAATATACCCCCATCCCCAAGAACACTTTATACATATTAA
ATGGATATATGATTACTGTGCAAAAATTCATTCTGGAAATGAACATATATTTGAGCACTAATATGTAATGTACAC
CTGCCCTAAGGAGAAAATAAATTATAAAACTTTTTACATTCAAAATTACTTTCCCAAGCATGTCTTAGAATAATC
TATGTGTTGATGCATGTAAATTGTACTTTAGGTAGGCAAAGAAATCTGGTTATTTATGTAAAAACTAGTCTAATA
AAGTTAGTTAGTGGCTTTATCACTTTAAATCTTTAGTGTCCAAAAGTGGTGTTTAAAGTAATAGCACATCAGAAA
ACCTTGTCTGGACAAAACTAGTTCACTCACTGCTTCTGCACCTGCAGTTGCTCCCTTTAGGGTTATAAAATAATG
ACCCAAATGTTACATGTGTTGATATTATAACTTGTCAGTTACTGATGTCTGTGGTATCCTACCCTCATCTCTGAA
AGGGATAATACTGAATAATTATTAGAAAACTATAAAACTTCACACTTTGTACCATTAAAACCTAAAATTTTAATC
TTGTCCTTTTTTACTATGGATCAGTCGGCACTCGGGAACAGCAGCAAGGAAAAAAAGCAAATTTCATTCACATGT
TCTGTGTTCATACCTCTTCTCTACCTAATTGTTCATTTAAATTTCAGCCTTATTCCTTGATAAGGGATTTTACCA
CATGAAGTCATCCAGTGACCCTAGCTCTTATTGTGAAGTTAGTGGAGTATACTTAGAAATGTTACAACTTTAAAA
TGTTACAAAACATTCATTAAAGCTCATATTTAAAGTAGAGCATCTAGTTTGAGAAATAGAAATCAATTATTAAAG
ATGTCTTTTTTCTACCCATTTAACTAGTTAAAACCATGACATGTAAATGTAGAAGTAGAATAATCATAGAATTCC
CTAAAATATTTCTGTTTACTAACATATATTGACCAAGTACATCAAGCAGGAGAGATCTTCCTTCATTCTGTTATA
GTCCACATCATTCTAATTTTGCTCAGTTGTTATTAAGAGCATATTCCTAAACCATACACTTTTGTTTCAATAAAG
TTTTATTTTGTTGAGATGAATAAAATAACAAAGTTATAAGCTGCATAAGACAAAAGTTCAATTGTTCAAAAAAAA
TTTACTGGGATAGCTTTCTATTACAGGTATTGTTAGATTATATTGTGCTGATAAGATTACTTTCTAAAAAATTTG
TACTTTTCTGTAAATTAAAAGAATATGGAGTCATAAAATGGCAAGTGTTTTAGGATTAGCCTAAAATTGGACATT
GTCATTGATTTCAAAGAAGGTATGAACTAGCAGTCTTACAGCCTAATTCTTCTTTGGACTGGTCCTTGGCAGCAG
TTCCTTTTCAGACTCGATAAACAGAATTCAGATGATGTAAGTCAAAACAAAACTTTACAAAGCCAAGCGTATTAT
CTTTTGCATTAACCTATTTTTTTCCATCATACATGCTACTAGTATGTGCATTAGCATGATATTCTCATATACATT
GCATTAAAAATTAAAAGGTGGCAGCTCAGGGTGAGCTCTTCTGTTGCTCATTTGTTCCTAAATTTTTAAGGGCTT
TTTCTCAGTCAATAGTTTGTACAAACTGGTTAGTTTAACTTCATTACCCATTTCATTAAAGTTGATGGGTCGTGT
GATGAGATGCATTTAAGGCCGATAGTGATAGATGTTTTTTTTATTTCTTGAACACAGGCTTTGTCTGAATGATGT
TCTTTTATCTCTTGAACACAAGCTTTGAATGATAACTACAGGTTTTAAGTGCTGTTACATTAATACCATAATGTG
ATGTGTTAGAAACAAAGGGATATTTCAAAGGTAGATATTTGAAAATTCTCTAGTCTCAATATGTATGTGTATTGA

FIGURE 2697C

ATATACTCTAAAAATAAATGTGCAATTTGCTAGTAGGACAATGCAGTGACTGACTAGCATTAGGTATGTTTCTTT
TATATCCTAGCTATGTCCCACTTTCTTCTAAGTGCAATCCTTTCATGTTCACTTGCTGTTTTACCCCATCTACTC
TAACTTCATTTGGAAGGCTTGTCTAGAGTATAGCATGTATTTTTACCTTTGCAGTGAATTGCATGTGCTAATTGT
AACCACAGCTATTTTTATGTTGACATAACTCCAAATGTTATATTAAATGTTCTATTATATATTAGCTCTAATCCC
TTAAGTAAATTTTAAGAAATAAATACTTGTTCAAATTTTTTTTCTGTATGTGGTTACTATCATCTGACTATGCAT
ATTTGTAACAGCATTTATCATTAGTGGTGTTAGCTAAATAAGCATCTTAGTGTAAATGAGATGCTTCGTGTGGGT
TTTGTGACATTTTAAATGACATAATGGAATGTGATTTAAAAGAAAACCAGTACACTATCTTGGTCTTAATAACAT
AGAATGGAGATGGCAAATTTATCCACTAGTTTTCCAGATTTACTATTTAATAGCTGAGGTCTGAAATCGTAGCAT
CCTCCCTCCTAGTGGACATT

FIGURE 2698

MLTLQTWLVQALFIFLTTESTGELLDPCGYISPESPVVQLHSNFTAVCVLKEKCMDYFHVNANYIVWKTNHFTIP
KEQYTIINRTASSVTFTDIASLNIQLTCNILTFGQLEQNVYGITIISGLPPEKPKNLSCIVNEGKKMRCEWDGGR
ETHLETNFTLKSEWATHKFADCKAKRDTPTSCTVDYSTVYFVNIEVWVEAENALGKVTSDHINFDPVYKVKPNPP
HNLSVINSEELSSILKLTWTNPSIKSVIILKYNIQYRTKDASTWSQIPPEDTASTRSSFTVQDLKPFTEYVFRIR
CMKEDGKGYWSDWSEEASGITYEDRPSKAPSFWYKIDPSHTQGYRTVQLVWKTLPPFEANGKILDYEVTLTRWKS
HLQNYTVNATKLTVNLTNDRYLATLTVRNLVGKSDAAVLTIPACDFQATHPVMDLKAFPKDNMLWVEWTTPRESV
KKYILEWCVLSDKAPCITDWQQEDGTVHRTYLRGNLAESKCYLITVTPVYADGPGSPESIKAYLKQAPPSKGPTV
RTKKVGKNEAVLEWDQLPVDVQNGFIRNYTIFYRTIIGNETAVNVDSSHTEYTLSSLTSDTLYMVRMAAYTDEGG
KDGPEFTFTTPKFAQGEIEAIVVPVCLAFLLTTLLGVLFCFNKRDLIKKHIWPNVPDPSKSHIAQWSPHTPPRHN
FNSKDQMYSDGNFTDVSVVEIEANDKKPFPEDLKSLDLFKKEKINTEGHSSGIGGSSCMSSSRPSISSSDENESS
QNTSSTVQYSTVVHSGYRHQVPSVQVFSRSESTQPLLDSEERPEDLQLVDHVDGGDGILPRQQYFKQNCSQHESS
PDISHFERSKQVSSVNEEDFVRLKQQISDHISQSCGSGQMKMFQEVSAADAFGPGTEGQVERFETVGMEAATDEG
MPKSYLPQTVRQGGYMPQ

FIGURE 2699A

GGCGCCGAGAACATGGCTGGAGGCAAAGCTGGAAAGGACAGTGGGAAGGCCAAGGCTAAGGCAGTATCTCGCTCA
CAGAGAGCTGGGCTACAGTTTCCTGTGGGCCGCATCCACAGACACTTGAAGACTCGCACCACAAGCCATGGAAGG
GTGGGTGCCACTGCTGCCGTGTACAGTGCTGCGATTCTGGAGTACCTCACTGCAGAGGTGCTGGAGCTGGCAGGT
AATGCTTCTAAGGATCTCAAAGTAAAGCGTATCACTCCGCGTCACTTGCAGCTTGCAATCCGTGGTGATGAAGAG
TTGGATTCTCTTATCAAGGCTACCATAGCTGGGGGTGAGAAGAGAAGGTGTTCTTAGATCAGAAGATGCCATTGT
ATTAGGTGACGGCAAGGTTTTGCTGATTTAGTGGAACAAGATTCTACTGGGATGTGTGCTGAGCTGAACCAAGGA
ACTGCCCGAATGTGCTGAACAAGGACATTTGCTTCTCAGATACGTGAATTCAATTTTAAGCAAGATTCTTGATCT
GCTTCAGAGCAGCTTTGATTTAAAGTAATTTCAGAGCGCTTTTCCTTGCATGAGTAATTTTCTGAATGTATAAAA
TATTCTATTTATGTTTGACCTTTGGATAAACTGTGTTGCTGCAGTGTTGGTCCACACTACATCCTAAGTGAAGAC
TTAGTAAGTCTGAGATCTCCAGGCACTGGAAGAGTGAGAACCTGGGAGTGAAAGGGTTATAGTTAGTGTTCATTT
TTCGGGTTTTGTTTCATAGGGAGTCCTGAGTGGGGTAACCTGAAATGTTTTAACAGTTGAAGATCATCCCATTCC
TATCCCCAGTAAAAATAGGCCTTTCCACAATCTTCTACCAGTTAACTTAGCNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
TACATGGTGTTAATTTATATTTTGAGTGAGACCCAGTCCAGCTGCTATAACTGCTTGGACACTTGGCAGAGGACA
GAGTACTGCAAAAGTGTCTAAGGGAGACAGCATTTTGCCTTGGGTGCTGTAGATGTACAAGAGAGGTTCCAGGAG
GGGGTGATAGGCAGAATTTTGGTCCCCATCACCTTCCCTGCCCAGTGTTATGCCTATGAATGTGTTACATTATGT
GGTAAAAGGGACTTTGCAGATGTAACTAAAATTTCTAAAATAGAGATATTATCCTGTGATTACCTGGGGGAACCC
AGTGTAATTACATGAACCCTTAAAAATGGAAGAGGATGCAGGAGTCAGATTCAAAGGAAGGCCCAAGGTGCTATT
GCTGACTTGAAGATAGAGGGGCCATGTGGAAATCAAGAGAAGGAAGTGAATCCTTCCAGTGAGCTTGGAAGAGAG
CACCTTGAGGCACAGATGAGAAGCTTGGCCTTACCTGATGCCTTGATTTTAGCCTGGTGAGACCCCGAGCATATA
AATTTGCTGTGCTATGCCACACTTCTCACCTACAGAAACTTAGTTTAAAGCCACTAAGTTGTGGTAATGTGTGGC
TTTAGGCCCCTGAGGGTAGAGATTTATGGCTTGTGTTACAAGTAGAGAGCAGTGGAGAGTTGGGCTTTGTAATTC
TTTCAAGGGTGATTGTAGTTCTGGAGTCCTATCTACCTGGGTTCAGATCTTTGTTGGCCAGTCCCTGGCTGTGTG
ACTTCACTGCTTTAAGCCTCTGTCTTCATCCTTAAAGTGGCGATGATAGTACCTACCTCACTCTGATCTCTGAAT
AAGAACACATGTAAGACACTTAGCACAGTTCCTGGTGCTCAAAGAGTTCCAACACCTGAAAGCACCATGGCCCTG
TTTGTTTTTCAGTCAAGATTTCTAAAAGCCGTTATTACCAGAGGTTCAGTGAGAACATGGGCAGGGTAAACTCAA
AATGGAGAACATAAAAACTGGGACTCCCAGACCAGTCACTTAGAAGACTGCTGCAGGAAGTACCAAGGTCGTTAA
GAATCAGTAATAATAATAAGTAATGTGTGAATCCATTAGAATGTTGAGAAGTAGACCTTTGACATTTCAGAAAAA
TGTATATCTCAGACACAGCCATATGTATTGTTATCCCTGAGTTGGAAGAGCATCACAGGGCATAGTTTCACAAAA
GCTTCAAAAAATATACTAATTGCTGGTAATATGTGAACTAACAGAAAAAAATAGCCATGTTAAAATAGGAGTGCC
TGACAATTAGCTCTATTCATCTTGTCTCCTAGCTGTAAGCACCCTAGATTCAAATTATGCACCTAGAAAACTAAA
TTACTATGTATGTTATAGGCCTTTGAAATGGATACATGAAAATTAGTGAAATCAGAATGAACGTTTCGCCTGCCA
AAGATATGTATTTTTATAAGTGATACAAGGGCCCCATGAGCTCCATGGCCACATCTGTACAAAACAGGCCCTCCT
TTCAGGAACTGGTCTCGAGAGAGCAAAGGGGTCAACTCCCTAAATGGCAGCTGAGACAGTCCTCCCTGGTGGCAT
GGCCCTGTTTCCTGTTGATATGGTGATAGTTGGAGAGTCAAATTTTTACCAGAATTTGTGAATATCATCTCTGGT
TAATGATTACACAAAACCTTTTAAAATTTTAAAAAATTATTTCTAATTCTATAAATAAACTCTGCAGTTGTACAG
CCACTGTACAGCTAACATCTCAACACTGGAAATGAGGCTGGTTTCTTCCAGTTTGGCTCAGATTCTTCAGGGAAG
CCCAGTTAAGACAAACAGCTCTCTATACTCAATCCTTACTTTGCTGAGAAGATACAGGCCTGCCCACTCGCTCCC
ACCTGCTCTTCATGAGGAGTCCTTTATTCCTGCATGTTTCCTGTTCTTTGGGACCTTTAGGAGCTAACCTCCACA
GATGCTGATAGTCTGTAGAGTCAGGAATACCATGTAACATGTTGAAGTAGACTAAAGATTAGTTCTTTGGCAATA
GCCCAGTCTGGACTTACTATGTACTTTTGAAAATAAAACTGCTTATTTGTAAACTCTGTAATTAGGACCTTTTGC
TATTTGAGTTATATTCCTTTCTAACTTCAAACGTCTGCATTCATGTATAATAGCCATTTTATGCACAGATGAGGT
GATTCCCACACTTCTTTTCGCAGATGTTTCATTATCTGGATGAGTGTATTACATAATAAATTTGAATAATGGTAG
TCTTCCAAACGACAAAAAGCAAGCTAGTTGATTTGTCAATTTTGAGTTTAAATGTTTTGACTGCTTATCAGCAAA
AAAAATCAAAGAATAGCATACTAATATTAATGGAAATGCAGAGTATATTTAATTGGCATGATTTTTTCATGGATG

FIGURE 2699B

TGTGCTTCATTTGATCTATTGTATGTAGCTCGTGATCACATTTTCTGTTGGTTAACATTGTTCCTAGCTTATATG
ATGGAATTAAATATATTCTGTGTAAAAAGA

FIGURE 2700

GAENMAGGKAGKDSGKAKAKAVSRSQRAGLQFPVGRIHRHLKTRTTSHGRVGATAAVYSAAILEYLTAEVLELAG
NASKDLKVKRITPRHLQLAIRGDEELDSLIKATIAGGEKRRCS

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FIGURE 2701

CGCCGCCGAGGATTCAGCAGCCTCCCCCTTGAGCCCCCTCGCTTCCCGACGTTCCGTTCCCCCCTGCCCGCCTTC
TCCCGCCACCGCCGCCGCCGCCTTCCGCAGGCCGTTTCCACCGAGGAAAAGGAATCGTATCGTATGTCCGCTATC
CAGAACCTCCACTCTTTCGACCCCTTTGCTGATGCAAGTAAGGGTGATGACCTGCTTCCTGCTGGCACTGAGGAT
TATATCCATATAAGAATTCAACAGAGAAACGGCAGGAAGACCCTTACTACTGTCCAAGGGATCGCTGATGATTAC
GATAAAAAGAAACTAGTGAAGGCGTTTAAGAAAAAGTTTGCCTGCAATGGTACTGTAATTGAGCATCCGGAATAT
GGAGAAGTAATTCAGCTACAGGGTGACCAACGCAAGAACATATGCCAGTTCCTCGTAGAGATTGGACTGGCTAAG
GACGATCAGCTGAAGGTTCATGGGTTTTAAGTGCTTGTGGCTCACTGAAGCTTAAGTGAGGATTTCCTTGCAATG
AGTAGAATTTCCCTTCTCTCCCTTGTCACAGGTTTAAAAACCTCACAGCTTGTATAATGTAACCATTTGGGGTCC
GCTTTTAACTTGGACTAGTGTAACTCCTTCATGCAATAAACTGAAAAGAGCCATGCTGTCTAGTCTTGAAGTCCC
TCATTTAAACAGAGGTCAAGCAATAGGCGCCTGGCAGTGTCAAGCCTGAAACCAAGCAATACCGTCATGTTTCAG
CCAAGCCCAGAGCCCTAAGATTACAAACAACTATGGCCGGAACCTCCTCAGCTCTCCCTCTGCAGAGTTCCCTAC
CCTAAGAGAATGTTACCACCTGAACAGTCCTCGGTGAATCTGAGAGGAGAGGATGGGGTAAGGCAGAAGCACCAG
CTGTACTACTAGAAGGGAGCTTTTGGTGGTAGATCCCCTGGTGTCTCCAACCTGACTAGGTGGACAGAGCTCAAA
GAGGCCCTCTTACCGCTAGCGAGGTGATAGGACATCTGGCTTGCCACAAAGGTCTGTTCGACCAGACATATCCTA
GCTAAGGGATGTCCAAACATCAGAATGTGAGGCCAACCTTCTATCAGAGTTAAACTTTTGACAAGGGAACAAATC
TCAAACTGATCCATCAGTCATGTAGCTAGCTGTAGAGCTTGCAACTTAATAGCAGCAGCTGCCCAATGCCATGTG
AAGTAACAAACTGGTTTTTGGTTTTTTTTTCCCCTTCAGTTTTAATGTTATGTGTAATGTATTTAAACCCTTATT
TAAATAAAACTTGTTTTCAGAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2702

MSAIQNLHSFDPFADASKGDDLLPAGTEDYIHIRIQQRNGRKTLTTVQGIADDYDKKKLVKAFKKKFACNGTVIE
HPEYGEVIQLQGDQRKNICQFLVEIGLAKDDQLKVHGF

FIGURE 2703

ATATACATATATGTATATATATGCACATATATATATGTATTTAAAAAAATCAAAACAAAAAAAAACTCATTTATA
CCTGTGTATTTTTTAAAGCTACAATCTGTTCAATGTTTTTAAAAATCTGTTTATATGACATTGTTAAAATAAAGT
TGGTCTTTTGACGAGAGGGAGGATGTCACGGTCAGTTGTAACTTTGCCTTCACAAGGCAACTGGGGTGGGGGGTG
GGGGTAGTGTGCCTCCTTGACATTTCGTTCAAGTTATAGATTCAATGGAGCTATGTCTTGTTTTAAGTTGCTTTA
ATGCATTGTATTAGATCTTCAAACAGAATAAAGGTTGTTTTGAAACTGACAGT

FIGURE 2704

IYIYVYICTYIYVFKKIKTKKNSFIPVYFLKLQSVQCF

FIGURE 2705

TACAACCAGGCTCAACTGTTGCATGGTAGCAGATTTGCAAACATGAGTGCTGAGGGGTACCAGTACAGAGCGCTG
TATGATTATAAAAAGGAAAGAGAAGAAGATATTGACTTGCACTTGGGTGACATATTGACTGTGAATAAAGGGTCC
TTAGTAGCTCTTGGATTCAGTGATGGACAGGAAGCCAGGCCTGAAGAAATTGGCTGGTTAAATGGCTATAATGAA
ACCACAGGGGAAAGGGGGGACTTTCCGGGAACTTACGTAGAATATATTGGAAGGAAAAAAATCTCGCCTCCCACA
CCAAAGCCCCGGCCACCTCGGCCTCTTCCTGTTGCACCAGGTTCTTCGAAAACTGAAGCAGATGTTGAACAACAA
GCTTTGACTCTCCCGGATCTTGCAGAGCAGTTTGCCCCTCCTGACATTGCCCCGCCTCTTCTTATCAAGCTCGTG
GAAGCCATTGAAAAGAAAGGTCTGGAATGTTCAACTCTATACAGAACACAGAGCTCCAGCAACCTGGCAGAATTA
CGACAGCTTCTTGATTGTGATACACCCTCCGTGGACTTGGAAATGATCGATGTGCACGTTTTGGCTGACGCTTTC
AAACGCTATCTCCTGGACTTACCAAATCCTGTCATTCCAGCAGCCGTTTACAGTGAAATGATTTCTTTAGCTCCA
GAAGTACAAAGCTCCGAAGAATATATTCAGCTATTGAAGAAGCTTATTAGGTCGCCTAGCATACCTCATCAGTAT
TGGCTTACGCTTCAGTATTTGTTAAAACATTTCTTCAAGCTCTCTCAAACCTCCAGCAAAAATCTGTTGAATGCA
AGAGTACTCTCTGAAATTTTCAGCCCTATGCTTTTCAGATTCTCAGCAGCCAGCTCTGATAATACTGAAAACCTC
ATAAAAGTTATAGAAATTTTAATCTCAACTGAATGGAATGAACGACAGCCTGCACCAGCACTGCCTCCTAAACCA
CCAAAACCTACTACTGTAGCCAACAACGGTATGAATAACAATATGTCCTTACAAAATGCTGAATGGTACTGGGGA
GATATCTCGAGGGAAGAAGTGAATGAAAAACTTCGAGATACAGCAGACGGGACCTTTTTGGTACGAGATGCGTCT
ACTAAAATGCATGGTGATTATACTCTTACACTAAGGAAAGGGGGAAATAACAAATTAATCAAAATATTTCATCGA
GATGGGAAATATGGCTTCTCTGACCCATTAACCTTCAGTTCTGTGGTTGAATTAATAAACCACTACCGGAATGAA
TCTCTAGCTCAGTATAATCCCAAATTGGATGTGAAATTACTTTATCCAGTATCCAAATACCAACAGGATCAAGTT
GTCAAAGAAGATAATATTGAAGCTGTAGGGAAAAAATTACATGAATATAACACTCAGTTTCAAGAAAAAAGTCGA
GAATATGATAGATTATATGAAGAATATACCCGCACATCCCAGGAAATCCAAATGAAAAGGACAGCTATTGAAGCA
TTTAATGAAACCATAAAAATATTTGAAGAACAGTGCCAGACCCAAGAGCGGTACAGCAAAGAATACATAGAAAAG
TTTAAACGTGAAGGCAATGAGAAAGAAATACAAAGGATTATGCATAATTATGATAAGTTGAAGTCTCGAATCAGT
GAAATTATTGACAGTAGAAGAAGATTGGAAGAAGACTTGAAGAAGCAGGCAGCTGAGTATCGAGAAATTGACAAA
CGTATGAACAGCATTAAACCAGACCTTATCCAGCTGAGAAAGACGAGAGACCAATACTTGATGTGGTTGACTCAA
AAAGGTGTTCGGCAAAAGAAGTTGAACGAGTGGTTGGGCAATGAAAACACTGAAGACCAATATTCACTGGTGGAA
GATGATGAAGATTTGCCCCATCATGATGAGAAGACATGGAATGTTGGAAGCAGCAACCGAAACAAAGCTGAAAAC
CTGTTGCGAGGGAAGCGAGATGGCACTTTTCTTGTCCGGGAGAGCAGTAAACAGGGCTGCTATGCCTGCTCTGTA
GTGGTGGACGGCGAAGTAAAGCATTGTGTCATAAACAAAACAGCAACTGGCTATGGCTTTGCCGAGCCCTATAAC
TTGTACAGCTCTCTGAAAGAACTGGTGCTACATTACCAACACACCTCCCTTGTGCAGCACAACGACTCCCTCAAT
GTCACACTAGCCTACCCAGTATATGCACAGCAGAGGCGATGAAGCGCTTACTCTTTGATCCTTCTCCTGAAGTTC
AGCCACCCTGAGGCCTCTGGAAAGCAAAGGGCTCCTCTCCAGTCTGATCTGTGAATTGAGCTGCAGAAACGAAGC
CATCTTTCTTTGGATGGGACTAGAGCTTTCTTTCACAAAAAAGAAGTAGGGGAAGACATGCAGCCTAAGGCTGTA
TGATGACCACACGTTCCTAAGCTGGAGTGCTTATCCCTTCTTTTTCTTTTTTTCTTTGGTTTAATTTAAAGCCAC
AACCACATACAACACAAAGAGAAAAAGAAATGCAAAAATCTCTGCGTGCAGGGACAAAGAGGCCTTTAACCATGG
TGCTTGTTAATGCTTTCTGAAGCTTTACCAGCTGAAAGTTGGGACTCTGGAGAGCGGAGGAGAGAGAGGCAGAAG
AACCCTGGCCTGAGAAGGTTTGGTCCAGCCTGGTTTAGCCTGGATGTTGCTGTGCACGGTGGACCCAGACACATC
GCACTGTGGATTATTTCATTTTGTAACAAATGAACGATATGTAGCAGAAAGGCACGTCCACTCACAAGGGACGCT
TTGGGAGAATGTCAGTTCATGTATGTTCAGAAGAAATTCTGTCATAGAAAGTGCCAGAAAGTGTTTAACTTGTCA
AAAAACAAAAACCCAGCAACAGAAAAATGGAGTTTGGAAAACAGGACTTAAAATGACATTCAGTATATAAAATAT
GTACATAATATTGGATGACTAACTATCAAATAGATGGATTTGTATCAATACCAAATAGCTTCTGTTTTGTTTTGC
TGAAGGCTAAATTCACAGCGCTATGCAATTCTTAATTTTCATTAAGTTGTTATTTCAGTTTTAAATGTACCTTCA
GAATAAGCTTCCCCACCCCAGTTTTTGTTGCTTGAAAATATTGTTGTCCCGGATTTTTGTTAATATTCATTTTTG
TTATCCTTTTTTAAAAATAAATGTACAGGATGCCAGTAAAAAAAAAAAATGGCTTCAGAATTAAAACTATGAAATA
TTTTACAGTTTTTCTTGTACAGAGTACTTGCTGTTAGCCCAAGGTTAAAAAGTTCATAACAGATTTTTTTTGGAC
TGTTTTGTTGGGCAGTGCCTGATAAGCTTCAAAGCTGCTTTATTCAATAAAAAAAAAACCCGAATTCACTGG

FIGURE 2706

MSAEGYQYRALYDYKKEREEDIDLHLGDILTVNKGSLVALGFSDGQEARPEEIGWLNGYNETTGERGDFPGTYVE
YIGRKKISPPTPKPRPPRPLPVAPGSSKTEADVEQQALTLPDLAEQFAPPDIAPPLLIKLVEAIEKKGLECSTLY
RTQSSSNLAELRQLLDCDTPSVDLEMIDVHVLADAFKRYLLDLPNPVIPAAVYSEMISLAPEVQSSEEYIQLLKK
LIRSPSIPHQYWLTLQYLLKHFFKLSQTSSKNLLNARVLSEIFSPMLFRFSAASSDNTENLIKVIEILISTEWNE
RQPAPALPPKPPKPTTVANNGMNNNMSLQNAEWYWGDISREEVNEKLRDTADGTFLVRDASTKMHGDYTLTLRKG
GNNKLIKIFHRDGKYGFSDPLTFSSVVELINHYRNESLAQYNPKLDVKLLYPVSKYQQDQVVKEDNIEAVGKKLH
EYNTQFQEKSREYDRLYEEYTRTSQEIQMKRTAIEAFNETIKIFEEQCQTQERYSKEYIEKFKREGNEKEIQRIM
HNYDKLKSRISEIIDSRRRLEEDLKKQAAEYREIDKRMNSIKPDLIQLRKTRDQYLMWLTQKGVRQKKLNEWLGN
ENTEDQYSLVEDDEDLPHHDEKTWNVGSSNRNKAENLLRGKRDGTFLVRESSKQGCYACSVVVDGEVKHCVINKT
ATGYGFAEPYNLYSSLKELVLHYQHTSLVQHNDSLNVTLAYPVYAQQRR

FIGURE 2707

AGCCCGCGCAGAATGTGCTCGCTGCCCCGCGGCTTCGAGCCCCAAGCTCCCGAGGACTTGGCGCAGCGGAGTTTG
GTGGAGCTGCGGGAAATGTTGAAGCGCCAGGAGAGACTTTTGCGCAACGAAAAATTCATTTGCAAATTGCCCGAC
AAAGGTAAAAAGATCTTTGACTCTTTTGCCAAACTGAAAGCTGCCATTGCAGAATGTGAAGAAGTTAGAAGAAAA
AGTGAACTGTTTAACCCTGTTAGTTTAGACTGTAAGCTAAGGCAAAAAGCAATTGCAGAAGTTGATGTGGGTACA
GATAAGGCCCAGAATTCTGACCCGATACTTGATACTTCATCACTAGTTCCTGGATGTTCCTCTGTAGATAACATC
AAGTCATCTCAAACCTCACAAAACCAGGGACTTGGACGTCCTACTCTTGAAGGTGATGAAGAGACTTCAGAGGTT
GAGTACACAGTGAATAAGGGCCCAGCTTCCAGCAATAGAGACAGGGTACCACCTTCATCTGAAGCTAGTGAGCAT
CACCCGCGGCATCGTGTTTCAAGTCAAGCGGAAGATACTTCCAGCAGCTTTGACAACCTGTTTATTGACAGGTTA
CAGAGGATCACCATTGCGGACCAAGGTGAACAACAGTCAGAAGAAAACGCAAGTACTAAGAACTTGACAGGCCTT
TCCAGTGGGACTGAGAAGAAACCTCATTACATGGAAGTGCTAGAAATGCGAGCCAAAAACCCAGTGCCCCAGCTG
CGTAAATTTAAAACCAATGTGTTACCTTTTCGACAAAATGATTCATCTAGTCATTGCCAGAAGAGTGGGTCTCCT
ATTTCCTCAGAAGAGCGGCGGCGCAGGGATAAGCAGCATCTTGATGACATCACAGCAGCTCGGCTTCTACCACTT
CACCATATGCCCACGCAGCTGCTCTCCATAGAAGAATCCTTGGCACTTCAGAAACAGCAGAAACAGAATTATGAG
GAGATGCAAGCAAAGCTCGCAGCGCAAAAATTAGCTGAAAGACTGAATATTAAAATGCGGAGTTATAATCCAGAA
GGGGAGTCTTCAGGGAGATACCGAGAAGTAAGGGATGAAGATGACGATTGGTCCTCTGATGAATTCTGA

FIGURE 2708A

GTAAGATTTTTAAACCAAGGAATGACTGGGCTATCTATAAACCCAGATGCACTAAGTGGGGAGAAAAGCTCGGAG
CTGCAGCATATCAGCTTTGTCAACCTGCCAACAGCAGAGCGTACCATGCTGCAAGGAGTAATAAACAAGGAATTA
GAAAACTCGCTGCTGGAGAACAGTCAAATTAAACACCTTTTTGAAAGGATGAGCATGTATATATTGCAGTTCTAT
TAAATGTAGCTTCTTAGTGAGGTTGGCATTATGTTAAGGCTGGTATGGAAGAGAACTGATGAAGCAGGAGTGGTC
TGGTGACATTTTTCTGACTTGATTGGCTGGGGCGTGTGATGTAATAGGTTTCAGTGCAGCCCCTTATAGGTTTTA
AAATGAATTCCAAGACACCATTACAAAGAAAGCCGGACTCTTTTCTTATAACTGAGCTCAGCCAAGGAAACTCTT
GCACAA**ATG**TACAATACTGTTTGGAATATGGAAGACCTGGATTTAGAATATGCCAAGACAGATATAAATTGTGGC
ACAGACTTGATGTTTTATATAGAAATGGACCCACCAGCACTGCCTCCTAAACCACCAAAACCTACTACTGTAGCC
AACAACGGTATGAATAACAATATATCCTTACAAGATGCTGAATGGTACTGGGGAGATATCTCGAGGGAAGAAGTG
AATGAAAAACTTCGAGATACAGCAGACGGGACCTTTTTGGTACGAGATGCGTCTACTAAAATGCATGGTGATTAT
ACTCTTACACTAAGGAAAGGGGGAAATAACAAATTAATCAAAATATTTCATCGAGATGGGAAATATGGCTTCTCT
GACCCATTAACCTTCAGTTCTGTGGTTGAATTAATAAACCACTACCGGAATGAATCTCTAGCTCAGTATAATCCC
AAATTGGATGTGAAATTACTTTATCCAGTATCCAAATACCAACAGGATCAAGTTGTCAAAGAAGATAATATTGAA
GCTGTAGGGAAAAAATTACATGAATATAACACTCAGTTTCAAGAAAAAAGTCGAGAATATGATAGATTATATGAA
GAATATACCCGCACATCCCAGGAAATCCAAATGAAAAGGACAGCTATTGAAGCATTTAATGAAACCATAAAAATA
TTTGAAGAACAGTGCCAGACCCAAGAGCGGTACAGCAAAGAATACATAGAAAAGTTTAAACGTGAAGGCAATGAG
AAAGAAATACAAAGGATTATGCATAATTATGATAAGTTGAAGTCTCGAATCAGTGAAATTATTGACAGTAGAAGA
AGATTGGAAGAAGACTTGAAGAAGCAGGCAGCTGAGTATCGAGAAATTGACAAACGTATGAACAGCATTAAACCA
GACCTTATCCAGCTGAGAAAGACGAGAGACCAATACTTGATGTGGTTGACTCAAAAAGGTGTTCGGCAAAAGAAG
TTGAACGAGTGGTTGGGCAATGAAAACACTGAAGACCAATATTCACTGGTGGAAGATGATGAAGATTTGCCCCAT
CATGATGAGAAGACATGGAATGTTGGAAGCAGCAACCGAAACAAAGCTGAAAACCTGTTGCGAGGGAAGCGAGAT
GGCACTTTTCTTGTCCGGGAGAGCAGTAAACAGGGCTGCTATGCCTGCTCTGTAGTGGTGGACGGCGAAGTAAAG
CATTGTGTCATAAACAAAACAGCAACTGGCTATGGCTTTGCCGAGCCCTATAACTTGTACAGCTCTCTGAAAGAA
CTGGTGCTACATTACCAACACACCTCCCTTGTGCAGCACAACGACTCCCTCAATGTCACACTAGCCTACCCAGTA
TATGCACAGCAGAGGCGA**TGA**AGCGCTTACTCTTTGATCCTTCTCCTGAAGTTCAGCCACCCTGAGGCCTCTGGA
AAGCAAAGGGCTCCTCTCCAGTCTGATCTGTGAATTGAGCTGCAGAAACGAAGCCATCTTTCTTTGGATGGGACT
AGAGCTTTCTTTCACAAAAAAGAAGTAGGGGAAGACATGCAGCCTAAGGCTGTATGATGACCACACGTTCCTAAG
CTGGAGTGCTTATCCCTTCTTTTTCTTTTTTTCTTTGGTTTAATTTAAAGCCACAACCACATACAACACAAAGAG
AAAAAGAAATGCAAAAATCTCTGCGTGCAGGGACAAAGAGGCCTTTAACCATGGTGCTTGTTAATGCTTTCTGAA
GCTTTACCAGCTGAAAGTTGGGACTCTGGAGAGCGGAGGAGAGAGAGGCAGAAGAACCCTGGCCTGAGAAGGTTT
GGTCCAGCCTGGTTTAGCCTGGATGTTGCTGTGCACGGTGGACCCAGACACATCGCACTGTGGATTATTTCATTT
TGTAACAAATGAACGATATGTAGCAGAAAGGCACGTCCACTCACAAGGGACGCTTTGGGAGAATGTCAGTTCATG
TATGTTCAGAAGAAATTCTGTCATAGAAAGTGCCAGAAAGTGTTTAACTTGTCAAAAAACAAAAACCCAGCAACA
GAAAAATGGAGTTTGGAAAACAGGACTTAAAATGACATTCAGTATATAAAATATGTACATAATATTGGATGACTA
ACTATCAAATAGATGGATTTGTATCAATACCAAATAGCTTCTGTTTTGTTTTGCTGAAGGCTAAATTCACAGCGC
TATGCAATTCTTAATTTTCATTAAGTTGTTATTTCAGTTTTAAATGTACCTTCAGAATAAGCTTCCCCACCCCAG
TTTTTGTTGCTTGAAAATATTGTTGTCCCGGATTTTTGTTAATATTCATTTTTGTTATCCTTTTTTAAAAGTAAA
TGTACAGGATGCCAGTAAAAAAAAAAAAAATGGCTTCAGAATTAAAACTATGAAATATTTTACAGTTTTTCTTGTA
CAGAGTACTTGGCTGTTAGCCCAAGGTTAAAAAGTTCATAACAGATTTTTTTTGGACTGTTTTGTTGGGCAGTGC
CTGATAAGCTTCAAAGCTGCTTTATTCAATAAAAAAAAGAAATGAAAAAGATATATGAATATGACAAAGTATTGC
TGAGTCCAACAATGTTGTTTTAAGACTCTTAAAATACGGTACCTGGCAATGTTTATTTCATAAAGAATTGTGAAC
TTCTTGAATCTAGGGAGGGGGAATGTAGTGAAGGGATGTATCAAGTGGGGTGGTGGGAGGGGGAGGCAAGGTTAT
ATGCACTTTCTCATGATTTACAGAGAAGTGAATAACTGCAAAGTGAAGTTGCTTCTTCTACTTCAGTCTTCTCTC
ACTTTGATTTGCTAGTTGTTATCAATTAATGACAATTACAAACCTACTGTATCTCTAATACAGTGTGACTGGTCA
GGTATTTCAGTTCTTAGGAAGGAAGTGCCAAGTTTGTTTTTGGGTTCCTGGAACAGCGCTCACCTTTGTTTAGAA
CACTGGTTTAAAGGGATAATCATCTCTGTCACATTAGACTATCCATCATGACCAGCAAATACTCATTTTAGGAAA
AAAAAAAGCATGATCTGAAAAATACTTTTGGTGGTATGTTGGTTACCCTCCTAGCTTTCCATTTGGTTTAGAACA
TAAAGCAAATAGACACAGTCATACTGTCACTGCTCTGGACTGTGTGGAGCTCGCTAAAGTCATGGTCATTGCAGG

FIGURE 2708B

AATCCAAGTGGCAGTCCTTCTCATTCATTCTAATCATTGTATGTGCTTCACTACGGGGGGGAGAAGGAAACGTTA
GCATCATGTTTCCCATTTAGGGCAGGAGTGAGAGGTCTCTCTTCCTGATTTAGATATGCAAAAGCTGGTATGTTC
AGTAGGAACTGTACATGTGTTGGGAGGCATAAAGACTAATTAGCAACCATAATATGGTCACTACCCTAATAGACT
AAATGAAATCTTGCAATTTCAAATTACTCTTTCTCCATATTAGATTTACCCACAGCTATATTTCTGTTTAAGTAC
TAGGGTGAGGGTTTTCTGTTACTTTGTTTTTTAATGTTGTTCCTTTTGAAAGAATCAGTCTTGCAGCTGAGTGAA
AAATCTGTGGAATGTATTATTTGTCCTCTTTACATGAAACTACTCATACTTAAGCAAAAGTCAGTCTTATAGCAA
GACTGTTAGCCCTCAAACTTGACTCTACTGATCTGACCATTTCCCTCTCATCGCCAGACAACTGACGATTTCCCT
GGTTTTAGTCTGCGTCTCTGCTTTAAAGTTATTGTGATATCCTTCTAGATCATACACAAGTCTAACAGTTAATTA
GTTAACAGTTTTTAAACTAGGTTTGTGGGTATTTTTTTGGTAGCACATGTATGCTATTACATACAAATTTTTATT
TCTAAAATATAAGATCTGAGATTGAATATTTTCATTAAAAGCTACAGTTTTGTGAATCTTTGTGCTTCAACATTC
TTTGCAAGATGATACGGTATTTAGGCATTTGCCTTATTTTTGCATCTCACAAACATAAGTGCAATAGATCTTTTC
ATTGAACAGCAAAGTAGGATTCATCATTCCATATGACTTGAGTTACACCAGACCTGTTCTGCCCAATGCCTTTTT
GATTACAGTGTAGCTTGCCCACCGCATTTGTCGTTTTAGATACTTTGCTAGCCGGCCACTTTGGATTTCATCAGA
CAGTCCTAACAATATTGTCTGAACGGCTGAATATGAATAGATACAGCAGAGGCACTCCTGATATATGATTTTTAT
CCATGCGTCAGTTTTTCCCACCCAGTGTAGCATCCTAAAGATAAAGCCAGAAGCTAAGCTGCAGTGAGGCTGTGA
TTGGGCGTAGAAGTGGGAGCATTGGGACCTCACATTACACACACGAGAGATCATAACCATGTGAAAAGGCAAAAA
GCATGTGTTTGCAACATCTGATAACTTCATGGCCTTTGATAAATGTATATATGTATATGTGCATGGACTGTGTTT
CCAGTACACCTTTCAGCCAAAACAGATCCACAGTAGTTGTTGAGTTCAAGTACATAAAGTACATAACAAGCGAAC
GTCTAGTACAATTCTTACTTATGTGTATGGGATTTTTCCCTTTGAGGTTGCTTTGTTTTGTCTTACAAAGGTGAA
AATTGTTTGTAAGTGAAGTGAGAAGTTCATATTTCTTTGGCTTTTTTGTGTTTTTAAAAGTTACTCCTTTTAGGG
AGCTGGTCTGATGACTTGCTTAGCTTGGAAATCCTTGTTTTCAGTGTGTCGAGTCAAAATGTGTTTATGTGAGCT
GTCACTGTGGGGAACCAATTGCTTTGTCATATAGCTGGTTATGAACTAGTAACATGTTTGGGAAGTCCTACTGAT
GTTCCTTTGGAAGAAAAAATCTGCTGGTTTTAACAACTGTGCTTTTGCTATGTATGGTATCCAAGTTAGTTGAAA
TGCAGACACTGAGATCTGTTTGAGTTTAGGGTCATTTTTAGAAAGGGGCAGTTTAAAGCACAATGTCTCACATGG
GACAAAGTTCCAAAATGCCAAATTCTTATTTTTTAAAAAGCTAGTTCTATAAAATACTGGTATTATGGGTGGGGA
GGAAATAGAATTGAGTCAATTGGAAAGACTATCCAACTTAACATGAAACTTGTCACCATGAGATAGCATTAGCTG
CCCAGGATGCTGCTATATATATATATGTATT

FIGURE 2709

MYNTVWNMEDLDLEYAKTDINCGTDLMFYIEMDPPALPPKPPKPTTVANNGMNNNISLQDAEWYWGDISREEVNE
KLRDTADGTFLVRDASTKMHGDYTLTLRKGGNNKLIKIFHRDGKYGFSDPLTFSSVVELINHYRNESLAQYNPKL
DVKLLYPVSKYQQDQVVKEDNIEAVGKKLHEYNTQFQEKSREYDRLYEEYTRTSQEIQMKRTAIEAFNETIKIFE
EQCQTQERYSKEYIEKFKREGNEKEIQRIMHNYDKLKSRISEIIDSRRRLEEDLKKQAAEYREIDKRMNSIKPDL
IQLRKTRDQYLMWLTQKGVRQKKLNEWLGNENTEDQYSLVEDDEDLPHHDEKTWNVGSSNRNKAENLLRGKRDGT
FLVRESSKQGCYACSVVVDGEVKHCVINKTATGYGFAEPYNLYSSLKELVLHYQHTSLVQHNDSLNVTLAYPVYA
QQRR

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FIGURE 2710

GACCGAAGCAAGAGCTGGTTCAGGTGGCAGCCACAGCAGCCTCAGGGACCTCAGCAACTATGGCCTCCTGCCCAG
ACTCTGATAATAGCTGGGTGCTTGCTGGCTCCGAGAGCCTGCCAGTGGAGACACTGGGCCCGGCATCCAGGATGG
ACCCAGAATCTGAGAGAGCCCTGCAGGCCCCTCACAGCCCCTCCAAGACAGATGGGAAAGAATTAGCTGGGACCA
TGGATGGAGAAGGGACGCTCTTCCAGACTGAAAGCCCTCAGTCTGGCAGCATTCTAACAGAGGAGACTGAGGTCA
AGGGCACCCTGGAAGGTGATGTTTGTGGTGTGGAGCCTCCTGGCCCAGGAGACACAGTAGTCCAGGGAGACCTGC
AGGAGACCACCGTGGTGACAGGCCTGGGACCAGACACACAGGACCTGGAAGGCCAGAGCCCTCCACAGAGCCTGC
CTTCAACCCCCAAAGCAGCTTGGATCAGGGAGGAGGGCCGCTGCTCCAGCAGTGACGATGACACCGACGTGGACA
TGGAGGGTCTGCGGAGACGGCGGGGCCGGGAGGCCGGCCCACCTCAGCCCATGGTGCCCCTGGCTGTGGAGAACC
AGGCTGGGGGTGAGGGTGCAGGCGGGGAGCTGGGCATCTCCCTCAACATGTGCCTCCTTGGGGCCCTGGTTCTGC
TTGGCCTGGGGGTCCTCCTCTTCTCAGGTGGCCTCTCAGAGTCTGAGACTGGGCCCATGGAGGAAGTGGAGCGGC
AGGTCCTCCCAGACCCCGAGGTGCTGGAAGCTGTGGGGGACAGGCAGGATGGGCTAAGGGAACAGCTGCAGGCCC
CAGTGCCTCCTGACAGTGTCCCCAGCCTGCAAAACATGGGTCTTCTGCTGGACAAGCTGGCCAAGGAGAACCAGG
ACATCCGGCTGCTGCAGGCCCAGCTGCAGGCCCAAAAGGAAGAGCTTCAGAGCCTGATGCACCAGCCCAAAGGGC
TAGAGGAGGAGAATGCCCAGCTCCGGGGGGCTCTGCAGCAGGGCGAAGCCTTCCAGCGGGCTCTGGAGTCAGAGC
TGCAGCAGCTGCGGGCCCGGCTCCAGGGGCTGGAGGCCGACTGTGTCCGGGGCCCAGATGGGGTGTGCCTCAGTG
GGGGTAGAGGCCCACAGGGTGACAAGGCCATCAGGGAGCAAGGCCCCAGGGAGCAGGAGCCAGAACTCAGCTTCC
TGAAGCAGAAGGAACAGCTGGAGGCTGAGGCACAGGCATTAAGGCAAGAGTTAGAGAGGCAGCGACGGCTGCTGG
GGTCTGTACAGCAGGATCTGGAGAGGAGCTTGCAGGATGCCAGCCGCGGGGACCCAGCTCATGCTGGCTTGGCTG
AGCTGGGCCACAGATTGGCCCAGAAACTGCAGGGCCTGGAGAACTGGGGCCAGGACCCTGGGGTCTCTGCCAATG
CCTCAAAGGCCTGGCACCAGAAGTCCCACTTCCAGAATTCTAGGGAGTGGAGTGGAAAGGAAAAGTGGTGGGATG
GGCAGAGAGACCGGAAGGCTGAGCACTGGAAACATAAGAAGGAAGAATCTGGCCGGGAAAGGAAGAAGAACTGGG
GAGGTCAGGAGGACAGGGAGCCAGCAGGAAGGTGGAAGGAGGGCAGGCCAAGGGTGGAGGAGTCGGGGAGCAAGA
AGGAGGGCAAGCGACAGGGCCCGAAGGAACCCCCAAGGAAAAGTGGTAGCTTCCACTCCTCTGGAGAAAAGCAGA
AGCAACCTCGGTGGAGGGAAGGGACTAAGGACAGCCATGACCCCCTGCCATCCTGGGCAGAGCTGTTGAGGCCCA
AGTACCGGGCACCCCAGGGCTGCTCAGGTGTGGACGAGTGTGCCCGGCAGGAGGGCCTGACTTTCTTTGGCACAG
AGCTAGCCCCAGTGCGGCAACAGGAGCTGGCCTCTCTGCTAAGAACATACTTGGCACGGCTGCCCTGGGCTGGGC
AGCTGACCAAGGAGCTACCCCTCTCACCTGCTTTCTTTGGTGAGGATGGCATCTTCCGTCATGACCGCCTCCGCT
TCCGGGATTTTGTGGATGCCCTGGAGGACAGCTTGGAGGAGGTGGCTGTGCAACAGACAGGTGATGATGATGAAG
TAGATGACTTTGAGGACTTCATCTTCAGCCACTTCTTTGGAGACAAAGCACTGAAGAAGAGGTCAGGGAAGAAGG
ACAAGCACTCACAGAGCCCAAGAGCTGCGGGGCCCAGGGAGGGGCACAGCCATAGCCACCACCACCACCACCGGG
GCTGACACCCTGCCCCACAGGGAATGGCCTTGGCCTGGCCCAGCCCAAGATCCCAGCGTTATCTAACTCCTGGAG
GGTGGACTCTGTCCTGGCTTGTTTGGTGTCCTCAGATATCTTTCACACAGTAGAGCAAAATCACCAGCCCTGCAC
TGATGTCACTTTATGTAGAAAAAGGCCTTAGCTGGACCTGCGTTGCCGTCTATGCAAATGCATGCAAATACTCCA
GGCCCTGGGATGTGGGCTTGTGTTTTGTCACTGTGAAGGGGGAGATGGGAGAGGAGCCTGTTTTGGGGTGGGGTC
TGGGGAAGGCAATCTGATTCTGAAGCTAAAGAGCTTTCATCCTCTTGAGTGTATGTCCCCATAGTGGGCCCCTTG
ACCCACATGCTGACCGGTGCCTTGGGATTTGACTAGAGTTGCTGGCTCGAGGCCCAGCACGAGGACTTACCCTGG
GGTTTTGTTAGGTTTGGAAGCAGCTGTCCCTAGGGGGTGAAGTCCCCCCCCCTTTTTTTTTTTACCCCTGCTTCTC
CCACGGCTTCACCTCCCTATGTGAACTGTAGACTCAGATCCCAATAAAGTGCTGTTGCAGCTATGATGCTAGGTG
GTTTCTAAGCACAGGGGACACCCCACACCCCCTGCCTGAATGGATGGGTCCATCCCAGGCACTGGTACTTGCCCC
CTTGTTCTGTATCCCCCTTTGCCCTTGCCTTGCCCTTCCAACAAACCCTAGGCCCTTGAGAAGCTGATACTTCTC
CTTTTGCTCACAGCTGCCTTGGCCCCACCCCTGGGAGATGTAGCAAATTGAGTGTGGGTTTTGGAGTCTGAGCCT
CAGGCTCAAATCCAGGCCAAGTGATCTTGGGCAAGTTAATCTCTGGGAACTTTGGGTTTCTTATCCTCAAAAAAG
GCGATGGAAGGGCTGGGGAAGTGATTAAATAAAAGCAACGCAAGAAAAAAAAAAAAAAAAAAA

FIGURE 2711

MASCPDSDNSWVLAGSESLPVETLGPASRMDPESERALQAPHSPSKTDGKELAGTMDGEGTLFQTESPQSGSILT
EETEVKGTLEGDVCGVEPPGPGDTVVQGDLQETTVVTGLGPDTQDLEGQSPPQSLPSTPKAAWIREEGRCSSSDD
DTDVDMEGLRRRRGREAGPPQPMVPLAVENQAGGEGAGGELGISLNMCLLGALVLLGLGVLLFSGGLSESETGPM
EEVERQVLPDPEVLEAVGDRQDGLREQLQAPVPPDSVPSLQNMGLLLDKLAKENQDIRLLQAQLQAQKEELQSLM
HQPKGLEEENAQLRGALQQGEAFQRALESELQQLRARLQGLEADCVRGPDGVCLSGGRGPQGDKAIREQGPREQE
PELSFLKQKEQLEAEAQALRQELERQRRLLGSVQQDLERSLQDASRGDPAHAGLAELGHRLAQKLQGLENWGQDP
GVSANASKAWHQKSHFQNSREWSGKEKWWDGQRDRKAEHWKHKKEESGRERKKNWGGQEDREPAGRWKEGRPRVE
ESGSKKEGKRQGPKEPPRKSGSFHSSGEKQKQPRWREGTKDSHDPLPSWAELLRPKYRAPQGCSGVDECARQEGL
TFFGTELAPVRQQELASLLRTYLARLPWAGQLTKELPLSPAFFGEDGIFRHDRLRFRDFVDALEDSLEEVAVQQT
GDDDEVDDFEDFIFSHFFGDKALKKRSGKKDKHSQSPRAAGPREGHSHSHHHHHRG

FIGURE 2712

GGCACGAGGGTGGCGTAGACGAGTTAAGTCCTGGTCTGCGTGGAGGTCGACGACTCCGTCGCAGACTACGGACCT
GTCTGGGTCTCAGCCGCCAAAGACCCCGTCCGGTAGGTGAGTGGCTCACTTTGAGGGCAAGCCTTCTCGGATCGA
GGCTTCTTCATGGCCGCTCAGATCGTGAGCGGCCGGGGCTGCTCTCTTTGCGGAGGATGGCGTCTAATGAGCGCA
GTTGATTCGAGGAAGTACTAGCCGGACATC**ATG**AGTGGCTGTCGGGTATTCATCGGGAGACTAAATCCAGCGGCC
AGGGAGAAGGACGTGGAAAGATTCTTCAAGGGATATGGACGGATAAGAGATATTGATCTGAAAAGAGGCTTTGGT
TTTGTGGAATTTGAGGATCCAAGGGATGCAGATGATGCTGTGTATGAGCTTGATGGAAAAGAACTCTGTAGTGAA
AGGGTTACTATTGAACATGCTAGGGCTCGGTCACGAGGTGGAAGAGGTAGAGGACGATACTCTGACCGTTTTAGT
AGTCGCAGACCTCGAAATGATAGACGAAATGCTCCACCTGTAAGAACAGAAAATCGTCTTATAGTTGAGAATTTA
TCCTCAAGAGTCAGCTGGCAGGATCTCAAAGATTTCATGAGACAAGCTGGGGAAGTAACGTTTGCGGATGCACAC
CGACCTAAATTAAATGAAGGGGTGGTTGAGTTTGCCTCTTATGGTGACTTAAAGAATGCTATTGAAAAACTTTCT
GGAAAGGAAATAAATGGGAGAAAAATAAAATTAATTGAAGGCAGCAAAAGGCACAGTAGGTCAAGAAGCAGGTCT
CGATCCCGGACCAGAAGTTCCTCTAGGTCTCGTAGCCGATCCCGTTCCCGTAGTCGCAAATCTTACAGCCGGTCA
AGAAGCAGGAGCAGGAGCCGGAGCCGGAGCAAGTCCCGTTCTGTTAGTAGGTCTCCCGTGCCTGAGAAGAGCCAG
AAACGTGGTTCTTCAAGTAGATCTAAGTCTCCAGCATCTGTGGATCGCCAGAGGTCCCGGTCCCGATCAAGGTCC
AGATCAGTTGACAGTGGCAAT**TAA**ACTGTAAATAACTTGCCCTGGGGGCCTTTTTTTAAAAAACAAAAACCACAA
AAATTCCCAAACCATACTTGCTAAAAATTCTGGTAAGTATGTGCTTTTCTGTGGGGGTGGGATTTGGAAGGGGGG
TTGGGTTGGGCTGGATATCTTTGTAGATGTGGACCACCAAGGGGTTGTTGAAAACTAATTGTATTAAATGTCTTT
TGATAAGCAAAAAAAAAAAAAAAAAA

FIGURE 2713

MSGCRVFIGRLNPAAREKDVERFFKGYGRIRDIDLKRGFGFVEFEDPRDADDAVYELDGKELCSERVTIEHARAR
SRGGRGRGRYSDRFSSRRPRNDRRNAPPVRTENRLIVENLSSRVSWQDLKDFMRQAGEVTFADAHRPKLNEGVVE
FASYGDLKNAIEKLSGKEINGRKIKLIEGSKRHSRSRSRSRSRTRSSSRSRSRSRSRSRKSYSRSRSRSRSRSRS
KSRSVSRSPVPEKSQKRGSSSRSKSPASVDRQRSRSRSRSRSVDSGN

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FIGURE 2714

GCTCGGAGCCCGGAGCGTGCCTCGGCGGCCTGTCGGTTTTCACC**ATG**GAGCAGCTGAGCTCAGCAAACACCCGCT
TCGCCTTGGACCTGTTCCTGGCGTTGAGTGAGAACAATCCGGCTGGAAACATCTTCATCTCTCCCTTCAGCATTT
CATCTGCTATGGCCATGGTTTTTCTGGGGACCAGAGGTAACACGGCAGCACAGCTGTCCAAGACTTTCCATTTCA
ACACGGTTGAAGAGGTTCATTCAAGATTCCAGAGTCTGAATGCTGATATCAACAAACGTGGAGCGTCTTATATTC
TGAAACTTGCTAATAGATTATATGGAGAGAAAACTTACAATTTCCTTCCTGAGTTCTTGGTTTCGACTCAGAAAA
CATATGGTGCTGACCTGGCCAGTGTGGATTTTCAGCATGCCTCTGAAGATGCAAGGAAGACCATAAACCAGTGGG
TCAAAGGACAGACAGAAGGAAAAATTCCGGAACTGTTGGCTTCGGGCATGGTTGATAACATGACCAAACTTGTGC
TAGTAAATGCCATCTATTTCAAGGGAAACTGGAAGGATAAATTCATGAAAGAAGCCACGACGAATGCACCATTCA
GATTGAATAAGAAAGACAGAAAAACTGTGAAAATGATGTATCAGAAGAAAAAATTTGCATATGGCTACATCGAGG
ACCTTAAGTGCCGTGTGCTGGAACTGCCTTACCAAGGCGAGGAGCTCAGCATGGTCATCCTGCTGCCGGATGACA
TTGAGGACGAGTCCACGGGCCTGAAGAAGATTGAGGAACAGTTGACTTTGGAAAAGTTGCATGAGTGGACTAAAC
CTGAGAATCTCGATTTCATTGAAGTTAATGTCAGCTTGCCCAGGTTCAAACTGGAAGAGAGTTACACTCTCAACT
CCGACCTCGCCCGCCTAGGTGTGCAGGATCTCTTTAACAGTAGCAAGGCTGATCTGTCTGGCATGTCAGGAGCCA
GAGATATTTTTATATCAAAAATTGTCCACAAGTCATTTGTGGAAGTGAATGAAGAGGGAACAGAGGCGGCAGCTG
CCACAGCAGGCATCGCAACTTTCTGCATGTTGATGCCCGAAGAAAATTTCACTGCCGACCATCCATTCCTTTTCT
TTATTCGGCATAATTCCTCAGGTAGCATCCTATTCTTGGGGAGATTTTCTTCCCCT**TAG**AAGAAAGAGACTGTAG
CAATACAAAAATCAAGCTTAGTGCTTTATTACCTGAGTTTTTAATAGAGCCAATATGTCTTATATCTTTACCAAT
AAAACCACTGTCCAGAAAAAAAAAAAAAAAAAAA

FIGURE 2715

MEQLSSANTRFALDLFLALSENNPAGNIFISPFSISSAMAMVFLGTRGNTAAQLSKTFHFNTVEEVHSRFQSLNA
DINKRGASYILKLANRLYGEKTYNFLPEFLVSTQKTYGADLASVDFQHASEDARKTINQWVKGQTEGKIPELLAS
GMVDNMTKLVLVNAIYFKGNWKDKFMKEATTNAPFRLNKKDRKTVKMMYQKKKFAYGYIEDLKCRVLELPYQGEE
LSMVILLPDDIEDESTGLKKIEEQLTLEKLHEWTKPENLDFIEVNVSLPRFKLEESYTLNSDLARLGVQDLFNSS
KADLSGMSGARDIFISKIVHKSFVEVNEEGTEAAAATAGIATFCMLMPEENFTADHPFLFFIRHNSSGSILFLGR
FSSP

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FIGURE 2716

TCCTCTTTCCCTAAGCAGCCTGAGGGTTGACTGGATTGGTGAGGCCCGTGTGGCTACTTCTGTGGAAGCAGTGCT
GTAGTTACTGGAAGATAAAAGGGAAAGCAAGCCCTTGGTGGGGGAAAGTATGGCTGCGATGATGGCATTTCTTAG
GACACCTTTGGATTAATAATGAAAACAACTACTCTCTGAGCAGCTGTTCGAATCATCTGATATTTATACTGAATG
AGTTACTGTAAGTACGTATTGACAGAATTACACTGTACTTTCCTCTAGGTGATCTGTGAAAATGGTTCGCTATTC
ACTTGACCCGGAGAACCCCACGAAATCATGCAAATCAAGAGGTTCCAATCTTCGTGTTCACTTTAAGAACACTCG
TGAAACTGCTCAGGCCATCAAGGGTATGCATATACGAAAAGCCACGAAGTATCTGAAAGATGTCACTTTACAGAA
ACAGTGTGTACCATTCCGACGTTACAATGGTGGAGTTGGCAGGTGTGCGCAGGCCAAGCAATGGGGCTGGACACA
AGGTCGGTGGCCCAAAAAGAGTGCTGAATTTTTGCTGCACATGCTTAAAAACGCAGAGAGTAATGCTGAACTTAA
GGGTTTAGATGTAGATTCTCTGGTCATTGAGCATATCCAAGTGAACAAAGCACCTAAGATGCGCCGCCGGACCTA
CAGAGCTCATGGTCGGATTAACCCATACATGAGCTCTCCCTGCCACATTGAGATGATCCTTACGGAAAAGGAACA
GATTGTTCCTAAACCAGAAGAGGAGGTTGCCCAGAAGAAAAAGATATCCCAGAAGAAACTGAAGAAACAAAAACT
TATGGCACGGGAGTAAATTCAGCATTAAAATAAATGTAATTAAAAGGAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2717

MVRYSLDPENPTKSCKSRGSNLRVHFKNTRETAQAIKGMHIRKATKYLKDVTLQKQCVPFRRYNGGVGRCAQAKQ
WGWTQGRWPKKSAEFLLHMLKNAESNAELKGLDVDSLVIEHIQVNKAPKMRRRTYRAHGRINPYMSSPCHIEMIL
TEKEQIVPKPEEEVAQKKKISQKKLKKQKLMARE

FIGURE 2718

CTCTTCTCACATCAGCGGGTCCAGGCCCAACCGACAGACTATGGGGGCTCCTTCACCAGGCGCTGCGTGGAGTGG
CTGCTGGGCCTCTACTTCCTCAGCCACATCCCCATCACCCTGTTCATGGACCTGCAGGCGGTCGTGCCGCGCGAG
CTCTACCCAGTCGAGTTTAGAAACCTGCTGAAGTGGTATGCTAAGGAGTTCAAAGACCCACTGCTACAGGAGCCC
CCAGCCTGGTTTAAGTCCTTTCTGTTTTGCGAGCTTGTGTTTCAGCTGCCTTTCTTTCCCATTGCAACGTATGCC
TTCCTCAAAGGAAGCTGCAAGTGGATTCGAACTCCTGCAATCATCTACTCTGTTCACACCATGACAACCTTAATT
CTGATACTCTCCACATTTCTGTTTGAGGATTTCTCCAAAGCCAGTGGTTTCAAGGGACAAAGACCTGAGACTTTG
CATGAACGGTTAACCCTTGTGTCTGTCTATGCCCCCTACTTACTCATCCCATTCATACTTTTAATTTTCATGTTG
CGGAGCCCCTACTACAAGTATGAAGAGAAAAGAAAAAAAAAATGAAGGAAACAACCACTGGCCCAGGGTAGAGAT
GCCTACAGGGTGGTTGCTTGTTGGATACATACAGGAACACTGCTCAGAACCCACGTCTTCAGCAGCATTTGAAAC
ACTGGCAGCAATGCACAAGAGCAAGATGGTGTCAGGAACCATGTCAAACCCTCACCTTCTTCCATTTTTTTTTTT
TTTTTGAGACAGTCTCACTCTGTTGCCAGGCTGGAGTAAAGGGCAGTGGCATGATCTCGGCTCACTGCAACCTCC
GCCTCCTGGGCTCAAGCCATCTTCCTTAGCCTCCCAAGTAGCTAGAACTACAGGTGTGTACCAACACGTATGGCT
AATTTGTTTTGTTTTTTTTGTGTGTGTGGAGACAGGGTTTTGCCATGTTGCCCAGGTTGGTCTCGAACGCCTAGG
CTCAAGTGATCTGCCCACCTCAGTCTCCCTAAGTGCTGGGATTACAGACGTGAACCACTGGGCCCAGCCCAAACC
TTCACCTTCTAAGGGCACTGGGATGAACAGACCGATCGGCTTGAGGGTGGGCAAAGGGGTGTGGGCTAGGTTATA
AGGAAGTGGTACCAAATAACTGTGTTGCCTGAGTTCCACCGCAAGATTACTAAAAGCAGGACCAGACCAGAAACT
GCTAAAGAACATGGCCTGTTTGACATGTTCATGAGTCACCTGACCCACAGCATATATGCTTATGACTAAACCCTC
CACTCCTGATTCTCAAGAGTGTATCACCTGTCAGCAAAATGAATAGTGGGATATTTTGGGCCATTTTAAATGTGA
AATTTTGCCTCTTTAATGTTAATTCAAAACTATATCAATGTTTTCTTGTTCCCACCTCTAACCCAAGGAAAAAAG
AGAAAACATACTATGCAAAGGAAGTTTAAACTTAAGTTTTCCTTAAGGGTCAGCCCAACAATGACTTTCAGTCAA
ATGGATTAAACTGGAAAATGTTTTTGTTTCTGTTGTAAACAGATCATCCTAGGCGAAAGTTTTTTTTGTTTGTTT
GCTTTTAAATTAGTTTATTTCTAAATCTTAGTCTTCCACATTTCTAGAGGCCACCTGACACAAGTCCCTGTATCT
GAAGTCTAGCATCTCAAGGCTGATCTGGAAGTGTGCTAGTATGCTCCCTAGTGGATAACTTAATCTTTTAATACA
GTTCCGTCATTCCCATCTTGTTTTCAGAAGAGAAGGTGGCTACAGCCAGGCATAACTTATCCACTGTGTGCATAG
AGGGTCTCTTCACGTTGATGCTTGGCATTCCATCAGCTTTCTCTAAGTCTTTGCTCAAGTTCAAGGTTAAAATGA
TGTTAGACAACAGGTCCCAGTCAGTCCCCTCTATTTTCACCCATTTTGCTCACAAGCCATATTGGCCCGATTAGT
GGTACTGTCTGACTCACGTGTGTGATCCAAATAAAGGTAGCTGCCGGGAATT

FIGURE 2719

CTCTTCTCACATCAGCGGGTCCAGGCCCAACCGACAGACTATGGGGGCTCCTTCACCAGGCGCTGCGTGGAGTGG
CTGCTGGGCCTCTACTTCCTCAGCCACATCCCCATCACCCTGTTCATGGACCTGCAGGCGGTCGTGCCGCGCGAG
CTCTACCCAGTCGAGTTTAGAAACCTGCTGAAGTGGTATGCTAAGGAGTTCAAAGACCCACTGCTACAGGAGCCC
CCAGCCTGGTTTAAGTCCTTTCTGTTTTGCGAGCTTGTGTTTCAGCTGCCTTTCTTTCCCATTGCAACGTATGCC
TTCCTCAAAGGAAGCTGCAAGTGGATTCGAACTCCTGCAATCATCTACTCTGTTCACACCATGACAACCTTAATT
CTGATACTCTCCACATTTCTGTTTGAGGATTTCTCCAAAGCCAGTGGTTTCAAGGGACAAAGACCTGAGACTTTG
CATGAACGGTTAACCCTTGTGTCTGTCTATGCCCCCTACTTACTCATCCCATTCATACTTTTAATTTTCATGTTG
CGGAGCCCCTACTACAAGTATGAAGAGAAAAGAAAAAAAAAAATGAAGGAAACAACCACTGGCCCAGGGTAGAGAT
GCCTACAGGGTGGTTGCTTGTTGGATACATACAGGAACACTGCTCAGAACCCACGTCTTCAGCAGCATTTGAAAC
ACTGGCAGCAATGCACAAGAGCAAGATGGTGTCAGGAACCATGTCAAACCCTCACCTTCTTCCATTTTTTTTTTT
TTTTTGAGACAGTCTCACTCTGTTGCCAGGCTGGAGTAAAGGGCAGTGGCATGATCTCGGCTCACTGCAACCTCC
GCCTCCTGGGCTCAAGCCATCTTCCTTAGCCTCCCAAGTAGCTAGAACTACAGGTGTGTACCAACACGTATGGCT
AATTTGTTTTGTTTTTTTTGTGTGTGTGGAGACAGGGTTTTGCCATGTTGCCCAGGTTGGTCTCGAACGCCTAGG
CTCAAGTGATCTGCCCACCTCAGTCTCCCTAAGTGCTGGGATTACAGACGTGAACCACTGGGCCCAGCCCAAACC
TTCACCTTCTAAGGGCACTGGGATGAACAGACCGATCGGCTTGAGGGTGGGCAAAGGGGTGTGGGCTAGGTTATA
AGGAAGTGGTACCAAATAACTGTGTTGCCTGAGTTCCACCGCAAGATTACTAAAAGCAGGACCAGACCAGAAACT
GCTAAAGAACATGGCCTGTTTGACATGTTCATGAGTCACCTGACCCACAGCATATATGCTTATGACTAAACCCTC
CACTCCTGATTCTCAAGAGTGTATCACCTGTCAGCAAAATGAATAGTGGGATATTTTGGGCCATTTTAAATGTGA
AATTTTGCCTCTTTAATGTTAATTCAAAACTATATCAATGTTTTCTTGTTCCCACCTCTAACCCAAGGAAAAAAG
AGAAAACATACTATGCAAAGGAAGTTTAAACTTAAGTTTTCCTTAAGGGTCAGCCCAACAATGACTTTCAGTCAA
ATGGATTAAACTGGAAAATGTTTTTGTTTCTGTTGTAAACAGATCATCCTAGGCGAAAGTTTTTTTTGTTTGTTT
GCTTTTAAATTAGTTTATTTCTAAATCTTAGTCTTCCACATTTCTAGAGGCCACCTGACACAAGTCCCTGTATCT
GAAGTCTAGCATCTCAAGGCTGATCTGGAAGTGTGCTAGTATGCTCCCTAGTGGATAACTTAATCTTTTAATACA
GTTCCGTCATTCCCATCTTGTTTTCAGAAGAGAAGGTGGCTACAGCCAGGCATAACTTATCCACTGTGTGCATAG
AGGGTCTCTTCACGTTGATGCTTGGCATTCCATCAGCTTTCTCTAAGTCTTTGCTCAAGTTCAAGGTTAAAATGA
TGTTAGACAACAGGTCCCAGTCAGTCCCCTCTATTTTCACCCATTTTGCTCACAAGCCATATTGGCCCGATTAGT
GGTACTGTCTGACTCACGTGTGTGATCCAAATAAAGGTAGCTGCCGGGAATT

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FIGURE 2720

LFSHQRVQAQPTDYGGSFTRRCVEWLLGLYFLSHIPITLFMDLQAVVPRELYPVEFRNLLKWYAKEFKDPLLQEP
PAWFKSFLFCELVFQLPFFPIATYAFLKGSCKWIRTPAIIYSVHTMTTLILILSTFLFEDFSKASGFKGQRPETL
HERLTLVSVYAPYLLIPFILLIFMLRSPYYKYEEKRKKK

FIGURE 2721

ATGTGGCTTCATCGAGTATTCCTTTGTGAATTCCTGGATGAAATTTTCAAGGCAAACAGGAAAAGCACTGAAATT
GCTGAATGGTGGCGAACGGAGCCACGAGGGAAGGGAGCGCCGCCGGCAGCTGCCGGGACACCAGGATACCACGCG
GCCAGCACCGAAACGCTAGGCTCGCGCTCACAACCGCAATCTACACTGAGTAGCCGCGCGCCGAACGGCGTGACT
AAGCCCCGCCCACACGGCGCTCCTGGCGGCCAATGGAAATGGCTTACGAGACGCCTTCTCCACGCGCTATACTTA
TACGGACCAATGGGTGCGCCCTGTGGGGAGTGCCGCCCCCTGTCCACGAGCCTCCTCTTCTCGCCAGCCAATGGA
AGCGGTCTGCCTAGCCCTCGCGGGGGCAAGGCGGCGACCGAGGCGCGTGGGTCTGGGAAGGCGCGCGGATTTGGC
CTCTTCTCACATCAGCGGGTCCAGGCCCAACCGACAGACTATGGGGGCTCCTTCACCAGGCGCTGCGTGGAGTGG
CTGCTGGGCCTCTACTTCCTCAGCCACATCCCCATCACCCTGTTCATGGACCTGCAGGCGGTCGTGCCGCGCGAG
CTCTACCCAGTCGAGTTTAGAAACCTGCTGAAGTGGTATGCTAAGGAGTTCAAAGACCCACTGCTACAGGAGCCC
CCAGCCTGGTTTAAGTCCTTTCTGTTTTGCGAGCTTGTGTTTCAGCTGCCTTTCTTTCCCATTGCAACGTATGCC
TTCCTCAAAGGAAGCTGCAAGTGGATTCGAACTCCTGCAATCATCTACTCTGTTCACACCATGACAACCTTAATT
CTGATACTCTCCACATTTCTGTTTGAGGATTTCTCCAAAGCCAGTGGTTTCAAGGGACAAAGACCTGAGACTTTG
CATGAACGGTTAACCCTTGTGTCTGTCTATGCCCCCTACTTACTCATCCCATTCATACTTTTAATTTTCATGTTG
CGGAGCCCCTACTACAAGTATGAAGAGAAAAGAAAAAAAAAATGAAGGAAACAACCACTGGCCCAGGGTAGAGAT
GCCTACAGGGTGGTTGCTTGTTGGATACATACAGGAACACTGCTCAGAACCCACGTCTTCAGCAGCATTTGAAAC
ACTGGCAGCAATGCACAAGAGCAAGATGGTGTCAGGAACCATGTCAAACCCTCACCTTCTTCCATTTTTTTTTTT
TTTTTGAGACAGTCTCACTCTGTTGCCAGGCTGGAGTAAAGGGCAGTGGCATGATCTCGGCTCACTGCAACCTCC
GCCTCCTGGGCTCAAGCCATCTTCCTTAGCCTCCCAAGTAGCTAGAACTACAGGTGTGTACCAACACGTATGGCT
AATTTGTTTTGTTTTTTTTGTGTGTGTGGAGACAGGGTTTTGCCATGTTGCCCAGGTTGGTCTCGAACGCCTAGG
CTCAAGTGATCTGCCCACCTCAGTCTCCCTAAGTGCTGGGATTACAGACGTGAACCACTGGGCCCAGCCCAAACC
TTCACCTTCTAAGGGCACTGGGATGAACAGACCGATCGGCTTGAGGGTGGGCAAAGGGGTGTGGGCTAGGTTATA
AGGAAGTGGTACCAAATAACTGTGTTGCCTGAGTTCCACCGCAAGATTACTAAAAGCAGGACCAGACCAGAAACT
GCTAAAGAACATGGCCTGTTTGACATGTTCATGAGTCACCTGACCCACAGCATATATGCTTATGACTAAACCCTC
CACTCCTGATTCTCAAGAGTGTATCACCTGTCAGCAAAATGAATAGTGGGATATTTTGGGCCATTTTAAATGTGA
AATTTTGCCTCTTTAATGTTAATTCAAAACTATATCAATGTTTTCTTGTTCCCACCTCTAACCCAAGGAAAAAAG
AGAAAACATACTATGCAAAGGAAGTTTAAACTTAAGTTTTCCTTAAGGGTCAGCCCAACAATGACTTTCAGTCAA
ATGGATTAAACTGGAAAATGTTTTTGTTTCTGTTGTAAACAGATCATCCTAGGCGAAAGTTTTTTTTGTTTGTTT
GCTTTTAAATTAGTTTATTTCTAAATCTTAGTCTTCCACATTTCTAGAGGCCACCTGACACAAGTCCCTGTATCT
GAAGTCTAGCATCTCAAGGCTGATCTGGAAGTGTGCTAGTATGCTCCCTAGTGGATAACTTAATCTTTTAATACA
GTTCCGTCATTCCCATCTTGTTTTCAGAAGAGAAGGTGGCTACAGCCAGGCATAACTTATCCACTGTGTGCATAG
AGGGTCTCTTCACGTTGATGCTTGGCATTCCATCAGCTTTCTCTAAGTCTTTGCTCAAGTTCAAGGTTAAAATGA
TGTTAGACAACAGGTCCCAGTCAGTCCCCTCTATTTTCACCCATTTTGCTCACAAGCCATATTGGCCCGATTAGT
GGTACTGTCTGACTCACGTGTGTGATCCAAATAAAGGTAGCTGCCGGGAATT

FIGURE 2722

MWLHRVFLCEFLDEIFKANRKSTEIAEWWRTEPRGKGAPPAAAGTPGYHAASTETLGSRSQPQSTLSSRAPNGVT
KPRPHGAPGGQWKWLTRRLLHALYLYGPMGAPCGECRPLSTSLLFSPANGSGLPSPRGGKAATEARGSGKARGFG
LFSHQRVQAQPTDYGGSFTRRCVEWLLGLYFLSHIPITLFMDLQAVVPRELYPVEFRNLLKWYAKEFKDPLLQEP
PAWFKSFLFCELVFQLPFFPIATYAFLKGSCKWIRTPAIIYSVHTMTTLILILSTFLFEDFSKASGFKGQRPETL
HERLTLVSVYAPYLLIPFILLIFMLRSPYYKYEEKRKKK

FIGURE 2723

GGCTTACAGGAGGGCAGCTCTGCAGTTGGGAGGGGCACCGTCCGGAGGAGACCAGGCCTCTACACACCCCCCACT
CTACTTATCATCCCTGCTCACACACCCTTGTCCAAGGCTTTATGCATCGGATTTATTTTTCCAAATCAAGAGGAC
AGTGATAGATGCATTTTCCCCAGGCTGTCTCAGAAAGGTCGCTAAATGTATACTGTTGTCAGAATTGCTGAGATC
TCCCCCCACTTTTGGTTTTTGCAGCAGTAAAAACTCTTTCCACTGTGACTTATTTTCTCTCTCAGGCAGCCAGCC
ACCTGGTCCCTTGTGCTGACTCTAGCACAGTGGCCAGGATCCAATACGAGTCCAGGGGTGACCGCAGGATGGTGG
GGGCAGCGGGCTTCTCCACCTACCCCAGCCACCAAGGCCCTGACGCACTGCCTCCTGCACCTTCAGCACATCCCT
GTGCACAGCTGGAAGGGTGCATGGCCCGCTCACCTTTGTTCAGATGGGTGGAAACGCTGATGATACCAGCTCCTC
CCTGCCGTGCCCCTGCCACGGAGCAGGCATTGTGAACTGGCTGGTGTTTGCAGTCCCACGTGGCATGGCCTCCAG
CCCAACCCACAGTGGAGACTGGAGACAGGGCAATGAGTCTGGTCGGGGGCACGTGGACATGCCCCATAGGGGCCC
CACCCAGACTTAACAGGCAAGGTCCTGGGCATTGCGCGACGCAGGACTCAATGCTAAAGCAAGCCTGCCTGGCTC
TGTGCCAGGGCCCCTCTTCTGATTTACACATCCCATTTTTACACAGACCCTTCCTTCTTAATAAAGGCTGACAGT
TCTGTTGGCAGCCAAGAACCCACACCATGAAGACAGGGAGTGAGGGGCCTTTGTGCCCAACTCCAGCACAGCTGC
GTTCTGGGGTGTGTGAGAGGCATGTTCGTGTCTGTGCGCTGGTGGTCTCGTGAGACAGTTCCGAGGACGGGGAAA
TTGCAGGGTGGTGGGGGCGTGAGGCTTATATGTGGAACTGATGCAGAGTTCGCCTGCAGACGGATCTGGATATAC
ACTATGTATAATTGTTACGTGTAATTTAAAATATATCTGTTTGCCATCGTCATGAGAAGATTATATGTAAGGCTC
TGAAGGGAGAGGGAGATGTACATTCTGCCAGGCTCCTGGGGACCTTATCCGAGTC**ATG**AAATTGATGACTGTTGA
TCCAGTGGTGCAAGAAGCTACACTCCATGTGTCATCACGCTTA**TGA**CTCCTAATGTATTTTTAAGGCAAAAAATG
TCAGCCGACTCCATCTTCACCCCTCGATTCCTCGAGTCCAGCCTTTCTGTGCCAGTGCTTCACTGAGCCACAACG
CTCTCGCCATCGGGACCCGGCTGGGCCTGGAGTCTCGGGGCACAGTTGCCATGGAGCCCTCCTGGGTCATTCTAC
AAATGTGCTGAGTGCCAGCTGAAAACCCCACAGGAGATGGAGTACCTTGGCCAAGCTTAAAGAGAAGATTTTCTC
AGGGTATTTATTAGTGTGTCCAGCAGGGTCAGGAAGCAGGATGGAAAGATGCATTCAGACTGTTAATTTATTAAC
AAGGCAAATGATTTTGTGTTTCTTGATGACAGACTATTAAGTTTGGGACTTATTTTCCCATTTGAGAAGTTATAA
TATATATTTAAGATGATAAGTTTCCTGCTTAAGTTGTGCCTTTCAGCTTCAATGAGTTTAAGGAGCACTAAGGGT
AATGATACCAATGAGGGTTGGTTTATTATCAAACCTGAATAGCTGTGGTTTCTCCAGTAAATATTTTCTTCTACT
GAACATGGAGCCATTATTAAGAGTTGTGTGTTTTTTATTATGTACATTTGTATATTTTTTTGCTTGTTTGATGTT
CTATTTTTCTAATAGTTTTCTTTTAGTTTCTTAAAGTTGTGATACTAGATTTAGATTCTGATGCTAACTGCAAAT
CAGGTTGGTCTCTGCTGGGTCTCTCCTGCTTTTATTTTACTTTAAGGACAAGTGTAGTTGTCGTCCACCACCTTT
CAAAAAATGTGAAACTGCCCTGCCTCCCCTTTTTGCTGACAACACTGTGTACATTGACCACTTCCTACCATACTT
TATGTTGTAAAATCAAACTCTTTTGTGGTACATTATCTCATGCTTCTGCAAATTCGAATAAATTCTATGGCTTCC
AAAAAAAAAAAAAAA

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FIGURE 2724

MKLMTVDPVVQEATLHVSSRL

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FIGURE 2725

GCGTCACCACAGAGGCAAGACAAGGGTCCATATCGCGGCATCCGGCTCCCGCCCGTCTTCAGGAGAGAAAGAAAA
AATAAAATATACTTGGGGAAGTTGTACCTGCCAGAATTAGTAAGAGCTTTCTTTAAGAAGACATTTGTCAAACTC
AACAAATTGAAGGTTAACACCTTAAGAGTTGTAGTTACTGACCAGAAATATGGACAGACTTCTTAGACTTGGAGG
AGGTATGCCTGGACTGGGCCAGGGGCCACCTACAGATGCTCCTGCAGTGGACACAGCAGAACAAGTCTATATCTC
TTCCCTGGCACTGTTAAAAATGTTAAAACATGGCCGTGCTGGAGTTCCAATGGAAGTTATGGGTTTGATGCTTGG
AGAATTTGTTGATGATTATACCGTCAGAGTGATTGATGTGTTTGCTATGCCACAGTCAGGAACAGGTGTCAGTGT
GGAGGCAGTTGATCCAGTGTTCCAAGCTAAAATGTTGGATATGTTGAAGCAGACAGGAAGGCCGGAGATGGTTGT
TGGTTGGTATCACAGTCACCCTGGCTTTGGTTGTTGGCTTTCTGGTGTGGATATCAACACTCAGCAGAGCTTTGA
AGCCTTGTCGGAGAGAGCTGTGGCAGTGGTTGTGGATCCCATTCAGAGTGTAAAAGGAAAGGTTGTTATTGATGC
CTTCAGATTGATCAATGCTAATATGATGGTCTTAGGACATGAACCAAGACAAACAACTTCGAATCTGGGTCACTT
AAACAAGCCATCTATCCAGGCATTAATTCATGGACTAAACAGACATTATTACTCCATTACTATTAACTATCGGAA
AAATGAACTGGAACAGAAGATGTTGCTAAATTTGCATAAGAAGAGTTGGATGGAAGGTTTGACACTTCAGGACTA
CAGTGAACATTGTAAACACAATGAATCAGTGGTAAAAGAGATGTTGGAATTAGCCAAGAATTACAATAAGGCTGT
AGAAGAAGAAGATAAGATGACACCTGAACAGCTGGCAATAAAGAATGTTGGCAAGCAGGACCCCAAACGTCATTT
GGAGGAACATGTGGATGTACTTATGACCTCAAATATTGTCCAGTGTTTAGCAGCTATGTTGGATACTGTCGTATT
TAAATAA

FIGURE 2726

MDRLLRLGGGMPGLGQGPPTDAPAVDTAEQVYISSLALLKMLKHGRAGVPMEVMGLMLGEFVDDYTVRVIDVFAM
PQSGTGVSVEAVDPVFQAKMLDMLKQTGRPEMVVGWYHSHPGFGCWLSGVDINTQQSFEALSERAVAVVVDPIQS
VKGKVVIDAFRLINANMMVLGHEPRQTTSNLGHLNKPSIQALIHGLNRHYYSITINYRKNELEQKMLLNLHKKSW
MEGLTLQDYSEHCKHNESVVKEMLELAKNYNKAVEEEDKMTPEQLAIKNVGKQDPKRHLEEHVDVLMTSNIVQCL
AAMLDTVVFK

FIGURE 2727

AAGGCAACAGACTCTTTATTTAATGTGGTTTAAAATACATCAAAATCAAGTCCCTGGCTGTTGTGAATACCCAAA
GGAGACAAAAAAGCTGCCAGTGCAGCTTCAAACAAGTCTGAGTGGCCGGGCTGGGCCATAAGGAAAGCAGTTACA
GGGACAGAAGGCAGCTCCCTTCCCCCAGGAAGGGCAAGAGGAGCAGGTGCCTGGCTGTCCCTGGGGTGACCACCT
CTGTGCTGTGCAAGGCGGAAAGGCTGGGGCAGCAGCTGGAGAATCAGCTCAGCAGGCCTTGGCCCTCCCCCGTGG
ACACCAGGCAGCTCCACTGGCCTCCGGGTCAGCCCTCAGGGCCACCGTGATGGGGTGGAGGAGGGTTAAATAACC
ATCTTTACAGAAATAACAGTCTCCTACAGAAAGTGCCTGAGCTCAGCCCATGGTCCGATAACCTCATGGAAAACA
AACAACAAATAAAAAAAAAAAGTGCTGCTGACACCTCTCAGAATCTGGTGGACATGAAGCTCTCAGCTGGACAAG
GCCCTGAAAACAATTTACTATTAGCAGAGCCATGCGCTCTTGAGCTTCACCTGCTGTGGTCCCCTGGAGGAAAAG
CTAGCAATCTAAGAAACCAACACAGATCTTGGTCCTAAAACTGAGGTCACAAGTGTGGGACCCACCCAGGTGAGG
AAGACACTGGCCTTCACTCATGGATAGGCACCTCCCCTGCATCTGGCCCAGGACCTGGGCTACTTTGGAAAGCAG
AAGCAGAGCAGCTGTAGTGATTGGTTGATTTGGTCAATGAAGAGAAGAAAXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXAAGGAGCCTCCAGAGCAGCTAGGAGGGCCTGAGCTGACCAAGCAAGCCCTG
CTCACAAGACAAATGCAGTCAAGACCTGGGTGTATTACTTGTCTTGAGCTCTGAAGGGCAGGGAGGGGTCTGAGC
CTCAAATCAGACAGAGAAATGCTCAAGTCACTTCTGCCAACTCACTGTGATGGCAGCTACAGATGACAGCCCCTC
TCAAGACTCTTCAGCTCACAGACAAGCCACTGACTTCATCTGTACACACCCCCATCCCCAATGCAAGCCCACTGT
ACACTTACAGGTATAAATGCATTTGCAAGGCCTTGCAAAATGCCCTATGTACGTAAAACTGACCCACAAAATCCA
AAATTGCAAGTGCCAGATGCCAGCCAGGTCAGAACATCCTGGCTTCAGCAATGGGCTGCTCAGCATGGGAGCCTT
TTATGGGCCAGGCCTGGCTGGGCTGCCGCTCCCTTCCCAGCATGACCCAACACCAGGCTCTCTAGGCCCTGGCGG
AGGTGGGCTCTTGAGGCCCAGTCTGGCCTGATGCTTCTGTGCTCGGTGCTCCTGGGTAGCAAGGCGCTTCTGTGA
CCCTGGGGGGAGCTGGGTGCTTGAGCCCCAGGCCCCTCTGGCCTCCTCTCAGGGCCACTGTCAGTGAGGGAGCCCT
GGCCACCAGCACTCAGGTCCTGTACCCTCTTGTTCAGGTCATTGCGCTCTGTCTGCAGTGCCCGGCACAGCTTCT
CCAGCCGTTGGATTTTTACCTGCAGGCCCTCCAGTTCTTTATCCCGGACTGTTTTCTCCTCAGCCATCTCAAGCA
GGGCCTTGTTGCTGCTCTCCCACCGGGACCGGTACATGGTGGTTTCTTTCTCCAGCTTCTTGATCTTCTTAGTCA
TCTTTTCCATCTCCTGCTTGAATGTGGTGAATACCTCGCTGCTTTTGGAAAGTGTGTTCTGGAACTCCTCAAACT
TCTCTGTGTATAGGGCAAGCTGTTGCTTCAGGTGGGTCTCTTGCTGCTTCATCAGCTCACACATCCTCTGGGACT
CTACTGCCTCTTTCAGGAGAAAATCCTTCTCCCGCTGGTGCCGCTCTTCTGCCTCCTTTAGCATCTCCTGGGCCT
GCTGGAGCTTGGCATCCACCAGCTGCTGTTGTAGGTCCTTGTGTTTGAAGACTTTGTCGATATGCTCCTCGCGCA
GCTCATACTGCTCAATCAGCTTCTTGAGCCTCTCAGCCAGCTCCATGTTCTCTTGGCGCAGCTTGGAGTTGCGCT
CATTGTGCTGTTCCATCCGGACGCGTGGGTCGAGGTCGAGGGATC

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FIGURE 2728

CGGACCAGGGCCAGGCTTGTGTTCGCAGCCTTGCCGTGGCTGGGGTTCCGATGTGGTCCCCGGAGCGGGAGGCCG
AGGCCCCAGCCGGGGGAGACCCGGCGGGCCTTCTGCCCCCCGAGTGGGAGGAGGACGAGGAGCGCATGTCCTTCC
TGTTCTCCGCTTTCAAGAGGAGTCGCGAGGTGAACAGCACCGACTGGGACAGCAAGATGGGCTTCTGGGCGCCGT
TGGTGCTGAGCCACAGCCGCCGCCAGGGGGTGGTGCGCCTGCGTCTGCGGGACTTGCAGGAGGCCTTTCAGCGCA
AGGGGAGCGTCCCGCTGGGGCTGGCCACGGTGCTGCAGGACCTGCTGCGTCGAGGGGAGCTGCAGCGGGAGTCAG
ACTTCATGGCCAGTGTAGACAGCAGCTGGATCTCCTGGGGGGTTGGGGTCTTCCTGCTGAAGCCTCTCAAGTGGA
CTCTTTCTAACATGCTGGGAGATAATAAGGTTCCAGCTGAGGAGGTCCTTGTCGCTGTGGAGCTGTTGAAGGAAA
AGGCTGAGGAGGTGTATCGTCTGTATCAGAACTCGCCCCTCTCCTCCCACCCCGTGGTGGCCCTGTCAGAGCTCA
GCACCCTCTGTGCTAACTCCTGCCCAGATGAGAGGACCTTCTACTTGGTGTTGCTGCAGCTGCAGAAGGAGAAGA
GGGTCACAGTCCTCGAGCAGAACGGGGAGAAGATTGTGAAGTTTGCCCGAGGGCCACGTGCCAAGGTCTCTCCAG
TCAATGACGTAGATGTTGGGGTGTACCAGCTGATGCAGAGTGAACAGCTTCTCTCACGCAAAGTGGAGTCCTTAT
CCCAGGAAGCAGAGAGGTGTAAAGAAGAAGCCCGCCGGGCATGCCGAGCAGGAAAGAAGCAGCTGGCACTGAGGT
CTCTCAAGGCCAAGCAACGGACAGAGAAGCGCATCGAGGCCTTGCATGCCAAGCTGGACACTGTTCAAGGCATCC
TGGACCGGATCTATGCCTCCCAGACAGATCAGATGGTTTTTAACGCCTACCAGGCTGGGGTAGGAGCACTCAAAC
TCTCCATGAAGGATGTCACAGTGGAGAAGGCAGAGAGCCTCGTGGATCAGATCCAAGAGCTCTGTGACACCCAGG
ATGAAGTTTCTCAGACTCTGGCTGGTGGGGTAACAAATGGCTTAGATTTTGACAGTGAAGAACTGGAGAAGGAAT
TGGACATCCTCCTTCAGGATACCACCAAAGAACCTTTGGATCTGCCTGACAACCCCCGCAATAGGCATTTTACCA
ACAGCGTGCCTAACCCTAGGATCTCAGATGCTGAACTTGAAGCTGAACTTGAGAAACTGTCCTTATCAGAGGGAG
GTTTGGTCCCAAGCAGTAAATCTCCAAAAAGGCAATTGGAACCGACTCTAAAGCCATTGTAGGACCCTCAAGTGA
AGGACCCTCATGTAAAAGAGAGACCAGGCCTGCTGGGTGTGTACATAGTTATTTAAACAAGAAACTCTCAGAATG
TGTTTGGAAGAGGAGAAAGGAGAACCACTGATTTTATCTGGATGCTACTACTTACTACAGGACAGATAGAATTTC
TGGAAGCGATGCTCCAAAGGCTTGCTCCCAGCTGTATCATGGACCTGCCTTCTCATCTTTATAGTGCCACGATTT
ATACAGTCCTGTGTCTGACCTGTCATTTCATAGCCTGCAGTTCTTGCCATTGGCACACTTAGATTTGTCTTCACC
CACCAGCTTCGTTCCAGCCCATGAAGGGGAAAGATTTGCAGCTTTGCCAAATCTGAATCAGTTCCCACTCCCCCC
TGTGGTTTTTTAGAGGGGTTTATCCTGTCGCTAATGTCAGTTAAATAGCTTATTCCTGTCCCACTTGATTTCACT
GGTAAGAATGAGAATGAAATACTTAAAGGTTTTATTTGAGGGGACTTAGCTGCCATTTTATGGAAAAACATGTAG
TATAAAAGGTTTTTCTCCAGGGTCATTTGACAGAATTCTCCAGGTGTTCAGAGAAAGAGGTCGCCCCAAGTGGCC
CAGAGTCGTGACAGTCCGGAGGGGCTGGTGTGGCCGGTGGGCGCTGCCTCTTCATCTGATGGAGCCAGGAGGTCC
GCCGGTGGGGGAAAGGCTTCTTCCGAGGCTTCTGCACTCGCCTGGGAAGAGGCCCAGTCACTACAGGACCCTGAG
ATGTCCAGACCCCTTATGCAAAGAGGCAAAATTGTTGCCTTGGCCCCATCATGGAGTAACTTAAAAATACATATC
TATCTTCCAGAACAAGCCACACAACAACACACCTCCCCTCCTTGAGCCTGGCACACAGCACCGGGCTCTCTGAAT
TTGGAAAGTGTTTCATTTTGTGGCCTACTGCTCGGGGCAGGGGGGCTGAGCCAGGATGTGCAATAGAAGCAGGGG
TTGTCCCCTCTGCCAGATCTGTGGGGAGCTGCCCAGGCCACCCGTGCACCTGTCCTGCTTCCTGCAGTCCCCACT
CCCTGCCTCCTTTGAGGGACTGGGGGACTTGGGGTAGGGGGACAGACGGGAAAGGGTCTGAATGCTCTGGCAATG
GCGAGAAGAAGCGATCGCCACACTGCCACTCTGCTGCCCAGCCACCAGGATTTCTGCCTGGAGCCCTTTGCCCTG
TCCCTGCTGCCTGAGGTGGCGTAGAGCAGAGGAGAAGAATTTGCTCCAGGCCAGGAGCACAAATCGTTGTTCAAT
GAATTTCTCTCCAACTCGACCTTGGTAAACGGAAATGTTGGGGGTGAAGAGAAACAATCACTATTTTTTTCTTTT
TTATCTGGTAAATAATTAAAAGAAAAACCGAAAAAAAAAAAAAAAAAAA

FIGURE 2729

MWSPEREAEAPAGGDPAGLLPPEWEEDEERMSFLFSAFKRSREVNSTDWDSKMGFWAPLVLSHSRRQGVVRLRLR
DLQEAFQRKGSVPLGLATVLQDLLRRGELQRESDFMASVDSSWISWGVGVFLLKPLKWTLSNMLGDNKVPAEEVL
VAVELLKEKAEEVYRLYQNSPLSSHPVVALSELSTLCANSCPDERTFYLVLLQLQKEKRVTVLEQNGEKIVKFAR
GPRAKVSPVNDVDVGVYQLMQSEQLLSRKVESLSQEAERCKEEARRACRAGKKQLALRSLKAKQRTEKRIEALHA
KLDTVQGILDRIYASQTDQMVFNAYQAGVGALKLSMKDVTVEKAESLVDQIQELCDTQDEVSQTLAGGVTNGLDF
DSEELEKELDILLQDTTKEPLDLPDNPRNRHFTNSVPNPRISDAELEAELEKLSLSEGGLVPSSKSPKRQLEPTL
KPL

FIGURE 2730

CCTCGCTGCTCCAGCCTCTGGGGCGCATTCCAACCTTCCAGCCTGCGACCTGCGGAGAAAAAAAATTACTTATTT
TCTTGCCCCATACATACCTTGAGGCGAGCAAAAAAATTAAATTTTAACCATGAGGGAAATCGTGCACATCCAGGC
TGGTCAGTGTGGCAACCAGATCGGTGCCAAGTTCTGGGAGGTGATCAGTGATGAACATGGCATCGACCCCACCGG
CACCTACCACGGGGACAGCGACCTGCAGCTGGACCGCATCTCTGTGTACTACAATGAAGCCACAGGTGGCAAATA
TGTTCCTCGTGCCATCCTGGTGGATCTAGAACCTGGGACCATGGACTCTGTTCGCTCAGGTCCTTTTGGCCAGAT
CTTTAGACCAGACAACTTTGTATTTGGTCAGTCTGGGGCAGGTAACAACTGGGCCAAAGGCCACTACACAGAGGG
CGCCGAGCTGGTTGATTCTGTCCTGGATGTGGTACGGAAGGAGGCAGAGAGCTGTGACTGCCTGCAGGGCTTCCA
GCTGACCCACTCACTGGGCGGGGGCACAGGCTCTGGAATGGGCACTCTCCTTATCAGCAAGATCCGAGAAGAATA
CCCTGATCGCATCATGAATACCTTCAGTGTGGTGCCTTCACCCAAAGTGTCTGACACCGTGGTCGAGCCCTACAA
TGCCACCCTCTCCGTCCATCAGTTGGTAGAGAATACTGATGAGACCTATTGCATTGACAACGAGGCCCTCTATGA
TATCTGCTTCCGCACTCTGAAGCTGACCACACCAACCTACGGGGATCTGAACCACCTTGTCTCAGCCACCATGAG
TGGTGTCACCACCTGCCTCCGTTTCCCTGGCCAGCTCAATGCTGACCTCCGCAAGTTGGCAGTCAACATGGTCCC
CTTCCCACGTCTCCATTTCTTTATGCCTGGCTTTGCCCCTCTCACCAGCCGTGGAAGCCAGCAGTATCGAGCTCT
CACAGTGCCGGAACTCACCCAGCAGGTCTTCGATGCCAAGAACATGATGGCTGCCTGTGACCCCCGCCACGGCCG
ATACCTCACCGTGGCTGCTGTCTTCCGTGGTCGGATGTCCATGAAGGAGGTCGATGAGCAGATGCTTAACGTGCA
GAACAAGAACAGCAGCTACTTTGTGGAATGGATCCCCAACAATGTCAAGACAGCCGTCTGTGACATCCCACCTCG
TGGCCTCAAGATGGCAGTCACCTTCATTGGCAATAGCACAGCCATCCAGGAGCTCTTCAAGCGCATCTCGGAGCA
GTTCACTGCCATGTTCCGCCGGAAGGCCTTCCTCCACTGGTACACAGGCGAGGGCATGGACGAGATGGAGTTCAC
CGAGGCTGAGAGCAACATGAACGACCTCGTCTCTGAGTATCAGCAGTACCAGGATGCCACCGCAGAAGAGGAGGA
GGATTTCGGTGAGGAGGCCGAAGAGGAGGCCTAAGGCAGAGCCCCCATCACCTCAGGCTTCTCAGTTCCCTTAGC
CGTCTTACTCAACTGCCCCTTTCCTCTCCCTCAGAATTTGTGTTTGCTGCCTCTATCTTGTTTTTTGTTTTTTCT
TCTGGGGGGGTCTAGAACAGTGCCTGGCACATAGTAGGCGCTCAATAAATACTTGTTTGTTGAATGTCTCCTCTC
TCTTTCCACTCTGGGAAACCTAGGTTTCTGCCATTCTGGGTGACCCTGTATTTCTTTCTGGTGCCCATTCCATTT
GTCCAGTTAATACTTCCTCTTAAAAATCTCCAAGAAGCTGGGTCTCCAGATCCCATTTAGAACCAACCAGGTGCT
GAAAACACATGTAGATAATGGCTATCATCCTAAGCCCAAAGTAGAAAATGGTAGAAGGTAGTGGGTGGAAGTCAC
TATATAAGGAAGGGGATGGGATTTTCCATTCTAAAAGTTTTGGAGAGGGAAATCCAGGCTATTAAAGTCACTAAA
TTTCTAAGTATGTCCATTTCCCATCTCAGCTTCAAGGGAGGTGTCAGCAGTATTATCTCCACTTTCAATCTCCCT
CCAAGCTCTACTCTTTGGAGGAGTCTGTCCCACTCTGTCAAGTGGAATCCTTCCCTTTCCAACTCTACCTCCCTC
ACTCGAGCTCCTTTCCCCTGATCAGAGAAAGGGATCAAGGGGGTTGGGAGGGGGGAAAGAGACCAGCCTTGGTCC
CTAAGCCTCCAGAAACGTCTTCTTAATCCCCACCTTTTCTTACTCCCAAAAAAGAATGAACACCCCTGACTCTGG
AATGGTGTATACTGCCACATCAGTGTTTGAGTCAGTCCCCAGAGGAGAGGGGAACCCTCCTCCATCTTTTTTGCA
ACATCTCATTTCTTCCTTTTGCTGTTGCTTCCCCCCTCACACACTTGGTTTTGTTCTATCCTACATTTGAGATTT
CTATTTTGTGTTGAACTTGCTGCTTTTTTTCATATTGAAAAGATGACATCGCCCCAAGAGCCAAAAATAAATGGG
AATTGAAAAAAAAAAAAAAAAAAAA

FIGURE 2731

MREIVHIQAGQCGNQIGAKFWEVISDEHGIDPTGTYHGDSDLQLDRISVYYNEATGGKYVPRAILVDLEPGTMDS
VRSGPFGQIFRPDNFVFGQSGAGNNWAKGHYTEGAELVDSVLDVVRKEAESCDCLQGFQLTHSLGGGTGSGMGTL
LISKIREEYPDRIMNTFSVVPSPKVSDTVVEPYNATLSVHQLVENTDETYCIDNEALYDICFRTLKLTTPTYGDL
NHLVSATMSGVTTCLRFPGQLNADLRKLAVNMVPFPRLHFFMPGFAPLTSRGSQQYRALTVPELTQQVFDAKNMM
AACDPRHGRYLTVAAVFRGRMSMKEVDEQMLNVQNKNSSYFVEWIPNNVKTAVCDIPPRGLKMAVTFIGNSTAIQ
ELFKRISEQFTAMFRRKAFLHWYTGEGMDEMEFTEAESNMNDLVSEYQQYQDATAEEEEDFGEEAEEEA

FIGURE 2732A

TTCGCCGTTTGAATTGCTGCGGGCCCGGGCCCTCACCTCACCTGAGGTCCGGCCGCCCAGGGGTGCGCTATGCCG
TCGGGAGGTGACCAGTCGCCACCGCCCCCGCCTCCCCCTCCGGCGGCGGCAGCCTCGGATGAGGAGGAGGAGGAC
GACGGCGAGGCGGAAGACGCCGCGCCGTCTGCCGAGTCGCCCACCCCTCAGATCCAGCAGCGGTTCGACGAGCTG
TGCAGCCGCCTCAACATGGACGAGGCGGCGCGGCCCGAGGCCTGGGACAGCTACCGCAGCATGAGCGAAAGCTAC
ACGCTGGAGGGAAATGATCTTCATTGGTTAGCATGTGCCTTATATGTGGCTTGCAGAAAATCTGTTCCAACTGTA
AGCAAAGGGACAGTGGAAGGAAACTATGTATCTTTAACTAGAATCCTGAAATGTTCAGAGCAGAGCTTAATCGAA
TTTTTTAATAAGATGAAGAAGTGGGAAGACATGGCAAATCTACCCCCACATTTCAGAGAACGTACTGAGAGATTA
GAAAGAAACTTCACTGTTTCTGCTGTAATTTTTAAGAAATATGAACCCATTTTTCAGGACATCTTTAAATACCCT
CAAGAGGAGCAACCTCGTCAGCAGCGAGGAAGGAAACAGCGGCGACAGCCCTGTACTGTGTCTGAAATTTTCCAT
TTTTGTTGGGTGCTTTTTATATATGCAAAAGGTAATTTCCCCATGATTAGTGATGATTTGGTCAATTCTTATCAC
CTGCTGCTGTGTGCTTTGGACTTAGTTTATGGAAATGCACTTCAGTGTTCTAATCGTAAAGAACTTGTGAACCCT
AATTTTAAAGGCTTATCTGAAGATTTTCATGCTAAAGATTCTAAACCTTCCTCTGACCCCCCTTGTATCATTGAG
AAACTGTGTTCCTTACATGATGGCCTAGTTTTGGAAGCAAAGGGGATAAAGGAACATTTCTGGAAACCCTATATT
AGGAAACTTTATGAAAAAAAGCTCCTTAAGGGAAAAGAAGAAAATCTCACTGGGTTTCTAGAACCTGGGAACTTT
GGAGAGAGTTTTAAAGCCATCAATAAGGCCTATGAGGAGTATGTTTTATCTGTTGGGAATTTAGATGAGCGGATA
TTTCTTGGAGAGGATGCTGAGGAGGAAATTGGGACTCTCTCAAGGTGTCTGAACGCTGGTTCAGGAACAGAGACT
GCTGAAAGGGTGCAGATGAAAAACATCTTACAGCAGCATTTTGACAAGTCCAAAGCACTTAGAATCTCCACACCA
CTAACTGGTGTTAGGTACATTAAGGAGAATAGCCCTTGTGTGACTCCAGTTTCTACAGCTACGCATAGCTTGAGT
CGTCTTCACACCATGCTGACAGGCCTCAGGAATGCACCAAGTGAGAAACTGGAACAGATTCTCAGGACATGTTCC
AGAGATCCAACCCAGGCTATTGCTAACAGACTGAAAGAAATGTTTGAAATATATTCTCAGCATTTCCAGCCAGAC
GAGGATTTCAGTAATTGTGCTAAAGAAATTGCCAGCAAACATTTTCGTTTTGCGGAGATGCTTTACTATAAAGTA
TTAGAATCTGTTATTGAGCAGGAACAAAAAAGACTAGGAGACATGGATTTATCTGGTATTCTGGAACAAGATGCA
TTCCACAGATCTCTCTTGGCCTGCTGCCTTGAGGTCGTCACTTTTTCTTATAAGCCTCCTGGGAATTTTCCATTT
ATTACTGAAATATTTGATGTGCCTCTTTATCATTTTTATAAGGTGATAGAAGTATTCATTAGAGCAGAAGATGGC
CTTTGTAGAGAGGTGGTAAAACACCTTAATCAGATTGAAGAACAGATCTTAGATCATTTGGCATGGAAACCAGAG
TCTCCACTCTGGGAAAAAATTAGAGACAATGAAAACAGAGTTCCTACATGTGAAGAGGTCATGCCACCTCAGAAC
CTGGAAAGGGCAGATGAAATTTGCATTGCTGGCTCCCCTTTGACTCCCAGAAGGGTGACTGAAGTTCGTGCTGAT
ACTGGAGGACTTGGAAGGAGCATAACATCTCCAACCACATTATACGATAGGTACAGCTCCCCACCAGCCAGCACT
ACCAGAAGGCGGCTATTTGTTGAGAATGATAGCCCCTCTGATGGAGGGACGCCTGGGCGCATGCCCCCACAGCCC
CTAGTCAATGCTGTCCCTGTGCAGAATGTATCTGGGGAGACTGTTTCTGTCACACCAGTTCCTGGACAGACTTTG
GTCACCATGGCAACCGCCACTGTCACAGCCAACAATGGGCAAACGGTAACCATTCCTGTGCAAGGTATTGCCAAT
GAAAATGGAGGGATAACATTCTTCCCTGTCCAAGTCAATGTTGGGGGGCAGGCACAAGCTGTGACAGGCTCCATC
CAGCCCCTCAGTGCTCAGGCCCTGGCTGGAAGTCTGAGCTCTCAACAGGTGACAGGAACAACTTTGCAAGTCCCT
GGTCAAGTGGCCATTCAACAGATTTCCCCAGGTGGCCAACAGCAGAAGCAAGGCCAGTCTGTAACCAGCAGTAGT
AATAGACCCAGGAAGACCAGCTCTTTATCGCTTTTCTTTAGAAAGGTATACCATTTAGCAGCTGTCCGCCTTCGG
GATCTCTGTGCCAAACTAGATATTTCAGATGAATTGAGGAAAAAAATCTGGACCTGCTTTGAATTCTCCATAATT
CAGTGTCCTGAACTTATGATGGACAGACATCTGGACCAGTTATTAATGTGTGCCATTTATGTGATGGCAAAGGTC
ACAAAAGAAGATAAGTCCTTCCAGAACATTATGCGTTGTTATAGGACTCAGCCGCAGGCCCGGAGCCAGGTGTAT
AGAAGTGTTTTGATAAAAGGGAAAAGAAAAAGAAGAAATTCTGGCAGCAGTGATAGCAGAAGCCATCAGAATTCT
CCAACAGAACTAAACAAAGATAGAACCAGTAGAGACTCCAGTCCAGTTATGAGGTCAAGCAGCACCTTGCCAGTT
CCACAGCCCAGCAGTGCTCCTCCCACACCTACTCGCCTCACAGGTGCCAACAGTGACATGGAAGAAGAGGAGAGG
GGAGACCTCATTCAGTTCTACAACAACATCTACATCAAACAGATTAAGACATTTGCCATGAAGTACTCACAGGCA
AATATGGATGCTCCTCCACTCTCTCCCTATCCATTTGTAAGAACAGGCTCCCCTCGCCGAATACAGTTGTCTCAA
AATCATCCTGTCTACATTTCCCCACATAAAAATGAAACAATGCTTTCTCCTCGAGAAAAGATTTTCTATTACTTC
AGCAACAGTCCTTCAAAGAGACTGAGAGAAATTAATAGTATGATACGCACAGGAGAAACTCCTACTAAAAAGAGA
GGAATTCTTTTGGAAGATGGAAGTGAATCACCTGCAAAAAGAATTTGCCCAGAAAATCATTCTGCCTTATTACGC
CGTCTCCAAGATGTAGCTAATGACCGTGGTTCCCACTGAGGTTAGTCTCTTGTATTAAACTCTTCACAAAATCTG
TTTAGCAGCAGCCTTTAATGCATCTAGATTATGGAGCTTTTTTCCTTAATCCAGCTGATGAGTTACAGCCTGTTA

FIGURE 2732B

GTAACATGAGGGGACATTTTGGTGAGAAATGGGACTTAACTCCTTCCAGTGTCCTTAGAACATTTTAATTCATCC
CAACTGTCTTTTTTTCCCTACCACTCAGTGATTACTGTCAAGGCTGCTTACAATCCAAACTTGGGTTTTTGGCTC
TGGCAAAGCTTTTAGAAATACTGCAAGAAATGATGTGTACCCAACGTGAGCATAGGAGGCTTCTGTTGACGTCTC
CAACAGAAGAACTGTGTTTCAAGTTCAATCCTACCTGTTTTGTGGTCAGCTGTAGTCCTCATAAAAAGCAAAACA
AAAATTAGGTATTTTGTCCTAAAACACCTGGTAGGAGTGTGTGATTTTTTGCATTCCTGACAAAGGAGAGCACAC
CCAGGTTTGGAGGTCCTAGGTCATTAGCCCTCGTCTCCCGTTCCCTTTGTGCACATCTTCCCTCTCCCCATTCGG
TGTGGTGCAGTGTGAAAAGTCCTTGATTGTTCGGGTGTGCAATGTCTGAGTGAACCTGTATAAGTGGAGGCACTT
TAGGGCTGTAAAATGCATGATTTTGTAACCCAGATTTTGCTGTATATTTGTGATAGCACTTTCTACAATGTGAAC
TTTATTAAATACAAAACTTCCAGGCTAAACATCCAATATTTTCTTTAATGCTTTTATATTTTTTTAAAATGTTAA
AACCCCTATAGCCACCTTTTGGGAATGTTTTAAATTCTCCAGTTTTTTGTTATATAGGGATCAACCAGCTAAGAA
AAGATTTTAAGTCAAGTTGAATTGAGGGGATTAATATGAAAACTTATGACCTCTTCCTTTAGGAGGGAGTTATCT
AAAAGAAATGTCTATTAAGGTGATATATTTAAAAATATTTTTGGGTGTTCCTGGCAGTTTAAAAAAATTGGTTGG
AGAATTTAGGTTTTTATTAGTACCATAGTACCATTTATACAAATTAGAAAATGTTATTTAACAGCTGAATTATCT
ATACATATCTTTATTAATCACTATTGTTCCAGCAGTTTTCAAGTCAAATTAATAATCTTATTAGGGAGAAAATTC
AATTGTAAATTGAATCAGTATAAACAAAGTTACTAGGTAACTTCATATTGCTGAGAGAAATATGGAACTTACATT
GTTCAATTAGAATAGTGTTCTCCCCAAATATTTATAAAACTTCTCAAGATACTGCTACGTGTAATTTTATATGAA
GATAAGTGTATTTTTCAATAAAGCATTTATAAATTAAAAAAAAAAAAAAAAAA

FIGURE 2733

MPSGGDQSPPPPPPPPAAAASDEEEEDDGEAEDAAPSAESPTPQIQQRFDELCSRLNMDEAARPEAWDSYRSMSE
SYTLEGNDLHWLACALYVACRKSVPTVSKGTVEGNYVSLTRILKCSEQSLIEFFNKMKKWEDMANLPPHFRERTE
RLERNFTVSAVIFKKYEPIFQDIFKYPQEEQPRQQRGRKQRRQPCTVSEIFHFCWVLFIYAKGNFPMISDDLVNS
YHLLLCALDLVYGNALQCSNRKELVNPNFKGLSEDFHAKDSKPSSDPPCIIEKLCSLHDGLVLEAKGIKEHFWKP
YIRKLYEKKLLKGKEENLTGFLEPGNFGESFKAINKAYEEYVLSVGNLDERIFLGEDAEEEIGTLSRCLNAGSGT
ETAERVQMKNILQQHFDKSKALRISTPLTGVRYIKENSPCVTPVSTATHSLSRLHTMLTGLRNAPSEKLEQILRT
CSRDPTQAIANRLKEMFEIYSQHFQPDEDFSNCAKEIASKHFRFAEMLYYKVLESVIEQEQKRLGDMDLSGILEQ
DAFHRSLLACCLEVVTFSYKPPGNFPFITEIFDVPLYHFYKVIEVFIRAEDGLCREVVKHLNQIEEQILDHLAWK
PESPLWEKIRDNENRVPTCEEVMPPQNLERADEICIAGSPLTPRRVTEVRADTGGLGRSITSPTTLYDRYSSPPA
STTRRRLFVENDSPSDGGTPGRMPPQPLVNAVPVQNVSGETVSVTPVPGQTLVTMATATVTANNGQTVTIPVQGI
ANENGGITFFPVQVNVGGQAQAVTGSIQPLSAQALAGSLSSQQVTGTTLQVPGQVAIQQISPGGQQQKQGQSVTS
SSNRPRKTSSLSLFFRKVYHLAAVRLRDLCAKLDISDELRKKIWTCFEFSIIQCPELMMDRHLDQLLMCAIYVMA
KVTKEDKSFQNIMRCYRTQPQARSQVYRSVLIKGKRKRRNSGSSDSRSHQNSPTELNKDRTSRDSSPVMRSSSTL
PVPQPSSAPPTPTRLTGANSDMEEEERGDLIQFYNNIYIKQIKTFAMKYSQANMDAPPLSPYPFVRTGSPRRIQL
SQNHPVYISPHKNETMLSPREKIFYYFSNSPSKRLREINSMIRTGETPTKKRGILLEDGSESPAKRICPENHSAL
LRRLQDVANDRGSH

FIGURE 2734A

TTCGCCGTTTGAATTGCTGCGGGCCCGGGCCCTCACCTCACCTGAGGTCCGGCCGCCCAGGGGTGCGCTATGCCG
TCGGGAGGTGACCAGTCGCCACCGCCCCCGCCTCCCCCTCCGGCGGCGGCAGCCTCGGATGAGGAGGAGGAGGAC
GACGGCGAGGCGGAAGACGCCGCGCCGTCTGCCGAGTCGCCCACCCCTCAGATCCAGCAGCGGTTCGACGAGCTG
TGCAGCCGCCTCAACATGGACGAGGCGGCGCGGCCCGAGGCCTGGGACAGCTACCGCAGCATGAGCGAAAGCTAC
ACGCTGGAGGGAAATGATCTTCATTGGTTAGCATGTGCCTTATATGTGGCTTGCAGAAAATCTGTTCCAACTGTA
AGCAAAGGGACAGTGGAAGGAAACTATGTATCTTTAACTAGAATCCTGAAATGTTCAGAGCAGAGCTTAATCGAA
TTTTTTAATAAGATGAAGAAGTGGGAAGACATGGCAAATCTACCCCCACATTTCAGAGAACGTACTGAGAGATTA
GAAAGAAACTTCACTGTTTCTGCTGTAATTTTTAAGAAATATGAACCCATTTTTCAGGACATCTTTAAATACCCT
CAAGAGGAGCAACCTCGTCAGCAGCGAGGAAGGAAACAGCGGCGACAGCCCTGTACTGTGTCTGAAATTTTCCAT
TTTTGTTGGGTGCTTTTTATATATGCAAAAGGTAATTTCCCCATGATTAGTGATGATTTGGTCAATTCTTATCAC
CTGCTGCTGTGTGCTTTGGACTTAGTTTATGGAAATGCACTTCAGTGTTCTAATCGTAAAGAACTTGTGAACCCT
AATTTTAAAGGCTTATCTGAAGATTTTCATGCTAAAGATTCTAAACCTTCCTCTGACCCCCCTTGTATCATTGAG
AAACTGTGTTCCTTACATGATGGCCTAGTTTTGGAAGCAAAGGGGATAAAGGAACATTTCTGGAAACCCTATATT
AGGAAACTTTATGAAAAAAAGCTCCTTAAGGGAAAAGAAGAAAATCTCACTGGGTTTCTAGAACCTGGGAACTTT
GGAGAGAGTTTTAAAGCCATCAATAAGGCCTATGAGGAGTATGTTTTATCTGTTGGGAATTTAGATGAGCGGATA
TTTCTTGGAGAGGATGCTGAGGAGGAAATTGGGACTCTCTCAAGGTGTCTGAACGCTGGTTCAGGAACAGAGACT
GCTGAAAGGGTGCAGATGAAAAACATCTTACAGCAGCATTTTGACAAGTCCAAAGCACTTAGAATCTCCACACCA
CTAACTGGTGTTAGGTACATTAAGGAGAATAGCCCTTGTGTGACTCCAGTTTCTACAGCTACGCATAGCTTGAGT
CGTCTTCACACCATGCTGACAGGCCTCAGGAATGCACCAAGTGAGAAACTGGAACAGATTCTCAGGACATGTTCC
AGAGATCCAACCCAGGCTATTGCTAACAGACTGAAAGAAATGTTTGAAATATATTCTCAGCATTTCCAGCCAGAC
GAGGATTTCAGTAATTGTGCTAAAGAAATTGCCAGCAAACATTTTCGTTTTGCGGAGATGCTTTACTATAAAGTA
TTAGAATCTGTTATTGAGCAGGAACAAAAAAGACTAGGAGACATGGATTTATCTGGTATTCTGGAACAAGATGCA
TTCCACAGATCTCTCTTGGCCTGCTGCCTTGAGGTCGTCACTTTTTCTTATAAGCCTCCTGGGAATTTTCCATTT
ATTACTGAAATATTTGATGTGCCTCTTTATCATTTTTATAAGGTGATAGAAGTATTCATTAGAGCAGAAGATGGC
CTTTGTAGAGAGGTGGTAAAACACCTTAATCAGATTGAAGAACAGATCTTAGATCATTTGGCATGGAAACCAGAG
TCTCCACTCTGGGAAAAAATTAGAGACAATGAAAACAGAGTTCCTACATGTGAAGAGGTCATGCCACCTCAGAAC
CTGGAAAGGGCAGATGAAATTTGCATTGCTGGCTCCCCTTTGACTCCCAGAAGGGTGACTGAAGTTCGTGCTGAT
ACTGGAGGACTTGGAAGGAGCATAACATCTCCAACCACATTATACGATAGGTACAGCTCCCCACCAGCCAGCACT
ACCAGAAGGCGGCTATTTGTTGAGAATGATAGCCCCTCTGATGGAGGGACGCCTGGGCGCATGCCCCCACAGCCC
CTAGTCAATGCTGTCCCTGTGCAGAATGTATCTGGGGAGACTGTTTCTGTCACACCAGTTCCTGGACAGACTTTG
GTCACCATGGCAACCGCCACTGTCACAGCCAACAATGGGCAAACGGTAACCATTCCTGTGCAAGGTATTGCCAAT
GAAAATGGAGGGATAACATTCTTCCCTGTCCAAGTCAATGTTGGGGGGCAGGCACAAGCTGTGACAGGCTCCATC
CAGCCCCTCAGTGCTCAGGCCCTGGCTGGAAGTCTGAGCTCTCAACAGGTGACAGGAACAACTTTGCAAGTCCCT
GGTCAAGTGGCCATTCAACAGATTTCCCCAGGTGGCCAACAGCAGAAGCAAGGCCAGTCTGTAACCAGCAGTAGT
AATAGACCCAGGAAGACCAGCTCTTTATCGCTTTTCTTTAGAAAGGTATACCATTTAGCAGCTGTCCGCCTTCGG
GATCTCTGTGCCAAACTAGATATTTCAGATGAATTGAGGAAAAAAATCTGGACCTGCTTTGAATTCTCCATAATT
CAGTGTCCTGAACTTATGATGGACAGACATCTGGACCAGTTATTAATGTGTGCCATTTATGTGATGGCAAAGGTC
ACAAAAGAAGATAAGTCCTTCCAGAACATTATGCGTTGTTATAGGACTCAGCCGCAGGCCCGGAGCCAGGTGTAT
AGAAGTGTTTTGATAAAAGGGAAAAGAAAAAGAAGAAATTCTGGCAGCAGTGATAGCAGAAGCCATCAGAATTCT
CCAACAGAACTAAACAAAGATAGAACCAGTAGAGACTCCAGTCCAGTTATGAGGTCAAGCAGCACCTTGCCAGTT
CCACAGCCCAGCAGTGCTCCTCCCACACCTACTCGCCTCACAGGTGCCAACAGTGACATGGAAGAAGAGGAGAGG
GGAGACCTCATTCAGTTCTACAACAACATCTACATCAAACAGATTAAGACATTTGCCATGAAGTACTCACAGGCA
AATATGGATGCTCCTCCACTCTCTCCCTATCCATTTGTAAGAACAGGCTCCCCTCGCCGAATACAGTTGTCTCAA
AATCATCCTGTCTACATTTCCCCACATAAAAATGAAACAATGCTTTCTCCTCGAGAAAAGATTTTCTATTACTTC
AGCAACAGTCCTTCAAAGAGACTGAGAGAAATTAATAGTATGATACGCACAGGAGAAACTCCTACTAAAAAGAGA
GGAATTCTTTTGGAAGATGGAAGTGAATCACCTGCAAAAAGAATTTGCCCAGAAAATCATTCTGCCTTATTACGC
CGTCTCCAAGATGTAGCTAATGACCGTGGTTCCCACTGAGGTTAGTCTCTTGTATTAAACTCTTCACAAAATCTG
TTTAGCAGCAGCCTTTAATGCATCTAGATTATGGAGCTTTTTTCCTTAATCCAGCTGATGAGTTACAGCCTGTTA

FIGURE 2734B

GTAACATGAGGGGACATTTTGGTGAGAAATGGGACTTAACTCCTTCCAGTGTCCTTAGAACATTTTAATTCATCC
CAACTGTCTTTTTTTCCCTACCACTCAGTGATTACTGTCAAGGCTGCTTACAATCCAAACTTGGGTTTTTGGCTC
TGGCAAAGCTTTTAGAAATACTGCAAGAAATGATGTGTACCCAACGTGAGCATAGGAGGCTTCTGTTGACGTCTC
CAACAGAAGAACTGTGTTTCAAGTTCAATCCTACCTGTTTTGTGGTCAGCTGTAGTCCTCATAAAAAGCAAAACA
AAAATTAGGTATTTTGTCCTAAAACACCTGGTAGGAGTGTGTGATTTTTTGCATTCCTGACAAAGGAGAGCACAC
CCAGGTTTGGAGGTCCTAGGTCATTAGCCCTCGTCTCCCGTTCCCTTTGTGCACATCTTCCCTCTCCCCATTCGG
TGTGGTGCAGTGTGAAAAGTCCTTGATTGTTCGGGTGTGCAATGTCTGAGTGAACCTGTATAAGTGGAGGCACTT
TAGGGCTGTAAAATGCATGATTTTGTAACCCAGATTTTGCTGTATATTTGTGATAGCACTTTCTACAATGTGAAC
TTTATTAAATACAAAACTTCCAGGCTAAACATCCAATATTTTCTTTAATGCTTTTATATTTTTTTAAAATGTTAA
AACCCCTATAGCCACCTTTTGGGAATGTTTTAAATTCTCCAGTTTTTTGTTATATAGGGATCAACCAGCTAAGAA
AAGATTTTAAGTCAAGTTGAATTGAGGGGATTAATATGAAAACTTATGACCTCTTCCTTTAGGAGGGAGTTATCT
AAAAGAAATGTCTATTAAGGTGATATATTTAAAAATATTTTTGGGTGTTCCTGGCAGTTTAAAAAAATTGGTTGG
AGAATTTAGGTTTTTATTAGTACCATAGTACCATTTATACAAATTAGAAAATGTTATTTAACAGCTGAATTATCT
ATACATATCTTTATTAATCACTATTGTTCCAGCAGTTTTCAAGTCAAATTAATAATCTTATTAGGGAGAAAATTC
AATTGTAAATTGAATCAGTATAAACAAAGTTACTAGGTAACTTCATATTGCTGAGAGAAATATGGAACTTACATT
GTTCAATTAGAATAGTGTTCTCCCCAAATATTTATAAAACTTCTCAAGATACTGCTACGTGTAATTTTATATGAA
GATAAGTGTATTTTTCAATAAAGCATTTATAAATTAAAAAAAAAAAAAAAAAA

FIGURE 2735

MPSGGDQSPPPPPPPPAAAASDEEEEDDGEAEDAAPSAESPTPQIQQRFDELCSRLNMDEAARPEAWDSYRSMSE
SYTLEGNDLHWLACALYVACRKSVPTVSKGTVEGNYVSLTRILKCSEQSLIEFFNKMKKWEDMANLPPHFRERTE
RLERNFTVSAVIFKKYEPIFQDIFKYPQEEQPRQQRGRKQRRQPCTVSEIFHFCWVLFIYAKGNFPMISDDLVNS
YHLLLCALDLVYGNALQCSNRKELVNPNFKGLSEDFHAKDSKPSSDPPCIIEKLCSLHDGLVLEAKGIKEHFWKP
YIRKLYEKKLLKGKEENLTGFLEPGNFGESFKAINKAYEEYVLSVGNLDERIFLGEDAEEEIGTLSRCLNAGSGT
ETAERVQMKNILQQHFDKSKALRISTPLTGVRYIKENSPCVTPVSTATHSLSRLHTMLTGLRNAPSEKLEQILRT
CSRDPTQAIANRLKEMFEIYSQHFQPDEDFSNCAKEIASKHFRFAEMLYYKVLESVIEQEQKRLGDMDLSGILEQ
DAFHRSLLACCLEVVTFSYKPPGNFPFITEIFDVPLYHFYKVIEVFIRAEDGLCREVVKHLNQIEEQILDHLAWK
PESPLWEKIRDNENRVPTCEEVMPPQNLERADEICIAGSPLTPRRVTEVRADTGGLGRSITSPTTLYDRYSSPPA
STTRRRLFVENDSPSDGGTPGRMPPQPLVNAVPVQNVSGETVSVTPVPGQTLVTMATATVTANNGQTVTIPVQGI
ANENGGITFFPVQVNVGGQAQAVTGSIQPLSAQALAGSLSSQQVTGTTLQVPGQVAIQQISPGGQQQKQGQSVTS
SSNRPRKTSSLSLFFRKVYHLAAVRLRDLCAKLDISDELRKKIWTCFEFSIIQCPELMMDRHLDQLLMCAIYVMA
KVTKEDKSFQNIMRCYRTQPQARSQVYRSVLIKGKRKRRNSGSSDSRSHQNSPTELNKDRTSRDSSPVMRSSSTL
PVPQPSSAPPTPTRLTGANSDMEEEERGDLIQFYNNIYIKQIKTFAMKYSQANMDAPPLSPYPFVRTGSPRRIQL
SQNHPVYISPHKNETMLSPREKIFYYFSNSPSKRLREINSMIRTGETPTKKRGILLEDGSESPAKRICPENHSAL
LRRLQDVANDRGSH

FIGURE 2736

TGGGCAATTAACCAAGCCATAGCCAATGAATATGAAGTCCGGAGAAAGCTGCTAATAAAACGTTTGGATGTCACT
GTACAATCCTTTGGCTGGTCTGACAGAGCTAAGAGCCAGACAGAAAAATTAGCCAAGGTTTACCAGCCGAAACGT
TCAGTCTTATCCCCTAAAACTACTATTTCTGTTGCCCATCTTTTGGCTGCAAGGCAGGACTTGTCAAAGATTTTA
AGGACAAGCAGCGGCTCTATAAGAGAAAAGACTGCCTGTGCCATCAATAAGGTGTTGATGGGCAGGGTGCCTGAC
AGAGGTGGTAGACCCAATGAAATCGAACCTCCACCCCCAGAGATGCCACCGTGGCAGAAGAGGCAAGATGGCCCC
CAGCAGCAAACAGGAGGCCGAGTAGGAGGGAGAGGTGGCTATGAACATTCCTCATACGGAGGACGAGGAGGTCAT
GAACAAGGAGGCGGGAGAGGTGGACGTGGTGGCTATGACCATGGTGGCCGAGGGGGAGGAAGAGGAAATAAGCAT
CAAGGAGGCTGGACAGATGGAGGGAGTGGTGGAGGAGGTGGCTACCAAGATGGTGGTTATCGAGATTCAGGTTTC
CAGCCAGGTGGCTATCATGGTGGCCACAGCAGTGGTGGCTATCAAGGCGGAGGTTATGGTGGCTTCCAAACATCT
TCTTCATATACAGGAAGTGGATACCAGGGTGGTGGCTACCAGCAGGACAATAGATACCAAGATGGCGGGCACCAT
GGTGATCGTGGTGGTGGTCGTGGTGGGCGAGGTGGTCGTGGAGGCCGAGGTGGTCGTGCAGGCCAGGGAGGAGGC
TGGGGAGGAAGAGGGAGCCAGAATTATCACCAAGGGGGTCAATTTGAACAGCATTTCCAGCATGGAGGTTATCAG
TATAATCATTCTGGATTTGGACAGGGAAGACATTACACTAGTTGAGGCTACCGAACTTTACATTTTGCTAGAGCT
CAAGTAATAGAAACTTAGTTTCAGAATCCTGAATTCAGCACCTATTTTGAATTAATGTGAGACCACAGGTGGCAG
GCAGATTCCTGCTTGGCATAAGCATTTGTAGGTCTTCATTCAATTCTGTTAGATTTTTTTATTGGACTTACATAA
TGCCGTTTATTTGAGAAACACATAACATCTCTCCTTCCTATGAAAAATTTTTTAAAAGGTGGTTAAAATTGCCTT
TAATTGCCCAGTAGACTAATTCCACAGTCAGAACATGCAAACTTTTTTGAAGAAATTACTTGAATAAGTAGTTTT
CATGTTTTCAATATGCAGTTTTGAAAATGAGGATTCACCTAGACTTTTTTAGATTTACTACTAGGAAACCTTCCT
CATATGAATAACCATTTATATGTGTTTTGCTTAAAGTATTCCAATGCCTATTTTCCAAGCACAGTTCTGCCCCCC
GGTTGACTTTTATGCCACGTGTGCTTCATGATGGAACTTTTAGGTCAGTTCCTATTAAATGAGCTCTTCTGCAGA
TAGCACATTCAGTAGCCTTATTTTGTTGATGGAATACTGTATCATATGCTCAACTCTGAAAACCTTGAACACGGC
CAAAATCCATAAAGATTATAAAAGCAAACTAAGTTGTGAAGCTATAGTACATGTAGGCATTTAGTTAAGTATAGC
AATTCAAACTGACCTGCATCCATCCAAAACAAATTCCTCCTTCAACCTTATTTTTACTTGAAATTTGCTAGAAGA
AATAGCAAACCGAAATTTGTTTTATGCATGAGTTAATACCACTGGCTCAGCAAATACAAGTTAGTTTGCTTTAAG
CAGGTAACTTTTTTTGTAATGGAAGAAATGCACTACAAAGTTAAGACAGATTTTTGCTAAGTGCAGGAGGCCCTT
TATTATTGCTGCAGAAAACAAAAGCCTGGCTGAGTTGATGTTTTACATTCTCCCTTACTGAAATCTACATGACAT
GATGCTTCTTGCTGGGTTTTTGTACATGTAAACATTGTCAAGCTGTGAAAGAAAATGGCTGGAGGTGTGCTTTGT
GTGAAAGGTGAGCAATAAAGTATCTGTTAAGTTCAAAAAAAAAAAAAAAAAAA

FIGURE 2737

WAINQAIANEYEVRRKLLIKRLDVTVQSFGWSDRAKSQTEKLAKVYQPKRSVLSPKTTISVAHLLAARQDLSKIL
RTSSGSIREKTACAINKVLMGRVPDRGGRPNEIEPPPPEMPPWQKRQDGPQQQTGGRVGGRGGYEHSSYGGRGGH
EQGGGRGGRGGYDHGGRGGGRGNKHQGGWTDGGSGGGGGYQDGGYRDSGFQPGGYHGGHSSGGYQGGGYGGFQTS
SSYTGSGYQGGGYQQDNRYQDGGHHGDRGGGRGGRGGRGGRGGRAGQGGGWGGRGSQNYHQGGQFEQHFQHGGYQ
YNHSGFGQGRHYTS

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FIGURE 2738A

CCGTCCCGGGGCGGACGGGCGCGGGCGGGAGGATGGAGCTGAACTCCCTGCTGATCCTGCTGGAGGCGGCCGAGT
ACCTGGAGCGCAGGGATCGAGAGGCCGAGCACGGCTACGCCTCGGTGCTGCCCTTCGACGGCGACTTCGCCAGGG
AGAAAACAAAGGCGGCCGGCCTGGTGCGCAAGGCCCCGAACAACAGGTCTTCACACAACGAGCTAGAAAAGCACA
GACGAGCCAAACTCAGGCTGTACCTTGAGCAGCTCAAGCAACTGGTGCCCCTGGGCCCCGACAGCACCCGCCACA
CCACGCTGAGCCTCCTGAAGCGGGCCAAGGTGCACATCAAGAAACTGGAGGAGCAGGACCGCCGGGCACTGAGCA
TCAAGGAGCAGCTGCAGCAGGAGCATCGTTTCCTGAAGCGGCGCCTGGAGCAGCTGTCGGTGCAGAGCGTGGAGC
GCGTGCGCACAGATAGCACGGGCTCTGCTGTCTCCACGGACGACTCAGAGCAAGAAGTGGACATAGAGGGCATGG
AGTTTGGCCCTGGTGAGCTGGACAGTGTTGGCAGCAGCAGTGACGCGGACGACCACTACAGCCTGCAGAGTGGCA
CCGGCGGCGACAGTGGCTTCGGGCCCCACTGCCGGCGGCTGGGCCGCCCCGCCCTCTCGTAGGCCCGTGCCCTCT
GCTCCTTGGCCTGCCTGCCCGCCAGCCACGCGTGTCAGCCCTCCAGTTCTCCTTCAGTTGACGCCAGCCTCTCCA
CAGGCCCACTGCTGTGCCATTCTGGAAGCTCCAGCTGCTGCTGGGCTGCCTGGCACTGCCCGCTTGCCGGTCAGG
GCCTGCCGAGCTGCCTGCCCCTTCCAGCTGGGCAGAGTCCCCTGCAAGGAGGCAGGGCCCAGCTTCCACATCCGG
AGCCCTGGTCAGCATAGCCGCCCACGGTCTGTTCTCAGATTCCTAATCATTCCAGAAGTATTAAACGTCATTGCT
GCAAACCTCGGCAGGTGCCGTGTGAGGGGCTTAATGACCACCACAGGGAGCTCAGACCCCAACCCTGGATCCCAG
GAGAAAGGAGTGGACCGAGGAAGGAAGGAAGGCAAGGCTGTCTGTCCATCCGTCCGTCTGTCCACCTACCTGTCA
GTCCACATAGGCTCCTGGCGTGGACAAGGGGTCTGTGAAGGGCGGGAACTGGGTGAGCACCTGGGGCAGGTGGGT
GGTTAAGGTCCTTCCCACTTCGCAGGTGTCAGAACCTAGGGCTGGGCTCTCGGGGCCAGGCAGGCCAGCCCAGCC
CACGCCGAGCTGGGCAGCGTCTGCTCTGGTAGGACTGTCAGACGCACACGCGCACGCACCTAGACACACCCACTC
ATGTACATGCTCACACATGCAGACACACCTGGGCGTCCCGAGGTCACATGTTCTGGGGATGATGGCCTTCAGGGG
TCATCTGGCAAACAGCCCCTGGGCTGTGCCTGGATCCCCCTCTAGCTCCTGCTCACCCACGCCCACCCAGTAGTC
CTGCCTGTCTGCACAGGAGAGGGGCTTCTCTTCCTGGCTGGGGCTGGGGTGAACTGGAGGCTGGTTAAGTTGCAG
CCGCTGGGTCCTCGGGGGCTTACTCATCTCCCTTTTTTAAACAAAAAGCAAAAAAGTAAAATGCTGCACTGCCCA
GCAGCCCGGTTAGGGCTCCTGGAGCCACCTTAGGAAAGGGCTTCTCATGAGCTCTGCTGCGGCAGCTTCAGCTGG
CAGAGAGGCTTTCCCAGAAAAAAAAAAAAAACCATTTTTAAAAAGAAGAAAGCCTAAAGACTCTCGGCCTAGGGA
CGTCCGTGTGTGCCGCCTCTGTTTCCTGTACCAGATTTTTGTATTCTATTTTCCTAGCTGTTGTTGCGTCCTTGT
TTGCTGAGGGGTGGGAGCCACCCAGCGTCTCAGGGACCTGTCCCTCCGTCACGTCGTCAAAGTGTGCCTTGTGTC
TTGTGTCAGGCCTTGCCCTTCCCACCAGCATGTCCCTCGTGGCTCAGGGTGCCCCAGGCCTGCCCAGCTAGTGCT
GTCCTCCCATCTCCTGTGGGCAGCCCCTCCCGGCAGCCAGGGCTTCCTGGAGGCGATGCAGCCAGGCCCCTGTGG
GTGGCACGGAGGGGCTGTGACCTGGTCCCCAGTGTTGCCCTCCCCAGTGGCTGGCAGGGGCCTGCTTGCTCACTA
GAGAGATGGATTCTCACCTGTCACCTGACTCGAGCCCCCTGCTTCCTGGCCTAGGCGAGGGTTCCAGGTTTCAGA
CACTGGCAGCCAATGAAGACTGTGCTCGCTGGGTGGTGCAGGCCTGGCACCAGGAGGCTTGCACCCGCCTTTCCT
TCCTGACGTCCTCTGTCCTTGGGGCTGGCCCATAGCAGTGCCTGCCGTGCCTCTGGTACATCTGTAGCCAATTCC
CATATCATGGGGAAAATTCGTGTCTATTTTCAGTCGTACGCATAGACGCCCCAGGATGGGGGGCCCACTGTGGCG
GAAGGGGGTCCCTGGAAACAACTCTGGCACAGAACCTGCCCTGCAGGCTGTAGGGGGCATGGTGCCTGGAGCTGA
GGGGCATCCGAACGCGTTGCGGGTGGTTGTGAGGAGGCCTGTCTGCATCTCCTTCCGGCCCCACTGGGGTCCAGG
GGTGCCCAGAAAGGAGCTTCCCCTGCCTGCCTGAGTCTGTCCCCCCAGGCTTCATTTCAAACACCGTGGCACCTC
CGAGCAAGGCGGGCCGTGTGTAAAAGCTTGCTTCCCCAGCCAGCACTGCAGGGCCCTGAGGTGGTCGTGTCCCTG
CCCTCAATTCTTGAAGCACCAGCTCCCTGCCCCACCCTCCAGTGCCTGAGGCAGCTAGGGGCTTCTGCTCTCATC
TCTGACCAGCAGAATCCACCCGGTGACCAGTGGTGGCCCCTCAGCCCACCCTCCCGGCAGCTCAGCCTGTGGCTC
TTGAGGCCGTGGTTCCCACGTGGACTGGGAGGCAGTCTCAGCCACCCGGGGTGCTGTTCAGCTGCCCCTCCCTGC
CATCAGCAGGTGGGTGAGGGGTTGCCCACTGGGTGGGGGCCCGTGCTAGGAGTCACCACATGCTCCAACCTCCCA
CTGCTCCCTGTCAGGGGCCCAGGCTGCCATCACTGGAGGCTGCAGGGACCAAGAGGCCATCACCGTGTCTATAGA
GAGCAGACAGAAGCAGAACAGAGCCCGGGGCTCCTGAGCCTCTGCGTGTGCCCTCCCAGCCCACACCAGTGCTCT
CGGCCACTGAGCACCCAGACTCAGGCTTGGGTTCCCCAGCCTTATTGGAAGGCAGCTCCCGCATACCAGGATAAC
CCCCGCAAACCACATAGCAGACCCCCGCCATCCTCGCAGAGTGGGAGAGGCTGCAGCAAGGCTTTGCCTCTGCAG
ACCCCATCTTAGTGGCACGGTGCTTGGGCCTGTGTCCCCGGGTGGTGGAACCCTGTACCGGTCTGTGGCCCTAGG
GTCCCTGCTCTGTCTGCCCCGGCCCGTGCTGTCCGCTGGGTGAGGCAGGCTCCCCCGTGCCCTGCCTCCCTCTGT
CAGGGAACCTGGGACCCCCTCCCCACTGCCTGCACAGAGGACCCTGACCCTCGGCCAGCAGGGTGGCCCCAGGTC

FIGURE 2738B

CATGTTGGGCACTAGGGCAGGTTCCGTGCCAGAGTCGGGGGCCACACGAGGGCCTGGTGCCGGTGAGGGGGGCGT
GCGCTAGAGGGGGAAAGGGGCCCCCGGCCACCTGTCCACCGTGTGGGCCGTGCTGTGTCCTTATGTCATTGTAAT
ATAAATACAGATTTTTATATCTC

FIGURE 2739

MELNSLLILLEAAEYLERRDREAEHGYASVLPFDGDFAREKTKAAGLVRKAPNNRSSHNELEKHRRAKLRLYLEQ
LKQLVPLGPDSTRHTTLSLLKRAKVHIKKLEEQDRRALSIKEQLQQEHRFLKRRLEQLSVQSVERVRTDSTGSAV
STDDSEQEVDIEGMEFGPGELDSVGSSSDADDHYSLQSGTGGDSGFGPHCRRLGRPALS

FIGURE 2740A

GGTGAACAGCTCAAATCCATTTTTTACATCACAGACCAAAGCCAATGGGAATCCTGCTTGTTCGGCCCAGTTGCA
GCATGTCTCGCCACCCATTTTTCCAGCTCATTTAGCAAGTGTGTCAACTCCATTGTTGTCCTCAATGGAAAGTGT
CATAAATCCAAATATAACTTCTCAGGATAAAAATGAACAAGGTGGTATGTTATGTTCCCAAATGGAAAATTTACC
TAGTACTGCCTTGCCAGCACAAATGGAAGATCTAACCAAAACAGTTCTGCCTTTGAATATTGACAGTGGCTCAGA
TCCTTTCCTTCCTTTACCTGCAGAAAGTAGTTCAATGTCTCTCTTCCCTTCACCAGCAGATAGTGGGACTAATTC
TGTTTTTTCCCAACTGGAAAATAATACAAATCATTATTCCTCACAGATTGAAGGAAACACTAATTCCTCCTTTCT
AAAGGGGGGTAATGGTGAAAATGCAGTTTTTCCTTCACAAGTGAATGTTGCAAATAACTTCAGTAGCACCAATGC
CCAACAGTCTGCACCTGAAAAAGTTAAAAAAGACCGTGGGCGGGGCCCAAATGGGAAGGAAAGAAAACCTAAGCA
CAACAAAAGGGCTAAATGGCCTGCAATTATCAGAGATGGGAAATTTATCTGTAGCAGGTGTTACAGGGCTTTTAC
TAATCCCAGATCACTGGGTGGGCACTTATCCAAGCGATCTTACTGTAAACCACTGGATGGAGCCGAAATTGCTCA
AGAACTTCTACAGAGTAATGGACAGCCTTCTCTTCTTGCCAGCATGATTCTCTCCACAAATGCAGTAAATTTGCA
GCAGCCACAACAATCTACCTTCAATCCAGAAGCATGTTTTAAAGATCCATCATTTCTACAGCTTCTTGCTGAAAA
TCGCTCGCCAGCATTTTTACCAAATACATTTCCTCGATCTGGTGTGACTAACTTTAATACCAGTGTCAGTCAAGA
AGGTAGTGAAATTATTAAACAGGCTTTGGAAACTGCTGGCATTCCCAGTACATTTGAGGGTGCCGAAATGCTTTC
TCATGTTTCAACAGGTTGTGTCTCTGATGCATCACAAGTAAATGCAACGGTGATGCCAAATCCAACTGTACCACC
CCTGTTGCACACTGTATGCCATCCAAACACCTTGCTGACCAACCAGAATAGGACGTCAAACTCCAAAACTTCCTC
CATTGAGGAATGTAGCAGCTTGCCTGTTTTTCCAACGAATGACTTACTACTGAAGACTGTTGAAAATGGTTTGTG
CTCTAGTTCATTTCCTAATTCTGGTGGGCCATCACAAAATTTTACCAGTAACAGTTCTCGTGTTTCTGTTATAAG
TGGTCCTCAGAACACAAGATCCAGTCATTTAAATAAAAAGGGAAACAGTGCTTCTAAGAGAAGAAAGAAAGTTGC
TCCTCCACTAATTGCACCTAACGCTTCCCAAAACTTGGTAACAAGTGACTTAACAACAATGGGACTCATAGCAAA
GAGTGTTGAAATCCCAACTACTAACCTTCATTCAAATGTAATTCCAACTTGTGAACCTCAGAGTTTGGTGGAAAA
TCTAACACAGAAATTAAATAATGTTAACAATCAGTTATTTATGACTGATGTAAAAGAGAATTTCAAAACCAGTCT
TGAGTCCCATACAGTGTTAGCCCCTTTAACATTAAAAACTGAAAATGGTGATTCCCAAATGATGGCTTTGAATTC
ATGCACAACTTCAGTAAATTCTGATTTGCAGATTTCTGAAGACAATGTTATACAAAACTTTGAAAAGACTCTTGA
AATTATTAAAACTGCTATGAATTCTCAAATACTTGAGGTAAAAAGTGGATCTCAGGGTGCTGGTGAAACTTCACA
AAATGCTCAAATAAATTATAACATTCAGCTTCCTTCAGTAAACACTGTGCAAAATAACAAATTACCCGATTCTTC
TCCGTTTTCCTCCTTTATAAGTGTCATGCCAACAAAAAGTAACATTCCTCAGTCTGAAGTATCACATAAGGAGGA
TCAAATACAGGAAATTTTAGAAGGCTTACAGAAATTAAAATTAGAAAATGACCTATCCACTCCAGCATCCCAATG
TGTACTGATAAATACATCAGTGACACTGACTCCCACGCCTGTTAAATCAACTGCAGATATCACAGTTATTCAGCC
AGTTTCTGAAATGATAAACATTCAATTTAATGACAAAGTTAATAAACCCTTTGTGTGTCAAAACCAAGGCTGTAA
CTACAGTGCTATGACAAAGGATGCACTATTTAAGCACTATGGTAAAATTCATCAATACACTCCAGAAATGATTCT
TGAAATTAAGAAGAATCAATTGAAATTTGCTCCCTTTAAATGTGTAGTACCTACATGTACAAAAACATTTACAAG
AAATTCTAACCTCCGGGCACACTGTCAGTTGGTGCATCATTTTACAACTGAAGAAATGGTAAAGTTAAAAATTAA
AAGGCCTTATGGAAGAAAATCTCAGAGTGAAAATGTGCCGGCCTCACGAAGTACACAAGTGAAAAAACAGCTAGC
TATGACAGAGGAAAATAAAAAGGAATCTCAGCCTGCTTTAGAATTGAGAGCAGAGACCCAAAATACCCACAGTAA
TGTAGCAGTGATCCCAGAAAAACAACTTATAGAAAAAAAAAGTCCTGACAAAACAGAAAGTTCTTTACAAGTGAT
TACAGTTACTTCAGAACAATGTAATACAAATGCACTCACAAACACACAAACCAAAGGACGGAAGATTAGGAGGCA
TAAAAAAGAAAAGGAGGAGAAAAAACGAAAGAAGCCAGTTTCCCAATCCCTTGAGTTTCCAACAAGATACAGTCC
TTACAGACCTTATCGATGTGTTCACCAGGGATGCTTTGCTGCCTTTACGATACAGCAAAATTTGATTCTCCATTA
CCAGGCTGTACACAAATCAGATCTACCTGCATTTTCAGCAGAGGTCGAAGAGGAAAGTGAAGCTGGTAAAGAAAG
TGAAGAAACTGAAACTAAACAAACTTTGAAAGAATTTCGATGTCAGGTAAGTGACTGTTCTCGAATTTTCCAAGC
AATTACTGGCCTAATACAACACTACATGAAACTTCATGAAATGACTCCTGAAGAAATTGAAAGTATGACTGCTTC
AGTGGATGTTGGGAAGTTTCCATGTGACCAGTTAGAGTGTAAATCTTCATTTACTACATATTTGAACTATGTTGT
TCATCTAGAGGCAGACCACGGGATTGGACTAAGGGCAAGTAAAACAGAAGAAGATGGTGTATACAAATGTGATTG
TGAAGGCTGTGACCGTATATATGCAACCCGGTCGAATCTCCTCCGACACATTTTTAATAAGCATAATGACAAACA
TAAGGCTCATTTGATTCGTCCAAGAAGATTAACACCAGGCCAGGAAAATATGTCAAGCAAGGCAAACCAAGAAAA
ATCAAAGTCTAAACATCGGGGGACGAAGCACAGCAGATGTGGAAAGGAAGGAATAAAAATGCCCAAGACCAAACG
AAAGAAAAAAAATAATTTAGAAAACAAGAATGCAAAGATTGTGCAGATTGAAGAAAATAAGCCTTATTCTCTGAA

FIGURE 2740B

ACGTGGGAAGCATGTATATTCTATAAAGGCTAGAAATGATGCCCTGTCTGAGTGTACAAGCAGATTTGTAACCCA
GTATCCATGTATGATAAAGGGATGTACTTCAGTTGTTACAAGTGAAAGCAATATAATTAGACATTATAAGTGCCA
TAAATTATCTAAGGCATTTACATCACAACACCGAAATCTTCTTATTGTATTCAAACGGTGTTGCAACTCACAAGT
AAAGGAAACGTCTGAGCAAGAAGGTGCTAAGAATGATGTGAAAGATTCTGACACGTGTGTATCAGAGAGCAATGA
TAATTCAAGAACAACAGCTACAGTTTCACAAAAGGAAGTTGAAAAAAATGAAAAAGATGAAATGGATGAACTAAC
AGAATTGTTTATTACAAAATTAATAAATGAAGATAGCACAAGTGTAGAGACCCAAGCTAATACTTCTTCAAATGT
AAGTAATGATTTTCAGGAAGATAACCTCTGCCAGTCAGAAAGACAAAAAGCAAGTAATTTGAAGAGAGTTAATAA
GGAAAAAAATGTCTCACAAAATAAAAAAAGGAAAGTTGAAAAAGCTGAACCAGCATCAGCAGCTGAGTTAAGTAG
CGTGCGTAAAGAAGAAGAAACTGCTGTTGCCATTCAAACCATTGAGGAGCATCCTGCATCTTTTGACTGGAGCTC
TTTTAAGCCAATGGGATTTGAAGTATCATTTCTGAAGTTTCTTGAGGAGTCTGCAGTGAAGCAGAAGAAAAATAC
TGACAAAGACCATCCGAATACTGGAAACAAAAAAGGATCCCATTCAAATTCAAGAAAAAATATTGATAAGACTGC
TGTGACTAGTGGAAATCATGTATGTCCTTGTAAAGAAAGCGAAACGTTTGTACAGTTTGCCAATCCATCACAGCT
TCAGTGCAGTGATAATGTAAAAATTGTTTTAGACAAGAATCTTAAAGATTGCACTGAGCTTGTCTTAAAGCAACT
TCAGGAAATGAAACCTACCGTCAGTCTGAAAAAACTTGAAGTACATTCAAATGATCCAGATATGTCTGTTATGAA
AGATATCAGTATAGGTAAAGCCACAGGCAGAGGTCAGTACTGATAATTAATGTAGTATAAATACATCATTTACCA
TTTTATTTTAAATAGGAAGCCATCAAGCATGCTAGAATTGTGAAACTTTCATTATATTTTTTTGTTGTTGACATG
AATTAACCTGGCCAAAAACAAAAAAGAAAAAAAAAACATGACATTTGTCATGTAAAACTTTTTTTTATCCCTATG
GGACTTGAGGAACAGAATCAGTACTTCAGTTATTGTAAATAGTGAGCTAAACCTCAAATTTCTATCACCCAGTTG
CCCTTTTCATGAACTAAACAATTATCTGTGTGATTGGTATGTTTCACCAGGTCACTGCTCATGTATAACAGTACT
CTTTATTTGTAGATACCTTTTTTGTATATATTTATTATTGTAAATCATGTGCTGCCACCAGCAGTCTGTAAGTCT
AAACTATTAAATGACACATTTATATTTGGAATTTTAATTTTTAACTAAGCGATCAAGTTTTTTAAATTGTTCTTT
TATTGTTTTAAATTAAGAACTTTTTGAACTAAAACCAGAAACTCTGCCATAGTTCATTGATTTTTACATGAAACA
TTTATTTACAAGATGATATCAAGATTACTTTTCACAAAATAGGCACATTATATCAACACTTTGCTCTGCTTTGTA
AATTTGCCATCCAGGATTTTGGGGTGGTATTCATGTGAAATTAAAGCAGATTCTCTAGCAGTTTCCTATAGCTAC
AGTTTTTTTTTTTCATTGCTTCTAATTGGATATAGTTACTATGAGTCCATGAAATACAATGGAAATGTGAATAAA
GAATTTACTACATTGAAGATTTTAAACATTTGGTATTAAAAAAAAATCCTTTGTGAATGTGATAGAAAACTAGTA
GTGTGGAGCAGTGTAAATATTTGAGGTGGTGATTTGTGAAGTAGCCCAGTATTGCCTTAAATAAAATCACATTTC
ATTTCTTGTTTTATACATGTGATCTTATAAAGATTTTTTGTTTTGTTTTGTTTTCCATTTTCTGAGATTTATAGA
TTGGTGTATAGCTTTAAACTGTATAAAGTTTTGTGGAAAGATTTTTTTAAACATTTTTATAAATCTTAAAATTGA
TATCATCAAAGTGAGCCCATCTTGTGTTTATAAAATACAAGAGTCCTTAACATTTATAATTACATAGATAAAACA
CTTTCTATAAGGAAGTTGGATGTTTTGATTTTACTGTTTATAGATGTTAGATTGTACAGATTTGTCTGTATTTCT
CACCATATCTAATGATACTTTTTTCATTAGATTGGTCTTCAAGAACAGTATTAGTTATAATTATTTTGGTTATTC
AGTATATAGTTAGCTCTTACAGTTTAGCTTTATTCACCATATTTATACTGTGGATTCACAGCGAGAGGTAGAGGT
TATTCCAGGAGAGTTGATGACCTTCATTTAAAGTCCAACTAAAATCAGTAGTAGAAACATAAGAAAACATCTTTG
CAATATTTACTTTTGTTTCTGTTTGCCGTAAATAGTAACATTGTTTTTTTTTATTTTGTGTTTGTTATAAAACAG
TTGCATTCACAATATTATTGGCCTGAGATATTGATGATATTGTGATGGTATGAAAATGTGTACATTCCCTGTGCA
ACATCAGATTTGCAGGAAAAATGAAGCACTTACTGAAATCGCTGGTACTCTGAATAAATAAGCATGGTCAAGGAG
TGAACTATTTTCTTTTGGAAATTTCTTTTTAATTTTTATTATTAAAGTATTTTATTTTTAGGGCCTTTTGGGTTT
TATTGAATAGTTCATTTCACCTGTTTAAGACTTACTACCAATAAGCATAAAACCTGACACGTTAAAATCCCTGCC
CTTTGGTGAGCCCACTGTTATTTATTAAAATAAAAGTTATTTTATGGGTGATT

FIGURE 2741

VNSSNPFFTSQTKANGNPACSAQLQHVSPPIFPAHLASVSTPLLSSMESVINPNITSQDKNEQGGMLCSQMENLP
STALPAQMEDLTKTVLPLNIDSGSDPFLPLPAESSSMSLFPSPADSGTNSVFSQLENNTNHYSSQIEGNTNSSFL
KGGNGENAVFPSQVNVANNFSSTNAQQSAPEKVKKDRGRGPNGKERKPKHNKRAKWPAIIRDGKFICSRCYRAFT
NPRSLGGHLSKRSYCKPLDGAEIAQELLQSNGQPSLLASMILSTNAVNLQQPQQSTFNPEACFKDPSFLQLLAEN
RSPAFLPNTFPRSGVTNFNTSVSQEGSEIIKQALETAGIPSTFEGAEMLSHVSTGCVSDASQVNATVMPNPTVPP
LLHTVCHPNTLLTNQNRTSNSKTSSIEECSSLPVFPTNDLLLKTVENGLCSSSFPNSGGPSQNFTSNSSRVSVIS
GPQNTRSSHLNKKGNSASKRRKKVAPPLIAPNASQNLVTSDLTTMGLIAKSVEIPTTNLHSNVIPTCEPQSLVEN
LTQKLNNVNNQLFMTDVKENFKTSLESHTVLAPLTLKTENGDSQMMALNSCTTSVNSDLQISEDNVIQNFEKTLE
IIKTAMNSQILEVKSGSQGAGETSQNAQINYNIQLPSVNTVQNNKLPDSSPFSSFISVMPTKSNIPQSEVSHKED
QIQEILEGLQKLKLENDLSTPASQCVLINTSVTLTPTPVKSTADITVIQPVSEMINIQFNDKVNKPFVCQNQGCN
YSAMTKDALFKHYGKIHQYTPEMILEIKKNQLKFAPFKCVVPTCTKTFTRNSNLRAHCQLVHHFTTEEMVKLKIK
RPYGRKSQSENVPASRSTQVKKQLAMTEENKKESQPALELRAETQNTHSNVAVIPEKQLIEKKSPDKTESSLQVI
TVTSEQCNTNALTNTQTKGRKIRRHKKEKEEKKRKKPVSQSLEFPTRYSPYRPYRCVHQGCFAAFTIQQNLILHY
QAVHKSDLPAFSAEVEEESEAGKESEETETKQTLKEFRCQVSDCSRIFQAITGLIQHYMKLHEMTPEEIESMTAS
VDVGKFPCDQLECKSSFTTYLNYVVHLEADHGIGLRASKTEEDGVYKCDCEGCDRIYATRSNLLRHIFNKHNDKH
KAHLIRPRRLTPGQENMSSKANQEKSKSKHRGTKHSRCGKEGIKMPKTKRKKKNNLENKNAKIVQIEENKPYSLK
RGKHVYSIKARNDALSECTSRFVTQYPCMIKGCTSVVTSESNIIRHYKCHKLSKAFTSQHRNLLIVFKRCCNSQV
KETSEQEGAKNDVKDSDTCVSESNDNSRTTATVSQKEVEKNEKDEMDELTELFITKLINEDSTSVETQANTSSNV
SNDFQEDNLCQSERQKASNLKRVNKEKNVSQNKKRKVEKAEPASAAELSSVRKEEETAVAIQTIEEHPASFDWSS
FKPMGFEVSFLKFLEESAVKQKKNTDKDHPNTGNKKGSHSNSRKNIDKTAVTSGNHVCPCKESETFVQFANPSQL
QCSDNVKIVLDKNLKDCTELVLKQLQEMKPTVSLKKLEVHSNDPDMSVMKDISIGKATGRGQY

FIGURE 2742A

GTGGTCGCGGCTGGGGACGTGCGCCCGCGCCACCATCTTCGGCTGAAGAGGCAATTGCTTTTGGATCGTTCCATT
TACAATGGCGCAGAGAACTGGACTCGAGGATCCAGAGAGGTATCTCTTTGTGGACAGGGCTGTCATCTACAACCC
TGCCACTCAAGCTGATTGGACAGCTAAAAAGCTAGTGTGGATTCCATCAGAACGCCATGGTTTTGAGGCAGCTAG
TATCAAAGAAGAACGGGGAGATGAAGTTATGGTGGAGTTGGCAGAGAATGGAAAGAAAGCAATGGTCAACAAAGA
TGATATTCAGAAGATGAACCCACCTAAGTTTTCCAAGGTGGAGGATATGGCAGAATTGACATGCTTGAATGAAGC
TTCCGTTTTACATAATCTGAAGGATCGCTACTATTCAGGACTAATCTATACTTATTCTGGACTCTTCTGTGTAGT
TATAAACCCTTACAAGAATCTTCCAATTTACTCTGAGAATATTATTGAAATGTACAGAGGGAAGAAGCGTCATGA
GATGCCTCCACACATCTATGCTATATCTGAATCTGCTTACAGATGCATGCTTCAAGATCGTGAGGACCAGTCAAT
TCTTTGCACGGGTGAGTCAGGTGCTGGGAAGACAGAAAATACAAAGAAAGTTATTCAGTACCTTGCCCATGTTGC
TTCTTCACATAAAGGAAGAAAGGACCATAATATTCCTGGGGAACTTGAACGGCAGCTTTTGCAAGCAAATCCAAT
TCTCGAATCATTTGGAAATGCGAAGACTGTGAAAAATGATAACTCATCTCGTTTTGGCAAATTTATTCGGATCAA
CTTTGATGTAACTGGCTATATCGTTGGGGCCAACATTGAAACATACCTTCTGGAAAAGTCTCGTGCTGTTCGTCA
AGCAAAAGATGAACGTACTTTTCATATCTTTTACCAGTTGTTATCTGGAGCAGGAGAACACCTAAAGTCTGATTT
GCTTCTTGAAGGATTTAATAACTACAGGTTTCTCTCCAATGGCTATATTCCTATTCCGGGACAGCAAGACAAAGA
TAATTTCCAGGAGACCATGGAAGCAATGCACATAATGGGCTTCTCCCATGAAGAGATTCTGTCAATGCTTAAAGT
AGTATCTTCAGTGCTACAGTTTGGAAATATTTCTTTCAAAAAGGAGAGAAATACTGATCAAGCTTCCATGCCAGA
AAATACAGTTGCGCAGAAGCTCTGCCATCTTCTTGGGATGAATGTGATGGAGTTTACTCGGGCCATCCTGACTCC
CCGGATCAAGGTCGGCCGAGACTATGTGCAAAAAGCCCAGACCAAAGAACAGGCAGATTTTGCAGTAGAAGCATT
GGCAAAAGCTACCTATGAGCGGCTCTTTCGCTGGCTCGTTCATCGCATCAATAAAGCTCTGGATAGGACCAAACG
TCAGGGAGCATCTTTCATTGGAATCCTGGATATTGCTGGATTTGAAATTTTTGAGCTGAACTCCTTTGAACAACT
TTGCATCAACTACACCAATGAGAAGCTGCAGCAGCTGTTCAACCACACCATGTTTATCCTAGAACAAGAGGAATA
CCAGCGCGAAGGCATCGAGTGGAACTTCATCGATTTCGGGCTGGATCTGCAGCCATGCATCGACCTAATAGAGAG
ACCTGCGAACCCTCCTGGTGTACTGGCCCTTTTGGATGAAGAATGCTGGTTCCCTAAAGCCACAGATAAAACCTT
TGTTGAAAAACTGGTTCAAGAGCAAGGTTCCCACTCCAAGTTTCAGAAACCTCGACAATTAAAAGACAAAGCTGA
TTTTTGCATTATACATTATGCAGGGAAGGTGGACTATAAGGCAGATGAGTGGCTGATGAAGAATATGGACCCCCT
GAATGACAACGTGGCCACCCTTTTGCACCAGTCATCAGACAGATTTGTGGCAGAGCTTTGGAAAGATGTGGACCG
TATCGTGGGTCTGGATCAAGTCACTGGTATGACTGAGACAGCTTTTGGCTCCGCATATAAAACCAAGAAGGGCAT
GTTTCGTACCGTTGGGCAACTCTACAAAGAATCTCTCACCAAGCTGATGGCAACTCTCCGAAACACCAACCCTAA
CTTTGTTCGTTGTATCATTCCAAATCACGAGAAGAGGGCTGGAAAATTGGATCCACACCTAGTCCTAGATCAGCT
TCGCTGTAATGGTGTCCTGGAAGGGATCCGAATCTGTCGCCAGGGCTTCCCTAACCGAATAGTTTTCCAGGAATT
CAGACAGAGATATGAGATCCTAACTCCAAATGCTATTCCTAAAGGTTTTATGGATGGTAAACAGGCCTGTGAACG
AATGATCCGGGCTTTAGAATTGGACCCAAACTTGTACAGAATTGGACAGAGCAAGATATTTTTCAGAGCTGGAGT
TCTGGCACACTTAGAGGAAGAAAGAGATTTAAAAATCACCGATATCATTATCTTCTTCCAGGCCGTTTGCAGAGG
TTGCCTGGCCAGAAAGGCCTTTGCCAAGAAGCAGCAGCAACTAAGTGCCTTAAAGGTCTTGCAGCGGAACTGTGC
CGCGTACCTGAAATTACGGCACTGGCAGTGGTGGCGAGTCTTCACAAAGGTGAAGCCGCTTCTACAAGTGACTCG
CCAGGAGGAAGAACTTCAGGCCAAAGATGAAGAGCTGTTGAAGGTGAAGGAGAAGCAGACAAAGGTGGAAGGAGA
GCTGGAGGAGATGGAGCGGAAGCACCAGCAGCTTTTAGAAGAGAAGAATATCCTTGCAGAACAACTACAAGCAGA
GACTGAGCTCTTTGCTGAAGCAGAAGAGATGAGGGCAAGACTTGCTGCTAAAAAGCAGGAATTAGAAGAGATTCT
ACATGACTTGGAGTCTAGGGTTGAAGAAGAAGAAGAAAGAAACCAAATCCTCCAAAATGAAAAGAAAAAAATGCA
AGCACATATTCAGGACCTGGAAGAACAGCTAGACGAGGAGGAAGGGGCTCGGCAAAAGCTGCAGCTGGAAAAGGT
GACAGCAGAGGCCAAGATCAAGAAGATGGAAGAGGAGATTCTGCTTCTCGAGGACCAAAATTCCAAGTTCATCAA
AGAAAAGAAACTCATGGAAGATCGCATTGCTGAGTGTTCCTCTCAGCTGGCTGAAGAGGAAGAAAAGGCGAAAAA
CTTGGCCAAAATCAGGAATAAGCAAGAAGTGATGATCTCAGATTTAGAAGAACGCTTAAAGAAGGAAGAAAAGAC
TCGTCAGGAACTGGAAAAGGCCAAAAGAAAACTCGACGGGGAGACGACCGACCTGCAGGACCAGATCGCAGAGCT
GCAGGCGCAGATTGATGAGCTCAAGCTGCAGCTGGCCAAGAAGGAGGAGGAGCTGCAGGGCGCACTGGCCAGAGG
TGATGATGAAACACTCCATAAGAACAATGCCCTTAAAGTTGTGCGAGAGCTACAAGCCCAAATTGCTGAACTTCA
GGAAGACTTTGAATCCGAGAAGGCTTCACGGAACAAGGCCGAAAAGCAGAAAAGGGACTTGAGTGAGGAACTGGA
AGCTCTGAAAACAGAGCTGGAGGACACGCTGGACACCACGGCAGCCCAGCAGGAACTACGTACAAAACGTGAACA

FIGURE 2742B

AGAAGTGGCAGAGCTGAAGAAAGCTCTTGAGGAGGAAACTAAGAACCATGAAGCTCAAATCCAGGACATGAGACA
AAGACACGCAACAGCCCTGGAGGAGCTCTCAGAGCAGCTGGAACAGGCCAAGCGGTTCAAAGCAAATCTAGAGAA
GAACAAGCAGGGCCTGGAGACAGATAACAAGGAGCTGGCGTGTGAGGTGAAGGTCCTGCAGCAGGTCAAGGCTGA
GTCTGAGCACAAGAGGAAGAAGCTCGACGCGCAGGTCCAGGAGCTCCATGCCAAGGTCTCTGAAGGCGACAGGCT
CAGGGTGGAGCTGGCGGAGAAAGCAAGTAAGCTGCAGAATGAGCTAGATAATGTCTCCACCCTTCTGGAAGAAGC
AGAGAAGAAGGGTATTAAATTTGCTAAGGATGCAGCTAGTCTTGAGTCTCAACTACAGGATACACAGGAGCTTCT
TCAGGAGGAGACACGCCAGAAACTAAACCTGAGCAGTCGGATCCGGCAGCTGGAAGAGGAGAAGAACAGTCTTCA
GGAGCAGCAGGAGGAGGAGGAGGAGGCCAGGAAGAACCTGGAGAAGCAAGTGCTGGCCCTGCAGTCCCAGTTGGC
TGATACCAAGAAGAAAGTAGATGACGACCTGGGAACAATTGAAAGTCTGGAAGAAGCCAAGAAGAAGCTTCTGAA
GGACGCGGAGGCCCTGAGCCAGCGCCTGGAGGAGAAGGCACTGGCGTATGACAAACTGGAGAAGACCAAGAACCG
CCTGCAGCAGGAGCTGGACGACCTCACGGTGGACCTGGACCACCAGCGCCAGGTCGCCTCCAACTTGGAGAAGAA
GCAGAAGAAGTTTGACCAGCTGTTAGCAGAAGAGAAGAGCATCTCTGCTCGCTATGCCGAAGAGCGGGACCGGGC
CGAAGCCGAGGCCAGAGAGAAAGAAACCAAAGCCCTGTCACTGGCCCGGGCCCTCGAGGAAGCCCTGGAGGCCAA
GGAGGAGTTTGAGAGGCAGAACAAGCAGCTCCGAGCAGACATGGAAGACCTCATGAGCTCCAAAGATGATGTGGG
AAAAAACGTTCACGAACTTGAAAAATCCAAACGGGCCCTAGAGCAGCAGGTGGAGGAAATGAGGACCCAGCTGGA
GGAGCTGGAAGACGAACTCCAGGCCACGGAAGATGCCAAGCTTCGTCTGGAGGTCAACATGCAGGCCATGAAGGC
GCAGTTCGAGAGAGACCTGCAAACCAGGGATGAGCAGAATGAAGAGAAGAAGCGGCTGCTGATCAAACAGGTGCG
GGAGCTCGAGGCGGAGCTGGAGGATGAGAGGAAACAGCGGGCGCTTGCTGTAGCTTCGAAGAAAAAGATGGAGAT
AGACCTGAAGGACCTCGAAGCCCAAATCGAGGCTGCGAACAAAGCTCGGGATGAGGTGATTAAGCAGCTCCGCAA
GCTCCAGGCTCAGATGAAGGATTACCAACGTGAATTAGAAGAAGCTCGTGCATCCAGAGATGAGATTTTTGCTCA
ATCCAAAGAGAGTGAAAAGAAATTGAAGAGTCTGGAAGCAGAAATCCTTCAATTGCAGGAGGAACTTGCCTCATC
TGAGCGAGCCCGCCGACACGCCGAGCAGGAGAGAGATGAGCTGGCGGACGAGATCACCAACAGCGCCTCTGGCAA
GTCCGCGCTGCTGGATGAGAAGCGGCGTCTGGAAGCTCGGATCGCACAGCTGGAGGAGGAGCTGGAAGAGGAGCA
GAGCAACATGGAGCTGCTCAACGACCGCTTCCGCAAGACCACTCTACAGGTGGACACACTGAACGCCGAGCTAGC
AGCCGAGCGCAGCGCCGCCCAGAAGAGTGACAATGCACGCCAGCAACTGGAGCGGCAGAACAAGGAGCTGAAGGC
CAAGCTGCAGGAACTCGAGGGTGCTGTCAAGTCTAAGTTCAAGGCCACCATCTCAGCCCTGGAGGCCAAGATTGG
GCAGCTGGAGGAGCAGCTTGAGCAGGAAGCCAAGGAACGAGCAGCCGCCAACAAATTAGTCCGTCGCACTGAGAA
GAAGCTGAAAGAAATCTTCATGCAGGTTGAGGATGAGCGTCGACACGCGGACCAGTATAAAGAGCAGATGGAGAA
GGCCAACGCTCGGATGAAGCAGCTTAAACGCCAGCTGGAGGAAGCAGAAGAAGAAGCGACGCGTGCCAACGCATC
TCGGCGTAAACTCCAGCGGGAACTGGATGATGCCACCGAGGCCAACGAGGGCCTGAGCCGCGAGGTCAGCACCCT
GAAGAACCGGCTGAGGCGGGGTGGCCCCATCAGCTTCTCTTCCAGCCGATCTGGCCGGCGCCAGCTGCACCTTGA
AGGAGCTTCCCTGGAGCTCTCCGACGATGACACAGAAAGTAAGACCAGTGATGTCAACGAGACGCAGCCACCCCA
GTCAGAG**TAA**AGTTGCAGGAAGCCAGAGGAGGCAATACAGTGGGACAGTTAGGAATGCACCCGGGGCCTCCTGCA
GATTTCGGAAATTGGCAAGCTACGGGATTCCTTCCTGAAAGATCAACTGTGTCTTAAGGCTCTCCAGCCTATGCA
TACTGTATCCTGCTTCAGACTTAGGTACAATTGCTCCCCTTTTTATATACAGACACACACAGGACACATATATTA
AACAGATTGTTTCATCATTGCATCTATTTTCCATATAGTCATCAAGAGACCATTTTATAAAACATGGTAAGACCC
TTTTTAAAACAAACTCCAGGCCCTTGGTTGCGGGTCGCTGGGTTATTGGGGCAGCGCCGTGGTCGTCACTCAGTC
GCTCTGCATGCTCTCTGTCATACAGACAGGTAACCTAGTTCTGTGTTCACGTGGCCCCCGACTCCTCAGCCACAT
CAAGTCTCCTAGACCACTGTGGACTCTAAACTGCACTTGTCTCTCTCATTTCCTTCAAATAATGATCAATGCTAT
TTCAGTGAGCAAACTGTGAAAGGGGCTTTGGAAAGAGTAGGAGGGGTGGGCTGGATCGGAAGCAACACCCATTTG
GGGTTACCATGTCCATCCCCCAAGGGGGGCCCTCCCCCTCGAGTCGATGGTGTCCCGCATCTACTCATGTGAACT
GGCCTTGGCGAGGGCTGGTCTGTGCATAGAAGGGATAGTGGCCACACTGCAGCTGAGGCCCCAGGTGGCAGCCAT
GGATCATGTAGACTTCCAGATGGTCTCCCGAACCGCCTGGCTCTGCCGGCGCCCTCCTCACGTCAGGAGCAAGCA
GCCGTGGACCCCTAAGCCGAGCTGGTGGAAGGCCCCTCCCCGTCGCCAGCCGGGCCCTCATGCTGACCTTGCAAA
TTCAGCCGCTGCTTTGAGCCCAAAATGGGAATATTGGTTTTGTGTCCGAGGCTTGTTCCAAGTTTGTCAATGAGG
TTTATGGAGCCTCCAGAACAGATGCCATCTTCCTGAATGTTGACATGCCAGTGGGTGTGACTCCTTCATTTTTCC
TTCTCCCTTCCCTTTGGACAGTGTTACAGTGAACACTTAGCATCCTGTTTTTGGTTGGTAGTTAAGCAAACTGAC
ATTACGGAAAGTGCCTTAGACACTACAGTACTAAGACAATGTTGAATATATCATTCGCCTCTATAACAATTTAAT

FIGURE 2742C

GTATTCAGTTTTGACTGTGCTTCATATCATGTACCTCTCTAGTCAAAGTGGTATTACAGACATTCAGTGACAATG
AATCAGTGTTAATTCTAAATCCTTGATCCTCTGCAATGTGCTTGAAAACACAAACCTTTTGGGTTAAAAGCTTTA
ACATCTATTAGGAAGAATTTGTCCTGTGGGTTTGGAATCTTGGATTTTCCCCCTTTATGAACTGTACTGGCTGTT
GACCACCAGACACCTGACCGCAAATATCTTTTCTTGTATTCCCATATTTCTAGACAATGATTTTTGTAAGACAAT
AAATTTATTCATTATAGATATTTGCGCCTGCTCTGTTTACTTGAAGAAAAAAGCACCCGTGGAGAATAAAGAGAC
CTCAATAAACAAAAAAAAAAA

FIGURE 2743

MAQRTGLEDPERYLFVDRAVIYNPATQADWTAKKLVWIPSERHGFEAASIKEERGDEVMVELAENGKKAMVNKDD
IQKMNPPKFSKVEDMAELTCLNEASVLHNLKDRYYSGLIYTYSGLFCVVINPYKNLPIYSENIIEMYRGKKRHEM
PPHIYAISESAYRCMLQDREDQSILCTGESGAGKTENTKKVIQYLAHVASSHKGRKDHNIPGELERQLLQANPIL
ESFGNAKTVKNDNSSRFGKFIRINFDVTGYIVGANIETYLLEKSRAVRQAKDERTFHIFYQLLSGAGEHLKSDLL
LEGFNNYRFLSNGYIPIPGQQDKDNFQETMEAMHIMGFSHEEILSMLKVVSSVLQFGNISFKKERNTDQASMPEN
TVAQKLCHLLGMNVMEFTRAILTPRIKVGRDYVQKAQTKEQADFAVEALAKATYERLFRWLVHRINKALDRTKRQ
GASFIGILDIAGFEIFELNSFEQLCINYTNEKLQQLFNHTMFILEQEEYQREGIEWNFIDFGLDLQPCIDLIERP
ANPPGVLALLDEECWFPKATDKTFVEKLVQEQGSHSKFQKPRQLKDKADFCIIHYAGKVDYKADEWLMKNMDPLN
DNVATLLHQSSDRFVAELWKDVDRIVGLDQVTGMTETAFGSAYKTKKGMFRTVGQLYKESLTKLMATLRNTNPNF
VRCIIPNHEKRAGKLDPHLVLDQLRCNGVLEGIRICRQGFPNRIVFQEFRQRYEILTPNAIPKGFMDGKQACERM
IRALELDPNLYRIGQSKIFFRAGVLAHLEEERDLKITDIIIFFQAVCRGCLARKAFAKKQQQLSALKVLQRNCAA
YLKLRHWQWWRVFTKVKPLLQVTRQEEELQAKDEELLKVKEKQTKVEGELEEMERKHQQLLEEKNILAEQLQAET
ELFAEAEEMRARLAAKKQELEEILHDLESRVEEEEERNQILQNEKKKMQAHIQDLEEQLDEEEGARQKLQLEKVT
AEAKIKKMEEEILLLEDQNSKFIKEKKLMEDRIAECSSQLAEEEEKAKNLAKIRNKQEVMISDLEERLKKEEKTR
QELEKAKRKLDGETTDLQDQIAELQAQIDELKLQLAKKEEELQGALARGDDETLHKNNALKVVRELQAQIAELQE
DFESEKASRNKAEKQKRDLSEELEALKTELEDTLDTTAAQQELRTKREQEVAELKKALEEETKNHEAQIQDMRQR
HATALEELSEQLEQAKRFKANLEKNKQGLETDNKELACEVKVLQQVKAESEHKRKKLDAQVQELHAKVSEGDRLR
VELAEKASKLQNELDNVSTLLEEAEKKGIKFAKDAASLESQLQDTQELLQEETRQKLNLSSRIRQLEEEKNSLQE
QQEEEEEARKNLEKQVLALQSQLADTKKKVDDDLGTIESLEEAKKKLLKDAEALSQRLEEKALAYDKLEKTKNRL
QQELDDLTVDLDHQRQVASNLEKKQKKFDQLLAEEKSISARYAEERDRAEAEAREKETKALSLARALEEALEAKE
EFERQNKQLRADMEDLMSSKDDVGKNVHELEKSKRALEQQVEEMRTQLEELEDELQATEDAKLRLEVNMQAMKAQ
FERDLQTRDEQNEEKKRLLIKQVRELEAELEDERKQRALAVASKKKMEIDLKDLEAQIEAANKARDEVIKQLRKL
QAQMKDYQRELEEARASRDEIFAQSKESEKKLKSLEAEILQLQEELASSERARRHAEQERDELADEITNSASGKS
ALLDEKRRLEARIAQLEEELEEEQSNMELLNDRFRKTTLQVDTLNAELAAERSAAQKSDNARQQLERQNKELKAK
LQELEGAVKSKFKATISALEAKIGQLEEQLEQEAKERAAANKLVRRTEKKLKEIFMQVEDERRHADQYKEQMEKA
NARMKQLKRQLEEAEEEATRANASRRKLQRELDDATEANEGLSREVSTLKNRLRRGGPISFSSSRSGRRQLHLEG
ASLELSDDDTESKTSDVNETQPPQSE

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FIGURE 2744

ATGGCAGCCCGAGTACTTATAATTGGCAGTGGAGGAAGGGAACATACGCTGGCCTGGAAACTTGCACAGTCTCAT
CATGTCAAACAAGTGTTGGTTGCCCCAGGAAACGCAGGCACTGCCTGCTCTGAAAAGATTTCAAATACCGCCATC
TCAATCAGTGACCACACTGCCCTTGCTCAATTCTGCAAAGAGAAGAAAATTGAATTTGTAGTTGTTGGACCAGAA
GCACCTCTGGCTGCTGGGATTGTTGGGAACCTGAGGTCTGCAGGAGTGCAATGCTTTGGCCCAACAGCAGAAGCG
GCTCAGTTAGAGTCCAGCAAAAGGTTTGCCAAAGAGTTTATGGACAGACATGGAATCCCAACCGCACAATGGAAG
GCTTTCACCAAACCTGAAGAAGCCTGCAGCTTCATTTTGAGTGCAGACTTCCCTGCTTTGGTTGTGAAGGCCAGT
GGTCTTGCAGCTGGAAAAGGGGTGATTGTTGCAAAGAGCAAAGAAGAGGCCTGCAAAGCTGTACAAGAGATCATG
CAGGAGAAAGCCTTTGGGGCAGCTGGAGAAACAATTGTCATTGAAGAACTTCTTGACGGAGAAGAGGTGTCGTGT
CTGTGTTTCACTGATGGCAAGACTGTGGCCCCCATGCCCCCAGCACAGGACCATAAGCGATTACTGGAGGGAGAT
GGTGGCCCTAACACAGGGGGAATGGGAGCCTATTGTCCAGCCCCTCAGGTTTCTAATGATCTATTACTAAAAATT
AAAGATACTGTTCTTCAGAGGACAGTGGATGGCATGCAGCAAGAGGGTACTCCATATACAGGTATTCTCTATGCT
GGAATAATGCTGACCAAGAATGGCCCAAAAGTTCTAGAGTTTAATTGCCGTTTTGGTGATCCAGAGTGCCAAGTA
ATCCTCCCACTTCTTAAAAGTGATCTTTATGAAGTGATTCAGTCCACCTTAGATGGACTGCTCTGCACATCTCTG
CCTGTTTGGCTAGAAAACCACACCGCCCTAACTGTTGTCATGGCAAGTAAAGGTTATCCTGGAGACTACACCAAG
GGTGTAGAGATAACAGGGTTTCCTGAGGCTCAAGCTCTAGGACTGGAGGTGTTCCATGCAGGCACTGCCCTCAAA
AATGGCAAAGTAGTAACTCATGGGGGTAGAGTTCTTGCAGTCACAGCCATCCGGGAAAATCTCATATCAGCCCTT
GAGGAAGCCAAGAAAGGACTAGCTGCTATAAAGTTTGAGGGAGCAATTTATAGGAAAGACGTCGGCTTTCGTGCC
ATAGCTTTCCTCCAGCAGCCCAGGAGTTTGACTTACAAGGAATCTGGAGTAGATATCGCAGCTGGAAATATGCTG
GTCAAGAAAATTCAGCCTTTAGCAAAAGCCACTTCCAGATCAGGCTGTAAAGTTGATCTTGGAGGTTTTGCTGGT
CTTTTTGATTTAAAAGCAGCTGGTTTCAAAGATCCCCTTCTGGCCTCTGGAACAGATGGCGTTGGAACTAAACTA
AAGATTGCCCAGCTATGCAATAAACATGATACCATTGGTCAAGATTTGGTAGCAATGTGTGTTAATGATATTCTG
GCACAAGGAGCAGAGCCCCTCTTCTTCCTTGATTACTTTTCCTGTGGAAAACTTGACCTCAGTGTAACTGAAGCT
GTTGTTGCTGGAATTGCTAAAGCTTGTGGAAAAGCTGGATGTGCTCTCCTTGGAGGTGAAACAGCAGAAATGCCT
GACATGTATCCCCCTGGAGAGTATGACCTAGCTGGGTTTGCCGTTGGTGCCATGGAGCGAGATCAGAAACTCCCT
CACCTGGAAAGAATCACTGAGGGTGATGTTGTTGTTGGAATAGCTTCATCTGGTCTTCATAGCAATGGATTTAGC
CTTGTGAGGAAAATCGTTGCAAAATCTTCCCTCCAGTACTCCTCTCCAGCACCTGATGGTTGTGGTGACCAGACT
TTAGGGGACTTACTTCTCACGCCTACCAGAATCTACAGCCATTCACTGTTACCTGTCCTACGTTCAGGACATGTC
AAAGCCTTTGCCCATATTACTGGTGGAGGATTACTAGAGAACATCCCCAGAGTCCTCCCTGAGAAACTTGGGGTA
GATTTAGATGCCCAGACCTGGAGGATCCCCAGGGTTTTCTCATGGTTGCAGCAGGAAGGACACCTCTCTGAGGAA
GAGATGGCCAGAACATTTAACTGTGGGGTTGGCGCTGTCCTTGTGGTATCAAAGGAGCAGACAGAGCAGATTCTG
AGGGATATCCAGCAGCACAAGGAAGAAGCCTGGGTGATTGGCAGTGTGGTTGCACGAGCTGAAGGTTCCCCACGT
GTGAAAGTCAAGAATCTGATTGAAAGCATGCAAATAAATGGGTCAGTGTTGAAGAATGGCTCCCTGACAAATCAT
TTCTCTTTTGAAAAAAAAAAGGCCAGAGTGGCTGTCTTAATATCTGGAACAGGATCGAACCTGCAAGCACTTATA
GACAGTACTCGGGAACCAAATAGCTCTGCACAAATTGATATTGTTATCTCCAACAAAGCCGCAGTAGCTGGGTTA
GATAAAGCGGAAAGAGCTGGTATTCCCACTAGAGTAATTAATCATAAACTGTATAAAAATCGTGTAGAATTTGAC
AGTGCAATTGACCTAGTCCTTGAAGAGTTCTCCATAGACATAGTCTGTCTTGCAGGATTCATGAGAATTCTTTCT
GGCCCCTTTGTCCAAAAGTGGAATGGAAAAATGCTCAATATCCACCCATCCTTGCTCCCTTCTTTTAAGGGTTCA
AATGCCCATGAGCAAGCCCTGGAAACCGGAGTCACAGTTACTGGGTGCACTGTACACTTTGTAGCTGAAGATGTG
GATGCTGGACAGATTATTTTGCAAGAAGCTGTTCCCGTGAAGAGGGGTGATACTGTCGCAACTCTTTCTGAAAGA
GTAAAATTAGCAGAACATAAAATATTTCCTGCAGCCCTTCAGCTGGTGGCCAGTGGAACTGTACAGCTTGGAGAA
AATGGCAAGATCTGTTGGGTTAAAGAGGAATGA

FIGURE 2745

MAARVLIIGSGGREHTLAWKLAQSHHVKQVLVAPGNAGTACSEKISNTAISISDHTALAQFCKEKKIEFVVVGPE
APLAAGIVGNLRSAGVQCFGPTAEAAQLESSKRFAKEFMDRHGIPTAQWKAFTKPEEACSFILSADFPALVVKAS
GLAAGKGVIVAKSKEEACKAVQEIMQEKAFGAAGETIVIEELLDGEEVSCLCFTDGKTVAPMPPAQDHKRLLEGD
GGPNTGGMGAYCPAPQVSNDLLLKIKDTVLQRTVDGMQQEGTPYTGILYAGIMLTKNGPKVLEFNCRFGDPECQV
ILPLLKSDLYEVIQSTLDGLLCTSLPVWLENHTALTVVMASKGYPGDYTKGVEITGFPEAQALGLEVFHAGTALK
NGKVVTHGGRVLAVTAIRENLISALEEAKKGLAAIKFEGAIYRKDVGFRAIAFLQQPRSLTYKESGVDIAAGNML
VKKIQPLAKATSRSGCKVDLGGFAGLFDLKAAGFKDPLLASGTDGVGTKLKIAQLCNKHDTIGQDLVAMCVNDIL
AQGAEPLFFLDYFSCGKLDLSVTEAVVAGIAKACGKAGCALLGGETAEMPDMYPPGEYDLAGFAVGAMERDQKLP
HLERITEGDVVVGIASSGLHSNGFSLVRKIVAKSSLQYSSPAPDGCGDQTLGDLLLTPTRIYSHSLLPVLRSGHV
KAFAHITGGGLLENIPRVLPEKLGVDLDAQTWRIPRVFSWLQQEGHLSEEEMARTFNCGVGAVLVVSKEQTEQIL
RDIQQHKEEAWVIGSVVARAEGSPRVKVKNLIESMQINGSVLKNGSLTNHFSFEKKKARVAVLISGTGSNLQALI
DSTREPNSSAQIDIVISNKAAVAGLDKAERAGIPTRVINHKLYKNRVEFDSAIDLVLEEFSIDIVCLAGFMRILS
GPFVQKWNGKMLNIHPSLLPSFKGSNAHEQALETGVTVTGCTVHFVAEDVDAGQIILQEAVPVKRGDTVATLSER
VKLAEHKIFPAALQLVASGTVQLGENGKICWVKEE

FIGURE 2746

ATGGCAGCCCGAGTACTTATAATTGGCAGTGGAGGAAGGGAACATACGCTGGCCTGGAAACTTGCACAGTCTCAT
CATGTCAAACAAGTGTTGGTTGCCCCAGGAAACGCAGGCACTGCCTGCTCTGAAAAGATTTCAAATACCGCCATC
TCAATCAGTGACCACACTGCCCTTGCTCAATTCTGCAAAGAGAAGAAAATTGAATTTGTAGTTGTTGGACCAGAA
GCACCTCTGGCTGCTGGGATTGTTGGGAACCTGAGGTCTGCAGGAGTGCAATGCTTTGGCCCAACAGCAGAAGCG
GCTCAGTTAGAGTCCAGCAAAAGGTTTGCCAAAGAGTTTATGGACAGACATGGAATCCCAACCGCACAATGGAAG
GCTTTCACCAAACCTGAAGAAGCCTGCAGCTTCATTTTGAGTGCAGACTTCCCTGCTTTGGTTGTGAAGGCCAGT
GGTCTTGCAGCTGGAAAAGGGGTGATTGTTGCAAAGAGCAAAGAAGAGGCCTGCAAAGCTGTACAAGAGATCATG
CAGGAGAAAGCCTTTGGGGCAGCTGGAGAAACAATTGTCATTGAAGAACTTCTTGACGGAGAAGAGGTGTCGTGT
CTGTGTTTCACTGATGGCAAGACTGTGGCCCCCATGCCCCCAGCACAGGACCATAAGCGATTACTGGAGGGAGAT
GGTGGCCCTAACACAGGGGGAATGGGAGCCTATTGTCCAGCCCCTCAGGTTTCTAATGATCTATTACTAAAAATT
AAAGATACTGTTCTTCAGAGGACAGTGGATGGCATGCAGCAAGAGGGTACTCCATATACAGGTATTCTCTATGCT
GGAATAATGCTGACCAAGAATGGCCCAAAAGTTCTAGAGTTTAATTGCCGTTTTGGTGATCCAGAGTGCCAAGTA
ATCCTCCCACTTCTTAAAAGTGATCTTTATGAAGTGATTCAGTCCACCTTAGATGGACTGCTCTGCACATCTCTG
CCTGTTTGGCTAGAAAACCACACCGCCCTAACTGTTGTCATGGCAAGTAAAGGTTATCCTGGAGACTACACCAAG
GGTGTAGAGATAACAGGGTTTCCTGAGGCTCAAGCTCTAGGACTGGAGGTGTTCCATGCAGGCACTGCCCTCAAA
AATGGCAAAGTAGTAACTCATGGGGGTAGAGTTCTTGCAGTCACAGCCATCCGGGAAAATCTCATATCAGCCCTT
GAGGAAGCCAAGAAAGGACTAGCTGCTATAAAGTTTGAGGGAGCAATTTATAGGAAAGACGTCGGCTTTCGTGCC
ATAGCTTTCCTCCAGCAGCCCAGGAGTTTGACTTACAAGGAATCTGGAGTAGATATCGCAGCTGGAAATATGCTG
GTCAAGAAAATTCAGCCTTTAGCAAAAGCCACTTCCAGATCAGGCTGTAAAGTTGATCTTGGAGGTTTTGCTGGT
CTTTTTGATTTAAAAGCAGCTGGTTTCAAAGATCCCCTTCTGGCCTCTGGAACAGATGGCGTTGGAACTAAACTA
AAGATTGCCCAGCTATGCAATAAACATGATACCATTGGTCAAGATTTGGTAGCAATGTGTGTTAATGATATTCTG
GCACAAGGAGCAGAGCCCCTCTTCTTCCTTGATTACTTTTCCTGTGGAAAACTTGACCTCAGTGTAACTGAAGCT
GTTGTTGCTGGAATTGCTAAAGCTTGTGGAAAAGCTGGATGTGCTCTCCTTGGAGGTGAAACAGCAGAAATGCCT
GACATGTATCCCCCTGGAGAGTATGACCTAGCTGGGTTTGCCGTTGGTGCCATGGAGCGAGATCAGAAACTCCCT
CACCTGGAAAGAATCACTGAGGGTGATGTTGTTGTTGGAATAGCTTCATCTGGTCTTCATAGCAATGGATTTAGC
CTTGTGAGGAAAATCGTTGCAAAATCTTCCCTCCAGTACTCCTCTCCAGCACCTGATGGTTGTGGTGACCAGACT
TTAGGGGACTTACTTCTCACGCCTACCAGAATCTACAGCCATTCACTGTTACCTGTCCTACGTTCAGGACATGTC
AAAGCCTTTGCCCATATTACTGGTGGAGGATTACTAGAGAACATCCCCAGAGTCCTCCCTGAGAAACTTGGGGTA
GATTTAGATGCCCAGACCTGGAGGATCCCCAGGGTTTTCTCATGGTTGCAGCAGGAAGGACACCTCTCTGAGGAA
GAGATGGCCAGAACATTTAACTGTGGGGTTGGCGCTGTCCTTGTGGTATCAAAGGAGCAGACAGAGCAGATTCTG
AGGGATATCCAGCAGCACAAGGAAGAAGCCTGGGTGATTGGCAGTGTGGTTGCACGAGCTGAAGGTTCCCCACGT
GTGAAAGTCAAGAATCTGATTGAAAGCATGCAAATAAATGGGTCAGTGTTGAAGAATGGCTCCCTGACAAATCAT
TTCTCTTTTGAAAAAAAAAAGGCCAGAGTGGCTGTCTTAATATCTGGAACAGGATCGAACCTGCAAGCACTTATA
GACAGTACTCGGGAACCAAATAGCTCTGCACAAATTGATATTGTTATCTCCAACAAAGCCGCAGTAGCTGGGTTA
GATAAAGCGGAAAGAGCTGGTATTCCCACTAGAGTAATTAATCATAAACTGTATAAAAATCGTGTAGAATTTGAC
AGTGCAATTGACCTAGTCCTTGAAGAGTTCTCCATAGACATAGTCTGTCTTGCAGGATTCATGAGAATTCTTTCT
GGCCCCTTTGTCCAAAAGTGGAATGGAAAAATGCTCAATATCCACCCATCCTTGCTCCCTTCTTTTAAGGGTTCA
AATGCCCATGAGCAAGCCCTGGAAACCGGAGTCACAGTTACTGGGTGCACTGTACACTTTGTAGCTGAAGATGTG
GATGCTGGACAGATTATTTTGCAAGAAGCTGTTCCCGTGAAGAGGGGTGATACTGTCGCAACTCTTTCTGAAAGA
GTAAAATTAGCAGAACATAAAATATTTCCTGCAGCCCTTCAGCTGGTGGCCAGTGGAACTGTACAGCTTGGAGAA
AATGGCAAGATCTGTTGGGTTAAAGAGGAATGA

FIGURE 2747

MAARVLIIGSGGREHTLAWKLAQSHHVKQVLVAPGNAGTACSEKISNTAISISDHTALAQFCKEKKIEFVVVGPE
APLAAGIVGNLRSAGVQCFGPTAEAAQLESSKRFAKEFMDRHGIPTAQWKAFTKPEEACSFILSADFPALVVKAS
GLAAGKGVIVAKSKEEACKAVQEIMQEKAFGAAGETIVIEELLDGEEVSCLCFTDGKTVAPMPPAQDHKRLLEGD
GGPNTGGMGAYCPAPQVSNDLLLKIKDTVLQRTVDGMQQEGTPYTGILYAGIMLTKNGPKVLEFNCRFGDPECQV
ILPLLKSDLYEVIQSTLDGLLCTSLPVWLENHTALTVVMASKGYPGDYTKGVEITGFPEAQALGLEVFHAGTALK
NGKVVTHGGRVLAVTAIRENLISALEEAKKGLAAIKFEGAIYRKDVGFRAIAFLQQPRSLTYKESGVDIAAGNML
VKKIQPLAKATSRSGCKVDLGGFAGLFDLKAAGFKDPLLASGTDGVGTKLKIAQLCNKHDTIGQDLVAMCVNDIL
AQGAEPLFFLDYFSCGKLDLSVTEAVVAGIAKACGKAGCALLGGETAEMPDMYPPGEYDLAGFAVGAMERDQKLP
HLERITEGDVVVGIASSGLHSNGFSLVRKIVAKSSLQYSSPAPDGCGDQTLGDLLLTPTRIYSHSLLPVLRSGHV
KAFAHITGGGLLENIPRVLPEKLGVDLDAQTWRIPRVFSWLQQEGHLSEEEMARTFNCGVGAVLVVSKEQTEQIL
RDIQQHKEEAWVIGSVVARAEGSPRVKVKNLIESMQINGSVLKNGSLTNHFSFEKKKARVAVLISGTGSNLQALI
DSTREPNSSAQIDIVISNKAAVAGLDKAERAGIPTRVINHKLYKNRVEFDSAIDLVLEEFSIDIVCLAGFMRILS
GPFVQKWNGKMLNIHPSLLPSFKGSNAHEQALETGVTVTGCTVHFVAEDVDAGQIILQEAVPVKRGDTVATLSER
VKLAEHKIFPAALQLVASGTVQLGENGKICWVKEE

FIGURE 2748A

TGCCATGCTGCTGCACGGACAGGATGTGATCACTGTGTCCAATGGAGGCCGAATCATGCGTTCCTGGGAGACTAA
CATCGGGGGCCTGAACTGGGAGATAACCCTGGACAGTGGCAGTTTCCAGGCACTTGGGCTGGTTGGCCTGCAGGA
GTCTGTAAGGTACATCGCAGTCCTGAAGAAGACTACACTTGCCCTCCATCACCTCTCCAGTGGGCACCTCAAGTG
GGTGGAACATCTCCCAGAAAGTGACAGCATCCACTACCAGATGGTGTATTCTTACGGCTCTGGGGTGGTGTGGGC
CCTCGGAGTTGTTCCCTTCAGCCATGTGAACATTGTCAAGTTTAATGTGGAAGATGGAGAGATTGTTCAGCAGGT
TAGGGTTTCAACTCCGTGGCTGCAGCACCTGTCTGGAGCCTGTGGTGTGGTGGATGAGGCTGTCCTGGTGTGTCC
TGACCCGAGCTCACGTTCCCTCCAAACTTTGGCTCTGGAGACGGAATGGGAGTTGAGACAGATCCCACTGCAGTC
TCTCGACTTAGAATTTGGAAGTGGATTCCAACCCCGGGTCCTGCCTACCCAGCCCAACCCAGTGGACGCTTCCCG
GGCCCAGTTCTTCCTGCACTTGTCCCCAAGCCACTATGCTCTGCTGCAGTACCATTATGGAACGCTGAGTTTGCT
TAAAAACTTCCCACAGACTGCCCTAGTGAGCTTTGCCACCACTGGGGAGAAGACGGTGGCTGCAGTCATGGCCTG
TCGGAATGAAGTGCAGAAAAGTAGCAGTTCTGAAGATGGGTCAATGGGGAGCTTTTCGGAGAAGTCTAGTTCAAA
GGACTCTCTGGCTTGCTTCAATCAGACCTACACCATTAACCTATACCTCGTGGAGACAGGTCGGCGGCTGCTGGA
CACCACGATAACATTTAGCCTGGAACAGAGCGGCACTCGGCCTGAGCGGCTGTATATCCAGGTGTTCTTGAAGAA
GGATGACTCAGTGGGCTACCGGGCTTTGGTGCAGACAGAGGATCATCTGCTACTTTTCCTGCAGCAGTTGGCAGG
GAAGGTGGTGCTGTGGAGCCGTGAGGAGTCCCTGGCAGAAGTGGTGTGCCTAGAGATGGTGGACCTCCCCCTGAC
TGGGGCACAGGCCGAGCTGGAAGGAGAATTTGGCAAAAAGGCAGATGGCTTGCTGGGGATGTTCCTGAAACGCCT
CTCGTCTCAGCTTATCCTGCTGCAAGCATGGACTTCCCACCTCTGGAAAATGTTTTATGATGCTCGGAAGCCCCG
GAGTCAGATTAAGAATGAGATCAACATTGACACCCTGGCCAGAGATGAATTCAACCTCCAGAAGATGATGGTGAT
GGTAACAGCCTCAGGCAAGCTTTTTGGCATTGAGAGCAGCTCTGGCACCATCCTGTGGAAACAGTATCTACCCAA
TGTCAAGCCAGACTCCTCCTTTAAACTGATGGTCCAGAGAACTACTGCTCATTTCCCCCATCCCCCACAGTGCAC
CCTGCTGGTGAAGGACAAGGAGTCGGGAATGAGTTCTCTGTATGTCTTCAATCCCATTTTTGGGAAGTGGAGTCA
GGTAGCTCCCCCAGTGCTGAAGCGCCCCATCTTGCAGTCCTTGCTTCTCCCAGTCATGGATCAAGACTACGCCAA
GGTGTTGCTGTTGATAGATGATGAATACAAGGTCACAGCTTTTCCAGCCACTCGGAATGTCTTGCGACAGCTACA
TGAGCTTGCCCCTTCCATCTTCTTCTATTTGGTGGATGCAGAGCAGGGACGGCTGTGTGGATATCGGCTTCGAAA
GGATCTCACCACTGAGCTGAGTTGGGAGCTGACCATTCCCCCAGAAGTACAGCGGATCGTCAAGGTGAAGGGGAA
ACGCAGCAGTGAGCACGTTCATTCCCAGGGCCGTGTGATGGGGGACCGCAGTGTGCTCTACAAGAGCCTGAACCC
CAACCTGCTGGCCGTGGTGACAGAGAGCACAGACGCGCACCATGAGCGCACCTTTATTGGCATCTTCCTCATTGA
TGGCGTCACTGGGCGTATCATTCACTCCTCTGTGCAGAAGAAAGCCAAAGGCCCTGTCCATATCGTGCATTCAGA
GAACTGGGTGGTGTACCAGTACTGGAACACCAAGGCTCGGCGCAACGAGTTTACCGTACTGGAGCTCTATGAGGG
CACTGAGCAATACAACGCCACCGCCTTCAGCTCCCTGGACCGCCCCCAGCTGCCCCAGGTCCTCCAGCAGTCCTA
TATCTTCCCGTCCTCCATCAGTGCCATGGAGGCCACCATCACCGAACGGGGCATCACCAGCCGACACCTGCTGAT
TGGACTACCTTCTGGAGCAATTCTTTCCCTTCCTAAGGCTTTGCTGGATCCCCGCCGCCCCGAGATCCCAACAGA
ACAAAGCAGAGAGGAGAACTTAATCCCGTATTCTCCAGATGTACAGATACACGCAGAGCGATTCATCAACTATAA
CCAGACAGTTTCTCGAATGCGAGGTATCTACACAGCTCCCTCGGGTCTGGAGTCCACTTGTTTGGTTGTGGCCTA
TGGTTTGGACATTTACCAAACTCGAGTCTACCCATCCAAGCAGTTTGACGTTCTGAAGGATGACTATGACTACGT
GTTAATCAGCAGCGTCCTCTTTGGCCTGGTTTTTGCCACCATGATCACTAAGAGACTGGCACAGGTGAAGCTCCT
GAATCGGGCCTGGCGATAAAGAACAAAGACTGTGCCTAAAAGTGGAGAGCCAGGGGAGTGTGGGTCAGATAAGCA
GCTACAGCTGCAGTTTGGTGGATTGGTGGAGTATGTGTGTGTGTCAGTGCTCAGCTAAGAACTGTAGGGAAGATG
GATGACCTTCACGCAGAACTCCTTTTGGGATATACATGATGCAGAAAGGATCCTACATGGAGAGAGACAGAACTC
TCTCAGCTGACACTCTCAGAGATTCCTGATGGGCTTTCTCTTGAAGTCCAAAGGCGTCTGCATTGTTTCCTTTCT
TTGCCCATCCATGAATGTTCTGTTTTGTTTTTTTTAATAAGAATTCCGGCTGATTTTTGTGAGGCCTGTTTAAAT
TGACTTTACTTTGCCTTTTGTGTTTCTCAATTTTATCTAGAAATCTTTCTGACTTTTTCCATCTCTTGCTTCAAA
GTAAGAGGGGAACTCTCCTTGCCGACTCCACCTTATAGGTACATTTGGTGTTTTGCACTGGGAAGAAATAGGATC
CATCCTTAGCTGAGGCTTGAGGACTGATCCAGCCTCTCATGGCTTCCCTCCAAAGTAACTTAGGGTTGAGGGATC
TATATGTGATGTCAAAACTTACTTTAAACCTCTAGTTTCGTGCTGTCATTTATTAGGCTGGGCCACCAAATCTTT
GTTTCAATTTATCAGAAGCCAAGTGCATACTAGCGTCTTGTTTGTTGCCCATTGCCTATACTTTTCACCTGAGAT
GTGTGAGTTGGGGCCTTTTAAAAACTACTGAATTGTCTGAGCCTTGAAGACATTTCCAGGGAGAAGAGATAATCT
CTCATTTCACCCACAGGCTGGTCTAATCATAACCTAGTTAAAGATGTCCTTGTTTAAGAACCCCATTATTTATTT

FIGURE 2748B

TTAGTTTTTAATATAAATTAACATGTGGGTCATTATATTTCTCCTTAAATGAGGAAATTTTAAATTTTATTGATC
TAACCTTTGAAGCTTTAAAAAAGGAGAAAGAGGGTAGGGGTGGGAAACTGGCATACTGTGTGTATAGCACTGCCG
ATTGGCTAGGCCACTGTGTCTCTGCTACAAATTAAAGAAATCCTAAAAGTTTTCCTTGGTCATAGAGTTGGGGAA
TGACAGAATTTTTCTTTGTTGTGAAATGTATGTACAGAGTAGACCATCTCTAGCCCTGTGGTGAAAGAGGTACAC
TCGAATGTTTGCATAAAGCAAGTGACAAATGACACTGTTTAAGTCCTCTTTTGTGTCTTAGAAGATCATTTTGAG
GCTATTTTCACATTAGAGGGGATAAAAGCAGTGAAGACATGGAGTAAGTGTATTTTATTTTAGTAAGGAAAGGTC
AGTTTAATCATATATGGGTTGGTTAGGTTATCTAAAAATTTGTCATCTTTCTATGGTCATATGCTGATGGTAGAT
TATGGCAGAGAAGGAAGAGGAAATGACAACCATTTTATTAATTGTCAGTTTGATATTGAGTGACTGAATGTCTAA
GAATCTCCAGAAAAAAACAGGCATCTATCATCCTGACCCAAGGCATATTTTAACATAACCTGGGAGAAGAGAGTT
AAGTACAAGTTAAAAAAAATTCTGCCCTAGTTTTGAGAAAGCCTGGCTGGAATTCTGACTGTCTTACATACATAT
GTGCAAGGTTAGCCTGCAAGATTCTAGTTTTTATTTACCAGTGTGCCAGAATCTGAAACAAGCTACTGGGAGGGA
AGGTATTTGTCCTTTAGTAAAATTCCCTGTATTTCAGCTGTAATCAAAGTTACCTCAAAGCAGGTGCTTTTTTTT
TTTTTGAGACCCTGGCTCAAAAACAAAAACAAAAACTAGTTTGTTTTAGTATTCATTAATTACGTATATGAGCAC
TGGTAGTCTAGTGTTTGTTCTTGTATACAGTGTTTTCTTAAATGAGATGATGCTATTTAATTCTGTTACTTGTTT
TTTCAACTAATGGATCTTTTAAAGTTTTTTATTTAAATTTTTTGTGGGTACATATTAGGTACATATACTTATGGG
GTACATGAGATGTTTTTATAAAGGCTCAGCTAATGTATCTTGAATATCATGTATTCATAAAGATGACTGAAATAG
TTTCTGGAACAAAGTCTGATAGAAAAAATACTCAATTCCTAATTTAAGTGTTAGAGACTTTAATGTAAGCTATCT
AATCTGAACTAGTTTCATTATTTGTGTGTGGGTACATGTTATGTGCTCCGTAAGGCATCTTTCAATTTGAAAATT
TCATAATTGTAATTTCACTGCCTTTATAAATTGCTTTTTTTTGGAGGCAGGGTCTCTGTCACCCAGGCTGGAGAG
CAGTGGCACAGTCATAGCTCACTGCAGCCTCGAACACCTGGGCTGAAGTGATCCTCCCTCCTTAGCCTCCCAAAG
TGCCGGGATTACAGGCATGAGCTACTGCACCTGGCCCATAAATTGTCATACTTTTAAAGAGCCTATTACACAAAG
TATCATCAGAATCATCCCAAGACTCATTTCCTGATTCCTAATTATTTAAAATTTTGCTTTTAGGCGAGGCATGGT
GGCTCAAGCCTATGGTCCCAGCACTTTGGGAGGCCAAGGCAGGCAGATCATTTGAGGTCAGGAGTTTGGGACCAG
CCTGGCCAACATGGTGAAACCTGAAACCCCATCTCTACCAAAAAAATGGAAAAATTTAGCCAGGTGTGGTGGTGC
ATGCCTGTAATCCCAGCCTCCCGAGTAGCTGGGGCTCAGGCGTGCGCCACCATGCCCGGCTAATTTTTGTATATT
TATGGAAATGCCAAGAGATAGTTCAATCTGCCTCTCTGGCAAGCCATGGACACCAGGTCTGACAAACTCTCTTAC
TCCTTAAGACAAATGCTCACCTGATCAATATGGGGAAATAAGCTGCATGGTACCATAATTTCTATTCTAAAAGGG
AAAAGTATCTCTTTGGTATTGCTTTGGAAAACATTCTTTATAACTATCTTGCTATTTAAAAATTGACAATTATCC
TTCCATAATTAAAACAGGTAGACAAC

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FIGURE 2749A

AATTCGGCACGAGACAAAAAGAGAAAGAAAATGCCGAAACCAATCAACGTAAGAGTAACTACAATGGATGCTGAG
CTGGAATTTGCCATTCAGCCCAATACAACTGGCAAACAACTTTTTGACCAGGTGGTGAAAACAGTTGGTTTGCGT
GAGGTCTGGTTTTTTGGGCTGCAGTATGTAGACAGCAAAGGTTATTCTACATGGCTTAAACTAAATAAAAAGGTA
ACACAGCAGGATGTTAAAAAAGAGAATCCTTTACAGTTCAAGTTTAGAGCTAAATTCTTTCCTGAAGATGTTTCT
GAGGAATTAATTCAAGAAATAACCCAGAGACTCTTCTTCTTGCAAGTTAAAGAAGCCATCTTAAATGATGAGATA
TATTGCCCGCCAGAAACTGCAGTTCTTTTGGCTTCCTATGCTGTCCAAGCCAAGTATGGAGATTACAATAAAGAG
ATTCATAAGCCAGGCTACCTGGCTAATGATAGACTCCTACCCCAGCGTGTATTGGAACAACACAAACTAACAAAA
GAACAGTGGGAAGAAAGAATACAGAACTGGCATGAAGAACATAGAGGAATGTTAAGGGAGGATTCTATGATGGAA
TACCTGAAGATTGCACAAGATCTAGAAATGTATGGAGTCAACTATTTTGAAATAAAAAATAAAAAAGGAACTGAA
TTGTGGCTAGGTGTTGATGCTTTGGGTCTGAATATTTATGAGCATGACGACAAGTTAACACCTAAAATTGGTTTT
CCCTGGAGTGAAATCAGAAATATTTCATTTAATGACAAAAAATTTGTTATAAAGCCAATCGACAAAAAGGCACCT
GATTTTGTGTTTTATGCACCTCGTCTGAGAATCAATAAGCGGATTTTGGCCTTATGTATGGGAAACCATGAACTA
TACATGCGAAGAAGGAAGCCTGATACTATTGAAGTACAACAGATGAAGGCTCAGGCTAGGGAGGAGAAACATCAG
AAGCAGTTGGAAAGGGCACAATTAGAGAATGAAAAGAAGAAAAGAGAAATAGCAGAAAAGGAAAAGGAAAGAATA
GAACGTGAAAAGGAAGAGCTAATGGAACGTCTAAAACAAATTGAAGAGCAGACAATTAAAGCTCAGAAAGAACTA
GAAGAACAGACTCGAAAAGCTCTAGAACTGGATCAAGAACGAAAACGAGCAAAAGAAGAAGCAGAACGACTTGAA
AAGGAGCGTCGAGCTGCTGAAGAGGCAAAGTCTGCCATAGCAAAACAAGCTGCCGACCAGATGAAGAATCAGGAG
CAGCTAGCAGCAGAACTTGCTGAATTCACTGCCAAGATTGCACTTCTAGAGGAAGCCAAGAAGAAAAAGGAAGAG
GAAGCAACTGAGTGGCAACACAAAGCTTTTGCAGCCCAGGAAGACTTGGAAAAGACCAAAGAAGAGTTAAAAACT
GTGATGTCTGCCCCCCCTCCACCTCCACCACCACCAGTCATTCCTCCAACAGAAAACGAACATGATGAACACGAT
GAGAATAATGCTGAAGCTAGTGCTGAATTATCAAATGAAGGGGTAATGAACCATAGAAGCGAGGAAGAACGTGTA
ACCGAAACACAGAAAAATGAGCGTGTTAAGAAGCAACTTCAGGCATTAAGTTCAGAATTAGCCCAAGCCAGAGAT
GAAACCAAGAAAACACAAAATGATGTTCTTCATGCTGAGAATGTTAAAGCAGGCCGTGATAAGTACAAGACTCTG
CGACAGATTCGACAAGGCAATACAAAGCAGCGTATCGATGAGTTTGAAGCAATGTGAGAGCTGTTATTTTGCATA
TATGTTCTTCATAAGCTGAACCACCAACAGAGAAAAGCAGGCCTTTGCAGATATGATGGAATGCATCCCACCTTG
CCAAAGCACTTACACCAGTTTGACTGTGCTAGCTAAAAGACAAATTTAAGGGGAGCTCTTCAACATTAAGGCAGT
ATGATATCATGCTTGGTTTTCTTTTTTCTTTTGGTCCAGGGAATGGAGAATGGTGTTCCATTGCCTCTTTTCACA
TTTTTTTTCTTTTTCTTTTTTTTTTCTGTTGAAGATTAACACTAATTATCACGTCTGACAAATGTGTATGTGTGG
TTTCAGTTCTGTGTACATTTTAAAGGATAATGGTGAACATTTTAATGGGTTTCCCTTGCCCTTTCCATATTTAAC
CTATTTCCACATTCTCTCTCACTCACATTTTCTCAGTGTGCCCTTCTCTTATCTGCCATGTCCATAGCCATAATT
CCACCATCATACAGATCAGGCAGTGTTTAAAATGATGGTAGGTAGCACAGTGGACAGTCTTTGATCATCATGTAG
AATATGGCTATGAATCAGGAAAGAGATTAGAACATTTAATAATGTATGTACAGCTGGTGCTTAGTTTTTTTTTAA
TCTAAATTTAATTACCTTATTGGATATTTGATATTTGGTTATTTAATCACAGTCATCTTTAACAGCTTACACTGA
TTGGTGTTTTATCTCCTGTGATCCTTTGATGGCTTTTTTTGCCTACCATTTCACAGAGGTTTAGACAGCAGTAGT
AGCTCCCTAGGAGAGTTTACTGATGAAACAGCCTCTGCAAGATTTTAAAAGTTTTGTTCTTTTATAGACTGATTT
AGAAAAACAAATGATTAGTTAAAAAAAGAAAATATACATTTGTTGGTAACTAATGTTATTTTTTAAAACCTGGAC
CTTTCTGGAAGGGCAGCATATAAAAACATCAGTCCCGAGGAGGGGACAACAATACTACCTCACTACTACATCTGT
GATGACTGGTTGTTCAAACACAATGGAGTGTGTAAGGTATATGTTTTATAATTCATAACCATAGCCTCGATCATC
AAGAAATACTTTCGAAATTTCATTTTCCTTCAGAATATCTTAAGAGTGCTAAATTTTTAACTGCCTTTTTGTCGA
GTCAAACTGTGGGATTCTGATTTGTATTAAAATTGTAAGCTCCTCACTGGTATACTATCATCCTGGAGGGGTGTT
GTATGGCTGAGCAAGAGAGAGAGAGAATGAGAGAGAGACTGTGTGTGTGTGTGTGTGTGTGTACTCTGTGTGT
GTATGAGAGAGAGAGAGAAATGCTAACCTTGTAGCATGTGAAGAATGTCTGTACCTTGATACGATAGTTACATAA
TCAGTATATTTGGTTTCTAGATCACTGTGCTTATTTTGTTTCAATCTCTGACTAAAAATACTTAAATTTGGTTTG
TTAATTCTTATTTTAGAAATTATAATTTTAGTTTATATTAATTTCGGTTATAGCTTACTGAAGAAATCTTTCCAG
TTAGAAGGAGGTTCTAATATTCACATGTTCTAATACTTTGTTTATTGTAAAACAGCTAAATTTGGAGATACGTAA
AGCCTTGTTTTCTCTGTGTGGTTCAGCTACTTTCCATTTGGTATTACACAGTCAAATTTACATTTATCTATTAAA
ATTGCCATTTTATTAAACATTTTCATGCACAGTAGATTCAAGTTGTGTCTGAAAATATCTCTTGTGCTTTTTTGA
TTTTGCTGACTTTAAAAGGATTAATCTGGGCAGACATTATGTAAAAGAAAGGTTGCGTTTAATATATTTTTTGAA

FIGURE 2749B

CTTTGTAGGACAAAACATAGCTGGTTAACCTTGAAGTGACTGTTGTACCATGGTTGTGCACATGCTTCAGAATCC
TATGGAAGAGAATATTCCTACTTGCAGTACATCAAAGGAATGGATGGTGGACCCTACTATTCATGTTTTGAGACA
TAAATGTTCACTTTAAAGCAATTGCATAATAGATAAAAACCTGAACTTTCATTGGATTTTTGTTAATTTTCCTCA
TTTTGAATTATGTGCACTACCATAGCTACATCAGTTTGATACAGTATTGAAAAATTATCAGTTATATTTTGCTGT
TTATGATCTATTTGTAGATTAGGATTAAAATGGATTTAATCCATTTTTAAGGCTGTGTGAATTTTTCTAAACAAG
AACCATTTGCAATATGGATTTCTTAGAGATTAAACCAATTATAACTTATTAGCAGTCGCGAGCACATGTTCATAT
AGTCAATGTAAAAATACACTAATGAGTATTTGGTAAATCCCAGTAGGCTTTTACCATTAGCATAATTTTGTGTTG
TACAATTAAGTTACAATTACATCTCTAATTTTGGATAATATTCATTGGTTAACAATAAAGTGACAAAAGCTCATG
CAAAAAAAAAAAAAAAAAAAA

FIGURE 2750

MPKPINVRVTTMDAELEFAIQPNTTGKQLFDQVVKTVGLREVWFFGLQYVDSKGYSTWLKLNKKVTQQDVKKENP
LQFKFRAKFFPEDVSEELIQEITQRLFFLQVKEAILNDEIYCPPETAVLLASYAVQAKYGDYNKEIHKPGYLAND
RLLPQRVLEQHKLTKEQWEERIQNWHEEHRGMLREDSMMEYLKIAQDLEMYGVNYFEIKNKKGTELWLGVDALGL
NIYEHDDKLTPKIGFPWSEIRNISFNDKKFVIKPIDKKAPDFVFYAPRLRINKRILALCMGNHELYMRRRKPDTI
EVQQMKAQAREEKHQKQLERAQLENEKKKREIAEKEKERIEREKEELMERLKQIEEQTIKAQKELEEQTRKALEL
DQERKRAKEEAERLEKERRAAEEAKSAIAKQAADQMKNQEQLAAELAEFTAKIALLEEAKKKKEEEATEWQHKAF
AAQEDLEKTKEELKTVMSAPPPPPPPPVIPPTENEHDEHDENNAEASAELSNEGVMNHRSEEERVTETQKNERVK
KQLQALSSELAQARDETKKTQNDVLHAENVKAGRDKYKTLRQIRQGNTKQRIDEFEAM

FIGURE 2751A

AATTCGGCACGAGACAAAAAGAGAAAGAAAATGCCGAAACCAATCAACGTAAGAGTAACTACAATGGATGCTGAG
CTGGAATTTGCCATTCAGCCCAATACAACTGGCAAACAACTTTTTGACCAGGTGGTGAAAACAGTTGGTTTGCGT
GAGGTCTGGTTTTTTGGGCTGCAGTATGTAGACAGCAAAGGTTATTCTACATGGCTTAAACTAAATAAAAAGGTA
ACACAGCAGGATGTTAAAAAAGAGAATCCTTTACAGTTCAAGTTTAGAGCTAAATTCTTTCCTGAAGATGTTTCT
GAGGAATTAATTCAAGAAATAACCCAGAGACTCTTCTTCTTGCAAGTTAAAGAAGCCATCTTAAATGATGAGATA
TATTGCCCGCCAGAAACTGCAGTTCTTTTGGCTTCCTATGCTGTCCAAGCCAAGTATGGAGATTACAATAAAGAG
ATTCATAAGCCAGGCTACCTGGCTAATGATAGACTCCTACCCCAGCGTGTATTGGAACAACACAAACTAACAAAA
GAACAGTGGGAAGAAAGAATACAGAACTGGCATGAAGAACATAGAGGAATGTTAAGGGAGGATTCTATGATGGAA
TACCTGAAGATTGCACAAGATCTAGAAATGTATGGAGTCAACTATTTTGAAATAAAAAATAAAAAAGGAACTGAA
TTGTGGCTAGGTGTTGATGCTTTGGGTCTGAATATTTATGAGCATGACGACAAGTTAACACCTAAAATTGGTTTT
CCCTGGAGTGAAATCAGAAATATTTCATTTAATGACAAAAAATTTGTTATAAAGCCAATCGACAAAAAGGCACCT
GATTTTGTGTTTTATGCACCTCGTCTGAGAATCAATAAGCGGATTTTGGCCTTATGTATGGGAAACCATGAACTA
TACATGCGAAGAAGGAAGCCTGATACTATTGAAGTACAACAGATGAAGGCTCAGGCTAGGGAGGAGAAACATCAG
AAGCAGTTGGAAAGGGCACAATTAGAGAATGAAAAGAAGAAAAGAGAAATAGCAGAAAAGGAAAAGGAAAGAATA
GAACGTGAAAAGGAAGAGCTAATGGAACGTCTAAAACAAATTGAAGAGCAGACAATTAAAGCTCAGAAAGAACTA
GAAGAACAGACTCGAAAAGCTCTAGAACTGGATCAAGAACGAAAACGAGCAAAAGAAGAAGCAGAACGACTTGAA
AAGGAGCGTCGAGCTGCTGAAGAGGCAAAGTCTGCCATAGCAAAACAAGCTGCCGACCAGATGAAGAATCAGGAG
CAGCTAGCAGCAGAACTTGCTGAATTCACTGCCAAGATTGCACTTCTAGAGGAAGCCAAGAAGAAAAAGGAAGAG
GAAGCAACTGAGTGGCAACACAAAGCTTTTGCAGCCCAGGAAGACTTGGAAAAGACCAAAGAAGAGTTAAAAACT
GTGATGTCTGCCCCCCCTCCACCTCCACCACCACCAGTCATTCCTCCAACAGAAAACGAACATGATGAACACGAT
GAGAATAATGCTGAAGCTAGTGCTGAATTATCAAATGAAGGGGTAATGAACCATAGAAGCGAGGAAGAACGTGTA
ACCGAAACACAGAAAAATGAGCGTGTTAAGAAGCAACTTCAGGCATTAAGTTCAGAATTAGCCCAAGCCAGAGAT
GAAACCAAGAAAACACAAAATGATGTTCTTCATGCTGAGAATGTTAAAGCAGGCCGTGATAAGTACAAGACTCTG
CGACAGATTCGACAAGGCAATACAAAGCAGCGTATCGATGAGTTTGAAGCAATGTGAGAGCTGTTATTTTGCATA
TATGTTCTTCATAAGCTGAACCACCAACAGAGAAAAGCAGGCCTTTGCAGATATGATGGAATGCATCCCACCTTG
CCAAAGCACTTACACCAGTTTGACTGTGCTAGCTAAAAGACAAATTTAAGGGGAGCTCTTCAACATTAAGGCAGT
ATGATATCATGCTTGGTTTTCTTTTTTCTTTTGGTCCAGGGAATGGAGAATGGTGTTCCATTGCCTCTTTTCACA
TTTTTTTTCTTTTTCTTTTTTTTTTTCTGTTGAAGATTAACACTAATTATCACGTCTGACAAATGTGTATGTGTGG
TTTCAGTTCTGTGTACATTTTAAAGGATAATGGTGAACATTTTAATGGGTTTCCCTTGCCCTTTCCATATTTAAC
CTATTTCCACATTCTCTCTCACTCACATTTTCTCAGTGTGCCCTTCTCTTATCTGCCATGTCCATAGCCATAATT
CCACCATCATACAGATCAGGCAGTGTTTAAAATGATGGTAGGTAGCACAGTGGACAGTCTTTGATCATCATGTAG
AATATGGCTATGAATCAGGAAAGAGATTAGAACATTTAATAATGTATGTACAGCTGGTGCTTAGTTTTTTTTTAA
TCTAAATTTAATTACCTTATTGGATATTTGATATTTGGTTATTTAATCACAGTCATCTTTAACAGCTTACACTGA
TTGGTGTTTTATCTCCTGTGATCCTTTGATGGCTTTTTTTGCCTACCATTTCACAGAGGTTTAGACAGCAGTAGT
AGCTCCCTAGGAGAGTTTACTGATGAAACAGCCTCTGCAAGATTTTAAAAGTTTTGTTCTTTTATAGACTGATTT
AGAAAAACAAATGATTAGTTAAAAAAAGAAAATATACATTTGTTGGTAACTAATGTTATTTTTTAAAACCTGGAC
CTTTCTGGAAGGGCAGCATATAAAAACATCAGTCCCGAGGAGGGGACAACAATACTACCTCACTACTACATCTGT
GATGACTGGTTGTTCAAACACAATGGAGTGTGTAAGGTATATGTTTTATAATTCATAACCATAGCCTCGATCATC
AAGAAATACTTTCGAAATTTCATTTTCCTTCAGAATATCTTAAGAGTGCTAAATTTTTAACTGCCTTTTTGTCGA
GTCAAACTGTGGGATTCTGATTTGTATTAAAATTGTAAGCTCCTCACTGGTATACTATCATCCTGGAGGGGTGTT
GTATGGCTGAGCAAGAGAGAGAGAGAATGAGAGAGAGACTGTGTGTGTGTGTGTGTGTGTGTACTCTGTGTGT
GTATGAGAGAGAGAGAGAAATGCTAACCTTGTAGCATGTGAAGAATGTCTGTACCTTGATACGATAGTTACATAA
TCAGTATATTTGGTTTCTAGATCACTGTGCTTATTTTGTTTCAATCTCTGACTAAAAATACTTAAATTTGGTTTG
TTAATTCTTATTTTAGAAATTATAATTTTAGTTTATATTAATTTCGGTTATAGCTTACTGAAGAAATCTTTCCAG
TTAGAAGGAGGTTCTAATATTCACATGTTCTAATACTTTGTTTATTGTAAAACAGCTAAATTTGGAGATACGTAA
AGCCTTGTTTTCTCTGTGTGGTTCAGCTACTTTCCATTTGGTATTACACAGTCAAATTTACATTTATCTATTAAA
ATTGCCATTTTATTAAACATTTTCATGCACAGTAGATTCAAGTTGTGTCTGAAAATATCTCTTGTGCTTTTTTGA
TTTTGCTGACTTTAAAAGGATTAATCTGGGCAGACATTATGTAAAAGAAAGGTTGCGTTTAATATATTTTTTGAA

FIGURE 2751B

CTTTGTAGGACAAAACATAGCTGGTTAACCTTGAAGTGACTGTTGTACCATGGTTGTGCACATGCTTCAGAATCC
TATGGAAGAGAATATTCCTACTTGCAGTACATCAAAGGAATGGATGGTGGACCCTACTATTCATGTTTTGAGACA
TAAATGTTCACTTTAAAGCAATTGCATAATAGATAAAAACCTGAACTTTCATTGGATTTTTGTTAATTTTCCTCA
TTTTGAATTATGTGCACTACCATAGCTACATCAGTTTGATACAGTATTGAAAAATTATCAGTTATATTTTGCTGT
TTATGATCTATTTGTAGATTAGGATTAAAATGGATTTAATCCATTTTTAAGGCTGTGTGAATTTTTCTAAACAAG
AACCATTTGCAATATGGATTTCTTAGAGATTAAACCAATTATAACTTATTAGCAGTCGCGAGCACATGTTCATAT
AGTCAATGTAAAAATACACTAATGAGTATTTGGTAAATCCCAGTAGGCTTTTACCATTAGCATAATTTTGTGTTG
TACAATTAAGTTACAATTACATCTCTAATTTTGGATAATATTCATTGGTTAACAATAAAGTGACAAAAGCTCATG
CAAAAAAAAAAAAAAAAAAA

FIGURE 2752

MPKPINVRVTTMDAELEFAIQPNTTGKQLFDQVVKTVGLREVWFFGLQYVDSKGYSTWLKLNKKVTQQDVKKENP
LQFKFRAKFFPEDVSEELIQEITQRLFFLQVKEAILNDEIYCPPETAVLLASYAVQAKYGDYNKEIHKPGYLAND
RLLPQRVLEQHKLTKEQWEERIQNWHEEHRGMLREDSMMEYLKIAQDLEMYGVNYFEIKNKKGTELWLGVDALGL
NIYEHDDKLTPKIGFPWSEIRNISFNDKKFVIKPIDKKAPDFVFYAPRLRINKRILALCMGNHELYMRRRKPDTI
EVQQMKAQAREEKHQKQLERAQLENEKKKREIAEKEKERIEREKEELMERLKQIEEQTIKAQKELEEQTRKALEL
DQERKRAKEEAERLEKERRAAEEAKSAIAKQAADQMKNQEQLAAELAEFTAKIALLEEAKKKKEEEATEWQHKAF
AAQEDLEKTKEELKTVMSAPPPPPPPPVIPPTENEHDEHDENNAEASAELSNEGVMNHRSEEERVTETQKNERVK
KQLQALSSELAQARDETKKTQNDVLHAENVKAGRDKYKTLRQIRQGNTKQRIDEFEAM

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FIGURE 2753

AGAAAATGAATGTTAGAAGGTGCCTGCCGAGGCGGGACAGAGTGTTTGCTCGCGCTGGAGAAGGCTCTGCTCAGC
CCTGAGAGTCCCTTCCTGCCCCACCGATACTGGCACTTTAAAAAGGAAGCTGACCGCACAGTGTCCAGACGAATT
GGCCCCCAGAAGATGGGGAGTTCTGTCCTGCCCTTCTGTGTCTGCGTGACCTCACCCAGCCTAGGAGGGAGGTGC
ATTCAGGGTAGATTTGCCTCTCATTCAAAGTTCTGGGGCTTTGGGCGGAAAACAGCCAGCTTTGGCGCTGTTGGG
GAGACTCCTCCAGACCAGGAACCCCAGAAGGAGACAGAGCCTGCCACATCCTCCCACGCCAGGCCCTGGGCCAGG
GTGATTGGACTGAGAATTTGGCCACAACCAAATTGATGCTGGCTGGAACCAGAGGCCAGAAAGCCTGGCCTTGTC
CCCATGTGGGAGCCCTGTCCTCAGCCCTCTTGTCCCCTTGAGCTCAGTGAATTCCCACCAGGTGCCCACAGCTCC
TGGACTTCAAATTCTATATATTGAGAGAGTTGGAGAGTATATCAGAGATATTTTTGGAAAGGAGTTGGTCTATGC
AATGTCAGTTTGGAATCTTCTTGAAAGTTTAATGTTTTTATTAGGAGATTTAAAGAAAATAAAGGTCTACAATAT
CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2754

MGSSVLPFCVCVTSPSLGGRCIQGRFASHSKFWGFGRKTASFGAVGETPPDQEPQKETEPATSSHARPWARVIGL
RIWPQPN

FIGURE 2755A

GTTGGAGCGGCGCTGCTCGGCCGCGGACACACGAGGGACGCGCCCGAGGAGCTGCAGGTGGCAGCCCAGGCGGTC
CGAACCCGTCGGCCGGCCGAGCCTGGAGTATTGCCTAAGTGTAATCTTGAACATGGGCGGTGCTGTGAGTGCTGG
TGAAGACAATGAAGAGCTGATAGATAATTTGAAAGAAGCACAGTATATCCGGACTGAGCTGGTAGAGCAGGCTTT
CAGAGCTATCGATCGTGCAGACTATTATCTTGAAGAATTTAAAGAAAATGCTTATAAAGACTTGGCATGGAAGCA
TGGAAACATTCACCTCTCAGCCCCGTGCATCTACTCGGAGGTGATGGAAGCCCTAGATCTGCAGCCTGGACTCTC
GTTTCTGAACCTGGGCAGTGGCACTGGGTATCTCAGCTCCATGGTGGGCCTCATTCTAGGTCCTTTTGGTGTGAA
CCATGGGGTGGAACTTCACTCAGATGTGATAGAGTATGCAAAGCAGAAACTGGACTTCTTCATCAGAACAAGTGA
TAGTTTTGACAAGTTTGACTTCTGTGAACCTTCCTTTGTTACTGGGAATTGCCTGGAGATTTCTCCGGATTGTTC
TCAGTATGATCGTGTATACTGTGGGGCTGGCGTGCAGAAAGAGCATGAAGAGTACATGAAGAATCTTCTCAAAGT
GGGAGGGATCCTTGTCATGCCACTGGAAGAGAAGTTGACTAAGATAACACGCACAGGTCCTTCAGCTTGGGAAAC
CAAAAAGATTCTTGCTGTTTCTTTTGCTCCTCTGATCCAGCCCTGCCATTCAGAGTCAGGAAAATCAAGACTTGT
CCAGTTACCACCAGTGGCAGTTCGCAGCCTCCAGGACTTGGCTCGCATCGCCATCCGGGGCACCATTAAAAAGAT
TATTCATCAGGAAACTGTGAGCAAAAACGGAAACGGACTAAAGAACACCCCCAGGTTTAAACGAAGGAGAGTTCG
CCGCCGTCGAATGGAAACGATTGTCTTTTTGGACAAAGAAGTCTTTGCCAGTCGGATTTCCAACCCCTCAGATGA
CAACAGCTGTGAAGACTTGGAAGAGGAACGGAGGGAAGAAGAAGAGAAGACCCCGCCGGAAACAAAGCCAGACCC
CCCAGTGAACTTCCTACGCCAGAAGGTCCTGAGCCTCCCTCTGCCAGATCCCCTGAAATACTACTTGCTTTATTA
CAGAGAAAAATAAGTCTCCTGTTTGAAAGGGGGAAATAGGAAGAGCAGATTGCTGAGTGTGAAGTTCGTGCTGCC
TGTGTGCTGTTGAAGGGTCACCTGGAGGCAGACGTTGTGGGGAAGGGAACTGCTGGGCTCATCCACACCATGGTT
TTCTTCTAGTTCCTGATTGACCTCTAAAATTCTATTCAGTTGTATGATTTGTTTACATAGTTCCACAAGACCTTC
ATTGCATAGAAGATTGTTTTCCCAAAGTGGAGAGAATCTTCATAGAGAAAAAGAGAAGGCTGTTTCTTTTTCGGC
TCTGACGAAACACTGAAGTCTGCGTAAGAGAGACTGTTTGATGACCGTCCCTCATGCAACATGCACGGTACTCAC
TAAAAATGAAAACTGAAGTGGAAACTAACCTGTGTTGCTTATAAAGTGTGAAAGCACAAGCTTATAAATGTATAA
AATCTTTTCTGGGTGTGACGCACCTGCGTCCAAGTTTGAATTTTTATGATATGTACCACTTAATTACTGGCACTG
AGTATCACTGAATTTCTTAGTTTTCTAGTGGGGAAACATTATTGAGAAGCCCTCCCTTATTTTAAGTAAGTTGAT
TAAATCTTATGTGAGTTGCCAGTTGTAATTTTTCAAAGGAAAAATTTTGATGGGGTGGAGGAATGAATTGCCAGA
TAATCTTTCTGGAATTCCGAGAGAATTCCAAAGAGGGTTTTTTTTTTTTTTTTTTAGGACATCTTTTGATACCT
TTAAAAGAACCACTGTCAAGTAATCCTTAAAAAAATATCTTGGAAAAGGAAACAGATTTTTTCCTGTGTGTAAGC
AATAAGTGAAGTTACATTTGCCCTAACCCTAGGGATGATTCTTTACCCAGTTTTAAAGCCCATCATGGTATTCTA
AGGTGTTGACACCCTCCATCCTCAGAGCAGGTCGAAAATATTAAATAGACTGGGGACTCTATGATGGGCAGCCTG
TGCTTTTTGACTTCAGTTTGCTATTTTTCTGTGATCACATTAGTACTGATTCATAGATTCTATCTTTTATAATTC
TGGAGAAAAAGATTTGTTAGTTTTGTAATTTTTTTGTAAGACCAAATGTATGTATTTTAGTAGCTCCATTGCATG
AGAAGAGTGTAACTCACACTGACTTGTGATATCAGCCTTCTCTGGGCCTTGTGTGTGGAGAGCTTTCTATCTTAC
CAAGTGGTAGGGCTAAAAGAACAACAGCCTTTTTGGTAGTCACATAGCAGAATGATCAGAGTTACATTGCTTATT
CCAAAACATTGGTTCTTTTTAAAACATTTTTTTTTACCCAAAGAAAAGAATAATAGAAATTACTAACAATAAATA
TAAATTCAGAGTGTTGATATAGGATTCAGTATCCAGAGTTTATTTTTAATCTTAATCCTCAGCTTCTTGGGAGTT
GCTGGGCTTCAGTGTCTCTGTGGTTTCACCAGCTTAGCTTGAGCTCTGGTTATTTTGGATCTTTTCTGCTTTTTT
TAAGTAACTGAGTCATTTTTACCACACAGTCCAGTTTGCATGTATAGCTAGGAAACATGTATTGCTCTAGATTGG
GCAGTTTAAGTCATTTTAAAGAAAGTTAGTTCATAGTTGTTGCCTTTTAACTCATAGTCAAGCTTCAGTCTTTCA
AAGAGAAATGTGTGATTTTCATTTACTTGCTGATATTTTGTAGTTTGGAGATCCTTGTGGGCATTATTCTAACTG
ATACGTAGACACTTACTTGGAAATTTTTGGACATTATATTAAATGAGTGCTATCTGTGAAATTGGTTATATTAGG
TGGCTTGACTAATGTTTTTTCTATAATTGTATATGGACTGCATTTTTAAAAAAACCGCATTTGCCTTTATGCTAG
ATTGTAAAAAATTATATTAGAATGCATAAGACATGTTTTTCCTTCATATGCTAGACTTTTCCTAGCATTTCGTAT
TTCTGTGTTGTCAGTGTGTGATTTTTAAACCGGAATTTGGTTTAAAAAAAATCTGGTGGTAATATATGTGAGAAA
TACTTTGGTGTTTACCTTATGAAAATAAAGGATTGTAAGTAAAGTTTCCTGCGCACCTTATACCAGAATTCAGTA
TAATACACTACTTTCTGTTTTCAAACAGATAAATCATAATATAGTCTGTATTATCTGTAAGATCTGTCTTGTAAA
CCACATTCTTGACAACTATTTGCTTTTGAGTAGTTTGTATTTTAATATGTGACTTTTGTCTTGAAAAGTAGTAAA
GCCATAGACTTGTGCAAAACAAGTTTCAAGTTTATAGATATTAAGTTTGTAATGTGAGCATCAAATGTGTATGTA
AAAATACTTTTTACCAGTCTGGAACTTGGGAAAATCCAGGGAATTTGAAACATAGATTTTAATGAGCTGGTAAAC

FIGURE 2755B

ACAAATCATGTCAATAAAGGTAGTCAGGATATTTTATCCTTAGCATTGCTTCTGC

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FIGURE 2756

MGGAVSAGEDNEELIDNLKEAQYIRTELVEQAFRAIDRADYYLEEFKENAYKDLAWKHGNIHLSAPCIYSEVMEA
LDLQPGLSFLNLGSGTGYLSSMVGLILGPFGVNHGVELHSDVIEYAKQKLDFFIRTSDSFDKFDFCEPSFVTGNC
LEISPDCSQYDRVYCGAGVQKEHEEYMKNLLKVGGILVMPLEEKLTKITRTGPSAWETKKILAVSFAPLIQPCHS
ESGKSRLVQLPPVAVRSLQDLARIAIRGTIKKIIHQETVSKNGNGLKNTPRFKRRRVRRRRMETIVFLDKEVFAS
RISNPSDDNSCEDLEEERREEEEKTPPETKPDPPVNFLRQKVLSLPLPDPLKYYLLYYREK

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FIGURE 2757

GTACTACCTTCGGTCTAGGCAGCGGAGGCAGCCGCGACCCCAGGAAACCGAGGAAATGAAGACGCGAAGGACTAC
CCGCCTTCAGCAGCAGCACTCAGAGCAGCCTCCGCTACAGCCGTCTCCTGTTACGACCAGGAGAGGGCTGCGGGA
CTCTCATTCCTCTGAAGAGGATGAAGCATCTTCCCAAACTGATTTAAGCCAAACGATCTCAAAGAAAACTGTCAG
GAGCATACAAGAGGCTCCAGTGAGTGAAGATCTTGTAATCAGGTTACGTCGACCCCCTCTAAGATGCCCAAGATA
TGAAGCCACCAGTGTCCAACAGAAGGTCAATTTCTCTGAAGAAGGAGAAACTGAAGAAGATGATCAAGACAGCTC
TCACAGCAGTGTCACTACTGTTAAGGCCAGATCCAGGGATTCTGATGAATCTGGAGATAAAACCACCAGATCATC
TAGTCAATATATAGAATCATTTTGGCAGTCATCACAAAGTCAAAACTTCACAGCTCATGATAAGCAACGTTCAGT
GCTAAGCTCAGGATATCAAAAAACTCCCCAGGAATGGGCCCCACAAACTGCAAGAATAAGGACCAGGATGCAAAA
TGACAGCATTCTGAAATCAGAGCTTGGAAACCAGTCACCATCAACCTCCAGCCGACAAGTGACTGGACAACCCCA
AAATGCATCTTTTGTCAAGAGGAACCGGTGGTGGCTACTTCCTCTGATAGCTGCTCTTGCCTCTGGGAGTTTTTG
GTTCTTTAGTACTCCTGAGGTAGAAACCACTGCTGTTCAAGAGTTCCAGAACCAGATGAATCAACTTAAGAATAA
GTACCAAGGTCAAGATGAGAAGCTGTGGAAAAGGAGCCAAACATTCCTGGAAAAACATCTTAATAGCTCCCATCC
TCGGTCTCAGCCTGCTATCTTACTGCTCACTGCTGCCCGAGATGCTGAAGAAGCACTTAGGTGTCTGAGTGAACA
AATTGCTGATGCCTATTCTTCTTTTCGTAGTGTCCGTGCCATCCGGATTGATGGGACAGATAAAGCTACTCAAGA
CAGTGATACTGTCAAACTAGAGGTAGACCAAGAACTGAGCAATGGATTTAAGAATGGCCAGAATGCAGCTGTGGT
ACACCGCTTTGAGTCATTTCCCGCAGGCTCTACTTTGATCTTCTACAAATATTGTGACCATGAAAACGCAGCCTT
CAAAGATGTAGCCTTAGTCCTGACTGTCTTATTGGAGGAAGAGACACTTGGAACAAGTCTAGGCCTAAAGGAAGT
TGAAGAAAAAGTAAGAGATTTTCTTAAAGTCAAGTTCACCAATTCTAACACACCCAACTCCTACAATCATATGGA
CCCAGACAAACTGAATGGCCTCTGGAGCCGTATTTCTCACTTAGTTCTGCCTGTGCAACCTGAAAATGCCCTGAA
AAGGGGCATCTGCTTATTAAGAAGTGAGAGAGAAGAAAAATCATGTCCCAAGTTCTGAGAATTGTTCACACTTTCT
AACCAGAGACAGAATTCAGAGCTCTTTTTGAAAGAACTAGTTTCTTTTTAAAGAAGTTAAGTGCTTACATAAACA
TGGAACATATAAATCATTCATTCAACCTAATTATCTGTGATATGAGAGAATCATTTCAGTTTCCATTGAGAGCTC
TGTTAAAGGTATCTTAGGAGTGCAGATTATATGCAGTTCCTTAGAGAATCTGTTTTGATTCTGGGCTGAGTTATT
ACAATTATGGTATGACCAGTGAGAGCGATTTGTGTCCTTTCTTATGAACCTTCCTGATTTTTTAACTTAGATTTC
TCACTAAGTTTCCTGAGTTATTAGTAAGATTGCTCCCTAAATGTAACCAGGGATTTTTCCATTATGTTCCCTTTT
ATACCATTTAGGTGTGAGTTCCTTAGCTTCTGCCTATAGGAACATAAGTAATGAAAGGTCATCTAGGTGTGTGTT
TGGAATTTTTTTCTTTTGTTTTTTGGAAAATGGAAAGAACAAGGCAAGGAAGGAAAATTAATGGGGAAGCTGAAG
GGAGGAAATGTTACAGTAATCCACTGAGATGTAGTTTAGTCAAACATAGGTATATGAACTGTTAATCTTGGTGGA
TTCCGTTGGGATTTGTTTTTTACATCTCCTTTTTCCTTCCTTGAAGAAAAATTCTTGGCTGTCCCAAGGATTCTT
CATGTATATTGCAAAATTTAATATATTTGTTCACTTGAGTCTTAAGAGTAGGTCAGGCCAAGGCAGGTGGATCAC
CTGAGGTCAGAAGTTCAAGACCAGCCTGGCCAACATGGTGAAACCCCCTCTCTACTAAAAATACAAAAATTAGCT
GGGCGTGGTGGTGCATGCCTGAAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATTGCTTGAACCCGGGAGGC
GGAGGTTGCAGTAAGCCGAGACCATGCTTATTGCCCTCCAGTCTGGGCAACAAAAATGAAACTCCGTCTCAAAAA
AAAAAAAGTAGGTCAATTCGTAACAGTTTATTTTGGACACACCCTGAAGCTTTTGTTTTGAATTAAGAAATGAGT
TTCAGGAATTGACAAACCATTTGTTAACCAGCTGTCCTGGGCTATTGAAGAAGATTTCATTTTCCGCGCATCCAC
TTGTTGCAGTCCAAGTCCTCTAGTGCAACGCCATAGCAAATATAAAGATTTACTATGCACGTGATACATTTTATG
GAGTGCCTCAAGCCAAGATAGTGAATTTATATGAAGGGTGTGAAATGTATTTCTTTACTACTATAGTAGTTTAGT
TATAACTTTGCATCTATAATTGAGCTTTCTCATCTGTCAAATGCTATGGTTTTCTTAAAATGTTACAATTCTAGA
TCTATCCACCTTGTTTTTTTATTGTCTACAAACCATTAAATGTAAATATTGTTTTTAGAGTCAGTCATTGGCTTT
GTCATTTACCCTTTGAGAGTTCCACAAGTGGTAGTAGAGTGGTTTAACGTCTTTCCTCTAGTACTACCAGTATTC
ATAAATGTATACCCCTTACTGTAATTTGTTCCTCTTAGAAGTCAGATCATCTGATTTATAGAGGATTATGAAAAC
CAGAGTTTTTGAAAAGGCTTATTTTATACATACGTATTATATAGAGAAACAAATGTTTTTATTAAATGTTTCATT
GACCCAAGTAATTTAAAAGTAATATGTTACCTATGTCTTTCAGGAAAAATAATTATAGCAGCTGATCTGTAAATG
ACTTTAAAAGCTATTTTAGTAATTTAAATAAATTTACTTTCTTGGTTTAT

FIGURE 2758

MKTRRTTRLQQQHSEQPPLQPSPVTTRRGLRDSHSSEEDEASSQTDLSQTISKKTVRSIQEAPVSEDLVIRLRRP
PLRCPRYEATSVQQKVNFSEEGETEEDDQDSSHSSVTTVKARSRDSDESGDKTTRSSSQYIESFWQSSQSQNFTA
HDKQRSVLSSGYQKTPQEWAPQTARIRTRMQNDSILKSELGNQSPSTSSRQVTGQPQNASFVKRNRWWLLPLIAA
LASGSFWFFSTPEVETTAVQEFQNQMNQLKNKYQGQDEKLWKRSQTFLEKHLNSSHPRSQPAILLLTAARDAEEA
LRCLSEQIADAYSSFRSVRAIRIDGTDKATQDSDTVKLEVDQELSNGFKNGQNAAVVHRFESFPAGSTLIFYKYC
DHENAAFKDVALVLTVLLEEETLGTSLGLKEVEEKVRDFLKVKFTNSNTPNSYNHMDPDKLNGLWSRISHLVLPV
QPENALKRGICL

FIGURE 2759

CGAGGGCAGCGCCGGTCGGGAGCGCAGCGCGGCGCAGCTCGGCGCGCACGGCGGGAGCGGCGCGCGAGTGGTCGG
GCCTGGCGGCTGGACGGGCGCCCCTCGCTGCCCCGCGCGCTCCCCGCCGCCCCCCATGAGCGCAGCCCCGCGCGG
CCCGGGTCCGTAGGCGGCGGGGCGCCCCCCATGCTGCTGCAGCCCGCGCCGTGCGCCCCGAGCGCGGGCTTCCCG
CGGCCCCTGGCCGCCCCCGGCGCCATGCACGGCTCGCAGAAGGACACCACGTTCACCAAGATCTTCGTGGGCGGC
CTGCCGTACCACACTACCGACGCCTCGCTCAGGAAGTACTTCGAGGGCTTCGGCGACATCGAGGAGGCCGTGGTC
ATCACCGACCGCCAGACGGGCAAGTCCCGCGGCTACGGCTTCGTGACCATGGCCGACCGGGCGGCAGCTGAGAGG
GCTTGCAAAGACCCGAACCCCATCATCGACGGCCGCAAGGCCAACGTGAACCTGGCATATCTGGGCGCCAAGCCG
CGGAGCCTCCAGACGGGCTTTGCCATTGGGGTGCAGCAGCTGCACCCCACCTTGATCCAGCGGACTTACGGGCTG
ACCCCGCACTACATCTACCCACCAGCCATCGTGCAGCCCAGCGTGGTGATCCCAGCCGCCCCTGTCCCGTCGCTG
TCCTCGCCCTACATTGAGTACACGCCGGCCAGCCCGGCCTACGCCCAGTACCCACCGGCCACCTATGACCAGTAC
CCATACGCCGCCTCGCCTGCCACGGCTGCCAGCTTCGTGGGCTACAGCTACCCTGCCGCCGTGCCCCAGGCCCTC
TCAGCCGCAGCACCCGCGGGCACCACTTTCGTGCAGTACCAGGCGCCGCAGCTGCAGCCTGACAGGATGCAGTGA

GGGGCGTTCCTGCCCCGAGGACTGTGGCATTGTCACCTTCACAGCAGACAGAGCTGCCAGGCCATGATGGGCTGG
CGACAGCCCGGCTGAGCTTTAGTGAGGTGCCACCAGCACCCGTGCCTCCGAAGACCGCTCGGGCATTCCGCCTGC
GCCCTGGGACAGCGGAGAGATGGCTTCTCTTTAATCTAGGTCCCATTGTGTCTTGAGGGAGGACTTTAAGAATGA
CTGAGAACTATTTAAAGACGCAATCCCAGGTTCCTTGCACACCATGGCAGCCTCTTCTTGCACCTTCTCCTGCCT
CTCCACACTCCAGGTTCCCTCAGGCTTGTGTCCCCACTGCTGCATCGTGGCGGGGTGTCACAGACCCTCTGCAGC
CCCTGGCTGCCCTGGACTGTGCAGAGATGCCTGACTCCAGGGAAACCTGAAAGCAAGAAGTTAATGGACTGTTTA
TTGTAACTTGATCCTCCCGAGCTGTGAGCGCAGTCTGAGGTGTGAGGACACGGCCTCCTGTTGGAGTCCCATTTT
CTCCATCAGGGCACGTGGGCGGCTTCCTCAAGCCCGGAGGAGCTCCCAGGCGCACAGGGGCCGCCGGTAACAGGG
GCCGCCGGCCAAAGGCCCCTTTCCAGTCATAGCACTGAAGTTGCAACTTTTTTCTTGTAATTGTTTTGCTACTAA
GATAATTTCAGAAGTTCAGTCTATTTTTTCAGCGGATACTGCCGCCACCAAGAATCCAAAACCTATTTTTGACTT
GGAGAGACTTGCTTTTGTTGGTTCCGCCCGTGGAGACGACGACAGTGTTTCTGTATAATAAAGTGTCTGCCGGCT
CGCGGGCCAGGATCCTCTCGGTGGGATGGGCACCACAGACAGGAGGCCCCTCAGGCCCGTGCGGGCCACTGTCTG
CTGCCGCCTGCCGGGGTGGCAGAGTGAGTTGTCTCAGGACCCCGTCACTGCGACGTTGACACTCTCTCCTTCCTT
CCTTCCCCAACTCCCCAAACACTGTGGAAGGGAAGAAGGAAGTGATCCACAGCATTCAGGCCACTTGGGGTCTAG
ACCATGGTGGTGCCAGCCTGGGGGGGGCAGTGGCCCTCAGCTCTGCCCGCTGGAGCGGTTGAGTGCAGAAGGGTG
CGCCTCTTCCCTCTACCCCCGCACCACCTGCTGTGTGCCAGCCTGAGACGGTTCCTGCCTGTCTTGGGGGTTGGT
GGAGGGTGGAGGCAGTTCTGCCAGCCGTGGCAGGGCTGCTATGGGGCATCCAGGGCTGTGGGGGTCTGGAGGAGG
GGACATGAGGTGAGAGGTATCCTGGCCGAGGGCGGGGGGCAGCGGGGGGTCTCCCTCCGGACCTACCTCAGGGAG
CTGAGCGTGCAGGCGCTCCAGGGCAGGCCTGGGACAGAGTCAAGGCTCAGAGAATAAAGGTAGCTAATCTCATCA
TAATATTTTTATTAGAATGTTCTGATGATAAAAATAAAACTTGTTTTCTTT

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FIGURE 2760

MHGSQKDTTFTKIFVGGLPYHTTDASLRKYFEGFGDIEEAVVITDRQTGKSRGYGFVTMADRAAAERACKDPNPI
IDGRKANVNLAYLGAKPRSLQTGFAIGVQQLHPTLIQRTYGLTPHYIYPPAIVQPSVVIPAAPVPSLSSPYIEYT
PASPAYAQYPPATYDQYPYAASPATAASFVGYSYPAAVPQALSAAAPAGTTFVQYQAPQLQPDRMQ

FIGURE 2761

GGGGAGACTGACGTGTGAGCTGCATCGCGGGAGGCGCATGGCGGGGATGGCGCTGGCGCGGGCCTGGAAGCAGAT
GTCCTGGTTCTACTACCAGTACCTGCTGGTCACGGCGCTCTACATGCTGGAGCCCTGGGAGCGGACGGTGTTCAA
TTCCATGCTGGTTTCCATTGTGGGGATGGCACTATACACAGGATACGTCTTCATGCCCCAGCACATCATGGCGAT
ATTGCACTACTTTGAAATCGTACAATGACCAAGATGCGACCAGGATCAGAGGTTCCTTGGGGAAGACCCACCCTA
CGAAGTTGGAATGAGACCATCAGATGTGATAAGAAACTCTTCTAGATGTCAACATAACCAACCTTATAAAGACTA
AAATTCATGAGTAGAACAGGAAAATCATCCTGACTCATGTGTTGTGTTCTTTATTTTTAATTTTCAAAGAGGCTC
TTGTATAGCAGTTTTTGTCTATTTTAACATTGTAGTCATTTGTACTTTGATATCAGTATTTTCTTAACCTTTGTG
ACTGTTTCAATATTACCCCCGTGAAAGCTTTTCTTAATGTAACTTTGAGTACATTTTAATTGCCTTCTATTTTTA
AAACTCAAAATCATTAGTTGGGCTTTACTGTTCTTGCTATTGTATGGCATATACATCTGCCTGGATATATTTCTA
CTCTTGACCAAAGTTTTGTAAAGAACAATATAAGATTTCGGGTAGGGGTATGGGGAGGGAAGATATTTTATTGAG
AACTACTTAACAAAAGATTTATCTGTAAGCTTGAACTCAGGAGTACAGTTTTAGCTATCTAGACTCTAACAGCTT
TTGCTTTAAAATTATTAAAGTGTTTCTTAATGAAAAAGAAAAGATCTTGCTAAAGTTAAAATAAGGAACATTTCA
CCTTTTAAATATTTAATTCTTATGTGGACTTATTTCCAGAAAACTTTGGTGATAATTCTTGAGACAAAAGGTGGT
TAAGTAGCATTATTATGTAATGCTTATATACCATAGAGTTTTTAATAGAAGAGAAATCCATTTCCTCCGAGGGTC
ACTATTAACAATGTACTTCCTTAAATTTAGTTTAATGATTGTAATGGGTGCTGCATTTGCACATTGCATTAAGTT
ATGATGAGACGAATTGTTGTTAAAAATTATAGCAAAAAGAAATGTAAACTTGGTTAAAATCCTTTCACTCTTTGT
ATTGTTTTTTTTAAGGTTTTTATTCCTTAAATGTAAAATGACTACCTAATTTTTTGATGTAAATACATTAAATTC
AAAGAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2762

MALARAWKQMSWFYYQYLLVTALYMLEPWERTVFNSMLVSIVGMALYTGYVFMPQHIMAILHYFEIVQ

FIGURE 2763A

CCGGGCCGCCTCGCTCGCTCCCAGCTCTGTCAGTGGCCCGCGGGGCCCGATCGCTGCGCCCGCGGCCAGGGCCGA
GGCAGGCCTGACCCGGGGCCGGGCAGCCCGCGCGACTTTCGGAACATGGCAACCCGTGTGTGTCTCATCCCAGAA
AGAGAAGACTTTAACCACTGTGATGCCTGAGAATCCAGTGTGACGTTTCTCCAGATACTTCATGCTGTTCACCTG
TGTCCTCGCCGCACCACTGCCGCACACGACTCCTGAACC**ATG**GGGGAAAACGAGGATGAGAAGCAGGCCCAGGCG
GGGCAGGTTTTTGAGAACTTTGTCCAGGCATCCACGTGCAAAGGTACCCTCCAGGCCTTCAACATTCTCACACGA
CACCTGGACCTAGACCCTCTGGACCACAGAAACTTTTATTCCAAGCTCAAGTCCAAGGTGACCACCTGGAAAGCC
AAAGCCCTGTGGTACAAATTGGATAAGCGTGGTTCCCACAAAGAGTATAAGCGAGGGAAGTCGTGCACGAACACC
AAGTGTCTCATAGTTGGGGGAGGACCCTGTGGCTTGCGCACTGCCATTGAACTTGCCTACCTGGGAGCCAAAGTG
GTCGTGGTGGAGAAGAGGGACTCCTTCTCCCGGAACAACGTGCTACACCTCTGGCCTTTCACCATCCATGACCTT
CGGGGCCTGGGAGCCAAGAAGTTCTATGGGAAGTTCTGTGCTGGCTCCATCGACCATATCAGTATTCGCCAACTA
CAGCTCATCCTATTCAAGGTGGCCCTGATGCTGGGAGTTGAAATCCATGTGAATGTGGAGTTCGTGAAGGTTCTA
GAGCCTCCTGAAGATCAAGAAAATCAAAAAATTGGCTGGCGGGCAGAATTTCTCCCTACAGACCATTCTCTGTCG
GAGTTTGAGTTTGACGTCATCATTGGTGCCGATGGCCGCAGGAACACCCTGGAAGGGTTCAGAAGAAAAGAATTC
CGTGGGAAGCTGGCGATTGCCATCACCGCCAACTTCATAAACAGAAACAGCACAGCGGAAGCCAAGGTGGAAGAG
ATTAGTGGTGTGGCTTTCATCTTCAATCAGAAATTTTTTCAGGACCTTAAAGAAGAAACAGGCATAGATCTTGAG
AACATTGTTTACTACAAGGACTGCACCCACTATTTTGTAATGACAGCCAAGAAGCAGAGCCTGCTCGACAAAGGT
GTCATCATTAACGACTACATCGACACAGAGATGCTGCTGTGTGCGGAGAACGTGAACCAAGACAACCTGCTATCC
TATGCCCGGGAAGCTGCAGACTTTGCCACCAACTACCAGCTGCCATCCTTAGACTTTGCCATGAACCACTATGGG
CAGCCTGATGTGGCCATGTTTGACTTTACCTGCATGTATGCCTCAGAGAACGCGGCCCTGGTGCGGGAGCGGCAG
GCGCACCAGCTGCTCGTGGCCCTTGTGGGTGACAGCTTGCTTGAGCCATTTTGGCCCATGGGTACAGGCTGTGCC
CGTGGCTTCCTGGCAGCCTTTGACACGGCATGGATGGTGAAGAGCTGGAACCAGGGCACCCCTCCCCTGGAGCTG
CTGGCTGAAAGGGAAAGTCTCTACCGGCTGTTACCTCAGACAACCCCGGAGAACATCAACAAGAACTTTGAGCAG
TACACGTTGGACCCAGGGACACGGTACCCAAACCTCAACTCACACTGTGTCAGGCCCCATCAGGTGAAGCATTTG
TATATCACTAAGGAGCTGGAGCACTACCCTCTCGAGAGACTGGGCTCGGTGAGGAGATCTGTCAACCTCTCCAGG
AAGGAGTCAGATATCCGGCCCAGCAAGCTCCTGACCTGGTGCCAGCAGCAGACAGAGGGCTACCAGCATGTCAAC
GTCACCGACCTGACCACATCCTGGCGCAGTGGGTTGGCCCTGTGTGCCATCATCCACCGCTTCCGGCCTGAGCTC
ATCAACTTTGACTCTTTGAATGAAGATGATGCTGTGGAGAACAACCAGCTCGCATTTGATGTGGCCGAGCGAGAG
TTTGGGATCCCTCCAGTGACCACGGGCAAAGAGATGGCATCTGCCCAGGAGCCTGACAAGCTCAGCATGGTCATG
TACCTCTCCAAGTTCTACGAGCTCTTCCGGGGCACCCCACTGAGGCCCGTGGATTCTTGGCGCAAAAACTATGGA
GAAAATGCTGACCTCAGCTTGGCCAAATCATCCATTTCTAATAACTATCTCAACCTCACATTTCCAAGGAAGAGG
ACTCCACGGGTGGATGGTCAAACCGGAGAGAATGACATGAACAAACGGAGACGGAAGGGCTTCACCAACCTGGAC
GAGCCTTCAAACTTTTCCAGCCGTAGCTTGGGCTCCAATCAAGAGTGTGGGAGCAGTAAGGAAGGTGGAAATCAG
AACAAAGTCAAGTCCATGGCGAATCAGCTGCTGGCCAAGTTTGAGGAGAGCACTCGGAACCCCTCACTCATGAAG
CAGGAACGCCGTGTCTCAGGGATAGGTAAGCCGGTCCTGTGCTCTTCCTCCGGCCCTCCTGTTCACTCTTGCTGC
CCCAAGCCGGAGGAGGCCACACCCAGCCCATCACCTCCTCTGAAAAGGCAGTTCCCCTCTGTGGTCGTGACGGGG
CACGTGCTCAGAGAGCTCAAGCAAGTGTCTGCTGGCAGTGAGTGCCTGAGCAGACCTTGGAGAGCCAGAGCCAAG
TCTGACCTACAGCTGGGTGGGACAGAAAATTTCGCTACCCTGCCTTCTACCCGCCCGAGGGCGCAGGCTCTTTCC
GGGGTGCTGTGGCGGCTGCAGCAAGTGGAGGAAAAGATTCTCCAGAAGAGGGCTCAGAACTTGGCCAACAGGGAA
TTTCACACAAAGAACATTAAGGAGAAGGCGGCTCACCTTGCCTCCATGTTTGGACACGGGGATTTCCCGCAGAAT
AAACTGCTCTCTAAAGGCCTGTCTCATACTCATCCTCCATCTCCTCCCTCTCGCCTTCCGTCTCCTGATCCAGCT
GCTTCTTCCTCTCCATCAACTGTTGACTCTGCTTCTCCTGCCAGAAAGGAAAAGAAGTCACCTTCAGGGTTCCAT
TTTCATCCCAGCCATTTGAGAACAGTGCATCCTCAGCTGACGGTAGGGAAAGTGTCCAGCGGAATAGGGGCTGCA
GCTGAAGTCCTGGTCAATCTGTACATGAATGATCACAGACCTAAGGCCCAGGCCACCTCTCCAGACCTGGAATCT
ATGCGAAAGTCATTTCCCCTTAACCTGGGAGGCAGCGACACGTGTTACTTCTGTAAGAAACGTGTGTACGTGATG
GAACGGCTGAGCGCCGAGGGCCACTTCTTCCACCGGGAGTGTTTCCGCTGCAGCATCTGTGCCACCACCTTGCGC
CTGGCCGCCTACACCTTTGACTGCGATGAAGGCAAATTTTACTGCAAGCCTCACTTCATTCACTGTAAAACCAAT
AGCAAACAACGGAAGAGACGGGCAGAGTTGAAGCAACAAAGAGAGGAGGAGGCAACATGGCAAGAGCAGGAAGCC
CCTCGGAGAGACACTCCCACCGAAAGTTCTTGCGCAGTGGCCGCCATTGGCACCCTGGAAGGCAGCCCCCCAGTT

FIGURE 2763B

CATTTCAGCCTTCCAGTGCTACACCCACTTCTTGGCTGACACACTTCTGCTCTAAGAGTCTCCCTCCCTTTATAG
AATGTCAACCAAAGAGTGCCCTCCTCCCCTCTCAGCCTCCTCTTTAGCTAGCCTCCCCATCTCATCACAACGCAT
GTCTGTGACCTTTGGTAATCATTTACAGTGCCACACGGAACCCTGTATTTTGCACACAGCAAAACAAACAATGTT
TAGCTTTATTTATGGTATTTGATGCTGTAAATGGAAATAAATATTGTTCTTTATAAAGCT

FIGURE 2764

MGENEDEKQAQAGQVFENFVQASTCKGTLQAFNILTRHLDLDPLDHRNFYSKLKSKVTTWKAKALWYKLDKRGSH
KEYKRGKSCTNTKCLIVGGGPCGLRTAIELAYLGAKVVVVEKRDSFSRNNVLHLWPFTIHDLRGLGAKKFYGKFC
AGSIDHISIRQLQLILFKVALMLGVEIHVNVEFVKVLEPPEDQENQKIGWRAEFLPTDHSLSEFEFDVIIGADGR
RNTLEGFRRKEFRGKLAIAITANFINRNSTAEAKVEEISGVAFIFNQKFFQDLKEETGIDLENIVYYKDCTHYFV
MTAKKQSLLDKGVIINDYIDTEMLLCAENVNQDNLLSYAREAADFATNYQLPSLDFAMNHYGQPDVAMFDFTCMY
ASENAALVRERQAHQLLVALVGDSLLEPFWPMGTGCARGFLAAFDTAWMVKSWNQGTPPLELLAERESLYRLLPQ
TTPENINKNFEQYTLDPGTRYPNLNSHCVRPHQVKHLYITKELEHYPLERLGSVRRSVNLSRKESDIRPSKLLTW
CQQQTEGYQHVNVTDLTTSWRSGLALCAIIHRFRPELINFDSLNEDDAVENNQLAFDVAEREFGIPPVTTGKEMA
SAQEPDKLSMVMYLSKFYELFRGTPLRPVDSWRKNYGENADLSLAKSSISNNYLNLTFPRKRTPRVDGQTGENDM
NKRRRKGFTNLDEPSNFSSRSLGSNQECGSSKEGGNQNKVKSMANQLLAKFEESTRNPSLMKQERRVSGIGKPVL
CSSSGPPVHSCCPKPEEATPSPSPPLKRQFPSVVVTGHVLRELKQVSAGSECLSRPWRARAKSDLQLGGTENFAT
LPSTRPRAQALSGVLWRLQQVEEKILQKRAQNLANREFHTKNIKEKAAHLASMFGHGDFPQNKLLSKGLSHTHPP
SPPSRLPSPDPAASSSPSTVDSASPARKEKKSPSGFHFHPSHLRTVHPQLTVGKVSSGIGAAAEVLVNLYMNDHR
PKAQATSPDLESMRKSFPLNLGGSDTCYFCKKRVYVMERLSAEGHFFHRECFRCSICATTLRLAAYTFDCDEGKF
YCKPHFIHCKTNSKQRKRRAELKQQREEEATWQEQEAPRRDTPTESSCAVAAIGTLEGSPPVHFSLPVLHPLLG

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FIGURE 2765

GAGCCCAGCCGAGCGTCCGCCGCTGCCCGTGCGCCTCTGCGCTCCGCGCC**ATG**GCCGGCCTCAACTCCCTGGAGG
CGGTGAAACGCAAGATCCAGGCCCTGCAGCAGCAGGCGGACGAGGCGGAAGACCGCGCGCAGGGCCTGCAGCGGG
AGCTGGACGGCGAGCGCGAGCGGCGCGAGAAAGCTGAAGGTGATGTGGCCGCCCTCAACCGACGCATCCAGCTCG
TTGAGGAGGAGTTGGACAGGGCTCAGGAACGACTGGCCACGGCCCTGCAGAAGCTGGAGGAGGCAGAAAAAGCTG
CAGATGAGAGTGAGAGAGGAATGAAGGTGATAGAAAACCGGGCCATGAAGGATGAGGAGAAGATGGAGATTCAGG
AGATGCAGCTCAAAGAGGCCAAGCACATTGCGGAAGAGGCTGACCGCAAATACGAGGAGGTAGCTCGTAAGCTGG
TCATCCTGGAGGGTGAGCTGGAGAGGGCAGAGGAGCGTGCGGAGGTGTCTGAACTAAAATGTGGTGACCTGGAAG
AAGAACTCAAGAATGTTACTAACAATCTGAAATCTCTGGAGGCTGCATCTGAAAAGTATTCTGAAAAGGAGGACA
AATATGAAGAAGAAATTAAACTTCTGTCTGACAAACTGAAAGAGGCTGAGACCCGTGCTGAATTTGCAGAGAGAA
CGGTTGCAAAACTGGAAAAGACAATTGATGACCTGGAAGAGAAACTTGCCCAGGCCAAAGAAGAGAACGTGGGCT
TACATCAGACACTGGATCAGACACTAAACGAACTTAACTGTATA**TAA**GCAAAACAGAAGAGTCTTGTTCCAACAG
AAACTCTGGAGCTCCGTGGGTCTTTCTCTTCTCTTGTAAGAAGTTCCTTTTGTTATTGCCATCTTCGCTTTGCTG
GAAATGTCAAGCAAATTATGAATACATGACCAAATATTTTGTATCGGAGAAGCTTTGAGCACCAGTTAAATCTCA
TTCCTTCCCTTTTTTTTTCAAATGGCACCAGCTTTTTCAGCTCTCTTATTTTTTCCTTAAGTAGCATTTATTCCT
AAGGTAGGCAGGGTATTTCCTAGTAAGCATACTTTCTTAAGACGGAGGCCATTTGGTTCCTGGGAGAATAGGCAG
CCCCACACTTTGAAGAATACAGACCCCAGTATCTAGTCGTGGATATAATTAAAACGCTGAAGACCATAACCTTTT
GGGTCAACTGTTGGTCAAACTATAGGAGAGACCAGGGACCATCACATGGGTAGGGATTTTCCATCCAGAGCCAAT
AAAAGGACTGGTGGGGGCCGGGGGTGGCTATTGTGGGAAGTCATAACCCACAGATAGATCAACCTAAGAATCCTG
GCCCTTCTCCACTCTCCACCATGCAGGACAAACATCTTCTCAAGCAGTCAACGTAGAATGCTTGGGAAATAGTCA
TAATTACCCACATATAGTAATTAATAGATGGTAATTAATTGATCCTTGATGTGATGTTCTTTTGCATATTTCCTT
CATTCTAAAGTTGTTCCCTGGCCGGGAGCGTTTGCTTTCGCCTGTAATCCCAACACTTTGGGAGGCCAGGACAGA
TCACTTGAGGTCAGGAGTTCGAGACCAGCCCAGCCAACATGGCGAAACCATGTCTCTACTAAAAATACAAAAATT
ATGGTGACGCCTGCCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCAGGAGGATCGCTTGAACCCAGGAAGTGGAG
ACTGCAGTGAGCCGATATCGCACCACAGCGCTCCAGCCTGGTCGACAGAGTGAGACTCCATCTCAAGAAAAAATA
AAAATAAAGTTGTTCTCTGAAGAGCAAATGTCTCATTCCAGTAATGACCCACTCAGCAGGAATATGGTGGAGTTC
AGTCCAATTCAGGTCAGCCATATCCAAAAGACCACAAGTCATTACTAAGTTGAGCAAAAGAGTTTTTATCTATTA
GCAGAAAGGGCCTCTCTGGCAGCAGAGATTAAAAACTGGCCCAACTTCATTTCCATACTTCAGGGAACAGCAAAT
TGAGGATTTACTTATCTAGGACTT

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FIGURE 2766

MAGLNSLEAVKRKIQALQQQADEAEDRAQGLQRELDGERERREKAEGDVAALNRRIQLVEEELDRAQERLATALQ
KLEEAEKAADESERGMKVIENRAMKDEEKMEIQEMQLKEAKHIAEEADRKYEEVARKLVILEGELERAEERAEVS
ELKCGDLEEELKNVTNNLKSLEAASEKYSEKEDKYEEEIKLLSDKLKEAETRAEFAERTVAKLEKTIDDLEEKLA
QAKEENVGLHQTLDQTLNELNCI

FIGURE 2767

GGCACGAGGATTCAACGCTGGTCTCAGACTAAGACTGCTGTCCCTCCGTTGAGTGAAGGAGATGGGTATTCTAGT
GAGAATACATCGCGTGCTCATACACCACTCAACACACCTGATCCTTCCACCAAGCTGAGCACAGAAGCTGACACA
GACACTCCCAAGAAACTAATGTTTCGCAGACTGAAAATTATAAGTGAAAATAGCATGGACAGTGCAATCTCTGAT
GCAACCAGTGAGCTAGAAGGCAAGGATGGCAAAGAGGATCTTGATCAATTAGAAAATGTCCCTGTAGAGGAAGAG
GAAGAATTGCAGTCACAACAGCTACTCCCACAACAGCTGCCTGAATGCAAAGTTGATAGTGAAACCAACATAGAA
GCTAGTAAGCTACCTACATCTGAACCAGAAGCTGACGCTGAAATAGAGCCCAAAGAGAGCAACGGCACAAAACTA
GAAGAACCTATTAATGAAGAAACACCATCCCAAGATGAAGAGGAGGGTGTGTCTGATGTGGAGAGTGAAAGGAGC
CAAGAACAGCCAGATAAAACAGTGGATATAAGTGATTTGGCCACCAAACTCCTGGACAGTTGGAAAGACCTAAAG
GAGGTATATCGAATTCCAAAGAAAAGTCAAACTGAAAAGGAAAACACAACAACTGAACGAGGAAGGGATGCTGTT
GGCTTCAGAGATCAAACACCTGCCCCGAAGACTCCTAATAGGTCAAGAGAGAGAGTGTGTCTGATGTGGAGAGTG
AAAGGAGCCAAGAACAGCCAGATAAAACAGTGGATATAAGTGATTTGGCCACCAAACTCCTGGACAGTTGGAAAG
ACCTAAAGGAGGTATATCGAATTCCAAAGAAAAGTCAAACTGAAAAGGAAAACACAACAACTGAACGAGGAAGGG
ATGCTGTTGGCTTCAGAGATCAAACACCTGCCCCGAAGACTCCTAATAGGTCAAGAGAGAGAGACCCAGACAAGC
AAACTCAAAATAAAGAGAAAAGGAAACGAAGAAGCTCCCTCTCACCACCCTCTTCTGCCTATGAGCGGGGAACAA
AAAGGCCAGATGACAGATATGATACACCAACTTCTAAAAAGAAAGTACGAATTAAAGACCGCAATAAACTTTCTA
CAGAGGAACGCCGGAAGTTGTTTGAGCAAGAGGTGGCTCAACGGGAGGCTCAGAAACAACAGCAACAG**ATG**CAGA
ACCTGGGAATGACATCACCACTGCCCTATGACTCTCTTGGTTATAATGCCCCGCATCATCCCTTTGCTGGTTACC
CACCAGGTTATCCCATGCAGGCCTATGTGGATCCCAGCAACCCTAATGCTGGAAAGGTGCTCCTGCCCACACCCA
GCATGGACCCAGTGTGTTCTCCTGCTCCTTATGATCATGCTCAGCCCTTGGTGGGACATTCTACAGAACCCCTTT
CTGCCCCTCCACCAGTACCAGTGGTGCCACATGTGGCAGCTCCTGTGGAAGTTTCCAGTTCCCAGTATGTGGCCC
AGAGTGATGGTGTAGTACACCAAGACTCCAGCGTTGCTGTCTTGCCAGTGCCGGCCCCCGGCCCAGTTCAGGGAC
AGAATTATAGTGTTTGGGATTCAAACCAACAGTCTGTCAGTGTACAGCAGCAGTACTCTCCTGCACAGTCTCAAG
CAACCATATATTATCAAGGACAGACATGTCCAACAGTCTATGGTGTGACATCACCTTATTCACAGACAACTCCAC
CAATTGTACAGAGTTATGCCCAGCCAAGTCTTCAGTATATCCAGGGGCAACAGATTTTCACAGCTCATCCACAAG
GAGTGGTGGTACAGCCAGCCGCAGCAGTGACTACAATAGTTGCACCAGGGCAGCCTCAGCCCTTGCAGCCATCTG
AAATGGTTGTGACAAATAATCTCTTGGATCTGCCGCCCCCCTCTCCTCCCAAACCAAAAACCATTGTCTTACCTC
CCAACTGGAAGACAGCTCGAGATCCAGAAGGGAAGATTTATTACTACCATGTGATCACAAGGCAGACTCAGTGGG
ATCCTCCTACTTGGGAAAGCCCAGGAGATGATGCCAGCCTTGAGCATGAAGCTGAGATGGACCTGGGAACTCCAA
CATATGATGAAAACCCCATGAAGGCCTCGAAAAAGCCCAAGACAGCAGAAGCAGACACCTCCAGTGAACTAGCAA
AGAAAAGCAAAGAAGTATTCAGAAAAGAGATGTCCCAGTTCATCGTCCAGTGCCTGAACCCTTACCGGAAACCTG
ACTGCAAAGTGGGAAGAATTACCACAACTGAAGACTTTAAACATCTGGCTCGCAAGCTGACTCACGGTGTTATGA
ATAAGGAGCTGAAGTACTGTAAGAATCCTGAGGACCTGGAGTGCAATGAGAATGTGAAACACAAAACCAAGGAGT
ACATTAAGAAGTACATGCAGAAGTTTGGGGCTGTTTACAAACCCAAAGAGGACACTGAATTAGAG**TGA**CTGTTGG
GCCAGGGTGGGAGGATGGGTGGTCAGGTAAGACAGACTCTAGGGAGAGGAAATCCTGTGGGCCTTTCTGTCCCAC
CCCTGTCAGCACTGTGCTACTGATGATACATCACCCTGGGGAATTCAACCCTGCAGATGTCAACTGAAGGCCACA
AAAATGAACTCCATCTACAAGTGATTACCTAGTTGTGAGCTGTTGGCATGTGGTTAGAAGCCATCAGAGGTGCAA
GGGCTTAGAAAAGACCCTGGCCAGACCTGACTCCACTCTTAAACCTGGGTCTTCTCCTTGGCGGTGCTGTCAGCG
CACAGACCCATGCGCATCCCCACCCACAACCCTTTACCCTGATGATCTGTATTATATTTTAATGTATATGTGAAT
ATATTGAAAATAATTTGTTTTTTCCTGGTTTTTGTTTGGTTTTCGTTTTGCTTTTAGCCTCTACATGCTAGGATC
ACAGGAAGACTTTGTAAGGACAGTTTAAGTTCTCCTGCAAGGTTTAATTTGTTATCATGTAAATATTCCAAAGCA
GGCTGCCTTGTGGTTTTGGCCAGCCTTGTGCTATGTTGATAAGATTGATTTACTGCTTAAAATCACTTTACTTTA
TCCAATTTTTACTGAACTTTTTATGTAAAAAAATAAAATCAATTAAAGAAAAAAAAAAAAAAAAAA

FIGURE 2768

MQNLGMTSPLPYDSLGYNAPHHPFAGYPPGYPMQAYVDPSNPNAGKVLLPTPSMDPVCSPAPYDHAQPLVGHSTE
PLSAPPPVPVVPHVAAPVEVSSSQYVAQSDGVVHQDSSVAVLPVPAPGPVQGQNYSVWDSNQQSVSVQQQYSPAQ
SQATIYYQGQTCPTVYGVTSPYSQTTPPIVQSYAQPSLQYIQGQQIFTAHPQGVVVQPAAAVTTIVAPGQPQPLQ
PSEMVVTNNLLDLPPPSPPKPKTIVLPPNWKTARDPEGKIYYYHVITRQTQWDPPTWESPGDDASLEHEAEMDLG
TPTYDENPMKASKKPKTAEADTSSELAKKSKEVFRKEMSQFIVQCLNPYRKPDCKVGRITTTEDFKHLARKLTHG
VMNKELKYCKNPEDLECNENVKHKTKEYIKKYMQKFGAVYKPKEDTELE

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FIGURE 2769

AAAAACAGGTGGAATCCGGGCTGGAGCCGGAGCTCCGGCGGCGCGGGTGGCGGCACGTCCCTCCAGACAGTACCA
CAGGCACCTGGAGTACCGGCATCGGTCGCTGTGGCCCCCGAGTGTCCGTCAGAGCCTAGGGGAGCCTGCCCTCCC
GCGCCTCGTCGGGGCCCGGCCAGGCACCTTGGCCGCCGGCGCACGGACGCGGGCACGAGCACTAGATCACGGCTG
CTGGACCTCGGCACGTTGACAAGATTTCTCTGGGGTACCGCGGAGGATTACTTTGAATTTCGGTGGTCGCCTGTG
GTCTGGCATATTTAGAACTTAAGTCTATTATTTCGGGCACCATGACTTTGAGGCTTTTAGAAGACTGGTGCAGGG
GGATGGACATGAACCCTCGGAAAGCGCTATTGATTGCCGGCATCTCCCAGAGCTGCAGTGTGGCAGAAATCGAGG
AGGCTCTGCAGGCTGGTTTAGCTCCCTTGGGGGAGTACAGACTGCTTGGAAGGATGTTCAGGAGGGATGAGAACA
GGAAAGTAGCCTTAGTAGGGCTTACTGCGGAGACTAGTCACGCCCTGGTCCCTAAGGAGATACCGGGAAAAGGGG
GTATCTGGAGAGTGATCTTTAAGCCCCCTGACCCAGATAATACATTTTTTAAGCAGATTAAATGAATTTTTAGCG
GGAGAGGGC**ATG**ACAGTGGGTGAGTTGAGCAGAGCTCTTGGACATGAAAATGGCTCCTTAGACCCAGAGCAGGGC
ATGATCCCGGAAATGTGGGCCCCTATGTTGGCACAGGCATTAGAGGCTCTTCAGCCTGCCCTGCAATGCTTGAAG
TATAAAAAGCTGAGAGTGTTCTCGGGCAGGGAGTCTCCAGAACCAGGAGAAGAAGAATTTGGACGCTGGATGTTT
CATACTACTCAGATGATAAAGGCGTGGCAGGTGCCAGATGTAGAGAAGAGAAGGCGATTGCTAGAGAGCCTTCGA
GGCCCAGCACTTGATGTTATTCGTGTCCTCAAGATAAACAATCCTTTAATTACTGTCGATGAATGTCTGCAGGCT
CTTGAGGAGGTATTTGGGGTTGCAGATAATCCTAGGGAGTTGCAGGTCAAATATCTAACCACTCACCAGAAGGAT
GAGGAAAAGTTGTCGGCTTATGTACTAAGGCTGGAGCCTTTGTTACAGAAGCTGGTACAGAGAGGAGCAATTGAG
AGAGATGCTGTGAATCAGGCCCGCCTAGACCAAGTCATTGCTGGGGCAGTCCACAAAACAATTCGCAGAGAGCTT
AATCTGCCAGAGGATGGCCCAGCCCCTGGTTTCTTGCAGTTATTGGTACTAATAAAGGATTATGAGGCAGCTGAG
GAGGAGGAGGCCCTTCTCCAGGCAATATTGGAAGGTAATTTCACC**TGA**GTCTCAGGGAACCACGAAGGGATATGG
CAACGAGTAGAGCATGAAGGTAGAACAGTCTATATACTCTTGTGACACATACAATCCCTACCTTGTGCTGCCAAG
TAACTCATTTTTGTGCAATTCTCAGTATAAGCCCTTTGTCGTTTCTATGCCTATTTAAAGTCTCCTAAAGGTGTA
ATTGACTAGGAAGGATGTAGTTCTACACTGCCATTTACCTATTTAAATTCATCCTTGTGAATATCTTTGTTGTTG
TTGTTGAGACAGAGTCTCGCTCTGTCACCCAGGCTGGAGTGCAGTGGCGTGATCTTGGCTCACTGCATCCTCCGC
CTTCCAGGTTTAAGCTATTCTCCTGCCTCAGTTGCCCGAGTAGCTGGGACTACAGGCATGTGCCACCACGCCCAG
CTAAGTTTTGCATTATCAGTAGAGACGGGGTTTCACCATGTTGGCCAGGCTAGTTTCGAACTCCTGACCTCAAGT
GATCCACCTGCTTCGGCCTCTGAAAGTGCTGGGATTACAGGCGTGAGACACTGCGCCCAGCCTCATCCCTGTGAA
TTTCTTATTGTACACAAGTTCTTTCACTATCTGTGTGCAGTGCTCTGAGGGGACAGACAAGGCTTGGGTGTATAT
GCCAACCAGATCTCATTGAAGTATCAGCTTGTTTGGTACTAGGTGCAAGTGTAGCATGTCACATGTGACCATGTT
GGATCATTGACAATTTTTAGGTATGTACTGACCTACATTTATGATGAAGATCCTGAGCGGAGGTTAAGATATTAA
GTTATTTTCCATATGAATCAGAATTATATTGATTCTGTGCAATCAAAACAAAAGGCAGAATAGAATGCTGAGATT
GGTTAAGTTTGCAATGACCATCTTGAACCACAGATTTCTGCTATGTGTCATCAAAACATCTAGTTCTGAGTAACA
TTTTCACGATTGTTATAAAATTATAGGTGTGAACTTCTAAAATAAAGGAATGCT

FIGURE 2770

MTVGELSRALGHENGSLDPEQGMIPEMWAPMLAQALEALQPALQCLKYKKLRVFSGRESPEPGEEEFGRWMFHTT
QMIKAWQVPDVEKRRRLLESLRGPALDVIRVLKINNPLITVDECLQALEEVFGVADNPRELQVKYLTTHQKDEEK
LSAYVLRLEPLLQKLVQRGAIERDAVNQARLDQVIAGAVHKTIRRELNLPEDGPAPGFLQLLVLIKDYEAAEEEE
ALLQAILEGNFT

FIGURE 2771A

CGAAGCGGGTCCTGCCCCGCTGTCAGCTGCGGCCCCCGGCGCCGGGCGGGGGTGGCCGCGACCATTGGCGGAGAG
GCGAAAGGGGCGGGGCCGCCGCCAGCCGCTGCGGGCAAGGCTGAACAGGCGGAGGTGGGCAGCCGGCCAGGGAAG
CACGGTCCAGGCGGCTACATTCGGCCCGGCCATGGCAGCGGCGCCCCTGAAAGTGTGCATCGTGGGCTCGGGGAA
CTGGGGTTCAGCTGTTGCAAAAATAATTGGTAATAACGTCAAGAAACTTCAGAAATTTGCCTCCACAGTCAAGAT
GTGGGTCTTTGAAGAAACAGTGAATGGCAGAAAACTGACAGACATCATAAATAATGACCATGAAAATGTAAAATA
TCTTCCTGGACACAAGCTGCCAGAAAATGTGGTTGCCATGTCAAATCTTAGCGAGGCTGTGCAGGATGCAGACCT
GCTGGTGTTTGTCATTCCCCACCAGTTCATTCACAGAATCTGTGATGAGATCACTGGGAGAGTGCCCAAGAAAGC
GCTGGGAATCACCCTCATCAAGGGCATAGACGAGGGCCCCGAGGGGCTGAAACTCATTTCTGACATCATCCGTGA
GAAGATGGGTATTGACATCAGTGTGCTGATGGGAGCCAACATTGCCAATGAGGTGGCTGCAGAGAAGTTCTGTGA
GACCACCATCGGCAGCAAAGTAATGGAGAACGGCCTTCTCTTCAAAGAACTTCTGCAGACTCCAAATTTTCGAAT
TACGGTGGTTGATGATGCAGACACTGTTGAACTCTGTGGTGCGCTTAAGAACATCGTAGCTGTGGGAGCTGGGTT
CTGCGACGGCCTCCGCTGTGGAGACAACACCAAAGCGGCCGTCATCCGCCTGGGACTCATGGAAATGATTGCTTT
TGCCAGGATCTTCTGCAAAGGCCAAGTGTCTACAGCCACCTTCCTAGAGAGCTGCGGGGTGGCCGACCTGATCAC
CACCTGTTACGGAGGGCGGAACCGCAGGGTGGCCGAGGCCTTCGCCAGAACTGGGAAGACCATTGAAGAGTTGGA
GAAGGAGATGCTGAATGGGCAAAAGCTCCAAGGACCGCAGACTTCTGCTGAAGTGTACCGCATCCTCAAACAGAA
GGGACTACTGGACAAGTTTCCATTGTTTACTGCAGTGTATCAGATCTGCTACGAAAGCAGACCAGTTCAAGAGAT
GTTGTCTTGTCTTCAGAGCCATCCAGAGCATACA**TAA**AGTGAATCATGCAACGTGTTGGGGGAAGTTCTGCCTTT
CTGATCAATCTTTTGGGTTCACGTGGAAACCAGGACTTGGCAACATGATGTTTGACTGTAATCTCATCACGGATA
TGTATGAATTTTTACAGGTTCGTTTTTGAATTGTGAGAGGCAGTTCATTAGCAAAGATGTACTGGGCAGTAACTA
AACACACATGCAAACATGTGAATGGTGGTTTATTCCTCATTCTGTGGATGTTTCTATGAGCCAAAATTTGATGTC
TTTTTTTCAAAATTGCTTATGAAATTTCCACACAATCGTAGCTTATAAGATTGGAACGATCTCAGCCAAATATTT
TAGGTGTAATTCATATGTATTTGAGTGGAGGATTTTTTTTCTCATTTTTCTAGTGTTAAATTTTAACCAGCATTA
ACATGGTAGAGTGGAGGAGTGAGTGTGTTCAAAGATCAACATATTTAACTTTTAAACACTATCTCAAAGCCAGCA
TAATTAACTACTTTGATTGTGGGCTGACCTTTGTTTTTTTAACAATCAGGCATTTTTAATTAGATAATCCACTCA
TGTATTTCCCCCTCACTGCAGTTGTCTGCATTTTTAGCCTCTTTTCTCTTCGTTAGTTGTCAGAATATGCCTTTG
TCAAGGCTCAGAGGTAACAAGACAGAAAATTCATCTGGGATTTTCCTGCTGTGGCTGGCACATTCTTCTGATTAA
CAGACACTTGTATGATGCTTTAGGCTAGTTAGTGCATTTTTTAGCAAACATTTATCTTAAACATCACAGATCCAC
TGGGGGGTGCAAGGGGCTACTGTTAGTCCTCTTGTTAGATGCAGTCACTCCTCCTGGTCACCTAGTGAGCAGGGA
CAGAGCCAGGAGTCAAGTGCAGTGCCAAGGTGCATGACCCTCTGAGAAGTCACTGGGCTGATTTGACCTCCGACT
CATTGGTTGTGTAAATGCCATGTGCAGCCTTTCCTGAGGCCATAGGAGGGCTTCCTGCAGCTGAGATCTATGCAG
GCCATCCTCTCAACAGGTGCCACTCCAAGGGCGGTCCTCGGTGCAGCAGCATCAGCTTCACTTGTGGGGGGGTGG
GGGAAGGGGCGGTCTCAGAAATGCAGGTTCCCAGGTCCCACCCTGGACTTCTGAAGGGGTGTGGCATCTGTGTTT
CTGATGCTTACTACAATATGTGAACCACTACTTTAGAAAATCTGCTTTAACTTGGTATTCCTCTAATTGTGTTCC
CTAGGAAATGACTGTCCCAAGAGCCAGTGATTATTCCAGGTGTTCCCTGGAAAGGTCAAGTGAGTCTGGGAAACA
CTATGTCTGTACACCTCTTGAAGGTGTCGAATGTATGTTTATACATCAGTGGAACCCATTTTTCTAGCCTAGCAA
GTCCCAAACACATTACACTGAAGAGATTTTGGTGAGGAAACTTGCTGGAGTTTTCAGGGAACACTGTTCTAGGCT
TAGGTGACCTTAGGATCACTCAAGTAGACCCTTCACTCCCTGCGAGAAATTAGGATGAATAACTACCTGTGGCAT
TGTTGGTTCTGAACTTTTACAGTTCAGGCCTGCTGTGAATCTTTGATGAAGCTTTAAGGTGACACTGTTGTACAA
GATGTCAGCTTTGCTGAAACGCACATTACCTGGAATAAGTGCTTTAATTGTAGAATTAGAATGGGATTTACTGTA
CTGTTTTAAATGAGATTGGCTTCAGAATCCATTACAGTTACCTTACATAGCACTTGATACGTGTTAAATGAACAT
ATGAATGTAATTTATATATTCCTAGAATTTAAGTTACTTTGTGAGATTTGGGCCTGTCCCTCAATGCCAGTTTAG
GATTTCTTTTTTTCTATACCTTGAAATGATTATAAAATAGATTTTCATGGGAATTTTAAAAACTCTATCCAAAAC
ATTTTTGGAGCATTTTAAAGCCCCATACACAGAAGTATACGAAAGCACACAAAACACTCCAAGTTTCAGCAGTTT
TAGCGCCACCATTAACCCACTTTGCTTGTCTCATGAAAAATCTTTGTTAAAGTTTGTACACAGGTAACAAAAAGT
TACTTTAAAAGATATATAAAGGGCTGTAAGCTAATTGTGGTGTCTAGTAAGTAGCATAATGAGATGTGAGGAGTT
GGAACTTTGCGTGTTTTGCGTATTTTCATCTGCATTCAGCTTCTTACTCTGGGTTTGTACTCGAGTGTTATTTCT
TTACAAATGCCCTTGTAATTACCACTCTGAAGTCTGCTGACTGTGTCTCTTGAACATACTTAGGATATTCTGCAC
ATTATGGAAAAAGGTAAATTTTAGAAGTTTCTGCTCTACTAACTGTAGATATTTATGACTCTGCGAGTTATCTAT

FIGURE 2771B

TTTTATAACCACCTGTGGTCCATTGTTCATTTTAATTCACATTTCTTATGAAGTATGGTAACAGGGAGGGAGACA
CCTAGATTAGCAGCTCAATTTGTACTACTTCAGCCAATCTGTGAATGTAAAAACTACACTGTTGCCTTGCTAGGA
TCCACCCTCCTATAATATGGAACAAATATCTGAATGAAATCCACCCTAGGAGACGGAGTCAAACTAAACTTGTGG
TTTTTCATTTAACTTTTGACTACAGCATGGCCCCATGGCATCCACACCAAGAGGGTGTTGTGATGAGGTGCCGGT
GTGCAAAGGGAACTTTAGTTTTTCCACTGGTTCTTATCTGCTAGCCTTTTACATACATGTGTACTATATTTGTTT
ATAGACTGTAGGTGGATATATAATTTAAAAGCTTGATTTAATAAACATTTAACCCCCTAAACTTGGGG

FIGURE 2772

EAGPAPLSAAAPGAGRGWPRPLAERRKGRGRRQPLRARLNRRRWAAGQGSTVQAATFGPAMAAAPLKVCIVGSGN
WGSAVAKIIGNNVKKLQKFASTVKMWVFEETVNGRKLTDIINNDHENVKYLPGHKLPENVVAMSNLSEAVQDADL
LVFVIPHQFIHRICDEITGRVPKKALGITLIKGIDEGPEGLKLISDIIREKMGIDISVLMGANIANEVAAEKFCE
TTIGSKVMENGLLFKELLQTPNFRITVVDDADTVELCGALKNIVAVGAGFCDGLRCGDNTKAAVIRLGLMEMIAF
ARIFCKGQVSTATFLESCGVADLITTCYGGRNRRVAEAFARTGKTIEELEKEMLNGQKLQGPQTSAEVYRILKQK
GLLDKFPLFTAVYQICYESRPVQEMLSCLQSHPEHT

FIGURE 2773

CCCTCTTCCGTGTGGGCCCTCCCTGTCCCCTCTCTGTCACCTCACAGTAGTCGTTGCCGGTAGCGGGTGTGGGGG
CGCGAGCAGCGCAGGGCGGCCTCTCCCCCACCCCTACAGCCCGGGCCCGGGCTCGGTCCCCCCCTCTCCCTCCGC
TTCGCACTCCCGTCGGGTACGGGAAGGTCCAAGCCGCTGCCGGGTGCCCGAGGGCCGTCGTGGCCGCCGTCGCCA
CGGGTCCCAATGGAGCCGCCGAATCTCTATCCGGTGAAGCTCTACGTGTACGACCTGTCCAAAGGCCTGGCCCGG
CGGCTCAGCCCCATCATGCTGGGGAAACAACTGGAAGGCATCTGGCACACATCCATAGTTGTGCACAAGGATGAG
TTCTTCTTCGGCAGTGGTGGTATCTCCAGCTGCCCCCCGGGAGGGACATTGCTTGGGCCTCCAGACTCTGTGGTT
GATGTGGGGAGTACAGAAGTCACAGAAGAAATCTTTCTGGAGTACCTCTCCTCCCTGGGGGAGTCCCTGTTCCGA
GGTGAGGCCTACAACCTCTTTGAACACAATTGTAACACCTTCAGCAACGAAGTGGCACAGTTCCTGACTGGGCGG
AAGATTCCTTCTTACATCACAGACCTGCCCTCTGAAGTTCTCTCCACGCCCTTTGGACAGGCACTTCGGCCCCTC
CTGGACTCCATTCAGATCCAGCCTCCAGGAGGGAGCTCCGTGGGCAGACCCAACGGCCAGAGCTAACAGGACTGC
CTGGGACCGCCCTGCCTCACCAGGGCTTTTCCTTTTTAAACAAAACAAACCCTACCAGATTTCTATTTTATAATT
TTACATCAGAGCTAACAACCAGGGGACGGCTTTTTAAATTTCCCAGGGAAGGAGACCGTCAGGCCGCATGTAGAC
AATGCTGCTAAGAAACAGAACAAAATGCCACCCCTTCTAATAGTATTATACTAATTTATTAAGGCTGTCTTGTCT
GTGCGTTCACTTCGGATGCTGTTTCCTAAGCGTCCTCCACACTGGAGAAAGGGAGGGGCTTTGTTTAAACAGAAA
GCGAGTCACAGTTTGCGGGAGCCCCAACCTAGAACTCTTTCCAGAGAACACTCACGCTCTACCCAAGTTGCCAAC
ACCTGTGGGACCCAGGTGAGTTTTAGAACATCCGTGACCCAGAAAGTTACTCTAGTGTTAAATGAACCAAAGGAT
TTGGTGTACATGGGACCGGTTTCAGGATGACTAACCTAACCTAAGTGAACTCTTTAGCCACAACCCTCACCTTCC
CTCCCTTACCCCAAGCAAGGCCAGTGCTGGAGCAGCCATTGCCTCCGGATCAAGGGAGTAACAGCAAGTATCAGG
CCGGAGAAAACAGGATAAAGCCATTCCTCCTTCCACCTAGATGGATTGCCAATCTTCTGCCATCAATTTTGGGAA
ACCTGCCTTTGTGCCCCCGAGGCTGCCTTTCCTCAGCATAGCTGACTTGTCATAGTGGATGAGGTCTGGGCTGGA
GCAGTAGAAGCCAAGGCCTTTTTTCTGCAAGTAATGATGTAGGTTATTTGCAGTCTCTGTAACCACCATCCAGGC
CAGTACGCAGTATTTAGCTGGGGACCAAGGGATGGGATTCCCTACTCTAAGAAAATACCTTTATTTTAATTATTA
TTATTTTTTGAGACGGAGTCTCGCTCTACCACCCAGGCTGGTGTGCAGTGGCATGATCCCGGGAGGCAGAGATTG
CGATGAGCCGAGATCGTACCAGTGCACTCCAGCCTGGGCGACAGAGTGAGACTCCATCTCAAAAAAATAAAATAA
TGAAGTGGAATCAAGGTGGCAAGAAAATTTAGAATCGTTTCTGATAGGGACTTTCCCTTATCCTAAATGTGTTTT
GAAGGCACACGTTATTTCCATTGTCATTCTGACTTTAGAAAGGCAGGTTGGGGCATGAGTGGGCATTTTCCTAAT
GACTTGCTGCTAGGAGGTTATAGGCAGGGAACAGTCTGGGAGTCTCTAATCCAGAGAGACTTTCAGATTCCCTCT
CTTCACATGAACCTCCATTAGTTAGATTTTGGGAAAGTGAGCATGAAGAAGGGACTCAGAGCTGCCAGGTACCCG
AGTCTCAGGTCTGACATCCTTGGGCCCCTTCTGCCACAACTTCTTGCCACTTCACGGACTTGAATTATGTTGCTT
CTTCCTGGAAGTCTGGCCTGCAGCACAGGCCTTTCCTCTCCAAAAAGCTGCTGCTCATTTCTGGCCCCATCTGCT
GCTATCTTTGCCATCAGCCATCACAGTTTGGCATCATCAGAGTCTCAGCTAGAGGAGCTGTCATTCTGCCTTAGT
GTTTGCCTGCGACCTGACCAGGGGCATGACCAGCTGGGATGTCAAGTGACATTTGGGAACTTGTAGAGGCCAAAT
GATTGAAAGTTTAATTCTTCTCAAGACCCACTGATTTGCCAGTGTGCATGGAAATAATAGATTAGAGCAGAAACT
AGCAGGGACTGTTGTATAATCGTGATCTACTAGCAGAATTGGGCCCAAAGAGAAAGAATTTCTGAGGCTGGGTTT
CTTCTGGGAGGGTAGCAGGTTGGTCTTGGCCAGTGCTCTGTTTCCCACCAGTGTTGTTCCCTTTTCCAGCTTGCC
TGGCCCGGCTCTGTCTTCCAGGGTCCTGCTCCAGACCCCTCTGCCTGGGGTCTCCCCTCCATCCAGGGGGTTCTG
GGCATCACAGCTCCTTTTTTTTCCTTTCTCCTCTTCCAGATCCAGTTTCAGCTGGTTTGCTTCTTCCAGCAGGCA
CCCTTAGGCCCAGGAGCAGCTCCCCTGAGAGAATTTGAGTCACTCATTTCCTTGAACAGCACCCCCCTTTATACT
AGCAGCCATTTGTGCCATTGCCTGTGCCCTAGGGTTTGTGGGGAGAGAGCGAGGGATCACTGAGCAGTTTTCCCA
GAGCTCCATGGGAAGGCAAGCTCTCCCTCCCAATGGGAGCCCCACTGTCACTAACTGTAAACTCAGGCTCAGGCT
TCAACTGCCTACCCCCATCCTCATATTTCTGTCTGTCCCAGCACCTCAGGAGCATTCTCATTGTGGCCGGCTAAC
TCCGCCTGGATGTGAACAGGCAAGCACAGTGGGAAATGAGTCACGTACTTGTATTGCACAGTGGACACCTCTAGA
GGTCCATTGGTTTAAAGGGATAGGGAAGGAGGAGGGATGAGACCATCACCCCCTCCCAGAAGTAAATCTAGTATC
TGAGTTTTCTTTATGCCCTTGAGTCAAACTAATAACTGTCTAGTACGGAGGTGTTTGCTGGTTTTCTTCGGTGTT
TTTTCTAATGCAATAAACTCATTTCTGCCTGCTCG

FIGURE 2774

PLPCGPSLSPLCHLTVVVAGSGCGGASSAGRPLPHPYSPGPGSVPPSPSASHSRRVREGPSRCRVPEGRRGRRRH
GSQWSRRISIR

FIGURE 2775

ATGCCCCTAGGTCTCCTGTGGCTGGGCCTAGCCCTGTTGGGGGCTCTGCATGCCCAGGCCCAGGACTCCACCTCA
GACCTGATCCCAGCCCCACCTCTGAGCAAGGTCCCTCTGCAGCAGAACTTCCAGGACAACCAATTCCAGGGGAAG
TGGTATGTGGTAGGCCTGGCAGGGAATGCAATTCTCAGAGAAGACAAAGACCCGCAAAAGATGTATGCCACCATC
TATGAGCTGAAAGAAGACAAGAGCTACAATGTCACCTCCGTCCTGTTTAGGAAAAAGAAGTGTGACTACTGGATC
AGGACTTTTGTTCCAGGTTGCCAGCCCGGCGAGTTCACGCTGGGCAACATTAAGAGTTACCCTGGATTAACGAGT
TACCTCGTCCGAGTGGTGAGCACCAACTACAACCAGCATGCTATGGTGTTCTTCAAGAAAGTTTCTCAAAACAGG
GAGTACTTCAAGATCACCCTCTACGGGAGAACCAAGGAGCTGACTTCGGAACTAAAGGAGAACTTCATCCGCTTC
TCCAAATATCTGGGCCTCCCTGAAAACCACATCGTCTTCCCTGTCCCAATCGACCAGTGTATCGACGGC**TGA**

FIGURE 2776

MPLGLLWLGLALLGALHAQAQDSTSDLIPAPPLSKVPLQQNFQDNQFQGKWYVVGLAGNAILREDKDPQKMYATI
YELKEDKSYNVTSVLFRKKKCDYWIRTFVPGCQPGEFTLGNIKSYPGLTSYLVRVVSTNYNQHAMVFFKKVSQNR
EYFKITLYGRTKELTSELKENFIRFSKYLGLPENHIVFPVPIDQCIDG

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FIGURE 2777

CACCGTCCGCAGCCCGAGCGCCCCGGAGCCGCAGGCGCCGCCGCGCAGAGACGCCGCGGCTGCGACTAGGCGCGC
CCAGCCGCACGTGGCGGACCCGCCCCCAGGCCCGCAGTGTCCTGGACCCCGCAGGCCTCCGCTCTCCTGTCCTCG
GCCCCGTCCCCAGGGCCGCG**ATG**AGCTTCCTGAGCCGACAGCAGCCGCCGCCACCCCGCCGCGCCGGGGCGGCCT
GCACCTTGCGGCAGAAGCTGATCTTCTCGCCCTGCAGCGACTGTGAGGAGGAGGAAGAAGAGGAGGAGGAGGAGG
GCAGCGGCCACAGCACCGGGGAGGACTCGGCCTTTCAAGAGCCCGACTCGCCGCTGCCGCCCGAGCGGAGCCCCA
CGGAGCCCGGGCCCGAGCGCCGCCGCTCGCCCGGGCCGGCCCCCGGCAGCCCCGGCGAGCTGGAGGAGGACCTGT
TGCTGCCCGGCGCCTGCCCGGGCGCGGACGAGGCGGGCGGTGGGGCGGAGGGCGACTCGTGGGAGGAGGAGGGCT
TCGGCTCCTCGTCGCCGGTCAAGTCGCCGGCGGCCCCCTACTTCCTGGGTAGCTCTTTCTCGCCGGTGCGCTGCG
GCGGCCCAGGAGATGCGTCGCCGCGGGGTTGCGGGGCGCGCCGGGCGGGCGAAGGCCGCCGCTCGCCGCGGCCGG
ACCACCCGGGCACCCCGCCACACAAGACCTTCCGCAAGCTGCGACTCTTCGACACCCCGCACACGCCCAAGAGTT
TGCTCTCCAAAGCTCGGGGAATTGATTCCAGCTCTGTTAAACTCCGGGGTAGTTCTCTCTTCATGGATACAGAAA
AATCAGGAAAAAGGGAATTTGATGTGCGACAGACTCCTCAAGTGAATATTAATCCTTTTACTCCGGATTCTTTGT
TGCTTCATTCCTCAGGACAGTGTCGTCGTAGAAAGAGAACGTATTGGAATGATTCCTGTGGTGAAGACATGGAAG
CCAGTGATTATGAGCTTGAAGATGAAACAAGACCTGCTAAGAGAATTACAATTACTGAAAGCAATATGAAGTCCC
GGTATACAACAGAATTTCATGAGCTAGAGAAAATCGGCTCTGGAGAATTTGGTTCTGTATTTAAGTGTGTGAAGA
GGCTGGATGGATGCATTTATGCCATTAAGCGATCAAAAAAGCCATTGGCGGGCTCTGTTGATGAGCAGAACGCTT
TGAGAGAAGTATATGCTCATGCAGTGCTTGGACAGCATTCTCATGTAGTTCGATATTTCTCTGCGTGGGCAGAAG
ATGATCATATGCTTATACAGAATGAATATTGTAATGGTGGAAGTTTAGCTGATGCTATAAGTGAAAACTACAGAA
TCATGAGTTACTTTAAAGAAGCAGAGTTGAAGGATCTCCTTTTGCAAGTTGGCCGAGGCTTGAGGTATATTCATT
CAATGTCTTTGGTTCACATGGATATAAAACCTAGTAATATTTTCATATCTCGAACCTCAATCCCAAATGCTGCCT
CTGAAGAAGGAGACGAAGATGATTGGGCATCCAACAAAGTTATGTTTAAAATAGGTGATCTTGGGCATGTAACAA
GGATCTCCAGTCCACAAGTTGAGGAGGGCGATAGTCGTTTTCTTGCAAATGAAGTTTTACAGGAGAATTATACCC
ATCTACCAAAAGCAGATATTTTTGCGCTTGCCCTCACAGTGGTATGTGCTGCTGGTGCTGAACCTCTTCCGAGAA
ATGGAGATCAATGGCATGAAATCAGACAGGGTAGATTACCTCGGATACCACAAGTGCTTTCCCAAGAATTTACAG
AGTTGCTAAAAGTTATGATTCATCCAGATCCAGAGAGAAGACCTTCAGCAATGGCACTGGTAAAGCATTCAGTAT
TGCTGTCCGCTTCTAGAAAGAGTGCAGAACAATTACGAATAGAATTGAATGCCGAAAAGTTCAAAAATTCACTTT
TACAAAAAGAACTCAAGAAAGCACAGATGGCAAAAGCTGCAGCTGAGGAAAGAGCACTCTTCACTGACCGGATGG
CCACTAGGTCCACCACCCAGAGTAATAGAACATCTCGACTTATTGGAAAGAAAATGAACCGCTCTGTCAGCCTTA
CTATATAC**TGA**GCTACTCCTTTCCCACCTCCCCCTGAACACTGTGACAAGAGGAAGCTAGGTTGAAATCACTGAT
AGAATCCAGTTTGCAATTACTTTCTCGATTGGTGTCAGTAGTTTTACTGATTAGGACTTTTATTGTGAATTACAG
TTGAAAGCTGTATTTTGATGATTGCTATGTCAGGCTTTCATCTAATCTTACCAGTCTGTCTTCTGTAGGATGTGT
CACTGTTGGATGTTACACCAGCCTTTCCAGGGTTAACCACTGTGGTGGTGTGCTGCTTATAGTTTGCTGTTGCAT
TGTAATAAAAGGTGTCTTTCCCTGTAGTGACCTGTAAAAAGTACTCAAGGGCTTTATTACAGACATACCCTCCCT
TTGAAAAGGGACATGCTAAAAGACTCATTACTACTCAGCCTTCAATGTACCTGTGTGTCCATCTTATATTTCTTT
TTTTTTTAATTGTGAATTAGACTTGTATATCCCACTGGGAGCACTTTGTAGGCATTGCATGAACCATGGGATGAT
GATTCTGTGGAGGTATTGCCTTGTGAATTTGCTGCTATTTTAGTTTTGTCTTTGCTGTAAACTTGTAGCATTAAA
CAATCATTGTTGTTAATAGGTCTTCTTTTTGAAACAATTATGTGAAATGTATAGCTGCTTTTGATGGAAAGCAGC
TATTTGCCTTTTTTTTTTTCCTTTGAACTTTGAAGCTAGTGCATTGGAAAAATGCACCCTTTCCCTCCTTTGGAA
TGCTGTATTAATGTAGTATAATAATTACTGGTTTTGTAACTTGTTCTGGTAATGTCCTTCCCGGACTCTTTTTAA
ATGTCTCCCCCTAAGTTTTATACTTGATTGTATTATTAGTCTGTTTTTAAATGTTTTGCCCGGTTTTTCTCTTCA
ATATTTGTGTATATAAACCGATCTTCGTGATACTGTACATAGCTGTTTGAAATGCCAGAATGACTTCTGACATTC
CAAGTTTTTCACAAAATATATTTTATCTGTGATTAGCCATTTGACTAATAATACTGGCTAACAGATGTTGAAAAA
AATTGTCTGTTTTCTCATTAATTTTGGTCTAAAACATGTTTGCACTTGTCTTTGACTTGTGTTTTATTAACATTG
ATTGGCATATTAAAAGTCACTCTGAGCTT

FIGURE 2778

MSFLSRQQPPPPRRAGAACTLRQKLIFSPCSDCEEEEEEEEEEGSGHSTGEDSAFQEPDSPLPPERSPTEPGPER
RRSPGPAPGSPGELEEDLLLPGACPGADEAGGGAEGDSWEEEGFGSSSPVKSPAAPYFLGSSFSPVRCGGPGDAS
PRGCGARRAGEGRRSPRPDHPGTPPHKTFRKLRLFDTPHTPKSLLSKARGIDSSSVKLRGSSLFMDTEKSGKREF
DVRQTPQVNINPFTPDSLLLHSSGQCRRRKRTYWNDSCGEDMEASDYELEDETRPAKRITITESNMKSRYTTEFH
ELEKIGSGEFGSVFKCVKRLDGCIYAIKRSKKPLAGSVDEQNALREVYAHAVLGQHSHVVRYFSAWAEDDHMLIQ
NEYCNGGSLADAISENYRIMSYFKEAELKDLLLQVGRGLRYIHSMSLVHMDIKPSNIFISRTSIPNAASEEGDED
DWASNKVMFKIGDLGHVTRISSPQVEEGDSRFLANEVLQENYTHLPKADIFALALTVVCAAGAEPLPRNGDQWHE
IRQGRLPRIPQVLSQEFTELLKVMIHPDPERRPSAMALVKHSVLLSASRKSAEQLRIELNAEKFKNSLLQKELKK
AQMAKAAAEERALFTDRMATRSTTQSNRTSRLIGKKMNRSVSLTIY

FIGURE 2779A

TTGCTGCGTCAACTGTGTTCCCTTTGGCCTGGCTGAGTTTGATACTGTGGGGATTCAGTTTAGGCGCTGGCCCGA
GGATATCCCAGCGGTGGTACTTCGGAGACACCTGTCTGCATCTGACTGAGCCGGCTCTCCTGGCCTCGCGCTGCA
CATTCTCTCCTGGCGGCGGCGCCACCTGCAGTAGCGTTCGCCCGAACATGGCGACACGGAGCAGCAGGAGGGAGT
CGCGACTCCCGTTCCTATTCACCCTGGTCGCACTGCTGCCGCCCGGAGCTCTCTGCGAAGTCTGGACGCAGAGGC
TGCACGGCGGCAGCGCGCCCTTGCCCCAGGACCGGGGCTTCCTCGTGGTGCAGGGCGACCCGCGCGAGCTGCGGC
TGTGGGCGCGCGGGGATGCCAGGGGGGCGAGCCGCGCGGACGAGAAGCCGCTCCGGAGGAAACGGAGCGCTGCCC
TGCAGCCCGAGCCCATCAAGGTGTACGGACAGGTTAGTCTGAATGATTCCCACAATCAGATGGTGGTGCACTGGG
CTGGAGAGAAAAGCAACGTGATCGTGGCCTTGGCCCGAGATAGCCTGGCATTGGCGAGGCCCAAGAGCAGTGATG
TGTACGTGTCTTACGACTATGGAAAATCATTCAAGAAAATTTCAGACAAGTTAAACTTTGGCTTGGGAAATAGGA
GTGAAGCTGTTATCGCCCAGTTCTACCACAGCCCTGCGGACAACAAGCGGTACATCTTTGCAGACGCTTATGCCC
AGTACCTCTGGATCACGTTTGACTTCTGCAACACTCTTCAAGGCTTTTCCATCCCATTTCGGGCAGCTGATCTCC
TCCTACACAGTAAGGCCTCCAACCTTCTCTTGGGCTTTGACAGGTCCCACCCCAACAAGCAGCTGTGGAAGTCAG
ATGACTTTGGCCAGACCTGGATCATGATTCAGGAACATGTCAAGTCCTTTTCTTGGGGAATTGATCCCTATGACA
AACCAAATACCATCTACATTGAACGACACGAACCCTCTGGCTACTCCACTGTCTTCCGAAGTACAGATTTCTTCC
AGTCCCGGGAAAACCAGGAAGTGATCCTTGAGGAAGTGAGAGATTTTCAGCTTCGGGACAAGTACATGTTTGCTA
CAAAGGTGGTGCATCTCTTGGGCAGTGAACAGCAGTCTTCTGTCCAGCTCTGGGTCTCCTTTGGCCGGAAGCCCA
TGAGAGCAGCCCAGTTTGTCACAAGACATCCTATTAATGAATATTACATCGCAGATGCCTCCGAGGACCAGGTGT
TTGTGTGTGTCAGCCACAGTAACAACCGCACCAATTTATACATCTCAGAGGCAGAGGGGCTGAAGTTCTCCCTGT
CCTTGGAGAACGTGCTCTATTACAGCCCAGGAGGGGCCGGCAGTGACACCTTGGTGAGGTATTTTGCAAATGAAC
CATTTGCTGACTTCCACCGAGTGGAAGGATTGCAAGGAGTCTACATTGCTACTCTGATTAATGGTTCTATGAATG
AGGAGAACATGAGATCGGTCATCACCTTTGACAAAGGGGGAACCTGGGAGTTTCTTCAGGCTCCAGCCTTCACGG
GATATGGAGAGAAAATCAATTGTGAGCTTTCCCAGGGCTGTTCCCTTCATCTGGCTCAGCGCCTCAGTCAGCTCC
TCAACCTCCAGCTCCGGAGAATGCCCATCCTGTCCAAGGAGTCGGCTCCAGGCCTCATCATCGCCACTGGCTCAG
TGGGAAAGAACTTGGCTAGCAAGACAAACGTGTACATCTCTAGCAGTGCTGGAGCCAGGTGGCGAGAGGCACTTC
CTGGACCTCACTACTACACATGGGGAGACCACGGCGGAATCATCACGGCCATTGCCCAGGGCATGGAAACCAACG
AGCTAAAATACAGTACCAATGAAGGGGAGACCTGGAAAACATTCATCTTCTCTGAGAAGCCAGTGTTTGTGTATG
GCCTCCTCACAGAACCTGGGGAGAAGAGCACTGTCTTCACCATCTTTGGCTCGAACAAAGAGAATGTCCACAGCT
GGCTGATCCTCCAGGTCAATGCCACGGATGCCTTGGGAGTTCCCTGCACAGAGAATGACTACAAGCTGTGGTCAC
CATCTGATGAGCGGGGGAATGAGTGTTTGCTGGGACACAAGACTGTTTTCAAACGGCGGACCCCCCATGCCACAT
GCTTCAATGGAGAGGACTTTGACAGGCCGGTGGTCGTGTCCAACTGCTCCTGCACCCGGGAGGACTATGAGTGTG
ACTTCGGTTTCAAGATGAGTGAAGATTTGTCATTAGAGGTTTGTGTTCCAGATCCGGAATTTTCTGGAAAGTCAT
ACTCCCCTCCTGTGCCTTGCCCTGTGGGTTCTACTTACAGGAGAACGAGAGGCTACCGGAAGATTTCTGGGGACA
CTTGTAGCGGAGGAGATGTTGAAGCGCGACTGGAAGGAGAGCTGGTCCCCTGTCCCCTGGCAGAAGAGAACGAGT
TCATTCTGTATGCTGTGAGGAAATCCATCTACCGCTATGACCTGGCCTCGGGAGCCACCGAGCAGTTGCCTCTCA
CCGGGCTACGGGCAGCAGTGGCCCTGGACTTTGACTATGAGCACAACTGTTTGTATTGGTCCGACCTGGCCTTGG
ACGTCATCCAGCGCCTCTGTTTGAATGGAAGCACAGGGCAAGAGGTGATCATCAATTCTGGCCTGGAGACAGTAG
AAGCTTTGGCTTTTGAACCCCTCAGCCAGCTGCTTTACTGGGTAGATGCAGGCTTCAAAAAGATTGAGGTAGCTA
ATCCAGATGGCGACTTCCGACTCACAATCGTCAATTCCTCTGTGCTTGATCGTCCCAGGGCTCTGGTCCTCGTGC
CCCAAGAGGGGGTGATGTTCTGGACAGACTGGGGAGACCTGAAGCCTGGGATTTATCGGAGCAATATGGATGGTT
CTGCTGCCTATCACCTGGTGTCTGAGGATGTGAAGTGGCCCAATGGCATCTCTGTGGACGACCAGTGGATTTACT
GGACGGATGCCTACCTGGAGTGCATAGAGCGGATCACGTTCAGTGGCCAGCAGCGCTCTGTCATTCTGGACAACC
TCCCGCACCCCTATGCCATTGCTGTCTTTAAGAATGAAATCTACTGGGATGACTGGTCACAGCTCAGCATATTCC
GAGCTTCCAAATACAGTGGGTCCCAGATGGAGATTCTGGCAAACCAGCTCACGGGGCTCATGGACATGAAGATTT
TCTACAAGGGGAAGAACACTGGAAGCAATGCCTGTGTGCCCAGGCCATGCAGCCTGCTGTGCCTGCCCAAGGCCA
ACAACAGTAGAAGCTGCAGGTGTCCAGAGGATGTGTCCAGCAGTGTGCTTCCATCAGGGGACCTGATGTGTGACT
GCCCTCAGGGCTATCAGCTCAAGAACAATACCTGTGTCAAAGAAGAGAACACCTGTCTTCGCAACCAGTATCGCT
GCAGCAACGGGAACTGTATCAACAGCATTTGGTGGTGTGACTTTGACAACGACTGTGGAGACATGAGCGATGAGA
GAAACTGCCCTACCACCATCTGTGACCTGGACACCCAGTTTCGTTGCCAGGAGTCTGGGACTTGTATCCCACTGT

FIGURE 2779B

CCTATAAATGTGACCTTGAGGATGACTGTGGAGACAACAGTGATGAAAGTCATTGTGAAATGCACCAGTGCCGGA
GTGACGAGTACAACTGCAGTTCCGGCATGTGCATCCGCTCCTCCTGGGTATGTGACGGGGACAACGACTGCAGGG
ACTGGTCTGATGAAGCCAACTGTACCGCCATCTATCACACCTGTGAGGCCTCCAACTTCCAGTGCCGAAACGGGC
ACTGCATCCCCCAGCGGTGGGCGTGTGACGGGGATACGGACTGCCAGGATGGTTCCGATGAGGATCCAGTCAACT
GTGAGAAGAAGTGCAATGGATTCCGCTGCCCAAACGGCACTTGCATCCCATCCAGCAAACATTGTGATGGTCTGC
GTGATTGCTCTGATGGCTCCGATGAACAGCACTGCGAGCCCCTCTGTACGCACTTCATGGACTTTGTGTGTAAGA
ACCGCCAGCAGTGCCTGTTCCACTCCATGGTCTGTGACGGAATCATCCAGTGCCGCGACGGGTCCGATGAGGATG
CGGCGTTTGCAGGATGCTCCCAAGATCCTGAGTTCCACAAGGTATGTGATGAGTTCGGTTTCCAGTGTCAGAATG
GAGTGTGCATCAGTTTGATTTGGAAGTGCGACGGGATGGATGATTGCGGCGATTATTCTGATGAAGCCAACTGCG
AAAACCCCACAGAAGCCCCAAACTGCTCCCGCTACTTCCAGTTTCGGTGTGAGAATGGCCACTGCATCCCCAACA
GATGGAAATGTGACAGGGAGAACGACTGTGGGGACTGGTCTGATGAGAAGGATTGTGGAGATTCACATATTCTTC
CCTTCTCGACTCCTGGGCCCTCCACGTGTCTGCCCAATTACTACCGCTGCAGCAGTGGGACCTGCGTGATGGACA
CCTGGGTGTGCGACGGGTACCGAGATTGTGCAGATGGCTCTGACGAGGAAGCCTGCCCCTTGCTTGCAAACGTCA
CTGCTGCCTCCACTCCCACCCAACTTGGGCGATGTGACCGATTTGAGTTCGAATGCCACCAACCGAAGACGTGTA
TTCCCAACTGGAAGCGCTGTGACGGCCACCAAGATTGCCAGGATGGCCGGGACGAGGCCAATTGCCCCACACACA
GCACCTTGACTTGCATGAGCAGGGAGTTCCAGTGCGAGGACGGGGAGGCCTGCATTGTGCTCTCGGAGCGCTGCG
ACGGCTTCCTGGACTGCTCGGACGAGAGCGATGAAAAGGCCTGCAGTGATGAGTTGACTGTGTACAAAGTACAGA
ATCTTCAGTGGACAGCTGACTTCTCTGGGGATGTGACTTTGACCTGGATGAGGCCCAAAAAAATGCCCTCTGCAT
CTTGTGTATATAATGTCTACTACAGGGTGGTTGGAGAGAGCATATGGAAGACTCTGGAGACCCACAGCAATAAGA
CAAACACTGTATTAAAAGTCTTGAAACCAGATACCACGTATCAGGTTAAAGTACAGGTTCAGTGTCTCAGCAAGG
CACACAACACCAATGACTTTGTGACCCTGAGGACCCCAGAGGGATTGCCAGATGCCCCTCGAAATCTCCAGCTGT
CACTCCCCAGGGAAGCAGAAGGTGTGATTGTAGGCCACTGGGCTCCTCCCATCCACACCCATGGCCTCATCCGTG
AGTACATTGTAGAATACAGCAGGAGTGGTTCCAAGATGTGGGCCTCCCAGAGGGCTGCTAGTAACTTTACAGAAA
TCAAGAACTTATTGGTCAACACTCTATACACCGTCAGAGTGGCTGCGGTGACTAGTCGTGGAATAGGAAACTGGA
GCGATTCTAAATCCATTACCACCATAAAAGGAAAAGTGATCCCACCACCAGATATCCACATTGACAGCTATGGTG
AAAATTATCTAAGCTTCACCCTGACCATGGAGAGTGATATCAAGGTGAATGGCTATGTGGTGAACCTTTTCTGGG
CATTTGACACCCACAAGCAAGAGAGGAGAACTTTGAACTTCCGAGGAAGCATATTGTCACACAAAGTTGGCAATC
TGACAGCTCATACATCCTATGAGATTTCTGCCTGGGCCAAGACTGACTTGGGGGATAGCCCTCTGGCATTTGAGC
ATGTTATGACCAGAGGGGTTCGCCCACCTGCACCTAGCCTCAAGGCCAAAGCCATCAACCAGACTGCAGTGGAAT
GTACCTGGACCGGCCCCCGGAATGTGGTTTATGGTATTTTCTATGCCACGTCCTTTCTTGACCTCTATCGCAACC
CGAAGAGCTTGACTACTTCACTCCACAACAAGACGGTCATTGTCAGTAAGGATGAGCAGTATTTGTTTCTGGTCC
GTGTAGTGGTACCCTACCAGGGGCCATCCTCTGACTACGTTGTAGTGAAGATGATCCCGGACAGCAGGCTTCCAC
CCCGTCACCTGCATGTGGTTCATACGGGCAAAACCTCCGTGGTCATCAAGTGGGAATCACCGTATGACTCTCCTG
ACCAGGACTTGTTGTATGCAATTGCAGTCAAAGATCTCATAAGAAAGACTGACAGGAGCTACAAAGTAAAATCCC
GTAACAGCACTGTGGAATACACCCTTAACAAGTTGGAGCCTGGCGGGAAATACCACATCATTGTCCAACTGGGGA
ACATGAGCAAAGATTCCAGCATAAAAATTACCACAGTTTCATTATCAGCACCTGATGCCTTAAAAATCATAACAG
AAAATGATCATGTTCTTCTGTTTTGGAAAAGCCTGGCTTTAAAGGAAAAGCATTTTAATGAAAGCAGGGGCTATG
AGATACACATGTTTGATAGTGCCATGAATATCACAGCTTACCTTGGGAATACTACTGACAATTTCTTTAAAATTT
CCAACCTGAAGATGGGTCATAATTACACGTTCACCGTCCAAGCAAGATGCCTTTTTGGCAACCAGATCTGTGGGG
AGCCTGCCATCCTGCTGTACGATGAGCTGGGGTCTGGTGCAGATGCATCTGCAACGCAGGCTGCCAGATCTACGG
ATGTTGCTGCTGTGGTGGTGCCCATCTTATTCCTGATACTGCTGAGCCTGGGGGGTGGGGTTTGCCATCCTGTACA
CGAAGCACCGGAGGCTGCAGAGCAGCTTCACCGCCTTCGCCAACAGCCACTACAGCTCCAGGCTGGGGTCCGCAA
TCTTCTCCTCTGGGGATGACCTGGGGGAAGATGATGAAGATGCCCCTATGATAACTGGATTTTCAGATGACGTCC
CCATGGTGATAGCC**TGA**AAGAGCTTTCCTCACTAGAAACCAAATGGTGTAAATATTTTATTTGATAAAGATAGTT
GATGGTTTATTTTAAAAGATGCACTTTGAGTTGCAATATGTTATTTTTATATGGGCCAAAAACNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNGGAATGAATAAACTTTGTAGTAATCAACTGTGAACTTCAAACCAGGTTGATTTTA
GTAACCCAATTGCTTTGATTTGACATTAATGTAGTCTTACAGGGCTGTGCTTGCTGGGCATGCTTTTACGTCTGT
GAGATAATTTCGGTTCAGTAAATTGGCCAATCTTTTTATTTTTCTAAGACACAGAAATGTATTTAATAAAAACCT

FIGURE 2779C

CGAGAGAGTGATGGGTGGAACCCCTTCTCCTTGAAAGTGTGTACAGATATTCCATTTTGTTTGGATATAGTTTAT
AGGAAAGTGTGTGGATGTATTATGGCGGAAGGTTTCTTTATGTTATTTTGTTAATTTATTGGGACTCTGTGTAAG
GCCAGGCTTTAGTGGTCATTAGACACCACATGTGTTATGAGCCCCTTACCCATAGGGTTGGGGGTGGGAAGAGAA
GCATATTTTTTTGCCATTCCGGAAGCAATCCATTTTTATTCACTTGTGTGTCATGTAATGGTCTTTGGCAGGAGA
GAGCACTGAGTCATTGCTGGAGTTCAGTTCAACAGAGCTGCAGCTTGGGAAGCCCTGTAAGCCCACAGCTTCCTC
TCTTATATTAATTGATGGAATTTTACTGTATGTGCCTCTGTACAAGATGTAGCTTTGAGAGCTACAAAATGATAA
CACTGCTTTATTACACACTGGTTTCATTGTCATTGCAAAAACTTACCCTGGTTGTGGGGGAGAGTTCTAGATCTG
TGCCATGATCCATACACTGGCTAATAGAGTACATAATTTTTCCATTTTCCATTTTTTGTTTTTACTTACTACTGA
AGGATCTCAGATGTAAAATTATGTATTTGGTTTGAGATGGCCACTTATTGTCCTTAAAAATCCATACTGATATAT
GCAGTCATTTTGAATTGGACAGTGCCTTCTCTTTTTTTTTCTCCTCTTCTTCCATCTCCCTCACCCATGCCCCCA
CCCAATCTAAAGAGACAGTGCTGTACATTCTCATAGAGATAGAGAAGATCTAAAAAGTTGAGACTACTCAATCCA
GTTAACAACAGCAGGAGCACTAGAGTTTGTTCATTTATTCTCTCTGTAAAACAAGCTGTGCTTTTTTTCTTCTGC
CTTTAAAATGCCACCCGTGTATTCAAACCATGGCCACTTGATACTTATGTAGAATCCATCGTGGGCTGATGCAAG
CCCTTTATTTAGGCTTAGTGTTGTGGGCACCAATGTCGAGCATCGTTGTGACTTGTGCTGTATGATTCTCACTGA
AGAATTTCCTTTCAGCCAAGAAGCAGTGAGGTCTGGGAATATTCCAAAGTCATGTCTCTGAATATGTGTCCTTGA
CGTGCAAGCTTTGTAAAACCCCATCCCCGCTTAGGTGCGAGGCATCACCTTCTCACAAGTGTTTAGTTTCTTTTA
ACCACAAGTATCATTCTTGGGTGATAATATAGTTTCATTCTACTTAGGGATTGTTTAGAAAACAAAGAAAGAGCC
AATTAAATTTTTTAGTTTTTGAAATTTTTATTTATATGTATACTTAGATGAGTATTTTAAGCTGTCGACCTTTAG
TTTGCCATACGGGTAGGACTGTATTTCATGTTAACAACTGGTGGTAATGATAAGCCTTCTTCTAGCGTATTTTCT
CTTCTTTCCTGTCACTTTCCTAAGTTTTTTTTTTTAAAGACTGGAATTTTTTTTGGCTTTATCTTGTCTTACCGT
AGAGATTTGTTCAAAACTCTAAGCCCTACCACCTCCCCTTTAATAAGCTCTTTAAATAGTTGAATCATTAACAAC
CTGGTGGGAGGCAAGTCATTTAATTGAACCACTAGGAAGTGTATTTTCTTTTCTTTTTCTGCCAACTTTTTGGTG
GCATTTGTAAAAGCTGATATAAAAGGCTCTGAGATGTTATTTTCAGTTATTCCATAGGCAAGCCTTTTTACAGAG
CATATGTCTCCAGTTGGCAGCTTGAGATATTTCCGAGCATCCGGTTCTAGCTACCAGTGCCTCCCAATGCTTAGT
GCACAGTACTGTAGACTGGCCATCACCCCTCTCCTTGGAAAATGCCACTGTGCTGTTTGAAAAAAAGCAGCCTTT
TAGGGCTAGAGTATTTTATATAAACAGAAGAGCTAAGTTCCTGAAGACTAAGCTAGATAGCTGCAGCTATATGTA
AATTGTATATTTTTATGAACTTTTGAAGCACACACTCCTGTTTCCCTCTGTGTAGCTTTGTGGGGATTTCATGTA
TATATGCTGTCTGAAAGAATCCAGAGGTTGGAGTGCCAATAGAAAATGAAAACAAATGCCTTGTACTACAGGCAG
CCTCTGAAGGTGACCACATAACTGTCTTCACTGTGACCAATCGGAGTCCCTGCTTGCTTGTGAAGAAGGGGCTTT
TGTACCTTGTTGGAGATGCCACCTCAGAAGTTCACACTGTGCAGGAAAAAGGTTTTATTCTCTCCTGGCATACAT
TAGAATGTCAGATGCCTGCATCCATGTGGACCACGATGGGCCTCTAAAAATTGGTGGGCAGGGGGTTTGCTTATG
AGTTTTCTCTGGAAACCGATTTTACTCCTGGATGTATTGAATGCCCCTTGAGCTTTATGAGATACGAGTCCACAT
GGATAAAATGTTAGAGAGTGGAGTTCTACAGAGGATTCCAGGAAGAGGCCATGTCTGTGCAGTCCTAGTTCCAGA
CAGGTGAGAAGCTCCAGGAACTACTGGCTACCTTGACAAGCTGGGTAAATAGTTATCATTCTGGGTAACTGGTTG
AAACTCTGACTTTTGGACAAGTAATTCCTGGGGTTCTGTCTTTGGTAGCATCACCAGGGATATTTGGGTGGGACA
GACAGAAGACACACAGCTGCCTGTTCTCTCCTGCCCATCATGTTTGGCCCACTAGATGAAGCTGTACTCAGCAAT
TTAGGGAATGTAACCCTTCTCAGAACTGGCCATTTTCAGGGGAAGCTTGGGAGAGCAATAGTATGGTGAGCCCCT
TAGAGATGAGCGCCTACTCCTTCTTGGCGAATGCTGCCTTCAGATGCTTACCAAGTGGTCACTGCATCTAGTAAG
ATTATATTTCCAGTACACTTCCTTAGGGCAGAAACACCATCCTATCAGGTTTGGTCAGTCCCTTCTTCATGAAGG
GAGTCATGGGGAATTCCTGAAAATTTTCTTCCTTCTGCAGACAGTTGGATGAGTCCCTTAGAGAAGGCATCCAGA
GACATAACTAAACTGAATATCATCCCATATTGATTTTAGGAATTGACTCTAAAACTCTGTGCAGAATCTTGTGTT
GGGATTGTATCTTGACATTCCTGTTGTGTTATTTTTCTTAACTGGAGTGTGTGCTGCCTTTCAGGTACAATTTTT
GTGTAATAAAAGCCAGTGCATTAAGTTTATATAGACTACTTTCTATGCAAGACTGAGATATGGAATAGATAGGAA
GAGATATGTACTGCTGGGTACATGGACAGTAAGTGTGTTTTCAGATGGAGTACCAGCACCGAAAATGGGTTGAGG
GAGGATGGGTTGTATGTATGTTTCTGCCCACTAATTTTGAGCAGCCATATTATGAATTAAATCGTCACAGCCAAG
TAATAACCCAAGAATGGTATGAGTTTCATGTGTAATAGCTCAAATGGAATAAGCATGAATGCTGGAGTGGACCAT
TATCCTCAAATATTCTATGTCACTTCTCATTTAAAGACTCTTGTTATGAACTATTAGAAACTTTAGGCAAAATCA
AAAGTATTTGCGGCAAAATAAAGGCCTATTCTACTCTTATTTAAAGTGAAACACTGTATACTTGTTTCTCTCCAA

FIGURE 2779D

AGCGAAATTAAGTATTTATAATTTCAATTGCCTCGATAAGTTTCCAAGTCACTGAAATCTGCTGAAGGTTTTACT
GTATTGTTGCACAACTTTAAGATAATTTTTGTCTCAATGTCAACTTTTTTCACTGAATAAAAATTTAACTGGGTC
AAGAAAACACCTCTTTGAAAATCCACTGTCTCTGTGTGTCTCGAGCTGTTCTTTAGAGCGCAATAAAGATGGCTG
ACGCAGTCTCCAAACCCC

FIGURE 2780

AASTVFPLAWLSLILWGFSLGAGPRISQRWYFGDTCLHLTEPALLASRCTFSPGGGATCSSVRPNMATRSSRRES
RLPFLFTLVALLPPGALCEVWTQRLHGGSAPLPQDRGFLVVQGDPRELRLWARGDARGASRADEKPLRRKRSAAL
QPEPIKVYGQVSLNDSHNQMVVHWAGEKSNVIVALARDSLALARPKSSDVYVSYDYGKSFKKISDKLNFGLGNRS
EAVIAQFYHSPADNKRYIFADAYAQYLWITFDFCNTLQGFSIPFRAADLLLHSKASNLLLGFDRSHPNKQLWKSD
DFGQTWIMIQEHVKSFSWGIDPYDKPNTIYIERHEPSGYSTVFRSTDFFQSRENQEVILEEVRDFQLRDKYMFAT
KVVHLLGSEQQSSVQLWVSFGRKPMRAAQFVTRHPINEYYIADASEDQVFVCVSHSNNRTNLYISEAEGLKFSLS
LENVLYYSPGGAGSDTLVRYFANEPFADFHRVEGLQGVYIATLINGSMNEENMRSVITFDKGGTWEFLQAPAFTG
YGEKINCELSQGCSLHLAQRLSQLLNLQLRRMPILSKESAPGLIIATGSVGKNLASKTNVYISSSAGARWREALP
GPHYYTWGDHGGIITAIAQGMETNELKYSTNEGETWKTFIFSEKPVFVYGLLTEPGEKSTVFTIFGSNKENVHSW
LILQVNATDALGVPCTENDYKLWSPSDERGNECLLGHKTVFKRRTPHATCFNGEDFDRPVVVSNCSCTREDYECD
FGFKMSEDLSLEVCVPDPEFSGKSYSPPVPCPVGSTYRRTRGYRKISGDTCSGGDVEARLEGELVPCPLAEENEF
ILYAVRKSIYRYDLASGATEQLPLTGLRAAVALDFDYEHNCLYWSDLALDVIQRLCLNGSTGQEVIINSGLETVE
ALAFEPLSQLLYWVDAGFKKIEVANPDGDFRLTIVNSSVLDRPRALVLVPQEGVMFWTDWGDLKPGIYRSNMDGS
AAYHLVSEDVKWPNGISVDDQWIYWTDAYLECIERITFSGQQRSVILDNLPHPYAIAVFKNEIYWDDWSQLSIFR
ASKYSGSQMEILANQLTGLMDMKIFYKGKNTGSNACVPRPCSLLCLPKANNSRSCRCPEDVSSSVLPSGDLMCDC
PQGYQLKNNTCVKEENTCLRNQYRCSNGNCINSIWWCDFDNDCGDMSDERNCPTTICDLDTQFRCQESGTCIPLS
YKCDLEDDCGDNSDESHCEMHQCRSDEYNCSSGMCIRSSWVCDGDNDCRDWSDEANCTAIYHTCEASNFQCRNGH
CIPQRWACDGDTDCQDGSDEDPVNCEKKCNGFRCPNGTCIPSSKHCDGLRDCSDGSDEQHCEPLCTHFMDFVCKN
RQQCLFHSMVCDGIIQCRDGSDEDAAFAGCSQDPEFHKVCDEFGFQCQNGVCISLIWKCDGMDDCGDYSDEANCE
NPTEAPNCSRYFQFRCENGHCIPNRWKCDRENDCGDWSDEKDCGDSHILPFSTPGPSTCLPNYYRCSSGTCVMDT
WVCDGYRDCADGSDEEACPLLANVTAASTPTQLGRCDRFEFECHQPKTCIPNWKRCDGHQDCQDGRDEANCPTHS
TLTCMSREFQCEDGEACIVLSERCDGFLDCSDESDEKACSDELTVYKVQNLQWTADFSGDVTLTWMRPKKMPSAS
CVYNVYYRVVGESIWKTLETHSNKTNTVLKVLKPDTTYQVKVQVQCLSKAHNTNDFVTLRTPEGLPDAPRNLQLS
LPREAEGVIVGHWAPPIHTHGLIREYIVEYSRSGSKMWASQRAASNFTEIKNLLVNTLYTVRVAAVTSRGIGNWS
DSKSITTIKGKVIPPPDIHIDSYGENYLSFTLTMESDIKVNGYVVNLFWAFDTHKQERRTLNFRGSILSHKVGNL
TAHTSYEISAWAKTDLGDSPLAFEHVMTRGVRPPAPSLKAKAINQTAVECTWTGPRNVVYGIFYATSFLDLYRNP
KSLTTSLHNKTVIVSKDEQYLFLVRVVVPYQGPSSDYVVVKMIPDSRLPPRHLHVVHTGKTSVVIKWESPYDSPD
QDLLYAIAVKDLIRKTDRSYKVKSRNSTVEYTLNKLEPGGKYHIIVQLGNMSKDSSIKITTVSLSAPDALKIITE
NDHVLLFWKSLALKEKHFNESRGYEIHMFDSAMNITAYLGNTTDNFFKISNLKMGHNYTFTVQARCLFGNQICGE
PAILLYDELGSGADASATQAARSTDVAAVVVPILFLILLSLGVGFAILYTKHRRLQSSFTAFANSHYSSRLGSAI
FSSGDDLGEDDEDAPMITGFSDDVPMVIA

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FIGURE 2781A

AAGAGGCTAACCTCTGCTTTGTGGACATTGACAACCACTTCATTGAGTTGCCAGAGGACTTGCCACAGTTCCCCA
ACAAATTGGAGTTTGTCCAGGAAGTCTCTGAGATTCTCATGGCATTTGGAATTCCCCCTGAAGGGAATCTTCATT
GCAGTGAGAGTGCCTCCAAGCTGAAGAGGCTGCGGGCCTCTGAGCTTGTCTCGGACAAGAGGAATGGGAACATTG
CTGGCTCCCCTTTGCATTCCTACGAGCTTCTTAAGGAGAATGAAACTATTGCCCGGCTGCAAGCCTTGGTCAAGA
GAACTGGGGTGAGCCTGGAAAAGTTGGAAGTGCGTGAAGACCCCAGCAGCAATAAGGATCTCAAAGTTCAGTGTG
ATGAAGAAGAACTCAGGATTTACCAGCTAAACATTCAGATCCGGGAAGTTTTTGCAAATCGTTTCACTCAGATGT
TTGCAGATTATGAGGTGTTTGTCATCCAACCCAGCCAGGATAAGGAATCCTGGTTTACCAACAGGGAGCAAATGC
AAAACTTTGATAAAGCATCTTTTCTGTCAGATCAGCCTGAGCCCTACCTGCCCTTCCTCTCAAGATTCCTGGAGA
CCCAGATGTTTGCATCTTTCATTGACAACAAAATAATGTGTCATGATGATGATGATGAAGACCCTGTACTCCGGG
TATTTGATTCCCGAGTTGACAAGATCAGGCTGTTGAATGTTCGGACACCTACTCTCCGTACATCCATGTACCAGA
AGTGTACCACTGTGGATGAAGCAGAGAAAGCAATTGAGCTGCGTCTGGCAAAAATTGACCATACTGCAATTCACC
CACATTTACTTGACATGAAGATTGGACAAGGGAAATATGAGCCGGGCTTCTTCCCTAAGCTGCAGTCTGATGTAC
TTTCCACTGGGCCAGCCAGCAACAAGTGGACGAAAAGGAATGCCCCTGCCCAGTGGAGGCGGAAAGATCGGCAGA
AGCAGCACACAGAACACCTGCGTTTAGATAATGACCAGAGGGAGAAGTACATCCAGGAAGCCAGGACTATGGGCA
GCACTATCCGCCAGCCCAAACTGTCCAACCTCTCTCCATCAGTGATTGCCCAGACCAATTGGAAGTTTGTAGAGG
GCCTGCTGAAGGAATGCCGCAATAAGACCAAGAGGATGCTGGTGGAAAAGATGGGCCGAGAAGCTGTGGAGCTAG
GGCATGGGGAGGTGAACATCACAGGGGTGGAAGAGAACACCCTGATTGCCAGCCTTTGTGATCTCCTGGAAAGGA
TCTGGAGTCATGGACTACAAGTGAAACAGGGGAAATCAGCCTTATGGTCCCACCTGTTACATTATCAGGACAACC
GGCAGAGAAAACTCACATCAGGAAGCCTCAGTACCTCAGGAATACTTCTTGATTCAGAACGTAGGAAGTCTGATG
CCAGCTCACTCATGCCTCCCCTGAGGATCTCCCTGATTCAGGATATGAGGCACATCCAGAACATCGGGGAAATCA
AGACTGATGTGGGAAAGGCCAGAGCATGGGTGCGACTGTCCATGGAAAAAAAGTTACTTTCCAGACACCTGAAGC
AGCTCCTCTCAGACCATGAGCTCACCAAAAAGTTATATAAGCGCTATGCCTTCCTGCGCTGTGATGACGAGAAGG
AGCAGTTCCTCTATCACCTCCTGTCTTTCAATGCCGTCGATTACTTTTGCTTCACCAATGTCTTCACAACTATCC
TGATCCCGTACCACATTCTGATCGTACCAAGCAAGAAGCTGGGGGGCTCCATGTTCACTGCCAACCCATGGATCT
GTATATCAGGAGAATTGGGTGAGACACAGATCATGCAGATTCCCAGGAATGTGCTAGAGATGACCTTCGAGTGCC
AGAACTTGGGGAAGCTTACTACTGTCCAGATTGGCCATGATAACTCTGGGCTGTATGCCAAATGGCTGGTGGAGT
ATGTGATGGTCAGGAATGAGATCACAGGACATACCTACAAGTTCCCGTGTGGCCGGTGGTTAGGGAAGGGCATGG
ATGATGGAAGCCTGGAGCGGATCCTAGTTGGGGAGCTGCTCACATCCCAGCCTGAGGTGGATGAGAGGCCATGCC
GGACCCCGCCGCTGCAGCAGTCCCCCAGTGTCATCCGGAGGCTTGTTACCATCTCACCCAACAACGAGCCCAAGC
TGAACACTGGGCAGATCCAGGAGTCCATCGGGGAGGCAGTCAATGGCATTGTGAAGCACTTCCATAAGCCTGAGA
AAGAGCGAGGCAGTCTGACGCTGTTGCTCTGTGGAGAGTGTGGCCTTGTCTCGGCCTTGGAACAGGCTTTCCAGC
ATGGATTTAAATCGCCCCGGCTCTTCAAAAATGTCTTCATTTGGGATTTCCTGGAAAAAGCACAAACCTATTATG
AGACATTAGAGAAGAATGAAGTAGTCCCTGAGGAAAACTGGCATACAAGAGCCCGGAACTTCTGCCGATTTGTCA
CTGCAATCAACAATACTCCCCGGAACATCGGCAAGGATGGCAAGTTTCAGATGCTGGTGTGCTTGGGAGCCAGAG
ATCACCTCCTACACCACTGGATTGCCCTGCTGGCTGACTGCCCCATCACTGCACACATGTATGAGGATGTGGCAC
TGATCAAAGACCATACACTTGTCAATTCCTTGATTCGTGTGCTGCAGACATTGCAGGAGTTCAACATCACGCTGG
AGACGTCCCTTGTCAAGGGCATCGACATCTGACCTCCCAGCACCAGCCAGCAGCAGGACTGAGAAAGACTCACCC
TGCAGCTCTGACCTTTTTTCCCAAAGGGACTTAAGCGATTGTGCAGGAGTAGGAGACAAAATGTACACTCACTGT
AAAAAGAAAACTAGAGGATTTTTGGAATAAATAATCTATTTTAGAGTTTATTTGCTGATTTGCTTTTTACACACT
TTCATGTGAAAGAGTGATAGGGAGAGGGAGCGAGGCTGGTGCCGCTTATTTTGAAGCTGGTGCCCTCCCTCGCCG
TGGCCACATGCTGGAAGCCTGAGGCCTCCCTGGACTGAGCCTGTGGCACTGCGTGCGGGACAGTTATGTTTCCTT
GCCCCGTCGCATTAATGAGGCCCTTCCACATCATTTTTAAACTAATGTTTTTCTATATTAACATTATTATGGATA
TTTGGCTTTCATAGGCCACACACAGGTGTGCTGCGCGGGAAGCCCCATGCTCCAATCAAAGGGATTTTTAGTAGT
GCCTCTAAGCAAGCACCGATGAGTCAGTCCCACGTATTTTCTTTTTTGTCAGTATTGTTTGGGAAGGAGACATGC
CGGGATGTGTCATCGTGCCAAATACCACATTTCCTGTTGGCACAGTTTCACAGAAGTAAACATAAGCATGTTTTA
ACAGGTTTTTCTTTTCTTTTTTCTTTTTTAAAATGTTTTATTTATTTAACCCGCCATTGTGTGTTTTTAAGTATT
TTCTTTTTTTAAGGAAAGGAAAAGCTTGTCACAATCTAACTGGCTATGTTATTATTATTAAATTTATGTTTTGCA
ACTTAGAAACCAGCTACAGTATGGCCCACTTAATAAAACACCTGAAACAAAAAAAAAAAAAAAAAAAAAAAAAA

AAAA

FIGURE 2781B

FIGURE 2782

MAFGIPPEGNLHCSESASKLKRLRASELVSDKRNGNIAGSPLHSYELLKENETIARLQALVKRTGVSLEKLEVRE
DPSSNKDLKVQCDEEELRIYQLNIQIREVFANRFTQMFADYEVFVIQPSQDKESWFTNREQMQNFDKASFLSDQP
EPYLPFLSRFLETQMFASFIDNKIMCHDDDDEDPVLRVFDSRVDKIRLLNVRTPTLRTSMYQKCTTVDEAEKAIE
LRLAKIDHTAIHPHLLDMKIGQGKYEPGFFPKLQSDVLSTGPASNKWTKRNAPAQWRRKDRQKQHTEHLRLDNDQ
REKYIQEARTMGSTIRQPKLSNLSPSVIAQTNWKFVEGLLKECRNKTKRMLVEKMGREAVELGHGEVNITGVEEN
TLIASLCDLLERIWSHGLQVKQGKSALWSHLLHYQDNRQRKLTSGSLSTSGILLDSERRKSDASSLMPPLRISLI
QDMRHIQNIGEIKTDVGKARAWVRLSMEKKLLSRHLKQLLSDHELTKKLYKRYAFLRCDDEKEQFLYHLLSFNAV
DYFCFTNVFTTILIPYHILIVPSKKLGGSMFTANPWICISGELGETQIMQIPRNVLEMTFECQNLGKLTTVQIGH
DNSGLYAKWLVEYVMVRNEITGHTYKFPCGRWLGKGMDDGSLERILVGELLTSQPEVDERPCRTPPLQQSPSVIR
RLVTISPNNEPKLNTGQIQESIGEAVNGIVKHFHKPEKERGSLTLLLCGECGLVSALEQAFQHGFKSPRLFKNVF
IWDFLEKAQTYYETLEKNEVVPEENWHTRARNFCRFVTAINNTPRNIGKDGKFQMLVCLGARDHLLHHWIALLAD
CPITAHMYEDVALIKDHTLVNSLIRVLQTLQEFNITLETSLVKGIDI

FIGURE 2783

CTCTCTGCTCCTCCTGTTCGACAGTCAGCCGCATCTTCTTTTGCGTCGCCAGCCGAGCCACATCGCTCAGACACC
ATGGGGAAGGTGAAGGTCGGAGTCAACGGATTTGGTCGTATTGGGCGCCTGGTCACCAGGGCTGCTTTTAACTCT
GGTAAAGTGGATATTGTTGCCATCAATGACCCCTTCATTGACCTCAACTACATGGTTTACATGTTCCAATATGAT
TCCACCCATGGCAAATTCCATGGCACCGTCAAGGCTGAGAACGGGAAGCTTGTCATCAATGGAAATCCCATCACC
ATCTTCCAGGAGCGAGATCCCTCCAAAATCAAGTGGGGCGATGCTGGCGCTGAGTACGTCGTGGAGTCCACTGGC
GTCTTCACCACCATGGAGAAGGCTGGGGCTCATTTGCAGGGGGGAGCCAAAAGGGTCATCATCTCTGCCCCCTCT
GCTGATGCCCCCATGTTCGTCATGGGTGTGAACCATGAGAAGTATGACAACAGCCTCAAGATCATCAGCAATGCC
TCCTGCACCACCAACTGCTTAGCACCCCTGGCCAAGGTCATCCATGACAACTTTGGTATCGTGGAAGGACTCATG
ACCACAGTCCATGCCATCACTGCCACCCAGAAGACTGTGGATGGCCCCTCCGGGAAACTGTGGCGTGATGGCCGC
GGGGCTCTCCAGAACATCATCCCTGCCTCTACTGGCGCTGCCAAGGCTGTGGGCAAGGTCATCCCTGAGCTGAAC
GGGAAGCTCACTGGCATGGCCTTCCGTGTCCCCACTGCCAACGTGTCAGTGGTGGACCTGACCTGCCGTCTAGAA
AAACCTGCCAAATATGATGACATCAAGAAGGTGGTGAAGCAGGCGTCGGAGGGCCCCCTCAAGGGCATCCTGGGC
TACACTGAGCACCAGGTGGTCTCCTCTGACTTCAACAGCGACACCCACTCCTCCACCTTTGACGCTGGGGCTGGC
ATTGCCCTCAACGACCACTTTGTCAAGCTCATTTCCTGGTATGACAACGAATTTGGCTACAGCAACAGGGTGGTG
GACCTCATGGCCCACATGGCCTCCAAGGAGTAAGACCCCTGGACCACCAGCCCCAGCAAGAGCACAAGAGGAAGA
GAGAGACCCTCACTGCTGGGGAGTCCCTGCCACACTCAGTCCCCCACCACACTGAATCTCCCCTCCTCACAGTTG
CCATGTAGACCCCTTGAAGAGGGGAGGGGCCTAGGGAGCCGCACCTTGTCATGTACCATCAATAAAGTACCCTGT
GCTCAACC

FIGURE 2784

MGKVKVGVNGFGRIGRLVTRAAFNSGKVDIVAINDPFIDLNYMVYMFQYDSTHGKFHGTVKAENGKLVINGNPIT
IFQERDPSKIKWGDAGAEYVVESTGVFTTMEKAGAHLQGGAKRVIISAPSADAPMFVMGVNHEKYDNSLKIISNA
SCTTNCLAPLAKVIHDNFGIVEGLMTTVHAITATQKTVDGPSGKLWRDGRGALQNIIPASTGAAKAVGKVIPELN
GKLTGMAFRVPTANVSVVDLTCRLEKPAKYDDIKKVVKQASEGPLKGILGYTEHQVVSSDFNSDTHSSTFDAGAG
IALNDHFVKLISWYDNEFGYSNRVVDLMAHMASKE

FIGURE 2785A

CACTAGAATGTGAAGGATCTTCGCGGTTCTGGGTGCCCAGAAAGGCGGCGACGCGGCGGATGACAACATTAGTGC
CGCGACGCGCTCCTGGCCAGGCGGCGGCTGTAGTGTTAGCTTTGGACGCCGCAGTAGCCGCTGCCGGTAGCAAGC
CGACTGAGGGAAGGTGGGGGTCCGCCCGGGCTGGTGGACCTCGGGGCCGAAAGTTCCCGCCCCGCTCGGGGGCTG
AGCCGGCAGTGCCTCCGCGGCCGCTGGGCAGCGCCCTTCGTCCAGGCTCGCGCCCCAGCTGCCGCCGACGACAGC
GGCCGAGAGAAGTTGGGGTCTGACTAGACGCTTACGGGGCCTCGGACCCCGGCGCCGCGGCGACCTCGGAGGAAC
CGGCTCCTTGCGTCCCGCCTCCCTGGGAGCTCCGCACGGGATTTGCAGATTTACAGAATGGCTGCACATTAATGG
AAAGAGAAGCATAAACCTATCTTCTTTCATTATGGAGGGAGGTTTGGCAGATGGAGAACCTGATCGAACTTCGCT
TCTTGGTGATAGCAAAGATGTCCTTGGGCCATCAACTGTTGTAGCAAACAGTGACGAATCTCAGCTTCTGACACC
AGGAAAGATGAGTCAGCGCCAAGGAAAAGAAGCTTATCCAACGCCAACCAAAGATTTGCATCAGCCATCTCTTAG
TCCAGCAAGTCCTCATAGCCAGGGTTTTGAAAGAGGGAAGGAAGATATTTCTCAAAATAAAGATGAATCTTCACT
TTCTATGTCAAAGAGCAAGTCTGAATCTAAACTTTATAATGGCTCAGAGAAGGACAGTTCAACTTCAAGCAAACT
CACAAAAAAAAGAATCTCTTAAGGTACAAAAGAAAAATTACCGAGAAGAAAAGAAAAGAGCCACAAAGGAGCTGCT
CAGTACAATCACAGATCCTTCTGTTATTGTTATGGCTGATTGGTTAAAGATTCGTGGTACTCTAAAGAGCTGGAC
CAAGTTATGGTGTGTGTTGAAACCTGGGGTGCTACTGATCTATAAAACCCAAAAAAAATGGTCAGTGGGTAGGAAC
AGTTCTTCTGAATGCCTGTGAAATCATTGAACGTCCATCAAAAAAGGATGGCTTTTGTTTCAAACTTTTCCATCC
TTTGGAGCAATCTATTTGGGCAGTGAAGGGTCCAAAAGGTGAAGCGGTTGGATCCATTACTCAACCCTTACCTAG
CAGTTATTTGATCATCCGAGCTACTTCAGAGTCAGATGGAAGGTGCTGGATGGATGCTTTGGAGTTGGCTTTGAA
ATGTTCTAGTCTTCTTAAACGTACAATGATCAGAGAAGGAAAGGAACATGACCTGAGCGTTTCATCAGATAGCAC
ACATGTGACTTTCTATGGCTTACTACGTGCTAACAATCTCCACAGTGGTGATAACTTCCAGTTAAATGATAGTGA
AATTGAACGACAACATTTTAAGGACCAAGATATGTATTCTGATAAATCTGATAAAGAAAATGATCAAGAACATGA
TGAGTCTGATAATGAGGTGATGGGGAAAAGTGAAGAAAGTGACACAGATACATCAGAAAGACAAGATGACTCATA
TATCGAACCTGAGCCTGTTGAGCCTTTAAAGGAGACTACCTACACTGAACAGAGCCATGAAGAACTTGGAGAGGC
AGGTGAGGCTTCTCAAACAGAAACTGTATCTGAAGAAAACAAAAGCCTTATCTGGACACTATTGAAACAAGTCCG
TCCTGGCATGGACCTATCCAAGGTGGTTCTGCCTACATTTATTTTGGAACCCCGTTCTTTCCTGGATAAACTTTC
AGATTACTACTATCATGCAGATTTCCTATCTGAGGCAGCTCTTGAAGAAAATCCTTATTTCCGTTTGAAGAAAGT
AGTGAAATGGTATTTGTCAGGATTCTATAAAAAGCCAAAGGGACTGAAGAAACCTTATAATCCTATACTTGGCGA
GACTTTCCGTTGTTTATGGATTCATCCCAGAACAAACAGCAAAACTTTTTATATTGCTGAACAGGTGTCCCATCA
TCCACCAATATCTGCCTTTTATGTTAGTAATCGAAAAGATGGATTTTGCCTTAGCGGTAGTATCCTGGCTAAGTC
TAAGTTTTATGGAAACTCATTATCTGCAATATTAGAGGGAGAAGCACGGTTAACTTTCTTGAATAGAGGTGAAGA
TTATGTAATGACAATGCCATACGCTCATTGTAAAGGAATTCTTTATGGTACAATGACACTGGAGCTTGGTGGAAC
AGTCAATATTACATGTCAAAAAACTGGATACAGTGCAATACTTGAATTTAAACTAAAGCCATTCCTAGGGAGTAG
TGACTGTGTTAATCAAATATCAGGGAAACTTAAACTGGGAAAAGAAGTCCTAGCTACTTTGGAAGGTCATTGGGA
TAGTGAAGTTTTTATTACTGATAAAAAGACTGATAATTCAGAGGTTTTCTGGAATCCAACACCTGACATTAAGCA
ATGGAGATTAATAAGGCACACTGTAAAATTTGAAGAACAGGGAGATTTTGAATCAGAGAAACTCTGGCAACGGGT
AACTCGAGCCATAAATGCCAAAGACCAAACTGAAGCTACCCAAGAGAAGTATGTTTTGGAAGAAGCTCAAAGACA
AGCTGCCAGGGATCGGAAAACAAAAAATGAAGAGTGGTCTTGCAAATTATTTGAACTTGATCCACTCACAGGAGA
ATGGCATTACAAGTTTGCAGATACCCGACCATGGGACCCACTTAATGATATGATACAGTTTGAAAAAGATGGTGT
TATTCAGACCAAAGTGAAACATCGTACTCCAATGGTTAGCGTCCCCAAAATGAAACATAAGCCAACCAGGCAACA
GAAGAAAGTAGCAAAAGGCTATTCCTCCCCAGAACCTGACATTCAAGACTCCTCTGGAAGTGAAGCTCAATCAGT
AAAACCAAGTACAAGAAGAAAGAAAGGAATAGAACTGGGAGACATTCAGAGTTCCATCGAATCTATAAAACAAAC
ACAGGAAGAAATTAAAAGAAATATTATGGCTCTTCGAAATCATTTAGTTTCAAGCACACCGGCCACGGATTATTT
TCTGCAACAAAAAGACTACTTCATCATTTTCCTCCTGATTTTGCTTCAAGTCATAATAAACTTCATGTTCAAGTA
GAAGTTCTCTACCATTGAATCAGTGAACTAGAAAGATCTGATTTGGCCTGGGACCAGTGTTCAAGTTGGTTTGGT
CTTTATTAAAAATCACAATATTCCGAAAACAAAAAAACCTAGGAGATAAATGTAGAGGTATTGACTTTTCGTATC
TTTTATCTTCACACTGAAACAAGAGCTATCCTATTTGATTATTAAAGTGAGCTATGTGTTAAGTGCCAGGACATT
TCTAGCTTTTGTGAGAATGTGTCTACATATGAGTATAATAAACCCACATGTATACACAATTGTCTCTTATGTACT
CCTACCTGACAGTAGTCTTTGTATTCTATAGTATGTTCTGAGATATAATGTTAACATTGTTCATAACAAAAAATG
CTATCAATCTTATAAATATATGTAATCTATTTTCTTCATAAAACAGGCACAAAAGTTTTATCAGTAAGGAATTAC

FIGURE 2785B

AGATTGAGAAATGATGGAATAATAGACATAATTAATTCAATACACTACTGTTAAAATCATTTGCAAAGCACTCAG
CTCAATTATCTTCTTAGAAAGAAAGAAAAAGTATGAATGGTCAAAATGAATACATCGAGAGAGATAAATGGCAAA
TTGCTTTTTTAAAAGTTTACATAAGTTTTTTTTAACCCCTAGAATTTAATATTTGTAGATGCAGGTAAATATATA
TACTTACGTGTATATCAGTATAAAAACACTGGTGTGCAATTAATTGGATTGATTATAATACCACCTTAAGCACTT
GCTGAAAAAAGTGTGGTCAAAATTGATTGCTGTCCTTTTGTCTTATTTTTGTTTTTCTTAAGTCAGCTGGTTCAT
AACATAGGCCAAATTCTAGAGATGTTTATAGAGCATTTGAAGTGCTGATAATTTATGTTTTTTCATTATGAAAAC
TTATTTTAGCTTTAGACTCCAGTGTGTTCAGTGAATAAGTAGAATATAAAAAAATATAACCAGTATTTTACTTCA
AAAGCCAAAAAGAGGCAATAAGAAAAGACACTTTGTGGTGGCCTTTATGTGTGCATTAAAATTGGTTTCTGTAAA
ACGTGTAATAAGTTGAGTATCTACGAAGAGTATCAAGTTCTGAAGTTTAATTTTTTTATTATCCTCCTCTCTTCT
TAGTAACTTCTTTCTGTGGCAAAACCACAATTCTTTAAGATTCCTATTGTTCAGGCTAAGGCAAATTTTTTTGTT
TGTTTCTTCAGTTTAATATTTTGATTTTGTGTTTTTACGTAAATATTTATATTCCTTGAAAGCAATTTTTGCCAA
GGTAGTTCAGTTTAGGAATATGTTGTTCTAAAATATGTCTTAGAATCCTGAAAGCATAGATTTTGAAATGTTTTT
TTAATGAAAATGAAGGTCAGAGAGAATAATTGCCCTGACCACATTTGCCTTTCAGTAGGAGGAGGCTGTGAAATA
GTAAAATTATAATCGTTTATGCCATGATAAATACAAGATTGGTAAATAAATACATTGATTGGTAAATTATGAGAA
TCAAAATGATAAAAAGAGCCTGCTTTTTTCCCTAACCAATATAGCTATCTTAAGTATCCTTAGGTTTCTGTGAAG
AACCATTTCCCATGTTTTCTTGGCAAAATAATGCTGTATTCCATATGTACATGTGAAATGATGTTTTAAATTGAT
AAAAGCTTAAATAAGATCTACCTATACCCAGTATTTTCATGATATTAGAACAAATGGGTTTTTGGTTATATTTTA
TATTTGTCAATATAATTTTTGTATTCACATTCTGTTACACTCTGCCTATTCATTGATATATGATATTCTGTAAAT
ATTGTACAATTTGATCTTTTTTATGGTTTAAATTAGTTAATTACATACAAATTGATTGGCTTATCACAAAAATCA
TTTCATCAGTAAACCTTGTTAACATTTTGTACTGGTGACCCACCTCTTAGGACTTTGGTCTTATCCACGTGTATG
TTGTTTTCATTTGGTCCAAATAATATTTTATTTGTATGGGTATCTTCTAAGACTAAATAGGTAGTTGTGTTCTTT
ATTTTTAAAATTTCTTTTTAGAGCAAATGTTATGGGTTCTTACCCAAAGAGTCAAAAACTATTTCTTAAGAAAGA
GCAGAGTTATTCATGACTGTTCTTTATACACTAAAAGCATGCATCTAATCTAATAGTCCTCTTATTATGCTTTTA
GTTGTATGAGTCTCTTTCTATGAACTGAACACAAAACTCAGGAATTGGTGGCTTAATTTTAGATCAGTGCTTGTA
CTAGGCTTAGTTATATGAATCTTTATAACACATAATTACTAACTTTGTAGCCATATATGTAATTGACTTTGAATG
TTATTTACCTGAAATTAATCTTCCTTCACACATGGACCGTAAACGGTTCCCAGTTGTCTGAGAGCCTCATGAGGG
TTTCTAGGATTTATGACCTTATGACCAGTTTTTTTCATTTACCAAGATTTTATTTTCCTACATGAAAATTTAATT
GAGTAATAATTATTCACATGTGCATTTTCTTTTTAGCTGTTAAATGTACTATGCCATCATCCACCATTTAGTAAA
ATGTAGCTGGCCCAGGACATGTAAAAAAAAAAAAAAAACAACAACAATAAATAGGGCATGTGAAATGTTAAGTTA
CAGCAATAGATATTTTATTTGTATTTCATGTTAGTACTTTTTTGTTTTATATCACTTATAAAGGTACAGTGTACT
CTTTGTCACAGCTCAGTTGGTAACCGCATTCCATTGAAAAGTTGGCCTTGTAAAATACAACTCTCATTTAATATT
CATGCTTTTGTGCCTTTAAGAAAATATTTTTTGTCATTTTTTGTGTTACAGAACTATAATGTGATTCAAGGTGTT
TATAGGCTTGTCATAAAAGGGTCATTTCTGTGTGTTACTTTCTTTTTATATAGCTATAGTATATTTAAACAATAA
TACTATCTTTTATAGGGGTTTGTCTATTTACCTATTCTTTACTCAGACATTGATGTAGACTTGTCAGATTATTCT
GAGTATTGTTAACAGTGCCTTTTCGATGGAATCACACTTTTTGGCTGTCACCTTGTGCCATATACACACAAAATT
TTGTGGAAGGCAGTTTTAACTTTCTGAAGAATATCTGTCAAAATTTAAGAAAACAAATGTATAAAATTCCATTTT
TTCCAGTGTTTAGCATTTCTAGTAAGCAGTGAGGTTGTTTGACATACAGTGATGATGGCATTATTGATAAGCCAT
ACATGAGACTGCAGATTATATTGAATCATATTAAATGTACAGAAATAAAATATTAGATTTATATCAAATTTTCCA
ATTTGAACCAGTGGGGAAAATCCCACAGAAATCAGTAAGTTTACATTTCAATTTCTATCTTATTTGACTAAGTGG
AAAGAGATTCTTTAAAATGTATAACCTGCCATTATGTAATTTGGTTTCATTTTATTCTACCTGTTGTGTGAGTTT
AGTATATTTAATTTACTTTTTGTTACTCTTTACATACTGTTTATTTTTGTTAGTTTTTAATTGAAGATGGACTGT
TGAAATTGTATAGGACCAGTGTCTTATTAATATGATTAATATATTTAGAAGAGCCACGTGAAACCCATGACAAAA
TGAATGTGAATATTCTTTCTAAAAATTTAGAAAATGTTATCTTTTTGCATTTATTATGTAAAACTGTTTTACAGT
ATCAAAATTTTTCACTTAAAGAAAAAAAATGCCATGAAACATTTGAACTGATGAGCCACAGAACTTCAGTTGAAA
TTTTTTTCACTTTTTAGCATGCTAAATATACATCTGAGTTTAAATGTTCTGTTTAATGGCCATTCATAAATTCAA
GCACTACCACTGGTCAGTTTTGTGTGATAGAATAAAAATATGTTACCTGCAGTGTAAGTACAGCACACTGTCAAA
TTCTTTTCCTTAAGGTGCACAGTAAATGTACAGATAGTTATAGGCCACTGTTTTGTAATGTAGTACATTTCTAAT
CTATTATTCCTAACCTATTATAACTGTTTGCAGAAAGAAAAGAATTTTTCTAATAATCTGTAAAATTATGCTAAC

FIGURE 2785C

TTCTACAAGTAGGCTTCTAAATAAAATTTTTAAAAAGAGC

FIGURE 2786

MEGGLADGEPDRTSLLGDSKDVLGPSTVVANSDESQLLTPGKMSQRQGKEAYPTPTKDLHQPSLSPASPHSQGFE
RGKEDISQNKDESSLSMSKSKSESKLYNGSEKDSSTSSKLTKKESLKVQKKNYREEKKRATKELLSTITDPSVIV
MADWLKIRGTLKSWTKLWCVLKPGVLLIYKTQKNGQWVGTVLLNACEIIERPSKKDGFCFKLFHPLEQSIWAVKG
PKGEAVGSITQPLPSSYLIIRATSESDGRCWMDALELALKCSSLLKRTMIREGKEHDLSVSSDSTHVTFYGLLRA
NNLHSGDNFQLNDSEIERQHFKDQDMYSDKSDKENDQEHDESDNEVMGKSEESDTDTSERQDDSYIEPEPVEPLK
ETTYTEQSHEELGEAGEASQTETVSEENKSLIWTLLKQVRPGMDLSKVVLPTFILEPRSFLDKLSDYYYHADFLS
EAALEENPYFRLKKVVKWYLSGFYKKPKGLKKPYNPILGETFRCLWIHPRTNSKTFYIAEQVSHHPPISAFYVSN
RKDGFCLSGSILAKSKFYGNSLSAILEGEARLTFLNRGEDYVMTMPYAHCKGILYGTMTLELGGTVNITCQKTGY
SAILEFKLKPFLGSSDCVNQISGKLKLGKEVLATLEGHWDSEVFITDKKTDNSEVFWNPTPDIKQWRLIRHTVKF
EEQGDFESEKLWQRVTRAINAKDQTEATQEKYVLEEAQRQAARDRKTKNEEWSCKLFELDPLTGEWHYKFADTRP
WDPLNDMIQFEKDGVIQTKVKHRTPMVSVPKMKHKPTRQQKKVAKGYSSPEPDIQDSSGSEAQSVKPSTRRKKGI
ELGDIQSSIESIKQTQEEIKRNIMALRNHLVSSTPATDYFLQQKDYFIIFLLILLQVIINFMFK

FIGURE 2787A

GCAGCTGAAGCTTTCACAAGTTTGTACAAAAAAGCAGGCTCTTCCTTACGGGGCCTCGGACCCCGGCGCCGCGGC
GACCTCGGAGGAACCGGCTCCTTGCGTCCCGCCTCCCTGGGAGCTCCGCACGGGATTTGCAGATTTACAGAATGG
CTGCACATTAATGGAAAGAGAAGCATAAACCTATCTTCTTTCATTATGGAGGGAGGTTTGGCAGATGGAGAACCT
GATCGAACTTCGCTTCTTGGTGATAGCAAAGATGTCCTTGGGCCATCAACTGTTGTAGCAAACAGTGACGAATCT
CAGCTTCTGACACCAGGAAAGATGAGTCAGCGCCAAGGAAAAGAAGCTTATCCAACGCCAACCAAAGATTTGCAT
CAGCCATCTCTTAGTCCAGCAAGTCCTCATAGCCAGGGTTTTGAAAGAGGGAAGGAAGATATTTCTCAAAATAAA
GATGAATCTTCACTTTCTATGTCAAAGAGCAAGTCTGAATCTAAACTTTATAATGGCTCAGAGAAGGACAGTTCA
ACTTCAAGCAAACTCACAAAAAAAGAATCTCTTAAGGTACAAAAGAAAAATTACCGAGAAGAAAAGAAAAGAGCC
ACAAAGGAGCTGCTCAGTACAATCACAGATCCTTCTGTTATTGTTATGGCTGATTGGTTAAAGATTCGTGGTACT
CTAAAGAGCTGGACCAAGTTATGGTGTGTGTTGAAACCTGGGGTGCTACTGATCTATAAAACCCAAAAAAATGGT
CAGTGGGTAGGAACAGTTCTTCTGAATGCCTGTGAAATCATTGAACGTCCATCAAAAAAGGATGGCTTTTGTTTC
AAACTTTTCCATCCTTTGGAGCAATCTATTTGGGCAGTGAAGGGTCCAAAAGGTGAAGCGGTTGGATCCATTACT
CAACCCTTACCTAGCAGTTATTTGATCATCCGAGCTACTTCAGAGTCAGATGGAAGGTGCTGGATGGATGCTTTG
GAGTTGGCTTTGAAATGTTCTAGTCTTCTTAAACGTACAATGATCAGAGAAGGAAAGGAACATGACCTGAGCGTT
TCATCAGATAGCACACATGTGACTTTCTATGGCTTACTACGTGCTAACAATCTCCACAGTGGTGATAACTTCCAG
TTAAATGATAGTGAAATTGAACGACAACATTTTAAGGACCAAGATATGTATTCTGATAAATCTGATAAAGAAAAT
GATCAAGAACATGATGAGTCTGATAATGAGGTGATGGGGAAAAGTGAAGAAAGTGACACAGATACATCAGAAAGA
CAAGATGACTCATATATCGAACCTGAGCCTGTTGAGCCTTTAAAGGAGACTACCTACACTGAACAGAGCCATGAA
GAACTTGGAGAGGCAGGTGAGGCTTCTCAAACAGAAACTGTATCTGAAGAAAACAAAAGCCTTATCTGGACACTA
TTGAAACAAGTCCGTCCTGGCATGGACCTATCCAAGGTGGTTCTGCCTACATTTATTTTGGAACCCCGTTCTTTC
CTGGATAAACTTTCAGATTACTACTATCATGCAGATTTCCTATCTGAGGCAGCTCTTGAAGAAAATCCTTATTTC
CGTTTGAAGAAAGTAGTGAAATGGTATTTGTCAGGATTCTATAAAAAGCCAAAGGGACTGAAGAAACCTTATAAT
CCTATACTTGGCGAGACTTTCCGTTGTTTATGGATTCATCCCAGAACAAACAGCAAAACTTTTTATATTGCTGAA
CAGGTGTCCCATCATCCACCAATATCTGCCTTTTATGTTAGTAATCGAAAAGATGGATTTTGCCTTAGCGGTAGT
ATCCTGGCTAAGTCTAAGTTTTATGGAAACTCATTATCTGCAATATTAGAGGGAGAAGCACGGTTAACTTTCTTG
AATAGAGGTGAAGATTATGTAATGACAATGCCATACGCTCATTGTAAAGGAATTCTTTATGGTACAATGACACTG
GAGCTTGGTGGAACAGTCAATATTACATGTCAAAAAACTGGATACAGTGCAATACTTGAATTTAAACTAAAGCCA
TTCCTAGGGAGTAGTGACTGTGTTAATCAAATATCAGGGAAACTTAAACTGGGAAAAGAAGTCCTAGCTACTTTG
GAAGGTCATTGGGATAGTGAAGTTTTTATTACTGATAAAAAGACTGATAATTCAGAGGTTTTCTGGAATCCAACA
CCTGACATTAAGCAATGGAGATTAATAAGGCACACTGTAAAATTTGAAGAACAGGGAGATTTTGAATCAGAGAAA
CTCTGGCAACGGGTAACTCGAGCCATAAATGCCAAAGACCAAACTGAAGCTACCCAAGAGAAGTATGTTTTGGAA
GAAGCTCAAAGACAAGCTGCCAGGGATCGGAAAACAAAAAATGAAGAGTGGTCTTGCAAATTATTTGAACTTGAT
CCACTCACAGGAGAATGGCATTACAAGTTTGCAGATACCCGACCATGGGACCCACTTAATGATATGATACAGTTT
GAAAAAGATGGTGTTATTCAGACCAAAGTGAAACATCGTACTCCAATGGTTAGCGTCCCCAAAATGAAACATAAG
CCAACCAGGCAACAGAAGAAAGTAGCAAAAGGCTATTCCTCCCCAGAACCTGACATTCAAGACTCCTCTGGAAGT
GAAGCTCAATCAGTAAAACCAAGTACAAGAAGAAAGAAAGGAATAGAACTGGGAGACATTCAGAGTTCCATCGAA
TCTATAAAACAAACACAGGAAGAAATTAAAAGAAATATTATGGCTCTTCGAAATCATTTAGTTTCAAGCACACCG
GCCACGGATTATTTTCTGCAACAAAAAGACTACTTCATCATTTTCCTCCTGATTTTGCTTCAAGTCATAATAAAC
TTCATGTTCAAGTAGAAGTTCTCTACCATTGAATCAGTGAACTAGAAAGATCTGATTTGGCCTGGGACCAGTGTT
CAAGTTGGTTTGGTCTTTATTAAAAATCACAATATTCCGAAAACAAAAAAACCTAGGAGATAAATGTAGAGGTAT
TGACTTTTCGTATCTTTTATCTTCACACTGAAACAAGAGCTATCCTATTTGATTATTAAAGTGAGCTATGTGTTA
AGTGCCAGGACATTTCTAGCTTTTGTGAGAATGTGTCTACATATGAGTATAATAAACCCACATGTATACACAATT
GTCTCTTATGTACTCCTACCTGACAGTAGTCTTTGTATTCTATAGTATGTTCTGAGATATAATGTTAACATTGTT
CATAACAAAAAATGCTATCAATCTTATAAATATATGTAATCTATTTTCTTCATAAAACAGGCACAAAAGTTTTAT
CAGTAAGGAATTACAGATTGAGAAATGATGGAATAATAGACATAATTAATTCAATACACTACTGTTAAAATCATT
TGCAAAGCACTCAGCTCAATTATCTTCTTAGAAAGAAAGAAAAAGTATGAATGGTCAAAATGAATACATCGAGAG
AGATAAATGGCAAATTGCTTTTTTAAAAGTTTACATAAGTTTTTTTTAACCCCTAGAATTTAATATTTGTAGATG
CAGGTAAATATATATACTTACGTGTATATCAGTATAAAAACACTGGTGTGCAATTAATTGGATTGATTATAATAC

FIGURE 2787B

CACCTTAAGCACTTGCTGAAAAAAGTGTGGTCAAAATTGATTGCTGTCCTTTTGTCTTATTTTTGTTTTTCTTAA
GTCAGCTGGTTCATAACATAGGCCAAATTCTAGAGATGTTTATAGAGCATTTGAAGTGCTGATAATTTATGTTTT
TTCATTATGAAAACTTATTTTAGCTTTAGACTCCAGTGTGTTCAGTGAATAAGTAGAATATAAAAAAATATAACC
AGTATTTTACTTCAAAAGCCAAAAAGAGGCAATAAGAAAAGACACTTTGTGGTGGCCTTTATGTGTGCATTAAAA
TTGGTTTCTGTAAAACGTGTAATAAGTTGAGTATCTACGAAGAGTATCAAGTTCTGAAGTTTAATTTTTTTATTA
TCCTCCTCTCTTCTTAGTAACTTCTTTCTGTGGCAAAACCACAATTCTTTAAGATTCCTATTGTTCAGGCTAAGG
CAAATTTTTTTGTTTGTTTCTTCAGTTTAATATTTTGATTTTGTGTTTTTACGTAAATATTTATATTCCTTGAAA
GCAATTTTTGCCAAGGTAGTTCAGTTTAGGAATATGTTGTTCTAAAATATGTCTTAGAATCCTGAAAGCATAGAT
TTTGAAATGTTTTTTTAATGAAAATGAAGGTCAGAGAGAATAATTGCCCTGACCACATTTGCCTTTCAGTAGGAG
GAGGCTGTGAAATAGTAAAATTATAATCGTTTATGCCATGATAAATACAAGATTGGTAAATAAATACATTGATTG
GTAAATTATGAGAATCAAAATGATAAAAAGAGCCTGCTTTTTTCCCTAACCAATATAGCTATCTTAAGTATCCTT
AGGTTTCTGTGAAGAACCATTTCCCATGTTTTCTTGGCAAAATAATGCTGTATTCCATATGTACATGTGAAATGA
TGTTTTAAATTGATAAAAGCTTAAATAAGATCTACCTATACCCAGTATTTTCATGATATTAGAACAAATGGGTTT
TTGGTTATATTTTATATTTGTCAATATAATTTTTGTATTCACATTCTGTTACACTCTGCCTATTCATTGATATAT
GATATTCTGTAAATATTGTACAATTTGATCTTTTTTATGGTTTAAATTAGTTAATTACATACAAATTGATTGGCT
TATCACAAAAATCATTTCATCAGTAAACCTTGTTAACATTTTGTACTGGTGACCCACCTCTTAGGACTTTGGTCT
TATCCACGTGTATGTTGTTTTCATTTGGTCCAAATAATATTTTATTTGTATGGGTATCTTCTAAGACTAAATAGG
TAGTTGTGTTCTTTATTTTTAAAATTTCTTTTTAGAGCAAATGTTATGGGTTCTTACCCAAAGAGTCAAAAACTA
TTTCTTAAGAAAGAGCAGAGTTATTCATGACTGTTCTTTATACACTAAAAGCATGCATCTAATCTAATAGTCCTC
TTATTATGCTTTTAGTTGTATGAGTCTCTTTCTATGAACTGAACACAAAACTCAGGAATTGGTGGCTTAATTTTA
GATCAGTGCTTGTACTAGGCTTAGTTATATGAATCTTTATAACACATAATTACTAACTTTGTAGCCATATATGTA
ATTGACTTTGAATGTTATTTACCTGAAATTAATCTTCCTTCACACATGGACCGTAAACGGTTCCCAGTTGTCTGA
GAGCCTCATGAGGGTTTCTAGGATTTATGACCTTATGACCAGTTTTTTTCATTTACCAAGATTTTATTTTCCTAC
ATGAAAATTTAATTGAGTAATAATTATTCACATGTGCATTTTCTTTTTAGCTGTTAAATGTACTATGCCATCATC
CACCATTTAGTAAAATGTAGCTGGCCCAGGACATGTAAAAAAAAAAAAAAAACAACAACAATAAATAGGGCATGTG
AAATGTTAAGTTACAGCAATAGATATTTTATTTGTATTTCATGTTAGTACTTTTTTGTTTTATATCACTTATAAA
GGTACAGTGTACTCTTTGTCACAGCTCAGTTGGTAACCGCATTCCATTGAAAAGTTGGCCTTGTAAAATACAACT
CTCATTTAATATTCATGCTTTTGTGCCTTTAAGAAAATATTTTTTGTCATTTTTTGTGTTACAGAACTATAATGT
GATTCAAGGTGTTTATAGGCTTGTCATAAAAGGGTCATTTCTGTGTGTTACTTTCTTTTTATATAGCTATAGTAT
ATTTAAACAATAATACTATCTTTTATAGGGGTTTGTCTATTTACCTATTCTTTACTCAGACATTGATGTAGACTT
GTCAGATTATTCTGAGTATTGTTAACAGTGCCTTTTCGATGGAATCACACTTTTTGGCTGTCACCTTGTGCCATA
TACACACAAAATTTTGTGGAAGGCAGTTTTAACTTTCTGAAGAATATCTGTCAAAATTTAAGAAAACAAATGTAT
AAAATTCCATTTTTTCCAGTGTTTAGCATTTCTAGTAAGCAGTGAGGTTGTTTGACATACAGTGATGATGGCATT
ATTGATAAGCCATACATGAGACTGCAGATTATATTGAATCATATTAAATGTACAGAAATAAAATATTAGATTTAT
ATCAAATTTTCCAATTTGAACCAGTGGGGAAAATCCCACAGAAATCAGTAAGTTTACATTTCAATTTCTATCTTA
TTTGACTAAGTGGAAAGAGATTCTTTAAAATGTATAACCTGCCATTATGTAATTTGGTTTCATTTTATTCTACCT
GTTGTGTGAGTTTAGTATATTTAATTTACTTTTTGTTACTCTTTACATACTGTTTATTTTTGTTAGTTTTTAATT
GAAGATGGACTGTTGAAATTGTATAGGACCAGTGTCTTATTAATATGATTAATATATTTAGAAGAGCCACGTGAA
ACCCATGACAAAATGAATGTGAATATTCTTTCTAAAAATTTAGAAAATGTTATCTTTTTGCATTTATTATGTAAA
ACTGTTTTACAGTATCAAAATTTTTCACTTAAAGAAAAAAAATGCCATGAAACATTTGAACTGATGAGCCACAGA
ACTTCAGTTGAAATTTTTTTCACTTTTTAGCATGCTAAATATACATCTGAGTTTAAATGTTCTGTTTAATGGCCA
TTCATAAATTCAAGCACTACCACTGGTCAGTTTTGTGTGATAGAATAAAAATATGTTACCTGCAGTGTAAGTACA
GCACACTGTCAAATTCTTTTCCTTAAGGTGCACAGTAAATGTACAGATAGTTATAGGCCACTGTTTTGTAATGTA
GTACATTTCTAATCTATTATTCCTAACCTATTATAACTGTTTGCAGAAAGAAAAGAATTTTTCTAATAATCTGTA
AAATTATGCTAACTTCTACAAGTAGGCTTCTAAATAAAATTTTTAAAAAGAGC

FIGURE 2788

AGGCGCTGCGGAGACGCGTAGAGGAGCGCGCCCCCCGGCCGMTGCCGMCCCTGGCCCGTGCCGTCACCCCGCTTC
TCCGCGCCTCGGGCGGTACCCAGCCAGTCCCCAGCGCCGCGCTACCGCGCTGACCGGCCCTCCAGACGCCTCCCG
GTACCCGGGACCCCAGCCCGGCCGCTCGCCCGCAGCCCGCCGGCCGCACACGTCCCCGGAGCCGGGCCTAGGGCG
GGCGGCAGGGCGGCTCGGCGCAGTCAGGCTGGGCTCTGTAGCGTCCCCATGGCCGCGGCCGGCTGGCGGGACGGC
TCCGGCCAGGAGAAGTACCGGCTCGTGGTGGTCGGCGGGGGCGGCGTGGGCAAGTCGGCGCTCACCATCCAGTTC
ATCCAGTCCTATTTTGTAACGGATTATGATCCAACCATTGAAGATTCTTACACAAAGCAGTGTGTGATAGATGAC
AGAGCAGCCCGGCTAGATATTTTGGATACAGCAGGACAAGAAGAGTTTGGAGCCATGAGAGAACAGTATATGAGG
ACTGGCGAAGGCTTCCTGTTGGTCTTTTCAGTCACAGATAGAGGCAGTTTTGAAGAAATCTATAAGTTTCAAAGA
CAGATTCTCAGAGTAAAGGATCGTGATGAGTTCCCAATGATTTTAATTGGTAATAAAGCAGATCTGGATCATCAA
AGACAGGTAACACAGGAAGAAGGACAACAGTTAGCACGGCAGCTTAAGGTAACATACATGGAGGCATCAGCAAAG
ATTAGGATGAATGTAGATCAAGCTTTCCATGAACTTGTCCGGGTTATCAGGAAATTTCAAGAGCAGGAATGTCCT
CCTTCACCAGAACCAACACGGAAAGAAAAAGACAAGAAAGGCTGCCATTGTGTCATTTTCTAGAATCCCTTCAGT
TTTAGCTACCAACGGCCAGGAAAAGCCCTCATCTTCTCTTTCTCTCCTCAGTTTACATCTTGTTGGTACCTTTCT
AGCCTTAGACAAATGATCACCATGTTAGCCTTAGACGAAGAAGCTGGCTAGTCCTTTCTGTGAAGCTAATACAAT
GGTCATTTCCAGACAAATTTAAAGGAAACACTAAGGCTGCTTCAAAGATTATCTGATTCCTTTAAAATATATGTC
TATATACACAGACATGCTCTTTTTTTAAGTGCTTACATTTTAATAGAGATGAATCAGTTTTGGAATCTAAGCTGT
TTGCCAAGCTGAAGCTACAGGTTGTGAAATAATTTTTAACTTTTGGAATCATACTGCCTACTGTTACTCTAAATA
GAAATATAGGGTTTTTTTTAATGTGAATTTTTGCCTATCTTTAAACATTTCAATGTCAGCCTTTGTTAACCTTAA
ATACACTGAATTGAATCTACAAAAGTGAACCATCTCAGACCTTTACTGATACTACAACTTTTGTTTTCTGATGGC
CAAAATACCAAATGCCTGTTGTATTTATGGATTAAAAACTGCTTATAAAACCCTGTGTTACTACTCCTACTCTTG
GAGATGATAATATTCTATGTGGTCAAATATTTGGACTCATTTAGGACTTAGATATTTCAGTGTACTTGATTTTTT
AATTTAACTCTTTTTCACAGCCACGCTAAGGGTAAAAAGGAATAATTTCCTTCTGTCTTCCTTTTCAAGTATTTC
TGGGTAAGGGATTCAAAAAACTAAAACTGTTTTTGTTTGTAATATAAAATATGGAATTGATCTTTCCAGGGTCAG
AGATGATTAATGTTTTTGCTATATACTTTTATACATTATTTTCTTATCAAACTAGTTAACAAGTATTTTTATATG
TTTGTAAGCAGATATGCTTTCATAGCATACCTTGTGTATATGTAAAGATAAGTATTTAATTCTCACTGTTCACTT
TTAACTGACAAAGAAAAACAAGTGGAAACTACAGAAACTGTGGTAGAACTTTTACTTGCTGGTCTGGTCTTGGTT
GTACCCATCTTTGGCCAGTCACATAACTACTCAAGAAACCTTCCCAATAGAGTACAACAGGATGAGACTCTGAAA
TCACTTTCAGTATTCCCTGCTAGATATTGATTGTTATTTCAAGTATTAAGTGTAAGCTTTTAATGGATAATTAGT
ATAACTGTGGATGGCATCTGATTTTGTTTTTAATTCTGTGGATTGTGTTTAAGCAATTCAATAGTATGTTCCTGA
TTTTGAGATGCTAAGTGGTATTGCACAGTTGTCACTTTATCAAGTGTGTACAACAGTCCCATGAAGTTTATAGAG
CATACCCTTGTATAGCTTCAGGTGCTAGAATTAAAATTGATCTGTTATCACAAAAAAAAAAAAAAAAAAAAAGG
CTCTTTAATTAGGCG

FIGURE 2789

GTCCGCGGAAATTTGAAATGGCTGACGGGTCGCTGACGGGCGGCGGTCTGGAGGCAGCGGCCATGGCGCCGGAGC
GCACGGGCTGGGCGGTGGAGCAGGAGCTGGCGTCTCTGGAGAAAGTTTTTCAGAAGAAGTGAAGTCAAGATGAAG
AACCATTTGCTTTTCTGGGGAGTCCTGGCGGTTTTTATTAAGGCTGTTCATGTGAAAGCCCAAGAAGATGAAAGG
ATTGTTCTTGTTGACAACAAATGTAAGTGTGCCCGGATTACTTCCAGGATCATCCGTTCTTCCGAAGATCCTAAT
GAGGACATTGTGGAGAGAAACATCCGAATTATTGTTCCTCTGAACAACAGGGAGAATATCTCTGATCCCACCTCA
CCATTGAGAACCAGATTTGTGTACCATTTGTCTGACCTCTGTAAAAAATGTGATCCTACAGAAGTGGAGCTGGAT
AATCAGATAGTTACTGCTACCCAGAGCAATATCTGTGATGAAGACAGTGCTACAGAGACCTGCTACACTTATGAC
AGAAACAAGTGCTACACAGCTGTGGTCCCACTCGTATATGGTGGTGAGACCAAAATGGTGGAAACAGCCTTAACC
CCAGATGCCTGCTATCCTGACTAATTTAAGTCATTGCTGACTGCATAGCTCTTTTTCTTGAGAGGCTCTCCATTT
TGATTCAGAAAGTTAGCATATTTATTACCAATGAATTTGAAACCAGGGCTTTTTTTTTTTTTGGGTGATGTAAA
ACCAACTCCCCGCCACCAAAATAATTAAAATAGTCACATTGTTATCTTTATTAGGTAATCACTTCTTAATTATAT
GTTCATACTCTAAGTATCAAAATCTTCCAATTATCATGCTCACCTGAAAGAGGTATGCTCTCTTAGGAATACAGT
TTCTAGCATTAAACAAATAAACAAGGGGAGAAAATAAAACTCAAGGAGTGAAAATCAGGAGGTGTAATAAAATGT
TCCTCGCATTCCCCCCCGCTTTTTTTTTTTTTTGACTTTGCCTTGGAGAGCCAGAGCTTCCGCATTTTCTTTACT
ATTCTTTTTAAAAAAAGTTTCACTGTGTAGAGAACATATATGCATAAACATAGGTCAATTATATGTCTCCATTAG
AAAAATAATAATTGGAAAACATGTTCTAGAACTAGTTACAAAAATAATTTAAGGTGAAATCTCTAATATTTATAA
AAGTAGCAAAATAAATGCATAATTAAAATATATTTGGACATAACAGACTTGGAAGCAGATGATACAGACTTCTTT
TTTTCATAATCAGGTTAGTGTAAGAAATTGCCATTTGAAACAATCCATTTTGTAACTGAACCTTATGAAATATAT
GTATTTCATGGTACGTATTCTCTAGCACAGTCTGAGCAATTAAATAGATTCATAAGAAAAAAAAAAAAAAAAAA
AAAAAAAAAAA

FIGURE 2790

MKNHLLFWGVLAVFIKAVHVKAQEDERIVLVDNKCKCARITSRIIRSSEDPNEDIVERNIRIIVPLNNRENISDP
TSPLRTRFVYHLSDLCKKCDPTEVELDNQIVTATQSNICDEDSATETCYTYDRNKCYTAVVPLVYGGETKMVETA
LTPDACYPD

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FIGURE 2791

AAAATAAAACGGAACTGCAGTGCTAACAGTAATTTATACATTTTTAAATGTTCTGAGTATGTTTTGACTGGGCTA
GTGTAACAATATACTACCCTGAAAGTGCAGTTTTGATTGTTGTTGGTGTCTTTGGGTCAGGAAAGTGAACTGTGC
CAAGAAGTATTTTTCAGTGACATGAATGGATTCCTGTTAATGCAATTGACTGAGAGATTGTGCTTACGCTTTCTT
AACTGACAAAAAGAGGCTTTGTCCAACATCAGAATTGTTGAAACTGGTGCTGTTTTCTGTTGCACTGGGATTCTG
ATGATCTGGGATTTTCCCTCCTTGGCACAGTAAACACCATGACTGTCTTTATTGAGAATGTCGTCACAGTCCTTT
AGTGATAGATTAGTTAGACCCATGGTTGCAATACCTTTATCTCCCCAAAGAAAATAATCAAAAGAAAGCACAAAA
GCTACCCTGTTTGCAGAATATTTCACTGACATTGATTTGTCATTAATTCTACCAGAGCTGACCTCATTCAGGCTT
GATAGAAACAGGTTCCTATGTTTAGGGCAGATCCCTAGCCTCTCGCTCACAGTGAGTCTGCATGTCCTAGATTCT
GGTTATTGCTGGAGCATCCATTAAAGTCTACCAAACTCAGGACAGAAGAAGATAGCAGTGGATTTGTAAAAATTT
TTAGTTTATAAATTACAGTCATTGGGGAAACACTAGTAAGGTCATGTGATCTTTTGGACCAGGATTTTCTCTCTG
TCTTCTCTCTGGGGTGTGTGTGTGTGGTATGTACAGAAGGGCTACCAGGAAGTGTCAACCATGTTAGATTTTCTG
TAGTCTTCCAGAAACAGTGCAGCCCATACAACAGGAATCTTAATTTTCCTCACAGCAAATATAACAGGATGGAAC
AGTTAGTGTTTTGTTTTCACAAGTGTCCACCACTCCATCTGCCCTGCATGGAGAGGGCTCTCTCACTGCTAGATC
TAGGCTGAGCCATCTGGAAGGATCAAAGGGTGTGGGAGTATCACCCCCTCTCAGGCTGCAGAAGGTCTCGAGGGT
GGCGTCACAGCAGGATTTCCGCCTTCTGCATTGCACTGCACAGCCCCATGGAACATGAGGCACTTGAGGCCTTGC
TTCTTGGAGCCTCTGGGGAGCAGAGTAGGTCACTGCCCTCTGGGAGTGTTTTGCAGTAGTTTTGTAAATGTGTTG
CTACATAGTCAAGTTCCTTTGTGGCAAAGAAATATTTTGTTTTGATATTAGGAGCCAGCCCATGTAATGCCTCTC
AGGCTTGCTTGCTTAGAAGAAAAAAAGTCACCCTTTGTGGTTTTTAAGAAAAAAATTCTGTGCAGATCTGTTCCT
CCTCCTGCTCCTTCCCTTTTCTCTACATACAGTGCTCATTGGAGGCTCCTGCTAAACCTTCTTAACCAGAGAAAT
AATAGGTATTTGTTAGACCTGAGTGTACATTTCACATGTTATCCTTCACATATTTCTCATTTTCATCTAGTACTT
TCTTAATGCCTTTATTGGAGTCCGCATCCTCATCTTTAAAAAAAAAAAAAAACAGCTTAGCCTAAGCCACATTCAC
TTTTTTTAGTTCACAAAAAGGATTTAATAGCCACAATGTGATTTTTGCCACAACTGTGTGATTTTAATATTCTCT
AATATCAAGGGCGGATTTAGAATTGCAGGAAATACCTGGAGAAATCACAGTGGAATGAATTTTTGCTTTAAGAGA
AATGAGAGTTGGCTGTCTCTGTAATTGATAATACAGCTTCATCCTAGTCCCATCTGCATTTCAGAAAATAACCCT
CATCTTTACAAAACACAGGACACTTGTGGGACAGTTAACTCAAGCAGCTATGGGGAGGGAGGAGATTATTGAATG
GTGATTAAATAATGCAAATGGCTCTTCTGTTTCTTAAAGACTGTGGAAGAGGTCAGACTGCCCAGTTGAGGTGGG
CAGTTCATACTGCTCAGTTGAGGTGGCAGTCATTTATTCTGAGTCCTGTTGGATAGAGCCTATCTCCTCAAGGCT
ACAGAGGCTTCCAGGATATGGAGCTGTGCATGTTA**ATG**GCTCAGCCTTGCCTCCATCAGGGCACCTGCCTAACTT
GGAGCAAGTGGGAGAGCACCCTAGAGTCATCCTCTGTGCTGTTTCGTGAGTTTTGCAGCGGAGACTTCACCATCC
GGAGGAGCTGTGTTTCTGTGTCACTTGGGATATCACCTAAAAATGAAACATTTGATATTTTAAGGTATAAAAAAA
AAGTAAATTGGGGAACATTGGCTGCAGTCCCTAAAAGATACTGTTGTCTGTGCATCAGGTTAGCT**TGA**GGTCACC
ACAGGTCCTGGGAGCCCAGAGAGTTTAGGCATACTCTCCTTTGGAGGCCAGCAGCCTTTCACAAACCCTGCCTCT
AAAAGGGCGGTTTCACATTTGACCATGTTTTTGCATTAGCCTCAGAAACTCTTGTCTTTAGCTGATAACCTTTGA
GGGATGTGAGAAGCCTAGTTGGAGCATCTGAGAAAATGATACCTCTCACCTTCAAATTAATCAAATAGTTTGTCC
TTCTAGTCCCCTTATAAATTAATAAATGGAGGGCTGGTCATGGT

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FIGURE 2792

MAQPCLHQGTCLTWSKWESTLESSSVLFREFCSGDFTIRRSCVSVSLGISPKNETFDILRYKKKVNWGTLAAVPK
RYCCLCIRLA

FIGURE 2793A

GGCAACCATGGCGGGAGGAATGAAAGTGGCGGTCTCGCCGGCAGTTGGTCCCGGGCCCTGGGGCTCGGGAGTCGG
GGGCGGTGGGACAGTGCGGCTACTCTTGATCCTCTCCGGCTGCTTGGTCTACGGCACAGCTGAAACTGATGTAAA
TGTGGTCATGCTTCAGGAATCCCAAGTTTGTGAAAAGCGTGCCAGCCAACAATTCTGTTACACAAATGTGCTTAT
CCCAAAATGGCATGATATATGGACACGGATACAGATCCGAGTAAATAGTTCCAGATTGGTTCGAGTCACCCAGGT
GGAGAATGAGGAGAAACTGAAGGAGCTAGAGCAGTTTAGTATCTGGAACTTTTTTTCCTCCTTTTTAAAAGAGAA
ATTGAATGACACCTATGTTAACGTGGGTCTATACAGCACAAAAACCTGCCTCAAAGTTGAGATTATAGAGAAGGA
CACCAAGTACAGTGTCATTGTGATCCGGAGATTTGATCCCAAACTCTTTCTTGTTTTCCTTCTTGGACTTATGCT
ATTTTTTTGTGGAGACTTGCTGAGCAGAAGTCAAATTTTCTACTACTCTACTGGGATGACTGTGGGAATTGTGGC
CTCTCTGCTAATCATCATTTTTATACTATCTAAGTTTATGCCTAAGAAAAGTCCCATTTACGTCATCCTGGTGGG
AGGCTGGTCTTTTTCTCTGTACCTCATTCAACTAGTTTTTAAAAATTTACAAGAGATCTGGAGGTGTTACTGGCA
GTATCTTTTAAGTTATGTCCTCACAGTTGGATTCATGAGTTTTGCAGTATGTTACAAGTATGGGCCCTTGGAGAA
TGAACGAAGTATCAACCTGCTGACCTGGACCTTGCAGCTGATGGGCCTGTGTTTCATGTATTCTGGCATCCAGAT
ACCACATATTGCCCTTGCCATTATCATCATTGCTCTTTGTACTAAGAACCTGGAACACCCTATTCAGTGGCTGTA
CATCACCTGCAGAAAGGTGTGTAAGGGAGCAGAAAAGCCTGTTCCCCCTCGTCTCCTGACAGAAGAAGAATATCG
GATACAAGGAGAGGTAGAAACCCGAAAGGCTTTAGAGGAGCTCCGAGAATTTTGTAACAGTCCAGACTGCTCTGC
TTGGAAGACTGTTTCTCGAATCCAGTCTCCAAAAAGATTTGCTGACTTTGTGGAAGGCTCTTCCCACCTCACGCC
AAATGAAGTTTCTGTCCATGAGCAGGAGTATGGATTAGGGAGCATTATTGCCCAGGATGAAATCTATGAGGAAGC
ATCCTCTGAGGAGGAGGACTCATATTCTCGGTGTCCTGCTATCACACAGAACAACTTTCTAACC**TAG**GTAGTGGT
CAGTTATCTTTACGTGGACTGGCTTGGTGCCTTGGTCCATGTTGCATGTGTTGTGCAATTGCTTTCAACCCTTTG
AAACAGAGTGAGATAGATAGGGTAGAAATTCTCCTACTGAAATAAGAGGCCTAAAAAGGCCTCCCTTTGGAAATG
GGAGGTCTCTATGGGATCCCTGAGGAAGGAGAGTGGATAAAGTAGTGAATGCTGGGTAGTTCACTTCCCATTGGT
TAAGCTAACAGCCCACTTTTATGTTTCCAGAGAAATTGGATGGCCACAGCTAGCATGGCATTCTAGCTCCTTCTT
GAAAGTTGATTCAATCATGGCATTTCTGTCACTGGCTGGCTCTCCAAAGTAAGAACTGTTGTTAAGTGCAGGAAT
GCTTTTAGACTATAGGCTGCAACTTCCAGAGAGAAATCCACAAATCTGAGCCTCCTTCACTCCAGCTTTTATTTC
AGTGACTTTAGAATAATTATTGATTTAACTGTTTTGGGAGGAAAATAGATTTTTATTGTTTTGTTTTTTAAATGA
ATGTCTTTTAAAAAACATAACAAACTCATGTTCCAGAACCAGCAAGTGCTCCAGAGTGACACACCCCCTAGGCCC
CTACATATTTATTAATATGGATTATCCATTAAAGCCCCAGGAGCTGTTGTTTTAAGCTTTGATTTAGTTCTCATA
CATATGATAGAAAGTCCTATTTGCCTTTAGGAACATGCCTGTAGGCTCTTCTGCAGGTGAGATGTACTGGGCTTT
TTATTATATTCAACTTTCAATTCCATCTTAAAAAACATTTGTATTCTTCTCTTCCCATTCTTCCTTACCCTGCCT
TTGCCCTTTCAGGAAGGGTCAGTTCCCTTACCTGTGAACTATGTATGTTCAGAGTAGCATTATTCCTGCTAGCTA
GGAGAAGTCATCTTGTTTAGGGGATTTGGATGCTTTTTATACGTTCTCCATTTTCCTGTCATTGGGTCATGTTAT
CTTTGAGTTGCTATGAAATCAGGAAACTGTCTCCTTTTCCTTTCCCTTCCTTTGTCTACATGCTCTGTCCATTCC
TTTCAGCCTTTTCTCACCACCCATACTCCCCCAAATCTGGGTAATTTTTAAGCCTTGAAACTATGTAGTTTCTTG
ATACACAATTTGTAGTTATGCAGCAGCCACAATTTGCATTGCCAGGAAATAGGCTCCAGGTTATCTTCATGCCTC
TGGGTGCTCATTCAGCTGTCAAGTTTCCATGAACTTACACTTATTTATGATTGCGTTTCTGACCTGAGATGTATG
CTGCCTGTTATTGCAGTAGCATTAGTTTCAGATTCTTTTGCCATTGCAAAGTACCCCTTATAAACCAGCAATGTC
ATCTGTGAGGAAGCAAATTCTCAAGTGTCTGTCATTTACTTGGTTCTTTTTCTTTGTGGTCTTCACCCTTATACC
CTGGAAAAGTCTGTAATTACCTTAGCCAGGAAGATAGATGGTCATGGCAAGCGCACAGCACCAGACTTACTGGCT
CACCAAGATGATGGAAAAAGGCAGATGATTTTTTAAAAAGCCGTAATGACTCCTTTAGACCAGCCATTTAGCGTG
GTAATTTTGAAAGGCCTAGCTCCATTGCAGACTTCCAAAGGGTCAGCTCTGAGACTGCCCTCCAGGTGGGCAGTT
GATTATTTCCACCAGTGTTTTCCAGAGCCTTAAACTGTCCTAAGTGACAACTACCTCAGTTGGCAGGAAAGAGAC
ATATAGTAGAAAGTGAAAAATGAGCAGTATTTGGGCAGATGCTATGGGTTACAGTTGAAGGGTAAAAGGAACTTT
ACATTGGGAAACCTTTATACCCTTGTGAATTATGTACATGGTAAAATGTTCTCTCTCTACAAAGAACTATTAAAA
CTTCTGAAATATACTATTTTTTACCTTATTTATAGAAATTGAGACCTAGCATATTTAAGCATAAGTTTATTTTAA
AAAATAATTCAACTCGTGCAAGTGGTCTCAGGATTCTCTGGAGATTTTGGTGCCTCCCCTACTTAGGGAGGTGAT
AGCTTGCCTATAAGGGTGACTTTTCCTGATCATGTCTTTATTTCAATGAGAAAGCACTGTGAAATTGTGAAAGAT
TCTCCTCTTTCTCTGTTTAATAAACCCCCATGAAATATAGTTTCCATCTCTAGACCAGTTTTTTTTCCACCGTGT
TTAGACTTGAGGTGAATAAAATCAAACTGTTTTTTACTCCCTATCTGGTAGTTGGAGACCTGAGCTGTAGGCAGT

FIGURE 2793B

GGAGATGGCAATTGGTTCTGCAGCCTGAGAGTTGCTCTCACACAGTGAAGGACGGTGCTGCTCTGGTGTGCTGTG
TGTCCTTGCCCTGCCTGCCTGTGGCTCTGCCCAGATGCTTCAGATCCTCTGTGTTCCGGAGATTGCTTGACTTCA
ACCTTCTTTAGGAGCTGCTCTTGTCTCCCTCTTGGCCACTTAGTTTGCTGGCTCAGTCACTACTTGAAGACCCCA
TTTAATTTTTCTCTGGCAGTTATAGCTCTTGTGATTTCAGTACAGTCTCATCTCTCAGACCAATCTCATCAAGAA
GGATTGAAGGGATAACTATGAGGTAAGCTGGACATTGGAGCCGTGTTTGCTGCCACGTCAGCGTCTTGCTGGGTG
AATGTCAAGCCATAAATGGGCTCCAGGGCTCTGGATCTCATCAGCATTGGAAATCTATTGCCTCTCATCAGTCTG
ACCAAATTATGTAGAGCATTAATGTAGAGACTCCCATTAATGGGAATACAAGAGGCAGCTGGCATAAAACATTTC
TTTCACTTTCCTTTCCCACTCAGATTGCTTCAAGAGACCAACAGAACACAGGGATCAAAAACAAGGAAAATTTAG
CAACTTCATTACCTTCTAATAAGTAATTCCTGTTAGCCACTGCATCCCACCAAAACTAGTTTATTTTTCCCCTCA
AATTCATGATTTTTACGTCTGTTACAAAGGGAATTTTGCTGATAGCTCTTTGGGTCCCACTGTTCCATTTTATGC
TAATAGATTCCATTCTAGGGCCCAGCCGTCTCTTGACTGATGGTGTTCCCTTTAACCCTTGGCATGTATAATAGA
ATTTTGGTGAATGAAAGAACCCAAATAGGCCAGATAGTCCCCCCAGGCCCTGATATCCATAAAAGGCTTGGGAAT
GCATTATGTAATTGTCCTTAGTCTTTTTGTTGTTTTAGAAAAAAAAAAACAAGATGGGCTCAGATGGATGCCTACG
TAAAAATGGTTCCTAGCTGTGTACTCATAACTTTTCTTTGAATTGAGTAGTGAAAGGAAGGAGGAGGAAAGGAAA
TTAAATGTCCTTCTAGTATTCTCTGGACTCAAGTCTGACATATGAGATAATAACCTATATTGAAATGCCAAGAAT
TGTATCTGAAACAAGAGAACAGTTTGACACATTTATCATGCCTTCATATTACATATTAACTGAAACCAATTAATA
AACATATGAAATATCCATTGCACAAGGCAAAGGCACCTAAACCTTTTGTTTCTTTTTCTACATAGCAGAAATTGA
TTTTTTTTTTATTTTTTTAGGGGAACCTATATAATTATGACCCAGTGATGTCTTTTGGTGACTTAAGCTTATGAA
TTCAGGTTACAATTGAGTTGATTCTAGATGGTTACTACCTTGAAAAGGATGTTGGTGCCTTATGTGACACGAGCC
AGAGCCTGCTGGGAATAAACAAAGCAGATTCATGCCAACACCAACTCGTAGCTTTAGTGGCAGATGGGAGTGGTC
ACAGACTCCCAAAATGTGGGGCTTTGGATTTCCACACCATCCCACGTGTGTGTCATCTTCCTCTTTCACACTCTT
GATGATAATTTGAAAATGATGAAATCACCTCTGAATTTGCCTATAGCATGAGCACATTCTTATGACAACATAACA
AATAGTTCATAATGTGAATATTAGAAACTGTTACAGCCTGCAGTTACCATAATTTTCCATGTTTGTGGAATTGAT
ATTGAAATAGCAGGGCTAAGGAATTACTGGCAAGTTTTAGCCTGTGGGTAATACCTTAGGGTTATTTAAATATTT
GTAATTTTATTTAAATGTTCATGAATGTTTGAAAGGAACAAAATTATCAGGGATGGCTCTTTGCCATGGGTCTTA
TTTTCACCCTCTTTTCTGTAAGAAAAAAGAACAATGTCTTAATGTATTTTTAAAGTTTTTGGTATAGTTTCTAAT
TCCAATTTTAATAAAAGTTTTATAGAT

FIGURE 2794

ATMAGGMKVAVSPAVGPGPWGSGVGGGGTVRLLLILSGCLVYGTAETDVNVVMLQESQVCEKRASQQFCYTNVLI
PKWHDIWTRIQIRVNSSRLVRVTQVENEEKLKELEQFSIWNFFSSFLKEKLNDTYVNVGLYSTKTCLKVEIIEKD
TKYSVIVIRRFDPKLFLVFLLGLMLFFCGDLLSRSQIFYYSTGMTVGIVASLLIIIFILSKFMPKKSPIYVILVG
GWSFSLYLIQLVFKNLQEIWRCYWQYLLSYVLTVGFMSFAVCYKYGPLENERSINLLTWTLQLMGLCFMYSGIQI
PHIALAIIIIALCTKNLEHPIQWLYITCRKVCKGAEKPVPPRLLTEEEYRIQGEVETRKALEELREFCNSPDCSA
WKTVSRIQSPKRFADFVEGSSHLTPNEVSVHEQEYGLGSIIAQDEIYEEASSEEEDSYSRCPAITQNNFLT

FIGURE 2795A

GGCAACCATGGCGGGAGGAATGAAAGTGGCGGTCTCGCCGGCAGTTGGTCCCGGGCCCTGGGGCTCGGGAGTCGG
GGGCGGTGGGACAGTGCGGCTACTCTTGATCCTCTCCGGCTGCTTGGTCTACGGCACAGCTGAAACTGATGTAAA
TGTGGTCATGCTTCAGGAATCCCAAGTTTGTGAAAAGCGTGCCAGCCAACAATTCTGTTACACAAATGTGCTTAT
CCCAAAATGGCATGATATATGGACACGGATACAGATCCGAGTAAATAGTTCCAGATTGGTTCGAGTCACCCAGGT
GGAGAATGAGGAGAAACTGAAGGAGCTAGAGCAGTTTAGTATCTGGAACTTTTTTTCCTCCTTTTTAAAAGAGAA
ATTGAATGACACCTATGTTAACGTGGGTCTATACAGCACAAAAACCTGCCTCAAAGTTGAGATTATAGAGAAGGA
CACCAAGTACAGTGTCATTGTGATCCGGAGATTTGATCCCAAACTCTTTCTTGTTTTCCTTCTTGGACTTATGCT
ATTTTTTTGTGGAGACTTGCTGAGCAGAAGTCAAATTTTCTACTACTCTACTGGGATGACTGTGGGAATTGTGGC
CTCTCTGCTAATCATCATTTTTATACTATCTAAGTTTATGCCTAAGAAAAGTCCCATTTACGTCATCCTGGTGGG
AGGCTGGTCTTTTTCTCTGTACCTCATTCAACTAGTTTTTAAAAATTTACAAGAGATCTGGAGGTGTTACTGGCA
GTATCTTTTAAGTTATGTCCTCACAGTTGGATTCATGAGTTTTGCAGTATGTTACAAGTATGGGCCCTTGGAGAA
TGAACGAAGTATCAACCTGCTGACCTGGACCTTGCAGCTGATGGGCCTGTGTTTCATGTATTCTGGCATCCAGAT
ACCACATATTGCCCTTGCCATTATCATCATTGCTCTTTGTACTAAGAACCTGGAACACCCTATTCAGTGGCTGTA
CATCACCTGCAGAAAGGTGTGTAAGGGAGCAGAAAAGCCTGTTCCCCCTCGTCTCCTGACAGAAGAAGAATATCG
GATACAAGGAGAGGTAGAAACCCGAAAGGCTTTAGAGGAGCTCCGAGAATTTTGTAACAGTCCAGACTGCTCTGC
TTGGAAGACTGTTTCTCGAATCCAGTCTCCAAAAAGATTTGCTGACTTTGTGGAAGGCTCTTCCCACCTCACGCC
AAATGAAGTTTCTGTCCATGAGCAGGAGTATGGATTAGGGAGCATTATTGCCCAGGATGAAATCTATGAGGAAGC
ATCCTCTGAGGAGGAGGACTCATATTCTCGGTGTCCTGCTATCACACAGAACAACTTTCTAACCTAGGTAGTGGT
CAGTTATCTTTACGTGGACTGGCTTGGTGCCTTGGTCCATGTTGCATGTGTTGTGCAATTGCTTTCAACCCTTTG
AAACAGAGTGAGATAGATAGGGTAGAAATTCTCCTACTGAAATAAGAGGCCTAAAAAGGCCTCCCTTTGGAAATG
GGAGGTCTCTATGGGATCCCTGAGGAAGGAGAGTGGATAAAGTAGTGAATGCTGGGTAGTTCACTTCCCATTGGT
TAAGCTAACAGCCCACTTTTATGTTTCCAGAGAAATTGGATGGCCACAGCTAGCATGGCATTCTAGCTCCTTCTT
GAAAGTTGATTCAATCATGGCATTTCTGTCACTGGCTGGCTCTCCAAAGTAAGAACTGTTGTTAAGTGCAGGAAT
GCTTTTAGACTATAGGCTGCAACTTCCAGAGAGAAATCCACAAATCTGAGCCTCCTTCACTCCAGCTTTTATTTC
AGTGACTTTAGAATAATTATTGATTTAACTGTTTTGGGAGGAAAATAGATTTTTATTGTTTTGTTTTTTAAATGA
ATGTCTTTTAAAAAACATAACAAACTCATGTTCCAGAACCAGCAAGTGCTCCAGAGTGACACACCCCCTAGGCCC
CTACATATTTATTAATATGGATTATCCATTAAAGCCCCAGGAGCTGTTGTTTTAAGCTTTGATTTAGTTCTCATA
CATATGATAGAAAGTCCTATTTGCCTTTAGGAACATGCCTGTAGGCTCTTCTGCAGGTGAGATGTACTGGGCTTT
TTATTATATTCAACTTTCAATTCCATCTTAAAAAACATTTGTATTCTTCTCTTCCCATTCTTCCTTACCCTGCCT
TTGCCCTTTCAGGAAGGGTCAGTTCCCTTACCTGTGAACTATGTATGTTCAGAGTAGCATTATTCCTGCTAGCTA
GGAGAAGTCATCTTGTTTAGGGGATTTGGATGCTTTTTATACGTTCTCCATTTTCCTGTCATTGGGTCATGTTAT
CTTTGAGTTGCTATGAAATCAGGAAACTGTCTCCTTTTCCTTTCCCTTCCTTTGTCTACATGCTCTGTCCATTCC
TTTCAGCCTTTTCTCACCACCCATACTCCCCCAAATCTGGGTAATTTTTAAGCCTTGAAACTATGTAGTTTCTTG
ATACACAATTTGTAGTTATGCAGCAGCCACAATTTGCATTGCCAGGAAATAGGCTCCAGGTTATCTTCATGCCTC
TGGGTGCTCATTCAGCTGTCAAGTTTCCATGAACTTACACTTATTTATGATTGCGTTTCTGACCTGAGATGTATG
CTGCCTGTTATTGCAGTAGCATTAGTTTCAGATTCTTTTGCCATTGCAAAGTACCCCTTATAAACCAGCAATGTC
ATCTGTGAGGAAGCAAATTCTCAAGTGTCTGTCATTTACTTGGTTCTTTTTCTTTGTGGTCTTCACCCTTATACC
CTGGAAAAGTCTGTAATTACCTTAGCCAGGAAGATAGATGGTCATGGCAAGCGCACAGCACCAGACTTACTGGCT
CACCAAGATGATGGAAAAAGGCAGATGATTTTTTAAAAAGCCGTAATGACTCCTTTAGACCAGCCATTTAGCGTG
GTAATTTTGAAAGGCCTAGCTCCATTGCAGACTTCCAAAGGGTCAGCTCTGAGACTGCCCTCCAGGTGGGCAGTT
GATTATTTCCACCAGTGTTTTCCAGAGCCTTAAACTGTCCTAAGTGACAACTACCTCAGTTGGCAGGAAAGAGAC
ATATAGTAGAAAGTGAAAAATGAGCAGTATTTGGGCAGATGCTATGGGTTACAGTTGAAGGGTAAAAGGAACTTT
ACATTGGGAAACCTTTATACCCTTGTGAATTATGTACATGGTAAAATGTTCTCTCTCTACAAAGAACTATTAAAA
CTTCTGAAATATACTATTTTTTACCTTATTTATAGAAATTGAGACCTAGCATATTTAAGCATAAGTTTATTTTAA
AAAATAATTCAACTCGTGCAAGTGGTCTCAGGATTCTCTGGAGATTTTGGTGCCTCCCCTACTTAGGGAGGTGAT
AGCTTGCCTATAAGGGTGACTTTTCCTGATCATGTCTTTATTTCAATGAGAAAGCACTGTGAAATTGTGAAAGAT
TCTCCTCTTTCTCTGTTTAATAAACCCCCATGAAATATAGTTTCCATCTCTAGACCAGTTTTTTTTCCACCGTGT
TTAGACTTGAGGTGAATAAAATCAAACTGTTTTTTACTCCCTATCTGGTAGTTGGAGACCTGAGCTGTAGGCAGT

FIGURE 2795B

GGAGATGGCAATTGGTTCTGCAGCCTGAGAGTTGCTCTCACACAGTGAAGGACGGTGCTGCTCTGGTGTGCTGTG
TGTCCTTGCCCTGCCTGCCTGTGGCTCTGCCCAGATGCTTCAGATCCTCTGTGTTCCGGAGATTGCTTGACTTCA
ACCTTCTTTAGGAGCTGCTCTTGTCTCCCTCTTGGCCACTTAGTTTGCTGGCTCAGTCACTACTTGAAGACCCCA
TTTAATTTTTCTCTGGCAGTTATAGCTCTTGTGATTTCAGTACAGTCTCATCTCTCAGACCAATCTCATCAAGAA
GGATTGAAGGGATAACTATGAGGTAAGCTGGACATTGGAGCCGTGTTTGCTGCCACGTCAGCGTCTTGCTGGGTG
AATGTCAAGCCATAAATGGGCTCCAGGGCTCTGGATCTCATCAGCATTGGAAATCTATTGCCTCTCATCAGTCTG
ACCAAATTATGTAGAGCATTAATGTAGAGACTCCCATTAATGGGAATACAAGAGGCAGCTGGCATAAAACATTTC
TTTCACTTTCCTTTCCCACTCAGATTGCTTCAAGAGACCAACAGAACACAGGGATCAAAAACAAGGAAAATTTAG
CAACTTCATTACCTTCTAATAAGTAATTCCTGTTAGCCACTGCATCCCACCAAAACTAGTTTATTTTTCCCCTCA
AATTCATGATTTTTACGTCTGTTACAAAGGGAATTTTGCTGATAGCTCTTTGGGTCCCACTGTTCCATTTTATGC
TAATAGATTCCATTCTAGGGCCCAGCCGTCTCTTGACTGATGGTGTTCCCTTTAACCCTTGGCATGTATAATAGA
ATTTTGGTGAATGAAAGAACCCAAATAGGCCAGATAGTCCCCCCAGGCCCTGATATCCATAAAAGGCTTGGGAAT
GCATTATGTAATTGTCCTTAGTCTTTTTGTTGTTTTAGAAAAAAAAAAACAAGATGGGCTCAGATGGATGCCTACG
TAAAAATGGTTCCTAGCTGTGTACTCATAACTTTTCTTTGAATTGAGTAGTGAAAGGAAGGAGGAGGAAAGGAAA
TTAAATGTCCTTCTAGTATTCTCTGGACTCAAGTCTGACATATGAGATAATAACCTATATTGAAATGCCAAGAAT
TGTATCTGAAACAAGAGAACAGTTTGACACATTTATCATGCCTTCATATTACATATTAACTGAAACCAATTAATA
AACATATGAAATATCCATTGCACAAGGCAAAGGCACCTAAACCTTTTGTTTCTTTTTCTACATAGCAGAAATTGA
TTTTTTTTTTATTTTTTTAGGGGAACCTATATAATTATGACCCAGTGATGTCTTTTGGTGACTTAAGCTTATGAA
TTCAGGTTACAATTGAGTTGATTCTAGATGGTTACTACCTTGAAAAGGATGTTGGTGCCTTATGTGACACGAGCC
AGAGCCTGCTGGGAATAAACAAAGCAGATTCATGCCAACACCAACTCGTAGCTTTAGTGGCAGATGGGAGTGGTC
ACAGACTCCCAAAATGTGGGGCTTTGGATTTCCACACCATCCCACGTGTGTGTCATCTTCCTCTTTCACACTCTT
GATGATAATTTGAAAATGATGAAATCACCTCTGAATTTGCCTATAGCATGAGCACATTCTTATGACAACATAACA
AATAGTTCATAATGTGAATATTAGAAACTGTTACAGCCTGCAGTTACCATAATTTTCCATGTTTGTGGAATTGAT
ATTGAAATAGCAGGGCTAAGGAATTACTGGCAAGTTTTAGCCTGTGGGTAATACCTTAGGGTTATTTAAATATTT
GTAATTTTATTTAAATGTTCATGAATGTTTGAAAGGAACAAAATTATCAGGGATGGCTCTTTGCCATGGGTCTTA
TTTTCACCCTCTTTTCTGTAAGAAAAAAGAACAATGTCTTAATGTATTTTTAAAGTTTTTGGTATAGTTTCTAAT
TCCAATTTTAATAAAAGTTTTATAGAT

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FIGURE 2796

TGAAAGAGGGAATCGTGTCTTACTCATCTTTGTATCCCCAGTGTCTAGCAGTTCCTGATACATAGTTTTAGCTGA
ATTTTGGGACATGGCCACTGCTTCACCAAGGTCTGATACTAGTAATAACCACAGTGGAAGGTTGCAGTTACAGGT
AACTGTTTCTAGTGCCAAACTTAAAAGAAAAAAGAACTGGTTCGGAACAGCAATATATACAGAAGTAGTTGTAGA
TGGAGAAATTACGAAAACAGCAAAATCCAGTAGTTCTTCTAATCCAAAATGGGATGAACAGCTAACTGTAAATGT
TACGCCACAGACTACATTGGAATTTCAAGTTTGGAGCCATCGCACTTTAAAAGCAGATGCTTTATTAGGAAAAGC
AACGATAGATTTGAAACAAGCTCTGTTGATACACAATAGAAAATTGGAAAGAGTGAAAGAACAATTAAAACTTTC
CTTGGAAAACAAGAATGGCATAGCACAAACTGGTGAATTGACAGTTGTGCTTGATGGATTGGTGATTGAGCAAGA
AAATATAACAAACTGCAGCTCATCTCCAACCATAGAAATACAGGAAAATGGTGATGCCTTACATGAAAATGGAGA
GCCTTCAGCAAGGACAACTGCCAGGTTGGCTGTTGAAGGCACGAATGGAATAGATAATCATGTACCTACAAGCAC
TCTAGTCCAAAACTCATGCTGCTCGTATGTAGTTAATGGAGACAACACACCTTCATCTCCGTCTCAGGTTGCTGC
CAGACCCAAAAATACACCAGCTCCAAAACCACTCGCATCTGAGCCTGCCGATGACACTGTTAATGGAGAATCATC
CTCATTTGCACCAACTGATAATGCGTCTGTCACGGGTACTCCAGTAGTGTCTGAAGAAAATGCCTTGTCTCCAAA
TTGCACTAGTACTACTGTTGAAGATCCTCCAGTTCAAGAAATACTGACTTCCTCAGAAAACAATGAATGTATTCC
TTCTACCAGTGCAGAATTGGAATCTGAAGCTAGAAGTATATTAGAGCCTGACACCTCTAATTCTAGAAGTAGTTC
TGCTTTTGAAGCAGCCAAATCAAGACAGCCAGATGGGTGTATGGATCCTGTACGGCAGCAGTCTGGGAATGCCAA
CACAGAAACCTTGCCATCAGGGTGGGAACAAAGAAAAGATCCTCATGGTAGAACCTATTATGTGGATCATAATAC
TCGAACTACCACATGGGAGAGACCACAACCTTTACCTCCAGGTTGGGAAAGAAGAGTTGATGATCGTAGAAGAGT
TTATTATGTGGATCATAACACCAGAACAACAACGTGGCAGCGGCCTACCATGGAATCTGTCCGAAATTTTGAACA
GTGGCAATCTCAGCGGAACCAATTGCAGGGAGCTATGCAACAGTTTAACCAACGATACCTCTATTCGGCTTCAAT
GTTAGCTGCAGAAAATGACCCTTATGGACCTTTGCCACCAGGCTGGGAAAAAAGAGTGGATTCAACAGACAGGGT
TTACTTTGTGAATCATAACACAAAAACAACCCAGTGGGAAGATCCAAGAACTCAAGGCTTACAGAATGAAGAACC
CCTGCCAGAAGGCTGGGAAATTAGATATACTCGTGAAGGTGTAAGGTACTTTGTTGATCATAACACAAGAACAAC
AACATTCAAAGATCCTCGCAATGGGAAGTCATCTGTAACTAAAGGTGGTCCACAAATTGCTTATGAACGCGGCTT
TAGGTGGAAGCTTGCTCACTTCCGTTATTTGTGCCAGTCTAATGCACTACCTAGTCATGTAAAGATCAATGTGTC
CCGGCAGACATTGTTTGAAGATTCCTTCCAACAGATTATGGCATTAAAACCCTATGACTTGAGGAGGCGCTTATA
TGTAATATTTAGAGGAGAAGAAGGACTTGATTATGGTGGCCTAGCGAGAGAATGGTTTTTCTTGCTTTCACATGA
AGTTTTGAACCCAATGTATTGCTTATTTGAGTATGCGGGCAAGAACAACTATTGTCTGCAGATAAATCCAGCATC
AACCATTAATCCAGACCATCTTTCATACTTCTGTTTCATTGGTCGTTTTATTGCCATGGCACTATTTCATGGAAA
GTTTATCGATACTGGTTTCTCTTTACCATTCTACAAGCGTATGTTAAGTAAAAAACTTACTATTAAGGATTTGGA
ATCTATTGATACTGAATTTTATAACTCCCTTATCTGGATAAGAGATAACAACATTGAAGAATGTGGCTTAGAAAT
GTACTTTTCTGTTGACATGGAGATTTTGGGAAAAGTTACTTCACATGACCTGAAGTTGGGAGGTTCCAATATTCT
GGTGACTGAGGAGAACAAAGATGAATATATTGGTTTAATGACAGAATGGCGTTTTTCTCGAGGAGTACAAGAACA
GACCAAAGCTTTCCTTGATGGTTTTAATGAAGTTGTTCCTCTTCAGTGGCTACAGTACTTCGATGAAAAAGAATT
AGAGGTTATGTTGTGTGGCATGCAGGAGGTTGACTTGGCAGATTGGCAGAGAAATACTGTTTATCGACATTATAC
AAGAAACAGCAAGCAAATCATTTGGTTTTGGCAGTTTGTGAAAGAGACAGACAATGAAGTAAGAATGCGACTATT
GCAGTTCGTCACTGGAACCTGCCGTTTACCTCTAGGAGGATTTGCTGAGCTCATGGGAAGTAATGGGCCTCAAAA
GTTTTGCATTGAAAAAGTTGGCAAAGACACTTGGTTACCAAGAAGCCATACATGTTTTAATCGCTTGGATCTACC
ACCATATAAGAGTTATGAACAACTAAAGGAAAAACTTCTTTTTGCAATAGAAGAGACAGAGGGATTTGGACAAGA
ATGAAATGTGGCTTCTTATTTTGGAGGAGCTCTTGCATTTAAATACCCCAGCCAAGAAAAATTGCACAGATAGTGT
ATATAAGCTGTTCATTCTGTACAGTGAATTTTCCGAACCTCTCAAAGTATGTTTTCCGTTCTTCCACAGAAATAT
GCAAAACAGTTCATCCTTTTCTACTTTATTTATTGTTCCCTTGAAATGACTGACCAGGAAAAAGATCATCCTTAA
ATTTTGAAGCAAGTGAGAGACTTTATTAAAAATACATATATATCTATATAAACATATATGATAGTGGCTCTAGTT
TTATAGAGCTCCAAGTGTATTAAACATGACAGCCATTCATTCATAAAGATCTGGATTTGCTTTACCTTGTTAATA
TTATCTAGGGGAAAAAGTGCAAATTGCTCCATGTTCTTCTCTCCCTTATGTAACATCTCCTGAGGGTGTTTAGTT
GCATGGCTGTTCAGAAAGGTATTAAGGGCTTAGGCCAAATCTTACTTTGAGTATGTTAAAAAAAAAAAAATGCTG
CTGGCTTTTCTGAAGACAGGTGCTTGAACTTGTCAGTTTGTTTTAAATAAATACAATAGTTGAAAATTTAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2797

MATASPRSDTSNNHSGRLQLQVTVSSAKLKRKKNWFGTAIYTEVVVDGEITKTAKSSSSSNPKWDEQLTVNVTPQ
TTLEFQVWSHRTLKADALLGKATIDLKQALLIHNRKLERVKEQLKLSLENKNGIAQTGELTVVLDGLVIEQENIT
NCSSSPTIEIQENGDALHENGEPSARTTARLAVEGTNGIDNHVPTSTLVQNSCCSYVVNGDNTPSSPSQVAARPK
NTPAPKPLASEPADDTVNGESSSFAPTDNASVTGTPVVSEENALSPNCTSTTVEDPPVQEILTSSENNECIPSTS
AELESEARSILEPDTSNSRSSSAFEAAKSRQPDGCMDPVRQQSGNANTETLPSGWEQRKDPHGRTYYVDHNTRTT
TWERPQPLPPGWERRVDDRRRVYYVDHNTRTTTWQRPTMESVRNFEQWQSQRNQLQGAMQQFNQRYLYSASMLAA
ENDPYGPLPPGWEKRVDSTDRVYFVNHNTKTTQWEDPRTQGLQNEEPLPEGWEIRYTREGVRYFVDHNTRTTTFK
DPRNGKSSVTKGGPQIAYERGFRWKLAHFRYLCQSNALPSHVKINVSRQTLFEDSFQQIMALKPYDLRRRLYVIF
RGEEGLDYGGLAREWFFLLSHEVLNPMYCLFEYAGKNNYCLQINPASTINPDHLSYFCFIGRFIAMALFHGKFID
TGFSLPFYKRMLSKKLTIKDLESIDTEFYNSLIWIRDNNIEECGLEMYFSVDMEILGKVTSHDLKLGGSNILVTE
ENKDEYIGLMTEWRFSRGVQEQTKAFLDGFNEVVPLQWLQYFDEKELEVMLCGMQEVDLADWQRNTVYRHYTRNS
KQIIWFWQFVKETDNEVRMRLLQFVTGTCRLPLGGFAELMGSNGPQKFCIEKVGKDTWLPRSHTCFNRLDLPPYK
SYEQLKEKLLFAIEETEGFGQE

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FIGURE 2798

CTCGACTCTTAGCTTGTCGGGGACGGTAACCGGGACCCGGTGTCTGCTCCTGTCGCCTTCGCCTCCTAATCCCTA
GCCACTATGCGTGAGTGCATCTCCATCCACGTTGGCCAGGCTGGTGTCCAGATTGGCAATGCCTGCTGGGAGCTC
TACTGCCTGGAACACGGCATCCAGCCCGATGGCCAGATGCCAAGTGACAAGACCATTGGGGGAGGAGATGACTCC
TTCAACACCTTCTTCAGTGAGACGGGCGCTGGCAAGCACGTGCCCCGGGCTGTGTTTGTAGACTTGGAACCCACA
GTCATTGATGAAGTTCGCACTGGCACCTACCGCCAGCTCTTCCACCCTGAGCAGCTCATCACAGGCAAGGAAGAT
GCTGCCAATAACTATGCCCGAGGGCACTACACCATTGGCAAGGAGATCATTGACCTTGTGTTGGACCGAATTCGC
AAGCTGGCTGACCAGTGCACCGGTCTTCAGGGCTTCTTGGTTTTCCACAGCTTTGGTGGGGGAACTGGTTCTGGG
TTCACCTCCCTGCTCATGGAACGTCTCTCAGTTGATTATGGCAAGAAGTCCAAGCTGGAGTTCTCCATTTACCCA
GCACCCCAGGTTTCCACAGCTGTAGTTGAGCCCTACAACTCCATCCTCACCACCCACACCACCCTGGAGCACTCT
GATTGTGCCTTCATGGTAGACAATGAGGCCATCTATGACATCTGTCGTAGAAACCTCGATATCGAGCGCCCAACC
TACACTAACCTTAACCGCCTTATTAGCCAGATTGTGTCCTCCATCACTGCTTCCCTGAGATTTGATGGAGCCCTG
AATGTTGACCTGACAGAATTCCAGACCAACCTGGTGCCCTACCCCCGCATCCACTTCCCTCTGGCCACATATGCC
CCTGTCATCTCTGCTGAGAAAGCCTACCATGAACAGCTTTCTGTAGCAGAGATCACCAATGCTTGCTTTGAGCCA
GCCAACCAGATGGTGAAATGTGACCCTCGCCATGGTAAATACATGGCTTGCTGCCTGTTGTACCGTGGTGACGTG
GTTCCCAAAGATGTCAATGCTGCCATTGCCACCATCAAAACCAAGCGCAGCATCCAGTTTGTGGATTGGTGCCCC
ACTGGCTTCAAGGTTGGCATCAACTACCAGCCTCCCACTGTGGTGCCTGGTGGAGACCTGGCCAAGGTACAGAGA
GCTGTGTGCATGCTGAGCAACACCACAGCCATTGCTGAGGCCTGGGCTCGCCTGGACCACAAGTTTGACCTGATG
TATGCCAAGCGTGCCTTTGTTCACTGGTACGTGGGTGAGGGGATGGAGGAAGGCGAGTTTTCAGAGGCCCGTGAA
GATATGGCTGCCCTTGAGAAGGATTATGAGGAGGTTGGTGTGGATTCTGTTGAAGGAGAGGGTGAGGAAGAAGGA
GAGGAATACTAATTATCCATTCCTTTTGGCCCTGCAGCATGTCATGCTCCCAGAATTTCAGCTTCAGCTTAACTG
ACAGACGTTAAAGCTTTCTGGTTAGATTGTTTTCACTTGGTGATCATGTCTTTTCCATGTGTACCTGTAATATTT
TTCCATCATATCTCAAAGTAAAGTCATTAACATCAAAAAAAAAAAAAAAAA

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FIGURE 2799

MRECISIHVGQAGVQIGNACWELYCLEHGIQPDGQMPSDKTIGGGDDSFNTFFSETGAGKHVPRAVFVDLEPTVI
DEVRTGTYRQLFHPEQLITGKEDAANNYARGHYTIGKEIIDLVLDRIRKLADQCTGLQGFLVFHSFGGGTGSGFT
SLLMERLSVDYGKKSKLEFSIYPAPQVSTAVVEPYNSILTTHTTLEHSDCAFMVDNEAIYDICRRNLDIERPTYT
NLNRLISQIVSSITASLRFDGALNVDLTEFQTNLVPYPRIHFPLATYAPVISAEKAYHEQLSVAEITNACFEPAN
QMVKCDPRHGKYMACCLLYRGDVVPKDVNAAIATIKTKRSIQFVDWCPTGFKVGINYQPPTVVPGGDLAKVQRAV
CMLSNTTAIAEAWARLDHKFDLMYAKRAFVHWYVGEGMEEGEFSEAREDMAALEKDYEEVGVDSVEGEGEEEGEE
Y

FIGURE 2800A

GTCGACCTGCAGGTCAACGGATCTGAGAGGAGAGTAGCTTCTTGTAGATAACAGTTGGATTATATACCATGTCCT
GATCCCCTTCATCATCCAGGAGAGCAGAGGTGGTCACCCTGATAGCAGCAAGCCTGGGGGCTGCAGCTTGGTGGG
TAGAGGTACTCAGGGGTACAGATGTCTCCAAACCTGTCCTGCTGCCTTAGGGAGCTTCTAATAAGTTGATGGATT
TGGTTAAAATTAACTTGGCTACTTGGCAGGACTGGGTCAGTGAGGACCAACAAAAAGAAGACATCAGATTATACC
CTGGGGGTTTGTATTTCTTGTGTTTCTTTCTCTTCTTTGTACTAAAATATTTACCCATGACTGGGAAAGAGCAAC
TGGAGTCTTTGTAGCATTATCTTAGCAAAAATTTACAAAGTTTGGAAAACAATATTGCCCATATTGTGTGGTGTG
TCCTGTGACACTCAGGATTCAAGTGTTGGCCGAAGCCACTAAATGTGAGATGAAGCCATTACAAGGCAGTGTGCA
CATCTGTCCACCCAAGCTGGATGCCAACATTTCACAAATAGTGCTTGCGTGACACAAATGCAGTTCCAGGAGGCC
CAAATGAAAATGTTTGTACTGAAATTTGTTAAAGCTTCCCGACAAACTAGATTTATCAGTAAGGATTGTTTTCTG
CAAGGGGGATGAAACTTGTGGGGTGAGCCATTTGGGCTGAGGAGGAGGGAGGTTGGAGCTGAGAAATGTGGAGAC
AATTTCCCTTTAGAAGGACTGAATCTCCCTGCCTCTCTGGGGTGCGGCAGCCAGCAGGATCCAATGGTGTATATG
TCTCCCCAGCTCCCCATTCAGTGATATCATGTCAGTAGCTTGAAATTATCCGTGGTGGGAGTATTATGTCATGGA
AATTGGCAAATGGAAACTTTTATTGGAGATTCAATTGTTAAACTTTTACCAGCACAACACTGCCCTGCCTTCAGA
GTCAATGACCCTATCCAAGTTTAATCCATCTGTCCACTGTCTCCAACACGATCTTTATAAAACACACCTGACAAC
ATTACCCTTTTATTCAGTTTTTTAAAAGATAAGTTTCCAGCTCATCGGGGTGGCTTTAAAGGCCATTTCTCCTCT
GGACCTCACCCAACTTTTCAAATCACTTTTCCTACCCCTACCTCTAAATGCTACTCAAACTCCAGCCATCCTGAA
TAATAAGACTTTTGAAAAGTAGATTATGGGCTGGGCACAGTGGCTCACACCTGTAATCCCAGCACTTTGGGAGGC
CAAGATGGGTGGATCACCTGAGGTCGGGAGTTCGAGACCAGCCTGACTAACATAGTGAAACCCTGTCTCTACTAA
AAATACAAAATTAGTTGGGGGTGGTGGCACAAGCCTGTAATCCCAGCTACTCAGGAGGTTGAGGCAGGGGAATTG
CTTGAACCTGGGAGGCGGAGGTTGCGGTGAGCCTAGATTGCTCCACTGCACTCCAGCCTGGGCAACAAGAGCGAA
ACTCCATCTCAAAAAAATAAATAAATAAATAAAGTAGATTACATCAGATACCTCTGGCCTAGGTTGTTTATGACC
AACTCTCCTGCTGAGAATAACTAGAAAAGCTAGACAAAACATATTTCCAAAAGATCTCTTTGGAGGCATCAGAGA
ATGGCCAAGGCTGTAAGGAACTGCCTGAGCCCAGAGAGGTGGAGCCCAGCACTGGTGCCCTTTACTCCTGGGGAC
ATGTGCTGGTTTCAAAAACTTCAGCTGAGCTTTTGAGCATTCATGGAACTTGGTGGGGGAGATGAAATTTGTACC
TTAAATCCTGCCTACAGGGAGGGTCCCTGATAATCCCCACCCAATTTGGAAATCTGGGTCAGCCTTCACAGGTAC
TGAAGCCCTCCTCTGAATGATCTCAAGTCCTGCTAGGGTAGAGGTTACCTGCTTTTGAAAGGCTCCTGGCCTACC
TGTGCAGCAGGAGCAAAAGTGAACCATCTCAGGGTACAGATAACAATCATCCAGAGCCTTGAATGACCTCTACTG
TGCTTAATATATAGTATTCAGCAGTCAGTAAAAAGGATTTAGGCACATGCAAGATGACCTGTGTATCAGGGAGAA
ATAGGCAATAAATTGAGATCCAGCAGGGATTTGAATCATGGATTTGAATCAGGGGCAGCCTTCGAAAGAACTATG
GAGAATATACTCAGATTTAAAACATAAGATTGGAATTTTTGGCAGAGAACTAACAACTGTACAAAAAAGGAACCA
AATGGAAATCCTAGAACTGAAAGATGCAATTAACCGATGTTGAGAAATAGCCAACATCTATTGAACACTTCCCAT
GTGGACAGCTGTGCTAAACACTTTACAGGCATCAACATAAGATGTGTCCCCTTACAGCAGTGCAGTGTCCCTCCT
AAGACATGGACAGCCTGGTTTCCCTATCTCTCTGCTTCATCAAAACCCCTTTACGTGGGGCTTAGACACTCCTGT
TGTCTCTAGTGTCTAGTAGCACAGGGCTCAGCACATGGAAGCCACTAGATACAATTTGATGACCAGGACCTCCGA
TGAAAGCCATGGGTGCTGATTGGGAAGGCATTGTCTTTTATGTGCTATGGTCTTAAAGCTTCATCCAGGAAGCAG
AACTCGGGGGGTGCTGAGGACCCAGAACCGAGAATAAGATTAGTCAGAGATTTCCTGTGGGCAGAAATCATAAGG
ACGCCAACTGTTTGGGTGAGATAAGACGAAACCAAGAGTGGACTTGTGGCCAGAAGCGTGAGGAAGAGGGAGAGA
GCTTCCCTTGTCCCCTTTCTTCCTCTCCCTAAGCCACAGTGATTGACAGCCCCCCCGCTTTGGAGTCAGAGCAGG
CTTGAGACTGGACTGGGAAAGGAGGGTGGGTCAGGATACAGAGCAGGAAGGCTGGGAGTGCAGGGCAGGAGCAAG
GGGCTGGGGCATTCATTGTGCCTGATCTCTCCCACTTTACCTGGGGTAAAGAAGCATATGCAAAAGCCACGGTGT
GAGTATTTCCCAAGTGCCAGGGTCAGGGCATGATTCATCACGTGCAGCATTTCATTCAATCCTTATAGTAACCGA
TGATGTGGCTTCTATTATTAGCTCTATCAGATAATGAAACTGAGACCAAGACAGGCTCTGCACATTGTGTGGGGT
AATGACACAGGGGGATTCAGACCTAGACTCCATAACTCCTGCCCCAGGGACCACCCCCACCCTCACCCTGTGCAT
GTCGACAAAGGACAGACTGGGCCACTTCTCAGGACACAGCGGGGAAATGACACAGAGCAGGGAGGTTCCAGGAGC
CCCGAGCGTCTTTTCTCCAGGAGAATACTCTCTGAATTCAGACTGGGGTCAGAGAAACATTTACCCAGGAGCCGC
AGTGTGGGTGGGGCTTTTTACTTGAAACGCTGTCTGAAGGCAGTGGCAGGATGAACTCTCCACCCTACCTTGGCA
AGCCACTTCTCTTCTGCAATCTGTAAGGACATTGTTGAGAGAATTATGGTCTTCCAATTCCGGAGGGTTGAAGAA
AGACAAATAGGAGAGAACCTATCATAGTCAGGTGCTAGCTGCCTTCTCTTTCAGAGAGTGTGAGAATAAAGTGAT

FIGURE 2800B

ACACTTGATTATTAGCAAATACTTTGGAAATTTTAAACGCTAATATTCAACACACTCTGGAAGAGGCAAATAAGT
AGACAGGTTCATATACATCATCTCCTTCAGCTAGTCCTCACAAAAACAAACAAATGAATAAACAAAATTCTTCTT
TGGCCCTCATAGGAAGACACTGTTTCTTGAACGTGTTTCAAAAAGGATGGGTGACTCACTCAAGGTCACACTGTT
TATGAGGACAGTACAGGAATACAGACATGCCATTTTGCCTGAAAAAATCCATCACCCAGGGAGGTGACACAATTT
TGCAGAAATGTTCTATTTCCTCTGAAGGATACATTCTTTAAACCTTTGGGAAATTCATTCATAGTCTTCCTCCTT
TGAAGGATTACTCTCTGGACACAAAGTGTTTGATTCTGATTTGTTGGTTGGAAGATGTGTTGGTTGAGAGAAAGA
TTCTGATTTGTTGGTTGAAAATAGACTCATCAAGATCAACTGCTGTAGTAGTAAATATTTTGACATTTTGTCTGT
ATTCCTGTGCTGCCCTCACAAGCTGCATCACCTTGAGTGAGTCATTCATACTTTTTTGTTTGTTTTTGTTTTGGA
GATGGAGTCTTACTCTGTTGCCTAGGCTGGAGTGCGGTGGCGTGATCTTGGCTCACTGCGACCTCCATCTCCTGG
GTTCAAGTGATCCTCCTGCCTCAGCCTCCCGAGTAGCTGGGATTACAGGCACATGCCACCATCCCTGCTAATTTT
TGCATTTTCAGTAGAGACGGAGTTTCACCATGTTGGTCAGGTTGGTCTTGAACTCCTGACCTCAGGTGATCCGCC
CACCTCAGCCTCCCCAAGTGCTGGGATTACAGGTGTGAGCCACCGTGCCCAGCCCAGCCATCATTTTTGAAACAC
GTTTGAGAAATAGTGTCTTCCTTTGAGGGCCAAGGAGACATTTTTTTTGTTTATTTGTTTGTTTTTGTGAGGACT
AGCTGAAGGGGGTGATGTATATTAACCTGCCTACTTATTTGCCTCTTCCCAGAGTGTGATGAATATTAGGGTTTA
AAGTTTCTGAAGCATTTGTTAATAAAGCCCGGGGCTGGAGGTCAGAAGACCTGGATTTCTCTGCATACTTTTGCC
ATCAGCAAGCTGTGTGACCTTGGACAGATCCCTTTTTTGTCTAAATCTTTCTGAGTCTTCTTGAAAACAATGCCA
GGTTGGGACAGGATGATTGCCAAGCTCCCGTCCAGCTCTAAAACACTGCAACGTATGCTTCTGCACCAGCACTGT
CCATCCTGTAGATCATGCAGAAATTCTCTTCAACTTTTTCCTACCCATAAAATAGGAGCATGCTTACCTTTTTCC
TAATGTTCCAGGCCCCGGGTCTAGATATTGTAAGTAAGGAAGTTAATGTGTATCAGAGCCCATTATGGGCCAGAA
GTTCTCCTCTTCCTTCCTACACCTGCTTCCTCCCTCCCTCCCTCCCTCTTTCCCTTCCTTCCTTCCATCCATTTG
TGAAGAAGACATGATCACCCTCATTCTGAGAGTGAAGAGACAGAGGCTCAACTAATGAAATGATTTGTTCAAGGT
CACACGGGTGGCACAAGGCAAGTGGCAGAGGTTGAATTTAGACCCATTCCTGTCCAAATGCTGAGTTTATGTCAT
CGTCCCGAGACCATAACTTTAAAGATGTAAGATAGTGGGAAAAGAGTTGATTTCAAAGCACCTCTCAGAAGGACT
CACTTTACATCAGGGGTCAGCAGACTCAGGCCAAATCCGGTCCATTCCCCGCTTTTGCAAAGAAAGTTGTAGTGG
AACACAGCTAGGCTTATTGATTTATGGATTGCCAACGTCCTTTTGTGAAACAGACAGCTGAGCTGAGTAATCGTG
GCGCACAAAACCTAAAATATTTACTATCTCGTCCTTTACAGAATGTTTGCCAATCTATGGTCCGGAGTCCAAGGC
TGTCCATTTTTCAAAGAACACAAAGTGACATGAGACTGTCCCATGTGCAGGGAGCCCTATCATTTTATTATGAAA
AAACGGCCTTTCTGCTCAAATCTGTTTTTTAAAAAGTCAACAAACAGACTCTGGGTACCTGTCAGGAACAGTAGG
GAGTTTGGTTTCCATTGTGCTCTTCTTCCCAGGAACTCAATGAAGGGGAAATAGAAATCTTAATTTTGGGGAAAT
TGCACAGGGGAAAAAGGGGAGGGAATCAGTTACAACACTCCATTGCGACACTTAGTGGGGTTGAAAGTGACAACA
GCAAGGGTTTCTCTTTTTGGAAATGCGAGGAGGGTATTTCCGCTTCTCGCAGTGGGGCAGGGTGGCAGACGCCTA
GCTTGGGTGAGTGACTATTTCTTTATAAACCACAACTCTGGGCCCGCAATGGCAGTCCACTGCTTGCTGCAGTCA
CAGAATGGAAATCTGCAGAGGCCTCCGCAGTCACCTAATCACTCTCCTCCTCTTCCTGTTCCATTCAGAGACGAT
CTGCCGACCCTCTGGGAGAAAATCCAGCAAGATGCAAGCCTTCAGGTAAGGCTACCCCAAGGAGGAGAAGGTGAG
GGTGGATCAGCTGGAGACTGGAAACATATCACAGCTGCCAGGGCTGCCAGGCCAGAGGGCCTGAGAACTGGGTTT
GGGCTGGAGAGGATGTCCATTATTCAAGAAAGAGGCTGTTACATGCATGGGCTTCAGGACTTGTGTTTCAAAATA
TCCCAGATGTGGATAGTGCGACCGGAGGGCTGTCTTACTTTCCCAGAGACTCAGGAACCCAGTGAGTAATAGATG
CATGCCAAGGAGTGGGACTGCGATTCAGGCCTAGTTGAATGTGCTGACAGAGAAGCAGAGAGGGGCACCAGGGGC
ACAGCCCGAAGGCCCAGACTGATATGGGCAAGGCCTGTCTGTGCTGACATGTCGGAGGGTCCCACTCTCCAGGGA
CCTTGGTTTCCCCGTCTGTGACATCTGTGACATGAGAGTCACGATAACTCCTTGTGTGCCTTACAGGGTTGTTGT
GAAAATTAAATGCACAGATAATAGCGTAACAGTATTCCGTGCATTGTAAAGAGCCTGAAAACCATTATGATTTGA
AAATGGAATCGGCTTTGTGAGACCATCACTATTGTAAAGATGTGATGCTGATAGAAATGACAGGACTGCTTGTGC
ATGCCCTCTGCAGTGTGACATTCCAGCAGTGAAATCATGTTGGGGTGACTTCTCCCCCACTCTGACCTTTATGTT
TGTCTGGGCCGAGGCTGCAAGTCGGGCTCTGTGGGTGTATGAGTGACAAGTCTCTCCCTTCCAGATATGGGGACT
GTCTGCTTCCCTAGGTTGCCTCTCCCTGCTCTGATCAGCTAGAAGCTCCAGGAGATCCTCCTGGAGGCCCCAGCA
GGTGATGTTTATCCCTCCAGACTGAGGCTAAATCTAGAAACTAGGATAATCACAAACAGGCCAATGCTGCCATAT
GCAAAGCACTTTGGTTTGCCTGGCCACCCCTCGTCGAGCATGTGGGCTCTTCAGAGCACCTGATGAGGTGGGTAC
AGTTAGCCACACTTCACAGGTGAAGAGGTGAGGCACAGGTCCCAGGTCAGGCTGGCCGGAGCTCTGTTTATTACG

FIGURE 2800C

TCTCACAGCTTTGAGTCCTGCTCTCAACCAGAGAGGCCCTTTACCAAGAAGAAAGGATTGGGACCCAGAATCAGG
TCACTGGCTGAGGTAGAGAGGAAGCCGGGTTGTTCCCAAGGGTAGCTGCTCCTGCAGGACTCTGAGCAGGTCACC
AGCTAATGGAGGAAAGGCTCTAGGGAAAGACCCTTCTGGTCTCAGACTCAGAGCGAGTTAGCTGCAAGGTGTTCC
GTCTCTTGAAACTTCTACCTAGGTGCTATGGTAGCCACTAGTCTCAGGTGGCTATTTAAATTTATACTTAAATGA
ATGAAAATAGAAGAAAATTTAAAATCCAGACCCTTGGTCACACTATCCACATTTAAAGAGGTCAATAGCCACATG
TGGTTAGTGGCCACCCTATTGGGCAGTGCAGCTACAGAACATTTTTGCATCCCAGAAAGTTCTTTTGGATGTTGC
TGCTCTACAGCATGCTTTGCTGAAACAGAAGTGCCTTCCCTGGGAATCTCAGATGGGAAGCAAGTAAGGAGGGGA
GTCAAATGTGGGCTCACTGCTCACCAGCTGTGAGGGTTGGGCCTGCCTCTTAACCATTGTCAGCCTCAGTCTTCT
CATCCATGCATGCCGTGGGTATACTAAAATACTATACCCCTGGAAGAGCTGGATGCAAATTTGACAAGTTCTGGG
GGACACAGGAAGGTGCCAAGCACAAGGCTGGGCACATGGTGGCTGTGCACTACAGCTGAGTCCTTTTCCTTTTCA
GAATCTGGGATGTTAACCAGAAGACCTTCTATCTGAGGAACAACCAACTAGTTGCTGGATACTTGCAAGGACCAA
ATGTCAATTTAGAAGGTGAGTGGTTGCCAGGAAAGCCAATGTATCTGGGCATCACGTCACTTTGCCCGTCTGTCT
GCAGCAGCATGGCCTGCCTGCACAAACCCTAGGTGCAATGTCCTAATCCTTGTTGGGTCTTTGTATTCAAGTTTG
AAGCTGGGAGGGCCTGGCTACTGAAGGGCACATATGAGGGTAGCCTGAAGAGGGTGTGGAGAGGTAGAGTCTAGG
TCAGAGGTCAGTGCCTATAGGCAAGTGGTCCCAGGGCCACAGCTGGGAAGGGCAAATACCAGAAGGCAAGGTTGA
CCATTCCCTTCCTCAAGTGCCTATTAAGGCTCCATGTTCCTATGTTGTTCAAACCCTAACTCAATCCCAAATTAA
TCCACCATGTATAAGGTTGAGCTATGTCTCTTATTCCTGGACACCATACTCAGCCATATCTGGTCCACACATTAA
CAGCTGGATGACCTTGAAGAAGCTTCACCCACTCTGTTCCTCAGCTTTCCCTTCAGTGGGATGATATCAACTGGA
CAACAGGATGTGCGATTCTTTTAGTTCCAGCCTTCCAGGATGTTTTCACTCCCCTGTTTGTTGTTGTAGGATGGT
ATTACCTCCACCTTCCCACCTTCCCTATGCCCTGGTTCTGTCTCCTGTGCCTCGCTCTGAAAGTGGATGAGACCT
ACAATTCCTGTCCTGGTAGTTCTCCTAATGAACACACTGAAGCACGAGGAAGCTGAGATTTTTGTTGCTACATGA
GAGCATGGAGGCCTCTTAGGGAGAGAGGAGGTTCAGAGACTCCTAGGCTCCTGGTGGAGCCCCACTCATGGCCTT
GTTCATTTTCCCTGCCCCTCAGCAACACTCCTATTGACCTGGAGCACAGGTATCCTGGGGAAAGTGAGGGAAATA
TGGACATCACATGGAACAACATCCAGGAGACTCAGGCCTCTAGGAGTAACTGGGTAGTGTGCATCCTGGGGAAAG
TGAGGGAAATATGGACATCACATGGAACAACATCCAGGAGACTCAGGCCTCTAGGAGTAACTGGGTAGTGTGCAT
CCTGGGGAAAGTGAGGGAAATATGGACATCACATGGAACAACATCCAGGAGACTCAGGCCTCTAGGAGTAACTGG
GTAGTGTGCATCCTGGGGAAAGTGAGGGAAATATGGACATCACATGGAACAACATCCAGGAGACTCAGGCCTCTA
GGAGTAACTGGGTAGTGTGCTTGGTTTAATCTTCTATTTACCTGCAGACCAGGAAGATGAGACCTCTCTGCCCTT
CTGACCTCGGGATTTTAGTTTTGTGGGGACCAGGGGAGATAGAAAAATACCCGGGGTCTCTTCATTATTGCTGCT
TCCTCTTCTATTAACCTGACCCTCCCCTCTGTTCTTCCCCAGAAAAGATAGATGTGGTACCCATTGAGCCTCATG
CTCTGTTCTTGGGAATCCATGGAGGGAAGATGTGCCTGTCCTGTGTCAAGTCTGGTGATGAGACCAGACTCCAGC
TGGAGGTAAAAACATGCTTTGGATCTCAAATCACCCCAAAACCCAGTGGCTTGAAACAACCAAAATTTTTTCTTA
TGATTCTGTGGGTTGACCAGGATTAGCTGGGTAGTTCTGTTCCATGTGGTGGAACATGCTGGGGTCACTTTGGAA
GCTGCATTCAGCAGAGTGCCAGGCTTGCGCTGGGCATCCAAGGTGGTCCCTCATCCTCCAGGCTCTCTTTCCATG
TGATCTCTCAGTGTTTAAGAGTTAGTTGGAGCTTCCTTACAGCATGGCGGCTGACTTCCAAAAGGGATTATTCCA
AAAAGAGCCTCAACATGCAGGCGCTTATTATGACTTCTGCTTGCATCATCCTATTGGCCAAAGCCAGTCACGTGG
CTAAGTCTAGCCCCCTGTGAGAGGAGACTGCATAAGAGTGTGAACACCAGGAGACACGGTCACTGGGGGCCACCA
CTGTAACCATCTACCACAGGACCTGAATCTCTGTGTGCTACTCCCTTGCTCAAGGGCCCCCCTACCCACGCAGAC
CTGCTGTCTTCTAGCAAAGCCCATCCTCAGGACCTTTCTCTTCCAATCCTTATTGACTCAAATTGATTAGTTGGT
GCTCCACCCAGAGCCCTGTGCTCCTTTATCTCATGTAATGTTAATGGGTTTCCCAGCCCTGGGAAAACATGGCTT
TGTCTCAGGGGCTTGCTGGATGCAACCTTAACCTCAATGTGAGTGGCCATACTGTGGCACTGTCCCATCCCTCAC
CAGGGACACTGTTCTGGAGGGTGACTGCCTGTTCTGTGAGGAGTGGGGATGGCTAGGACATTGCATGGAACACAC
CACCACCCCATCTTCTCAGAGCTCAAACCCTGACAGAACACCAGCTCCACAGGCCTTGGCTTCTGCTGATGGTGC
CGTGTATTTACCAGACTTAGTGGTCCAAGGCCAGAGTGGCAGATTTCCCAAAGTCAAGGTGTGACAGTGGGACAG
CCTCTTTGTGTCTTTGCTGTCCTAAGAAACCTGGGCCAGGCCAGGCGCAGTGGCTCACGCCTTGTAATCCCAGCA
CTTTGAGAGGCCAAGGTGGGCAGATCACGAGGTCAGGAGTTTGAGACCAGCCTGGCCAACATTGGTGAAACCCTG
TCTCTATTAAAAATAGAAAACATTAGACAGGTGTGGTGGTGCATGCCTGTAATCCCAGCTACTCAGGAGGCTGAG
GCAGGAGAATCGCTTGAACCCAGGAGGTGGAGGTTGCAGTGAGCCGAGATTGTGCCACTGCACTCCAGCCTAGGC

FIGURE 2800D

GACAGAGCAAGACTCCGTCTCGGGAAAATTAATTAATAAATAAATAAACCTAGGTCCCAGAGTCCCACAGAATGG
CAGACAGGAGCACCTGGGGGCTTTTAGGGTATGGCATTTCCCCTGTACTAACTCTGGGCTGTCCAGAGGCGATTT
CATGGCGTGGAGTGGAGAGGGAGGCAGCACAGGACTTCCTAGGCCTCAGCTCTCACCTGCCCATCTTTTGATTTC
CAGGCAGTTAACATCACTGACCTGAGCGAGAACAGAAAGCAGGACAAGCGCTTCGCCTTCATCCGCTCAGACAGT
GGCCCCACCACCAGTTTTGAGTCTGCCGCCTGCCCCGGTTGGTTCCTCTGCACAGCGATGGAAGCTGACCAGCCC
GTCAGCCTCACCAATATGCCTGACGAAGGCGTCATGGTCACCAAATTCTACTTCCAGGAGGACGAGTAGTACTGC
CCAGGCCTGCCTGTTCCCATTCTTGCATGGCAAGGACTGCAGGGACTGCCAGTCCCCCTGCCCCAGGGCTCCCGG
CTATGGGGGCACTGAGGACCAGCCATTGAGGGGTGGACCCTCAGAAGGCGTCACAACAACCTGGTCACAGGACTC
TGCCTCCTCTTCAACTGACCAGCCTCCATGCTGCCTCCAGAATGGTCTTTCTAATGTGTGAATCAGAGCACAGCA
GCCCCTGCACAAAGCCCTTCCATGTCGCCTCTGCATTCAGGATCAAACCCCGACCACCTGCCCAACCTGCTCTCC
TCTTGCCACTGCCTCTTCCTCCCTCATTCCACCTTCCCATGCCCTGGATCCATCAGGCCACTTGATGACCCCCAA
CCAAGTGGCTCCCACACCCTGTTTTACAAAAAAGAAAAGACCAGTCCATGAGGGAGGTTTTTAAGGGTTTGTGGA
AAATGAAAATTAGGATTTCATGATTTTTTTTTTTCAGTCCCCGTGAAGGAGAGCCCTTCATTTGGAGATTATGTT
CTTTCGGGGAGAGGCTGAGGACTTAAAATATTCCTGCATTTGTGAAATGATGGTGAAAGTAAGTGGTAGCTTTTC
CCTTCTTTTTCTTCTTTTTTTGTGATGTCCCAACTTGTAAAAATTAAAAGTTATGGTACTATGTTAGCCCCATAA
TTTTTTTTTTCCTTTTAAAACACTTCCATAATCTGGACTCCTCTGTCCAGGCACTGCTGCCCAGCCTCCAAGCTC
CATCTCCACTCCAGATTTTTTACAGCTGCCTGCAGTACTTTACCTCCTATCAGAAGTTTCTCAGCTCCCAAGGCT
CTGAGCAAATGTGGCTCCTGGGGGTTCTTTCTTCCTCTGCTGAAGGAATAAATTGCTCCTTGACATTGTAGAGCT
TCTGGCACTTGGAGACTTGTATGAAAGATGGCTGTGCCTCTGCCTGTCTCCCCACCAGGCTGGGAGCTCTGCAGA
GCAGGAAACATGACTCGTATATGTCTCAGGTCCCTGCAGGGCCAAGCACCTAGCCTCGCTCTTGGCAGGTACTCA
GCGAATGAATGCTGTATATGTTGGGTGCAAAGTTCCCTACTTCCTGTGACTTCAGCTCTGTTTTACAATAAAATC
TTGAAAATGCCTATATTGTTGACTATGTCCTTGGCCTTGACAGGCTTTGGGTATAGAGTGCTGAGGAAACTGAAA
GACCAATGTGTYTTYCTTACCCCAGAGGCTGGCGCCTGGCCTCTTCTCTGAGAGTTCTTTTCTTCCTTCAGCCTC
ACTCTCCCTGGATAACATGAGAGCAAATCTCTCTGCGGGG

FIGURE 2801A

AGGGCGTGGTCAGCGCGGCCGAAGGGCGTGGTTGGCGCTCGGTCCTGCCCTGCGCGTTTTGGGCTGCGGTTGGAG
GGCCGCAGTTGCAGTCAGGGTCCGCCAGCTCGGGGCCAGCGCATGGGGCTGCTGAGACCGCTCCGGACGTGCGAA
GCGTTCGCGGTGCGGTAGGAAGCTGAAGTCTTCAGCAGAACCCTGACCTAGGTAGGGAGTCTCAATGGCCCTGGG
TGAAGAAAAGGCAGAAGCGGAAGCATCTGAAGACACAAAGGCCCAGTCCTATGGGAGAGGGAGCTGCAGGGAGCG
GGAGCTGGACATCCCAGGGCCCATGAGTGGGGAGCAGCCCCCACGCCTGGAAGCTGAGGGAGGGCTCATCTCCCC
TGTATGGGGGGCAGAAGGGATACCTGCCCCTACTTGCTGGATTGGGACTGACCCTGGCGGCCCCTCTAGAGCCCA
CCAGCCACAGGCCAGTGATGCCAACAGAGAGCCCGTAGCTGAGAGGTCTGAGCCTGCACTCAGTGGCCTGCCTCC
TGCCACCATGGGGTCTGGAGACCTTCTGCTCTCCGGGGAAAGCCAGGTGGAGAAGACCAAGCTTTCTTCCTCCGA
GGAGTTCCCTCAGACTCTGAGCCTTCCCAGAACAACAACTATTTGCTCAGGACATGATGCTGATACCGAAGATGA
TCCATCCCTAGCAGATTTGCCCCAGGCACTGGACCTCAGCCAGCAGCCTCACAGCTCAGGTCTCTCTTGCCTGTC
ACAGTGGAAGTCCGTGCTGAGCCCAGGTTCCGCAGCTCAGCCTTCCAGCTGCAGCATCTCTGCTTCCTCCACAGG
CAGCAGTCTCCAGGGTCACCAGGAGAGGGCGGAGCCTCGTGGTGGTTCTCTGGCCAAGGTCTCCTCCTCCCTGGA
GCCGGTCGTCCCCCAGGAACCTTCCTCTGTGGTGGGGCTAGGACCTCGGCCCCAGTGGTCACCACAGCCTGTGTT
CTCTGGGGGTGATGCTTCTGGGCTAGGCAGGAGACGCCTCTCCTTCCAGGCTGAGTACTGGGCCTGTGTGCTGCC
AGATTCCCTGCCTCCATCACCCGACCGCCACTCCCCTCTCTGGAACCCAAATAAAGAGTATGAAGATCTGCTTGA
CTATACTTACCCACTGAGGCCCGGGCCTCAGCTCCCAAAGCACCTTGATAGCCGTGTGCCAGCTGACCCTGTCCT
GCAGGACTCCGGGGTAGACCTGGATAGCTTCTCTGTCTCTCCAGCAAGCACCCTCAAATCACCTACTAATGTCTC
CCCCAACTGCCCACCAGCAGAGGCCACTGCCCTGCCATTTTCTGGGCCCAGAGAGCCAAGCCTTAAGCAGTGGCC
CTCCAGAGTACCCCAGAAACAGGGTGGCATGGGCTTGGCATCTTGGAGCCAACTTGCATCTACCCCCAGAGCCCC
AGGCAGTAGGGATGCTCGTTGGGAGCGCAGAGAGCCAGCCCTGAGGGGTGCGAAGGACCGGCTGACTATAGGCAA
GCACCTTGATATGGGCTCTCCCCAGCTAAGGACACGGGACAGAGGGTGGCCCTCGCCCAGGCCAGAGAGGGAGAA
GAGGACCAGCCAGAGTGCCCGGCGCCCTACCTGCACAGAGTCTAGGTGGAAATCAGAAGAGGAAGTGGAAAGTGA
TGACGAGTATCTTGCCCTCCCCGCTCGGCTGACACAGGTTTCTAGCCTGGTTTCGTATCTAGGATCCATTTCTAC
CTTGGTTACCCTGCCCACTGGGGATATCAAAGGGCAGAGCCCCTTGGAAGTGTCAGACAGTGATGGGCCAGCTTC
CTTCCCTTCAAGCTCCAGCCAAAGCCAGCTTCCCCCTGGAGCTGCCCTCCAAGGATCTGGGGATCCTGAGGGCCA
GAATCCCTGTTTCCTGCGCTCCTTCGTCCGTGCCCACGACTCCGCAGGGGAAGGCAGTCTGGGGAGCAGCCAGGC
CCTCGGGGTCTCCTCTGGACTGCTGAAAACACGCCCCTCCTTGCCAGCTAGGTTGGACCGGTGGCCATTCTCAGA
CCCAGATGTTGAAGGGCAGCTTCCCAGGAAAGGAGGAGAACAGGGAAAAGAATCACTGGTGCAATGTGTGAAGAC
ATTTTGCTGTCAGCTGGAAGAGCTGATCTGCTGGCTGTATAATGTTGCAGATGTTACTGACCACGGGACTGCAGC
CAGGTCCAATCTTACAAGTCTCAAGTCTTCTCTGCAGCTTTACCGGCAATTTAAGAAAGATATAGATGAACATCA
GTCTCTGACGGAGAGTGTCTTACAGAAGGGGGAGATTCTTCTTCAGTGCCTGTTGGAGAACACCCCAGTTTTAGA
GGATGTCCTTGGGAGGATCGCAAAGCAGTCTGGTGAGCTGGAGAGCCACGCAGATCGCCTGTATGACTCTATCTT
GGCCTCTCTGGACATGCTGGCTGGCTGCACCCTTATCCCTGACAAAAAGCCCATGGCGGCAATGGAGCACCCATG
TGAAGGGGTTTAACCTGGCATCTTCTCAGGCAGAGGTGCAACCTGTCGGCCAAACACTGGCTAGTGAGAAAAAAT
CCTTCAAGAAGTCCTTGCAAGAGCCATTCAACACTGAAGTCAAGGGGGAAACCTTCAATATACTAGCTTTAAAAT
GCCTTTCTCCTCCCTGAATGGAGGGCTGAGTTACTATTTTTATTTACAATGAATCCTTCCAAACTAAGGTTTTCC
TTTTGGTGCTTCTCCACAAAGAGCGTGTAGCTTTGCAATTTTTGATAAAATAAGACGTGTTGCCTTCCCCTCTAT
CCCATTAAAAAAGAGCAGATAAAGCTCAAACTATTCCACCTGGTAGGGTCATTTACCAAGGGCTGGTAGGAGATT
CCGAATACTCAATATTCTCAGGCATGCAAGAGGACCTAAGAGACTGAAAAAAGTGAATTGTTGGCCAGAAACCTT
GGGTCTTTTCATAAAGGAAATTTGGGCTTGTCAATCCCTCTTTAAAGATATAGGTAGAAAGAAGAGATTTTTAAC
CCTTTGTCTGCAAAAGAAAAAGGGTTAAATGAAGCATCTATACAGATGACTTTGGGAGATTATGACACCTTTTGC
CATCTTCAGGGCTTACGTCTTTACTTTCTTGGCTAACCAGTTTCTTAGAAGAAAATGTGTCAGGGACTTGGGGAT
CTACAGTCATGCTTTAGCATGGCTATGGAGCTAATTATCAAGCTTAAAGGGTAACTTTGGGAGGACTCCTCCCTT
CACTCCTAGTCTCCCTTGGAAGAGCAGTCCAGGCTCAGGGAAGGGAATGGATAGGATGACACAGTAAGTACAGAA
ACTGAAGCTGTCAATAGTGAAGGAAAAAGGGGAATTCTTCGTTGCTTTGGCATTGACACATAAGTACTTTGATTA
AAAAAAAAAAAAACTATGGATCAACCATTCAAAGCATCAATTCTATAGCTTTTTGCAGCAAGATGATCAGTTATT
GCTGGTAACTGCAGATTCTACAGAAAAGCACTTTTAAAGTTCTGTTGGGCCATGAATGAACCTGGAAGGAGGAAA
GCACAGTAACAATGGAAACTAAAGTCCTATTATTAATGTGACTTTTCTGCTTCAGAATTTCTGAGACTTTATAGT

FIGURE 2801B

CACTGGAAAATAGCCATTAAATTCTTTAAAGATTAGCTCTTCAACAGTAGCTACACATAAAATGCAGTATTTCAA
GTGCCTGATGCTGCTGTGGTATGCTTTATCATAATGCTTAAGGGCATGATCAAAATTAAAATGGCTTATGAGTTT
GCCATATTAATCATCTTAGTTCCATACACACTGAGACTTTAAAAGGGAAAAACCACTCTAGCAAATAATTGTCAA
TTATAAACCTGTATGTAAAACATTCTTGAAAACCTAGAGTTGGTTAAAAAGGTAGAGATGTCTGACGGCCTCTTC
TTAAATTGATATATTTTACCTTCTCTTAGATGTATATTTATAAGTAGGAACATGTCCTTCCACTGAGTATGTTAC
TGAATAGCCCTTAGGAAATTAAACCCATTTATTTACTAATATTTGACAGGCATAGAAGTGTATTAATTAGCATAA
AAGTTGGAGATGAAAACCCTATAGAAACAAATTGGCCAATATTATACTAATTGAATGCAGAATGTGGCATTCTAT
TCCCATTCAACTAATAATCAGCTTCAACTGACAGGAATTTGCACAGAATGTTACACAATACCCTGTTTCCCAAGA
AAGTACTACCTTACCTAGAGATGATCTAAGATATTTTTGTTCATCCTCTGAATAAGGTGAGACTAAAGGGTGCTA
ACTCCCTGGACCTGGCTGTGAATGCTACTGAAGAGTATCAACACAACTGTTAATTATACCGCCGTGCTTTAAGTT
TAAGACTTACCTTAAAACTCAAGCTGAAGGCTGGGCACGGTGGCTCATGCCTGTAATCCCAGCACTTTGGGAGGC
CGAGGCGGGTGGATCACAAGGTCAGGAGATCGAGACCATCCTGGCTAACACGGTGAAACCCCATCTCTACTAAAA
ATACAAAAAGAAATTAGCCAGGCGTGGTGATGGGCGCCTGTAGTCCCAGCTACTTGGGAGGCTGAGGCATGAGAA
TGGCATGAACCCGGGAGGCGGAGCTTGCAGTGAGCTGAGATGGCACCACTGCACTCCAGCCTGGGCAACAGAGTG
AGACTCTTGTCTCAAAAAAAAAAAATCAAGCTGAAATTGTTTCAGCCTAGTAAGATGCTGCCAGCAGCATTTCTA
TGAGCAAACATGGCCAAATTAGAGTCAAGTAGCTGAGCTTGCTAACTGCACTGTGATGCCACACTGGAATAACTT
AGTAGTCCCTTAAAATTAATGGAAGTTAAATCCACAGGGAAGTGATGATACTCAAAGCTGGATCAGCAGTTTCAA
GATCTGGGTTCTTGGAGATCCATAGGTAAGCTCAGCAAATGGAAGACGACGTCAACACAGGGCTATTTTGAAGCT
TAGGTGGGAATGGAACACAAAGAAGGTTTGAGGTAAGATATGCTGGAAAGGCAAGATGTAGGCTAAGGGAAATTC
AATCCAAGGTCGAAGAATAGGAAATTACTGCTCAGACCACAATGACTATCATTCTGAAAGGATTTCACAGAGTGT
GCAGCTGCTTAGATTTAAGAACACTCTTCTTCACTATGTAAACTAATTTATGGCAGCACCTTATATTTAGAACAA
GTGGTAATTCCCTTTACTAAGTGAACAGATTATTAAAACCTGTAGTAGCTTTGAACCGTTTGTACTTGAAAATGG
GGGTATAAAGGGGTATATATTTTTTCCAGAACCACATTTATTGGCGTATACATAGAAGCAAATCTTAAGGCATGC
TGAAATTTGTTGTAAATCCCAATCTTTACTGCCATGGGGAAAAGAACGCTGGAATTTTCCAAACTTAAGTCTGTA
AATATGCTCATCTTAAGTTCATGTAATGTTTCCGCTAACTCACCAAGAATAAGCTGACAATTTAAACAACTTTTA
CTGTGTAAAAATGAAGTGCACGGCATGGCATCACAGTATCTTGACATTTGTTTTGTGTCATTTAGCTACTTTAGA
AAATAGTTTCTGAACTCTTTCCCCCTTTATACTGTATTAAGGCAAAAACAAAACTTCTGAAGCATTAAAGATCTT
CACCAAAATAACTATTGGTAACTTCAGGAATTTGTCAGTTGCCTTATGTGAGGATGAATAGATCCACCAAGCACG
CCTATAATACAAAGTAAACTATGATTTTTATTGTGAAATTTTCATAGATGGAAAATTGAATATTCTGTCCATTTC
ATTTTACAATTATCTTACCACTTATTTTTGTACCATGTATTTCAATTGCCTGTTTAGTGAAAAATAAAAATTAAA
AAAACCT

FIGURE 2802

CCAGATGTGAGGCCACCTCCCAGGAAGGAGAGCACAGGAAAAGATTCCTGGTGCAATGTGTGAGACATTTTGCTG
TCAGYTGGAAGAGCTGATCTGCTGGCTGTATAATGTTGCAGATGTTACTGACCACGGGACTGCAGCCAGGTCCAA
TCTTACAAGTCTCAAGTCTTCTCTGCAGCTTTACCGGCAATTTAAGAAAGATATAGATGAACATCAGTCTCTGAC
GGAGAGTGTCTTACAGAAGGGGGAGATTCTTCTTCAGTGCCTGTTGGAGAACACCCCAGTTTTAGAGGATGTCCT
TGGGAGGATCGCAAAGCAGTCTGGTGAGCTGGAGAGCCACGCAGATCGCCTGTATGACTCTATCTTGGCCTCTCT
GGACATGCTGGCTGGCTGCACCCTTATCCCTGACAAAAAGCCCATGGCGGCAATGGAGCACCCATGTGAAGGGGT
TTAACCTGGCATCTTCTCAGGCAGAGGTGCAACCTGTCGGCCAAACACTGGCTAGTGAGAAAAAAAWCCTTCAAG
AAGTCCTTGCAAGAGCCATTCAACACTGAAGTCAAGGGGGAAACCTTCAATATACTAGCTTTAAAATGCCTTTCT
CCTCCCTGAATGGAGGGCTGAGTTACTATTTTTATTTACAATGAATCCTTCCAAACTAAGGTTTTCCTTTTGGTG
CTTCTCCACAAAGAGCGTGTAGCTTTGCAATTTTTGATAAAATAAGACGTGTTGCCTTCCCCTCTATCCCATTAA
AAAAGAGCAGATAAAGCTCAAACTATTCCACCTGGTAGGGTCATTTACCAAGGGCTGGTAGGAGATTCCGAATAC
TCAATATTCTCAGGCATGCAAGAGGACCTAAGAGACTGAAAAAAGTGAATTGTTGGCCAGAAACCTTGGGTCTTT
TCATAAAAGGAAATTTGGGCTTGTCAATCCCTCTTTAAAGATATAGGTAGAAAGAAGAGATTTTTAACCCTTTGT
CTGCAAAAGAAAAAGGGTTAAATGAAGCATCTATACAGATGACTTTGGGAGATTATGACACCTTTTGCCATCTTC
AGGGCTTACGTCTTTACTTTCTTGGCTAACCAGTTTCTTAGAAGAAAATGTGTCAGGGACTTGGGGATCTACAGT
CATGCTTTAGCATGGCTATGGAGCTAATTATCAAGCTTAAAGGGTAACTTTGGGAGGACTCCTCCCTTCACTCCT
AGTCTCCCTTGGAAGAGCAGTCCAGGCTCAGGGAAGGGAATGGATAGGATGACACAGTAAGTACAGAAACTGAAG
CTGTCAATAGTGAAGGAAAAAGGGGAATTCTTCGTTGCTTTGGCATTGACACATAAGTACTTTGATTAAAAAAAA
AAAAAAAACTATGGATCAACCATTCAAAGCATCAATTCTATAGCTTTTTGCAGCAAGATGATCAGTTATTGCTGG
TAACTGCAGATTCTACAGAAAAGCACTTTTAAAGTTCTGTTGGGCCATGAATGAACCTGGAAGGAGGAAAGCACA
GTAACAATGGAAACTAAAGTCCTATTATTAATGTGACTTTTCTGCTTCAGAATTTCTGAGACTTTATAGTCACTG
GAAAATAGCCATTAAATTCTTTAAAGATTAGCTCTTCAACAGTAGCTACACATAAAATGCAGTATTTCAAGTGCC
TGATGCTGCTGTGGTATGCTTTATCATAATGCTTAAGGGCATGATCMAAATTWAAATGGCTTAWGAKTTTGCCAT
ATTAATCATCTTAGTTCCATACACACTGAGACTTTAAAAGGGAAAAACCACTCTAGCAAATAATTGGCAATTATA
AACCTGXATGTAAAACATTCTTGAAAACCTAGAGTTGGGTXAAAAGGTAGAAGAATGTC

FIGURE 2803

GGGCTTCCTGGGGAGGGTGTGGCAGGGTGGTGGGCATCCCCTCCCTCACCAAAGCATGGGCTCTTTGTTTCCTCT
TTGCCAGGCCTGGGTCCTTCCCAGTGACCCCTCAGCCTTCACTTCCTCGTCACTCCCGGGGAGCTGTGACAGGTG
TTTGGGGGAGGGGAGGGGGGTATGATAAGCTGGGACAGCTGCACCCACCGGTGCTCTGGTGAGATGGGGGGCCCG
G**ATG**TTGGGGAGACACATCTGCTGGGTTCCCAGCCCAAGGTCCCCAACCCTGGCTGTCTGGCCTTGTCTGTCACC
CCCCGTGCCCACTGGCAGGGACAGGAAGCTCCCCCCCCCACCCCGCTTTGGGCAGTTTGCCTTGGCACGGGCCTGA
TCTGTTTTCCTCCCCAGAGCAGCTGCTGTTCTGTCTGCTGGGCAGAGGGCTGGGTTCCTCCGAGGTAGGCAGGGG
CCTCAACCCAGAGCCCCTCTCACACCCTCTTTCAACTCAGGCTTATGTCTCTCCCTCCTCCCCCACCCCCACCCC
AGGAAGAGGAGATCCCAGAACTGGAGAT**TGA**CGTGGATGAGCTCCTGGACATGGAGAGTGACGATGCCCGGGCTG
CCAGGGTCAAGGAGCTGCTGGTTGACTGTTACAAACCCACAGAGGCCTTCATTTCTGGCCTGCTGGACAAGATCC
GGGGCATGCAGAAGCTGAGCACACCCCAGAAGAAGTGAGGGTCCCCGACCCAGGAGAACGGTGGCTCCCACAGGA
CAATCGCTGCCCCCCAACCTCGTAGCAACAGCAATACCGGGGGACCCTGCGGCCAGGCCTGGTGCCATGAGCAGG
GCTCCTCGTGCCCCTGGCCCAGGGGTCTCTTCCCCTGCCCCCTCAGTTTTCCACTTTTGGGGTTTTTTATTGTTA
TTAAACTGATGGGACTTTAAAAAAAAAAAAAAAAAAAA

FIGURE 2804

MLGRHICWVPSPRSPTLAVWPCLSPPVPTGRDRKLPPHPALGSLPWHGPDLFSSPEQLLFCLLGRGLGSSEVGRG
LNPEPLSHPLSTQAYVSPSSPTPTPGRGDPRTGD

FIGURE 2805A

AAACAAGAAGAATGGGATTGATATTTCCGCAGAAGTTTGGAAGTTATGTAACAGAGCAGGTTGAGATCCTACCTT
TTAGGAGCAGCCTGCCCCTTTTGAAGGGGTAAAGGGAGTGGGTGCAGTGCCCTCTCTTCTGTTGTAGTGGCTTAT
CCCTCTAAGGCATGACCCTTGGATAGGGGTTACCTGCCTCGGAAAGTCCCCACTTCCTTGTGGGAGTTTAAAATA
GATTGGCATATGTGAGAGATGGAGACAAGGTGGGAAATCGGATCCTGTCTTAGGATTTCTCATCAGGAGATGCTG
ATACTTGGTGTTTCAGCTTGATAAATTGAGAAGGTGCCATGAAACCAGGTCCTGGAACAGAATCCCTGGTTGCTC
TGTCTTTTAGCTGCTCTGACCCTCTGCCCTGCAGAGCATGCATTTTGCATGTGCCTGGCAGGAGGCCCTCCTGCT
TGAGCCCTGCTGTATTTGTCTGTGTTGACAACGTGACTGCCAGCCATTAAGCTTGGTCAGTCCACAGACACACTA
GGAAAGCAGAGGCAGCTCTTGGTTTCTCTGGAACAGAGCTGCAAGAAGTCTCTGGGCATCTGCATGGCCAGGAGC
TTATGCTTAACTGTTGAGTGACCTGCAGCCATAAGGGCATTAATTCTGCCTTCCAGAGGTGGGAATGACTTGGCT
TTAAACAGTGATTTGTGTGAGAATTCTTCAAATCCCATAAGGTAGAAGGCATGGTGGAGTGGAGGAGAAATCTTG
GCTCATATCTGCCTCTTCCATTGACCAGCTGTGTGACCTTGGGCCTGTTACTTTTAACCTACCTGACCCTCCATT
TCCTCATTTATCAGAAGTGTCTAACTGTACACAAGTTAAACTGTAAGGATTACATGAGGTAGTAGTCAATCCTGG
TGTTTCTCTGTATCTTCTCACTTCTCACTGGTGTTGGAAATATGATCTTGCGACCCTAGATGGCAGCCACTCTGG
GGCAGAAGAGACAGTGACCACCTTTTGAAGAGCTCAAAGGAGAATATTGCCCCACAGGGCTTAGTGGGTCCCCCA
GGCTGAGGCTGGGGAGGAGGGCCACCTTTGCCTACAGCAAGTGGCATATCATTGTTCTAGGGGTTCTCTTGACGG
CAGAACTTTGCCTCTAGCTCATTTTCCACAGCCTAGATTTTCCAATCTTGCCAATCCAGTTGACTTCTGTCTTCT
CATTTCCAAGCCATTGTTCTCTCTCTTTCACTATCTACATGGATTATCCTTCATTCAAACTGCTTTGTCCCGGCC
GGGTGCGGTGGCTCATGCCTGTAGTCCTAGCACTTTGGGAGGCCGAGGCGGGTGGATCACGAGGTCAGGAGATCG
AGACCATCCTGGCTAACATGGTGAAACCCCGTCTCTACTAAAATTAAAAAAATTAGCCGGGCGTGGTGGCAGGCG
CCTGTGGTCCCGGCTACTTGGGAGGCTGAGGCGGGAGAATGGCATGAACCCGGGAGGTGGAGCTTGCAGTGGGTG
GAGATCGCGCCACTGCACTCCAGCCTGGGCGACAGAGCGAGACTCCGTCTGAAAAAAAAAAACAAAAAAACTGCTT
TGTCCTGTAGGAATCCTGTGCGGGTTATGTGCACCTCCCTCAATCCTTACCTTGAAGCTGAGGTTTCCCCTCAGC
TCTCAAGTACTCAGTTTGCACTGCAGGTAGTCCCTATTTTAACGAAAGTTATACGGTCCAGCTCAGGGAATCCTG
AAAAGCTGCCCTTGCTTCCATGGTAATCAAAAGGCAGTTCTCATGGAATAAAAGCTACCTGAAGCCTGAGTTGGG
ACCTTTGGCTGGGGAAGGTGGTTGAGGACGTTCTCTGATTAGATGCTTGGCATGAGGTTTGCTACTGGAACTGCT
AGTGTAGAATGTTTCAGCCCCCTAGAGTTGTCCCTGTGATGTGGCTACCTCCTTTCTCTGGGATTTCTCTTAAAG
TCTGGGGAGCCCCTGCTTCTCATTTCCTGGAATTTATCTTCCCAGTCTCCCTTTCTGGCTGAAAATTTCTAGTAT
CTTACAGAACAGCGGTGGGATACACTGGAGCACATCATATTACCACTAAGTATGTCTAATAAATGATGTCCTCTG
ATTTGACATTTCCTAAATGTGAAGCTCCTGATTTTATACAATTTTGAAATTAGTAAGCTTGTTAGTTTTGTTTGA
AATTCTAGGCATTGGATACACTTAACATGAGGGCTACATGTGCATCAACATACTCTGGTTTCCTTCCCTCTGTAT
CTTTTTTTTTTTTGAGATGGAGTCTCACTGTCTCCTAGGCTGGAGTGCAGTGGTGTGATCATGGCTCACTGCAGC
CCCAACCTTCAGGGCTCAGGTGATCCTCCCGCCTCAGCCACCCAAGTGGCTGGGACCGCAGGTGCATGCCACCAT
GCCTGGCTAACTTATTTTTATATATTGTAGAGACGGAGTCTCCCTATGTTGCCTAGGCTGACCTTGAGCTCTTGG
GCTCAGGTGATCCTCCCGCCTTGGCCTCCCAAAGTGTTGGGATTATAGGCGTGAGCCACTGTGTCCAGCCTTTTC
CTCTGTATCTTGTATCCATTCCCCAGAGCGATACTGTGTATCCTTGAACAGACGGTTTCTTGAAGTCAGAGTCTA
TCTCCTCTGTCACTTCTCCCCCTTCATTATCTAAGACTGAGGTTGTGGTTTATATGCTTAGAGTTGAAAGCATGG
GGTCCAACGTGTTCTGTACTCTGTAGTTCCCCAGACTCTCCAGGGAAACTACTTAGCTCTCAGGTGGTTCTTTTC
TGTTTTTCTCAGAGCAAGTTATCTAATAACTGAAGAGGACTCTGCCCTTTGGCCTGTTCCTGACTTTCTAACTCC
TTTTGCTGGAGGAAGGGGAGGTTGAGGGGGGTGCCCTGTGGTGTGAAAGCCCCACTTGCCCTCTCCTCTATACTT
TCTTCCAATGCAGACGGGAGAAAGTATCATAAATGTAGTGACTGTGGGTCAGGGGAGCTCTGAGAGGCCAGCACA
GGAAACCAGAAACAAAATGAGTCAGTTCGTAGGTGGCGATCAGAGGCACCCTGCTGAGGGTGCAAGGCCACAGGT
GATGCCTCCTCAGTAGGCCCAGGAGCATCAAAACGGGAACAGTCCCTTTCAGCCTTCAGGAGCCTCCCAAATGTC
ACTTAGTGATGTCCCATTCACCTGCTTAAAGGCCCTGCATCCTGCCAGGTAGTTGGTTTGTCCATAGCATCCTGA
GCTCTGCTTGGGTGAGCCAGACAAAAAGAATGATTCCTGGCCAGAGTAGTGATACCAGGGCCCAGACAGAGGCAG
AGAGTCCGGATAGAAGATCCTGTAAGCTGGGGTAGGGAGCCGAGGAGGCCATGGAGCCAGGGGAATCATTGAAGT
GAGGGACAATTTCTGGAGGAGGGAAACTGAGTAAGGAAGGCCTGGCCAAGGACCAAGAAGGGGACAGTATCCTGA
TCTATGAAAGAAGACTCAAGTGGGGATTGACAGAGCCAGATTGGGTGGAGTCCAAGCTTTGGGCAGGTGAGTGTC
CAGGAGATGAGGGCTGAGAATGGGCCTTCAGAGCCCAGCCAGAAGGGGAAAGCACAAAGCTCCACCCTCCTTCTT

FIGURE 2805B

CACATCCCTCCATGCTGCTCAAATCCCAGGTCTTCAGGCACCATGGAGGACAAACGCAACATCCAGATCATCGAG
TGGGAACACCTGGACAAGAAGAAGTTCTACGTGTTTGGTGTGGCAATGACAATGATGATCCGTGTCAGTGTCTAC
CCATTCACCCTCATCCGCACCCGGTTGCAAGTTCAGAAGGGGAAGAGCCTCTACCATGGGACCTTCGATGCCTTC
ATCAAGATCCTGCGAGCAGATGGTATCACTGGCCTCTACCGAGGGTTCCTGGTCAATACCTTCACCCTCATCTCT
GGCCAGTGTTATGTCACCACTTATGAGCTCACCCGGAAGTTTGTAGCTGACTACAGCCAGAGTAACACAGTCAAA
TCACTGGTGGCTGGTGGCTCAGCCTCCCTTGTGGCCCAGAGCATCACAGTGCCCATTGATGTAGTCTCCCAGCAC
CTGATGATGCAACGCAAGGGTGAGAAAATGGGCCGCTTTCAGGTGCGGGGGAACCCAGAGGGACAAGGGGTAGTT
GCCTTTGGCCAAACCAAGGACATCATCAGGCAGATCCTGCAGGCTGATGGACTTCGCGGCTTCTATCGAGGCTAT
GTGGCTTCACTGCTTACCTATATCCCAAACAGTGCTGTCTGGTGGCCCTTCTATCACTTCTATGCAGAGCAGCTC
TCCTACCTGTGTCCTAAGGAGTGCCCTCACATTGTCTTTCAAGCTGTCTCGGGGCCCCTGGCTGCAGCCACTGCC
TCCATCCTCACCAATCCCATGGATGTCATACGAACCCGTGTGCAGGTTGAGGGCAAGAACTCCATCATCCTGACC
TTCAGACAGCTGATGGCAGAAGAAGGGCCTTGGGGCCTCATGAAGGGCCTCTCGGCCAGAATCATCTCAGCCACA
CCTTCCACCATTGTCATTGTGGTGGGCTATGAGAGCCTCAAGAAACTCAGCCTCCGACCTGAGCTGGTGGACTCG
AGACACTGGTAACCAGTGGTGGGGAGAGAAGCCTGCTGTTTTCCACACTACCGTGGGTCAGGGGCAGAGTGGAGA
GGACAGCACCCTCTCCAGGTGCTCCCACCACACACCCAGCCCTGCCCTGGGCCAAGTGGCCTATCTGGGATAGGG
ATAGAGACTTTGAACTGCTCTTGCTGAAGAGGCTCCACGCCTGGATCCCTTGCCCCCACTATTTAAAATTCTCTT
CTGAGCCGGGCTCCCTCACTCAGTCCCTGTATTTGATACTGGCCTAAAGACCCCACCCCCCACCCTGCCAGCCCT
TCTTCTGGCTTCCCCTTCCATCTGTGTCCCTGAGACCCTGAGAAGAGCTGTACATAGAGCTTGCTTACTACCACT
GGTTCTTCCTCTTGGGCTTTCAGCCCAGACTCCAAGCAGCTGCTATCAACCCTCTCTCCCTTCATCTCTTAGCCT
TGCTTATTTTTATTTTGGGACCGAGCTGCCCACTAGATGACTCTGCTTTTCCCTGCATTTGGGGCTAAGGTGCCA
GGTACTTATTTGCACAGGGAGCAGGAGCAGCAAAAAATCTCTGGTTCTCCAGAGCACTCGTCCTCTCTTTGGAGG
GGTTATTAGGTTGGGAGAAATGTTGATACTTTTGTTTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG
TGTGTGTTTTAACATCTGTGAACCAGGCTATTAGTCCTGCTAAAGCGCCAATCCTGCTGTCAGAGCTCACCCCCT
TCCTAAGACAGGTAGAAAAATGTAATGTAGCTTTTTCCACAAGCCAGTTCCCTGTCCCTTCAGTCTCAGGAGCCC
TAGGAGAGTCTAAGCTGGGGCATCCCCTGGCCCAGAGGACTCCCGTGGTGGGCACAGTTCTAAGTGGATCAGGCT
GTCTTGGGTGCACTGGACTTGGAGCACTACCTTGAGAAGTCAGGTTGAGAAAGTAGTTGATCTAGAAGGCAACAA
GTGGGCATGTGTTCCCCAGCACATTACCCAGGCCAGCAGAGCCAAACCTAGGAGAGGGCAGTGGGTAGATTCTCT
GCCCCAGGCAGCCATGACATACACATAAATACCCCAATCACTCAGACTTACGGCAACAAGTGTTGTCTCACTATG
GTGATCTCTAAGATCCACATCACTGGATGCGTAGTCATCCCAGTCATGGTACCCTGTGGAGGAATGCTGGAAGAA
CATAAAGAGCAGTTCAGAAAGTCACCCAATACCAGGACCACTGCATTTACCAGCCTGATACTGCCAAGATTATCT
GATGCTCTCCTCAGGAGCTAGGAGAGGAGTGCTCCTTCCTCCCTACCGCTACTCTCCCCAAGCCTGTGTTGCAGG
TAGAGAGGTGCAGCAAATAGAGAAGGCATGTCAAACCCTGCATTTCTACCTGAGAGTGTGACCTGGATGATCCTC
CAAACCCTATTGGTCCCACCCCCTGGGAAAGGCCATGGTGCCAGTTTGAAAGGTGCTAGCTACCTGAAGCCTTGA
TATTTCTTCATGGCTGCCGCACATTCTTCCACCTTGGCCAGAACAGGTTCTGAAAACCGCTTCTCTACCTTCACC
ACCACCACTGCCCATCTTGATCTCTTTGAGGGTTTTCCCATTTCACTTGATCTTATTTTTGTTTATCCCTTCCTG
CACTTTGTCAAGAGAGTCCTCCAGTTTCTATCCAGGAATGTTCACATCCAAAGGGTTGGACCCACGGATCATTCT
GAATCTTCCTGCCCCTCCTCACTGCTTAACCCTGAGAACCACAAATATAATGGAAGCAGTTCCCCCCACCCTCAC
CCCATCTCTTTAAGCTCATCCTAGCAAGACCTCTAGAGACCCTAGAGACTCGACTTTAGCCTTCCCCGCCATGGC
ACAGTGGGGAAGGTGTCAATGGGGAGTGTCACGGACAGGAGGTAGGATCCTGCCGCTCGCGTCTTAGTGTTTCTC
CCTCAAGACTTTCCTTCTGTTTTGTTGTCTTGTGCAGTATTTTACAGCCCCTCTTGTGTTTTTCTTTATTTCTCG
TACACACACGCAGTTTTAAGGGTGATGTGTGTATAATTAAAAGGACCCTTGGCCCATACTTTCCTAATTCTTTAG
GGACTGGGATTGGGTTTGACTGAAATATGTTTTGGTGGGGATGGGACGGTGGACTTCCATTCTCCCTAAACTGGA
GTTTTGGTCGGTAATCAAAACTAAAAGAAACCTCTGGGAGACTGGAAACCTGATTGGAGCACTGAGGAACAAGGG
AATGAAAAGGCAGACTCTCTGAACGTTTGATGAAATGGACTCTTGTGAAAATTAACAGTGAATATTCACTGTTGC
ACTGTACGAAGTCTCTGAAATGTAATTAAAAGTTTTTATTGAGCCCCCG

FIGURE 2806A

GGACCCCGGTGTCTGGCTTCCCCCGAGCCGGGACCCCGCGATGGCCAAGCGCAGCTCGCTGTACATCCGCATCGT
GGAGGGGAAGAACCTTCCCGCCAAGGACATCACTGGCAGCAGCGACCCCTACTGCATCGTGAAGGTGGACAATGA
GCCCATCATCAGGACAGCCACAGTGTGGAAGACCCTGTGCCCCTTCTGGGGTGAGGAGTACCAAGTGCACCTGCC
GCCCACCTTCCACGCTGTGGCTTTCTATGTCATGGATGAGGATGCCCTCAGCCGGGACGACGTTATCGGAAAGGT
CTGCCTTACAAGGGACACCATAGCCTCTCACCCTAAGGGTTTCAGCGGGTGGGCCCACCTGACGGAGGTCGACCC
CGACGAGGAGGTGCAGGGCGAGATCCACCTGCGGCTGGAAGTGTGGCCAGGGGCCCGGGCCTGCCGGCTACGCTG
CTCTGTGCTGGAGGCCAGGGATCTGGCCCCAAAGGACCGCAATGGCACATCTGACCCCTTCGTCCGAGTGCGCTA
CAAGGGCCGGACACGGGAGACCTCGATCGTGAAGAAGTCATGCTACCCACGCTGGAATGAGACGTTTGAATTTGA
GCTGCAGGAGGGGGCCATGGAGGCACTGTGCGTGGAGGCCTGGGACTGGGACCTTGTCAGCCGAAACGACTTCCT
GGGCAAAGTGGTGATTGATGTCCAGAGACTGCGGGTGGTGCAGCAGGAGGAGGGCTGGTTCCGGCTGCAGCCCGA
CCAGTCCAAGAGCCGGCGGCATGACGAGGGCAACCTGGGCTCCTTGCAGCTGGAGGTGCGGCTGCGGGACGAGAC
GGTGCTGCCCTCCAGCTACTACCAGCCACTGGTGCACCTGCTGTGCCACGAGGTCAAGCTGGGCATGCAGGGCCC
AGGGCAGCTGATCCCACTCATCGAGGAGACAACCAGCACCGAGTGTCGCCAGGACGTGGCCACGAACCTGCTCAA
GCTCTTCCTGGGGCAGGGGCTGGCCAAGGACTTCCTGGACCTGCTCTTCCAGCTGGAGCTGAGTCGCACCAGTGA
GACCAACACCCTGTTCCGGAGCAACTCTCTGGCCTCAAAGTCCATGGAGTCTTTTCTGAAGGTGGCCGGGATGCA
GTACCTGCACGGCGTCCTGGGCCCCATCATCAACAAGGTGTTTGAGGAGAAGAAGTACGTGGAGCTGGACCCCAG
CAAAGTGGAAGTTAAGGATGTAGGGTGCTCCGGGCTGCACCGCCCGCAGACCGAGGCCGAGGTGCTGGAGCAGAG
CGCGCAGACGCTGCGCGCCCACCTGGGGGCCCTGCTGAGCGCGCTCAGCCGCTCGGTTCGCGCGTGCCCCGCCGT
GGTGCGCGCCACCTTCCGCCAGCTCTTCCGGCGCGTGCGCGAGCGCTTCCCCGGCGCCCAGCACGAGAATGTACC
GTTCATCGCCGTCACCAGCTTCCTGTGCCTGCGCTTCTTCTCTCCCGCCATCATGTCGCCCAAGCTCTTCCACCT
GCGGGAGCGCCACGCGGACGCCCGCACCAGCCGCACCCTGCTCCTGTTGGCCAAGGCAGTCCAGAACGTGGGCAA
CATGGACACGCCGGCTTCCAGGGCCAAGGAGGCTTGGATGGAGCCGCTGCAGCCCACCGTGCGCCAGGGCGTGGC
GCAGCTGAAGGACTTCATCACCAAGCTCGTGGACATCGAGGAGAAGGACGAGCTGGACCTGCAGCGGACGCTGAG
TTTGCAGGCGCCACCTGTGAAGGAGGGGCCACTCTTCATCCACAGGACCAAGGGCAAGGGCCCCCTCATGTCCTC
CTCCTTCAAGAAGCTCTACTTCTCCCTCACTACCGAGGCCCTCAGCTTCGCGAAGATGCCCAGCTCCAAGAAAAG
CGCCCTCATCAAGTTAGCCAACATCCGGGCAGCGGAAAAGGTTGAGGAAAAGAGCTTTGGCGGCTCGCACGTCAT
GCAGGTCATCTACACGGACGACGCCGGCAGGCCCCAGACTGCCTACCTGCAGTGCAAGTGTGTGAATGAGCTTAA
CCAGTGGCTGTCTGCGCTGCGGAAGGTGAGCATCAACAACACCGGACTGCTGGGCTCCTACCACCCTGGCGTCTT
CCGTGGGGACAAGTGGAGCTGCTGCCACCAAAAAGAGAAGACAGGTCAGGGCTGCGATAAGACCCGGTCACGGGT
GACCCTGCAGGAGTGGAATGACCCTCTTGACCATGACCTTGAGGCCCAGCTCATCTACCGGCACCTGCTGGGCGT
GGAGGCCATGCTGTGGGAGAGGCACCGGGAGCTGAGCGGGGGCACAGAGGCAGGCACGGTGCCCACGAGCCCTGG
CAAAGTCCCCGAGGACTCATTGGCCCGGCTGCTCCGGGTGCTGCAGGACCTCCGCGAGGCCCATAGCTCCAGCCC
GGCCGGCTCCCCACCCTCAGAGCCCAACTGCCTCCTGGAGCTGCAGACGTGAGGCCCGCCCTACGCTCCCCTTGC
TGAGTCCCCTGCCAAGCGCTCGGAGCCCCCCCAGGACACTCTGCACCCCCTCACCCCGGTCCTCCTCATTAGGGT
GCAGGGCCTAGGTCTCTTCCAGGTGGGGGAGGGGGGAGAGTCAGGAATAAGGGGATCCCCAGAAGTGCAGAGCTG
AGCAGGCTTGGGCCTGTCATGGCTGGCCGGAAGTGTCCCCAGCTCCCTACAGACGCTGTAGCCATCACTGCCTCT
CCAGGGACCCTCCTCTCCTGCCCAGGACAGACCCAGCCAGAACCACTGCTAGGATGGGCCGCACCCAGGGGTCTG
GCCTCCAGGGACCTAGAGAATGGGAGGGAGAACGGGGCCCCAGGAGACCCGGCCGCCACCCCACCCGCTACCCTT
GGGTGCCACAGGGCTGTGCTGTTGCCAACAGTAAACCTGCTCTTACTGTCCAGGCTCTGGGGTCTTGTGATGAGG
GTCTGGGGAGAAAGTGGGCCCGGGGGGACCCCGGAGGCTGTCGGTGGATGTGCCGATGATGGGGCTGACAGTATG
GGCTCTGGGCATCCCTGTTCCCCCCCCTTTCTTCCCCCCACTCTTCTGGGGTCGGGGGTTCCTTTCCCTTCCCAG
TTGCTGTCCCTGGGTCCCCTCTTTCATGTCCCACAGGCCACAGAGCCCAGTGTGTCCAACCAGCTGTTCTCTCCT
CAAAGCAGCCCCCAAGCAAGTCCCTTCTCTAGGGTGTCCCTGAGGACAGCACAGAGGCGGGACTCAGAGACCCCA
TTCCTCTTCACGCAGCCCTTACCCCAAGCCCTCTAGCTGTGTGGCTGGCAGTGTTGGCCACGTAGGGGCTCCCAT
CCCCCCACCATTGTGTCACATGGGCTGCCAGGCTCAGCTCCCAGCTGCGTCCACAGTGACCTGGATCAGGGTGGG
GACAAGGACTGGACCCTCCTTCTCCAGAAGGCCTTCAGCTCTTGCCTTGCCATGCAGTCACCTCCTTCCCCCTCT
GACCCCAGATCCCAAAGGTGCACCGTTGCCCCAGCCCCTTTCTGGCCCCATGGGGTTTCTCTGATGCCTTCATCA
TAGAGGCCCGGGGCTGGTCCGATGGTTGGCAAAACTTGACTCCGGCCCAGTCCCCACTCTTGGGGACTTAGAACC

FIGURE 2806B

CCTGCTGTCCTGGGATCTGGCCTGCCTTTCTTTGGTCAGTCCCTGTGGTCCCCCACCAGCTCCCCCTCCCATAGG
GCTGCCCACCAAGCCCTGCCCCCAGCCCAAGAGGAGCCCCCACTGCCTGCGGGGCAGTGATGTCTGGCCACCGGC
TCACACCAATGACTTGGTCCTGGGGTGGCAGAAGCAGCAGGTGACAGGAGCAGGGCCCCTGTCCCTCTCTTCTGG
CCCTGTGGTACCCAGGCCACACGTTGTGCCCGCTCTTGGGGCTGACCGGCTGTAGGGACCACCAGCCGCTGCTAC
TGTGGGCCGCCCCGGGGCAGGGTGGGCAGGGCTTTTGTGGGTTATGAGGACACAGAAGTCCCTGAGGCCCCCAGA
CCTGGCTCAGCCAACCTCCTTCCTCCCCCGGTTGCCCCCCACTCTAAAGCCTCCTCCCTCCCAGCGTCCACTGGC
TCCAGGCTCCTCACAACAGCAGCTCATAGACACGGGGCGTCTCCAGGTGGTCCCAGCCCTCCAGATGTTTCTAGC
TCTCCAGGTGGGCGCTGTTTTCACGTCTGCCTGCATCCATTCATTCCTTCATTCCTCACCTTTATCCTGTTATCT
CTATTTTTTTAAGCTACCAGGAAGGAAAGGGAAGAAGAGATCACGAAACTGGGACCCCCAGAAGGGAGGAGTGGG
CTTTGAACTTAGACATCTACCTCAGAGCTCAAATAGGTTGTTTAAAATCACATTCAATTTTCAGATGAAGGGGAA
CTTTATAGTTTTTTTTTTTTTTTTTTTTTTTTTTGGGGCGGAGTCTCACTGTGTTGCCCAGGCTGGAGTGCAAAT
GGCTTGATCTTGGTTCACTGCAACCTCTGCCTCCCAGGTTCAAGCAATTCTCTTGCCTCGGCCTCCCGAGTAGCT
GGGACTGGAGGCGTGTGCCACCATGCCCAGCTAATTCTTGTATTTTTAGTAGAGACGGAGTTTCTCCATGTTGGC
CAGACTGGTCTCGAACTCCTGACCTCAGGTGATCTGACCGCCTTGGCCTCCGAAAGTGCTGAGATTACAGTTGCG
AGCCACTGTGCGTGGCCAGAACTTTATAATAAGAGACTTGAAGCTGGGTGTGACGGTGCACGCCTCTGGTCCCAG
CTGCTCGGGAGGCCGGGACAGAAGGATCACCTTGAGGCCAGGAGTTTAAGGCCAGCCTGGGCAACATAGCAAAAC
CTAGTCCCTAAAATTAAAAAAAAAAAAAAAAAAAAAAGGAAAATAAAGGAGACTTGAAATTTTTGAACTAAATAGT
GGTGATGGCTACACATTGTGAATGTAATTAACACCACTGAGTTAAACACTTAAAATGGTTAAAATGGCAAATTGT
ATGTTATACCTATTTTACTACAATAAAAAGTATAAAAAAGAGAAGATATTTAGGTGACTTACAGCAACCAATTGC
AACAAAACAAAATGTTAAGAAATGATCTTTTTATGAGGCAATTGGAAATTTGAACACTGATCAACTATAGGATGA
TTGGAATTATTAATTTTTAAAGGTGTGATAAGATGCTGCACTTGGCTGGGCACAGTGGCACATGCCTGTAATCCC
AGCTACTTGGCAGGCTGAGGTGGGAGAATCGCTTGAGCTCAGGAGTTCGAGACCAGCCTGGGCAACGTGGCGAAA
TCCCCGTCTTTACAAAAACAAACAAACAAACAAAAAAGATATTGCAGTTGTGTTGTAAGCGTCCTTATCTTTCAG
AGCTACATAGTGGAATGTTTATGGAATATTTAGGATAAATGATATAGGCATTTGGGATTTGCTGCAAAATGACCC
AGAGGCAGGGGTCAGGGGGAGAGGTAGAGATGAGACAAGAGGTAGAGGGGAGAGGTAGAGGTAGCCACGAGCTGA
TAATTACAGACAAGAGATGCGGAGTATGTGGGGGCTCATTATCCTGCATAGTCTATCTTTGTATATCTTTGAACT
TTTCAAGAATAAAAAAGCTTAAAAAGTAT

FIGURE 2807A

CAAGCCAATTATGGCTCCCTTTCCCAATGGTAGTTTGTGAATGGCTTTAATTCGCCAGGATCTTATAAAACAAAT
GCTGCTGCTATGAATATGGGTCGACCATTCCAAAAAAATCGTGTGAAGCCTCAGTTTAGGTCATCTGGTGGTTCA
GAACACTCAACAGAGGGCTCTGTATCCTTGGGGGATGGACAGTTGAACAGATATAGTTCAAGAAACTTTCCAGCT
GAACGGCATAACCCCACAGTAACTGGGCATCAGGAGCAAACTTACCTTCAGAAGGAGACTTCCACTTTGCAGGTG
GAACAGAATGGGGACTATGGTAGGGGCAGGAGAACTCTCTTCAGAGGTCGAAGACGACGAGAAGATGACAGGATC
TCAAGACCTCATCCTTCAACAGCTGAATCAAAGGCTCCAACACCAAAGTTTGACTTATTAGCCTCAAATTTTCCA
CCTTTACCTGGAAGTTCATCAAGAATGCCAGGTGAACTCGTTTGGAGAATAGGATGTCTGATGTTGTTAAAGGTG
TCTACAAAGAAAAGGATAATGAAGAGTTGACAATTAGTTGCCCAGTGCCTGCAGATGAGCAGACAGAATGCACTT
CTGCCCAGCAACTCAATATGAGTACCAGTTCTCCATGTGCTGCTGAGCTTACTGCATTAAGCACAACTCAGCAAG
AAAAGGATCTAATAGAAGATTCCTCTGTTCAGAAGGATGGTCTCAATCAGACAACTATACCAGTTTCTCCTCCAA
GTACTACAAAGCCATCGAGGGCAAGTACTGCTTCACCATGTAATAATAACATAAATGCAGCTACAGCTGTGGCTC
TACAGGAACCCCGAAAGTTAAGTTATGCTGAAGTGTGCCAGAAGCCCCCTAAAGAGCCATCTTCAGTTCTTGTGC
AGCCACTACGGGAACTTCGCTCCAATGTGGTGTCTCCCACCAAAAATGAAGACAATGGAGCTCCTGAGAACTCCG
TTGAGAAACCACATGAGAAGCCAGAAGCAAGGGCTAGTAAGGATTATTCTGGCTTCCGAGGCAATATAATCCCCA
GGGGAGCAGCAGGAAAAATCAGGGAACAGAGACGCCAGTTTAGCCATAGGGCTATACCTCAGGGAGTGACTCGAC
GTAATGGCAAAGAGCAATATGTGCCACCCAGATCACCAAAGTAAAAAACAACAAAACTATTCAAAAACTTCACTC
TCTTCCCATTAAACTTGAACTGTGGCTATATTGAACTGTTTTGGAGGGGAGGGGGTAGCCAGGAAGGAAACAAGA
GAAAGTACGTCCATTTCATTATGGATTTTGGAGTTGTGAGTGATAGGATCCCAAAATTCATCTCTAATGTGGTTT
TTAAATGCTGGAGGATTCCAATCAATATAAATATATATATATATACACACACATATATAAAAAGTATAATTTT
TCTATTTTTGTTTTTGGTTTTAATTTGCAGAGATTTGCTGCCAGGAATCAATTTTGAGGGTTCAGATTTAGCTTG
GAAGAAAAAAAAGAAACATACATCCTTCAGTATAGGAGATGAGGGAATGAGAGAAAATATTTTTTGAAGAAGCAT
TTCTGTAAAATTAGAAATTACTTTTTTTAATCTATTTAAAGTTTGGCTTGAAGAATGCCATCTCTGACTATATGG
CCTTGTATTGCAAAGCAGATCAGTGGCTGGGGTGCCTGTTGTGGGTGTGAGTGTGTACAAGAGCGATTGAAGCCA
AATCTGTTGTCATGTTAGTAAATGATTTGAAAACTGAATGTAATACTTGAGTAGATTTTTTTTTCTAGTTTGAAA
TTTAGTCTGTCTTTTTGACCTTACTAATATTTCATTTAACAAGTTGTAAAACTCTGATTGTACTTAGAGATGTGA
CTACCAATCAGTTTGATACTCAAGGAAAGGGGGTTATTCAAGAAATTGAAAATTTCATCTTGGACCTCAGTGCAT
CGGTCAAATGGATTTCAGAGGTTTAAACTTCCCTGTGATTCCCCCTGAATACCCCCAAAATGAGAAACAAAATTT
TTTTTCTTACTCCATTTGTTACTCTCTGTTCTTTGACTGCCCACCCACAGAAAAGCAAAATAACCAACTACCTAC
TCAATTGTGTGTTTGTAATTGCTTTGAGCAGTCTAGTCAAATCATATAAATTGTTCTAAATTTCAGAATTGAACA
TTGAAGTATTAACTCTTCTGTTCACACATTTAGAATTTTAGCTCCCAAGATGGTAGGGCAGACTGACCGTACAGT
AATTTATTTGTCGTTAGTGTTAAAGATTAAGCATAGTAACTGACTCTTAAGTGTTAAATAATGTAGAAGTAAAAA
AATTTTTTTTAAAGGCTTAATTTGGGAGGGGGGACTTATTTCTGTTTACAGTGTATTACCTTCCTTCCCTCCTCT
TCTCCCCCCCACACCCAACAAAATACAGTTTGGAATTCACTGAAACAGTACCAGCAAGTCATGAGATTTTTTAGTA
AAGATGAGAAAGATGGTTGAAGAAAATTAGTGCATAATTTCTCAGTGAATAAAGTTGTAGCTCTCATATACTAAA
TAGACAAGTTTACATGCTGTTATTTAGAAAATGACTAAAATATTAAAAACCGTGTTGTGTTAATCTGTTTTAAGT
CATACCATGTTCAGAGTTCTATGTAAGGTGGGTTTTATTTTTCTTTTAAGGGATAGTTTGTAATAGTAAGAACTG
TCCCATATGTTAGTAAATTACATATGTACAAATTGAAACTGTAAATTGTGAACACTGGAAAGCACCATTGTGACA
TAGAGTAAACATCTTAGTAATATATTAAAGTGAATGTAAATGGTGGTTAAAATTACATTACTGTGAAATTCATCT
TCCAACTCTAAGTTAAGCTTTGGAGATACATGTTAGTGGTTAACTGTTAAGAGCTTTGAAAACACTGCACATATC
TGTACAAGCCAGAATTACTATTTCTTTGACTTATTATTAGCTTGGCAGTTGCTTTTGATTTGATTGTTTTATGAC
ATGGTATACTACTATATTTACTCAGTTTGAAACTATTCATTTCTACACACTATTTTTAAAAATTGCCTACTAGGT
GAAACATAACAATAAAACTACCTGTGCTGAAATTTGGGGGAAGTTTAGGTCCTTTAAAAAAACATATTAATCATT
GACTACATCTATGATAAAAGTGCTTATTTTGGTTTACTAAGATAATGCAGTTGGTGGAAATGATAAACGTTTTAA
GTGTTAACATCCTTTGAATGCGTTGGATTTCAGAGAATAAACATTTTGTAAAAATCACTTGGTAAGGATTATAAA
CTTAATTACTGCACTTAAAATGAAACATTACTTTTTTTAAACAATGTGTCACAAATGTAGGTCTGTATTACTTGT
ATGCTTGTGTGACTTACTGTTAGTCCAGCTCTAAAAATTTAAAGGTTGTAATTGAAATACAAGAAAAGAGCCTTC
TTTTAGAAGAAAGCAAGTATATTTTTGCTTTTACTTCAAATGTTATTTAAAGTAGAAATTTAATTTGTAGATATA
ACCTTTAAAAATTTTCTCATTAAGACAATGTTTTTAATTTAATTTGCCTCATTACATCTAATAGTTCCCATTTGA

FIGURE 2807B

TGGCATGTATAGGGAAGAGTGANNNNNNNNNNNNNNNNNNNNNNNNNNNNNAATATTTATATATATTCACAGTATG
TATTTAGCATTTATTTTATTACAGCAGATTTAAAGTTTGTATCTAAATAATGCCTATGAGTTGTGTGAAGCTCTT
GGCTTTTTTTCCAACGTTACTTTGTAACTAATGAGGGTGGATGTTCATTGTAGTTTATTTATTTGGTTCTTTAGAT
GGAGGAATTTAAAAAATCAAATTTTTCTCTTCACCTTTATGACTTGACATTTCCTTGATCTGTTGGAGGCTAAAA
GTAGGTATAAATGATATTGAATGTTGGGTATAGTGATACTCTGCCATAGTTCTTACTGCATGAAGAGAACAAGAG
TCACACAAGTTCACCACTTTGCACTTCATAGAGAAGGTACATAGAGACATTGCAAAACCTGTCTCCATTTGCTAT
CCTGATAATTAAGGTTTTCATAATACCTAGGGCCTGTCTCTGAGTAATTTTAATTTTGCCAAATACACTGACATT
TAAAATAGTGATCCATCTAAATTTTTTTCAGCTGGGTTTTGAGGAATATAAGAGCTTTCAATGATAAAGGTTTGT
TGTAGTTGTCTTATGTGCTGAATTTGCAGATGATCAGATGCTGTGCAGAATTCTGATTTATTTTTGTTTCCTAAA
ATTAAGATAGCTTGAATATTATTTCACATTCCTTTTTCTTTTTTAAATAAACAGGTTTGCTTTGGAAAGGCTTAA
TGATGGAATGTTAGCATCTTCACTAGGGTAAAGAAGAACAAAAAGAATGTTGCTGGAACGTAAAATAGTATTTAA
AAGTTAATGAACACTTCTCTAGTTTTCTTAGTTATGGCCTTAATAATTAGTCTCTTGGCTTAAATGTCCACTGGT
TTTACTTTGACACAGTTGAACAACACTGGGGTTAAGTCTCTGGTATTTAGGCTGGCAATATATATATTAACCATA
TTTTAAAAGTACCAATTTTGTTTTTACAGAAAAGATAAAACTCAAAAGAGAACAGTGTATTCCTTCTGAGGGGCT
TTTATAAATTATTAACTATAATATATGATGGATTTTTTCCTAATTTTTTATATTTCCTTACAATTTTGGTGGCCA
TTAATTTAACTTTAGGCTTTTGGGCATATGCTAGTCTGAGCTTCCGAAAAGATACATATATGTTTCCCTTTTCAT
TAGCTGAATGAGGATATTTTAAGAAGTTGAAAGAGAATTTATTTTCAAGTTGTGAGTAAATCCTCCTTTGAAATT
CACCTGATTATTAGATAACTTAAAGTTTATTTTTAAAAGCTGACAACTTTTTATGAATCTTCGAGTTGACAGTTC
CTAAAAGCGTAACTCAGATATTAATGGGCTGTGTATTAAATGGTTTTATTTTCAGTTTTGCAGCACAGAACACTG
TTGAAATATCCATATCAACTTGATTTTTTTAACCTAATTCAGGTGTCCTTTGCATCTCTTAAATGTTGGGGGTGG
GGGTCAGAGCCAGTTATCCGGCTTCTGTTTTGTCGATTGCTTAGATTTGTTCCTGTTGTCAAAACTGTTACCCCC
AAAATTGGTGTGACACATGCTCATGCATAAAATGTTAAAATGAGTACATCCTTGTATTTGTATTTGTTTTCAACA
TCGCCAAGGTGCTATGGGAAATTAACAAAATTAGAAAAAAAATAAAATTATTAAAAAGCAGAAAAA

FIGURE 2808

MNMGRPFQKNRVKPQFRSSGGSEHSTEGSVSLGDGQLNRYSSRNFPAERHNPTVTGHQEQTYLQKETSTLQVEQN
GDYGRGRRTLFRGRRRREDDRISRPHPSTAESKAPTPKFDLLASNFPPLPGSSSRMPGELVWRIGCLMLLKVSTK
KRIMKSTISCPVPADEQTECTSAQQLNMSTSSPCAAELTALSTTQQEKDLIEDSSVQKDGLNQTTIPVSPPSTTK
PSRASTASPCNNNINAATAVALQEPRKLSYAEVCQKPPKEPSSVLVQPLRELRSNVVSPTKNEDNGAPENSVEKP
HEKPEARASKDYSGFRGNIIPRGAAGKIREQRRQFSHRAIPQGVTRRNGKEQYVPPRSPK

FIGURE 2809

GGCACGAGGCCTGCGCAGGAGCCGCAGGGCCGTAGGCAGCCATGGCGCCCAGCCGGAATGGCATGGTCTTGAAGC
CCCACTTCCACAAGGACTGGCAGCGGCGCGTGGCCACGTGGTTCAACCAGCCGGCCCGTAAGATCCGCAGACGTA
AGGCCCGGCAAGCCAAGGCGCGCCGCATCGCCCCGCGCCCCGCGTCGGGTCCCATCCGGCCCATCGTGCGCTGCC
CCACGGTTCGGTACCACACGAAGGTGCGCGCCGGCCGCGGCTTCAGCCTGGAGGAGCTCAGGGTGGCCGGCATTC
ACAAGAAGGTGGCCCGGACCATCGGCATTTCTGTGGATCCGAGGAGGCGGAACAAGTCCACGGAGTCCCTGCAGG
CCAACGTGCAGCGGCTGAAGGAGTACCGCTCCAAACTCATCCTCTTCCCCAGGAAGCCCTCGGCCCCCAAGAAGG
GAGACAGTTCTGCTGAAGAACTGAAACTGGCCACCCAGCTGACCGGACCGGTCATGCCCGTCCGGAACGTCTATA
AGAAGGAGAAAGCTCGAGTCATCACTGAGGAAGAGAAGAATTTCAAAGCCTTCGCTAGTCTCCGTATGGCCCGTG
CCAACGCCCGGCTCTTCGGCATACGGGCAAAAAGAGCCAAGGAAGCCGCAGAACAGGATGTTGAAAAGAAAAAAT
AAAGCCCTCCTGGGGACTTGGAATCAGTCGGCAGTCATGCTGGGTCTCCACGTGGTGTGTTTCGTGGGAACAACT
GGGCCTGGGATGGGGCTTCACTGCTGTGACTTCCTCCTGCCAGGGGATTTGGGGCTTTCTTGAAAGACAGTCCAA
GCCCTGGATAATGCTTTACTTTCTGTGTTGAAGCACTGTTGGTTGTTTGGTTAGTGACTGATGTAAAACGGTTTT
CTTGTGGGGAGGTTACAGAGGCTGACTTCAGAGTGGACTTGTGTTTTTTCTTTTTAAAGAGGCAAGGTTGGGCTG
GTGCTCACAGCTGTAATCCCAGCACTTTGAGGTTGGCTGGGAGTTCAAGACCAGCCTGGCCAACATGTCAGAACT
ACTAAAAATAAAGAAATCAGCCATGAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2810

MAPSRNGMVLKPHFHKDWQRRVATWFNQPARKIRRRKARQAKARRIAPRPASGPIRPIVRCPTVRYHTKVRAGRG
FSLEELRVAGIHKKVARTIGISVDPRRRNKSTESLQANVQRLKEYRSKLILFPRKPSAPKKGDSSAEELKLATQL
TGPVMPVRNVYKKEKARVITEEEKNFKAFASLRMARANARLFGIRAKRAKEAAEQDVEKKK

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FIGURE 2811

CTCTTCTTGTGGCTTTTACAACTTCATTTCTTTCTGGGGTCACCTGTGATGGGCTTTGATGTGGTGTCAATTTGG
GGCCTTGTGTTTGTGCCAGAGGGATACACATATTAAACTGCAGGCCACCTTCCTGGTCCAGACTGTACTGTGTGA
ACCCCACTGACTAAATTAGTGAGAACCATAGGCGTTGGAATTTCTCACCTTTTACAATGATAGACTTTTGCATTG
GGACCAATGAATCTGGTGTGAAAAACCCTGCTGTAGTAGTGAAAGAGCATCAGGAGATACTGACTGTACCTGAGG
GCCAAAACAGGAGCAGGTAACGAACCGTAAAAAAAGGAGCAGGTAATGAATCGTAACCAAAACTACAGTTGATCC
TCCGCAAAGGAAAGCTCTTTACCCAGAATGTCCTTCCAGAGTCATTCAGGAAGGACAAGGGAACACCCTTGGGAA
ATGGGCTAGTGGAGGGCTGTTGACTGCAGTGACACCTGGGTGCTCCGGAGGTATCTGTTCTGTTGACCTGTAAGG
AAGCAGTCGATCCTAGAGTGTCAGAACAGAGCCATTCTCTCCTCCTGAGTAGGAACGTTTCTGTTCAGTTTCCCT
CACAGCAGCCTGTGTTAGCATGCAGTTGAAAATACTGCCGTCTAGGAGAACCTGTGGTCACTGGGAACGTGCCCC
ACAGTGACTGGCCATGCAACCAGGTGATTTTTAGGAATAGATGTCTCTAGACTCTGTCTCCTTTCCTACAAGGCC
TCACACAGATGCTTGAGGCTAATGGCCCCCATTCTGAGGTCATTTTTGTGTAGAACTCCTTTCCCCAGGAGAGAG
CCTTATCTCTGCCCTCCTTTACCCTGAAGGCTTCAAACGGAAGACAGGACCTAGATCTAAACCTAGATACTAGCA
TTTTGTGGGATTGTCTAGAATTTGGGGAAGATTTGGGTTCCTAAGATGCACAAGCGTTTTACACCAGTGGTGATT
AACTCAACTAAAACCCACTGTAGGAAGTTAGCTTCCCCAGACAGCTAATGCCGAGATCTTCTACCAGCGTAGAGT
TGACAGAAGCAGGCCAGCGAGGAGGTGTGGGACATAATAGCCTGAGTGCTTGGGTTACCATGGAGACTGGAGTGT
GTGAGGCCACAGCCTGTGCTAAAGAGCCATGGAGCCCTCCCCTGGCCATGTCTGGGGACAGATAGAACCTGTTGG
GGGAAATATTCCCTCACCCCAGGGTTCTTTCTGCAGAGCAAGGGTTGCCTTTGTCCTATCCCTGAGCTTGCTCAA
CAAGAGAAACAAGGTTTCTTAAGTGTTTTGGTTAAAGTTTTCATTCTTATTTGACTATGTATATGTAATTGTAAA
GAAACGATCCTATGCATTGTCTTTCTTTTATATTCTTGTAATATTCTGAAATTAAAATTGTTTTGTTTCATAAAA
AAAAAAAAAAAAAAA

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FIGURE 2812

MIDFCIGTNESGVKNPAVVVKEHQEILTVPEGQNRSR

FIGURE 2813

GGTTTTTTTTTTTTACCCCCCTTTTTTATTTATTATTTTTTTGCACATTGAGCGGATCCTTGGGAACGAGAGAAA
AAAGAAACCCAAACTCACGCGTGCAGAAGATCTCCCCCCCCTTCCCCTCCCCTCCTCCCTCTTTTCCCCTCCCCA
GGAGAAAAAGACCCCCAAGCAGAAAAAAGTTCACCTTGGACTCGTCTTTTTCTTGCAATATTTTTTGGGGGGGCA
AAACTTTGAGGGGGTGATTTTTTTTTGGCTTTTCTTCCTCCTTCATTTTTCTTCCAAAATTGCTGCTGGTGGGTGA
AAAAAAAATGCCGCAGCTGAACGGCGGTGGAGGGGATGACCTAGGCGCCAACGACGAACTGATTTCCTTCAAAGA
CGAGGGCGAACAGGAGGAGAAGAGCTCCGAAAACTCCTCGGCAGAGAGGGATTTAGCTGATGTCAAATCGTCTCT
AGTCAATGAATCAGAAACGAATCAAAACAGCTCCTCCGATTCCGAGGCGGAAAGACGGCCTCCGCCTCGCTCCGA
AAGTTTCCGAGACAAATCCCGGGAAAGTTTGGAAGAAGCGGCCAAGAGGCAAGATGGAGGGCTCTTTAAGGGGCC
ACCGTATCCCGGCTACCCCTTCATCATGATCCCCGACCTGACGAGCCCCTACCTCCCCAACGGATCGCTCTCGCC
CACCGCCCGAACCTATCTCCAGATGAAATGGCCACTGCTTGATGTCCAGGCAGGGAGCCTCCAGAGTAGACAAGC
CCTCAAGGATGCCCGGTCCCCATCACCGGCACACATTGTCTCTAACAAAGTGCCAGTGGTGCAGCACCCTCACCA
TGTCCACCCCCTCACGCCTCTTATCACGTACAGCAATGAACACTTCACGCCGGGAAACCCACCTCCACACTTACC
AGCCGACGTAGACCCCAAAACAGGAATCCCACGGCCTCCGCACCCTCCAGATATATCCCCGTATTACCCACTATC
GCCTGGCACCGTAGGACAAATCCCCCATCCGCTAGGATGGTTAGTACCACAGCAAGGTCAACCAGTGTACCCAAT
CACGACAGGAGGATTCAGACACCCCTACCCCACAGCTCTGACCGTCAATGCTTCCGTGTCCAGGTTCCCTCCCCA
TATGGTCCCACCACATCATACGCTACACACGACGGGCATTCCGCATCCGGCCATAGTCACACCAACAGTCAAACA
GGAATCGTCCCAGAGTGATGTCGGCTCACTCCATAGTTCAAAGCATCAGGACTCCAAAAAGGAAGAAGAAAAGAA
GAAGCCCCACATAAAGAAACCTCTTAATGCATTCATGTTGTATATGAAGGAAATGAGAGCAAAGGTCGTAGCTGA
GTGCACGTTGAAAGAAAGCGCGGCCATCAACCAGATCCTTGGGCGGAGGTGGCATGCACTGTCCAGAGAAGAGCA
AGCGAAATACTACGAGCTGGCCCGGAAGGAGCGACAGCTTCATATGCAACTGTACCCCGGCTGGTCCGCGCGGGA
TAACTATGGAAAGAAGAAGAAGAGGAAAAGGGACAAGCAGCCGGGAGAGACCAATGAACACAGCGAATGTTTCCT
AAATCCTTGCCTTTCACTTCCTCCGATTACAGACCTCAGCGCTCCTAAGAAATGCCGAGCGCGCTTTGGCCTTGA
TCAACAGAATAACTGGTGCGGCCCTTGCAGGAGAAAAAAAAAAGTGCGTTCGCTACATACAAGGTGAAGGCAGCTG
CCTCAGCCCACCCTCTTCAGATGGAAGCTTACTAGATTCGCCTCCCCCCTCCCCGAACCTGCTAGGCTCCCCTCC
CCGAGACGCCAAGTCACAGACTGAGCAGACCCAGCCTCTGTCGCTGTCCCTGAAGCCCGACCCCCTGGCCCACCT
GTCCATGATGCCTCCGCCACCCGCCCTCCTGCTCGCTGAGGCCACCCACAAGGCCTCCGCCCTCTGTCCCAACGG
GGCCCTGGACCTGCCCCCAGCCGCTTTGCAGCCTGCCGCCCCCTCCTCATCAATTGCACAGCCGTCGACTTCTTG
GTTACATTCCCACAGCTCCCTGGCCGGGACCCAGCCCCAGCCGCTGTCGCTCGTCACCAAGTCTTTAGAATAGCT
TTAGCGTCGTGAACCCCGCTGCTTTGTTTATGGTTTTGTTTCACTTTTCTTAATTTGCCCCCCACCCCCACCTTG
AAAGGTTTTGTTTTGTACTCTCTTAATTTTGTGCCATGTGGCTACATTAGTTGATGTTTATCGAGTTCATTGGTC
AATATTTGACCCATTCTTATTTCAATTTCTCCTTTTAAATATGTAGATGAGAGAAGAACCTCATGATTGGTACCA
AAATTTTTATCAACAGCTGTTTAAAGTCTTTGTAGCGTTTAAAAAATATATATATATACATAACTGTTATGTAGT
TCGGATAGCTTAGTTTTAAAAGACTGATTAAAAAACAAAAAAAA

FIGURE 2814

MPQLNGGGGDDLGANDELISFKDEGEQEEKSSENSSAERDLADVKSSLVNESETNQNSSSDSEAERRPPPRSESF
RDKSRESLEEAAKRQDGGLFKGPPYPGYPFIMIPDLTSPYLPNGSLSPTARTYLQMKWPLLDVQAGSLQSRQALK
DARSPSPAHIVSNKVPVVQHPHHVHPLTPLITYSNEHFTPGNPPPHLPADVDPKTGIPRPPHPPDISPYYPLSPG
TVGQIPHPLGWLVPQQGQPVYPITTGGFRHPYPTALTVNASVSRFPPHMVPPHHTLHTTGIPHPAIVTPTVKQES
SQSDVGSLHSSKHQDSKKEEEKKKPHIKKPLNAFMLYMKEMRAKVVAECTLKESAAINQILGRRWHALSREEQAK
YYELARKERQLHMQLYPGWSARDNYGKKKKRKRDKQPGETNEHSECFLNPCLSLPPITDLSAPKKCRARFGLDQQ
NNWCGPCRRKKKCVRYIQGEGSCLSPPSSDGSLLDSPPPSPNLLGSPPRDAKSQTEQTQPLSLSLKPDPLAHLSM
MPPPPALLLAEATHKASALCPNGALDLPPAALQPAAPSSSIAQPSTSWLHSHSSLAGTQPQPLSLVTKSLE

FIGURE 2815

CGGCCTCTCATTTCTCCTAGCCCTTCTGTTCTTCCTTGGCCAAGCTGCAGGGGATTTGGGGGATGTGGGACCTCC
AATTCCCAGCCCCGGCTTCAGCTCTTTCCCAGGTGTTGACTCCAGCTCCAGCTTCAGCTCCAGCTCCAGGTCGGG
CTCCAGCTCCAGCCGCAGCTTAGGCAGCGGAGGTTCTGTGTCCCAGTTGTTTTCCAATTTCACCGGCTCCGTGGA
TGACCGTGGGACCTGCCAGTGCTCTGTTTCCCTGCCAGACACCACCTTTCCCGTGGACAGAGTGGAACGCTTGGA
ATTCACAGCTCATGTTCTTTCTCAGAAGTTTGAGAAAGAACTTTCCAAAGTGAGGGAATATGTCCAATTAATTAG
TTTGTATGAAAAGAAACTGTTAAACCTAACTGTCCGAATTGACATCATGGGAGAAGGATACATTTCTTACACTGA
ACTGGACTTCGAGCTGATAAGGTAGAAGTGAAGGAGATGGAAAAACTGGTCATACAGCTGAAGGAGAGTTTTGGT
GGAAGCTCAGAAATTGTTGACCAGCTGGAGGTGGAGATAAGAAATATGACTCTCTTGGTAGAGAAGCTTGAGACA
CTAGACAAAAACAATGTCCTTGCCATTCGCCGAGAAATCGTGGCTCTGAAGACCAAGCTGAAAGAGTGTGAGGCC
TCTAAAGATCAAAACACCCCTGTCGTCCACCCTCCTCCCACTCCAGGGAGCTGTGGTCATGGTGGTGTGGTGAAC
ATCAGCAAACCGTCTGTGGTTCAGCTCAACTGGAGAGGGTTTTCTTATCTATATGGTGCTTGGGGTAGGGATTAC
TCTCCCCAGCATCCAAACAAAGGACTGTATTGGGTGGCGCCATTGAATACAGATGGGAGACTGTTGGAGTATTAT
ATACTGTACAACACACTGGATGATTTGCTATTGTATATAAATGCTCGAGAGTTGCGGATCACCTATGGCCAAGGT
AGTGGTACAGCAGTTTACAACAACAACATGTACGTCAACATGTACAACACCGGGAATATTGCCAGAGTTAACCTG
ACCACCAACACGATTGCTGTGACTCAAACTCTCCCTAATGCTGCCTATAATAACCGCTTTTCATATGCTAATGTT
GCTTGGCAAGCATATTGACTTTGCTGTGGATGAGAATGGATTGTGGGTTATTTATTCAACTGAAGCCAGCACTGG
TTAACATGGTGATTAGTAAACTCAATGACACCACACTTCAGGTGCTAAACACTTGGTATACCAAGCAGTATAAAC
CATCTGCTTCTAACGCCTTCATGGTATGTGGGGTTCTGTATGCCACCCGTACTATGAACACCAGAACAGAAGAGA
TTTTTTACTATTATGACACAAACACAGGGAAAGAGGGCAAACTAGACATTGTAATGCATAAGATGCAGGAAAAAG
TGCAGAGCATTAACTATAACCCTTTTGACCAGAAACTTTATGTCTATAACGATGGTTACCTTCTGAATTATGATC
TTTCTGTCTTGCAGAAGCCCCAGTAAGCTGTTTAGGAGTTAGGGTGAAAGAGAAAATGTTTGTTGAAAAAATAGT
CTTCTCCACTTACTTAGATATCTGCAGATATCTAAGTAAGTGGAGAAGACTATTTTTTCAACAAACATTTTCTCT
TTCACCCTAACTCCTAAACAGCTTACTGGGGCTTCTGCAAGACAGAAAGATCATAATTCAGAAGGTAACCATCGT
TATAGACATAAAGTTTCTGGTCAAAAGGGTTATAGTTAATGCTCTGCACTTTTTCCTGCATCTTATGCATTACAA
TGTCTAGTTTGCCCTCTTTCCCTGTGTTTGTGTCATAATAGTAAAAAATCTCTTCTGTTTGGCGTATAGGGATTC
TTTGTACAGGAAATATTGCCCAATGACTAGTCCTCATCCATGTAGCACCACTAATTCTTCCATGCCTGGAAGAAA
CCTGGGGACTTAGTTAGGTAGATTAATATCTGGAGCTCCTCGAGGGACCAAATCTCCAACTTTTTTTTCCCCTCA
CTAGCACCTGGAATGATGCTTTGTATGTGGCAGATAAGTAAATTTGGCATGCTTATATATTCTACATCTGTAAAG
TGCTGAGTTTTATGGAGAGAGGCCTTTTTATGCATTAAATTGTACATGGCAAATAAATCCCAGAAGGATCTGTAG
ATGAGGCACCTGCTTTTTCTTTTCTCTCATTGTCCACCTTACTAAAAGTCAGTAGAATCTTCTACCTCATAACTT
CCTTCCAAAGGCAGCTCAGAAGATTAGAACCAGACTTACTAACCAATTCCACCCCCCACCAACCCCCTTCTACTG
CCTACTTTAAAAAAATTAATAGTTTTCTATGGAACTGATCTAAGATTAGAAAAATTAATTTTCTTTAATTTCATT
ATGAACTTTTATTTACATGACTCTAAGACTATAAGAAAATCTGATGGCAGTGACAAAGTGCTAGCATTTATTGTT
ATCTAATAAAGACCTTGGAGCATATGTGCAACTTATGAGTGTATCAGTTGTTGCATGTAATTTTTGCCTTTGTTT
AAGCCTGGAACTTGTAAGAAAATGAAAATTTAATTTTTTTTTCTAGGACGAGCTATAGAAAAGCTATTGAGAGTA
TCTAGTTAATCAGTGCAGTAGTTGGAAACCTTGCTGGTGTATGTGATGTGCTTCTGTGCTTTTGAATGACTTTAT
CATCTAGTCTTTGTCTATTTTTCCTTTGATGTTCAAGTCCTAGTCTATAGGATTGGCAGTTTAAATGCTTTACTC
CCCCTTTTAAAATAAATGATTAAAATGTGCTTCGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2816

MEKLVIQLKESFGGSSEIVDQLEVEIRNMTLLVEKLETLDKNNVLAIRREIVALKTKLKECEASKDQNTPVVHPP
PTPGSCGHGGVVNISKPSVVQLNWRGFSYLYGAWGRDYSPQHPNKGLYWVAPLNTDGRLLEYYILYNTLDDLLLY
INARELRITYGQGSGTAVYNNNMYVNMYNTGNIARVNLTTNTIAVTQTLPNAAYNNRFSYANVAWQAY

FIGURE 2817A

GGCGGCGGCGAGCCGGTGCCCTGGGATCATGGTGGCGTTGCGGGGCCTTGGTAGCGGCCTGCAGCCCTGGTGTCC
GCTGGATCTTAGACTCGAATGGGTTGACACAGTGTGGGAACTGGATTTCACAGAGACTGAGCCTTTGGATCCCAG
CATAGAAGCAGAGATCATAGAGACTGGATTGGCTGCATTCACAAAACTCTATGAAAGCCTTTTACCCTTTGCTAC
TGGAGAACATGGATCTATGGAGAGTATCTGGACCTTCTTCATTGAGAACAATGTTTCCCATAGTACACTGGTGGC
ATTGTTCTATCATTTTGTTCAAATAGTTCATAAGAAGAATGTCAGTGTACAGTATCGAGAATATGGCCTTCATGC
CGCTGGGCTTTACTTTTTGCTACTAGAAGTACCAGGCAGTGTAGCCAATCAAGTATTCCACCCAGTGATGTTTGA
CAAATGCATTCAGACTCTAAAGAAGAGCTGGCCCCAGGAATCTAACTTGAATCGGAAAAGAAAGAAAGAACAGCC
TAAGAGCTCTCAGGCTAACCCCGGGAGGCATAGAAAAAGGGGAAAGCCACCCAGGAGAGAAGATATTGAGATGGA
TGAAATTATAGAAGAACAAGAAGATGAGAATATTTGTTTTTCTGCCCGGGACCTTTCTCAAATTCGAAATGCCAT
CTTTCACCTTTTAAAGAATTTTTTAAGGCTTCTGCCAAAGTTTTCCTTGAAAGAAAAGCCACAATGTGTACAGAA
TTGTATAGAGGTCTTTGTTTCATTAACTAATTTTGAGCCAGTTCTTCATGAATGTCATGTTACACAAGCCAGAGC
TCTTAACCAAGCAAAATACATACCAGAACTGGCTTATTATGGATTGTATTTGCTGTGCTCTCCCATTCATGGAGA
AGGAGATAAGGTCATCAGTTGTGTTTTCCATCAAATGCTCAGTGTAATATTAATGTTAGAAGTTGGTGAAGGATC
CCATCGTGCCCCCCTTGCTGTTACCTCCCAAGTCATCAACTGTAGAAACCAGGCGGTCCAGTTTATCAGCGCCCT
TGTGGATGAATTAAAGGAGAGTATATTCCCAGTCGTCCGTATCTTACTGCAGCACATCTGTGCCAAGGTGGTAGA
TAAATCAGAGTATCGTACTTTTGCAGCCCAGTCCCTAGTCCAGCTGCTCAGTAAACTTCCTTGTGGGGAATACGC
TATGTTCATTGCCTGGCTTTACAAATACTCCCGAAGTTCCAAGATCCCACACCGGGTTTTTACTCTTGATGTTGT
CTTAGCTCTGTTAGAACTGCCTGAAAGAGAGGTGGATAACACCCTCTCCTTGGAGCATCAGAAGTTCTTAAAGCA
TAAGTTCCTGGTGCAGGAAATTATGTTTGATCGTTGCTTAGACAAGGCGCCTACTGTCCGCAGCAAGGCACTGTC
CAGCTTTGCACACTGTCTGGAGTTGACTGTTACCAGTGCGTCGGAGAGTATCCTGGAGCTCCTGATTAACAGTCC
TACGTTTTCTGTAATAGAGAGTCACCCTGGTACCTTACTGAGAAATTCATCAGCTTTTTCCTACCAAAGGCAGAC
ATCTAACCGTTCCGAACCCTCAGGGGAGATCAACATAGACAGCAGTGGTGAAACAGTTGGATCTGGAGAAAGATG
TGTCATGGCAATGCTGAGAAGGAGGATCAGGGATGAGAAGACCAACGTTAGGAAGTCTGCACTGCAGGTATTAGT
GAGTATTTTGAAACACTGTGATGTCTCAGGCATGAAGGAAGACCTGTGGATTCTGCAGGACCAGTGTCGGGACCC
TGCAGTGTCTGTCCGGAAGCAGGCCCTCCAGTCTCTTACTGAACTCCTTATGGCTCAGCCTAGATGCGTGCAGAT
CCAGAAAGCCTGGTTGCGGGGGGTGGTCCCGGTGGTGATGGACTGCGAGAGCACTGTGCAGGAGAAGGCCCTGGA
GTTCCTGGACCAGCTGCTGCTGCAGAACATCCGGCATCACAGTCATTTTCACTCTGGGGACGACAGCCAGGTCCT
CGCCTGGGCGCTTCTTACTCTCCTCACCACCGAAAGCCAGGAACTGAGCCGATATTTAAATAAGGCTTTTCATAT
CTGGTCCAAGAAAGAAAAATTCTCACCCACTTTTATAAACAATGTAATATCTCACACTGGCACGGAACATTCGGC
ACCTGCCTGGATGCTGCTCTCCAAGATTGCTGGCTCCTCACCCAGGCTGGACTACAGCAGAATAATACAATCTTG
GGAGAAAATCAGCAGTCAGCAGAATCCCAATTCAAACACCTTAGGACATATTCTCTGTGTGATTGGGCATATTGC
AAAGCATCTTCCTAAGAGCACCCGGGACAAAGTGACTGATGCTGTCAAGTGTAAGCTGAATGGATTTCAGTGGTC
TCTAGAGGTGATCAGTTCAGCTGTTGACGCCTTGCAGAGGCTTTGTAGAGCATCTGCAGAGACACCAGCAGAGGA
GCAGGAATTGCTGACGCAGGTGTGTGGGGATGTACTCTCCACCTGCGAGCACCGCCTCTCCAACATCGTTCTCAA
GGAGAATGGAACAGGGAATATGGACGAAGACCTGTTGGTGAAGTACATTTTTACCTTAGGGGATATAGCCCAGCT
GTGTCCAGCCAGGGTGGAGAAGCGCATCTTCCTTCTGATTCAGTCCGTCCTGGCTTCGTCTGCTGATGCTGACCA
CTCACCATCATCTCAAGGCAGCAGTGAGGCCCCAGCGTCTCAGCCACCCCCCCAGGTCAGAGGTTCTGTCATGCC
CTCTGTGATTAGAGCACATGCCATCATTACCTTAGGTAAGCTGTGCTTACAGCACGAGGATCTGGCAAAGAAGAG
CATCCCAGCCCTGGTGCGAGAGCTCGAGGTGTGTGAGGACGTGGCTGTCCGCAACAACGTCATCATTGTAATGTG
CGATCTCTGCATTCGCTACACCATCATGGTGGACAAGTATATTCCCAACATCTCCATGTGTCTGAAGGATTCCGA
CCCATTCATCCGGAAGCAGACACTCATCTTGCTTACCAATCTCTTGCAGGAGGAATTTGTGAAATGGAAGGGCTC
CCTGTTCTTCCGATTTGTCAGCACTCTGATCGATTCACACCCAGACATTGCCAGCTTCGGGGAGTTTTGCCTGGC
TCACCTGTTACTGAAGAGGAACCCTGTCATGTTCTTCCAACACTTCATTGAATGTATTTTTCACTTTAATAACTA
TGAGAAGCATGAGAAGTACAACAAGTTCCCCCAGTCAGAGAGAGAGAAGCGGCTGTTTTCATTGAAGGGAAAGTC
AAACAAAGAGAGACGAATGAAAATCTACAAATTTCTTCTAGAGCACTTCACAGATGAACAGCGATTCAACATCAC
TTCCAAAATCTGCCTTAGTATTTTGGCGTGCTTTGCTGATGGCATCCTACCCCTGGACCTGGACGCCAGTGAGTT
ACTCTCAGACACGTTTGAGGTCCTCAGCTCAAAGGAGATCAAGCTTTTGGCAATGAGATCTAAACCAGACAAAGA
CCTCCTTATGGAAGAAGATGACATGGCCTTGGCAAATGTAGTCATGCAGGAAGCTCAGAAGAAGCTCATCTCACA

FIGURE 2817B

AGTTCAGAAGAGGAATTTCATAGAAAATATTATTCCAATTATCATCTCCCTGAAGACTGTGCTGGAGAAAAATAA
GATCCCAGCTTTGCGGGAACTCATGCACTATCTCAGGGAGGTGATGCAGGATTACCGAGATGAGCTCAAGGACTT
CTTTGCAGTTGACAAACAGCTGGCATCAGAGCTTGAGTATGACATGAAGAAGTACCAGGAACAGCTGGTCCAGGA
GCAGGAGCTAGCAAAACATGCAGATGTGGCCGGGACGGCTGGAGGTGCTGAGGTGGCACCTGTGGCACAGGTTGC
CCTGTGTTTAGAAACAGTGCCAGTTCCTGCTGGCCAAGAAAACCCTGCCATGTCACCTGCCGTGAGCCAGCCCTG
CACACCCAGGGCAAGTGCTGGCCATGTAGCAGTATCATCTCCTACACCTGAAACAGGGCCATTGCAGAGGTTGCT
GCCCAAAGCCAGGCCCATGTCCCTGAGCACCATTGCAATCCTGAATTCTGTCAAGAAAGCCGTGGAGTCAAAGAG
CAGGCATCGGAGTCGGAGCTTAGGAGTGCTGCCTTTCACTTTAAATTCTGGAAGCCCAGAAAAAACGTGCAGTCA
GGTGTCTTCATACAGTTTGGAGCAAGAGTCGAATGGCGAGATTGAGCACGTGACCAAGCGGGCCATCAGCACCCC
CGAGAAGAGCATCAGTGATGTCACGTTTGGAGCAGGGGTCAGTTACATCGGGACACCACGGACTCCGTCGTCAGC
CAAAGAGAAAATTGAAGGCCGGAGTCAAGGAAATGACATCTTATGTTTATCACTGCCTGATAAACCGCCCCCACA
GCCTCAGCAGTGGAATGTGCGGTCTCCCGCCAGGAATAAAGACACTCCAGCCTGCAGCAGGAGGTCCCTCCGAAA
GACCCCTCTGAAAACAGCCAAC**TAA**ACAGCGCCTCCCACCAGTGTCCAGGCAGGCAGGAGCCCTTGAGGAAGCAG
TCTCGTGTCCTCCGTGTGAAGGCAGCTGGATCACTTCCCGCAGTCCTTGGGCAGCGCTTTGCTGTGGAACACGAG
AGCTCCTCCTCAGGGGCCTGGCACTCACCTTCTATTCTGTATGATGTATTTGGTTAAACACTGTCAAATAATAGA
GATGTGCCAGATTTAGATTTTCTTACCCTAATCTGTTTAATATTGTAACTTTATTCCATTTGAAAGTGTCAAGCC
CATTCAGATAAGCTATAATCTGGTCTTTAAGGAATACAACTTTAAAACTGCAGCTTTCTTTTATATAAATCAAGC
CTCTGTTAACTTGAATTCCTTATAGTACATATTTTCCCATCTGTAATGCCGGAATTTTGATTCTAATATTTTTTC
TATTATTTATAAGTGCAAATTTTTTTAAAAAGTGTACAGCTTTCTTAAAGTAATAAAGGTTTAGCATAAATAC

FIGURE 2818

AAASRCPGIMVALRGLGSGLQPWCPLDLRLEWVDTVWELDFTETEPLDPSIEAEIIETGLAAFTKLYESLLPFAT
GEHGSMESIWTFFIENNVSHSTLVALFYHFVQIVHKKNVSVQYREYGLHAAGLYFLLLEVPGSVANQVFHPVMFD
KCIQTLKKSWPQESNLNRKRKKEQPKSSQANPGRHRKRGKPPRREDIEMDEIIEEQEDENICFSARDLSQIRNAI
FHLLLKNFLRLLPKFSLKEKPQCVQNCIEVFVSLTNFEPVLHECHVTQARALNQAKYIPELAYYGLYLLCSPIHGE
GDKVISCVFHQMLSVILMLEVGEGSHRAPLAVTSQVINCRNQAVQFISALVDELKESIFPVVRILLQHICAKVVD
KSEYRTFAAQSLVQLLSKLPCGEYAMFIAWLYKYSRSSKIPHRVFTLDVVLALLELPEREVDNTLSLEHQKFLKH
KFLVQEIMFDRCLDKAPTVRSKALSSFAHCLELTVTSASESILELLINSPTFSVIESHPGTLLRNSSAFSYQRQT
SNRSEPSGEINIDSSGETVGSGERCVMAMLRRRIRDEKTNVRKSALQVLVSILKHCDVSGMKEDLWILQDQCRDP
AVSVRKQALQSLTELLMAQPRCVQIQKAWLRGVVPVVMDCESTVQEKALEFLDQLLLQNIRHHSHFHSGDDSQVL
AWALLTLLTTESQELSRYLNKAFHIWSKKEKFSPTFINNVISHTGTEHSAPAWMLLSKIAGSSPRLDYSRIIQSW
EKISSQQNPNSNTLGHILCVIGHIAKHLPKSTRDKVTDAVKCKLNGFQWSLEVISSAVDALQRLCRASAETPAEE
QELLTQVCGDVLSTCEHRLSNIVLKENGTGNMDEDLLVKYIFTLGDIAQLCPARVEKRIFLLIQSVLASSADADH
SPSSQGSSEAPASQPPPQVRGSVMPSVIRAHAIITLGKLCLQHEDLAKKSIPALVRELEVCEDVAVRNNVIIVMC
DLCIRYTIMVDKYIPNISMCLKDSDPFIRKQTLILLTNLLQEEFVKWKGSLFFRFVSTLIDSHPDIASFGEFCLA
HLLLKRNPVMFFQHFIECIFHFNNYEKHEKYNKFPQSEREKRLFSLKGKSNKERRMKIYKFLLEHFTDEQRFNIT
SKICLSILACFADGILPLDLDASELLSDTFEVLSSKEIKLLAMRSKPDKDLLMEEDDMALANVVMQEAQKKLISQ
VQKRNFIENIIPIIISLKTVLEKNKIPALRELMHYLREVMQDYRDELKDFFAVDKQLASELEYDMKKYQEQLVQE
QELAKHADVAGTAGGAEVAPVAQVALCLETVPVPAGQENPAMSPAVSQPCTPRASAGHVAVSSPTPETGPLQRLL
PKARPMSLSTIAILNSVKKAVESKSRHRSRSLGVLPFTLNSGSPEKTCSQVSSYSLEQESNGEIEHVTKRAISTP
EKSISDVTFGAGVSYIGTPRTPSSAKEKIEGRSQGNDILCLSLPDKPPPQPQQWNVRSPARNKDTPACSRRSLRK
TPLKTAN

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FIGURE 2819

GGCACGAGGGTCATGGACCTCCTGCACAAGAACATGAAACACCTGTGGTTCTTCCTCCTCCTGGTGGCAGCTCCC
AGATGGGTCCTGTCCCAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTC
ACCTGCGGTGTTTATGGTGGGTCCTTCAGTGGTTACTATTGGAGCTGGATTCGCCAGCCCCCAGGGAAGGGGCTG
GAGTGGATTGGGGAAATCAATCATAGTGGAAGCACCAACTACAACCCGTCCCTCAAGAGTCGAGTCACCATATCA
GTAGACACGTCCAAGAAGCAGCTCTCCCTGAAGTTGAGCTCTGTGAACGCCGCGGACACGGCTGTGTATTACTGT
GCGAGAGTTATTACTAGGGCGAGTCCTGGCACAGACGGGAGGTACGGTATGGACGTCTGGGGCCAAGGGACCACG
GTCACCGTCTCCTCAGGGAGTGCATCCGCCCCAACCCTTTTCCCCCTCGTCTCCTGTGAGAATTCCCCGTCGGAT
ACGAGCAGCGTGGCCGTTGGCTGCCTCGCACAGGACTTCCTTCCCGACTCCATCACTTTCTCCTGGAAATACAAG
AACAACTCTGACATCAGCAGCACCCGGGGCTTCCCATCAGTCCTGAGAGGGGGCAAGTACGCAGCCACCTCACAG
GTGCTGCTGCCTTCCAAGGACGTCATGCAGGGCACAGACGAACACGTGGTGTGCAAAGTCCAGCACCCCAACGGC
AACAAAGAAAAGAACGTGCCTCTTCCAGTGATTGCCGAGCTGCCTCCCAAAGTGAGCGTCTTCGTCCCACCCCGC
GACGGCTTCTTCGGCAACCCCCGCAAGTCCAAGCTCATCTGCCAGGCCACGGGTTTCAGTCCCCGGCAGATTCAG
GTGTCCTGGCTGCGCGAGGGGAAGCAGGTGGGGTCTGGCGTCACCACGGACCAGGTGCAGGCTGAGGCCAAAGAG
TCTGGGCCCACGACCTACAAGGTGACCAGCACACTGACCATCAAAGAGAGCGACTGGCTCAGCCAGAGCATGTTC
ACCTGCCGCGTGGATCACAGGGGCCTGACCTTCCAGCAGAATGCGTCCTCCATGTGTGTCCCCGATCAAGACACA
GCCATCCGGGTCTTCGCCATCCCCCCATCCTTTGCCAGCATCTTCCTCACCAAGTCCACCAAGTTGACCTGCCTG
GTCACAGACCTGACCACCTATGACAGCGTGACCATCTCCTGGACCCGCCAGAATGGCGAAGCTGTGAAAACCCAC
ACCAACATCTCCGAGAGCCACCCCAATGCCACTTTCAGCGCCGTGGGTGAGGCCAGCATCTGCGAGGATGACTGG
AATTCCGGGGAGAGGTTCACGTGCACCGTGACCCACACAGACCTGCCCTCGCCACTGAAGCAGACCATCTCCCGG
CCCAAGGGGGTGGCCCTGCACAGGCCCGATGTCTACTTGCTGCCACCAGCCCGGGAGCAGCTGAACCTGCGGGAG
TCGGCCACCATCACGTGCCTGGTGACGGGCTTCTCTCCCGCGGACGTCTTCGTGCAGTGGATGCAGAGGGGGCAG
CCCTTGTCCCCGGAGAAGTATGTGACCAGCGCCCCAATGCCTGAGCCCCAGGCCCCAGGCCGGTACTTCGCCCAC
AGCATCCTGACCGTGTCCGAAGAGGAATGGAACACGGGGGAGACCTACACCTGCGTGGTGGCCCATGAGGCCCTG
CCCAACAGGGTCACCGAGAGGACCGTGGACAAGTCCACCGAGGGGGAGGTGAGCGCCGACGAGGAGGGCTTTGAG
AACCTGTGGGCCACCGCCTCCACCTTCATCGTCCTCTTCCTCCTGAGCCTCTTCTACAGTACCACCGTCACCTTG
TTCAAGGTGAAATGATCCCAACAGAAGAACATCGGAGACCAGAGAGAGGAACTCAAAGGGGCGCAGCCTCCGGGT
CTGGGGTCCTGGCCTGCGTGGCCTGTTGGCACGTGTTTCTCTTCCCCGCCCGGCCTCCAGTTGTGTGCTCTCACA
CAGGCTTCCTTCTCGACCGGCAGGGGCTGGCTGGCTTGCAGGCCACGAGGTGGGCTCTACCCCACACTGCTTTGC
TGTGTATACGCTTGTTGCCCTGAAATAAATATGCACATTTTATCCATGAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAA

FIGURE 2820

MKHLWFFLLLVAAPRWVLSQVQLQQWGAGLLKPSETLSLTCGVYGGSFSGYYWSWIRQPPGKGLEWIGEINHSGS
TNYNPSLKSRVTISVDTSKKQLSLKLSSVNAADTAVYYCARVITRASPGTDGRYGMDVWGQGTTVTVSSGSASAP
TLFPLVSCENSPSDTSSVAVGCLAQDFLPDSITFSWKYKNNSDISSTRGFPSVLRGGKYAATSQVLLPSKDVMQG
TDEHVVCKVQHPNGNKEKNVPLPVIAELPPKVSVFVPPRDGFFGNPRKSKLICQATGFSPRQIQVSWLREGKQVG
SGVTTDQVQAEAKESGPTTYKVTSTLTIKESDWLSQSMFTCRVDHRGLTFQQNASSMCVPDQDTAIRVFAIPPSF
ASIFLTKSTKLTCLVTDLTTYDSVTISWTRQNGEAVKTHTNISESHPNATFSAVGEASICEDDWNSGERFTCTVT
HTDLPSPLKQTISRPKGVALHRPDVYLLPPAREQLNLRESATITCLVTGFSPADVFVQWMQRGQPLSPEKYVTSA
PMPEPQAPGRYFAHSILTVSEEEWNTGETYTCVVAHEALPNRVTERTVDKSTEGEVSADEEGFENLWATASTFIV
LFLLSLFYSTTVTLFKVK

FIGURE 2821A

GGCCAGGTTATCAGGGGCTTCACTGTGAAACCTGCAAAGAGGGCTTTTACCTAAATTACACTTCTGGGCTCTGTC
AGCCATGTGACTGTAGTCCACATGGAGCTCTCAGCATACCGTGCAACAGTTCTGGGAAATGCCAGTGCAAAGTGG
GTGTCATTGGCTCTATATGTGACCGATGCCAAGATGGATATTATGGCTTTAGTAAGAATGGCTGCTTGCCCTGCC
AATGCAATAATCGGTCTGCCAGTTGCGATGCCCTCACAGGTGCTTGTTTAAACTGCCAGGAAAATAGCAAAGGAA
ATCACTGTGAAGAATGTAAAGAAGGATTTTATCAGAGTCCTGATGCCACTAAAGAATGTCTTCGCTGCCCTTGTT
CAGCAGTGACATCTACAGGCAGCTGCTCTATAAAATCGAGTGAATTGGAACCTGAATGTGACCAGTGTAAAGATG
GTTACATAGGCCCGAACTGCAATAAATGTGAAAATGGCTATTACAATTTTGACAGCATCTGTAGAAAGTGCCAAT
GTCACGGCCATGTGGACCCAGTTAAAACTCCAAAGATTTGTAAGCCCGAGAGTGGTGAGTGCATCAACTGCCTCC
ATAACACCACTGGGTTTTGGTGTGAGAACTGCCTAGAAGGTTATGTTCACGACCTCGAGGGAAATTGCATCAAGA
AAGAAGTTATTCTTCCAACACCTGAAGGTTCTACCATTTTGGTTTCCAATGCCTCTTTGACCACATCAGTGCCCA
CCCCTGTTATAAATAGTACTTTTACCCCTACAACCCTGCAGACTATCTTTTCAGTAAGCACTTCTGAAAACAGCA
CTTCAGCTTTAGCTGATGTATCATGGACCCAATTTAACATCATCATTTTGACAGTCATCATCATTGTTGTGGTGC
TGCTAATGGGATTTGTGGGGGCTGTATATATGTACCGCGAGTACCAAAACCGGAAACTCAATGCCCCCTTTTGGA
CCATCGAGCTGAAAGAAGACAATATCAGTTTCAGCAGCTACCATGACAGCATTCCCAATGCAGATGTTTCGGGAT
TGTTGGAAGATGATGGCAATGAAGTGGCTCCCAATGGGCAGCTGACCCTGACGACGCCCATACATAACTACAAAG
CC**TAA**GGAGCTAGAACTGTTCTGAATTGTTAAACCACAGTGCTTGCTAAGACAGAGTCAGCCCCTGGGCCAGACA
AAGCCTGGCTAGAGTTTGCTGAGAAAGCAAAGGCAAATAGTGCATCTGAAATTTTCAGGTACAAATTTGTAATGC
GCTTAGCCTATCTATTGCTCTTAGTTTTCCCATGAAGATCTGAAGCGTTCACTGTCATTAGGACTTGAAGTAAAG
TATATTTTTGTACCAAACCACATGGGAGTATGGAAAGGCTGAACCCCATAGTGCAGCCCAAAACCACTTTGACCT
CCAGATAGACTCCTGGGGAAGCATTCACCAAGCCAGTGGTAACAAGATGATGAATGTGGAGGGGGAAAAGACTGC
TGGAAGACTTCATCTCCATTCCTGAAACATTTTTTTTAAAACAGTGTCAGGGATTATATTCGTTTTACTATACAA
AAGGACATCATTGAGGAAAAGCTTGTTTCTAGGCTGTATCACAGTAAATAATCTTGATTGTTTCTAGAACAGGGG
TAGAAAAGTCCCAAGATCTTCAGAAGGGCTTGGTTTTTTCCTCCCAGGATTCTTGCTCAGTGATGAGTTGAAAGC
ACAGGATAAGCTTCTAAGGGAGGAAGGCAGCATTGGGGAGCAGGAGGCTGATGGTCCTCCTCAGGGTCTCAGTGT
AAATGATAAATTGTCTAAAAATAAGGAATATTCCTGCCTCTAGAGAAATAAGGTGTACATAGTTAATGTAGCATA
TCTGGTCGACGTTGTATTTGTATCTATTTGTAAAAAAAAAATCATGTCATATTTTATCATCTGGAATTTATTTGT
ACAGCAGTTAATGGTGTTGTAAAAAGAAAAATATGGGGATTGCTTAAAATACTGTAAAATAGATGGCAATATTGC
TAGAGCTGGGACTCTGGTGAGCATCCGTCATTTTTAGTCCTTCTTGAGGACATTGCTGAAATTTATAAGAGGTCG
AATGTTTCTTTCTTTCCTTTCTCAGTCTAAAAGTAGAGTTATATGCTCTTTGACTTACTATGATTCAAGCAATAG
ATTTTGAAGTCAGTAATCGTTAAGCTGGGACATAGGATGCATTCTCCAAAAACATTAATCTAATTAGACATTAGC
CACCCTATATATTTTACATAGATTAATATAAAACATATCCTCATTAAAAAATGTTTTTCTTGAATGTAAAAGATA
GTCTTCCAAAGGATAGAAATATTTTAGTTCCAAGAGAAAAGCCATCATATTACTTGGGATCTGTAGTTTTCATGC
CTATGAAATATTTATAATCCTCCCTCACCCCAAATAAAAAATCTCCTACATGTGAACATAGCCTGTCACTCATTT
GCCATGAGGTATGTGCCATCTCCCTGCAGTGCTATAGTTCTCCCATTGTCTTCCTGTCTGGTTAATGAGCAGCTT
TGTAGATGGGTGTGTCTAGTTAGTTCTTGCTTTTTGATGGAGTTTTTTCCTAGAGGCCAACTACTGTTGCTCTCG
TTTATTATGATATTGACATTTTGGGTTAAGCAAGGTGGGTGGGAAAGGTGGTCAGATGTTAAATATAACTTATTA
GGAGGAACAGTGAACTGTGAAGTGGTTAGAAAAAAAATAAAAACTTCTTATTAGATTAGACCTAGGAAATTCAAG
CTGACCCCTTTGCCTAACTTCCCTAGAGAAAAACCTAGAACTTGGTCATCCCTTTATAGGAGACCCCTAAGTTGT
TCTCAGGGTTTGGAGATGATGTTCTGGAGGGAGTACAAGCAAATAATCTACTTCTGGTAATCTGAGGGTGCTTTG
CGTATTTGGCCATTGCTCAGAAGAATAGAGGTTACATTATATTACATTATATGAAAATTATTTAGTTTTTCTATA
GCCCTTTGTAGTTTGCAAAGCACTTTTCCATATGTGTGTCCTCTCTTCCACACCATAGCCCCCTGAGGAAGTAAT
TGTTGTCCCCATTTTATAGATGAAAAGGCTGAGGCACAGAGGAGCTAAATATCTTGTTCAAGGCTATACAATGTG
TGTGATTATTAGGCTTGGAATCAGGGCCTCTAACTCTAAAGCACATGTTTTTTCAACTATATGCAGAAATTGCCT
AGCCATGGACACAAGAAAGCTGGGAGGAAGAGTTCTACTTGTGGATGTTTTTAATTTTTTTTAAATATCAGGAGC
AATCCAGGGCCATACAGCTATGAAGCACTTAGTGAAAAGAACACAAGAAGATTTACTAACTGAAGTTAGTATTAG
TGATTAGAAAACAAAACTGCCAGTTTGTGCTTCATTAAGGTGAACTCATCTCTCCAAGCAGGAAGGGAAAATTTG
CTTTCCCTAGCAGTTGCTGCATATGTGTGTACAGACTGCACAATTCTAAGAAATTGTGCAAAATGGCATACCTGT
CTTTCTCCCAGATACACCGCCCCCTGCCCCCCCCCAAAAAAGGTCAGGATTAAAGGTGGTGAGAAGTGAACATTTA

FIGURE 2821B

TTAAACAGAAGTTAAACCAATAGAGAGAAAGGAGGTTTGTTGGAGTCTAAGAGGATTTTGACCATGTAGAAATTC
CTTGAAACAGACCTTAAAAGGTATTGAAAAATTGAATCACAAAGAAAGTTTACCTTTAAATACTTGTTAATGGCT
CCTAGATCATGGTTATAATTTTTCTCAATGGGAAAAAAAGTCTTAAAATTTGTTTTAAATAAGATCCTCTAATGT
CTCGAGCTTTTTGATTCTGGAAATAATTTGCTTTAAAATATAAATCAATCAGAAAGTGATCTACCACTGAAATCA
TTCTAGGAAACTAGCATGGGATGCACTGCACAATGTTCTTTCCTCTAAAGGCATGGGCCCCATAAACTGTGGCAT
CTGGCAGCAGGATGCCATCAGTCCTTTAGAAAGCCTAATTTTGGGCCGGGTGCGGTGGCTCACGCCTGTAATCCC
AGCACTTTGGGAGGCCGAGGCGGGTGGATCACAAGGTCAGGAGTTCGAGACCAGCCTGGTCAACATGGCGAAATC
CCGTCTCTACTAAAAACACAAAAATTAGCCGGGTGTACGTGCCTGTGGTCTCAGCTGCTTGGGAGGCTGAGGCAG
GAGAATCGCTTGAACCTGGGAGGCGGAGGTTACAGTGGGCCGAGATGGCGCCATTTCACTCCAGCCTGGGCGACA
GAGCAAGACTCTGTCTCAAAAAAAAGGAAGAAAAAGAAAGCCTAATATTGGGAGAATGTTTGTGTAAGGATTGGA
AATCTGTTTATTTTTAAATAAGATAGCACTGATGTGAATCTTGTTTGGAAATTACAGATACTGCCATTAAGCGAT
GCTTTTATCTTCATTAATTCATTTTGGTAAGCGCCTATGCATTTCTGATGGTTAGGTGCCCTAGGTAGTGTTAAG
TATGTCCGTGTCCTCCCTTACTCCCCTCTCGCTCCCTCTACCCTCTATCCCCTAGGGTTCTTTTATTAATGGAAT
TTCTCCAGTTATAGAGAAAAAAATGACATTTGAAAACTAAAGCTCATTTATATTAATACTAAGGTCCTGTGGGCC
TAGTGCGTTACTCTTCCCAGTGATACCTAGATTTTAAGAGTAGAGAACAGAGGAAACATGGGATGAGAGGAGAGA
GGTTTTTTAGACAACATTTGTAGACACCTCAAATTATATCACTGTTCTCTAGCGCCAATATTCCCAGGTAAATTG
ACCATTAAAGCAATACTCACTGACCTACTAGTTTATTTTGGTCAGCTGAGTACCATCAGGATATTTAACCCTTTA
AGTGCTGTTTTGGGAGTAGAAAACTAAAGCAACAATACTTCCTCTTGACAGCTTTGATTGGAATGGGGTTATTAG
ATCATTCACCTTGGTCCTACACTTTTTAGGATGCTTGGTGAACATAACACCACTTATAATGAACATCCCTGGTTC
CTATATTTTGGGCTATGTGGGTAGGAATTGTTACTTGTTGCTGCAGCAGCAGCCCTAGAAAGTAAGCCCAGGGCT
TCAGATCTAAGTTAGTCCAAAAGCTAAATGATTTAAAGTCAAGTTGTAATGCTAGGCATAAGCACTCTATAATAC
ATTAAATTATAGGCCGAGCAATTAGGGAATGTTTCTGAAACATTAAACTTGTATTTATGTCACTAAAATTCTAAC
ACAAACTTAAAAAATGTGTCTCATACATATGCTGTACTAGGCTTCATCATGCATTTCTAAATTTGTGTATGATTT
GAATATATGAAAGAATTTATACAAGAGTGTTATTTAAAATTATTAAAAATAAATGTATATAATTTGTACCTATTG
TAGATTTGTTGTTTACTTTTTTGTGTGGTCAGAGTTGTTTCATGTCTTCAAATACATGCCAAGGATCATTTACTT
TCAGCCCACTTCATAAAAATCTTTGAACTCTT

FIGURE 2822

PGYQGLHCETCKEGFYLNYTSGLCQPCDCSPHGALSIPCNSSGKCQCKVGVIGSICDRCQDGYYGFSKNGCLPCQ
CNNRSASCDALTGACLNCQENSKGNHCEECKEGFYQSPDATKECLRCPCSAVTSTGSCSIKSSELEPECDQCKDG
YIGPNCNKCENGYYNFDSICRKCQCHGHVDPVKTPKICKPESGECINCLHNTTGFWCENCLEGYVHDLEGNCIKK
EVILPTPEGSTILVSNASLTTSVPTPVINSTFTPTTLQTIFSVSTSENSTSALADVSWTQFNIIILTVIIIVVVL
LMGFVGAVYMYREYQNRKLNAPFWTIELKEDNISFSSYHDSIPNADVSGLLEDDGNEVAPNGQLTLTTPIHNYKA

FIGURE 2823A

CCCAGCTGAGGAAATACTCTTAATTCTAAGGAAAACCTGGAAGCACAATGGGAGATGACAGTGAGTGGTTGAAAC
TGCCAGTTGATCAGAAATGTGAACACAAGCTGTGGAAAGCAAGGTTAAGTGGGTATGAAGAGGCCCTGAAGATCT
TCCAGAAAATAAAGGATGAAAAGAGCCCAGAGTGGTCCAAATTTTTAGGATTGATCAAAAAATTTGTCACTGATT
CCAATGCAGTGGTTCAATTGAAAGGATTAGAAGCTGCACTTGTTTATGTTGAAAATGCCCATGTAGCAGGAAAAA
CCACAGGAGAAGTTGTGTCAGGTGTTGTAAGTAAGGTGTTCAATCAACCTAAAGCTAAAGCCAAGGAGCTGGGCA
TAGAGATCTGTCTTATGTACATAGAGATTGAGAAAGGAGAGGCTGTTCAAGAAGAGCTCCTGAAAGGCTTGGACA
ATAAGAATCCCAAGATCATAGTGGCCTGTATAGAGACACTGAGGAAAGCCTTAAGTGAATTTGGTTCCAAAATCA
TCTTGCTTAAGCCAATTATCAAAGTGTTGCCAAAACTCTTTGAGTCTCGAGAGAAGGCTGTTCGAGATGAAGCCA
AACTAATTGCTGTGGAGATTTACAGATGGATTCGGGATGCTCTGAGACCCCCATTACAAAATATAAACTCTGTTC
AGTTGAAAGAACTAGAAGAAGAATGGGTCAAACTGCCAACAAGTGCTCCTAGACCTACTCGATTTCTTCGTTCCC
AACAAGAACTAGAAGCTAAATTGGAACAACAACAGTCTGCTGGTGGAGATGCTGAAGGAGGTGGTGATGATGGTG
ATGAGGTGCCACAAATAGATGCTTATGAGCTTTTAGAAGCTGTAGAAATCCTTTCCAAACTTCCCAAAGACTTTT
ATGACAAAATTGAGGCAAAAAAATGGCAAGAGAGAAAAGAGGCCCTGGAGTCTGTAGAAGTACTAATAAAAAACC
CCAAACTGGAAGCTGGCGATTATGCAGATTTAGTAAAAGCATTAAAGAAGGTTGTTGGAAAGGACACCAATGTCA
TGTTGGTGGCTTTGGCAGCAAAATGTCTTACTGGCCTGGCTGTTGGGCTAAGGAAGAAATTTGGACAATATGCAG
GACATGTTGTGCCAACCATCTTGGAGAAATTCAAAGAGAAGAAACCTCAAGTGGTACAAGCCCTGCAGGAGGCAA
TTGATGCAATCTTCCTTACTACCACACTACAGAACATCAGTGAGGATGTTTTAGCAGTAATGGATAATAAAAATC
CAACCATCAAGCAGCAGACATCTCTTTTTATTGCAAGAAGTTTCCGCCACTGCACTGCTTCTACCCTGCCAAAGA
GCTTGCTAAAGCCCTTTTGTGCTGCACTACTTAAGCACATCAATGATTCTGCTCCTGAAGTCAGAGATGCCGCAT
TTGAAGCATTGGGTACTGCTTTGAAGGTGGTTGGCGAGAAAGCAGTAAAACCATTCCTAGCTGATGTGGACAAAC
TCAAGCTTGATAAGATCAAAGAATGTTCAGAAAAGGTAGAACTGATACATGGTAAGAAAGCTGGACTAGCTGCTG
ATAAGAAGGAATTCAAACCTCTGCCTGGAAGGACTGCTGCTTCAGGGGCTGCAGGAGATAAGGACACAAAGGACA
TTTCTGCACCCAAACCAGGACCTCTAAAAAAGGCACCTGCTGCTAAGGCTGGTGGGCCACCAAAAAAGGGGAAAC
CAGCTGCACCAGGAGGCGCAGGGAATACTGGAACCAAGAACAAGAAAGGACTGGAGACTAAAGAAATAGTGGAGC
CTGAGCTCTCGATAGAAGTATGTGAAGAAAAAGCTTCAGCTGTTCTTCCCCCTACCTGTATACAGCTTCTTGACA
GCAGTAACTGGAAAGAAAGGCTGGCTTGTATGGAAGAGTTCCAGAAGGCTGTTGAGCTAATGGACCGAACTGAAA
TGCCATGCCAGGCATTAGTGAGGATGCTAGCCAAGAAACCTGGATGGAAAGAAACTAATTTTCAGGTGATGCAAA
TGAAGCTTCATATAGTTGCTTTGATTGCCCAGAAGGGAAATTTTTCCAAAACGTCAGCTCAGGTTGTATTAGATG
GCCTTGTGGACAAGATTGGAGATGTGAAATGTGGGAACAATGCAAAAGAAGCTATGACAGCAATAGCCGAAGCCT
GTATGTTACCATGGACTGCTGAACAGGTTGTGTCAATGGCTTTCTCACAAAAGAATCCCAAAAATCAGTCAGAAA
CTCTGAATTGGCTATCAAATGCCATAAAAGAATTTGGTTTTTCTGGGTTGAATGTCAAAGCTTTCATTAGCAATG
TGAAGACAGCTCTTGCTGCAACAAACCCAGCTGTGAGGACTGCTGCCATAACCCTGCTTGGCGTGATGTATCTGT
ATGTTGGTCCCTCTTTGCGAATGTTCTTTGAGGATGAGAAGCCTGCCCTCCTATCCCAGATAGATGCAGAATTTG
AGAAGATGCAGGGACAAAGTCCACCTGCTCCAACCAGAGGAATTTCCAAGCATAGCACAAGTGGTACAGATGAAG
GAGAAGATGGAGATGAACCAGATGACGGGAGCAATGATGTCGTTGATCTTTTGCCGAGGACGGAGATCAGTGATA
AAATCACTTCAGAGTTGGTATCTAAGATTGGTGATAAGAATTGGAAGATTAGGAAAGAAGGCCTAGATGAAGTGG
CAGGTATTATTAATGACGCAAAATTTATCCAACCGAATATAGGTGAACTTCCAACTGCCTTGAAGGGTCGACTCA
ATGATTCAAATAAAATCTTGGTACAGCAAACGCTGAATATCCTGCAACAACTGGCAGTAGCCATGGGCCCAAATA
TTAAGCAACATGTAAAAAATTTAGGCATCCCTATCATCACAGTCCTTGGAGACAGCAAGAACAATGTTCGAGCTG
CTGCCCTAGCGACTGTGAATGCTTGGGCAGAACAGACTGGCATGAAGGAATGGCTGGAAGGAGAAGATCTTTCTG
AAGAGCTCAAAAAGGAAAATCCTTTCTTGAGGCAAGAGCTTCTGGGCTGGCTGGCTGAGAAACTACCTACTCTTC
GTTCCACCCCTACAGACCTTATCCTTTGTGTTCCTCATCTCTACTCCTGCCTAGAAGATCGAAATGGAGATGTGC
GAAAGAAGGCCCAAGATGCCTTGCCATTCTTCATGATGCATTTAGGATATGAAAAAATGGCCAAGGCTACTGGGA
AACTAAAGCCAACTTCTAAAGATCAGGTATTGGCCATGCTAGAGAAAGCCAAAGTTAACATGCCAGCCAAGCCTG
CTCCACCCACTAAAGCAACTTCTAAACCAATGGGAGGGTCCGCTCCAGCCAAATTCCAGCCTGCATCAGCACCTG
CTGAAGATTGTATTTCCAGCAGTACAGAACCCAAACCTGATCCAAAAAAGGCCAAAGCTCCAGGATTATCCTCTA
AAGCAAAGAGTGCACAAGGGAAGAAGATGCCAAGCAAAACCAGCTTAAAGGAGGATGAAGACAAATCCGGGCCTA
TTTTTATTGTTGTTCCAAATGGAAAAGAGCAAAGGATGAAAGATGAAAAAGGATTGAAGGTGCTAAAGTGGAATT

FIGURE 2823B

TTACTACCCCACGGGATGAATACATTGAGCAACTAAAGACTCAAATGTCTAGCTGTGTGGCTAAATGGTTACAAG
ATGAGATGTTTCACTCAGACTTTCAGCATCATAACAAAGCCCTTGCTGTTATGGTTGATCACTTGGAGAGTGAAA
AAGAAGGAGTTATTGGTTGCCTGGATCTTATCTTAAAGTGGCTTACCCTGAGGTTTTTTGACACCAATACAAGCG
TCCTGATGAAAGCACTAGAATATTTAAAATTGCTCTTCACCTTGCTAAGTGAAGAAGAATATCATCTTACTGAGA
ATGAAGCATCTTCCTTCATCCCCTATCTTGTCGTCAAGGTTGGAGAACCAAAGGATGTCATTCGTAAAGATGTTC
GTGCCATCCTGAACCGGATGTGCCTTGTCTACCCAGCTAGCAAGATGTTTCCCTTTATCATGGAAGGAACCAAAT
CCAAAAACTCTAAGCAGAGAGCAGAGTGCCTGGAAGAGCTGGGATGTCTGGTTGAGTCCTATGGCATGAATGTTT
GCCAACCAACCCCAGGAAAAGCCTTAAAGGAAATAGCTGTTCACATAGGAGACCGTGACAATGCTGTACGCAATG
CTGCACTCAACACCATTGTAACGGTGTACAATGTACATGGGGATCAGGTGTTCAAACTGATTGGAAATCTTTCTG
AAAAGGATATGAGCATGCTCGAGGAGAGGATTAAGCGGTCAGCAAAGAGACCCTCTGCTGCACCAATAAAACAGG
TGGAAGAGAAACCTCAGCGTGCACAGAACATAAGCTCCAATGCCAACATGTTACGCAAGGGACCAGCTGAGGACA
TGTCTTCCAAACTCAACCAAGCCCGAAGCATGAGTGGGCATCCTGAGGCAGCCCAGATGGTCCGCCGAGAATTCC
AGCTGGATCTAGATGAGATTGAGAATGACAATGGTACAGTCCGATGTGAAATGCCAGAACTTGTTCAGCACAAAC
TGGATGACATTTTTGAGCCAGTCCTTATTCCTGAACCCAAGATCCGGGCTGTTTCTCCACACTTCGATGACATGC
ACAGTAATACAGCATCCACAATCAATTTCATTATCTCCCAAGTAGCCAGTGGTGACATCAACACAAGTATCCAAG
CTCTGACACAGATCGATGAGGTCCTGAGACAGGAAGACAAAGCTGAAGCCATGTCCGGCCATATTGATCAGTTTC
TGATAGCCACTTTTATGCAGCTAAGACTCATCTACAACACACACATGGCAGATGAGAAATTGGAGAAGGACGAGA
TCATCAAGTTGTATAGCTGTATCATTGGCAACATGATTTCGCTGTTTCAGATAGAGAGCCTTGCCCGGGAGGCCT
CCACTGGAGTACTAAAAGACCTAATGCATGGCCTCATCACCTTAATGCTGGATTCTCGGATTGAAGATCTTGAGG
AAGGACAACAGGTCATCCGCTCTGTGAACCTCTTGGTGGTGAAGGTTCTGGAGAAGTCAGACCAGACCAACATCC
TGAGTGCCCTACTTGTTTTGCTCCAAGACAGCCTGCTAGCAACAGCCAGTTCTCCCAAATTCTCAGAGCTTGTTA
TGAAGTGTCTCTGGAGAATGGTTCGACTGTTGCCTGATACCATCAATAGCATTAACCTAGACAGAATTCTTCTGG
ATATCCACATTTTCATGAAGGTCTTCCCCAAAGAGAAACTGAAGCAATGCAAAAGTGAATTTCCCATAAGGACCC
TAAAGACCCTGCTACACACCTTATGCAAATTAAAAGGGCCCAAGATCCTGGACCACCTAACGATGATCGACAACA
AAAACGAGTCTGAGCTGGAGGCCCATCTCTGCCGGATGATGAAGCACAGTATGGACCAGACTGGGAGCAAGTCTG
ATAAGGAAACAGAAAAGGGAGCATCTCGAATAGATGAAAAATCATCAAAGGCCAAAGTGAATGATTTCTTAGCTG
AGATTTTTAAGAAGATTGGCTCTAAAGAAAACACTAAAGAGGGACTAGCAGAGTTATATGAATATAAGAAGAAAT
ACTCAGATGCTGACATTGAACCATTTCTGAAAAATTCCTCACAGTTCTTCCAGAGCTATGTCGAAAGAGGCCTTC
GGGTGATTGAGATGGAGAGGGAGGGCAAAGGTCGTATTTCCACTTCAACAGGCATCTCCCCTCAGATGGAAGTCA
CATGTGTGCCCACGCCCACAAGCACAGTGTCCTCCATAGGTAACACAAATGGGGAAGAAGTGGGGCCATCTGTCT
ACTTGGAAAGGCTAAAGATCCTCCGACAGCGATGTGGTCTGGACAACACAAAGCAAGATGACCGACCTCCTTTGA
CCTCTTTGCTCTCCAAACCAGCAGTTCCTACTGTCGCCTCTTCCACAGACATGCTCCACAGCAAACTCTCTCAGC
TCCGGGAGTCACGGGAGCAGCACCAGCATTCAGACCTGGATTCTAACCAGACTCACTCTTCAGGAACTGTGACCT
CCTCCTCCTCCACAGCTAACATAGACGACTTGAAAAAAAGACTGGAGAGAATAAAGAGCAGTCGCAAATGAAGCT
GCCCCACTCCCCCGGCACCCTGCAGCTTTAGTTTACTAAACTAGAAGTCCTCATAGTTTAAAATGGCCTCAGCAG
GCCTAGTGTATACAAACTGGTTGTATGTATCATGCCGTGGAGCTAGGGGGAGGAGTCATTGTGGCACAAGTATTT
GTACATACTCTGCTTCTCTCTGTCAGCGTCCTGCTGCTCTAGAAGACTGTCCGTGGATGAGTTTAGTGTACAGAC
TTGTAAACAGCTGCCCCCTCTCTGCTCAGTCTAGTTCCCAGATCCTTTTCTTTTTAATTGCTCATTTGTAAAATT
GTCCTAATCTTTCCTAGCTTTTTAATAGTTAATATTAGAAACTCTTTAATAGTTTTCCTTTCAGTTTGTGAGCTC
TTCTCTGTCGCCCTGAAGGGTCACTGTATTCTGTATGAATGCATGGCATGATACAACTAATTTAAGAGTCTTTTA
TAAATAAAGTTTGCATTAACTATACCTG

FIGURE 2824

GKPGSTMGDDSEWLKLPVDQKCEHKLWKARLSGYEEALKIFQKIKDEKSPEWSKFLGLIKKFVTDSNAVVQLKGL
EAALVYVENAHVAGKTTGEVVSGVVSKVFNQPKAKAKELGIEICLMYIEIEKGEAVQEELLKGLDNKNPKIIVAC
IETLRKALSEFGSKIILLKPIIKVLPKLFESREKAVRDEAKLIAVEIYRWIRDALRPPLQNINSVQLKELEEEWV
KLPTSAPRPTRFLRSQQELEAKLEQQQSAGGDAEGGGDDGDEVPQIDAYELLEAVEILSKLPKDFYDKIEAKKWQ
ERKEALESVEVLIKNPKLEAGDYADLVKALKKVVGKDTNVMLVALAAKCLTGLAVGLRKKFGQYAGHVVPTILEK
FKEKKPQVVQALQEAIDAIFLTTTLQNISEDVLAVMDNKNPTIKQQTSLFIARSFRHCTASTLPKSLLKPFCAAL
LKHINDSAPEVRDAAFEALGTALKVVGEKAVKPFLADVDKLKLDKIKECSEKVELIHGKKAGLAADKKEFKPLPG
RTAASGAAGDKDTKDISAPKPGPLKKAPAAKAGGPPKKGKPAAPGGAGNTGTKNKKGLETKEIVEPELSIEVCEE
KASAVLPPTCIQLLDSSNWKERLACMEEFQKAVELMDRTEMPCQALVRMLAKKPGWKETNFQVMQMKLHIVALIA
QKGNFSKTSAQVVLDGLVDKIGDVKCGNNAKEAMTAIAEACMLPWTAEQVVSMAFSQKNPKNQSETLNWLSNAIK
EFGFSGLNVKAFISNVKTALAATNPAVRTAAITLLGVMYLYVGPSLRMFFEDEKPALLSQIDAEFEKMQGQSPPA
PTRGISKHSTSGTDEGEDGDEPDDGSNDVVDLLPRTEISDKITSELVSKIGDKNWKIRKEGLDEVAGIINDAKFI
QPNIGELPTALKGRLNDSNKILVQQTLNILQQLAVAMGPNIKQHVKNLGIPIITVLGDSKNNVRAAALATVNAWA
EQTGMKEWLEGEDLSEELKKENPFLRQELLGWLAEKLPTLRSTPTDLILCVPHLYSCLEDRNGDVRKKAQDALPF
FMMHLGYEKMAKATGKLKPTSKDQVLAMLEKAKVNMPAKPAPPTKATSKPMGGSAPAKFQPASAPAEDCISSSTE
PKPDPKKAKAPGLSSKAKSAQGKKMPSKTSLKEDEDKSGPIFIVVPNGKEQRMKDEKGLKVLKWNFTTPRDEYIE
QLKTQMSSCVAKWLQDEMFHSDFQHHNKALAVMVDHLESEKEGVIGCLDLILKWLTLRFFDTNTSVLMKALEYLK
LLFTLLSEEEYHLTENEASSFIPYLVVKVGEPKDVIRKDVRAILNRMCLVYPASKMFPFIMEGTKSKNSKQRAEC
LEELGCLVESYGMNVCQPTPGKALKEIAVHIGDRDNAVRNAALNTIVTVYNVHGDQVFKLIGNLSEKDMSMLEER
IKRSAKRPSAAPIKQVEEKPQRAQNISSNANMLRKGPAEDMSSKLNQARSMSGHPEAAQMVRREFQLDLDEIEND
NGTVRCEMPELVQHKLDDIFEPVLIPEPKIRAVSPHFDDMHSNTASTINFIISQVASGDINTSIQALTQIDEVLR
QEDKAEAMSGHIDQFLIATFMQLRLIYNTHMADEKLEKDEIIKLYSCIIGNMISLFQIESLAREASTGVLKDLMH
GLITLMLDSRIEDLEEGQQVIRSVNLLVVKVLEKSDQTNILSALLVLLQDSLLATASSPKFSELVMKCLWRMVRL
LPDTINSINLDRILLDIHIFMKVFPKEKLKQCKSEFPIRTLKTLLHTLCKLKGPKILDHLTMIDNKNESELEAHL
CRMMKHSMDQTGSKSDKETEKGASRIDEKSSKAKVNDFLAEIFKKIGSKENTKEGLAELYEYKKKYSDADIEPFL
KNSSQFFQSYVERGLRVIEMEREGKGRISTSTGISPQMEVTCVPTPTSTVSSIGNTNGEEVGPSVYLERLKILRQ
RCGLDNTKQDDRPPLTSLLSKPAVPTVASSTDMLHSKLSQLRESREQHQH

FIGURE 2825

AGACGTTTCCCGCCGGCGGGAGCTGTGGCTGTGATTGAGAGAGGGGTTAGAGGCGGGTCCCAGCGCTGCCGCACC
ATGGCGGACCAGCTTTATCTGGAAAATATAGACGAGTTCGTCACGGACCAAAACAAGATCGTGACATACAAATGG
CTGAGCTATACACTAGGGGTTCATGTTAACCAGGCCAAACAGATGCTGTATGATTATGTTGAAAGGAAACGAAAA
GAAAATTCAGGAGCCCAACTGCATGTTACCTACTTGGTGTCTGGCAGTCTCATTCAGAATGGACATTCCTGCCAC
AAGGTTGCAGTAGTGAGAGAAGATAAATTGGAAGCAGTGAAGTCCAAGCTAGCTGTGACTGCCAGCATCCATGTG
TACAGCATCCAGAAAGCCATGCTAAAGGACAGTGGGCCTCTGTTCAATACTGACTATGACATCCTTAAAAGCAAC
TTGCAGAACTGCAGCAAATTTAGTGCTATACAATGTGCAGCTGCCGTCCCTAGAGCTCCTGCTGAATCCTCTTCG
TCTTCCAAAAAGTTTGAGCAGTCACATCTTCACATGTCAAGTGAGACACAAGCCAACAATGAGCTGACCACCAAT
GGTCATGGCCCACCTGCATCCAAGCAGGTTTCCCAGCAGCCCAAAGGAATTATGGGAATGTTTGCCTCCAAAGCT
GCTGCTAAAACCCAAGAAACCAACAAGGAAACGAAAACAGAGGCTAAAGAAGTAACAAATGCATCTGCAGCAGGC
AACAAGGCACCAGGGAAAGGGAATATGATGAGCAACTTTTTTGGAAAAGCTGCTATGAATAAATTTAAAGTCAAT
TTGGACTCAGAACAAGCAGTGAAAGAAGAAAAAATAGTGGAGCAGCCTACAGTGTCTGTCACGGAACCAAAGCTG
GCAACTCCTGCAGGCCTGAAAAAATCCAGCAAAAAAGCAGAGCCTGTTAAGGTGCTGCAGAAGGAAAAAAAAAGG
GGGAAGCGAGTAGCATTATCTGATGATGAGACAAAGGAAACTGAAAACATGAGGAAAAAGAGGAGAAGAATCAAA
CTTCCTGAATCTGATAGCAGTGAAGATGAAGTCTTTCCAGACTCTCCTGGGGCTTATGAAGCTGAGTCACCATCC
CCACCTCCTCCTCCGTCTCCACCTCTTGAACCAGTGCCAAAGACTGAGCCTGAACCTCCTTCTGTCAAGAGCTCA
AGTGGAGAAAACAAAAGAAAACGAAAACGCGTACTAAAATCTAAAACTTACCTGGATGGGGAAGGCTGCATAGTG
ACTGAAAAAGTCTACGAGAGTGAATCCTGCACAGATAGTGAAGAGGAGCTTAACATGAAGACATCCTCAGTACAC
AGACCCCCTGCCATGACTGTGAAAAAAGAACCCAGAGAGGAACGAAAGGGCCCCAAGAAAGGGACTGCTGCTCTG
GGCAAAGCCAACAGACAGGTGTCCATTACTGGCTTCTTCCAGAGGAAA**TAA**ACTGCCATCTCTGGTAGATCAGAG
ACTTGGAGTGGTCAAGGGAGAAGACCAAGAAATGTACTCCTCACTTACTATGTAAGTTCATCTAGATCTCCACCT
CACCTGTATCAAAAGACTGTTCTTTCATCCTGTGAGGTTTATACTATTTCTGGTTTTTAACCAAAAGGAAATCAT
CTGGAAGCAGGAGGCAAAAAGCTGTTACCTTCTAATGACATTTAAAAAGCACAGTCTTTGACCTGTCCAGGAGAA
GGATTTACTCCAAAATTATACTGGAACAGTTTTCAGAATTCTCACTGAAGCCATTTAGTGGCTAACCCACTGTGC
TCCACTCACCCTATGCCCTGGTCCGCATATGGCACAGGAATTATTCCTTCTTGTTCCTCTGTATTCTAAGAATTC
ATGTGGGTGTTTCTTATCCTTACATTCTGCTGGATACGTTTACCCCTCTTGTCTTCCTGCAGTACCACACTTCTG
TCCCCTAACCTCCTGAGGCTGTTCTCTGTAAGTCTTTTAAGTTTTGGTTGGACTAAAGGCTGAAGTGAAAATCTC
CCTGTAATCCTCTTCCTCCATTATGCAGTACACGGACACCTGGCTACAGACCAGGACGTGGCTTGTGTTCTGTTC
CTTTCACAAAAGCTCTCTGGGACCTTCACTTGCAATTAGTGGTTAGGGAAAAGCCTCAGGCAGAACACAAATAGA
AATTTAATGATGTGTTCAACTCCACCAGAAATTACCTCGAGTCAGCATTGACGATATTGGAGGAGCTGCCGTGCT
GCTGATACGGGGTGTGCTTTATGCTGCTCTTTGCGGTTTGTTGATCCCCTCCTCCCCCACTCTCAATACCTAGAG
AGTGAAACCCGTACAATGAGATAAAGACTAAAAAGAGAAATCCCTTCCTATATACAGTGTGCTACATTTACAAAA
AATTTCTCCTTAAGAAAACAGAATATTCAAAAACAGCACTTTTCCAGGAAGTTAGTGAGGAAGATAAGGCACACA
TTTATTTATAAATGGATGTTGCTCCTTTGTATTTTTAGCTTCCCTATTTGCTTAAAAGTACAGGCTCCCTAAGAG
AGGATGGAGAGGGAGAGACTGAATTGTTAGTAGGTCTAAACATCAAAGAAAACATTTTTATTAGTTACTTATGGA
AAATCATCTATTACAATGATAACCTTCAAGTGACTTCCATTATGGCTGGACAGGCGGTGAGCTCAGTGGATTGCA
GTGGTGTGCTGGTGATTTTGCACAGTGAGCTCTGCGGAAGGGGTCAGGCTCAACTGCTGATGTGTCTCACACGTA
GCAGACAAGGGGTGTCTGACTGGCTTCTTTTGCCTCAAGATGGTGTATGTCGTAAGTGATGCAATCAGCTGTCTG
CTTTTTAAGGTTGGGATTGTGCTGACTTTGGGATTAACATGAGCTTCTTTAGCAACCAAGCATGAACTTGATTAA
GACCAGAAGTTTGGGAGATGAGTCCTGGCATTATGTCTAGGACTAAAGCAGTGGCTTTGTATAGCAAGCTGAGTA
AAGGTTGACATATTCCAAAACCCTTCTTTTTAAAATGAAAAAGGATGGAGAGAAGGATGGAAAGCCTGGACTTAA
ACCTTTAGAAAAAACTTCTGGAGAGAAATCCCTTTTAAACAGTTACTTTTGTCATTGCCTCTGGTCATTTGTCTA
AATAGGAATGGAAAATTAAAAGAAAAGCAACAATCCAATCTTTTTTCTAAAAATTATGCTGGGGTCTCGACTAAA
ACTGAATTTGAATTGGAAAATTCTGGTGTTGGTTGGAGTTCCATCTTGCAAGGGATAATACAAATCCTATGATCT
CTATGCCCAATATGCTGCCTCAACTCTGAGCTGTCTGCAAGGCTTAGTAAGTATTGAGTGGTGTTTTTTTTTCT
TTTTATACAATACCATGTTAACCACATGAGTTAAATAAATTTGAGAAGTTGTTTT

FIGURE 2826

RRFPPAGAVAVIERGVRGGSQRCRTMADQLYLENIDEFVTDQNKIVTYKWLSYTLGVHVNQAKQMLYDYVERKRK
ENSGAQLHVTYLVSGSLIQNGHSCHKVAVVREDKLEAVKSKLAVTASIHVYSIQKAMLKDSGPLFNTDYDILKSN
LQNCSKFSAIQCAAAVPRAPAESSSSSKKFEQSHLHMSSETQANNELTTNGHGPPASKQVSQQPKGIMGMFASKA
AAKTQETNKETKTEAKEVTNASAAGNKAPGKGNMMSNFFGKAAMNKFKVNLDSEQAVKEEKIVEQPTVSVTEPKL
ATPAGLKKSSKKAEPVKVLQKEKKRGKRVALSDDETKETENMRKKRRRIKLPESDSSEDEVFPDSPGAYEAESPS
PPPPPSPPLEPVPKTEPEPPSVKSSSGENKRKRKRVLKSKTYLDGEGCIVTEKVYESESCTDSEEELNMKTSSVH
RPPAMTVKKEPREERKGPKKGTAALGKANRQVSITGFFQRK

FIGURE 2827

CCCGGGACGGCAGCAGGTGGGCTGCACACGGACTCTGGGACAAGTCGAGCTGAAAACCGCGGAGCAGGGGTGGGG
TGGAGACGCCCGCGACGCCAAGGCTGGGGTCCCGGAACACGCTGGGAGGAGGGTGGAAGGCAACCTCGGGGAAAC
TGGGAAAGGCGGCCTGGACTTCGGGAACACCGCGTACCTGCGGGGGCACAGCCCACCCGAGCGAACGGGCTCCAA
AGGGAAGGTCCCGCGGTGCCCACCGGCAGAGCTCAGGGGGTGGTGCGCCCGGCCCTTCTGCGGCGCACAGCCCAG
CCCAGGAACGCGGGCGGTGCGGACTCAGCGGGCCGGGTGCAGGCGCGGAGCTGGGCCTCTGCGCCCGGCCCGACC
TCCGTCTATAAATAGAGCAGCCAGTTGCAGGGCTCCATTCTGCTTTCCAACTGCCTGACTGCTTGTTCGTCTCAC
TGGTGTGAGCTCCAGCATCCCCTTTGCTCGAA**ATG**GACCCCAACTGCTCTTGCGCCACTGGTAAGGGAAGCTCTG
CGCCCTGGAATCCCCATTTCCCAGCCCTATTACAGAGGGTCTCTGGGTTTCAGGAAGTCGCATTTTAAGTTCTGA
GCGACGGGGACTCCAGTACTTCGTTAGATGCTTTCTTCCTGATCACGCCCCTGAGAGCATTGCCCTCATCCCTGG
GCCTCTACGTCAGAGTTAAGAATACTGAGGCTCAAGGCTGAACTGCTCCACATCACCCAGTTGGTCATGGGCCTG
CTGGCTGGGCCCCAGTGCTCTGTCCAGGCTCTGAGCAATCAGTGTGGTTGGGGGTGCTGGAAACATTGACTCTTC
AGAGTTCAGGACAGAAGGTTCTGGCTCGCAGTCTCAATATTCCTGGGTTGTATGTGCACGTGGGACCTTCCTGGT
GCGGTAAAACAGGAGGGTCCTTGCCCCTTCCCCAGCGTTAGTGAGAGGACATGGGGCTTCTGTTCCTCTGTCCTG
AGTGGGAAAGGAGCTCTGAGGGCTGGCCCTGCACAGAGGAGGGGGCACTGGAGACTCACTGACCCACTGCTGTAC
CTTCTGCATCTCACTCACTGCCCACTGCGTTTTCCTCTTCCTTGTAGGTGGCTCCTGCACGTGCGCCGGCTCCTG
CAAGTGCAAAGAGTGCAAATGCACCTCCTGCAAGAAGAGTGAGTGCGGGGCCATCTCCAGGAATCTGGGGCTGTG
GCTCAGGTTGGGAGGGAACTCAAGGCTGGCCCTGAGTGCATCCTTCTGGGGAACTGGGCTTTCTTTGCCCTCATT
GCCCGTGTCATTCCCTCTCCAGGCTTTCTGCCCTAAATTCAGATGGGGCAGGACAGCATTTTTCTCGTGGGACAC
AAACCCCAACTGTACCCCCTATGGTTTCAGAACAGAGCTGTGCCAGACGAAAAAAAGCATCCTCTGGGTCTGGGT
TCTGAGCTCGAGCCAGGCTTGCTATTAGGGCAGGGAGGTGCCCGGTCAAGTCTACTGCCACCTCTCACTCTCCCC
TTCTTCCCCAGGCTGCTGTTCCTGCTGCCCCGTGGGCTGTGCCAAGTGTGCCCAGGGCTGCGTCTGCAAAGGGGC
ATCGGAGAAGTGCAGCTGCTGTGCC**TGA**TGTGGGAACAGCTCTTCTCCCAGATGTAAATAGAACAACCTGCACAA
CCTGGATTTTTTTAAAAATACAACACTGAGCCATTTGCTGCATTTCTTTTTATACTAAATATGTGACTGACAATA
AAAACAATTTTGACTTTAATCTTACTCCCTGTTCTTCT

FIGURE 2828

MDPNCSCATGGSCTCAGSCKCKECKCTSCKKSCCSCCPVGCAKCAQGCVCKGASEKCSCCA

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FIGURE 2829A

ACAATGTGGTCCCGAAGCGGCCAGCGCCGGGAGCTGCAGCGCTGAGACCCCCAGCCCGCCCCCTCGGGCTCCCGG
CCGGGGCCCCATCATGTTCTCCAGGAAGAAACGAGAGCTCATGAAAACCCCTTCCATCTCGAAAAAGAACCGCGC
GGGAAGCCCCAGCCCGCAGCCCTCGGGGGAGCTGCCCAGGAAGGATGGGGCTGACGCGGTGTTCCCCGGACCAAG
CCTGGAGCCGCCCGCTGGGTCCTCCGGCGTCAAGGCCACAGGGACCCTCAAGCGGCCCACCAGCCTGAGCCGCCA
CGCCAGCGCGGCTGGCTTCCCCCTGTCGGGTGCTGCCTCCTGGACACTGGGCCGGAGCCACCGGAGCCCACTGAC
AGCCGCCAGCCCGGGCGAGCTGCCCACCGAGGGTGCCGGCCCGGACGTCGTCGAGGACATCTCCCATCTGCTGGC
GGACGTGGCCCGCTTCGCTGAGGGCCTTGAGAAACTTAAGGAGTGTGTGTTGCGTGACGACCTCCTTGAGGCCCG
CCGCCCGCGGGCCCACGAGTGCCTGGGTGAGGCTCTGCGTGTCATGCATCAGATCATCTCCAAGTACCCGCTGCT
GAACACCGTGGAGACGCTCACCGCAGCCGGCACCCTCATTGCCAAGGTCAAAGCCTTCCATTATGAGAGCAACAA
TGATCTGGAGAAACAGGAGTTCGAGAAGGCCCTGGAGACGATTGCTGTGGCCTTCAGTAGCACAGTGTCCGAGTT
CCTCATGGGTGAAGTGGACAGCAGCACCCTCCTAGCAGTGCCTCCTGGGGACTCGAGCCAGTCCATGGAAAGCCT
GTATGGACCGGGCAGTGAGGGCACGCCTCCCAGCCTGGAAGACTGTGACGCCGGCTGCCTGCCCGCCGAGGAGGT
GGACGTGCTGCTACAGCGCTGTGAGGGGGGCGTGGATGCCGCACTGCTGTATGCCAAGAACATGGCCAAGTACAT
GAAGGACCTCATCAGCTACCTGGAGAAGCGGACGACGCTGGAGATGGAGTTTGCCAAGGGCCTGCAGAAGATCGC
TCACAACTGCAGACAGAGCGTCATGCAGGAGCCCCACATGCCGCTCCTGTCCATCTACTCGCTGGCCCTGGAGCA
GGACCTGGAGTTCGGCCACAGCATGGTGCAGGCGGTGGGCACCTTGCAGACCCAGACCTTCATGCAGCCCCTGAC
CCTGCGGCGGCTTGAACACGAGAAGCGCAGGAAGGAGATCAAGGAGGCCTGGCACCGTGCCCAGAGGAAGCTGCA
AGAGGCGGAGTCCAACCTGCGCAAGGCCAAGCAGGGTTACGTGCAGCGCTGCGAGGACCACGACAAGGCTCGCTT
CCTCGTGGCCAAGGCGGAGGAGGAGCAGGCTGGCAGCGCGCCGGGAGCAGGCAGCACGGCCACCAAGACCCTGGA
CAAGCGGCGGCGGCTGGAGGAGGAGGCCAAGAACAAGGCGGAGGAAGCTATGGCCACCTACCGCACCTGCGTGGC
CGACGCGAAGACGCAGAAGCAGGAGCTGGAGGATACCAAGGTGACGGCGCTGCGGCAGATCCAGGAGGTCATCCG
GCAGAGCGACCAAACCATCAAGTCGGCCACGATCTCCTACTACCAGATGATGCATATGCAGACGGCGCCGCTGCC
CGTGCACTTCCAGATGCTGTGTGAGAGCAGCAAGCTGTATGACCCAGGCCAGCAGTACGCCTCCCACGTGCGCCA
GCTGCAGCGGGACCAGGAGCCCGATGTGCACTACGACTTTGAGCCCCACGTCTCCGCCAACGCCTGGTCCCCCGT
CATGCGTGCCCGGAAGAGCAGCTTCAACGTGAGTGATGTGGCGCGGCCGGAGGCTGCCGGGAGCCCCCCAGAAGA
AGGCGGGTGCACTGAGGGCACACCTGCCAAGGACCACAGGGCCGGGCGAGGACACCAGGTTCACAAGTCATGGCC
GCTCTCGATCTCAGACTCGGACAGTGGGCTGGACCCCGGCCCTGGCGCAGGGGACTTTAAGAAGTTCGAGCGGAC
GTCATCCAGTGGTACCATGTCGTCCACGGAGGAGCTGGTGGACCCAGACGGTGGAGCCGGGGCTTCAGCCTTTGA
GCAGGCTGACCTCAACGGCATGACCCCCGAGCTGCCGGTGGCCGTGCCCAGTGGACCGTTCCGCCACGAGGGGCT
GTCCAAGGCGGCCCGTACTCACCGGCTCCGGAAGCTCCGCACGCCCGCCAAGTGCCGCGAGTGCAACAGCTACGT
CTACTTCCAGGGTGCTGAGTGTGAAGAGTGCTGCCTGGCCTGCCACAAGAAATGTCTGGAGACGCTGGCCATACA
GTGCGGGCACAAGAAGCTGCAAGGCCGCCTGCAGCTGTTCGGCCAGGACTTCAGCCACGCGGCCCGCAGCGCCCC
CGACGGCGTGCCCTTCATCGTCAAGAAGTGCGTCTGCGAGATCGAGCGGCGGGCGCTGCGCACCAAGGGCATCTA
CCGGGTCAATGGGGTAAAGACACGCGTGGAGAAGCTGTGCCAGGCCTTCGAGAACGGCAAGGAGCTGGTCGAGCT
GTCGCAGGCCTCGCCCCACGACATCAGCAACGTCCTCAAGCTCTACCTGCGTCAGCTTCCCGAGCCGCTCATCTC
CTTCCGCCTCTACCACGAGCTCGTAGGGCTGGCCAAGGACAGCCTGAAGGCAGAGGCCGAGGCCAAGGCGGCGTC
CCGGGGCCGGCAGGACGGCTCGGAGAGCGAGGCAGTGGCGGTGGCCCTGGCAGGTCGGCTGCGGGAGCTCCTGCG
GGACCTGCCGCCTGAGAACCGGGCCTCGCTGCAGTACCTGCTGCGTCACCTACGCAGGATCGTGGAGGTGGAGCA
GGACAACAAGATGACCCCCGGGAACCTGGGCATCGTGTTCGGGCCCACGCTGCTTCGGCCACGGCCCACCGAGGC
CACCGTGTCCCTCTCCTCCCTGGTGGATTATCCCCATCAGGCCCGCGTCATCGAGACTCTCATCGTCCACTACGG
CCTGGTCTTCGAGGAGGAGCCGGAGGAGACCCCCGGGGGCCAGGACGAGTCATCCAACCAGCGAGCTGAGGTAGT
CGTCCAGGTGCCGTACCTGGAGGCGGGCGAGGCGGTGGTCTACCCGCTGCAGGAGGCGGCGGCGGACGGGTGCAG
AGAATCCCGAGTTGTGTCCAACGATTCGGACTCGGACCTAGAGGAGGCCTCCGAGCTGCTGTCCTCATCGGAGGC
CAGTGCCCTGGGCCACCTCAGCTTCCTGGAGCAGCAGCAGAGCGAGGCCAGCCTAGAGGTGGCTTCTGGCAGCCA
CAGCGGCAGTGAGGAGCAGCTGGAGGCCACAGCCCGGGAGGACGGGGACGGGGACGAGGACGGCCCGGCCCAGCA
GCTCTCAGGATTCAACACCAACCAGTCCAACAACGTGCTGCAGGCCCCACTGCCCCCCATGAGGCTCCGTGGCGG
GCGGATGACACTGGGCTCCTGCAGGGAAAGGCAGCCGGAATTCGTGTGAGCTGGGGTGGGGCTGGGACCACAGGT
GGCTTCTCTCTTGCCTGCTCCTGTCCCTCCAGCACGTCCCCTGCACCACGGCATAGCTTAGGTGCGCCGTCCTGG

FIGURE 2829B

GGTCGCTGCCGAGAGCGCCTGGACTTCGACGTCCCACCAGCGGGCGCCTCCTCCCAGAGGCTTCCAGGAGCACGA
GGGCCTTGCGGCACAGGACTGTGCCCTGTGCTGTCCCCTGCACCCCGGCTCAGCTGAGCTGGGGAACACTGCTGT
CGTGTGAAGTCACAGTGGCCTTGTTGGTGCCCACAGGGCTGTGTGGATGGAGGAAGCTGTCCCTGCCCAGTGCAT
CCCCCAGGTCATCACGGGGACGCAGGAGGCAGGCCCTGCCCTGCCCTCTCCTCACAGGTCTGTTGCAGGGACTCC
AGAAACCATTCTGGGAGCCGTGGATGGGGGCGGAGCTGGGGTTTGGTGCAGTTTCCAGGGTGCAGTACAGCAGGG
CCTGAATACTGGCCCTGGACTCCCTTTTCCAGAACACCAGGTGTGGCCACCTGGGGCTCAGGTACACAGTGGGGT
CTCTCGGAAGCCACCGTGTGGTTCTTTCACAGGCACGTTTATTTTGCTGAAATAAAAAGTTTTTAATCGGG

FIGURE 2830

QCGPEAASAGSCSAETPSPPPRAPGRGPIMFSRKKRELMKTPSISKKNRAGSPSPQPSGELPRKDGADAVFPGPS
LEPPAGSSGVKATGTLKRPTSLSRHASAAGFPLSGAASWTLGRSHRSPLTAASPGELPTEGAGPDVVEDISHLLA
DVARFAEGLEKLKECVLRDDLLEARRPRAHECLGEALRVMHQIISKYPLLNTVETLTAAGTLIAKVKAFHYESNN
DLEKQEFEKALETIAVAFSSTVSEFLMGEVDSSTLLAVPPGDSSQSMESLYGPGSEGTPPSLEDCDAGCLPAEEV
DVLLQRCEGGVDAALLYAKNMAKYMKDLISYLEKRTTLEMEFAKGLQKIAHNCRQSVMQEPHMPLLSIYSLALEQ
DLEFGHSMVQAVGTLQTQTFMQPLTLRRLEHEKRRKEIKEAWHRAQRKLQEAESNLRKAKQGYVQRCEDHDKARF
LVAKAEEEQAGSAPGAGSTATKTLDKRRRLEEEAKNKAEEAMATYRTCVADAKTQKQELEDTKVTALRQIQEVIR
QSDQTIKSATISYYQMMHMQTAPLPVHFQMLCESSKLYDPGQQYASHVRQLQRDQEPDVHYDFEPHVSANAWSPV
MRARKSSFNVSDVARPEAAGSPPEEGGCTEGTPAKDHRAGRGHQVHKSWPLSISDSDSGLDPGPGAGDFKKFERT
SSSGTMSSTEELVDPDGGAGASAFEQADLNGMTPELPVAVPSGPFRHEGLSKAARTHRLRKLRTPAKCRECNSYV
YFQGAECEECCLACHKKCLETLAIQCGHKKLQGRLQLFGQDFSHAARSAPDGVPFIVKKCVCEIERRALRTKGIY
RVNGVKTRVEKLCQAFENGKELVELSQASPHDISNVLKLYLRQLPEPLISFRLYHELVGLAKDSLKAEAEAKAAS
RGRQDGSESEAVAVALAGRLRELLRDLPPENRASLQYLLRHLRRIVEVEQDNKMTPGNLGIVFGPTLLRPRPTEA
TVSLSSLVDYPHQARVIETLIVHYGLVFEEEPEETPGGQDESSNQRAEVVVQVPYLEAGEAVVYPLQEAAADGCR
ESRVVSNDSDSDLEEASELLSSSEASALGHLSFLEQQQSEASLEVASGSHSGSEEQLEATAREDGDGDEDGPAQQ
LSGFNTNQSNNVLQAPLPPMRLRGGRMTLGSCRERQPEFV

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FIGURE 2831

TTAGGTCCCCTCAATGGGGACACAGCTATAACTGTCCAGCTCTGTGCATCAGAGGAGGCTGAGCGGCACCAGAAG
GATATAACCAGAATTCTCCAGCAACATGAGGAGGAAAAGAAGAAATGGGCACAACAGGTGGAGAAGGAAAGGGAG
CTAGAGCTTCGAGACAGACTGGATGAGCAGCAAAGGGTCCTGGAAGGAAAGAATGAAGAGGCCCTGCAAGTCCTC
CGGGCCTCATATGAACAGGAGAAAGAAGCGCTTACCCACTCTTTCCGGGAGGCCAGTTCTACCCAGCAGGAGACC
ATAGACAGACTGACCTCACAGCTGGAGGCTTTCCAGGCCAAAATGAAGAGGGTGGAGGAGTCCATTCTGAGCCGA
AACTATAAGAAACATATCCAGGATTATGGGAGCCCCAGCCAGTTCTGGGAGCAGGAGCTGGAGAGCTTACACTTT
GTCATCGAGATGAAGAATGAGCGTATTCATGAGCTGGACAGGCGGCTGATCCTCATGGAAACAGTGAAAGAGAAA
AATCTGATATTGGAGGAAAAAATTACGACCCTGCAACAGGAAA**ATG**AGGACCTCCATGTCCGAAGCCGCAACCAG
GTGGTCCTGTCAAGGCAGCTGTCAGAAGACCTGCTTCTCACGCGTGAGGCCCTGGAGAAGGAGGTGCAGCTGCGG
CGACAGCTCCAGCAGGAGAAGGAGGAGCTGTTGTACCGGGTCCTTGGGGCCAATGCCTCGCCTGCCTTCCCTCTG
GCCCCTGTCACTCCCACTGAGGTCTCTTTCCTCGCCACATAGGGTGCAGGGCCTGGGCCCACCACGACGCCTGAA
GTCACAGCTCCTTCCAAGGTTTTTCTGGAGAAGACAGCAGGAGCCTCTCAGTTCTTTTCCAGGAAGGAACGAGGG
TGGGAGCGAGATGGAGATCCTGGGTGTGTGCCCAGTGAGCCCTGGGGCCTTGAGTTACATGGAATCACCCACAGG
GTTTTGGAGGCCCCGAGAAGCGTCTTCCCTTGAGTTGGCCAAGGGAATAAGCAAGAGGAGACATTTCCTCCCTGC
CCCAGCACTCTGTCCCAATCCGAGAAGTTCCGAGGCTTTCCCGGGGCAGTCTGTGTCACGCTGGCCATTTGACAT
AAAGGAGACAGCCCCTGGTCCCAGCTTGTCAGCTCTGCTGCCGACTTGC**TGA**CTTATCAACTTCCTCTAGGTGTT
TCCACTCCACCCTGGCCTGCTCAGAGCCTCAGTTTACCCCTGCATTAAAATGGTGGGGGGACTGGTCAAAGGACT
CTTATGTCACTGCAGTGTCCCATTCTAGGATTGTCTGAAGGCCAGAGTAGGGGTTGGGGGGAGTGTGGACAAACC
CCGCAAATCAGAGTGGGGAAGGTGAGTGGTAGAGAGGGGGTCTCTGAAGGCCCTTGGGGCTGACAGGGCCAGGCA
GCCTCCCCAGCTGAGGCATCATTCCTGGGCCAGAGTCGTGTCCACCAAGGGACAGTAGCCAGAGCTCCTCTTCCT
TTACCAGGCAAGGTGCATCCCCTCAGCCCTCCTGGCCCTTCAGTCTTGGTGCCACCTGGGCACAGGGGCAAGCTT
GGTGGTTGTGAGTCCATTCATCTATCAGAGCTGGAACCTCATCCCTGCACAGATGAGGAAACCAAGGCATGGAGC
AGTTCCCAGAGTCGAATCTAGTTCTCATCTGTCATCCGGGTCTTATCCTTTGCTCTGTTTTTCTCTTCAGGCTCT
GGAAAATCAGATCTGTGACTTAATCTTCCTCTCCCTGGCCCTCACCCACTTAGTTTCTTTTTCATTCCTGCTCCC
TGCCTTAACTCCTCCTCCCACTGCCCCTGATCCCAGGCCCAGGCTTTTACAACCTGGTGCTCAGCTTCCCCATCA
GTGAAAAGGGGTGGCTAGAGTAACTAACCTCAGCAGGCCGTCCAGTCCTGATAGTCTGTGGATTTCGGATCCTTC
TCAGGAAGCTTCATGTCTAATGGAGACTATAATTATAACTCCTGTTCTGCGTAGAGCATTTGCATCAAAGGCTTT
CCATACCCCTCCCTCCCCTGGTCCTCATAAGATCCTTGAAGCAGGTTCCTATTCCTCATTGGCAACATGGCAAAC
AGATCACAGGAGTCAAAGGGCCTTGCTCAAGGTCCCCAGCTTCAGCCCCAGGCCCTAAGCCAGCGTCAGAACAGT
CAATCTGCATTTTTCATCAGTCATTCTATAGTGACATCATCCCAGACTGCCTTCTGTATTCCCCTGTGTACAGTC
TCCTTCTGTTTCTAGGTTTAGAAGTTCAGAGGTGACTGTGTTTCTCCATTTCCACAGCCAAATGGGGGAAGAGGT
GAGGCTAGGGGAGTGCTGTGCTGATTCTCCAGCCATGGTCAGACAGGTCACCCAGGAGCCTCGAGGAAAGCCCTG
GAGGGAATCACATGTGTACTTTTTCATGAAGCTTTTTGCAAAGCACATCTGCGATACACTAGTTTATTGAACTAA
TGTCCAGGAGTAGACGTGATTGGTGGCCAAGTTATTTGGGGACACCTAAACAGATCAGTGACCTGAATGACTTCT
CAGAACCTTTAATATGCCAATGTGTGTGGCAAACTTACAAGAAGGGAGCTAAGTATCCAGCCTCTCCCAAACCTC
TTTGAACAAAGCTTCTGTCCCTCCCACACCTCTCACCTCACAGGCACATCAGGCTGCAGAATGCGCTTTAGAAAG
CATTGTTTTAGTCCAGGCACAGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGTGGGTGGATCACA
AGGTTGGGAGATTGAGACCATCCTGGCTAACACAGTGAAACCCTGTCTCTACTAAAAAAATACAAAAAATTCGCT
TGGCGTGGTGGTGGGCGCCTGTAGTCCCAGCAGCTTGGGAGGCTGAGGCTGGAGAATGGTGTGAACCCAGGAGGC
GGAGCTTGCAGTGAGCCATGATCGCGCCACTGCACTCCAGCCCGGGTGACAGAGCAAGACTCCGTCTC

FIGURE 2832

MRTSMSEAATRWSCQGSCQKTCFSRVRPWRRRCSCGDSSSRRRRSCCTGSLGPMPRLPSLWPLSLPLRSLSSPHR
VQGLGPPRRLKSQLLPRFFWRRQQEPLSSFPGRNEGGSEMEILGVCPVSPGALSYMESPTGFWRPREASSLELAK
GISKRRHFLPAPALCPNPRSSEAFPGQSVSRWPFDIKETAPGPSLSALLPTC

FIGURE 2833A

ACCCACGCGTCCGGCCGCCGAAGGGGACTGTTTGCTCCTACGGGCTGTAGATGGAGCTGTCCGGCCCCGGAGAGG
GGGAAGGCGCCTGGAAAACGTTCTTCTTCTCCCTGGCCGACCCGAGCGGGGAACAGCACTCCCAGGATGCAGTTT
GTGTCAACACGGCCGCAGCCTCAGCAGCTGGGCATCCAGGGCCTGGGGCTGGACAGCGGGAGCTGGAGCTGGGCC
CAGGCTCTGCCCCCGGAGCAGGTCTGCCACCAGGAGCCGGCGCTGCGCGGGGAAATGGCCGAGGGAATGCCGCCC
ATGCAGGCTCAAGAATGGGACATGGACGCCCGGCGGCCAATGCCTTTTCAGTTCCCACCCTTTCCAGATAGGGCA
CCTGTCTTCCCCGACCGCATGATGCGAGAGCCCCAGTTGCCCACAGCAGAGATCTCACTCTGGACTGTGGTGGCT
GCCATTCAGGCTGTGGAGAGGAAGGTGGATGCCCAGGCCAGCCAGCTGCTGAACCTGGAGGGGCGCACGGGGACA
GCCGAGAAGAAGCTGGCCGACTGTGAAAAGACGGCCGTGGAATTTGGGAACCACATGGAGAGCAAGTGGGCCGTG
CTGGGGACCCTGCTGCAGGAGTACGGGCTGCTGCAGAGGCGGCTGGAGAACTTGGAGAACTTGCTGCGCAACAGG
AACTTCTGGGTCCTGCGGCTGCCCCCGGGCAGCAAGGGGGAGGCCCCCAAGGTTCCAGTGACTTTTGTCGACATT
GCTGTGTACTTCTCCGAAGACGAGTGGAAGAACTTGGACGAATGGCAGAAGGAGCTTTATAACAACCTTGTTAAG
GAGAACTACAAAACCCTCATGTCCCTGGACGCGGAGGGCTCAGTCCCCAAGCCAGATGCTCCAGTCCAGGCTGAG
CCCAGGGAAGAACCTTGTGTGTGGGAGCAGCGCCACCCCGAAGAGAGAGAAATCCCAATGGATCCCGAAGCAGGA
GCAGAGCCCCTGGTGCCTGCGCAGGATGCGTCCTCCCAGGTGAAGCGTGAGGACACCCTGTGTGTCCGGGGTCAG
CGGGGCCTGGAGGAAAGAGCCATCCCTACGGAATCCATTACCGACTCCCCAATTTCTGCCCAGGACCTCTTGTCC
CGGATTAAACAGGAGGAGCATCAGTGCGTGTGGGATCAGCAGGATTTGGCAGACAGAGATATTCCCACGGATCCC
AATTCAGAGTCTCTCATCTCAGCACATGACATTTTGTCATGGATCAAGCAGGAGGAGCAGCCATACCCATGGGGA
CCACGCGACTCAATGGACGGAGAGCTTGGATTAGACTCTGGCCCTAGTGACAGCCTGCTGATGGTGAAGAACCCA
CCCCCGGCCCCGCCACAGCCCCAGCCCCAGCGCCAGCCACCGCAGCCGCAGCTGCAGTCGCAGCCCCAGCCCCAG
AGCCTGCCCCCCATCGCGGTGGCCGAGAACCCGGGCGGCCCCCCGAGCCGAGGGCTGCTGGACGACGGTTTCCAG
GTGCTGCCCGGGGAGCGTGGCTCCGGCGAGGCGCCGCCGGGTGGGGACCGCAGCACCGGGGGCGGCGGGGGCGAT
GGGGGCGGTGGGGGCGGCGGCGCGGAGGCGGGGACGGGGGCAGGCGGCGGCTGTGGCAGCTGCTGCCCTGGCGGG
CTGCGGCGGAGCCTCCTCCTGCACGGCGCCCGCAGCAAGCCCTACTCGTGCCCCGAGTGCGGCAAGAGCTTCGGC
GTGCGCAAGAGCCTCATCATCCACCACCGCAGCCACACCAAGGAGCGGCCCTACGAGTGCGCTGAGTGCGAGAAG
AGCTTCAACTGCCACTCGGGCCTCATCCGCCACCAGATGACGCACCGCGGCGAGCGGCCCTACAAGTGCTCGGAG
TGCGAGAAGACCTACAGCCGTAAGGAGCACCTGCAGAACCACCAGCGGCTGCACACGGGCGAGCGGCCTTTCCAA
TGTGCACTGTGCGGCAAGAGCTTCATCCGCAAGCAGAACCTGCTCAAGCACCAGCGCATCCACACGGGCGAGCGC
CCCTACACGTGCGGCGAGTGCGGCAAGAGCTTCCGCTACAAGGAGTCGCTCAAGGACCACCTGCGCGTGCACAGC
GGCGGCCCGGGCCCCGGCGCCCCACGGCAGCTCCCGCCGCCTCCTGAGCGAGACTAGGCTGGGCTGGGGGAGGG
CAGGGCCGGACGGAGTGGATCGGGGGCGGCCTGAGCACCAACCACCTTGCCGGGTGTCCTCAGCCACCGTCTGGA
AATCGGCAACAGGCATTGCACTCCGGTTGGGGGTCCCCCAGGGTGGGGCAGGGATCCCCCAGATCTGTCTGGTCT
GAATGGACGCCCAGCTCATCTAGGGTGGACCCAGCTGCTGGGGAAGAGCCAGGGGGACCGCGAGGAGCCGAGCGT
CCTCGGGCACCGCCCTCACACCTCCTCGAGTGCCCTGGGACCACTGGGCCACAGATGGTCATCAGGGGAAGCCAC
CAGGGAGTCCCGAAGCCCTTCTGAGATCAGGAAATCAGGTCCCAAGGTTAGGAGACGCCCTGAAAAAAAGTGAAG
GCCGAGGGATGTGCTAAGGGTAACACCTTCATGATGACAACACTGCCTCGCGTTTCAATAGCGCTTTATACTTTT
TTAAGTGTTTTCTATCCGTTATCCATTTCACCCTTGGCCTATCCCTCTCAGATAGGTGGGGTAGGATTTTCCTGG
TGACCGAGTAAAGTGAGAGGCAGGTGAGACGGTTCACCCAATCACACGGGAAGGGGCGCGCGCTGCCCAACCGCG
CTCTCCGCCTACCTCGCTGCTCGGGAAGCTGCTGGCCTGGCCCTCCTGGTCTCTCTTCCTTTCTGGTCTCTCTTC
CTTTCCTTGCTCTCACCCACGGATAAAACCAGAAGCGACAGGAGGCCAGCTCCTGGGGTTCCTGGGACCGGGAAC
AGATTGGCTACGGAACGCCCCAGGTTGTACATTCAGAGGGCTCTTTCTCCATGGGAGCTCCTGGTGCCGCCTTCG
GCCCCAGCCTGTCCCCAGCCCCTCAATCTGGTGCAGCAGCATCTTGTCACTGCACAACAGTGGCCTGGTCCCCCA
CAGGCAGTTAGGGCCCCAGGTCAGACCTCACCATGATGATTTGTTCCAGTTCTCCCAGGGCAGAGGGGCGAGGGA
GAGGCTTTTGCTGTGAGAGTAGCCGTCACGTGTCTCTTCCCAGCAGCGCCGGGCAAGTGGGTGCTAGAGTCTGAG
CCTCAGGCTCTCCTGCCCTGGGCCTCCCAATTGGTGCTATCTGTTACTGCCCGTGCTCACGGACATGGATACAGA
CCCTGCTGTGCTCCACACCCTGCAGGCGCCTCGGGAAGCGCCCAAAGGATTCCCCTTCACGTTGGTGCACCTGCT
CCATAGCTCCGGGCGCTGCGTCCCGAGGGGCCACAGTCTCCATTTCAGCGTCTTGCATGGCCTGGCACCGGGTGG
GGTGGTATGCCCCCTTGTTTGTGTCAAAAATGACTTTCCCTGCCCTTGCCGTGGGTCCGGCGTTCCTCCCAGCCG
GGATCACAGTGGGCAGCCGGCACCCGGCACCACTTTGGCGAGCGTCCTGCTTCCGCCCTCGCCCTCATCTACGCT

FIGURE 2833B

GCTCCGCTTTCCTCAGACCCCTTTTTGCCGTGCAAAGGAATTCTTGACATTAAATAAAAGGTATCCAGATTGCAG
ACTGCATGTTCACAGAGCTGGGGGTTCTCCAGCTTGCCTACAGTAAAGCCTCAATGAACTGG

FIGURE 2834

THASGRRRGLFAPTGCRWSCPAPERGKAPGKRSSSPWPTRAGNSTPRMQFVSTRPQPQQLGIQGLGLDSGSWSWA
QALPPEQVCHQEPALRGEMAEGMPPMQAQEWDMDARRPMPFQFPPFPDRAPVFPDRMMREPQLPTAEISLWTVVA
AIQAVERKVDAQASQLLNLEGRTGTAEKKLADCEKTAVEFGNHMESKWAVLGTLLQEYGLLQRRLENLENLLRNR
NFWVLRLPPGSKGEAPKVPVTFVDIAVYFSEDEWKNLDEWQKELYNNLVKENYKTLMSLDAEGSVPKPDAPVQAE
PREEPCVWEQRHPEEREIPMDPEAGAEPLVPAQDASSQVKREDTLCVRGQRGLEERAIPTESITDSPISAQDLLS
RIKQEEHQCVWDQQDLADRDIPTDPNSESLISAHDILSWIKQEEQPYPWGPRDSMDGELGLDSGPSDSLLMVKNP
PPAPPQPQPQRQPPQPQLQSQPQPQSLPPIAVAENPGGPPSRGLLDDGFQVLPGERGSGEAPPGGDRSTGGGGGD
GGGGGGGAEAGTGAGGGCGSCCPGGLRRSLLLHGARSKPYSCPECGKSFGVRKSLIIHHRSHTKERPYECAECEK
SFNCHSGLIRHQMTHRGERPYKCSECEKTYSRKEHLQNHQRLHTGERPFQCALCGKSFIRKQNLLKHQRIHTGER
PYTCGECGKSFRYKESLKDHLRVHSGGPGPGAPRQLPPPPERD

FIGURE 2835A

CCTCCAGGCCCAGAACGGAGCCGCCTTGGCCTCGGGGTCTCCCTACACCAACGGTCCTGTCCAAAATGCATTGCT
GTCTTCACAAGAGTCAGTGAGCCAAGGATACAATTTCCAGCTTCCAGGATCCTACCCTCATCCAATACCAGCAAA
GACTTTGATCCAGTCTCTGGCCAGTCTAACTATGGTGGTTCTCAGGGATCTGGGCAGACTCTTAATAGACCACCT
GTGGCCTCTAATCCAGTGACACCTTCGCTTCATAGTGGTCCTGCTCCCCGAATGCCATTACCTGCTTCTCAGAAC
CCAGCTACTACACCAATGCCTTCTAGTAGCTTTCTTCCTGAAGCCAACCTGCCACCACCTTTGAATTGGCAATAT
AACTATCCATCCACAGCCTCACAAACAAACCATTGTCCTCGTGCATCATCCCAACCAACTGTATCTGGAAATACA
AGTTTAACCACAAATCATCAATATGTTTCTTCTGGATATCCTTCACTTCAAAATAGCTTCATAAAGTCAGGTCCT
TCTGTACCTCCCTTAGTGAATCCACCTCTGCCTACAACTTTTCAACCAGGAGCTCCTCATGGGCCCCCTCCAGCT
GGAGGCCCACCCCCAGTGAGGGCCCTCACGCCCCTGACATCATCATATAGAGATGTACCCCAGCCCTTATTTAAT
TCAGCTGTCAACCAAGAAGGTATTACATCAAATACCAATAACGGATCTATGGTGGTCCACAGTAGTTACGACGAG
ATTGAAGGAGGTGGCTTATTGGCAACACCACAGCTTACTAACAAGAATCCCAAAATGAGCCGAAGTGTTGGATAT
TCATATCCCTCCTTACCACCTGGTTATCAGAACACAACACCACCTGGTGCAACTGGAGTACCACCCTCTTCCTTG
AATTACCCAAGTGGGCCACAAGCCTTTACTCAGACTCCCTTAGGTGCTAATCATTTAACCACAAGCATGAGTGGA
TTAAGTCTACAACCAGAGGGTCTAAGAGTTGTCAATCTTCTTCAAGAAAGAAACATGCTTCCGTCAACACCTTTG
AAGCCTCCAGTTCCAAATTTGCATGAAGACATCCAGAAACTCAACTGTAACCCAGAGTTATTTCGATGCACGCTG
ACTAGCATTCCTCAGACGCAGGCCTTATTGAATAAAGCCAAACTTCCTTTGGGGCTGCTGCTTCATCCTTTCAAA
GACTTAGTGCAATTGCCTGTGGTTACCTCCAGTACAATTGTGAGATGCCGTTCATGCAGGACGTACATCAATCCT
TTCGTCAGCTTTCTTGATCAAAGGAGATGGAAGTGTAACTTATGTTATCGAGTCAATGATGTTCCTGAAGAATTC
TTGTACAACCCTTTGACCAGAGTTTATGGAGAACCTCACAGAAGACCAGAAGTTCAAAATGCTACTATTGAGTTT
ATGGCTCCTTCAGAATACATGTTACGACCACCTCAGCCTCCAGTGTATCTCTTTGTATTTGATGTGTCTCACAAT
GCAGTCGAAACTGGATACTTGAATTCAGTTTGCCAGAGTTTGTTAGACAATCTGGATTTGCTTCCTGGCAACACT
AGAACAAAAATTGGCTTCATAACATTTGACAGTACAATCCATTTCTACGGTCTTCAGGAAAGTCTCTCTCAACCT
CAGATGCTAATAGTTTCAGATATTGAAGATGTTTTTATACCTATGCCAGAGAACTTATTAGTAAACTTAAATGAA
AGTAAAGAGCTCGTGCAAGATTTACTGAAAACTTTGCCACAAATGTTTACCAAGACTCTGGAGACCCAGAGTGCC
TTGGGTCCTGCACTGCAGGCTGCCTTTAAGCTGATGTCTCCAACTGGTGGTCGAATGTCTGTCTTTCAAACACAA
CTCCCAACTCTTGGAGTGGGAGCCCTGAAACCACGAGAGGAACCAAACCACAGGTCATCTGCTAAGGATATACAC
ATGACACCATCCACTGACTTCTATAAGAAATTAGCCTTGGACTGTTCTGGTCAGCAAGTTGCTGTTGACTTATTC
CTTCTCAGTGGACAGTATTCTGATTTGGCTTCTCTGGGTTGTATTTCTCGGTATTCAGCAGGTAGTGTCTATTAC
TATCCCTCTTACCATCATCAGCACAACCCAGTCCAAGTACAGAAATTACAGAAGGAACTACAGAGATACCTTACT
CGGAAGATTGGCTTTGAGGCAGTCATGAGGATTCGGTGCACCAAAGGTCTTTCCATTCATACTTTCCATGGAAAC
TTCTTTGTTAGGTCAACCGACTTACTGTCTTTGCCTAACGTCAACCCAGACGCTGGGTATGCAGTACAGATGTCA
GTGGAAGAGAGTCTTACTGACACTCAGTTGGTTTCTTTTCAGTCAGCACTCTTGTATACATCCAGCAAAGGCGAA
AGAAGAATTCGTGTTCATACTTTGTGTTTGCCAGTAGTTTCGACTCTGAATGATGTCTTTCTTGGAGCTGATGTT
CAAGCAATTTCAGGGTTATTGGCCAATATGGCTGTTGACAGATCTATGACTGCCAGTCTGAGTGACGCTCGGGAT
GCTCTAGTGAATGCAGTCATTGACTCCCTTTCAGCTTACCGTTCTTCAGTCTTAAGTAACCAGCAGCCTGGACTC
ATGGTTCCTTTTTCTTTGCGGCTTTTCCCACTTTTTGTGTTGGCTCTCCTTAAACAGAAATCATTCCAGACTGGG
ACAAATGCACGTCTAGATGAACGCATTTTTGCTATGTGTCAAGTGAAAAACCAGCCCTTGGTTTACCTTATGCTC
ACAACTCATCCCAGTTTGTATAGAGTTGACAATCTCTCAGATGAGGGAGCACTCAACATCAGTGATAGAACCATA
CCTCAGCCCCCCATTCTTCAGCTTTCAGTGGAGAAGCTGAGCAGAGATGGAGCTTTCCTCATGGATGCAGGCTCT
GTACTGATGCTTTGGGTTGGAAAAAATTGTACACAGAATTTTCTCAGCCAAGTTCTAGGAGTTCAAAACTATGCA
TCAATTCCACAGCCTATGACAGACCTTCCAGAACTTGATACACCAGAATCTGCCAGAATAATAGCTTTCATCTCT
TGGCTTAGAGAGCAGAGACCATTTTTCCCAATACTTTATGTAATAAGGGATGAGAGTCCAATGAAAGCAAACTTC
CTTCAAAACATGATAGAAGACAGAACAGAATCTGCATTATCATATTATGAATTCCTGTTGCATATACAGCAACAA
GTGAATAAA<u>TGA</u>ATGAATGAAGAAATTTGACTTATTTTTAAGGAATGTCACAATAGTGCAGAATACCTGGAAATG
TGTAATACCTTCTTTTTCTATTATGTTTGTGGACTAATGTGATGATTGAGATGTTCTCACTGTGATTTCAACAAC
CTATAAGCAAATAAAAGACCACAGCAGAGAATCAAACATGCAACTCTGAAATACTGTATTTTTCAAATCAGAATA
TAGCTACGTATGATTGGATACTTTTTTCTTGCCAATTATGTTTGAGTTGTTATGGATTAAAATAAGAATATTGCA
GAGGCAAAGTACATTTTGTAAAATAAAGATTTCTGTGTTCTACATGTATATTTCTCATTTTTAATTTTTCTGAAT

FIGURE 2835B

CTTTGGCTGCTACATTTAAAACCTCACAAACCTAAGTGTTGCAGGGAAGTTACAAATTGATTGGTAGTGATGTTT
TTAAAATAAAAACAATGGAAAGTAAATATAATGTAGGAAAACTAGAATTCATTCCCCACACGTGTCTTTTTTTTT
TCTTTGTTAAGGGAAAGGATCATGTTGACTAAAACTAAACTAATTCTAGTATAGCTTGAGAAAAATATGAAGAAA
CACATTCAAGCTTTAAAATCTGTCAGTATTCTTTATGCTTGAAGAACAAAGTCACTTTGATTTGAAGTGAGAACT
ATCATTAGGTGGTTTTCTGATTTCCTGATGAAGAGTTGGACATACTGTCTTAATCTATAGTGAAAAGAATTTGAG
CTGTCTTCATAAACACTGGGACTAGCAATGATAATAGGGAGATAAGAAACTTTAATTATCTTGATCCTTTAAGTG
GATTTTATTTGGTGCATTTCTGCTCTGGGTATATAATAAAAGTGGGGGTTTTTGGTGAAATGAGTGAAGAAATGA
AAGGTTTCTAAAGTGCTATCCAAATACATCAGTAACATTTTTCTAAGGAGTTTAATTGTTAAATTGGAAGTCATT
CATAAGAAATATTTATGCTTGAATATGAAAATCTATGAAAGCATAAATGCTGCTGTTTGATTTGGTGGATATTAA
GATTATACACATCCAACATATTAAAGTTATGAAAGAAACTTGACTTCTGAAAATCCTTAAGAGACTGCTTTCTTG
ATTCAGCTAGAGAAATATTATAGTCAAAACTATTGAGTGAATTTTGTTTACAAATAGGTAAATTATACATTTGTA
TATTTAAAGTGCTGTGACATAGTATCTTTAAGAGTTTGGCTCAGTTTTCACAGATTCATTTTGTCTTAAGAATTT
CTTAAATATGTTCATGTATAATACTTGATCAAAATATTTTTGGGTTTTTTGTTTTGTTTTAATGGGTTAGAAAAT
GTTTACAATCTTGGTCTTATATGATCACCAATGGAATAGTAACTTCCAGGTTTATATCAATATGAGCTGACTTTA
ACTGAGTTGTTTGGGATAGGGAAGAAGCAGTCCCTCTACAGTATACAACTACTGCTTGCCAGCTGGATCAAAATA
ATCATGTTTTATGAAAATATCTCCCTTAAGCAGTGTTAAGGTTGGTTTGCAGTGTGTAAGTGGCACATTGAACTG
GAAGTTTTCTTGAAAGCTGCTTCATCTATTAAGAAGCAATTTTCAAATTGTAGCGAATTATATTATCCCCTCTTT
TAAAGAAACAGTCGTTATATGCTGATGTTTCTTAAAATAACTAAAATGTTCCTCTTAATGTGATTTTAAATGGAG
TTATTTGTAGGTCCTTTCTTAGTAGTAAAGAATCTTCTAGAGGGAAACATTTGTGCTTTTAGGGATAATCTTCCT
TGTGCCTCACTACATCCCTAAGTGGGTATGACTCTTGTTATTACCACATGCTTTTTTAGTATATTTCACAAATTT
ACTTTTAAATATTATTTTAGATACGGTGTAACATGTGCAATTCAGAATAATTTTATAACAGGTCATGAAAAACAT
AACTTTAGTTAGGATTCACAATATTTGTTCTCCACATAATGAGAGATGAATGAGCCTTTGGAGATACTGATATAA
GGCAATTATTTTTTGCAATGTTGAATGTGTTTTTTAGTTTGATTCTTTTTTTTTCCCCCAATAGGGCACTACCTG
CCATATCATCTTGTATTACTTTTTGATGTAAAGCGACTAATATTTACACTATGCCATATTTTTTTTAATTATAGT
TGTAAATTATGAAAGATCCTTGAATTTTCTACAGATCTACAACTACTAATGTAACAGACAAGGGCAATCTTGGTA
TTTAAATCTGAGCATGGCAGTTCTACCATAAAAAGTACTCTATTTTTCTAATTTCTAGGATTTTTAAAATAACAT
TTCTGTAAGTCTGACATACTAATAGTCACTCAAGCAGTACCATTTATTTTAGTTTGCATATATTTTCACTGTTTT
TAATTTAATGTATTGAGTCTAATAGACTGTTTTGCAATAATTAGAATAAAGATTTATTTCTTCTAATCAAAGATG
CATAACAGCTATTATCTAGGGGACCACCTAAATGTGATTTCAAAATTTTGTTAACTATTACAAATGTAATCCTTA
TATAGAAATTTTAATTTTGTAAAGTAGTGTATAATATTGTAATATTAAATTCTTGTTCTTAAATTCAAATATGTA
TTGATCTTCAATGTGCTGTGTTAAATCTTGCTTCTCTGAAAAGTTGGAGACAAGATTTGTCTTCCTTTTTACAGT
TTGTAATTTTCACTGTTTTATTCCTGTTAAAAAAAAAAAAA

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FIGURE 2836

PPGPERSRLGLGVSLHQRSCPKCIAVFTRVSEPRIQFPASRILPSSNTSKDFDPVSGQSNYGGSQGSGQTLNRPP
VASNPVTPSLHSGPAPRMPLPASQNPATTPMPSSSFLPEANLPPPLNWQYNYPSTASQTNHCPRASSQPTVSGNT
SLTTNHQYVSSGYPSLQNSFIKSGPSVPPLVNPPLPTTFQPGAPHGPPPAGGPPPVRALTPLTSSYRDVPQPLFN
SAVNQEGITSNTNNGSMVVHSSYDEIEGGGLLATPQLTNKNPKMSRSVGYSYPSLPPGYQNTTPPGATGVPPSSL
NYPSGPQAFTQTPLGANHLTTSMSGLSLQPEGLRVVNLLQERNMLPSTPLKPPVPNLHEDIQKLNCNPELFRCTL
TSIPQTQALLNKAKLPLGLLLHPFKDLVQLPVVTSSTIVRCRSCRTYINPFVSFLDQRRWKCNLCYRVNDVPEEF
LYNPLTRVYGEPHRRPEVQNATIEFMAPSEYMLRPPQPPVYLFVFDVSHNAVETGYLNSVCQSLLDNLDLLPGNT
RTKIGFITFDSTIHFYGLQESLSQPQMLIVSDIEDVFIPMPENLLVNLNESKELVQDLLKTLPQMFTKTLETQSA
LGPALQAAFKLMSPTGGRMSVFQTQLPTLGVGALKPREEPNHRSSAKDIHMTPSTDFYKKLALDCSGQQVAVDLF
LLSGQYSDLASLGCISRYSAGSVYYYPSYHHQHNPVQVQKLQKELQRYLTRKIGFEAVMRIRCTKGLSIHTFHGN
FFVRSTDLLSLPNVNPDAGYAVQMSVEESLTDTQLVSFQSALLYTSSKGERRIRVHTLCLPVVSTLNDVFLGADV
QAISGLLANMAVDRSMTASLSDARDALVNAVIDSLSAYRSSVLSNQQPGLMVPFSLRLFPLFVLALLKQKSFQTG
TNARLDERIFAMCQVKNQPLVYLMLTTHPSLYRVDNLSDEGALNISDRTIPQPPILQLSVEKLSRDGAFLMDAGS
VLMLWVGKNCTQNFLSQVLGVQNYASIPQPMTDLPELDTPESARIIAFISWLREQRPFFPILYVIRDESPMKANF
LQNMIEDRTESALSYYEFLLHIQQQVNK

FIGURE 2837A

CGCGCTTAGTGCCATGCGGAACCTCAATGGGCGGGAGTTCAGTGGGAGAGCGCTTCGGGTGGACAATGCTGCCAG
TGAAAAGAATAAGGAGGAGTTAAAGAGCCTTGGGCCTGCAGCGCCCATTATTGACTCACCCTATGGGGATCCCAT
CGATCCAGAAGATGCCCCTGAATCGATTACCAGAGCAGTAGCCAGTCTCCCCCCGGAGCAGATGTTTGAGCTGAT
GAAGCAGATGAAGCTCTGTGTCCAAAACAGCCACCAGGAAGCTCGAAACATGTTACTTCAAAATCCACAACTGGC
TTATGCACTGTTGCAGGCACAAGTAGTGATGAGAATCATGGATCCAGAGATTGCTCTGAAAATTCTGCATCGGAA
GATACATGTCACACCACTGATCCCAGGCAAATCTCAGTCTGTGTCTGTCTCTGGCCCTGGCCCTGGCCCTGGCCC
TGGGCTCTGCCCAGGACCTAATGTTCTGCTGAACCAGCAGAATCCTCCAGCTCCTCAGCCTCAGCATTTGGCTAG
AAGACCTGTGAAGGACATTCCTCCTCTGATGCAGACTCCTATCCAGGGTGGAATTCCAGCTCCAGGGCCAATACC
AGCTGCAGTTCCCGGAGCTGGTCCTGGTTCCTTAACTCCTGGAGGAGCAATGCAGCCCCAACTTGGAATGCCAGG
GGTTGGCCCAGTGCCTTTAGAGCGGGGACAAGTGCAGATGTCAGATCCTAGAGCTCCTATACCTCGCGGACCCGT
GACTCCTGGTGGTCTGCCTCCTCGAGGACTGTTAGGAGATGCTCCAAATGACCCACGTGGAGGGACTTTGCTTTC
AGTCACTGGAGAAGTGGAGCCCAGAGGTTATCTGGGTCCACCCCATCAGGGTCCCCCCATGCATCATGCCTCTGG
TCATGACACTCGTGGCCCTTCCTCACATGAGATGAGGGGAGGGCCATTAGGAGATCCCAGACTGCTAATTGGAGA
GCCCAGAGGCCCCATGATAGATCAAAGGGGTCTACCTATGGATGGTAGAGGTGGTAGAGATTCTCGAGCGATGGA
GACTCGTGCCATGGAAACTGAGGTCTTAGAGACACGTGTAATGGAGAGGAGAGGAATGGAGACCTGTGCGATGGA
AACCAGAGGGATGGAAGCAAGGGGCATGGATGCAAGAGGATTGGAGATGAGGGGCCCTGTCCCCAGTTCAAGAGG
CCCTATGACTGGTGGAATTCAGGGTCCTGGTCCCATTAATATAGGGGCAGGTGGCCCTCCTCAGGGACCCAGACA
GGTCCCAGGCATTTCAGGGGTGGGGAATCCTGGAGCTGGTATGCAGGGTACAGGCATACAAGGAACAGGCATGCA
GGGAGCAGGCATACAAGGAGGAGGGATGCAGGGGGCAGGCATACAAGGAGTCAGTATACAAGGAGGAGGTATACA
AGGAGGAGGTATACAGGGGGCAAGCAAGCAAGGTGGAAGCCAGCCTAGCAGTTTTAGTCCTGGGCAGAGCCAGGT
CACTCCACAGGATCAGGAGAAGGCAGCTTTGATCATGCAGGTTCTTCAACTGACTGCAGATCAGATTGCCATGCT
GCCCCCTGAGCAAAGGCAGAGTATCCTGATTTTAAAGGAACAAATCCAGAAATCCACTGGAGCGTCTTGAAAGGT
TTTAGAAAATATTTGGCTGTAGTCTCAAATTTTATTCTGTAGCATGGAGAATGGGTGCAAAAAGCTGACTTCTGT
ATCCCCACACTTGGATTAGGGTTTCCCTCCTCCTAGAACCTAATCTTATTTTTTGTTCTTTTTCTTTCTTTCTGT
TTTCCTTTTTTTTTTAATTGAGGGTGGGGGGAGGAGGGAGTGCGTCTGTTCACTTTAAGTTACTTTAAAATAACT
CTGAACATGATTATATTATGCCAAATAAGATTACAAAGAATAAGCAGCAATATTGAAGCATCTACAGTATGTTAA
CTACATTTTTTAAATGTCGAGTAAAACTTCGTGAAAACTGCTCATAAAGACTAAAAGTTGACCTGTTAAAACGTT
AATGTACTAAGATAGTTTTAAGATTTTTGGTTGTATAACAAAATAAAAGTTTACCCAAAAGTATAAGATACATTT
TTTGGTAAACCATTTTAAAATACAGAATCCCATTTTGGAGGCAATAGGATAAGCATTGTCTTAGTGTTTTAGAAT
TATTTTTGAAACAGAGTTAACAGGATAAGGTTACACTTGTATTAGAATTGTTTTTTTCTAAAGTTATGTTACCTG
AAAAATCAAGGAGTGCACCTGATTTACTGTTGCTTCATTTATCCCATCCTTCAGAGACCAGCAAGGTTCTGCCAG
GCCCCAAGCATCTGAGCATGATGATTTTGCTGTGACAATTCTAAGATCAACCAGGTTACTTAAGTCCGCTCTGAT
GAAACCCAGTCTCTCAATACCTTCCTATTTCTCAATAGTCTTTAAGCCCTAAATCTGAGTCAGTAATTCTCTAAA
AATCCTTCCCAAAAATCAGTGTCTAGGGACTGGTTGATCTAGATGAGTTATAAATGGTATTTGACTTTTCATAAG
TAGTGGAAGGTTTCACTAAGTAAAGATCTGAGTTTCTTGGTATCTGACGTTTGTATACAGATGGTGTCCATTTGC
TCAACCAGACAGGAGTTAACTTGTATTAGAATTGTTTTTTTCTAAAGTTATGTTACCTGAGAAATTAAGGACTGC
ACCTGGTTTAATGTTGCTTCACTTATCCCACCCTACAGAGACCAGCAAGGTTCTGCCAGGCCTCGAGCATCCAAG
CATGATTTTGCTGTGACAAATCTAAAATCAACCAGGCTACTTAAGTCTGCTCTGATGAAACCCAATAATCTCTCA
ATACCTTCCTATTTCTCAATAGTCTTTAAACCCTAAATCTGAGTCAGTAATTCTCTTACATCCTTCCCAAAAATC
AGTGTCTAGGGACTAGTTGATCTGGATGAGTTATACATGATATTTGACTTTTCATAAGTAGTGGAAGGTTTCACT
AAGTAAAACTCTCAGTTTCTTGGTATCTGGCTTTCTTATACAGATGGTGTCCATTTGCTCCACCAGACAGGAGTT
AAAAACCTTTAAAGAGCATTTAACATGCCTTTTAGTTTTCTTATTTCATAATCTACTTTTCTATCATTAATCATC
TTACCAGGAATAATCAAGGCCCAGGTAGGTAGAAGTTTTTATATAGCCTGAATACTCACTTGACTTACTGCTCAT
TTTACTTTTTGCATGGAATACAGCCATTTAGTCCTAATATACATACCAATGAGACAATTAAAAATTGGTTGGAAG
ATGGAGCTTATCACATTGTGCTACTACGACTTTATTTTTTCTTGAAAATAAAGCCTTGAGGATGTGAACATAAAT
GTTGGTATCATAAAACAAGTAGTAATAAAAGCATAAATTATCAAATATCAGGTGATCTTACTATGGAGAAGAAAA
ACCAATATCTAGTTACAGATGAAAAAATGTTTAATACAAAGAGCTGAAAATGTAGAAATTGAGTTATCTTCCCTT
TGCAAAATTTTTACACTTTAAATTAGTAATTCTTTGTTTGCAAGGTTTTCATCCCTATGCTGTTGTTTTCTACTA

FIGURE 2837B

CCTGTTTTACTCTTGTTCATACTGCTACTTTCCCATGTTTCCTATATGCCTCCCCTATATTGGAGAGGATAACTC
GCGTTTACATATGTGATAGTTATGCTTAATACTAATTCACAGAGTTGGCTCGATCATTTTGAGATTCTAGTTGCT
TTATCTCAAAGCTTTCACTGAAGGGCTGTAACTGAAAATTATTAAATGTTAGTCTTTAGTCAAATCTCTGCATTG
TTTCATGCAGAAAATAAAGATACAATTAAGGCTG

FIGURE 2838

GGCACGAGCAAGACATCAACTGAATGAGGATTTTAAAAAATGGTATATAAGCATAGGACAAGGGCTATGTTTGTT
TGTTTTTCAAAAGTGCTTTGAAGATAACAGCCTTTAGGTTTGAGTTATTTCACTTTTCATAATTTTTAAGTAGCT
TATATATAATGGTGGTACCATAGGATTTTCTTTTTTCAAATGACTGTCGGCAGAAACAGTGGGCACTGACTCACC
TTTTGAGTTTTAGCAGAGAATTATTTATTTCTTTACAATGCACTTTCTAACCCATTGTAGCTATATTAGCATTAT
CTTTTAAAAAAGACATGCTTTTGTATTTAAATATTGTAGGATTTAAGTGTCTTTCTCAAAATAGCTTATTCCTTT
CTGAAAGAAAATGAGGGAAATACTCTGAATTATTAGGAGACTTAAACCCAATATTTAAATATGCTATTTTATAAC
ACTGCATCAGTTTTAGGAGTTGCATCTCTCCTGCTGGCTCTTTTATATTTGAGCAAGATCAGTGTAGAATATGTG
TTTAGAAACTTGTCTGTTGTCTCAGTTTAGTGAAAAGGAGGTGCTGCATGTGCCTGAATTAAAACCAAGAAATTT
TTCCAAGCCAAATGCAGCCTTAGTGATGAGAGATTTAATTCTCCATTGTCACCTTTTAGCTTTTATGATTGCTTA
GTTTTTTCTGAAGGATGTCTGCATTGTAAAACTATGGACTAAAACCTAAAAAAACAGAATCCTCAAAAACTTTGCT
GTATGTGTTTTAACATTTTAGAGAACAGTATGTTGAATAACTAAGGTATGTAACTTGAATAGGAAAAATGTCCAT
CAAATGCACCTTGGAAAATCACAGTAGGTAGAAGGCTGTGTTAACCGTTTGTGTCTTATTAACATCCTTAAGTTA
ATTTTGAATTTTTGACAGTTTTGAGGGAAAAGACCTATGGAACCTAATGTGAAGTATTTCGTATGTTAACTGGTG
TTGAGTTGAAGATTTTTACTGTGTATAAGCAGATATCATTTGAATGATAAAAATGTCATTAACCTGCTGTCTTAA
GATGTTCACACAAATATGGAGAGTAATTCTACAATATAAAAATATTTATTTTAATACTGAGTTTCAGTTAAGTCA
TAAACAGTGTTAAAACTCTTGGGAAGGTGTAGGGGTTTTTTGTTTGTCATTTTTAAAATTGAAACTGTGTCATAC
AGTGTTTCACGTCTCTGAAATTGGGATTATAATAGCACTATTTTGATGTAGCTCTACCGATACTATGTGGTAATG
CTATTTTGTTTTACTAACAAGCTCTGGAATATTTAGCAGTCATTTTCACTGGCACAAGAGCCTTTTGTATGTTAT
TCAATTTAAACTTTTAAACCAAAAATTTTATGGTCCAGTGTCTTTGGCAAAAAGATGCTGGAGGGAATGTAACAT
ACAATTAATATGTGGTTATATATATATATAAAAAGACACAAATTGCCATGTTATGGTTCTGCCTTGAAACAGCAC
AATGAAGTGTATCAGTATATTCTGTGATTATGAAACTTATATGTTGTGTTGTTTTGTGTCTTCTGTTGCCTGTCC
TTTGGGCCAGATGTGGGCCAGTTAAATGCAGTTATCATCTCATTAAATACAGATGCAGATAAAATATCTTTAGTG
CTGCAACATTTTACCTAACTTTTTGTATGTTTTCATGACTGTGTGTTATTTTCCAAAGCTGTTCCTACCTCACCA
TGAGGCTTTATGGATTGTTATGTATTATAAATGTTCTATATGAGACAGACTACTGTGTTTCTTCTCATTTATTAA
AAGTTAAGTAGAAAAATAAACTAATTTTAATATCTAAAAAAAA

FIGURE 2839

CAGGAGTAAGGGTTGAGGTACTTGGGGCGAGTCCCTTCCCCTTCAGAGAGGCTTCTATCCTTCCCAGGGAGGAGG
CGCCGCTGAGACCCTTCTGCTGAGAGCTCTGCCCTCCCCTCATCACCTGGCCTGTGCAGAAACGCTCATGCACAC
CTGGCTGCACAGGTGTGCACGCATTACCCTTCGCGTGTACGTTCCCATGTGCCCCGTGAAAGCATGTGTGGCTGC
AGACGTGTCCACATGGGCCTTGCGAACCTGGGTTAGAAACCTTGGCCAGGCGAACGTGGGGTGATTCACAGCACA
AAAGACCTCACCACCACACCTGCACTCACCCCACCTTGCATGCACCTTGCTACCTGCTTGCGGCTTTCAGCGGAG
GGCAGGGGTCTGGCACAGGTGCGATGGCACCCCATGCTCCAGGCATACAGATGTGGTTTCTCGGCTGCACCGGGC
CAGGCTGCGGGTGTGCAGGCGTCTGCTAAGTTGTGTGATGTATCAGCACAGGCTTTGAGACGTCTGGACCCTGTC
CTTCCTCCCGTGAGGGGTTCTTGTTCTTTCTGACTCAGGTGACTTTTCAGCCCTTCCAATTCCCCTCTTTTTCTG
CCCTCCCCCTCCAACTCAGCCAACCCAGGTGTGGGCAGTCAGGGAGGGAGGGAGTGTCCCACCACGTTCTCAGGGC
AGCCCTTGACTCCTAAGCCCCTTCCTCCTTCCATTCTGCATCCCCTCCCCATCCAACCTAAATGCCACAGCTGGG
GCTGAGCTGTATTCCTGTGGAGGGACCTCTGCCGTGCCTCTCTGAGGTCAGGCTGTGCTGTGTGATGGGCAGGCT
TTGCCCCAGCCCACCCCTGGCAAGGTGCACTTGTTTTCTGGTTTGTACAAGGTGTCCTGGGGGCCCGTCGCTTCC
CTGCCAGTGAGGAGTGACTTCTCCCTCTCTTCCAGTCCTGTAGGGGAGACAAAACCAGATTGGGGGGCCCAAGGG
GAGCATGGAAAAGGCCGGCTCCCCTGTCTTTCCTTGGCTGTCAGAGTCAGGGTAACACACACCAAGAGTGGAGTG
CGGCCAGCAAGTTTGAGACCTGCCCGCCCTCCTCGCAGCTCTGCTCTGTGTCCTCAGGAAGTCACAGAGTCTACT
GAGGCAAGGAGAGGGTGATTCTTTCCCCAAATCCCTTCTTCCCTGGTTCCCAAACCAAAGACAGCCTGCAGCCCT
TTCTGCATGGGGTGCTCTGTTGACAGGCTTCCCAGATCCCTGAGTCTCTCTTTCCTTCCTCCTCGATCTTTAGTT
GTCCACGGTCAATTCAGTGCTTCCATTGGGGGACAGTCCCCTCCGGGATGACCTGATTCACCTCCAGCCCAGGGA
ATGGAATCTAGAGGAATACGTGGGGTGGGTCTGGACAAGGAGCGGCAGGAATCACCACCCATCTCCAGCTGTGGA
GCCCTGTGGAGGGGAAGGGGAAGCTTGGGGTTCAGAGGGAACTCTTCCAGGAGAGGGGTGCCCAGCGGAGGTAAA
GATGATAGAGGGTTGTGGGGGGTCTCTAGTTGAATGTTTTGGCCCATGACTTTGGAACATGGCTGGCAGCTTCCA
GCAGAAGTCACGCTCCCCATCCCCCAGGGGACATAGGACCTTTTTCCTGCTTCCTGGTCACTTTCAAAGAACTAT
TTGCGCAATCTGTGGGTCTGTGGATTCACGGGGCTTTCTGTGTGGGTGCTGCAGTTGCTTTTGTCTGCAGCAGCA
GGACACATCTTTCCTCTTACTCAGCCCTTTATGGCCCATGGGGAACTCCGTGGCTCAGGGAGAGCTGAACTCCAG
GGGTGTGACCTGGGACAGGTGGGCCTGAGGTGCCCAGCTCAGGGCAGCCAGGTGGCTCATGGGCTGTAGTGAGCC
AGCTCCCTGGGGGAAAAGGCTGTGGGCCGTTAGGACCATCCTCCAGGACAGGTGACCTCTATGAGGTCACCTACG
GCTGTGGCCGTGCAGGCCTCCTTCCAGCCCAGAGTGGCCCAGTAGAGCAAGGCAGACAGTGACCTCCACCCCCGC
AGCCCTCTTAAAAGGCCAGTACTCTTGGGGGTGGGGGGAGGGTTTAGAAAGCATTTGCCCATCTGCCTTTCTTTC
CCCCAGCCCCCACCCGCTTTGAATGTAGAGACCCGTGGGCACTTTTCCTTTTGTGGTGGGGGGTGCGGAGGAGGT
ACCCCCACCCCTGGGCACAGCCGCCTGGAATGCAGGACTGTCACTGCTGTTCGGGTGATGACCTCGTTGCCAAGC
TCCTCCTGTCCCCTTGTTCTGGGGGCAGGCGCTGTGCTTCTGTGAGGTGGTTTAGCTTTTGCTTTCGAAGTGGCC
AGCTGCGGCCACCAGGTCTCAGCACAAGAGCGCTTCCTTTGCACAGAATGAGCTTCGAGCTTTGTTCAGACTAAA
TGAATGTATCTGGGAGGGGTCGGGGGCACGAGTTGATTCCAAGCACATGCCTTTGCTGAGTGTGTGTGTGCTGGG
AGAGTCAGAGTGGATGTAGAGCGCGGTTTTATTTTTGTACTGACATTGGTAAGAGACTGTATAGCATCTATTTAT
TTAGATGATTTATCTGGTAAATGAGGCAAAAAAATTATTAAAAATACATTAAAGATGATTTAAAAAAAAGACCAA
AAAACCAAGAAACCCAAAGCCCAAGAATGCGCGTAGCATC

FIGURE 2840

GVRVEVLGASPFPFREASILPREEAPLRPFC

FIGURE 2841

GCAGAAGGAAAAAAAGGTGGCAGGAGGGGTGAAAGAGGAGACACGGCCCAGGGCCCCGAAGATCAATAACTGCATGGACTCACTGGAGGCCATCGATCAAGAGTTGTCAAACGTAAATGCCCAGGCTGACAGGGCCTTCCTTCAGCTTGAGCGCAAGTTTGGCCGCATGCGAAGGCTCCACATGCAGCGCAGAAGTTTCATTATCCAGAATATCCCAGGTTTCTGGGTTACTGCCTTTCGAAACCACCCCCAGCTGTCACCTATGATCAGTGGCCAAGATGAAGACATGCTGAGGTACATGATCAATTTGGAGGTGGAGGAGCTTAAACACCCCAGAGCAGGCTGCAAATTCAAGTTCATCTTTCAGGGCAACCCCTACTTCCGAAATGAGGGGCTTGTCAAGGAATATGAACGCAGATCCTCTGGCCGGGTGGTGTCTCTTTCCACTCCAATCCGCTGGCACCGAGGCCAAGACCCCCAGGCTCATATCCACAGAAACCGGGAAGGGAACACTATCCCTAGTTTCTTCAACTGGTTTTCAGACCACAGCCTTCTAGAATTCGACAGAATTGCAGAGATTATCAAAGGAGAACTGTGGCCCAATCCCCTACAATACTACCTGATGGGTGAAGGGCCCCGTAGAGGAATTCGAGGCCCACCAAGGCAGCCAGTGGAGAGCGCCAGATCCTTCAGGTTCCAGTCTGGCTAATCTCTGTCCTGTGAGAAGCTTCTGCACAAGTTTCCTTACCACCTCCTCTTGGACCTATGCTTGGCCAACAGCATGCAGTCTTCCATCTGCTTTCTCTTCATACTGTGGATTATCTTTTCCTTGGTTCTAAATCTTCAGTAATCGGTTGCAAGATTGTTGGCTTACCTGCCTGTGCCATTCTTCCTCTGGGCCTTCATGCTTTTCTGCATTGTGTTAACATGTTTCAAGTGCATGGCCTTCTACGGCTTCTATGCCAAGCGTATGATACTATAGATATAGTGTACCATACTGCCTTTCTTTGCATGGCTTGGACCCTATCTGTGACCATGCTCTTCTCCCAATTTAAGTGGTTCTGTACCACAAAGAATCTTGATACATTTTCACAAATAACTGATTGGGCTTCATACTTTATGCTGGCTGTGTCCTGATACCCATGTACTTATGGTAAGCTATTTGGGTATTACCACTGCAAGACAAAACTGATATCTTAACCCGGCCATCAACCCAAATTGGACATTCCAGACTACCACCAACTGGATCCCAGCTGCCTTCCTGGGCTTGTGCCATCCACCCTACTGGTTATCTGATAGAACAAGCTGGTGGCTGATGGGTGACTGCTAGGCGTGACTGAGGTAATAGATGAAAAGTGTTCTATGTTATCACATTGGTTTTCCTGTACCTTTGGTTACTCTACGTCATGACCAGCTGCTGGTGAGTATGAAGCCTGTGCTATAGCCCACCCCTACTCACTCTCACCTTCTGGTTGAACTTTGCTTAGGCCACCATTGTCTGCCTCATCAGGAACTATCTGTAGACGTAGCTCCCAGGGAGCTCACAGCAACACCCCCTACCACCAGGATGGGCAGTAATATGTGACAGAGCCCAAAGCAAGGCTGGAACGCAGTCCCTTCCAGCTTAGTCTTTCTGACTCCTAGCCAACAAACCATCCTTAATGTGAGCAACTTCTTTAGGCATTTCCTCTTTTCCCCGCCTGCACCCACTCTGAACATGACAAAAGTTGCCAGAGTTGGGGCATTGAGGAAGAGATATTTCTGGAATGTGAGACTTGTTATGCCTCTGTCTCTTTCTCTCCCTCCTCCTCCCCTCTCCCTCCCCCTCTCCCTCCCATCCCTTTTCTTCCCTTTCACTCTGAAGCAGTTTTAGCTTATTAACAGAAAACAAAACTGGCAAAGCAGGCTTTTTGTTTAATTTGCTCTTTCCCTGATTGTGTTCAGAGAGAAAGGTTATGATTAAATGGGCTCCAGATCTCTTATTGCCCTTATTCCTCCACCCCACTTCTTTTAGCAAGGTCTGAAAGTTTCAAAGGGAGACCTATAGGTTAATTGTTTAGTTATAGGCAGTGTTAAATTAGGCAGATTTTGACATATTTATCTTTTTTACCCCATCCATTCTACCAAAACCTGTGTATTTCTTGAGTTTTTAGTTTGAGAAGCTGGAAAGAGAGAGAAGGGCCTCACAGTGATGGGTTCAGGACGGGTCAAAGGCAAAGGCCTTTGTGATGTGAGCAAAGGCAACCAAAACTTAGCCTCACTCCACTTTTCTAAAGATGGAAATTCTTTTTTGGGCCTTGGACTGCTTCTAGGGTAGCATTTTGTAGGTCACTCTTCTCCTTTGTACTATTTTGTTTCTGCCCTGATGTCCCTTGGGTCTCCATCCTACTGCCTGGCTTTCTTGGCCCTCATTTCTCAGCTTCTGCATTTCCTTCCCTGCTCCTAACAAATGAAGAAGCAGGCTGCAGCCTGCATTGTGGAAGATCTCCAGCCTCCTTGTAGGGGATAAGGGGATGTGCAGCATCTGTGTGGATTTTCACGGACAAGTTCCAGTAGGTGGGACAGTGATGCCGTCAAGGCTTAGTTATGATCATGTGTGGTGATAAAGACCATCCACCATCACCCTTTTCCCCTTTGGGTTTGAAGGCCTTGCCCTAAGCTACCTGAGGGTTTAGGAGGTCTGAACACACACAGTGGAGAGGTTAATCTAGGTTGGGAAACTGAGTAAAAGTCCAGAGCAGGAATGAGCCTGCTGTGGCGTGGGTTTGGAAAGGCTCACAGGAAAGAACCTGCAGGATCAGGGGTGGGAGGGGAGGCCCCTGAGGTGCTCTCCAGGGAAGAGGGGCTGGGGTTTAAATAGCATGCTTGGAGGAAGATTTTCCTTCAATTTTTCCTAAGTCCTTGAATTCACCAGTAGATTTTTGTAAACAAAATGTAAGTCGATGTTTTCTCTCAATTATCCTAGGAGTGACCTTTATATGTGTGGAAGATTAATGGTATATGCTCCTTATGTCACTGTTTTTGAGTAAAATCCATTTCCTTTCTCTGTTTCAGCCTATGACAAAATTGATGTTTACAGGCCTGCTTTTTGCTTATAATTGACAACATGTGCAAAAATACCAAATTTGTGTCCTGTGCAGTATGAAGAATTCAGTGAATATTCATTAATGTATTAGCTTGTTTTGCTCTCTGTTCATATATGGCTCTATTCTTAGAAATATAATTTGAATGTGATCTTTCAATAGTCTGAATATTTTACAAATTATAGCTATGTCTTGTGAAAATAACCTCAAAAAGAAAAATACGACTCTGTTGTCTTACTTGATATTTCTTGCCCTAGTAATGTACTTGACATTTATGTTCCTAAGCAGTGTAAGTACCAGTAGAATTTCTCTGTCAAACTCAATGATCATTTAGTACTTTTGTCTTCTCCCATGTGCTTGAAGGAAAAATAAAGTGTCACTACCGTATTTCTTGTTTTCATCAAAAAATAAAAATAATTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2842

MDSLEAIDQELSNVNAQADRAFLQLERKFGRMRRLHMQRRSFIIQNIPGFWVTAFRNHPQLSPMISGQDEDMLRY
MINLEVEELKHPRAGCKFKFIFQGNPYFRNEGLVKEYERRSSGRVVSLSTPIRWHRGQDPQAHIHRNREGNTIPS
FFNWFSDHSLLEFDRIAEIIKGELWPNPLQYYLMGEGPRRGIRGPPRQPVESARSFRFQSG

FIGURE 2843

GTTTTCCTGCGCAGGAGCCGCAGGGCCGTAGGCAGCCATGGCGCCCAGCCGGAATGGCATGGTCTTGAAGCCCCA
CTTCCACAAGGACTGGCAGCGGCGCGTGGCCACGTGGTTCAACCAGCCGGCCCGGAAGATCCGCAGACGTAAGGC
CCGGCAAGCCAAGGCGCGCCGCATCGCTCCGCGCCCCGCGTCGGGTCCCATCCGGCCCATCGTGCGCTGCCCCAC
GGTTCGGTACCACACGAAGGTGCGCGCCGGCCGCGGCTTCAGCCTGGAGGAGCTCAGGGTGGCCGGCATTCACAA
GAAGGTGGCCCGGACCATCGGCATTTCTGTGGATCCGAGGAGGCGGAACAAGTCCACGGAGTCCCTGCAGGCCAA
CGTGCAGCGGCTGAAGGAGTACCGCTCCAAACTCATCCTCTTCCCCAGGAAGCCCTCGGCCCCCAAGAAGGGAGA
CAGTTCTGCTGAAGAACTGAAACTGGCCACCCAGCTGACCGGACCGGTCATGCCCGTCCGGAACGTCTATAAGAA
GGAGAAAGCTCGAGTCATCACTGAGGAAGAGAAGAATTTCAAAGCCTTCGCTAGTCTCCGTATGGCCCGTGCCAA
CGCCCGGCTCTTCGGCATACGGGCAAAAAGAGCCAAGGAAGCCGCAGAACAGGATGTTGAAAAGAAAAAATAAAG
CCCTCCTGGGGACTTGGAATCAGTCGGCAGTCATGCTGGGTCTCCACGTGGTGTGTTTCGTGGGAACAACTGGGC
CTGGGATGGGGCTTCACTGCTGTGACTTCCTCCTGCCAGGGGATTTGGGGCTTTCTTGAAAGACAGTCCAAGCCC
TGGATAATGCTTTACTTTCTGTGTTGAAGCACTGTTGGTTGTTTGGTTAGTGACTGATGTAAAACGGTTTTCTTG
TGGGGAGGTTACAGAGGCTGACTTCAGAGTGGACTTGTGTTTTTTCTTTTTAAAGAGGTAAGGTTGGGCTGGTGC
TCACAGCTGTAATCCCAGCACTTTGAGATTGGCTGGGAGTTCAAGACCAGCCTGGCCAACATGTCAAAACTACTA
AAAATAAAGAAATCAGCCATGAAAAAAAAAAAAAAAA

FIGURE 2844

MAPSRNGMVLKPHFHKDWQRRVATWFNQPARKIRRRKARQAKARRIAPRPASGPIRPIVRCPTVRYHTKVRAGRG
FSLEELRVAGIHKKVARTIGISVDPRRRNKSTESLQANVQRLKEYRSKLILFPRKPSAPKKGDSSAEELKLATQL
TGPVMPVRNVYKKEKARVITEEEKNFKAFASLRMARANARLFGIRAKRAKEAAEQDVEKKK

FIGURE 2845A

CCCACGCGTCCGTGAAGATTGATGTCTATTTCCTTGAGCTCTTTAATTTTGTTGCCAATTTGGATAAACATGGCA
CAAATCCAGCAGGGAGGTCCAGATGAAAAAGAAAAGACTACCGCACTGAAAGATTTATTATCTAGGATAGATTTG
GATGAACTAATGAAAAAAGATGAACCGCCTCTTGATTTTCCTGATACCCTGGAAGGATTTGAATATGCTTTTAAT
GAAAAGGGACAGTTAAGACACATAAAAACTGGGGAACCATTTGTTTTTAACTACCGGGAAGATTTACACAGATGG
AACCAGAAAAGATACGAGGCTCTAGGAGAGATCATCACGAAGTATGTATATGAGCTCCTGGAAAAGGATTGTAAT
TTGAAAAAAGTATCTATTCCAGTAGATGCCACTGAGAGTGAACCAAAGAGTTTTATCTTTATGAGTGAGGATGCT
TTGACAAATCCACAGAAACTGATGGTTTTAATTCATGGTAGTGGTGTTGTCAGGGCAGGGCAGTGGGCTAGAAGA
CTTATTATAAATGAAGATCTGGACAGTGGCACACAGATACCGTTTATTAAAAGAGCTGTGGCTGAAGGATATGGA
GTAATAGTACTAAATCCCAATGAAAACTATATTGAAGTAGAAAAGCCGAAGATACACGTACAGTCATCATCTGAT
AGTTCAGATGAACCAGCAGAAAAACGGGAAAGAAAAGATAAAGTTTCTAAAGAAACAAAGAAGCGACGTGATTTC
TATGAGAAGTATCGTAACCCCCAAAGAGAAAAAGAAATGATGCAATTGTATATCAGAGAAAATGGTTCTCCTGAA
GAACATGCAATCTATGTTTGGGATCATTTCATAGCTCAGGCTGCTGCTGAGAATGTGTTTTTCGTTGCTCACAGC
TATGGAGGACTTGCTTTTGTTGAACTGATGATTCAACGAGAAGCCGATGTAAAAAATAAGGTAACTGCTGTGGCA
TTGACAGACTCTGTTCACAATGTGTGGCATCAAGAAGCTGGCAAAACGATTCGAGAATGGATGAGAGAGAACTGT
TGTAATTGGGTCTCTAGCTCAGAACCATTAGACACATCAGTGGAGTCCATGCTACCTGATTGCCCCCGGGTCTCA
GCAGGCACCGACCGTCACGAGCTAACTTCCTGGAAGAGCTTTCCGTCTATTTTCAAATTCTTTACCGAAGCCTCA
GAGGCCAAGACCAGCTCCCTGAAGCCGGCTGTGACGCGCCGCTCCCACCGCATCAAGCACGAAGAGCTGTAAGAG
GAGCGAGCGCGACGGGGGAGGCCGCCCTGGCGCACCCACCCGCACGCCTCCTCACTGCTTGTGTCGAGCGGACTC
CCAGCCCCTCATTAGATTGTTTTCTTCCCAGAGCCCAGGGTCGTGATATATACATCTAAATAGCGTTTTGCATTA
TTTCTAGATGAGTGCAACTGTCAAAGCAATATGGGTTCACTGGTCGTGCTTCCTGCGGGCTGAGCGCGGGCTGAG
CGCTGCCAGTCAGCGCTCACATTAAGGCTGACAGCGCCCTGCCTGGCTCGGCCGGCGAAGCTCTAATTGCCCTGA
AGGAGACCGCGCGGGCGCTGCGGGTCCGGCGGCGTCGGCGCGGTCCTAGCGCCCGCCGTAGCGGAGCCGCTGCTG
CTTCCCCCTCCTTAATCATGTCCATCTTTCCCCGCTCTCAACTGGAGCAAACTTCTATTCCAGACTTCAGATTTC
CATTTTCACTAGGTTTTTCCCTGAGGGCATCTTATTACCCACCTCTTTTTTTTTTTTTTTAAGGAAGTTCCACA
CACACTCCAAAGCCGATTTCAAATTCAGAACCTGAATGCCATGATGTACCATGTAGTTTGGGGAATGCAAATTGT
TCTCTCCCTGTTTTCATTTCGGGACCAGAAAAAAAAACAACTCTGCATAAAAATCTATAAAGTACTGAATCCGCA
TTACTGCTGAAAATCCTTTTGCCAGCTAATTGTGAGAGTTTACACAAGTCTCTGATTTCAGAAGAGACTGTTAAA
ACCAAAACAATGATGGGCAGCTCTTTTAAGTGTAGGTGTGAAGGTCCCATTTTCAATGGAATTTCCAACTGTTAT
CACTGGGATTGACTTTACTTTTTAAACACATAATGTGTACTGTGTGGCATTGTAATTTAGATATAACACACTTAA
GTTTTGCTTTTTAAATCTCTCTGTGGAGAAAGGTTGTTGTTAATCCTTTCCAGAATGATCTATTCTGAGCTTTCC
TGGAGTTAGGCCCTTCTAGGGAGAGAATTTTTTTATTGTCATCAGGAAACGAAACCTTTGTGCTCTGCAGCCTTT
TTCTTCTGAAAGGCTAAGTGGGGCTAAAATTATCCTTTTAGTTTTCTGCTTTAACAAGAAGAGAAGGACTTGGTG
TGAAAGAATTTCTTCTCTCAGTCCAATGGTATAATTTTTAGCACTCCGCTTCCTCTGTAGGGTTTAGCCCTACAG
TTTGAACAATTATTTTAATCCAGCTAAGATGTGGCCAACACTGTGAAATACAGGAGATGTTAAGGTTTTGCTGAC
TTTTACATTAAAATCTTAAAATTTCACATTATATTTTAATTACTTGAAAAGTTTAATTACCTAGTAAAGATTGTT
TCTAATAGATGAGAACATAAATTTAATAGTTTTCATCCTTTTTTAAAGTGTGTGCAACAATTAATATGCCTGCCT
TATTTGAGGACATGATAAAATGTACCCAAAATGACTTCGAACTGTCTAATGCCTCAGAAAAGTAACTTAAAATCA
ACCACTTCGTGCTTAAATGTTTTTATATTATGAACCGATTTCAACAAGTTTTAAAGCTGTTAATATCTCATTGCT
GTGTTTGACATACAAGTACATTCATTGGTTCTATAGTCTTAATGATGACAAATTAAAGATGTTTTTTCAGTGCTC
AGGTATGCATATATTTTCGTGTTACTTAAGCAAAATCAACTATATAGGAGGAAAAATCAAAATGGCATTTTATTC
AGCTACCAGATGGCTTAAAATGAGTAAACCCCAACAACATCAAGCACATTTGTCTGTGATATTGACCCTTTTTAT
CCAATCATTACTATTTTAGAAGTAGTGGTGAACTGTGTAAAATAATGGTATCTTCAGCAGTGTTCCGGAATCTTA
GTTGAGGGACAAACATTCCTTCCAGTGAGAGATTCAAGAATTGATGTGAATTGAATATATTTTTCAAGGTATTAT
AAATTGTGTTGTGTTTTCAGTATAAGAAAATGTTGACAGGAAACAATTTTATAGCATTTATAAAAAACCAACACT
TGTGCAATGCTAAATTGGCGAAGCTTCTGCACCTGAATTAGAGCACAATAAATATGCTGTTTATAAACCAAATCA
CTGCTATTCCTTCTCTGAAATCATCTCTCCTCTTTTTAAACCTTTACTTATAGCTAGAATAAATCACTATTTAAT
TGCCTCTAATACTTTAAAACTACTGGATGGTTAGGCCTGGTTTAACTATTTATGGAGAGCTATTTGCAAACTTAA
GTTGTGTAAATGTAATTTCTACTTGTGAATCTGAGCTGTAGCAGCCCAGAGGGAGCTAGGCAAACTATTCCAGAC

FIGURE 2845B

CACCAACTGATAAGTGATCAGATTCTTTGTAATGTAGGATTTTTTAACCTGTTGATTATGGGTTTGTTGATATAA
ATGTAATAATGTTCACCTCGATTTTCCTGGAGTAACAACCAGCGTTGGTAGTAGCCCACCTGCATGAGGACGGCC
AGTGTTAACAATATTTTTGTTCTGATCTTCTTCCCCATTTTTGTTTCCTCAAACAGGTTTTTAGGAGAGTGGAGA
TTTAAAGTCAGGATGTGGCCTTTTTATTTTAATTATATACTTAATTCTTAGAACAAGTAGAATGGGAAAGGAGTG
ACTGATAAATCTAAGATTCAAAATAGTCCCGTCGAAACTTAAAGGCCAGATTATTGCTTTGGAGCTTTCTATAGG
TACTAGCCATCCCGTCGTTAAATGTTTTCATGGATATTTGAAAAGAAGACCATGTACCTTTAATAACTGTTCTTT
TCTCGAGTTTCTGCCTCGTGCTTTGACCTGGATTGCATTATTATTGTTTATGCGAAGTAAAAAAAAAAAAAGGAAA
GCACAAGCTTTTCCTGTATATTATATTTCCATTTCCATTTTAAAATAAAAACAATTTTCCCAACAAAAAAAAAAA
AAAA

FIGURE 2846

MSISLSSLILLPIWINMAQIQQGGPDEKEKTTALKDLLSRIDLDELMKKDEPPLDFPDTLEGFEYAFNEKGQLRH
IKTGEPFVFNYREDLHRWNQKRYEALGEIITKYVYELLEKDCNLKKVSIPVDATESEPKSFIFMSEDALTNPQKL
MVLIHGSGVVRAGQWARRLIINEDLDSGTQIPFIKRAVAEGYGVIVLNPNENYIEVEKPKIHVQSSSDSSDEPAE
KRERKDKVSKETKKRRDFYEKYRNPQREKEMMQLYIRENGSPEEHAIYVWDHFIAQAAAENVFFVAHSYGGLAFV
ELMIQREADVKNKVTAVALTDSVHNVWHQEAGKTIREWMRENCCNWVSSSEPLDTSVESMLPDCPRVSAGTDRHE
LTSWKSFPSIFKFFTEASEAKTSSLKPAVTRRSHRIKHEEL

FIGURE 2847

CAGGAGACGCCAAGGAAAGATGGGACCTCCCGGCCCAGCACTGCCAGCCACAATGAATAACTCTTCTTCAGAGAC
GCGAGGACACCCCCACAGTGCCTCCTCTCCTTCAGAGCGTGTGTTCCCGATGCCCCTGCCCAGGAAGGCGCCTCT
CAATATTCCTGGCACCCCAGTCCTCGAAGACTTTCCTCAGAATGACGATGAGAAGGAGCGGCTGCAGCGGAGGCG
CTCGAGGGTCTTTGATCTGCAGTTCAGCACTGACTCACCTCGCTTATTGGCCTCCCCCTCCAGCAGGAGTATTGA
CATTTCAGCTACTATCCCCAAGTTTACAAACACGCAGATTACGGAACATTACTCCACCTGTATCAAACTGTCCAC
TGAAAATAAAATCACTACCAAGAATGCTTTTGGTTTGCACTTGATTGATTTTATGTCAGAGATTCTTAAACAGAA
AGACACCGAACCAACCAACTTTAAAGTGGCTGCGGGTACTCTGGATGCCAGCACCAAGATCTATGCTGTGCGCGT
GGATGCCGTCCATGCCGATGTATACAGAGTCCTTGGGGGGCTGGGCAAAGATGCACCGTCTTTGGAAGAAGTAGA
AGGCCATGTTGCTGATGGAAGTGCTACTGAAATGGGAACAACCAAAAAGGCTGTAAAGCCAAAGAAGAAGCACTT
ACACAGAACTATTGAGCAGAACATAAACAACCTCAATGTCTCCGAAGCAGATCGGAAGTGTGAGATTGATCCCAT
GTTTCAGAAGACAGCAGCCTCATTTGATGAGTGCAGCACAGCAGGGGTGTTTCTGTCCACTCTCCACTGCCAGGA
CTACAGAAGTGAACTGCTGTTTCCCTCTGATGTCCAGACTCTCTCCACGGGAGAACCTCTCGAGTTGCCAGAGTT
AGGTTGTGTAGAAATGACAGATTTAAAAGCGCCCTTGCAGCAGTGTGCAGAAGATCGCCAGATCTGCCCTTCCCT
GGCCGGGTTCCAGTTTACACAGTGGGACAGTGAAACACATAATGAGTCTGTGTCGGCCCTGGTAGACAAGTTTAA
GAAGAATGACCAGGTATTTGACATCAATGCTGAAGTTGACGAGAGTGACTGTGGAGACTTCCCCGATGGGTCCCT
GGGGGATGACTTTGATGCCAACGATGAACCTGACCACACCGCAGTTGGGGATCATGAAGAGTTCAGGAGCTGGAA
GGAGCCCTGCCAGGTTCAGAGCTGCCAGGAAGAAATGATTTCCCTTGGGGATGGAGACATCAGGACCATGTGCCC
CCTTCTGTCTATGAAACCTGGAGAATATTCTTATTTCAGTCCTCGGACCATGTCGATGTGGGCTGGCCCGGATCA
CTGGCGCTTTAGGCCTCGACGCAAACAAGATGCTCCTTCCCAATCAGAAAACAAAAAGAAGAGTACAAAAAAAGA
TTTTGAAATTGACTTTGAAGATGATATTGACTTTGATGTATATTTTAGAAAAACAAAGGCTGCTACTATTCTGAC
CAAGTCCACTTTGGAGAACCAGAATTGGAGAGCTACCACCCTTCCTACAGATTTCAACTACAATGTTGACACTCT
GGTCCAGCTTCACCTCAAACCAGGCACCAGGTTACTTAAGATGGCCCAGGGCCATAGGGTAGAGACTGAGCATTA
TGAAGAAATTGAAGACTATGATTACAACAACCCTAACGACACCTCCAACTTTTGCCCTGGATTACAGGCTGCTGA
CAGTGATGATGAAGATTTGGATGACTTATTTGTGGGACCTGTTGGGAACTCTGACCTCTCACCTTATCCTTGCCA
TCCACCTAAGACAGCACAACAGAATGGTGACACTCCAGAAGCCCAAGGATTAGACATCACAACATATGGGGAGTC
AAACTTGGTAGCTGAGCCTCAGAAGGTAAATAAAATTGAAATTCACTATGCCAAGACTGCCAAAAAGATGGACAT
GAAGAAACTGAAGCAGAGCATGTGGAGTCTGCTGACAGCGCTCTCCGGAAAGGAGGCAGATGCAGAGGCAAACCA
CAGGGAAGCTGGAAAAGAAGCGGCCCTGGCAGAAGTGGCTGACGAGAAGATGCTTAGCGGGCTCACGAAGGACCT
GCAGAGGAGCCTGCCCCCTGTCATGGCTCAGAACCTCTCCATACCTCTGGCTTTTGCCTGTCTCCTACATTTAGC
CAATGAAAAGAATCTAAAACTGGAAGGAACAGAGGACCTCTCTGATGTTCTTGTGAGGCAAGGAGATTGAGTTCA
CTATGGAGAAGTCAGCAGCAGGAGGCCCATCCCTTACTCAGTTGCCGGGACATCCCCAGTCTCGGGGGAAGAAGA
TGCCATGGGCTTATACCCAGGCTGTAGCCAACTACCAACGTGCCTGTTTGTTTGTTGCTCTTTCCTTCTCTCCAT
CATAGTCTGGGTGCCAGCGCCCTGAAGCTCCGTGCTCAACTGATTAAACTTTACTGCCCTATGGTGACCATCTAG
GAGAGGGGAGGGCAGAGGGGGTGAGGGTACTATTCTGGATTGAGAAAACCTATATCCATTCTTTATATCAATGTA
TAGTTTTAGTCTCCTAAATTGATCTGTTATTTTCCAAACTATTCTCTTGTAGAAAATTTTCCAGTGGGCACTTAA
TGGTGCCCTTGAAGAACTTCCTAATCCATGTACATAAAATACATCATATGTACACTTATAAATGTATATAGAATG
CTCAAAAATAAAATTCTTAATAATAG

FIGURE 2848A

GTTCTGAATGATGACTGACGCGGGTTTGGGTGATACCCCTCACAGCCCCTGTCATTCCGGAGTCATAAGGCACCC
GCGCGTCTAGCCCCAGCGCCAGGGCACGCGAGCGGCGCTGGAGGGAGGAAAGCTTCCGCCTGCGGGCCGGACAAA
AGTCCCGCCTGCCCACGGCTTTTTGCCCGCCGCTCGTGACCGAGACGCCTCGCCGCGGCCAGCTCGCTGCTCTCG
CTGGCGGATGGTGTGTGGCCGCCGCAGGACGCCCGCCGTGCCCGGGCCATGAAGTAGCGGCTGCTGGCGGCGCCG
CTGCCCAACCGCCAGCCCCAGCCCCGCGCTGCGCTGCCCGGTCCTCTCCCGGCGGGGTCGTATCGGCGTGGACATG
GCTGGCCGCGTCCCTAGCCTGCTAGTTCTCCTTGTTTTTCCAAGCAGCTGTTTGGCTTTCCGAAGCCCACTTTC
TGTCTTTAAGAGGTTTAAAGAAACTACCAGACCATTTTCCAATGAATGTCTTGGTACCACCAGACCCGTAGTTCC
TATTGATTCATCAGATTTTGCATTGGATATTCGCATGCCTGGGGTTACACCTAAACAGTCCGATACATACTTCTG
CATGTCTATGCGAATACCAGTGGATGAGGAAGCCTTCGTGATTGACTTCAAGCCTCGAGCCAGCATGGATACTGT
CCATCACATGTTACTTTTTGGATGCAATATGCCTTCATCCACTGGAAGTTACTGGTTTTGTGATGAAGGAACCTG
TACAGATAAAGCCAATATTCTGTATGCCTGGGCGAGAAATGCTCCCCCTACCCGGCTCCCCAAAGGTGTTGGATT
CAGAGTTGGAGGAGAGACTGGAAGTAAATACTTTGTACTACAGGTACACTATGGGGATATTAGTGCTTTTAGAGA
TAATAACAAGGACTGTTCTGGTGTGTCCTTACACCTCACACGTCTGCCACAGCCTTTAATTGCTGGCATGTACCT
TATGATGTCTGTTGACACTGTTATCCCAGCAGGAGAAAAAGTGGTGAATTCTGACATTTCATGCCATTATAAAAA
TTATCCAATGCATGTCTTTGCCTATAGAGTTCACACTCACCATTTAGGTAAGGTAGTAAGTGGATACAGAGTAAG
AAATGGACAGTGGACACTGATTGGACGGCAGAGCCCTCAGCTGCCACAGGCTTTCTACCCTGTGGGGCATCCAGT
TGATGTAAGTTTTGGTGACCTACTGGCTGCAAGATGTGTATTCACTGGTGAAGGAAGGACAGAAGCCACACACAT
TGGTGGCACGTCTAGTGATGAAATGTGCAACTTATACATTATGTATTACATGGAAGCCAAGCATGCAGTTTCTTT
CATGACCTGTACCCAGAATGTAGCTCCAGATATGTTCAGAACCATACCACCAGAGGCCAACATTCCAATTCCCGT
GAAGTCTGATATGGTTATGATGCATGAACATCATAAAGAAACAGAATATAAAGATAAGATTCCTTTACTACAGCA
GCCAAAACGAGAAGAAGAAGAAGTGTTAGACCAGGGTGATTTCTATTCACTACTTTCCAAGCTGCTAGGAGAAAG
GGAAGATGTTGTTCATGTGCACAAATATAATCCTACAGAAAAGGCAGAATCAGAGTCAGACCTGGTAGCTGAGAT
TGCAAATGTAGTCCAAAAAAAGGATCTTGGTCGATCTGATGCCAGAGAGGGTGCAGAACATGAGAGGGGTAATGC
TATTCTTGTCAGAGACAGAATTCACAAATTCCACAGACTAGTATCTACCTTGAGGCCACCAGAGAGCAGAGTTTT
CTCATTACAGCAGCCCCCACCTGGTGAAGGCACCTGGGAACCAGAACACACAGGAGATTTCCACATGGAAGAGGC
ACTGGATTGGCCTGGAGTATACTTGTTACCAGGCCAGGTTTCTGGGGTGGCTCTAGACCCTAAGAATAACCTGGT
GATTTTCCACAGAGGTGACCATGTCTGGGATGGAAACTCGTTTGACAGCAAGTTTGTTTACCAGCAAATAGGACT
CGGACCAATTGAAGAAGACACTATTCTTGTCATAGATCCAAATAATGCTGCAGTACTCCAGTCCAGTGGAAAAAA
TCTGTTTTACTTGCCACATGGCTTGAGTATAGATAAAGATGGGAATTATTGGGTCACAGACGTGGCTCTCCATCA
GGTGTTCAAACTGGATCCAAACAATAAAGAAGGCCCTGTATTAATCCTGGGAAGGAGCATGCAACCAGGCAGTGA
CCAGAATCACTTCTGTCAACCCACTGATGTGGCTGTGGATCCAGGCACTGGAGCCATTTATGTATCAGATGGTTA
CTGCAACAGCAGGATTGTGCAGTTTTCACCAAGTGGAAAGTTCATCACACAGTGGGGAGAAGAGTCTTCAGGGAG
CAGTCCTCTGCCAGGCCAGTTCACTGTTCCTCACAGCTTGGCTCTTGTGCCTCTTTTGGGCCAATTATGTGTGGC
AGACCGGGAAAATGGTCGGATCCAGTGTTTTAAAACTGACACCAAAGAATTTGTGAGAGAGATTAAGCATTCATC
ATTTGGAAGAAATGTATTTGCAATTTCATATATACCAGGCTTGCTCTTTGCAGTGAATGGGAAGCCTCATTTTGG
GGACCAAGAACCTGTACAAGGATTTGTGATGAACTTTTCCAATGGGGAAATTATAGACATCTTCAAGCCAGTGCG
CAAGCACTTTGATATGCCTCATGATATTGTTGCATCTGAAGATGGGACTGTGTACATTGGAGATGCTCATACCAA
CACCGTGTGGAAGTTCACCTTGACTGAGAAATTGGAACATCGATCAGTTAAAAAGGCTGGCATTGAGGTCCAGGA
AATCAAAGAAGCCGAGGCAGTTGTTGAAACCAAAATGGAGAACAAACCCACCTCCTCAGAATTGCAGAAGATGCA
AGAGAAACAGAAACTGATCAAAGAGCCAGGCTCGGGAGTGCCTGTTGTTCTCATTACAACCCTTCTGGTTATTCC
GGTGGTTGTCCTGCTGGCCATTGCCATATTTATTCGGTGGAAAAAATCAAGGGCCTTTGGAGCAGATTCTGAACA
CAAACTCGAGACGAGTTCAGGAAGAGTACTGGGAAGATTTAGAGGAAAGGGAAGTGGAGGCTTAAACCTTGGTAA
TTTCTTTGCAAGCCGTAAGGGCTACAGTCGAAAAGGGTTTGACCGGCTTAGCACTGAGGGCAGTGACCAAGAGAA
AGAGGATGATGGAAGTGAATCAGAAGAGGAGTATTCAGCACCTCTGCCTGCGCTCGCACCTTCCTCCTCCTGAAA
ACCAAGCTTTGATTTAGATTGAGTAAGATTTACCCAGAATGTCAGATTCCTTTCCCTTTAGCACGTTTAAAGTTC
TGTGTATTTAATTGTAAACTGTACTAGTCTGTGTGGGACTGTACACACTTTATTTACTTCGTTTTGGTTAAGTTG
GCTTCTGTTTCTAGTTGAGGAGTTTCCTAAAAGTTCATAACAGTGCCATTGTCTTTATATGAACATAGACTAGAG
AAACCGTCCTCTTTTTCCATCATAATTCTAATCTAACAATGGAAGATTTGCCCATTTACACTTTTGAGACTTTTT

FIGURE 2848B

GGTGGATGTAAATAACCCCATTCTTTGCTTGAACACAGTATTTTCCCAATAGCACTTTCATTGCCAGTGTCTTTC
TTTGGTGCCTTTCCTGTTCAGCATTCTTAGCCTGTGGCAGTAAAGAGAAACTTTGTGCTACATGACGACAAAGCT
GCTAAATCTCCTATTTTTTTAAAATCACTAACATTATATTGCAATGAAGGAAATAAAAAAGTCTCTATTTAAATT
CTTTTTTAAATTTTCTTCAGTTGGTGTGTTTTTGGGATGTCTTATTTTTAGATGGTTACACTGTTAGAACACTAT
TTTCAGAATCTGAATGTAATTTGTGTAATAAAGTGTTTTCAGAGCAAAAAAAAAAAAAAA

FIGURE 2849

MAGRVPSLLVLLVFPSSCLAFRSPLSVFKRFKETTRPFSNECLGTTRPVVPIDSSDFALDIRMPGVTPKQSDTYF
CMSMRIPVDEEAFVIDFKPRASMDTVHHMLLFGCNMPSSTGSYWFCDEGTCTDKANILYAWARNAPPTRLPKGVG
FRVGGETGSKYFVLQVHYGDISAFRDNNKDCSGVSLHLTRLPQPLIAGMYLMMSVDTVIPAGEKVVNSDISCHYK
NYPMHVFAYRVHTHHLGKVVSGYRVRNGQWTLIGRQSPQLPQAFYPVGHPVDVSFGDLLAARCVFTGEGRTEATH
IGGTSSDEMCNLYIMYYMEAKHAVSFMTCTQNVAPDMFRTIPPEANIPIPVKSDMVMMHEHHKETEYKDKIPLLQ
QPKREEEEVLDQGDFYSLLSKLLGEREDVVHVHKYNPTEKAESESDLVAEIANVVQKKDLGRSDAREGAEHERGN
AILVRDRIHKFHRLVSTLRPPESRVFSLQQPPPGEGTWEPEHTGDFHMEEALDWPGVYLLPGQVSGVALDPKNNL
VIFHRGDHVWDGNSFDSKFVYQQIGLGPIEEDTILVIDPNNAAVLQSSGKNLFYLPHGLSIDKDGNYWVTDVALH
QVFKLDPNNKEGPVLILGRSMQPGSDQNHFCQPTDVAVDPGTGAIYVSDGYCNSRIVQFSPSGKFITQWGEESSG
SSPLPGQFTVPHSLALVPLLGQLCVADRENGRIQCFKTDTKEFVREIKHSSFGRNVFAISYIPGLLFAVNGKPHF
GDQEPVQGFVMNFSNGEIIDIFKPVRKHFDMPHDIVASEDGTVYIGDAHTNTVWKFTLTEKLEHRSVKKAGIEVQ
EIKGKGSGGLNLGNFFASRKGYSRKGFDRLSTEGSDQEKEDDGSESEEEYSAPLPALAPSSS

FIGURE 2850

CCTCAAGATGGGAAAAAGGTGACGTGGTATTGCTGTGGGCCAACCGTCTATGACGCATCTCACATGGGGCACGCC
AGGTCCTACATCTCTTTTGATATCTTGAGAAGAGTGTTGAAGGATTACTTCAAATTTGATGTCTTTTATTGCATG
AACATTACGGATATTGATGACAAGATCATCAAGAGGGCCCGGCAGAACCACCTGTTCGAGCAGTATCGGGAGAAG
AGGCCTGAAGCGGCACAGCTCTTGGAGGATGTTCAGGCCGCCCTGAAGCCATTTTCAGTAAAATTAAATGAGACC
ACGGATCCCGATAAAAAGCAGATGCTCGAACGGATTCAGCACGCAGTGCAGCTTGCCACAGAGCCACTTGAGAAA
GCTGTGCAGTCCAGACTCACGGGAGAGGAAGTCAACAGCTGTGTGGAGGTGTTGCTGGAAGAAGCCAAGGATTTG
CTCTCTGACTGGCTGGATTCTACACTTGGCTGTGATGTCACTGACAATTCCATCTTCTCCAAGCTGCCCAAGTTC
TGGGAGGGGGACTTCCACAGAGACATGGAAGCTCTGAATGTTCTCCCTCCAGATGTCTTAACCCGGGTTAGTGAG
TATGTGCCAGAAATTGTGAACTTTGTCCAGAAGATTGTGGACAACGGTTACGGCTATGTCTCCAATGGGTCTGTC
TACTTTGATACAGCGAAGTTTGCTTCTAGCGAGAAGCACTCCTATGGGAAGCTGGTGCCTGAGGCCGTTGGAGAT
CAGAAAGCCCTTCAAGAAGGGGAAGGTGACCTGAGCATCTCTGCAGACCGCCTGAGTGAGAAGCGCTCTCCCAAC
GACTTTGCCTTATGGAAGGCCTCTAAGCCCGGAGAACCGTCCTGGCCGTGCCCTTGGGGAAAGGGTCGTCCGGGC
TGGCATATCGAGTGCTCGGCCATGGCAGGCACCCTCCTAGGGGCTTCGATGGACATTCACGGAGGTGGGTTCGAC
CTCCGGTTCCCCCACCATGACAATGAGCTGGCACAGTCGGAGGCCTACTTTGAAAACGACTGCTGGGTCAGGTAC
TTCCTGCACACAGGCCACCTGACCATTGCAGGCTGCAAAATGTCAAAGTCACTAAAAAACTTCATCACCATTAAA
GATGCCTTGAAAAAGCACTCAGCACGGCAGTTGCGGCTGGCCTTCCTCATGCACTCGTGGAAGGACACCCTGGAC
TACTCCAGCAACACCATGGAGTCAGCGCTTCAATATGAGAAGTTCTTGAATGAGTTTTTCTTAAATGTGAAAGAT
ATCCTTCGCGCTCCTGTTGACATCACTGGTCAGTTTGAGAAGTGGGGAGAAGAAGAAGCAGAACTGAATAAGAAC
TTTTATGACAAGAAGACAGCAATTCACAAAGCCCTCTGTGACAATGTTGACACCCGCACCGTCATGGAAGAGATG
CGGGCCTTGGTCAGTCAGTGCAACCTCTATATGGCAGCCCGGAAAGCCGTGAGGAAGAGGCCCAACCAGGCTCTG
CTGGAGAACATCGCCCTGTACCTCACCCATATGCTGAAGATCTTTGGGGCCGTAGAAGAGGACAGCTCCCTGGGA
TTCCCGGTCGGAGGGCCTGGAACCAGCCTCAGTCTCGAGGCCACAGTCATGCCCTACCTTCAGGTGTTATCAGAA
TTCCGAGAAGGAGTGCGGAAGATTGCCCGAGAGCAAAAAGTCCCTGAGATTCTGCAGCTCAGCGATGCCCTGCGG
ACAACATCCTGCCCGAGCTTGGGGTGCGGTTTGAAGACCACGAAGGACTGCCCACAGTGGTGAAACTGGTAGACA
GAAACACCTTATTAAAAGAGAGAGAAGAAAAGAGACGGGTTGAAGAGGAGAAGAGGAAGAAGAAAGAGGAGGCGG
CCCGGAGGAAACAGGAACAAGAAGCAGCAAAGCTGGCCAAGATGAAGATTCCCCCCAGTGAGATGTTCTTGTCAG
AAACCGACAAATACTCCAAGTTTGATGAAAATGTAAGCATGGTCTGCCCACACATGACATGGAGGGCAAAGAGCT
CAGCAAAGGCAAGCCAAGAAGCTGAAGAAGTCTTCGAGGCTCAGGAGAAGCTCTACAAGGAATATCTGCAGATGG
CCCAGAATGGAAGCTTCCAGTGAGGGGGGCACAGGACTGACTTTTTAAACCATTGTGGACTAGTGGCTGCTGTCT
GCCTCAGTGACAATGTCCCAGCGCTCCTATCATGTTTACAGTCACCCTTGGGTCCTAAATTAAGAGTTGTGTTCA
TGTAGGTTCGTGTCGTCGTTGGCTCTGAGACATTGGGAATTCC

FIGURE 2851

GATGTCACAAATAGTAAGGTCTTCCTTACTGAGCTCTGTCATCTGTTTTGGCTTTTATGCATACTGTGATTTGGG
AGGCTGCTGCTCAACATTCTAGCCCATTTCCAGAGTGTTCCATTATTCTAGGACATGGCTGTCATGGGAGTCTGC
ACAAGGCAACTAATGCTCTAGATTTAACTGCCTTTTTTAAATCAGTAGATCATTAATTGTTTCAGTTACATAGGA
GCCATAGGCAGTAATAGAAACATCACAAGTATTGTTTCCAAAAATATACCCAACTAGAGATAAGACCACTAAGAT
GTTCCCTTTATTACCTTTCAGCATTTAATGATACCAGCTTGTAGCTTCCAAGGTGATAGAGTGTGCTGTGTACAT
ACAAGGCATAGTAAACGTGTATTTAAAACTTGTTTTTTTGTCGCACATGGCTTAAGAGTTTGAATCAGTAAGTTA
AAGTTACGAGAGTAAAATCATATGAAGGCCACACAGTTAACTGAAGGACAGTTTAAAAGTGTGTGCCGCCGCCTC
TGCATAGTTCTTACCCCATTTAAAGAAGCACTTGCTTTGGAAATTTCAACTCGGTTGGAGAAATCAGACTGTAGG
TTCTGATACTGGCTTATCAAGTTTGTAATAAGAGTGCTGATCAAATTGGCACAGTTTGCTTCAGAAAACACTTGA
CTTTGAACCTGAAAAAGAAGATTTAAAAAAATCTCCAAAAGACCAGCATAATGAAACCACAAGCATTAACTAATT
GGAAATGACACACTGAGTTTCCAAAGTACTACGTACCTTTAGAAGGAAATGTGTCATGAACGTGTAGACAATGTT
GTTGTTTAAAAAAGTTCTTTCATCCATTAGGATACATTTAATATATTCTGCGAAAACAGGATCTTCACACAAAAG
CTTGATGCAGTTTTTTGACATAGCAGACTAAAGTGGGGAGAAGATGGTTGAGCACTTACGGTTGAGCACGGAAAA
AACTTACACGGAAAAAACTTACACAGAAAAAACATACACTTGTGTATGATGGAATCTGAAGCCACTGAAAATCCT
ACTTGAAAAGCCATGTCTAACTCACCTATTGAATTTTTAGTTAACAGCAACTATTTTTCATACAGTAAAATGTTA
CTAATTTAGATTAAGGGAGTGCTGGGGGAAGACACTGATGCCGAAACTGAACAAATGTTTTAAAAGAAATGCAGG
TTTATTATCCAGCACTGAGAGAGTTAACAAGGACTGGAAAAATAAGGCTAACAAAGAATAGGATGTGAATGTTTT
CAAGGGCCAAATTAATGTATTTATAGGTAACCAGAGCATATGTTGCAAAAAGACACATTTTAAGAATCAAAATCA
ATTCTCCAAAATGTTTTAAACTTTACTGTATATTCTCGCTAGCAACAGTAATTCTGTAAATACCTTTTCCCCCCA
TAAACACTGCAAGGGTAAACAATAAATCTTCTTTCCTAATTATCTCACACAGAATCAGTGGTCTCAATATATGGA
AATTTTACTAAAATTTGGTTTTCCTGTTTTCAAATAGTCATGGCTCTTAAACACAAGTAGTATGTCTTTAAGCAG
ATACACTCCATAGATTTAAATGTGCATTTTAATAATTTATATGGAAAA

FIGURE 2852

MSQIVRSSLLSSVICFGFYAYCDLGGCCSTF

FIGURE 2853

AAGAATTGAAGAACAGAGCAAGCTAAGTCTCCAGATTGAGAGGGCCCAATACAATCTACATCTAGACACAATATT
GTAAAATTTTGGAATATTAAGGATAGAAGGAAGATATTAAAGTGGCCAGGGAGAAAACAAATGAGGTCATCACGA
TTAGCTCAACACAAAAATGGATGAGAAATAGACTGCTAACAGATTTGTCATCAGCAACACTGAATGCCAGAAGTC
AATGGATCAACATCTTCAGAGCTTAAGGAAAATTTTTGTACCTAGAATTTCATAGTAAGGCAGACTGTCAAGAAG
AACATCAAAGTGAAGACATTTTCTGTCAGGCAAATTTTCAGAAAGTCTCCTTTGCACCCTTACTGAGGAAGTATC
TTGAGGAAATTCTCCAGCAAAATGAGGATGAAAACCAGGAAAGAAGAAGAAATGGGATCCATAAAACAGTGGACC
TTACTTAGGATGTCTCATTCTAGAGTGACAGCCAAAAGGGTATCTCACCCTAGAGTGACAGCTATCCAGCAGACT
AATTTCAGATGAGAGCATACTGTCTCGGGCTTTCTGGGAAGAATGTGCATTCAGTGCCATAGATAGTATCATTGA
AGAGCTGGGATGCTTGAGAAGATTATTTAGTCAAGAAAAAAGAAAGACAAATCAACAATATGTCAAAAAATTCAG
GTCCAATTATAGAGCAAAATAAAATGAGGCATGATTTTGAGTTATTCATGAAGAATAAGAAGAGGCTTGATAGGT
ACATTTCCTTTTCTATGGCACAGGCATGATGATATTGGGTGTGTAGGGAAGAAAATATCCTAGCTTATACTAGGC
TCCCAGTAAGAAGTATTTAAATAGCCAAAATAATGTGGATATCATTTATTAGTATTCAATGTTCAGATCAGCCTA
TTAACAAAGTGTGAAAGGTTTCATTTTTTATTCAGAACTGAAGTTGAAAGTAATTAATGCTGACAAAGGGAAAGA
AAGCAGAAAGAGATTGAGAATTAGAGGAAGAGAAGTGGAATCAAAGGTAGAGATACTTATATATTCAAAGTGGGG
ATGAAAAGATCTTCAGTTAATGGAACAAGAACTAGAGGATTAGTGTATTGTTCAAAGCTATAAAATCAAACCAAT
AGATGTATTAAAAAGTGATGTAACTATCAGACATTTGGAGAGAGATGGACAAAGGAAAGTGGCGATAGTGTAAGT
TAAATCCTTATCTTTTGTAATGGGGAATTATTAAAGATGTTGTAAAGTCAGTAAGTCAAGAAATTATTGCTCAAA
CATATTATTTAAAGTTAGAAAGTTACCAGACGATCTAAAATAAATATTGTTAAAAGCATTACCTCTAGGGAATGG
GATTTAGATTTAAAAAGGGTGGGATGGGAAACTGTGTTTTTCATTTTAAGTCCTTCTGTACTATTTAATTTTTTA
CCTTGTGCATGTATTACTTTGAAAAAATTTTTAATAAACCCAAATAAAAATCTTAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2854

CAACTCCTCCAAGGCTCAAAATTTCTTCAGAATCTAGTTCCTCATAGATCTTATGTTTCAACCATGATCTTGGAA
GTAGTGAAGAATAGCGTTCATAGCTGGGACCATGTTACTCAGGGCCTCGTAGAACTTGGTTTCATTTTGATGGAT
TCATATGGGCCAAAGAAGGTTCTTGATGGAAAAACTATTGAAACCAGCCCAAGTCTTTCTAGAATGCCAAACCAG
CATGCATGTAAGCTCGGAGCTAATATCCTGTTGGAAACTTTTAAGATCCATGAGATGATCAGACAAGAAATTTTG
GAGCAGGTCCTCAACAGGGTTGTTACCAGAGCATCTTCTCCCATCAGTCATTTCTTAGACCTGCTTTCAAATATC
GTCATGTATGCACCCTTAGTTCTTCAAAGTTGTTCTTCTAAAGTCACAGAAGCTTTTGACTATTTGTCCTTTCTG
CCCCTTCAGACTGTACAAAGGCTGCTTAAGGCAGTGCAGCCCCTTCTCAAAGTCAGCATGTCAATGAGAGACTGC
TTGATACTTGTCCTTCGGAAAGCTATGTTTGCCAACCAGCTTGATGCCCGAAAATCTGCAGTTGCTGGGTTTTTG
CTGCTCCTGAAGAACTTTAAAGTTTTAGGCAGCCTGTCATCCTCTCAGTGCAGTCAGTCTCTCAGTGTCAGTCAG
GTTCATGTGGATGTTCACAGCCATTACAATTCTGTCGCCAATGAAACTTTTTGCCTTGAGATCATGGATAGTTTG
AGGAGATGCTTAAGCCAGCAAGCTGATGTTCGACTCATGCTTTATGAGGGGTTTTATGATGTTCTTCGAAGGAAC
TCTCAGCTGGCTAATTCAGTCATGCAAACTCTGCTCTCACAGTTAAAACAGTTCTATGAGCCAAAACCTGATCTG
CTGCCTCCTCTGAAATTAGAAGCTTGTATTCTGACCCAAGGAGATAAGATCTCTCTACAAGAACCACTGGATTAT
CTGCTGTGTTGTATTCAGCATTGTTTGGCCTGGTATAAGAATACAGTCATACCCTTACAGCAGGGAGAGGAGGAA
GAGGAGGAGGAAGAGGCATTCTACGAAGACCTAGATGATATATTGGAGTCCATTACTAATAGAATGATTAAGAGT
GAGCTGGAAGACTTTGAACTGGATAAATCAGCAGATTTTTCTCAGAGCACCAGTATTGGCATAAAAAATAATATC
TCTGCTTTTCTTGTGATGGGAGTTTGTGAGGTTTTAATAGAATACAATTTCTCCATAAGTAGTTTCAGTAAGAAT
AGGTTTGAGGACATCCTGAGCTTATTTATGTGTTACAAAAAACTCTCAGACATTCTTAATGAAAAAGCGGGTAAA
GCCAAAACTAAAATGGCCAACAAGACAAGTGATAGTCTTTTGTCCATGAAATTTGTGTCCAGTCTTCTCACTGCT
CTTTTCAGAGTCTTGCTATGGAGATACACTTCAATTCCTACTTCAGTGGAAGAGTCGGGAAAGAAAGAGAAAGGA
AAGAGCATCTCACTGCTGTGCTTGGAGGGTTTACAGAAAATATTCAGTGCTGTGCAACAGTTCTATCAGCCCAAG
ATTCAGCAGTTTCTCAGAGCTCTGGATGTCACAGATAAGGAAGGAGAAGAGAGAGAAGATGCAGATGTCAGTGTC
ACTCAGAGAACAGCATTCCAGATCCGGCAATTTCAGAGGTCCTTGTTGAATTTACTTAGCAGTCAAGAGGAAGAT
TTTAATAGCAAAGAAGCCCTCCTGCTAGTCACGGTTCTTACCAGTTTGTCCAAGTTACTGGAGCCCTCCTCTCCT
CAGTTTGTGCAGATGTTATCCTGGACATCAAAGATTTGCAAGGAAAACAGCCGGGAGGATGCCTTGTTTTGCAAG
AGCTTGATGAACTTGCTCTTCAGCCTGCATGTTTCGTATAAGAGTCCTGTCATTCTGCTGCGTGACTTGTCCCAG
GATATCCACGGGCATCTGGGAGATATAGACCAGGATGTAGAGGTGGAGAAAACAAACCACTTTGCAATAGTGAAT
TTGAGAACGGCTGCCCCCACTGTCTGTTTACTTGTTCTGAGTCAGGCCGAGAAGGTTCTAGAAGAAGTGGACTGG
CTAATCACCAAGCTTAAGGGACAAGTGAGCCAAGAAACCTTATCAGAAGAGGCCTCTTCTCAGGCAACCCTACCA
AATCAGCCTGTTGAGAAAGCTATCATCATGCAACTGGGAACTCTGCTTACATTTTTCCACGAGCTGGTGCAGACA
GCTCTGCCATCAGGCAGCTGTGTGGACACCTTGTTAAAGGACTTGTGCAAAATGTACACCACACTTACAGCCCTT
GTCAGATATTATCTCCAGGTGTGTCAGAGCTCCGGAGGAATTCCAAAAAATATGGAAAAGCTGGTGAAGCTGTCT
GGTTCTCATCTGACCCCCCTGTGTTATTCTTTCATTTCTTACGTACAGAATAAGAGTAAGAGCCTGAACTATACG
GGAGAGAAAAAGGAGAAACCTGCTGCCGTTGCCACAGCCATGGCCAGAGTTCTTCGGGAAACCAAGCCAATCCCT
AACCTCATCTTTGCCATAGAACAGTATGAAAAATTTCTCATCCACCTTTCTAAGAAGTCCAAGGTGAACCTGATG
CAGCACATGAAGCTCAGCACCTCACGAGACTTCAAGATCAAAGGAAACATCCTAGACATGGTTCTTCGAGAGGAT
GGCGAAGATGAAAATGAAGAGGGCACTGCATCAGAGCATGGGGGACAGAACAAAGAACCAGCCAAGAAGAAAAGG
AAAAAATAAATGAAATGCCTGAGTTAATGTGAACTTTGGGGCTTCTGCTTCATTTTTACCCAACAAGCAACAATG
CCCCTTGTCCTGTAGTCCACACCGATGTTGGCATCTTGGTTCTGAACCCACTGAATTCAACTGCACCTTCAGTTA
GAAGGAATCTTCTTGGCAGGTCCTGCTACTGAAAAATGGCTGGCCTTAGGCAAGCCCTTTTGCAAAAAGCACAGC
TGAAAGCCTGAGTTTGGGAGCCTGCACCCACCCCGATGAAGCTCCACGGGAGCAAATACAGAGCCTCCAGGCAGT
GCTATGGTCCAGGCTGGCTTCGTTTTTCCAAGGAGCCTTTGGTGAGTTCAATTATCTGGTAAATATCCAGCGCTT
CACCTGAAAGATAGTGCAAATTGGTTAGGATGCCACCTCAAGAACTGTAACTGAGAGCTCAGAAGTGAGCAAAGG
AGCTTAATGCTAAGGTCAAAAGGAGAGTGAAAGGTTGAGAACAATTGCCACGAACGGTAATGTTACATGTTAGGA
GGGTCTGTTTTCTTTTTATATAAGTGTGTCTTAGATATATTTTAAATAGAAAATAAGCTTTCTGATTTACTTGTT
TGGTATTTAAAGCACAGTTTGTTTTTCTGTCACCTATAGAGTGCAAGAATGCACTCTATAGAATAAATTCTCTTT
AAACATT

FIGURE 2855

MILEVVKNSVHSWDHVTQGLVELGFILMDSYGPKKVLDGKTIETSPSLSRMPNQHACKLGANILLETFKIHEMIR
QEILEQVLNRVVTRASSPISHFLDLLSNIVMYAPLVLQSCSSKVTEAFDYLSFLPLQTVQRLLKAVQPLLKVSMS
MRDCLILVLRKAMFANQLDARKSAVAGFLLLLKNFKVLGSLSSSQCSQSLSVSQVHVDVHSHYNSVANETFCLEI
MDSLRRCLSQQADVRLMLYEGFYDVLRRNSQLANSVMQTLLSQLKQFYEPKPDLLPPLKLEACILTQGDKISLQE
PLDYLLCCIQHCLAWYKNTVIPLQQGEEEEEEEEAFYEDLDDILESITNRMIKSELEDFELDKSADFSQSTSIGI
KNNISAFLVMGVCEVLIEYNFSISSFSKNRFEDILSLFMCYKKLSDILNEKAGKAKTKMANKTSDSLLSMKFVSS
LLTALFRVLLWRYTSIPTSVEESGKKEKGKSISLLCLEGLQKIFSAVQQFYQPKIQQFLRALDVTDKEGEEREDA
DVSVTQRTAFQIRQFQRSLLNLLSSQEEDFNSKEALLLVTVLTSLSKLLEPSSPQFVQMLSWTSKICKENSREDA
LFCKSLMNLLFSLHVSYKSPVILLRDLSQDIHGHLGDIDQDVEVEKTNHFAIVNLRTAAPTVCLLVLSQAEKVLE
EVDWLITKLKGQVSQETLSEEASSQATLPNQPVEKAIIMQLGTLLTFFHELVQTALPSGSCVDTLLKDLCKMYTT
LTALVRYYLQVCQSSGGIPKNMEKLVKLSGSHLTPLCYSFISYVQNKSKSLNYTGEKKEKPAAVATAMARVLRET
KPIPNLIFAIEQYEKFLIHLSKKSKVNLMQHMKLSTSRDFKIKGNILDMVLREDGEDENEEGTASEHGGQNKEPA
KKKRKK

FIGURE 2856

AATCCAACTCACCTCCATGTTCAAGGATGTCCCTCTGACTGCAGAAGAGGTGGAATTTGTGGTGGAAAAAGCATT
GAGCATGTTCTCCAAGATGAATCTTCAAGAAATACCACCTTTGGTCTATCAGCTTCTGGTTCTCTCCTCCAAGGG
AAGCAGAAAGAGTGTTTTGGAAGGAATCATAGCCTTCTTCAGTGCACTAGATAAGCAGCACAATGAGGAACAGAG
TGGTGACGAGCTATTGGATGTTGTCACTGTGCCATCAGGTGAACTTCGTCATGTGGAAGGCACCATTATTCTACA
CATTGTGTTTGCCATCAAATTGGACTATGAACTAGGCAGAGAACTCGTGAAACACTTAAAGGTAGGACAGCAAGG
AGATTCCAATAATAACTTAAGTCCCTTCAGCATTGCTCTTCTTCTGTCTGTAACAAGAATACAAAGATTTCAGGA
CCAGGTGCTTGATCTTTTAAAGACTTCGGTTGTAAAGAGCTTTAAGGATCTTCAACTCCTCCAAGGCTCAAAATT
TCTTCAGAATCTAGTTCCTCATAGATCTTATGTTTCAACCATGATCTTGGAAGTAGTGAAGAATAGCGTTCATAG
CTGGGACCATGTTACTCAGGGCCTCGTAGAACTTGGTTTCATTTTGATGGATTCATATGGGCCAAAGAAGGTTCT
TGATGGAAAAACTATTGAAACCAGCCCAAGTCTTTCTAGAATGCCAAACCAGCATGCATGTAAGCTCGGAGCTAA
TATCCTGTTGGAAACTTTTAAGATCCATGAGATGATCAGACAAGAAATTTTGGAGCAGGTCCTCAACAGGGTTGT
TACCAGAGCATCTTCTCCCATCAGTCATTTCTTAGACCTGCTTTCAAATATCGTCATGTATGCACCCTTAGTTCT
TCAAAGTTGTTCTTCTAAAGTCACAGAAGCTTTTGACTATTTGTCCTTTCTGCCCCTTCAGACTGTACAAAGGCT
GCTTAAGGCAGTGCAGCCCCTTCTCAAAGTCAGCATGTCAATGAGAGACTGCTTGATACTTGTCCTTCGGAAAGC
TATGTTTGCCAACCAGCTTGATGCCCGAAAATCTGCAGTTGCTGGGTTTTTGCTGCTCCTGAAGAACTTTAAAGT
TTTAGGCAGCCTGTCATCCTCTCAGTGCAGTCAGTCTCTCAGTGTCAGTCAGGTTCATGTGGATGTTCACAGCCA
TTACAATTCTGTCGCCAATGAAACTTTTTGCCTTGAGATCATGGATAGTTTGAGGAGATGCTTAAGCCAGCAAGC
TGATGTTCGACTCACGCTTTATGAGGGGTTTTATGATGTTCTTCGAAGGAACTCTCAGCTGGCTAATTCAGTCAT
GCAAACTCTGCTCTCACAGTTAAAACAGTTCTATGAGCCAAAACCTGATCTGCTGCCTCCTCTGAAATTAGAAGC
TTGTATTCTGACCCAAGGAGATAAGATCTCTCTACAAGAACCACTGGATTATCTGCTGTGTTGTATTCAGCATTG
TTTGGCCTGGTATAAGAATACAGTCATACCCTTACAGCAGGGAGAGGAGGAAGAGGAGGAGGAAGAGGCATTCTA
CGAAGACCTAGATGATATATTGGAGTCCATTACTAATAGAATGATTAAGAGTGAGCTGGAAGACTTTGAACTGGA
TAAATCAGCAGATTTTTCTCAGAGCACCAGTATTGGCATAAAAAATAATATCTCTGCTTTTCTTGTGATGGGAGT
TTGTGAGGTTTTAATAGAATACAATTTCTCCATAAGTAGTTTCAGTAAGAATAGGTTTGAGGACATTCTGAGCTT
ATTTATGTGTTACAAAAAACTCTCTGACATTCTTAATGAAAAAGCGGGTAAAGCCAAAACTAAAATGGCCAACAA
GACAAGTGATAGTCTTTTGTCCATGAAATTTGTGTCCAGTCTTCTCACTGCTCTTTTCAGAGTCTTGCTATGGAG
ATACACTTCAATTCCTACTTCAGTGGAAGAGTCGGGAAAGAAAGAGAAAGGAAAGAGCATCTCACTGCTGTGCTT
GGAGGGTTTACAGAAAATATTCAGTGCTGTGCAACAGTTCTATCAGCCCAAGATTCAGCAGTTTCTCAGAGCTCT
GGATGTCACAGATAAGGAAGGAGAAGAGAGAGAAGATGCAGATGTCAGTGTCACTCAGAGAACAGCATTCCAGAT
CCGGCAATTTCAGAGGTCCTTGTTGAATTTACTTAGCAGTCAAGAGGAAGATTTTAATAGCAAAGAAGCCCTCCT
GCTAGTCACGGTTCTTACCAGTTTGTCCAAGTTACTGGAGCCCTCCTCTCCTCAGTTTGTGCAGATGTTATCCTG
GACATCAAAGATTTGCAAGGAAAACAGCCGGGAGGATGCCTTGTTTTGCAAGAGCTTGATGAACTTGCTCTTCAG
CCTGCATGTTTCGTATAAGAGTCCTGTCATTCTGCTGCGTGACTTGTCCCAGGATATCCACGGGCATCTGGGAGA
TATAGACCAGGATGTAGAGGTGGAGAAAACAAACCACTTTGCAATAGTGAATTTGAGAACGGCTGCCCCCACTGT
CTGTTTACTTGTTCTGAGTCAGGCCGAGAAGGTTCTAGAAGAAGTGGACTGGCTAATCACCAAGCTTAAGGGACA
AGTGAGCCAAGAAACCTTATCAGAGGCCTCTTCTCAGGCAACCCTACCAAATCAGCCTGTTGAGAAAGCTATCAT
CATGCAACTGGGAACTCTGCTTACATTTTTCCACGAGCTGGTGCAGACAGCTCTGCCATCAGGCAGCTGTGTGGA
CACCTTGTTAAAGGACTTGTGCAAAATGTACACCACACTTACAGCCCTTGTCAGATATTATCTCCAGGTGTGTCA
GAGCTCCGGAGGAATTCCAAAAAATATGGAAAAGCTGGTGAAGCTGTCTGGTTCTCATCTGACCCCCCTGTGTTA
TTCTTTCATTTCTTACGTACAGAATAAGAGTAAGAGCCTGAACTATACGGGAGAGAAAAAGGAGAAACCTGCTGC
CGTTGCCACAGCCATGGCCAGAGTTCTTCGGGAAACCAAGCCAATCCCTAACCTCATCTTTGCCATAGAACAGTA
TGAAAAATTTCTCATCCACCTTTCTAAGAAGTCCAAGGTGAACCTGATGCAGCACATGAAGCTCAGCACCTCACG
AGACTTCAAGATCAAAGGAAACATCCTAGACATGGTTCTTCGAGAGGATGGCGAAGATGAAAATGAAGAGGGCAC
TGCATCAGAGCATGGGGGACAGAACAAAGAACCAGCCAAGAAG

FIGURE 2857

MFKDVPLTAEEVEFVVEKALSMFSKMNLQEIPPLVYQLLVLSSKGSRKSVLEGIIAFFSALDKQHNEEQSGDELL
DVVTVPSGELRHVEGTIILHIVFAIKLDYELGRELVKHLKVGQQGDSNNNLSPFSIALLLSVTRIQRFQDQVLDL
LKTSVVKSFKDLQLLQGSKFLQNLVPHRSYVSTMILEVVKNSVHSWDHVTQGLVELGFILMDSYGPKKVLDGKTI
ETSPSLSRMPNQHACKLGANILLETFKIHEMIRQEILEQVLNRVVTRASSPISHFLDLLSNIVMYAPLVLQSCSS
KVTEAFDYLSFLPLQTVQRLLKAVQPLLKVSMSMRDCLILVLRKAMFANQLDARKSAVAGFLLLLKNFKVLGSLS
SSQCSQSLSVSQVHVDVHSHYNSVANETFCLEIMDSLRRCLSQQADVRLTLYEGFYDVLRRNSQLANSVMQTLLS
QLKQFYEPKPDLLPPLKLEACILTQGDKISLQEPLDYLLCCIQHCLAWYKNTVIPLQQGEEEEEEEEAFYEDLDD
ILESITNRMIKSELEDFELDKSADFSQSTSIGIKNNISAFLVMGVCEVLIEYNFSISSFSKNRFEDILSLFMCYK
KLSDILNEKAGKAKTKMANKTSDSLLSMKFVSSLLTALFRVLLWRYTSIPTSVEESGKKEKGKSISLLCLEGLQK
IFSAVQQFYQPKIQQFLRALDVTDKEGEEREDADVSVTQRTAFQIRQFQRSLLNLLSSQEEDFNSKEALLLVTVL
TSLSKLLEPSSPQFVQMLSWTSKICKENSREDALFCKSLMNLLFSLHVSYKSPVILLRDLSQDIHGHLGDIDQDV
EVEKTNHFAIVNLRTAAPTVCLLVLSQAEKVLEEVDWLITKLKGQVSQETLSEASSQATLPNQPVEKAIIMQLGT
LLTFFHELVQTALPSGSCVDTLLKDLCKMYTTLTALVRYYLQVCQSSGGIPKNMEKLVKLSGSHLTPLCYSFISY
VQNKSKSLNYTGEKKEKPAAVATAMARVLRETKPIPNLIFAIEQYEKFLIHLSKKSKVNLMQHMKLSTSRDFKIK
GNILDMVLREDGEDENEEGTASEHGGQNKEPAKK

FIGURE 2858

GGCACGAGGGAGAACTAGTCTCAGTTTTTTTTTTTTTTTTTTTAGGTGAGAAAGCCAGCTGACTTTATTGCTCTG
GGGGCAGGGGGCTCAGGAGCTCTTGGTGGGGCGGGTCCGCTTCCTCTTCACCATCACAGGCTTCTGGCTGCGCAG
GATGGCGCTGGCCCTGCGGATGGCTGCCATGCGCAGGTCGGGGCGGTACTTGTTCTTGCGGATCATGTGTCTGAT
GCTGCTGAGCGTGGCGCGAGCATTCTTGTTGATGGTGGTCCGCACATAGGAGGTGGCAGGCTTCCGCTGGCCGGA
TCTCCGCTTAATGACCACCACGACACCTTTGCCGTCGGCTGCCGGCTCCACGCCCACAGTCTTGCGGTGAATCAG
TCCGTTGTAGCGGAAGGAATTGCGGGCCTTCAAGTTATTGGGCTCAGTGCTGTAGGTCTGCTTATTCCTCTTGAT
CAGGAAACTGGAGCAGTTCCGCACGACCATCCATTGCAGATGCGCAGACATGGCGGCGGCTCCCTTCGCAGCGGC
GACCTGACCTTCAGCGCCTCGGCTCCAGCGCC**ATG**GCGCCCTCCAGGAAGTTCTTCGTTGGGGGAAACTGGAAGA
TGAACGGGCGGAAGCAGAGTCTGGGGGAGCTCATCGGCACTCTGAACGCGGCCAAGGTGCCGGCCGACACCGAGG
TGGTTTGTGCTCCCCCTACTGCCTATATCGACTTCGCCCGGCAGAAGCTAGATCCCAAGATTGCTGTGGCTGCGC
AGAACTGCTACAAAGTGACTAATGGGGCTTTTACTGGGGAGATCAGCCCTGGCATGATCAAAGACTGCGGAGCCA
CGTGGGTGGTCCTGGGGCACTCAGAGAGAAGGCATGTCTTTGGGGAGTCAGATGAGCTGATTGGGCAGAAAGTGG
CCCATGCTCTGGCAGAGGGACTCGGAGTAATCGCCTGCATTGGGGAGAAGCTAGATGAAAGGGAAGCTGGCATCA
CTGAGAAGGTTGTTTTCGAGCAGACAAAGGTCATCGCAGATAACGTGAAGGACTGGAGCAAGGTCGTCCTGGCCT
ATGAGCCTGTGTGGGCCATTGGTACTGGCAAGACTGCAACACCCCAACAGGCCCAGGAAGTACACGAGAAGCTCC
GAGGATGGCTGAAGTCCAACGTCTCTGATGCGGTGGCTCAGAGCACCCGTATCATTTATGGAGGCTCTGTGACTG
GGGCAACCTGCAAGGAGCTGGCCAGCCAGCCTGATGTGGATGGCTTCCTTGTGGGTGGTGCTTCCCTCAAGCCCG
AATTCGTGGACATCATCAATGCCAAACAA**TGA**GCCCCATCCATCTTCCCTACCCTTCCTGCCAAGCCAGGGACTA
AGCAGCCCAGAAGCCCAGTAACTGCCCTTTCCCTGCATATGCTTCTGATGGTGTCATCTGCTCCTTCCTGTGGCC
TCATCCAAACTGTATCTTCCTTTACTGTTTATATCTTCACCCTGTAATGGTTGGGACCAGGCCAATCCCTTCTCC
ACTTACTATAATGGTTGGAACTAAACGTCACCAAGGTGGCTTCTCCTTGGCTGAGAGATGGAAGGCGTGGTGGGA
TTTGCTCCTGGGTTCCCTAGGCCCTAGTGAGGGCAGAAGAGAAACCATCCTCTCCCTTCTTACACCGTGAGGCCA
AGATCCCCTCAGAAGGCAGGAGTGCTGCCCTCTCCCATGGTGCCCGTGCCTCTGTGCTGTGTATGTGAACCACCC
ATGTGAGGGAATAAACCTGGCACTAGGTAAAAAAAAAAAAAAAAAAAA

FIGURE 2859

MAPSRKFFVGGNWKMNGRKQSLGELIGTLNAAKVPADTEVVCAPPTAYIDFARQKLDPKIAVAAQNCYKVTNGAF
TGEISPGMIKDCGATWVVLGHSERRHVFGESDELIGQKVAHALAEGLGVIACIGEKLDEREAGITEKVVFEQTKV
IADNVKDWSKVVLAYEPVWAIGTGKTATPQQAQEVHEKLRGWLKSNVSDAVAQSTRIIYGGSVTGATCKELASQP
DVDGFLVGGASLKPEFVDIINAKQ

FIGURE 2860

CTGCCATTTCATTACCTCTTTCTCCGCACCCGACATAGATTTTTTTGGCGGTATAATTAAATAAATAACTTTATT
TATGATACTTCAGATTTTATAAATGCCAACTACATAGCAAAGTCCCATAAATTTTAACCGAGACACAACCACCAA
TCAAGGCCCTTTGAAAAATCAAAGATAATAAAGTGTCAAGGGAGAAAAGTTTTGTTCTCCCAACAGAGAATTTAA
TCAATGAACTTACTTCTCTGATCATTTAAGGTTCACAATGGGAAAACTTCTTTTCTTTTAAGGGTACCCTGAATC
AATTAACAGTCAATCAACCCACATTTAGAAAAATAAACCCCATAGTTAAGAAAAATATATCAAATGCCCTTCACA
CCCATAATGTAACAAAACTTTGACACCAGAATGAAAAACTTCTCAGTCTCTGTACCAAACCAGGTGTTAGTCCAC
CCATGAGCAAGTTCGCCTGAATAACAGCATCTATACACCATGATGTAGCTGAGAACTACAGCTGATATCCTTTTA
TTGCCTGTGGCTCGGACTGAAGCCAATACTATAAATACCACAGTGAATTCCAATGGTGAAGAGCAGCAGTGTAGA
TGTTGGAAGTCTACAAACCAGGCTGTAGTTCAGTAAGACAAGTCATGAATTTACAGAAACTAAGAAATGGTTAAC
TCGAAAAGAATTCTGGTGGCTGGCTTAAAATCTGTCACTGTCCAGGGATGGTAACAGAAGACAGGTGCAGAGAGA
GACAGATTCTGCCACATGCACCCTCAACAGTGAAACCATTCTCTGGATGTTTGGAAATGCTTAACAGATTTGGAA
TGAACAGATTTTCACAGAACTCAGGATTCCTGGTACATCAGGCAGTAGTCCTTAAACTTTTGCCCATACGTTGTG
GAGCATTTACAAAGCAATTCTCTGGACAGTGAGCCCTCAATGCCTTTTTATATGTGGCTTCTTGAATAGATCACA
TTAGAAATTGAGCAGTCCCCCTCCTCATACCAGCATTGACACTGGTAGCTGAGGAAGGGGACTGCTCAATTTCTA
ATGTGATCTATTCAAGAAGCCACATATAAAAAGGCATTGAGGGCTCACTGTCCAGAGAATTGCTTTTGTAAATGC
TCCACAACGTATGGGCAAAAGTTTAAGGACTACTGCCTGATGTACCAGGAATCCTGAGTTCTGTGAAAATCTGTT
CATTCCAAATCTGTTAAGCATTTCCAAACATCCAGAGAATGGTTTCACTGTTGAGGGTGCATGTGGCAGAATCTG
TCTCTCTCTGCACCTGTCTTCTGTTACCATCCCTGGACAGTGACAGATTTTAAGCCAGCCACCAGAATTCTTTTC
GAGTTAACCATTTCTTAGTTTCTGTAAATTCATGACTTGTCTTACTGAACTACAGCCTGGTTTGTAGACTTCCAA
CATCTACACTGCTGCTCTTCACCATTGGAATTCACTGTGGTATTTATAGTATTGGCTTCAGTCCGAGCCACAGGC
AATAAAAGGATATCAGCTGTAGTTCTCAGCTACATCATGGTGTATAGATGCTGTTATTCAGGCGAACTTGCTCAT
GGGTGGACTAACACCTGGTTTGGTACAGAGACTGAGAAGTTTTTCATTCTGGTGTCAAAGTTTTGTTACATTATG
GGTGTGAAGGGCATTTGATATATTTTTCTTAACTATGGGGTTTATTTTTCTAAATGTGGGTTGATTGACTGTTAA
TTGATTCAGGGTACCCTTAAAAGAAAAGAAGTTTTCCCATTGTGAACCTTAAATGATCAGAGAAGTAAGTTCATT
GATTAAATTCTCTGTTGGGAGAACAAAACTTTTCTCCCTTGACACTTTATTATCTTTGATTTTTCAAAGGGCCTT
GATTGGTGGTTGTGTCTCGGTTAAAATTTATGGGACTTTGCTATGTAGTTGGCATTTATAAAATCTGAAGTATCA
TAAATAAAGTTATTTATTTAATTATACTACCAGTCTTTTTTACTGGTCTGATTCTTTTGTGCATTCATTAAAGCT
GATTGTGTGAGAGTGAACTGGGACACAAGCTAGTCTAGCTCACTGCAGCCAAGCAAACCCTGTTGATGGCTGATG
GGCCTTTCCATTAGGGTTTTGCTTATGTGAAGTAATGGAATTATGTTGGTTATTTTCTTTATGAAAATAAACCAG
TTCTTCCAAGGAAGTTAAAAGGCTTGGTATGGATGTTGGTGTCAGATAGGTCTGACTAACCTCTCCGTGCTGCAG
CCTATACTAAGGTGACCCAGGGCCACATGTAGACAGCTAGGCCAGTGCTTTTTCCTCTTAGGGTTTCTTTGCAGA
AAGAAACCTCCAGCAAGGGAAGAGAGGTGTGTGTCCACAGGAAGGGGCTCCGTGGGGATCCCATGAAGGGATTTG
AGCTCTTTCAGCTCCATGTCATTTAACTTTTTTGTTTAACCACCTTGGCTTTCTCTCCTTTTTTGCTGTCCTCCT
TACGGACCAGTTACCAGATTCAGAGGCTAACAGTTAGTTACTTGTTAATGCTAGTCACAGCCAGGAGGTCAGAAG
GAATTTTCTACTTCTGGATCCAAATGTTACCTCTTAGGGGAAGTTATGCCCCCTCAACTATTGTCTTATTATAAT
GAATCTTTCCTTTTTGGTCCTTTTAAGTAACCACTCAAAACTTTTCATTTCACTGAAAAAATATGAAAAACCATG
ACANNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
AGCTCACTTTAATATCAAGGTATTTGCATCCATTCCCACCCTGTTAGCTCTTAAGGGAGGAGGGAAATCAATTCC
AACCATACTTTCCTGTGATGGAAGATGTTTCCTCTTGAAAAAATGCCAATACAGATTTTTAAAACCTATTGTTTT
CCAAATGCACTTTGTAAGTTTTTGCTTTTAAAATAGCTTCTTGGAACCAATTTTATTGTATTTGTACTTAATTTT
TGTTCTCATCTAAATGTGCATTTTCTGACTGTATAGAAGAAGCTTTGGTATGTAATTTAATAATAAATTAGAAAT
CTAAATGATTGCATTTGTAATTGTTTATATTGAAACAGTAACCATCAAGGTAGTTTGGGGATAGAGATT**ATG**GTA
TCTCTGGTGTTGATAAGTGTTTCTCAGCACCTGTATTATTTCATCCTGGG

3238/8433
FIGURE 2861

MVSLVLISVSQHLYYFI

FIGURE 2862A

GGGCGCGGAGGCGACCGCCATGGCGTTCCTCAAACTCCGTGACCAGCCATCACTGGTGCAAGCTATATTTAACGG
AGATCCTGATGAAGTTCGAGCACTAATATTTAAGAAAGAAGATGTTAACTTTCAGGACAATGAAAAGCGAACCCC
ATTGCACGCCGCAGCTTACCTTGGAGATGCAGAAATCATTGAACTTCTTATTTTATCTGGAGCTAGAGTTAATGC
CAAAGACAGCAAATGGTTGACACCTTTACACAGAGCAGTTGCATCTTGTAGTGAGGAAGCAGTTCAGGTACTTTT
GAAGCATTCTGCAGATGTTAATGCTCGAGACAAAAATTGGCAAACCCCTTTACATATAGCTGCTGCTAATAAAGC
TGTAAAGTGTGCTGAAGCTTTGGTACCTCTTCTGAGTAATGTAAACGTATCTGATCGAGCAGGGAGGACTGCATT
ACATCATGCAGCTTTCAGTGGACATGGTGAGATGGTCAAACTACTCTTGTCTAGAGGTGCCAATATTAATGCTTT
TGACAAGAAAGATAGGCGTGCTATCCATTGGGCAGCATATATGGGTCACATTGAAGTAGTGAAATTGCTTGTGTC
GCATGGAGCTGAAGTGACATGCAAGGATAAAAAGTCTTATACACCTCTTCATGCAGCAGCCTCTAGTGGAATGAT
CAGCGTAGTCAAGTACCTTCTAGATCTTGGAGTTGATATGAATGAACCAAATGCCTATGGAAATACACCTCTTCA
TGTAGCCTGCTATAATGGACAAGATGTTGTAGTGAATGAACTTATAGACTGTGGTGCTATTGTGAATCAAAAGAA
TGAAAAAGGATTTACTCCTTTGCACTTTGCTGCTGCATCAACACATGGAGCATTGTGTTTAGAGCTTCTAGTTGG
CAATGGGGCCGATGTCAATATGAAGAGTAAAGATGGGAAAACCCCACTACACATGACTGCTCTCCACGGTAGATT
CTCCCGATCACAAACCATTATCCAGAGTGGAGCTGTAATCGACTGTGAGGATAAGAATGGAAATACCCCTTTGCA
CATAGCAGCACGGTATGGCCATGAGCTGCTGATCAACACTCTTATTACAAGTGGTGCTGACACTGCAAAGCGTGG
CATACATGGAATGTTCCCCCTCCATTTGGCAGCCTTAAGCGGCTTTTCAGATTGCTGCAGAAAACTTCTTTCTTC
AGGATTTGATATAGATACCCCAGATGATTTTGGCAGGACTTGTCTACATGCAGCTGCAGCTGGAGGGAATTTGGA
GTGCCTAAACCTTCTGCTGAATACTGGTGCAGACTTTAATAAAAAGGACAAATTTGGGAGATCTCCACTGCACTA
CGCTGCTGCCAACTGCAATTACCAGTGCCTGTTTGCTCTTGTGGGATCAGGAGCAAGTGTGAATGACCTTGATGA
AAGAGGCTGCACACCCCTGCACTATGCAGCTACATCAGACACAGATGGCAAGTGCCTGGAATACTTATTAAGAAA
CGATGCAAATCCAGGGATCCGTGATAAGCAAGGATACAACGCAGTTCATTATTCAGCTGCTTATGGTCACCGTCT
ATGTCTTCAGCTGATTGCAAGTGAAACTCCTCTAGATGTTTTAATGGAAACCTCAGGAACAGACATGCTGAGTGA
TTCAGATAATAGAGCAACAATAAGCCCTTTACACTTGGCTGCCTATCATGGTCACCATCAAGCACTGGAAGTGTT
GGTACAGTCTTTGTTAGATCTTGATGTCAGAAATAGTAGTGGAAGAACACCCCTAGATCTTGCAGCTTTTAAGGG
CCATGTTGAATGTGTGGATGTACTCATTAATCAGGGAGCCTCAATCTTAGTAAAAGATTACATTTTGAAGAGGAC
ACCTATTCATGCAGCAGCAACAAATGGTCATTCAGAATGCTTACGGCTATTAATAGGAAATGCAGAACCACAGAA
TGCAGTGGATATTCAAGATGGAAATGGACAGACGCCTCTGATGCTATCTGTTCTCAACGGGCACACAGACTGTGT
TTACTCATTGCTGAACAAAGGAGCAAATGTAGATGCCAAAGATAAGTGGGGAAGGACAGCGTTGCATAGAGGGGC
AGTTACAGGCCATGAAGAATGTGTAGATGCATTACTTCAACATGGTGCTAAGTGCTTACTTCGGGATAGCAGGGG
CCGGACGCCTATACACCTGTCTGCTGCCTGTGGACACATTGGTGTTCTTGGAGCCCTTTTGCAGTCAGCAGCATC
TATGGATGCAAATCCAGCCACAGCAGACAATCATGGATATACGGCACTTCACTGGGCTTGCTACAATGGTCACGA
GACATGTGTAGAACTGCTTTTAGAACAGGAAGTTTTCCAGAAAACGGAAGGAAATGCTTTTAGTCCATTGCATTG
TGCCGTGATAAATGACAACGAAGGTGCTGCTGAGATGTTAATTGATACATTAGGTGCCAGCATTGTGAACGCCAC
AGATTCAAAAGGAAGAACTCCTCTCCATGCAGCCGCCTTCACAGACCATGTAGAGTGTTTACAGCTGCTGCTCAG
CCATAATGCTCAAGTCAATTCTGTGGACTCTACAGGGAAAACACCTCTTATGATGGCTGCAGAAAATGGACAAAC
AAATACAGTTGAGATGCTGGTTAGCAGTGCTAGTGCAGAACTGACTTTACAAGATAACAGTAAAAATACTGCCCT
CCATTTGGCTTGTAGCAAGGGTCATGAAACTAGTGCCTTGTTAATACTGGAAAAGATAACAGATAGAAACCTCAT
CAATGCAACCAACGCAGCCTTGCAAACACCTCTGCATGTTGCTGCCCGAAATGGGCTAACAATGGTGGTTCAGGA
ACTTTTGGGAAAAGGAGCAAGTGTGCTTGCAGTAGATGAAAATGGCTATACCCCAGCTTTGGCCTGTGCTCCCAA
TAAGGATGTGGCTGATTGCCTGGCTCTCATTTTGGCCACCATGATGCCTGTCTCATCAAGTAGTCCTTTATCATC
CTTAACATTCAATGCCATTAACCGTTATACCAACACCTCAAAAACAGTCAGCTTTGAAGCTTTGCCCATCATGAG
GAATGAACCTAGCTCCTATTGCAGTTTCAATAACATTGGAGGGGAACAGGAGTACTTATACACTGACGTGGATGA
GCTCAACGACTCCGATTCTGAGACCTACTGAGAGGCTGAGGAGGAGGGAGTTCTCACAGTAAAGCTTCAAACTGT
GCTTTTTCAGGAAAAAGGCACTTTGATATTCACGTAGAAATTCAACCTAAGAGGAAAGATCCCACAGTGAGCCAA
TGTTAAGAGATCTGATGGCATTAGGAGGAAGAGTTTTAAAGGAATTCTCTTCTGAATTCCCTGAGGGAATTTTCT
AGAATCTCAGAATTGAAAGAGACCTGAGGTTCATCCAGTCTCTAACCTCTTAACAAATGCAGGAGTCCCTTCTAC
AAGGGTGATCTTTCCACCTTGAACACTTCCAAGTGACTCTACCTCACCAAGCAGTCCATTCAGTTGTTGAGCAGC
TCTAACTGTTAGAAAGGTCTTCCTTAGATGGAGTTGAAGCCTCCCTCCCGGTAACTTCTGTCTTTGGGCCTGGGT

FIGURE 2862B

CTGTCCTCCAAGAGAACCCTGAGAATGTTGGAAGGATGAATCTCGCACATTCTGCCATGTCTTCTCTTTTACAGG
CTGTTTGACTTCTCTGCTGAAGTGATTTCCAGAAGGACTCATTTGACACACTATTAGATTTACCACATCTAATGA
AATCCAAGGTGTAGCTATAAAGTGACAAGCTGTTTTTAATTTATCACATACACCAGAACTTCTATCCTGCATCAC
TTATATGTAAATGATGCTGTTACCAAAAACATTAAGGTAGTTCTTGCGAATGCCACCCCACTAAGAAAACTATTT
CATTACTTTTGTAATCCATCTGTGAGAGTCTGCCCCCCAGCTTAACCACTTCCTTTGATCTGCACCCAATGAAGG
GAAACCCCAAAGTACTGTCTCAAATGGTATTTGAACTACGCCAGTATTGTTGGAATAAGTACATTAATTACTTGA
ATGAATGAACACAGCACCGTAGAAATTTCCTTTATGGTTACACCTTGTATGTCTAAAGCATTCAGGCCCTGTTCT
GTAGTGTTTCTTATCCTCACACAGAGTAGAAAAGCCTGTTTGCTTTATTTAACTTATACATAAAAGATGACATCT
GAAATATCTGATGTGTATTATAATACCAGCTTCTGCTCTAGAACTACTTTGGGTGAAATGGTGGTAATAGCAAAT
GACCTCCTTTAACAAGACACTCATCTCAAACAATGCCATTTAGTTCAGGAGATCTCTAAGTGTAGCTGTAAATTT
TGGGGTTAATTTGGCTTATATTGGACCTTTTAAAAGAAATAAAGTTTTTTAATGCAAT

FIGURE 2863

GAEATAMAFLKLRDQPSLVQAIFNGDPDEVRALIFKKEDVNFQDNEKRTPLHAAAYLGDAEIIELLILSGARVNA
KDSKWLTPLHRAVASCSEEAVQVLLKHSADVNARDKNWQTPLHIAAANKAVKCAEALVPLLSNVNVSDRAGRTAL
HHAAFSGHGEMVKLLLSRGANINAFDKKDRRAIHWAAYMGHIEVVKLLVSHGAEVTCKDKKSYTPLHAAASSGMI
SVVKYLLDLGVDMNEPNAYGNTPLHVACYNGQDVVVNELIDCGAIVNQKNEKGFTPLHFAAASTHGALCLELLVG
NGADVNMKSKDGKTPLHMTALHGRFSRSQTIIQSGAVIDCEDKNGNTPLHIAARYGHELLINTLITSGADTAKRG
IHGMFPLHLAALSGFSDCCRKLLSSGFDIDTPDDFGRTCLHAAAAGGNLECLNLLLNTGADFNKKDKFGRSPLHY
AAANCNYQCLFALVGSGASVNDLLDERGCTPLHYAATSDTDGKCLEYLLRNDANPGIRDKQGYNAVHYSAAYGHRL
CLQLIASETPLDVLMETSGTDMLSDSDNRATISPLHLAAYHGHHQALEVLVQSLLDLDVRNSSGRTPLDLAAFKG
HVECVDVLINQGASILVKDYILKRTPIHAAATNGHSECLRLLIGNAEPQNAVDIQDGNGQTPLMLSVLNGHTDCV
YSLLNKGANVDAKDKWGRTALHRGAVTGHEECVDALLQHGAKCLLRDSRGRTPIHLSAACGHIGVLGALLQSAAS
MDANPATADNHGYTALHWACYNGHETCVELLLEQEVFQKTEGNAFSPLHCAVINDNEGAAEMLIDTLGASIVNAT
DSKGRTPLHAAAFTDHVECLQLLLSHNAQVNSVDSTGKTPLMMAAENGQTNTVEMLVSSASAELTLQDNSKNTAL
HLACSKGHETSALLILEKITDRNLINATNAALQTPLHVAARNGLTMVVQELLGKGASVLAVDENGYTPALACAPN
KDVADCLALILATMMPVSSSSPLSSLTFNAINRYTNTSKTVSFEALPIMRNEPSSYCSFNNIGGEQEYLYTDVDE
LNDSDSETY

FIGURE 2864A

GCTGGCGGAGAGCGGCCTGCGGGCGATCGGGCCGAGCCTCGCTCAAGGAGCACCCCCGGGGCACCCTCCTGTCCG
ATGGCAGCCCGGCCCTGTCCAGGAATGTCGGTATGACGGTCTCTCAGAAAGGGGGTCCCCAGCCAACACCGAGCC
CGGCTGGCCCTGGGACGCAACTCGGACCAATCACAGGAGAGATGGATGAAGCCGATTCTGCGTTTTTAAAATTTA
AGCAGACAGCTGATGACTCTCTGTCCCTTACATCTCCAAACACCGAGTCCATTTTTGTAGAAGATCCCTACACCG
CCTCGCTGAGGAGTGAGATTGAGTCAGACGGCCACGAGTTTGAAGCTGAGTCCTGGAGCCTCGCCGTGGATGCAG
CCTACGCCAAGAAGCAAAAGAGGGAGGTGGTGAAAAGACAAGATGTCCTTTATGAGCTGATGCAGACAGAGGTGC
ACCACGTGCGGACGCTCAAGATCATGCTGAAGGTGTACTCCAGGGCCCTGCAGGAGGAGCTGCAGTTCAGCAGCA
AGGCCATTGGCCGCCTCTTCCCATGCGCTGACGACCTGCTGGAGACGCACAGCCACTTCCTCGCTCGGCTCAAGG
AGCGCCGCCAGGAGTCCCTGGAGGAGGGCAGTGACCGGAATTATGTCATCCAGAAAATCGGCGACCTCCTGGTTC
AGCAGTTTTCAGGTGAAAATGGGGAGAGAATGAAAGAAAAGTACGGTGTGTTTTGTAGTGGCCACAATGAAGCTG
TTAGTCATTACAAGTTGCTGCTTCAGCAAAACAAGAAATTTCAAAACTTGATCAAGAAAATTGGCAACTTCTCCA
TCGTGCGGCGGCTTGGCGTGCAGGAGTGCATTCTCCTGGTTACACAACGCATAACCAAATACCCAGTGCTGGTGG
AGCGCATCATCCAGAACACGGAAGCTGGCACTGAGGACTATGAAGACCTGACCCAGGCCTTGAACCTCATCAAAG
ATATCATCTCACAAGTGGACGCCAAGGTCAGTGAGTGTGAGAAGGGCCAGCGCCTCAGGGAGATCGCAGGGAAGA
TGGACCTGAAGTCTTCCAGCAAACTCAAGAACGGGCTCACCTTCCGCAAGGAAGACATGCTTCAGCGGCAGCTCC
ACCTGGAGGGCATGCTATGCTGGAAGACCACATCAGGGCGCTTGAAAGATATCCTGGCTATCCTGCTGACCGACG
TACTTTTGCTGCTACAAGAAAAAGATCAGAAATACGTCTTTGCTTCTGTGGACTCAAAGCCACCCGTCATCTCGT
TACAAAAGCTCATCGTGAGGGAAGTGGCCAACGAGGAGAAAGCGATGTTTCTGATCAGCGCCTCCTTGCAAGGGC
CGGAGATGTATGAAATCTACACGAGCTCCAAAGAGGACAGGAACGCCTGGATGGCCCACATCCAAAGGGCTGTGG
AGAGCTGCCCTGACGAGGAGGAGGGGCCCTTCAGCCTGCCCGAAGAGGAAAGGAAGGTGGTCGAGGCCCGCGCCA
CGAGACTCCGGGACTTTCAAGAGCGGTTGAGCATGAAAGACCAGCTGATCGCACAGAGCCTCCTAGAGAAACAGC
AGATCTACCTGGAGATGGCCGAGATGGGCGGCCTCGAAGACCTGCCCCAGCCCCGAGGCCTATTCCGTGGAGGGG
ACCCATCCGAGACCCTGCAGGGGGAGCTAATTCTCAAGTCGGCCATGAGCGAGATCGAGGGCATCCAGAGCCTGA
TCTGCAGGCGGCTGGGCAGCGCCAACGGCCAGGCGGAAGACGGAGGCAGCTCCACAGGCCCGCCCAGGAGGGCTG
AGACCTTCGCGGGCTACGACTGCACAAACAGCCCCACCAAGAATGGCAGTTTCAAGAAGAAAGTCAGCAGCACTG
ACCCCAGGCCCCGAGACTGGCGAGGCCCCCCAAACAGCCCGGACTTGAAGCTCAGTGACAGTGACATTCCTGGGA
GCTCTGAGGAATCGCCGCAGGTGGTGGAGGCGCCAGGCACGGAATCCGATCCCCGTCTGCCCACCGTCCTGGAGT
CGGAGCTTGTCCAGCGGATCCAGACACTGTCCCAGCTGCTCCTGAACCTTCAGGCGGTAATCGCCCACCAGGACA
GCTATGTGGAGACGCAGCGGGCTGCCATCCAGGAGCGGGAGAAGCAGTTCCGGCTGCAGTCGACGCGTGGGAACC
TGCTGCTGGAGCAGGAGCGGCAACGCAACTTCGAGAAGCAGCGGGAGGAGCGCGCGGCCCTGGAGAAGCTGCAGA
GCCAGCTGCGGCACGAGCAGCAGCGCTGGGAGCGCGAGCGCCAGTGGCAGCACCAGGAGCTGGAGCGTGCGGGCG
CGCGGCTGCAGGAGCGCGAGGGCGAGGCGCGGCAGCTACGCGAGCGGCTGGAGCAGGAGCGGGCCGAGCTGGAGC
GCCAGCGCCAGGCCTACCAGCACGACCTGGAGCGGCTGCGCGAGGCCCAGCGTGCCGTGGAGCGCGAGCGGGAGC
GCCTGGAGCTGCTGCGCCGCCTCAAGAAGCAGAACACCGCGCCAGGCGCGCTGCCGCCCGACACACTGGCCGAGG
CCCAGCCCCCAAGCCACCCTCCCAGCTTCAACGGGGAAGGGCTGGAGGGCCCTCGGGTGAGCATGCTGCCATCCG
GCGTGGGGCCAGAGTACGCAGAGCGCCCCGAGGTGGCTCGCCGGGACAGCGCCCCCACCGAGAGCCGGCTGGCCA
AGAGCGATGTGCCCATCCAGCTGCTCAGCGCCACCAACCAGTTCCAGAGGCAGGCGGCCGTGCAGCAGCAGATCC
CCACCAAGCTGGCGGCCTCCACCAAGGGTGGCAAGGACAAGGGCGGCAAGAGCAGGGGCTCTCAGCGCTGGGAGA
GCTCAGCGTCCTTCGACCTGAAGCAGCAGCTGCTGCTCAACAAGCTCATGGGGAAAGATGAGAGCACCTCACGGA
ACCGCCGCTCGCTGAGCCCTATCCTGCCCGGCAGACACAGTCCTGCGCCCCCACCAGACCCTGGCTTCCCCGCCC
CGAGCCCACCGCCAGCTGACAGCCCCTCCGAGGGCTTCTCTCTCAAGGCCGGGGGCACAGCCCTCCTGCCCGGCC
CCCCAGCTCCCTCGCCACTGCCGGCCACACCACTCAGCGCCAAGGAGGACGCCAGCAAAGAAGACGTCATCTTCT
TCTAAAAGGGCCGTGACTCAAGGAAAGTTTTTAATGGAAAGTTGAGCCAGAACTAAACCAGGGAGCTGTCTGAAA
TCATAGCACCCCATCCGGGTGGCGGGGAGATCAACTCCGAGCTGTTTTTCCGAGGCAGTGAGGAACGGTGCCGGC
TCTGCACGGAGCTGAGGACAGGACAGACCTTGCTTTGAGAAGGAGCTGCCGGCCGGGGCCACGCTCCACAGCCGC
CGCGCGACAGTGGAGCCAAGGGTTAGGGCACCAGGAGGGGCCAGGTGGCGTCGGCAGCATCTGTCCCCAGAATCA
GGCAGAATCCACTTCCCAAACAGAGCCCCACGCAGGTTCACCATGAACCTCAGGGTCAGGGAATGAGCCAGGCAC
GGGGGCATGGGCAGAGAGGGCCACGGGGCAGGGCCCACTGAGGGAACATCAGTGGCCCTCCAGTCAGGTTCTGTG

FIGURE 2864B

GGTTTGGAAGCCCATCGTGAAAGGGGCTGACCTTTGCCCCTTTTTACTTGGCATTGGTTTTGAAACCAGCTGTTT
CCCAAACTCTGCTTCCCAAGGGCAACCGTTGCTGTTCACACGCTCAGCCTGTCTGGGGGAGCGGGCCTCTAGCTT
CAGCCAGGGCGGGTACACACCCTGGGCACAGGGTCCTCAGCCCCCGGGAAATGAGCTCCCAGGGCTGGCGTCCCA
CCTTCCAGGTGGGGGCTGGCACATCACAGACTGTCGAGAGCGCCATGTCCCAGGGCATGCAGAGGTTGCACCTAG
AGACGTTGCAGCAAGTGGACAAGTGGCCGCTGTGCGGGCCCCTCGCTTGTAGTGAGCTGTTGCAGCTTACGGTCC
GTTCCCTGGAGGGGTGGAGGAAGGAGGTGTTGGGCAGCATCAAAGGTGCTGGGACATCCCAGGGTGGTGAGATCC
ATCCACGATCCAGCTCCGGTGGAGAAAGGGCCCATGTCAAGCCTTGTTCTGCACCCCAAGCATTGGTGGTAGGAC
TGGGTCCTGGCTGATCGTCCTTGTTCCCAGTGGGGTACATGTGAGCCCCTGCCAGGGCCAAGTCCTTCTCCCGAA
CCCAGGGTCCTGGGAACTGCAGATCCCGGGGGGGATTCAGCCCTTCTCCCACTGTGCTGGCAGAGGCACTCCTGTG
ACGCTGAATACAGTGAACAGGGACATTCCCGCCACTCGGGGACAGATGGGCACAAGGGAGGGGAAACTCCATCAG
GAAGTGCTCCCCTGGGCAGAGGCGCCCACTGGGTGCTGTGGGCTCAGGAGGGGGCGGGGCAGGAGCTGGTGCCAA
CCGGGAACCAGAGCCCCACAGCCATACAGCCCATTGGTGACAAGGTCCTGAGAACACAGTGGCCAGGTGTCCCCA
GGCTCCTGGCCCCTCCGACGACCTCAACTCTGCCCAGCCCGGTCCCTGGCCATCAGCGACGCTGTCCGCCCCCCG
TCAGATCCCATGTGTGCCATGTTTATCATCAGTGTTTTGTATTTTTGTACTGAGTATCGGAGCACTTTACAGAAG
CTGACTGTACATTCCTGTTCTGTTGTGAAGAGAACATTCCCAGACCCTGGCACCCTCCTGAGCCGGCGTGTGCCG
GTCCAGCCCTCCGAGATGCCACAATTCCTTGGATGGGGGAGAAGTTCAAGGAATTTCTGCTCGGCCACGCGGTGG
GAACCCCGCGTCCCCGCCATGTGGCAGAGGGGTCTCAGTCGTGCTAGGCATCGGGCGGCAGCGCCGACAGCCCTT
CCCTCGCCAGTGCCCCTCGGCCACTCCTGGGTTGGAGCCCGATTTTATTTGTAAAGTTGACAGTCGAGCAAATGT
TCCTATTTTCGTGGGATCTGCACACGTCTTTGTCAGTTGTGGTCATGATCTTAGTCACCTGCTAATTATTTTTAC
AATGATTACAACATTTCCTCACTGCGGGATATTTCTGACCCGCTTTAGAACTTAAGACCTGATTCTAGCAATAAA
CGTGTCCGAGATG

FIGURE 2865

MTVSQKGGPQPTPSPAGPGTQLGPITGEMDEADSAFLKFKQTADDSLSLTSPNTESIFVEDPYTASLRSEIESDG
HEFEAESWSLAVDAAYAKKQKREVVKRQDVLYELMQTEVHHVRTLKIMLKVYSRALQEELQFSSKAIGRLFPCAD
DLLETHSHFLARLKERRQESLEEGSDRNYVIQKIGDLLVQQFSGENGERMKEKYGVFCSGHNEAVSHYKLLLQQN
KKFQNLIKKIGNFSIVRRLGVQECILLVTQRITKYPVLVERIIQNTEAGTEDYEDLTQALNLIKDIISQVDAKVS
ECEKGQRLREIAGKMDLKSSSKLKNGLTFRKEDMLQRQLHLEGMLCWKTTSGRLKDILAILLTDVLLLLQEKDQK
YVFASVDSKPPVISLQKLIVREVANEEKAMFLISASLQGPEMYEIYTSSKEDRNAWMAHIQRAVESCPDEEEGPF
SLPEEERKVVEARATRLRDFQERLSMKDQLIAQSLLEKQQIYLEMAEMGGLEDLPQPRGLFRGGDPSETLQGELI
LKSAMSEIEGIQSLICRRLGSANGQAEDGGSSTGPPRRAETFAGYDCTNSPTKNGSFKKKVSSTDPRPRDWRGPP
NSPDLKLSDSDIPGSSEESPQVVEAPGTESDPRLPTVLESELVQRIQTLSQLLLNLQAVIAHQDSYVETQRAAIQ
EREKQFRLQSTRGNLLLEQERQRNFEKQREERAALEKLQSQLRHEQQRWERERQWQHQELERAGARLQEREGEAR
QLRERLEQERAELERQRQAYQHDLERLREAQRAVERERERLELLRRLKKQNTAPGALPPDTLAEAQPPSHPPSFN
GEGLEGPRVSMLPSGVGPEYAERPEVARRDSAPTESRLAKSDVPIQLLSATNQFQRQAAVQQQIPTKLAASTKGG
KDKGGKSRGSQRWESSASFDLKQQLLLNKLMGKDESTSRNRRSLSPILPGRHSPAPPPDPGFPAPSPPPADSPSE
GFSLKAGGTALLPGPPAPSPLPATPLSAKEDASKEDVIFF

FIGURE 2866A

GGACGAGTCGAGCCTCCTGCGGCGCCGCGGGCTCCAGAAGGAGCTGAGCCTGCCACGCCGAGGACGTGGCTGCCG
CAGCGGGAACCGCAAGAGCTTGGTGGTAGGAACGCCCTCCCCGACCCTCTCCCGGCCCCTGTCGCCATTGTCGGT
CCCAACGGCAGGCAGCAGCCCCTTGGATAGTCCTCGGAATTTCTCGGCTGCCTCTGCCCTAAATTTCCCCTTTGC
CCGGAGGGCAGACGGCAGAAGATGGTCCCTCGCGTCTCTCCCATCTTCCGGCTATGGAACCAACACACCCAGCTC
CACCCTCTCGTCAAGCTCATCCTCCCGGGAACGTCTCCACCAGCTTCCCTTCCAGCCGACGCCGGACGAGCTGCA
CTTCCTGTCCAAGCACTTCCGCAGCTCAGAGAATGTGCTTGATGAGGAAGGCGGCCGGTCACCCCGCCTCCGACC
CCGCTCTCGCAGTCTCAGCCCGGGCCGTGCAACGGGGACCTTCGACAATGAGATTGTCATGATGAATCACGTGTA
CCGGGAGAGGTTCCCCAAGGCCACAGCACAGATGGAGGGCCGTCTGCAGGAGTTCCTGACGGCCTACGCGCCCGG
CGCCCGGCTGGCGCTGGCTGATGGCGTCTTGGGCTTCATCCACCACCAGATCGTCGAGCTGGCCCGAGACTGCTT
GGCCAAGTCTGGCGAGAACCTCGTCACCTCCCGCTACTTCCTAGAGATGCAGGAGAAGCTGGAGCGGCTTCTGCA
GGATGCCCATGAGCGTTCGGACAGTGAGGAGGTCAGCTTCATCGTCCAGCTTGTCCGGAAACTGCTGATCATCAT
CTCACGGCCAGCTCGGCTGCTGGAGTGTCTGGAGTTTGACCCTGAGGAATTTTACCACCTGCTGGAGGCGGCTGA
GGGCCATGCGCGGGAGGGCCAAGGCATTAAGACTGACCTTCCACAGTACATCATTGGGCAGCTGGGCCTGGCCAA
GGACCCCCTGGAGGAGATGGTGCCACTGAGTCACCTCGAAGAAGAACAGCCCCCAGCACCTGAGTCCCCAGAGAG
CCGCGCCCTGGTCGGCCAGTCACGGAGGAAGCCATGCGAAAGCGACTTTGAGACCATCAAACTCATTAGCAACGG
AGCCTATGGGGCCGTCTACCTGGTGCGGCACCGTGACACACGGCAGCGCTTTGCCATCAAGAAGATCAACAAACA
GAACTTGATCCTGCGTAACCAGATCCAGCAGGTCTTTGTGGAGCGTGACATTCTCACCTTTGCCGAGAACCCCTT
TGTGGTCAGCATGTTCTGCTCCTTTGAGACCCGGCGCCACCTATGTATGGTCATGGAATACGTGGAAGGCGGCGA
CTGCGCCACGCTCCTGAAGAACATGGGCCCGCTGCCCGTGGACATGGCCCGCCTGTACTTCGCCGAGACGGTGTT
GGCGCTGGAGTACCTGCATAACTATGGCATCGTGCACCGTGACCTCAAACCAGACAATCTGCTCATCACCTCGCT
TGGCCACATCAAGCTCACGGACTTCGGCCTGTCCAAGATCGGCCTCATGAGCATGGCCACCAACCTCTATGAGGG
CCACATCGAGAAGGACGCCCGAGAGTTCATCGACAAGCAGGTGTGTGGGACGCCGGAGTACATAGCCCCCGAGGT
GATCTTCCGCCAGGGCTATGGGAAGCCAGTGGACTGGTGGGCCATGGGCGTCGTCCTCTATGAGTTTCTGGTGGG
CTGCGTGCCTTTCTTTGGAGATACCCCCGAGGAACTCTTCGGTCAGGTGGTCAGCGATGAGATCATGTGGCCAGA
GGGAGATGAGGCCCTTCCAGCAGACGCCCAGGACCTCATCACCAGGTTGCTCCGGCAGAGCCCGCTGGACCGTCT
GGGCACTGGTGGCACCCACGAAGTGAAGCAGCACCCCTTTTTCCTGGCCCTGGACTGGGCAGGGCTTCTCCGACA
CAAAGCCGAGTTCGTGCCCCAGCTCGAAGCCGAGGATGATACCAGCTACTTTGACACACGTTCGGAACGTTACCG
CCATCTGGGCTCCGAGGACGACGAGACCAATGATGAAGAATCGTCCACAGAGATCCCCCAGTTCTCCTCCTGCTC
CCACCGGTTCAGCAAGGTCTACAGCAGCTCTGAGTTCCTGGCCGTCCAGCCCACTCCTACCTTCGCTGAAAGGAG
CTTCAGTGAAGACCGGGAGGAGGGGTGGGAGCGCAGCGAAGTGGACTATGGCCGCCGGCTGAGTGCTGACATCCG
GCTGAGGTCCTGGACATCCTCTGGATCCTCCTGTCAGTCATCTTCGTCCCAGCCCGAGCGGGGTCCCAGCCCATC
TCTCCTGAATACCATCAGCCTGGACACAATGCCCAAGTTTGCCTTCTCATCAGAGGATGAGGGGGTAGGCCCAGG
CCCTGCAGGCCCCAAGAGGCCCGTCTTCATTCTAGGGGAGCCTGACCCCCCACCAGCGGCCACCCCAGTGATGCC
CAAGCCCTCGAGCCTTTCTGCCGACACAGCTGCTCTCAGCCACGCCCGCCTACGGAGCAATAGCATCGGCGCCCG
ACACTCCACACCAAGGCCTCTGGATGCCGGCCGGGGCCGCCGCCTTGGGGGCCCAAGAGACCCAGCCCCTGAGAA
GTCCAGAGCCTCCTCCAGCGGTGGCAGTGGTGGCGGCAGTGGGGGCCGCGTGCCCAAGTCAGCCTCTGTCTCTGC
CCTGTCCCTCATCATCACGGCAGATGATGGCAGCGGCGGCCCCCTCATGAGCCCCCTTTCCCCGCGCTCTCTGTC
CTCGAACCCGTCGTCCCGTGACTCTTCGCCGAGCCGAGACCCGTCCCCCGTGTGTGGCAGCCTGCGGCCCCCCAT
CGTTATCCACAGCTCTGGCAAGAAGTACGGCTTCAGCCTGCGGGCGATCCGCGTCTACATGGGTGATAGCGACGT
CTACACTGTGCACCACGTCGTCTGGAGTGTGGAGGACGGAAGCCCCGCCCAGGAGGCGGGCCTGCGGGCTGGGGA
CCTCATCACCCACATCAACGGGGAGTCAGTGCTGGGGCTGGTGCACATGGACGTCGTGGAGCTGCTGCTGAAGAG
CGGCAACAAGATATCCCTGCGGACCACAGCCCTGGAGAACACCTCCATCAAGGTGGGCCCCGCCCGGAAGAATGT
GGCCAAGGGCCGCATGGCACGCAGGAGCAAGAGGAGCCGTCGGCGGGAGACCCAGGATCGGCGGAAGTCACTTTT
CAAGAAGATCTCCAAGCAGACCTCCGTGCTGCACACCAGCCGCAGCTTCTCCTCCGGACTCCACCACTCACTGTC
ATCCAGTGAGAGCCTCCCCGGCTCGCCCACCCACAGCCTCTCCCCCAGCCCCACCACTCCCTGCCGAAGCCCAGC
CCCTGATGTCCCAGCAGATACCACTGCATCCCCACCCAGCGCATCCCCGAGCTCCAGCAGCCCCGCCTCCCCAGC
TGCTGCTGGCCACACCCGCCCCAGCTCCCTGCACGGCCTGGCTGCCAAGCTTGGGCCACCCCGCCCCAAGACTGG
CCGCCGCAAGTCCACCAGCAGCATCCCGCCCTCCCCGCTGGCCTGCCCGCCCATCTCCGCGCCCCCACCCCGCTC

FIGURE 2866B

GCCCTCGCCCCTGCCCGGGCACCCGCCCGCACCTGCCCGATCCCCGCGGCTGCGCCGGGGCCAGTCAGCTGACAA
GCTGGGCACAGGGGAGCGGCTGGATGGGGAGGCGGGGCGGCGCACTCGTGGGCCAGAGGCCGAGCTCGTGGTCAT
GCGGCGGCTGCACCTGTCCGAGCGCCGAGACTCCTTCAAGAAGCAGGAGGCCGTGCAGGAGGTTAGCTTCGATGA
GCCGCAGGAGGAGGCCACTGGGCTGCCCACCTCAGTGCCACAGATCGCCGTGGAGGGCGAGGAAGCCGTGCCAGT
AGCTCTCGGGCCCACCGGAAGAGACTGATCCCCTGCCAGGTCTCTCCCTGGCATCAAAGTTACGCGTTTTCTTGT
GCAATGTTTTTTCCGTAAAGTCATGCCTGGATGGGGACTGAGCCACCAGCCTGACACCCAGAAGGCGAGAAGCCA
TCTCGGTCCTTGCTGGAAGGTGGAGACATCGCTTGTGTTCTGGTGTCAATCAGGGGGCTGGATGGGGCAAGAATG
GGGGACAAGGGTGGCTTTGTAAATAGCAGCAAATCCCTGCAACTAATTTATTACTTTTTTTTTCTTTTTTTTTTT
TTTTTTTGAGACAGAGTCTCACTCTGTTGCCCCGGCTGGAGTGCAGCGGCGTGATCTCAGCTCACTGCAACCTCC
GCCTCCCAAGTTCAAGCGATTGTCCTGCCTCAGCTTCCCAAGTGGCTGGGATTACAGGCGCCCACCACTATGCCC
AGCTAATTTTTTGTATTTTTAGTACAGACGGGGTTTCACCATGTTGGTCAGGCTGGTCTCGAACTCCTGACCTCA
TGATTTGCCTGCCTTTGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACTGGGCCCAGCCTAATTTATTACT
TTTTATAAGCGATAGCCGTACTGAGCCGCCCCCTGAAGGCGGCTGCCAGGTCTTGCCCCAGGCACCTGGGACTCT
GTTTGCAGGCCCTGCCCTCTGGGCTGAGAAGGATGCACTTTGGACAAGTCATCTGTGTTTGTGTTTTCCAGTTTT
TCTGTACTTTTTAAGTGTTTTGTGTTACCTGGTCTCATTCCCCTCCCCACACCTACCCATTTGAGGGGATGGAGT
TGAAGTCACCTGGTCACCTGTACCGGCCCAGTTCGGCTACAACCTGGAGTGTCCGTAAACAATTCCTCTCACCCA
CAAAACAATGTAATCCCAGCGATGGACTGGATTCTGAAGGCCACTTCCCACCATCATAGCTGCCATGCCCAGGCA
GTGCCTGCTCTATATATAGAGTCTGCCTCCAATCCTGCTGGCTTCAGCCTGGAGAAGGGATATGGGAGCTGGAGC
TTTGATGGATGAATAGGTGTTCACCGGATCTGGGCAGAGGGGTCATCCGCTCCCCAGGTGGGCACTGATAAAGGA
AGGTACAGGCCTCACCTGGAACTGCCAAGGCAGCCTCCAGAAATGCTCGGCTGTCTCGGGGCACGCTCCAGTATG
CCAGTCCTGCGGGATTACGTCCAGCTACTTCCAGAAACACTCAGTGTCCCCTCCCCTCAGGCTCTGCCTTGGCCT
GGCCTTGTCCAGTCTACCCTGGACAAGATGCCGTGTGTTTGAGGCCCAGCAGAGTAAGCCCTTGGCCGTGATGTG
TCTGAAACACCTGTTAGGGGTTCCCTCCATATGTCAGAGCCTCTCTGGGATGAAGTTCAAGCCAGAAAACCCAGT
CGAGGCTCAAGTTTGAATTTCAGCTTCACTGTGTGGCTCTGGGAAAATGGCTTTCCCACTCTGTGCCTCAGTTTC
CTTGTGTTTACAAGACTAATCCCATTGACTGTTTATTAAGCACCTACTGTGTGCCAAGCGCTTTTACGTGGCTTC
TCCCTCAGCCAGCCTTGAGAAGGCTGGAGGTGGTGTCATCACCTCCATTTTACAGACAAAGCAGCTGAGACCCCA
GCGAGGGGCGGAGACCTGTCCCACGATCACCCAGCAGGAGTCGTGGCAGAACGGAGCATCAGCCAGACCCTGTTG
TGGGCGTTGTCATCAAGGGAGCTTGAATGGAGGGTCTGGTGTCAGATACAGCCGACTCCAGCCCCAGCTCATCCC
CCATGATGCTGTGTGACCCACTGGGCACTCTGGTGAGGGAGCTTTCCAGACATCAACAGCCCACTCTGCTTCCCT
TTCTGAGTCCCCTGTCCAGCACTGCCTAGTGTTGGAGGGTAGACCAAGGCTGTGCATGATTCACCCCCTCCTTCC
ATCCTGGAGCTGGCAGTGAATAAAAGCCCGTATTTAC

FIGURE 2867

DESSLLRRRGLQKELSLPRRGRGCRSGNRKSLVVGTPSPTLSRPLSPLSVPTAGSSPLDSPRNFSAASALNFPFA
RRADGRRWSLASLPSSGYGTNTPSSTLSSSSSSRERLHQLPFQPTPDELHFLSKHFRSSENVLDEEGGRSPRLRP
RSRSLSPGRATGTFDNEIVMMNHVYRERFPKATAQMEGRLQEFLTAYAPGARLALADGVLGFIHHQIVELARDCL
AKSGENLVTSRYFLEMQEKLERLLQDAHERSDSEEVSFIVQLVRKLLIIISRPARLLECLEFDPEEFYHLLEAAE
GHAREGQGIKTDLPQYIIGQLGLAKDPLEEMVPLSHLEEEQPPAPESPESRALVGQSRRKPCESDFETIKLISNG
AYGAVYLVRHRDTRQRFAIKKINKQNLILRNQIQQVFVERDILTFAENPFVVSMFCSFETRRHLCMVMEYVEGGD
CATLLKNMGPLPVDMARLYFAETVLALEYLHNYGIVHRDLKPDNLLITSLGHIKLTDFGLSKIGLMSMATNLYEG
HIEKDAREFIDKQVCGTPEYIAPEVIFRQGYGKPVDWWAMGVVLYEFLVGCVPFFGDTPEELFGQVVSDEIMWPE
GDEALPADAQDLITRLLRQSPLDRLGTGGTHEVKQHPFFLALDWAGLLRHKAEFVPQLEAEDDTSYFDTRSERYR
HLGSEDDETNDEESSTEIPQFSSCSHRFSKVYSSSEFLAVQPTPTFAERSFSEDREEGWERSEVDYGRRLSADIR
LRSWTSSGSSCQSSSSQPERGPSPSLLNTISLDTMPKFAFSSEDEGVGPGPAGPKRPVFILGEPDPPPAATPVMP
KPSSLSADTAALSHARLRSNSIGARHSTPRPLDAGRGRRLGGPRDPAPEKSRASSSGGSGGGSGGRVPKSASVSA
LSLIITADDGSGGPLMSPLSPRSLSSNPSSRDSSPSRDPSPVCGSLRPPIVIHSSGKKYGFSLRAIRVYMGDSDV
YTVHHVVWSVEDGSPAQEAGLRAGDLITHINGESVLGLVHMDVVELLLKSGNKISLRTTALENTSIKVGPARKNV
AKGRMARRSKRSRRRETQDRRKSLFKKISKQTSVLHTSRSFSSGLHHSLSSSESLPGSPTHSLSPSPTTPCRSPA
PDVPADTTASPPSASPSSSSPASPAAAGHTRPSSLHGLAAKLGPPRPKTGRRKSTSSIPPSPLACPPISAPPPRS
PSPLPGHPPAPARSPRLRRGQSADKLGTGERLDGEAGRRTRGPEAELVVMRRLHLSERRDSFKKQEAVQEVSFDE
PQEEATGLPTSVPQIAVEGEEAVPVALGPTGRD

FIGURE 2868A

CGGGAGCCCAGGCGGGCAGGCCGCTGGGGTCGGGGCTGCACGTACGAGAGCCGGGACGCCCGGGTTCAGAGCGAA
GGAGGAGGCATGGCTTCGGTGTTCATGTGTGGCGTGGAGGACCTGCTGTTCAGCGGCAGCCGCTTCGTATGGAAC
TTGACCGTGTCCACGCTGCGGAGATGGTACACGGAGAGGCTGCGGGCTTGCCACCAGGTGCTGCGGACGTGGTGC
GGGCTGCAGGACGTGTACCAGATGACAGAAGGCAGGCACTGCCAGGTGCACCTCCTGGATGATAGGAGACTGGAG
CTGCTGGTTCAGCCCAAACTTCTAGCAAGAGAGTTGCTGGACCTAGTGGCTTCACATTTCAACCTGAAAGAAAAG
GAGTATTTTGGAATAACATTCATAGATGACACAGGTCAGCAGAACTGGCTGCAGTTAGATCACCGAGTTCTTGAC
CACGATTTGCCCAAGAAACCAGGCCCAACCATTTTGCACTTTGCTGTGAGGTTTTACATTGAGAGCATATCGTTT
TTAAAGGATAAAACCACCGTGGAGCTGTTTTTCCTGAATGCAAAGGCCTGTGTGCACAAGGGGCAAATCGAAGTA
GAGAGCGAAACCATCTTCAAGTTAGCAGCGTTTATTTTACAGGAAGCCAAGGGAGATTATACCAGTGATGAAAAT
GCCAGGAAAGATTTAAAGACATTACCAGCCTTTCCAACCAAAACTCTTCAGGAGCATCCATCCCTTGCCTACTGT
GAGGACAGGGTAATTGAGCATTATTTGAAAATCAAAGGTCTCACTCGAGGTCAAGCTGTGGTTCAGTATATGAAA
ATAGTAGAAGCTCTACCGACTTACGGTGTCCATTATTATGCAGTAAAGGATAAGCAAGGACTTCCTTGGTGGCTT
GGAATAAGCTATAAGGGAATTGGCCAATATGATATACAAGACAAGGTGAAGCCTCGGAAGTTATTCCAATGGAAA
CAGCTGGAGAACTTATATTTCCGTGAGAAAAAATTTGCTGTTGAAGTTCATGATCCACGAAGGATTTCAGTTTCA
AGAAGAACCTTTGGGCAAAGTGGCCTGTTTGTGCAAACATGGTATGCTAACTCTTCTCTCATCAAGTCCATTTGG
GTAATGGCAATTAGTCAGCATCAGTTTTACTTGGACCGGAAGCAAAGCAAAGCAAAAATTCCTTCAGCCAGGAGT
TTAGATGAGATTGCAATGGATTTGACAGAGACAGGAACACAAAGGGCCTCCAAGCTGGTGACACTGGAGGCGAAA
AGTCAGTTCATCATGGCAAGTAATGGCAGTTTAATCTCCTCAGGTTCTCAAGACTCAGAAGTTAGTGAAGAGCAA
AAGAGAGAAAAAATCCTTGAACTAAAGAAGAAGGAGAAACTATTACAAGAAAAACTTCTGAAAAAAGTTGAGGAG
CTTAAGAAGATCTGTCTGCGGGAGGCTGAGCTCACAGGCAAAATGCCAAAGGAGTATCCCCTGAACATAGGCGAG
AAGCCTCCTCAGGTCAGAAGACGTGTGGGTACTGCGTTCAAATTAGATGACAACTTGCTGCCGAGTGAAGAAGAT
CCTGCTTTGCAAGAACTGGAGAGTAATTTTCTAATACAACAAAAGCTGGTGGAAGCTGCAAAGAAACTTGCCAAT
GAGCCAGACCTTTGTAAAACTGTGAAGAAAAAGCGAAAGCAAGATTACACAGATGCGATGAAAAAGCTTCAGGAG
ATTGAAAATGCAATAAACGAATACCGAATTAGGTGTGGAAAGAAACCCAGCCAGAAAGCAACAGTGTTACCAGAA
GACATAATCCCCTCAGAGAGTAGCTCTTTGTCTGACACCACCACCTATGATGATCCCAGTGATGCCTTCACTTTT
CCTGGGCAGCGATCAAGTTCAGTACCTCATTCTCCAAGAATTCTTCCCCCCAAGTCTCTTGGTATTGAGCGAATC
CATTTCAGAAAGTCGTCCATCAATGAACAGTTTGTGGATACCAGGCAGTCCAGAGAAATGCTGTCCACACACAGC
AGCCCTTACAAAACTCTGGAGAGGCGGCCCCAGGGAGGACGAAGCATGCCCACCACGCCAGTTCTTACCCGAAAC
GCCTACAGCAGCAGCCACTTGGAACCCGAATCTTCATCTCAGCACTGCCGCCAGCGGAGTGGAAGCCTGGAGTCC
CAGTCCCATCTGCTCTCCGAGATGGACAGCGATAAGCCATTTTTCTCCCTCTCCAAATCCCAAAGAAGCAGCAGC
ACAGAAATCCTCGATGACGGGTCTTCTTATACAAGCCAATCAAGCACAGAGTATTACTGTGTGACACCAGTTACC
GGCCCCTATTACACCACCCAGACCCTGGACACTCGCACCAGGGGTCGGAGGAGGTCAAAGAAACAGAATGTTTCT
ACTTCAAATTCAGGAAGCATGCCCAACCTAGCACAAAAGGATAGTTTGAGGAATGGTGTTTACTCAAAGAGTCAG
GAGCCACCGTCTTCCAGTTACTACATTGCCGGGTACACACCCTATGCAGAGTGTGACTTTTATTACAGTGGTGGT
TATGTCTATGAGAATGACACCGAGGGACAGTATAGTGTCAACCCTTCCTACCGGTCCTCAGCCCACTATGGATAT
GAGCGCCAGAGGGACTACAGCAGATCCTTTCACGAAGATGAGGTCGACCGGGTACCCCATAACCCATATGCAACT
CTCCGGCTGCCAAGGAAGGCTGCTGCAAAATCGGAGCACATCACCAAAAACATCCACAAGGCCTTAGTTGCCGAG
CACTTGCGTGGCTGGTACCAGCGGGCCTCTGGGCAGAAGGATCAGGGACACAGCCCGCAGACCAGCTTTGACTCA
GACAGGGGATCACAGAGATGCCTGGGGTTTGCGGGGCTGCAAGTACCTTGTTCTCCAAGCAGTCGTGCATCCTTG
TACTCTTCAGTGTCTTCTACAAATGCTTCTGGGAACTGGAGGACCCAGTTAACCATAGGGCTGTCGGATTACGAG
ACTCCAGCACATTCTTCTTACACCAGCTGCTATGGCAATGTCTATAATCCTTTACCCTCTCCAAGCAGACAATAC
ACAGAAATCAGTCAACTGGATGGTACAGATGGAAACCAGCTGGAAGACAACCTGGAGAGTAGTGAGCAGAGACTC
TTTTGGCATGAAGATTCAAAGCCTGGAACATTAGTC**TGA**ACTGCAGTTGGACCTCCTGACCAAGCACTGCGTTCT
CACACTAGTGTGCCTTGCAAATTGTATTTGTCTTCCGAGAGGATGTTCGTTTTAGAAACCTAAAGACATCAAAGG
TTGAAGAGAAGACTTAGTTGCCCTGGAAGTGAATCAGTGAATCACACACCAAGCCCCACAAAGCCCCTAAAGGAG
GATTTGGCCTTTCAAACTCTAGGCACTAACGTAACTGTAGGGTCTGCCCACATGTTGAAGTATTGCCAAGAGAGG
ACTCAGTGTGAAGCCTTCATCAATAGCAAGCACTTTTTAAGGGAGTAAAAGTTGTTAAAGGCAAACGTCAAAAAC
ATGAAAGGGCATTCAGGATGTCCCATGGCAATAAGAACAGGGGAAATCTCAGAGCACAATTCAGCAGGATGAGAG

FIGURE 2868B

AAGGGGAACCAGAAGCTCCGGAGTCATTGCTCACTTCAGAGTTTGAATTCGTGAGCTGACAAAGAGTAACATGCT
CTTTCTACACAGACATGGACAATTTAGACAGTATTGGAAAATTACTTGAAGCTGGATTTTCATGAAGTTCTGAAT
GAGTGTAAATGTTTTTTAGGATACTATAAAGAGTGATGTTTTTCATAAGCACCATAAAATGGGTTCTGGAAAAAC
TGATTACCTTAGCATCCTGTAATATAACTTATGGTAGCAGATTGGGGAAAATGAAGCAGCCCACTGAATAATTGA
CAAAGTCTGCTTGGAGAACATTCTAAGGTACAATATCATGGAGCTCCTTTTTCCTTTCTCCACTAATTGCGTGAT
GAGCTATTGTTCTGGCTGGTAATTCTCCAACTCGGCTGTCATTTGAAGTGGCAGACTTAATATGGAAAGTTTTTA
TAATTATGAGTTTGAAAAAGCATTTTAAGATGATACAGAAAGTATCCAAAACAACAGAAAAAAAAAGCCACGTCA
TTTTAGATGAATTGCGTGCCTTAAAATGGTGAACGTTAGAAAATTAAACAAGTCTGGATTCCACAAGTAGTTCCA
AGTCACCAAGTGACAAAAACAAGGTTAACATTAAAAAAGAAAAACAACAACAACGACAAAAAGCTCCAAGCTGCA
GTGGATTTAATTATGAGGCTAAAACTACCTCATACTTTCCTTGGAAGAACTAATTAGCTATGGTTTATTGTAGGG
TTTTGTTTGTTTGTTTTTTAAAGCAAATGATTTCCATATTCCTGATTGATCTTTTTTGTCATCTTTGCTTCAAAA
TTACATAAAAGGTGCTCCTTTCCCCCTTCTTTTATACAAGTTTCTTGTTCATATTGTGAATAGAAAAGTTTCTGA
ACAACTTTTTTGGAACATTTTCTATCTATATTCCAAAGCATGTAATATATACATAAAAACGATTTGTTAAACTGG
TCCTTAGTCATTTGTATAATTAGAAATGAAGTTTGGGAAAAAATTTTGGAAAAAAGACAAGCAAAAAAAAAATAA
CTTATTCCTTTTTTGCATATTTGTATAGCCTTCTAGAATCAGAAATAACCTTTTTGCATATTCTTTTATTGTTCT
GACTTTTCAAGACCTATTATTTTTTTACATAGGTCAATAAACAAAAGGTGTGCTACTG

FIGURE 2869

REPRRAGRWGRGCTYESRDARVQSEGGGMASVFMCGVEDLLFSGSRFVWNLTVSTLRRWYTERLRACHQVLRTWC
GLQDVYQMTEGRHCQVHLLDDRRLELLVQPKLLARELLDLVASHFNLKEKEYFGITFIDDTGQQNWLQLDHRVLD
HDLPKKPGPTILHFAVRFYIESISFLKDKTTVELFFLNAKACVHKGQIEVESETIFKLAAFILQEAKGDYTSDEN
ARKDLKTLPAFPTKTLQEHPSLAYCEDRVIEHYLKIKGLTRGQAVVQYMKIVEALPTYGVHYYAVKDKQGLPWWL
GISYKGIGQYDIQDKVKPRKLFQWKQLENLYFREKKFAVEVHDPRRISVSRRTFGQSGLFVQTWYANSSLIKSIW
VMAISQHQFYLDRKQSKAKIPSARSLDEIAMDLTETGTQRASKLVTLEAKSQFIMASNGSLISSGSQDSEVSEEQ
KREKILELKKKEKLLQEKLLKKVEELKKICLREAELTGKMPKEYPLNIGEKPPQVRRRVGTAFKLDDNLLPSEED
PALQELESNFLIQQKLVEAAKKLANEPDLCKTVKKKRKQDYTDAMKKLQEIENAINEYRIRCGKKPSQKATVLPE
DIIPSESSSLSDTTTYDDPSDAFTFPGQRSSSVPHSPRILPPKSLGIERIHFRKSSINEQFVDTRQSREMLSTHS
SPYKTLERRPQGGRSMPTTPVLTRNAYSSSHLEPESSSQHCRQRSGSLESQSHLLSEMDSDKPFFSLSKSQRSSS
TEILDDGSSYTSQSSTEYYCVTPVTGPYYTTQTLDTRTRGRRRSKKQNVSTSNSGSMPNLAQKDSLRNGVYSKSQ
EPPSSSYYIAGYTPYAECDFYYSGGYVYENDTEGQYSVNPSYRSSAHYGYERQRDYSRSFHEDEVDRVPHNPYAT
LRLPRKAAAKSEHITKNIHKALVAEHLRGWYQRASGQKDQGHSPQTSFDSDRGSQRCLGFAGLQVPCSPSSRASL
YSSVSSTNASGNWRTQLTIGLSDYETPAHSSYTSCYGNVYNPLPSPSRQYTEISQLDGTDGNQLEDNLESSEQRL
FWHEDSKPGTLV

FIGURE 2870

CCTAGCGCCGCTGGGCCTGCAGGTCTCTGTCGAGCAGCGGACGCCGGTCTCTGTTCCGCAGGATGGGGTTTGTTA
AAGTTGTTAAGAATAAGGCCTACTTTAAGAGATACCAAGTGAAATTTAGAAGACGACGAGAGGGTAAAACTGATT
ATTATGCTCGGAAACGCTTGGTGATACAAGATAAAAATAAATACAACACACCCAAATACAGGATGATAGTTCGTG
TGACAAACAGAGATATCATTTGTCAGATTGCTTATGCCCGTATAGAGGGGGATATGATAGTCTGCGCAGCGTATG
CACACGAACTGCCAAAATATGGTGTGAAGGTTGGCCTGACAAATTATGCTGCAGCATATTGTACTGGCCTGCTGC
TGGCCCGCAGGCTTCTCAATAGGTTTGGCATGGACAAGATCTATGAAGGCCAAGTGGAGGTGACTGGTGATGAAT
ACAATGTGGAAAGCATTGATGGTCAGCCAGGTGCCTTCACCTGCTATTTGGATGCAGGCCTTGCCAGAACTACCA
CTGGCAATAAAGTTTTTGGTGCCCTGAAGGGAGCTGTGGATGGAGGCTTGTCTATCCCTCACAGTACCAAACGAT
TCCCTGGTTATGATTCTGAAAGCAAGGAATTTAATGCAGAAGTACATCGGAAGCACATCATGGGCCAGAATGTTG
CAGATTACATGCGCTACTTAATGGAAGAAGATGAAGATGCTTACAAGAAACAGTTCTCTCAATACATAAAGAACA
GCGTAACTCCAGACATGATGGAGGAGATGTATAAGAAAGCTCATGCTGCTATACGAGAGAATCCAGTCTATGAAA
AGAAGCCCAAGAAAGAAGTTAAAAAGAAGAGGTGGAACCGTCCCAAAATGTCCCTTGCTCAGAAGAAGGATCGGG
TAGCTCAAAAGAAGGCAAGCTTCCTCAGAGCTCAGGAGCGGGCTGCTGAGAGCTAAACCCAGCAATTTTCTATGA
TTTTTTCAGATATAGATAATAAACTTATGAACAGCAACTAAAAAAAAAAAAAAAAAAA

FIGURE 2871

MGFVKVVKNKAYFKRYQVKFRRRREGKTDYYARKRLVIQDKNKYNTPKYRMIVRVTNRDIICQIAYARIEGDMIV
CAAYAHELPKYGVKVGLTNYAAAYCTGLLLARRLLNRFGMDKIYEGQVEVTGDEYNVESIDGQPGAFTCYLDAGL
ARTTTGNKVFGALKGAVDGGLSIPHSTKRFPGYDSESKEFNAEVHRKHIMGQNVADYMRYLMEEDEDAYKKQFSQ
YIKNSVTPDMMEEMYKKAHAAIRENPVYEKKPKKEVKKKRWNRPKMSLAQKKDRVAQKKASFLRAQERAAES

FIGURE 2872

ATTCACGAGTCCTGCATGAGCCAGATAGGCTGGAACCGCATCATCGTGGAGAAGCCCTTCGGGAGGGACCTGCAG
AGCTCTGACCGGCTGTCCAACCACATCTCCTCCCTGTTCCGTGAGGACCAGATCTACCGCATCGACCACTACCTG
GGCAAGGAGATGGTGCAGAACCTCATGGTGCTGAGATTTGCCAACAGGATCTTCGGCCCCATCTGGAACCGGGAC
AACATCGCCTGCGTTATCCTCACCTTCAAGGAGCCCTTTGGCACTGAGGGTCGCGGGGGCTATTTCGATGAATTT
GGGATCATCCGGGACGTGATGCAGAACCACCTACTGCAGATGCTGTGTCTGGTGGCCATGGAGAAGCCCGCCTCC
ACCAACTCAGATGACGTCCGTGATGAGAAGGTCAAGGTGTTGAAATGCATCTCAGAGGTGCAGGCCAACAATGTG
GTCCTGGGCCAGTACGTGGGGAACCCCGATGGAGAGGGCGAGGCCACCAAAGGGTACCTGGACGACCCCACGGTG
CCCCGCGGGTCCACCACCGCCACTTTTGCAGCCGTCGTCCTCTATGTGGAGAATGAGAGGTGGGATGGGGTGCCC
TTCATCCTGCGCTGCGGCAAGGCCCTGAACGAGCGCAAGGCCGAGGTGAGGCTGCAGTTCCATGATGTGGCCGGC
GACATCTTCCACCAGCAGTGCAAGCGCAACGAGCTGGTGATCCGCGTGCAGCCCAACGAGGCCGTGTACACCAAG
ATGATGACCAAGAAGCCGGGCATGTTCTTCAACCCCGAGGAGTCGGAGCTGGACCTGACCTACGGCAACAGATAC
AAGAACGTGAAGCTCCCTGAGCCCTACGAGCGCCTCATCCTGGACGTCTTCTGCGGGAGCCAGATGCACTTCGTG
CGCAGCGACGAGCTCCGTGAGGCCTGGCGTATTTTCACCCCACTGCTGCACCAGATTGAGCTGGAGAAGCCCAAG
CCCATCCCCTATATTTATGGCAGCCGAGGCCCCACGGAGGCAGACGAGCTGATGAAGAGAGTGGGTTTCCAGTAT
GAGGGCACCTACAAGTGGGTGAACCCCCACAAGCTCTGAGCCCTGGGCACCCACCTCCACCCCCGCCACGGCCAC
CCTCCTTCCCGCCGCCGACCCGAGTCGGGAGGACTCCGGGACCATTGACCTCAGCTGCACATTCCTGGCCCCGGG
CTCTGGCACCCTGGCCGCCCCTCGCTGCTGCTACTACCCGAGCCCAGCTACATTCCTCAGCTGCCAAGCACTCGA
GACCATCCTGGCCCCTCCAGACCCTGCCTGAGCCCAGGAGCTGAGTCACCTCCTCCACTCACTCCAGCCCAACAG
AAGGAAGGAGGAGGGCGCCCATTCGTCTGTCCCAGAGCTTATTGGCCACTGGGTCTCACTCCTGAGTGGGGCCAG
GGTGGGAGGGAGGGACAAGGGGGAGGAAAGGGGCGAGCACCCACGTGAGAGAATCTGCTGTGCCTTGCCCGCCAG
CCTCAGTGCCACTTGACATTCCTTGTCACCAGCAACATCTCGAGCCCCCTGGATGTCCCCTGTCCCACCAACTCT
GCACTCCATGGCCACCCCGTGCCACCCGTAGGCAGCCTCTCTGCTATAAGAAAAGCAGACGCAGCAGCTGGGACC
CCTCCCAACCTCAATGCCCTGTAAGGATTTTGCCCACTGGGCAACTCAGAAATACTTCGATCTCCCAAGATATAA
GAGGCAGCAGCAAACGTGCCTATTGACGTCTGTTTCATAGTTACCACTTACGCGAGTAGACAGAACTCGGCTTTT
CAGAAAATAGGTGTCAAGTCCACTTTATAAGAACCTTTTTTTCTAAAATAAGATAAAAGGTGGCTTTGCATTTTC
TGATTAAACGACTGTGTCTTTGTCACCTCTGCTTAACTTTAGGAGTATCCATTCCTGTGATTGTAGACTTTTGTT
GATATTCTTCCTGGAAGAATATCATTCTTTTCTTGAAGGGTTGGTTTACTAGAATATTCAAAATCAATCATGAAG
GCAGTTACTATTTTGAGTCTAAAGGTTTTCTAAAAATTAACCTCACATCCCTTCTGTTAGGGTCTTTCAGAATAT
CTTTTATAAACAGAAGCATTTGAAGTCATTGCTTTTGCTACATGATTTGTGTGTGTGAAGGACATACCACGTTTA
AATCATTAATTGAAAAACATCATATAAGCCCCAACTTTGTTTGGAGGAAGAGACGGAGGTTGAGGTTTTTCCTTC
TGTATAAGCACCTACTGACAAAATGTAGAGGCCATTCAACCGTCAAACACCATTTGGTTATATCGCAGAGGAGAC
GGATGTGTAAATTACTGCATTGCTTTTTTTTTCAGTTTGTATAACCTCTAATCTCCGTTTGCATGATACGCTTTG
TTAGAAACATTAATTGTAGTTTGGAAGCAAGTGTGTATGGGAATTC

FIGURE 2873

GAGAGAAGGAGAGCCTGCAGACAGAGGCCTCCAGCTTGGTCTGTCTCCCCACCTCTACCAGCATCTGCTGAGCTA
TGAGCCAAACCAGGGATTTACAGGGAGGAAAAGCTTTCGGACTGCTGAAGGCCCAGCAGGAAGAGAGGCTGGATG
AGATCAACAAGCAATTCCTAGACGATCCCAAATATAGCAGTGATGAGGATCTGCCCTCCAAACTGGAAGGCTTCA
AAGAGAAATACATGGAGTTTGACCTTAATGGAAATGGCGATATTGATATCATGTCCCTGAAACGAATGCTGGAGA
AACTTGGAGTCCCCAAGACTCACCTAGAGCTAAAGAAATTAATTGGAGAGGTGTCCAGTGGCTCCGGGGAGACGT
TCAGCTACCCTGACTTTCTCAGGATGATGCTGGGCAAGAGATCTGCCATCCTAAAAATGATCCTGATGTATGAGG
AAAAAGCGAGAGAAAAGGAAAAGCCAACAGGCCCCCCAGCCAAGAAAGCTATCTCTGAGTTGCCCTGATTTGAAG
GGAAAAGGGATGATGGGATTGAAGGGGCTTCTAATGACCCAGATATGGAAACAGAAGACAAAATTGTAAGCCAGA
GTCAACAAATTAAATAAATTACCCCCTCCTCCAGATCAA

FIGURE 2874

MSQTRDLQGGKAFGLLKAQQEERLDEINKQFLDDPKYSSDEDLPSKLEGFKEKYMEFDLNGNGDIDIMSLKRMLE
KLGVPKTHLELKKLIGEVSSGSGETFSYPDFLRMMLGKRSAILKMILMYEEKAREKEKPTGPPAKKAISELP

FIGURE 2875

GAAAAAAATGCAATACAAGAAGCAAGACCAAACAGATATCTAAACACTACAACCACTTCTACTACGAAAGGCCAA
AACAGCAGACTTGATTGTGACATCAGGTGACCTAGTAATCAGCTGTGTATTCTAGCTGGTGCCTCTACCAGCTTC
CCATGTGACCTTGAACATGTCATTGAATGCTCGCTAGGCCTCTGTTTCTTTATCTGTGAAATGGGCTTGATATTC
CTCCTCTACCCCAACCGATAGTGCAGAATGAAAAGTAACTGAAAGTCCTTCCTCCAGGGCACCATAGTGTCTGGG
TGAAAAGTAGAATATAAACTCGGTAGACTTCTGGTCCCTTCATTGGTCATGGAATGGACCAGTGCTTGCTTCATT
GAGCAACAGTTCTGTTGTTCAGAATTCCTGGATTTCACCTCACTTCTGCTCTCCCTGCAGGTGAATGTGATGTTC
ATGCTTGCCATTCTTCTGACATTCTTCCACCCCTTTCTGGTATATCGGGA**ATG**CCGTACTTGGAAAGAAAGTCCC
TCTGCAATTGCATAGTTCAGAAGCCCTCACTTTTCAGCCCCGAGGATGGTTTTGTTCATCTTCCACCACCTTTGA
GGACCTCGTGTCCCAAAAGACTTTGCCTATCCCAGCAAAACACACACACACACACACACACACACACAATAAAGA
CACACAAGGACGTCTGCGCAGCAAGAAAAGAATCTCAGTTGCCAAGCAGATTGATATCACACAGACTCAAAGCAA
AGGCATGTGGAACTTCTATATTTCAAAACAGAAGTGTCTCCTTGCACTTAGCCTTGGCAGACCCT**TGA**CTCCAGG
GGAGATGACCTGGGGGAGGAAGTGTGTCAACTATTTCTTTAGGCCTGTTTGGCTCCGAAGCCTATATGTGCCTGG
ATCCTCTGCCACGGGTTAAATTTTCAGGTGAAGAGTGAGGTTGTCATGGCCTCAGCTATGCTTCCTGGCTCTCCC
TCAAGAGTGCAGCCTTGGCTAGAGAACTCACAGCTCTGGGAAAAAGAGGAGCAGACAGGGTTCCCTGGGCCCAGT
CTCAGCCCAGCCACTGATGCTGGATGACCTTGGCCTGACCCTGGTCTGGTCTCAGAATCACTTTTCCCATCTGTA
AAATTGAGATGAATTTTGGTGTTGAAAGTTCTTCCTGGAGCAGATGTCCTAGAAGGTTTTAGGAATAGTGACAGA
GTCAGGCCACCCCAAGGGCCATGGGAGCCAGCTGACCTGCTTGACCGAAGGATTTCTGACAGACTATCTTTGGGG
ATGTTTTCAAGAAGGGATATAAGTTATTTACTTTGGGCATTTAAAAGAAAATTTCTCTCGGGAATAATTTTATAG
AAAAATAAAGCTTCTGTGTCTAAGGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAA

3257/8433

FIGURE 2876

MPYLERKSLCNCIVQKPSLFSPEDGFVHLPPPLRTSCPKRLCLSQQNTHTHTHTHTIKTHKDVCAARKESQLPSR
LISHRLKAKACGTSIFQNRSVSLHLALADP

3258/8433

FIGURE 2877

CGGTCCGGACAGCCGCGCGCTGAGGGTCTCGGGGCGGGCGCCGCGGGACCTCTCCGGGCCATGGCAGCCCCTGTC
AAAGGGAACAGGAAGCAGTCCACGGAGGGTGACGCCCTAGACCCACCTGCATCCCCCAAACCTGCTGGCAAGCAG
AACGGAATCCAGAACCCCATCTCGCTGGAGGACTCCCCCGAGGCAGGCGGGGAGCGGGAGGAGGAGCAGGAGCGG
GAGGAGGAGCAGGCCTTCCTGGTCAGCCTCTACAAGTTCATGAAGGAGCGACACACGCCCATCGAGAGGGTGCCC
CATCTCGGCTTCAAGCAGATTAACCTGTGGAAGATCTACAAAGCAGTGGAGAAGCTGGGGGCCTATGAGCTGGTG
ACCGGGCGCCGCCTCTGGAAGAACGTGTACGACGAGCTGGGGGGCAGCCCAGGCAGCACCAGCGCGGCCACGTGC
ACGCGCCGCCACTACGAGAGGCTGGTCCTGCCATACGTGCGGCACCTGAAGGGGGAGGATGACAAGCCGCTGCCC
ACCTCCAAGCCCAGGAAACAGTACAAGATGGCTAAGGAGAACAGGGGGGATGATGGGGCCACCGAGAGGCCGAAG
AAGGCCAAGGAGGAGCGGCGCATGGACCAGATGATGCCAGGAAAGACCAAAGCAGATGCTGCTGACCCAGCACCA
CTTCCCAGCCAGGAGCCCCCCAGGAACAGCACAGAACAGCAGGGCCTGGCCTCTGGGTCTTCTGTGTCCTTTGTG
GGTGCCAGCGGCTGTCCTGAGGCCTACAAGCGGCTCCTATCCAGCTTCTACTGCAAGGGGACACACGGCATCATG
TCACCACTGGCCAAAAAGAAGCTCCTGGCCCAGGTGAGCAAGGTGGAGGCCTTGCAGTGCCAGGAGGAGGGCTGC
CGCCATGGGGCAGAGCCCCAGGCGTCCCCAGCTGTTCACCTCCCAGAGAGTCCCCAGAGCCCCAAAGGGCTGACT
GAGAACTCCAGGCACCGGCTGACCCCTCAGGAGGGATTGCAGGCCCCAGGTGGCAGCCTCAGAGAGGAGGCGCAG
GCAGGCCCCTGCCCGGCAGCCCCCATCTTCAAGGGCTGCTTCTACACCCACCCCACCGAGGTGCTGAAGCCTGTC
AGCCAGCACCCCAGGGACTTCTTCTCTAGACTTAAAGATGGGGTGCTATTGGGGCCTCCTGGCAAAGAGGGGCTG
TCAGTGAAAGAGCCCCAGCTGGTGTGGGGCGGAGACGCTAACCGCCCTTCTGCGTTCCATAAAGGTGGCTCCAGA
AAGGGCATCCTCTACCCCAAGCCCAAAGCCTGCTGGGTGTCCCCCATGGCCAAGGTCCCAGCCGAGAGCCCCACG
CTCCCGCCCACCTTCCCCAGTAGCCCAGGCCTGGGCAGCAAGCGCAGCCTGGAGGAAGAGGGTGCTGCCCACAGT
GGGAAGAGACTGCGGGCCGTGTCTCCCTTTCTTAAGGAGGCGGATGCCAAGAAGTGTGGGGCCAAACCTGCAGGG
TCCGGCCTGGTCTCCTGCCTTCTGGGCCCAGCCCTGGGGCCTGTGCCCCCAGAGGCCTACAGGGGCACCATGCTG
CACTGCCCGCTGAACTTCACTGGCACCCCGGGCCCCTTGAAGGGCCAGGCTGCACTCCCCTTCAGCCCCCTGGTC
ATCCCGGCCTTCCCGGCCCACTTCCTGGCCACCGCAGGCCCCTCGCCCATGGCCGCTGGCCTGATGCACTTCCCC
CCAACGTCCTTCGACAGTGCCCTCCGCCACAGACTTTGCCCGGCCTCATCTGCCTGGCACGCACCACCAGTCACA
ACCTATGCAGCGCCCCACTTCTTCCACCTCAACACCAAGCTG**TAG**GCCAGCCCATGGTGTTGTGTACACTGTGGA
GTCGACAGGGGCCTACAACAGGCAGGTACTGCTGCCAGGGGGCTCTGAACTAGTGCCTGCTACCCAGGACACCCG
GGCCATGCCCCTGGCTGGGCAGCCTGGCACAAGTGAAGAAGAAGGCAGTGGGAAAACTGGGTTTATCTCAAGGCA
GCAGCCTGAGCCCAGGAGCAGAGGACCCAGTTGTTATAAGGCGCTGGGAGAGGATGGGCAGCTCCCACTGCCCCA
GAGCGGASSTCGAAGCACCCAGGTTGCCCACGGAAAATCCAATAAAAAGACACCAGTGTGAATCCAAAAAAAA

FIGURE 2878

RSGQPRAEGLGAGAAGPLRAMAAPVKGNRKQSTEGDALDPPASPKPAGKQNGIQNPISLEDSPEAGGEREEEQER
EEEQAFLVSLYKFMKERHTPIERVPHLGFKQINLWKIYKAVEKLGAYELVTGRRLWKNVYDELGGSPGSTSAATC
TRRHYERLVLPYVRHLKGEDDKPLPTSKPRKQYKMAKENRGDDGATERPKKAKEERRMDQMMPGKTKADAADPAP
LPSQEPPRNSTEQQGLASGSSVSFVGASGCPEAYKRLLSSFYCKGTHGIMSPLAKKKLLAQVSKVEALQCQEEGC
RHGAEPQASPAVHLPESPQSPKGLTENSRHRLTPQEGLQAPGGSLREEAQAGPCPAAPIFKGCFYTHPTEVLKPV
SQHPRDFFSRLKDGVLLGPPGKEGLSVKEPQLVWGGDANRPSAFHKGGSRKGILYPKPKACWVSPMAKVPAESPT
LPPTFPSSPGLGSKRSLEEEGAAHSGKRLRAVSPFLKEADAKKCGAKPAGSGLVSCLLGPALGPVPPEAYRGTML
HCPLNFTGTPGPLKGQAALPFSPLVIPAFPAHFLATAGPSPMAAGLMHFPPTSFDSALRHRLCPASSAWHAPPVT
TYAAPHFFHLNTKL

FIGURE 2879

AATTTGGGGCCAAGATTAACACCCCTCCTGCAGGAGGAAGACAGCCACCAGCGGCTGCTCATGGGGCTGATGGTG
TCTGAGCTAAAAGACCATTTTTTGAGACACCTACAGGGTGTAGAAAAGAAGAAAATTGAACAGATGGTTCTGGAC
TACATTTCAAAACTGCTGGATCTCATTTGCCACATCGTAGAAACCAATTGGAGGAAACATAATCTTCATTCCTGG
GTTCTCCACTTCAATAGTCGTGGCAGTGCTGCTGAATTTGCAGTTTTTCACATCATGACCAGGATTCTGGAAGCT
ACAAACAGTTTGTTTTTACCTCTGCCTCCTGGTTTTCATACTCTGCACACCATCCTCGGGGGTCCAGTGTCTCCCT
TTGCATAACCTGCTGCATTGCATTGACAGTGGAGTGTTGCTTCTCACTGAAACAGCTGTCATAAGGCTCATGAAA
GATCTGGATAATACAGAGAAAAATGAAAAACTGAAATTCAGTATCATTGTGCGGCTTCCTCCGCTTATTGGGCAG
AAGATTTGTAGACTTTGGGATCATCCTATGAGTTCTAACATCATTTCGCGGAACCACGTGACGCGACTGCTTCAG
AACTATAAGAAACAGCCTCGGAATTCTATGATTAACAAGTCATCGTTCAGTGTAGAATTTCTGCCTCTGAACTAC
TTCATTGAAATTCTGACAGATATAGAGTCCTCCAATCAAGCCCTGTATCCTTTTGAAGGACATGACAATGTGGAT
GCAGAATTTGTAGAGGAAGCAGCTCTGAAACACACCGCGATGCTTTTAGGCTTA**TGA**AAAAGAAAACGCAATTGG
ATCTGCTGCTGCCATTTTAATCTTGCTCATTAACCTTACTCCTCTGAGAATTCTTTAACAATATTTAAAATTGGT
AACAAAAATAGTTTAGCCATAATTGTTTAGCCATGTGAGTTTCAGGTTGGTACACGTTCAGACAGAACTGCTGTA
TCACATTCCAATTTTGAATAGCCAGTGAGCAATCAAGTGTAGAGAAATGATAAATGGCCTAAGAAGGCATACAGT
GGCATAAACGATGCTCTTCCTAGTAGCTTAATAGGCCACAAGCTAGTTTCTGTTGCACTCTGAAATAAAATATGC
TTTAAAAATGTAGGGAACAGTGCTTAGAAAAGCAAAAACTAGGTGTGTCATTGAAATAATAGGCATAAAAATTAA
ATGTTACATAAGAACACTATTTGGAAAGAGGGTCCTTTTAAAAACTGAATTTGTACTAAATCAGATTTGCCATGT
CCCAGTCCAGAATAATTTGTACTTAGTATTTGCAGCAGGGTTTGTCTTTGTGAATTCAGATGAAACATATTTATT
TTTTTTTATTTATAAAAGGTTGATTTAGGAATATTTTGTCAGTCATTAAAAAACCTGAAAACATAAAAAAAAAAA
AAAAAAAA

FIGURE 2880

NLGPRLTPLLQEEDSHQRLLMGLMVSELKDHFLRHLQGVEKKKIEQMVLDYISKLLDLICHIVETNWRKHNLHSW
VLHFNSRGSAAEFAVFHIMTRILEATNSLFLPLPPGFHTLHTILGVQCLPLHNLLHCIDSGVLLLTETAVIRLMK
DLDNTEKNEKLKFSIIVRLPPLIGQKICRLWDHPMSSNIISRNHVTRLLQNYKKQPRNSMINKSSFSVEFLPLNY
FIEILTDIESSNQALYPFEGHDNVDAEFVEEAALKHTAMLLGL

FIGURE 2881

GATTTCTTTTAGTCATGTTGATTTGATTTCAGTTTCTGGCTATGAAAAACATTTTTAAACTCGTCACCCACAACA
AACTGAACAAAACTACTACAGTGAAAGCCCTTTTCAGTGAAAGATGTCAGAAACCTCAAAACCTTTGGCCTGACT
CAGAACTACCATGTGAAAATCAGTACTCTCTTAATGTTTGAAATAAAAACTGAAAAAAAAAACAAAAAAACAAAA
AACCTTTTTTGAAGCACCTTAACGTGGCCATCCATTTGAGAAGTGGGTGCCACTTTTTTTCTTTGAGCACCTTAT
TGATGTGTTTGCTATCTGCTGTCTTTCTGTTACCTGTTGGCTGAATGGCTAGCTGTTAACATATACATGTGCACA
GAAGAGATATCTGGGCATGTATGTTCTCAATGAAGTTTACTGTGGTGACTGCTGAAAGGTGAACCCATTTCCTGA
TTTTTCCCGCCGCAGTGTTGTGATAAGATTCGAAGAAACCTTTTTCCCTGCACAGAAATGTTTCTTATCACATTG
TATCTTAGTATGGAAAGGAATATGGTCCCTTTTTTGCAATTGCTACTGTGTACACACACACACACACACACACAC
ACACACACACACACACACTCTGTATGTTTAGACCTAAAATACACACACCCACGCACACACTGTATGTTTATGTGA
CCTAAAACATACACACATGCACACACACATACATATCCATTCATTCATTCATTCAAGTGGTGTTTCCAGTGTCTG
TGTGTCACTGTTTATGCAGTTTCCATTTCCCAGTGAATTATGAGTGGAGGGCAACTTTTCTAACCAGATTGTCTT
TTCAGAACAAAGACCTGGGAATTGAGGAAGAGTTTGGAAAGAGGGAGAGGCAAGGAAAGAGAGCTTTAAATTGAA
AGGTTAATTTCCTAAGAGGAACCTGGGCTGAATGACTACAGTGTTATACCCTCCAATCTTTGCAGGTGGGCATGG
AACACTGCTTGTATCACTCTGTGCACGGTATAAATCCATATATCCACAAAAACACACATCCATCCATCAACATAT
ACATGGTTTGGGATGAGCAGGTCAATAGTTTTGAGAGGGAGTTTGTTCCTTTTTTTTTCTCATTATACTCTTAAA
TTGTTGTCAGTTATCAAACAAACAAACAGAAAAATTGTTTGGAAAAACCTTGCATACGCCTTTTCTATCAAGTGC
TTTAAAATATAGACTAAATACACACATCCTGCCAGTTTTTTCTTACAGTGACAGTATCCTTACCTGCCATTTAAT
ATTAGCCTCGTATTTTTCTCACGTATATTTACCTGTGACTTGTATTTGTTATTTAAACAGGAAAAAAAACATTCA
AAAAAAGAAAAATTAACTGTAGCGCTTCATTATACTATTATATTATTATTATTGTGACATTTTGGAATACTG
TGAAGTTTTATCTCTTGCATATACTTTATACGGAAGTATTACGCCTTAAAAATACGAAAATAAATTTTACAAGGT
TTCTGTTTTGTGTGGAAGAGTAATTGATGTTGCTAAGAATGATGTTTGTTTTTTTGGGGTTTTTGTTGTTTTTTT
TTTAAATGTTACCAGCACTTTTTTTGTAAGTTTCACTTTCCGAGGTATTGTACAAGTTCACACTGTTTGTGAAGT
TTGAATATGAAGGAATAATTAAAAAAAAAAAAAACTCTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAGGGCGGCCG

FIGURE 2882

TGTTTATGTGACCTAAAACATACACACATGCACACACACATACATATCCATTCATTCATTCATTCAAGTGGTGTT
TCCAGTGTCTGTGTGTCACTGTTTATGCAGTTTCCATTTCCCAGTGAATTATGAGTGGAGGGCAACTTTTCTAAC
CAGATTGTCTTTTCAGAACAAAGACCKGGGRATTGAGGAAGAGTTTGGAAAGAGGGAGAGGCAAGGAAAGAGAGC
TTTAAATTGAAAGGTTAATTTCCTAAGAGGAACCTGGGCTGAATGACTACAGTGTTATACCCTCCAATCTTTGCA
GGTGGGCATGGAACACTGCTTGTATCACTCTGTGCACGGTATAAATCCATATATCCACAAAAACACACATCCATC
CATCAACATATACATGGTTTGGGATGAGCAGGTCAATAGTTTTGAGAGGGAGTTTGTTCCTTTTTTTTTCTCATT
ATACTCTTAAATTGTTGTCAGTTATCAAACAAACAAACAGAAAAATTGTTTGGGAAAAACCTTGCATACGCCTTT
TCTATCMAGTGCTTTAAAATATAGACTAAATACACACATCCTGCCAGTTTTTTCTTACAGTGACAGTATCCTTAC
CTGCCATTTAATATTAGCCTCGTATTTTTCTCACGTATATTTACCTGTGACTTGTATTTGTTATTTAAACAGGAA
AAAAAACATTCAAAAAAAGAAAAATTAACTGTAGCGCTTCATTATACTATTATATTATTATTATTATTGTGACAT
TTTGGAATACTGTGAAGTTTTATCTCTTGCATATACTTTATACGGAAGTATTACGCCTTAAAAATACGAAAATAA
ATTTTACAAGGTTTCTGTTTTGTGTGGAAGAGTAATTGATGTTGCTAAGAATGATGTTTGTTTTTTTGGGGTTTT
TGTTGTTTTTTTTTTAAATGTTACCAGCACTTTTTTTGTAAGTTTCACTTTCCGAGGTATTGTACAAGTTCACAC
TGTTTGTGAAGTTTGAATATGAAGGAATAATTAAAAAAAAAAAAAAAACCXCGGGGGGGGCCCGGTCCCATTGGX
CCCAAGGGGGCGGTTACGGGGTCACGGCCG

FIGURE 2883

MSRSIVLRGSLFLFFSHYTLKLLSVIKQTNRKIVWEKPCIRLFYXVL

FIGURE 2884

CTTCCTTCACTAGTTACGACAAAATTTAAGAGGAATAACAAATACAAATTTTCTGTTAAGAACGGAAAGGTGCAA
ACTAGCAGAGTCAATACTGGTAACCAGAAGGCACTAATCCAAACACATAAATTTCAAAAGCTGGTTATATTATGG
AATACCATATATACTGGCCTTTGCCAGTTTGGGATTTCTGCAATAGCAATAAGCCTCGTTTCTGTTTCCAATTAT
AACAACAAAAAGATGAGTTACTAATGAACATTCCACTTACAGAAGTCTAGGCTATGTTGATAAATTGAAAACTTA
TCTAGACTACTCTGTCTAAGAGCAATAAAAAGTAAACACTCTTTTATCCAGCAGCACTAGGAAACAGGGTGAATT
TAC

FIGURE 2885A

CTCGGGGCCACGGTCCCCCCGCAGCGCTAGTCCCGGGCCCGCGAGCACCGGCCCCCGCCACCCGCAGGTTGCGGA
GGGAGGAGGGCGGGAGCGGGCGGCGCGGAGCCGGGAGGCGGGGGAGGGGCCGGCGTCCGAGGCGGCGGCGGCGGC
GGCTGGAGCAGCCTCTGGCAGCAGCGGGGAGAATGGGAGTGCGGGGCGCCAGACCGCCGCGGGGTGTCACGGCCG
CCACGAAGCCTGCGAGGCGCGGGGCCGGCGCCCGCGGCTTTTAAACCCGGGAAGGCGCGGCGGCGGCGGCGGCGG
CGGGCAGATCGCGGCGCGCACCAGGCGCCGGGGCGGCGGCCGAATGGAGAGAAAGGGCTCGGCGGCCGGGGCCAA
GGGGAACCCGAGCCCGCCCGCGGCCGGAGAGGGGCAGCGGCCACCGCCGCCGCTGTGCGTCCCGGGCGGCGGCGG
AGGAGCCCCAGCGAGGGGCCAGGTCGGGGCGGCGGCCGAGCCGGCCGAGCTCATCCGACGAGCGCACGAGTTCAA
AAGCCAAGGGGCGCAGTGCTACAAGGACAAGAAATTCCGTGAAGCCATAGGCAAATACCACCGGGCGTTGCTGGA
GCTGAAGGGGCTGCTGCCGCCCCCCGGGGAACGGGAGCGGGACTCGCGCGCGGCCTCCCCGGCTGGGGCCCTGAA
GCCCGGCCGCCTCTCGGAGGAGCAGAGCAAGACGGTGGAAGCCATCGAGATCGACTGTTACAACAGCCTGGCAGC
CTGCCTGCTCCAGGCTGAGCTGGTAAACTATGAACGAGTCAAGGAATATTGCCTCAAAGTCTTGAAGAAGGAAGG
GGAGAACTTCAAGGCCCTTTACCGGTCTGGTGTGGCCTTCTACCACCTTGGGGACTATGACAAAGCACTCTACTA
CCTGAAAGAAGCAAGGACCCAACAACCAACAGACACCAACGTGATTCGGTATATCCAGCTGACGGAGATGAAACT
CAGCCGATGCTCCCAGAGAGAAAAAGAAGCCATG**TAA**CCAGGAAGCAGCTCCAGAGCTGCGCCCACGCCTGACCG
GGGACTTCCAGGCATCCCCTGGCAGAGAGCCCCGTCCTGGATTCTGTCCCTTTCTCCCCACTTCTTCTGGCTCCT
CATTTTTCCTCCTGTTGCACCCCAGCTCTTTGTCTCCTCCCAGTACGAAAAGGAGAGATGCAAATTTGGAATCTG
GTAGGTCGCCCAGACAATGGAGACATCCTCTCCTCTAGCAGGTCAGCGACTGAGAGGGGCCTGACTTCTGCTGGG
ACAGCTGGAGAGGAGTCTCATGGGCTGGGATGCTGTTGTGGCTTTGACTTTGGCCAGTGCTTCTGACAGAGGCGG
AGCCTGGCAAGTGTACCATCCCACAGGCAGCAGGCACACAGCCCATGGGCTGGATCCTTCCACACTTTCCTGACA
GACCAGAACCAGAGCATCTCGAGGCAACTGTTAGAAATCCAGGGACGAGACAAACAGAGAAGCGCTGGTGAAGCC
AACATAGAGACTGTCAATGTGTACACTGGAGTTCCCACCCCCACCCCCCACCCGTCACTTAGCCCCTGCCTCCTT
CCCCCACTCGTTGTCTTGGCTTGTGCTTTCTCCTCTCCCCATCGGGGATCCGAGACTCTGCCAGGATTCACATGC
CACTGAAGCCCACTCAGTGCCCTCTGGTGACCACACATACCATTCCCCCGGACTCCCACCCAGCAGGCAGCTGTG
ACCGCAGAAGGGCAGGATGAAGTGGGCCAAGGTTTGGGACAGGTTGACTGTGTAGGTGACAGGGAGGGAAAGATG
ATGGCCAGGGGAAAGAGCATCGTATAGGCTAGGGGATTGAACTGTGGACTGATTCCGTGTAAATAAAAATAAATT
AACAGGTAGTAGTTCCTGTCAGTTCTGTTGGAAGCAGCCCACTCCCTCACTTTTACTCCTTCCTCCAACCCTCAA
TCAGAGCTACTTACAGCCAGGCAGGATGGGGCTTTCCCCAAAGCAATTGGCCGTTTGTCCAGTGGCAGACAATGG
TGGCTACAGCCTTTGTGCTTTTAAGAGTGGGCTGGGATTGTGGAGACTGCCCAGGGGCTTGGCTTTGTCAGAACT
TGTACAATCTTCTTTTGATGAAATTATCTGAACTCAACATCTAGCACATAGAATGTGTTCAACAAATGCTTGTTG
AATGAATAAATTATGACTGCAGACTGGCTCTCCTGCCTTAAACTAATTTCATCCCAGCCTAGTCTCCTGATGTCT
GTGCTCGTTATGCTATGCCATGTTGCTTCAGTCAAACAAGAAACACTTACTGAGGGCATATTGTTTGCCCATCAT
TGTGCAATATGCTGTGGGACATGGGATGTCGTCTCAGTCTTCAAGGAAATGGAAGGGTTAAGAAATGCATATGAG
ATTATTACCAATGACACCTTTAATTTATATGATGCTTTAAAATTATCAGAGCACTTTCATGTATTTTTCGTGTGA
CTAGTGAAAAAGACAATGTTGTACAAAATTAAAATATATACAGATGCAATAATGTGAATAGTTAGGATTTATTAA
ATGCATTATCTTCAGATCTTTACATGTATAATCTCATTTCTTTCATGCAGTTACTCTGGGATACTGTTCCCATTT
GATGGGTAAGAATATTGAAAACCAGAAAAATTAATTATCCCAAGGTTGCATGGCCTTTAGTGGCATAGCTAGGAT
TTGAACCAGGCCTGCCTGACTCCAGAGCTCTGGCTAGTATCTATGCTATACTTAGTTGCCTCTCTATAAGTATAA
TATTGGGCAATTATAACCATTTGAGAACAGGACAATATGTATTAACCTGAAAAGTGTTCATGATGTCAGTGATAG
TACATGGCCTCCTTATGTATTTACTCAAGGGCCCCAAAAGACCAGAGGCCAGAATCCCTAGTAGTCAGAGCAGTG
ACAGGTCAGAAAAAGGCAGCTGAGGTCCAATAGTTATGTCTGTGTATTGCTCATTCTACTTACTGATGGAGCCAG
CATGTATCTCAACAACTCACCTAGCATTCATCACCCATCCCCAGCATTGGGAAAGGGTCACAATTAAGACCGAAA
GGAAACACAAAGTTAAATATGGGTTAATTATGTAAGCAGATGCCCCACCACGGCAGGATCCAATCACAGCCGAGG
GGCCCAGAAGAGAGCAGCGTAAGTTATATTCACATAGTTCCCCAAAGGCTTTCAACGGGGGCTACAGGAAGGTGC
TAGAAATATTGAGGGGCCTGCCATTACTCACCTAGAGCTCACTCTCTGGAGAAGAGGAAAAGGAAGAAGCTATTT
CCGCTGCCACATTCTCCCCAATCCCTACTATATTATGCTGTCTTTCCTCTTCCTCCTAGCTGGCTTTACATGACC
CTAACCCAAAACTACCCTATGGCCCCACACGGGAATGTGTTCAAACGCCCCGACCCCCACCCCCACCCCCATTCC
CAAGCCTCCAACTTAGAACGTTTGTGATTTGGCAGATGGTTTGTTAGGATCTGAAGGATGAAGAGAAGGGTAGAG
GTCACCTGGAGAATGAGTTCAAACTGCCAGGGTCTTCCCTTGGTCTTTGTGCGTCAGGAAGGACTCCGAGTAATT

FIGURE 2885B

ATTCCCTATGCAGAGACAGGAGAGAGGTCTTGTTTACATGAGTGTGCTGGGGCAGGGCTGGACAATCCAGGATAT
GATTGTAGCCATCCCATGTAGAAAGATCAAAAACCAGAACGAAATGAAGACAGCCTCTCAGAACCTCATAGAACA
AGCGTCCAGGTCATCTGCTTGTTTGGTGACTTAGATATACAGGCTTACTGGAACTCCATTCACTGTGACCTGAAG
TTAAATAATCCCAAAGAGAAAAAGCTACCTGGGGTATTGGTTGATGTTTGGGGTGATAGGGCTGAATTTTCTGTG
CATTTGTCCAACAAAGGCTTTAGAGCACAAAACCAGGTTCATTCTCCCTACCAAATCTTCAGCTTCCTTCTCCTC
ATCCCTCCCCAAAACAAGAACTGTGATTTAATTCCGTACGTTGCGGATGTCACTGCTGACCTATGTAGCTGGAGT
ACTAATCAGGCATCTGACCTGCACTGTCATCCCCTGCCTGGACTTTTGCGATGGACTCTTTGGGGGAAAAACTAA
CGCTTTTTAATTATTGTGAAAGCATCATGTGTGTATTGTAGAAGTTTTAGGAAAAAAAGGACAAAATCCAATCCA
TAAGCTTACCACCCAAGACAAACGTGTATTCTTTTGAATATACCTTTTAGTTCTTTTTGGTGTAAATGTACACAC
GCACACACAGTTGTGGATTTTTTTAAACAAAAACTGGATACACTGAATATACTCTTTAATAACTTTTCAAGTGTG
TATTTATATTTTAGAATATGTAATCCTACACAGATACAAAATTCAAAAAGTACAAACTGCTCTGTAGTCAGAAGT
AAATCTTCTCCCTACCCCGTCTGCCAGCATCTAGTTTCCCTCTAATTTATTTTGCATCCTAGTGGAGATGCTTAC
ACATTGTCAAACATATGTATATATTCTTTTATCACACACAAATGGCAGCATATTGGACACTTTTTGTTTTTTGCT
CCTTCTGTTCCTTCACTTAATAATATCACGAACATTTTCGGCATATCAAACTTTCTCAACAGCATCTTCATTGTA
TGGATGGACCCTTTTTTTATCATCAATCCTCAAATAGTGATTATTTCATTTGTTCCCAATCTTCATTGTAAATAG
TGTTGCAACTGACATTCTTGTAGCTAAATTTTGCACATGTCTATAACGATTTCCTTAGGATAAACTCCAAGAAGA
GACTTGCTTGGCTATTTTTAAGAATTTTGATACATGTTGCCAACCACCCTCCAGAAAGTTTGTACCAAAACGCTC
TCCTATTTGGATCCTAGAGAGTACCCTGTTTCCTGCACCCTAACACTAGGTATCATCACTTATCAAATCTTTCCC
AATTTGGTAGCTGGGATAATAGTATGTCAATGTTATTTTAACTTTCTTTGATTCTTCGCGAATAACATTTTCATA
TGCTTATTGACCATTTGTACTTCTTTCTTTGTGAATTTTCTATTTATTTGATATTGGTATGTTTATTATCAATTT
GTAATTTTATTAAGAATATTATTTTTGTCAAGAAATGCTGCAAATATGCTTTCCAAGTGCTTTGCTTTCAAATTT
TGTTTATGGTGCTTTTTGACATACATAAATTCTTAATTCTGC

FIGURE 2886

SGPRSPRSASPGPASTGPRHPQVAEGGGRERAARSREAGEGPASEAAAAAAGAASGSSGENGSAGRQTAAGCHGR
HEACEARGRRPRLLNPGRRGGGGGGGQIAARTRRRGGGRMERKGSAAGAKGNPSPPAAGEGQRPPPPLCVPGGGG
GAPARGQVGAAAEPAELIRRAHEFKSQGAQCYKDKKFREAIGKYHRALLELKGLLPPPGERERDSRAASPAGALK
PGRLSEEQSKTVEAIEIDCYNSLAACLLQAELVNYERVKEYCLKVLKKEGENFKALYRSGVAFYHLGDYDKALYY
LKEARTQQPTDTNVIRYIQLTEMKLSRCSQREKEAM

FIGURE 2887

ATGCTGCTGCTTCTGCTGCTTCTGGGGCCAGGCTCCGGGCTTGGTGCTGTCGTCTCTCAACATCCGAGCAGGGTT
ATCTGTAAGAGTGGAACCTCTGTGAAGATCGAGTGCCGTTCCCTGGACTTTCAGGCCACAACTATGTTTTGGTAT
CGTCAGTTCCCGAAACAGAGTCTCATGCTGATGGCAACTTCCAATGAGGGCTCCAAGGCCACATACGAGCAAGGC
GTCGAGAAGGACAAGTTTCTCATCAACCATGCAAGCCTGACCTTGTCCACTCTGACAGTGACCAGTGCCCATCCT
GAAGACAGCAGCTTCTACATCTGCAGTGCTAGTCCCACGGGTGAGACCCAGTACTTCGGGCCAGGCACGCGGCTC
CTGGTGCTCGAGGACCTGAACAAGGTGTTCCCACCCGAGGTCGCTGTGTTTGAGCCATCAGAAGCAGAGATCTCC
CACACCCAAAAGGCCACACTGGTGTGCCTGGCCACAGGTATCTTCCCTGACCACGTGGAGCTGAGCTGGTGGGTG
AATGGGAAGGAGGTGCACAGTGGGGTCAGCACGGACCCGCAGCCCCTCAAGGAGCAGCCCGCCCTCAATGACTCC
AGATACTGCCTGAGCAGCCGCCTGAGGGTCTCGGCCACCTTCTGGCAGAACCCCCGCAACCACTTCCGCTGTCAA
GTCCAGTTCTACGGGCTCTCGGAGAATGACGAGTGGACCCAGGATAGGGCCAAACCCGTCACCCAGATCGTCAGC
GCCGAGGCCTGGGGTAGAGCAGACTGTGGCTTTACCTCGGTGTCCTACCAGCAAGGGGTCCTGTCTGCCACCATC
CTCTATGAGATCCTGCTAGGGAAGGCCACCATGTATGCTGTGCTGGTCAGCGCCCTTGTGTTGATGGCCATGGTC
AAGAGAAAGGATTTCTGA

FIGURE 2888

MLLLLLLLGPGSGLGAVVSQHPSRVICKSGTSVKIECRSLDFQATTMFWYRQFPKQSLMLMATSNEGSKATYEQG
VEKDKFLINHASLTLSTLTVTSAHPEDSSFYICSASPTGETQYFGPGTRLLVLEDLNKVFPPEVAVFEPSEAEIS
HTQKATLVCLATGIFPDHVELSWWVNGKEVHSGVSTDPQPLKEQPALNDSRYCLSSRLRVSATFWQNPRNHFRCQ
VQFYGLSENDEWTQDRAKPVTQIVSAEAWGRADCGFTSVSYQQGVLSATILYEILLGKATMYAVLVSALVLMAMV
KRKDF

FIGURE 2889

CGACCGGCACGTTCACCCCATCCCTCAGGCTTTATTTATTTTTTTTCGACAGGTTCTTTTCAAGGCTCCAGTCAC
CGCAGCAGTTGTCCATGCTGTAGTTTCCACTTTCCTGTATGGGCGGGCTGGTTAGGATTCCACTTTCCCCCAAGT
GCTTAGCCCAGGGCCAGACAAAAAGTAGTTGCTTAAGAAATACTTGTTGAAGGAATAAATTAATGAATGAATTTG
TGCTTACAGCGGCTGGATGGCAGACAAACCTATGATTATAGGAACATCAGGATCTCATTTGGAACAGATTACGGA
TGCTGCATTGTGGAACTTGGAAAAACAAGAGTTCTTGGACAGGTTTCCTGTGAACTTGTGTCTCCAAAACTCAAT
CGGGCAACAGAAGGTATTCTTTTTTTAACCTTGAACTCTCTCAG**ATG**GCCGCTCCAGCTTTCGAACCTGGCAGGC
AGTCAGATCTCTTGGTGAAGTTGAATCGACTCATGGAAAGATGTCTAAGAAATTCGAAGTGTATAGACACTGAGT
CTCTCTGTGTTGTTGCTGGTGAAAAGGTTTGGCAAATACGTGTAGACCTACATTTATTAAATCATGATGGAAATA
TTATTGATGCTGCCAGCATTGCTGCAATCGTGGCCTTATGTCATTTCCGAAGACCTGATGTCTCTGTCCAAGGAG
ATGAAGTAACACTGTATACACCTGAAGAGCGTGATCCTGTACCATTAAGTATCCACCACATGCCCATTTGTGTCA
GTTTTGCCTTTTTCCAGCAAGGAACATATTTATTGGTGGATCCCAATGAACGAGAAGAACGTGTGATGGATGGCT
TGCTGGTGATTGCCATGAACAAACATCGAGAGATTTGTACTATCCAGTCCAGTGGTGGGATAATGCTACTAAAAG
ATCAAGTTCTGAGATGCAGTAAAATCGCTGGTGTGAAAGTAGCAGAAATTACAGAGCTAATATTGAAAGCTTTGG
AGAATGACCAAAAAGTAAGGAAAGAAGGTGGAAAGTTTGGTTTTGCAGAGTCTATAGCAAATCAAAGGATCACAG
CATTTAAAATGGAAAAGGCCCCTATTGATACCTCGGATGTAGAAGAAAAAGCAGAAGAAATCATTGCTGAAGCAG
AACCTCCTTCAGAAGTTGTTTCTACACCTGTGCTATGGACTCCTGGAACTGCCCAAATTGGAGAGGGAGTAGAAA
ACTCCTGGGGTGATCTTGAAGACTCTGAGAAGGAAGATGATGAAGGCGGTGGTGATCAAGCTATCATTCTTGATG
GTATAAAAATGGACACTGGAGTAGAAGTCTCTGATATTGGAAGCCAAGATGCTCCCATAATACTCTCAGATAGTG
AAGAAGAAGAAATGATCATTTTGGAACCAGACAAGAATCCAAAGAAAATAAGAACACAGACCACCAGTGCAAAAC
AAGAAAAAGCACCAAGTAAAAAGCCAGTGAAAAGAAGAAAAAAGAAGAGAGCTGCCAAT**TAA**AGCTAACAGTTGT
ATATCTGTATATATAACTATTAAAAGGGATATTTATTCCATT

FIGURE 2890

MAAPAFEPGRQSDLLVKLNRLMERCLRNSKCIDTESLCVVAGEKVWQIRVDLHLLNHDGNIIDAASIAAIVALCH
FRRPDVSVQGDEVTLYTPEERDPVPLSIHHMPICVSFAFFQQGTYLLVDPNEREERVMDGLLVIAMNKHREICTI
QSSGGIMLLKDQVLRCSKIAGVKVAEITELILKALENDQKVRKEGGKFGFAESIANQRITAFKMEKAPIDTSDVE
EKAEEIIAEAEPPSEVVSTPVLWTPGTAQIGEGVENSWGDLEDSEKEDDEGGGDQAIILDGIKMDTGVEVSDIGS
QDAPIILSDSEEEEMIILEPDKNPKKIRTQTTSAKQEKAPSKKPVKRRKKKRAAN

FIGURE 2891A

GAGAGAGCAAGAGGGAGAGTGTGTGAGAGAGAGTTAGTTCAAGCCAAAATGGCCGACAGAGTCTCTGCTGGTTTC
TGAATATTTAAAATACAAAAAAACAGATAGACAAAAAGAATTCATTTTTTGGACCTTTTTTCATTTCCATTTCTA
CCTTGTATGCCTCAATTTGCTGGATTTAAGCACTGCTGCACTTTATGAGAGAGAAGGAGCAAGAAAGGGAAGAAC
AGTTAATGGAAGACAAGAAAAGGAAGAAAGAGGATAAAAAGAAAAAAGAAGCCACTCAGAAGGTCACGGAACAAA
AAACCAAAGTGCCCGAAGTGACGAAACCAAGTTTAAGCCAACCAACGGCCGCCAGCCCAATTGGCAGCTCTCCAT
CGCCACCAGTCAATGGTGGCAACAATGCCAAAAGGGTGGCAGTGCCGAACGGACAACCGCCAAGCGCCGCCCGCT
ACATGCCTCGGGAGGTGCCGCCGCGATTCCGTTGCCAGCAGGACCACAAAGTGTTACTAAAACGTGGGCAGCCCC
CTCCACCGTCCTGCATGCTCCTTGGGGGTGGGGCAGGGCCTCCTCCCTGCACAGCACCTGGAGCAAACCCAAACA
ACGCACAAGTGACAGGAGCGCTGCTGCAGAGTGAGAGTGGGACTGCGCCAGACTCAACCCTTGGAGGTGCTGCTG
CTTCAAATTATGCAAATTCCACTTGGGGCTCGGGAGCCTCCTCCAACAACGGCACCTCCCCCAACCCAATTCACA
TCTGGGACAAGGTGATTGTAGACGGGTCTGACATGGAAGAGTGGCCTTGTATTGCCAGCAAAGACACTGAATCTT
CTTCCGAAAACACCACCGATAACAACAGTGCCTCGAACCCTGGCTCTGAGAAGAGCACTCTGCCAGGAAGCACCA
CTAGTAACAAAGGAAAAGGGAGCCAGTGCCAGTCTGCAAGTTCTGGGAACGAATGTAATCTTGGGGTCTGGAAAT
CTGACCCTAAGGCTAAATCTGTTCAATCTTCCAACTCTACTACAGAGAACAACAATGGACTAGGAAATTGGAGGA
ATGTGAGTGGTCAGGATAGAATTGGACCTGGCTCTGGCTTCAGCAACTTTAACCCAAATAGCAACCCATCTGCCT
GGCCAGCACTGGTCCAAGAAGGAACTTCTAGGAAAGGGGCATTGGAAACAGATAATAGTAATTCCAGTGCACAGG
TTAGCACAGTAGGTCAGACATCCAGGGAACAGCAGTCAAAGATGGAAAATGCGGGTGTTAATTTTGTTGTCTCTG
GCAGAGAACAGGCTCAAATTCATAACACTGATGGACCAAAAAATGGAAACACTAACTCCTTGAACTTAAGTTCAC
CAAACCCCATGGAGAATAAGGGAATGCCCTTTGGAATGGGCTTGGGGAACACCTCCAGGAGCACTGATGCCCCTT
CACAAAGCACTGGAGATCGAAAGACTGGGAGTGTTGGATCTTGGGGTGCAGCTAGGGGGCCTTCTGGAACTGACA
CAGTCTCTGGACAAAGCAATTCTGGAAACAATGGGAACAATGGAAAAGAGAGAGAGGACTCCTGGAAAGGAGCTT
CTGTTCAGAAATCAACTGGGTCAAAAAATGACTCTTGGGACAACAATAACAGGTCTACGGGTGGGTCCTGGAACT
TTGGCCCCCAGGACTCTAATGACAACAAATGGGGTGAAGGGAACAAAATGACATCTGGGGTCTCTCAGGGAGAAT
GGAAACAGCCGACTGGGTCTGATGAGTTGAAAATTGGAGAATGGAGTGGTCCAAACCAACCAAATTCTAGCACTG
GAGCATGGGACAATCAAAAGGGCCACCCCCTCCCTGAAAACCAAGGCAATGCCCAGGCTCCCTGTTGGGGAAGAT
CTTCCAGCTCCACAGGAAGTGAAGTTGGAGGTCAAAGCACTGGAAGCAACCACAAAGCAGGAAGTAGTGACAGTC
ATAACTCTGGCCGTCGGTCGTACAGGCCCACACATCCTGATTGTCAGGCTGTCTTGCAGACTCTTTTGAGCCGAA
CTGATTTGGACCCCAGGGTGCTCTCAAACACTGGCTGGGGCCAAACTCAAATTAAGCAGGACACAGTGTGGGACA
TTGAAGAGGTGCCAAGGCCTGAGGGGAAATCTGACAAAGGAACTGAGGGGTGGGAGAGCGCTGCCACACAGACCA
AGAACTCAGGGGGCTGGGGAGATGCACCCAGCCAAAGCAATCAAATGAAGTCTGGATGGGGGGAGCTCTCAGCCT
CTACAGAGTGGAAAGACCCCAAGAACACAGGAGGCTGGAATGACTACAAGAACAACAACTCTTCCAACTGGGGAG
GAGGACGACCTGATGAAAAGACACCTTCCTCTTGGAATGAGAATCCCAGCAAGGATCAGGGGTGGGGAGGTGGAC
GCCAGCCCAATCAAGGATGGTCTTCTGGAAAGAATGGTTGGGGGGAGGAAGTCGATCAGACAAAAAACAGCAATT
GGGAAAGTTCTGCAAGTAAACCTGTGTCTGGGTGGGGTGAAGGAGGGCAGAATGAAATCGGGACTTGGGGTAATG
GTGGCAATGCAAGCCTAGCTTCAAAAGGTGGGTGGGAGGATTGCAAAAGATCCCCAGCATGGAATGAGACGGGCC
GACAGCCCAATTCCTGGAATAAACAACACCAACAGCAGCAGCCCCCACAGCAGCCGCCGCCACCACAACCAGAGG
CTTCTGGTTCGTGGGGAGGCCCACCCCCACCACCTCCAGGCAACGTTCGACCTTCCAATTCCAGCTGGAGCAGCG
GGCCACAGCCTGCAACACCTAAGGATGAGGAACCCAGTGGTTGGGAAGAGCCATCCCCACAGTCAATTAGTCGGA
AAATGGACATTGATGATGGCACTTCAGCATGGGGAGACCCTAACAGTTATAACTACAAGAATGTGAATCTGTGGG
ATAAGAATTCCCAAGGGGGCCCAGCACCTCGAGAACCAAACCTGCCCACCCCAATGACCAGTAAATCGGCATCAG
ATTCCAAATCTATGCAAGACGGCTGGGGGGAGAGTGACGGGCCAGTCACAGGAGCTCGCCATCCCAGCTGGGAAG
AGGAGGAGGATGGAGGAGTCTGGAACACCACTGGCTCTCAGGGCAGTGCTTCCTCCCACAACTCAGCAAGCTGGG
GACAAGGAGGAAAGAAACAAATGAAGTGCTCACTCAAAGGAGGAAACAATGATTCATGGATGAATCCTCTTGCCA
AACAGTTTTCAAATATGGGATTGCTGAGTCAGACTGAAGATAATCCAAGCAGCAAAATGGATTTGTCTGTAGGAA
GCCTTTCAGATAAAAAATTTGATGTGGACAAGCGAGCGATGAATCTCGGGGATTTTAATGATATCATGAGGAAGG
ATCGATCTGGGTTCCGTCCACCTAATTCCAAAGACATGGGAACCACAGATAGTGGGCCTTATTTTGAGAAGGGCG
GTAGTCATGGTTTGTTTGGAAACAGCACAGCACAATCGAGAGGTCTGCACACACCCGTGCAGCCACTAAATTCTT
CTCCCAGTCTCCGGGCGCAAGTGCCTCCCCAGTTTATTTCCCCCCAGGTTTCTGCCTCAATGCTCAAGCAGTTTC

FIGURE 2891B

CCAACAGTGGCCTGAGTCCAGGTCTTTTCAATGTGGGGCCCCAGTTATCTCCTCAACAAATTGCCATGCTGAGCC
AGCTTCCACAAATTCCCCAGTTTCAGTTGGCATGTCAGCTTCTCTTGCAGCAGCAGCAACAGCAGCAGTTGTTAC
AGAACCAGAGAAAGATTTCTCAAGCTGTACGCCAACAGCAAGAGCAGCAGCTGGCTCGAATGGTGAGTGCACTGC
AGCAGCAGCAGCAGCAGCAGAGGCAGCCAGGCATGAAGCACTCGCCCTCTCATCCTGTTGGGCCCAAGCCGCATC
TGGACAACATGGTACCCAACGCATTGAATGTGGGGCTCCCAGACCTTCAAACCAAAGGGCCAATACCTGGATATG
GTTCTGGCTTCAGCTCTGGCGGCATGGACTATGGCATGGTTGGTGGGAAGGAGGCTGGAACCGAGTCTCGCTTTA
AACAGTGGACCTCCATGATGGAGGGGCTGCCCTCTGTAGCCACACAGGAAGCCAATATGCACAAAAATGGCGCTA
TAGTGGCCCCTGGTAAAACCCGGGGAGGGTCACCGTACAACCAGTTTGATATCATCCCTGGTGACACACTGGGTG
GCCATACGGGTCCTGCTGGTGATAGCTGGTTACCTGCCAAATCTCCACCAACAAATAAAATCGGAAGTAAATCCA
GCAATGCCAGTTGGCCTCCAGAATTCCAACCAGGAGTGCCATGGAAAGGTATCCAAAACATTGACCCTGAATCTG
ACCCCTATGTCACCCCAGGAAGTGTGCTGGGGGGTACAGCCACATCTCCCATTGTAGATACTGACCACCAACTGC
TGCGGGATAACACCACAGGGTCTAATTCTTCCCTCAACACCTCGCTGCCTTCACCTGGTGCCTGGCCCTACAGTG
CCTCTGACAACTCCTTTACCAACGTTCATAGCACTTCAGCAAAGTTCCCTGATTACAAATCAACATGGTCCCCAG
ATCCCATAGGACACAACCCCACTCATCTCTCCAACAAGATGTGGAAAAACCATATTTCCTCCAGGAACACTACAC
CGCTGCCCCGCCCACCTCCTGGTCTGACCAACCCCAAACCATCATCTCCCTGGAGCAGCACAGCACCCCGATCAG
TCAGGGGGTGGGGGACACAGGACTCACGGCTCGCCTCGGCCTCTACCTGGAGTGATGGTGGCTCAGTTCGTCCTA
GTTACTGGCTGGTTCTTCACAATCTCACCCCACAGATTGATGGGTCAACCTTGAGAACGATCTGCATGCAGCATG
GCCCACTGCTGACATTCCATCTGAATCTAACCCAGGGCACTGCCCTGATCCGATACAGCACCAAACAGGAGGCGG
CCAAGGCCCAAACTGCACTGCACATGTGTGTGTTGGGAAACACTACCATCCTTGCTGAGTTTGCCACTGATGATG
AAGTCAGCCGCTTTCTGGCACAAGCTCAGCCCCCTACACCTGCAGCAACCCCAAGTGCGCCAGCTGCGGGGTGGC
AGTCGCTGGAGACCGGCCAGAACCAGTCAGATCCCGTGGGACCTGCTCTGAATCTTTTTGGTGGGTCCACTGGGC
TCGGGCAGTGGAGCAGCAGCGCTGGTGGCAGCAGCGGGGCCGATCTTGCTGGCGCTTCATTGTGGGGGCCCCCAA
ACTATTCTTCTAGCTTATGGGGAGTCCCAACGGTGGAAGATCCCCATAGGATGGGCAGCCCTGCTCCTTTACTAC
CTGGTGACCTTCTGGGAGGAGGGTCGGATTCAATC**TGA**ACTTAGAACTTTCAACTCTGACCTCGTGACCTTTTTT
GGAACAGCAGCAGCACTAACTTGACCTTTTCGTTTTTTTTTTCAACTTGCAATAAATACATTTTTAAAAGGAAA
AAAG

FIGURE 2892

ALLHFMREKEQEREEQLMEDKKRKKEDKKKKEATQKVTEQKTKVPEVTKPSLSQPTAASPIGSSPSPPVNGGNNA
KRVAVPNGQPPSAARYMPREVPPRFRCQQDHKVLLKRGQPPPPSCMLLGGGAGPPPCTAPGANPNNAQVTGALLQ
SESGTAPDSTLGGAAASNYANSTWGSGASSNNGTSPNPIHIWDKVIVDGSDMEEWPCIASKDTESSSENTTDNNS
ASNPGSEKSTLPGSTTSNKGKGSQCQSASSGNECNLGVWKSDPKAKSVQSSNSTTENNNGLGNWRNVSGQDRIGP
GSGFSNFNPNSNPSAWPALVQEGTSRKGALETDNSNSSAQVSTVGQTSREQQSKMENAGVNFVVSGREQAQIHNT
DGPKNGNTNSLNLSSPNPMENKGMPFGMGLGNTSRSTDAPSQSTGDRKTGSVGSWGAARGPSGTDTVSGQSNSGN
NGNNGKEREDSWKGASVQKSTGSKNDSWDNNNRSTGGSWNFGPQDSNDNKWGEGNKMTSGVSQGEWKQPTGSDEL
KIGEWSGPNQPNSSTGAWDNQKGHPLPENQGNAQAPCWGRSSSSTGSEVGGQSTGSNHKAGSSDSHNSGRRSYRP
THPDCQAVLQTLLSRTDLDPRVLSNTGWGQTQIKQDTVWDIEEVPRPEGKSDKGTEGWESAATQTKNSGGWGDAP
SQSNQMKSGWGELSASTEWKDPKNTGGWNDYKNNNSSNWGGGRPDEKTPSSWNENPSKDQGWGGGRQPNQGWSSG
KNGWGEEVDQTKNSNWESSASKPVSGWGEGGQNEIGTWGNGGNASLASKGGWEDCKRSPAWNETGRQPNSWNKQH
QQQQPPQQPPPPQPEASGSWGGPPPPPPGNVRPSNSSWSSGPQPATPKDEEPSGWEEPSPQSISRKMDIDDGTSA
WGDPNSYNYKNVNLWDKNSQGGPAPREPNLPTPMTSKSASDSKSMQDGWGESDGPVTGARHPSWEEEEDGGVWNT
TGSQGSASSHNSASWGQGGKKQMKCSLKGGNNDSWMNPLAKQFSNMGLLSQTEDNPSSKMDLSVGSLSDKKFDVD
KRAMNLGDFNDIMRKDRSGFRPPNSKDMGTTDSGPYFEKGGSHGLFGNSTAQSRGLHTPVQPLNSSPSLRAQVPP
QFISPQVSASMLKQFPNSGLSPGLFNVGPQLSPQQIAMLSQLPQIPQFQLACQLLLQQQQQQQLLQNQRKISQAV
RQQQEQQLARMVSALQQQQQQQRQPGMKHSPSHPVGPKPHLDNMVPNALNVGLPDLQTKGPIPGYGSGFSSGGMD
YGMVGGKEAGTESRFKQWTSMMEGLPSVATQEANMHKNGAIVAPGKTRGGSPYNQFDIIPGDTLGGHTGPAGDSW
LPAKSPPTNKIGSKSSNASWPPEFQPGVPWKGIQNIDPESDPYVTPGSVLGGTATSPIVDTDHQLLRDNTTGSNS
SLNTSLPSPGAWPYSASDNSFTNVHSTSAKFPDYKSTWSPDPIGHNPTHLSNKMWKNHISSRNTTPLPRPPPGLT
NPKPSSPWSSTAPRSVRGWGTQDSRLASASTWSDGGSVRPSYWLVLHNLTPQIDGSTLRTICMQHGPLLTFHLNL
TQGTALIRYSTKQEAAKAQTALHMCVLGNTTILAEFATDDEVSRFLAQAQPPTPAATPSAPAAGWQSLETGQNQS
DPVGPALNLFGGSTGLGQWSSSAGGSSGADLAGASLWGPPNYSSSLWGVPTVEDPHRMGSPAPLLPGDLLGGGSD
SI

FIGURE 2893A

CTTTTAAGGAGTTCTTGGACCTGCTGGGGGACACGATCACACTGCAGGATTTCAAAGGTTTCCGAGGAGGCCTGG
ACGTGACCCACGGACAGACAGGGGTGGAATCAGTGTACACAACATTCCGGGACAGGGAGATCATGTTTCACGTTT
CCACAAAGCTGCCATTTACCGACGGAGACGCCCAGCAGCTCCAGAGAAAGAGACACATTGGAAATGACATCGTGG
CCATCATCTTCCAAGAGGAAAACACGCCGTTTGTCCCAGACATGATAGCCTCCAATTTCTTACATGCCTACATCG
TCGTGCAGGTCGAGACCCCAGGCACAGAGACCCCATCCTACAAGGTCTCTGTCACTGCGCGGGAAGATGTGCCCA
CCTTTGGTCCACCTCTGCCCAGTCCCCCCGTTTTCCAGAAGGGCCCGGAATTCAGGGAGTTTCTGCTCACCAAGC
TCACCAATGCCGAGAACGCCTGCTGCAAGTCGGACAAGTTTGCAAAGCTGGAGGACCGGACCAGGGCTGCCCTCC
TGGACAACCTTCACGATGAGCTCCACGCCCACACACAGGCCATGCTGGGACTGGGCCCAGAGGAGGACAAGTTTG
AGAATGGAGGCCACGGGGGGTTCCTGGAGTCTTTTAAGAGGGCCATCCGCGTACGCAGCCACTCCATGGAGACCA
TGGTGGGCGGCCAGAAGAAGTCGCACAGTGGGGGCATCCCTGGCAGCCTCAGCGGGGGCATCTCCCACAACAGCA
TGGAGGTCACCAAGACCACCTTCTCGCCTCCAGTGGTGGCGGCAACGGTGAAGAACCAGTCACGGAGTCCCATCA
AGCGACGCTCGGGGCTCTTCCCCCGCCTGCACACGGGCTCAGAAGGCCAGGGCGACAGCCGGGCACGATGTGACA
GCACATCCAGCACACCCAAGACCCCAGATGGTGGACACTCCTCTCAGGAGATAAAGTCTGAGACCTCATCCAATC
CCAGCTCTCCAGAAATCTGCCCCAACAAGGAGAAGCCCTTCATGAAGTTGAAGGAAAACGGCCGCGCCATCTCCC
GCTCCTCCTCCAGCACCAGCAGCGTCAGCAGCACTGCAGGGGAGGGCGAGGCCATGGAGGAGGGCGACAGTGGGG
GCAGCCAGCCGTCCACGACCTCACCCTTCAAGCAGGAGGTGTTTGTCTACAGCCCGTCCCCGAGCAGCGAGAGCC
CCAGCCTGGGGGCAGCTGCCACCCCAATCATCATGAGCCGGAGTCCCACAGATGCCAAAAGCAGAAACTCCCCGA
GATCGAACCTGAAATTCCGCTTTGACAAGCTCAGCCATGCCAGCTCTGGTGCGGGTCACTAATGTGAAAGTGGAG
TCCTTCGCCTGTCCAAGGGAATCCCCTCTTCTGTCCTGGAAAAGGCTCCTGACCTCCCAGTGTGATGTCCGGGTC
CTTTATCATCCTATTCATCCTGGAGAGGAAAAGTGTCGGGCAAAGGGGGATCTGGGGGGAGCTCAGCAGTGACTG
GGGAGCTGGTCTGCCTCAGAGACAGAGTAGGGGGTGGGAGCAGAGCCTCGGTGAGGGTCTTGGCCACAGGGCAGT
GCCTTCCTGAACGTGGCAGGCTTTACTACCAGGAACGCACTCGGTGGTGGAGGCCCCATGTTCCCAGGAGCCAAG
ATTCGTAGCATCCTTGAGGCCATCCTGATAAAATTCGGCGCTATTGCCCCCGTAGCTCTGGAGCTCTAAACCGTC
TATCTGCTTCTGTGCTGAACGCCTTTCCCATCTGCTGACGTAGGCCCAGGGCTGCCCTGCCCCTGCTGCCAGTGT
ACCGTGAGCGGGGCTCCAGCCAGTTCAAGCTCAGAGCCAGAGCTGGACGGGCCAGAACTGCGCTGCACACTTCCT
GGACTGAGGCGGGGACTTTGGGTCCCACCCGGTTTCTCCTGATTATGGCTGCTGTGGGGTGAGGGGAGGGAGGGG
CAGCCCCGAGGCAGTCTCTTCCCTTTGAGAAGATATTTTCCCACAAAGGGGTGGGAAGCCAGGAGTGAGAAGGAA
TTCAGGGAGAGCAAAGGAGCCAGTGCTGAGATGCTGCTGTGTTGGTTGAGGAAAACCTCGGGCCTGAGGGCCAGG
CCGGAGCCCAGGTCTCTGCTGACAATGGGGGTTCAAGGAAGACGTCGTTATCTCCCCTCCCCACTTACTCGAGGA
GAGAGGTGAGGGGGGGATGACTTGCGGGTTCTGATCAGGCCCCTGGGTGGGGAAGGGGCACAGTGTCCCTCAGCA
GCTTACGCCCCTGGAGTCTTGGGGGGCCCAGCCTGGCCCTGGGGCCTTTTCCAGCTACTGTGCCCTTGGGCAGCT
GCGTCTGGGGCTCAACCCCCCAATCCTGTTCCCCTCTCCAGCTGCGGGTCTGTAGGCAGCTGTCACATCTGAAGG
GTTTCTGCAACCTGGACCCCATCTGGGTGTGGGTCAGACCCTGTGACCCACATGCCACCCCCACCCTCCACAGAG
CCCCCTTGCTGGGACAGCCAGCTCACCTCCAAGGACATCCCCTCCTGGCTTCTCCCCCTTCCGAGTCTGCAGCGC
CGTGGGCTTCTCTGCCGATGGGCCCGGGTTGGGGTTAAGGTGGGCATCCTCCAGGTACAACGAGCCTGAAGAGCC
CCTTTCAGTGCAGACGGGGCTGCAGAGTGACACTGGCTGGGCACCTGCCCCACGACCAATGACAAGGATTTCCAG
CTGAATGCTTTATTCCCATAGGGATCTGGACCTGTGCCCAAGATATAAATACTACACTTTTTTTTTTTTTTTTT
TTTAACTGACATTGTGAAATTCTCCCTATAGCTTTTGCCATTCAAGCAACATTGTGATCTTTCTTCCCCGCCACG
TGTGTGGGAATGATTGAGTCCTGTTTGCAAGCTGGAGAGGAGCTCTCCCTTCGCTAGTACTTTCTCTAAAGTACT
AGTCTAGTAAAATTTATTCTTGTTAGAAGGTCAACAAAATATCTGTTTAGCTTTTATGAAGAGTCACCGTAGCAG
CCCCCACGGCTGGAAAGAGGCCCGTACGTTCTGGACGCGTTTTGTTGGCTGGGCTTCTGGAGGCACTGGCAAGGT
CAAACTGCATTTCTTTAAGAACAGTTGCAGGATCTGGCTTGCCTCTGTGGGAAGCCGGCATTACAGGTGCTTGGT
GGATGGGCCGTGTCACATTGCCATCTGGGGTCCTTTGGGGTTTCCAGGTTGTCAGCATGCTGTCCCATTTGGGAA
TCCCATACCTGCCTGTCCCCACTGCGCTGGCTGACCCTTGCTGCCTGCTGCCTCTTGGGAGGGCTTTGTCCCTGC
CTCTGAGCTGGTGGGCAGGATGGCTGGGTGGCCCCCAGAGAAGCACAGACCTGGGATGGGGTCTCCATGCCCGGT
TTGCTGTTGGAATGATCTGAACAGGACCCCAAATGCCTCTTCCCTCTGGTCATGCCTCACTATCTCTAGGAGCTC
CATCCTGTGGCTTCCAGAGTGTGCACTTCCAGCCCACCCGGGCAGTGCTGAGAGGGAGGAGGAGAACAAGGATGG
CCCAGCCTCCCCTCCCTCCCCTAGACCACGGGGCGGGCAGCTCGGGTTCCTGGAGGGCTGTTTCCCCCACGCTGT

FIGURE 2893B

CCCTACATCTGCTCTGATCTAAAATGTCTTTCCTTTTATGCTGCGCCCAGTCTTGGGGCTCAAAGATTTGCCCAA
ACCTCATTGGCCCTCGTGACTAGGCTCATCTAGATGGTGCTCACGCTGGTGTTTGAGGCATTTCCACTGTGATCT
CCACGAGGGGATGTTTTCCGGGACACATCTCTGGCTCTGGGAACTGCCTGACTCACTGAAGAAACTACTTTTCAG
GCACTGTAGGGTCACCCATATGCCTCCAGCTCAGTTGACGCTTAAAAACAGGTGCAGAAAAGCTCGCGATGGAAG
GTCTTAATGAGAGTGTCTGTCTATGCCAGTCATGTAAAATGACGTTTCTTGAAAAAGATTCAGTGGTTCAGCTTT
GTCAGCATCATCTCAACACAAGCCTGCTGGCTCTTTTTAGCATCTCATCCAACCATGTCATCGTCCAGATGAGAA
ATCTTAGCCCAGGTGAGGGGAATAACTTGCTTGAGGTCACACAGCTGGCTGTTGGCAAAGCTGGGATTAGAACCC
TCAACCCAGGGTCCCTTCCTCTGCAGCGCCTACATGGTTGGTTGAATAAGTGGCTGCGTTTCCTGGGGCCCTGGG
TTTTGGGGAAGCCAGTTAGCTGCTGCTTTGGCACTGGCATGGAGGTGAGCAGTCAAGGATGCTGGTGAGGCCGCA
GTTTCTGCTCTTTTTCATCAGGGGGGATAGTCTCTAGGATTTTTCAGTGAGGACCCTTGGGCTTTGGATGCAGCT
TGAACCAAGAAAACGAGGAGGGAAAGGGATTCAGTGAACTATTCCTCAGTGGGATCGGTTCTTCAGCTCCTGATG
GGGGCTGTGTAATGGGGGCAGAGGCCAGGGAAAAAGATGCTGTTCACCCACCCTCAGCTTCCCTTTTCCTAAATT
AAGAGGAAAAGTGGTCAAAGAAAAACTCTTCATTTCTCCCTGATTCTTAAGCGAAGGTGGTTAATAGAAACTCAG
GCTCCCGTGACAAGGCAGGACAAGAGCCTGTTTCGCTTTCCTCCCTGACCCTGCCAGGTGCCAACTCAAACACTA
CCTTTCTCATTGGTTTCTAAGTCAGTAGAGACAGATCTGTTTTAAGCAGTTGGGGGTTCGAGTAGATCTCATGGG
TACAGGAGGCCAGCAGGGACCAGGCCAGTCAGCCATGCTCAGGACCCCTCGGCTCCTCCCCCAGCCTCTAGCTAC
CCTGTATCGAGGCAAGGGGAGGCCAGTAAAGTTTGCCAAGCCTGATCCTGCAGCCTGGTGGGGCTGGCTGGGGTA
TTCTTTTACCAAACTCTGTTTTACCGCCAGCCCCTTGTACACCCCAATCCCATGTCTCCCTCCCTTCAGCTGGAC
CGTGTGCCCCTTTGGGAGGAAGAAGACAAGCCCCACTAGGGCCAAGGGCAGCAGAGCCCTGCCGAGTGAGAGGCT
GTGGGGCAGCGGCTCTGTCCTGTGCCTTACCAGCCCTGGGGAGGGGGACATTTGGCTGGAAGACTGGAATTTAAT
TGCCATCGTCTTTGATTTTGTGACATTTCTGCTTGGAAGTGTGAACTACCCTCCCCCCCCCGCTTCCTGCTCCTT
AGCATGCGTGCAGCTCTCTCCTGTTTTGGGTGTTCCCCTTGGACACTCCAGCTCGGGGACTGCTGGCGTGTGAAT
GTGCAGATTCCCCTGTGTGGTCGAACCTAAGAACTGTGGCTTGGAAGTGATGCTCCATGTGACGACGACTTTGCT
TTCTTTCCTCTTAGTGAGGAGGTGATTCGTAGATCCCAACTGCCTATGTAATGTAAATAATGTACATTTAATTTA
TTGCTATGGTAGCACATTGTATTTGTTAATGTACAAAACAAATTCT

FIGURE 2894

FKEFLDLLGDTITLQDFKGFRGGLDVTHGQTGVESVYTTFRDREIMFHVSTKLPFTDGDAQQLQRKRHIGNDIVA
IIFQEENTPFVPDMIASNFLHAYIVVQVETPGTETPSYKVSVTAREDVPTFGPPLPSPPVFQKGPEFREFLLTKL
TNAENACCKSDKFAKLEDRTRAALLDNLHDELHAHTQAMLGLGPEEDKFENGGHGGFLESFKRAIRVRSHSMETM
VGGQKKSHSGGIPGSLSGGISHNSMEVTKTTFSPPVVAATVKNQSRSPIKRRSGLFPRLHTGSEGQGDSRARCDS
TSSTPKTPDGGHSSQEIKSETSSNPSSPEICPNKEKPFMKLKENGRAISRSSSSTSSVSSTAGEGEAMEEGDSGG
SQPSTTSPFKQEVFVYSPSPSSESPSLGAAATPIIMSRSPTDAKSRNSPRSNLKFRFDKLSHASSGAGH

FIGURE 2895

GGCACGAGGCCAAGAACGTGACAGATGAGCAGGAGGGCTTCGCCGAGGGCTTCGTGCGCGCCCTGGCCGAACTGC
ACAGCCAGAACACGCTGCCCAGCGTCACGTCGGCGGCGCAGCCGGTCAACGGGGCAGGCATGGTGGCTCCCGCGG
TAGCCTCGGTGGCAGGGGGCAGCGGCAGCGGCGGCTTCAGCGCCAGCCTGCACAGCGAGCCGCCGGTCTACGCAA
ACCTCAGCAACTTCAACCCAGGCGCGCTGAGCAGCGGCGGCGGGGCGCCCTCCTACGGCGCGGCCGGCCTGGCCT
TTCCCGCGCAACCCCAGCAGCAGCAGCAGCCGCCGCACCACCTGCCCCAGCAGATGCCCGTGCAGCACCCGCGGC
TGCAGGCCCTGAAGGAGGAGCCTCAGACAGTGCCCGAGATGCCCGGCGAGACACCGCCCCTGTCCCCCATCGACA
TGGAGTCCCAAGAGCGGATCAAGGCGGAGAGGAAGCGCATGAGGAACCGCATCGCTGCCTCCAAGTGCCGAAAAA
GGAAGCTGGAGAGAATCGCCCGGCTGGAGGAAAAAGTGAAAACCTTGAAAGCTCAGAACTCGGAGCTGGCGTCCA
CGGCCAACATGCTCAGGGAACAGGTGGCACAGCTTAAACAGAAAGTCATGAACCACGTTAACAGTGGGTGCCAAC
TCATGCTAACGCAGCAGTTGCAAACATTTTGAAGAGAGACCGTCGGGGGCTGAGGGGCAACGAAGAAAAAAAATA
ACACAGAGAGACAGACTTGAGAACTTGACAAGTTGCGACGGAGAGAAAAAAGAAGTGTCCGAGAACTAAAGCCAA
GGGTATCCAAGTTGGACTGGGTTGCGTCCTGACGGCGCCCCCAGTGTGCACGAGTGGGAAGGACTTGGCGCGCCC
TCCCTTGGCGTGGAGCCAGGGAGCGGCCGCCTGCGGGCTGCCCCGCTTTGCGGACGGGCTGTCCCCGCGCGAACG
GAACGTTGGACTTTTCGTTAACATTGACCAAGAACTGCATGGACCTAACATTCGATCTCATTCAGTATTAAAGGG
GGGAGGGGGAGGGGGTTACAAACTGCAATAGAGACTGTAGATTGCTTCTGTAGTACTCCTTAAGAACACAAAGCG
GGGGGAGGGTTGGGGAGGGGCGGCAGGAGGGAGGTTTGTGAGAGCGAGGCTGAGCCTACAGATGAACTCTTTCTG
GCCTGCCTTCGTTAACTGTGTATGTACATATATATATTTTTTAATTTGATGAAATCTGATTACTGTCAATAAACA
GCTTCATGCCTTTGTAAAAAAAAAAAAAAAAAAA

FIGURE 2896A

AAGCTTCTAATTGCAGTTCAACCACCTGTTACATATCTTCAGGAAAAAATCACAACCTCTCAACTTCAACTTCCT
CTTCTATAAATTAGAAATAACAATAACCACACCTGTAACCCCAGCACTTTGGGAGGCCAAGGCAGGCAGATCAAG
AGGTGAGGAGATTGAGACCATCCTGGCTAACATGATGAAACCCTGTCTCTACCAAAAAGACAAAAAATTAGCCAG
GTATGGTGGCACACACCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCAGGAGAATGGCGTGAACCCGGGAGGTGG
AGCTTGCAGTGAGCCGAGATGGCGCCACTGCACTCCAGCCTGGGCGACAGAGCAAGCCTCCGTCTAAAAAAAAAA
AAAGAAAGAAAGAAAGAAAGAAAGAAAAGAAATAATAATAACCACCATTCCTATCTCAACAGCTTGTTCTAGAAA
TTTTTAAAGCACAGTATCACAAACAGCACTACATAATTGTAAAACATGTATGAATATATACATCCAAACAACAGC
AATGTCATAGCCTATGGGTAGATATAATCTTATACAATGTACCAAAATCCCAATTTACTTCACTAGACAAACTGT
TATACCAAATTCTGTACACAGTATATCCAAGAAAATGTGTTGTTTTTATTGAGAAACTGAACCTAGCTTGGGAAC
ACATGTGCACAGTCTAGTTCATAATATTTGGTGCAAGTATCATTCTCTAATATAGATTTACATTTTTGCAAGCAA
ATTTTTACTTGCAATCGTAACATATCCAAATTTTCCCTTTTTACTCAATCAGAACTTAGTGTAAAGTACTACAAG
TTAGTTCTTCGGATTTCATGCTAAGAAAATAATGCAGATTTTCTGCATTATTATGGTCTTCACAGAAACCTTAAC
TATGATGAATTTAAAAGTGCAAAATAATCCAGGATAACTTTATGATTTCACATTTTTTAATGTTAAAAATAATGC
CATCATTAATTAGAAAATTCTAAAATCATTACTTCCACTTTCTTAGGCAAAATATCAATATACTCTCATTTGCCA
AATAAATTAAAAGATCTCCTACAAACACAATCTCCTAAATTGTGGTTTTATGGCTTTAATGTTTTATGTGTGGCA
ACTATTGATGCTAGTTAAAATTTTAGAAACTCTTTCTTTTTGATTCCCTACAGTTGTCTACAAGAACCTTATTGT
AGCATGATCCTGCCAGACTTTATACTATTTGTTGCTCCAATTAAAACTGTTTAAAACATGAATTTGAAAAATCTT
ATTTTAACTATAATTTTGTAGCTGAAACTTTTTTTTCTAAACTTTGCAAACATTCTATGCAACCTGAATTAGTGC
TGAGAAAATTGGATCTTAATGGTTGCTCAATGTTCTTCAACAGGTGAAAAGCATAATAAAACATGCTCATCTGAA
CTCCACCCATTTTCAATTTCAACATAGCATACCTCGTGTTTATTCTTAGGGCAAATTCAAAATTGTACATATTAG
GATTGGTTATTACTGAAGATAATTTATGCAATCATAAGCCAAAGATGCTAAGTTGGCAAAAAGAAAACAATGTAA
GTAAGCAAACTCTAACACATGTGGACACACCCTCTCAGTATATAAAGGCTTGTCACTGTCCTTGGTAGCAGGCAC
TCCCTGGGCTAAACAGCATCACCATGTCTGTTCGATACAGCTCAAGCAAGCACTACTCTTCCTCCCGCAGTGGAG
GAGGAGGAGGAGGAGGAGGATGTGGAGGAGGAGGAGGAGTGTCATCCCTAAGAATTTCTAGCAGCAAAGGCTCCC
TTGGTGGAGGATTTAGCTCAGGGGGGTTCAGTGGTGGCTCTTTTAGCCGTGGGAGCTCTGGTGGGGGATGCTTTG
GGGGCTCATCAGGTGGCTATGGAGGATTAGGAGGTTTTGGTGGAGGTAGCTTTCATGGAAGCTATGGAAGTAGCA
GCTTTGGTGGGAGTTATGGAGGCAGCTTTGGAGGGGGCAATTTCGGAGGTGGCAGCTTTGGTGGGGGCAGCTTTG
GTGGAGGCGGCTTTGGTGGAGGCGGCTTTGGAGGAGGCTTTGGTGGTGGATTTGGAGGAGATGGTGGCCTTCTCT
CTGGAAATGAAAAAGTAACCATGCAGAATCTGAATGACCGCCTGGCTTCCTACTTGGACAAAGTTCGGGCTCTGG
AAGAATCAAACTATGAGCTGGAAGGCAAAATCAAGGAGTGGTATGAAAAGCATGGCAACTCACATCAGGGGGAGC
CTCGTGACTACAGCAAATACTACAAAACCATCGATGACCTTAAAAATCAGGTAAGAGGTATTTTTAAATCCAGCT
TTAAGTATCTTGTCCATGTAATCCAGACAGATGAATCTTAAATTAAGCACAATGTGGCTGTTCACTATGCTTACC
CATGTTACTTTCTTCCTTCAAAAATAACCCAGTCTCATCAAAGATAAACATCTGTGAAACTATGGTCATGGCAAT
CTTCATCCAGCAAGTGTGCTACTTGTCTTAAGAGGATGGGAGATTTACTAAGCACTTTTGAGGTTTTAATGAGCA
TACAATGAGTCCACAGTTAAAATATGCTAGGCTATTTACAAATGTAGAAACTGAAAAAAAAAATCATGATATGAA
TCAGAACAAAATGTTATTCAGACTGATAACAAGCCATATTCAGTACCAACATGGCAAGAAAAATAAATTTTCCAG
TATGAAAATGGGACACTGCTTGCTTCTAAGGAATTTCTGAATTGTACCTATTGTGTACCAGTTCAGAGTGTATTT
ATTTATTAGTATTTATCATGAGTTAAACAAATGCAGGTGTGAGTCAGCCAAAGCATGGCTGAAATACATGGAAAT
CACATAGTCTAAAAGAGGAGGGCACACTTACAGGAATACATCTATATAATTCCAGTTAGTTTTCAGAAAGGAATA
ATTCGTGTACAGAAATACAAGACTGGAGAAATTCCAAGAGAACAAATAATTCAAAGTTAAGTATATGGGTAAGCC
TGCAATATTTCATATTTAAAATAAAAAATTTTCCCAAGATTTTGTAAGAGAACAACATAAAAGTGCAGAGTGCAT
CTATGTCACTACAAAAGCCATATCTGCATCTGACCTCTTCTCAAATAACTGTGCCTCTCCCTCCAGATTCTCAAC
CTAACAACTGATAATGCCAACATCCTGCTTCAGATCGACAATGCCAGGCTGGCAGCTGATGACTTCAGGCTGAAG
TAAGTTAAGTGATCGTTGTATAATACTATCACAACGAATACATCAGTGGTTTTTAACAATGACTTGGGATGCCCT
CAATAACATTTACATTTTTCTGAATTCACCCAAAGTTAAATAGTATTGGAGTTATCTGAGAAATTTTCCATGTCA
GTGTTACCTTTTTGGCAATATTAAAGGAAGAAAATGCATATTAAAGTAACTGCTAAGGTTTTTTCCATTAAACCA
CTATTACTTCTAAGAGAACTGTACATGACAAATATTGCCATTACATGAGATCAACTATGTAGTTGCTTTTTAAAT
AGTCTCTGCCCAGATACATCTCCCCTATATAAGTTATAACCAGTATTGATATCATGCTTGTTTCAGGTATGAGAA

FIGURE 2896B

TGAGGTAGCTCTGCGCCAGAGCGTGGAGGCTGACATCAACGGCCTGCGTAGGGTGCTGGATGAGCTGACCCTGAC
CAAGGCTGACCTGGAGATGCAAATTGAGAGCCTGACTGAAGAGCTGGCCTATCTGAAGAAGAACCACGAGGAGGT
GACACAAAAGTTATACTTTTCCCAGCCAAAAGAGAGTTCATTATGGTCCTCGTGTAGCCAATAAATCTTTCTGTT
CCTCAAACAGGAAATGAAAGACCTTCGAAATGTGTCCACTGGTGATGTGAATGTGGAAATGAATGCTGCCCCGGG
TGTTGATCTGACTCAACTTCTGAATAACATGAGAAGCCAATATGAACAACTTGCTGAACAAAACCGCAAAGATGC
TGAAGCCTGGTTCAATGAAAAGGTAAAGTAATCTTCCTTATAGTGAAACTCATGGAGGTTTTATCATTTCAGAAT
TTCCTCACCCTTTTCCTTGTTTTTAATACTCTAGAGCAAGGAACTGACTACAGAAATTGATAATAACATTGAACA
GATATCCAGCTATAAATCTGAGATTACTGAATTGAGACGTAATGTACAAGCTCTGGAGATAGAACTACAGTCCCA
ACTGGCCTTGGTATGTTAACTCTCATGAAATGACTTCAACTTTATCATACAAAGTTTCATGCTCACCTAAGAATA
TGCAATGCAACAAAAAAATGCAGAGTTGGAGGTAAGAAAGAGAAAACAAAGTGAAGCTCATGTTAATGGAGGAAA
AGTACTACTAGTGTTGATCTAAAAGTGCTGAAACTGAAATGGTGCCATTAAACATACAACAAATTCTGTTCATTT
TCTTATTCTTCTATATAATGCCTTACTAAATAATCAAATAAGCGTCACCATACTCAACTGAACAAGGAAGTCACT
AAGCCACAAAAAAATCCGTTTCAGAAACAATCCCTGGAAGCCTCCTTGGCAGAAACAGAAGGTCGCTACTGTGTG
CAGCTCTCACAGATTCACGCCCAGATATCCGCTCTGGAAGAACAGTTGCAACAGATTCGAGCTGAAACCGAGTGC
CAGAATACTGAATACCAACAACTCCTGGATATTAAGATCCGACTGGAGAATGAAATTCAAACCTACCGCAGCCTG
CTAGAAGGAGAGGGAAGGTAAATTATAACATGAAAAGTTATCCCAGTTTCTTTTATTCAATATTCCAGATAGCAA
GGCTTATCTAAACCCCAAGAAGATGCCAGAGAATGAGAGGAAGGGAGGAGAGAGGGTAGAGTACAGAAAAAGGAG
TACGCAACCGCAATCTCACTTTCTCATGAATTTGGCCCAAAATGATTCTTAAGAGTTCTGTGAACTTAACATTGT
TTTCAAAGGATGGGTTTTAAAATATATACCTGGCAGGGTTTTATTTTTTCAACACGTTTTGCTTATTTTCTAAAT
TAACGGCAACTGGAAAGCTACCCACCGTTTTCCAACGTTAGAGATAACCGAATGTGACCTCACCCCGTTTAGTTC
CGGAGGCGGCGGACGCGGCGGCGGAAGTTTCGGCGGCGGCTACGGCGGCGGAAGCTCCGGCGGCGGAAGCTCCGG
CGGCGGCTACGGCGGCGGCCACGGCGGCAGTTCCGGCGGCGGCTACGGAGGCGGAAGCTCCGGCGGCGGAAGCTC
CGGCGGCGGCTACGGGGGCGGAAGCTCCAGCGGCGGCCACGGCGGCGGAAGCTCCAGCGGCGGCCACGGCGGCAG
TTCCAGCGGCGGCTACGGTGGTGGCAGTTCCGGCGGCGGCGGCGGCGGCTACGGGGGCGGCAGCTCCGGCGGCGG
CAGCAGCTCCGGCGGCGGATACGGCGGCGGCAGCTCCAGCGGAGGCCACAAGTCCTCCTCTTCCGGGTCCGTGGG
CGAGTCTTCATCTAAGGGACCAAGGTCAGCAGAAACTAGCTGGGGTAATCTAGAATTAGTTTTAACTTCCTGTGA
TGGTTTTTTTGCGCTTTAAGCTCTAGAGTTGTTTTAAAAAATTAAAAATCTTAGAGACGGTTCCGTTTGCATTTG
TTCACAAACTACTCTTAACACCAGCCGTGAAAAATGGCATGATCAAAATGTCATACCTTAAGCATTTTTTTGGGC
TTAACAATGTAAAGTTGAAATTTCCTTCTTTTTACAATATTTGCTTGTTAATTACTAAGGATCCCTACAGACTGT
TTAAAATTTTTTTTCCATCATTCACACAGATACTAACAAAACCAGAGTAATCAAGACAATTATTGAAGAGGTGGC
GCCCGACGGTAGAGTTCTTTCATCTATGGTTGAATCAGAAACCAAGAAACACTACTATTAAACTGCATCAAGAGG
AAAGAGTCTCCCTTCACACAGACCATTATTTACAGATGCATGGAAAACAAAGTCTCCAAGAAAACACTTCTGTCT
TGATGGTCTATGGAAATAGACCTTGAAAATAAGGTGTCTACAAGGTGTTTTGTGGTTTCTGTATTTCTTCTTTTC
ACTTTACCACAAAGTGTTCTTTAATGGAAAGAAAAACAACTTTGTGTTCTCATTTACTAATGAATTTCAATAAAC
TTTCTTACTGATGCAAACTATCCCAATTTGTCAGAATTTATCTTTACTTAAGTACATAATACTCTTTAAAATTAA
AGATTAGTAACCCATAGCAGTTGAAGGTTGATGTATCCAGAAATTCGGAAGACAGAACTATTGTCATGCCTTTTC
TAAGTTTTTTAATCATGTATGTTCAGACCACCGTCAGTAAATTCACTGAGTAAAGTCTGTAAATCCCCAATATTA
CTCTTTAAGATACACAATATGTGGAAGGCTCCCAGCTCTCTGGCTTTAAATTATTTCAATCCTGGAAATTCTGGA
ATATCTCAAATATAACCCCCAAAATAATAATAA

FIGURE 2897

GAATTCGGCACGAGCTCTTCTCCCCTGATTCAAGACTCCTCTGCTTTGGACTGAAGCACTGCAGGAGTTTGTGAC
CAAGAACTTCAAGAGTCAAGACAGAAGGAAGCCAAGGGAGCAGTGCAATGGATTTCTCAGTAAAGGTAGACATAG
AGAAGGAGGTGACCTGCCCCATCTGCCTGGAGCTCCTGACAGAACCTCTGAGCCTAGATTGTGGCCACAGCTTCT
GCCAAGCCTGCATCACTGCAAAGATCAAGGAGTCAGTGATCATCTCAAGAGGGGAAAGCAGCTGTCCTGTGTGTC
AGACCAGATTCCAGCCTGGGAACCTCCGACCTAATCGGCATCTGGCCAACATAGTTGAGAGAGTCAAAGAGGTCA
AGATGAGCCCACAGGAGGGGCAGAAGAGAGATGTCTGTGAGCACCATGGAAAAAAACTCCAGATCTTCTGTAAGG
AGGATGGAAAAGTCATTTGCTGGGTTTGTGAACTGTCTCAGGAACACCAAGGTCACCAAACATTCCGCATAAACG
AGGTGGTCAAGGAATGTCAGGAAAAGCTGCAGGTAGCCCTGCAGAGGCTGATAAAGGAGGATCAAGAGGCTGAGA
AGCTGGAAGATGACATCAGACAAGAGAGAACCGCCTGGAAGATCGAGAGACAGAAGATTCTGAAAGGGTTCAATG
AAATGAGAGTCATCTTGGACAATGAGGAGCAGAGAGAGCTGCAAAAGCTGGAGGAAGGTGAGGTGAATGTGCTGG
ACAACCTGGCAGCAGCTACAGACCAGCTGGTCCAGCAGAGGCAGGATGCCAGCACGCTCATCTCAGATCTCCAGC
GGAGGTTGACGGGATCGTCAGTAGAGATGCTGCAGGATGTGATTGACGTCATGAAAAGGAGTGAAAGCTGGACAT
TGAAGAAGCCAAAATCTGTTTCCAAGAAACTAAAGAGTGTATTCCGAGTACCAGATCTGAGTGGGATGCTGCAAG
TTCTTAAAGAGCTGACAGATGTCCAGTACTACTGGGTGGACGTGATGCTGAATCCAGGCAGTGCCACTTCGAATG
TTGCTATTTCTGTGGATCAGAGACAAGTGAAAACTGTACGCACCTGCACATTTAAGAATTCAAATCCATGTGATT
TTTCTGCTTTTGGTGTCTTCGGCTGCCAATATTTCTCTTCGGGGAAATATTACTGGGAAGTAGATGTGTCTGGAA
AGATTGCCTGGATCCTGGGCGTACACAGTAAAATAAGTAGTCTGAATAAAAGGAAGAGCTCTGGGTTTGCTTTTG
ATCCAAGTGTAAATTATTCAAAAGTTTACTCCAGATATAGACCTCAATATGGCTACTGGGTTATAGGATTACAGA
ATACATGTGAATATAATGCTTTTGAGGACTCCTCCTCTTCTGATCCCAAGGTTTTGACTCTCTTTATGGCTGTGC
TCCCTGTCGTATTGGGGTTTTCCTAGACTATGAGGCAGGCATTGTCTCATTTTTCAATGTCACAAACCACGGAGC
ACTCATCTACAAGTTCTCTGGATGTCGCTTTTCTCGACCTGCTTATCCGTATTTCAATCCTTGGAACTGCCTAGT
CCCCATGACTGTGTGCCCACCGAGCTCCTGAGTGTTCTCATTCCTTTACCCACTTCTGCATAGTAGCCCTTGTGC
TGAGACTCAGATTCTGCACCTGAGTTCATCTCTACTGAGACCATCTCTTCCTTTCTTTCCCCTTCTTTTACTTAG
AATGTCTTTGTATTCATTTGCTAGGGCTTCCATAGCAAAGCATCATAGATTGCTGATTTAAACTGTAATTGTATT
GCCGTACTGTGGGCTGGAAATCCCAAATCTAGATTCCAGCAGAGTTGGTTCTTTCTGAGGTCTGCAAGGAAGGGC
TCTGTTCCATGCCTCTCTCCTTGGCTTGTAGAAGGCATCTTGTCCCTATGACTCTTCACATTGTCTTTATGTACA
TCTCTGTGCCCAAGTTTTCCCTTTTTATTAAGACACCAGTCATACTGGCTCAGGGCCCACCGCTAATGCCTTAAT
GAAATCATTTTAACATTATATTCTCTACAAAGACCTTATTTCCAAATAAGATAATATTTGGAGGTATTGGGAATA
AAATTTGAGGAAGGCACGATTTCACTCATAACAATCTTACCCTTTCTTGCAAGAGATGCTTGTACATTATTTTCC
TAATACCTTGGTTTCACTAGTAGTAAACATTATTATTTTTTTTATATTTGCAAAGGAAACATATCTAATCCTTCC
TATAGAAAGAACAGTATTGCTGTAATTCCTTTTCTTTTCTTCCTCATTTCCTCTGCCCCTTAAAAGATTGAAGAA
AGAGAAACTTGTCAACTCATATCCACGTTATCTAGCAAAAGTCATAAGAATCTATCACTAAGTAATGTATCCTTC
AGAATGTGTTGGTTTACCAGTGACACCCCATATTCATCACAAAATTAAAGCAAGAAGTCCATAGTAATTTATTTG
CTAATAGTGGATTTTTAATGCTCAGAGTTTCTGAGGTCAAATTTTATCTTTTCACTTACAAGCTCTATGATCTTA
AATAATTTACTTAATGTATTTTGGTGTATTTTCCTCAAATTAATATTGGTGTTCAAGACTATATCTAATTCCTCT
GATCACTTTGAGAAACAAACTTTTATTAAATGTAAGGCACTTTTCTATGAATTTTAAATATAAAAATAAATATTG
TTCTGATTATTACTGAAAAGATGTCAGCCATTTCAATGTCTTGGGAAACAATTTTTTGTTTTTGTTCTGTTTTCT
TTTTGCTTCAATAAAACAATAGCTGGCTCTAAAAAAAAAA

FIGURE 2898

MDFSVKVDIEKEVTCPICLELLTEPLSLDCGHSFCQACITAKIKESVIISRGESSCPVCQTRFQPGNLRPNRHLA
NIVERVKEVKMSPQEGQKRDVCEHHGKKLQIFCKEDGKVICWVCELSQEHQGHQTFRINEVVKECQEKLQVALQR
LIKEDQEAEKLEDDIRQERTAWKIERQKILKGFNEMRVILDNEEQRELQKLEEGEVNVLDNLAAATDQLVQQRQD
ASTLISDLQRRLTGSSVEMLQDVIDVMKRSESWTLKKPKSVSKKLKSVFRVPDLSGMLQVLKELTDVQYYWVDVM
LNPGSATSNVAISVDQRQVKTVRTCTFKNSNPCDFSAFGVFGCQYFSSGKYYWEVDVSGKIAWILGVHSKISSLN
KRKSSGFAFDPSVNYSKVYSRYRPQYGYWVIGLQNTCEYNAFEDSSSSDPKVLTLFMAVLPVVLGFS

FIGURE 2899

TTTAGGTAAAACCGGATTTAACCCTTGGGAAAAAAAAAAAAAAGGAGAGAGAAGACAGTTCCTTTCCTGTAGAA
ATTAAAACAAAATACAAATTGAGGAAGCTCTGCTACCCAGGCTGTCATGGTAGAGAACTTGAAGAAGACCTGTTT
GGATGGACACCTGGTTTCAAAAGTCAGGTGTGGAGACTGTTAAATGGGAGGGCCTCATCCATAAATGATTTCTGG
CAACGTCTTCTTCAGGTGGAGCTTGACGTCTTTTTAATGTTACTTGGGGAGGGAGTGCTCATTAAGGGATGCCAG
GGCCAGCTCTGGTGGTTCCTGGGGAGGCTGCGTCCTTCCCTGCTTCTGCATGTCATGAGGCAGCAGGAAGGTTTC
CCCTGCACCTGTCTGTCCTGGCTCCCTCTGGGTAGCCCCCTACTGTTCTGTGCTTCAGCACAGCCTGGTTTGTCA
AGAGGCACATAGTTGGGGCTGGGCTGCATGGCACAGGGGCTTATGTGCCTGCTGGTTATTTAATTTTCAGCCTTA
AGTTTTCTTTAATATTTTCCTGTTGGCTATTTAAAGGTTTTGGTTATCTTTTATTCCTTATCTACAATCAAGATG
ACAATGTAATTGAATTATCTTATTTATAACACGGTTCGTGATTCATGATTCATGATTACAAGTAGAAAATATGTC
ATGTTCCTCACCTCCAAATAAATATGTGTGTGTCTGTNTGNGTGTCTATATGTATGTGCGGAGAGGGAGAGAGTG
GGGAAGGAGAGCAGTGTTATCATACATAGAGAGGCTAAATGTGTCCCATCCCTCACTGTCAGCTTTATAAAGGAG
TTTGACTCCATCCACAGAAGAATGTTTTATAAGACTAGGAAAACACGTTGAAAACTAGGATAAACAGCAACAAAA
ATCAACTAAATATGTTGTTACTGTTGCTAAGGATTTTCTCCTTAGAATAATTTAGGATTTTTAAAAATTTCTGTT
TGCCAAATGCTGTAGATAAATGGCCAGATTCTTCCTATCCCTAGGATTCCTTTATTATTTTTTTTCACAGATTTT
GAGAACAAGGGGGAGAGATAGTATGGAAGATTAAGATTCCATTAATCTTATAGAACTGTGTTGTCACCCAAATTC
CTGCTTGTTTGAACATGGCATCTTCATAGATTCAGGATTCACTACCCTCTATAGCTGGATCTTGAAAATTATCTG
GCCAGATAATTTTGCATCTGCTTGGATGATTGTAGACTGAGATGTGAGTGGAGGATAAAGTATTAGACTTTTGCT
GAGTAACTGCCAACCAAGAAGTATTTATCGGACACTTACTAGGTGCCTAGGATTGTATCAGAGGGAATATGAAAT
GTGTCCCTGCCCTACCTAGTTTTAACGACAGAATATCTATTAAAGGCTACTTAGCTGAAGGGTAAGGGTGACAGG
TCTAGGGGAAGCTTTGGGAGGTGGTGTGCTGTGACAGAAAAAGTGGCAGAGTAGGGACGAGAGACCTGCATTCTA
GCCCTGTTTCTGTCACTTGCTCTGTACACTTAGACAACAGCTTGACCTCTTGAGCTTTAGTTTCCTCCTCTGCAT
AATGAGAGGGTTAGACTACTGAATTGTATGGGAAAAAAATACAAATTCCTGGGTCCTAGGCCATGCCTGCTGAAT
CCGACTGTTCAGGAAGAGGCCTAGGAAATCTGTGAGGGAATCCCCAGGGGAATCTCGTGACCAGCCAGGTGTGAA
ATCTGCTAACTGGAAGATCTCAAAGCTTCCTTCACTTTTTGTGATTTTGTGGTCATGTAACGTTACTGTATTATT
CTACGTAAATGTGGGTACTTGGATGTTTATCATACTGTTTCTCTGTGTTTACATACTAATTTGTGTAAGAAATGC
ATTTTAGTCTGTGTACCTCAACCTGCTGTTTGTTTCCTAGAGGTGTTAGTAGTCTTTAAATACAAGTAAGACTTA
AGAGGATATTTGATGTTATTTACCTGGATATTTTCTTCCCCTTTTATTTATTTAGAGGAAATTGAGATTCTAGGA
GCCAAAAAAAATGAAAACAAAATTCTAAGGCAAAGTTAAAGAAAAAAATTACATTATTTCTTACCATTTGCTACTT
TATAATGAAAATTTAAAAATTATATGGGAAGATTTTTCTCTGGGATAACAAATCCTTGTCATAAAGTAAGAGGTC
TTTTTAAAGTAGGTAGGCTATAAGGCCTGTAATTTAAAATAATACTCCTTTCTCTAGGGTTTGGTGCAATTCTCC
ATTAATGAAGATAACATTTGAATTCCCCAAAGCAGGTGAGGAGTCGGGGAGGAGAAAGCGATGTTAAAATGAAAA
CTCACTGCAAAAGAGGAGGCAGAGGAAGAAGGAATGTAAACCCCTTAAAGCAGATGTGTGTGGGGCCTTATGAAG
ACCAGGATTCTGCGGGTGTCAGGGGATTGCCCCTCTTGACAGAGACTAGGGTTTTAGACTGAGGCTTCCTGCAGG
GTGTTCGCATTGCCCTTCTCCGTTCCCCTTCAGACCTTTCTGGGGAGAAGAGGTGGGAGGAGGGGAGAAAGACTG
TTCATCTTATTCTGAATCCTGGAGCAGCTGAAGGTTTTCTCTTGAGTCAGGATGCAGTGGTAATGCATTAACCAG
CAAGTGTGGCCAAGGATAATGAAAAAGTGGGAAAGGAAGGTCCTCCTCCTCCCTGATTGTAGCATCCAGCAGTCT
CTGTAGCCAGGTTACTCAAGAACCACATTTGATTTCCTGGCCCTTTGCCTTGGCAGTGATGGCATTTTTATTTCA
CTGTGTTTTAAAGTCTTCATTTATTTTTATAACATGGGTTAGGGAGAAGGGCCACAAATGGAGGGATTGTCCTTT
CAAGCACCACAGCTTCAGATAAAATTAGTACTTTCAAATATTGTCCACTTTAACTTAAAAAATTCTAGAGGGATT
ATATTGGAGACTCAACTGCCCTTGGTTTTAGTTTATAAAATGGCCTAGTACTGTGGAATTTTAATTTTAGAAAGT
CTTAGCATCAGATCATAAACATTCATTAAAAGAACTCACATCCCATCTGAAACTTCCCAGGGGAGTTGGGATTCT
TAGTAGATTGGTAGAAAGGGGCTCATTTTCTACTGCATTTCCCATTTTTGGTATCTTGTTCAGCATGTTTTATTT
TTATTTCTTGTCTGCAGAACATCCTATATTTATGAGAACATTCTTTAAGAAGACCACCACATAGAATACCCCTTC
CTATCAGCTCGCTCTGATTTAGCCTTAATTTTGTTAAATTTTTTAGAGATGAATGAAGTGCTGCTGTGGAAAGAA
ATGTACATATACTATTTCTGTATCATTAAAATTACATTTTTATGGTTCAAG

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FIGURE 2900

LGKTGFNPWEKKKKRREKTVPFL

FIGURE 2901A

GGCCGCGAGTGCATCTTCCACGAACCTAATTCATCTCTCCAGCAAAGGACACATCTCTCCAGCAAAGGACACCTC
TCTCCAGCAAAGGACACCTGCAGAGATGTCCCCAGTCCTTCACTTCTATGTTCGTCCCTCTGGCCATGAGGGGGC
AGCCTCTGGACACACTCGGAGGAAACTGCAAGGGAAACTGCCAGAGCTGCAGGGCGTCGAGACTGAACTGTGCTA
CAACGTGAACTGGACAGCTGAGGCCCTCCCCAGTGCTGAGGAGACAAAGAAGCTGATGTGGCTGTTTGGTTGCCC
CTTACTGCTGGATGATGTTGCTCGGGAGTCCTGGCTCCTTCCTGGCTCCAATGACCTGCTGCTGGAGGTCGGGCC
CAGGCTGAACTTCTCCACCCCAACATCCACCAACATCGTGTCAGTGTGCCGCGCCACTGGGCTGGGGCCTGTGGA
TCGTGTGGAGACCACCCGGCGCTACCGGCTCTCGTTTGCCCACCCCCCGTCAGCTGAGGTGGAAGCCATTGCTCT
GGCTACCCTGCACGACCGGATGACAGAGCAGCACTTCCCCCATCCCATCCAGAGTTTCTCCCCTGAGAGCATGCC
GGAACCCCTCAATGGCCCTATCAATATACTGGGTGAGGGCCGGCTTGCGCTGGAGAAGGCCAACCAGGAGCTTGG
TCTGGCTTTAGACTCTTGGGACCTAGACTTCTACACCAAGCGCTTCCAGGAGCTACAGCGGAACCCGAGCACTGT
GGAGGCCTTTGACTTGGCGCAGTCCAATAGCGAGCACAGCCGACACTGGTTCTTCAAGGGCCAGCTCCACGTGGA
TGGGCAGAAGCTGGTGCACTCACTGTTTGAGTCCATCATGAGCACCCAGGAATCCTCGAACCCCAACAACGTCCT
CAAATTCTGTGATAACAGCAGTGCAATCCAGGGAAAGGAAGTCCGATTCCTACGGCCTGAGGACCCCACACGGCC
AAGCCGCTTCCAGCAACAGCAAGGGCTGAGACATGTTGTCTTCACAGCAGAGACTCACAACTTTCCCACAGGAGT
ATGCCCCTTTAGTGGTGCAACCACTGGCACAGGGGGCCGGATTCGAGATGTCCAGTGCACAGGCCGCGGGGCCCA
CGTGGTGGCTGGCACTGCCGGCTATTGCTTTGGAAATCTGCATATTCCAGGTTACAATCTGCCCTGGGAGGATCT
AAGCTTCCAGTATCCTGGGAATTTTGCCCGGCCCCTGGAGGTTGCCATTGAAGCCAGTAATGGAGCTTCTGACTA
TGGCAACAAGTTTGGGGAACCAGTGCTGGCTGGCTTCGCCCGCTCCTTGGGCCTCCAGCTCCCAGACGGCCAGCG
GCGTGAGTGGATCAAGCCCATCATGTTTAGTGGGGGCATTGGGTCCATGGAAGCTGACCACATAAGCAAGGAGGC
CCCAGAGCCAGGCATGGAAGTTGTAAAGGTTGGAGGTCCCGTCTACAGGATTGGAGTTGGAGGTGGAGCTGCTTC
ATCTGTGCAGGTGCAGGGAGATAACACCAGTGACCTGGACTTTGGGGCTGTGCAGCGAGGAGACCCGGAGATGGA
ACAGAAGATGAACCGTGTGATCAGGGCTTGTGTGGAGGCCCCCAAGGGAAACCCCATCTGCAGCCTTCATGATCA
GGGCGCTGGTGGCAATGGCAATGTCCTAAAAGAGCTGAGTGACCCAGCTGGAGCCATCATTTACACCAGCCGCTT
CCAGCTTGGGGACCCAACCCTGAATGCCCTGGAAATCTGGGGGGCTGAGTACCAGGAATCAAATGCTCTTCTGCT
GAGGTCCCCCAACCGGGACTTCCTGACTCATGTCAGTGCCCGTGAACGTTGCCCGGCTTGCTTCGTGGGCACCAT
CACTGGAGACCGGAGAATAGTGCTGGTGGACGATCGGGAGTGTCCTGTCAGAAGAAATGGCCAGGGGGATGCCCC
CCCGACACCCCCGCCAACCCCTGTGGACCTGGAGCTCGAATGGGTGCTGGGCAAGATGCCTCGGAAGGAGTTCTT
CCTGCAGAGGAAGCCCCCCATGCTGCAGCCTCTGGCCTTGCCCCCAGGGCTGAGCGTGCACCAGGCTCTGGAGAG
GGTTCTGAGGCTGCCCGCCGTGGCCAGCAAGCGCTACCTCACCAATAAGGTGGACCGCTCCGTGGGAGGCCTGGT
GGCCCAGCAGCAGTGCGTGGGGCCCCTGCAAACTCCTCTGGCAGATGTAGCGGTTGTGGCACTGAGCCATGAGGA
GCTCATAGGGGCTGCCACAGCCTTGGGAGAACAGCCAGTCAAGAGCCTGCTGGACCCAAAAGTCGCCGCCCGGCT
GGCCGTGGCCGAAGCCCTCACCAACCTGGTGTTTGCTCTGGTCACTGACCTCCGGGATGTGAAGTGTAGCGGGAA
CTGGATGTGGGCAGCCAAGCTCCCAGGGGAGGGCGCAGCTTTGGCGGATGCCTGTGAGGCTATGGTGGCAGTGAT
GGCAGCCCTGGGTGTGGCAGTGGATGGTGGCAAGGACTCCCTCAGCATGGCTGCTCGGGTTGGCACTGAGACCGT
GCGGGCTCCTGGGTCACTGGTCATCTCAGCCTATGCCGTCTGCCCAGACATCACAGCCACTGTGACCCCAGACCT
CAAGCATCCTGAAGGGAGAGGCCATCTGCTCTATGTGGCTCTGAGCCCTGGGCAGCACCGGCTCGGGGGCACAGC
TCTGGCCCAGTGCTTCTCCCAGCTTGGGGAACACCCTCCAGACCTGGACCTTCCTGAGAACTTGGTGCGGGCCTT
CAGCATCACTCAGGGGCTGCTGAAAGACCGCCTCCTCTGCTCAGGCCACGATGTCAGTGACGGAGGCCTCGTCAC
ATGCCTGCTGGAGATGGCCTTTGCTGGAAATTGCGGGCTACAGGTGGATGTGCCTGTCCCCAGGGTTGATGTCCT
GTCTGTGCTGTTCGCTGAGGAGCCAGGCCTCGTGCTGGAGGTGCAGGAGCCAGACCTGGCCCAGGTGCTGAAGCG
TTACCGGGATGCTGGCCTCCATTGCCTGGAGCTGGGCCACACAGGCGAGGCCGGGCCCCACGCCATGGTCCGGGT
GTCAGTGAACGGGGCTGTGGTTCTGGAGGAGCCTGTTGGGGAGCTGCGAGCCCTCTGGGAGGAGACGAGTTTCCA
GCTGGACCGGCTACAGGCAGAGCCTCGCTGTGTGGCAGAGGAGGAACGGGGCCTGAGGGAGCGGATGGGGCCCAG
CTATTGCCTGCCCCCCACCTTTCCCAAAGCCTCCGTGCCCCGTGAGCCTGGTGGTCCCAGCCCCCGAGTCGCCAT
CTTGCGAGAGGAGGGCAGTAATGGAGACCGGGAGATGGCCGATGCCTTCCACTTAGCTGGGTTTGAGGTATGGGA
CGTGACCATGCAGGACCTCTGCTCTGGGGCAATTGGGCTGGACACTTTCCGTGGCGTGGCCTTCGTGGGCGGCTT
CAGCTATGCAGATGTCCTGGGCTCTGCCAAAGGGTGGGCAGCTGCTGTGACCTTTCATCCCAGGGCTGGGGCTGA
GCTGAGGCGCTTCCGGAAGCGGCCAGACACCTTCAGCCTGGGCGTGTGTAATGGCTGTCAACTGCTGGCTCTGCT

FIGURE 2901B

CGGCTGGGTGGGAGGCGACCCCAATGAGGATGCTGCAGAGATGGGCCCTGACTCCCAGCCAGCCCGGCCAGGCCT
TCTGCTACGCCACAACCTGTCTGGGCGCTACGAGTCTCGCTGGGCCAGCGTGCGTGTGGGGCCTGGGCCAGCCCT
GATGCTGCGAGGGATGGAGGGCGCCGTGCTGCCCGTGTGGAGTGCGCACGGGGAAGGTTACGTAGCATTTTCTTC
TCCGGAACTCCAAGCTCAGATTGAGGCCAGGGGCTTGGCTCCACTGCACTGGGCTGATGATGACGGGAACCCCAC
AGAGCAGTACCCTCTGAATCCCAATGGGTCCCCAGGGGGCGTGGCTGGCATCTGCTCCTGTGATGGCCGCCACCT
GGCTGTCATGCCTCACCCTGAGCGGGCCGTTAGGCCTTGGCAGTGGGCATGGCGACCCCCTCCATTTGATACTCT
GACCACCTCCCCCTGGCTCCAGCTCTCTATCAATGCCCGAAACTGGACCCTGGAAGGGAGCTGCTGACTGGCCAC
AGGGGCTCACCTGGGCCCCATGGCTTTTCACCTAAGTGGGTCCTGCCCCCTCCCCCATGACCTTCAGGAGCACCC
CATATTATTTCCAAAAATATCTTGGACAGACAAGGACCAAAATGCCAAAATCTCAGCGGACTCGATGATCTGCCT
GCTGATGTTCCTTCTGTGGCTGTGTCTATTTTCAGTTCTGCTCTAACATGGCATGCCCTTTCTCAGCCCAGGAAA
CAGCATGTGGTTCAGAGAAAAGAGCGACAAGGAAAAGTTAGGACTCCTGAGGTCCGAACAGGGGCTTCTGTTGCC
CACTTCACAACACCCAGTGATCACCGGTGTGCAATTGCCTCCTTGGCTCTGAGGGATGTTTTGCGCTCCCTTTTC
TCATCATTGGGGTTAGCGGGTGCAGACAAATTCAGCAATAGTATGCAGATCAGCCCCTCACCACCTCATTGTTCT
CATCTGGAACTGAAACTTTCTGGATTTCTCTTGAAGTGCTACACTGCACTGAATGTAAGGAATTGTTGCTTGTGG
AAGTTTCTCAGCGTTTCTGGCTGTCTTAGGGCTGGCCTCAGAACCCAGCATTCCTGTTATTTGCTTCTAAATTAG
CAGCTCTCTTTTTTTTTTTTTTTTTGAGGCAGTCTCACTCTGTCACCCAGGCTGGAGTGCAGTGGCGTGATCTCG
GCCCACTGCAACCTCTGCCTCCTGGGTTCAAGCAATTTTCCTGCCTCAGCCTCCCGAGTAGCTGGGAGTACAGGC
ACACACCACCACACCCAGCTAATTTTTGTATTTTTAGTAGAGATAGGGTTTCACCGTGTCTCCCAGGCTGGTCTC
AAACTCCTAACCTCAAGTGATTCGCCTGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGTGGGAGCCACTACAGC
TGGCCCAGCAGCTCTGTTTCTGATAGAGGTGGTTGGGGCTCTCATCCCTAGATCCTAACCCTTTAGTATGCTGGA
ATTCTACTCTTCACTTACTGCATTGACTGTTGTTGATTAGTTATTATTGCAAAGCACTGCCACCGGCCTCAGGGA
GTTTATGTGTAATAGAATTAAAAATAATAGCTGTGTATAACACTTAGCTCAAGCCACGCATGTGTGAGGCATTTG
GTATGTATCTGAATTAATTCTCACTAAAATTCAGCAAAGGACTTGATAGCCTCTCCCCGCCTTTTCAATAAAGGA
TGAATGAAGGTTG

FIGURE 2902

AASASSTNLIHLSSKGHISPAKDTSLQQRTPAEMSPVLHFYVRPSGHEGAASGHTRRKLQGKLPELQGVETELCY
NVNWTAEALPSAEETKKLMWLFGCPLLLDDVARESWLLPGSNDLLLEVGPRLNFSTPTSTNIVSVCRATGLGPVD
RVETTRRYRLSFAHPPSAEVEAIALATLHDRMTEQHFPHPIQSFSPESMPEPLNGPINILGEGRLALEKANQELG
LALDSWDLDFYTKRFQELQRNPSTVEAFDLAQSNSEHSRHWFFKGQLHVDGQKLVHSLFESIMSTQESSNPNNVL
KFCDNSSAIQGKEVRFLRPEDPTRPSRFQQQQGLRHVVFTAETHNFPTGVCPFSGATTGTGGRIRDVQCTGRGAH
VVAGTAGYCFGNLHIPGYNLPWEDLSFQYPGNFARPLEVAIEASNGASDYGNKFGEPVLAGFARSLGLQLPDGQR
REWIKPIMFSGGIGSMEADHISKEAPEPGMEVVKVGGPVYRIGVGGGAASSVQVQGDNTSDLDFGAVQRGDPEME
QKMNRVIRACVEAPKGNPICSLHDQGAGGNGNVLKELSDPAGAIIYTSRFQLGDPTLNALEIWGAEYQESNALLL
RSPNRDFLTHVSARERCPACFVGTITGDRRIVLVDDRECPVRRNGQGDAPPTPPPTPVDLELEWVLGKMPRKEFF
LQRKPPMLQPLALPPGLSVHQALERVLRLPAVASKRYLTNKVDRSVGGLVAQQQCVGPLQTPLADVAVVALSHEE
LIGAATALGEQPVKSLLDPKVAARLAVAEALTNLVFALVTDLRDVKCSGNWMWAAKLPGEGAALADACEAMVAVM
AALGVAVDGGKDSLSMAARVGTETVRAPGSLVISAYAVCPDITATVTPDLKHPEGRGHLLYVALSPGQHRLGGTA
LAQCFSQLGEHPPDLDLPENLVRAFSITQGLLKDRLLCSGHDVSDGGLVTCLLEMAFAGNCGLQVDVPVPRVDVL
SVLFAEEPGLVLEVQEPDLAQVLKRYRDAGLHCLELGHTGEAGPHAMVRVSVNGAVVLEEPVGELRALWEETSFQ
LDRLQAEPRCVAEEERGLRERMGPSYCLPPTFPKASVPREPGGPSPRVAILREEGSNGDREMADAFHLAGFEVWD
VTMQDLCSGAIGLDTFRGVAFVGGFSYADVLGSAKGWAAAVTFHPRAGAELRRFRKRPDTFSLGVCNGCQLLALL
GWVGGDPNEDAAEMGPDSQPARPGLLLRHNLSGRYESRWASVRVGPGPALMLRGMEGAVLPVWSAHGEGYVAFSS
PELQAQIEARGLAPLHWADDDGNPTEQYPLNPNGSPGGVAGICSCDGRHLAVMPHPERAVRPWQWAWRPPPFDTL
TTSPWLQLSINARNWTLEGSC

FIGURE 2903A

CCGCGCGCGGCGGCCCGAGGCGGCGGCGGGGACGCGGGGACGCGAGGACGCGGCTTTGTGCAGGCGGGTCGCGGG
GCGCCCATGGCGGAGTGCGGCCGGGGGGGCGCCGCCGGCGGGGCCCTGCCCACCTCCCCGGGCCCGGCCCTCGGC
GCCAAGGGCGCCCTGAAAGCCGGAGTGGGGGAAGGCGGTGGCGGGGGAGGTCGCCTCGGCCACGGGCGGGCGCGC
TATGACAGCGGCGGGGTTTCCAACGGAGACTGCAGCCTCGGCGTGTCCGGGGACGAAGCCCGGGCTAGCCCTACC
AGGGGACCCCGCGGCGTTGCGCTCGCCCCGACCCCCAGCGCGGTCGTCTGTACCCTCCCCCGGGAGAGCAAGCCG
GGCGGCCTGCCCCGCCGGAGCAGCATCATCAAGGATGGTACAAAACAGAAGAGGGAACGGAAAAAGACAGTCTCA
TTCAGCAGCATGCCAACAGAGAAGAAGATCAGCAGTGCAAGTGATTGTATTAATTCAATGGTTGAGGGTTCAGAA
CTCAAAAAGGTTCGCTCCAACTCTAGAATTTATCATAGGTACTTTTTACTGGATGCTGACATGCAGAGCCTAAGG
TGGGAGCCATCTAAGAAGGATTCTGAGAAAGCCAAGATTGACATTAAATCCATCAAGGAAGTGAGAACAGGAAAA
AACACAGACATATTCCGCAGCAATGGCATTTCTGACCAGATATCTGAAGATTGTGCGTTTTCCGTCATATATGGA
GAGAATTATGAGTCACTGGATTTGGTTGCCAACTCCGCAGATGTTGCAAACATCTGGGTTACAGGACTGCGGTAC
CTAATTTCTTATGGAAAACATACACTTGATATGTTAGAAAGTAGCCAAGATAACATGAGGACTTCTTGGGTTTCA
CAAATGTTTAGTGAAATTGATGTAGATAACCTTGGACATATAACTCTGTGTAATGCTGTGCAATGTATCAGAAAC
CTCAATCCTGGTTTAAAAACGAGCAAAATTGAGCTTAAGTTCAAAGAATTGCATAAATCAAAGGACAAAGCTGGT
ACCGAGGTCACAAAGGAAGAATTTATTGAGGTTTTTCATGAGCTTTGTACTAGACCTGAAATTTATTTCCTTTTA
GTTCAGTTTTCAAGCAATAAAGAATTCCTTGATACCAAGGACCTTATGATGTTTCTTGAGGCAGAACAGGGTGTG
GCACATATAAATGAGGAAATAAGCCTTGAAATTATTCACAAATATGAACCATCCAAAGAGGGTCAGGAAAAGGGC
TGGCTCTCCATAGACGGGTTCACTAATTACCTTATGTCACCTGACTGTTATATATTCGATCCAGAACATAAGAAG
GTCTGTCAGGATATGAAGCAACCTCTGTCTCATTACTTTATAAACTCATCTCATAATACATACTTAATAGAGGAT
CAGTTCCGAGGTCCCTCCGACATCACAGGATATATTCGAGCTCTTAAAATGGGTTGCCGGAGTGTTGAATTAGAT
GTATGGGATGGGCCGGACAATGAACCTGTAATTTACACAGGCCACACCATGACCTCTCAGATAGTTTTCCGCAGT
GTCATTGATATTATTAACAAGTATGCATTCTTTGCTTCAGAGTATCCTCTTATCTTGTGTTTAGAAAACCACTGT
TCCATTAAACAACAGAAGGTAATGGTTCAGCACATGAAGAAACTTTTAGGAGACAAGCTCTATACAACATCACCC
AATGTTGAGGAATCTTATCTACCATCCCCAGATGTCCTGAAAGGGAAAATACTAATTAAAGCAAAGAAGCTGTCC
TCAAATTGCTCTGGGGTAGAAGGAGATGTTACTGACGAAGATGAAGGAGCAGAAATGTCTCAGAGGATGGGAAAA
GAGAACATGGAGCAACCCAATAATGTGCCTGTGAAGCGATTTCAGCTTTGTAAAGAACTGTCTGAACTGGTCAGC
ATCTGCAAATCAGTTCAGTTCAAAGAATTTCAGGTGTCGTTTCAGGTTCAGAAGTACTGGGAAGTCTGTTCCTTT
AATGAAGTGCTTGCCAGCAAGTACGCCAATGAAAATCCAGGGGACTTTGTAAATTACAACAAACGTTTTCTTGCT
AGGGTTTTTCCCAGTCCAATGAGAATTGATTCCAGTAACATGAATCCTCAAGATTTTTGGAAATGTGGTTGCCAA
ATTGTAGCCATGAACTTTCAGACACCAGGACTGATGATGGACCTGAATATTGGCTGGTTTAGGCAGAACGGAAAC
TGTGGCTATGTCCTCCGGCCAGCCATCATGAGGGAGGAGGTCTCCTTCTTCAGCGCCAATACAAAAGACTCTGTC
CCAGGGGTCTCACCTCAACTTCTTCACATTAAAATCATCAGTGGGCAGAACTTTCCCAAGCCCAAAGGATCAGGT
GCCAAAGGTGATGTGGTAGATCCTTATGTCTATGTTGAAATCCATGGAATCCCTGCTGATTGTGCAGAACAAAGG
ACAAAAACAGTGCACCAGAATGGAGACGCTCCCATTTTTGATGAAAGCTTTGAATTTCAAATCAACCTGCCTGAA
CTGGCCATGGTGCGCTTTGTAGTGCTGGATGATGACTACATTGGGGATGAATTCATCGGCCAGTACACAATTCCC
TTTGAATGTTTACAGACGGGCTACCGCCATGTCCCCCTGCAGTCCTTAACTGGAGAGGTCCTTGCACATGCTTCT
TTATTTGTCCACGTGGCTATTACTAACCGAAGAGGAGGAGGAAAGCCTCATAAAAGGGGCCTTTCTGTGAGAAAA
GGGAAGAAATCCAGGGAATATGCATCTTTGAGAACACTGTGGATTAAAACCGTGGATGAGGTATTCAAGAATGCC
CAGCCCCCTATACGGGATGCCACAGATCTGAGAGAAAACATGCAGAATGCGGTGGTGTCATTCAAGGAGCTGTGT
GGCCTCTCCTCTGTGGCCAATCTCATGCAGTGCATGTTGGCGGTGTCTCCCCGCTTTCTGGGGCCCGATAACACA
CCCCTAGTGGTCCTAAATCTCAGCGAGCAGTACCCCACAATGGAGCTGCAGGGAATTGTGCCGGAGGTTCTGAAG
AAGATCGTAACAACTTATGACATGATGATTCAGTCCCTCAAGGCGTTGATTGAAAATGCAGATGCTGTATATGAA
AAGATCGTACATTGTCAGAAGGCAGCCATGGAATTCCATGAACACTTGCACAGCATAGGCACCAAGGAAGGTTTG
AAGGAAAGAAAACTACAAAAAGCAGTGGAGAGCTTTACCTGGAATATTACCATCTTAAAGGGACAAGCAGATCTT
TTGAAATATGCTAAGAATGAGACATTGGAGAACCTGAAACAAATCCATTTTGCTGCTGTTTCATGTGGACTGAAT
AAACCAGGCACCGAAAATGCTGATGTCCAGAAGCCACGCCGGAGCTTGGAAGTCATACCCGAAAAAGCAAACGAT
GAAACTGGAGAATGAGGAAACTTACAATAAACCATTATGGAGTTTATAACTCTAGGACCAATTGTAGTCAGATGG
GACATTTGCTTTGCACTCACTAATGAGAATAATATTCGGGATTTTAAAGCACAACTGGAATAGCTAATTACAGTC

FIGURE 2903B

TATTAAAACTGTGAATGTATGTAGCAATCCTGCGTGTGAAGGCAAATAAACTCTTTAACAGGCAATTATATTGCT
GGCCAAAATATGCTATATTTGTATACAAAGACATTCTAACTCAGTTCCAGTATGAAGAAAGATTATTCACTCTAG
CTCCACTGAGAAACATTTTCCTAAGTGAAAACAATTTCTTAAGATGGAAATGGATTGGATTGTCAAATTATTATT
TATTGGAGAAAAAAACCTGATCTACACATTTTTACTTATATGGGGTTGCCAGAGTCTCTGGGTTCTAGATGATTT
TGGTGGCATGCTTGCTGAGCCATAATTACTAAAGAGAATGTAAGTGGACGGGTTCCCTGAATCCCCGGGGTCCTT
GGAGAGCCATCGAGGAGAATGTGCAATTGGACTGAAGCTCCCTGGCTGAAGATACATGCCGAGTCAGCACATGGG
TAGAGATGATGTAAAAGCAGCCAATCTGGAAACAATACATTGTAAATAGTTTTTCATTGTATGAAGTAGTGTTCA
CATTAAAAAGATGTTTTATGAT

FIGURE 2904

PRAAARGGGGDAGTRGRGFVQAGRGAPMAECGRGGAAGGALPTSPGPALGAKGALKAGVGEGGGGGGRLGHGRAR
YDSGGVSNGDCSLGVSGDEARASPTRGPRGVALAPTPSAVVCTLPRESKPGGLPRRSSIIKDGTKQKRERKKTVS
FSSMPTEKKISSASDCINSMVEGSELKKVRSNSRIYHRYFLLDADMQSLRWEPSKKDSEKAKIDIKSIKEVRTGK
NTDIFRSNGISDQISEDCAFSVIYGENYESLDLVANSADVANIWVTGLRYLISYGKHTLDMLESSQDNMRTSWVS
QMFSEIDVDNLGHITLCNAVQCIRNLNPGLKTSKIELKFKELHKSKDKAGTEVTKEEFIEVFHELCTRPEIYFLL
VQFSSNKEFLDTKDLMMFLEAEQGVAHINEEISLEIIHKYEPSKEGQEKGWLSIDGFTNYLMSPDCYIFDPEHKK
VCQDMKQPLSHYFINSSHNTYLIEDQFRGPSDITGYIRALKMGCRSVELDVWDGPDNEPVIYTGHTMTSQIVFRS
VIDIINKYAFFASEYPLILCLENHCSIKQQKVMVQHMKKLLGDKLYTTSPNVEESYLPSPDVLKGKILIKAKKLS
SNCSGVEGDVTDEDEGAEMSQRMGKENMEQPNNVPVKRFQLCKELSELVSICKSVQFKEFQVSFQVQKYWEVCSF
NEVLASKYANENPGDFVNYNKRFLARVFPSPMRIDSSNMNPQDFWKCGCQIVAMNFQTPGLMMDLNIGWFRQNGN
CGYVLRPAIMREEVSFFSANTKDSVPGVSPQLLHIKIISGQNFPKPKGSGAKGDVVDPYVYVEIHGIPADCAEQR
TKTVHQNGDAPIFDESFEFQINLPELAMVRFVVLDDDYIGDEFIGQYTIPFECLQTGYRHVPLQSLTGEVLAHAS
LFVHVAITNRRGGGKPHKRGLSVRKGKKSREYASLRTLWIKTVDEVFKNAQPPIRDATDLRENMQNAVVSFKELC
GLSSVANLMQCMLAVSPRFLGPDNTPLVVLNLSEQYPTMELQGIVPEVLKKIVTTYDMMIQSLKALIENADAVYE
KIVHCQKAAMEFHEHLHSIGTKEGLKERKLQKAVESFTWNITILKGQADLLKYAKNETLENLKQIHFAAVSCGLN
KPGTENADVQKPRRSLEVIPEKANDETGE

FIGURE 2905

TTAATGGTAGGAATTTGTATTTTTTGCCTTTGTTCAGAATACATGACATTGGTAAATATGCCACATGCCTTTGGT
GGAAGTACAACTGTTGTTATTACTCTATACAAGTATGAGATCAGGGTTAGGAAAAAAAGACAAAGAGGTGATGAC
AGACACACAGTGGAAACCCCACATCGTCTCATGGCAAACCGAAGAACGGGATGTGGGAAGCTCAGCTTCATTTGA
CTGCAAAGTCCCAGGGTTTTGTTGCACATTTGCTCATGCACATGGGTGGTGGGAGGAAAGGGGGATAGCAGAGAC
ACACAGAAGAGGGTACAGGGTGGGTGAGAAAGAAAGTAGAAGGGCTAATACCCCCAAAGAACAAGGCCAACTACA
CCTGGTGAGCCTCAGAGGGACAGAAACCCAGGAATGATTCCT

FIGURE 2906A

CGAATTCCCCCCTCCCCTCCCCATAACATGCCCACTGCCCCAAATAAAAAAAAAACCAACTATGGGAGAGCAGCC
GAGACAGCAACTAGGGGCAGGGGAAAGAGACATGGAACTCGAGGGCAGCGGTGAAGAGACCATGCGTGTGCTGGG
AGGGCCCAGAGGCAGCGGCGGCACAAACAGCGCAGGTACGAGTCTCTGTGTCTTCCCCGGGGTTATGTATAAATA
TAGAGAGATGAGGCCTTCTCTCCCCTGCTCTCCCTTCCGCTCCGTGCTGCTCGCCGCGGTCCCAGCTCCTCTTTC
CACATGAGGGCGAAGGGAAGGGGGGATGAACAAGTCATCACCGAATTGCAATCAGACCCACATCCATCAGCTTCT
GGATCTTCTGTGCTATTACAGGATTCTTTAAGTGTTCGCTGAGTGCCTGCTCCTGGGGACAATTCCCTTTTCCTT
TCTTCAGCCTAACCCGCGGTGGCCCTCGCGGAGTCCGGTCAGCCCCGGGGAGCGCAACCCGGGAGGGGCGTCCAA
GGGGCGTCTCGCGTCTGGGAACGGCCGGGCCCCCAGCGGGCTGTGGTCGCGGGGTGGGGGCCGGAGCGGCGAGGC
CCCCCTTACCGGGCTGCGCAGGCCGCCCAGGGCCCCCGGGCTGAGACGGGGCCGGAGCGGCGCCCCGGCCGCCCG
CGCGGGGTCTCCCCCATGGTGCAGCGGGGTTCGGGATGTCGAAGACGCTGAAGAAGAAGAAGCACTGGCTCAGCA
AGGTGCAGGAGTGCGCCGTGTCCTGGGCCGGGCCCCCGGGCGACTTCGGCGCGGAGATCCGCGGTGGCGCGGAGC
GTGGCGAATTCCCCTACCTGGGGCGGCTCCGCGAAGAACCCGGCGGGGGCACCTGCTGCATCGTCTCGGGCAAGG
CGCCCAACCCAAGCGATGTGCTGCTGGAGGTAAACGGGACGCCTGTCAGCGGGCTCACCAACCGGGACACCCTGG
CTGTCATCCGCCACTTCCGCGAGCCCATCCGTCTCAAGACTGTGAAACCAGGCAAAGTCATTAATAAAGATTTGC
GGCATTACCTAAGTCTTCAGTTTCAAAAAGGATCAATTGACCACAAACTGCAGCAAGTGATCAGAGATAATCTCT
ACTTGAGAACCATTCCATGCACTACAAGGGCCCCCAGGGATGGAGAAGTACCAGGAGTGGATTATAATTTCATTT
CCGTTGAACAGTTCAAAGCACTGGAGGAGAGTGGAGCATTGTTAGAAAGTGGGACATATGATGGAAACTTCTATG
GAACTCCCAAGCCTCCAGCAGAACCCAGCCCTTTTCAGCCAGATCCAGTTGATCAAGTCCTCTTTGATAATGAGT
TTGATGCAGAATCTCAAAGAAAACGAACGACATCTGTCAGCAAGATGGAAAGAATGGATAGCTCTCTTCCTGAAG
AGGAAGAAGATGAGGACAAGGGAGCTATTAATGGCAGTGGAAACGCAGAAAACAGAGAGAGGCATTCTGAGTCAT
CTGACTGGATGAAGACTGTTCCAAGTTACAACCAAACAAATAGCTCCATGGACTTTAGAAATTATATGATGAGAG
ATGAGACTCTGGAACCACTGCCCAAAAACTGGGAAATGGCCTACACTGACACAGGGATGATCTACTTCATTGACC
ACAATACCAAGACAACCACTTGGTTGGATCCTCGTCTTTGTAAGAAAGCCAAAGCCCCTGAAGACTGTGAAGATG
GAGAGCTTCCTTATGGCTGGGAGAAAATAGAGGACCCTCAGTATGGGACATACTATGTTGATTTCACTCTTGTCG
CCCAAGCTGGAGTGCAATGGCATGATCTCGGCTCACTGCAACCTCCGCCTCCTGGGTTCAATCACCTTAACCAGA
AAACCCAGTTTGAAAATCCAGTGGAGGAAGCCAAAAGGAAAAAGCAGTTAGGACAGGTTGAAATTGGGTCTTCAA
AACCAGATATGGAAAAATCACACTTCACAAGAGATCCATCCCAGCTTAAAGGTGTCCTTGTTCGAGCATCACTGA
AAAAAAGCACAATGGGATTTGGTTTTACTATTATTGGTGGAGATAGACCTGATGAGTTCCTACAAGTGAAAAATG
TGCTGAAAGATGGTCCCGCAGCTCAGGATGGGAAAATTGCACCAGGCGATGTTATTGTAGACATCAATGGCAACT
GTGTCTTCGGTCACACTCATGCAGATGTTGTCCAGATGTTTCAATTGGTACCTGTCAATCAGTATGTAAACCTCA
CTTTATGTCGTGGTTATCCACTTCCTGATGACAGTGAAGATCCTGTTGTGGACATTGTTGCTGCTACCCCTGTCA
TCAATGGACAGTCATTAACCAAGGGAGAGACTTGCATGAATCCTCAGGATTTTAAGCCAGGAGCAATGGTTCTGG
AGCAGAATGGAAAATCGGGACACACTTCGACTGGTGATGGTCTCAATGGACCATCAGATGCAAGTGAGCAGAGAG
TATCCATGGCATCGTCAGGCAGCTCCCAGCCTGAACTAGTGACTATCCCTTTGATTAAGGGCCCTAAAGGGTTTG
GGTTTGCAATTGCTGACAGCCCTACTGGACAGAAGGTGAAAATGATACTGGATAGTCAGTGGTGTCAAGGCCTTC
AGAAAGAAGATATAATTAAGGAAATATACCATCAAAATGTGCAGAATTTAACACATCTCCAAGTGGTAGAGGTGC
TAAAGCAGTTTCCAGTAGGTGCTGATGTACCATTGCTTATCTTAAGAGGAGGTCCTCCTTCAACAACCAAAACTG
CCAAAATGAAAACAGATAAAAAGGAAAATGCAGGAAGTTTGGAGGCCATAAATGAGCCTATTCCTCAGCCTATGC
CTTTTCCACCGAGCATTATCAGGTCAGGATCCCCAAAATTGGATCCTTCTGAGGTCTACCTGAAATCTAAGACTT
TATATGAAGATAAACCACCAAACACCAAAGATTTGGATGTTTTTCTTCGAAAACAAGAGTCAGGGTTTGGCTTCA
GGGTGCTAGGAGGAGATGGACCTGACCAGTCTATATATATTGGGGCTATTATTCCCCTGGGAGCAGCTGAGAAAG
ATGGTCGGCTCCGCGCAGCTGATGAACTAATGTGCATTGATGGAATTCCTGTTAAAGGGAAATCACACAAACAAG
TCTTGGACCTCATGACAACTGCTGCTCGAAATGGCCATGTGTTACTAACTGTCAGACGGAAGATCTTCTATGGAG
AAAAACAACCCGAGGACGACAGCTCTCAGGCCTTCATTTCAACACAGAATGGATCTCCCCGCCTGAACCGGGCAG
AGGTCCCAGCCAGGCCTGCACCCCAGGAGCCCTATGATGTTGTCTTGCAACGAAAAGAAAATGAAGGATTTGGCT
TTGTCATCCTCACCTCCAAAAACAAACCACCTCCAGGAGTTATTCCTCATAAAATTGGCCGAGTCATAGAAGGAA
GTCCGGCTGACCGCTGTGGAAAACTGAAAGTTGGAGATCATATCTCTGCAGTGAATGGGCAGTCCATTGTTGAAC
TGTCTCATGCTAACATTGTTCAGCTGATCAAAGATGCTGGTGTCACCGTCACACTAACGGTCATTGCTGAAGAAG

FIGURE 2906B

AGCATCATGGTCCACCATCAGGAACAAACTCAGCCAGGCAAAGCCCAGCCCTGCAGCACAGGCCCATGGGACAGT
CACAGGCCAACCACATACCTGGGGACAGAAGTGCCCTAGAAGGTGAAATTGGAAAAGATGTCTCCACTTCTTACA
GACATTCTTGGTCAGACCACAAGCACCTTGCACAGCCTGACACCGCAGTAATTTCAGTTGTAGGCAGTCGGCACA
ATCAGAACCTTGGTTGTTATCCAGTAGAGCTGGAGAGAGGCCCCCGGGGCTTTGGATTCAGCCTCCGAGGGGGGA
AGGAGTACAACATGGGGCTGTTCATCCTTCGTCTTGCTGAAGATGGTCCTGCCATCAAAGATGGCAGAATTCATG
TTGGTGACCAAATTGTTGAAATCAATGGGGAACCTACACAAGGAATCACACATACTCGAGCAATTGAGCTCATTC
AGGCTGGTGGAAATAAAGTTCTTCTTCTTTTGAGGCCAGGAACTGGCTTGATACCTGACCATGGTTTGGCTCCTT
CCGGTCTGTGCTCCTACGTGAAACCCGAGCAACATTAAGGCTTTCAGGGCTTTTCTTGGTCTTTCCTTAAAAAGA
CTTGGTAAATTTGCATGTCTTGTAAATCACTTTCTTCTTTTGTTTTCTTTTAAATTAAAAATGATGCTATTAAAT
AAAAAAAAAAAAA

FIGURE 2907

MSKTLKKKKHWLSKVQECAVSWAGPPGDFGAEIRGGAERGEFPYLGRLREEPGGGTCCIVSGKAPNPSDVLLEVN
GTPVSGLTNRDTLAVIRHFREPIRLKTVKPGKVINKDLRHYLSLQFQKGSIDHKLQQVIRDNLYLRTIPCTTRAP
RDGEVPGVDYNFISVEQFKALEESGALLESGTYDGNFYGTPKPPAEPSPFQPDPVDQVLFDNEFDAESQRKRTTS
VSKMERMDSSLPEEEEDEDKGAINGSGNAENRERHSESSDWMKTVPSYNQTNSSMDFRNYMMRDETLEPLPKNWE
MAYTDTGMIYFIDHNTKTTTWLDPRLCKKAKAPEDCEDGELPYGWEKIEDPQYGTYYVDFTLVAQAGVQWHDLGS
LQPPPPGFNHLNQKTQFENPVEEAKRKKQLGQVEIGSSKPDMEKSHFTRDPSQLKGVLVRASLKKSTMGFGFTII
GGDRPDEFLQVKNVLKDGPAAQDGKIAPGDVIVDINGNCVFGHTHADVVQMFQLVPVNQYVNLTLCRGYPLPDDS
EDPVVDIVAATPVINGQSLTKGETCMNPQDFKPGAMVLEQNGKSGHTSTGDGLNGPSDASEQRVSMASSGSSQPE
LVTIPLIKGPKGFGFAIADSPTGQKVKMILDSQWCQGLQKEDIIKEIYHQNVQNLTHLQVVEVLKQFPVGADVPL
LILRGGPPSTTKTAKMKTDKKENAGSLEAINEPIPQPMPFPPSIIRSGSPKLDPSEVYLKSKTLYEDKPPNTKDL
DVFLRKQESGFGFRVLGGDGPDQSIYIGAIIPLGAAEKDGRLRAADELMCIDGIPVKGKSHKQVLDLMTTAARNG
HVLLTVRRKIFYGEKQPEDDSSQAFISTQNGSPRLNRAEVPARPAPQEPYDVVLQRKENEGFGFVILTSKNKPPP
GVIPHKIGRVIEGSPADRCGKLKVGDHISAVNGQSIVELSHANIVQLIKDAGVTVTLTVIAEEEHHGPPSGTNSA
RQSPALQHRPMGQSQANHIPGDRSALEGEIGKDVSTSYRHSWSDHKHLAQPDTAVISVVGSRHNQNLGCYPVELE
RGPRGFGFSLRGGKEYNMGLFILRLAEDGPAIKDGRIHVGDQIVEINGEPTQGITHTRAIELIQAGGNKVLLLLR
PGTGLIPDHGLAPSGLCSYVKPEQH

FIGURE 2908A

GGTTCCTGTGACTCTTGCCTGTGTCGATAGAGTTAAACTGGAGCTCTGCTTTGAAAGATAAATAAAGCACAGCCT
CTCAACTGGACATAAATGGATCTAAAGACAGCAGTATTTAACGCAGCTCGGGATGGCAAACTCCGGCTTCTCACC
AAATTGTTGGCAAGCAAATCCAAAGAGGAGGTTTCCTCCTTGATCTCTGAAAAAACAAATGGGGCCACGCCACTC
TTGATGGCCGCCAGGTATGGGCACCTTGACATGGTGGAATTCCTCCTAGAGCAATGCAGTGCCTCCATAGAAGTT
GGGGGCTCCGTCAATTTTGATGGCGAAACCATTGAGGGGGCTCCCCCTTTATGGGCCGCTTCTGCAGCAGGACAT
CTGAAGGTGGTCCAGTCCTTGTTAAATCATGGAGCATCTGTCAACAACACGACTTTAACCAATTCAACTCCTCTT
CGAGCTGCGTGTTTCGATGGCCATTTGGAAATAGTGAAGTACCTTGTAGAACACAAAGCTGATTTGGAAGTGTCA
AACCGACATGGGCATACGTGCTTGATGATTTCATGTTACAAAGGACATAAAGAGATTGCTCAGTATTTACTTGAA
AAGGGGGCAGATGTTAATAGAAAAAGTGTCAAAGGTAATACTGCATTGCATGATTGTGCAGAATCTGGAAGTTTG
GACATCATGAAGATGCTTCTTATGTATTGTGCCAAGATGGAAAAGGATGGTTATGGAATGACTCCCCTTCTCTCA
GCAAGTGTGACTGGTCACACAAATATTGTGGATTTTCTGACACACCATGCACAGACCAGCAAGACAGAACGTATT
AATGCTCTAGAGCTTCTGGGAGCTACATTTGTAGACAAAAAAAGAGATCTGCTTGGGGCTTTGAAATACTGGAAA
AAGGCAATGAACATGAGGTACAGTGATAGGACTAATATTATTAGTAAACCAGTGCCACAGACACTAATAATGGCT
TATGATTATGCCAAGGAAGTGAACAGTGCAGAAGAGCTAGAAGGTCTTATTGCTGATCCTGATGAGATGAGAATG
CAGGCACTATTAATCAGAGAACGTATTCTTGGTCCTTCTCATCCTGATACCTCTTACTATATTAGATATAGAGGC
GCTGTCTATGCAGACTCTGGAAATTTCAAACGATGCATCAACCTATGGAAGTATGCTTTGGATATGCAGCAGAGC
AATTTGGATCCTTTAAGCCCAATGACCGCCAGCAGCTTATTATCTTTTGCAGAACTATTCTCCTTTATGCTACAG
GATAGGGCTAAAGGCCTGCTGGGTACTACTGTTACATTTGATGATCTTATGGGCATACTTTGCAAAAGCGTCCTT
GAAATAGAGCGAGCTATCAAACAAACTCAGTGTCCAGCTGACCCATTACAGTTAAATAAGGCCCTTTCTATTATT
TTGCACTTAATTTGCTTGTTAGAGAAAGTTCCTTGTACTCTAGAACAAGACCATTTCAAAAAGCAGACTATATAC
AGGTTTCTTAAGCTGCATCCAAGGGGAAAGAATAACTTCAGCCCTCTTCATCTGGCTGTGGACAAGAATACTACA
TGTGTAGGGCGGTACCCTGTTTGTAAATTTCCATCTCTACAAGTTACTGCAATACTGATAGAATGTGGTGCTGAT
GTGAACGTCAGAGACTCGGATGACAACAGTCCCCTGCATATCGCTGCTCTTAACAACCATCCAGACATCATGAAT
CTCCTTATTAAATCAGGTGCACATTTTGATGCCACAAACTTGCACAAACAAACTGCTAGTGACTTGCTGGATGAG
AAGGAAATAGCTAAAAATTTAATCCAGCCTATAAATCATACCACATTGCAGTGTCTTGCTGCTCGTGTCATAGTG
AATCATAGAATATATTATAAAGGGCATATCCCAGAAAAGCTAGAGACTTTTGTTTCCCTTCATAGATGATAACTT
GACTGTATTTTAGCACTGTTAAAGCACGAATTGGTAACAGTTGTTTCATAAATGAGCACTGTTGTGATAACACCA
GCATTCATTTAGCTTGATTGATATCATTGTGCTCTCATTGGCTAAAGCATTATAAGCATCAAATTTACAACATTG
GTTTCCCAATATTTAATATAAATATACCATATAATATATTGTTTGTGAATTATTGAGAAATGTAACATTCAAATT
TCTAAAATTGTCTGCCAAAGGCTTATTCATTCTGGTTTTGTTTGCTGTTGGGTGTTTGGGGCAGAGTTAACCATT
TCTCCATGGTGTCTTATACTTTACTGGTTTGTGAATTTTATACAATTGAAAGTCTTTTTTTCTTGCTTCTTTCTT
CTCTTCTCAAGTTTCCCCCCTGTTTCTACTTTATTGTTTGTCCTAACCATTTCTACTACAGTTTTTTCCTTATGG
ACCCATACTAGGTTGTACAAACCTTAAGGACTCGTTACCATTTGCAGTTACCATAAGTGCTTTATCTTCTCTATG
CACAGGCTTAAACTTGACTGTTGTATGTTAGCATATTTTCTATGCAGCAGTTGGTCAACTTCAACTCAAAACACT
GTTTTCTTATGTTTGTTACAAACTTAATTTTTTGAAAGTACTCTGTAGCATGACAATTTTTAGAGCTGCAGGTTA
GCTATTATAGCTCAAGCTTTTTTGTTTGTTTTTTTCTTCACTTTCTTCACATCTGAGGTTTCTTTCTCTAATCCA
CTGAAATTATTGTGTGCTAAATTTGGGAAACAGATCTATTCTAACTCATTAACCCAGTTGAAATTTAGGTCTGTC
ATCTTAATATATCATGCAGTAAAAGGAAGAATCTTTTTAAAGTGACCCACCTTTCATGCTGCTCCAGCATTGTCC
TGCTTGTGCTGATGGTGTGATTAGGTGTAGAGAATTTGCTTAAATTTAACTTCAAAGTTCATCACACAGCTTAAT
GAGTCACATTGAAATACTCAGTAATTGAACTGCAAATCACTTTTAGTTACAAAAAGAGCTAAAGCATGTCAGTGG
CATGATGCTTGCCAAGCCAGATCTAGGCATCTAGGATAATTAAGGTATTTTAGTATGCAATTTACTGCCATAATA
TCAAAGGTCAGTAACAGTGTTCTTTCTTTCTTCAAGCTTATGTATACCTTTAAAGATAACTTGCATGAATTACTT
TGATTACTTTGGTCTCAATTATTTGTCACCCCAGTTAAACATGAAAGGTTGCAGTGCTTCCTGTTCCCTTACTGG
AAGTTAGCTTTTTCTTTTCTCTTTCTTCCTTTCTTTCTCTCACTCTTTCTTTCTCTTTCTCTTTCTCTCTCTC
TCTCTCTCACTCACTCACTCACAGATTTGCTAATGCCACAGAAAGGGCTCTTTTAACTTAAGATAAGTGAAAAGT
ACTAAAAAAGATTCAGGTAATTATCATTCAGCACTTTATTGTAATTCAGAATAAAATTTATGATGGCATATTTGC
CCTGCAAATGTCTTAATGAAGTTGTTCTCAATAAAAAGCTCCTTATTGATTTAGAAAAAATCAGTTTACCTGTGA
GTTCAATGAGCTGGATCACTCACTTGGATTTTTGTGTTGACATTTTATTCTGAGGGTTGATGTTACACTATTTAA

FIGURE 2908B

GGAGTCATCAATGCAAACAGTCACATTAGGTATGTCATCATCTTTAGTCAGTAAAAACCTTGTAATGAGGAGTAG
TAAATAAACAAGAGAACATTAGACTTTTTGGTTAAATAATTGAGATTTAATTTTTAAAAGATATTCTTACTCATT
TGCTAGGTTGTAAATTTGATTTCACCATTAAGAAAAGGTAAATTGGATATAAATGAACGATCTCCAACTTTTTGA
TGAAGAGGTTTTACTATCTCTCACTGTGGGAAAATTTGATGAAATATTTGAACTGTCACATATATTAAGAATACT
TTATGATTTAGACCAATATTCTAGAAATATCAAATGTCAGTATCTTGAAATCATCTGCCTCTAACTTTGTGGTAT
AAGAATTATATATGAATAAGCTATTATTTTTATAAAGGAAAACTTTGCCATTATAGTAAATTACATTAGTTGATC
TCGATAATTTGAGGATAACAGATGACAATTGAATTTTTAATTGATTTAGTATTTCCTCCTCCTCTTTGGGGGCTG
GGTGGGAGGGCTTACATGCTCTTATAGTGAGGCACATCTCACTGTTTTGCAGCAGAATTTGAATTGTGCAACTCC
TGTGTAAAGTAAGGATTTCTTTAAATAGCATTTTTGCACCAGTAAAAATAGATAACTTAGAACTCAGTCTTGATA
ACTGAAATGACTTATTTCACTTAGAATACATTTCTCCCTTCTCTGCCATCTCCACAAATGCCATTGGGAGGTTTT
GAAAAACCAGTTAATTTAATAGCTCAAAATTGTCCCTGATTTTATTTTCTTTTAGGGAAAATTGTTTCATAAATG
TGACACTGATAAAGCCTTTGTCAGAAAGTATTCTCACAATTATGAGATGGATTATAATAAAATACTTAAATTTGT
GTTATTTTTTGAACCACAGATGAGTAAATTTAATAATGAACCAATTACACTCTTGAGTCTAACTAAACTGTACAC
TGTAGCACGGTGTTATTGACTGGAGTTAATGTGTAAGTTATTAACATTTCTATGAAAATGCCCTTTTGGGGCCTC
CTGAATTTTAGATGTTCCACTGTTTTGATCATTTCTATAAAAGAAATGGTCATTTTACTTAGATGCCAGTCTACT
TTATAAAGACAAATGGATTATAGACTTAAAAATAGTCATTTTTCTTATTCATAAATCTGACAGGCATAAACCCAA
ATCAAAGATAATTTGGTGCCCATTATGAATTTGAAGTTAAGTGATAGCTCACTTGTAAAGTGACTACCTTAATGT
GTATAGAGACCCCAGTCTACTATTATTTGGGAAAATTGTTTAGGTTATATGGGAAAAGTAGCTCTTTAAAAATCA
TATTGCCCAACAGAAACCTTAGGCTGAATTTACAGGTATGATAATTTTTGTAATTAATTTTCTTAGAATTGTGCA
GGCTGGATGAGATAATGACATACTCTTTTACACTGTAACAGCAGCATTATTGCCTAGAACTTTAACCATTTTAGA
GTTAGATACTAAGGAAACAAACTAATTGGTCATCATCATTTTCTTTTTTTCTTTTTCTTTTTTTTTTTTTTGCCC
TTATGTGTCACTAAACAACTAGTTTCTCTCCCTTTTGTCAGTTCCCATTGTGTATTTTTTCAAAAGAAGTACTGT
ATTCGGATGCCAGCTAATAAATTGTCACACAATGGAAAATCATATGCCACAACATTCATTGTAAGGTTTAATAAA
ATTAAATTTGCACC

FIGURE 2909

CATCTTGCTCAGGGTGGTCCTCTGGGAGTCTTTCCCCAGGGCTGATGCTGGGTGCCCTGCCCCAGTGAGATATGT
GTGGGTGGTATCTGTAAAGAGGTTTGTCTTGCAGTTGAAGGTGGGAAAAGAAGGAAGGGGGGGCATGCAATATGG
GTGAGGGTAGGGTATTACCTTTTTTTTGCAGCATTTTTCGGCCTCTTTATTTAGAACCCGGCGGACGAGGGGCCG
GGGCAGTGGTACAGACGGCTCAGGAACCATTTTAACAGACTTGTCTTCAAGTTTCAGATAAACACAGTCATAATA
AGAGAGACAGCGAAAGCGCGAAGAGACTGCAAGCTAGATGGGCATGTATGGCAGCTACAGCTTGTGAGTGACCCC
CTTCCCCAGAGTCCGCGATGAAAATAAAGTTACACTTGTCAATAACCAGATGTGGGAGATGGAGAGTGCCTTTGG
CATAACCAATAACCGAGCTAGTGCGTGGCAGAGCGGTCCACGCCTGGACATAAATAGAAAATATAAGTTAGTATA
ACTTTAAAAACTTTTTGTACAAATATACATGGTTTTTTTATTTTTTCCTTTTTTTTTTCTTTTTTCTTTTTTTTG
CACTGAGTTTCAGCAGAGATTAAACATTTTATATAAATGACTCTTAAAGCTTTACACCTTGGGACCAGTGTACCT
TCTCGTGCAGAATACATTTAGATATAAAAAGACGTTATTAATACATTGCACAGTTTTCAAAATTTAAAAACAAAA
CCGAACGCTGCTCTGCGGCAGCCGCCGCCGGTTGCTGCTACATGAACGGTCCCAGCCGAGGCCCAGCGCCCTTCC
AACGTCCGCTGCCCCGGCAGGTTCCCTCGGGGCTCTTTGGGCTCTAAATTGGCTCACCGCAGCCTCTTGCGCGGG
GTCTGCTCCACCGAGCCCACGCCAGGGGCGGCGCTTGGAGAGGGACACGGCGCGGGGACATCGCCCGACGACTTC
TCAGGCGCTGATCTCTTGCGCTTGGCGAAGAAATCTGCACCGACTCGCGGATAGAACGCGGGCACCGAGTCGACT
GTCCACTTCGGTCCAGCTGCAGGCGTCCAGGGCCCCGCAGCGGCATGTCCTGCTGGAAGTCGTAATCCCAGCGGT
TCTGGTCCTCGGCGTTCAGCTCGGCCAGGCGGGCCTGCAGCTCGCGGCTCAGCTCCTCGTGGTCCACCGGCCCGA
AGAGGCTGCGGCAGGCGCTGGTGCGCACTAGTGCTGGGAAGGTCCCACGGGCGACAGACGCTCCATCGTGGATGT
GCTGGCTGTCCGGTGGTTGACTCTTCTGCGTCGGGTCGCCTGTCT

FIGURE 2910

ILLRVVLWESFPRADAGCPAPVRYVWVVSVKRFVLQLKVGKEGRGGMQYG

FIGURE 2911

AATGCCACCTGCTTGAAGGCTATATGTGACAAGTCACTAGAGGTTCACCTGCAGGTTGACGCCATGTACACAAAT
GTCAAAGTAACTAATATTTGCTCTGATGGGACACTCTACTGCCAGGTGCCTTGTAAGGGTCTGAACAAGCTCAGT
GACCTTCTACGTAAGATAGAGGACTACTTCCATTGCAAGCACATGACCTCTGAGTGCTTTGTTTCATTACCCTTC
TGTGGGAAAATCTGCCTCTTCCATTGCAAAGGAAAATGGTTACGAGTAGAGATCACAAATGTTCACAGCAGCCGG
GCTCTTGATGTTCAGTTCCTGGACTCTGGCACTGTGACATCTGTAAAAGTGTCAGAGCTCAGGGAAATTCCACCT
CGGTTTCTACAAGAAATGATTGCAATACCACCTCAGGCCATTAAGTGCTGTTTAGCAGATCTTCCACAATCTATT
GGCATGTGGACACCAGATGCAGTGCTGTGGTTAAGAGATTCTGTTTTGAATTGCTCGGACTGTAGCATTAAGGTT
ACAAAAGTGGATGAAACCAGAGGGATCGCACATGTTTATTTATTTACCCCTAAGAACTTCCCTGACCCTCATCGC
AGTATTAATCGCCAGATTACAAATGCAGACTTGTGGAAGCATCAGAAGGATGTGTTTTTGAGTGCCATATCCAGT
GGAGCTGACTCTCCCAACAGCAAAAATGGCAACATGCCCATGTCGGGCAACACTGGAGAGAATTTCAGAAAGAAC
CTCACAGATGTCATCAAAAAGTCCATGGTGGACCATACGAGCGCTTTCTCCACAGAGGAACTGCCACCTCCTGTC
CACTTATCAAAGCCAGGGGAACACATGGATGTGTATGTGCCTGTGGCCTGTCACCCAGGCTACTTCGTCATCCAG
CCTTGGCAGGAGATACATAAGTTGGAAGTTCTGATGGAAGAGATGATTCTATATTACAGCGTGTCTGAAGAGCGC
CACATAGCAGTGGAGAAAGACCAAGTGTATGCTGCAAAAGTGGAAAATAAGTGGCACAGGGTGCTTTTAAAAGGA
ATCCTGACCAATGGACTGGTATCTGTGTATGAGCTGGATTATGGCAAACACGAATTAGTCAACATAAGAAAAGTA
CAGCCCCTAGTGGACATGTTCCGAAAGCTGCCCTTCCAAGCAGTCACAGCTCAACTTGCAGGAGTGAAGTGCAAC
CAGTGGTCTGAGGAGGCTTCTATGGTGTTTCGAAATCATGTGGAGAAGAAACCTCTGGTGGCACTGGTGCAGACA
GTCATTGAAAATGCTAACCCTTGGGACCGGAAAGTAGTGGTCTACTTAGTGGACACATCGTTGCCAGACACCGAT
ACCTGGATTCATGATTTTATGTCAGAGTATCTGATAGAGCTTTCAAAAGTTAATTAATGACTGCCTCTGAAACCT
TGACAACTAATTCAGATTTTTTAGCAATAACAAAATGTAGTAGGCTTAAAAAAAATCTTAACTCTGCTACATGGC
TCTGACTGCTGTGGGGGATTGAAAAGAATATGCTTATGTTTGATGAAAGATATTTAACAAGTTTTGTTTTAACAG
AGTTGACTTTTCAAAGAAAATTGTACTTGAATTATTACTATAATATTAGAATAAAAATGTTTATC

FIGURE 2912

GACAGAGCAAGATCTTGTCTCAAAAAAAAAAACAGCTCTGGATGGGAAGGGAGGCCAGTTGCTTTAAGTAGGGGA
GATAGAGTTAAAGGAGGCTTTGTTTTATTTAAAGGTGGGACAAACTTAAGCATGTTAATAAAATTCAGAGAAGAG
AAAGAGAATGACTATCAGAGCCATGTTTGGAAGAAAATGGGGTCCAGAGCACAGGAAGGGGACCTGTGTTCAGAG
GGTGCCTCACTGCTGAGGCCACAGGAAAGAATCTGTAGGTGGAGGGGAGGCCGAAGAGGGGAAGTTTCATGCTTG
ATAATTAAAATTTTC**TGA**GATAGGAATGTCATATTTACCTATTTAAGCCAAGTTTTTTTAGATAAAAGGTATGGA
ACCTGCTTTCCCCTTGGCTAGTTCAGCGTTTGGGCTCCGGAGTGCTGAAGATGAGGACTGGACTTCGAGCTGGTG
TGATCCCAGTATTCAGTGTCAGTACTCAGTGACAAAATAAATGAGAGAAACGGGAATAAGAATTGTCGCCTACAC
AAAAATACCAGCAACTGTTAACTCTTCCCAGAAGATTTTCATTCTGAATGCTCCTGTAGCTAGGAACCCTAAAAA
GTCTTTGAAGCAACTCAAGTTTTAAAAAAGGGGAGGAACTCCTGGAAATCTCAGGATGGGGCCAAGATGTGGCTG
GAGAGTGTGTGGTGATGGAGGGCGTGTCTTTTGCCGAGCACACTCAGGGCCCACGGGAAGCCCATAGACTTCAAG
GACATCAAGCCCCAAGGTGGTGGGATTTTCCCCACCAGTACTTGGCAGCCTAGGGGGAAGGGGAGGGCGGGAGAA
GATAATGGGGATCCCTGGCTCCAAACATAGGAGGACACATCTGTGCTACAGTGCGCACATGCCTGGATGTACACT
CTGTCTTTGGAGACACTGGCTAAGATTCTCTGCTCCATGTTTGGACAGGGTCGTGCCTGATCTGAGATAAATGGA
CAAGAACAACTGAAGCCTGTCTTCTGGTGCATGTGTCACCTGCCGATAACTGCATCTTGTGATAAAGTTGGGTGA
TTTACAGTCTCCACCAAATGCTAAACTCTGGGGTCTTACGCCTTTATAACTCCATGGGCCCCAGCAAAGGTTCAG
GCTCAAAACAGGTGTCAAATAGATAACTGTTGAATGATTGTTCCCCAGTTGCAGGCTCTGCCACCTGGCGTTCAT
ACTGTCTGTGAAAGGACCCAGCTCACCTTTCCCTCTTTATCTCCCAGTCCTTCCCAACAGCGCCGACACCTCATG
GAAACTGATTGCAAATGTGCTACTTCTCACTTCTGTGTGGCCCGAGGAGGCTGGGTTAATGCTGGGCTTGGTACC
TTAAGCACCCTTTCTCCCTTCCCCATCTTCATTCTCAGAATTACACCTGTCTGAAGCAGGCATTTTCCAATGCCC
TAGATGGGAATATAAGTGTAAGGAGATGTGAAGCATTTGCCTGTGTGTCAGAACATTCACTGAGGATCCTCATAG
GCACTTCTAGAAACCAAATCCTTGAAGATGACTAACCAGAAATGCCCGTCATAGCACTGTTTACAGTTGCAAAAA
CTGAAGCCAATTGAAATGTCCATCAGGAGGGGATTAAATGAATTATGGTACAGTTACACCGTTGAATATTTTACA
GCCATTGAAGATGATATATAGCTATATTCATTGACAAGGAAAACTCATATTTTTTAGTGAAAAAAGCAGGTTATA
GAATTGCATGATATTCACATTTATATAAAACTTTATATATGGGAAGGATGTTGATTGAATTGTTAATAACTATGG
TCACCTCTAGAGATGGAAGTTTGCATTACCTTTAATTTTTAATACCATTTTGTATTGCTTAAAATTTGTATGTAT
TATCGTTAAAATAAGAAAAATCAAATAAAGCTATTTTCATTATGGGAAACGAAAAAAAATCTATGTCGGTGCGGA
GAAAGAGGTAATGAAATGGCA

FIGURE 2913

DRARSCLKKKNSSGWEGRPVALSRGDRVKGGFVLFKGGTNLSMLIKFREEKENDYQSHVWKKMGSRAQEGDLCSE
GASLLRPQERICRWRGGRRGEVSCLIIKIF

FIGURE 2914A

AGAGGCAAGAGGGTGTCAACCCCGCCGCCGCGACGCCCCCGCGTGCGGGTTGCGCCAGCCTCCTCGGAGCTCGAC
GCAGAAACTTGTTGCAACAAACAGGCGACCGCGGGTGCCCCTAGCAGCCAGCGGCAGAGTGGGTGGGCGGGCGAG
AGGGAGGGGAAGGCTGGCGGACGCCGCAGCGAACTGGTGGGCAGACCCGGAGTCGCCGCGTAAGCGGGGCCGGCT
CAGTGCGGTGCGGCAGGCGCGGCTGTGCGGCAGCGGAAGTCCTTTGTTGCAGCACAGTCCCTGGCAGAGCCAGAG
CCTCTCCGCGCAGCCCAGCCCGAGCGCCGAGCGCCGCGCGCCGCCGCCACTGCAGCTCGCGGCCCCTTCGCCTTC
GCCCGCCTTTCCCGCGGCTGATTTGCCTTAAACTCCCTAAAATCTCCGCAGCTCTGGTTCCTGTTGCGGCCGGTC
TCTAATTAACAGAAGATGGCAAAGCCCAGCCACAGCAGCTATGTCCTTCAGCAGCTAAACAACCAAAGAGAATGG
GGTTTTCTCTGTGACTGCTGTATTGCAATTGATGACATTTACTTTCAAGCACACAAGGCAGTTCTAGCTGCCTGT
AGCTCCTATTTTAGAATGTTTTTCATGAACCATCAGCATAGTACTGCACAACTGAATCTCAGCAACATGAAAATT
AGTGCAGAATGTTTTGATCTCATTTTGCAGTTTATGTATTTAGGAAAAATTATGACAGCTCCCTCCAGTTTTGAG
CAGTTTAAAGTGGCAATGAACTACCTACAGCTATACAATGTTCCTGACTGTTTAGAAGACATCCAGGATGCAGAT
GTTCTAGTTCAAA**ATG**TTCCTCTTCTGCTTCCAGCAAACAGAACAGCAAAATGATATTGGGGTAAGAATGTATGA
AGATACTGTGGCTCGAAATGGCAATGAAGCCAACAGGTGGTGTGCAGAGCCAAGTTCAACGGTAAATACACCACA
TAATAGAGAGGCTGATGAAGAGTCTTTACAATTAGGTAATTTTCCTGAGCCACTATTTGATGTATGTAAAAAAAG
TTCCGTGTCCAAATTATCTAATCCAAAAGAACGTGTGTCAAGACGCTTTGGGCGGAGTTTTACCTGTGATAGCTG
TGGATTTGGCTTTAGCTGTGAAAAATTATTAGATGAGCATGTGCTAACCTGTACTAACAGACATTTATACCAAAA
CACAAGATCTTACCATAGAATAGTAGATATTAGAGATGGAAAAGACAGTAACATCAAAGCTGAATTTGGTGAAAA
AGATTCTTCCAAAACATTTTCTGCACAGACGGACAAATACAGAGGAGACACAAGCCAGGCTGCTGATGATTCAGC
TTCAACCACTGGAAGCAGAAAAAGTAGCACAGTGGAGTCTGAAATAGCAAGCGAAGAGAAAAGCAGAGCTGCTGA
GAGGAAAAGGATTATTATTAAGATGGAGCCAGAAGATATTCCTACAGATGAACTGAAAGACTTTAACATTATTAA
AGTTACTGATAAAGACTGTAATGAATCCACTGACAATGATGAATTAGAAGATGAACCTGAAGAGCCATTTTATAG
ATACTATGTTGAAGAAGATGTCAGCATAAAAAAAAGTGGTAGGAAAACTCTAAAACCTCGAATGTCAGTAAGTGC
TGATGAAAGAGGTGGTTTAGAGAATATGAGGCCCCCTAACAACAGCAGTCCAGTACAAGAGGATGCTGAAAATGC
ATCTTGTGAGCTGTGTGGACTTACAATAACCGAGGAGGACCTGTCATCTCATTACTTAGCCAAACACATTGAAAA
TATCTGTGCATGTGGTAAATGTGGACAAATACTTGTAAAGGGTAGGCAGCTTCAGGAACATGCTCAACGATGTGG
CGAGCCCCAAGATCTGACCATGAATGGGTTAGGAAATACTGAGGAGAAAATGGACTTGGAAGAGAATCCTGATGA
GCAGTCCGAAATAAGAGATATGTTTGTTGAAATGCTGGATGATTTTAGGGACAATCATTACCAGATAAACAGTAT
CCAAAAAAAGCAGTTATTTAAACATTCTGCCTGCCCTTTTCGATGTCCTAATTGTGGCCAGCGTTTTGAAACTGA
AAATCTAGTGGTTGAACATATGTCTAGCTGCTTAGATCAAGATATGTTTAAGAGTGCCATCATGGAAGAAAATGA
AAGAGATCACAGACGAAAGCATTTTTGTAATCTGTGTGGAAAAGGATTTTATCAGCGGTGTCACTTAAGAGAACA
CTATACTGTTCATACTAAGGAAAAACAGTTTGTTTGTCAAACATGTGGAAAGCAGTTTTTAAGAGAGCGTCAGTT
GCGACTGCACAATGATATGCACAAAGGCATGGCCAGGTATGTCTGTTCCATTTGTGATCAAGGAAACTTCAGAAA
ACATGACCATGTACGGCATATGATTTCTCATTTATCTGCTGGTGAGACTATATGCCAGGTCTGCTTTCAGATATT
CCCAAATAATGAACAGTTGGAGCAGCACATGGATGTTCATCTGTATACATGTGGAATATGTGGAGCAAAATTTAA
TTTGAGGAAAGATATGAGATCACATTATAATGCCAAGCATTTGAAAAGAACC**TGA**GTGATTTTCTACTGTACTAA
TGTTTAGATGATAGCAGATAAAACACCAAAGCAAAGGATATGAGCTATTTAGGAATTGATTATATAAGATGATTT
GTTAGAAACAAATTTCAAGGCCCTTTTAACTTTAATATTTTTGTTTAGGATTTTAAGTATCTACATTTAGGTATT
AAATGTTTATCATTTTTGTTGTTTCTTAATAGAATTATTTGTTTTTAGTTTTTCTTAGCTATGATTAAAATTTTT
AAATGTAGACTACAAGCGGTTGTTACCCATTCAATGACTATTAAACTTTAGTTTTTCATCAATAAGGTGATGACT
TCACTATTTCTATGTGTTTTTGTGTTTTTAAGGTTATCCTGTGAAATTTTAAACCCAGAATCATTGGCCATTTCT
GTTTAAATTTTAAAAATTCCTTAAGTAATTATTTGAAACTATCCCGTTTGCTTTTAGTGAGTTAACTACTCTTTA
TTCCCCCTTATTAATGAAATTCATATTCTTAAATTGACAAGCTTATTAGGCAAGTTAGGTGCACTGAATCTAACC
TTTAAGGTTGACATGGGCTCAAACTTGGCCTAAAAAGATTGATGAACCTGAGGAAATTTTTATAAATGAATATTT
CCTATAATTGATAAAATATTATCATTTAATTATCACATTTAAAACTTATATTAAGTGTAAATTCCAGTGGCTTTA
CCTCACTTGAAAAATTAGTGGGGATAAGCCATTTTGTTTTGTGATATTAAATTTAACTATGATAGTTAATTAAAA
AGACATATCTTGTATTCATTAAAAATATTTTAATTTAAAATATTCTGATTTCTAAAGTGTGTTAGCTTATCAATT
ATTTTTGTTTATAAATAGACTTTAATAGCTCTCTAAGAATATGACCTCTAAAGGAAAAGATGATTTTTTACAATA
CATACTTCTGGAACTTTGAGATTTGAGAAAGCTTCCATGTATATTGATAAATCTAATAAAATAAAGAGATCAATT

FIGURE 2914B

ATAAACCTGGTTGTTCTATAAAAGTAGAGTGCACAAAAAAATGTCTTGTGTTTTATACTGTCTAAGATTTGGAGG
AAATGTGGCAAATTGCAGTTTATCGCCATATTTTATTATCATTTTTTTCTGTAAAAGACTATAAAACTTGAGGAT
TATAAAATAATCACAGAGTATATCAATGGAAACAGTTTATCATTTTTTCAGTTAAAGTAGTAGTATTGTTAGTTG
TTGCTGACACAGGGTCTACATAATTACATGTGAATTAAAACATTGGCAAAACTGACCCACCAATAAACACATCTA
TTGAATAGAATGCCTTTTAATGTGAATTACTTGCAATGTAGTACCCTTTTCATAATGAAAGGGATTTTAATTAAC
TCCTAATTTTAAAAATATAAATTTGTGATTCTGAACACT

FIGURE 2915

MFLFCFQQTEQQNDIGVRMYEDTVARNGNEANRWCAEPSSTVNTPHNREADEESLQLGNFPEPLFDVCKKSSVSK
LSNPKERVSRRFGRSFTCDSCGFGFSCEKLLDEHVLTCTNRHLYQNTRSYHRIVDIRDGKDSNIKAEFGEKDSSK
TFSAQTDKYRGDTSQAADDSASTTGSRKSSTVESEIASEEKSRAAERKRIIIKMEPEDIPTDELKDFNIIKVTDK
DCNESTDNDELEDEPEEPFYRYYVEEDVSIKKSGRKTLKPRMSVSADERGGLENMRPPNNSSPVQEDAENASCEL
CGLTITEEDLSSHYLAKHIENICACGKCGQILVKGRQLQEHAQRCGEPQDLTMNGLGNTEEKMDLEENPDEQSEI
RDMFVEMLDDFRDNHYQINSIQKKQLFKHSACPFRCPNCGQRFETENLVVEHMSSCLDQDMFKSAIMEENERDHR
RKHFCNLCGKGFYQRCHLREHYTVHTKEKQFVCQTCGKQFLRERQLRLHNDMHKGMARYVCSICDQGNFRKHDHV
RHMISHLSAGETICQVCFQIFPNNEQLEQHMDVHLYTCGICGAKFNLRKDMRSHYNAKHLKRT

FIGURE 2916

GCGGGCGGCTGTGAGCGGCGCTCGGGGCGCGCTAGGCGGGGAGCCGAGCCGGGCTGGCGGCAGGCGGACGGGGCG
GGCGCGTGCGGCGCGAGCCGGGCGCTGAGGACAAGGGCCGCTGGTAGGGCCGGCCGGCCGGCGGGCGGAGCGCCG
CCGCCGACGCACACGAGGTGACCAGGCATTG**ATG**CACCCCCAGGAAGGCCACGCGCTCAGGAGGCCCCCCCCCCG
CTGGCTGCTGCTCACATGGTGTCTGGGCCCTTGGCACTCCGTTCATGCGGGAGATGACAGGGGCTGGCACATGAC
AGTGGAGCAGAAATTTGGCCTGTTTTCTGCTGAGATAAAGGAAGCAGACCCCCTGGCTGCCTCGGAAGCAAGTCA
ACCCAAACCCTGTCCCCCCGAAGTGACCCCCCACTACATCTGGATCGACTTCCTGGTGCAGCGGTTTGAGATCGC
CAAGTACTGCAGCTCTGACCAAGTGGAGATCTTCTCCAGCCTGCTGCAGCGCTCCATGTCCCTGAACATCGGCAG
GGCCAAGGGGAGCATGAACCGGCACGTGGCGGCCATCGGGCCCCGCTTCAAGCTGCTGACCCTGGGGCTGTCCCT
CCTGCATGCCGATGTGGTTCCAAATGCAACCATCCGCAATGTGCTTCGCGAGAAGATCTACTCCACTGCCTTTGA
CTACTTCAGCTGTCCCCCAAAGTTTCCTACTCAAGGAGAGAAGCGGCTGCGTGAAGACATAAGCATCATGATTAA
ATTTTGGACCGCCATGTTCTCAGATAAGAAGTACCTGACCGCCAGCCAGCTTGTTCCCCCAGCTGACATCGGCGA
CCTCCTGGAGCAGTTAGTAGAGGAGAACACAGGCTCCTTGTCGGGCCCAGCGAAGGACTTTTACCAGCGGGAGTT
TGATTTCTTTAACAAGATCACCAACGTGTCGGCTATCATCAAGCCCTACCCTAAAGGCGACGAGAGAAAGAAGGC
TTGTCTGTCGGCCCTGTCTGAAGTGACGGTGCAGCCAGGCTGCTCCCTGCCCAGCAACCCCGAAGCCATTGTGCT
GGACGTCGACTACAAGTCTGGGACCCCGATGCAGAGTGCTGCAAAAGCCCCATATCTGGCCAAGTTCAAGGTGAA
GCGATGTGGAGTTAGTGAACTTGAAAAAGAAGGTCTGCGGTGCCGCTCAGACTCTGAGGATGAGTGCAGCACGCA
GGAGGCCGACGGCCAGAAGATCTCCTGGCAGGCAGCCATCTTCAAACTGGGAGACGACTGCCGGCAGGACATGCT
GGCCCTGCAGATCATCGACCTCTTCAAGAACATCTTCCAGCTGGTCGGCCTGGACCTCTTTGTTTTTCCCTACCG
CGTGGTGGCCACTGCCCCTGGGTGCGGGGTGATCGAGTGCATCCCCGACTGCACCTCCCGGGACCAGCTGGGCCG
CCAGACAGACTTCGGCATGTACGACTACTTCACACGCCAGTACGGGGATGAGTCCACTCTGGCCTTCCAGCAGGC
CCGCTACAACTTCATCCGAAGCATGGCCGCCTACAGCCTCCTGCTGTTCCTGCTGCAGATCAAGGACAGACACAA
CGGCAACATTATGCTGGACAAGAAGGGCCATATCATCCACATTGACTTTGGCTTCATGTTTGAAAGCTCGCCGGG
CGGCAATCTCGGCTGGGAACCCGACATCAAGCTGACGGATGAGATGGTGATGATCATGGGGGGCAAGATGGAGGC
CACACCCTTCAAGTGGTTCATGGAGATGTGTGTCCGAGGCTACCTGGCTGTGCGGCACAGGTTTAGCCCCAACAT
GACTGAGCGCGAGGCTGCAAATTTCATCATGAAGGTCATCCAGAGCTGCTTCCTCAGCAACAGGAGCCGGACCTA
CAACATGATCCAGTACTATCAGAATGACATCCCCTAC**TGA**GGAGGGGACCTTCGAGGGCCTCTGCCCCATGTGCC
CTTGAAGCTGCCCCACAATCATGGAGCCCTGCGACCTACCCGCCCTGCCGCCACATGCAGTGGAGGAGAGGCCTG
TGGCCCGAAGAGCCTGGTAGCGCCTCCTGGGGCAGCACGTGGGTGGCGCAGGCTTAGTAACGCCGTGGACTGCAG
CGACAATCAGTGGATGGTGCTGTCTATGCACAGGTGTGAGTCCTCTGTTTGCACTGGACATATTCCCTACCTGTT
TTATTTCATAGGTACATGAAGTATTGTGTATAAAAAAAGAGATAAGATTTAACCAACATCAACAAAATAAAAACC
CAAAATAGTGCTGTGTTGGAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2917

MHPQEGHALRRPPPRWLLLTWCLGPWHSVHAGDDRGWHMTVEQKFGLFSAEIKEADPLAASEASQPKPCPPEVTP
HYIWIDFLVQRFEIAKYCSSDQVEIFSSLLQRSMSLNIGRAKGSMNRHVAAIGPRFKLLTLGLSLLHADVVPNAT
IRNVLREKIYSTAFDYFSCPPKFPTQGEKRLREDISIMIKFWTAMFSDKKYLTASQLVPPADIGDLLEQLVEENT
GSLSGPAKDFYQREFDFFNKITNVSAIIKPYPKGDERKKACLSALSEVTVQPGCSLPSNPEAIVLDVDYKSGTPM
QSAAKAPYLAKFKVKRCGVSELEKEGLRCRSDSEDECSTQEADGQKISWQAAIFKLGDDCRQDMLALQIIDLFKN
IFQLVGLDLFVFPYRVVATAPGCGVIECIPDCTSRDQLGRQTDFGMYDYFTRQYGDESTLAFQQARYNFIRSMAA
YSLLLFLLQIKDRHNGNIMLDKKGHIIHIDFGFMFESSPGGNLGWEPDIKLTDEMVMIMGGKMEATPFKWFMEMC
VRGYLAVRHRFSPNMTEREAANFIMKVIQSCFLSNRSRTYNMIQYYQNDIPY

FIGURE 2918

CTCCTGTATGTAGTAGTGTAAGCATGTGACTTTTAACACCATTTGGTTTGAAACTAATGTAGAGATGCCTGATTC
CAAACAGGTGTGGAGAATATTGAACGGCTCAGAAGCCGCGTCCCTTACTTAACACAATTCCGAATCTCCCTCATC
CATGATGCGTCCATTGGATCACTCGCTGGTGGTCACTGTGTGGCAGTTACTAGGGGAATTCTGCCTCTGACTGTT
CTTTTTCTTTTGGTCTTTAAACACCCTGTCGTGGGATGTGCTCACTGATTTGTGGCTATGTTGAAGGTATCACTT
GTCTTGAGGGTTTTCAATATTTCAGGATCATGCTGGTGGCAAAAGGACTCCACGCCTCTGTGGAATCATGTCCAC
AGGGGGACCTGCCTCCCGTGATGTCCCACCTTTCCTTCAAGGTCTGTCATATGAGTCCTCCCCTTTTACAACACT
TATTATGGTATTTTTCAAGTTATTCTTCTTAGATTTGCAGTACCTACTGAAATTTGTGTTTTTATAGTTGAAGTT
AGGAAAATGCTATTTGATTTGTATTTAGATATTTAAGTCACTTGTCCAATGATGTGTATGTCTAAGCCTCATGTA
CCGATTTGAAGTCAGACTTAAAAATGTATTTACAGATTCACTTGAGACTTTTTAATCGGTTCTTCAAATATTTCA
TGTTTACATTAAAAATTTCCAGAGAAGCATAAAAGTATTCACTTTCCTGCCTTGTCATTTCTGGAAAGATTTTGG
GGAGATATTTTATTGCATATTAATTAATAAATTGTTCTACTAGGAAAA

FIGURE 2919

MCSLICGYVEGITCLEGFQYFRIMLVAKGLHASVESCPQGDLPPVMSHLSFKVCHMSPPLLQHLLWYFSSYSS

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FIGURE 2920

CTCTCTGCTCCTCCTGTTCGACAGTCAGCCGCATCTTCTTTTGCGTCGCCAGCCGAGCCACATCGCTCAGACACC
ATGGGGAAGGTGAAGGTCGGAGTCAACGGATTTGGTCGTATTGGGCGCCTGGTCACCAGGGCTGCTTTTAACTCT
GGTAAAGTGGATATTGTTGCCATCAATGACCCCTTCATTGACCTCAACTACATGGTTTACATGTTCCAATATGAT
TCCACCCATGGCAAATTCCATGGCACCGTCAAGGCTGAGAACGGGAAGCTTGTCATCAATGGAAATCCCATCACC
ATCTTCCAGGAGCGAGATCCCTCCAAAATCAAGTGGGGCGATGCTGGCGCTGAGTACGTCGTGGAGTCCACTGGC
GTCTTCACCACCATGGAGAAGGCTGGGGCTCATTTGCAGGGGGGAGCCAAAAGGGTCATCATCTCTGCCCCCTCT
GCTGATGCCCCCATGTTCGTCATGGGTGTGAACCATGAGAAGTATGACAACAGCCTCAAGATCATCAGCAATGCC
TCCTGCACCACCAACTGCTTAGCACCCCTGGCCAAGGTCATCCATGACAACTTTGGTATCGTGGAAGGACTCATG
ACCACAGTCCATGCCATCACTGCCACCCAGAAGACTGTGGATGGCCCCTCCGGGAAACTGTGGCGTGATGGCCGC
GGGGCTCTCCAGAACATCATCCCTGCCTCTACTGGCGCTGCCAAGGCTGTGGGCAAGGTCATCCCTGAGCTGAAC
GGGAAGCTCACTGGCATGGCCTTCCGTGTCCCCACTGCCAACGTGTCAGTGGTGGACCTGACCTGCCGTCTAGAA
AAACCTGCCAAATATGATGACATCAAGAAGGTGGTGAAGCAGGCGTCGGAGGGCCCCCTCAAGGGCATCCTGGGC
TACACTGAGCACCAGGTGGTCTCCTCTGACTTCAACAGCGACACCCACTCCTCCACCTTTGACGCTGGGGCTGGC
ATTGCCCTCAACGACCACTTTGTCAAGCTCATTTCCTGGTATGACAACGAATTTGGCTACAGCAACAGGGTGGTG
GACCTCATGGCCCACATGGCCTCCAAGGAGTAAGACCCCTGGACCACCAGCCCCAGCAAGAGCACAAGAGGAAGA
GAGAGACCCTCACTGCTGGGGAGTCCCTGCCACACTCAGTCCCCCACCACACTGAATCTCCCCTCCTCACAGTTG
CCATGTAGACCCCTTGAAGAGGGGAGGGGCCTAGGGAGCCGCACCTTGTCATGTACCATCAATAAAGTACCCTGT
GCTCAACC

FIGURE 2921

MGKVKVGVNGFGRIGRLVTRAAFNSGKVDIVAINDPFIDLNYMVYMFQYDSTHGKFHGTVKAENGKLVINGNPIT
IFQERDPSKIKWGDAGAEYVVESTGVFTTMEKAGAHLQGGAKRVIISAPSADAPMFVMGVNHEKYDNSLKIISNA
SCTTNCLAPLAKVIHDNFGIVEGLMTTVHAITATQKTVDGPSGKLWRDGRGALQNIIPASTGAAKAVGKVIPELN
GKLTGMAFRVPTANVSVVDLTCRLEKPAKYDDIKKVVKQASEGPLKGILGYTEHQVVSSDFNSDTHSSTFDAGAG
IALNDHFVKLISWYDNEFGYSNRVVDLMAHMASKE

FIGURE 2922A

TCGGCCTCCCAATGTAGTGGGATTTCAGGCATGACCACCTGGCCTAGTTCCTATACTTTTCTTAATTCTTCAGAC
TTCTCACATTTAGTATAGTGCATTCATTTCATCTTGCTGTTTATTAGCACCCTTTGTGGCCAAGGGAAATAAAAG
GTGGTAAAATTCAGTTTTCAGTTTAGTTCTTGAAAGCTCTGGGAAATGGAGGAAACACAAAACTATGAATTAAAC
TAGGGCTGTTGATTTCTGAACCCCCAGATAAATCAGTTGACCCACATTTTCATTTTAGGTGTTAGGTCCAAATTA
GCATAATGTCTTGCATTATTATTAGGTTCAGTGTGAAACTTTACAGTGCTGCATTTGAAGTTTAGTAACTGGTTA
TTATTAATCATTTGGGAAAAATGAAAATGTGTTGGGACTTTCTATGACTAGGCATTTGTTGATTATTTTTCATGA
TTGCTTTTTGTTTTCTCATTGTGTAGGATTTGTGAACTTGTATATTACAGGAAACAAGATACTTTGTAAAATTTA
CTGGGGAAAATCCATTTGGAGTGCATGACATTTGCCAGGATAAGAAAGCAGTAATATGTTTGTATTATAAAATTA
CACCCTGCCAGAAAACTTTCTTTCCTAGTAAGGTAAATGTAGAAGGGACTTTTACAGCATAGTAAGTTGATTAGG
AGCCAAAATTTTATTCCAGTTTTTTTTTGAACTAAGAATGTTTTAAATTCTGTAATGAACTTTTATGTTTACCCA
TTACTCATGCATTCTTTCACAATATGTTTAATAGCCTGAGGAAATAGGAAAGCTGTGAAGCTACTACCATTCTTT
ACTTTTAATAAGAATAATAGGAAAGAAAAGTCAGGTCAGTAATCCAAATCCAAATATGTATACTGCAAATGCTCA
AGAAGTCACATTTTTTGATAAATTGTATTGAGTACAGAAGAACTTATATGAATTTATTATCTGTTAATAACTTAG
TTTTGACAACAGAATAACATTTGGAAATTGTGAGAATAATCAAGCTGTTTTTCCATTAACAGTGTAAATTCATAA
CATGTCCTTCAAAAGGTGATATTCTAAGCTGTCTTAATTGTCTACGGTTGATAACTTTTAAATAAAGTACAGGAC
TTTCTGAAAGTGTTTGGCACGTTATGCTGCCAAAAACAATCTGTGTTTTGAAATACCAATTAATCAGTTAATTTC
TGAAGACTTTGTATAGGACTTGATATATGAGTCAGAATCTGTCTGTACTCATTCTGTACATTGTAACTTTGAACA
CTTATGAAAAACTGTATCTGTTGGTGTGTTTTGATTAGTTAGTGTAGATTTGTTTGCGTATTTGAATTCCGATTT
TAGTTTAGGAAGACTAAAAGTAGCCATTTTTGTAAAGTTCATATGCTATTTTTTAATGTCATTTTTGTTTTTAAT
ATTTATACAATAGTGATGTTACTAGTAAAAAATGTTTATAGATAACACGTAGAGCTATTAACTGTTCAAAAGCCT
ACATGATAGGCATATTTTGTATTTCGTGTTGCACTCGTTCTGTTTCATATTGGACTTTTTACATCCCTTTTTTAG
CAAAAAAAAGAGACACATTTGAATTCTCTTTAGCATAAAGCTGTGCATTGGAAACTATGTGACTGTATCCATACG
GTTAGCAAAATACTCTTTGCCACCAAAGGTAAATGAAACTGTAAAATACCTCTGGATATTTGTGCCAATGAACTT
TTCTTAGCATATTAGGATTAAAGCAAAAATAATCTTTTCAGTATGTTTCATCTAGGACTTACAATAAATGTTTAA
ACCATGAAAACTTATATTTCATACCCTAATTTTTCTTTGAAAATATTCAAGATTTGTAGCCTAGTGTGTTCTATT
TTGTGTGATTGCTTGAATGTTTTCTGATTTTATTGGGTAAAAGTTTGCCTAGTAATGATCTTTCAGCAATTCATT
GAAATAATTATTTGAAGTAATCTTGCTTCAGATTTAATTTGTGATGTACATTGTTGTACAAGCCATTTTAGTACA
GGTGTCTCATTTATGTAGTTGAAAGGTGACTGTGGAATTTCTTTTGTTTTTTATGTATTTCCATTCAGTCTCTTT
ATATAGTCACATGTTTCACAGGGGAACTTGTCCACTGGAACCTAACATAGTACAACCTTTTAATATGCGTATCTT
AAAGGAAAATATTATAAAACAAGATATTAATACTAAAGTGTTAACATTAATATGTTGTTCTCATGGAAGAAAAGT
AGAAAATGTGATAGGCTTAGAAATTATTTTTTATCAGCATTAAGTGCTTCAATTTCTCCCCATAAAGATTCTAAG
GAAATTTCAGTTCCTCATATTATAGTTTTCCCCATAATTTAATATTACTAAGTATTTCTCTGCCCAGTAATGTTG
ATGCAGTTTGCATAAATAGCCTTGGAAGTAAGGAGGCAGGACAGAAAGCCAAATATCGAAATCTCTGGCCTTGAT
TTAGTGACAGTTTATTCTAATGGGGACCATAGGTGTTATTAGTAAAAAGATAGTGTACAAGGCCTAAGTTCAGTT
TACATTGTTCTTTGAAATGAGTTCATCTTTTGTGTTGAATAATTGTATTCTAAGTAGGAGATGCCTGTATTTAAC
ATAATCATGCTTTCTATATAATCAAATATGTATTTGTTGGAATACTGGTAGAAATAACCTTCCCTTCCTCCACTG
TGCAGTGGAAAAAAAACTCCCGATTTATACTGTATATAAATTAGGAAATTATGTTACATATTTACATTTTTAAAA
ATATAAAAATGACATATTATTTTGAAGTGATTGTATTATAGTTTCTGAAGCTTATGACTGGCTATAAATATAACA
ACATACCCATGAGAAACCAGACCAAAATTGAATATATATCATCACTGTGACCTTGAACTTATAGTCATTTGGGAT
AAAACAGAGTGTGCCTTGAAATGATAAAGAGTGCCCTGCAATTTTATAACTGTACATTTTATTATGGGTGGTCCT
CTCAAATTGGCCCCAAATCCTTGTCTTCGAGGTTGGTGAAATAAAAGTTTAAAATAAAAGTTGACTGGTATTTCC
TTTAGTATTTCCAGAACTATTGCTGTAGAGGCCTCCCTTAATTTTCAGAGTTCTCATTTTGAATTAAAGTAGACT
TACGCTACATAGATGTAGAAAATTAGGTTTGGCTTAGGTTTCTGAAAAAATATTCTAGGAGAAGGTGGTAGCATT
GTTCTGAACTTACCACACTTGGAAAAACTAATCTTCAAATGTAATTTTTTGTCTTATTAATGAGTAATCTGTCAA
AGACATGAATTCTTTGACTTGTGCTCATTCTTTCTGAACTTATTGAGGCTTATATATATCAAATAAGGTTAATTT
ACACAATAATTATTTTTAATAATTAATAAACTCATTCATGTAGTATATTTTAAAACATTATTTCCTCTCATTTTT
CCTTCTCTTTTTTCTTCCTATATATTTTTAAGGTTTCAAGAGAAAACGGGCTTCAGTTTTTAAAAAAATGTAGAC
TTGCATTTTTACTGTGCTTATTTAAAATAATGGATATAATTTATATTAAGGTCCAAATTATTTTATTCACAGGAT

FIGURE 2922B

AATCATGGTCTCTGATAAAAGATGCCCACATTTCTGTGTACTCACAGTTGTTGTATATTTTTCAATTTCAATTTT
GAAAGTAAACTCAACACATTGTTTTCCCATTTTACCTCCACTACCTACTCGCCAGACAAAAATATAGATTTCTCT
AAAAACACATACAAAGAAAACGTCTTTCCTTAAAACATGATCTTATTGACATGAAGGTAGTTTGAGCAAGGGTAT
GTAATAAAATAAATGGCTCTCAACCTGCATCAATTTTTATACTATAGTTAAAAAATTTATAGAGGACAACCTATG
TGTTATGCTGAGATAGACTCAGTAATCATTTGTTTGCAAATTGATTATTTTTTTCTCATCCATCCAGAAAGTACA
GTGCATAACAACAACACTTAACAAGTGCAGAGGAACCTGTCCTGTAGTATATAATAAAAAATGATTGTCACCTTG
CTGATCTTTCCATTTAAACATGCATGATCTCCAGTACTTTGTACAATGTATAGTATATTAAATACATTTATGTGT
AATTTTGTGTGTATTTTTATATGGTATAATTAAAATTATTACATTTATGTGATTGTAATTCACAAAAAGTACTAC
TTACTATATTCTGTAGAGTGTGTTGTGAATGTTTTTACCTGTGTTTGAGCATTATGGTGTAGGTTTAATAGATGA
ATATTTGCCTTCAGTCTCTGCTCAGGTATTAATGTGTAGTAATTTTTGGTGCTTTCTTTTTAATCTGTGATAATC
TGGTGTTCTGAATGTTCAAAAATAAATTTGGTTGAATACGCACATGGTAAAAAGATTGCTTACCAATTGACATAC
TCTCTATAATACCATCTTGGTAAAAACTCTTTACAAAGGATTTATTGGCCGGGCG

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FIGURE 2923

SASQCSGISGMTTWPSSYTFLNSSDFSHLV

FIGURE 2924

ATGCGGGAGATCGTGCACATCCAGGCCGGCCAGTGCGGCAACCAGATCGGGGCCAAGTTCTGGGAAGTCATCAGT
GATGAGCATGGCATCGACCCCAGCGGCAACTACGTGGGCGACTCGGACTTGCAGCTGGAGCGGATCAGCGTCTAC
TACAACGAGGCCTCTTCTCACAAGTACGTGCCTCGAGCCATTCTGGTGGACCTGGAACCCGGAACCATGGACAGT
GTCCGCTCAGGGGCCTTTGGACATCTCTTCAGGCCTGACAATTTCATCTTTGGTCAGAGTGGGGCCGGCAACAAC
TGGGCCAAGGGTCACTACACGGAGGGGGCGGAGCTGGTGGATTCGGTCCTGGATGTGGTGCGGAAGGAGTGTGAA
AACTGCGACTGCCTGCAGGGCTTCCAGCTGACCCACTCGCTGGGGGGGGGGACGGGCTCCGGCATGGGCACGTTG
CTCATCAGCAAGGTGCGTGAGGAGTATCCCGACCGCATCATGAACACCTTCAGCGTCGTGCCCTCACCCAAGGTG
TCAGACACGGTGGTGGAACCCTACAACGCCACGCTGTCCATCCACCAGCTGGTGGAAAACACGGATGAAACCTAC
TGCATCGACAACGAGGCGCTCTACGACATCTGCTTCCGCACCCTCAAGCTGGCCACGCCCACCTACGGGGACCTC
AACCACCTGGTATCGGCCACCATGAGCGGAGTCACCACCTCCTTGCGCTTCCCGGGCCAGCTCAACGCTGACCTG
CGCAAGCTGGCCGTCAACATGGTGCCCTTCCCGCGCCTGCACTTCTTCATGCCCGGCTTCGCCCCCCTCACCAGG
CGGGGCAGCCAGCAGTACCGGGCCCTGACCGTGCCCGAGCTCACCCAGCAGATGTTCGATGCCAAGAACATGATG
GCCGCCTGCGACCCGCGCCACGGCCGCTACCTGACGGTGGCCACCGTGTTCCGGGGCCGCATGTCCATGAAGGAG
GTGGACGAGCAGATGCTGGCCATCCAGAGCAAGAACAGCAGCTACTTCGTGGAGTGGATCCCCAACAACGTGAAG
GTGGCCGTGTGTGACATCCCGCCCCGCGGCCTCAAGATGTCCTCCACCTTCATCGGGAACAGCACGGCCATCCAG
GAGCTGTTCAAGCGCATCTCCGAGCAGTTCACGGCCATGTTCCGGCGCAAGGCCTTCCTGCACTGGTACACGGGC
GAGGGCATGGACGAGATGGAGTTCACCGAGGCCGAGAGCAACATGAACGACCTGGTGTCCGAGTACCAGCAGTAC
CAGGACGCCACGGCCGAGGAAGAGGGCGAGATGTACGAAGACGACGAGGAGGAGTCGGAGGCCCAGGGCCCCAAG
TGAAACTGCTCGCAGCTGGAGTGAGAGGCAGGTGGCGGCCGGGGCCGAAGCCAGCAGTGTCTAAACCCCCGGAGC
CATCTTGCTGCCGACACCCTGCTTTCCCCATCGCCCTAGGGCTCCCTTGCCGCCCTCCTGCAGTATTTATGGCCT
CGTCCTCCCCCACCTAGGCCACGTGTGAGCTGCTCCTGTCTCTGTCTTATTGCAGCTCCAGGCCTGACGTTTTAC
GGTTTTGTTTTTTACTGGTTTGTGTTTATATTTTCGGGGATACTTAATAAATCTATTGCTGTCAGATACCCTT

FIGURE 2925

MREIVHIQAGQCGNQIGAKFWEVISDEHGIDPSGNYVGDSDLQLERISVYYNEASSHKYVPRAILVDLEPGTMDS
VRSGAFGHLFRPDNFIFGQSGAGNNWAKGHYTEGAELVDSVLDVVRKECENCDCLQGFQLTHSLGGGTGSGMGTL
LISKVREEYPDRIMNTFSVVPSPKVSDTVVEPYNATLSIHQLVENTDETYCIDNEALYDICFRTLKLATPTYGDL
NHLVSATMSGVTTSLRFPGQLNADLRKLAVNMVPFPRLHFFMPGFAPLTRRGSQQYRALTVPELTQQMFDAKNMM
AACDPRHGRYLTVATVFRGRMSMKEVDEQMLAIQSKNSSYFVEWIPNNVKVAVCDIPPRGLKMSSTFIGNSTAIQ
ELFKRISEQFTAMFRRKAFLHWYTGEGMDEMEFTEAESNMNDLVSEYQQYQDATAEEEGEMYEDDEEESEAQGPK

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FIGURE 2926

TGAAACCTAACCCGCCCTGGGGAGGCGCGCAGCAGAGGCTCCGATTCGGGGCAGGTGAGAGGCTGACTTTCTCTC
GGTGCGTCCAGTGGAGCTCTGAGTTTCGAATCGGCGGCGGCGGATTCCCCGCGCGCCCGGCGTCGGGGCTTCCAG
GAGGATGCGGAGCCCCAGCGCGGCGTGGCTGCTGGGGGCCGCCATCCTGCTAGCAGCCTCTCTCTCCTGCAGTGG
CACCATCCAAGGAACCAATAGATCCTCTAAAGGAAGAAGCCTTATTGGTAAGGTTGATGGCACATCCCACGTCAC
TGGAAAAGGAGTTACAGTTGAAACAGTCTTTTCTGTGGATGAGTTTTCTGCATCTGTCCTCACTGGAAAACTGAC
CACTGTCTTCCTTCCAATTGTCTACACAATTGTGTTTGTGGTGGGTTTGCCAAGTAACGGCATGGCCCTGTGGGT
CTTTCTTTTCCGAACTAAGAAGAAGCACCCTGCTGTGATTTACATGGCCAATCTGGCCTTGGCTGACCTCCTCTC
TGTCATCTGGTTCCCCTTGAAGATTGCCTATCACATACATGGCAACAACTGGATTTATGGGGAAGCTCTTTGTAA
TGTGCTTATTGGCTTTTTCTATGGCAACATGTACTGTTCCATTCTCTTCATGACCTGCCTCAGTGTGCAGAGGTA
TTGGGTCATCGTGAACCCCATGGGGCACTCCAGGAAGAAGGCAAACATTGCCATTGGCATCTCCCTGGCAATATG
GCTGCTGATTCTGCTGGTCACCATCCCTTTGTATGTCGTGAAGCAGACCATCTTCATTCCTGCCCTGAACATCAC
GACCTGTCATGATGTTTTGCCTGAGCAGCTCTTGGTGGGAGACATGTTCAATTACTTCCTCTCTCTGGCCATTGG
GGTCTTTCTGTTCCCAGCCTTCCTCACAGCCTCTGCCTATGTGCTGATGATCAGAATGCTGCGATCTTCTGCCAT
GGATGAAAACTCAGAGAAGAAAAGGAAGAGGGCCATCAAACTCATTGTCTCTGTCCTGGCCATGTACCTGATCTG
CTTCACTCCTAGTAACCTTCTGCTTGTGGTGCATTATTTTCTGATTAAGAGCCAGGGCCAGAGCCATGTCTATGC
CCTGTACATTGTAGCCCTCTGCCTCTCTACCCTTAACAGCTGCATCGACCCCTTTGTCTATTACTTTGTTTCACA
TGATTTCAGGGATCATGCAAAGAACGCTCTCCTTTGCCGAAGTGTCCGCACTGTAAAGCAGATGCAAGTATCCCT
CACCTCAAAGAAACACTCCAGGAAATCCAGCTCTTACTCTTCAAGTTCAACCACTGTTAAGACCTCCTATTGAGT
TTTCCAGGTCCTCAGATGGGAATTGCACAGTAGGATGTGGAACCTGTTTAATGTTATGAGGACGTGTCTGTTATT
TCCTAATCAAAAAGGTCTCACCACATACCATGTGGATGCAGCACCTCTCAGGATTGCTAGGAGCTCCCCTGTTTG
CATGAGAAAAGTAGTCCCCCAAATTAACATCAGTGTCTGTTTCAGAATCTCTCTACTCAGATGACCCCAGAAACT
GAACCAACAGAAGCAGACTTTTCAGAAGATGGTGAAGACAGAAACCCAGTAACTTGCAAAAAGTAGACTTGGTGT
GAAGACTCACTTCTCAGCTGAAATTATATATATACACATATATATATTTTACATCTGGGATCATGATAGACTTGT
TAGGGCTTCAAGGCCCTCAGAGATGATCAGTCCAACTGAACGACCTTACAAATGAGGAAACCAAGATAAATGAGC
TGCCAGAATCAGGTTTCCAATCAACAGCAGTGAGTTGGGATTGGACAGTAGAATTTCAATGTCCAGTGAGTGAGG
TTCTTGTACCACTTCATCAAAATCATGGATCTTGGCTGGGTGCGGTGCCTCATGCCTGTAATCCTAGCACTTTGG
GAGGCTGAGGCAGGCAATCACTTGAGGTCAGGAGTTCGAGACCAGCCTGGCCATCATGGCGAAACCTCATCTCTA
CTAAAAATACAAAAGTTAACCAGGTGTGTGGTGCACGTTTGTAATCCCAGTTACTCAGGAGGCTGAGGCACAAGA
ATTGAGTATCACTTTAACTCAGGAGGCAGAGGTTGCAGTGAGCCGAGATTGCACCACTGCACTCCAGCTTGGGTG
ATAAAATAAAATAAAATAGTCGTGAATCTTGTTCAAAATGCAGATTCCTCAGATTCAATAATGAGAGCTCAGACT
GGGAACAGGGCCCAGGAATCTGTGTGGTACAAACCTGCATGGTGTTTATGCACACAGAGATTTGAGAACCATTGT
TCTGAATGCTGCTTCCATTTGACAAAGTGCCGTGATAATTTTTGAAAAGAGAAGCAAACAATGGTGTCTCTTTTA
TGTTCAGCTTATAATGAAATCTGTTTGTTGACTTATTAGGACTTTGAATTATTTCTTTATTAACCCTCTGAGTTT
TTGTATGTATTATTATTAAAGAAAAATGCAATCAGGATTTTAAACATGTAAATACAAATTTTGTATAACTTTTGA
TGACTTCAGTGAAATTTTCAGGTAGTCTGAGTAATAGATTGTTTTGCCACTTAGAATAGCATTTGCCACTTAGTA
TTTTAAAAAATAATTGTTGGAGTATTTATTGTCAGTTTTGTTCACTTGTTATCTAATACAAAATTATAAAGCCTT
CAGAGGGTTTGGACCACATCTCTTTGGAAAATAGTTTGCAACATATTTAAGAGATACTTGATGCCAAAATGACTT
TATACAACGATTGTATTTGTGACTTTTAAAAATAATTATTTTATTGTGTAATTGATTTATAAATAACAAAATTTT
TTTTACAACTTAAAAAAAAAAAAAA

FIGURE 2927

MRSPSAAWLLGAAILLAASLSCSGTIQGTNRSSKGRSLIGKVDGTSHVTGKGVTVETVFSVDEFSASVLTGKLTT
VFLPIVYTIVFVVGLPSNGMALWVFLFRTKKKHPAVIYMANLALADLLSVIWFPLKIAYHIHGNNWIYGEALCNV
LIGFFYGNMYCSILFMTCLSVQRYWVIVNPMGHSRKKANIAIGISLAIWLLILLVTIPLYVVKQTIFIPALNITT
CHDVLPEQLLVGDMFNYFLSLAIGVFLFPAFLTASAYVLMIRMLRSSAMDENSEKKRKRAIKLIVSVLAMYLICF
TPSNLLLVVHYFLIKSQGQSHVYALYIVALCLSTLNSCIDPFVYYFVSHDFRDHAKNALLCRSVRTVKQMQVSLT
SKKHSRKSSSYSSSSTTVKTSY

FIGURE 2928

AGCAGCCGGCGCGGCCGCCAGCGCGGTGTAGGGGGCAGGCGCGGATCCCGCCACCGCCGCGCGCTCGGCCCGCCG
ACTCCCGGCGCCGCCGCCGCCACTGCCGTCGCCGCCGCCGCCTGCCGGGACTGGAGCGCGCCGTCCGCCGCGGAC
AAGACCCTGGCCTCAGGCCGGAGCAGCCCCATCATGCCGAGGGAGCGCAGGGAGCGGGATGCGAAGGAGCGGGAC
ACCATGAAGGAGGACGGCGGCGCGGAGTTCTCGGCTCGCTCCAGGAAGAGGAAGGCAAACGTGACCGTTTTTTTG
CAGGATCCAGATGAAGAAATGGCCAAAATCGACAGGACGGCGAGGGACCAGTGTGGGAGCCAGCCTTGGGACAAT
AATGCAGTCTGTGCAGACCCCTGCTCCCTGATCCCCACACCTGACAAAGAAGATGATGACCGGGTTTACCCAAAC
TCAACGTGCAAGCCTCGGATTATTGCACCATCCAGAGGCTCCCCGCTGCCTGTACTGAGCTGGGCAAATAGAGAG
GAAGTCTGGAAAATCATGTTAAACAAGGAAAAGACATACTTAAGGGATCAGCACTTTCTTGAGCAACACCCTCTT
CTGCAGCCAAAAATGCGAGCAATTCTTCTGGATTGGTTAATGGAGGTGTGTGAAGTCTATAAACTTCACAGGGAG
ACCTTTTACTTGGCACAAGATTTCTTTGACCGGTATATGGCGACACAAGAAAATGTTGTAAAAACTCTTTTACAG
CTTATTGGGATTTCATCTTTATTTATTGCAGCCAAACTTGAGGAAATCTATCCTCCAAAGTTGCACCAGTTTGCG
TATGTGACAGATGGAGCTTGTTCAGGAGATGAAATTCTCACCATGGAATTAATGATTATGAAGGCCCTTAAGTGG
CGTTTAAGTCCCCTGACTATTGTGTCCTGGCTGAATGTATACATGCAGGTTGCATATCTAAATGACTTACATGAA
GTGCTACTGCCGCAGTATCCCCAGCAAATCTTTATACAGATTGCAGAGCTGTTGGATCTCTGTGTCCTGGATGTT
GACTGCCTTGAATTTCCTTATGGTATACTTGCTGCTTCGGCCTTGTATCATTTCTCGTCATCTGAATTGATGCAA
AAGGTTTCAGGGTATCAGTGGTGCGACATAGAGAACTGTGTCAAGTGGATGGTTCCATTTGCCATGGTTATAAGG
GAGACGGGGAGCTCAAAACTGAAGCACTTCAGGGGCGTCGCTGATGAAGATGCACACAACATACAGACCCACAGA
GACAGCTTGGATTTGCTGGACAAAGCCCGAGCAAAGAAAGCCATGTTGTCTGAACAAAATAGGGCTTCTCCTCTC
CCCAGTGGGCTCCTCACCCCGCCACAGAGCGGTAAGAAGCAGAGCAGCGGGCCGGAAATGGCGTGACCACCCCAT
CCTTCTCCACCAAAGACAGTTGCGCGCCTGCTCCACGTTCTCTTCTGTCTGTTGCAGCGGAGGCGTGCGTTTGCT
TTTACAGATATCTGAATGGAAGAGTGTTTCTTCCACAACAGAAGTATTTCTGTGGATGGCATCAAACAGGGCAAA
GTGTTTTTTATTGAATGCTTATAGGTTTTTTTTAAATAAGTGGGTCAAGTACACCAGCCACCTCCAGACACCAGT
GCGTGCTCCCGATGCTGCTATGGAAGGTGCTACTTGACCTAAGGGACTCCCACAACAACAAAAGCTTGAAGCTGT
GGAGGGCCACGGTGGCGTGGCTCTCCTCGCAGGTGTTCTGGGCTCCGTTGTACCAAGTGGAGCAGGTGGTTGCGG
GCAAGCGTTGTGCAGAGCCCATAGCCAGCTGGGCAGGGGGCTGCCCTCTCCACATTATCAGTTGACAGTGTACAA
TGCCTTTGATGAACTGTTTTGTAAGTGCTGCTATATCTATCCATTTTTTAATAAAGATAATACTGTTTTTGAGAC
AAAAAAAA

FIGURE 2929

MPRERRERDAKERDTMKEDGGAEFSARSRKRKANVTVFLQDPDEEMAKIDRTARDQCGSQPWDNNAVCADPCSLI
PTPDKEDDDRVYPNSTCKPRIIAPSRGSPLPVLSWANREEVWKIMLNKEKTYLRDQHFLEQHPLLQPKMRAILLD
WLMEVCEVYKLHRETFYLAQDFFDRYMATQENVVKTLLQLIGISSLFIAAKLEEIYPPKLHQFAYVTDGACSGDE
ILTMELMIMKALKWRLSPLTIVSWLNVYMQVAYLNDLHEVLLPQYPQQIFIQIAELLDLCVLDVDCLEFPYGILA
ASALYHFSSSELMQKVSGYQWCDIENCVKWMVPFAMVIRETGSSKLKHFRGVADEDAHNIQTHRDSLDLLDKARA
KKAMLSEQNRASPLPSGLLTPPQSGKKQSSGPEMA

FIGURE 2930A

GGAGGAGTTGAGAGAACGGAGCGGACGCCATGGCGACCAACATCGAGCAGATTTTTAGGTCTTTCGTGGTCAGTA
AATTCCGGGAAATTCAACAGGAGCTTTCCAGTGGAAGGAATGAAGGCCAGCTGAATGGTGAAACAAATACACCCA
TTGAAGGAAACCAGGCGGGTGATGCAGCTGCCTCTGCCAGGAGTCTACCAAATGAAGAAATAGTGCAGAAGATAG
AGGAAGTACTTTCTGGGGTCTTAGATACAGAACTACGATATAAGCCAGACTTGAAAGAGGGCTCCAGAAAAAGTA
GATGCGTATCTGTACAAACAGATCCTACTGATGAAATTCCCACTAAAAAGTCAAAGAAGCATAAAAAGCACAAAA
ACAAAAAGAAGAAAAAGAAGAAAGAAAAGGAAAAAAAATATAAAAGACAGCCAGAAGAATCTGAGTCAAAGACGA
AATCTCATGATGATGGGAACATAGATTTAGAATCTGATTCCTTTTTAAAGTTTGATTCTGAACCTTCAGCTGTGG
CGCTGGAGCTTCCTACAAGAGCATTTGGCCCATCTGAGACCAATGAATCCCCTGCAGTTGTGCTAGAACCTCCTG
TAGTATCAATGGAGGTATCAGAGCCACACATCTTAGAAACTCTGAAGCCAGCTACAAAAACTGCAGAACTGTCAG
TTGTATCTACATCAGTAATCTCAGAGCAGTCAGAGCAGTCTGTGGCAGTAATGCCAGAACCATCCATGACAAAGA
TTCTGGATTCCTTTGCAGCAGCACCAGTGCCTACTACAACACTGGTGTTGAAGTCATCTGAGCCAGTTGTAACAA
TGTCAGTGGAGTATCAGATGAAGTCTGTGCTGAAATCTGTGGAGAGCACATCTCCAGAGCCATCAAAGATCATGT
TGGTAGAGCCCCCAGTAGCAAAAGTGTTAGAGCCTTCAGAAACCCTTGTGGTATCATCAGAGACACCTACTGAGG
TGTACCCTGAGCCAAGCACATCAACAACAATGGATTTTCCAGAGTCATCTGCAATTGAAGCGCTAAGATTGCCAG
AGCAGCCTGTAGACGTACCATCGGAGATTGCAGATTCATCCATGACAAGACCGCAGGAGTTGCCGGAGCTGCCTA
AGACCACAGCGTTGGAGCTGCAGGAGTCGTCGGTGGCCTCAGCGATGGAGTTGCCGGGGCCACCTGCGACCTCCA
TGCCGGAGTTGCAGGGGCCCCCTGTGACTCCAGTGCTGGAGTTACCTGGGCCCTCTGCTACCCCGGTGCCAGAGT
TGCCAGGGCCCCTTTCTACCCCAGTGCCTGAGTTGCCAGGGCCCCCTGCGACAGCAGTGCCTGAGTTGCCAGGGC
CCTCTGTGACACCAGTGCCACAGTTGTCGCAGGAATTGCCAGGGCTTCCAGCACCATCCATGGGGTTGGAGCCAC
CACAGGAGGTACCAGAGCCATCTGTGATGGCACAGGAGTTGCCAGGGCTGCCTTTGGTGACAGCAGCAGTAGAGT
TGCCAGAGCAGCCTGCGGTAACAGTAGCAATGGAGTTGACCGAACAACCTGTGACGACGACAGAGTTGGAGCAGC
CTGTGGGGATGACAACGGTGGAACATCCTGGGCATCCTGAGGTGACAACGGCAACAGGGTTGCTGGGGCAGCCTG
AGGCAACGATGGTGCTGGAGTTGCCAGGACAGCCAGTGGCAACGACAGCGCTGGAGTTGCCGGGGCAGCCTTCGG
TGACTGGGGTGCCAGAGTTGCCAGGGCTGCCTTCGGCAACTAGGGCACTGGAGTTGTCGGGGCAGCCTGTGGCAA
CTGGGGCACTAGAGTTGCCTGGGCCGCTCATGGCAGCTGGGGCACTGGAGTTCTCGGGGCAGTCTGGGGCAGCTG
GAGCACTGGAGCTTTTGGGGCAGCCTCTGGCAACAGGGGTGCTGGAGTTGCCAGGGCAGCCTGGGGCGCCAGAGT
TGCCTGGGCAGCCTGTGGCAACTGTGGCGCTGGAGATCTCTGTTCAGTCTGTGGTGACAACATCGGAGCTGTCAA
CGATGACCGTGTCGCAGTCCCTGGAGGTGCCCTCGACGACAGCGCTGGAATCCTATAATACGGTAGCACAGGAGC
TGCCTACTACATTAGTGGGGGAGACTTCTGTAACAGTAGGAGTGGATCCCTTGATGGCCCCAGAATCCCATATAT
TAGCTTCTAACACCATGGAGACCCATATATTAGCATCCAACACCATGGACTCCCAAATGCTAGCGTCCAACACCA
TGGACTCCCAGATGCTAGCATCCAACACCATGGACTCCCAGATGTTAGCGTCTAGCACCATGGACTCCCAGATGT
TAGCAACTAGCTCCATGGACTCCCAGATGTTAGCAACTAGCTCCATGGACTCCCAGATGTTAGCAACTAGCACTA
TGGACTCCCAGATGTTAGCAACCAGTTCCATGGACTCCCAGATGTTAGCAACCAGCTCCATGGACTCCCAGATGT
TAGCAACCAGCTCCATGGACTCCCAGATGTTAGCAACCAGCTCCATGGACTCCCAGATGTTAGCAACCAGCACCA
TGGATTCTCAGATGTTAGCAACCAGCACCATGGACTCCCAGATGTTAGCAACTAGCTCAATGGATTCCCAGATGT
TAGCATCTGGCACTATGGACTCTCAAATGTTAGCTTCTGGCACCATGGATGCTCAGATGTTAGCGTCTGGTACCA
TGGATGCCCAGATGTTAGCGTCTAGTACCCAAGATTCTGCTATGTTGGGTTCAAAATCTCCTGATCCCTATAGGT
TAGCTCAGGATCCTTACAGGTTAGCTCAGGATCCCTATAGGTTGGGCCATGACCCCTATAGATTAGGTCATGATG
CTTACAGGTTAGGACAAGACCCTTATAGATTAGGCCATGATCCCTACAGACTAACTCCTGATCCCTATAGGATGT
CACCTAGACCCTACAGGATAGCACCCAGGTCCTATAGAATAGCACCCAGGCCATATAGGTTAGCACCTAGACCCC
TGATGTTAGCATCTAGACGTTCTATGATGATGTCCTATGCTGCAGAACGTTCCATGATGTCATCTTACGAACGCT
CTATGATGTCTTATGAGCGGTCTATGATGTCCCCTATGGCTGAACGCTCTATGATGTCAGCCTACGAGCGCTCTA
TGATGTCAGCCTACGAGCGCTCTATGATGTCCCCTATGGCTGAGCGCTCTATGATGTCAGCTTATGAACGCTCCA
TGATGTCAGCTTATGAACGCTCCATGATGTCCCCAATGGCTGATCGATCTATGATGTCCATGGGTGCTGACCGGT
CTATGATGTCGTCATACTCTGCTGCTGACCGGTCTATGATGTCATCGTACTCTGCAGCTGACCGATCTATGATGT
CATCTTATACTGCTGATCGTTCAATGATGTCTATGGCTGCTGATTCTTACACCGATTCTTACACTGACACATATA
CAGAGGCATATATGGTGCCACCTTTGCCTCCTGAAGAGCCCCCAACAATGCCACCGTTGCCACCTGAGGAGCCAC
CAATGACACCACCATTGCCTCCTGAGGAACCACCAGAGGGTCCAGCATTGCCCACTGAGCAGTCAGCATTAACAG

FIGURE 2930B

CTGAAAATACTTGGCCTACAGAGGTGCCATCATTACCATCTGAAGAGTCTGTATCGCAGCCTGAGCCTCCTGTGA
GTCAAAGTGAGATTTCGGAGCCTTCAGCAGTGCCTACTGATTATTCAGTGTCAGCATCAGATCCCTCAGTTTTAG
TATCAGAGGCTGCTGTGACTGTTCCAGAACCACCACCAGAGCCAGAATCTTCAATTACGTTAACACCTGTAGAGT
CTGCAGTAGTAGCAGAAGAACATGAAGTTGTTCCAGAGAGACCAGTGACTTGTATGGTATCTGAAACTCCCGCCA
TGTCAGCTGAACCAACTGTGTTAGCATCAGAGCCTCCTGTTATGTCAGAGACAGCAGAAACATTTGATTCCATGA
GAGCCTCAGGACATGTTGCCTCAGAAGTATCTACATCCTTGTTGGTTCCAGCAGTAACTACTCCAGTGCTGGCAG
AGAGCATTCTGGAGCCGCCAGCCATGGCTGCCCCAGAGTCTTCAGCTATGGCTGTCCTGGAGTCTTCGGCTGTGA
CCGTCCTGGAGTCTTCGACTGTGACTGTCCTGGAGTCTTCGACTGTAACTGTCCTGGAGCCTTCGGTTGTGACTG
TCCCGGAGCCTCCTGTTGTGGCTGAGCCAGACTATGTTACCATTCCTGTGCCAGTTGTTTCTGCGCTGGAGCCTT
CTGTGCCTGTTCTGGAACCAGCGGTGTCAGTCCTTCAACCTTCTATGATTGTTTCAGAACCATCTGTTTCTGTCC
AGGAATCGACTGTGACAGTTTCAGAGCCTGCTGTCACAGTCTCAGAGCAGACTCAAGTAATACCAACTGAGGTGG
CTATAGAGTCCACACCAATGATACTGGAATCTAGTATCATGTCATCACATGTTATGAAAGGAATTAATCTATCCT
CTGGTGATCAAAATCTTGCTCCAGAGATTGGCATGCAGGAGATTGCATTGCATTCAGGTGAAGAACCACATGCTG
AGGAACACCTGAAAGGTGACTTTTACGAAAGTGAACATGGTATAAATATAGACCTTAATATAAATAATCATTTAA
TTGCTAAAGAGATGGAACATAATACAGTGTGTGCTGCTGGTACTAGTCCTGTTGGGGAAATTGGTGAAGAGAAAA
TTTTGCCCACCAGTGAGACTAAACAGCGCACAGTATTGGATACCTACCCTGGTGTTAGTGAAGCTGATGCAGGAG
AAACTCTATCTTCTACTGGTCCTTTTGCTCTGGAACCTGATGCAACAGGAACTAGTAAGGGTATTGAATTTACCA
CAGCATCTACTCTCAGTTTAGTTAATAAATATGATGTTGATTTATCTTTAACTACTCAAGATACTGAACATGACA
TGGTAATTTCCACCAGTCCTAGTGGTGGTAGTGAAGCTGACATTGAAGGGCCTTTGCCTGCTAAAGATATTCATC
TTGATTTACCATCTAATAATAACCTTGTTAGTAAGGATACAGAAGAACCATTACCTGTAAAAGAGAGTGACCAGA
CATTAGCAGCTCTGCTCAGCCCTAAAGAAAGTAGTGGAGGAGAAAAAGAAGTACCTCCCCCTCCTAAAGAGACAC
TGCCTGATTCAGGATTTTCTGCCAATATTGAGGATATTAATGAAGCAGATTTAGTGAGACCGTTACTTCCTAAGG
ACATGGAACGTCTTACAAGCCTTAGAGCTGGCATTGAAGGACCTTTACTTGCAAGTGATGTTGGACGTGACAGAT
CTGCTGCCAGCCCGGTTGTAAGTAGTATGCCAGAAAGAGCTTCAGAGTCTTCTTCAGAGGAAAAAGATGATTATG
AAATTTTTGTAAAAGTTAAGGACACTCACGAAAAAAGCAAGAAAAATAAGAACCGTGATAAGGGGGAGAAAGAGA
AGAAAAGAGACTCTTCATTAAGATCTCGAAGTAAGCGTTCCAAATCTTCTGAACACAAATCACGCAAGCGTACCA
GTGAATCTCGTTCTAGGGCAAGAAAGAGATCATCTAAGTCCAAGTCTCATCGCTCTCAGACACGTTCACGGTCAC
GTTCAAGACGCAGGAGGAGAAGCAGCAGATCAAGATCAAAGTCTAGAGGAAGAAGATCTGTATCAAAAGAGAAGC
GCAAAAGATCTCCAAAGCACAGATCCAAGTCTAGGGAAAGAAAAAGAAAAAGATCAAGCTCCAGGGATAACCGAA
AGACAGTTAGAGCTCGAAGTCGAACCCCAAGTCGTCGGAGTCGGAGTCATACTCCAAGTCGTCGACGAAGGTCTA
GATCTGTGGGTAGAAGAAGGAGCTTTAGCATTTCCCCAAGCCGCCGCAGCCGCACCCCCAGCCGCCGCAGCCGCA
CCCCCAGCCGCCGCAGCCGCACCCCCAGCCGCCGCAGCCGCACCCCCAGCCGCCGGAGCCGCACCCCTAGCCGTC
GGAGCCGCACCCCAAGCCGCCGGAGAAGATCAAGGTCTGTGGTAAGAAGACGAAGCTTCAGTATCTCACCAGTCA
GATTAAGGCGATCAAGAACACCCTTAAGAAGAAGGTTTAGCAGATCTCCCATCCGTCGTAAAAGATCCAGGTCTT
CTGAACGAGGCAGATCACCCAAACGTCTGACAGATTTGGATAAGGCTCAATTACTTGAAATAGCCAAAGCTAATG
CAGCTGCCATGTGTGCTAAGGCTGGTGTCCCTTTACCACCAAACCTAAAGCCTGCACCTCCACCTACTATAGAAG
AGAAAGTTGCTAAAAAGTCAGGAGGAGCTACTATAGAAGAACTAACTGAGAAATGTAAACAGATCGCACAGAGTA
AAGAAGATGATGATGTAATAGTGAATAAACCTCATGTTTCGGATGAAGAGGAAGAAGAACCTCCTTTTTATCATC
ATCCCTTTAAACTCAGTGAACCCAAACCTATTTTTTTCAATCTGAATATTGCTGCAGCAAAACCAACTCCACCAA
AAAGCCAGGTAACATTAACAAAAGAATTCCCTGTATCATCTGGATCTCAACATCGGAAAAAAGAAGCGGATAGTG
TTTATGGAGAATGGGTTCCTGTGGAGAAAAATGGTGAAGAAAACAAAGATGATGATAATGTTTTCAGCAGCAATT
TGCCCTCAGAGGGCCGGGTTAAACGGCAGGGCCGGGTTAGACGACAGATGAAACAACCCGCAGCTTCTCATTTGA
CAGTAACTCGATGCAATTCACTTTGTGGAACCAAGCCACAAAGTGAAAAGCATCGAATTGCAGAGAACAGTGTTA
TCACATCCCTACCCAACATTGGGCCCTCCCTGCACTTGTGGGAAGGTAGTCCAAGGTACAACTATTTAGCTTCCC
GATTTGCTTCAAGGCTCTATAGCTCTAGATTTTGGTGG**TAG**CAAATTTATCGGGTGGAGGGATTGATCGGAGAGG
GCAGATCCTCAGGTTCAACACAAGAACTGGATTGGAAAAGGTCATTGTAGGTTGATGTGAGCATCTTGGGTACAT
AGCCCATTGCCCTTAATGATGGTTTCTTACTGTTTCTCTGGGTTGTTTGTCAGATAGCCTTTAATTTTAATTATT
TTTCCTTCCCTTTGCTACCTTGGCCCTTTTAAATTCTTGTGTTTAACCTAATGCTCAGCCTTGGTACTCCATTCC

FIGURE 2930C

CTTCTCCTTCCCCTCTTTGCTACTATTAAAAGTCGGAGAAGTGGAATTCAAACGTTGAAATTTCCACGGGGCTAT
AGTTGTATCTTAATAATGCCAAGTGTCAAAACAACCCCATTAAAATGCCGCCTGATTAAATAATGTGCTGCTAAA
TATAGTGCACATGAAAACAGCAAGACTGTATATATATGTAAATATATATATATATCTGTATCTTTGTATGTATCT
CTGTATCTGTACCTTTGCTGTATCTTTTAATAAACAGTTTACTTTT

FIGURE 2931

MATNIEQIFRSFVVSKFREIQQELSSGRNEGQLNGETNTPIEGNQAGDAAASARSLPNEEIVQKIEEVLSGVLDT
ELRYKPDLKEGSRKSRCVSVQTDPTDEIPTKKSKKHKKHKNKKKKKKKEKEKKYKRQPEESESKTKSHDDGNIDL
ESDSFLKFDSEPSAVALELPTRAFGPSETNESPAVVLEPPVVSMEVSEPHILETLKPATKTAELSVVSTSVISEQ
SEQSVAVMPEPSMTKILDSFAAAPVPTTTLVLKSSEPVVTMSVEYQMKSVLKSVESTSPEPSKIMLVEPPVAKVL
EPSETLVVSSETPTEVYPEPSTSTTMDFPESSAIEALRLPEQPVDVPSEIADSSMTRPQELPELPKTTALELQES
SVASAMELPGPPATSMPELQGPPVTPVLELPGPSATPVPELPGPLSTPVPELPGPPATAVPELPGPSVTPVPQLS
QELPGLPAPSMGLEPPQEVPEPSVMAQELPGLPLVTAAVELPEQPAVTVAMELTEQPVTTTELEQPVGMTTVEHP
GHPEVTTATGLLGQPEATMVLELPGQPVATTALELPGQPSVTGVPELPGLPSATRALELSGQPVATGALELPGPL
MAAGALEFSGQSGAAGALELLGQPLATGVLELPGQPGAPELPGQPVATVALEISVQSVVTTSELSTMTVSQSLEV
PSTTALESYNTVAQELPTTLVGETSVTVGVDPLMAPESHILASNTMETHILASNTMDSQMLASNTMDSQMLASNT
MDSQMLASSTMDSQMLATSSMDSQMLATSSMDSQMLATSTMDSQMLATSSMDSQMLATSSMDSQMLATSSMDSQM
LATSSMDSQMLATSTMDSQMLATSTMDSQMLATSSMDSQMLASGTMDSQMLASGTMDAQMLASGTMDAQMLASST
QDSAMLGSKSPDPYRLAQDPYRLAQDPYRLGHDPYRLGHDAYRLGQDPYRLGHDPYRLTPDPYRMSPRPYRIAPR
SYRIAPRPYRLAPRPLMLASRRSMMMSYAAERSMMSSYERSMMSYERSMMSPMAERSMMSAYERSMMSAYERSMM
SPMAERSMMSAYERSMMSAYERSMMSPMADRSMMSMGADRSMMSSYSAADRSMMSSYSAADRSMMSSYTADRSMM
SMAADSYTDSYTDTYTEAYMVPPLPPEEPPTMPPLPPEEPPMTPPLPPEEPPEGPALPTEQSALTAENTWPTEVP
SLPSEESVSQPEPPVSQSEISEPSAVPTDYSVSASDPSVLVSEAAVTVPEPPPEPESSITLTPVESAVVAEEHEV
VPERPVTCMVSETPAMSAEPTVLASEPPVMSETAETFDSMRASGHVASEVSTSLLVPAVTTPVLAESILEPPAMA
APESSAMAVLESSAVTVLESSTVTVLESSTVTVLEPSVVTVPEPPVVAEPDYVTIPVPVVSALEPSVPVLEPAVS
VLQPSMIVSEPSVSVQESTVTVSEPAVTVSEQTQVIPTEVAIESTPMILESSIMSSHVMKGINLSSGDQNLAPEI
GMQEIALHSGEEPHAEEHLKGDFYESEHGINIDLNINNHLIAKEMEHNTVCAAGTSPVGEIGEEKILPTSETKQR
TVLDTYPGVSEADAGETLSSTGPFALEPDATGTSKGIEFTTASTLSLVNKYDVDLSLTTQDTEHDMVISTSPSGG
SEADIEGPLPAKDIHLDLPSNNNLVSKDTEEPLPVKESDQTLAALLSPKESSGGEKEVPPPPKETLPDSGFSANI
EDINEADLVRPLLPKDMERLTSLRAGIEGPLLASDVGRDRSAASPVVSSMPERASESSSEEKDDYEIFVKVKDTH
EKSKKNKNRDKGEKEKKRDSSLRSRSKRSKSSEHKSRKRTSESRSRARKRSSKSKSHRSQTRSRSRSRRRRRSSR
SRSKSRGRRSVSKEKRKRSPKHRSKSRERKRKRSSSRDNRKTVRARSRTPSRRSRSHTPSRRRRSRSVGRRRSFS
ISPSRRSRTPSRRSRTPSRRSRTPSRRSRTPSRRSRTPSRRSRTPSRRRRSRSVVRRRSFSISPVRLRRSRTPLR
RRFSRSPIRRKRSRSSERGRSPKRLTDLDKAQLLEIAKANAAAMCAKAGVPLPPNLKPAPPPTIEEKVAKKSGGA
TIEELTEKCKQIAQSKEDDDVIVNKPHVSDEEEEEPPFYHHPFKLSEPKPIFFNLNIAAAKPTPPKSQVTLTKEF
PVSSGSQHRKKEADSVYGEWVPVEKNGEENKDDDNVFSSNLPSEGRVKRQGRVRRQMKQPAASHLTVTRCNSLCG
TKPQSEKHRIAENSVITSLPNIGPSLHLWEGSPRYNYLASRFASRLYSSRFWW

FIGURE 2932

ACGCCCTATACAACTTGGCTTCACATACTTTTACACTAACTTTATATGATTTTTAAAAACTGGTCTGATCGGACT
TCTCGTCCTGGGACACTGTTTACTGGAGTCTGGCCGGCTCTCCGTGCTCCTCTTGGTACCTCATTTTGGGGAGAA
CCTTAAACCCACTCGAGCAGATAATCTCCGCCTTGACCGGTGCCACCAAAGAAGGGTTGGAACCATGTGGACTTT
TCTGGGCATTGCCACTTTCACCTATTTTTATAAGAAGTTCGGGGACTTCATCACTTTGGCCAACAGGGAGGTCCT
GTTGTGCGTGCTGGTGTTCCTCTCGCTGGGCCTGGTGCTCTCCTACCGCTGTCGCCACCGAAACGGGGGTCTCCT
CGGGCGCCAGCGGAGCGGCTCCCAGTTCGCCCTCTTCTCGGATATTCTCTCAGGCCTGCCTTTCATTGGCTTCTT
CTGGGCCAAATCCCCCCCTGAATCAGAAAATAAGGAGCAGCTCGGGGCCAGGAGGCGCAGAAAAGGAACCAATAT
TTCAGAAACAAGCTTAATAGGAACAGCTGCCTGTACATCAACATCTTCTCAGAATGACCCAGAAGTTATCATCGT
GGGAGCTGGCGTGCTTGGCTCTGCTTTGGTAGCTGTGCTTTCCAGAGATGGAAGAAAGGTGACAGTCATTGAGAG
AGACTTAAAAGAGCCTGACAGAATAGTTGGAGAATTCCTGCAGCCGGGTGGTTATCATGTTCTCAAAGACCTTGG
TCTTGGAGATACAGTGGAAGGTCTTGATGCCCAGGTTGTAAATGGTTACATGATTCATGATCAGGAAAGCAAATC
AGAGGTTCAGATTCCTTACCCTCTGTCAGAAAACAATCAAGTGCAGAGTGGAAGAGCTTTCCATCACGGAAGATT
CATCATGAGTCTCCGGAAAGCAGCTATGGCAGAGCCCAATGCAAAGTTTATTGAAGGTGTTGTGTTACAGTTATT
AGAGGAAGATGATGTTGTGATGGGAGTTCAGTACAAGGATAAAGAGACTGGAGATATCAAGGAACTCCATGCTCC
ACTGACTGTTGTTGCAGATGGGCTTTTCTCCAAGTTCAGGAAAAGCCTGGTCTCCAATAAAGTTTCTGTATCATC
TCATTTTGTTGGCTTTCTTATGAAGAATGCACCACAGTTTAAAGCAAATCATGCTGAACTTATTTTAGCTAACCC
GAGTCCAGTTCTCATCTACCGGATTTCATCCAGTGAAACTCGAGTACTTGTTGACATTAGAGGAGAAATGCCAAG
GAATTTAAGAGAATACATGGTTGAAAAAATTTACCCACAAATACCTGATCACCTGAAAGAACCATTCTTAGAAGC
CACTGACAATTCTCATCTGAGGTCCATGCTAGCAAGCTTCCTTCCTCCTTCATCAGTGAAGAAACGAGGTGTTCT
TCTTTTGGGAGACGCATATAATATGAGGCATCCACTTACTGGTGGAGGAATGACTGTTGCTTTTAAAGATATAAA
ACTATGGAGAAAACTGCTAAAGGGTATCCCTGACCTTTATGATGATGCAGCTATTTTCGAGGCCAACAAATCATT
TTACTGGGCAAGAAAAACATCTCATTCCTTTGTCGTGAATATCCTTGCTCAGGCTCTTTATGAATTATTTTCTGC
CACAGATGATTCCCTGCATCAACTAAGAAAAGCCTGTTTTCTTTATTTCAAACTTGGTGGCGAATGTGTTGCGGG
TCCTGTTGGGCTGCTTTCTGTATTGTCTCCTAACCCTCTAGCTTTAATTGGACACTTCTTTGCTGTTGCAATCTA
TGCCGTGTATTTTTGCTTTAAGTCAGAACCTTGGATTACAAAACCTCGAGCCCTTCTCAGTAGTAGTGCTGTATT
GTACAAAGCGTGTTCTGTAATATTTCCTCTAATTTACTCAGAAATGAAGTATATGGTTCATTAAGCTTAAAGGGG
AACCATTTGTGAATGAATATTTGGAACTTACCAAGTCCTAAGAGACTTTTGGAAGAGGATATATATAGCATAGTA
CCATACCACTTATAAAGTGGAAACTCTTGGACCAAGATTTGGATTAATTTGTTTTTGAAGTTTTTTGTATATAAA
TATGTAAATACATGCTTTAATTTGCAATTTAAAATGAAGGGGTTAAATAAGTTAGACATTTGAAAGAAATGATTG
TTACCATAAATTAGTGCTAATGCTGAGGAGAACTACAGTTTTTCTTTTGAATTTAGTATTTGAGATGAGTTGTTG
GGACATGCAAATAAAATGAAGAATGAC

FIGURE 2933

MWTFLGIATFTYFYKKFGDFITLANREVLLCVLVFLSLGLVLSYRCRHRNGGLLGRQRSGSQFALFSDILSGLPF
IGFFWAKSPPESENKEQLGARRRRKGTNISETSLIGTAACTSTSSQNDPEVIIVGAGVLGSALVAVLSRDGRKVT
VIERDLKEPDRIVGEFLQPGGYHVLKDLGLGDTVEGLDAQVVNGYMIHDQESKSEVQIPYPLSENNQVQSGRAFH
HGRFIMSLRKAAMAEPNAKFIEGVVLQLLEEDDVVMGVQYKDKETGDIKELHAPLTVVADGLFSKFRKSLVSNKV
SVSSHFVGFLMKNAPQFKANHAELILANPSPVLIYRISSSETRVLVDIRGEMPRNLREYMVEKIYPQIPDHLKEP
FLEATDNSHLRSMLASFLPPSSVKKRGVLLLGDAYNMRHPLTGGGMTVAFKDIKLWRKLLKGIPDLYDDAAIFEA
NKSFYWARKTSHSFVVNILAQALYELFSATDDSLHQLRKACFLYFKLGGECVAGPVGLLSVLSPNPLALIGHFFA
VAIYAVYFCFKSEPWITKPRALLSSSAVLYKACSVIFPLIYSEMKYMVH

FIGURE 2934

GTTTTCAGTCATGTTGTTTCTTTAAGTTGGTTTAGCCTTCCTGTATACATGTGATAATGATACTGTTTTAAAGAA
CAGGTGTGAAAGTCTAAGAGTTTAATCCAGACTCTGCACAAGAAGTTAATCTGCCAAACCCTAGGATTCTCCTTC
TGAAAGCTCAGAATATTTCTTCCCCTTCCCTATACACACAGGGCTCGAAGGGTTAGAGAAGAAAGGCAGACAACA
GCTTCTGAGCTTTGGACTAATCACAGCCTCTGTTCTCAGCAGGAGCCCCAACACTGAGACCAGAAAAG**ATG**GTGC
TATGCTTTCCTCTTCTTTTACTGCTGCTGGTTCTATGGGGACCAGTGTGTCCACTTCATGCTTGGCCTAAGCGTC
TCACCAAGGCTCACTGGTTTGAAATTCAGCATATACAGCCAAGTCCTCTCCAATGCAACAGGGCAATGAGTGGCA
TCAACAATTATACCCAGCACTGTAAGCATCAAAATACCTTTCTGCATGACTCTTTCCAGAATGTGGCTGCTGTCT
GTGATTTGCTCAGCATTGTCTGCAAAAATCGTCGGCACAACTGCCACCAGAGCTCAAAGCCTGTCAACATGACTG
ACTGCAGACTCACTTCAGGAAAGTATCCCCAGTGCCGCTATAGTGCTGCTGCCCAGTACAAATTCTTCATTGTTG
CCTGTGACCCCCCTCAGAAGAGCGATCCCCCCTACAAGTTGGTTCCTGTACACTTAGATAGTATTCTC**TAA**GGCA
TCCACTGCATTTCCTTTCATTTGACATAGCTTCTGTTACAATTGCATCCACGTTTTCTTTTCTTTTGTTGATTTT
CTTGTTCCCGTAGAAGAAAGAAGAAAGGTGTTTGGAGAATTCGAGTGCCTAGGATGCCAGACCAGAGTTGAGACA
AAAAGAAATAAGATTATTTTCTGCTTTGTAGTTCTGTACTTTTCGAGAGAAGGGAATAGGGAAGACAGCAAAGAA
AGATTCAGATTTCTAACCCTGCAACTTTTGCCAAGCTTTATTGCCCTGTGTTCACAGCAATAAAACCACTTCCTG
CTGCATTCTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2935

MVLCFPLLLLLLVLWGPVCPLHAWPKRLTKAHWFEIQHIQPSPLQCNRAMSGINNYTQHCKHQNTFLHDSFQNVA
AVCDLLSIVCKNRRHNCHQSSKPVNMTDCRLTSGKYPQCRYSAAAQYKFFIVACDPPQKSDPPYKLVPVHLDSIL

FIGURE 2936

GGCCACCATTTTACTCTTTTTAGGTACAGTAATCTAATATCCAAAGTCTTGGACTCAGCTAAAGAGGGTATTTAC
CTTNNNNNNNNNNNNNNNNNCTCCATCTTTGGATCCATAATGGTGGGGGGGGCGGGGAATCAAGACAACCTTAG

TCACTTGGGTATTACCATAATTCTGTCTTTTCAGGGTGTCCTGTTCAGCTGCATAAAACATCATGTATTCTAGGT
ATTTCCTACCTTCACTTACATTTTTACTTGCCGATGTGCTGCCTTCATAAATGGGTATATTCCGCCACACATCTA
GTAAGCCCCCAATGCAGTACACAATGTGTATCACTGATAAAACTCGCACTTCTGCCATGTCAGTATTATATTCAG
TTGAGTGGTCTTTAGCATAGTGGCAGTCCTAGTCATCCTAACCTTTTAGTTAAGGTAAAATTACATATGTTTATA
GAACTCATATAGACAAGCTAGTTTTTAAAATCTTCCTTTTAACCAGTTTAGGATGATCTAGGATAGCTAAGTTAC
CTACATGGTGACTGTTCGGTCTAATTCAGAAACAGAAGTACTAAAAGAATACTAAAAAGTTTTTACCCATTATCT
CTATCCCTGTTTTCTTTTTGCAATTCTCAGCTGCAGGGAGCAAGAAAATACACAGCAGATAGGAAATGTTTGTTT
GCATCCTGGCTTTCTCAACCGCACTTTACGTCCTTGAATATTCTAGATATTTACTCCTTCAAGAAGTCAGGAGTA
TATCCAGGCCTACCTATCATCCTTGCCATCCCCATTAACCCTCATTTTTCAGTATGTGTTTTACATTTATGGTTA
TTTTTCAGTCTATAGTATCTGTTCACTCATTGCTCTATCACATCTGAGTTTCTCCGTCTTTCTTTCCACTAGATT
GTAAGCTCCTTAAGGGCAAGGTCGGCATATAAGCAAAGTTCTGTAAACACCGTGAAGGTACCATGAGTTCTATGG
GTACTCAATAAATGCTTGTGATAATGATGCAATTTCTCAGATGAACTGATTGTAGTGACTACCTCTAAAAGCCTT
CAATCTACAGTTTTTAAATTTGTCTCATTGCATCTGAGTTTTAGAAAGCCTTCCGATAGAAAGGGGAGATACTTC
ATAGCTTGCCAGATGAATGCCC

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FIGURE 2937

GHHFTLFRYSNLISKVLDSAKEGIYLXXXXXXLHLWIHNGGGGGESRQP

FIGURE 2938

CCGCCGCCGCCATCTGAGGGAGGTACCCTGGAAACCACCTTTTATCGGTGGGGAAGTGCAGTCGCGGTGGGCGGC
TCTGGGGGCCAGCGAAACGGGAGGCCTCTAAATCTTTAGGTTGGGGCTGCATTGCCCTGGAGCCGCACTCTTGAG
TCCGAGGCCATCTTTTGTTGGAGAAGGCGTCGGCGTTGGCGTTTTCCCGAGGTTGGGCTGTACAGTGTCTCCGTC
CGCGGAAAAAGAAGCCTCTGAACCCGCGCCGGCCCGCAGCCCCCGTGCCTTCCGGCCGCTGCTCGCCGTCGCCAG
AGGCTAGGCCACGTTTCCCCCAGTGCCGAGGTGTTTCTGTGACCCTCCCTCCACTCCCATTCCCTTCTGAAAGGG
CACCTGCTCTTGGTGAGAAAAGAAATTATAGCACGAAGAGCCAGTATCAGAAGAGTATCCATCACCCGCAGCAAC
CGCTCAGGGAACACCATCAAAAAAAAAAAAAAAAAAA

FIGURE 2939

GGCTGCGCCCCACGCCAGCCCGCGCCCCGGGATGGCTGCCGCCGGGGCCAGGCCTGTGGAGCTGGGCTTCGCCGA
GTCGGCGCCCGCTCTCCTTCCTGCTGCAGGTGTATGCGCCGCTGCCTGGCCGCCCGGACGCCTTCCACCGCTGCA
TCTTCCTCTTCTGCTGCCGCGAGCAGCCGTGCTGTGCCGGCCTGCGAGTTTTTAGGAATCAACTACCCAGGAAAA
ACGATTTTTACTCATATGAGCCACCTTCTGAGAATCCTCCCCCAGAAACAGGAGAATCAGTGTGTCTCCAGCTTA
AGTCTGGTGCTCATCTCTGCAGGGTTTGTGGCTGTTTAGGCCCCAAAACGTGCTCCAGATGCCACAAAGCATATT
ACTGCAGCAAGGAGCATCAGACCCTAGACTGGAGATTGGGACATAAGCAGGCTTGTGCACAACCCAGATCATCTG
GACCATATAATTCCAGACCACAACTTCCTTTTTCCAGAATTTGAAATTGTAATAGAAACAGAAGATGAGATTATG
CCTGAGGTTGTGGAAAAGGAAGATTACTCAGAGATTATAGGGAGCATGGGGATATAATGGGAAGCAACACTCCAG
TGGTCAGATGCTCACAGTCTTATGGAGGAGCCCAAATAATATCTGGGGAAGTTAAAGTCCATATAATGACTGATA
AGAGTACAATACAGGTGCCATGGGAACACGTGACATCACTGAAGACTGCCTGGAAGGGGCCGCGCGTGTGTTCAT
GCCTATACGATAAACATGATACATAATGAAAATGCTTATCTTTAGGAGAAAGGAGAGCCTAGAGTAGCAGGATCA
AGGATGAAAGCTGGACTTCAAATATGCCTTGTTAGTGTAAATGTGACTGTGGAACTGTATGAGTATTTTAAGATT
ATGGAGTAAAGTAAGTTTTAAAAAGCAGTCCCTAATCATCAAAAGTAAAAAACTCTTGATGTAGTCATATAACCA
CACTAAGAACTCTTCCAGGTGACTTCAAAACATAGGACAGTACATCTCTAGTAGAATATGCCCTGAGAATGAAAA
GAATGTAACAGTGTTAGTATTTTGAATAAACATGTTATTACTAGACTGTTGCTTTTATTTTGAGATGGTTGTGTG
TGTATTGGGGGGAAAGGAAACGAGTAATTATGTTGGTGTTACTGAGAACTGAGATGTTGGGCGTAGGAGGAAGAT
AATGTTGATTGTGTCTACGTACCATTTCTCTCTAAAAGGAACTCCAGGCTCTTTGGAGAGGTGGTTGATTCCAGA
ACTAGGTCAGGAAACGTTCATATAATGTGGGAACATGGTCATATCAAAGATTAAGGATAAGGATTACTAGGGCCA
TGTCAGAACTCAAGCAACATGAAAAGGCTCCTGCTTGCAAAAGATGGACAGTTTGAACATCCACAAGGACGCTAA
CTGCATCAGATATGTTTAATGGGTTCAAAATGATACTTTAAAAAAACTCAGTAATCATCTTTATAGGATACTTGG
GAACAGACTCATTTTCAAATTGGTAAATAAAAGGAAAGAGTTTGCCTTCGAGGGGTACATAACTTAATTATGAAT
GAAGTGATATGTGTGGAATTTACTTCAGAGTAATGGAGGTGGAAGTGGCAGAGAAAGGAAACACTGGACTTGATA
GTGTTGAAACTGATTAATGATATGTGGCGGTTCATTATAGTATTTCCACTTTTCTGTATGTCCAAAATTTTCTAA
AATAAAAGGAGAATTGAATAGAAAAATGCTTCCTGGAGGTAGCTGTGTCTTACCTGAGACTTGGCAGGAGGCAGT
AGGGCCTGAGGGAACAGCATTTACAGTGTCCTAACGGTTATACTGAAACTTTCCACGTATACTTGATGGAACATC
AATCTGGAAGGCATCC

FIGURE 2940

LRPTPARAPGWLPPGPGLWSWASPSRRPLSFLLQVYAPLPGRPDAFHRCIFLFCCREQPCCAGLRVFRNQLPRKN
DFYSYEPPSENPPPETGESVCLQLKSGAHLCRVCGCLGPKTCSRCHKAYYCSKEHQTLDWRLGHKQACAQPRSSG
PYNSRPQLPFSRI

FIGURE 2941

GCCAAA**ATG**AAGTTTAATCCCTTTGTGACTTCCGACCGAAGCAAGAATCGCAAAAGGCATTTCAATGCACCTTCC
CACATTCGAAGGAAGATTATGTCTTCCCCTCTTTCCAAAGAGCTGAGACAGAAGTACAACGTGCGATCCATGCCC
ATCCGAAAGGATGATGAAGTTCAGGTTGTACGTGGACACTATAAAGGTCAGCAAATTGGCAAAGTAGTCCAGGTT
TACAGGAAGAAATATGTTATCTACATTGAACGGGTGCAGCGGGAAAAGGCTAATGGCACAACTGTCCACGTAGGC
ATTCACCCCAGCAAGGTGGTTATCACTAGGCTAAAACTGGACAAAGACCGCAAAAAGATCCTCGAACGGAAAGCC
AAATCTCGCCAAGTAGGAAAGGAAAAGGGCAAATACAAGGAAGAAACCATTGAGAAGATGCAGGAA**TAA**AGTAAT
CTTATATACAAGCTTTGATTAAAACTTGAAACAAAAAAAAAGGGGAAGAAACGACAGCCTCACTTCTGTATGGAC
TGCTGATGTGGCCTGCCATCCTGTTCAGCGGGCATTGTCTTTGGAGCAGCAGGAGACTAGGATGCCTCTCACTCA
CATCGAGTTCCTGGCTGGCCAGCTGCTCAGGGCTCAGGCTGGGGCCTCCCATTGACATCCTCCCCCTACACTCCC
TCTCTGAGCCTCCGTCGCCCCTCCTGTTGGGTAAGGGTGTTGAGTGTGACTTGTGCTGAAAACCTGGTTCATATA
TAATAAATAATGGTGATGAAAAG

FIGURE 2942

MKFNPFVTSDRSKNRKRHFNAPSHIRRKIMSSPLSKELRQKYNVRSMPIRKDDEVQVVRGHYKGQQIGKVVQVYR
KKYVIYIERVQREKANGTTVHVGIHPSKVVITRLKLDKDRKKILERKAKSRQVGKEKGKYKEETIEKMQE

FIGURE 2943

GGGAAGATGGCGGCTCAGCCGCTGCGGCATCGCTCACGTTGTGCAACGCCGCCCCGGGGGGACTTTTGTGGTGGC
ACTGAGAGGGCGATTGACCAAGCTTCTTTTACGACCTCCATGGAGTGGGATACGCAGGTGGTGAAGGGGTCCTCG
CCGCTCGGCCCCGCAGGGCTGGGGGCTGAGGAGCCAGCCGCCGGCCCGCAGCTGCCGTCTTGGCTGCAGCCTGAG
AGGTGCGCTGTGTTCCAGTGCGCACAGTGTCACGCAGTGCTCGCCGACTCGGTGCACCTCGCCTGGGACCTGTCG
CGGTCCCTCGGGGCCGTGGTCTTCTCCAGAGTTACAAATAACGTCGTTTTGGAAGCGCCCTTCCTAGTTGGCATT
GAAGGTTCACTCAAAGGCAGTACTTACAACCTTTTATTCTGTGGTTCTTGTGGGATTCCCGTTGGTTTCCATCTG
TATTCTACCCATGCTGCCCTGGCTGCCTTGAGAGGTCACTTCTGCCTTTCCAGTGACAAAATGGTGTGCTATCTC
TTAAAAACAAAAGCCATAGTAAATGCATCAGAGATGGATATTCAAAATGTTCCTCTATCAGAAAAGATTGCAGAG
CTGAAAGAGAAGATAGTGCTAACGCACAATCGCTTAAAATCACTAATGAAGATTCTGAGTGAAGTGACTCCTGAC
CAGTCCAAGCCAGAAAAC**TGA**TCCTGTACCAAAGCTTGAGTGTCAGGTTCAGGCTTTATTGCTGTCTTCAACAAC
AGGTGCTGCTTAGTCATTTCTTGAAAAAGATTGGCTTCAAGAATGGAGGGGAAATGCAGTTTCTATTTACCTTTA
GGCTGATTTTCCAAATTATTTGTGAAGCTGTTTTTAGAAGATGAGAGACTAAGGATTCTTCTCTTTTATAGCTAT
TTGCCTTAAGAACTTACTTTAGATTCTTATTGAATTCATAATACTTATCTCTGAAAATGTCTTTGACTGTAAATT
TAGGAATTAAGATGCAGAGTCCCATGTGTCCTCTGATCTAAAGTTGCATGGTTGGTCTGAAAATAGAGTTGGGCT
TAATGTTGACTTCTATTACTCCTGCATGGAGCAGTTGTTATGAATACTAATACATCACTTTTTAACTTCTGTAAA
ATACAGATCATAATATTCTATAGGTAATGTTTAATAAATTGCCTGAATAATAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2944

GKMAAQPLRHRSRCATPPRGDFCGGTERAIDQASFTTSMEWDTQVVKGSSPLGPAGLGAEEPAAGPQLPSWLQPE
RCAVFQCAQCHAVLADSVHLAWDLSRSLGAVVFSRVTNNVVLEAPFLVGIEGSLKGSTYNLLFCGSCGIPVGFHL
YSTHAALAALRGHFCLSSDKMVCYLLKTKAIVNASEMDIQNVPLSEKIAELKEKIVLTHNRLKSLMKILSEVTPD
QSKPEN

FIGURE 2945

CCAAGAAAGCCTCTGAAGTTGACTGAATTGCTCTATTCTGTAGCCAGTTTACCACCTGCTGCTGTGTGCTGAGTT
CCAGTAAAATCACCTTGTCTAAATAAGTGTATCATCAAGGATCCCTCTTTTCAGGGACTGGATAAAATGGCTACA
AGAACTGTCCCAGGCAGCCAGCTCTTCCTGTATAAATACCACGTTTTTATTCAGTTCTTATTTGAAAATTGCGAT
TTAAAAAACTATAATTATTCCCTTGGGTACATGACAAGTGTTTTTTTGGAAAAGCAACTTTATTTCCTAGCCCAT
TGCCCTGCCCAAAAGCATCTGGCTGTTCCCCAGTGGGATCGCTCTCCCCAAAGAGCAGTGAGGGCTTAAAAGCAT
TTTTAGGCAGATACTATTAGGGGCGAAGTCTCTCTCTGAAGGGAAACAAAATTTTTGGTTAGTTTTCTGAAAGAG
AAAAAGCCAAACCCTCTGCTTAGCTGGGCCAACTGAATAGTCCACATACTGCAGTGACCTCTCATAGTTCAGGAA
AACTGCTGCTGACACAGAGGAACACAAGGCCCCCTATTACCTTGTGGCTCATTTAATGTGCTACCTGTAACATGC
TATGCATGCCTCTGGAATATCTTTAAATTCTGAACCAAGACCCATGTATTCCTATTTCCATCTGCACCAGATAAC
TTATAATATCAAA**ATG**AATAGAAGAAAATGTGTTCACTGGAAACTGGCTGTTGAGCCCCTCCAATGGGAGCTGAG
GAGCTGTGTCTCTGCAGGCATGGGGACTGGCCACAAGCAAAGAGTCAGCAGCATGAAGCCCCGGAGCTGTAGCGT
GTGCAGCAGGCGCCAATCCAACAGCATGGGAACAACAGTGTCGCAATCATTCCTCAGT**TAA**TAACCAAGAATGTG
CTATTTTTCACTGTTAGGTGTTGCTTCTGAGAACTACAAATAAAACTCTCCAAC

FIGURE 2946

MNRRKCVHWKLAVEPLQWELRSCVSAGMGTGHKQRVSSMKPRSCSVCSRRQSNSMGTTVSQSFLS

FIGURE 2947A

GCGGCCGCCGCCAGGCAGCAGAGGCGACTGCGGACAGCCGGCGGGGACCGGGAAAGAGGAGGCCTGGCGCCTCCG
GCAGAGGGGCGAGGACCGAGCGCCCAAGGCTGGGAGAGACGCCGGCGCTGAGCTTCCCAGCGCCGCCTCACCTCG
CTTTTCGAACTCCGCGACCCGAGCGCAAGGCTTAAGCAGGTAAAGCAGTCACTGTGAAGAAAATAACATTTTAAG
AAACTTTTCTGTCACAATTGATAGAGGAAAAGCCAGTAGAGAAGTACATCTTCTTGTGTGTGTGTCTCATCGTGC
CACTTTTTGTAACTCAGCTTAGTAATGAAGCCACCATT**ATG**TCCTCAGTCAGTGAAGTAAATGTGGATATAAAAG
ATTTCCTAATGAGCATTAATTTGGAGCAGTATCTCTTACATTTCCATGAGTCTGGTTTTACTACTGTGAAGGACT
GTGCAGCAATAAATGACAGCCTGCTGCAGAAAATTGGAATATCACCTACAGGTCACCGTAGGAGGATACTTAAAC
AGTTACAGATAATCTTGTCAAAAATGCAAGATATTCCAATATATGCAAATGTTCATAAAACTAAGAAGAATGATG
ACCCTTCAAAGGATTACCATGTTCCATCTTCTGATCAGAATATCTGCATAGAACTTTCCAATTCTGGTAGTGTTC
AGACATCTAGCCCACCGCAGTTGGAGACTGTTAGAAAAAATCTTGAAGACAGTGATGCAAGTGTGGAAAGAAGCC
AGTATCCTCAATCAGATGATAAGCTGTCTCCTCCTAAACGCGACTTCCCCACTGCAGAGGAACCACACCTGAATT
TGGGTTCTTTGAATGATTCTTTATTTGGTAGTGACAATATTAAAATAGAATCATTGATTACAAAGAAGACTGTGG
ATCACACAGTTGAAGAACAACAAACAGAAAAAGTTAAATTGATCACAGAAAATCTCAGTAAGCTCCCTAATGCAG
ACTCTGAATGCCTTTCTTTTGTTGGCTGTTCAACATCAGGAACAAATTCTGGAAATGGAACAAATGGTTTATTAG
AAGGATCACCACCATCCCCATTCTTTAAGTTTCAAGGAGAAATGATTGTAAATGACTTGTATGTTCCATCATCAC
CAATCCTAGCACCTGTGAGAAGTCGTAGCAAGTTGGTTTCAAGACCATCTCGATCTTTTCTGCTAAGACATCGAC
CTGTACCAGAGATTCCAGGGTCAACAAAAGGAGTTTCTGGGAGCTATTTCCGTGAAAGAAGAAATGTTGCTACCT
CAACTGAAAAATCTGTGGCATGGCAAAATTCAAATGAGGAGAATTCATCTTCCATCTTTCCTTATGGAGAGACCT
TTCTCTTCCAGAGACTAGAAAATTCCAAGAAGCGATCTATAAAGAATGAATTTTTGACCCAGGGAGAAGCACTCA
AAGGGGAAGCAGCTACTGCAACAAACTCTTTTATCATCAAATCAAGCATATACGATAACAGAAAGGAGAAAATAA
GCGAGGACAAGGTGGAAGATATTTGGATACCTCGAGAGGACAAAAACAATTTTTTGATAGACACTGCTTCTGAAT
CAGAATACTCAACAGTAGAAGAATGCTTTCAGAGTTTAAGAAGAAAAAATTCAAAGGCATCTAAATCTAGGACTC
AAAAAGCCTTGATTTTGGACTCCGTTAATAGGCACAGTTATCCGTTAAGCTCAACAAGTGGAAATGCTGATTCAT
CAGCCGTTTCTTCACAGGCAATATCTCCCTATGCCTGCTTTTATGGAGCATCTGCAAAGAAGGTTAAATCAGGAT
GGCTGGATAAACTCTCTCCTCAAGGAAAACGCATGTTTCAAAAGAGATGGGTGAAATTTGATGGCCTTAGCATTT
CTTACTACAATAATGAGAAGGAGATGTATTCGAAAGGAATAATTCCCCTTTCTGCTATATCAACAGTACGAGTTC
AAGGAGACAACAAATTTGAAGTTGTTACAACACAAAGAACTTTTGTTTTTAGAGTAGAAAAAGAAGAGGAGAGAA
ATGACTGGATCAGCATACTATTAAATGCACTGAAATCACAATCCCTTACCTCGCAGTCTCAAGCTGTTGTTACAC
CTGAGAAATGTGGATATCTTGAATTGAGAGGCTATAAGGCAAAAATTTTTACTGTGTTAAGTGGAAACAGTGTGT
GGCTTTGCAAAAACGAACAGGATTTTAAGAGTGGACTTGGTATTACCATAATTCCTATGAATGTAGCAAATGTAA
AGCAAGTGGACCGAACTGTGAAACAATCTTTTGAAATAATCACTCCCTACAGGAGTTTCAGCTTTACAGCCGAGA
CTGAAAAGGAGAAACAAGACTGGATTGAAGCTGTGCAGCAATCAATAGCAGAAACTCTCTCTGATTATGAAGTAG
CTGAGAAGATTTGGTTCAATGAATCCAACAGGAGCTGTGCAGATTGTAAAGCCCCAGATCCTGACTGGGCATCCA
TCAATCTCTGTGTTGTCATCTGTAAGAAGTGTGCAGGACAGCATAGATCTTTAGGACCAAAAGATTCCAAGGTTA
GAAGTCTAAAAATGGATGCTAGCATTTGGAGCAATGAACTCATCGAGCTTTTTATTGTCATTGGAAACAAAAGAG
CAAATGACTTTTGGGCTGGTAATCTTCAAAAGGATGAAGAATTACATATGGACTCACCAGTAGAAAAGAGAAAAA
ACTTTATTACTCAGAAATATAAAGAAGGAAAATTCAGAAAAACTCTTTTGGCATCTCTCACCAAAGAAGAATTAA
ATAAGGCTCTATGTGCTGCTGTAGTGAAACCGGATGTTCTAGAAACAATGGCTTTGCTGTTCAGTGGAGCAGATG
TCATGTGTGCCACCGGAGACCCCGTGCATAGCACCCCCTATCTGCTAGCCAAGAAAGCTGGGCAAAGTCTGCAAA
TGGAATTTCTCTACCATAACAAATTCTCAGATTTCCCTCAACATGATATTCATTCCGAGGGTGTATTAAGTCAAG
AGTCTTCCCAGTCCACATTCCTCTGTGACTTTTTATATCAAGCTCCTTCTGCTGCTTCTAAACTCTCTTCAGAGA
AAAAACTGCTTGAAGAGACAAATAAAAAATGGTGTGTTTTGGAAGGAGGCTTCTTGAGTTACTATGAAAATGATA
AGTCTACCACACCTAATGGCACCATTAATATCAATGAAGTTATCTGCCTGGCTATACACAAAGAGGACTTCTATT
TAAATACTGGGCCCATCTTTATCTTTGAGATCTACTTACCCTCCGAACGTGTGTTTTTATTTGGAGCTGAAACAT
CTCAAGCTCAAAGAAAATGGACAGAGGCAATAGCCAAGCATTTTGTTCCCTTATTTGCTGAAAACTTAACAGAAG
CTGACTATGATTTGATTGGTCAACTCTTCTACAAAGACTGCCATGCCCTGGATCAGTGGAGAAAAGGCTGGTTTG
CTATGGACAAATCCAGCTTGCATTTTTGCCTTCAAATGCAAGAAGTTCAGGGAGATAGAATGCACTTAAGAAGAC
TGCAAGAGCTAACAATCAGCACAATGGTTCAAAATGGGGAAAAACTGGATGTTTTACTCTTGGTAGAAAAAGGGA

FIGURE 2947B

GAACATTATACATCCATGGGCATACCAAGTTGGATTTCACAGTCTGGCATACTGCAATTGAAAAAGCAGCAGGTA
CAGATGGTAATGCTTTACAAGATCAGCAGCTCAGCAAAAATGACGTTCCCATTATAGTGAACAGCTGTATAGCAT
TTGTTACACAGTATGGTTTAGGATGCAAATATATCTATCAAAAGAATGGTGATCCTTTGCATATAAGTGAACTCC
TGGAGAGTTTCAAAAAGGATGCAAGAAGCTTTAAATTGAGGGCTGGAAAACATCAGCTTGAAGATGTGACGGCTG
TGTTGAAAAGTTTTCTCTCTGACATTGATGATGCACTGCTTACTAAGGAGCTCTACCCATATTGGATCTCTGCTT
TAGATACGCAAGATGACAAGGAAAGAATTAAAAAATATGGAGCATTTATACGTTCTCTTCCAGGGGTCAACCGAG
CAACACTAGCAGCTATCATTGAACACCTGTATAGGGTTCAGAAATGCTCAGAAATCAATCACATGAATGCCCATA
ATTTGGCCTTGGTCTTTTCATCCTGTTTGTTTCAAACGAAGGGACAAACTAGTGAAGAAGTGAATGTAATTGAGG
ACCTAATTAATAATTATGTAGAAATATTTGAGGTTAAAGAAGATCAAGTCAAACAAATGGACATAGAAAATAGCT
TTATTACCAAGTGGAAAGACACCCAAGTTTCCCAGGCTGGAGATTTGTTAATTGAAGTATATGTAGAAAGGAAGG
AACCCGACTGTAGTATTATAATTCGGATATCTCCTGTGATGGAAGCAGAAGAATTAACTAATGATATATTAGCGA
TAAAAAATATTATTCCTACAAAAGGTGATATTTGGGCCACATTTGAAGTCATTGAAAATGAAGAGCTAGAGCGTC
CTCTTCACTACAAGGAAAATGTACTGGAGCAGGTGCTTCGGTGGAGTTCATTAGCTGAACCTGGCTCTGCTTACC
TGGTGGTGAAGAGATTCTTAACCGCTGACACAATTAAACACTGCAGTGACCGGAGTACACTGGGAAGCATCAAAG
AAGGAATCTTGAAAATCAAAGAAGAACCATCCAAAATACTATCTGGAAATAAGTTTCAAGACCGGTATTTTGTTT
TACGAGATGGGTTTCTCTTTCTTTACAAGGATGTGAAGAGTAGTAAACATGACAAGATGTTTTCTCTCAGTTCCA
TGAAGTTTTATCGTGGAGTGAAAAAGAAAATGAAGCCTCCAACAAGCTGGGGATTGACCGCATATTCTGAGAAAC
ATCACTGGCACCTGTGTTGTGATAGTTCACGAACTCAGACGGAGTGGATGACCAGTATCTTTATTGCCCAGCATG
AATATGATATATGGCCACCAGCTGGAAAGGAACGAAAACGTTCAATAACCAAAAATCCCAAAATTGGAGGTTTGC
CTCTGATTCCTATACAGCATGAGGGGAATGCAACCTTGGCCCGGAAAAATATTGAGAGTGCAAGAGCAGAACTTG
AAAGGCTGCGGCTCAGTGAAAAGTGTGATAAAGAGTCCGTGGACTCTAGCTTAAAGGAGAGAGCTTCCATGGTGG
CCCACTGCCTGGAGCACAAGGACGATAAACTTCGAAATCGACCCCGAAAACATCGGAGTTTCAACTGCCTGGAGG
ACACAGAGCCTGAAGCCCCACTTGGGCAACCAAAAGGCCATAAAGGCCTAAAGACATTGAGGAAGACTGAGGACA
GGAATAGCAAAGCTACTTTGGACTCTGATCATAAGTTACCATCAAGGGTAATTGAAGAACTTAATGTGGTTCTAC
AACGGTCAAGAACCCTTCCAAAAGAATTACAGGATGAGCAGATTTTGAAGTAGGAAATAAAATGAATTGCTCCCC
AGATTATTTTTTTAATATTGTATGCAATCTTTATGTGTAACTCCAAAACTGAACTATAAGATAATTCATAAGAAT
TTGCCTATTGATAGGCAAATTTGTCTATGCTTAGGCATTTAAGGAGCATTTAAAAATATGTATATATGTGACTGA
ATGTAAGATTAACTTTATTTTGGTCTGAACAAACCTTGTAAAGTTCCATTGTATTAACGTGTGTAAGAAGACATT
GGGTTACTTAGGTGGTCAGTCCTTTTAAAGTAGTTGTCTGTTAAGTGGTATAATTTATGAGCAGAAATCTCAAAC
TGTACTGTATTGTATAAAATGCTGTGTTTAAATGAAGCCTAAGAAACTATCTGTAACATATTTTGCACTTTGAGA
AACCTTGTATATTAAATTACCATATGTTTTTAGGTTTACAGAAGTTCTACCTTAGGGAAAAGAAAGGGAAGTAAA
TTGAAAAAGGGGGGAGAATTTATTGTAGTGGCTGCCTAAAAACCACTGGAGTTTTTAAAAGAAGCAAGGAGTTAA
ATGTCCTGCAAAACAAGGAAGTGAGCTAAGATTCATTCTAGTTCACTAATGACCAGAACTTGTCAATGAGAAACC
ACTTGTTAAGAAAAAGTCCAGTGTTTATTTCTCAAGAGTAATATTCGGCCAACAGATGTAAATAATAGCACTAGC
CACTCTTATTAATATTTATAGTGTTAGAAAACCAGCCACATTACAGATTCACTACGTTTGAGCTCATTGTTGGTG
GCTGCTAAGAGGAAACTTACACTGCATTGGAGAGGTTGTGTACACAGGACCTGGCCTGGATGCTGATTGCACTGT
CATTGTATGCAAGCATTTTGTCTTTTTTCAGAATTTCTGACTATACTTTTGGTACGAACAAAATTCATCACCACA
GGGTCCTGTTGTTTTGTTTGATTTTTAGATTTTTTTAAATTATTATTAAGGTTGTAATGTTTTTCTCCGAGTTGT
CAGAAATAACTGGAAGAATACAATATATGGCCATTATGGAGCCAGGGGCTAGTTGGTGGTTTACTATACATTTGG
GGGCTACCTGGTCACATTTAATCTAGGTTTTTTTTTCTTTTTTTAAGTAAAGGTGTGGTCTCTTCCCTGTACTTA
TGAATAAGGACAAAGCCCTATTTTTGTTTCCACATAAAGATCAGCTACTGAATTGGTGAATTTCCTGACAGACAA
TGCTATCTAACCATAGTTCATGTTAGGGGAAGCATTTTTCCATCAGTTTCTTTAAAATTGGATTGTCTGGTGAGT
TTTGATATTAAACATTATGTAGCTAAGTTTTTTTTTTTTAGCATTTCTTTTTTATTTTTCAATCTATATTCACAG
GCCCATACTTCAGTCAGTCCAATCATAGTACAGTGATGTGGTGGTAGATGCTATGAATTTCTTCATTGTAAAATA
CGGATCATTTGTATTTTGGGGTGATAAAATAGTTCACCATGGGTATGAGATATTTATTCTTTAAATCAAAGTAAA
TTAGAATTTTTAAAAAGCACAAAACTGCAGGACAGTTTATGAAATAGGTGGCACTATTAGGGAATCTTCCTTTAA
AGCAAGAAATCATGTTATTTAGAAAGAAAAACTAATCTTAAACATACTATTTCTAATAAATATTTATATTTTTAT
GAAATAAAGAGGTATGTGGAAATTAATATTTGGTGATGTTGGACAGTGGAAAAGTATCTAGAGTTTTTACCTGCC

FIGURE 2947C

TTATCTGAATTCTTCTTGAAACTTGAGCTTAAACTCTAATAGCTGTTTCCCTTTCTATTCTGAACAACTGTCTCC
ATTTTTCAAGTGTGAGAGATAAGGGCTAATGATGACATCTCATTTATTTTGAGTAAACATTAAAATTGTTTTACA
AGTCTACTTG

FIGURE 2948

MSSVSEVNVDIKDFLMSINLEQYLLHFHESGFTTVKDCAAINDSLLQKIGISPTGHRRRILKQLQIILSKMQDIP
IYANVHKTKKNDDPSKDYHVPSSDQNICIELSNSGSVQTSSPPQLETVRKNLEDSDASVERSQYPQSDDKLSPPK
RDFPTAEEPHLNLGSLNDSLFGSDNIKIESLITKKTVDHTVEEQQTEKVKLITENLSKLPNADSECLSFVGCSTS
GTNSGNGTNGLLEGSPPSPFFKFQGEMIVNDLYVPSSPILAPVRSRSKLVSRPSRSFLLRHRPVPEIPGSTKGVS
GSYFRERRNVATSTEKSVAWQNSNEENSSSIFPYGETFLFQRLENSKKRSIKNEFLTQGEALKGEAATATNSFII
KSSIYDNRKEKISEDKVEDIWIPREDKNNFLIDTASESEYSTVEECFQSLRRKNSKASKSRTQKALILDSVNRHS
YPLSSTSGNADSSAVSSQAISPYACFYGASAKKVKSGWLDKLSPQGKRMFQKRWVKFDGLSISYYNNEKEMYSKG
IIPLSAISTVRVQGDNKFEVVTTQRTFVFRVEKEEERNDWISILLNALKSQSLTSQSQAVVTPEKCGYLELRGYK
AKIFTVLSGNSVWLCKNEQDFKSGLGITIIPMNVANVKQVDRTVKQSFEIITPYRSFSFTAETEKEKQDWIEAVQ
QSIAETLSDYEVAEKIWFNESNRSCADCKAPDPDWASINLCVVICKKCAGQHRSLGPKDSKVRSLKMDASIWSNE
LIELFIVIGNKRANDFWAGNLQKDEELHMDSPVEKRKNFITQKYKEGKFRKTLLASLTKEELNKALCAAVVKPDV
LETMALLFSGADVMCATGDPVHSTPYLLAKKAGQSLQMEFLYHNKFSDFPQHDIHSEGVLSQESSQSTFLCDFLY
QAPSAASKLSSEKKLLEETNKKWCVLEGGFLSYYENDKSTTPNGTININEVICLAIHKEDFYLNTGPIFIFEIYL
PSERVFLFGAETSQAQRKWTEAIAKHFVPLFAENLTEADYDLIGQLFYKDCHALDQWRKGWFAMDKSSLHFCLQM
QEVQGDRMHLRRLQELTISTMVQNGEKLDVLLLVEKGRTLYIHGHTKLDFTVWHTAIEKAAGTDGNALQDQQLSK
NDVPIIVNSCIAFVTQYGLGCKYIYQKNGDPLHISELLESFKKDARSFKLRAGKHQLEDVTAVLKSFLSDIDDAL
LTKELYPYWISALDTQDDKERIKKYGAFIRSLPGVNRATLAAIIEHLYRVQKCSEINHMNAHNLALVFSSCLFQT
KGQTSEEVNVIEDLINNYVEIFEVKEDQVKQMDIENSFITKWKDTQVSQAGDLLIEVYVERKEPDCSIIIRISPV
MEAEELTNDILAIKNIIPTKGDIWATFEVIENEELERPLHYKENVLEQVLRWSSLAEPGSAYLVVKRFLTADTIK
HCSDRSTLGSIKEGILKIKEEPSKILSGNKFQDRYFVLRDGFLFLYKDVKSSKHDKMFSLSSMKFYRGVKKKMKP
PTSWGLTAYSEKHHWHLCCDSSRTQTEWMTSIFIAQHEYDIWPPAGKERKRSITKNPKIGGLPLIPIQHEGNATL
ARKNIESARAELERLRLSEKCDKESVDSSLKERASMVAHCLEHKDDKLRNRPRKHRSFNCLEDTEPEAPLGQPKG
HKGLKTLRKTEDRNSKATLDSDHKLPSRVIEELNVVLQRSRTLPKELQDEQILK

FIGURE 2949

ATCTCCCTCCAGGCAGCCCTTGGCTGGTCCCTGCGAGCCCGTGGAGACTGCCAGAGATGTCCTCTTTCGGTTACA
GGACCCTGACTGTGGCCCTCTTCACCCTGATCTGCTGTCCAGGATCGGATGAGAAGGTATTCGAGGTACACGTGA
GGCCAAAGAAGCTGGCGGTTGAGCCCAAAGGGTCCCTCGAGGTCAACTGCAGCACCACCTGTAACCAGCCTGAAG
TGGGTGGTCTGGAGACCTCTCTAAATAAGATTCTGCTGGACGAACAGGCTCAGTGGAAACATTACTTGGTCTCAA
ACATCTCCCATGACACGGTCCTCCAATGCCACTTCACCTGCTCCGGGAAGCAGGAGTCAATGAATTCCAACGTCA
GCGTGTACCAGCCTCCAAGGCAGGTCATCCTGACACTGCAACCCACTTTGGTGGCTGTGGGCAAGTCCTTCACCA
TTGAGTGCAGGGTGCCCACCGTGGAGCCCCTGGACAGCCTCACCCTCTTCCTGTTCCGTGGCAATGAGACTCTGC
ACTATGAGACCTTCGGGAAGGCAGCCCCTGCTCCGCAGGAGGCCACAGCCACATTCAACAGCACGGCTGACAGAG
AGGATGGCCACCGCAACTTCTCCTGCCTGGCTGTGCTGGACTTGATGTCTCGCGGTGGCAACATCTTTCACAAAC
ACTCAGCCCCGAAGATGTTGGAGATCTATGAGCCTGTGTCGGACAGCCAGATGGTCATCATAGTCACGGTGGTGT
CGGTGTTGCTGTCCCTGTTCGTGACATCTGTCCTGCTCTGCTTCATCTTCGGCCAGCACTTGCGCCAGCAGCGGA
TGGGCACCTACGGGGTGCGAGCGGCTTGGAGGAGGCTGCCCCAGGCCTTCCGGCCATAGCAACCATGAGTGGCAT
GGCCACCACCACGGTGGTCACTGGAACTCAGTGTGACTCCTCAGGGTTGAGGTCCAGCCCTGGCTGAAGGACTGT
GACAGGCAGCAGAGACTTGGGACATTGCCTTTTCTAGCCCGAATACAAACACCTGGACTT

FIGURE 2950

MSSFGYRTLTVALFTLICCPGSDEKVFEVHVRPKKLAVEPKGSLEVNCSTTCNQPEVGGLETSLNKILLDEQAQW
KHYLVSNISHDTVLQCHFTCSGKQESMNSNVSVYQPPRQVILTLQPTLVAVGKSFTIECRVPTVEPLDSLTLFLF
RGNETLHYETFGKAAPAPQEATATFNSTADREDGHRNFSCLAVLDLMSRGGNIFHKHSAPKMLEIYEPVSDSQMV
IIVTVVSVLLSLFVTSVLLCFIFGQHLRQQRMGTYGVRAAWRRLPQAFRP

FIGURE 2951

GGCACGAGGACCTCGACTCTTAGCTTGTCGGGGACGGTAACCGGGACCCGGTGTCTGCTCCTGTCGCCTTCGCCT
CCTAATCCCTAGCCACT**ATG**CGTGAGTGCATCTCCATCCACGTTGGCCAGGCTGGTGTCCAGATTGGCAATGCCT
GCTGGGAGCTCTACTGCCTGGAACACGGCATCCAGCCCGATGGCCAGATGCCAAGTGACAAGACCATTGGGGGAG
GAGATGACTCCTTCAACACCTTCTTCAGTGAGACGGGCGCTGGCAAGCACGTGCCCCGGGCTGTGTTTGTAGACT
TGGAACCCACAGTCATTGATGAAGTTCGCACTGGCACCTACCGCCAGCTCTTCCACCCTGAGCAGCTCATCACAG
GCAAGGAAGATGCTGCCAATAACTATGCCCGAGGGCACTACACCATTGGCAAGGAGATCATTGACCTTGTGTTGG
ACCGAATTCGCAAGCTGGCTGACCAGTGCACCGGTCTTCAGGGCTTCTTGGTTTTCCACAGCTTTGGTGGGGGAA
CTGGTTCTGGGTTCACCTCCCTGCTCATGGAACGTCTCTCAGTTGATTATGGCAAGAAGTCCAAGCTGGAGTTCT
CCATTTACCCAGCACCCCAGGTTTCCACAGCTGTAGTTGAGCCCTACAACTCCATCCTCACCACCCACACCACCC
TGGAGCACTCTGATTGTGCCTTCATGGTAGACAATGAGGCCATCTATGACATCTGTCGTAGAAACCTCGATATCG
AGCGCCCAACCTACACTAACCTTAACCGCCTTATTAGCCAGATTGTGTCCTCCATCACTGCTTCCCTGAGATTTG
ATGGAGCCCTGAATGTTGACCTGACAGAATTCCAGACCAACCTGGTGCCCTACCCCCGCATCCACTTCCCTCTGG
CCACATATGCCCCTGTCATCTCTGCTGAGAAAGCCTACCATGAACAGCTTTCTGTAGCAGAGATCACCAATGCTT
GCTTTGAGCCAGCCAACCAGATGGTGAAATGTGACCCTCGCCATGGTAAATACATGGCTTGCTGCCTGTTGTACC
GTGGTGACGTGGTTCCCAAAGATGTCAATGCTGCCATTGCCACCATCAAAACCAAGCGCAGCATCCAGTTTGTGG
ATTGGTGCCCCACTGGCTTCAAGGTTGGCATCAACTACCAGCCTCCCACTGTGGTGCCTGGTGGAGACCTGGCCA
AGGTACAGAGAGCTGTGTGCATGCTGAGCAACACCACAGCCATTGCTGAGGCCTGGGCTCGCCTGGACCACAAGT
TTGACCTGATGTATGCCAAGCGTGCCTTTGTTCACTGGTACGTGGGTGAGGGGATGGAGGAAGGCGAGTTTTCAG
AGGCCCGTGAAGATATGGCTGCCCTTGAGAAGGATTATGAGGAGGTTGGTGTGGATTCTGTTGAAGGAGAGGGTG
AGGAAGAAGGAGAGGAATAC**TAA**TTATCCATTCCTTTTGGCCCTGCAGCATGTCATGCTCCCAGAATTTCAGCTT
CAGCTTAACTGACAGACGTTAAAGCTTTCTGGTTAGATTGTTTTCACTTGGTGATCATGTCTTTTCCATGTGTAC
CTGTAATATTTTTCCATCATATCTCAAAGTAAAGTCATTAACATCAAAAAAAAAAAAAAAAAAAAA

FIGURE 2952

MRECISIHVGQAGVQIGNACWELYCLEHGIQPDGQMPSDKTIGGGDDSFNTFFSETGAGKHVPRAVFVDLEPTVI
DEVRTGTYRQLFHPEQLITGKEDAANNYARGHYTIGKEIIDLVLDRIRKLADQCTGLQGFLVFHSFGGGTGSGFT
SLLMERLSVDYGKKSKLEFSIYPAPQVSTAVVEPYNSILTTHTTLEHSDCAFMVDNEAIYDICRRNLDIERPTYT
NLNRLISQIVSSITASLRFDGALNVDLTEFQTNLVPYPRIHFPLATYAPVISAEKAYHEQLSVAEITNACFEPAN
QMVKCDPRHGKYMACCLLYRGDVVPKDVNAAIATIKTKRSIQFVDWCPTGFKVGINYQPPTVVPGGDLAKVQRAV
CMLSNTTAIAEAWARLDHKFDLMYAKRAFVHWYVGEGMEEGEFSEAREDMAALEKDYEEVGVDSVEGEGEEEGEE
Y

FIGURE 2953A

CCCCGGTTCCGCTGTCTTTTCTGTCTACAGTTTGCGATCCCCGCGTCCAGGATGGAGCAGCTGAACGAACTGGAG
CTGCTGATGGAGAAGAGTTTTTGGGAGGAGGCGGAGCTGCCGGCGGAGCTATTTCAGAAGAAAGTGGTAGCTTCC
TTTCCAAGAACAGTTCTGAGCACAGGAATGGATAACCGGTACCTGGTGTTGGCAGTCAATACTGTACAGAACAAA
GAGGGAAACTGTGAAAAGCGCCTGGTCATCACTGCTTCACAGTCACTAGAAAATAAAGAACTATGCATCCTTAGG
AATGACTGGTGTTCTGTTCCAGTAGAGCCAGGAGATATCATTCATTTGGAGGGAGACTGCACATCTGACACTTGG
ATAATAGATAAAGATTTTGGATATTTGATTCTGTATCCAGACATGCTGATTTCTGGCACCAGCATAGCCAGTAGT
ATTCGATGTATGAGAAGAGCTGTCCTGAGTGAAACTTTTAGGAGCTCTGATCCAGCCACACGCCAAATGCTAATT
GGTACGGTTCTCCATGAGGTGTTTCAAAAAGCCATAAATAATAGCTTTGCCCCAGAAAAGCTACAAGAACTTGCT
TTTCAAACAATTCAAGAAATAAGACATTTGAAGGAAATGTACCGCTTAAATCTAAGTCAAGATGAAATAAAACAA
GAAGTAGAGGACTATCTTCCTTCGTTTTGTAAATGGGCAGGAGATTTCATGCATAAAAACACTTCGACTGACTTC
CCTCAGATGCAGCTCTCTCTGCCAAGTGATAATAGTAAGGATAATTCAACATGTAACATTGAAGTCGTGAAACCA
ATGGATATTGAAGAAAGCATTTGGTCCCCTAGGTTTGGATTGAAAGGCAAAATAGATGTTACAGTTGGTGTGAAA
ATACATCGAGGGTATAAAACAAAATACAAGATAATGCCGCTGGAACTTAAAACTGGCAAAGAATCAAATTCTATT
GAACACCGTAGTCAGGTTGTTCTGTACACTCTACTAAGCCAAGAGAGAAGAGCTGATCCAGAGGCTGGCTTGCTT
CTCTACCTCAAGACTGGTCAGATGTACCCTGTGCCTGCCAACCATCTAGATAAAAGAGAATTATTAAAGCTAAGA
AACCAGATGGCATTCTCATTGTTTCACCGTATTAGCAAATCTGCTACTAGACAGAAGACACAGCTTGCTTCTTTG
CCACAAATAATTGAGGAAGAGAAAACTTGTAAATATTGTTCACAAATTGGCAATTGTGCTCTTTATAGCAGAGCA
GTTGAACAACAGATGGATTGTAGTTCAGTCCCAATTGTGATGCTGCCCAAAATAGAAGAAGAAACCCAGCATCTG
AAGCAAACACACTTAGAATATTTCAGCCTTTGGTGTCTAATGTTAACCCTGGAGTCACAATCGAAGGATAATAAA
AAGAATCACCAAAATATCTGGCTAATGCCTGCTTCGGAAATGGAGAAGAGTGGCAGTTGCATTGGAAACCTGATT
AGAATGGAACATGTAAAGATAGTTTGTGATGGGCAATATTTACATAATTTCCAATGTAAACATGGTGCCATACCT
GTCACAAATCTAATGGCAGGTGACAGAGTTATTGTAAGTGGAGAAGAAAGGTCACTGTTTGCTTTGTCTAGAGGA
TATGTGAAGGAGATTAACATGACAACAGTAACTTGTTTATTAGACAGAAACTTGTCGGTCCTTCCAGAATCAACT
TTGTTCAGATTAGACCAAGAAGAAAAAAATTGTGATATAGATACCCCATTAGGAAATCTTTCCAAATTGATGGAA
AACACGTTTGTCAGCAAAAAACTTCGAGATTTAATTATTGACTTTCGTGAACCTCAGTTTATATCCTACCTTAGT
TCTGTTCTTCCACATGATGCAAAGGATACAGTTGCCTGCATTCTAAAGGGTTTGAATAAGCCTCAGAGGCAAGCG
ATGAAAAAGGTACTTCTTTCAAAAGACTACACACTCATCGTGGGTATGCCTGGGACAGGAAAAACAACTACGATA
TGTACTCTCGTAAGAATTCTCTACGCCTGTGGTTTTAGCGTTTTGTTGACCAGCTATACACACTCTGCTGTTGAC
AATATTCTTTTGAAGTTAGCCAAGTTTAAAATAGGATTTTTGCGTTTGGGTCAGATTCAGAAGGTTCATCCAGCT
ATCCAGCAATTTACAGAGCAAGAAATTTGCAGATCAAAGTCCATTAAATCCTTAGCTCTTCTAGAAGAACTCTAC
AATAGTCAACTTATAGTTGCAACAACATGTATGGGAATAAACCATCCAATATTTTCCCGTAAAATTTTTGATTTT
TGTATTGTGGATGAAGCCTCTCAAATTAGCCAACCAATTTGTCTGGGCCCCCTTTTTTTTTCACGGAGATTTGTG
TTAGTGGGGGACCATCAGCAGCTTCCTCCCCTGGTGCTAAACCGTGAAGCAAGAGCTCTTGGCATGAGTGAAAGC
TTATTCAAGAGGCTGGAGCAGAATAAGAGTGCTGTTGTACAGTTAACCGTGCAGTACAGAATGAACAGTAAAATT
ATGTCCTTAAGTAATAAGCTGACCTATGAGGGCAAGCTGGAGTGTGGATCAGACAAAGTGGCCAATGCAGTGATA
AACCTACGTCACTTTAAAGATGTGAAGCTGGAACTGGAATTTTATGCTGACTATTCTGATAATCCTTGGTTGATG
GGAGTATTTGAACCCAACAATCCTGTTTGTTTCCTTAATACAGACAAGGTTCCAGCGCCAGAACAAGTTGAAAAA
GGTGGTGTGAGCAATGTAACAGAAGCCAAACTCATAGTTTTCCTAACCTCCATTTTTGTTAAGGCTGGATGCAGT
CCCTCTGATATTGGTATTATTGCACCGTACAGGCAGCAATTAAAGATCATCAATGATTTATTGGCACGTTCTATT
GGGATGGTCGAAGTTAATACAGTAGACAAATACCAAGGAAGGGACAAAAGTATTGTCCTAGTATCTTTTGTTAGA
AGTAATAAGGATGGAACTGTTGGTGAACTCTTGAAAGATTGGCGACGTCTTAATGTTGCTATAACCAGAGCCAAA
CATAAACTGATTCTTCTGGGGTGTGTGCCCTCACTAAATTGCTATCCTCCTTTGGAGAAGCTGCTTAATCATTTA
AACTCAGAAAAATTAATCATTGATCTTCCATCAAGAGAACATGAAAGTCTTTGCCACATATTGGGTGACTTTCAA
AGAGAA**TAA**AACACTATTTCCCTTGCCTTTTCATACTAGGGCAGTATCTCCTCTAGCTAGTGCCCATACAGAAAA
TTCTATCACCATACAAAATTTAATGCAGTATTTATGTTTTAAAGCACAGGTGTACCGAAAACTGTGAAAAGTCTG
AATTTATGGGTTCTATGCATGCATTTTTGCCTAACCTAGAGAAAGAGTTTGATAAATTTTTACCAGCTTTGAAGA
TGGATTAACTTTTGACTTTGAGCTTTAAACTTTTAAGTCAGACATTTCAGGACTAATTTGATTTTGTAGATATCA
TTGTAAGAACTTTATTTGAAAGACTGAATAAAGGGATTTGATTTGTTTTCATCATTTAAGCACAGTCTTGTGATG

FIGURE 2953B

ATGAGAACATAAGTGTGATTCTTTTCTGTATTTTGAGGTCCCTAATCCAAAGCCCATTTTGCTAGGATTTTTTCT
GCTATCAGATGTGTTTTCACTCTAAACCTAGTCTTTTATGACATGAATTGATTACTTCCTGTTAATTTTCTATCC
TCCCTTACTATCCTCCTTTTTTGTTTTCAGTATTCAGTATTTCAGTATTCTAGAGTAGATTTTGATATAAAAGAA
AATAATTCTTACATCATCTTTTGCAACAAATTTTGTTTTCTGAATTGATAATAAATTTAAAAAGTTGATTCCTAT
TTTCACATATGTTCATATGCCCCTATGTTTGGGGGTATCACTCAGTTTTCCCTTTTTTGTGTAAAGATGTTTTGT
AAAACAAAATTGTCTCAAAGTGATTATATTATATATATAAAAAGTAACAGATTTTAACAAAGGTTAAAAGATTCT
TGGGGTAACAGATTCTTCTGGGGTTGGAAATCTTCCATTTCTCTTGAGGGTTTTTTTTAATGAGTGTTAAATATG
TTAAAATTTTTATTTCTACCTCATGTGTTTTTTTAAATTATTACTTGAAGTTTTTTATTTAATAAATTTTTTCTA
CTAATGG

FIGURE 2954

PRFRCLFCLQFAIPASRMEQLNELELLMEKSFWEEAELPAELFQKKVVASFPRTVLSTGMDNRYLVLAVNTVQNK
EGNCEKRLVITASQSLENKELCILRNDWCSVPVEPGDIIHLEGDCTSDTWIIDKDFGYLILYPDMLISGTSIASS
IRCMRRAVLSETFRSSDPATRQMLIGTVLHEVFQKAINNSFAPEKLQELAFQTIQEIRHLKEMYRLNLSQDEIKQ
EVEDYLPSFCKWAGDFMHKNTSTDFPQMQLSLPSDNSKDNSTCNIEVVKPMDIEESIWSPRFGLKGKIDVTVGVK
IHRGYKTKYKIMPLELKTGKESNSIEHRSQVVLYTLLSQERRADPEAGLLLYLKTGQMYPVPANHLDKRELLKLR
NQMAFSLFHRISKSATRQKTQLASLPQIIEEEKTCKYCSQIGNCALYSRAVEQQMDCSSVPIVMLPKIEEETQHL
KQTHLEYFSLWCLMLTLESQSKDNKKNHQNIWLMPASEMEKSGSCIGNLIRMEHVKIVCDGQYLHNFQCKHGAIP
VTNLMAGDRVIVSGEERSLFALSRGYVKEINMTTVTCLLDRNLSVLPESTLFRLDQEEKNCDIDTPLGNLSKLME
NTFVSKKLRDLIIDFREPQFISYLSSVLPHDAKDTVACILKGLNKPQRQAMKKVLLSKDYTLIVGMPGTGKTTTI
CTLVRILYACGFSVLLTSYTHSAVDNILLKLAKFKIGFLRLGQIQKVHPAIQQFTEQEICRSKSIKSLALLEELY
NSQLIVATTCMGINHPIFSRKIFDFCIVDEASQISQPICLGPLFFSRRFVLVGDHQQLPPLVLNREARALGMSES
LFKRLEQNKSAVVQLTVQYRMNSKIMSLSNKLTYEGKLECGSDKVANAVINLRHFKDVKLELEFYADYSDNPWLM
GVFEPNNPVCFLNTDKVPAPEQVEKGGVSNVTEAKLIVFLTSIFVKAGCSPSDIGIIAPYRQQLKIINDLLARSI
GMVEVNTVDKYQGRDKSIVLVSFVRSNKDGTVGELLKDWRRLNVAITRAKHKLILLGCVPSLNCYPPLEKLLNHL
NSEKLIIDLPSREHESLCHILGDFQRE

FIGURE 2955

GAGTCGGAGACACTATCCGCTTCCATCCGTCGCGCAGACCCTGCCGGAGCCGCTGCCGCTATGGATGATCGAGAG
GATCTGGTGTACCAGGCGAAGCTGGCCGAGCAGGCTGAGCGATACGACGAAATGGTGGAGTCAATGAAGAAAGTA
GCAGGGATGGATGTGGAGCTGACAGTTGAAGAAAGAAACCTCCTATCTGTTGCATATAAGAATGTGATTGGAGCT
AGAAGAGCCTCCTGGAGAATAATCAGCAGCATTGAACAGAAAGAAGAAAACAAGGGAGGAGAAGACAAGCTAAAA
ATGATTCGGGAATATCGGCAAATGGTTGAGACTGAGCTAAAGTTAATCTGTTGTGACATTCTGGATGTACTGGAC
AAACACCTCATTCCAGCAGCTAACACTGGCGAGTCCAAGGTTTTCTATTATAAAATGAAAGGGGACTACCACAGG
TATCTGGCAGAATTTGCCACAGGAAACGACAGGAAGGAGGCTGCGGAGAACAGCCTAGTGGCTTATAAAGCTGCT
AGTGATATTGCAATGACAGAACTTCCACCAACGCATCCTATTCGCTTAGGTCTTGCTCTCAATTTTTCCGTATTC
TACTACGAAATTCTTAATTCCCCTGACCGTGCCTGCAGGTTGGCAAAAGCAGCTTTTGATGATGCAATTGCAGAA
CTGGATACGCTGAGTGAAGAAAGCTATAAGGACTCTACACTTATCATGCAGTTGTTACGTGATAATCTGACACTA
TGGACTTCAGACATGCAGGGTGACGGTGAAGAGCAGAATAAAGAAGCGCTGCAGGACGTGGAAGACGAAAATCAG
TGAGACATAAGCCAACAAGAGAAACCATCTCTGACCACCCCCTCCTCCCCATCCCACCCTTTGGAAACTCCCCAT
TGTCACTGAGAACCACCAAATCTGACTTTTACATTTGGTCTCAGAATTTAGGTTCCTGCCCTGTTGGTTTTTTTT
TTTTTTTTTTTTAAACAGTTTTCAAAAGTTCTTAAAGGCAAGAGTGAATTTCTGTGGATTTTACTGGTCCCAGCT
TTTAGGTTCTTTAAGACACTAACAGGACTACATAGAGGCTTTTTCAGCATTACTGTGTCGTCTCCGTGCCAGATG
TGGCAAGATCACCATTAGCAAATGGAAATTACATTTGAAAGCCATTAGACTTATAGGTGATGCAAGCATCTAAGA
GAGAGGTTAATCACACTATAGAGGCATAAGTGGTATCAGTTTTCATTTTTCTAATTGTTTAAACTGTGTTTTATA
CCAGTGTTTGCAAGTAATTGGGTGTTAGCTTGAGATGGTTAAAGGTGGTTTGGGGAGGGACTTCGTTGTAATGGT
TTTGCTGTAAAAAATGTTTCCAACTCCGCTGAAATGTTGCTGAAAAGCATGGTGCTGGTAACAGTTCAACAATCC
GTGGCTGCTCATTCTTGCCTACTTTACTCTCCCACTGAAGCAGGTTAGCGTTGAAGGTGGTATGGAAAAGCCTGC
ATGCCTGTTCAATTCTTTTGTTTCTTCTCCTTCCCCCTCCCCCTACCTCCTTCCCCTCACTCCTCCCCTCCTTCG
CTCGCTCAACCTCTTTTGTTCAGTATGTGTAACTTGAAGCTAATTTGTACTACTGGATATCTGACTGGAGCCACA
GATACAGAATCTGTATTGTTCTTACTGAAACACAGCATGGAATTAACATTAAACTTAAATAAAACAAACCTAAAT
T

FIGURE 2956

MDDREDLVYQAKLAEQAERYDEMVESMKKVAGMDVELTVEERNLLSVAYKNVIGARRASWRIISSIEQKEENKGG
EDKLKMIREYRQMVETELKLICCDILDVLDKHLIPAANTGESKVFYYKMKGDYHRYLAEFATGNDRKEAAENSLV
AYKAASDIAMTELPPTHPIRLGLALNFSVFYYEILNSPDRACRLAKAAFDDAIAELDTLSEESYKDSTLIMQLLR
DNLTLWTSDMQGDGEEQNKEALQDVEDENQ

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FIGURE 2957

GGCACGAGGCAGTAGCTCCCGTTGCGGCGGCACCCGTGGCAGCCCTGGCGGACGCAGGAGCGATGGCAGCGACCG
ATATAGCTCGCCAGGTGGGTGAAGGTTGCCGAACTGTCCCCCTGGCTGGACATGTGGGGTTTGACAGCTTGCCTG
ACCAGCTGGTGAATAAGTCCGTCAGCCAGGGCTTCTGCTTCAACATCCTGTGCGTGGGAGAGACAGGTTTGGGCA
AGTCCACCCTCATGGACACCCTGTTCAACACCAAATTCGAAGGGGAGCCAGCCACCCACACACAGCCGGGTGTCC
AGCTCCAGTCTAATACCTATGACCTCCAAGAGAGCAACGTGAGGCTAAAGCTCACGATCGTTAGCACAGTTGGCT
TTGGGGACCAGATCAACAAAGAGGACAGCTACAAGCCTATCGTGGAATTCATCGATGCACAATTCGAGGCCTACC
TGCAGGAAGAGCTAAAGATCCGAAGAGTGCTACACACCTACCATGACTCCCGAATCCATGTCTGCTTGTATTTCA
TTGCCCCCACGGGTCATTCCCTGAAGTCTCTGGACCTAGTGACTATGAAGAAGCTGGACAGTAAGGTGAACATCA
TCCCCATCATTGCCAAAGCAGATGCCATTTCGAAGAGTGAGCTAACAAAGTTCAAAATCAAAATCACCAGCGAGC
TTGTCAGCAACGGAGTCCAGATCTATCAGTTTCCTACAGATGATGAGTCGGTGGCAGAGATCAATGGAACCATGA
ACGCCCACCTGCCGTTTGCTGTCATTGGCAGCACAGAAGAACTGAAGATAGGCAACAAGATGATGAGGGCGCGGC
AGTATCCTTGGGGCACTGTGCAGGTTGAAAACGAGGCCCACTGCGACTTTGTGAAGCTGCGGGAGATGCTGATTC
GGGTCAACATGGAGGATCTGCGGGAGCAGACCCACACCCGGCACTATGAGCTGTATCGCCGCTGTAAGCTGGAGG
AGATGGGCTTCAAGGACACCGACCCTGACAGCAAACCCTTCAGTTTACAGGAGACATATGAGGCCAAAAGGAACG
AGTTCCTAGGGGAACTCCAGAAAAAAGAAGAGGAGATGAGACAGATGTTCGTCCAGCGAGTCAAAGAGAAAGAAG
CGGAGCTCAAAGAGGCAGAGAAAGAGCTGCACGAGAAGTTTGACCGTCTGAAGAAACTGCACCAGGACGAGAAGA
AGAAACTGGAGGATAAGAAGAAATCCCTGGATGATGAAGTGAATGCTTTCAAGCAAAGAAAGACGGCGGCTGAGC
TGCTCCAGTCCCAGGGCTCCCAGGCTGGAGGCTCACAGACTCTGAAGAGAGACAAAGAGAAGAAAAACTTTTTTTAA
TCTTGTCTTCAGCAGCTGCACTAAGTCTAAAGGAGAAGACTGCCATTATAGAAGAGTTAGGGTTCCATATTGT
CTCAAATCAGAAATCAACCAATTTCCTCTCCCCTCAAACTGCAAGCACACACACATACACCACACCACTCAACAA
GTGTTCATGTGTCCCTGTGTCCAGGCAAGAAGCTCTCTTCCTGACTCACATGGTATTTTAAATGGAAGTGTCTTG
TCCTAACTAACAAGGCAGGAAAAGAACCATCAGAGCTGGAAAATGGACGAAATGTAACCTCAGAGAAACAACTAC
AGGACCACTCACCCAAGTGTAAGTGACTGGGGCAGGACACCTCAGCTGTGGGTATGAAAGTACTGTTCTGTTCAC
AAGGTTTTGTTTGAGTTTTATGTTTTTCTTTTAAACATTTCTCTGGTTCGATGGGTTGACTGTCTACAGCCACTG
TTAAACATTTCTGAATATGCAAGAGAAAGTCAAGTGACATTTGTATCTTCTTCAGCATTCGCAGACCTTCTATAG
ATTCCAGCAAAGGGGGAAAATGTATCCACTATCTAACACTTAGGTAGAGAAGGGAGGGGGTTTAAGCTTAGTGAG
GGCAAAATTACTCCATTCCACCTTCCGAGACCAGTTAGGGTTTTGAGAGAGGTTTCTGCTCAACCTGGGATCTGG
AGGGAGAGCTTTGATGTTGGTAAATCTGCCTTGAATTCATTGGTTTAACTTGCATCAAAATACCATGTGAGTGTG
CTCATTCTCATATATCCCCTACCACCATCACCACCATTCTGCTGTTCAGTGTCTCTTGAGAGAGCCTCTTTGCAT
GTTTTCCAGAATCTGTGTGTGTTTTTCCTTTCTTCTCCTTTGTTCTTTTTGCTCAAAGGTGTGACCAGTCATTGC
CCCTCTGGGGCTTTCATTCTCCAGGAGAAACATCCCAGAACCAGCACTGTTTAGCCTGATACCTTTCTAATGTCC
ATGTCAATTTTCAATAAAATTCAAAGAAATGCTAAAAAAAAAAAAAAAAAAAAA

FIGURE 2958

MAATDIARQVGEGCRTVPLAGHVGFDSLPDQLVNKSVSQGFCFNILCVGETGLGKSTLMDTLFNTKFEGEPATHT
QPGVQLQSNTYDLQESNVRLKLTIVSTVGFGDQINKEDSYKPIVEFIDAQFEAYLQEELKIRRVLHTYHDSRIHV
CLYFIAPTGHSLKSLDLVTMKKLDSKVNIIPIIAKADAISKSELTKFKIKITSELVSNGVQIYQFPTDDESVAEI
NGTMNAHLPFAVIGSTEELKIGNKMMRARQYPWGTVQVENEAHCDFVKLREMLIRVNMEDLREQTHTRHYELYRR
CKLEEMGFKDTDPDSKPFSLQETYEAKRNEFLGELQKKEEEMRQMFVQRVKEKEAELKEAEKELHEKFDRLKKLH
QDEKKKLEDKKKSLDDEVNAFKQRKTAAELLQSQGSQAGGSQTLKRDKEKKNFF

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FIGURE 2959

ATCAGCGAGGGATTCACGGCGAAATGAGACTGTTCGTGAGTGATGGCGTCCCGGGTTGCTTGCCGGTGCTGGCCG
CCGCCGGGAGAGCCCGGGGCAGAGCAGAGGTGCTCATCAGCACTGTAGGCCCGGAAGATTGTGTGGTCCCGTTCC
TGACCCGGCCTAAGGTCCCTGTCTTGCAGCTGGATAGCGGCAACTACCTCTTCTCCACTAGTGCAATCTGCCGAT
ATTTTTTTTTGTTATCTGGCTGGGAGCAAGATGACCTCACTAACCAGTGGCTGGAATGGGAAGCGACAGAGCTGC
AGCCAGCTTTGTCTGCTGCCCTGTACTATTTAGTGGTCCAAGGCAAGAAGGGGGAAGATGTTCTTGGTTCAGTGC
GGAGAGCCCTGACTCACATTGACCACAGCTTGAGTCGTCAGAACTGTCCTTTCCTGGCTGGGGAGACAGAATCTC
TAGCCGACATTGTTTTGTGGGGAGCCCTATACCCATTACTGCAAGATCCCGCCTACCTCCCTGAGGAGCTGAGTG
CCCTGCACAGCTGGTTCCAGACACTGAGTACCCAGGAACCATGTCAGCGAGCTGCAGAGACTGTACTGAAACAGC
AAGGTGTCCTGGCTCTCCGGCCTTACCTCCAAAAGCAGCCCCAGCCCAGCCCCGCTGAGGGAAGGGCTGTCACCA
ATGAGCCTGAGGAGGAGGAGCTGGCTACCCTATCTGAGGAGGAGATTGCTATGGCTGTTACTGCTTGGGAGAAGG
GCCTAGAAAGTTTGCCCCCGCTGCGGCCCCAGCAGAATCCAGTGTTGCCTGTGGCTGGAGAAAGGAATGTGCTCA
TCACCAGTGCCCTCCCTTACGTCAACAATGTCCCCCACCTTGGGAACATCATTGGTTGTGTGCTCAGTGCCGATG
TCTTTGCCAGGTACTCTCGCCTCCGCCAGTGGAACACCCTCTATCTGTGTGGGACAGATGAGTATGGTACAGCAA
CAGAGACCAAGGCTCTGGAGGAGGGACTAACCCCCCAGGAGATCTGCGACAAGTACCACATCATCCATGCTGACA
TCTACCGCTGGTTTAACATTTCGTTTGATATTTTTGGTCGCACCACCACTCCACAGCAGACCAAAATCACCCAGG
ACATTTTCCAGCAGTTGCTGAAACGAGGTTTTGTGCTGCAAGATACTGTGGAGCAACTGCGATGTGAGCACTGTG
CTCGCTTCCTGGCTGACCGCTTCGTGGAGGGCGTGTGTCCCTTCTGTGGCTATGAGGAGGCTCGGGGTGACCAGT
GTGACAAGTGTGGCAAGCTCATCAATGCTGTCGAGCTTAAGAAGCCTCAGTGTAAAGTCTGCCGATCATGCCCTG
TGGTGCAGTCGAGCCAGCACCTGTTTCTGGACCTGCCTAAGCTGGAGAAGCGACTGGAGGAGTGGTTGGGGAGGA
CATTGCCTGGCAGTGACTGGACACCCAATGCCCAGTTTATCACCCGTTCTTGGCTTCGGGATGGCCTCAAGCCAC
GCTGCATAACCCGAGACCTCAAATGGGGAACCCCTGTACCCTTAGAAGGTTTTGAAGACAAGGTATTCTATGTCT
GGTTTGATGCCACTATTGGCTATCTGTCCATCACAGCCAACTACACAGACCAGTGGGAGAGATGGTGGAAGAACC
CAGAGCAAGTGGACCTGTATCAGTTCATGGCCAAAGACAATGTTCCTTTCCATAGCTTAGTCTTTCCTTGCTCAG
CCCTAGGAGCTGAGGATAACTATACCTTGGTCAGCCACCTCATTGCTACAGAGTACCTGAACTATGAGGATGGGA
AATTCTCTAAGAGCCGCGGTGTGGGAGTGTTTGGGGACATGGCCCAGGACACGGGGATCCCTGCTGACATCTGGC
GCTTCTATCTGCTGTACATTCGGCCTGAGGGCCAGGACAGTGCTTTCTCCTGGACGGACCTGCTGCTGAAGAATA
ATTCTGAGCTGCTTAACAACCTGGGCAACTTCATCAACAGAGCTGGGATGTTTGTGTCTAAGTTCTTTGGGGGCT
ATGTGCCTGAGATGGTGCTCACCCCTGATGATCAGCGCCTGCTGGCCCATGTCACCCTGGAGCTCCAGCACTATC
ACCAGCTACTTGAGAAGGTTCGGATCCGGGATGCCTTGCGCAGTATCCTCACCATATCTCGACATGGCAACCAAT
ATATTCAGGTGAATGAGCCCTGGAAGCGGATTAAAGGCAGTGAGGCTGACAGGCAACGGGCAGGAACAGTGACTG
GCTTGGCAGTGAATATAGCTGCCTTGCTCTCTGTCATGCTTCAGCCTTACATGCCCACGGTTAGTGCCACAATCC
AGGCCCAGCTGCAGCTCCCACCTCCAGCCTGCAGTATCCTGCTGACAAACTTCCTGTGTACCTTACCAGCAGGAC
ACCAGATTGGCACAGTCAGTCCCTTGTTCCAAAAATTGGAAAATGACCAGATTGAAAGTTTAAGGCAGCGCTTTG
GAGGGGGCCAGGCAAAAACGTCCCCGAAGCCAGCAGTTGTAGAGACTGTTACAACAGCCAAGCCACAGCAGATAC
AAGCGCTGATGGATGAAGTGACAAAACAAGGAAACATTGTCCGAGAACTGAAAGCACAAAAGGCAGACAAGAACG
AGGTTGCTGCGGAGGTGGCGAAACTCTTGGATCTAAAGAAACAGTTGGCTGTAGCTGAGGGGAAACCCCCTGAAG
CCCCTAAAGGCAAGAAGAAAAAGTAAAAGACCTTGGCTCATAGAAAGTCACTTTAATAGATAGGGACAGTAATAA
ATAAATGTACAATCTCTATA

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FIGURE 2960

MRLFVSDGVPGCLPVLAAAGRARGRAEVLISTVGPEDCVVPFLTRPKVPVLQLDSGNYLFSTSAICRYFFLLSGW
EQDDLTNQWLEWEATELQPALSAALYYLVVQGKKGEDVLGSVRRALTHIDHSLSRQNCPFLAGETESLADIVLWG
ALYPLLQDPAYLPEELSALHSWFQTLSTQEPCQRAAETVLKQQGVLALRPYLQKQPQPSPAEGRAVTNEPEEEEL
ATLSEEEIAMAVTAWEKGLESLPPLRPQQNPVLPVAGERNVLITSALPYVNNVPHLGNIIGCVLSADVFARYSRL
RQWNTLYLCGTDEYGTATETKALEEGLTPQEICDKYHIIHADIYRWFNISFDIFGRTTTPQQTKITQDIFQQLLK
RGFVLQDTVEQLRCEHCARFLADRFVEGVCPFCGYEEARGDQCDKCGKLINAVELKKPQCKVCRSCPVVQSSQHL
FLDLPKLEKRLEEWLGRTLPGSDWTPNAQFITRSWLRDGLKPRCITRDLKWGTPVPLEGFEDKVFYVWFDATIGY
LSITANYTDQWERWWKNPEQVDLYQFMAKDNVPFHSLVFPCSALGAEDNYTLVSHLIATEYLNYEDGKFSKSRGV
GVFGDMAQDTGIPADIWRFYLLYIRPEGQDSAFSWTDLLLKNNSELLNNLGNFINRAGMFVSKFFGGYVPEMVLT
PDDQRLLAHVTLELQHYHQLLEKVRIRDALRSILTISRHGNQYIQVNEPWKRIKGSEADRQRAGTVTGLAVNIAA
LLSVMLQPYMPTVSATIQAQLQLPPPACSILLTNFLCTLPAGHQIGTVSPLFQKLENDQIESLRQRFGGGQAKTS
PKPAVVETVTTAKPQQIQALMDEVTKQGNIVRELKAQKADKNEVAAEVAKLLDLKKQLAVAEGKPPEAPKGKKKK

FIGURE 2961

GGAGAAGCAGCTTGAGGCATCATTAGATGCACTGCTGAGTCAAGTGGCTGATCTGAAGAACTCTCTGGGGAGTTT
CATTTGCAAGTTGGAGAACGAGTATGGCCGGCTGACCTGGCCATCTGTCCTGGACAGCTTTGCCTTGCTTTCTGG
ACAGCTGAACACTCTGAACAAGGTCTTGAAGCATGAAAAAACACCGCTGTTCCGTAACCAGGTCATCATTCCTCT
GGTGTTGTCTCCAGACCGAGATGAAGATCTCATGCGGCAGACTGAAGGACGGGTGCCTGTTTTCAGCCATGAGGT
AGTCCCTGACCATCTGAGAACCAAGCCTGACCCTGAAGTGGAAGAACAGGAGAAGCAACTGACGACAGATGCTGC
CCGCATTGGTGCAGATGCAGCCCAGAAGCAGATCCAGAGCTTGAATAAAATGTGTTCAAACCTTCTGGAGAAAAT
CAGCAAAGAGGAGCGAGAATCAGAGAGTGGAGGTCTCCGGCCGAACAAGCAGACCTTTAACCCTACAGACACTAA
TGCCTTGGTGGCAGCTGTTGCCTTTGGGAAAGGACTATCTAATTGGAGACCTTCAGGCAGCAGTGGTCCTGGCCA
GGCAGGCCAGCCAGGAGCTGGGACGATCCTTGCAGGAACCTCAGGATTACAGCAGGTGCAGATGGCAGGAGCTCC
AAGCCAGCAGCAGCCAATGCTCAGTGGGGTACAAATGGCTCAGGCAGGTCAACCAGGGAAAATGCCAAGTGGAAT
AAAAACCAACATCAAGTCGGCTTCCATGCATCCCTACCAGCGGCCCTCCTGCCTGGGTTTCATTCTGGCTATCCC
TCTAAGGCGCAAGGTGAAGAAGCTTCTGGGCCAGGAAGGAAAAAAAAATGCCCACCTGCAGCTCTGGTGAAGCTT
GGGCCTGCTCTCCTTTCCATCCTCTAAGGAGCCAACTTGGCTTTTACCTGTCAAATAGTCATAAAGTCCCCTATC
CTTTACCCCACCTTATACACACGAGGCTTTCTCAGGAAGTGGCTCTGCCAGGCAGGACTATGTGGGAAAGGGTTT
TTCCTTAGCACACGAAAAAGCCCCTTCCCCTGGATTCATGTTTCTTATTTTGGAGGGAGAAGGGAATTGCACTTC
ACACTGCCATCAGGGTTTAGTTGACCTCATAATGGTGCCCACTTTCTCGACTTTGGCCAGGATTTCCTTCAAAGA
AAACGACTTTCCTTCATTTCCCTAAGCCTGTGGCCCAAATGGTGGACCAGAATGATGGTGGGAGGGGGCAACCCC
CAGTAGCTTTGCCTGCTTTTATAAAGTTGAACAAATTGAATTTAGACATTCAGGCTAACCTGCCTTTCTTAGTAC
TCCTTTGTTGGCATGGGCAGGGGTTGAGTCAGCAGAAGTGGACCAAAGGATTCCTCTGAATAAAGTTATTTAAAT
TGAAAAAAAAAAAAAAAA

FIGURE 2962

MRQTEGRVPVFSHEVVPDHLRTKPDPEVEEQEKQLTTDAARIGADAAQKQIQSLNKMCSNLLEKISKEERESESG
GLRPNKQTFNPTDTNALVAAVAFGKGLSNWRPSGSSGPGQAGQPGAGTILAGTSGLQQVQMAGAPSQQQPMLSGV
QMAQAGQPGKMPSGIKTNIKSASMHPYQRPSCLGFILAIPLRRKVKKLLGQEGKKNAHLQLW

FIGURE 2963

GGCACGAGGCTAGAGCGATGCCGGGCCGGAGTTGCGTCGCCTTAGTCCTCCTGGCTGCCGCCGTCAGCTGTGCCG
TCGCGCAGCACGCGCCGCCGTGGACAGAGGACTGCAGAAAATCAACCTATCCTCCTTCAGGACCAACGTACAGAG
GTGCAGTTCCATGGTACACCATAAATCTTGACTTACCACCCTACAAAAGATGGCATGAATTGATGCTTGACAAGG
CACCAATGCTAAAGGTTATAGTGAATTCTCTGAAGAATATGATAAATACATTCGTGCCAAGTGGAAAAGTTATGC
AGGTGGTGGATGAAAAATTGCCTGGCCTACTTGGCAACTTTCCTGGCCCTTTTGAAGAGGAAATGAAGGGTATTG
CCGCTGTTACTGATATACCTTTAGGAGAGATTATTTCATTCAATATTTTTTATGAATTATTTACCATTTGTACTT
CAATAGTAGCAGAAGACAAAAAAGGTCATCTAATACATGGGAGAAACATGGATTTTGGAGTATTTCTTGGGTGGA
ACATAAATAATGATACCTGGGTCATAACTGAGCAACTAAAACCTTTAACAGTGAATTTGGATTTCCAAAGAAACA
ACAAAACTGTCTTCAAGGCTTCAAGCTTTGCTGGCTATGTGGGCATGTTAACAGGATTCAAACCAGGACTGTTCA
GTCTTACACTGAATGAACGTTTCAGTATAAATGGTGGTTATCTGGGTATTCTAGAATGGATTCTGGGAAAGAAAG
ATGCCATGTGGATAGGGTTCCTCACTAGAACAGTTCTGGAAAATAGCACAAGTTATGAAGAAGCCAAGAATTTAT
TGACCAAGACCAAGATATTGGCCCCAGCCTACTTTATCCTGGGAGGCAACCAGTCTGGGGAAGGTTGTGTGATTA
CACGAGACAGAAAGGAATCATTGGATGTATATGAACTCGATGCTAAGCAGGGTAGATGGTATGTGGTACAAACAA
ATTATGACCGTTGGAAACATCCCTTCTTCCTTGATGATCGCAGAACGCCTGCAAAGATGTGTCTGAACCGCACCA
GCCAAGAGAATATCTCATTTGAAACCATGTATGATGTCCTGTCAACAAAACCTGTCCTCAACAAGCTGACCGTAT
ACACAACCTTGATAGATGTTACCAAAGGTCAATTCGAAACTTACCTGCGGGACTGCCCTGACCCTTGTATAGGTT
GGTGAGCACACGTCTGGCCTACAGAATGCGGCCTCTGAGACATGAAGACACCATCTCCATGTGACCGAACACTGC
AGCTGTCTGACCTTCCAAAGACTAAGACTCGCGGCAGGTTCTCTTTGAGTCAATAGCTTGTCTTCGTCCATCTGT
TGACAAATGACAGATCTTTTTTTTTTTCCCCCTATCAGTTGATTTTTCTTATTTACAGATAACTTCTTTAGGGGA
AGTAAAACAGTCATCTAGAATTCACTGAGTTTTGTTTCACTTTGACATTTGGGGATCTGGTGGGCAGTCGAACCA
TGGTGAACTCCACCTCCGTGGAATAAATGGAGATTCAGCGTGGGTGTTGAATCCAGCACGTCTGTGTGAGTAACG
GGACAGTAAACACTCCACATTCTTCAGTTTTTCACTTCTACCTACATATTTGTATGTTTTTCTGTATAACAGCCT
TTTCCTTCTGGTTCTAACTGCTGTTAAAATTAATATATCATTATCTTTGCTGTTATTGACAGCGATATTATTTTA
TTACATATCATTAGAGGGATGAGACAGACATTCACCTGTATATTTCTTTTAATGGGCACAAAATGGGCCCTTGCC
TCTAAATAGCACTTTTTGGGGTTCAAGAAGTAATCAGTATGCAAAGCAATCTTTTATACAATAATTGAAGTGTTC
CCTTTTTCATAATTACTCTACTTCCCAGTAACCCTAAGGAAGTTGCTAACTTAAAAAACTGCATCCCACGTTCTG
TTAATTTAGTAAATAAACAAGTCAAAGACTTGTGGAAAATAGGAAGTGAACCCATATTTTAAATTCTCATAAGTA
GCATTGATGTAATAAACAGGTTTTTAGTTTGTTCTTCAGATTGATAGGGAGTTTTAAAGAAATTTTAGTAGTTAC
TAAAATTATGTTACTGTATTTTTCAGAAATCAAACTGCTTATGAAAAGTACTAATAGAACTTGTTAACCTTTCTA
ACCTTCACGATTAACTGTGAAATGTACGTCATTTGTGCAAGACCGTTTGTCCACTTCATTTTGTATAATCACAGT
TGTGTTCCTGACACTCAATAAACAGTCACTGGAAAGAGTGCCAGTCAGCAGTCATGCACGCTGATAAAAAAAAAA
AAAAAAAA

FIGURE 2964

MPGRSCVALVLLAAAVSCAVAQHAPPWTEDCRKSTYPPSGPTYRGAVPWYTINLDLPPYKRWHELMLDKAPMLKV
IVNSLKNMINTFVPSGKVMQVVDEKLPGLLGNFPGPFEEEMKGIAAVTDIPLGEIISFNIFYELFTICTSIVAED
KKGHLIHGRNMDFGVFLGWNINNDTWVITEQLKPLTVNLDFQRNNKTVFKASSFAGYVGMLTGFKPGLFSLTLNE
RFSINGGYLGILEWILGKKDAMWIGFLTRTVLENSTSYEEAKNLLTKTKILAPAYFILGGNQSGEGCVITRDRKE
SLDVYELDAKQGRWYVVQTNYDRWKHPFFLDDRRTPAKMCLNRTSQENISFETMYDVLSTKPVLNKLTVYTTLID
VTKGQFETYLRDCPDPCIGW

FIGURE 2965

CGTTATTTGCAGTGGCTTTGGGGACTCAGCAGTGGCAAGTCCCTGTGCATAATGTGAACCTGCAGACTTCAAGAT
GGGGCCCCTCCTGCACCCACTAACATGTCTGCCCTTTTTTGTTTTTATCCTGGAACAAGTGGAGAAATGGCAGAG
CTGGCTGACTCTGGGGACCCTTCCCTTTTTCCCATGGCTTCATTTCTTCCTCACCACAACTAATTCGGGGAGCTG
AGAAGTCACACAGGGTATTCCTCTCCCTTCTCTGATGTTATTAATTAATAGACCAGAGAATAAGGTTGCAGATAT
TACATTTGTTGTGTTTTTGTGTTTTGTTTTTTTTTTTAAGGAAAATCCCAAACAAAGCCCAGCATGATTTGAGAA
AAGAGGATGTTTTCCCAGGGAAAATAATTTTTTTAACCTGCCTGAGAATGATTTATTTATTTGTTGGAGGCCATT
GGTCAGACAGCCTGGAGCTTGGGCTGTGGAAGATTTCAAAAGCATAGGGCTGTGGTCTCTGGAAACCTATTACAG
CCTGCAGCTGTGAGCTGAGCCAGTGACGAGGTCCCTGGAAACTCAGGAAGGCTGACAGGTGGGCCTTGGGGTATT
GGTTTGTGGAGAAGGAAGCATTCTTTAGGCTGCGGCACTCCTTATAGTTTCCCACCCACCGAGTGACATTCAGGC
AGAAATTGAGCTCAGGAGACAGCCAGCCTTCCCACATCCCACTTCACTTCCCGGTCCACACGTAAAGCAGTGTGT
CTCCAAGGAGGCAGTGAGCAATTCCCAAGGTCCCCGTGTTGTGAGAAGCGCGCTGCTTTCTCCCTTTGCAGGGAA
AAAAAAAGGCTTTCCTGGTGAGATCATGAGTCCTTCCGGCTTCATTTCTCATTGTGGGTTTAACTTCTAAAACGC
AAATGGAGTTTAGAGAGGATGAGCAGAACCACAGGACCTGCCCCCATCTCTCACTCACTGCAATTGCTTCTACTC
TGGGCACAAGTAGGGTGTCTGAAGACCATGTTTCCCTCTGGTTCTCTAGTTTGCAGATAACACAGAAGACACTGG
CTAGAACCTTAAGCTTTCTGCCAAAAAGATGCAGAGAGCAGGGCAGTAGCTACTGGCAGTGGGGTGTGAATAAAG
AGTCCTTTCACAACCAAGTTCACTGAGGATTTGGAGCACCAGCTTCCCAGCAGTATCGAGGGGTGGAGAGGTGTA
CATTCAGGTGGAGGGGTACATCTAGGGGTGGAGAGGTGTACATTCTAGAAACAGCTGTTAACACACTCCACTTTA
AAGACAGCAAGCTAGACCTGCAGGATCAAAGCCACACACTGTGGTAGGGGTTACAAATGTTTATGGGGCCCAGAA
TACTAGCATAGATGCGTGAAATGGTTGGTGTGAGGCAAAAGGGCATGGTGGGGGCAAGGATGGGGACTGTGGTCT
TACTGGCATGCACGTGACCTACCCAGAATGAGCAGCTGCTACTCAGCCCCAACCTGTCATTGTTTGTAAAAATGT
AAGCACAGTGTAGTGGAATCTTCCAATTTGGAAGGGAAGCCGGAAATCCAGATTTAATGGAAAAAATCTGATTTT
TCAACGTCGGGTTTTTTGTTTGTTTGTTTTTGTTTTTTTTTAACAGATAGTGGGCAAAGAAAAATTCCACTGTTCC
ACGTGTACACTGCCAGCAACCTCTGCTCTCTGGAGAGGTGGTTTAAAGTGAGATTATGCATTGCCCTGGTAGAAG
AGGAAAAAAGCCAGCATCAGGTCAGGGCAAAAATAACAGCCCATGTTGAACTCGGAATGGGGACCTCTTGCTAAG
TCATTCCACTCCTCAAGAGACCATTCCACAGAGGGGGGATGGATCATTCAGCTCTCCTGGTCCCAAGATTGTGCT
GAAGGGAAGAAGGAATAGAATCTGGAGATCTGGACTGCTGCCCCTTAGATATGCAGAGGTCCACATCTGCCTGGG
GCTACAGCTTGTGGGACTCCATCAAACCAGGCCGAAATGGCAAAGACAGTCTAGGAGGAGGAGGAGGTAGGGTGT
GAAACAGCCAGGCTCTCTCCAAATCCCAAGTGTTGACACAGCCATCTTGTCCCATCCCTGGAAGCCTCTTTGGAA
ACCACATAGAGCTGTGCTGGCTCACGGGATGTCCTGTTTGCTTCTGCCTCAGTTACCTTACTTTGCCCATGGGTC
TACCACAGGCGCTACCTCATTGTGTCTGCTGAGAAGTTTACCTGGGAGGGGGGAACAAAGTTGTCCAAATCTGCT
TGAGCTGAATGTATGATCTATGCAAATTCTCTCTCTCCTCTCTCTCTTCCTCTCTGGCTCTCTTAGAAGTTTTTT
TGTTTTGTTTTGTTTTGTTTTGTGTTTACCTTGCAAACAAGATACTGTATAGGACCCTCTTAAGATGGAGGAGGG
CTTTCTTGCGCCACCTGTGTCTACCCCTCACGTTGTCTTTGGCTCTGGTCTTACCAGGCGTATGCAGGGAGAAAG
TGACCTCTCTTCCCTCTCCACTTGGCTGGGAATATTCCAACTGCCTCTGCCTACAGATACCACCAGAAAGCGGGT
TCTGCACCTTGTCATCCCCCTCCCTAACGTCATCTACTCCATCCCTCATGTTCCTCCAACTTGCTTCTCCCATCC
CTCCTTCAAAAACAAAACAAAACAAAACAAAAGCCTTAGGTTTCTCCTTTTTGAAATGTGGCCTTAACATTATTT
TTGGGAAGCTGACCATCCATCCTTTCCCTCCCATCTCCACCAACATCAGAGAAGACAGCATCGTGAAGCTTCTGT
GGCAGCCTCCTAAGGAAGGGGCTGCCAATCTGTAGTTGGCAGATGCTATAGGAATTGCTTACAAATGTCGTCTTT
AAGAAAAATGTTCTTATATTTTTCCTATGGGCAAAATGAAGGCTTGGGTGCTCATCTAAAGCTCAGCCAACTCCT
GAAGCACTCTCTCAGAGCATACTGCTGCTGTAATGGGCTGGCTTAATTATCGGCAGAGTGCTTGAAAAGGCTTTG
CAGACCTCCCCTGCCCCCAAGACTGGGTGACTTTATATGTACTTCATTCAAGGGTAAATCAGGAGACGTTCTCCA
TTTATCTCTTCGTCCTTCCTGCCTGGAAAGTGATAGCACTAAATATTCCCAGCAGATGGGTAGTGTTCTCAAAGG
AATCACCCTTTCCCTACCTTCAGACTCTATTCTTTACCCTTCCATTGCTCCAGTGCTGATGGAGGCCAAAGACAA
CCCCAGGGTTTTCATAGGAAATTCACTGGAATTGTGCGCAATTGTCTTTGTAGTCCTTTTGCCTTTTTTTTTTTT
AAATATTATGTTGTCAATAGCATTTGTTTGGGTATTTGTTTTAGAGGCCTCACTCTAAGTTATTACCGTCCCCTT
CATTGTTTTCAAAGACATGTGGTGATATAGTTTTTAAAAATAACTATTTTGTTATAGATCATAATATGCATAAAA
CTGTACAGAAATATTTTGTAATGTGTTGATTTTAAAAAAAGAATCTGTAAATAAAGTTTTAAAAAAAGAAAAAAA
AAAAAAAAAAGG

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FIGURE 2966

GGCACGAGGCTGCTGTTTGTCTACTTCCTCCTGCTTCCCCGCCGCCGCCGCCGCCATCATGAGGGAAATCGTGCA
CTTGCAGGCCGGGCAGTGCGGCAACCAAATCGGCGCCAAGTTTTGGGAGGTGATCAGCGATGAGCACGGCATCGA
CCCCACGGGCACCTACCACGGGGACAGCGACCTGCAGCTGGAACGCATCAACGTGTACTACAATGAGGCCACCGG
CGGCAAGTACGTGCCCCGCGCCGTGCTCGTGGATCTGGAGCCCGGCACCATGGACTCCGTGCGCTCGGGGCCCTT
CGGGCAGATCTTCCGGCCGGACAACTTCGTTTTCGGTCAGAGTGGTGCTGGGAACAACTGGGCCAAGGGGCACTA
CACAGAAGGCGCGGAGCTGGTGGACTCGGTGCTGGATGTTGTGAGAAAGGAGGCTGAGAGCTGTGACTGCCTGCA
GGGTTTCCAGCTGACCCACTCCCTGGGTGGGGGGACTGGGTCTGGGATGGGTACCCTCCTCATCAGCAAGATCCG
GGAGGAGTACCCAGACAGGATCATGAACACGTTTAGTGTGGTGCCTTCGCCCAAAGTGTCAGACACAGTGGTGGA
GCCCTACAACGCCACCCTCTCAGTCCACCAGCTCGTAGAAAACACAGACGAGACCTACTGCATTGATAACGAAGC
TCTCTACGACATTTGCTTCAGAACCCTAAAGCTGACCACGCCCACCTATGGTGACCTGAACCACCTGGTGTCTGC
TACCATGAGTGGGGTCACCACCTGCCTGCGCTTCCCAGGCCAGCTCAATGCTGACCTGCGGAAGCTGGCTGTGAA
CATGGTCCCGTTTCCCCGGCTGCACTTCTTCATGCCCGGCTTTGCCCCACTGACCAGCCGGGGCAGCCAGCAGTA
CCGGGCGCTGACCGTGCCCGAGCTCACCCAGCAGATGTTTGATGCCAAGAACATGATGGCTGCCTGCGACCCCCG
CCATGGCCGCTACCTGACGGTTGCCGCCGTGTTCAGGGGCCGCATGTCCATGAAGGAGGTGGATGAGCAAATGCT
TAATGTCCAAAACAAAAACAGCAGCTATTTTGTTGAGTGGATCCCCAACAATGTGAAAACGGCTGTCTGTGACAT
CCCACCTCGGGGGCTAAAAATGTCCGCCACCTTCATTGGCAACAGCACGGCCATCCAGGAGCTGTTCAAGCGCAT
CTCCGAGCAGTTCACGGCCATGTTCCGGCGCAAGGCCTTCCTGCACTGGTACACGGGCGAGGGCATGGACGAGAT
GGAGTTCACCGAGGCCGAGAGCAACATGAATGACCTGGTGTCCGAGTACCAGCAGTACCAGGATGCCACAGCCGA
GGAGGAGGGCGAGTTCGAGGAGGAGGCTGAGGAGGAGGTGGCCTAGAGCCTTCAGTCACTGGGGAAAGCAGGGAA
GCAGTGTGAACTCTTTATTCACTCCCAGCCTGTCCTGTGGCCTGTCCCACTGTGTGCACTTGCTGTTTTCCCTGT
CCACATCCATGCTGTACAGACACCACCATTAAAGCATTTTCATAGTGAAAAAAAAAAAAAAAAAAAAAAAAAAA
AA

FIGURE 2967

MREIVHLQAGQCGNQIGAKFWEVISDEHGIDPTGTYHGDSDLQLERINVYYNEATGGKYVPRAVLVDLEPGTMDS
VRSGPFGQIFRPDNFVFGQSGAGNNWAKGHYTEGAELVDSVLDVVRKEAESCDCLQGFQLTHSLGGGTGSGMGTL
LISKIREEYPDRIMNTFSVVPSPKVSDTVVEPYNATLSVHQLVENTDETYCIDNEALYDICFRTLKLTTPTYGDL
NHLVSATMSGVTTCLRFPGQLNADLRKLAVNMVPFPRLHFFMPGFAPLTSRGSQQYRALTVPELTQQMFDAKNMM
AACDPRHGRYLTVAAVFRGRMSMKEVDEQMLNVQNKNSSYFVEWIPNNVKTAVCDIPPRGLKMSATFIGNSTAIQ
ELFKRISEQFTAMFRRKAFLHWYTGEGMDEMEFTEAESNMNDLVSEYQQYQDATAEEEGEFEEEAEEEVA

FIGURE 2968

CAGGAGAAGCTGACCAGCCGCAAGATGGACAGCCGCTGGGGCGGGCGCAGCGAGTCCATCAATGTGACCCTCAAC
GTGGAGCAGGCAGCCTACACCCGTGATGCCCTGGCCAAGGGGCTCTATGCCCGCCTCTTCGACTTCCTCGTGGAG
GCCATCAACCGTGCTATGCAGAAACCCCAGGAAGAGTACAGCATCGGTGTGCTGGACATTTACGGCTTCGAGATC
TTCCAGAAAAATGGCTTCGAGCAGTTTTGCATCAACTTCGTCAATGAGAAGCTGCAGCAAATCTTTATCGAACTT
ACCCTGAAGGCCGAGCAGGAGGAGTATGTGCAGGAAGGCATCCGCTGGACTCCAATCCAGTACTTCAACAACAAG
GTCGTCTGTGACCTCATCGAAAACAAGCTGAGCCCCCCAGGCATCATGAGCGTCTTGGACGACGTGTGCGCCACC
ATGCACGCCACGGGCGGGGGAGCAGACCAGACACTGCTGCAGAAGCTGCAGGCGGCTGTGGGGACCCACGAGCAT
TTCAACAGCTGGAGCGCCGGCTTCGTCATCCACCACTACGCTGGCAAGGTCTCCTACGACGTCAGCGGCTTCTGC
GAGAGGAACCGAGACGTTCTCTTCTCCGACCTCATAGAGCTGATGCAGTCCAGTGACCAGGCCTTCCTCCGGATG
CTCTTCCCCGAGAAGCTGGATGGAGACAAGAAGGGGCGCCCCAGCACCGCCGGCTCCAAGATCAAGAAACAAGCC
AACGACCTGGTGGCCACACTGATGAGGTGCACACCCCACTACATCCGCTGCATCAAACCCAACGAGACCAAGCAC
GCCCGAGACTGGGAGGAGAACAGAGTCCAGCACCAGGTGGAATACCTGGGCCTGAAGGAAAACATCAGGGTGCGC
AGAGCCGGCTTCGCCTACCGCCGCCAGTTCGCCAAATTCCTGCAGAGGTATGCCATTCTGACCCCCGAGACGTGG
CCGCGGTGGCGTGGGGACGAACGCCAGGGCGTCCAGCACCTGCTTCGGGCGGTCAACATGGAGCCCGACCAGTAC
CAGATGGGGAGCACCAAGGTCTTTGTCAAGAACCCAGAGTCGCTTTTCCTCCTGGAGGAGGTGCGAGAGCGAAAG
TTCGATGGCTTTGCCCGAACCATCCAGAAGGCCTGGCGGCGCCACGTGGCTGTCCGGAAGTACGAGGAGATGCGG
GAGGAAGCTTCCAACATCCTGCTGAACAAGAAGGAGCGGAGGCGCAACAGCATCAATCGGAACTTCGTCGGGGAC
TACCTGGGGCTGGAGGAGCGGCCCGAGCTGCGTCAGTTCCTGGGCAAGAAGGAGCGGGTGGACTTCGCCGATTCG
GTCACCAAGTACGACCGCCGCTTCAAGCCCATCAAGCGGGACTTGATCCTGACGCCCAAGTGTGTGTATGTGATT
GGGCGAGAGAAGATGAAGAAGGGACCTGAGAAAGGTCCAGTGTGTGAAATCTTGAAGAAGAAATTGGACATCCAG
GCTCTGCGGGGGGTCTCCCTCAGCACGCGACAGGACGACTTCTTCATCCTCCAAGAGGATGCCGCCGACAGCTTC
CTGGAGAGCGTCTTCAAGACCGAGTTTGTCAGCCTTCTGTGCAAGCGCTTCGAGGAGGCGACGCGGAGGCCCCTG
CCCCTCACCTTCAGCGACACACTACAGTTTCGGGTGAAGAAGGAGGGCTGGGGCGGTGGCGGCACCCGCAGCGTC
ACCTTCTCCCGCGGCTTCGGCGACTTGGCAGTGCTCAAGGTTGGCGGTCGGACCCTCACGGTCAGCGTGGGCGAT
GGGCTGCCCAAGAACTCCAAGCCTACCGGAAAGGGATTGGCCAAGGGTAAACCTCGGAGGTCGTCCCAAGCCCCT
ACCCGGGCGGCCCCTGGCGCCCCCCAAGGCATGGATCGAAATGGGGCCCCCCTCTGCCCACAGGGGGGGGCCCCC
TGCCCCCTGGAGAAATTCATTTGGCCCAGGGGGCACCCACAGGCCTCCCCGGCCCTCCGTCCACATCCCTGGGAT
GCCAGCAGACGACCCCGGGCACGTCCGCCCTCAGAGCACAACACAGAATTCCTCAACGTGCCTGACCAGGGGATG
GCCGGCATGCAGAGGAAGCGCAGCGTGGGGCAACGGCCAGTGCCTGTGGGCCGACCCAAGCCCCAGCCTCGGACA
CATGGTCCCAGGTGCCGGGCCCTATACCAGTACGTGGGCCAAGATGTGGACGAGCTGAGCTTCAACGTGAACGAG
GTCATTGAGATCCTCATGGAAGATCCCTCGGGCTGGTGGAAGGGCCGGCTTCACGGCCAGGAGGGCCTTTTCCCA
GGAAACTACGTGGAGAAGATCTGAGCTGGGCCCTGGGATACTGCCTTCTCTTTCGCCCGCCTATCTGCCTGCCGG
CCTGGTGGGGAGCCAGGCCCTGCCAATGAAAGCCTCGTTTACCTGGGCTGCAATAGCCTAAAAGTCCAATCCTTT
GGCCTCCAGTCCTTGCCCAGGCCCTGGGTCACCAGGTCACTGGTGCAGCCCCCGCCCCTGGGCCCTGGTTTTCCT
CCAACATCACACCTGCTGCCCATTGTCCAAAACTGTGTGTGTCAAAGGGGACTAACAGCAGAATTTACCTCCCAA
CTGCCATGTGATTAAGAAATGGGTCTTGAGTCCTGTGCTGTTGGCAAAGTTCCAGGCACAGTTGGGGAGGGGGGG
CCGGAATCCGC

FIGURE 2969A

GCGATCCGGGCGCCACCCCGCGGTCATCGGTCACCGGTCGCTCTCAGGAACAGCAGCGCAACCTCTGCTCCCTGC
CTCGCCTCCCGCGCGCCTAGGTGCCTGCGACTTTAATTAAAGGGCCGTCCCCTCGCCGAGGCTGCAGCACCGCCC
CCCCGGCTTCTCGCGCCTCAAAATGAGTAGCTCCCACTCTCGGGCGGGCCAGAGCGCAGCAGGCGCGGCTCCGGG
CGGCGGCGTCGACACGCGGGACGCCGAGATGCCGGCCACCGAGAAGGACCTGGCGGAGGACGCGCCGTGGAAGAA
GATCCAGCAGAACACTTTCACGCGCTGGTGCAACGAGCACCTGAAGTGCGTGAGCAAGCGCATCGCCAACCTGCA
GACGGACCTGAGCGACGGGCTGCGGCTTATCGCGCTGTTGGAGGTGCTCAGCCAGAAGAAGATGCACCGCAAGCA
CAACCAGCGGCCCACTTTCCGCCAAATGCAGCTTGAGAACGTGTCGGTGGCGCTCGAGTTCCTGGACCGCGAGAG
CATCAAACTGGTGTCCATCGACAGCAAGGCCATCGTGGACGGGAACCTGAAGCTGATCCTGGGCCTCATCTGGAC
CCTGATCCTGCACTACTCCATCTCCATGCCCATGTGGGACGAGGAGGAGGATGAGGAGGCCAAGAAGCAGACCCC
CAAGCAGAGGCTCCTGGGCTGGATCCAGAACAAGCTGCCGCAGCTGCCCATCACCAACTTCAGCCGGGACTGGCA
GAGCGGCCGGGCCCTGGGCGCCCTGGTGGACAGCTGTGCCCCGGGCCTGTGTCCTGACTGGGACTCTTGGGACGC
CAGCAAGCCCGTTACCAATGCGCGAGAGGCCATGCAGCAGGCGGATGACTGGCTGGGCATCCCCCAGGTGATCAC
CCCCGAGGAGATTGTGGACCCCAACGTGGACGAGCACTCTGTCATGACCTACCTGTCCCAGTTCCCCAAGGCCAA
GCTGAAGCCAGGGGCTCCCTTGCGCCCCAAACTGAACCCGAAGAAAGCCCGTGCCTACGGGCCAGGCATCGAGCC
CACAGGCAACATGGTGAAGAAGCGGGCAGAGTTCACTGTGGAGACCAGAAGTGCTGGCCAGGGAGAGGTGCTGGT
GTACGTGGAGGACCCGGCCGGACACCAGGAGGAGGCAAAAGTGACCGCCAATAACGACAAGAACCGCACCTTCTC
CGTCTGGTACGTCCCCGAGGTGACGGGGACTCATAAGGTTACTGTGCTCTTTGCTGGCCAGCACATCGCCAAGAG
CCCCTTCGAGGTGTACGTGGATAAGTCACAGGGTGACGCCAGCAAAGTGACAGCCCAAGGTCCCGGCCTGGAGCC
CAGTGGCAACATCGCCAACAAGACCACCTACTTTGAGATCTTTACGGCAGGAGCTGGCACGGGCGAGGTCGAGGT
TGTGATCCAGGACCCCATGGGACAGAAGGGCACGGTAGAGCCTCAGCTGGAGGCCCGGGGCGACAGCACATACCG
CTGCAGCTACCAGCCCACCATGGAGGGCGTCCACACCGTGCACGTCACGTTTGCCGGCGTGCCCATCCCTCGCAG
CCCCTACACTGTCACTGTTGGCCAAGCCTGTAACCCGAGTGCCTGCCGGGCGGTTGGCCGGGGCCTCCAGCCCAA
GGGTGTGCGGGTGAAGGAGACAGCTGACTTCAAGGTGTACACAAAGGGCGCTGGCAGTGGGGAGCTGAAGGTCAC
CGTGAAGGGCCCCAAGGGAGAGGAGCGCGTGAAGCAGAAGGACCTGGGGGATGGCGTGTATGGCTTCGAGTATTA
CCCCATGGTCCCTGGAACCTATATCGTCACCATCACGTGGGGTGGTCAGAACATCGGGCGCAGTCCCTTCGAAGT
GAAGGTGGGCACCGAGTGTGGCAATCAGAAGGTACGGGCCTGGGGCCCTGGGCTGGAGGGCGGCGTCGTTGGCAA
GTCAGCAGACTTTGTGGTGGAGGCTATCGGGGACGACGTGGGCACGCTGGGCTTCTCGGTGGAAGGGCCATCGCA
GGCTAAGATCGAATGTGACGACAAGGGCGACGGCTCCTGTGATGTGCGCTACTGGCCGCAGGAGGCTGGCGAGTA
TGCCGTTCACGTGCTGTGCAACAGCGAAGACATCCGCCTCAGCCCCTTCATGGCTGACATCCGTGACGCGCCCCA
GGACTTCCACCCAGACAGGGTGAAGGCACGTGGGCCTGGATTGGAGAAGACAGGTGTGGCCGTCAACAAGCCAGC
AGAGTTCACAGTGGATGCCAAGCACGGTGGCAAGGCCCCACTTCGGGTCCAAGTCCAGGACAATGAAGGCTGCCC
TGTGGAGGCGTTGGTCAAGGACAACGGCAATGGCACTTACAGCTGCTCCTACGTGCCCAGGAAGCCGGTGAAGCA
CACAGCCATGGTGTCCTGGGGAGGCGTCAGCATCCCCAACAGCCCCTTCAGGGTGAATGTGGGAGCTGGCAGCCA
CCCCAACAAGGTCAAAGTATACGGCCCCGGAGTAGCCAAGACAGGGCTCAAGGCCCACGAGCCCACCTACTTCAC
TGTGGACTGCGCCGAGGCTGGCCAGGGGGACGTCAGCATCGGCATCAAGTGTGCCCCTGGAGTGGTAGGCCCCGC
CGAAGCTGACATCGACTTCGACATCATCCGCAATGACAATGACACCTTCACGGTCAAGTACACGCCCCGGGGGGC
TGGCAGCTACACCATTATGGTCCTCTTTGCTGACCAGGCCACGCCCACCAGCCCCATCCGAGTCAAGGTGGAGCC
CTCTCATGACGCCAGTAAGGTGAAGGCCGAGGGCCCTGGCCTCAGTCGCACTGGTGTCGAGCTTGGCAAGCCCAC
CCACTTCACAGTAAATGCCAAAGCTGCTGGCAAAGGCAAGCTGGACGTCCAGTTCTCAGGACTCACCAAGGGGGA
TGCAGTGCGAGATGTGGACATCATCGACCACCATGACAACACCTACACAGTCAAGTACACGCCTGTCCAGCAGGG
TCCAGTAGGCGTCAATGTCACTTATGGAGGGGATCCCATCCCTAAGAGCCCTTTCTCAGTGGCAGTATCTCCAAG
CCTGGACCTCAGCAAGATCAAGGTGTCTGGCCTGGGAGAGAAGGTGGACGTTGGCAAAGACCAGGAGTTCACAGT
CAAATCAAAGGGTGCTGGTGGTCAAGGCAAAGTGGCATCCAAGATTGTGGGCCCCTCGGGTGCAGCGGTGCCCTG
CAAGGTGGAGCCAGGCCTGGGGGCTGACAACAGTGTGGTGCGCTTCCTGCCCCGTGAGGAAGGGCCCTATGAGGT
GGAGGTGACCTATGACGGCGTGCCCGTGCCTGGCAGCCCCTTTCCTCTGGAAGCTGTGGCCCCCACCAAGCCTAG
CAAGGTGAAGGCGTTTGGGCCGGGGCTGCAGGGAGGCAGTGCGGGCTCCCCCGCCCGCTTCACCATCGACACCAA
GGGCGCCGGCACAGGTGGCCTGGGCCTGACGGTGGAGGGCCCCTGTGAGGCGCAGCTCGAGTGCTTGGACAATGG
GGATGGCACATGTTCCGTGTCCTACGTGCCCACCGAGCCCGGGGACTACAACATCAACATCCTCTTCGCTGACAC

FIGURE 2969B

CCACATCCCTGGCTCCCCATTCAAGGCCCACGTGGTTCCCTGCTTTGACGCATCCAAAGTCAAGTGCTCAGGCCC
CGGGCTGGAGCGGGCCACCGCTGGGGAGGTGGGCCAATTCCAAGTGGACTGCTCGAGCGCGGGCAGCGCGGAGCT
GACCATTGAGATCTGCTCGGAGGCGGGGCTTCCGGCCGAGGTGTACATCCAGGACCACGGTGATGGCACGCACAC
CATTACCTACATTCCCCTCTGCCCCGGGGCCTACACCGTCACCATCAAGTACGGCGGCCAGCCCGTGCCCAACTT
CCCCAGCAAGCTGCAGGTGGAACCTGCGGTGGACACTTCCGGTGTCCAGTGCTATGGGCCTGGTATTGAGGGCCA
GGGTGTCTTCCGTGAGGCCACCACTGAGTTCAGTGTGGACGCCCGGGCTCTGACACAGACCGGAGGGCCGCACGT
CAAGGCCCGTGTGGCCAACCCCTCAGGCAACCTGACGGAGACCTACGTTCAGGACCGTGGCGATGGCATGTACAA
AGTGGAGTACACGCCTTACGAGGAGGGACTGCACTCCGTGGACGTGACCTATGACGGCAGTCCCGTGCCCAGCAG
CCCCTTCCAGGTGCCCGTGACCGAGGGCTGCGACCCCTCCCGGGTGCGTGTCCACGGGCCAGGCATCCAAAGTGG
CACCACCAACAAGCCCAACAAGTTCACTGTGGAGACCAGGGGAGCTGGCACGGGCGGCCTGGGCCTGGCTGTAGA
GGGCCCCTCCGAGGCCAAGATGTCCTGCATGGATAACAAGGACGGCAGCTGCTCGGTCGAGTACATCCCTTATGA
GGCTGGCACCTACAGCCTCAACGTCACCTATGGTGGCCATCAAGTGCCAGGCAGTCCTTTCAAGGTCCCTGTGCA
TGATGTGACAGATGCGTCCAAGGTCAAGTGCTCTGGGCCCGGCCTGAGCCCAGGCATGGTTCGTGCCAACCTCCC
TCAGTCCTTCCAGGTGGACACAAGCAAGGCTGGTGTGGCCCCATTGCAGGTCAAAGTGCAAGGGCCCAAAGGCCT
GGTGGAGCCAGTGGACGTGGTAGACAACGCTGATGGCACCCAGACCGTCAATTATGTGCCCAGCCGAGAAGGGCC
CTACAGCATCTCAGTACTGTATGGAGATGAAGAGGTACCCCGGAGCCCCTTCAAGGTCAAGGTGCTGCCTACTCA
TGATGCCAGCAAGGTGAAGGCCAGTGGCCCCGGGCTCAACACCACTGGCGTGCCTGCCAGCCTGCCCGTGGAGTT
CACCATCGATGCAAAGGACGCCGGGGAGGGCCTGCTGGCTGTCCAGATCACGGATCCCGAAGGCAAGCCGAAGAA
GACACACATCCAAGACAACCATGACGGCACGTATACAGTGGCCTACGTGCCAGACGTGACAGGTCGCTACACCAT
CCTCATCAAGTACGGTGGTGACGAGATCCCCTTCTCCCCGTACCGCGTGCGTGCCGTGCCCACCGGGGACGCCAG
CAAGTGCACTGTCACAGTGTCAATCGGAGGTCACGGGCTAGGTGCTGGCATCGGCCCCACCATTCAGATTGGGGA
GGAGACGGTGATCACTGTGGACACTAAGGCGGCAGGCAAAGGCAAAGTGACGTGCACCGTGTGCACGCCTGATGG
CTCAGAGGTGGATGTGGACGTGGTGGAGAATGAGGACGGCACTTTCGACATCTTCTACACGGCCCCCCAGCCGGG
CAAATACGTCATCTGTGTGCGCTTTGGTGGCGAGCACGTGCCCAACAGCCCCTTCCAAGTGACGGCTCTGGCTGG
GGACCAGCCCTCGGTGCAGCCCCCTCTACGGTCTCAGCAGCTGGCCCCACAGTACACCTACGCCCAGGGCGGCCA
GCAGACTTGGGCCCCGGAGAGGCCCCTGGTGGGTGTCAATGGGCTGGATGTGACCAGCCTGAGGCCCTTTGACCT
TGTCATCCCCTTCACCATCAAGAAGGGCGAGATCACAGGGGAGGTTCGGATGCCCTCAGGCAAGGTGGCGCAGCC
CACCATCACTGACAACAAAGACGGCACCGTGACCGTGCGGTATGCACCCAGCGAGGCTGGCCTGCACGAGATGGA
CATCCGCTATGACAACATGCACATCCCAGGAAGCCCCTTGCAGTTCTATGTGGATTACGTCAACTGTGGCCATGT
CACTGCCTATGGGCCTGGCCTCACCCATGGAGTAGTGAACAAGCCTGCCACCTTCACCGTCAACACCAAGGATGC
AGGAGAGGGGGGCCTGTCTCTGGCCATTGAGGGCCCGTCCAAAGCAGAAATCAGCTGCACTGACAACCAGGATGG
GACATGCAGCGTGTCCTACCTGCCTGTGCTGCCGGGGGACTACAGCATTCTAGTCAAGTACAATGAACAGCACGT
CCCAGGCAGCCCCTTCACTGCTCGGGTCACAGGTGACGACTCCATGCGTATGTCCCACCTAAAGGTCGGCTCTGC
TGCCGACATCCCCATCAACATCTCAGAGACGGATCTCAGCCTGCTGACGGCCACTGTGGTCCCGCCCTCGGGCCG
GGAGGAGCCCTGTTTGCTGAAGCGGCTGCGTAATGGCCACGTGGGGATTTCATTCGTGCCCAAGGAGACGGGGGA
GCACCTGGTGCATGTGAAGAAAAATGGCCAGCACGTGGCCAGCAGCCCCATCCCGGTGGTGATCAGCCAGTCGGA
AATTGGGGATGCCAGTCGTGTTCGGGTCTCTGGTCAGGGCCTTCACGAAGGCCACACCTTTGAGCCTGCAGAGTT
TATCATTGATACCCGCGATGCAGGCTATGGTGGGCTCAGCCTGTCCATTGAGGGCCCCAGCAAGGTGGACATCAA
CACAGAGGACCTGGAGGACGGGACGTGCAGGGTCACCTACTGCCCCACAGAGCCAGGCAACTACATCATCAACAT
CAAGTTTGCCGACCAGCACGTGCCTGGCAGCCCCTTCTCTGTGAAGGTGACAGGCGAGGGCCGGGTGAAAGAGAG
CATCACCCGCAGGCGTCGGGCTCCTTCAGTGGCCAACGTTGGTAGTCATTGTGACCTCAGCCTGAAAATCCCTGA
AATTAGCATCCAGGATATGACAGCCCAGGTGACCAGCCCATCGGGCAAGACCCATGAGGCCGAGATCGTGGAAGG
GGAGAACCACACCTACTGCATCCGCTTTGTTCCCGCTGAGATGGGCACACACACAGTCAGCGTCAAGTACAAGGG
CCAGCACGTGCCTGGGAGCCCCTTCCAGTTCACCGTGGGGCCCCTAGGGGAAGGGGGAGCCCACAAGGTCCGAGC
TGGGGGCCCTGGCCTGGAGAGAGCTGAAGCTGGAGTGCCAGCCGAATTCAGTATCTGGACCCGGGAAGCTGGTGC
TGGAGGCCTGGCCATTGCTGTCGAGGGCCCCAGCAAGGCTGAGATCTCTTTTGAGGACCGCAAGGACGGCTCCTG
TGGTGTGGCTTATGTGGTCCAGGAGCCAGGTGACTACGAAGTCTCAGTCAAGTTCAACGAGGAACACATTCCCGA
CAGCCCCTTCGTGGTGCCTGTGGCTTCTCCGTCTGGCGACGCCCGCCGCCTCACTGTTTCTAGCCTTCAGGAGTC

FIGURE 2969C

AGGGCTAAAGGTCAACCAGCCAGCCTCTTTTGCAGTCAGCCTGAACGGGGCCAAGGGGGCGATCGATGCCAAGGT
GCACAGCCCCTCAGGAGCCCTGGAGGAGTGCTATGTCACAGAAATTGACCAAGATAAGTATGCTGTGCGCTTCAT
CCCTCGGGAGAATGGCGTTTACCTGATTGACGTCAAGTTCAACGGTACCCACATCCCTGGAAGCCCCTTCAAGAT
CCGAGTTGGGGAGCCTGGGCATGGAGGGGACCCAGGCTTGGTGTCTGCTTACGGAGCAGGTCTGGAAGGCGGTGT
CACAGGGAACCCAGCTGAGTTCGTCGTGAACACGAGCAATGCGGGAGCTGGTGCCCTGTCGGTGACCATTGACGG
CCCCTCCAAGGTGAAGATGGATTGCCAGGAGTGCCCTGAGGGCTACCGCGTCACCTATACCCCCATGGCACCTGG
CAGCTACCTCATCTCCATCAAGTACGGCGGCCCCTACCACATTGGGGGCAGCCCCTTCAAGGCCAAAGTCACAGG
CCCCCGTCTCGTCAGCAACCACAGCCTCCACGAGACATCATCAGTGTTTGTAGACTCTCTGACCAAGGCCACCTG
TGCCCCCCAGCATGGGGCCCCGGGTCCTGGGCCTGCTGACGCCAGCAAGGTGGTGGCCAAGGGCCTGGGGCTGAG
CAAGGCCTACGTAGGCCAGAAGAGCAGCTTCACAGTAGACTGCAGCAAAGCAGGCAACAACATGCTGCTGGTGGG
GGTTCATGGCCCAAGGACCCCCTGCGAGGAGATCCTGGTGAAGCACGTGGGCAGCCGGCTCTACAGCGTGTCCTA
CCTGCTCAAGGACAAGGGGGAGTACACACTGGTGGTCAAATGGGGGCACGAGCACATCCCAGGCAGCCCCTACCG
CGTTGTGGTGCCC**TGA**GTCTGGGGCCCGTGCCAGCCGGCAGCCCCCAAGCCTGCCCCGCTACCCAAGCAGCCCCG
CCCTCTTCCCCTCAACCCCGGCCCAGGCCGCCCTGGCCGCCCGCCTGTCACTGCAGCTGCCCCTGCCCTGTGCCG
TGCTGCGCTCACCTGCCTCCCCAGCCAGCCGCTGACCTCTCGGCTTTCACTTGGGCAGAGGGAGCCATTTGGTGG
CGCTGCTTGTCTTCTTTGGTTCTGGGAGGGGTGAGGGATGGGG

FIGURE 2970

MSSSHSRAGQSAAGAAPGGGVDTRDAEMPATEKDLAEDAPWKKIQQNTFTRWCNEHLKCVSKRIANLQTDLSDGL
RLIALLEVLSQKKMHRKHNQRPTFRQMQLENVSVALEFLDRESIKLVSIDSKAIVDGNLKLILGLIWTLILHYSI
SMPMWDEEEDEEAKKQTPKQRLLGWIQNKLPQLPITNFSRDWQSGRALGALVDSCAPGLCPDWDSWDASKPVTNA
REAMQQADDWLGIPQVITPEEIVDPNVDEHSVMTYLSQFPKAKLKPGAPLRPKLNPKKARAYGPGIEPTGNMVKK
RAEFTVETRSAGQGEVLVYVEDPAGHQEEAKVTANNDKNRTFSVWYVPEVTGTHKVTVLFAGQHIAKSPFEVYVD
KSQGDASKVTAQGPGLEPSGNIANKTTYFEIFTAGAGTGEVEVVIQDPMGQKGTVEPQLEARGDSTYRCSYQPTM
EGVHTVHVTFAGVPIPRSPYTVTVGQACNPSACRAVGRGLQPKGVRVKETADFKVYTKGAGSGELKVTVKGPKGE
ERVKQKDLGDGVYGFEYYPMVPGTYIVTITWGGQNIGRSPFEVKVGTECGNQKVRAWGPGLEGGVVGKSADFVVE
AIGDDVGTLGFSVEGPSQAKIECDDKGDGSCDVRYWPQEAGEYAVHVLCNSEDIRLSPFMADIRDAPQDFHPDRV
KARGPGLEKTGVAVNKPAEFTVDAKHGGKAPLRVQVQDNEGCPVEALVKDNGNGTYSCSYVPRKPVKHTAMVSWG
GVSIPNSPFRVNVGAGSHPNKVKVYGPGVAKTGLKAHEPTYFTVDCAEAGQGDVSIGIKCAPGVVGPAEADIDFD
IIRNDNDTFTVKYTPRGAGSYTIMVLFADQATPTSPIRVKVEPSHDASKVKAEGPGLSRTGVELGKPTHFTVNAK
AAGKGKLDVQFSGLTKGDAVRDVDIIDHHDNTYTVKYTPVQQGPVGVNVTYGGDPIPKSPFSVAVSPSLDLSKIK
VSGLGEKVDVGKDQEFTVKSKGAGGQGKVASKIVGPSGAAVPCKVEPGLGADNSVVRFLPREEGPYEVEVTYDGV
PVPGSPFPLEAVAPTKPSKVKAFGPGLQGGSAGSPARFTIDTKGAGTGGLGLTVEGPCEAQLECLDNGDGTCSVS
YVPTEPGDYNINILFADTHIPGSPFKAHVVPCFDASKVKCSGPGLERATAGEVGQFQVDCSSAGSAELTIEICSE
AGLPAEVYIQDHGDGTHTITYIPLCPGAYTVTIKYGGQPVPNFPSKLQVEPAVDTSGVQCYGPGIEGQGVFREAT
TEFSVDARALTQTGGPHVKARVANPSGNLTETYVQDRGDGMYKVEYTPYEEGLHSVDVTYDGSPVPSSPFQVPVT
EGCDPSRVRVHGPGIQSGTTNKPNKFTVETRGAGTGGLGLAVEGPSEAKMSCMDNKDGSCSVEYIPYEAGTYSLN
VTYGGHQVPGSPFKVPVHDVTDASKVKCSGPGLSPGMVRANLPQSFQVDTSKAGVAPLQVKVQGPKGLVEPVDVV
DNADGTQTVNYVPSREGPYSISVLYGDEEVPRSPFKVKVLPTHDASKVKASGPGLNTTGVPASLPVEFTIDAKDA
GEGLLAVQITDPEGKPKKTHIQDNHDGTYTVAYVPDVTGRYTILIKYGGDEIPFSPYRVRAVPTGDASKCTVTVS
IGGHGLGAGIGPTIQIGEETVITVDTKAAGKGKVTCTVCTPDGSEVDVDVVENEDGTFDIFYTAPQPGKYVICVR
FGGEHVPNSPFQVTALAGDQPSVQPPLRSQQLAPQYTYAQGGQQTWAPERPLVGVNGLDVTSLRPFDLVIPFTIK
KGEITGEVRMPSGKVAQPTITDNKDGTVTVRYAPSEAGLHEMDIRYDNMHIPGSPLQFYVDYVNCGHVTAYGPGL
THGVVNKPATFTVNTKDAGEGGLSLAIEGPSKAEISCTDNQDGTCSVSYLPVLPGDYSILVKYNEQHVPGSPFTA
RVTGDDSMRMSHLKVGSAADIPINISETDLSLLTATVVPPSGREEPCLLKRLRNGHVGISFVPKETGEHLVHVKK
NGQHVASSPIPVVISQSEIGDASRVRVSGQGLHEGHTFEPAEFIIDTRDAGYGGLSLSIEGPSKVDINTEDLEDG
TCRVTYCPTEPGNYIINIKFADQHVPGSPFSVKVTGEGRVKESITRRRRAPSVANVGSHCDLSLKIPEISIQDMT
AQVTSPSGKTHEAEIVEGENHTYCIRFVPAEMGTHTVSVKYKGQHVPGSPFQFTVGPLGEGGAHKVRAGGPGLER
AEAGVPAEFSIWTREAGAGGLAIAVEGPSKAEISFEDRKDGSCGVAYVVQEPGDYEVSVKFNEEHIPDSPFVVPV
ASPSGDARRLTVSSLQESGLKVNQPASFAVSLNGAKGAIDAKVHSPSGALEECYVTEIDQDKYAVRFIPRENGVY
LIDVKFNGTHIPGSPFKIRVGEPGHGGDPGLVSAYGAGLEGGVTGNPAEFVVNTSNAGAGALSVTIDGPSKVKMD
CQECPEGYRVTYTPMAPGSYLISIKYGGPYHIGGSPFKAKVTGPRLVSNHSLHETSSVFVDSLTKATCAPQHGAP
GPGPADASKVVAKGLGLSKAYVGQKSSFTVDCSKAGNNMLLVGVHGPRTPCEEILVKHVGSRLYSVSYLLKDKGE
YTLVVKWGHEHIPGSPYRVVVP

FIGURE 2971

GGCACGAGGGCGGCGGCGGCGGTAGAGGCGGCGGCGGCGGCGGCAGCGGGCTCGGAGGCAGCGGTTGGGCTCGCG
GCGAGCGGACGGGGTCGAGTCAGTGCGTTCGCGCGAGTTGGAATCGAAGCCTCTTAAAATGGCAGATGACTTGGA
CTTCGAGACAGGAGATGCAGGGGCCTCAGCCACCTTCCCAATGCAGTGCTCAGCATTACGTAAGAATGGCTTTGT
GGTGCTCAAAGGCCGGCCATGTAAGATCGTCGAGATGTCTACTTCGAAGACTGGCAAGCACGGCCACGCCAAGGT
CCATCTGGTTGGTATTGACATCTTTACTGGGAAGAAATATGAAGATATCTGCCCGTCAACTCATAATATGGATGT
CCCCAACATCAAAAGGAATGACTTCCAGCTGATTGGCATCCAGGATGGGTACCTATCACTGCTCCAGGACAGCGG
GGAGGTACGAGAGGACCTTCGTCTCCCTGAGGGAGACCTTGGCAAGGAGATTGAGCAGAAGTACGACTGTGGAGA
AGAGATCCTGATCACGGTGCTGTCTGCCATGACAGAGGAGGCAGCTGTTGCAATCAAGGCCATGGCAAAATAACT
GGCTCCCAGGATGGCGGTGGTGGCAGCAGTGATCCTCTGAACCTGCAGAGGCCCCCTCCCCGAGCCTGGCCTGGC
TCTGGCCCGGTCCTAAGCTGGACTCCTCCTACACAATTTATTTGACGTTTTATTTTGGTTTTCCCCACCCCCTCA
ATCTGTCGGGGAGCCCCTGCCCTTCACCTAGCTCCCTTGGCCAGGAGCGAGCGAAGCTGTGGCCTTGGTGAAGCT
GCCCTCCTCTTCTCCCCTCACACTACAGCCCTGGTGGGGGAGAAGGGGGTGGGTGCTGCTTGTGGTTTAGTCTTT
TTTTTTTTTTTTTTTTTTTTTTTAAATTCAATCTGGAATCAGAAAGCGGTGGATTCTGGCAAATGGTCCTTGTGC
CCTCCCCACTCATCCCTGGTCTGGTCCCCTGTTGCCCATAGCCCTTTACCCTGAGCACCACCCCAACAGACTGGG
GACCAGCCCCCTCGCCTGCCTGTGTCTCTCCCCAAACCCCTTTAGATGGGGAGGGAAGAGGAGGAGAGGGGAGGG
GACCTGCCCCCTCCTCAGGCATCTGGGAGGGCCCTGCCCCCATGGGCTTTACCCTTCCCTGCGGGCTCTCTCCCC
GACACATTTGTTAAAATCAAACCTGAATAAAACTACAAGTTTAATATGAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2972

MADDLDFETGDAGASATFPMQCSALRKNGFVVLKGRPCKIVEMSTSKTGKHGHAKVHLVGIDIFTGKKYEDICPS
THNMDVPNIKRNDFQLIGIQDGYLSLLQDSGEVREDLRLPEGDLGKEIEQKYDCGEEILITVLSAMTEEAAVAIK
AMAK

FIGURE 2973A

AGCCGCCGCCGGGGCTGTAGGCGCCAAGGCCATGTCCGACTCGTGGGTCCCGAACTCCGCCTCGGGCCAGGACCC
AGGGGGCCGCCGGAGGGCCTGGGCCGAGCTGCTGGCGGGAAGGGTCAAGAGGGAAAAATATAATCCTGAAAGGGC
ACAGAAATTAAAGGAATCAGCTGTGCGCCTCCTGCGAAGCCATCAGGACCTGAATGCCCTTTTGCTTGAGGTAGA
AGGTCCACTGTGTAAAAAATTGTCTCTCAGCAAAGTGATTGACTGTGACAGTTCTGAGGCCTATGCTAATCATTC
TAGTTCATTTATAGGCTCTGCTTTGCAGGATCAAGCCTCAAGGCTGGGGGTTCCCGTGGGTATTCTCTCAGCCGG
GATGGTTGCCTCTAGCGTGGGACAGATCTGCACGGCTCCAGCGGAGACCAGTCACCCTGTGCTGCTGACTGTGGA
GCAGAGAAAGAAGCTGTCTTCCCTGTTAGAGTTTGCTCAGTATTTATTGGCACACAGTATGTTCTCCCGTCTTTC
CTTCTGTCAAGAATTATGGAAAATACAGAGTTCTTTGTTGCTTGAAGCGGTGTGGCATCTTCACGTACAAGGCAT
TGTGAGCCTGCAAGAGCTGCTGGAAAGCCATCCCGACATGCATGCTGTGGGATCGTGGCTCTTCAGGAATCTGTG
CTGCCTTTGTGAACAGATGGAAGCATCCTGCCAGCATGCTGACGTCGCCAGGGCCATGCTTTCTGATTTTGTTCA
AATGTTTGTTTTGAGGGGATTTCAGAAAAACTCAGATCTGAGAAGAACTGTGGAGCCTGAAAAAATGCCGCAGGT
CACGGTTGATGTACTGCAGAGAATGCTGATTTTTGCACTTGACGCTTTGGCTGCTGGAGTACAGGAGGAGTCCTC
CACTCACAAGATCGTGAGGTGCTGGTTCGGAGTGTTCAGTGGACACACGCTTGGCAGTGTAATTTCCACAGATCC
TCTGAAGAGGTTCTTCAGTCATACCCTGACTCAGATACTCACTCACAGCCCTGTGCTGAAAGCATCTGATGCTGT
TCAGATGCAGAGAGAGTGGAGCTTTGCGCGGACACACCCTCTGCTCACCTCACTGTACCGCAGGCTCTTTGTGAT
GCTGAGTGCAGAGGAGTTGGTTGGCCATTTGCAAGAAGTTCTGGAAACGCAGGAGGTTCACTGGCAGAGAGTGCT
CTCCTTTGTGTCTGCCCTGGTTGTCTGCTTTCCAGAAGCGCAGCAGCTGCTTGAAGACTGGGTGGCGCGTTTGAT
GGCCCAGGCATTCGAGAGCTGCCAGCTGGACAGCATGGTCACTGCGTTCCTGGTTGTGCGCCAGGCAGCACTGGA
GGGCCCCTCTGCGTTCCTGTCATATGCAGACTGGTTCAAGGCCTCCTTTGGGAGCACACGAGGCTACCATGGCTG
CAGCAAGAAGGCCCTGGTCTTCCTGTTTACGTTCTTGTCAGAACTCGTGCCTTTTGAGTCTCCCCGGTACCTGCA
GGTGCACATTCTCCACCCACCCCTGGTTCCCAGCAAGTACCGCTCCCTCCTCACAGACTACATCTCATTGGCCAA
GACACGGCTGGCCGACCTCAAGGTTTCTATAGAAAACATGGGACTCTACGAGGATTTGTCATCAGCTGGGGACAT
TACTGAGCCCCACAGCCAAGCTCTTCAGGATGTTGAAAAGGCCATCATGGTGTTTGAGCATACGGGGAACATCCC
AGTCACCGTCATGGAGGCCAGCATATTCAGGAGGCCTTACTACGTGTCCCACTTCCTCCCCGCCCTGCTCACACC
TCGAGTGCTCCCCAAAGTCCCTGACTCCCGTGTGGCGTTTATAGAGTCTCTGAAGAGAGCAGATAAAATCCCCCC
ATCTCTGTACTCCACCTACTGCCAGGCCTGCTCTGCTGCTGAAGAGAAGCCAGAAGATGCAGCCCTGGGAGTGAG
GGCAGAACCCAACTCTGCTGAGGAGCCCCTGGGACAGCTCACAGCTGCACTGGGAGAGCTGAGAGCCTCCATGAC
AGACCCCAGCCAGCGTGATGTTATATCGGCACAGGTGGCAGTGATTTCTGAAAGACTGAGGGCTGTCCTGGGCCA
CAATGAGGATGACAGCAGCGTTGAGATATCAAAGATTCAGCTCAGCATCAACACGCCGAGACTGGAGCCACGGGA
ACACATTGCTGTGGACCTCCTGCTGACGTCTTTCTGTCAGAACCTGATGGCTGCCTCCAGTGTCGCTCCCCCGGA
GAGGCAGGGTCCCTGGGCTGCCCTCTTCGTGAGGACCATGTGTGGACGTGTGCTCCCTGCAGTGCTCACCCGGCT
CTGCCAGCTGCTCCGTCACCAGGGCCCGAGCCTGAGTGCCCCACATGTGCTGGGGTTGGCTGCCCTGGCCGTGCA
CCTGGGTGAGTCCAGGTCTGCGCTCCCAGAGGTGGATGTGGGTCCTCCTGCACCTGGTGCTGGCCTTCCTGTCCC
TGCGCTCTTTGACAGCCTCCTGACCTGTAGGACGAGGGATTCCTTGTTCTTCTGCCTGAAATTTTGTACAGCAGC
AATTTCTTACTCTCTCTGCAAGTTTTCTTCCCAGTCACGAGATACTTTGTGCAGCTGCTTATCTCCAGGCCTTAT
TAAAAAGTTTCAGTTCCTCATGTTCAGATTGTTCTCAGAGGCCCGACAGCCTCTTTCTGAGGAGGACGTAGCCAG
CCTTTCCTGGAGACCCTTGCACCTTCCTTCTGCAGACTGGCAGAGAGCTGCCCTCTCTCTCTGGACACACAGAAC
CTTCCGAGAGGTGTTGAAAGAGGAAGATGTTCACTTAACTTACCAAGACTGGTTACACCTGGAGCTGGAAATTCA
ACCTGAAGCTGATGCTCTTTCAGATACTGAACGGCAGGACTTCCACCAGTGGGCGATCCATGAGCACTTTCTCCC
TGAGTCCTCGGCTTCAGGGGGCTGTGACGGAGACCTGCAGGCTGCGTGTACCATTCTTGTCAACGCACTGATGGA
TTTCCACCAAAGCTCAAGGAGTTATGACCACTCAGAAAATTCTGATTTGGTCTTTGGTGGCCGCACAGGAAATGA
GGATATTATTTCCAGATTGCAGGAGATGGTAGCTGACCTGGAGCTGCAGCAAGACCTCATAGTGCCTCTCGGCCA
CACCCCTTCCCAGGAGCACTTCCTCTTTGAGATTTTCCGCAGACGGCTCCAGGCTCTGACAAGCGGGTGGAGCGT
GGCTGCCAGCCTTCAGAGACAGAGGGAGCTGCTAATGTACAAACGGATCCTCCTCCGCCTGCCTTCGTCTGTCCT
CTGCGGCAGCAGCTTCCAGGCAGAACAGCCCATCACTGCCAGATGCGAGCAGTTCTTCCACTTGGTCAACTCTGA
GATGAGAAACTTCTGCTCCCACGGAGGTGCCCTGACACAGGACATCACTGCCCACTTCTTCAGGGGCCTCCTGAA
CGCCTGTCTGCGGAGCAGAGACCCCTCCCTGATGGTCGACTTCATACTGGCCAAGTGCCAGACGAAATGCCCCTT
AATTTTGACCTCTGCTCTGGTGTGGTGGCCGAGCCTGGAGCCTGTGCTGCTCTGCCGGTGGAGGAGACACTGCCA

FIGURE 2973B

GAGCCCGCTGCCCCGGGAACTGCAGAAGCTACAAGAAGGCCGGCAGTTTGCCAGCGATTTCCTCTCCCCTGAGGC
TGCCTCCCCAGCACCCAACCCGGACTGGCTCTCAGCTGCTGCACTGCACTTTGCGATTCAACAAGTCAGGGAAGA
AAACATCAGGAAGCAGCTAAAGAAGCTGGACTGCGAGAGAGAGGAGCTATTGGTTTTCCTTTTCTTCTTCTCCTT
GATGGGCCTGCTGTCGTCACATCTGACCTCAAATAGCACCACAGACCTGCCAAAGGCTTTCCACGTTTGTGCAGC
AATCCTCGAGTGTTTAGAGAAGAGGAAGATATCCTGGCTGGCACTCTTTCAGTTGACAGAGAGTGACCTCAGGCT
GGGGCGGCTCCTCCTCCGTGTGGCCCCGGATCAGCACACCAGGCTGCTGCCTTTCGCTTTTTACAGTCTTCTCTC
CTACTTCCATGAAGACGCGGCCATCAGGGAAGAGGCCTTCCTGCATGTTGCTGTGGACATGTACTTGAAGCTGGT
CCAGCTCTTCGTGGCTGGGGATACAAGCACAGTTTCACCTCCAGCTGGCAGGAGCCTGGAGCTCAAGGGTCAGGG
CAACCCCGTGGAACTGATAACAAAAGCTCGTCTTTTTCTGCTGCAGTTAATACCTCGGTGCCCGAAAAAGAGCTT
CTCACACGTGGCAGAGCTGCTGGCTGATCGTGGGGACTGCGACCCAGAGGTGAGCGCCGCCCTCCAGAGCAGACA
GCAGGCTGCCCCTGACGCTGACCTGTCCCAGGAGCCTCATCTCTTC**TGA**CGGGACCTGCCACTGCACACCAGCCC
AGCTCCCGTGTAAATAATTTATTACAAGCATAACATGGAGCTCTTGTTGCACTAAAAAGTGGATTACAAATCTCC
TCGACTGCTTTAGTGGGGAAAGGAATCAATTATTTATGAACTGTCCGGCCCCGAGTCACTCAGCGTTTGCGGGAA
AATAAACCACTGGTCCCAGAGCAGAGGAAGGCTACTTGAGCCGGACACCAAGCCCGCCTCCAGCACCAAGGGCGG
GCAGCACCCTCCGACCCTCCCATGCGGGTGCACACGAAGGGTGAGGCTGACACAGCCACTGCGGAGTCCAGGCTG
CTAGAGGTGCTCATCCTCACTGCCGTCCTCAGGTGGGTTCGGGCTTCACCGCCTGGCCCTCTGTGGTCACAGAGG
GGCTCGGTGGCCCAGGTGGTGGTTCCGCCTCCAGGGGCAGGGCCTTGTCCTGGGTCTGTGTCAGCGGGTGCACCA
TGGACATGTGTACATTGAGGTTGTGGGCCTTCTCAAACCGCCGGCCACACTGGTCACAGGCAAAGTCCAGCTCAG
TCTCAGCCTTGTGTTTGGTCATGTGGTACTTGAGGGATGCCCGCTGCCTGCACTGGAACCCACAGACCTCACACC
TGGGGGGACAGAGGCAGATAAGAAGGTGCGAGGCCACAGCCCTGGGAGGGGGTCCTGACTCACACTTACTGCAAAG
GCTTGGCTCCCGAATGTCGCATTTGGTGGACGAGAAGGTGCTTCCGCTGCTTGAAGGTTTGTCCACATTCGTCAC
AGATATAGTTCCGCACCTCTGAGAGGGGAGAGTCCAGTGAGTCCAGGCCCCTGATGCTCCAACCTCCCGGGGGGA
CGACGATGACAATGTGAAACCATCACAGCTGGGAAGACATTTCTGCACATGGTTCACCATGCAGTGGGCCCAAGC
AAGGGGCCTATGAGGGCCTCGTTTATTAAGATCTTTAAACTGCTTTATACACTGTCACGTGGCTTCATCAGCTGT
GTGCATTTCAGGATGGTTTTTAAAGAAACCTCAGAAAGCTATTTCCTTAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2974

MSDSWVPNSASGQDPGGRRRAWAELLAGRVKREKYNPERAQKLKESAVRLLRSHQDLNALLLEVEGPLCKKLSLS
KVIDCDSSEAYANHSSSFIGSALQDQASRLGVPVGILSAGMVASSVGQICTAPAETSHPVLLTVEQRKKLSSLLE
FAQYLLAHSMFSRLSFCQELWKIQSSLLLEAVWHLHVQGIVSLQELLESHPDMHAVGSWLFRNLCCLCEQMEASC
QHADVARAMLSDFVQMFVLRGFQKNSDLRRTVEPEKMPQVTVDVLQRMLIFALDALAAGVQEESSTHKIVRCWFG
VFSGHTLGSVISTDPLKRFFSHTLTQILTHSPVLKASDAVQMQREWSFARTHPLLTSLYRRLFVMLSAEELVGHL
QEVLETQEVHWQRVLSFVSALVVCFPEAQQLLEDWVARLMAQAFESCQLDSMVTAFLVVRQAALEGPSAFLSYAD
WFKASFGSTRGYHGCSKKALVFLFTFLSELVPFESPRYLQVHILHPPLVPSKYRSLLTDYISLAKTRLADLKVSI
ENMGLYEDLSSAGDITEPHSQALQDVEKAIMVFEHTGNIPVTVMEASIFRRPYYVSHFLPALLTPRVLPKVPDSR
VAFIESLKRADKIPPSLYSTYCQACSAAEEKPEDAALGVRAEPNSAEEPLGQLTAALGELRASMTDPSQRDVISA
QVAVISERLRAVLGHNEDDSSVEISKIQLSINTPRLEPREHIAVDLLLTSFCQNLMAASSVAPPERQGPWAALFV
RTMCGRVLPAVLTRLCQLLRHQGPSLSAPHVLGLAALAVHLGESRSALPEVDVGPPAPGAGLPVPALFDSLLTCR
TRDSLFFCLKFCTAAISYSLCKFSSQSRDTLCSCLSPGLIKKFQFLMFRLFSEARQPLSEEDVASLSWRPLHLPS
ADWQRAALSLWIHRTFREVLKEEDVHLTYQDWLHLELEIQPEADALSDTERQDFHQWAIHEHFLPESSASGGCDG
DLQAACTILVNALMDFHQSSRSYDHSENSDLVFGGRTGNEDIISRLQEMVADLELQQDLIVPLGHTPSQEHFLFE
IFRRRLQALTSGWSVAASLQRQRELLMYKRILLRLPSSVLCGSSFQAEQPITARCEQFFHLVNSEMRNFCSHGGA
LTQDITAHFFRGLLNACLRSRDPSLMVDFILAKCQTKCPLILTSALVWWPSLEPVLLCRWRRHCQSPLPRELQKL
QEGRQFASDFLSPEAASPAPNPDWLSAAALHFAIQQVREENIRKQLKKLDCEREELLVFLFFFSLMGLLSSHLTS
NSTTDLPKAFHVCAAILECLEKRKISWLALFQLTESDLRLGRLLLRVAPDQHTRLLPFAFYSLLSYFHEDAAIRE
EAFLHVAVDMYLKLVQLFVAGDTSTVSPPAGRSLELKGQGNPVELITKARLFLLQLIPRCPKKSFSHVAELLADR
GDCDPEVSAALQSRQQAAPDADLSQEPHLF

FIGURE 2975

ATTTTGTGGAATAGAGTTGATCGCTGTCTCCTCCGCAAAGCATTTTAACTCGAATAAGCAAATGCCGCCTCTGTT
TGAACGTTTTGGTATTTACAAGAGAGAAATCATTTTACCTAAGAGAACTAATTGAATTGGCAGCATCCTTGAAAT
ACCTCCGGACAAGGATCTGGGGGTGGGGGTGGAAAAGCAACTGCGAAATAGCAGACGGAGAAATTCCTTTGGAAG
TTATTCCGTAGCATAAGAGCTGAAACTTCAGAGCAAGTTTTCATTGGGCAAA**ATG**GGGGAACAACCTATCTTCAG
CACTCGAGCTCATGTCTTCCAAATTGACCCAAACACAAAGAAGAACTGGGTACCCACCAGCAAGCATGCAGTTAC
TGTGTCTTATTTCTATGACAGCACAAGAAATGTGTATAGGATAATCAGTTTAGATGGCTCAAAGGCAATAATAAA
TAGTACCATCACCCCAAACATGACATTTACTAAAACATCTCAGAAGTTTGGCCAGTGGGCTGATAGCCGGGCAAA
CACCGTTTATGGATTGGGATTCTCCTCTGAGCATCATCTTTCGAAATTTGCAGAAAAGTTTCAGGAATTTAAAGA
AGCTGCTCGACTAGCAAAGGAAAAATCACAAGAGAAGATGGAACTTACCAGTACACCTTCACAGGAATCCGCAGG
CGGGGATCTTCAGTCTCCTTTAACACCGGAAAGTATCAACGGGACAGATGATGAAAGAACACCTGATGTGACACA
GAACTCAGAGCCAAGGGCTGAACCAACTCAGAATGCATTGCCATTTTCACATAGTTCAGCAATCAGCAAACATTG
GGAGGCTGAACTGGCTACCCTCAAAGGAAATAATGCCAAACTCACTGCAGCCCTGCTGGAGTCCACTGCCAATGT
GAAACAATGGAAACAGCAACTTGCTGCCTATCAAGAGGAAGCAGAACGTCTGCACAAGCGGGTGACTGAACTTGA
ATGTGTTAGTAGCCAAGCAAATGCAGTACATACTCATAAGACAGAATTAAATCAGACAATACAAGAACTGGAAGA
GACACTGAAACTGAAGGAAGAGGAAATAGAAAGGTTAAAACAAGAAATTGATAATGCCAGAGAACTACAAGAACA
GAGGGATTCTTTGACTCAGAAACTACAGGAAGTAGAAATTCGGAACAAAGACCTGGAGGGACAACTGTCTGACTT
AGAGCAACGTCTGGAGAAAAGTCAGAATGAACAAGAAGCTTTTCGCAATAACCTGAAGACACTCTTAGAAATTCT
GGATGGAAAGATATTTGAACTAACAGAATTACGAGATAACTTGGCCAAGCTACTAGAATGCAGC**TAA**GGAAAGTG
AAATTTCAGTGCCAATTAATTAAAAGATACACTGTCTCTCTTCATAGGACTGTTTAGGCTCTGCATCAAGATTGC
ACAAAAAAAAAAAAAAAAAA

FIGURE 2976

MGEQPIFSTRAHVFQIDPNTKKNWVPTSKHAVTVSYFYDSTRNVYRIISLDGSKAIINSTITPNMTFTKTSQKFG
QWADSRANTVYGLGFSSEHHLSKFAEKFQEFKEAARLAKEKSQEKMELTSTPSQESAGGDLQSPLTPESINGTDD
ERTPDVTQNSEPRAEPTQNALPFSHSSAISKHWEAELATLKGNNAKLTAALLESTANVKQWKQQLAAYQEEAERL
HKRVTELECVSSQANAVHTHKTELNQTIQELEETLKLKEEEIERLKQEIDNARELQEQRDSLTQKLQEVEIRNKD
LEGQLSDLEQRLEKSQNEQEAFRNNLKTLLEILDGKIFELTELRDNLAKLLECS

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FIGURE 2977

GCTCTGCTCCAGGCATCTGCCACAATGTGGGTGCTTACACCTGCTGCTTTTGCTGGGAAGCTCTTGAGTGTGTTC
AGGCAACCTCTGAGCTCTCTGTGGAGGAGCCTGGTCCCGCTGTTCTGCTGGCTGAGGGCAACCTTCTGGCTGCTA
GCTACCAAGAGGAGAAAGCAGCAGCTGGTCCTGAGAGGGCCAGATGAGACCAAAGAGGAGGAAGAGGACCCTCCT
CTGCCCACCACCCCAACCAGCGTCAACTATCACTTCACTCGCCAGTGCAACTACAAATGCGGCTTCTGTTTCCAC
ACAGCCAAAACATCCTTTGTGCTGCCCCTTGAGGAAGCAAAGAGAGGATTGCTTTTGCTTAAGGAAGCTGGTATG
GAGAAGATCAACTTTTCAGGTGGAGAGCCATTTCTTCAAGACCGGGGAGAATACCTGGGCAAGTTGGTGAGGTTC
TGCAAAGTAGAGTTGCGGCTGCCCAGCGTGAGCATCGTGAGCAATGGAAGCCTGATCCGGGAGAGGTGGTTCCAG
AATTATGGTGAGTATTTGGACATTCTCGCTATCTCCTGTGACAGCTTTGACGAGGAAGTCAATGTCCTTATTGGC
CGTGGCCAAGGAAAGAAGAACCATGTGGAAAACCTTCAAAAGCTGAGGAGGTGGTGTAGGGATTATAGAGTCGCT
TTCAAGATAAATTCTGTCATTAATCGTTTCAACGTGGAAGAGGACATGACGGAACAGATCAAAGCACTAAACCCT
GTCCGCTGGAAAGTGTTCCAGTGCCTCTTAATTGAGGGTGAGAATTGTGGAGAAGATGCTCTAAGAGAAGCAGAA
AGATTTGTTATTGGTGATGAAGAATTTGAAAGATTCTTGGAGCGCCACAAAGAAGTGTCCTGCTTGGTGCCTGAA
TCTAACCAGAAGATGAAAGACTCCTACCTTATTCTGGATGAATATATGCGCTTTCTGAACTGTAGAAAGGGACGG
AAGGACCCTTCCAAGTCCATCCTGGATGTTGGTGTAGAAGAAGCTATAAAATTCAGTGGATTTGATGAAAAGATG
TTTCTGAAGCGAGGAGGAAAATACATATGGAGTAAGGCTGATCTGAAGCTGGATTGGTAGAGCGGAAAGTGGAAC
GAGACTTCAACACACCAGTGGGAAAACTCCTAGAGTAACTGCCATTGTCTGCAATACTATCCCGTTGGTATTTCC
CAGTGGCTGAAAACCTGATTTTCTGCTGCACGTGGCATCTGATTACCTGTGGTCACTGAACACACGAATAACTTG
GATAGCAAATCCTGAGACAATGGAAAACCATTAACTTTACTTCATTGGCTTATAACCTTGTTGTTATTGAAACAG
CACTTCTGTTTTTGAGTTTGTTTTAGCTAAAAAGAAGGAATACACACAGGAATAATGACCCCAAAAATGCTTAGA
TAAGGCCCCTATACACAGGACCTGACATTTAGCTCAATGATGCGTTTGTAAGAAATAAGCTCTAGTGATATCTGT
GGGGGCAAAATTTAATTTGGATTTGATTTTTTAAAACAATGTTTACTGCGATTTCTATATTTCCATTTTGAAACT
ATTTCTTGTTCCAGGTTTGTTCATTTGACAGAGTCAGTATTTTTTGCCAAATATCCAGATAACCAGTTTTCACAT
CTGAGACATTACAAAGTATCTGCCTCAATTATTTCTGCTGGTTATAATGCTTTTTTTTTTTTGCCTTTATGCCAT
TGCAGTCTTGTACTTTTTACTGTGATGTACAGAAATAGTCAACAGATGTTTCCAAGAACATATGATATGATAATC
CTACCAATTTTCAAGAAGTCTCTAGAAAGAGATAACACATGGAAAGACGGCGTGGTGCAGCCCAGCCCACGGTGC
CTGTTCCATGAATGCTGGCTACCTATGTGTGTGGTACCTGTTGTGTCCCTTTCTCTTCAAAGATCCCTGAGCAAA
ACAAAGATACGCTTTCCATTTGATGATGGAGTTGACATGGAGGCAGTGCTTGCATTGCTTTGTTCGCCTATCATC
TGGCCACATGAGGCTGTCAAGCAAAAGAATAGGAGTGTAGTTGAGTAGCTGGTTGGCCCTACATTTCTGAGAAGT
GACGTTACACTGGGTTGGCATAAGATATCCTAAAATCACGCTGGAACCTTGGGCAAGGAAGAATGTGAGCAAGAG
TAGAGAGAGTGCCTGGATTTCATGTCAGTGAAGCCATGTCACCATATCATATTTTTGAATGAACTCTGAGTCAGT
TGAAATAGGGTACCATCTAGGTCAGTTTAAGAAGAGTCAGCTCAGAGAAAGCAAGCATAAGGGAAAATGTCACGT
AAACTAGATCAGGGAACAAAATCCTCTCCTTGTGGAAATATCCCATGCAGTTTGTTGATACAACTTAGTATCTTA
TTGCCTAAAAAAAAATTTCTTATCATTGTTTCAAAAAAGCAAAATCATGGAAAATTTTTGTTGTCCAGGCAAATA
AAAGGTCATTTTAATTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAGGCCAAGGAAAAAAAATATTCCTACT
TAAATTTTAAGTCTATAATTCAATTTAAATATGTGTGTGTCTCATCCAGGATAGGATAGGTTGTCTTCTATTTTC
CATTTTACCTATTTACTTTTTTTGTAAGAAAAGAGAAGAATGAATTCTAAAGATGTTCCCCATGGGTTTTGATTG
TGTCTAAGCTATGATGACCTTCATATAATCAGCATAAACATAAAACAAATTTTTTACTTAACATGAGTGCACTTT
ACTAATCCTCATGGCACAGTGGCTCACGCCTGTAATCCCAGCACTTGGGGAGGACAATGTGGGGTGGATCACGAG
GTC

FIGURE 2978

MWVLTPAAFAGKLLSVFRQPLSSLWRSLVPLFCWLRATFWLLATKRRKQQLVLRGPDETKEEEEDPPLPTTPTSV
NYHFTRQCNYKCGFCFHTAKTSFVLPLEEAKRGLLLLKEAGMEKINFSGGEPFLQDRGEYLGKLVRFCKVELRLP
SVSIVSNGSLIRERWFQNYGEYLDILAISCDSFDEEVNVLIGRGQGKKNHVENLQKLRRWCRDYRVAFKINSVIN
RFNVEEDMTEQIKALNPVRWKVFQCLLIEGENCGEDALREAERFVIGDEEFERFLERHKEVSCLVPESNQKMKDS
YLILDEYMRFLNCRKGRKDPSKSILDVGVEEAIKFSGFDEKMFLKRGGKYIWSKADLKLDW

FIGURE 2979A

GCGAGTGTTGAAAGTCGGTGGCGTAGGTCGTCGTCCTGGATGCTGGCGAGATAGATGTTATCTTCCAGAGGAAGA
GGAGGAGGCGGCGAAGCGTTTTCCCAGCCTCAGTCTCTCTTTCGTTTTCCTTTTCCCTTCCCCCAACCCTCCGCC
CTTCTCTAAATCAGCCGGCCTTCCTTGACCTCAGTGACCCGTCTGGCCCCGCCCACCCTCGTCGACGTGATTCCC
GCCGTGAGGTAAGCGCCGGTGGAACCTAGAGCCCCGCGGAAGAGCAGAACGTTTGGGAGTGTGCAGCTCCTGGGC
CCGGCTCAGGCCCGTCGCGGAGGCGCGGCGCAGGGGAGCGCTCGGGTGGGAGTCTCGCTCCTCCACCAGTTTATT
GCGACGTAGCATCCAGGCCTAGGCCTCCCCGTCCATCCCCGCCGGACTCGGGCCTCTGGCAGCAGCGGGTGACGC
AGACGGAACATC**ATG**TCGTCCGCGGCCGAGCCTCCGCCACCCCCGCCTCCCGAGAGCGCGCCTTCCAAGCCCGCA
GCCTCGATCGCCAGCGGCGGGAGCAACAGCAGCAACAAAGGCGGCCCCGAAGGCGTCGCGGCGCAGGCGGTTGCG
TCTGCGGTCAGCGCTGGTCCCGCAGACGCCGAGATGGAGGAAATATTTGATGATGCGTCACCTGGAAAGCAAAAG
GAAATCCAAGAACCAGATCCTACCTATGAAGAAAAAATGCAAACTGACCGGGCAAATAGATTCGAGTATTTATTA
AAGCAGACAGAACTTTTTGCACATTTCATTCAACCTGCTGCTCAGAAGACTCCAACTTCACCTTTGAAGATGAAA
CCAGGGCGCCCACGAATAAAAAAAGATGAGAAGCAGAACTTACTATCCGTTGGCGATTACCGACACCGTAGAACA
GAGCAAGAGGAGGATGAAGAGCTATTAACAGAAAGCTCCAAAGCAACCAATGTTTGCACTCGATTTGAAGACTCT
CCATCGTATGTAAAATGGGGTAAACTGAGAGATTATCAGGTCCGAGGATTAAACTGGCTCATTTCTTTGTATGAG
AATGGCATCAATGGTATCCTTGCAGATGAAATGGGCCTAGGAAAGACTCTTCAAACAATTTCTCTTCTTGGGTAC
ATGAAACATTATAGAAACATTCCTGGGCCTCATATGGTTTTGGTTCCTAAGTCTACATTACACAACTGGATGAGT
GAATTCAAGAGATGGGTACCAACACTTAGATCTGTTTGTTTGATAGGAGATAAAGAACAAAGAGCTGCTTTTGTC
AGAGACGTTTTATTACCGGGAGAATGGGATGTATGTGTAACATCTTATGAAATGCTTATTAAAGAGAAGTCTGTG
TTCAAAAAATTTAATTGGAGATACTTAGTAATAGATGAAGCTCACAGGATCAAAAATGAAAAATCTAAGTTGTCA
GAAATAGTGAGGGAATTCAAGACTACAAATAGACTATTATTAACTGGAACACCTCTTCAGAACAACTTGCATGAG
CTGTGGTCACTTCTTAACTTTCTGTTGCCAGATGTGTTTAATTCAGCAGATGACTTTGATTCCTGGTTTGATACA
AACAACTGCCTTGGGGATCAAAAACTAGTTGAGAGGCTTCATATGGTTTTGCGTCCATTCCTCCTTCGTCGAATT
AAGGCTGATGTTGAAAAGAGTTTGCCTCCAAAGAAGGAAGTAAAAATCTATGTGGGCCTCAGCAAAATGCAAAGG
GAATGGTATACTCGGATATTAATGAAGGATATAGATATACTCAACTCAGCAGGCAAGATGGACAAAATGAGGTTA
TTGAACATCCTAATGCAGTTGAGAAAATGTTGTAATCATCCATATCTCTTTGATGGAGCAGAACCTGGTCCACCT
TATACAACAGATATGCATCTAGTAACCAACAGTGGCAAAATGGTGGTTTTAGACAAGCTGCTCCCTAAGTTAAAA
GAACAAGGTTCACGAGTACTAATCTTCAGTCAAATGACAAGGGTATTGGACATTTTGGAAGATTATTGCATGTGG
AGAAATTATGAGTACTGCAGGTTGGATGGTCAGACACCCCATGATGAGAGACAAGACTCCATCAATGCATACAAT
GAACCAAACAGCACAAAGTTTGTTTTCATGTTAAGCACGCGTGCTGGTGGTCTTGGCATCAATCTTGCGACTGCT
GATGTAGTAATTTTGTATGATTCTGATTGGAATCCCCAAGTAGATCTTCAGGCTATGGACCGAGCACATAGAATT
GGGCAGACTAAGACAGTCAGAGTGTTCCGCTTTATAACTGATAACACTGTAGAAGAAAGAATAGTAGAACGTGCT
GAGATGAAACTCAGACTGGATTCAATAGTCATTCAACAAGGGAGGCTTGTGGATCAGAATCTGAACAAAATTGGG
AAAGATGAAATGCTTCAAATGATTAGACATGGAGCAACACATGTGTTTGCTTCAAAGGAAAGTGAGATCACTGAT
GAAGATATCGATGGTATTTTGGAAAGAGGTGCAAAGAAGACTGCAGAGATGAATGAAAAGCTCTCCAAGATGGGC
GAAAGTTCACTTAGAAACTTTACAATGGATACAGAGTCAAGTGTTTATAACTTCGAAGGAGAAGACTATAGAGAA
AAACAAAAGATTGCATTCACAGAGTGGATTGAACCACCTAAACGAGAAAGAAAAGCCAACTATGCCGTTGATGCA
TATTTCAGGGAAGCTCTTCGTGTTAGTGAACCTAAAGCACCCAAGGCTCCTCGACCTCCAAAACAACCCAATGTT
CAGGATTTCCAGTTCTTTCCTCCACGTTTATTTGAATTACTGGAAAAAGAAATTCTGTTTTACAGAAAAACTATT
GGGTACAAGGTACCTCGAAATCCTGAGCTGCCTAACGCAGCACAGGCACAAAAAGAAGAACAGCTTAAAATTGAT
GAAGCTGAATCCCTTAATGATGAAGAGTTAGAGGAAAAAGAGAAGCTTCTAACACAGGGATTTACCAATTGGAAT
AAGAGAGATTTTAACCAGTTTATCAAAGCTAATGAGAAGTGGGGTCGTGATGATATTGAAAATATAGCAAGAGAA
GTAGAAGGCAAAACTCCAGAAGAAGTCATTGAATATTCAGCTGTGTTTTGGGAAAGGTGCAACGAGCTCCAGGAC
ATAGAGAAGATTATGGCTCAGATTGAAAGGGGAGAGGCGAGAATTCAAAGAAGAATAAGCATCAAGAAAGCACTT
GACACAAAGATTGGACGGTACAAAGCACCTTTTCATCAGCTGAGAATATCATATGGTACTAACAAAGGAAAAAAC
TATACTGAAGAAGAAGATCGTTTTCTGATTTGTATGCTTCACAAACTTGGATTTGACAAAGAAAATGTTTATGAT
GAATTGCGACAGTGTATTCGCAACTCTCCTCAGTTCAGATTTGACTGGTTTCTTAAGTCCAGAACTGCAATGGAG
CTCCAGAGGAGATGTAATACCTTAATTACTTTGATTGAAAGAGAAAACATGGAACTAGAAGAAAAGGAGAAGGCA
GAGAAAAAGAAACGAGGACCAAAGCCTTCAACACAGAAACGTAAAATGGATGGCGCACCTGATGGTCGAGGAAGA

FIGURE 2979B

AAAAAGAAGCTGAAACTATGAATATGTTTTTGTTTCATAATCACTAACTTTAAACCAGTAGTTCTTTAATTTACG
GGTCTTCATAAGATGTACTGTACAATGCTCAATTGTTATGTCATTTAAAGACATCAGGTTCATCTGTTTACTGAG
CTAGAAACATAGTATGTAGTTTCACTTTTTTAAATGCAACAGCTGTGCTGAAATTTTTTTATCATTAACACTTGA
AGTAATAAAATAGGCTTCATTTATTAAAAAAAAAAAAAAA

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FIGURE 2980

MSSAAEPPPPPPPESAPSKPAASIASGGSNSSNKGGPEGVAAQAVASAVSAGPADAEMEEIFDDASPGKQKEIQE
PDPTYEEKMQTDRANRFEYLLKQTELFAHFIQPAAQKTPTSPLKMKPGRPRIKKDEKQNLLSVGDYRHRRTEQEE
DEELLTESSKATNVCTRFEDSPSYVKWGKLRDYQVRGLNWLISLYENGINGILADEMGLGKTLQTISLLGYMKHY
RNIPGPHMVLVPKSTLHNWMSEFKRWVPTLRSVCLIGDKEQRAAFVRDVLLPGEWDVCVTSYEMLIKEKSVFKKF
NWRYLVIDEAHRIKNEKSKLSEIVREFKTTNRLLLTGTPLQNNLHELWSLLNFLLPDVFNSADDFDSWFDTNNCL
GDQKLVERLHMVLRPFLLRRIKADVEKSLPPKKEVKIYVGLSKMQREWYTRILMKDIDILNSAGKMDKMRLLNIL
MQLRKCCNHPYLFDGAEPGPPYTTDMHLVTNSGKMVVLDKLLPKLKEQGSRVLIFSQMTRVLDILEDYCMWRNYE
YCRLDGQTPHDERQDSINAYNEPNSTKFVFMLSTRAGGLGINLATADVVILYDSDWNPQVDLQAMDRAHRIGQTK
TVRVFRFITDNTVEERIVERAEMKLRLDSIVIQQGRLVDQNLNKIGKDEMLQMIRHGATHVFASKESEITDEDID
GILERGAKKTAEMNEKLSKMGESSLRNFTMDTESSVYNFEGEDYREKQKIAFTEWIEPPKRERKANYAVDAYFRE
ALRVSEPKAPKAPRPPKQPNVQDFQFFPPRLFELLEKEILFYRKTIGYKVPRNPELPNAAQAQKEEQLKIDEAES
LNDEELEEKEKLLTQGFTNWNKRDFNQFIKANEKWGRDDIENIAREVEGKTPEEVIEYSAVFWERCNELQDIEKI
MAQIERGEARIQRRISIKKALDTKIGRYKAPFHQLRISYGTNKGKNYTEEEDRFLICMLHKLGFDKENVYDELRQ
CIRNSPQFRFDWFLKSRTAMELQRRCNTLITLIERENMELEEKEKAEKKKRGPKPSTQKRKMDGAPDGRGRKKKL
KL

FIGURE 2981

GAATTCAGCACAATGAAGGAGCCATGGAATGCCAATTTAACGTCAGTCTTGTACTTGAAGGGAAAAAAAACACTT
GTAATGGTGGCAACAGTGAAGCTGTTCCTTTAACATCCCCAAATATAGCCAAGTTTAGCACTCCACCAGCCATCC
TCAGAAAGAAGAGAAAAATGCGAGTGGGTCATTCCCCAGGCAGCGAACTTAGGGATGGCTCATTGAACGATGGTG
GTAATATGGCGCTAAAACATACACCACTGAAAACACTACCATTTTCTCCTTCACAGTTTTTCAACACATGTCCTG
GTAATGAACAACTTAATATAGAAAATCCTTCATTTACATCAACCCCTATTTGTGGGCAGAAAGCTCTCATTACAA
CTCCTCTTCATAAGGAAACAACTCCCAAAGATCAAAAGGAAAATGTAGGGTTTAGAACACCTACTATTAGAAGAT
CTATACTGGGTACCACACCAAGAACTCCTACTCCTTTTAAGAATGCGCTTGCTGCTCAGGAGAAAAAATATGGAC
CTCTTAAAATTGTGTCCCAGCCACTTGCTTTCTTGGAAGAAGATATTCGGGAAGTTTTAAAAGAAGAAACTGGAA
CAGACCTATTCCTCAAAGAGGAAGATGAACCTGCTTACAAAAGCTGCAAACAAGAGAATACCGCTTCTGGGAAGA
AAGTCAGAAAATCACTAGTCTTAGATAATTGGGAAAAAGAAGAATCAGGCACTCAACTGTTGACTGAAGACATTT
CAGACATGCAGTCAGAAAATAGATTTACTACATCCTTATTAATGATACCATTATTGGAAATACATGACAATAGGT
GCAACTTGATTCCTGAAAAACAAGATATAAATTCAACCAACAAAACATATACACTTACTAAAAAGAAACCAAACC
CTAACACTTCCAAAGTTGTCAAATTGGAAAAGAATCTTCAGTCAAATTGTGAATGGGAAACAGTGGTTTATGGGA
AGACAGAAGACCAACTTATTATGACTGAACAAGCAAGAAGATATCTGAGTACTTACACAGCTACCAGTAGTACTT
CAAGAGCTCTCATACTGTAATTGTTATTAAAATTGATGAAATGCCCCACTCCCTTACTGCAGTCTCTACTAAATT
AGGTTGCAGTGAAATTTTTCTCAATTAGTTGTTTTTAAAGTTGTAAGATACCCTTTTAATACAGCATCTTTTTTC
TATTCTATATAGTAGGCAGAAAGCTAGTAAGTCACTTAAGGGGTAGATAGTTTCATAGTTTATTTTTTAAGAGAT
GAGATTTTTAAAAATTGTTTTTAAAGAACAAGATGGGAAAATAATAGAATGTTCATGGATTTCTAAAAGTAAATT
CTCATATATTTTCTTCACAAGATATATGTTGCTACTCTCTTGATGCTGCAGTTTTGTTATAGATAGGTGTATGAG
TATATATGATTTCTGAAATTAGTCTATGTATGGAAAGCACACATGATTTTATGAAGGTACTTTTGCCCATGTGCT
GATTTACTTAGGCTACCATTTACAAAGAAACACATTGAAAAGGAATTTAAAGGAAGGATAGAAAGTTGCACTACT
AATTTTTTGTTTTTTTTTTCAGAAGCAGTAAAATTAACTACAGTGTTAAATGTATTTATTTGAGCATAGTACTGA
AAACAAAAAGCATTCAAAAAAGAGTTTTTTCTTTATTAGTAAATAGTATTTTCTTAATCTCAGAGGAGCTGAGAG
TTTTGTTGAATGTATTGTACAGTATGTAGGAGCAGGAGAACTTTGTAAATTGGAAAGAAGTCTGTTTTTATAATT
TATTTTTATTTTTAAAGCTTAAATGTAGATATTTATAGTATACAGGGAGCCTAGAAGCCAATGTTGTTTCCTGTT
ATTACAGCTAACACAGTAAAGAATAATTTTGACTTTAAGTATGAAACAGTAGTAAGTTATAGCTGCAAAGAATAC
AATATCTATACTGTATGTCACATCTACCTAAATGTTGCACTATGCCCTTTAAATCATGCTGGTTATAAAGTAGTT
CTAAAAATGTACTAAATAATAATTTAATATTTTCTTTTTAAATTATATCGGGGGTGGTCATATACATTAATCTGG
TGATTTGTATATGTGTTTGAAATTTTTTGCTTTTGTTTAAAAAAAAATAATATGGTACCTTGGTCCCTAAAAACA
GTCTGCACTTAGAAGTTATATTTACTCAGTGTTTCAGAAGTGGAGAACTTATCTTTTATTTATAAAAATATTTTG
TCCTTTTTTAAATGTTTTGTGTTTCTCTACAGGTTACAACAGTTGCTTCAGTTGCCTGTTTTAGGTGTTTGCACT
TATTTTATTTCTTCTTGAAAGAATTTTTATTTGCTTTTGTGGTAGAGATTATATGTAATTTTTTTTCAGTCATAT
AATGGTGTGCTGTCAACTTAAACACTGACAGGTAAATAGAATTGTACACTGTAGTTTGAATTATTTATAATTGAC
ACACTCTCTCCCTCTCCACTCCTGAAGTATGCTGCTATAGAAAATAGCAGAATCGGCTTGCTGCTACGAGAGAAG
GAAAGAGCGACCACCACTTGCACTGTGTGAAAAGATAAAAAACAAATGATGGCAAGTTCTCAAGTTAACTAAATG
GAATCAACCATTACCAGGCAAATTCTTGCAAATACCAAAATACTACTATGCCTTATAAAACAAAATGAAAGCAGG
TTAAGATTTTCTGCTCTGTTTGTATGTTAATAGAAATGGAAATACTAAGTATTTTAATGCTTAGCTATTGAACAG
TAGACCTAAAAGGGTTTTAAGCTATTTAAATCTACTTGCTAGTTTTTGCATATTTTATATATATATATATTTATA
TATATATATAGTGAGAAGTGAAGAAAATGTATGGTACTAAGATTATGCCTTATTGATAAATAGATAAACCAATTT
GAATCCTCTTAGCATGTTTAAGTATGTTGATTGCTTTCTAATTAATGAACTTCTCACAGAAATTTCACTTAGTGA
AACCAATGATTGTAGCAAACTCATACTGGATCATTTCAGTTACCTTGAACTAATAGCACATAATGGTTTTTTGTT
GTTGTTGTTTTTAATGTAGCCCTTACCTGGATATACATAGTCTGCAATCACCAAAGTATAATATCTTGTAAGGCT
ATATTTTTTAAAGCATATTTTTTCTTGAGCATTAAATTATCCTAAATGGTAATATATTGTGGATAAGTCTGGGCT
TATTGGACATAATACATATTTGGGTTGGTACTGGTTGAATCCTTCAGTTAACTGCTTTGTTGCTTTTTGCAAGAT
TTTTTATCTTAAACATGTCAGGCATCTTAAGTCACCTTTATACTGTTTTGTTCCTCTGAGTTTCTTTCAGTATGT
TATACAAATGCCAGACATAACATGTAGCAGCCATACTTGCATGGAAACTGACTACACATACATAATACTGCATTT
TATTGTAAGGTTTTCACATTAATACAGCAATTACCCTGACTAAATTGAGTTTTGTGATATATGGAAAACTTCATT
GTAAGAGAATCTTGCATACAATGTTGACTATTAACATCCAAAATAAAGCATCTGTGTACAAG

FIGURE 2982

ACTGCAGCAGGAGCATGTCCCTTTAAGCACAGATCACTGCAACTATTGTTTGTGGTTTAAGAATGCCTTTAAGCA
GTTTTCCACCCCCAGGCAGGCCCAGGTGTTCTTTGCCCTCATTCCCAGTAAACCCACAACCTTCCAGCATGGGTG
TTAGGGCCATTATGAACATGTTACAGTGCTGCAGAGATTTTATTTATGGCCAGTTTATGGCCAGATTTTGGGGGG
CCTGCTCCCAACACTCTACATATGCTCCATCTTGCAGAGGCTTCATTCTTGGTTCTCTAGCTAAAAACAGTAGAA
ATTTTGCACACCTGGGTTAGAAAAAAAAAATAGCCATTAAACCCACCCCTGTTACAGGTCACTATTGGTATTTTG
ATTTTGCCTTCAATCCATCTGTTATTGTTTACTTTTAAGAGTCCTTGATAGTTGCTTTTTATGTCCAGAGTTTTA
ATTTCAGTCAGAAAGAGAAATAGGCCTTGGTGAGCATGCTTTGTCTTGGCTGGTGCCAGAAGTCTGTACTCAAAT
ATTTTAAAAATAATTTTTAGTTGAATAACAAGTTAGACCTGTGTTTAGCTTTCTCATTGTTTTCCTAAAAATAGA
AGAAAAGGTTTTAAATACTTTAACCACGAAATACTTTAAAGCAGGTTTAAAATAAACTCCTTCATTTTGCCTGTT
CTATTACTCTGTTCTCACACTGCTAATAAAGACATACCCAAGACTGGTAATTTATAAAGTAAAGAGGTTTAATTG
ACTCACAGTTCCACATGGCTGGGGGAGGCCTCCCAATCATGGGCAGAAGGTGAATGAGGAGCAGAGTTACAACTT
ACATGGTGGCAGGCAAGAGAGAGAGCATGTGTGCAGGGGAATTCCCCCTTTATAAAACCGTCCCAATCTCATGAG
ACTTATGCAGTCTCATGGGAGCAGCATGAGAAAGACCTCACCTCCGTGATTCAGTTACCTCCCACTGTGTCCCTG
CCACAACATGTGGGAATTGTGGGAGCTAAAAATCAAGATGAGATTTGGGTAGGAACACAGTCAAACCACATCTCC
TATATACATTCACACTAGCATTTTAGTTTTAGAACTAGTTCTATGTTACTATCTGAATTAATTTTTCCACAATTT
TGTAAGGAAAAATAATGCGTTCTTTGAATTTCATGTGTAAATGATATTTTTAGTTTTGTGTCATTTTGTCAAATA
AATTCTGAAAATCTTTGTATTGACAGTGTGTTATCTCTGCATAACCATATATGTATAAGAGTGCTCAATAAAAAG
AATAAAGAGGAAACAGCACTGGATCTATACCTATACAAAACAAGCTACCAGCAGAGCCCACTGGGAATGGTCATG
ATATAATCAGGAATGTTATATTCACACGTTGTAGATCTGCATATGAGAGGAGGGTTTGCAGATAGCAGATTCTAG
AAAAGTTGTCTAATCAGACAGTAAATGAAGGTGTTGAAGCACTGAACAAAAATAAGCTGCTTTAATTACTCATAA
GAGGGAAGTACAAGTCATTATTCCATCTGCCAATTTACAGACTGTAAGATACCCTTTAAAAGTAGCAGTAAGTAA
ACTCTTCATAAAAGTTAGACTGT**ATG**ACAAATCCACTGCCTTTCTTCTTTTGCAGCAGGGCCTTTCTTTTTAATG
ACNNN

FIGURE 2983

MTNPLPFFFCSRAFLFNDXXX

FIGURE 2984

GAATTCGGCACGAGGATGACGGAGCCGGGCGCCTCTCCCGAGGACCCTTGGGTCAAGGTGGAGTATGCCTACAGC
GACAACAGCCTGGACCCCGGGCTTTTTGTAGAAAGCACCCGCAAGGGGAGTGTAGTGTCCAGAGCTAATAGCATC
GGTTCCACCAGTGCCTCTTCTGTCCCCAACACAGATGATGAGGACAGTGATTACCACCAGGAGGCCTACAAGGAG
TCCTACAAAGACCGGCGGCGGCGCGCACACACTCAGGCTGAGCAGAAGAGGAGGGACGCCATCAAGAGAGGCTAT
GATGACCTTCAGACCATCGTCCCCACTTGCCAGCAGCAGGACTTCTCCATTGGCTCCCAAAAGCTCAGCAAAGCC
ATCGTTCTACAAAAGACCATTGACTACATTCAGTTTTTGCACAAGGAGAAGAAAAAGCAGGAGGAGGAGGTGTCC
ACGTTACGCAAGGATGTCACCGCCCTAAAGATCATGAAAGTGAACTATGAGCAGATTGTGAAGGCACACCAGGAC
AACCCCCATGAAGGGGAGGACCAGGTCTCTGACCAGGTCAAGTTCAACGTGTTTCAAGGCATCATGGTTTCCCTG
TTCCAGTCCTTCAATGCCTCCATCTCAGTGGCCAGCTTCCAGGAGCTGTCAGCGTGTGTCTTCAGCTGGATCGAG
GAGCACTGTAAGCCTCAGACCCTGCGGGAGATTGTGATTGGCGTCCTGCACCAATTGAAAAACCAGCTTTACTGA

CCGGTTCTTGGAAACCTGGAGAACAGCCAACAAGAGGCCCTTGAATCTCTACGTGGCCACTGAACTGCTGGGCCC
GGGAGACTGGTCTACAACACCACACACTGGACAGCTGGTCTCTACTTGGTGTGTGGTTTCTCCCAGCCCCATTTT
CTCTACAGCGGAGCCGCGGTGTGTGTTGTGTGAAAGCTTCTGATTAATTTATTATATTGACGATAAAACTCAAAC
CTACCCAGCCTTCCCCCCACTCCATGGAAGTCCTTGGGATGGGCGTCTGCTCTGGACACCCCAAAGAGCTCCTGC
CCTCTCAGCCCTTTATTCAAGCCTCAGATTTCTGCTCATGATCTACATAGATTTGGAAACTGTTTTCCTCTGTTG
TGGTCTCTTGGGCAACATTTGTGGCCCAAGTTTGGGCAACATTTGGCCCAAGTTTGGGCATTGTGGGAGTAGCTG
TATGGGAGAAAAAGAGTAAGAGGAAATATTCCCACAGCCATGAAGGGTGAAAGGGCACCTTGTGCCTAGACTAGG
GCTGGCTGGTCAGTCCCAGGTGAGGACAAGGGCTTTCTGGCCATCTCAGGGAGGGGGCACCAGGTTCCTCCCCTC
ACCCCATATTCCATCACCTTCCTCCTCTGCTCTGGGTGGTAAGGGAAGCCCTCCCGGTTCCCACAGGCTATGATG
CTGCATGGCAGAGGCAGGTATAACACAGCACTACATATTGGAAATTTTTTATTTTTCTAAATACCAATGCAGTTT
TGCTACGGTTACAATTTTGAAATATTAACTGAGCCTCAAAATCACCCTTTCTGTCAAGCATATCTTGGCCTCTCC
CATGTCTCAGTGTTGCCTGCATTTCTCCCAGGACTTGGGGGTGGGGTGAAAAGCGTACAAAAGATACTTAAAAGG
GCTCCTGGGGTACACAAGCCCAGCAGGTCCTGAGTGAAGCCGTGGGCCCTCCAAATGCTCGTTTTATAGCAACCT
CTCTCTACCCTAGTTCTCCAAATTCACTTCTGCCTTCCTCAGGTTTGATATCTGGCAGGTTTGACTATCCAGAGG
AAATTAAATATTTTTATATAAAATTAAATTATAATAAATATTGCCAAATGCTAAAAAAAAAAAAAAAAAA

FIGURE 2985

MTEPGASPEDPWVKVEYAYSDNSLDPGLFVESTRKGSVVSRANSIGSTSASSVPNTDDEDSDYHQEAYKESYKDR
RRRAHTQAEQKRRDAIKRGYDDLQTIVPTCQQQDFSIGSQKLSKAIVLQKTIDYIQFLHKEKKKQEEEVSTLRKD
VTALKIMKVNYEQIVKAHQDNPHEGEDQVSDQVKFNVFQGIMVSLFQSFNASISVASFQELSACVFSWIEEHCKP
QTLREIVIGVLHQLKNQLY

FIGURE 2986

GCGTGCTGGCCCGGGGTGGCAGGAGCCGCAGAGGCTTGGGCTGCAGAAAAAGGATCCTGTTTGCTGTGTAATCCT
GAGAATGGACTGCAAGAGAGGAAAAACTGGGCGTCTGCTTGGGAATCTATTGTGGAAACCCAGGGTGTTTCCCGA
CCAGTCCCTGGGCGCCAACTAGAGTATGGACTGACCAGGTACCTGGATGGAGACCTGAGCTGGAGAAGGAGATGC
GCTTGGGAGGAAATTGCAGAGGCCGTCAACATGGAAAAGCAGCCCCAGAACAGCAGGAGAGGCCTCGCCCCCCGA
GAGGTGCCGCCAGCTGTTGGGCTGCTGCTGATCATGGCCCTGATGAATACTCTACTCTACCTCTGCCTCGACCAC
TTCTTCATCGCTCCTCGACAATCCACTGTGGACCCCACACACTGTCCCTATGGTCACTTCAGGATAGGACAGATG
AAAAACTGCTCACCTTGGCTGTCCTGCGAGGAGCTGAGAACAGAAGTGAGACAGCTGAAGCGTGTTGGGGAAGGA
GCTGTAAAGAGAGTCTTTCTGTCTGAGTGGAAGGAGCACAAAGTTGCACTCTCACAGCTCACCAGCCTGGAGATG
AAAGATGATTTCCTCCATGGACTGCAGATGCTGAAATCTCTCCAAGGCACACATGTTGTCACGCTGCTTGGCTAT
TGTGAGGATGACAACACTATGCTTACTGAATATCACCCTCTAGGTTCCTTGAGTAACCTGGAAGAAACACTAAAC
CTTTCAAAGTACCAAAATGTGAACACGTGGCAGCACAGGCTGGAGCTGGCCATGGACTATGTCAGCATCATTAAT
TACCTGCACCACAGCCCTGTGGGCACACGGGTCATGTGCGACTCCAACGACCTGCCGAAGACACTGTCCCAGTAT
CTGCTAACAAGCAACTTCAGCATTTTGGCAAATGACTTGGACGCCTTACCCCTGGTGAACCACAGCTCCGGGATG
CTGGTGAAGTGCGGCCACAGGGAGCTGCATGGGGATTTCGTGGCTCCAGAGCAACTGTGGCCCTATGGAGAGGAC
GTGCCTTTCCACGATGATCTCATGCCCTCATATGATGAGAAGATTGACATTTGGAAGATCCCAGACATCTCCAGT
TTCCTTCTGGGGCACATTGAAGGGAGTGATATGGTCCGATTCCATTTGTTTGATATTCACAAAGCATGCAAGAGC
CAGACTCCCTCAGAAAGACCCACTGCCCAGGACGTTCTGGAGACCTACCAGAAGGTCTTGGATACACTTAGAGAT
GCCATGATGTCTCAGGCAAGAGAGATGCTGTGAAACCAGTCCAGCCAATGAAGGTGGGATTGAAGGGCTGAATG
GAAGTTACAGCATTCTACTCTGATGGTGGAGTTTTTTGCCTGAGTTTCGTGTTTTATTGTTTTTTTTATGGCTTA
GCCATGTGGTTCGTTGTCCACATCCACATGTACGTTTGTATGTAGTCCACATTGGTTGTTAGATTTTTTTTTTTT
TTCTTTGAGATGCGGTCTTGCTCTGTTGCTGAGGCTGGAGTGCAGTGATGTGATCTTGGCTCACTGCAGCCTCTG
CCTCCCAGGTTCAAGCAATTCTCCCACCTCAGCCTCCAAAGTGCTGGGATTACAGGCGTGAGCCACTGCGCCCGG
CCACATTCAGTTCTTATCAAAGAAATAACCCAGACTTAATCTTGAATGATACGATTATGCCCAATATTAAGTAAA
AAATATAAGAAAAGGTTATCTTAAATAGATCTTAGGCAAAATACCAGCTGATGAAGGCATCTGATGCCTTCATCT
GTTCAGTCATCTCCAAAAACAGTAAAAATAACCACTTTTTGTTGGGCAATATGAAATTTTTAAAGGAGTAGAATA
CCAAATGATAGAAACAGACTGCCTGAATTGAGAATTTTGATTTTTTAAAGTGTGTTTCTTTCTAAATTGCTGTTC
CTTAATTTGATTAATTTAATTCATGTATTATGATTAAATCTGAGGCAGATGAGCTTACAAGTATTGAAATAATTA
CTAATTAATCACAAATGTGAAGTTATGCATGATGTAAAAAATACAAACATTCTAATTAAAGGCTTTGCAACACCA
AAAAAAAAAAAAAAAAA

FIGURE 2987

MEKQPQNSRRGLAPREVPPAVGLLLIMALMNTLLYLCLDHFFIAPRQSTVDPTHCPYGHFRIGQMKNCSPWLSCE
ELRTEVRQLKRVGEGAVKRVFLSEWKEHKVALSQLTSLEMKDDFLHGLQMLKSLQGTHVVTLLGYCEDDNTMLTE
YHPLGSLSNLEETLNLSKYQNVNTWQHRLELAMDYVSIINYLHHSPVGTRVMCDSNDLPKTLSQYLLTSNFSILA
NDLDALPLVNHSSGMLVKCGHRELHGDFVAPEQLWPYGEDVPFHDDLMPSYDEKIDIWKIPDISSFLLGHIEGSD
MVRFHLFDIHKACKSQTPSERPTAQDVLETYQKVLDTLRDAMMSQAREML

FIGURE 2988

CGCGGGCCGACTGGTGTTTATCCGTCACTCGCCGAGGTTCCTTGGGTCATGGTGCCAGCCTGACTGAGAAGAGGA
CGCTCCCGGGAGACGAATGAGGAACCACCTCCTCCTACTGTTCAAGTACAGGGGCCTGGTCCGCAAAGGGAAGAA
AAGCAAAAGACGAAA**ATG**GCTAAATTCGTGATCCGCCCAGCCACTGCCGCCGACTGCAGTGACATACTGCGGCTG
ATCAAGGAGCTGGCTAAATATGAATACATGGAAGAACAAGTAATCTTAACTGAAAAAGATCTGCTAGAAGATGGT
TTTGGAGAGCACCCCTTTTACCACTGCCTGGTTGCAGAAGTGCCGAAAGAGCACTGGACTCCGGAAGGACACAGC
ATTGTTGGTTTTGCCATGTACTATTTTACCTATGACCCGTGGATTGGCAAGTTATTGTATCTTGAGGACTTCTTC
GTGATGAGTGATTATAGAGGCTTTGGCATAGGATCAGAAATTCTGAAGAATCTAAGCCAGGTTGCAATGAGGTGT
CGCTGCAGCAGCATGCACTTCTTGGTAGCAGAATGGAATGAACCATCCATCAACTTCTATAAAAGAAGAGGTGCT
TCTGATCTGTCCAGTGAAGAGGGTTGGAGACTGTTCAAGATCGACAAGGAGTACTTGCTAAAAATGGCAACAGAG
GAG**TGA**GGAGTGCTGCTGTAGATGACAACCTCCATTCTATTTTAGAATAAATTCCCAACTTCTCTTGCTTTCTAT
GCTGTTTGTAGTGAAATAATAGAATGAGCACCCATTCCAAAGCTTTATTACCAGTGGCGTTGTTGCATGTTTGAA
ATGAGGTCTGTTTAAAGTGGCAATCTCAGATGCAGTTTGGAGAGTCAGATCTTTCTCCTTGAATATCTTTCGATA
AACAACAAGGTGGTGTGATCTTAATATATTTGAAAAAAACTTCATTCTCGTGAGTCATTTAAATGTGTACAATGT
ACACACTGGTACTTAGAGTTTCTGTTTGATTCTTTTTTAATAAACTACTCTTTGATTTAAAAAAAAAAAAAAAAA
AAAAAAAAAA

FIGURE 2989

MAKFVIRPATAADCSDILRLIKELAKYEYMEEQVILTEKDLLEDGFGEHPFYHCLVAEVPKEHWTPEGHSIVGFA
MYYFTYDPWIGKLLYLEDFFVMSDYRGFGIGSEILKNLSQVAMRCRCSSMHFLVAEWNEPSINFYKRRGASDLSS
EEGWRLFKIDKEYLLKMATEE

FIGURE 2990

GCGGCCGCCGTGGCCAGGCAACCTATGGGTACCACCGGGTTCTCGCGGGTCTTGCGAACGAACTTTTCCTTGAAA
CTCTCTGGATTCCTGTAAACAGTGGGGCTCAGCCCCTCAATGACTGGAGGCTTCGATGGTTCAAAGGGGACCTCC
GGAATCACAGGGCCGGGAGTCGCCATGTCCGGGCCACAGCAGCAGGAGAAAATCGGGACTCCGACCTCAGCCTCC
CGGTGAAGGTCATGAAAGGGGCGGGGAAACGAATAAATTGAGCCTTGTACGCAGGCGCAAATGCTCGTTGCATCC
TGGGAGTCGTAGTGCTCAGCACGGTAGTGCTACAAAAGGACTACATTTCCCCAAATGCCCGCAAAGCCTTGTGCA
CGCCTTCCGGAAGGAGTTTGTTACACGAGGTCTGAGAGACAGAGGCAGCGTGTTTGAGCTGCTGGTGCGGTGGTC
AGCGCG**ATG**CCCAAGGCCAAGGGCAAAACCCGGAGGCAGAAGTTTGGTTACAGTGTCAACCGAAAGCGTCTGAAC
CGGAATGCTCGACGGAAGGCAGCGCGCGGAATCGAATGCTCCCACATCCGACATGCCTGGGACCACGCTAAATCG
GTACGGCAGAACCTGGCCGAGATGGGGTTGGCTGTGGACCCCAACAGGGCGGTGCCCCTCCGTAAGAGAAAGGTG
AAGGCCATGGAGGTGGACATAGAGGAGAGGCCTAAAGAGCTTGTACGGAAGCCCTATGTGCTGAATGACCTGGAG
GCAGAAGCCAGCCTTCCAGAAAAGAAAGGAAATACTCTGTCTCGGGACCTCATTGACTATGTACGCTACATGGTA
GAGAACCACGGGGAGGACTATAAGGCCATGGCCCGTGATGAGAAGAATTACTATCAAGATACCCCAAAACAGATT
CGGAGTAAGATCAACGTCTATAAACGCTTTTACCCAGCAGAGTGGCAAGACTTCCTCGATTCTTTGCAGAAGAGG
AAGATGGAGGTGGAG**TAA**CTGGTTTACATCACAGCTGCCCCAGGCTGAGGCGTCCCCCGGACCAGTGAAGCTGGA
GCCAGGGTGTAAGGCAAGGAGGTGCTGTGTGGCTCCAGAGGGGCTGGCCAGGTCCCATGGAATCAGAAGGTTACA
CACACACGTGCACACTCCCCGCTCTGGGGAAGGAACTGTTCTCAGAGGCTCCAATTTATATTCATCTGGGGGTTC
ACGGAAAAGCCAGAACCTGCTGTTTTCAGGGTGGGTGATGTAAATATAGTGTGTACATAATAAAGCAAATATATT
TTAAA

FIGURE 2991

MPKAKGKTRRQKFGYSVNRKRLNRNARRKAARGIECSHIRHAWDHAKSVRQNLAEMGLAVDPNRAVPLRKRKVKA
MEVDIEERPKELVRKPYVLNDLEAEASLPEKKGNTLSRDLIDYVRYMVENHGEDYKAMARDEKNYYQDTPKQIRS
KINVYKRFYPAEWQDFLDSLQKRKMEVE

FIGURE 2992

TTTTTTAATTAGGATAATGCCTTTATTAACGAGAATGAAACGTTCATTCCTCCTTCCACTCCTTCTCGTTGGTTT
TCTGGACACAGCTCACCTGATCCTGCTAGAAACGTTGTCAGTCTGCTTGTGGCTTCCCTCCTTGATTGACTCACG
CTGTGTGATGTCTTGAGAAGTATCTATCCACTTCATGTGAATGAGCACTCCAATATCAGCCAACATCAATCATTC
TTACCATGTCACTTCCCATCATGGAACCACTCATGGTTGCTGGTGGAACGCCAGGATTAGCTTCATAACCTATGC
CACCACCACCTCCTAGAGGTGGAAATTTCTGGCCTCCTGAACCATAGGGATCTCCCATGTTCATTGCTCCTCCGC
CACCCATTCGCATGTCTCTTTCCCGTGGATCCATGTAGCCCATTCGGCTGTAACTTTCCTCTCTTTGGCGCCTC

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FIGURE 2993

FLIRIMPLLTRMKRSFLLPLLLVGFLDTAHLILLETLSVCLWLPSLIDSRCVMS

FIGURE 2994

ACACGGACCAAGGAGTCTAACACGTGCGCGAGTCGGGGGCTCGCACGAAAGCCGCCGTGGCGCAATGAAGGTGAA
GGCCGGCGCGCTCGCCGGCCGAGGTGGGATCCCGAGGCCTCTCCAGTCCGCCGAGGGCGCACCACCGGCCCGTCT
CGCCCGCCGCGCCGGGGAGGTGGAGCACGAGCGCACGTGTTAGGACCCGAAAG**ATG**GTGAACTATGCCTGGGCAG
GGCGAAGCCAGAGGAAACTCTGGTGGAGGTCCGTAGCGGTCCTGACGTGCAAATCGGTCGTCCGACCTGGGTATA
GGGGCGGGCTCCAGGCGAGGCGGTCGACGCTCCTGAAAACTTGCGCGCGCGCTCGCGCCACTGCGCCCGGAGCGA
TGAAGATGGTCGCGCCCTGGACGCGGTTCTACTCCAACAGCTGCTGCTTGTGCTGCCATGTCCGCACCGGCACCA
TCCTGCTCGGCGTCTGGTATCTGATCATCAATGCTGTGGTACTGTTGATTTTATTGAGTGCCCTGGCTGATCCGG
ATCAGTATAACTTTTCAAGTTCTGAACTGGGAGGTGACTTTGAGTTCATGGATGATGCCAACATGTGCATTGCCA
TTGCGATTTCTCTTCTCATGATCCTGATATGTGCTATGGCTACTTACGGAGCGTACAAGCAACGCGCAGCCTGGA
TCATCCCATTCTTCTGTTACCAGATCTTTGACTTTGCCCTGAACATGTTGGTTGCAATCACTGTGCTTATTTATC
CAAACTCCATTCAGGAATACATACGGCAACTGCCTCCTAATTTTCCCTACAGAGATGATGTCATGTCAGTGAATC
CTACCTGTTTGGTCCTTATTATTCTTCTGTTTATTAGCATTATCTTGACTTTTAAGGGTTACTTGATTAGCTGTG
TTTGGAACTGCTACCGATACATCAATGGTAGGAACTCCTCTGATGTCCTGGTTTATGTTACCAGCAATGACACTA
CGGTGCTGCTACCCCCGTATGATGATGCCACTGTGAATGGTGCTGCCAAGGAGCCACCGCCACCTTACGTGTCTG
CC**TAA**GCCTTCAAGTGGGCGGAGCTGAGGGCAGCAGCTTGACTTTGCAGACATCTGAGCAATAGTTCTGTTATTT
CACTTTTGCCATGAGCCTCTCTGAGCTTGTTTGTTGCTGAAATGCTACTTTTTAAAATTTAGATGTTAGATTGAA
AACTGTAGTTTTCAACATATGCTTTGCTAGAACACTGTGATAGATTAACTGTAGAATTCTTCCTGTACGATTGGG
GATATAATGGGCTTCACTAACCTTCCCTAGGCATTGAAACTTCCCCCAAATCTGATGGACCTAGAAGTCTGCTTT
TGTACCTGCTGGGCCCCAAAGTTGGGCATTTTTCTCTCTGTTCCCTCTCTTTTGAAAATGTAAAATAAAACCAAA
AATAGACAACTTTTTCTTCAGCCATTCCAGCATAGAGAACAAAACCTTATGGAAACAGGAATGTCAATTGTGTAA
TCATTGTTCTAATTAGGTAAATAGAAGTCCTTATGTATGTGTTACAAGAATTTCCCCCACAACATCCTTTATGAC
TGAAGTTCAATGACAGTTTGTGTTTGGGTGGTAAAGGATTTTCTCCATGGCCTGAATTAAGACCATTAGAAAGCA
CCAGGCCGTGGGAGCAGTGACCATCTGCTGACTGTTCTTGTGGATCTTGTGTCCAGGGACATGGGGTGACATGCC
TCGTATGTGTTAGAGGGTGGAATGGATGTGTTTGGCGCTGCATGGGATCTGGTGCCCCTCTTCTCCTGGATTCAC
ATCCCCACCCAGGGCCCGCTTTTACTAAGTGTTCTGCCCTAGATTGGTTCAAGGAGGTCATCCAACTGACTTTAT
CAAGTGGAATTGGGATATATTTGATATACTTCTGCCTAACAACATGGAAAAGGGTTTTCTTTTCCCTGCAAGCTA
CATCCTACTGCTTTGAACTTCCAAGTATGTCTAGTCACCTTTTAAAATGTAAACATTTTCAGAAAAATGAGGATT
GCCTTCCTTGTATGCGCTTTTTACCTTGACTACCTGAATTGCAAGGGATTTTTATATATTCATATGTTACAAAGT
CAGCAACTCTCCTGTTGGTTCATTATTGAATGTGCTGTAAATTAAGTTGTTTGCAATTAAAACAAGGTTTGCCCA
CAAAAAAAAAA

FIGURE 2995

MVNYAWAGRSQRKLWWRSVAVLTCKSVVRPGYRGGLQARRSTLLKTCARARATAPGAMKMVAPWTRFYSNSCCLC
CHVRTGTILLGVWYLIINAVVLLILLSALADPDQYNFSSSELGGDFEFMDDANMCIAIAISLLMILICAMATYGA
YKQRAAWIIPFFCYQIFDFALNMLVAITVLIYPNSIQEYIRQLPPNFPYRDDVMSVNPTCLVLIILLFISIILTF
KGYLISCVWNCYRYINGRNSSDVLVYVTSNDTTVLLPPYDDATVNGAAKEPPPPYVSA

FIGURE 2996

GAACTTCAGAGAAGGGAAACACACGGCTAAGAAGAGAGAGGCAAGGGCAGGAGTGAAGGAGAGAGCTGAAGCCTG
GGGCTCCGAGATGGTCAGAGGATGGGAGACGGGGCAGTGAAACAAGGCTTCTTGTATCTTCAGCAGCAGCAGACG
TTTGGAAAGAAATGGCGCCGCTTCGGCGCCTCACTGTATGGAGGGTCGGACTGCGCCTTGGCCCGGCTGGAGCTG
CAGGAGGGCCCGGAGAAGCCTCGTCGGTGTGAGGCTGCCCGGAAGGTCATCCGCCTCAGTGACTGCCTGCGGGTG
GCCGAGGCCGGCGGAGAGGCCAGCAGCCCCCGGGACACCAGTGCCTTCTTCCTGGAGACCAAGGAGCGCCTGTAC
CTCCTGGCGGCCCCTGCAGCGGAGCGCGGCGACTGGGTGCAGGCCATCTGCCTCCTGGCCTTCCCCGGGCAGAGG
AAGGAGCTCTCGGGGCCAGAGGGAAAGCAGAGCCGGCCCTGCATGGAGGAAAATGAATTGTACAGCAGCGCAGTC
ACAGTCGGCCCCCACAAGGAATTTGCTGTGACCATGAGACCTACAGAAGCCAGTGAGAGGTGCCACCTGCGGGGG
TCCTATACCCTCCGGGCTGGGGAGAGTGCCCTGGAGCTGTGGGGTGGGCCCGAGCCAGGGACCCAGCTGTACGAC
TGGCCCTACAGGTTTCTGCGGCGCTTTGGGCGGGACAAGGTAACCTTTTCCTTTGAGGCAGGCCGTCGCTGCGTC
TCTGGAGAGGGCAACTTTGAGTTCGAAACCCGGCAAGGCAATGAGATCTTCTTGGCCCTGGAAGAGGCCATCTCT
GCCCAGAAGAATGCTGCACCCGCTACACCCCAACCGCAGCCAGCCACAATCCCCGCGTCGCTGCCCCGGCCTGAT
AGCCCCTACTCTCGGCCGCATGACTCACTGCCGCCGCCTTCACCCACCACACCGGTGCCTGCTCCACGGCCTCGG
GGCCAGGAGGGGGAGTATGCCGTGCCCTTCGATGCGGTGGCCCGTTCCTTGGGGAAGAACTTCAGGGGCATCTTG
GCAGTCCCTCCTCAGCTCCTGGCCGACCCTCTGTACGACAGCATTGAGGAGACCCTGCCCCCTCGACCTGACCAC
ATATACGATGAGCCCGAGGGAGTGGCTGCCCTGTCCCTCTATGACAGCCCGCAGGAGCCCCGGGGTGAGGCATGG
AGGAGGCAGGCGACAGCTGACAGGGACCCTGCTGGCCTCCAGCATGTCCAGCCAGCCGGGCAGGATTTCTCTGCT
TCTGGCTGGCAGCCAGGAACTGAGTATGACAATGTTGTACTAAAGAAAGGCCCAAAGTGACAGAGGCAGCAGAGG
GATGGTCCACCGCCCCTTGGCTTCTGCTGGTGACTCCTCCTGGCCACTGCATCAGAAGAACCTCCTCTGCCCCTT
CTGGAGCCCGAGGCCTGGCCTGTCTTCGTTGGGGCTGATAAATTGCCTCTCCCAGGGCCTGCTGGGTGAGTCACC
ATCCCAAAGCAGGAAGGGTGCCCTGGAGAGAACCACCCTCCTCCTACTCTTTTTCCACTTCCTCCTCTTTCTTTC
CCCAGCTGAGGAGGAACCTGGGGCATTTAGGGCAGAGGACAAAAGGATGTCAGCAATTGCTTGGGCTGCTTGGCT
ATGCAAGCCTCCTGCCTGCTGATGGCCACTTCAGGGACAGCCTGGGCCCAGGCACCCAGGGGGATGGCGGCAGCT
TCCTGCACCTTTCAGATTTCTTGGTGGCATTAAAGCATTTTCAGAAC

FIGURE 2997

MGDGAVKQGFLYLQQQQTFGKKWRRFGASLYGGSDCALARLELQEGPEKPRRCEAARKVIRLSDCLRVAEAGGEA
SSPRDTSAFFLETKERLYLLAAPAAERGDWVQAICLLAFPGQRKELSGPEGKQSRPCMEENELYSSAVTVGPHKE
FAVTMRPTEASERCHLRGSYTLRAGESALELWGGPEPGTQLYDWPYRFLRRFGRDKVTFSFEAGRRCVSGEGNFE
FETRQGNEIFLALEEAISAQKNAAPATPQPQPATIPASLPRPDSPYSRPHDSLPPPSPTTPVPAPRPRGQEGEYA
VPFDAVARSLGKNFRGILAVPPQLLADPLYDSIEETLPPRPDHIYDEPEGVAALSLYDSPQEPRGEAWRRQATAD
RDPAGLQHVQPAGQDFSASGWQPGTEYDNVVLKKGPK

FIGURE 2998

XXACTCCTGGCAGCCCGCGGCCCCCGAGCACGCGCCTGACAGCCCCTGCTGGCCCGGCGCGCGGCGTCGCCAGGC
CAGCTCATGGCCCCCGACCCGTTGGCCGCCGAGACCGCGGCTCAGGGACTTACCCCGCGCTACTTCACCTGGGAC
GAGGTGGCCCAGCGCTCAGGGTGCGAGGAGCGGTGGCTAGTGATCGACCGTAAGGTGTACAACATCAGCGACTTC
AGTCGCCGGCATCCAGGGGGCTCCCGGGTCATCAGCCACTACGCCGGGCAGGATGCCACGGATCCCTTTGTGGCC
TTCCACATCAACAAGGGCCTTGTGAAGAAGTATATGAACTCTCTCCTGATTGGAGAACTGTCTCCAGAGCAGCCC
AGCTTTGAGCCCACCAAGAATAAAGAGCTGACAGATGAGTTCCGGGAGCTGCGGGCCACAGTGGAGCGGATGGGG
CTCATGAAGGCCAACCATGTCTTCTTCCTGCTGTACCTGCTGCACATCTTGCTGCTGGATGGTGCAGCCTGGCTC
ACCCTTTGGGTCTTTGGGACGTCCTTTTTGCCCTTCCTCCTCTGTGCGGTGCTGCTCAGTGCAGTTCAGGCCCAG
GCTGGCTGGCTGCAGCATGACTTTGGGCACCTGTCGGTCTTCAGCACCTCAAAGTGGAACCATCTGCTACATCAT
TTTGTGATTGGCCACCTGAAGGGGGCCCCCGCCAGTTGGTGGAACCACATGCACTTCCAGCACCATGCCAAGCCC
AACTGCTTCCGCAAAGACCCAGACATCAACATGCATCCCTTCTTCTTTGCCTTGGGGAAGATCCTCTCTGTGGAG
CTTGGGAAACAGAAGAAAAAATATATGCCGTACAACCACCAGCACAAATACTTCTTCCTAATTGGGCCCCCAGCC
TTGCTGCCTCTCTACTTCCAGTGGTATATTTTCTATTTTGTTATCCAGCGAAAGAAGTGGGTGGACTTGGTCTGG
ATGATTACCTTCTACGTCCGCTTCTTCCTCACTTATGTGCCACTATTGGGGCTGAAAGCCTTCCTGGGCCTTTTC
TTCATAGTCAGGTTCCTGGAAAGCAACTGGTTTGTGTGGGTGACACAGATGAACCATATTCCCATGCACATTGAT
CATGACCGGAACATGGACTGGGTTTCCACCCAGCTCCAGGCCACATGCAATGTCCACAAGTCTGCCTTCAATGAC
TGGTTCAGTGGACACCTCAACTTCCAGATTGAGCACCATCTTTTTCCCACGATGCCTCGACACAATTACCACAAA
GTGGCTCCCCTGGTGCAGTCCTTGTGTGCCAAGCATGGCATAGAGTACCAGTCCAAGCCCCTGCTGTCAGCCTTC
GCCGACATCATCCACTCACTAAAGGAGTCAGGGCAGCTCTGGCTAGATGCCTATCTTCACCAATAACAACAGCCA
CCCTGCCCAGTCTGGAAGAAGAGGAGGAAGACTCTGGAGCCAAGGCAGAGGGGAGCTTGAGGGACAATGCCACTA
TAGTTTAATACTCAGAGGGGGTTGGGTTTGGGGACATAAAGCCTCTGACTCAAACTCCTCCCTTTTATCTTCTAG
CCACAGTTCTAAGACCCAAAGTGGGGGGTGGACACAGAAGTCCCTAGGAGGGAAGGAGCTGTTGGGGCAGGGGTG
TAAATTATTTCCTTTTTCTAGTTTGGCACATGCAGGTAGTTGGTGAACAGAGAGAACCAGGAGGGTAACAGAAGA
GGAGGGACCTACTGAACCCAGAGTCAGGAAGAGATTTAACACTAAAATTCCACTCATGCCGGGCGTGGTGGCACG
CGCCTGTAATCCCAGCTACCCAGGAGGCTGAGGCAGGAGAATCGCTTGAACCGGGGAGGTGGAGGTTGCAGTGAG
CTGAGATCACGCCATTGTACTCCAGCCTGGGCGACAGAGCCTCCATCTCCAAAGGAAAAACAAAAGGTTATTCTG
TATTGTAATTTAAAAATAAAATTTCTTCTATTTGAATTTTTAAAGTTAAAAACGTAAGTAAATCCTGTCATTGCT
AACAGGGCCACATATGGACTCTTACTCTTTCCTCTAGACCCCCAGAGTGTAGAATGTGATACACTTTTGTCCTTT
TCTCTGAGGATGTGCTGCCTAGTGTCGTGGAATCTGCCTGACCATTGCAAGCATCCAATTTTGTGACCAGTTCTT
TTGCAGGAAATTGTTTCTGAGAAGACTGGAAGACAAGAAATATCCCACCTCTTCTAACAAGATCTGAATTGTTCG
AAAAGCAGCCAGTGCCTAACTTGTAGCTCCACTTATGCCAACTGTATATATACCTCTCGTGAGCATAGCAAGTGA
TTTAATATTTTGAAAAGATGGCTAAAATCCTTTTAATGAACAGCACTAAAGTTATATGTATTAGAGGAGAATTAT
TGAATGAGATGGAGAAAGAGTTCTGAAATTAATATTTACATTTTGGCTTTTTTACAGATAATATTATATTTCTGA
GTGACCAGACGAAAGAGAAGGAGTAGAAAGGATGATTCTTCTTTGGCCATCATTTGGTACAGTCTCATTTCCAAG
TCATGTATAATCTTTATGGCTTCCAAGGACAAGAATTAAAATACTCTTTTACGTAAAAAAAATA

FIGURE 2999A

GCGGCCGCAGCCTGAGCCAGGGCCCCCTCCCTCGTCAGGACCGGGGCAGCAAGCAGGCCGGGGGCAGGTCCGGGC
ACCCACCATGCGAGGCGAGCTCTGGCTCCTGGTGCTGGTGCTCAGGGAGGCTGCCCGGGCGCTGAGCCCCCAGCC
CGGAGCAGGTCACGATGAGGGCCCAGGCTCTGGATGGGCTGCCAAAGGGACCGTGCGGGGCTGGAACCGGAGAGC
CCGAGAGAGCCCTGGGCATGTGTCAGAGCCGGACAGGACCCAGCTGAGCCAGGACCTGGGTGGGGGCACCCTGGC
CATGGACACGCTGCCAGATAACAGGACCAGGGTGGTGGAGGACAACCACAGCTATTATGTGTCCCGTCTCTATGG
CCCCAGCGAGCCCCACAGCCGGGAACTGTGGGTAGATGTGGCCGAGGCCAACCGGAGCCAAGTGAAGATCCACAC
AATACTCTCCAACACCCACCGGCAGGCTTCGAGAGTGGTCTTGTCCTTTGATTTCCCTTTCTACGGGCATCCTCT
GCGGCAGATCACCATAGCAACTGGAGGCTTCATCTTCATGGGGGACGTGATCCATCGGATGCTCACAGCTACTCA
GTATGTGGCGCCCCTGATGGCCAACTTCAACCCTGGCTACTCCGACAACTCCACAGTTGTTTACTTTGACAATGG
GACAGTCTTTGTGGTTCAGTGGGACCACGTTTATCTCCAAGGCTGGGAAGACAAGGGCAGTTTCACCTTCCAGGC
AGCTCTGCACCATGACGGCCGCATTGTCTTTGCCTATAAAGAGATCCCTATGTCTGTCCCGGAAATCAGCTCCTC
CCAGCATCCTGTCAAAACCGGCCTATCGGATGCCTTCATGATTCTCAATCCATCCCCGGATGTGCCAGAATCTCG
GCGAAGGAGCATCTTTGAATACCACCGCATAGAGCTGGACCCCAGCAAGGTCACCAGCATGTCGGCCGTGGAGTT
CACCCCATTGCCGACCTGCCTGCAGCATAGGAGCTGTGACGCCTGCATGTCCTCAGACCTGACCTTCAACTGCAG
CTGGTGCCATGTCCTCCAGAGATGCTCCAGTGGCTTTGACCGCTATCGCCAGGAGTGGATGGACTATGGCTGTGC
ACAGGAGGCAGAGGGCAGGATGTGCGAGGACTTCCAGGATGAGGACCACGACTCAGCCTCCCCTGACACTTCCTT
CAGCCCCTATGATGGAGACCTCACCACTACCTCCTCCTCCCTCTTCATCGACAGCCTCACCACAGAAGATGACAC
CAAGTTGAATCCCTATGCAGGAGGAGACGGCCTTCAGAACAACCTGTCCCCCAAGACAAAGGGCACTCCTGTGCA
CCTGGGCACCATCGTGGGCATCGTGCTGGCAGTCCTCCTCGTGGCGGCCATCATCCTGGCTGGAATTTACATCAA
TGGCCACCCCACATCCAATGCTGCGCTCTTCTTCATCGAGCGTAGACCTCACCACTGGCCAGCCATGAAGTTTCG
CAGCCACCCTGACCATTCCACCTATGCGGAGGTGGAGCCCTCGGGCCATGAGAAGGAGGGCTTCATGGAGGCTGA
GCAGTGCTGAGAACACCAAGTCTCCCCTTTGAAGACTTTGAGGCCACAGAAAAGACAGTTAAAGCAAAGAAGAGA
AGTGACTTTTCCTGGCCTCTCCCAGCATGCCCTGGGCTGAGATGAGATGGTGGTTTATGGCTCCAGAGCTGCTGT
TCGCTTCGTCAGCACACCCCGAATATTGAAGAGGGGGCCAAAAAACAACCACATGGATTTTTTATAGGAACAACA
ACCTAATCTCATCCTGTTTTGATGCAAGGGTTCTCTTCTGTGTCTTGTAACCATGAAACAGCAGAAGAACTAACA
TAACTAACTCCATTTTTGTTTAAGGGGCCTTTACCTATTCCTGCACCTAGGCTAGGATAACTTTAGAGCACTGAC
ATAAAACGCAAAAACAGGAATCATGCCGTTTGCAAAACTAACTCTGGGATTAAAGGGGAAGCATGTAAACAGCTA
ACTGTTTTTGTTAAAGATTTATAGGAATGAGGAGGTTTGGCTATTGTCACATGACAGACTGTTAGCCAAGGACAA
AGAAGTTCTGCAAACCTCCCCTGGACCCTTGCTGGTGTCCAGATGTCTGCGGTTGTCAGCCCCTTCCTTTCCCCC
GACCTAAACATAAAAGACAAGGCAAAGCCCGCATAATTTTAAGACGGTTCTTTAGGACATTAGTCCACCATCTTC
TTGGTTTGCTGGCTCTCCGAAATAAAGTCCCTTTCCTTGCTCCAACTCCTTGTCTCTCAACGTATTGGCTATGAC
GCAGCAAGCAGAATGAATTTGGACTCAGTTACAGGCTGTCAATGGTCTGCTCTGTAGCAGTCTCAGAGCCTCCCC
GACCCACTACCTGGAGATAGCCAGATAGCCAGATGCCCTGCTCCTGGCCACCTTTAAAGCCCCTGCATATGACAC
AGGTTAACTAAAGTCAAGATTGGGGCTGCTGCATTCCAGGTTCCCTAGACTCACAAGCTGGTCCTTGGCCAGGTG
CAGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCTGAGGCAGGCGGATCACCTGAAGTCAGAAGTTTGAGA
CCAGCCTGGCCAACATAATTAAAATGTCTCTACTAAAAATACAAAAAATTAGCTGGGTGTGGTGACGCTTGCCTG
TATCCCAGCTACTCAGGAAGCTGAGACACGAGAATCACTTGAACCTGGGAGGCAGAGGTTGCAGTGAGCTCAGAT
AGTGCCACTGCACTCCAGCCTGGGTGACAGAGCGAGACTCCGTCTCAAAAAAAAAAAAAAGAAAGCAGAACCTCAT
GGCTATAGAGTTGGCATTTTAGCCCCAGCTTCTGTAGCTCTGAAAGCCTAAAGAAGGTATTCTCTCCATCTGTTA
AACACAGTATAGTGGCTCTCAGCCCTTGGGGCATGTTATCATGGGAGGGAAGTCAAATAAGAGGAGAGAAAAGAA
CTCAAGGGGGAAACTGCATTTTTAGGCTTTGCTCTCTTACCTTGCCCTTTCTACTCAGAACCAATAACTTCTGCA
TCAAAACATGTTACAGCCTGCATCAAGGGCTTTACCCCAACCTGCAGCCCAGCCTTCCCTGGGTGAGCTTGCTAT
GCGCAGCCACATTTACCATGTGGGGCTCCCTATTCTGATGGCCTGTTCGGTGCCGGGTTTACTCACTGCCCTGTT
CTGATGTCAGTGCCTGTACATACCTCCAAAGGCAGGACTTGCCTGATAAATATTTTTCCTCCTCTGAACTGGATT
TTATAGGCATTAAAGACAAGTCGGGTGGCTAGAGGGCTCCTTGAGACATACCTAGCAGGGAACTGCAGGTGGATT
CTGTTGAGAGGCAAAGCACCTGAGTGGTTGGGACACAGGCAGCTGGCATGGGAGGGACTTTTTTTGAGACAGGGT
CTCACTGTGTCGCCCAGGGCAAGGATGCCCAAAGACACCAGGTTGGAGAGGCACCTGCCAACTACTTGCTTTCCC
TGGAGCCTGCATGTGCCTGTGGGGTGGGGAGGCGTAGGGGTCTACGGCTGCCTGAGATGGGTGTGCACAGTGTGT

FIGURE 2999B

GAAGTACCTACCTCCTTGCCTTGCTGGACTGTCAGCCAGTCGCAGGGCCGGCCACAAGACCCATGTCTCCATCTG
GTCATACTCCATAGCTACCAAGTTAACCTGCTCTAAACTTTGGAGAACTGGATCTGTCCAATAAACGCTTATTTG
GCCAAGCCTGATGGCTCGTGCCTGTACTCCCAGCACTTTGGGAGGCTGAGGTGGGAGGGTTGCTTGAGCCCAGGG
GTTTGAGACCAGCTTGGGCAACAACAACAAAAATGCCAGGTGTGGTGGGGTGCACCTGTAGTCCCAGCTACTAGG
GAGGCTGAGCCAGGAGGATCACTTGAGCCCGGGAGGTTGAGGCTGCAGTGGGGGGTCATAATCATGCCACTGTAC
TCCAGCCTGGGTGACAGAGTGAGACCCTGTCTCCGAAAAAAAAAAAAAAAAAAGAACGGAAAAAGAAATGCTTAC
ATTGTCAGGGATCCTGTAGACAATCATTAACTCTATGAGATGCTTGGTTCTATTTTTTTGGGAGACTTTGTCCAA
GTGTTTTGGCTTAAGAAATCCATAGGCCTCTCTTGGTGACACATCTCTAGTACTTTTTGTCATAAACAAACAGGC
CATCTGCCGCCAAATACATCCACTCCCCATGCCACTGACATCCTATGGGTCAGCCAGGCTTGCTTTGACTGAGGC
CGAGGCATCTGGAACTTTCTCTGCCTGCAGGGGCTAGCAGCAGAGGCTTCACCGCATCACCACCCCTTCCTCCAC
TCCTGACATTCTTTCCCTTCAGGGATCCAAAATGGTTGGCCGAGCTCCCAGTGGGAAAACGTGTGCTAGAGTTGG
GGAGTGAGATGAGTGGTGCTGTCCATGGAATCAGGCCACAGCAGGAACTGCCCCACTGGCCATTTGAGACACACA
CAGGTGGTAAATGCTCTGCTGGTGGGCTGTGCTTCCCTCATTCAGAGAGCTCTGTTACAGCCCACTGTGTCCTTT
AGAAGCTTGAAAGGAACCCAACTCTTTGCTGCACTGTCCTTTTTCTTCCTCAAATTCAGACCCTCCTTCCACCGG
CACCCCCCTACTCCACCCTCAGCTCTTCCTTGCCTGGTTTATCAAGCAGAGCTGAGGCCCCACGTTTCCAACTCT
GATTGTCACTTGCATCTTCACAAAGGATAAACCACGGAGCAACTGGAAAACCATCAGCCAAGCGTTCGGATGAGT
CTGGTTATTGGTCCACCCCCGACCAGATTCCCTTACACTTAACTCACTTCTTTCTTTGGCAATGACCCTCATGAC
ATGTATAAATGGGTATGACTAAGAAGAGGCTGTGATCTAACATTTATTTGCTGCCATTTTTTACTCTGGGGAGAA
GCAGCCCCAACTCATCACTGGGAAAGAACTCCCCCTGCAAACCAGCTAAATTTGATAATTTAAACCCCCTGCCCC
TAAAACTTCTCACAGAGCTGGGGAGTTGGTGGCAACTTTCCAAGTCAAGGTCTTGCTTAGAAAGTCCTTCACTAC
ATGGCCAGGTGCAGTGGCTCACGCCTGTAGTCCCAGGTACTTGGGAGCCTGAGGCAGGAGGATTGCTTGAGCTCA
GGAGTTCAAGGCTGCAGAGAGCTATGATCATCCCACTGCATTTGTTTAAAAATAAATTTTTAAAATTTGTGTGTT
TTATCAGGGGTCTCCTGTACAGTGTATCTGTGTATGTTTGTGTGTGTGTTTGTATACAGCCTTGTTTAATGTTTT
GAGCAATAAGATATGCACACACAGGTATTTTGTTGCTAAAGAGATTGGACAAGGTTGTAGCTGTGCTCAGGCTTC
AGCTTGGTTTGTTAAATTGAGAGATAAACAATGACAAGAGCTGCCAGCCAACCACACTATTCAAAAAGCAAAGTG
TTCACCACTAAAGCTAACCATTCATCTGGTTGCAGGCAAGGCTAAGGCTCTCTCTCCTCTAGTTCCTGGAACAGA
CTCACAGATTGGCATGAAGCACTGATCAGGGGCTGCACTCAGACTCCCTGGCCAAGCAAACCTACACCAGAAGAG
TCAGTGTCACAGATATGATGCGGCCAATCTCTGTCTCCAAAAACCTACCTGAACTTAATGGTAGAATTCAAAGAT
CTGGGGACTGAGGGCACCCAGCCTTCTAAAACACAATGTATTCATGTGTTTAGTGTAAACTCTCTGCATGGATTC
TCAGTGTTAATAATAAAAGGAAGCATTCTTTTACAACTCCTGCTGTGTGCAAAAGAAAGTGCAAAGGATTTGGAG
TGGCATTCCGAAGATCACCACACATACCTTGGTTCTGATGGCTGCTGAACTCCGACTTCTTCGCTGAGACATGAC
TGTGGGAACAGCCTCCAGCTATCTGCTCATCAGAGGTGCTTTCCTCAACCTCCTGCACCACCTCCAAGAGAAACA
GCCTAAAAAGAAACCCCAGCTGTTTACTTATATTGGTCTGTAAATCCCTGGAAGTAAACCCCATGCATTTTTATC
TACTGTCTGAGGACATACAATAAATCTGAGAAAGTCTATGCTGTCAAAAAAAAAAAAAAAAAAA

FIGURE 3000

MRGELWLLVLVLREAARALSPQPGAGHDEGPGSGWAAKGTVRGWNRRARESPGHVSEPDRTQLSQDLGGGTLAMD
TLPDNRTRVVEDNHSYYVSRLYGPSEPHSRELWVDVAEANRSQVKIHTILSNTHRQASRVVLSFDFPFYGHPLRQ
ITIATGGFIFMGDVIHRMLTATQYVAPLMANFNPGYSDNSTVVYFDNGTVFVVQWDHVYLQGWEDKGSFTFQAAL
HHDGRIVFAYKEIPMSVPEISSSQHPVKTGLSDAFMILNPSPDVPESRRRSIFEYHRIELDPSKVTSMSAVEFTP
LPTCLQHRSCDACMSSDLTFNCSWCHVLQRCSSGFDRYRQEWMDYGCAQEAEGRMCEDFQDEDHDSASPDTSFSP
YDGDLTTTSSSLFIDSLTTEDDTKLNPYAGGDGLQNNLSPKTKGTPVHLGTIVGIVLAVLLVAAIILAGIYINGH
PTSNAALFFIERRPHHWPAMKFRSHPDHSTYAEVEPSGHEKEGFMEAEQC

FIGURE 3001

GGCCACCCAGTCATGGGGGACACCTTCATCCGTCACATCGCCCTGCTGGGCTTTGAGAAGCGCTTCGTACCCAGC
CAGCACTATGTGTACATGTTCCTGGTGAAATGGCAGGACCTGTCGGAGAAGGTGGTCTACCGGCGCTTCACCGAG
ATCTACGAGTTCCATAAAACCTTAAAAGAAATGTTCCCTATTGAGGCAGGGGCGATCAATCCAGAGAACAGGATC
ATCCCCCACCTCCCAGCTCCCAAGTGGTTTGACGGGCAGCGGGCCGCCGAGAACCGCCAGGGCACACTTACCGAG
TACTGCAGCACGCTCATGAGCCTGCCCACCAAGATCTCCCGCTGTCCCCACCTCCTCGACTTCTTCAAGGTGCGC
CCTGATGACCTCAAGCTCCCCACAGACAACCAGACAAAAAAGCCAGAGACATACTTGATGCCCAAAGATGGCAAG
AGTACCGCGACAGACATCACCGGCCCCATCATCCTGCAGACGTACCGCGCCATTGCCGACTACGAGAAGACCTCG
GGCTCCGAGATGGCTCTGTCCACGGGGGACGTGGTGGAGGTCGTGGAGAAGAGCGAGAGCGGTTGGTGGTTCTGT
CAGATGAAAGCAAAGCGAGGCTGGATCCCAGCATCCTTCCTCGAGCCCCTGGACAGTCCTGACGAGACGGAAGAC
CCTGAGCCCAACTATGCAGGTGAGCCATACGTCGCCATCAAGGCCTACACTGCTGTGGAGGGGGACGAGGTGTCC
CTGCTCGAGGGTGAAGCTGTTGAGGTCATTCACAAGCTCCTGGACGGCTGGTGGGTCATCAGGAAAGACGACGTC
ACAGGCTACTTTCCGTCCATGTACCTGCAAAAGTCGGGGCAAGACGTGTCCCAGGCCCAACGCCAGATCAAGCGG
GGGGCGCCGCCCCGCAGGTCGTCCATCCGCAACGCGCACAGCATCCATCAGCGGTCGCGGAAGCGCCTCAGCCAG
GACGCCTATCGCCGCAACAGCGTCCGTTTTCTGCAGCAGCGACGCCGCCAGGCGCGGCCGGGACCGCAGAGCCCC
GGGAGCCCGCTCGAGGAGGAGCGGCAGACGCAGCGCTCTAAACCGCAGCCGGCGGTGCCCCCGCGGCCGAGCGCC
GACCTCATCCTGAACCGCTGCAGCGAGAGCACCAAGCGGAAGCTGGCGTCTGCCGTCTGAGGCTGGAGCGCAGTC
CCCAGCTAGCGTCTCGGCCCTTGCCGCCCCGTGCCTGTACATACGTGTTCTATAGAGCCTGGCGTCTGGACGCCG
AGGGCAGCCCCGACCCCTGTCCAGCGCGGCTCCCGCCACCCTCAATAAATGTTGCTTGGAGTGG

FIGURE 3002

MGDTFIRHIALLGFEKRFVPSQHYVYMFLVKWQDLSEKVVYRRFTEIYEFHKTLKEMFPIEAGAINPENRIIPHL
PAPKWFDGQRAAENRQGTLTEYCSTLMSLPTKISRCPHLLDFFKVRPDDLKLPTDNQTKKPETYLMPKDGKSTAT
DITGPIILQTYRAIADYEKTSGSEMALSTGDVVEVVEKSESGWWFCQMKAKRGWIPASFLEPLDSPDETEDPEPN
YAGEPYVAIKAYTAVEGDEVSLLEGEAVEVIHKLLDGWWVIRKDDVTGYFPSMYLQKSGQDVSQAQRQIKRGAPP
RRSSIRNAHSIHQRSRKRLSQDAYRRNSVRFLQQRRRQARPGPQSPGSPLEEERQTQRSKPQPAVPPRPSADLIL
NRCSESTKRKLASAV

FIGURE 3003

GGGGGCAGCTTGCAAATGGCGTCTCCCTCGCTGGAGCGGCCAGAAAAAGGCGCTGGAAAAAGTGAATTTCGTAAC
CAGAAGCCGAAGCCGGAGAACCAAGATGAATCAGAACTCCTTACGGTTCCTGATGGTTGGAAGGAACCAGCTTTT
TCCAAAGAGGACAATCCCAGAGGACTTTTGGAGGAGAGCAGTTTCGCAACTTTGTTCCCAAAATACAGGGGAGCT
TACTTGAAAGAGTGTTGGCCATTGGTGCAGAAAGCCTTAAATGAACATCATGTTAATGCAACCCTGGACCTGATC
GAAGGCAGCATGACTGTTTGTACTACAAAGAAGACTTTTGATCCATATATCATCATTAGGGCCAGAGATCTGATA
AAACTGTTAGCAAGGAGTGTTTCATTTGAACAGGCAGTACGAATTCTTCAGGATGATGTTGCATGTGACATCATT
AAAATAGGTTCTTTAGTAAGGAATAAAGAGAGATTTGTAAAACGAAGACAACGGCTTATTGGTCCCAAAGGATCT
ACATTGAAGGCATTGGAACTCTTAACTAATTGTTACATTATGGTTCAGGGAAACACAGTTTCAGCCATTGGACCT
TTTAGTGGCTTAAAAGAGGTTAGAAAAGTAGTCCTTGATACTATGAAGAATATTCATCCAATTTATAACATTAAA
AGCTTAATGATTAAGAGAGAGTTGGCAAAAGATTCTGAATTACGATCACAAAGTTGGGAGAGATTTTTGCCACAG
TTCAAACACAAAAATGTGAATAAACGCAAGGAACCAAAGAAAAAAACTGTTAAGAAAGAATATACGCCATTCCCA
CCACCACAACCAGAAAGTCAGATCGATAAAGAATTGGCTAGTGGTGAATACTTTTTGAAGGCAAATCAGAAGAAG
CGGCAGAAAATGGAAGCAATAAAGGCTAAACAAGCAGAAGCCATCAGTAAGAGACAAGAGGAAAGAAACAAAGCA
TTTATTCCACCTAAGGAAAAACCAATTGTGAAACCTAAGGAAGCTTCTACTGAAACTAAAATTGATGTGGCCAGC
ATCAAGGAAAAGGTTAAGAAAGCAAAGAATAAGAAACTGGGAGCTCTTACAGCTGAAGAAATTGCACTTAAGATG
GAGGCAGATGAAAAGAAAAAGAAGAAAAAAAAGTAACATACCCAAAACTCCTTGACTAGAACTATCTCCTTTTGT
AAAGGATTTTGAGATATCAGGCATTAGTTGCCTTATTTGTGAGAAATTTTCTGAGGGCTTTTTTTTTTTGGTGGT
GGTGGTTGTTCATAGAAGAGTGTTCTTTATAAATTATATTATTATTGTATTTTTTGAAAAATTTATACTAGAAAG
TGGTATATATGTCTTTGTATACATTACGACCATTGTGATTATCCATTAAATCCAGTGTCTGATGCAAAAAAAAAA
AAAAAAAAAAAAAAAAAAA

FIGURE 3004

MASPSLERPEKGAGKSEFRNQKPKPENQDESELLTVPDGWKEPAFSKEDNPRGLLEESSFATLFPKYRGAYLKEC
WPLVQKALNEHHVNATLDLIEGSMTVCTTKKTFDPYIIIRARDLIKLLARSVSFEQAVRILQDDVACDIIKIGSL
VRNKERFVKRRQRLIGPKGSTLKALELLTNCYIMVQGNTVSAIGPFSGLKEVRKVVLDTMKNIHPIYNIKSLMIK
RELAKDSELRSQSWERFLPQFKHKNVNKRKEPKKKTVKKEYTPFPPPQPESQIDKELASGEYFLKANQKKRQKME
AIKAKQAEAISKRQEERNKAFIPPKEKPIVKPKEASTETKIDVASIKEKVKKAKNKKLGALTAEEIALKMEADEK
KKKKKK

FIGURE 3005

CCATGGCGGCGCGGCGGCGACGGAGCACCGGCGGCGGCAGGGCGAGAGCATTAAATGAAAGCAAAAGAGTTAATA
ATGGCAACACGGCTCCAGAAGACTCTTCCCCTGCCAAGAAAACTCGTAGATGCCAGAGACAGGAGTCGAAAAAGA
TGCCTGTGGCTGGAGGAAAAGCTAATAAGGACAGGACAGAAGACAAGCAAGATGGTATGCCAGGAAGGTCATGGG
CCAGCAAAAGGGTCTCTGAATCTGTGAAGGCCTTGCTGTTAAAGGGCAAAGCTCCTGTGGACCCAGAGTGTACAG
CCAAGGTGGGGAAGGCTCATGTGTATTGTGAAGGAAATGATGTCTATGATGTCATGCTAAATCAGACCAATCTCC
AGTTCAACAACAACAAGTACTATCTGATTCAGCTATTAGAAGATGATGCCCAGAGGAACTTCAGTGTTTGGATGA
GATGGGGCCGAGTTGGGAAAATGGGACAGCACAGCCTGGTGGCTTGTTCAGGCAATCTCAACAAGGCCAAGGAAA
TCTTTCAGAAGAAATTCCTTGACAAAACGAAAAACAATTGGGAAGATCGAGAAAAGTTTGAGAAGGTGCCTGGAA
AATATGATATGCTACAGATGGACTATGCCACCAATACTCAGGATGAAGAGGAAACAAAAAAAGAGGAATCTCTTA
AATCTCCCTTGAAGCCAGAGTCACAGCTAGATCTTCGGGTACAGGAGTTAATAAAGTTGATCTGTAATGTTCAGG
CCATGGAAGAAATGATGATGGAAATGAAGTATAATACCAAGAAAGCCCCACTTGGGAAGCTGACAGTGGCACAAA
TCAAGGCAGGTTACCAGTCTCTTAAGAAGATTGAGGATTGTATTCGGGCTGGCCAGCATGGACGAGCTCTCATGG
AAGCATGCAATGAATTCTACACCAGGATTCCGCATGACTTTGGACTCCGTACTCCTCCACTAATCCGGACACAGA
AGGAACTGTCAGAAAAAATACAATTACTAGAGGCTTTGGGAGACATTGAAATTGCTATTAAGCTGGTGAAAACAG
AGCTACAAAGCCCAGAACACCCATTGGACCAACACTATAGAAACCTACATTGTGCCTTGCGCCCCCTTGACCATG
AAAGTTACGAGTTCAAAGTGATTTCCCAGTACCTACAATCTACCCATGCTCCCACACACAGCGACTATACCATGA
CCTTGCTGGATTTGTTTGAAGTGGAGAAGGATGGTGAGAAAGAAGCCTTCAGAGAGGACCTTCATAACAGGATGC
TTCTATGGCATGGTTCCAGGATGAGTAACTGGGTGGGAATCTTGAGCCATGGGCTTCGAATTGCCCACCCTGAAG
CTCCCATCACAGGTTACATGTTTGGGAAAGGAATCTACTTTGCTGACATGTCTTCCAAGAGTGCCAATTACTGCT
TTGCCTCTCGCCTAAAGAATACAGGACTGCTGCTCTTATCAGAGGTAGCTCTAGGTCAGTGTAATGAACTACTAG
AGGCCAATCCTAAGGCCGAAGGATTGCTTCAAGGTAAACATAGCACCAAGGGGCTGGGCAAGATGGCTCCCAGTT
CTGCCCACTTCGTCACCCTGAATGGGAGTACAGTGCCATTAGGACCAGCAAGTGACACAGGAATTCTGAATCCAG
ATGGTTATACCCTCAACTACAATGAATATATTGTATATAACCCCAACCAGGTCCGTATGCGGTACCTTTTAAAGG
TTCAGTTTAATTTCCTTCAGCTGTGGTGAATGTTGATCTTAAATAAACCAGAGATCTGATCTTCAAGCAAGAAAA
TAAGCAGTGTTGTACTTGTGAATTTTGTGATATTTTATGTAATAAAAACTGTACAGGTCTAAAAAAAAAAAAAAA
AAAAAAAAAAAA

FIGURE 3006

MPVAGGKANKDRTEDKQDGMPGRSWASKRVSESVKALLLKGKAPVDPECTAKVGKAHVYCEGNDVYDVMLNQTNL
QFNNNKYYLIQLLEDDAQRNFSVWMRWGRVGKMGQHSLVACSGNLNKAKEIFQKKFLDKTKNNWEDREKFEKVPG
KYDMLQMDYATNTQDEEETKKEESLKSPLKPESQLDLRVQELIKLICNVQAMEEMMMEMKYNTKKAPLGKLTVAQ
IKAGYQSLKKIEDCIRAGQHGRALMEACNEFYTRIPHDFGLRTPPLIRTQKELSEKIQLLEALGDIEIAIKLVKT
ELQSPEHPLDQHYRNLHCALRPLDHESYEFKVISQYLQSTHAPTHSDYTMTLLDLFEVEKDGEKEAFREDLHNRM
LLWHGSRMSNWVGILSHGLRIAHPEAPITGYMFGKGIYFADMSSKSANYCFASRLKNTGLLLLSEVALGQCNELL
EANPKAEGLLQGKHSTKGLGKMAPSSAHFVTLNGSTVPLGPASDTGILNPDGYTLNYNEYIVYNPNQVRMRYLLK
VQFNFLQLW

FIGURE 3007

GGCACGAGGCCGAGTTGCGATGCTGTACTTCTCTTTGTTTTGGGCGGCTCGGCCTCTGCAGAGATGTGGGCAGCT
GGTCAGGATGGCCATTCGGGCTCAGCACAGCAACGCAGCCCAGACTCAGACTGGGGAAGCAAACAGGGGCTGGAC
AGGCCAGGAGAGCCTGTCGGACAGTGATCCTGAGATGTGGGAGTTGCTGCAGAGGGAGAAGGACAGGCAGTGTCG
TGGCCTGGAGCTCATTGCCTCAGAGAACTTCTGCAGCCGAGCTGCGCTGGAGGCCCTGGGGTCCTGTCTGAACAA
CAAGTACTCGGAGGGTTATCCTGGCAAGAGATACTATGGGGGAGCAGAGGTGGTGGATGAAATTGAGCTGCTGTG
CCAGCGCCGGGCCTTGGAAGCCTTTGACCTGGATCCTGCACAGTGGGGAGTCAATGTCCAGCCCTACTCCGGGTC
CCCAGCCAACCTGGCCGTCTACACAGCCCTTCTGCAACCTCACGACCGGATCATGGGGCTGGACCTGCCCGATGG
GGGCCATCTCACCCACGGCTACATGTCTGACGTCAAGCGGATATCAGCCACGTCCATCTTCTTCGAGTCTATGCC
CTATAAGCTCAACCCCAAAACTGGCCTCATTGACTACAACCAGCTGGCACTGACTGCTCGACTTTTCCGGCCACG
GCTCATCATAGCTGGCACCAGCGCCTATGCTCGCCTCATTGACTACGCCCGCATGAGAGAGGTGTGTGATGAAGT
CAAAGCACACCTGCTGGCAGACATGGCCCACATCAGTGGCCTGGTGGCTGCCAAGGTGATTCCCTCGCCTTTCAA
GCACGCGGACATCGTCACCACCACTACTCACAAGACTCTTCGAGGGGCCAGGTCAGGGCTCATCTTCTACCGGAA
AGGGGTGAAGGCTGTGGACCCCAAGACTGGCCGGGAGATCCCTTACACATTTGAGGACCGAATCAACTTTGCCGT
GTTCCCATCCCTGCAGGGGGGCCCCCACAATCATGCCATTGCTGCAGTAGCTGTGGCCCTAAAGCAGGCCTGCAC
CCCCATGTTCCGGGAGTACTCCCTGCAGGTTCTGAAGAATGCTCGGGCCATGGCAGATGCCCTGCTAGAGCGAGG
CTACTCACTGGTATCAGGTGGTACTGACAACCACCTGGTGCTGGTGGACCTGCGGCCCAAGGGCCTGGATGGAGC
TCGGGCTGAGCGGGTGCTAGAGCTTGTATCCATCACTGCCAACAAGAACACCTGTCCTGGAGACCGAAGTGCCAT
CACACCGGGCGGCCTGCGGCTTGGGGCCCCAGCCTTAACTTCTCGACAGTTCCGTGAGGATGACTTCCGGAGAGT
TGTGGACTTTATAGATGAAGGGGTCAACATTGGCTTAGAGGTGAAGAGCAAGACTGCCAAGCTCCAGGATTTCAA
ATCCTTCCTGCTTAAGGACTCAGAAACAAGTCAGCGTCTGGCCAACCTCAGGCAACGGGTGGAGCAGTTTGCCAG
GGCCTTCCCCATGCCTGGTTTTGATGAGCATTGAAGGCACCTGGGAAATGAGGCCCACAGACTCAAAGTTACTCT
CCTTCCCCCTACCTGGGCCAGTGAAATAGAAAGCCTTTCTATTTTTTGGTGCGGGAGGGAAGACCTCTCACTTAG
GGCAAGAGCCAGGTATAGTCTCCCTTCCCAGAATTTGTAACTGAGAAGATCTTTTCTTTTTCCTTTTTTTGGTAA
CAAGACTTAGAAGGAGGGCCCAGGCACTTTCTGTTTGAACCCCTGTCATGATCACAGTGTCAGAGACGCGTCCTC
TTTCTTGGGGAAGTTGAGGAGTGCCCTTCAGAGCCAGTAGCAGGCAGGGGTGGGTAGGCACCCTCCTTCCTGTTT
TTATCTAATAAAATGCTAACCTGCCCTGAGTTTCCATTACTGTGGGTGGGGTTCCCCTGGGCCAAACAGTGATTT
GTCTCCCTCAATGTGTACACCGCTCCGCTCCCACCACCGCTACCACAAGGACCCCCGGGGCTGCAGCCTCCTCTT
TCTGTCTCTGATCAGAGCCGACACCAGACGTGATTAGCAGGCGCAGCAAATTCAATTTGTTAAATGAAATTGTAT
TTTGAAAAAAAAAAAAAAAAAA

FIGURE 3008

MLYFSLFWAARPLQRCGQLVRMAIRAQHSNAAQTQTGEANRGWTGQESLSDSDPEMWELLQREKDRQCRGLELIA
SENFCSRAALEALGSCLNNKYSEGYPGKRYYGGAEVVDEIELLCQRRALEAFDLDPAQWGVNVQPYSGSPANLAV
YTALLQPHDRIMGLDLPDGGHLTHGYMSDVKRISATSIFFESMPYKLNPKTGLIDYNQLALTARLFRPRLIIAGT
SAYARLIDYARMREVCDEVKAHLLADMAHISGLVAAKVIPSPFKHADIVTTTTHKTLRGARSGLIFYRKGVKAVD
PKTGREIPYTFEDRINFAVFPSLQGGPHNHAIAAVAVALKQACTPMFREYSLQVLKNARAMADALLERGYSLVSG
GTDNHLVLVDLRPKGLDGARAERVLELVSITANKNTCPGDRSAITPGGLRLGAPALTSRQFREDDFRRVVDFIDE
GVNIGLEVKSKTAKLQDFKSFLLKDSETSQRLANLRQRVEQFARAFPMPGFDEH

FIGURE 3009

GGCACGAGGCTCTACAATCTGTGGCCTCAGCCCTTGCCAACTCTGCCTCTTCCCCCGCTGACTGGGCCTCTGCAG
AGATGTGGGCAGCTGGTCAGGATGGCCATTCGGGCTCAGCACAGCAACGCAGCCCAGACTCAGACTGGGGAAGCA
AACAGGGGCTGGACAGGCCAGGAGAGCCTGTCGGACAGTGATCCTGAGATGTGGGAGTTGCTGCAGAGGGAGAAG
GACAGGCAGTGTCGTGGCCTGGAGCTCATTGCCTCAGAGATACTATGGGGGAGCAGAGGTGGTGGATGAAATTGA
GCTGCTGTGCCAGCGCCGGGCCTTGGAAGCCTTTGACCTGGATCCTGCACAGTGGGGAGTCAATGTCCAGCCCTA
CTCCGGGTCCCCAGCCAACCTGGCCGTCTACACAGCCCTTCTGCAACCTCACGACCGGATCATGGGGCTGGACCT
GCCCGATGGGGGCCATCTCACCCACGGCTACATGTCTGACGTCAAGCGGATATCAGCCACGTCCATCTTCTTCGA
GTCTATGCCCTATAAGCTCAACGGCTTTAGCTGTTTGTGTGTCTGTCCAGCCCAAAACTGGCCTCATTGACTACA
ACCAGCTGGCACTGACTGCTCGACTTTTCCGGCCACGGCTCATCATAGCTGGCACCAGCGCCTATGCTCGCCTCA
TTGACTACGCCCGCATGAGAGAGGTGTGTGATGAAGTCAAAGCACACCTGCTGGCAGACATGGCCCACATCAGTG
GCCTGGTGGCTGCCAAGGTGATTCCCTCGCCTTTCAAGCACGCGGACATCGTCACCACCACTACTCACAAGACTC
TTCGAGGGGCCAGGTCAGGGCTCATCTTCTACCGGAAAGGGGTGAAGGCTGTGGACCCCAAGACTGGCCGGGAGA
TCCCTTACACATTTGAGGACCGAATCAACTTTGCCGTGTTCCCATCCCTGCAGGGGGGCCCCCACAATCATGCCA
TTGCTGCAGTAGCTGTGGCCCTAAAGCAGGCCTGCACCCCCATGTTCCGGGAGTACTCCCTGCAGGTTCTGAAGA
ATGCTCGGGCCATGGCAGATGCCCTGCTAGAGCGAGGCTACTCACTGGTATCAGGTGGTACTGACAACCACCTGG
TGCTGGTGGACCTGCGGCCCAAGGGCCTGGATGGAGCTCGGGCTGAGCGGGTGCTAGAGCTTGTATCCATCACTG
CCAACAAGAACACCTGTCCTGGAGACCGAAGTGCCATCACACCGGGCGGCCTGCGGCTTGGGGCCCCAGCCTTAA
CTTCTCGACAGTTCCGTGAGGATGACTTCCGGAGAGTTGTGGACTTTATAGATGAAGGGGTCAACATTGGCTTAG
AGGTGAAGAGCAAGACTGCCAAGCTCCAGGATTTCAAATCCTTCCTGCTTAAGGACTCAGAAACAAGTCAGCGTC
TGGCCAACCTCAGGCAACGGGTGGAGCAGTTTGCCAGGGCCTTCCCCATGCCTGGTTTTGATGAGCATTGAAGGC
ACCTGGGAAATGAGGCCCACAGACTCAAAGTTACTCTCCTTCCCCCTACCTGGGCCAGTGAAATAGAAAGCCTTT
CTATTTTTTGGTGCGGGAGGGAAGACCTCTCACTTAGGGCAAGAGCCAGGTATAGTCTCCCTTCCCAGAATTTGT
AACTGAGAAGATCTTTTCTTTTTCCTTTTTTTGGTAACAAGACTTAGAAGGAGGGCCCAGGCACTTTCTGTTTGA
ACCCCTGTCATGATCACAGTGTCAGAGACGCGTCCTCTTTCTTGGGGAAGTTGAGGAGTGCCCTTCAGAGCCAGT
AGCAGGCAGGGGTGGGTAGGCACCCTCCTTCCTGTTTTTATCTAATAAAATGCTAACCTGCCCTGAGTTTCCATT
ACTGTGGGTGGGGTTCCCCTGGGCCAAACAGTGAAAAAAAAAAAAAAAAAAAAACTCGAGACTAGTTCTCTCCTGA
AAACTGGAGGGCCTTCAAGGCTCTCATCGCTGCTCAGTACAGCGGGGCTCAGGTCCGCGTGCTCTCCGCACCACC
CCACTTCCATTTTGGCCAAACCAACCGCACCCCTGAATTTCTCCGCAAATTTCCTGCCGGCAAGGTCCCAGCATT
TGAGGGTGATGATGGATTCTGTGTGTTTGAGAGCAACGCCATTGCCTACTATGTGAGCAATGAGGAGCTGCGGGG
AAGTACTCCAGAGGCAGCAGCCCAGGTGGTGCAGTGGGTGAGCTTTGCTGATTCCGATATAGTGCCCCCAGCCAG
TACCTGGGTGTTCCCCACCTTGGGCATC**ATG**CACCACAACAAACAGGCCACTGAGAATGCAAAGGAGGAAGTGAG
GCGAATTCTGGGGCTGCTGGATGCTTACTTGAAGACGAGGACTTTTCTGGTGGGCGAACGAGTGACATTGGCTGA
CATCACAGTTGTCTGCACCCTGTTGTGGCTCTATAAGCAGGTTCTAGAGCCTTCTTTCCGCCAGGCCTTTCCCAA
TACCAACCGCTGGTTCCTCACCTGCATTAACCAGCCCCAGTTCCGGGCTGTCTTGGGCGAAGTGAAACTGTGTGA
GAAGATGGCCCAGTTTGATGCTAAAAAGTTTGCAGAGACCCAACCTAAAAAGGACACACCACGGAAAGAGAAGGG
TTCACGGGAAGAGAAGCAGAAGCCCCAGGCTGAGCGGAAGGAGGAGAAAAAGGCGGCTGCCCCTGCTCCTGAGGA
GGAGATGGATGAATGTGAGCAGGCGCTGGCTGCTGAGCCCAAGGCCAAGGACCCCTTCGCTCACCTGCCCAAGAG
TACCTTTGTGTTGGATGAATTTAAGCGCAAGTACTCCAATGAGGACACACTCTCTGTGGCACTGCCATATTTCTG
GGAGCACTTTGATAAGGACGGCTGGTCCCTGTGGTACTCAGAGTATCGCTTCCCTGAAGAACTCACTCAGACCTT
CATGAGCTGCAATCTCATCACTGGAATGTTCCAGCGACTGGACAAGCTGAGGAAGAATGCCTTCGCCAGTGTCAT
CCTTTTTGGAACCAACAATAGCAGCTCCATTTCTGGAGTCTGGGTCTTCCGAGGCCAGGAGCTTGCCTTTCCGCT
GAGTCCAGATTGGCAGGTGGACTACGAGTCATACACATGGCGGAAACTGGATCCTGGCAGCGAGGAGACCCAGAC
GCTGGTTCGAGAGTACTTTTCCTGGGAGGGGGCCTTCCAGCATGTGGGCAAAGCCTTCAATCAGGGCAAGATCTT
CAAG**TGA**ACATCTCTTGCCATCACCTAGCTGCCTGCACCTGCCCTTCAGGGAGATGGGGGTCATTAAAGGAAACT
GAACATTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3010

MHHNKQATENAKEEVRRILGLLDAYLKTRTFLVGERVTLADITVVCTLLWLYKQVLEPSFRQAFPNTNRWFLTCI
NQPQFRAVLGEVKLCEKMAQFDAKKFAETQPKKDTPRKEKGSREEKQKPQAERKEEKKAAAPAPEEEMDECEQAL
AAEPKAKDPFAHLPKSTFVLDEFKRKYSNEDTLSVALPYFWEHFDKDGWSLWYSEYRFPEELTQTFMSCNLITGM
FQRLDKLRKNAFASVILFGTNNSSSISGVWVFRGQELAFPLSPDWQVDYESYTWRKLDPGSEETQTLVREYFSWE
GAFQHVGKAFNQGKIFK

FIGURE 3011

ATCATAGCAACCAAACAATGAATTGAGACCTGGAGGTCTTGGGTTGTAATTTAAATTCACATAAACCAGGCCTTT
TGTGCCTATTGCCTAATTCATGGCATAATTATTATTAGCCGCCTTAGGATAAAAGGAATACAGACTTTATCCCAT
ACATGAAATTATCAGACTTTCACTCATTTTAATAGCTAGAATCTTATTTTCTTTCCTTAAGATGTATATTTTCTT
TTAATGACCAGGCTCTATGTGCTGCTGTAGTGAAACCGGATGTTCTAGAAACA**ATG**GCTTTGCTGTTCAGTGGAG
CAGATGTCATGTGTGCCACCGGAGACCCCGTGCATAGCACCCCCTATCTGCTAGCCAAGAAAGCTGGGCAAAGTC
TGCAAATGGAATTTCTCTACCATAACAAATTCTCAGATTTCCCTCAACATGATATTCATTCCGAGGGTGTATTAA
GTCAAGAGTCTTCCCAGTCCACATTCCTCTGTGACTTTTTATATCAAGCTCCTTCTGCTGCTTCTAAACTCTCTT
CAGAGAAAAAACTGCTTGAAGAGACAAATAAAAAATGGTGTGTTTTGGAAGGAGGCTTCTTGAGTTACTATGAAA
ATGATAAGTCTACCACACCTAATGGCACCATTAATATCAATGAAGTTATCTGCCTGGCTATACACAAAGAGGACT
TCTATTTAAATACTGGGCCCATCTTTATCTTTGAGATCTACTTACCCTCCGAACGTGTGTTTTTATTTGGAGCTG
AAACATCTTTTTTCCCCAGTCTCATAAGGAAGAGAGAAAAGTCAGAAAATAATATT**TAA**ATTGTGTAACTAGCTT
ATTATTTTCATACTAAAAAGTAATCACTGATAGTTTTTCTATAGGTATGAGATCAAGGGAATCATTTTTAGAAAT
CATTTTCATTGTAAAAAGTATATTAGATGTCTTTTGCCAAATTTTATCTAGTTAGTAATTATAAACAGTATCAGT
CTTATTTTCCTATTGTTTATGAACAATATAAAGACCTCTTAATAGTGATCTAAAAGTTTTCTATTGTCACTGGGT
TACCTTCAGAATTTCTAGGCCTGTTAGATTTATTTTTGTGGTTAGCATTTAAAGTTTTGCTCTGTATTAGAAAAT
AGAAAACTTAGAAAAACAGGTAGTGGCAGTTCATCACTTCCCCCACTTTTATTTCCAAGTCATTATCTAGTTTCT
CAATGTGGCATTGCAACTCTGATTTTTTACTGTTCGTGCACTAAAGCATTTGAGATAAGCCCTTAGTGTTGAGGA
AATCCTAAATCCTACTGCTGGGGGGTTAAAAGAAATATAGTGACAGGCTATGAAATAGTGTTGTCATAACTTATC
AGTGGCTAGTAAATAGGGTAGTTGCCTTCTGACACCATTTTGAGTGAAGGCAGTTTAATTGCGTTGCCTCTGTTT
AGATAAGCATTTGGAATCCACAGTCAAATGTGTGAATGCTGTGGTTAAAGTATTTCCATTATATGAGATTTGATT
TCTTAAGTGATTTTTTTGTCTCAGGTTCCATTCTACATCAAAAGGTATTTGGAAAATGTCTTTCACTGTATGTGT
ACACGGAGAACCTTAACCTATAATTGTATGTAAATCTAGTGATTGTGAAAAACAAGAAACTTGCAGACACATATT
AACAGTTGGTGACTTATCGCCAGTTGGTGACTTACTTACCTACCCCTGCCTCTCAAATCTTGTTATAACAATTAA
ACAGTTCGTATTAAGACTTTGT

FIGURE 3012

MALLFSGADVMCATGDPVHSTPYLLAKKAGQSLQMEFLYHNKFSDFPQHDIHSEGVLSQESSQSTFLCDFLYQAP
SAASKLSSEKKLLEETNKKWCVLEGGFLSYYENDKSTTPNGTININEVICLAIHKEDFYLNTGPIFIFEIYLPSE
RVFLFGAETSFFPSLIRKREKSENNI

FIGURE 3013

AAAAGGGAAGCCTGCAACAAGTTAAGCTGAAGACCGAAGCAAGAGCTGGTTCAGCCTGCCAGTGGAGACACTGGG
CCCGGCATCCAGGATGGACCCAGAATCTGAGAGAGCCCTGCAGGCCCCTCACAGCCCCTCCAAGACAGATGGGAA
AGAATTAGCTGGGACCATGGATGGAGAAGGGACGCTCTTCCAGACTGAAAGCCCTCAGTCTGGCAGCATTCTAAC
AGAGGAGACTGAGGTCAAGGGCACCCTGGAAGGTGATGTTTGTGGTGTGGAGCCTCCTGGCCCAGGAGACACAGT
AGTCCAGGGAGACCTGCAGGAGACCACCGTGGTGACAGGCCTGGGACCAGACACACAGGACCTGGAAGGCCAGAG
CCCTCCACAGAGCCTGCCTTCAACCCCCAAAGCAGCTTGGTTCAGGGAGGAGGGCCGCTGCTCCAGCAGTGACGA
TGACACCGACGTGGACATGGAGGGTCTGCGGAGACGGCGGGGCCGGGAGGCCGGCCCACCTCAGCCCATGGTGCC
CCTGGCTGTGGAGAACCAGGCTGGGGGTGAGGGTGCAGGCGGGGAGCTGGGCATCTCCCTCAACATGTGCCTCCT
TGGGGCCCTGGTTCTGCTTGGCCTGGGGGTCCTCCTCTTCTCAGGTGGCCTCTCAGAGTCTGAGACTGGGCCCAT
GGAGGAAGTGGAGCGGCAGGTCCTCCCAGACCCCGAGGTGCTGGAAGCTGTGGGGGGACAGGCAGGATGGGCTAAG
GGAACAGCTGCAGGCCCCAGTGCCTCCTGACAGTGTCCCCAGCCTGCAAAACATGGGTCTTCTGCTGGACAAGCT
GGCCAAGGAGAACCAGGACATCCGGCTGCTGCAGGCCCAGCTGCAGGCCCAAAAGGAAGAGCTTCAGAGCCTGAT
GCACCAGCCCAAAGGGCTAGAGGAGGAGAATGCCCAGCTCCGGGGGGCTCTGCAGCAGGGCGAAGCCTTCCAGCG
GGCTCTGGAGTCAGAGCTGCAGCAGCTGCGGGCCCGGCTCCAGGGGCTGGAGGCCGACTGTGTCCGGGGCCCAGA
TGGGGTGTGCCTCAGTGGGGATAGAGGCCCACAGGGTGACAAGGCCATCAGGGAGCAAGGCCCCAGGGAGCAGGA
GCCAGAACTCAGCTTCCCGAAGCAGAAGGAACAGCTGGAGGCTGAGGCACAGGCATTAAGGCAAGAGTTAGAGAG
GCAGCGACGGCTGCTGGGGTCTGTACAGCAGGATCTGGAGAGGAGCTTGCAGGATGCCAGCCGCGGGGACCCAGC
TCATGCTGGCTTGGCTGAGCTGGGCCACAGATTGGCCCAGAAACTGCAGGGCCTGGAGAACTGGGGCCAGGACCC
TGGGGTCTCTGCCAATGCCTCAAAGGCCTGGCACCAGAAGTCCCACTTCCAGAATTCTAGGGAGTGGAGTGGAAA
GGAAAAGTGGTGGGATGGGCAGAGAGACCGGAAGGCTGAGCACTGGAAACATAAGAAGGAAGAATCTGGCCGGGA
AAGGAAGAAGAACTGGGGAGGTCAGGAGGACAGGGAGCCAGCAGGAAGGTGGAAGGAGGGCAGGCCAAGGGTGGA
GGAGTCGGGGAGCAAGAAGGAGGGCAAGCGACAGGGCCCGAAGGAACCCCCAAGGAAAAGTGGTAGCTTCCACTC
CTCTGGAGAAAAGCAGAAGCAACCTCGGTGGAGGGAAGGGACTAAGGACAGCCATGACCCCCTGCCATCCTGGGC
AGAGCTGTTGAGGCCCAAGTACCGGGCACCCCAGGGCTGCTCAGGTGTGGACGAGTGTGCCCGGCAGGAGGGCCT
GACTTTCTTTGGCACAGAGCTAGCCCCAGTGCGGCAACAGGAGCTGGCCTCTCTGCTAAGAACATACTTGGCACG
GCTGCCCTGGGCTGGGCAGCTGACCAAGGAGCTACCCCTCTCACCTGCTTTCTTTGGTGAGGATGGCATCTTCCG
TCATGACCGCCTCCGCTTCCGGGATTTTGTGGATGCCCTGGAGGACAGCTTGGAGGAGGTGGCTGTGCAACAGAC
AGGTGATGATGATGAAGTAGATGACTTTGAGGACTTCATCTTCAGCCACTTCTTTGGAGACAAAGCACTGAAGAA
GAGGTCAGGGAAGAAGGACAAGCACTCACAGAGCCCAAGAGCTGCGGGGCCCAGGGAGGGGCACAGCCATAGCCA
CCACCACCACCACCGGGGCTGACACCCTGCCCCACAGGGAATGGCCTTGGCCTGGCCCAGCCCAAGATCCCAGCG
TTATCTAACTCCTGGAGGGTGGACTCTGTCCTGGCTTGTTTGGTGTCCTCAGATATCTTTCACACAGTAGAGCAA
AATCACCAGCCCTGCACTGATGTCACTTTATGTAGAAAAAGGCCTTAGCTGGACCTGTGTTGCCGTCTATGCAAA
TGCATGCAAATACTCCAGGCCCTGGGATGTGGGCTTGTGTTTTGTCACTGTGAAGGGGGAGATGGGAGAGGAGCC
TGTTTTGGGGTGGGGTCTGGGGAAGGCAATCTGATTCTGAAGCTAAAGAGCTTTCATCCTCTTGAGTGTATGTCC
CCATAGTGGGCCCCTTGACCCACATGCTGACCGGTGCCTTGGGATTTGACTAGAGTTGCTGGCTCGAGGCCCAGC
ACGAGGACTTACCCTGGGGTTTTGTTAGGTTTGGAAGCAGCTGTCCCTAGGGGGTGAAGTCCCCCCCCTTTTTTT
TTTTACCCCTGCTTCTCCCACGGCTTCACCTCCCTATGTGAACTGTAGACTCAGATCCCAATAAAGTGCTGTTGC
AGCTATGATGCTAGGTGGTTTCTAAGCACAGGGGACACCCCACACCCCCTGCCTGAATGGATGGGTCCATCCCAG
GCACTGGTACTTGCCCCCTTGTTCTGTATCCCCCTTTGCCCTTGCCTTGCCCTTCCAACAAACCCTAGGCCCTTG
AGAAGCTGATACTTCTCCTTTTGCTCACAGCTGCCTTGGCCCCACCCCTGGGAGATGTAGCAAATTGAGTGTGGG
TTTTGGAGTCTGAGCCTCAGGCTCAAATCCAGGCCAAGTGATCTTGGGCAAGTTAATCTCTGGGGACTTTGGGTT
TCTTATCCTCAAAAAAGGCGATGGAAGGGCTGGGGAAGTGATTAAATAAAAGCAACGCAAGAAAAATGCC

FIGURE 3014

MDPESERALQAPHSPSKTDGKELAGTMDGEGTLFQTESPQSGSILTEETEVKGTLEGDVCGVEPPGPGDTVVQGD
LQETTVVTGLGPDTQDLEGQSPPQSLPSTPKAAWFREEGRCSSSDDDTDVDMEGLRRRRGREAGPPQPMVPLAVE
NQAGGEGAGGELGISLNMCLLGALVLLGLGVLLFSGGLSESETGPMEEVERQVLPDPEVLEAVGDRQDGLREQLQ
APVPPDSVPSLQNMGLLLDKLAKENQDIRLLQAQLQAQKEELQSLMHQPKGLEEENAQLRGALQQGEAFQRALES
ELQQLRARLQGLEADCVRGPDGVCLSGDRGPQGDKAIREQGPREQEPELSFPKQKEQLEAEAQALRQELERQRRL
LGSVQQDLERSLQDASRGDPAHAGLAELGHRLAQKLQGLENWGQDPGVSANASKAWHQKSHFQNSREWSGKEKWW
DGQRDRKAEHWKHKKEESGRERKKNWGGQEDREPAGRWKEGRPRVEESGSKKEGKRQGPKEPPRKSGSFHSSGEK
QKQPRWREGTKDSHDPLPSWAELLRPKYRAPQGCSGVDECARQEGLTFFGTELAPVRQQELASLLRTYLARLPWA
GQLTKELPLSPAFFGEDGIFRHDRLRFRDFVDALEDSLEEVAVQQTGDDDEVDDFEDFIFSHFFGDKALKKRSGK
KDKHSQSPRAAGPREGHSHSHHHHHRG

FIGURE 3015A

GGCCGGCGGTGGCGGCGGCGAGGGCTGGACTCGGGCTTAGGGCCTGCTGTGGAGGCAGCGGCGGACGCCGAGCTA
AGCAGTTTCTCTGGAAACCCCCCTGGTAAGTGTGGAGGAGGCGGGACACTCTGACCCAAGACGAAAGGCCTGTAG
CTCCAGCCAAAGAAAATAAACCTTAGGAGGGAGAAGGAAAAAAAAAAATCCATCAGCTGTTCCTGAGAACAGCCT
GCATTGGAATCTACAGAGAGGACAACTAATGTGAGTGAGGAAGTGACTGTATGTGGACTGTGGAGAAAGTAAGTC
ACGTGGGCCCTTGAGGACCTGGACTGGGTTAGGAACAGTTGTACTTTCAGAGGTGAGGTGTCGAGAAGGGAAAGT
GAATGTGGTCTGGAGTGTGTCCTTGGCCTTGGCTCCACAGGGTGTGCTTTCCTCTGGGGCCGTCAGGGAGCTCAT
CCCTTGTGTTCTGCCAGGGTGGGGTACGGGGTTTGACACTGAGGAGGGTAACCTGCTGGCTGGAGCGGCAGAGCA
GTGGCCTTGATTTGTCTTTTGGAAGATTTTAAAAACCAAAAAGCATAAACATTCTGGTCCTTCAGCA**ATG**CTTTC
TCTGAAGAAATACTTAACGGAAGGACTTCTCCAGTTCACCATTCTGCTGAGTTTGATTGGGGTACGGGTGGACGT
GGATACTTACCTGACCTCACAGCTTCCCCCACTCCGGGAGATCATCCTGGGGCCCAGTTCTGCCTATACTCAGAC
CCAGTTCCACAACCTGAGGAATACCTTGGATGGCTATGGTATCCACCCCAAGAGCATAGACCTGGACAATTACTT
CACTGCCCGGCGGCTCCTCAGTCAGGTGAGGGCCCTGGACAGGTTCCAGGTGCCAACCACTGAGGTAAATGCCTG
GCTGGTTCACCGAGACCCAGAGGGGTCTGTCTCTGGCAGTCAGCCCAACTCAGGCCTCGCCCTCGAGAGTTCCAG
TGGCCTCCAAGATGTGACAGGCCCAGACAACGGGGTGCGAGAAAGCGAAACGGAGCAGGGATTCGGTGAAGATTT
GGAGGATTTGGGGGCTGTAGCCCCCCCAGTCAGTGGAGACTTAACCAAAGAGGACATAGATCTGATTGACATCCT
TTGGCGACAGGATATTGATCTGGGGGCTGGGCGTGAGGTTTTTGACTATAGTCACCGCCAGAAGGAGCAGGATGT
GGAGAAGGAGCTGCGAGATGGAGGCGAGCAGGACACCTGGGCAGGCGAGGGCGCGGAAGCTCTGGCACGGAACCT
GCTAGTGGATGGAGAGACTGGGGAGAGCTTCCCTGCACAGGTGCCTAGTGGGGAGGACCAGACGGCCCTGTCCCT
GGAAGAGTGCCTTAGGCTGCTGGAAGCCACCTGCCCCTTTGGGGAGAATGCTGAGTTTCCAGCAGACATTTCCAG
CATAACAGAAGCAGTGCCTAGTGAGAGTGAGCCCCCTGCTCTTCAAAACAACCTCTTGTCTCCTCTTCTGACCGG
GACAGAGTCACCATTTGATTTGGAACAGCAGTGGCAAGATCTCATGTCCATCATGGAAATGCAGGCCATGGAAGT
GAACACATCAGCAAGTGAAATCCTGTACAGTGCCCCTCCTGGAGACCCACTGAGCACCAACTACAGCCTTGCCCC
CAACACTCCCATCAATCAGAATGTCAGCCTGCATCAGGCGTCCCTGGGGGGCTGCAGCCAGGACTTCTTACTCTT
CAGCCCCGAGGTGGAAAGCCTGCCTGTGGCCAGTAGCTCCACGCTGCTCCCGTTGGCCCCCAGCAATTCTACCAG
CCTCAACTCCACCTTCGGCTCCACCAACCTGACAGGGCTCTTCTTTCCACCCCAGCTCAATGGCACAGCCAATGA
CACAGCAGGCCCAGAGCTGCCTGACCCTTTGGGGGGTCTGTTAGATGAAGCTATGTTGGATGAGATCAGCCTTAT
GGACCTGGCCATTGAAGAAGGCTTTAACCCTGTGCAGGCCTCCCAGCTGGAGGAGGAATTTGACTCTGACTCAGG
CCTTTCCTTAGACTCGAGCCATAGCCCTTCTTCCCTAAGCAGCTCTGAAGGCAGTTCTTCCTCTTCTTCCTCCTC
CTCTTCCTCTTCTTCCTCTGCTTCTTCCTCTGCCTCTTCCTCCTTTTCTGAGGAAGGTGCGGTTGGCTACAGCTC
TGACTCTGAGACCCTGGATCTGGAAGAGGCCGAGGGTGCTGTGGGCTACCAGCCTGAGTATTCCAAGTTCTGCCG
CATGAGCTACCAGGATCCAGCTCAGCTCTCATGCCTGCCCTACCTGGAGCACGTGGGCCACAACCACACATACAA
CATGGCACCCAGTGCCCTGGACTCAGCCGACCTGCCACCACCCAGTGCCCTCAAGAAAGGCAGCAAGGAGAAGCA
GGCTGACTTCCTGGACAAGCAGATGAGCCGGGATGAGCACCGAGCCCGAGCCATGAAGATCCCTTTCACCAATGA
CAAAATCATCAACCTGCCTGTGGAGGAGTTCAATGAACTGCTGTCCAAATACCAGTTGAGTGAAGCCCAGCTGAG
CCTCATCCGAGACATCCGGCGCCGGGGCAAGAACAAGATGGCGGCGCAGAACTGCCGCAAGCGCAAGCTGGACAC
CATCCTGAATCTGGAGCGTGATGTGGAGGACCTGCAGCGTGACAAAGCCCGGCTGCTGCGGGAGAAAGTGGAGTT
CCTGCGCTCCCTGCGACAGATGAAGCAGAAGGTCCAGAGCCTGTACCAGGAGGTGTTTGGGCGGCTGCGAGATGA
GAACGGACGACCCTACTCGCCCAGTCAGTATGCGCTCCAGTACGCCGGGGACGGCAGTGTCCTCCTCATCCCCCG
CACGATGGCCGACCAGCAGGCCCGGCGGCAGGAGAGGAAGCCAAAGGACCGGAGAAAG**TGA**GCCTGGGGAAGAAG
GGGGTTTGAAGCCCACCAAGACCGAAACTGGAGAAGGGCTGGACCTGGACCTGGACCTGGACCTACAGCGGGGAC
TTAAATGCCTTCTTATCCAATATATCTTCTCAGATGGGATGACTGCGGGTCAGTGTACAGGAAGAGGCAGGCACT
GGCTGGCTCAGCTCCACTCGGGTGGAGTGGAAGTGGCCAGACCATTTAGACGGACAGGGTCCTCACCCTACCCCT
TTCCTGTGAGGCAGGGGTGGTGGTGGAGTTGCTGGAGGTAGAGGAGCTATGTGGAGCAAAGGCCGACAGAGGGGA
AGGAATGGACCTGTGAGAGGAAGGGAAGGTGGCAGAAAGTCTCATTTCAGGAAGGAGGGATAGAAGGAAGGAAGG
AAGGAACCCCCCCCCCCCCCCCGAAAAAAAAATCAAAGCGGGAAGAAAATCAGAGGGAAGGTTAAGGTTGGCTCTG
GCCAGGATTCCAGGCAGCAGGTTGGAGTGACTGGTGGGCCTAGATCACTGGTGTGATAAACCCCATTTCACCCCG
GGGGGGGTGGGGTACACAGACACAGGGTGGGGGTGGGGAGGGGCGGTGTTAACTCTTTCTGCTCCTTGCATTTTG
ACATCCCTGAAGGGGAGCTCTTGGATATCATTGGCCATGTTTCAATCGAATGGAGCCACTGGGCCCCAACACTGG

FIGURE 3015B

CTTTGAGATTTAGAGTCAAAGGGTAGAGTGAACAGGAAAGGGTCACGTGGTCCCATGTTGCAACAGCCCCAACAT
CACGCATGTCATTCACTGCCTTGCCACTCCATCTCCCTCCGTGCTCCAGCCACCCCTGAGCTGAGGCTCCCATTG
TCTCCATCAGAGCCTGCATGTGTATGCCGTCCTCCCCTGGTCCGGTGTTTGTGTTCCCCACCCCTCACAGACTGC
CTGAGCTCTTCTGTAAGCTGGGGTAGGGTGATGGCAGTGCTCCGGGAACTGGGCCTGCAGCCTTCCTCTTCTGGG
ACTGCTGTGAGGCAGAGGAATGATGGAGAATCTAGTGTAGCAGCCTCCAGGCAGGATTCAGCACAACACTGGGGA
GTCACCCTTCCCTCGGGCCTCTGCCTACCAACAACTGGGCTTATCACTGGGAAAACACAAAAAATTACACAACCC
AGCAACAACAAAAGAACTAGTCCTCTTAGAATTTCTTGCGCTTTGATTTTTTTAGGGCTTGTGCCCTGTTTCACT
TATAGGGTCTAGAATGCTTGTGTTGAGTAAAAAGGAGATTCCCAATATTCAAAGCTGCTAAATGTTCTCTTTGCC
ATAAAGACTCCGTGTAACTGTGTGAACACTTGGGATTTTTCTCCTCTGTCCCGAGGTCGTCGTCTGCTTTCTTTT
TTGGGTTTCTTTCTAGAAGATTGAGAAGTGCATATGACAGGCTGAGAGCACCTCCCCAAACACACAAGCTCTCAG
CCACAGGCAGCTTCTCCACAGCCCCAGCTTCGCACAGGCTCCTGGAGGGCTGCCTGGGGGAGGCAGACATGGGAG
TGCCAAGGTGGCCAGATGGTTCCAGGACTACAATGTCTTTATTTTTAACTGTTTGCCACTGCTGCCCTCACCCCT
GCCCGGCTCTGGAGTACCGTCTGCCCCAGACAAGTGGGAGTGAAATGGGGGTGGGGGGAAGCACTGATTCCCAGT
TAGGGGGTGCCTAACTGAGCAGTAGGGATAGAAGGTGTGAACCTGGGAGTGCTTTTATAAATTATTTTCCTTGTA
GATTTTATTTTTAATTTATCTCTGTGACCTGCCAGGGAGAGGGGAGAGAGAGAGATGCTGTTGAGCACATGAC
AAAATAAAATAAAATGGATGATTCAAAAAAAAAAA

FIGURE 3016

MLSLKKYLTEGLLQFTILLSLIGVRVDVDTYLTSQLPPLREIILGPSSAYTQTQFHNLRNTLDGYGIHPKSIDLD
NYFTARRLLSQVRALDRFQVPTTEVNAWLVHRDPEGSVSGSQPNSGLALESSSGLQDVTGPDNGVRESETEQGFG
EDLEDLGAVAPPVSGDLTKEDIDLIDILWRQDIDLGAGREVFDYSHRQKEQDVEKELRDGGEQDTWAGEGAEALA
RNLLVDGETGESFPAQVPSGEDQTALSLEECLRLLEATCPFGENAEFPADISSITEAVPSESEPPALQNNLLSPL
LTGTESPFDLEQQWQDLMSIMEMQAMEVNTSASEILYSAPPGDPLSTNYSLAPNTPINQNVSLHQASLGGCSQDF
LLFSPEVESLPVASSSTLLPLAPSNSTSLNSTFGSTNLTGLFFPPQLNGTANDTAGPELPDPLGGLLDEAMLDEI
SLMDLAIEEGFNPVQASQLEEEFDSDSGLSLDSSHSPSSLSSSEGSSSSSSSSSSSSSSASSSASSSFSEEGAVG
YSSDSETLDLEEAEGAVGYQPEYSKFCRMSYQDPAQLSCLPYLEHVGHNHTYNMAPSALDSADLPPPSALKKGSK
EKQADFLDKQMSRDEHRARAMKIPFTNDKIINLPVEEFNELLSKYQLSEAQLSLIRDIRRRGKNKMAAQNCRKRK
LDTILNLERDVEDLQRDKARLLREKVEFLRSLRQMKQKVQSLYQEVFGRLRDENGRPYSPSQYALQYAGDGSVLL
IPRTMADQQARRQERKPKDRRK

FIGURE 3017

ACTTCAGCCCTAGCAGCATCTGCCTGTGGGAAGCAGCTCTCCACACCAGCCAAGGGGGCCCCCACACTCCCGCGC
TGCTCTGCGGCTCAGGGAGCAGCCCACCTGCTGGATGAGGAACTTGAGGCAAGTCACCAGCCCCTGATCATTTCG
CCTAAAAGAGCAAGGACTAGAGTTCCTGACCTCCAGGCCAGTCCCTGATCCCTGACCTAATGTTATCGCGGAATG
ATGATATATGTATCTACGGGGGCCTGGGGCTGGGCGGGCTCCTGCTTCTGGCAGTGGTCCTTCTGTCCGCCTGCC
TGTGTTGGCTGCATCGAAGAGCACCTTCTGTCCTGGTCCCAGGCCCAGGGCTCCTCAGAGCAGGAACTCCACTAT
GCATCTCTGCAGAGGCTGCCAGTGCCCAGCAGTGAGGGACCTGACCTCAGGGGCAGAGACAAGAGAGGCACCAAG
GAGGATCCAAGAGCTGACTATGCCTGCATTGCTGAGAACAAACCCACC**TGA**GCACCCCAGACACCTTCCTCAACC
CAGGCGGGTGGACAGGGTCCCCCTGTGGTCCAGCCAGTAAAAACCATGGTCCCCCCACTTCTGTGTCTCAGTCCT
CTCAGTCCATCTCGAGCCTCCGTTCAAATTGATCA

FIGURE 3018

MIYVSTGAWGWAGSCFWQWSFCPPACVGCIEEHLLSWSQAQGSSEQELHYASLQRLPVPSSEGPDLRGRDKRGTK
EDPRADYACIAENKPT

FIGURE 3019

CCACGTGCTTGTGTTGACTGGACAACTTCCTGGTGGAAAACCGCGACTCTTGCAAGTGGGCAAACTTGACGTTTT
CGCTATGGGCAAACGCGGGAGCCGGAGCCAGAGCCAGCTACTCAACACCCTAACTAAAAAGCAGAAGAAACATCT
TCGAGATTTCGGCGAGGAGCATCCCTTCTATGACAGGGTTTCCAGAAAGGAAGCAAAGCCACAGATTTGTCAACT
GTCAGAGAGTTCAGATTCTTCAGATTCTGAAAGCGACTCAGAGAGTGAACCACAACAAGTTTCTGGCTACCACAG
ACTACTTGCTACATTAAAGAATGTTTCTGAGGAAGAAGAGGAAGATGAGGAGGAGGAAGAGGAAGAAGACAGTAT
TGTAGATGATGCAGAAATGAACGATGAAGATGGTGGTAGCGATGTCAGTGTGGAAGAAGAGATGGCTGCAGAGTC
TACTGAAAGTCCAGAGAATGTAGCTTTATCTGCTGACCCTGAGGGAAAAGAAGATGGGGAAGAGCCACCGGGCAC
ATCACAAACATCCCCCGAAGAGTTCACAGATGCAAAACACGAGTCACTGTTCAGCCTGGAAACCAATTTTCTGGA
AGAGGAAAGTGGAGACAACTCTTCTTTGAAAGCCTCTCAAGATCCATTTCTTCAACATGTGAACAAAGAACTGAA
AGAAAAAGCAATTCAGGCTGTTGCCACAAATCCCAAAACTACCCACGAGCTTAAATGGCCTATTCTGGGCCAGCT
TTTCTTTTCCTCTAAGTTTCAGAAGTTGGAAACATTTAAACCCCCAAAGGATATTGACTTAAAGTCACTTCATCT
CCAGAAGCCTCTGGAATCCACCTGGACTAAGACCAACAGCCAGTTCCTATCTGGTCCCCAAAAATCAAGCAGCCC
ATTCACCCCCCTCCAGAAAGAACTCTTCTTAATTATGAATTCTTACCGGGACCTGTTCTACCCGGAAAGGACTGC
TCTGAAGAACGGGGAAGAGATCCGCCATGTGTATTGCCTGCATGTGATAAATCACATCCTCAAAGCCAATGCCCA
GGTGCTTGGCAACAATAGCAGACGCCGAAGCCAGAAGTTTGGAGTGGGTGATGATGATGACTTCAGAGACCAAGG
GTTAACAAGGCCCAAGGTACTGATAGTGGTGCCATTCCGGGAAGCTGCTTTGCGGGTGGTGCAGCTCTTCATCAG
CCTCCTCGAGGGTGACAGCAAGAAGAAAATCATTGTGAGCAACAAAAAGAGGTTTCAGGGAGAATATGGATCAGA
TCCCGAGGAGAGACCACCCAACTTGAAGAGGCCTGAGGATTATGAAGCCGTATTTGTGGGCAATATTGATGACCA
CTTCAGGATTGGAGTGGCAATACTTCAGAGAAGCATCCGACTCTATGCCCCGTTTTACTCCTCGGATATCCTCAT
TGCTTCCCCCCTGGGCTTGAGGACCATCATTGGTGGAGAAGGAGAGAAGAAGAGAGATTTTGACTTTCTGTCTTC
TATCGAGCTTCTCATCATTGATCAAGCTGACATTTACCTGATGCAGAACTGGGAGCATGTCCTGCATTTGATGAA
TCACATGAACCTACTACCCCTGGACTCACATGGGGTAGACTTTTCTCGAGTGCGGATGTGGAGCCTCAATAATTG
GTCCAAGTACTATCGCCAGACACTGCTATTTGGGGCCCTTCAGGATGCCCAGATCAACTCAGTGTTCAACAAGTA
CTGTGTCAACATGCAAGGCCAGGTGGCCGTGAGGAATGTCCCAATGACAGGCTCTATCAGTCATGTCCTGGTGCA
GCTCCCACATGTCTTCCAGAGGATGGAAGCTGAAAACCTAGCTTCAGTGATTGATGCCAGGTTTAACTTTTTTGT
GAACAAGATTTTGCCACAGTATCGTGATGCAGTCATGTCTCACACGCTCATCTATATCCCCTCCTACTTTGACTT
CGTGCGTCTTCGAAATTACTTCAAGAAGGAGGAATTGAATTTTACCCACATCTGCGAGTACACGCAGAAGTCTGG
TGTCTCCAGGGCCAGACACTTCTTCCTTCAAGGAGAGAAACAGTTTCTACTTTTCACAGAGCGCTTCCATTTCTA
CAAAAGGTATACAATAAAAGGCATCAGGAACCTGATTTTCTATGAACTGCCGACATATCCACACTTTTACAGTGA
AATCTGTAATATGCTGAGAGCCACCAACAGAGGAGAAGAGGCCACGTGGACCTGCACTGTTCTCTACTCCAAATA
TGATGCCCAGAGGTTAGCTGCCGTGGTTGGTGTGGAGCGGGCGGCACAGATGCTACAGTCCAACAAGAATGTCCA
CCTCTTCATTACTGGAGAAAAATGAAATTTTGTTGGGCAGGAAGTGGTATTTGGCATGATACATAATGTTTGATT
CTATGCCATTTGGACCCAATTCTGATTACTTACAGAAGAAGGACTGATACAAAGAAAGTGCATGAGGCAATGTCA
GTATTATCTGACATCTTTCTTTTCAGGTCATGTGTCCCTGAAAAGTTAAATGTAAACCAGATTTTGGTAAATCCC
ATCTTTCAGAAGTGAAGAGGGGGCTAGAAGGACTCTGAGAAGTTGGTAGAAGAAAACTCCCACTTGTGAATATTT
TTGTGAGACATAAATTCTTTTATTACGATTTACCTCTAATTTATTACACTTAGTAAATTCTTCCAGATTTTTCTA
TTTGTTTGACACTTCCTTAAAGTAAGGAATACACATTGCTTGCGAGAACTGGTTATGAGACATTGGAATACTTCT
TGCTGCTACATGTCATCTTAATTTTGGATGGCATGGGTTTTGTAAAACTTATTCTGCCCCAGCCAAACTTTTTTG
AAACCTTAAATAGTCTACCTTAATTCAGCCTAGAAGAGTACATTGATTTACTGATCTTTTTTCATATTCATAATA
CTAAATGTTTTAGTTTTGTTCAAATATATGCTTAAAATCACGTTATTTAAAAAACACATCAGCTCTGTCTCAAGA
AGTAATTTTGTTGAAACTCCATGTTAAAATATCCATCTTCAACAGTAGTGTCTTCATAATAACTAGTCATTTTTT
CAGTCATAAACAGATGCAAATAAAAAGGAAATTACACTTTTAAAAA

FIGURE 3020

MGKRGSRSQSQLLNTLTKKQKKHLRDFGEEHPFYDRVSRKEAKPQICQLSESSDSSDSESDSESEPQQVSGYHRL
LATLKNVSEEEEEDEEEEEEEDSIVDDAEMNDEDGGSDVSVEEEMAAESTESPENVALSADPEGKEDGEEPPGTS
QTSPEEFTDAKHESLFSLETNFLEEESGDNSSLKASQDPFLQHVNKELKEKAIQAVATNPKTTHELKWPILGQLF
FSSKFQKLETFKPPKDIDLKSLHLQKPLESTWTKTNSQFLSGPQKSSSPFTPLQKELFLIMNSYRDLFYPERTAL
KNGEEIRHVYCLHVINHILKANAQVLGNNSRRRSQKFGVGDDDDFRDQGLTRPKVLIVVPFREAALRVVQLFISL
LEGDSKKKIIVSNKKRFQGEYGSDPEERPPNLKRPEDYEAVFVGNIDDHFRIGVAILQRSIRLYAPFYSSDILIA
SPLGLRTIIGGEGEKKRDFDFLSSIELLIIDQADIYLMQNWEHVLHLMNHMNLLPLDSHGVDFSRVRMWSLNNWS
KYYRQTLLFGALQDAQINSVFNKYCVNMQGQVAVRNVPMTGSISHVLVQLPHVFQRMEAENLASVIDARFNFFVN
KILPQYRDAVMSHTLIYIPSYFDFVRLRNYFKKEELNFTHICEYTQKSGVSRARHFFLQGEKQFLLFTERFHFYK
RYTIKGIRNLIFYELPTYPHFYSEICNMLRATNRGEEATWTCTVLYSKYDAQRLAAVVGVERAAQMLQSNKNVHL
FITGEK

FIGURE 3021

CCGGCGGCGCCTCAGGTCGCGGGGCGCCTAGGCCTGGGTTGTCCTTTGCATCTGCACGTGTTCGCAGTCGTTTCC
GCGATGCTGCCTCTGCTGCGCTGCGTGCCCCGTGTGCTGGGCTCCTCCGTCGCCGGCCTCCGCGCTGCCGCGCCC
GCCTCGCCTTTCCGGCAGCTCCTGCAGCCGGCACCCCGGCTGTGCACCCGGCCCTTCGGGCTGCTCAGCGTGCGC
GCAGGTTCCGAGCGGCGGCCGGGCCTCCTGCGGCCTCGCGGACCCTGCGCCTGTGGCTGTGGCTGCGGCTCGCTG
CACACCGACGGAGACAAAGCTTTTGTTGATTTCCTGAGTGATGAAATTAAGGAGGAAAGAAAAATTCAGAAGCAT
AAAACCCTCCCTAAGATGTCTGGAGGTTGGGAGCTGGAACTGAATGGGACAGAAGCGAAATTAGTGCGGAAAGTT
GCCGGGGAAAAAATCACGGTCACTTTCAACATTAACAACAGCATCCCACCAACATTTGATGGTGAGGAGGAACCC
TCGCAAGGGCAGAAGGTTGAAGAACAGGAGCCTGAACTGACATCAACTCCCAATTTCGTGGTTGAAGTTATAAAG
AATGATGATGGCAAGAAGGCCCTTGTGTTGGACTGTCATTATCCAGAGGATGAGGTTGGACAAGAAGACGAGGCT
GAGAGTGACATCTTCTCTATCAGGGAAGTTAGCTTTCAGTCCACTGGCGAGTCTGAATGGAAGGATACTAATTAT
ACACTCAACACAGATTCCTTGGACTGGGCCTTATATGACCACCTAATGGATTTCCTTGCCGACCGAGGGGTGGAC
AACACTTTTGCAGATGAGCTGGTGGAGCTCAGCACAGCCCTGGAGCACCAGGAGTACATTACTTTTCTTGAAGAC
CTCAAGAGTTTTGTCAAGAGCCAGTAGAGCAGACAGATGCTGAAAGCCATAGTTTCATGGCAGGCTTTGGCCAGT
GAACAAATCCTACTCTGAAGCTAGACATGTGCTTTGAAATGATTATCATCCTAATATCATGGGGGAAAAAATACC
AAATTTAAATTATATGTTTTGTGTTCTCATTTATTATCATTTTTTTCTGTACAAATCTATTATTTCTAGATTTTT
GTATAACATGATAGACATAAAATTGGTTTATCTCCTCCGCTGAGTCTTCCTAGAAGTACCTGCTGGGTTCTCAGT
TCCAGTTCCCATCCTTTGATTGATCACTCTCCCTGACATCCACCTGTATGACTTTGTCACCAAATGCTGTCTTCT
CTTTCTCCAATCAAGAAATAATAATCCCTCGAGTTTACAAAACAAAAAAAAAAAAA

FIGURE 3022

MLPLLRCVPRVLGSSVAGLRAAAPASPFRQLLQPAPRLCTRPFGLLSVRAGSERRPGLLRPRGPCACGCGCGSLH
TDGDKAFVDFLSDEIKEERKIQKHKTLPKMSGGWELELNGTEAKLVRKVAGEKITVTFNINNSIPPTFDGEEEPS
QGQKVEEQEPELTSTPNFVVEVIKNDDGKKALVLDCHYPEDEVGQEDEAESDIFSIREVSFQSTGESEWKDTNYT
LNTDSLDWALYDHLMDFLADRGVDNTFADELVELSTALEHQEYITFLEDLKSFVKSQ

FIGURE 3023

CGAGGATGTGCGTGGGGGCTCGGCGGCTGGGCCGCGGGCCGTGTGCGGCTCTGCTCCTCCTGGGCCTGGGGCTGA
GCACCGTGACGGGGCTCCACTGTGTCGGGGACACCTACCCCAGCAACGACCGGTGCTGCCACGAGTGCAGGCCAG
GCAACGGGATGGTGAGCCGCTGCAGCCGCTCCCAGAACACGGTGTGCCGTCCGTGCGGGCCGGGCTTCTACAACG
ACGTGGTCAGCTCCAAGCCGTGCAAGCCCTGCACGTGGTGTAACCTCAGAAGTGGGAGTGAGCGGAAGCAGCTGT
GCACGGCCACACAGGACACAGTCTGCCGCTGCCGGGCGGGCACCCAGCCCCTGGACAGCTACAAGCCTGGAGTTG
ACTGTGCCCCCTGCCCTCCAGGGCACTTCTCCCCAGGCGACAACCAGGCCTGCAAGCCCTGGACCAACTGCACCT
TGGCTGGGAAGCACACCCTGCAGCCGGCCAGCAATAGCTCGGACGCAATCTGTGAGGACAGGGACCCCCCAGCCA
CGCAGCCCCAGGAGACCCAGGGCCCCCCGGCCAGGCCCATCACTGTCCAGCCCACTGAAGCCTGGCCCAGAACCT
CACAGGGACCCTCCACCCGGCCCGTGGAGGTCCCCGGGGGCCGTGCGGTTGCCGCCATCCTGGGCCTGGGCCTGG
TGCTGGGGCTGCTGGGCCCCCTGGCCATCCTGCTGGCCCTGTACCTGCTCCGGAGGGACCAGAGGCTGCCCCCCG
ATGCCCACAAGCCCCCTGGGGGAGGCAGTTTCCGGACCCCCATCCAAGAGGAGCAGGCCGACGCCCACTCCACCC
TGGCCAAGATCTGACCTGGGCCCACCAAGGTGGACGCTGGGCCCCGCCAGGCTGGAGCCCGGAGGGTCTGCTGGG
CGAGCAGGGCAGGTGCAGGCCGCCTGCCCCGCCACGCTCCTGGGCCAACTCTGCACCGTTCTAGGTGCCGATGGC
TGCCTCCGGCTCTCTGCTTACGTATGCCATGCATACCTCCTGCCCCGCGGGACCACAATAAAAACCTTGGCAGAC
GGGAGTCTCCGACCGGCAAAAAAAAAAAAAAAAA

FIGURE 3024

MCVGARRLGRGPCAALLLLGLGLSTVTGLHCVGDTYPSNDRCCHECRPGNGMVSRCSRSQNTVCRPCGPGFYNDV
VSSKPCKPCTWCNLRSGSERKQLCTATQDTVCRCRAGTQPLDSYKPGVDCAPCPPGHFSPGDNQACKPWTNCTLA
GKHTLQPASNSSDAICEDRDPPATQPQETQGPPARPITVQPTEAWPRTSQGPSTRPVEVPGGRAVAAILGLGLVL
GLLGPLAILLALYLLRRDQRLPPDAHKPPGGGSFRTPIQEEQADAHSTLAKI

FIGURE 3025

TTACAAACGGTTGTATATTTTTAATTTCAAAATTTGAAGGTAACCACAATTGTATATTTCCCTCACAATAAAATC
AGAAGCAGGAAAATATAAAGGTGGCAGCTTTACATCTCAGCATTAACAAACTGTAAGTCAACTGTTTAAATGGAT
GTTATTCTTAAAAGATAATGTAACAAATGAACTCATAAAGCAGTAGCAGATACATCAATATCTTCCCCACCCCAG
ACTGACAAATACTCCACTACAGCACAGACAGCCAAAGCAACAGCAACACAAAGTTTCACCGCACAAAGGAAAACC
AGAAAAGAATCCTCCCTTCCCCATTACACTCTACTAGGTCACCCCTTTTCCATAAGGTTTGTCATGCAATTACAA
TTAACAATTGATGCTAAGAGTAAAATGATGTTTGTGTTACTTTCTCCATCTAGAACTAAGATCTAGAAGTGTTAA
AACTCTTGTTATTTTCTCCAAGAGGACATTCTTAAAGCC

FIGURE 3026

CGCAAGCAGCTGGATCTCCGGTAACTGAGACATAGGGTATAACTGTTGTCGCGGCGGAGGAAGTGAGGACGGCGC
CAAGGGCCTTCCGGGCCAGTGTTGGATCCCTGTAGTTTGTGAAGATGGTGTTGCTAACAATGATCGCCCGAGTGG
CGGACGGGCTCCCGCTGGCCGCCTCGATGCAGGAGGACGAACAGTCTGGCCGGGACCTTCAACAGTATCAGAGTC
AGGCTAAGCAACTCTTTCGAAAGTTGAATGAACAGTCCCCTACCAGATGTACCTTGGAAGCAGGAGCCATGACTT
TTCACTACATTATTGAGCAGGGGGTGTGTTATTTGGTTTTATGTGAAGCTGCCTTCCCTAAGAAGTTGGCTTTTG
CCTACCTAGAAGATTTGCACTCAGAATTTGATGAACAGCATGGAAAGAAGGTGCCCACTGTGTCCCGACCCTATT
CCTTTATTGAATTTGATACTTTCATTCAGAAAACCAAGAAGCTCTACATTGACAGTCGTGCTCGAAGAAATCTAG
GCTCCATCAACACTGAATTGCAAGATGTGCAGAGGATCATGGTGGCCAATATTGAAGAAGTGTTACAACGAGGAG
AAGCACTCTCAGCATTGGATTCAAAGGCTAACAATTTGTCCAGTCTGTCCAAGAAATACCGCCAGGATGCGAAGT
ACTTGAACATGCGTTCCACTTATGCCAAACTTGCAGCAGTAGCTGTATTTTTCATCATGTTAATAGTGTATGTCC
GATTCTGGTGGCTGTGAAATAATGAATACAGTCACTGGTAAGGGAGAACCTAGAACCCAGTAGGTGTATATTTTC
AGGAAACTGAGCTCACAGAGATGTGTATTAGAATCCAAGTGGAACTTCTGCCCTCTAAAGACCTTGCAAGAAAAG
AGATGCCCTGAAAATGAAAGGTTGCACCTCATTTAATGAAGCTTAACCCTATGTAGAAAGTCTCTTTCGGGGGCA
GAGGCTTTCTCTGGGTGCCAAGCCATATATATTAGGGAATAGTAGATTGTTAATTTCGTTTTTTCCCTCCCAGTG
CATTTTAAAAACAGCACTGGCTGGGGCATTCTCATTCTCTGATGGAGCCATCAATGAGATTTAACTTAGTCAACC
TGTGCCAGCAACATTCTGAAATTCCTTCAAAGAAGGCAGTCCTTTGGGAAGGTGTTTTTTTTTTTTTTTTTTTT
TGACTCTAATCAACATTCCTTTTGTTGGTGACATTTGTGATTTTCAGTAATCTGAGTTTTTGATGGCCTTTTAAA
CAAGACTCCAGTATGTGAAGGTTAATTGCTGTGCTCCACAGATCTCGTCTATTGGCCCCTGTAGAAAGTTAACCT
TTGTTGTTTTCCTTTTATAATTTGCTTATTGCACAATTGCTTTAGGGTAAGTGAATTATATTAAGATGCCTTGAA
ATTATAGCACTCCTTGATTAAGAAGCTAAAATGTTTCTCTCATTTACTCCTTAAACAAAAGACAAAAAAAAAAAA
AAAAAAAAAAAAAAAAA

FIGURE 3027

MVLLTMIARVADGLPLAASMQEDEQSGRDLQQYQSQAKQLFRKLNEQSPTRCTLEAGAMTFHYIIEQGVCYLVLC
EAAFPKKLAFAYLEDLHSEFDEQHGKKVPTVSRPYSFIEFDTFIQKTKKLYIDSRARRNLGSINTELQDVQRIMV
ANIEEVLQRGEALSALDSKANNLSSLSKKYRQDAKYLNMRSTYAKLAAVAVFFIMLIVYVRFWWL

FIGURE 3028

GGTGTGGAGACTGTTAAATGGGAGGGCCTCATCCATAAATGATTTCTGGCAACGTCTTCTTCAGGTGGAGCTTGA
CGTCTTTTTAATGTTACTTGGGGATGGAGTGCTCATTAAGGGATGCCAGGGCCAGCTCTGGTGGTTCCTGGGGAG
GCTGCGTCCTTCCCTGCTTCTGCATGTCATGAGGCAGCAGGAAGGTTTCCCCTGCACCTGTCTGTCCTGGCTCCC
TCTGGGTAGCCCCCTACTGTTCTGTGCTT

FIGURE 3029

CCGAGGCTATAAGAGGGCGCACAAGTGGCGCGGCGCAGGAGCCGCCGCCAGTGGAGGGCCGGGCGCTGCGGCCGC
GGCCGGGGCGGGCGCAGGGCCGAGCGGACGGGGGGGCGCGGGCCCCCCGGGAGGCCGCGGCCACTCCCCCCCGGG
CCGGCGCGGCGGGGGAGGCGGAGG**ATG**GAAACACCCTTCTACGGCGATGAGGCGCTGAGCGGCCTGGGCGGCGGC
GCCAGTGGCAGCGGCGGCACGTTCGCGTCCCCGGGCCGCTTGTTCCCCGGGGCGCCCCCGACGGCCGCGGCCGGC
AGCATGATGAAGAAGGACGCGCTGACGCTGAGCCTGAGTGAGCAGGTGGCGGCAGCGCTCAAGCCTGCGCCCGCG
CCCGCCTCCTACCCCCCTGCCGCCGACGGCGCCCCCAGCGCGGCACCCCCCGACGGCCTGCTCGCCTCTCCCGAC
CTGGGGCTGCTGAAGCTGGCCTCCCCCGAGCTCGAGCGCCTCATCATCCAGTCCAACGGGCTGGTCACCACCACG
CCGACGAGCTCACAGTTCCTCTACCCCAAGGTGGCGGCCAGCGAGGAGCAGGAGTTCGCCGAGGGCTTCGTCAAG
GCCCTGGAGGATTTACACAAGCAGAACCAGCTCGGCGCGGGCCGGGCCGCTGCCGCCGCCGCCGCCGCCGCCGGG
GGGCCCTCGGGCACGGCCACGGGCTCCGCGCCCCCCGGCGAGCTGGCCCCGGCGGCGGCCGCGCCCGAAGCGCCT
GTCTACGCGAACCTGAGCAGCTACGCGGGCGGCGCCGGGGGCGCGGGGGGCGCCGCGACGGTCGCCTTCGCTGCC
GAACCTGTGCCCTTCCCGCCGCCGCCACCCCCAGGCGCGTTGGGGCCGCCGCGCCTGGCTGCGCTCAAGGACGAG
CCACAGACGGTGCCCGACGTGCCGAGCTTCGGCGAGAGCCCGCCGTTGTCGCCCATCGACATGGACACGCAGGAG
CGCATCAAGGCGGAGCGCAAGCGGCTGCGCAACCGCATCGCCGCCTCCAAGTGCCGCAAGCGCAAGCTGGAGCGC
ATCTCGCGCCTGGAAGAGAAAGTGAAGACCCTCAAGAGTCAGAACACGGAGCTGGCGTCCACGGCGAGCCTGCTG
CGCGAGCAGGTGGCGCAGCTCAAGCAGAAAGTCCTCAGCCACGTCAACAGCGGCTGCCAGCTGCTGCCCCAGCAC
CAGGTCCCGGCGTAC**TGA**GTCGGGCATGGCGGCCACCTCCAAGGGGCGGGCTCGCGGGGGGGTGTCGTGGGCGCC
CCGGACTTGGAGAGGGTGCGGCCCTCCACCCCCCCCTCCCCGAGTGTGCCCAGGAACTCAGAGAGGCGCGGCCCC
GGGGATTCCCCCCCGAGGTGCCCAGGACTCGGAAGGGGCGCCCCGGACTCGACAAGCTGGACCCCCTGCTCCCGG
GGGCGAGCGCATGACCCCCCCGCCCTCGCGCTGCCTCTTTCCCCCGCGCGGCCGCCCCGTGTTGCACAAACCCGC
GCGTCTCGGCTGCCCCTTTGTACACCGCGCCGCAAGGGGGCTCCGAGGGGGCGCACGTCAAACCCTGCCTTTCCT
TTACTTTTACTTTTTTTTTTTCTTTGGAAGAGAGAAGAACAGAGTGTTCGATTCTGCCCTATTTATGTTTCTACT
CGGGGAACAAACGTTGGTTGTGTGTGTGTGTGTTTTCTTGTGTTGGTTTTTTAAAGAAATGGGAAGAAGAAAAAA
AAATTCTCCGCCCCTTTCCTCGATCTCGCTCCCCCTTCGGTCTTTCGACCGTCCCCCCCTCCCCTTTTTTTGTTC
TGTTTTGTTTTGTTTTGCTACGAGTCCACATTCCTGTTTGTAATCCTTGGTTCGCCCGGTTTTCTGTTTTCAGTA
AAGTCTCGTTACGCCA

FIGURE 3030

METPFYGDEALSGLGGGASGSGGTFASPGRLFPGAPPTAAAGSMMKKDALTLSLSEQVAAALKPAPAPASYPPAA
DGAPSAAPPDGLLASPDLGLLKLASPELERLIIQSNGLVTTTPTSSQFLYPKVAASEEQEFAEGFVKALEDLHKQ
NQLGAGRAAAAAAAAAGGPSGTATGSAPPGELAPAAAAPEAPVYANLSSYAGGAGGAGGAATVAFAAEPVPFPPP
PPPGALGPPRLAALKDEPQTVPDVPSFGESPPLSPIDMDTQERIKAERKRLRNRIAASKCRKRKLERISRLEEKV
KTLKSQNTELASTASLLREQVAQLKQKVLSHVNSGCQLLPQHQVPAY

FIGURE 3031

CCTCACTGACTATAAAAGAATAGAGAAGGAAGGGCTTCAGTGACCGGCTGCCTGGCTGACTTACAGCAGTCAGAC
TCTGACAGGATCATGGCTATGATGGAGGTCCAGGGGGGACCCAGCCTGGGACAGACCTGCGTGCTGATCGTGATC
TTCACAGTGCTCCTGCAGTCTCTCTGTGTGGCTGTAACTTACGTGTACTTTACCAACGAGCTGAAGCAGATGCAG
GACAAGTACTCCAAAAGTGGCATTGCTTGTTTCTTAAAAGAAGATGACAGTTATTGGGACCCCAATGACGAAGAG
AGTATGAACAGCCCCTGCTGGCAAGTCAAGTGGCAACTCCGTCAGCTCGTTAGAAAGATGATTTTGAGAACCTCT
GAGGAAACCATTTCTACAGTTCAAGAAAAGCAACAAAATATTTCTCCCCTAGTGAGAGAAAGAGGTCCTCAGAGA
GTAGCAGCTCACATAACTGGGACCAGAGGAAGAAGCAACACATTGTCTTCTCCAAACTCCAAGAATGAAAAGGCT
CTGGGCCGCAAAATAAACTCCTGGGAATCATCAAGGAGTGGGCATTCATTCCTGAGCAACTTGCACTTGAGGAAT
GGTGAACTGGTCATCCATGAAAAAGGGTTTTACTACATCTATTCCCAAACATACTTTCGATTTCAGGAGGAAATA
AAAGAAAACACAAAGAACGACAAACAAATGGTCCAATATATTTACAAATACACAAGTTATCCTGACCCTATATTG
TTGATGAAAAGTGCTAGAAATAGTTGTTGGTCTAAAGATGCAGAATATGGACTCTATTCCATCTATCAAGGGGGA
ATATTTGAGCTTAAGGAAAATGACAGAATTTTTGTTTCTGTAACAAATGAGCACTTGATAGACATGGACCATGAA
GCCAGTTTTTTCGGGGCCTTTTTAGTTGGCTAACTGACCTGGAAAGAAAAAGCAATAACCTCAAAGTGACTATTC
AGTTTTCAGGATGATACACTATGAAGATGTTTCAAAAAATCTGACCAAAACAAACAAACAGAAAACAGAAAACAA
AAAAACCTCTATGCAATCTGAGTAGAGCAGCCACAACCAAAAAATTCTACAACACACACTGTTCTGAAAGTGACT
CACTTATCCCAAGAAAATGAAATTGCTGAAAGATCTTTCAGGACTCTACCTCATATCAGTTTGCTAGCAGAAATC
TAGAAGACTGTCAGCTTCCAAACATTAATGCAATGGTTAACATCTTCTGTCTTTATAATCTACTCCTTGTAAAGA
CTGTAGAAGAAAGCGCAACAATCCATCTCTCAAGTAGTGTATCACAGTAGTAGCCTCCAGGTTTCCTTAAGGGAC
AACATCCTTAAGTCAAAAGAGAGAAGAGGCACCACTAAAAGATCGCAGTTTGCCTGGTGCAGTGGCTCACACCTG
TAATCCCAACATTTTGGGAACCCAAGGTGGGTAGATCACGAGATCAAGAGATCAAGACCATAGTGACCAACATAG
TGAAACCCCATCTCTACTGAAAGTGCAAAAATTAGCTGGGTGTGTTGGCACATGCCTGTAGTCCCAGCTACTTGA
GAGGCTGAGGCAGGAGAATCGTTTGAACCCGGGAGGCAGAGGTTGCAGTGTGGTGAGATCATGCCACTACACTCC
AGCCTGGCGACAGAGCGAGACTTGGTTTCAAAAAAAAAAAAAAAAAAAAACTTCAGTAAGTACGTGTTATTTTTT
TCAATAAAATTCTATTACAGTATGTCAAAAAAAAAAAAAAAAA

FIGURE 3032

MAMMEVQGGPSLGQTCVLIVIFTVLLQSLCVAVTYVYFTNELKQMQDKYSKSGIACFLKEDDSYWDPNDEESMNS
PCWQVKWQLRQLVRKMILRTSEETISTVQEKQQNISPLVRERGPQRVAAHITGTRGRSNTLSSPNSKNEKALGRK
INSWESSRSGHSFLSNLHLRNGELVIHEKGFYYIYSQTYFRFQEEIKENTKNDKQMVQYIYKYTSYPDPILLMKS
ARNSCWSKDAEYGLYSIYQGGIFELKENDRIFVSVTNEHLIDMDHEASFFGAFLVG

FIGURE 3033

CTCCGAACAGGAAGAGGACGAAAAAAATAACCGTCCGCGACGCCGAGACAAACCGGACCCGCAACCACCATGAAC
AGCAAAGGTCAATATCCAACACAGCCAACCTACCCTGTGCAGCCTCCTGGGAATCCAGTATACCCTCAGACCTTG
CATCTTCCTCAGGCTCCACCCTATACCGATGCTCCACCTGCCTACTCAGAGCTCTATCGTCCGAGCTTTGTGCAC
CCAGGGGCTGCCACAGTCCCCACCATGTCAGCCGCATTTCCTGGAGCCTCTCTGTATCTTCCCATGGCCCAGTCT
GTGGCTGTTGGGCCTTTAGGTTCCACAATCCCCATGGCTTATTATCCAGTCGGTCCCATCTATCCACCTGGCTCC
ACAGTGCTGGTGGAAGGAGGGTATGATGCAGGTGCCAGATTTGGAGCTGGGGCTACTGCTGGCAACATTCCTCCT
CCACCTCCTGGATGCCCTCCCAATGCTGCTCAGCTTGCAGTCATGCAGGGAGCCAACGTCCTCGTAACTCAGCGG
AAGGGGAACTTCTTCATGGGTGGTTCAGATGGTGGCTACACCATCTGGTGAGGAACCAAGGCCACCTCTGTGCCG
GGAAAGACATCACATACCTTCAGCACTTCTCACAATGTAACTGCTTTAGTCATATTAACCTGAAGTTGCAGTTTA
GACACATGTTGTTGGGGTGTCTTTCTGGTGCCCAAACTTTCAGGCACTTTTCAAATTTAATAAGGAACCATGTAA
TGGTAGCAGTACCTCCCTAAAGCATTTTGAGGTAGGGGAGGTATCCATTCATAAAATGAATGTGGGTGAAGCCGC
CCTAAGGATTTTCCTTTAATTTCTCTGGAGTAATACTGTACCATACTGGTCTTTGCTTTTAGTAATAAAACATCA
AATTAGGTTTGGAGGGAACTTTGATCTTCCTAAGAATTAAAGTTGCCAAATTATTCTGATTGGTCTTTAATCTCC
TTTAAGTCTTTGATATATATTACTTGTTATAAATGGAACGCATTAGTTGTCTGCCTTTTCCTTTCCATCCCTTGC
CCCACCCATCCCATCTCCAACCCTAGTCTTCCATTTCCTCCCGCCAGTCTCCATTGAATCAATGGTGCAGGACAG
AAAGCCAGTCAGACTAATTTCCTTCTTTCCTCGCACTTCTCCCCACTCGTCATCTTTTAACTAGTGTTTCACAAG
GATCCTCTGAAACCCTCTCTGTGCCCCAAGTACAGATGCCATTACTTCTGCTTTCGTATCTCCTCAGGCAAAAGT
GGAGGGTGCCTTATGGGCCCTCCTCATAGGTTGTCTCTGCATACACGAACCTAACCCAAATTTGCTTTGGTGCCA
GAAAAACTGAGCTATGTTTGAACAAAGATGTCGTGCAAACTGTACTGTGAACAACAGTTGGTTTAAAATATGAGG
GGCAAGGAGGAGGATGCATTTCAAAAGCTTGATTGATGTGTTCAGAGCTAAATTAAGAGGAGTTTTCAGATCAAA
AACTGGTTACCATTTTTTGTCAGAGTGTCTGATGCGGCCACTCATTCGGCTCCCCAGAATTCCTAGACTGGGTTA
ATAGGGTCATATTGTGAATGTCTCACTACAAAATGACTTGAGTCCAGTGAAATCTCATTAGGGTTTAAGAATATT
TCAGGGATCCTTAATGTTTTGATTTTTGTTTTCTGAAATTGGATTTTATTTTATTTTATCTTATAATTTCAGTTC
ATCTAAATTGTGTGTTCTGTACATGTGATGTTTGACTGTACCATTGACTGTTATGGAAGTTCAGCGTTGTATGTC
TCTCTCTACACTGTGGTGCACTTAACTTGTGGAATTTTTATACTAAAAATGTAGAATAAAGACTATTTTGAAGAT
TTGAATAAAGTGATGAAGTTGC

FIGURE 3034

MNSKGQYPTQPTYPVQPPGNPVYPQTLHLPQAPPYTDAPPAYSELYRPSFVHPGAATVPTMSAAFPGASLYLPMA
QSVAVGPLGSTIPMAYYPVGPIYPPGSTVLVEGGYDAGARFGAGATAGNIPPPPPGCPPNAAQLAVMQGANVLVT
QRKGNFFMGGSDGGYTIW

FIGURE 3035

ATGACCAAAGCTGATCTCATAAATAATTTGGGAACCATTGCCAAGTCTGGTACTAAAGCATTCATGGAGGCTCTT
CAGGCTGGTGCAGACATCTCCATGATTGGGCAGTTTGGTGTTGGCTTTTATTCTGCCTACTTGGTGGCAGAGAAA
GTGGTTGTGATCACAAAGCACAACGATGATGAACAGTATGCTTGGGAGTCTTCTGCTGGAGGTTCCTTCACTGTG
CGTGCTGACCATGGTGAGCCCATTGGCAGGGGTACCAAAGTGATCCTCCATCTTAAAGAAGATCAGACAGAGTAC
CTAGAAGAGAGGCGGGTCAAAGAAGTAGTGAAGAAGCATTCTCAGTTCATAGGCTATCCCATCACCCTTTATTTG
GAGAAGGAACGAGAGAAGGAAATTAGTGATGATGAGGCAGAGGAAGAGAAAGGTGAGAAAGAAGAGGAAGATAAA
GATGATGAAGAAAAGCCCAAGATCGAAGATGTGGGTTCAGATGAGGAGGATGACAGCGGTAAGGATAAGAAGAAG
AAAACTAAGAAGATCAAAGAGAAATACATTGATCAGGAAGAACTAAACAAGACCAAGCCTATTTGGACCAGAAAC
CCTGATGACATCACCCAAGAGGAGTATGGAGAATTCTACAAGAGCCTCACTAATGACTGGGAAGACCACTTGGCA
GTCAAGCACTTTTCTGTAGAAGGTCAGTTGGAATTCAGGGCATTGCTATTTATTCCTCGTCGGGCTCCCTTTGAC
CTTTTTGAGAACAAGAAGAAAAAGAACAACATCAAACTCTATGTCCGCCGTGTGTTCATCATGGACAGCTGTGAT
GAGTTGATACCAGAGTATCTCAATTTTATCCGTGGTGTGGTTGACTCTGAGGATCTGCCCCTGAACATCTCCCGA
GAAATGCTCCAGCAGAGCAAAATCTTGAAAGTCATTCGCAAAAACATTGTTAAGAAGTGCCTTGAGCTCTTCTCT
GAGCTGGCAGAAGACAAGGAGAATTACAAGAAATTCTATGAGGCATTCTCTAAAAATCTCAAGCTTGGAATCCAC
GAAGACTCCACTAACCGCCGCCGCCTGTCTGAGCTGCTGCGCTATCATACCTCCCAGTCTGGAGATGAGATGACA
TCTCTGTCAGAGTATGTTTCTCGCATGAAGGAGACACAGAAGTCCATCTATTACATCACTGGTGAGAGCAAAGAG
CAGGTGGCCAACTCAGCTTTTGTGGAGCGAGTGCGGAAACGGGGCTTCGAGGTGGTATATATGACCGAGCCCATT
GACGAGTACTGTGTGCAGCAGCTCAAGGAATTTGATGGGAAGAGCCTGGTCTCAGTTACCAAGGAGGGTCTGGAG
CTGCCTGAGGATGAGGAGGAGAAGAAGAAGATGGAAGAGAGCAAGGCAAAGTTTGAGAACCTCTGCAAGCTCATG
AAAGAAATCTTAGATAAGAAGGTTGAGAAGGTGACAATCTCCAATAGACTTGTGTCTTCACCTTGCTGCATTGTG
ACCAGCACCTACGGCTGGACAGCCAATATGGAGCGGATCATGAAAGCCCAGGCACTTCGGGACAACTCCACCATG
GGCTATATGATGGCCAAAAAGCACCTGGAGATCAACCCTGACCACCCCATTGTGGAGACGCTGCGGCAGAAGGCT
GAGGCCGACAAGAATGATAAGGCAGTTAAGGACCTGGTGGTGCTGCTGTTTGAAACCGCCCTGCTATCTTCTGGC
TTTTCCCTTGAGGATCCCCAGACCCACTCCAACCGCATCTATCGCATGATCAAGCTAGGTCTAGGTATTGATGAA
GATGAAGTGGCAGCAGAGGAACCCAATGCTGCAGTTCCTGATGAGATCCCCCCTCTCGAGGGCGATGAGGATGCG
TCTCGCATGGAAGAAGTCGATTAGGTTAGGAGTTCATAGTTGGAAAACTTGTGCCCTTGTATAGTGTCCCCATGG
GCTCCCACTGCAGCCTCGAGTGCCCCTGTCCCACCTGGCTCCCCCTGCTGGTGTCTAGTGTTTTTTT

FIGURE 3036

MTKADLINNLGTIAKSGTKAFMEALQAGADISMIGQFGVGFYSAYLVAEKVVVITKHNDDEQYAWESSAGGSFTV
RADHGEPIGRGTKVILHLKEDQTEYLEERRVKEVVKKHSQFIGYPITLYLEKEREKEISDDEAEEEKGEKEEEDK
DDEEKPKIEDVGSDEEDDSGKDKKKKTKKIKEKYIDQEELNKTKPIWTRNPDDITQEEYGEFYKSLTNDWEDHLA
VKHFSVEGQLEFRALLFIPRRAPFDLFENKKKKNNIKLYVRRVFIMDSCDELIPEYLNFIRGVVDSEDLPLNISR
EMLQQSKILKVIRKNIVKKCLELFSELAEDKENYKKFYEAFSKNLKLGIHEDSTNRRRLSELLRYHTSQSGDEMT
SLSEYVSRMKETQKSIYYITGESKEQVANSAFVERVRKRGFEVVYMTEPIDEYCVQQLKEFDGKSLVSVTKEGLE
LPEDEEEKKKMEESKAKFENLCKLMKEILDKKVEKVTISNRLVSSPCCIVTSTYGWTANMERIMKAQALRDNSTM
GYMMAKKHLEINPDHPIVETLRQKAEADKNDKAVKDLVVLLFETALLSSGFSLEDPQTHSNRIYRMIKLGLGIDE
DEVAAEEPNAAVPDEIPPLEGDEDASRMEEVD

FIGURE 3037

CGATTTCATTCCTCGCTCCCCACAGGTCCCTCTCCCCAAAATATTCCCATCTTGTCCTAGCCCATCCCCCAGACT
ATCTCAAGGACCAGCTGTCCCCACGCCCCCGACCTCCACTAGGCCTGTGCCACCCGCTGCCTGCAGGAAGACGCC
CGGTCCCGGGCCGGGTTAGCCCCATGGGAACGGGGTTCGGTCCGAGCCCGGTGGGAGGCTCCCGGAGCGCAGCCT
GGGCCCAGCCCACCCCGCGCCGGCGGCCATGGCAGGCACCCTGGACCTGGACAAGGGCTGCACGGTGGAGGAGCT
GCTCCGCGGGTGCATCGAAGCCTTCGATGACTCCGGGAAGGTGCGGGACCCGCAGCTGGTGCGCATGTTCCTCAT
GATGCACCCCTGGTACATCCCCTCCTCTCAGCTGGCGGCCAAGCTGCTCCACATCTACCAACAATCCCGGAAGGA
CAACTCCAATTCCCTGCAGGTGAAAACGTGCCACCTGGTCAGGTACTGGATCTCCGCCTTCCCAGCGGAGTTTGA
CTTGAACCCGGAGTTGGCTGAGCAGATCAAGGAGCTGAAGGCTCTGCTAGACCAAGAAGGGAACCGACGGCACAG
CAGCCTAATCGACATAGACAGCGTCCCTACCTACAAGTGGAAGCGGCAGGTGACTCAGCGGAACCCTGTGGGACA
GAAAAAGCGCAAGATGTCCCTGTTGTTTGACCACCTGGAGCCCATGGAGCTGGCGGAGCATCTCACCTACTTGGA
GTATCGCTCCTTCTGCAAGATCCTGTTTCAGGACTATCACAGTTTCGTGACTCATGGCTGCACTGTGGACAACCC
CGTCCTGGAGCGGTTCATCTCCCTCTTCAACAGCGTCTCACAGTGGGTGCAGCTCATGATCCTCAGCAAACCCAC
AGCCCCGCAGCGGGCCCTGGTCATCACACACTTTGTCCACGTGGCGGAGAAGCTGCTACAGCTGCAGAACTTCAA
CACGCTGATGGCAGTGGTCGGGGGCCTGAGCCACAGCTCCATCTCCCGCCTCAAGGAGACCCACAGCCACGTTAG
CCCTGAGACCATCAAGCTCTGGGAGGGTCTCACGGAACTAGTGACGGCGACAGGCAACTATGGCAACTACCGGCG
TCGGCTGGCAGCCTGTGTGGGCTTCCGCTTCCCGATCCTGGGTGTGCACCTCAAGGACCTGGTGGCCCTGCAGCT
GGCACTGCCTGACTGGCTGGACCCAGCCCGGACCCGGCTCAACGGGGCCAAGATGAAGCAGCTCTTTAGCATCCT
GGAGGAGCTGGCCATGGTGACCAGCCTGCGGCCACCAGTACAGGCCAACCCCGACCTGCTGAGCCTGCTCACGGT
GTCTCTGGATCAGTATCAGACGGAGGATGAGCTGTACCAGCTGTCCCTGCAGCGGGAGCCGCGCTCCAAGTCCTC
GCCAACCAGCCCCACGAGTTGCACCCCACCACCCCGGCCCCCGGTACTGGAGGAGTGGACCTCGGCTGCCAAACC
CAAGCTGGATCAGGCCCTCGTGGTGGAGCACATCGAGAAGATGGTGGAGTCTGTGTTCCGGAACTTTGACGTCGA
TGGGGATGGCCACATCTCACAGGAAGAATTCCAGATCATCCGTGGGAACTTCCCTTACCTCAGCGCCTTTGGGGA
CCTCGACCAGAACCAGGATGGCTGCATCAGCAGGGAGGAGATGGTTTCCTATTTCCTGCGCTCCAGCTCTGTGTT
GGGGGGGCGCATGGGCTTCGTACACAACTTCCAGGAGAGCAACTCCTTGCGCCCCGTCGCCTGCCGCCACTGCAA
AGCCCTGATCCTGGGCATCTACAAGCAGGGCCTCAAATGCCGAGCCTGTGGAGTGAACTGCCACAAGCAGTGCAA
GGATCGCCTGTCAGTTGAGTGTCGGCGCAGGGCCCAGAGTGTGAGCCTGGAGGGGTCTGCACCCTCACCCTCACC
CATGCACAGCCACCATCACCGCGCCTTCAGCTTCTCTCTGCCCCGCCCTGGCAGGCGAGGCTCCAGGCCTCCAGA
GATCCGTGAGGAGGAGGTACAGACGGTGGAGGATGGGGTGTTTGACATCCACTTGTAATAGATGCTGTGGTTGGA
TCAAGGACTCATTCCTGCCTTGGAGAAAATACTTCAACCAGAGCAGGGAGCCTGGGGGTGTCGGGGCAGGAGGCT
GGGGATGGGGGTGGGATATGAGGGTGGCATGCAGCTGAGGGCAGGGCCAGGGCTGGTGTCCCTAAGGTTGTACAG
ACTCTTGTGAATATTTGTATTTTCCAGATGGAATAAAAAGGCCCGTGTAATTAACCTTCA

FIGURE 3038

MAGTLDLDKGCTVEELLRGCIEAFDDSGKVRDPQLVRMFLMMHPWYIPSSQLAAKLLHIYQQSRKDNSNSLQVKT
CHLVRYWISAFPAEFDLNPELAEQIKELKALLDQEGNRRHSSLIDIDSVPTYKWKRQVTQRNPVGQKKRKMSLLF
DHLEPMELAEHLTYLEYRSFCKILFQDYHSFVTHGCTVDNPVLERFISLFNSVSQWVQLMILSKPTAPQRALVIT
HFVHVAEKLLQLQNFNTLMAVVGGLSHSSISRLKETHSHVSPETIKLWEGLTELVTATGNYGNYRRRLAACVGFR
FPILGVHLKDLVALQLALPDWLDPARTRLNGAKMKQLFSILEELAMVTSLRPPVQANPDLLSLLTVSLDQYQTED
ELYQLSLQREPRSKSSPTSPTSCTPPPRPPVLEEWTSAAKPKLDQALVVEHIEKMVESVFRNFDVDGDGHISQEE
FQIIRGNFPYLSAFGDLDQNQDGCISREEMVSYFLRSSSVLGGRMGFVHNFQESNSLRPVACRHCKALILGIYKQ
GLKCRACGVNCHKQCKDRLSVECRRRAQSVSLEGSAPSPSPMHSHHHRAFSFSLPRPGRRGSRPPEIREEEVQTV
EDGVFDIHL

FIGURE 3039

CGATTTCATTCCTCGCTCCCCACAGGTCCCTCTCCCCAAAATATTCCCATCTTGTCCTAGCCCATCCCCCAGACT
ATCTCAAGGACCAGCTGTCCCCACGCCCCCGACCTCCACTAGGCCTGTGCCACCCGCTGCCTGCAGGAAGACGCC
CGGTCCCGGGCCGGGTTAGCCCCATGGGAACGCAGCGCCTGTGTGGCCGCGGGACTCAAGGCTGGCCTGGCTCAA
GTGAACAGCACGTCCAGGAGGCGACCTCGTCCGCGGGTTTGCATTCTGGGGTGGACGAGCTGGGGGTTCGGTCCG
AGCCCGGTGGGAGGCTCCCGGAGCGCAGCCTGGGCCCAGCCCACCCCGCGCCGGCGGCCATGGCAGGCACCCTGG
ACCTGGACAAGGGCTGCACGGTGGAGGAGCTGCTCCGCGGGTGCATCGAAGCCTTCGATGACTCCGGGAAGGTGC
GGGACCCGCAGCTGGTGCGCATGTTCCTCATGATGCACCCCTGGTACATCCCCTCCTCTCAGCTGGCGGCCAAGC
TGCTCCACATCTACCAACAATCCCGGAAGGACAACTCCAATTCCCTGCAGGTGAAAACGTGCCACCTGGTCAGGT
ACTGGATCTCCGCCTTCCCAGCGGAGTTTGACTTGAACCCGGAGTTGGCTGAGCAGATCAAGGAGCTGAAGGCTC
TGCTAGACCAAGAAGGGAACCGACGGCACAGCAGCCTAATCGACATAGACAGCGTCCCTACCTACAAGTGGAAGC
GGCAGGTGACTCAGCGGAACCCTGTGGGACAGAAAAAGCGCAAGATGTCCCTGTTGTTTGACCACCTGGAGCCCA
TGGAGCTGGCGGAGCATCTCACCTACTTGGAGTATCGCTCCTTCTGCAAGATCCTGTTTCAGGACTATCACAGTT
TCGTGACTCATGGCTGCACTGTGGACAACCCCGTCCTGGAGCGGTTCATCTCCCTCTTCAACAGCGTCTCACAGT
GGGTGCAGCTCATGATCCTCAGCAAACCCACAGCCCCGCAGCGGGCCCTGGTCATCACACACTTTGTCCACGTGG
CGGAGAAGCTGCTACAGCTGCAGAACTTCAACACGCTGATGGCAGTGGTCGGGGGCCTGAGCCACAGCTCCATCT
CCCGCCTCAAGGAGACCCACAGCCACGTTAGCCCTGAGACCATCAAGCTCTGGGAGGGTCTCACGGAACTAGTGA
CGGCGACAGGCAACTATGGCAACTACCGGCGTCGGCTGGCAGCCTGTGTGGGCTTCCGCTTCCCGATCCTGGGTG
TGCACCTCAAGGACCTGGTGGCCCTGCAGCTGGCACTGCCTGACTGGCTGGACCCAGCCCGGACCCGGCTCAACG
GGGCCAAGATGAAGCAGCTCTTTAGCATCCTGGAGGAGCTGGCCATGGTGACCAGCCTGCGGCCACCAGTACAGG
CCAACCCCGACCTGCTGAGCCTGCTCACGGTGTCTCTGGATCAGTATCAGACGGAGGATGAGCTGTACCAGCTGT
CCCTGCAGCGGGAGCCGCGCTCCAAGTCCTCGCCAACCAGCCCCACGAGTTGCACCCCACCACCCCGGCCCCCGG
TACTGGAGGAGTGGACCTCGGCTGCCAAACCCAAGCTGGATCAGGCCCTCGTGGTGGAGCACATCGAGAAGATGG
TGGAGTCTGTGTTCCGGAACTTTGACGTCGATGGGGATGGCCACATCTCACAGGAAGAATTCCAGATCATCCGTG
GGAACTTCCCTTACCTCAGCGCCTTTGGGGACCTCGACCAGAACCAGGATGGCTGCATCAGCAGGGAGGAGATGG
TTTCCTATTTCCTGCGCTCCAGCTCTGTGTTGGGGGGGCGCATGGGCTTCGTACACAACTTCCAGGAGAGCAACT
CCTTGCGCCCCGTCGCCTGCCGCCACTGCAAAGCCCTGATCCTGGGCATCTACAAGCAGGGCCTCAAATGCCGAG
CCTGTGGAGTGAACTGCCACAAGCAGTGCAAGGATCGCCTGTCAGTTGAGTGTCGGCGCAGGGCCCAGAGTGTGA
GCCTGGAGGGGTCTGCACCCTCACCCTCACCCATGCACAGCCACCATCACCGCGCCTTCAGCTTCTCTCTGCCCC
GCCCTGGCAGGCGAGGCTCCAGGCCTCCAGAGATCCGTGAGGAGGAGGTACAGACGGTGGAGGATGGGGTGTTTG
ACATCCACTTGTAAATAGATGCTGTGGTTGGATCAAGGACTCATTCCTGCCTTGGAGAAAATACTTCAACCAGAGC
AGGGAGCCTGGGGGTGTCGGGGCAGGAGGCTGGGGATGGGGGTGGGATATGAGGGTGGCATGCAGCTGAGGGCAG
GGCCAGGGCTGGTGTCCCTAAGGTTGTACAGACTCTTGTGAATATTTGTATTTTCCAGATGGAATAAAAAGGCCC
GTGTAATTAACCTTCA

FIGURE 3040

MGTQRLCGRGTQGWPGSSEQHVQEATSSAGLHSGVDELGVRSEPGGRLPERSLGPAHPAPAAMAGTLDLDKGCTV
EELLRGCIEAFDDSGKVRDPQLVRMFLMMHPWYIPSSQLAAKLLHIYQQSRKDNSNSLQVKTCHLVRYWISAFPA
EFDLNPELAEQIKELKALLDQEGNRRHSSLIDIDSVPTYKWKRQVTQRNPVGQKKRKMSLLFDHLEPMELAEHLT
YLEYRSFCKILFQDYHSFVTHGCTVDNPVLERFISLFNSVSQWVQLMILSKPTAPQRALVITHFVHVAEKLLQLQ
NFNTLMAVVGGLSHSSISRLKETHSHVSPETIKLWEGLTELVTATGNYGNYRRRLAACVGFRFPILGVHLKDLVA
LQLALPDWLDPARTRLNGAKMKQLFSILEELAMVTSLRPPVQANPDLLSLLTVSLDQYQTEDELYQLSLQREPRS
KSSPTSPTSCTPPPRPPVLEEWTSAAKPKLDQALVVEHIEKMVESVFRNFDVDGDGHISQEEFQIIRGNFPYLSA
FGDLDQNQDGCISREEMVSYFLRSSSVLGGRMGFVHNFQESNSLRPVACRHCKALILGIYKQGLKCRACGVNCHK
QCKDRLSVECRRRAQSVSLEGSAPSPSPMHSHHHRAFSFSLPRPGRRGSRPPEIREEEVQTVEDGVFDIHL

FIGURE 3041

ATGGATTGCAGTAACGGATCGGCAGAGTGTACCGGAGAAGGAGGATCAAAAGAGGTGGTGGGGACTTTTAAGGCT
AAAGACCTAATAGTCACACCAGCTACCATTTTAAAGGAAAAACCAGACCCCAATAATCTGGTTTTTGGAACTGTG
TTCACGGATCATATGCTGACGGTGGAGTGGTCCTCAGAGTTTGGATGGGAGAAACCTCATATCAAGCCTCTTCAG
AACCTGTCATTGCACCCTGGCTCATCAGCTTTGCACTATGCAGTGGAATTATTTGAAGGATTGAAGGCATTTCGA
GGAGTAGATAATAAAATTCGACTGTTTCAGCCAAACCTCAACATGGATAGAATGTATCGCTCTGCTGTGAGGGCA
ACTCTGCCGGTATTTGACAAAGAAGAGCTCTTAGAGTGTATTCAACAGCTTGTGAAATTGGATCAAGAATGGGTC
CCATATTCAACATCTGCTAGTCTGTATATTCGTCCTGCATTCATTGGAACTGAGCCTTCTCTTGGAGTCAAGAAG
CCTACCAAAGCCCTGCTCTTTGTACTCTTGAGCCCAGTGGGACCTTATTTTTCAAGTGGAACCTTTAATCCAGTG
TCCCTGTGGGCCAATCCCAAGTATGTAAGAGCCTGGAAAGGTGGAACTGGGGACTGCAAGATGGGAGGGAATTAC
GGCTCATCTCTTTTTGCCCAATGTGAAGACGTAGATAATGGGTGTCAGCAGGTCCTGTGGCTCTATGGCAGAGAC
CATCAGATCACTGAAGTGGGAACTATGAATCTTTTTCTTTACTGGATAAATGAAGATGGAGAAGAAGAACTGGCA
ACTCCTCCACTAGATGGCATCATTCTTCCAGGAGTGACAAGGCGGTGCATTCTGGACCTGGCACATCAGTGGGGT
GAATTTAAGGTGTCAGAGAGATACCTCACCATGGATGACTTGACAACAGCCCTGGAGGGGAACAGAGTGAGAGAG
ATGTTTAGCTCTGGTACAGCCTGTGTTGTTTGCCCAGTTTCTGATATACTGTACAAAGGCGAGACAATACACATT
CCAACTATGGAGAATGGTCCTAAGCTGGCAAGCCGCATCTTGAGCAAATTAACTGATATCCAGTATGGAAGAGAA
GAGAGCGACTGGACAATTGTGCTATCCTGA

FIGURE 3042

MDCSNGSAECTGEGGSKEVVGTFKAKDLIVTPATILKEKPDPNNLVFGTVFTDHMLTVEWSSEFGWEKPHIKPLQ
NLSLHPGSSALHYAVELFEGLKAFRGVDNKIRLFQPNLNMDRMYRSAVRATLPVFDKEELLECIQQLVKLDQEWV
PYSTSASLYIRPAFIGTEPSLGVKKPTKALLFVLLSPVGPYFSSGTFNPVSLWANPKYVRAWKGGTGDCKMGGNY
GSSLFAQCEDVDNGCQQVLWLYGRDHQITEVGTMNLFLYWINEDGEEELATPPLDGIILPGVTRRCILDLAHQWG
EFKVSERYLTMDDLTTALEGNRVREMFSSGTACVVCPVSDILYKGETIHIPTMENGPKLASRILSKLTDIQYGRE
ESDWTIVLS

FIGURE 3043

GGGATCAGTCTTCCCGCGTCCGCCGATTCCTCCTCCTTGGTCGCCGCGTCCTTGGCTGGCGTCAGAAAA**ATG**GCT
ACAAACTTCCTAGCACATGAGAAGATCTGGTTCGACAAGTTCAAATATGACGACGCAGAAAGGAGATTCTACGAG
CAGATGAACGGGCCTGTGCGAGGTGCCTCCCGCCAGGAGAACGGCGCCACGGTGATCCTCCGTGACATTGCGAGA
GCCAGAGAGAACATCCAGAAATCCCTGGCTGGAAGCTCAGGCCCCGGGGCCTCCAGCGGCACCAGCGGAGACCAC
GGTGAGCTCGTCGTCCGGATTGCCAGTCTGGAAGTGGAGAACCAGAGTCTGCGTGGCGTGGTACAGGAGCTGCAG
CAGGCCATCTCCAAGCTGGAGGCCCGGCTGAACGTGCTGGAGAAGAGCTCGCCTGGCCACCGGGCCACGGCCCCA
CAGACCCAGCACGTATCTCCCATGCGCCAAGTGGAGCCCCCAGCCAAGAAGCCAGCCACACCAGCAGAGGATGAC
GAGGATGATGACATTGACCTGTTTGGCAGTGACAATGAGGAGGAGGACAAGGAGGCGGCACAGCTGCGGGAGGAG
CGGCTACGGCAGTACGCGGAGAAGAAGGCCAAGAAGCCTGCACTGGTGGCCAAGTCCTCCATCCTGCTGGATGTC
AAGCCTTGGGATGATGAGACGGACATGGCCCAGCTGGAGGCCTGTGTGCGCTCTATCCAGCTGGACGGGCTGGTC
TGGGGGGCTTCCAAGCTGGTGCCCGTGGGCTACGGTATCCGGAAGCTACAGATTCAGTGTGTGGTGGAGGACGAC
AAGGTGGGGACAGACTTGCTGGAGGAGGAGATCACCAAGTTTGAGGAGCACGTGCAGAGTGTCGATATCGCAGCT
TTCAACAAGATC**TGA**AGCCTGAGTGTGTGTACGTGCGCGCGTGCGTGAGGGCCCTGCCACGATTAAAGACTGAGA
CCGGCAAAAAAAAAAA

FIGURE 3044

MATNFLAHEKIWFDKFKYDDAERRFYEQMNGPVRGASRQENGATVILRDIARARENIQKSLAGSSGPGASSGTSG
DHGELVVRIASLEVENQSLRGVVQELQQAISKLEARLNVLEKSSPGHRATAPQTQHVSPMRQVEPPAKKPATPAE
DDEDDDIDLFGSDNEEEDKEAAQLREERLRQYAEKKAKKPALVAKSSILLDVKPWDDETDMAQLEACVRSIQLDG
LVWGASKLVPVGYGIRKLQIQCVVEDDKVGTDLLEEEITKFEEHVQSVDIAAFNKI

FIGURE 3045

TCCCCGTACGCCCAAATGAAACCTACATGTGCAGAATGAAGCGTTTTTTCGTTGTCATCATGAAAACTCCTTTTT
TTCTACCTTTCTGTTTCTTTTTTTAAATATGTATCCTTGGGGTTTGTTTATTTTTTTTTTCTTGTTTCACTTCAA
ATGAATCTGGAAGAACTTTCCAGGGGGCTTCTCCCTGGGTGTGGTGTGTGATCGGCAGCCCCGCCGTTGTGGCCC
GAGGCTCCTGGAAGCTCATCAGCTGATGGTCTTCCTTGGCCTGTAGTAAAAATACTGCTGAATTCCTCGTTGGGC
TTTAAATCCATTGGCACTGCCACCTGGTTCCATTGTAACATAGCTTTTGGATTATTAGAAATAGGAATAACTTGA
TAGTTAAATCATTCAGCAGCATCTTTACGAATATGGTTTGGGAAGCTGGCCTTGGAGCTAAGAATCACATTGAAT
GGTTAATTTATTTTTAATTCT**ATG**AAAGGAGCTGGAGAGAGAGAAGTAAAATATTCAGGGGATTTTCTGTGTTTT
AAAAGAGAAAACCTCCTGATTGCAAGCTCTAAAATAAATGCTAAGATTTGTCACACTTTCAGCCCACGGGAGATT
TGCTTTTCTCGCATAGTATGGACTCACCAGGATCTGAAATTAGGGGCTTTCCTTAGAGGTGGCCTCAGGCTTTCC
TACCCCCACAGTTGGATTATGCAGAGAAGGTCACTGGGTCCTGAGGCTGCTGCCGAGGCGTGCTGTCCCGGGTGG
ACAGCGTGGCCCTGTCATCTTTCATTAGGATGTGTGTGCCTGTGCCGCACCAGCCACAGGTCAGGATGCCAGCCC
CTGCACGCCCTGCGTGCTCATTTGAAAACTGAGGGTATCTGGGAAGTCACCTTACAAGGTGCCGAGGAGCAGATG
GCTAATTTAAAGGCAATCTGTATGTGCTCTGAGCCTCCCAAATTATCCATTTCT**TGA**ATCCTCAATGTGTGAAAT
TCAGCACACTAAGTCCTCACAGGCTAGGAAATCAAATGCTGGACAGGCCATTCCCTACCATCATCTGGAGTATTC
AGAGTATTTGGAATATTCACAGTCTTCAAGGTGTAGCTGTCGGGCTCTGTGAAGGATACCTTGCATTTATAGGGA
TCGTCAGGTCTCCTCTTCCTACGTATTTGAAGTATTATGGCTTGGAGTACTTTCTCCACCAATGAAGAAAAGTTT
ATATGGCCTCTCCTACGCTCTTGTCTTGTCCCAAAAGTAGGGCTTAACTCTGTCCTTGCCATCAATCTGTGCACA
TGTTATGGAGTGACCATGGTGAATGGGCGATAGAGGTTCCTTCCTAGGAGAAACTTTCCCAGCTTCCCCAAATGT
GAGAGGGGCGCCTCTCTCCCGAATTCCCCAGAGCCCTTTCCTCCCTTCCCTCTGCCCTCACCTCCCTGGATGCTT
CAGGATACTCTGTGGATACTCTTCCGTGCTCCAGGAGAGCATGGCCCCGTGGCTGATAGACTCAGCTCTCACCCC
TCTAAGAGCTGCTCATGAGTATCCTCGAGTGGATGAGTGAACAGATTTCTAACTCAACAGACATAAATCCCCAGT
GGAGCTTAAGTTAAATGCCTGGTTTTTAAATTAAGAAATATGACTTCAGCAATATGTATAAACCAAAGGAACATT
AAACTAATGATAGTATCTTTACAAATGAGTTGTTGAGGATTTGGAGATAGTTTGTATAACATAAAACATAACAAA
TACAGTAGAAAGCATATGGTAGTGGGATTGAAGAAACCCGAGAGGTTATTTATCCCAAACACCACCTGATGTTAC
AGTGCTTATTGAGTGATTGATACTGTGTCCTACGTAGAGGGGGCACATAAACAATTCACATGTAATTTTTCTGTA
TTACATTGACAGATATATATAAAATGATCTCTGCATCTAAAATTCAAGCAGTCCAGCCTGGAATACTATCACCAA
AAAGTGAAAACTGATTTTAGAAACGAATAATATTTTGTTGTGAACAACTCTGAAAACATACTGGTCGATGAGGTT
TATAGCTAGAGTCTAAAATGCCACATTTATATGGGTGAAACATTTTCAGCTTCAGGAGAAAATAAAACC

FIGURE 3046

MKGAGEREVKYSGDFLCFKRENLLIASSKINAKICHTFSPREICFSRIVWTHQDLKLGAFLRGGLRLSYPHSWIM
QRRSLGPEAAAEACCPGWTAWPCHLSLGCVCLCRTSHRSGCQPLHALRAHLKTEGIWEVTLQGAEEQMANLKAIC
MCSEPPKLSIS

FIGURE 3047

ACTCTTCTGGTCCCCACAGACTCAGAGAGAACCCACC**ATG**GTGCTGTCTCCTGCCGACAAGACCAACGTCAAGGC
CGCCTGGGGTAAGGTCGGCGCGCACGCTGGCGAGTATGGTGCGGAGGCCCTGGAGAGGATGTTCCTGTCCTTCCC
CACCACCAAGACCTACTTCCCGCACTTCGACCTGAGCCACGGCTCTGCCCAGGTTAAGGGCCACGGCAAGAAGGT
GGCCGACGCGCTGACCAACGCCGTGGCGCACGTGGACGACATGCCCAACGCGCTGTCCGCCCTGAGCGACCTGCA
CGCGCACAAGCTTCGGGTGGACCCGGTCAACTTCAAGCTCCTAAGCCACTGCCTGCTGGTGACCCTGGCCGCCCA
CCTCCCCGCCGAGTTCACCCCTGCGGTGCACGCCTCCCTGGACAAGTTCCTGGCTTCTGTGAGCACCGTGCTGAC
CTCCAAATACCGT**TAA**GCTGGAGCCTCGGTGGCCATGCTTCTTGCCCCTTGGGCCTCCCCCCAGCCCCTCCTCCC
CTTCCTGCACCCGTACCCCCGTGGTCTTTGAATAAAGTCTGAGTGGGCGGC

FIGURE 3048

MVLSPADKTNVKAAWGKVGAHAGEYGAEALERMFLSFPTTKTYFPHFDLSHGSAQVKGHGKKVADALTNAVAHVD
DMPNALSALSDLHAHKLRVDPVNFKLLSHCLLVTLAAHLPAEFTPAVHASLDKFLASVSTVLTSKYR

FIGURE 3049

GGAGTGCGGGGCGCCCGGCGCCAGGGGAGCCGCCACAGCCATGGATTGCAAAGATAGACCAGCTTTTCCAGTTAA
GAAGTTAATACAAGCCCGTCTGCCGTTTAAGCGCCTGAATCTTGTCCCAAAGGGGAAAGCCGATGACATGTCAGA
CGATCAGGGTACTTCTGTGCAAAGTAAAAGCCCCGATTTAGAGGCCTCTTTGGACACCTTGGAAAACAACTGTCA
TGTGGGTTCTGACATAGACTTTAGACCGAAACTTGTCAACGGGAAGGGTCCCTTAGATAACTTTTTAAGAAATAG
AATCGAAACCAGTATTGGCCAGAGCACAGTCATCATTGATTTGACAGAGGACTCGAATGAGCAGCCAGACAGTCT
TGTGGACCACAATAAACTAAATTCTGAAGCCTCTCCCTCCAGGGAGGCAATAAATGGCCAGCGAGAAGACACTGG
GGATCAGCAGGGGTTGTTGAAGGCCATTCAGAACGACAAGTTGGCATTTCCTGGAGAGACCCTTTCAGACATTCC
TTGCAAAACAGAGGAGGAGGGTGTTGGCTGTGGAGGTGCAGGGAGGAGAGGCGACTCCCAGGAATGTTCGCCACG
GAGCTGCCCGGAGCTGACGAGTGGCCCGAGAATGTGCCCCAGAAAGGAGCAGGACAGTTGGAGTGAAGCTGGGGG
CATCCTGTTCAAAGGGAAGGTGCCTATGGTGGTCTTGCAGGACATCTTGGCTGTGAGACCACCGCAAATCAAGTC
CCTTCCAGCCACACCCCAAGGCAAGAACATGACCCCTGAGAGTGAGGTGCTGGAATCTTTCCCCGAAGAAGACTC
TGTACTCAGCCATTCGTCCCTGAGCTCTCCCTCTTCCACCAGCTCGCCCGAGGGGCCGCCTGCTCCCCCAAAGCA
GCACAGCAGTACCAGTCCCTTCCCCACCTCCACGCCCCTCCGCAGAATAACTAAGAAATTCGTCAAAGGCTCTAC
AGAGAAGAACAAGCTCAGACTGCAAAGAGATCAGGAGCGTCTGGGCAAGCAGCTCAAGTTACGTGCAGAAAGGGA
AGAAAAGGAGAAGCTGAAAGAGGAGGCCAAGCGGGCCAAGGAGGAGGCCAAGAAGAAGAAGGAGGAAGAGAAGGA
GCTTAAGGAAAAGGAGAGGCGGGAGAAGCGGGAGAAGGATGAGAAGGAGAAGGCGGAGAAGCAGCGGCTCAAGGA
GGAGCGGCGCAAGGAGAGACAGGAAGCCCTGGAGGCTAAACTTGAGGAAAAAAGGAAAAAGGAAGAAGAGAAACG
GTTAAGAGAAGAAGAGAAGCGCATTAAAGCAGAGAAGGCCGAAATCACGAGGTTCTTCCAGAAACCAAAGACTCC
ACAGGCCCCCAAGACCCTGGCCGGCTCCTGTGGGAAGTTTGCCCCCTTTGAAATTAAAGAGCACATGGTCCTGGC
CCCTCGGCGTCGGACCGCTTTCCATCCAGACCTCTGCAGTCAGCTGGACCAGCTCCTCCAGCAGCAGAGCGGCGA
GTTCTCCTTCTTGAAAGACCTCAAAGGCCGGCAGCCCCTGAGGTCCGGACCCACGCACGTTTCCACCCGGAATGC
AGATATTTTTAACAGTGATGTCGTCATCGTGGAGCGTGGGAAGGGCGACGGTGTTCCCGAGAGGAGGAAGTTTGG
CAGGATGAAGCTCCTGCAGTTCTGTGAGAACCACCGGCCTGCCTACTGGGGTACCTGGAATAAGAAGACGGCACT
CATCCGCGCGCGAGACCCCTGGGCCCAGGACACGAAGCTCCTGGACTATGAGGTGGACAGTGATGAGGAGTGGGA
AGAAGAGGAGCCTGGGGAGTCCCTGTCCCACAGTGAGGGGGATGATGATGACGACATGGGAGAGGATGAAGATGA
GGACGATGGTTTCTTTGTGCCCCATGGGTACCTGTCTGAGGACGAAGGTGTGACAGAGGAGTGTGCCGACCCTGA
GAACCATAAGGTCCGCCAGAAACTGAAGGCCAAGGAGTGGGACGAGTTCCTGGCTAAGGGGAAGCGCTTTCGCGT
CCTGCAACCTGTGAAGATCGGCTGCGTGTGGGCGGCTGACAGAGACTGCGCAGGCGATGACCTGAAGGTACTGCA
GCAGTTCGCAGCCTGCTTCCTGGAGACCCTGCCGGCCCAGGAGGAGCAGACGCCCAAGGCCTCCAAGCGGGAGAG
GAGAGACGAGCAGATCCTGGCCCAGCTGCTGCCGCTCCTGCACGGCAATGTGAACGGGAGCAAGGTCATCATCCG
GGAGTTCCAGGAGCACTGCCGCCGGGGACTGCTCAGCAACCACACCGGCAGCCCGCGGACGCCCTCCACCACCTA
CCTGCACACCCCCACCCCCAGCGAGGATGCCGCCATCCCCTCTAAGTCCCGGCTCAAGCGGCTCATTTCCGAGAA
CTCAGTGTATGAGAAGCGGCCTGACTTCAGGATGTGCTGGTACGTGCACCCGCAGGTGCTACAGAGCTTCCAGCA
GGAGCACCTGCCCGTGCCGTGCCAGTGGAGCTATGTGACATCGGTGCCCTCGGCCCCCAAAGAGGACAGTGGCAG
CGTCCCCTCCACGGGGCCCAGCCAGGGCACTCCCATCTCGCTGAAGAGGAAGTCAGCGGGCAGCATGTGCATCAC
CCAATTCATGAAGAAGCGCAGGCACGACGGCCAGATTGGTGCTGAAGACATGGACGGCTTCCAGGCAGACACGGA
GGAGGAGGAAGAGGAGGAGGGCGACTGTATGATCGTGGATGTCCCGGATGCTGTGGAGGTCCAAGCCCCGTGTGG
AGCCGCTTCCGGAGCTGGGGGTGGTGTGGGGGTGGACACCGGCAAGGCCACCCTGACCGCGAGCCCACTGGGTGC
ATCCTGAGAGCAGGGGTGACGTATGTAGAACGCTTAGGGTGTCCTCCCCACAGAGCAGATACTTGAACCGACTCA
ATTCCTGTGTAAAGAGCACTTTGTCCTGCTTCACGGACCTCCCCAAAGTGTGCAGAGTTCTATATAGGATGCTGG
ATTAGTTCCTTTGATATTTGTAAAAATTCCCCCAAGAGCCGCATATGAATCTGCCCTTTAATAAAGCATTATTGA
GATTGCTGGCCTATTGGGGAAGCTGCGGGCACAGGA

FIGURE 3050

MDCKDRPAFPVKKLIQARLPFKRLNLVPKGKADDMSDDQGTSVQSKSPDLEASLDTLENNCHVGSDIDFRPKLVN
GKGPLDNFLRNRIETSIGQSTVIIDLTEDSNEQPDSLVDHNKLNSEASPSREAINGQREDTGDQQGLLKAIQNDK
LAFPGETLSDIPCKTEEEGVGCGGAGRRGDSQECSPRSCPELTSGPRMCPRKEQDSWSEAGGILFKGKVPMVVLQ
DILAVRPPQIKSLPATPQGKNMTPESEVLESFPEEDSVLSHSSLSSPSSTSSPEGPPAPPKQHSSTSPFPTSTPL
RRITKKFVKGSTEKNKLRLQRDQERLGKQLKLRAEREEKEKLKEEAKRAKEEAKKKKEEEKELKEKERREKREKD
EKEKAEKQRLKEERRKERQEALEAKLEEKRKKEEEKRLREEEKRIKAEKAEITRFFQKPKTPQAPKTLAGSCGKF
APFEIKEHMVLAPRRRTAFHPDLCSQLDQLLQQQSGEFSFLKDLKGRQPLRSGPTHVSTRNADIFNSDVVIVERG
KGDGVPERRKFGRMKLLQFCENHRPAYWGTWNKKTALIRARDPWAQDTKLLDYEVDSDEEWEEEEPGESLSHSEG
DDDDDMGEDEDEDDGFFVPHGYLSEDEGVTEECADPENHKVRQKLKAKEWDEFLAKGKRFRVLQPVKIGCVWAAD
RDCAGDDLKVLQQFAACFLETLPAQEEQTPKASKRERRDEQILAQLLPLLHGNVNGSKVIIREFQEHCRRGLLSN
HTGSPRTPSTTYLHTPTPSEDAAIPSKSRLKRLISENSVYEKRPDFRMCWYVHPQVLQSFQQEHLPVPCQWSYVT
SVPSAPKEDSGSVPSTGPSQGTPISLKRKSAGSMCITQFMKKRRHDGQIGAEDMDGFQADTEEEEEEEGDCMIVD
VPDAVEVQAPCGAASGAGGGVGVDTGKATLTASPLGAS

FIGURE 3051

AGGTTAATCTTAAAAGCCCAGGTTACCCGCGGAAATTTATGCTGTCCGGTCACCGTGACAATGCAGCTGAGGAAC
CCAGAACTACATCTGGGCTGCGCGCTTGCGCTTCGCTTCCTGGCCCTCGTTTCCTGGGACATCCCTGGGGCTAGA
GCACTGGACAATGGATTGGCAAGGACGCCTACCATGGGCTGGCTGCACTGGGAGCGCTTCATGTGCAACCTTGAC
TGCCAGGAAGAGCCAGATTCCTGCATCAGTGAGAAGCTCTTCATGGAGATGGCAGAGCTCATGGTCTCAGAAGGC
TGGAAGGATGCAGGTTATGAGTACCTCTGCATTGATGACTGTTGGATGGCTCCCCAAAGAGATTCAGAAGGCAGA
CTTCAGGCAGACCCTCAGCGCTTTCCTCATGGGATTCGCCAGCTAGCTAATTATGTTCACAGCAAAGGACTGAAG
CTAGGGATTTATGCAGATGTTGGAAATAAAACCTGCGCAGGCTTCCCTGGGAGTTTTGGATACTACGACATTGAT
GCCCAGACCTTTGCTGACTGGGGAGTAGATCTGCTAAAATTTGATGGTTGTTACTGTGACAGTTTGGAAAATTTG
GCAGATGGTTATAAGCACATGTCCTTGGCCCTGAATAGGACTGGCAGAAGCATTGTGTACTCCTGTGAGTGGCCT
CTTTATATGTGGCCCTTTCAAAAGCCCAATTATACAGAAATCCGACAGTACTGCAATCACTGGCGAAATTTTGCT
GACATTGATGATTCCTGGAAAAGTATAAAGAGTATCTTGGACTGGACATCTTTTAACCAGGAGAGAATTGTTGAT
GTTGCTGGACCAGGGGGTTGGAATGACCCAGATATGTTAGTGATTGGCAACTTTGGCCTCAGCTGGAATCAGCAA
GTAACTCAGATGGCCCTCTGGGCTATCATGGCTGCTCCTTTATTCATGTCTAATGACCTCCGACACATCAGCCCT
CAAGCCAAAGCTCTCCTTCAGGATAAGGACGTAATTGCCATCAATCAGGACCCCTTGGGCAAGCAAGGGTACCAG
CTTAGACAGGGAGACAACTTTGAAGTGTGGGAACGACCTCTCTCAGGCTTAGCCTGGGCTGTAGCTATGATAAAC
CGGCAGGAGATTGGTGGACCTCGCTCTTATACCATCGCAGTTGCTTCCCTGGGTAAAGGAGTGGCCTGTAATCCT
GCCTGCTTCATCACACAGCTCCTCCCTGTGAAAAGGAAGCTAGGGTTCTATGAATGGACTTCAAGGTTAAGAAGT
CACATAAATCCCACAGGCACTGTTTTGCTTCAGCTAGAAAATACAATGCAGATGTCATTAAAAGACTTACTTTAA

FIGURE 3052

MQLRNPELHLGCALALRFLALVSWDIPGARALDNGLARTPTMGWLHWERFMCNLDCQEEPDSCISEKLFMEMAEL
MVSEGWKDAGYEYLCIDDCWMAPQRDSEGRLQADPQRFPHGIRQLANYVHSKGLKLGIYADVGNKTCAGFPGSFG
YYDIDAQTFADWGVDLLKFDGCYCDSLENLADGYKHMSLALNRTGRSIVYSCEWPLYMWPFQKPNYTEIRQYCNH
WRNFADIDDSWKSIKSILDWTSFNQERIVDVAGPGGWNDPDMLVIGNFGLSWNQQVTQMALWAIMAAPLFMSNDL
RHISPQAKALLQDKDVIAINQDPLGKQGYQLRQGDNFEVWERPLSGLAWAVAMINRQEIGGPRSYTIAVASLGKG
VACNPACFITQLLPVKRKLGFYEWTSRLRSHINPTGTVLLQLENTMQMSLKDLL

FIGURE 3053

GGCACGAGGTTCCGAGTTGCGATGCTGTACTTCTCTTTGTTTTGGGCGGCTCGGCCTCTGCAGAGATGTGGGCAG
CTGGTCAGGATGGCCATTCGGGCTCAGCACAGCAACGCAGCCCAGACTCAGACTGGGGAAGCAAACAGGGGCTGG
ACAGGCCAGGAGAGCCTGTCGGACAGTGATCCTGAGATGTGGGAGTTGCTGCAGAGGGAGAAGGACAGGCAGTGT
CGTGGCCTGGAGCTCATTGCCTCAGAGAACTTCTGCAGCCGAGCTGCGCTGGAGGCCCTGGGGTCCTGTCTGAAC
AACAAGTACTCGGAGGGTTATCCTGGCAAGAGATACTATGGGGGAGCAGAGGTGGTGGATGAAATTGAGCTGCTG
TGCCAGCGCCGGGCCTTGGAAGCCTTTGACCTGGATCCTGCACAGTGGGGAGTCAATGTCCAGCCCTACTCCGGG
TCCCCAGCCAACCTGGCCGTCTACACAGCCCTTCTGCAACCTCACGACCGGATCATGGGGCTGGACCTGCCCGAT
GGGGGCCATCTCACCCACGGCTACATGTCTGACGTCAAGCGGATATCAGCCACGTCCATCTTCTTCGAGTCTATG
CCCTATAAGCTCAACCCCAAAACTGGCCTCATTGACTACAACCAGCTGGCACTGACTGCTCGACTTTTCCGGCCA
CGGCTCATCATAGCTGGCACCAGCGCCTATGCTCGCCTCATTGACTACGCCCGCATGAGAGAGGTGTGTGATGAA
GTCAAAGCACACCTGCTGGCAGACATGGCCCACATCAGTGGCCTGGTGGCTGCCAAGGTGATTCCCTCGCCTTTC
AAGCACGCGGACATCGTCACCACCACTACTCACAAGACTCTTCGAGGGGCCAGGTCAGGGCTCATCTTCTACCGG
AAAGGGGTGAAGGCTGTGGACCCCAAGACTGGCCGGGAGATCCCTTACACATTTGAGGACCGAATCAACTTTGCC
GTGTTCCCATCCCTGCAGGGGGGCCCCCACAATCATGCCATTGCTGCAGTAGCTGTGGCCCTAAAGCAGGCCTGC
ACCCCCATGTTCCGGGAGTACTCCCTGCAGGTTCTGAAGAATGCTCGGGCCATGGCAGATGCCCTGCTAGAGCGA
GGCTACTCACTGGTATCAGGTGGTACTGACAACCACCTGGTGCTGGTGGACCTGCGGCCCAAGGGCCTGGATGGA
GCTCGGGCTGAGCGGGTGCTAGAGCTTGTATCCATCACTGCCAACAAGAACACCTGTCCTGGAGACCGAAGTGCC
ATCACACCGGGCGGCCTGCGGCTTGGGGCCCCAGCCTTAACTTCTCGACAGTTCCGTGAGGATGACTTCCGGAGA
GTTGTGGACTTTATAGATGAAGGGGTCAACATTGGCTTAGAGGTGAAGAGCAAGACTGCCAAGCTCCAGGATTTC
AAATCCTTCCTGCTTAAGGACTCAGAAACAAGTCAGCGTCTGGCCAACCTCAGGCAACGGGTGGAGCAGTTTGCC
AGGGCCTTCCCCATGCCTGGTTTTGATGAGCATTGAAGGCACCTGGGAAATGAGGCCCACAGACTCAAAGTTACT
CTCCTTCCCCCTACCTGGGCCAGTGAAATAGAAAGCCTTTCTATTTTTTGGTGCGGGAGGGAAGACCTCTCACTT
AGGGCAAGAGCCAGGTATAGTCTCCCTTCCCAGAATTTGTAACTGAGAAGATCTTTTCTTTTTCCTTTTTTTGGT
AACAAGACTTAGAAGGAGGGCCCAGGCACTTTCTGTTTGAACCCCTGTCATGATCACAGTGTCAGAGACGCGTCC
TCTTTCTTGGGGAAGTTGAGGAGTGCCCTTCAGAGCCAGTAGCAGGCAGGGGTGGGTAGGCACCCTCCTTCCTGT
TTTTATCTAATAAAATGCTAACCTGCAAAAAAAAAAAAAAAAAAAAAAAAAATCAGACTAGGTGGACTCTGCCTG
CCTACCTGGTCTGGGAAGATGTTCTACCATATCTCCCTAGAGCACGAAATCCTGCTGCACCCGCGCTACTTCGGC
CCCAACTTGCTCAACACGGTGAAGCAGAAGCTCTTCACCGAGGTGGAGGGGACCTGCACAGGGAAGTGAGTGTCG
AGCTCACCGCACCGCCAGATCGTTCGATGCGCACACGGGGCGCTATACCTGCAACCCCTCCCCAACTCCTACTCG
TCCTGCCACCCACTCTGGGGACCCCTCTCCTCTCTCAGGCAGCCAGTTGCTTCCTGCTTTGGGTTCCCAGGGCGC
CCTCTGCAATGCTGGACAATAAGACTTCCTTCTCTCAGCTGAGATGGGTCATTCATTGACTCCTCAAACATTTTA
AAAACCCTTGGTGTGTGCCAGGACCCGTGTTGGGCTCAGAACAAGGTAGAATGGGAACAAGATAGAATGAGGACA
GCCCCTGTGGAGCTCACAGTGTAATCATTGTTCCTGTGTCTGCTCTCCCTCTGTCATTCTGCTGGTTTTCTCTTA
TCCCCTGTGCCCAGGGACCACACACCATGGGCCTCTATATATCTTCTGAATGAATGACCAGAAAAAGCAGATCGA
GAGTTTGGGGGAGGAAGGAAGTAGCCTGGGATTTGACCATCTCTGGGCTTTGCACAGAGGGGCCTCTCTGATATT
AATGAGCTGGGACCCAGCTCAGGGCAGTGGAGTACTTGGGCCTCCAGCATCAGAAAAACCTGCAGGAACATGCAG
ATTCCTGAGCCTCCTTATTCCCTACAGAATCAAGACTGTCTGGGGCAGACCTGAGAATCTGCATTTTAAGAAGAT
GATTCTCAGGCATCCCGAAGATTGAGATCTGTTGCCTCAAGGACTCCAGCCTTCTTGGACATTTATTGTGAAATT
ACCAGAACAGCATTTGGTCTTACACATACTGATCTCTGTTCTGTCTTCTTTTGGTCATTAAGCTCTCTGGGAGCA
GAGGTGCTATCTACTTGTCCTTTTGCTCTCCCCGACCCTACCCCCAAGAGCTCAGCGACTTTTATTGCAGATGTC
TTTAGAGGCTCTTGGACACACAGTGTCTTCCTGTTTCTCATCCTCCTTGCAGGTTGGACTCTTCACAGAAATTGG
GCCCATGTCTTGCTTCATCTCTCGACATTCCATCCCTTCAGAGATGGAGTTTGATCCTAACTCCAACCCACCATG
TTACAAGACAATGGATGAGGATATTGTGATTCAGCAGGACGATGAGATCCGCTTAAAGATTGTGGGGACCCGTGT
GGACAAGAATGACATTTTTGCTATTGGCTCCCTGATGGACGATTACTTGGGGCTTGTAAGCTGAGCCTGGTGGCC
TCCTACCCTTGGTCCTACTCTAGGAAGTGTGATTGTCACACTTATCATGTTGTCCAGAGGTCCAGTCTGGCTGCT
GTTGTGGAGGCAAGGAAGGCAACTCATCCCAGAAGGCATCTGGTGCTTCTTGTAGCTTAACTACTGCCTCCTCAT
TTTTCAGTATGTGTTCTAAGTATAAAAAGTCCTTGGTTCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3054

MLYFSLFWAARPLQRCGQLVRMAIRAQHSNAAQTQTGEANRGWTGQESLSDSDPEMWELLQREKDRQCRGLELIA
SENFCSRAALEALGSCLNNKYSEGYPGKRYYGGAEVVDEIELLCQRRALEAFDLDPAQWGVNVQPYSGSPANLAV
YTALLQPHDRIMGLDLPDGGHLTHGYMSDVKRISATSIFFESMPYKLNPKTGLIDYNQLALTARLFRPRLIIAGT
SAYARLIDYARMREVCDEVKAHLLADMAHISGLVAAKVIPSPFKHADIVTTTTHKTLRGARSGLIFYRKGVKAVD
PKTGREIPYTFEDRINFAVFPSLQGGPHNHAIAAVAVALKQACTPMFREYSLQVLKNARAMADALLERGYSLVSG
GTDNHLVLVDLRPKGLDGARAERVLELVSITANKNTCPGDRSAITPGGLRLGAPALTSRQFREDDFRRVVDFIDE
GVNIGLEVKSKTAKLQDFKSFLLKDSETSQRLANLRQRVEQFARAFPMPGFDEH

FIGURE 3055

CTCGCCCGTCCGGCGCACGCTCCGCCTCCGTCAGTTGGCTCCGCTGTCGGGTGCGCGGCGTGGAGCGGCAGCCGG
TCTGGACGCGCGGCCGGGGCTGGGGGCTGGGAGCGCGGCGCGCAAGATCTCCCCGCGCGAGAGCGGCCCCTGCCA
CCGGGCGAGGCCTGCGCCGCG**ATG**GCAGAGATGGGCAGTAAAGGGGTGACGGCGGGAAAGATCGCCAGCAACGTG
CAGAAGAAGCTCACCCGCGCGCAGGAGAAGGTTCTCCAGAAGCTGGGGAAGGCAGATGAGACCAAGGATGAGCAG
TTTGAGCAGTGCGTCCAGAATTTCAACAAGCAGCTGACGGAGGGCACCCGGCTGCAGAAGGATCTCCGGACCTAC
CTGGCCTCCGTCAAAGCCATGCACGAGGCTTCCAAGAAGCTGAATGAGTGTCTGCAGGAGGTGTATGAGCCCGAT
TGGCCCGGCAGGGATGAGGCAAACAAGATCGCAGAGAACAACGACCTGCTGTGGATGGATTACCACCAGAAGCTG
GTGGACCAGGCGCTGCTGACCATGGACACGTACCTGGGCCAGTTCCCCGACATCAAGTCACGCATTGCCAAGCGG
GGGCGCAAGCTGGTGGACTACGACAGTGCCCGGCACCACTACGAGTCCCTTCAAACTGCCAAAAAGAAGGATGAA
GCCAAAATTGCCAAGGCCGAGGAGGAGCTCATCAAAGCCCAGAAGGTGTTTGAGGAGATGAATGTGGATCTGCAG
GAGGAGCTGCCGTCCCTGTGGAACAGCCGCGTAGGTTTCTACGTCAACACGTTCCAGAGCATCGCGGGCCTGGAG
GAAAACTTCCACAAGGAGATGAGCAAGCTCAACCAGAACCTCAATGATGTGCTGGTCGGCCTGGAGAAGCAACAC
GGGAGCAACACCTTCACGGTCAAGGCCCAGCCCAGTGACAACGCGCCTGCAAAAGGGAACAAGAGCCCTTCGCCT
CCAGATGGCTCCCCTGCCGCCACCCCCGAGATCAGAGTCAACCACGAGCCAGAGCCGGCCGGCGGGGCCACGCCC
GGGGCCACCCTCCCCAAGTCCCCATCTCAGCTCCGGAAAGGCCCACCAGTCCCTCCGCCTCCCAAACACACCCCG
TCCAAGGAAGTCAAGCAGGAGCAGATCCTCAGCCTGTTTGAGGACACGTTTGTCCCTGAGATCAGCGTGACCACC
CCCTCCCAGCCAGCAGAGGCCTCGGAGGTGGCGGGTGGGACCCAACCTGCGGCTGGAGCCCAGGAGCCAGGGGAG
ACGGCGGCAAGTGAAGCAGCCTCCAGCTCTCTTCCTGCTGTCGTGGTGGAGACCTTCCCAGCAACTGTGAATGGC
ACCGTGGAGGGCGGCAGTGGGGCCGGGCGCTTGGACCTGCCCCCAGGTTTCATGTTCAAGGTACAGGCCCAGCAC
GACTACACGGCCACTGACACAGACGAGCTGCAGCTCAAGGCTGGTGATGTGGTGCTGGTGATCCCCTTCCAGAAC
CCTGAAGAGCAGGATGAAGGCTGGCTCATGGGCGTGAAGGAGAGCGACTGGAACCAGCACAAGGAGCTGGAGAAG
TGCCGTGGCGTCTTCCCCGAGAACTTCACTGAGAGGGTCCCA**TGA**CGGCGGGGCCCAGGCAGCCTCCGGGCGTGT
GAAGAACACCTCCTCCCGAAAAATGTGTGGTTCTTTTTTTTGTTTTGTTTTCGTTTTTCATCTTTTGAAGAGCAA
AGGGAAATCAAGAGGAGACCCCCAGGCAGAGGGGCGTTCTCCCAAAGATTAGGTCGTTTTCCAAAGAGCCGCGTC
CCGGCAAGTCCGGCGGAATTCACCAGTGTTCCTGAAGCTGCTGTGTCCTCTAGTTGAGTTTCTGGCGCCCCTGCC
TGTGCCCGCATGTGTGCCTGGCCGCAGGGCGGGGCTGGGGGCTGCCGAGCCACCATGCTTGCCTGAAGCTTCGGC
CGCGCCACCCGGGCAAGGGTCCTCTTTTCCTGGCAGCTGCTGTGGGTGGGGCCCAGACACCAGCCTAGCCTGGCT
CTGCCCCGCAGACGGTCTGTGTGCTGTTTGAAAATAAATCTTAGTGTTCAAAACAAAATGAAACAAAAAAAAAAT
GATAAAAACTTTCAG

FIGURE 3056

MAEMGSKGVTAGKIASNVQKKLTRAQEKVLQKLGKADETKDEQFEQCVQNFNKQLTEGTRLQKDLRTYLASVKAM
HEASKKLNECLQEVYEPDWPGRDEANKIAENNDLLWMDYHQKLVDQALLTMDTYLGQFPDIKSRIAKRGRKLVDY
DSARHHYESLQTAKKKDEAKIAKAEEELIKAQKVFEEMNVDLQEELPSLWNSRVGFYVNTFQSIAGLEENFHKEM
SKLNQNLNDVLVGLEKQHGSNTFTVKAQPSDNAPAKGNKSPSPPDGSPAATPEIRVNHEPEPAGGATPGATLPKS
PSQLRKGPPVPPPPKHTPSKEVKQEQILSLFEDTFVPEISVTTPSQPAEASEVAGGTQPAAGAQEPGETAASEAA
SSSLPAVVVETFPATVNGTVEGGSGAGRLDLPPGFMFKVQAQHDYTATDTDELQLKAGDVVLVIPFQNPEEQDEG
WLMGVKESDWNQHKELEKCRGVFPENFTERVP

FIGURE 3057

TGCGCGGCTTCCTGCCTCCATGCCACTCCAGACTGCACCGGCATGGCACTGACTGCCCACCCCTCCTGCCTCCTG
GCCCTGTTGGTGGCAGGCCTAGCCCAAGGCATCAGAGGCCCCCTTAGGGCCCAGGACCTAGGTCCCCAGCCGCTA
GAGCTGAAAGAGGCCTTCAAGTTGTTCCAGATCCAGTTCAACCGGAGTTACCTGAGCCCAGAAGAGCATGCTCAC
CGCCTGGACATCTTTGCCCACAACCTGGCCCAGGCTCAGAGGCTGCAGGAGGAGGACTTGGGCACAGCTGAGTTT
GGGGTGACTCCATTCAGTGACCTCACAGAGGAGGAGTTTGGCCAGCTCTATGGCTATCGGAGGGCAGCTGGAGGG
GTCCCCAGCATGGGCAGAGAAATAAGGTCTGAAGAGCCAGAGGAGTCAGTACCTTTCAGCTGTGACTGGCGGAAG
GTGGCCGGCGCCATCTCACCCATCAAGGACCAGAAAAACTGCAACTGCTGCTGGGCCATGGCAGCGGCAGGCAAC
ATAGAGACCCTGTGGCGCATCAGTTTCTGGGATTTTGTGGACGTCTCCGTGCAGGAACTGCTGGACTGTGGCCGC
TGTGGGGATGGCTGCCACGGTGGCTTCGTCTGGGACGCGTTCATAACTGTCCTCAACAACAGCGGCCTGGCCAGT
GAAAAGGACTACCCGTTCCAGGGCAAAGTCAGAGCCCACAGGTGCCACCCCAAGAAGTACCAGAAGGTGGCCTGG
ATCCAGGACTTCATCATGCTGCAGAACAACGAGCACAGAATTGCGCAGTACCTGGCCACTTATGGCCCCATCACC
GTGACCATCAACATGAAGCCCCTTCAGCTATACCGGAAAGGTGTGATCAAGGCCACACCCACCACCTGTGACCCC
CAGCTTGTGGACCACTCTGTCCTGCTGGTGGGTTTTGGCAGCGTCAAGTCAGAGGAGGGGATATGGGCAGAGACA
GTCTCATCGCAGTCTCAGCCTCAGCCTCCACACCCCACCCCATACTGGATCCTGAAGAACTCCTGGGGGGCCCAA
TGGGGAGAGAAGGGCTATTTCCGGCTGCACCGAGGGAGCAATACCTGTGGCATCACCAAGTTCCCGCTCACTGCC
CGTGTGCAGAAACCGGATATGAAGCCCCGAGTCTCCTGCCCTCCCTGACCACCTGGCCCCCTCAGCTCTGTCCTG
TTAGGCCAACTGCCTCCTTGCCAGCCCCACCCCCAGGTTTTTGCCCATCCTCCCAATCTCAATACAGCCTGAATA
AACCAAGACAAGACCTC

FIGURE 3058

MALTAHPSCLLALLVAGLAQGIRGPLRAQDLGPQPLELKEAFKLFQIQFNRSYLSPEEHAHRLDIFAHNLAQAQR
LQEEDLGTAEFGVTPFSDLTEEEFGQLYGYRRAAGGVPSMGREIRSEEPEESVPFSCDWRKVAGAISPIKDQKNC
NCCWAMAAAGNIETLWRISFWDFVDVSVHELLDCGRCGDGCHGGFVWDAFITVLNNSGLASEKDYPFQGKVRAHR
CHPKKYQKVAWIQDFIMLQNNEHRIAQYLATYGPITVTINMKPLQLYRKGVIKATPTTCDPQLVDHSVLLVGFGS
VKSEEGIWAETVSSQSQPQPPHPTPYWILKNSWGAQWGEKGYFRLHRGSNTCGITKFPLTARVQKPDMKPRVSCP
P

FIGURE 3059

ATGGATTGCAGTAACGGATCGGCAGAGTGTACCGGAGAAGGAGGATCAAAAGAGGTGGTGGGGACTTTTAAGGCT
AAAGACCTAATAGTCACACCAGCTACCATTTTAAAGGAAAAACCAGACCCCAATAATCTGGTTTTTGGAACTGTG
TTCACGGATCATATGCTGACGGTGGAGTGGTCCTCAGAGTTTGGATGGGAGAAACCTCATATCAAGCCTCTTCAG
AACCTGTCATTGCACCCTGGCTCATCAGCTTTGCACTATGCAGTGGAATTATTTGAAGGATTGAAGGCATTTCGA
GGAGTAGATAATAAAATTCGACTGTTTCAGCCAAACCTCAACATGGATAGAATGTATCGCTCTGCTGTGAGGGCA
ACTCTGCCGGTATTTGACAAAGAAGAGCTCTTAGAGTGTATTCAACAGCTTGTGAAATTGGATCAAGAATGGGTC
CCATATTCAACATCTGCTAGTCTGTATATTCGTCCTGCATTCATTGGAACTGAGCCTTCTCTTGGAGTCAAGAAG
CCTACCAAAGCCCTGCTCTTTGTACTCTTGAGCCCAGTGGGACCTTATTTTTCAAGTGGAACCTTTAATCCAGTG
TCCCTGTGGGCCAATCCCAAGTATGTAAGAGCCTGGAAAGGTGGAACTGGGGACTGCAAGATGGGAGGGAATTAC
GGCTCATCTCTTTTTGCCCAATGTGAAGACGTAGATAATGGGTGTCAGCAGGTCCTGTGGCTCTATGGCAGAGAC
CATCAGATCACTGAAGTGGGAACTATGAATCTTTTTCTTTACTGGATAAATGAAGATGGAGAAGAAGAACTGGCA
ACTCCTCCACTAGATGGCATCATTCTTCCAGGAGTGACAAGGCGGTGCATTCTGGACCTGGCACATCAGTGGGGT
GAATTTAAGGTGTCAGAGAGATACCTCACCATGGATGACTTGACAACAGCCCTGGAGGGGAACAGAGTGAGAGAG
ATGTTTAGCTCTGGTACAGCCTGTGTTGTTTGCCCAGTTTCTGATATACTGTACAAAGGCGAGACAATACACATT
CCAACTATGGAGAATGGTCCTAAGCTGGCAAGCCGCATCTTGAGCAAATTAACTGATATCCAGTATGGAAGAGAA
GAGAGCGACTGGACAATTGTGCTATCCTGA

FIGURE 3060

MDCSNGSAECTGEGGSKEVVGTFKAKDLIVTPATILKEKPDPNNLVFGTVFTDHMLTVEWSSEFGWEKPHIKPLQ
NLSLHPGSSALHYAVELFEGLKAFRGVDNKIRLFQPNLNMDRMYRSAVRATLPVFDKEELLECIQQLVKLDQEWV
PYSTSASLYIRPAFIGTEPSLGVKKPTKALLFVLLSPVGPYFSSGTFNPVSLWANPKYVRAWKGGTGDCKMGGNY
GSSLFAQCEDVDNGCQQVLWLYGRDHQITEVGTMNLFLYWINEDGEEELATPPLDGIILPGVTRRCILDLAHQWG
EFKVSERYLTMDDLTTALEGNRVREMFSSGTACVVCPVSDILYKGETIHIPTMENGPKLASRILSKLTDIQYGRE
ESDWTIVLS

FIGURE 3061

GGGGCATTTTGTGCCTGCCTAGCTATCCAGACAGAGCAGCTACCCTCAGCTCTAGCTGATACTACAGACAGTACA
ACAGATCAAGAAGTATGGCAGTGACAACTCGTTTGACACGGTTGCACGAAAAGATCCTGCAAAATCATTTTGGAG
GGAAGCGGCTTAGCCTTCTCTATAAGGGTAGTGTCCATGGATTCCGTAATGGAGTTTTGCTTGACAGATGTTGTA
ATCAAGGGCCTACTCTAACAGTGATTTATAGTGAAGATCATATTATTGGAGCATATGCGGAAGAGAGTTACCAGG
AAGGAAAGTATGCTTCCATCATCCTTTTTGCACTTCAAGATACTAAAATTTCAGAATGGAAACTAGGACTATGTA
CACCAGAAACACTGTTTTGTTGTGATGTTACAAAATATAACTCCCCAACTAATTTCCAGATAGATGGAAGAAATA
GAAAAGTGATTATGGACTTAAAGACAATGGAAAATCTTGGACTTGCTCAAAATTGTACTATCTCTATTCAGGATT
ATGAAGTTTTTCGATGCGAAGATTCACTGGATGAAAGAAAGATAAAAGGGGTCATTGAGCTCAGGAAGAGCTTAC
TGTCTGCCTTGAGAACTTATGAACCATATGGATCCCTGGTTCAACAAATACGAATTCTGCTGCTGGGTCCAATTG
GAGCTGGGAAGTCCAGCTTTTTCAACTCAGTGAGGTCTGTTTTCCAAGGGCATGTAACGCATCAGGCTTTGGTGG
GCACTAATACAACTGGGATATCTGAGAAGTATAGGACATACTCTATTAGAGACGGGAAAGATGGCAAATACCTGC
CGTTTATTCTGTGTGACTCACTGGGGCTGAGTGAGAAAGAAGGCGGCCTGTGCAGGGATGACATATTCTATATCT
TGAACGGTAACATTCGTGATAGATACCAGTTTAATCCCATGGAATCAATCAAATTAAATCATCATGACTACATTG
ATTCCCCATCGCTGAAGGACAGAATTCATTGTGTGGCATTTGTATTTGATGCCAGCTCTATTCAATACTTCTCCT
CTCAGATGATAGTAAAGATCAAAAGAATTCGAAGGGAGTTGGTAAACGCTGGTGTGGTACATGTGGCTTTGCTCA
CTCATGTGGATAGCATGGATTTGATTACAAAAGGTGACCTTATAGAAATAGAGAGATGTGAGCCTGTGAGGTCCA
AGCTAGAGGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACATCTCGGTGGTTAGCAATTATTCCTCTGAGT
GGGAGCTGGACCCTGTAAAGGATGTTCTAATTCTTTCTGCTCTGAGACGAATGCTATGGGCTGCAGATGACTTCT
TAGAGGATTTGCCTTTTGAGCAAATAGGGAATCTAAGGGAGGAAATTATCAACTGTGCACAAGGAAAAAAATAGA
TATGTGAAAGGTTCACGTAAATTTCCTCACATCACAGAAGATTAAAATTCAGAAAGGAGAAAACACAGACCAAAG
AGAAGTATCTAAGACCAAAGGGATGTGTTTTATTAATGTCTAGGATGAAGAAATGCATAGAACATTGTAGTACTT
GTAAATAACTAGAAATAACATGATTTAGTCATAATTGTGAAAAATAGTAATAATTTTTCTTGGATTTATGTTCTG
TATCTGTGAAAAAATAAATTTCTTATAAAACTCGGAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3062

MAVTTRLTRLHEKILQNHFGGKRLSLLYKGSVHGFRNGVLLDRCCNQGPTLTVIYSEDHIIGAYAEESYQEGKYA
SIILFALQDTKISEWKLGLCTPETLFCCDVTKYNSPTNFQIDGRNRKVIMDLKTMENLGLAQNCTISIQDYEVFR
CEDSLDERKIKGVIELRKSLLSALRTYEPYGSLVQQIRILLLGPIGAGKSSFFNSVRSVFQGHVTHQALVGTNTT
GISEKYRTYSIRDGKDGKYLPFILCDSLGLSEKEGGLCRDDIFYILNGNIRDRYQFNPMESIKLNHHDYIDSPSL
KDRIHCVAFVFDASSIQYFSSQMIVKIKRIRRELVNAGVVHVALLTHVDSMDLITKGDLIEIERCEPVRSKLEEV
QRKLGFALSDISVVSNYSSEWELDPVKDVLILSALRRMLWAADDFLEDLPFEQIGNLREEIINCAQGKK

FIGURE 3063

AAAGCAGAATTGAGAGTTTGTTCTTACACACAAGTTTAATGCCACCTTCCTCTGTCTGCC**ATG**GACCAACAAGCA
ATATATGCTGAGTTAAACTTACCCACAGACTCAGGCCCAGAAAGTTCTTCACCTTCATCTCTTCCTCGGGATGTC
TGTCAGGGTTCACCTTGGCATCAATTTGCCCTGAAACTTAGCTGTGCTGGGATTATTCTCCTTGTCTTGGTTGTT
ACTGGGTTGAGTGTTTCAGTGACATCCTTAATACAGAAATCATCAATAGAAAAATGCAGTGTGGACATTCAACAG
AGCAGGAATAAAACAACAGAGAGACCGGGTCTCTTAAACTGCCCAATATATTGGCAGCAACTCCGAGAGAAATGC
TTGTTATTTTCTCACACTGTCAACCCTTGGAATAACAGTCTAGCTGATTGTTCCACCAAAGAATCCAGCCTGCTG
CTTATTCGAGATAAGGATGAATTGATACACACACAGAACCTGATACGTGACAAAGCAATTCTGTTTTGGATTGGA
TTAAATTTTTCATTATCAGAAAAGAACTGGAAGTGGATAAACGGCTCTTTTTTAAATTCTAATGACTTAGAAATT
AGAGGTGATGCTAAAGAAAACAGCTGTATTTCCATCTCACAGACATCTGTGTATTCTGAGTACTGTAGTACAGAA
ATCAGATGGATCTGCCAAAAAGAACTAACACCTGTGAGAAATAAAGTGTATCCTGACTCT**TGA**

FIGURE 3064

MDQQAIYAELNLPTDSGPESSSPSSLPRDVCQGSPWHQFALKLSCAGIILLVLVVTGLSVSVTSLIQKSSIEKCS
VDIQQSRNKTTERPGLLNCPIYWQQLREKCLLFSHTVNPWNNSLADCSTKESSLLLIRDKDELIHTQNLIRDKAI
LFWIGLNFSLSEKNWKWINGSFLNSNDLEIRGDAKENSCISISQTSVYSEYCSTEIRWICQKELTPVRNKVYPDS

FIGURE 3065

ATGGACACTGCCAGCCATAGCCTTGTTCTTCTCCAGCAGCTGAACATGCAGCGAGAATTTGGTTTTCTGTGTGAT
TGCACAGTTGCAATTGGAGATGTTTACTTCAAAGCCCACAGAGCAGTGCTTGCTGCTTTTTCTAACTATTTCAAG
ATGATATTTATTCACCAAACAAGTGAATGCATAAAAATACAACCAACTGACATCCAACCTGACATATTCAGCTAT
TTGTTGCACATTATGTACACGGGGAAAGGGCCAAAACAGATTGTGGATCATAGTCGTTTGGAGGAAGGGATTCGA
TTTCTTCACGCCGACTACCTTTCTCACATTGCAACTGAAATGAATCAAGTGTTCTCACCAGAGACTGTGCAGTCC
TCAAATTTATATGGCATTCAGATCTCAACAACCCAAAAAACAGTTGTCAAACAAGGACTGGAGGTCAAAGAAGCT
CCTTCCAGTAACAGTGGAAACAGAGCTGCTGTCCAGGGTGACCTCCCCCAGTTGTCTCTTGCTATTGGTCTGGAT
GATGGCACTGCAGACCAGCAGAGGGCCTGTCCTGCCACCCAGGCCCTGGAGGAGCACCAGAAGCCCCCAGTTTCC
ATCAAGCAGGAGAGATGTGACCCAGAATCTGTGATCTCCCAGAGCCACCCCTCACCCTCATCAGAGGTGACAGGC
CCCACTTTTACTGAAAACAGTGTCAAAATACACTTATGCCATTACTGTGGGGAACGTTTTGATTCCCGTAGTAAC
CTAAGGCAACATCTCCATACACATGTGTCTGGATCCCTGCCATTCGGTGTCCCTGCTTCCATTCTGGAAAGTAAT
GACCTTGGTGAAGTGCATCCCCTTAATGAAAACAGCGAGGCCCTTGAATGCCGCAGGCTCAGCTCCTTCATTGTT
AAGGAGAATGAACAGCAGCCAGACCACACCAACCGGGGTACCACAGAGCCTTTGCAGATCAGTCAAGTATCTTTG
ATCTCCAAAGACACAGAGCCAGTAGAATTAAACTGTAATTTTTCTTTTTCAAGGAAAAGAAAAATGAGCTGTACC
ATCTGTGGTCATAAATTCCCTCGAAAGAGCCAATTGTTGGAACACATGTATACACACAAAGGTAAATCTTACAGA
TATAACCGATGCCAAAGGTTTGGTAATGCATTGGCCCAGAGATTTCAGCCATACTGTGACAGCTGGTCTGATGTC
TCCCTGAAAAGTTCTCGCTTGTCACAAGAACACTTAGACTTGCCTTGTGCCTTAGAGTCAGAGCTCACACAAGAA
AATGTGGATACTATCCTAGTTGAGTAG

FIGURE 3066

MDTASHSLVLLQQLNMQREFGFLCDCTVAIGDVYFKAHRAVLAAFSNYFKMIFIHQTSECIKIQPTDIQPDIFSY
LLHIMYTGKGPKQIVDHSRLEEGIRFLHADYLSHIATEMNQVFSPETVQSSNLYGIQISTTQKTVVKQGLEVKEA
PSSNSGNRAAVQGDLPQLSLAIGLDDGTADQQRACPATQALEEHQKPPVSIKQERCDPESVISQSHPSPSSEVTG
PTFTENSVKIHLCHYCGERFDSRSNLRQHLHTHVSGSLPFGVPASILESNDLGEVHPLNENSEALECRRLSSFIV
KENEQQPDHTNRGTTEPLQISQVSLISKDTEPVELNCNFSFSRKRKMSCTICGHKFPRKSQLLEHMYTHKGKSYR
YNRCQRFGNALAQRFQPYCDSWSDVSLKSSRLSQEHLDLPCALESELTQENVDTILVE

FIGURE 3067

GGCACGAGGAGATGGCGATGGAGATGAGGCTTCCAGTGGCTCGCAAGCCTCTTAGCGAGAGACTGGGCCGCGACA
CTAAGAAACATCTAGTGGTGCCGGGGGATACAATCACTACGGACACAGGATTCATGCGGGGCCATGGAACGTATA
TGGGAGAAGAGAAGCTCATTGCATCTGTTGCTGGCTCTGTGGAGAGAGTAAACAAGTTGATCTGTGTGAAAGCTT
TGAAAACCAGATACATTGGTGAAGTAGGAGACATCGTAGTGGGACGAATCACAGAGGTTCAACAGAAGAGGTGGA
AGGTGGAGACCAACTCCAGGCTGGATTCGGTCTTGCTGCTCTCGTCCATGAACCTTCCTGGAGGAGAGCTGAGGA
GAAGATCTGCAGAAGATGAGCTTGCAATGAGAGGTTTCTTACAGGAAGGGGACCTTATCAGTGCTGAGGTCCAGG
CAGTGTTCTCTGACGGAGCTGTCTCTTTGCACACGAGGAGCCTGAAATATGGAAAACTAGGTCAGGGGGTTTTGG
TCCAGGTTTCCCCCTCCCTGGTGAAACGGCAGAAGACCCACTTTCATGATTTGCCATGTGGTGCCTCAGTGATTC
TCGGTAACAACGGCTTCATCTGGATTTACCCAACACCTGAGCACAAAGAAGAGGAAGCAGGGGGCTTCATTGCAA
ACCTGGAGCCTGTCTCTCTTGCTGATCGAGAGGTGATATCCCGGCTTCGGAACTGCATCATCTCGCTGGTAACTC
AGAGGATGATGCTGTATGATACCAGCATCCTGTACTGCTATGAAGCATCCCTTCCACATCAGATCAAAGACATCT
TAAAGCCAGAAATAATGGAGGAGATTGTGATGGAAACACGCCAGAGGCTTTTGGAACAGGAGGGATAAGGAGGTG
CTCCAGAAGCACGGGACTGTGGACCTTGCAGGAGTGAAGACTGTGATGTGTGGTCCCCATATGTGGCTCAGCAAA
GACTCGAGAGATCATCCCTTTGTCTGCATTGACGGCCCTGTGACGGCCTCCAGCCCACAGGCCTGCTTTCTCCTG
TCCTAACACCAAGCCTGGGTGGCAGATGAACAGTGCTTCCTTGGGTTGCCAGCTGAGTCCCGGTATTAGGGAATA
GTTTCAGCTCTTTCAAAGTGCACAGTGTTACAGTCGAATGGGCTCCCATCCTGGAATAATATGGAGAATCCTTTG
TCTTCCACTCACTGTCATTCACAAGGCACAGTGCCCCATGAAATTGCCCCAATAGAAAACATGGCATCCCTGACC
TCCAAATGGTCTGTTTTGGCCTCCATTCCTATATCCTTTAAATGACTGAGAATGCAGCTGGTAAAGTTGGAAGAA
TAAAGTTAACCAAGCAGGCCAGGCACGGTGGCTCACGCCTATAATCCCAGCACTTAGGGAGGCCAAGGCGGGCAG
ATCACCTGAGGTCAATAGTTCGAGACCAGCCTGGCCAACAAGGTGAAACCCCATCTCTACTAAAAATACAAAAAA
TTAGCCAGGTGTGGTGGTGTGCACCTGTAGTCCCAGCTATTTGGGAGGCTGAGGTGGGAGAATCACTTGAACCTG
GGAGGCGGAGGTTGCAGTGAGCTGAAATCGCGTACCACACTCCAGCCTGGGTGACAGAGCGAGACTGTGTTTCAA
AGAAAAAAAAAAACAAGCAGCCTTTTGCTTGGTTGGAATCTGATTTTCTGTTGCGTGTTCCTTGTAGCCATAGAT
GTGATTATGTCCACACCGGGCTGCCTTAATCTGTCCTGCTTGGAGAGTGACTTGTAAGATGCTGAATTATTCATG
ATAATACAGTGAATGTTCTGGGTCCATGTACTCAGATAAACATGAAGAAAATAAGCAAAGAAAAATGGAGACTGG
GAAAGCAAAGCTGTTTTCATCCTATAATTGAAGTAGTGTGGAGCATTAACTTGTGGATGATTCAGAGTTAAAAGA
TAAAAAGACGCCAGAGTTCTCGCTGAAGAATGTGAGAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3068

MAMEMRLPVARKPLSERLGRDTKKHLVVPGDTITTDTGFMRGHGTYMGEEKLIASVAGSVERVNKLICVKALKTR
YIGEVGDIVVGRITEVQQKRWKVETNSRLDSVLLLSSMNLPGGELRRRSAEDELAMRGFLQEGDLISAEVQAVFS
DGAVSLHTRSLKYGKLGQGVLVQVSPSLVKRQKTHFHDLPCGASVILGNNGFIWIYPTPEHKEEEAGGFIANLEP
VSLADREVISRLRNCIISLVTQRMMLYDTSILYCYEASLPHQIKDILKPEIMEEIVMETRQRLLEQEG

FIGURE 3069

ATGACCATGGAAACAGTTGAATCCCAGCATGATGGAAGTATAACAGCTTCTTTGACAGAGAGCAAGTCTGCTCAT
GTGCAGACTCAGACTGGGCAAATTTCAATCCCTGCTTTAGCTCAGTGCAGTGAGCTGAGATCAGGCACCAGAAGA
GGCTCCCCAGCTGTAACTCTAGTGCAGTTACCTTCGGGCCAAACTATACATGTCCAGGGAGTAATTCAGACACCA
CAGCCATGGGTTATTCAGTCATCAGAAATACACACCGTTCAGGTAGCAGCAATTGCAGAGACAGATGAATCTGCA
GAATCAGAAGGTGTAATTGATTCTCATAAACGTAGAGAAATCCTTTCACGAAGACCCTCTTATAGGAAAATACTG
AATGAACTGTCCTCTGATGTGCCTGGTGTTCCCAAGATTGAAGAAGAGAGATCAGAGGAAGAAGGAACACCACCT
AGTATTGCTACCATGGCAGTACCAACTAGCATATATCAGACTAGCACGGGGCAATACATTGCTATAGCCCAAGGT
GGAACAATCCAGATTTCTAACCCAGGATCTGATGGTGTTCAGGGACTGCAGGCATTAACAATGACAAATTCAGGA
GCTCCTCCACCAGGTGCTACAATTGTACAGTACGCAGCACAATCAGCTGATGGCACACAGCAGTTCTTTGTCCCA
GGCAGCCAGGTTGTTGTTCAAGCTGCCACTGGTGACATGCCAACTTACCAGATCCGAGCTCCTACTGCTGCTTTG
CCACAGGGAGTGGTGATGGCTGCATCGCCCGGAAGTTTGCACAGTCCCCAGCAGCTGGCAGAAGAAGCAACACGC
AAACGAGAGCTGAGGCTAATGAAAAACAGAGAAGCTGCCCGGGAGTGTCGCAGGAAGAAGAAAGAATATGTCAAA
TGTCTTGAAAATCGTGTGGCTGTGCTTGAAAACCAAAACAAGACTCTCATTGAGGAACTCAAGGCCCTCAAAGAT
CTTTATTGCCATAAAGTAGAGTAACTGTCTTTGACTTGGACCTTGTTTACTCTAATCAAGGCAGGAGATGCAGCA
GTCCTACTTATTGCCATGTGGACTTGTGGGAAGGACACGTGTGACCCTTAAGAATCCAGTTTGGATTAGTGTTTG
AAATTGAATTGGGAATGTTGTTCCAGGATGTGGAATGCAGCGTGATCACACTTACCGAGCTTACTTTGATCTGTT
TGTCAATAGCATGCAAAAAATGCTTTGTTTGCCCTTTGCTTCTGCTTTTTTTCAGGGAAGCTGCCAAAGAATGTC
GACGTCGAAAGAAAGAATATGTAAAATGCCTGGAGAGCCGAGTTGCAGTGCTGGAAGTCCAGAACAAGAAGCTTA
TAGAGGAACTTGAAACCTTGAAAGACATTTGTTCTCCCAAAACTGATTACTAGAAATATTTAACTATGAACTGAT
TACAGA

FIGURE 3070

MAVTGDETDEETDLAPSHMAAATGDMPTYQIRAPTTALPQGVVMAASPGSLHSPQQLAEEATRKRELRLMKNREA
AKECRRRKKEYVKCLESRVAVLEVQNKKLIEELETLKDICSPKTD

FIGURE 3071

GGGTGGAAGAAGATGGCGTCGGGTGGTGGTGGCTGTAGCGCTTCGGAGAGACTGCCTCCGCCCTTCCCCGGCCTG
GAGCCGGAGTCCGAGGGGGCGGCCGGGGGATCAGAACCCGAGGCTGGGGACAGCGACACCGAGGGGGAGGACATT
TTCACCGGCGCCGCGGTGGTCAGTAAACATCAGTCTCCAAAGATAACTACATCCCTTCTTCCCATCAACAATGGC
TCCAAAGAAAATGGGATCCATGAAGAACAAGACCAAGAGCCACAGGATCTCTTTGCAGATGCCACAGTGGAGCTA
TCCTTGGACAGCACACAAAATAATCAGAAGAAGGTGCTAGCCAAAACACTCATTTCTCTTCCTCCTCAGGAAGCC
ACAAATTCTTCGAAGCCCCAGCCAACCTATGAGGAGCTAGAGGAAGAAGAACAGGAGGATCAATTTGATTTGACA
GTCGGTATAACTGATCCTGAGAAGATAGGGGATGGTATGAATGCATATGTAGCCTACAAAGTTACAACACAGACA
AGCTTACCATTGTTCAGAAGCAAACAGTTTGCAGTAAAAAGAAGATTTAGTGACTTTCTGGGTCTTTATGAGAAG
CTTTCCGAGAAGCACTCTCAGAATGGCTTCATTGTCCCTCCGCCCCCGGAGAAGAGCCTCATAGGGATGACAAAA
GTGAAAGTTGGGAAGGAAGATTCTTCTTCTGCAGAATTTCTTGAAAAACGGAGGGCCGCTTTAGAAAGGTACCTT
CAGAGGATTGTAAATCATCCTACCATGTTACAGGACCCTGACGTCAGAGAGTTCTTGGAAAAAGAAGAGCTGCCA
CGTGCCGTGGGTACCCAGACATTGAGTGGTGCTGGTCTCCTCAAGATGTTCAACAAAGCCACAGATGCCGTCAGC
AAAATGACCATCAAGATGAATGAATCAGACATTTGGTTTGAGGAGAAGCTCCAGGAGGTAGAGTGTGAGGAGCAG
CGCTTACGGAAACTGCATGCTGTTGTAGAAACTCTAGTCAACCATAGGAAAGAGCTAGCGCTGAACACAGCCCAG
TTTGCAAAGAGTCTAGCCATGCTTGGGAGCTCTGAGGACAACACGGCATTGTCACGGGCACTCTCCCAGCTGGCT
GAGGTGGAAGAAAAAATTGAGCAGCTCCACCAGGAACAGGCCAACAATGACTTCTTCCTCCTTGCTGAGCTCCTG
AGTGACTACATTCGCCTCCTGGCCATAGTCCGCGCTGCCTTCGACCAGCGCATGAAGACATGGCAGCGCTGGCAG
GATGCCCAAGCCACACTGCAGAAGAAGCGGGAGGCCGAGGCTCGGCTGCTGTGGGCCAACAAGCCTGATAAGCTG
CAGCAGGCCAAGGACGAGATCCTCGAGTGGGAGTCTCGGGTGACTCAATATGAAAGGGACTTCGAGAGGATTTCA
ACAGTGGTCCGAAAAGAAGTGATACGGTTTGAGAAAGAGAAATCCAAGGACTTCAAGAACCACGTGATCAAGTAC
CTTGAGACACTCCTTTACTCACAGCAGCAGCTGGCAAAGTACTGGGAAGCCTTCCTTCCTGAGGCAAAGGCCATC
TCCTAAATGGACCAAGGACCCCAGAGCCCACCTGTGTGACGCTGCCTTTTTATACACTGTCCTCCTCCACCTTGAT
GGACCCCTAGTGATGCATCCTGCCTAGGCTGGACTTAACCCCTTCCTCCCTGTCCCCACGACCAACTGTCCCCAG
TTACTCTAACCGTTATTTCATTTAGCTTCCATATATATTTTCTTACCTAAGAGAATAGTTTCCTGCTTTAAGCAA
AAGACCTACAATAGGTGGTGGAATTATGGGATGGGGTGGAGTATTGATATAAATATATAAATACAAATGTATATT
TTTCAGGATGTGGTTTAGGAACTGGGAATAACGTTTTCTGTTACTCCTGATGGTGCCATGAAAAGGTTATGTAAT
AAAATATTTTAAAATCAAAAAAAAAAAAAAAAAA

FIGURE 3072

MASGGGGCSASERLPPPFPGLEPESEGAAGGSEPEAGDSDTEGEDIFTGAAVVSKHQSPKITTSLLPINNGSKEN
GIHEEQDQEPQDLFADATVELSLDSTQNNQKKVLAKTLIXLPPQEATNSSKPQPTYEELEEEEQEDQFDLTVGIT
DPEKIGDGMNAYVAYKVTTQTSLPLFRSKQFAVKRRFSDFLGLYEKLSEKHSQNGFIVPPPPEKSLIGMTKVKVG
KEDSSSAEFLEKRRAALERYLQRIVNHPTMLQDPDVREFLEKEELPRAVGTQTLSGAGLLKMFNKATDAVSKMTI
KMNESDIWFEEKLQEVECEEQRLRKLHAVVETLVNHRKELALNTAQFAKSLAMLGSSEDNTALSRALSQLAEVEE
KIEQLHQEQANNDFFLLAELLSDYIRLLAIVRAAFDQRMKTWQRWQDAQATLQKKREAEARLLWANKPDKLQQAK
DEILEWESRVTQYERDFERISTVVRKEVIRFEKEKSKDFKNHVIKYLETLLYSQQQLAKYWEAFLPEAKAIS

FIGURE 3073

ATGAGACTTCTCATCCTGGCCCTCCTTGGCATCTGCTCTCTCACTGCATACATTGTGGAAGGTGTAGGGAGTGAA
GTCTCACATAGGAGGACCTGTGTGAGCCTCACTACCCAGCGACTGCCAGTTAGCAGAATCAAGACCTACACCATC
ACGGAAGGCTCCTTGAGAGCAGTAATTTTTATTACCAAACGTGGCCTAAAAGTCTGTGCTGATCCACAAGCCACG
TGGGTGAGAGACGTGGTCAGGAGCATGGACAGGAAATCCAACACCAGAAATAACATGATCCAGACCAAGCCAACA
GGAACCCAGCAATCGACCAATACAGCTGTGACCCTGACTGGC**TAG**

FIGURE 3074

MRLLILALLGICSLTAYIVEGVGSEVSHRRTCVSLTTQRLPVSRIKTYTITEGSLRAVIFITKRGLKVCADPQAT
WVRDVVRSMDRKSNTRNNMIQTKPTGTQQSTNTAVTLTG

FIGURE 3075

TCCGCTATCATGCCAGGTGCTTGCCCCACCTGGGAGGAGGCACCTGCCTGGACTATGTCCCCCAAATGCTTCTGG
GGGAGCCTCCAGGAAACCGGAGTGGGGCCGTGTGGTGAGAACAGTGAGCTTGGAAAGAACCAGTATGCTTGGACT
GAAGGGGTTCTCACAGTGGGAGCCAGGGCTGTCTTCGTATTCCCATTAGACCAAGCTTGTCCAACCCGAGACCCG
CATGCGGCCCAGGATGGCTTTGAATGCGGCCCAACGCAAATTCGCAAACTTTCTTAAAACATTATGAGTTTCTTT
TTGCTATTTTTTTTTTTTTTTTAGCTCATCGGCTATCGTTAGTGCTAGTGGATTTTACATGTGGCCCAACACAA
TTCTTCTTCCAACGTGGCCCAGAGAAGCCAAAAGATTGGATACGCATCAGACAGATGGAAAAGGGAGATTCAGAC
TGTTTCCCAGGGAGGTGGCTGGGTTTACACGCTAATCCCGATTCACCCTGTCCAAACTGTCTAAGCCCTCCGTCA
TTCTCAAGCCCTGCAGTCACAGCTACACAGATCACAGCTTCAGCCAGGAGCTGGGCAGAAGGACAAGAGGGCTGT
TCCCACCAGGCTGATCAGGCTGGTCTTTTAGGACCCTTCCCTTGAGCCCTCTATGGTGTGGCAAAGCCTTCATTG
CCTTAACTGGAGCCCCATCAGCTCCAGCTGCTCTGTCTTCTTTGCCCACAATGCTTTGCCCCTGAGACAAATGGC
GGCCTGTCCTGACCTGTCTCACCATGTACATAGCTTGATAAAGGGCCAATAAATATGATGTTATGGTG

FIGURE 3076

GGCACGAGGGGCGCGCAAGATCTCCCCGCGCGAGAGCGGCCCTTGCCACCGGGCGAGGCCTGCGCCGCGATGGCA
GAGATGGGCAGTAAAGGGGTGACGGCGGGAAAGATCGCCAGCAACGTGCAGAAGAAGCTCACCCGCGCGCAGGAG
AAGGTTCTCCAGAAGCTGGGGAAGGCAGATGAGACCAAGGATGAGCAGTTTGAGCAGTGCGTCCAGAATTTCAAC
AAGCAGCTGACGGAGGGCACCCGGCTGCAGAAGGATCTCCGGACCTACCTGGCCTCCGTCAAAGCCATGCACGAG
GCTTCCAAGAAGCTGAATGAGTGTCTGCAGGAGGTGTATGAGCCCGATTGGCCCGGCAGGGATGAGGCAAACAAG
ATCGCAGAGAACAACGACCTGCTGTGGATGGATTACCACCAGAAGCTGGTGGACCAGGCGCTGCTGACCATGGAC
ACGTACCTGGGCCAGTTCCCCGACATCAAGTCACGCATTGCCAAGCGGGGGCGCAAGCTGGTGGACTACGACAGT
GCCCGGCACCACTACGAGTCCCTTCAAACCGCCAAAAAGAAGGATGAAGCCAAAATTGCCAAGGCCGAGGAGGAG
CTCATCAAAGCCCAGAAGGTGTTTGAGGAGATGAATGTGGATCTGCAGGAGGAGCTGCCGTCCCTGTGGAACAGC
CGCGTAGGTTTCTACGTCAACACGTTCCAGAGCATCGCGGGCCTGGAGGAAAACTTCCACAAGGAGATGAGCAAG
CTCAACCAGAACCTCAATGATGTGCTGGTCGGCCTGGAGAAGCAACACGGGAGCAACACCTTCACGGTCAAGGCC
CAGCCCAGTGACAACGCGCCTGCAAAAGGGAACAAGAGCCCTTCGCCTCCAGATGGCTCCCCTGCCGCCACCCCC
GAGATCAGAGTCAACCACGAGCCAGAGCCGGCTGGCGGGGCCACGCCCGGGGCCACCCTCCCCAAGTCCCCATCT
CAGCCAGCAGAGGCCTCGGAGGTGGCGGGTGGGACCCAACCTGCGGCTGGAGCCCAGGAGCCAGGGGAGACGGCG
GCAAGTGAAGCAGCCTCCAGCTCTCTTCCTGCTGTCGTGGTGGAGACCTTCCCAGCAACTGTGAATGGCACCGTG
GAGGGCGGCAGTGGGGCCGGGCGCTTGGACCTGCCCCCAGGTTTCATGTTCAAGGTACAGGCCCAGCACGACTAC
ACGGCCACTGACACAGACGAGCTGCAGCTCAGGGCTGGTGATGTGGTGCTGGTGATCCCCTTCCAGAACCCTGAA
GAGCAGGATGAAGGCTGGCTCATGGGCGTGAAGGAGAGCGACTGGAACCAGCACAAGGAGCTGGAGAAGTGCCGT
GGCGTCTTCCCCGAGAACTTCACTGAGAGGGTCCCATGACGGCGGGGCCCAGGCAGCCTCCGGGCGTGTGAAGAA
CACCTCCTCCCGAAAAATGTGTGGTTCTTTTTTTTGTTTTGTTTTCGTTTTTCATCTTTTGAAGAGCAAAGGGAA
ATCAAGAGGAGACCCCCAGGCAGAGGGGCGTTCTCCCAAAGATTAGGTCGTTTTCCAAAGAGCCGCGTCCCGGCA
AGTCCGGCGGAATTCACCAGTGTTCCTGAAGCTGCTGTGTCCTCTAGTTGAGTTTCTGGCGCCCCTGCCTGTGCC
CGCATGTGTGCCTGGCCGCAGGGCGGGGCTGGGGGCTGCCGAGCCACCATGCTTGCCTGAAGCTTCGGCCGCGCC
ACCCGGGCAAGGGTCCTCTTTTCCTGGCAGCTGCTGTGGGTGGGGCCCAGACACCAGCCTAGCCTGGCTCTGCCC
CGCAGACGGTCTGTGTGCTGTTTGAAAATAAATCTTAGTGTTCAAAACAAAATGAAACAAAAAAAAAAAAAAAAA
A

FIGURE 3077

MAEMGSKGVTAGKIASNVQKKLTRAQEKVLQKLGKADETKDEQFEQCVQNFNKQLTEGTRLQKDLRTYLASVKAM
HEASKKLNECLQEVYEPDWPGRDEANKIAENNDLLWMDYHQKLVDQALLTMDTYLGQFPDIKSRIAKRGRKLVDY
DSARHHYESLQTAKKKDEAKIAKAEEELIKAQKVFEEMNVDLQEELPSLWNSRVGFYVNTFQSIAGLEENFHKEM
SKLNQNLNDVLVGLEKQHGSNTFTVKAQPSDNAPAKGNKSPSPPDGSPAATPEIRVNHEPEPAGGATPGATLPKS
PSQPAEASEVAGGTQPAAGAQEPGETAASEAASSSLPAVVVETFPATVNGTVEGGSGAGRLDLPPGFMFKVQAQH
DYTATDTDELQLRAGDVVLVIPFQNPEEQDEGWLMGVKESDWNQHKELEKCRGVFPENFTERVP

FIGURE 3078

CCTGTCTCTCTTCGGGTCTCGGGCCCTTGGGCGCAGCGGGGCGCGCGCCATGGCGAAGGCGAAGAAGGTCGGGGC
GCGAAGGAAGGCCTCCGGGGCGCCGGCGGGAGCGCGAGGGGGCCCGGCGAAGGCCAACTCCAATCCGTTCGAGGT
GAAAGTTAACAGGCAGAAGTTCCAGATCCTGGGCCGGAAGACGCGCCACGACGTGGGACTGCCCGGGGTGTCTCG
CGCACGGGCCCTCAGGAAGCGTACACAGACTTTACTAAAAGAGTACAAAGAAAGGGATAAATCCAATGTATTCAG
AGATAAACGCTTCGGAGAATACAACAGCAACATGAGCCCCGAGGAGAAGATGATGAAGAGGTTTGCTCTGGAACA
GCAGCGACATCATGAGAAAAAAAGCATCTACAATCTAAATGAAGATGAAGAATTGACTCATTATGGCCAGTCTTT
GGCAGACATCGAGAAGCATAATGACATTGTGGACAGTGACAGCGATGCTGAGGATCGAGGAACGTTGTCTGCTGA
GCTGACTGCTGCCCACTTTGGAGGAGGCGGTGGGCTCCTTCACAAGAAGACTCAACAGGAAGGCGAGGAGCGGGA
GAAACCGAAGTCCCGGAAAGAGCTGATTGAAGAGCTCATTGCCAAGTCAAAACAAGAGAAGAGGGAGAGACAAGC
TCAACGAGAAGATGCCCTCGAGCTCACGGAGAAGCTAGACCAAGACTGGAAAGAAATTCAGACTCTCCTGTCCCA
CAAAACTCCCAAGTCAGAGAACAGAGACAAAAAGGAAAAACCCAAGCCCGATGCATATGACATGATGGTTCGCGA
GCTTGGCTTTGAAATGAAGGCGCAGCCCTCTAACAGGATGAAGACGGAGGCAGAATTGGCAAAGGAAGAGCAGGA
GCACCTCAGGAAGCTGGAGGCTGAGAGACTTCGAAGAATGCTTGGAAAGGATGAGGATGAAAATGTTAAGAAACC
AAAACATATGTCAGCAGATGATCTGAATGATGGCTTCGTGCTAGATAAAGATGACAGGCGTTTGCTTTCCTACAA
AGATGGAAAGATGAATGTCGAGGAAGATGTCCAGGAAGAGCAAAGCAAGGAAGCCAGTGACCCTGAGAGCAACGA
GGAAGAAGGTGACAGTTCAGGCGGGGAGGACACAGAGGAGAGCGACAGCCCAGATAGCCACTTGGACCTGGAATC
CAACGTGGAGAGTGAGGAAGAAAACGAGAAGCCAGCAAAAGAGCAGAGGCAGACTCCTGGGAAAGGGTTGATAAG
CGGCAAGGAAAGAGCTGGAAAAGCTACCAGAGACGAGCTGCCCTACACGTTCGCAGCCCCTGAATCCTATGAGGA
ACTGAGATCTCTGTTGTTAGGAAGATCGATGGAAGAGCAGCTTTTGGTGGTGGAGAGAATTCAGAAGTGCAACCA
CCCGAGTCTCGCAGAAGGAAACAAAGCAAAATTAGAAAAACTGTTTGGCTTTCTTTTGGAATACGTTGGCGATTT
GGCTACAGATGACCCACCAGACCTCACAGTCATTGATAAGTTGGTTGTGCACTTATATCATCTTTGCCAGATGTT
TCCTGAATCTGCAAGTGACGCTATCAAATTTGTTCTCCGAGATGCGATGCATGAGATGGAAGAAATGATTGAGAC
CAAAGGCCGGGCGGCATTGCCAGGGTTGGATGTGCTCATTTATTTGAAAATCACTGGGCTGCTATTTCCAACTTC
CGACTTCTGGCACCCAGTGGTGACCCCTGCCCTCGTGTGCCTCAGTCAGCTGCTCACCAAGTGCCCCATCCTGTC
CCTCCAGGACGTGGTGAAGGGCCTGTTCGTGTGCTGCCTGTTCCTGGAGTATGTGGCTTTGTCCCAGAGGTTTAT
ACCTGAGCTTATTAATTTTCTTCTTGGGATTCTTTACATAGCAACTCCAAACAAAGCAAGCCAAGGTTCCACTCT
GGTGCACCCTTTCAGAGCGCTTGGGAAGAACTCGGAACTGCTCGTGGTGTCTGCTAGAGAGGATGTGGCCACGTG
GCAGCAGAGCAGCCTCTCCCTCCGCTGGGCGAGTAGACTGAGGGCCCCAACTTCGACAGAGGCCAATCACATCCG
ACTGTCCTGCCTGGCTGTGGGCCTGGCCCTGCTGAAGCGCTGCGTGCTCATGTACGGGTCCCTGCCATCCTTCCA
CGCCATCATGGGGCCTCTCCAAGCCCTCCTCACGGATCACCTGGCGGACTGCAGCCACCCGCAGGAGCTCCAGGA
GCTGTGTCAGAGCACACTGACCGAAATGGAAAGCCAGAAGCAGCTCTGCCGGCCGCTGACCTGTGAGAAGAGCAA
GCCTGTCCCACTGAAGCTTTTCACACCCCGGCTGGTCAAAGTCCTCGAGTTTGGAAGAAAACAAGGCAGTAGTAA
GGAGGAACAGGAAAGGAAGAGGCTGATCCACAAACACAAGCGTGAATTTAAAGGGGCCGTTCGAGAAATCCGCAA
GGACAATCAGTTCCTGGCGAGGATGCAACTCTCAGAAATCATGGAACGGGATGCGGAAAGAAAGCGGAAAGTAAA
GCAGCTTTTTAACAGCCTGGCTACACAGGAAGGCGAATGGAAGGCTCTGAAGAGGAAAAAGTTCAAAAAATAAAT
TACATTTTATAAATAAGCTCCCCCCACCCGCTGCCTGCGGTTTTGTTTCTGTTAAAACGTCACCTGATGAAATAG
AATGAATCCTGAAATGCACCTCTGGGATCGGGAATGGTCTGTGTGTTATCAGCTGCGACTGGTTCACTGCGTCTG
GACAAGCCTCATGGGGACTGGGGATTCTGGCCAGTGTAATTTCTGTCAACCACGGACGTTTGCCTTCATGTGTAG
AATTTACTGTTGTTATGCAAATTATATTTTCAATTATAA

FIGURE 3079

LSLFGSRALGRSGARAMAKAKKVGARRKASGAPAGARGGPAKANSNPFEVKVNRQKFQILGRKTRHDVGLPGVSR
ARALRKRTQTLLKEYKERDKSNVFRDKRFGEYNSNMSPEEKMMKRFALEQQRHHEKKSIYNLNEDEELTHYGQSL
ADIEKHNDIVDSDSDAEDRGTLSAELTAAHFGGGGGLLHKKTQQEGEEREKPKSRKELIEELIAKSKQEKRERQA
QREDALELTEKLDQDWKEIQTLLSHKTPKSENRDKKEKPKPDAYDMMVRELGFEMKAQPSNRMKTEAELAKEEQE
HLRKLEAERLRRMLGKDEDENVKKPKHMSADDLNDGFVLDKDDRRLLSYKDGKMNVEEDVQEEQSKEASDPESNE
EEGDSSGGEDTEESDSPDSHLDLESNVESEEENEKPAKEQRQTPGKGLISGKERAGKATRDELPYTFAAPESYEE
LRSLLLGRSMEEQLLVVERIQKCNHPSLAEGNKAKLEKLFGFLLEYVGDLATDDPPDLTVIDKLVVHLYHLCQMF
PESASDAIKFVLRDAMHEMEEMIETKGRAALPGLDVLIYLKITGLLFPTSDFWHPVVTPALVCLSQLLTKCPILS
LQDVVKGLFVCCLFLEYVALSQRFIPELINFLLGILYIATPNKASQGSTLVHPFRALGKNSELLVVSAREDVATW
QQSSLSLRWASRLRAPTSTEANHIRLSCLAVGLALLKRCVLMYGSLPSFHAIMGPLQALLTDHLADCSHPQELQE
LCQSTLTEMESQKQLCRPLTCEKSKPVPLKLFTPRLVKVLEFGRKQGSSKEEQERKRLIHKHKREFKGAVREIRK
DNQFLARMQLSEIMERDAERKRKVKQLFNSLATQEGEWKALKRKKFKK

FIGURE 3080

CACGTGGCTGCAGCGGGGCCAGAGCAGCAATGGCGGCGGGCGGCGGCGGTAGCTGCGACCCCCTGGCCCCTGCTG
GGGTCCCTTGCGCCTTCTCCCCGCACAGCCAGGCCTACTTCGCTTTGGCCTCTACCGACGGTCACTTACGAGTAT
GGGAGACGGCCAACAACCGGCTGCACCAGGAGTACGTGCCTTCCGCGCACCTCAGTGGTACCTGCACCTGTCTGG
CCTGGGCGCCAGCGCGGCTGCAGGCCAAGGAAAGTCCCCAGAGGAAAAAAAGGAAATCAGAAGCTGTAGGAATGA
GTAACCAGACTGACTTATTGGCTCTTGGCACAGCAGTTGGTAGCATTTTATTATACAGCACAGTAAAAGGAGAGT
TACACAGTAAATTAATAAGTGGTGGACATGACAACAGAGTCAACTGCATACAGTGGCATCAAGACAGTGGCTGTT
TATATAGTTGTTCAGATGATAAACATATTGTGGAATGGAACGTACAGACATGCAAAGTAAAGTGCAAATGGAAAG
GGGACAATAGCAGTGTCAGTTCCCTATGTATCAGCCCAGATGGAAAGATGTTGCTTTCAGCTGGTCGAACAATCA
AACTATGGGTTTTGGAGACCAAAGAAGTCTACAGGCATTTCACAGGACATGCAACGCCAGTTTCGTCACTGATGT
TCACTACCATCAGACCTCCTAATGAGAGCCAGCCCTTTGATGGAATTACAGGTCTTTATTTCTTATCTGGAGCAG
TACATGACCGGTTACTTAATGTCTGGCAGGTCCGATCAGAAAACAAAGAAAAGAGTGCAGTGATGTCATTTACAG
TTACCGATGAACCTGTCTATATTGACTTAACTTTGTCAGAAAACAAAGAAGAGCCTGTCAAGTTGGCTGTTGTTT
GCAGAGATGGTCAAGTCCATCTTTTTGAACACATATTAAATGGGTACTGCAAAAAGCCTTTGACTTCAAACTGCA
CAATTCAGATAGCAACACCTGGGAAAGGCAAGAAGTCAACACCAAAACCCATCCCTATTCTAGCTGCTGGTTTTT
GCTCAGACAAAATGTCATTGTTGCTTGTATATGGCAGTTGGTTTCAGCCTACTATTGAGCGAGTGGCTTTAAACT
CCAGAGAACCTCATATGTGTTTAGTAAGAGATATTTCAAACTGCTGGGCCCCCAAAGTAGAAACAGCTATAACAA
AGGTGAGGACACCAGTGATGAATTCTGAAGCAAAAGTTCTGGTGCCTGGGATTCCTGGTCATCATGCAGCTATCA
AGCCCGCTCCTCCACAAACCGAGCAAGTAGAGAGCAAGAGGAAGTCAGGGGGAAATGAGGTTAGCATTGAAGAAC
GTCTGGGAGCAATGGATATAGACACACACAAAAAAGGAAAGGAAGACCTCCAGACGAATAGCTTTCCAGTTCTTC
TTACCCAGGGCTTAGAAAGTAACGATTTTGAAATGCTAAATAAAGTACTTCAAACTAGGAATGTAAACCTTATAA
AGAAGACTGTATTAAGGATGCCCCTGCATACTATTATTCCGTTGTTACAAGAGCTTACAAAGAGGTTACAAGGAC
ATCCTAATAGTGCTGTGCTAATGGTTCAGTGGCTAAAATGTGTGTTAACAGTTCATGCATCATACCTGTCCACGT
TGCCTGACCTGGTACCCCAGCTGGGGACACTCTACCAGTTAATGGAAAGCAGAGTCAAAACTTTTCAGAAACTTT
CACACCTTCATGGAAAGCTTATTCTTCTAATTACACAAGTAACAGCATCAGAGAAGACAAAGGGAGCAACTTCCC
CTGGACAGAAGGCAAAGTTGGTGTATGAAGAAGAGTCTTCTGAAGAGGAGTCTGATGATGAAATAGCAGATAAGG
ATTCTGAAGATAATTGGGATGAAGATGAGGAGGAGAGTGAAAGTGAAAAAGATGAGGACGTTGAAGAGGAAGATG
AGGATGCCGAAGGAAAAGATGAAGAAAATGGCGAGGACAGAGATACAGCAAGTGAAAAAGAATTAAATGGAGATT
CTGACTTAGATCCTGAAAATGAAAGTGAAGAAGAATGAAGACAGCAAAGCAAGCCGGTCAAACTATATAAACTCT
GGCTCACCTTGCCCAGTGGTGAGGGCTGCCTCTGTGCCAGGATGCCAAGGACCGCTGCACATTTCCAAATTCACA
GCAGTGGATCCCATGCCACTTTGCTGTCCTGAGCACCCCAGACTTGACTGTGTAAATAAGAGTGTTTCATTCAAA
TGTTAATAAACTTTACACAGTATATAGACACATTTTCTGCAATGTACTGACATCAGTGTCCAATATATGGTATAT
TTTTATAATATAATATCCTAGTATGATTGGTTATATCAAGAATTGACAAGTGCAGATAAAGACCTTTCCCATAGG
AGTTCAAGAACTGGACTGTTGTGAAGAAGTCAGCTCTTATCTCAGGTTGGTATCTTTCATCAAATCCAGATGCAA
AGCAGCACTAGTGAAAATTTTTTTAATTTAGTACATTTAATTTGGTACATTTTCATAAAATATGAAGGGATAACT
ACAAACTGGAGTAAAAATGATGGTAATTAAAAAAAATCCTCAGTATCCCTAGCTTGTCTATTAACTGTGATAATC
TGACTTGAGTCAGATTGAATATTTGGAGTGCTTCCCCAGAATAACCACTTATTTTTGAAGCTATCATGTGAAGTA
TTTTTTTAAAACAAAACAAAAATTATGGTCATTAAAAAACTAGAGAATTAGCCATATTAAGGATTTTTCTTGACT
GCAAATTACTTCTAAAGAATCATCAGTGTATAGATTAGAAGTGCTCATTACCTGCAACTTTTAAAAAAAATTCAG
TTATAGCTGCTTTTGAAGAGGTTTCCATTTTTATTTAAATTACTAATGGATCAAAGAACAATTGTTTATTTTTTC
TCTTTGGTTTTAGATATTAATGATAACCTTGTTGGAATTTTTTTTCCAAAGAAAATATTTTTATAATTAAATAAT
TTAATGTTTTTCTTCCTTTTCATTACCTACTCTTGGCAGTGTTAGGGTATCTGTTTACCTTTAAAATGATAAGTC
TCACTCAAGATTTTTTATCTATGTATAAATATTTTGGTGTGCTACAAAAGCCTTTACAAATTATCAGTAGTAGTT
TTTTTTTTTTTTTTTTTTTTTAAAGAATGAGCCGATATTGGCTTAGTGCTCACTAGGGGACATGCACATGGAAGC
TCACCTCTAAGAAAGGGCTGGGCAGATGGATTTATTTTTCCCACCTGTGAATATGTAAAACAAAACCATTATCT
TTGAGGGAGTTTTTAATACCAATGACAGAACAGAGATTTGTGTGCTCATCTTAAGAGCCAGAGCCATATAAGCAT
CTTGGGAAAGCAAGTTTGAACCAGCTGCTGGTGTAATGTACAGTTATATTTGTCTATAAATGGAGCTGTTTATGG
CAATTTAATACCATTCTCTTTGTAAAGTGAATAAATATTCATCTTTTCCC

FIGURE 3081

RGCSGARAAMAAGGGGSCDPLAPAGVPCAFSPHSQAYFALASTDGHLRVWETANNRLHQEYVPSAHLSGTCTCLA
WAPARLQAKESPQRKKRKSEAVGMSNQTDLLALGTAVGSILLYSTVKGELHSKLISGGHDNRVNCIQWHQDSGCL
YSCSDDKHIVEWNVQTCKVKCKWKGDNSSVSSLCISPDGKMLLSAGRTIKLWVLETKEVYRHFTGHATPVSSLMF
TTIRPPNESQPFDGITGLYFLSGAVHDRLLNVWQVRSENKEKSAVMSFTVTDEPVYIDLTLSENKEEPVKLAVVC
RDGQVHLFEHILNGYCKKPLTSNCTIQIATPGKGKKSTPKPIPILAAGFCSDKMSLLLVYGSWFQPTIERVALNS
REPHMCLVRDISNCWAPKVETAITKVRTPVMNSEAKVLVPGIPGHHAAIKPAPPQTEQVESKRKSGGNEVSIEER
LGAMDIDTHKKGKEDLQTNSFPVLLTQGLESNDFEMLNKVLQTRNVNLIKKTVLRMPLHTIIPLLQELTKRLQGH
PNSAVLMVQWLKCVLTVHASYLSTLPDLVPQLGTLYQLMESRVKTFQKLSHLHGKLILLITQVTASEKTKGATSP
GQKAKLVYEEESSEEESDDEIADKDSEDNWDEDEEESESEKDEDVEEEDEDAEGKDEENGEDRDTASEKELNGDS
DLDPENESEEE

FIGURE 3082

CAGCATCGGAGGTCGCTCAGCC**ATG**GCATGGATCCCTCTCTTCCTCGGCGTCCTTGCTTACTGCACAGGATCCGT
GGCCTCCTATGAGCTGACTCAGCCACCCTCAGTGTCCGTGTCCCCAGGCAAGACAGCCAGCATCACCTGCTCTGG
AGATAAATTGGGGGATAAATATGCTTCCTGGTATCAGCAGAAGGCAGGCCAGTCCCCCGTGCTGGTCATCTATCG
ACATAGCAAGCGGCCCTCAGGGATCCCTGAGCGATTCTCTGGCTCCAATTCTGGGAACACAGCCACTCTGACCAT
CAGTGGGACCCAGGTCATGGATGAGGCTGACTATTACTGTCAGGCGTGGGACAGCAGCATCGTGGTGTTCGGCGG
AGGGACCAAGTTGACCGTCCTAGGTCAGCCCAAGGCTGCCCCCTCGGTCACTCTGTTCCCGCCCTCCTCTGAGGA
GCTTCAAGCCAACAAGGCCACACTGGTGTGTCTCATAAGTGACTTCTACCCGGGAGCCGTGACAGTGGCCTGGAA
GGCAGATAGCAGCCCCGTCAAGGCGGGAGTGGAGACCACCACACCCTCCAAACAAAGCAACAACAAGTACGCGGC
CAGCAGCTATCTGAGCCTGACGCCTGAGCAGTGGAAGTCCCACAGAAGCTACAGCTGCCAGGTCACGCATGAAGG
GAGCACCGTGGAGAAGACAGTGGCCCCTACAGAATGTTCA**TAG**GTTCTCAACCCTCACCCCCCACCACGGGAGAC
TAGAGCTGCAGGATCCCAGGGGAGGGGTCTCTCCTCCCACCCCAAGCATCAAGCCCTTCTCCCTGCACTCAATAA
ACCCTCGTGAGCAG

FIGURE 3083

MAWIPLFLGVLAYCTGSVASYELTQPPSVSVSPGKTASITCSGDKLGDKYASWYQQKAGQSPVLVIYRHSKRPSG
IPERFSGSNSGNTATLTISGTQVMDEADYYCQAWDSSIVVFGGGTKLTVLGQPKAAPSVTLFPPSSEELQANKAT
LVCLISDFYPGAVTVAWKADSSPVKAGVETTTPSKQSNNKYAASSYLSLTPEQWKSHRSYSCQVTHEGSTVEKTV
APTECS

FIGURE 3084

AGTACCGGGTACGCAGGGGTGCCTCAACCACACTCCGTCCACGGACTCTCCGTTATTTTAGGAGGTCCCTGGCCA
AAGATTTATTTCTCTTGACAACCAAGGGCCTCCGTCTGGATTTCCAAGGAAGAATTTCCTCTGAAGCACCGGAAC
TTGCTACTACCAGCACCATGCCCTACCAATATCCAGCACTGACCCCGGAGCAGAAGAAGGAGCTGTCTGACATCG
CTCACCGCATCGTGGCACCTGGCAAGGGCATCCTGGCTGCAGATGAGTCCACTGGGAGCATTGCCAAGCGGCTGC
AGTCCATTGGCACCGAGAACACCGAGGAGAACCGGCGCTTCTACCGCCAGCTGCTGCTGACAGCTGACGACCGCG
TGAACCCCTGCATTGGGGGTGTCATCCTCTTCCATGAGACACTCTACCAGAAGGCGGATGATGGGCGTCCCTTCC
CCCAAGTTATCAAATCCAAGGGCGGTGTTGTGGGCATCAAGGTAGACAAGGGCGTGGTCCCCCTGGCAGGGACAA
ATGGCGAGACTACCACCCAAGGGTTGGATGGGCTGTCTGAGCGCTGTGCCCAGTACAAGAAGGACGGAGCTGACT
TCGCCAAGTGGCGTTGTGTGCTGAAGATTGGGGAACACACCCCCTCAGCCCTCGCCATCATGGAAAATGCCAATG
TTCTGGCCCGTTATGCCAGTATCTGCCAGCAGAATGGCATTGTGCCCATCGTGGAGCCTGAGATCCTCCCTGATG
GGGACCATGACTTGAAGCGCTGCCAGTATGTGACCGAGAAGGTGCTGGCTGCTGTCTACAAGGCTCTGAGTGACC
ACCACATCTACCTGGAAGGCACCTTGCTGAAGCCCAACATGGTCACCCCAGGCCATGCTTGCACTCAGAAGTTTT
CTCATGAGGAGATTGCCATGGCGACCGTCACAGCGCTGCGCCGCACAGTGCCCCCCGCTGTCACTGGGATCACCT
TCCTGTCTGGAGGCCAGAGTGAGGAGGAGGCGTCCATCAACCTCAATGCCATTAACAAGTGCCCCCTGCTGAAGC
CCTGGGCCCTGACCTTCTCCTACGGCCGAGCCCTGCAGGCCTCTGCCCTGAAGGCCTGGGGCGGGAAGAAGGAGA
ACCTGAAGGCTGCGCAGGAGGAGTATGTCAAGCGAGCCCTGGCCAACAGCCTTGCCTGTCAAGGAAAGTACACTC
CGAGCGGTCAGGCTGGGGCTGCTGCCAGCGAGTCCCTCTTCGTCTCTAACCACGCCTATTAAGCGGAGGTGTTCC
CAGGCTGCCCCCAACAACTCCAGGCCCTGCCCCCTCCCACTCTTGAAGAGGAGGCCGCCTCCTCGGGGCTCCAGG
CTGGCTTGCCCGCGCTCTTTCTTCCCTCGTGACAGTGGTGTGTGGTGTCGTCTGTGAATGCTAAGTCCATCACCC
TTTCCGGCACACTGCCAAATAAACAGCTATTTAAGGGGG

FIGURE 3085

MPYQYPALTPEQKKELSDIAHRIVAPGKGILAADESTGSIAKRLQSIGTENTEENRRFYRQLLLTADDRVNPCIG
GVILFHETLYQKADDGRPFPQVIKSKGGVVGIKVDKGVVPLAGTNGETTTQGLDGLSERCAQYKKDGADFAKWRC
VLKIGEHTPSALAIMENANVLARYASICQQNGIVPIVEPEILPDGDHDLKRCQYVTEKVLAAVYKALSDHHIYLE
GTLLKPNMVTPGHACTQKFSHEEIAMATVTALRRTVPPAVTGITFLSGGQSEEEASINLNAINKCPLLKPWALTF
SYGRALQASALKAWGGKKENLKAAQEEYVKRALANSLACQGKYTPSGQAGAAASESLFVSNHAY

FIGURE 3086

GTGATATTTTACAGGAAGATCACCATACTTCACAGAAAGTGGAGGAACCATCACAGTGTCTGGCATCTGGAACAG
CTATCTCTGAGCTAATAATAGAAGACAATAATGCATCTCCTCAAAAACTAAGGGAACTTGATCCTTCACTTGTGT
CAGCAAATGACAGTCCTAGTGGCATGCAGACACGCTGTGTCTGGTCTCCTTTGGCTTCTCCGTCTACGAGCATTT
TAAAGAGAGGACTAAAAAGATCCCAAGAAGATGAAATCTCATCACCTGTTAATAAGGTTCGCCGTGTCTCCTTTG
CAGATCCAATATACCAAGCAGGATTGGCAGATGACATTGATAGACGGTGCTCTATTGTTAGGTCCCATTCTTCCA
ATAGTTCTCCCATAGGAAAAAGTGTTAAAACTTCTCCTACTACACAATCTAAGATTTCAGAAATGGCCAAAGAAT
CCATACCATGCCCAACAGAAAGTGTTTACCCACCATTGGTGAACTGTGTGGCACCAGTTGACATCATTTTACCTC
AGATTACATCAAACATGTGGGCAAGAGGCCTGGGACAACTCATTAGAGCTAAGAATATAAAAACTATTGGTGATT
TGAGTACTCTTACAGCATCTGAAATAAAAACTCTTCCTATCCGTTCTCCAAAAGTGTCCAATGTAAAAAAGGCTC
TCAGAATATATCATGAGCAGCAGGTGAAGACTCGTGGACTAGAAGAGATTCCAGTTTTTGATATTTCTGAAAAAA
CAGTAAATGGAATAGAAAATAAATCTTTGTCACCTGATGAAGAAAGACTTGTCTCAGATATAATTGATCCTGTTG
CTTTAGAAATTCCATTATCCAAAAACCTTGTGGCACAGATTAGTGCTCTTGCTCTTCAGCTGGATTCAGAAGATC
TTCATAATTATTCAGGAAGCCAACTATTTGAAATGCACGAGAAACTAAGTTGTATGGCAAACTCTGTAATAAAAA
ATCTACAGTCACGTTGGAGATCACCATCCCATGAAAATTCTATTTAGTATTTTCAGAGAAAATTGAAGGTTTTTT
TAAACATCACTGGATTTCTTGATTGAGGAAACAAGTTCTGAAATAATAGCACAATTTCAAAGAAGAGACTCTTTG
CAAAGTTGATAACATTTCAAACCCTGAAGGACAGTGACTTATTATGTAAGTTCAATGTTGTAAGTTCATTATGTA
AGATCCTTTTTTTTTTCATAATATGTATTCTTGGCTGCTATGCGTGGTTTTTCAGGAAATTTAATTATCTTACTG
AGATGTGAAAGCAAAACTAGTAACAGAACTTACATTTTATTTCATGCTTTCTTAAACCCGTGCATATTCTGGTGA
AACATGTAAAATACTTTAAGTAAAATTGAACATTTTTATTTGAATTTTTGCTGAACTGATAAAGGTGTTTATATT
TTTGTTTGTTTGTTTGTTTAATTCATGTTTGTTGGGACTGAGGTTTAGGAAGTTTGTTACTGGTTAAAAACCTCA
AATGAAATGCGAAAGAATTTGAATTTTTCCTGCATATGTCAACTTTGGACAGCTTTCAAGAAAAAAAAAAAAAAA
AAAAAAAAA

FIGURE 3087

ACGAACAGGCCAATAAGGAGGGAGCAGTGCGGGGTTTAAATCTGAGGCTAGGCTGGCTCTTCTCGGCGTGCTGCG
GCGGAACGGCTGTTGGTTTCTGCTGGTTGTAGGTCCTTGGCTGGTCGGGCCTCCGGTGTTCTGCTTCTCCCCGCT
GAGCTGCTGCCTGGTGAAGAGGAAGCC**ATG**GCGCTCCGAGTCACCAGGAACTCGAAAATTAATGCTGAAAATAAG
GCGAAGATCAACATGGCAGGCGCAAAGCGCGTTCCTACGGCCCCTGCTGCAACCTCCAAGCCCGGACTGAGGCCA
AGAACAGCTCTTGGGGACATTGGTAACAAAGTCAGTGAACAACTGCAGGCCAAAATGCCTATGAAGAAGGAAGCA
AAACCTTCAGCTACTGGAAAAGTCATTGATAAAAAACTACCAAAACCTCTTGAAAAGGTACCTATGCTGGTGCCA
GTGCCAGTGTCTGAGCCAGTGCCAGAGCCAGAACCTGAGCCAGAACCTGAGCCTGTTAAAGAAGAAAAACTTTCG
CCTGAGCCTATTTTGGTTGATACTGCCTCTCCAAGCCCAATGGAAACATCTGGATGTGCCCCTGCAGAAGAAGAC
CTGTGTCAGGCTTTCTCTGATGTAATTCTTGCAGTAAATGATGTGGATGCAGAAGATGGAGCTGATCCAAACCTT
TGTAGTGAATATGTGAAAGATATTTATGCTTATCTGAGACAACTTGAGGAAGAGCAAGCAGTCAGACCAAAATAC
CTACTGGGTCGGGAAGTCACTGGAAACATGAGAGCCATCCTAATTGACTGGCTAGTACAGGTTCAAATGAAATTC
AGGTTGTTGCAGGAGACCATGTACATGACTGTCTCCATTATTGATCGGTTCATGCAGAATAATTGTGTGCCCAAG
AAGATGCTGCAGCTGGTTGGTGTCACTGCCATGTTTATTGCAAGCAAATATGAAGAAATGTACCCTCCAGAAATT
GGTGACTTTGCTTTTGTGACTGACAACACTTATACTAAGCACCAAATCAGACAGATGGAAATGAAGATTCTAAGA
GCTTTAAACTTTGGTCTGGGTCGGCCTCTACCTTTGCACTTCCTTCGGAGAGCATCTAAGATTGGAGAGGTTGAT
GTCGAGCAACATACTTTGGCCAAATACCTGATGGAACTAACTATGTTGGACTATGACATGGTGCACTTTCCTCCT
TCTCAAATTGCAGCAGGAGCTTTTTGCTTAGCACTGAAAATTCTGGATAATGGTGAATGGACACCAACTCTACAA
CATTACCTGTCATATACTGAAGAATCTCTTCTTCCAGTTATGCAGCACCTGGCTAAGAATGTAGTCATGGTAAAT
CAAGGACTTACAAAGCACATGACTGTCAAGAACAAGTATGCCACATCGAAGCATGCTAAGATCAGCACTCTACCA
CAGCTGAATTCTGCACTAGTTCAAGATTTAGCCAAGGCTGTGGCAAAGGTG**TAA**CTTGTAAACTTGAGTTGGAGT
ACTATATTTACAAATAAAATTGGCACCATGTGCCATCTGTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAA

FIGURE 3088

MALRVTRNSKINAENKAKINMAGAKRVPTAPAATSKPGLRPRTALGDIGNKVSEQLQAKMPMKKEAKPSATGKVI
DKKLPKPLEKVPMLVPVPVSEPVPEPEPEPEPEPVKEEKLSPEPILVDTASPSPMETSGCAPAEEDLCQAFSDVI
LAVNDVDAEDGADPNLCSEYVKDIYAYLRQLEEEQAVRPKYLLGREVTGNMRAILIDWLVQVQMKFRLLQETMYM
TVSIIDRFMQNNCVPKKMLQLVGVTAMFIASKYEEMYPPEIGDFAFVTDNTYTKHQIRQMEMKILRALNFGLGRP
LPLHFLRRASKIGEVDVEQHTLAKYLMELTMLDYDMVHFPPSQIAAGAFCLALKILDNGEWTPTLQHYLSYTEES
LLPVMQHLAKNVVMVNQGLTKHMTVKNKYATSKHAKISTLPQLNSALVQDLAKAVAKV

FIGURE 3089

GCTTCCGGCACGGGATGTTTTCGGTTGTTTGACCGAGAGAGTTGTAGGCGCAAAGCTGAGGAAAGGAGAGTGTGG
AGAGGGGCCTGGTGTGGTGGGGCCCGGTGTTTGGGACCGGAGGGTGTTGACGGCTGATGAGTTCCTTGGGTTTGC
TCTTTCTTCACCTGAAAAGAAGACTCCAGGAAGGGCAGCACATGCCGGAGAAAG**ATG**AATTGCAGCTTGACCGCC
CAGAGGCGCGGCAGTGACGCCGAGTTGGGACCCTGGGTGATGGCTGCGAGGTCCAAGGACGCGGCGCCGTCCCAA
CGCGACGGACTTTTGCCCGTGAAAGTGGAGGAAGACTCACCCGGAAGTTGGGAGCCCAACTATCCCGCGGCTTCG
CCGGACCCCGAAACTTCTCGACTGCACTTTAGGCAGCTGCGTTACCAGGAGGTGGCTGGACCGGAAGAGGCGCTG
AGCCGGCTCCGAGAACTCTGTCGTCGGTGGCTGAGACCCGAGCTGCTCTCCAAGGAGCAGATCCTGGAGCTGCTG
GTGCTGGAGCAGTTCCTCACCATCCTGCCCGAGGAGCTTCAAGCCTGGGTGCGAGAGCACTGCCCAGAGAGCGGG
GAGGAGGCGGTGGCCGTGGTGCGGGCTCTGCAGCGAGCGCTCGATGGAACCTCATCCCAGGGGATGGTGACTTTC
GAGGACACGGCTGTGTCTCTAACCTGGGAGGAGTGGGAGCGCCTGGACCCAGCACGGAGGGACTTCTGCAGAGAG
AGTGCGCAGAAGGATTCCGGGAGCACAGTTCCGCCGAGTTTGGAAAGCAGAGTGGAGAACAAAGAGTTGATTCCA
ATGCAACAAATTTTAGAAGAAGCGGAGCCACAGGGGCAACTACAAGAAGCGTTCCAGGGGAAGCGCCCCCTGTTT
TCTAAGTGTGGCAGTACCCATGAGGACAGGGTGGAAAAGCAGTCCGGAGACCCCTTGCCCCTGAAACTTGAAAAT
TCTCCTGAAGCAGAAGGACTCAACAGCATCTCAGATGTCAATAAGAATGGTTCCATAGAAGGGGAAGACTCTAAA
AATAATGAATTGCAGAACAGTGCCAGGTGTTCCAACCTTGTTCTATGTCAGCACATCCCGAAAGCAGAGAGGCCC
ACTGACAGTGAGGAACACGGGAACAAGTGCAAGCAAAGTTTCCACATGGTGACGTGGCACGTGCTGAAACCTCAC
AAGTCTGACAGTGGAGACAGTTTCCATCATTCCAGCCTTTTTGAGACCCAGAGGCAGCTCCATGAAGAAAGACCT
TATAAATGTGGTAACTGTGGGAAGAGTTTCAAACAACGCTCTGACCTCTTTAGACACCAGAGAATCCACACAGGT
GAGAAACCCTATGGCTGCCAAGAATGTGGGAAAAGCTTCAGCCAGAGTGCTGCCCTGACCAAGCACCAGAGGACA
CACACAGGCGAGAAGCCGTACACCTGTCTGAAATGTGGGGAGCGCTTCAGGCAGAATTCACACCTAAATCGTCAT
CAAAGTACCCACAGTAGAGACAAACATTTTAAATGTGAGGAATGCGGGGAAACCTGTCATATTTCCAACCTTTTT
AGACATCAGAGACTACATAAAGGGGAAAGACCCTATAAGTGTGAAGAATGCGAGAAGAGCTTCAAACAGCGCTCT
GACCTCTTTAAACACCACAGAATCCACACTGGGGAGAAGCCCTATGGATGTTCCGTCTGTGGGAAACGCTTCAAT
CAGAGTGCAACCCTCATTAAACACCAGAGAATTCACACTGGGGAAAAGCCTTACAAATGTCTTGAATGTGGGGAA
AGATTTAGACAAAGTACACACCTTATCCGACACCAAAGAATTCATCAAAATAAAGTGCTGTCGGCTGGGCGTGGT
GGCTCACGCCTA**TAA**TCCCAGCACTTTGGGAGGCCAAGGCAGGCAGATCATTTGAGATCAGGAGTTTGAAACCAG
CCTGGCCAACATGGTGAAATTCTGTCTCTACTAAAAATACAAAAATGAGCCGGGCATGGTGGTGCATGCCTGTAA
GCCCAGCTATTCGGGAGGCTGAGGTAGGAGAATCACTTGAACCCAGGAGGCGGAAGTTGCAGTGAGCTGAGATCA
TGCCACTGCACTCCAGCCTGGGCAACAGAGCGAGACTCCATCTCAAAAAAAGAAATAAAGTGCTGTCATTTTGAT
ATGTT

FIGURE 3090

MNCSLTAQRRGSDAELGPWVMAARSKDAAPSQRDGLLPVKVEEDSPGSWEPNYPAASPDPETSRLHFRQLRYQEV
AGPEEALSRLRELCRRWLRPELLSKEQILELLVLEQFLTILPEELQAWVREHCPESGEEAVAVVRALQRALDGTS
SQGMVTFEDTAVSLTWEEWERLDPARRDFCRESAQKDSGSTVPPSLESRVENKELIPMQQILEEAEPQGQLQEAF
QGKRPLFSKCGSTHEDRVEKQSGDPLPLKLENSPEAEGLNSISDVNKNGSIEGEDSKNNELQNSARCSNLVLCQH
IPKAERPTDSEEHGNKCKQSFHMVTWHVLKPHKSDSGDSFHHSSLFETQRQLHEERPYKCGNCGKSFKQRSDLFR
HQRIHTGEKPYGCQECGKSFSQSAALTKHQRTHTGEKPYTCLKCGERFRQNSHLNRHQSTHSRDKHFKCEECGET
CHISNLFRHQRLHKGERPYKCEECEKSFKQRSDLFKHHRIHTGEKPYGCSVCGKRFNQSATLIKHQRIHTGEKPY
KCLECGERFRQSTHLIRHQRIHQNKVLSAGRGGSRL

FIGURE 3091

GCCCCCCGCAGGCCCAGCTCGCTGCAGAGCCTTTTCGGCCTCCCCGAGGCCGCGGGCGCCCGGGACTCGCGCGAC
AACCCCCTGCGCAAGAAGAAGGCCGCGAACTTGAACAGCATCATCCACCGCCTGGAGAAGGCCGCCAGCCGGGAG
GAACCTATCGAATGGGAGTTCTGAGGGGCCGCAGGCCCTGGGGCGGGCAGCCAGGCTGGGCCGCAAGGGCCTGGA
CGGGGTCGGACGGGGCAGGCGCTGCGGACACCGTGGCCTGGGCTTGGCCCGCGGCCTGCACCGACCCCGGGCCGG
ACCTGAGCCCGCAGCCCAGACCCCCTCCACGGTCCGCGGCCTGCACCGACCCGAGGCCCAGATCCAAGGCCGCGG
CCCAGACCCACTCTGCGGCCCGGGCCGACCCTGCGGCCTCCACCAACCCCGCGGCCCAGACCCAGCCCGCGGCCT
GGACCCCTGGACCGCTTTGCGCACTTACCGCCCTGCGGGCCACAGGGCAAAATCGCCATAGGCCAAGGTGCATAT
AGAAAACAAAGGAGCATTAAGCCCAATCTATGTCGTGTTTTCAAGGAAGAAAACGGAAATGTGTGGTCGAGCTTT
TTTGTACCCTGAAGTGTTTTTTTTATTGCCCTAAGTGATTTCCACAGGTTCTGGAATAACTCTTACAGCTTTGCC
TTGTGTCCTCCTGTTCCGTGTGGGCTTTAAAAGAAAAAAAATCAAACCCACATATTAAAAGGGGGCTTTTTATCT
GCCATCTAATGGCTTCAGAGCGATAATACACTATTATCTTCTTAAACCAGGAAGGGGGGGGATTTTTTCAGAAAA
ATTAAAAAAAGAAAGTTTTTGTAGCTGTTCAGTTGCCACTAAGAGATTGCACAGTCAAAACGACTCTAAACACACT
AGTTTGGATTCCTAAATATTTTCAAGAAAAGAATCTTCTCGTTTGAAACTTTGAATTAAAATAAAACACATTTAC
TCCACATATTTTTTAACAAAAAGAAAACGTCACATCAGGAAACTCTGATTTTGTGGTAGCTGACATAGTGTTTTC
TTGTACGTGAATAGAATCCTGACATGTAGTGCACATTGATGTATAGCTTTAACTGACCCTGGGTTTTGCAGACCA
GGGTTTGTTTAATACACTCCATTCTAGGCCAAATCAGGACAAAAAANNNNNNNNNNNNNNNNNNNNNNNNNNN
NNTCCGAATCTAGGTATTTTATAATCTGCTTTTTAACCTCTAACCGCAGAGCACGCTGATCAGACCTCATATCTT
GGAGGTTTAGGAGACAAGTTAGAACTGTAGCATGTACCTGTTAATTTGGTTTAATTTATGGTGTCTCAATCTGTC
TGTGCGTCTGCACGTTGTGCAAGCATTTGAAAGAAAGGAGAGAGTAGTCCGGGCGAGCACAGCAGGCAGTCCCAG
GGCCAGACGGGCCCATCCCCAAGTAGATAGCAGTCTACGGATCTCTCTCTGGCACAGAAGGCACCTCACCTCAGA
CCATCTCCTGGATACCTGATGAACTGAGCCCTCCCAGGGGAAGACACTCCCCAGGCCTGGGCAAGGTTACAGCGC
ACTCTCTCTCTTCTTTCCCTTTTTCTTCCCA

FIGURE 3092

PPQAQLAAEPFRPPRGRGRPGLARQPPAQEEGRELEQHHPPPGEGRQPGGTYRMGVLRGRRPWGGQPGWAARAWT
GSDGAGAADTVAWAWPAACTDPGPDLSPQPRPPPRSAACTDPRPRSKAAAQTHSAARADPAASTNPAAQTQPAAW
TPGPLCALTALRATGQNRHRPRCI

FIGURE 3093

GAGGACGGCACTTTCGACATCTTCTACACGGCCCCCCAGCCGGGCAAATACGTCATCTGTGTGCGCTTTGGTGGC
GAGCACGTGCCCAACAGCCCCTTCCAAGTGACGGCTCTGGCTGGGGACCAGCCCTCGGTGCAGCCCCCTCTACGG
TCTCAGCAGCTGGCCCCACAGTACACCTACGCCCAGGGCGGCCAGCAGACTTGGGCCCCGGAGAGGCCCCTGGTG
GGTGTCAATGGGCTGGATGTGACCAGCCTGAGGCCCTTTGACCTTGTCATCCCCTTCACCATCAAGAAGGGCGAG
ATCACAGGGGAGGTTCGGATGCCCTCAGGCAAGGTGGCGCAGCCCACCATCACTGACAACAAAGACGGCACCGTG
ACCGTGCGGTATGCACCCAGCGAGGCTGGCCTGCACGAGATGGACATCCGCTATGACAACATGCACATCCCAGGA
AGCCCCTTGCAGTTCTATGTGGATTACGTCAACTGTGGCCATGTCACTGCCTATGGGCCTGGCCTCACCCATGGA
GTAGTGAACAAGCCTGCCACCTTCACCGTCAACACCAAGGATGCAGGAGAGGGGGGCCTGTCTCTGGCCATTGAG
GGCCCGTCCAAAGCAGAAATCAGCTGCACTGACAACCAGGATGGGACATGCAGCGTGTCCTACCTGCCTGTGCTG
CCGGGGGACTACAGCATTCTAGTCAAGTACAATGAACAGCACGTCCCAGGCAGCCCCTTCACTGCTCGGGTCACA
GGTGACGACTCCATGCGTATGTCCCACCTAAAGGTCGGCTCTGCTGCCGACATCCCCATCAACATCTCAGAGACG
GATCTCAGCCTGCTGACGGCCACTGTGGTCCCGCCCTCGGGCCGGGAGGAGCCCTGTTTGCTGAAGCGGCTGCGT
AATGGCCACGTGGGGATTTCATTCGTGCCCAAGGAGACGGGGGAGCACCTGGTGCATGTGAAGAAAAATGGCCAG
CACGTGGCCAGCAGCCCCATCCCGGTGGTGATCAGCCAGTCGGAAATTGGGGATGCCAGTCGTGTTCGGGTCTCT
GGTCAGGGCCTTCACGAAGGCCACACCTTTGAGCCTGCAGAGTTTATCATTGATACCCGCGATGCAGGCTATGGT
GGGCTCAGCCTGTCCATTGAGGGCCCCAGCAAGGTGGACATCAACACAGAGGACCTGGAGGACGGGACGTGCAGG
GTCACCTACTGCCCCACAGAGCCAGGCAACTACATCATCAACATCAAGTTTGCCGACCAGCACGTGCCTGGCAGC
CCCTTCTCTGTGAAGGTGACAGGCGAGGGCCGGGTGAAAGAGAGCATCACCCGCAGGCGTCGGGCTCCTTCAGTG
GCCAACGTTGGTAGTCATTGTGACCTCAGCCTGAAAATCCCTGAAATTAGCATCCAGGATATGACAGCCCAGGTG
ACCAGCCCATCGGGCAAGACCCATGAGGCCGAGATCGTGGAAGGGGAGAACCACACCTACTGCATCCGCTTTGTT
CCCGCTGAGATGGGCACACACACAGTCAGCGTGAAGTACAAGGGCCAGCACGTGCCTGGGAGCCCCTTCCAGTTC
ACCGTGGGGCCCCTAGGGGAAGGGGGAGCCCACAAGGTCCGAGCTGGGGGCCCTGGCCTGGAGAGAGCTGAAGCT
GGAGTGCCAGCCGAATTCAGTATCTGGACCCGGGAAGCTGGTGCTGGAGGCCTGGCCATTGCTGTCGAGGGCCCC
AGCAAGGCTGAGATCTCTTTTGAGGACCGCAAGGACGGCTCCTGTGGTGTGGCTTATGTGGTCCAGGAGCCAGGT
GACTACGAAGTCTCAGTCAAGTTCAACGAGGAACACATTCCCGACAGCCCCTTCGTGGTGCCTGTGGCTTCTCCG
TCTGGCGACGCCCGCCGCCTCACTGTTTCTAGCCTTCAGGAGTCAGGGCTAAAGGTCAACCAGCCAGCCTCTTTT
GCAGTCAGCCTGAACGGGGCCAAGGGGGCGATCGATGCCAAGGTGCACAGCCCCTCAGGAGCCCTGGAGGAGTGC
TATGTCACAGAAATTGACCAAGATAAGTATGCTGTGCGCTTCATCCCTCGGGAGAATGGCGTTTACCTGATTGAC
GTCAAGTTCAACGGCACCCACATCCCTGGAAGCCCCTTCAAGATCCGAGTTGGGGAGCCTGGGCATGGAGGGGAC
CCAGGCTTGGTGTCTGCTTACGGAGCAGGTCTGGAAGGCGGTGTCACAGGGAACCCAGCTGAGTTCGTCGTGAAC
ACGAGCAATGCGGGAGCTGGTGCCCTGTCGGTGACCATTGACGGCCCCTCCAAGGTGAAGATGGATTGCCAGGAG
TGCCCTGAGGGCTACCGCGTCACCTATACCCCCATGGCACCTGGCAGCTACCTCATCTCCATCAAGTACGGCGGC
CCCTACCACATTGGGGGCAGCCCCTTCAAGGCCAAAGTCACAGGCCCCCGTCTCGTCAGCAACCACAGCCTCCAC
GAGACATCATCAGTGTTTGTAGACTCTCTGACCAAGGCCACCTGTGCCCCCCAGCATGGGGCCCCGGGTCCTGGG
CCTGCTGACGCCAGCAAGGTGGTGGCCAAGGGCCTGGGGCTGAGCAAGGCCTACGTAGGCCAGAAGAGCAGCTTC
ACAGTAGACTGCAGCAAAGCAGGCAACAACATGCTGCTGGTGGGGGTTCATGGCCCAAGGACCCCCTGCGAGGAG
ATCCTGGTGAAGCACGTGGGCAGCCGGCTCTACAGCGTGTCCTACCTGCTCAAGGACAAGGGGGAGTACACACTG
GTGGTCAAATGGGGGGACGAGCACATCCCAGGCAGCCCCTACCGCGTTGTGGTGCCCTGAGTCTGGGGCCCGTGC
CAGCCGGCAGCCCCCAAGCCTGCCCCGCTACCCAAGCAGCCCCGCCCTCTTCCCCTCAACCCCGGCCCAGGCCGC
CCTGGCCGCCCGCCTGTCACTGCAGCCGCCCCTGCCCTGTGCCGTGCTGCGCTCACCTGCCTCCCCAGCCAGCCG
CTGACCTCTCGGCTTTCACTTGGGCAGAGGGAGCCATTTGGTGGCGCTGCTTGTCTTCTTTGGTTCTGGGAGGGG
TGAGGGATGGGGGTCCTGTACACAACCACCCACTAGTTCTCTTCTCCAGCCAAGAGGAATAAAGTTTTGCTTCCA
TTCTAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3094

MPSGKVAQPTITDNKDGTVTVRYAPSEAGLHEMDIRYDNMHIPGSPLQFYVDYVNCGHVTAYGPGLTHGVVNKPA
TFTVNTKDAGEGGLSLAIEGPSKAEISCTDNQDGTCSVSYLPVLPGDYSILVKYNEQHVPGSPFTARVTGDDSMR
MSHLKVGSAADIPINISETDLSLLTATVVPPSGREEPCLLKRLRNGHVGISFVPKETGEHLVHVKKNGQHVASSP
IPVVISQSEIGDASRVRVSGQGLHEGHTFEPAEFIIDTRDAGYGGLSLSIEGPSKVDINTEDLEDGTCRVTYCPT
EPGNYIINIKFADQHVPGSPFSVKVTGEGRVKESITRRRRAPSVANVGSHCDLSLKIPEISIQDMTAQVTSPSGK
THEAEIVEGENHTYCIRFVPAEMGTHTVSVKYKGQHVPGSPFQFTVGPLGEGGAHKVRAGGPGLERAEAGVPAEF
SIWTREAGAGGLAIAVEGPSKAEISFEDRKDGSCGVAYVVQEPGDYEVSVKFNEEHIPDSPFVVPVASPSGDARR
LTVSSLQESGLKVNQPASFAVSLNGAKGAIDAKVHSPSGALEECYVTEIDQDKYAVRFIPRENGVYLIDVKFNGT
HIPGSPFKIRVGEPGHGGDPGLVSAYGAGLEGGVTGNPAEFVVNTSNAGAGALSVTIDGPSKVKMDCQECPEGYR
VTYTPMAPGSYLISIKYGGPYHIGGSPFKAKVTGPRLVSNHSLHETSSVFVDSLTKATCAPQHGAPGPGPADASK
VVAKGLGLSKAYVGQKSSFTVDCSKAGNNMLLVGVHGPRTPCEEILVKHVGSRLYSVSYLLKDKGEYTLVVKWGD
EHIPGSPYRVVVP

FIGURE 3095

GGAAAAGTGGTCCTGGAGCTGGAGCGCTTCCTGCCCCAGCCCTTCACCGGCGAGATCCGCGGCATGTGTGACTTC
ATGAACCTCAGCCTGGCGGACTGCCTTCTGGTCAACCTGGCCTACGAGTCCTCCGTGTTCTGCACCAGTATTGTG
GCTCAAGACTCCAGAGGCCACATTTACCATGGTCGGAATTTGGATTATGCTTTTGGGAATGTCTTACGCAAGCTG
ACAGTGGATGTGCAATTCTTAAAGAATGGGCAGATTGCATTCACAGGAACTACTTTTATTGGCTATGTAGGATTA
TGGACTGGCCAGAGCCCACACAAGTTTACAGTTTCTGGTGATGAACGAGATAAAGGCTGGTGGTGGGAGAATGCT
ATCGCTGCCCTGTTTCGGAGACACATTCCCGTCAGCTGGCTGATCCGCGCTACCCTGAGTGAGTCGGAAAACTTC
GAAGCAGCTGTTGGCAAGTTGGCCAAGTCTCCCCTTATTGCTGATGTTTATTACATTCTTGGTGGCACGTCCCCC
CGGGAGGGGGTGGTCATCACGAGGAACAGAGATGGCCCAGCAGACATTTGGCCTCTAGATCCTTTGAATGGAGCG
TGGTTCCGAGTTGAGACAAATTACGACCACTGGAAGCCAGCACCCAAGGAAGATGACCGGAGAACATCTGCCATC
AAGGCCCTTAATGCTACAGGACAAGCAAACCTCAGCCTGGAGGCACTTTTCCAG**TGA**GCAAGAAGAACCCATCAG
GTGATTGTCAGGCCTCTGAGCCCAAGCTAAGCCATCATATGCCCTGTGACCTGCACGTATACATCCAGATGGCCT
GAAGCAACTGAAGATCCACAAAAGAAGAGAAAATAGCCAGTTCCTGCCTTAACTGATGACATTTCACCATTGTGA
TTTGTTCCTGCCCCACCCTAACTGATCAATTGACTTTGTGACAAGACACCCTCCCCACCCTTGCAATAATGTACT
TTGTGATATTCCCCCGCCCTTGTGAATGTACTTTGTACGATACACCCTCCCCACCCTTGAGAAGGTACTTTGTAA
TATCCTCTCCGCCCTTGAGAATGTACTTTGTAAGATCCACTTCCTGCCTGCAAAAAATTGCTCCGAACTCCACCG
TCTATCCCAAACCTATAAGAACTAATGATAATCCTACCACCCTTTGCTGACTCCTTTTTTGGACTCAGCCCACGT
TGCGACCCAGGTGATTAAAAAGCTTTATTGCTC

FIGURE 3096

GKVVLELERFLPQPFTGEIRGMCDFMNLSLADCLLVNLAYESSVFCTSIVAQDSRGHIYHGRNLDYAFGNVLRKL
TVDVQFLKNGQIAFTGTTFIGYVGLWTGQSPHKFTVSGDERDKGWWWENAIAALFRRHIPVSWLIRATLSESENF
EAAVGKLAKSPLIADVYYILGGTSPREGVVITRNRDGPADIWPLDPLNGAWFRVETNYDHWKPAPKEDDRRTSAI
KALNATGQANLSLEALFQ

FIGURE 3097

GACCAAGAGGTGGGGTGAATAGGGAGTGACTGCTAACTGGTATAAGGTTTCTTTTTGGTGAGATGAAAATGTTCT
GGAATTAGGCAGTGGTGATAGTTGTACAATCTTGTGAATATACCAAAAAAACACTAAATTGTACACTTTAAGTTA
GTGAATTGTATGGTATATGGATTATATTTCAATTTTTAAAAGTTAATCTGACAAGAAAAGGACTAGTCAGGAAAA
ATTATTTAATTGAAAGGAGCCGGGTGCGGTAGCTCATGTCTGTAATCCCAGCACTTTGGGAGGCCAAGGTGGGTG
GATCGCTTGAGGCCAGGAGTTTGAGACCAGCCTGGGCAACATGGTGAAACCCCATTTCTACCAAAAAAAAAAAAA
AGTTAGCCAGATGTGGTGGCACATGGCTGTAGTCCCAGCTACTTGGGAGGCTGAGGTGAAAGTATCATGTGAGCC
TGGGCAGTCGAGGCTGCAGTGAGCCATGACGGTGCAGCTGCATGCCAGCTTGGGCTGTAGAGCAAGACCTTATCT
GATAAAAAAAGAATCAACAGAAGGTGATTCTTTTCTAGAAGCTACTGTAATTACATCAGGGTAATGCTACCAGGG
GCAGAGCTGGAAAAATCAATGGTACAGAATAGGGAGTCTAGAAATAAACATAAATATCTATGGGAATATAATATA
TAATAAAATCAGCCAGGTGCAGTGGTTCACGCCTGTAATCCCAACACTGTAGGAGGCCAAGGCGGGCAGATCATC
TGAGGTCAGGAGTTCGAGGCAAGCCTGGCCAATATGGTGAAACCCCATCTCTACTAAAAATACAAAATTAGCCAG
GCGTGGTGGCGCATGCTGXTAGTCCCAGCTACTCAGGCGCCTGAGGCAGGAGAATCACTTGAACCCAGGAGGCGG
AGGCAGCAGTGAGCCGAGATTGTGCCACTGCACTCCAGCCTGCGCAACAAGAGTGAAACTCCGTCTAACCAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAATATATATATATATACACACACACACATATATATAAAAAATAAAATGTT
AGGAAAGGTAGACTATTAAATGGCATTGGGATAGTCATTCTAGCCACTTGAGAAAGATGCCAGAACTTAACCAAA
ATCATGAATAGTGTTATTTGAGCTAGGCCTTTTAACTATGGTGAAACAGAGGATACCAAAAAGGATTATTCAGAT
CCTTGTTACCATCCCTTTATTCCCTACCTAATACAAGCCCAGACTGTAGTCAGATATTACTCTAGCCCTCTGCCA
AAGGTGGGATTTCCTTGAATGTCTAAAAAATTCCGGACCTCCAAGCTAGAGAAGCTCACTTGCTCATGCACTTGA
CTCAACTCAAACAAGCCTTCATGGGTACCACTGTGGTACTGTTTCAGAGAGGAAAGATGTTCTTAGGTCCGTCAC
CTCCCCAAAGCAGAAAAATAGGATCTTAGTGACATTGTTATAATTCATACCCCATTTGGCTCTCTGAGGGGCAAA
TTTTTATCCAGTATGTGTTTAAAATAAGCAATAAGTTAGCATGATTTCTAGACTGAGAGAAACTTTTAGCAGAAG
CTTGTAAACCTCTGTTGTCCCTTTTTGTCACATGTGGACTATCTTCTGGGGAAAAGGCACACAGACCTTGGTATA
ATCTCCTTAAAAATAAAAGTAACAGTCTGTTAGCTCCATCTGTTGCCATGTGGAAAAGGGAAAAAAAAATCATTA
CATGGTGATTTCAGATATTTGGATTATTTTCCCAGAGGTAGCCCATAATATAGGAAGTTAGGACACACAAACCAA
AAAAAATTTCTGTTGAAGCAAAATTTAAATTTAAAAAATGAAACCATAAAAGGACTAGTGTAAAGAAAATATGGG
CAAAAAAACTTTTTGTCAATCCTGGTGGGAAAAGGCTATTATTTATTTTTACTGTTTTTATTGAGTATGCAAAGC
AAAGTACCAAAAAAGTGTGTGTGGTATTTGGTGGTTTTTAACATCTGTACCTGGTAAAATTAAAAATTGGCATTT
TCAAACCTTTAAGTTTCACTGGTCTGTGCAATCCAGCTGTGGTCCTTTGGATAAAGAAATGTCCTAGCAATTCCT
TCTTGGCCTCTAATGTTGTGTTTCTGTAGTATTATAGAAACTTGATAGTTTTCAACATCAGACCTAAATTTCTTT
ATTCTTTTATTTCTTTATCAATTTCTGCAGATGCTTTTGATAAAGAGTACAAGATGGCATACGATCGTCTCACAC
CTAGTCAAGTCAAGAGTACACACAACTGTGATAGACCACCAAGTACAGGGGTGATGGAATGTCGAAAAACCTTTG
GAGAACCTTATCTTTAAGATGTATTTGTATGTGTAAACATTCAATGTATATTGTATAGTCAGTGTATAAAATAAC
ACTTTTAGAGCTCTAAATATTTTTTCTTCAATTTTTGAAAATACAATTTGTAAATGGTTCAAAAGACTCAGACAG
CTTATGTACAGAATGTTTGAAGAAGAGAATAGTGACAAGTGGGGAGAAAGCCACTTTGTTTCTCATTTCTTTTTT
CTTCTTCTTTAACTCCCCTGTAATAGGAAATAAAGTATTTTTGTGATGAGGAAATCCCTAAACAAAATTAGTTGC
CATAAAATATGACAACTGCTTTATGGTTTCTTTTGGAAGAGACAGATTGAAAAATCATGAATGGAATCTAAACAG
AAATGTCAGATGAACGTATTTCCTGTTTTCATAGACTATTCAAATGTTTTGACCATGAAGTTGTATTATACATAT
TTTAAATTGTTTATAGTAAGTTGATATTTTTTTAATTTTTAAATTTAATATAGCAAACTTAAAATGAATTTAAAC
TTAAGCAAGCAAGCGTGTATTTTCCTTGTCTGCTGCTATTTGAAGTAATTA

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FIGURE 3098A

CAGTCTCCTGCCATGCAAAGAAGGCTCATAGAGTTGCTTTGGAAGTGGATTCTTTGTACAGCCTGGAAGAAGACG
CTGTGTAAATGACATGCTTTGGGGGCTCCCCCGGCCACAGAAGGAGAAAACTGGAGCCTTCTGATTTCCTGTTGT
TTACTTTCCAGAGGCTGGAGTTGGGTAGGAAACCTGAGCATACCGGCACACTGGCTTGTGGGTGACTTCTCTCCC
TGCTGTATTTCCCGGACAGGTGAGGCGGACCCTGTTCATCACAGGACTCCCCAGAGATGCCAGGAAGGAGACTGT
GGAGAGCCACTTCCGGTAAGCAGGTGGGGTGGGAGGGGAGCTGAGCCCCCTCCACGTAGGACCAACACAGCCCCA
CCCGCAGGGCGAGCACCTTAGGTGAGCGCCTTCTGTCTCTCGCTTGGGTATCCAGGTGAGATCTGAGAAGGACCT
GGCCCTGCCACACGTGTATGGAGTGGCTCCTGTGTGCCAGCCCTGCTGGTGCTGTGCAGTGAATAGCGCCCTGGT
GGCCTATCCTCTTCAAGCAGCCTGTGCACAGTGTCCAGAGCACAGACCAGGGTGTAGGTGCGAATAAACGTCTTG
AGAGCATACGGGGGAAAAAATTGTTGACCCCGGGGTTCTTAGCATCACCTTTGCAGAATAAGAGAGACGTGAGCT
GAGCATTTGTATGGACCCACAGGGCTAGGGTCTCACAGGTGGAAGGACCTCGGGGCCATCTCTGCGTTTGTTCGT
TTGTCCACCCACTGAGCGGGTGTCTGTTGAGTGAGCACTGTGTCTGAGTCCAGGCTCTCCCTGGTAGAACCTCCT
TTCCAGCGGCTCCCTTTGAGTATCTGCACCACCAATTCCTGCAGATGGAGGCTGGAGGAAAGTCTTTCCTGTGAG
GAGATTACGTGTGCAGCCAGGGATGCGGGGAAAGGCCCAGAGCATCAGGAAAGGTGGCGGTGGGGTGCAGGGGGG
CAGGGCAAGCAGTCCGGGAAGGCTCCCAGGACCCCATGCTGGAGGACCTGAAGGCTGGGCTGAGGAGCTGACATT
TTATTCTTTCTTCATTCCTTTTTTTGTAATCCTATTTTTTTAGAGACAGGGTCTTGCTCTGTTGCCCAGGCTAGA
GTTCAGTGGTGCAATAATGGCTTACTGCGGCCTCAACTCCTGGACTTAAGGCATCTTCCTGCCTCAGCCTCCCAA
GTAGCTGGGACTGCAGACACATGGCACCACACCCAGCTAATTTTTAAATTTTTTATGGAGATAGAGTCTTGCTAT
GTTGCCCAGGCTGGTCTCGAATTGCTGGGCTCAAGTGATCCTCCTGCCTTGCCCTCCCAAAGTGCTGGGATTACA
GGCGTGAGCCACCATGCCCGGCCTCTCTTCATTCCTTATCAATACAGCAGCCACTAATTTGTTGCATGGACTAGG
AGTTGGCTGCACTTTAACTTTGCACTATTTGTGAAGAAAGCACTTGCTAAGCAAATTGCTAGACAGGATCGTAAA
CTGAATGTTTAAAATTTGAAAAACTTCTTCAGAAACTCTAAGTATTTTAGAAATATTTACTAATATGTAAATACT
CAATACCAGAATCATTTTTCTGTATTTCCTTGAAGCAACTCCTCAAAGTTGCCTGCTAGGCAACACCTGGAAACA
GTAATTCCACTTAATGTATAACTTTAAAGAGAAAAAAAAAAGTCTCCTCATTCTCATACAAACATTGCATGACTCA
TGCTTTCCCCTATTTTAAGAGGCCTTTTTAGTGAATGCTGTTGCAGTCCGTGGGGATTGATGTATGAATTTGCCT
TTCAAGCAGGGATGCTTAAATTGCAGTTTTCTTCCTCACAGCTCTTATTGAGACCAGAAATTGTCCTACTGTTTA
ATTTCATGATTGATATACCTATGGGCTGTCTCTCTCACTAAAATGTAAGCACATCCAGGCCCTGTTACCAGCACC
TAGAACAGTGCCTGGCAGGTGGTAGGTGGGGATTTACATGGTTCTGGAATCCCCTGGAATTGTATGTATAATTTT
GCGTGTATGGTGAGGGGGTATTGCATGGTGGCCATGAGCATTGACCTTGGAGCCAGGTTGCCTGTATTCACCTCC
TGGCTCAGACACTCACTAGCTGTGTGATCTTGGGCACAAGCCACTTACCTCTGTCGGCCTCAGTTTACTCATCTG
TAAAATGGGGACAAAACCTCACAGGTTATGATGAGGATTAAATAAATAAATATATGTAACAATACCTGGTCAATA
GTGAGTATGTATTTTGCTGGGTGACAGAGTGAGACCCTGTCTCTAAACAAAACAAAACAAAACAAAAGCCCTCTT
TGTATTAAATTTCAAAATTTCCCCCTTTTGGAGGATAAAAGACAAAGAGAAGAGAGGTCTCCGCTGGCACAGAAA
CCAGCAGCGAGATCACTCTGCCATCCTTTCCCTTGGATCCGTGGGCACGTCTCCTGCTTGGGGTGTTTTCTTTTC
CAACGGTGTCTTTTGCCTCCTTCTCTCCCTGGCCACAGGGACGCGTATCCCACGTGTGAGGTGGTTGATGTGCAG
CTGTGCTACAACGTGGCCAAACTGATCTACCTGTGCAAGGAGAAAAAGAAGACTGAGAAGAGCCTGACCTATTAC
ACAAACCTGCAGGTGAAGACAGGCCAGCGGACCCTCATCAACCCCAAGCCCTGTGGCCAGTTTTGCTGCTGTGAA
GTGCTGGGCTGTGAGTGGGAAGACGCCATCTCTTACTACACACGGATGAAGGACAGGCTGCTGGAGAGGATCACA
GAGGAAGAACGCCACGTCCAGGACCAGCCCCTGGGAATGGCCTTCGTCACCTTCCAGGAGAAGTCCATGGCCACC
TAGTGAGTGTAGGCACATCCAGACCCCTTCTTGGCTGACTCCCTGTTCCCCTCCAGATAACTCACTGTCCCTCTC
GAGTGGAGATGGTACTGCTGACCCACCATCCCTGGGATTTATCTGTGGTGTTTCCTTCTCCTCCCTCAGCTACCC
ACACTCACTTTCAGCCAGCCCAGCCCATGTTTGTGTAACAGGCGGTGGGGGTGTGGGCAGCAGCCACGGAGTGGG
TGATTCTGGCTGACCCCCTCGAGCTGATGTGGCCTGGCCCCACTGCCGGGCTCTTCCCTGCTGCCCTGGACCCAT
CCTGTTGGCTTCATGTGCCAGCCTTGCCCCAGGGGAGATGGAGGCACCCTCCTTTCAGACATCTGCTCTGGGCCA
CAGATCCTTCTGTCTGTGGCTCCCCACCTTCCCACAAATGCAAAGCTGTGGGGAAGACCCCTGGGGCACGCTGGG
GCGCTCACTGCAGTGGGGAGCTTGACCCTGGGGAGTGGCTTTTCACAGTGGCCCTTGGCATGGGACTCTAGGCTC
TCATGCCTGTGGTCTCAGTGTCATCTCGCCTTAGGAGCAGCACAGGGTGGGTCGGGAGAGGGGTGTGGAAAGGTG
TCCAGCCACTGCCCCAGGCATTGTGACACTAGGAATGGACTCACACAGGACTTCCTGCCTCCTTGCAGACACTGG
GGCAGGAGGAAAGGGGAAGGCATCTGAGGCAGGAGTAGAGGGGCTGCTGGGCTCCTTACGGGAGGTTAAAGGAGG

FIGURE 3098B

AAAAGCTGTGACCTGTTGAGATGGTGAGGGTCGAGGTGGGAGCCCTGAGGAGGGAAGCTTGGGAACAGGCAATGT
GTAACGTGGTCTATTGCTACACTTGGGCCTGGGGAAAAAGTGACAGAATGAAAAGTTGAGCCACTGGCCTGGCAG
TAGCACTGATCAGAGCTCCAGCTTAACAGGCAGGGTGGAGGGGGATGGCCCTATGGAAGAGCAGTGTGTTGCCCT
CAGTTTCCTTATCTGTAAAATGGGAATCGTACTCCCTTTGTTGCTGGTGGTTGCGAGGATTAAACAAAATTCTCC
ACACACTGTGCTAGCGTGGCACCTCTTACATAGCGTTACTCATAATACACTAATCACAACAAAGCAAAGGTCCTA
TGCCACTGCCTCCCACTCCTACTCAGTCCCCACTTGCCACATGTGTGCTGGTAACCTGAGTAGCCTGGGCCTGGC
TGTTGCTACATTTCCTTGCAGCATCCTGAAAGATTTCAATGCCTGCAAGTGTCAGAGCCTTCAGTGCAAAGGTGA
GCCCCAGCCGTCCTCCCATAGCAGGGAGCTCTATACCTCCAAGTGGACAGTCACCTTTGCTGCTGACCCTGAGGA
CATCTGCTGGTAAGCTCCTAGACCAAGGAGAGGTGGGAGAGAGGCCTGGGTTCCTGGTGGGAGCTGCCCATCACC
TGGAGCACAGGTGTGACCTGGCAGTCAATGGAGATCTCCACACATCTGCAATTCTGTGGGCTGTGATGCTGTGAT
GTGCTCGGTGTGGCCCAACTGGGGTATCTGCCCAGCCCTTCCCTCCAGTGTTCCTCCCTAGCATTCAAGTGCTAC
CCAGCAGAAATATAATGCCAGTTCTGCATCTAATTTTAAATTTCCTAATAGCCATGCTAAAAAAGTAAAAAGAAA
CAGTTGAAATTAATTTTAATAATGTATCTCGCCCAATATATCCAAACTGTTATTTCAACATGCAATTTTTGAAAA
ATGTGAGATGTTTTACATTCTCTTTTTCACACTTAGTCTTCAATATCTGGTGTGTATTTTACACTTCTAGCACCT
CTCAATTCACACCAGCCACATTTAAAATGCTCAGTAGCCGCATGCAGCTTGTGCAGCCTTACTTAGGTCCAGTGT
CAGCCTGGGGCCGTGCTGGGGAGCTGAGCTGTGTCCATGGGGGCCCTGGTGAGCCTCCAGTGCTGTGCTGAGGGT
AAGGGCACCCAGCGCAAGCCCCAGCGCAGCTGCCTGTCCAGCCCTGCCTCAGCTCCTTGCACAGAATGAGCTTGA
AGTGCTCCCCTCTGCTCGGTTCTAGTTCTGCCTCTGACAGTTTTGCTCTTTGGTTCACAAGGCTTCCTAAACTCA
GGATTGCTTTGTGGGTCTGTTCTTTGGGATGAGAGGCCAGGGCAGGTGCAAGCTATGCCTTCACTCCTTTGTCCC
TGCCTTCCTCCTTCCTGTACCCCAGCTACAGCCCCGTTGGGAAGAATGTGTCGTTAGTCACAAAGCATTGCAGAT
GTGTCTAAGAAATGCCACGCTGGGGCCGGGCGTGGTGCTCACACCTGTAATCCCAGCACTTCGAGAGGCTGAGGC
AGGCGGATTGCCTGAGCTCAGGATTTCAAGACCACCCTGGGTAACATGGTGAAACCCTGTCTCTACTAAAAATAC
AAAAAAATTAGCTGGGTGTGGTGGTACACGCCTATAGTCCCAGCTACATGGGAGGCTGAGCAGGAGAATTGCTTG
AACCTGGGAGGCAGAGGTTGCAGTGAGCCGAGATCACACCACTGCACTCTAGCCTGGGTGACTGAGCAAGACTCT
GTCTCC

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FIGURE 3099

CCGGAGCGGGGATCACCTTAACTTGACTGTGGTCCCCCAGCCCTCCAAGAAATGCCCATAAACCAAGGAGGAGAG
GGTAAAAAATAGAAGAATACATGGAATTGGGGAGAAGAATGGGAAAAAAGATGGGAGTGACTGCATAATGTCAGC
ATTTTGTGCTTTTGGCTCAGCATTTGGATTGGATGGAGGATTTTCATCCTGAAACCAGCCCTCCGTCGCCACCGA
CCATGGAATAATTGTCTTCCACGAAACTCTTCCCTGGTGCCAAAAAGGGTTTTATGTATATATTTGAGAGCTCCA
CATCCCTGGATCTGAATCCTCCACTTCCCACTGGAACCATGCCCCTCCCAGTCCCGTTTCTCCCCTCTAGGGGATG
GGAGGCTGAGAGACCCCAGGAAGAAGAGGATGGTGAGCAGGGCCCCCCTCAGGATGAGGAAGGCTGGCCCCCTCC
AAACTCCACCACTCGGCCTTGGCGATCTGCTCCTCCATCCCCTCCTCCTCCAGGGACCCGCCACACAGCCCTGGG
ACCCCGCTCGGCCTCCCTGCTCTCCCTGCAGACTGAACTCCTTCTGGACCTGGTGGCTGAAGCCCAGTCCCGCCG
CCTGGAGGAGCAGAGGGCCACCTTCTACACCCCCCAAAACCCCTCAAGCCTAGCCCCTGCCCCACTCCGTCCTCT
CGAGGACAGAGAACAGCTTTACAGCACTATCCTCAGTCACCAGTGCCAGCGGATGGAAGCCCAGCGGTCAGAGCC
TCCCCTCCCTCCAGGGGGGCAAGAGCTCCTGGAGTTGCTGCTGAGAGTTCAGGGTGGGGGTCGAATGGAGGAGCA
AAGGTCCCGGCCCCCCACACACACCTGCTGAGACTTGAGCCCCAACCAGCCCTTCCTTGCCACTGGTCTCAAAGC
TGGGCAGCCCATTGCATGCCCTCAACTCTTGCTTGGCAGGGGTACCAGAGACTGAAAGACACGGCACAAATCTCA
ATATTCATCTCCCACATCACCTTCCCTGGGAACTGGACAGGGTGAAAGTCCTCAAACTCTGGGAACAGGCGAGAT
GGAACAGGGATTTAACTCCCCGCCCACAGGTCCATGGGAGCTTGAGGCAGTAAGGGGGATCCCAGGCACCCATCT
CAAGGAGTGGCTGGGAGTCTTTTCCCTAACTTGTGGGGACACCACCAGTTGTCAAGCTACTAGGCAGTAGGGTCT
GAGGGCTCAGGCCTCCACCTGAGAGGTTATAACCTGAGAGACAGCTCTACCCTTCCTCCCAGTAAGAAGGGAAGG
TGGGTGGGCACCTGAGAGATTAAGACTATTCTCCCAGTCCCACTACCAGCACCCCCGATCCCTGAGACTGAGGGG
TTTACGGGCTGTGAATGGACCTTCAGCCCTGCCCACCCTCCCTCCCCACTGCTGCTGAGTCTGTCTGATGTTTTG
GTTGTGTGAATAAATATAATTCCCCTCTGGAAAAAAAAAAAAAAAAA

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FIGURE 3100

MEAERPQEEEDGEQGPPQDEEGWPPPNSTTRPWRSAPPSPPPPGTRHTALGPRSASLLSLQTELLLDLVAEAQSR
RLEEQRATFYTPQNPSSLAPAPLRPLEDREQLYSTILSHQCQRMEAQRSEPPLPPGGQELLELLLRVQGGGRMEE
QRSRPPTHTC

FIGURE 3101A

TAAAACTTACAATCCAGATTACGATGAGGACCTGGTGCAGGAAGCTTCATCTGAAGATGTCCTGGGCGTTCATAT
GGTGGACAAAGACACAGAGAGAGACATTGAGATGAAACGGCAACTACGGCGACTACGGGAGCTCCACCTATACAG
CACATGGAAGAAGTACCAAGAGGCGATGAAGACATCCTTGGGAGTTCCACAACGTGAGCGTGACGAAGGCTCCTT
GGGCAAGCCATTGTGTCCACCCGAGATACTCTCGGAGACGTTGCCAGGCTCTGTGAAGAAAAGGGTATGCTTTCC
ATCAGAAGATCATCTAGAGGAGTTTATAGCAGAACATCTCCCTGAAGCATCCAATCAGAGTCTCCTCACTGTTGC
CCATGCAGACGCAGGCACCCAAACCAACGGTGACCTGGAAGACCTGGAGGAGCATGGGCCAGGGCAGACAGTCTC
TGAGGAAGCCACAGAAGTTCACATGATGGAGGGGGACCCAGACACACTGGCCGAACTTCTGATCAGGGATGTACT
TCAGGAGCTGTCCAGTTACAACGGCGAGGAGGAGGACCCAGAGGAGGTGAAGACATCCTTGGGAGTTCCACAACG
TGGTGACCTGGAAGACCTGGAGGAGCATGTGCCAGGGCAGACAGTCTCTGAGGAAGCCACAGGGGTTCACATGAT
GCAGGTGGACCCAGCCACGCTGGCAAAGAGTGACCTGGAAGACCTGGAGGAGCATGTGCCAGAGCAGACAGTCTC
TGAGGAAGCCACAGGGGTTCACATGATGCAGGTGGACCCAGCCACACTGGCAAAGCAATTGGAAGACTCCACCAT
TACAGGCAGCCACCAGCAGATGTCAGCAAGTCCTTCCTCTGCACCTGCAGAAGAAGCAACAGAAAAGACCAAAGT
GGAAGAGGAAGTGAAAACCAGAAAGCCCAAGAAGAAAACCAGGAAGCCCAGCAAGAAAAGCCGGTGGAATGTCCT
GAAATGTTGGGACATTTTTAATATATTT**TAG**AGACCTCTGAAGATTCCTCGACCACCAGGAAGGGCCCCGACGTG
GGGATGTCAACATGGCTCAGACTTGATGTGGATCGTGATCATTTCGGGAAATGTGTTACTCCAAAAACTTTTATA
ATCTTTGCTTAATTTGTTTTTAAATACTTTCCTGGCTGGGCGTGGTGGCTTATGCCTGTAATCCCAGCACTTTGG
GAGGCCGAGGTGGGTGGATCACCTGAGGTCAGGAGTTCAAGACCAGCCTGGCCAACAAGGTGAAACCCCGTCTCT
ACTAAAAATACAAAAATTAGCTAGGCGTGGTGGCGCACTCTTGTAGTCCCAGCTATTTGGGAGGCTGAGGCAGGA
GAGTCGCTTGAACTCAGGAGGCGGAGGTTGCGGTGAGCCGAGATCATGCCACTGCACCCCAGCGCCTGGCTACAG
AGTGAGACTTTGTCTCAAAAAAAAAAAAAAAAGAACAAAAAAATTCTGACTTTAACCTCTGTTTTTCAGAGGGCA
CAAATTGTTCTTGTATTGTTTCCATTTTACATTTTTTTCTTGAAGTTATTTTCCAATTGTTTTCATTTTTTCTGA
AGTTTTGTTTACTCGGTTTTAAGTTTTTGTAATTTTGATAGACTTCTTTTGTGCTTTCATTTTCTTAATGACTTT
TACCTCATTTTTAAAACAAATCCATAGTATGGATGATATTGATGATGAAATGTCTTACGATGATCATTTAGAGGT
TTATTTTGAACAACTGGCAATTCCACGAATGATGGAATAAAACATATGAAGTAGAAGGACTGGAACCTCCAGAAA
AAGTACTTTAAGTTACCTACAGGTGATCCTAGTCAGGTATGAATTGATAAGAAATGCCTGCACCTTCCCTCCTTC
CTATCTTTCCCTTGCCTACAGAAAATTAAAAGGCAAAACAATGGACATCTACATATTCTTCATTCAGATCAACCA
GTGGCTAGCATTTGCCACCTTTTGCAGTTTCTTTCTCTTTCCATAAGTACTTTCTTCTCTGAATCATTTGAAAGC
AAATGAAAACAGTAGCCTAAAGTGTCAGTTTCAACCAGAAAATAACAGCTCTGATTTCTCATGGCTCACACTCGT
CTGAAACGACTCGGGTAGAGGCTGAGGAAGGCCGTGTTGTTTGTCTACCTGGGACTACACCTACTGAAAGAAGTT
CTCAAGTTCTGATTGAGTTCTAAAATTCTTTTGAAGATTGGAATTCTTCCTATGGCACCATGGGCCGGCACTGCC
ACGTTTTCCAAGGAACCTGCCAGAGCTCCTGCGGAAGCTGCTCCTCGGGCGATGGAGTCCCTTTGCTGCTAGGCC
CTTCTTCAGTCACCACAGGATGCCTGCCATTCATGAACAGGAAGGAGAGGACGGGCTTTGAATAAAAAACAGGAT
CCAGGAAATATTTGTGAGGCCATTTGGACTTCAGTGTGAAATGGTGTTAAAAGATGAAGTCATTTATTCAAGAAG
TAAACCTCTGCCACCTGGACTGTGCTCAGACATTTCATTGATTTTGTTTAATAAACATTTTCTGGCTTTGGGAGG
TGTCTCTCTTGGTAGAGCACAGTGTCAAAGATGGACAAGATGGACACATAGTCCATTATTTGGTATTGTTTGTGT
ATGGGAGCGGACCACAAATTAATGTTTGGAGAACAATTTTGTCATAACACACTGTTGAGGCTCAGTTGTACAGAA
CTGGAAAAGTCTTTCAGCTTGGCACATGTCCTGATTCAGCCTTTGTTTAACATACATTCCAATCCGGATTCTATC
TTCACTGGCTACAAAGACCACCTGATACGTGCACCACGACACAGGAGCTGCTGGAGAGGGGGTAGTGTTATCACC
TCAAACCCACAGCCATATTTTTCAAAAGCCAGCTTAGAGAGAGGTGTACTGATAGCTGCATAGAGAACATGCAGT
CCATCCATTCTTCCCAGTGATGTACATTTCTCAATCAGTAACCACGTGGTATACCAGCCTTGAGTGTCACATCTC
CCAACCATACCAAATGGATCACCTAACTGGAGGTGGGGGGGGCCCCTCAGAAATGAGATTTCGTATTTACTGTAA
AATTGCCTTATTTTTTCTTTTGAGGTGGAGTCTCGCTCTGTTGCCTGGGCTGGAGTGCAATGGTGTGATCGCTGC
TCACTGCAACCTCCGCCTCCTGGGTTCGAGCGGTTCTCCTGCCTCAGCCTCCCAAGTAGCTGCAATTACAGGCGC
ATGCCACCACTCCCAGCAAATTTTTATATTTTTAGTGGAGACGGGGTTTCACCATGTTGGCCAGGCTGGTCTCAA
ACTCCTGACCTCAGGTGATCTGCCCACCTTGGCCTCCCAAAGTTCTGGGATTAAAGGTACGAGCCACCGCAACTG
GCTGAGAATCTTTTTATTTGCTGATTTGTCTCTTGTGTATTTTCTTTGTTCAGATGTCTCTTCAGATCTTTTTCT
CACTTTTAAATTGTTTTTTTAATTGTTAAGAATTTTCTGTCTAGTTTAGATATAAGCCCTTTATCAGACATGTGT
TTTGCAAATATTTTCTCCTAGTCTGTGGCTTGTATTCTGTCTCTTAACAGTCATTTTATTTTTACTTTTGAAACT

FIGURE 3101B

AAAGAAGAAGAATGGTCAGCTTTCCGTTATTCTTGTAACAGTAATGGCAGAACCAAGTCTGCTAATGCTACATTG
AGCAAAGAAAGTCACCTGGTCAAGTCCAACATTAATGAAATGGGGTAGTACATGCAGGCGGCGTTGGGGTTGGGG
AGGGAACAAATGCTTCTTGAGAGTAATATAATCTGCCATACCATCCAGGAACCTACAATGGCTATCTATTACCTT
ATTCTCTGGTTTGTTTAATGTTCAAATCTTTCCTAAAGATCCTTCAACTTTTCTGGAAGAATCTAATCTGATAAC
ACCATCAAAAACACATTACTTCTTTTGGCATAATTTAAATTGTAAGACATCATTCACATTTATCAATGTTACATA
TATAAGAACTCACCCACCATATTCCTCCTTGAGGAATTATAGCATGTAATTCTATAACCATTTTTATAATCGTCT
AACAATTTTATAATGGATTGGCTGCTATCAATTTTTTAAAAGTCATGGCTTCTCCAGTCATTTCTTGCTTATCAA
AATTATTTCATGAGATGGGTCTATCCTTGTATATTTGAAAATGAGGTTTGCTTCCTTCTACTTAAAAAACAACTT
GAACATACCTGTTTGGATCACATGGTCTTGTCCTGATAACTTGGAAGAGGTTGCTTCAGCATTATTCTTATTGTT
GTGGTGGTTATTATTAACATTGTTTCATATTCCGTTTAAAAAATTAAAATTTTACAC

FIGURE 3102

KTYNPDYDEDLVQEASSEDVLGVHMVDKDTERDIEMKRQLRRLRELHLYSTWKKYQEAMKTSLGVPQRERDEGSL
GKPLCPPEILSETLPGSVKKRVCFPSEDHLEEFIAEHLPEASNQSLLTVAHADAGTQTNGDLEDLEEHGPGQTVS
EEATEVHMMEGDPDTLAELLIRDVLQELSSYNGEEEDPEEVKTSLGVPQRGDLEDLEEHVPGQTVSEEATGVHMM
QVDPATLAKSDLEDLEEHVPEQTVSEEATGVHMMQVDPATLAKQLEDSTITGSHQQMSASPSSAPAEEATEKTKV
EEEVKTRKPKKKTRKPSKKSRWNVLKCWDIFNIF

FIGURE 3103

GCTCCTCACAGGCGCGGGTTGCTTCACCCACACCGTCATGTACTACGGCCACTACAGTAACGCCACGCTGAACCA
GCCGTGTGGCAGCCCCCTGGATGGCAGCCAGTGCACACCCAGGGTGGGTGGCCTGCCCTACAACATGCCCCTGGC
CTACCTCTCCACTGTGGGCGTGAGCTTCTTTATCACCTGCATCACCCTGGTGTACAGC**ATG**GCTCACTCTTTCGG
GGAGAGCTACCGGGTGGGCAGCACCTCTGGCATCCACGCCATCACCGTCTTCTGCTCCTGGGACTACAAGGTGAC
GCAGAAGCGGGCCTCCCGCCTCCAGCAGGACAATATTCGCACCCGGCTGAAGGAGCTGCTGGCCGAGTGGCAGCT
GCGGCACAGCCCCAGGAGCGTGTGCGGGAGGCTGCGGCAGGCGGCTGTGCTGGGGCTTGTGTGGCTGCTGTGTCT
GGGGACCGCGCTGGGCTGCGCCGTGGCCGTCCACGTCTTCTCGGAGTTCATGATCCAGAGTCCAGAGGCTGCTGG
CCAGGAGGCTGTGCTGCTGGTCCTGCCCCTGGTGGTTGGCCTCCTCAACCTGGGGGCCCCCTACCTGTGCCGTGT
CCTGGCCGCCCTGGAGCCGCATGACTCCCCGGTACTGGAGGTGTACGTGGCCATCTGCAGGAACCTCATCCTCAA
GCTGGCCATCCTGGGGACACTGTGCTACCACTGGCTGGGCCGCAGGGTGGGCGTCCTGCAGGGCCAGTGCTGGGA
GGATTTTGTGGGCCAGGAGCTGTACCGGTTCCTGGTGATGGACTTCGTCCTCATGTTGCTGGACACGCTTTTTGG
GGAACTGGTGTGGAGGATTATCTCCGAGAAGAAGCTGAAGAGGAGGCGGAAGCCGGAGTTTGACATTGCCCGGAA
TGTCCTGGAGCTGATTTATGGGCAGACTCTGACCTGGCTGGGGGTGCTCTTCTCGCCCCTCCTCCCCGCCGTGCA
GATCATCAAGCTGCTGCTCGTCTTCTATGTCAAGAAGACCAGCCTTCTGGCCAACTGCCAGGCGCCGCGCCGGCC
CTGGCTGGCCTCACACATGAGCACCGTCTTCCTCACGCTGCTCTGCTTCCCCGCCTTCCTGGGCGCCGCTGTCTT
CCTCTGCTACGCCGTCTGGCAGGTGAAGCCCTCGAGCACCTGCGGCCCCTTCCGGACCCTGGACACCATGTACGA
GGCCGGCAGGGTGTGGGTGCGCCACCTGGAGGCGGCAGGCCCCAGGGTCTCCTGGCTGCCCTGGGTGCACCGGTA
CCTGATGGAAAACACCTTCTTTGTCTTCCTGGTGTCAGCCCTGCTGCTGGCCGTGATCTACCTCAACATCCAGGT
GGTGCGGGGCCAGCGCAAGGTCATCTGCCTGCTCAAGGAGCAGATCAGCAATGAGGGTGAGGACAAAATCTTCTT
AATCAACAAGCTTCACTCCATCTACGAGAGGAAGGAGAGGGAGGAGAGGAGCAGGGTTGGGACAACCGAGGAGGC
TGCGGCACCCCCTGCCCTGCTCACAGATGAACAGGATGCC**TAG**GGGGACGGCGATGGGCCTCACGGGCCCGCCCA
GCACCCTGAGACCACACTGTTGCCTCCCAGTGACCCTGCTGGGACACCAGGACAAGGAAGACAGTTTCGCCTCTC
GAAAGCCGCAGCTGCGCCTAGGCTGGAGCTGGAAGGGTGGGTGAATCCGGCTTGGGCATCCCCAATGAACTCTGC
CCTGCCTGGGACTCTATTTATTCTGATTAAAGGGGTTTTGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAA

FIGURE 3104

MAHSFGESYRVGSTSGIHAITVFCSWDYKVTQKRASRLQQDNIRTRLKELLAEWQLRHSPRSVCGRLRQAAVLGL
VWLLCLGTALGCAVAVHVFSEFMIQSPEAAGQEAVLLVLPLVVGLLNLGAPYLCRVLAALEPHDSPVLEVYVAIC
RNLILKLAILGTLCYHWLGRRVGVLQGQCWEDFVGQELYRFLVMDFVLMLLDTLFGELVWRIISEKKLKRRRKPE
FDIARNVLELIYGQTLTWLGVLFSPLLPAVQIIKLLLVFYVKKTSLLANCQAPRRPWLASHMSTVFLTLLCFPAF
LGAAVFLCYAVWQVKPSSTCGPFRTLDTMYEAGRVWVRHLEAAGPRVSWLPWVHRYLMENTFFVFLVSALLLAVI
YLNIQVVRGQRKVICLLKEQISNEGEDKIFLINKLHSIYERKEREERSRVGTTEEAAAPPALLTDEQDA

FIGURE 3105A

GGGCAGGCTGATCCAGCTGAGTCGGGATGGAGCCACAGGCCATGTTCTGCTAACAGACTCCGAATTCAGTATGCA
GGAGCCTATGGTGCCTGCCAAGCTGGGGACCCAGGCAGAGAAGGACCGGCGGCTAAAGAAGAAACACCAGCTGCT
TGAAGATGCCCGCAGGAAAGGAATGCCCTTTGCCCAGTGGGATGGTCCTACTGTGGTCTCCTGGTTGGAGCTCTG
GGTGGGGATGCCTGCCTGGTATGTGGCAGCCTGCCGGGCCAACGTCAAGAGTGGTGCCATCATGTCCGCTCTGTC
GGACACAGAGATCCAGCGGGAGATCGGCATCAGCAATGCCCTGCACCGGCTCAAGCTCCGCCTGGCCATTCAGGA
GATGGTGTCATTGACCAGCCCCTCTGCCCCACCCACCTCCAGGACTTCTTCTGGGAATGTCTGGGTCACCCATGA
AGAGATGGAAACTCTGGAAACATCTACTAAAACAGACAGTGAGGAGGGCAGCTGGGCTCAGACCCTGGCCTATGG
GGACATGAACCATGAGTGGATTGGGAATGAATGGCTACCCAGCCTGGGGCTCCCGCAGTACCGCAGCTACTTCAT
GGAGTGCCTGGTGGACGCCCGCATGCTGGACCACCTCACCAAGAAGGACCTGCGGGTCCACCTGAAGATGGTGGA
CAGCTTCCATCGAACCAGTCTTCAGTATGGCATCATGTGTCTGAAGAGGCTGAATTATGACCGGAAGGAGCTGGA
GAAGAGGCGAGAGGAGAGCCAGCATGAGATCAAGGATGTGTTAGTCTGGACCAACGACCAGGTGGTTCATTGGGT
CCAGTCTATTGGGCTCCGGGACTACGCAGGAAACCTGCATGAGAGTGGTGTGCATGGAGCCTTGCTGGCCCTGGA
CGAGAACTTCGACCACAACACACTGGCCCTGATCCTCCAGATCCCCACACAGAACACCCAGGCACGCCAAGTGAT
GGAAAGAGAGTTCAATAACCTGTTGGCCTTGGGCACAGACCGGAAGCTGGATGACGGGGATGACAAGGTGTTTCG
CCGCGCGCCCTCCTGGAGGAAGCGCTTCCGGCCGCGGGAGCACCACGGTCGCGGCGGCATGCTCAGCGCTTCCGC
GGAGACCCTCCCGGCGGGCTTCCGTGTGTCCACCCTGGGGACCCTGCAGCCCCCACCGGCCCCGCCAAAGAAGAT
CATGCCTGAAGCTCACTCCCACTATCTCTACGGACACATGCTCTCCGCCTTCCGGGACTAGCCATGGCCCCCAGG
GCTGGCTTCCTCCTTCTGGGTTTCACAGGCTCCTCTGGCCCTGACCCCTCTTGCTCGTTCCCCTTCCTTCCGCAG
CTCCTAGTCTCGTCCGTGACTTTCCGGTTGCCCTGGATCTCAGAATATATTCGTCCACCCCCTCGGCACCCCATT
ACCCCGAGTCCCACCGTGTGTCCGTTGTAAGTCCGGTGGATGTGGCTGGGGTTTCCTGGTATTGTGGAGGCACCC
AGGTTGTCCATGCTTGGGATTCTGGGGGAAGGAGAGAAGGGCAGCTCAGGGTGGATGTGAAGCCACCCTTCCTCT
TCTGGACCCAGCCTGGTCTGCACTGCAACCTCCACCAGGACCAGGATCCTGGGCCACAGGCTGGGATGATCCTTC
CAAGAAAGGGTCATTTCAGACGCAGCCCTGCTTGGGCTATTCAATCTTAGGGTGTCTATCCACGTCTGGCTGTGC
CAAATGGTCTGGCAGCTGGTTTTGGCATCCCCAGCATCACCACTCTCCCAACCCATCACCGTGACTGCAGTTCCT
GCCCCCATTCTCTTGGGGTCAGGGAGGGGCTGGGAAGGGCTACTGAAGGCCCCATTCTCCCACAGGATGGTGAGG
CTGGGAGGAGGAAGACTGAGGTAGAGATTCCAGGCCCTGGCATAAGCTGAATCCCAAATTTGGGTTTGGGAAGAA
CCAGAGAGAAATGGATCCCTGAGCTCTGAGCCAAGGGTGAGGATGGGGAAACTCTAAGCTCCCACCTAATAAGAA
GCATAGGCAGACCAGCCAGAGGGAGAGCCAATGGCCTCTGGTAGCCTTAAGCCCAAAGGGCAGTGGGAATGTCCC
CTGCCCCAACCATCGGGTGGAGCTCCTGCTGGGCTATGGGGAAGGGAGGTTGTGCGGATCTTGACTCTAGGGCAG
AACAGATCTAACCATGCATTGCTAGCTCTGCTCTCAGCATCCCTTCCCCTTCTCTCCTCCTCTGCCTCACTTCTT
TAGTAATCCCAACCCTATAAAAATGAGCCTAATGGGTGGATTGAATATACATTGAGCCCAAAGTCAAGTTTGGGG
AAAAGGCAGACTAAGGCCTCCTTTCTCTGACCTCCCAGGAAGAAAATAGCTTCTCCTACAGTGATTCATGTCCCA
GGTCCAGGAAATCCAATCTTGGTGAAGGCAGCCACTCTCTTGCTTGTCCCCAAATCACCTAACCCTCATCCAGGG
CTATTTTGGTGGGCAGGGACTGCCTCCTCCCGGAATTCCTAAGATCTGCCCAGCTGCCACCATTTTCATTGCTTT
CCCCAGCAGCATGATGGGAACCCAAGCTGAGGGATACAGGTCCTGATTTGGTAGGAATATTATTCCCAAGAAATA
CCCGCTCCTCACCTACTCCCTCATCCTACCAAGGTGCCTGAAAATGTTCAAGACTTATGTTCAGGGTGGGATGAT
GGAACCGAGGGCTTCATCAAAGTGAGAGGAAAGGAAAAGCATCTGGCATGTGTTTCTTGGATAGGGGCCAGTGCA
GTGCCATCCTACAGGTGGCTGGAGCAGCTGCTTTGCAACCTGATCACCTTGAGTTCTGAGCAGGGACTAGGCTTG
CAGGTGAGATAATGGGCCAGGGCACCCAGTCCAGAAGGAGCAATGGCACCTGGGCAGTGCCAGGGCTTAAAGCCC
GCTGCTCCTTTTCGGTAGAGGAGAGGCCCATCACTGGTGTGGTGGGGTGGGCTCTCCCTTAGGCTTGGGCAAGGC
AGCCACCTGCCCTTGCTCTCCCTTAGTGTTCCCTGGCCTCCCTGCCATCAGGTTGCTGGGAGTGGAGATGGAGGG
ATTATTGAGCAGAAAATGAGTTGGATGGAGATAAACAGCTCCCATCCCTGGGTAATGGATGGTAAGATGATGGAG
ATTCCTAAGATTGGTGGAGTTGGGCAATGCATAGCCATCTGACTCCTTCAGGGTGCTCTTGATGGGCTGGCTGTA
AGGGAGACTCAGTCCCAGCCTCTCCCCTCTACAACTCCTGCCACTGTTGGCCATGTCGTAAGGCAGCAGCTGTGC
CAGGATAGCTGGGTCCATTCAGAGCACCTTGAGAAGTGTTGCAGGGAGGTGTTAAGAAGAGAAATCTGTGCAAAC
AGTGATGGAAGGCTGTTGTCTTGGTGTATCCCTTGCCTCATAGTCAATATATTTTTTTTTGGCGAGTCACCAGTG
ACCCGAGCCCTCCACACCAGCCTCCTGTATCTCATCAGGTCCCTTCTCAGTACTGTATTTGCTCAGTGCATCAGG
AATGGGTGTATGGGTGTGTGTGGGTGGGTGTGAGTGTGGGTGTGTACGTACCAATAAACAACCTGGTTTTAAGAC

AATGT

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FIGURE 3105B

FIGURE 3106A

GTTTAGTGTTAACCTCAGCTACACTGAAGGAATAGACCTTAGTCCTCACAAGTATAAGTTCTAGCTTGGAAGCCT
GGGTTCTGCAGTAGCTGTGGAACTTAAGCCTCTGAGCTCAGGGATGCAGAGGCATTGAGTTACTACCAAGGGCCT
GATCTTTTCTTTAGCAGGCATCTGTGTTAATTGTTTCAAAAGGTGGTGATCAGTTTTACAGCCTATTATAAAGGA
GATTTTTGCCTACTATAAAACTAATCCCCCTGAAAGAGTGAGTAAACATAACTTTTTGTGTGTTGACTTCCACAA
GGGAAGGAGTTGGCACTTACACTCTGACTTTTGATTCAGTCGTCCTTCTTGAGCCATTTTTGCAGGGGATCAGTT
TGGAGTGGGCGTTAACAATGTTATTCTTTTTTTCTTCTCCAGAACACCTTCCACC**ATG**ACCACCTCAGCAAGTTC
CCACTTAAATAAAGGCATCAAGCAGGTGTACATGTCCCTGCCTCAGGGTGAGAAAGTCCAGGCCATGTATATCTG
GATCGATGGTACTGGAGAAGGACTGCGCTGCAAGACCCGGACCCTGGACAGTGAGCCCAAGTGTGTGGAAGAGTT
GCCTGAGTGGAATTTCGATGGCTCTAGTACTTTACAGTCTGAGGGTTCCAACAGTGACATGTATCTCGTGCCTGC
TGCCATGTTTCGGGACCCCTTCCGTAAGGACCCTAACAAGCTGGTGTTATGTGAAGTTTTCAAGTACAATCGAAG
GCCTGCAGGTGTGTTA**TAG**CACAGCTATGGATACCCCTCCTCAATCTGTGAATGCTGTGAAGGGGAGGGAGAAGA
CATTCTGAAATCAGCATTGGGAAGACTAGGCAATTTCAGCACTATTTTAAGAATCTGAGTGATTCTTTTCCCTGA
ACTTCTGCTTTGAGGAAGAGATAATATGGCCCATCTTTCTATGGTCTTCTCTGTTGGTTGCATAAAATAGCATTG
GATTTGTCCAGATCTGTTTGCCGGTCTTGGAGTCCCCAGTAACAGCCTTCCTGCCTGGAATGTAGGCCAGGACAA
ATGTAAACCAATGGACAAATGTTTCTCAAAAATTATAGAATGGCTCCAAGTGCCTGAGAAATGAAGAATAAATCT
GACAACCAGAAGCAGCTGTCTTGTGAATAGAGGGTTAAGTGCCTGGCATTTGGTGCTTGGGAGGTGGCCAGAATG
CAGATAAGGTGAAAGTTGCCCTGTTCTAAATCCACTCCCATGTGACTTGGTTGTAACTGAGTTTAGTTAAAACTG
AAGTCTTTCAGAGTCTTCCTACAGATGTACAATTAACAGCTTCTCTCATTTTTCTGACTCGGTGATCCCAAGAAG
GCCTATACTGGGTCAGTTCATACCATAGTGCACACCTCAGTTGTATAGAATCCAAGGACTATTCTCCCATCAGCA
TCGGTATTCAGCATCTATGTCTTTAGATCCCTGATGGCGTATTATTGACTCTTTTTTCTAGAGACCAATTTGAGG
CACACCTGTAAACGGATAATGGACATGGTGAGCAACCAGCACCCCTGGTTTGGCATGGAGCAGGAGTATACCCTC
ATGGGGACAGATGGGCACCCCTTTGGTTGGCCTTCCAACGGCTTCCCAGGGCCCCAGGGTAAGTCTCCTTGGGTT
AGAGGTGAAATTCCCAGAAGTGTCTAACTGTGCAGGAATGCCCCTTCCCAGGGATGGGAATGACTTTCAGAATCA
AGAAGCAAAATAATACAGTAAAGGCGAAACAGCCCTCACATCACCAAAGTCCAAAAATGGATATGAATATATAAA
GTAAGGTTTTAGGGGGAACGTTTGGCCCCACTGAAGCTGTGGTGAAGAGGAACTCCCCTATTGCCCCTCCCCTGC
CCCGCACCTGCAGATGAAGGCAAGGATAGTGATTCAAGAGGGCAAGGCTTAAGGGCCTTCTGATCTCTGACTTTG
GGATTCTCTGGATTTCTTGACTCTTAGTGTTTTGTCCTGATGCTTCTGTAGGTCCATATTACTGTGGTGTGGGAG
CAGACAGAGCCTATGGCAGGGACATCGTGGAGGCCCATTACCGGGCCTGCTTGTATGCTGGAGTCAAGATTGCGG
GGACTAATGCCGAGGTCATGCCTGCCCAGGTAAGTATAGCTCCAATCCATCAATGAAGAAGGGTAGGTAGGTGTA
CATAGGACTTTTGCTAGTAAGGGCTGCTGATACACCACTCACTAACCCAAAACCTAAGAACGGGTTGGAGTACAG
GTGAGAAGAGAACAGGTTTAGGAGATTCTGAGTTGGAGTGAGCAGTTAGCTTTGTTTTAATGGCCAAGCTTCTCG
TTTCTAGTGGGAATTTCAGATTGGACCTTGTGAAGGAATCAGCATGGGAGATCATCTCTGGGTGGCCCGTTTCAT
CTTGCATCGTGTGTGTGAAGACTTTGGAGTGATAGCAACCTTTGATCCTAAGCCCATTCCTGGGAACTGGAATGG
TGCAGGCTGCCATACCAACTTCAGCACCAAGGCCATGCGGGAGGAGAATGGTCTGAAGTGAGTACCTTCTGCTGG
GGCCATCTTTAATCTCCTGTGGCAGAAAACTTGGGAGGAGACTTAGCAATCTCTCAGCAAAGTCTCCTTTGCAGG
ATGACTTGCAAATATTTGCCAAAGATGAGTAAACTTGACTTCTCAGTCTGGACGTACTTTAGGTGTTGACACTTG
CCTTCACATTCTCTCATTTTGTTCCTATTTGAAAAATACCAAATAATACTTCTGATTCACAGTGATAAATATTTG
TTATAATTTATATAATATATATTAGTCATATATCATTATATAAATATATATCGATATATATATTTGTGACATATG
TCATGGTGACAGGGAAAAGTTGACAAATTCATGCATTTGAAAATCTTTTAGAACTAAATTAGTAACAATACAGGC
ATGTGGATAAGCTTAATGCTTATGAGGGGGAGAAAGTTTCAAATGATTAGTCTTTTCAACAAACAGTAACTTTGT
ACTGCTTGTCGGGCACTGTTCTCACCACTGAGACACACAGGTAAGAAGATGCAGCCACTGCCCTCATGAAGTATT
TGTTCTACTGGTATCATATTTTGGTGCACTTCATTCTTGGCTCCATACCTGGAGACAAGGTTGGACTGCCATCTT
TTCTGTTTACTCTAGGTACATCGAGGAGGCCATTGAGAAACTAAGCAAGCGGCACCAGTACCACATCCGTGCCTA
TGATCCCAAGGGAGGCCTGGACAATGCCCGACGTCTAACTGGATTCCATGAAACCTCCAACATCAACGACTTTTC
TGCTGGTGTAGCCAATCGTAGCGCCAGCATACGCATTCCCCGGACTGTTGGCCAGGAGAAGAAGGGTTACTTTGA
AGATCGTCGCCCCTCTGCCAACTGCGACCCCTTTTCGGTGACAGAAGCCCTCATCCGCACGTGTCTTCTCAATGA
AACCGGCGATGAGCCCTTCCAGTACAAAAATTAAGTGGACTAGACCTCCAGCTGTTGAGCCCCTCCTAGTTCTTC
ATCCCACTCCAACTCTTCCCCCTCTCCCAGTTGTCCCGATTGTAACTCAAAGGGTGGAATATCAAGGTCGTTTTT

FIGURE 3106B

TTCATTCCATGTGCCCAGTTAATCTTGCTTTCTTTGTTTGGCTGGGATAGAGGGGTCAAGTTATTAATTTCTTCA
CACCTACCCTCCTTTTTTTCCCTATCACTGAAGCTTTTTAGTGCATTAGTGGGGAGGAGGGTGGGGAGACATAAC
CACTGCTTCCATTTAATGGGGTGCACCTGTCCAATAGGCGTAGCTATCCGGACAGAGCACGTTTGCAGAAGGGGG
TCTCTTCTTCCAGGTAGCTGAAAGGGGAAGACCTGACGTACTCTGGTTAGGTTAGGACTTGCCCTCGTGGTGGAA
ACTTTTCTTAAAAAGTTATAACCAACTTTTCTATTAAAAGTGGGAATTAGGAGAGAAGGTAGGGGTTGGGAATCA
GAGAGAATGGCTTTGGTCTCTTGCTTGTGGGACTAGCCTGGCTTGGGACTAAATGCCCTGCTCTGAACACGAAGC
TTAGTATAAACTGATGGATATCCCTACCTTGAAAGAAGAAAAGGTTCTTACTGCTTGGTCCTTGATTTATCACAC
AAAGCAGAATAGTATTTTTATATTTAAATGTAAAGACAAAAAACTATATGTATGGTTTTGTGGATTATGTGTGTT
TTGCTAAAGGAAAAAACCATCCAGGTCACGGGGCACCAAATTTGAGACAAATAGTCGGATTAGAAATAAAGCATC
TCATTTTGAGTAGAGAGCAAGGGAAGTGGTTCTTAGATGGTGATCTGGGATTAGGCCCTCAAGACCCTTTTGGGT
TTCTGCCCTGCCCACCCTCTGGAGAAGGTGGGCACTGGATTAGTTAACAGACAACACGTTACTAGCAGTCACTTG
ATCTCCGTGGCTTTGGTTTAAAAGACACACTTGTCCACATAGGTTTAGAGATAAGAGTTGGCTGGTCAACTTGAG
CATGTTACTGACAGAGGGGGTATTGGGGTTATTTTCTGGTAGGAATAGCATGTCACTAAAGCAGGCCTTTTGATA
TTAAATTTTTTAAAAAGCAAAATTATAGAAGTTTAGATTTTAATCAAATTTGTAGGGTTTCTAGGTAATTTTTAC
AGAATTGCTTGTTTGCTTCAACTGTCTCCTACCTCTGCTCTTGGAGGAGATGGGGACAGGGCTGGAGTCAAAACA
CTTGTAATTTTGTATCTTGATGTCTTTGTTAAGACTGCTGAAGAATTATTTTTTTTCTTTTATAATAAGGAATAA
ACCCCACCTTTATTCCTTCATTTCATCTACCATTTTCTGGTTCTTGTGTTGGCTGTGGCAGGCCAGCTGTGGTTT
TCTTTTGCCATGACAACTTCTAATTGCCATGTACAGTATGTTCAAAGTCAAATAACTCCTCATTGTAAACAAACT
GTGTAACTGCCCAAAGCAGCACTTATAAATCAGCCTAACATAAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAA

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FIGURE 3107

MTTSASSHLNKGIKQVYMSLPQGEKVQAMYIWIDGTGEGLRCKTRTLDSEPKCVEELPEWNFDGSSTLQSEGSNS
DMYLVPAAMFRDPFRKDPNKLVLCEVFKYNRRPAGVL

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FIGURE 3108

GCCACTTGCAGTGATGTTTTGTTCTTCCCTAGCTCCTGCAGATACCTAAAGATAGTCCATAATCTTTTTGGGTCT
CACTTCTGCAAATTGGAGTTCATACTTGCGCTATCTTTTGTTGAAGAACCCTCAAGATAGTTGCAAAAAGTATTT
TGAAAAGTATAAAGTGATGGGTTTAATGTAAATGTTTTATTCAATACTACTATCCTCTAGACTAATTTGGTTGTA
GTTCACATTACAGTAGCTGCTTCGTAAGTGATTTTTG

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FIGURE 3109

ATCSDVLFFPSSCRYLKIVHNLFGSHFCKLEFILALSFVEEPSR

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FIGURE 3110

GAATCTCTTTCTCTCCCTTCAGAATCTTATCTTGGCTTTGGATCTTAGAAGAGAATCACTAACCAGAGACGAGAC
TCAGTGAGTGAGCAGGTGTTTTGGACAATGGACTGGTTGAGCCCATCCCTATTATAAAAATGTCTCAGAGCAACC
GGGAGCTGGTGGTTGACTTTCTCTCCTACAAGCTTTCCCAGAAAGGATACAGCTGGAGTCAGTTTAGTGATGTGG
AAGAGAACAGGACTGAGGCCCCAGAAGGGACTGAATCGGAGATGGAGACCCCCAGTGCCATCAATGGCAACCCAT
CCTGGCACCTGGCAGACAGCCCCGCGGTGAATGGAGCCACTGCGCACAGCAGCAGTTTGGATGCCCGGGAGGTGA
TCCCCATGGCAGCAGTAAAGCAAGCGCTGAGGGAGGCAGGCGACGAGTTTGAACTGCGGTACCGGCGGGCATTCA
GTGACCTGACATCCCAGCTCCACATCACCCCAGGGACAGCATATCAGAGCTTTGAACAGGTAGTGAATGAACTCT
TCCGGGATGGGGTAAACTGGGGTCGCATTGTGGCCTTTTTCTCCTTCGGCGGGGCACTGTGCGTGGAAAGCGTAG
ACAAGGAGATGCAGGTATTGGTGAGTCGGATCGCAGCTTGGATGGCCACTTACCTGAATGACCACCTAGAGCCTT
GGATCCAGGAGAACGGCGGCTGGGATACTTTTGTGGAACTCTATGGGAACAATGCAGCAGCCGAGAGCCGAAAGG
GCCAGGAACGCTTCAACCGCTGGTTCCTGACGGGCATGACTGTGGCCGGCGTGGTTCTGCTGGGCTCACTCTTCA
GTCGGAAATGACCAGACACTGACCATCCACTCTACCCTCCCACCCCCTTCTCTGCTCCACCACATCCTCCGTCCA
GCCGCCATTGCCACCAGGAGAACCCG

FIGURE 3111

MSQSNRELVVDFLSYKLSQKGYSWSQFSDVEENRTEAPEGTESEMETPSAINGNPSWHLADSPAVNGATAHSSSL
DAREVIPMAAVKQALREAGDEFELRYRRAFSDLTSQLHITPGTAYQSFEQVVNELFRDGVNWGRIVAFFSFGGAL
CVESVDKEMQVLVSRIAAWMATYLNDHLEPWIQENGGWDTFVELYGNNAAAESRKGQERFNRWFLTGMTVAGVVL
LGSLFSRK

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FIGURE 3112

GAGGAAAAGCTTTCGGACTGCTGAAGGCCCAGCAGGAAGAGAGGCTGGATGAGATCAACAAGCAATTCCTAGACG
ATCCCAAATATAGCAGTGATGAGGATCTGCCCTCCAAACTGGAAGGCTTCAAAGGTGAGGGGGAAACTGTAGGCG
GTGGAGACAGGGCTGGGGGTAGGAGGGTTAGGATTTCCACAAGAACAAGGCAGGAACAGCAGAGATAAAAAGTTT
ACTTTTGTGGTAGCAAAAGGGGAACCTGCCTTTATTGCCCTCCTGCCACACTGCGGTCCCTTTCCCGGGCCTGCC
TCTCTCAGCATCCCCTCTAGCTCCTTACACCCTAGCGGGGCCCCTCAACTCCCCAACCCCACTTCCTCTGCCTGC
CCCTCCTCCTCCTTCCACGTTGTCTCCTCCACCTAGCAGTTGGTTGGCAACCCCTTCCTCACTCACCCAGAGAAA
TAC**ATG**GAGTTTGACCTTAATGGAAATGGCGATATTGGTGAGAAACGGGTGATTTGCGGGGGCAGGGTGGTGTGC
AGGCCTAAGAAGACAGAGGTCTCTCCTACATGCTCCATTCCTCATGATTTGGGAGGGGGCCCACCTACCACAGTG
GGAGGAAGGAGAATGGGGATGCGGAAGTGGGAGAGGAGAGAGAGGGTCTCCCCACCTTCTCCCCATCCCCATCCT
CTGCCCCCAGATATCATGTCCCTGAAACGAATGCTGGAGAAACTTGGAGTCCCCAAGACTCACCTAGAGCTAAAG
AAATTAATTGGAGAGGTGTCCAGTGGCTCCGGGGAGACGTTCAGCTACCCTGACTTTCTCAGGATGATGCTGGGC
AAGAGATCTGCCATCCTAAAAATG**TGA**GTGTCAATTTCCAACCTCCCCTGTACTTACCTGTTTTCTCCTCCCCCA
TCCCTACCCTTGTCCACAGGCTCAACATTTCTACACGTTGCCCATCATCCCTTCTTCCATCCTTAGAGGGACCCT
TCCAAGGTCCCGACCCCATCCCTATCCATAGTCCTGGTCCCCAGAAACTCCAACCCCTGCCCTTCCTCTTCCCCC
TTCCACCCTCACATCCCCATCCCCTTCTAGCCTTTCCTAGCACCCTATGATTTATTCCCTTGAGAGGAGTGTTCC
CTGATCCCTGTGCCTCTTCCCATCTCAACCAGGATCCTGATGTATGAGGAAAAAGCGAGAGAAAAGGAAAAGCCA
ACAGGCCCCCCAGCCAAGAAAGCTATCTCTGAGTTGCCCTGATTTGAAGGGAAAAGGGATGATGGGATTGAAGGG
GCTTCTAATGACCCAGATATGGAAACAGAAGACAAAATTGTAAGCCAGAGTCAACAAATTAAATAAATTACCCCC
TCCTCCAGATCAA

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FIGURE 3113

MEFDLNGNGDIGEKRVICGGRVVCRPKKTEVSPTCSIPHDLGGGPPTTVGGRRMGMRKWERRERVSPPSPHPHPL
PPDIMSLKRMLEKLGVPKTHLELKKLIGEVSSGSGETFSYPDFLRMMLGKRSAILKM

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FIGURE 3114

AAAGCGGCCATGTTTTACATATTTCTTGATTTTGTTTGTTTTCTCGTGAGCTTAGGCCGCTGGTTTTGGTGATTT
TTGTCTGATTGCAATGTCTGGACGTGGTAAGCAAGGAGGCAAAGCTCGCGCCAAAGCGAAATCCCGCTCTTCTCG
CGCTGGTCTCCAGTTCCCGGTGGGCCGAGTGCACCGCCTGCTCCGTAAAGGCAACTACGCAGAGCGGGTTGGGGC
AGGCGCGCCGGTGTACCTGGCGGCGGTGTTAGAGTACCTGACCGCCGAGATCCTGGAGCTGGCCGGCAACGCGGC
TCGCGACAACAAGAAGACTCGCATCATCCCGCGCCACTTGCAGCTGGCCATCCGCAACGACGAGGAGCTCAACAA
ACTGCTAGGCCGGGTGACCATTGCTCAGGGCGGCGTCCTTCCTAACATCCAGGCCGTGCTTCTGCCTAAGAAGAC
CGAGAGTCACCACAAGGCCAAGGGCAAGTGATTTGACAGGTATCTGAGCTCCCGGAAACGCTATCAAACCCAAAG
GCTCTTTTCAGAGCCCCCCTA

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FIGURE 3115

MSGRGKQGGKARAKAKSRSSRAGLQFPVGRVHRLLRKGNYAERVGAGAPVYLAAVLEYLTAEILELAGNAARDNK
KTRIIPRHLQLAIRNDEELNKLLGRVTIAQGGVLPNIQAVLLPKKTESHHKAKGK

FIGURE 3116A

TAAAACTTACAATCCAGATTACGATGAGGACCTGGTGCAGGAAGCTTCATCTGAAGATGTCCTGGGCGTTCATAT
GGTGGACAAAGACACAGAGAGAGACATTGAGATGAAACGGCAACTACGGCGACTACGGGAGCTCCACCTATACAG
CACATGGAAGAAGTACCAAGAGGCGATGAAGACATCCTTGGGAGTTCCACAACGTGAGCGTGACGAAGGCTCCTT
GGGCAAGCCATTGTGTCCACCCGAGATACTCTCGGAGACGTTGCCAGGCTCTGTGAAGAAAAGGGTATGCTTTCC
ATCAGAAGATCATCTAGAGGAGTTTATAGCAGAACATCTCCCTGAAGCATCCAATCAGAGTCTCCTCACTGTTGC
CCATGCAGACGCAGGCACCCAAACCAACGGTGACCTGGAAGACCTGGAGGAGCATGGGCCAGGGCAGACAGTCTC
TGAGGAAGCCACAGAAGTTCACATGATGGAGGGGGACCCAGACACACTGGCCGAACTTCTGATCAGGGATGTACT
TCAGGAGCTGTCCAGTTACAACGGCGAGGAGGAGGACCCAGAGGAGGTGAAGACATCCTTGGGAGTTCCACAACG
TGGTGACCTGGAAGACCTGGAGGAGCATGTGCCAGGGCAGACAGTCTCTGAGGAAGCCACAGGGGTTCACATGAT
GCAGGTGGACCCAGCCACGCTGGCAAAGAGTGACCTGGAAGACCTGGAGGAGCATGTGCCAGAGCAGACAGTCTC
TGAGGAAGCCACAGGGGTTCACATGATGCAGGTGGACCCAGCCACACTGGCAAAGCAATTGGAAGACTCCACCAT
TACAGGCAGCCACCAGCAGATGTCAGCAAGTCCTTCCTCTGCACCTGCAGAAGAAGCAACAGAAAAGACCAAAGT
GGAAGAGGAAGTGAAAACCAGAAAGCCCAAGAAGAAAACCAGGAAGCCCAGCAAGAAAAGCCGGTGGAATGTCCT
GAAATGTTGGGACATTTTTAATATATTTTAGAGACCTCTGAAGATTCCTCGACCACCAGGAAGGGCCCCGACGTG
GGGATGTCAACATGGCTCAGACTTGATGTGGATCGTGATCATTTCGGGAAATGTGTTACTCCAAAAACTTTTATA
ATCTTTGCTTAATTTGTTTTTAAATACTTTCCTGGCTGGGCGTGGTGGCTTATGCCTGTAATCCCAGCACTTTGG
GAGGCCGAGGTGGGTGGATCACCTGAGGTCAGGAGTTCAAGACCAGCCTGGCCAACAAGGTGAAACCCCGTCTCT
ACTAAAAATACAAAAATTAGCTAGGCGTGGTGGCGCACTCTTGTAGTCCCAGCTATTTGGGAGGCTGAGGCAGGA
GAGTCGCTTGAACTCAGGAGGCGGAGGTTGCGGTGAGCCGAGATCATGCCACTGCACCCCAGCGCCTGGCTACAG
AGTGAGACTTTGTCTCAAAAAAAAAAAAAAAAGAACAAAAAAATTCTGACTTTAACCTCTGTTTTTCAGAGGGCA
CAAATTGTTCTTGTATTGTTTCCATTTTACATTTTTTTCTTGAAGTTATTTTCCAATTGTTTTCATTTTTTCTGA
AGTTTTGTTTACTCGGTTTTAAGTTTTTGTAATTTTGATAGACTTCTTTTGTGCTTTCATTTTCTTAATGACTTT
TACCTCATTTTTAAAACAAATCCATAGTATGGATGATATTGATGATGAAATGTCTTACGATGATCATTTAGAGGT
TTATTTTGAACAACTGGCAATTCCACGAATGATGGAATAAAACATATGAAGTAGAAGGACTGGAACCTCCAGAAA
AAGTACTTTAAGTTACCTACAGGTGATCCTAGTCAGGTATGAATTGATAAGAAATGCCTGCACCTTCCCTCCTTC
CTATCTTTCCCTTGCCTACAGAAAATTAAAAGGCAAAACAATGGACATCTACATATTCTTCATTCAGATCAACCA
GTGGCTAGCATTTGCCACCTTTTGCAGTTTCTTTCTCTTTCCATAAGTACTTTCTTCTCTGAATCATTTGAAAGC
AAATGAAAACAGTAGCCTAAAGTGTCAGTTTCAACCAGAAAATAACAGCTCTGATTTCTCATGGCTCACACTCGT
CTGAAACGACTCGGGTAGAGGCTGAGGAAGGCCGTGTTGTTTGTCTACCTGGGACTACACCTACTGAAAGAAGTT
CTCAAGTTCTGATTGAGTTCTAAAATTCTTTTGAAGATTGGAATTCTTCCTATGGCACCATGGGCCGGCACTGCC
ACGTTTTCCAAGGAACCTGCCAGAGCTCCTGCGGAAGCTGCTCCTCGGGCGATGGAGTCCCTTTGCTGCTAGGCC
CTTCTTCAGTCACCACAGGATGCCTGCCATTCATGAACAGGAAGGAGAGGACGGGCTTTGAATAAAAAACAGGAT
CCAGGAAATATTTGTGAGGCCATTTGGACTTCAGTGTGAAATGGTGTTAAAAGATGAAGTCATTTATTCAAGAAG
TAAACCTCTGCCACCTGGACTGTGCTCAGACATTTCATTGATTTTGTTTAATAAACATTTTCTGGCTTTGGGAGG
TGTCTCTCTTGGTAGAGCACAGTGTCAAAGATGGACAAGATGGACACATAGTCCATTATTTGGTATTGTTTGTGT
ATGGGAGCGGACCACAAATTAATGTTTGGAGAACAATTTTGTCATAACACACTGTTGAGGCTCAGTTGTACAGAA
CTGGAAAAGTCTTTCAGCTTGGCACATGTCCTGATTCAGCCTTTGTTTAACATACATTCCAATCCGGATTCTATC
TTCACTGGCTACAAAGACCACCTGATACGTGCACCACGACACAGGAGCTGCTGGAGAGGGGGTAGTGTTATCACC
TCAAACCCACAGCCATATTTTTCAAAAGCCAGCTTAGAGAGAGGTGTACTGATAGCTGCATAGAGAACATGCAGT
CCATCCATTCTTCCCAGTGATGTACATTTCTCAATCAGTAACCACGTGGTATACCAGCCTTGAGTGTCACATCTC
CCAACCATACCAAATGGATCACCTAACTGGAGGTGGGGGGGGCCCCTCAGAAATGAGATTTCGTATTTACTGTAA
AATTGCCTTATTTTTTCTTTTGAGGTGGAGTCTCGCTCTGTTGCCTGGGCTGGAGTGCAATGGTGTGATCGCTGC
TCACTGCAACCTCCGCCTCCTGGGTTCGAGCGGTTCTCCTGCCTCAGCCTCCCAAGTAGCTGCAATTACAGGCGC
ATGCCACCACTCCCAGCAAATTTTTATATTTTTAGTGGAGACGGGGTTTCACCATGTTGGCCAGGCTGGTCTCAA
ACTCCTGACCTCAGGTGATCTGCCCACCTTGGCCTCCCAAAGTTCTGGGATTAAAGGTACGAGCCACCGCAACTG
GCTGAGAATCTTTTTATTTGCTGATTTGTCTCTTGTGTATTTTCTTTGTTCAGATGTCTCTTCAGATCTTTTTCT
CACTTTTAAATTGTTTTTTTAATTGTTAAGAATTTTCTGTCTAGTTTAGATATAAGCCCTTTATCAGACATGTGT
TTTGCAAATATTTTCTCCTAGTCTGTGGCTTGTATTCTGTCTCTTAACAGTCATTTTATTTTTACTTTTGAAACT

FIGURE 3116B

AAAGAAGAAGAATGGTCAGCTTTCCGTTATTCTTGTAACAGTAATGGCAGAACCAAGTCTGCTAATGCTACATTG
AGCAAAGAAAGTCACCTGGTCAAGTCCAACATTAATGAAATGGGGTAGTACATGCAGGCGGCGTTGGGGTTGGGG
AGGGAACAAATGCTTCTTGAGAGTAATATAATCTGCCATACCATCCAGGAACCTACAATGGCTATCTATTACCTT
ATTCTCTGGTTTGTTTAATGTTCAAATCTTTCCTAAAGATCCTTCAACTTTTCTGGAAGAATCTAATCTGATAAC
ACCATCAAAAACACATTACTTCTTTTGGCATAATTTAAATTGTAAGACATCATTCACATTTATCAATGTTACATA
TATAAGAACTCACCCACCATATTCCTCCTTGAGGAATTATAGCATGTAATTCTATAACCATTTTTATAATCGTCT
AACAATTTTATAATGGATTGGCTGCTATCAATTTTTTAAAAGTCATGGCTTCTCCAGTCATTTCTTGCTTATCAA
AATTATTTCATGAGATGGGTCTATCCTTGTATATTTGAAAATGAGGTTTGCTTCCTTCTACTTAAAAAACAACTT
GAACATACCTGTTTGGATCACATGGTCTTGTCCTGATAACTTGGAAGAGGTTGCTTCAGCATTATTCTTATTGTT
GTGGTGGTTATTATTAACATTGTTTCATATTCCGTTTAAAAAATTAAAATTTTACAC

FIGURE 3117

AGTCCAAAATATAATGACGAAGCTGCTTTTAATGCTGTTCTTTCCAGAGCCCAAATGGACCTCACCTTGCACAGA
CATGAACAGCTTCGAGGTTCTCTTTGGACCTGATGGAGGAATCAGGAGGAATATGTAGTTTTCTAAAGCGAGTGA
TAAAAGCCACAAGCCTTTTCTAATTTCACATGGCATTTTTGACAGGTAAGCATAGTTTCAAAAGCTCAAAGAGCA
CAAAGATTTCTTTGGCTCAGTTGCTCTAAATAGCTCCTGTAGTTTTGAAAGAAGTATAACGAGCTCTAATTGCAC
TTTTATTGAGTTTGCTGACATTTATGGATAGCACAAAGGACTCATCACAGTTAGACAGTTACTGTCTTCATTATC
ACTGTGTTCAGATTTCTAAAACTTTGTATGTGCTGAGCCAGAAAGAGCTGCTAATCATGGATTAATTCATGATGG
ACAGGTGAACTCCAGAAAAGCAGTCACCCTTGGCAGCTTTCGTCCATCGAGCGATTCTGAGAGAGGGAACCTCTG
GGGTGAGCCCCGAAATGTTAGGTTGCGCTCAGATCAGCCCTGCACTTTGGGATGTCACTGAGCAGACTTCCCGAG
TCTCCATGGCTTCCTGTAACCTGCCCTTTCCATTGGCTCTGATTTAAGCTGCAGCCTCTGGCACACCGATGGAAG
CTCGCGGCATCGTGTTTTCCATCCACGTGCTCCCACAGAGCCAGGTTGTCCAAAAGGAAAATAATCCCACTCTGG
GAGAAGCAAAAACTTGCTGGGGGCTGCTTAAGGAGGGAGCACACTTGAGTTAAACCACCCACCTTCCAACAGAAT
CCGCCTTTTTTGTTATTTTTCCATTGCAGAAAGACGAATGGCGGGACAGGCAGGGCTTTTGAGGAGGTGTGGATT
TCATCCTCCATCATAAACAAGCAGTGGCTCAGGCCAGCTGATGCTTTCCTCACTGAGCTCCCTCTCTGCACATGA
AGCGGAAGATGGGGCGTGCCATCCTGAGGTCGGGCTGCTTTCCGCCATCCACCCAAGCCAGGTCCCTACTGCCCC
GCACTGTGCACCTTGCCTGGTTAGGACCTCTTTGCTCTCCCACCTCCAGTCTCTCCAGACCCTTCGTCCAGCTTC
AATTCCACATCCCCCAGCGAGCCTTTCTCAAACACCTGGGTGCACGATTCGTAGTTTACAAGTATTGTGGAATCG
TGCCTTTCAACTTGTATTCCTTGGAGCCCTAGAGTTTCTGCGGTGTCCCAGGAGTTGTCACAGTGGGGAGAGAGC
TGGGTGGAAGGGATTCTGACCCCCCACTCACCGTCCCTGCCTCAAGAGCCCCAGTCACCCCGAGTATGTCACAGG
CCACCTTCTCTCCATTTCTAGGAGAGAAAAGAGTCTAAACTTTCATTCCATGGATGACAAAACAGAGGTCCTCAG
AGGTCAGCCTATTCTCCAAAGACACATATCAAACTCATGGCAGCACCGGACCTAGAACCTTGGTCTTCTAATCAC
CGCCATTGCTCTCCCCTTCAAGCCTTCTCTCCTCCTCTGAACTTGGAGGAGACACAGCAGGGGAAGGAATCCTTG
GCTGGGAGGAGGACTCCAGGCTGTGGGCCAGGCTGGATGACCCTAGGCGGGTCCCTCCCCCGCTGGACCTTGGGA
AATCTTTTGGAGACAGACAGAAGCTCCCTTAGGTCTCTTCCTTCCACTCTGGGATGCTATGAAGAGGAGCCTTTA
GCTGTCTCCTCTAGGCCCTTCAGGGCCGTGCTGGCTCATGGAGCAATCATGTGTGGCTCTTTAATTAAAATTACA
TTTTAGAAAAGCACTTCCTCAATCACACCAGTCCCTTTAAGTGCTCAGCAGCCACATGTGGCTTTAGTTTCTGTG
TCAACAGCACTGTGGTAGAGGAACCCACCTGTTACCAGTACACCTGCCCCAGCCCCTTCTCAGCACAGAGGTGTG
CTTTAGCGTCCAGAAGGAACTGGCCCCAGTAAGTCTGGGATAATTGCCTATTCGCTAAATGAAAATGAGACACTT
CCTGTCCGGGGTAGGCATAAAAGAAACAGAAATAAAAGCCAATTAAATAGGAATGACAAGATGATAGTGCAGATT
CAAAAGAAATAGGTATGCACAAGTGACTTAAAGCAGAGTCCTCCTCTAGCCCAGGACACTCTTCAGTCTGGCTGC
AGCTGGCTAGCNNNNNNNNNNNNNNNNNNNNNNNNAAGAAATAGATTGAAATGAAACGATGGAAAAGAAGCAGGA
CTTCTCCCCGTGGGTGTCTGTGATGTCCTNNNNNNNNNNNNNNNNNNNNGGCACCTCTCCTAAAAAGGACTCCAAA
CGCTGTCCTGAGATCAGTTTTAACCTCGTCTTTCGGGCCGAAAGTAGTTCACATTTCCCGAGCACAAGCATGGAG
ATTTTGAGGAAAATCTCCCGGGCCCTGTGAAGTACAACGTGTCTTATCTTCCCCAATGTCAGGTGCCCAGGTTAG
AATTTGCGTGTCGTCCTC**ATG**ATCCCCAAATGCACTTTTATTCCCCGAGAATCTTGCCTCCCGGTGGCTAGT

3525/8433

FIGURE 3118

MIPKCTFIPRESCLPVA

FIGURE 3119

CTGCAGACGAGGCAGGGAGAGGCGGGACTTCGCGGGCGAGACGTCATCGGGGCGCCGGACGCCGGGGCGCCTGGG
AGTTTGAAGCAAACAGGCAGCGCGCGACA**ATG**GCGGTCGCTCGTGCAGCTTTGGGGCCATTGGTGACGGGTCTGT
ACGACGTGCAGGCTTTCAAGTTTGGGGACTTCGTGCTGAAGAGCGGGCTTTCCTCCCCCATCTACATCGATCTGC
GGGGCATCGTGTCTCGACCGCGTCTTCTGAGTCAGGTTGCAGATATTTTATTCCAAACTGCCCAAAATGCAGGCA
TCAGTTTTGACACCGTGTGTGGAGTGCCTTATACAGCTTTGCCATTGGCTACAGTTATCTGTTCAACCAATCAAA
TTCCAATGCTTATTAGAAGGAAAGAAACAAAGGATTATGGAACTAAGCGTCTTGTAGAAGGAACTATTAATCCAG
GAGAAACCTGTTTAATCATTGAAGATGTTGTCACCAGTGGATCTAGTGTTTTGGAAACTGTTGAGGTTCTTCAGA
AGGAGGGCTTGAAGGTCACTGATGCCATAGTGCTGTTGGACAGAGAGCAGGGAGGCAAGGACAAGTTGCAGGCGC
ACGGGATCCGCCTCCACTCAGTGTGTACATTGTCCAAAATGCTGGAGATTCTCGAGCAGCAGAAAAAAGTTGATG
CTGAGACAGTTGGGAGAGTGAAGAGGTTTATTCAGGAGAATGTCTTTGTGGCAGCGAATCATAATGGTTCTCCCC
TTTCTATAAAGGAAGCACCCAAAGAACTCAGCTTCGGTGCACGTGCAGAGCTGCCCAGGATCCACCCAGTTGCAT
CGAAGCTTCTCAGGCTTATGCAAAAGAAGGAGACCAATCTGTGTCTATCTGCTGATGTTTCACTGGCCAGAGAGC
TGTTGCAGCTAGCAGATGCTTTAGGACCTAGTATCTGCATGCTGAAGACTCATGTAGATATTTTGAATGATTTTA
CTCTGGATGTGATGAAGGAGTTGATAACTCTGGCAAAATGCCATGAGTTCTTGATATTTGAAGACCGGAAGTTTG
CAGATATAGGAAACACAGTGAAAAAGCAGTATGAAGGAGGTATCTTTAAAATAGCTTCCTGGGCAGATCTAGTAA
ATGCTCACGTGGTGCCAGGCTCAGGAGTTGTGAAAGGCCTGCAAGAAGTGGGCCTGCCTTTGCATCGGGGGTGCC
TCCTTATTGCGGAAATGAGCTCCACCGGCTCCCTGGCCACTGGGGACTACACTAGAGCAGCGGTTAGAATGGCTG
AGGAGCACTCTGAATTTGTTGTTGGTTTTATTTCTGGCTCCCGAGTAAGCATGAAACCAGAATTTCTTCACTTGA
CTCCAGGAGTTCAGTTGGAAGCAGGAGGAGATAATCTTGGCCAACAGTACAATAGCCCACAAGAAGTTATTGGCA
AACGAGGTTCCGATATCATCATTGTAGGTCGTGGCATAATCTCAGCAGCTGATCGTCTGGAAGCAGCAGAGATGT
ACAGAAAAGCTGCTTGGGAAGCGTATTTGAGTAGACTTGGTGTT**TGA**GTGCTTCAGATACATTTTTCAGATACAA
TGTGAAGACATTGAAGATATGTGGTCCTCCTGAAAGTCACTGGCTGGAAATAATCCAATTATTCCTGCTTGGATT
CTTCCACAGGGCCTGTGTAAGAATGGGTTCTGGAGTTCTCATGGTCTTTAGGAAATATTGAGTAATTTGTAATCA
CCGCATTGATACTATAATAAGTTCATTCTTAAGCTTGCTTTTTTTGAGACTGGTGTTTGTTAGACAGCCACAGTC
CTGTCTGGGTTAGGGTCTTCCACATTTGAGGATCCTTCCTATCTCTCCATGGGACTAGACTGCTTTGTTATTCTA
TTTATTTTTTAATTTTTTTCGAGACAGGATCTCACTCTGTTGCCCAGGATGGAGTGCAGTGGTGAGATCACGGCT
CATTGCAGCCTCGACCTCCCAGGTGATCCTCCCACCTCAGCTTCCAGATTAGCTGGTGCTATAGGCATGCACCAC
CACGTCCATCTAAATTTCTTTATTATTTGTAGAGATGAGGTCTTGCCATGTTACCCAGGCTGGTCTCAACTCCTG
GGCTCAAGCGATCCTCCTGCCTCAGTCTCTCAAAGTGCTGGGATTACAGGTGTGAGCCACTGTGCCCAGCCTAAT
TGCAGTAAGACAAAAATTCTAGGGCACCAAGAGGCTAAAGTCAGCACAGCTTTTCTTGTGTCCTGTATT

FIGURE 3120

MAVARAALGPLVTGLYDVQAFKFGDFVLKSGLSSPIYIDLRGIVSRPRLLSQVADILFQTAQNAGISFDTVCGVP
YTALPLATVICSTNQIPMLIRRKETKDYGTKRLVEGTINPGETCLIIEDVVTSGSSVLETVEVLQKEGLKVTDAI
VLLDREQGGKDKLQAHGIRLHSVCTLSKMLEILEQQKKVDAETVGRVKRFIQENVFVAANHNGSPLSIKEAPKEL
SFGARAELPRIHPVASKLLRLMQKKETNLCLSADVSLARELLQLADALGPSICMLKTHVDILNDFTLDVMKELIT
LAKCHEFLIFEDRKFADIGNTVKKQYEGGIFKIASWADLVNAHVVPGSGVVKGLQEVGLPLHRGCLLIAEMSSTG
SLATGDYTRAAVRMAEEHSEFVVGFISGSRVSMKPEFLHLTPGVQLEAGGDNLGQQYNSPQEVIGKRGSDIIIVG
RGIISAADRLEAAEMYRKAAWEAYLSRLGV

FIGURE 3121A

GAGGAGGAGCTGGAGGGGGCGCGGCTTCCTCTCGGTCGCTCCCTGGCGCCGGGCCTCTTTCTCTGCCTGGCCCAG
GGCTGGCGGCCGGCGGGGGTCGCGGCGGCGGCAGTGGGGGCGCTGGCGGGCCGCGGGTGGCGGGGGCCGGGCCGC
GGCTCCGGGTGTTAGGAGACAAGATGGCGGCGGCTCTCAGAAGGCCGGTCTCCTCCTCTCCGCCGTCCTCCGCCC
CGCCGCTCGCCGCCTCCTCCTCTCGGGTCTCCTCCTCCTCGTTTGCTGCCTCCTCCTCCTCCTGCAGCAGCACCA
GCGACCGCCGAAGCGCCGGCTCGCTCACCCGGAGCTCCGGAGGTGGATAGACGGGGCAGCTGCAGGCTCCGGCGA
CCGAGGCCGAGCTGGGGCCGGGGCGGGGACGGCGGCGGCGGCGGCGGCGACGGCGGCGGCGCCGGGTGGGGATGG
GGTCGCAGACGCTGCAGATCCTCCGACAGGGGGTGTGGGCCGCGCTCAGCGGGGGCTGGTACTACGACCCGCACC
AGGCCACCTTCGTGAACGCGCTGCACCTCTACCTGTGGCTCTTCTGCTGGGCCTACCCTTCACCCTCTACATGGC
CCTTCCTTCTACCATGATTATAGTAGCAGTTTATTGTCCTGTGATAGCTGCTGTTTTCATTGTTCTGAAGATGGT
CAACTATCGACTACACAGAGCACTTGATGCTGGAGAAGTTGTAGATAGGACTGCAAATGAGTTCACGGATCAGCG
AACCAAAGCTGAACAAGGCAACTGTTCAACCAGGAGAAAAGACAGCAATGGACCGAGTGATCCTGGTGGAGGGAT
TGAAATGTCTGAGTTCATCCGAGAGGCCACACCCCCAGTTGGTTGCAGTTCCAGAAATTCTTATGCCGGTCTAGA
TCCAAGCAACCAGATTGGATCTGGTTCCTCGCGTCTTGGAACAGCAGCAACTATTAAAGGAGATACAGACACTGC
TAAGACTTCTGATGATATCAGTTTAAGTCTGGGCCAAAGTTCTAGTCTTTGTAAGGAAGGAAGTGAAGAACAAGA
TTTGGCAGCTGATCGGAAGCTCTTTCGTCTTGTCTCCAATGACTCCTTCATCTCTATTCAGCCTTCCTTATCCTC
TTGTGGACAGGACTTGCCAAGGGACTTCAGTGACAAAGTGAACCTGCCAAGTCATAACCACCACCACCATGTTGA
TCAGTCTCTGTCCAGCGCCTGTGACACAGAAGTAGCTTCTCTTGTACCTTTACACTCACACTCTTATAGAAAAGA
CCACCGGCCGCGAGGTGTACCACGGACTTCTAGCTCTGCTGTGGCTTTTCCAGACACTTCACTGAATGATTTTCC
CCTTTATCAGCAAAGACGTGGATTAGATCCAGTTAGTGAGTTAGAATCTTCCAAGCCTCTTTCTGGATCCAAAGA
ATCCTTGGTGGAAAATTCTGGTTTATCTGGGGAATTTCAGCTTGCTGGTGACTTGAAAATCAATACTTCTCAGCC
ACCCACAAAAAGTGGGAAGAGCAAACCTTTGAAAGCAGAGAAAAGCATGGACAGCTTGAGGAGCCTGAGCACACG
GAGTAGTGGGTCAACAGAAAGCTACTGCAGTGGAACGGACCGGGACACTAACAGTACTGTCAGCAGCTATAAAAG
TGAGCAGACCAGCTCAACTCACATAGAGAGCATCCTGTCAGAGCATGAGGAGTCTCCTAAAGCAGGAACAAAAAG
TGGGAGGAAGAAAGAGTGCTGTGCAGGCCCAGAGGAGAAGAATAGCTGTGCCAGTGACAAAAGGACTAGCAGTGA
AAAGATTGCTATGGAAGCGAGTACCAACAGTGGGGTTCACGAGGCCAAGGACCCCACCCCCTCTGATGAGATGCA
CAACCAGAGAGGTCTCAGCACCTCTGCATCTGAAGAAGCCAATAAAAATCCCCATGCAAATGAATTTACTTCCCA
AGGGGACAGACCACCTGGGAACACTGCAGAAAACAAAGAAGAGAAGAGTGATAAGTCAGCTGTTTCTGTGGATTC
CAAAGTGCGTAAAGATGTTGGTGGAAAGCAAAAGGAAGGGGATGTTCGACCTAAATCTTCTAGCGTAATCCATCG
GACAGCTTCTGCCCACAAGTCAGGCAGGAGACGCACAGGAAAAAAACGGGCTAGCAGTTTTGATTCAAGCCGGCA
TAGGGACTATGTTTGCTTTCGAGGTGTTTCTGGTACCAAGCCACACAGTGCTATATTTTGTCATGACGAAGACTC
TAGTGATCAGAGTGACTTGAGTAGAGCATCAAGTGTTCAGTCTGCTCACCAGTTCAGCAGTGATAGCTCTTCTAG
CACCACTTCTCATTCCTGTCAGTCTCCTGAGGGCAGATACAGTGCTCTAAAGACCAAACACACTCATAAAGAAAG
GGGCACAGACTCTGAACACACACACAAAGCTCATTTGGTTCCTGAAGGAACCAGCAAAAAGCGTGCAACACGACG
GACTTCTAGCACAAATAGTGCCAAGACTCGTGCCCGAGTGTTGAGCCTGGACAGTGGCACAGTAGCATGTTTGAA
TGACTCAAACAGGTTAATGGCACCTGAAAGTATAAAGCCCTTAACCACTTCAAAATCAGATCTTGAGGCCAAAGA
GGGAGAGGTGCTAGATGAGCTATCTTTATTAGGACGGGCTTCCCAGTTAGAGACAGTCACTCGATCTAGGAATAG
CTTGCCAAACCAGGTTGCATTTCCTGAAGGGGAAGAGCAAGATGCAGTCAGTGGAGCAGCACAAGCCAGCGAGGA
GGCAGTGTCATTTCGCCGTGAACGCAGCACATTTAGGCGCCAGGCAGTACGGCGCCGGCACAATGCAGGGAGTAA
CCCTACCCCTCCTACATTGCTCATCGGATCACCCCTAAGCCTTCAAGATGGTCAGCAAGGCCAGCAGTCCACAGC
CCAGGTCAAAGTCCAGTCCCGCCCCCCTTCCCAGGCTGCAGTGCTCAGTGCTAGTGCCTCCTTGCTGGTAAGTTC
TCTTCTACGCTGTATGAGACTGGTGGCTGTGATATGTCACTTGTGAATTTTGAACCAGCAGCAAGAAGAGCATCC
AATATCTGTGACACAGATTCTCATGTATCCAGTTCTACCTCAGTTCGATTTTATCCACATGATGTGGTAGGTTTT
TCTTTATTTTTACAACATGATAAATTTTCAGATTAAATCTGAAATATGTATTTACATAGATAGCTATAAAAGCCA
TAAAAATTGATGAAGTTACACAAAAATTTTTTGAAAACTATGGCAAAATCACTTTGCTGCCCTCCAGTGGCTCTC
TTTTTCTAAGTCCTTTGATAAGAAACAAAAGTACAAGGTTAAGAAACCCTGGCATAGAGTATTTTAAAAAGTGTT
TTGGAAAGTATTTGTCAATGCTTAGAGATAGAAATGGCTGTGTTATATATAGGAAGTAAATTTTCTCAACTATAC
CCAGATATGTGTTTGAAAAGTAAAACCCTCCCTACTTTTTGGCTATAGTGTATTCCTGGAAACTGCATAGGAAAG
CAAACATGGGAAGATGATTGTTTTATTGTTTTCTACTTTTAAATGGTATGGGAACCTTGAGATAGCAAAATGCTG

FIGURE 3121B

CCTAGTACTATGCCAAATACAGTCAACTTTTGATGCTTTCTGAGGAAAAGAAAACTGGTAAACTGATGGATGGAT
GAGTTGAAGTTAAATATAGTATAGTAATTTGTATAGCCTCAGGTGAGCAGCTTGCCAAAACAAACAAACAAACAA
ACAAACAGGGGTGAGGGATTTGGAAATATAGTAACAACAATGATAAGAGACTGTGGGAAGAAATGAGAGTTGCTG
CCATCAGATCCAATGCAGTGGGGCTCAGATTTAACACTGATAATGAGGTTCAAAGCTTAAGGAGAAAAGACTATA
AATGTGAGAAGAGAAGCCACTAACGATTCACAGTAAGTGGTTTTAGTAGATTCGCTAGCTATACAGTTATAAAAT
CTTAAGGTTTTTTCTTAAGCATTCCCTGAGAAAAATCTTAAGATTTTAGACACTTTTCTAGTCAATTATTTACAA
TAGGTTTATTGATTAATTAACTTTGTTTTAGTTCACTTCCTATTGTCACCTTCTATAGTTTCTGGTAATCATAAC
ATATTCATAAAGAGTAGGCTGGGCGCAGTGGCTCCTGCCTGTAATCCCAGCACTTTGAGAGGCCGAGGCGGGTGG
ATCACGAGGTCAAGAGTTCAAGACCAGCCTGGCCAAGATGGTAAAATCCCGTCTCTACAAAAAATAGAAAAAGAA
TTAGCCGGGCATGGTGGCAGGTGCCTGTAATCCCAGCTGCTTGGGAGGCTGAGGCAGAGAATTGCTTGAACCGGG
GAGGCAGAGGTTGCAGTGAGCCGAGATTGCACCACTGTACTTCAGACAAGACTCTGTCTC

FIGURE 3122A

GCGCGACCGTCCCGGGGGTGGGGCCGGGCGCAGCGGCGAGAGGAGGCGAAGGTGGCTGCGGTAGCAGCAGCGCGG
CAGCCTCGGACCCAGCCCGGAGCGCAGGGCGGCCGCTGCAGGTCCCCGCTCCCCTCCCCGTGCGTCCGCCC**ATG**G
CCGCCGCCGGGCAGCTGTGCTTGCTCTACCTGTCGGCGGGGCTCCTGTCCCGGCTCGGCGCAGCCTTCAACTTGG
ACACTCGGGAGGACAACGTGATCCGGAAATATGGAGACCCCGGGAGCCTCTTCGGCTTCTCGCTGGCCATGCACT
GGCAACTGCAGCCCGAGGACAAGCGGCTGTTGCTCGTGGGGGCCCCGCGCGGAGAAGCGCTTCCACTGCAGAGAG
CCAACAGAACGGGAGGGCTGTACAGCTGCGACATCACCGCCCGGGGGCCATGCACGCGGATCGAGTTTGATAACG
ATGCTGACCCCACGTCAGAAAGCAAGGAAGATCAGTGGATGGGGGTCACCGTCCAGAGCCAAGGTCCAGGGGGCA
AGGTCGTGACATGTGCTCACCGATATGAAAAAAGGCAGCATGTTAATACGAAGCAGGAATCCCGAGACATCTTTG
GGCGGTGTTATGTCCTGAGTCAGAATCTCAGGATTGAAGACGATATGGATGGGGGAGATTGGAGCTTTTGTGATG
GGCGATTGAGAGGCCATGAGAAATTTGGCTCTTGCCAGCAAGGTGTAGCAGCTACTTTTACTAAAGACTTTCATT
ACATTGTATTTGGAGCCCCGGGTACTTATAACTGGAAAGGGATTGTTCGTGTAGAGCAAAAGAATAACACTTTTT
TTGACATGAACATCTTTGAAGATGGGCCTTATGAAGTTGGTGGAGAGACTGAGCATGATGAAAGTCTCGTTCCTG
TTCCTGCTAACAGTTACTTAGGTTTTTCTTTGGACTCAGGGAAAGGTATTGTTTCTAAAGATGAGATCACTTTTG
TATCTGGTGCTCCCAGAGCCAATCACAGTGGAGCCGTGGTTTTGCTGAAGAGAGACATGAAGTCTGCACATCTCC
TCCCTGAGCACATATTCGATGGAGAAGGTCTGGCCTCTTCATTTGGCTATGATGTGGCGGTGGTGGACCTCAACA
AGGATGGGTGGCAAGATATAGTTATTGGAGCCCCACAGTATTTTGATAGAGATGGAGAAGTTGGAGGTGCAGTGT
ATGTCTACATGAACCAGCAAGGCAGATGGAATAATGTGAAGCCAATTCGTCTTAATGGAACCAAAGATTCTATGT
TTGGCATTGCAGTAAAAAATATTGGAGATATTAATCAAGATGGCTACCCAGATATTGCAGTTGGAGCTCCGTATG
ATGACTTGGGAAAGGTTTTTATCTATCATGGATCTGCAAATGGAATAAATACCAAACCAACACAGGTTCTCAAGG
GTATATCACCTTATTTTGGATATTCAATTGCTGGAAACATGGACCTTGATCGAAATTCCTACCCTGATGTTGCTG
TTGGTTCCCTCTCAGATTCAGTAACTATTTTCAGATCCCGGCCTGTGATTAATATTCAGAAAACCATCACAGTAA
CTCCTAACAGAATTGACCTCCGCCAGAAAACAGCGTGTGGGGCGCCTAGTGGGATATGCCTCCAGGTTAAATCCT
GTTTTGAATATACTGCTAACCCCGCTGGTTATAATCCTTCAATATCAATTGTGGGCACACTTGAAGCTGAAAAAG
AAAGAAGAAAATCTGGGCTATCCTCAAGAGTTCAGTTTCGAAACCAAGGTTCTGAGCCCAAATATACTCAAGAAC
TAACTCTGAAGAGGCAGAAACAGAAAGTGTGCATGGAGGAAACCCTGTGGCTACAGGATAATATCAGAGATAAAC
TGCGTCCCATTCCCATAACTGCCTCAGTGGAGATCCAAGAGCCAAGCTCTCGTAGGCGAGTGAATTCACTTCCAG
AAGTTCTTCCAATTCTGAATTCAGATGAACCCAAGACAGCTCATATTGATGTTCACTTCTTAAAAGAGGGATGTG
GAGACGACAATGTATGTAACAGCAACCTTAAACTAGAATATAAATTTTGCACCCGAGAAGGAAATCAAGACAAAT
TTTCTTATTTACCAATTCAAAAAGGTGTACCAGAACTAGTTCTAAAAGATCAGAAGGATATTGCTTTAGAAATAA
CAGTGACAAACAGCCCTTCCAACCCAAGGAATCCCACAAAAGATGGCGATGACGCCCATGAGGCTAAACTGATTG
CAACGTTTCCAGACACTTTAACCTATTCTGCATATAGAGAACTGAGGGCTTTCCCTGAGAAACAGTTGAGTTGTG
TTGCCAACCAGAATGGCTCGCAAGCTGACTGTGAGCTCGGAAATCCTTTTAAAAGAAATTCAAATGTCACTTTTT
ATTTGGTTTTAAGTACAACTGAAGTCACCTTTGACACCCCATATCTGGATATTAATCTGAAGTTAGAAACAACAA
GCAATCAAGATAATTTGGCTCCAATTACAGCTAAAGCAAAAGTGGTTATTGAACTGCTTTTATCGGTCTCGGGAG
TTGCTAAACCTTCCCAGGTGTATTTTGGAGGTACAGTTGTTGGCGAGCAAGCTATGAAATCTGAAGATGAAGTGG
GAAGTTTAATAGAGTATGAATTCAGGGTAATAAACTTAGGTAAACCTCTTACAAACCTCGGCACAGCAACCTTGA
ACATTCAGTGGCCAAAAGAAATTAGCAATGGGAAATGGTTGCTTTATTTGGTGAAAGTAGAATCCAAAGGATTGG
AAAAGGTAACTTGTGAGCCACAAAAGGAGATAAACTCCCTGAACCTAACGGAGTCTCACAACTCAAGAAAGAAAC
GGGAAATTACTGAAAAACAGATAGATGATAACAGAAAATTTTCTTTATTTGCTGAAAGAAAATACCAGACTCTTA
ACTGTAGCGTGAACGTGAACTGTGTGAACATCAGATGCCCGCTGCGGGGGCTGGACAGCAAGGCGTCTCTTATTT
TGCGCTCGAGGTTATGGAACAGCACATTTCTAGAGGAATATTCCAAACTGAACTACTTGGACATTCTCATGCGAG
CCTTCATTGATGTGACTGCTGCTGCCGAAAATATCAGGCTGCCAAATGCAGGCACTCAGGTTCGAGTGACTGTGT
TTCCCTCAAAGACTGTAGCTCAGTATTCGGGAGTACCTTGGTGGATCATCCTAGTGGCTATTCTCGCTGGGATCT
TGATGCTTGCTTTATTAGTGTTTATACTATGGAAGTGTGGTTTCTTCAAGAGAAATAAGAAAGATCATTATGATG
CCACATATCACAAGGCTGAGATCCATGCTCAGCCATCTGATAAAGAGAGGCTTACTTCTGATGCA**TAG**TATTGAT
CTACTTCTGTAATTGTGTGGATTCTTTAAACGCTCTAGGTACGATGACAGTGTTCCCCGATACCATGCTGTAAGG
ATCCGGAAAGAAGAGCGAGAGATCAAAGATGAAAAGTATATTGATAACCTTGAAAAAAAACAGTGGATCACAAAG
TGGAACAGAAATGAAAGCTACTCATAGCGGGGGCCTAAAAAAAAAAAAGCTTCACAGTACCCAAACTGCTTTTTC

FIGURE 3122B

CAACTCAGAAATTCAATTTGGATTTAAAAGCCTGCTCAATCCCTGAGGACTGATTTCAGAGTGACTACACACAGT
ACGAACCTACAGTTTTAACTGTGGATATTGTTACGTAGCCTAAGGCTCCTGTTTTGCACAGCCAAATTTAAAACT
GTTGGAATGGATTTTTCTTTAACTGCCGTAATTTAACTTTCTGGGTTGCCTTTGTTTTTGGCGTGGCTGACTTAC
ATCATGTGTTGGGGAAGGGCCTGCCCAGTTGCACTCAGGTGACATCCTCCAGATAGTGTAGCTGAGGAGGCACCT
ACACTCACCTGCACTAACAGAGTGGCCGTCCTAACCTCGGGCCTGCTGCGCAGACGTCCATCACGTTAGCTGTCC
CACATCACAAGACTATGCCATTGGGGTAGTTGTGTTTCAACGGAAAGTGCTGTCTTAAACTAAATGTGCAATAGA
AGGTGATGTTGCCATCCTACCGTCTTTTCCTGTTTCCTAGCTGTGTGAATACCTGCTCACGTCAAATGCATACAA
GTTTCATTCTCCCTTTCACTAAAAACACACAGGTGCAACAGACTTGAATGCTAGTTATACTTATTTGTATATGGT
ATTTATTTTTTCTTTTCTTTACAAACCATTTTGTTATTGACTAACAGGCCAAAGAGTCTCCAGTTTACCCTTCAG
GTTGGTTTAATCAATCAGAATTAGAATTAGAGCATGGGAGGGTCATCACTATGACCTAAATTATTTACTGCAAAA
AGAAAATCTTTATAAATGTACCAGAGAGAGTTGTTTTAATAACTTATCTATAAACTATAACCTCTCCTTCATGAC
AGCCTCCACCCCACAACCCAAAAGGTTTAAGAAATAGAATTATAACTGTAAAGATGTTTATTTCAGGCATTGGAT
ATTTTTTACTTTAGAAGCCTGCATAATGTTTCTGGATTTACATACTGTAACATTCAGGAATTCTTGGAGAAGATG
GGTTTATTCACTGAACTCTAGTGCGGTTTACTCACTGCTGCAAATACTGTATATTCAGGACTTGAAAGAAATGGT
GAATGCCTATGGAACTAGTGGATCCAAACTGATCCAGTATAAGACTACTGAATCTGCTACCAAAACAGTTAATCA
GTGAGTCGAGTGTTCTATTTTTTGTTTTGTTTCCTCCCCTATCTGTATTCCCAAAAATTACTTTGGGGCTAATTT
AACAAGAACTTTAAATTGTGTTTTAATTGTAAAAATGGCAGGGGGTGGAATTATTACTCTATACATTCAACAGAG
ACTGAATAGATATGAAAGCTGATTTTTTTTAATTACCATGCTTCACAATGTTAAGTTATATGGGGAGCAACAGCA
AACAGGTGCTAATTTGTTTTGGATATAGTATAAGCAGTGTCTGTGTTTTGAAAGAATAGAACACAGTTTGTAGTG
CCACTGTTGTTTTGGGGGGGGCTTTTTTTCTTTTTCCGGAAAATCCTTAAACCTTAAGATACTAAGGACGTTGTT
TTGGTTGTACTTGGAATTCTTAGTCACAAAATATATTTTGTTTACAAAAATTTCTGTAAAACAGGTTATAACAGT
GTTTAAAGTCTCAGTTTCTTGCTTGGGGAACTTGTGTCCCTAATGTGTTAGATTGCTAGATTGCTAAGGAGCTGA
TACTTGACAGTTTTTTAGACCTGTGTTACTAAAAAAAAGATGAATGTCGGAAAAGGGTGTTGGGAGGGTGGTCAA
CAAAGAAACAAAGATGTTATGGTGTTTAGACTTATGGTTGTTAAAAATGTCATCTCAAGTCAAGTCACTGGTCTG
TTTGCATTTGATACATTTTTGTACTAACTAGCATTGTAAAATTATTTCATGATTAGAAATTACCTGTGGATATTT
GTATAAAAGTGTGAAATAAATTTTTTATAAAAGTGTTCATTGTTTCGTAACACAGCATTGTATATGTGAAGCAAA
CTCTAAAATTATAAATGACAACCTGAATTATCTATTTCATCAAAAAAAAAAAAAAAAAAAA

FIGURE 3123

MAAAGQLCLLYLSAGLLSRLGAAFNLDTREDNVIRKYGDPGSLFGFSLAMHWQLQPEDKRLLLVGAPRGEALPLQ
RANRTGGLYSCDITARGPCTRIEFDNDADPTSESKEDQWMGVTVQSQGPGGKVVTCAHRYEKRQHVNTKQESRDI
FGRCYVLSQNLRIEDDMDGGDWSFCDGRLRGHEKFGSCQQGVAATFTKDFHYIVFGAPGTYNWKGIVRVEQKNNT
FFDMNIFEDGPYEVGGETEHDESLVPVPANSYLGFSLDSGKGIVSKDEITFVSGAPRANHSGAVVLLKRDMKSAH
LLPEHIFDGEGLASSFGYDVAVVDLNKDGWQDIVIGAPQYFDRDGEVGGAVYVYMNQQGRWNNVKPIRLNGTKDS
MFGIAVKNIGDINQDGYPDIAVGAPYDDLGKVFIYHGSANGINTKPTQVLKGISPYFGYSIAGNMDLDRNSYPDV
AVGSLSDSVTIFRSRPVINIQKTITVTPNRIDLRQKTACGAPSGICLQVKSCFEYTANPAGYNPSISIVGTLEAE
KERRKSGLSSRVQFRNQGSEPKYTQELTLKRQKQKVCMEETLWLQDNIRDKLRPIPITASVEIQEPSSRRRVNSL
PEVLPILNSDEPKTAHIDVHFLKEGCGDDNVCNSNLKLEYKFCTREGNQDKFSYLPIQKGVPELVLKDQKDIALE
ITVTNSPSNPRNPTKDGDDAHEAKLIATFPDTLTYSAYRELRAFPEKQLSCVANQNGSQADCELGNPFKRNSNVT
FYLVLSTTEVTFDTPYLDINLKLETTSNQDNLAPITAKAKVVIELLLSVSGVAKPSQVYFGGTVVGEQAMKSEDE
VGSLIEYEFRVINLGKPLTNLGTATLNIQWPKEISNGKWLLYLVKVESKGLEKVTCEPQKEINSLNLTESHNSRK
KREITEKQIDDNRKFSLFAERKYQTLNCSVNVNCVNIRCPLRGLDSKASLILRSRLWNSTFLEEYSKLNYLDILM
RAFIDVTAAAENIRLPNAGTQVRVTVFPSKTVAQYSGVPWWIILVAILAGILMLALLVFILWKCGFFKRNKKDHY
DATYHKAEIHAQPSDKERLTSDA

FIGURE 3124

ACTCGCGCGGATGCTGCAGGGGGCACTTCTGAATAAGATCAATGTTGGAAATTTTGTTTCTTCCTCTCAGTTCCT
TCATTTTTTTTCACATCGATCCTATCTACCAGCCCAAAGGTGGAGTGTATTTCAGGGGAGCATATTGGGCCATAG
TACTGGAGAATGTTTGCTGACCCACAATTTAGGGTCTCACTTAAAATCCTAGTTCTGCCATTTCCTAGCTGTGAT
GTACCTAGGTAAATTATTCCATCCAGTTGCATCTCTTTTTATCTTCCTCTGTTAAATAATAGTATACTCCACAGA
GAGCTCCTGTGAGATTAAATGAGCTATGCACGTGATGTGATTCTGTTGACCTAAAATGGAGACCAGTGTTTGTCT
AATGGAGTGTAATGGTTACAGACACAGGCTCTAGTGCTAGGCTATGTGTTCAAATCTTAGCTCAGTTATTTTTTA
GCTGTCTGGCCCTTTCATAAGTTATTTTGCCATACTGAGCCTTGGTTCCCCATCTGAGAAGTTGAAATTTAAAAA
AATCCCTCTTACTGTGTCATCATAAGGACTAACTAATTGAAGGTGCCCTGGAGTGCAATGCCTGCATGTGGTTGG
AGCACACCATAAATGGCAGCTGCAGAGCTAGACATATCTTGGGGAGTTTGAATAAGTGGGGTTAATATGTAGACT
AGTTTTCTCTGTTCTCACTTTGGGGGAAAAACCAACTAGCGTTTCCATTATTCTAATCTACTTCTCTTATGGACT
AGAATAGTTAAAATTAACAAAATGCCTTGTTAGGAGTAAAATGGGAGCTTGGATTCTCTTTATTATTTGTTTTCT
GGACTGGGGTTTCCTGTTGGAGTTCTGGGCTGGTTTCAAAGTCCCAGATGCTGGGCAGAATAAGAAGAGGTCTTC
CCTCAGGGTTGGCATCATTTACTTCATTGAAGTGAAATAGCGTGTATCAGAGCAAGTGGAACCGACACCCAAAAT
ATGACTTGAAGAATGTAATTTAAAATGTAGCATAGA

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FIGURE 3125

LARMLQGALLNKINVGNFVSSSQFLHFFSHRSYLPAQRWSVFQGSILGHSTGECLLTHNLGSHLKS

FIGURE 3126

CAGCATGTTGAGCCGGGCAGTGTGCGGCACCAGCAGGCAGCTGCCTCCGGTTTTGGGGTATCTGGGCTCCAGGCA
GAAGCACAGCCTCCCCGACCTGCCCTACGACTACGGCGCCCTGGAACCTCACATCAACGCGCAGATCATGCAGCT
GCACCACAGCAAGCACCACGCGGCCTACGTGAACAACCTGAACGTCACCGAGGAGAAGTACCAGGAGGCGTTGGC
CAAGGGAGATGTTACAGCCCAGATAGCTCTTCAGCCTGCACTGAAGTTCAATGGTGGTGGTCATATCAATCATAG
CATTTTCTGGACAAACCTCAGCCCTAACGGTGGTGGAGAACCCAAAGGGGAGTTGCTGGAAGCCATCAAACTGGA
CTTTGGTTCCTTTGACAAGTTTAAGGAGAAGCTGACGGCTGCATCTGTTGGTGTCCAAGGCTCAGGTTGGGGTTG
GCTTGGTTTCAATAAGGAACGGGGACACTTACAAATTGCTGCTTGTCCAAATCAGGATCCACTGCAAGGAACAAC
AGGCCTTATTCCACTGCTGGGGATTGATGTGTGGGAGCACGCTTACTACCTTCAGTATAAAAATGTCAGGCCTGA
TTATCTAAAAGCTATTTGGAATGTAATCAACTGGGAGAATGTAACTGAAAGATACATGGCTTGCAAAAAGTAAAC
CACGATCGTTATGCTGAGTATGTTAAGCTCTTTATGACTGTTTTTGTAGTGGTATAGAGTACTGCAGAATACAGT
AAGCTGCTCTATTGTAGCATTTCTTGATGTTGCTTAGTCACTTATTTCATAAACAACTTAATGTTCTGAATAATT
TCTTACTAAACATTTTGTTATTGGGCAAGTGATTGAAAATAGTAAATGCTTTGTGTGATTGAATCTGATTGGACA
TTTTCTTCAGAGAGCTAAATTACAATTGTCATTTATAAAACCATCAAAAATATTCCATCCATATACTTTGGGGAC
TTGTAGGGATGCCTTTCTAGTCCTATTCTATTGCAGTTATAGAAAATCTAG

FIGURE 3127

MLSRAVCGTSRQLPPVLGYLGSRQKHSLPDLPYDYGALEPHINAQIMQLHHSKHHAAYVNNLNVTEEKYQEALAK
GDVTAQIALQPALKFNGGGHINHSIFWTNLSPNGGGEPKGELLEAIKLDFGSFDKFKEKLTAASVGVQGSGWGWL
GFNKERGHLQIAACPNQDPLQGTTGLIPLLGIDVWEHAYYLQYKNVRPDYLKAIWNVINWENVTERYMACKK

FIGURE 3128A

ATCAAACCAAACTTTTCCCTTGCTTCAGTCCAAGACAATGTCTTCTTATTCTGTCAACCCCAGAGATACAAACAA
TAGTCATCCCAAGAATCAATAAAATATTTGAAGAGAGTTAAGATACTCCTTAGACATCTCTCAGTACAGTCAACC
TTGATCTCTAAGGCCCATTTTTCTATCATGAAATTATAGAAAGGTAAAGCTGAAAGCAATTTTAAATTGCATAGT
CCTACCCACAGCGACAGATAAGGAAAGCAGGTTTCAGAGAGAGGTGGAATGAGTCACACAGGAAACAAGTCGTAG
AATGGGCATGATTTAGGTCTCTTGAAGCCTGGTGTCATGTTCCTCCCACCATCCCACACAGCCAACCAATCTGCC
TCATTTTTTGTTTCTTCTCTCTGGGCTTCTATAGTCTCTAAGACAGACAGGCCTAATTGGAGTTCTATTCTATAG
AAGTATCAGAAGAAAATATATCCATAAAAGCTGAAGGAAAAGACCAACATATATGATTATATATAACTTTAAAAC
TCTGTTATAAGTTACAACAAACAGAATTCAGGAACTGGTAACAGACTGGAAAAAAATATGTATTTGTAGTACACA
TAACAAAGGATTAGCACTCATTCTATTTTTATAAAGGGTTATAAATCATTAAGATATCAAAATGGATATACAACA
GGAATATACCATTCTGAAAAGAAGAAATAAGGATGGCTAAAATACCTTAGGAAAAAAAAAATGCTACGGAACAATC
AGAAAATTCAATCAGAAAATTGTTAGTTAAAAAAATCACCTTTCATCTAACTGATTAGGGGAAAAAAAATACTTA
AGTATGAGACTGAGGGTATCTAATGTTGGCTAGAAATGGGCACTTTCATACCCTGTTAGAATATAAACTGATTAG
GCATTTTATAGGGTAACTTGGTAATACTAGTCAATTTTTTATTCAGAAATGGCACTTCTAGTAATTCTACAGGAG
TATGTGCAGNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
CATAGTTGTATAGGTACCCACAGTTGTATATGTATACAAGATTAATATACCATAAAATTTCTAAAAGGATACCCA
GCAAGTTTTTTATACAGAAGTTCCTTCTAGGCAAGGGAATAGGATGGGGGAGAAGAGAACGTCAGCATTTTAATC
TATATAATTTTATTTAATATTTGTGGTCACATTTATTAGGTAATTAAAAAATTATTTAACAATTTTTGATCATAT
TTATTAGGTAATTAATTTTTAAAAAGGAAGAGATAAAATCTTGTTATGCTCAAATATAGCAAAATAGGACATGGG
GATGAGCTGGAAGGGGCCAGGTTAGGCTGATGAGCTCCTGCAGGTTTTAAGAATTCAGAACAGACCATATGAAGA
TGGCTGCTCAACAACTATAAAAGTTTGGATTTCTGGGCACGAAACATTTTAAAATGCATGCCTTGATTTTATGGC
ACATTAGGAGGTATCTACATGTCATCACCACACTGCTAGCTTATTGTATGTTAAGAAAGAGTAATATTAAAGACC
AGACATCTCACTGTTTAAGATGAGAACAGTATACTTCTTTTGAGTTTTAAAATAAAATAAAATGAAATAACGGCT
CTCAGGTTAAATTATCAGATCATCTGCAATAACCAGGAATGGAGGAAATTGCTGTTTTCCATTCAGACAGGAAAA
AAAAAATAGGAGCAACAAGACATGCCCTTGGATCATTTGACAATCACTGCATCCACACGTGTTTGTGCTGTGAGT
CCCATATAACAATCCTCCTACCCTCCAGAGCATGGGTGCAGCCTTTCCCACTCTGCTACCCCTGGGCCCCTAAGA
TCCATCATTCCAGTGACTCACCAGTCATCCATTTGCTATAGCTTCTCTTTCAAACAGTGATAGGTGCAAAAAAAT
ATGTTGCCCCAGAGCATTTCCACTTTCAATTTTGTCGAAATGTTCTCAATGTGTTACTCAGTTATTTCCAGAAGA
TACCTTTATCACTTAGACTTACAAAAAATAGTTTCCCAAGTATTTAACTTGCTCCTAAGATAACCTTTGTCTTAT
ACGTTCCTATCTTCAATGTCTAGCTCAGTGACCGCACATAGCAGATGCTCAATAAATGACATCATCCTCTAGAAG
AAGGTGTCACTTCCCTAACTGAGTCCCACTGAATTACTCTTCCATGGTTTTTCATACAATCAGGCTGTTATTTCA
CTCCTCTTAAAAAAACAGAACAAACTGTGCTTTAATAGTACTGTACCAATTTAGCTGTACTGTTCATTCCCTAGT
TTTGATAAATATACCACAACTACGTTAAACATTTGGGGAAGCTGGATGAAGGATATAGAGGAACGCTGTCTTTGC
AACTCTTCTGTAAATCTAAAATTACTTCACAAAAGTTTTAAAAAATAAAACAACCCAATGAGAACAATAAATGTT
CTCTTGACCCCACTTCCCTTTCCAGCTACCATTCCATCTTTTTTCTTCTCTTTATAGTAAATTTCTTTAAAACTA
TTATCTATATTCATTATAATTGATTTCCTCTCAATTACTCCTAAACCTATTTCACTGTTTTCACTCCCACCATCC
GTCTTATCAAGATCACCAATGACTGGACCAGTTGCCAAATCAATAGCCACTCAATGATCACTCATCAGACCTCAT
CTTTCCTGTCCTATTAGCAGCATGACACAGCTAGCCAATCCATCCTCTATGAAACACTTTCTTCATGAGGCTTCT
TAACACCACACTCATCTCCTTTTCCTCCTACCTGTTTATTAGAGAACTTTTTGCACGTTAAGAGCCCCGAACCTC
ATCAACCATCATGATTGAGTGTGAACCACTGACACAGCAGGGGCGACCTAAAACAAGCTGAACATCAAAAAATTG
ACTGTAATGGATGAAAACAATCAAATGTATAAAAAGCCATGAGTTCATAATGATACTTTAAATAATCTCACTGGT
CGTCTAAAGGTTGCTAAGGCACCAACTCATAGTATGCTAACTGATAAATGAAAGAAATCAAGCATCAATACTGCC
ATTTCTTTACAGACTCATTTCAGGGGAATCAAAGCTGATGAGGGAAAGTTCTATATGGAACAATCACAGACAATA
TATACAGGAAGAATAACAGAAATGGATAATTAATCCTTAATGAAAAAATAGCTATCAGCAATGATCAATGGCTGC
TAAAACAATTAGGTGAAAGTTTGATGAAGACCATATTGGATGAATCAGGCTGACAAATGCTGAAACCACTGATCC
ATCTTAACAGCATTAAAAGTGGGACAGACATTATATGCCTCATGTGATGCCACAGGAAGCACACCACTTTATAAT
ACAGGCTTGCAAAAAAAAAATCTTGAATCCGAATATAAACAAGTTCTAAATCTAATTACCAGTTTACATGAAATA
CAGAGGAGAGAGGATCAAGCAACACCCTGAGGATACAATAGGCCAGGTTCAAAATGTGGGAAAGCCTACAGAACA

FIGURE 3128B

AATAAGTCAGTTTCTTTAACAAATGAATCATGGGGGAAAAAAAGTGTCCATGTATATGTGTAGGGGGTGTAAGGA
GTGTGCCATTAATTAAAATAAAAGACATTAACCTAATGCAATATTCGGACTTTTGAGGCCATGAGGAAACAACAC
AGAAGGGTCTTAGAGGATATTAAGGAATCATTGTCACTTGTGTTAGGTATGATGATGACATTGTGGTTGTGCCTG
TAGGTGATGTATCTGTTAGAAATATATACTGAAGAATTTAGAAGTGACACGATACAATTGCTAGGCTTTGCTTGA
AAACACACCAGCAAGAAGAACACCCCCACAAAGAAGCTGAGGGCTGACAAAAACAGAATGCTGCTAGTCATGGAA
GCCGGGTGATG

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FIGURE 3129

QTKLFPCFSPRQCLLILSTPEIQTIVIPRINKIFEES

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FIGURE 3130

GTACCCCCATCCTTTCTCTCGCCCCTCCTACCCGCAGCTCCTGGCGCTCGGCGGGGCTAACTGCAGCGCGGAGAT
CTCGGCCGCCAAGCTCCGCCTCCCGCCCCGGGCTGTGCCCCGGGGCTCGCCTGAGGCCGACCACCCGCACCCCAC
CTCTAGCGGCTTTGCTCGAGGCCCACCTTCTTCCCACCCCCGGCAAACTCCAGTAGGCTCGCCCTCGCTGACTCC
CCGCCCCCGCGTCAACTGCAAGGGGCCCGCCCATAGCCAGTTCCGGGGCGGTTGCTCACATCGACCGGAACTCCC
CGCCCCCTCCCGCGGCCCCTGGGGCCGTAGGAGGCCGCAGCGAGGAGGTAGAGGGGGCGGGGGTCGCACTAGGGT
GTCCCTAGAGAACGAGGACTCTGAAGGCGGGACATTTGGGCGACCCCCGGGCGGGGCCAGCCATTAAACAGTCCC
ACTTCTGTGCCAGACACTGAACTGGGCTCTTGACGGGCATCATCTCTTAATCCTCAGAACATCCCAGGGAGCTCC
ACAGGATCCCCATATCCTGGGCC**ATG**AGTGAGTTGAAAGACTGCCCCTTGCAGTTCCACGACTTCAAGTCTGTGG
ATCACCTGAAGGTCTGTCCCCGCTACACGGCAGTGCTGGCACGCTCTGAGGATGATGGCATCGGCATCGAGGAGC
TGGACACCCTGCAGCTGGAGCTGGAGACCCTGCTGTCTTCTGCCAGCCGGCGCCTGCGTGTGCTTGAGGCCGAAA
CCCAGATCCTCACCGACTGGCAGGATAAGAAAGGTGACAGACGATTCCTGAAGCTGGGTCGAGACCATGAACTTG
GAGCTCCCCCCAAACATGGGAAGCCCAAGAAGCAGAAACTGGAAGGGAAGGCAGGACATGGGCCGGGCCCTGGCC
CAGGACGGCCCAAATCCAAAAACCTTCAGCCCAAGATCCAGGAATATGAATTCACTGATGACCCTATCGACGTGC
CACGGATCCCCAAAAATGATGCCCCCAACAGGTTCTGGGCTTCAGTGGAGCCCTACTGTGCTGACATCACCAGCG
AGGAGGTCCGCACACTTGAGGAGTTACTGAAGCCCCCAGAAGATGAGGCTGAGCATTACAAGATCCCACCCCTGG
GGAAGCACTACTCCCAGCGCTGGGCCCAGGAGGACCTGCTGGAGGAGCAGAAGGATGGGGCCCGGGCAGCGGCTG
TGGCTGACAAGAAGAAAGGCCTCATGGGGCCACTGACCGAACTGGACACTAAAGATGTGGATGCCCTGCTGAAGA
AGTCTGAGGCCCAGCATGAACAGCCGGAAGATGGATGCCCCTTTGGTGCCCTGACGCAGCGCCTCCTGCAGGCCC
TGGTGGAGGAAAATATTATTTCCCCTATGGAGGATTCTCCTATTCCTGACATGTCTGGGAAAGAATCAGGGGCTG
ACGGGGCAAGCACCTCCCCTCGCAATCAGAACAAGCCCTTCAGTGTGCCGCATACTAAGTCCCTGGAGAGCCGCA
TCAAGGAGGAGCTAATTGCCCAGGGCCTTTTGGAGTCTGAGGACCGCCCCGCAGAGGACTCCGAGGATGAGGTCC
TTGCTGAGCTTCGCAAACGGCAGGCTGAGCTGAAGGCACTTAGTGCCCACAACCGCACCAAGAAGCACGACCTGC
TGAGGCTGGCAAAGGAGGAGGTGAGCCGGCAGGAGCTGAGGCAGCGGGTGCGCATGGCTGACAACGAGGTCATGG
ACGCCTTTCGCAAGATCATGGCTGCCCGGCAGAAGAAGCGGACTCCCACCAAGAAAGAAAAGGACCAGGCCTGGA
AGACTCTGAAGGAGCGTGAGAGCATCCTGAAGCTGCTGGATGGGTAGCCCTCACCCCTGCCTCAGGCTGATTATC
TGGCCTAGGGGAGGGGAAGGGAGGCCCACTTCCTTCTTTGGGCACAGGAAACATTGGCCTGTGGCTGTCCCTCAA
ATGGCGGCAGTCTCTAGAGGGCCGTGGCCCTTCCCCTGAGGTCTTTTGGCCTAGCTCTGTACAACCAGGACACAG
GAAGCCCTGCTGGGCTAGCCTGAGGCCTAGTCTCTGCTTGGTCCCCGAGATGGGGTTGGAGGGGACTTCGTTTCT
GGGTCTTCCTCTTCCCCTCTTTACCATCCCCCACTCCCTAATCCCCTACCCCTGTCTCCCCTTCAAGGACTTCTC
CCTTGTGGTTTTGTAAAGTGCAAACTTAAGAATAAAGTGACTGCTGTGGTTTTTCAAAAAAAAAAAAAAA

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FIGURE 3131

MSELKDCPLQFHDFKSVDHLKVCPRYTAVLARSEDDGIGIEELDTLQLELETLLSSASRRLRVLEAETQILTDWQ
DKKGDRRFLKLGRDHELGAPPKHGKPKKQKLEGKAGHGPGPGPGRPKSKNLQPKIQEYEFTDDPIDVPRIPKNDA
PNRFWASVEPYCADITSEEVRTLEELLKPPEDEAEHYKIPPLGKHYSQRWAQEDLLEEQKDGARAAAVADKKKGL
MGPLTELDTKDVDALLKKSEAQHEQPEDGCPFGALTQRLLQALVEENIISPMEDSPIPDMSGKESGADGASTSPR
NQNKPFSVPHTKSLESRIKEELIAQGLLESEDRPAEDSEDEVLAELRKRQAELKALSAHNRTKKHDLLR

FIGURE 3132

CAGAGGCAGGGAAAACCACGCAGAAGCAGGAGCTGAAGACCTCAGACCGGCACCAGGACAGCTTAATGAAGACAA
ACTGAAGGGGAAACTGAGATCCTTAGAAAACCAGCTATACACCTGTACCCAGAAATACTCCCCTTGGGGAATGAA
AAAAGTACTACTGGAGATGGAAGACCAGAAAAACAGCTATGAGCAGAAGGCCAAGGAGTCACTGCAGAAAGTGCT
GGAGGAGAAAATGAATGCAGAGCAGCAACTACAGAGCACACAGGTATGGGGATGCCACATAGACATGGGGCTGGG
GACTCCAGGCAGCTTGGGGAACAAGGGGAGCCAGCTGCACAACTCCCTGGAGCCCTCTCCTCTC**TGA**TCTCCCTC
AGCGATCCCTGGCCCTGGCAGAGCAGAAGTGTGAAGAGTGGAGGAGCCAGTATGAGGCTCTGAAGGAGGACTGGA
GGACCCTTGGGACCCAGCACAGGGAGCTGGAGAGCCAACTCCACGTGCTTCAGTCCAAACTGCAGGTACCAGGCA
CTGGGGGTGGGGAGGGAAGACAGGGTATGGGGAGGAGGGATGGTGATGAAAGAAGCTGTTCTGGATTAGGGACTC
CAAAGGCAGCTGACAGCATCTGGCTTTCAGTTCCTCAGTCACCACTACTTTGTACCAAATTCACTGTTTTGGCTC
TGAAATCTAATTTTGAGTTTAGCAAGGATGTCTGCATTGCTCATGCAAATGAACTAAGCGTTCATTGGAATGACA
CCATCACCACCCAAATGAAAAGAACTGGCTGGAATATTCATCAGCCTACTAATGTCATCTCCCAACCCACTCTCC
AAACTCCATCCCAAAAAAGCATCCAGTTCAGAATTGCCCACTGTTGGCAAAGAAAGAATGTCACTAATTTATTTA
CAGGTGAGTATTAACACTTTCTGCCAATGTGTATTTTAAGCAATTACATTTAGCAATTACAATTAGATTCTTGGC
ATCCTCAAGGGTTCCATCATCTTCAATCTGTCCTAAGCCTCAGTTTCCCCCATCTCTAGAATGAGGATAATAGTA
CCTACATCATAAGGTGGCTCTGAGTATTAAGTAAGATGATCCATGTCAAGCACTTAGCACAATGCCTGGCACACA
AAAACACTCAGTAAATATTAGCTATTATTTTGCATAGATTTATTTACCTGGTTTGGAATTTTGAGGATCCACCTC
AAAAGCTGATCTTTGTAATTTTCCTGAAGCAGGGCTCAGAACAGCCCACTTGATAAGAGACAGAGTATGTGAGTC
TTATCAAAGGAGTGAACCCAGCTGGTCACTCTGCGTGGTATCCACAGCTCAACCTTTGTTGTTTTCTTCTTCCCA
TCACCTATAAGGCAACTCCTATGAAGATTTTTGTGAGGGGTTTTTTAACTTTAAATCTTTGTGGAAAAAAAAAGA
CCCTAACCAAAAAAAAACTGATACTGCCAGAAGTAGAAAAAAGAGAAAATGAAAACATCCAGAAAACTAATGACT
TTGTATTCCTTAATTTGGTGATTTACCAAAGTGTCAAGACATGACTCCCACACCAATGACAACCACTTACATTTC
CCCTAGAATGGCAGATTTTTTAACGTACTGGGTTTCCTAAAGCAATTCTTATTTTATATATTCTAATTTATGTAC
ATGAATGTGTCACTTAGACCTGTCACTAGGGATGGTTTAGAAAATAAACTTACACTGCACATGCCTCAGTCCACT
TCAAAACTNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNAGACGCGAGTTCCTTGTGAATATCAAAAGTCTAATCTGCTGTTATAAATATGAGGA
ACAAAGCAAAGGGAAGAAATAGGAAAAAAGAAAGACTTCTCTATTTTCTCATCTCCCTAACATTCCTTCTATCTC
TAAAATTCCAGACTTTTCTACATTTTCCTCTTCCATGGTACCCGCCCCCCAACCTCCACCCCAACACTGACCATC
CTTCTATATTGGCCCCTCCTCCTCCTTACAGGGAGCAGATAGCAGGGACTTACAGATGAACCAGGCCCTGCGATT
TTTGGAAAATGAGCACCAGGAACTGCAGGCCAAGATTGAATGCCTGCAAGGGGACAGAGACCTGTGCAGCTTGGA
TACCCAGGACCTACAAGGTACTCTTCTCCTTGGAGGCCTTGAGTGCATGGCAGCCATGGCCAAGTGAGCTAAGAA
AAAAGAAACTGAATTAAGAGAAAGGCTTCAGCCTTTTATTTGTTTGCTTGATTGGTTGATTGGCTTTATAATCTC
ATTTTACCTTGAGGGAGAGGCAGGACTGTTTTAATCATCCAAAATTGAAAATTAATTTCACTGTAGTAGATAGAG
TATCTTGTTGTCTGAGCTCTCTTTTTTAGCCCATCCCTCTGGGCCAGATCACAGCTGCTCCCACATCAGTCACAT
ATGTCAAGGCCACAGTCCTAATTTGAAAGGGAAAGGTCAGTTGAAACACAAGGCATAGAGAAAGTCTCTCAGTCA
CATCCTCTGTGTCCGCTGATAGAGAGGACTAGATAGTGTGTAAACACAAGCCTCAATGCAACCCAACATTGTTGA
TGCACAAAAACCTGAGGTACTTGGCTTCTGGTTTACCTCTTCAGAACTGGGACACGAAGATAGAGCAACTTCCAA
TAGACACACGTTAAAGACCATGACAAGACAGCATCTATTACTAATTTCCATCCTAAGTACTGAGTTCATTAAGTC
TTGGGTTCCTTTATTTTGGCTTGCATTATTGCATTTTCAGATCAACTAAAAAGGTCAGAGGCAGAGAAACTCACC
CTGGTGACCAGAGTACAGCAGTTGCAGGGTTTGCTTCAAAATCAATCCTTACAGCTTCAAGAACAGGAGAAACTC
TTAACAAAGAAAGGTCAGCAAATTTATTACCACAAATTCTAAGATATTGCTCTTCTCTTACCTGCCTAGAGGCAG
CGGGATGGACTACATGACCTCCTGGAGTCCCAGCCAGTTCTGGGAGTCTGTTAAGTCCGGGATGTGTGGGAGCTT
TTTAAGGACTGATCATTGGCTCTGAGGACACTTCAACTAGTTAGCCTTCTATCTTGAGGTATATAAACTGTGAAA
AGGGTTCTATTCTCTCTGAAAGCACATGTCT

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FIGURE 3133

RGRENHAEAGAEDLRPAPGQLNEDKLKGKLRSLENQLYTCTQKYSPWGMKKVLLEMEDQKNSYEQKAKESLQKVL
EEKMNAEQQLQSTQVWGCHIDMGLGTPGSLGNKGSQLHNSLEPSPL

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FIGURE 3134

GTTCACTCAAGTTGACACAAAATTAACCATCACAGAAGGAGACTGGCCTTACTCTGAAATTAGGAAACTAAAGAA
GTGACCAGAATGGAGACTAGGTAGAGACAACTAGTTTTCTACCAAACATGTACAGTCATTCCTTGGTATCTGAAG
GGGATTGGTTCCAGGAACTCTCAGGGATACCAAAATCTGCAGGTGCTCAAGTCATTTATATAAAATATTACAGTA
TTTGCATATAACCTTTGCACATCTTCCATATACTTTAAATCATCTCTACATTACTTATAATAATGAATGTAGTGT
AAATGCCTATGAAAATAGTTACTACACTGTATTGTTTATTTGTATTTTTATTGAATTGTTTCGGGGTGGGGGGCA
GCTGTATCTTTCTTAGTAATAGAACCCCTGGTTTTAGCTGGGCACATGACTGCCCTCAATAAAGATTAAAGTACC
CCAGCCTTCCTTGAGATTGTGGCCATGTGACTGAACTTTAGACAGTGAGATATAAGCAGATATCTTCTGTGGCAG
TGTTAGGAAACTATTAAAGACAGTAAGAACATTGCCCTTTGCCTTCTTTTTCCTTTCTTCATTTTTCTGTCTGGA
ATGCAAATGTGATAGCTAACACCCTAGCAGCCATTTTAGATTATGAAGATGAGAGTCACTCCCCAGGAAGGGTGG
ACCTGAAAGCTGGATTCTAGATGTGGAATGACAATACCAGCCCTGGACTACCTACCTGTAGGCNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCCACAAGTAACACAAAGCATCATACCTGGGACTGGGAAGGTT
AATGTTTAAACATTTTAA**ATG**TGGCATTGGTTTGTTGAAGACAGTCAAGCAGTAGGTGCTGCAGGCTTTGTTGAG
GCTAGAAAGCTGTTGGTCTTTATTAGGTGAT

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FIGURE 3135

MWHWFVEDSQAVGAAGFVEARKLLVFIR

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FIGURE 3136

TTTGAGTTGCTGCCACCTTTTGGCTATTGTGAATGGTGTTGCTGTGAACTTTGGCTTACAAGTATCTGAGTCCCT
GCTTTCAGTTCTTTTGAGTGGAATTTGCTGGATCATATGGTAATTCCCGTGTTTAACTTTTGGAGGAACTGCCAA
ACTGTTTTCTACCGTGGCTGTACCATTTTATATTCCCACCAACCATTGATTTAGTTTGACTTCTGTTGTTTAAAG
AAGTATATCTGAATTTTACACATACTCCAAAACTGTAATTATTTGAATTAATTGGAGTAGAAATTAATTTGAAAT
AATGAAATGTCTGATTACTGGACATCAAAAGCTGCTTTGCATTAGGCCATGGTTCTCAGAATTCACAATCCTCCT
TTCCATTTTTTCCTCCCTCCCTCCCTTCCTCCTCTCGCTACCATGGTCACTCTCAGCTTCACATAAGCACGTGTA
TCTTAGGGCATTTGAACTTCAAATACTACAGGACCTCACACGTAAGAACTCTGTAACAGTAGACCTCTATTTCCC
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNTTTGTATTTTTGTNATACATTTTATTTCCCAGTATTATAGACTCCAGAATATGTTGTTGT
TATTGTTTTAAAAGTCAGTTATCTTCTTAGTTTTCTTTCAGAAAAATTAAATGGTGAGTNNNNNNNNNNNNNNN
NNNNNNNNNNNTGCATGGCCCATGTATTTACCATTCCTGGTGCTCTTCCTTCTTTTGTGTGGATTCAGTTTTCCA
TCTAGTATCATTTTCGTTCTGGTAAAAGCATGTTTGACATTTCCTGTAGTATTGCTTTGCTGGTGACACATTCTT
CCTCAGCTTTTGTCTGAAATGCCTTTATTTCACCATCATTTTTGAAGGATGTTTTTGCTGGGTATAGAATTCTAG
GTTGGTAGTTTTTGTTATTTTTCAGCATTTTTAAGGTGACATTTGGCTTGTACATGTTGTTCTTGAGAATTCTGC
AGTTATTCTTTGTTCCACTGTATGTAATAATATATGTTTTTCTCCTTTCTCTGATTTTACGGTTTTTCTCTTTGT
TGCTGATATTCTGAAACTTGACTATGATGTGTCTTTGTGTGGTTTTCTTTGTGGTTTTTTTCCTGTGGAATTTAT
TCAACTTCTGGGATCTGTAGGTTATAGTTTTCACAAATTGGAAATTTTTGACATTACTTCTTCAGACACTTTTTC
TGTCTTCCCCTCCATCATTCTGGGATTTGAATTACATGTATACAGTAACTGTTGTTGTTTCATAGGTGACTAACT
GGGTAGGGGAATGTCTGGTTCCCTTACTATCCGGTGAAGTAGCAGAACCACCTTTTGTAGGAATCAGTTATCAGG
CCCTTTACTTTCCCTTGAACTCTAGGCTAGTTCCAGAACCTTTGGTGGACTGGAAAGAGGAAATAGTTATGCCAC
AATTTTTAGTACATGCAAATGTACATGTAATGTTTAAAAAAA

FIGURE 3137

MKCLITGHQKLLCIRPWFSEFTILLSIFSSLPPFLLSLPWSLSASHKHVYLRAFELQILQDLTRKNSVTVDLYFP
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXLYFCXTFYFPVL

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FIGURE 3138

ACTAAGAAAGTATTCTTTTAATTTGACAAATCAAGTTGGATCTCATTGTGCTAAAAAAGGTTTTTAAAATATTA
TCCAATACAGTGCCATCTAGTGACAAATCATTTACTTGCTGGTTATTGAAAATAGTTGACTACAAGTTTTATGTC
CTGATAAGTCAGGAACTTCACTTCTAATTGTGCAAATTCTTAAGATATTTTAAGCGACTATTTCTAAATAAATAA
AATATTTGTAAATAGAGAGCTGGAAAATATTTTCTAACCCTCAGGTTTTATACATATGTATCACAATGTGTCTTA
TTTAATGCCACGTGGACCCAGGAGTAAAATCAAAATCAGTGTTTTGTCTAATAAGGTGGTAATAGGATTATTTTA
GAAATGTGATGTAAAGGAATGAGCATGGCTTTAAAATCAAACAGACACGAGTTTGTCTATTTGGACTTATTTTTC
TTATGACTTAGCAGGTAATTACTACCTGCTTGGAAGTGCACCAAGCACTATATAGGTACTGCCTCATTACATATT
CACAAAACTCTATAGGTATTTTACAAATGAGGAAACCGGCCAGGCGCGGTGGCTCACGCCT

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FIGURE 3139

LRKYSFNLTNQVGSHCAKKGF

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FIGURE 3140

CTCTGAGCCCTGCTCGGTTTAGGCCTGTCTGCGGAATCCGCACCAACCAGCACCATGCCCATGATACTGGGGTAC
TGGGACATCCGCGGGCTGGCCCACGCCATCCGCCTGCTCCTGGAATACACAGACTCAAGCTATGAGGAAAAGAAG
TACACGATGGGGGACGCTCCTGATTATGACAGAAGCCAGTGGCTGAATGAAAAATTCAAGCTGGGCCTGGACTTT
CCCAATCTGCCCTACTTGATTGATGGGGCTCACAAGATCACCCAGAGCAACGCCATCTTGTGCTACATTGCCCGC
AAGCACAACCTGTGTGGGGAGACAGAAGAGGAGAAGATTCGTGTGGACATTTTGGAGAACCAGACCATGGACAAC
CATATGCAGCTGGGCATGATCTGCTACAATCCAGAATTTGAGAAACTGAAGCCAAAGTACTTGGAGGAACTCCCT
GAAAAGCTAAAGCTCTACTCAGAGTTTCTGGGGAAGCGGCCATGGTTTGCAGGAAACAAGATCACTTTTGTAGAT
TTTCTCGTCTATGATGTCCTTGACCTCCACCGTATATTTGAGCCCAAGTGCTTGGACGCCTTCCCAAATCTGAAG
GACTTCATCTCCCGCTTTGAGGGCTTGGAGAAGATCTCTGCCTACATGAAGTCCAGCCGCTTCCTCCCAAGACCT
GTGTTCTCAAAGATGGCTGTCTGGGGCAACAAGTAGGGCCTTGAAGGCCAGGAGGTGGGAGTGAGGAGCCCATAC
TCAGCCTGCTGCCCAGGCTGTGCAGCGCAGCTGGACTCTGCATCCCAGCACCTGCCTCCTCGTTCCTTTCTCCTG
TTTATTCCCATCTTTACTCCCAAGACTTCATTGTCCCTCTTCACTCCCCCTAAACCCCTGTCCCATGCAGGCCCT
TTGAAGCCTCAGCTACCCACTATCCTTCGTGAACATCCCCTCCCATCATTACCCTTCCCTGCACTAAAGCCAGCC
TGACCTTCCTTCCTGTTAGTGGTTGTGTCTGCTTTAAAGGGCCTGCCTGGCCCCTCGCCTGTGGAGCTCAGCCCC
GAGCTGTCCCCGTGTTGCATGAAGGAGCAGCATTGACTGGTTTACAGGCCCTGCTCCTGCAGCATGGTCCCTGCC
TTAGGCCTACCTGATGGAAGTAAAGCCTCAACCACA

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FIGURE 3141

MPMILGYWDIRGLAHAIRLLLEYTDSSYEEKKYTMGDAPDYDRSQWLNEKFKLGLDFPNLPYLIDGAHKITQSNA
ILCYIARKHNLCGETEEEKIRVDILENQTMDNHMQLGMICYNPEFEKLKPKYLEELPEKLKLYSEFLGKRPWFAG
NKITFVDFLVYDVLDLHRIFEPNCLDAFPNLKDFISRFEGLEKISAYMKSSRFLPRPVFSKMAVWGNK

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FIGURE 3142

GGCACGAGGCGCCAGTCCCCTAACCCTGAGGCTGCCGCGCGGCGGTCACTGCGCCGGGGTAGTGGGCCCCAGTGT
TGCGCTCTCTGGCCGTTCCTTACACTTTGCTTCAGGCTCCAGTGCAGGGGCGTAGTGGGATATGGCCAACTCGGG
CTGCAAGGACGTCACGGGTCCAGATGAGGAGAGTTTTCTGTACTTTGCCTACGGCAGCAACCTGCTGACAGAGAG
GATCCACCTCCGAAACCCCTCGGCGGCGTTCTTCTGTGTGGCCCGCCTGCAGGATTTTAAGCTTGACTTTGGCAA
TTCCCAAGGCAAAACAAGTCAAACTTGGCATGGAGGGATAGCCACCATTTTTCAGAGTCCTGGCGATGAAGTGTG
GGGAGTAGTATGGAAAATGAACAAAAGCAATTTAAATTCTCTGGATGAGCAAGAAGGGGTTAAAAGTGGAATGTA
TGTTGTAATAGAAGTTAAAGTTGCAACTCAAGAAGGAAAAGAAATAACCTGTCGAAGTTATCTGATGACAAATTA
CGAAAGTGCTCCCCCATCCCCACAGTATAAAAAGATTATTTGCATGGGTGCAAAAGAAAATGGTTTGCCGCTGGA
GTATCAAGAGAAGTTAAAAGCAATAGAACCAAATGACTATACAGGAAAGGTCTCAGAAGAAATTGAAGACATCAT
CAAAAAGGGGGAAACACAAACTCTTTAGAACATAACAGAATATATCTAAGGGTATTCTATGTGCTAATATAAAAT
ATTTTTAACACTTGAGAACAGGGATCTGGGGGATCTCCACGTTTGATCCGTTTTCAGCAGTGCTCTGAAGGAGTA
TCTTACTTGGGTGATTCCTTGTTTTTAGACTATAAAAAGAAACTGGGATAGGAGTTAGACAATTTAAAAGGGGTG
TATGAGGGCCTGAAATATGTGACAAATGAATGTGAGTACCCCTTCTGTGAACACTGAAAGCTATTCTCTTGAATT
GATCTTAAGTGTCTCCTTGCTCTGGTAAAAGATAGATTTGTAGCTCACTTGATGATGGTGCTGGTGAATTGCTCT
GCTCTGTCTGAGATTTTTAAAAATCAGCTTAATGAGAGTAATCTGCAGACAATTGATAATAACATTTTGAAAATT
GGAAAGATGGTATACTGTTTTTAGAGGAATAAACGTATTTGTGGTTTAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3143

MANSGCKDVTGPDEESFLYFAYGSNLLTERIHLRNPSAAFFCVARLQDFKLDFGNSQGKTSQTWHGGIATIFQSP
GDEVWGVVWKMNKSNLNSLDEQEGVKSGMYVVIEVKVATQEGKEITCRSYLMTNYESAPPSPQYKKIICMGAKEN
GLPLEYQEKLKAIEPNDYTGKVSEEIEDIIKKGETQTL

FIGURE 3144

GTTGGAAATAACTATAACTTAAAGCAAATCTAACCCAGTAAGCTATCAAAAAGAAAAATTATATAATTACCAAGT
AGAGTTAATTTCACCTGAGTTCTATGAACATATTCATTATTAAAGGAAACCTCAAATTATTGTCCCATTGGAAGC
AAAATATACATTTATAAATAGCCATTTCTCGTTTTAAAAAACTAATAACATTGAAATAAACAGAAACTTAAGCTC
TTCTAGTTTGCCAAAAACCAGAAAGCAAACATCATATACTAAATGATGAAATGCCAAAGCCATTTCCATTATATC
AGAAACGAGACTAATACTTCCTGTCATCATTTACATGATTGTCACTATTATTAAGCATTGTTTTGGTAGTTCTAG
CCATTGCAGTAAGACAGTAGACAGAAAGTCAAATAATTGGCATAAATATTGGAAACAAAAAATTATTTCTACTTT
GAAATGATACAATAGAATAGCTGGAAAGCCCAGGGGGACTCTAGTAGAAAACAGCAATGAGGATTAAATGTAAGA
CACTTTGGAAAGCTGATGTGTGAGAAATGTACACAAACTAATAGCTTTCTCTTTATTAGTAGTCATCAGTTGAAA
ATGGAAATGACCAAGCAAAAATATTCAACAGAATGACAAAACTATTGGTTACACCTAGGAATAAATGTGTTAAAG
AAAGGTACAGAGTGAAGGTAATGACCCTTATGAAGAAAACTTGATATTATAAAAAGTAGTCCTTTTCTCCCTCAG
TTTTTGTCTTCAAAATGTTTACTTGGGACAGATCGTGGTTTACATGATGGTCCTCAAACATATTGTGAACAACAT
TAAAAAAAAAAGACACATTTTACTCAATAAGTAACATTTTTTGAGAAGCTACTATGTGCTAGGGACCTAGTTTTT
AGTGCAGTGGTCTCCAAAATAATGTACTGGCAGTATGGGAAGAGCGTTTAGAACACTGTACCTTTTTATTTGGGA
GGAGAAAAGAAACCTTTGTCAAATATTTAACACCTGCTGCCAGAGGTCTGTAGATTTGATGATTGTGTGCCATGA
GTTACACACAGACTCCTAAATCAGTTTCACCTGTGGTGTCCTCATTCTGTTTACTTTGAGCATTTTGCATTCTAT
ATCTGCTTAGTTATATGGATTTATTCGTCCCATATAATATGTGTAGCCACATGGACACATGTTTTAAAAGGTTTT
AAATTCTGCAAGATAGTGACGATGATGTAAACACAAGAAAAGGGCAAATGGATACATTTTCCTACTCTGTGCTCA
TCAAACATATTACAGGATAAAATTATTGGCTATCTAATAAAAACACAGACTAATAAGACCTGATAAGTTGGACAA
AATGTTTAAAAATTAACATGAAGATGATAGGAAGTATGAATCTATATTCACTGTCATTA**ATGT**CAAACCTTTACC
TTATGGTATATTGTACTTTGAGAAATTA

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FIGURE 3145

MSNLYLMVYCTLRN

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FIGURE 3146

GGCTTCTGGGAGCGACCGCTCCGCTCGTCTCGTTGGTTCCGGAGGTCGCTGCGGCGGTGGGAA**ATG**CTGGCGCGC
GCGGCGCGGGGCACTGGGGCCCTTTTGCTGAGGGGCTCTCTACTGGCTTCTGGCCGCGCTCCGCGCCGCGCCTCC
TCTGGATTGCCCCGAAACACCGTGGTACTGTTCGTGCCGCAGCAGGAGGCCTGGGTGGTGGAGCGAATGGGCCGA
TTCCACCGGATCCTGGAGCCTGGTTTGAACATCCTCATCCCTGTGTTAGACCGGATCCGATATGTGCAGAGTCTC
AAGGAAATTGTCATCAACGTGCCTGAGCAGTCGGCTGTGACTCTCGACAATGTAACTCTGCAAATCGATGGAGTC
CTTTACCTGCGCATCATGGACCCTTACAAGGCAAGCTACGGTGTGGAGGACCCTGAGTATGCCGTCACCCAGCTA
GCTCAAACAACCATGAGATCAGAGCTCGGCAAACTCTCTCTGGACAAAGTCTTCCGGGAACGGGAGTCCCTGAAT
GCCAGCATTGTGGATGCCATCAACCAAGCTGCTGACTGCTGGGGTATCCGCTGCCTCCGTTATGAGATCAAGGAT
ATCCATGTGCCACCCCGGGTGAAAGAGTCTATGCAGATGCAGGTGGAGGCAGAGCGGCGGAAACGGGCCACAGTT
CTAGAGTCTGAGGGGACCCGAGAGTCGGCCATCAATGTGGCAGAAGGGAAGAAACAGGCCCAGATCCTGGCCTCC
GAAGCAGAAAAGGCTGAACAGATAAATCAGGCAGCAGGAGAGGCCAGTGCAGTTCTGGCGAAGGCCAAGGCTAAA
GCTGAAGCTATTCGAATCCTGGCTGCAGCTCTGACACAACATAATGGAGATGCAGCAGCTTCACTGACTGTGGCC
GAGCAGTATGTCAGCGCGTTCTCCAAACTGGCCAAGGACTCCAACACTATCCTACTGCCCTCCAACCCTGGCGAT
GTCACCAGCATGGTGGCTCAGGCCATGGGTGTATATGGAGCCCTCACCAAAGCCCCAGTGCCAGGGACTCCAGAC
TCACTCTCCAGTGGGAGCAGCAGAGATGTCCAGGGTACAGATGCAAGTCTTGATGAGGAACTTGATCGAGTCAAG
ATGAGT**TAG**TGGAGCTGGGCTTGGCCAGGGAGTCTGGGGACAAGGAAGCAGATTTTCCTGATTCTGGCTCTAGCT
TCCCTGCCAAGATTTTGGTTTTTATTTTTTTATTTGAACTTTAGTCGTGTAATAAACTCACCAGTGGCAAACCTG
AAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3147

MLARAARGTGALLLRGSLLASGRAPRRASSGLPRNTVVLFVPQQEAWVVERMGRFHRILEPGLNILIPVLDRIRY
VQSLKEIVINVPEQSAVTLDNVTLQIDGVLYLRIMDPYKASYGVEDPEYAVTQLAQTTMRSELGKLSLDKVFRER
ESLNASIVDAINQAADCWGIRCLRYEIKDIHVPPRVKESMQMQVEAERRKRATVLESEGTRESAINVAEGKKQAQ
ILASEAEKAEQINQAAGEASAVLAKAKAKAEAIRILAAALTQHNGDAAASLTVAEQYVSAFSKLAKDSNTILLPS
NPGDVTSMVAQAMGVYGALTKAPVPGTPDSLSSGSSRDVQGTDASLDEELDRVKMS

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FIGURE 3148

GGCACACACGAGGAGGAGGGTTGAGCTGCTGCCGCCGCCGCCTCTGTCGTCGTCGCGAGTGTGGAGTCGGGACTG
GAGCTGCTGCCGCGGCGACGCCGGGGATCTTTGTCGCTAGCTCCCGGCCCTTCTGCCCCGCCGCCTTCCCTCAGT
CAGCGTTGCCCACTCCTCTCCGGCCGGGCGCCCCTGCCTCCATTTCTCGCTCTCTGTCCACCACACACACGGCCC
CCCCGATCATGGATCCGGGCAGTGGCGGCGGCGGCGGCGGCGGCGGCGGCGGGAGCAGCAGCGGCAGCAGCA
GCAGCGACTCGGCGCCTGACTGCTGGGACCAGGCGGACATGGAAGCCCCCGGGCCGGGCCCTTGCGGCGGCGGCG
GCTTCCCTGGCGGCGGCGGCCGAGGCCCAGCGGGAGAACCTCAGCGCGGCCTTCAGCCGGCAACTCAACGTCAAC
GCCAAGCCCTTCGTGCCCAACGTCCACGCCGCCGAGTTCGTGCCGTCCTTCCTGCGGGGCCCGGCAGCGCCGCCA
CCCCCAGCTGGCGGCGCCGCCAATAACCACGGAGCCGGCAGCGGCGCGGGAGGCCGTGCGGCACCTGTGGAATCC
TCTCAAGAGGAACAGTCATTGTGTGAAGGTTCAAATTCAGCTGTTAGC**ATG**GAACTTTCAGAACCTATTGTAGAA
AATGGAGAGACAGAAATGTCTCCAGAAGAATCATGGGAGCACAAAGAAGAAATAAGTGAAGCAGAGCCAGGGGGT
GGTTCCTTGGGAGATGGAAGGCCGCCAGAGGAAAGTGCCCATGAAATGATGGAGGAGGAAGAGGAAATCCCAAAA
CCTAAGTCTGTGGTTGCACCGCCAGGTGCTCCTAAGAAAGAGCATGTAAATGTAGTATTCATTGGGCACGTAGAT
GCTGGCAAGTCAACCATTGGAGGACAAATAATGTATTTGACTGGAATGGTTGACAAAAGGACGCTTGAAAAGTAT
GAAAGAGAAGCTAAAGAGAAAAACAGAGAAACTTGGTACTTGTCTTGGGCCTTAGACACAAATCAGGAAGAACGA
GACAAGGGTAAAACAGTAGAAGTGGGTCGTGCCTATTTTGAAACCGAAAAGAAGCATTTCACAATTCTAGATGCC
CCTGGCCACAAGAGTTTTGTCCCAAATATGATTGGTGGTGCCTCTCAAGCTGATTTGGCTGTGCTGGTAATCTCA
GCCAGGAAAGGAGAGTTTGAAACTGGATTTGAAAAAGGAGGACAGACAAGAGAACATGCAATGTTGGCAAAGACA
GCAGGTGTAAAACACCTAATTGTGCTAATTAATAAGATGGATGATCCAACAGTAAATTGGAGCAATGAGAGATAT
GAAGAATGTAAGGAGAAACTAGTGCCATTTTTGAAAAAAGTTGGCTTCAATCCCAAAAAGGACATTCACTTTATG
CCCTGCTCAGGACTTACTGGAGCAAATCTCAAAGAGCAGTCGGATTTCTGTCCTTGGTACATTGGATTACCGTTT
ATTCCATATCTGGATAATTTGCCGAACTTCAATAGATCAGTTGATGGACCAATCAGGCTGCCAATTGTGGATAAG
TACAAGGATATGGGCACTGTGGTCCTGGGAAAGCTGGAATCAGGATCTATTTGTAAAGGCCAGCAGCTTGTGATG
ATGCCAAACAAGCACAACGTGGAAGTTCTTGGAATACTTTCCGATGATGTAGAGACTGATACCGTAGCCCCAGGT
GAAAACCTCAAAATCAGACTGAAAGGAATTGAAGAAGAGGAGATTCTTCCAGGGTTTATACTTTGTGATCCTAAT
AATCTTTGTCATTCTGGACGCACATTTGATGCCCAGATAGTGATTATAGAGCACAAATCCATCATCTGCCCAGGC
TATAATGCGGTGCTGCATATTCATACCTGTATTGAGGAGGTGGAAATAACAGCCTTAATCTGCTTGGTAGACAAA
AAATCAGGAGAAAAAAGTAAGACCCGACCCCGTTTTGTGAAACAAGATCAAGTATGCATTGCTCGCTTAAGGACA
GCAGGAACCATCTGCCTTGAGACCTTTAAAGACTTCCCTCAGATGGGTCGTTTCACCTTAAGAGATGAGGGTAAG
ACCATTGCAATTGGAAAAGTTCTGAAACTGGTTCCAGAGAAAGAC**TAA**GCATTTTCTTGATGACCCTGCACAATA
CTGTGAGGAAAATTGACTGCAGAAGCCTACTTCACACCGCCTTCTCTTATTTTCTGCCCATTGATAAACCTCTCC
CCATATTTTGCAAAGAGGAAATTCACAGCAAAAGTCCACATTATGTCAGCTTTCTCATATTGAGAGCTCTGCTAT
GCCACTGTTGAATTTTTCCCAAGATTCCTGTCCCTAGCCCTCACTTCAAACTCTGCTTCCTTGGACAGATTTGGC
AATAGCTTTGTAAGTGATGTGGACATAATTGCCTACAATAATGAAAACCTACAGGAATTTTTTTATTTTTCATTT
TCCCCTTAGGCATATTTAGTATTTTTCCCCCAGGCCAGATCATTCGTGAGTGTGCGAGTGTGTGTGCACATGTTA
CAAAGGCAACTACCATGTTAATAAAATATTCAATTTG

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FIGURE 3149

MELSEPIVENGETEMSPEESWEHKEEISEAEPGGGSLGDGRPPEESAHEMMEEEEEIPKPKSVVAPPGAPKKEHV
NVVFIGHVDAGKSTIGGQIMYLTGMVDKRTLEKYEREAKEKNRETWYLSWALDTNQEERDKGKTVEVGRAYFETE
KKHFTILDAPGHKSFVPNMIGGASQADLAVLVISARKGEFETGFEKGGQTREHAMLAKTAGVKHLIVLINKMDDP
TVNWSNERYEECKEKLVPFLKKVGFNPKKDIHFMPCSGLTGANLKEQSDFCPWYIGLPFIPYLDNLPNFNRSVDG
PIRLPIVDKYKDMGTVVLGKLESGSICKGQQLVMMPNKHNVEVLGILSDDVETDTVAPGENLKIRLKGIEEEEIL
PGFILCDPNNLCHSGRTFDAQIVIIEHKSIICPGYNAVLHIHTCIEEVEITALICLVDKKSGEKSKTRPRFVKQD
QVCIARLRTAGTICLETFKDFPQMGRFTLRDEGKTIAIGKVLKLVPEKD

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FIGURE 3150

CCCACGCGTCCGCCCACGCGTCCGGCTCGTTCCATTCTCGGCGGTGGTACCTGCTCCCGGTGGCCCTGAGGACGT
GTGGGCCAGGGGCGGCCCCGAAATTAGGAAGCGGAGGGGGAGCAGTCTGCAGGTCTGCGGGGCTAAGTGTCGCGG
CGGCGCACCTCGCGTCAAGAATCCGGAGGAGGAGACTGCAAGGATAGGCCCAGGAGTAATGGAGTCCAAAGAGGA
ACTAGCGGCAAACAATCTCAACGGGGAAAATGCCCAACAAGAAAACGAAGGAGGGGAGCAGGCCCCCACGCAGAA
TGAAGAAGAATCCCGCCATTTGGGAGGGGGTGAAGGCCAGAAGCCTGGAGGAAATATCAGGCGGGGGCGAGTTAG
GCGACTTGTCCCTAATTTTCGATGGGCCATACCTAATAGGCATATTGAGCACAATGAAGCGAGAGATGATGTAGA
AAGGTTTGTAGGGCAGATGATGGAAATCAAGAGAAAGACTAGGGAACAGCAGATGAGGCACTATATGCGCTTCCA
AACTCCTGAACCTGACAACCATTATGACTTTTGCCTCATACCTTGAATCCTAAAAGTTTTCGCTGAGGTTAATGT
GAACACTGCTTTACAAGCTTGTATTTTTGTGATTTACTTTTTCTGTAAGCCTTTTGGGGTTTACACTTACCAGTT
TCTAATGGAAATTAGAATTCTAATTGAATATTGTTTTGTCTCAGCCTAAAAGTTACGGTCAGCATGGCAATTCAC
CTATTTTAGGAAAAATACTCTTTTCATAATATGAAATGCATAAAGCAGTTCAAAAAGCAGTCTGTATTCCATCAT
CTTCCTTTTTCATTCCAGTCCTTATTTTTGTAAGTATTACTTTTCCTCCTCCGGCTACCTGGACTCAAAATCTCA
GTTGTCTTTGACAGTTTTTTTCTTGTCCCTGACCAAAAAAGAATGATCATACCCAGAATTCAATGTTTGATATTT
TAAGAATGTATGTTCTAGTGTTTTTCAGAGTGAGTCTACCATCTGTATAAAAACACCTTGGGGGCAGGCAGGGGC
ATTTAAAAATGTAGGACCTATCGTCCAGACTCACAGAGTGGGGCTCCAGAATCTCCATTTTTAACAAACTCTCTT
AAGTAATTCTGATGTGTACCAAAATCAGTGCCATTGGTGTGTGTGTACGTAACTATATACATATGTGTGTGTGTG
TATATATATAATGTGTCATAACCGTAAACAATAAACAATATCAAGATAAAAAAAAAAAAAAAA

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FIGURE 3151

MESKEELAANNLNGENAQQENEGGEQAPTQNEEESRHLGGGEGQKPGGNIRRGRVRRLVPNFRWAIPNRHIEHNE
ARDDVERFVGQMMEIKRKTREQQMRHYMRFQTPEPDNHYDFCLIP

FIGURE 3152

ATCAATACAATCTCATCTCTAAAGGATTTAATTACAAAGATGCAACTGCAAAGAGAAGCCGAGGTTTATGATAGT
TCTCAATCTCATGAGAGCTTCTCAGACTGGCGAGGTGAACTACTGCTTGCCCTTCAACAAGTTTTCTTAGAAGAG
CGTAGTGTTTTACTAGCAGCATTTCGGACGGAGCTGACAGCTCTAGGTACTACAGATGCAGTTGGTTTACTAAAC
TGTTTGGAACAGAGAATACAAGAACAGGGTGTTGAATATCAAGCAGCTATGGAATGCCTCCAGAAAGCAGATAGA
AGGAGTTTGTTATCTGAAATTCAGGCACTGCATGCACAAATGAATGGTAGGAAAATTACTCTGAAAAGAGAACAA
GAGAGTGAGAAACCAAGCCAAGGTATGTTGTATGACAAGCTCATATGGTTACACAAACAGGTGAAAAGATTTCAC
TTTGTTTTCTTTCTTATTATTATTAAGTTAAAACATATTTTCTTGGTCACATTTTCTTCTCATTCTCATAATGTT
AAGGATACAATCTATATTAATTACTCTAGGGGTTAGAGGATTGTCTAATTGGTTTAAACAGCTACGTTGACTTTA
AAATAAACTGCCATTCCCCTGATAAGGTTAAGCCCATTGGATTCATTCTTTTTCTTTATTTTAGAGCTGTATGTT
AAGAAAACAGTCTTTCCAATCATAAAACAGAAAATACTCTTTAGAGGAAAATCCACAATGCATGTAACTAATTAT
TTTTTAATCCTTTTTTAAAAAAATTGTGAGCCATAACATACAGAAAATTACAAATTGCAAATATGCAGTATGACG
CATTTTTAAATGAGTATCTATGGAAACATCACCCATGTGAATATAGCCAGTATCCCAACAGCCCCTTCTCCCAAG
CACATGCTCCTCTGAGTAACTTAGAGGTAATCATTGTTCTGATTTTTCTTTAGTTTTACTATCTATTTATATATT
CCTAAAACATTTAAGTTTCAAGTTTTTTTCTGTTTTTGAACTTTATCAATCTGTATGTATTTTTTATCTTGTTTC
TTTCACCTCTCTGTAACATTCTTCCAACATTCTTCCAAGTTACTGCATTTTTCAAGTTACTGCATTCTTCCAAAT
TAGTAGTAGAACATTCTTCCAAGTTACTGCATTTATCTCTAGTTCATTCATTCTTGTTACTCTATAACTCTATGA
CCCTGTGTAGGGCCAGGCACGGTGGCTTACACCTGTAATCCCAGCACTTTGGGAGGCTGACGTGGGTGGATCACG
AGGTCAGAAGTTCAAGATGAGCCTAGCCAAAATGGTGAAACCCAGTCTCTACTAAAAATACAAAAATTAGCCAGG
CGTGGTGGCGGGTGCCTGTAAGGCCAGCCACTCAGGAGACTGAAGCAGAGAATTACTTGAACCCAGAAGGTGGAG
GTTGCAGTGAGCTGAAATCACACCACTGCACTCTAGCCTGAGCGACAGAGCAAGACTCCATCTCAAAAAAAAAAA
AAAAAAAAA

FIGURE 3153

TGGCTGGCAATGGCCTTGCTGACCTCGAGCCGGGCCCACGTGGGGACCTTTGGAGCACAGCCTACGATCCTGGTG
CAAGGCCGGTGGATGCAGAGGCCAGTCCATATACCACCCAGGCCTGCGAGGAGCGTGGTCCCCACCCATCCAGCC
CATATGTGCAAGTGCCCTTGACAGAGAGGCTGGTCATATCCATGGTGACCATTTATGGGCCACAACAGGTCCCCA
TCTGCGCAGTGAACCCTGTGCTGAGCACCTTGCAGACGTGATCTTGCTTCGTCCTGCAGCACTGTGCGGGGCAGG
AAAATCCAAGAGGAAGAAGGATCTACGGATATCCTGCATGTCCAAGCCACCCGCACCCAACCCCACACCCCCCCG
GAACCTGGACTCCCGGACCTTCATCACCATTGGAGACAGAAACTTTGAGGTGGAGGCTGATGACTTGGTGACCAT
CTCAGAACTGGGCCGTGGAGCCTATGGGGTGGTAGAGAAGGTGCGGCACGCCCAGAGCGGCACCATCATGGCCGT
GAAGCGGATCCGGGCCACCGTGAACTCACAGGAGCAGAAGCGGCTGCTCATGGACCTGGACATCAACATGCGCAC
GGTCGACTGTTTCTACACTGTCACCTTCTACGGGGCACTATTCAGAGAGGGAGACGTGTGGATCTGCATGGAGCT
CATGGACACATCCTTGGACAAGTTCTACCGGAAGGTGCTGGATAAAAACATGACAATTCCAGAGGACATCCTTGG
GGAGATTGCTGTGTCTATCGTGCGGGCCCTGGAGCATCTGCACAGCAAGCTGTCGGTGATCCACAGAGATGTGAA
GCCCTCCAATGTCCTTATCAACAAGGAGGGCCATGTGAAGATGTGTGACTTTGGCATCAGTGGCTACTTGGTGGA
CTCTGTGGCCAAGACGATGGATGCCGGCTGCAAGCCCTACATGGCCCCTGAGAGGATCAACCCAGAGCTGAACCA
GAAGGGCTACAATGTCAAGTCCGACGTCTGGAGCCTGGGCATCACCATGATTGAGATGGCCATCCTGCGGTTCCC
TTACGAGTCCTGGGGGACCCCGTTCCAGCAGCTGAAGCAGGTGGTGGAGGAGCCGTCCCCCCAGCTCCCAGCCGA
CCGTTTCTCCCCCGAGTTTGTGGACTTCACTGCTCAGTGCCTGAGGAAGAACCCCGCAGAGCGTATGAGCTACCT
GGAGCTGATGGAGCACCCCTTCTTCACCTTGCACAAAACCAAGAAGACGGACATTGCTGCCTTCGTGAAGGAGAT
CCTGGGAGAAGACTCATAGGGGCTGGGCCTCGGACCCCACTCCGGCCCTCCAGAGCCCCACAGCCCCATCTGCGG
GGGCAGTGCTCACCCACACCATAAGCTACTGCCATCCTGGCCCAGGGCATCTGGGAGGAACCGAGGGGGCTGCTC
CCACCTGGCTCTGTGGCGAGCCATTTGTCCCAAGTGCCAAAGAAGCAGACCATTGGGGCTCCCAGCCAGGCCCTT
GTCGGCCCCACCAGTGCCTCTCCCTGCTGCTCCTAGGACCCGTCTCCAGCTGCTGAGATCCTGGACTGAGGGGGC
CTGGATGCCCCCTGTGGATGCTGCTGCCCCTGCACAGCAGGCTGCCAGTGCCTGGGTGGATGGGCCACCGCCTTG
CCCAGCCTGGATGCCATCCAAGTTGTATATTTTTTTAATCTCTCGACTGAATGGACTTTGCACACTTTGGCCCAG
GGTGGCCACACCTCTATCCCGGCTTTGGTGCGGGGTACACAAGAGGGGATGAGTTGTGTGAATACCCCAAGACTC
CCATGAGGGAGATGCCATGAGCCGCCCAAGGCCTTCCCCTGGCACTGGCAAACAGGGCCTCTGCGGAGCACACTG
GCTCACCCAGTCCTGCCCGCCACCGTTATCGGTGTCATTCACCTTTCGTGTTTTTTTTAATTTATCCTCTGTTGA
TTTTTTCTTTTGCTTTATGGGTTTGGCTTGTTTTTCTTGCATGGTTTGGAGCTGATCGCTTCTCCCCCACCCCCT
AGGG

FIGURE 3154

MGVQGTLMSRDSQTPHLLSILGKSKRKKDLRISCMSKPPAPNPTPPRNLDSRTFITIGDRNFEVEADDLVTISEL
GRGAYGVVEKVRHAQSGTIMAVKRIRATVNSQEQKRLLMDLDINMRTVDCFYTVTFYGALFREGDVWICMELMDT
SLDKFYRKVLDKNMTIPEDILGEIAVSIVRALEHLHSKLSVIHRDVKPSNVLINKEGHVKMCDFGISGYLVDSVA
KTMDAGCKPYMAPERINPELNQKGYNVKSDVWSLGITMIEMAILRFPYESWGTPFQQLKQVVEEPSPQLPADRFS
PEFVDFTAQCLRKNPAERMSYLELMEHPFFTLHKTKKTDIAAFVKEILGEDS

FIGURE 3155

TTCTAGTTTGCGGTTCAGGTTTGCCGCTGCCGGCCAGCGTCCTCTGGCCATGGACACCCCGGAAAATGTCCTTCA
GATGCTTGAAGCCCACATGCAGAGCTACAAGGGCAATGACCCTCTTGGTGAATGGGAAAGATACATACAGTGGGT
AGAAGAGAATTTTCCTGAGAATAAAGAATACTTGATAACTTTACTAGAACATTTAATGAAGGAATTTTTAGATAA
GAAGAAATACCACAATGACCCAAGATTCATCAGTTATTGTTTAAAATTTGCTGAGTACAACAGTGACCTCCATCA
ATTTTTTGAGTTTCTGTACAACCATGGGATTGGAACCCTGTCATCCCCTCTGTACATTGCCTGGGCGGGGCATCT
GGAAGCCCAAGGAGAGCTGCAGCATGCCAGTGCTGTCCTTCAGAGAGGAATTCAAAACCAGGCTGAACCCAGAGA
GTTCCTGCAACAACAATACAGGTTATTTCAGACACGCCTCACTGAAACCCATTTGCCAGCTCAAGCTAGAACCTC
AGAACCTCTGCATAATGTTCAGGTTTTAAATCAAATGATAACATCAAAATCAAATCCAGGAAATAACATGGCCTG
CATTTCTAAGAATCAGGGTTCAGAGCTTTCTGGAGTGATATCTTCAGCTTGTGATAAAGAGTCAAATATGGAACG
AAGAGTGATCACGATTTCTAAATCAGAATATTCTGTGCACTCATCTTTGGCATCCAAAGTTGATGTTGAGCAGGT
TGTTATGTATTGCAAGGAGAAGCTTATTCGTGGGGAATCAGAATTTTCCTTTGAAGAATTGAGAGCCCAGAAATA
CAATCAACGGAGAAAGCATGAGCAATGGGTAAATGAAGACAGACATTATATGAAAAGGAAAGAAGCAAATGCTTT
TGAAGAACAGCTATTAAAACAGAAAATGGATGAACTTCATAAGAAGTTGCATCAGGTGGTGGAGACATCCCATGA
GGATCTGCCCGCTTCCCAGGAAAGGTCCGAGGTTAATCCAGCACGTATGGGGCCAAGTGTAGGCTCCCAGCAGGA
ACTGAGAGCGCCATGTCTTCCAGTAACCTATCAGCAGACACCAGTGAACATGGAAAAGAACCCAAGAGAGGCACC
TCCTGTTGTTCCTCCTTTGGCAAATGCTATTTCTGCAGCTTTGGTGTCCCCAGCCACCAGCCAGAGCATTGCTCC
TCCTGTTCCTTTGAAAGCCCAGACAGTAACAGACTCCATGTTTGCAGTGGCCAGCAAAGATGCTGGATGTGTGAA
TAAGAGTACTCATGAATTCAAGCCACAGAGTGGAGCAGAGATCAAAGAAGGGTGTGAAACACATAAGGTTGCCAA
CACAAGTTCTTTTCACACAACTCCAAACACATCACTGGGAATGGTTCAGGCAACGCCATCCAAAGTGCAGCCATC
ACCCACCGTGCACACAAAAGAAGCATTAGGTTTCATCATGAATATGTTTCAGGCTCCTACACTTCCTGATATTTC
TGATGACAAAGATGAATGGCAATCTCTAGATCAAAATGAAGATGCATTTGAAGCCCAGTTTCAAAAAAATGTAAG
GTCATCTGGGGCTTGGGGAGTCAATAAGATCATCTCTTCTTTGTCATCTGCTTTTCATGTGTTTGAAGATGGAAA
CAAAGAAAATTATGGATTACCACAGCCTAAAAATAAACCCACAGGAGCCAGGACCTTTGGAGAACGCTCTGTCAG
CAGACTTCCTTCAAAACCAAAGGAGGAAGTGCCTCATGCTGAAGAGTTTTTGGATGACTCAACTGTATGGGGTAT
TCGCTGCAACAAAACCCTGGCACCCAGTCCTAAGAGCCCAGGAGACTTCACATCTGCTGCACAACTTGCGTCTAC
ACCATTCCACAAGCTTCCAGTGGAGTCAGTGCACATTTTAGAAGATAAAGAAAATGTGGTAGCAAAACAGTGTAC
CCAGGCGACTTTGGATTCTTGTGAGGAAAACATGGTGGTGCCTTCAAGGGATGGAAAATTCAGTCCAATTCAAGA
GAAAAGCCCAAAACAGGCCTTGTCGTCTCACATGTATTCAGCATCCTTACTTCGTCTGAGCCAGCCTGCTGCAGG
TGGGGTACTTACCTGTGAGGCAGAGTTGGGCGTTGAGGCTTGCAGACTCACAGACACTGACGCTGCCATTGCAGA
AGATCCACCAGATGCTATTGCTGGGCTCCAAGCAGAATGGATGCAGATGAGTTCACTTGGGACTGTTGATGCTCC
AAACTTCATTGTTGGGAACCCATGGGATGATAAGCTGATTTTCAAACTTTTATCTGGGCTTTCTAAACCAGTGAG
TTCCTATCCAAATACTTTTGAATGGCAATGTAAACTTCCAGCCATCAAGCCCAAGACTGAATTTCAATTGGGTTC
TAAGCTGGTCTATGTCCATCACCTTCTTGGAGAAGGAGCCTTTGCCCAGGTGTACGAAGCTACCCAGGGAGATCT
GAATGATGCTAAAAATAAACAGAAATTTGTTTTAAAGGTCCAAAAGCCTGCCAACCCCTGGGAATTCTACATTGG
GACCCAGTTGATGGAAAGACTAAAGCCATCTATGCAGCACATGTTTATGAAGTTCTATTCTGCCCACTTATTCCA
GAATGGCAGTGTATTAGTAGGAGAGCTCTACAGCTATGGAACATTATTAAATGCCATTAACCTCTATAAAAATAC
CCCTGAAAAAGTGATGCCTCAAGGTCTTGTCATCTCTTTTGCTATGAGAATGCTTTACATGATTGAGCAAGTGCA
TGACTGTGAAATCATTCATGGAGACATTAAACCAGACAATTTCATACTTGGAAACGGATTTTTGGAACAGGATGA
TGAAGATGATTTATCTGCTGGCTTGGCACTGATTGACCTGGGTCAGAGTATAGATATGAAACTTTTTCCAAAAGG
AACTATATTCACAGCAAAGTGTGAAACATCTGGTTTTCAGTGTGTTGAGATGCTCAGCAACAAACCATGGAACTA
CCAGATCGATTACTTTGGGGTTGCTGCAACAGTATATTGCATGCTCTTTGGCACTTACATGAAAGTGAAAAATGA
AGGAGGAGAGTGTAAGCCTGAAGGTCTTTTTAGAAGGCTTCCTCATTTGGATATGTGGAATGAATTTTTTCATGT
TATGTTGAATATTCCAGATTGTCATCATCTTCCATCTTTGGATTTGTTAAGGCAAAAGCTGAAGAAAGTATTTCA
ACAACACTATACTAACAAGATTAGGGCCCTACGTAATAGGCTAATTGTACTGCTCTTAGAATGTAAGCGTTCACG
AAAATAAAATTTGGATATAGACAGTCCTTAAAAATCACACTGTAAATATGAATCTGCTCACTTTAAACCTGTTTT
TTTTTCATTTATTGTTTATGTAAATGTTTGTTAAAAATAAATCCCATGGAATATTTCCATGTAAAAAAAAA

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FIGURE 3156

MDTPENVLQMLEAHMQSYKGNDPLGEWERYIQWVEENFPENKEYLITLLEHLMKEFLDKKKYHNDPRFISYCLKF
AEYNSDLHQFFEFLYNHGIGTLSSPLYIAWAGHLEAQGELQHASAVLQRGIQNQAEPREFLQQQYRLFQTRLTET
HLPAQARTSEPLHNVQVLNQMITSKSNPGNNMACISKNQGSELSGVISSACDKESNMERRVITISKSEYSVHSSL
ASKVDVEQVVMYCKEKLIRGESEFSFEELRAQKYNQRRKHEQWVNEDRHYMKRKEANAFEEQLLKQKMDELHKKL
HQVVETSHEDLPASQERSEVNPARMGPSVGSQQELRAPCLPVTYQQTPVNMEKNPREAPPVVPPLANAISAALVS
PATSQSIAPPVPLKAQTVTDSMFAVASKDAGCVNKSTHEFKPQSGAEIKEGCETHKVANTSSFHTTPNTSLGMVQ
ATPSKVQPSPTVHTKEALGFIMNMFQAPTLPDISDDKDEWQSLDQNEDAFEAQFQKNVRSSGAWGVNKIISSLSS
AFHVFEDGNKENYGLPQPKNKPTGARTFGERSVSRLPSKPKEEVPHAEEFLDDSTVWGIRCNKTLAPSPKSPGDF
TSAAQLASTPFHKLPVESVHILEDKENVVAKQCTQATLDSCEENMVVPSRDGKFSPIQEKSPKQALSSHMYSASL
LRLSQPAAGGVLTCEAELGVEACRLTDTDAAIAEDPPDAIAGLQAEWMQMSSLGTVDAPNFIVGNPWDDKLIFKL
LSGLSKPVSSYPNTFEWQCKLPAIKPKTEFQLGSKLVYVHHLLGEGAFAQVYEATQGDLNDAKNKQKFVLKVQKP
ANPWEFYIGTQLMERLKPSMQHMFMKFYSAHLFQNGSVLVGELYSYGTLLNAINLYKNTPEKVMPQGLVISFAMR
MLYMIEQVHDCEIIHGDIKPDNFILGNGFLEQDDEDDLSAGLALIDLGQSIDMKLFPKGTIFTAKCETSGFQCVE
MLSNKPWNYQIDYFGVAATVYCMLFGTYMKVKNEGGECKPEGLFRRLPHLDMWNEFFHVMLNIPDCHHLPSLDLL
RQKLKKVFQQHYTNKIRALRNRLIVLLLECKRSRK

FIGURE 3157

GTGTTGCTATTAAAAGGAGATTTAACAGGAGAACCTGTAGGACAGAAGAGTGATGAAAGTAGAACAGGAGATGAT
AGTGTCACAGAGGCAGGCAAAAGGAGGAAGAGGTCATTTTCTTTGATCCAGGGGCTTCTAGATATGTGACAAGAT
TATAAGTACCATCTAATGAAAAGAAATATTAACGATTCAGTTAGAATCTGAATATAAGAGTAAGTGGAATTTTGG
AGAGTGAGTGAACCCCTGGTGAAGGTAATAGTGGGACCCCAAGCCCTTCTTCAAGGTGGTAACCAACAAAGACTA
TCCAGGTGTTTCTAGAGGGCCCAAAAGTTGACACGACTTGTCTCAGCTCACAGACTTAAGCAATAGGACAGCTGG
AACTGAGCCCAAGACTTCAGTAATAACAGCAGCCCTTATTGAGCACCTGGTCTTTGTGTGGCATTATCCCTTTTG
CCTCCTCTCACTGGCCCTCACAGCAAGCCTGTGATGTGAACATCACGTCTCTCACTCTGGACAAGGGGACGAGGA
GGTTCAGGCAAGTGAAATGACTGACTCTCTAGCATTCAGTGTCAGTGCAGGACGTCCATCTGAGCTCATTTTGGT
CACTGTCATGCTGCTTCCGAAGGTCTTCCCCAAGAATCACTTTTTCTCAAGTGCATTGTTGTTTTCTGTTAAAGA
GGTAGGAACCTA

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FIGURE 3158

MTDSLAFSVSAGRPSELILVTVMLLPKVFPKNHFFSSALLFSVKEVGT

FIGURE 3159

CACCCACCCAGGCCCAGGCTCCTTCCCCTCCATCATCCCCTTACCAGCACCTAGAACCATCCAGGGCTGAAAAGT
CCCCTCCAAACCACGTGATGAGGAACTTGAGGCAAGTCACCAGCCCCTGATCATTTCGCCTAAAAGAGCAAGGAC
TAGAGTTCCTGACCTCCAGGCCAGTCCCTGATCCCTGACCTAATGTTATCGCGGAATG**ATG**ACCCAGGGCTCCTC
AGAGCAGGAACTCCACTATGCATCTCTGCAGAGGCTGCCAGTGCCCAGCAGTGAGGGACCTGACCTCAGGGGCAG
AGACAAGAGAGGCACCAAGGAGGATCCAAGAGCTGACTATGCCTGCATTGCTGAGAACAAACCCACC**TGA**GCACC
CCAGACACCTTCCTCAACCCAGGCGGGTGGACAGGGTCCCCCTGTGGTCCAGCCAGTAAAAACCATGGTCCCCCC
ACTTCTGTGTCTCAGTCCTCTCAGTCCATCTCGAGCCTCCGTTCAAATTGATCA

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FIGURE 3160

MTQGSSEQELHYASLQRLPVPSSEGPDLRGRDKRGTKEDPRADYACIAENKPT

FIGURE 3161

GAGCCCGGAAGGTCCGGCGCCCAGAGCTAACGGGAGTCCCAGGTTAAACACTTTAAG**ATG**AGAAAAATTGATCTC
TGTCTGAGCTCTGAAGGGTCCGAAGTGATTTTAGCTACATCAAGTGATGAAAAACACCCACCTGAAAATATCATT
GATGGGAATCCAGAAACGTTTTGGACCACCACAGGAATGTTTCCCCAGGAATTCATTATTTGTTTCCACAAACAT
GTAAGGATTGAAAGGCTTGTAATCCAAAGTTACTTTGTACAGACCTTGAAGATTGAAAAAACACGTCTAAAGAGC
CAGTTGATTTTGAGCAATGGATTGAAAAAGATTTGGTACACACAGAGGGGCAGCTTCAAAATGAAGAAATTGTGG
CACATGATGGCTCCGCTACTTACT**TGA**GATTCATTATTGTATCAGCCTTTGATCATTTTGCATCTGTGCATAGCG
TTTCTGCAGAAGGAACAGTAGTCTCAAATCTTTCCTCATAATGATAACAAAATGCTCTTGCATGATTTTTTAACA
ATATATTTAAACAGGAAGTTGTCACTGATATACTTTATTAAAAGGATTTTTATCAAAAAAAAAAAAAAAAAAA

FIGURE 3162

MRKIDLCLSSEGSEVILATSSDEKHPPENIIDGNPETFWTTTGMFPQEFIICFHKHVRIERLVIQSYFVQTLKIE
KTRLKSQLILSNGLKKIWYTQRGSFKMKKLWHMMAPLLT

FIGURE 3163

AAGCTTTTTTGGCTACATTTTTTTATTTGTAAAGTAAGTTTAATAATCACTCATCTCACTGGGCTATAATGATAA
GTATTAAGTAAGGAAGATCCACATATGTGAGTTGCTGGCTTATAATTCACACTCAAGAGATACTGATTTTGTCAA
TTGTCCTTTCCCCTTTTTTTCTCTCTTCCCTCCTTCCATTCCTTCTTCCCTTACCTCTCCTTTCCTTCCCTCACA
CCCCTTTTCCTTCCTTCTTTTTACATTTTTTTATTTAAATGAACTTTTCATTTTGGAATAGTTTTAGGATTTCAA
AAAATTTGCAGAGATAATACAGAGAATGCCCATATACCATCCTCCTTATCCCACTTCTTTTTGTGTCTATTAGAT
GCTCAGAGTGTGTGCACAAGGCTGGCACGCCCAGGGTCTTCCTCATGGCACTAACAGTCTACTGAAAGGTGGAAC
AGAGACAAGCCTATCAACACCTACAGACTGGTGGTAAGTGCAGTGACAGATGCAAAACACAGGGTGATGGAAAGC
CCTCAGGAGGGTAACCTAACCTAGATTTGAGGGCCCAAACAGGCTCCAGAAGAAAATGTCAACTGAGAGGAAGCC
TGAAGGATGAACAGTGGGCTAAGCAAAGGGTTATTAATGTGTTATTAATGGGTTGAATCTAATTGGGAAGGGAGA
GAGGTTGCAGAGTGAGGTGCAGAGCTTGGTGGACGATGCCAAAGGAATACTGAAACCTTTAGTGTGTCCAGTCTG
GAACTGCATCCAAATTCAGGTTCAGTAATGATGTCATTATCCAAACATACCTTCTGTAAAATTCATGCTAAACTA
CCTAAGAGCTATCTACCGTTCCAAAGCAATAGTGACTTTGAACAGTGTTCACCAGAGCACGAAAGAATTACAAGA
TTTTTTTTTAAAGAAAATTGGCCAGGAAATAATGAGTAACGAAGGACAGGAAGTAATTGTGAATGTTTAATATAG
CTGGGGCTATGCGATTTGGCTTAAGTTGTTAGCTTTGTTTTCCTCTTGAGAAATAAAAACTAAGGGGCCCTCCCT
TTTCAGAGCCCTATGGCGCAACATCTGTACTTTTTCATATGGTTAACTGTCCATTCCAGAAACGTCTGTGAGCCT
CTCATGTTGCAGCCACAACATGGACAGCCCAGTCAAATGCCCCGCAAGTCTTTCTCTGAGTGACTCCAGCAATTA
GCCAAGGCTCCTGTACCCAGGCAGGACCTCTGCGCTCTGAGCTCCATTCTCCTTCAAGACCTCCCCAACTTCCCA
GGTTGAACTACAGCAGAAGCCTTTAGAAAGGGCAGGAGGCCGGCTCTCGAGGTCCTCACCTGAAGTGAGCATGCC
AGCCACTGCAGGAACGCCCCGGGACAGGAATGCCCATTTGTGCAACGAACCCTGACTCCTTCCTCACCCTGACTT
CTCCCCCTCCCTACCCGCGCGCAGGCCAAGTTGCTGAATCAATGGAGCCCTCCCCAACCCGGGCGTTCCCCAGCG
AGGCTTCCTTCCCATCCTCCTGACCACCGGGGCTTTTCGTGAGCTCGTCTCTGATCTCGCGCAAGAGTGACACAC
AGGTGTTCAAAGACGCTTCTGGGGAGTGAGGGAAGCGGTTTACGAGTGACTTGGCTGGAGCCTCAGGGGCGGGCA
CTGGCACGGAACACACCCTGAGGCCAGCCCTGGCTGCCCAGGCGGAGCTGCCTCTTCTCCCGCGGGTTGGTGGAC
CCGCTCAGTACGGAGTTGGGGAAGCTCTTTCACTTCGGAGGATTGCTCAACAACCATGCTGGGCATCTGGACCCT
CCTACCTCTGGTGAGCCCTCTCCTGCCCGGGTGGAGGCTTACCCCGTCTTAGTCCCGGGGATAGGCAAAGTGGGG
CG

FIGURE 3164A

GCCCGAAACCCGGAAGTGAGCGGCGGCAGCTGCGAGGCTCGGAGAAACAGGCGCCGCGGGCTCCGCGCCCGGCCG
GACCCGGGCCCGAGATCATGATGCTGCCGCCACCGCCGCCACCACGGAGCGAGAAGCCCAGATAGACGCCCCGGC
GGCCCCGGGTCCTGGAGTCCCGCCGCCTGCTGCCCGGCCGAGGACCCCACCCCGCCTGCCGCCCG**ATG**CTTGCAG
TGGGGCCCGCCATGGACAGGGATTACCCGCAGCATGAACCCCCGCCGGCGGGCAGCCTCCTGTACAGCCCGCCGC
CCCTGCAGAGCGCCATGCTGCACTGCCCCTACTGGAACACCTTCTCGCTGCCGCCATACCCTGCCTTCTCCAGCG
ACAGCCGCCCGTTCATGAGCTCCGCCTCCTTCCTCGGCAGCCAGCCCTGCCCAGACACCAGCTATGCCCCCGTGG
CCACCGCCTCCAGCTTGCCACCAAAGACCTGCGACTTTGCTCAGGACTCCTCCTATTTTGAGGACTTCTCCAACA
TCTCCATCTTCTCCTCGTCCGTGGACTCCCTGTCGGACATCGTGGACACGCCCGACTTCCTGCCGGCTGACAGCC
TCAACCAGGTGTCCACCATCTGGGACGATAACCCTGCCCCCTCCACCCACGATAAGCTGTTCCAGCTCAGCAGGC
CGTTTGCAGGCTTCGAGGACTTTCTGCCCTCCCACAGCACCCCGCTTCTCGTCAGCTACCAGGAGCAGAGTGTGC
AGAGCCAGCCAGAGGAGGAGGACGAGGCTGAGGAGGAGGAGGCGGAGGAGCTGGGGCACACAGAGACCTACGCCG
ACTACGTGCCGTCCAAGTCCAAGATCGGGAAGCAGCACCCAGACCGCGTGGTGGAGACCAGCACACTGTCCAGCG
TCCCACCCCCAGACATCACCTACACCCTGGCCCTGCCCTCGGACAGCGGGGCCCTGTCTGCCCTGCAGCTAGAGG
CCATCACCTACGCCTGCCAGCAACACGAGGTCCTGCTCCCCAGCGGGCAGCGCGCGGGCTTTCTCATCGGCGATG
GGGCCGGCGTGGGCAAAGGCCGGACGGTGGCCGGAGTCATCCTGGAGAACCACCTGCGCGGCCGGAAGAAAGCAT
TGTGGTTCAGCGTCTCCAACGACCTCAAGTACGATGCGGAGCGCGACCTGCGGGACATCGAAGCCACGGGCATCG
CGGTGCACGCGCTCAGCAAGATCAAGTACGGTGACACCACTACCTCAGAGGGCGTCCTCTTCGCCACCTACTCCG
CCCTGATTGGGGAGAGCCAGGCCGGTGGCCAGCACCGCACTCGCCTCCGGCAGATCCTGGACTGGTGTGGGGAGG
CCTTTGAGGGCGTCATCGTGTTCGACGAGTGTCACAAAGCCAAGAATGCCGGCTCCACCAAGATGGGCAAGGCCG
TGCTAGACCTGCAGAACAAGCTGCCCCTGGCCCGCGTGGTCTACGCCAGCGCCACAGGTGCCTCTGAGCCTCGGA
ACATGATCTACATGAGCCGCTTGGGTATCTGGGGCGAGGGCACACCCTTCCGGAACTTTGAGGAGTTCCTGCACG
CCATCGAGAAGAGGGGCGTTGGCGCCATGGAGATCGTGGCCATGGACATGAAGGTCAGCGGCATGTACATCGCAC
GCCAGCTCAGCTTCTCCGGCGTCACCTTCCGCATCGAGGAGATCCCGCTGGCCCCAGCCTTCGAGTGCGTCTACA
ACCGCGCAGCCCTGCTGTGGGCCGAGGCCCTGAACGTGTTCCAGCAGGCGGCCGACTGGATCGGCCTGGAGTCGC
GCAAGTCCCTGTGGGGCCAGTTCTGGTCGGCACACCAGCGCTTCTTCAAGTATCTGTGCATCGCAGCCAAGGTGC
GCCGGCTGGTGGAGCTGGCCCGAGAGGAGCTGGCGCGAGACAAGTGCGTGGTCATCGGGCTGCAGTCCACGGGCG
AGGCGCGCACGCGGGAGGTGCTGGGGGGAGAACGATGGGCACCTCAACTGCTTCGTCTCGGCCGCTGAAGGCGTGT
TCCTGTCGCTAATTCAGAAGCACTTTCCGTCCACCAAGAGAAAGCGGGACAGAGGAGCGGGCAGCAAGCGGAAAC
GGCGACCTCGGGGACGCGGGGCCAAAGCCCCCCGGCTGGCGTGCGAGACAGCGGGCGTCATCCGCATCAGTGACG
ACAGCAGCACGGAGTCGGACCCTGGCCTGGACAGCGACTTCAACTCCTCCCCCGAGTCCCTGGTGGATGACGACG
TTGTCATCGTTGATGCAGTCGGGCTCCCCAGTGACGACCGGGGATCCCTGTGCCTCCTGCAGAGAGACCCGCATG
GCCCCGGGGTCCTGGAGCGGGTGGAGCGGCTGAAGCAGGATCTGCTGGACAAAGTGCGCCGGCTGGGCCGGGAAC
TGCCAGTCAACACCCTGGACGAGCTCATCGACCAGCTGGGCGGCCCCCAGCGGGTGGCGGAGATGACCGGCAGGA
AAGGCCGCGTGGTGTCCAGGCCCGACGGGACGGTGGCCTTCGAGTCGCGGGCAGAGCAGGGTCTGTCCATCGACC
ACGTGAACCTCAGGGAGAAGCAGCGCTTCATGAGCGGCGAGAAGCTCGTGGCCATCATCTCGGAGGCCTCCAGCT
CGGGTGTCTCCCTCCAAGCCGACCGCCGTGTCCAGAACCAGCGGCGCCGCGTGCACATGACCTTGGAGCTGCCGT
GGAGCGCCGACCGCGCCATCCAGCAGTTCGGCCGCACCCACCGGTCCAACCAGGTCTCCGCGCCAGAGTATGTCT
TCCTCATCTCGGAGCTGGCCGGGGAGCGCCGGTTCGCCTCCATCGTGGCCAAGCGCCTGGAGAGTCTGGGGGCCC
TGACCCACGGAGACCGCCGCGCCACGGAGTCCCGTGACCTCAGCAAGTACAACTTTGAGAACAAGTATGGCACCC
GGGCCCTGCACTGTGTCCTCACCACCATCCTGAGCCAGACTGAGAACAAAGTGCCTGTGCCCCAGGGATACCCTG
GAGGGGTCCCCACCTTCTTCCGGGACATGAAGCAGGGCCTGCTGTCTGTGGGCATTGGTGGCCGGGAGTCCCGGA
ATGGCTGCCTGGACGTGGAGAAGGACTGTTCCATCACCAAGTTCCTGAACCGCATCCTGGGGCTGGAGGTGCACA
AGCAGAATGCCCTGTTCCAGTACTTCTCAGACACCTTCGACCACCTCATCGAGATGGACAAGCGGGAGGGCAAAT
ACGACATGGGCATCCTGGACCTTGCTCCCGGTATCGAGGAGATCTACGAGGAGAGCCAGCAGGTGTTCCTGGCTC
CCGGGCACCCGCAGGACGGGCAGGTGGTCTTCTACAAGATCAGCGTGGACCGCGGCCTGAAGTGGGAGGACGCCT
TTGCCAAGTCGCTGGCGCTGACGGGCCCCTATGACGGCTTCTACCTCTCCTACAAGGTCCGCGGTAACAAGCCCA
GCTGCCTGCTGGCGGAGCAGAACCGCGGCCAGTTCTTCACGGTGTACAAGCCCAACATCGGCCGGCAGAGCCAGC
TGGAGGCCCTGGACAGCCTCCGCCGCAAGTTCCACCGGGTCACCGCGGAGGAGGCCAAGGAGCCCTGGGAGAGTG

FIGURE 3164B

GCTACGCTTTGTCGCTGACGCACTGCAGCCACAGCGCCTGGAACCGGCACTGCCGGCTGGCGCAGGAGGGTAAGG
ACTGCCTGCAGGGGCTGCGGCTGCGGCACCACTACATGCTGTGCGGCGCGCTGCTGCGCGTGTGGGGCCGCATCG
CCGCCGTCATGGCCGACGTCAGCAGCAGCAGCTACCTGCAGATCGTGCGGCTGAAGACCAAGGACAGGAAGAAGC
AAGTGGGCATCAAGATCCCCGAGGGCTGCGTGCGCCGGGTGCTGCAGGAGCTGCGGCTGATGGATGCGGACGTGA
AGCGCAGGCAGGCGCCCGCCCTGGGCTGCCCCGCCCCGCCCGCCCCGCGCCCGCTGGCGCTGCCTTGCGGCCCCG
GAGAGGTGCTGGACCTCACCTACAGCCCCCCGGCCGAGGCCTTCCCGCCGCCCCCGCACTTCTCTTTCCCGGCGC
CGCTGTCCCTGGACGCCGGCCCCGGCGTCGTGCCGCTGGGCACCCCCGACGCCCAGGCCGACCCTGCGGCCCTCG
CGCACCAGGGCTGCGACATCAACTTCAAGGAGGTGCTGGAGGACATGCTGCGCTCGCTGCACGCGGGGCCGCCCT
CCGAGGGCGCGCTGGGGGAGGGCGCGGGGGCGGGGGGCGCGGCGGGCGGTGGTCCCGAGCGGCAGAGCGTGATCC
AGTTCAGCCCACCCTTCCCCGGCGCCCAGGCTCCTCTC**TGA**CACGCCTTTAGGCGAAACATGCCCCAAGACACAG
GGACCGTTTCTCCCCTAGGAGCAGCGGTGGGGAGCAGGGCCAAGGTCCCCTGACCACTGCTCAGAGGAGCCCTAG
GCCCTGGCCGCAGTGCCTTCAGCGCCCGACCCGGGCCCCCACCTGGTCAGCCCTGGCGGGGCCCACTCAGGACAG
CTGGGGGCCGGGGCGTGGCAGGGCCCTCTCTGTGCCTCTCCTCCTAAGTAGGAAGGGGCTCCGGGTGGCTGCTCT
GGGACTGGGCACCCACAAGGGCTCAGTGGGCCCAAACCCTTGAAATCCGTGAAACCGGGTGGTCCCAAGAGCTAG
AAACTCAGGAAACCCCAGGTGCTCAGGGCCCCGCGTCTCGGGGGCTCCGTGGGGCAGACCCCTGCTAATATATGC
AATTCTCCCTCCCCCAGCCCTTCCCTGACCCCTAAGTTATTGCCCGCTCACCTCTCCCAGGCCCCAGGCCGCGGA
GCTGGCAGGGTGGCGCCTGCGGTTTCTATGTATTTATAGCAAGTTCTGATGTACATATGTAAAGGACTTTTTTAA
AT

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FIGURE 3165

MLAVGPAMDRDYPQHEPPPAGSLLYSPPPLQSAMLHCPYWNTFSLPPYPAFSSDSRPFMSSASFLGSQPCPDTSY
APVATASSLPPKTCDFAQDSSYFEDFSNISIFSSSVDSLSDIVDTPDFLPADSLNQVSTIWDDNPAPSTHDKLFQ
LSRPFAGFEDFLPSHSTPLLVSYQEQSVQSQPEEEDEAEEEEAEELGHTETYADYVPSKSKIGKQHPDRVVETST
LSSVPPPDITYTLALPSDSGALSALQLEAITYACQQHEVLLPSGQRAGFLIGDGAGVGKGRTVAGVILENHLRGR
KKALWFSVSNDLKYDAERDLRDIEATGIAVHALSKIKYGDTTTSEGVLFATYSALIGESQAGGQHRTRLRQILDW
CGEAFEGVIVFDECHKAKNAGSTKMGKAVLDLQNKLPLARVVYASATGASEPRNMIYMSRLGIWGEGTPFRNFEE
FLHAIEKRGVGAMEIVAMDMKVSGMYIARQLSFSGVTFRIEEIPLAPAFECVYNRAALLWAEALNVFQQAADWIG
LESRKSLWGQFWSAHQRFFKYLCIAAKVRRLVELAREELARDKCVVIGLQSTGEARTREVLGENDGHLNCFVSAA
EGVFLSLIQKHFPSTKRKRDRGAGSKRKRRPRGRGAKAPRLACETAGVIRISDDSSTESDPGLDSDFNSSPESLV
DDDVVIVDAVGLPSDDRGSLCLLQRDPHGPGVLERVERLKQDLLDKVRRLGRELPVNTLDELIDQLGGPQRVAEM
TGRKGRVVSRPDGTVAFESRAEQGLSIDHVNLREKQRFMSGEKLVAIISEASSSGVSLQADRRVQNQRRRVHMTL
ELPWSADRAIQQFGRTHRSNQVSAPEYVFLISELAGERRFASIVAKRLESLGALTHGDRRATESRDLSKYNFENK
YGTRALHCVLTTILSQTENKVPVPQGYPGGVPTFFRDMKQGLLSVGIGGRESRNGCLDVEKDCSITKFLNRILGL
EVHKQNALFQYFSDTFDHLIEMDKREGKYDMGILDLAPGIEEIYEESQQVFLAPGHPQDGQVVFYKISVDRGLKW
EDAFAKSLALTGPYDGFYLSYKVRGNKPSCLLAEQNRGQFFTVYKPNIGRQSQLEALDSLRRKFHRVTAEEAKEP
WESGYALSLTHCSHSAWNRHCRLAQEGKDCLQGLRLRHHYMLCGALLRVWGRIAAVMADVSSSSYLQIVRLKTKD
RKKQVGIKIPEGCVRRVLQELRLMDADVKRRQAPALGCPAPPAPRPLALPCGPGEVLDLTYSPPAEAFPPPPHFS
FPAPLSLDAGPGVVPLGTPDAQADPAALAHQGCDINFKEVLEDMLRSLHAGPPSEGALGEGAGAGGAAGGGPERQ
SVIQFSPPFPGAQAPL

FIGURE 3166A

CGCCCCGGCGCGGGGCCCTGCGGTAGCCTCAGGCCCCTCCCCTGGACCCGCCGCAGAGCCAGTGCAGAATACAGA
AACTGCAGCCATGACCACGCACGTCACCCTGGAAGATGCCCTGTCCAACGTGGACCTGCTTGAAGAGCTTCCCCT
CCCCGACCAGCAGCCATGCATCGAGCCTCCACCTTCCTCCATCATGTACCAGGCTAACTTTGACACAAACTTTGA
GGACAGGAATGCATTTGTCACGGGCATTGCAAGGTACATTGAGCAGGCTACAGTCCACTCCAGCATGAATGAGAT
GCTGGAGGAAGGACATGAGTATGCGGTCATGCTGTACACCTGGCGCAGCTGTTCCCGGGCCATTCCCCAGGTGAA
ATGCAACGAGCAGCCCAACCGAGTAGAGATCTATGAGAAGACAGTAGAGGTGCTGGAGCCGGAGGTCACCAAGCT
CATGAAGTTCATGTATTTTCAGCGCAAGGCCATCGAGCGGTTCTGCAGCGAGGTGAAGCGGCTGTGCCATGCCGA
GCGCAGGAAGGACTTTGTCTCTGAGGCCTACCTCCTGACCCTTGGCAAGTTCATCAACATGTTTGCTGTCCTGGA
TGAGCTAAAGAACATGAAGTGCAGCGTCAAGAATGACCACTCTGCCTACAAGAGGGCAGCACAGTTCCTGCGGAA
GATGGCAGATCCCCAGTCTATCCAGGAGTCGCAGAACCTTTCCATGTTCCTGGCCAACCACAACAGGATCACCCA
GTGTCTCCACCAGCAACTTGAAGTGATCCCAGGCTATGAGGAGCTGCTGGCTGACATTGTCAACATCTGTGTGGA
TTACTACGAGAACAAGATGTACCTGACTCCCAGTGAGAAACATATGCTCCTCAAGGTGATGGGCTTTGGCCTCTA
CCTAATGGATGGAAATGTCAGTAACATTTACAAACTGGATGCCAAGAAGAGAATTAATCTTAGCAAAATTGATAA
ATTCTTTAAGCAGCTGCAGGTGGTGCCCCTTTTCGGCGACATGCAGATAGAGCTGGCCAGATACATTGAGACCAG
TGCTCACTATGAAGAGAACAAGTCCAAGTGGACGTGCACCCAGAGCAGCATCAGCCCCCAGTACAATATCTGCGA
GCAGATGGTTCAGATCCGGGATGACCACATCCGCTTCATCTCCGAGCTCGCTCGCTACAGCAACAGTGAGGTGGT
GACGGGCTCAGGGCTGGACAGCCAGAAGTCAGACGAGGAGTATCGCGAGCTCTTCGACCTAGCCCTGCGGGGTCT
GCAGCTTCTATCCAAGTGGAGCGCCCACGTCATGGAGGTGTACTCTTGGAAGCTGGTTCATCCCACAGACAAGTT
CTGCAACAAGGACTGTCCTGGCACCGCGGAGGAATATGAGAGAGCCACACGCTACAATTACACCAGTGAGGAAAA
ATTTGCCTTCGTTGAGGTGATCGCCATGATCAAAGGCCTGCAGGTGCTCATGGGCAGGATGGAGAGCGTCTTCAA
CCAGGCCATCAGGAACACCATCTACGCGGCATTGCAGGACTTCGCCCAGGTGACGCTGCGTGAGCCCCTGCGGCA
GGCGGTACGGAAGAAGAAGAATGTCCTCATCAGCGTCCTACAGGCAATTCGAAAGACCATCTGTGACTGGGAGGG
AGGGCGAGAGCCCCCTAATGACCCATGCTTGAGAGGGGAGAAGGACCCCAAAGGTGGATTTGATATCAAGGTGCC
CCGGCGTGCTGTGGGGCCATCCAGCACACAGCTGTACATGGTGCGGACCATGCTTGAATCACTCATTGCAGACAA
AAGCGGCTCCAAGAAGACCCTGAGGAGCAGCCTGGATGGACCCATTGTCCTCGCCATAGAGGACTTTCACAAACA
GTCCTTCTTCTTCACACATCTGCTCAACATCAGTGAAGCCCTGCAGCAGTGTTGTGACCTCTCCCAGCTCTGGTT
CCGAGAATTCTTCCTGGAGTTAACCATGGGCCGACGAATCCAGTTCCCCATCGAGATGTCCATGCCCTGGATTCT
AACGGACCATATCCTGGAAACCAAAGAACCTTCCATGATGGAGTATGTCCTCTACCCTCTGGATCTGTACAACGA
CAGCGCCTACTATGCTCTGACCAAGTTTAAAAAGCAGTTCCTGTACGATGAGATAGAAGCTGAGGTGAACCTGTG
TTTTGATCAGTTTGTCTACAAGCTGGCAGACCAGATCTTTGCTTACTACAAAGCCATGGCTGGCAGTGTCCTGTT
GGATAAACGTTTTCGAGCTGAGTGTAAGAATTATGGCGTCATCATTCCGTATCCACCGTCCAATCGCTATGAAAC
ACTGCTGAAGCAGAGACACGTCCAGCTGTTGGGTAGATCAATTGACTTGAACAGACTCATTACCCAGCGCATCTC
TGCCGCCATGTATAAATCCTTGGACCAAGCTATCAGCCGCTTTGAGAGTGAGGACCTGACCTCCATTGTGGAGCT
GGAGTGGCTGCTGGAGATTAACCGGCTCACGCATCGGCTGCTCTGTAAGCATATGACGCTGGACAGCTTCGATGC
CATGTTCCGAGAGGCCAATCACAATGTGTCCGCCCCCTATGGCCGTATCACCCTGCATGTCTTCTGGGAACTGAA
CTTTGACTTTCTCCCCAACTACTGCTACAATGGGTCCACTAACCGTTTTGTGCGGACTGCCATTCCTTTCACCCA
AGAACCACAACGAGACAAACCTGCCAACGTCCAGCCTTATTACCTCTATGGATCCAAGCCTCTCAACATTGCCTA
CAGCCACATCTACAGCTCCTACAGGAATTTCGTGGGGCCACCTCATTTCAAGACTATCTGCAGACTCCTGGGTTA
TCAGGGCATCGCTGTGGTCATGGAGGAACTGCTAAAGATTGTGAAGAGCTTGCTCCAAGGAACCATTCTCCAGTA
TGTGAAAACACTGATAGAGGTGATGCCCAAGATATGCCGCTTGCCCCGACATGAGTATGGCTCCCCAGGGATCCT
GGAGTTCTTCCACCACCAGCTGAAGGACATCATTGAGTACGCAGAGCTCAAAACAGACGTGTTCCAGAGCCTGAG
GGAAGTGGGCAATGCCATCCTCTTCTGCCTCCTCATAGAGCAAGCTCTGTCTCAGGAGGAGGTCTGCGATTTGCT
CCATGCCGCACCCTTCCAAAACATCTTGCCTAGAGTCTACATCAAAGAGGGGGAGCGCCTGGAGGTCCGGATGAA
ACGTCTGGAAGCCAAGTATGCCCCGCTCCACCTGGTCCCTCTGATCGAGCGGCTGGGGACCCCTCAGCAAATCGC
CATTGCTCGCGAGGGTGACCTCCTGACCAAGGAGCGGCTGTGCTGTGGCCTGTCCATGTTCGAGGTCATCCTGAC
CCGCATTCGGAGCTACCTGCAGGACCCCATCTGGCGGGGCCCACCGCCCACCAATGGCGTCATGCACGTCGATGA
GTGTGTGGAGTTCCACCGGCTGTGGAGCGCCATGCAGTTCGTGTACTGCATCCCTGTGGGAACCAACGAGTTCAC
AGCTGAGCAGTGTTTCGGCGATGGCTTGAACTGGGTTGGTTGCTCCATCATTGTCCTGCTGGGCCAGCAGCGTCG

FIGURE 3166B

CTTTGACCTGTTCGACTTCTGTTACCACCTGCTAAAAGTGCAGAGGCAGGACGGGAAGGATGAAATCATTAAGAA
TGTGCCCCTGAAGAAGATGGCCGACCGGATCAGGAAGTATCAGATCTTGAACAATGAGGTTTTTGCCATCCTGAA
CAAATACATGAAGTCCGTGGAGACAGACAGTTCCACTGTGGAGCATGTGCGCTGCTTCCAGCCACCCATCCACCA
GTCCTTGGCCACCACTTGCTAAGCAGAAGATCCTGCAGACCCTTATCTGGAGGAGGAAGAGAAGCAGGAGAGAGA
AAGCCACAGCCAGCCTGCCATAGGATCCAACTGGACAACGTGTGGGATGGACCTGGAAACAAGCACCTCCCCAAA
CACATCACCACTCCCTAGGGCGGGGCCTGTGCATGCTCTCCCATGACATCTCCATGCTGGTTTCTCCATAGCATA
AATG

FIGURE 3167

APARGPAVASGPSPGPAAEPVQNTETAAMTTHVTLEDALSNVDLLEELPLPDQQPCIEPPPSSIMYQANFDTNFE
DRNAFVTGIARYIEQATVHSSMNEMLEEGHEYAVMLYTWRSCSRAIPQVKCNEQPNRVEIYEKTVEVLEPEVTKL
MKFMYFQRKAIERFCSEVKRLCHAERRKDFVSEAYLLTLGKFINMFAVLDELKNMKCSVKNDHSAYKRAAQFLRK
MADPQSIQESQNLSMFLANHNRITQCLHQQLEVIPGYEELLADIVNICVDYYENKMYLTPSEKHMLLKVMGFGLY
LMDGNVSNIYKLDAKKRINLSKIDKFFKQLQVVPLFGDMQIELARYIETSAHYEENKSKWTCTQSSISPQYNICE
QMVQIRDDHIRFISELARYSNSEVVTGSGLDSQKSDEEYRELFDLALRGLQLLSKWSAHVMEVYSWKLVHPTDKF
CNKDCPGTAEEYERATRYNYTSEEKFAFVEVIAMIKGLQVLMGRMESVFNQAIRNTIYAALQDFAQVTLREPLRQ
AVRKKKNVLISVLQAIRKTICDWEGGREPPNDPCLRGEKDPKGGFDIKVPRRAVGPSSTQLYMVRTMLESLIADK
SGSKKTLRSSLDGPIVLAIEDFHKQSFFFTHLLNISEALQQCCDLSQLWFREFFLELTMGRRIQFPIEMSMPWIL
TDHILETKEPSMMEYVLYPLDLYNDSAYYALTKFKKQFLYDEIEAEVNLCFDQFVYKLADQIFAYYKAMAGSVLL
DKRFRAECKNYGVIIPYPPSNRYETLLKQRHVQLLGRSIDLNRLITQRISAAMYKSLDQAISRFESEDLTSIVEL
EWLLEINRLTHRLLCKHMTLDSFDAMFREANHNVSAPYGRITLHVFWELNFDFLPNYCYNGSTNRFVRTAIPFTQ
EPQRDKPANVQPYYLYGSKPLNIAYSHIYSSYRNFVGPPHFKTICRLLGYQGIAVVMEELLKIVKSLLQGTILQY
VKTLIEVMPKICRLPRHEYGSPGILEFFHHQLKDIIEYAELKTDVFQSLREVGNAILFCLLIEQALSQEEVCDLL
HAAPFQNILPRVYIKEGERLEVRMKRLEAKYAPLHLVPLIERLGTPQQIAIAREGDLLTKERLCCGLSMFEVILT
RIRSYLQDPIWRGPPPTNGVMHVDECVEFHRLWSAMQFVYCIPVGTNEFTAEQCFGDGLNWVGCSIIVLLGQQRR
FDLFDFCYHLLKVQRQDGKDEIIKNVPLKKMADRIRKYQILNNEVFAILNKYMKSVETDSSTVEHVRCFQPPIHQ
SLATTC

FIGURE 3168

ATAAACAACTTGATGCAGATGTTTCCCCCAAGCCCACTATTTTTCTTCCTTCGATTGCTGAAACAAAACTCCAGA
AGGCTGGAACATATCTTTGTCTTCTTGAGAAATTTTTCCCAGATATTATTAAGATACATTGGCAAGAAAAGAAGA
GCAACACGATTCTGGGATCCCAGGAGGGGAACACCATGAAGACTAACGACACATACATGAAATTTAGCTGGTTAA
CGGTGCCAGAAGAGTCACTGGACAAAGAACACAGATGTATCGTCAGACATGAGAATAATAAAAACGGAATTGATC
AAGAAATTATCTTTCCTCCAATAAAGACAGATGTCACCACAGTGGATCCCAAAGACAGTTATTCAAAAGATGCAA
ATGATGTCACCACAGTGGATCCCAAATACAATTATTCAAAGGATGCAAATGATGTCATCACAATGGATCCCAAAG
ACAATTGGTCAAAAGATGCAAATGATACACTACTGCTGCAGCTCACAAACACCTCTGCATATTACATGTACCTCC
TCCTGCTCCTCAAGAGTGTGGTCTATTTTGCCATCATCACCTGCTGTCTGCTTGGAAGAACGGCTTTCTGCTGCA
ATGGAGAGAAATCATAACAGACGGTGGCACAAGGAGGCCATCTTTTCCTCATCGGTTATTGTCCCTAGAAGCGTC
TTCTGAGGATCTAGTTGGGCTTTCTTTCTGGGTTTGGGCCATTTCAGTTCTCATGTGTGTACTATTCTATCATTA
TTGTATAATGGTTTTCAAACCAGTGGGCACACAGAGAACCTCAGTCTGTAATAACAATGAGGAATAGCCATGGCG
ATCTCCAGCACCAATCTCTCCATGTTTTCCACAGCTCCTCCAGCCAACCCAAATAGCGCCTGCTATAGTGTAGAC
AGCCTGCGGCTTCTAGCCTTGTCCCTCTCTTAGTGTTCTTTAATCAGATAACTGCCTGGAAGCCTTTCATTTTAC
ACGCCCTGAAGCAGTCTTCTTTGCTAGTTGAATTATGTGGTGTGTTTTTCCGTAATAAGCAAAATAAATTT

FIGURE 3169

ACTTAAGAAGCCATTTTATGGGGAAATTAGAATGAATCTTAAAAAAGTTTTTTTTCTTCTTTTGATTGTATTGAA
TTCCTTTGTAGTGTGGCTTTTTTAAAAGACTGAATCTTTGTTCTCATTAACCCTAGGAAATGTTCTTGCTTTCTC
TGCTTATCTCTTTGCTCTTTAATATGAACAGAATTTTTTTTACTCCCTAAGGAACGCAAGCCATTTTCTGTTTCT
AGCACTCCCACCATGTCACGCTCAAGTTCAATAAGTGGTGTTGATATGGCAGGACTACAGACATCTTTTCTGTCT
CAGGTGATGTTTTATTTTTTATATGTGCTTAGTTCTTAGAATAATAATAAAGGAAATATGCAAATGGCAATATTG
TCTGTCATCATGACCTTGCCATTCTATGGGTAATTCATCTGAATACTTGTGGAGGAGTGCTAATTTTAGTGAGAG
GAAACACGTGAATGATTTTCTGCCTTTGAGAAGACATTTAAAGCAAAAATTGACAGAACCATTTTTGTTCGAACC
TGGTAATGGAAGACAAGCTATGATAACTGAGTAACTGTGTGAACTTTCTTAATTAACATAGGATGAGTCTCATGA
TCACTCATTTGGACCAATGCCTATATCAGCAAATGGAAGCAATCTTTATGATGCTGTAAGGATGGGAGCAGGATC
AAGCATAATTGAAAACCTACAGTCTCAGCTAAAGCTAAGGGAAGGGGAAATCACTCATTTACAGGTATTGGAAAA
ATTAAATTTGCTATAGAAGTAAATGAAGTTTTGAGGCCTAATAAATAGCACCCTTCATTTCCATCTGAATTCTGA
GCAAATTGAGAAACAAGATGACATAGTGGCATGTGAAGCCCAAAATGTATCACATATATCAATGATAAAGGCTAA
AAAGAGAAATTAGCTAAGGATAACAGCCAACTGAACCTGCTAATTGCCAGAATTAGGCATATTCGGCTGATCTGT
CACAGGAAATGCTGGGCTGGAGCAGGCCTCCCATGTTTTACAACCTGCCTACATAAGACATAAGCATCTAGGAGC
AGAGAATCCCTCCTCCTTTCAAGCAGCTCTTTCCCAACAGAATAAAGGGAAGTCACTGAGCTGTGAATGCCTGTT
CTATTCAGATTTACCTCTTAGATAAGTTGTTCCAGCTACCCCGGGAAGGAGGGGTAAAGGGGATGAGATGTTTGA
ACTGTAACACCCTGTACATGGGAGGAAACAACATGAGTTGTTGATGGAGCATCCTTCCATCTTACCTTTTTGGCT
TTTAAAAAACTTTATGCAGTCAGAAATATTGAAATGTTTTACAGGTTTGAGCATCCCAGCTCTGAAATCTGAAAT
GCCCCCAAATCCAAAACTTTGAGTGCTGACATGCTGCTCAAAGGAAAAGCTCAATTGAGCATTTTGGATTTCCAG
ATTTGGGATGCTCAACCAGTAAGTACATAATGCAATTATTCCATAATCTGAA

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FIGURE 3170

LKKPFYGEIRMNLKKVFFLLLIVLNSFVVWLF

3583/8433

FIGURE 3171

GTTCTAAAAGATTATGGTGATGGTTGCGTAACTGTAAATATACTTAAACAATTGAAGTCTTTAAATTGGTGAACT
TTATGACATATATCTGAATAAAATTGTTAATTACACCACTTGGTAGAAATCCANNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCTGGGGAGCAGAAAGCAACCTTCCGGGTACAGGTGAGCCAAGGT
TGATGGGCAGTTATGCAGAGGGAGTTGGGATATCACTGTGTGTACCTGTGCAAGTCCTGGAGTGTGTTGGGTCCT
CATCAGCAGGGCTGTATGAAGGTGTTCATTAAAACAAAACTACTGATAGTGTGGCAGGAGCTAGAAAACACCCCT
TTCTTCTTAGATATCCCTCCAGCACCCTCTACTGGCAAAGTTTAACTGCCCCTAGCC

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FIGURE 3172

VLKDYGDGCVTVNILKQLKSLNW

FIGURE 3173

AGCTCTGCGAGGGGCCGGAGCGCGGCGGAGCCATGCAGTACCCGCACCCCGGGCCGGCGGCGGGCGCCGTGGGGG
TGCCGCTGTACGCGCCCACGCCGCTGCTGCAACCCGCACACCCGACGCCCTTTTACATCGAGGACATCCTGGGCC
GCGGGCCCGCCGCGCCCACGCCCGCCCCCACGCTGCCGTCCCCCAACTCCTCCTTCACCAGCCTCGTGTCCCCCT
ACCGGACCCCGGTGTACGAGCCCACGCCGATCCATCCAGCCTTCTCGCACCACTCCGCCGCCGCGCTGGCCGCTG
CCTACGGACCCGGCGGCTTCGGGGGCCCTCTGTACCCCTTCCCGCGGACGGTGAACGACTACACGCACGCCCTGC
TCCGCCACGACCCCCTGGGCAAACCTCTACTCTGGAGCCCCTTCTTGCAGAGGCCTCTGCATAAAAGGAAAGGCG
GCCAGGTGAGATTCTCCAACGACCAGACCATCGAGCTGGAGAAGAAATTCGAGACGCAGAAATATCTCTCTCCGC
CCGAGAGGAAGCGTCTGGCCAAGATGCTGCAGCTCAGCGAGAGACAGGTCAAAACCTGGTTTCAGAATCGACGCG
CTAAATGGAGGAGACTAAAACAGGAGAACCCTCAAAGCAATAAAAAAGAAGAACTGGAAAGTTTGGACAGTTCCT
GTGATCAGAGGCAAGATTTGCCCAGTGAACAGAATAAAGGTGCTTCTTTGGATAGCTCTCAATGTTCGCCCTCCC
CTGCCTCCCAGGAAGACCTTGAATCAGAGATTTCAGAGGATTCTGATCAGGAAGTGGACATTGAGGGCGATAAAA
GCTATTTTAATGCTGGATGATGACCACTGGCATTGGCATGTTCAGAAAACTGGATTTAGGAATAATGTTTTGCTA
CAGAAAATCTTCATAGAAGAACTGGAAGGCTATATAAGAAAGGGAATCAATTCTCTGGTATTCTGGAAACCTAAA
AATATTTGGTGCACTGCTCAATTAACAAACCTACATGGAGACCTTAATTTTGACTTAACAAATAGTTTATGTACT
GCTCTTAGGTTGTTTTGATAAAGTGACATTATAGTGATTAAATTCTTCCCCCTTTAAAAAAACAGTTAGTGGTTT
TCACTATTTATAAAAAATTAATTTTGAACTTTTTGTTAAATTTTTAAGTTATAGCTTTAAAGGTTTTAATAGGAC
CTTCTTGAACGACTTTTCTGTAATCTGTTTATCTCCCACTTAATGGAAAGGCAAAGGGGTACCCCAAATCCAGAG
CTGCCTACATTTCAGGCAGCCTTGGAGTATTTTAAAAGGAAAACATTCTTTACTTTTATATGACATTCTTATACT
GCTGTCTCAAATCCAAAAACATTTCAGAGCTCTTGTCTCAGAGATGTGTGTTCTTTTTGTCAGAGATATGGTTGA
TGAGAATCTTAAATGCTTGTTTTGCACTATCACTTAGTACCTGTTTGACCAAGGTGTTAAGGGGATAGTACCTCC
CAATTCAAGCAGAGAAACTGACCTGACTAAAGTTAATCGCAGATGAACTAGAAGTCACAGGTTAATTAAATGTAA
GTAGATTGTAGATACTGTTTTATATCAAACAATGTTTATAATGTGTATATAGAATTGTTCACTGTAAAAAAAATG
GCCAAAATGTGTTTTTTTTTTAATAAGTAACTTGACTATAAAATAAAGCCGTCCGTGGGACGACTGACCTCGTAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAA

FIGURE 3174

MQYPHPGPAAGAVGVPLYAPTPLLQPAHPTPFYIEDILGRGPAAPTPAPTLPSPNSSFTSLVSPYRTPVYEPTPI
HPAFSHHSAAALAAAYGPGGFGGPLYPFPRTVNDYTHALLRHDPLGKPLLWSPFLQRPLHKRKGGQVRFSNDQTI
ELEKKFETQKYLSPPERKRLAKMLQLSERQVKTWFQNRRAKWRRLKQENPQSNKKEELESLDSSCDQRQDLPSEQ
NKGASLDSSQCSPSPASQEDLESEISEDSDQEVDIEGDKSYFNAG

FIGURE 3175

GACAGCTCTCTCCATGGAAGGAGGCGGCGGCCGCGATGAGCCTTCAGCCTGCCGGGCAGGGGACGTGAACATGGA
TGACCCTAAGAAGGAAGACATTCTTCTTTTGGCCGATGAAAAATTTGACTTCGATCTTTCATTGTCTTCTTCGAG
TGCAAATGAAGATGATGAAGTCTTCTTCGGACCCTTTGGACATAAAGAAAGATGTATTGCTGCCAGCTTGGAATT
AAATAATCCGGTTCCCGAACAGCCTCCGTTGCCCACATCTGAGAGTCCCTTTGCCTGGAGCCCTCTGGCCGGGGA
GAAGTTCGTGGAGGTGTACAAAGAAGCTCACTTACTGGCTTTACACATTGAGAGCAGCAGCCGGAACCAGGCAGC
CCAAGCTGCCAAGCCTGAAGACCCTCGGAGCCAGGGCGTGGAAAGATTCATACAGGAGTCAAAATTAAAAATAAA
CCTCTTTGAGAAAGAAAAGGAAATGAAGAAAAGCCCCACGTCTCTTAAAAGGGAGACATACTACCTGTCAGACAG
CCCCTTGCTGGGGCCCCCTGTGGGTGAGCCTCGGCTCTTGGCCTCCTCCCCGGCCCTGCCCAGCTCTGGTGCCCA
GGCCCGCCTCACCCGGGCGCCGGGGCCTCCGCACTCTGCTCATGCTTTGCCCAGGGAATCATGCACTGCTCATGC
TGCAAGTCAGGCAGCGACTCAGAGGAAGCCCGGGACCAAATTGCTGCTGCCTCGAGCGGCCTCTGTTAGAGGAAG
AAGCATCCCTGGGGCTGCGGAGAAGCCCAAGAAAGAGATTCCAGCTAGTCCTTCCAGGACAAAAATCCCAGCTGA
GAAGGAATCCCACCGGGATATTCTCCCTGACAAACCTGCCCCGGGTGCTGTCAATGTGCCGGCCGCCGGAAGCCA
CTTGGGCCAGGGCAAGCGGGCGATCCCTGTTCCAAACAAGTTGGGGCTGAAGAAGACCCTGTTAAAAGCACCCGG
CTCTACCAGCAATCTCGCAAGGAAGTCCTCCTCGGGGCCTGTTTGGAGCGGGGCATCCAGTGCGTGCACATCCCC
AGCAGTGGGCAAAGCTAAATCAAGTGAATTTGCAAGTATTCCTGCAAATAGCTCCCGGCCTCTGTCAAACATCAG
CAAGTCAGGCAGAATGGGACCCGCCATGCTGCGGCCAGCTCTGCCTGCAGGCCCTGTGGGGGCATCCTCCTGGCA
GGCCAAGCGGGTCGATGTTTCTGAGCTGGCAGCGGAGCAGCTCACGGCACCCCCCTCAGCATCCCCCACCCAACC
CCAGACTCCGGAAGGTGGCGGCCAGTGGCTGAACTCCAGTTGCGCTTGGTCAGAATCTTCTCAATTGAATAAGAC
TAGAAGTATCAGACGGCGAGATTCCTGTCTAAATTCCAAGACAAAGGTTATGCCTACTCCTACAAATCAATTTAA
AATTCCTAAGTTTTCTATTGGTGACTCCCCGGACAGCTCAACACCAAAGCTTTCGCGGGCACAGCGGCCGCAGTC
GTGCACGTCAGTTGGCAGGGTCACTGTCCACAGCACCCCGGTTAGACGCTCATCTGGGCCAGCACCACAAAGCCT
GCTGAGCGCACGGCGTGTGTCAGCCTTGCCCACACCCGCCAGCCGGCGCTGCTCTGGCCTTCCACCGATGACCCC
CAAAACGATGCCCAGGGCCGTGGGCTCTCCCCTGTGTGTGCCAGCTCGGAGACGTTCCTCTGAGCCCCGCAAGAA
CTCTGCAATGAGAACTGAACCAACAAGGGAGAGCAACAGAAAGACAGATTCCAGGCTGGTGGATGTGTCCCCTGA
CAGGGGTTCTCCTCCTTCCCGTGTGCCTCAGGCACTTAACTTTTCTCCAGAGGAAAGCGATTCTACTTTCTCCAA
AAGTACTGCCACAGAAGTAGCTCGGGAGGAAGCCAAGCCGGGTGGAGATGCAGCCCCTAGTGAGGCTCTTCTTGT
AGATATCAAACTGGAACCACTCGCGGTCACTCCAGATGCTGCAAGCCAGCCCCTCATTGACCTTCCTCTCATCGA
CTTCTGCGATACCCCAGAAGCACACGTGGCTGTAGGATCTGAAAGCAGGCCTCTGATCGACCTCATGACAAACAC
TCCAGACATGAATAAAAATGTGGCCAAACCTTCACCGGTGGTGGGACAGCTCATAGACCTGAGCTCCCCTCTGAT
CCAGCTGAGCCCTGAGGCTGACAAGGAGAACGTGGATTCCCCACTCCTCAAGTTCTAAGCCGAACCAAATCCTTT
GCCTTGAAAGAACAGCCCTAAAGTGGTTTTCAACCCTCAGAAACAAGCTTTAGGCTGGTCGCAGTGGCTTACACT
TGTAACCCTAGAACTTGGGAGGCTGAGGTGGGCGGATTACTTGAGCCCAGGAGTTCGGGACCAGCCTGGGAAATA
TAGTGAAACTCCTGTCCCTACAAAAAATACAAAAATTAGCCGGGTGTGGTAGTGCATGCCTGTAGTCCCAGCTAC
TTGGGAGGCTGAAGTGGGAGGATGGCCTGAGCTCAAGGAGATGCAGGCTGCAGTGGGCTGTGATTGTGCCACTGC
ACTCCAGCCTGGGCACCAATGTGAGAACCTGTCTTGGAAAAAAAAAAAAAGAAACATGTTTTAGTAGAAGTTTTA
TTTGAAAAAAAAAAAAAAAAA

FIGURE 3176

MDDPKKEDILLLADEKFDFDLSLSSSSANEDDEVFFGPFGHKERCIAASLELNNPVPEQPPLPTSESPFAWSPLA
GEKFVEVYKEAHLLALHIESSSRNQAAQAAKPEDPRSQGVERFIQESKLKINLFEKEKEMKKSPTSLKRETYYLS
DSPLLGPPVGEPRLLASSPALPSSGAQARLTRAPGPPHSAHALPRESCTAHAASQAATQRKPGTKLLLPRAASVR
GRSIPGAAEKPKKEIPASPSRTKIPAEKESHRDILPDKPAPGAVNVPAAGSHLGQGKRAIPVPNKLGLKKTLLKA
PGSTSNLARKSSSGPVWSGASSACTSPAVGKAKSSEFASIPANSSRPLSNISKSGRMGPAMLRPALPAGPVGASS
WQAKRVDVSELAAEQLTAPPSASPTQPQTPEGGGQWLNSSCAWSESSQLNKTRSIRRRDSCLNSKTKVMPTPTNQ
FKIPKFSIGDSPDSSTPKLSRAQRPQSCTSVGRVTVHSTPVRRSSGPAPQSLLSARRVSALPTPASRRCSGLPPM
TPKTMPRAVGSPLCVPARRRSSEPRKNSAMRTEPTRESNRKTDSRLVDVSPDRGSPPSRVPQALNFSPEESDSTF
SKSTATEVAREEAKPGGDAAPSEALLVDIKLEPLAVTPDAASQPLIDLPLIDFCDTPEAHVAVGSESRPLIDLMT
NTPDMNKNVAKPSPVVGQLIDLSSPLIQLSPEADKENVDSPLLKF

FIGURE 3177

TTTCCAGTCCAGGGCCGCTGAGAGTGGGGGTGGCTGGGAGCAGCGCAGCCTCCGGAGGAGGAGGCGGAGGCCGAG
GACCAGGAATCACCTTCAAGCCTATGTCGTGAGGCTTTGGCAGAAATTAAGAAGGAAATATCTCCATTGTTCATT
GGCATGGAAAAATGTTCAGTGGGAGGATTAGAGTTGACTGAACAGACTCCTGCTTTATTAGGGAATATGGCCATG
GCAACTAGTCTCATGGACATAGGGGATTCATTTGGTCATCCAGCTTGTCCTTTAGTCAGTAGATCTAGGAACTCA
CCAGTGGAAGATGATGATGATGATGATGATGTTGTGTTTATTGAATCTATACAACCTCCTTCAATTTCTGCTCCA
GCAATAGCTGATCAAAGAAACTTCATATTTGCATCATCAAAAAATGAAAAGCCTCAAGGAAATTATTCTGTAATT
CCTCCTTCTTCAAGAGATTTGGCATCTCAGAAAGGAAATATAAGTGAGACAATTGTTATTGATGATGAAGAGGAC
ATAGAAACAAATGGAGGAGCAGAGAAAAAGTCTTCCTGTTTTATCGAATGGGGACTTCCTGGAACTAAAAACAAA
ACCAACGATTTGGATTTCTCCACTTCCAGTCTTTCAAGAAGTAAGGTAAATGCAGGAATGGGTAATAGTGGTATC
ACTACAGAATTGACTCTGAAATACATTATTACTAATGTTACAACCTTAGAAACAGGTATAAGCTCTGTGAATGCT
GGGCAAGATGTGAACATAATTATTACATATAAAACATCACTATAGAATACCAACTTGGGAGATGTCGCTAAAGGA
CTTCAGTCAAGTAATTTTGGTGTTAATATACAAACGTACACCCCATCTTTAACTCCACAGACCAAGACTGGAGTA
AGACCTTTTAACCCTGGTAGAATGAATGTGGCAGGAGACTTATTTCAGAATGGAGAATTTGCAACTCATCATAGT
CCTGATTCTTGGATCTCCCAGTCAGCTTCATTTCCCAGTAATCAGAAACAGCCAGGGGTGGATTCTTTATCACCA
GTGGCCTTACTTCGTAAGCAGAATTTCCAGCCTACAGCCCAACAACAACTTACTAAACCAGCTAAAATCACTTGT
GCAAATTGCAAAAAGCCTTTACAGAAGGGACAGACAGCTTATCAACGAAAAGGATCAGCTCACCTCTTTTGCTCT
ACCACCTGCCTTTCTTCCTTCTCTCATAAACGTACTCAAAACACACGAAGCATAATATGTAAAAAAGATGCATCT
ACAAAGAAGGCTAATGTCATTCTTCCAGTAGAATCAAGCAAATCCTTCCAAGAATTTTATAGTACATCTTGTTTG
TCTCCCTGTGAAAACAACTGGAATCTTAAAAAAGGAGTTTTTAATAAGTCAAGATGTACAATTTGTAGTAAATTA
GCAGAGGTCTGGATTTTTATACCTAAGTTGTTGTTTAGGCTAACAGTGATAATTTTAACTTTTAAGTGCTATTAT
GTACTCTTTCATCTACATAATGCACGTGTTCTGGATGTATAACATGAAGCTGAAAGGAAGAATAAGGATATGTTA
GAACTATCTTATGGGATATTTTATAAATAAAATTCCATTTGCATAGC

FIGURE 3178

MEKCSVGGLELTEQTPALLGNMAMATSLMDIGDSFGHPACPLVSRSRNSPVEDDDDDDDVVFIESIQPPSISAPA
IADQRNFIFASSKNEKPQGNYSVIPPSSRDLASQKGNISETIVIDDEEDIETNGGAEKKSSCFIEWGLPGTKNKT
NDLDFSTSSLSRSKVNAGMGNSGITTELTLKYIITNVTTLETGISSVNAGQDVNIIITYKTSL

FIGURE 3179

TTGAACTCCTGGAGCCCGTCACCCAGGAAACCGGCCGCAATCGCCGGCCGACCTGAAGCTGGTTTCATGGCAGCC
TCAAAGAAGGCAGTTTTGGGGCCATTGGTGGGGGCGGTGGACCAGGGCACCAGTTCGACGCGCTTTTTGGTTTTC
AATTCAAAAACAGCTGAACTACTTAGTCATCATCAAGTAGAAATAAAACAAGAGTTCCCAAGAGAAGGATGGGTG
GAACAGGACCCTAAGGAAATTCTACATTCTGTCTATGAGTGTATAGAGAAAACATGTGAGAAACTTGGACAGCTC
AATATTGATATTTCCAACATAAAAGCTATTGGTGTCAGCAACCAGAGGGAAACCACTGTAGTCTGGGACAAGATA
ACTGGAGAGCCTCTCTACAATGCTGTGGTGTGGCTTGATCTAAGAACCCAGTCTACCGTTGAGAGTCTTAGTAAA
AGAATTCCAGGAAATAATAACTTTGTCAAGTCCAAGACAGGCCTTCCACTTAGCACTTACTTCAGTGCAGTGAAA
CTTCGTTGGCTCCTTGACAATGTGAGAAAAGTTCAAAAGGCCGTTGAAGAAAAACGAGCTCTTTTTGGGACTATT
GATTCATGGCTTATTTGGAGTTTGACAGGAGGAGTCAATGGAGGTGTCCACTGTACAGATGTAACAAATGCAAGT
AGGACTATGCTTTTCAACATTCATTCTTTGGAATGGGATAAACAACTCTGCGAATTTTTTGGAATTCCAATGGAA
ATTCTTCCAAATGTCCGGAGTTCTTCTGAGATCTATGGCCTAATGAAAGCTGGGGCCTTGGAAGGTGTGCCAATA
TCTGGGTGTTTAGGGGACCAGTCTGCTGCATTGGTGGGACAAATGTGCTTCCAGATTGGACAAGCCAAAAATACG
TATGGAACAGGATGTTTCTTACTATGTAATACAGGCCATAAGTGTGTATTTTCTGATCATGGCCTTCTCACCACA
GTGGCTTACAAACTTGGCAGAGACAAACCAGTATATTATGCTTTGGAAGGTTCTGTAGCTATAGCTGGTGCTGTT
ATTCGCTGGCTAAGAGACAATCTTGGAATTATAAAGACCTCAGAAGAAATTGAAAAACTTGCTAAAGAAGTAGGT
ACTTCTTATGGCTGCTACTTCGTCCCAGCATTTTCGGGGTTATATGCACCTTATTGGGAGCCCAGCGCAAGAGGG
ATAATCTGTGGACTCACTCAGTTCACCAATAAATGCCATATTGCTTTTGCTGCATTAGAAGCTGTTTGTTTCCAA
ACTCGAGAGATTTTGGATGCCATGAATCGAGACTGTGGAATTCCACTCAGTCATTTGCAGGTAGATGGAGGAATG
ACCAGCAACAAAATTCTTATGCAGCTACAAGCAGACATTCTGTATATACCAGTAGTGAAGCCCTCAATGCCCGAA
ACCACTGCACTGGGTGCGGCTATGGCGGCAGGGGCTGCAGAAGGAGTCGGCGTATGGAGTCTCGAACCCGAGGAT
TTGTCTGCCGTCACGATGGAGCGGTTTGAACCTCAGATTAATGCGGAGGAAAGTGAAATTCGTTATTCTACATGG
AAGAAAGCTGTGATGAAGTCAATGGGTTGGGTTACAACTCAATCTCCAGAAAGTGGTATTCCATAAAACCTACCA
ACTCATGGATTCCCAAGATGTGAGCTTTTTACATAATGAAAGAACCCAGCAATTCTGTCTCTTAATGCAATGACA
CTATTCATAGACTTTGATTTTATTTATAAGCCACTTGCTGCATGACCCTCCAAGTAGACCTGTGGCTTAAAATAA
AGAAAATGCAGCAAAAAGAATGCTATAGAAATATTTGGTGGTTTTTTTTTTTTAAACATCCACAGTTAAGGTTG
GGCCAGCTACCTTTGGGGGTGACCCCCCCCATTGCCATAACATCCTGCTCCATTCCCTCTAAGATGTAGGAAGAA
TTCGGATCCTTACCATTGGAATCTTCCATCGAACATACTCAAACACTTTTGGGCCAGGATTTGAGTCTCTGCATG
ACATATACTTGATTAAAAGGTTATTACTAACCTGTTAAAAATC

FIGURE 3180

MAASKKAVLGPLVGAVDQGTSSTRFLVFNSKTAELLSHHQVEIKQEFPREGWVEQDPKEILHSVYECIEKTCEKL
GQLNIDISNIKAIGVSNQRETTVVWDKITGEPLYNAVVWLDLRTQSTVESLSKRIPGNNNFVKSKTGLPLSTYFS
AVKLRWLLDNVRKVQKAVEEKRALFGTIDSWLIWSLTGGVNGGVHCTDVTNASRTMLFNIHSLEWDKQLCEFFGI
PMEILPNVRSSSEIYGLMKAGALEGVPISGCLGDQSAALVGQMCFQIGQAKNTYGTGCFLLCNTGHKCVFSDHGL
LTTVAYKLGRDKPVYYALEGSVAIAGAVIRWLRDNLGIIKTSEEIEKLAKEVGTSYGCYFVPAFSGLYAPYWEPS
ARGIICGLTQFTNKCHIAFAALEAVCFQTREILDAMNRDCGIPLSHLQVDGGMTSNKILMQLQADILYIPVVKPS
MPETTALGAAMAAGAAEGVGVWSLEPEDLSAVTMERFEPQINAEESEIRYSTWKKAVMKSMGWVTTQSPESGIP

FIGURE 3181

GTCAGGGATCCTAGGGGGTTCCGTGACTCTCCCCCTAAACATCTCAGTAGACACAGAGATTGAGAACGTCATCTG
GATTGGTCCCAAAAATGCTCTTGCTTTCGCACGTCCCAAAGAAAATGTAACCATTATGGTCAAAAGCTACCTGGG
CCGACTAGACATCACCAAGTGGAGTTACTCCCTGTGCATCAGCAATCTGACTCTGAATGATGCAGGATCCTACAA
AGCCCAGATAAACCAAAGGAATTTTGAAGTCACCACTGAGGAGGAATTCACCCTGTTCGTCTATGAGCAGCTGCA
GGAGCCCCAAGTCACCATGAAGTCTGTGAAGGTGTCTGAGAACTTCTCCTGTAACATCACTCTAATGTGCTCCGT
GAAGGGGGCAGAGAAAAGTGTTCTGTACAGCTGGACCCCAAGGGAACCCCATGCTTCTGAGTCCAATGGAGGCTC
CATTCTTACCGTCTCCCGAACACCATGTGACCCAGACCTGCCATACATCTGCACAGCCCAGAACCCCGTCAGCCA
GAGAAGCTCCCTCCCTGTCCATGTTGGGCAGTTCTGTACAGATCCAGGAGCCTCCAGAGGAGGAACAACGGGGGA
GACTGTGGTAGGGGTCCTGGGAGAGCCAGTCACCCTGCCACTTGCACTCCCAGCCTGCCGGGACACAGAGAAGGT
TGTCTGGTTGTTTAACACATCCATCATTAGCAAAGAGAGGGAAGAAGCAGCAACGGCAGATCCACTCATTAAATC
CAGGGATCCTTACAAGAACAGGGTGTGGGTCTCCAGCCAGGACTGCTCCCTGAAGATCAGCCAGCTGAAGATAGA
GGACGCCGGCCCCTACCATGCCTACGTGTGCTCAGAGGCCTCCAGCGTCACCAGCATGACACATGTCACCCTGCT
CATCTACCGACCTGAGAGAAACACAAAGCTTTGGATTGGGTTGTTCCTGATGGTTTGCCTTCTGTGCGTTGGGAT
CTTCAGCTGGTGCATTTGGAAGCGAAAAGGACGGTGTTCAGTCCCAGCCTTCTGTTCCAGCCAAGCTGAGGCCCC
AGCGGATACACCAGGATATGAGAAGCTGGACACTCCCCTCAGACAGCCCATCAGTGGAAGATATGAGGTATTTGA
CCAGGTCACTCAGGAGGGCGCTGGACATGACCCAGCCCCTGAGGGCCAAGCAGACTATGATCCCGTCACTCCATA
TGTCACGGAAGTTGAGTCTGTGGTTGGAGAGAACACCATGTATGCACAAGTGTTCAACTTACAGGGAAAGACCCC
AGTTTCTCAGAAGGAAGAGAGCTCAGCCACAATCTACTGCTCCATACGGAAACCTCAGGTGGTGCCACCACCACA
ACAGAATGATCTTGAGATTCCTGAAAGTCCTACCTATGAAAATTTCACCTGAAAGGAAAAGCAGCTGCTGCCTCT
CTCCTGGGACCGTGGGGTTGGAAAGTCAGCTGGACCTCATGGGGCCTGGGGCTCACAGACAGAAGCACCTCAGAA
TTTCCTTCAGTGCCTCAGAGATGCCTGGATGTGGCCCCTCCCCCTCCTTCTCACCCTTAAGGACTCCCAAACCCA
TTAATAGTTCAGACACAGGCTCCTTCTTGGAGCCTATGGGCTTCAGATGTCTTTGCCCCATTTGTCACCTCGCAC
ACTTATAGCGTTTCCTCCTCGAAATTCTACCAAGACTGGTCAAATGTTGCTGAGGGGCCTGGACCAGCTGTCCTT
TACACCACCTTCTCAACACTGCTGAAAAGAACCCAAGAGAATTGTCACACATGACACAAGATGTACATAATATCA
TGCTCACTGCAGTGTTATTTAAAATAAAAGGCAGGAAATAAACAAAA

FIGURE 3182

MVKSYLGRLDITKWSYSLCISNLTLNDAGSYKAQINQRNFEVTTEEEFTLFVYEQLQEPQVTMKSVKVSENFSCN
ITLMCSVKGAEKSVLYSWTPREPHASESNGGSILTVSRTPCDPDLPYICTAQNPVSQRSSLPVHVGQFCTDPGAS
RGGTTGETVVGVLGEPVTLPLALPACRDTEKVVWLFNTSIISKEREEAATADPLIKSRDPYKNRVWVSSQDCSLK
ISQLKIEDAGPYHAYVCSEASSVTSMTHVTLLIYRPERNTKLWIGLFLMVCLLCVGIFSWCIWKRKGRCSVPAFC
SSQAEAPADTPGYEKLDTPLRQPISGRYEVFDQVTQEGAGHDPAPEGQADYDPVTPYVTEVESVVGENTMYAQVF
NLQGKTPVSQKEESSATIYCSIRKPQVVPPPQQNDLEIPESPTYENFT

FIGURE 3183

CAGCTCAATATTGATATTTCCAACATAAAAGCTATTGGTGTCAGCAACCAGAGGGAAACCACTGTAGTCTGGGAC
AAGATAACTGGAGAGCCTCTCTACAATGCTGTGGTGTGGCTTGATCTAAGAACCCAGTCTACCGTTGAGAGTCTT
AGTAAAAGAATTCCAGGAAATAATAACTTTGTCAAGTCCAAGACAGGCCTTCCACTTAGCACTTACTTCAGTGCA
GTGAAACTTCGTTGGCTCCTTGACAATGTGAGAAAAGTTCAAAAGGCCGTTGAAGAAAAACGAGCTCTTTTTGGG
ACTATTGATTCATGGCTTATTTGGAGTTTGACAGGAGGAGTCAATGGAGGTGTCCACTGTACAGATGTAACAATG
CAAGTAGGACTATGCTTTTCAACATGTCATTCTTTGGAATGGGATAAACAACTCTGCGAATTTTTTGGAATTCCA
ATGGAAATTCTTCCAAATGTCCGGAGTTCTTCTGAGATCTATGGCCTAATGAAAATCTCTCATAGCGTGAAAGCT
GGGGCCTTGGAAGGTGTGCCAATATCTGGGTGTTTAGGGGACCAGTCTGCTGCATTGGTGGGACAAATGTGCTTC
CAGATTGGACAAGCCAAAAATACGTATGGAACAGGATGTTTCTTACTATGTAATACAGGCCATAAGTGTGTATTT
TCTGATCATGGCCTTCTCACCACAGTGGCTTACAAACTTGGCAGAGACAAACCAGTATATTATGCTTTGGAAGGT
TCTGTAGCTATAGCTGGTGCTGTTATTCGCTGGCTAAGAGACAATCTTGGAATTATAAAGACCTCAGAAGAAATT
GAAAAACTTGCTAAAGAAGTAGGTACTTCTTATGGCTGCTACTTCGTCCCAGCATTTTCGGGGTTATATGCACCT
TATTGGGAGCCCAGCGCAAGAGGGATAATCTGTGGACTCACTCAGTTCACCAATAAATGCCATATTGCTTTTGCT
GCATTAGAAGCTGTTTGTTTCCAAACTCGAGAGATTTTGGATGCCATGAATCGAGACTGTGGAATTCCACTCAGT
CATTTGCAGGTAGATGGAGGAATGACCAGCAACAAAATTCTTATGCAGCTACAAGCAGACATTCTGTATATACCA
GTAGTGAAGCCCTCAATGCCCGAAACCACTGCACTGGGTCGGCTATGGCGGCAGGGGCTGCAGAAGGAGTCGGCG
TATGGAGTCTCGAACCCGAGGATTTGTCTGCCGTCACGATGGAGCGGTTTGAACCTCAGATTAATGCGGAGGAAA
GTGAAATTCGTTATTCTACATGGAAGAAAGCTGTGATGAAGTCAATGGGTTGGGT

FIGURE 3184

GGCCCCTCGAGCCTCGAACCGGAACCTCCAAATCCGAGACGCTCTGCTTATGAGGACCTCGAAATATGCCGGCCA
GTGAAAAAAATCTTATGGCTTTGAGGGCTTTTGGTTGGCCAGGGGCAGTAAAAATCTCGGAGAGCTGACACCAAGT
CCTCCCCTGCCACGTAGCAGTGGTAAAGTCCGAAGCTCAAATTCCGAGAATTGAGCTCTGTTGATTCTTAGAACT
GGGGTTCTTAGAAGTGGTGATGCAAGAAGTTTCTAGGAAAGGCCGGACACCAGGTTTTGAGCAAAATTTTGGACT
GTGAAGCAAGGCATTGGTGAAGACAAA**ATG**GCCTCGCCGGCTGACAGCTGTATCCAGTTCACCCGCCATGCCAGT
GATGTTCTTCTCAACCTTAATCGTCTCCGGAGTCGAGACATCTTGACTGATGTTGTCATTGTTGTGAGCCGTGAG
CAGTTTAGAGCCCATAAAACGGTCCTCATGGCCTGCAGTGGCCTGTTCTATAGCATCTTTACAGACCAGTTGAAA
TGCAACCTTAGTGTGATCAATCTAGATCCTGAGATCAACCCTGAGGGATTCTGCATCCTCCTGGACTTCATGTAC
ACATCTCGGCTCAATTTGCGGGAGGGCAACATCATGGCTGTGATGGCCACGGCTATGTACCTGCAGATGGAGCAT
GTTGTGGACACTTGCCGGAAGTTTATTAAGGCCAGTGAAGCAGAGATGGTTTCTGCCATCAAGCCTCCTCGTGAA
GAGTTCCTCAACAGCCGGATGCTGATGCCCCAAGACATCATGGCCTATCGGGGTCGTGAGGTGGTGGAGAACAAC
CTGCCACTGAGGAGCGCCCCTGGGTGTGAGAGCAGAGCCTTTGCCCCCAGCCTGTACAGTGGCCTGTCCACACCG
CCAGCCTCTTATTCCATGTACAGCCACCTCCCTGTCAGCAGCCTCCTCTTCTCCGATGAGGAGTTTCGGGATGTC
CGGATGCCTGTGGCCAACCCCTTCCCCAAGGAGCGGGCACTCCCATGTGATAGTGCCAGGCCAGTCCCTGGTGAG
TACAGCCGGCCGACTTTGGAGGTGTCCCCCAATGTGTGCCACAGCAATATCTATTCACCCAAGGAAACAATCCCA
GAAGAGGCACGAAGTGATATGCACTACAGTGTGGCTGAGGGCCTCAAACCTGCTGCCCCCTCAGCCCGAAATGCC
CCCTACTTCCCTTGTGACAAGGCCAGCAAAGAAGAAGAGAGACCCTCCTCGGAAGATGAGATTGCCCTGCATTTC
GAGCCCCCCAATGCACCCCTGAACCGGAAGGGTCTGGTTAGTCCACAGAGCCCCCAGAAATCTGACTGCCAGCCC
AACTCGCCCACAGAGGCCTGCAGCAGTAAGAATGCCTGCATCCTCCAGGCTTCTGGCTCCCCTCCAGCCAAGAGC
CCCACTGACCCCAAAGCCTGCAACTGGAAGAAATACAAGTTCATCGTGCTCAACAGCCTCAACCAGAATGCCAAA
CCAGGGGGGCCTGAGCAGGCTGAGCTGGGCCGCCTTTCCCCACGAGCCTACACGGCCCCACCTGCCTGCCAGCCA
CCCATGGAGCCTGAGAACCTTGACCTCCAGTCCCCAACCAAGCTGAGTGCCAGCGGGGAGGACTCCACCATCCCA
CAAGCCAGCCGGCTCAATAACATCGTTAACAGGTCCATGACGGGCTCTCCCCGCAGCAGCAGCGAGAGCCACTCA
CCACTCTACATGCACCCCCCGAAGTGCACGTCCTGCGGCTCTCAGTCCCCACAGCATGCAGAGATGTGCCTCCAC
ACCGCTGGCCCCACGTTCGCTGAGGAGATGGGAGAGACCCAGTCTGAGTACTCAGATTCTAGCTGTGAGAACGGG
GCCTTCTTCTGCAATGAGTGTGACTGCCGCTTCTCTGAGGAGGCCTCACTCAAGAGGCACACGCTGCAGACCCAC
AGTGACAAACCCTACAAGTGTGACCGCTGCCAGGCCTCCTTCCGCTACAAGGGCAACCTCGCCAGCCACAAGACC
GTCCATACCGGTGAGAAACCCTATCGTTGCAACATCTGTGGGGCCCAGTTCAACCGGCCAGCCAACCTGAAAACC
CACACTCGAATTCACTCTGGAGAGAAGCCCTACAAATGCGAAACCTGCGGAGCCAGATTTGTACAGGTGGCCCAC
CTCCGTGCCCATGTGCTTATCCACACTGGTGAGAAGCCCTATCCCTGTGAAATCTGTGGCACCCGTTTCCGGCAC
CTTCAGACTCTGAAGAGCCACCTGCGAATCCACACAGGAGAGAAACCTTACCATTGTGAGAAGTGTAACCTGCAT
TTCCGTCACAAAAGCCAGCTGCGACTTCACTTGCGCCAGAAGCATGGCGCCATCACCAACACCAAGGTGCAATAC
CGCGTGTCAGCCACTGACCTGCCTCCGGAGCTCCCCAAAGCCTGC**TGA**AGCATGGAGTGTTGATGCTTTCGTCTC
CAGCCCCTTCTCAGAATCTACCCAAAGGATACTGTAACACTTTACAATGTTCATCCCATGATGTAGTGCCTCTTT
CATCCACTAGTGCAAATCATAGCTGGGGGTTGGGGGTGGTGGGGGTCGGGGCCTGGGGGACTGGGAGCCGCAGCA
GCTCCCCCTCCCCCACTGCCATAAAACATTAAGAAAATCATATTGCTTCTTCTCCTATGTGTAAGGTGAACCATG
TCAGCAAAAAGCAAAATCATTTTATATGTCAAAGCAGGGGAGTATGCAAAAGTTCTGACTTGACTTTAGTCTGCA
AAATGAGGAATGTATATGTTTTGTGGGAACAGATGTTTCTTTTGTATGTAAATGTGCATTCTTTTAAAAGACAAG
ACTTCAGTATGTTGTCAAAGAGAGGGCTTTAATTTTTTTAACCAAAGGTGAAGGAATATATGGCAGAGTTGTAAA
TATATAAATATATATATATATAAAATAAATATATATAAACCTAACAAAGATATATTAAAAATATAAAACTGCGTT
AAAGGCTCGATTTTGTATCTGCAGGCAGACACGGATCTGAGAATCTTTATTGAGAAAGAGCACTTAAGAGAATAT
TTTAAGTATTGCATCTGTATAAGTAAGAAAATATTTTGTCTAAAATGCCTCAGTGTATTTGTATTTTTTTGCAAG
TGAAGGTTTACAATTTACAAAGTGTGTATTAAAAAAAACCCAAAGAACCCAAAAATCTGCAGAAGGAAAAATGTG
TAATTTTGTTCTAGTTTTCAGTTTGTATATACCCGTACAACGTGTCCTCACGGTGCCTTTTTTCACGGAAGTTTT
CAATGATGGGCGAGCGTGCACCATCCCTTTTTGAAGTGTAGGCAGACACAGGGACTTGAAGTTGTTACTAACTAA
ACTCTCTTTGGGAATGTTTGTCTCATCCCATTCTGCGTCATGCTTGTGTGATAACTACTCCGGAGACAGGGTTTG
GCTGTGTCTAAACTGCATTACCGCGTTGTAAAAAATAGCTGTACCAATATAAGAATAAAATGTTGGAAAGTCGCA
AAAAAAAAAAA

FIGURE 3185

MASPADSCIQFTRHASDVLLNLNRLRSRDILTDVVIVVSREQFRAHKTVLMACSGLFYSIFTDQLKCNLSVINLD
PEINPEGFCILLDFMYTSRLNLREGNIMAVMATAMYLQMEHVVDTCRKFIKASEAEMVSAIKPPREEFLNSRMLM
PQDIMAYRGREVVENNLPLRSAPGCESRAFAPSLYSGLSTPPASYSMYSHLPVSSLLFSDEEFRDVRMPVANPFP
KERALPCDSARPVPGEYSRPTLEVSPNVCHSNIYSPKETIPEEARSDMHYSVAEGLKPAAPSARNAPYFPCDKAS
KEEERPSSEDEIALHFEPPNAPLNRKGLVSPQSPQKSDCQPNSPTEACSSKNACILQASGSPPAKSPTDPKACNW
KKYKFIVLNSLNQNAKPGGPEQAELGRLSPRAYTAPPACQPPMEPENLDLQSPTKLSASGEDSTIPQASRLNNIV
NRSMTGSPRSSSESHSPLYMHPPKCTSCGSQSPQHAEMCLHTAGPTFAEEMGETQSEYSDSSCENGAFFCNECDC
RFSEEASLKRHTLQTHSDKPYKCDRCQASFRYKGNLASHKTVHTGEKPYRCNICGAQFNRPANLKTHTRIHSGEK
PYKCETCGARFVQVAHLRAHVLIHTGEKPYPCEICGTRFRHLQTLKSHLRIHTGEKPYHCEKCNLHFRHKSQLRL
HLRQKHGAITNTKVQYRVSATDLPPELPKAC

FIGURE 3186

AAGAACCAAATGTTATAAATATTTGCTGAAGTTTATACATTTTAATCTGCATTAAGGTAATGGTTAGTTGGTCAA
TGCTGCCTCTGCCTCAGTCTGCAGCGAGAACATTGTGTTTTCATTTGGTAAATACAGTTGAGCATCCACCGGNGT
NNCAAGTGGCTGGTATTAGGTGCTAAGGATGCAGGGGTGAACAAAACAGGCCCCTGCCTCCATGCAATTCTCATT
CTCTGGGTGGCACAGTTTTATGCAAGTTATCACATGTGAAAGAATTTATAGTTTTTATTATGCAAGTTTTCAAAT
AAATCCAATTGCTGTTATCTTTTGTTTTTCATGGAATATCTCGCATCTCAGAACACAGTTTGGGAATCATATTTT
ATTTAGTGTTTTCAGATGCTATCTATTATATCTAAGATATTTCACATTTAGCCATTCGTTTTATAAAAAACTCCA
GGCAAACTCAGCTGGACTTTTCTTGCTTTAATAACAGCTTTATTGAGGATACAATTCACATATCTACGAAATTCT
TTTTAAAAATTTTACACGTTCAGGCCGGGCGCGGTGGCTCATGCC

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FIGURE 3187

MQFSFSGWHSFMQVITCERIYSFYYASFQINPIAVIFCFSWNISHLRTQFGNHILFSVFRCYLLYLRYFTFSHSF
YKKLQANSAGLFLLNNSFIEDTIHISTKFFLKILHVQAGRGGSC

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FIGURE 3188

GACAGAAGGAATGGAGACCCTCTTGGGCCTGCTTATCCTTTGGCTGCAGCTGCAATGGGTGAGCAGCAAACAGGA
GGTAACACAGATTCCTGCAGCTCTGAGTGTCCCAGAAGGAGAAAACTTGGTTCTCAACTGCAGTTTCACTGATAG
CGCTATTTACAACCTCCAGTGGTTTAGGCAGGACCCTGGGAAAGGTCTCACATCTCTGTTGCTTATTCAGTCAAG
TCAGAGAGAGXAAACAAGTGGAAGACTTAATGCCCCGCTGGATAAATCATCAGGACGTAGTACTTTATACATTGC
AGCTTCTCAGCCTGGTGACTCAGCCACCTACCTCTGTGCTGTGGTTTCGGATTCCGGGTATGCACTCAACTCGGC
AAAGGCACCTCGCTGTTGGTCAC

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FIGURE 3189

METLLGLLILWLQLQWVSSKQEVTQIPAALSVPEGENLVLNCSFTDSAIYNLQWFRQDPGKGLTSLLLIQSSQRE
XTSGRLNAPLDKSSGRSTLYIAASQPGDSATYLCAVVSDSGYALNSAKAPRCW

FIGURE 3190

GAGCAGCGCGGCCTGACGGGACCAAGGCGGCGGGAGTCTGCGGTCGTTCCCTCGGCTGTGGACCGGGCGGCACGC
ACGCGGTGCAGGGTAACATGGCGGATGCGGAAGTAATTATTTTGCCAAAGAAACATAAGAAGAAAAAGGAGCGGA
AGTCATTGCCAGAAGAAGATGTAGCCGAAATACAACACGCTGAAGAATTTCTTATCAAACCTGAATCCAAAGTTG
CTAAGTTGGACACGTCTCAGTGGCCCCTTTTGCTAAAGAATTTTGATAAGCTGAATGTAAGGACAACACACTATA
CACCTCTTGCATGTGGTTCAAATCCTCTGAAGAGAGAGATTGGGGACTATATCAGGACAGGTTTCATTAATCTTG
ACAAGCCCTCTAACCCCTCTTCCCATGAGGTGGTAGCCTGGATTCGACGGATACTTCGGGTGGAGAAGACAGGGC
ACAGTGGTACTCTGGATCCCAAGGTGACTGGTTGTTTAATCGTGTGCATAGAACGAGCCACTCGCTTGGTGAAGT
CACAACAGAGTGCAGGCAAAGAGTATGTGGGGATTGTCCGGCTGCACAATGCTATTGAAGGGGGGACCCAGCTTT
CTAGGGCCCTAGAAACTCTGACAGGTGCCTTATTCCAGCGACCCCCACTTATTGCTGCAGTAAAGAGGCAGCTCC
GAGTGAGGACCATCTACGAGAGCAAAATGATTGAATACGATCCTGAAAGAAGATTAGGAATCTTTTGGGTGAGTT
GTGAGGCTGGCACCTACATTCGGACATTATGTGTGCACCTTGGTTTGTTATTGGGAGTTGGTGGTCAGATGCAGG
AGCTTCGGAGGGTTCGTTCTGGAGTCATGAGTGAAAAGGACCACATGGTGACAATGCATGATGTGCTTGATGCTC
AGTGGCTGTATGATAACCACAAGGATGAGAGTTACCTGCGGCGAGTTGTTTACCCTTTGGAAAAGCTGTTGACAT
CTCATAAACGGCTGGTTATGAAAGACAGTGCAGTAAATGCCATCTGCTATGGGGCCAAGATTATGCTTCCAGGTG
TTCTTCGATATGAGGACGGCATTGAGGTCAATCAGGAGATTGTGGTTATCACCACCAAAGGAGAAGCAATCTGCA
TGGCTATTGCATTAATGACCACAGCGGTCATCTCTACCTGCGACCATGGTATAGTAGCCAAGATCAAGAGAGTGA
TCATGGAGAGAGACACTTACCCTCGGAAGTGGGGTTTAGGTCCAAAGGCAAGTCAGAAGAAGCTGATGATCAAGC
AGGGCCTTCTGGACAAGCATGGGAAGCCCACAGACAGCACACCTGCCACCTGGAAGCAGGAGTATGTTGACTACA
GTGAGTCTGCCAAAAAAGAGGTGGTTGCTGAAGTGGTAAAAGCCCCGCAGGTAGTTGCCGAAGCAGCAAAAACTG
CGAAGCGGAAGCGAGAGAGTGAGAGTGAAAGTGACGAGACTCCTCCAGCAGCTCCTCAGTTGATCAAGAAGGAAA
AGAAGAAGAGTAAGAAGGACAAGAAGGCCAAAGCTGGTCTGGAGAGCGGGGCCGAGCCTGGAGATGGGGACAGTG
ATACCACCAAGAAGAAGAAGAAGAAGAAGAAAGCAAAAGAGGTAGAATTGGTTTCTGAGTAGTGAAGGCCACTTG
AAGCTGGAGGAGAAACTAAAGCCTTATTGAGAAAACATGTTATAGATCCTTTTGTTGCTGAGAGAGTGGAACATA
GGTCCTAGACAGGGTGAAGAGTTCTGGCACATTTTAGCTGCTACTTTGAGACCTCGGTGATGTTACCTGGTGTGG
TCATCCCATCTTGTCCTGTTTTAAGGATATGGGTGGTGAAAGATGAAAGAGGCAGAGTTTATCCCAATGACTTCT
CTGTTTGAGTTGGGAAGCCTCACCTTCAGACCCAGTAACTGTCCGCAGCTGTCTGCTAGTGGTTGTCTTAACATC
GTAGTCCTAGTTTGCATTTTTTAAATCCCCTCTGTTTAAAAGGTTTGTAAAACAAAAACAAAAAACTAAGTCTGC
TCAGTGAAATGCTGTAGAACCCTAAATAAGTGGTAGAAGAGTGTCACTGAATTTTGTCTCTGAATTCAGTATAAC
TGAGTTTTGTCCATGCTGGTGTCTGGGTTATAGGCCTGATGGGCCTGGTAGTTTTCCATCTTGTTCTGGCCTAGA
GGTCAGTCCTTTGCACTTCCTCAAAGCTTGTGTACAGTGCTCACCTAAATCCATCTGACTACTTGTTCCTGTGCC
CTCTTGTTTTAGGCCTCGTTTACTTTTAAAAAATGAAATTGTTCATTGCTGGGAGAAGAATGTTGTAATTTTTAC
TTATTAAAGTCAACTTGTTAAGTTTTTTATGTATTCCTGTTGGGTTTTCTTGTTGATCTCATGCTAGCAGAGCAA
AAATTGTAAAATATTTTGATTAAAAATCTAGGGACCTTTATGTCCTATTTGGAATTCGATATCAA

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FIGURE 3191

MADAEVIILPKKHKKKKERKSLPEEDVAEIQHAEEFLIKPESKVAKLDTSQWPLLLKNFDKLNVRTTHYTPLACG
SNPLKREIGDYIRTGFINLDKPSNPSSHEVVAWIRRILRVEKTGHSGTLDPKVTGCLIVCIERATRLVKSQQSAG
KEYVGIVRLHNAIEGGTQLSRALETLTGALFQRPPLIAAVKRQLRVRTIYESKMIEYDPERRLGIFWVSCEAGTY
IRTLCVHLGLLLGVGGQMQELRRVRSGVMSEKDHMVTMHDVLDAQWLYDNHKDESYLRRVVYPLEKLLTSHKRLV
MKDSAVNAICYGAKIMLPGVLRYEDGIEVNQEIVVITTKGEAICMAIALMTTAVISTCDHGIVAKIKRVIMERDT
YPRKWGLGPKASQKKLMIKQGLLDKHGKPTDSTPATWKQEYVDYSESAKKEVVAEVVKAPQVVAEAAKTAKRKRE
SESESDETPPAAPQLIKKEKKKSKKDKKAKAGLESGAEPGDGDSDTTKKKKKKKKAKEVELVSE

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FIGURE 3192A

CCGCGCGCGGCGGCCCGAGGCGGCGGCGGGGACGCGGGGACGCGAGGACGCGGCTTTGTGCAGGCGGGTCGCGGG
GCGCCCATGGCGGAGTGCGGCCGGGGGGGCGCCGCCGGCGGGGCCCTGCCCACCTCCCCGGGCCCGGCCCTCGGC
GCCAAGGGCGCCCTGAAAGCCGGAGTGGGGGAAGGCGGTGGCGGGGGAGGTCGCCTCGGCCACGGGCGGGCGCGC
TATGACAGCGGCGGGGTTTCCAACGGAGACTGCAGCCTCGGCGTGTCCGGGGACGAAGCCCGGGCTAGCCCTACC
AGGGGACCCCGCGGCGTTGCGCTCGCCCCGACCCCCAGCGCGGTCGTCTGTACCCTCCCCCGGGAGAGCAAGCCG
GGCGGCCTGCCCCGCCGGAGCAGCATCATCAAGGATGGTACAAAACAGAAGAGGGAACGGAAAAAGACAGTCTCA
TTCAGCAGCATGCCAACAGAGAAGAAGATCAGCAGTGCAAGTGATTGTATTAATTCAATGGTTGAGGGTTCAGAA
CTCAAAAAGGTTCGCTCCAACTCTAGAATTTATCATAGGTACTTTTTACTGGATGCTGACATGCAGAGCCTAAGG
TGGGAGCCATCTAAGAAGGATTCTGAGAAAGCCAAGATTGACATTAAATCCATCAAGGAAGTGAGAACAGGAAAA
AACACAGACATATTCCGCAGCAATGGCATTTCTGACCAGATATCTGAAGATTGTGCGTTTTCCGTCATATATGGA
GAGAATTATGAGTCACTGGATTTGGTTGCCAACTCCGCAGATGTTGCAAACATCTGGGTTACAGGACTGCGGTAC
CTAATTTCTTATGGAAAACATACACTTGATATGTTAGAAAGTAGCCAAGATAACATGAGGACTTCTTGGGTTTCA
CAAATGTTTAGTGAAATTGATGTAGATAACCTTGGACATATAACTCTGTGTAATGCTGTGCAATGTATCAGAAAC
CTCAATCCTGGTTTAAAAACGAGCAAAATTGAGCTTAAGTTCAAAGAATTGCATAAATCAAAGGACAAAGCTGGT
ACCGAGGTCACAAAGGAAGAATTTATTGAGGTTTTTCATGAGCTTTGTACTAGACCTGAAATTTATTTCCTTTTA
GTTCAGTTTTCAAGCAATAAAGAATTCCTTGATACCAAGGACCTTATGATGTTTCTTGAGGCAGAACAGGGTGTG
GCACATATAAATGAGGAAATAAGCCTTGAAATTATTCACAAATATGAACCATCCAAAGAGGGTCAGGAAAAGGGC
TGGCTCTCCATAGACGGGTTCACTAATTACCTTATGTCACCTGACTGTTATATATTCGATCCAGAACATAAGAAG
GTCTGTCAGGATATGAAGCAACCTCTGTCTCATTACTTTATAAACTCATCTCATAATACATACTTAATAGAGGAT
CAGTTCCGAGGTCCCTCCGACATCACAGGATATATTCGAGCTCTTAAAATGGGTTGCCGGAGTGTTGAATTAGAT
GTATGGGATGGGCCGGACAATGAACCTGTAATTTACACAGGCCACACCATGACCTCTCAGATAGTTTTCCGCAGT
GTCATTGATATTATTAACAAGTATGCATTCTTTGCTTCAGAGTATCCTCTTATCTTGTGTTTAGAAAACCACTGT
TCCATTAAACAACAGAAGGTAATGGTTCAGCACATGAAGAAACTTTTAGGAGACAAGCTCTATACAACATCACCC
AATGTTGAGGAATCTTATCTACCATCCCCAGATGTCCTGAAAGGGAAAATACTAATTAAAGCAAAGAAGCTGTCC
TCAAATTGCTCTGGGGTAGAAGGAGATGTTACTGACGAAGATGAAGGAGCAGAAATGTCTCAGAGGATGGGAAAA
GAGAACATGGAGCAACCCAATAATGTGCCTGTGAAGCGATTTCAGCTTTGTAAAGAACTGTCTGAACTGGTCAGC
ATCTGCAAATCAGTTCAGTTCAAAGAATTTCAGGTGTCGTTTCAGGTTCAGAAGTACTGGGAAGTCTGTTCCTTT
AATGAAGTGCTTGCCAGCAAGTACGCCAATGAAAATCCAGGGGACTTTGTAAATTACAACAAACGTTTTCTTGCT
AGGGTTTTTCCCAGTCCAATGAGAATTGATTCCAGTAACATGAATCCTCAAGATTTTTGGAAATGTGGTTGCCAA
ATTGTAGCCATGAACTTTCAGACACCAGGACTGATGATGGACCTGAATATTGGCTGGTTTAGGCAGAACGGAAAC
TGTGGCTATGTCCTCCGGCCAGCCATCATGAGGGAGGAGGTCTCCTTCTTCAGCGCCAATACAAAAGACTCTGTC
CCAGGGGTCTCACCTCAACTTCTTCACATTAAAATCATCAGTGGGCAGAACTTTCCCAAGCCCAAAGGATCAGGT
GCCAAAGGTGATGTGGTAGATCCTTATGTCTATGTTGAAATCCATGGAATCCCTGCTGATTGTGCAGAACAAAGG
ACAAAAACAGTGCACCAGAATGGAGACGCTCCCATTTTTGATGAAAGCTTTGAATTTCAAATCAACCTGCCTGAA
CTGGCCATGGTGCGCTTTGTAGTGCTGGATGATGACTACATTGGGGATGAATTCATCGGCCAGTACACAATTCCC
TTTGAATGTTTACAGACGGGCTACCGCCATGTCCCCCTGCAGTCCTTAACTGGAGAGGTCCTTGCACATGCTTCT
TTATTTGTCCACGTGGCTATTACTAACCGAAGAGGAGGAGGAAAGCCTCATAAAAGGGGCCTTTCTGTGAGAAAA
GGGAAGAAATCCAGGGAATATGCATCTTTGAGAACACTGTGGATTAAAACCGTGGATGAGGTATTCAAGAATGCC
CAGCCCCCTATACGGGATGCCACAGATCTGAGAGAAAACATGCAGAATGCGGTGGTGTCATTCAAGGAGCTGTGT
GGCCTCTCCTCTGTGGCCAATCTCATGCAGTGCATGTTGGCGGTGTCTCCCCGCTTTCTGGGGCCCGATAACACA
CCCCTAGTGGTCCTAAATCTCAGCGAGCAGTACCCCACAATGGAGCTGCAGGGAATTGTGCCGGAGGTTCTGAAG
AAGATCGTAACAACTTATGACATGATGATTCAGTCCCTCAAGGCGTTGATTGAAAATGCAGATGCTGTATATGAA
AAGATCGTACATTGTCAGAAGGCAGCCATGGAATTCCATGAACACTTGCACAGCATAGGCACCAAGGAAGGTTTG
AAGGAAAGAAAACTACAAAAAGCAGTGGAGAGCTTTACCTGGAATATTACCATCTTAAAGGGACAAGCAGATCTT
TTGAAATATGCTAAGAATGAGACATTGGAGAACCTGAAACAAATCCATTTTGCTGCTGTTTCATGTGGACTGAAT
AAACCAGGCACCGAAAATGCTGATGTCCAGAAGCCACGCCGGAGCTTGGAAGTCATACCCGAAAAAGCAAACGAT
GAAACTGGAGAATGAGGAAACTTACAATAAACCATTATGGAGTTTATAACTCTAGGACCAATTGTAGTCAGATGG
GACATTTGCTTTGCACTCACTAATGAGAATAATATTCGGGATTTTAAAGCACAACTGGAATAGCTAATTACAGTC

FIGURE 3192B

TATTAAAACTGTGAATGTATGTAGCAATCCTGCGTGTGAAGGCAAATAAACTCTTTAACAGGCAATTATATTGCT
GGCCAAAATATGCTATATTTGTATACAAAGACATTCTAACTCAGTTCCAGTATGAAGAAAGATTATTCACTCTAG
CTCCACTGAGAAACATTTTCCTAAGTGAAAACAATTTCTTAAGATGGAAATGGATTGGATTGTCAAATTATTATT
TATTGGAGAAAAAAACCTGATCTACACATTTTTACTTATATGGGGTTGCCAGAGTCTCTGGGTTCTAGATGATTT
TGGTGGCATGCTTGCTGAGCCATAATTACTAAAGAGAATGTAAGTGGACGGGTTCCCTGAATCCCCGGGGTCCTT
GGAGAGCCATCGAGGAGAATGTGCAATTGGACTGAAGCTCCCTGGCTGAAGATACATGCCGAGTCAGCACATGGG
TAGAGATGATGTAAAAGCAGCCAATCTGGAAACAATACATTGTAAATAGTTTTTCATTGTATGAAGTAGTGTTCA
CATTAAAAAGATGTTTTATGAT

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FIGURE 3193A

GAATTCGGCACGAGGTCACCCGGATAGGTAAAGGAAAACATGCCTGCCACACGGAAGCCAATGAGATATGGGCAT
ACAGAGGGACACACGGAGGTCTGTTTTGATGATTCTGGGAGTTTTATTGTGACTTGTGGAAGTGATGGTGATGTG
AGGATTTGGGAAGACTTGGATGATGATGATCCTAAGTTCATTAATGTTGGAGAAAAGGCATATTCATGTGCTTTG
AAGAGTGGAAAACTGGTCACTGCAGTTTCTAATAATACTATTCAAGTCCACACATTTCCTGAAGGAGTTCCAGAT
GGTATATTGACTCGCTTCACTACAAATGCAAACCATGTGGTCTTTAATGGGGATGGTACTAAAATTGCTGCTGGA
TCTAGTGATTTTCTAGTCAAAATTGTGGATGTGATGGATAGCAGCCAACAGAAAACATTTCGAGGACATGATGCC
CCTGTTTTAAGTCTTTCCTTTGATCCTAAGGACATCTTTCTGGCATCAGCTAGTTGTGATGGATCTGTCAGAGTG
TGGCAAATTTCAGATCAGACATGTGCTATTAGTTGGCCACTGCTACAAAAATGCAACGATGTGATAAATGCAAAA
TCAATCTGCAGACTTGCTTGGCAGCCAAAAAGTGGGAAGTTACTGGCAATTCCTGTGGAAAAATCTGTTAAGCTA
TATAGAAGAGAATCTTGGAGTCATCAATTTGATCTTTCAGATAATTTCATCTCTCAGACCCTCAATATAGTAACC
TGGTCTCCCTGTGGGCAATATTTAGCTGCAGGTAGTATTAATGGTCTAATCATAGTTTGGAATGTGGAAACCAAA
GACTGCATGGAAAGGGTGAAACATGAGAAAGGTTATGCAATTTGTGGTCTGGCATGGCATCCTACTTGTGGTCGA
ATATCGTATACTGATGCGGAAGGAAATCTAGGGCTTCTAGAGAATGTTTGTGACCCCAGTGGAAAGACATCAAGC
AGTAAGGTATCTAGCAGAGTGGAAAAGGATTATAATGATCTTTTTGATGGAGATGATATGAGTAATGCTGGTGAT
TTTCTAAATGACAATGCAGTTGAGATCCCTTCTTTTTCAAAAGGGATTATAAATGATGATGAGGATGATGAAGAC
CTCATGATGGCTTCAGGTCGTCCTAGACAGCGAAGTCACATCCTAGAAGATGATGAAAACTCAGTTGATATTTCA
ATGCTAAAAACTGGTTCTAGTCTTCTCAAAGAGGAGGAGGAAGATGGTCAAGAAGGCAGCATTCACAATCTACCA
CTTGTAACATCCCAAAGGCCATTTTATGATGGACCCATGCCAACTCCCCGGCAAAAGCCATTTCAGTCAGGTTCT
ACACCGTTGCATCTCACTCACAGATTCATGGTGTGGAACTCTATTGGAATTATTCGCTGCTATAATGATGAGCAA
GACAATGCCATAGATGTGGAGTTCCATGATACCTCCATACACCATGCAACACACTTATCAAACACTTTGAATTAT
ACAATAGCAGATCTTTCCCACGAAGCTATTTTGTTGGCATGTGAAAGCACTGATGAACTAGCAAGCAAGCTTCAC
TGCCTGCACTTTAGTTCTTGGGATTCAAGCAAAGAGTGGATAATAGACTTGCCTCAGAATGAGGATATTGAAGCC
ATATGTCTCGGTCAAGGATGGGCTGCTGCCGCTACTAGTGCCCTGCTTCTTCGATTGTTTACTATTGGAGGGGTT
CAAAAAGAGGTATTCAGCCTTGCTGGACCTGTGGTGTCAATGGCAGGACATGGAGAACAGCTTTTCATTGTTTAT
CACAGAGGTACAGGATTTGATGGGGATCAGTGCCTTGGAGTTCAACTGCTAGAGCTGGGGAAAAAGAAAAAACAA
ATTTTGCATGGTGACCCTCTTCCTCTTACAAGGAAATCCTACCTTGCATGGATTGGGTTTTCAGCTGAAGGTACC
CCTTGTTACGTGGATTCAGAAGGAATTGTTCGAATGCTTAACAGAGGACTTGGTAATACGTGGACTCCTATATGT
AATACAAGAGAGCACTGCAAAGGAAAATCTGATCACTACTGGGTGGTTGGTATCCATGAAAATCCCCAGCAACTA
AGGTGCATTCCTTGTAAAGGTTCTCGGTTTCCCCCAACCCTTCCACGCCCTGCTGTTGCTATATTATCCTTTAAG
CTTCCTTACTGTCAGATTGCAACAGAGAAAGGACAAATGGAGGAGCAATTTTGGCGTTCAGTTATATTTCACAAC
CACCTTGATTATTTAGCTAAAAATGGTTATGAATATGAAGAGAGCACTAAAAATCAAGCAACAAAAGAGCAACAG
GAACTTTTAATGAAAATGCTTGCGCTTTCTTGTAAACTGGAGCGAGAATTCCGTTGTGTGGAACTTGCTGATCTA
ATGACTCAAAATGCTGTGAATTTAGCCATTAAATATGCTTCTCGCTCTCGGAAATTAATACTGGCTCAAAAACTA
AGTGAACTGGCTGTAGAGAAGGCAGCCGAATTGACAGCAACCCAGGTGGAAGAGGAAGAAGAAGAAGAAGATTTC
AGAAAAAAGCTGAATGCTGGTTACAGCAATACTGCTACAGAGTGGAGCCAACCAAGGTTCAGAAATCAAGTTGAA
GAAGATGCTGAGGACAGTGGAGAAGCTGATGATGAAGAAAAACCAGAAATACATAAGCCTGGACAGAACTCGTTT
TCCAAAAGTACAAATTCCTCTGATGTTTCAGCTAAGTCAGGTGCAGTTACCTTTAGCAGCCAAGGACGAGTAAAT
CCCTTTAAGGTATCAGCCAGTTCCAAAGAACCAGCCATGTCAATGAATTCAGCACGTTCAACTAATATTTTAGAC
AATATGGGCAAATCATCCAAGAAATCCACTGCACTTAGTCGAACTACAAATAATGAAAAGTCTCCCATTATAAAG
CCTCTGATTCCAAAGCCGAAGCCTAAGCAGGCATCTGCAGCATCCTATTTCCAGAAAAGAAATTCTCAAACTAAT
AAAACTGAGGAAGTGAAAGAAGAAAATCTTAAAAATGTATTATCTGAAACCCCAGCTATATGTCCTCCTCAAAAC
ACTGAAAACCAAAGGCCAAAGACCGGGTTCCAGATGTGGTTAGAAGAAAATAGAAGTAATATTTTGTCTGACAAT
CCTGACTTTTCAGATGAAGCAGACATAATAAAAGAAGGAATGATTCGATTTAGAGTATTGTCAACTGAAGAAAGA
AAGGTGTGGGCTAACAAAGCCAAAGGAGAAACGGCAAGTGAAGGAACTGAAGCAAAGAAGCGAAAACGTGTGGTT
GATGAAAGTGATGAAACAGAAAACCAGGAAGAAAAAGCAAAAGAGAACCTGAATTTGTCTAAAAAGCAGAAACCT
TTAGATTTTTCTACAAATCAGAAACTATCAGCTTTTGCATTTAAGCAGGAGTAAAGGAAGAAAGTGACCCTAGGG
AAGTAATGGATTTTTTTTACTCATCTTTGAATATAGACTCGAGTCTTTGGGAAACTCATTATATATATATTTTTT
AAAGAGTTTGAAGCAACTGTTTGTCTTTATAAGATAATGTAGTAATTATATTGGTGTAGGTAACAGGACATATGT

FIGURE 3193B

AAAAACTATCATCTTTGCAGATTACTCTGCCTCCAAATGCAGGGCCTTTCAGAGATGCATTGTGATTGTAATTAC
TGAGTTGAAGCTCCAACCAATTTGAATTTGTTTCTTAACCTTGAAAAATCATTAAAGCCAAGGTATTAAAACCTT
TGTGCATTAATACCTTCTAGGGGTTTGGTTCATTTGGTTTTTGTCATGTGCAAGGAAGGACAATAGTCCTCTTTC
CAAGTGTGTTAGCATAGACTTCTCTATATGTTTCTACTAGACCTAGGGGATGACGTCTTTTAATAATACTGGCCC
TAAACATGTAAATAATCTTGTAGGTGAGACTTTTTCTTTTGTGTTTCGGAAATTTCCTATGTGGCTTTCAGTTGT
CTGTTTGTATAGCCTGGATTTTTTTGAGGTAAATGAAACTTTCTCATTTGTAAAAAAAAAAAAAAAAAAACTCGAG

FIGURE 3194

MPATRKPMRYGHTEGHTEVCFDDSGSFIVTCGSDGDVRIWEDLDDDDPKFINVGEKAYSCALKSGKLVTAVSNNT
IQVHTFPEGVPDGILTRFTTNANHVVFNGDGTKIAAGSSDFLVKIVDVMDSSQQKTFRGHDAPVLSLSFDPKDIF
LASASCDGSVRVWQISDQTCAISWPLLQKCNDVINAKSICRLAWQPKSGKLLAIPVEKSVKLYRRESWSHQFDLS
DNFISQTLNIVTWSPCGQYLAAGSINGLIIVWNVETKDCMERVKHEKGYAICGLAWHPTCGRISYTDAEGNLGLL
ENVCDPSGKTSSSKVSSRVEKDYNDLFDGDDMSNAGDFLNDNAVEIPSFSKGIINDDEDDEDLMMASGRPRQRSH
ILEDDENSVDISMLKTGSSLLKEEEEDGQEGSIHNLPLVTSQRPFYDGPMPTPRQKPFQSGSTPLHLTHRFMVWN
SIGIIRCYNDEQDNAIDVEFHDTSIHHATHLSNTLNYTIADLSHEAILLACESTDELASKLHCLHFSSWDSSKEW
IIDLPQNEDIEAICLGQGWAAAATSALLLRLFTIGGVQKEVFSLAGPVVSMAGHGEQLFIVYHRGTGFDGDQCLG
VQLLELGKKKKQILHGDPLPLTRKSYLAWIGFSAEGTPCYVDSEGIVRMLNRGLGNTWTPICNTREHCKGKSDHY
WVVGIHENPQQLRCIPCKGSRFPPTLPRPAVAILSFKLPYCQIATEKGQMEEQFWRSVIFHNHLDYLAKNGYEYE
ESTKNQATKEQQELLMKMLALSCKLEREFRCVELADLMTQNAVNLAIKYASRSRKLILAQKLSELAVEKAAELTA
TQVEEEEEEEDFRKKLNAGYSNTATEWSQPRFRNQVEEDAEDSGEADDEEKPEIHKPGQNSFSKSTNSSDVSAKS
GAVTFSSQGRVNPFKVSASSKEPAMSMNSARSTNILDNMGKSSKKSTALSRTTNNEKSPIIKPLIPKPKPKQASA
ASYFQKRNSQTNKTEEVKEENLKNVLSETPAICPPQNTENQRPKTGFQMWLEENRSNILSDNPDFSDEADIIKEG
MIRFRVLSTEERKVWANKAKGETASEGTEAKKRKRVVDESDETENQEEKAKENLNLSKKQKPLDFSTNQKLSAFA
FKQE

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FIGURE 3195

CTTGTCTCCCCTGGTTTGTGAAGTGCGGAAAACCAGAGGCGCAGTCATGTCGGGATTCGACGATCCTGGCATTTT
CTACAGCGACAGCTTCGGGGGCGACGCCCAGGCCGACGAGGGGCAGGCCCGCAAATCGCAGCTGCAGAGGCGCTT
CAAGGAGTTCCTGCGGCAGTACCGAGTGGGCACCGACCGCACGGGCTTCACCTTCAAATACAGGGATGAACTCAA
GCGGCATTACAACCTGGGGGAGTACTGGATTGAGGTGGAGATGGAGGATCTGGCCAGCTTTGATGAGGACCTGGC
CGACTACTTGTACAAGCAGCCAGCCGAGCACCTGCAGCTGCTGGAGGAAGCTGCCAAGGAGGTAGCTGATGAGGT
GACCCGGCCCCGGCCTTCTGGGGAGGAGGTGCTCCAGGACATCCAGGTCATGCTCAAGTCGGACGCCAGCCCTTC
CAGCATTCGTAGCCTGAAGTCGGACATGATGTCACACCTGGTGAAGATCCCTGGCATCATCATCGCGGCCTCTGC
GGTCCGTGCCAAGGCCACCCGCATCTCTATCCAGTGCCGCAGCTGCCGCAACACCCTCACCAACATTGCCATGCG
CCCTGGCCTCGAGGGCTATGCCCTGCCCAGGAAGTGCAACACAGATCAGGCTGGGCGCCCCAAATGCCCATTGGA
CCCGTACTTCATCATGCCCGACAAATGCAAATGCGTGGACTTCCAGACCCTGAAGCTGCAGGAGCTGCCTGATGC
AGTCCCCCACGGGGAGATGCCCAGACACATGCAGCTCTACTGCGACAGGTACCTGTGTGACAAGGTCGTCCCTGG
GAACAGGGTTACCATCATGGGCATCTACTCCATCAAGAAGTTTGGCCTGACCACCAGCAGGGGCCGTGACAGGGT
GGGCGTGGGCATCCGAAGCTCCTACATCCGTGTCCTGGGCATCCAGGTGGACACAGATGGCTCTGGCCGCAGCTT
TGCTGGGGCCGTGAGCCCCCAGGAGGAGGAGGAGTTCCGTCGCCTGGCTGCCCTCCCAAATGTCTATGAGGTCAT
CTCCAAGAGCATCGCCCCCTCCATCTTTGGGGGCACAGACATGAAGAAGGCCATTGCCTGCCTGCTCTTTGGGGG
CTCCCGAAAGAGGCTCCCTGATGGACTTACTCGCCGAGGAGACATCAACCTGCTGATGCTAGGGGACCCTGGGAC
AGCCAAGTCCCAGCTTCTGAAGTTTGTGGAGAAGTGTTCTCCCATTGGGGTATACACGTCTGGGAAAGGCAGCAG
CGCAGCTGGACTGACAGCCTCGGTGATGAGGGACCCTTCGTCCCGGAATTTCATCATGGAGGGCGGAGCCATGGT
CCTGGCCGATGGTGGGGTCGTCTGTATTGACGAGTTTGACAAGATGCGAGAAGATGACCGTGTGGCAATCCACGA
AGCCATGGAGCAGCAGACCATCTCTATCGCCAAGGCTGGGATCACCACCACCCTGAACTCCCGCTGCTCCGTCCT
GGCTGCTGCCAACTCAGTGTTCGGCCGCTGGGATGAGACGAAGGGGGAGGACAACATTGACTTCATGCCCACCAT
CTTGTCGCGCTTCGACATGATCTTCATCGTCAAGGATGAGCACAATGAGGAGAGGGATGTGATGCTGGCCAAGCA
TGTCATCACTCTGCACGTGAGCGCACTGACACAGACACAGGCTGTGGAGGGCGAGATTGACCTGGCCAAGCTGAA
GAAGTTTATTGCCTACTGCCGAGTGAAATGTGGCCCCCGGCTGTCAGCAGAGGCTGCAGAGAAACTGAAGAACCG
CTACATCATCATGCGGAGCGGGGCCCGTCAGCACGAGAGGGACAGTGACCGCCGCTCCAGCATCCCCATCACTGT
GCGGCAGCTGGAGGCCATTGTGCGCATCGCGGAAGCCCTCAGCAAGATGAAGCTGCAGCCCTTCGCCACAGAGGC
AGATGTGGAGGAGGCCCTGCGGCTCTTCCAAGTGTCCACGTTGGATGCTGCCTTGTCCGGTACCCTGTCAGGGGT
GGAGGGCTTCACCAGCCAGGAGGACCAGGAGATGCTGAGCCGCATCGAGAAGCAGCTCAAGCGCCGCTTTGCCAT
TGGCTCCCAGGTGTCTGAGCACAGCATCATCAAGGACTTCACCAAGCAGAAATACCCGGAGCACGCCATCCACAA
GGTGCTGCAGCTCATGCTGCGGCGCGGCGAGATCCAGCATCGCATGCAGCGCAAGGTTCTCTACCGCCTCAAGTG
AGTCGCGCCGCCTCACTGGACTCATGGACTCGCCCACGCCTCGCCCCTCCTGCCGCTGCCTGCCATTGACAATGT
TGCTGGGACCTCTGCCTCCCCACTGCAGCCCTCGAACTTCCCAGGCACCCTCCTTTCTGCCCCAGAGGAAGGAGC
TGTAGTGTCCTGCTGCCTCTGGGCGCCCGCCTCTAGCGCGGTTCTGGGAAGTGTGCTTTTGGCATCCGTTAATAA
TAAAGCCACGGTGTGTTCAGGTAAAAAAAAAAAAAAA

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FIGURE 3196

MSGFDDPGIFYSDSFGGDAQADEGQARKSQLQRRFKEFLRQYRVGTDRTGFTFKYRDELKRHYNLGEYWIEVEME
DLASFDEDLADYLYKQPAEHLQLLEEAAKEVADEVTRPRPSGEEVLQDIQVMLKSDASPSSIRSLKSDMMSHLVK
IPGIIIAASAVRAKATRISIQCRSCRNTLTNIAMRPGLEGYALPRKCNTDQAGRPKCPLDPYFIMPDKCKCVDFQ
TLKLQELPDAVPHGEMPRHMQLYCDRYLCDKVVPGNRVTIMGIYSIKKFGLTTSRGRDRVGVGIRSSYIRVLGIQ
VDTDGSGRSFAGAVSPQEEEEFRRLAALPNVYEVISKSIAPSIFGGTDMKKAIACLLFGGSRKRLPDGLTRRGDI
NLLMLGDPGTAKSQLLKFVEKCSPIGVYTSGKGSSAAGLTASVMRDPSSRNFIMEGGAMVLADGGVVCIDEFDKM
REDDRVAIHEAMEQQTISIAKAGITTTLNSRCSVLAAANSVFGRWDETKGEDNIDFMPTILSRFDMIFIVKDEHN
EERDVMLAKHVITLHVSALTQTQAVEGEIDLAKLKKFIAYCRVKCGPRLSAEAAEKLKNRYIIMRSGARQHERDS
DRRSSIPITVRQLEAIVRIAEALSKMKLQPFATEADVEEALRLFQVSTLDAALSGTLSGVEGFTSQEDQEMLSRI
EKQLKRRFAIGSQVSEHSIIKDFTKQKYPEHAIHKVLQLMLRRGEIQHRMQRKVLYRLK

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FIGURE 3197

GCTCGCGCACGGCTCCGCGGTCCCTTTTGCCTGTCCAGCCGGCCGCCTGTCCCTGCTCCCTCCCTCCGTGAGTGT
CCGGGTTCCCTTCGCCCAGCTCTCCCACCCCTACCCGACCCCGGCGCCCGGGCTCCCAGAGGGAACTGCACTTCG
GCAGAGTTGAATGAATGAAGAGAGACGCGGAGAACTCCTAAGGAGGAGATTGGACAGGCTGGACTCCCCATTGCT
TTTCTAAAAATCTTGGAAACTTTGTCCTTCATTGAATTACGACACTGTCCACCTTTAATTTCCTCGAAAACGCCT
GTAACTCGGCTGAAGCCATGCCTTGTGTTCAGGCGCAGTATGGGTCCTCGCCTCAAGGAGCCAGCCCCGCTTCTC
AGAGCTACAGTTACCACTCTTCGGGAGAATACAGCTCCGATTTCTTAACTCCAGAGTTTGTCAAGTTTAGCATGG
ACCTCACCAACACTGAAATCACTGCCACCACTTCTCTCCCCAGCTTCAGTACCTTTATGGACAACTACAGCACAG
GCTACGACGTCAAGCCACCTTGCTTGTACCAAATGCCCCTGTCCGGACAGCAGTCCTCCATTAAGGTAGAAGACA
TTCAGATGCACAACTACCAGCAACACAGCCACCTGCCCCCCCAGTCTGAGGAGATGATGCCGCACTCCGGGTCGG
TTTACTACAAGCCCTCCTCGCCCCCGACGCCCACCACCCCGGGCTTCCAGGTGCAGCACAGCCCCATGTGGGACG
ACCCGGGATCTCTCCACAACTTCCACCAGAACTACGTGGCCACTACGCACATGATCGAGCAGAGGAAAACGCCAG
TCTCCCGCCTCTCCCTCTTCTCCTTTAAGCAATCGCCCCCTGGCACCCCGGTGTCTAGTTGCCAGATGCGCTTCG
ACGGGCCCCTGCACGTCCCCATGAACCCGGAGCCCGCCGGCAGCCACCACGTGGTGGACGGGCAGACCTTCGCTG
TGCCCAACCCCATTCGCAAGCCCGCGTCCATGGGCTTCCCGGGCCTGCAGATCGGCCACGCGTCTCAGCTGCTCG
ACACGCAGGTGCCCTCACCGCCGTCGCGGGGCTCCCCCTCCAACGAGGGGCTGTGCGCTGTGTGTGGGGACAACG
CGGCCTGCCAACACTACGGCGTGCGCACCTGTGAGGGCTGCAAAGGCTTCTTTAAGCGCACAGTGCAAAAAAATG
CAAAATACGTGTGTTTAGCAAATAAAAACTGCCCAGTGGACAAGCGTCGCCGGAATCGCTGTCAGTACTGCCGAT
TTCAGAAGTGCCTGGCTGTTGGGATGGTCAAAGAAGTGGTTCGCACAGACAGTTTAAAAGGCCGGAGAGGTCGTT
TGCCCTCGAAACCGAAGAGCCCACAGGAGCCCTCTCCCCCTTCGCCCCCGGTGAGTCTGATCAGTGCCCTCGTCA
GGGCCCATGTCGACTCCAACCCGGCTATGACCAGCCTGGACTATTCCAGGTTCCAGGCGAACCCTGACTATCAAA
TGAGTGGAGATGACACCCAGCATATCCAGCAATTCTATGATCTCCTGACTGGCTCCATGGAGATCATCCGGGGCT
GGGCAGAGAAGATCCCTGGCTTCGCAGACCTGCCCAAAGCCGACCAAGACCTGCTTTTTGAATCAGCTTTCTTAG
AACTGTTTGTCCTTCGATTAGCATACAGGTCCAACCCAGTGGAGGGTAAACTCATCTTTTGCAATGGGGTGGTCT
TGCACAGGTTGCAATGCGTTCGTGGCTTTGGGGAATGGATTGATTCCATTGTTGAATTCTCCTCCAACTTGCAGA
ATATGAACATCGACATTTCTGCCTTCTCCTGCATTGCTGCCCTGGCTATGGTCACAGAGAGACACGGGCTCAAGG
AACCCAAGAGAGTGGAAGAACTGCAAAACAAGATTGTAAATTGTCTCAAAGACCACGTGACTTTCAACAATGGGG
GGTTGAACCGCCCCAATTATTTGTCCAAACTGTTGGGGAAGCTCCCAGAACTTCGTACCCTTTGCACACAGGGGC
TACAGCGCATTTTCTACCTGAAATTGGAAGACTTGGTGCCACCGCCAGCAATAATTGACAAACTTTTCCTGGACA
CTTTACCTTTCTAAGACCTCCTCCCAAGCACTTCAAAGGAACTGGAATGATAATGGAAACTGTCAAGAGGGGGCA
AGTCACATGGGCAGAGATAGCCGTGTGAGCAGTCTCAGCTCAAGCTGCCCCCCATTTCTGTAACCCTCCTAGCCC
CCTTGATCCCTAAAGAAAACAAACAAACAAACAAAAACTGTTGCTATTTCCTAACCTGCAGGCAGAACCTGAAAG
GGCATTTTGGCTCCGGGGCATCCTGGATTTAGAACATGGACTACACACAATACAGTGGTATAAACTTTTTATTCT
CAGTTTAAAAATCAGTTTGTTGTTCAGAAGAAAGATTGCTATAAGGTATAATGGGAAATGTTTGGCCATGCTTGG
TTGTTGCAGTTCAGACAAATGTAACACACACACACATACACACACACACACACACAGAGACACATCTTAAGGGGA
CCCACAAGTATTGCCCTTTAACAAGACTTCAAAGTTTTCTGCTGTAAAGAAAGCTGTAATATATAGTAAAACTAA
ATGTTGCGTGGGTGGCATGAGTTGAAGAAGGCAAAGGCTTGTAAATTTACCCAATGCAGTTTGGCTTTTTAAATT
ATTTTGTGCCTATTTATGAATAAATATTACAAATTCTAAAAGATAAGTGTGTTTGCAAAAAAAAAAGAAAATAAAT
ACATAAAAAAAGGGACAAGCATGTTGATTCTAGGTTGAAAATGTTATAGGCACTTGCTACTTCAGTAATGTCTATA
TTATATAAATAGTATTTCAGACACTATGTAGTCTGTTAGATTTTATAAAGATTGGTAGTTATCTGAGCTTAAACA
TTTTCTCAATTGTAAAATAGGTGGGCACAAGTATTACACATCAGAAAATCCTGACAAAAGGGACACATAGTGTTT
GTAACACCGTCCAACATTCCTTGTTTGTAAGTGTTGTATGTACCGTTGATGTTGATAAAAAGAAAGTTTATATCT
TGATTATTTTGTTGTCTAAAGCTAAACAAAACTTGCATGCAGCAGCTTTTGACTGTTTCCAGAGTGCTTATAATA
TACATAACTCCCTGGAAATAACTGAGCACTTTGAATTTTTTTTATGTCTAAAATTGTCAGTTAATTTATTATTTT
GTTTGAGTAAGAATTTTAATATTGCCATATTCTGTAGTATTTTTCTTTGTATATTTCTAGTATGGCACATGATAT
GAGTCACTGCCTTTTTTTCTATGGTGTATGACAGTTAGAGATGCTGATTTTTTTTCTGATAAATTCTTTCTTTGA
GAAAGACAATTTTAATGTTTACAACAATAAACCATGTAAATGAAAAAAAAAA

FIGURE 3198

MPCVQAQYGSSPQGASPASQSYSYHSSGEYSSDFLTPEFVKFSMDLTNTEITATTSLPSFSTFMDNYSTGYDVKP
PCLYQMPLSGQQSSIKVEDIQMHNYQQHSHLPPQSEEMMPHSGSVYYKPSSPPTPTTPGFQVQHSPMWDDPGSLH
NFHQNYVATTHMIEQRKTPVSRLSLFSFKQSPPGTPVSSCQMRFDGPLHVPMNPEPAGSHHVVDGQTFAVPNPIR
KPASMGFPGLQIGHASQLLDTQVPSPPSRGSPSNEGLCAVCGDNAACQHYGVRTCEGCKGFFKRTVQKNAKYVCL
ANKNCPVDKRRRNRCQYCRFQKCLAVGMVKEVVRTDSLKGRRGRLPSKPKSPQEPSPPSPPVSLISALVRAHVDS
NPAMTSLDYSRFQANPDYQMSGDDTQHIQQFYDLLTGSMEIIRGWAEKIPGFADLPKADQDLLFESAFLELFVLR
LAYRSNPVEGKLIFCNGVVLHRLQCVRGFGEWIDSIVEFSSNLQNMNIDISAFSCIAALAMVTERHGLKEPKRVE
ELQNKIVNCLKDHVTFNNGGLNRPNYLSKLLGKLPELRTLCTQGLQRIFYLKLEDLVPPPAIIDKLFLDTLPF

FIGURE 3199

AGCCCTCCCCAACCCGGGCGTTCCCCAGCGAGGCTTCCTTCCCATCCTCCTGACCACCGGGGCTTTTCGTGAGCT
CGTCTCTGATCTCGCGCAAGAGTGACACACAGGTGTTCAAAGACGCTTCTGGGGAGTGAGGGAAGCGGTTTACGA
GTGACTTGGCTGGAGCCTCAGGGGCGGGCACTGGCACGGAACACACCCTGAGGCCAGCCCTGGCTGCCCAGGCGG
AGCTGCCTCTTCTCCCGCGGGTTGGTGGACCCGCTCAGTACGGAGTTGGGGAAGCTCTTTCACTTCGGAGGATTG
CTCAACAACC**ATG**CTGGGCATCTGGACCCTCCTACCTCTGGTTCTTACGTCTGTTGCTAGATTATCGTCCAAAAG
TGTTAATGCCCAAGTGACTGACATCAACTCCAAGGGATTGGAATTGAGGAAGACTGTTACTACAGTTGAGACTCA
GAACTTGGAAGGCCTGCATCATGATGGCCAATTCTGCCATAAGCCCTGTCCTCCAGGTGAAAGGAAAGCTAGGGA
CTGCACAGTCAATGGGGATGAACCAGACTGCGTGCCCTGCCAAGAAGGGAAGGAGTACACAGACAAAGCCCATTT
TTCTTCCAAATGCAGAAGATGTAGATTGTGTGATGAAGGACATGGCTTAGAAGTGGAAATAAACTGCACCCGGAC
CCAGAATACCAAGTGCAGATGTAAACCAAACTTTTTTTGTAACTCTACTGTATGTGAACACTGTGACCCTTGCAC
CAAATGTGAACATGGAATCATCAAGGAATGCACACTCACCAGCAACACCAAGTGCAAAGAGGAAGGATCCAGATC
TAACTTGGGGTGGCTTTGTCTTCTTCTTTTGCCAATTCCACTAATTGTTTGGGTGAAGAGAAAGGAAGTACAGAA
AACATGCAGAAAGCACAGAAAGGAAAACCAAGGTTCTCATGAATCTCCAACCTTAAATCCTGAAACAGTGGCAAT
AAATTTATCTGATGTTGACTTGAGTAAATATATCACCACTATTGCTGGAGTCATGACACTAAGTCAAGTTAAAGG
CTTTGTTCGAAAGAATGGTGTCAATGAAGCCAAAATAGATGAGATCAAGAATGACAATGTCCAAGACACAGCAGA
ACAGAAAGTTCAACTGCTTCGTAATTGGCATCAACTTCATGGAAAGAAAGAAGCGTATGACACATTGATTAAAGA
TCTCAAAAAAGCCAATCTTTGTACTCTTGCAGAGAAAATTCAGACTATCATCCTCAAGGACATTACTAGTGACTC
AGAAAATTCAAACTTCAGAAATGAAATCCAAAGCTTGGTC**TAG**AGTGAAAAACAACAAATTCAGTTCTGAGTATA
TGCAATTAGTGTTTGAAAAGATTCTTAATAGCTGGCTGTAAATACTGCTTGGTTTTTTACTGGGTACATTTTATC
ATTTATTAGCGCTGAAGAGCCAACATATTTGTAGATTTTTAATATCTCATGATTCTGCCTCCAAGGATGTTTAAA
ATCTAGTTGGGAAAACAAACTTCATCAAGAGTAAATGCAGTGGCATGCTAAGTACCCAAATAGGAGTGTATGCAG
AGGATGAAAGATTAAGATTATGCTCTGGCATCTAACATATGATTCTGTAGTATGAATGTAATCAGTGTATGTTAG
TACAAATGTCTATCCACAGGCTAACCCCACTCTATGAATCAATAGAAGAAGCTATGACCTTTTGCTGAAATATCA
GTTACTGAACAGGCAGGCCACTTTGCCTCTAAATTACCTCTGATAATTCTAGAGATTTTACCATATTTCTAAACT
TTGTTTATAACTCTGAGAAGATCATATTTATGTAAAGTATATGTATTTGAGTGCAGAATTTAAATAAGGCTCTAC
CTCAAAGACCTTTGCACAGTTTATTGGTGTCATATTATACAATATTTCAATTGTGAATTCACATAGAAAACATTA
AATTATAATGTTTGACTATTATATATGTGTATGCATTTTACTGGCTCAAAACTACCTACTTCTTTCTCAGGCATC
AAAAGCATTTTGAGCAGGAGAGTATTACTAGAGCTTTGCCACCTCTCCATTTTTGCCTTGGTGCTCATCTTAATG
GCCTAATGCACCCCCAAACATGGAAATATCACCAAAAAATACTTAATAGTCCACCAAAAGGCAAGACTGCCCTTA
GAAATTCTAGCCTGGTTTGGAGATACTAACTGCTCTCAGAGAAAGTAGCTTTGTGACATGTCATGAACCCATGTT
TGCAATCAAAGATGATAAAATAGATTCTTATTTTTCCCCCACCCCCGAAAATGTTCAATAATGTCCCATGTAAAA
CCTGCTACAAATGGCAGCTTATACATAGCAATGGTAAAATCATCATCTGGATTTAGGAATTGCTCTTGTCATACC
CCCAAGTTTCTAAGATTTAAGATTCTCCTTACTACTATCCTACGTTTAAATATCTTTGAAAGTTTGTATTAAATG
TGAATTTTAAGAAATAATATTTATATTTCTGTAAATGTAAACTGTGAAGATAGTTATAAACTGAAGCAGATACCT
GGAACCACCTAAAGAACTTCCATTTATGGAGGATTTTTTTGCCCCTTGTGTTTGGAATTATAAAATATAGGTAAA
AGTACGTAATTAAATAATGTTTTTGGTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAA

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FIGURE 3200

MLGIWTLLPLVLTSVARLSSKSVNAQVTDINSKGLELRKTVTTVETQNLEGLHHDGQFCHKPCPPGERKARDCTV
NGDEPDCVPCQEGKEYTDKAHFSSKCRRCRLCDEGHGLEVEINCTRTQNTKCRCKPNFFCNSTVCEHCDPCTKCE
HGIIKECTLTSNTKCKEEGSRSNLGWLCLLLLPIPLIVWVKRKEVQKTCRKHRKENQGSHESPTLNPETVAINLS
DVDLSKYITTIAGVMTLSQVKGFVRKNGVNEAKIDEIKNDNVQDTAEQKVQLLRNWHQLHGKKEAYDTLIKDLKK
ANLCTLAEKIQTIILKDITSDSENSNFRNEIQSLV

FIGURE 3201

CTTTCTACAAACAACCCTTCGCTGACGTGATTGGTTATGTGTATGTTGCAAAACTAATTCCTTTTTCTACATCTG
ATTCTTTCTACTTTTGTTTAGAGTTAATGCTCCTTTTATGTCACAAGTTGCTTTGCTTTTTAAATTATTTCAAAT
TGGCACTTTGGGGGCTGCCTAAGAATTGATAAGCGGGGTATGATCTGTTGATGAATCTTCCAGATTTGTGACTCC
CTGCATCCTCTGATGGCCATTTTTCATATTTGGGGTTTTGGAGGGAAGAAAGCTAACTCGCTTTCAAAATGTGTC
ATTTGCGATCTTATCTGGGAACGGTTTGAGGCTCGGGGGAACTCTGCTCTCTTGCTCTTGGCTGCCATCACTGCT
GCCATGCCCTGTTGCCTGCCTGCCTCAGGTGGGAAGGAGGTTTCCCCACCTGGGAGCAGGTGGCAGTCCCAGGTG
GTTAGGAGCCAGTGAGCAGCAGCACCTTGCATTGCCAAAATCAGAGCTGTGGGGCAGCATTTTTCCATACTTGGT
TCATTCAAACAATGTGGGGTCGTTTGCCTCTCCCTCAGGCAGAAGAGTCCAGAGCAGAGGGGGTTGTCTCCAGTG
GGTGTCTATAATTGTTCCTCTGTGGTCTTGCATGTCAGAAATTGCTATTTAGTGGTCAGCTTCTGATGTCCTGTC
TCCTAGCACAGGGAAGCCCCCAGCTTTGAGATCAGGATAGTCAAAGTGTCTTGATACGGGCCACTTGGGCTTCTC
CCCCTGACCCCCCCAAAAGAAACCTGCATCTTCTCTGGAGAAGGTGTTTTTCTTATTCTTTTTTTTTTCTTTTTT
TCTTTTTTCTTTTTTTTAAGGATTTCTTTTATCAAAGCAGTATTGCTGAAGAGTTGGAAACAGTTCTCATTGTCT
CCTCCTTAAAAAAAGGGCTGGCTTTACATGAGAAGTAAGGGTGGAATGGAAGAGGAGAGGAACCTGTGGAAGGTG
GGCGATGAGCTCAGGTCTGTAGAGCCTCTCAGGGCCTATGACCTTGAGATGTTCATCCCCTTAGAAGATAGAACT
GGGTTTCCTGGGCCCCCAGATGCATTTGCAGTGAGACTTGTGAAATGCTGGACTTACAGGTGGTGTTTGATTTGA
TTTCTGCACATTCTCTCTGGAGTAGAAATGGAGACTGGAAAGGTCGAGTCTGGTTTTGCTGGGCAGCTGGGTGGC
CAGCAAAGCCAGCTGCACGTCCCCAAGCACAGATAGAGTGGCAAGGGCATGTCCAGCTTACTGACCATCTGCATT
GAGCTCATTCTCATTTTCTATATCTGACTTAAAGTTTCTCTCGTTTCTTTTCTTCTCTTCACCTTTAAGCACAAA
CATAAACCATCCTTGCTACAGCCTAGAACAGTTAAGTAAACCTTTCTCACTGCCCCTAACTGTGTGTGCCATGAA
GTCGCAGTGTTGTAGTGGCTCTGGGCTTCAGCGGTGTTTGCCACGGCCATCCCTGTGATAGTGCCACCTCAGTCC
CCACAGACCAGTCATCTCCATTGCTTTTCTTTGCCCGTGATGCTTGTTGGAGTAGATGAATATAGTGTGTCTTAG
CGCTGTCCTTTCCGGCTGTAGCTCCCACCAGTTAATTCCGAACTGGGGGTGGGCTGACCTTGATGTGAAAGAATG
TTGGAGCAGCATCCTGCCAAAAAGCAACTCACGTTGGCTCTCCTGCCAGTGTGCCCTGAGTGGCCCCAAGGCACC
TGGCTGGAGGGAAAATGGCAAACTTTTGGCTGAACTGGAGAATGTCCTAACAAACCCCCTTCCAGAATGGCTTTA
GTCTCTAGTGCTTGCTAGCATGGGAGCTTTGTCTTGAATTCCTTTTGATCTGCCCCGTTTCTCTCCAGCCTTAGG
AATAAATCTAGAGGCTATTGTGCAATGATCTGTGGGCTTTTTAGAAGTCTCTAAATTTCCTTGAAATTCAGTACA
GCCCAGCATAAACTACTCAAGTTCTTGATCAGCCTGCTGCTTTGTTCTTATTAATAAAAGCAGTGTGTAGCTGGC
TAAGGACTTGTTTTATTAATGCTCCACAGGAGCAGAGACAGACAGAGAGACATAGTGAGCCTTGAACCAAACACC
TGTATTCCAACATTTTACACAGCGGTCTGGGCACCCTGTGCCTAGGAGAGCCAGCTACGTGTCTACCTGAGTCTG
ACCTGGGCCAGGGGCTGTTATCTTGGGAAAGCCAGAATGTCATTAAGAAAGGGACAAATAGGCAGTTGCTTGTGT
AGCAAGGCAGCCACCAGGTTGCTCAAAGGGGGTTCTGCATAAACCAACATATTTTGTTGTTGCTTCCAGGGCAGC
AGAAGAAGCCTTTGTAAATGACATTGACGAGTCGTCCCCAGGCACTGAGTGGGAACGGGTGGCCCGGCTGTGTGA
CTTTAACCCCAAGTCTAGCAAGCAGGCCAAAGATGTCTCCCGCATGCGCTCAGTCCTCATCTCCCTCAAGCAGGC
CCCGCTGGTGCACTGAAGAGCACCCTGTGGAAACACTACATCTGCAATATCTTAATCCTACTCAGTGAAGCTCTT
CACAGTCATTGGATTAATTATGTTGAGTTCTTTTGGACCAAACCTTTTTGTCTTTAGAGTTGTTCATTGTTTGTG
ATTGCATGTTTCCTTCCTTCAACTGTGTTCTCCCTGGCATTCAGAGAGGAGGGAGAGGAGGAAGAGGAAGGGGAG
GGAAGCTTGCATGCCTGCAGGTCGACTCTAGAGGATC

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FIGURE 3202

CGGTTCTCCAAGCACCCAGCATCCTGCTAGACGCGCCGCGCACCGACGGAGGGGACATGGGCAGAGCAATGGTGG
CCAGGCTGGGGCTGGGGCTGCTGCTGCTGGCACTGCTCCTACCCACGCAGATTTATTCCAGTGAAACAACAACTG
GAACTTCAAGTAACTCCTCCCAGAGTACTTCCAACTCTGGGTTGGCCCCAAATCCAACTAATGCCACCACCAAGG
CGGCTGGTGGTGCCCTGCAGTCAACAGCCAGTCTCTTCGTGGTCTCACTCTCTCTTCTGCATCTCTACTCTTAAG
AGACTCAGGCCAAGAAACGTCTTCTAAATTTCCCCATCTTCTAAACCCAATCCAAATGGCGTCTGGAAGTCCAAT
GTGGCAAGGAAAAACAGGTCTTCATCGAATCTACTAATTCCACACCTTTTATTGACACAGAAAATGTTGAGAATC
CCAAATTTGATTGATTTGAAGAACATGTGAGAGGTTTGACTAGATGATGAATGCCAATATTAAATCTGCTGGAGT
TTCATGTACAAGATGAAGGAGAGGCAACATCCAAAATAGTTAAGACATGATTTCCTTGAATGTGGCTTGAGAAAT
ATGGACACTTAATACTACCTTGAAAATAAGAATAGAAATAAAGGATGGGATTGTGGAATGGAGATTCAGTTTTCA
TTGGTTCATTAATTCTATAAGGCCATAAAACAGGTAATATAAAAAGCTTCCATCGATCTATTTATATGTACATGA
GAAGGAATCCCCAGGTGTTACTGTAATTCCTCAACGTATTGTTTCGACGGCACTAATTTAATGCCGATATACTCT
AGATGAATGTTTACATTGTTGAGCTATTGCTGTTCTCTTGGGAACTGAACTCACTTTCCTCCTGAGGCTTTGGAT
TTGACATTGCATTTGACCTTTTAGGTAGTAATTGACATGTGCCAGGGCAATGATGAATGAGAATCTACCCCAGAT
CCAAGCATCCTGAGCAACTCTTGATTATCCATATTGAGTCAAATGGTAGGCATTTCCTATCACCTGTTTCCATTC
AACAAGAGCACTACATTCTTTTAGCTAAACGGATTCCAAAGAGTAGAATTGCATTGACCACGACTAATTTCAAAA
TGCTTTTTATTATTATTATTTTTTAGACAGTCTCACTTTGTCGCCCAGGCCGGAGTGCAGTGGTGCGATCTCAGA
TCAGTGTACCATTTGCCTCCCGGGCTCAAGCGATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGATTACAGGCAC
CTGCCACCATGCCCGGCTAATTTTTGTAATTTTAGTAGAGACAGGGTTTCACCATGTTGCCCAGGCTGGTTTAGA
ACTCCTGACCTCAGGTGATCCACCCGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGCTTGAGCCCCCGCGCCCA
GCCATCAAAATGCTTTTTATTTCTGCATATGTTTGAATACTTTTTACAATTTAAAAAAATGATCTGTTTTGAAGG
CAAAATTGCAAATCTTGAAATTAAGAAGGCAAAATGTAAAGGAGTCAAACTATAAATCAAGTATTTGGGAAGTGA
AGACTGGAAGCTAATTTGCATAAATTCACAAACTTTTATACTCTTTCTGTATATACATTTTTTTCTTTAAAAAA
CAACTATGGATCAGAATAGCAACATTTAGAACACTTTTTGTTATCAGTCAATATTTTTAGATAGTTAGAACCTGG
TCCTAAGCCTAAAAGTGGGCTTGATTCTGCAGTAAATCTTTTACAACTGCCTCGACACACATAAACCTTTTTAAA
AATAGACACTCCCCGAAGTCTTTTGTTTGTATGGTCACACACTGATGCTTAGATGTTCCAGTAATCTAATATGGC
CACAGTAGTCTTGATGACCAAAGTCCTTTTTTTCCATCTTTAGAAAACTACATGGGAACAAACAGATCGAACAGT
TTTGAAGCTACTGTGTGTGTGAATGAACACTCTTGCTTTATTCCAGAATGCTGTACATCTATTTTGGATTGTATA
TTGTGGTTGTGTATTTACGCTTTGATTCATAGTAACTTCTTATGGAATTGATTTGCATTGAACGACAAACTGTAA
ATAAAAAGAAACGGTG

FIGURE 3203

MGRAMVARLGLGLLLLALLLPTQIYSSETTTGTSSNSSQSTSNSGLAPNPTNATTKAAGGALQSTASLFVVSLSL
LHLYS

FIGURE 3204

CCCAGCGGAGGGTGGAACGGCGTCGGCGCGAGCTTGTGGGCCGCGCTGCTCCTAGGGGCCGTGGCGCTGAGGCCG
GCGGAGGCGGTGTCCGAGCCCACGACGGTGGCGTTTGACGTGCGGCCCGGCGGCGTCGTGCATTCCTTCTCCCAT
AACGTGGGCCCGGGGGACAAATATACGTGTATGTTCACTTACGCCTCTCAAGGAGGGACCAATGAGCAATGGCAG
ATGAGTCTGGGGACCAGCGAAGACCACCAGCACTTCACCTGCACCATCTGGAGGCCCCAGGGGAAGTCCTATCTG
TACTTCACACAGTTCAAGGCAGAGGTGCGGGGCGCTGAGATTGAGTACGCCATGGCCTACTCTAAAGCCGCATTT
GAAAGGGAAAGTGATGTCCCTCTGAAAACTGAGGAATTTGAAGTGACCAAAACAGCAGTGGCTCACAGGCCCGGG
GCATTCAAAGCTGAGCTGTCCAAGCTGGTGATTGTGGCCAAGGCATCGCGCACTGAGCTGTGACCAGCAGCCCTG
TTGCGGGTGGCACCTTCTCATCTCCGGTGAAGCTGAAGGGGCCTGTGTCCCTGAAAGGGCCAGCACATCACTGGT
TTTCTAGGAGGGACTCTTAAGTTTTCTACCTGGGCTGACGTTGCCTTGTCCGGAGGGGCTTGCAGGGTGGCTGAA
GCCCTGGGGCAGAGAACAGAGGGTCCAGGGCCCTCCTGGCTCCCAACAGCTTCTCAGTTCCCACTTCCTGCTGAG
CTCTTCTGGACTCAGGATCGCAGATCCGGGGCACAAAGAGGGTGGGGAACATGGGGGCTATGCTGGGGAAAGCAG
CCATGCTCCCCCCGACCTCCAGCCGAGCATCCTTCATGAGCCTGCAGAACTGCTTTCCTATGTTTACCCAGGGGA
CCTCCTTTCAGATGAACTGGGAAGAGATGAAATGTTTTTTCATATTTAAATAAATAAGAACATTAAAAAGCAAAA
AAAAAAAAAAAAAAA

FIGURE 3205

CTGGAAGGAGTCATGGCGGATGGTCAGGTGGCGGAACTGCTGCTCCGGCGGCTGGAGGCGTCTGATGGCGGCCTG
GACAGCGCCGAGTTGGCGGCTGAGCTGGGCATGGAGCACCAGGCGGTGGTGGGCGCCGTGAAGAGCCTTCAGGCG
CTGGGCGAGGTCATCGAGGCTGAACTTCGGTCCACCAAGCACTGGGAGCTTACTGCGGAGGGCGAGGAGATTGCC
CGGGAGGGCAGCCATGAGGCCCGTGTGTTTCGAAGCATTCCCCCAGAGGGCCTGGCCCAGAGCGAGCTTATGCGA
CTGCCCAGTGGCAAAGTGGGCTTCAGCAAGGCCATGTCCAACAAGTGGATTCGGGTGGACAAGAGTGCGGCTGAC
GGGCCCCGGGTGTTCCGAGTGGTGGACAGCATGGAGGATGAGGTGCAGCGGCGGCTCCAGCTGGTCCGGGGGGGA
CAGGCTGAGAAGCTGGGGGAGAAGGAGAGGAGCGAGCTGAGGAAGAGGAAGCTGTTGGCTGAAGTGACTCTGAAG
ACCTACTGGGTGAGCAAAGGCAGTGCCTTTAGTACCAGCATCTCCAAGCAAGAGACAGAGCTGAGCCCAGAGATG
ATCTCCAGTGGCTCTTGGCGGGACCGGCCCTTCAAGCCCTACAACTTCTTGGCCCACGGTGTCCTCCCCGACAGC
GGCCACCTTCACCCGCTGCTCAAGGTCCGCTCCCAGTTCCGACAGATCTTCCTGGAGATGGGGTTCACCGAGATG
CCGACTGATAACTTCATTGAGAGCTCCTTCTGGAACTTTGACGCCCTCTTCCAGCCCCAGCAGCACCCAGCCCGT
GACCAGCACGACACCTTCTTCCTTCGAGATCCAGCGGAGGCCCTGCAGCTCCCAATGGACTATGTCCAGCGGGTC
AAGCGGACCCACTCTCAGGGCGGCTACGGCTCACAGGGGTACAAGTATAACTGGAAGCTGGACGAGGCCCGGAAA
AACCTACTGCGAACCCACACCACATCAGCCAGCGCCCGTGCGCTCTACCGCCTTGCCCAGAAGAAGCCCTTCACT
CCGGTCAAGTACTTCTCCATCGACCGCGTATTCCGGAATGAGACCCTGGACGCCACGCACCTGGCTGAGTTCCAC
CAGATCGAGGGCGTGGTGGCGGATCATGGTCTCACCTTGGGCCACCTCATGGGCGTTCTGCGGGAGTTCTTCACC
AAGCTGGGTATCACGCAACTCCGCTTCAAGCCAGCCTACAACCCATACACAGAGCCCAGCATGGAGGTGTTCAGC
TACCACCAAGGCCTGAAGAAGTGGGTGGAGGTCGGAAACTCGGGGGTCTTCCGTCCAGAGATGCTGCTGCCCATG
GGGCTTCCCGAGAACGTGTCGGTCATTGCCTGGGGCCTCTCCCTGGAGCGCCCAACGATGATCAAATATGGCATC
AACAATATCCGGGAGCTGGTGGGCCACAAGGTGAACCTGCAGATGGTGTATGACAGTCCCCTGTGCCGCCTGGAT
GCCGAGCCGAGGCCCCCTCCCACACAGGAGGCTGCGTGACATGGGCCACTCTAGGACAGGTCATCCTCCCCGAGT
CCCTGCTGCTGCGCTCCTTTGCATCCCTGGCCAGTGACCTTGTATTTATGAGGCTCTGTGAGGCCAGCCCCCACC
TTCCTCTTTCCCACCTGTCCCAGGACCAGAATCCCAGGGACAGAGGACTGGGTAGCAGGTTCCTTCTGTTGTCCT
GTGTGGTGTGTCTACTGTGAGGGTGGGCCCTGAGGAGACCTGTGGGCCACCTATTGTCTAATAAAGTGGGCAGTT
GCCCCCA

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FIGURE 3206

MADGQVAELLLRRLEASDGGLDSAELAAELGMEHQAVVGAVKSLQALGEVIEAELRSTKHWELTAEGEEIAREGS
HEARVFRSIPPEGLAQSELMRLPSGKVGFSKAMSNKWIRVDKSAADGPRVFRVVDSMEDEVQRRLQLVRGGQAEK
LGEKERSELRKRKLLAEVTLKTYWVSKGSAFSTSISKQETELSPEMISSGSWRDRPFKPYNFLAHGVLPDSGHLH
PLLKVRSQFRQIFLEMGFTEMPTDNFIESSFWNFDALFQPQQHPARDQHDTFFLRDPAEALQLPMDYVQRVKRTH
SQGGYGSQGYKYNWKLDEARKNLLRTHTTSASARALYRLAQKKPFTPVKYFSIDRVFRNETLDATHLAEFHQIEG
VVADHGLTLGHLMGVLREFFTKLGITQLRFKPAYNPYTEPSMEVFSYHQGLKKWVEVGNSGVFRPEMLLPMGLPE
NVSVIAWGLSLERPTMIKYGINNIRELVGHKVNLQMVYDSPLCRLDAEPRPPPTQEAA

FIGURE 3207

CCCCAGCCACCCTGAACCAGTTACCTCTGTACTTTTACGCTCGGGATGCAAGCTGTCTTGTACTAACTAAGAAGT
TAAGCCTAATCTTTTTGTACTGTTGACACGTATGCTTATTTATCACAATCAGGAAATGCTTTCTCATTTTAGCTC
AAGGATCTAAATTTACTTGATCGCTGTATAAAAGAAACATTAAGACTTAGACCTCCTATAATGATCATGATGAGA
ATGGCCAGAACTCCTCAGGTGAGTATCTTGGCTACATCTTCCCCTCTATACCCCCAGTTATTTATCAAAAAGAAG
AAATA

FIGURE 3208

MIMMRMARTPQVSILATSSPLYPQLFIKKK

FIGURE 3209

GAATTCGCTTTGGATCCATTTCCATCGGTCCTTACAGCCGCTCGTCAGACTCCAGCAGCCAAGATGGTGAAGCAG
ATCGAGAGCAAGACTGCTTTTCAGGAAGCCTTGGACGCTGCAGGTGATAAACTTGTAGTAGTTGACTTCTCAGCC
ACGTGGTGTGGGCCTTGCAAAATGATCAACCCTTTCTTTCATTCCCTCTCTGAAAAGTATTCCAACGTGATATTC
CTTGAAGTAGATGTGGATGACTGTCAGGATGTTGCTTCAGAGTGTGAAGTCAAATGCACGCCAACATTCCAGTTT
TTTAAGAAGGGACAAAAGGTGGGTGAATTTTCTGGAGCCAATAAGGAAAAGCTTGAAGCCACCATTAATGAATTA
GTCTAATCATGTTTTCTGAAAACATAACCAGCCATTGGCTATTTAAACTTGTATTTTTTTATTTACAAAATATAA
ATATGAAGACATAACCAGTTGCCATCTGCGTGACAATAAACATTATGCTAA

FIGURE 3210

MVKQIESKTAFQEALDAAGDKLVVVDFSATWCGPCKMINPFFHSLSEKYSNVIFLEVDVDDCQDVASECEVKCTP
TFQFFKKGQKVGEFSGANKEKLEATINELV

FIGURE 3211

GAATTCGGGCGTGGGCGCGGGGGCGCGGCGTGCGGCACGCTGCAGGGCTGAAGCGGCGGCGGCGGTGGGGACTGC
ACGTAGCCCGGCGCTCGGCATGGCTCTCCTGGTGCTCGGTCTGGTGAGCTGTACCTTCTTTCTGGCAGTGAATGG
TCTGTATTCCTCTAGTGATGATGTGATCGAATTAACTCCATCAAATTTCAACCGAGAAGTTATTCAGAGTGATAG
TTTGTGGCTTGTAGAATTCTATGCTCCATGGTGTGGTCACTGTCAAAGATTAACACCAGAATGGAAGAAAGCAGC
AACTGCATTAAAAGATGTTGTCAAAGTTGGTGCAGTTGATGCAGATAAGCATCATTCCCTAGGAGGTCAGTATGG
TGTTCAGGGATTTCCTACCATTAAGATTTTTGGATCCAACAAAAACAGACCAGAAGATTACCAAGGTGGCAGAAC
TGGTGAAGCCATTGTAGATGCTGCGCTGAGTGCTCTGCGCCAGCTCGTGAAGGATCGCCTCGGGGGACGGAGCGG
AGGATACAGTTCTGGAAAACAAGGCAGAAGTGATAGTTCAAGTAAGAAGGATGTGATTGAGCTGACAGACGACAG
CTTTGATAAGAATGTTCTGGACAGTGAAGATGTTTGGATGGTTGAGTTCTATGCTCCTTGGTGTGGACACTGCAA
AAACCTAGAGCCAGAGTGGGCTGCCGCAGCTTCAGAAGTAAAAGAGCAGACGAAAGGAAAAGTGAAACTGGCAGC
TGTGGATGCTACAGTCAATCAGGTTCTGGCCTCCCGATACGGGATTAGAGGATTTCCTACAATCAAGATATTTCA
GAAAGGCGAGTCTCCTGTGGATTATGACGGTGGGCGGACAAGATCCGACATCGTGTCCCGGGCCCTTGATTTGTT
TTCTGATAACGCCCCACCTCCTGAGCTGCTTGAGATTATCAACGAGGACATTGCCAAGAGGACGTGTGAGGAGCA
CCAGCTCTGTGTTGTGGCTGTGCTGCCCCATATCCTTGATACTGGAGCTGCAGGCAGAAATTCTTATCTGGAAGT
TCTTCTGAAGTTGGCAGACAAATACAAAAAGAAAATGTGGGGGTGGCTGTGGACAGAAGCTGGAGCCCAGTCTGA
ACTTGAGACCGCGTTGGGGATTGGAGGGTTTGGGTACCCCGCCATGGCCGCCATCAATGCACGCAAGATGAAATT
TGCTCTGCTAAAAGGCTCCTTCAGTGAGCAAGGCATCAACGAGTTTCTCAGGGAGCTCTCTTTTGGGCGTGGCTC
CACGGCACCTGTAGGAGGCGGGGCTTTCCCTACCATCGTTGAGAGAGAGCCTTGGGACGGCAGGGATGGCGAGCT
TCCCGTGGAGGATGACATTGACCTCAGTGATGTGGAGCTTGATGACTTAGGGAAAGATGAGTTGTGAGAGCCACA
ACAGAGGCTTCAGACCATTTTCTTTTCTTGGGAGCCAGTGGATTTTTCCAGCAGTGAAGGGACATTCTCTACTTT
CTTTTCTTGGGAGCCAGTGGATTTTTCCAGCAGTGAAGGGACATTCTCTACACTCAGATGACTCTACCAGTGGCC
TTTTAACCAAGAAGTAGTACTTGATTGGTCATTTGAAAACACTGCAACAGTGAACTTTTGCATCTCAAGAAAACA
TTGAAAAATTCTATGAATTGTTGTAGCCGGTGAATTGAGTCGTATTCTGTCACATAATATTTTGAAGAAAACTTG
GCTGTCGAAACATTTTTCTCTCTGACTGCTGCTTGAATGTTCTTGGAGGCTGTTTCTTATGTATGGGTTTTTTTT
AATGTGATCCCTTCATTTGAATATTAATGGCTTTTTCCATTAAAGAATAAATTGGAAAAAAGAAAAAAAAAAAAA
GGAATTC

FIGURE 3212

MALLVLGLVSCTFFLAVNGLYSSSDDVIELTPSNFNREVIQSDSLWLVEFYAPWCGHCQRLTPEWKKAATALKDV
VKVGAVDADKHHSLGGQYGVQGFPTIKIFGSNKNRPEDYQGGRTGEAIVDAALSALRQLVKDRLGGRSGGYSSGK
QGRSDSSSKKDVIELTDDSFDKNVLDSEDVWMVEFYAPWCGHCKNLEPEWAAAASEVKEQTKGKVKLAAVDATVN
QVLASRYGIRGFPTIKIFQKGESPVDYDGGRTRSDIVSRALDLFSDNAPPPELLEIINEDIAKRTCEEHQLCVVA
VLPHILDTGAAGRNSYLEVLLKLADKYKKKMWGWLWTEAGAQSELETALGIGGFGYPAMAAINARKMKFALLKGS
FSEQGINEFLRELSFGRGSTAPVGGGAFPTIVEREPWDGRDGELPVEDDIDLSDVELDDLGKDEL

FIGURE 3213

TAGATGGCAACCTCCCTATCTGCCCGCAGGTCATAGAGGCGACACGTAGCGTCATCTGACCCTGAAGCAAAGGCA
TCTCCACTCCAAAGTTAGACAAAATGCCAGGAATGTTCTTCTCTGCTAACCCAAAGGAATTGAAAGGAACCACTC
ATTCACTTCTAGACGACAAAATGCAAAAAAGGAGGCCAAAGACTTTTGGAATGGATATGAAAGCATACCTGAGAT
CTATGATCCCACATCTGGAATCTGGAATGAAATCTTCCAAGTCCAAGGATGTACTTTCTGCTGCTGAAGTAATGC
AATGGTCTCAATCTCTGGAAAAACTTCTTGCCAACCAAACTGGTCAAAATGTCTTTGGAAGTTTCCTAAAGTCTG
AATTCAGTGAGGAGAATATTGAGTTCTGGCTGGCTTGTGAAGACTATAAGAAAACAGAGTCTGATCTTTTGCCCT
GTAAAGCAGAAGAGATATATAAAGCATTTGTGCATTCAGATGCTGCTAAACAAATCAATATTGACTTCCGCACTC
GAGAATCTACAGCCAAGAAGATTAAAGCACCAACCCCCACGTGTTTTGATGAAGCACAAAAAGTCATATATACTC
TTATGGAAAAGGACTCTTATCCCAGGTTCCTCAAATCAGATATTTACTTAAATCTTCTAAATGACCTGCAGGCTA
ATAGCCTAAAGTGACTGGTCCCTGGCTGAAGGGAATTAACAGATAGTATCAAGGCACGAAGGAATGTGCCAGTAT
GGCTCCCTGGGTGAACAGCTTGGCCTTTTTTGGGTGTCTTGACAGGCCAAGAAGAACAAATGACTCAGAATGGAT
TAACATGAAAGTTATCCAGGCGCAGAGTTGAAGAAGCATAAGCAAGACAAAAACAGAGAGACCGCAGAAGGAGGA
AGATACTGTGGTACTGTCATAAAAAACAGTGGAGCTCTGTATTAGAAAGCCCCTCAGAACTGGGAAGGCCAGGTA
ACTCTAGTTACACAGAAACTGTGACTAAAGTCTATGAAACTGATTACAACAGGCTGTAAGAATCAAAGTCAACTG
ACATCTATGCTACATATTATTATATAGTTTGTACTGAGCTATTGAAGTCCCATTAACTTAAAGTATATGTTTTCA
AATTGCCATTGCTACTATTGCTTGTCGGTGTATTTTATTTTATTGTTTTTGACTTTGGAAGAGATGAACTGTGTA
TTTAACTTAAGCTATTGCTCTTAAAACCAGGGATCAGAATATATTTGTAAGTTAAATCATTGGTGCTAATAATAA
ATGTGGATTTTGTATTAAAATATATAGAAGCAATTTCTGTTTACATGTCCTTGCTACTTTTAAAAACTTGCATTT
ATTCCTCAGATTTTAAAAATAAATAAATAATTCATTTAAAAAAAAAAA

FIGURE 3214

MPGMFFSANPKELKGTTHSLLDDKMQKRRPKTFGMDMKAYLRSMIPHLESGMKSSKSKDVLSAAEVMQWSQSLEK
LLANQTGQNVFGSFLKSEFSEENIEFWLACEDYKKTESDLLPCKAEEIYKAFVHSDAAKQINIDFRTRESTAKKI
KAPTPTCFDEAQKVIYTLMEKDSYPRFLKSDIYLNLLNDLQANSLK

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FIGURE 3215

CAGCATGTTGAGCCGGGCAGTGTGCGGCACCAGCAGGCAGCTGCCTCCGGTTTTGGGGTATCTGGGCTCCAGGCA
GAAGCACAGCCTCCCCGACCTGCCCTACGACTACGGCGCCCTGGAACCTCACATCAACGCGCAGATCATGCAGCT
GCACCACAGCAAGCACCACGCGGCCTACGTGAACAACCTGAACGTCACCGAGGAGAAGTACCAGGAGGCGTTGGC
CAAGGGAGATGTTACAGCCCAGATAGCTCTTCAGCCTGCACTGAAGTTCAATGGTGGTGGTCATATCAATCATAG
CATTTTCTGGACAAACCTCAGCCCTAACGGTGGTGGAGAACCCAAAGGGGAGTTGCTGGAAGCCATCAAACTGGA
CTTTGGTTCCTTTGACAAGTTTAAGGAGAAGCTGACGGCTGCATCTGTTGGTGTCCAAGGCTCAGGTTGGGGTTG
GCTTGGTTTCAATAAGGAACGGGGACACTTACAAATTGCTGCTTGTCCAAATCAGGATCCACTGCAAGGAACAAC
AGGCCTTATTCCACTGCTGGGGATTGATGTGTGGGAGCACGCTTACTACCTTCAGTATAAAAATGTCAGGCCTGA
TTATCTAAAAGCTATTTGGAATGTAATCAACTGGGAGAATGTAACTGAAAGATACATGGCTTGCAAAAAGTAAAC
CACGATCGTTATGCTGAGTATGTTAAGCTCTTTATGACTGTTTTTGTAGTGGTATAGAGTACTGCAGAATACAGT
AAGCTGCTCTATTGTAGCATTTCTTGATGTTGCTTAGTCACTTATTTCATAAACAACTTAATGTTCTGAATAATT
TCTTACTAAACATTTTGTTATTGGGCAAGTGATTGAAAATAGTAAATGCTTTGTGTGATTGAATCTGATTGGACA
TTTTCTTCAGAGAGCTAAATTACAATTGTCATTTATAAAACCATCAAAAATATTCCATCCATATACTTTGGGGAC
TTGTAGGGATGCCTTTCTAGTCCTATTCTATTGCAGTTATAGAAAATCTAG

FIGURE 3216

MLSRAVCGTSRQLPPVLGYLGSRQKHSLPDLPYDYGALEPHINAQIMQLHHSKHHAAYVNNLNVTEEKYQEALAK
GDVTAQIALQPALKFNGGGHINHSIFWTNLSPNGGGEPKGELLEAIKLDFGSFDKFKEKLTAASVGVQGSGWGWL
GFNKERGHLQIAACPNQDPLQGTTGLIPLLGIDVWEHAYYLQYKNVRPDYLKAIWNVINWENVTERYMACKK

FIGURE 3217A

AAAACAGCGGCAGAACAAAGTTCAAAAGAACGAGTATCGATCGCCTAATGAATACCCTGGTGCTCTGGATTTTTG
GATTCCTGGTTTGCATGGGGGTGATCCTGGCCATTGGCAATGCCATCTGGGAGCACGAGGTGGGGATGCGTTTCC
AGGTCTACCTGCCGTGGGATGAGGCAGTGGACAGTGCCTTCTTCTCTGGCTTCCTCTCCTTCTGGTCCTACATCA
TCATCCTCAACACCGTTGTGCCCATTTCACTCTATGTCAGTGTGGAGGTCATCCGTCTGGGCCACAGCTACTTCA
TCAACTGGGATAAGAAGATGTTCTGCATGAAGAAGCGGACGCCTGCAGAAGCCCGCACCACCACCCTAAACGAGG
AGCTGGGCCAGGTGGAGTACATCTTCTCCGACAAGACGGGCACCCTCACCCAGAACATCATGGTTTTCAACAAGT
GCTCCATCAATGGCCACAGCTATGGTGATGTGTTTGACGTCCTGGGACACAAAGCTGAATTGGGAGAGAGGCCTG
AACCTGTTGACTTCTCCTTCAATCCTCTGGCTGACAAGAAGTTCTTATTTTGGGACCCCAGCCTGCTGGAGGCTG
TCAAGATCGGGGACCCCCACACGCATGAGTTCTTCCGCCTCCTTTCCCTGTGTCATACTGTCATGTCAGAAGAAA
AGAACGAAGGAGAGCTGTACTACAAAGCTCAGTCCCCAGATGAGGGGGCCCTGGTCACCGCAGCCAGGAACTTTG
GTTTTGTTTTCCGCTCTCGCACCCCCAAAACAATCACCGTCCATGAGATGGGCACAGCCATCACCTACCAGCTGC
TGGCCATCCTGGACTTCAACAACATCCGCAAGCGGATGTCGGTCATAGTGCGGAATCCAGAGGGGAAGATCCGAC
TCTACTGCAAAGGGGCTGACACTATCCTACTGGACAGACTGCACCACTCCACTCAAGAGCTGCTCAACACCACCA
TGGACCACCTTAATGAGTACGCAGGGGAAGGGCTGAGGACCCTGGTGCTGGCCTACAAGGATCTGGATGAAGAGT
ACTACGAGGAGTGGGCTGAGCGACGCCTCCAGGCCAGCCTGGCCCAGGACAGCCGGGAGGACAGGCTGGCTAGCA
TCTATGAGGAGGTTGAGAACAACATGATGCTGCTGGGTGCAACGGCCATTGAGGACAAACTTCAGCAAGGGGTTC
CAGAGACCATTGCCCTCCTGACACTGGCCAACATCAAGATTTGGGTGCTAACCGGAGACAAGCAAGAGACGGCTG
TGAACATCGGCTATTCCTGCAAGATGCTGACGGATGACATGACTGAGGTTTTCATAGTCACTGGCCATACTGTCC
TGGAGGTGCGGGAGGAGCTCAGGAAAGCCCGGGAGAAGATGATGGACTCATCCCGCTCTGTAGGCAACGGCTTCA
CCTATCAGGACAAGCTTTCTTCTTCCAAGCTAACTTCTGTCCTGGAGGCCGTTGCTGGGGAGTACGCCCTGGTCA
TAAATGGTCACAGCCTGGCCCACGCACTGGAGGCAGACATGGAGCTGGAGTTTCTGGAGACAGCGTGTGCCTGCA
AAGCTGTCATCTGCTGCCGGGTGACCCCCTTGCAGAAGGCACAGGTGGTAGAACTGGTCAAGAAGTACAAGAAGG
CTGTGACGCTTGCCATTGGAGACGAAGCCAATGATGTCAGCATGATCAAAACGGCTCACATTGGTGTGGGGATCA
GTGGGCAGGAAGGGATCCAGGCTGTCTTGGCCTCCGATTACTCCTTCTCCCAGTTCAAGTTCCTGCAGCGCCTCC
TGCTGGTGCATGGGCGCTGGTCCTACCTGCGAATGTGCAAGTTTCTTTGCTATTTCTTCTACAAAAACTTTGCTT
TCACCATGGTCCACTTCTGGTTTGGCTTCTTCTGTGGCTTCTCAGCCCAGACCGTCTATGACCAGTATTTCATCA
CCCTGTATAACATCGTGTACACCTCCCTGCCAGTCCTGGCTATGGGGGTCTTTGATCAGGATGTCCCCGAGCAGC
GGAGCATGGAGTACCCTAAGCTGTATGAGCCGGGCCAGCTGAACCTTCTCTTCAACAAGCGGGAGTTCTTCATCT
GCATCGCCCAGGGCATCTACACCTCCGTGCTCATGTTCTTCATTCCCTATGGGGTGTTTGCTGATGCCACCCGGG
ATGATGGCACTCAGCTGGCTGACTACCAGTCCTTTGCAGTCACTGTGGCCACATCCTTGGTCATTGTGGTTAGCG
TGCAGATTGGGCTCGACACAGGCTACTGGACGGCCATCAACCACTTCTTCATCTGGGGAAGCCTTGCTGTTTACT
TTGCCATCCTCTTTGCCATGCACAGCAATGGGCTCTTCGACATGTTTCCCAACCAGTTCCGGTTTGTGGGGAATG
CCCAGAACACCTTGGCCCAGCCCACGGTGTGGCTGACCATTGTGCTCACCACAGTCGTCTGCATCATGCCCGTGG
TTGCCTTCCGATTCCTCAGGCTCAACCTGAAGCCGGATCTCTCCGACACGGTCCGCTACACACAGCTCGTGAGGA
AGAAGCAGAAGGCCCAGCACCGCTGCATGCGGCGGGTTGGCCGCACTGGCTCCCGGCGCTCCGGCTATGCCTTCT
CCCATCAGGAGGGCTTCGGGGAGCTCATCATGTCTGGCAAGAACATGCGGCTGAGCTCTCTCGCGCTCTCCAGCT
TCACCACCCGCTCCAGCTCCAGCTGGATTGAGAGCCTGCGCAGGAAGAAGAGTGACAGTGCCAGTAGCCCCAGTG
GCGGTGCCGACAAGCCCCTCAAGGGC**TGA**AGGCCGAGGATGGATGCCCTGTGCCAGTGACCAGAGCACCCAGGGC
TGGCCAGTCACTGAGGGAACAGCGTCTCGGAACTGCTGGTCCTCATTCCTTGCTTCCCGTCCCCCCGGTAGACTC
TGTCCTGCTGGTCCCACCACACATGGCTGGGACATCTGTTCCCAGCTGTAGGCCCTTCCACCAGCTGGGGAGCTA
GAGGGAGCAGGCCCAAGGGCAGAGCAGAGGCTGAGGCACGGGGAGCCAGCCCCACTCGGGGACCAGAAGTGGAAC
CAAAAACAAGAAAAAACTGTGAGAGATTGTGTCTGCCCCTGCCCTGCCTGGGACCCACAGGGAGACTATAATCTC
CTTATTTTTTTACTCCTACTCCCCAGAGGGGCCCTAGTGCCTCTGTTCCTGAATTACATAAGAATGTACCATGCC
GGGAAGCCAGAGACCTGCAGGGGCCTCGGCCCCTCACATCGTGTATGTCTCTCCTTGATTTGTGTTGTGTCCAGT
TTGGTTTTGTCTTTTTTTATTTGGCAAGTGGAGGAGGCTTTTATGTGACTTTTATGTTGTGGTTGGTGTCTTAAC
TCTCCTGGGAAAAGGAGGCTGGCACACACTGGGATGCCGCAGCCTGGCCGGCTGTGGGGTGGTTTGGGAGGATCC
ATGTCGGCTCTGCCTGCAGTGACCAGTGCTCTGTGGGGCAGAGGAGCTGACCAGGGAGGGAGGTACCCATGAGCA
GAGGGTAGTGGGAGAGTGTAAAGGAGGGTTTGGTCCTGTCTGCTTCCTCACCTTGAGAGTAAAGTGCTGCCCTCT

FIGURE 3217B

GCCCCCAACACACACACATATCAATTCCTGGATTCCTTAGTCCTGCTGGCCTTGGGCTGGAGCCTAGGAAAGTGG
CCCCCAAATCCTTAGTGAGCTAAAGCTGGGTCTGAAATTTGGTCAGTGGGGAGGGGTAGTTTTCTTTTCTTTTTT
CTTTTTCTTTTTTTCTTTTTTTTTTTTGAGATGGAGTCTCACTCTTGTCACCTAGGCAAGAGTGCAATGGCACAAT
CTCAGCTCACTGCAACCTCCACCTCCTGGGTTCAAGCGATTCTCCTGCCTCAGCCTCCTGAGTAGCTGGGATTAC
AGGCACACACCACCACGCTTGGTTAATTTTTGTATTTTTAGTAGAGATGTTTCACCATGTTGGCCAGGCTAGTCT
TGAATTCCTGACCTCCTGACCTGCCCACCTCAACCTCCCAAAGTGCTGAGATTACAGGCGTGAGCCACCACACCC
AGCTCAGGGAGGCGTAGTTTTCTTTAATTTTAAATTTAAACCCAAGTTTATTGGCAGACTCCCTTTTGACCTCCC
TTTGCCTCCCCATCTGGTGCTTTCTTGCATCTACACCCCAGGGCCCTGTGGTGGGGCTGCAGGGGGAAGCTGTGC
ACCTGAGATGAGGCTGGAACGGGAATTGGCCTCTCTGCTCCCTTCTTCAGTAAGCAAGGAGCCCCGCCCCTCAGG
CCCAGCCTCTGGCAAGAGGTGGTGGAATCCTTGTGCCGGGTAGTAGAGGAGGATAAGGGCAAAACCAGGCCCAGG
CCAGTGCCTGGCTTGGTCTGGATGGGACACTGTCAGAGTTTGGCCACAGCCTGTCCTTTACTTCATCCACACCTA
TGAAGCTATTCCCTAAATAAGGCATTTCCCAAGTTAGTCGCTACCTAATCAGCCTTGAGAAGAATCCTTTCCTCT
TCTTTGATAGTGGGTCGGGGGATTCTTCAGGAATGGTTTGGAGCTGGGAGTGGGTAGGGGGATTTTAAATGTTCC
ATATGGGAGCCCCAAAGGAACTGGATGGGCTGCAGTGAGGTGGGGGCGGGTGGGCAGGGAATGGGAGAGGGGAAG
TCTTGGCAGGGAAATCCCTTTTGGCCACACAGTTTACAAACCCAGTATCATGTCTGTCTGTGTGTCTCTCAAGGT
GAGAGTCTGATTTTTATACCAAAGAGGAAATGATTTTTTTCATATTTTGTTTGTCTATATTATATAAATATATAT
ATACAGTTATATATATATATATTATTTTTTGGTTCTCTCTCGTTTTTTAGGGAGGGAAGAAAGTACCAAGTTGCA
TTGAGCTGTAATTAAGGAACATTATAATTTATGACACATTTCTATACTTGCAAAAATTATATCATTTTATGGATA
TAAGAGAAAAATGCCTTTTTATAAAATTTCAATTTCTGAG

FIGURE 3218

NSGRTKFKRTSIDRLMNTLVLWIFGFLVCMGVILAIGNAIWEHEVGMRFQVYLPWDEAVDSAFFSGFLSFWSYII
ILNTVVPISLYVSVEVIRLGHSYFINWDKKMFCMKKRTPAEARTTTLNEELGQVEYIFSDKTGTLTQNIMVFNKC
SINGHSYGDVFDVLGHKAELGERPEPVDFSFNPLADKKFLFWDPSLLEAVKIGDPHTHEFFRLLSLCHTVMSEEK
NEGELYYKAQSPDEGALVTAARNFGFVFRSRTPKTITVHEMGTAITYQLLAILDFNNIRKRMSVIVRNPEGKIRL
YCKGADTILLDRLHHSTQELLNTTMDHLNEYAGEGLRTLVLAYKDLDEEYYEEWAERRLQASLAQDSREDRLASI
YEEVENNMMLLGATAIEDKLQQGVPETIALLTLANIKIWVLTGDKQETAVNIGYSCKMLTDDMTEVFIVTGHTVL
EVREELRKAREKMMDSSRSVGNGFTYQDKLSSSKLTSVLEAVAGEYALVINGHSLAHALEADMELEFLETACACK
AVICCRVTPLQKAQVVELVKKYKKAVTLAIGDEANDVSMIKTAHIGVGISGQEGIQAVLASDYSFSQFKFLQRLL
LVHGRWSYLRMCKFLCYFFYKNFAFTMVHFWFGFFCGFSAQTVYDQYFITLYNIVYTSLPVLAMGVFDQDVPEQR
SMEYPKLYEPGQLNLLFNKREFFICIAQGIYTSVLMFFIPYGVFADATRDDGTQLADYQSFAVTVATSLVIVVSV
QIGLDTGYWTAINHFFIWGSLAVYFAILFAMHSNGLFDMFPNQFRFVGNAQNTLAQPTVWLTIVLTTVVCIMPVV
AFRFLRLNLKPDLSDTVRYTQLVRKKQKAQHRCMRRVGRTGSRRSGYAFSHQEGFGELIMSGKNMRLSSLALSSF
TTRSSSSWIESLRRKKSDSASSPSGGADKPLKG

FIGURE 3219

GAATTCCGGCAGGCACAAACTCATCCATCCCCAGTTGATTGGAAGAAACAACGATGACTCCTGGGAAGACCTCAT
TGGTGTCACTGCTACTGCTGCTGAGCCTGGAGGCCATAGTGAAGGCAGGAATCACAATCCCACGAAATCCAGGAT
GCCCAAATTCTGAGGACAAGAACTTCCCCCGGACTGTGATGGTCAACCTGAACATCCATAACCGGAATACCAATA
CCAATCCCAAAAGGTCCTCAGATTACTACAACCGATCCACCTCACCTTGGAATCTCCACCGCAATGAGGACCCTG
AGAGATATCCCTCTGTGATCTGGGAGGCAAAGTGCCGCCACTTGGGCTGCATCAACGCTGATGGGAACGTGGACT
ACCACATGAACTCTGTCCCCATCCAGCAAGAGATCCTGGTCCTGCGCAGGGAGCCTCCACACTGCCCCAACTCCT
TCCGGCTGGAGAAGATACTGGTGTCCGTGGGCTGCACCTGTGTCACCCCGATTGTCCACCATGTGGCCTAAGAGC
TCTGGGGAGCCCACACTCCCCAAAGCAGTTAGACTATGGAGAGCCGACCCAGCCCCTCAGGAACCCTCATCCTTC
AAAGACAGCCTCATTTCGGACTAAACTCATTAGAGTTCTTAAGGCAGTTTGTCCAATTAAAGCTTCAGAGGTAAC
ACTTGGCCAAGATATGAGATCTGAATTACCTTTCCCTCTTTCCAAGAAGGAAGGTTTGACTGAGTACCAATTTGC
TTCTTGTTTACTTTTTTAAGGGCTTTAAGTTATTTATGTATTTAATATGCCCTGAGATAACTTTGGGGTATAAGA
TTCCATTTTAATGAATTACCTACTTTATTTTGTTTGTCTTTTTAAAGAAGATAAGATTCTGGGCTTGGGAATTTT
ATTATTTAAAAGGTAAAACCTGTATTTATTTGAGCTATTTAAGGATCTATTTATGTTTAAGTATTTAGAAAAAGG
TGAAAAAGCACTATTATCAGTTCTGCCTAGGTAAATGTAAGATAGAATTAAATGGCAGTGCAAAATTTCTGAGTC
TTTACAACATACGGATATAGTATTTCCTCCTCTTTGTTTTTAAAAGTTATAACATGGCTGAAAAGAAAGATTAAA
CCTACTTTCATATGTATTAATTTAAATTTTGCAATTTGTTGAGGTTTTACAAGAGATACAGCAAGTCTAACTCTC
TGTTCCATTAAACCCTTATAATAAAATCCTTCTGTAATAATAAAGTTTCAAAAGAAAATGTTTATTTGTTCTCAT
TAAATGTATTTTAGCAAACTCAGCTCTTCCCTATTGGGAAGAGTTATGCAAATTCTCCTATAAGCAAAACAAAGC
ATGTCTTTGAGTAACAATGACCTGGAAATACCCAAAATTCCAAGTTCTCGATTTCACATGCCTTCAAGACTGAAC
ACCGACTAAGGTTTTCATACTATTAGCCAATGCTGTAGACAGAAGCATTTTGATAGGAATAGAGCAAATAAGATA
ATGGCCCTGAGGAATGGCATGTCATTATTAAAGATCATATGGGGAAAATGAAACCCTCCCCAAAATACAAGAAGT
TCTGGGAGGAGACATTGTCTTCAGACTACAATGTCCAGTTTCTCCCCTAGACTCAGGCTTCCTTTGGAGATTAAG
GCCCCTCAGAGATCAACAGACCAACATTTTTCTCTTCCTCAAGCAACACTCCTAGGGCCTGGCTTCTGTCTGATC
AAGGCACCACACAACCCAGAAAGGAGCTGATGGGGCAGAATGAACTTTAAGTATGAGAAAAGTTCAGCCCAAGTA
AAATAAAAACTCAATCACATTCAATTCCAGAGTAGTTTCAAGTTTCACATCGTAACCATTTTCGCCCGGAATTC

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FIGURE 3220

MTPGKTSLVSLLLLLSLEAIVKAGITIPRNPGCPNSEDKNFPRTVMVNLNIHNRNTNTNPKRSSDYYNRSTSPWN
LHRNEDPERYPSVIWEAKCRHLGCINADGNVDYHMNSVPIQQEILVLRREPPHCPNSFRLEKILVSVGCTCVTPI
VHHVA

FIGURE 3221A

GAATTCCGGCGTCGCGGACGCATCCCAGTCTGGGCGGGACGCTCGGCCGCGGCGAGGCGGGCAAGCCTGGCAGGG
CAGAGGGAGCCCCGGCTCCGAGGTTGCTCTTCGCCCCCGAGGATCAGTCTTGGCCCCAAAGCGCGACGCACAAAT
CCACATAACCTGAGGACCATGGATGCTGATGAGGGTCAAGACATGTCCCAAGTTTCAGGGAAGGAAAGCCCCCCT
GTAAGCGATACTCCAGATGAGGGCGATGAGCCCATGCCGATCCCCGAGGACCTCTCCACCACCTCGGGAGGACAG
CAAAGCTCCAAGAGTGACAGAGTCGTGGCCAGTAATGTTAAAGTAGAGACTCAGAGTGATGAAGAGAATGGGCGT
GCCTGTGAAATGAATGGGGAAGAATGTGCGGAGGATTTACGAATGCTTGATGCCTCGGGAGAGAAAATGAATGGC
TCCCACAGGGACCAAGGCAGCTCGGCTTTGTCGGGAGTTGGAGGCATTCGACTTCCTAACGGAAAACTAAAGTGT
GATATCTGTGGGATCATTTGCATCGGGCCCAATGTGCTCATGGTTCACAAAAGAAGCCACACTGGAGAACGGCCC
TTCCAGTGCAATCAGTGCGGGGCCTCATTCACCCAGAAGGGCAACCTGCTCCGGCACATCAAGCTGCATTCCGGG
GAGAAGCCCTTCAAATGCCACCTCTGCAACTACGCCTGCCGCCGGAGGGACGCCCTCACTGGCCACCTGAGGACG
CACTCCGTTGGTAAACCTCACAAATGTGGATATTGTGGCCGAAGCTATAAACAGCGAAGCTCTTTAGAGGAACAT
AAAGAGCGCTGCCACAACTACTTGGAAAGCATGGGCCTTCCGGGCACACTGTACCCAGTCATTAAAGAAGAAACT
AATCACAGTGAAATGGCAGAAGACCTGTGCAAGATAGGATCAGAGAGATCTCTCGTGCTGGACAGACTAGCAAGT
AACGTCGCCAAACGTAAGAGCTCTATGCCTCAGAAATTTCTTGGGGACAAGGGCCTGTCCGACACGCCCTACGAC
AGCAGCGCCAGCTACGAGAAGGAGAACGAAATGATGAAGTCCCACGTGATGGACCAAGCCATCAACAACGCCATC
AACTACCTGGGGGCCGAGTCCCTGCGCCCGCTGGTGCAGACGCCCCCGGGCGGTTCCGAGGTGGTCCCGGTCATC
AGCCCGATGTACCAGCTGCACAAGCCGCTCGCGGAGGGCACCCCGCGCTCCAACCACTCGGCCCAGGACAGCGCC
GTGGAGAACCTGCTGCTGCTCTCCAAGGCCAAGTTGGTGCCCTCGGAGCGCGAGGCGTCCCCGAGCAACAGCTGT
CAAGACTCCACGGACACCGAGAGCAACAACGAGGAGCAGCGCAGCGGTCTCATCTACCTGACCAACCACATCGCC
CCGCACGCGCGCAACGGCTTGTCGCTCAAGGAGGAGCACCGCGCCTACGACCTGCTGCGCGCCGCCTCCGAGAAC
TCGCAGGACGCGCTCCGCGTGGTCAGCACCAGCGGGGAGCAGATGAAGGTGTACAAGTGCGAACACTGCCGGGTG
CTCTTCCTGGATCACGTCATGTACACCATCCACATGGGCTGCCACGGCTTCCGTGATCCTTTTGAGTGCAACATG
TGCGGCTACCACAGCCAGGACCGGTACGAGTTCTCGTCGCACATAACGCGAGGGGAGCACCGCTTCCACATGAGC
TAAAGCCCTCCCGCGCCCCCACCCCAGACCCCGAGCCACCCCAGGAAAAGCACAAGGACTGCCGCCTTCTCGCTC
CCGCCAGCAGCATAGACTGGACTGGACCAGACAATGTTGTGTTTGGATTTGTAACTGTTTTTTGTTTTTTGTTTG
AGTTGGTTGATTGGGGTTTGATTTGCTTTTGAAAAGATTTTTATTTTTAGAGGCAGGGCTGCATTGGGAGCATCC
AGAACTGCTACCTTCCTAGATGTTTCCCCAGACGCTGGCTGAGATTCCCTCACCTGTCGCTTCCTAGAATCCCCT
TCTCCAAACGATTAGTCTAAATTTTCAGAGAGAAATAGATAAAACACGCCACAGCCTGGGAAGGAGCGTGCTCTA
CCCTGTGCTAAGCACGGGGTTCGCGCACCAGGTGTCTTTTTCCAGTCCCCAGAAGCAGAGAGCACAGCCCCTGCT
GTGTGGGTCTGCAGGTGAGCAGACAGGACAGGTGTGCCGCCACCCAAGTGCCAAGACACAGCAGGGCCAACAACC
TGTGCCCAGGCCAGCTTCGAGCTACATGCATCTAGGGCGGAGAGGCTGCACTTGTGAGAGAAAATACTTATTTCA
AGTCATATTCTGCGGTAGGAAAATGATTGGGTTGGGGAAAGTCGGTGTCTGTCAGACTGCCCTGGGTGGAGGGAG
ACGCCGGGTTAGAGCCTTTGGGATCGTCCTGGATTCACTGGCTTGGGGGAGGCTGTTCAGATGGCCTGAGCCTCC
CGAGGCTTGCTGCCCCGTAGGAGGAGACTGTCTTCCCGTGGGCATATCTGGGGAGCCCTGTTCCCCGCTTTTTCA
CTCCCATACCTTTAATGGCCCCCAAAATCTGTCACTACAATTTAAACACCAGTCCCGAAATTTGGATCTTCTTTC
TTTTTGAATCTCTCAAACGGCAACATTCCTCAGAAACCAAAGCTTTATTTCAAATCTCTTCCTTCCCTGGCTGGT
TCCATCTAGTACCAGAGGCCTCTTTTCCTGAAGAAATCCAATCCTAGCCCTCATTTTAATTATGTACATCTGTTT
GTAGCCACAAGCCTGAATTTCTCAGTGTTGGTAAGTTTCTTTACCTACCCTCACTATATATTATTCTCGTTTTAA
AACCCATAAAGGAGTGATTTAGAACATCATTAATTTTCCAACTCAATGAAAATATGTGAAGCCCAGCATCTCTGT
TGCTAACACACAGAGCTCACCTGTTGAAACCCAAGCTTTCAAACATGTTGAAGCTCTTTACTGTAAAGGCAAGCC
AGCATGTGTGTCCACACATACATAGGATGGCTGGCTCTGCACCTGTAGGATATTGGAATGCACAGGGCAATTGAG
GGXCTGAGCCAGACCTTCGGAGAGTAATGCCACCAGATCCCCTAGGAAAGAGGAGGCAAATGGCACTGCAGGTGA
GAACCCCGCCCATCCGTGCTATGACATGGAGGCACTGAAGCCCGAGGAAGGTGTGTGGAGATTCTAATCCCAACA
AGCAAGGGTCTCCTTCAAGATTAATGCTATCAATCATTAAGGTCATTACTCTCAACCACCTAGGCAATGAAGAAT
ATACCATTTCAAATATTTACAGTACTTGTCTTCACCAACACTGTCCCAAGGTGAAATGAAGCAACAGAGAGGAAA
TTGTACATAAGTACCTCAGCATTTAATCCAAACAGGGGTTCTTAGTCTCAGCACTATGACATTTTGGGCTGACTA
CTTATTTGTTAGGCGGGAGCTCTCCTGTGCATTGTAGGATAATTAGCAGTATCCCTGGTGGCTACCCAATAGACG
CCAGTAGCACCCCGAATTGACAACCCAAACTCTCCAGACATCACCAACTGTCCCCTGCGAGGAGAAATCACTCCT

FIGURE 3221B

GGGGGAGAACCACTGACCCAAATGAATTC

FIGURE 3222

MDADEGQDMSQVSGKESPPVSDTPDEGDEPMPIPEDLSTTSGGQQSSKSDRVVASNVKVETQSDEENGRACEMNG
EECAEDLRMLDASGEKMNGSHRDQGSSALSGVGGIRLPNGKLKCDICGIICIGPNVLMVHKRSHTGERPFQCNQC
GASFTQKGNLLRHIKLHSGEKPFKCHLCNYACRRRDALTGHLRTHSVGKPHKCGYCGRSYKQRSSLEEHKERCHN
YLESMGLPGTLYPVIKEETNHSEMAEDLCKIGSERSLVLDRLASNVAKRKSSMPQKFLGDKGLSDTPYDSSASYE
KENEMMKSHVMDQAINNAINYLGAESLRPLVQTPPGGSEVVPVISPMYQLHKPLAEGTPRSNHSAQDSAVENLLL
LSKAKLVPSEREASPSNSCQDSTDTESNNEEQRSGLIYLTNHIAPHARNGLSLKEEHRAYDLLRAASENSQDALR
VVSTSGEQMKVYKCEHCRVLFLDHVMYTIHMGCHGFRDPFECNMCGYHSQDRYEFSSHITRGEHRFHMS

FIGURE 3223

GATAAACAACTTGATGCAGATGTTTCCCCCAAGCCCACTATTTTTCTTCCTTCGATTGCTGAAACAAAACTCCAG
AAGGCTGGAACATACCTTTGTCTTCTTGAGAAATTTTTCCCAGATATTATTAAGATACATTGGCAAGAAAAGAAG
AGCAACACGATTCTGGGATCCCAAAGACAATTGGTCAAAAGATGCAAATGATACACTACTGCTGCAGCTCACAAA
CACCTCTGCATATTACATGTACCTCCTCCTGCTCCTCAAGAGTGTGGTCTATTTTGCCATCATCACCTGCTGTCT
GCTTGGAAGAACGGCTTTCTGCTGCAATGGAGAGAAATCATAACAGACGGTGGCACAAGGAGGCCATCTTTTCCT
CATCGGTTATTGTCCCTAGAAGCGTCTTCTGAGGATCTAGTTGGGCTTTCTTTCTGGGTTTGGGCCATTTCAGTT
CTCATGTGTGTACTATTCTATCTATTGTATAATGGTTTTCAAACCAGTGGGCACACAGAGAACCTCACTCTGTAA
TAACAATGAGGAATAGCCATGGCGATCTCCAGCACCAATCTCTCCATGTTTTCCACAGCTCCTCCAGCCAACCCA
AATAGCGCCTGCTATAGTGTAGACAGCCTGCGGCTTCTAGCCTTGTCCCTCTCTTAGTGTTCTTTAATCAGATAA
CTGCCTGGAAGCCTTTCATTTTACACGCCCTGAAGCAGTCTTCTTTGCTAGTTGAATTATGTGGTGTGTTTTTCC
GTAATAAGCAAAATAAATTTAAAAAAATGAAAAGTT

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FIGURE 3224A

GTTGCTGTCGGAGAGAGAAAGCCGCACCCGAGAGGAGGTGTGGGTGTTCCGCTTCCATCCTAACGGAACGAGCTC
CCTCTTCGCGGACATGGGATTACCCAGCGGCTGCTAACCCCTCTCCTCGCCCTGCTCCCCCAAACCGGCGTGGCT
CCCCGGGCACCAAGGAGCTGACTACAGAGGAGCAGGATTTGCACCCCTCGCTGGGCTTGCTTTGGCAACAGAGTG
CCTGACCCAGGTCAGGATTTTCAAGAAAGACATGTCTGACAAAATGTCTAGCTTCCTACATATTGGAGACATTTG
TTCTCTGTACGCGGAGGGATCGACAAATGGATTTATTAGCACCTTGGGCCTGGTTGATGATCGTTGTGTTGTACA
GCCAGAAACCGGGGACCTTAACAATCCACCTAAGAAATTCAGAGACTGCCTCTTTAAGCTATGTCCCATGAACCG
CTACTCTGCCCAAAAGCAGTTCTGGAAAGCCGCTAAGCCTGGGGCCAACAGCACCACAGACGCAGTGCTACTCAA
CAAACTGCACCACGCTGCAGACTTGGAAAAGAAGCAGAATGAGACAGAAAACAGGAAATTGCTGGGGACCGTAAT
CCAGTATGGCAATGTGATCCAGCTCCTGCATTTGAAAAGTAATAAATACCTAACAGTGAATAAGAGGCTTCCTGC
TCTGTTGGAGAAGAATGCCATGAGAGTCACATTGGACGAGGCTGGAAATGAAGGGTCCTGGTTTTATATTCAGCC
ATTCTACAAGCTGCGATCCATTGGAGACAGCGTGGTCATAGGTGACAAGGTGGTTCTGAACCCCGTCAATGCTGG
TCAGCCCCTACATGCTAGCAGCCATCAACTGGTAGATAACCCAGGCTGCAATGAGGTCAATTCCGTCAACTGCAA
TACAAGCTGGAAAATAGTCCTTTTCATGAAATGGAGTGATAACAAAGACGACATATTAAAGGGGGGTGACGTGGT
GAGGCTGTTTCATGCTGAGCAGGAGAAGTTTCTCACCTGTGACGAACACAGGAAGAAGCAGCACGTCTTCCTGAG
AACCACGGGCCGGCAGTCGGCCACATCTGCCACCAGTTCAAAAGCCCTGTGGGAGGTGGAGGTGGTCCAGCATGA
CCCATGTCGGGGCGGAGCAGGGTATTGGAACAGCCTTTTCCGTTTCAAGCATCTGGCCACGGGGCATTACTTGGC
AGCAGAGGTGGACCCTGATCAGGACGCCTCTCGAAGTAGGTTGCGGAATGCCCAAGAAAAGATGGTATACTCCCT
GGTCTCTGTGCCTGAAGGCAATGACATCTCCTCCATTTTCGAGCTAGATCCCACCACTCTGCGTGGAGGTGACAG
CCTTGTCCCAAGGAACTCTTATGTTCGGCTCAGACACCTATGTACTAATACCTGGGTTCACAGCACAAATATTCC
TATTGACAAGGAAGAAGAAAAGCCCGTGATGCTGAAAATTGGCACCTCTCCTGTGAAGGAGGATAAGGAAGCATT
TGCCATAGTTCCGGTTTCTCCTGCTGAAGTTCGGGACCTGGACTTTGCCAATGATGCCAGCAAGGTGCTGGGCTC
CATTGCTGGGAAGCTAGAGAAGGGCACCATCACCCAGAATGAAAGGAGGTCTGTAACCAAGCTGCTAGAAGATTT
GGTTTACTTCGTCACTGGTGGAACTAATTCTGGTCAAGATGTTCTCGAAGTTGTCTTCTCCAAGCCCAACAGAGA
ACGGCAGAAACTGATGAGAGAACAGAATATTCTCAAGCAGATCTTCAAGTTGTTACAAGCCCCATTCACAGACTG
CGGTGATGGCCCAATGCTTCGGCTGGAAGAGCTCGGGGACCAGCGGCACGCTCCTTTCAGACACATCTGCCGGCT
CTGCTACAGGGTGCTGAGACACTCGCAGCAAGACTACAGGAAGAACCAGGAGTATATAGCCAAGCAGTTTGGCTT
CATGCAGAAGCAGATTGGCTATGATGTGTTGGCTGAAGACACTATCACTGCCCTGCTCCACAATAATCGGAAACT
CCTGGAAAAACACATTACCGCGGCAGAGATTGACACATTTGTCAGCCTGGTGCGAAAGAACAGGGAGCCCAGATT
CTTAGATTACCTCTCCGACCTCTGTGTCTCCATGAACAAATCAATTCCAGTGACCCAGGAACTGATATGTAAAGC
TGTGCTGAACCCCACCAACGCTGACATCCTGATTGAGACCAAATTGGTTCTTTCTCGTTTTGAATTTGAAGGTGT
CTCTTCCACTGGAGAGAATGCTCTGGAGGCAGGAGAAGACGAGGAAGAGGTGTGGCTGTTTTGGAGGGACAGCAA
CAAAGAGATTCGCAGCAAGAGTGTGAGGGAATTGGCTCAGGATGCTAAAGAAGGGCAGAAGGAGGACCGAGACGT
TCTCAGCTACTACAGATATCAGCTGAACCTCTTTGCGAGGATGTGTCTGGACCGCCAATACCTGGCCATCAACGA
AATCTCAGGCCAGCTGGATGTCGATCTCATTCTCCGCTGCATGTCTGACGAGAACCTGCCCTATGACCTCAGGGC
GTCCTTCTGCCGCCTCATGCTTCACATGCATGTGGACCGAGATCCCCAGGAACAAGTCACCCCCGTGAAATATGC
CCGCCTCTGGTCGGAGATTCCCTCGGAGATCGCCATTGACGACTATGATAGTAGTGGAGCTTCCAAAGATGAAAT
TAAGGAGAGATTTGCTCAGACCATGGAGTTTGTGGAGGAGTATTTAAGAGATGTGGTTTGTCAGAGGTTCCCTTT
CTCTGATAAAGAGAAGAATAAGCTTACGTTTGAGGTTGTAAATTTAGCTAGGAATCTCATATACTTTGGTTTCTA
CAACTTCTCTGACCTTCTCCGATTAACTAAGATCCTTCTGGCCATATTGGACTGTGTACATGTGACAACAATCTT
CCCCATTAGCAAGATGGCGAAAGGAGAAGAGAATAAAGGCAGTAACGTGATGAGATCTATTCATGGCGTGGGAGA
GCTGATGACCCAGGTGGTGCTCCGGGGAGGAGGCTTTTTGCCCATGACTCCCATGGCTGCTGCCCCTGAAGGCAA
TGTGAAGCAGGCAGAGCCTGAGAAGGAGGACATCATGGTCATGGACACCAAGCTGAAGATCATTGAGATACTCCA
GTTTATTTTGAATGTGAGGTTGGATTATAGGATCTCCTGCCTCCTGTGTATATTTAAGCGAGAGTTTGATGAAAG
CAATTCCCAGACTTCAGAAACATCCTCCGGAAACAGCAGCCAAGAAGGGCCAAGTAATGTACCAGGTGCTCTTGA
CTTTGAACACATTGAAGAACAAGCAGAAGGCATCTTTGGAGGAAGTGAGGAGAACACCCCACTGGACTTGGATGA
CCACGGCGGCAGAACCTTTCTCCGTGTCCTGCTCCACTTGACGATGCATGACTACCCACCCCTGGTGTCAGGGGC
CCTGCAGCTCCTCTTCCGGCACTTCAGCCAGAGGCAGGAGGTGCTCCAGGCCTTCAAACAGGTTCAACTGCTGGT
TACCAGCCAAGATGTGGACAACTACAAACAGATCAAACAAGACTTGGATCAACTGAGGTCCATCGTGGAAAAGTC

FIGURE 3224B

AGAGCTTTGGGTGTACAAAGGGCAGGGCCCCGATGAGACTATGGATGGTGCATCTGGAGAAAATGAACATAAGAA
AACGGAGGAGGGAAATAACAAGCCACAAAAGCATGAAAGCACCAGCAGCTACAACTACAGAGTGGTCAAAGAGAT
TTTGATTCGGCTTAGCAAACTCTGTGTTCAAGAGAGTGCCTCAGTGAGAAAGAGCAGGAAGCAGCAACAGCGTCT
GCTCCGGAACATGGGCGCGCACGCCGTGGTGCTGGAGCTGCTGCAGATTCCCTATGAGAAGGCCGAAGATACCAA
GATGCAAGAGATAATGAGGTTGGCTCATGAATTTTTGCAGAATTTCTGCGCAGGCAACCAGCAGAATCAAGCTTT
GCTACATAAACACATAAACCTGTTTCTCAACCCAGGGATCCTGGAGGCAGTAACCATGCAGCACATCTTCATGAA
CAATTTCCAGCTTTGCAGTGAGATCAACGAGAGAGTTGTTCAGCACTTCGTTCACTGCATAGAGACTCACGGTCG
GAATGTCCAGTATATAAAGTTCTTACAGACAATTGTCAAGGCAGAAGGGAAATTTATTAAAAAATGCCAAGACAT
GGTTATGGCCGAGCTGGTCAATTCGGGAGAGGATGTCCTCGTGTTCTACAACGACAGAGCCTCTTTCCAGACTCT
GATCCAGATGATGCGGTCAGAACGGGATCGGATGGATGAGAACAGCCCTCTCATGTACCACATCCACTTGGTCGA
GCTCCTGGCTGTGTGCACGGAGGGTAAGAATGTCTACACAGAGATCAAGTGCAACTCCCTGCTCCCGCTGGATGA
CATCGTTCGCGTGGTGACCCACGAGGACTGCATCCCTGAGGTTAAAATTGCATACATTAACTTCCTGAATCACTG
CTATGTGGATACAGAGGTGGAAATGAAGGAGATTTATACCAGCAATCACATGTGGAAATTGTTTGAGAATTTCCT
TGTAGACATCTGCAGGGCCTGTAACAACACTAGTGACAGGAAACATGCAGACTCGATTTTGGAGAAGTATGTCAC
CGAAATCGTCATGAGTATTGTTACTACTTTCTTCAGCTCTCCCTTCTCAGACCAGAGTACGACTTTGCAGACTCG
CCAGCCTGTCTTTGTGCAACTGCTGCAAGGCGTGTTCAGGGTTTACCACTGCAACTGGTTAATGCCAAGCCAAAA
AGCCTCCGTGGAGAGCTGTATTCGGGTGCTGTCTGATGTAGCCAAGAGCCGGGCCATTGCCATTCCCGTGGACCT
GGACAGCCAAGTCAACAACCTCTTTCTCAAGTCCCACAGCATTGTGCAGAAAACAGCCATGAACTGGCGGCTCTC
AGCCCGCAATGCCGCACGCAGGGACTCTGTTCTGGCAGCTTCCAGAGACTACCGGAATATCATTGAGAGATTGCA
GGACATCGTCTCCGCGCTGGAGGACCGTCTCAGGCCCCTGGTGCAGGCAGAGTTATCTGTGCTCGTGGATGTTCT
CCACAGACCCGAGCTGCTTTTCCCAGAGAACACAGACGCCAGAAGGAAATGTGAAAGTGGCGGTTTCATTTGCAA
GTTAATAAAGCATACAAAACAGCTGCTAGAAGAAAATGAAGAGAAGCTCTGCATTAAGGTCCTACAGACCCTGAG
GGAAATGATGACCAAAGATAGAGGCTATGGAGAAAAGGGTGAGGCGCTCAGGCAAGTTCTGGTCAACCGTTACTA
TGGAAACGTCAGACCTTCGGGACGAAGAGAGAGCCTTACCAGCTTTGGCAATGGCCCACTGTCAGCAGGAGGACC
CGGCAAGCCCGGGGGAGGAGGGGGAGGTTCCGGATCCAGCTCTATGAGCAGGGGTGAGATGAGTCTGGCCGAGGT
TCAGTGTCACCTTGACAAGGAGGGGGCTTCCAATCTAGTTATCGACCTCATCATGAACGCATCCAGTGACCGAGT
GTTCCATGAAAGCATTCTCCTGGCCATTGCCCTTCTGGAAGGAGGCAACACCACCATCCAGCACTCCTTTTTCTG
TCGCTTGACAGAAGATAAGAAGTCAGAGAAATTCTTTAAGGTGTTTTATGACCGGATGAAGGTGGCCCAGCAAGA
AATCAAAGCAACAGTGACAGTGAACACCAGTGACTTGGGAAATAAAAAGAAAGACGATGAGGTAGACAGGGATGC
CCCATCACGGAAAAAAGCTAAAGAGCCCACAACACAGATAACAGAAGAGGTCCGGGATCAGCTCCTGGAGGCCTC
CGCTGCCACCAGGAAAGCCTTCACCACTTTCAGGAGGGAGGCTGATCCCGACGACCACTACCAGCCTGGAGAGGG
CACCCAGGCCACTGCCGACAAGGCCAAGGACGACCTGGAGATGAGCGCGGTCATCACCATCATGCAGCCCATCCT
CCGCTTCCTTCAGCTCCTGTGTGAAAACCACAACCGAGACCTGCAGAACTTCCTCCGTTGCCAAAATAACAAGAC
CAACTACAATTTGGTATGTGAGACCCTGCAGTTTCTGGACTGTATTTGTGGAAGCACAACTGGAGGCCTTGGTCT
TCTGGGCTTGTATATAAATGAAAAGAACGTAGCGCTTATCAACCAAACCCTGGAAAGTCTGACCGAATACTGTCA
AGGACCTTGCCATGAGAACCAGAACTGCATAGCCACCCATGAATCCAATGGCATTGACATCATCACAGCCCTGAT
CCTCAATGATATCAATCCTTTGGGAAAGAAGAGGATGGACCTTGTGTTAGAACTGAAGAACAATGCCTCGAAGTT
GCTCCTGGCCATCATGGAAAGCAGGCACGACAGTGAAAACGCAGAGAGGATACTTTATAACATGAGGCCCAAGGA
ACTGGTGGAAGTGATCAAGAAAGCCTACATGCAAGGTGAAGTGGAATTTGAGGATGGAGAAAACGGTGAGGATGG
GGCGGCGTCCCCCAGGAACGTGGGGCACAACATCTACATATTAGCCCATCAGTTGGCTCGGCATAACAAAGAACT
TCAGAGCATGCTGAAACCTGGTGGCCAAGTGGACGGAGATGAAGCCCTGGAGTTTTATGCCAAGCACACGGCGCA
GATAGAGATTGTCAGATTAGACCGAACAATGGAACAGATAGTCTTTCCCGTGCCCAGCATATGTGAATTCCTAAC
CAAGGAGTCAAAACTACGAATTTACTATACTACAGAGAGAGACGAACAAGGCAGCAAAATCAATGATTTCTTTCT
GCGGTCTGAAGACCTCTTCAATGAAATGAATTGGCAGAAGAAACTGAGAGCCCAGCCCGTGTTGTACTGGTGTGC
CCGCAACATGTCTTTCTGGAGCAGCATTTCGTTTAACCTGGCCGTCCTGATGAACCTGCTGGTGGCGTTTTTCTA
CCCGTTTAAGGGAGTCCGAGGAGGAACCCTGGAGCCCCACTGGTCGGGACTCCTGTGGACAGCCATGCTCATCTC
TCTGGCCATCGTCATTGCCCTCCCCAAGCCCCATGGCATCCGGGCCTTAATTGCCTCCACAATTCTACGACTGAT
ATTTTCAGTCGGGTTACAACCCACGTTGTTTCTTCTGGGCGCTTTCAATGTATGCAATAAAATCATCTTTCTAAT

FIGURE 3224C

GAGCTTTGTGGGCAACTGTGGGACATTCACAAGAGGCTACCGAGCCATGGTTCTGGATGTTGAGTTCCTCTATCA
TTTGTTGTATCTGGTGATCTGTGCCATGGGGCTCTTTGTCCATGAATTCTTCTACAGTCTGCTGCTTTTTGATTT
AGTGTACAGAGAAGAGACTTTGCTTAATGTCATTAAAAGTGTCACTCGCAATGGACGGTCCATCATCCTGACAGC
AGTTCTGGCTCTGATCCTCGTTTACCTGTTCTCAATAGTGGGCTATCTTTTCTTCAAGGATGACTTTATCTTGGA
AGTAGATAGGCTGCCCAATGAAACAGCTGTTCCAGAAACCGGCGAGAGTTTGGCAAGCGAGTTCCTGTTCTCCGA
TGTGTGTAGGGTGGAGAGTGGGGAGAACTGCTCCTCTCCTGCACCCAGAGAAGAGCTGGTCCCTGCAGAAGAGAC
GGAACAGGATAAAGAGCACACATGTGAGACGCTGCTGATGTGCATTGTCACCGTGCTGAGTCACGGGCTGCGGAG
CGGGGGTGGAGTAGGAGATGTACTCAGGAAACCGTCCAAAGAGGAACCCCTGTTTGCTGCTAGAGTTATTTATGA
CCTCTTGTTCTTCTTCATGGTCATCATCATTGTTCTTAACCTGATTTTTGGGGTTATCATTGACACTTTTGCTGA
CCTGAGGAGTGAGAAGCAGAAGAAGGAAGAGATCTTGAAGACCACGTGCTTTATCTGTGGCTTGGAAAGAGACAA
GTTTGACAACAAGACTGTCACCTTTGAAGAGCACATCAAGGAAGAACACAACATGTGGCACTATCTGTGCTTCAT
CGTCCTGGTGAAAGTAAAGGACTCCACCGAATATACTGGGCCTGAGAGTTACGTGGCAGAAATGATCAAGGAAAG
AAACCTTGACTGGTTCCCCAGGATGAGAGCCATGTCATTGGTCAGCAGTGATTCTGAAGGAGAACAGAATGAGCT
GAGAAACCTGCAGGAGAAGCTGGAGTCCACCATGAAACTTGTCACGAACCTTTCTGGCCAGCTGTCGGAATTAAA
GGATCAGATGACAGAACAAAGGAAGCAGAAACAAAGAATTGGTCTTCTAGGACATCCTCCTCACATGAATGTCAA
CCCACAACAACCAGCA**TAA**GCAAATGAAAGAAAGGAATTGTATTTACCTTTTATAATTATTATTAGTGTGGGTAT
GGCTAATGAGTTCTGATTCACCCACGAAGGTTACATTTATGCTGAATACATTTGTAAATACTCAGTTTTATACTG
TATGTATATGATTGCTACTCTAAAGGTTTGGATATATGTATTGTAATTAGAATTGTTGGCATGATGACATTTCAT
TTGTGCCAAAAATATTAAAAATGCCTTTTTTGGAAGGACTAACAGAAAGCACCTGATTTGCACTTGAACCAGATT
ATAGATTTAAAAGTATATGACATGTATTTTGTATTTAAAACTAGAATAGCCAGTATTTATGTTTTTTATAAAACT
GTGCAATACGAATTATGCAATCACAATACATTTGTAGCTCCCGAGTGTCCTAAAGGGAGTGCACTTCTTTGAAGC
TGGTGTGTTAATACTATGTAATAAATGGTTAACTTTCAAATGATGCTGCTGCCAAAATTATATTAATAGTGAGTT
TCAGGCCCCTGGGCATTTTGTACCATGTAATTATCCTCTGGTGATGCTGTTTCTCGTTAGTGGCAGTAGTGCCTC
CGTCTCCTAGTGATAATGCTCCAAGTCTATGAACTGTTAAATCAGCATTCATTTTAAGAAAAGCAACTTTAGTTT
CAAAGATACTTTTAAGCTTCTAAATTGATCATTTAAACTATTTCTTTAAATAAGAGAGCCAAATTAGAGGCTCAT
ACTTTAGCTTGTGAAGAAGATAATGAATTTTTTAAAGGGAACTTTCTATGCAATGTTCAGGATAAATCGATACTG
CTGGCCAATCAGTGTCATCTCCTGGGTAAATTTTGATGTCGCATTATAAAGACATGCATAATTGATGGTTTCTAG
ATTATCTAGTCCAAACAATAGAGTTTATTTTTTCTTCATCTGAACCAACATGCTACAGTAGCTAAGAAGTATTAA
AACTATATACATCCATATAAAGATGAAATATGAACTATCTCATTAGAAGTCATAGTTGACCACAGACATGTTATT
CTTCTGAAAGAGCCACATTTTGGTTTTATTTCTTGTCACATGATTTCTTTTCTTGATGGATGAAAAATATGAAAT
GAAATCTTTTATATCTGTTGCCTAGTTTTGTACATGGATCTCATTTTACAAGAGAATCTCTCTGCTA

FIGURE 3225

MSDKMSSFLHIGDICSLYAEGSTNGFISTLGLVDDRCVVQPETGDLNNPPKKFRDCLFKLCPMNRYSAQKQFWKA
AKPGANSTTDAVLLNKLHHAADLEKKQNETENRKLLGTVIQYGNVIQLLHLKSNKYLTVNKRLPALLEKNAMRVT
LDEAGNEGSWFYIQPFYKLRSIGDSVVIGDKVVLNPVNAGQPLHASSHQLVDNPGCNEVNSVNCNTSWKIVLFMK
WSDNKDDILKGGDVVRLFHAEQEKFLTCDEHRKKQHVFLRTTGRQSATSATSSKALWEVEVVQHDPCRGGAGYWN
SLFRFKHLATGHYLAAEVDPDQDASRSRLRNAQEKMVYSLVSVPEGNDISSIFELDPTTLRGGDSLVPRNSYVRL
RHLCTNTWVHSTNIPIDKEEEKPVMLKIGTSPVKEDKEAFAIVPVSPAEVRDLDFANDASKVLGSIAGKLEKGTI
TQNERRSVTKLLEDLVYFVTGGTNSGQDVLEVVFSKPNRERQKLMREQNILKQIFKLLQAPFTDCGDGPMLRLEE
LGDQRHAPFRHICRLCYRVLRHSQQDYRKNQEYIAKQFGFMQKQIGYDVLAEDTITALLHNNRKLLEKHITAAEI
DTFVSLVRKNREPRFLDYLSDLCVSMNKSIPVTQELICKAVLNPTNADILIETKLVLSRFEFEGVSSTGENALEA
GEDEEEVWLFWRDSNKEIRSKSVRELAQDAKEGQKEDRDVLSYYRYQLNLFARMCLDRQYLAINEISGQLDVDLI
LRCMSDENLPYDLRASFCRLMLHMHVDRDPQEQVTPVKYARLWSEIPSEIAIDDYDSSGASKDEIKERFAQTMEF
VEEYLRDVVCQRFPFSDKEKNKLTFEVVNLARNLIYFGFYNFSDLLRLTKILLAILDCVHVTTIFPISKMAKGEE
NKGSNVMRSIHGVGELMTQVVLRGGGFLPMTPMAAAPEGNVKQAEPEKEDIMVMDTKLKIIEILQFILNVRLDYR
ISCLLCIFKREFDESNSQTSETSSGNSSQEGPSNVPGALDFEHIEEQAEGIFGGSEENTPLDLDDHGGRTFLRVL
LHLTMHDYPPLVSGALQLLFRHFSQRQEVLQAFKQVQLLVTSQDVDNYKQIKQDLDQLRSIVEKSELWVYKGQGP
DETMDGASGENEHKKTEEGNNKPQKHESTSSYNYRVVKEILIRLSKLCVQESASVRKSRKQQQRLLRNMGAHAVV
LELLQIPYEKAEDTKMQEIMRLAHEFLQNFCAGNQQNQALLHKHINLFLNPGILEAVTMQHIFMNNFQLCSEINE
RVVQHFVHCIETHGRNVQYIKFLQTIVKAEGKFIKKCQDMVMAELVNSGEDVLVFYNDRASFQTLIQMMRSERDR
MDENSPLMYHIHLVELLAVCTEGKNVYTEIKCNSLLPLDDIVRVVTHEDCIPEVKIAYINFLNHCYVDTEVEMKE
IYTSNHMWKLFENFLVDICRACNNTSDRKHADSILEKYVTEIVMSIVTTFFSSPFSDQSTTLQTRQPVFVQLLQG
VFRVYHCNWLMPSQKASVESCIRVLSDVAKSRAIAIPVDLDSQVNNLFLKSHSIVQKTAMNWRLSARNAARRDSV
LAASRDYRNIIERLQDIVSALEDRLRPLVQAELSVLVDVLHRPELLFPENTDARRKCESGGFICKLIKHTKQLLE
ENEEKLCIKVLQTLREMMTKDRGYGEKGEALRQVLVNRYYGNVRPSGRRESLTSFGNGPLSAGGPGKPGGGGGGS
GSSSMSRGEMSLAEVQCHLDKEGASNLVIDLIMNASSDRVFHESILLAIALLEGGNTTIQHSFFCRLTEDKKSEK
FFKVFYDRMKVAQQEIKATVTVNTSDLGNKKKDDEVDRDAPSRKKAKEPTTQITEEVRDQLLEASAATRKAFTTF
RREADPDDHYQPGEGTQATADKAKDDLEMSAVITIMQPILRFLQLLCENHNRDLQNFLRCQNNKTNYNLVCETLQ
FLDCICGSTTGGLGLLGLYINEKNVALINQTLESLTEYCQGPCHENQNCIATHESNGIDIITALILNDINPLGKK
RMDLVLELKNNASKLLLAIMESRHDSENAERILYNMRPKELVEVIKKAYMQGEVEFEDGENGEDGAASPRNVGHN
IYILAHQLARHNKELQSMLKPGGQVDGDEALEFYAKHTAQIEIVRLDRTMEQIVFPVPSICEFLTKESKLRIYYT
TERDEQGSKINDFFLRSEDLFNEMNWQKKLRAQPVLYWCARNMSFWSSISFNLAVLMNLLVAFFYPFKGVRGGTL
EPHWSGLLWTAMLISLAIVIALPKPHGIRALIASTILRLIFSVGLQPTLFLLGAFNVCNKIIFLMSFVGNCGTFT
RGYRAMVLDVEFLYHLLYLVICAMGLFVHEFFYSLLLFDLVYREETLLNVIKSVTRNGRSIILTAVLALILVYLF
SIVGYLFFKDDFILEVDRLPNETAVPETGESLASEFLFSDVCRVESGENCSSPAPREELVPAEETEQDKEHTCET
LLMCIVTVLSHGLRSGGGVGDVLRKPSKEEPLFAARVIYDLLFFFMVIIIVLNLIFGVIIDTFADLRSEKQKKEE
ILKTTCFICGLERDKFDNKTVTFEEHIKEEHNMWHYLCFIVLVKVKDSTEYTGPESYVAEMIKERNLDWFPRMRA
MSLVSSDSEGEQNELRNLQEKLESTMKLVTNLSGQLSELKDQMTEQRKQKQRIGLLGHPPHMNVNPQQPA

FIGURE 3226A

AGAGTCCTGGATGAGACGGCTCGAGAGCGTGCCCGGCTGCAGATAGAGATTGGGAAGCTGAGGGCAGAGTTGGAC
GAGGTCAACAAGAGCGCCAAGAAGAGGGAGGGCGAGCTTACGGTGGCCCAGGGCCGTGTGAAGGACCTGGAGTCC
CTGTTCCACCGGAGCGAGGTGGAGCTGGCAGCTGCCCTCAGCGACAAGCGCGGCCTGGAGAGTGACGTGGCTGAG
CTGCGGGCCCAGCTGGCCAAGGCCGAGGACGGTCATGCAGTGGCCAAAAAGCAGCTGGAGAAGGAGACGCTGATG
CGTGTGGACCTGGAGAACCGCTGCCAGAGCCTGCAGGAGGAGCTGGACTTCCGGAAGAGTGTGTTCGAGGAGGAG
GTGCGGGAGACGCGGCGGCGGCACGAGCGGCGCCTGGTGGAGGTGGACAGCAGCCGGCAGCAGGAGTACGACTTC
AAGATGGCACAGGCGCTGGAGGAGCTGCGGAGCCAGCACGACGAGCAAGTGCGGCTCTACAAGCTGGAGCTGGAG
CAGACCTACCAGGCCAAGCTGGACAGCGCCAAGCTGAGCTCTGACCAGAACGACAAGGCGGCCAGTGCGGCTCGC
GAGGAGCTGAAGGAGGCCCGCATGCGCCTGGAGTCCCTCAGCTACCAGCTCTCCGGCCTCCAGAAGCAGGCCAGT
GCCGCTGAAGATCGCATTCGGGAGCTGGAGGAGGCCATGGCCGGGGAGCGGGACAAGTTCCGGAAGATGCTGGAC
GCCAAGGAGCAGGAGATGACGGAGATGCGGGACGTGATGCAGCAGCAGCTGGCCGAGTACCAGGAGCTGCTGGAC
GTGAAGCTGGCCCTGGACATGGAGATCAACGCCTACCGGAAGCTCCTGGAGGGCGAGGAGGAGAGCCTGAAGCTG
TCCCCCAGCCCATCTTCGCGCGTCACCGTCTCACGAGCCACCTCGAGCAGCAGCGGCAGCTTGTCCGCCACCGGG
CGCCTGGGCCGCAGTAAGCGGAAGCGCTGGAGGTGGAGGAGCCCTTGGCAGCGGCCCAAGCGTCCTGGGCACGGG
CACGGGTGGCAGCGGTGGCTTCCACCTGGCCCAGCAGGCCTCGGCCTCGGGCAGCGTCACATCGAGGAGATCGAC
CTGGAGGGCAAGTTTGTGCAGCTCAAGAACAACTCGGACAAGGATCAGTCTCTGGGGAACTGGAGAATCAAGAGG
CAGGTCTTGGAGGGGGAGGAGATCGCCTACAAGTTCACGCCCAAGTACATCCTGCGGGCCGGCCAGATGGTCACG
GTGTGGGCAGCTGGTGCGGGGGTGGCCCACAGCCCCCCCTCGACGCTGGTGTGGAAGGGCCAGAGCAGCTGGGGC
ACGGGCGAGAGCTTCCGCACCGTCCTGGTTAACGCGGATGGCGAGGAAGTGGCCATGAGGACTGTGAAGAAGTCC
TCGGTGATGCGTGAGAATGAGAATGGGGAGGAAGAGGAGGAGGAAGCCGAGTTTGGCGAGGAGGATCTTTTCCAC
CAACAGGGGGACCCGAGGACCACCTCAAGAGGCTGCTACGTGATG**TGA**ACCCACACTCCTCATCCACACACCTTT
CTTTACCCAGAGCCACTGAAAACTATTTTTTATCATTGGCTTTCTTTAGTTCTTGATACATTTCTAGAGAATTTC
TAAGCGAACTGCCAGAACGTGTGGGTGGGTCTCCCCCAGCCCTCCCTCCTGGCGGGTCTCCTCCAGCCTCACTTC
GCTGCCACTTCGCCGCTGCCCCGGAGACTTTTCAATCCCACCCCACTCCTCATCTCACCATTTGGTCAAATTGGA
AGCCCAGGGCCAGGACCCGGAGGTTTAGAAGATGCTTGGGCTTGGAGGGAGGAGGGCCGGCGAGGCTAGCGAGGG
GACAGGAGACGGCCCTGCTGCGGACGGAGCGCGGAAACTGCGTAGGAATTCAGTGGTGGTGGGTTTTTTTAAGGC
TTTCTACAAAACCAAATTCAGAATCCAGGCGTCGACCTGGTGGGGCCCGGGGCAAGCCTGCATTCTGGCTGCCCA
GCTTCGGACAGCGGGAACTCCTCAGGCAGCCACGCAGCGGGTGTGGGCCAGCATGGGGATGGCGTGGCCCCAGGG
GGGTTTTCACTCCGCTGCCTGGGCTTCCAGATTCCCGTTCTGGCAGCGACCGGCCGGGTTTCTCGGACCGTTGAC
TTTATTTGGGGGAGTTTTCCCGCAGTTCAGTTCCTGACTGTGCAAGGCCAACAGGGCAGGGGAGGGGAAGACCTG
GGGAAGGAAGAATGAGGACACAGTCCCGTCGTAAGACCTGTCACAACAATAAGCAGGGAGGGGAGATGTGGAGGG
GACACATCTGGTTGCCTTGGAGGCAGAAGCTGTGAGTTTCAGAACAGCTGTCTGCAGGGAACGCCACCATGTTGA
CCCTCTGGAGGAGAGCGCTGTGGAGCCCCTCCCGTGTTCCAGCTCCGTCTGCCCTGTGCCTATATATCACATGCG
TCTATCATACTGTGTCTTTATCTGTGATTTTTCTCGCTGAAACATGTTTCTCAGACAGCCAAGGCCACCTGACTC
CTATCACGACGCACCCAAGCCCCTCAGTCCAGCTTCCCAATGCCTGGCACCCCCTTCGGCAATAGCTCACCGTTT
ACACCCTCCCTCATAGATACACAGAAGTTATTTTTTTAATGGATATTTATTTTTTTACATTGGTCAGTACACAGG
TCAGGGAGCTCACGCCAGGGCCTTGAGGACAGGCTGACCCTCCTCCCCGGGGTGGCGTGGGGCTGGGGCACCCCC
GACGGCAGAGCCTCCTTCAGAAAGTGCAGCTCAAGTCTTAAAGACACCAAAACTGAGCCATGGGCACGCGCCGTC
TCCGGGCCATGGCGTTCACTGCAGGGCGGGGGCGGCACCGCTCCCCTGTGACTGCATCCCGCCTCCCTGGGGACC
TGCCTGTGGCAGGAAGGAATGGGGGGCCCCAGCCCAGGCCGGGAAGGAGCCAGCGGCCGACAAAGCAGAAACACC
GCTGCTCCACGTAGCCCCTGCTGGCTGTCCTTGCTCTCAGAAGTCCCGGTCCCATGTAGATAGAGCCCGGCGGAT
CTTACCAAAGCATTTCCTCCTGGAGGCTACGCCGCTTGGTGCTCCCAGTGAGGCGGCTGGTAGGGAGCTTTGCCT
GCCCCGGGGATACCCTCTACCAGCCGCTGGAAGTGGGAATGCTGGCGACAGACTGTGTCTGTTTCCCACCTTCAT
AGCAGGAATCACCCGGACCCGACTGGCTGGGCTTCGTGCTAGCGAGGGTTTTCTGGGGGTGGGTCTTGGTGATCT
TGTCCTATGGGGATCTCTGCAGTGGTCTCAGCCACATCCTAGTATATTTTGGCTCTGGAGGAGCAAAGCTGTATC
CTGGAGTTGGTCTGTGATTTGCCGACAGACTTGCAGGCTGGGCTCAGCAAAGTCCCCCCCAAAACCCGCAGGTCC
TCATGTCCAGACGCTGCCAGTCCTGTCCTGAAAACAGCACGCCCCAGGCCCACAGAACCCCCCACCCTACATTTG
CCTTGGGTGGAGCTGGGGGTGGTCCTAGGACTGCGGGTGCCCTTAGCTGAAGGGGGCCCGCAGAAGCGTGAGCTG

FIGURE 3226B

GGCCGCCTGTGGGTCATTGGAGGTTCATTGAGAATTGAGTCCTTTGGAAAGACTAAGAAAATCAAATTTTTAAAA
GTTATTTATGGCCTGGGAAACAATTTGCATTTGTCCCCAAATACGCTTAGCTGTGTGCCGCTTAGAACGATGAGA
AACCATCCCTCTGTGTAAGCCCGTGCCGTGTGACTCGAAGCCTAGCGCCCTCCCTGCGAAGCATCAGACGCCACC
CAGCCCTGGGGGAGGCCCACGCCTGCTGGACCAACGCGGGTTCTGGGGTGCACAGCGCCAGGTTAACGCTGAAGC
CTGCCCCGCTGAGCCCAAGAGCCGGGAGGCCTGCGGGCTGACCCAGAATCCGATCATGCACCTGTCCTCATGCCA
GCGGCTTTGGCTGGGGTTGGTCTGAAGCCTGCACGCGGCAGTTCTTTGTTAAAGATCTGAGGGACTCGTCAGTCC
TAGCGTCGCCGCCTGCAGCCTCTTCCAAGCCCTGCGTCCAGCGAGCGTCACAGCACAACCTGCAAAAACGGAGCT
GGGCTGCAGCTGGGGCTGGCATGGACTTTCATTTCAGAGATTCGGTTTTTAAGAAGATGCATGCCTAGCGTGTTC
TTTTTTTTTTCCAATGATTTGTAATATACATTTTATGACTGGAAACTTTTTTGTACAACACTCCAATAAA

FIGURE 3227

RVLDETARERARLQIEIGKLRAELDEVNKSAKKREGELTVAQGRVKDLESLFHRSEVELAAALSDKRGLESDVAE
LRAQLAKAEDGHAVAKKQLEKETLMRVDLENRCQSLQEELDFRKSVFEEEVRETRRRHERRLVEVDSSRQQEYDF
KMAQALEELRSQHDEQVRLYKLELEQTYQAKLDSAKLSSDQNDKAASAAREELKEARMRLESLSYQLSGLQKQAS
AAEDRIRELEEAMAGERDKFRKMLDAKEQEMTEMRDVMQQQLAEYQELLDVKLALDMEINAYRKLLEGEEESLKL
SPSPSSRVTVSRATSSSSGSLSATGRLGRSKRKRWRWRSPWQRPKRPGHGHGWQRWLPPGPAGLGLGQRHIEEID
LEGKFVQLKNNSDKDQSLGNWRIKRQVLEGEEIAYKFTPKYILRAGQMVTVWAAGAGVAHSPPSTLVWKGQSSWG
TGESFRTVLVNADGEEVAMRTVKKSSVMRENENGEEEEEEAEFGEEDLFHQQGDPRTTSRGCYVM

FIGURE 3228A

CGCCCGGGCAGGTGGCGGCAGAGCTGAAGTGAGCGGAGCCACCAGGAGGCCATGTCGGGTGAGGACGCTGAGGTC
CGGGCAGTCTCTGAAGATGTCTCCAATGGAAGCAGTGGCTCGCCCAGCCCTGGGGACACACTGCCCTGGAACCTT
GGGAAAACGCAGCGGAGCCGGCGCAGCGGGGGTGGCGCTGGGAGCAACGGGAGTGTCCTGGACCCAGCTGAGCGG
GCGGTCATTCGCATCGCAGATGAGCGGGATCGTGTGCAGAAGAAAACCTTCACCAAGTGGGTCAACAAGCACCTC
ATCAAGGCCCAGAGGCACATCAGTGACCTGTATGAAGACCTCCGCGATGGCCACAACCTCATCTCCCTGCTGGAG
GTCCTCTCGGGGGACAGCCTGCCCCGGGAGAAGGGGAGGATGCGTTTCCACAAGCTGCAGAATGTCCAGATTGCC
CTGGACTACCTCCGGCACCGCCAGGTGAAGCTGGTGAACATCAGGGATGATGACATCGCTGACGGCAACCCCAAG
CTGACCCTTGGCCTCATCTGGACAATCATTCTGCACTTCCAGATCTCAGATATCCAGGTGAGTGGGCAGTCGGAG
GACATGACGGCCAAGGAGAAGCTGCTGCTGTGGTCGCAGCGAATGGTGGAGGGGTACCAGGGCCTGCGATGCGAC
AACTTCACCTCCAGCTGGAGAGACGGCCGCCTCTTCAATGCCATCATCCACCGGCACAAGCCCCTGCTCATCGAC
ATGAACAAGGTGTACCGGCAGACCAACCTGGAGAACCTGGACCAGGCCTTCTCTGTGGCGGAGCGGGACCTGGGA
GTGACGCGGCTCCTGGACCCTGAGGACGTGGATGTCCCTCAGCCCGACGAGAAGTCCATCATCACCTACGTCTCG
TCGCTGTATGACGCCATGCCCCGCGTGCCGGACGTGCAGGATGGGGTGAGGGCCAACGAGCTGCAGCTGCGCTGG
CAGGAGTACCGGGAGCTGGTGCTGCTGCTGCTTCAGTGGATGCGACACCACACGGCCGCCTTTGAGGAACGCAGG
TTCCCCTCCAGCTTCGAGGAGATTGAGATCCTGTGGTCTCAGTTCCTGAAGTTTAAGGAGATGGAGCTACCAGCC
AAGGAGGCCGACAAGAACAGGTCCAAGGGCATCTACCAATCCCTGGAGGGAGCGGTGCAAGCAGGCCAGCTCAAG
GTGCCCCCTGGCTACCACCCGCTGGATGTGGAGAAGGAGTGGGGCAAGCTGCACGTGGCCATCCTGGAGCGGGAG
AAGCAGCTCCGCAGCGAGTTTGAGAGGCTGGAGTGTCTTCAGCGCATCGTGACCAAGCTGCAGATGGAGGCGGGG
CTGTGTGAGGAGCAGCTGAACCAGGCCGACGCCCTGCTGCAGTCGGATGTCCGGCTGCTGGCTGCAGGCAAAGTG
CCACAGCGGGCGGGGGAGGTGGAACGGGACTTGGACAAGGCGGATAGCATGATCCGGCTGCTCTTCAACGACGTG
CAGACCCTCAAGGATGGACGGCACCCGCAGGGCGAGCAGATGTACCGCAGGGTGTACCGTCTGCACGAGCGCCTG
GTAGCCATCCGCACCGAGTACAACCTACGGCTGAAGGCAGGCGTGGCGGCCCCTGCAACCCAGGTGGCCCAGGTG
ACTCTGCAGAGTGTGCAGAGGCGCCCCGAGCTGGAGGACTCCACTCTGCGCTACCTGCAGGACCTGCTGGCCTGG
GTGGAGGAGAACCAGCACCGTGTGGATGGCGCTGAGTGGGGTGTGGACCTGCCCAGCGTGGAGGCGCAGCTGGGC
AGCCACCGAGGCCTGCACCAGTCCATCGAAGAATTCCGGGCCAAGATCGAGCGGGCACGGAGTGACGAGGGCCAG
CTCTCCCCCGCCACCCGGGGTGCCTACCGTGACTGCCTGGGTCGGCTGGACCTGCAGTACGCCAAGCTGCTGAAC
TCCTCCAAGGCCCGCCTCAGGTCCCTGGAGAGCTTGCACAGCTTTGTGGCAGCCGCCACTAAGGAGCTAATGTGG
CTGAATGAGAAGGAGGAGGAGGAGGTGGGCTTCGACTGGAGCGACCGCAACACCAACATGACCGCCAAGAAGGAG
AGCTACTCGGCGCTGATGCGGGAGCTGGAGCTGAAGGAGAAGAAGATCAAGGAGCTCCAAAATGCTGGGGACCGG
CTGCTGCGGGAGGACCACCCGGCCCGGCCCACGGTGGAGTCCTTCCAGGCGGCCCTGCAGACGCAGTGGAGCTGG
ATGCTACAGCTGTGCTGCTGTATCGAGGCACACCTGAAGGAGAACGCTGCCTACTTTCAGTTCTTCTCAGATGTG
CGGGAGGCCGAGGGGCAGTTGCAGAAGCTGCAGGAGGCACTGCGTAGGAAATACAGTTGTGATCGCTCCGCCACC
GTCACCCGGCTGGAGGACCTGCTGCAGGATGCCCAGGACGAGAAGGAACAGCTGAACGAGTACAAGGGCCACCTC
TCAGGCCTGGCCAAGCGGGCCAAGGCCGTCGTGCAGCTGAAGCCCCGCCACCCAGCCCACCCCATGCGGGGCCGC
CTGCCCCTGCTGGCCGTGTGCGACTATAAGCAGGTGGAGGTGACTGTGCACAAGGGTGACGAGTGCCAGCTGGTG
GGCCCTGCACAGCCGTCCCACTGGAAGGTGCTCAGCAGCTCCGGCAGCGAGGCCGCCGTGCCCTCCGTGTGCTTC
CTGGTGCCCCCGCCCAACCAGGAGGCCCAGGAGGCCGTCACCAGGCTGGAGGCCCAGCACCAGGCCCTGGTCACG
CTGTGGCACCAGTTGCACGTGGACATGAAGAGCCTTCTGGCCTGGCAGAGCCTTCGCCGCGACGTGCAGCTCATC
CGCTCGTGGTCCCTGGCCACGTTCCGCACCCTGAAGCCAGAGGAGCAGCGCCAAGCCCTGCACAGCCTGGAGCTG
CACTACCAGGCCTTCCTGCGGGACAGCCAGGACGCGGGCGGCTTCGGACCCGAGGACCGGCTGATGGCTGAGCGC
GAGTACGGCTCCTGCAGCCACCACTACCAGCAGCTGCTGCAGAGCCTGGAACAGGGTGCACAGGAAGAGTCTCGC
TGCCAGCGCTGCATCTCCGAGCTCAAAGACATCCGGCTGCAGCTGGAGGCCTGTGAGACGCGCACCGTGCACCGC
CTGCGGCTGCCGCTGGACAAAGAGCCGGCACGGGAGTGTGCCCAGCGCATCGCCGAGCAGCAGAAGGCACAGGCA
GAGGTGGAGGGGCTGGGCAAGGGGGTCGCCCGGCTCTCTGCCGAGGCCGAGAAGGTCTTGGCCCTACCAGAGCCA
TCGCCTGCGGCCCCCACGCTGCGCTCGGAGCTGGAGCTGACGCTGGGCAAGCTGGAGCAGGTCCGCAGCCTGTCT
GCCATCTACCTGGAGAAGCTCAAGACCATCAGCCTGGTGATCCGCGGCACGCAGGGGGCCGAGGAGGTGCTCAGG
GCCCACGAGGAGCAGCTCAAGGAGGCCCAGGCCGTGCCGGCCACCCTCCCGGAGCTCGAGGCCACCAAGGCCTCT
CTGAAGAAGCTGCGGGCCCAGGCCGAGGCACAGCAGCCCACGTTCGACGCCCTGCGGGATGAGCTGCGGGGGGCA

FIGURE 3228B

CAGGAGGTGGGGGAGCGACTGCAGCAGCGGCACGGGGAGCGGGACTTGGAGGTGGAGCGCTGGCGGGAGCGGGTC
GCCCAGGTGCTTGAGCGCTGGCAGGCTGTGCTGGCCCAGACCGACTTGCGGCAGCGCGAGCTCGAGCAACTGGGC
CGCCAGCTGCGTTACTACCGCGAGAGTGCAGACCCCTTGGGCGCCTGGCTGCAGGACGCCAGGCGGCGGCAGGAG
CAGATCCAGGCCATGCCGCTGGCCGACAGCCAGGCTGTGCGGGAGCAGCTGCGGCAGGAGCAGGCCCTGCTGGAG
GAGATCGAGCGCCACGGCGAGAAGGTCGAGGAGTGCCAGAGGTTTGCGAAACAGTACATCAACGCCATCAAGGAC
TATGAACTCCAGCTGGTGACGTACAAGGCGCAGCTTGAGCCGGTGGCCTCCCCGGCCAAGAAGCCCAAGGTCCAG
TCGGGATCAGAGAGTGTCATCCAGGAGTACGTGGACCTGCGTACGCACTACAGCGAGCTGACCACACTGACGAGC
CAGTACATCAAGTTCATCAGCGAGACTCTGCGGCGCATGGAGGAGGAGGAGAGGCTGGCTGAGCAGCAGCGGGCA
GAGGAGCGCGAGCGGCTGGCCGAGGTGGAGGCCGCGCTGGAGAAGCAGCGGCAGCTGGCCGAGGCGCACGCCCAG
GCAAAGGCACAGGCGGAGCGGGAGGCGAAGGAGCTGCAGCAGCGCATGCAGGAGGAGGTGGTGCGGCGGGAGGAG
GCGGCGGTGGACGCGCAGCAGCAGAAGCGCAGCATTCAGGAGGAGCTGCAGCAGCTGCGGCAGAGCTCGGAGGCG
GAGATCCAGGCCAAGGCCCGGCAGGCAGAGGCGGCTGAGCGCAGCCGGCTGCGCATCGAGGAGGAGATCCGCGTG
GTGCGCCTGCAGTTGGAGGCCACCGAGCGCCAGCGTGGCGGGGCTGAGGGGGAGCTGCAGGCACTGCGTGCACGG
GCGGAGGAGGCTGAGGCACAAAAGCGACAGGCGCAGGAGGAGGCCGAGCGCTTGCGGAGGCAGGTGCAGGACGAG
AGCCAGCGTAAGCGGCAGGCGGAGGTGGAGCTGGCCTCGCGCGTGAAGGCCGAGACCGAGGCGGCGCGCGAGAAG
CAGCGGGCCCTGCAGGCCCTGGAGGAGCTGCGGCTGCAGGCGGAGGAGGCGGAGCGGCGCCTGCGGCAGGCCGAG
GTGGAGCGAGCGCGGCAGGTACAGGTGGCCCTGGAGACGGCGCAGCGCAGTGCAGAGGCGGAGCTGCAGAGCAAA
CGCGCCTCCTTCGCCGAGAAGACGGCACAGCTGGAGCGCTCCCTGCAGGAGGAACACGTGGCTGTGGCACAGCTG
CGGGAGGAGGCTGAGCGGCGGGCACAGCAGCAGGCCGAGGCCGAGCGGGCGCGCGAGGAGGCAGAGCGGGAGCTG
GAGCGCTGGCAGCTCAAGGCCAACGAGGCGCTACGGCTGCGGCTGCAGGCGGAGGAGGTGGCGCAGCAGAAGAGC
CTGGCGCAGGCCGAGGCTGAGAAGCAGAAGGAGGAGGCGGAGCGCGAGGCGCGGCGGCGCGGCAAGGCGGAGGAG
CAGGCCGTCCGGCAGCGGGAGCTGGCTGAACAAGAGCTGGAGAAGCAGCGGCAGCTGGCGGAAGGCACCGCGCAG
CAGCGCCTGGCCGCGGAGCAGGAGTTGATCCGGCTGCGGGCCGAGACGGAGCAGGGGGAGCAGCAGCGGCAGCTG
CTGGAGGAGGAGCTGGCCCGGCTGCAGCGTGAGGCGGCTGCAGCCACGCAGAAACGGCAGGAGCTGGAAGCCGAG
CTGGCCAAGGTGCGGGCCGAGATGGAGGTGCTGCTGGCCAGCAAGGCGAGGGCTGAGGAGGAGTCGCGCTCCACC
AGCGAGAAGTCCAAGCAGAGGCTGGAGGCCGAGGCCGGCCGGTTCCGCGAGCTGGCCGAGGAGGCCGCCCGCCTG
CGTGCCCTGGCGGAAGAGGCCAAGCGGCAGCGGCAGCTGGCCGAGGAAGACGCGGCGCGGCAGCGGGCCGAGGCG
GAGCGGGTGCTTGCGGAGAAGCTGGCCGCCATCGGCGAGGCCACGCGGCTCAAGACGGAGGCGGAGATCGCGCTC
AAGGAGAAGGAGGCGGAGAACGAGCGCCTGCGGCGGCTGGCGGAGGACGAGGCCTTCCAGCGGCGGCGGCTGGAG
GAGCAGGCCGCGCAACACAAGGCTGACATCGAGGAGCGCCTGGCCCAGCTGCGCAAGGCATCGGACAGCGAGCTG
GAGCGGCAGAAGGGGCTGGTGGAGGACACGCTGAGGCAGCGGCGGCAGGTGGAGGAAGAGATCCTGGCGCTGAAG
GCGAGCTTCGAGAAGGCGGCCGCTGGCAAGGCGGAGCTGGAGCTGGAGCTGGGACGCATCCGCAGCAACGCGGAG
GACACGCTGCGCAGCAAGGAGCAGGCCGAGCTGGAGGCCGCGAGGCAGCGGCAGCTGGCGGCGGAGGAGGAGCGG
CGGCGCCGTGAGGCTGAGGAGCGCGTGCAGAAGAGCCTGGCGGCCGAGGAGGAGGCCGCACGGCAGCGGAAGGCG
GCGCTGGAGGAAGTCGAGCGGCTGAAAGCCAACGTGGAGGAGGCGCGGCGCCTGCGGGAGCGAGCGGAGCAGGAG
TCGGCGCGGCAGCTGCAGCTGGCCCAGGAGGCCGCCCAGAAGCGGCTGCAGGCGGAAGAGAAGGCACACGCCTTC
GCGGTGCAGCAGAAGGAGCAGGAGCTACAGCAGACGCTGCAGCAGGAGCAGAGCGTGCTGGACCAGCTGCGCGGC
GAGGCGGAGGCGGCCCGGCGGGCGGCTGAGGAGGCGGAGGAGGCCCGGGTGCAGGCGGAGCGTGAGGCGGCGCAG
GCCCGGCGGCAGGTGGAAGAGGCCGAGCGGCTGAAGCAGTCGGCAGAGGAGCAGGCACAGGCCCGGGCTCAGGCA
CAGGCGGCTGCAGAGAAGCTGCGCAAGGAGGCCGAGCAAGAGGCGGCGCGGCGGGCACAGGCGGAGCAGGCGGCC
CTGCGGCAGAAGCAGGCAGCTGACGCGGAGATGGAGAAGCATAAGAAATTCGCCGAGCAGACGCTGCGGCAGAAG
GCGCAGGTGGAGCAGGAGCTGACAACACTGCGGCTGCAGCTGGAGGAGACCGACCACCAGAAGAACCTGCTGGAC
GAGGAGCTGCAGCGGCTGAAGGCGGAGGCCACGGAGGCCGCACGCCAGCGCAGCCAGGTGGAGGAGGAGCTCTTC
TCGGTGCGCGTGCAGATGGAGGAGCTGAGCAAGCTCAAGGCACGCATCGAGGCTGAGAACCGCGCACTCATCTTG
CGTGACAAGGACAATACGCAGCGCTTCCTGCAGGAGGAGGCTGAGAAGATGAAGCAGGTGGCGGAGGAGGCCGCG
CGGCTGAGTGTGGCGGCCCAAGAGGCTGCGCGACTGCGGCAGCTGGCAGAGGAGGACCTGGCACAGCAGCGGGCC
TTGGCAGAGAAGATGCTCAAGGAGAAGATGCAGGCGGTGCAGGAGGCCACGCGACTCAAGGCTGAGGCGGAACTG
CTGCAGCAGCAGAAGGAGCTTGCGCAGGAGCAGGCGCGGCGGCTGCAGGAGGACAAGGAGCAGATGGCGCAGCAG

FIGURE 3228C

CTGGCGGAGGAGACGCAGGGCTTCCAGCGGACGCTGGAGGCCGAGCGGCAGCGGCAGCTGGAGATGAGCGCTGAG
GCTGAGCGCCTCAAGCTGCGTGTGGCCGAGATGAGCCGAGCCCAGGCCCGCGCTGAGGAGGACGCCCAGCGCTTC
CGGAAGCAGGCGGAGGAGATCGGTGAGAAGCTGCACCGCACGGAGCTCGCCACCCAGGAGAAGGTGACCCTGGTG
CAGACACTGGAGATCCAGCGACAGCAGAGTGACCATGATGCCGAGCGCCTGCGGGAGGCCATCGCTGAGCTGGAG
CGTGAGAAGGAGAAGCTCCAACAGGAGGCCAAACTGCTGCAGCTCAAGTCTGAGGAGATGCAGACGGTGCAGCAG
GAGCAGCTGCTGCAGGAGACGCAGGCCCTGCAGCAAAGCTTCCTCTCTGAAAAGGACAGCCTGCTACAGCGGGAG
CGCTTCATCGAGCAGGAGAAGGCCAAGCTGGAGCAGCTCTTCCAGGACGAGGTGGCCAAGGCACAGCAGCTGCGT
GAGGAGCAGCAGCGGCAGCAGCAGCAGATGGAGCAGGAACGGCAGCGGCTGGTGGCCAGCATGGAGGAGGCGCGG
CGGCGGCAGCATGAGGCCGAGGAGGGCGTGCGGCGCAAGCAGGAGGAGCTGCAGCAGCTGGAGCAGCAGCGGCGG
CAGCAGGAGGAGCTGCTGGCTGAGGAGAACCAGAGGCTGCGTGAGCAGCTGCAGCTCCTGGAGGAGCAGCACCGG
GCCGCGCTGGCGCACTCAGAGGAGGTCACTGCCTCGCAGGTGGCTGCCACAAAGACCCTGCCCAATGGCCGGGAT
GCACTTGATGGCCCCGCGGCAGAGGCAGAGCCGGAGCACAGCTTCGATGGCCTGCGGCGGAAGGTGTCAGCTCAG
AGGCTGCAGGAGGCCGGCATCCTGAGTGCGGAGGAGCTGCAGCGGTTGGCGCAGGGCCACACCACGGTGGACGAG
CTCGCACGGCGGGAAGACGTGCGCCACTACCTGCAGGGCCGCAGCAGTATCGCAGGGCTGTTGCTGAAGGCCACC
AATGAGAAGCTGAGTGTTTACGCCGCCCTGCAGAGGCAGCTGCTGAGTCCCGGCACGGCCCTCATCCTGCTGGAG
GCGCAGGCGGCCTCAGGCTTCCTGCTGGACCCTGTGCGGAACCGGCGGCTGACCGTCAACGAGGCTGTGAAGGAG
GGTGTGGTGGGCCCCGAGCTGCACCACAAGCTGCTGTCGGCCGAGCGCGCCGTCACTGGCTACAAGGACCCCTAC
ACTGGCCAGCAGATCTCTCTCTTCCAAGCCATGCAGAAGGGCCTCATCGTCCGGGAGCACGGCATCCGCCTGCTG
GAGGCCCAGATCGCCACGGGCGGCGTTATCGACCCCGTGCACAGCCACCGCGTGCCCGTGGACGTGGCCTACCGG
CGCGGCTACTTCGACGAGGAGATGAACCGCGTCCTGGCGGACCCCAGCGACGACACCAAGGGCTTCTTTGACCCC
AACACGCACGAGAACCTCACGTACCTGCAGCTACTGGAGCGCTGCGTGGAGGACCCCGAGACGGGCCTGTGCCTT
CTGCCACTCACGGATAAGGCTGCCGAGGGCGGGGAGCTGGTCTACACTGACTCCGAGGCCCGGGACGTCTTTGAG
AAGGCCACCGTGTCTGCGCCGTTCGGCAAGTTCCAGGGCAAGACGGTGACCATTTGGGAGATCATCAACTCGGAA
TACTTCACGGCAGAGCAGCGGCGGGACCTGCTGCGGCAGTTCCGCACGGGCCGGATCACAGTGGAGAAGATCATC
AAGATCATCATCACGGTGGTGGAGGAGCAGGAGCAGAAGGGCCGGCTTTGCTTTGAGGGCCTGCGCAGCCTGGTG
CCAGCCGCCGAGCTGCTGGAGAGCAGGGTCATCGACCGCGAGCTCTACCAGCAGCTGCAGCGAGGTGAGCGCTCT
GTGCGAGACGTAGCCGAGGTGGACACTGTGCGGCGGGCTCTCCGGGGTGCCAACGTCATCGCGGGTGTATGGCTG
GAGGAGGCGGGGCAGAAGCTGAGTATCTACAATGCCCTGAAGAAAGACCTGCTGCCATCCGACATGGCCGTGGCC
CTGTTGGAAGCCCAGGCCGGCACCGGGCACATCATCGACCCCGCCACCAGCGCCCGGCTGACCGTGGACGAGGCA
GTGCGTGCTGGCCTGGTGGGCCCCGAGTTTCATGAGAAGCTGCTATCAGCCGAGAAGGCTGTGACAGGGTACAGG
GACCCCTACACAGGGCAGAGCGTCTCCCTGTTCCAGGCCCTGAAGAAGGGCCTCATTCCCCGGGAGCAGGGCCTG
CGCCTGTTGGACGCCCAGCTGTCCACGGGCGGCATCGTGGACCCCAGCAAGAGCCACCGCGTGCCCCTGGATGTC
GCCTGCGCCCGAGGCTGCCTGGATGAGGAGACCAGCAGGGCCCTGTCGGCACCAAGGGCCGACGCCAAGGCCTAC
AGTGACCCCAGCACAGGGGAGCCGGCCACCTACGGCGAGCTCCAGCAGCGGTGCCGGCCCGACCAGCTGACCGGG
CTGAGCCTGCTGCCGCTCTCAGAAAAGGCTGCTCGGGCCCGGCAGGAGGAGCTCTACTCAGAGCTGCAGGCCCGT
GAGACCTTTGAAAAGACCCCGGTTGAGGTCCCCGTGGGTGGCTTCAAGGGCAGGACGGTGACGGTGTGGGAGCTC
ATCAGCTCTGAGTACTTCACTGCGGAGCAGCGGCAGGAGCTGTTGCGTCAGTTCCGCACGGGCAAGGTCACCGTG
GAGAAGGTCATCAAGATTCTCATTACCATCGTGGAGGAGGTGGAGACCCTGCGGCAGGAGAGGCTGTCCTTCAGC
GGCCTCCGTGCCCCTGTGCCAGCCAGCGAGCTCCTGGCTTCCGGGGTCCTCAGCAGAGCCCAGTTTGAGCAGCTC
AAGGACGGCAAGACGACGGTCAAGGACCTTTCGGAGCTGGGCTCCGTGCGGACGCTGCTGCAGGGCAGTGGCTGC
CTCGCCGGCATCTACCTGGAGGACACCAAGGAGAAGGTGTCCATCTACGAGGCCATGCGCCGGGGCCTGCTGAGA
GCCACAACGGCTGCGCTCCTGCTGGAGGCGCAGGCGGCCACTGGCTTCCTGGTGGACCCCGTGCGGAACCAGCGC
CTGTATGTCCACGAGGCCGTGAAGGCGGGCGTGGTGGGCCCCGAGCTTCACGAGCAGCTGCTGTCTGCCGAGAAG
GCCGTCACCGGCTACAGAGACCCCTACTCGGGCAGCACCATCTCCCTCTTCCAGGCCATGCAGAAGGGCCTGGTT
CTCCGGCAGCACGGCATCCGCCTGCTGGAGGCCCAGATCGCCACGGGCGGCATCATCGACCCCGTGCACAGCCAC
CGCGTGCCTGTGGACGTGGCCTACCAGCGCGGCTACTTCAGTGAGGAGATGAACCGCGTCCTGGCGGACCCCAGC
GACGACACCAAGGGCTTCTTTGACCCCAACACGCATGAGAACCTCACGTACAGGCAGCTGCTGGAGCGGTGCGTG
GAGGACCCCGAGACGGGCTTGCGCCTTCTGCCACTGAAAGGGGCGGAGAAGGCTGAGGTGGTGGAGACCACGCAG

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FIGURE 3228D

GTGTACACTGAGGAGGAGACAAGAAGGGCATTTGAAGAGACACAGATCGACATTCCCGGCGGCGGCAGCCACGGC
GGCTCCACCATGTCCCTGTGGGAGGTGATGCAGTCGGACCTGATCCCCGAGGAGCAGCGGGCCCAGCTGATGGCT
GACTTCCAGGCCGGCCGGGTGACCAAGGAACGCATGATCATCATCATCATCGAGATCATTGAGAAGACAGAGATC
ATCCGCCAGCAGGGTCTGGCCTCCTATGACTACGTGCGCCGCCGCCTCACGGCTGAGGACCTGTTCGAGGCTCGG
ATCATCTCTCTCGAGACCTACAACCTGCTCCGGGAGGGCACCAGGAGCCTCCGTGAGGCTCTCGAGGCGGAGTCC
GCCTGGTGCTACCTCTATGGCACGGGCTCCGTGGCTGGTGTCTACCTGCCCGGTTCCAGGCAGACACTGAGCATC
TACCAGGCTCTCAAGAAAGGGCTGCTGAGTGCCGAGGTGGCCCGCCTGCTGCTGGAGGCACAGGCAGCCACAGGC
TTCCTGCTGGACCCGGTGAAGGGGGAGCGGCTGACTGTGGATGAGGCTGTGCGGAAGGGCCTCGTGGGGCCCGAG
CTGCACGACCGCCTGCTCTCGGCTGAGCGGGCGGTCACCGGCTACCGTGACCCCTACACCGAGCAGACCATCTCG
CTCTTCCAGGCCATGAAGAAGGAGCTGATCCCTACTGAGGAGGCCCTGCGGCTGCTGGATGCCCAGCTGGCCACC
GGCGGCATCGTGGACCCCCGCCTGGGCTTCCACCTTCCCCTGGAGGTGGCTTACCAGCGTGGCTACCTCAACAAG
GACACGCACGACCAGCTGTCAGAGCCCAGCGAGGTGCGCAGCTACGTGGACCCGTCCACCGACGAGCGCCTCAGC
TACACGCAGCTGCTCAGGCGGTGCCGTCGTGACGACGGCACCGGCCAGCTGCTCCTGCCACTGTCGGACGCCCGC
AAGCTGACCTTCCGTGGCCTGCGGAAGCAGATCACCATGGAGGAGCTGGTGCGCTCGCAGGTCATGGACGAGGCC
ACGGCGCTGCAGCTGCGGGAGGGCCTGACCTCCATCGAGGAGGTCACCAAGAACTTGCAGAAGTTCCTGGAAGGC
ACCAGCTGCATCGCTGGTGTCTTCGTGGACGCCACCAAGGAACGGCTCTCGGTGTACCAGGCCATGAAGAAAGGC
ATCATCCGCCCCGGCACAGCCTTTGAGCTCCTGGAGGCGCAGGCGGCCACCGGTTACGTCATCGACCCCATCAAG
GGACTGAAGCTGACGGTGGAGGAGGCTGTGCGTATGGGCATTGTGGGCCCCGAGTTCAAGGACAAGCTGCTGTCG
GCCGAGCGCGCCGTCACTGGGTACAAGGACCCCTACTCTGGGAAGCTCATCTCCCTCTTCCAGGCCATGAAGAAG
GGCCTGATCCTGAAGGACCATGGCATCCGCCTGCTGGAGGCCCAGATCGCCACGGGCGGCATCATCGACCCTGAG
GAGAGCCACCGGCTGCCCGTGGAGGTGGCCTACAAGCGCGGCCTCTTCGATGAGGAGATGAACGAGATCCTGACC
GACCCCTCGGACGACACCAAGGGCTTCTTTGACCCTAACACGGAGGAGAACCTCACCTACCTGCAGCTGATGGAG
CGTTGTATCACTGACCCCCAGACGGGCCTGTGTCTCTTGCCGCTGAAGGAGAAGAAGCGGGAGCGGAAGACGTCC
TCCAAGTCCTCCGTGCGCAAGCGCCGAGTGGTCATCGTGGACCCCGAGACGGGCAAGGAGATGTCAGTGTACGAG
GCCTACCGCAAGGGCCTGATTGACCACCAGACGTACCTGGAGCTGTCCGAGCAGGAGTGCGAGTGGGAGGAGATC
ACCATCTCCTCCTCGGACGGCGTGGTCAAGTCCATGATCATCGACCGCCGCTCCGGGCGCCAGTACGACATCGAT
GATGCCATCGCCAAGAACCTCATCGACCGCTCGGCACTGGACCAGTACCGCGCCGGCACGCTCTCCATCACCGAG
TTCGCCGACATGCTCTCGGGCAACGCCGGTGGTTTCCGCTCCCGTTCCTCCTCGGTGGGATCCTCCTCCTCCTAC
CCCATCAGCCCCGCCGTCTCCAGGACCCAGCTGGCCTCCTGGTCAGACCCCACTGAGGAGACGGGCCCCGTGGCT
GGCATCCTGGACACGGAGACGCTGGAGAAGGTGTCCATCACCGAGGCCATGCACCGGAACCTGGTGGATAACATC
ACGGGGCAGCGGCTGCTGGAGGCGCAGGCCTGCACCGGGGGCATCATCGACCCCAGCACCGGTGAGCGCTTCCCT
GTCACCGACGCCGTCAACAAGGGCCTGGTGGACAAGATCATGGTGGACCGCATCAACCTGGCCCAGAAGGCCTTT
TGCGGCTTCGAGGACCCACGCACCAAGACCAAGATGTCGGCCGCCCAGGCCCTGAAGAAGGGCTGGCTCTACTAC
GAGGCCGGCCAGCGCTTCCTGGAGGTGCAGTACCTGACCGGCGGCTTGATCGAGCCCGACACGCCGGGCCGCGTG
CCCCTGGACGAGGCCCTGCAGCGCGGCACGGTGGACGCCCGCACCGCACAGAAGCTGCGTGACGTGGGCGCCTAC
TCCAAGTACCTCACCTGCCCTAAGACCAAGCTCAAGATCTCCTATAAGGACGCGCTGGACCGCAGCATGGTGGAG
GAGGGCACGGGGCTGCGGCTGCTGGAGGCTGCCGCGCAGTCCACCAAGGGCTACTACAGCCCCTACAGCGTCAGC
GGCTCCGGCTCTACCGCTGGCTCCCGCACCGGCTCGCGCACCGGCTCCCGGGCCGGCTCCCGCCGCGGCAGCTTT
GACGCCACCGGCTCCGGCTTCTCCATGACCTTCTCTTCATCCTCCTACTCCTCCTCGGGCTACGGCCGCCGCTAC
GCCTCGGGGTCCTCGGCCTCCCTGGGGGGCCCTGAGTCTGCCGTGGCCTGAGGCTGCCTGCGCCCACCCCGCTCT
GCATGCGGCCCAGCCCGGCTCCCACCGAGGCGCGGGGGCCGTTTTCAACGCTTAAAGGTGTCTTCCTCCCAAGTG
GTGCCTAAAGTTTAACCAAAAAGACCAGACTAATATATTAATATATATCTGCTGTCCAGACAGCCTGTATCTTGG
GGGACAGGGCTGGCCCAGCCCTGCTGGCCGCCTCACCCCCTCGGGTCTCCTCACTCCCTTCTACCTGCCACTCAC
ACAGCCAGGTGCCTTGGAGGGTCCCAAGCTGGGCCCCAGCCCACCCTCCTGTCTTCCCAGGGTAGCCCGCCTGCC
AGTCCTAGCTGCACAGGGCAGCTGGGCCCAACCCTGTCTGTAGAGGGCCCTGGTGTTTCTAGCACTGGCCTGCAC
GGTGGGCCTTGCTGGGGACGGGGGGCCCCAGTCAGCCTCTCTCCCAGTCTACCCAGAGAAGCCCCTTCCCCATGG
GAAGACGAGGCCCTCGGGCCCAGCCCCCACAGTGCTGTCTGATCTGTGCTTTCCAGCTCACCCCCCACACTCACT
CCTGAGACCCCTGGCCTCCGGCGTCAGCCTCCAGCCTCTGTTCCCCTAGTAAGTGCCTTCCATGTCGGCCTCTAA

FIGURE 3228E

CCCCAGGCCCCGAGGACCCAGACCCAGTGGGGAGGCGGACGTTCCAGCCGGCATGGCTGGGAACTGCAGACCTGT
CCTCCTGGTGGGTCCAGGGGCCCCTCCAGCTTGTGGAGCCCCACACTGGGGTGCCGCCTGCCCGTCTCTCTCCCA
TGGAGCCCCAGCCCCCTTTGGGCCCAGGGACACCAGCCAGGCTCTGTGCTGACCCTCCTGTTGCGCCCAGCCCTG
GTCTCAGCAGCGACCACCCCTGCCTCCACCCTCTGAGCTTTGCATGTTCCACTAACCCCGGGCGGGTGGCAGGTG
GAGGTGTCAGGCTGCTGGCGCCTCTGCAAGGGCAGAACACTAACCTGACCGTGGGCGGGGCCTTGCGGTATCCGC
CCCCAATAAAAGCAATTCCAACCTT

FIGURE 3229A

MSGEDAEVRAVSEDVSNGSSGSPSPGDTLPWNLGKTQRSRRSGGGAGSNGSVLDPAERAVIRIADERDRVQKKTF
TKWVNKHLIKAQRHISDLYEDLRDGHNLISLLEVLSGDSLPREKGRMRFHKLQNVQIALDYLRHRQVKLVNIRDD
DIADGNPKLTLGLIWTIILHFQISDIQVSGQSEDMTAKEKLLLWSQRMVEGYQGLRCDNFTSSWRDGRLFNAIIH
RHKPLLIDMNKVYRQTNLENLDQAFSVAERDLGVTRLLDPEDVDVPQPDEKSIITYVSSLYDAMPRVPDVQDGVR
ANELQLRWQEYRELVLLLLQWMRHHTAAFEERRFPSSFEEIEILWSQFLKFKEMELPAKEADKNRSKGIYQSLEG
AVQAGQLKVPPGYHPLDVEKEWGKLHVAILEREKQLRSEFERLECLQRIVTKLQMEAGLCEEQLNQADALLQSDV
RLLAAGKVPQRAGEVERDLDKADSMIRLLFNDVQTLKDGRHPQGEQMYRRVYRLHERLVAIRTEYNLRLKAGVAA
PATQVAQVTLQSVQRRPELEDSTLRYLQDLLAWVEENQHRVDGAEWGVDLPSVEAQLGSHRGLHQSIEEFRAKIE
RARSDEGQLSPATRGAYRDCLGRLDLQYAKLLNSSKARLRSLESLHSFVAAATKELMWLNEKEEEEVGFDWSDRN
TNMTAKKESYSALMRELELKEKKIKELQNAGDRLLREDHPARPTVESFQAALQTQWSWMLQLCCCIEAHLKENAA
YFQFFSDVREAEGQLQKLQEALRRKYSCDRSATVTRLEDLLQDAQDEKEQLNEYKGHLSGLAKRAKAVVQLKPRH
PAHPMRGRLPLLAVCDYKQVEVTVHKGDECQLVGPAQPSHWKVLSSSGSEAAVPSVCFLVPPPNQEAQEAVTRLE
AQHQALVTLWHQLHVDMKSLLAWQSLRRDVQLIRSWSLATFRTLKPEEQRQALHSLELHYQAFLRDSQDAGGFGP
EDRLMAEREYGSCSHHYQQLLQSLEQGAQEESRCQRCISELKDIRLQLEACETRTVHRLRLPLDKEPARECAQRI
AEQQKAQAEVEGLGKGVARLSAEAEKVLALPEPSPAAPTLRSELELTLGKLEQVRSLSAIYLEKLKTISLVIRGT
QGAEEVLRAHEEQLKEAQAVPATLPELEATKASLKKLRAQAEAQQPTFDALRDELRGAQEVGERLQQRHGERDLE
VERWRERVAQVLERWQAVLAQTDLRQRELEQLGRQLRYYRESADPLGAWLQDARRRQEQIQAMPLADSQAVREQL
RQEQALLEEIERHGEKVEECQRFAKQYINAIKDYELQLVTYKAQLEPVASPAKKPKVQSGSESVIQEYVDLRTHY
SELTTLTSQYIKFISETLRRMEEEERLAEQQRAEERERLAEVEAALEKQRQLAEAHAQAKAQAEREAKELQQRMQ
EEVVRREEAAVDAQQQKRSIQEELQQLRQSSEAEIQAKARQAEAAERSRLRIEEEIRVVRLQLEATERQRGGAEG
ELQALRARAEEAEAQKRQAQEEAERLRRQVQDESQRKRQAEVELASRVKAETEAAREKQRALQALEELRLQAEEA
ERRLRQAEVERARQVQVALETAQRSAEAELQSKRASFAEKTAQLERSLQEEHVAVAQLREEAERRAQQQAEAERA
REEAERELERWQLKANEALRLRLQAEEVAQQKSLAQAEAEKQKEEAEREARRRGKAEEQAVRQRELAEQELEKQR
QLAEGTAQQRLAAEQELIRLRAETEQGEQQRQLLEEELARLQREAAAATQKRQELEAELAKVRAEMEVLLASKAR
AEEESRSTSEKSKQRLEAEAGRFRELAEEAARLRALAEEAKRQRQLAEEDAARQRAEAERVLAEKLAAIGEATRL
KTEAEIALKEKEAENERLRRLAEDEAFQRRRLEEQAAQHKADIEERLAQLRKASDSELERQKGLVEDTLRQRRQV
EEEILALKASFEKAAAGKAELELELGRIRSNAEDTLRSKEQAELEAARQRQLAAEEERRRREAEERVQKSLAAEE
EAARQRKAALEEVERLKANVEEARRLRERAEQESARQLQLAQEAAQKRLQAEEKAHAFAVQQKEQELQQTLQQEQ
SVLDQLRGEAEAARRAAEEAEEARVQAEREAAQARRQVEEAERLKQSAEEQAQARAQAQAAAEKLRKEAEQEAAR
RAQAEQAALRQKQAADAEMEKHKKFAEQTLRQKAQVEQELTTLRLQLEETDHQKNLLDEELQRLKAEATEAARQR
SQVEEELFSVRVQMEELSKLKARIEAENRALILRDKDNTQRFLQEEAEKMKQVAEEAARLSVAAQEAARLRQLAE
EDLAQQRALAEKMLKEKMQAVQEATRLKAEAELLQQQKELAQEQARRLQEDKEQMAQQLAEETQGFQRTLEAERQ
RQLEMSAEAERLKLRVAEMSRAQARAEEDAQRFRKQAEEIGEKLHRTELATQEKVTLVQTLEIQRQQSDHDAERL
REAIAELEREKEKLQQEAKLLQLKSEEMQTVQQEQLLQETQALQQSFLSEKDSLLQRERFIEQEKAKLEQLFQDE
VAKAQQLREEQQRQQQQMEQERQRLVASMEEARRRQHEAEEGVRRKQEELQQLEQQRRQQEELLAEENQRLREQL
QLLEEQHRAALAHSEEVTASQVAATKTLPNGRDALDGPAAEAEPEHSFDGLRRKVSAQRLQEAGILSAEELQRLA
QGHTTVDELARREDVRHYLQGRSSIAGLLLKATNEKLSVYAALQRQLLSPGTALILLEAQAASGFLLDPVRNRRL
TVNEAVKEGVVGPELHHKLLSAERAVTGYKDPYTGQQISLFQAMQKGLIVREHGIRLLEAQIATGGVIDPVHSHR
VPVDVAYRRGYFDEEMNRVLADPSDDTKGFFDPNTHENLTYLQLLERCVEDPETGLCLLPLTDKAAEGGELVYTD
SEARDVFEKATVSAPFGKFQGKTVTIWEIINSEYFTAEQRRDLLRQFRTGRITVEKIIKIIITVVEEQEQKGRLC
FEGLRSLVPAAELLESRVIDRELYQQLQRGERSVRDVAEVDTVRRALRGANVIAGVWLEEAGQKLSIYNALKKDL
LPSDMAVALLEAQAGTGHIIDPATSARLTVDEAVRAGLVGPEFHEKLLSAEKAVTGYRDPYTGQSVSLFQALKKG
LIPREQGLRLLDAQLSTGGIVDPSKSHRVPLDVACARGCLDEETSRALSAPRADAKAYSDPSTGEPATYGELQQR
CRPDQLTGLSLLPLSEKAARARQEELYSELQARETFEKTPVEVPVGGFKGRTVTVWELISSEYFTAEQRQELLRQ
FRTGKVTVEKVIKILITIVEEVETLRQERLSFSGLRAPVPASELLASGVLSRAQFEQLKDGKTTVKDLSELGSVR
TLLQGSGCLAGIYLEDTKEKVSIYEAMRRGLLRATTAALLLEAQAATGFLVDPVRNQRLYVHEAVKAGVVGPELH
EQLLSAEKAVTGYRDPYSGSTISLFQAMQKGLVLRQHGIRLLEAQIATGGIIDPVHSHRVPVDVAYQRGYFSEEM
NRVLADPSDDTKGFFDPNTHENLTYRQLLERCVEDPETGLRLLPLKGAEKAEVVETTQVYTEEETRRAFEETQID

FIGURE 3229B

IPGGGSHGGSTMSLWEVMQSDLIPEEQRAQLMADFQAGRVTKERMIIIIIEIIEKTEIIRQQGLASYDYVRRRLT
AEDLFEARIISLETYNLLREGTRSLREALEAESAWCYLYGTGSVAGVYLPGSRQTLSIYQALKKGLLSAEVARLL
LEAQAATGFLLDPVKGERLTVDEAVRKGLVGPELHDRLLSAERAVTGYRDPYTEQTISLFQAMKKELIPTEEALR
LLDAQLATGGIVDPRLGFHLPLEVAYQRGYLNKDTHDQLSEPSEVRSYVDPSTDERLSYTQLLRRCRRDDGTGQL
LLPLSDARKLTFRGLRKQITMEELVRSQVMDEATALQLREGLTSIEEVTKNLQKFLEGTSCIAGVFVDATKERLS
VYQAMKKGIIRPGTAFELLEAQAATGYVIDPIKGLKLTVEEAVRMGIVGPEFKDKLLSAERAVTGYKDPYSGKLI
SLFQAMKKGLILKDHGIRLLEAQIATGGIIDPEESHRLPVEVAYKRGLFDEEMNEILTDPSDDTKGFFDPNTEEN
LTYLQLMERCITDPQTGLCLLPLKEKKRERKTSSKSSVRKRRVVIVDPETGKEMSVYEAYRKGLIDHQTYLELSE
QECEWEEITISSSDGVVKSMIIDRRSGRQYDIDDAIAKNLIDRSALDQYRAGTLSITEFADMLSGNAGGFRSRSS
SVGSSSSYPISPAVSRTQLASWSDPTEETGPVAGILDTETLEKVSITEAMHRNLVDNITGQRLLEAQACTGGIID
PSTGERFPVTDAVNKGLVDKIMVDRINLAQKAFCGFEDPRTKTKMSAAQALKKGWLYYEAGQRFLEVQYLTGGLI
EPDTPGRVPLDEALQRGTVDARTAQKLRDVGAYSKYLTCPKTKLKISYKDALDRSMVEEGTGLRLLEAAAQSTKG
YYSPYSVSGSGSTAGSRTGSRTGSRAGSRRGSFDATGSGFSMTFSSSSYSSSGYGRRYASGSSASLGGPESAVA

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FIGURE 3230

GCGGCCGCCTCCTCTTCGGGGTCATTAAAGCCAATGAGCCGCGCGCCTCTGCCGAGCGCAGCCAACTAAATCGGC
TTGGATGATTCGCGACCTGAGCAAGATGTACCCGCAGACCAGACACCCGGCACCGCATCAGCCTGCTCAACCCTT
TAAATTTACAATTTCCGAATCCTGTGATCGGATTAAGGAAGAGTTTCAGTTTTTACAGGCTCAATACCACAGTCT
GAAGCTGGAATGTGAGAAACTCGCCAGTGAGAAGACAGAGATGCAGCGGCATTATGTCATGTATTATGAAATGTC
CTATGGGTTGAATATAGAAATGCACAAGCAGGCAGAGATTGTCAAGAGGCTGAATGCTATCTGTGCACAAGTCAT
TCCTTTCCTGTCCCAAGAGCACCAGCAACAAGTGGTGCAGGCTGTGGAACGGGCCAAGCAGGTGACCATGGCAGA
ACTGAACGCCATCATTGGGCAACAACTCCAGGCCCAGCATTTATCACATGGACATGGTCTCCCCGTACCTCTGAC
TCCACACCCTTCAGGGCTCCAGCCCCCTGCCATTCCACCCATCGGTAGCAGTGCCGGGCTTCTGGCCCTCTCCAG
TGCTCTAGGAGGTCAGTCCCATCTTCCAATTAAAGATGAGAAGAAGCACCATGACAATGATCACCAAAGAGACAG
AGACTCCATCAAGAGCTCTTCAGTATCCCCATCAGCCAGTTTCCGAGGTGCTGAGAAGCACAGAAACTCCGCAGA
CTACTCCTCAGAGAGCAAAAAGCAGAAAACTGAAGAAAAGGAAATTGCAGCTCGTTATGACAGCGATGGTGAGAA
AAGTGATGACAACTTGGTGGTTGACGTTTCCAATGAGGATCCATCTTCCCCTCGAGGGAGCCCAGCACATTCCCC
CAGAGAGAATGGCCTAGACAAGACACGCCTGCTCAAGAAAGATGCCCCGATTAGTCCAGCCTCTATTGCATCTTC
CAGCAGTACTCCCTCCTCCAAATCCAAAGAACTTAGCCTTAATGAAAAATCTACTACTCCCGTCTCAAAGTCCAA
TACCCCTACTCCACGAACTGATGCGCCCACCCCAGGCAGTAACTCTACTCCCGGATTGAGGCCTGTACCTGGAAA
ACCACCAGGAGTTGACCCTTTGGCCTCAAGCCTAAGGACCCCAATGGCAGTACCTTGTCCATATCCAACTCCATT
TGGGATTGTGCCCCATGCTGGAATGAACGGAGAGCTGACCAGCCCCGGAGCGGCCTACGCTGGGCTCCACAACAT
CTCCCCTCAGATGAGCGCAGCTGCTGCCGCCGCCGCTGCTGCTGCTGCCTATGGGAGATCACCAGTGGTGGGATT
TGATCCACACCATCACATGCGTGTGCCAGCAATACCTCCAAACCTGACAGGCATTCCAGGAGGAAAACCAGCATA
CTCCTTCCATGTTAGCGCAGATGGTCAGATGCAGCCTGTCCCTTTTCCACCCGACGCCCTCATCGGACCTGGAAT
CCCCCGGCATGCTCGCCAGATCAACACCCTCAACCACGGGGAGGTGGTGTGCGCGGTGACCATCAGCAACCCCAC
GAGACACGTGTACACGGGTGGGAAGGGCTGCGTCAAGGTCTGGGACATCAGCCACCCAGGCAATAAGAGTCCTGT
CTCCCAGCTCGACTGTCTGAACAGGGATAACTACATCCGTTCCTGCAGATTGCTCCCTGATGGTCGCACCCTAAT
TGTTGGAGGGGAAGCCAGTACTTTGTCCATTTGGGACCTGGCGGCTCCAACCCCACGCATCAAGGCAGAGCTGAC
ATCCTCGGCCCCCGCCTGCTATGCCCTGGCCATCAGCCCCGATTCCAAGGTCTGCTTCTCATGCTGCAGCGACGG
CAACATCGCTGTGTGGGATCTGCACAACCAGACCTTGGTGAGGCAATTCCAGGGCCACACAGATGGAGCCAGCTG
TATTGACATTTCTAATGATGGCACCAAGCTCTGGACAGGTGGTTTGGACAACACGGTCAGGTCCTGGGACCTGCG
CGAGGGGCGGCAGCTGCAGCAGCACGACTTCACCTCCCAGATCTTTTCTCTGGGCTACTGCCCAACTGGAGAGTG
GCTTGCAGTGGGGATGGAGAACAGCAATGTGGAAGTTTTGCATGTCACCAAGCCAGACAAATACCAACTACATCT
TCATGAGAGCTGTGTGCTGTCGCTCAAGTTTGCCCATTGTGGCAAATGGTTTGTAAGCACTGGAAAGGACAACCT
TCTGAATGCCTGGAGAACACCTTATGGGGCCAGTATATTCCAGTCCAAAGAATCCTCATCGGTGCTTAGCTGTGA
CATCTCCGTGGACGACAAATACATTGTCACTGGCTCTGGGGATAAGAAGGCCACAGTTTATGAAGTTATTTATTA
AAGACAAATCTTCATGCAGACTGGACTTCTCCTCCTGGTAGCACTTTGCTCTGTCATCCTTTTTGTTCACCCCCA
TCCCCGCATCTAAAACCAAGGATTTCAGATACTCATTGCAGTTGTGGAGTTTAATCCCCTTTCTTAACCTCACTT
CCCACTTGCTATTGAATTGTGAATAGTCATTAAAAACCTGTGATACCAAATCTTCAGCTGTCTACTTGGAAGAAC
ATGGAATAAGCATACTTAACAGTGAAAAGAATCTTTAATTATGTATTATATCTGTAATATATTTATTTTGTTTAA
AGAAGGCTTTCTAACAATGACTGACTAAATAAAGCTGTCTGCTCCTGCATTGAT

FIGURE 3231

AARLCRAQPTKSAWMIRDLSKMYPQTRHPAPHQPAQPFKFTISESCDRIKEEFQFLQAQYHSLKLECEKLASEKT
EMQRHYVMYYEMSYGLNIEMHKQAEIVKRLNAICAQVIPFLSQEHQQQVVQAVERAKQVTMAELNAIIGQQLQAQ
HLSHGHGLPVPLTPHPSGLQPPAIPPIGSSAGLLALSSALGGQSHLPIKDEKKHHDNDHQRDRDSIKSSSVSPSA
SFRGAEKHRNSADYSSESKKQKTEEKEIAARYDSDGEKSDDNLVVDVSNEDPSSPRGSPAHSPRENGLDKTRLLK
KDAPISPASIASSSSTPSSKSKELSLNEKSTTPVSKSNTPTPRTDAPTPGSNSTPGLRPVPGKPPGVDPLASSLR
TPMAVPCPYPTPFGIVPHAGMNGELTSPGAAYAGLHNISPQMSAAAAAAAAAAAAYGRSPVVGFDPHHHMRVPAIP
PNLTGIPGGKPAYSFHVSADGQMQPVPFPPDALIGPGIPRHARQINTLNHGEVVCAVTISNPTRHVYTGGKGCVK
VWDISHPGNKSPVSQLDCLNRDNYIRSCRLLPDGRTLIVGGEASTLSIWDLAAPTPRIKAELTSSAPACYALAIS
PDSKVCFSCCSDGNIAVWDLHNQTLVRQFQGHTDGASCIDISNDGTKLWTGGLDNTVRSWDLREGRQLQQHDFTS
QIFSLGYCPTGEWLAVGMENSNVEVLHVTKPDKYQLHLHESCVLSLKFAHCGKWFVSTGKDNLLNAWRTPYGASI
FQSKESSSVLSCDISVDDKYIVTGSGDKKATVYEVIY

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FIGURE 3232

GGTCCAACCGCAGGCCCATGGTGCAGGAGCTGTGTAACCTATGGGGCTGTCACCAGGCCTCTCTGTGCTGGGTTC
CTCCAGTGTAGAGGAGAGGCAGGTACAGCCTGTCCTCCTGGGGACATGGCATGAGGGCCGCGTCCTCACAGCGCA
TTCTGTGTTCCAGCATCCCCGACCAGCCCCAAGGTCTTCCCGCTGAGCCTCGACAGCACCCCCCAAGATGGGAAC
GTGGTCGTCGCATGCCTGGTCCAGGGCTTCTTCCCCCAGGAGCCACTCAGTGTGACCTGGAGCGAAAGCGGACAG
AACGTGACCGCCAGAAACTTCCCACCTAGCCAGGATGCCTCCGGGGACCTGTACACCACGAGCAGCCAGCTGACC
CTGCCGGCCACACAGTGCCCAGACGGCAAGTCCGTGACATGCCACGTGAAGCACTACACGAATCCCAGCCAGGAT
GTGACTGTGCCCTGCCCAGGTCAGAGGGCAGGCTGGGGAGTGGGGCGGGGCCACCCCGTCCTGCCCTGACACTGC
GCCTGCACCCGTGTTCCCCACAGGGAGCCGCCCCTTCACTCACACCAGAGTGGACCCCGGGCCGAGCCCCAGGAG
GTGGTGGTGGACAGGCCAGGAGGGGCGAGGCGGGGGCACGGGGAAGGGCGTTCTGACCAGCTCAGGCCATCTCTC
CACTCCAGTTCCCCCACCTCCCCCATGCTGCCACCCCCGACTGTCGCTGCACCGACCGGCCCTCGAGGACCTGCT
CTTAGGTTCAGAAGCGAACCTCACGTGCACACTGACCGGCCTGAGAGATGCCTCTGGTGCCACCTTCACCTGGAC
GCCCTCAAGTGGGAAGAGCGCTGTTCAAGGACCACCTGAGCGTGACCTCTGTGGCTGCTACAGCGTGTCCAGTGT
CCTGCCTGGCTGTGCCCAGCCATGGAACCATGGGGAGACCTTCACCTGCACTGCTGCCCACCCCGAGTTGAAGAC
CCCACTAACCGCCAACATCACAAAATCCGGTGGGTCCAGACCCTGCTCGGGGCCCTGCTCAGTGCTCTGGTTTGC
AAAGCATATTCCCGGCCTGCCTCCTCCCTCCCAATCCTGGGCTCCAGTGCTCATGCCAAGTACACAGGGAAACTG
AGGCAGGCTGAGGGGCCAGGACACAGCCCAGGGTGCCCACCAGAGCAGAGGGGCTCTCTCATCCCCTGCCCAGCC
CCCTGACCTGGCTCTCTACCCTCCAGGAAACACATTCCGGCCCGAGGTCCACCTGCTGCCGCCGCCGTCGGAGGA
GCTGGCCCTGAACGAGCTGGTGACGCTGACGTGCCTGGCACGTGGCTTCAGCCCCAAGGATGTGCTGGTTCGCTG
GCTGCAGGGGTCACAGGAGCTGCCCCGCGAGAAGTACCTGACTTGGGCATCCCGGCAGGAGCCCAGCCAGGGCAC
CACCACCTTCGCTGTGACCAGCATACTGCGCGTGGCAGCCGAGGACTGGAAGAAGGGGGACACCTTCTCCTGCAT
GGTGGGCCACGAGGCCCTGCCGCTGGCCTTCACACAGAAGACCATCGACCGCTTGGCGGGTAAACCCACCCATGT
CAATGTGTCTGTTGTCATGGCGGAGGTGGACGGCACCTGCTAC**TGA**GCCGCCCGCCTGTCCCCACCCCTGAATAA
ACTCCATGCTCCCCCAAGCAGCCCCACGCTTCCATCCGGCGCCTGTCTGTCCATCCTCAGGGTCTCAGCACTTGG
GAAAGGGCCAGGGCATGGACAGGGAAGAATACCCCCTGCCCTGAGCCTCGGGGGGCCCCTGGCACCCCCATGAGA
CTTTCCACCCTGGTGTGAGTGTGAGTTGTGAGTGTGAGAGTGTGTGGTGCAGGAGGCCTCGCTGGTGTGAGATCT
TAGGTCTGCCAAGGCAGGCACAGCCCAGGATGGGTTCTGAGAGACGCACATGCCCCGGACAGTTCTGAGTGAGCA
GTGGCATGGCCGTTTGTCCCTGAGAGAGCCGCCTCTGGCTGTAGCTGGGAGGGAATAGGGAGGGTAAAAGGAGCA
GGCTAGCCAAGAAAGGCGCAGGTAGTGGCAGGAGCGGCGAGGGAGTGAGGGGCTGGACTCCAGGGCCCCACTGGG
AGGACAAGCTCCAGGAGGGCCCCACCACCCTAGTGGGTGGGCCTCAGGACGTCCCACTGACGCATGCAGGAAGGG
GCACCTCCCCTTAACCACACTGCTCTGTACGGGGCACGTGGGCACACATGCACACTCACACTCACATATACGCCT
GAGCCCTGCAGGAGTGGAACGTTCACAGCCCAGACCCAGTTCCAGAAAAGCCAGGGGAGTCCCCTCCCAAGCCCC
CAAGCTCAGCCTGCTCCCCCAGGCCCCTCTGGCTTCCCTGTGTTTCCACTGTGCACAGATCAGGCACCAACTCCA
CAGACCCCTCCCAGGCAGCCCCTGCTCCCTGCCTGGCCAAGTCTCCCATCCCTTCCTAAGCCCAACTAGGACCCA
AAGCATAGACAGGGAGGGGCCGCGTGGGGTGGCATCAGAAG

FIGURE 3233

SPTSPKVFPLSLDSTPQDGNVVVACLVQGFFPQEPLSVTWSESGQNVTARNFPPSQDASGDLYTTSSQLTLPATQ
CPDGKSVTCHVKHYTNPSQDVTVPCPVPPPPPCCHPRLSLHRPALEDLLLGSEANLTCTLTGLRDASGATFTWTP
SSGKSAVQGPPERDLCGCYSVSSVLPGCAQPWNHGETFTCTAAHPELKTPLTANITKSGNTFRPEVHLLPPPSEE
LALNELVTLTCLARGFSPKDVLVRWLQGSQELPREKYLTWASRQEPSQGTTTFAVTSILRVAAEDWKKGDTFSCM
VGHEALPLAFTQKTIDRLAGKPTHVNVSVVMAEVDGTCY

FIGURE 3234

CGGCACGAGGCAAGTGACGCCGAGGGCCTGAGTGCTCCAGTAGCCACCGCATCTGGAGAACCAGCGGTTACC**ATG**

GAGGGGATCAGTATATACACTTCAGATAACTACACCGAGGAAATGGGCTCAGGGGACTATGACTCCATGAAGGAA
CCCTGTTTCCGTGAAGAAAATGCTAATTTCAATAAAATCTTCCTGCCCACCATCTACTCCATCATCTTCTTAACT
GGCATTGTGGGCAATGGATTGGTCATCCTGGTCATGGGTTACCAGAAGAAACTGAGAAGCATGACGGACAAGTAC
AGGCTGCACCTGTCAGTGGCCGACCTCCTCTTTGTCATCACGCTTCCCTTCTGGGCAGTTGATGCCGTGGCAAAC
TGGTACTTTGGGAACTTCCTATGCAAGGCAGTCCATGTCATCTACACAGTCAACCTCTACAGCAGTGTCCTCATC
CTGGCCTTCATCAGTCTGGACCGCTACCTGGCCATCGTCCACGCCACCAACAGTCAGAGGCCAAGGAAGCTGTTG
GCTGAAAAGGTGGTCTATGTTGGCGTCTGGATCCCTGCCCTCCTGCTGACTATTCCCGACTTCATCTTTGCCAAC
GTCAGTGAGGCAGATGACAGATATATCTGTGACCGCTTCTACCCCAATGACTTGTGGGTGGTTGTGTTCCAGTTT
CAGCACATCATGGTTGGCCTTATCCTGCCTGGTATTGTCATCCTGTCCTGCTATTGCATTATCATCTCCAAGCTG
TCACACTCCAAGGGCCACCAGAAGCGCAAGGCCCTCAAGACCACAGTCATCCTCATCCTGGCTTTCTTCGCCTGT
TGGCTGCCTTACTACATTGGGATCAGCATCGACTCCTTCATCCTCCTGGAAATCATCAAGCAAGGGTGTGAGTTT
GAGAACACTGTGCACAAGTGGATTTCCATCACCGAGGCCCTAGCTTTCTTCCACTGTTGTCTGAACCCCATCCTC
TATGCTTTCCTTGGAGCCAAATTTAAAACCTCTGCCCAGCACGCACTCACCTCTGTGAGCAGAGGGTCCAGCCTC
AAGATCCTCTCCAAAGGAAAGCGAGGTGGACATTCATCTGTTTCCACTGAGTCTGAGTCTTCAAGTTTTCACTCC
AGC**TAA**CACAGATGTAAGAGACTTTTTTTTATACGATAAATAACTTTTTTTTAAGTTACACATTTTTCAGATATA
AAAGACTGACCAATATTGTACAGTTTTTATTGCTTGTTGGATTTTTGCTCTTGTGTTTCTTTAGTTTTTCGTGAA
GGTTTAATTGACTTATTTATATAAATTTTTTTTGTTTCATATTGATGTGTGTCTAGGCAGGACCTGTGGCCAAGT
TCTTAGTTGCTGTATGTCTCGTGGTAGGACTGTAGAAAAGGGAACTGAACATTCCAGAGCGTGTAGTGAATCACG
TAAAGCTAGAAATGATCCCCAGCTGTTTATGCATAGATAATCTCTCCATTCCCGTGGAACGTTTTTCCTGTTCTT
AAGACGTGATTTTGCTGTAGAAGATGGCACTTATAACCAAAGCCCAAAGTGGTATAGAAATGCTGGTTTTTCAGT
TTTCAGGAGTGGGTTGATTTCAGCACCTACAGTGTACAGTCTTGTATTAAGTTGTTAATAAAAGTACATGTTAAA
CTTAAAAAAAAAAAAAAAAA

FIGURE 3235

MEGISIYTSDNYTEEMGSGDYDSMKEPCFREENANFNKIFLPTIYSIIFLTGIVGNGLVILVMGYQKKLRSMTDK
YRLHLSVADLLFVITLPFWAVDAVANWYFGNFLCKAVHVIYTVNLYSSVLILAFISLDRYLAIVHATNSQRPRKL
LAEKVVYVGVWIPALLLTIPDFIFANVSEADDRYICDRFYPNDLWVVVFQFQHIMVGLILPGIVILSCYCIIISK
LSHSKGHQKRKALKTTVILILAFFACWLPYYIGISIDSFILLEIIKQGCEFENTVHKWISITEALAFFHCCLNPI
LYAFLGAKFKTSAQHALTSVSRGSSLKILSKGKRGGHSSVSTESESSSFHSS

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FIGURE 3236A

AAATGTAGAGAAGCAGCCGATAAAATAGCATTGCCTGAAGAAGTTTGGAGGCTGAGAGCAGCAGTAGACTGGCCA
ACTGCAGAGCAAGTTGTTTCTCCAGCCGTGCGGTGCAGCCTCATGCCCCCAACCCAGCTTAGCCACTGTAAGAAG
ACGTTCACTGTACAGACGACCAAACTTGCCGTGGAAGAGACAGTTGTGAGATTCCCTTGCAAATTTACATACGAG
AATGGCTTGTGAAATCATGCCTCTGCAAAGTTCACAGGAAGATGAAAGACCTCTGTCACCTTTCTATTTGAGTGC
TCATGTACCCCAAGTCAGCAATGTGTCTGCAACCGGAGAACTCTTAGAAAGAACCATCCGATCAGCTGTAGAACA
ACATCTTTTTGATGTTAATAACTCTGGAGGTCAAAGTTCAGAGGACTCAGAATCTGGAACACTATCAGCATCTTC
TGCCACATCTGCCAGACAGCGCCGCCGCCAGTCCAAGGAGCAGGATGAAGTTCGACATGGGAGAGACAAGGGACT
TATCAACAAAGAAAATACTCCTTCTGGGTTCAACCACCTTGATGATTGTATTTTGAATACTCAGGAAGTCGAAAA
GGTACACAAAAATACTTTTGGTTGTGCTGGAGAAAGGAGCAAGCCTAAACGTCAGAAATCCAGTACTAAACTTTC
TGAGCTTCATGACAATCAGGACGGTCTTGTGAATATGGAAAGTCTCAATTCCACACGATCTCATGAGAGAACTGG
ACCTGATGATTTTGAATGGATGTCTGATGAAAGGAAAGGAAATGAAAAAGATGGTGGACACACTCAGCATTTTGA
GAGCCCCACAATGAAGATCCAGGAGCATCCCAGCCTATCTGACACCAAACAGCAGAGAAATCAAGATGCCGGTGA
CCAGGAGGAGAGCTTTGTCTCCGAAGTGCCCCAGTCGGACCTGACTGCATTGTGTGATGAAAAGAACTGGGAAGA
GCCTATCCCTGCTTTCTCCTCCTGGCAGCGGGAGAACAGTGACTCTGATGAAGCCCACCTCTCGCCGCAGGCTGG
GCGCCTGATCCGTCAGCTGCTGGACGAAGACAGCGACCCCATGCTCTCTCCTCGGTTCTACGCTTATGGGCAGAG
CAGGCAATACCTGGATGACACAGAAGTGCCTCCTTCCCCACCAAACTCCCATTCTTTCATGAGGCGGCGAAGCTC
CTCTCTGGGGTCCTATGATGATGAGCAAGAGGACCTGACACCTGCCCAGCTCACACGAAGGATTCAGAGCCTTAA
AAAGAAGATCCGGAAGTTTGAAGATAGATTCGAAGAAGAGAAGAAGTACAGACCTTCCCACAGTGACAAAGCAGC
CAATCCGGAGGTTCTGAAATGGACAAATGACCTTGCCAAATTCCGGAGACAACTTAAAGAATCAAAACTAAAGAT
ATCTGAAGAGGACCTAACTCCCAGGATGCGGCAGCGAAGCAACACACTCCCCAAGAGTTTTGGTTCCCAACTTGA
GAAAGAAGATGAGAAGAAGCAAGAGCTGGTGGATAAAGCAATAAAGCCCAGTGTTGAAGCCACATTGGAATCTAT
TCAGAGGAAGCTCCAGGAGAAGCGAGCGGAAAGCAGCCGCCCTGAGGACATTAAGGATATGACCAAAGACCAGAT
TGCTAATGAGAAAGTGGCTCTGCAGAAAGCTCTGTTATATTATGAAAGCATTCATGGACGGCCGGTAACAAAGAA
CGAACGGCAGGTGATGAAGCCACTATACGACAGGTACCGGCTGGTCAAACAGATCCTCTCCCGAGCTAACACCAT
ACCCATCATTGGTTCCCCCTCCAGCAAGCGGAGAAGCCCTTTGCTGCAGCCAATTATCGAGGGCGAAACTGCTTC
CTTCTTCAAGGAGATAAAGGAAGAAGAGGAGGGGTCAGAAGACGATAGCAATGTGAAGCCAGACTTCATGGTCAC
TCTGAAAACCGATTTCAGTGCACGATGCTTTCTGGACCAATTCGAAGATGACGCTGATGGATTTATTTCCCCAAT
GGATGATAAAATACCATCAAAATGCAGCCAGGACACAGGGCTTTCAAATCTCCATGCTGCCTCAATACCTGAACT
CCTGGAACACCTCCAGGAAATGAGAGAAGAAAAGAAAAGGATTCGAAAGAAACTTCGGGATTTTGAAGACAACTT
TTTCAGACAGAATGGAAGAAATGTCCAGAAGGAAGACCGCACTCCTATGGCTGAAGAATACAGTGAATATAAGCA
CATAAAGGCGAAACTGAGGCTCCTGGAGGTGCTCATCAGCAAGAGAGACACTGATTCCAAGTCCATGTGAGGGGC
ATGGCCAAGCACAGGGGGCTGGCAGCTGCGGTGAGAGTTTACTGTCCCCAGAGAAAGTGCAGCTCTGGAAGGCAG
CCTTGGGGCTGGCCCTGCAAAGCATGCAGCCCTTCTGCCTCTAGACCATTTGGCATCGGCTCCTGTTTCCATTGC
CTGCCTTAGAAACTGGCTGGAAGAAGACAATGTGACCTGACTTAGGCATTTTGTAATTGGAAAGTCAAGACTGCA
GTATGTGCACATGCGCACGCGCATGCACGCACACACACACACAGTAGTGGAGCTTTCCTAACACTAGCAGAGATT
AATCACTACATTAGACAACACTCATCTACAGAGAATATACACTGTTCTTCCCTGGATAACTGAGAAACAAGAGAC
CATTCTCTGTCTAACTGTGATAAAAACAAGCTCAGGACTTTATTCTATAGAGCAAACTTGCTGTGGAGGGCCATG
CTCTCCTTGGACCCAGTTAACTGCAAACGTGCATTGGAGCCCTATTTGCTGCCGCTGCCATTCTAGTGACCTTTC
CACAGAGCTGCGCCTTCCTCACGTGTGTGAAAGGTTTTCCCCTTCAGCCCTCAGGTAGATGGAAGCTGCATCTGC
CCACGATGGCAGTGCAGTCATCATCTTCAGGATGTTTCTTCAGGACTTCCTCAGCTGACAAGGAATTTTGGTCCC
TGCCTAGGACCGGGTCATCTGCAGAGGACAGAGAGATGGTAAGCAGCTGTATGAATGCTGATTTTAAAACCAGGT
CATGGGAGAAGAGCCTGGAGATTCTTTCCTGAACACTGACTGCACTTACCAGTCTGATTTTATCGTCAAACACCA
AGCCAGGCTAGCATGCTCATGGCAATCTGTTTGGGGCTGTTTTGTTGTGGCACTAGCCAAACATAAAGGGGCTTA
AGTCAGCCTGCATACAGAGGATCGGGGAGAGAAGGGGCCTGTGTTCTCAGCCTCCTGAGTACTTACCAGAGTTTA
ATTTTTTTAAAAAAAATCTGCACTAAAATCCCCAAACTGACAGGTAAATGTAGCCCTCAGAGCTCAGCCCAAGGC
AGAATCTAAATCACACTATTTTCGAGATCATGTATAAAAAGAAAAAAAAGAAGTCATGCTGTGTGGCCAATTATA
ATTTTTTTCAAAGACTTTGTCACAAAACTGTCTATATTAGACATTTTGGAGGGACCAGGAAATGTAAGACACCAA
ATCCTCCATCTCTTCAGTGTGCCTGATGTCACCTCATGATTTGCTGTTACTTTTTTAACTCCTGCGCCAAGGACA

FIGURE 3236B

GTGGGTTCTGTGTCCACCTTTGTGCTTTGCGAGGCCGAGCCCAGGCATCTGCTCGCCTGCCACGGCTGACCAGAG
AAGGTGCTTCAGGAGCTCTGCCTTAGACGACGTGTTACAGTATGAACACACAGCAGAGGCACCCTCGTATGTTTT
GAAAGTTGCCTTCTGAAAGGGCACAGTTTTAAGGAAAAGAAAAAGAATGTAAAACTATACTGACCCGTTTTCAGT
TTTAAAGGGTCGTGAGAAACTGGCTGGTCCAATGGGATTTACAGCAACATTTTCCATTGCTGAAGTGAGGTAGCA
GCTCTCTTCTGTCAGCTGAATGTTAAGGATGGGGAAAAAGAATGCCTTTAAGTTTGCTCTTAATCGTATGGAAGC
TTGAGCTATGTGTTGGAAGTGCCCTGGTTAATCCATACACAAAGACGGTACATAATCCTACAGGTTTAAATGTAC
ATAAAAATATAGTTTGGAATTCTTTGCTCTACTGTTTACATTGCAGATTGCTATAATTTCAAGGAGTGAGATTAT
AAATAAAATGATGCACTTTAGGATGTTTCCTATTTTTGAAATCTGAACATGAATCATTCACATGACCAAAAATTG
TGTTTTTTTAAAAATACATGTCTAGTCTGTCCTTTAATAGCTCTCTTAAATAAGCTATGATATTAATCAGATCAT
TACCAGTTAGCTTTTAAAGCACATTTGTTTAAGACTATGTTTTTGGAAAAATACGCTACAGAATTTTTTTTTAAG
CTACAAATAAATGAGATGCTACTAATTGTTTTGGAATCTGTTGTTTCTGCCAAAGGTAAATTAACTAAAGATTTA
TTCAGGAATCCCCATTTGAATTTGTATGATTCAATAAAAGAAAACACCAAGTAAGTTATATAAAAT

FIGURE 3237

MACEIMPLQSSQEDERPLSPFYLSAHVPQVSNVSATGELLERTIRSAVEQHLFDVNNSGGQSSEDSESGTLSASS
ATSARQRRRQSKEQDEVRHGRDKGLINKENTPSGFNHLDDCILNTQEVEKVHKNTFGCAGERSKPKRQKSSTKLS
ELHDNQDGLVNMESLNSTRSHERTGPDDFEWMSDERKGNEKDGGHTQHFESPTMKIQEHPSLSDTKQQRNQDAGD
QEESFVSEVPQSDLTALCDEKNWEEPIPAFSSWQRENSDSDEAHLSPQAGRLIRQLLDEDSDPMLSPRFYAYGQS
RQYLDDTEVPPSPPNSHSFMRRRSSSLGSYDDEQEDLTPAQLTRRIQSLKKKIRKFEDRFEEEKKYRPSHSDKAA
NPEVLKWTNDLAKFRRQLKESKLKISEEDLTPRMRQRSNTLPKSFGSQLEKEDEKKQELVDKAIKPSVEATLESI
QRKLQEKRAESSRPEDIKDMTKDQIANEKVALQKALLYYESIHGRPVTKNERQVMKPLYDRYRLVKQILSRANTI
PIIGSPSSKRRSPLLQPIIEGETASFFKEIKEEEEGSEDDSNVKPDFMVTLKTDFSARCFLDQFEDDADGFISPM
DDKIPSKCSQDTGLSNLHAASIPELLEHLQEMREEKKRIRKKLRDFEDNFFRQNGRNVQKEDRTPMAEEYSEYKH
IKAKLRLLEVLISKRDTDSKSM

FIGURE 3238A

GGGGCACTGAGGAGCGGCGCCCGCGGGGCAGCGAGGAGCCCGATGCAGGGTTCTGCGCGTCATTTCCGGTCCCGC
GGGCGCCCCGTGAAGCCCACCTGGATCCGCCAGCGCTGTGCCACTCCCCAGTGCCGAGCTCCGAGCTGTCTCCGC
GGCCTCGCGCCCGGCCCCTCCACCGCGCACCTCTTAGGCCCCGCCCGCCAGCGTCCCTTTGTTGTGAAGGCGCCG
GGGCCTAGCGCTATGCCTGCGGCGGAGACTGCATCAGGCTCTCGCGTCTGCTTCTGCGCTTTGCCTGGGAGAGGC
CCTGGTGGCCTCGTTCCTGGCGCCCGGAGTCCCTGCTGCGGCCCCACCCCCGGGCGGTCACGGTGACCCATGCTG
CCCAGCCTGGAGGTAAAATCGTTCGTGGCTGTGGCTTCAGCATGTCGTCCTCGGTGAAAACCCCAGCACTGGAAG
AGCTGGTTCCTGGCTCCGAAGAGAAGCCGAAAGGCAGGTCGCCTCTCAGCTGGGGCTCTCTGTTTGGTCACCGAA
GTGAGAAGATTGTTTTTGCCAAGAGCGACGGCGGCACAGATGAGAACGTACTGACCGTCACCATCACGGAGACCA
CGGTCATCGAGTCAGACTTGGGTGTGTGGAGCTCGCGGGCGCTGCTCTACCTCACGCTGTGGTTCTTCTTCAGCT
TCTGCACGCTCTTCCTCAACAAGTACATCCTGTCCCTGCTGGGAGGCGAGCCCAGCATGCTAGGTGCGGTGCAGA
TGCTGTCCACCACGGTTATCGGGTGTGTGAAAACCCTCGTTCCTTGCTGTTTGTATCAGCACAAGGCCCGGCTTT
CCTACCCACCCAACTTCCTTATGACGATGCTGTTTGTGGGTCTGATGAGGTTTGCAACTGTGGTTTTGGGTTTGG
TCAGCCTGAAAAATGTGGCGGTTTCGTTTGCTGAGACGGTGAAGAGCTCCGCCCCCATCTTCACGGTGATCATGT
CTCGGATGATTCTGGGGGAGTACACAGGGCTGCTGGTCAACCTCTCCCTCATCCCAGTCATGGGCGGGCTGGCGC
TGTGCACGGCCACTGAGATCAGCTTCAATGTCCTGGGGTTCTCGGCCGCACTGTCCACCAACATCATGGACTGTT
TGCAAAATGTTTTTTCAAAAAAGCTGCTCAGCGGGGACAAATACAGGTTCTCGGCCCCGGAGCTGCAGTTCTACA
CCAGCGCCGCTGCGGTGGCCATGCTCGTCCCGGCCCGGGTTTTCTTTACGGACGTCCCAGTGATCGGGAGGAGCG
GGAAGAGCTTCAGCTACAACCAGGACGTGGTGCTGCTGCTTCTGACAGACGGAGTCCTGTTCCACCTTCAGAGCG
TCACGGCGTACGCCCTCATGGGGAAAATCTCCCCGGTGACTTTCAGCGTCGCCAGCACCGTGAAACATGCCTTGT
CCATCTGGCTCAGCGTAATCGTTTTCGGCAACAAGATCACCAGCTTGTCGGCCGTTGGCACAGCCCTGGTGACCG
TTGGGGTCCTGCTCTACAACAAAGCCAGGCAACACCAGCAGGAGGCGCTGCAGAGCCTGGCTGCAGCCACTGGCC
GGGCCCCAGACGACACAGTGGAGCCGCTGCTTCCACAGGACCCCAGGCAGCATCCCTGAGAGCAGGAAGCTGCCA
GCTGCTGCTGTCCTCGTGACACTGCATCCCCCAGAAATGGGCAGGGACGCCCTCCTCCATGGCCCTGCTGGGGTG
CAGGACATGGGGAGCTAAGTTGGCCATTGCCTGCGGCTTTCTCGGTTTGTCGGTGAAGACCAGCAGAAACTCAAA
CTGGGGATTCCAGGTATCAGCTTCCTGGAGTAGACACCAGACCAGTAGCTGACTGTGTCCGCCGAGCCCATCCCC
GTGTAATGTGAAAACAGCCTCTGAGGCTCCCATGCTGGGGGTGCCCACTTCCTCTCTGGGCGACACCCCAGGGTC
CACCGGGAGCCAGAGGTGGGTCCAGTGCCAACGAGAGCCGCTCCCTGCCACAGCCAAGAGAGCCCTCGGCTTCCC
ACACCAGCCATCGAAGGCCCTGAGGCCCTGGACCGGCGGCAGACTGGCCCTGGGCATGAGGCCACAGAGCAGGGC
CGAAGGGAGGGGACAGAGGGCCCTGGAAGGAAGGGTCTCCTGCTGCCACGGTGGGCACTCAGAACTTCTCCCCAC
CTGACCCAGGGCTGTGGGCATCCTCAGACTATCCCAGAGGCATCGCAAGCCTCAAGCTGCAGCATTGCACGGCAC
TCAAGGGCTATGACCACGGAGGCCGTTCAGTCGCTTCTGTTTAGAGGAAGGCCCCCTACCTCTTCCACACCCTGC
CCTCCTATCCCTTCCACACCCTGGGCTGCATGAGCTCCCCGCAACCCCAGGGCACCCTGCCCTCCTACCTGTGGG
GGTTTCCAGCCCTGAGGTTGAGGACAAACCTCTCGTGTTTAACTTGGGAGGAGATGTGTACGTTCCTTTTCTTTT
TTGGACTCTGAGTATGAGGCAGGCTGTTCTGAGGTCCCCGTGGGGTGAGCCTGTCTGTCCTCCCTCAGAGCCCAC
CGTTCCTATCATCATCTAGCACCTGTCCGGTTCCCCACGTGAGCCTTGGGCAGGACGCTGCAGTGTTGATGGTTT
GGGTTACGTGGCGTTTACCTGGGCGCCGTCCTTGCTGAAAAAGGAAACGTCCACACTGAATGTTTCTGGGGCGCG
TGGTGTGTGTCAGGCGCCCACCCTGTCCCACTCTCCCCAAGGGACAGTAGTACGGCACACTGGGGCCACCAGCCA
GCTCAACTCATCCTCCTGTGTCACGCACCCCCGAGGGCGCAGGAGGCCTGAGGAGTGGCTACTGGAGCCGTGTGT
TAGGCAGAGGCTTCTGACCATGTCTGAGCTCTTTACCCCCAATCTCGCAACCGGCGGATTCCCATGCCCGGTGCA
GCCTGTTGCCAGCCAGCCTTTGAGACCCAGAGCTCCAGGGCTTGTCAGAGGCAGCATGGGGCTCCAGTGGTCCCG
AGTCTCATTTCCCTGCCTGCTCTTTAGGCCTTTGGCACCCATGGTCACTTCACTGGTTTTCCATTTGGCTTCTCA
CCTGGGAAATACAAAAATAGCCCCTCCTGAAGATAAAATCGTTCAGAAACAGAGCAATAATTCTGACTCATTAAC
TTCTACCTACTCAAAAAAGTCTGCCATGATGATGGACCGAAGTGAGGCTTTTTAACCCACAAGTAACCTTTTTAT
TTTTTTGAGACGGTCTTGCTCTGTCACCCAGGCTGGAGTGCAGTGGCATGATCTTGGCTCGCTGCAGCCTCGACT
TCCTGGGCTCAAGTGATCCACCTCAGCCTCCCATGTGGCTGGAACCGCAGGCACGTGCCACCATGCCTGGCTATT
TTTTTGTTGAGCTGGGCTCTCGCTTTGTTGCCCAGGCTGGTCTTGAACTCCTCGGCTCAAGCAATCCTTCCCACT
CAGCCTCCTGTAGTGTCGAGAATATAGGCGTGGGCTACTACACCTGCTTCAGCCGCTTCTATAAAACCGCTGACC
TGTGTGTGGAGGACAGGCCAGGTGTGTGCTCACTGCGCTGCGAAGATGTTTTGTCACGTGACTTTCCCTGGGTTT

FIGURE 3238B

CCATTTCTTTTTTTCTGCTTTCCTCAAAAACTAATAGAAGACCGGCTGCGGTAGCTCAGGCCTCTAGTCCCAGCA
CTTTGGGAGGCTGCAGATGGCGGATCACAAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATGATGAAACCCTGT
CTCTACCAAAAATACAAAAATTAGCTGGGTGTGATGGTGGGTGCCTGTGGTCTCAGCTACTCAGGAGGCTGAGGC
AGGAGAATTGTTTGAGCCCCAGAGGCGGAGGTTGCAGTGAGCCAAGATCGTGCCATTGCACTCCAGCCTGGGCAA
CAGGGCAAGATTCCGTCTCAAAAACAAACACTATTAGAAAATGCTCTGGAGGTGGCGGGGAGTTGTTGATTTGTG
AGGACAGATTGAAAGCAACTCCCAGGGTGGCCTTGTCCACCTCCCCATCGAGAATATGGCTGCCGGCCTCTTTGA
AGATTGTGGTCTGGCATAAGGAGAGGTGCAGGCGCCTGGTTCTGAGCACCTTGGAATTTCCAGCCGCACAGCATC
TGGTGCCCTCCCCTCCACCCTCACAAGGAGCTGCCATCCTGTTTGGATTTTCTGTTTGTGGACCAGAAACAAACG
TTTTTCCAAAGGATTAGCAAATAGGTTGATTTCCTGTGTAACGCTGCTCTGGGGCCTCTTCCTCATCCTGGCAGA
AGGAGCCTGGAGCCCATGAGGCAGCCAGCACTGTGCCCTTGCTCAGTCGTGCTGTCCCCTCCCTCTCCCTCAGTC
TCTTCTCCATGCCCAAGTCAGTTTCCAGCCGCTGGTCTTCATGGCATTCCCAGCACAGCTGGACACCAAGAGGCA
AAACCCAAGGCCTGGCTTGGCCGTGTTAACGATTGTACAGACATTTTTTTAAATAACTTTGTGTAATACTTTTCT
AGAATAGTAAGTTCTTGTTGAACTGTCACAGATGAGCTTCTAGGAACACACCGGGTGTGGTTACTTCCACTGGGT
GTGTCCATGGTCGTGGTCTGTGCCTTTGTAAACAAACAGAACACTTGAACCACCTTCCGAATTGGGTCATCGGCT
TCTTTACATTGATACTTAGAGATTTGCAGCTCTCTAACTTTCAAGGAAACTTCCCCTACTGAAAGGCATAAAAAG
GTTAAAAAAGAAAATCCGAGAGTCCCAATTCCCTGTATAACAGCATTAAAATAATCTGCCTGCCTGGAAAGATGA
GAACACTGTTGCACAACCCAAAATGTGTTTTTAATTTGTGAAAAATTACCATGGTGAGTCAGACAGTCATTTTAA
ACAGCTGAACAGAGACTATCATCAGCAAATAGAGCTCAGCTTTGTAGCTGCCTTTAAAATCCTTGTCCCAAATCC
GGTGAGCTCTGCTTGCTGCCGCCGCGCTCCTGGGTGATCACTCAGACGGGTCAGTGGGAATAACGGGCCAACAAG
ACAGCTTTTTACATGTGTCCAAAGGATGGCCTTTCGAAGGCCTGGAAGTATTTCACTGTTGGAAGAAGTAAACAA
GAATGACATTCCAGATGGAAATAGAATTCTCTCTCTTGCCTTTGACCAACATGGTACTAAGGGGTTTCTTCTTTC
CCAATGTATGTACGTGCCCTGCTGGGGGCCTTACTTTATAGAATGAGAGCATCCGAGCTTCCCTAATGAATCTGG
CTAGTTCTGTGTCTGGCTGAGGATACAGGAGTGGGACATCCACTCTCGGATCCCTCAGAGCACAGAAACCTTCAG
CTTTGCTGTCTCTGAAGTATTTCCTCCAGTTTCCCTGCGGGCCCCTATGTTTGAGTTTGATGGCTGCTGGATCCT
CACTCAACGAAAACTCGGTTGGAAACTGTTCCGCCTGGCAGTCCTTTTTTGTTGTTTTCCATCTCATTTCCCTTC
CATCTGAAAGTGGCATTCAGCTGACTTGCTCATTTAGACTGTTCACGGAGTCTGAATCTGCCAACGTGGTGTTGG
AGGCTCCACCTTGAAAAGGGCCACAGTCAGGGCAACTTTCCCCATACAGGAAAACTTGAAAATTACATCAACAGT
CTACGTCACAGCCAAATTATATTTCCTTTATACCAAACAAAACTATGGAGAACTAAAAGTACATCACACAAAACG
TTTATAGTGTTTTGCATGTGACCTATTTCAGTATTTATATAACTAGATTAGTGCTTTCTAGCAAACGGTTCTGTT
AATTAGCGAGTCACTGTTGATTCTGCTGTGGTGGTAAGTTGATACCGTGTAACTAATCCCGTGGATGCCTCCTCG
TTATTTTTGTCCAAACGAAGCAGCCGTGGTAGTAGCTGTCTATGATTCTTGCTCAGCAAAGTAAAATAAATGTTA
AATATGG

FIGURE 3239

RYACGGDCIRLSRLLLRFAWERPWWPRSWRPESLLRPHPRAVTVTHAAQPGGKIVRGCGFSMSSSVKTPALEELV
PGSEEKPKGRSPLSWGSLFGHRSEKIVFAKSDGGTDENVLTVTITETTVIESDLGVWSSRALLYLTLWFFFSFCT
LFLNKYILSLLGGEPSMLGAVQMLSTTVIGCVKTLVPCCLYQHKARLSYPPNFLMTMLFVGLMRFATVVLGLVSL
KNVAVSFAETVKSSAPIFTVIMSRMILGEYTGLLVNLSLIPVMGGLALCTATEISFNVLGFSAALSTNIMDCLQN
VFSKKLLSGDKYRFSAPELQFYTSAAAVAMLVPARVFFTDVPVIGRSGKSFSYNQDVVLLLLTDGVLFHLQSVTA
YALMGKISPVTFSVASTVKHALSIWLSVIVFGNKITSLSAVGTALVTVGVLLYNKARQHQQEALQSLAAATGRAP
DDTVEPLLPQDPRQHP

FIGURE 3240

TCTAGACAGTGGCGCAAGAGACTGGGGTTGCACTGGGACTCCAGGAAAGGCTTAGCTGTTGACGAAGGACCGGGG
CGGGGCCGGGGGGCGGGGCGAAGGCCAGGATCTCCAGGTACCCGGAACCCCAAGGGGCGGGTGTAGCAGGCAATC
TTGGCGAAACTGGGAAGGGCGGGCAGGAGGGCAGGGAAGCCGCTCACCCAGGCACAAAGCGCCTCCCGCTTGAGC
GGACTCCAAAGGGACGGTCCGCGGTGTGCAGCGAGCTGCGCTCAGGGGACCTTGCGCCCGGCCCTTCTGCTGCAC
ACAGCCCACCCAGGACCTCCCGCAGCGCTGACAGGCGGGGCGGGTGCAAAGACGGGGCGGGGTCTCTGCGCCCGG
CCCCCTCCCCTGACTATCAAAGCAGCGGCCGGCTGTTTGGGTCCACCACGCCTTCCACCTGCCCCACTGCTTCTT
CGCTTCTCTCTTGGAAAGTCCAGTCTCTCCTCGGCTTGCAATGGACCCCAACTGCTCCTGCGCCGCTGGTAAGGA
ACGCCGGGTTCCGTGCCTGGGGATGCTCGATTCCCAGACACCATAGAGAGTGTTCCTGGGTTTGAGAAGGTCGTA
TTTTGAGATCTCAACTGTAGGGGACTCCTTGACTTAGTCCAGTGCTTTCCTCTTGGCCAAGATCCTGAGAGCATT
TCCTTCCTCTCTGTGCCTCTGTGTCAGCGTTGAGGGTACTGAGGCTCAAGGCTGTCCTGCTCCACGTCATGCGGT
TTGTCCCAGGGCTGTTGGCTGAGCCCCAGTGCTCTGACCAGGCTTTGAGCAGCAGGATTAGATAGGAGGCAGGGG
ACATTGCCTCTTCGGGGTTCAGGACAGAAAGTCGAAGTCGCCGTCTTCCCAGGCTGTGCCTGGAGCCTGGGACTT
TCCTTTGGAGTGCAAACAGGAGGCTGCTTGGCCTTCCCAGCATGAAGGGAGAGGACATGGGGCTTCTCTTCCTCT
GCTCTGAGTGGGAAAGGAGCTCTGAGGGCTGGCCCCGCACAGAGGAGGGGGCAATGGAGACTCATTAACTCACTG
CTGTACCTCCTGCAGGTCACTCGCCGCTCACTGGCTTTTTTTTCTCTTTCTCGCAGGTGTCTCCTGCACCTGCGC
TGGTTCCTGCAAGTGCAAAGAGTGCAAATGCACCTCCTGCAAGAAGAGTGAGTGTGAGGCCATCTCCATGGTCTG
GGGCTGTGGCTAAGGTTGGGATGGAACCCAAGGCTGGCCCTGAGTGCATGCTTCTGGGGAACTGGCCTTCCTTTG
TCCCCGTAGGTTGTCACTGCCTTTCTAGTCTTCTGCCCTGTGCAGGGCGCCTGGGCAGCTTTCTCATAGGAAGAC
CCACCCCAGATATTTCCCAGTTGTCTCCTGACAAAGCCATACCCTCCTGAACTGAGGGTCCTTTGTGGCTGGAGG
CTCTGTTGGGGGCCTCTGTTGGGGAGGGAGGTCCCTGGGCAAGTTGGCTGTGACCTCTCATGCTCCTCTTCTTCC
CCAGGCTGCTGCTCCTGCTGCCCCGTGGGCTGTAGCAAGTGTGCCCAGGGCTGTGTTTGCAAAGGGGCGTCAGAG
AAGTGCAGCTGCTGCGACTGATGCCAGGACAACCTTTCTCCCAGATGTAAACAGAGAGACATGTACAAACCTGGA
TTTTTTTTTTATACCACCTTGACCCATTTGCTACATTCCTTTTCCTGTGAAATATGTGAGTGATAATTAAACACT
TTAGACCTGATTCTGACTTCAGTTTCCCTTATGTGCTTCAGAAATCAGAGACTGGGGTGGGGGATCGAACTAGGG
TTGCAGACTCCTGGGCTCTAAATGGAAATCTGAGTCCCTAACAATCAGAGTGCATTAAGGCAAGCCAGGCTGCCT
CACTGTGCTTCCTCTTCTGTAGAATGGAATAACACTTCATCAGGTCATTGGTGGGGATCC

FIGURE 3241

MDPNCSCAAGVSCTCAGSCKCKECKCTSCKKSCCSCCPVGCSKCAQGCVCKGASEKCSCCD

FIGURE 3242

CTCTGGGCGACGTTGCTGGCAGAGGAAATGAGAAGAAGCCCAGTAGCGTGAGGGCTCTGTCCATTGTCCTCCCCA
TCGCCACGGAGCTGGGTCTCTGGTCTCGGGGGCAGCTGTGTGACAGAGCGTGCCTCTCCCTACGGTGCTCCTCGT
CTTCCTTTGCCTGGGGGTCTTCCTTCTATGGAAGAACTGGCGGCTTAAGAACATCAACAGCATCAACTTTGACAA
CCCCGTCTATCAGAAGACCACAGAGGATGAGGTCCACATTTGCCACAACCAGGACGGCTACAGCTACCCCTCGAG
ACAGATGGTCAGTCTGGAGGATGACGTGGCGTGAACATCTGCCTGGAGTCCCGCCCCTGCCCAGAACCCTTCCTG
AGACCTCGCCGGCCTTGTTTTATTCAAAGACAGAGAAGACCAAAGCATTGCCTGCCAGAGCTTTGTTTTATATAT
TTATTCATCTGGGAGGCAGAACAGGCTTCGGACAGTGCCCATGCAATGGCTTGGGTTGGGATTTTGGTTTCTTCC
TTTCCTGTGAAGGATAA

FIGURE 3243

CCCTGTGGAGCCATACCCTAGGGTTGGCCAATCTACTCCCAGGAGCAGGGAGGGCAGGAGCCAGGGCTGGGCATA
AAAGTCAGGGCAGAGCCATCTATTGCTTACATTTGCTTCTGACACAACTGTGTTCACTAGCAACCTCAAACAGAC
ACCATGGTGCACCTGACTCCTGTGGAGAAGTCTGCCGTTACTGCCCTGTGGGGCAAGGTGAACGTGGATGAAGTT
GGTGGTGAGGCCCTGGGCAGGTTGGTATCAAGGTTACAAGACAGGTTTAAGGAGACCAATAGAAACTGGGCATGT

3670/8433

FIGURE 3244

MVHLTPVEKSAVTALWGKVNVDEVGGEAL

FIGURE 3245

GCTGCTGCACTGACGGCGGGTGCCCGCGCCTCAGAGTTACTGATTTATTCTTGAGATTCCTCTACTCTCGTTATC
TGACCTCATGGATGAACTTCAGGATGTTCAGCTCACAGAGATCAAACCACTTCTAAATGATAAGAATGGTACAAG
AAACTTCCAGGACTTTGACTGTCAGGAACATGATATAGAAACAACTCATGGTGTGGTCCACGTCACTATAAGAGG
CTTACCCAAAGGAAACAGACCAGTTATACTAACATATCATGACATTGGCCTCAACCATAAATCCTGTTTCAATGC
ATTCTTTAACTTTGAGGATATGCAAGAGATCACCCAGCACTTTGCTGTCTGTCATGTGGATGCCCCAGGCCAGCA
GGAAGGTGCACCCTCTTTCCCAACAGGGTATCAGTACCCCACAATGGATGAGCTGGCTGAAATGCTGCCTCCTGT
TCTTACCCACCTAAGCCTGAAAAGCATCATTGGAATTGGAGTTGGAGCTGGAGCTTACATCCTCAGCAGATTTGC
ACTCAACCATCCAGAGCTTGTGGAAGGCCTTGTGCTCATTAATGTTGACCCTTGCGCTAAAGGCTGGATTGACTG
GGCAGCTTCCAAACTCTCTGGCCTGACAACCAATGTTGTGGACATTATTTTGGCTCATCACTTTGGGCAGGAAGA
GTTACAGGCCAACCTGGACCTGATCCAAACCTACAGAATGCATATTGCCCAAGACATCAACCAAGACAACCTGCA
GCTCTTCTTGAATTCCTACAATGGACGCAGAGACCTGGAGATCGAAAGACCCATACTGGGCCAAAATGATAACAA
ATCAAAAACATTAAAGTGTTCTACTTTACTGGTGGTAGGGGACAATTCGCCTGCAGTTGAGGCTGTGGTCGAATG
CAATTCCCGCCTGAACCCTATAAATACAACTTTGCTAAAGATGGCGGACTGTGGGGGACTGCCCCAGGTAGTTCA
GCCTGGGAAGCTCACCGAGGCCTTCAAGTACTTTTTGCAGGGAATGGGCTACATACCATCTGCCAGCATGACTCG
GCTCGCCCGATCACGAACCCACTCAACCTCGAGTAGCCTCGGCTCTGGAGAAAGTCCCTTCAGCCGGTCTGTCAC
CAGCAATCAGTCAGATGGAACTCAAGAATCCTGTGAGTCCCCTGATGTCCTGGACAGACACCAGACCATGGAGGT
GTCCTGCTAAGCAGATGCTCCTCCCCTGGACCATTGCAAGTCCATCCTTCAAATGACCACTCCATAATATAACAT
TTCATCCAGTAAACTGGCCTCTACTATCTTTAACTCATGCATGGCCACTGAACCTCTCTCTAGTAGCCTGGATTT
ATCATTCTCTCTGCCTGCCCACCCCCTTTTTTGTATAGCCCAAGAACCACTTCCATGCCATACTGTAACATTCCA
ACATCTTTAGCTGATCAGATCTCTCCATATCCTCTCTTGCCAGCTTTTTCCCGTGCTCCCCCAACTATGTATCAG
ATAAGATTCTTTGATCCCGACTCTGTGTGTGCGAGCACGCGTGTCTGTGTTTGTGTGTGCATAGTTCTGTGGTTT
TAGACACGCTTTCTTGTAGTGCTTCTGCAAAAAACAAAAAAGGGACTTATTTTGCATTCTCAATGGTGTTTTTAA
GGGAATTAGGCAGAACAGATTTCTAGGTTGGGTAGGCCACTGCATTCTCTTTTGTTTGCAAATTGGTCAACAAAA
TTTGCAAAGTGATTTCAGGAGAGAGCAGCTTTGAGGAATGTGGAAAATCATAATTGCCGTCTGGACCATTGATTG
ATTGTGACCAGTAGCAGAAGGGTGCCTGTTACATAGAGAGGCTCCTTCTGTCCAAATGAATTTCTGTATACTCTT
CTATAAATAAAAGGGAGGAATATATTCTGCTGGAAGCCCATGAACCATCGCTGAGGTTCTGATACAACATAGAGT
TTTTTCCAAGGAGTGAATGTGGTTTAATTACTGGACTCTCTTAGCACAGGAAGGTGGAAACAAAATGCCAGGCCT
CTGCTCTGAAGAGCAAAACTGCTGTCGCTGCAGTATCTGATACCAGACATCCACATATCCACAAGAAGTGCCTCT
TAGGTCTGTGACAGAGAGTGTGTCTCCATTCCTCAGTTCCCAGAAAGGGGAGAGGTTTGGCCTAAAAAGCATGTA
GATGGGGGAGAAATGGGTGGGGGGAGAGGAACAGCCATTAACACAGTATCATGTTTAACAAGTATAGCCTTGATT
TCAGTAGATGTAATGGAAGCCAAATTAAATTGATACAGAACCCATTTCTCAGAGTCTTTTTTTTTTTTTTTGAGA
CAGAGTCTCGCTGTTACCCAGGCTGGAGTGCAATGGCGCAAACTTGGCTCACTGCAACCTCTGCCCCCTGGGTTC
AAGCGATTCTCCTGCCTCAGCCTCCCGAGTAGCTGAGACTACAGGCACCTGCCACCATACCCAGCTAAGTTATGT
ATTTTTAGTAGAGATGGAGTTTCACCATGTTGGCCAGGCTGGTCTCAAACTCCTGACCTCAGGTGATCCACCTGC
CTCAGCCTCCCAAAGTGCTGGGATTACAGGCATGAGTCATTGCTCCCAGCCATTAGAAAGATTGTTAATCCTATG
AACTCCCTTTTGTAGGAGAGAAAGGGCCAATCTGTAGGGGTAGCCCTGTCCAGGTAAAGTTGTTTTCAGCCTCAT
GTCTACTGTTAGGTGAGGGAGTCACAGCCAGACAGAGAGTATTGCTGGAGGGTGAGAGAATTGTGGAGACCAACT
ACCACATAGCAAGAGCCCAGCTCTTGGGAGCATTGAGATGTAAGCTCAGGGTTACACAGTTCCAAATCTTGGGAA
GGGGCTTTTCAGACAGACTGTTTGCTTTCTGCTGAGATAAGGAATGCATCACTCTGCCAGAGTATGACTTTTTAC
AGATTATTAAATAAAGCTGCATATGTCTCATTGTTACC

FIGURE 3246

MDELQDVQLTEIKPLLNDKNGTRNFQDFDCQEHDIETTHGVVHVTIRGLPKGNRPVILTYHDIGLNHKSCFNAFF
NFEDMQEITQHFAVCHVDAPGQQEGAPSFPTGYQYPTMDELAEMLPPVLTHLSLKSIIGIGVGAGAYILSRFALN
HPELVEGLVLINVDPCAKGWIDWAASKLSGLTTNVVDIILAHHFGQEELQANLDLIQTYRMHIAQDINQDNLQLF
LNSYNGRRDLEIERPILGQNDNKSKTLKCSTLLVVGDNSPAVEAVVECNSRLNPINTTLLKMADCGGLPQVVQPG
KLTEAFKYFLQGMGYIPSASMTRLARSRTHSTSSSLGSGESPFSRSVTSNQSDGTQESCESPDVLDRHQTMEVSC

FIGURE 3247

TGCAGGAGTTCATGATCCTCCCAGTCGGTGCAGCAAACTTCAGGGAAGCCATGCGCATTGGAGCAGAGGTTTACC
ACAACCTGAAGAATGTCATCAAGGAGAAATATGGGAAAGATGCCACCAATGTGGGGGATGAAGGCGGGTTTGCTC
CCAACATCCTGGAGAATAAAGAAGGCCTGGAGCTGCTGAAGACTGCTATTGGGAAAGCTGGCTACACTGATAAGG
TGGTCATCGGCATGGACGTAGCGGCCTCCGAGTTCTTCAGGTCTGGGAAGTATGACCTGGACTTCAAGTCTCCCG
ATGACCCCAGCAGGTACATCTCGCCTGACCAGCTGGCTGACCTGTACAAGTCCTTCATCAAGGACTACCCAGTGG
TGTCTATCGAAGATCCCTTTGACCAGGATGACTGGGGAGCTTGGCAGAAGTTCACAGCCAGTGCAGGAATCCAGG
TAGTGGGGGATGATCTCACAGTGACCAACCCAAAGAGGATCGCCAAGGCCGTGAACGAGAAGTCCTGCAACTGCC
TCCTGCTCAAAGTCAACCAGATTGGCTCCGTGACCGAGTCTCTTCAGGCGTGCAAGCTGGCCCAGGCCAATGGTT
GGGGCGTCATGGTGTCTCATCGTTCGGGGGAGACTGAAGATACCTTCATCGCTGACCTGGTTGTGGGGCTGTGCA
CTGGGCAGATCAAGACTGGTGCCCCTTGCCGATCTGAGCGCTTGGCCAAGTACAACCAGCTCCTCAGAATTGAAG
AGGAGCTGGGCAGCAAGGCTAAGTTTGCCGGCAGGAACTTCAGAAACCCCTTGGCCAAGTAAGCTGTGGGCAGGC
AAGCCTTCGGTCACCTGTTGGCTACACAGACCCCTCCCCTCGTGTCAGCTCAGGCAGCTCGAGGCCCCCGACCAA
CACTTGCAGGGGTCCCTGCTAGTTAGCGCCCCACCGCCGTGGAGTTCGTACCGCTTCCTTAGAACTTCTACAGAA
GCCAAGCTCCCTGGAGCCCTGTTGGCAGCTCTAGCTTTTGCAGTCGTGTAATGGGCCCAAGTCATTGTTTTTCTC
GCCTCACTTTCCACCAAGTGTCTAGAGTCATGTGAGCCTCGTGTCATCTCCGGGGTGGCCACAGGCTAGATCCCC
GGTGGTTTTGTGCTCAAAATAAAAAGCCTCAGTGACCCATGAGACGGAGATCTCGCCGGCTTTACGTTCACCTCG
GTGTCTGCAGCACCCTCCGCTTCCTCTCCTAGGCGACGAGACCCAGTGGCTAGAAGTTCACCATGTCTATTCTCA
AGATCCATGCCAGGGAGATCTTTGACTCTCGCGGGAATCCCACTGTTGAGGTTGATCTCTTCACCTCAAAATAAA
AAGCCTCAGTGACCCTGCATTTGAGGGTTCAGCAGCATATACCTTCACACTAGGTTTCAGAGCCTGGGAAGAGGA
ATATTAAGACATCTTAACAACAAACCACAACATTGCCTGCATGTCTAAAAGAAAATATGGGCCTGGTGTGGTGGC
TCACACCTGTAATCCCAACACTTTGGGAGCCCGAGXCAG

FIGURE 3248A

AGCCCCGGTTACGCGGTTGCACGTCGGCCCCAGCCCTGAGGAGCCGGACCGATGTGGAAACTGCTGCCCGCCGCG
GGCCCGGCAGGAGGAGAACCATACAGACTTTTGACTGGCGTTGAGTACGTTGTTGGAAGGAAAAACTGTGCCATT
CTGATTGAAAATGATCAGTCGATCAGCCGAAATCATGCTGTGTTAACTGCTAACTTTTCTGTAACCAACCTGAGT
CAAACAGATGAAATCCCTGTATTGACATTAAAAGATAATTCTAAGTATGGTACCTTTGTTAATGAGGAAAAAATG
CAGAATGGCTTTTCCCGAACTTTGAAGTCGGGGGATGGTATTACTTTTGGAGTGTTTGGAAGTAAATTCAGAATA
GAGTATGAGCCTTTGGTTGCATGCTCTTCTTGTTTAGATGTCTCTGGGAAAACTGCTTTAAATCAAGCTATATTG
CAACTTGGAGGATTTACTGTAAACAATTGGACAGAAGAATGCACTCACCTTGTCATGGTATCAGTGAAAGTTACC
ATTAAAACAATATGTGCACTCATTTGTGGACGTCCAATTGTAAAGCCAGAATATTTTACTGAATTCCTGAAAGCA
GTTGAGTCCAAGAAGCAGCCTCCACAAATTGAAAGTTTTTACCCACCTCTTGATGAACCATCTATTGGAAGTAAA
AATGTTGATCTGTCAGGACGGCAGGAAAGAAAACAAATCTTCAAAGGGAAAACATTTATATTTTTGAATGCCAAA
CAGCATAAGAAATTGAGTTCCGCAGTTGTCTTTGGAGGTGGGGAAGCTAGGTTGATAACAGAAGAGAATGAAGAA
GAACATAATTTCTTTTTGGCTCCGGGAACGTGTGTTGTTGATACAGGAATAACAAACTCACAGACCTTAATTCCT
GACTGTCAGAAGAAATGGATTCAGTCAATAATGGATATGCTCCAAAGGCAAGGTCTTAGACCTATTCCTGAAGCA
GAAATTGGATTGGCGGTGATTTTCATGACTACAAAGAATTACTGTGATCCTCAGGGCCATCCCAGTACAGGATTA
AAGACAACAACTCCAGGACCAAGCCTTTCACAAGGCGTGTCAGTTGATGAAAAACTAATGCCAAGCGCCCCAGTG
AACACTACAACATACGTAGCTGACACAGAATCAGAGCAAGCAGATACATGGGATTTGAGTGAAAGGCCAAAAGAA
ATCAAAGTCTCCAAAATGGAACAAAAATTCAGAATGCTTTCACAAGATGCACCCACTGTAAAGGAGTCCTGCAAA
ACAAGCTCTAATAATAATAGTATGGTATCAAATACTTTGGCTAAGATGAGAATCCCAAACTATCAGCTTTCACCA
ACTAAATTGCCAAGTATAAATAAAAGTAAAGATAGGGCTTCTCAGCAGCAGCAGACCAACTCCATCAGAAACTAC
TTTCAGCCGTCTACCAAAAAAAGGGAAAGGGATGAAGAAAATCAAGAAATGTCTTCATGCAAATCAGCAAGAATA
GAAACGTCTTGTTCTCTTTTAGAACAAACACAACCTGCTACACCCTCATTGTGGAAAAATAAGGAGCAGCATCTA
TCTGAGAATGAGCCTGTGGACACAAACTCAGACAATAACTTATTTACAGATACAGATTTAAAATCTATTGTGAAA
AATTCTGCCAGTAAATCTCATGCTGCAGAAAAGCTAAGATCAAATAAAAAAAGGGAAATGGATGATGTGGCCATA
GAAGATGAAGTATTGGAACAGTTATTCAAGGACACAAAACCAGAGTTAGAAATTGATGTGAAAGTTCAAAAACAG
GAGGAAGATGTCAATGTTAGAAAAAGGCCAAGGATGGATATAGAAACAAATGACACTTTCAGTGATGAAGCAGTA
CCAGAAAGTAGCAAAATATCTCAAGAAAATGAAATTGGGAAGAAACGTGAACTCAAGGAAGACTCACTATGGTCA
GCTAAAGAAATATCTAACAATGACAAACTTCAGGATGATAGTGAGATGCTTCCAAAAAAGCTGTTATTGACTGAA
TTTAGATCACTGGTGATTAAAAACTCTACTTCCAGAAATCCATCTGGCATAAATGATGATTATGGTCAACTAAAA
AATTTCAAGAAATTCAAAAAGGTCACATATCCTGGAGCAGGAAAACTTCCACACATCATTGGAGGATCAGATCTA
ATAGCTCATCATGCTCGAAAGAATACAGAACTAGAAGAGTGGCTAAGGCAGGAAATGGAGGTACAAAATCAACAT
GCAAAAGAAGAGTCTCTTGCTGATGATCTTTTTAGATACAATCCTTATTTAAAAAGGAGAAGATAACTGAGGATT
TTAAAAAGAAGCCATGGAAAAACTTCCTAGTAAGCATCTACTTCAGGCCAACAAGGTTATATGAATATATAGTGT
ATAGAAGCGATTTAAGTTACAATGTTTTATGGCCTAAATTTATTAAATAAAATGCACAAAACTTTGATTCTTTTG
TATGTAACAATTGTTTGTTCTGTTTTCAGGCTTTGTCATTGCATCTTTTTTTCATTTTTAAATGTGTTTTGTTTA
TTAAATAGTTAATATAGTCACAGTTCAAAATTCTAAATGTACGTAAGGTAAAGACTAAAGTCACCCTTCCACCAT
TGTCCTAGCTACTTGGTTCCCCTCAGAAAAAAATTCATGATACTCATTTCTTATGAATCTTTCCAGGGATTTTTG
AGTCCTATTCAAATTCCTATTTTTAAATAATTTCCTACACAAATGATAGCATAACATATGCAGTGTTCTACACCT
TGCTTTTTTACTTAGTAGATTAAAAATTATAGGAATATCAATATAATGTTTTTAATATTTTTTCTTTTCCATTAT
GCTGTAGTCTTACCTAAACTCTGGTGATCCAAACAAAATGGCTTCAGTGGTGCAGATGTCACCTACATGTTATTC
TAGTACTAGAAACTGAAGACCATGTGGAGACTTCATCAAACATGGGTTTAGTTTTCACCAGAATGGAAAGACCTG
TACCCCTTTTTGGTGGTCTTACTGAGCTGGGTGGGTGTCTGTTTTGAGCTTATTTAGAGTCCTAGTTTTCCTACT
TATAAAGTAGAAATGGTGAGATTGTTTTCTTTTTCTACCTTAAAGGGAGATGGTAAGAAACAATGAATGTCTTTT
TTCAAACTTTATTGACAAGTGATTTTCAAGTCTGTGTTCAAAAATATATTCATGTACCTGTGATCCAGCAAGAAG
GGAGTTCCAGTCAAGAGTCACTACAACTGATTAGTTGTTTAGAGAATGAGAAATGGAACAGTGAGGAATGGAGGC
CATATTTCCATGACTTCCCTTGTAAACAGAAGCAACAGAAGGGACAAGAGGCTGGCCTCTACATCACTCTCACCT
TCCAAATCTTGTGGAAGTGCATCTACTTGCCAGAACCAAATTAACTTACTTCCAAGTTCTGGCTGCTTGCAGGTG
GAACTCCAGCTGCAAGGGAGTTAGGGAAATGAAGGTCTTTTTTTAAAAGCTTCTCAGCCTTCCTAGGGAACAGAA
ATTGGGTGAGCCAATCTGCAATTTCTACTACAGGCATTGAGACCAGTTAGATTATTGAAATATTATAGAGAGTTA

FIGURE 3248B

TGAACACTTAAATTATGATAGTGGTATGACATTGGATAGAACATGGGATACTTTAGAAGTAGAATTGACAGGGCA
TATTAGTTGATGAAATGGAGTCATTTGAGTCTCTTAATAGCCATGTATCATAATTACCAAGTGAAGCTGGTGGAA
CATATGGTCTCCATTTTACAGTTAAGGAATATAATGGACAGATTAATATTGTTCTCTGTCATGCCCACAATCCCT
TTCTAAGGAAGACTGCCCTACTATAGCAGTTTTTATATTTGTCAATTTATGAATATAATGAATGAGAGTTCTGGT
ACCTCCTGTCTTTACAAATATTGGTGTTGTCAGTATTTTTCCTTTTTAACCATTCCAATCGGTGTGTAGTGATGT
TTCATTTTGGTTTTAATTTGTATATCCCTGATAGCTATAATTGGGTCATAGAAATTCTTTATACATTCTAGATGC
AAGTCTCTTGTCGGATATATGTATTGAGATATTACACCTAGTCTGTGGCTTGACTGTTTTCTTTATGTCTTTTGA
TGAATAGAAGTTTTAAATTTTGACAAGGTCAAATTTATTTTTTTCTTTTGTTTGATATTTTTTCTCTCCAATTTA
ACCCCAAGATTTCAGATATTCTGCTCTATTATATAAACTTTATATTTTTATATTTGTGATCTACCTTGAATTGAT
ATGTATGTTGTGAATTATGGATCAGGGTTCTTTTTTTCCCCCATACAAGTATCCAGTCATTGTAACACTGTTTAT
TGAAAGAATTATCCTTTCCTCATTAAATTACCTTGCCAATTAGTAAAAAATCAATTAACCAT

FIGURE 3249

MWKLLPAAGPAGGEPYRLLTGVEYVVGRKNCAILIENDQSISRNHAVLTANFSVTNLSQTDEIPVLTLKDNSKYG
TFVNEEKMQNGFSRTLKSGDGITFGVFGSKFRIEYEPLVACSSCLDVSGKTALNQAILQLGGFTVNNWTEECTHL
VMVSVKVTIKTICALICGRPIVKPEYFTEFLKAVESKKQPPQIESFYPPLDEPSIGSKNVDLSGRQERKQIFKGK
TFIFLNAKQHKKLSSAVVFGGGEARLITEENEEEHNFFLAPGTCVVDTGITNSQTLIPDCQKKWIQSIMDMLQRQ
GLRPIPEAEIGLAVIFMTTKNYCDPQGHPSTGLKTTTPGPSLSQGVSVDEKLMPSAPVNTTTYVADTESEQADTW
DLSERPKEIKVSKMEQKFRMLSQDAPTVKESCKTSSNNNSMVSNTLAKMRIPNYQLSPTKLPSINKSKDRASQQQ
QTNSIRNYFQPSTKKRERDEENQEMSSCKSARIETSCSLLEQTQPATPSLWKNKEQHLSENEPVDTNSDNNLFTD
TDLKSIVKNSASKSHAAEKLRSNKKREMDDVAIEDEVLEQLFKDTKPELEIDVKVQKQEEDVNVRKRPRMDIETN
DTFSDEAVPESSKISQENEIGKKRELKEDSLWSAKEISNNDKLQDDSEMLPKKLLLTEFRSLVIKNSTSRNPSGI
NDDYGQLKNFKKFKKVTYPGAGKLPHIIGGSDLIAHHARKNTELEEWLRQEMEVQNQHAKEESLADDLFRYNPYL
KRRR

FIGURE 3250

AAAGTTGCAGACAAGATCCAGCTCATCAATAATATGCTGGACAAAGTCAATGAGATGATTATTGGTGGTGGAATG
GCTTTTACCTTCCTTAAGGTGCTCAACAACATGGCGGTAGGAAACAAATGCCAAGTGGATGTGAAATAGCTCTCC
ATGATAATAGCAGATTGGCACTTCTCTGTTTGATGAAGAGGGAGCCAAGATTGTCAAAGACCTAATGTCCAAAGC
TGAGAAGAATGGTGTGAAGATTACCTTGCCTGTTGACTTTGTCACTGCTGACAAGTTTGATGAGAATGCCAAGAC
TGGCCAA

FIGURE 3251

GGCAGTCAGCCGCATCTTCTTTTGCGTCGCCAGCCGAGCCACATCGCTCAGACACCATGGGGAAGGTGAAGGTCG
GAGTCAACGGATTTGGTCGTATTGGGCGCCTGGTCACCAGGGCTGCTTTTAACTCTGGTAAAGTGGATATTGTTG
CCATCAATGACCCCTTCATTGACCTCAACTACATGGTTTACATGTTCCAATATGATTCCACCCATGGCAAATTCC
ATGGCACCGTCAAGGCTGAGAACGGGAAGCTTGTCATCAATGGAAATCCCATCACCATCTTCCAGGAGCGAGATC
CCTCCAAAATCAAGTGGGGCGATGCTGGCGCTGAGTACGTCGTGGAGTCCACTGGCGTCTTCACCACCATGGAGA
AGGCTGGGGCTCATTTGCAGGGGGGAGCCAAAAGGGTCATCATCTCTGCCCCCTCTGCTGATGCCCCCATGTTCG
TCATGGGTGTGAACCATGAGAAGTATGACAACAGCCTCAAGATCATCAGCAATGCCTCCTGCACCACCAACTGCT
TAGCACCCCTGGCCAAGGTCATCCATGACAACTTTGGTATCGTGGAAGGACTCATGACCACAGTCCATGCCATCA
CTGCCACCCAGAAGACTGTGGATGGCCCCTCCGGAAACTGTGGCGTGATGGCCGCGGGGCTCTCCAGAACATCAT
CCCTGCCTCTACTGGCGCTGAAGGCTGTGGGCAAGGTCATCCCTGAGCTGAACGGGAAGCTCACTGGCATGGCCT
TCCGTGTCCCCACTGCCAACGTGTCAGTGGTGGACCTGACCTGCCGTCTAGAAAAACCTGCCAAATATGATGACA
TCAAGAAGGTGGTGAAGCAGGCGTCGGAGGGCCCCCTCAAGGGCATCCTGGGCTACACTGAGCACCAGGTGGTCT
CCTCTGACTTCAACAGCGACACCCACTCCTCCACCTTTGACGCTGGGGCTGGCATTGCCCTCAACGACCACTTTG
TCAAGCTCATTTCCTGGTATGACAACGAATTTGGCTACAGCAACAGGGTGGTGGACCTCATGGCCTCCAAGGAGTT
AAGACCCCTGGACCACCGAGCCCCAGCAAGAGCACAAGAGGAAGAGAGAGACCCTCACTGCTGGGGAGTCCCTGC
CACACTCAGTCCCCCACCACACTGAATCTCCCCTCCTCACAGTTCCATGTAGACCCCTTGAAGAGGGGAGGGGCC
TAGGGAGCCGCACCTTGTCATGTACCATCAATAAAGTACCCTGTGCTCAACCAAAAAAAAAAAAAAAAAAAAAA
ACCC

FIGURE 3252

MGKVKVGVNGFGRIGRLVTRAAFNSGKVDIVAINDPFIDLNYMVYMFQYDSTHGKFHGTVKAENGKLVINGNPIT
IFQERDPSKIKWGDAGAEYVVESTGVFTTMEKAGAHLQGGAKRVIISAPSADAPMFVMGVNHEKYDNSLKIISNA
SCTTNCLAPLAKVIHDNFGIVEGLMTTVHAITATQKTVDGPSGNCGVMAAGLSRTSSLPLLALKAVGKVIPELNG
KLTGMAFRVPTANVSVVDLTCRLEKPAKYDDIKKVVKQASEGPLKGILGYTEHQVVSSDFNSDTHSSTFDAGAGI
ALNDHFVKLISWYDNEFGYSNRVVDLMASKE

FIGURE 3253

GCCTTTCCGTCAATTCCTGTCCTGGGCGTACGTCAAGATGGCGGCGTCTGTATTAAACACCGTGCTGAGGCGGCT
TCCTATGCTATCTCTCTTCCGAGGTTCTCACAGAGTTCAGGTTCCCCTCCAGACTCTTTGCACCAAAGCTCCCTC
TGAGGAAGATTCTTTGTCCTCAGTTCCCATTTCTCCTTATAAGGATGAGCCCTGGAAATATCTGGAATCAGAAGA
ATACCAGGAGCGATATGGTTCTCGCCCCGTCTGGGCTGACTACCGCCGCAACCACAAGGGTGGTGTACCCCCACA
GCGGACTCGGAAGACATGTATTCGTCGGAATAAAGTTGTTGGGAATCCCTGCCCCATCTGTCGAGATCACAAGTT
GCATGTTGACTTTAGGAACGTGAAGCTCTTGGAGCAATTTGTCTGCGCCCACACGGGTATCATCTTCTATGCTCC
ATACACAGGAGTCTGTGTGAAGCAGCACAAGCGGTTGACCCAGGCCATCCAGAAAGCCAGGGATCATGGTCTCCT
CATTTACCACATCCCCCAGGTTGAACCACGGGACCTTGACTTCAGTACCTCTCATGGGGCTGTGAGTGCTACTCC
GCCAGCCCCCACCCTGGTCTCAGGTGACCCCTGGTACCCATGGTACAACTGGAAACAGCCACCGGAGAGAGAACT
GTCTCGCCTTCGCCGGCTTTACCAGGGTCATCTCCAAGAAGAGAGTGGCCCCCCACCTGAGTCAATGCCCAAGAT
GCCCCCTAGAACACCAGCGGAAGCCTCCTCCACTGGGCAGACAGGCCCTCAGAGTGCTCTGTAGGAGCTGTAGAC
TGGGAAGAGAGGCCAGGCGTGGTGGCTCACTCCTGTAATCCCAGCACTTTGGGAAGCCAAGGTGGGCTGATCACT
TGATCCCAGGAGTTTGAGACCAGCCTGGGCACCATGGTGAAACCTCGTCTTTACCAAAAAATACAAAAATTAGCT
GGGTGTGGTGGTGCACACCTGTAGTCTCAACTATTGGGGAGGCTAAGGTAGGATCACTTGATCCCAGGAGGCGGA
GGTTGCAGTGAGTTGCAGTCACACCCCTGCACTCCAGCCTGGGTGACAGCTAGACCCTGTCTCAAAAAAAAAAAA
AAAGACTGGGAAGAGAGCTAGAGGGACTAGGAGATAATGTGTATGTAGGTTTATGTGATGGGATATCACCCTGAA
GAGTTGTGTCTTTTGTGGCCAGTGACAAATCCAGGAAATGAATGTTGCTGATAGGGATAAATCTTGAGGCTGAGG
GCGGGTGGTACAGATGTGTATGGGAAACCCCAACCCCTATATATTGTAAATAGATGGGCTGGGCTAAACATTGTT
GCCGTTTCATACTTCTACCAACTCAGCTTTTACACAATAAAGCTCTACTGTCTCTGGGTAAAAAAAAAAAAAAAA
AAAAAAAAAAAAA

FIGURE 3254

MAASVLNTVLRRLPMLSLFRGSHRVQVPLQTLCTKAPSEEDSLSSVPISPYKDEPWKYLESEEYQERYGSRPVWA
DYRRNHKGGVPPQRTRKTCIRRNKVVGNPCPICRDHKLHVDFRNVKLLEQFVCAHTGIIFYAPYTGVCVKQHKRL
TQAIQKARDHGLLIYHIPQVEPRDLDFSTSHGAVSATPPAPTLVSGDPWYPWYNWKQPPERELSRLRRLYQGHLQ
EESGPPPESMPKMPPRTPAEASSTGQTGPQSAL

FIGURE 3255

CACAGACTCAGAGAGAACCCACCATGGTGCTGTCTCCTGCCGACAAGACCAACGTCAAGGCCGCCTGGGGTAAGG
TCGGCGCGCACGCTGGCGAGTATGGTGCGGAGGCCCTGGAGAGGATGTTCCTGTCCTTCCCCACCACCAAGACCT
ACTTCCCGCACTTCGACCTGAGCCACGGCTCTGCCCAGGTTAAGGGCCACGGCAAGAAGGTGGCCGACGCGCTGA
CCAACGCCGTGGCGCACGTGGACGACATGCCCAACGCGCTGTCCGCCCTGAGCGACCTGCACGCGCACAAGCTTC
GGGTGGACCCGGTCAACTTCAAGCTCCTAAGCCACTGCCTGCTGGTGACCCTGGCCGCCCACCTCCCCGCCGAGT
TCACCCCTGCGGTGCACGCCTCCCTGGACAAGTTCCTGGCTTCTGTGAGCACCGTGCTGACCTCCAAATACCGTT
AAGCTGGAGCCTCGGTAGCCGTTCCTCCTGCCCGCTGGGCCTCCCAACGGGCCCTCCTCCCCTCCTTGCAC

FIGURE 3256

MVLSPADKTNVKAAWGKVGAHAGEYGAEALERMFLSFPTTKTYFPHFDLSHGSAQVKGHGKKVADALTNAVAHVD
DMPNALSALSDLHAHKLRVDPVNFKLLSHCLLVTLAAHLPAEFTPAVHASLDKFLASVSTVLTSKYR

FIGURE 3257

CTAAAGCTGGGTTGGTAGCTCCTACCTACTGTGTGGCAAGAAGGTATGGGTCATGAACAGAACCAAGGAGCTGCG
CTGCTACAGATGTTACCACTTCTGTGGCTGCTACCCCACTCCTGGGCCGTCCCTGAAGCTCCTACTCCAATGTGG
CCAGATGACCTGCAAAACCACACATTCCTGCACACAGTGTACTGCCAGGATGGGAGTCCCAGTGTGGGACTCTCT
GAGGCCTACGACGAGGACCAGCTTTTCTTCTTCGACTTTTCCCAGAACACTCGGGTGCCTCGCCTGCCCGAATTT
GCTGACTGGGCTCAGGAACAGGGAGATGCTCCTGCCATTTTATTTGACAAAGAGTTCTGCGAGTGGATGATCCAG
CAAATAGGGCCAAAACTTGATGGGAAAATCCCGGTGTCCAGAGGGTTTCCTATCGCTGAAGTGTTCACGCTGAAG
CCCCTGGAGTTTGGCAAGCCCAACACTTTGGTCTGTTTTGTCAGTAATCTCTTCCCACCCATGCTGACAGTGAAC
TGGCAGCATCATTCCGTCCCTGTGGAAGGATTTGGGCCTACTTTTGTCTCAGCTGTCGATGGACTCAGCTTCCAG
GCCTTTTCTTACTTAAACTTCACACCAGAACCTTCTGACATTTTCTCCTGCATTGTGACTCACGAAATTGACCGC
TACACAGCAATTGCCTATTGGGTACCCCGGAACGCACTGCCCTCAGATCTGCTGGAGAATGTGCTGTGTGGCGTG
GCCTTTGGCCTGGGTGTGCTGGGCATCATCGTGGGCATTGTTCTCATCATCTACTTCCGGAAGCCTTGCTCAGGT
GACTGATTCTTCCAGACCAGAGTTTGATGCCAGCAGCTTCGGCCATCCAAACAGAGGATGCTCAGATTTCTCACA
TCCTGCCCAGGATCTCCTCTTAGGGTAGAAGAAGTCTCTGGGACATCCCTGGGGTGTGTGTGTAGATTTCCCACC
TGGGGACTCTGCTGTCCCTGGGCTTGCATCCCAGGGATCCCAGAGTGGCCTGCCTATCACAACCACATCCCTTCC
CCCCACAAGGCAATAAATCTCATTTCTTTAAAAAAAAAAAAAAAAAAAAA

FIGURE 3258

MGHEQNQGAALLQMLPLLWLLPHSWAVPEAPTPMWPDDLQNHTFLHTVYCQDGSPSVGLSEAYDEDQLFFFDFSQ
NTRVPRLPEFADWAQEQGDAPAILFDKEFCEWMIQQIGPKLDGKIPVSRGFPIAEVFTLKPLEFGKPNTLVCFVS
NLFPPMLTVNWQHHSVPVEGFGPTFVSAVDGLSFQAFSYLNFTPEPSDIFSCIVTHEIDRYTAIAYWVPRNALPS
DLLENVLCGVAFGLGVLGIIVGIVLIIYFRKPCSGD

FIGURE 3259

GGGGGAAGGGAAACAAACAAAAAGGAACCAGAGGCCACTTGTATATATAGGTCTCTTCAGCATTTATTGGTGGCA
GAAGAGGAAGATTTCTGAAGAGTGCAGCTGCCTGAACCGAGCCCTGCCGAACAGCTGAGAATTGCACTGCAACCA
TGAGTGAGAACAATAAGAATTCCTTGGAGAGCAGCCTACGGCAACTAAAATGCCATTTCACCTGGAACTTGATGG
AGGGAGAAAACTCCTTGGATGATTTTGAAGACAAAGTATTTTACCGGACTGAGTTTCAGAATCGTGAATTCAAAG
CCACAATGTGCAACCTACTGGCCTATCTAAAGCACCTCAAAGGGCAAAACGAGGCAGCCCTGGAATGCTTACGTA
AAGCTGAAGAGTTAATCCAGCAAGAGCATGCTGACCAGGCAGAAATCAGAAGTCTGGTCACCTGGGGAAACTATG
CCTGGGTCTACTATCACATGGGCCGACTCTCAGACGTTCAGATTTATGTAGACAAGGTGAAACATGTCTGTGAGA
AGTTTTCCAGTCCCTATAGAATTGAGAGTCCAGAGCTTGACTGTGAGGAAGGGTGGACACGGTTAAAGTGTGGAG
GAAACCAAAATGAAAGAGCGAAGGTGTGCTTTGAGAAGGCTCTGGAAAAGAAGCCAAAGAACCCAGAATTCACCT
CTGGACTGGCAATAGCAAGCTACCGTCTGGACAACTGGCCACCATCTCAGAACGCCATTGACCCTCTGAGGCAAG
CCATTCGGCTGAATCCTGACAACCAGTACCTTAAAGTCCTCCTGGCTCTGAAGCTTCATAAGATGCGTGAAGAAG
GTGAAGAGGAAGGTGAAGGAGAGAAGTTAGTTGAAGAAGCCTTGGAGAAAGCCCCAGGTGTAACAGATGTACTTC
GCAGTGCAGCCAAGTTTTATCGAAGAAAAGATGAGCCAGACAAAGCGATTGAACTGCTTAAAAAGGCTTTAGAAT
ACATACCAAACAATGCCTACCTGCATTGCCAAATTGGGTGCTGCTATAGGGCAAAAGTCTTCCAAGTAATGAATC
TAAGAGAGAATGGAATGTATGGGAAAAGAAAGTTACTGGAACTAATAGGACACGCTGTGGCTCATCTGAAGAAAG
CTGATGAGGCCAATGATAATCTCTTCCGTGTCTGTTCCATTCTTGCCAGCCTCCATGCTCTAGCAGATCAGTATG
AAGAAGCAGAGTATTACTTCCAAAAGGAATTCAGTAAAGAGCTTACTCCTGTAGCGAAACAACTGCTCCATCTGC
GGTATGGCAACTTTCAGCTGTACCAAATGAAGTGTGAAGACAAGGCCATCCACCACTTTATAGAGGGTGTAAAAA
TAAACCAGAAATCAAGGGAGAAAGAAAAGATGAAAGACAAACTGCAAAAAATTGCCAAAATGCGACTTTCTAAAA
ATGGAGCAGATTCTGAGGCTTTGCATGTCTTGGCATTCCTTCAGGAGCTGAATGAAAAAATGCAACAAGCAGATG
AAGACTCTGAGAGGGGTTTGGAGTCTGGAAGCCTCATCCCTTCAGCATCAAGCTGGAATGGGGAA<u>TGA</u>AGAATAG
AGATGTGGTGCCCACTAGGCTACTGCTGAAAGGGAGCTGAAATTCCTCCACCAAGTTGGTATTCAAAATATGTAA
TGACTGGTATGGCAAAAGATTGGACTAAGACACTGGCCATACCACTGGACAGGGTTATGTTAACACCTGAATTGC
TGGGTCTTGAGAGAGCCCAAGGAGTTCTGGGAGAGGGACCAGATTGGGGGGTAGGTCCACGGGCTTGGTGATAGA
ATTATTTCTCGATTGACTTCTTGAGTGCAATTTGAACTGTAACATTTGCTTAGTCACCTTTAGTGGAGTAATCTA
CTGGGCTTGTTTCTATATTTATATAAAGCAGCCAAATCCTTCATGTAATATTGAAGTCCATTTTTGCAATGTTGT
TCCATACTTGGAGTCATTTTGCATCCCATAGAGGTTAGTCCTGCATAGCCAGTAATGTGCTAAGTTCATCCAAAA
GCTGGCGGACCAAAGTCTAAATAGGGCTCAGTATCCCCCATCGCTTATCTCTGCCTCCTTCCTCCTCCTTCCCAG
TCTATCATCAACCTTGAGTATTCTACACAATGTGAATTCAAGTGCCTGATTAATTGAGGTGGCAACATAGTTTGA
GACGAGGGCAGAGAACAGGAAGATACATAGCTAGAAGCGACGGGTACAAAAAGCAATGTGTACAAGAAGACTTTC
AGCAAGTATACAGAGAGTTCACCTCTACTCTGCCCTCCTCATAGTCATAATGTAGCAAGTAAAGAATGAGAATGG
ATTCTGTACAATACACTAGAAACCAACATAATGTATTTCTTTAAAACCTGTGTGAAAAAATAAATGTTCCACCAG
TAGGGATAGGGGAAAAGTAACCAAAAGAGAGAAAGAGAAAGGAATGCTGGTTTATCTTTGTAGATTGTAATCGAA
TGGAGAAATTTGCAGTATTTTAGCCACTATTAGGAATTTTTTTTTTTGTAAAATGAAGACTGAACTCTGTTCAA
ATGCTTTCATGAACCTGGTTTGAGACGGTAGGAAAGCAACAAAACGTGGGAACCTGGTGACTAAGGGCCTGGTGC
AAGGACTTGGGAAATGTCATTGATAATAGATGGTGGGGTTTTCCCCCCTTTAGAAATGTTGGATATTAAGTGATA
TAAACACTTCTTTTAACTCCGAAAATCTTCTGAGAAATCACAAAATTCACGGTATGCTTGGAACGATTGAGATTT
TCTAGGTAGATGCTGAATAGCCTAGACATCAAAGTTGGTGTGAACCAAAATAGAGTCAGCTGACCCAGCATCAGC
CACACTCTGGGTTGGAAAATGTTTGCCTGTTGGAATTAATTTAAGCTTAAGTATATATCAACATTATTTTATTGT
GCAATTAAAACAATACAAATTCATGGTTTTTTAAAGTTAAAAATTCTAACCACTGTAACAACAGTTTTTGTGTTA
TTTTCTGTATTAAACATCTTGTTGCACGCATTTGAGGTCATCAGGGTGCAAAATTTGTATTCCTGAAAATGTCAT
ATATTTTCATTAATAAATAACCTAAATATGATAAAACATAAAGCAGTGTTCTGGTTCATCTGGAATTTTGCTGTA
CTTTAAATCTTTCAGACTCAGCTACTGATAAATGAAACGTTACACAGGTGTGAACCAAATCCAAATAACCTCGAC
TGGTCTACTATCATAATCACCTGAACAGAACAAAACTTTTTCCTCAGCTTTAAGAGTCCAGGGCTTCGGATAACA
GCTGCCATCTGCCACCTGCTACCATTGACCTACGTGAACACAGACATTCTGTCTCCACCTTGATGGTGGGTGGGC
TGCTCCCCTTTTCTTTGTTAAATTTTGTGCTTTCATCACATTTTCTCTATTCTGACCTCTGTTATGAGAAATAAA
AGTCACTGATTCCATTTT

FIGURE 3260

GEGKQTKRNQRPLVYIGLFSIYWWQKRKISEECSCLNRALPNSENCTATMSENNKNSLESSLRQLKCHFTWNLME
GENSLDDFEDKVFYRTEFQNREFKATMCNLLAYLKHLKGQNEAALECLRKAEELIQQEHADQAEIRSLVTWGNYA
WVYYHMGRLSDVQIYVDKVKHVCEKFSSPYRIESPELDCEEGWTRLKCGGNQNERAKVCFEKALEKKPKNPEFTS
GLAIASYRLDNWPPSQNAIDPLRQAIRLNPDNQYLKVLLALKLHKMREEGEEEGEGEKLVEEALEKAPGVTDVLR
SAAKFYRRKDEPDKAIELLKKALEYIPNNAYLHCQIGCCYRAKVFQVMNLRENGMYGKRKLLELIGHAVAHLKKA
DEANDNLFRVCSILASLHALADQYEEAEYYFQKEFSKELTPVAKQLLHLRYGNFQLYQMKCEDKAIHHFIEGVKI
NQKSREKEKMKDKLQKIAKMRLSKNGADSEALHVLAFLQELNEKMQQADEDSERGLESGSLIPSASSWNGE

FIGURE 3261

GCACAGGTGCGGCTCCGGCTTACGGCGGCGACGCGGCGGAGGCGGCGGGAGGCCAGAGGCGCTCACCCTCCTAGG
AGTCCGACGGCGGCGACAGGGGCGGTGGGGAATTCACAAAGCTCGTCGAGCTTACCCGGGCACCGAGGCCCGAGT
AGGGGATTTGGATGCGCGGGTCCCGGGTGGGGTCGGGGCCAGAGGGGGTCGCTAGTGCGGGTGTTCCACGGC**TGA**

TCACGCTTCGTTGGCCCCAGGCGGTGGGCTGCCGGCAGGGCAGGGCGCTGTAGTTGACGGGAGCTGCGGGGACCC
CGGAGACCCGGACGCCCGTCACCGCCCCCCTCCCCCAGTCCAGCAGCGCTCCGCGGGGATGCCCGTGGTCTCGAC
CCGGTCCGTCAGCCCCCGGCGGCGCAGGGATCCGCGCCCGGCGCCTAAACTGCCCTGGTGTCCTCTTCGTTCTGG
CCCGGGGCTGGCGGGGGGAGGTGCAGCATTAGGGGCGCTGAGGTGACACCCGAGAACTTCCCAGGGAGAGGGTGC
GCGGGGGGGTGGATTTCCACAGTCCTTCCCGCGGCCCCCGCGGGGGGGCGGTGTTGGGAGGGCACTTGGGGTTAT
CCCAGGCTCGCCGGTGGGGGTGGGGGGACTCCTCCCTTTACTTCCCTCCACCCCCTTGCACACCCACCCCCAGGC
TTCCCGTGTCCCTTGTTCTCCCTCTCTCCGGGTTAGAGATAGGTGGGTGGCTTTGAGTGGGCGGAGGACTTCAGG
GTTTTAGGGGCTCCCCCATTCTAGGTCATGCCTCTTGCTCTCTTCCTTGGCCTGTGTTGAGTAAGGTGTGTTCCT
GTGGTGGACGAAAGTCTGTACGATGGTTGGTGGCATTGGTCCTTAATCCTTTGGGTCTGTTTTAAGGTAAAGTGC
TGAGAGTTTGGGAAGCAAAAATTTCTATTTATTGGATTTCTTTTGGCTTTTCTCTCAAGAAGGAAGTGGAAAAAG
AGTCTTTTCTTTTTCCCTCTTCCTCCATTTGCATTCTTTGTGAGGTTTGTCTGCCTTGTGCTTTTTGTCCCGGAT
TAGTCTTGTTGAAGGATGGAGATTCCCAGGCGTGGAGTCTATAGCTTTTGGCTTCCATTAAGTAAAATCGCTAAC
CTTTTTTTAAGAGAAAGTTAATTTTTGCCTGCAGTCATTCCAGAAAAATAGTGTACACGGACTAGCTGAATTAAT
CCACTTAAAATTGTAACTTAGTTACATATGGTAGATATGTTAACTCCTATCTGATTTTTTTGGATGAAACTGTTG
TTTTGTTTTTAAATAGGAGATGAAGTAATGGATTTTTTTCCCTCCCTTAAAATGGCATAGCTGAGAAAGCCCCGG
TACTACTAATTGAGATGATCTGCTTAAGAGTCTTCATATTCTGAACTCGAAAGGCCTTTTATGTTATATTATTGC
TCGCTTTACGCAACTCCAAATTGCTTTCCTATTTAAATGAATGTTCTTCTAGTAAACTGGTGTTAGATTTAAAGA
AATCACTCAAGCTTCACCTTGGTAAACTGAACTCAGTTTAAGATTAAGAAACTGATTTC

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FIGURE 3262

AQVRLRLTAATRRRRREARGAHPPRSPTAATGAVGNSQSSSSLPGHRGPSRGFGCAGPGWGRGQRGSLVRVFHG

FIGURE 3263

GGAGAGACAGTATTCTGAAGGCTACAGAGGAGGAGATTGCTGGAAGTCTGCTGGGCTTTATAGAAGCCTAGTAGG
CAACAGATGATTCCAGCCAACGGTCAGAGCCACCTGGGTAATAGAGAATGCACACCCCATTCCCACTCGCTTGAT
TGACAGGATGAATGACGCTGTGGGAACCCAGCTTTATTGACAGGATGAATGAGGCTGTGAGAATCCAGCCTCATT
CACTCAGCATGTAGCCATTCACTCAGCATGTAGCCACACAACAGCCATGCCAACATAGCCCTTTGAAGTTCATTC
ACTAATCAATAACTTTATTTTACTTAAAAAGAGATTTAAAAATATAACTTATGTCTGTGAGTATTGAAAAATTTT
GGAGAGG**ATG**AGGGCATATATTCTTATGAAACAAGATTTTTTGGGTTCATATAGTTATTCCCTTAGGAGCTTTGT

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FIGURE 3264

MRAYILMKQDFLGSYSYSLRSF

FIGURE 3265

GTTGTGGGGAAAGGCAGAATAACAAGCAGAGAAACTAATTTTTTAAAAAGGTTTTTAAAATGTTGTGGGTGAAAT
AAAACACGAGCTATCAGTTAATCTGTATAACCAATGCCAAGTTTCATTACCTCTCTTGTCCAACTTCCTCATCAA
GAAAATGAGCATAGCCACATCTTTTTTTGCCTTAAGGGGAGAGGGAGAATCCTAACAATCATAAGACATGATTCC
TGATGTGTGCGTGATCCCCACTGAATCTGAGAGTCAAGCACTGTTGCCTCGGTCATACAACATGTATGTGTTGAT
CCTGACTTTGCACCAGGTCCTATTCTCACCCCAGT

FIGURE 3266

MIPDVCVIPTESESQALLPRSYNMYVLILTLHQVLFSP

FIGURE 3267

AGGATTCAGCAGCCTCCCCCTTGAGCCCCCTCGCTTCCCGACGTTCCGTTCCCCCCTGCCCGCCTTCTCCCGCCA
CCGCCGCCGCCGCCTTCCGCAGGCCGTTTCCCACCGAGGAAAAGGAATCGTATCGTATGTCCGCTATCCAGAACC
TCCACTCTTTCGACCCCTTTGCTGATGCAAGTAAGGGTGATGACCTGCTTCCTGCTGGCACTGAGGATTATATCC
ATATAAGAATTCAACAGAGAAACGGCAGGAAGACCCTTACTACTGTCCAAGGGATCGCTGATGATTACGATAAAA
AGAAACTAGTGAAGGCGTTTAAGAAAAAGTTTGCCTGCAATGGTACTGTAATTGAGCATCCGGAATATGGAGAAG
TAATTCAGCTACAGGGTGACCAACGCAAGAACATATGCCAGTTCCTCGTAGAGATTGGACTGGCTAAGGACGATC
AGCTGAAGGTTCATGGGTTTTAAGTGCTTGTGGCTCACTGAAGCTTAAGTGAGGATTTATTTCCCTTGCAATGAG
TAGAATTTCCCTTCTCTCCCTTGTCACAGGTTTAAAAACCTCACAGCTTGTATAATGTAACCATTTGGGGTCCGC
TTTTAACTTGGACTAGTGTAACTCCTTCATGCAATAAACTGAAAAGAGCCATGCTGTCTAGTCTTGAAGTCCCTC
ATTTAAACAGAGGTCAAGCAATAGGCGCCTGGCAGTGTCAAGCCTGAAACCAAGCAATACCGTCATGTTTCAGCC
AAGCCCAGAGCCCTAAGATTACAAACAACTATGGCCGGAACCTCCGCAGCTCTCCCTCTGCAGAGTTCCCTACCC
TAAGAGAATGTTACCACCTGAACAGTCCTCGGTGAATCTGAGAGGAGAGGATGGGGTAAGGCAGAAGCACCAGCT
GTACTACTAGAAGGGAGCTTTTGGTGGTAGATCCCCTGGTGTCTCCAACCTGACTAGGTGGACAGAGCTCAAAGA
GGCCCTCTTACCGCTAGCGAGGTGATAGGACATCTGGCTTGCCACAAAGGTCTGTTCGACCAGACATATCCTAGC
TAAGGGATGTCCAAACATCAGAATGTGAGGCCAACCTTCTATCAGAGTTAAACTTTTGACAAGGGAACAAATCTC
AAACTGATCCATCAGTCATGTAGCTAGCTGTAGAGCTTGCAACTTAATAGCAGCAGCTGCCCAATGCCATGTGAA
GTAACAAACTGGTTTTTGGTTTTTTTTTCCCCTTCAGTTTTAATGTTATGTGTAATGTATTTAAACCCTTATTTA
AATAAAACTTGTTTTCAGAAATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACCTGCCCGGGCGGCCGCTCGAGC

FIGURE 3268

GGGGGTGGGAAGAGCTGAAGCAGGCGCTCTTGGCTCGGCGCGGCCCGCTGCAATCCGTGGAGGAACGCGCCGCCG
AGCCACCATCATGCCTGGGCACTTACAGGAAGGCTTCGGCTGCGTGGTCACCAACCGATTCGACCAGTTATTTGA
CGACGAATCGGACCCCTTCGAGGTGCTGAAGGCAGCAGAGAACAAGAAAAAAGAAGCCGGCGGGGGCGGCGTTGG
GGGCCCTGGGGCCAAGAGCGCAGCTCAGGCCGCGGCCCAGACCAACTCCAACGCGGCAGGCAAACAGCTGCGCAA
GGAGTCCCAGAAAGACCGCAAGAACCCGCTGCCCCCCAGCGTTGGCGTGGTTGACAAGAAAGAGGAGACGCAGCC
GCCCGTGGCGCTTAAGAAAGAAGGAATAAGACGAGTTGGAAGAAGACCTGATCAACAACTTCAGGGTGAAGGGAA
AATAATTGATAGAAGACCAGAAAGGCGACCACCTCGTGAACGAAGATTCGAAAAGCCACTTGAAGAAAAGGGTGA
AGGAGGCGAATTTTCAGTTGATAGACCGATTATTGACCGACCTATTCGAGGTCGTGGTGGTCTTGGAAGAGGTCG
AGGGGGCCGTGGACGTGGAATGGGCCGAGGAGATGGATTTGATTCTCGTGGCAAACGTGAATTTGATAGGCATAG
TGGAAGTGATAGATCTGGCCTGAAGCACGAGGACAAACGTGGAGGTAGCGGATCTCACAACTGGGGAACTGTCAA
AGACGAATTAACTGACTTGGATCAATCAAATGTGACTGAGGAAACACCTGAAGGTGAAGAACATCATCCAGTGGC
AGACACTGAAAATAAGGAGAATGAAGTTGAAGAGGTAAAAGAGGAGGGTCCAAAAGAGATGACTTTGGATGAGTG
GAAGGCTATTCAAAATAAGGACCGGGCAAAAGTAGAATTTAATATCCGAAAACCAAATGAAGGTGCTGATGGGCA
GTGGAAGAAGGGATTTGTTCTTCATAAATCAAAGAGTGAAGAGGCTCATGCTGAAGATTCGGTTATGGACCATCA
TTTCCGGAAGCCAGCAAATGATATAACGTCTCAGCTGGAGATCAATTTTGGAGACCTTGGCCGCCCAGGACGTGG
CGGCAGGGGAGGACGAGGTGGACGTGGGCGTGGTGGGCGCCCAAACCGTGGCAGCAGGACCGACAAGTCAAGTGC
TTCTGCTCCTGATGTGGATGACCCAGAGGCATTCCCAGCTCTGGCTTAACTGGATGCCATAAGACAACCCTGGTT
CCTTTGTGAACCCTTCTGTTCAAAGCTTTTGCATGCTTAAGGATTCCAAACGACTAAGAAATTAAAAAAAAAAAG
ACTGTCATTCATACCATTCACACCTAAAGACTGAATTTTATCTGTTTTAAAAATGAACTTCTCCCGCTACACAGA
AGTAACAAATATGGTAGTCAGTTTTGTATTTAGAAATGTATTGGTAGCAGGGATGTTTTCATAATTTTCAGAGAT
TATGCATTCTTCATGAATACTTTTGTATTGCTGCTTGCAAATATGCATTTCCAAACTTGAAATATAGGTGTGAAC
AGTGTGTACCAGTTTAAAGCTTTCACTTCATTTGTGTTTTTTAATTAAGGACTTAGAAGTTCCCCCAATTACAAA
CTGGTTTTAAATATTGGACATACTGGTTTTAATACCTGCTTTGCATATTCACACATGGTCAACTGGGACATGTTA
AACTTTGATTTGTCAAATTTTATGCTGTGTGGAATACTAACTATATGTATTTTAACTTAGTTTTAATATTTTCAT
TTTGGGGGAAAAATCTTTTTTCACTTCTCATGATAGCTGTTATATATATATGCTAAATCTTTATATACAGAAATA
TCAGTACTTGAACAAATTCAAAGCACATTTGGTTTATTAACCCTTGCTCCTTGCATGGCTCATTAGGTTCAAATT
ATAACTAATTTACATTTTCAGCTATATTTACTTTTTAAATGCTTGAGTTTCCCATTTTAAAATCTAAACTAGACA
TCTTAATTGGTGAAAGTTGTTTAAACTACTTATTGTTGGTAGGCACATCGTGTCAAGTGAAGTAGTTTTATAGGT
ATGGGTTTTTTCTCCCCCTTCACCAGGGTGGGTGGAATAAGTTGATTTGGCCAATGTGTAATATTTAAACTGTTC
TGTAAAATAAAAAAAAAAAAAAAAAA

FIGURE 3269

MPGHLQEGFGCVVTNRFDQLFDDESDPFEVLKAAENKKKEAGGGGVGGPGAKSAAQAAAQTNSNAAGKQLRKESQ
KDRKNPLPPSVGVVDKKEETQPPVALKKEGIRRVGRRPDQQLQGEGKIIDRRPERRPPRERRFEKPLEEKGEGGE
FSVDRPIIDRPIRGRGGLGRGRGGRGRGMGRGDGFDSRGKREFDRHSGSDRSGLKHEDKRGGSGSHNWGTVKDEL
TDLDQSNVTEETPEGEEHHPVADTENKENEVEEVKEEGPKEMTLDEWKAIQNKDRAKVEFNIRKPNEGADGQWKK
GFVLHKSKSEEAHAEDSVMDHHFRKPANDITSQLEINFGDLGRPGRGGRGGRGGRGRGGRPNRGSRTDKSSASAP
DVDDPEAFPALA

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FIGURE 3270

GGCCGCCCGGCGCCCCCAGCAGCCCGAGCCGGGGCGCACAGCCGGGGCGCAGCCCGCGCCCCCCGCCGCGATTGA
C**ATG**ATGTTTCCACAAAGCAGGCATTCGGGCTCCTCGCACCTACCCCAGCAACTCAAATTCACCACCTCGGACTC
CTGCGACCGCATCAAAGACGAATTTCAGCTACTGCAAGCTCAGTACCACAGCCTCAAGCTCGAATGTGACAAGTT
GGCCAGTGAGAAGTCAGAGATGCAGCGTCACTATGTGATGTACTACGAGATGTCCTACGGCTTGAACATCGAGAT
GCACAAACAGGCTGAGATCGTCAAAAGGCTGAACGGGATTTGTGCCCAGGTCCTGCCCTACCTCTCCCAAGAGCA
CCAGCAGCAGGTCTTGGGAGCCATTGAGAGGGCCAAGCAGGTCACCGCTCCCGAGCTGAACTCTATCATCCGACA
GCAGCTCCAAGCCCACCAGCTGTCCCAGCTGCAGGCCCTGGCCCTGCCCTTGACCCCACTACCCGTGGGGCTGCA
GCCGCCTTCGCTGCCGGCGGTCAGCGCAGGCACCGGCCTCCTCTCGCTGTCCGCGCTGGGTTCCCAGGCCCACCT
CTCCAAGGAAGACAAGAACGGGCACGATGGTGACACCCACCAGGAGGATGATGGCGAGAAGTCGGAT**TAG**CAGGG
GGCCGGGACAGGGAGGTTGGGAGGGGGGACAGAGGGGAGACAGAGGCACGGAGAGAAAGGAATGTTTAGCACAAG
ACACAGCGGAGCTCGGGATTGGCTAAACTCCCATAGTATTTATGGTGGCCGCCGGCGGGGGCCCCAGCCCAGCTT
GCAGGCCACCTCTAGCTTTCTTCCTACCCCATTCCCGGCTTCCCTCCTCCTCCCCTGCAGCCTGGTTAGGTGGAT
ACCTGCCCTGACATGTGAGGCAAGCTAAGGCCTGGAGGGTCAGATGGGAGACCAGGTCCCAAGGGAGCAAGACCT
CGCGAAGCGCAGCAGCCCCGGCCCTTCCCCCGTTTTGAACATGTGTAACCGACAGTCTGCCTGGGCCACAGCCCT
CTCACCCTGGTACTGCATGCACGCAATGCTAGCTGCCCCTTTCCCGTCCTGGGCACCCCGAGTCTCCCCCGACCC
CGGGTCCCAGGTATGCTCCCACCTCCACCTGCCCCACTCACCACCTCTGCTAGTTCCAGACACCTCCACGCCCAC
CTGGTCCTCTCCCATCGCCCACAAAAGGGGGGGCACGAGGGACGAGCTTAGCTGAGCTGGGAGGAGCAGGGTGAG
GGTGGGCGACCCAGGATTCCCCCTCCCCTTCCCAAATAAAGATGAGGGTACT

FIGURE 3271

MMFPQSRHSGSSHLPQQLKFTTSDSCDRIKDEFQLLQAQYHSLKLECDKLASEKSEMQRHYVMYYEMSYGLNIEM
HKQAEIVKRLNGICAQVLPYLSQEHQQQVLGAIERAKQVTAPELNSIIRQQLQAHQLSQLQALALPLTPLPVGLQ
PPSLPAVSAGTGLLSLSALGSQAHLSKEDKNGHDGDTHQEDDGEKSD

FIGURE 3272

GCGAGATCCCTACCGCAGTAGCCGCCTCTGCCGCCGCGGAGCTTCCCGAACCTCTCAGCCGCCCGGAGCCGCTCC
CGGAGCCCGGCCGTAGAGGCTGCAATCGCAGCCGGGAGCCCGCAGCCCGCGCCCCGAGCCCGCCGCCGCCCTTCG
AGGGCGCCCCAGGCCGCGCC**ATG**GTGAAGGTGACGTTCAACTCCGCTCTGGCCCAGAAGGAGGCCAAGAAGGACG
AGCCCAAGAGCGGCGAGGAGGCGCTCATCATCCCCCCCGACGCCGTCGCGGTGGACTGCAAGGACCCAGATGATG
TGGTACCAGTTGGCCAAAGAAGAGCCTGGTGTTGGTGCATGTGCTTTGGACTAGCATTTATGCTTGCAGGTGTTA
TTCTAGGAGGAGCATACTTGTACAAATATTTTGCACTTCAACCAGATGACGTGTACTACTGTGGAATAAAGTACA
TCAAAGATGATGTCATCTTAAATGAGCCCTCTGCAGATGCCCCAGCTGCTCTCTACCAGACAATTGAAGAAAATA
TTAAAATCTTTGAAGAAGAAGAAGTTGAATTTATCAGTGTGCCTGTCCCAGAGTTTGCAGATAGTGATCCTGCCA
ACATTGTTCATGACTTTAACAAGAAACTTACAGCCTATTTAGATCTTAACCTGGATAAGTGCTATGTGATCCCTC
TGAACACTTCCATTGTTATGCCACCCAGAAACCTACTGGAGTTACTTATTAACATCAAGGCTGGAACCTATTTGC
CTCAGTCCTATCTGATTCATGAGCACATGGTTATTACTGATCGCATTGAAAACATTGATCACCTGGGTTTCTTTA
TTTATCGACTGTGTCATGACAAGGAAACTTACAAACTGCAACGCAGAGAAACTATTAAAGGTATTCAGAAACGTG
AAGCCAGCAATTGTTTCGCAATTCGGCATTTTGAAAACAAATTTGCCGTGGAAACTTTAATTTGTTCT**TGA**ACAG
TCAAGAAAAACATTATTGAGGAAAATTAATATCACAGCATAACCCCACCCTTTACATTTTGTGCAGTGATTATTT
TTTAAAGTCTTCTTTCATGTAAGTAGCAAACAGGGCTTTACTATCTTTTCATCTCATTAATTCAATTAAAACCAT
TACCTTAAAATTTTTTTCTTTCGAAGTGTGGTGTCTTTTATATTTGAATTAGTAACTGTATGAAGTCATAGATAA
TAGTACATGTCACCTTAGGTAGTAGGAAGAATTACAATTTCTTTAAATCATTTATCTGGATTTTTATGTTTTATT
AGCATTTTCAAGAAGACGGATTATCTAGAGAATAATCATATATATGCATACGTAAAAATGGACCACAGTGACTTA
TTTGTAGTTGTTAGTTGCCCTGCTACCTAGTTTGTTAGTGCATTTGAGCACACATTTTAATTTTCCTCTAATTAA
AATGTGCAGTATTTTCAGTGTCAAATATATTTAACTATTTAGAGAATGATTTCCACCTTTATGTTTTAATATCCT
AGGCATCTGCTGTAATAATATTTTAGAAAATGTTTGGAATTTAAGAAATAACTTGTGTTACTAATTTGTATAACC
CATATCTGTGCAATGGAATATAAATATCACAAAGTTGTTTAACTAGACTGCGTGTTGTTTTTCCCGTATAATAAA
ACCAAAGAATAGTTTGGTTCTTCAAATCTTAAGAGAATCCACATAAAAGAAGAAACTATTTTTTAAAAATTCACT
TCTATATATACAATGAGTAAAATCACAGATTTTTTCTTTAAATAAAAATAAGTCATTTTAATAACTAAACCAGAT
TCTTTGTGGATACTATTAAAGTAACATTTAAGCCTCAACCTTG

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FIGURE 3273

MVKVTFNSALAQKEAKKDEPKSGEEALIIPPDAVAVDCKDPDDVVPVGQRRAWCWCMCFGLAFMLAGVILGGAYL
YKYFALQPDDVYYCGIKYIKDDVILNEPSADAPAALYQTIEENIKIFEEEEVEFISVPVPEFADSDPANIVHDFN
KKLTAYLDLNLDKCYVIPLNTSIVMPPRNLLELLINIKAGTYLPQSYLIHEHMVITDRIENIDHLGFFIYRLCHD
KETYKLQRRETIKGIQKREASNCFAIRHFENKFAVETLICS

FIGURE 3274A

GCGCCCCGCCCTTTCTCGGCCCCCGGAGGTGACGGGGTGAAGGCGGGGGAACCGAGGTGGGGAGTCCGCCAGAGC
TCCCAGACTGCGAGCACGCGAGCCGCCGCAGCCGTCACCCGCGCCGCGTCACGGCTCCCGGGCCCGCCCTCCTCT
GACCCCTCCCCTCTCTCCGTTTGCCCCTCTCCCCCTCCTCCGCCGACCGAGCAGTGACTTAAGCAACGGAGCGCG
GTGAAGCTCATTTTTCTCCTTCCTCGCAGCCGCGCCAGGGAGCTCGCGGCGCGCGGCCCCTGTCCTCCGGCCCGA
GATGAATCCTGCGGCAGAAGCCGAGTTCAACATCCTCCTGGCCACCGACTCCTACAAGGTTACTCACTATAAACA
ATATCCACCCAACACAAGCAAAGTTTATTCCTACTTTGAATGCCGTGAAAAGAAGACAGAAAACTCCAAATTAAG
GAAGGTGAAATATGAGGAAACAGTATTTTATGGGTTGCAGTACATTCTTAATAAGTACTTAAAAGGTAAAGTAGT
AACCAAAGAGAAAATCCAGGAAGCCAAAGATGTCTACAAAGAACATTTCCAAGATGATGTCTTTAATGAAAAGGG
ATGGAACTACATTCTTGAGAAGTATGATGGGCATCTTCCAATAGAAATAAAAGCTGTTCCTGAGGGCTTTGTCAT
TCCCAGAGGAAATGTTCTCTTCACGGTGGAAAACACAGATCCAGAGTGTTACTGGCTTACAAATTGGATTGAGAC
TATTCTTGTTCAGTCCTGGTATCCAATCACAGTGGCCACAAATTCTAGAGAGCAGAAGAAAATATTGGCCAAATA
TTTGTTAGAAACTTCTGGTAACTTAGATGGTCTGGAATACAAGTTACATGATTTTGGCTACAGAGGAGTCTCTTC
CCAAGAGACTGCTGGCATAGGAGCATCTGCTCACTTGGTTAACTTCAAAGGAACAGATACAGTAGCAGGACTTGC
TCTAATTAAAAAATATTATGGAACGAAAGATCCTGTTCCAGGCTATTCTGTTCCAGCAGCAGAACACAGTACCAT
AACAGCTTGGGGGAAAGACCATGAAAAAGATGCTTTTGAACATATTGTAACACAGTTTTCATCAGTGCCTGTATC
TGTGGTCAGCGATAGCTATGACATTTATAATGCGTGTGAGAAAATATGGGGTGAAGATCTAAGACATTTAATAGT
ATCGAGAAGTACACAGGCACCACTAATAATCAGACCTGATTCTGGAAACCCTCTTGACACTGTGTTAAAGGTTTT
GGAGATTTTAGGTAAGAAGTTTCCTGTTACTGAGAACTCAAAGGGTTACAAGTTGCTGCCACCTTATCTTAGAGT
TATTCAAGGGGATGGAGTAGATATTAATACCTTACAAGAGATTGTAGAAGGCATGAAACAAAAAATGTGGAGTAT
TGAAAATATTGCCTTCGGTTCTGGTGGAGGTTTGCTACAGAAGTTGACAAGAGATCTCTTGAATTGTTCCTTCAA
GTGTAGCTATGTTGTAACTAATGGCCTTGGGATTAACGTCTTCAAGGACCCAGTTGCTGATCCCAACAAAAGGTC
CAAAAAGGGCCGATTATCTTTACATAGGACGCCAGCAGGGAATTTTGTTACACTGGAGGAAGGAAAAGGAGACCT
TGAGGAATATGGTCAGGATCTTCTCCATACTGTCTTCAAGAATGGCAAGGTGACAAAAAGCTATTCATTTGATGA
AATAAGAAAAAATGCACAGCTGAATATTGAACTGGAAGCAGCACATCATTAGGCTTTATGACTGGGTGTGTGTTG
TGTGTATGTAATACATAATGTTTATTGTACAGATGTGTGGGGTTTGTGTTTTATGATACATTACAGCCAAATTAT
TTGTTGGTTTATGGACATACTGCCCTTTCATTTTTTTTCTTTTCCAGTGTTTAGGTGATCTCAAATTAGGAAATG
CATTTAACCATGTAAAAGATGAGTGCTAAAGTAAGCTTTTTAGGGCCCTTTGCCAATAGGTAGTCATTCAATCTG
GTATTGATCTTTTCACAAATAACAGAACTGAGAAACTTTTATATATAACTGATGATCACATAAAACAGATTTGCA
TAAAATTACCATGATTGCTTTATGTTTATATTTAACTTGTATTTTTGTACAAACAAGATTGTGTAAGATATATTT
GAAGTTTCAGTGATTTAACAGTCTTTCCAACTTTTCATGATTTTTATGAGCACAGACTTTCAAGAAAATACTTGA
AAATAAATTACATTGCCTTTTGTCCATTAATCAGCAAATAAAACATGGCCTTAACAAAGTTGTTTGTGTTATTGT
ACAATTTGAAAATTATGTCGGGACATACCCTATAGAATTACTAACCTTACTGCCCCTTGTAGAATATGTATTAAT
CATTCTACATTAAAGAAAATAATGGTTCTTACTGGAATGTCTAGGCACTGTACAGTTATTATATATCTTGGTTGT
TGTATTGTACCAGTGAAATGCCAAATTTGAAAGGCCTGTACTGCAATTTTATATGTCAGAGATTGCCTGTGGCTC
TAATATGCACCTCAAGATTTTAAGGAGATAATGTTTTTAGAGAGAATTTCTGCTTCCACTATAGAATATATACAT
AAATGTAAAATACTTACAAAAGTGGAAGTAGTGTATTTTAAAGTAATTACACTTCTGAATTTATTTTTCATATTC
TATAGTTGGTATGACTTAAATGAATTACTGGAGTGGGTAGTGAGTGTACTTAAATGTTTCAATTCTGTTATATTT
TTTATTAAGTTTTTAAAAAATTAAATTGGATATTAAATTGTATGGACATCATTTATTAATTTTAAACTGAATGCC
CTCAATAAGTAATACTGAAGCACATTCTTAAATGAAGATAAATTATCTCCAATGAAAAGCATGACATGTGTTTCA
ATAGAAGAATCTTAAGTTGGCTAAATTCAAAGTGCTTGACATCAAAATGTTCTAGAGTGATTAGCTACTAGATTC
TGAATCATACATCACATCTGACTAGAGACCAGTTTCTTTCGAATGATTCTTTTATGTATGTAGATCTGTTCTTCT
GAGGCAGCGGTTGGCCAACTATAGCCCAAAGGCCAAATTTGGACTTCTTTTTATAAATGCAGATTGTCTATGGCT
GCTTTCCCACTACTCCAGCCTAAGGTAAACAGCTGCAATAGAAGCCAAATGAGAATCGCAAAGCCCAAAATGTTT
ATTAACCTGCCCTTTACACAAAATCACACAAAAAGTTTCCTGATCTCTGTTCTAAGAAAAGGAGTGTGCCTTGCA
TTTAAAAGGAAATGTTGGTTTCTAGGGAAGGGAGGAGGCTAAATAATTGATACGGAATTTTCCTCTTTTGTCTTC
TTTTTTCTCACTTAAGAATCCGATACTGGAAGACTGATTTAGAAAAGTTTTTAACATGACATTAAATGTGAAATT
TTAAAAATTGAAAAGCCATAAATCATCTGTTTTAAATAGTTACATGAGAAAATGATCACTAGAATAACCTAATTA
GAAGTGTTATCTTCATTAAATGTTTTTTGTAAGTGGTATTAGAAAGAATATGTTTTTCAGATGGTTCTTTAAACA

FIGURE 3274B

TGTAGTGAGAACAATAAGCATTATTCACTTTTAGTAAGTCTTCTGTAATCCATGATATAAAATAATTTTAAAATG
ATTTTTTAATGTATTTGAGTAAAGATGAGTAGTATTAAGAAAAACACACATTTCTTCACAAAATGTGCTAAGGGG
CGTGTAAAGAATCAAAAGAAACTATTACCAATAATAGTTTTGATAATCACCCATAATTTTGTGTTTAAACATTGA
AATTATAGTACAGACAGTATTCTCTGTGTTCTGTGAATTTCAGCAGCTTCAGAATAGAGTTTAATTTAGAAATTT
GCAGTGAAAAAAGCTATCTCTTTGTTCACAACCATAAATCAGGAGATGGAGATTAATTCTATTGGCTCTTAGTCA
CTTGGAACTGATTAATTCTGACTTTCTGTCACTAAGCACTTGGTATTTGGCCATCTCCATTCTGAGCACCAAACG
GTTAACACGAATGTCCACTAGAACTCTGCTGTGTGTCACCCTTAAATCAGTCTAAATCTTCCAGACAAAAGCAAA
TGGCATTTATGGATTTAAGTCATTAGATTTTCAACTGACATTAATTAATCCCTCTTGATTGATTATATCATCAAG
TATTTATATCTTAAATAGGAGGTAGGATTTCTGTGTTAAGACTCTTATTTGTACCCTATAATTAAAGTAAAATGT
TTTTTATGAGTATCCCTTGTTTTCCCTTCTTAAATTGTTATCAAACAATTTTTATAATGAAATCTATCTTGGAAA
ATTAGAAAGAAAAATGGCAAGGTATTTATTGTTCTGTTTGCCATAATTTAGAACTCACACTTAAGTATTTTGTAG
TTTTACATTCCTTTTTAACCCATTCAGTGGAGAATGTCAGCTTTTCTCCCAAGTTGTATGTTAAGTCTATTCTAA
TATGTACTCAACATCAAGTTATAAACATGTAATAAACATGGAAATAAAGTTTAGCTCTATTAGTGAAGTGTTAAA

FIGURE 3275

MNPAAEAEFNILLATDSYKVTHYKQYPPNTSKVYSYFECREKKTENSKLRKVKYEETVFYGLQYILNKYLKGKVV
TKEKIQEAKDVYKEHFQDDVFNEKGWNYILEKYDGHLPIEIKAVPEGFVIPRGNVLFTVENTDPECYWLTNWIET
ILVQSWYPITVATNSREQKKILAKYLLETSGNLDGLEYKLHDFGYRGVSSQETAGIGASAHLVNFKGTDTVAGLA
LIKKYYGTKDPVPGYSVPAAEHSTITAWGKDHEKDAFEHIVTQFSSVPVSVVSDSYDIYNACEKIWGEDLRHLIV
SRSTQAPLIIRPDSGNPLDTVLKVLEILGKKFPVTENSKGYKLLPPYLRVIQGDGVDINTLQEIVEGMKQKMWSI
ENIAFGSGGGLLQKLTRDLLNCSFKCSYVVTNGLGINVFKDPVADPNKRSKKGRLSLHRTPAGNFVTLEEGKGDL
EEYGQDLLHTVFKNGKVTKSYSFDEIRKNAQLNIELEAAHH

FIGURE 3276

CGCGCGGCCCCTGTCCTCCGGCCCGAGATGAATCCTGCGGCAGAAGCCGAGTTCAACATCCTCCTGGCCACCGAC
TCCTACAAGGTTACTCACTATAAACAATATCCACCCAACACAAGCAAAGTTTATTCCTACTTTGAATGCCGTGAA
AAGAAGACAGAAAACTCCAAATTAAGGAAGGTGAAATATGAGGAAACAGTATTTTATGGGTTGCAGTACATTCTT
AATAAGTACTTAAAAGGTAAAGTAGTAACCAAAGAGAAAATCCAGGAAGCCAAAGATGTCTACAAAGAACATTTC
CAAGATGATGTCTTTAATGAAAAGGGATGGAACTACATTCTTGAGAAGTATGATGGGCATCTTCCAATAGAAATA
AAAGCTGTTCCTGAGGGCTTTGTCATTCCCAGAGGAAATGTTCTCTTCACGGTGGAAAACACAGATCCAGAGTGT
TACTGGCTTACAAATTGGATTGAGACTATTCTTGTTCAGTCCTGGTATCCAATCACAGTGGCCACAAATTCTAGA
GAGCAGAAGAAAATATTGGCCAAATATTTGTTAGAAACTTCTGGTAACTTAGATGGTCTGGAATACAAGTTACAT
GATTTTGGCTACAGAGGAGTCTCTTCCCAAGAGACTGCTGGCATAGGAGCATCTGCTCACTTGGTTAACTTCAAA
GGAACAGATACAGTAGCAGGACTTGCTCTAATTAAAAAATATTATGGAACGAAAGATCCTGTTCCAGGCTATTCT
GTTCCAGCAGCAGAACACAGTACCATAACAGCTTGGGGGAAAGACCATGAAAAAGATGCTTTTGAACATATTGTA
ACACAGTTTTCATCAGTGCCTGTATCTGTGGTCAGCGATAGCTATGACATTTATAATGCGTGTGAGAAAATATGG
GGTGAAGATCTAAGACATTTAATAGTATCGAGAAGTACACAGGCACCACTAATAATCAGACCTGATTCTGGAAAC
CCTCTTGACACTGTGTTAAAGGTTTTGGAGATTTTAGGTAAGAAGTTTCCTGTTACTGAGAACTCAAAGGGTTAC
AAGTTGCTGCCACCTTATCTTAGAGTTATTCAAGGGGATGGAGTAGATATTAATACCTTACAAGAGATTGTAGAA
GGCATGAAACAAAAAATGTGGAGTATTGAAAATATTGCCTTCGGTTCTGGTGGAGGTTTGCTACAGAAGTTGACA
AGAGATCTCTTGAATTGTTCCTTCAAGTGTAGCTATGTTGTAACTAATGGCCTTGGGATTAACGTCTTCAAGGAC
CCAGTTGCTGATCCCAACAAAAGGTCCAAAAAGGGCCGATTATCTTTACATAGGACGCCAGCAGGGAATTTTGTT
ACACTGGAGGAAGGAAAAGGAGACCTTGAGGAATATGGTCAGGATCTTCTCCATACTGTCTTCAAGAATGGCAAG
GTGACAAAAAGCTATTCATTTGATGAAATAAGAAAAAATGCACAGCTGAATATTGAACTGGAAGCAGCACATCAT
TAGGCTTTATGACTGGGTGTGTGTTGTGTGTATGTAATACATAATGTTTATTGTACAGATGTGTGGGGTTTGTGT
TTTATGATACATTACAGCCAAATTATTTGTTGGTTTATGGACATACTGCCCTTTCATTTTTTTTCTTTTCCAGTG
TTTAGGTGATCTCAAATTAGGAAATGCATTTAACCATGTAAAAGATGAGTGCTAAAGTAAGCTTTTTAGGGCCCT
TTGCCAATAGGTAGTCATTCAATCTGGTATTGATCTTTTCACAAATAACAGAACTGAGAAACTTTTATATATAAC
TGATGATCACATAAAACAGATTTGCATAAAATTACCATGATTGCTTTATGTTTATATTTAACTTGTATTTTTGTA
CAAACAAGATTGTGTAAGATATATTTGAAGTTTCAGTGATTTAACAGTCTTTCCAACTTTTCATGATTTTTATGA
GCACAGACTTTCAAGAAAATACTTGAAAATAAATTACATTGCCTTTTGTCCATTAATCAGCAAATAAAACATGGC
CTTAACAAAGTTGTTTGTGTTATTGTACAATTTGAAAATTATGTCGGGACATACCCTATAGAATTACTAACCTTA
CTGCCCCTTGTAGAATATGTATTAATCATTCTACATTAAAGAAAATAATGGTTCTTACTGGAATGTCTAGGCACT
GTACAGTTATTATATATCTTGGTTGTTGTATTGTACCAGTGAAATGCCAAATTTGAAAGGCCTGTACTGCAATTT
TATATGTCAGAGATTGCCTGTGGCTCTAATATGCACCTCAAGATTTTAAGGAGATAATGTTTTTAGAGAGAATTT
CTGCTTCCACTATAGAATATATACATAAATGTAAAATACTTACAAAAGTGG

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FIGURE 3277

MNPAAEAEFNILLATDSYKVTHYKQYPPNTSKVYSYFECREKKTENSKLRKVKYEETVFYGLQYILNKYLKGKVV
TKEKIQEAKDVYKEHFQDDVFNEKGWNYILEKYDGHLPIEIKAVPEGFVIPRGNVLFTVENTDPECYWLTNWIET
ILVQSWYPITVATNSREQKKILAKYLLETSGNLDGLEYKLHDFGYRGVSSQETAGIGASAHLVNFKGTDTVAGLA
LIKKYYGTKDPVPGYSVPAAEHSTITAWGKDHEKDAFEHIVTQFSSVPVSVVSDSYDIYNACEKIWGEDLRHLIV
SRSTQAPLIIRPDSGNPLDTVLKVLEILGKKFPVTENSKGYKLLPPYLRVIQGDGVDINTLQEIVEGMKQKMWSI
ENIAFGSGGGLLQKLTRDLLNCSFKCSYVVTNGLGINVFKDPVADPNKRSKKGRLSLHRTPAGNFVTLEEGKGDL
EEYGQDLLHTVFKNGKVTKSYSFDEIRKNAQLNIELEAAHH

FIGURE 3278

GAAAGGTCACAGCGCGGCAGCGGGTCTGGCTGGCGGCAGCGGCGGGAGGGAGCCGAGAGACCCGAGTGCACGTGT
GGAGAAGCGGCGGCACAAGCGCGGCGGCGGGAGACACTCCCGCCCCCACCAGACTCAAGCCCTCACTCGACTCTC
GCGGCCTTCGTTGCTCGCACAGCTCCCTGCCCAGGCTAGGAGGCCGGCTTGCGGGGTTGAGTGGCCCGAGCTAAG
GGTGCGGAGACCTAAGGGCGGCGACTACGACGGCGTTGATATCGGTGGTAACGACGGCCTCAGCAGGCGGGGAAG
ATGAAAGGTAGCCGGATCGAGCTGGGAGATGTGACACCACACAATATTAAACAGTTGAAAAGATTGAATCAGGTC
ATCTTTCCAGTCAGCTACAATGACAAGTTCTACAAGGATGTGCTGGAGGTTGGCGAGCTAGCAAAACTTGCCTAT
TTCAATGATATTGCTGTAGGTGCAGTATGCTGTAGGGTGGATCATTCACAGAATCAGAAGAGACTTTACATCATG
ACACTAGGATGTCTGGCACCTTACCGAAGGCTAGGAATAGGAACTAAAATGTTAAATCATGTCTTAAACATCTGT
GAAAAAGATGGTACTTTTGACAACATTTATCTGCATGTCCAGATCAGCAATGAGTCGGCAATTGACTTCTACAGG
AAGTTTGGCTTTGAGATTATTGAGACAAAGAAGAACTACTATAAGAGGATAGAGCCCGCAGATGCTCATGTGCTG
CAGAAAAACCTCAAAGTTCCTTCTGGTCAGAATGCAGATGTGCAAAAGACAGACAAC**TGA**ACAAATTACAAATGA
ACTTTCTTGCACTTGCTTGTCGCCAAATAAAAGAGAGGCCCATTGATTCCTCCCCCACCCCAACACTTTTCTTTT
AAAGCTTTTCTCCCTCCTTGTTCTTGTTTTTCTTTCTTCCTTTCCTTTTCTCTGAGAGTTTTAATACTTTCAAGG
ACTTTAAAAAAATAATCATGTTTGAATTGTTTTCTCTTATTTTTGTGAGGTGGTTTGAAGGAAGGACAAGGTAGA
TCTGTTTAGTTTTGCAGTTGAAGTTAGATGGTCCTAAACATTTAATTGTCAAATAATTTCAAATTTAATGTCCTG
CTTTCACATTGAAGGGCAGAGCCTACAAAACATTGTATATTTCAAAAGACAAAAAGAAGCAGCAGCAGTATCTTG
TTCTCTAATTCATAGACAAGTTGAGTGTGTTTGTGGTACTTTGGGTTTTTAAACACTTTGGGATACTAATCCCTA
GACATTGCCTTCACTCCACCTTTAGTCCTTCTGAGCACTCTCTCGGGAGTTGGAACATTGTTATCCTTGTAAGAA
ATACTAAGCTTATGTTGATTTTTAAGTAATTATATCTTCTCTTCTTGCTGGTGGGTGGGGCAGTTTGGTTTAGTG
TTATACTTTGGTCTAAGTATTTGAGTTAAACTGCTTTTTTGCTAATGAGTGGGCTGGTTGTTAGCAGGTTTGTTT
TTCCTGCTGTTGATTGTTACTAGTGGCATTAACTTTTAGAATTTGGGCTGGTGAGATTAATTTTTTTTAATATCC
CAGCTAGAGATATGGCCTTTAACTGACCTAAAGAGGTGTGTTGTGATTTAATTTTTTCCCGTTCCTTTTTCTTCA
GTAAACCCAACAATAGTCTAACCTTAAAAATTGAGTTGATGTCCTTATAGGTCACTACCCCTAAATAAACCTGAA
GCAGGTGTTTTCTCTTGGACATACTAAAAAATACCTAAAAGGAAGCTTAGATGGGCTGTGACACAAAAAATTCAA
TTACTGTCATCTAATGCCAGCTGTTAAAAGTGTGGCCACTGAGCATTTGATTTTATAGGAAAAAATAGTATTTTT
GAGAATAACATAGCTGTGCTATTGCACATCTGTTGGAGGACATCCCAGATTTGCTTATACTCAGTGCCTGTGATA
TTGAGTTTAAGGATTTGAGGCAGGGGTAATTATTAAACATATTGCTTCTATTCTTGGAAAAATAGAAGTGTAAAA
TGTTAATAATACAAATGTCACTGTGACCTCCTCCACTGTGAGGACTGGTTTATGCCAGATCATTTTCCGGCACAC
ACGGAGTGGCTTTGACAGATTGATAACTTTGTAAGATGGGAGACATCTGAAATATTCATGTTTTCCTTTTGTAGT
CCCATCTCCACTATTTAGAAATGTTCTCAGACTTTAAAATAATGCACAGGGCTTGAGCTTTCTGTCATTTGACTT
TAAAAGGAAGTTTCATTCATATTTATCCTCTTATGTAAAATTGCGGTATAAAGTCTCATTTCCAAATATGTTAAA
TGACAAAATTATTTTATAAAATGTTTATGCACACTTTATAACCTTAAGTTTTTATTTGAGAATGTGAAAGTACAA
AGTGCAGTAGACTTCAACAATCTTGAGTGCCAAGAATAATACAGAAAAAGAAGACAGTTGATGAATGAGTTTATA
GGGTTCTAATCTTAAGATGGTAAAAATGTAGAAAGACCTTGCTGGTTTTTTGGGGGTATTCGTTTCTTAAACAAT
CCAAATCTAAGCTTAGAAGAAAAGTTTAGCGTTAAGCACCTTTATCTTCATGAATAAGCTTCAGCTTGCTCTTGG
CAAGAGAAGAGTGCTTGAGTTACAGAAGGCATAAGTAGTTTGAAGAATGCAGCAGCCTTTTTGTAAACTTCCCAG
ATATCAAAATAGACTTTGATATATAAATGGTTTTCTGAGATGACACTGCCTCTATTTCTATAACCATTTCACCTG
GACTATCTAACCAGTCCTATGAATGTATCCCTAAATGTGGTTATTGAAAACCTAATAGCTGCCTCATGACAAGTA
CATGTTATTTAAGGAGGAAAAAATATTAAATTTTGAATTGAGTGTGTAGGCTCCCTATCATTATATATAGAGTTT
CTTTTTCCACGGTAGTCAGTGACTTAACCTGAATTGTAAATGTTTGTAAAGGGTTAATTGTCCTACATCAAACTT
AGTTAAATAATTCCATCCACTTATGGAGGAGGAGGAGAATGTGGAAGAGGTAAAAAGCTGGGCACAAGTTCATAT
GCCTATGAGTCAGTAAAGACTGAAGTAATGTCCTATGTTGAGCTGGTTATTTTGATATATGATAATAATTATCTT
TGAAGTAGAACAATTCTGTTAACTGGAAAATCACAGGATATATCCATCATATTTTTCAGGACAGATAGTTTTTAC
TGTGGGGCAAATAGGTTAAAATTACACTATGTTAGTTGCATTTAGGTTTTAAAGCAAAGAATCTGTAGAGAAATC
TATGCAATATATAGTTTGTCCAGATTAGCTTTCATTTGGGGAATGAAGTTCTGAAATATCTAAAGCAGTTTACTC
ATCAATTGAAAAGTCCTCCAAAAAGAGAACTATTGGGAAACCATGGTGTGGTGGTGGAAAAGAAAAGCTCCCTCA
GTTTTTTGGAGGGAATAACTTAAAAAAATACTTAAATGGCTAAGTTTACTTGGTGCAGTTAAGAATTAAACTTGT
CAATTTTAACATTGCTGTTACATCTGAAATAAACTTATGTGATGTTCTGGT

FIGURE 3279

MKGSRIELGDVTPHNIKQLKRLNQVIFPVSYNDKFYKDVLEVGELAKLAYFNDIAVGAVCCRVDHSQNQKRLYIM
TLGCLAPYRRLGIGTKMLNHVLNICEKDGTFDNIYLHVQISNESAIDFYRKFGFEIIETKKNYYKRIEPADAHVL
QKNLKVPSGQNADVQKTDN

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FIGURE 3280

TGCAGCGGTGGTCGGCTGTTGGGTGTGGAGTTTCCCAGCGCCCCTCGGGTCCGACCCTTTGAGCGTTCTGCTCCG
GCGCCAGCCTACCTCGCTCCTCGGCGCCATGACCACAACCACCACCTTCAAGGGAGTCGACCCCAACAGCAGGAA
TAGCTCCCGAGTTTTGCGGCCTCCAGGTGGTGGATCCAATTTTTCATTAGGTTTTGATGAACCAACAGAACAACC
TGTGAGGAAGAACAAAATGGCCTCTAATATCTTTGGGACACCTGAAGAAAATCAAGCTTCTTGGGCCAAGTCAGC
AGGTGCCAAGTCTAGTGGTGGCAGGGAAGACTTGGAGTCATCTGGACTGCAGAGAAGGAACTCCTCTGAAGCAAG
CTCCGGAGACTTCTTAGATCTGAAGGGAGAAGGTGATATTCATGAAAATGTGGACACAGACTTGCCAGGCAGCCT
GGGGCAGAGTGAAGAGAAGCCCGTGCCTGCTGCGCCTGTGCCCAGCCCGGTGGCCCCGGCCCCAGTGCCATCCAG
AAGAAATCCCCCTGGCGGCAAGTCCAGCCTCGTCTTGGGTTAGCTCTGACTGTCCTGAACGCTGTCGTTCTGTCT
GTTTCCTCCATGCTTGAGAACTGCACAACTTGAGCCTGACTGTACATCTTCTTGGATTTGTTTCATTAAAAAGAA
GCACTTTATGTAAAAAAAAAAAAAAAAA

FIGURE 3281

MTTTTTFKGVDPNSRNSSRVLRPPGGGSNFSLGFDEPTEQPVRKNKMASNIFGTPEENQASWAKSAGAKSSGGRE
DLESSGLQRRNSSEASSGDFLDLKGEGDIHENVDTDLPGSLGQSEEKPVPAAPVPSPVAPAPVPSRRNPPGGKSS
LVLG

FIGURE 3282A

GGCCCAGAAATAGCAGCGGCGCGTTCCCCTCGGCGCAGAGCGACGGGCAGAGGCGAGAGACGCCGCGGGGCCGGG
CGGCGGCCCCGGAAGGATGCTGCTGAGCCCCGGCACTGCCTGGCTGCGAGCACATGATGGCGATACGGGAGCTCA
AAGTGTGCCTTCTCGGGGACACTGGGGTTGGGAAATCAAGCATCGTGTGTCGATTTGTCCAGGATCACTTTGACC
ACAACATCAGCCCTACTATTGGGGCATCTTTTATGACCAAAACTGTGCCTTGTGGAAATGAACTTCACAAGTTCC
TCATCTGGGACACTGCTGGTCAGGAACGGTTTCATTCATTGGCTCCCATGTACTATCGAGGCTCAGCTGCAGCTG
TTATCGTGTATGATATTACCAAGCAGGATTCATTTTATACCTTGAAGAAATGGGTCAAGGAGCTGAAAGAACATG
GTCCAGAAAACATTGTAATGGCCATCGCTGGAAACAAGTGCGACCTCTCAGATATTAGGGAGGTTCCCCTGAAGG
ATGCTAAGGAATACGCTGAATCCATAGGTGCCATCGTGGTTGAGACAAGTGCAAAAAATGCTATTAATATCGAAG
AGCTCTTTCAAGGAATCAGCCGCCAGATCCCACCCTTGGACCCCCATGAAAATGGAAACAATGGAACAATCAAAG
TTGAGAAGCCAACCATGCAAGCCAGCCGCCGGTGCTGTTGACCCAAGGGCCGTGGTCCACGGTACTTGAAGAAGC
CAGAGCCCACATCCTGTGCACTGCTGAAGGACCCTACGCTCGGTGGCCTGGCACCTCACTTTGAGAAGAGTGAGC
ACACTGGCTTTGCATCCTGGAAGACCTGCAGGGGGCGGGGCAGGAAATGTACCTGAAAAGGATTTTAGAAAACCC
TGGGAAAACCCACCACACCACCACAAAATGGCCTTTAGTGTATGAAATGCACATGGAGGGGATGTAGTTGCATTT
TTGCTAAAAAAAAAAAAAAACCTTTAAAAATTGTTGGATGTGTACAAAAGTCTTACTGCCTTATTATGTGTATGG
GATTCTAAAGTGGCATTCCACTTGGATTTCCTGTGCTACCTATCCCAAATTCCCAGTAACTACTTCAGTGTCATT
GCCTTTGTTACCTAACCAACCTTCACTGAAAGGCAAATTTAGTTCAGGAGGTTAGTTTTTAGCTAGCTTTGGAAG
TAAGCCTTTATTTATTACTTTTTGGAGGAAATCAGAGAAGTGTCAATGGACCGTCACTCAGACTGAGACTTGAGT
TATTACAGAAGCCAGGAAAAGTGTATTAGAAACTGTTGTCTACACCACTTTTAATTGGTGAACAATTTTTCTAAG
TTATGGTCATATATACCCAAACAAACCAAATCAAACTAAATTACTGCATATAATTTTGGGATTGGGTGGCCTAGT
TTGAAAGAGTGATTTAAGTAATCACTATGTAAGTGGTGAGAGATGCAGGACATACACATTATTCAAGAGACCACC
TGACATGCATCTCCTCCGCAGGAATACATTCGTCCTCTCTTAGAGAAGTTTAACGCACATAGTATTATTTTACTA
AGAGAATATCTCTTGGTGTCATATCTAGGGGAAGAGAATTAACTAGAATTAAATTTAATGTTTGAATCTAAATCA
TTGGGCAAACTTCTAATAATAACAATTAATAATAGGTTACAGGAAAGCCAGCCAGAGGAAGTGTCAGCACTTTAA
AATTCTAGACCCCAAAAAACTACAAAATCAGAAAAAGTATTTTTATGTTTCTAGCTTGAGGAGAAGGGCTTTAGG
GCTAACCAGAGGTCTGACCCTAGAATGCCAAGGAACTGAGAATGGGCTCCGATGAAAACCTTCCTTTTCAGATTC
CCTGTCTGCTCAATTAAAGATGTTTGAATCCAAAGGAAGTCAAGGAAGAAAAAGCATGGAAAGGAAGAGAACTGA
TTCCTACTGAAAATTCAAATTCTATTACCATTCTAACTTTCATAAAAAGTTGGGATCAAGAAGCAGCTGATTTCC
TGCCAGGGCTTATATTAGGGGGTGATTCTTAAAGGACATTAGGATTGGTGCTCAGAAATGGTTAATCATGCTGTG
TGCTAGCCAGGGCCAGCTGGTACCTTCTTTGCCATGAGCATTCAAGGGACAGCTAACCTTTATTGACAATCTATA
TTGCAAAAGTCAGGAAAGAGGTTGTGAGCTGATTGGATTAAAGACCTGGCACTTCAGTAACTCAGCACGCTTCCA
CTTCACTCAACTTAAGAGAGTTCATTGACAGTGTTAGGATGTGAAGGCTGGGAAACACTTATTTTGCTTCAAGAG
TTCCACTTGGCTCTCCCAAATAGGTACCTCAAAAACTGTTAGCAAGCGGCATTTGGATGTCTTGACAGGGGCTTT
GCAGGGATTTTTAGGGTTTTTTCCACATTGTCCACATTAATGGTTGGCATGATTGTGCTTGCAGGCCAAGAAATG
ATCATACCCCTTGCCAAAGGTAAAAAAAAAAAAAAAAAAATGAGTTGAAAATTGAAGTGACCTCTTTCCAGCTGA
CTTGCAGGCTTATTTTGTAACCTTTCCTCATCCAGTTTTCCCTGAGAACCTGGGTTTATCTCTAGATAGCTGTTC
AGGTTTTTTAGCTGAGGGGTAAGTATCCTAGCTGAGAGTTTTGCATCTTTGGGCTGGGTTTGCAGTGGTTGTGTT
TTGCATAAAATGTCTAGTCTTTGCCACAGATAGTGAGCTACCCACTAATGAGCCCATGGTTTTATTTCAGAAGCA
CATGAGGGTGTGAAACCACTCTGTTACCTTTCTGTATTGTCTTAGCTATTCAAGCCAGTCAGAGGATAATATATA
TATTCTCATCAGCACTCAGAGTAGTCAGTGAAGAGAGTAGGATCACACTTGGGGCACACCAGGATTCACATAAAC
ATTGTATCTTCTCTGTGGATGCTCAGGCCTTGTCTACAATGAGGCTTTACAACCTTCCTTGTTTGGCTCGGGATT
ACTTCCTGGCTGTCTAATAATTGAACCATAACCATGTAATATTATGTAAAGGCCTGGAAATTACTGTTGCTAAAA
AAAGTCATGTAGTTTCATGTAGTGTAGCATCCTTGGCATCGTTTTCCAAAATTTGTTCCTTCTCCCTTTTTTTTT
TCTTTCGTGTGTGGCATGAGTGTGTATCTGTGTAAATATGATTGTATATGTGTTACTCCGATATGTAATCCATTT
CACTGGCTGAGTTTGGCCCCTAGCCATGTGTTAATATAAAGTAGGGCATGGGCTTCCCAATGGAAATCTCTGAGA
ATGACAGTGGAGTTGTGCAAGCATTTTACATTGCCACATAATTGACTTGCCATTTTATGGTTAAAAACGGGCACA
TTAGGCAGTTGAATATGACGTTACCTTGCAGACTAAAAGGTTGAAGGCCCGAAACTAACTTTTAGCTAACAATAA
GGGCTGTGCCCCAATGGAAACTGAGTTCATTTTCTGAGAAAGGTTTGGATGACTGAAATATTTCCTCTACAGTCA
AGGACTTTGGCATGCGGTGGCTGAAACTGAGCTTTTTTGTGTGGGCTCCAGTTCTCACTGTTCTGCAATGCTCAT

FIGURE 3282B

GGCAAGTTGAATGGTGAGCTAGCTTATAAATTAAAGAGCTCTGAACTGTATTCAGACCGACTGGGTATCTAGCTT
ACTGTTTTAACATCATTGTTGAAACCAGACCCTGTAGTCCAGTGGTGCTGCCCTGTTGTGCAAACTGCTCCTTTT
TCTCGTGTTTTTGTAAAGAGCTTCCATCTGGGCTGGACCCAGTTCTTGCACATACAAGACACCGCTGCAGTCAGC
TAGGACCTTTCCGCCATGTATTCTATTCTGTAGTAAAGCATTTCCATCAACAATGCCTAATTGTATCTGTTATTT
TTGGTTTAACACACACTGATTCATACTAATAAATATTTTCAGTTTTAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3283

MMAIRELKVCLLGDTGVGKSSIVCRFVQDHFDHNISPTIGASFMTKTVPCGNELHKFLIWDTAGQERFHSLAPMY
YRGSAAAVIVYDITKQDSFYTLKKWVKELKEHGPENIVMAIAGNKCDLSDIREVPLKDAKEYAESIGAIVVETSA
KNAINIEELFQGISRQIPPLDPHENGNNGTIKVEKPTMQASRRCC

FIGURE 3284

CCCTCGGACGGCCCCGGAGGATGCTGCTGAGCCCCGGCACTGCCTGGCTGCGAGCACATGATGGCGATACGGGAG
CTCAAAGTGTGCCTTCTCGGGGACACTGGGGTTGGGAAATCAAGCATCGTGTGTCGATTTGTCCAGGATCACTTT
GACCACAACATCAGCCCTACTATTGGGGCATCTTTTATGACCAAAACTGTGCCTTGTGGAAATGAACTTCACAAG
TTCCTCATCTGGGACACTGCTGGTCAGGAACGGTTTCATTCATTGGCTCCCATGTACTATCGAGGCTCAGCTGCA
GCTGTTATCGTGTATGATATTACCAAGCAGGATTCATTTTATACCTTGAAGAAATGGGTCAAGGAGCTGAAAGAA
CATGGTCCAGAAAACATTGTAATGGCCATCGCTGGAAACAAGTGCGACCTCTCAGATATTAGGGAGGTTCCCCTG
AAGGATGCTAAGGAATACGCTGAATCCATAGGTGCCATCGTGGTTGAGACAAGTGCAAAAAATGCTATTAATATC
GAAGAGCTCTTTCAAGGAATCAGCCGCCAGATCCCACCCTTGGACCCCCATGAAAATGGAAACAATGGAACAATC
AAAGTTGAGAAGCCAACCATGCAAGCCAGCCGCCGGTGCTGTTGACCCAAGGGCGTGGTCCACGGTACTTGAAGA
AGCCAGAGCCCACATCCTGTGCACTGCTGAAGGACCCTACGCTCGGTGGCCTGGCACCTCACTTTGAGAAGAGTG
AGCACACTGGCTTTGCATCCTGGAAGGCCTGCAGGGGGCGGGGCAGGAAATGTACCTGAAAAGGATTTTAGAAAA
CCCTGGGAAACCCACCACACCACCACAAAATGGCCTTTAGTGTATGAAATGCACATGGAGGGGATGTAGTTGCAT
TTTTGCTAAAAAAAAAAAAAA

FIGURE 3285

MAIRELKVCLLGDTGVGKSSIVCRFVQDHFDHNISPTIGASFMTKTVPCGNELHKFLIWDTAGQERFHSLAPMYY
RGSAAAVIVYDITKQDSFYTLKKWVKELKEHGPENIVMAIAGNKCDLSDIREVPLKDAKEYAESIGAIVVETSAK
NAINIEELFQGISRQIPPLDPHENGNNGTIKVEKPTMQASRRCC

FIGURE 3286A

GGCCCAGAAATAGCAGCGGCGCGTTCCCCTCGGCGCAGAGCGACGGGCAGAGGCGAGAGACGCCGCGGGGCCGGG
CGGCGGCCCCGGAAGGATGCTGCTGAGCCCCGGCACTGCCTGGCTGCGAGCACATGATGGCGATACGGGAGCTCA
AAGTGTGCCTTCTCGGGGACACTGGGGTTGGGAAATCAAGCATCGTGTGTCGATTTGTCCAGGATCACTTTGACC
ACAACATCAGCCCTACTATTGGGGCATCTTTTATGACCAAAACTGTGCCTTGTGGAAATGAACTTCACAAGTTCC
TCATCTGGGACACTGCTGGTCAGGAACGGTTTCATTCATTGGCTCCCATGTACTATCGAGGCTCAGCTGCAGCTG
TTATCGTGTATGATATTACCAAGCAGGATTCATTTTATACCTTGAAGAAATGGGTCAAGGAGCTGAAAGAACATG
GTCCAGAAAACATTGTAATGGCCATCGCTGGAAACAAGTGCGACCTCTCAGATATTAGGGAGGTTCCCCTGAAGG
ATGCTAAGGAATACGCTGAATCCATAGGTGCCATCGTGGTTGAGACAAGTGCAAAAAATGCTATTAATATCGAAG
AGCTCTTTCAAGGAATCAGCCGCCAGATCCCACCCTTGGACCCCCATGAAAATGGAAACAATGGAACAATCAAAG
TTGAGAAGCCAACCATGCAAGCCAGCCGCCGGTGCTGTTGACCCAAGGGCCGTGGTCCACGGTACTTGAAGAAGC
CAGAGCCCACATCCTGTGCACTGCTGAAGGACCCTACGCTCGGTGGCCTGGCACCTCACTTTGAGAAGAGTGAGC
ACACTGGCTTTGCATCCTGGAAGACCTGCAGGGGGCGGGGCAGGAAATGTACCTGAAAAGGATTTTAGAAAACCC
TGGGAAAACCCACCACACCACCACAAAATGGCCTTTAGTGTATGAAATGCACATGGAGGGGATGTAGTTGCATTT
TTGCTAAAAAAAAAAAAAAACCTTTAAAAATTGTTGGATGTGTACAAAAGTCTTACTGCCTTATTATGTGTATGG
GATTCTAAAGTGGCATTCCACTTGGATTTCCTGTGCTACCTATCCCAAATTCCCAGTAACTACTTCAGTGTCATT
GCCTTTGTTACCTAACCAACCTTCACTGAAAGGCAAATTTAGTTCAGGAGGTTAGTTTTTAGCTAGCTTTGGAAG
TAAGCCTTTATTTATTACTTTTTGGAGGAAATCAGAGAAGTGTCAATGGACCGTCACTCAGACTGAGACTTGAGT
TATTACAGAAGCCAGGAAAAGTGTATTAGAAACTGTTGTCTACACCACTTTTAATTGGTGAACAATTTTTCTAAG
TTATGGTCATATATACCCAAACAAACCAAATCAAACTAAATTACTGCATATAATTTTGGGATTGGGTGGCCTAGT
TTGAAAGAGTGATTTAAGTAATCACTATGTAAGTGGTGAGAGATGCAGGACATACACATTATTCAAGAGACCACC
TGACATGCATCTCCTCCGCAGGAATACATTCGTCCTCTCTTAGAGAAGTTTAACGCACATAGTATTATTTTACTA
AGAGAATATCTCTTGGTGTCATATCTAGGGGAAGAGAATTAACTAGAATTAAATTTAATGTTTGAATCTAAATCA
TTGGGCAAACTTCTAATAATAACAATTAATAATAGGTTACAGGAAAGCCAGCCAGAGGAAGTGTCAGCACTTTAA
AATTCTAGACCCCAAAAAACTACAAAATCAGAAAAAGTATTTTTATGTTTCTAGCTTGAGGAGAAGGGCTTTAGG
GCTAACCAGAGGTCTGACCCTAGAATGCCAAGGAACTGAGAATGGGCTCCGATGAAAACCTTCCTTTTCAGATTC
CCTGTCTGCTCAATTAAAGATGTTTGAATCCAAAGGAAGTCAAGGAAGAAAAAGCATGGAAAGGAAGAGAACTGA
TTCCTACTGAAAATTCAAATTCTATTACCATTCTAACTTTCATAAAAAGTTGGGATCAAGAAGCAGCTGATTTCC
TGCCAGGGCTTATATTAGGGGGTGATTCTTAAAGGACATTAGGATTGGTGCTCAGAAATGGTTAATCATGCTGTG
TGCTAGCCAGGGCCAGCTGGTACCTTCTTTGCCATGAGCATTCAAGGGACAGCTAACCTTTATTGACAATCTATA
TTGCAAAAGTCAGGAAAGAGGTTGTGAGCTGATTGGATTAAAGACCTGGCACTTCAGTAACTCAGCACGCTTCCA
CTTCACTCAACTTAAGAGAGTTCATTGACAGTGTTAGGATGTGAAGGCTGGGAAACACTTATTTTGCTTCAAGAG
TTCCACTTGGCTCTCCCAAATAGGTACCTCAAAAACTGTTAGCAAGCGGCATTTGGATGTCTTGACAGGGGCTTT
GCAGGGATTTTTAGGGTTTTTTCCACATTGTCCACATTAATGGTTGGCATGATTGTGCTTGCAGGCCAAGAAATG
ATCATACCCCTTGCCAAAGGTAAAAAAAAAAAAAAAAAAATGAGTTGAAAATTGAAGTGACCTCTTTCCAGCTGA
CTTGCAGGCTTATTTTGTAACCTTTCCTCATCCAGTTTTCCCTGAGAACCTGGGTTTATCTCTAGATAGCTGTTC
AGGTTTTTTAGCTGAGGGGTAAGTATCCTAGCTGAGAGTTTTGCATCTTTGGGCTGGGTTTGCAGTGGTTGTGTT
TTGCATAAAATGTCTAGTCTTTGCCACAGATAGTGAGCTACCCACTAATGAGCCCATGGTTTTATTTCAGAAGCA
CATGAGGGTGTGAAACCACTCTGTTACCTTTCTGTATTGTCTTAGCTATTCAAGCCAGTCAGAGGATAATATATA
TATTCTCATCAGCACTCAGAGTAGTCAGTGAAGAGAGTAGGATCACACTTGGGGCACACCAGGATTCACATAAAC
ATTGTATCTTCTCTGTGGATGCTCAGGCCTTGTCTACAATGAGGCTTTACAACCTTCCTTGTTTGGCTCGGGATT
ACTTCCTGGCTGTCTAATAATTGAACCATAACCATGTAATATTATGTAAAGGCCTGGAAATTACTGTTGCTAAAA
AAAGTCATGTAGTTTCATGTAGTGTAGCATCCTTGGCATCGTTTTCCAAAATTTGTTCCTTCTCCCTTTTTTTTT
TCTTTCGTGTGTGGCATGAGTGTGTATCTGTGTAAATATGATTGTATATGTGTTACTCCGATATGTAATCCATTT
CACTGGCTGAGTTTGGCCCCTAGCCATGTGTTAATATAAAGTAGGGCATGGGCTTCCCAATGGAAATCTCTGAGA
ATGACAGTGGAGTTGTGCAAGCATTTTACATTGCCACATAATTGACTTGCCATTTTATGGTTAAAAACGGGCACA
TTAGGCAGTTGAATATGACGTTACCTTGCAGACTAAAAGGTTGAAGGCCCGAAACTAACTTTTAGCTAACAATAA
GGGCTGTGCCCCAATGGAAACTGAGTTCATTTTCTGAGAAAGGTTTGGATGACTGAAATATTTCCTCTACAGTCA
AGGACTTTGGCATGCGGTGGCTGAAACTGAGCTTTTTTGTGTGGGCTCCAGTTCTCACTGTTCTGCAATGCTCAT

FIGURE 3286B

GGCAAGTTGAATGGTGAGCTAGCTTATAAATTAAAGAGCTCTGAACTGTATTCAGACCGACTGGGTATCTAGCTT
ACTGTTTTAACATCATTGTTGAAACCAGACCCTGTAGTCCAGTGGTGCTGCCCTGTTGTGCAAACTGCTCCTTTT
TCTCGTGTTTTTGTAAAGAGCTTCCATCTGGGCTGGACCCAGTTCTTGCACATACAAGACACCGCTGCAGTCAGC
TAGGACCTTTCCGCCATGTATTCTATTCTGTAGTAAAGCATTTCCATCAACAATGCCTAATTGTATCTGTTATTT
TTGGTTTAACACACACTGATTCATACTAATAAATATTTTCAGTTTTAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3287

MMAIRELKVCLLGDTGVGKSSIVCRFVQDHFDHNISPTIGASFMTKTVPCGNELHKFLIWDTAGQERFHSLAPMY
YRGSAAAVIVYDITKQDSFYTLKKWVKELKEHGPENIVMAIAGNKCDLSDIREVPLKDAKEYAESIGAIVVETSA
KNAINIEELFQGISRQIPPLDPHENGNNGTIKVEKPTMQASRRCC

FIGURE 3288

GGGGGGAAACGGAAGTGAGCGGCGGGGTCGACTGACGGTAACGGGGCAGAGAGGCTGTTCGCAGAGCTGCGGAAG
ATGAATGCCAGAGGACTTGGATCTGAGCTAAAGGACAGTATTCCAGTTACTGAACTTTCAGCAAGTGGACCTTTT
GAAAGTCATGATCTTCTTCGGAAAGGTTTTTCTTGTGTGAAAAATGAACTTTTGCCTAGTCATCCCCTTGAATTA
TCAGAAAAAAATTTCCAGCTCAACCAAGATAAAATGAATTTTTCCACACTGAGAAACATTCAGGGTCTATTTGCT
CCGCTAAAATTACAGATGGAATTCAAGGCAGTGCAGCAGGTTCAGCGTCTTCCATTTCTTTCAAGCTCAAATCTT
TCACTGGATGTTTTGAGGGGTAATGATGAGACTATTGGATTTGAGGATATTCTTAATGATCCATCACAAAGCGAA
GTCATGGGAGAGCCACACTTGATGGTGGAATATAAACTTGGTTTACTGTAATAGTGTGCTGTTCATGGAAACCGA
GGGCTGCATCTTGTTTATAGTCATCTTTGTACTGTAATTTGATGTACACAACATTAAAAGTACTGACACCTGAGA
ATTTCTGCTCAAGTAGTATCAGTGATCATTTAAAATTTGGAGGGGTCTTTGGTTTACAGCCATGTGACAATTAAA
AGCACTAAAGGGAGATCATGTTAAAGCTCTTAATTTATATTAAAACAGTAGCCTTTGTCTTTAAAAAAGTTGTTG
CTCATGAATATTATAAAATGATCTACAGGTTTCAATTCAACCTGTTTCTAGGTTTTTTTGTAAATTTAGTTTTGA
TTAAGCATTATAAGCATTTGAGTCTATAAACTTTATAGTAGCATCTTTCAGAATAAACATTTTTAATTGATTTCA
GTGGCAACTCTCAAATTGATTACAATATGAGATATATCAGTGTCGTCCATTAACACTCATAAGAATAATATTTAC
TGTGTCAGTGCTATTTTAGGATTATAGTTATTGTTTGATTATTTCAGGTTGAAAAGTAGAAGTTCCAAGGTTTTG
ATTTTGGTCTGGTCTTTAAGTGAAAAATTAAAGCAACCAGTAGATGTAGGTTAAACTTTTACTTCATAGACTTAA
TATGTGATTAATATATTGCCAAGCAACACTGTTAAAGAAAAGTAAAACTCATTTTTTCTTGTTCTTAATTTATAT
ATTACAAGATACTGTAAGGTATTCTTTATGAAGTTGATATATAAAAATTTACATTTTTAGAACATTAGTGAATGG
ATCATCTTTTACAATTAAAAGTATATTTTGATTATCAGTTTCTTAGCAAAAAAAAAAAAAAAAAAAAAAAAAAA
AA

FIGURE 3289

MNARGLGSELKDSIPVTELSASGPFESHDLLRKGFSCVKNELLPSHPLELSEKNFQLNQDKMNFSTLRNIQGLFA
PLKLQMEFKAVQQVQRLPFLSSSNLSLDVLRGNDETIGFEDILNDPSQSEVMGEPHLMVEYKLGLL

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FIGURE 3290

GCTGGAGCATCCCGCTCTGGTGCCGCTGCAGCCGGCAGAGATGGTTGAGCTCATGTTCCCGCTGTTGCTCCTCCT
TCTGCCCTTCCTTCTGTATATGGCTGCGCCCCAAATCAGGAAAATGCTGTCCAGTGGGGTGTGTACATCAACTGT
TCAGCTTCCTGGGAAAGTAGTTGTGGTCACAGGAGCTAATACAGGTATCGGGAAGGAGACAGCCAAAGAGCTGGC
TCAGAGAGGAGCTCGAGTATATTTAGCTTGCCGGGATGTGGAAAAGGGGGAATTGGTGGCCAAAGAGATCCAGAC
CACGACAGGGAACCAGCAGGTGTTGGTGCGGAAACTGGACCTGTCTGATACTAAGTCTATTCGAGCTTTTGCTAA
GGGCTTCTTAGCTGAGGAAAAGCACCTCCACGTTTTGATCAACAATGCAGGAGTGATGATGTGTCCGTACTCGAA
GACAGCAGATGGCTTTGAGATGCACATAGGAGTCAACCACTTGGGTCACTTCCTCCTAACCCATCTGCTGCTAGA
GAAACTAAAGGAATCAGCCCCATCAAGGATAGTAAATGTGTCTTCCCTCGCACATCACCTGGGAAGGATCCACTT
CCATAACCTGCAGGGCGAGAAATTCTACAATGCAGGCCTGGCCTACTGTCACAGCAAGCTAGCCAACATCCTCTT
CACCCAGGAACTGGCCCGGAGACTAAAAGGCTCTGGCGTTACGACGTATTCTGTACACCCTGGCACAGTCCAATC
TGAACTGGTTCGGCACTCATCTTTCATGAGATGGATGTGGTGGCTTTTCTCCTTTTTCATCAAGACTCCTCAGCA
GGGAGCCCAGACCAGCCTGCACTGTGCCTTAACAGAAGGTCTTGAGATTCTAAGTGGGAATCATTTCAGTGACTG
TCATGTGGCATGGGTGTCTGTCCAAGCTCGTAATGAGACTATAGCAAGGCGGCTGTGGGACGTCAGTTGTGACCT
GCTGGGCCTCCCAATAGACTAACAGGCAGTGCCAGTTGGACCCAAGAGAAGACTGCAGCAGACTACACAGTACTT
CTTGTCAAAATGATTCTCCTTCAAGGTTTTCAAAACCTTTAGCACAAAGAGAGCAAAACCTTCCAGCCTTGCCTG
CTTGGTGTCCAGTTAAAACTCAGTGTACTGCCAGATTCGTCTAAATGTCTGTCATGTCCAGATTTACTTTGCTTC
TGTTACTGCCAGAGTTACTAGAGATATCATAATAGGATAAGAAGACCCTCATATGACCTGCACAGCTCATTTTCC
TTCTGAAAGAAACTACTACCTAGGAGAATCTAAGCTATAGCAGGGATGATTTATGCAAATTTGAACTAGCTTCTT
TGTTCACAATTCAGTTCCTCCCAACCAACCAGTCTTCACTTCAAGAGGGCCACACTGCAACCTCAGCTTAACATG
AATAACAAAGACTGGCTCAGGAGCAGGGCTTGCCCAGGCATGGTGGATCACCGGAGGTCAGTAGTTCAAGACCAG
CCTGGCCAACATGGTGAAACCCCACCTCTACTAAAAATTGTGTATATCTTTGTGTGTCTTCCTGTTTATGTGTGC
CAAGGGAGTATTTTCACAAAGTTCAAAACAGCCACAATAATCAGAGATGGAGCAAACCAGTGCCATCCAGTCTTT
ATGCAAATGAAATGCTGCAAAGGGAAGCAGATTCTGTATATGTTGGTAACTACCCACCAAGAGCACATGGGTAGC
AGGGAAGAAGTAAAAAAAGAGAAGGAGAATACTGGAAGATAATGCACAAAATGAAGGGACTAGTTAAGGATTAAC
TAGCCCTTTAAGGATTAACTAGTTAAGGATTAATAGCAAAAGATATTAAATATGCTAACATAGCTATGGAGGAAT
TGAGGGCAAGCACCCAGGACTGATGAGGTCTTAACAAAAACCAGTGTGGCAAAAAAAAAAAAAAAAAAAAAAAA
AAAAATCCTAAAAACAAACAAACAAAAAAAACAATTCTTCATTCAGAAAAATTATCTTAGGGACTGATATTGGTA
ATTATGGTCAATTTAATAATATTTTGGGGCATTTCCTTACATTGTCTTGACAAGATTAAAATGTCTGTGCCAAAA
TTTTGTATTTTATTTGGAGACTTCTTATCAAAAGTAATGCTGCCAAAGGAAGTCTAAGGAATTAGTAGTGTTCCC
ATCACTTGTTTGGAGTGTGCTATTCTAAAAGATTTTGATTTCCTGGAATGACAATTATATTTTAACTTTGGTGGG
GGAAAGAGTTATAGGACCACAGTCTTCACTTCTGATACTTGTAAATTAATCTTTTATTGCACTTGTTTTGACCAT
TAAGCTATATGTTTAGAAATGGTCATTTTACGGAAAAATTAGAAAAATTCTGATAATAGTGCAGAATAAATGAAT
TAATGTTTTACTTAATTTATATTGAACTGTCAATGACAAATAAAAATTCTTTTTGATTATTTTTTGTTTTCATTT
ACCAGAATAAAAACTAAGAATTAAAAGTTTGATTACAGTCAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3291

MVELMFPLLLLLLPFLLYMAAPQIRKMLSSGVCTSTVQLPGKVVVVTGANTGIGKETAKELAQRGARVYLACRDV
EKGELVAKEIQTTTGNQQVLVRKLDLSDTKSIRAFAKGFLAEEKHLHVLINNAGVMMCPYSKTADGFEMHIGVNH
LGHFLLTHLLLEKLKESAPSRIVNVSSLAHHLGRIHFHNLQGEKFYNAGLAYCHSKLANILFTQELARRLKGSGV
TTYSVHPGTVQSELVRHSSFMRWMWWLFSFFIKTPQQGAQTSLHCALTEGLEILSGNHFSDCHVAWVSVQARNET
IARRLWDVSCDLLGLPID

FIGURE 3292

CGGGAGCGTGGGGTATCTCGAGGTGCCGGGTTGCAGGCGCTCAGGGGCGCTAGGGTTTGAGGCCTGCTTTCTGCT
CGCGCCAGCAGAGCACTACCTGAGGCAGCGAGGCGCAGCGAGCCTAGCCTCCCCGCGCCCTGGGCAGTGTGGCCA
TGGAGAATCAGGTGTTGACGCCGCATGTCTACTGGGCTCAGCGACACCGCGAGCTATATCTGCGCGTGGAGCTGA
GTGACGTACAGAACCCTGCCATCAGCATCACTGAAAACGTGCTGCATTTCAAAGCTCAAGGACATGGTGCCAAAG
GAGACAATGTCTATGAATTTCACCTGGAGTTCTTAGACCTTGTGAAACCAGAGCCTGTTTACAAACTGACCCAGA
GGCAGGTAAACATTACAGTACAGAAGAAAGTGAGTCAGTGGTGGGAGAGACTCACAAAGCAGGAAAAGCGACCAC
TGTTTTTGGCTCCTGACTTTGATCGTTGGCTGGATGAATCTGATGCGGAAATGGAGCTCAGAGCTAAGGAAGAAG
AGCGCCTAAATAAACTCCGACTGGAAAGCGAAGGCTCTCCTGAAACTCTTACAAACTTAAGGAAAGGATACCTGT
TTATGTATAATCTTGTGCAATTCTTGGGATTCTCCTGGATCTTTGTCAACCTGACTGTGCGATTCTGTATCTTGG
GAAAAGAGTCCTTTTATGACACATTCCATACTGTGGCTGACATGATGTATTTCTGCCAGATGCTGGCAGTTGTGG
AAACTATCAATGCAGCAATTGGAGTCACTACGTCACCGGTGCTGCCTTCTCTGATCCAGCTTCTTGGAAGAAATT
TTATTTTGTTTATCATCTTTGGCACCATGGAAGAAATGCAGAACAAAGCTGTGGTTTTCTTTGTGTTTTATTTGT
GGAGTGCAATTGAAATTTTCAGGTACTCTTTCTACATGCTGACGTGCATTGACATGGATTGGAAGGTGCTCACAT
GGCTTCGTTACACTCTGTGGATTCCCTTATATCCACTGGGATGTTTGGTGGAAGCTGTCTCAGTGATTCAGTCCA
TTCCAATATTCAATGAGACCGGACGATTCAGTTTCACATTGCCATATCCAGTGAAAATCAAAGTTAGATTTTCCT
TTTTTCTTCAGATTTATCTTATAATGATATTTTTAGGTTTATACATAAATTTTCGTCACCTTTATAAACAGCGCA
GACGGCGCTATGGAAAAAAAAGAAAAAGATCCACTAAAAAGAAAGATTTAGATGGCTTCTTGCCAGTTTGAGCCT
AATCTGATTCTTACAGTTTTACCTTCTTGAACCAATGTAAAAGTTTTTTTAATGTTAAATGATTAAATTCTCAGT
GAGGCTATCTTCCTTTTCCCCAGTAACATTCCTGAATTTACTGTTATCTTATTGTAGTACTTGCATGACATGGAT
TCCTGATATCTGATGAGAGGTTCATTCTTGTGTATTCAGTTAATGACACCAAAAGGCTCAGCCCACCCCAACCCT
ATCTCATGTTCAGTCTGTCTAATACATGCCAGAGATTTTTTTTTCAAAAAGTGCTTTATCCCTACAATGTACTGA
CAGTTCTTACAGTTGAGGATTTGGTTCTTTTCAGCTAATTGCTTGGTGGATTAAAAAAAGCAAGACTAATGTCAA
CTCTAATGGAAGGCTGGTTAAAAGTGGACTCAGGCAAGG

FIGURE 3293

MENQVLTPHVYWAQRHRELYLRVELSDVQNPAISITENVLHFKAQGHGAKGDNVYEFHLEFLDLVKPEPVYKLTQ
RQVNITVQKKVSQWWERLTKQEKRPLFLAPDFDRWLDESDAEMELRAKEEERLNKLRLESEGSPETLTNLRKGYL
FMYNLVQFLGFSWIFVNLTVRFCILGKESFYDTFHTVADMMYFCQMLAVVETINAAIGVTTSPVLPSLIQLLGRN
FILFIIFGTMEEMQNKAVVFFVFYLWSAIEIFRYSFYMLTCIDMDWKVLTWLRYTLWIPLYPLGCLVEAVSVIQS
IPIFNETGRFSFTLPYPVKIKVRFSFFLQIYLIMIFLGLYINFRHLYKQRRRRYGKKRKRSTKKKDLDGFLPV

FIGURE 3294

CCAGGGCCTGACTAAACCTGGAGACTCGGGTGGCCGAGGGGCTTCATACCAGCTGAAGAGCGACAAGCCGCTGGC
AGCCGCGGATCTCACCGCCGCTCAGGGTTTTTAGAACTTCAGCCATAAAA**ATG**GGCAGAATTTTCCTTGATCATA
TCGGTGGTACCCGTCTGTTTTCTTGTGCAAACTGTGATACGATCCTGACCAACCGCTCAGAACTCATCTCCACTC
GTTTCACAGGCGCCACTGGCAGAGCATTTCTTTTTAACAAGGTAGTTAACCTGCAGTACAGCGAAGTTCAAGATC
GGGTCATGCTCACTGGCCGCCACATGGTTCGAGATGTGAGCTGCAAAAACTGCAATAGCAAACTGGGATGGATCT
ATGAGTTTGCCACTGAAGACAGCCAGCGATATAAGGAAGGCCGCGTGATCCTGGAACGTGCTCTAGTTCGAGAGA
GTGAGGGCTTTGAGGAGCATGTACCATCTGATAACTCT**TGA**AGATACAGAGAGAAATCCATCTTTTCCCAGGTCT
CCTTCACTGAAAACAAAAATCTACTTACATACACTGTCACCTTAGCATCAGAGTCGGATTAATGAACTGCGGAAC
AAGAGGTTGTGAGAATCTAAGATGGAACCTTTCTTTCTTTCTTTCTTTTTTTTTAAATTTTGTATTTTCCATCCA
ACAGCAGTGTGTAGAGAGAATATTATGCAGATGCCGTTAATTTTTTACCCTATGTTTACATCTTGAGGCAGCAGA
GTCTGTCTGCAGCTATGTGGTGAGCTATGTAAGGAAAAAAATCTGGGCTGTTAGAGTGAAAAAGTGTGTTTTATG
TCAATTGTGAAAGGAAAATGTTAGGAGTATGGTTTTTAAACTTGGGCTTCATTTTAAACTTTTTTTTTTAAACCC
AGTTATTTCACTTGATTTGCTAGCTTCAGAGAAGAGATCCGAATCTGTGCCCAGCGCTAAAGGCTCAGTGTTAGC
ATGGCTTGTGCTGGCCGGTGTGCCATATTCTTGTTGGAGATGAACCGTAGCACCAGAGCCCATTCTTCCTTGTCA
GTCTTGGCCCAAAGATGTCACCATTCCTAGTTATTTGTCACCACATAATTGGTGTTGATTGGAAACTTTTTCTGA
GATGGGACAGAACTGCTGGGTTGTCTTTTTCCATGTAACTTAAGCATAGTAATATAAATAAAGTAATAGTTGGAT
GCTTTTGGTCCTGTGTTGCTTTTAAAAACACCTTATAAAAGAGGAGAGTATTTGATAAGCAATTTTCATAGTAGT
AAAGTTTTTTTTCATCTCTTAAACTAAATTGACCATGCATATAATATTCTTTGTTTAAATGAAAGCATACTGTTG
AAACCCGCAGTGTTGCATTTAGAAAACAGTTGAACAGAATGTCAATGTGCATTCATGCAAAAAAACATTTAATCT
GCATCTGTTTTAGAAAAGGGGGAAATGAAGCAACTTGTCTAAAAATACTGCTTTACAAAGCATTTCAGCCTTTCC
CCCTCAGTTTTGCATTGATTTTTTGACAAGTCTGTAGAGCCTAATAGTTTCCATCAAAGGCCTAGATCTCTTATT
TAGCATTTTTTTCAGCTCTTCTCTCAGAAGTTCAGCTGTTGAAACGAAAACTGTACTTTGTACCCTCACATACAA
AGGGATCAAATTTGACCTGGTGTTATTTTAGCCCCAAATTTATGACATTACACAATATTAAAATGTAAATGTTTC
TTTACCCAAACTACTTCTAGATATTCTAGTATTTGCTTCTGGTGGAATTAAATGACGGTAAAATTGGCTAATTAT
TTGAATGAATGAATGGATGGATGTTTTGCATGCTCAATTTCTAGGTCCTTTGTCTAGAAAGGAAATTTGCCTCAG
TTGAATTAGTGAAATATTTCTGTCGTTGATATTAAAAGTGACTTCTGAGTACAGTTAAGTTCCTCCTATTTGCCA
CTGGGCTGTTGGTTAGAAGCATAGGTAACTGATTAAGTAGGTATGATACTGCATTTGAAATAAGTGGACACAAAC
TATCCTTTCTCCACCATGGACTCAATCTGAGAACAACAGCATTCATTTCCATTCATTTCCATACTGGCTTTTGAT
TATATGCAGATTCCTAGTAGCATGCCTTACCTACAGCACTATGTGCATTTGCTGTCACAATAAAGTATATTTTGT
CTTGCAAA

FIGURE 3295

MGRIFLDHIGGTRLFSCANCDTILTNRSELISTRFTGATGRAFLFNKVVNLQYSEVQDRVMLTGRHMVRDVSCKN
CNSKLGWIYEFATEDSQRYKEGRVILERALVRESEGFEEHVPSDNS

FIGURE 3296

GCGACTCGTCCCGCCTTCTGGGGCACTAGTTTGACTTTGTGATTGGCTACTAGTATCAAGGAATCCCGGCGTGGA
CAGCGCGAGGAGAAAG**ATG**GCGGCGATGGCGGTCGGGGGTGCTGGTGGGAGCCGCGTGTCCAGCGGGAGGGACCT
GAATTGCGTCCCCGAAATAGCTGACACACTAGGGGCTGTGGCCAAGCAGGGGTTTGATTTCCTCTGCATGCCTGT
CTTCCATCCGCGTTTCAAGAGGGAGTTCATTCAGGAACCTGCTAAGAATCGGCCCGGTCCCCAGACACGATCAGA
CCTACTGCTGTCAGGAAGGGACTGGAATACGCTAATTGTGGGAAAGCTTTCTCCATGGATTCGTCCAGACTCAAA
AGTGGAGAAGATTCGCAGGAACTCCGAGGCGGCCATGTTACAGGAGCTGAATTTTGGTGCATATTTGGGTCTTCC
AGCTTTCCTGCTGCCCCTTAATCAGGAAGATAACACCAACCTGGCCAGAGTTTTGACCAACCACATCCACACTGG
CCATCACTCTTCCATGTTCTGGATGCGGGTACCCTTGGTGGCACCAGAGGACCTGAGAGATGATATAATTGAGAA
TGCACCAACTACACACACAGAGGAGTACAGTGGGGAGGAGAAAACGTGGATGTGGTGGCACAACTTCCGGACTTT
GTGTGACTATAGTAAGAGGATTGCAGTGGCTCTTGAAATTGGGGCTGACCTCCCATCTAATCATGTCATTGATCG
CTGGCTTGGGGAGCCCATCAAAGCAGCCATTCTCCCCACTAGCATTTTCCTGACCAATAAGAAGGGATTTCCTGT
TCTTTCTAAGATGCACCAGAGGCTCATCTTCCGGCTCCTCAAGTTGGAGGTGCAGTTCATCATCACAGGCACCAA
CCACCACTCAGAGAAGGAGTTCTGCTCCTACCTCCAATACCTGGAATACTTAAGCCAGAACCGTCCTCCACCTAA
TGCCTATGAACTCTTTGCCAAGGGCTATGAAGACTATCTGCAGTCCCCGCTTCAGCCACTGATGGACAATCTGGA
ATCTCAGACATATGAAGTGTTTGAAAAGGACCCCATCAAATACTCTCAGTACCAGCAGGCCATCTATAAATGTCT
GCTAGACCGAGTACCAGAAGAGGAGAAGGATACCAATGTCCAGGTACTGATGGTGCTGGGAGCAGGACGGGGACC
CCTGGTGAACGCTTCCCTGCGGGCAGCCAAGCAGGCCGACCGGCGGATAAAGCTGTATGCTGTGGAGAAAAACCC
AAATGCCGTGGTGACGCTAGAGAACTGGCAGTTTGAAGAATGGGGAAGCCAAGTGACCGTAGTCTCATCAGACAT
GAGGGAATGGGTGGCTCCAGAGAAAGCAGACATCATTGTCAGTGAGCTTCTGGGCTCATTTGCTGACAATGAATT
GTCGCCTGAGTGCCTGGATGGAGCCCAGCACTTCCTAAAAGATGATGGTGTGAGCATCCCCGGGGAGTACACTTC
CTTTCTGGCTCCCATCTCTTCCTCCAAGCTGTACAATGAGGTCCGAGCCTGTAGGGAGAAGGACCGTGACCCTGA
GGCCCAGTTTGAGATGCCTTATGTGGTACGGCTGCACAACTTCCACCAGCTCTCTGCACCCCAGCCCTGTTTCAC
CTTCAGCCATCCCAACAGAGATCCTATGATTGACAACAACCGCTATTGCACCTTGGAATTTCCTGTGGAGGTGAA
CACAGTACTACATGGCTTTGCCGGCTACTTTGAGACTGTGCTTTATCAGGACATCACTCTGAGTATCCGTCCAGA
GACTCACTCTCCTGGGATGTTCTCATGGTTTCCCATCCTCTTCCCTATTAAGCAGCCCATAACGGTACGTGAAGG
CCAAACCATCTGTGTGCGTTTCTGGCGATGCAGCAATTCCAAGAAGGTGTGGTATGAGTGGGCTGTGACAGCACC
AGTCTGTTCTGCTATTCATAACCCCACAGGCCGCTCATATACCATTGGCCTC**TAG**CCCTGCGTGCCAAGTGTCCA
GAGCCTTGGAAGCAGCTTCAGGTTCCTGCTCCTGTAGTACAGAAGGTGCAGTACATCTATGGGCTGTGATTCCCC
CTTGCCCATCAGAGAGGAGCATTTCAATCTGCTTTCCTGCCTTACATCAAGGTGGGCAAGGGATTATAATTAATT
GCAGGGCTCAAGCCACCAATCTATGAAGACCTCAGGCCAGGGGGTGAGGAATTAGTGCTGGATTTGAAGCTACGC
ACTCAGCCTCAAGAACTCCCTGGAATATCCCTGAGAACATGGGGTTTGAACGGATTTTCAGCCTTTTTCTGTTCT
TGTTTTGATGGTTTTGTGTAAGAGGAAATACCAATAAAGTTATAGCCCTTTACTGCCAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAA

FIGURE 3297

MAAMAVGGAGGSRVSSGRDLNCVPEIADTLGAVAKQGFDFLCMPVFHPRFKREFIQEPAKNRPGPQTRSDLLLSG
RDWNTLIVGKLSPWIRPDSKVEKIRRNSEAAMLQELNFGAYLGLPAFLLPLNQEDNTNLARVLTNHIHTGHHSSM
FWMRVPLVAPEDLRDDIIENAPTTHTEEYSGEEKTWMWWHNFRTLCDYSKRIAVALEIGADLPSNHVIDRWLGEP
IKAAILPTSIFLTNKKGFPVLSKMHQRLIFRLLKLEVQFIITGTNHHSEKEFCSYLQYLEYLSQNRPPPNAYELF
AKGYEDYLQSPLQPLMDNLESQTYEVFEKDPIKYSQYQQAIYKCLLDRVPEEEKDTNVQVLMVLGAGRGPLVNAS
LRAAKQADRRIKLYAVEKNPNAVVTLENWQFEEWGSQVTVVSSDMREWVAPEKADIIVSELLGSFADNELSPECL
DGAQHFLKDDGVSIPGEYTSFLAPISSSKLYNEVRACREKDRDPEAQFEMPYVVRLHNFHQLSAPQPCFTFSHPN
RDPMIDNNRYCTLEFPVEVNTVLHGFAGYFETVLYQDITLSIRPETHSPGMFSWFPILFPIKQPITVREGQTICV
RFWRCSNSKKVWYEWAVTAPVCSAIHNPTGRSYTIGL

FIGURE 3298

GAGAGGCGCCCAGGCGGCGGCGGCGGCGGCCCAGCTTCTTCTTTCCTCGCACAGCCAGGCGGCCCCTGCTCGAGT
CCCGCGTCGCC**ATG**GCCGCGGTTCCCGAGTTGCTGCAGCAGCAGGAGGAGGACCGCAGCAAGCTGAGATCTGTAT
CTGTGGACCTGAATGTTGATCCCTCGCTTCAGATTGACATACCTGATGCGCTCAGTGAGAGAGACAAAGTCAAAT
TTACAGTGCACACAAAGACCACACTGCCCACGTTTCAGAGCCCAGAGTTTTCTGTTACAAGGCAACATGAAGACT
TTGTGTGGCTACATGACACTCTTATTGAAACAACAGACTATGCTGGGCTTATTATTCCACCTGCTCCTACGAAGC
CCGACTTTGATGGTCCTCGAGAGAAGATGCAGAAACTGGGAGAAGGTGAAGGGTCTATGACCAAAGAAGAATTTG
CCAAGATGAAACAAGAACTGGAAGCTGAGTATCTCGCTGTGTTTAAGAAGACTGTGTCCTCCCATGAAGTCTTTC
TTCAGCGGCTTTCTTCTCACCCTGTTCTCAGTAAAGATCGCAACTTTCATGTTTTCCTGGAATATGATCAGGATC
TAAGTGTTAGGCGGAAAAATACTAAAGAGATGTTTGGTGGCTTCTTCAAAAGTGTGGTGAAAAGTGCTGATGAAG
TCCTTTTTACTGGAGTTAAGGAGGTAGATGACTTCTTTGAGCAAGAGAAGAACTTCCTTATTAACTATTACAATA
GGATCAAAGATTCTTGTGTGAAAGCTGACAAAATGACCAGATCTCATAAAAATGTTGCCGATGACTATATCCACA
CCGCAGCCTGCTTACATAGCCTGGCTTTAGAAGAGCCCACAGTCATCAAAAAGTACCTATTGAAGGTTGCTGAGC
TATTTGAAAAACTAAGGAAAGTAGAGGGTCGAGTTTCATCAGATGAAGATTTGAAGCTAACAGAGCTCCTCCGAT
ACTACATGCTCAACATTGAAGCTGCTAAGGATCTCTTATACAGACGCACCAAAGCCCTCATTGACTATGAGAACT
CAAACAAAGCTCTGGATAAGGCCCGGTTAAAGAGCAAAGACGTCAAGTTGGCTGAGGCACACCAGCAGGAGTGCT
GCCAGAAATTTGAACAACTTTCCGAATCTGCAAAAGAAGAACTGATAAATTTCAAACGGAAGAGAGTGGCAGCAT
TTAGAAAGAATCTAATTGAAATGTCTGAACTGGAAATAAAACATGCCAGGAACAATGTCTCCCTTTTGCAGAGCT
GTATTGACTTGTTCAAGAATAAC**TGA**TATGCCTTCACTCAGAAGAAAAGAAATGAATGTGAAAGAAAGCCAAGCA
TCACTTGCACTTAAATCATTACCACGGAAGATATATTAGCTTCAACTTTAGTTTAAAATTATGTGAATAAATATT
TTGATTTCTACAAATCTTAACATTTAACCATGTTGGTTTAAAAATATTATTGCTTGCTACTTGGACATAACTAAT
TTTTCCTTGTGCATTTAATACCTCTGGGCAGAATCCAAATACTGGGTTCTCCCGTAGTTCGTCTTTAGTTACTAA
GAAAGGGTGTAGGACACATTAGCCTTCTGGAAACAAGTAGAAGCCATCACCTGGCCCATGTCCCTACAAACCCAT
GATTGTCAGGGAGGTGCCAGTTACAGCAGGTGATTCAGCTACTTGAGGTCGGTAACAGACCTTCCATTCCTCACT
GAAGGTGGGGTTTGTGTTTTTGTTTTGCCCTGTTACTCCACTGGTAGTCATCTGGTGTTTGTACTATAACAACAG
CAAGAAAATCTCATTTATCTTTATATACTCTTTGCACCTCCTTTTTTTAGTCGAGATATAAATATTTGAGGGGAG
AGAAATATCTACAGGTATATATGGAAACAAATAATGTGGTCTGCTTTATAAGATGGCCAGATCTACATTAGGAAA
AGTATAAGCCCCCTCCCTAATGGCCGCTGGGGGGGTGAGGGCGGTGTGTTGTATGTCTTTGGGTGTTTGTTTTTTT
ATAAAGCATATAATAAAATAATCGTGCTACTAA

FIGURE 3299

MAAVPELLQQQEEDRSKLRSVSVDLNVDPSLQIDIPDALSERDKVKFTVHTKTTLPTFQSPEFSVTRQHEDFVWL
HDTLIETTDYAGLIIPPAPTKPDFDGPREKMQKLGEGEGSMTKEEFAKMKQELEAEYLAVFKKTVSSHEVFLQRL
SSHPVLSKDRNFHVFLEYDQDLSVRRKNTKEMFGGFFKSVVKSADEVLFTGVKEVDDFFEQEKNFLINYYNRIKD
SCVKADKMTRSHKNVADDYIHTAACLHSLALEEPTVIKKYLLKVAELFEKLRKVEGRVSSDEDLKLTELLRYYML
NIEAAKDLLYRRTKALIDYENSNKALDKARLKSKDVKLAEAHQQECCQKFEQLSESAKEELINFKRKRVAAFRKN
LIEMSELEIKHARNNVSLLQSCIDLFKNN

FIGURE 3300

GGCACGAGGGAGAGAACTAGTCTCGAGTTTTTTTTTTTTTTTTTTGACAAGATGGCGGCAGGAGGCAGTGGCGT
TGGTGGGAAGCGCAGCTCGAAAAGCGATGCCGATTCTGGTTTCCTGGGGCTGCGGCCCACTTCGGTGGACCCAGC
GCTGAGGCGGCGGCGGCGAGGCCCAAGAAATAAGAAGCGGGGCTGGCGGCGGCTTGCTCAGGAGCCGCTGGGGCT
GGAGGTTGACCAGTTCCTGGAAGACGTGCGGCTACAGGAGCGCACGAGCGGTGGCTTGTTGTCAGAGGCCCCAAA
TGAAAAACTCTTCTTCGTGGACACTGGCTCCAAGGAAAAAGGGCTGACAAAGAAGAGAACCAAAGTCCAGAAGAA
GTCACTGCTTCTCAAGAAACCCCTTCGGGTTGACCTCATCCTCGAGAACACATCCAAAGTCCCTGCCCCCAAAGA
CGTCCTCGCCCACCAGGTCCCCAACGCCAAGAAGCTCAGGCGGAAGGAGCAGCTATGGGAGAAGCTGGCCAAGCA
GGGCGAGCTGCCCCGGGAGGTGCGCAGGGCCCAGGCCCGGCTCCTCAACCCTTCTGCAACAAGGGCCAAGCCCGG
GCCCCAGGACACCGTAGAGCGGCCCTTCTACGACCTCTGGGCCTCAGACAACCCCCTGGACAGGCCGTTGGTTGG
CCAGGATGAGTTTTTCCTGGAGCAGACCAAGAAGAAAGGAGTGAAGCGGCCAGCACGCCTGCACACCAAGCCGTC
CCAGGCGCCCGCCGTGGAGGTGGCGCCTGCCGGAGCTTCCTACAATCCATCCTTTGAAGACCACCAGACCCTGCT
CTCAGCGGCCCACGAGGTGGAGTTGCAGCGGCAGAAGGAGGCGGAGAAGCTGGAGCGGCAGCTGGCCCTGCCCGC
CACGGAGCAGGCCGCCACCCAGGAGTCCACATTCCAGGAGCTGTGCGAGGGGCTGCTGGAGGAGTCGGATGGTGA
GGGGGAGCCAGGCCAGGGCGAGGGGCCGGAGGCTGGGGATGCCGAGGTCTGTCCCACGCCCGCCCGCCTGGCCAC
CACAGAGAAGAAGACGGAGCAGCAGCGGCGGCGGGAGAAGGCTGTGCACAGGCTGCGGGTACAGCAGGCCGCGTT
GCGGGCCGCCCGGCTCCGGCACCAGGAGCTGTTCCGGCTGCGCGGGATCAAGGCCCAGGTGGCCCTGAGGCTGGC
GGAGCTGGCGCGGCGGCGGAGGCGGCGGCAGGCGCGGCGGGAGGCTGAGGCTGACAAGCCCCGAAGGCTGGGACG
GCTCAAGTACCAGGCACCTGACATCGACGTGCAGCTGAGCTCGGAGCTGACAGACTCGCTCAGGACCCTGAAGCC
CGAGGGCAACATCCTTCGAGACCGGTTCAAGAGCTTCCAGAGGAGGAATATGATCGAGCCTCGAGAGAGAGCCAA
GTTCAAACGCAAGTACAAGGTGAAGCTGGTGGAGAAGCGGGCGTTCCGTGAGATCCAGTTGTAGCTGCCATCAGA
TGCCGGAGACTCGCCCTTCAATAAAAAATCTCTTCTAGCTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3301

MAAGGSGVGGKRSSKSDADSGFLGLRPTSVDPALRRRRRGPRNKKRGWRRLAQEPLGLEVDQFLEDVRLQERTSG
GLLSEAPNEKLFFVDTGSKEKGLTKKRTKVQKKSLLLKKPLRVDLILENTSKVPAPKDVLAHQVPNAKKLRRKEQ
LWEKLAKQGELPREVRRAQARLLNPSATRAKPGPQDTVERPFYDLWASDNPLDRPLVGQDEFFLEQTKKKGVKRP
ARLHTKPSQAPAVEVAPAGASYNPSFEDHQTLLSAAHEVELQRQKEAEKLERQLALPATEQAATQESTFQELCEG
LLEESDGEGEPGQGEGPEAGDAEVCPTPARLATTEKKTEQQRRREKAVHRLRVQQAALRAARLRHQELFRLRGIK
AQVALRLAELARRRRRRQARREAEADKPRRLGRLKYQAPDIDVQLSSELTDSLRTLKPEGNILRDRFKSFQRRNM
IEPRERAKFKRKYKVKLVEKRAFREIQL

FIGURE 3302

GTGAAGAGAGGCGCGGCGTGACTGAGCTACGGTTCTGGCTGCGTCCTAGAGGCATCCGGGGCAGTAAAACCGCTG
CGATCGCGGAGGCGGCGGCCAGGCCGAGAGGCAGGCCGGGCAGGGGTGTCGGACGCAGGGCGCTGGGCCGGGTTT
CGGCTTCGGCCACAGCTTTTTTTCTCAAGGTGCAATGAAAGCCTTCCACACTTTCTGTGTTGTCCTTCTGGTGTT
TGGGAGTGTCTCTGAAGCCAAGTTTGATGATTTTGAGGATGAGGAGGACATAGTAGAGTATGATGATAATGACTT
CGCTGAATTTGAGGATGTCATGGAAGACTCTGTTACTGAATCTCCTCAACGGGTCATAATCACTGAAGATGATGA
AGATGAGACCACTGTGGAGTTGGAAGGGCAGGATGAAAACCAAGAAGGAGATTTTGAAGATGCAGATACCCAGGA
GGGAGATACTGAGAGTGAACCATATGATGATGAAGAATTTGAAGGTTATGAAGACAAACCAGATACTTCTTCTAG
CAAAAATAAAGACCCAATAACGATTGTTGATGTTCCTGCACACCTCCAGAACAGCTGGGAGAGTTATTATCTAGA
AATTTTGATGGTGACTGGTCTGCTTGCTTATATCATGAATTACATCATTGGGAAGAATAAAAACAGTCGCCTTGC
ACAGGCCTGGTTTAACACTCATAGGGAGCTTTTGGAGAGCAACTTTACTTTAGTGGGGGATGATGGAACTAACAA
AGAAGCCACAAGCACAGGAAAGTTGAACCAGGAGAATGAGCACATCTATAACCTGTGGTGTTCTGGTCGAGTGTG
CTGTGAGGGCATGCTTATCCAGCTGAGGTTCCTCAAGAGACAAGACTTACTGAATGTCCTGGCCCGGATGATGAG
GCCAGTGAGTGATCAAGTGCAAATAAAAGTAACCATGAATGATGAAGACATGGATACCTACGTATTTGCTGTTGG
CACACGGAAAGCCTTGGTGCGACTACAGAAAGAGATGCAGGATTTGAGTGAGTTTTGTAGTGATAAACCTAAGTC
TGGAGCAAAGTATGGACTGCCGGACTCTTTGGCCATCCTGTCAGAGATGGGAGAAGTCACAGACGGAATGATGGA
TACAAAGATGGTTCACTTTCTTACACACTATGCTGACAAGATTGAATCTGTTCATTTTTCAGACCAGTTCTCTGG
TCCAAAAATTATGCAAGAGGAAGGTCAGCCTTTAAAGCTACCTGACACTAAGAGGACACTGTTGTTTACATTTAA
TGTGCCTGGCTCAGGTAACACTTACCCAAAGGATATGGAGGCACTGCTACCCCTGATGAACATGGTGATTTATTC
TATTGATAAAGCCAAAAAGTTCCGACTCAACAGAGAAGGCAAACAAAAAGCAGATAAGAACCGTGCCCGAGTAGA
AGAGAACTTCTTGAAACTGACACATGTGCAAAGACAGGAAGCAGCACAGTCTCGGCGGGAGGAGAAAAAAAGAGC
AGAGAAGGAGCGAATCATGAATGAGGAAGATCCTGAGAAACAGCGCAGGCTGGAGGAGGCTGCATTGAGGCGTGC
AAAAAAGAAGTTGGAAAAGAAGCAAATGAAAATGAAACAAATCAAAGTGAAAGCCATGTAAAGCCATCCCAGAGA
TTTGAGTTCTGATGCCACCTGTAAGCTCTGAATTCACAGGAAACATGAAAAACGCCAGTCCATTTCTCAACCTTA
AATTTCAGACAGTCTTGGGCAACTGAGAAATCCTTATTTCATCATCTACTCTGTTTGGGGTTTGGGGTTTTACAG
AGATTGAAGATACCTGGAAAGGGCTCTGTTTCAAGAATTTTTTTTTCCAGATAATCAAATTATTTTGATTATTTT
ATAAAAGGAATGATCTATGAAATCTGTGTAGGTTTTAAATATTTTAAAAATTATAATACAAATCATCAGTGCTTT
TAGTACTTCAGTGTTTAAAGAAATACCATGAAATTTATAGGTAGATAACCAGATTGTTGCTTTTTGTTTAAACCA
AGCAGTTGAAATGGCTATAAAGACTGACTCTAAACCAAGATTCTGCAAATAATGATTGGAATTGCACAATAAACA
TTGCTTGATGTTTTCTTGTATGTCTACATTAAACTTGAGAAAAAGTAAAAATTAGAACACTGTATGTAGTAATGA
AATTTCAGGGACCCAGAACATAATGTAGTATATGTTTTTAGGTGGGAGATGCTGATAACAAAATTAATAGGAAGT
CTGTAGGCATTAGGATACTGACATGTACATGGAAAATTCTAGGGACAGGAGCATCATTTTTTCCTTACCTGATAC
CACGAACCAGTGACAACGTGAATGCTGTATTTTAAGTGGTTGTATGTTTATTTTCTTGAGTAACAAATGCATGAA
AAATTAATGCTTCACCTAGGTAAGATCATTGGTCTGTGTGAAATCACAAATGTTTTTTCCTTCTTGGTTGCTGCA
GCCTGGGTGGATGTTCATGGAGAAGCTCTGTTCTCTATATTATGGCTGTGTGCCGTTGCTTCTCCCTCTGCTTTT
ATCTTTTCCACAGTTGAGGCTGGGTATGTTCTTTCAAAGAAATGGCCATGAATATGTGTAAGTATACTTTTGAAA
ATGAGCTTTCCTAAACTATTGAGAGTTCTTTCCACCTCTTGCGGAACCAACTCTTGGAGGAGAGGCCCATGTATC
TGCACGAGCACTTAGCTTGTTCAGATCTCTGCATTTTATAAATGCTTCTTACCAAGAAAGCATTTTTAGGTCATT
GCTTGTACCAGGTAATTTTTGCCGGGGATGGGTAAGGGTTGGGTTTTCTGGTGGGAGTGGGGTGGTGGGTATTTT
TTGTTGATGCTTTAGTGCAGGCCTGTTCTGAGGCAATAACAAGTTGCTGTGAAAACAGCATGTGCTGCTGCCTTT
GTAACTGCATGGAAACTTTTCACATGGGTTTTTCTCCAAGTTAATACAGAAATATGTAAACTGAGAGATGCAAAT
GTAATATTTTTAACAGTTCATGAAGTTGTTATTAAAATAACTAACATAAAACTTAATTACTTTAATATTATATAA
TTATAGTAGTGGCCTTGTTTTACAAACCTTTAAATTACATTTTAGAAATCAAAGTTGATAGTCTTAGTTATCTTT
TGAGTAAGAAAAGCTTTCCTAAAGTCCCATACATTTGGACCATGGCAGCTAATTTTGTAACTTAAGCATTCATAT
GAACTACCTATGGACATCTATTAAAGTGATTGACAAAATCTCAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3303

MKAFHTFCVVLLVFGSVSEAKFDDFEDEEDIVEYDDNDFAEFEDVMEDSVTESPQRVIITEDDEDETTVELEGQD
ENQEGDFEDADTQEGDTESEPYDDEEFEGYEDKPDTSSSKNKDPITIVDVPAHLQNSWESYYLEILMVTGLLAYI
MNYIIGKNKNSRLAQAWFNTHRELLESNFTLVGDDGTNKEATSTGKLNQENEHIYNLWCSGRVCCEGMLIQLRFL
KRQDLLNVLARMMRPVSDQVQIKVTMNDEDMDTYVFAVGTRKALVRLQKEMQDLSEFCSDKPKSGAKYGLPDSLA
ILSEMGEVTDGMMDTKMVHFLTHYADKIESVHFSDQFSGPKIMQEEGQPLKLPDTKRTLLFTFNVPGSGNTYPKD
MEALLPLMNMVIYSIDKAKKFRLNREGKQKADKNRARVEENFLKLTHVQRQEAAQSRREEKKRAEKERIMNEEDP
EKQRRLEEAALRRAKKKLEKKQMKMKQIKVKAM

FIGURE 3304

GTGGGGCTGGGCCCAGCCGGACGCGACCTCAGCCTGCGGCGGCTAACTGCCGGTAGGCGTCTGTGTGCGCCGCCA
AGTCGGTGGGGCGGGGACGCGAGGTGTGGATGGGGGGTCGCCTTGACCTCTGCCTCAGCCAGTAGCGCAGTCTCG
GCCTCGCCGTTACGGAGATGGTGCCCTGGGTGCGGACG**ATG**GGGCAGAAGCTGAAGCAGCGGCTGCGACTGGACG
TGGGACGCGAGATCTGCCGCCAGTACCCGCTGTTCTGCTTCCTGCTGCTCTGTCTCAGCGCCGCCTCCCTGCTTC
TTAACAGGTATATTCATATTTTAATGATCTTCTGGTCATTTGTTGCTGGAGTTGTCACATTCTACTGCTCACTAG
GACCTGATTCTCTCTTACCAAATATATTCTTCACAATAAAATACAAACCCAAGCAGTTAGGACTTCAGGAATTAT
TTCCTCAAGGTCATAGCTGTGCTGTTTGTGGTAAAGTGAAATGTAAACGACATAGGCCTTCTTTGCTACTTGAAA
ACTACCAGCCATGGCTAGACCTGAAAATTTCTTCCAAGGTTGATGCATCTCTCTCAGAGGTGGATATTCCATCTA
TTATAACCAAGAAACTATTAAAAGCAGCAATGAAGCATATAGAAGTGATAGTTAAAGCCAGACAGAAAGTAAAAA
ATACAGAGTTTTTACAGCAAGCTGCTTTAGAAGAATATGGTCCAGAGCTTCATGTTGCTTTGAGAAGTCGAAGAG
ATGAATTGCACTATTTAAGGAAACTTACTGAACTGCTTTTTCCTTATATTTTGCCTCCTAAAGCAACAGACTGCA
GATCTCTGACCTTACTTATAAGAGAGATTCTGTCTGGCTCTGTGTTCCTTCCTTCTTTGGATTTCCTAGCTGATC
CAGATACTGTGAATCATTTGCTTATCATCTTCATAGATGACAGTCCACCTGAAAAAGCAACTGAACCGGCTTCTC
CTTTGGTTCCATTCTTGCAGAAATTTGCAGAACCTAGAAATAAAAAGCCATCTGTGCTGAAGTTAGAATTGAAGC
AAATCAGAGAGCAACAAGATCTTTTATTTCGTTTTATGAACTTTCTGAAACAAGAAGGCGCAGTGCACGTGTTGC
AGTTTTGTTTGACTGTGGAGGAATTTAATGATAGAATTTTACGACCAGAATTATCAAATGATGAAATGCTGTCTC
TTCATGAAGAATTGCAGAAGATTTATAAAACATACTGTTTGGATGAAAGTATTGACAAAATTAGATTTGATCCCT
TCATTGTAGAAGAGATTCAAAGAATTGCTGAAGGCCCATACATAGATGTTGTGAAACTTCAAACTATGAGATGTC
TTTTTGAAGCATATGAACATGTTCTTTCCCTTTTGGAGAATGTATTTACTCCTATGTTCTGCCATAGTGATGAGT
ATTTCAGACAACTTTTAAGAGGTGCAGAATCACCAACACGCAATTCAAAATTGAACAGGAACACACAGAAAAGGG
GAGAAATCATTTGGAATCAGCAGAATAGGTAGCAAAATTAAAGGAGTATTCAAAAGTACCACAATGGAGGGAGCTA
TGTTGCCTAATTATGGTGTAGCTGAAGGTGAAGATGATTTTATTGAAGAAGGTATTGTTGTAATGGAAGATGATT
CTCCAGTGGAGGCTGTGAGCACACCTAATACTCCCCGAAACCTTGCTGCATGGAAAATTAGCATTCCATATGTAG
ACTTTTTTGAGGATCCCTCCTCTGAAAGGAAGGAGAAAAAAGAAAGAATTCCTGTGTTTTGTATTGATGTTGAAA
GAAATGATAGAAGAGCAGTTGGACACGAGCCTGAACATTGGTCTGTCTATAGAAGATATCTTGAATTCTATGTAC
TTGAATCAAAACTAACAGAATTTCATGGTGCATTTCCTGATGCCCAGCTTCCTTCTAAGAGGATCATTGGCCCCA
AAAATTATGAATTCTTAAAGTCAAAGAGGGAAGAGTTCCAAGAATATCTACAGAAACTTCTGCAGCATCCAGAAC
TGAGTAATAGTCAACTTCTGGCAGACTTTCTTTCCCCTAATGGTGGGGAAACACAATTTCTTGATAAGATACTAC
CAGATGTAAATCTTGGGAAAATTATAAAATCTGTTCCTGGAAAACTAATGAAAGAGAAAGGTCAGCATTTGGAAC
CTTTTATCATGAATTTCATTAATTCTTGTGAGTCTCCAAAGCCTAAACCAAGTAGACCAGAACTGACCATTCTCA
GCCCTACTTCAGAAAACAACAAGAAGCTTTTCAATGATCTGTTTAAAAATAATGCAAACCGTGCTGAAAATACAG
AGAGAAAGCAAAATCAGAATTATTTTATGGAGGTGATGACTGTAGAAGGAGTCTATGATTACCTGATGTATGTAG
GACGGGTAGTTTTCCAGGTTCCTGACTGGCTTCATCATCTCTTAATGGGAACTCGAATCCTCTTTAAAAACACCC
TGGAAATGTATACTGATTACTATCTTCAGTGTAAACTAGAACAGCTATTTCAGGAGCACCGTTTGGTCTCACTCA
TAACACTTCTCAGAGATGCTATATTCTGTGAAAACACTGAACCTCGCTCTCTCCAAGATAAGCAAAAAGGAGCAA
AACAGACTTTTGAAGAAATGATGAATTACATTCCAGATCTGTTAGTCAAGTGTATTGGTGAAGAAACCAAGTATG
AAAGCATCAGACTTCTGTTTGATGGCTTACAGCAACCAGTACTCAACAAGCAGCTGACTTATGTTTTATTGGACA
TTGTGATACAGGAACTGTTTCCAGAGCTCAATAAGGTACAAAAGGAAGTTACCTCTGTGACATCTTGGATG**TAA**A
CACTTGGATTTGGTATAGAATAACCCATTGAAATTTCTGCTGTGCGAGGGTGGTAGAAATTTACTTTTTTGGGTA
TATTCTTATATATATTATGTACATCGCTGTCTGAAATTTTAGTTATTTTTTGTTTTTAATAAAGACTAACACAAA
CTTAATGATTAAAAGTGAAAAAAAAAAAAAAAAAAAA

FIGURE 3305

MGQKLKQRLRLDVGREICRQYPLFCFLLLCLSAASLLLNRYIHILMIFWSFVAGVVTFYCSLGPDSLLPNIFFTI
KYKPKQLGLQELFPQGHSCAVCGKVKCKRHRPSLLLENYQPWLDLKISSKVDASLSEVDIPSIITKKLLKAAMKH
IEVIVKARQKVKNTEFLQQAALEEYGPELHVALRSRRDELHYLRKLTELLFPYILPPKATDCRSLTLLIREILSG
SVFLPSLDFLADPDTVNHLLIIFIDDSPPEKATEPASPLVPFLQKFAEPRNKKPSVLKLELKQIREQQDLLFRFM
NFLKQEGAVHVLQFCLTVEEFNDRILRPELSNDEMLSLHEELQKIYKTYCLDESIDKIRFDPFIVEEIQRIAEGP
YIDVVKLQTMRCLFEAYEHVLSLLENVFTPMFCHSDEYFRQLLRGAESPTRNSKLNRNTQKRGESFGISRIGSKI
KGVFKSTTMEGAMLPNYGVAEGEDDFIEEGIVVMEDDSPVEAVSTPNTPRNLAAWKISIPYVDFFEDPSSERKEK
KERIPVFCIDVERNDRRAVGHEPEHWSVYRRYLEFYVLESKLTEFHGAFPDAQLPSKRIIGPKNYEFLKSKREEF
QEYLQKLLQHPELSNSQLLADFLSPNGGETQFLDKILPDVNLGKIIKSVPGKLMKEKGQHLEPFIMNFINSCESP
KPKPSRPELTILSPTSENNKKLFNDLFKNNANRAENTERKQNQNYFMEVMTVEGVYDYLMYVGRVVFQVPDWLHH
LLMGTRILFKNTLEMYTDYYLQCKLEQLFQEHRLVSLITLLRDAIFCENTEPRSLQDKQKGAKQTFEEMMNYIPD
LLVKCIGEETKYESIRLLFDGLQQPVLNKQLTYVLLDIVIQELFPELNKVQKEVTSVTSWM

FIGURE 3306

GGCACGAGTGGGAGTACAGGACTCGCCTCCTCAGGGTTCCCTGTGCTGCCACTTTTCAGCCATGGCCACAAGTGA
ACAGAGTATCTGCCAAGCCCGGGCTTCCGTGATGGTCTACGATGACACCAGTAAGAAATGGGTACCAATCAAACC
TGGCCAGCAGGGATTCAGCCGGATCAACATCTACCACAACACTGCCAGCAACACCTTCAGAGTCGTTGGAGTCAA
GTTGCAGGATCAGCAGGTTGTGATCAATTATTCAATCGTGAAAGGGCTGAAGTACAATCAGGCCACGCCAACCTT
CCACCAGTGGCGAGATGCCCGCCAGGTCTACGGCTTAAACTTTGCAAGTAAAGAAGAGGCAACCACGTTCTCCAA
TGCAATGCTGTTTGCCCTGAACATCATGAATTCCCAAGAAGGAGGCCCCTCCAGCCAGCGTCAGGTGCAGAATGG
CCCCTCTCCTGATGAGATGGACATCCAGAGAAGACAAGTGATGGAGCAGCACCAGCAGCAGCGTCAGGAATCTCT
AGAAAGAAGAACCTCGGCCACAGGGCCCATCCTCCCACCAGGACATCCTTCATCTGCAGCCAGCGCCCCCGTCTC
ATGTAGTGGGCCTCCACCGCCCCCCCCACCCCCAGTCCCACCTCCACCCACTGGGGCTACCCCACCTCCCCCACC
CCCACTGCCAGCCGGAGGAGCCCAGGGGTCCAGCCACGACGAGAGCTCCATGTCAGGACTGGCCGCTGCCATAGC
TGGGGCCAAGCTGAGAAGAGTCCAACGGCCAGAAGACGCATCTGGAGGCTCCAGTCCCAGTGGGACCTCAAAGTC
CGATGCCAACCGGGCAAGCAGCGGGGGTGGCGGAGGAGGCCTCATGGAGGAAATGAACAAACTGCTGGCCAAGAG
GAGAAAAGCAGCCTCCCAGTCAGACAAGCCAGCCGAGAAGAAGGAAGATGAAAGCCAAATGGAAGATCCTAGTAC
CTCCCCCTCTCCGGGGACCCGAGCAGCCAGCCAGCCACCTAACTCCTCAGAGGCTGGCCGGAAGCCCTGGGAGCG
GAGCAACTCGGTGGAGAAGCCTGTGTCCTCGATTCTGTCCAGAACCCCGTCTGTGGCAAAGAGCCCCGAAGCTAA
GAGCCCCCTTCAGTCGCAGCCTCACTCTAGGATGAAGCCTGCTGGGAGCGTGAATGACATGGCCCTGGATGCCTT
CGACTTGGACCGGATGAAGCAGGAGATCCTAGAGGAGGTGGTGAGAGAGCTCCACAAGGTGAAGGAGGAGATCAT
CGACGCCATCAGGCAGGAGCTGAGTGGGATCAGCACCACGTAAGGGGCCGGCCTCGCTGCGCTGATTCGTCGAGC
CCATCCGGCGACAGAGGACAGCCAGAAGCCCAGCCAGCCCCAGACTCCAGTGCACCAGAGCACGCACAGGAGCCT
GGGCGCGCTGCTGTGAAACGTCCTGACCTGTGATCACACATGACAGTGAGGAAACCAAGTGCAACTCCTGGGTTT
TTTTAGATTCTGCCTGACACGGAACACCAGGTCTGCTCGTCTTTTTTGTGTTTTATATTTGCTTATTTAAGGTAC
ATTTCTTTGGGTTTCTAGAGACGCCCCTAAGTCACCTGCTTCATTAGACGGTTTCCAGGTTTTCTCCCAGGTGAC
GCTGTTAGCGCCTCAGCTGGCGGTGACAGCCGGCCCAGCGTGGCGCCACCACACACCGCAGAGCTGTCCAGGCAC
AGCTCCGTCCCCAGCGCTCATGGTGTTGAAACTGTCTGTCATGCACCACGGTGTCTGTGTCCACACAGTAATAAA
CGGTTTACTGTCCGCAAAAAAAAAAAAAAAAAA

FIGURE 3307

MATSEQSICQARASVMVYDDTSKKWVPIKPGQQGFSRINIYHNTASNTFRVVGVKLQDQQVVINYSIVKGLKYNQ
ATPTFHQWRDARQVYGLNFASKEEATTFSNAMLFALNIMNSQEGGPSSQRQVQNGPSPDEMDIQRRQVMEQHQQQ
RQESLERRTSATGPILPPGHPSSAASAPVSCSGPPPPPPPPVPPPPTGATPPPPPPLPAGGAQGSSHDESSMSGL
AAAIAGAKLRRVQRPEDASGGSSPSGTSKSDANRASSGGGGGGLMEEMNKLLAKRRKAASQSDKPAEKKEDESQM
EDPSTSPSPGTRAASQPPNSSEAGRKPWERSNSVEKPVSSILSRTPSVAKSPEAKSPLQSQPHSRMKPAGSVNDM
ALDAFDLDRMKQEILEEVVRELHKVKEEIIDAIRQELSGISTT

FIGURE 3308

GGCACGAGGGAGGGGCGAAAGGACATTTTTTTTTTTCTTGCTCCCGCCTCTGTTCTTCCCCCACCTGCCACGTAC
AGAGCCCAAGTTCTCGCTAGGCTTGTTGGGTCAGCGCGATTGGCCGGGGCCCGCGCGAGCCTGCGAGCGAGGTGC
GGCGGTCGCGAAGGGCAACCGAGGGGGCCGTGACCACCGCCTCCCCGCGACGCCCCAGTCCAGTGGCCTCGCGTC
CGCCCATTCAGCGGAGACCTGCGGAGAGGCGGCGGCCGCGGCCTCCGCAAGCCGTCTTTCTCTAGAGTTGTATAT
ATAGAACATCCTGGAGTCCACCATGAACGGACAGTTGGATCTAAGTGGGAAGCTAATCATCAAAGCTCAACTTGG
GGAGGATATTCGGCGAATTCCTATTCATAATGAAGATATTACTTATGATGAATTAGTGCTAATGATGCAACGAGT
TTTCAGAGGAAAACTTCTGAGTAATGATGAAGTAACAATAAAGTATAAAGATGAAGATGGAGATCTTATAACAAT
TTTTGATAGTTCTGACCTTTCCTTTGCAATTCAGTGCAGTAGGATACTGAAACTGACATTATTTGTTAATGGCCA
GCCAAGACCCCTTGAATCAAGTCAGGTGAAATATCTCCGTCGAGAACTGATAGAACTTCGAAATAAAGTGAATCG
TTTATTGGATAGCTTGGAACCACCTGGAGAACCAGGACCTTCCACCAATATTCCTGAAAATGATACTGTGGATGG
TAGGGAAGAAAAGTCTGCTTCTGATTCTTCTGGAAAACAGTCTACTCAGGTTATGGCAGCAAGTATGTCTGCTTT
TGATCCTTTAAAAAACCAAGATGAAATCAATAAAAATGTTATGTCAGCGTTTGGCTTAACAGATGATCAGGTTTC
AGGGCCACCCAGTGCTCCTGCAGAAGATCGTTCAGGAACACCCGACAGCATTGCTTCCTCCTCCTCAGCAGCTCA
CCCACCAGGCGTTCAGCCACAGCAGCCACCATATACAGGAGCTCAGACTCAAGCAGGTCAGATTGAAGGTCAGAT
GTACCAACAGTACCAGCAACAGGCCGGCTATGGTGCACAGCAGCCGCAGGCTCCACCTCAGCAGCCTCAACAGTA
TGGTATTCAGTATTCAGCAAGCTATAGTCAGCAGACTGGACCTCAACAACCTCAGCAGTTCCAGGGATATGGCCA
GCAACCAACTTCCCAGGCACCAGCTCCTGCCTTTTCTGGTCAGCCTCAACAACTGCCTGCTCAGCCGCCACAGCA
GTACCAGGCGAGCAATTATCCTGCACAAACTTACACTGCCCAAACTTCTCAGCCTACTAATTATACTGTGGCTCC
TGCCTCTCAACCTGGAATGGCTCCAAGCCAACCTGGGGCCTATCAACCAAGACCAGGTTTTACTTCACTTCCTGG
AAGTACCATGACCCCTCCTCCAAGTGGGCCTAATCCTTATGCGCGTAACCGTCCTCCCTTTGGTCAGGGCTATAC
CCAACCTGGACCTGGTTATCGATTAAGGAGGCTCCTCTACACCAATTAATGTAGCTGCTAGCTATTGGCCTCCCAA
AAGACTCCAGTACTATTTTAATTTGTATTGAAGAAGTTCAGAAATTTAAAAGCAGAGCATTTTTTATGATATCAT
TGTTGGTGTTAATTGAAAGTATAATTTGCTGGAACACAAAGACCAAAATGAAAGTTTTTTCCTCCCTGCTTAAAA
ATGTAGCAGCTTCTTAGTTACTTTGGAACACTACTCTTACATGTATAAAGTGATTGACTTGACTTTCTAGCTTCC
CTTGTCCGGAGGATATTAAAATGCTAGGGTGAGGTTTAGCCATCTTACTTGGCTTTTTACTATTAACATGATGTA
CTAAAGTAGAGCCCTTTGAGAATACAAGATATTATGTATAAAATGTAACACTGATGATAGGTTAATAAAGATGAT
TGAATCCAAAAAAAAAAAAAAAAAA

FIGURE 3309

MNGQLDLSGKLIIKAQLGEDIRRIPIHNEDITYDELVLMMQRVFRGKLLSNDEVTIKYKDEDGDLITIFDSSDLS
FAIQCSRILKLTLFVNGQPRPLESSQVKYLRRELIELRNKVNRLLDSLEPPGEPGPSTNIPENDTVDGREEKSAS
DSSGKQSTQVMAASMSAFDPLKNQDEINKNVMSAFGLTDDQVSGPPSAPAEDRSGTPDSIASSSSAAHPPGVQPQ
QPPYTGAQTQAGQIEGQMYQQYQQQAGYGAQQPQAPPQQPQQYGIQYSASYSQQTGPQQPQQFQGYGQQPTSQAP
APAFSGQPQQLPAQPPQQYQASNYPAQTYTAQTSQPTNYTVAPASQPGMAPSQPGAYQPRPGFTSLPGSTMTPPP
SGPNPYARNRPPFGQGYTQPGPGYR

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FIGURE 3310

GGGCGTCGTTAGGGGAGCGAGTCGTGACCGGTTGGGCCACACTCAACGTGGGACGAAGCTTCGCCTACTGTTTGA
CTACGTGCGTGCAGCCTCCCCTCG**ATG**TCGGCCCTCGAAAAGAGCATGCACCTCGGCCGCCTTCCCTCTCGCCCA
CCTCTACCCGGCAGCGGGGGCAGTCAGAGCGGAGCCAAGATGCGAATGGGCCCTGGAAGAAAGCGGGACTTTTCC
CCTGTTCCTTGGAGTCAGTATTTTGAGTCCATGGAAGATGTAGAAGTAGAGAATGAAACTGGCAAGGATACTTTT
CGAGTCTACAAGAGTGGTTCAGAGGGTCCAGTCCTGCTCCTTCTGCATGGAGGAGGTCATTCTGCCCTTTCTTGG
GCTGTGTTCACGGCAGCGATTATTAGTAGAGTTCAGTGTAGGATTGTAGCTTTGGATCTGCGAAGTCATGGTGAA
ACAAAGGTCAAGAATCCTGAAGATCTGTCTGCAGAAACAATGGCAAAAGACGTTGGCAATGTGGTTGAAGCCATG
TATGGGGACCTTCCTCCTCCAATTATGCTGATTGGACATAGCATGGGTGGTGCTATTGCAGTCCACACAGCATCA
TCCAACCTGGTACCAAGCCTCTTGGGTCTGTGCATGATTGATGTTGTAGAAGGTACAGCTATGGATGCACTTAAT
AGCATGCAGAATTTCTTACGGGGTCGTCCTAAAACCTTCAAGTCTCTGGAGAATGCTATTGAATGGAGTGTGAAG
AGTGGCCAGATTCGAAATCTGGAGTCTGCCCGTGTCTCAATGGTTGGCCAAGTCAAACAGTGTGAAGGAATTACA
AGTCCAGAAGGCTCAAAATCTATAGTGGAAGGAATCATAGAGGAAGAAGAAGAAGATGAGGAAGGAAGTGAGTCT
ATAAGCAAGAGGAAAAAGGAAGATGACATGGAGACCAAGAAAGACCATCCATACACCTGGAGAATTGAACTGGCA
AAAACAGAAAAATACTGGGACGGCTGGTTCCGAGGCTTATCCAATCTCTTTCTTAGTTGTCCCATTCCTAAATTG
CTGCTCTTGGCTGGTGTTGATAGATTGGATAAAGATCTGACCATTGGCCAGATGCAAGGGAAGTTCCAGATGCAG
GTCCTACCCCAGTGTGGCCATGCAGTCCATGAGGATGCCCCTGACAAGGTAGCTGAAGCTGTTGCCACTTTCCTG
ATCCGGCACAGGTTTGCAGAACCCATCGGTGGATTCCAGTGTGTGTTTCCTGGCTGT**TAG**TGACCTGCTGTCCAC
CCCTCCTCAACATCGAGCTCTGTTGTAAATACGTCGCACCAGAGGCCACTGTGATGCCACTGTCTCCTCTCCATC
CCGCCCAGCCATGTGACACTGGCTCCCGGTAGACGGGCACCCCGAGATGTACCAACCTTTTCATGTATTCTGCCA
AAAGCATTGTTTTCCAGGGCCCTTGACCAACATCGGCTTCCCCAGTCCAGGGCTCCCCTGCTCCTTTCCCTTCCC
TGTACTGGGGTAGCTCCTGCCTGCTCTCCCTGCGTTGCCTAGGGTAAAGCCTCCAGATTTGCCATACTGAGCCCC
TCTTCCTAGCATCAGGCGATACATCTGAGTTCAAATGTCTTCCCAGGCTCAGGGACCTCCATTCCTTGAGATTGT
CTTGGCATGGCCCAGCCCTGCCTCATGGGATGGACAATGCATGGGGTGGTCTTTATTTTCCCTTTCAAATAAAA
CACTAGTCAGGTACCGTTTTATCCCAGTCGTACTCTTCCAGGTTTGGAAGACCCAGAGAGGCCAAGATCCCATCC
TTAGCCATAGCGAGCGGTGGTGGTGGATAGCATCACAAGAAACGAGCCTGAAAATCAGGTCCAGCCGGTCCAAGC
ACATGGCCTCCCATCTGGGAGAGCCCACTGTCCCACTCCCACATGTCTGGGCACCTGCCCTGGGCTGAGGCCAGG
CTGCTCCAGGGGCCTCCTGCGCCCTCACCTGCCACAGAGCAACCCAGGTTAAATACAGCCCATGCACAAAGCCAC
AGGCCAAAGCCTATGGAATTGTTTTTAATCATCAAATTTAACCATTTTCATAACTGGTTCCTGGAGGTGTGCAGT
GCCCCCTTGCCTCTTCAAACCTACAGCTTCTCTTTGCCATTTGTGGATTTCACATCACTCCACACAGAAACATTA
CAGCCTGGCATCCCCAGTCTTTGCCTTCTTCCAGCTGCCTCGACACAGCACTGTGGCCTGTCCCTATTGCCCAGG
CACGCCATTTCCAAGGGCAGGAAGGGGCAGTGTCCTGAAGCCCATCTTTTCTGTGACTGTCTTAGGTGATGTGTA
GCCCCCTCCACCTTTCCACTCAACAACCTCCCACCCCTGTCCTGCTGCATGGTCCGGAGTCTGGGACCTACTTTG
TTTTTTGTTATTTATGACCTTGTTTAAAGAAAATAAATATCTCCCAACCTTTAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAA

FIGURE 3311

MSALEKSMHLGRLPSRPPLPGSGGSQSGAKMRMGPGRKRDFSPVPWSQYFESMEDVEVENETGKDTFRVYKSGSE
GPVLLLLHGGGHSALSWAVFTAAIISRVQCRIVALDLRSHGETKVKNPEDLSAETMAKDVGNVVEAMYGDLPPPI
MLIGHSMGGAIAVHTASSNLVPSLLGLCMIDVVEGTAMDALNSMQNFLRGRPKTFKSLENAIEWSVKSGQIRNLE
SARVSMVGQVKQCEGITSPEGSKSIVEGIIEEEEEDEEGSESISKRKKEDDMETKKDHPYTWRIELAKTEKYWDG
WFRGLSNLFLSCPIPKLLLLAGVDRLDKDLTIGQMQGKFQMQVLPQCGHAVHEDAPDKVAEAVATFLIRHRFAEP
IGGFQCVFPGC

FIGURE 3312

CGCCTAGCCGCGCCGGTCCCAGAAGTGGCGAAAGCCGCAGCCGAGTCCAGGTCACGCCGAAGCCGTTGCCCTTTT
AAGGGGGAGCCTTGAAACGGCGCCTGGGTTCCATGTTTGCATCCGCCTCGCGGGAAGGAAACTCCATGTTGTAAC
AAAGTTTCCTCCGCGCCCCCTCCCTCCCCCTCCCCCCTAGAACCTGGCTCCCCTCCCCTCCGGAGCTCGCGGGGA
TCCCTCCCTCCCACCCCTCCCCTCCCCCCCGCGCCCCGATTCCGGCCCCAGCCGGGGGGGAGGCCGGGCGCCCGG
GCCAGAGTCCGGCCGGAGCGGAGCGCGCCCGGCCCCATGGACAGCTCGGCCGTCATTACTCAGATCAGCAAGGAG
GAGGCTCGGGGCCCGCTGCGGGGCAAAGGTGACCAGAAGTCAGCAGCTTCCCAGAAGCCCCGAAGCCGGGGCATC
CTCCACTCACTCTTCTGCTGTGTCTGCCGGGATGATGGGGAGGCCCTGCCTGCTCACAGCGGGGCGCCCCTGCTT
GTGGAGGAGAATGGAGCCATCCCTAAGCAGACCCCAGTCCAATACCTGCTCCCTGAGGCCAAGGCCCAGGACTCA
GACAAGATCTGCGTGGTCATCGACCTGGACGAGACCCTGGTGCACAGCTCCTTCAAGCCAGTGAACAACGCGGAC
TTCATCATCCCTGTGGAGATTGATGGGGTGGTCCACCAGGTCTACGTGTTGAAGCGTCCTCACGTGGATGAGTTC
CTGCAGCGAATGGGCGAGCTCTTTGAATGTGTGCTGTTCACTGCTAGCCTCGCCAAGTACGCAGACCCAGTAGCT
GACCTGCTGGACAAATGGGGGGCCTTCCGGGCCCGGCTGTTTCGAGAGTCCTGCGTCTTCCACCGGGGGAACTAC
GTGAAGGACCTGAGCCGGTTGGGTCGAGACCTGCGGCGGGTGCTCATCCTGGACAATTCACCTGCCTCCTATGTC
TTCCATCCAGACAATGCTGTACCGGTGGCCTCGTGGTTTGACAACATGAGTGACACAGAGCTCCACGACCTCCTC
CCCTTCTTCGAGCAACTCAGCCGTGTGGACGACGTGTACTCAGTGCTCAGGCAGCCACGGCCAGGGAGCTAGTGA
GGGTGATGGGGCCAGGACCTGCCCCTGACCAATGATACCCACACCTCCTCCCAGGAAGACTGCCCAGGCCTTTGT
TAGGAAAACCCATGGGCCGCCGCCACACTCAGTGCCATGGGGAAGCGGGCGTCTCCCCCACCAGCCCCACCAGGC
GGTGTAGGGGCAGCAGGCTGCACTGAGGACCGTGAGCTCCAGGCCCCGTGTCAGTGCCTTCAAACCTCCTCCCCT
ATTCTCAGGGGACCTGGGGGGCCCTGCCTGCTGCTCCCTTTTTCTGTCTCTGTCCATGCTGCCATGTTTCTCTGC
TGCCAAATTGGGCCCCTTGGCCCCTTCCGGTTCTGCTTCCTGGGGGCAGGGTTCCTGCCTTGGACCCCCAGTCTG
GGAACGGTGGACATCAAGTGCCTTGCATAGAGCCCCCTCTTCCCCGCCCAGCTTTCCCAGGGGCACAGCTCTAGG
CTGGGAGGGGAGAACCAGCCCCTCCCCCTGCCCCACCTCCTCCCTTGGGACTGAGAGGGCCCCTACCAACCTTTG
CCTCTGCCTTGGAGGGAGGGGAGGTCTGTTACCACTGGGGAAGGCAGCAGGAGTCTGTCCTTCAGGCCCCACAGT
GCAGCTTCTCCAGGGCCGACAGCTGAGGGCTGCTCCCTGCATCATCCAAGCAATGACCTCAGACTTCTGCCTTAA
CCAGCCCCGGGGCTTGGCTCCCCCAGCTCTGAGCGTGGGGGCATAGGCAGGACCCCCCTTGTGGTGCCATATAAA
TATGTACATGTGTATATAGATTTTTAGGGGAAGGAGAGAGGGAAGGGTCAGGGTAGAGACACCCCTCCCTTGCCC
CTTTCCTGGGCCCAGAAGTTGGGGGGAGGGAGGGAAAGGATTTTTACATTTTTTAAACTGCTATTTTCTGAATGG
AACAAGCTGGGCCAAGGGGCCCAGGCCCTGTCCTCTGTCCCTCACACCCCTTTGCTCCGTTCATTCATTCAAAAA
AACATTTCTTGAGCACCTTCTGTGCCCAGCATATGCTAGGCCCACCAGCTAAGTGTGTGTGGGGGGTCTCTACGC
CAGCTCATCAGTGCCTCCTTGCCCATCCTTCACCGGTGCCTTTGGGGGATCTGTAGGAGGTGGGACCTTCTGTGG
GGTTTGGGGATCTCCAGGAAGCCCGACCAAGCTGTCCCCTTCCCCTGTGCCAACCCATCTCCTACAGCCCCCTGC
CTGATCCCCTGCTGGCTGGGGGCAGCTCCCAGGATATCCTGCCTTCCAACTGTTTCTGAAGCCCCTCCTCCTAAC
ATGGCGATTCCGGAGGTCAAGGCCTTGGGCTCTCCCCAGGGTCTAACGGTTAAGGGGACCCACATACCAGTGCCA
AGGGGGATGTCAAGTGGTGATGTCGTTGTGCTCCCCTCCCCCAGAGCGGGTGGGCGGGGGGTGAATATGGTTGGC
CTGCATCAGGTGGCCTTCCCATTTAAGTGCCTTCTCTGTGACTGAGAGCCCTAGTGTGATGAGAACTAAAGAGAA
AGCCAGACCCCTAAAAAAAAAAAAAAAAA

FIGURE 3313

MDSSAVITQISKEEARGPLRGKGDQKSAASQKPRSRGILHSLFCCVCRDDGEALPAHSGAPLLVEENGAIPKQTP
VQYLLPEAKAQDSDKICVVIDLDETLVHSSFKPVNNADFIIPVEIDGVVHQVYVLKRPHVDEFLQRMGELFECVL
FTASLAKYADPVADLLDKWGAFRARLFRESCVFHRGNYVKDLSRLGRDLRRVLILDNSPASYVFHPDNAVPVASW
FDNMSDTELHDLLPFFEQLSRVDDVYSVLRQPRPGS

FIGURE 3314

GCGGCCGCCAAGCGATCCCTGCTCCGCGCGACACTGCGTGCCCGCGCACGCAGAGAGGCGGTGACGCACTTTACG
GCGGCACGTAAGTGCGTGACGCTCGTCAGTGGCTTCAGTTCACASGTGGCGCCMGSASGMRGGTTGCTGTGTTTG
TGCTTCCTTCTACAGCCAATATGAAAAGGCCTAAGTTAAAGAAAGCAAGTAAACGCATGACCTGCCATAAGCGGT
ATAAAATCCAAAAAAAGGTTCGAGAACATCATCGAAAATTAAGAAAGGAGGCTAAAAAGCAGGGTCACAAGAAGC
CTAGGAAAGACCCAGGAGTTCCAAACAGTGCTCCCTTTAAGGAGGCTCTTCTTAGGGAAGCTGAGCTAAGGAAAC
AGAGGCTTGAAGAACTAAAACAGCAGCAGAAACTTGACAGGCAGAAGGAACTAGAAAAGAAAAGAAAACTTGAAA
CTAATCCTGATATTAAGCCATCAAATGTGGAACCTATGGAAAAGGAGTTTGGGCTTTGCAAAACTGAGAACAAAG
CCAAGTCGGGCAAACAGAATTCAAAGAAGCTGTACTGCCAAGAACTTAAAAAGGTGATTGAAGCCTCCGATGTTG
TCCTAGAGGTGTTGGATGCCAGAGATCCTCTTGGTTGCAGATGTCCTCAGGTAGAAGAGGCCATTGTCCAGAGTG
GACAGAAAAAGCTGGTACTTATATTAAATAAATCAGATCTGGTACCAAAGGAGAATTTGGAGAGCTGGCTAAATT
ATTTGAAGAAAGAATTGCCAACAGTGGTGTTCAGAGCCTCAACAAAACCAAAGGATAAAGGGAAGATAACCAAGC
GTGTGAAGGCAAAGAAGAATGCTGCTCCATTCAGAAGTGAAGTCTGCTTTGGGAAAGAGGGCCTTTGGAAACTTC
TTGGAGGTTTTCAGGAAACTTGCAGCAAAGCCATTCGGGTTGGAGTAATTGGTTTCCCAAATGTGGGGAAAAGCA
GCATTATCAATAGCTTAAAACAAGAACAGATGTGTAATGTTGGTGTATCCATGGGGCTTACAAGGAGCATGCAAG
TTGTCCCCTTGGACAAACAGATCACAATCATAGATAGTCCGAGCTTCATCGTATCTCCACTTAATTCCTCCTCTG
CGCTTGCTCTGCGAAGTCCAGCAAGTATTGAAGTAGTAAAACCGATGGAGGCTGCCAGTGCCATCCTTTCCCAGG
CTGATGCTCGACAGGTAGTACTGAAATATACTGTCCCAGGCTACAGGAATTCTCTGGAATTTTTTACTATGCTTG
CTCAGAGAAGAGGTATGCACCAAAAAGGTGGAATCCCAAATGTTGAAGGTGCTGCCAAACTGCTGTGGTCTGAGT
GGACAGGTGCCTCATTAGCTTACTATTGCCATCCCCCTACATCTTGGACTCCTCCTCCATATTTTAATGAGAGTA
TTGTGGTAGACATGAAAAGCGGCTTCAATCTGGAAGAACTGGAAAAGAACAATGCACAGAGCATAAGAGCCATCA
AGGGCCCTCATTTGGCCAATAGCATCCTTTTCCAGTCTTCCGGTCTGACAAATGGAATAATAGAAGAAAAGGACA
TACATGAAGAATTGCCAAAACGGAAAGAAAGGAAGCAGGAGGAGAGGGAGGATGACAAAGACAGTGACCAGGAAA
CTGTTGATGAAGAAGTTGATGAAAACAGCTCAGGCATGTTTGCTGCAGAAGAGACAGGGGAGGCACTTCTGAGGA
GACTACAGCAGGTGAACAGTCTACAAGGTCTTTTATCTTGGATAAAATCATTGAAGAGGATGATGCTTATGACTT
CAGTACAGATTATGTGTAACAGAACAATGGCTTTTTATGATTTTTTTTTTTAACATTTTAAGCAGACTGCTAAAC
TGTTCTCTGTATAAGTTATGGTATGCATGAGCTGTGTAAATTTTGTGAATATGTATTATATTAAAACCAGGCAAC
TTGGAATCCCTAAATTCTGTAAAAAGACAATTCATCTCATTGTGAGTGGAAGTAGTTATCTGGAATAAAAAAAGA
AGATACCTATTGAAAAAAAAAAAAAAAAAAAAA

FIGURE 3315

MKRPKLKKASKRMTCHKRYKIQKKVREHHRKLRKEAKKQGHKKPRKDPGVPNSAPFKEALLREAELRKQRLEELK
QQQKLDRQKELEKKRKLETNPDIKPSNVEPMEKEFGLCKTENKAKSGKQNSKKLYCQELKKVIEASDVVLEVLDA
RDPLGCRCPQVEEAIVQSGQKKLVLILNKSDLVPKENLESWLNYLKKELPTVVFRASTKPKDKGKITKRVKAKKN
AAPFRSEVCFGKEGLWKLLGGFQETCSKAIRVGVIGFPNVGKSSIINSLKQEQMCNVGVSMGLTRSMQVVPLDKQ
ITIIDSPSFIVSPLNSSSALALRSPASIEVVKPMEAASAILSQADARQVVLKYTVPGYRNSLEFFTMLAQRRGMH
QKGGIPNVEGAAKLLWSEWTGASLAYYCHPPTSWTPPPYFNESIVVDMKSGFNLEELEKNNAQSIRAIKGPHLAN
SILFQSSGLTNGIIEEKDIHEELPKRKERKQEEREDDKDSDQETVDEEVDENSSGMFAAEETGEALLRRLQQVNS
LQGLLSWIKSLKRMMLMTSVQIMCNRTMAFYDFFF

FIGURE 3316A

TTCGTAGTAGAAAAATACTGATTTTCCTTTCAGTGTAAATTTATGTTTAAAGTCAGTCTATTTAAGGAAAAATAA
TAAGCAACAACTAGTATGGAGGCTATTTTCAAATATTAAAAACCATGAATACTCAAATATTTGAAGTAGGTAAAT
TTCTTGCCTATAGGATAAATTCCAAAATCCTTAGCACAGCAGABXCTAAACTGTATTTCCAGCTTTATTTTCCAG
TCACATAGCATCGGGCAGACAGAATTTCCTGCBATTCTAATATTCATTCATTCGATAAGTATCTACCAAATGTCT
ACCATGAGCCAGACATTGGGCTAAACTTCAGGGATTTTAGTTGTAAATAACTATCTCTGCTATAAGGATTACATT
CTAACGGGAAAAACAGACAATAAACAAGTTAGAAAGTAAACAAGGGTAATTAAAGATTCTGACTGGGCCTAAGCA
ACATGGCAAGACCCGGTCTYTACAAAAGWTTTTTTAAAAATTACCCGTGTCCAGTGGCGTGTCCCTGTAGCCCCA
GATATCCCGGAGGCTGAGGCAAGAGAWTCACTTGGSCCTGGGAGTTTGCCTSCTGTGASCCATAATTGCACCACT
GCACTCAGCCTGTTTGACAGAGTGAGACCYTTGTCTTAAAAAAAAAAAAAAGAWTGAAAGAAGATTCTGATTTAAA
GTTCTGTGARGGAAATACACAGTTAAAGACAGGAGGKTAGAGAAGACCCCTTTGGGTGACAGTACTATTGAGATC
TTAAAAATGAGGTCGAACTCGGCCGGGCGCGGTGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGTGGG
TGGATCACAAGGTACGGAGTTCAAGACTAGCCTGGCCAATATGCTGAAACCCCGTCTCTACTAAAAAAATTTTAA
AAAGCTGGGCGTGGTGGCACGTGCCTGTAGTCCCAGCTACTCCGGAGGCTGAGGCAGAGGAATCGCTTGAACCCA
GTAAGTGGAGGTTACAGTGGGCCGAGATCGTGCCACTGCACTCCAGCCTGGGTGACAGAGCGATACTCCATCTCA
AAAAAAAAAAAAAAAAAAAAAAAATGAGGTCGAACCCAATATGTGAAAAGCTAGAGGAAGAGCACCAGGAACAGA
AAGCTGCGGGGAGCAGTGGCTCATGCCTGTADTCCAAACACTTTGGGAGGCCGAGAAGGGCGGATGACCGGAAGT
CAGGAGTTAGAAACCAGCCTGGCCAACATGGCGAAACCCCGTCTCCACTAAAAATACAAAAATTAGCTAGGTGTG
GTGCCGCACGCCTGTAGTCCCAGCTAATCGGGAGGCTGGCGCAGGAGAAGCCTTGAACCCAGGAGACAGAGGTTG
CAGTGAGCCAAGATCGCATCACTGCACTCCAGCCTGAGTGACAGAGTGAGACTCCGTCTCAAAAACAAAACAAAC
CAAGTTGCAAAAGCCCTGGGATGAGAAAGAGCACACCACAGTTGGGCGAAAGAGCAAGGAGAGCTTCATGGGTGA
AGGAGAAGAACGGTGGTTGAACAGGTTGAAAACACAGGCAGAGCAGGCTTTGTGAGTTTGAATTTTTATTCTAAG
TGCAGCAAAATGCCAAGGAAAGAGCCGGGTGCATGGTTACACCCCTGTCGTCCCAGATGCTTGGGAGGCGAGTTT
CAGGCCAGCCTGGGTAGTATAACCAAACCCCTCTAACAAAAAGGGTTTTTAGGCCGGGCGCAGTGCTCACGCCTG
TAATCCCAGCACTTTGGGAGGTGGAGGCTGGTGGATCACTTGAGGTCAGGAGTTCAAGACCAGCCTGGCCAACAT
GGTGAAATCCCCGTCTCTACTAAAAAATACAAAAAATTAGCCCGGGTGTGTGTGTGTGTGTGGGGGGGGGCGCCT
GTAGTCCCAGGTACTCAGGAGGCTTGGAGGGCGCCTGTAGTCCCAGGTACTCAGGAGGCTTGAGGCAGGAGAATT
GCTTGAACCCGGGAGGCAGAGGATGCAGTGAGCCGAGACTGCACCACTGCACTCTTAGCCTGGGTGATAGAGCGA
GACTACGTCTCAAAACAACAACAACAAGGATTTTTAGTAGGTATGTAACCAACTGATTTTTAAAATGATCACAGT
ACCTACTGTGGAGATGAATAGTGCTCTATCGTTTAAATTATTTCGTTTACTCTATCACTTTTTTTTTTTTTGAGA
CAGAGTCTCGCTCTTGTCCCCCCAGACTGGAGTGCAGTGGCAAGATCTCGGCTCGCTGCAACCTCCGTCTCCCGG
GTTCAACTGATTCTCCTGCCTCAGCCTCCTAGGTAGCTGGGATTACAGGTGCACTCCACCACGCCCAGCTAATCA
GCTTCCGTTTCTCGGGTTCAAGCGATTCTCCTGCCTCAGCCTCCCTAGTAGCTGGGATTACAGGCAGGGAGTTTT
ATATTTTAAAAAAAAATTGATATCTGTCTCACCAACCGTATTGCAACCAAGTCTGTTAGTTTCCTGAAGAGAAAT
TTGGTGCTGCAGGTTCCAGAAGCAGCTCTTTATGCCCTCACTGCTGATCAAACTATTTTTTAAAAACGCTCCTAT
CATACACCACGCTGCCTAAAGACAGGGTACAGGCCTGGGATTTTTGAAAGAAAAGGGTTTCTTCAATTACCATTT
CCCAGTTTGGGATGAAGAGACGTAAAGAAGCCCTCTAATAAGGAAATTACGCCGGGCCTCACTGTTAATAGTACA
GTATTTATCAGCAGCTGCCGCGGTTAAGAGGAAGCCACGCCCCCCTGTAGTCTGTACCTCCTAAGATGGATGATT
TAGCTTGCGATCTGTTCAAGATGGSCCACAGAAACACTTCCGGTATCTTTCCGCACTAGGCCCGCCCCAATTTGC
GTGTTTTTACCGTGCAGAGGGAGGGATTTAGAGTTAGCCTTTGATTGGTCAGCTTGACTGGCGACCTTTCCCCTC
TGCGACAGTTTCCCGAGGTACCTAGTGTCTGAGCGGCACAGACGAGATCTCGATCGAAGGCGAGATGGCGGACGT
GCTAGATCTTCACGAGGCTGGGGGCGAAGATTTCGCCATGGATGAGGATGGGGACGGTGAGGACAGTGGAGACGG
CTGGTGGGAAGCGGGGAAGGTGCGAGAGAAGGCTATAATAGGAAAATTTACTCTTTTTTCCTCGGTCGTAAGGAT
GGGAATCGAGGAACCGGGTCTTGGGTGGATTAGAGATTCCGCCCCCTTCAGGAGAAGGGAGGGCGTGACCGGGAA
GGCACTAAGACTGGAGGCGGTGTGGGTCGGCTTGCTGGTAGTGTATTGGGAAAGAGACGATTGTTACAAATGACT
GTCATAGTTACTTATTCTTTTATCTTCTGGGGTTCCAGAGAGCATTCACAAACTGAAAGAAAAAGCGAAGAAACG
GAAGGGTCGCGGCTTTGGCTCCGGTGAGTGTGGGGAAAATGGGGTAGAGTGGCCTAGTAGGGCAGGAGCTACGGG
TTTTGGAGTCCCCACCCACCTCATAGGAACAATGGGAGAAAGGAGGAGTTTTCGGTGATCTCGTGTATGTCCCTT
ATAGAAGAGGGGTCCCGAGCGCGGATGCGTGAGGATTATGACAGCGTGGAGCAGGATGGCGATGAACCCGGACCA

FIGURE 3316B

CAACGCTGTGAGTAATAATGGAACCTGTGAGGTATCCGTGTCTGTGGTAGTAGTTAGAAACCAATAAAATAGTTA
AACGCAGTAGGAATGGGTTCAGAGATAGCTTAAACAATCTGAGTCCGCACTCACTCTATTCCTGTGAGCCTGCTT
AAAGTGTCTCTCATGTACTCATACAACTTCCCCCCGTCCCCCAACAGCTGTTGAAGGCTGGATTCTCTTTGTAAC
TGGAGTCCATGAGGAAGCCACCGAAGAAGACATACACGACAAATTCGCAGAATATGGGGAAATTAAAAACATTCA
TCTCAACCTCGACAGGCGAACAGGATATCTGAAGGTATCCTAAGTGACACTTTATTGCCTCCTTTCTTTCATAAG
CCTTAGGTAGCATTCGTAGTTCTGTGTTTGCTGTGGTTGGCCAAGAGCAAAGTTGAAATAAAATGACATTGGAAA
TCTATGTTTTGTCAGACACGCCAAAGAGACAGAAACGGAGATGATGTATATATACAGTAGAGATATATGATGTAC
ATTCATTGTTTAAAGTGTGTAGATTTTTCTGAGTTTAGATTTGAGGAAAAAGATACTCAGTGATACTTGGGGAAA
TAGGAGGGTTTTCATATCTGTCTTTTCACTTTCCCCAGGGGTATACTCTAGTTGAATATGAAACATACAAGGAAG
CCCAGGCTGCTATGGAGGGACTCAATGGCCAGGATTTGATGGGACAGCCCATCAGCGTTGACTGGTGTTTTGTTC
GGGGTCCACCAAAAGGCAAGAGGAGGTAAAATGAAGAGGGCAAATACTGTCTGGGTGAAGGGAATACGAACGAAA
CAGAATGAGGACTTAGTATTATGTCCCTCTAATGGACTCCTCTCCCTGCTTCTTTTTCCCTAGAGGTGGCCGAAG
ACGCAGCAGAAGTCCAGACCGGAGACGTCGCTGACAGGTCCTCTGTTGTCCAGGTGTTCTCTTCAAGATTCCATT
TGACCATGCAGCCTTGGACAAATAGGACTGGGGTGGAACTTGCTGTGTTTATATTTAATCTCTTACCGTATATGC
GTAGTATTTGAGTTGCGAATAAATGTTCCATTTTTGTTTTCTACATTTAATGTTACTTTCCTGTCCTAAAATTGA
AAGTTCTAAAGCATAGCAAGGCTGTATGGATCATTGTGAAGATACTTCTAGGGACTGAACTCTATGTATTTCTTT
TTTTTCTTTTTTTTTGAGATAGAGTCTTGCTGTGTTACCCAGGGTGGATTGCAGCTGATCATAGCTCACTGCAGCT
TCAAACTCTTGGGCTCAAGCCATCCTTCTGCCTCACTGTCCCTAGTAGTTGGGATTACAGGCACATGCCACCATG
CCCAGCTAAATTTTTAATATTTTTGTAGAGATGGGGTCTTGCTGTGTTACCTGGGCTAGTTATGTGAGTTTCTAT
ATTAGACATAGTCTCAAGTTTCAGGTAGGGTTTAAAGTAGAGACACTGGTCAGTATTTCTTTTTTGGGGGGAACT
AGGAGAGCAGGAGTAGAAGTGAGATGTTAAGATCTTATGGCACTAAAGACTTACTATTCTGTTCCTACATACTCT
GTTAGGATCAGATAGATGTTATAGAAATGCCTTTTGTTTCTCCTGCCCTTCTTGATGTCACAGTTTTTTGTACTT
CCAGCTGTCTAAAGGCATGAATCTCCTCTTGGAGCATTCTCCCAGACCCTTCTTTAGAAGAGTCTATACTAAGTT
CTTGGTGCCCTCTTCGGCAGCCAAGGGTGAAGGCCCCATAGAGGAGAGGATCCAAAGGAGCATTGAGGAGGCCCA
AGAGGAAAAGGATGTGGCTCAGGCTGGGAGGGACTTCAGTTAGCATGGTGGGGGAGAACCAGTACCACATACCCA
GTAGGTAATAAGGTGTCCAGCAGAGGATGAAGGTCAGCAAGATAAGCAGGGCCAGTCTCAGGGCCCGGAGACGAA
CACGGGGACAATTGTCAAAGGAGCGGGGGAGGGCAAATTCACCAGCAGGGGCTAGGAATTTAGAAAATATACTGT
AATTCAGACACTCAGCTTCTGATCTGAGTATAGGGTGAATTGATGGAGGGGCATAGCTAGTGAGACAGAGCTCGC
CTCCTACAAGGAGGAGAATGTTGCAAACCGTTTTCCCCTTCCCAACCTGGGACTATATGATTTCTTACCCCCAGG
GATTATGATAGAAATATGAAGCCACCAAGTCTAGACTTGATGGTGTTCAAGAATAAATAATACTGATTGCCTCCC
TAGTCCTTGTCCAGCTAACTCAGCTGTTTATAATTGAAGGGATTCAACAAAATTATCTCTAGCATCAGGTGCTAG
ACATGGTTAGAATCTCACCATGGTTTAGTGACTGGTAGATAGCTATTAGGTAGGTAGATAAATAAATGATGCTAG
AGGCAACAGGTCTAGGGTTAAGGATTAAGGCCTGGGAATTGGAGTCTCACCATGGCTCCCCTTCCTTGTCTGGGG
CCTGGACACACTGAGGACAATGCGGCTATAGCAGATGGCCATGGCAGTCAGTGGCAGCAGAAAGAGGCAGCAGAA
GGTGAAGAGGTTATAGGTGGTCTCTTGCCATTGAGCCTTGAAGCTGCCTTTGGTGACACACTGAGTGAAAGGGAC
TGGGCCAGCTCAGTGGACCGTGTGGAACAGGAACAGCTGGAGTGGAGTTGAGGACTATTAGAACTGGTTCCCCTC
ACCACCCAACCTACCCACCTATGTCATACTGTCTCCTCCCAATTCATCCTTAATTCCAAGTGAAGCAGCACAGTG
CTGAGAAACAGTTCATCCATGGTGCCATGTTAAAGAAGTTGGAAATATATCTTGAAAATCCTATCTTCCTTTTAG
GCTTGAATATGATGCTGAACAGTAAGTTTGTTAAATCTTGGAACTTAAAACAATCCTGCTTTCTCAAGTACTATT
CTAACATTGCGCTTTATAAGGGATGATATTTCTACCACCTCACTCATATTTTTAGCTGAAATGATTTTCCTGGTA
TGTCTGTTATTTTGTGGAAAAAGAAATATTGTGTAAAATGGGTGCTGCCAAAATTCCAGGCCATTTTGCAGGGAC
TCTGAAGTGACCTTTAGTAGTAATAGTCTTATGTGCAGTAACTATAATGGTAAAGAATGTTAAATAATAAAATTT
AACATTTTCCAAATGCTATTGGGCTGCCCCTCCCCCTTTTTGTTAAATTGCTGGGTTTTCCAACTGAATCAGTAA
AAACTATTTCTGTTTAGAGCTACAAGGTTAAAGTACCTGCTT

FIGURE 3317

CTCCCTCAGCGTCCGGCCGAGGCGCGGTGTATGCTGAGCCGCTGCCGCAGCGGGCTGCTCCACGTCCTGGGCCTT
AGCTTCCTGCTGCAGACCCGCCGGCCGATTCTCCTCTGCTCTCCACGTCTCATGAAGCCGCTGGTCGTGTTCGTC
CTCGGCGGCCCCGGCGCCGGCAAGGGGACCCAGTGCGCCCGCATCGTCGAGAAATATGGCTACACACACCTTTCT
GCAGGAGAGCTGCTTCGTGATGAAAGGAAGAACCCAGATTCACAGTATGGTGAACTTATTGAAAAGTACATTAAA
GAAGGAAAGATTGTACCAGTTGAGATAACCATCAGTTTATTAAAGAGGGAAATGGATCAGACAATGGCTGCCAAT
GCTCAGAAGAATAAATTCTTGATTGATGGGTTTCCAAGAAATCAAGACAACCTTCAAGGATGGAACAAGACCATG
GATGGGAAGGCAGATGTATCTTTCGTTCTCTTTTTTGACTGTAATAATGAGATTTGTATTGAACGATGTCTTGAG
AGGGGAAAGAGTAGTGGTAGGAGTGATGACAACAGAGAGAGCTTGGAAAAGAGAATTCAGACCTACCTTCAGTCA
ACAAAGCCAATTATTGACTTATATGAAGAAATGGGGAAAGTCAAGAAAATAGATGCTTCTAAATCTGTTGATGAA
GTTTTTGATGAAGTTGTGCAGATTTTTGACAAGGAAGGCTAATTCTAAACCTGAAAGCATCCTTGAAATCATGCT
TGAATATTGCTTTGATAGCTGCTATCATGACCCCTTTTTAAGGCAATTCTAATCTTTCATAACTACATCTCAATT
AGTGGCTGGAAAGTACATGGTAAAACAAAGTAAATTTTTTTATGTTCTTTTTTTGGTCACAGGAGTAGACAGTGA
ATTCAGGTTTAACTTCACCTTAGTTATGGTGCTCACCAAACGAAGGGTATCAGCTATTTTTTTTTAAATTCAAAA
AGAATATCCCTTTTATAGTTTGTGCCTTCTGTGAGCAAAACTTTTTAGTACGCGTATATATCCCTCTAGTAATCA
CAACATTTTAGGATTTAGGGATACCTGCTTCCTCTTTTTCTTGCAAGTTTTAAATTTCCAACCTTAAGTGAATTT
GTGGACCAAATTTCAAAGGAACTTTTTGTGTAGTCAGTTCTTGCACAATGTGTTTGGTAAACAAACTCAAAATGG
ATTCTTAGGAGCATTTTAGTGTTTATTAAATAACTGACCATTTGCTGTAGAAAGATGAGAAAACTTAAGCTTTGT
TTTACTACAACTTGTACAAAGTTGTATGACAGGGCATATTCTTTGCTTCCAAGATTTGGGTTGGGGGCACTAGGG
GTTCAGAGCCTGGCAGAATTGTCAGCTTTAGTCTGACATAATCTAAGGGTATGGGGCAAGGATCACATCTAATGC
TTGTGTCCTTATACTCTATTATATAGTGTTATTCATGATTCAGCTGATCTTAACAAAATTCGTAGCAGTGGAACC
TTGAAATGCATGTGGCTAGATTTATGCTAAAATGATTCTCAGTTAGCATTTTAGTAACACTTCAAAGGTTTTTTT
TTGTTTGTTTTCTAGACTTAATAAAAGCTTAGGATTAATTAGAAGAAGCAATCTAGTTAAATTTCCCATTTGTAT
TTTATTTTCTTGAATACTTTTTTCATAGTTATTTGTTTAAAAAGATTTAAAAATCATTGCACTTTGGTCAGAAAA
ATAATAAATATATCTTATAAATGTTTGATTCCCTTCCTTGCTATTTTTATTCAGTAGATTTTTGTTTGGCATCAT
GTTGAAGCACCGAAAGATAAATGATTTTTAAAAGGCTATAGAGTCCAAAGGAATATTCTTTTACACCAATTCTTC
CTTTAAAAATCTCTGAGGAATTTGTTTTCGCCTTACTTTTTTTTCTTCTGTCACAATGCTAAGTGGTATCCGAGG
TTCTTAATATGAGATTTAAAATCTTAAAATGTTTCTTATTTTCAGCACTTACATCATTTGGTACACAGGGTCAAA
TAGGGCAAATAATTTTGTCTTTGTATAATAGATTTGATATTTAAAGTCACTGGAAATAGGACAAGTTAATGGATG
TTTTTATATTTTAATAGAATCATTTATTTCTATGTGTTATGAAATTCACTTAATGATAAATTTTTCAACATACTT
GCCATTAGAAAACAAAGTATTGCTAAGTACTATAACATATTGGCCACTAAAATTCATATTGAGATTATCTTGGTT
TCTTGGAAGAGATAGGAATGAGTTCTTATCTAGTGTTGCAGGCCAGCAAATACAGAGGTGGTTTAATCAAACAGC
TCTAGTATGAAGCAAGAGTAAAGACTAAGGTTTCGAGAGCATTCCTACTCACATAAGTGAAGAAATCTGTCAGAT
AGGAATCTAAATATTTATAGTGAGATTGTGAAAGCAACCTTAAAGTTTTGAAGAAGACTGATGAGACTAGGTGCT
TTGCTTCCTTTCATCAGGTATCTTTCTGTGGCATTTGAGAACAGAAACCAAGAAACATGGTAATTACTAAATTAT
GAGGCTTTGCTTTTTGTTTGCTTTTAAGTAGAAAAACATGTTGGCAACATTGAGTTTTGGAGTTGATTGAGATAA
TATGACTTAACTAGTTTTGTCATTCCATTTGTTAAAGATACAGTCACCAAGAATGTTTTGAGTTTTTTGAAAGAC
CCCAATTTAAGCCTTGCTTATTTTTAAATTATTTCCATTCAGTGATGTTGGATGTATATCAGTTATTTAGTAAAT
AATCTCAATAAATTTTGTGCTGTGGCCTTTGCTAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3318

MLSRCRSGLLHVLGLSFLLQTRRPILLCSPRLMKPLVVFVLGGPGAGKGTQCARIVEKYGYTHLSAGELLRDERK
NPDSQYGELIEKYIKEGKIVPVEITISLLKREMDQTMAANAQKNKFLIDGFPRNQDNLQGWNKTMDGKADVSFVL
FFDCNNEICIERCLERGKSSGRSDDNRESLEKRIQTYLQSTKPIIDLYEEMGKVKKIDASKSVDEVFDEVVQIFD
KEG

FIGURE 3319

ACCACAGTGGTGTCCGAGAAGTCAGGCACGTAGCTCAGCGGCGGCCGCGGCGCGTGCGTCTGTGCCTCTGCGCGG
GTCTCCTGGTCCTTCTGCCATC**ATG**CCGATGTTCATCGTAAACACCAACGTGCCCCGCGCCTCCGTGCCGGACGG
GTTCCTCTCCGAGCTCACCCAGCAGCTGGCGCAGGCCACCGGCAAGCCCCCCCCAGTACATCGCGGTGCACGTGGT
CCCGGACCAGCTCATGGCCTTCGGCGGCTCCAGCGAGCCGTGCGCGCTCTGCAGCCTGCACAGCATCGGCAAGAT
CGGCGGCGCGCAGAACCGCTCCTACAGCAAGCTGCTGTGCGGCCTGCTGGCCGAGCGCCTGCGCATCAGCCCGGA
CAGGGTCTACATCAACTATTACGACATGAACGCGGCCAATGTGGGCTGGAACAACTCCACCTTCGCC**TAA**GAGCC
GCAGGGACCCACGCTGTCTGCGCTGGCTCCACCCGGGAACCCGCCGCACGCTGTGTTCTAGGCCCGCCCACCCCA
ACCTTCTGGTGGGGAGAAATAAACGGTTTAGAGACT

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FIGURE 3320

MPMFIVNTNVPRASVPDGFLSELTQQLAQATGKPPQYIAVHVVPDQLMAFGGSSEPCALCSLHSIGKIGGAQNRS
YSKLLCGLLAERLRISPDRVYINYYDMNAANVGWNNSTFA

FIGURE 3321

AGACGGGCTGCAAGAGGGAGCCGGCCCGACGCGGACCGCTTCCCTGCAGTGCCCCGAGTCCCGGGCCCGCGCCGC
CGCCGCCCGGCTCCGCTCGCGGCCCCTCTGTCTGCAGGCGTGCCCCGGCGGCGGCGGAGAGCCGTCCTCGGCCGA
GGAGGCTGGGAAACGCGAGCGCAGGCGGCAGAGAGGCCTCAACGCCGTCCCTTTCGCCACCGCCTTTTCCTTGCC
TCGCGCCGCTGTGCATTTCTCTCCTTTTCCTTTGTTTTTTTGGCCCCTCGCGGGTGTGGGCATTGTTGGTTAGCA
AAAGTGCAGCCTCAAG**ATG**GCTGATGGCAACGAGGATCTGCGGGCTGACGACTTGCCTGGGCCAGCCTTCGAGAG
CTATGAGTCCATGGAGCTTGCCTGCCCCGCTGAGCGCAGCGGCCACGTAGCCGTCAGCGACGGGCGCCACATGTT
CGTCTGGGGCGGCTACAAGAGTAATCAAGTCAGAGGATTATATGACTTTTATCTGCCTAGAGAAGAACTATGGAT
CTACAACATGGAGACTGGAAGATGGAAAAAAATCAACACTGAAGGTGATGTTCCTCCTTCTATGTCAGGAAGCTG
TGCTGTGTGTGTAGACAGGGTGCTGTACTTGTTTGGAGGACACCATTCAAGAGGCAATACCAATAAGTTCTACAT
GCTGGATTCAAGGTCTACAGACAGAGTGTTACAGTGGGAAAGAATTGATTGCCAAGGAATTCCTCCATCATCAAA
GGACAAACTTGGTGTCTGGGTATATAAAAACAAGTTAATATTTTTTGGAGGGTATGGATATTTGCCTGAAGATAA
AGTATTGGGAACTTTTGAATTCGATGAAACATCTTTTTGGAATTCAAGTCATCCAAGAGGATGGAATGATCATGT
ACATATTTTAGATACTGAAACATTTACCTGGAGCCAGCCTATAACTACTGGTAAAGCACCTTCACCTCGTGCTGC
CCATGCCTGTGCAACTGTCGGAAATAGAGGCTTCGTGTTTGGAGGCAGGTATCGAGATGCTAGAATGAATGATCT
TCACTATCTTAATCTGGATACATGGGAGTGGAATGAATTAATTCCACAAGGCATATGCCCAGTTGGTCGATCTTG
GCACTCACTAACACCAGTTTCTTCAGATCATCTTTTTCTCTTTGGAGGATTTACCACTGATAAACAGCCACTAAG
TGATGCCTGGACTTACTGCATCAGTAAAAATGAATGGATACAATTTAATCATCCATATACCGAAAAACCAAGGTT
ATGGCACACAGCTTGTGCCAGCGATGAAGGAGAAGTAATTGTTTTTGGTGGATGTGCCAACAACTTGCTTGTCCA
TCACAGAGCTGCACACAGTAATGAAATACTAATATTTTCAGTTCAACCAAAATCTCTTGTACGGCTAAGCTTAGA
AGCAGTCATTTGCTTTAAAGAAATGTTAGCCAACTCATGGAACTGCCTTCCAAAACACTTACTTCACAGTGTTAA
TCAGAGGTTTGGTAGTAACAACACTTCTGGATCT**TAA**GGCTTCATAAATAATGCCTATGATCACCTTGCATGGAC
AGCAATCCTGTAAACATCACAGAGTGGCATCATTTGTATAATTATATGCATTGTTGTAGTTTGCACCTGTTGGTT
TTAATGTGCATGTGAATGGCCTAGAGAACCTATTTTTGTGTCTAAAGTTTACAATAAATGTATTTAACACC

FIGURE 3322

MADGNEDLRADDLPGPAFESYESMELACPAERSGHVAVSDGRHMFVWGGYKSNQVRGLYDFYLPREELWIYNMET
GRWKKINTEGDVPPSMSGSCAVCVDRVLYLFGGHHSRGNTNKFYMLDSRSTDRVLQWERIDCQGIPPSSKDKLGV
WVYKNKLIFFGGYGYLPEDKVLGTFEFDETSFWNSSHPRGWNDHVHILDTETFTWSQPITTGKAPSPRAAHACAT
VGNRGFVFGGRYRDARMNDLHYLNLDTWEWNELIPQGICPVGRSWHSLTPVSSDHLFLFGGFTTDKQPLSDAWTY
CISKNEWIQFNHPYTEKPRLWHTACASDEGEVIVFGGCANNLLVHHRAAHSNEILIFSVQPKSLVRLSLEAVICF
KEMLANSWNCLPKHLLHSVNQRFGSNNTSGS

FIGURE 3323

GGAGAGTTTGGGGATCTACAGCAGCCAAAGGCTTGTCCCTGACTTTATATGGCTGCTCCTGGCGAGCGACTGAGT
CGTCCGTGAGGAAAAAGAGGCGAGGCTTTTCCGAGATCGTCTCAGCGATGGCGCTTCGGTCGCGGTTTTGGGGGT
TGTTCTCGGTTTGCAGGAACCCTGGGTGCAGGTTCGCAGCCCTGTCAACCAGCTCCGAGCCGGCAGCGAAACCTG
AAGTGGACCCTGTGGAAAATGAAGCTGTCGCCCCAGAATTCACCAACCGGAACCCCCGGAACCTGGAGCTTTTAT
CTGTAGCCAGGAAAGAGCGGGGCTGGCGGACGGTGTTTCCCTCCCGTGAGTTCTGGCACAGGTTGCGAGTTATAA
GGACTCAGCATCATGTAGAAGCACTTGTGGAGCATCAGAATGGCAAGGTTGTGGTTTCGGCCTCCACTCGTGAGT
GGGCTATTAAAAAGCACCTTTATAGTACCAGAAATGTGGTGGCTTGTGAGAGTATAGGACGAGTGCTGGCACAGA
GATGCTTAGAGGCGGGAATCAACTTCATGGTCTACCAACCAACCCCGTGGGAGGCAGCCTCAGACTCGATGAAAC
GACTACAAAGTGCCATGACAGAAGGTGGTGTGGTTCTACGGGAACCTCAGAGAATCTATGAATAAATGGAAGCAT
TAATTGTTTTGAACATGTAAATATAAATCTGTCAGCCACTACAGCCATCAAAAGAGAGCATCTGGAAGAACAGCC
AGCTTGGAAGTTTTACAGCAATAATGTTGCAGTGGAATATTATTTGTAGTTAAGGTCATCCTCCTCCCCTTTCTG
TTTTTTTAAATCAAGAACTACGTTCTGCCCCTCTCTTGGGCTTCAGAAGCATCTAAGAAAAGCAGTCATCAATTA
TAATTAACTTTCAAAGGGCAAGTCAGAAGTTGTTTATAAATTACAAAATAAAGGCATATTATGAACTCTTAAAAA
AAAAAAAAAAAAAA

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FIGURE 3324

MALRSRFWGLFSVCRNPGCRFAALSTSSEPAAKPEVDPVENEAVAPEFTNRNPRNLELLSVARKERGWRTVFPSR
EFWHRLRVIRTQHHVEALVEHQNGKVVVSASTREWAIKKHLYSTRNVVACESIGRVLAQRCLEAGINFMVYQPTP
WEAASDSMKRLQSAMTEGGVVLREPQRIYE

FIGURE 3325

GGCACGAGGCTCTGTCACCTGGGCTGGAGTCCAGTGGCGTGATCATAGCTCACTGTAGCCTCCAACCCCTGGGCT
CAAGTGATCCTCCCCACTCAGCCTACCCAAGCAGCTGGAACTACAGGAGTGGTATGAGGAGCATGCCAGGGAGCA
AGAGCAGCAGCGACAACTCAGCAGCAGTGCAGCCCCCGCCGCCCAGCAGCCCCCAGGCAGCCGCCAGCGCTCCCA
GACCGTTACCTAGCCCAGCGCCCGAAAGCCGTCTCTTCTATGCAATAACACAATAGTATTACTCTACTGCGATGT
ACGGAACTGCGGTGTGTGTACACATACTCACGTATATGCACATATTTATATACAGGAAGAAAAAAGACAGACAAG
ATGGGGCTTGGTTTATAACCACCTTGCCCTGTCTTCCTTAACTCCAGAAGCCAGTTTGGTGAGGGGTGGGGGTGC
GGCCACCAGGTCTGAGCTCTTCCTACTGTGGAAGGCTCCAGAAGGCCCTTCACAAGGAGACCCCTCACCTGGATC
CAGTCGACTGCGGGGCTTGCCCCTCATGTGGGCTGGCCTCCATCGGCCACGTCCAAAGCTGTCACTGCTACTGCT
TCAGGCTCACATCCCCCCGACCTGATGGCGTGCCCGCCCCCTCTCCCTGCGGCCCATGCCACAGGTTTCTGTGTT
TTGCTTTAGGGACAGAACCACTTAGGAAGGAAAGAACTCCCGGTCTCCAGGGTGGTATTTCAGTGTCTGTGATAA
TGTCACGCAACACCTCTTCGGGGACCAGTGCCCAGGATCTAATGGAAGCGGAATTGGGGCAACTGGGCCCATGTG
GCCAGAGCTCAGTTAGCCAGTGCCGGGCGGCCACAGATTACACTGACCAATCTCCTCCCTTGGCTCTGCAAGCCT
CCCACCCAGCCTTCTCTGGCTTAACCCTTGTTGGCGAAAACTCTTCCACAGTGGCCTCCTTGGGGACCCAGAACC
CGGAGGAAGGGGCATGAGGCAGGAAGTGGGGCCGATGTCTGCAACCCAGACCACTTCGTGGAATGGGCTCTTGAC
CAAATCCCTTTTTTTGCGATTTACCCGTTCAAGCAAAACAACGTTTTGGTTAACTAAGGATTGTGCTAAAGCCGA
TACCAGGTCCTTCACACGTGTGCACTAGGAACAGGAGCGAACAGCACAGAGAGACGCTCCCTGTGGGACGCAGCA
GCCCCGTGGCCCCGGCCCAGTTCCCAGCCACCCTCCCTGGCTCTGCTCACACCAGAGATTTCCATAGCAGGAGCG
GTTGGTGCAGAAGTAGGTTCAGATGAACCTCAGTTAACGTCGCCACCCCTCCTCCCACCATGGTACCCTGTAGGA
GCCCTGTATGACATCTGAGCGTGGTGGAGGTAGGAGGGTTGCCAGCTGCAGTGACCCTGCCACAGAGGCAGGGTC
AGTGCAGAGGTCGCTTTGGTTCCGCTTCCCTGGGCCACAGAACGGAACACAGCATAGGTTCTGCAGCAGGAGCCG
CAGTGGCAGGATGGAGGGTGCGAAGGGCAAGGAGTGCACTGCTGGGCATTCCTGGCCAGCCCCGGCCCTCTGGTG
CCTGCTTCCTGTGACTTCAGAAGGCAGGTGGACAGAGCCTCCCTCTGGCCTTGTCCTCTTCCCAGCCACAGAACG
GGCAGGGTGGCACCCGACCCCAGGGGAGCAGTACCTGGTCCCCCACCCCCTCCTCCCAACCACCTCCAAGGCCAA
GCTGGGTCCCATAGCCAGCACGGCATGGTTCTCCCCTTCCCCCCTTCCCAGGTCAGGGGAGTTGGACAAGTAGCA
GGTGTTTGTTTTTAAAGCACAGCCCTTTGGGAAAGCAACACATTATTGAGACTCACTGTGATTCCCCCGGGAGTC
AGACTGGCTTTGTCCTCTTCCTCTCTGGAGGGCCATGGGCCATCAGCAGGAGCTCCACATCGAGCCCCAGGCCAG
AACCCCCTCCCTTTCACAGAGAGGGAACTTTATTGCACAATTGGGTGCCTTTTAGCTTTTGTGTGTTGAAATGGG
CGTTTTGGAAGCAAGGGTCAGGGGACAGCTTCTAAAGGTGTGAGTCTCTGACCTGAGCATCTGGGCCTCGCCTGG
GCCCTTCTTCCTCCCCAGGGGTGGAAACGTGGAGGGGCCAGCAGCACCCCGGGGTCTGCCCAGGGGAGTCAAGGC
CCCGAGGTGGGGGGGCCTATTCCAGGAGGAGTGGGATCTCGGCCCTGTCCAGAGCGAGTTAATGTGTCCATCTGC
CCAACCCTGTCCTGAGAAAGGACCTGGTTTTGGCCAGGACCTGACAAATACCCAATGGCAGCAGTGTCAACAGAC
GGGAGTCCAGCCAGGGTGGGTGCCCTTGTCATTGAGGTTAGGGACAGCTATCCCCAGGTTATGCCTGGCCCCACC
CAGCAGGGAGTTGGGGTCCCCCCACAGGCTGTGAGCTCTGTGGGCCCTGGGATGTGATCTAGCTCAGATGCCCTC
TCATCCTTGATGTCATAGTTGAGTGCACCCAAGTGGCACCCACTGGCGGCCAGGGGCACAGCCTGGTGGTGGTGG
CAATAGAACTGTGCCCCTCCTCAGCTCCTCGCTTCCCCTCCCACAGCCCCAGCCTTACTCCACCATGCGGACAAT
CATTTTGTACGGATCACGGGAGCAATGCTGTACGGTTTTGTACACTGGTGGTTTGTTTCCTAGAAAACCCATTGT
GTCTCTGGATTTCTAGCACATTACTAAAAGAGCCTCTGCTTTGTAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3326

MTSERGGGRRVASCSDPATEAGSVQRSLWFRFPGPQNGTQHRFCSRSRSGRMEGAKGKECTAGHSWPAPALWCLL
PVTSEGRWTEPPSGLVLFPATERAGWHPTPGEQYLVPHPLLPTTSKAKLGPIASTAWFSPSPLPRSGELDK

FIGURE 3327

AGCCGGATTGAAACAAGATGGCGGGTTCGTGGTGAGAAGCCGTCAAGGAGTAGAAATTGGTATGCTTAGAAGCAG
ATTCTAAAAGCAGTTTCTCTTCAGAACATCTTTTTTCATACCACTTGATAAGCATCTTGAAACACCATGGCTGTA
GCTGCAGTAAAATGGGTGATGTCAAAGAGAACTATCTTGAAACATTTATTTCCAGTCCAAAATGGAGCTTTATAT
TGTGTTTGTCATAAATCTACGTATTCTCCTCTACCAGATGACTATAATTGCAACGTAGAGCTTGCTCTGACTTCT
GATGGCAGGACAATAGTATGCTACCACCCTTCTGTGGACATTCCATATGAACACACAAAACCTATCCCTCGGCCA
GATCCTGTGCATAATAATGAAGAAACACATGATCAAGTGCTGAAAACCAGATTGGAAGAAAAAGTTGAACACCTT
GAGGAAGGACCTATGATAGAACAACTTAGCAAAATGTTCTTTACTACTAAGCACCGTTGGTATCCTCATGGACGG
TATCACAGATGTCGTAAGAATCTGAATCCTCCAAAAGACAGATGATGCGGAGGTTCCTGGGGGAATCAAAGAGAA
ATGTGCCTCATTTGCCATTTGAGAAAATGCAGTCTGGTGTATTCAGTAATATATAGTAAAGTAATAATGATAAAA
TATCTTTTCATATATTAGAATGTGTACTTTTATATAAAGTAATTCTGGATTTGACATTCTCATTTAGAGAAACCT
ATTTTCTTTTTTCTTTTTCTATTTTAGTGTTTCATTTATGTGCGGTCTCCAATTTAGGACTTTTCCATAGTGCCA
AAGCCATACATATTCAGTAGAACATCAATAAATTCATCAGAAATTCAAACACTTTATTATAAAACGGGCTTCGTG
TTAGATAATTTTGCTAAACAGTAGGCTACTGTAAGTGTTCTGAGCATATTTAAGCAGGCTAGCATTTTCAATTTA
CAATATTTTCAACTGATAGTAGGTTTATTGGGATGTAACCCTATGATAAGTTGAGAAACATCTCTTTTTGTGTGT
CTACTGTGATTTAAGTATTTTTAATCATCAGCCAAGCATTGTTAGTAGTATAAATATGATTAATAAAAATGTGCA
TGGCTTTCCTACAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3328

MAVAAVKWVMSKRTILKHLFPVQNGALYCVCHKSTYSPLPDDYNCNVELALTSDGRTIVCYHPSVDIPYEHTKPI
PRPDPVHNNEETHDQVLKTRLEEKVEHLEEGPMIEQLSKMFFTTKHRWYPHGRYHRCRKNLNPPKDR

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FIGURE 3329

TTATTTAGTTTAATAAGCATGTGGTTTAATAAGGACACACTCTCTCTCTCTCTCTCTCTATATATATATATATATAT
ATATATATATATGAGAGATATATGAGATATATGAGAGATCAAGATCTATATATGTATATAAATACAATTATACAC
AGATAATTTTTAATACTCTTTGTTAACAAACACAGTTGAAAACTGGTTTCGGCTGCACAAATAAGCAGAATATTT
GAGTAACTATATATGATATGGAGATATTTTAATCCATTTATCCTGGCTCAAGAACACTGATAAAGATGATTTTCT
GTTACTTTAGCTCATTCAGATCAGGATGGACATGCTCTTTTTGATCTATAACTGTTCAGCCAGCTTCCAGATAAT
ATTTTAGGCTATGAGAGCTATACAGTCTCTCTTATTACTCATTTCTGCTGTTGAAGTATCGAAAACAGATAGAGA
TACTATGTAAAGAATGGGCGTACGTATGTTCCAGGAAAACTTTATTTACAAAAGCAGATGGAGGGCTGGATTTGG
TCCATGGGTCATAGTTAGTGACCCTGATCCCAAGTTTATTTTGTGTTAGACCCTCTAACCTTTGATCTGCGTCTT
TTCTGTTTTGATTTACATAATTCATTTTTAAATCAAAAAGATGTGCGTATATATGGTTGTGTGTATCTGTATAAC
CTAAAGCTATAATATTTTGTTGTCTTGAAAGCAGATACACTCTTCCTGGAGTCTGTTCAGGTTTCAGGACGATTG
ACTATAATGAAAGAGACAGAATAGGGTAAGGGAAGATGGGTATGCTATCAGCCATTTTCTTTGCCTTGTCATTTA
ATGCCATAATTTCAGATTCTCTATGTAAAAAGAAGGTCTGTGTATTGTCAAAATAATATACTCTCCAAGTTCTCC
TGCTCATTGACCCTTGAACCAGGATTCTGGATTGCTAGAGCTGCAGAAATTCACCCACTTGGGTACTCTTAGAGC
TCTACAGCAAGAATATGATAGAATGTCTGATCTTTGTGCTGCAGAAAGCAAACTTTTGAAGAATTCTAAGCAACA
GAAAATGGGTTATGTGACTCATCTGCTATTTGGCAGCCACTATTCCTTTTTTAGACTGCAGAACGGTACTGCCCC
TGTTACCTCTAGAATAGCCTGAGTCTGAGGAGTGCAGAGAAAAGATATATCCAAAAGGAGAATCCCTTTCTCTTG
CATAACTCTCAATCCTTTACAAGTAAGTAGCATTATTTCAGAATGTCTATATGCATCATTTTCAACTAAAGCATA
CCTCATCCTTAAACTTCCACTATTTAACAGCTAATCCATTTCAAACTTGGTTTGAGCCTAGCAATTGCAGAACTC
ATAAAATTGCTTGTGAAATTACACACCATATTACTAGCATATACATTGCAGTGCTCCAATCATGCTAACAGATAA
TAGATTTTTCTTTAAGAATTTTATCAAATATTTCACTATTTGGGGAAATTTTAGAGGAGGGGAAGCCTGTATTCA
GGATGATAGAGGGAGCAGAGACTTACTGTCTCTCTTCCACATTATAAATGAACTGCCTTTCCAGGTCCAACATGC
TGTCAGGTTGCTTCAGCTCGGTGTGAATGTAAGTGTGGGGATCAAACACACACACCTATACACATACATATTAAT
ATGCAGAGGATTTTAAATAATTGCAAATGTCTTGTGGCTGTTTTATTTCTACAAAATTCTGTAAGATGTATACCA
GAAAACATAATAAAGATAAGCTCAGTTCTTCATTGGGAAAAAATATTTTTAAAGAAAATTTAGAAGTTTTTGCTG
AATTAAAGTATCTTCAATTTTAATTACTGGATTTGGAAGTTGAAATGCCATCCTTCAATATCACTGGTCTCAAAT
TCATTGATAGAATTTTTTCTTAAACTAATAAGTGGGGTAAGTATAATCTCCTAAATTGGTACCCACTGGCTGCTC
CTAAACTGGTTTCCAGTCATGTCCTCCAGTATGTGATTTTTATAAATTAAAGGTAATATTGTATATTAAAGTTCA
AATAAAGATGTTCTTTAAGTGAACTTTAATATACAATATTACCTTTAATTTTTAAAGAAAATTTAGAAGTTTTTG
CTGAATTAAAGTATCTTCAATTTTAATTACTCGATTTGGAAGTTGAAATGCCATCCTTCAATATCACTGGTCTCA
AATTCATTGATAGAATTTTTTCTTAAACTAATAAGTGGGGTAAGTATAATCTCCTAAATTGGTACCCACTGGCTG

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FIGURE 3330

LFSLISMWFNKDTLSLSLSLYIYIYIYERYMRYMRDQDLYMYINTIIHR

FIGURE 3331

AATTAAATGCATATGTTCTCCAAGAACCACCTAAAGGAGAAACCTACACCTACGACTGGCAGCTGATTACTCATC
CTAGAGACTACAGTGGAGAAATGGAAGGGAAACATTCCCAGATCCTCAAACTATCGAAGCTCACTCCAGGCCTGT
ATGAATTCAAAGTGATTGTAGAGGGTCAAAATGCCCATGGGGAAGGCTATGTGAACGTGACAGTCAAGCCAGAGC
CCCGTAAGAATCGGCCCCCCATTGCTATTGTGTCACCTCAGTTCCAGGAGATCTCTTTGCCAACCACTTCTACAG
TCATTGATGGCAGTCAAAGCACTGATGATGATAAAATCGTTCAGTACCATTGGGAAGAACTTAAGGGGCCTCTAA
GAGAAGAGAAGATTTCTGAAGATACAGCCATATTAAAACTAAGTAAACTCGTCCCTGGGAACTACACTTTCAGCT
TGACTGTAGTAGACTCTGATGGAGCTACCAACTCTACTACTGCAAACCTGACAGTGAACAAAGCTGTGGATTACC
CCCCTGTGGCCAACGCAGGCCCCAACCAAGTGATCACCCTGCCCCAAAACTCCATCACCCTCTTTGGGAACCAGA
GCACTGATGATCATGGCATCACCAGCTATGAGTGGTCACTCAGCCCAAGCAGCAAAGGGAAAGTGGTGGAGATGC
AGGGTGTTAGAACACCAACCTTACAGCTCTCTGCGATGCAAGAAGGAGACTACACTTACCAGCTCACAGTGACTG
ACACAATAGGACAGCAGGCCACTGCTCAAGTGACTGTTATTGTGCAACCTGAAAACAATAAGCCTCCTCAGGCAG
ATGCAGGCCCAGATAAAGAGCTGACCCTTCCTGTGGATAGCACAACCCTGGATGGCAGCAAGAGCTCAGATGATC
AGAAAATTATCTCATATCTCTGGGAAAAAACACAGGGACCTGATGGGGTGCAGCTCGAGAATGCTAACAGCAGTG
TTGCTACTGTGACTGGGCTGCAAGTGGGGACCTATGTGTTCACCTTGACTGTCAAAGATGAGAGGAACCTGCAAA
GCCAGAGCTCTGTGAATGTCATTGTCAAAGAAGAAATAAACAAACCACCTATAGCCAAGATAACTGGGAATGTGG
TGATTACCCTACCCACGAGCACAGCAGAGCTGGATGGCTCTAAGTCCTCAGATGACAAGGGAATAGTCAGCTACC
TCTGGACTCGAGATGAGGGGAGCCCAGCAGCAGGGGAGGTGTTAAATCACTCTGACCATCACCCTATCCTTTTTC
TTTCAAACCTGGTTGAGGGAACCTACACTTTTCACCTGAAAGTGACCGATGCAAAGGGTGAGAGTGACACAGACC
GGACCACTGTGGAGGTGAAACCTGATCCCAGGAAAAACAACCTGGTGGAGATCATCTTGGATATCAACGTCAGTC
AGCTAACTGAGAGGCTGAAGGGGATGTTCATCCGCCAGATTGGGGTCCTCCTGGGGGTGCTGGATTCCGACATCA
TTGTGCAAAAGATTCAGCCGTACACGGAGCAGAGCACCAAAATGGTATTTTTTGTTCAAAACGAGCCTCCCCACC
AGATCTTCAAAGGCCATGAGGTGGCAGCGATGCTCAAGAGTGAGCTGCGGAAGCAAAAGGCAGACTTTTTGATAT
TCAGAGCCTTGGAAGTCAACACTGTCACATGTCAGCTGAACTGTTCCGACCATGGCCACTGTGACTCGTTCACCA
AACGCTGTATCTGTGACCCTTTTTGGATGGAGAATTTCATCAAGGTGCAGCTGAGGGATGGAGACAGCAACTGTG
AGTGGAGCGTGTTATATGTTATCATTGCTACCTTTGTCATTGTTGTTGCCTTGGGAATCCTGTCTTGGACTGTGA
TCTGTTGTTGTAAGAGGCAAAAAGGAAAACCCAAGAGGAAAAGCAAGTACAAGATCCTGGATGCCACGGATCAGG
AAAGCCTGGAGCTGAAGCCAACCTCCCGAGCAGGCATCAAACAGAAAGGCCTTTTGCTAAGTAGCAGCCTGATGC
ACTCCGAGTCAGAGCTGGACAGCGATGATGCCATCTTTACATGGCCAGACCGAGAGAAGGGCAAACTCCTGCATG
GTCAGAATGGCTCTGTACCCAACGGGCAGACCCCTCTGAAGGCCAGGAGCCCGCGGGAGGAGATCCTGTAGCCAC
CTGGTCTGTCTCCTCAGGGCAGGGCCCAGCACACTGCCCGGCCAGTCCTCCTACCTCCCGAGTCTGCGGGCAGCT
GCTGTCCCAGCATCTGCTGGTCATTTCGCCCTGACAGTCCCAACCAGAACCCCTGGGACTTGAATCCAGAGACGT
CCTCCAGGAACCCCTCAACGAAGCTGTGAATGAAGAGGTTTCCTCTTTAAACCTGTCTGGTGGGCCCCCAGATAT
CCTCACCTCAGGGCCTCCTTTTTTTGCAAACTCCTCCCCTCCCCCGAGGGCAGACCCAGCCAGCTGCTAAGCTCT
GCAGCTCCCCAGTGGACAGTGTCATTGTGCCCAGAGTGCTGCAAGGTGAGGCCTGCTGTGCTGCCCGCACACCTG
AGTGCAAAACCAAGCACTGTGGGCATGGTGTTTCCCTCTCTGGGGTAGAGTACGCCCTCTCGCTGGGCAAAGAGG
AAGTGGCACCCCTCCCCTCACCACAGATGCTGAGATGGTAGCATAGAAATGATGGCCGGGCGCGGTGGCTCACGC
CTGTAATCCCAGCACTTTGGGAGGCCGAGGCGGGCGGATCATGAGGTCAGGAGATCAAGACCACCCTGGCTAACA
CGGTGAAACCCCATCTCTACT

FIGURE 3332

MEGKHSQILKLSKLTPGLYEFKVIVEGQNAHGEGYVNVTVKPEPRKNRPPIAIVSPQFQEISLPTTSTVIDGSQS
TDDDKIVQYHWEELKGPLREEKISEDTAILKLSKLVPGNYTFSLTVVDSDGATNSTTANLTVNKAVDYPPVANAG
PNQVITLPQNSITLFGNQSTDDHGITSYEWSLSPSSKGKVVEMQGVRTPTLQLSAMQEGDYTYQLTVTDTIGQQA
TAQVTVIVQPENNKPPQADAGPDKELTLPVDSTTLDGSKSSDDQKIISYLWEKTQGPDGVQLENANSSVATVTGL
QVGTYVFTLTVKDERNLQSQSSVNVIVKEEINKPPIAKITGNVVITLPTSTAELDGSKSSDDKGIVSYLWTRDEG
SPAAGEVLNHSDHHPILFLSNLVEGTYTFHLKVTDAKGESDTDRTTVEVKPDPRKNNLVEIILDINVSQLTERLK
GMFIRQIGVLLGVLDSDIIVQKIQPYTEQSTKMVFFVQNEPPHQIFKGHEVAAMLKSELRKQKADFLIFRALEVN
TVTCQLNCSDHGHCDSFTKRCICDPFWMENFIKVQLRDGDSNCEWSVLYVIIATFVIVVALGILSWTVICCCKRQ
KGKPKRKSKYKILDATDQESLELKPTSRAGIKQKGLLLSSSLMHSESELDSDDAIFTWPDREKGKLLHGQNGSVP
NGQTPLKARSPREEIL

FIGURE 3333

GGCACGAGGAGGTGGTGATGGACATCCCCTATGAGCTGTGGAACGAGACTTCTGCAGAGGTGGCTGACCTCAAGA
AGCAGTGTGATGTGCTGGTGGAAGAGTTTGAGGAGGTGATCGAGGACTGGTACAGGAACCACCAGGAGGAAGACC
TGACTGAATTCCTCTGCGCCAACCACGTGCTGAAGGGAAAAGACACCAGTTGCCTGGCAGAGCAGTGGTCCGGCA
AGAAGGGAGACACAGCTGCCCTGGGAGGGAAGAAGTCCAAGAAGAAGAGCAGCAGGGCCAAGGCAGCAGGCGGCA
GGAGTAGCAGCAGCAAACAAAGGAAGGAGCTGGGTGGCCTTGAGGGAGACCCCAGCCCCGAGGAGGATGAGGGCA
TCCAGAAGGCATCCCCTCTCACACACAGCCCCCCTGATGAGCTCTGAGCCCACCCAGCATCCTCTGTCCTGAGAC
CCCTGATTTTGAAGCTGAGGAGTCAGGGGCATGGCTCTGGCAGGCCGGGATGGCCCCGCAGCCTTCAGCCCCTCC
TTGCCTTGGCTGTGCCCTCTTCTGCCAAGGAAAGACACAAGCCCCAGGAAGAACTCAGAGCCGTCATGGGTAGCC
CACGCCGTCCTTTCCCCTCCCCAAGTGTTTCTCTCCTGACCCAGGGTTCAGGCAGGCCTTGTGGTTTCAGGACTG
CAAGGACTCCAGTGTGAACTCAGGAGGGGCAGGTGTCAGAACTGGGCACCAGGACTGGAGCCCCCTCCGGAGACC
AAACTCACCATCCCTCAGTCCTCCCCAACAGGGTACTAGGACTGCAGCCCCCTGTAGCTCCTCTCTGCTTACCCT
ACCTGTGGACACCTTGCACTCTGCCTGGCCCTTCCCAGAGCCCAAAGAGTAAAAATGTTCTGGTTCTGAAAAAAA
AAAAAAAAAAAAA

FIGURE 3334

GGCTCTTTTAAATGACCCCAGGCGTCGTGTATTGAATCCTAGACTCACGTCCGTCTCGCCGGCGCCCGAGCCAGT
CCGCGCGCACCGCGTCTGCGTCCCCGAAAGCCCCGCCCGCAAGGGCTGCCCTGCCTACCTGGTCTCCGACGTGCT
CGTCTGGAGGGCGGTGCGAGGGGCCGAGCCGACGAGATGTTCTTGCTGCCTCTTCCGGCTGCGGGGCGAGTAGTC
GTCCGACGTCTGGCCGTAGTACGTTCTGGGAGCCGGAGTCTCTCCACCGCAGACATGACGAAGGGCCTTGTTTTA
GGAATCTATTCCAAAGAAAAAGAAGATGATGTGCCACAGTTCACAAGTGCAGGAGAGAATTTTGATAAATTGTTA
GCTGGAAAGCTGAGAGAGACTTTGAACATATCTGGACCACCTCTGAAGGCAGGGAAGACTCGAACCTTTTATGGT
CTGCATCAGGACTTCCCCAGCGTGGTGCTAGTTGGCCTCGGCAAAAAGGCAGCTGGAATCGACGAACAGGAAAAC
TGGCATGAAGGCAAAGAAAACATCAGAGCTGCTGTTGCAGCGGGGTGCAGGCAGATTCAAGACCTGGAGCTCTCG
TCTGTGGAGGTGGATCCCTGTGGAGACGCTCAGGCTGCTGCGGAGGGAGCGGTGCTTGGTCTCTATGAATACGAT
GACCTAAAGCAAAAAAAGAAGATGGCTGTGTCGGCAAAGCTCTATGGAAGTGGGGATCAGGAGGCCTGGCAGAAA
GGAGTCCTGTTTGCTTCTGGGCAGAACTTGGCACGCCAATTGATGGAGACGCCAGCCAATGAGATGACGCCAACC
AGATTTGCCGAAATTATTGAGAAGAATCTCAAAAGTGCTAGTAGTAAAACCGAGGTCCATATCAGACCCAAGTCT
TGGATTGAGGAACAGGCAATGGGATCATTCCTCAGTGTGGCCAAAGGATCTGACGAGCCCCCAGTCTTCTTGGAA
ATTCACTACAAAGGCAGCCCCAATGCAAACGAACCACCCCTGGTGTTTGTTGGGAAAGGAATTACCTTTGACAGT
GGTGGTATCTCCATCAAGGCTTCTGCAAATATGGACCTCATGAGGGCTGACATGGGAGGAGCTGCAACTATATGC
TCAGCCATCGTGTCTGCTGCAAAGTTAAATTTGCCCATTAATATTATAGGTCTGGCCCCTCTTTGTGAAAATATG
CCCAGCGGCAAGGCCAACAAGCCGGGGGATGTTGTTAGAGCCAAAAACGGGAAGACCATCCAGGTTGATAACACT
GATGCTGAGGGGAGGCTCATACTGGCTGATGCGCTCTGTTACGCACACACGTTTAACCCGAAGGTCATCCTCAAT
GCCGCCACCTTAACAGGTGCCATGGATGTAGCTTTGGGATCAGGTGCCACTGGGGTCTTTACCAATTCATCCTGG
CTCTGGAACAAACTCTTCGAGGCCAGCATTGAAACAGGGGACCGTGTCTGGAGGATGCCTCTCTTCGAACATTAT
ACAAGACAGGTTGTAGATTGCCAGCTTGCTGATGTTAACAACATTGGAAAATACAGATCTGCAGGAGCATGTACA
GCTGCAGCATTCCTGAAAGAATTCGTAACTCATCCTAAGTGGGCACATTTAGACATAGCAGGCGTGATGACCAAC
AAAGATGAAGTTCCCTATCTACGGAAAGGCATGACTGGGAGGCCCACAAGGACTCTCATTGAGTTCTTACTTCGT
TTCAGTCAAGACAATGCTTAGTTCAGATACTCAAAAATGTCTTCACTCTGTCTTAAATTGGACAGTTGAACTTAA
AAGGTTTTTGAATAAATGGATGAAAATCTTTTAACGGAGACAAAGGATGGTATTTAAAAATGTAGAACACAATGA
AATTTGTATGCCTTGATTTTTTTTTCATTTCACACAAAGATTTATAAAGGTAAAGTTAATATCTTACTTGATAAG
GATTTTTAAGATACTCTATAAATGATTAAAATTTTTAGAACTTCCTAATCACTTTTCAGAGTATATGTTTTTCAT
TGAGAAGCAAAATTGTAACTCAGATTTGTGATGCTAGGAACATGAGCAAACTGAAAATTACTATGCACTTGTCAG
AAACAATAAATGCAACTTGTTGTGAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3335

MFLLPLPAAGRVVVRRLAVVRSGSRSLSTADMTKGLVLGIYSKEKEDDVPQFTSAGENFDKLLAGKLRETLNISG
PPLKAGKTRTFYGLHQDFPSVVLVGLGKKAAGIDEQENWHEGKENIRAAVAAGCRQIQDLELSSVEVDPCGDAQA
AAEGAVLGLYEYDDLKQKKKMAVSAKLYGSGDQEAWQKGVLFASGQNLARQLMETPANEMTPTRFAEIIEKNLKS
ASSKTEVHIRPKSWIEEQAMGSFLSVAKGSDEPPVFLEIHYKGSPNANEPPLVFVGKGITFDSGGISIKASANMD
LMRADMGGAATICSAIVSAAKLNLPINIIGLAPLCENMPSGKANKPGDVVRAKNGKTIQVDNTDAEGRLILADAL
CYAHTFNPKVILNAATLTGAMDVALGSGATGVFTNSSWLWNKLFEASIETGDRVWRMPLFEHYTRQVVDCQLADV
NNIGKYRSAGACTAAAFLKEFVTHPKWAHLDIAGVMTNKDEVPYLRKGMTGRPTRTLIEFLLRFSQDNA

FIGURE 3336A

AAAGATCTTTTTTTTTTTTTTTTCTTTTTTTTTCGGCGGAGATCCTCGTTGGGGCTGGGAAACTCCTGCAAAACT
CGAGACCAGGAAGCCAGCCCGCACCCCAACCCCCACCAAAGCCACCTACTCTTCTTCTGTGGGAGGCCAGTCCAC
ATCCGCTCTCACCCGAGAGAGATATTCAGCTGGATCCAAAGTGACTGATGAAGGGAAGGAAATCATGTCAAGCGA
AGCCTTGAAAAAGCTGCCCTGAGACGGTGTCCCGCCGAAAGAATGTTGGCTCAATTAAGAAACATCAGGGAGATA
AATTCAACCCAGTGTGTCTAAAA**ATG**ACTACAAAACGAAGTTTGTTTGTGCGGTTGGTACCATGTCGCTGTCTAC
GAGGGGAAGAGGAGACTGTCACTACTCTTGATTATTCTCATTGCAGCTTAGAACAAGTTCCGAAAGAGATTTTTA
CTTTTGAAAAAACCTTGGAGGAACTCTATTTAGATGCTAATCAGATTGAAGAGCTTCCAAAGCAACTTTTTAACT
GTCAGTCTTTACACAAGCTGAGTTTGCCAGACAATGATTTAACAACGTTACCAGCATCCATTGCAAACCTTATTA
ATCTCAGGGAACTGGATGTCAGCAAGAATGGAATACAGGAGTTTCCAGAAAATATAAAAAATTGTAAAGTTTTGA
CAATTGTGGAGGCCAGTGTAAACCCTATTTCCAAGCTCCCTGATGGATTTTCTCAGCTGTTAAACCTAACCCAGT
TGTATCTGAATGATGCTTTTCTTGAGTTCTTGCCAGCAAATTTTGGCAGATTAACTAAACTCCAAATATTAGAGC
TTAGAGAAAACCAGTTAAAAATGTTGCCTAAAACTATGAATAGACTGACCCAGCTGGAAAGATTGGATTTGGGAA
GTAACGAATTCACGGAAGTGCCTGAAGTACTTGAGCAACTAAGTGGATTGAAAGAGTTTTGGATGGATGCTAATA
GACTGACTTTTATTCCAGGGTTTATTGGTAGTTTGAAACAGCTCACATATTTGGATGTTTCTAAAAATAATATTG
AAATGGTTGAAGAAGGAATTTCAACATGTGAAAACCTTCAAGACCTCCTATTATCAAGCAATTCACTTCAGCAGC
TTCCTGAGACTATTGGTTCGTTGAAGAATATAACAACGCTTAAAATAGATGAAAACCAGTTAATGTATCTGCCAG
ACTCTATAGGAGGGTTAATATCAGTAGAAGAACTGGATTGTAGTTTCAATGAGGTTGAAGCTTTGCCTTCATCTA
TTGGGCAGCTTACTAACTTAAGAACTTTTGCTGCTGATCATAATTACTTACAGCAGTTGCCCCCAGAGATTGGAA
GCTGGAAAAATATAACTGTGCTGTTTCTCCATTCCAATAAACTTGAGACACTTCCAGAGGAAATGGGTGATATGC
AAAAATTAAAAGTCATTAATTTAAGTGATAATAGATTAAAGAATTTACCCTTTAGCTTTACAAAGCTACAGCAAT
TGACAGCTATGTGGCTCTCAGATAATCAGTCCAAACCCCTGATACCTCTTCAAAAAGAAACTGATTCAGAGACCC
AGAAAATGGTGCTTACCAACTACATGTTCCCTCAACAGCCAAGGACTGAGGATGTTATGTTTATATCAGATAATG
AAAGTTTTAACCCTTCATTGTGGGAGGAACAGAGGAAACAGCGGGCTCAAGTTGCATTTGAATGTGATGAAGACA
AAGATGAAAGGGAGGCACCTCCCAGGGAGGGAAATTTAAAAAGATATCCAACACCATACCCAGATGAGCTTAAGA
ATATGGTCAAAACTGTTCAAACCATTGTACATAGATTAAAAGATGAAGAGACCAATGAAGACTCAGGAAGAGATT
TGAAACCACATGAAGATCAACAAGATATAAATAAAGATGTGGGTGTGAAGACCTCAGAAAGTACTACTACAGTAA
AAAGCAAAGTTGATGAAAGAGAAAAATATATGATAGGAAACTCTGTACAGAAGATCAGTGAACCTGAAGCTGAGA
TTAGTCCTGGGAGTTTACCAGTGACTGCAAATATGAAAGCCTCTGAGAACTTGAAGCATATTGTTAACCATGATG
ATGTTTTTGAGGAATCTGAAGAACTTTCTTCTGATGAAGAGATGAAAATGGCGGAGATGCGACCACCATTAATTG
AAACCTCTATTAACCAGCCAAAAGTCGTAGCACTTAGTAATAACAAAAAAGATGATACAAAGGAAACAGATTCTT
TATCAGATGAAGTTACACACAATAGCAATCAGAATAACAGCAATTGTTCTTCTCCATCTCGGATGTCTGATTCAG
TTTCTCTTAATACTGATAGTAGTCAAGACACCTCACTCTGCTCTCCAGTGAAACAAACTCATATTGATATTAATT
CCAAAATCAGGCAAGAAGATGAAAATTTTAACAGCCTTTTACAAAATGGAGATATTTTAAACAGTTCAACAGAGG
AAAAGTTCAAAGCTCATGATAAAAAAGATTTTAACTTACCTGAATATGATTTGAATGTTGAAGAGCGATTAGTTC
TAATTGAGAAAAGTGTTGACTCAACAGCCACAGCTGATGACACTCACAAATTAGATCATATCAATATGAATCTTA
ATAAACTTATAACTAATGATACATTTCAACCAGAGATCATGGAAAGATCAAAAACACAGGATATTGTGCTTGGAA
CAAGCTTTTTAAGCATTAATTCTAAAGAGGAAACTGAGCACTTGGAAAATGGAAACAAGTATCCTAATTTGGAAT
CCGTAAATAAGGTAAATGGACATTCTGAGGAAACTTCCCAGTCTCCTAATAGGACTGAACCACATGACAGTGATT
GTTCTGTTGACTTAGGTATTTCCAAAAGCACTGAAGATCTCTCCCCTCAGAAAAGTGGTCCAGTTGGATCTGTTG
TGAAATCTCATAGCATAACTAATATGGAGATTGGAGGGCTAAAAATCTATGATATTCTTAGTGATAATGGACCTC
AGCAGCCAAGTACAACCGTTAAAATCACATCTGCTGTTGATGGAAAAAATATAGTCAGGAGCAAGTCTGCCACAC
TGTTGTATGATCAACCATTGCAGGTATTTACTGGTTCTTCCTCATCTTCTGATTTAATATCAGGAACAAAGGCAA
TTTTCAAGTTTGATTCAAATCATAATCCCGAAGAGCCAAATATAATAAGAGGCCCCACAAGTGGCCCACAATCTG
CACCTCAAATATATGGTCCTCCACAGTATAATATCCAATACAGTAGCAGTGCTGCAGTCAAAGACACTTTGTGGC
ACTCCAAACAAAATCCCCAAATAGACCATGCCAGTTTTCCTCCTCAGCTCCTTCCTAGATCAGAGAGCACAGAAA
ATCAAAGTTATGCTAAACATTCTGCCAATATGAATTTCTCTAATCATAACAATGTTCGAGCTAATACTGCATACC
ATTTACATCAGAGACTTGGCCCAGCAAGACATGGGGAAATGTGGGCCATCTCACCAAACGACCGACTTATTCCTG
CAGTAACTCGAAGTACAATCCAGCGACAAAGTAGTGTGTCCTCCACAGCCTCTGTAAATCTTGGTGATCCAGGCT

FIGURE 3336B

CTACAAGGCGGGCTCAGATTCCTGAAGGAGATTATTTATCATACAGAGAGTTCCACTCAGCGGGAAGAACTCCTC
CAATGATGCCAGGATCACAGAGACCCCTTTCTGCACGAACATACAGCATAGATGGTCCAAATGCATCAAGACCTC
AGAGTGCTCGACCCTCTATTAATGAAATACCAGAGAGAACTATGTCAGTTAGTGATTTCAATTATTCACGGACTA
GTCCTTCAAAAAGACCAAATGCAAGGGTTGGTTCTGAGCATTCTTTATTAGATCCTCCAGGAAAAAGTAAAGTTC
CTCGTGACTGGAGAGAACAAGTACTTCGACATATTGAAGCCAAAAAGTTAGAAAAGATGCCTTTGAGTAATGGAC
AGATGGGCCAGCCTCTCAGGCCTCAGGCAAATTATAGTCAAATACATCACCCCCCTCAGGCATCTGTGGCAAGGC
ATCCCTCTAGAGAACAACTAATTGATTACTTGATGCTGAAAGTGGCCCACCAGCCTCCATATACACAGCCCCATT
GTTCTCCTAGACAAGGCCATGAACTGGCAAAACAAGAGATTCGAGTGAGGGTTGAAAAGGATCCAGAACTTGGAT
TTAGCATATCAGGTGGTGTCGGGGGTAGAGGAAACCCATTCAGACCTGATGATGATGGTATATTTGTAACAAGGG
TACAACCTGAAGGACCAGCATCAAAATTACTGCAGCCAGGTGATAAAATTATTCAGGCTAATGGCTACAGTTTTA
TAAATATTGAACATGGACAAGCAGTGTCCTTGCTAAAAACTTTCCAGAATACAGTTGAACTCATCATTGTACGAG
AAGTTTCCTCATAAGCACTGTGGACAAAAAAAGCGGGGAAGACAGCAAGATTTATTGGAAGATACTTACAGGGGA
AATTAATATTTTGACTATTTTTATATATAAAGAAGAACTCAAAAAATTATGTTCAAATTTGTACATTAATGAAAT
AATGGATAAAGGAGACTGTTGAATTCATACCATATAAAACTTGTTAGGTTTTTAAACATAGCAATCAAGGCTACA
AAAACAAACCTGTGTTGTTTTTGTATAGATTGTAGGTTTATTTTTGGATTTCATATACATGACTGAACTGTGTGC
AAGGCAATAGTTAGCCTTGATTTTAGCCCAGAGACAGATGGCAGAGCTATCTCTCTCATAGCTTTTATGCCCTTA
TTTTTATTCAACTGGTATTAATGTTTTTCTCCTGAAACTACTTTTTTTGATGTGGGCAAGAGATTTGAAGTGTTG
GCTTTTGCTATGTGCATATTGAATTGAAGAGTGAGTAGGTGAAGGTGGTGCTGGTGGGTTCACTTTCCAAGGCCA
GACTAAAACAGTTATTTTCTATAAAAATCTGGAAGCAAAGAATGGGGATGGGGAGAGCTACGTGGTAGTATGTTT
TTATTAGGAGAATAATGCAATAAAATATGTAATGTCTTTTTTATAAAGCAAAAAAGACAATAATTGCATTTATGA
GCTCGGCAGGATCTGTTCTTGTCATAGCCATTGACTATACATTTGCTACTGGTGATTCAGTTTTTAATTTTTTAG
TCACAGGAAATTTTTAACTCTACTGTAGATGCATGTCCATGCATTTTCTGTGTTATGGAAATCCACTGATTTTTT
TTTTTTTTTCAAATGGTGGTACTTGCAATCTGTTTTATAATTAGTGCTCCATTTAAATCTAATTTATAATTTTTA
TTTTAAGCAGCAAATGAAACAAAAATGGCCAGTTTTAAGATTGTGTTGCCTGTAACACAAAATGTTACGAAGGTT
TAGGAAAGCCTCTTTGATTTTTGTTTGGCCTTGCATTGGCCCTTGGTAAAGTAAAAGGAAACAGTACACTTGGAG
CTAGGAAACCAAAGCAAGCTTTGTGAAACTGGCACAGTGATAGAGAATTGCTGTGGAGAGTTATAGAGCAAAGGG
ATGGGTCCTTGAGGCCTGCCAGTGTGTAAAGGTGTTCAAATAAAGGGCTGTTTCTACAGGTAACATTAAATGTGA
ACTCAACACTTCCAGAGTCTTTAAAGGGTTTCTATGTGTATCAGTGTAATAGTGTTTTACCACCAACTGCCTTTC
TTTGTTCCTAGTTACTGTAACAAATATTTGATGATAGAGGTTTATTAATTTTGTTTATCCAGACCATTAATTTTA
TTTGTTTTTGTCTATGTAATCAAATAAAATTTGAGTAACATGTAATGGTAAGGATTAATGCATGGTTATTTGGAC
CAGAAAAAAGTGCCATAGAAGACCAATAACTGTTTAGTTGAGGCTAGTCTGGAACCTTTCATTAGAGCAATATTT
GGTTATTGCACTTCATTTTTATTTACTAAGAAATGCAATTTGGGAATTTTTAATCTGTTATGCTTTGTTTATCAA
CCTTGATTTTAATTAAGACTTTTATAAGACTAGCTTAAAACACCAACCAACATTATTTTTGCAAAAGTGAGTTGG
ACTCACTTTCCATTCTTGCTAGTCAGAGTAAGTAGGCAGCACTTTTAAAAATATGTGAACTCAAATATTGCACTT
CTTTCAAGATGTTATCAATTGGTTATTGTACTGTATAGTTTTAATAATTTTGATTGAAACCCTTTAACAACTCTT
TGTAAATTTTAACTCATTTTAGTTGATTTTCAGTACTATTTACATAGGAATTGATTTTTATGGATATAGTAGAAG
AAATGTGCTGTATTTTGATAAAATTCACTTATTGTATGTGTGTTGTAATCTAAAAAAAAAAAGAATGACAAACAG
CTTCTTTAAGACAAAAAAAAAAAAAAAAAAAA

FIGURE 3337

MTTKRSLFVRLVPCRCLRGEEETVTTLDYSHCSLEQVPKEIFTFEKTLEELYLDANQIEELPKQLFNCQSLHKLS
LPDNDLTTLPASIANLINLRELDVSKNGIQEFPENIKNCKVLTIVEASVNPISKLPDGFSQLLNLTQLYLNDAFL
EFLPANFGRLTKLQILELRENQLKMLPKTMNRLTQLERLDLGSNEFTEVPEVLEQLSGLKEFWMDANRLTFIPGF
IGSLKQLTYLDVSKNNIEMVEEGISTCENLQDLLLSSNSLQQLPETIGSLKNITTLKIDENQLMYLPDSIGGLIS
VEELDCSFNEVEALPSSIGQLTNLRTFAADHNYLQQLPPEIGSWKNITVLFLHSNKLETLPEEMGDMQKLKVINL
SDNRLKNLPFSFTKLQQLTAMWLSDNQSKPLIPLQKETDSETQKMVLTNYMFPQQPRTEDVMFISDNESFNPSLW
EEQRKQRAQVAFECDEDKDEREAPPREGNLKRYPTPYPDELKNMVKTVQTIVHRLKDEETNEDSGRDLKPHEDQQ
DINKDVGVKTSESTTTVKSKVDEREKYMIGNSVQKISEPEAEISPGSLPVTANMKASENLKHIVNHDDVFEESEE
LSSDEEMKMAEMRPPLIETSINQPKVVALSNNKKDDTKETDSLSDEVTHNSNQNNSNCSSPSRMSDSVSLNTDSS
QDTSLCSPVKQTHIDINSKIRQEDENFNSLLQNGDILNSSTEEKFKAHDKKDFNLPEYDLNVEERLVLIEKSVDS
TATADDTHKLDHINMNLNKLITNDTFQPEIMERSKTQDIVLGTSFLSINSKEETEHLENGNKYPNLESVNKVNGH
SEETSQSPNRTEPHDSDCSVDLGISKSTEDLSPQKSGPVGSVVKSHSITNMEIGGLKIYDILSDNGPQQPSTTVK
ITSAVDGKNIVRSKSATLLYDQPLQVFTGSSSSSDLISGTKAIFKFDSNHNPEEPNIIRGPTSGPQSAPQIYGPP
QYNIQYSSSAAVKDTLWHSKQNPQIDHASFPPQLLPRSESTENQSYAKHSANMNFSNHNNVRANTAYHLHQRLGP
ARHGEMWAISPNDRLIPAVTRSTIQRQSSVSSTASVNLGDPGSTRRAQIPEGDYLSYREFHSAGRTPPMMPGSQR
PLSARTYSIDGPNASRPQSARPSINEIPERTMSVSDFNYSRTSPSKRPNARVGSEHSLLDPPGKSKVPRDWREQV
LRHIEAKKLEKMPLSNGQMGQPLRPQANYSQIHHPPQASVARHPSREQLIDYLMLKVAHQPPYTQPHCSPRQGHE
LAKQEIRVRVEKDPELGFSISGGVGGRGNPFRPDDDGIFVTRVQPEGPASKLLQPGDKIIQANGYSFINIEHGQA
VSLLKTFQNTVELIIVREVSS

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FIGURE 3338

GGCACGAGGAAGCGACCGAGGGACTGGGAGTCGTTAGTGAGAGTTTCACTCTTGTTGCCTAGGCTGGAGTGCAAT
GGTGCGATCTTGGCTCATCACGACCTTCGCCTCCCAGGTTCAAGTGATTGTCCCATTTCAGCCTCCCGAGTAGCT
GGGATTACAGGATGACGCGGCATGGCAAGAACTGCACCGCAGGGGCCGTCTACACCTACCACGAGAAGAAGAAGG
ACACAGCGGCCTCGGGCTATGGGACCCAGAACATTCGACTGAGCCGGGATGCCGTGAAGGACTTCGACTGCTGTT
GTCTCTCCCTGCAGCCTTGCCACGATCCTGTTGTCACCCCAGATGGCTACCTGTATGAGCGTGAGGCCATCCTGG
AGTACATTCTGCACCAGAAGAAGGAGATTGCCCGGCAGATGAAGGCCTACGAGAAGCAGCGGGGCACCCGGCGCG
AGGAGCAGAAGGAGCTTCAGCGGGCGGCCTCGCAGGACCATGTGCGGGGCTTCCTGGAGAAGGAGTCGGCTATCG
TGAGCCGGCCCCTCAACCCTTTCACAGCCAAGGCCCTCTCGGGCACCAGCCCAGATGATGTCCAACCTGGGCCCA
GTGTGGGTCCTCCAAGTAAGGACAAGGACAAAGTGCTGCCCAGCTTCTGGATCCCGTCGCTGACGCCCGAAGCCA
AGGCCACCAAGCTGGAGAAGCCGTCCCGCACGGTGACCTGCCCCATGTCAGGGAAGCCCCTGCGCATGTCGGACC
TGACGCCCGTGCACTTCACACCGCTAGACAGCTCCGTGGACCGCGTGGGGCTCATCACCCGCAGCGAGCGCTACG
TGTGTGCCGTGACCCGCGACAGCCTGAGCAACGCCACCCCCTGCGCTGTGCTGCGGCCCTCTGGGGCTGTGGTCA
CCCTCGAATGCGTGGAGAAGCTGATTCGGAAGGACATGGTGGACCCTGTGACTGGAGACAAACTCACAGACCGCG
ACATCATCGTGCTGCAGCGGGGCGGTACCGGCTTCGCGGGCTCCGGAGTGAAGCTGCAAGCGGAGAAATCACGGC
CGGTGATGCAGGCCTGAGTGTGTGCGGGAGACCAAATAAACCGGCTTGGGTGCGCAAAAAAAAAAAAAAAAAAA

FIGURE 3339

MTRHGKNCTAGAVYTYHEKKKDTAASGYGTQNIRLSRDAVKDFDCCCLSLQPCHDPVVTPDGYLYEREAILEYIL
HQKKEIARQMKAYEKQRGTRREEQKELQRAASQDHVRGFLEKESAIVSRPLNPFTAKALSGTSPDDVQPGPSVGP
PSKDKDKVLPSFWIPSLTPEAKATKLEKPSRTVTCPMSGKPLRMSDLTPVHFTPLDSSVDRVGLITRSERYVCAV
TRDSLSNATPCAVLRPSGAVVTLECVEKLIRKDMVDPVTGDKLTDRDIIVLQRGGTGFAGSGVKLQAEKSRPVMQ
A

FIGURE 3340

ACAGGGGAAATACCGCGGCGCCGGTAGTTGCTGTGGTTTCCGTTCTGAGCTCGCAGCTTAGGAGCTGAAGATCGC
GGACTTAGCGTTGCCGCGTCCGAGTCCGGCCATCAGTGGCTGCAGATCCGGAGCCAGGAGCTCAACCACCCTTCT
TCGGAACAGGGCCGGCCTGCTGCTGTGCCCTCGACGCTCGGTGCCTGTATCTACTCCGGGGCCTAGGTCGGCTCC
GGGGGCGGCTTAGGAGAAGGCCGCCGGCGAGATGTTCAAAAACACGTTCCAGAGCGGCTTCCTCTCCATCCTCTA
CAGCATCGGCAGCAAGCCTCTGCAAATCTGGGACAAAAAGGTACGGAATGGCCACATCAAAAGAATCACTGATAA
TGACATCCAGTCCCTGGTGCTAGAGATTGAAGGGACAAATGTAAGCACCACATATATCACATGCCCTGCAGACCC
CAAGAAGACGCTGGGAATTAAACTTCCTTTCCTTGTCATGATTATCAAAAACCTGAAGAAGTATTTTACCTTCGA
AGTGCAGGTACTAGATGACAAGAATGTGCGTCGTCGCTTTCGGGCAAGTAACTACCAGAGCACCACCCGGGTCAA
ACCCTTCATCTGCACCATGCCCATGCGGCTGGATGACGGCTGGAACCAGATTCAGTTCAACTTGCTAGACTTCAC
ACGGCGAGCATACGGCACCAATTACATCGAGACCCTCAGAGTGCAGATCCATGCAAATTGTCGCATCCGACGGGT
TTACTTCTCAGACAGACTCTACTCAGAAGATGAGCTGCCGGCAGAGTTCAAACTGTATCTCCCAGTTCAGAACAA
GGCAAAGCAATAACTGGAATTGTGACTCGAGGGATAGACCCCTGGATGTGACTCTTCTTTTTAAAAGGAAACTAT
GTGGAGGACGATGCAAAAACATATTTATCTTAGTTTGCTCTGCTGTAGTTCTGTTATTTATACTTGGTGTTGCTT
GTCATGGACACCGGTGAACATGCCGTAACTCTGTGACTGCATTGTAAGTGCAGTGGGGGTAAGCAGTCCTGTGAG
TGGCGCATGAACGCTGGAGCTTATTCCGCCGCCTGCCCCAGTGTGGGGGGAGATACCTTTACCATGAACTTACAG
AATTAAAGATGGCCCATAAGGAATTCCAGACCAATATTTCTTCCTGCGGTTTATTCTATGTTTTATATATTATCT
AAATATATGTATATGCTGTGTCATACTCATAATCTGGAAATGAATAAAGTGATATATTCCTGGTTTGTAAAAAAA
AAA

FIGURE 3341

MFKNTFQSGFLSILYSIGSKPLQIWDKKVRNGHIKRITDNDIQSLVLEIEGTNVSTTYITCPADPKKTLGIKLPF
LVMIIKNLKKYFTFEVQVLDDKNVRRRFRASNYQSTTRVKPFICTMPMRLDDGWNQIQFNLLDFTRRAYGTNYIE
TLRVQIHANCRIRRVYFSDRLYSEDELPAEFKLYLPVQNKAKQ

FIGURE 3342

TGACGCATACTATAGCGCTGTTTTCCTGCACTGATAAACGAAAAGCAATCCACCAGGTCTCGGCAGCTAACTTTC
CGGCACTACTTATGCCCGAGCGTGTCGTCCCAGTGCGCAAGTGCAGCAGGTGGCTACGGAGGGGCGCGGGAGGAA
GAGGAGGAGGAGGAGGAGGCTGGGTTGGGCCGGCGCAAGTGCTGTGATGCGGTTCCGGGCAGGGTTCTGTAGAAT
CTGAATACCAGTTTCCGAGCGGCAAGGCAGCG**ATG**GCGATTTTTAGTGTGTATGTGGTGAACAAAGCTGGCGGCT
TGATTTACCAGTTGGACAGCTACGCGCCACGGGCTGAGGCTGAGAAAACTTTCAGTTATCCGCTGGATCTGCTGC
TCAAGCTACACGATGAGCGTGTGTTGGTTGCTTTCGGCCAGCGGGACGGCATCCGAGTGGGTCATGCAGTGCTGG
CCATCAATGGCATGGACGTGAATGGCAGGTACACGGCCGACGGGAAAGAGGTGCTGGAGTATCTGGGTAACCCTG
CTAATTACCCGGTGTCCATTCGATTTGGCCGGCCCCGCCTCACTTCTAATGAGAAGCTTATGCTGGCCTCCATGT
TCCACTCGCTCTTTGCCATCGGCTCCCAGCTGTCTCCTGAACAGGGAAGCTCAGGCATTGAGATGCTGGAGACAG
ACACATTCAAATTGCACTGCTACCAGACACTGACAGGGATCAAGTTTGTGGTTCTAGCAGATCCTAGGCAAGCTG
GAATAGATTCTCTTCTCCGAAAGATTTATGAGATTTACTCAGACTTTGCCCTCAAGAATCCATTCTATTCCTTAG
AAATGCCTATCAGGTGTGAGCTCTTTGACCAGAACCTGAAGCTAGCTCTGGAGGTGGCAGAGAAGGCTGGAACTT
TTGGACCTGGGTCA**TAG**GCTGAACCTGTTATGGACCCCCAAATTCTGAGAGTTCCTGCAACAAGAATACTGCTGT
TGACACTCCAGTGGAAATCCCAGCAGCCTTGTTAGTGCACTTGAAAGTGGGAGAATGCTGACCCTGATGACTTGT
ACTGATTCCTGAGCCTTAACACTGTGCTCTTTCCTTCTGTATATACCATGGTCTTACTTTCCAACTCTGTACAGA
TTTATTTATGGAGGAGCTAGGTCCATAAATGTTGTAATAAATATTCCTTTGATCTTGGTGTTTGCGTAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAA

FIGURE 3343

MAIFSVYVVNKAGGLIYQLDSYAPRAEAEKTFSYPLDLLLKLHDERVLVAFGQRDGIRVGHAVLAINGMDVNGRY
TADGKEVLEYLGNPANYPVSIRFGRPRLTSNEKLMLASMFHSLFAIGSQLSPEQGSSGIEMLETDTFKLHCYQTL
TGIKFVVLADPRQAGIDSLLRKIYEIYSDFALKNPFYSLEMPIRCELFDQNLKLALEVAEKAGTFGPGS

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FIGURE 3344

GGCCACGAGGGGAAATTGACGAACACGTGACGCGGTCGGGCGGACCACTGCAGACTGAGCGGTGGACCGAATTGG
GACCGCTGGCTTATAAGCGATCATGTTTCTCCAGTATTACCTCAACGAGCAGGGAGATCGAGTCTATACGCTGAA
GAAATTTGACCCGATGGGACAACAGACCTGCTCAGCCCATCCTGCTCGGTTCTCCCCAGATGACAAATACTCTCG
ACACCGAATCACCATCAAGAAACGCTTCAAGGTGCTCATGACCCAGCAACCGCGCCCTGTCCTCTGAGGGTCCCT
TAAACTGATGTCTTTTCTGCCACCTGTTACCCCTCGGAGACTCCGTAACCAAACTCTTCGGACTGTGAGCCCTGA
TGCCTTTTTGCCAGCCATACTCTTTGGCATCCAGTCTCTCGTGGCGATTGATTATGCTTGTGTGAGGCAATCATG
GTGGCATCACCCATAAAGGGAACACATTTGACTTTTTTTTCTCATATTTTAAATTACTACAAGATTATTAAAGAT
AAAATGATTTTGAAAAACAAAAAAAAAAAAA

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FIGURE 3345

MFLQYYLNEQGDRVYTLKKFDPMGQQTCSAHPARFSPDDKYSRHRITIKKRFKVLMTQQPRPVL

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FIGURE 3346

ACCCCATCCCCCACTCCTATACCGGTCCTCCATTTTGGTGCCTGCAAAGCTCTGGGAAAGAATCCCGGGAAACGA
AAAATGGTGGGTTTGGGGGAAGGGAGGTAAGGGGAGAAAGCTGGAGGGAGGGGCTTTAATTGGAGGCCCCGTAGA
GGACGCGCGGAACTTCTAAGGTGGGAAAAAACGAAATTAAAAAATCCTTTGATATCAGGGCTCTGAATCCTGCTG
GTCAGAGCACCAAGCATTCAGTCTCTCTCCTTGCCTTTGTCTTACTTGTGTTCAAAGAAAAACAACCAGAAAAAA
AAAATCTCATCATGGCAAATATTCACCAGGAAAACGAAGAGATGGAGCAGCCTATGCAGAATGGAGAGGAAGACC
GCCCTTTGGGAGGAGGTGAAGGCCACCAGCCTGCAGGAAATCGACGGGGACAGGCTCGCCGACTTGCCCCTAATT
TTCGATGGGCCATACCCAATAGGCAGATCAATGATGGGATGGGTGGAGATGGAGATGATATGGAAATATTCATGG
AGGAGATGAGAGAAATCAGAAGAAAACTTAGGGAGCTGCAGTTGAGGAATTGTCTGCGTATCCTTATGGGGGAGC
TCTCTAATCACCATGACCATCATGATGAATTTTGCCTTATGCCTTGACTCCTGCCATTTATCATGAGATTAATAC
TGTGATTCCCGCTGTTTTCTTTTTCCTTGCATTTTCCTAATATGCCTTTACTGATCCGTTTGCTGTGAACCCTAT
GTTATTTCCATGTGTCAAGTGGGTCTTGTGTTGCCAGCTTCTATTTGAAGATTGCCTTTGCACTCAGTGTAAGTT
TCTGTCAGCAGTAGTTTCACCCATTTGCATGGAAAAATTTAAAGCTAATAAAGCAATTTAAAAAGC

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FIGURE 3347

MANIHQENEEMEQPMQNGEEDRPLGGGEGHQPAGNRRGQARRLAPNFRWAIPNRQINDGMGGDGDDMEIFMEEMR
EIRRKLRELQLRNCLRILMGELSNHHDHHDEFCLMP

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FIGURE 3348

TTCCTTTCCAGCCTCACGCCCGTGGGCTGCAGTTGGAACGATGGCGGCGGCAGCTGCCGCCGGGCCTAGCCCGGG
GTCTGGACCTGGGGACTCCCCAGAAGGGCCCGAGGGGGAGGCTCCGGAGCGTCGGCGGAAGGCGCACGGGATGCT
GAAGCTTTACTACGGCCTCTCGGAAGGGGAGGCGGCGGGACGCCCCGCGGGGCCCGACCCCCTGGACCCGACTGA
TCTGAACGGGGCGCACTTCGACCCGGAAGTTTACCTAGACAAGCTGCGTAGAGAGTGCCCTCTGGCCCAGTTGAT
GGACAGTGAGACGGACATGGTGCGGCAGATCCGGGCTCTAGACAGCGACATGCAGACCCTGGTCTATGAGAACTA
CAACAAGTTCATCTCAGCCACAGACACCATCCGGAAGATGAAGAACGATTTCCGGAAGATGGAGGATGAGATGGA
CCGGCTGGCCACCAACATGGCAGTGATCACCGACTTCAGCGCTCGCATCAGCGCCACGCTGCAGGACCGCCACGA
GCGCATCACCAAGCTGGCAGGGGTCCACGCGCTGCTGCGGAAGCTGCAGTTCCTCTTTGAGCTGCCCTCGCGCCT
CACCAAGTGCGTGGAACTGGGCGCCTATGGGCAGGCGGTGCGCTACCAGGGCCGCGCGCAGGCCGTGCTGCAGCA
GTACCAACACCTGCCCTCGTTCCGCGCCATCCAGGACGACTGCCAGGTCATCACGGCCCGCCTGGCCCAGCAGCT
GCGGCAGCGCTTTAGGGAGGGCGGCTCAGGCGCCCCGGAGCAGGCAGAGTGCGTGGAGCTGCTGCTGGCCCTGGG
CGAGCCTGCGGAGGAGCTGTGCGAGGAGTTCCTGGCGCACGCCCGCGGCCGGCTGGAGAAGGAGCTGAGAAACCT
GGAGGCCGAGCTGGGGCCCTCACCTCCGGCTCCCGACGTGTTAGAGTTCACCGACCATGGAGGCAGTGGCTTCGT
GGGCGGCCTCTGCCAGGTGGCGGCGGCCTACCAGGAGCTGTTTGCGGCCCAGGGCCCAGCAGGTGCCGAGAAGCT
GGCGGCCTTCGCCCGGCAGCTGGGCAGCCGCTATTTTGCGCTGGTGGAGCGGCGGCTGGCGCAGGAGCAGGGTGG
TGGTGACAACTCACTGCTGGTGCGGGCGCTGGACCGCTTCCACCGGCGCTTGCGGGCTCCCGGGGCCCTGCTGGC
CGCTGCCGGGCTCGCAGACGCTGCCACGGAGATCGTGGAACGAGTGGCCCGCGAGCGCCTGGGCCACCACCTGCA
GGGTCTCCGGGCGGCCTTCCTGGGCTGCCTGACAGACGTCCGCCAGGCGCTGGCAGCACCTCGCGTGGCTGGGAA
GGAGGGCCCTGGCCTGGCCGAGTTGCTGGCCAATGTGGCCAGCTCCATCCTGAGCCACATTAAGGCCTCTCTGGC
AGCAGTGCACCTTTTCACCGCCAAAGAGGTGTCCTTCTCCAACAAGCCCTACTTCCGGGGTGAGTTCTGCAGTCA
GGGTGTCCGTGAGGGCCTCATCGTGGGCTTCGTCCACTCTATGTGCCAGACGGCTCAGAGCTTCTGCGACAGCCC
TGGGGAGAAGGGGGGTGCCACACCACCTGCCCTGCTCCTGCTGCTCTCCCGCCTCTGCCTGGACTACGAGACGGC
CACCATCTCCTACATCCTCACTCTCACTGATGAACAGTTTCTGGTGCAGGATCAGTTCCCAGTGACGCCCGTGAG
CACGCTGTGTGCAGAGGCCAGGGAAACGGCGCGGCGGCTGCTGACCCACTACGTGAAGGTGCAGGGCCTGGTCAT
ATCACAGATGCTGCGCAAGAGCGTGGAGACTCGCGACTGGCTCAGCACTCTGGAGCCCCGGAATGTGCGGGCCGT
CATGAAGCGGGTGGTGGAGGATACCACCGCCATCGACGTGCAGGTGGGGCTCCTGTACGAAGAGGGTGTTCGCAA
GGCCCAGAGCAGCGACTCCAGCAAGAGGACTTTCTCCGTGTACAGCAGCTCTCGGCAGCAGGGCCGCTACGCCCC
CAGCTATACCCCCAGTGCCCCGATGGACACCAACCTCTTGAGCAATATCCAGAAGCTATTCTCTGAACGTATTGA
TGTGTTCAGCCCTGTGGAGTTCAACAAGGTGTCGGTGCTGACCGGCATCATCAAGATCAGCCTGAAGACGCTGCT
GGAGTGTGTGCGGCTGCGCACCTTTGGGCGCTTCGGGCTGCAGCAGGTGCAAGTGGACTGCCACTTTCTGCAGCT
CTACCTGTGGCGTTTTGTGGCCGACGAAGAACTCGTGCACTTGCTGCTGGACGAAGTGGTGGCCTCTGCTGCCCT
GCGCTGCCCAGACCCTGTGCCCATGGAGCCCAGTGTGGTTGAGGTCATCTGCGAGCGCGGCTAGGCGCAGCCGCT
GCCATGCACCGGTCTGTCCCTGCACCCCATGGCACCCAGGATCTGGTCTCGGTGGTCCTTCCCCGCAGGCAGGTG
TCAGGACCGGCCTAATAAACATGTGTGGCCTCCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3349

MAAAAAAGPSPGSGPGDSPEGPEGEAPERRRKAHGMLKLYYGLSEGEAAGRPAGPDPLDPTDLNGAHFDPEVYLD
KLRRECPLAQLMDSETDMVRQIRALDSDMQTLVYENYNKFISATDTIRKMKNDFRKMEDEMDRLATNMAVITDFS
ARISATLQDRHERITKLAGVHALLRKLQFLFELPSRLTKCVELGAYGQAVRYQGRAQAVLQQYQHLPSFRAIQDD
CQVITARLAQQLRQRFREGGSGAPEQAECVELLLALGEPAEELCEEFLAHARGRLEKELRNLEAELGPSPPAPDV
LEFTDHGGSGFVGGLCQVAAAYQELFAAQGPAGAEKLAAFARQLGSRYFALVERRLAQEQGGGDNSLLVRALDRF
HRRLRAPGALLAAAGLADAATEIVERVARERLGHHLQGLRAAFLGCLTDVRQALAAPRVAGKEGPGLAELLANVA
SSILSHIKASLAAVHLFTAKEVSFSNKPYFRGEFCSQGVREGLIVGFVHSMCQTAQSFCDSPGEKGGATPPALLL
LLSRLCLDYETATISYILTLTDEQFLVQDQFPVTPVSTLCAEARETARRLLTHYVKVQGLVISQMLRKSVETRDW
LSTLEPRNVRAVMKRVVEDTTAIDVQVGLLYEEGVRKAQSSDSSKRTFSVYSSSRQQGRYAPSYTPSAPMDTNLL
SNIQKLFSERIDVFSPVEFNKVSVLTGIIKISLKTLLECVRLRTFGRFGLQQVQVDCHFLQLYLWRFVADEELVH
LLLDEVVASAALRCPDPVPMEPSVVEVICERG

FIGURE 3350

GAAGTCCTGGTAATCTGGTCCTTGTTCCCGTCTGGATACCAGCTTCCTTCAGCAGCGCAGGCGGTCGGTCCCTGA
GGCCCGTGGAAGGAGTCAAACTTGCGGGAATTTTGCAGTTTATCTGCAGGGCTGTTGTTTCCAGCAAGACCCAAA
GCTAGAAAAGGAGGAGGAAGAAACTGACCCGATCAGTGCCAGAAGTCATTGTATTCAAAGAAGAATAAGCAAGAA
AGAAAAGAAGGAAGGAAGAGAGGTAGACAGATACAAGATGAAATCCTGTCAAAAAATGGAAGGAAAACCAGAAAA
TGAGAGTGAACCAAAGCATGAGGAAGAGCCAAAGCCTGAGGAAAAGCCAGAAGAGGAGGAGAAGCTAGAGGAGGA
GGCCAAAGCAAAAGGAACTTTTAGAGAAAGGCTGATTCAATCTCTCCAGGAGTTTAAAGAAGATATACACAACAG
GCATTTAAGCAATGAAGATATGTTTAGAGAAGTGGATGAAATAGATGAGATAAGGAGAGTCAGAAACAAACTTAT
AGTGATGCGTTGGAAGGTTAATCGAAACCATCCTTACCCCTATTTAATGTAGTTTACCTTGATTTTTATCTGATA
TTAACAATACCATATAGCTTGCTTTTTATTAGCATTTCCTGATATTCCTTTGTCCATATTTCTACTTATAACCTG
TTGCTATTAATGGTTTTAGATGTATCTCTTGTTATCTGCATCTCATTGTTTATTGTATTTTGAACCAATCTACAA
GTCTCTGTCTTTTAATAAAAGAACTTTACACATTTGTAAAAAAGAGGTTCTTGGTAAGATATAAAATGGAAAAAG
GCTAAGTAATATGTGAATATCATATTTTTGAAAGGTAAAAAGTACATTTGTATATTACATATATGGACATAACTT
GTGAAGGATGAAAGAAAGTCAGCCTCTCGGTGGTGGGATTATGAATGATTTTTCTCCTTTTGCTTGTTAGTATTT
TCTATATTCTAAAATTAACACACATTATTATAGCTAGAATATAAAAGTTTTATAAAAAAAAAA

FIGURE 3351

MKSCQKMEGKPENESEPKHEEEPKPEEKPEEEEKLEEEAKAKGTFRERLIQSLQEFKEDIHNRHLSNEDMFREVD
EIDEIRRVRNKLIVMRWKVNRNHPYPYLM

FIGURE 3352

CGGCGACTGACCGTGGTCGTGGGCGGACGGCGGCTTGCAGCGTGGAGGAGCTGGGGTCGCTGTGGGTCGCGAAGC
AGAGCCCGGGACGTGCGCGCTTGGTGCACGATCCTGAAGGGGAGCTCCGAGGGGCCCGGGTCGCCAGGGCTGCTG
CGGCCATTCCCGGAGCCCGGCGCGGGGCCCGCGAGATACTGGTTTAGGCCGTCCCAGGGCTCCGGGCGCACCCGG
TGGCCGCTGCTGCAGCGGAGGGAGCGCGGCGGCGCGGGGGCTCGGAGACAGCGTTTCTCCCGGAAGTCTTCCTCG
GGCAGCAGGTGGGAAGTGGGAGCCGGAGCGGCAGCTGGCAGCGTTCTCTCCGCAGGTCGGCACC**ATG**CGCCCTGC
AGCCCTGCGCGGGGCCCTGCTGGGCTGCCTCTGCCTGGCGTTGCTTTGCCTGGGCGGTGCGGACAAGCGCCTGCG
TGACAACCATGAGTGGAAAAAACTAATTATGGTTCAGCACTGGCCTGAGACAGTATGCGAGAAAATTCAAAACGA
CTGTAGAGACCCTCCGGATTACTGGACAATACATGGACTATGGCCCGATAAAAGTGAAGGATGTAATAGATCGTG
GCCCTTCAATTTAGAAGAGATTAAGGATCTTTTGCCAGAAATGAGGGCATACTGGCCTGACGTAATTCACTCGTT
TCCCAATCGCAGCCGCTTCTGGAAGCATGAGTGGGAAAAGCATGGGACCTGCGCCGCCCAGGTGGATGCGCTCAA
CTCCCAGAAGAAGTACTTTGGCAGAAGCCTGGAACTCTACAGGGAGCTGGACCTCAACAGTGTGCTTCTAAAATT
GGGGATAAAACCATCCATCAATTACTACCAAGTTGCAGATTTTAAAGATGCCCTTGCCAGAGTATATGGAGTGAT
ACCCAAAATCCAGTGCCTTCCACCAAGCCAGGATGAGGAAGTACAGACAATTGGTCAGATAGAACTGTGCCTCAC
TAAGCAAGACCAGCAGCTGCAAAACTGCACCGAGCCGGGGGAGCAGCCGTCCCCCAAGCAGGAAGTCTGGCTGGC
AAATGGGGCCGCCGAGAGCCGGGGTCTGAGAGTCTGTGAAGATGGCCCAGTCTTCTATCCCCCACCTAAAAAGAC
CAAGCAT**TGA**TGCCCAAGTTTTGGAAATATTCTGTTTTAAAAAGCAAGAGAAATTCACAAACTGCAG

FIGURE 3353

MRPAALRGALLGCLCLALLCLGGADKRLRDNHEWKKLIMVQHWPETVCEKIQNDCRDPPDYWTIHGLWPDKSEGC
NRSWPFNLEEIKDLLPEMRAYWPDVIHSFPNRSRFWKHEWEKHGTCAAQVDALNSQKKYFGRSLELYRELDLNSV
LLKLGIKPSINYYQVADFKDALARVYGVIPKIQCLPPSQDEEVQTIGQIELCLTKQDQQLQNCTEPGEQPSPKQE
VWLANGAAESRGLRVCEDGPVFYPPPKKTKH

FIGURE 3354

CGGCGACTGACCGTGGTCGTGGGCGGACGGCGGCTTGCAGCGTGGAGGAGCTGGGGTCGCTGTGGGTCGCGAAGC
AGAGCCCGGGACGTGCGCGCTTGGTGCACGATCCTGAAGGGGAGCTCCGAGGGGCCCGGGTCGCCAGGGCTGCTG
CGGCCATTCCCGGAGCCCGGCGCGGGGCCCGCGAGATACTGGTTTAGGCCGTCCCAGGGCTCCGGGCGCACCCGG
TGGCCGCTGCTGCAGCGGAGGGAGCGCGGCGGCGCGGGGGCTCGGAGACAGCGTTTCTCCCGGAAGTCTTCCTCG
GGCAGCAGGTGGGAAGTGGGAGCCGGAGCGGCAGCTGGCAGCGTTCTCTCCGCAGGTCGGCACC**ATG**CGCCCTGC
AGCCCTGCGCGGGGCCCTGCTGGGCTGCCTCTGCCTGGCGTTGCTTTGCCTGGGCGGTGCGGACAAGCGCCTGCG
TGACAACCATGAGTGGAAAAAACTAATTATGGTTCAGCACTGGCCTGAGACAGTATGCGAGAAAATTCAAAACGA
CTGTAGAGACCCTCCGGATTACTGGACAATACATGGACTATGGCCCGATAAAAGTGAAGGATGTAATAGATCGTG
GCCCTTCAATTTAGAAGAGATTAAGGATCTTTTGCCAGAAATGAGGGCATACTGGCCTGACGTAATTCACTCGTT
TCCCAATCGCAGCCGCTTCTGGAAGCATGAGTGGGAAAAGCATGGGACCTGCGCCGCCCAGGTGGATGCGCTCAA
CTCCCAGAAGAAGTACTTTGGCAGAAGCCTGGAACTCTACAGGGAGCTGGACCTCAACAGTGTGCTTCTAAAATT
GGGGATAAAACCATCCATCAATTACTACCAAGTTGCAGATTTTAAAGATGCCCTTGCCAGAGTATATGGAGTGAT
ACCCAAAATCCAGTGCCTTCCACCAAGCCAGGATGAGGAAGTACAGACAATTGGTCAGATAGAACTGTGCCTCAC
TAAGCAAGACCAGCAGCTGCAAAACTGCACCGAGCCGGGGGAGCAGCCGTCCCCCAAGCAGGAAGTCTGGCTGGC
AAATGGGGCCGCCGAGAGCCGGGGTCTGAGAGTCTGTGAAGATGGCCCAGTCTTCTATCCCCCACCTAAAAAGAC
CAAGCAT**TGA**TGCCCAAGTTTTGGAAATATTCTGTTTTAAAAAGCAAGAGAAATTCACAAACTGCAG

FIGURE 3355

MRPAALRGALLGCLCLALLCLGGADKRLRDNHEWKKLIMVQHWPETVCEKIQNDCRDPPDYWTIHGLWPDKSEGC
NRSWPFNLEEIKDLLPEMRAYWPDVIHSFPNRSRFWKHEWEKHGTCAAQVDALNSQKKYFGRSLELYRELDLNSV
LLKLGIKPSINYYQVADFKDALARVYGVIPKIQCLPPSQDEEVQTIGQIELCLTKQDQQLQNCTEPGEQPSPKQE
VWLANGAAESRGLRVCEDGPVFYPPPKKTKH

FIGURE 3356A

CTTTTCCCATCGTGTAGTCAAGAGTCTGTGCCAGACTTGAAGGCTTTACTTTGTTAGCCATGTGTTTATGAACCC
CCAGCGCTTTCCCTAGATCTTTTGGCTGATAATCTCAAACATGGAGGATGCTTCTGAATCTTCACGAGGGGTTGC
TCCATTAATTAATAATGTAGTTCTCCCAGGCTCTCCGCTGTCTCTTCCTGTATCAGTGACAGGCTGTAAAAGTCA
TCGAGTAGCCAATAAAAAGGTAGAAGCGAGGAGTGAAAAGCTCCTCCCAACAGCTCTTCCTCCTTCAGAGCCGAA
AGTAGATCAGAAACTTCCCAGGAGCTCCGAGAGGCGGGGAAGTGGCGGTGGGACGCAATTCCCCGCGCGGAGTCG
GGCAGTGGCAGCGGGAGAAGCGGCAGCCAGGGGCGCGGCGGGGCCGGAGAGAGGCAGTCCCCTGGGAAGACGGGT
CTCCCCTCGTTGCCTTTGTAGTGGAGAAGGTGGACAAGTGGCAGTCGGCGTGATCGCAGGGAAGCGGGGCCGGCG
CGGGCGCGACGGGTCCAGGCGAGCCCCGGGCGGACGGGAGATGCCGCTGCTACACCGAAAGCCGTTTGTGAGACA
GAAGCCGCCCGCGGACCTGCGGCCCGACGAGGAAGTTTTCTACTGTAAAGTCACCAACGAGATCTTCCGCCACTA
CGATGACTTTTTTGAACGAACCATTCTGTGCAACAGCCTTGTGTGGAGTTGTGCTGTGACGGGTAGACCTGGACT
GACGTATCAGGAAGCACTTGAGTCAGAAAAAAAAGCAAGACAGAATCTTCAGAGTTTTCCAGAACCACTAATTAT
TCCAGTTTTATACTTGACCAGCCTTACCCATCGTTCGCGCTTACATGAAATTTGTGATGATATCTTTGCATATGT
CAAGGATCGATATTTTGTCGAAGAAACTGTGGAAGTCATTAGGAACAATGGTGCAAGGTTGCAGTGTACGATTTT
GGAAGTCCTCCCTCCATCACATCAAAATGGTTTTGCTAATGGACATGTTAACAGTGTGGATGGAGAAACTATTAT
CATCAGTGATAGTGATGATTCAGAAACACAAAGCTGTTCTTTTCAAAATGGGAAGAAAAAAGATGCAATTGATCC
CTTACTATTCAAGTATAAAGTGCAACCCACTAAAAAAGAATTACATGAGTCTGCTATTGTTAAAGCAACACAAAT
CAGCCGGAGAAAACACCTATTTTCTCGTGATAAACTAAAGCTTTTTCTGAAGCAACACTGTGAACCACAAGAAGG
AGTCATTAAAATAAAGGCATCATCTCTTTCAACGTATAAAATAGCAGAACAAGATTTTTCTTATTTCTTCCCTGA
TGATCCACCCACATTTATCTTCAGTCCTGCTAACAGACGAAGAGGGAGACCTCCCAAACGAATACATATTAGTCA
AGAGGACAATGTTGCTAATAAACAGACTCTTGCAAGTTATAGGAGCAAAGCTACTAAAGAAAGAGATAAACTTTT
GAAACAAGAAGAAATGAAGTCACTGGCTTTTGAAAAGGCTAAATTAAAAAGAGAAAAAGCAGATGCCCTAGAAGC
GAAGAAAAAAGAAAAAGAAGATAAAGAGAAAAAGAGGGAAGAATTGAAAAAAATTGTTGAAGAAGAGAGACTAAA
GAAAAAAGAAGAAAAAGAGAGGCTTAAAGTAGAAAGAGAAAAGGAAAGAGAGAAGTTACGTGAAGAAAAGCGAAA
GTATGTGGAATACTTAAAACAGTGGAGTAAACCTAGAGAAGATATGGAATGTGATGACCTTAAGGAACTTCCAGA
ACCAACACCAGTGAAAACTAGACTACCTCCTGAAATCTTTGGTGATGCTCTGATGGTTTTGGAGTTCCTTAATGC
ATTTGGGGAACTTTTTGATCTTCAAGATGAGTTTCCTGATGGAGTAACCCTAGAAGTATTAGAGGAAGCTCTTGT
TGGAAATGACAGTGAAGGCCCACTGTGTGAATTGCTTTTTTTCTTCCTGACTGCAATCTTCCAGGCAATAGCTGA
AGAAGAAGAGGAAGTAGCCAAAGAGCAACTAACTGATGCTGACACCAAAGGCTGCAGTTTGAAAAGTTTGGATCT
TGATAGCTGCACTCTTTCAGAAATCCTCAGACTGCACATCTTAGCTTCAGGTGCTGATGTAACATCAGCAAATGC
AAAGTATAGATATCAAAAACGAGGAGGATTTGATGCTACAGATGATGCTTGTATGGAGCTTCGTTTGAGCAATCC
CAGTCTAGTGAAGAAACTGTCAAGCACCTCAGTGTATGATTTGACACCAGGAGAAAAAATGAAGATACTCCATGC
TCTCTGTGGAAAGCTACTGACCCTAGTTTCAACTAGGGATTTTATTGAAGATTATGTTGATATATTACGACAGGC
AAAGCAGGAGTTCCGGGAATTAAAAGCAGAACAACATCGAAAAGAGAGGGAAGAAGCAGCTGCCAGAATTCGTAA
AAGGAAGGAAGAAAAACTTAAGGAGCAAGAACAAAAAATGAAAGAGAAACAAGAAAAACTGAAAGAAGATGAGCA
AAGAAATTCAACGGCAGATATATCTATTGGGGAGGAAGAAAGGGAAGATTTTGATACTAGCATTGAGAGCAAAGA
CACAGAGCAAAAGGAATTAGATCAAGATATGTTCACTGAAGATGAAGATGACCCAGGATCACATAAAAGAGGCAG
AAGGGGGAAAAGAGGACAAAATGGATTTAAAGAATTTACAAGGCAAGAACAGATCAACTGTGTAACAAGAGAGCT
TCTTACTGCTGATGAGGAAGAAGCATTAAAACAGGAACACCAACGAAAAGAGAAAGAGCTCTTAGAAAAAATCCA
AAGTGCCATAGCCTGTACCAATATCTTTCCCTTGGGTCGCGACCGCATGTATAGACGATACTGGATTTTCCCTTC
TATTCCTGGACTCTTTATTGAAGAGGATTATTCTGGTCTTACTGAAGACATGCTGTTGCCTAGACCTTCATCATT
TCAGAATAATGTACAGTCTCAAGATCCTCAGGTATCCACTAAAACTGGAGAGCCTTTGATGTCTGAATCTACCTC
CAACATTGACCAAGGTCCACGTGACCATTCTGTGCAGCTGCCAAAACCAGTGCATAAGCCAAATCGGTGGTGCTT
TTACAGTTCTTGTGAACAGCTAGACCAGCTTATTGAAGCTCTTAATTCTAGAGGACATAGAGAAAGTGCCTTAAA
AGAAACTTTGTTACAAGAGAAAAGCAGAATATGTGCACAGCTAGCCCGTTTTTCTGAAGAGAAATTTCATTTTTC
AGACAAACCTCAGCCTGATAGCAAACCAACATATAGTCGGGGAAGATCTTCCAATGCATATGATCCATCTCAGAT
GTGTGCAGAAAAGCAACTTGAACTAAGGCTGAGAGATTTTCTTTTAGATATTGAAGATAGAATCTACCAAGGAAC
ATTAGGAGCCATCAAGGTTACAGATCGACATATCTGGAGATCAGCATTAGAAAGTGGACGGTATGAGCTGTTAAG
TGAGGAAAACAAGGAAAATGGGATAATTAAAACTGTGAATGAAGACGTAGAAGAGATGGAAATTGATGAACAAAC

FIGURE 3356B

AAAGGTCATAGTAAAAGACAGACTTTTGGGGATAAAAACAGAAACTCCAAGTACTGTATCAACAAATGCAAGTAC
ACCACAATCAGTGAGCAGTGTGGTTCATTATCTGGCAATGGCACTCTTTCAAATAGAGCAGGGCATTGAGCGGCG
TTTTCTGAAAGCTCCACTTGATGCCAGTGACAGTGGGCGTTCTTATAAAACAGTTCTGGACCGTTGGAGAGAGTC
TCTCCTTTCTTCTGCTAGTCTATCCCAAGTTTTTCTTCACCTATCCACCTTGGATCGTAGCGTGATATGGTCTAA
ATCTATACTGAATGCGCGTTGCAAGATATGTCGAAAGAAAGGCGATGCTGAAAACATGGTTCTTTGTGATGGCTG
TGATAGGGGTCATCATACCTACTGTGTTCGACCAAAGCTCAAGACTGTGCCTGAAGGAGACTGGTTTTGTCCAGA
ATGTCGACCAAAGCAACGTTGTAGAAGACTGTCCTTTAGACAGAGACCATCCTTGGAAAGTGATGAAGATGTGGA
AGACAGTATGGGAGGTGAGGATGATGAAGTTGATGGCGATGAAGAAGAAGGTCAAAGTGAGGAGGAAGAGTATGA
GGTAGAACAAGATGAAGATGACTCTCAAGAAGAGGAAGAAGTCAGCCTACCCAAACGAGGAAGACCACAAGTTAG
ATTGCCAGTTAAAACAAGAGGGAAACTTAGCTCTTCTTTCTCAAGTCGTGGCCAACAACAAGAACCTGGAAGATA
CCCTTCCAGGAGTCAGCAGAGCACACCCAAAACAACTGTTTCTTCTAAAACTGGTAGAAGCCTAAGAAAGATAAA
CTCTGCTCCTCCTACAGAAACAAAATCTTTAAGAATTGCCAGTCGTTCTACTCGCCACAGTCATGGCCCACTGCA
AGCAGATGTATTTGTGGAATTGCTTAGTCCTCGTAGAAAACGCAGAGGCAGGAAAAGTGCTAATAATACACCAGA
AAATAGTCCCAACTTCCCTAACTTCAGAGTCATTGCCACAAAGTCAAGTGAACAGTCAAGATCTGTAAATATTGC
TTCAAAACTTTCTCTCCAAGAGAGTGAATCCAAAAGAAGATGCAGAAAAAGACAATCTCCAGAGCCATCGCCTGT
GACACTGGGTCGAAGGAGTTCTGGCCGACAGGGAGGAGTTCATGAATTGTCTGCTTTTGAACAACTTGTTGTAGA
ATTGGTACGACATGATGACAGCTGGCCTTTTTTGAAACTTGTTTCTAAAATCCAGGTCCCAGACTACTATGACAT
CATCAAAAAGCCCATTGCCTTAAATATAATTCGTGAAAAAGTGAATAAGTGTGAATATAAATTAGCATCTGAGTT
TATTGATGACATTGAGTTAATGTTTTCGAACTGCTTTGAATACAACCCTCGTAACACAAGTGAAGCAAAAGCTGG
AACTAGGCTTCAAGCATTTTTTCATATTCAGGCTCAAAAGCTTGGACTCCACGTCACACCCAGTAATGTGGACCA
AGTTAGCACACCACCGGCTGCGAAAAAGTCACGAATC**TGA**CTTTGTCCTTCTAAAGGATATATTTGAAGAAAAAC
AAATTGTTCATGAAAATGGAACATTAAATCATGCTGTATAAAGCAATAACAAACAATTGATTGACCACATGAAAG
TGTGGCCTGCACTATATTCTCAATTTTAATATTAAGCACTCAGGAGAATGTAGGAAAGATATCCTTTGCTACAGT
TTTGTTCAGTATCTAATAAGTTTGATAGATGTATTGGATACAGTACTGGTTTACAGAGGTTTTTGTACATTTTTG
AXATCATTCATGTGTCCAGAGATCTTGGAAAATATTTTTTCACCCACGATTTATTTTGTTATTGATGATTTATTT
TTAAAGTGGTGGTATTAAGGGAGAGTTATCTACATGGATGAGTCTTCCGCTATAGCACAGTTTAGAAAAGGTGTT
TATGTCTTAATTAATTGTTTGAGTACATTCTTTCAACACTACACATGAATGAATCCAATCTTATAACCTTGAAGT
GCTGTACCAGTGCTGGCTGCAGGTATTAAGTCCAAGTTTATTAACTAGATATTTATTTAGTATTGAGAGTAATTT
GTGAATTTGTTTTGTATTTATAAAATTTATACCTGGAAAATGTTCCTTAATGTTTTAAACCTTTTACTGTGTTTT
TATTCCTCTAACTTCCTTAATGATCAATCAAAAAAAGTAACACCCTCCCTTTTTCCTGACAGTTCTTTCAGCTTT
ACAGAACTGTATTATAAGTTCTATGTATAATTTTAACTGTTCAAATAAAATACATTTTTCCAATAAAAAAAAAAA

FIGURE 3357

MEDASESSRGVAPLINNVVLPGSPLSLPVSVTGCKSHRVANKKVEARSEKLLPTALPPSEPKVDQKLPRSSERRG
SGGGTQFPARSRAVAAGEAAARGAAGPERGSPLGRRVSPRCLCSGEGGQVAVGVIAGKRGRRGRDGSRRAPGGRE
MPLLHRKPFVRQKPPADLRPDEEVFYCKVTNEIFRHYDDFFERTILCNSLVWSCAVTGRPGLTYQEALESEKKAR
QNLQSFPEPLIIPVLYLTSLTHRSRLHEICDDIFAYVKDRYFVEETVEVIRNNGARLQCTILEVLPPSHQNGFAN
GHVNSVDGETIIISDSDDSETQSCSFQNGKKKDAIDPLLFKYKVQPTKKELHESAIVKATQISRRKHLFSRDKLK
LFLKQHCEPQEGVIKIKASSLSTYKIAEQDFSYFFPDDPPTFIFSPANRRRGRPPKRIHISQEDNVANKQTLASY
RSKATKERDKLLKQEEMKSLAFEKAKLKREKADALEAKKKEKEDKEKKREELKKIVEEERLKKKEEKERLKVERE
KEREKLREEKRKYVEYLKQWSKPREDMECDDLKELPEPTPVKTRLPPEIFGDALMVLEFLNAFGELFDLQDEFPD
GVTLEVLEEALVGNDSEGPLCELLFFFLTAIFQAIAEEEEEVAKEQLTDADTKGCSLKSLDLDSCTLSEILRLHI
LASGADVTSANAKYRYQKRGGFDATDDACMELRLSNPSLVKKLSSTSVYDLTPGEKMKILHALCGKLLTLVSTRD
FIEDYVDILRQAKQEFRELKAEQHRKEREEAAARIRKRKEEKLKEQEQKMKEKQEKLKEDEQRNSTADISIGEEE
REDFDTSIESKDTEQKELDQDMFTEDEDDPGSHKRGRRGKRGQNGFKEFTRQEQINCVTRELLTADEEEALKQEH
QRKEKELLEKIQSAIACTNIFPLGRDRMYRRYWIFPSIPGLFIEEDYSGLTEDMLLPRPSSFQNNVQSQDPQVST
KTGEPLMSESTSNIDQGPRDHSVQLPKPVHKPNRWCFYSSCEQLDQLIEALNSRGHRESALKETLLQEKSRICAQ
LARFSEEKFHFSDKPQPDSKPTYSRGRSSNAYDPSQMCAEKQLELRLRDFLLDIEDRIYQGTLGAIKVTDRHIWR
SALESGRYELLSEENKENGIIKTVNEDVEEMEIDEQTKVIVKDRLLGIKTETPSTVSTNASTPQSVSSVVHYLAM
ALFQIEQGIERRFLKAPLDASDSGRSYKTVLDRWRESLLSSASLSQVFLHLSTLDRSVIWSKSILNARCKICRKK
GDAENMVLCDGCDRGHHTYCVRPKLKTVPEGDWFCPECRPKQRCRRLSFRQRPSLESDEDVEDSMGGEDDEVDGD
EEEGQSEEEEYEVEQDEDDSQEEEEVSLPKRGRPQVRLPVKTRGKLSSSFSSRGQQQEPGRYPSRSQQSTPKTTV
SSKTGRSLRKINSAPPTETKSLRIASRSTRHSHGPLQADVFVELLSPRRKRRGRKSANNTPENSPNFPNFRVIAT
KSSEQSRSVNIASKLSLQESESKRRCRKRQSPEPSPVTLGRRSSGRQGGVHELSAFEQLVVELVRHDDSWPFLKL
VSKIQVPDYYDIIKKPIALNIIREKVNKCEYKLASEFIDDIELMFSNCFEYNPRNTSEAKAGTRLQAFFHIQAQK
LGLHVTPSNVDQVSTPPAAKKSRI

FIGURE 3358A

CTTTTCCCATCGTGTAGTCAAGAGTCTGTGCCAGACTTGAAGGCTTTACTTTGTTAGCCATGTGTTTATGAACCC
CCAGCGCTTTCCCTAGATCTTTTGGCTGATAATCTCAAACATGGAGGATGCTTCTGAATCTTCACGAGGGGTTGC
TCCATTAATTAATAATGTAGTTCTCCCAGGCTCTCCGCTGTCTCTTCCTGTATCAGTGACAGGCTGTAAAAGTCA
TCGAGTAGCCAATAAAAAGGTAGAAGCGAGGAGTGAAAAGCTCCTCCCAACAGCTCTTCCTCCTTCAGAGCCGAA
AGTAGATCAGAAACTTCCCAGGAGCTCCGAGAGGCGGGGAAGTGGCGGTGGGACGCAATTCCCCGCGCGGAGTCG
GGCAGTGGCAGCGGGAGAAGCGGCAGCCAGGGGCGCGGCGGGGCCGGAGAGAGGCAGTCCCCTGGGAAGACGGGT
CTCCCCTCGTTGCCTTTGTAGTGGAGAAGGTGGACAAGTGGCAGTCGGCGTGATCGCAGGGAAGCGGGGCCGGCG
CGGGCGCGACGGGTCCAGGCGAGCCCCGGGCGGACGGGAGATGCCGCTGCTACACCGAAAGCCGTTTGTGAGACA
GAAGCCGCCCGCGGACCTGCGGCCCGACGAGGAAGTTTTCTACTGTAAAGTCACCAACGAGATCTTCCGCCACTA
CGATGACTTTTTTGAACGAACCATTCTGTGCAACAGCCTTGTGTGGAGTTGTGCTGTGACGGGTAGACCTGGACT
GACGTATCAGGAAGCACTTGAGTCAGAAAAAAAAGCAAGACAGAATCTTCAGAGTTTTCCAGAACCACTAATTAT
TCCAGTTTTATACTTGACCAGCCTTACCCATCGTTCGCGCTTACATGAAATTTGTGATGATATCTTTGCATATGT
CAAGGATCGATATTTTGTCGAAGAAACTGTGGAAGTCATTAGGAACAATGGTGCAAGGTTGCAGTGTACGATTTT
GGAAGTCCTCCCTCCATCACATCAAAATGGTTTTGCTAATGGACATGTTAACAGTGTGGATGGAGAAACTATTAT
CATCAGTGATAGTGATGATTCAGAAACACAAAGCTGTTCTTTTCAAAATGGGAAGAAAAAAGATGCAATTGATCC
CTTACTATTCAAGTATAAAGTGCAACCCACTAAAAAAGAATTACATGAGTCTGCTATTGTTAAAGCAACACAAAT
CAGCCGGAGAAAACACCTATTTTCTCGTGATAAACTAAAGCTTTTTCTGAAGCAACACTGTGAACCACAAGAAGG
AGTCATTAAAATAAAGGCATCATCTCTTTCAACGTATAAAATAGCAGAACAAGATTTTTCTTATTTCTTCCCTGA
TGATCCACCCACATTTATCTTCAGTCCTGCTAACAGACGAAGAGGGAGACCTCCCAAACGAATACATATTAGTCA
AGAGGACAATGTTGCTAATAAACAGACTCTTGCAAGTTATAGGAGCAAAGCTACTAAAGAAAGAGATAAACTTTT
GAAACAAGAAGAAATGAAGTCACTGGCTTTTGAAAAGGCTAAATTAAAAAGAGAAAAAGCAGATGCCCTAGAAGC
GAAGAAAAAAGAAAAAGAAGATAAAGAGAAAAAGAGGGAAGAATTGAAAAAAATTGTTGAAGAAGAGAGACTAAA
GAAAAAAGAAGAAAAAGAGAGGCTTAAAGTAGAAAGAGAAAAGGAAAGAGAGAAGTTACGTGAAGAAAAGCGAAA
GTATGTGGAATACTTAAAACAGTGGAGTAAACCTAGAGAAGATATGGAATGTGATGACCTTAAGGAACTTCCAGA
ACCAACACCAGTGAAAACTAGACTACCTCCTGAAATCTTTGGTGATGCTCTGATGGTTTTGGAGTTCCTTAATGC
ATTTGGGGAACTTTTTGATCTTCAAGATGAGTTTCCTGATGGAGTAACCCTAGAAGTATTAGAGGAAGCTCTTGT
TGGAAATGACAGTGAAGGCCCACTGTGTGAATTGCTTTTTTTCTTCCTGACTGCAATCTTCCAGGCAATAGCTGA
AGAAGAAGAGGAAGTAGCCAAAGAGCAACTAACTGATGCTGACACCAAAGGCTGCAGTTTGAAAAGTTTGGATCT
TGATAGCTGCACTCTTTCAGAAATCCTCAGACTGCACATCTTAGCTTCAGGTGCTGATGTAACATCAGCAAATGC
AAAGTATAGATATCAAAAACGAGGAGGATTTGATGCTACAGATGATGCTTGTATGGAGCTTCGTTTGAGCAATCC
CAGTCTAGTGAAGAAACTGTCAAGCACCTCAGTGTATGATTTGACACCAGGAGAAAAAATGAAGATACTCCATGC
TCTCTGTGGAAAGCTACTGACCCTAGTTTCAACTAGGGATTTTATTGAAGATTATGTTGATATATTACGACAGGC
AAAGCAGGAGTTCCGGGAATTAAAAGCAGAACAACATCGAAAAGAGAGGGAAGAAGCAGCTGCCAGAATTCGTAA
AAGGAAGGAAGAAAAACTTAAGGAGCAAGAACAAAAAATGAAAGAGAAACAAGAAAAACTGAAAGAAGATGAGCA
AAGAAATTCAACGGCAGATATATCTATTGGGGAGGAAGAAAGGGAAGATTTTGATACTAGCATTGAGAGCAAAGA
CACAGAGCAAAAGGAATTAGATCAAGATATGTTCACTGAAGATGAAGATGACCCAGGATCACATAAAAGAGGCAG
AAGGGGGAAAAGAGGACAAAATGGATTTAAAGAATTTACAAGGCAAGAACAGATCAACTGTGTAACAAGAGAGCT
TCTTACTGCTGATGAGGAAGAAGCATTAAAACAGGAACACCAACGAAAAGAGAAAGAGCTCTTAGAAAAAATCCA
AAGTGCCATAGCCTGTACCAATATCTTTCCCTTGGGTCGCGACCGCATGTATAGACGATACTGGATTTTCCCTTC
TATTCCTGGACTCTTTATTGAAGAGGATTATTCTGGTCTTACTGAAGACATGCTGTTGCCTAGACCTTCATCATT
TCAGAATAATGTACAGTCTCAAGATCCTCAGGTATCCACTAAAACTGGAGAGCCTTTGATGTCTGAATCTACCTC
CAACATTGACCAAGGTCCACGTGACCATTCTGTGCAGCTGCCAAAACCAGTGCATAAGCCAAATCGGTGGTGCTT
TTACAGTTCTTGTGAACAGCTAGACCAGCTTATTGAAGCTCTTAATTCTAGAGGACATAGAGAAAGTGCCTTAAA
AGAAACTTTGTTACAAGAGAAAAGCAGAATATGTGCACAGCTAGCCCGTTTTTCTGAAGAGAAATTTCATTTTTC
AGACAAACCTCAGCCTGATAGCAAACCAACATATAGTCGGGGAAGATCTTCCAATGCATATGATCCATCTCAGAT
GTGTGCAGAAAAGCAACTTGAACTAAGGCTGAGAGATTTTCTTTTAGATATTGAAGATAGAATCTACCAAGGAAC
ATTAGGAGCCATCAAGGTTACAGATCGACATATCTGGAGATCAGCATTAGAAAGTGGACGGTATGAGCTGTTAAG
TGAGGAAAACAAGGAAAATGGGATAATTAAAACTGTGAATGAAGACGTAGAAGAGATGGAAATTGATGAACAAAC

FIGURE 3358B

AAAGGTCATAGTAAAAGACAGACTTTTGGGGATAAAAACAGAAACTCCAAGTACTGTATCAACAAATGCAAGTAC
ACCACAATCAGTGAGCAGTGTGGTTCATTATCTGGCAATGGCACTCTTTCAAATAGAGCAGGGCATTGAGCGGCG
TTTTCTGAAAGCTCCACTTGATGCCAGTGACAGTGGGCGTTCTTATAAAACAGTTCTGGACCGTTGGAGAGAGTC
TCTCCTTTCTTCTGCTAGTCTATCCCAAGTTTTTCTTCACCTATCCACCTTGGATCGTAGCGTGATATGGTCTAA
ATCTATACTGAATGCGCGTTGCAAGATATGTCGAAAGAAAGGCGATGCTGAAAACATGGTTCTTTGTGATGGCTG
TGATAGGGGTCATCATACCTACTGTGTTCGACCAAAGCTCAAGACTGTGCCTGAAGGAGACTGGTTTTGTCCAGA
ATGTCGACCAAAGCAACGTTGTAGAAGACTGTCCTTTAGACAGAGACCATCCTTGGAAAGTGATGAAGATGTGGA
AGACAGTATGGGAGGTGAGGATGATGAAGTTGATGGCGATGAAGAAGAAGGTCAAAGTGAGGAGGAAGAGTATGA
GGTAGAACAAGATGAAGATGACTCTCAAGAAGAGGAAGAAGTCAGCCTACCCAAACGAGGAAGACCACAAGTTAG
ATTGCCAGTTAAAACAAGAGGGAAACTTAGCTCTTCTTTCTCAAGTCGTGGCCAACAACAAGAACCTGGAAGATA
CCCTTCCAGGAGTCAGCAGAGCACACCCAAAACAACTGTTTCTTCTAAAACTGGTAGAAGCCTAAGAAAGATAAA
CTCTGCTCCTCCTACAGAAACAAAATCTTTAAGAATTGCCAGTCGTTCTACTCGCCACAGTCATGGCCCACTGCA
AGCAGATGTATTTGTGGAATTGCTTAGTCCTCGTAGAAAACGCAGAGGCAGGAAAAGTGCTAATAATACACCAGA
AAATAGTCCCAACTTCCCTAACTTCAGAGTCATTGCCACAAAGTCAAGTGAACAGTCAAGATCTGTAAATATTGC
TTCAAAACTTTCTCTCCAAGAGAGTGAATCCAAAAGAAGATGCAGAAAAAGACAATCTCCAGAGCCATCGCCTGT
GACACTGGGTCGAAGGAGTTCTGGCCGACAGGGAGGAGTTCATGAATTGTCTGCTTTTGAACAACTTGTTGTAGA
ATTGGTACGACATGATGACAGCTGGCCTTTTTTGAAACTTGTTTCTAAAATCCAGGTCCCAGACTACTATGACAT
CATCAAAAAGCCCATTGCCTTAAATATAATTCGTGAAAAAGTGAATAAGTGTGAATATAAATTAGCATCTGAGTT
TATTGATGACATTGAGTTAATGTTTTCGAACTGCTTTGAATACAACCCTCGTAACACAAGTGAAGCAAAAGCTGG
AACTAGGCTTCAAGCATTTTTTCATATTCAGGCTCAAAAGCTTGGACTCCACGTCACACCCAGTAATGTGGACCA
AGTTAGCACACCACCGGCTGCGAAAAAGTCACGAATCTGACTTTGTCCTTCTAAAGGATATATTTGAAGAAAAAC
AAATTGTTCATGAAAATGGAACATTAAATCATGCTGTATAAAGCAATAACAAACAATTGATTGACCACATGAAAG
TGTGGCCTGCACTATATTCTCAATTTTAATATTAAGCACTCAGGAGAATGTAGGAAAGATATCCTTTGCTACAGT
TTTGTTCAGTATCTAATAAGTTTGATAGATGTATTGGATACAGTACTGGTTTACAGAGGTTTTTGTACATTTTTG
AXATCATTCATGTGTCCAGAGATCTTGGAAAATATTTTTTCACCCACGATTTATTTTGTTATTGATGATTTATTT
TTAAAGTGGTGGTATTAAGGGAGAGTTATCTACATGGATGAGTCTTCCGCTATAGCACAGTTTAGAAAAGGTGTT
TATGTCTTAATTAATTGTTTGAGTACATTCTTTCAACACTACACATGAATGAATCCAATCTTATAACCTTGAAGT
GCTGTACCAGTGCTGGCTGCAGGTATTAAGTCCAAGTTTATTAACTAGATATTTATTTAGTATTGAGAGTAATTT
GTGAATTTGTTTTGTATTTATAAAATTTATACCTGGAAAATGTTCCTTAATGTTTTAAACCTTTTACTGTGTTTT
TATTCCTCTAACTTCCTTAATGATCAATCAAAAAAAGTAACACCCTCCCTTTTTCCTGACAGTTCTTTCAGCTTT
ACAGAACTGTATTATAAGTTCTATGTATAATTTTAACTGTTCAAATAAAATACATTTTTCCAATAAAAAAAAAAA

FIGURE 3359

MEDASESSRGVAPLINNVVLPGSPLSLPVSVTGCKSHRVANKKVEARSEKLLPTALPPSEPKVDQKLPRSSERRG
SGGGTQFPARSRAVAAGEAAARGAAGPERGSPLGRRVSPRCLCSGEGGQVAVGVIAGKRGRRGRDGSRRAPGGRE
MPLLHRKPFVRQKPPADLRPDEEVFYCKVTNEIFRHYDDFFERTILCNSLVWSCAVTGRPGLTYQEALESEKKAR
QNLQSFPEPLIIPVLYLTSLTHRSRLHEICDDIFAYVKDRYFVEETVEVIRNNGARLQCTILEVLPPSHQNGFAN
GHVNSVDGETIIISDSDDSETQSCSFQNGKKKDAIDPLLFKYKVQPTKKELHESAIVKATQISRRKHLFSRDKLK
LFLKQHCEPQEGVIKIKASSLSTYKIAEQDFSYFFPDDPPTFIFSPANRRRGRPPKRIHISQEDNVANKQTLASY
RSKATKERDKLLKQEEMKSLAFEKAKLKREKADALEAKKKEKEDKEKKREELKKIVEEERLKKKEEKERLKVERE
KEREKLREEKRKYVEYLKQWSKPREDMECDDLKELPEPTPVKTRLPPEIFGDALMVLEFLNAFGELFDLQDEFPD
GVTLEVLEEALVGNDSEGPLCELLFFFLTAIFQAIAEEEEEVAKEQLTDADTKGCSLKSLDLDSCTLSEILRLHI
LASGADVTSANAKYRYQKRGGFDATDDACMELRLSNPSLVKKLSSTSVYDLTPGEKMKILHALCGKLLTLVSTRD
FIEDYVDILRQAKQEFRELKAEQHRKEREEAAARIRKRKEEKLKEQEQKMKEKQEKLKEDEQRNSTADISIGEEE
REDFDTSIESKDTEQKELDQDMFTEDEDDPGSHKRGRRGKRGQNGFKEFTRQEQINCVTRELLTADEEEALKQEH
QRKEKELLEKIQSAIACTNIFPLGRDRMYRRYWIFPSIPGLFIEEDYSGLTEDMLLPRPSSFQNNVQSQDPQVST
KTGEPLMSESTSNIDQGPRDHSVQLPKPVHKPNRWCFYSSCEQLDQLIEALNSRGHRESALKETLLQEKSRICAQ
LARFSEEKFHFSDKPQPDSKPTYSRGRSSNAYDPSQMCAEKQLELRLRDFLLDIEDRIYQGTLGAIKVTDRHIWR
SALESGRYELLSEENKENGIIKTVNEDVEEMEIDEQTKVIVKDRLLGIKTETPSTVSTNASTPQSVSSVVHYLAM
ALFQIEQGIERRFLKAPLDASDSGRSYKTVLDRWRESLLSSASLSQVFLHLSTLDRSVIWSKSILNARCKICRKK
GDAENMVLCDGCDRGHHTYCVRPKLKTVPEGDWFCPECRPKQRCRRLSFRQRPSLESDEDVEDSMGGEDDEVDGD
EEEGQSEEEEYEVEQDEDDSQEEEEVSLPKRGRPQVRLPVKTRGKLSSSFSSRGQQQEPGRYPSRSQQSTPKTTV
SSKTGRSLRKINSAPPTETKSLRIASRSTRHSHGPLQADVFVELLSPRRKRRGRKSANNTPENSPNFPNFRVIAT
KSSEQSRSVNIASKLSLQESESKRRCRKRQSPEPSPVTLGRRSSGRQGGVHELSAFEQLVVELVRHDDSWPFLKL
VSKIQVPDYYDIIKKPIALNIIREKVNKCEYKLASEFIDDIELMFSNCFEYNPRNTSEAKAGTRLQAFFHIQAQK
LGLHVTPSNVDQVSTPPAAKKSRI

FIGURE 3360

GAATTCCGAGCTTTTTATTCCTAAGAGGAGAAAATCAGTAACGGGAGAAGCAGGAGGATGTCCAGAAGAAATTTC
ATCCCTTGCTCTCGCCCCTACTCTTTCTGGTGTTAGATCGAGCTACCCTCTAAAAGCAGTTTAGAGTGGTAAAAA
AAAAAAAAACACACCAAACGCTCGCAGCCACAAAAGGGATGAAATTTCTTCTGGACATCCTCCTGCTTCTCCCGT
TACTGATCGTCTGCTCCCTAGAGTCCTTCGTGAAGCTTTTTATTCCTAAGAGGAGAAAATCAGTCACCGGCGAAA
TCGTGCTGATTACAGGAGCTGGGCATGGAATTGGGAGACTGACTGCCTATGAATTTGCTAAACTTAAAAGCAAGC
TGGTTCTCTGGGATATAAATAAGCATGGACTGGAGGAAACAGCTGCCAAATGCAAGGGACTGGGTGCCAAGGTTC
ATACCTTTGTGGTAGACTGCAGCAACCGAGAAGATATTTACAGCTCTGCAAAGAAGGTGAAGGCAGAAATTGGAG
ATGTTAGTATTTTAGTAAATAATGCTGGTGTAGTCTATACATCAGATTTGTTTGCTACACAAGATCCTCAGATTG
AAAAGACTTTTGAAGTTAATGTACTTGCACATTTCTGGACTACAAAGGCATTTCTTCCTGCAATGACGAAGAATA
ACCATGGCCATATTGTCACTGTGGCTTCGGCAGCTGGACATGTCTCGGTCCCCTTCTTACTGGCTTACTGTTCAA
GCAAGTTTGCTGCTGTTGGATTTCATAAAACTTTGACAGATGAACTGGCTGCCTTACAAATAACTGGAGTCAAAA
CAACATGTCTGTGTCCTAATTTCGTAAACACTGGCTTCATCAAAAATCCAAGTACAAGTTTGGGACCCACTCTGG
AACCCGAGGAAGTGGTAAACAGGCTGATGCATGGGATTCTGACTGAGCAGAAGATGATTTTTATTCCATCTTCTA
TAGCTTTTTTAACAACATTGGAAAGGATCCTTCCTGAGCGTTTCCTGGCAGTTTTAAAACGAAAAATCAGTGTTA
AGTTTGATGCAGTTATTGGATATAAAATGAAAGCGCAATAAGCACCTAGTTTTCTGAAAACTGATTTACCAGGTT
TAGGTTGATGTCATCTAATAGTGCCAGAATTTTAATGTTTGAACTTCTGTTTTTTCTAATTATCCCCATTTCTTC
AATATCATTTTTGAGGCTTTGGCAGTCTTCATTTACTACCACTTGTTCTTTAGCCAAAAGCTGATTACATATGAT
ATAAACAGAGAAATACCTTTAGAGGTGACTTTAAGGAAAATGAAGAAAAAGAACCAAAATGACTTTATTAAAATA
ATTTCCAAGATTATTTGTGGCTCACCTGAAGGCTTTGCAAAATTTGTACCATAACCGTTTATTTAACATATATTT
TTATTTTTGATTGCACTTAAATTTTGTATAATTTGTGTTTCTTTTTCTGTTCTACATAAAATCAGAAACTTCAAG
CTCTCTAAATAAAATGAAGGACTATATCTAGTGGTATTTCACAATGAATATCATGAACTCTCAATGGGTAGGTTT
CATCCTACCCATTGCCACTCTGTTTCCTGAGAGATACCTCACATTCCAATGCCAAACATTTCTGCACAGGGAAGC
TAGAGGTGGATACACGTGTTGCAAGTATAAAAGCATCACTGGGGGGATTTAAGGAGAATTGAGAGAATGTACCCAC
AAATGGCAGCAATAATAAATGGATCACACTTAACG

FIGURE 3361

MKFLLDILLLLPLLIVCSLESFVKLFIPKRRKSVTGEIVLITGAGHGIGRLTAYEFAKLKSKLVLWDINKHGLEE
TAAKCKGLGAKVHTFVVDCSNREDIYSSAKKVKAEIGDVSILVNNAGVVYTSDLFATQDPQIEKTFEVNVLAHFW
TTKAFLPAMTKNNHGHIVTVASAAGHVSVPFLLAYCSSKFAAVGFHKTLTDELAALQITGVKTTCLCPNFVNTGF
IKNPSTSLGPTLEPEEVVNRLMHGILTEQKMIFIPSSIAFLTTLERILPERFLAVLKRKISVKFDAVIGYKMKAQ

FIGURE 3362

GGCACGAGGAAGGTTTTTGCTGCGCCAACGCAGTGACCGAAGGCTCCGCTCACGCCCGGCCTGATCCTGCCTGAA
GATGGTGCCACTGGTGGCTGTGGTATCAGGGCCCCGTGCCCAGCTCTTTGCCTGCCTGCTCAGGCTGGGCACTCA
GCAGGTCGGCCCCCTTCAGCTGCACACCGGGGCCAGCCATGCGGCCAGGAACCATTATGAGGTGCTGGTGCTGGG
TGGGGGCAGTGGCGGAATCACCATGGCTGCCCGCATGAAGAGGAAAGTGGGTGCAGAGAATGTGGCCATTGTTGA
GCCCAGTGAGAGACATTTCTACCAGCCAATCTGGACACTGGTGGGTGCTGGTGCCAAACAATTGTCCTCATCTGG
TCGTCCCACGGCAAGTGTGATTCCATCTGGTGTAGAATGGATCAAAGCTAGAGTGACTGAGTTGAACCCAGACAA
GAACTGCATTCACACAGATGACGACGAGAAGATCTCCTACCGATATCTTATTATTGCTCTCGGAATCCAGCTGGA
CTATGAGAAGATTAAAGGCCTACCTGAAGGTTTCGCTCATCCCAAAATAGGGTCGAATTATTCAGTTAAGACTGT
AGAGAAGACATGGAAAGCTCTGCAGGACTTCAAAGAGGGCAATGCCATCTTCACCTTCCCAAATACTCCAGTGAA
GTGTGCTGGAGCCCCTCAGAAGATCATGTACTTATCAGAAGCCTACTTCAGGAAGACAGGGAAGCGATCCAAGGC
CAATATCATTTTCAACACTTCTCTTGGAGCCATTTTCGGGGTTAAGAAGTATGCAGATGCCCTGCAGGAGATCAT
CCAGGAGCGGAACCTCACTGTTAACTACAAGAAAAACCTCATTGAAGTCCGAGCCGATAAACAAGAGGCTGTATT
TGAGAACCTGGACAAACCAGGAGAGACCCAAGTGATTTCATATGAAATGCTTCATGTCACACCTCCAATGAGCCC
ACCAGATGTCCTCAAGACCAGTCCTGTGGCTGATGCTGCTGGTTGGGTGGATGTGGATAAAGAAACTCTGCAACA
CAGGAGGTACCCAAATGTGTTTGGGATTGGGGACTGCACCAACCTTCCTACGTCAAAGACCGCTGCTGCAGTAGC
TGCCCAGTCAGGAATACTTGATAGGACAATTTCTGTAATTATGAAGAATCAAACACCAACAAAGAAGTATGATGG
CTACACATCATGTCCACTGGTGACCGGCTACAACCGTGTGATTCTTGCTGAGTTTGACTACAAAGCAGAGCCGCT
AGAAACCTTCCCCTTTGATCAAAGCAAAGAGCGCCTTTCCATGTATCTCATGAAAGCTGACCTGATGCCTTTCCT
GTATTGGAATATGATGCTAAGGGGTTACTGGGGAGGACCAGCGTTTCTGCGCAAGTTGTTTCATCTAGGTATGAG
TTAAGGATGGCTCAGCACTTGCTCATCTTGGATGGCTTCTGGGCCAAAACTGCAGTCACTGAATGACCAAGAGCA
GCACGAAGGACTTGGAACCTATCCTTGTAAAGAGTTCCTTGATGGGTAATGGTGACCAAATGCCTCCCTTTTCAG
TACCTTTGAACAGCAACCATGTGGGCTACTCATGATGGGCTTGATTCTTTGGGAATAATAAAATGAAATAATACT
TTTATTTTCTGAATAAAAGTTTGTCACTGAAAAAAAAAAA

FIGURE 3363

MVPLVAVVSGPRAQLFACLLRLGTQQVGPLQLHTGASHAARNHYEVLVLGGGSGGITMAARMKRKVGAENVAIVE
PSERHFYQPIWTLVGAGAKQLSSSGRPTASVIPSGVEWIKARVTELNPDKNCIHTDDDEKISYRYLIIALGIQLD
YEKIKGLPEGFAHPKIGSNYSVKTVEKTWKALQDFKEGNAIFTFPNTPVKCAGAPQKIMYLSEAYFRKTGKRSKA
NIIFNTSLGAIFGVKKYADALQEIIQERNLTVNYKKNLIEVRADKQEAVFENLDKPGETQVISYEMLHVTPPMSP
PDVLKTSPVADAAGWVDVDKETLQHRRYPNVFGIGDCTNLPTSKTAAAVAAQSGILDRTISVIMKNQTPTKKYDG
YTSCPLVTGYNRVILAEFDYKAEPLETFPFDQSKERLSMYLMKADLMPFLYWNMMLRGYWGGPAFLRKLFHLGMS

FIGURE 3364

GGCACGAGGGTGAGCGCTCGCAAGAGGACGGCAGAGGCCCGGCAGCTCGGAGCTCCGGGACCTTGTGGCGCATCA
GGACGCGGCTGTCCCTCTGCCGGGACCCAGAGCCGCCGCCGCCGCTCTGCCTCCTGCGTGTTAGCCTCCTCTGCG
CGCTCCGGGCAGGCGGCCGTGGGAGCCGCTGGGGCGAGGACGGCGCGAGGCTGCTGCTGCTGCCCCCGGCCCGCG
CGGCTGGAAACGGAGAGGCCGAGCCAAGCGGCGGCCCCTCTTATGCTGGGAGGATGCTGGAGAGTAGCGGCTGCA
AAGCGCTGAAGGAGGGCGTGCTGGAGAAGCGCAGCGACGGGTTGTTGCAGCTCTGGAAGAAAAAGTGTTGCATCC
TCACCGAGGAAGGGCTGCTGCTTATCCCGCCCAAGCAGCTGCAACACCAGCAGCAGCAGCAACAGCAGCAGCAGC
AGCAGCAACAACAGCCCGGGCAGGGGCCGGCCGAGCCGTCCCAACCCAGTGGCCCCGCTGTCGCCAGCCTCGAGC
CGCCGGTCAAGCTCAAGGAACTGCACTTCTCCAACATGAAGACCGTGGACTGTGTGGAGCGCAAGGGCAAGTACA
TGTACTTCACTGTGGTGATGGCAGAGGGCAAGGAGATCGACTTTCGGTGCCCGCAAGACCAGGGCTGGAACGCCG
AGATCACGCTGCAGATGGTGCAGTACAAGAATCGTCAGGCCATCCTGGCGGTCAAATCCACGCGGCAGAAGCAGC
AGCACCTGGTCCAGCAGCAGCCCCCCTCGCAGCCGCAGCCGCAGCCGCAGCTCCAGCCCCAACCCCAGCCTCAGC
CTCAGCCGCAACCCCAGCCCCAATCACAACCCCAGCCTCAGCCCCAACCCAAGCCTCAGCCCCAGCAGCTCCACC
CGTATCCGCATCCACATCCACATCCACACTCTCATCCTCACTCGCACCCACACCCTCACCCGCACCCGCATCCGC
ACCAAATACCGCACCCACACCCACAGCCGCACTCGCAGCCGCACGGGCACCGGCTTCTCCGCAGCACCTCCAACT
CTGCCTGAAAGGGGCAGCTCCCGGGCAAGACAAGGTTTTGAGGACTTGAGGAAGTGGGACGAGCACATTTCTATT
GTCTTCACTTGGATCAAAAGCAAAACAGTCTCTCCGCCCCGCACCAGATCAAGTAGTTTGGACATCACCCTACTG
AAAACTTGCGATTCTTCTTAGTTTTCTGCATACTTTTCATCACGATGCAGGAAACGATTTCGAGTCAAGAAGACT
TTTATTTATGAACCTTTGAAAGGATCGTCTTGTATGGTGAATTTTCTAGGAGCGATGATGTACTGTAATTTTATT
TTAATGTATTTTGATTTATGATTATTTATTAGTTTTTTTTAAATGCTTGTTCTAAGACATTTCTGAATGTAGACC
ATTTTCCAAAAAGGAAACTTTATTTTCAAAAACCTAATCCGTAGTAATTCCTAATCTTGGAGAATAAAAAAGGGC
GGTGGAGGGGAAAACATTAAGAATTTATTCATTATTTCTCGAGTACTTTCAGAAAGTCTGACACTTTCATTGTTG
TGCCAGCTGGTTGAAATTAAAACTCTGATATTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAA

FIGURE 3365

MLESSGCKALKEGVLEKRSDGLLQLWKKKCCILTEEGLLLIPPKQLQHQQQQQQQQQQQQQQPGQGPAEPSQPSG
PAVASLEPPVKLKELHFSNMKTVDCVERKGKYMYFTVVMAEGKEIDFRCPQDQGWNAEITLQMVQYKNRQAILAV
KSTRQKQQHLVQQQPPSQPQPQPQLQPQPQPQPQPQPQPQSQPQPQPQPKPQPQQLHPYPHPHPHPHSHPHSHPH
PHPHPHPHQIPHPHPQPHSQPHGHRLLRSTSNSA

FIGURE 3366

CCCGTATCCGCATCCACATCCACATCCACACTCTCATCCTCACTCGCACCCACACCCTCACCCGCACCCGCATCC
GCACCAAATACCGCACCCACACCCACAGCCGCACTCGCAGCCGCACGGGCACCGGCTTCTCCGCAGCACCTCCAA
CTCTGCCTGAAAGGGGCAGCTCCCGGGCAAGACAAGGTTTTGAGGACTTGAGGAAGTGGGACGAGCACATTTCTA
TTGTCTTCACTTGGATCAAAAGCAAAACAGTCTCTCCGCCCCGCACCAGATCAAGTAGTTTGGACATCACCCTAC
TGAACAACTTGGCGATTCTTCTTAGTTTTCTGCATACTTTTCATCACCGATGCAGGAAACGATTTCGAGTCAAGA
AGACTTTTATTTATGAACCTTTGAAAGGATCGTCTTGTATGGTGAATTTTCTAGGAGCGATGATGTACTGTAATT
TTATTTTAATGTATTTTGATTTATGATTATTTATTAGTTTTTTTTAAATGCTTGTTCTAAGACATTTCTGAATGT
AGACCATTTTCCAAAAAGGAAACTTTATTTTCAAAAACCTAATCCGTAGTAATTCCTAATCTTGGAGAATAAAAA
AGGGCGGTGGAGGGGAAAACATTAAGAATTTATTCATTATTTCTCGAGTACTTTCAGAAAGTCTGACACTTTCAT
TGTTGTGCCAGCTGGTTGAAATTAAAACTCTGATATTACTTTTTTTGAGGATTTTTATTTTTGTTTTTGCTTAAA
CACTATAGTTTGTCTAGAAGTTTAAAAAGCTAAAAGTTAAAAATGGTGTAATTATGAAAATCTAACACTCAAGAT
AGTTTCTAAAAGGAAATCAGTAGTTAAGGATACCTGATTTCAAAATATTTAAAGCATAACCTAACTGATGGTAGG
ATGATTGTATCTTGAATATGTGGTAGGGCCACATCTATTGTAGGAAAACCTTGCTTTTATCATCTGTGTGTAAAG
GGCTTAATAAGGAGAAGAGGCCTTTTGACTGATTTGTGAGTATAAATGCATTTGCTGTTTCATTTCAAAAATGTT
GTGGAGGAAAAGAGTACATTTAACTTGTATAAGAGAATATTTGTACTCCTGTCCAGGCTGCAGGACCTTTCTTCG
AGAGCTTTGCACACTTGACTTGAACCACATTTTCTGATCCCTTTACTTTGTTTTAGAAGCACACTGAAAAATCTC
GTTGTTTAAAGTACAATTTGTAAATATTTCAAAGGTCTAGGAGTCATAACTTTTGTTTTCATACTGAAAATGATG
TTGATCAGAGAAACCAACTGTTTTGCTTTTCATTGCTCTGTGAGAAATTGAGGATTCTGTTTTGCTGTTAGGTAA
GCTAACTCAGAAATTGAAAGGAAAGACTGGATAAACACCGGATTTTCAGTAAGAAAACAACCCCAGTCTTGTCTT
AGAAGCCACTTGTTGAGGAGTCTGTTGGGGGAAAAAAGAGGATATGCTTTTAAAGGTAGAACAAACCTTCTTCTG
TGTTAAATCAAAAGGATGTTCAAAATCCACCAGGACAGATGCTACTTGGGTTTAAATGGAGCCATAGATGATACA
AAGTCCTCTTGGGGCTGAAAATCACTTCCTATTTGCATGGCTTTACTAACTGGTTTCTGTTTTCCATTATCTTTT
TCACAGAAAGTCTTGGTCAGTATTTTTCCAGCATTTAAATTGAAACGGTCAGTATTAGACCACTGCTAGGTTATG
TAGTCAAGAAATAAAAATAGAATTACATGCTACAGATGTCTTTATTCTCCTTCCATCTAGAAAGGAGTTCCAAGG
TCAAATTACTTTTTAGTGCAATAGTTAAATGACATTTTGAGATCATAACTCATATCCAAAAAGTTGCAGGGAAAA
TTAAAATAGCTTTCCCCTATTAAGCTAATGGCAAACAAAACTTAAGTGGACCCCCACTTCCAGTGGTTGTTTAGG
TTGCAGTTGTGAAAATATGCTGCCAACATTTAAAAACTTGTTTCATATGTATATATGTATACACATATATGAATA
TGTATGTATATATACATATATGAGAACATGTGTGTACACATATATGAATATGTATATATGTGTATGTATGTATAT
ATGTATATGAAATGAGAGCCACATCTAAAGATTTCTTAAATCAAGTTTGGTTCAGCTTCCTTAGAACTGTGGCTG
TACTTTTTGAGGAGTACCTCATAGTACTATATTTTTAATGCATGCAAATCATAATAGCTCCAAATGAACCACAGT
TTTTTCCCAATGGAGGATTTTTTTTTAATTCTTGTACTAAAAAAAAAAAAATCCATACCAAATATTTTTACAAATT
AAGATTGATGTAGGTTTTAAAAAAGGCATTTGTATGTTGTTAGCTTACATATGGGGCTAGGTAATTTCATTGCTT
AAAAAGATGCGCCTAGGCTCCCTCTTGGTGGCTGGATTTCTTTTTCTTCGCCCGTGGTGGCCATGGTTTTTAATA
GGGCCACCGGAATCATGGTTTCTTTTTTTTTTTTTTTTTGGAGATGGAGTCTCGCCCTGTGACCCAGGCTGGAG
TGCAGTGGCACGATCTCGGCTCACTGCAACCTCTGCCTCTTGGGTTCACGCCATTCTCCTGTGTCAGCCTCCTGA
GTAGCTGGGACTACAGGTGAATGCCACCACGCCCGGCTGATTTTTGTATTTTTAGTAGAGATGGGGTTTCACCAT
AGTGGTCAGGCTGTTCTCGAACTCCTGACCTCAGGTGATCCACCTGCCTTGGCCTCCCAAAGTGCTAGGATTACA
GGTGTGAGCCACCACACCCGGCCCCAGAGTAATGGTTTCTTGACTTTCTGTAGCCCTTGTTCCTTAGTCTGCTGT
GATATTTATGTTGACCTTTATCATTTTCTATTCTGAACCCCTCTTAGCATTTAATGTGAAATCTAAGAAATTAGA
AGTAGAATGGCTTTTATTGTTTTGACACCTTTGAAATTATTATTAATAATTTTTCCAGAGCAAAAAAGCAAACAC
GCTCAATAAGACTAAACAAAACAAAATATAAATGTACATCATTTAATGTCCCAGTGGCTCTATTCTACCTGTAAG
AAAATGATACAAAACCACCTAAGATATTTTGAAGCCTGACAAATCAGCTTCATGGAAAAAGGTAAAAAATGCATT
TTTCAACCGAAAGGGCAGATCCAATAGAAGACCCGCTCCTTAAATAAACATAAAATGTAAAAAGTTGGAAAAAAA
AA

FIGURE 3367

CTCCTTGGGCGATCGCCTGGGTAGAGGAGAGGAGTTTCCGGGGCTCGGGTCCGGGTCGCCTTCCAGGGGAACGAG
CGCGGAAGCAAGTGGGCGGCGAGAGGCGGAGCAAGAGACGCTGGAGGGCGTGGACGCAGCGGGCTTTGGAAAGGC
CCCAAGTTAATGAGGCGTGCGCCGGCTGCCGAGCGCCTCTTGGAGCTGGGCTTTCCCCCGCGGTGCGGGCGCCAG
GAGCCGCCTTTTCCGCTGGGTGTCACTCGGGGGTGGGGAAGATGGCCCATTCAAAAGCGCCGCGAGGGGGCCCGG
CCAGTGCCCTTCAGTGAGCGCTCGCAAGAGGACGGCAGAGGCCCGGCAGCTCGGAGCTCCGGGACCTTGTGGCGC
ATCAGGACGCGGCTGTCCCTCTGCCGGGACCCAGAGCCGCCGCCGCCGCTCTGCCTCCTGCGTGTTAGCCTCCTC
TGCGCGCTCCGGGCAGGCGGCCGTGGGAGCCGCTGGGGCGAGGACGGCGCGAGGCTGCTGCTGCTGCCCCCGGCC
CGCGCGGCTGGAAACGGAGAGGCCGAGCCAAGCGGCGGCCCCTCTTATGCTGGGAGGATGCTGGAGAGTAGCGGC
TGCAAAGCGCTGAAGGAGGGCGTGCTGGAGAAGCGCAGCGACGGGTTGTTGCAGCTCTGGAAGAAAAAGTGTTGC
ATCCTCACCGAGGAAGGGCTGCTGCTTATCCCGCCCAAGCAGCTGCAACACCAGCAGCAGCAGCAACAGCAGCAG
CAGCAGCAGCAACAACAGCCCGGGCAGGGGCCGGCCGAGCCGTCCCAACCCAGTGGCCCCGCTGTCGCCAGCCTC
GAGCCGCCGGTCAAGCTCAAGGAACTGCACTTCTCCAACATGAAGACCGTGGACTGTGTGGAGCGCAAGGGCAAG
TACATGTACTTCACTGTGGTGATGGCAGAGGGCAAGGAGATCGACTTTCGGTGCCCGCAAGACCAGGGCTGGAAC
GCCGAGATCACGCTGCAGATGGTGCAGTACAAGAATCGTCAGGCCATCCTGGCGGTCAAATCCACGCGGCAGAAG
CAGCAGCACCTGGTCCAGCAGCAGCCCCCCTCGCAGCCGCAGCCGCAGCCGCAGCTCCAGCCCCAACCCCAGCCT
CAGCCTCAGCCGCAACCCCAGCCCCAATCACAACCCCAGCCTCAGCCCCAACCCAAGCCTCAGCCCCAGCAGCTC
CACCCGTATCCGCATCCACATCCACATCCACACTCTCATCCTCACTCGCACCCACACCCTCACCCGCACCCGCAT
CCGCACCAAATACCGCACCCACACCCACAGCCGCACTCGCAGCCGCACGGGCACCGGCTTCTCCGCAGCACCTCC
AACTCTGCCTGAAAGGGGCAGCTCCCGGGCAAGACAAGGTTTTGAGGACTTGAGGAAGTGGG

FIGURE 3368

MRRAPAAERLLELGFPPRCGRQEPPFPLGVTRGWGRWPIQKRREGARPVPFSERSQEDGRGPAARSSGTLWRIRT
RLSLCRDPEPPPPLCLLRVSLLCALRAGGRGSRWGEDGARLLLLPPARAAGNGEAEPSGGPSYAGRMLESSGCKA
LKEGVLEKRSDGLLQLWKKKCCILTEEGLLLIPPKQLQHQQQQQQQQQQQQQQPGQGPAEPSQPSGPAVASLEPP
VKLKELHFSNMKTVDCVERKGKYMYFTVVMAEGKEIDFRCPQDQGWNAEITLQMVQYKNRQAILAVKSTRQKQQH
LVQQQPPSQPQPQPQLQPQPQPQPQPQPQPQSQPQPQPQPKPQPQQLHPYPHPHPHPHSHPHSHPHPHPHPHPHQ
IPHPHPQPHSQPHGHRLLRSTSNSA

FIGURE 3369

GTTTGCGGGTGGTTGTTGCTCTCGGGGCCGTGTGGAGTAGGTCTGGACCTGGACTCACGGCTGCTTGGAGCGTCC
GCCATGAGGAGAAGTGAGGTGCTGGCGGAGGAGTCCATAGTATGTCTGCAGAAAGCCCTAAATCACCTTCGGGAA
ATATGGGAGCTAATTGGGATTCCAGAGGACCAGCGGTTACAAAGAACTGAGGTGGTAAAGAAGCATATCAAGGAA
CTCCTGGATATGATGATTGCTGAAGAGGAAAGCCTGAAGGAAAGACTCATCAAAAGCATATCCGTCTGTCAGAAA
GAGCTGAACACTCTGTGCAGCGAGTTACATGTTGAGCCATTTCAGGAAGAAGGAGAGACGACCATCTTGCAACTA
GAAAAAGATTTGCGCACCCAAGTGGAATTGATGCGAAAACAGAAAAAGGAGAGAAAACAGGAACTGAAGCTACTT
CAAGAGCAAGATCAAGAACTGTGCGAAATTCTTTGTATGCCCCACTATGATATTGACAGTGCCTCAGTGCCCAGC
TTAGAAGAGCTGAACCAGTTCAGGCAACATGTGACAACTTTGAGGGAAACAAAGGCTTCTAGGCGTGAGGAGTTT
GTCAGTATAAAGAGACAGATCATACTGTGTATGGAAGAATTAGACCACACCCCAGACACAAGCTTTGAAAGAGAT
GTGGTGTGTGAAGACGAAGATGCCTTTTGTTTGTCTTTGGAGAATATTGCAACACTACAAAAGTTGCTACGGCAG
CTGGAAATGCAGAAATCACAAAATGAAGCAGTGTGTGAGGGGCTGCGTACTCAAATCCGAGAGCTCTGGGACAGG
TTGCAAATACCTGAAGAAGAAAGAGAAGCTGTGGCCACCATTATGTCTGGGTCAAAGGCCAAGGTCCGGAAAGCG
CTGCAATTAGAAGTGGATCGGTTGGAAGAACTGAAAATGCAAAACATGAAGAAAGTGATTGAGGCAATTCGAGTG
GAGCTGGTTCAGTACTGGGACCAGTGCTTTTATAGCCAGGAGCAGAGACAAGCTTTTGCCCCTTTCTGTGCTGAG
GACTACACAGAAAGTCTGCTCCAGCTCCACGATGCTGAGATTGTGCGGTTAAAAAACTACTATGAAGTTCACAAG
GAACTCTTTGAAGGTGTCCAGAAGTGGGAAGAAACCTGGAGGCTTTTCTTAGAGTTTGAGAGAAAAGCTTCAGAT
CCAAATCGATTTACAAACCGAGGAGGAAATCTTCTAAAAGAAGAAAAACAACGAGCCAAGCTCCAGAAAATGCTG
CCCAAGCTGGAAGAAGAGTTGAAGGCACGAATTGAATTGTGGGAACAGGAACATTCAAAGGCATTTATGGTGAAT
GGGCAGAAATTCATGGAGTATGTGGCAGAACAATGGGAGATGCATCGATTGGAGAAAGAGAGAGCCAAGCAGGAA
AGACAACTGAAGAACAAAAAACAGACAGAGACAGAGATGCTGTATGGCAGCGCTCCTCGAACACCTAGCAAGCGG
CGAGGACTGGCTCCCAATACACCGGGCAAAGCACGTAAGCTGAACACTACCACCATGTCCAATGCTACGGCCAAT
AGTAGCATTCGGCCTATCTTTGGAGGGACAGTCTACCACTCCCCCGTGTCTCGACTTCCTCCTTCTGGCAGCAAG
CCAGTCGCTGCTTCCACCTGTTCAGGGAAGAAAACACCCCGTACTGGCAGGCATGGAGCCAACAAGGAGAACCTG
GAGCTCAACGGCAGCATCCTGAGTGGTGGGTACCCTGGCTCGGCCCCCCTCCAGCGCAACTTCAGCATTAATTCT
GTTGCCAGCACCTATTCTGAGTTTGCGAAGGATCCGTCCCTCTCTGACAGTTCCACTGTTGGGCTTCAGCGAGAA
CTTTCAAAGGCTTCCAAATCTGATGCTACTTCTGGAATCCTCAATTCAACCAACATCCAGTCCTGAGAAGCCCTG
ATCAGTCAACCAGCTGTGGCTTCCTGTGCCTAGACTGGACCTAATTATATGGGGGTGACTTTAGTTTTTCTTCAG
CTTAGGAGTGCTTGAAACCTTGGCCAGGTTCCATGACCATGGGCCTAACTTAAAGATGTGAATGAGTGTTACAGT
TGAAAGCCCATCATAGGTTTAGTGGTCCTAGGAGACTTGGTTTTGACTTATATACATGAAAAGTTTATGGCAAGA
AGTGCAAATTTTAGCATATGGGGCCTGACTTCTCTACCACATAATTCTACTTGCTGAAGCATGATCAAAGCTTGT
TTTATTTCACCACTGTAGGAAAATGATTGACTATGCCCATCCCTGGGGGTAATTTTGGCATGTATACCTGTAACT
AGTAATTAACATCTTTTTTGTTTAGGCATGTTCAATTAATGCTGTAGCTATCATAGCTTTGCTCTTACCTGAAGC
CTTGTCCCCACCACACAGGACAGCCTTCCTCCTGAAGAGAATGTCTTTGTGTGTCCGAAGTTGAGATGGCCTGCC
CTACTGGCAAAGAGGTGACAGGAAGGCTGGGAGCAGCTTTGTTAAATTGTGTTCAGTTCTGTTACACAGTGCATT
GCCCTTTGTTGGGGGTATGCATGTATGAACACACATGCTTGTCGGAACGCTTTCTCGGCGTTTGTCCCTTGGCTC
TCATCTCCCCCATTCCTGTGCCTACTTTGCCTGAGTTCTTCTACCCCCGCAGTTGCCAGCCAGATTGGGAGTCTG
TTTGTTCCAATGGGTTGAGCTGTCTTTGTCGTGGAGATCTGGAACTTTGCACATGTCACTACTGGGGAGGTGTTC
CTGCTCTAGCTTCCACGATGAGGCGCCCTCTTTACCTATCCTCTCAATCACTACTCTTCTTGAAGCACTATTATT
TATTCTTCCGCTGTCTGCCTGCAGCAGTACTACTGTCAACATAGTGTAAATGGTTCTCAAAAGCTTACCAGTGTG
GACTTGGTGTTAGCCACGCTGTTTACCTCATACAGTACGTGTCCTGTTTTTAAAATATACAATTATTCTTAAAAA
TAAATTAAAATCGTATACTTACATTTCAAAAAAAAAAAAAAAA

FIGURE 3370

MRRSEVLAEESIVCLQKALNHLREIWELIGIPEDQRLQRTEVVKKHIKELLDMMIAEEESLKERLIKSISVCQKE
LNTLCSELHVEPFQEEGETTILQLEKDLRTQVELMRKQKKERKQELKLLQEQDQELCEILCMPHYDIDSASVPSL
EELNQFRQHVTTLRETKASRREEFVSIKRQIILCMEELDHTPDTSFERDVVCEDEDAFCLSLENIATLQKLLRQL
EMQKSQNEAVCEGLRTQIRELWDRLQIPEEEREAVATIMSGSKAKVRKALQLEVDRLEELKMQNMKKVIEAIRVE
LVQYWDQCFYSQEQRQAFAPFCAEDYTESLLQLHDAEIVRLKNYYEVHKELFEGVQKWEETWRLFLEFERKASDP
NRFTNRGGNLLKEEKQRAKLQKMLPKLEEELKARIELWEQEHSKAFMVNGQKFMEYVAEQWEMHRLEKERAKQER
QLKNKKQTETEMLYGSAPRTPSKRRGLAPNTPGKARKLNTTTMSNATANSSIRPIFGGTVYHSPVSRLPPSGSKP
VAASTCSGKKTPRTGRHGANKENLELNGSILSGGYPGSAPLQRNFSINSVASTYSEFAKDPSLSDSSTVGLQREL
SKASKSDATSGILNSTNIQS

FIGURE 3371

CAGGTGGCGTACTTGGCTTGGAGACTGGCGCGGCGTTCGTGTCCGAGTTCTCTGCAGGTCACTAGTTTCCCGGTA
GTTCAGCTGCACATGAATAGAACAGCAATGAGAGCCAGTCAGAAGGACTTTGAAAATTCAATGAATCAAGTGAAA
CTCTTGAAAAAGGATCCAGGAAACGAAGTGAAGCTAAAACTCTACGCGCTATATAAGCAGGCCACTGAAGGACCT
TGTAACATGCCCAAACCAGGTGTATTTGACTTGATCAACAAGGCCAAATGGGACGCATGGAATGCCCTTGGCAGC
CTGCCCAAGGAAGCTGCCAGGCAGAACTATGTGGATTTGGTGTCCAGTTTGAGTCCTTCATTGGAATCCTCTAGT
CAGGTGGAGCCTGGAACAGACAGGAAATCAACTGGGTTTGAAACTCTGGTGGTGACCTCCGAAGATGGCATCACA
AAGATCATGTTCAACCGGCCCAAAAAGAAAAATGCCATAAACACTGAGATGTATCATGAAATTATGCGTGCACTT
AAAGCTGCCAGCAAGGATGACTCAATCATCACTGTTTTAACAGGAAATGGTGACTATTACAGTAGTGGGAATGAT
CTGACTAACTTCACTGATATTCCCCCTGGTGGAGTAGAGGAGAAAGCTAAAAATAATGCCGTTTTACTGAGGGAA
TTTGTGGGCTGTTTTATAGATTTTCCTAAGCCTCTGATTGCAGTGGTCAATGGTCCAGCTGTGGGCATCTCCGTC
ACCCTCCTTGGGCTATTCGATGCCGTGTATGCATCTGACAGGGCAACATTTCATACACCATTTAGTCACCTAGGC
CAAAGTCCGGAAGGATGCTCCTCTTACACTTTTCCGAAGATAATGAGCCCAGCCAAGGCAACAGAGATGCTTATT
TTTGGAAAGAAGTTAACAGCGGGAGAGGCATGTGCTCAAGGACTTGTTACTGAAGTTTTCCCTGATAGCACTTTT
CAGAAAGAAGTCTGGACCAGGCTGAAGGCATTTGCAAAGCTTCCCCCAAATGCCTTGAGAATTTCAAAAGAGGTA
ATCAGGAAAAGAGAGAGAGAAAAACTACACGCTGTTAATGCTGAAGAATGCAATGTCCTTCAGGGAAGATGGCTA
TCAGATGAATGCACAAATGCTGTGGTGAACTTCTTATCCAGAAAATCAAAACTGTGATGACCACTACAGCAGAGT
AAAGCATGTCCAAGGAAGGATGTGCTGTTACCTCTGATTTCCAGTACTGGAACTAAATAAGCTTCATTGTGCCTT
TTGTAGTGCTAGAATATCAATTACAATGATGATATTTCACTACAGCTCTGATGAATAAAAAGTTTTGTAAAAC

FIGURE 3372

MRASQKDFENSMNQVKLLKKDPGNEVKLKLYALYKQATEGPCNMPKPGVFDLINKAKWDAWNALGSLPKEAARQN
YVDLVSSLSPSLESSSQVEPGTDRKSTGFETLVVTSEDGITKIMFNRPKKKNAINTEMYHEIMRALKAASKDDSI
ITVLTGNGDYYSSGNDLTNFTDIPPGGVEEKAKNNAVLLREFVGCFIDFPKPLIAVVNGPAVGISVTLLGLFDAV
YASDRATFHTPFSHLGQSPEGCSSYTFPKIMSPAKATEMLIFGKKLTAGEACAQGLVTEVFPDSTFQKEVWTRLK
AFAKLPPNALRISKEVIRKREREKLHAVNAEECNVLQGRWLSDECTNAVVNFLSRKSKL

FIGURE 3373

CCCGAGACCACGTGGCCTCCGAGCAGCTCAGGGCGCCCTTGAAAGTTCTTGGATCTGCGGGTTATGGCCGGTCCC
TTGCAGGGCGGTGGGGCCCGGGCCCTGGACCTACTCCGGGGCCTGCCGCGTGTGAGCCTGGCCAACTTAAAGCCG
AATCCCGGCTCCAAGAAACCGGAGAGAAGACCAAGAGGTCGGAGAAGAGGTAGAAAATGTGGCAGAGGCCATAAA
GGAGAAAGGCAAAGAGGAACCCGGCCCCGCTTGGGCTTTGAGGGAGGCCAGACTCCATTTTACATCCGAATCCCA
AAATACGGGTTTAACGAAGGACATAGTTTCAGACGCCAGTATAAGCCTTTGAGTCTCAATAGACTGCAGTATCTT
ATTGATTTGGGTCGTGTTGATCCTAGTCAACCTATTGACTTAACCCAGCTTGTCAATGGGAGAGGTGTGACCATC
CAGCCACTTAAAAGGGATTATGGTGTCCAGCTGGTTGAGGAGGGTGCTGACACCTTTACGGCAAAAGTTAATATT
GAAGTACAGTTGGCTTCAGAACTAGCTATTGCTGCCATTGAAAAAAATGGTGGTGTTGTTACTACAGCCTTCTAT
GATCCAAGAAGTCTGGACATTGTATGCAAACCTGTTCCATTCTTTCTTCGTGGACAACCCATTCCAAAAAGAATG
CTTCCACCAGAAGAACTGGTACCATATTACACTGATGCAAAGAACCGTGGGTACCTGGCGGATCCTGCCAAATTT
CCTGAAGCACGACTTGAACTCGCCAGGAAGTATGGTTATATCTTACCTGATATCACTAAAGATGAACTCTTCAAA
ATGCTCTGTACTAGGAAGGATCCAAGGCAGATTTTCTTTGGTCTTGCTCCAGGATGGGTGGTGAATATGGCCGAT
AAGAAAATCCTAAAACCTACAGATGAAAATCTCCTTAAGTATTATACCTCATGAATTCCCGTCCAAGGAAGCAGA
GTTGTTAAAGAGTACTGGAATAGGGGCTGAAGGATCTATATTCCCTTATTGCATTTTCCTTATGTATAATTTTCC
AGATGGTGATGTTACTTTTCAGTGTACTCATATGTCTCATTTTCATCTAAAATTAAATGGCAGGAAACAAGGACT
GCATAGAGAAAAAAAAAAAAAAAAAAAAA

FIGURE 3374

MAGPLQGGGARALDLLRGLPRVSLANLKPNPGSKKPERRPRGRRRGRKCGRGHKGERQRGTRPRLGFEGGQTPFY
IRIPKYGFNEGHSFRRQYKPLSLNRLQYLIDLGRVDPSQPIDLTQLVNGRGVTIQPLKRDYGVQLVEEGADTFTA
KVNIEVQLASELAIAAIEKNGGVVTTAFYDPRSLDIVCKPVPFFLRGQPIPKRMLPPEELVPYYTDAKNRGYLAD
PAKFPEARLELARKYGYILPDITKDELFKMLCTRKDPRQIFFGLAPGWVVNMADKKILKPTDENLLKYYTS

FIGURE 3375

GGTATCGATAAGCTTGATATCGAATTCGGCACGAGGCCGGGCCCGCGGGGCTGCTGCGGGGCGATCGGGCCGGGC
CGCTGCCGCGCCATGGACTCCCGTGTCCAGCCTGAGTTCCAGCCTCACTGAGTGGCCACCCCCAAAGTGCTGCCA
GCCGAGGAAGCCCCCAGCACTGACCATGTCTATTATGGACCACAGCCCCACCACGGGCGTGGTCACAGTCATTGT
CATCCTCATTGCCATCGCGGCCCTGGGGGCCTTGATCCTGGGCTGCTGGTGCTACCTGCGGCTGCAGCGCATCAG
CCAGTCAGAGGACGAGGAGAGCATCGTGGGGGATGGGGAGACCAAGGAACCCTTCCTGCTGGTGCAGTATTCGGC
CAAGGGACCGTGCGTGGAGAGAAAGGCCAAGCTGATGACTCCCAACGGCCCGGAAGTCCACGGCTGAGCCAGGAT
GCAAGGCTCCTGGTCCTGTTTGCAGCCGGCCAAGAGGCGCTGGGAGGGGCAAAACCATACGGATGCGCTGCTGTC
TGAGAGGAAGGGCTGACACTTGCTGGCATGGCCTCTGCGGGCTTCGTCATCGCATGCACTGATGCCCGGGGACCT
GGCTGTCCTGGGCTTCCCCTCGGCCTCCAGGTGAGGCTGCCCATTGCAGGCACTGGGCAGGCCTGACCTTGCTGG
GGCTCATGGCCCTGTAGCGCTTTTGTTACTTGAATGTCTAGCTGAGCCTGTTTTTGATGGAGCTACTACTGTAAT
GCGTGAACTAACAAACCTGTGAACTGTAAATAGGCCCCTGGAAGCACGTGCTTAAGCCCTTTTGCTGATTTTTAA
AAATATCATCTAGCGCACACGGGACTGGTATTCTGGCTGTACTAATGACAAGCTGAGTCAAGACCCTGGAGGGTC
ATAGGCTTGTAAAGGCCCACGCCACACTCGGCAGGGGTCTCTCATGTGTGTCCATCTGCGTGTATGTCAAGGAAG
TGAGATGCCAATTTGGGGTCTTGAGGCTGACCAGTTGGGGTGCTTGGGTGATCTCTGCTTCGTTAGTCATGGGTG
GAAGAAAAACCACACCYCYMRMRCCCCTCCGTTCTTTCTGCATAGACTCACTTGTTAAATAGCAGTTCTGTTGAG
AGTGGAGTTACTGCAGGGAAGCTACCGGACCTGCCTGGGAGCCAGTGAAGGGCGAGTCAGGGCACGCGTCCTGGA
GGCTGCCAGCGTCCTTGTAGCAGAGCAGTTTCTTGCCGCTTGGGTCTTCAGCACGCCAAGCCCCCCACCAACCCT
CCACCCCCGAGTGAAGGCTTCGCTGAAATTGCTTTGGTCCTCATAGAGCCTGTGGTGGCTACTTTTGGTCTGAAA
CCCACTTGGCCCAGGAAAGAGAAAAGGTTGTATGTTTTGTGTTGGTGTTTCCTATTTTCTGCACTGGAGGGGAGG
GGACTGTTGAGGTTCTGTCTTTTTTCTTCTTTTCCTCTTCCCTCTTCACATCACTTGGCTTCCTTTCCTCTCTGA
TGACCGTCCGCCTATGGGGTTCTGACTTCACTTTCCTCAGCGGGTCTCCAGTCCCCTGACCCAGCTCTAAAGGCA
CTTAGGACCCAGGGAACATTTCTCACGTGCACATTCCCCTAAGAGCCACCAGACTGCTTCCTGCCAGCCTGTGCT
TGCGGCAGGGAGCCGGGGCAGGGCAGAGGTGACTTGAAAGTTCAGGACTTGACTCTCCCACAGGTGGTGAGCTGG
TGGCTCTCTGGTGAGCTAGTGTCTCCACAGMCWVTCTCCAAAGGCTCCCCTATGTACATTTGAGTGAGCTCACTT
TGATTTTTAATCCCACCACAAGCACATACTAATTTTATTTATGATTCAAATGTGACTCGTGCCTGCCCATCCCTG
TAATAGATGGAAGGTCAGCCCCGGCTTAACCACAGAGCACTGGCCCTTCATGGCTGAGCTCAGAGCTCTGGCCTC
CTGCTCAGACTAAAGGCACCTCCTCTGGCCTCACCCAAGCCTCTTCTAAAAACCATGTTGAATGAATCCACGTTC
TGGAACCCCGAGGCGGGAGAAGTAGGGAGCTGTTCGTTTAAGCAGCATACACCTAAATTGGGGGTTTAAACATTA
AGTAGGAGCTTGGGGTGGAAGAGGGACAGCCGGCTGGGCCACCTGAGCAGAAGGTGGTAATGAAACACCTCAGCT
GGGCTCTTGGGAGACCTTAGGAAGCAGGAGAGGCAACACCTCTGGCTACTGATGGTGTGGCAAGTTCAGAAGAGG
TGGTGGTGGGGTAGGCGTGATGTCAGCAGAAGCCCTGCAGGCTGGGTGGGCAGGACACGTGGTGGGGGCCACTGA
AACCAGGCCTAGGAGGGAGAACAAGTTCCAAAGGTGCCGACTGGAAGAAGGGGGTAAAAGTTTGCTTTGGTGAGT
GAGAAAAGGCTGGGGCGTGTGATCCATCCCCTCACGTTTCAGAACTTCCAGGCTTTCTACCTCGACTCTCACCAC
AGCCAGCACATACACCTAGGCTGTTTTTCCTTCCTCCACACCTGAGGGACGCAGCAACAGCTAGGATCTGCATTT
TCAGGTTCCGAGCCTGACCCCTGGAACTGACCAGCGCTCGATTGTCAGCCTTGGCCTGGGGTTTTGACCTTGCCA
GTGAAGTTTCGGTTTTGAAGTGATTAAATGTCACTTCCTCATCAGTTTCACTTCTGGAGGTTTTCTTATCCTACT
CCCTGGTGCCAGGGACGTACCTGGGAGTTTGAATCAGGCCCATTTGAGCGTGGCAGCCGTGTTGGGTGAAGGTCC
GGGGCTCGGTGAGGCACTGGGGGGGTTTTCGGGAGGAAAATGAAAATGCTTCTAGAATGAGTGAACCACATCATA
GCTCTCACTGTTTTTTCAATAGCTACTTTTTTTAGCAGACACCAGAGCCACACTCAAATGGCTAAGTAGGTTATG
ACCTCTCTGGATTATTTTTGAATGCCCAACTGTTGCAATTCAAGTTTTCTGAACTAATAAGAAATTAAGCATTCA
TCCTTCGTATCACTGCAGAAGCAACAGTGGGGGCACAGGGAGGGAACTCTTGACACTGAGCCACTAAAATATGGA
CTAATTTTTTGGACAAATCTTCAAACGGACTGTGCTACTGTATTTGTCTCAAAGCTACCAAGTTTGTGCAATAAG
TGGAAGGGATGTCATCCTTCTTCAATAAATGCTGAATGACATTCAAGCTGATTTTCTAGACCACTGAGAAAATCT
TTATTTACAATAAATTTCAATAAAATTTGCATAAATATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3376

MSIMDHSPTTGVVTVIVILIAIAALGALILGCWCYLRLQRISQSEDEESIVGDGETKEPFLLVQYSAKGPCVERK
AKLMTPNGPEVHG

FIGURE 3377

GGGATTTGAACCXCGCTGACGAAGTTTGGTGATCCATCTTCCGAGTATCGCCGGGATTTCGAATCGCGATGATCA
TCCCCTCTCTAGAGGAGCTGGACTCCCTCAAGTACAGTGACCTGCAGAACTTAGCCAAGAGTCTGGGTCTCCGGG
CCAACCTGAGGGCAACCAAGTTGTTAAAAGCCTTGAAAGGCTACATTAAACATGAGGCAAGAAAAGGAAATGAGA
ATCAGGATGAAAGTCAAACTTCTGCATCCTCTTGTGATGAGACTGAGATACAGATCAGCAACCAGGAAGAAGCTG
AGAGACAGCCACTTGGCCATGTCACCAAAACAAGGAGAAGGTGCAAGACTGTCCGTGTGGACCCTGACTCACAGC
AGAATCATTCAGAGATAAAAATAAGTAATCCCACTGAATTCCAGAATCATGAAAAGCAGGAAAGCCAGGATCTCA
GAGCTACTGCAAAAGTTCCTTCTCCACCAGACGAGCACCAAGAAGCTGAGAATGCTGTTTCCTCAGGTAACAGAG
ATTCAAAGGTACCTTCAGAAGGAAAGAAATCTCTCTACACAGATGAGTCATCCAAACCTGGAAAAAATAAAAGAA
CTGCAATCACTACTCCAAACTTTAAGAAGCTTCATGAAGCTCATTTTAAGGAAATGGAGTCCATTGATCAATATA
TTGAGAGAAAAAGAAACATTTTGAAGAACACAATTCCATGAATGAACTGAAGCAGCAGCCCATCAATAAGGGAGG
GGTCAGGACTCCAGTACCTCCAAGAGGAAGACTCTCTGTGGCTTCTACTCCCATCAGCCAACGACGCTCGCAAGG
CCGGTCTTGTGGCCCTGCAAGTCAGAGTACCTTGGGTCTGAAGGGGTCACTCAAGCGCTCTGCTATCTCTGCAGC
TAAAACGGGTGTCAGGTTTTCAGCTGCTACTAAAGATAATGAGCATAAGCGTTCACTGACCAAGACTCCAGCCAG
AAAGTCTGCACATGTGACCGTGTCTGGGGGCACCCCAAAAGGCGAGGCTGTGCTTGGGACACACAAATTAAAGAC
CATCACGGGGAATTCTGCTGCTGTTATTACCCCATTCAAGTTGACAACTGAGGCAACGCAGACTCCAGTCTCCAA
TAAGAAACCAGTGTTTGATCTTAAAGCAAGTTTGTCTCGTCCCCTCAACTATGAACCACACAAAGGAAAGCTAAA
ACCATGGGGGCAATCTAAAGAAAATAATTATCTAAATCAACATGTCAACAGAATTAACTTCTACAAGAAAACTTA
CAAACAACCCCATCTCCAGACAAAGGAAGAGCAACGGAAGAAACGCGAGCAAGAACGAAAGGAGAAGAAAGCAAA
GGTTTTGGGAATGCGAAGGGGCCTCATTTTGGCTGAAGATTAATAATTTTTTAATATCTTGTAAATATTCCTGTA
TTCTCAACTTTTTTCCTTTTGTAAATTTTTTTTTTTTTGCTGTCATCCCCACTTTAGTCACGAGATCTTTTTCTG
CTAACTGTTCATAGTCTGTGTAGTGTCCATGGGTTCTTCATGTGCTATGATCTCTGAAAAGACGTTATCACCTTA
AAGCTCAAATTCTTTGGGATGGTTTTTACTTAAGTCCATTAACAATTCAGGTTTCTAACGAGACCCATCCTAAAA
TTCTGTTTCTAGATTTTTAATGTCAAGTTCCCAAGTTCCCCCTGCTGGTTCTAATATTAACAGAACTGCAGTCTT
CTGCTAGCCAATAGCATTTACCTGATGGCAGCTAGTTATGCAAGCTTCAGGAGAATTTGAACAATAACAAGAATA
GGGTAAGCTGGGATAGAAAGGCCACCTCTTCACTCTCTATAGAATATAGTAACCTTTATGAAACGGGGCCATATA
GTTTGGTTATGACATCAATATTTTACCTAGGTGAAATTGTTTAGGCTTATGTACCTTCGTTCAAATATCCTCATG
TAATTGCCATCTGTCACTCACTATATTCACAAAAATAAAACTCTACAACTCATTCTAACATTGCTTACTTAAAAG
CTACATAGCCCTATCGAAATGCGAGGATTAATGCTTTAATGCTTTTAGAGACAGGGTCTCACTGTGTTGCCCAGG
CTGGTCTCAAACTCCACCAAATGTACTTCTTATTCATTTTATGGAAAAGACTAGGCTTTGCTTAGTATCATGTCC
ATGTTTCCTTCACCTCAGTGGAGCTTCTGAGTTTTATACTGCTCAAGATCGTCATAAATAAAATTTTTTCTCATT
GTCAAAAAAAAAAAAAAA

FIGURE 3378

MIIPSLEELDSLKYSDLQNLAKSLGLRANLRATKLLKALKGYIKHEARKGNENQDESQTSASSCDETEIQISNQE
EAERQPLGHVTKTRRRCKTVRVDPDSQQNHSEIKISNPTEFQNHEKQESQDLRATAKVPSPPDEHQEAENAVSSG
NRDSKVPSEGKKSLYTDESSKPGKNKRTAITTPNFKKLHEAHFKEMESIDQYIERKKKHFEEHNSMNELKQPINK
GGVRTPVPPRGRLSVASTPISQRRSQGRSCGPASQSTLGLKGSLKRSAISAAKTGVRFSAATKDNEHKRSLTKTP
ARKSAHVTVSGGTPKGEAVLGTHKLKTITGNSAAVITPFKLTTEATQTPVSNKKPVFDLKASLSRPLNYEPHKGK
LKPWGQSKENNYLNQHVNRINFYKKTYKQPHLQTKEEQRKKREQERKEKKAKVLGMRRGLILAED

FIGURE 3379

GTCGGCTGGAAATTATGTCCTCCGTCGGTTTTCCGCAGTTTTTCCACCAAGCGAGATATTTTTGGGAGTTATTCC
CTAAATAACTGCATTATATGCTCCTTTCATGACGAAATTGCTGCCGTGGAGAAGACTGGAGGAAACTCGAGGAAG
AGGGAGAAGCCGACAAGTGCTCGACGGGCTAGGAACTGTCCTGCTTGGGTGTTAGCGTTTCCCGCCGGGCCAGTA
AGGCTGAGTGACCCGGCGTGGCTACTAGGAGAAGGACGTACGGTCCTGCTAGTAGAGGAATATGTCGAGTTTCTC
TAGGGCGCCCCAGCAATGGGCCACTTTTGCTAGAATATGGTATCTCTTAGATGGGAAAATGCAGCCACCTGGCAA
ACTTGCTGCTATGGCATCTATAAGACTTCAGGGATTACATAAACCTGTGTACCATGCACTGAGTGACTGTGGGGA
TCATGTTGTTATAATGAACACAAGACACATTGCATTTTCTGGAAACAAATGGGAACAAAAAGTATACTCTTCGCA
TACTGGCTACCCAGGTGGATTTAGACAAGTAACAGCTGCTCAGCTTCACCTGAGGGATCCAGTGGCAATTGTAAA
ACTAGCTATTTATGGCATGCTGCCAAAAAACCTTCACAGAAGAACAATGATGGAAAGGTTGCATCTTTTTCCAGA
TGAGTATATTCCAGAAGATATTCTTAAGAATTTAGTAGAGGAGCTTCCTCAACCACGAAAAATACCTAAACGTCT
AGATGAGTACACACAAGAAGAAATAGACGCCTTCCCAAGATTGTGGACTCCACCTGAAGATTATCGGCTATAAGA
GAATAAGAATTGCAGAAAATAACAGTGAAGTGATTGAAACTTTCTTCTGATGAGTTTCTCTAACCTACAGGATGG
AGTAAAACAACTGCTACAGTTCAGCACCTGTTTTATGTGCCGAATCACTGTGGGGAAAGGTCAGGAAGGTATAGT
CCTTCAATAGGAAATTGTAATTAAAATATAATTTTATAGAACCATTTTTATGTAATCTGATTTGAATGTTATAGT
TGATAATAATAAAATCACTTACTTGGTTGACTAAAA

FIGURE 3380

MSSFSRAPQQWATFARIWYLLDGKMQPPGKLAAMASIRLQGLHKPVYHALSDCGDHVVIMNTRHIAFSGNKWEQK
VYSSHTGYPGGFRQVTAAQLHLRDPVAIVKLAIYGMLPKNLHRRTMMERLHLFPDEYIPEDILKNLVEELPQPRK
IPKRLDEYTQEEIDAFPRLWTPPEDYRL

FIGURE 3381

AAAAAAAAAAACACAGGCTTGATGCTCGCTCCCGTTTCTACAGGAGGTTTTGACGGCTGGATGCTGCAGGGCATC
CCCTCGCCTGGAGGAGGTTCACTTGTGGCCAGGTTCCCAGCACACCCACTTGCTCACTGGGGCCCTGGGGACACC
GCCACACTCGAGCCCATCCTACGGCCTCAATCCTTACCAGTCCCCAGGCCATGGACTGCCACACTGTAGGTCTTC
AATCAAGGTTTAGTGGAGTTTCGAATGTACACACACCCTGAAAGACAGCGAGGCCACCTCAGAAAACAACGCGCG
CCCAGCTGGCTCCCCTCCGACAGGGCCCACGGCTACTGGGTCGGCCTCCTCCGGACCCTGAGCACAGCCTGGTAT
GCGTGCGGGCTCGGAATACGGATCTGAGCAGAAGAA**ATG**CGAGTGGAGAGCGGTTCTGCGCAGGAAAGAGGAATT
TTGTTGGAAAGCCTGTCGACGTTGCTAGAAAAGACCACAGCATCTCACGAGGGGCGTGCGCCGGGAAACCGGGAG
TTGACGGACCTCCTGCCCCCCGAGGTCTGCAGTCTCCTGAACCCAGCAGCCATCTACGCCAACAACGAGATCAGC
CTGCGTGACGTTGAGGTCTACGGCTTTGACTACGACTACACCCTGGCCCAGTATGCAGACGCACTGCACCCCGAG
ATCTTCAGTACCGCCCGTGACATCCTGATCGAGCACTACAAGTACCCAGAAGGGATTCGGAAGTATGACTACAAC
CCCAGCTTTGCCATCCGTGGCCTCCACTATGACATTCAGAAGAGCCTTCTGATGAAGATTGACGCCTTCCACTAC
GTGCAGCTGGGGACAGCCTACAGGGGCCTCCAGCCTGTGCCAGACGAGGAGGTGATTGAGCTGTATGGGGGTACC
CAGCACATCCCACTATACCAGATGAGTGGCTTCTATGGCAAGGGTCCCTCCATTAAGCAGTTCATGGACATCTTC
TCGCTACCGGAGATGGCTCTGCTGTCCTGTGTGGTGGACTACTTTCTGGGCCACAGCCTGGAGTTTGACCAAGCA
CATCTCTACAAGGACGTGACGGACGCCATCCGAGACGTGCATGTGAAGGGCCTCATGTACCAGTGGATCGAGCAG
GACATGGAGAAGTACATCCTGAGAGGGGATGAGACGTTTGCTGTCCTGAGCCGCCTGGTGGCCCATGGGAAACAG
CTGTTCCTCATCACCAACAGTCCTTTCAGCTTCGTAGACAAGGGGATGCGGCACATGGTGGGTCCCGATTGGCGC
CAGCTCTTCGATGTGGTCATTGTCCAGGCAGACAAGCCCAGCTTCTTCACTGACCGGCGCAAGCCTTTCAGAAAA
CTCGATGAGAAGGGCTCACTTCAGTGGGACCGGATCACCCGCTTGGAAAAGGGCAAGATCTATCGGCAGGGAAAC
CTGTTTGACTTCTTACGCTTGACGGAATGGCGTGGCCCCCGCGTGCTCTACTTCGGGGACCACCTCTATAGTGAT
CTGGCGGATCTCATGCTGCGGCACGGCTGGCGCACAGGCGCCATCATCCCCGAGCTGGAGCGTGAGATCCGCATC
ATCAACACGGAGCAGTACATGCACTCGCTGACGTGGCAGCAGGCGCTCACGGGGCTGCTGGAGCGCATGCAGACC
TATCAGGACGCGGAGTCGAGGCAGGTGCTGGCTGCCTGGATGAAAGAGCGGCAGGAGCTGAGGTGCATCACCAAG
GCCCTGTTCAATGCGCAGTTCGGCAGCATCTTCCGCACCTTCCACAACCCCACCTACTTCTCAAGGCGCCTCGTG
CGCTTCTCTGACCTCTACATGGCCTCCCTCAGCTGCCTGCTCAACTACCGCGTGGACTTCACCTTCTACCCACGC
CGTACGCCGCTGCAGCACGAGGCACCCCTCTGGATGGACCAGCTCTGCACCGGCTGCATGAAGACCCCCTTCCTT
GGTGACATGGCCCACATCCGC**TGA**GGGCACCTTTATTGTCTGGGACAGGCCCTCAGCCCCTCCTGCCCCATCCAC
CCAGACAAGCAATAAAAGTGGTCTCCTCCCTG

FIGURE 3382

MRVESGSAQERGILLESLSTLLEKTTASHEGRAPGNRELTDLLPPEVCSLLNPAAIYANNEISLRDVEVYGFDYD
YTLAQYADALHPEIFSTARDILIEHYKYPEGIRKYDYNPSFAIRGLHYDIQKSLLMKIDAFHYVQLGTAYRGLQP
VPDEEVIELYGGTQHIPLYQMSGFYGKGPSIKQFMDIFSLPEMALLSCVVDYFLGHSLEFDQAHLYKDVTDAIRD
VHVKGLMYQWIEQDMEKYILRGDETFAVLSRLVAHGKQLFLITNSPFSFVDKGMRHMVGPDWRQLFDVVIVQADK
PSFFTDRRKPFRKLDEKGSLQWDRITRLEKGKIYRQGNLFDFLRLTEWRGPRVLYFGDHLYSDLADLMLRHGWRT
GAIIPELEREIRIINTEQYMHSLTWQQALTGLLERMQTYQDAESRQVLAAWMKERQELRCITKALFNAQFGSIFR
TFHNPTYFSRRLVRFSDLYMASLSCLLNYRVDFTFYPRRTPLQHEAPLWMDQLCTGCMKTPFLGDMAHIR

FIGURE 3383

GGAGCTCTGGAGGCGGGGCTTCGAGCGTGGCTCGTGGGTTTTCCGTGAAGTCGCGGTGCAGCGGTGGGCGGCATG

TCTGTGGCCGGTGGGGAGATTCGTGGGGACACGGGGGGAGAGGACACTGCTGCTCCCGGCCGGTTCAGCTTCAGC
CCGGAGCCCACGCTCGAGGACATCCGCCGCCTCCATGCTGAGTTTGCTGCGGAACGAGACTGGGAACAGTTCCAT
CAGCCTCGGAATCTCCTCCTGGCCTTGGTTGGGGAAGTGGGGGAGCTGGCAGAACTCTTTCAGTGGAAAACCGAT
GGGGAACCTGGCCCCCAAGGCTGGTCCCCCAGGGAACGGGCAGCCCTTCAAGAGGAGCTTAGTGACGTCCTCATC
TACCTGGTGGCATTAGCAGCCCGCTGCCGTGTGGATCTGCCGCTAGCAGTGCTCTCCAAAATGGACATCAACCGG
CGACGCTACCCAGCCCATCTGGCCCGCAGCTCTTCCCGCAAGTATACAGAATTGCCCCATGGGGCCATCTCTGAA
GACCAGGCTGTGGGGCCTGCGGACATTCCCTGTGACTCCACAGGCCAGACCTCAACCTAGAAAGATGGCCACAGG
ACTTGCAACTCAGGGTGGTGTCTGAAGAGCAGAGAGTGGCCTGGCCCTGGAGCCTTTTTCTAGTCTTTTCAGAAT
AGATCATGGGCCTGAGGCCTCCACTTCTTGAGGTCTGAGGCCCAGCAGCCTCTAGAAGGTAGCCTCCTGGTGTTT
GTTCTCCCAGTAAAATGGTTTTGGGCGATAACTTCTAGATTATTCCTGGATGGCCAGGGAGGCTCTCTGTCTCAG
CAGGTGATGACGGGGGTACCAGGGGTGCCTCTGAGACCCATTCTCGTGTTTCCCTGTTGTACCTTTTGCCTGCAG
GGCAGAGAGATCTGGTTTCTAGCAAATTCCCAGTAGGATGTCATGTAAGTTCCTTCCCCCTCTTAGAGATTGAAG
GCTGTAAGAGTCCAGATGGTGGAGCCAGGCTGTCTGGGTTCAAATGCCATCTTTGACACTTGCAAGCTAAATGAC
ATTACTCAAATTAATCGTTCTGCACTTCAGCTTCCTTGTCTATCAAATAAAAAGAATAGTACCTGCCCAAAAAAA
AAAAAAAAAAAAAAAAAA

FIGURE 3384

MSVAGGEIRGDTGGEDTAAPGRFSFSPEPTLEDIRRLHAEFAAERDWEQFHQPRNLLLALVGEVGELAELFQWKT
DGEPGPQGWSPRERAALQEELSDVLIYLVALAARCRVDLPLAVLSKMDINRRRYPAHLARSSSRKYTELPHGAIS
EDQAVGPADIPCDSTGQTST

FIGURE 3385

GGCACGAGGCAGAGGGCGGTTCCTGGAGTTACAGCCGCGTTTGCGGGACGTGTCTGCGCGGCAGTCCTGGCCTGT
TGAGCTTGTCCAGACGAAGCCTCGCAGGGATGGGTTGGAGCCTGGGCCGGGCTTCGCTCAGGCAGCGTTTGAGGC
AGACCCAGCAGGGTCCTCCTGGGGCCTTCCTGCCTTTGAACTGCGGTGGCGGGCGGGCGCACGGTCTCCTGTACG
CCCTAGACTAGGGGCCGCCATCTCC**ATG**GCCACGGCCGTGAGCCGGCCCTGCGCCGGCAGGTCGCGGGACATACT
GTGGCGCGTTTTGGGCTGGAGGATAGTTGCAAGTATTGTTTGGTCAGTGCTATTTCTACCCATCTGCACCACAGT
ATTTATAATTTTCAGCAGGATTGATTTGTTTCATCCTATACAGTGGCTGTCTGATTCTTTCAGTGACCTGTATAG
TTCCTATGTAATCTTTTACTTCCTGCTGCTGTCAGTGGTAATAATAATAATAAGTATTTTCAATGTGGAGTTCTA
TGCAGTTGTGCCTTCTATTCCTTGCTCCAGACTAGCTCTGATAGGGAAGATCATTCATCCTCAGCAACTCATGCA
CTCATTTATTCATGCTGCAATGGGAATGGTGATGGCCTGGTGTGCTGCAGTGATAACCCAGGGCCAGTACAGCTT
TCTTGTGGTTCCCTGCACTGGTACTAACAGCTTTGATAGCCCTGCTGCGCAAACCTGCTTAAATGAATATCATCT
TTTTTTCCTACTGACTGGAGCATTTATGGGCTATAGCTATAGCCTCCTGTATTTTGTTAACAACATGAACTATCT
TCCATTTCCCATCATACAGCAATACAAGTTCTTGCGTTTTAGGAGATCTCTGCTCTTATTAGTTAAACACAGTTG
TGTGGAATCACTGTTCCTGGTTAGAAATTTCTGCATTTTATATTATTTTCTTGGCTATATTCCCAAAGCTTGGAT
TAGCACTGCTATGAACCTTCACATAGATGAGCAGGTTCATAGGCCACTTGACACAGTGAGTGGCCTCTTAAATCT
CTCGTTACTCTACCATGTCTGGCTGTGTGGTGTCTTTCTCCTGACGACTTGGTATGTCTCATGGATACTCTTCAA
AATCTATGCCACAGAGGCTCATGTGTTTCCTGTTCAACCACCATTTGCAGAAGGGTCAGATGAGTGCCTTCCAAA
AGTGTTAAATAGCAATCCTCCCCCCATCATAAAGTATTTAGCCTTGCAGGACCTGATGTTGCTTTCTCAATATTC
TCCTTCACGAAGACAAGAAGTTTTCAGCCTCAGCCAACCAGGTGGACATCCCCACAATTGGACAGCCATTTCAAG
GGAGTGTTTGAATCTTTTAAATGGTATGACTCAGAAACTGATTCTCTATCAAGAAGCTGCTGCTACGAATGGGAG
AGTGTCTTCATCTTACCCAGTGGAACCTAAGAAATTAAATTCTCCAGAAGAAACTGCTTTTCAGACACCAAAATC
TAGCCAGATGCCTCGGCCTTCAGTGCCACCATTAGTTAAAACATCACTGTTTTCTTCAAAATTATCTACACCTGA
TGTTGTGAGCCCATTTGGGACCCCATTTGGCTCTAGTGTAATGAATCGGATGGCTGGAATTTTTGATGTAAACAC
CTGCTATGGGTCACCGCAAAGTCCTCAGCTAATAAGAAGGGGGCCAAGATTGTGGACATCAGCTTCTGATCAGCA
AATGACTGAATTTTCTAATCCTTCTCCATCTACCTCTATTAGTGCTGAGGGTAAGACAATGAGACAACCCAGTGT
GATTTATTCATGGATTCAGAATAAACGTGAACAGATTAAGAATTTCTTGTCAAAACGGGTGCTGATAATGTATTT
TTTCAGTAAGCACCCAGAGGCCTCCATTCAGGCTGTTTTTTCAGATGCCCAAATGCATATTTGGGCATTAGAAGG
TCTGTCGCACTTAGTAGCAGCATCATTTACAGAGGATAGATTTGGAGTTGTCCAGACGACACTACCAGCTATCCT
TAATACTTTGTTGACACTGCAAGAGGCAGTCGACAAGTACTTTAAGCTTCCTCATGCTTCCAGTAAACCACCCCG
GATTTCAGGAAGCCTTGTGGACACTTCATATAAAACATTAAGATTTGCATTCAGAGCATCACTGAAAACTGCCAT
CTATCGAATAACTACTACATTTGGTGAACATCTGAATGCTGTGCAAGCATCTGCAGAACATCAGAAAAGACTTCA
ACAGTTCTTGGAGTTCAAAGAA**TAG**TTAAGTAATATAAACTGTGTTCATTACACTGCTGATACAACTACAGATGG
GACAGTAAATGTTCAGCATTCTTGGATCAGAAGAAAACGGACTAATTAGATGCTTCCTTTGTCGTGGTGGTTGCT
TTGAAAACTATACTTTAATGGGAGAAATCATGGAAAGAAATTCTCAACAGAATAACTGAAAACTGCCTTTTCTGT
ACCGATTGCTTTTTGTGTGTGTGGTATAATAAAATCTTTATTCAATTTTACAGAAAAAAAAAAAAAAAAAAAAA

FIGURE 3386

MATAVSRPCAGRSRDILWRVLGWRIVASIVWSVLFLPICTTVFIIFSRIDLFHPIQWLSDSFSDLYSSYVIFYFL
LLSVVIIIISIFNVEFYAVVPSIPCSRLALIGKIIHPQQLMHSFIHAAMGMVMAWCAAVITQGQYSFLVVPCTGT
NSFDSPAAQTCLNEYHLFFLLTGAFMGYSYSLLYFVNNMNYLPFPIIQQYKFLRFRRSLLLLVKHSCVESLFLVR
NFCILYYFLGYIPKAWISTAMNLHIDEQVHRPLDTVSGLLNLSLLYHVWLCGVFLLTTWYVSWILFKIYATEAHV
FPVQPPFAEGSDECLPKVLNSNPPPIIKYLALQDLMLLSQYSPSRRQEVFSLSQPGGHPHNWTAISRECLNLLNG
MTQKLILYQEAAATNGRVSSSYPVEPKKLNSPEETAFQTPKSSQMPRPSVPPLVKTSLFSSKLSTPDVVSPFGTP
FGSSVMNRMAGIFDVNTCYGSPQSPQLIRRGPRLWTSASDQQMTEFSNPSPSTSISAEGKTMRQPSVIYSWIQNK
REQIKNFLSKRVLIMYFFSKHPEASIQAVFSDAQMHIWALEGLSHLVAASFTEDRFGVVQTTLPAILNTLLTLQE
AVDKYFKLPHASSKPPRISGSLVDTSYKTLRFAFRASLKTAIYRITTTFGEHLNAVQASAEHQKRLQQFLEFKE

FIGURE 3387

GGAAACCCAAGAGGAAATGACTGAGCCCGTCTGGGTCCCCGCCCGCTCGCGCTCCCCTGGCCACACCCTCCGCCT
GGACGCAGCAGCCACCGCCGCGTCCCTCTCTCCACGAGGCTGCCGGCTTAGGACCCCCAGCTCCGACATGTCGCC
CTCTGGTCGCCTGTGTCTTCTCACCATCGTTGGCCTGATTCTCCCCACCAGAGGACAGACGTTGAAAGATACCAC
GTCCAGTTCTTCAGCAGACTCAACTATCATGGACATTCAGGTCCCGACACGAGCCCCAGATGCAGTCTACACAGA
ACTCCAGCCCACCTCTCCAACCCCAACCTGGCCTGCTGATGAAACACCACAACCCCAGACCCAGACCCAGCAACT
GGAAGGAACGGATGGGCCTCTAGTGACAGATCCAGAGACACACAAGAGCACCAAAGCAGCTCATCCCACTGATGA
CACCACGACGCTCTCTGAGAGACCATCCCCAAGCACAGACGTCCAGACAGACCCCCAGACCCTCAAGCCATCTGG
TTTTCATGAGGATGACCCCTTCTTCTATGATGAACACACCCTCCGGAAACGGGGGCTGTTGGTCGCAGCTGTGCT
GTTCATCACAGGCATCATCATCCTCACCAGTGGCAAGTGCAGGCAGCTGTCCCGGTTATGCCGGAATCGTTGCAG
GTGAGTCCATCAGAAACAGGAGCTGACAACCTGCTGGGCACCCGAAGACCAAGCCCCCTGCCAGCTCACCGTGCC
CAGCCTCCTGCATCCCCTCGAAGAGCCTGGCCAGAGAGGGAAGACACAGATGATGAAGCTGGAGCCAGGGCTGCC
GGTCCGAGTCTCCTACCTCCCCCAACCCTGCCCGCCCCTGAAGGCTACCTGGCGCCTTGGGGGCTGTCCCTCAAG
TTATCTCCTCTGCTAAGACAAAAAGTAAAGCACTGTGGTCTTTGCC

FIGURE 3388

MSPSGRLCLLTIVGLILPTRGQTLKDTTSSSSADSTIMDIQVPTRAPDAVYTELQPTSPTPTWPADETPQPQTQT
QQLEGTDGPLVTDPETHKSTKAAHPTDDTTTLSERPSPSTDVQTDPQTLKPSGFHEDDPFFYDEHTLRKRGLLVA
AVLFITGIIILTSGKCRQLSRLCRNRCR

FIGURE 3389

GAGTGTTTGGGTTTCTTCGCGGCTGCTCAAGATGAACCGACTCTTCGGGAAAGCGAAACCCAAGGCTCCGCCGCC
CAGCCTGACTGACTGCATTGGCACGGTGGACAGTAGAGCAGAATCCATTGACAAGAAGATTTCTCGATTGGATGC
TGAGCTAGTGAAGTATAAGGATCAGATCAAGAAGATGAGAGAGGGTCCTGCAAAGAATATGGTCAAGCAGAAAGC
CTTGCGAGTTTTAAAGCAAAAGAGGATGTATGAGCAGCAGCGGGACAATCTTGCCCAACAGTCATTCAACATGGA
ACAAGCCAATTATACCATCCAGTCTTTGAAGGACACCAAGACCACGGTTGATGCTATGAAACTGGGAGTAAAGGA
AATGAAGAAGGCATACAAGCAAGTGAAGATCGACCAGATTGAGGATTTACAAGACCAGCTAGAGGATATGATGGA
AGATGCAAATGAAATCCAAGAAGCACTGAGTCGCAGTTATGGCACCCCAGAACTGGATGAAGATGATTTAGAAGC
AGAGTTGGATGCACTAGGTGATGAGCTTCTGGCTGATGAAGACAGTTCTTATTTGGATGAGGCAGCATCTGCACC
TGCAATTCCAGAAGGTGTTCCCACTGATACAAAAAACAAGGATGGAGTTCTGGTGGATGAATTTGGATTGCCACA
GATCCCTGCTTCATAGATTTGCATCATTCAAGCATATCTTGTAAAACAAACACATATTATGGGACTAGGAAATAT
TTATCTTTCCAAATTTGCCATAACAGATTTAGGTTTCTTTCCTTTCTTTGAAGGAAAGTTTAATTACATTGCTCT
TTTATTTTTTCCATTAAGAGACTCATTGCTTGGGAAATGCTTTCTTCGTACTAAAATTTGATTCCTTTTTTTCTT
ATGAAAAACGAACTCAGTTTAAAAGTATTTTTAGCTCGTATGACTTGTTTTCATTCATTAATAATAATTTGAAAT
AAAACTAAGGAAATGGAATCTTAAAAGTCTATGACAGTGTAACTCTACAGTCTCAAAATGACCTGATAAATTGAT
AAGACAAAGATGAGATTATTGGGGCTGTTCATATTATGATTCAGAATCATTTTCTATTGTGGTATTATAGGTTGG
TTAAAGTGATGGCCTTTTTGATGGGTTTTGTTGTGTCTTGTGAACAAGTCGTTACTGTGTCCATTATTGGAATGG
AATTATCACTACTGTATCATGAGTGGGTATTTTGATTCTATGGTTCCCTCAGTATTACATCTTGACTTGTAATCA
ATTATGAATATTTCTTGATATTTAATGTATAGGACATTTATTTATACTCAATAAATATTTTTCAAAAGGAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3390

MNRLFGKAKPKAPPPSLTDCIGTVDSRAESIDKKISRLDAELVKYKDQIKKMREGPAKNMVKQKALRVLKQKRMY
EQQRDNLAQQSFNMEQANYTIQSLKDTKTTVDAMKLGVKEMKKAYKQVKIDQIEDLQDQLEDMMEDANEIQEALS
RSYGTPELDEDDLEAELDALGDELLADEDSSYLDEAASAPAIPEGVPTDTKNKDGVLVDEFGLPQIPAS

FIGURE 3391

TGGCGGCGGCGGCGGCGGTTGTCCCGGCTGTGCCGGTTGGTGTGGCCCGTCAGCCCGCGTACCACAGCGCCCGGG
CCGCGTCGAGCCCAGTACAGCCAAGCCGCTGCGGCCGGGTCCGGCGCGGGCGGCGCGCGCAGACGGAGGGCGGCG
GCCGCGGCCAGGGCGGCCCGTGGGACCGCGGGCCCCCGGCGCAGCGCTGCCCGGCTCCCGGCCCTGCCGGCCTCC
TCCCTTGGCGCCGCGGCC**ATG**GCGGCCAGCGCGAAGCGGAAGCAGGAGGAGAAGCACCTGAAGATGCTGCGGGAC
ATGACCGGCCTCCCGCGCAACCGAAAGTGCTTCGACTGCGACCAGCGCGGCCCCACCTACGTTAACATGACGGTC
GGCTCCTTCGTGTGTACCTCCTGCTCCGGCAGCCTGCGAGGATTAAATCCACCACACAGGGTGAAATCTATCTCC
ATGACAACATTCACACAACAGGAAATTGAATTCTTACAAAAACATGGAAATGAAGTCTGTAAACAGATTTGGCTA
GGATTATTTGATGATAGATCTTCAGCAATTCCAGACTTCAGGGATCCACAAAAAGTGAAAGAGTTTCTACAAGAA
AAGTATGAAAAGAAAAGATGGTATGTCCCGCCAGAACAAGCCAAAGTCGTGGCATCAGTTCATGCATCTATTTCA
GGGTCCTCTGCCAGTAGCACAAGCAGCACACCTGAGGTCAAACCACTGAAATCTCTTTTAGGGGATTCTGCACCA
ACACTGCACTTAAATAAGGGCACACCTAGTCAGTCCCCAGTTGTAGGTCGTTCTCAAGGGCAGCAGCAGGAGAAG
AAGCAATTTGACCTTTTAAGTGATCTCGGCTCAGACATCTTTGCTGCTCCAGCTCCTCAGTCAACAGCTACAGCC
AATTTTGCTAACTTTGCACATTTCAACAGTCATGCAGCTCAGAATTCTGCAAATGCAGATTTTGCAAACTTTGAT
GCATTTGGACAGTCTAGTGGTTCGAGTAATTTTGGAGGTTTCCCCACAGCAAGTCACTCTCCTTTTCAGCCCCAA
ACTACAGGTGGAAGTGCTGCATCAGTAAATGCTAATTTTGCTCATTTTGATAACTTCCCCAAATCCTCCAGTGCT
GATTTTGGAACCTTCAATACTTCCCAGAGTCATCAAACAGCATCAGCTGTTAGTAAAGTTTCAACGAACAAAGCT
GGTTTACAGACTGCAGACAAATATGCAGCACTTGCTAATTTAGACAATATCTTCAGTGCCGGGCAAGGTGGTGAT
CAGGGAAGTGGCTTTGGGACCACAGGTAAAGCTCCTGTTGGTTCTGTGGTTTCAGTTCCCAGTCAGTCAAGTGCA
TCTTCAGACAAGTATGCAGCTCTGGCAGAACTAGACAGCGTTTTCAGTTCTGCAGCCACCTCCAGTAATGCGTAT
ACTTCCACAAGTAATGCTAGCAGCAATGTTTTTGGAACAGTGCCAGTGGTTGCTTCTGCACAGACACAGCCTGCT
TCATCAAGTGTGCCTGCTCCATTTGGACGTACGCCTTCCACAAATCCATTTGTTGCTGCTGCTGGTCCTTCTGTG
GCATCTTCTACAAACCCATTTCAGACCAATGCCAGAGGAGCAACAGCGGCAACCTTTGGCACTGCATCCATGAGC
ATGCCCACGGGATTCGGCACTCCTGCTCCCTACAGTCTTCCCACCAGCTTTAGTGGCAGCTTTCAGCAGCCTGCC
TTTCCAGCCCAAGCAGCTTTCCCTCAACAGACAGCTTTTTCTCAACAGCCCAATGGTGCAGGTTTTGCAGCATTT
GGACAAACAAAGCCAGTAGTAACCCCTTTTGGTCAAGTTGCAGCTGCTGGAGTATCTAGTAATCCTTTTATGACT
GGTGCACCAACAGGACAATTTCCAACAGGAAGCTCATCAACCAATCCTTTCTTA**TAG**CCTTATATAGACAATTTA
CTGGAACGAACTTTTATGTGGTCACATTACATCTCTCCACCTCTTGCACTGTTGTCTTGTTTCACTGATCTTAGC
TTTAAACACAAGAGAAGTCTTTAAAAAGCCTGCATTGTGTATTAAACACCAGGTAATATGTGCAAAACCGAGGGC
TCCAGTAACACCTTCTAACCTGTGAATTGGCAGAAAAGGGTAGCGGTATCATGTATATTAAAATTGGCTAATATT
AAGTTATTGCAGATACCACATTCATTATGCTGCAGTACTGTACATATTTTTCTTAGAAATTAGCTATTTGTGCAT
ATCAGTATTTGTAACTTTAACACATTGTTATGTGAGAAATGTTACTGGGGAAATAGATCAGCCACTTTTAAGGTG
CTGTCATATATCTTGGAATGAATGACCTAAAATCATTTTAACCATTGCTACTGGAAAGTAACAGAGTCAAAATTG
GAAGGTTTTATTCATTCTTGAATTTTTCCTTTCTAAAGAGCTCTTCTATTTATACATGCCTAAATTCTTTTAAAA
TGTAGAGGGATACCTGTCTGCATAATAAAGCTGATCATGTTTTGCTACAGTTTGCAGGTGAAAAAAAATAAATAT
TATAAAATAAAAAAAAAAAAAAAGAAAAAAAAAA

FIGURE 3392

MAASAKRKQEEKHLKMLRDMTGLPRNRKCFDCDQRGPTYVNMTVGSFVCTSCSGSLRGLNPPHRVKSISMTTFTQ
QEIEFLQKHGNEVCKQIWLGLFDDRSSAIPDFRDPQKVKEFLQEKYEKKRWYVPPEQAKVVASVHASISGSSASS
TSSTPEVKPLKSLLGDSAPTLHLNKGTPSQSPVVGRSQGQQQEKKQFDLLSDLGSDIFAAPAPQSTATANFANFA
HFNSHAAQNSANADFANFDAFGQSSGSSNFGGFPTASHSPFQPQTTGGSAASVNANFAHFDNFPKSSSADFGTFN
TSQSHQTASAVSKVSTNKAGLQTADKYAALANLDNIFSAGQGGDQGSGFGTTGKAPVGSVVSVPSQSSASSDKYA
ALAELDSVFSSAATSSNAYTSTSNASSNVFGTVPVVASAQTQPASSSVPAPFGRTPSTNPFVAAAGPSVASSTNP
FQTNARGATAATFGTASMSMPTGFGTPAPYSLPTSFSGSFQQPAFPAQAAFPQQTAFSQQPNGAGFAAFGQTKPV
VTPFGQVAAAGVSSNPFMTGAPTGQFPTGSSSTNPFL

FIGURE 3393

GCACGAGGCAGGCCGAAGTCCGCAGCCCCGGCTCGGCGCCCGCTGCTTGCACCTCCCGGATGGTGCTGACTGCTC
CCTAAGCGGCGGCGGCGGCGAGTCGTGAGGACGCGCCGCGGAGGCTGTTCGGGGTCGAGGCTTCCCGTCGCCGGC
ACTTCCTCTTGCGGCGCCCGTGCGCGGCCGGCCCGGCAGGCGGGATGAGCGGCCGCGGCTCCGGGAACGGCCGCG
CATCGGCGCCCCGGCTGCTTCTGCTCTTTCTGGTTCCGCTGCTGTGGGCCCCGGCTGCGGTCCGGGCCGGCCCAG
ATGAAGACCTTAGCCACCGGAACAAAGAACCGCCGGCGCCGGCCCAGCAGCTGCAGCCGCAGCCTGTGGCTGTGC
AGGGCCCCGAGCCGGCCCGGGTCGAGAAAATATTTACACCAGCAGCTCCAGTTCATACCAATAAAGAAGATCCTG
CTACCCAAACTAATTTGGGATTTATCCATGCATTTGTCGCTGCCATATCAGTTATTATTGTATCTGAATTGGGTG
ATAAGACATTTTTTATAGCAGCCATCATGGCAATGCGCTATAACCGCCTGACCGTGCTGGCTGGTGCAATGCTTG
CCTTGGGACTAATGACATGCTTGTCAGTTTTGTTTGGCTATGCCACCACAGTCATCCCCAGGGTCTATACATACT
ATGTTTCAACTGTATTATTTGCCATTTTTGGCATTAGAATGCTTCGGGAAGGCTTAAAGATGAGCCCTGATGAGG
GTCAAGAGGAACTGGAAGAAGTTCAAGCTGAATTAAAGAAGAAAGATGAAGAATTTCAACGAACCAAACTTTTAA
ATGGACCGGGAGATGTTGAAACGGGTACAAGCATAACAGTACCTCAGAAAAAGTGGTTGCATTTTATTTCACCCA
TTTTTGTTCAAGCTCTTACATTAACATTCTTAGCAGAATGGGGTGATCGCTCTCAACTAACTACAATTGTATTGG
CAGCTAGAGAGGACCCCTATGGTGTAGCCGTGGGTGGAACTGTGGGGCACTGCCTGTGCACGGGATTGGCAGTAA
TTGGAGGAAGAATGATAGCACAGAAAATCTCTGTCAGAACTGTGACAATCATAGGAGGCATCGTTTTTTTGGCGT
TTGCATTTTCTGCACTATTTATAAGCCCTGATTCTGGTTTTTAACGCTGTTTGTTCATCTATATTTAGTTTAAAA
TAGGTAGTATTATCTTTCTGTACATAGTGTACATTACAACTAAAAGTGATGGGAAAAATACTGTATTTTGTAGGC
ACTGGATTTTGTGAGTTTGACCCCTTATTATGTCTGGAGGATATAATCATTGGATTCCTATCTTGTGCCAAGGGA
GTTTTTAAAAGGAAACCCTGACTTTTTAAGTGTGGGGGTTTTTTCTTCTCTTCCCAACCTTAATTATGGTTTAAT
ATGGTCCTCATTTTTCTTTTGGTGCAGAACCGTTGTGCAGTGGGGTCTACCATGCAATTTTCTTTCAGCACTGAC
CCCTTTTTAAGGAATACAAATTTTCTCCTTCATCACTTAGGTGTTTTAAGATGTTTACCTTAAAGTTTTCTTGGG
GAAAGAATGAATTAATTTCTATTTCTTAAAACATTTCCCTGAGCCAGTAAACAGTAGTTTAATCATTGGTCTTTT
CAAAACTAGGTGTTTAAAAAAAGAGACATATATGATATTGCTGTTATATCAATAACATGGCACAACAAGAACTGT
CTGCCAGGTCATTCTTCCTCTTTTTTTTTTAATTGGGTAGGACACCCCATATAAAAACCATCCATATTTGGCCAT
GTGGGATTACCCAAATAAAAGAGGAATCCATGGATGGATTCAGAATTTTTTTAAATTTAATAAACCAACCAACCC
TTGGTTCCCATATTTAATTAAAAGGAGGGTTGCCCAGT

FIGURE 3394

MSGRGSGNGRASAPRLLLLFLVPLLWAPAAVRAGPDEDLSHRNKEPPAPAQQLQPQPVAVQGPEPARVEKIFTPA
APVHTNKEDPATQTNLGFIHAFVAAISVIIVSELGDKTFFIAAIMAMRYNRLTVLAGAMLALGLMTCLSVLFGYA
TTVIPRVYTYYVSTVLFAIFGIRMLREGLKMSPDEGQEELEEVQAELKKKDEEFQRTKLLNGPGDVETGTSITVP
QKKWLHFISPIFVQALTLTFLAEWGDRSQLTTIVLAAREDPYGVAVGGTVGHCLCTGLAVIGGRMIAQKISVRTV
TIIGGIVFLAFAFSALFISPDSGF

FIGURE 3395

CCCAAAGTAGGCTAGGCCTACGGAAGCTGGGTCTTCTTGCTGTGAGGTCGCGTTCCCCAGTGTTACGGAGGGTCC
TTGAGGCAGGAGTGAAAATTGGGTCTGGGGGTTAGTCCTGGGGTGGAGGTCTGGGCACGCCGGGTCGGACCCCCT
CCATCTTCGGTTTTGCACACCCCGCTTTCCAGCGCGGAGTCGCGGCGGGTAGGGCGGCGTCGCGTGCGTGACGTC
ATCCAGCGGCGCCTCGCGAGGCTCCAGTGGCCTTGACCTCCCGCGGCGTGGGAGGCTGCGCGGCG**ATG**CTGCAGT
TCGTCCGGGCCGGGGCGCGGGCCTGGCTTCGGCCTACCGGCAGCCAGGGCCTGAGTTCCCTGGCGGAAGAGGCAG
CGCGTGCGACCGAGAACCCGGAGCAGGTGGCGAGCGAGGGTCTCCCGGAGCCCGTGCTGCGCAAAGTCGAGCTCC
CGGTACCCACTCATCGACGCCCAGTGCAGGCCTGGGTCGAGTCCTTGCGGGGCTTCGAGCAGGAGCGCGTGGGCC
TGGCCGACCTGCACCCCGATGTTTTCGCCACCGCGCCCAGGCTGGACATACTGCACCAGGTTGCTATGTGGCAGA
AGAACTTCAAGAGAATTAGCTATGCCAAGACCAAGACGAGAGCCGAGGTGCGGGGCGGTGGCCGGAAGCCTTGGC
CGCAGAAAGGCACTGGGCGGGCCCGGCATGGCAGCATCCGCTCTCCGCTCTGGCGAGGAGGAGGTGTTGCCCATG
GCCCCCGGGGCCCCACAAGTTACTACTACATGCTGCCCATGAAGGTGCGGGCGCTGGGTCTCAAAGTGGCACTGA
CCGTCAAGCTGGCCCAGGACGACCTGCACATCATGGACTCCCTAGAGCTGCCCACCGGAGACCCACAGTACCTGA
CAGAGCTGGCGCACTACCGCCGCTGGGGGGACTCCGTACTCCTCGTGGACTTAACACACGAGGAGATGCCACAGA
GCATCGTGGAGGCCACCTCTAGGCTTAAGACCTTCAACTTGATCCCGGCTGTTGGCCTAAATGTGCACAGCATGC
TCAAGCACCAGACGCTGGTCCTGACGCTGCCCACCGTCGCCTTCCTGGAGGACAAGCTGCTCTGGCAGGACTCAC
GTTACAGACCCCTCTACCCCTTCAGCCTGCCCTACAGCGACTTCCCCCGACCCCTACCCCACGCTACCCAGGGCC
CAGCGGCCACCCCGTACCACTGTTGATGTGAAGCACCTCTTCTGAGCCAGGCCGAGCCCCTGGCCGACTTGGGAG
CCTCAGGCCCACGCCCACCCTTCGAGGAAGGTGTCACCTGGACCCCTTCATTCCACGGAGGAAGCTGAGGCCACA
GGGAGCGGCCATCGCCATTGGGAAGGGGCGACTCCACGGAAAGCCCAGACGGGCTTCTGCATCCATTCCCTCTTT
TTGTTTTTAAAATAAATTGTATTTTTGAATCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAA

FIGURE 3396

MLQFVRAGARAWLRPTGSQGLSSLAEEAARATENPEQVASEGLPEPVLRKVELPVPTHRRPVQAWVESLRGFEQE
RVGLADLHPDVFATAPRLDILHQVAMWQKNFKRISYAKTKTRAEVRGGGRKPWPQKGTGRARHGSIRSPLWRGGG
VAHGPRGPTSYYYMLPMKVRALGLKVALTVKLAQDDLHIMDSLELPTGDPQYLTELAHYRRWGDSVLLVDLTHEE
MPQSIVEATSRLKTFNLIPAVGEQRAQAPRVRMCRLRC

FIGURE 3397

AGATTTGAAGGCGGCGCGCGGACTAGGTGCGCACTTCAGTTCTCGGAGAGAAGAGGCGGGAGTGGACCTGGTCAG
CCCTACCCCACTGACCCCACCGGACCCAGGCGCGGCCTCCGCCACAGCCACAGCCCCTGCCCCTGCTGCGGCGCG
GCGAGGCGAGGCG**ATG**GCCAAGGTGTCGGTGCTGAACGTGGCGGTCCTGGAGAACCCGAGCCCTTTCCACAGCCC
CTTCCGGTTCGAGATCAGCTTCGAGTGCAGTGAAGCCCTGGCGGACGACCTGGAGTGGAAGATCATTTATGTTGG
CTCGGCTGAGAGTGAGGAATTTGATCAGATCCTAGACTCGGTGCTGGTGGGCCCTGTGCCAGCAGGGAGACACAT
GTTTGTCTTTCAGGCCGACGCCCCCAACCCATCCCTCATCCCAGAGACTGATGCCGTGGGTGTGACTGTGGTCCT
CATCACCTGCACCTACCATGGACAGGAGTTCATCCGAGTGGGCTACTACGTCAACAACGAGTACCTCAACCCTGA
GCTGCGTGAGAACCCGCCCATGAAGCCAGATTTCTCCCAGCTCCAGCGGAACATCTTGGCCTCGAACCCCCGGGT
GACCCGCTTCCATATCAACTGGGACAACAACATGGACAGGCTGGAGGCCATAGAGACCCAGGACCCCTCCCTGGG
CTGCGGCCTCCCACTCAACTGCACTCCTATCAAGGGCTTGGGGCTCCCTGGCTGCATCCCTGGCCTCCTCCCTGA
GAACTCCATGGACTGCATC**TAA**CTGCAGGAACCCAGAGTGTCCCAGCACGCCGGGAGGGGCAACCAGGCCTCCCA
GCGAGTCCTGCAGGGCCCATCTAGAGGACTTTGGGGGCCATCAGCTGCAATCCAGGTCTGTCAAACTCAGCCCCT
AGGAAAGAACAGGCCTTGGGTCTCCCCTAGTCCTGGCCAGAAGGATGATCTCGCTTTTCCTCTACAGGCCTATAA
GAAGCAGGTACTTCAGTTCTAAATTCTGACTTGTGTTCTTTTCGTCTTCATAAATTCTAACTAAGGCCACTGTGC
CACTGTGCACCCTTGAGTACCATTGATCCAAAGCTTTCCCACAGACCTCCCTGGCCCACCTAGAGGCTTTCTTGG
TCAGTGCCTGTCAAGGCTCCAGTCCTGCTGAGCCAAAGGCTTTGTCATTCCTTTCTCTTCCTGTACATCTGAGCA
GACCCACTCCAGCTTTCTGGTGTCACAGGCGGGAATGTTAGTTAGTAGGTAGACTTAGATCCCATTTCTGTCCTG
CTCCCAGGAAGATTCTTAGGTCCTCTTCAATCCAGCAGCCCCTCCCAGAGGTGTGATCAGCAGGATGCTGAGGAA
CCATGTTGCCTTTCCTGTCAATCACAGCCACCTTCCTGTTATCTCCTAAATGGATCTGGCTTTTCCTGGAGGCTG
CCATGGTTGGAAGATGGTATCAGAGGGCCTGCCTGGGCAGTCTGTCTCCGGGCCAGGGTCAGGGACCCTCTGCCT
CTGGCAGCCTTAACCTGTCCTCTGCTAGGACCAGGGTGATTTCAAGCCAGGGAAGCAACTGGGACCCTGAAAACT
GTCCCTCCCCAGCCCGCTCCCCCTCTCTGTGCCCTGGTCCCCTTGCCGCCATGTGGATGCTGTTGTGATTGCTGT
TTGTATATTATCAAAATGTTTTTATATTAAAAATGTTTGGTCTGAAAATT

FIGURE 3398

MAKVSVLNVAVLENPSPFHSPFRFEISFECSEALADDLEWKIIYVGSAESEEFDQILDSVLVGPVPAGRHMFVFQ
ADAPNPSLIPETDAVGVTVVLITCTYHGQEFIRVGYYVNNEYLNPELRENPPMKPDFSQLQRNILASNPRVTRFH
INWDNNMDRLEAIETQDPSLGCGLPLNCTPIKGLGLPGCIPGLLPENSMDCI

FIGURE 3399

AGACCGTGTGTTTCCAAAATGGCGGCAGCGATGGATGTGGATACCCCGAGCGGCACCAACAGCGGCGCGGGCAAG
AAGCGCTTTGAAGTGAAAAAGTGGAATGCAGTAGCCCTCTGGGCCTGGGATATTGTGGTTGATAACTGTGCCATC
TGCAGGAACCACATTATGGATCTTTGCATAGAATGTCAAGCTAACCAGGCGTCCGCTACTTCAGAAGAGTGTACT
GTCGCATGGGGAGTCTGTAACCATGCTTTTCACTTCCACTGCATCTCTCGCTGGCTCAAAACACGACAGGTGTGT
CCATTGGACAACAGAGAGTGGGAATTCCAAAAGTATGGGCACTAGGAAAAGACTTCTTCCATCAAGCTTAATTGT
TTTGTTATTCATTTAATGACTTTCCCTGCTGTTACCTAATTACAAATTGGATGGAACTGTGTTTTTTTCTGCTTT
GTTTTTTCAGTTTGCTGTTTCTGTAGCCATATTGTATTCTGTGTCAAATAAAGTCCAGTTGGATTCTGGAA

FIGURE 3400

MAAAMDVDTPSGTNSGAGKKRFEVKKWNAVALWAWDIVVDNCAICRNHIMDLCIECQANQASATSEECTVAWGVC
NHAFHFHCISRWLKTRQVCPLDNREWEFQKYGH

FIGURE 3401

GAAGGTCAGCGTGTGAAGTAGGCGCTGGCAACGCGGGGTTACCCTGXTXTATTGAGGAGTAACGGCCCAGCGGAC
CACCCAGGCTTGAGGCAGCGGCGGGAACCACTCGGTTTGCTGCGATACCATGGAAGGAGGCGGGGGAAGCGGCAA
CAAAACCACAGGGGGATTGGCCGGCTTTTTCGGAGCCGGCGGAGCAGGTTACTCGCACGCGGATTTGGCTGGCGT
CCCGCTAACTGGTATGAACCCTCTGTCTCCTTATTTAAATGTGGATCCACGATACCTCGTGCAGGATACAGATGA
GTTTATTTTACCTACCGGAGCTAATAAAACCCGGGGCAGATTTGAGCTGGCCTTCTTTACGATTGGAGGATGTTG
CATGACAGGGGCTGCGTTTGGTGCAATGAATGGTCTTCGGCTAGGATTGAAGGAAACCCAGAACATGGCCTGGTC
CAAACCAAGAAATGTACAGATTTTGAATATGGTGACTAGGCAAGGGGCACTTTGGGCTAATACTCTAGGTTCTCT
GGCTTTGCTCTATAGTGCATTTGGTGTCATCATTGAGAAAACACGAGGTGCAGAAGATGACCTTAACACAGTAGC
AGCTGGAACCATGACAGGCATGTTGTATAAATGTACAGGTGGTCTTCGAGGGATAGCACGAGGTGGTCTGACAGG
ACTAACACTTACCAGCCTCTATGCACTATATAATAACTGGGAGCACATGAAAGGCTCCTTGCTCCAACAGTCACT
CTGAAGATTTTGCCAACTCATGAATGGAGGACACTTCAGTAGTTCATCTAGGATCCTTTTATTAAGGACAGTTTG
GGAGTTATTTCTCTCT

FIGURE 3402

MEGGGGSGNKTTGGLAGFFGAGGAGYSHADLAGVPLTGMNPLSPYLNVDPRYLVQDTDEFILPTGANKTRGRFEL
AFFTIGGCCMTGAAFGAMNGLRLGLKETQNMAWSKPRNVQILNMVTRQGALWANTLGSLALLYSAFGVIIEKTRG
AEDDLNTVAAGTMTGMLYKCTGGLRGIARGGLTGLTLTSLYALYNNWEHMKGSLLQQSL

FIGURE 3403

GGCGACCAGAGTTGCTGGGCAGTCTTGGGTTTAGTGCCGCAATGCTGCACTTCTGACAGGCTGCTTCCTGGATCC
CTGCAGGGACCTGGCCAGGGCATTGGCCCCAGGTCACCTGTGGCTTTGGGGAGAGCAGTTGCAGGGCTGGCCTGG
GCTGTGGGAGGCAGCTGTGCCGTTTTCTGACAGCCATTGGGACCGCCCCAGTACCCGAAGAGGTGGCTGCCCTGA
GTTGCCACGGGAAACTGCAGGGTGGCCCTGGCTCAGCAGCCAACCTTGGGGAGACCTGGAGGAACAGTGCAGTGT
AAAGATGGCCTCGCGCTGAGCGGGTCCCCGCAGTCGGCACTCCCAGGAGAACCAGCGGGCTGTGCATGTGACCCG
CCAGCCTGCACCGCGGGCACGTCCTTCCCACCCAGAGGACCCTGCACTGCCTTCAGGGCCACAGCAGTCCTCCGG
GGCCCAGCCTCAGGCAGGAAACAGCAAATGCTTTTGCTGCCAACCAAGTGTGGCTGTCGCTTTCGATGATGCCAG
TGGCGCTGGTGCGACTGCCGGGCAGCATGTGTGGGCGGGGATGGCTCGGCCACTGACCGTCTCCCCGCAGTGGTG
GTCCTGCTCCATGATGTCCGTGATGTGAGCGTGGAGGAGGAGAAGGTCCGGTACTTCGGGAAAGGCTACATGGTG
GTGCTCCGGCTTGCAGACGGGCTTCTCCCACCCCCTCACGCAGAGTGCAGTC**ATG**GGCCACCGCAGTGATGTGGA
AGCCATCGCAAGCTCATCACCAGCTTCCTGGAGCTGCACTGCCTTGAGAGCCCCACAGAGCTGTCTCAGAGCAGC
GACAGTGAGGCCGGTGACCCTGCAAGCCAGAGCTGACAGCCCCACTGTGCCTGAGCCCGTGCACCGCCCACAGGA
CCCATGGCACATTCCCGGTGTGCCTGAGCCCGTGCACCGCCCACAGGACCCGTGGCACATTCCCGGTGTGCCTGA
GCCCGTGCACCGCCCACAGGACCCGTGGCACATTCCCGGTGTGCCTGAGCCCGTGCACCCCCCACAGGACCCGTG
GCACATTCCCGGTGTGCCTGAGCCCGTGCACCGCCCACAGGACCCGTGGCCTTGGCTTCAGTTGGTGCCTCCAGC
CGAGTTGGCCTATTGCCTGCTCATGCTGCTGCTTGCACACTGCATGAAACAGCAGGCCAGACCAGGACATCCAGA
CTTTCTCCATCGTGAGGCCTGGGCCTGCCTTTCTGCAGCCGGAGTCTCGCCAGCCCTGGACTCCTGCTTTGGGCC
ACAGCAAGACCTCGGGCGAGTGGAGAGGCGGCCCACGCCGCCCCTTGTGGGTGCTGATGCTGCATGTTGTCCCCG
ACACAGCGTCCTCTCCCTGGTGGACATCCCCAGCGGTCAGGGTGCTTCCCCAAGGCAG**TGA**GGGGTGAACATCCA
GGGCCTACCTGGCTGTGACGCTGAAGCCACACTGTGGAAGCTGCCCCTCCCCGAGGACCCGCCTCCCTTGCTGAT
GCCAGGATCTCGGCGCATAGACCACTCTGCCCCAGCGGTCGTCACAGAAAGGTCTCTCTGTTCCTCACACTCAGC
TTCAGCATAAGCTGTGAGGCCAGAAAAAAGGTCAGCTCTTCTAGTATCGTGCAGTGCTTAAAAACCGGGAGCTCC
AGCCGGGCGCAGTGGTTCATGCCAGTAATCCCAGCACTTTCGGAGGCCGAGGTGGGAGGATTGCTTGAGGCCAGG
AGTTCAAGACCAGCCTGGGCAACACAGCAAGATCCTGTCTTTGTAAAAAAACTAACCAAACAGGAAAAACTGGGA
GATTTTCTGCAGAAATTGAGTTCCAGCCTCTCTCGAACCTGGGAAGACCTGGCAGGAGGGGGCTGGGCTCTCGGC
TACAGACTTCTCCCCACCCCGTAGGAGCTGAACGCCAACCATCCTGACCCGCCAGTGCTCTTGGTCTCCTGAGTG
TACCCAGGTCCTCCCAGGTGCGGTGTGCACCGAGCGCGCCTGGCCTGATGCCCTGGCCTGTGAGCTGGGGACTCC
TGGGCCCTGTGAGCCCCTAGGCGGCAGGCCCAGGAATGGCTGGGTAGGACAGGGAACACCTTTGCCCCACGTCTG
GCTGTGACCTCGGTGAAAGCCGACAGGAGAGAGATGGGACCCTCCTCCTCAGTAGTGGCTGCCAGTCCCTCGTTG
CAGGACAGGGTCATCATAACCATAAATAACCCTTCACGTGTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3404

MGHRSDVEAIASSSPASWSCTALRAPQSCLRAATVRPVTLQARADSPTVPEPVHRPQDPWHIPGVPEPVHRPQDP
WHIPGVPEPVHRPQDPWHIPGVPEPVHPPQDPWHIPGVPEPVHRPQDPWPWLQLVPPAELAYCLLMLLLAHCMKQ
QARPGHPDFLHREAWACLSAAGVSPALDSCFGPQQDLGRVERRPTPPLVGADAACCPRHSVLSLVDIPSGQGASP
RQ

FIGURE 3405

GGGACCCGGGCTTCTGTGAAACATGGCGGTAGGCTGGGACCATAACACAAGCATGACTATATGAAGGAAGAGGAA
GGTTTTCCTGAAGATGAGGCGACTGAATCGGAAAAAAACTTTAAGTTTGGTAAAAGAGTTGGATGCCTTTCCGAA
GGTTCCTGAGAGCTATGTAGAGACTTCAGCCAGTGGAGGTACAGTTTCTCTAATAGCATTTACAACTATGGCTTT
ATTAACCATAATGGAATTCTCAGTATATCAAGATACATGGATGAAGTATGAATACGAAGTAGACAAGGATTTTTC
TAGCAAATTAAGAATTAATATAGATATTACTGTTGCCATGAAGTGTCAATATGTTGGAGCGGATGTATTGGATTT
AGCAGAAACAATGGTTGCATCTGCAGATGGTTTAGTTTATGAACCAACAGTATTTGATCTTTCACCACAGCAGAA
AGAGTGGCAGAGGATGCTGCAGCTGATTCAGAGTAGGCTACAAGAAGAGCATTCACTTCAAGATGTGATATTTAA
AAGTGCTTTTAAAAGTACATCAACAGCTCTTCCACCAAGAGAAGATGATTCATCACAGTCTCCAAATGCATGCAG
AATTCATGGCCATCTATATGTCAATAAAGTAGCAGGGAATTTTCACATAACAGTGGGCAAGGCAATTCCACATCC
TCGTGGTCATGCACATTTGGGCAGCACTTGTCAACCATGGAATCTTACAATTTTTTCTCATAGAATAGATCATTT
GTCTTTTGGAGAGCTTGTTCCAGCAATTATTAATCCTTTAGATGGAACTGAAAAAATTGCTATAGATCACAACCA
GATGTTCCAATATTTTATTACAGTTGTGCCAACAAAACTACATACATATAAAATATCAGCAGACACCCATCAGTT
TTCTGTGACAGAAAGGGAACGTATCATTAACCATGCTGCAGGCAGCCATGGAGTCTCTGGGATATTTATGAAATA
TGATCTCAGTTCTCTTATGGTGACAGTTACTGAGGAGCACATGCCATTCTGGCAGTTTTTTGTAAGACTCTGTGG
TATTGTTGGAGGAATCTTTTCAACAACAGGCATGTTACATGGAATTGGAAAATTTATAGTTGAAATAATTTGCTG
TCGTTTCAGACTTGGATCCTATAAACCTGTCAATTCTGTTCCTTTTGAGGATGGCCACACAGACAACCACTTACC
TCTTTTAGAAAATAATACACATTAACACCTCCCGATTGAAGGAGAAAAACTTTTTGCCTGAGACATAAAACCTTT
TTTTAATAATAAAATATTGTGCAATATATTCAAAGAAAAGAAAACACAAATAAGCAGAAAACATACTTATTTTAA
AAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3406

MRRLNRKKTLSLVKELDAFPKVPESYVETSASGGTVSLIAFTTMALLTIMEFSVYQDTWMKYEYEVDKDFSSKLR
INIDITVAMKCQYVGADVLDLAETMVASADGLVYEPTVFDLSPQQKEWQRMLQLIQSRLQEEHSLQDVIFKSAFK
STSTALPPREDDSSQSPNACRIHGHLYVNKVAGNFHITVGKAIPHPRGHAHLGSTCQPWNLTIFSHRIDHLSFGE
LVPAIINPLDGTEKIAIDHNQMFQYFITVVPTKLHTYKISADTHQFSVTERERIINHAAGSHGVSGIFMKYDLSS
LMVTVTEEHMPFWQFFVRLCGIVGGIFSTTGMLHGIGKFIVEIICCRFRLGSYKPVNSVPFEDGHTDNHLPLLEN
NTH

FIGURE 3407

AGGGATTTCCCCATTTCTGTTTGCTGCCTGAAAGCAGGATGAGGAAGGCCAAGGAGAGTCCTTGCACCCGTGAGC
GTCAGGATGAGGAAATGACAGGAGGAAGACGTGGGTTTGGGTTAGTGGCTGCTGGCGTTTTGGCCCTTGGTGTTT
CTGGAGCCTCCAGGGATCTAGGGGAGCCTGGGCTGCGTGCATGTCGATAAGCAGAGCTGTTCTTGGGGAGAAGGA
GGGAGGTCTCGGGAGTGTAGCACCATGCCAACCAGCCCTGCGCGAAGACAGAGTGAGCCACGCCCGGATGGCAGG
GCATGTTTCTGTTTTGGTGTCTCACTTTCCTCCCAGCGTGACTTATTTGGGGATTCCTCAGGGCCTACTGGAATG
TGACTGCCCACTGCCCAGCTGCCTCGGGTACAAGTCCTGGCCCTATGTCCCAGCTGTCAGGGGCTCAGGGAATCC
TACCCAGCCACCTGTCCTGGGATGGAGTGTCAGCATCCACCCCTTGGTTGTCATCGAGGCCGCCCTCCCAGTCCT
GGGTGAAGATATTTGGGCCACCAGGGCTCCCTTGGCCCCTTCACGTAGGAAATAGACACGTGCTTTTTAATGCAG
GACACTTTGAGTGTTACAAAATCTGTAGACCTGGCAGTAGGGTCATGATGTTGGGAAGGGTGTAGTGCCCTAGGT
TGGTGACAGAAGGGACAGACACTTGTGCACAGGTGTCTTTGGTGATGGGGTTTTTTTTTTTATAACTTAGTAAAA
AAAAAAAAAAATGTATGTGGAATTCTGTCTCTTGGTAAAGCTCAAAGCCAGGCTAGCCTGAGGTGGCGCAGGGCT
CTCCTTCCTGTCCCTTCGATCTCCTTGAGAATTAAGAGCTGGCAGCTGCTGATGGTGTTTCCCAACCCCCCTCAC
TTCCCAAGACAACCCCCAGCTTCAGGTCCTCATGGGGAGGGGAGGGCACGTTCTTGACACATGGGAACTTCGCTC
AGGAGGGCCTCCCCTTCCCCTCTCCCTCAGAGTTTTCACTGCCGTCTCGTCTTTAGAAAGCTGTTTGAATTCCCC
CCGCCCCCAGTTTGGACCGTGTAGATATAACTGGATATACGGATTTTTCTCTTTGTGCAGGCTTCTTATGCCGTT
GGTATACAGGGCAGGAAAGAGAGGAATAAAGGGAGAGAGCAGTGTGGAAACCACGGTGGTTTTGCTTTGTTCTTA
CTAGGTTTTGGTGCCACCTTCCCTGCCTGCGCTTGTGCCCCCTCTCCTCCTTGGCACTGGCGGCCTCCTTGCCTC
CCTTCCACCCGTGCTGCCATCCCGTGCCTGTCGTGTTGGTTCTTCACACGTGCTCTGTTCTCGGGGTTGTTCCAT
TCATGCCTTCTTGGAGGGTGAGGGTGGCTTGGGAACCGACCCAGTGATCATGCCTACTTTCTTCTTTGTATCTCC
CTCCTTCCCAGCCCACCCGGGCAGCAGACTCTGATGGAAGGAAGGTGCCGTAGGTGGGCTTTTAGAAACTAACGG
GACTGGTTTTCAAAGCAGTTATCTTGGGAAACTGTTTATTCCAGCGATGTGACTTTTTTCAGAATATTTCTTGGA
ATCATATTCAGAGTCTGGGGCTGTGTGTTGAGCAGCCTTAAGGATGCTAGACACTCATTTAGTGCCCAGGGAGTC
CAGCGAATGACGTCTGTGGCCAAGCGAGGTCTCAGGTGCAAAGCAAAAGGACCATTTAAAGTAAAATAGCTTGGA
TTCAATCATGTGACTTTTAAATTGGCTCAGAAAGCAATTTTGTAATTTCAGAGAGTGTTTTGAGCCATGGCCACG
TTGTCATTGTGAGTCTATAGCTTGACTCCTTGGAGAACAATATTCATTTGGTTGTGGAGACTGATTTGCTGGGAG
AAATCTGTCCTGTTACTTTCTGGTCATCCCAGGTTCTGACTTTTACCAGGGGCAAAAAAAAAAAAAAAAAGCAAG
AGGGAGATAAATCCCATCTGTGAGTTTGTCTTATTGGCGCCTTTTTCCTCAGCTGTCTTCCAAGTATTATTTTTA
CTGTTAAAAAATTTTTTAAAAATGTGAAATGTAATGTTTTTACAGCAACAATATGAAATATATTTTATAAGGAAT
AAAATGGTACCTTGTCTGAAAAAAAAAAAAAA

FIGURE 3408

MSISRAVLGEKEGGLGSVAPCQPALREDRVSHARMAGHVSVLVSHFPPSVTYLGIPQGLLECDCPLPSCLGYKSW
PYVPAVRGSGNPTQPPVLGWSVSIHPLVVIEAALPVLGEDIWATRAPLAPSRRK

FIGURE 3409

GGCACGAGGCCTGGGCGGGCCCTGCGTCAGGTTGCAGTTTCACTTTTAGCTCTGGGCACCTCCAGCTCCTGCTCG
CCGGACGGCTCCCAGGGAGAGCAGACGCGCCAGACGCGCCACCCTCGGGGCGCCGACGGTCACGGAGCATGGGGT
CGGCCTTTGAGCGGGTAGTCCGGAGAGTGGTCCAGGAGCTGGACCATGGTGGGGAGTTCATCCCTGTGACCAGCC
TGCAGAGCTCCACTGGCTTCCAGCCCTACTGCCTGGTGGTTAGGAAGCCCTCAAGCTCATGGTTCTGGAAACCCC
GTTATAAGTGTGTCAACCTGTCTATCAAGGACATCCTGGAGCCGGATGCCGCGGAACCAGACGTGCAGCGTGGCA
GGAGCTTCCACTTCTACGATGCCATGGATGGGCAGATACAGGGCAGCGTGGAGCTGGCAGCCCCAGGACAGGCAA
AGATCGCAGGCGGGGCCGCGGTGTCTGACAGCTCCAGCACCTCAATGAATGTGTACTCGCTGAGTGTGGACCCTA
ACACCTGGCAGACTCTGCTCCATGAGAGGCACCTGCGGCAGCCAGAACACAAAGTCCTGCAGCAGCTGCGCAGCC
GCGGGGACAACGTGTACGTGGTGACTGAGGTGCTACAGACACAGAAGGAGGTGGAAGTCACGCGCACCCACAAGC
GGGAGGGCTCGGGCCGGTTTTCCCTGCCCGGAGCCACGTGCTTGCAGGGTGAGGGCCAGGGCCATCTGAGCCAGA
AGAAGACGGTCACCATCCCCTCAGGCAGCACCCTCGCATTCCGGGTGGCCCAGCTGGTTATTGACTCTGACTTGG
ACGTCCTTCTCTTCCCGGATAAGAAGCAGAGGACCTTCCAGCCACCCGCGACAGGCCACAAGCGTTCCACGAGCG
AAGGCGCCTGGCCACAGCTGCCCTCTGGCCTCTCCATGATGAGGTGCCTCCACAACTTCCTGACAGATGGGGTCC
CTGCGGAGGGGGCGTTCACTGAAGACTTCCAGGGCCTACGGGCAGAGGTGGAGACCATCTCCAAGGAACTGGAGC
TTTTGGACAGAGAGCTGTGCCAGCTGCTGCTGGAGGGCCTGGAGGGGGTGCTGCGGGACCAGCTGGCCCTGCGAG
CCTTGGAGGAGGCGCTGGAGCAGGGCCAGAGCCTTGGGCCGGTGGAGCCCCTGGACGGTCCAGCAGGTGCTGTCC
TGGAGTGCCTGGTGTTGTCCTCCGGAATGCTGGTGCCGGAACTCGCTATCCCTGTTGTCTACCTGCTGGGGGCAC
TGACCATGCTGAGTGAAACGCAGCACAAGCTGCTGGCGGAGGCGCTGGAGTCGCAGACCCTGTTGGGGCCGCTCG
AGCTGGTGGGCAGCCTCTTGGAGCAGAGTGCCCCGTGGCAGGAGCGCAGCACCATGTCCCTGCCCCCCGGGCTCC
TGGGGAACAGCTGGGGCGAAGGAGCACCGGCCTGGGTCTTGCTGGACGAGTGTGGCCTAGAGCTGGGGGAGGACA
CTCCCCACGTGTGCTGGGAGCCGCAGGCCCAGGGCCGCATGTGTGCACTCTACGCCTCCCTGGCACTGCTATCAG
GACTGAGCCAGGAGCCCCACTAGCCTGTGCCCGGGCATGGCCTGGCAGCTCTCCAGCAGGGCAGAGTGTTTGCCC
ACCAGCTGCTAGCCCTAGGAAGGCCAGGAGCCCAGTAGCCATGTGGCCAGTCTACCATGGGGCCCAGGAGTTGGG
GAAACACAATAAAGGTGGCATACGAAGGAAAAAAAAAAAAAAAAAAAAAACCAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3410

MGSAFERVVRRVVQELDHGGEFIPVTSLQSSTGFQPYCLVVRKPSSSWFWKPRYKCVNLSIKDILEPDAAEPDVQ
RGRSFHFYDAMDGQIQGSVELAAPGQAKIAGGAAVSDSSSTSMNVYSLSVDPNTWQTLLHERHLRQPEHKVLQQL
RSRGDNVYVVTEVLQTQKEVEVTRTHKREGSGRFSLPGATCLQGEGQGHLSQKKTVTIPSGSTLAFRVAQLVIDS
DLDVLLFPDKKQRTFQPPATGHKRSTSEGAWPQLPSGLSMMRCLHNFLTDGVPAEGAFTEDFQGLRAEVETISKE
LELLDRELCQLLLEGLEGVLRDQLALRALEEALEQGQSLGPVEPLDGPAGAVLECLVLSSGMLVPELAIPVVYLL
GALTMLSETQHKLLAEALESQTLLGPLELVGSLLEQSAPWQERSTMSLPPGLLGNSWGEGAPAWVLLDECGLELG
EDTPHVCWEPQAQGRMCALYASLALLSGLSQEPH

FIGURE 3411

GCAGAGGTGCGGCCGGGGAGGCGCGCGGAGGCTGGAGCTGGAGGCGCGGCGCCGGTGAGCTGAGAACCATGTGTG
CTCAGTATTGCATCTCCTTTGCTGATGTTGAAAAAGCTCATATCAACATTCGAGATTCTATCCACCTCACACCAG
TGCTAACAAGCTCCATTTTGAATCAACTAACAGGGCGCAATCTTTTCTTCAAATGTGAACTCTTCCAGAAAACAG
GATCTTTTAAGATTCGTGGTGCTCTCAATGCCGTCAGAAGCTTGGTTCCTGATGCTTTAGAAAGGAAGCCGAAAG
CTGTTGTTACTCACAGCAGTGGAAACCATGGCCAGGCTCTCACCTATGCTGCCAAATTGGAAGGAATTCCTGCTT
ATATTGTGGTGCCCCAGACAGCTCCAGACTGTAAAAAACTTGCAATACAAGCCTACGGAGCGTCAATTGTATACT
GTGAACCTAGTGATGAGTCCAGAGAAAATGTTGCAAAAAGAGTTACAGAAGAAACAGAAGGCATCATGGTACATC
CCAACCAGGAGCCTGCAGTGATAGCTGGACAAGGGACAATTGCCCTGGAAGTGCTGAACCAGGTTCCTTTGGTGG
ATGCACTGGTGGTACCTGTAGGTGGAGGAGGAATGCTTGCTGGAATAGCAATTACAGTTAAGGCTCTGAAACCTA
GTGTGAAGGTATATGCTGCTGAACCCTCAAATGCAGATGACTGCTACCAGTCCAAGCTGAAGGGGAAACTGATGC
CCAATCTTTATCCTCCAGAAACCATAGCAGATGGTGTCAAATCCAGCATTGGCTTGAACACCTGGCCTATTATCA
GGGACCTTGTGGATGATATCTTCACTGTCACAGAGGATGAAATTAAGTGTGCAACCCAGCTGGTGTGGGAGAGGA
TGAAACTACTCATTGAACCTACAGCTGGTGTTGGAGTGGCTGCTGTGCTGTCTCAACATTTTCAAACTGTTTCCC
CAGAAGTAAAGAACATTTGTATTGTGCTCAGTGGTGGAAATGTAGACTTAACCTCCTCCATAACTTGGGTGAAGC
AGGCTGAAAGGCCAGCTTCTTATCAGTCTGTTTCTGTTTAATTTACAGAAAAGGAAATGGTGGGAATTCAGTGTC
TTTAGATACTGAAGACATTTTGTTTCCTAGTATTGTCAACTCTTAGTTATCAGATTCTTAATGGAGAGTGGCTAT
TTCATTAAGATTTAATAGTTTTTTTTGGACTAAGTAGTGGAAAAACTTTTATACTTAACTGAGACATTTTGTCAA
GGCTAAAAAAAAAGTCTTGCAAAATGGGGCAGTGGACTGACAGGCTGACATAGAAAATAAACTTTGCCCAATCACA
ACTTGTGCCTCCCATCCCTGGAGTACTGACTGGCACCGGTAAGACAGAATCTCTCTGAATCCATTACTCCATGCC
CCCTTGAGGCACTGTTGAAGAAATCTCACTTTTCAGCCAGGGTACTGGTTCTGGTACATATGGATCATAAGTCCA
TTTGGGGAAGACTCGTTTATACAGGTTCATCAGTACTGTGTCTTGAGATTTTAGCTTCCCATCAAAGCTGCATTT
CATGTGGCCATGGGTACCTAGAAAGACATCAGAACAAGTCGGTCAAATTAAAAGTAGAAAATTTTAAAGCAATGA
CTTCCAACCCAACAGTCATTTAGCAACACTGCAGAAATGCAGACATGGTCTCAAATCCCGTGTTTCCTTACCTAA
AGGTTCCTTGATATGTCCTCTCCGGCCCCACTTCGTTCTCAGTTCCACTGGTTTAAACCACAGCACATCCTCTTA
GAATCAAACACATTAAAGACCAAGATGAAACATTTACCCACAAAATGTAAACCCAACCTTTATACCACAAAGGCA
ATCAGATCCCATCCTCCTCCTTCATACCCACCTCTGTTGAAGAACATGTAACGTACTACTGCCATCTTAGTAAAA
ATTTTGAAAGGATGACCACTCAGAACAACTCTCTTGATGACCATTCTGTCTGGATCTACTGACATAAGATGGCCT
GTAGCAATGAGGCTGTGCATTCCTAAAGGACAAAAGCAAAGAAGCTATTTAGGAATTTACAGGCCAAAGTCTTCA
TTTATTGCCCAGTCCATTTAAAGACCCATGCAAGAGCCTGGTTTGTCATCCCTGCCCTAGCCCAATCTGAGGCTA
AGATTGGTAAACTGTAAGCCCACACTTAACCTTGTCAATAGGTTCTTGAAAACTTGTACTTCAAGAGAAATGATG
TATAACAAAACCATACTTTTTCTCATCAGTTGTTACAAGGAAAGGATGTTGAACAAAAGGCAGTTATTTGAGGAC
TGGCTATACACTGTTTCACGTAAAAGTTGGAGTTTTCATTGTTCTATTAACAATGTTAAATGAAGACTTACTGTA
TTTTGAAAACCATCATTACCTTCTCCATACCATTTGGCTCCCAAATTTAAATAAACAAGAGAAAACGGTGTTCAT
CT

FIGURE 3412

MCAQYCISFADVEKAHINIRDSIHLTPVLTSSILNQLTGRNLFFKCELFQKTGSFKIRGALNAVRSLVPDALERK
PKAVVTHSSGNHGQALTYAAKLEGIPAYIVVPQTAPDCKKLAIQAYGASIVYCEPSDESRENVAKRVTEETEGIM
VHPNQEPAVIAGQGTIALEVLNQVPLVDALVVPVGGGGMLAGIAITVKALKPSVKVYAAEPSNADDCYQSKLKGK
LMPNLYPPETIADGVKSSIGLNTWPIIRDLVDDIFTVTEDEIKCATQLVWERMKLLIEPTAGVGVAAVLSQHFQT
VSPEVKNICIVLSGGNVDLTSSITWVKQAERPASYQSVSV

FIGURE 3413

GTTATTTATTGACTTTTGCCAAGGCTTGGTCACAACAATCATATTCACGTAATTTTCCCCCTTTGGTGGCAGAAC
TGTAGCAATAGGGGGAGAAGACAAGCAGCGGATGAAGCGTTTTCTCAGCTTTTGGAATTGCTTCGACCTGACATC
CGTTGTAACCGTTTGCCACTTCTTCAGATATTTTTATAAAAAAGTACCACTGAGTCAGTGAGGGCCACAGATTGG
TATTAATGAGATACGAGGGTTGTTGCTGGGTGTTTGTTTCCTGAGCTAAGTGATCAAGACTGTAGTGGAGTTGCA
GCTAACATGGGTTAGGTTTAAACCGTGGGGGATGCAACCCCTTTGCGTTTCATATGTAGGCCTACTGGCTTTGTG
TAGCTGGAGTAGTTGGGTTGCTTTGTGTTAGGAGGATCCAGATCATGTTGGCTACAGGGAGATGCTCTCTTTGAG
AGGCTCCTGGGCATTGATTCCATTTCAATCTCATTCTGGAT**ATG**TGTTCATTGAGTAAAGGAGGAGAGACCCTCA
TACGCTATTTAAATGTCACTTTTTTGCCTATGCCCCGTTTTTTGGTCATGTTTCAATTAATTGTGAGGAAGGCGC
AGCTCCTCTCTGCACGTAGATCATTTTTTAAAGCTAATGTAAGCACATCTAAGGGAATAACA**TGA**TTTAAGGTTG
AAATGGCTTTAGAATCATTTGGGTTTGAGGGTGTGTTATTTTGAGTCATGAATGTACAAGCTCTGTGAATCAGAC
CAGCTTAAATACCCACACCTTTTTTTCGTAGGTGGGCTTTTCCTATCAGAGCTTGGCTCATAACCAAATAAAGTT
TTTTGAAGGCCATGGCTTTTCACACAGTTATTTTATTTTATGACGTTATCTGAAAGCAGACTGTTAGGAGCAGTA
TTGAGTGGCTGTCACACTTTGAGGCAACTAAAAAGGCTTCAAACGTTTTGATCAGTTTCTTTTCAGGAAACATTG
TGCTCTAACAGTATGACTATTCTTTCCCCCACTCTTAAACAGTGTGATGTGTGTTAT

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FIGURE 3414

MCSLSKGGETLIRYLNVTFLPMPRFLVMFQLIVRKAQLLSARRSFFKANVSTSKGIT

FIGURE 3415

CGCGCTTCTCAGCCGGGCCGCCGACCCAAAGGAGCCGTCCGACTATGTCTAACATGGAGAAACACCTGTTCAACC
TGAAGTTCGCGGCCAAAGAACTGAGTAGGAGTGCCAAAAAATGCGATAAGGAGGAAAAGGCCGAAAAGGCCAAAA
TTAAAAAGGCCATTCAGAAGGGCAACATGGAAGTTGCGAGGATACACGCCGAAAATGCCATCCGCCAGAAGAACC
AGGCGGTGAATTTCTTGAGAATGAGTGCGCGAGTCGATGCAGTGGCTGCCAGGGTCCAGACGGCGGTGACGATGG
GCAAGGTGACCAAGTCGATGGCTGGTGTGGTTAAGTCGATGGATGCGACATTGAAGACCATGAATCTGGAGAAGA
TTTCTGCTTTGATGGACAAATTCGAGCACCAGTTTGAGACTCTGGACGTCCAGACGCAGCAAATGGAAGACACGA
TGAGCAGCACGACGACGCTCACCACTCCCCAGAACCAAGTGGATATGCTGCTCCAGGAAATGGCAGATGAGGCGG
GCCTCGACCTCAACATGGAGCTGCCGCAGGGCCAGACCGGCTCCGTGGGCACGAGCGTGGCTTCGGCGGAGCAGG
ATGAACTGTCTCAGAGACTGGCCCGCCTTCGGGATCAAGTGTGACGGCAGAACCCGCTCTGAGGTTTCCTGGCCA
TAGCCACCCTTTGAAATGCTCTCTGTGTGTTAGAGAGATACTATACCCTAGAAACTCTGAACACGCCAGAATGCT
GAAATGCCCTTCTACCTTTGGGTTTACAGCCCCCTCCACATAAATTAAGAAATTCAGTATTTCTGCACTCTTAGC
TGGATTCTAAAGTTCTGTATAGCTCGTAATGATGGTATTTTTATAGCAGCCTTTTAACAGAACTAGTTAATTTCG
TGTATATGAATCTTTCTCGAAGATCTGGTCAAAACTGTATTCAGTTTCCTGCCCAGAATGATCAGATTGAAGGTG
GTTGGTTTTTATTATTATTTAGTGTGATTGATAGTATCTAGAATGGCAGGTGGTGCATAAAAGTTAAAGAGAGGG
GAAAGATTACT

FIGURE 3416

MEKHLFNLKFAAKELSRSAKKCDKEEKAEKAKIKKAIQKGNMEVARIHAENAIRQKNQAVNFLRMSARVDAVAAR
VQTAVTMGKVTKSMAGVVKSMDATLKTMNLEKISALMDKFEHQFETLDVQTQQMEDTMSSTTTLTTPQNQVDMLL
QEMADEAGLDLNMELPQGQTGSVGTSVASAEQDELSQRLARLRDQV

FIGURE 3417

CAGCTTCCCACCCTGGGCTTTCCGAGGTGCTTTCGCCGCTGTCCCCACCACTGCAGCCATGATCTCCTTAACGGA
CACGCAGAAAATTGGAATGGGATTAACAGGATTTGGAGTGTTTTTCCTGTTCTTTGGAATGATTCTCTTTTTTGA
CAAAGCACTACTGGCTATTGGAAATGTTTTATTTGTAGCCGGCTTGGCTTTTGTAATTGGTTTAGAAAGAACATT
CAGATTCTTCTTCCAAAAACATAAAATGAAAGCTACAGGTTTTTTTCTGGGTGGTGTATTTGTAGTCCTTATTGG
TTGGCCTTTGATAGGCATGATCTTCGAAATTTATGGATTTTTTCTCTTGTTCAGGGGCTTCTTTCCTGTCGTTGT
TGGCTTTATTAGAAGAGTGCCAGTCCTTGGATCCCTCCTAAATTTACCTGGAATTAGATCATTTGTAGATAAAGT
TGGAGAAAGCAACAATATGGTATTAACAACAAGTGAATTTGAAGACTCATTTAAAATATTGTGTTATTTATAAAGT
CATTTGAAGAATATTCAGCACAAAATTAAATTACATGAAATAGCTTGTAATGTTCTTTACAGGAGTTTAAAACGT
ATAGCCTACAAAGTACCAGCAGCAAATTAGCAAAGAAGCAGTGAAAACAGGCTTCTACTCAAGTGAACTAAGAAG
AAGTCAGCAAGCAAACTGAGAGAGGTGAAATCCATGTTAATGATGCTTAAGAAACTCTTGAAGGCTATTTGTGTT
GTTTTTCCACAATGTGCGAAACTCAGCCATCCTTAGAGAACTGTGGTGCCTGTTTCTTTTCTTTTTATTTTGAAG
GCTCAGGAGCATCCATAGGCATTTGCTTTTTAGAAGTGTCCACTGCAATGGCAAAAATATTTCCAGTTGCACTGT
ATCTCTGGAAGTGATGCATGAATTCGATTGGATTGTGTCATTTTAAAGTATTAAAACCAAGGAAACCCCAATTTT
GATGTATGGATTACTTTTTTTTGTAAACATGGTTAAAATAAAACTTTTGTGGTTCTTCTGAATCTTAATATTTCA
AAGCCAGGTGAAAATCTGAACTAGATATTCTTTGTTGGAATATGCAAAGGTCATTCTTTACTAACTTTTAGTTAC
TAAATTATAGCTAAGTTTTGTCAGCAGCATACTCCGGAAAGTCTCATACTTCTTGGGAGTCTGCCCTCCTAAGTA
TCTGTCTATATCATTCATTACGTGTAAGTATTTAACAAAAAAGCATTCTTGACCATGAATGAAGTAGTTTGTTTC
ATAGCTTGTCTCATTGAATAGTATTATTGAAGATACTAAATGATGCAAACCAAATGGATTTTTTCCATGTCATGA
TGTAATTTTTCTTTCTTCTTTCTTTTTTTTAAATTTTAGCAGTGGCTTATTATTTGTTTTTCATAAATTAAAATA
ACTTTTGATAATGTTTACTTTAAGACATGTAACATGTTAAAAGGTTAAACTTATGGCTGTTTTTAAAGGGCTATT
CATTTAATCTGAGTTTTCCCTTATTTTCAGCTTTTTCCTAGCATATAATAGTCATTAAGCATGACATATCCTTCA
TATGATCACTCATCTTGAGTTAATTAGAAAATACCTGAGTTCACGTGCTAAAGTCATTTCACTGTAATAAACTGA
CTATGGTTTCTTAAGAACATGACACTAAAAAAAAAAGTGGTTTTTTTCCACCGTTGCTGATTATTAGACAGTAGG
AAATAGCTGTTTTCTTTAGTTTTACAAGATGTGACAGCTTTAGTGGTAGATGTAGGGAAACATTTCAACAGCCAT
AGTACTATTTGTTTTACCACTGATTGCACTATTTTGTTTTTTTAACAGTTGCAAAGCTTTTTAATGCATAAAAGT
ATAATTGAAATCTGTGGTATTTATTTACAAACATGTCTACAAAAATAGATTACAGCTTATTTTATTTTTAGTTAA
ATCTCTTAATACACAGAGAACTCCCAATCTTGCTCATCTAAATAAGGAAAGACTTGGTGTATAGTGTGATGGTTT
AGTCTTAAGGATTAAGACATTTTTGGTACTTGCATTTGACTTACGATGTATCTGTGAAAATGGGATGATATTGAC
AAATGGAGACTCCTACCTCAATAGTTAATGGAATAATAAGAGGCTACTGTTGTGTCTAATGTTCTTCAAAAAAGT
AATATCCTCACTTGGAGAGTGTCAAATACATACTTTGAGGATTGACTTTATATAAGGTGCCCTGTAGAACTCTGT
TACACATATTTTTGACCCATATTATTTACAATGTCTTGATAATTCTACCTTTTTAGAGCAAGAATAGTATCTGCT
AATGTAAGGGACATCTGTATTTAACTCCTTTGTAGACATGAATTTCTATCAAAATGTTCTTTGCACTGTAACAGA
GATTCCTTTTTTCAATAATCTTAATTCAAAAGCATTATTAGACTTGAAAGGGTTTGATAATCTCCCAGTCCTTAG
TAAAGATTGAGAGAGGCTGGAGCAGTTTTCAGTTTTAAATGAGTCTGCAGTTAATATCAAATGTGAGTTTGGGAC
TGCCTGGCAACATTTATATTTCTTATTCAGAACCCTTGATGAGACTATTTTTAAACATACTAGTCTGCTGATAGA
AAGCACTATACATCCTATTGTTTCTTTCTTTCCAAAATCAGCCTTCTGTCTGTAACAAAAATGTACTTTATAGAG
ATGGAGGAAAAGGTCTAATACTACATAGCCTTAAGTGTTTCTGTCATTGTTCAAGTGTATTTTCTGTAACAGAAA
CATATTTGGAATGTTTTTCTTTTCCCCTTATAAATTGTAATTCCTGAAATACTGCTGCTTTAAAAAGTCCCACTG
TCAGATTATATTATCTAACAATTGAATATTGTAAATATACTTGTCTTACCTCTCAATAAAAGGGTACTTTTCTAT
CAAAAAAAAAAAAAAAAAAA

FIGURE 3418

MISLTDTQKIGMGLTGFGVFFLFFGMILFFDKALLAIGNVLFVAGLAFVIGLERTFRFFFQKHKMKATGFFLGGV
FVVLIGWPLIGMIFEIYGFFLLFRGFFPVVVGFIRRVPVLGSLLNLPGIRSFVDKVGESNNMV

FIGURE 3419A

CGTCATGGCCGTCAGCACCGCGTTCCCGTCCTCTTCCGCTTGGCCCCAGAAAGTTTCGGTTCTGCCCGGCGGTGG
ACCCACGAGCGCGTGCCACCATGGAGTCTGACCACTGCTGAGCAGACAGCCACCGAGGGCCGAAATTCTGAGCCT
TCCTCTGGACCCAGGCAGGAGACATACAGACAAGAAAGGCAAACTCACCATGGCCTCCACCAATGCAGAGAGCCA
GCTCCAGAGAATCATCCGAGACTTGCAAGATGCTGTGACAGAACTAAGCAAAGAATTTCAGGAAGCAGGGGAACC
CATCACGGATGACAGCACCAGCTTGCATAAATTTTCTTATAAACTTGAGTATCTCCTGCAATTTGATCAGAAAGA
GAAGGCCACCCTCCTGGGCAACAAGAAGGACTACTGGGATTACTTCTGTGCCTGCCTGGCCAAGGTGAAAGGAGC
CAATGATGGGATCCGATTTGTCAAGTCTATCTCAGAGCTCCGAACATCCTTGGGGAAAGGAAGAGCATTTATTCG
CTACTCCTTGGTGCACCAGAGGTTGGCAGACACCTTACAGCAGTGCTTCATGAACACCAAAGTGACCAGTGACTG
GTACTATGCAAGAAGCCCCTTTCTGCAGCCAAAGCTGAGCTCGGACATTGTGGGCCAACTCTATGAGCTGACTGA
GGTTCAGTTTGACCTGGCGTCGAGGGGCTTTGACTTGGATGCTGCCTGGCCAACATTTGCCAGGAGGACGCTGAC
CACTGGCTCTTCTGCTTACCTGTGGAAACCCCCTAGCCGCAGCTCCAGCATGAGCAGCTTGGTGAGCAGCTACCT
GCAGACTCAAGAGATGGTGTCCAACTTTGACCTGAACAGCCCCCTAAACAACGAGGCATTGGAGGGCTTTGATGA
GATGCGACTAGAGCTGGACCAGTTGGAGGTGCGGGAGAAGCAGCTACAGGAGCGCATGCAGCAGCTGGACAGAGA
GAACCAGGAGCTGAGGGCAGCTGTCAGCCAGCAAGGGGAGCAACTGCAGACAGAGAGGGAGAGGGGGCGCACTGC
AGCGGAGGACAACGTTCGCCTCACTTGCTTGGTAGCTGAGCTCCAGAAGCAGTGGGAGGTCACCCAGGCCACCCA
GAACACTGTGAAGGAGCTGCAGACATGCCTGCAGGCCCTGGAGCTAGGAGCAGCAGAGAAGGAGGAGGACTACCA
CACAGCCCTGCGGCGGCTGGAGTCCATGCTGCAGCCCTTGGCACAGGAGCTTGAGGCCACACGGGACTCACTGGA
CAAGAAAAACCAGCATTTAGCCAGCTTCCCAGGCTGGCTAGCCATGGCTCAGCAGAAGGCAGATTCGGCATCAGA
CACAAAGGGCCGGCAAGAACCTATTCCCAGTGATGCGGCCCAGGAGATGCAGGAGCTAGGGGAGAAGCTTCAAGC
CCTAGAAAGGGAGAGAACCAAGGTCGAGGAGGTCAACAGACAGCAGAGTGCCCAACTGGAACAGCTGGTCAAGGA
GCTTCAGCTGAAAGAGGATGCCCGGGCCAGCCTGGAGCGCCTGGTGAAGGAGATGGCCCCACTCCAGGAGGAGTT
GTCTGGGAAGGGACAGGAGGCAGACCAGCTCTGGCGACGGCTGCAGGAGTTGCTGGCCCACACGAGCTCCTGGGA
GGAGGAGCTAGCAGAGTTGAGGCGGGAGAAAAAACAGCAACAGGAGGAGAAGGAGCTGCTGGAGCAGGAGGTCAG
GTCTCTGACCCGGCAGCTGCAGTTCCTGGAGACCCAGCTGGCACAGGTGAGCCAACATGTGAGTGACCTGGAGGA
GCAGAAGAAGCAGCTCATTCAGGACAAAGACCACCTCAGCCAGCAGGTGGGTATGCTCGAGCGGCTTGCTGGGCC
GCCTGGCCCAGAACTGCCAGTGGCAGGTGAGAAGAATGAGGCCCTGGTCCCTGTGAACTCCAGTCTGCAAGAGGC
CTGGGGGAAGCCAGAGGAGGAGCAGAGGGGCCTGCAGGAGGCACAGTTAGACGATACCAAGGTGCAAGAGGGCAG
CCAGGAGGAAGAGCTCCGGCAGGCCAACAGGGAGCTGGAGAAGGAGCTACAGAATGTGGTCGGGCGTAACCAGCT
CCTGGAGGGCAAGCTGCAAGCCCTGCAGGCCGATTACCAGGCTTTGCAGCAGCGGGAATCAGCCATCCAGGGCTC
CTTGGCCTCCCTGGAGGCCGAGCAGGCCAGCATCCGGCACTTGGGTGACCAGATGGAGGCGAGCTTGCTGGCTGT
AAGGAAGGCCAAGGAGGCCATGAAAGCCCAGATGGCAGAGAAGGAGGCCATTCTACAGAGCAAGGAGGGCGAGTG
TCAGCAGCTGCGGGAGGAGGTGGAGCAGTGCCAGCAACTGGCAGAAGCCCGGCACAGAGAGCTTAGGGCTCTCGA
GAGCCAGTGCCAGCAGCAGACCCAGCTGATTGAGGTCCTCACAGCAGAGAAAGGCCAACAGGGAGTTGGCCCACC
CACTGACAATGAAGCCCGTGAGCTGGCTGCCCAGCTAGCCCTGTCTCAGGCGCAGCTGGAAGTCCATCAGGGGGA
GGTCCAACGGCTGCAGGCTCAGGTGGTGGACCTCCAGGCCAAGATGCGGGCAGCCCTGGATGACCAGGACAAGGT
GCAGAGCCAGCTAAGCATGGCTGAGGCCGTCCTGAGGGAGCACAAAACCCTTGTGCAGCAGCTGAAGGAGCAGAA
TGAAGCCCTTAACAGAGCCCATGTCCAGGAGCTGCTGCAATGCTCGGAGCGTGAAGGGGCACTGCAGGAGGAGAG
GGCCGATGAGGCCCAGCAGAGGGAGGAGGAGCTGCGGGCCCTGCAGGAGGAGCTGTCCCAGGCCAAATGCAGCTC
CGAGGAAGCACAGCTGGAGCACGCTGAGCTGCAAGAGCAGCTGCACCGGGCCAACACAGACACAGCTGAGCTGGG
CATCCAGGTTTGCGCACTGACCGTGGAAAAGGAGCGAGTGGAGGAGGCACTGGCCTGTGCTGTCCAGGAGCTCCA
GGACGCCAAAGAGGCAGCCTCAAGGGAGCGAGAGGGCCTGGAGCGCCAAGTAGCTGGGCTGCAGCAAGAGAAGGA
GAGCTTGCAGGAGAAGCTGAAGGCGGCCAAGGCAGCAGCCGGCTCACTGCCTGGCCTGCAGGCCCAGCTCGCCCA
GGCAGAGCAGCGGGCCCAGAGCCTCCAAGAGGCTGCACACCAGGAGCTCAACACCCTCAAGTTCCAGCTGAGTGC
TGAAATCATGGACTACCAGAGCAGACTTAAGAATGCTGGTGAAGAGTGCAAGAGCCTCAGGGGCCAGCTTGAGGA
GCAAGGCCGGCAGCTGCAGGCTGCTGAGGAAGCTGTGGAGAAGCTGAAGGCCACCCAAGCAGACATGGGAGAGAA
GCTGAGCTGCACTAGCAACCATCTTGCAGAGTGCCAGGCGGCCATGCTGAGGAAGGACAAGGAGGGGGCTGCCCT
GCGTGAAGACCTAGAAAGGACCCAGAAGGAACTCGAAAAAGCCACAACAAAAATCCAAGAGTATTACAACAAACT
CTGCCAGGAGGTGACAAATCGTGAGAGGAATGACCAGAAGATGCTTGCTGACCTGGATGACCTCAACAGAACCAA

FIGURE 3419B

GAAGTATCTCGAGGAGCGGCTGATAGAGCTGCTCAGGGACAAGGATGCTCTCTGGCAGAAGTCAGATGCCCTGGA
ATTCCAGCAGAAGCTCAGTGCTGAGGAGAGATGGCTCGGAGACACAGAGGCAAACCACTGCCTCGACTGTAAGCG
GGAGTTCAGCTGGATGGTGCGGCGGCACCACTGCAGGATATGTGGCCGCATCTTCTGTTACTACTGCTGCAACAA
CTACGTCCTGAGCAAGCACGGTGGCAAAAAGGAGCGCTGCTGCCGAGCCTGTTTCCAGAAGCTCAGTGAAGGCCC
TGGCTCCCCTGATAGCAGTGGCTCAGGCACTAGCCAGGGAGAGCCCAGCCCTGCACTGTCACCAGCCTCACCTGG
GCCCCAGGCCACAGGAGGCCAAGGAGCAAATACAGACTACAGGCCACCGGACGACGCTGTGTTTGATATCATCAC
AGATGAGGAATTGTGCCAGATACAGGAGTCCGGCTCCTCTTTGCCTGAAACACCCACTGAAACTGATTCTCTTGA
CCCAAATGCGGCTGAACAGGATACTACATCAACCTCGCTAACGCCTGAGGACACTGAAGACATGCCCGTGGGGCA
GGATTCGGAAATCTGCCTGCTGAAGTCTGGAGAACTGATGATCAAAGTACCCCTCACAGTGGATGAGATCGCCAG
CTTCGGGGAGGGTAGCAGGGAGCTGTTTGTGAGGTCCAGCACCTACAGCCTGATCCCCATCACTGTGCCCGAGGC
AGCCCTCACCATCAGCTGGGTCTTCTCCTCTGACCCCAAGAGCATCTCCTTCAGTGTGGTCTTCCAGGAGGCCGA
GGACACACCGCTGGATCAGTGTAAGGTCCTCATTCCCACGACCCGATGCAACTCCCACAAGGAGAACATCCAGGG
CCAGCTCAAGGTTCGCACACCCGGCATCTACATGCTCATCTTCGACAATACCTTCTCAAGGTTTGTCTCTAAAAA
GGTATTTTATCACTTGACGGTTGATCGGCCTGTGATCTACGATGGAAGTGATTTCCTGTAGCTTCAGCACCTCAG
TAACTTCACTTCATCCACAGGAAACACTGCTCTTCCTCACCTGTCACATAAAGCATTTTTTTAAAAAGTCAGCTG
CTCCAAAATCATCAACTCAGCCCCTGGGCTGCCCCTCAGAGGCGGTGTCTGGGGAGGACTTTGTGCTCAGCACTC
TGCACCGGCCACTCTTAGCCCCCGAGGCGTTGAAGGGCTCAGGCAATGTTTCCATTAAGTAGAGACTCAGCTGTT
GTCACACCCAAAGGGATGCTCTGCCAAAGGTTTAAACACCCAGGAGACCATCAGCCTCTCCTGGGAGCACAGTTG
ACTACAGGCCTCTTGTGGAGAGTTTCACGGGCAGGGGTGATTCCAACTTCTGCCTGTGGAGAGATTTTCTGCCCT
GCCCCACCAGGGCCCTGCATGTTGGAGACTGAGCTGGGTGCACTGGCCATACCCTGTGAATCCTCGGGCTGTGAC
GCCCTCAGGTACTCCTGGGAAAAGGAGGTACACAGCCATCATGCGAGTCGGTGCCAGGGGACCCCCCGGAGATCC
TGACCAGCTCCTCCAGTCATGCTCTTGTCCCTCACTGCCCCAGTAAGCTGGAGGCTGCTCCAGAACTCAGCAGTG
TTGGAGGGGCCTCTAAGCTGCACTCTCTTTCTGGCCCTTTTGTCTGGCTGATTCTGTCCTCAAATAAAGCCCTTC
ACTCAGCCAGACCTCTCCACAGCTCAAAGCATTGCCCTAAGAATCAGAAGTAAAGATAATCCAAGAGCAAAACCC
ACTGTACTTGGGGCCTGCAATGGCTGTGTGTACACTACATCTAATGCCCAAATGCCAGCCAGTGTGGATGTTGTG
ACCACAGAGCAGGATTGTGCATTGGCTTTAGAGCTACTCCTCAGCTGATGGCCCACTTTTGTTTATATAAATAAG
AGCTTCTGCCCCACCTGCAGACATGTTTACTAATGATCATAGCCAGGATTAGAACCACTTTCAAACATTGGGGCC
TTCTTAACAAAAGTCTTTGATAACTTAAGAACCAAAGTAACAGAGTAAACAGAGGCATGATGGATCCCTGGGCCC
CACTCCCCTCCTGACAGGTTCCCCAACAGCCCATTTGCCCACTTCCCACTGCTCAGCCCACACCAGACCTCCAGG
AGACATCCCCCCTTGAGGCAGAGAGATCCTGTTCCCTATTCCCAGACAAGAATTATTTAATCTTCCCTGTTCTCT
GTGGTCCTTTTCTTCCCCAACAACAGATAGCTCACCTTGGACAGCTCTTCGTCCCTTGTTCATGGAACCAGCTGC
CTGCAGTCAGGCCCCAGGTTCTTCCATGGGTGAACAGAGCATCTGACAAAAGGTCCCAGTTTGGCCAGGGGTGAG
GGAGAGAGCACCAGACAGGCTATCCGAGAATCTGAGAGCTGGGCCCGGCAATTCCTCCAGCTACCCTTGTGACCT
AAGTCCAGTCACACATTTCCCAAAGTTTCTCTTTGTCATAACCCTGGTCTGGCTGGTTTTGAGGGCTTGAGAATG
GGTCAGGGACTCCAGGCCAAGTCCAACAGAGACCCCAAACCCACCACACACCAGCAGCCACAACCTCACCACCAA
CAAAGAGGACTTTTGTGGGGCCACAAGTAAGAGGTCATTTCTGGAATGGACTCAGACCTTTAAACAGGAGAGTTG
AGCACTTCCAGTCAGTTTTTAAGCAAGGCATGGGGAACAGGGAATAGAACCTTTCAAAGAGGTTGCCCAGAGAAA
AGCTGGGCCTCTTGCATTCGGCTTCCTTGGAGCAGCCTCTTCTGGCAGAAAGCCATCAGGTGCTCAATCATCTTC
TCCTGGCCAAGGCTCTGACCATGCTTAGTACTGGAATAGAGGTGGCCAGGCCCCCAGCGACTCTTCTTGGCCTGA
TGTTTGTCCTCACAGGCATGCCACGTGGCCTGAGATGATTCAGAACAAATCATGCTAACTTTGAATCCATCCAGC
CACTTGCAAATGATAATCAGAAGTCAGCTTGTTCACTGTTAGAAAGAAACTAACAAAAGAGAACCCAGAGCAATC
TAGAATCTTTGAGTGCTTGGCTTTCCAAGGATACTGCGGAGACTCTGGCCAAGCTGATGACCTTCTGAAGTGTCA
CTGGCACCATATGCAACAAGAACCACCATTCACTGAGTAGCTAATGGGTTTGGGGCCTGGGACATTCCATCTGAG
GTCCTTCCTGAACATGTCACTCCACAGCAGAGGACCGGTTGCAGCTTACCCAGAACCACTCCTCCAGGAGAGCTG
GATGTTTTGCGTGCAACACCTTGAGCACTGACTGCTATTGTTCAAAAAAAGCCTTTGCTGCATTCGGAGGACTGC
CCCGTGCCCTGAGGTGACTTCCTAACTATGTGGTTTCATTAGCGAATTTATTTTTTGGGCTGGGTGGACATTTGT
ATTTTGTTAGGTTGCTGTTTAAGCTCAAGTTTGCTGTGCTCTCTGCAGCTACAAAACATCTTGGCATATTTAAGA
GTGGCTTTTATAAATAGCTTTATTCTGATATTAATCAGATTCCCAACTTTACTGAGAATTAAGGACTGGGGTACT

FIGURE 3419C

TTAAAGAAATGCAAATAGCAATTGAAGAACCACTGCTGCAGGTGGTAGCCCTGGCTAGACTGAATTACACTAGAA
ATCAGCCAGAAGGAAGCGTCCTTGGGATCCCAGATCACTCTTTTTTTTTTTTTTTTTAAAAGGGGCAGCCCCTT
GATGGCTCATCTCTCTGAATAACAGTTACGTCTTCATATCGATACCAGATGCCTTCTTCATCATGCCACTGAAGC
CACTCACCACCTTCAAGAACATGCCAACCTCTGTCAGATTCACTTACCCACAAACAAGGAGGCACGTTTGGCACA
AAGTGTTGTCCTCCAGGTCCAAGTGGACTCTACAGAGTGCTTGACCTCAACACACTGGATTCCAGGTGGACTGGA
CCAAGAGCAGGCAAAGACACGGGAACTGAAAAACTCCACAGGGTTTGGAGAATAGAAATGAAAAGCCACGTCATA
TAACTCAAGAATAAATGGTGTTTTGGAAATTTTAAAATTATCATCGAAGGTGGTGAAACTATTTCAGGCCCAAAT
GAAAGGAAATCGCCAGTTGGGGATGAAATCACAGAGCCTGTGTTTTATGATATGGTTGGATGTCCACTGATGAAA
TTTTAAAGGAGTTTCATTTTTAAAAGTGCGCATGATTCTACATATGAGAATTCTTTAGGCCAAGAAACTGTCCTT
GGCTCAGAGGTGTTGGGAATTAAAGCAGAGAGAAGCCATTCGTGATGCTTAGAACCAAGGATGGTCATGTACACA
AAGACCATCGAGACGGCCATTCTTGTTTACAAAACACTTACCAAGAAAGCACTTTGTAGGGGAACTTTAGTAAGT
TCTTCTCATTTCATTATGTTTCTTCCAAGGAAACAGGAGAGACTGAATTAATAATTCTCTCTTTCCTCTTAAGCA
CTTTTAAAATAATAAAGTACATCTTGAAATTTGGGGAGGCATCTCTGATTTAAAAAAAGAAAAAGGCTGCTTGAT
GTATGTTATGCAGAGACACTCTGCCTCTGGTGGCTGCAGAGCAATACCCAAGCCTCATTTGGAAGGCTCAACATT
TGGAATTGCACTTTAATTGATTAATCCTCAATTCATGTGGCCTTACGGGATGGTGGGTCTGGGACCCCAATTCAT
TCTTATCTGCCAAAGAATTATCTAGAAGCACATCAAATACCAGCACCCCACCTGCACAATGGGGGTGGAAAACTT
TTGTATCCCTAAGCATATTATTTTATAGTGTCTGCCATGCCATGTGGAAATACTTTATTTTTAACCTCAGGATTT
AAATAAAGTAAACACTATGACATTT

FIGURE 3420

MASTNAESQLQRIIRDLQDAVTELSKEFQEAGEPITDDSTSLHKFSYKLEYLLQFDQKEKATLLGNKKDYWDYFC
ACLAKVKGANDGIRFVKSISELRTSLGKGRAFIRYSLVHQRLADTLQQCFMNTKVTSDWYYARSPFLQPKLSSDI
VGQLYELTEVQFDLASRGFDLDAAWPTFARRTLTTGSSAYLWKPPSRSSSMSSLVSSYLQTQEMVSNFDLNSPLN
NEALEGFDEMRLELDQLEVREKQLQERMQQLDRENQELRAAVSQQGEQLQTERERGRTAAEDNVRLTCLVAELQK
QWEVTQATQNTVKELQTCLQALELGAAEKEEDYHTALRRLESMLQPLAQELEATRDSLDKKNQHLASFPGWLAMA
QQKADSASDTKGRQEPIPSDAAQEMQELGEKLQALERERTKVEEVNRQQSAQLEQLVKELQLKEDARASLERLVK
EMAPLQEELSGKGQEADQLWRRLQELLAHTSSWEEELAELRREKKQQQEEKELLEQEVRSLTRQLQFLETQLAQV
SQHVSDLEEQKKQLIQDKDHLSQQVGMLERLAGPPGPELPVAGEKNEALVPVNSSLQEAWGKPEEEQRGLQEAQL
DDTKVQEGSQEEELRQANRELEKELQNVVGRNQLLEGKLQALQADYQALQQRESAIQGSLASLEAEQASIRHLGD
QMEASLLAVRKAKEAMKAQMAEKEAILQSKEGECQQLREEVEQCQQLAEARHRELRALESQCQQQTQLIEVLTAE
KGQQGVGPPTDNEARELAAQLALSQAQLEVHQGEVQRLQAQVVDLQAKMRAALDDQDKVQSQLSMAEAVLREHKT
LVQQLKEQNEALNRAHVQELLQCSEREGALQEERADEAQQREEELRALQEELSQAKCSSEEAQLEHAELQEQLHR
ANTDTAELGIQVCALTVEKERVEEALACAVQELQDAKEAASREREGLERQVAGLQQEKESLQEKLKAAKAAAGSL
PGLQAQLAQAEQRAQSLQEAAHQELNTLKFQLSAEIMDYQSRLKNAGEECKSLRGQLEEQGRQLQAAEEAVEKLK
ATQADMGEKLSCTSNHLAECQAAMLRKDKEGAALREDLERTQKELEKATTKIQEYYNKLCQEVTNRERNDQKMLA
DLDDLNRTKKYLEERLIELLRDKDALWQKSDALEFQQKLSAEERWLGDTEANHCLDCKREFSWMVRRHHCRICGR
IFCYYCCNNYVLSKHGGKKERCCRACFQKLSEGPGSPDSSGSGTSQGEPSPALSPASPGPQATGGQGANTDYRPP
DDAVFDIITDEELCQIQESGSSLPETPTETDSLDPNAAEQDTTSTSLTPEDTEDMPVGQDSEICLLKSGELMIKV
PLTVDEIASFGEGSRELFVRSSTYSLIPITVPEAALTISWVFSSDPKSISFSVVFQEAEDTPLDQCKVLIPTTRC
NSHKENIQGQLKVRTPGIYMLIFDNTFSRFVSKKVFYHLTVDRPVIYDGSDFL

FIGURE 3421

CCCGCGTGCATACGGTTGCCGGCATGGCACATTACAACTTCAAGAAAATTACGGTGGTGCCGTCCGCCAAGGACT
TCATAGACCTCACGTTGTCGAAGACTCAACGAAAGACTCCAACCGTTATTCATAAACATTACCAAATACATCGCA
TTAGACATTTTTACATGAGAAAAGTCAAATTTACTCAACAGAATTACCATGATAGACTTTCACAAATTCTAACAG
ATTTCCCCAAATTGGATGATATTCATCCGTTCTATGCTGATTTGATGAATATTCTCTACGACAAGGATCATTACA
AGTTGGCTCTGGGGCAAATAAATATTGCCAAAAATTTAGTGGACAATGTTGCTAAAGATTATGTGCGACTGATGA
AGTATGGCGACTCTCTCTACCGCTGCAAACAGCTGAAGCGTGCGGCCCTGGGACGGATGTGCACAGTGATCAAGA
GGCAGAAGCAGAGTTTGGAGTATTTGGAGCAAGTGCGTCAGCATTTATCCCGTTTGCCAACCATTGATCCGAATA
CCAGGACCCTGCTTTTGTGTGGGTACCCAAATGTTGGGAAGTCCAGCTTCATCAACAAGGTGACGAGAGCAGACG
TGGATGTCCAGCCCTATGCGTTCACAACCAAGTCTCTGTTTGTTGGGCACATGGATTATAAGTATCTACGTTGGC
AGGTTGTAGACACTCCTGGGATCCTGGACCACCCTCTGGAGGATAGGAACACCATCGAGATGCAGGCCATCACTG
CCCTGGCCCACCTCCGTGCTGCGGTCCTGTATGTGATGGATTTGTCTGAGCAGTGTGGGCATGGGCTGAGGGAGC
AGCTAGAACTCTTCCAGAACATCAGACCTCTCTTCATCAACAAGCCTCTCATAGTTGTAGCCAACAAATGTGATG
TGAAGAGAATAGCTGAACTTTCTGAAGATGATCAGAAAATATTTACAGATTTGCAGTCTGAAGGATTCCCTGTAA
TAGAGACCAGCACCCTGACTGAGGAAGGTGTTATTAAAGTTAAAACAGAGGCTTGCGATAGGCTTTTGGCTCATC
GAGTGGAAACCAAAATGAAGGGAAATAAAGTGAATGAGGTGCTGAATAGACTGCACCTGGCTATCCCAACCAGGA
GGGACGATAAGGAGAGGCCCCCTTTCATCCCTGAAGGAGTGGTGGCTCGCAGGAAGAGGATGGAAACTGAGGAGT
CCAGGAAGAAGAGGGAACGAGATCTTGAGCTGGAAATGGGAGATGATTATATTTTGGATCTTCAGAAGTACTGGG
ATTTAATGAATTTGTCTGAAAAACATGATAAGATACCAGAAATCTGGGAAGGCCATAATATAGCTGATTATATTG
ATCCAGCCATCATGAAGAAATTGGAAGAATTAGAAAAAGAAGAAGAGCTGAGAACAGCTGCTGGAGAGTATGACA
GTGTATCTGAGAGTGAAGACGAAGAGATGCTGGAAATCCGACAGCTGGCAAAGCAAATTCGAGAGAAAAAGAAGT
TGAAAATTCTGGAGTCCAAAGAAAAGAATACACAGGGACCCAGGATGCCGCGAACTGCTAAGAAGGTTCAGAGGA
CAGTTTTGGAGAAGGAGATGCGTAGTCTTGGTGTTGACATGGACGATAAAGACGATGCCCATTACGCAGTCCAGG
CAAGAAGATCCCGGAGCATCACTAGGAAAAGAAAGCGGGAAGACTCTGCTCCCCCGTCCTCTGTGGCCCGGAGTG
GGAGTTGCTCTCGAACTCCACGTGACGTTTCTGGTCTTAGGGATGTCAAGATGGTGAAGAAAGCCAAGACTATGA
AGAATGCTCAGAAGAAGATGAATCGGTTGGGGAAGAAAGGGGAGGCGGATAGACACGTGTTTGATATGAAGCCCA
AGCACTTGCTGTCTGGGAAGAGGAAAGCTGGTAAAAAGGACAGGAGATAGTATCCGTTTGGTTGGCGTGGCTTCG
CTAGAGTGTTGCTGTTTATTTCCTGGTTTGGTACAGTATGGTTTCATGAAATTGGAGCTCTGTACAAACTGAAAA
AGACAAAATAAGTAAAGCACTTGTTGCTTTGCTGAAAACTATGGTTAACCCTATATAGGTGTGGGAAATTTTTGT
CACTGCATAATATTACAAATATTTTGAGTAGACAGTGTTTCCACATTTAATGGAGTATCAGTTGCTTCAGATTTT
CAGAACTGGGAAGATTTACTGGTGTAACTGGGTTGTTTTTGATGGAGAAAAACCTTATTTTCTTTTGTAAGAGCT
GGGAGCAAACACGTTTATGAGTGTGTCGGAATCCCGTGCTTAAAATACGCTCTTAAATTATTTTCTAGTCTTATT
TTACAATGTCTCATTGTAGTCTGTCTTCAACTATTTTATCCAAAATAAACCTCCAGAAGAAACTAAAAAAAAAAA
AAAAAAAAAAAAA

FIGURE 3422

MAHYNFKKITVVPSAKDFIDLTLSKTQRKTPTVIHKHYQIHRIRHFYMRKVKFTQQNYHDRLSQILTDFPKLDDI
HPFYADLMNILYDKDHYKLALGQINIAKNLVDNVAKDYVRLMKYGDSLYRCKQLKRAALGRMCTVIKRQKQSLEY
LEQVRQHLSRLPTIDPNTRTLLLCGYPNVGKSSFINKVTRADVDVQPYAFTTKSLFVGHMDYKYLRWQVVDTPGI
LDHPLEDRNTIEMQAITALAHLRAAVLYVMDLSEQCGHGLREQLELFQNIRPLFINKPLIVVANKCDVKRIAELS
EDDQKIFTDLQSEGFPVIETSTLTEEGVIKVKTEACDRLLAHRVETKMKGNKVNEVLNRLHLAIPTRRDDKERPP
FIPEGVVARRKRMETEESRKKRERDLELEMGDDYILDLQKYWDLMNLSEKHDKIPEIWEGHNIADYIDPAIMKKL
EELEKEEELRTAAGEYDSVSESEDEEMLEIRQLAKQIREKKKLKILESKEKNTQGPRMPRTAKKVQRTVLEKEMR
SLGVDMDDKDDAHYAVQARRSRSITRKRKREDSAPPSSVARSGSCSRTPRDVSGLRDVKMVKKAKTMKNAQKKMN
RLGKKGEADRHVFDMKPKHLLSGKRKAGKKDRR

FIGURE 3423

CCCGCGTGCATACGGTTGCCGGCATGGCACATTACAACTTCAAGAAAATTACGGTGGTGCCGTCCGCCAAGGACT
TCATAGACCTCACGTTGTCGAAGACTCAACGAAAGACTCCAACCGTTATTCATAAACATTACCAAATACATCGCA
TTAGACATTTTTACATGAGAAAAGTCAAATTTACTCAACAGAATTACCATGATAGACTTTCACAAATTCTAACAG
ATTTCCCCAAATTGGATGATATTCATCCGTTCTATGCTGATTTGATGAATATTCTCTACGACAAGGATCATTACA
AGTTGGCTCTGGGGCAAATAAATATTGCCAAAAATTTAGTGGACAATGTTGCTAAAGATTATGTGCGACTGATGA
AGTATGGCGACTCTCTCTACCGCTGCAAACAGCTGAAGCGTGCGGCCCTGGGACGGATGTGCACAGTGATCAAGA
GGCAGAAGCAGAGTTTGGAGTATTTGGAGCAAGTGCGTCAGCATTTATCCCGTTTGCCAACCATTGATCCGAATA
CCAGGACCCTGCTTTTGTGTGGGTACCCAAATGTTGGGAAGTCCAGCTTCATCAACAAGGTGACGAGAGCAGACG
TGGATGTCCAGCCCTATGCGTTCACAACCAAGTCTCTGTTTGTTGGGCACATGGATTATAAGTATCTACGTTGGC
AGGTTGTAGACACTCCTGGGATCCTGGACCACCCTCTGGAGGATAGGAACACCATCGAGATGCAGGCCATCACTG
CCCTGGCCCACCTCCGTGCTGCGGTCCTGTATGTGATGGATTTGTCTGAGCAGTGTGGGCATGGGCTGAGGGAGC
AGCTAGAACTCTTCCAGAACATCAGACCTCTCTTCATCAACAAGCCTCTCATAGTTGTAGCCAACAAATGTGATG
TGAAGAGAATAGCTGAACTTTCTGAAGATGATCAGAAAATATTTACAGATTTGCAGTCTGAAGGATTCCCTGTAA
TAGAGACCAGCACCCTGACTGAGGAAGGTGTTATTAAAGTTAAAACAGAGGCTTGCGATAGGCTTTTGGCTCATC
GAGTGGAAACCAAAATGAAGGGAAATAAAGTGAATGAGGTGCTGAATAGACTGCACCTGGCTATCCCAACCAGGA
GGGACGATAAGGAGAGGCCCCCTTTCATCCCTGAAGGAGTGGTGGCTCGCAGGAAGAGGATGGAAACTGAGGAGT
CCAGGAAGAAGAGGGAACGAGATCTTGAGCTGGAAATGGGAGATGATTATATTTTGGATCTTCAGAAGTACTGGG
ATTTAATGAATTTGTCTGAAAAACATGATAAGATACCAGAAATCTGGGAAGGCCATAATATAGCTGATTATATTG
ATCCAGCCATCATGAAGAAATTGGAAGAATTAGAAAAAGAAGAAGAGCTGAGAACAGCTGCTGGAGAGTATGACA
GTGTATCTGAGAGTGAAGACGAAGAGATGCTGGAAATCCGACAGCTGGCAAAGCAAATTCGAGAGAAAAAGAAGT
TGAAAATTCTGGAGTCCAAAGAAAAGAATACACAGGGACCCAGGATGCCGCGAACTGCTAAGAAGGTTCAGAGGA
CAGTTTTGGAGAAGGAGATGCGTAGTCTTGGTGTTGACATGGACGATAAAGACGATGCCCATTACGCAGTCCAGG
CAAGAAGATCCCGGAGCATCACTAGGAAAAGAAAGCGGGAAGACTCTGCTCCCCCGTCCTCTGTGGCCCGGAGTG
GGAGTTGCTCTCGAACTCCACGTGACGTTTCTGGTCTTAGGGATGTCAAGATGGTGAAGAAAGCCAAGACTATGA
AGAATGCTCAGAAGAAGATGAATCGGTTGGGGAAGAAAGGGGAGGCGGATAGACACGTGTTTGATATGAAGCCCA
AGCACTTGCTGTCTGGGAAGAGGAAAGCTGGTAAAAAGGACAGGAGATAGTATCCGTTTGGTTGGCGTGGCTTCG
CTAGAGTGTTGCTGTTTATTTCCTGGTTTGGTACAGTATGGTTTCATGAAATTGGAGCTCTGTACAAACTGAAAA
AGACAAAATAAGTAAAGCACTTGTTGCTTTGCTGAAAACTATGGTTAACCCTATATAGGTGTGGGAAATTTTTGT
CACTGCATAATATTACAAATATTTTGAGTAGACAGTGTTTCCACATTTAATGGAGTATCAGTTGCTTCAGATTTT
CAGAACTGGGAAGATTTACTGGTGTAACTGGGTTGTTTTTGATGGAGAAAAACCTTATTTTCTTTTGTAAGAGCT
GGGAGCAAACACGTTTATGAGTGTGTCGGAATCCCGTGCTTAAAATACGCTCTTAAATTATTTTCTAGTCTTATT
TTACAATGTCTCATTGTAGTCTGTCTTCAACTATTTTATCCAAAATAAACCTCCAGAAGAAACTAAAAAAAAAAA
AAAAAAAAAAAAA

FIGURE 3424

MAHYNFKKITVVPSAKDFIDLTLSKTQRKTPTVIHKHYQIHRIRHFYMRKVKFTQQNYHDRLSQILTDFPKLDDI
HPFYADLMNILYDKDHYKLALGQINIAKNLVDNVAKDYVRLMKYGDSLYRCKQLKRAALGRMCTVIKRQKQSLEY
LEQVRQHLSRLPTIDPNTRTLLLCGYPNVGKSSFINKVTRADVDVQPYAFTTKSLFVGHMDYKYLRWQVVDTPGI
LDHPLEDRNTIEMQAITALAHLRAAVLYVMDLSEQCGHGLREQLELFQNIRPLFINKPLIVVANKCDVKRIAELS
EDDQKIFTDLQSEGFPVIETSTLTEEGVIKVKTEACDRLLAHRVETKMKGNKVNEVLNRLHLAIPTRRDDKERPP
FIPEGVVARRKRMETEESRKKRERDLELEMGDDYILDLQKYWDLMNLSEKHDKIPEIWEGHNIADYIDPAIMKKL
EELEKEEELRTAAGEYDSVSESEDEEMLEIRQLAKQIREKKKLKILESKEKNTQGPRMPRTAKKVQRTVLEKEMR
SLGVDMDDKDDAHYAVQARRSRSITRKRKREDSAPPSSVARSGSCSRTPRDVSGLRDVKMVKKAKTMKNAQKKMN
RLGKKGEADRHVFDMKPKHLLSGKRKAGKKDRR

FIGURE 3425A

GACGGCTTAGCCGCGGTGCAGACTGCGGCGGCGGTGGTCTGAGGAAGTTCTATCTTGGCGCTAAAGCGGAGACGC
ATCCCCCGACCCGAGGCTACGATGAGCACACCGGCCGTGCCCCAGGACCTGCAGCTGCCCCCGAGTCAGAGGGCG
CAGTCCGCATTCAAAGAGCAAAGAAGACAAAAACTCAAGGAACATCTGTTGAGAAGAAAAACGCTTTTTGCATAC
AAGCAGGAAAATGAGATGTTATCCAGTAGAGATCAGAGAGTTGTGACATCTGAGGACCAAGTTCAAGAAGGGACT
AAAGTGCTGAAACTTAAAACAAAAATGGCTGATAAAGAAAACATGAAGAGACCTGCAGAGAGCAAAAATAATACA
GTGGTGGGGAAACATTGTATTCCTTTAAAACCTTCAAATGAACTAACCAATTCAACTGTAGTAATTGACACACAT
AAACCTAAGGATAGTAATCAAACTCCGCATTTGTTACTAACTGAAGATGATCCCCAAAGTCAACATATGACATTA
AGCCAGGCATTTCACCTTAAAAACAATAGTAAAAAGAAACAAATGACTACAGAAAAACAAAAGCAAGATGCTAAC
ATGCCCAAGAAACCTGTGCTTGGATCTTATCGTGGCCAGATTGTTCAGTCTAAGATTAATTCATTTAGAAAACCT
CTACAAGTCAAAGATGAGAGTTCTGCAGCAACAAAGAAACTTTCAGCCACTATACCTAAAGCCACAAAACCTCAG
CCTGTAAACACCAGCAGTGTAACAGTGAAAAGTAATAGATCCTCCAATATGACTGCCACTACTAAATTTGTGAGC
ACTACATCTCAGAACACACAACTTGTGCGACCTCCTATTAGAAGTCATCACAGTAATACCCGGGACACTGTGAAA
CAAGGCATCAGTAGAACCTCTGCCAATGTTACAATCCGGAAAGGGCCTCATGAAAAAGAACTATTACAATCAAAA
ACAGCTTTATCTAGTGTCAAAACCAGTTCTTCTCAAGGTATAATAAGAAATAAGACTCTATCAAGATCCATAGCA
TCTGAAGTTGTAGCCAGGCCTGCTTCATTGTCTAATGATAAACTGATGGAAAAGTCAGAGCCCGTTGACCAGCGA
AGACATACTGCAGGAAAAGCAATTGTTGATAGTAGATCAGCTCAGCCCAAAGAAACCTCGGAAGAGAGAAAAGCT
CGTCTGAGTGAGTGGAAAGCTGGCAAAGGAAGAGTGCTAAAAAGGCCCCCTAATTCAGTAGTTACTCAGCATGAG
CCTGCAGGACAAAATGAAAAACCAGTTGGGTCTTTTTGGACTACCATGGCAGAAGAAGATGAACAAAGATTATTT
ACTGAAAAAGTAAACAACACATTTTCTGAATGCCTGAACTTGATTAATGAGGGATGTCCAAAAGAAGATATACTG
GTCACACTGAATGACCTGATTAAAAATATTCCAGATGCCAAAAAGCTTGTTAAGTATTGGATATGTCTTGCACTT
ATTGAACCAATCACAAGTCCTATTGAAAATATTATTGCAATCTATGAGAAAGCCATTCTGGCAGGGGCTCAGCCT
ATTGAAGAGATGCGACACACGATTGTAGATATTCTAACAATGAAGAGTCAAGAAAAAGCTAATTTAGGAGAAAAT
ATGGAGAAGTCTTGTGCAAGCAAGGAAGAAGTCAGAGAAGTCAGTATTGAAGATACAGGTGTTGATGTAGATCCA
GAAAAACTGGAAATGGAGAGTAAACTTCATAGAAATTTGCTACTTCAAGATTGTGAAAAAGAGCAAGACAACAAA
ACAAAAGATCCAACCCATGATGCTAAAACCCCCAATACAGAAACGAGGACAAGTTGCTTAATTAAATATAATGTG
TCTACTACGCCATACTTGCAAAGTGTGAAAAAAAAGGTGCAGTTTGATGGAACAAATTCCGCATTTAAAGAGCTG
AAGTTTTTAACACCAGTGAGACGTTCTCGACGTCTTCAAGAGAAAACTTCTAAATTGCCAGATATGTTAAAAGAT
CATTATCCTTGTGTGTCTTCATTGGAACAGCTAACGGAGTTGGGAAGAGAAACTGATGCTTTTGTATGCCGCCCT
AATGCAGCACTGTGCCGGGTGTACTATGAGGCTGATACAACATAAGGGAAATAAAGCTCTGTTAGGGAATGGGGT
TTTTATTATTTGTGGGGTGTTTTGTTTTGAGTAGCTTTATATTGCTCTTAGGTCTGGAGTTGGCCATGTACCTAT
GTATCCTAAGCATTCACGGCAGTGAGCTCCTTTACTAACATTCATGTTATGGCAAGAGTTGTCCTCTACATTGGA
AAGCTAATCCTACCTTGTCAGTTTCAACCAACTGAGTTTTTTCTTTAAGAAAGGTAAATTTTGTCAGCTAGTTTA
CTATGTTCCTTGAATATAAACAGGTTATAATACTACCCTGTTCACTTTACTAAATATAAGTACAGTAATGATGCA
TAATTAGAAAATGAGGTATTCTAGGTAAAATGTATGTTTGCCTTGACATGTTTTTAAAAGTTATGATGTACCTCC
CTGCCTTTAAACAGAATACTTTTTTCTTTTTTTTGGCCTTTCTCAGATTAGTCAAAAATTCTATAGAATGACTCA
CTTCGAATACTAAGACACAGGAGGTTTAGCCTGCTTTCTTACCAAATTCATGTTACCCAGACTTGTGTTCTCTTG
CGTCCCTTGGACTGCCTGTTGATTGATGGAAAGTGTCTGCACTGACACTTTTCGTCAGTAGTCTGTAGTTTCGTG
GCCTCTTTTGATTATAACTGGGGTCACCAAGAAGGTTTACTTAATTAAATACCGCATTTCTAAGAGAAGATACTT
TGTGTAAGAAAAGATGCCACATTTAGTGGTTTAACTTTTGTAACTTCACTTGATAGTTTTTAAGCAATTAGAATG
GAGTTAGGGAAAGAACATATCATACTGAACAAATGTCATTCTAGTTTAGATAGCATTTCTAAGATAACTGATACT
AATACTTGTTTTCTTCCCTATAACATAAAAAACTTCACTGTTAAGTCATGTCCCTTGAAACATGATAGTTACATA
CACAGTTTTCTCTCCACACATAAATAACACCACTAAAGTTGTTTTGTAAGGTTCCAAACTAATATGGCATATATC
AACTCTACAGTTTCAAATAAATGACTTTTTAATTGTAAAAGATTAGTTGAAAAACTGTATGAATGTGAAGATCAC
ATGCTTAGTCATTTCTATGTTCATTCCACTTTGTATATCTTTTCTATTTATTGACTTCTCATGTTCTAGAGAGTA
GGACTTTTATTCCGTGTACCTGATATATATACAATTAAAATATCTGTATAATTATGTTTTAATGAGGTTTATTTC
AACAGATATTTTATGAAATGCAGTTTAACCACAGTGAATGAATTTTAGCTTTGCTTTTGAAATACATTGTAAGAT
TTGACTTGAGGTTTTTGACACTTAAGTACATGCTTAATGATATATTTTCAAAAGTCATCAGTCTACTTACATAAA
CTTTACCTAATTTTTTTCACTTTAACAAAAACATAACTATGCCCTTGTTTTTTCATACTTTGACCCAAAATATGC

FIGURE 3425B

CATTTTGAAATAAAATTTAAGCTTTG

FIGURE 3426

MSTPAVPQDLQLPPSQRAQSAFKEQRRQKLKEHLLRRKTLFAYKQENEMLSSRDQRVVTSEDQVQEGTKVLKLKT
KMADKENMKRPAESKNNTVVGKHCIPLKPSNELTNSTVVIDTHKPKDSNQTPHLLLTEDDPQSQHMTLSQAFHLK
NNSKKKQMTTEKQKQDANMPKKPVLGSYRGQIVQSKINSFRKPLQVKDESSAATKKLSATIPKATKPQPVNTSSV
TVKSNRSSNMTATTKFVSTTSQNTQLVRPPIRSHHSNTRDTVKQGISRTSANVTIRKGPHEKELLQSKTALSSVK
TSSSQGIIRNKTLSRSIASEVVARPASLSNDKLMEKSEPVDQRRHTAGKAIVDSRSAQPKETSEERKARLSEWKA
GKGRVLKRPPNSVVTQHEPAGQNEKPVGSFWTTMAEEDEQRLFTEKVNNTFSECLNLINEGCPKEDILVTLNDLI
KNIPDAKKLVKYWICLALIEPITSPIENIIAIYEKAILAGAQPIEEMRHTIVDILTMKSQEKANLGENMEKSCAS
KEEVREVSIEDTGVDVDPEKLEMESKLHRNLLLQDCEKEQDNKTKDPTHDAKTPNTETRTSCLIKYNVSTTPYLQ
SVKKKVQFDGTNSAFKELKFLTPVRRSRRLQEKTSKLPDMLKDHYPCVSSLEQLTELGRETDAFVCRPNAALCRV
YYEADTT

FIGURE 3427

GGCTGCGAGAAGACGACAGAAGGGGGAAGGGGCTGATGCGAACTGGGGCCACGGTAGCCATCGCGCTTTGCAGTT
CGGTCTCCTGGTGTACGGCCAACGCCAAGTAGGGGATTGCGTTCCCTCCAGTCGCAGACCCTATCAGATTTGGAT
ATGTCCTTCATATTTGATTGGATTTACAGTGGTTTCAGCAGTGTGCTACAGTTTTTAGGATTATATAAGAAAACT
GGTAAACTGGTATTTCTTGGATTGGATAATGCAGGAAAAACAACATTGCTACACATGCTAAAAGATGACAGACTT
GGACAACATGTCCCAACATTACATCCCACTTCCGAAGAACTGACCATTGCTGGCATGACGTTTACAACTTTTGAT
CTGGGTGGACATGTTCAAGCTCGAAGAGTGTGGAAAAACTACCTTCCTGCTATCAATGGCATTGTATTTCTGGTG
GATTGTGCAGACCACGAAAGGCTGTTAGAGTCAAAAGAAGAACTTGATTCACTAATGACAGATGAAACCATTGCT
AATGTGCCTATACTGATTCTTGGGAATAAGATCGACAGACCTGAAGCCATCAGTGAAGAGAGGTTGCGAGAGATG
TTTGGTTTATATGGTCAGACAACAGGAAAGGGGAGTATATCTCTGAAAGAACTGAATGCCCGACCCTTAGAAGTT
TTCATGTGTAGTGTGCTCAAAAGACAAGGTTACGGAGAAGGCTTCCGCTGGATGGCACAGTACATTGATTAACAC
AAACTCACATTGGTTCCAGGTCTCAACGTTCAGGCTTACTCAGAGATTTGATTGCTCAACATGCATAACTTGAAT
TCAATAGACTTTTGCTGGTTATAAAACAGATGTTTTTTAGATTATTAATATTAAATCAACTTAATTTGAATGAGA
ATTGAAAACTGATTCAAGTAAGTTTGAGTATCACAATGTTAGCTTTCTAATTCCATAAAAGTACTTGGTTTTTAC
AGTTTATAATCTGACATCACCCCAGCGCCATTTGTAAAGAGCAACTTTCCAGCAGTACATTTGAAGCACTTTTTA
ACAACATGAAACTATAAACCATATTTAAAAGCTCATCATGTTAAATTTTTTATGTACTTTTCTGGAACTAGTTTT
TAAATTTTAGATTATATGTCCACCTATCTTAAGTGTACAGTTAATAATTAGCTTATTCAATGATTGCATGATGCC
TTACAGTTTTCAATAACTTTTTTTCTTATGCAAACGTCATGCAATAAAACAAACTCTAATGTTTGGCAAAAAAAA
AAAAA

FIGURE 3428

MSFIFDWIYSGFSSVLQFLGLYKKTGKLVFLGLDNAGKTTLLHMLKDDRLGQHVPTLHPTSEELTIAGMTFTTFD
LGGHVQARRVWKNYLPAINGIVFLVDCADHERLLESKEELDSLMTDETIANVPILILGNKIDRPEAISEERLREM
FGLYGQTTGKGSISLKELNARPLEVFMCSVLKRQGYGEGFRWMAQYID

FIGURE 3429

AGAAAGTCGACGGGCGTGGCGGGGGAGGGGACGCTGAGGGCCCATGTGCTGAAAATCCGAAGTGCCGCGGAAAGT
GGAGAGCTGACAAGGAAGGTTTCGAGCGTTTTGCTGGCAAAGGGATTTCTTACAACCTCCAGGCATGCGTCTTTC
TGCCCTGCTGGCCTTGGCATCCAAGGTCACTCTGCCCCCCCCATTACCGCTATGGGATGAGCCCCCCAGGCTCTGT
TGCAGACAAGAGGAAGAACCCCCCATGGATCAGGCGGCGCCCAGTGGTTGTGGAACCCATCTCTGATGAAGACTG
GTATCTGTTCTGTGGGGACACGGTGGAGATCCTAGAAGGCAAGGATGCCGGGAAGCAGGGCAAAGTGGTTCAAGT
TATCCGGCAGCGAAACTGGGTGGTCGTGGGAGGGCTGAACACACATTACCGCTACATTGGCAAGACCATGGATTA
CCGGGGAACCATGATCCCTAGTGAAGCCCCCTTGCTCCACCGCCAGGTCAAACTTGTGGATCCTATGGACAGGAA
ACCCACTGAGATCGAGTGGAGATTTACTGAAGCAGGAGAGCGGGTACGAGTCTCCACACGATCAGGGAGAATTAT
CCCTAAACCCGAATTTCCCAGAGCTGATGGCATCGTCCCTGAAACGTGGATTGATGGCCCCAAAGACACATCAGT
GGAAGATGCTTTAGAAAGAACCTATGTGCCCTGTCTAAAGACACTGCAGGAGGAGGTGATGGAGGCCATGGGGAT
CAAGGAGACCCGGAAATACAAGAAGGTCTATTGGTATTGAGCCTGGGGCAGAGCAGCTCCTCCCCAACTTCTGTC
CCAGCCTTGAAGGCTGAGGCACTTCTTTTTCAGATGCCAATAAAGAGCACTTTATGAGTCCAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAA

FIGURE 3430

MRLSALLALASKVTLPPHYRYGMSPPGSVADKRKNPPWIRRRPVVVEPISDEDWYLFCGDTVEILEGKDAGKQGK
VVQVIRQRNWVVVGGLNTHYRYIGKTMDYRGTMIPSEAPLLHRQVKLVDPMDRKPTEIEWRFTEAGERVRVSTRS
GRIIPKPEFPRADGIVPETWIDGPKDTSVEDALERTYVPCLKTLQEEVMEAMGIKETRKYKKVYWY

FIGURE 3431

CACGGGGCTGCGTGGAAAGAGCGCCGAGCGGTGGCGTCGTTGTCGCCCCCTCCTCGTCGGGAAGAATCGTTTGGT
CTCCTGCCGTGCCCGGCCGGTGCTGCTGTCGCTGCTGCTGCCCGCGCGGGTTGTGGATGTTGTCGGCTCCGTGTT
GTGATGACAGGAGAATGTGTGTGTGTCCCGGGCCCAGACGAATTGGAATCCCAGTCAGAAGTTCCAGCCTGCCAC
TGTTCTCTGATGCCATGCCAGCACCAACTCAACTGTTTTTTCCTCTCATCCGTAACTGTGAACTGAGCAGGATCT
ATGGCACTGCATGTTACTGCCACCACAAACATCTCTGTTGTTCCTCATCGTACATTCCTCAGAGTCGACTGAGAT
ACACACCTCATCCAGCATATGCTACCTTTTGCAGGCCAAAGGAGAACTGGTGGCAGTACACCCAAGGAAGGAGAT
ATGCTTCCACACCACAGAAATTTTACCTCACACCTCCACAAGTCAATAGCATCCTTAAAGCTAATGAATACAGTT
TCAAAGTGCCAGAATTTGACGGCAAAATGTCAGTTCTATCCTTGGATTTGACAGCAATCAAGCTGCCTGCAAATG
CACCCATTGAGGACCGGAGAAGTGCAGCAACCTGCTTGCAGACCAGAGGGATGCTTTTGGGGGTTTTTGATGGCC
ATGCAGGTTGTGCTTGGTCCCAGGCAGTCAGTGAAAGACTCTTTTATTATATTGCTGGCTCTTTGGTACCCCATG
AGACTTTGCTAGAGATTGAAAATGCAGTGGAGAGCGGCCGGGCACTGCTACCCATTCTCCAGTGGCACAAGCACC
CCAATGATTACTTTAGTAAGGAGGCATCCAAATTGTACTTTAACAGCTTGAGGACTTACTGGCAAGAGCTTATAG
ACCTCAACACTGGTGAGTCGACTGATATTGATGTTAAGGAGGCTCTAATTAATGCCTTCAAGAGGCTTGATAATG
ACATCTCCTTGGAGGCGCAAGTTGGTGATCCTAATTCTTTTCTCAACTACCTGGTGCTTCGAGTGGCATTTTCTG
GAGCCACTGCTTGTGTGGCCCATGTGGATGGTGTTGACCTTCATGTGGCCAATACTGGCGATAGCAGAGCCATGC
TGGGTGTGCAGGAAGAGGACGGCTCATGGTCAGCAGTCACGCTGTCTAATGACCACAATGCTCAAAATGAAAGAG
AACTAGAACGGCTGAAATTGGAACATCCAAAGAGTGAGGCCAAGAGTGTCGTGAAACAGGATCGGCTGCTTGGCT
TGCTGATGCCATTTAGGGCATTTGGAGATGTAAAGTTCAAATGGAGCATTGACCTTCAAAAGAGAGTGATAGAAT
CTGGCCCAGACCAGTTGAATGACAATGAATATACCAAGTTTATTCCTCCTAATTATCACACACCTCCTTATCTCA
CTGCTGAGCCAGAGGTAACTTACCACCGATTAAGGCCACAGGATAAGTTTCTGGTGTTGGCTACTGATGGGTTGT
GGGAGACTATGCATAGGCAGGATGTGGTTAGGATTGTGGGTGAGTACCTAACTGGCATGCATCACCAACAGCCAA
TAGCTGTTGGTGGCTACAAGGTGACTCTGGGACAGATGCATGGCCTTTTAACAGAAAGGAGAACCAAAATGTCCT
CGGTATTTGAGGATCAGAACGCAGCAACCCATCTCATTCGCCACGCTGTGGGCAACAACGAGTTTGGGACTGTTG
ATCATGAGCGCCTCTCTAAAATGCTTAGTCTTCCTGAAGAGCTTGCTCGAATGTACAGAGATGACATTACAATCA
TTGTAGTTCAGTTCAATTCTCATGTTGTAGGGGCGTATCAAAACCAAGAAAAGTGAGTGGCTCTTTACTGGCAAT
TCTCAAATGATTACATTTAAAGGGCAGATTTTTTAAAAGATCTACTATAATAAACATTTTCAGGTGGCATTCTAA
GCATTTACCCTTTTGATACTCTAGGGGCGCTCCAAATTGACTTTGCAGCAGGGTGGCAGGGCAGAAGAGTCTGGT
CCTGCCTAGCTCAGATTTCATGGCACCTGCACTTGAGGCAAGCACTTCTTTATCACAGGTGTCTTGAAACATTAG
CTTCTTTTACCAACCTGAGAAAATTAGGATGACCTGGCAAATAAGATCTTGAATAGCCAAAAGCAAGTATCTTGC
TGTGTGTAGTCTCTTGGTTAAAGTGAAGAACAGTACTGTTCACACCTTTCTTCACTGAGATTCCAGTGACATGAG
AACATATATTTATTGCATGATTTTCTAGTACACAGTCTATGCATTATTCATATACATTTATTTTAGCCTAAAGTG
GTTTTCAAATCCAGTTCTTCAAGCCATAAATGACCAAGATCCAAGCAATCTGAATTTGTTTTTGTGATTATTTGA
CTGGAATGCTTCTTAAGTGGAATAACTATACTCCGTTATCCACCCGATTTCCTAATGTAATTGAAACATTTTCTA
GTTTGCCACACACTTGGAGACCGTAAGGGTTTTTAGTTTGATCTACTCTTCTATTGAAGTTAAAAAAAAAAAAAA
AAAAA

FIGURE 3432

MLSAPCCDDRRMCVCPGPRRIGIPVRSSSLPLFSDAMPAPTQLFFPLIRNCELSRIYGTACYCHHKHLCCSSSYI
PQSRLRYTPHPAYATFCRPKENWWQYTQGRRYASTPQKFYLTPPQVNSILKANEYSFKVPEFDGKMSVLSLDLTA
IKLPANAPIEDRRSAATCLQTRGMLLGVFDGHAGCAWSQAVSERLFYYIAGSLVPHETLLEIENAVESGRALLPI
LQWHKHPNDYFSKEASKLYFNSLRTYWQELIDLNTGESTDIDVKEALINAFKRLDNDISLEAQVGDPNSFLNYLV
LRVAFSGATACVAHVDGVDLHVANTGDSRAMLGVQEEDGSWSAVTLSNDHNAQNERELERLKLEHPKSEAKSVVK
QDRLLGLLMPFRAFGDVKFKWSIDLQKRVIESGPDQLNDNEYTKFIPPNYHTPPYLTAEPEVTYHRLRPQDKFLV
LATDGLWETMHRQDVVRIVGEYLTGMHHQQPIAVGGYKVTLGQMHGLLTERRTKMSSVFEDQNAATHLIRHAVGN
NEFGTVDHERLSKMLSLPEELARMYRDDITIIVVQFNSHVVGAYQNQEK

FIGURE 3433

GGCGGCGGTAGCAGCCAGGCTTGGCCCCCGGCGTGGAGCAGACGCGGACCCCTCCTTCCTGGCGGCGGCGGCGCG
GGCTCAGAGCCCGGCAACGGGCGGGCGGGCAGAATGAGTCTGCAGGTCTTAAACGACAAAAATGTCAGCAATGAA
AAAAATACAGAAAATTGCGACTTCCTGTTTTCGCCACCAGAAGTTACCGGAAGATCGTCTGTTCTTCGTGTGTCA
CAGAAAGAAAATGTGCCACCCAAGAACCTGGCCAAAGCTATGAAGGTGACTTTTCAGACACCTCTGCGGGATCCA
CAGACGCACAGGATTCTAAGTCCTAGCATGGCCAGCAAACTTGAGGCTCCTTTCACTCAGGATGACACCCTTGGA
CTGGAAAACTCACACCCGGTCTGGACACAGAAAGAGAACCAACAGCTCATCAAGGAAGTGGATGCCAAAACTACT
CATGGAATTCTACAGAAACCAGTGGAGGCTGACACCGACCTCCTGGGGGATGCAAGCCCAGCCTTTGGGAGTGGC
AGCTCCAGCGAGTCTGGCCCAGGTGCCCTGGCTGACCTGGACTGCTCAAGCTCTTCCCAGAGCCCAGGAAGTTCT
GAGAACCAAATGGTGTCTCCAGGAAAAGTGTCTGGCAGCCCTGAGCAAGCCGTGGAGGAAAACCTTAGTTCCTAT
TCCTTAGACAGAAGAGTGACACCCGCCTCTGAGACCCTAGAAGACCCTTGCAGGACAGAGTCCCAGCACAAAGCG
GAGACTCCGCACGGAGCCGAGGAAGAATGCAAAGCGGAGACTCCGCACGGAGCCGAGGAGGAATGCCGGCACGGT
GGGGTCTGTGCTCCCGCAGCAGTGGCCACTTCGCCTCCTGGTGCAATCCCTAAGGAAGCCTGCGGAGGAGCACCC
CTGCAGGGTCTGCCTGGCGAAGCCCTGGGCTGCCCTGCGGGTGTGGGCACCCCCGTGCCAGCAGATGGCACTCAG
ACCCTTACCTGTGCACACACCTCTGCTCCTGAGAGCACAGCCCCAACCAACCACCTGGTGGCTGGCAGGGCCATG
ACCCTGAGTCCTCAGGAAGAAGTGGCTGCAGGCCAAATGGCCAGCTCCTCGAGGAGCGGACCTGTAAAACTAGAA
TTTGATGTATCTGATGGCGCCACCAGCAAAAGGGCACCCCCACCAAGGAGACTGGGAGAGAGGTCCGGCCTCAAG
CCTCCCTTGAGGAAAGCAGCAGTGAGGCAGCAAAAGGCCCCGCAGGAGGTGGAGGAGGACGACGGTAGGAGCGGA
GCAGGAGAGGACCCCCCCCATGCCAGCTTCTCGGGGCTCTTACCACCTCGACTGGGACAAAATGGATGACCCAAAC
TTCATCCCGTTCGGAGGTGACACCAAGTCTGGTTGCAGTGAGGCCCAGCCCCCAGAAAGCCCTGAGACCAGGCTG
GGCCAGCCAGCGGCTGAACAGTTGCATGCTGGGCCTGCCACGGAGGAGCCAGGTCCCTGTCTGAGCCAGCAGCTG
CATTCAGCCTCAGCGGAGGACACGCCTGTGGTGCAGTTGGCAGCCGAGACCCCAACAGCAGAGAGCAAGGAGAGA
GCCTTGAACTCTGCCAGCACCTCGCTTCCCACAAGCTGTCCAGGCAGTGAGCCAGTGCCCACCCATCAGCAGGGG
CAGCCTGCCTTGGAGCTGAAAGAGGAGAGCTTCAGAGACCCCGCTGAGGTTCTAGGCACGGGCGCGGAGGTGGAT
TACCTGGAGCAGTTTGGAACTTCCTCGTTTAAGGAGTCGGCCTTGAGGAAGCAGTCCTTATACCTCAAGTTCGAC
CCCCTCCTGAGGGACAGTCCTGGTAGACCAGTGCCCGTGGCCACCGAGACCAGCAGCATGCACGGTGCAAATGAG
ACTCCCTCAGGACGTCCGCGGGAAGCCAAGCTTGTGGAGTTCGATTTCTTGGGAGCACTGGACATTCCTGTGCCA
GGCCCACCCCCAGGTGTTCCCGCGCCTGGGGGCCCACCCCTGTCCACCGGACCTATAGTGGACCTGCTCCAGTAC
AGCCAGAAGGACCTGGATGCAGTGGTAAAGGCGACACAGGAGGAGAACCGGGAGCTGAGGAGCAGGTGTGAGGAG
CTCCACGGGAAGAACCTGGAACTGGGGAAGATCATGGACAGGTTCGAAGAGGTTGTGTACCAGGCCATGGAGGAA
GTTCAGAAGCAGAAGGAACTTTCCAAAGCTGAAATCCAGAAAGTTCTAAAAGAAAAAGACCAACTTACCACAGAT
CTGAACTCCATGGAGAAGTCCTTCTCCGACCTCTTCAAGCGTTTTGAGAAACAGAAAGAGGTGATCGAGGGCTAC
CGCAAGAACGAAGAGTCACTGAAGAAGTGCGTGGAGGATTACCTGGCAAGGATCACCCAGGAGGGCCAGAGGTAC
CAAGCCCTGAAGGCCCACGCGGAGGAGAAGCTGCAGCTGGCAAACGAGGAGATCGCCCAGGTCCGGAGCAAGGCC
CAGGCGGAAGCGTTGGCCCTCCAGGCCAGCCTGAGGAAGGAGCAGATGCGCATCCAGTCGCTGGAGAAGACAGTG
GAGCAGAAGACTAAAGAGAACGAGGAGCTGACCAGGATCTGCGACGACCTCATCTCCAAGATGGAGAAGATCTGA

CCTCCACGGAGCCGCTGTCCCCGCCCCCCTGCTCCCGTCTGTCTGTCCTGTCTGATTCTCTTAGGTGTCATGTTC
TTTTTTCTGTCTTGTCTTCAACTTTTTTTAAAACTAGATTGCTTTGAAAACATGACTCAATAAAAGTTTCCTTTC
AATTTAAAAAAAA

FIGURE 3434

MSLQVLNDKNVSNEKNTENCDFLFSPPEVTGRSSVLRVSQKENVPPKNLAKAMKVTFQTPLRDPQTHRILSPSMA
SKLEAPFTQDDTLGLENSHPVWTQKENQQLIKEVDAKTTHGILQKPVEADTDLLGDASPAFGSGSSSESGPGALA
DLDCSSSSQSPGSSENQMVSPGKVSGSPEQAVEENLSSYSLDRRVTPASETLEDPCRTESQHKAETPHGAEEECK
AETPHGAEEECRHGGVCAPAAVATSPPGAIPKEACGGAPLQGLPGEALGCPAGVGTPVPADGTQTLTCAHTSAPE
STAPTNHLVAGRAMTLSPQEEVAAGQMASSSRSGPVKLEFDVSDGATSKRAPPPRRLGERSGLKPPLRKAAVRQQ
KAPQEVEEDDGRSGAGEDPPMPASRGSYHLDWDKMDDPNFIPFGGDTKSGCSEAQPPESPETRLGQPAAEQLHAG
PATEEPGPCLSQQLHSASAEDTPVVQLAAETPTAESKERALNSASTSLPTSCPGSEPVPTHQQGQPALELKEESF
RDPAEVLGTGAEVDYLEQFGTSSFKESALRKQSLYLKFDPLLRDSPGRPVPVATETSSMHGANETPSGRPREAKL
VEFDFLGALDIPVPGPPPGVPAPGGPPLSTGPIVDLLQYSQKDLDAVVKATQEENRELRSRCEELHGKNLELGKI
MDRFEEVVYQAMEEVQKQKELSKAEIQKVLKEKDQLTTDLNSMEKSFSDLFKRFEKQKEVIEGYRKNEESLKKCV
EDYLARITQEGQRYQALKAHAEEKLQLANEEIAQVRSKAQAEALALQASLRKEQMRIQSLEKTVEQKTKENEELT
RICDDLISKMEKI

FIGURE 3435

CAATGCTACATTAACCCATTATGTAAGACCAATAAATGCAGAGCCAGCGTTTCAAGCACAGGAAATACCAGCAGG
CAGAATGGCCAGTTTGCTTAAGAATGGTGAGCCTGAAGCTGAGTTACATAAAGAAACCACAGGTCCAGGCACTGC
TGGCCCTCAGTCCAACACCACATCTTCTCTAAAAGGTGAACGCAAAGCCATCCACACGCTGCAAGATGTGTCAAC
ATGTGAAACAAAGGAGCTATTGAATGTCGGGGTTTCCTCCCTTTGTGCTGGTCCCTACCAAAATACAGCAGACAC
CAAGGAAAACCTCAGTAAAGAGCCTTTGGCCTCCTTTGTTTCAGAATCCTTTGATACTTCTGTTTGTGGAATAGC
CACAGAGCACGTAGAAATTGAGAACAGTGGGGAGGGGCTCAGGGCTGAGGCTGGTTCTGAAACCCTAGGCAGAGA
TGGAGAGGTCGGTGTGAATTCCGACATGCACTATGAACTCTCTGGAGATTCTGATCTAGACCTGCTTGGTGATTG
TAGAAATCCCAGACTGGATTTGGAGGATTCTTATACTTTAAGAGGTAGTTACACCAGGAAAAAAGATGTTCCCAC
AGATGGCTATGAGTCGTCGTTGAACTTCCACAACAACAACCAAGAGGACTGGGGCTGCTCTAGCCGGGTTCCAGG
CATGGAGACGAGCCTCCCTCCCGGGCACTGGACTGCTGCGGTAAAGAAAGAAGAGAAGTGTGTGCCGCCTTACGT
CCAAATCCGAGATCTCCACGGGATCCTCAGGACTTACGCCAACTTCTCTATAACAAAAGAACTCAAAGATACCAT
GAGAACTTCACACGGCCTGAGGAGGCACCCGAGTTTCAGTGCAAACTGTGGCCTGCCCAGCTCCTGGACAAGCAC
TTGGCAGGTGGCAGACGACCTCACCCAGAACACTTTAGACCTGGAGTATCTGCGTTTTGCACATAAACTAAAACA
GACCATAAAGAATGGGGATTCTCAGCATTCTGCCTCCTCTGCCAATGTCTTTCCAAAGGAGTCACCAACCCAGAT
CTCCATTGGTGCTTTCCCTTCGACAAAAATCTCTGAGGCCCCATTTCTGCATCCTGCACCTAGGAGCAGAAGCCC
CCTTCTGGTAACAGCTGTGGAGTCAGATCCCAGACCACAGGGACAGCCCAGGAGAGGCTACACAGCCAGCAGTCT
GGACATCTCTTCCTCTTGGAGAGAGAGATGTAGTCATAATAGAGATCTTAGAAATTCTCAAAGAAATCACACTGT
TTCATTCCACCTCAACAAACTGAAATACAACAGTACTGTGAAGGAATCTCGGAATGATATTTCACTTATTCTCAA
TGAGTATGCTGAATTCAACAAGGTGATGAAGAATAGCAACCAATTCATTTTCCAAGACAAAGAGCTAAATGATGT
TTCTGGAGAAGCCACTGCTCAAGAGATGTATCTGCCTTTCCCAGGACGGTCAGCCTCCTATGAAGACATAATCAT
AGACGTGTGCACCAATTTGCACGTCAAACTAAGAAGTGTTGTGAAAGAGGCTTGTAAAAGTACCTTCCTGTTCTA
CCTTGTCGAAACAGAAGACAAATCATTCTTTGTAAGAACAAAGAACCTTCTGAGGAAAGGAGGCCATACAGAAAT
TGAACCTCAGCACTTCTGTCAAGCTTTCCACAGAGAGAATGATACACTAATCATCATCATCAGAAATGAAGATAT
ATCATCACATTTGCATCAGATTCCTTCTTTGCTGAAGCTGAAGCATTTCCCCAGTGTCATCTTTGCTGGAGTAGA
CAGCCCTGGAGATGTTCTTGATCACACCTACCAAGAACTGTTTCGTGCAGGAGGCTTTGTGATATCAGATGACAA
GATACTAGAAGCTGTAACATTAGTTCAACTGAAGGAAATTATCAAAATCCTGGAAAAACTAAATGGAAATGGAAG
ATGGAAGTGGTTGCTTCACTACAGGGAAAATAAAAAGCTAAAAGAAGATGAAAGAGTGGATTCAACTGCACATAA
GAAGAACATAATGTTGAAGTCATTTCAGAGTGCAAATATCATTGAATTGCTTCATTATCACCAGTGTGACTCTCG
ATCATCAACAAAAGCAGAAATTCTGAAATGTTTGCTAAACCTGCAAATTCAGCATATTGATGCCAGGTTTGCTGT
CCTCCTAACAGACAAGCCTACTATCCCCAGAGAAGTCTTTGAAAATAGTGGAATCCTTGTTACAGATGTAAATAA
CTTTATAGAAAACATAGAAAAAATAGCAGCTCCATTTAGGAGTAGCTATTGGTGACTCAACTACAGCCTGCCTGG
ATATGGATGATGCCAATAAAAAATTAGTATTTTCCCTTTGGAAAACTTGTGAACATGTGAATACACATGTGAAGT
CTTACATTTGAAAAACCAATGTTCTACAACTTGGAAAGTTTTCATTTTTTATATTTTGCTGAAATATGTCACAGT
GGCATTGCAGTTGTCTGTTAGCTTTGGGTTGCAGTGCTAGATATTGTTTTAAATTATTTTCATTTTAAACAAGAT
GCCTTCTAAGCTATTGAGCTTATTAAAAATAATTTTACATGTTTACTTAGTTGGAGCAAAAATAAGTCTATTTTA
ACGAATAGCTTTGTTTTTGCTATGCTAATGTCTAGAAAGGCATACGATGCTACTATTATGCTCTGTTTTAAAGGT
TTTACCTACCCTTGTAAAAACTATAATCTTAAATGGTTTTATTTGCTGTTTACTACTTATACATACTACTACTAT
AAAACTATTTTTTCCTAAATGGTACAAATTTATAAACTATCATTTTTCACTTACGGTATTTGTAAATACTACTAC
TACAAAAATCAGCTTTCCGAGAAAGAAATAATCATTTATTTATGATATTGAAAATTTCTACAGTAAACACTCAAA
ACCAAGCAAAAAACATTTGTAAGATACACGGTATCTATTTGGAGCAACGGTTTTTGTAACTAATGTGTTTCATTT
TTTAAATAAAGACAACTAAAAATAAAAAAAAAAAAAAAAA

FIGURE 3436

MASLLKNGEPEAELHKETTGPGTAGPQSNTTSSLKGERKAIHTLQDVSTCETKELLNVGVSSLCAGPYQNTADTK
ENLSKEPLASFVSESFDTSVCGIATEHVEIENSGEGLRAEAGSETLGRDGEVGVNSDMHYELSGDSDLDLLGDCR
NPRLDLEDSYTLRGSYTRKKDVPTDGYESSLNFHNNNQEDWGCSSRVPGMETSLPPGHWTAAVKKEEKCVPPYVQ
IRDLHGILRTYANFSITKELKDTMRTSHGLRRHPSFSANCGLPSSWTSTWQVADDLTQNTLDLEYLRFAHKLKQT
IKNGDSQHSASSANVFPKESPTQISIGAFPSTKISEAPFLHPAPRSRSPLLVTAVESDPRPQGQPRRGYTASSLD
ISSSWRERCSHNRDLRNSQRNHTVSFHLNKLKYNSTVKESRNDISLILNEYAEFNKVMKNSNQFIFQDKELNDVS
GEATAQEMYLPFPGRSASYEDIIIDVCTNLHVKLRSVVKEACKSTFLFYLVETEDKSFFVRTKNLLRKGGHTEIE
PQHFCQAFHRENDTLIIIIRNEDISSHLHQIPSLLKLKHFPSVIFAGVDSPGDVLDHTYQELFRAGGFVISDDKI
LEAVTLVQLKEIIKILEKLNGNGRWKWLLHYRENKKLKEDERVDSTAHKKNIMLKSFQSANIIELLHYHQCDSRS
STKAEILKCLLNLQIQHIDARFAVLLTDKPTIPREVFENSGILVTDVNNFIENIEKIAAPFRSSYW

FIGURE 3437

GCTCCCTGGGGAACCCAGCAGGCGGCGAAGATGGCGGAGAACAGCGGTCGCGCCGGCAAGAGCAGCGGGAGCGGC
GCGGGGAAGGGGGCGGTGTCCGCAGAGCAGGTGATTGCTGGCTTCAACCGCCTTCGGCAGGAACAGCGAGGCCTG
GCATCCAAAGCAGCTGAGTTGGAGATGGAGTTGAATGAGCACAGCCTAGTGATCGATACACTGAAGGAGGTAGAT
GAAACTCGTAAGTGCTACCGCATGGTTGGAGGAGTGCTGGTGGAGCGAACTGTCAAAGAGGTGCTGCCCGCTTTG
GAGAACAACAAGGAGCAGATACAGAAGATCATTGAGACACTGACACAGCAGCTTCAGGCAAAGGGAAAAGAACTA
AATGAATTCCGGGAAAAGCACAACATTCGTCTCATGGGAGAAGATGAGAAGCCAGCAGCCAAGGAAAACTCAGAA
GGGGCTGGGGCTAAGGCCAGCTCAGCTGGAGTGTTGGTCTCCTAGGGACCAAGGCCTTTGCATTTTTTTCTACCC
TGACTCCCACTTCTAATTTCTCTTTATTGTTATTATTATTATTTTCTCTGCTATTGTAATATTTTTTTGTTAATT
AAATGTTTTGGTCAGAATCTTAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3438

MAENSGRAGKSSGSGAGKGAVSAEQVIAGFNRLRQEQRGLASKAAELEMELNEHSLVIDTLKEVDETRKCYRMVG
GVLVERTVKEVLPALENNKEQIQKIIETLTQQLQAKGKELNEFREKHNIRLMGEDEKPAAKENSEGAGAKASSAG
VLVS

FIGURE 3439A

CCCGCCCTCGGCGCCCCCGCCCCTCCAGAAAGGGGAGGAGGCGAGGGGAGCCCGCCGCGGAGGCCGAGCGAGCCG
GCGCCCAGCCCAGCCTGGCGACTGGGGACCCCGGCACATGAGGTGGACGCCCCGGGGAAGACTTGGGTGCACAGC
CAGGCGAGAAGGTCTTGAGTCAGACAGAGCACCAGCCTTGGGGACCCTGGACCACTATCATGGAGACTGAGAGCG
AGCAGAACTCCAATTCCACCAATGGGAGTTCTAGCTCAGGGGGCAGCTCTCGGCCCCAGATAGCTCAAATGTCAC
TTTATGAACGACAAGCAGTGCAGGCTCTGCAAGCACTGCAGCGGCAGCCCAATGCAGCTCAGTATTTCCACCAGT
TCATGCTCCAGCAGCAGCTCAGTAATGCCCAGCTGCATAGCCTGGCTGCCGTCCAGCAGGCCACAATTGCTGCCA
GTCGGCAGGCCAGCTCCCCAAACACCAGCACTACACAGCAGCAGACTACCACCACCCAGGCCTCGATCAATCTGG
CCACCACATCGGCCGCCCAGCTCATCAGCCGATCCCAGAGTGTGAGCTCTCCCAGTGCTACCACCTTGACCCAAT
CTGTGCTACTGGGGAACACCACCTCCCCACCCCTCAACCAGTCTCAGGCCCAGATGTATCTACGGCCACAGCTGG
GAAACCTATTGCAGGTAAACCGAACCCCTGGGTCGAATGTGCCTCTAGCCTCCCAACTCATCCTGATGCCTAATG
GGGCGGTGGCTGCAGTCCAGCAGGAGGTGCCATCTGCTCAGTCTCCTGGAGTTCATGCAGATGCAGATCAGGTTC
AGAACTTGGCAGTAAGGAATCAACAGGCCTCAGCTCAAGGACCTCAGATGCAAGGCTCCACTCAGAAGGCCATTC
CTCCAGGAGCCTCCCCTGTCTCTAGCCTCTCCCAGGCCTCTAGCCAGGCCCTAGCGGTGGCACAGGCTTCCTCTG
GGGCCACAAACCAGTCCCTCAACCTTAGTCAAGCTGGTGGAGGCAGTGGGAATAGCATCCCAGGGTCCATGGGTC
CAGGTGGAGGTGGGCAGGCACATGGTGGTTTGGGTCAGTTGCCTTCCTCAGGAATGGGTGGTGGGAGCTGTCCCA
GGAAGGGTACAGGAGTGGTGCAGCCCTTGCCTGCAGCCCAAACAGTAACTGTGAGCCAGGGCAGCCAGACAGAGG
CAGAAAGTGCAGCAGCCAAGAAGGCAGAAGCAGATGGGAGTGGCCAGCAGAATGTGGGCATGAACCTGACACGGA
CAGCCACACCTGCGCCCAGCCAGACACTTATTAGCTCAGCCACCTACACACAGATCCAGCCCCATTCACTGATTC
AGCAACAGCAACAGATCCACCTCCAGCAGAAACAGGTGGTGATCCAGCAGCAGATTGCCATCCACCACCAGCAGC
AGTTCCAGCACCGGCAGTCCCAGCTCCTTCACACAGCTACACACCTCCAGTTGGCGCAGCAGCAGCAGCAGCAAC
AACAGCAACAGCAGCAACAGCAGCAGCCGCAAGCCACCACCCTCACTGCCCCTCAGCCACCACAGGTCCCACCTA
CTCAGCAGGTCCCACCTTCCCAGTCCCAGCAGCAAGCCCAAACCCTGGTCGTTCAGCCCATGCTTCAGTCTTCAC
CCTTGTCTCTTCCACCTGATGCAGCCCCTAAGCCACCAATTCCCATCCAATCCAAACCACCTGTAGCACCTATCA
AGCCGCCTCAGTTAGGGGCCGCTAAGATGTCAGCTGCCCAGCAACCACCACCCCATATCCCTGTGCAAGTTGTAG
GCACTCGACAGCCAGGTACAGCCCAGGCACAGGCTTTGGGGTTGGCACAGCTGGCAGCTGCTGTACCTACTTCCC
GGGGGATGCCAGGTACAGTGCAGTCTGGTCAGGCCCTAAAGGCTTCCTCGCCACCTTCATCCCAGGCTCCTGGTG
CACTGCAGGAGTGCCCTCCCACATTGGCCCCGGGGATGACCCTTGCTCCTGTGCAGGGGACAGCACATGTGGTAA
AGGGTGGGGCTACCACCTCCACACCTGTTGTAGCCCAGGTCCCTGCTGCCTTCTATATGCAGTCTGTGCACTTGC
CGGGAAAACCCCAGACATTGGCTGTCAAACGCAAGGCTGACTCTGAGGAGGAGAGAGATGATGTCTCCACATTGG
GTTCAATGCTTCCTGCCAAGGCATCTCCAGTAGCAGAAAGCCCAAAAGTCATGGACGAGAAGAGCAGTCTTGGAG
AAAAAGCTGAATCAGTGGCTAATGTGAATGCTAATACTCCAAGCAGTGAACTAGTAGCCTTGACCCCCGCCCCTT
CAGTACCGCCTCCTACACTAGCCATGGTGTCTAGACAAATGGGTGACTCAAAACCCCCACAGGCCATCGTGAAGC
CCCAGATTCTCACCCACATCATTGAAGGCTTTGTTATCCAGGAAGGAGCAGAACCTTTCCCCGGTGGTTGTTCTC
AGTTACTGAAGGAGTCTGAGAAGCCACTACAGACTGGCCTTCCGACAGGCTTGACTGAGAATCAGTCAGGTGGCC
CCTTTGGAGTGGACAGCCCATCTGCTGAGTTAGATAAGAAGGCGAATCTCCTGAAGTGCGAGTACTGTGGGAAGT
ACGCCCCCGCAGAGCAGTTTCGTGGCTCTAAGAGGTTCTGCTCCATGACCTGCGCTAAGAGGTACAATGTGAGCT
GTAGCCATCAGTTCCGGCTGAAGAGGAAAAAAATGAAAGAGTTTCAAGAAGCCAACTATGCTCGCGTTCGCAGGC
GTGGACCCCGCCGCAGCTCCTCTGACATTGCCCGTGCCAAGATTCAGGGCAAGTGCCACCGGGGTCAAGAAGACT
CTAGCCGGGGTTCAGATAATTCCAGTTATGATGAAGCACTCTCTCCAACATCTCCTGGGCCTTTATCAGTAAGAG
CTGGGCATGGAGAACGTGACCTGGGGAATCCCAATACAGCTCCACCTACACCGGAATTACATGGCATCAACCCTG
TGTTCCTGTCCAGTAATCCCAGCCGTTGGAGTGTAGAGGAGGTGTACGAGTTTATTGCTTCTCTCCAAGGCTGCC
AAGAGATTGCAGAGGAATTTCGCTCACAGGAGATTGATGGACAGGCCTTTTTATTACTTAAAGAAGAACATCTTA
TGAGTGCCATGAACATCAAGCTGGGCCCTGCCCTCAAGATCTGTGCCAAGATCAATGTCCTCAAGGAGACCTAAG
GTGGCCCTCTTGCACAAACCAGCCTAAGGCAGACACTCTCCACTGTCCAGGTTATAACCTGGTACCAGCAGACTT
TGCAGGGAAGAAAGAGTTGTTCCAATCATGTAACCTTCTGTAGGGGATTACTGAGACAGGGAAGAGAAGTGCAAG
AATTGGTTGCTGGTGCTACATGGCGGCAGCTTTGACATTTTCTCTGGGTTCTACTTTATTTTTTAAAATCTTTAC
AGTTCTCACCATTTCACGTACCTTAATCCAATCTTTATAAAAGAGGCAGTCTAGAGAACTAGGACTGCTCAGCCT
TATCCTGGAGTGGAGCATTTAGCCCAGGTCTTAATTCTCCAAGAGGAGGAATACATAGTATGGTAAGGCAAGGAA

FIGURE 3439B

CTGGGTGGAATGTCAGGTTGCCTGCCCAATGGGAGAGGTAGGGTTTTTCTAGCTTGTGTGACAGAAGTAGCAAAA
TCTGGTCCTCCCCCCTCCCAGTGTAGCTGTGGCTCAGAGTTTTTTCTTTTTGTTGTCACTTACTCCCTTGTGATT
GAATTTTTTCTCCTGCATCCATGGCAGGATCCCCAGCCAGTATAGAGACTTGGTTGGCATCTTCTGCTGCAGGGA
CTAAAAGTATTTGACTGGGGCACATGTGGCTGTTGTCATTCTTTCTGCATCCCACTGTTCCCCTCCAATTTATGT
TATTTTCTACCCTGTTTTTCAGTTCCATCTCTGCTCTGTCCTATAGCTTTATAAAACCAGAGTGTGTGGGGCTGA
GGTCAGGAGTATAAGTACCTGCCTTAGGCACTATTCCTTATATAACAAAAATATTAAATATTTTTTTCCTCAGTA
AAAGGATG

FIGURE 3440

METESEQNSNSTNGSSSSGGSSRPQIAQMSLYERQAVQALQALQRQPNAAQYFHQFMLQQQLSNAQLHSLAAVQQ
ATIAASRQASSPNTSTTQQQTTTTQASINLATTSAAQLISRSQSVSSPSATTLTQSVLLGNTTSPPLNQSQAQMY
LRPQLGNLLQVNRTPGSNVPLASQLILMPNGAVAAVQQEVPSAQSPGVHADADQVQNLAVRNQQASAQGPQMQGS
TQKAIPPGASPVSSLSQASSQALAVAQASSGATNQSLNLSQAGGGSGNSIPGSMGPGGGGQAHGGLGQLPSSGMG
GGSCPRKGTGVVQPLPAAQTVTVSQGSQTEAESAAAKKAEADGSGQQNVGMNLTRTATPAPSQTLISSATYTQIQ
PHSLIQQQQQIHLQQKQVVIQQQIAIHHQQQFQHRQSQLLHTATHLQLAQQQQQQQQQQQQQQQQPQATTLTAPQP
PQVPPTQQVPPSQSQQQAQTLVVQPMLQSSPLSLPPDAAPKPPIPIQSKPPVAPIKPPQLGAAKMSAAQQPPPHI
PVQVVGTRQPGTAQAQALGLAQLAAAVPTSRGMPGTVQSGQALKASSPPSSQAPGALQECPPTLAPGMTLAPVQG
TAHVVKGGATTSTPVVAQVPAAFYMQSVHLPGKPQTLAVKRKADSEEERDDVSTLGSMLPAKASPVAESPKVMDE
KSSLGEKAESVANVNANTPSSELVALTPAPSVPPPTLAMVSRQMGDSKPPQAIVKPQILTHIIEGFVIQEGAEPF
PGGCSQLLKESEKPLQTGLPTGLTENQSGGPFGVDSPSAELDKKANLLKCEYCGKYAPAEQFRGSKRFCSMTCAK
RYNVSCSHQFRLKRKKMKEFQEANYARVRRRGPRRSSSDIARAKIQGKCHRGQEDSSRGSDNSSYDEALSPTSPG
PLSVRAGHGERDLGNPNTAPPTPELHGINPVFLSSNPSRWSVEEVYEFIASLQGCQEIAEEFRSQEIDGQAFLLL
KEEHLMSAMNIKLGPALKICAKINVLKET

FIGURE 3441

GATCCGCCACC**ATG**GCTGAAGGAGAGAATGAAGTGAGATGGGATGGACTCTGCAGCAGAGATTCAACTACTAGGG
AGACAGCATTGGAAAACATTAGGCAAACCATTTTGAGGAAAACCGAGTATCTTCGTTCGGTGAAAGAAACACCTC
ATCGTCCATCAGACGGGCTTTCAAATACCGAGTCTTCGGATGGGTTGAATAAGCTACTTGCTCATCTGCTTATGC
TTTCTAAGAGGTGTCCCTTCAAAGATGTGAGAGAGAAAAGTGAGTTTATTCTGAAGAGCATCCAGGAACTTGGCA
TTAGAATTCCTCGACCACTAGGACAGGGACCAAGCAGATTCATCCCAGAAAAGGAGATCCTCCAAGTGGGGAGTG
AAGACGCACAGATGCATGCTTTATTTGCAGATTCTTTTGCTGCTTTGGGCCGTTTGGATAACATTACGTTAGTGA
TGGTTTTCCACCCACAATATTTAGAAAGTTTCTTAAAAACTCAGCACTATCTACTGCAAATGGATGGGCCGTTAC
CCCTACATTATCGTCACTACATTGGAATAATGGCTGCGGCAAGACATCAGTGCTCCTACTTAGTGAACCTGCATG
TAAATGATTTCCTTCATGTTGGTGGGGACCCCAAGTGGCTCAATGGTTTAGAGAATGCTCCTCAAAAACTACAGA
ATTTAGGAGAACTTAACAAAGTGTTAGCCCATAGACCTTGGCTTATTACCAAAGAACACATTGAGGGACTTTTAA
AAGCTGAAGAGCACAGCTGGTCCCTTGCGGAATTGGTACATGCAGTAGTTTTACTCACACACTATCATTCTCTTG
CCTCATTCACATTCGGCTGTGGAATCAGTCCAGAAATTCATTGTGATGGTGGCCACACATTCAGACCTCCTTCTG
TTAGCAACTACTGCATCTGTGACATTACAAATGGCAATCACAGTGTGGATGAGATGCCGGTCAACTCAGCAGAAA
ATGTTTCTGTAAGTGATTCTTTCTTTGAGGTTGAAGCCCTCATGGAAAAGATGAGGCAGTTACAGGAATGTCGAG
ATGAAGAAGAGGCAAGTCAGGAAGAGATGGCTTCACGTTTTGAAATAGAAAAAAGAGAGAGTATGTTTGTCTTCT
CTTCAGATGATGAAGAAGTTACACCAGCAAGAGCTGTATCTCGTCATTTTGAGGATACTAGTTATGGCTATAAAG
ATTTCTCTAGACATGGGATGCATGTTCCAACATTTCGTGTCCAGGACTATTGCTGGGAAGATCATGGTTATTCTT
TGGTAAATCGCCTTTATCCAGATGTGGGACAGTTGATTGATGAAAAATTTCACATTGCTTACAATCTTACTTATA
ATACAATGGCAATGCACAAAGATGTTGATACCTCAATGCTTAGACGGGCAATTTGGAACTATATTCACTGCATGT
TTGGAATAAGATATGATGATTATGACTATGGTGAAATTAACCAGCTATTGGATCGTAGCTTTAAAGTTTATATCA
AAACTGTTGTTTGCACTCCTGAAAAGGTTACCAAAAGAATGTATGATAGCTTCTGGAGGCAGTTCAAGCACTCTG
AGAAGGTTCATGTTAATCTGCTTCTTATAGAAGCTAGGATGCAAGCAGAACTCCTTTATGCTCTGAGAGCCATTA
CCCGCTATATGACC**TGA**TGCCTTTCCTTCATTAAAGATGATTCTGGAATGATCAGCAGATATAGTCTACAAGGGG
GAAGGTACTAAGCCCCAGGACCAATGGTAGACAAAATAATTCAGAAATCCATTGTGCCATGATTCCTTTAGTTTC
TGCTATTTTTCTGTGGAAAACCACTGCTGGCACAAGCAGTGACTGTTTGGCAGCTTCAAGTTTAGAGCTGTGAAG
ACAGGCTGCCATTCACAGTATTTTGCTTTTTGACAGTACAAGATGCTGTGTAACTGTTTTAATACAGCAAATAGT
AACTCTCCAAATCCTGTTGCTTTTATGTTAAATAAGATAACAAGAATTGGAGCATGCAAAGAATGGGACTTGGAT
AATGACTTAAGCTTTATATGTAAAGAATTTTAGAAGATCTTGGTGCTGCTATTCCTGCTGGAGGAATGAATAGAT
GGCTGTTTCAGTTAAGCTATTAGTAATAAAAGTGAACATTGCTACTATCTGAGCCTACATACATAACTTGTGTGA
TTTCAAATTAAACTTGCATTATGTGTTAATTTTCTTGCATCTAAAAAAGCATAGAATTCCTACTCACACAGCTCA
GCAACAACCATTTTGATGGTAACAGTTAATTTCTTTCATTAGTTTTTTAAATTCAGGGTTCTGGATATTAAATTA
AAATGGCATTCTTAAAGATTTTCTTCAAAAAGCAATCCTAAATGAAAGTGTGTAAATTATAAGAAGCTGGCGATC
TTTTGATATGCTGTTTCACAGGATCCTGACACTGGAGGGCAGCTGTCTTGTGCATTACTTGTGTTCCCAGCACCA
AAGTTGTGGGACATGTTGCTGTAGACTGCTGCGCAGTCCTGGGTGCATTCAGTCTCTCTGCCTCTGCCTGCCTCC
TGGTCCCCACTTTAAAGGCTGTGCAGCTCCTTAAATAATAAAGCTGGAAAATATTTTTAGTCGGGTTATCAAATT
TGATTTACAAAAACGCTAACTTTGTTTGAAATGCAAACAGGTTTGAAAATATGTATTAAGTACTTTGTATTCTGG
AAGCGTGAATTGCTTTTGAAGTCTGTCAGTATTACTGGTATTTTTAAATAAAGAAGAATTTTTCTCCAAAAAAAA
AAAAAAAAAA

FIGURE 3442

MAEGENEVRWDGLCSRDSTTRETALENIRQTILRKTEYLRSVKETPHRPSDGLSNTESSDGLNKLLAHLLMLSKR
CPFKDVREKSEFILKSIQELGIRIPRPLGQGPSRFIPEKEILQVGSEDAQMHALFADSFAALGRLDNITLVMVFH
PQYLESFLKTQHYLLQMDGPLPLHYRHYIGIMAAARHQCSYLVNLHVNDFLHVGGDPKWLNGLENAPQKLQNLGE
LNKVLAHRPWLITKEHIEGLLKAEEHSWSLAELVHAVVLLTHYHSLASFTFGCGISPEIHCDGGHTFRPPSVSNY
CICDITNGNHSVDEMPVNSAENVSVSDSFFEVEALMEKMRQLQECRDEEEASQEEMASRFEIEKRESMFVFSSDD
EEVTPARAVSRHFEDTSYGYKDFSRHGMHVPTFRVQDYCWEDHGYSLVNRLYPDVGQLIDEKFHIAYNLTYNTMA
MHKDVDTSMLRRAIWNYIHCMFGIRYDDYDYGEINQLLDRSFKVYIKTVVCTPEKVTKRMYDSFWRQFKHSEKVH
VNLLLIEARMQAELLYALRAITRYMT

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FIGURE 3443

GGGCAAACCCTTTGAAAAATATTCTAAATGAAAATGACATAGTATTCATAGTGGAAAAAGTGCCTTTAGAAAAGG
AAGAAACAAGTCATATTGAAGAACTTCAATCTGAAGAAACTGCCATATCTGATTTCTCTACTGGCGAAAATGTTG
GACCACTTGCTTTACCAGTTGGGAAGGCAAGGCAGTTAATTGGACTTTACACCATGGCTCACAATCCTAATATGA
CCCATTTGAAGATTAATCTGCCTGTTACTGCCCTTCCCCCCCTTTGGGTAAGATGTGACAGTTCAGATCCTGAAG
GTACTTGTTGGCTAGGAGCTGAGCTTATCACAACAAACAACAGCATTACAGGAATTGTCTTATATGTGGTCAGTT
GTAAAGCTGATAAAAATTATTCTGTAAATCTTGAAAACCTAAAAAATTTACACAAGAAAAGACATCACTTGTCTA
CTGTAACATCCAAAGGCTTTGCCCAGTATGAGCTCTTTAAGTCCTCTGCCTTGGATGATACAATCACAGCATCAC
AAACTGCGATCGCTTTGGATATTTCCTGGAGTCCTGTGGATGAGATTCTTCAAATCCCTCCACTCTCTTCAACTG
CAATCTGAATATTAAAGTGGAATCAGGAGAGCCCAGAGGTCCTTTGAATCATCTCTACAGAGAACTGAAATTTCT
TCTTGTTTTGGCTGATGGTTTGAGGACTGGTGTCACTGAATGGCTCGAGCCCCTGGAAGCAAAATCTGCTGTTGA
ACTTGTTCAGGAATTTCTGAATGACTTAAATAAGCTGGATGGATTTGGTGATTCTACAAAAAAAGACACTGAGGT
TGAGACCTTGAAGCATGACACTGCTGCAGTCGATCGTTCCGTCAAGCGTCTTTTCAAAGTTCGGAGTGATCTTGA
TTTTGCTGAGCAACTGTGGTGCAAAATGAGCAGTAGTGTGATTTCATACCAAGACTAGGTGAAGTGTTTCACATT
GATCATCCAGAGTCTACAACGTGGTGATATACAGCCATGGCTCCATAGTGGAAGTAACAGTTTACTAAGTAAGCT
CATTCATCAGTCTTATCATGGAACCATGGACACAGTTTCTCTCAGTGGGACTATTCCAGTTCAAATGCTTTTGGA
AATTGGTTTGGACAAACTAAAGAAAGATTATATCAGTTTTTTCATAGGTCAGGAACTTGCATCTTTGAATCATTT
GGAATACTTCATTGCTCCATCAGTAGATATACAAGAACAGGTTTATCGTGTCCAAAAACTCCACCATATTCTAGA
AATATTAGTCAGTTGCATGCCTTTCATTAAATCTCAACATGAACTCCTCTTTTCTTTAACACAGATCTGCATAAA
GTATTACAAACAAAATCCTCTTGATGAGCAACACATTTTTCAGCTGCCAGTCAGACCAACTGCTGTAAAGAACTT
ATATCAAAGTGAGAAGCCACAGAAATGGAGAGTGGAAATATATAGTGGTCAAAAGAAGATTAAGACAGTTTGGCA
ACTGAGTGACAGCTCACCCATAGGCCATCTGAATTTTCACAAACCTGATTTTTCGGAATTAACACTAAGCGGTAG
CCTGGAAGAAAGGATATTCTTTACTAACATGGTTACCTGCAGCCAGGTGCATTTCAAGTGAAGTGTGCTGATGAA
GTCCTCTATAAGCACAAGCC

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FIGURE 3444

MAHNPNMTHLKINLPVTALPPLWVRCDSSDPEGTCWLGAELITTNNSITGIVLYVVSCKADKNYSVNLENLKNLH
KKRHHLSTVTSKGFAQYELFKSSALDDTITASQTAIALDISWSPVDEILQIPPLSSTAI

FIGURE 3445

GTTCGGAGCGGGCGAGCGGAGTTAGCAGGGCTTTACTGCAGAGCGCGCCGGGCACTCCAGCGACCGTGGGGATCA
GCGTAGGTGAGCTGTGGCCTTTTGCGAGGTGCTGCAGCCATAGCTACGTGCGTTCGCTACGAGGATTGAGCGTCT
CCACCCAGTAAGTGGGCAAGAGGCGGCAGGAAGTGGGTACGCAGGGGCGCAAGGCGCACAGCCTCTAGACGACTC
GCTTTCCCTCCGGCCAACCTCTGAAGCCGCGTCCTACTTTGACAGCTGCAGGGCCGCGGCCTGGTCTTCTGTGCT
TCACCATCTACATA**ATG**AATCCCAGTATGAAGCAGAAACAAGAAGAAATCAAAGAGAATATAAAGAATAGTTCTG
TCCCAAGAAGAACTCTGAAGATGATTCAGCCTTCTGCATCTGGATCTCTTGTTGGAAGAGAAAATGAGCTGTCCG
CAGGCTTGTCCAAAAGGAAACATCGGAATGACCACTTAACATCTACAACTTCCAGCCCTGGGGTTATTGTCCCAG
AATCTAGTGAAAATAAAAATCTTGGAGGAGTCACCCAGGAGTCATTTGATCTTATGATTAAAGAAAATCCATCCT
CTCAGTATTGGAAGGAAGTGGCAGAAAAACGGAGAAAGGCGCTGTATGAAGCACTTAAGGAAAATGAGAAACTTC
ATAAAGAAATTGAACAAAAGGACAATGAAATTGCCCGCCTGAAAAAGGAGAATAAAGAACTGGCAGAAGTAGCAG
AACATGTACAGTATATGGCAGAGCTAATAGAGAGACTGAATGGTGAACCTCTGGATAATTTTGAATCACTGGATA
ATCAGGAATTTGATTCTGAAGAAGAAACTGTTGAGGATTCTCTAGTGGAAGACTCAGAAATTGGCACGTGTGCTG
AAGGAACTGTATCTTCCTCTACGGATGCAAAGCCATGTATA**TGA**AATGCATTAATATTTGACTGTTGAGAATTTT
ACTGCCGAAGTTTACCTCCACTAGTTCTTTGTAGCAGAGTACATAACTACATAATGCCAACTCTGGAATCAAATT
TCCTTGTTTGAATCCTGGGACCCTATTGCATTAAAGTACAAATACTATGTATTTTTAATCTATGATGGTTTATGT
GAATAGGATTTTCTCAGTTGTCAGCCATGACTTATGTTTATTACTAAATAAACTTCAAACTCCTGTGGAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3446

MNPSMKQKQEEIKENIKNSSVPRRTLKMIQPSASGSLVGRENELSAGLSKRKHRNDHLTSTTSSPGVIVPESSEN
KNLGGVTQESFDLMIKENPSSQYWKEVAEKRRKALYEALKENEKLHKEIEQKDNEIARLKKENKELAEVAEHVQY
MAELIERLNGEPLDNFESLDNQEFDSEEETVEDSLVEDSEIGTCAEGTVSSSTDAKPCI

FIGURE 3447A

GGGAGGCCCAGGGAGAACGGGGAAGGGACATTTAGTTTGAGACGGTGCTGAGATAGGATCATGAAGGAAGAGGTG
AAGGGAATTCCTGTAAGAGTGGCGCTGCGTTGTCGCCCTCTGGTCCCCAAAGAGATTAGCGAGGGCTGCCAGATG
TGCCTTTCCTTCGTGCCCGGAGAGCCTCAGGTGGTGGTTGGTACAGATAAATCCTTCACCTACGATTTTGTATTT
GATCCCTCTACTGAACAGGAAGAAGTCTTCAATACAGCAGTAGCGCCACTCATAAAAGGTGTATTTAAAGGATAT
AATGCAACGGTCCTGGCCTATGGGCAGACTGGCTCTGGAAAAACCTATTCAATGGGAGGTGCATATACTGCAGAG
CAAGAGAATGAACCAACAGTTGGGGTTATTCCTAGGGTAATACAACTGCTCTTCAAAGAAATTGATAAAAAGAGT
GACTTTGAATTTACTCTGAAAGTGTCTTACTTAGAGATTTACAATGAAGAAATTTTGGATCTTCTATGTCCATCT
CGTGAGAAAGCTCAAATAAATATACGAGAGGATCCTAAGGAAGGCATAAAGATTGTGGGACTCACTGAGAAGACT
GTTTTGGTTGCCTTGGATACTGTTTCCTGTTTGGAACAGGGCAACAACTCTAGGACTGTGGCCTCCACGGCTATG
AACTCCCAGTCGTCCCGATCTCATGCCATCTTTACAATCTCCTTAGAGCAAGGAAAGAAAAGTGACAAGAATAGC
AGCTTTCGCTCCAAGCTGCATCTTGTAGACCTCGCTGGATCAGAAAGACAGAAGAAAACCAAGGCTGAAGGGGAT
CGTCTAAAAGAGGGTATTAATATTAACCGAGGCCTCCTATGCTTGGGAAATGTAATCAGTGCTCTTGGAGATGAC
AAAAAGGGTGGCTTTGCGCCCTACAGAGATTCCAAGTTGACTCGACTGCTTCAAGATTCTCTAGGAGGTAATAGC
CATACTCTTATGATAGCCTGTGTGAGTCCTGCTGACTCCAATCTAGAGGAAACATTAAATACCCTTCGCTATGCT
GACAGAGCAAGAAAAATCAAGAACAAACCTATTGTTAATATTGATCCCCAGACAGCTGAACTTAATCATCTAAAG
CAACAGGTACAACAGCTACAAGTCTTGTTGCTACAGGCCCATGGAGGTACCCTGCCTGGATCTATAACTGTGGAA
CCATCAGAGAATCTACAATCCCTGATGGAGAAGAATCAGTCCCTGGTAGAGGAGAATGAAAAATTAAGTCGTGGT
CTGAGCGAGGCAGCTGGTCAGACAGCCCAGATGTTGGAGAGGATCATTTGGACAGAGCAAGCGAATGAAAAAATG
AACGCCAAGCTAGAAGAGCTCAGGCAGCATGCGGCCTGCAAACTGGATCTTCAAAAGCTAGTGGAGACTTTGGAA
GACCAGGAATTGAAAGAAAATGTAGAGATAATTTGTAACCTGCAGCAATTGATTACCCAGTTATCGGATGAAACT
GTTGCTTGCATGGCTGCAGCCATTGATACTGCGGTGGAGCAAGAAGCCCAAGTAGAAACCAGTCCAGAGACGAGC
AGGTCTTCTGACGCTTTTACCACTCAGCATGCTCTCCGTCAAGCGCAGATGTCTAAGGAGCTGGTTGAGTTGAAT
AAAGCGCTTGCACTGAAAGAGGCCCTGGCTAGGAAGATGACTCAGAATGACAGCCAACTGCAGCCTATTCAGTAC
CAATACCAGGATAACATAAAAGAGCCAGAATTAGAAGTCATCAATCTGCAAAAGGAAAAGGAAGAATTGGTTCTT
GAACTTCAGACAGCAAAGAAGGATGCCAACCAAGCCAAGTTGAGTGAGCGCCGCCGCAAACGTCTCCAGGAGCTG
GAGGGTCAAATTGCTGATCTGAAGAAGAAACTGAATGAGCAGTCCAAACTTCTGAAACTAAAGGAATCCACAGAG
CGTACTGTCTCCAAACTGAACCAGGAGATACGGATGATGAAAAACCAGCGGGTACAGTTAATGCGTCAAATGAAA
GAAGATGCTGAGAAGTTTAGACAGTGGAAGCAGAAAAGAGACAAAGAAGTAATACAGTTAAAAGAACGAGACCGT
AAGAGGCAATATGAGCTGCTGAAACTTGAAAGAAACTTCCAGAAACAATCCAATGTGCTCAGACGTAAAACGGAG
GAGGCAGCAGCTGCCAACAAGCGTCTCAAGGATGCTCTCCAGAAACAACGGGAGGTTGCAGATAAGCGGAAAGAG
ACTCAGAGCCGTGGAATGGAAGGCACTGCAGCTCGAGTGAAGAATTGGCTTGGAAACGAAATTGAGGTTATGGTC
AGTACTGAGGAAGCCAAACGCCATCTGAATGACCTCCTTGAAGATAGAAAGATCCTGGCTCAAGATGTGGCTCAA
CTCAAAGAAAAAAAGGAATCTGGGGAGAATCCACCTCCTAAACTCCGGAGGCGTACATTCTCCCTTACTGAAGTG
CGTGGTCAAGTTTCGGAGTCAGAAGATTCTATTACAAAGCAGATTGAAAGCCTAGAGACTGAAATGGAATTCAGG
AGTGCTCAGATTGCTGACCTACAGCAGAAGCTGCTGGATGCAGAAAGTGAAGACAGACCAAAACAACGCTGGGAG
AATATTGCCACCATTCTGGAAGCCAAGTGTGCCCTGAAATATTTGATTGGAGAGCTGGTCTCCTCCAAAATACAG
GTCAGCAAACTTGAAAGCAGCCTGAAACAGAGCAAGACCAGCTGTGCTGACATGCAGAAGATGCTGTTTGAGGAA
CGAAATCATTTTGCCGAGATAGAGACAGAGTTACAAGCTGAGCTGGTCAGAATGGAGCAACAGCACCAAGAGAAG
GTGCTGTACCTTCTCAGCCAGCTGCAGCAAAGCCAAATGGCAGAGAAGCAGTTAGAGGAATCAGTCAGTGAAAAG
GAACAGCAGCTGCTGAGCACACTGAAGTGTCAGGATGAAGAACTTGAGAAAATGCGAGAAGTGTGTGAGCAAAAT
CAGCAGCTTCTCCGAGAGAATGAAATCATCAAGCAGAAACTGACCCTCCTCCAGGTAGCCAGCAGACAGAAACAT
CTTCCTAAGGATACCCTTCTATCTCCAGACTCTTCTTTTGAATATGTCCAGCCTAAGCCAAAACCTTCTCGTGTT
AAAGAAAAGTTCCTGGAGCAAAGCATGGACATCGAGGATCTAAAATATTGTTCAGAGCATTCTGTGAATGAGCAT
GAGGATGGTGATGGTGATGATGATGAGGGGGATGACGAGGAATGGAAGCCAACAAAATTAGTTAATGTGTCCAGG
AAGAACATCCAAGGGTGTTCCTGCAAGGGCTGGTGTGGAAACAAGCAATGTGGGTGCAGGAAGCAAAAGTCAGAC
TGTGGTGTGGACTGTTGCTGTGACCCCACAAAGTGTCGGAACCGCCAGCAAGGCAAGGATAGCTTGGGCACTGTT
GAACGGACCCAGGATTCAGAAAGCTCCTTCAAACTGGAGGATCCTACCGAGGTGACCCCAGGATTGAGCTTCTTT
AATCCCGTCTGTGCCACCCCCAATAGCAAGATCCTGAAAGAGATGTGCGATGTGGAGCAGGTGCTGTCAAAGAAG

FIGURE 3447B

ACTCCCCCAGCTCCCTCCCCTTTTGACCTCCCAGAGTTGAAACATGTAGCAACAGAATACCAAGAAAACAAGGCT
CCAGGGAAGAAAAAGAAACGGGCTCTGGCCAGCAACACCAGCTTCTTCTCTGGCTGCTCCCCTATCGAAGAAGAG
GCCCACTGAAGTTGGAGTCATCATCTCTACCCCCAGTCTGGCTTGGGAGATGCTTTCAGGTTGCAGCCAGAAGGG
GTTTTTTAAATGACTTCTCTGGATTTCAGGTTTCTTGCTGTTGAAAAAAGGAACAAAGCGTTACTGAAAAGAAGG
TAACCTTTGTTGGATGTGGGCCTTAGCCTCCAGGTCCAGACTACTACTCTATGTTCTCCAGAAGGGTGCTAAGTC
ACCTACTGAAGAGAGAACCAACTGACTTTCCTATTGACTCATCAGGAACCAGTCCTCAGTCTGGTCAAGTTGTTT
CTTATTTGTGAGCAGTTCAGGCTATCTCCTGATGGGGATGAGGCCAAGGCTTTCTTATCTTTTGGTTGTCTCTGC
TTAATGGAGGAGCCTGGCCTAGGATGGAGGCCTGGCTTAGATCTTTCATTCCACCTCAGGAATGAGGTTGTGATC
TTTCCTGTCCTGACCCTCTCTGAATTATGTTTCAATAGTACTCTTGATTGTCTGCCATGTTGTTGAAGCAAATGA
ATTATTTTTAAATGTTAAGTAAGTAAATAAACCTTAGCCCGTCTTTTTTTTTTTTTTTTTTTTTTTTTTTT

FIGURE 3448

MKEEVKGIPVRVALRCRPLVPKEISEGCQMCLSFVPGEPQVVVGTDKSFTYDFVFDPSTEQEEVFNTAVAPLIKG
VFKGYNATVLAYGQTGSGKTYSMGGAYTAEQENEPTVGVIPRVIQLLFKEIDKKSDFEFTLKVSYLEIYNEEILD
LLCPSREKAQINIREDPKEGIKIVGLTEKTVLVALDTVSCLEQGNNSRTVASTAMNSQSSRSHAIFTISLEQGKK
SDKNSSFRSKLHLVDLAGSERQKKTKAEGDRLKEGININRGLLCLGNVISALGDDKKGGFAPYRDSKLTRLLQDS
LGGNSHTLMIACVSPADSNLEETLNTLRYADRARKIKNKPIVNIDPQTAELNHLKQQVQQLQVLLLQAHGGTLPG
SITVEPSENLQSLMEKNQSLVEENEKLSRGLSEAAGQTAQMLERIIWTEQANEKMNAKLEELRQHAACKLDLQKL
VETLEDQELKENVEIICNLQQLITQLSDETVACMAAAIDTAVEQEAQVETSPETSRSSDAFTTQHALRQAQMSKE
LVELNKALALKEALARKMTQNDSQLQPIQYQYQDNIKEPELEVINLQKEKEELVLELQTAKKDANQAKLSERRRK
RLQELEGQIADLKKKLNEQSKLLKLKESTERTVSKLNQEIRMMKNQRVQLMRQMKEDAEKFRQWKQKRDKEVIQL
KERDRKRQYELLKLERNFQKQSNVLRRKTEEAAAANKRLKDALQKQREVADKRKETQSRGMEGTAARVKNWLGNE
IEVMVSTEEAKRHLNDLLEDRKILAQDVAQLKEKKESGENPPPKLRRRTFSLTEVRGQVSESEDSITKQIESLET
EMEFRSAQIADLQQKLLDAESEDRPKQRWENIATILEAKCALKYLIGELVSSKIQVSKLESSLKQSKTSCADMQK
MLFEERNHFAEIETELQAELVRMEQQHQEKVLYLLSQLQQSQMAEKQLEESVSEKEQQLLSTLKCQDEELEKMRE
VCEQNQQLLRENEIIKQKLTLLQVASRQKHLPKDTLLSPDSSFEYVQPKPKPSRVKEKFLEQSMDIEDLKYCSEH
SVNEHEDGDGDDDEGDDEEWKPTKLVNVSRKNIQGCSCKGWCGNKQCGCRKQKSDCGVDCCCDPTKCRNRQQGKD
SLGTVERTQDSESSFKLEDPTEVTPGLSFFNPVCATPNSKILKEMCDVEQVLSKKTPPAPSPFDLPELKHVATEY
QENKAPGKKKKRALASNTSFFSGCSPIEEEAH

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FIGURE 3449

GCGGCGCGCTGCAGGCGCGGGGAACACCAATGGCGGGGTACTTGAAGCTGGTGTGTGTTTCCTTTCAGCGTCAAG
GGTTCCACACTGTTGGGAGTCGCTGCAAGAATCGGACAGGCGCTGAGCACCTGTGGCTGACCCGACATCTCAGGG
ACCCATTTGTGAAGGCTGCGAAGGTGGAGAGTTACCGGTGTCGAAGCGCCTTCAAGCTCCTGGAGGTGAACGAGA
GGCACCAGATTCTGCGGCCCGGCCTTCGGGTGTTAGACTGTGGGGCAGCTCCTGGGGCCTGGAGTCAGGTGGCGG
TGCAGAAGGTCAACGCCGCAGGCACAGATCCCAGCTCTCCTGTTGGCTTCGTGCTTGGGGTAGATCTTCTTCACA
TATTCCCCCTGGAAGGAGCAACTTTTCTGTGCCCTGCTGACGTGACTGACCCGAGAACCTCACAGAGAATCCTCG
AGGTGCTTCCTGGCAGGAGAGCAGATGTGATTCTGAGCGACATGGCGCCCAATGCCACAGGGTTCCGGGACCTCG
ATCATGACAGGCTCATCAGCCTGTGCCTGACCCTTCTCAGCGTGACCCCAGACATCCTGCAACCTGGGGGGACAT
TCCTTTGTAAAACCTGGGCTGGAAGTCAAAGCCGTCGGTTACAGAGGAGACTGACAGAGGAATTCCAGAATGTAA
GGATCATCAAACCTGAAGCCAGCAGGAAAGAGTCATCAGAAGTGTACTTCTTGGCCACACAGTACCACGGAAGGA
AGGGCACTGTGAAGCAGTGAGGATTTCTTGTGCCATTTTCATAATGGTCATTAGCTCCTTTTAAGCTAGAAACGT
AGCCTGAGCTCCTGAAGAGTTCCTGGGAGATTTGAGCTGATTTTGGAGATGGAGCAGGACAAGTGGGGAGTCTCT
CTCTCTCTTTCTCTCTCTCTTTTTAACCAAAAAGAGATGACAAAACTAAGTTCAGGGGCCATGGAAAATGAAA
AAGTCCGCTATATTGTGATTTGGGAAGAGAAAGTTATCAAGAGAAAGAGGTGAGGATGGAAGGATGGAGAAAAAC
AGACTGTGGGAAGGATCAGAAGGAATCCGCCGAGGCAGGGATGGGTGTGCCCATGTGTGCCTTGACGGGACTTCA
TCTTATAGACTGTTAAACTGTCACACACAAACAGGCTTTCCACCCCTGCTCTGAGAGCACCACGCACAGATTTCC
AGTTCTTAGTGTGGCTGTTTAAAGTAGAAAATCTGGGGGCTGGGTGAGGCCACTCATGCCTGTAAACCCAGGGCT
TTAGAAGGCTGAGGCTGGGGGATTGCTTGAAGTCAGGAGTTCAAGACCAACCTGGGCAACATAGCAACACCCCCC
ATGTCTACAAAAATGAAAAACCAAAAAGCAAACCAAAAGAAAAATCTGAAATTTCCATCTGGGGATTAACTTCTG
TCTTTCTGGTGAACAATATAGCAATTCACGCATTCTTCAAGCAGCAAAAGTTCCCGGAACAATTAGGGAAGACGT
ATGGTCTGAATTTATCCAGGCAGTGGGTCTGCTTTGGTTTTTGCTGGAAATTTATATCAGTGTCTGGGCTCCCAA
GAACATAAATGTAATTGCCAAAGCAAAAAA

FIGURE 3450

MAGYLKLVCVSFQRQGFHTVGSRCKNRTGAEHLWLTRHLRDPFVKAAKVESYRCRSAFKLLEVNERHQILRPGLR
VLDCGAAPGAWSQVAVQKVNAAGTDPSSPVGFVLGVDLLHIFPLEGATFLCPADVTDPRTSQRILEVLPGRRADV
ILSDMAPNATGFRDLDHDRLISLCLTLLSVTPDILQPGGTFLCKTWAGSQSRRLQRRLTEEFQNVRIIKPEASRK
ESSEVYFLATQYHGRKGTVKQ

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FIGURE 3451

CTGAGGCGAACA**ATG**GCGGAGCTGGGCGAAGCCGATGAAGCGGAGTTGCAGCGCCTGGTGGCCGCCGAGCAGCAG
AAGGCGCAGTTTACTGCACAGGTGCATCACTTCATGGAGTTATGTTGGGATAAATGTGTGGAGAAGCCAGGGAAT
CGCCTAGACTCTCGCACTGAAAATTGTCTCTCCAGCTGTGTAGACCGCTTCATTGACACCACTCTTGCCATCACC
AGTCGGTTTGCCCAGATTGTACAGAAAGGAGGGCAG**TAG**GCCATCCCCCAGGAGAATGACAGAAGCAAAGGACTT
GTTACTAAGCAGATTTAAGGGTCAGTGGGGGAAGGCTATCAACCCATTGTCAGATCAGCATCAGGCTGTTATCAA
GTCTGTTGGTGCTAAAAAGTAAAAGATGAAATGTTCAAAAAAAAAAAA

FIGURE 3452

MAELGEADEAELQRLVAAEQQKAQFTAQVHHFMELCWDKCVEKPGNRLDSRTENCLSSCVDRFIDTTLAITSRFA
QIVQKGGQ

FIGURE 3453A

CCCAAGACTGTCCCCGCTGGAGGCGGTAGAGGGATCCAGAAGTAATGAGATGCTAATGAGTCGCGAATAAAGCCC
GGGCGGCGCCCCGCGCCCCTCGCGGAAGCCCACACTCCGCGCGACTCCAGGCGCACGCCCCGGGCCGCCCCGCAT
CCCAGCATCCCCGCCCGATCTCGGCGTTTCCGCCCCCGCCCCCGCCCCCGCCCTCCCACCCGCTCAGACCTGGTT
GCCAGCCCAACAGGAAGCGGCCCCTCCCGGCTTCGGAGCCGCCGCCACTCGTCTCTGCCCAGCTGCTGCCCTCCC
CAGGAGGCCTCC**ATG**GCTTCACCTACCTCCACCAACCCAGCGCATGCCCACTTTGAGAGCTTCCTGCAGGCCCAG
CTGTGCCAGGACGTGCTGAGCAGCTTCCAGGAGCTGTGTGGGGCCCTGGGGCTGGAACCCGGTGGGGGGCTGCCC
CAGTACCACAAGATCAAGGACCAGCTCAACTACTGGAGCGCCAAGTCACTGTGGACCAAGCTGGACAAGCGAGCA
GGCCAGCCTGTCTACCAGCAGGGCCGGGCCTGCACCAGCACCAAGTGCCTGGTGGTGGGTGCTGGACCTTGCGGG
CTGCGGGTCGCTGTGGAGCTGGCGCTGCTGGGGGCCCGAGTGGTGCTGGTGGAAAAGCGCACCAAGTTCTCTCGC
CACAACGTGCTCCACCTCTGGCCCTTCACCATCCACGACCTGCGGGCACTCGGTGCTAAGAAGTTCTACGGGCGC
TTCTGCACCGGCACCCTGGACCACATCAGCATCAGGCAGCTCCAGCTGCTTCTGCTGAAGGTAGCATTGCTGCTG
GGGGTGGAAATTCACTGGGGTGTCACTTTCACTGGCCTCCAGCCCCCTCCTAGGAAGGGGAGTGGCTGGCGTGCC
CAGCTCCAACCCAACCCCCCTGCCCAGCTGGCCAACTATGAATTTGACGTCCTTATCTCGGCTGCAGGAGGTAAA
TTCGTCCCTGAAGGCTTCAAAGTTCGAGAAATGCGAGGCAAACTGGCCATTGGCATCACAGCCAACTTTGTGAAT
GGACGCACCGTGGAGGAGACACAGGTGCCGGAGATCAGTGGTGTAGCCAGGATCTACAACCAGAGCTTCTTCCAG
AGCCTTCTCAAAGCCACAGGCATTGATCTGGAGAACATTGTGTACTACAAGGACGACACCCACTACTTTGTGATG
ACAGCCAAGAAGCAGTGCCTGCTGCGGCTGGGGGTGCTGCGCCAGGACTGGCCAGACACCAATCGGCTGCTGGGC
AGTGCCAATGTGGTGCCCGAGGCTCTGCAGCGCTTTACCCGGGCAGCTGCTGACTTTGCCACCCATGGCAAGCTC
GGGAAACTAGAGTTTGCCCAGGATGCCCATGGGCAGCCTGATGTCTCTGCCTTTGACTTCACGAGCATGATGCGG
GCAGAGAGTTCTGCTCGTGTGCAAGAGAAGCATGGCGCCCGCCTGCTGCTGGGACTGGTGGGGGACTGCCTGGTG
GAGCCCTTCTGGCCCCTGGGCACTGGAGTGGCACGGGGCTTCCTGGCAGCCTTTGATGCAGCCTGGATGGTGAAG
CGGTGGGCAGAGGGCGCTGAGTCCCTAGAGGTGTTGGCTGAGCGTGAGAGCCTGTACCAGCTTCTGTCACAGACA
TCCCCAGAAAACATGCATCGCAATGTGGCCCAGTATGGGCTGGACCCAGCCACCCGCTACCCCAACCTGAACCTC
CGGGCAGTGACCCCCAATCAGGTACGAGACCTGTATGATGTGCTAGCCAAGGAGCCTGTGCAGAGGAACAACGAC
AAGACAGATACAGGGATGCCAGCCACCGGGTCGGCAGGCACCCAGGAGGAGCTGCTACGCTGGTGCCAGGAGCAG
ACAGCTGGGTACCCGGGAGTCCACGTCTCCGATTTGTCTTCCTCCTGGGCTGATGGGCTAGCTCTGTGTGCCCTG
GTGTACCGGCTGCAGCCTGGCCTGCTGGAACCCTCAGAGCTGCAGGGGCTGGGAGCTCTGGAAGCAACTGCTTGG
GCACTAAAGGTGGCAGAGAATGAGCTGGGCATCACACCGGTGGTGTCTGCACAGGCCGTGGTAGCAGGGAGTGAC
CCACTGGGCCTCATTGCCTACCTCAGCCACTTCCACAGTGCCTTCAAGAGCATGGCCCACAGCCCAGGCCCTGTC
AGCCAGGCCTCCCCAGGGACCTCCAGTGCTGTATTATTCCTTAGTAAACTTCAGAGGACCCTGCAGCGATCCCGG
GCCAAGGAAAATGCAGAGGATGCTGGTGGCAAGAAGCTGCGCTTGGAGATGGAGGCCGAGACCCCAAGTACTGAG
GTGCCACCTGACCCAGAGCCTGGTGTACCCCTGACACCCCCATCCCAACACCAGGAGGCCGGTGCTGGGGACCTG
TGTGCACTTTGTGGGGAACACCTCTATGTCCTGGAACGCCTCTGTGTCAACGGCCATTTCTTCCACCGGAGCTGC
TTCCGCTGCCATACCTGTGAGGCCACACTGTGGCCAGGTGGCTATGAGCAGCACCCAGGAGATGGACATTTCTAC
TGCCTCCAGCACCTGCCCCAGACAGACCACAAAAAGGAAGGCAGCGATAGAGGCCCTGAGAGTCCGGAGCTCCCC
ACACCAAGTGAGAATAGCATGCCACCAGGCCTCTCAACTCCCACAGCCTCGCAGGAGGGGGCCGGTCCTGTTCCA
GATCCCAGCCAGCCCACCCGTCGGCAGATCCGCCTCTCCAGCCCGGAGCGCCAGCGGTTGTCCTCCCTTAACCTT
ACCCCTGACCCGGAAATGGAGCCTCCACCCAAGCCTCCCCGCAGCTGCTCCGCCTTGGCCCGCCACGCCCTGGAG
AGCAGCTTTGTGGGCTGGGGCCTGCCAGTCCAGAGCCCTCAAGCTCTTGTGGCCATGGAGAAGGAGGAAAAAGAG
AGTCCCTTCTCCAGTGAAGAGGAAGAAGAAGATGTGCCTTTGGACTCAGATGTGGAACAGGCCCTGCAGACCTTT
GCCAAGACCTCAGGCACCATGAATAACTACCCAACATGGCGTCGGACTCTGCTGCGCCGTGCGAAGGAGGAGGAG
ATGAAGAGGTTCTGCAAGGCCCAGACCATCCAACGGCGACTAAATGAGATTGAGGCTGCCTTGAGGGAGCTAGAG
GCCGAGGGCGTGAAGCTGGAGCTGGCCTTGAGGCGCCAGAGCAGTTCCCCAGAACAGCAAAAGAAACTATGGGTA
GGACAGCTGCTACAGCTCGTTGACAAGAAAAACAGCTTGGTGGCTGAGGAGGCCGAGCTCATGATCACGGTGCAG
GAATTGAATCTGGAGGAGAAACAGTGGCAGCTGGACCAGGAGCTACGAGGCTACATGAACCGGGAAGAAAACCTA
AAGACAGCTGCTGATCGGCAGGCTGAGGACCAGGTCCTGAGGAAGCTGGTGGATTTGGTCAACCAGAGAGATGCC
CTCATCCGCTTCCAGGAGGAGCGCAGGCTCAGCGAGCTGGCCTTGGGGACAGGGGCCCAGGGC**TAG**ACGAGGGTG
GGCCGTCTGCTTTCGTTCCCACAAAGAAAGCACCTCACCCCAGCACAGTGCCACCCCTGTTCATCTGGGCTGCCT

FIGURE 3453B

GGCAGAGAGCCTTGCTGTTTACAATTAAAATGTTTCTGCCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAA

FIGURE 3454

MASPTSTNPAHAHFESFLQAQLCQDVLSSFQELCGALGLEPGGGLPQYHKIKDQLNYWSAKSLWTKLDKRAGQPV
YQQGRACTSTKCLVVGAGPCGLRVAVELALLGARVVLVEKRTKFSRHNVLHLWPFTIHDLRALGAKKFYGRFCTG
TLDHISIRQLQLLLLKVALLLGVEIHWGVTFTGLQPPPRKGSGWRAQLQPNPPAQLANYEFDVLISAAGGKFVPE
GFKVREMRGKLAIGITANFVNGRTVEETQVPEISGVARIYNQSFFQSLLKATGIDLENIVYYKDDTHYFVMTAKK
QCLLRLGVLRQDWPDTNRLLGSANVVPEALQRFTRAAADFATHGKLGKLEFAQDAHGQPDVSAFDFTSMMRAESS
ARVQEKHGARLLLGLVGDCLVEPFWPLGTGVARGFLAAFDAAWMVKRWAEGAESLEVLAERESLYQLLSQTSPEN
MHRNVAQYGLDPATRYPNLNLRAVTPNQVRDLYDVLAKEPVQRNNDKTDTGMPATGSAGTQEELLRWCQEQTAGY
PGVHVSDLSSSWADGLALCALVYRLQPGLLEPSELQGLGALEATAWALKVAENELGITPVVSAQAVVAGSDPLGL
IAYLSHFHSAFKSMAHSPGPVSQASPGTSSAVLFLSKLQRTLQRSRAKENAEDAGGKKLRLEMEAETPSTEVPPD
PEPGVPLTPPSQHQEAGAGDLCALCGEHLYVLERLCVNGHFFHRSCFRCHTCEATLWPGGYEQHPGDGHFYCLQH
LPQTDHKKEGSDRGPESPELPTPSENSMPPGLSTPTASQEGAGPVPDPSQPTRRQIRLSSPERQRLSSLNLTPDP
EMEPPPKPPRSCSALARHALESSFVGWGLPVQSPQALVAMEKEEKESPFSSEEEEEDVPLDSDVEQALQTFAKTS
GTMNNYPTWRRTLLRRAKEEEMKRFCKAQTIQRRLNEIEAALRELEAEGVKLELALRRQSSSPEQQKKLWVGQLL
QLVDKKNSLVAEEAELMITVQELNLEEKQWQLDQELRGYMNREENLKTAADRQAEDQVLRKLVDLVNQRDALIRF
QEERRLSELALGTGAQG

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FIGURE 3455

TAGGGAGGGGGCGACGCTGAGATGGGGGCGGCGGCGGCGGAAGCGGATCGCACTCTCTTTGTGGGCAACCTTGAA
ACGAAAGTGACCGAGGAGCTCCTTTTCGAGCTTTTCCACCAGGCTGGGCCAGTAATAAAGGTGAAAATTCCAAAA
GATAAGGATGGTAAACCAAAGCAGTTTGCGTTTGTGAATTTCAAACATGAAGTGTCTGTTCCTTATGCAATGAAT
CTACTTAATGGAATCAAACTTTATGGAAGGCCTATCAAAATTCAATTTAGATCAGGAAGTAGTCATGCCCCACAA
GATGTCAGTTTGTCATATCCCCAACATCATGTTGGAAATTCAAGCCCTACCTCCACATCTCCTAGCAGGTACGAA
AGGACTATGGATAACATGACTTCATCAGCACAGATAATTCAGAGATCTTTCTCTTCTCCAGAAAATTTTCAGAGA
CAAGCAGTGATGAACAGTGCTTTGAGACAAATGTCATATGGTGGAAAATTTGGTTCTTCACCTCTGGATCAATCA
GGATTTTCACCATCAGTTCAATCACACAGTCATAGTTTCAATCAGTCTTCAAGCTCCCAGTGGCGCCAAGGTACA
CCATCATCACAGCGTAAAGTCAGAATGAATTCTTATCCCTACCTAGCAGATAGACATTATAGCCGGGAACAGCGT
TACACTGATCATGGGTCTGACCATCATTACAGAGGAAAGAGAGATGATTTCTTCTATGAAGACAGGAATCATGAT
GACTGGAGCCATGACTATGATAACAGAAGAGACAGTAGTAGAGATGGAAAATGGCGCTCATCTCGACACTAACAC
ATGTTAAAAGGACATTGTTTTTATAGGGTCATTTTAGGCCCTTTGACTAAGTTGATATGGAAATATTTTGTTGAA
AAACTGTACAGAGCAGCTTTACAAGTTGTCACATTTCTTTATAAATTTTTTTAAAGCTACAGTTTAATACAAAAT
GAATTGCGGTTTTATTACATTAATAACCTTTCACCTCAGGGTTTTATGAAGAGGAAAGGGTTTTATGCAAAAGAA
AGTGCTACAATTCCTAATCATTTTAGACACTTTAGGAGGGGGTGAAGTTGTATGATAAAGCAGATATTTTAATTA
TTTGTTATCTTTTTGTATTGCAAGAAATTTCTTGCTAGTGAATCAAGAAAACATCCAGGTTGACAGTCTAAAATG
GCTACTGGTATTTTAGTTAATTCAAAAATGAAACTTTTCAGTGATTCACTTTACTAACATTCTATTTGAGAAGGC
TTATTGGTAAAGTTTGGGGATAAAGGCATTGCTTAACTTCTTATATAATTTAGGTATAAATTCTGTGACATGCTC
TTGAGCTTTACCCTAGTTGAACATACATGTGTAGATTTACACATACTGTTTCATTCTAAAATTTAGAAATTGTTC
ATTAAATCCCATTTGAGGTATAAGTCACTCAGGAAGTTAAAATATCTCTACACGTATATTTTTACATTAAAAATA
CAGTGTTAGCATAAATCCCCTTTTCAGGAAGAACAAAAATGTCAGTGCATAGTTAGATAAAATGGTAAAATGTTT
TACTGAAAGCATACTTTTTTGGAAAATAGATTCATGAAGCCTTTAAGTGCTGCTTCTGTCAGTCAAACGTTAAAA
ACTTTAACATTTTCAAAGTGCCCAGACTGTGTACAAAGACACATGTAATGGAGATTGTACAGGTTGTTTTTTTGT
TTGAACCTTTGAAAGAGTTTAATCTTAACGTTTTCTAATTTTAAAATTTTAAAATCTTGTTTAACAAAAGCTTGT
ATTAAGATACTGTTTTCATTTCATTACAGAATTGTTTATAAAAGTTCATTTGTTGAAAAATAAGGATCCTTTTTA
ATACCACAGCATTTGTACTGTTCCTTTTTAATATACTGAAAAAATAAAAGGAAAAAAAAAAAAA

FIGURE 3456

MGAAAAEADRTLFVGNLETKVTEELLFELFHQAGPVIKVKIPKDKDGKPKQFAFVNFKHEVSVPYAMNLLNGIKL
YGRPIKIQFRSGSSHAPQDVSLSYPQHHVGNSSPTSTSPSRYERTMDNMTSSAQIIQRSFSSPENFQRQAVMNSA
LRQMSYGGKFGSSPLDQSGFSPSVQSHSHSFNQSSSSQWRQGTPSSQRKVRMNSYPYLADRHYSREQRYTDHGSD
HHYRGKRDDFFYEDRNHDDWSHDYDNRRDSSRDGKWRSSRH

FIGURE 3457

GGCTGACCCACCTACCCGCGATCCTGCCCATGGCTGACGGGCTCTTTCGGCGCAGACCCTGGGGTCTCGAGCAGA
TTCGCCCGGACCCCGAGTCCGAAGGCCTGTTTGACAAGCCTCCCCCGGAAGACCCTCCCGCTGCCCGCGGGCCCA
GGTCGGCGTCGGCCGCGGGCAAGAAGGCTGGTCGGCGCGCGGGCGGGAGGGCGCAGGGGGGCCGCGCCGGGCAGC
CCCCGAAGGCCGCATCGCACCCCCCGCCCAAGAAGGAGGCGCCTCCACTGGACGAGGGCTGCTATCTCGACCATT
TTCCGCACCTCTCCATCTTCATCTACGCAGCCATCGCCTTCTCCATCACCTCCTGCATCTTTACCTATATCCATT
TACAGCTTGCCTGAGTGGCCAGCGCGGGACGGGGTGGGCGCAGGACCGAGCGGGGAGGGAAAGGGAAAACGGGGC
TCGGCATTTTGTGTTTTAGAACAGCGCTGCACCCCCTTCATGTAGCTTTCGATGCTTGTTTCTTTCCGTCTTTGT
TGTCACTATCTTTGTCTATCAGTACGAAAGTACAAAGTAGCTGCCGGCAATGAAATAGGGGTGCTGTTTGCACCT
GCAGGTTAGGGGTGGAGGCGTTTAGAATTTTGGGGTGTGATTGAGCCCCGTTTATAATTAGA**ATG**CCCCTGGACC
CCTACCACTCTGTGACGTGGGGGCACGCGCAGGGATCCCATCATTTTGTGTTTGGGGAGCTCAGAGTGCGCCCAA
TCTTGGAATCTTTAAGGGATGAGCCAGACCCAGACCCGCGGCCTTCTAGAGAGGGTCCGGCAGGGAGGGTCGGCG
CCCTGGCCCGGGATGGGCCGGAGCCCTGTGATGCTGCATCGCCCCCAGGAGGAGCCAGCTGTGCCCCAGAGTTGG
CGCGGCCGAGAGAGGACAAGAGCGCGCAGCAGGCGAAGCTGGAGGGCGGGACTCGACTTTGTTGTCGCTGCCCGG
AGGAGTCGAGACTGGTACCCGGAGGAGCTGTCTCACCAGGAGACCACGTCCTGGAAGTGTCCGGGACTCGCGGGA
CCTGTGGCTGCAGACCCCGCCGGCACGCAGGCCCAGAGCTGGCGCACTCC**TGA**GGATGAGACTCTGGGGGCCCTA
GCCGGGGTCCACGGGAGGGCTGTCCTTGGGGACTCTAGGATGGCTTCGTTCTGGCCCGGCTCACTTCTGGAGCTG
TGAGACCCAAGACAAAAGGGGCTGAGGGATTTCTCATTGACAAGAGTTCGTGCGGGAAAACCACCTGACCCCTAG
GGATTTGTCATCTTAAGACTCAAAAGGCTTAATACCAGGAACCACCTTGGCAAGATATTTACCCACCGGCCATCT
CTGTTTACTCATGAATGTTAAATGTTAAAACGCAGCGCTCTAACCCTGCATATTATTTACTTGCAAATGTCTGTA
ATCTGTAATTGTGATGCCTCTGATGGAATAAATTATCTTTTTCAGTCTCCTCTAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3458

MPLDPYHSVTWGHAQGSHHFVFGELRVRPILESLRDEPDPDPRPSREGPAGRVGALARDGPEPCDAASPPGGASC
APELARPREDKSAQQAKLEGGTRLCCRCPEESRLVPGGAVSPGDHVLEVSGTRGTCGCRPRRHAGPELAHS

FIGURE 3459

CTGCACTGCGAGGCCGACGCAGCTGGAGAGAAGTTAGGCAGGTCCTAGGGAGGGCAGGCTCGAGTGCTGGGCCCG
CCTCCCCGCGGGACTGTAGGCCCGGGGGCTCCGCCTCGTCGCAGCGGCAGAAGTG**ATG**CCACCAAAAAGAAATGA
AAAATACAAACTTCCTATTCCATTTCCAGAAGGCAAGGTTCTGGATGATATGGAAGGCAATCAGTGGGTACTGGG
CAAGAAGATTGGCTCTGGAGGATTTGGATTGATATATTTAGCTTTCCCCACAAATAAACCAGAGAAAGATGCAAG
ACATGTAGTAAAAGTGGAATATCAAGAAAATGGCCCGTTATTTTCAGAACTTAAATTTTATCAGAGAGTTGCAAA
AAAAGACTGTATCAAAAAGTGGATAGAACGCAAACAACTTGATTATTTAGGAATTCCTCTGTTTTATGGATCTGG
TCTGACTGAATTCAAGGGAAGAAGTTACAGATTTATGGTAATGGAAAGACTAGGAATAGATTTACAGAAGATCTC
AGGCCAGAATGGTACCTTTAAAAAGTCAACTGTCCTGCAATTAGGTATCCGAATGTTGGATGTACTGGAATATAT
ACATGAAAATGAATATGTTCATGGTGATGTAAAAGCAGCAAATCTACTTTTGGGTTACAAAAATCCAGACCAGGT
TTATCTTGCAGATTATGGACTTTCCTACAGATATTGTCCCAATGGGAACCACAAACAGTATCAGGAAAATCCTAG
AAAAGGCCATAATGGGACAATAGAGTTTACCAGTTTGGATGCCCACAAGGGAGTAGCCTTGTCCAGACGAAGTGA
CGTTGAGATCCTCGGCTACTGCATGCTGCGGTGGTTGTGTGGGAAACTTCCCTGGGAACAGAACCTGAAGGACCC
TGTGGCTGTGCAGACTGCTAAAACAAATCTGTTGGACGAGCTCCCCCAGTCAGTGCTTAAATGGGCTCCTTCTGG
AAGCAGTTGCTGTGAAATAGCCCAATTTTTGGTATGTGCTCATAGTTTAGCATATGATGAAAAGCCAAACTATCA
AGCCCTCAAGAAAATTTTGAACCCTCATGGAATACCTTTAGGACCACTGGACTTTTCCACAAAAGGACAGAGTAT
AAATGTCCATACTCCAAACAGTCAAAAAGTTGATTCACAAAAGGCTGCAACAAAGCAAGTCAACAAGGCACACAA
TAGGTTAATCGAAAAAAAAAGTCCACAGTGAGAGAAGCGCTGAGTCCTGTGCAACATGGAAAGTGCAGAAAGAGGA
GAAACTGATTGGATTGATGAACAATGAAGCAGCTCAGGAAAGCACAAGGAGAAGACAGAAATATCAAGAGTCTCA
AGAACCTTTGAATGAAGTAAACAGTTTCCCACAAAAAATCAGCTATACACAATTCCCAAACTCATTTTATGAGCC
TCATCAAGATTTTACCAGTCCAGATATATTCAAGAAGTCAAGATCTCCATCTTGGTATAAATACACTTCCACAGT
CAGCACGGGGATCACAGACTTAGAAAGTTCAACTGGACTTTGGCCTACAATTTCCCAGTTTACTCTTAGTGAAGA
GACAAACGCAGATGTTTATTATTATCGCATCATCATACCTGTCCTTTTGATGTTAGTATTTCTTGCTTTATTTTT
TCTC**TGA**AGATGATACCAAAATTCCTTTTGATAATTTTTTAAGTTTCCAGCTCTTCACCGAAATGTTGTATTCTT
ATTTCAGTGTTTCCTTCCAGACATTTTTAAGGTAATTGGCTTTAAAAAGAGAACATATTTTAACAAAGTTTGTGG
ACACTCTAAAAAATAAAATTGCTTTGTACTAGT

FIGURE 3460

MPPKRNEKYKLPIPFPEGKVLDDMEGNQWVLGKKIGSGGFGLIYLAFPTNKPEKDARHVVKVEYQENGPLFSELK
FYQRVAKKDCIKKWIERKQLDYLGIPLFYGSGLTEFKGRSYRFMVMERLGIDLQKISGQNGTFKKSTVLQLGIRM
LDVLEYIHENEYVHGDVKAANLLLGYKNPDQVYLADYGLSYRYCPNGNHKQYQENPRKGHNGTIEFTSLDAHKGV
ALSRRSDVEILGYCMLRWLCGKLPWEQNLKDPVAVQTAKTNLLDELPQSVLKWAPSGSSCCEIAQFLVCAHSLAY
DEKPNYQALKKILNPHGIPLGPLDFSTKGQSINVHTPNSQKVDSQKAATKQVNKAHNRLIEKKVHSERSAESCAT
WKVQKEEKLIGLMNNEAAQESTRRRQKYQESQEPLNEVNSFPQKISYTQFPNSFYEPHQDFTSPDIFKKSRSPSW
YKYTSTVSTGITDLESSTGLWPTISQFTLSEETNADVYYYRIIIPVLLMLVFLALFFL

FIGURE 3461A

GCCCTGCTTCCCCTTGCACCTGCGCCGGGCGGCCATGGACTTGTACAGCACCCCGGCCGCTGCGCTGGACAGGTT
CGTGGCCAGAAGGCTGCAGCCGCGGAAGGAGTTCGTAGAGAAGGCGCGGCGCGCTCTGGGCGCCCTGGCCGCTGC
CCTGAGGGAGCGCGGGGGCCGCCTCGGTGCTGCTGCCCCGCGGGTGCTGAAAACTGTCAAGGGAGGCTCCTCGGG
CCGGGGCACAGCTCTCAAGGGTGGCTGTGATTCTGAACTTGTCATCTTCCTCGACTGCTTCAAGAGCTATGTGGA
CCAGAGGGCCCGCCGTGCAGAGATCCTCAGTGAGATGCGGGCATCGCTGGAATCCTGGTGGCAGAACCCAGTCCC
TGGTCTGAGACTCACGTTTCCTGAGCAGAGCGTGCCTGGGGCCCTGCAGTTCCGCCTGACATCCGTAGATCTTGA
GGACTGGATGGATGTTAGCCTGGTGCCTGCCTTCAATGTCCTGGGTCAGGCCGGCTCCGCGGTCAAACCCAAGCC
ACAAGTCTACTCTACCCTCCTCAACAGTGGCTGCCAAGGGGGCGAGCATGCGGCCTGCTTCACAGAGCTGCGGAG
GAACTTTGTGAACATTCGCCCAGCCAAGTTGAAGAACCTAATCTTGCTGGTGAAGCACTGGTACCACCAGGTGTG
CCTACAGGGGTTGTGGAAGGAGACGCTGCCCCCGGTCTATGCCCTGGAATTGCTGACCATCTTCGCCTGGGAGCA
GGGCTGTAAGAAGGATGCTTTCAGCCTAGGCGAAGGCCTCCGAACTGTCCTGGGCCTGATCCAACAGCATCAGCA
CCTGTGTGTTTTCTGGACTGTCAACTATGGCTTCGAGGACCCTGCAGTTGGGCAGTTCTTGCAGCGGCACGTTAA
GAGACCCAGGCCTGTGATCCTGGACCCAGCTGACCCCACATGGGACCTGGGGAATGGGGCAGCCTGGCACTGGGA
TTTGCATGCCCAGGAGGCAGCATCCTGCTATGACCACCCATGCTTTCTGAGGGGGATGGGGGACCCAGTGCAGTC
TTGGAAGGGGCCGGGCCTTCCACGTGCTGGATGCTCAGGTTTGGGCCACCCCATCCAGCTAGACCCTAACCAGAA
GACCCCTGAAAACAGCAAGAGCCTCAATGCTGTGTACCCAAGAGCAGGGAGCAAACCTCCCTCATGCCCAGCTCC
TGGCCCCACTGCGGAGCCAGCATCGTACCCCTCTGTGCCGGGAATGGCCTTGGACCTGTCTCAGATCCCCACCAA
GGAGCTGGACCGCTTCATCCAGGACCACCTGAAGCCGAGCCCCCAGTTCCAGGAGCAGGTGAAAAAGGCCATCGA
CATCATCTTGCGCTGCCTCCATGAGAACTGTGTTCACAAGGCCTCAAGAGTCAGTAAAGGGGGCTCATTTGGCCG
GGGCACAGACCTAAGGGATGGCTGTGATGTTGAACTCATCATCTTCCTCAACTGCTTCACGGACTACAAGGACCA
GGGGCCCCGCCGCGCAGAGATCCTTGATGAGATGCGAGCGCACGTAGAATCCTGGTGGCAGGACCAGGTGCCCAG
CCTGAGCCTTCAGTTTCCTGAGCAGAATGTGCCTGAGGCTCTGCAGTTCCAGCTGGTGTCCACAGCCCTGAAGAG
CTGGACGGATGTTAGCCTGCTGCCTGCCTTCGATGCTGTGGGGCAGCTCAGTTCTGGCACCAAACCAAATCCCCA
GGTCTACTCGAGGCTCCTCACCAGTGGCTGCCAGGAGGGCGAGCATAAGGCCTGCTTCGCAGAGCTGCGGAGGAA
CTTCATGAACATTCGCCCTGTCAAGCTGAAGAACCTGATTCTGCTGGTGAAGCACTGGTACCGCCAGGTTGCGGC
TCAGAACAAAGGAAAAGGACCAGCCCCTGCCTCTCTGCCCCCAGCCTATGCCCTGGAGCTCCTCACCATCTTTGC
CTGGGAGCAGGGCTGCAGGCAGGATTGTTTCAACATGGCCCAAGGCTTCCGGACGGTGCTGGGGCTCGTGCAACA
GCATCAGCAGCTCTGTGTCTACTGGACGGTCAACTATAGCACTGAGGACCCAGCCATGAGAATGCACCTTCTTGG
CCAGCTTCGAAAACCCAGACCCCTGGTCCTGGACCCCGCTGATCCCACCTGGAACGTGGGCCACGGTAGCTGGGA
GCTGTTGGCCCAGGAAGCAGCAGCGCTGGGGATGCAGGCCTGCTTTCTGAGTAGAGACGGGACATCTGTGCAGCC
CTGGGATGTGATGCCAGCCCTCCTTTACCAAACCCCAGCTGGGGACCTTGACAAGTTCATCAGTGAATTTCTCCA
GCCCAACCGCCAGTTCCTGGCCCAGGTGAACAAGGCCGTTGATACCATCTGTTCATTTTTGAAGGAAAACTGCTT
CCGGAATTCTCCCATCAAAGTGATCAAGGTGGTCAAGGGTGGCTCTTCAGCCAAAGGCACAGCTCTGCGAGGCCG
CTCAGATGCCGACCTCGTGGTGTTCCTCAGCTGCTTCAGCCAGTTCACTGAGCAGGGCAACAAGCGGGCCGAGAT
CATCTCCGAGATCCGAGCCCAGCTGGAGGCATGTCAACAGGAGCGGCAGTTCGAGGTCAAGTTTGAAGTCTCCAA
ATGGGAGAATCCCCGCGTGCTGAGCTTCTCACTGACATCCCAGACGATGCTGGACCAGAGTGTGGACTTTGATGT
GCTGCCAGCCTTTGACGCCCTAGGCCAGCTGGTCTCTGGCTCCAGGCCCAGCTCTCAAGTCTACGTCGACCTCAT
CCACAGCTACAGCAATGCGGGCGAGTACTCCACCTGCTTCACAGAGCTACAACGGGACTTCATCATCTCTCGCCC
TACCAAGCTGAAGAGCCTGATCCGGCTGGTGAAGCACTGGTACCAGCAGTGTACCAAGATCTCCAAGGGGAGAGG
CTCCCTACCCCCACAGCACGGGCTGGAACTCCTGACTGTGTATGCCTGGGAGCAGGGCGGGAAGGACTCCCAGTT
CAACATGGCTGAGGGCTTCCGCACGGTCCTGGAGCTGGTCACCCAGTACCGCCAGCTCTGTATCTACTGGACCAT
CAACTACAACGCCAAGGACAAGACTGTTGGAGACTTCCTGAAACAGCAGCTTCAGAAGCCCAGGCCTATCATCCT
GGATCCGGCTGACCCGACAGGCAACCTGGGCCACAATGCCCGCTGGGACCTGCTGGCCAAGGAAGCTGCAGCCTG
CACATCTGCCCTGTGCTGCATGGGACGGAATGGCATCCCCATCCAGCCATGGCCAGTGAAGGCTGCTGTGTGAAG
TTGAGAAAATCAGCGGTCCTACTGGATGAAGAGAAGATGGACACCAGCCCTCAGCATGAGGAAATTCAGGGTCCC
CTACCAGATGAGAGAGATTGTGTACATGTGTGTGTGAGCACATGTGTGCATGTGTGTGCACACGTGTGCATGTGT
GTGTTTTAGTGAATCTGCTCTCCCAGCTCACACACTCCCCTGCCTCCCATGGCTTACACACTAGGATCCAGACTC
CATGGTTTGACACCAGCCTGCGTTTGCAGCTTCTCTGTCACTTCCATGACTCTATCCTCATACCACCACTGCTGC

FIGURE 3461B

TTCCCACCCAGCTGAGAATGCCCCCTCCTCCCTGACTCCTCTCTGCCCATGCAAATTAGCTCACATCTTTCCTCC
TGCTGCAATCCATCCCTTCCTCCCATTGGCCTCTCCTTGCCAAATCTAAATACTTTATATAGGGATGGCAGAGAG
TTCCCATCTCATCTGTCAGCCACAGTCATTTGGTACTGGCTACCTGGAGCCTTATCTTCTGAAGGGTTTTAAAGA
ATGGCCAATTAGCTGAGAAGAATTATCTAATCAATTAGTGATGTCTGCCATGGATGCAGTAGAGGAAAGTGGTGG
TACAAGTGCCATGATTGATTAGCAATGTCTGCACTGGATATGGAAAAAAGAAGGTGCTTGCAGGTTTACAGTGTA
TATGTGGGCTATTGAAGAGCCCTCTGAGCTCGGTTGCTAGCAGGAGAGCATGCCCATATTGGCTTACTTTGTCTG
CCACAGACACAGACAGAGGGAGTTGGGACATGCATGCTATGGGGACCCTCTTGTTGGACACCTAATTGGATGCCT
CTTCATGAGAGGCCTCCTTTTCTTCACCTTTTATGCTGCACTCCTCCCCTAGTTTACACATCTTGATGCTGTGGC
TCAGTTTGCCTTCCTGAATTTTTATTGGGTCCCTGTTTTCTCTCCTAACATGCTGAGATTCTGCATCCCCACAGC
CTAAACTGAGCCAGTGGCCAAACAACCGTGCTCAGCCTGTTTCTCTCTGCCCTCTAGAGCAAGGCCCACCAGGTC
CATCCAGGAGGCTCTCCTGACCTCAAGTCCAACAACAGTGTCCACACTAGTCAAGGTTCAGCCCAGAAAACAGAA
AGCACTCTAGGAATCTTAGGCAGAAAGGGATTTTATCTAAATCACTGGAAAGGCTGGAGGAGCAGAAGGCAGAGG
CCACCACTGGACTATTGGTTTCAATATTAGACCACTGTAGCCGAATCAGAGGCCAGAGAGCAGCCACTGCTACTG
CTAATGCCACCACTACCCCTGCCATCACTGCCCCACATGGACAAAACTGGAGTCGAGACCTAGGTTAGATTCCTG
CAACCACAAACATCCATCAGGGATGGCCAGCTGCCAGAGCTGCGGGAAGACGGATCCCACCTCCCTTTCTTAGCA
GAATCTAAATTACAGCCAGACCTCTGGCTGCAGAGGAGTCTGAGACATGTATGATTGAATGGGTGCCAAGTGCCA
GGGGGCGGAGTCCCCAGCAGATGCATCCTGGCCATCTGTTGCGTGGATGAGGGAGTGGGTCTATCTCAGAGGAAG
GAACAGGAAACAAAGAAAGGAAGCCACTGAACATCCCTTCTCTGCTCCACAGGAGTGTCTTAGACAGCCTGACTC
TCCACAAACCACTGTTAAAACTTACCTGCTAGGAATGCTAGATTGAATGGGATGGGAAGAGCCTTCCCTCATTAT
TGTCATTCTTGGAGAGAGGTGAGCAACCAAGGGAAGCTCCTCTGATTCACCTAGAACCTGTTCTCTGCCGTCTTT
GGCTCAGCCTACAGAGACTAGAGTAGGTGAAGGGACAGAGGACAGGGCTTCTAATACCTGTGCCATATTGACAGC
CTCCATCCCTGTCCCCCATCTTGGTGCTGAACCAACGCTAAGGGCACCTTCTTAGACTCACCTCATCGATACTGC
CTGGTAATCCAAAGCTAGAACTCTCAGGACCCCAAACTCCACCTCTTGGATTGGCCCTGGCTGCTGCCACACACA
TATCCAAGAGCTCAGGGCCAGTTCTGGTGGGCAGCAGAGACCTGCTCTGCCAAGTTGTCCAGCAGCAGAGTGGCC
CTGGCCTGGGCATCACAAGCCAGTGATGCTCCTGGGAAGACCAGGTGGCAGGTCGCAGTTGGGTACCTTCCATTC
CCACCACACAGACTCTGGGCCTCCCCGCAAAATGGCTCCAGAATTAGAGTAATTATGAGATGGTGGGAACCAGAG
CAACTCAGGTGCATGATACAAGGAGAGGTTGTCATCTGGGTAGGGCAGAGAGGAGGGCTTGCTCATCTGAACAGG
GGTGTATTTCATTCCAGGCCCTCAGTCTTTGGCAATGGCCACCCTGGTGTTGGCATATTGGCCCCACTGTAACTT
TTGGGGGCTTCCCGGTCTAGCCACACCCTCGGATGGAAAGACTTGACTGCATAAAGATGTCAGTTCTCCCTGAGT
TGATTGATAGGCTTAATGGTCACCCTAAAAACACCCACATATGCTTTTCGATGGAACCAGATAAGTTGACGCTAA
AGTTCTTATGGAAAAATACACACGCAATAGCTAGGAAAACACAGGGAAAGAAGAGTTCTGAGCAGGGCCTAGTCT
TAGCCAATATTAAAACATACTATGAAGCCTCTGATACTTAAACAGCATGGCGCTGGTACGTAAATAGACCAATGC
AGTTAGGTGGCTCTTTCCAAGACTCTGGGGAAAAAAGTAGTAAAAAGCTAAATGCAATCAATCAGCAATTGAAAG
CTAAGTGAGAGAGCCAGAGGGCCTCCTTGGTGGTAAAAGAGGGTTGCATTTCTTGCAGCCAGAAGGCAGAGAAAG
TGAAGACCAAGTCCAGAACTGAATCCTAAGAAATGCAGGACTGCAAAGAAATTGGTGTGTGTGTGTGTGTGTGTG
TGTGTGTGTGTTTAATTTTTAAAAAGTTTTTATTCGGAATCCGCG

FIGURE 3462

MDLYSTPAAALDRFVARRLQPRKEFVEKARRALGALAAALRERGGRLGAAAPRVLKTVKGGSSGRGTALKGGCDS
ELVIFLDCFKSYVDQRARRAEILSEMRASLESWWQNPVPGLRLTFPEQSVPGALQFRLTSVDLEDWMDVSLVPAF
NVLGQAGSAVKPKPQVYSTLLNSGCQGGEHAACFTELRRNFVNIRPAKLKNLILLVKHWYHQVCLQGLWKETLPP
VYALELLTIFAWEQGCKKDAFSLGEGLRTVLGLIQQHQHLCVFWTVNYGFEDPAVGQFLQRHVKRPRPVILDPAD
PTWDLGNGAAWHWDLHAQEAASCYDHPCFLRGMGDPVQSWKGPGLPRAGCSGLGHPIQLDPNQKTPENSKSLNAV
YPRAGSKPPSCPAPGPTAEPASYPSVPGMALDLSQIPTKELDRFIQDHLKPSPQFQEQVKKAIDIILRCLHENCV
HKASRVSKGGSFGRGTDLRDGCDVELIIFLNCFTDYKDQGPRRAEILDEMRAHVESWWQDQVPSLSLQFPEQNVP
EALQFQLVSTALKSWTDVSLLPAFDAVGQLSSGTKPNPQVYSRLLTSGCQEGEHKACFAELRRNFMNIRPVKLKN
LILLVKHWYRQVAAQNKGKGPAPASLPPAYALELLTIFAWEQGCRQDCFNMAQGFRTVLGLVQQHQQLCVYWTVN
YSTEDPAMRMHLLGQLRKPRPLVLDPADPTWNVGHGSWELLAQEAAALGMQACFLSRDGTSVQPWDVMPALLYQT
PAGDLDKFISEFLQPNRQFLAQVNKAVDTICSFLKENCFRNSPIKVIKVVKGGSSAKGTALRGRSDADLVVFLSC
FSQFTEQGNKRAEIISEIRAQLEACQQERQFEVKFEVSKWENPRVLSFSLTSQTMLDQSVDFDVLPAFDALGQLV
SGSRPSSQVYVDLIHSYSNAGEYSTCFTELQRDFIISRPTKLKSLIRLVKHWYQQCTKISKGRGSLPPQHGLELL
TVYAWEQGGKDSQFNMAEGFRTVLELVTQYRQLCIYWTINYNAKDKTVGDFLKQQLQKPRPIILDPADPTGNLGH
NARWDLLAKEAAACTSALCCMGRNGIPIQPWPVKAAV

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FIGURE 3463

CTGGGACCCGGGCTGGAAGGCAGGGCATCAGCTATGGAACAACCTGGGCAGGATCCCACCTCAGACGACGTCATG
GACTCGTTCCTGGAAAAGTTCCAGAGCCAGCCTTACCGTGGCGGCTTTCATGAGGACCAGTGGGAGAAGGAATTT
GAAAAGGTCCCCCTATTTATGTCGAGAGCGCCATCAGAAATTGATCCCAGGGAGAATCCTGACTTGGCTTGTCTC
CAGTCAATTATTTTTGATGAGGAGCGTTCTCCAGAAGAACAGGCCAAGACCTATAAAGATGAGGGCAATGATTAC
TTTAAAGAAAAAGACTACAAGAAAGCTGTAATTTCATACACTGAAGGCTTAAAGAAGAAATGTGCAGATCCTGAT
TTGAATGCTGTCCTTTATACCAACCGGGCAGCAGCACAGTACTATCTGGGCAATTTTCGTTCTGCTCTCAATGAT
GTGACAGCTGCCAGAAAGCTAAAACCCTGCCACCTCAAAGCAATAATAAGAGGTGCCTTATGCCATCTGGAACTG
ATACACTTTGCCGAGGCCGTGAACTGGTGTGATGAGGGACTGCAAATAGATGCCAAAGAGAAGAAGCTTCTGGAA
ATGAGGGCTAAAGCAGACAAGCTGAAGCGAATTGAACAGAGGGATGTGAGGAAAGCCAACTTGAAAGAAAAGAAG
GAGAGGAATCAGAATGAGGCTTTACTCCAGGCCATCAAGGCTAGGAATATCAGGCTCTCAGAAGCTGCCTGTGAG
GATGAAGATTCAGCCTCAGAAGGTCTAGGTGAGCTTTTCCTGGATGGACTCAGCACTGAGAACCCCCATGGAGCC
AGGCTGAGTCTAGATGGCCAGGGCAGGCTGAGCTGGCCTGTGCTCTTTCTGTACCCAGAGTATGCCCAGTCGGAC
TTCATCTCTGCTTTTCATGAGGACTCCAGGTTTATTGATCATCTAATGGTGATGTTTGGTGAAACACCTTCTTGG
GACCTAGAGCAAAAATATTGCCTGATAATTTGGAGGTCTACTTTGAGGATGAGGACAGGGCAGAACTATACCGGG
TGCCTGCCAAGAGCACCTTGCTACAGGTTCTACAGCACCAGAGGTACTTTGTAAAAGCCCTGACACCAGCATTTT
TGGTCTGTGTAGGATCCTCTCCTTTTTGCAAGAATTTTCTCCGGGGGAGAAAGGTGTACCAGATACGATGACTAA
GCCAGGGCCCCTGGATCTCCTCCCTTACCCTCCTCTGCTGGGAACCTAGCACACCTGAATCAGCTGGACATACTG
CTGGAGTCCAGTGCTTTCTTTCCGTCACCCTGGGGATAGTCCTTCCTGGCATCGTGGTGGGGGAGGAGCCTCTGG
CTTCCCTAAACTGCAGCTCTCTGGCTGGTCTTCACTTTCCTCAGTTGATATAAAACTCTGGTCTTGGCCATGATG
TCCTTGGATTCCATCGCTAAAGGGACCATCTGCTGCAGTTACCACAGCAACTGACTTGAGCGGCACCTGGTCTGT
GGAGATGGACTCAGGATCCAGTGACATGATTCTGAACTTTTGTGGAGTTTGACACCTTAGAGAAGCTACCCCTCA
AACTGCACATCTACACACAAACAAACAATGCATAGGATTCCAAGGCTTTAAAGCTGAGAGACCCTGGCCTCAAGT
TATTTCATGCGCACAGAGGGAAGCCATGTGGGGTTGCTGAAGATGCCTTGAGGTGAAATGGGGGCAGGAAAGCCA
CATCTTGCTCTGCATTTATAAAGACCGTACAAACTCAGATCCTTGGTACCCCTAAAAAGATTGCCAATTTTCTTC
ATCTTTGCCATATGGAGGACTGTGACAGACTTTGGACAGTGGCCTCTTGAGTTCCTCTGCAGTTTTGACATTTAG
GATTTTGTGTCTTTTAAACTGGAAAATCTTCTAGCATGTTGGGTTGTTACAGAGTATATTTTTGTCTGCAGCTGT
TTGTTGCCCCATTCCTAAGAGGAGTTTATCCATCCTGAAAAAAAAAAAAAAAAAA

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FIGURE 3464

MEQPGQDPTSDDVMDSFLEKFQSQPYRGGFHEDQWEKEFEKVPLFMSRAPSEIDPRENPDLACLQSIIFDEERSP
EEQAKTYKDEGNDYFKEKDYKKAVISYTEGLKKKCADPDLNAVLYTNRAAAQYYLGNFRSALNDVTAARKLKPCH
LKAIIRGALCHLELIHFAEAVNWCDEGLQIDAKEKKLLEMRAKADKLKRIEQRDVRKANLKEKKERNQNEALLQA
IKARNIRLSEAACEDEDSASEGLGELFLDGLSTENPHGARLSLDGQGRLSWPVLFLYPEYAQSDFISAFHEDSRF
IDHLMVMFGETPSWDLEQKYCLIIWRSTLRMRTGQNYTGCLPRAPCYRFYSTRGTL

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FIGURE 3465

GACAGCAAATACTTCCGTAAAACAGACCATCAAGCTTTCCACTTAGAGCCCAGTGTGGCCCCAATACCTTTCCTT
GTCGCTCCTGCGTGCCAGTCCGCCTCCGCGTGGTCCGGCCGCTGCGCCACGCCCCCGCTCGCCCCGCCCCTGGAT
TTGCTCCCTCAAAGCTGAAGTGAGGCCGGGCTGAGGCTCTTACAGTGGTCCCTGCTGGCCCTTGGTGACGGGTCG
CCTCAGTTCCGACCCGGACCCGTACGCTGCTGCGCTGACGTGGCTCCCGGAAGTAGGGCTGGCGTAGGGCCGCCA
TGTTGCAGCAGGATAGTAATGATGACACTGAAGATGTTTCACTGTTTGATGCGGAAGAGGAGACGACTAATAGAC
CAAGAAAAGCCAAAATCAGACATCCAGTAGCATCGTTTTTCCACTTATTCTTTCGAGTCAGTGCAATCATCGTCT
ATCTTCTCTGTGAGTTGCTCAGCAGCAGCTTTATTACCTGTATGGTGACAATTATCTTGTTGTTGTCGTGTGACT
TTTGGGCAGTGAAGAATGTCACAGGTAGACTAATGGTTGGCCTACGTTGGTGGAATCACATTGATGAAGATGGAA
AGAGCCATTGGGTGTTTGAATCTAGAAAGGAGTCCTCTCAAGAGAATAAAACTGTGTCAGAGGCTGAATCAAGAA
TCTTTTGGTTGGGACTTATTGCCTGTCCAGTACTGTGGGTGATATTTGCCTTTAGTGCACTCTTCTCCTTCAGAG
TAAAGTGGTTGGCGGTGGTTATCATGGGTGTGGTGCTACAAGGTGCCAACCTGTATGGTTACATCAGGTGTAAGG
TGCGCAAGAAAAGCATTTAACCAGCATGGCTACTTCATATTTTGGAAAGCAGTTTTTAAGACAAAACACTGGAGA
TGATCAGACTTCCTGAATAGAGAAAGCTTATGTGCTTTGTTACATTGGGGAACAACTGAAGAGATTCTTGACTCA
ACCTTTTAGAGCTTAGTCCATGTTGCAACGAGGAGTGTTGGCTTTGTTTTTCCACTTAAAAACTTTATTTATAAA
AAGGAAAAGTAGTTTTCATATTAAGTTTTTATTTCCTTTCCAGCAGTTGGGGCTAGAAAGTATGTGTTGGCACTA
GAAACATTGTCAAGATTTGTTCTGTGGTGTAGGTATGCACATTCCATAGGTATGCACACGGCCATGTAATATCAG
TATATCCCAAGTTAATGAAAGTGTTCATTTACATAGGTAATGGAGACCTTTGCATTTTGATCCATAGAACATAGG
AGGATGTTCTTAGTCTGTCTCAAAGCTCTATATGTTTACATATTATTTCTGTAGGATTGTTTTCAGGAGAAAGTT
TTGCTTCTATGGGTAAGGAGTGAGGCACTTTGGGCTTATGTATAAGTTAGAAATAATTGTTAGTTTTTAATATGC
ACTTCGTGGGGAAATTTCTTAGACGTATGCAAGCAAGTGAAAACAATTAGGGCCAGTGGTATTAACTACTTTATA
AAATTTTATTTTTGTTTGTAAGAAGTCATCTACTTAAGGCCCAGTTAATATAAGTGGAATCATCATAGTTTAAGG
AATACCCAGAGATTGCTGCTGTTCTATTTATTTTACAGAAAGGGTAGCTAGATTGAAAGCTCTTCAGTGGACCTT
GAGCTAATAGATCTTTTACCACTAAAAGAGCATTATTCTCATGTCATAATGAGAATAATAATTTACATACTTGGC
ATAATAAATGCCTAAAAGACATTTTATTTTCTGAATCTATTTTTTTCTTGCTATAATGGGGATATTGTAAATTAT
GCATTTGTATTAATGGTATTTCTTAAAGCAATCTATGTAACTGTAAATTAAACCAATCTACAAACTATTGTAGGC
ATCTGTAAATTCTGTTGTAGGTATTATAAACTTTGTTGAAGTCTTAATCAGCAGATTATGTTGTGAATATATTTG
TACATTGTTAAAATAGTTTTTAAGATTATTTGTTTAATTGAATAAGTGTCTTATTGGAGTGATAGCTTTGAAGGT
GCAAAACTTTATATTTGTATAAAATTCTACTATTTACAAGGCAAA

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FIGURE 3466

MLQQDSNDDTEDVSLFDAEEETTNRPRKAKIRHPVASFFHLFFRVSAIIVYLLCELLSSSFITCMVTIILLLSCD
FWAVKNVTGRLMVGLRWWNHIDEDGKSHWVFESRKESSQENKTVSEAESRIFWLGLIACPVLWVIFAFSALFSFR
VKWLAVVIMGVVLQGANLYGYIRCKVRKKSI

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FIGURE 3467

TCAGTGGGCGTCGCGCGAAGGCTAAGGGAGTGTGGCGGGCGGCTCCGGGAGCCAACATGCCTCGGTATGCGCAGC
TGGTCATGGGCCCCGCGGGCAGCGGGAAGAGCACCTACTGTGCCACCATGGTCCAGCACTGTGAAGCCCTCAACC
GGTCTGTCCAAGTTGTAAACCTGGATCCAGCAGCAGAACACTTCAACTACTCCGTGATGGCTGACATCCGGGAAC
TGATCGAGGTGGATGATGTAATGGAGGATGATTCTCTGCGATTCGGTCCCAACGGAGGATTGGTATTTTGCATGG
AGTACTTTGCCAATAATTTTGACTGGCTGGAGAACTGTCTTGGCCATGTAGAGGACGACTATATCCTTTTTGATT
GTCCAGGTCAGATTGAGTTGTACACTCACCTGCCTGTGATGAAACAGCTGGTCCAGCAGCTCGAGCAGTGGGAGT
TCCGAGTCTGTGGAGTTTTTCTTGTTGATTCTCAGTTCATGGTGGAGTCATTCAAGTTTATTTCTGGCATCTTGG
CAGCCCTGAGTGCCATGATCTCTCTAGAAATTCCGCAAGTCAACATCATGACAAAAATGGATCTGCTGAGTAAAA
AAGCAAAAAAGGAAATTGAGAAATTTTTAGATCCAGACATGTATTCTTTATTAGAAGATTCTACAAGTGACTTAA
GAAGCAAAAAATTCAAGAAACTGACTAAAGCTATATGTGGACTGATTGATGACTACAGCATGGTTCGATTTTTAC
CTTACGATCAGTCAGATGAAGAAAGCATGAACATTGCATTGCAGCATATTGATTTTGCCATTCAATATGGAGAAG
ACCTAGAATTTAAAGAACCAAAGGAACGTGAAGATGAGTCTTCCTCTATGTTTGACGAATATTTTCAAGAATGCC
AGGATGAATGAAGAGTTTACTAAAAGTAACCATCTAAAGAGCTTGTGGCCAAACCAGCAGAACATTCTTCTCTTC
AAAGGATGCAATAGTAGAAAGCTACTTATTTTAATGAAAAAAAGTAAAACTTCGTTCTTTATCAGCCTCATGCCT
GAATCAAATTTTTAATTATTCTGAAACTGCTGCTGTTTAAAGTGGAATCTTTTAGTATTATAACAGCATCACTTT
AGATTTTGTAAGTCAAAATTGAAATGAATGCACATAGATTTATATATAAATTAGCACCTGAGCTAAGGTTAAGGC
TGGTCTAAACTTATTTTCACTTTTTGTATTATTTTTGAGATGCAGGAATTACTGTAACAAAATATGTATGTCCGA
AGGGAAAAAGCTGCAAGGATATATATAAGACCACTGCTTATCTGTATCTTCCCATTTTCCTATATTGAAAATGTA
TATTATTTATATAACTTAAAAAGTAAAAATAACTATGTTTTGAGATATGTATGTGTATATATAAAAGAAACAAAG
GTTTTTAATGATTCTTGGACCTAGATAACAAGTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3468

MPRYAQLVMGPAGSGKSTYCATMVQHCEALNRSVQVVNLDPAAEHFNYSVMADIRELIEVDDVMEDDSLRFGPNG
GLVFCMEYFANNFDWLENCLGHVEDDYILFDCPGQIELYTHLPVMKQLVQQLEQWEFRVCGVFLVDSQFMVESFK
FISGILAALSAMISLEIPQVNIMTKMDLLSKKAKKEIEKFLDPDMYSLLEDSTSDLRSKKFKKLTKAICGLIDDY
SMVRFLPYDQSDEESMNIALQHIDFAIQYGEDLEFKEPKEREDESSSMFDEYFQECQDE

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FIGURE 3469

GCCCGCTGTTGCGTGCTGCCAGCGGGAACTGTGTAGGGGTAGATTTTCGCTGCAGTGTTCCCCGAGCCTGTTAGA
CGCAGCGCGCCGGGAGACTGAGAGAGGAAAGGATAGAGGAAGTGCTGCCCTAGGCTGCATGAGTCGAAGCAAGCG
TGTTTCCTTCCCGCCAGGCAAGTGCCCTTAGAAACCGGGCCCCGCCCCCTTCCTGGCCTGCATTCCCATCCCCTC
TCCCGGGGCGGAGGTGAGGACCTCTTTGGTTCCTTTGGTTCTGTCAGTGAGCCCCTTCCTTGGCCATGAAGCTCG
TGAGGAAGAACATCGAGAAGGACAATGCGGGCCAGGTGACCCTGGTCCCCGAGGAGCCTGAGGACATGTGGCACA
CTTACAACCTCGTGCAGGTGGGCGACAGCCTGCGCGCCTCCACCATCCGCAAGGTACAGACAGAGTCCTCCACGG
GCAGCGTGGGCAGCAACCGGGTCCGCACTACCCTCACTCTCTGCGTGGAGGCCATCGACTTCGACTCTCAAGCCT
GCCAGCTGCGGGTTAAGGGGACCAACATCCAAGAGAATGAGTATGTCAAGATGGGGGCTTACCACACCATCGAGC
TGGAGCCCAACCGCCAGTTCACCCTGGCCAAGAAGCAGTGGGATAGTGTGGTACTGGAGCGCATCGAGCAGGCCT
GTGACCCAGCCTGGAGCGCTGATGTGGCGGCTGTGGTCATGCAGGAAGGCCTCGCCCATATCTGCTTAGTCACTC
CCAGCATGACCCTCACTCGGGCCAAGGTGGAGGTGAACATCCCTAGGAAAAGGAAAGGCAATTGCTCTCAGCATG
ACCGGGCCTTGGAGCGGTTCTATGAACAGGTGGTCCAGGCTATCCAGCGCCACATACACTTTGATGTTGTAAAGT
GCATCCTGGTGGCCAGCCCAGGATTTGTGAGGGAGCAGTTCTGCGACTACATGTTTCAACAAGCAGTGAAGACCG
ACAACAAACTGCTCCTGGAAAACCGGTCCAAATTTCTTCAGGTACATGCCTCCTCCGGACACAAGTACTCCCTGA
AAGAGGCCCTTTGTGACCCTACTGTGGCTAGCCGCCTTTCAGACACTAAAGCTGCTGGGGAAGTCAAAGCCTTGG
ATGACTTCTATAAAATGTTACAGCATGAACCGGATCGAGCTTTCTATGGACTCAAGCAGGTGGAGAAGGCCAATG
AAGCCATGGCAATTGACACATTGCTCATCAGCGATGAGCTCTTCAGGCATCAGGATGTAGCCACACGGAGCCGGT
ATGTGAGGCTGGTGGACAGTGTGAAAGAGAATGCAGGCACCGTTAGGATATTCTCTAGTCTTCACGTTTCTGGGG
AACAGCTCAGCCAGTTGACTGGGGTAGCTGCCATTCTCCGCTTCCCTGTTCCCGAACTTTCTGACCAAGAGGGTG
ATTCCAGTTCTGAAGAGGATTAATGATTGAAACTTAAAATTGAGACAATCTTGTGTTTCCTAAACTGTTACAGTA
CATTTCTCAGCATCCTTGTGACAGAAAGCTGCAAGAAGGGCACTTTTTGATTCATACAGGGATTTCTTATGTCTT
TGGCTACACTAGATATTTTGTGATTGGCAAGACATGTATTTAAACATAAACTAAAAGGAAATAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3470

MKLVRKNIEKDNAGQVTLVPEEPEDMWHTYNLVQVGDSLRASTIRKVQTESSTGSVGSNRVRTTLTLCVEAIDFD
SQACQLRVKGTNIQENEYVKMGAYHTIELEPNRQFTLAKKQWDSVVLERIEQACDPAWSADVAAVVMQEGLAHIC
LVTPSMTLTRAKVEVNIPRKRKGNCSQHDRALERFYEQVVQAIQRHIHFDVVKCILVASPGFVREQFCDYMFQQA
VKTDNKLLLENRSKFLQVHASSGHKYSLKEALCDPTVASRLSDTKAAGEVKALDDFYKMLQHEPDRAFYGLKQVE
KANEAMAIDTLLISDELFRHQDVATRSRYVRLVDSVKENAGTVRIFSSLHVSGEQLSQLTGVAAILRFPVPELSD
QEGDSSSEED

FIGURE 3471

ATGGAGCGCCCCCCGCCCCGCGCCGCCGGCCGGGACCCCAGTGCGCTGCGGGCCGAGGCGCCGTGGCTGCGCGCG
GAGGGTCCGGGGCCGCGCGCCGCGCCCGTGACGGTGCCCACGCCGCCGCAGGGCTCTTCCGTGGGCGGCGGCTTC
GCGGGCTTGGAGTTCGCGCGGCCGCAGGAGTCGGAGCCGCGGGCCTCGGACCTGGGGGCCCCCCCGGACGTGGACG
GGGGCGGCGGCGGGGCCCCGGACTCCGTCGGCGCACATCCCCGTCCCAGCGCAGAGAGCCACCCCAGGAAAAGCC
CGGCTGGACGAGGTCATGGCTGCCGCTGCCCTTACAAGCCTGTCCACCAAGCCCTCTCCTTCTGGGGCCCCGGTT
GCAGCCTTCAGCCCAGAGCCTGGCCTGGAGCCCTGGAAGGAGGCCCTGGTGCGGCCCCCAGGCAGCTACAGCAGC
AGCAGCAACAGTGGAGACTGGGGATGGGACCTGGCCAGTGACCAGTCCTCTCCGTCCACCCCGTCACCCCCACTG
CCCCCCGAGGCAGCCCACTTTCTGTTTGGGGAGCCCACCCTGAGAAAAAGGAAGAGCCCGGCCCAGGTCATGTTC
CAGTGTCTGTGGAAGAGCTGCGGGAAGGTGCTGAGCACGGCGTCGGCGATGCAGAGACACATCCGCCTGGTGCAC
CTGGGGAGGCAGGCAGAGCCTGATCAGAGTGATGGTGAGGAGGACTTCTACTACACAGAGCTGGATGTTGGTGTG
GACACGCTGACCGACGGGCTGTCCAGCCTGACTCCAGTGTCCCCCACGGCCTCCATGCCGCCTGCCTTCCCCCGC
CTGGAGCTGCCAGAGCTGCTGGAGCCCCCAGCCCTGCCTAGTCCCCTGCGGCCGCCTGCCCCGCCCCTGCCCCCG
CCCCCTGTCCTGAGCACCGTTGCTAACCCCCAGTCCTGTCACAGTGACCGTGTCTACCAGGGCTGCCTGACGCCC
GCCCGCCTGGAGCCGCAGCCCACGGAGGTCGGAGCCTGCCCACCCGCCTTGTCCTCCAGGATCGGAGTCACCCTG
AGGAAGCCCCGCGGCGACGCGAAGAAGTGCCGGAAGGTGTATGGCATGGAGCGCCGGGACCTCTGGTGCACAGCC
TGCCGCTGGAAGAAAGCCTGCCAGCGGTTCCTGGACTAAGTCCGGCTCGTTCAAGAACATAAGCTACCACCTTCT
CCCTCCCCACCCCCTCCAGGCCCGGGGCTGAAACAGCCCGAGGACAGCCCCAGGGGCTGGCTTTCACCAGCTGCA
GGGTCTGCTTTTACTTGGGGTGGGGGGGCGGGGCTGACCCTGAACCCTCCCCCCCGCCAGGTCGGGGAGGGGTCC
CACCACTCAAAGTGCCTCTAAAGAAACCAGCTTTTTGCACTAAAGCCAAACCACACCGCTGTCCCCTTAGCCCCA
AGGGCCCTGGGGGCAGCCACCCTCCCGCCTGTCGGCCCGTAGATTTATCAAGGGTGTTATGGGCCCAGCTTTGGG
GGGCCAGTCCCGATGCACTTTGAGGGGTGTTGGAGAGGGGACTCCCCCACTCGCACTTAACTCAACGGCTCTCGG
GCCCTGGGGCTGTTTTTACCATGTTTGTTTTTGAAGCTCAGGTGTCTCACGTCTGGGCTGCACCAGGCGAAGAGA
GAAATTAAAGATTTGAGGTTTTTCCAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AA

FIGURE 3472

MERPPPRAAGRDPSALRAEAPWLRAEGPGPRAAPVTVPTPPQGSSVGGGFAGLEFARPQESEPRASDLGAPRTWT
GAAAGPRTPSAHIPVPAQRATPGKARLDEVMAAAALTSLSTKPSPSGAPVAAFSPEPGLEPWKEALVRPPGSYSS
SSNSGDWGWDLASDQSSPSTPSPPLPPEAAHFLFGEPTLRKRKSPAQVMFQCLWKSCGKVLSTASAMQRHIRLVH
LGRQAEPDQSDGEEDFYYTELDVGVDTLTDGLSSLTPVSPTASMPPAFPRLELPELLEPPALPSPLRPPAPPLPP
PPVLSTVANPQSCHSDRVYQGCLTPARLEPQPTEVGACPPALSSRIGVTLRKPRGDAKKCRKVYGMERRDLWCTA
CRWKKACQRFLD

FIGURE 3473

GCACGAGGGCGCTTTTGTCTCCGGTGAGTTTTGTGGCGGGAAGCTTCTGCGCTGGTGCTTAGTAACCGACTTTCC
TCCGGACTCCTGCACGACCTGCTCCTACAGCCGGCGATCCACTCCCGGCTGTTCCCCCGGAGGGTCCAGAGGCCT
TTCAGAAGGAGAAGGCAGCTCTGTTTCTCTGCAGAGGAGTAGGGTCCTTTCAGCCATGAAGCATGTGTTGAACCT
CTACCTGTTAGGTGTGGTACTGACCCTACTCTCCATCTTCGTTAGAGTGATGGAGTCCCTAGAAGGCTTACTAGA
GAGCCCATCGCCTGGGACCTCCTGGACCACCAGAAGCCAACTAGCCAACACAGAGCCCACCAAGGGCCTTCCAGA
CCATCCATCCAGAAGCATGTGATAAGACCTCCTTCCATACTGGCCATATTTTGGAACACTGACCTAGACATGTCC
AGATGGGAGTCCCATTCCTAGCAGACAAGCTGAGCACCGTTGTAACCAGAGAACTATTACTAGGCCTTGAAGAAC
CTGTCTAACTGGATGCTCATTGCCTGGGCAAGGCCTGTTTAGGCCGGTTGCGGTGGCTCATGCCTGTAATCCTAG
CACTTTGGGAGGCTGAGGTGGGTGGATCACCTGAGGTCAGGAGTTCGAGACCAGCCTCGCCAACATGGCGAAACC
CCATCTCTACTAAAAATACAAAAGTTAGCTGGGTGTGGTGGCAGAGGCCTGTAATCCCAGTTCCTTGGGAGGCTG
AGGCGGGAGAATTGCTTGAACCCGGGGACGGAGGTTGCAGTGAACCGAGATCGCACTGCTGTACCCAGCCTGGGC
CACAGTGCAAGACTCCATCTCAAAAAAAAAAAGAAAAGAAAAAGCCTGTTTAATGCACAGGTGTGAGTGGATTGC
TTATGGCTATGAGATAGGTTGATCTCGCCCTTACCCCGGGGTCTGGTGTATGCTGTGCTTTCCTCAGCAGTATGG
CTCTGACATCTCTTAGATGTCCCAACTTCAGCTGTTGGGAGATGGTGATATTTTCAACCCTACTTCCTAAACATC
TGTCTGGGGTTCCTTTAGTCTTGAATGTCTTATGCTCAATTATTTGGTGTTGAGCCTCTCTTCCACAAGAGCTCC
TCCATGTTTGGATAGCAGTTGAAGAGGTTGTGTGGGTGGGCTGTTGGGAGTGAGGATGGAGTGTTCAGTGCCCAT
TTCTCATTTTACATTTTAAAGTCGTTCCTCCAACATAGTGTGTATTGGTCTGAAGGGGGTGGTGGGATGCCAAAG
CCTGCTCAAGTTATGGACATTGTGGCCACCATGTGGCTTAAATGATTTTTTCTAACTAATAAAGTGGAATATATA
TTTCAAAAAAAAAAAAAAAAAA

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FIGURE 3474

MKHVLNLYLLGVVLTLLSIFVRVMESLEGLLESPSPGTSWTTRSQLANTEPTKGLPDHPSRSM

FIGURE 3475

AGAAGGGCAACCTCGTGCTTTCTGCAGAGGAGACCGGAGGGCAGAAGGCAGAGTCCAGGCTTAGACTGCAGTTCC
TCGCTTACCTGTGCAGTCTAATTTTGAGCTGCCTCTTTGTAGTCTTAAAAGGCAGGAGCTTCGTGTTGTGGGTCT
GCTAACCCGTACGTTTCCGTGGGCAAGTCGTGTGTACTCCTCGCC**ATG**GCTCAGCTCCAAACACGCTTCTACACT
GATAACAAGAAATATGCCGTAGATGATGTTCCCTTCTCAATCCCTGCTGCCTCTGAAATTGCCGACCTTAGTAAC
ATCATCAATAAACTACTAAAGGACAAAAATGAGTTCCACAAACATGTGGAGTTTGATTTCCTTATTAAGGGCCAG
TTTCTGCGAATGCCCTTGGACAAACACATGGAAGTGGAGAACATCTCATCAGAAGAAGTTGTGGAAATAGAATAC
GTGGAGAAGTGTACCGCACCCCAGCCAGAGCAATGCATGTTCCATGATGACTGGATCAGTTCAATTAAAGGGGCA
GAGGAATGGATCTTGACTGGTTCTTATGATAAGACTTCTCGGATCTGGTCCTTGGAAGGAAAGTCAATAATGACA
ATTGTGGGACATACGGATGTTGTAAAAGATGTGGCCTGGGTGAAAAAAGATAGTTTGTCCTGCTTATTATTGAGT
GCTTCTATGGATCAGACTATTCTCTTATGGGAGTGGAATGTAGAGAGAAACAAAGTGAAAGCCCTACACTGCTGT
AGAGGTCATGCTGGAAGTGTAGATTCTATAGCTGTTGATGGCTCAGGAACTAAATTTTGCAGTGGCTCCTGGGAT
AAGATGCTAAAGATCTGGTCTACAGTCCCTACAGATGAAGAAGATGAAATGGAGGAGTCCACAAATCGACCAAGA
AAGAAACAGAAGACAGAACAGTTGGGACTAACAAGGACTCCCATAGTGACCCTCTCTGGCCACATGGAGGCAGTT
TCCTCAGTTCTGTGGTCAGATGCTGAAGAAATCTGCAGTGCATCTTGGGACCATACAATTAGAGTGTGGGATGTT
GGGTCTGGCAGTCTTAAGTCAACTTTGACAGGAAATAAAGTGTTTAATTGTATTTCCTATTCTCCACTTTGTAAA
CGTTTAGCATCTGGAAGCACAGATAGGCATATCAGACTGTGGGATCCCCGAACTAAAGATGGTTCTTTGGTGTCG
CTGTCCCTAACGTCACATACTGGTTGGGTGACATCAGTAAAATGGTCTCCTACCCATGAACAGCAGCTGATTTCA
GGATCTTTAGATAACATTGTTAAGCTGTGGGATACAAGAAGTTGTAAGGCTCCTCTCTATGATCTGGCTGCTCAT
GAAGACAAAGTTCTGAGTGTAGACTGGACAGACACAGGGCTACTTCTGAGTGGAGGAGCAGACAATAAATTGTAT
TCCTACAGATATTCACCTACCACTTCCCATGTTGGGGCA**TGA**AAGTGAACAATAATTTGACTATAGAGATTATTT
CTGTAAATGAAATTGGTAGAGAACCATGAAATTACATAGATGCAGATGCAGAAAGCAGCCTTTTGAAGTTTATAT
AATGTTTTCACCCTTCATAACAGCTAACGTATCACTTTTTCTTATTTTGTATTTATAATAAGATAGGTTGTGTTT
ATGAAATACAAACTGTGGCATACATTCTCTATACAAACTTGAAATTAAACTGAGTTTTACATTTCTCTTT

FIGURE 3476

MAQLQTRFYTDNKKYAVDDVPFSIPAASEIADLSNIINKLLKDKNEFHKHVEFDFLIKGQFLRMPLDKHMEVENI
SSEEVVEIEYVEKCTAPQPEQCMFHDDWISSIKGAEEWILTGSYDKTSRIWSLEGKSIMTIVGHTDVVKDVAWVK
KDSLSCLLLSASMDQTILLWEWNVERNKVKALHCCRGHAGSVDSIAVDGSGTKFCSGSWDKMLKIWSTVPTDEED
EMEESTNRPRKKQKTEQLGLTRTPIVTLSGHMEAVSSVLWSDAEEICSASWDHTIRVWDVGSGSLKSTLTGNKVF
NCISYSPLCKRLASGSTDRHIRLWDPRTKDGSLVSLSLTSHTGWVTSVKWSPTHEQQLISGSLDNIVKLWDTRSC
KAPLYDLAAHEDKVLSVDWTDTGLLLSGGADNKLYSYRYSPTTSHVGA

FIGURE 3477

AGGCGCCACGTGGGATTCGGCCCGGGTGCTCTTGTGAGCTGCTGCTCCTGCGGTTGGTGAGATTACCTGGGTCTA
GAGTGCGGAGCTGCTCCGTGGCCACGAGGACGTCACCATGCCCAAAGCACCAAAGGGAAAAAGTGCAGGACGGGA
AAAAAAAGTCATCCATCCATATAGTAGAAAAGCAGCTCAAATTACGAGAGAGGCCCACAAACAAGAAAAAAAGGA
AAAATTGAAGAATGAAAAGGCCTTGCGTCTCAACCTTGTTGGTGAAAAACTGCAATGGTTTCAAAATCATCCTGA
TCCCCCAAAAAAGAGATATTCAAAGAAAGATGCTTGTGAACTAATTGAAAGGTACTTAAATCGATTCAGCAGTGA
GCTGGAGCAGATTGAGTTACATAACAGTATCAGGGACAGGCAGGGGAGGCGGCACTGTTCCCGGGAGACCGTCAT
CAAGCAGACGATGGAGCGGGAGCGACAGCAGTTTGAGGGATATGGCCTTGAGATTCCAGACATTCTAAATGCAAG
TAATCTGAAAACATTTAGGGAATGGGACTTTGATCTGAAGAAATTACCAAACATTAAAATGAGAAAAATTTGCGC
TAATGATGCAATTCCCAAGACGTGCAAGAGGAAAACTACTATAACTGTAGACCAAGATTTGGGGGAATTGGAACT
AAACGATGAATCAAGTGATTCAGATGAGGAAATGACTGCAGTGGCCTAATTGTCTTCACTTGAATTGAAAATAAA
TAATTTGAGAGCTTCAAATTATATTCATTGATTATGGTACCTAATTGTCAAGATACAAAAATTTGATACTGACAT
TCTCTTATATGATGAGAGTTTCATTTGCGTTTCAAAAATGGTGTTATGATACTTATTTTAAAATGAAGATTGCTT
TTCATTTCCATTAAGTTGCTAAAATAGATAGATGTGATCTGCAGAAGTTGTTTAGTCTTCATCTGAATTTCAGGC
TGGGAGGGAGCAATATAACTAAGGACAAAAAATGTTTTGTTTTTCTTGTGTATTTATGATCACCTAATTTCACGT
TTTGTGAAATGGACAGTAACCTGTTTCCTGAAAGATTCCTGTGGGTACTTTTTGAGCTGTGATAATAGCAAAATT
GTTTTTCGGTAATAATATCACACTAATGCTTCCTTTAAACATTAAACCTATTTTCCTTTTTTACAGAATAAGGGA
AAATGTGATAAGAAGTTTGTATACATTTCTGGATTATAGATTATTATTTATCTTTTGAACCAGAGCTAAATGGTA
AAAGAAAAAAAATCAGTGATGATTGTTATGTTGATCTCCCACAATTAATTTATCTTTTGACAAAGGGGATAAAGA
GTTTCAGTTTAGCTCCTTTTGATTGTATATTATTTTTTGCTTTTTTATTGTGAAAAGAGGTAGGTTTTATTTGTG
GAGAGAGAGTTGAAGATTAGGGAACCAGTGATTTTAATTATGCTACTTTTTCTTCTAAGAGATAAATTGATATAT
CATTCAGTGTCATGAAAAACATGAATGTTGTACAATTTTCTTCCTCAAAAAACTTTTTAAATGTAAGTATCCTTA
TTTTTTTTTTAAAAGAGCACAATGTAGGTGTATTTGAGTATTTTCAAGAAAAGAATAAAAACATTAATGCAGTAT
TAGGTTAACTGGATATCAGCTAAGCCTTGTTAACAGTTAAAGTATTATAACTTTTTTTACTTCTGAAAATTAAAA
ATAAAATTTATTTCTGCAATTTC

FIGURE 3478

MPKAPKGKSAGREKKVIHPYSRKAAQITREAHKQEKKEKLKNEKALRLNLVGEKLQWFQNHPDPPKKRYSKKDAC
ELIERYLNRFSSELEQIELHNSIRDRQGRRHCSRETVIKQTMERERQQFEGYGLEIPDILNASNLKTFREWDFDL
KKLPNIKMRKICANDAIPKTCKRKTTITVDQDLGELELNDESSDSDEEMTAVA

FIGURE 3479

TTTTTGTTCTGCAATAGGCGGCTTAGAGGGAGGGGCTTTTTCGCCTATACCTACTGTAGCTTCTCCACGTATGGA
CCCTAAAGGCTACTGCTGCTACTACGGGGCTAGACAGTTACTGTCTCAGCTCTAGGATGTGCGTTCTTCCACTAG
AAGCTCTTCTGAGGGAGGTAATTAAAAAACGGTGGAATGGAAAAACAGTGCTGTAGTCATCCTGTAATATGCTCC
TTGTCAACAATGTATACATTCCTGCTAGGTGCCATATTCATTGCTTTAAGCTCAAGTCGCATCTTACTAGTGAAG
TATTCTGCCAATGAAGAAAACAAGTATGATTATCTTCCAACTACTGTGAATGTGTGCTCAGAACTGGTGAAGCTA
GTTTTCTGTGTGCTTGTGTCATTCTGTGTTATAAAGAAAGATCATCAAAGTAGAAATTTGAAATATGCTTCCTGG
AAGGAATTCTCTGATTTCATGAAGTGGTCCATTCCTGCCTTTCTTTATTTCCTGGATAACTTGATTGTCTTCTAT
GTCCTGTCCTATCTTCAACCAGCCATGGCTGTTATCTTCTCAAATTTTAGCATTATAACAACAGCTCTTCTATTC
AGGATAGTGCTGAAGAGGCGTCTAAACTGGATCCAGTGGGCTTCCCTCCTGACTTTATTTTTGTCTATTGTGGCC
TTGACTGCCGGGACTAAAACTTTACAGCACAACTTGGCAGGACGTGGATTTCATCACGATGCCTTTTTCAGCCCT
TCCAATTCCTGCCTTCTTTTCAGAAGTGAGTGTCCCAGAAAAGACAATTGTACAGCAAAGGAATGGACTTTTCCT
GAAGCTAAATGGAACACCACAGCCAGAGTTTTCAGTCACATCCGTCTTGGCATGGGCCATGTTCTTATTATAGTC
CAGTGTTTTATTTCTTCAATGGCTAATATCTATAATGAAAAGATACTGAAGGAAGGGAACCAGCTCACTGAAAGC
ATCTTCATACAGAACAGCAAACTCTATTTCTTTGGCATTCTGTTTAATGGGCTGACTCTGGGCCTTCAGAGGAGT
AACCGTGATCAGATTAAGAACTGTGGATTTTTTTATGGCCACAGTGCATTCTCAGTAGCCCTTATTTTTGTAACT
GCATTCCAGGGCCTTTCAGTGGCTTTCATTCTGAAGTTCCTGGATAACATGTTCCATGTCTTGATGGCCCAGGTT
ACCACTGTCATTATCACAACAGTGTCTGTCCTGGTCTTTGACTTCAGGCCCTCCCTGGAATTTTTCTTGGAAGCC
CCATCAGTCCTTCTCTCTATATTTATTTATAATGCCAGCAAGCCTCAAGTTCCGGAATACGCACCTAGGCAAGAA
AGGATCCGAGATCTAAGTGGCAATCTTTGGGAGCGTTCCAGTGGGGATGGAGAAGAACTAGAAAGACTTACCAAA
CCCAAGAGTGATGAGTCAGATGAAGATACTTTCTAACTGGTACCCACATAGTTTGCAGCTCTCTTGAACCTTATT
TTCACATTTTCAGTGTTTGTAATATTTATCTTTTCACTTTGATAAACCAGAAATGTTTCTAAATCCTAATATTCT
TTGCATATATCTAGCTACTCCCTAAATGGTTCCATCCAAGGCTTAGAGTACCCAAAGGCTAAGAAATTCTAAAGA
ACTGATACAGGAGTAACAATATGAAGAATTCATTAATATCTCAGTACTTGATAAATCAGAAAGTTATATGTGCAG
ATTATTTTCCTTGGCCTTCAAGCTTCCAAAAAACTTGTAATAATCATGTTAGCTATAGCTTGTATATACACATAG
AGATCAATTTGCCAAATATTCACAATCATGTAGTTCTAGTTTACATGCCAAAGTCTTCCCTTTTTAACATTATAA
AAGCTAGGTTGTCTCTTGAATTTTGAGGCCCTAGAGATAGTCATTTTGCAAGTAAAGAGCAACGGGACCCTTTCT
AAAAACGTTGGTTGAAGGACCTAAATACCTGGCCATACCATAGATTTGGGATGATGTAGTCTGTGCTAAATATTT
TGCTGAAGAAGCAGTTTCTCAGACACAACATCTCAGAATTTTAATTTTTAGAAATTCATGGGAAATTGGATTTTT
GTAATAATCTTTTGATGTTTTAAACATTGGTTCCCTAGTCACCATAGTTACCACTTGTATTTTAAGTCATTTAAA
CAAGCCACGGTGGGGCTTTTTTCTCCTCAGTTTGAGGAGAAAAATCTTGATGTCATTACTCCTGAATTATTACAT
TTTGGAGAATAAGAGGGCATTTTATTTTATTAGTTACTAATTCAAGCTGTGACTATTGTATATCTTTCCAAGAGT
TGAAATGCTGGCTTCAGAATCATACCAGATTGTCAGTGAAGCTGATGCCTAGGAACTTTTAAAGGGATCCTTTCA
AAAGGATCACTTAGCAAACACATGTTGACTTTTAACTGATGTATGAATATTAATACTCTAAAAATAGAAAGACCA
GTAATATATAAGTCACTTTACAGTGCTACTTCACACTTAAAAGTGCATGGTATTTTTCATGGTATTTTGCATGCA
GCCAGTTAACTCTCGTAGATAGAGAAGTCAGGTGATAGATGATATTAAAAATTAGCAAACAAAAGTGACTTGCTC
AGGGTCATGCAGCTGGGTGATGATAGAAGAGTGGGCTTTAACTGGCAGGCCTGTATGTTTACAGACTACCATACT
GTAAATATGAGCTTTATGGTGTCATTCTCAGAAACTTATACATTTCCGCTCTCCTTTCTCCTAAGTTTCATGCAG
ATGAATATAAGGTAATATACTATTATATAATTCATTTGTGATATCCACAATAATATGACTGGCAAGAATTGGTGG
AAATTTGTAATTAAAATAATTATTAAACCT

FIGURE 3480

MEKQCCSHPVICSLSTMYTFLLGAIFIALSSSRILLVKYSANEENKYDYLPTTVNVCSELVKLVFCVLVSFCVIK
KDHQSRNLKYASWKEFSDFMKWSIPAFLYFLDNLIVFYVLSYLQPAMAVIFSNFSIITTALLFRIVLKRRLNWIQ
WASLLTLFLSIVALTAGTKTLQHNLAGRGFHHDAFFSPSNSCLLFRSECPRKDNCTAKEWTFPEAKWNTTARVFS
HIRLGMGHVLIIVQCFISSMANIYNEKILKEGNQLTESIFIQNSKLYFFGILFNGLTLGLQRSNRDQIKNCGFFY
GHSAFSVALIFVTAFQGLSVAFILKFLDNMFHVLMAQVTTVIITTVSVLVFDFRPSLEFFLEAPSVLLSIFIYNA
SKPQVPEYAPRQERIRDLSGNLWERSSGDGEELERLTKPKSDESDEDTF

FIGURE 3481

ATTCAAGGGAGGCAGGCGCTTTGGAAGTTTGTAAACACCAACTTTCTGAGTAAGGGAGGAGCACTTTTTTTCCAA
AAAGGAAAGAACGTCTCTACTGGGTTTTTTTCCTCCTGATATTCAGCATTAGAGTAGAAAAGAAACTATTGTTTG
GCCACATTAGCCGTGGTTAGCAGGTGCTGCAGCCTTTGCCACTGTTATTATTTTTAAAGGGCAGAA**ATG**CCTGAA
GGTGAAGACTTTGGACCAGGCAAAAGCTGGGAAGTTATCAATTCCAAACCAGATGAAAGACCCAGGCTCAGCCAC
TGTATTGCAGAATCATGGATGAATTTCAGCATATTTCTTCAAGAAATGTCTCTTTTTAAACAGCAGAGCCCTGGC
AAGTTTTGTCTCCTGGTCTGTAGTGTGTGCACATTTTTTACGATCTTGGGAAGTTACATTCCTGGGGTTATACTC
AGCTATCTACTGTTACTGTGTGCATTTTTGTGTCCATTGTTTAAATGTAATGATATTGGACAAAAAATTTACAGC
AAAATTAAGTCAGTTCTGCTGAAACTGGATTTTGGAATTGGAGAATATATTAATCAGAAGAAACGTGAGAGATCT
GAAGCAGACAAAGAAAAAAGTCACAAAGATGACAGTGAATTAGACTTTTCAGCTCTTTGTCCTAAGATTAGCCTC
ACGGTTGCTGCCAAAGAGTTATCTGTGTCTGACACAGACGTCTCAGAGGTATCCTGGACTGATAATGGGACCTTC
AACCTTTCAGAAGGATACACTCCACAGACAGACACTTCTGATGATCTTGACCGACCCAGTGAGGAAGTTTTCTCT
AGAGATCTTTCAGATTTTCCATCTCTAGAAAATGGCATGGGAACAAATGATGAAGATGAATTAAGCCTTGGTTTG
CCCACTGAGCTCAAGAGAAAGAAGGAACAGTTGGACAGTGGTCACAGACCAAGCAAAGAGACGCAATCAGCAGCT
GGTCTCACCCTTCCTCTGAACAGTGACCAAACCTTTCACCTGATGAGCAACCTGGCTGGGGATGTTATCACAGCT
GCAGTGACTGCAGCTATCAAAGACCAGTTAGAGGGTGTGCAGCAAGCACTTTCTCAGGCTGCCCCCATCCCAGAA
GAGGACACAGACACTGAAGAAGGTGATGACTTTGAACTACTTGACCAGTCAGAGCTGGATCAAATTGAGAGTGAA
TTGGGACTTACACAAGACCAGGAAGCAGAAGCACAGCAAAATAAGAAGTCTTCAGGTTTCCTTTCAAATCTGCTG
GGAGGCCAT**TAA**TCTAGGAATCAGCTTGCAACAGAGCACAAAAAACACCAAAAAAATTTCAAACAAGAAAAAAAA
AAAAAAAAAGGAAAAGAAAAAAATTGAACTGTAAGCTTTAATGATTACTTTAGATTTGTTTTATTTTCCCTCCTG
CAGTGAATTAATTGGATATATATCAGCTGACACTGATAGATTGATATTTCTGATCGTTATTTTTGTGTCATAAGC
ATGGAAATGAACTTTATACACACCACTGTGTTGTCAGAGATAAATATTAGGGGTTGTTTTTAAAGCAAAAAGAAA
AAAACAAAAACCAAACTATTAAAATCCTCCTATAAATATTCTTTTTCTTTACAGTTTTTCAAGCATGCAAAACAG
TTTATTGTAACTTACTGAAAAATATTAACAATTAATTGTGAATACATGCTGTTACCAGCTTCCTTATTCCTAATA
CCTGGAAAATTTTTTTTTCAACGGATAGATTTTGATGTAAAAAAGACCGAAATTATCAAGGTATCTTAGTTGAAG
GACTTGGGAAATACTATCAAAATTAATTTCTTAGGAAAAAATTTAAAAGTATATTTAAGTACTCTGGATAGACTG
AAACGTTTCCATGTTATTTCTGCAGTTGTAGACTTAGGCTTATTTGTAAAGAAGCATGCTCCATTGACTGCCATC
TCTAGTCTTGCAGTGGGTGGTATTAACCCATAGAAAGCAAGCAGTTGTGTATCACATAGACAATGGTTATGATGT
AAACAGATTCAGTTGTTTTGTTGTTCATTCGTCATATGTTTGTGATAGGGATGTTGGGAGCACAGCTCTATTCTG
CCTGCTCAGACTTAAGTTAGACCCTTATCTTTTATATTATGTCATGAAAAAAGTCTCCTAAAATTGTGAAACTAG
TTCTTGATGAGTGATGTGATCATCAGCAATAAAGATATAATAACTCTGTTTTCTTAGCCTGTATAGAGGAGAGGA
ACTTGCTTGGCTTTAAAATATATTTATTTGCCATTTAAGTATAAATATGGAATCTGTTTCTTATTGGGAAGATAG
AATATATATATTTTCCTTTAAACTTTTTAAGGTCACTTTTAAATAACCAAATTTGATTTATGGTTTTTAACAAAG
GACTAAAGAGCTGAAACCAACCTAGTTTTGTTTTTGTGATATAAACTTTAAGTGTCGAGGGACCATGCCAGCAAC
TACCAAAAATCTCTTAAATCTTCAGGTACAGCTGGCATTTTGGCAGATGCATAGAGACATCTGAGACCCTCAGAA
AGGAAGGATAATCCAAGAATATAGGAAATCTGTGTTCTCTTCCTTTCATTTTATCCCTTATATTTCTAAAGACTA
ATTATAAGTAATCTGACATTTTAATGTAGCTACTCTTATTTATTTTTTCTTTCTGAGGTATTAAAATATCTGGAC
TGAGTTTTGCCAAATGTTAAAGGGAGAAGAGTTACTGAAGACTTTGAACACTTGCTTTTTGTGATTGCTTATGTC
ATTAGTGCCTCATGACTGTGTTTGATGTCCTTTATTGATACAAAGTGAGCCTGTGCCTTCATTATCTTGCCCATT
TTAATACAAATGGAAACCTGGTGTTTGAAAATCTCTGAACTGTGTGGGTTTTGGAGGAATATACCTGAATTTTAT
TCAATAACAGTTTCTGGACAGGAAGAAAAATACAGTTACATATTTATAAAAAAAAAAAAAAAAA

FIGURE 3482

MPEGEDFGPGKSWEVINSKPDERPRLSHCIAESWMNFSIFLQEMSLFKQQSPGKFCLLVCSVCTFFTILGSYIPG
VILSYLLLLCAFLCPLFKCNDIGQKIYSKIKSVLLKLDFGIGEYINQKKRERSEADKEKSHKDDSELDFSALCPK
ISLTVAAKELSVSDTDVSEVSWTDNGTFNLSEGYTPQTDTSDDLDRPSEEVFSRDLSDFPSLENGMGTNDEDELS
LGLPTELKRKKEQLDSGHRPSKETQSAAGLTLPLNSDQTFHLMSNLAGDVITAAVTAAIKDQLEGVQQALSQAAP
IPEEDTDTEEGDDFELLDQSELDQIESELGLTQDQEAEAQQNKKSSGFLSNLLGGH

FIGURE 3483

GCTTTGCGGCTGTCGTCGGAGAGGCATCTGGGTTCGGACTGGGGCCGCCATGGGGAAAGTGAATGTGGCCAAGTT
GCGTTACATGAGCCGAGATGACTTCAGGGTCTTGACCGCGGTTGAAATGGGCATGAAGAACCATGAAATTGTTCC
CGGCAGTTTGATTGCTTCTATAGCCAGCCTTAAACATGGTGGCTGTAATAAAGTTTTAAGAGAATTAGTGAAACA
TAAACTCATAGCTTGGGAGCGTACCAAAACTGTCCAGGGCTATCGGTTGACAAATGCAGGATATGATTACCTAGC
TTTGAAAACACTTTCTTCTAGGCAAGTAGTTGAGTCTGTTGGAAACCAGATGGGTGTTGGCAAAGAATCAGATAT
TTACATTGTTGCAAATGAAGAAGGACAACAATTTGCATTAAAGCTTCACAGACTAGGAAGAACCTCGTTTCGAAA
TTTGAAAAACAAACGCGATTATCATAAACATAGGCACAATGTGTCTTGGCTTTATTTATCTCGTCTCTCTGCCAT
GAAGGAATTTGCCTATATGAAGGCATTGTATGAGAGGAAATTTCCAGTTCCAAAGCCAATTGATTACAATCGTCA
TGCAGTGGTCATGGAACTCATAAATGGTTATCCACTATGTCAGATACACCATGTTGAAGATCCTGCATCAGTATA
TGATGAAGCTATGGAACTAATTGTCAAACTTGCAAATCATGGGCTGATTCATGGAGATTTTAATGAATTTAATCT
CATTTTGGATGAAAGTGACCATATCACCATGATTGATTTTCCACAGATGGTTTCAACTTCTCATCCCAATGCTGA
GTGGTATTTTGACAGAGATGTTAAATGCATTAAAGATTTCTTTATGAAACGTTTCAGCTACGAAAGTGAGCTTTT
TCCAACTTTTAAGGATATCAGGAGAGAAGACACTCTTGATGTGGAGGTTTCTGCCAGTGGCTACACAAAGGAAAT
GCAGGCAGATGATGAACTGCTTCATCCATTAGGTCCAGATGATAAAAATATTGAAACAAAAGAGGGATCTGAATT
CTCATTTTCAGATGGAGAAGTGGCAGAAAAAGCAGAGGTTTACAGGTCAGAAAATGAAAGTGAACGGAACTGTCT
AGAAGAATCAGAGGGCTGCTATTGCAGATCATCTGGAGACCCTGAACAAATAAAGGAAGACAGTTTATCAGAAGA
GAGTGCTGATGCACGGAGTTTTGAAATGACTGAATTCAATCAAGCTTTAGAAGAAATAAAAGGGCAGGTTGTTGA
AAACAACTCTGTAACTGAATTTTCTGAGGAGAAAAACAGAACTGAAAATTACAACAGGCAAGATGGTCAGAGAGT
TCAAGGAGGAGTCCCTGCTGGCTCTGACGAGTATGAAGATGAATGCCCTCATCTAATTGCCTTGTCGTCATTAAA
TAGAGAATTCAGGCCTTTCAGAGATGAAGAAAATGTGGGAGCTATGAATCAGTATAGAACAAGAACTCTGAGTAT
CACTTCTTCAGGCAGTGCTGTAAGCTGTTCAACAATTCCTCCAGAACTGGTGAAACAGAAGGTGAAACGTCAGTT
GACAAAACAGCAAAAATCAGCTGTCAGACGTCGATTGCAGAAAGGAGAAGCAAATATATTTACCAAGCAACGTAG
GGAAAACATGCAAAATATCAAATCAAGTTTGGAAGCAGCTAGCTTTTGGGGAGAATAATATATTTAGGATCTTGG
ATATGTTTAATATATTTTTTAAAGTTACTGTAATTCCTTTTTGAGCCCTCATTTGTCTTTTTTGAGCCAAGGCTA
TCATATATTAATAAATAAACCCTCTTTCATCT

FIGURE 3484

MGKVNVAKLRYMSRDDFRVLTAVEMGMKNHEIVPGSLIASIASLKHGGCNKVLRELVKHKLIAWERTKTVQGYRL
TNAGYDYLALKTLSSRQVVESVGNQMGVGKESDIYIVANEEGQQFALKLHRLGRTSFRNLKNKRDYHKHRHNVSW
LYLSRLSAMKEFAYMKALYERKFPVPKPIDYNRHAVVMELINGYPLCQIHHVEDPASVYDEAMELIVKLANHGLI
HGDFNEFNLILDESDHITMIDFPQMVSTSHPNAEWYFDRDVKCIKDFFMKRFSYESELFPTFKDIRREDTLDVEV
SASGYTKEMQADDELLHPLGPDDKNIETKEGSEFSFSDGEVAEKAEVYRSENESERNCLEESEGCYCRSSGDPEQ
IKEDSLSEESADARSFEMTEFNQALEEIKGQVVENNSVTEFSEEKNRTENYNRQDGQRVQGGVPAGSDEYEDECP
HLIALSSLNREFRPFRDEENVGAMNQYRTRTLSITSSGSAVSCSTIPPELVKQKVKRQLTKQQKSAVRRRLQKGE
ANIFTKQRRENMQNIKSSLEAASFWGE

FIGURE 3485

GGCACGAGGGGCCGACGCGAGCGCCGCGCTTCGCTTCAGCTGCTAGCTGGCCCAAGGGAGGCGACCGCGGAGGGT
GGCGAGGGGCGGCCAGGACCCGCAGCCCCGGGGCCGGGCCGGTCCGGACCGCCAGGGAGGGCAGGTCAGTGGGCA
GATCGCGTCCGCGGGATTCAATCTCTGCCCGCTCTGATAACAGTCCTTTTCCCTGGCGCTCACTTCGTGCCTGGC
ACCCGGCTGGGCGCCTCAAGACCGTTGTCTCTTCGATCGCTTCTTTGGACTTGGCGACCATTTCAGAGATGTCTT
CCAGAAGTACCAAAGATTTAATTAAAAGTAAGTGGGGATCGAAGCCTAGTAACTCCAAATCCGAAACTACATTAG
AAAAATTAAAGGGAGAAATTGCACACTTAAAGACATCAGTGGATGAAATCACAAGTGGGAAAGGAAAGCTGACTG
ATAAAGAGAGACACAGACTTTTGGAGAAAATTCGAGTCCTTGAGGCTGAGAAGGAGAAGAATGCTTATCAACTCA
CAGAGAAGGACAAAGAAATACAGCGACTGAGAGACCAACTGAAGGCCAGATATAGTACTACCGCATTGCTTGAAC
AGCTGGAAGAGACAACGAGAGAAGGAGAAAGGAGGGAGCAGGTGTTGAAAGCCTTATCTGAAGAGAAAGACGTAT
TGAAACAACAGTTGTCTGCTGCAACCTCACGAATTGCTGAACTTGAAAGCAAAACCAATACACTCCGTTTATCAC
AGACTGTGGCTCCAAACTGCTTCAACTCATCAATAAATAATATTCATGAAATGGAAATACAGCTGAAAGATGCTC
TGGAGAAAAATCAGCAGTGGCTCGTGTATGATCAGCAGCGGGAAGTCTATGTAAAAGGACTTTTAGCAAAGATCT
TTGAGTTGGAAAAGAAAACGGAAACAGCTGCTCATTCACTCCCACAGCAGACAAAAAAGCCTGAATCAGAAGGTT
ATCTTCAAGAAGAGAAGCAGAAATGTTACAACGATCTCTTGGCAAGTGCAAAAAAAGATCTTGAGGTTGAACGAC
AAACCATAACTCAGCTGAGTTTTGAACTGAGTGAATTTCGAAGAAAATATGAAGAAACCCAAAAAGAAGTTCACA
ATTTAAATCAGCTGTTGTATTCACAAAGAAGGGCAGATGTGCAACATCTGGAAGATGATAGGCATAAAACAGAGA
AGATACAAAAACTCAGGGAAGAGAATGATATTGCTAGGGGAAAACTTGAAGAAGAGAAGAAGAGATCCGAAGAGC
TCTTATCTCAGGTCCAGTTTCTTTACACATCTCTGCTAAAGCAGCAAGAAGAACAAACAAGGGTAGCTCTGTTGG
AACAACAGATGCAGGCATGTACTTTAGACTTTGAAAATGAAAAACTCGACCGTCAACATGTGCAGCATCAATTGC
TTGTAATTCTTAAGGAGCTCCGAAAAGCAAGAAATCAAATAACACAGTTGGAATCCTTGAAACAGCTTCATGAGT
TTGCCATCACAGAGCCATTAGTCACTTTCCAAGGAGAGACTGAAAACAGAGAAAAAGTTGCCGCCTCACCAAAAA
GTCCCACTGCTGCACTCAATGAAAGCCTGGTGGAATGTCCCAAGTGCAATATACAGTATCCAGCCACTGAGCATC
GCGATCTGCTTGTCCATGTGGAATACTGTTCAAAGTAGCAAAATAAGTATTTGTTTTGATATTAAAAGATTCAAT
ACTGTATTTTCTGTTAGCTTGTGGGCATTTTGAATTATATATTTCACATTTTGCATAAAACTGCCTATCTACCTT
TGACACTCCAGCATGCTAGTGAATCATGTATCTTTTAGGCTGCTGTGCATTTCTCTTGGCAGTGATACCTCCCTG
ACATGGTTCATCATCAGGCTGCAATGACAGAATGTGGTGAGCAGCGTCTACTGAGACTACTAACATTTTGCACTG
TCAAAATACTTGGTGAGGAAAAGATAGCTCAGGTTATTGCTAATGGGTTAATGCACCAGCAAGCAAAATATTTTA
TGTTTTGGGGGTTTGAAAAATCAAAGATAATTAACCAAGGATCTTAACTGTGTTCGCATTTTTTATCCAAGCACT
TAGAAAACCTACAATCCTAATTTTGATGTCCATTGTTAAGAGGTGGTGATAGATACTATTTTTTTTTTCATATTG
TATAGCGGTTATTAGAAAAGTTGGGGATTTTCTTGATCTTTATTGCTGCTTACCATTGAAACTTAACCCAGCTGT
GTTCCCCAACTCTGTTCTGCGCACGAAACAGTATCTGTTTGAGGCATAATCTTAAGTGGCCACACACAATGTTTT
CTCTTATGTTATCTGGCAGTAACTGTAACTTGAATTACATTAGCACATTCTGCTTAGCTAAAATTGTTAAAATAA
ACTTTAATAAACCCATGTAGCCCTCTCATTTGATTGACAGTATTTTAGTTATTTTTGGCATTCTTAAAGCTGGGC
AATGTAATGATCAGATCTTTGTTTGTCTGAACAGGTATTTTTATACATGCTTTTTGTAAACCAAAAACTTTTAAA
TTTCTTCAGGTTTTCTAACATGCTTACCACTGGGCTACTGTAAATGAGAAAAGAATAAAATTATTTAATGTTTTA
AAAAAAAAAAAAAAAAAAA

FIGURE 3486

MSSRSTKDLIKSKWGSKPSNSKSETTLEKLKGEIAHLKTSVDEITSGKGKLTDKERHRLLEKIRVLEAEKEKNAY
QLTEKDKEIQRLRDQLKARYSTTALLEQLEETTREGERREQVLKALSEEKDVLKQQLSAATSRIAELESKTNTLR
LSQTVAPNCFNSSINNIHEMEIQLKDALEKNQQWLVYDQQREVYVKGLLAKIFELEKKTETAAHSLPQQTKKPES
EGYLQEEKQKCYNDLLASAKKDLEVERQTITQLSFELSEFRRKYEETQKEVHNLNQLLYSQRRADVQHLEDDRHK
TEKIQKLREENDIARGKLEEEKKRSEELLSQVQFLYTSLLKQQEEQTRVALLEQQMQACTLDFENEKLDRQHVQH
QLLVILKELRKARNQITQLESLKQLHEFAITEPLVTFQGETENREKVAASPKSPTAALNESLVECPKCNIQYPAT
EHRDLLVHVEYCSK

FIGURE 3487

GTGAGCCGTCTACGAAGCCCGGGCTTGGCCTGGGCGACACTGAGCGGCTTTAACCGGCGGCGTCCAGCCGGCTCC
GCCAGCGCTGCCGCCGCCCTCGAGGCTCCCTCTGACTGAAGGCGCGCTGAGCATCGCGGCATTAGGGGCTCCTGG
TCCCTCAAACATCCAGGGAAGCCATTTTCAGGGACTAGGTACTGACCCCCGCGAGCCGCCACAGCCACAGCCCGC
GCTCCGGGCCGAACGCCCGAGCTCAAGAGCTCCCGAGCTTCCGTCGGGCGGCGGCCTCACAGCTGGGGGCCCTGA
GGCGGAAGGCGCAGCCGCTCAGCTGCGGACCGGGGGCGTGGCGAGGGCGCACAGGTTCTGTTTTTCGCCGGCCCG
GGGCCGCTTTCGGTTTCGTTTCCCGCCGGCGTCTCCACCCTGCGAGAGCCGCCCGCCAGCCAGCGTCCGCCGCCG
TCCGCGTCGCGCCACCCGCGGTCCGACGGGAGCAGGCCCAGCGGCC**ATG**GCCCAGGCCGGCGTCGTCGGTGAGGT
CACCCAGGTGCTGTGCGCGGCCGGGGGCGCCCTGGAGTTGCCCGAGCTGCGGCGCCGCTTGCGGATGGGCTTGAG
CGCCGACGCGCTGGAGCGGCTGCTGCGGCAGCGTGGGCGCTTCGTGGTGGCGGTGCGGGCGGGCGGCGCAGCCGC
GGCCCCGGAGCGCGTGGTGCTGGCCGCCTCGCCGCTGCGCCTGTGTCGCGCGCACCAGGGCTCCAAGCCGGGCTG
CGTGGGGCTCTGCGCGCAGCTCCACCTCTGCAGGTTCATGGTCTACGGCGCCTGCAAGTTCCTGAGAGCCGGGAA
GAACTGTAGGAATAGTCACAGCTTGACAACCGAACACAACCTGAGTGTGCTGAGAACTCATGGCGTTGACCACCT
GAGCTATAATGAGCTATGCCAACTCTTGTTTCAGAACGACCCCTGGCTTTTGCCAGAAATTTGCCAACATTACAA
CAAAGGAGATGGACCCCACGGCTCTTGTGCCTTTCAAAAGCAGTGCATCAAGCTCCATATCTGCCAGTATTTTTT
ACAGGGGGAATGCAAGTTTGGCACTAGCTGTAAGAGATCCCATGATTTCTCTAATTCTGAGAATCTGGAAAAATT
GGAGAAGTTGGGTATGAGCTCAGACCTGGTGAGCAGGCTGCCTACCATTTATAGAAATGCACATGACATCAAGAA
TAAGAGCTCTGCCCCCAGCAGAGTGCCTCCTCTTTTTGTCCCACAGGGGACTTCTGAAAGAAAAGACAGTTCAGG
TTCTGTGTCCCCAAACACTCTTAGCCAGGAGGAGGGTGATCAGATCTGTTTGTACCATATCCGGAAAAGTTGTAG
CTTTCAAGATAAGTGCCATAGAGTTCATTTCCATTTGCCGTATCGATGGCAATTCTTGGATAGAGGCAAATGGGA
GGATTTGGACAACATGGAACTTATTGAAGAGGCATATTGCAATCCCAAAATAGAAAGGATCCTGTGCTCTGAGTC
AGCCAGTACCTTTCACTCTCATTGTCTGAACTTTAACGCCATGACTTACGGTGCTACCCAGGCTCGCCGCCTCTC
CACGGCCTCCTCTGTCACCAAACCTCCACACTTCATCCTCACCACTGACTGGATTTGGTACTGGAGTGATGAGTT
TGGTTCTTGGCAGGAATATGGAAGACAGGGCACGGTGCACCCTGTGACCACTGTCAGCAGTAGCGACGTGGAGAA
GGCCTACCTGGCCTACTGTACACCGGGGTCTGACGGCCAGGCAGCCACCTTGAAGTTCCAGGCCGGAAAGCACAA
CTACGAGTTAGATTTCAAAGCCTTCGTTCAGAAAAACCTGGTCTATGGCACAACTAAAAAGGTTTGCCGCAGACC
CAAATACGTGTCTCCCCAGGATGTGACGACCATGCAAACCTGCAATACCAAGTTTCCAGGCCCGAAGAGCATCCC
AGACTATTGGGACTCCTCTGCCCTGCCAGACCCAGGCTTTCAGAAGATCACCCTTAGTTCTTCCTCGGAAGAGTA
TCAGAAGGTCTGGAACCTCTTTAACCGCACGCTGCCTTTTTACTTTGTTCAGAAGATTGAGCGAGTACAGAACCT
GGCCCTCTGGGAAGTCTACCAGTGGCAAAAAGGACAGATGCAGAAGCAGAACGGAGGGAAGGCCGTGGACGAGCG
GCAGCTGTTCCACGGCACCAGCGCCATTTTTGTGGACGCCATCTGCCAGCAGAACTTTGACTGGCGGGTCTGTGG
TGTTCATGGCACTTCCTACGGCAAGGGGAGCTACTTTGCCCGAGATGCTGCATATTCCCACCACTACAGCAAATC
CGACACGCAGACCCACACGATGTTCCTGGCCCGGGTGCTGGTGGGCGAGTTCGTCAGGGGCAATGCCTCCTTTGT
CCGTCCACCGGCCAAGGAGGGCTGGAGCAACGCCTTCTATGATAGCTGCGTGAACAGTGTGTCCGACCCCTCCAT
CTTTGTGATCTTTGAGAAACACCAGGTCTACCCAGAGTATGTCATCCAGTACACCACCTCCTCCAAGCCCTCGGT
CACACCCTCCATCCTGCTGGCCTTGGGCTCCCTGTTCAGCAGCCGACAG**TGA**GTGCACAGGAGTGTTCCAGGCCT
TTCACCTGCTCTGCCTTGAAATGGCTATTTGGGCCTTTCCTTTTCTTTTTAAACAGAAACTTTTAATGAACTGTT
CTCTTAACATTGACCTCTCAATGAAGTTATGTTCTTAATCTCTTGCTAATAATGATTTTTACTTTTAAGTCACTT
TTGGGTTCACTAGTGGACTAACCAGAAGTGATTGTAGTTGAGTCCAGTTTTGCTTTTTAATAATGTGTTGAAGTT
TTAGTTTTTACTCTTTGTTGACTTTGCTGCTTATTGGCACCAGGGACAGAGTTTCTAGATACAATTTTATGGATT
GGTTTTAATTTTTATGAGTTTGTCTCTGCAGTGATTCGGTTTCTCAGAGTCTCATGGCATCATAGTTTTTCCAGA
ATGACACAGTAGCCACCGGTGGATGACAGCCCACGGGCGGCACAGTCACTTCTGCCTGTTGCTCTGACACCAACC
CAGGCAGCTCTGCTGTGGCTTCTCCTGGGCTCTGGCATTAGTTGGTCTGTGTCACATTGTCAGAACAGGTGGCTG
CTGTGTGGTGCCATCGAGTCCCTGCTGGTTCCCCTTGTCCTGGGAGGGTCACCCATTGCCCAAGGAAGTGCATCC
ACCTGGCAGGTGACCTGGAGGAGTAGCTTCCCCGAGGACCCCCAGGCTTGGCCTGTGATTGCGCAAACCCACATT
TCCTAAGCACACTGGACACCCTTCGAGTGTGGGTTTTAACATCCCTGTGAGATTGAATACTTGTGCCACACATGT
CACAAAAGAGTATGGAAATAAAAGAAAATTTATCCGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAA

FIGURE 3488

MAQAGVVGEVTQVLCAAGGALELPELRRRLRMGLSADALERLLRQRGRFVVAVRAGGAAAAPERVVLAASPLRLC
RAHQGSKPGCVGLCAQLHLCRFMVYGACKFLRAGKNCRNSHSLTTEHNLSVLRTHGVDHLSYNELCQLLFQNDPW
LLPEICQHYNKGDGPHGSCAFQKQCIKLHICQYFLQGECKFGTSCKRSHDFSNSENLEKLEKLGMSSDLVSRLPT
IYRNAHDIKNKSSAPSRVPPLFVPQGTSERKDSSGSVSPNTLSQEEGDQICLYHIRKSCSFQDKCHRVHFHLPYR
WQFLDRGKWEDLDNMELIEEAYCNPKIERILCSESASTFHSHCLNFNAMTYGATQARRLSTASSVTKPPHFILTT
DWIWYWSDEFGSWQEYGRQGTVHPVTTVSSSDVEKAYLAYCTPGSDGQAATLKFQAGKHNYELDFKAFVQKNLVY
GTTKKVCRRPKYVSPQDVTTMQTCNTKFPGPKSIPDYWDSSALPDPGFQKITLSSSSEEYQKVWNLFNRTLPFYF
VQKIERVQNLALWEVYQWQKGQMQKQNGGKAVDERQLFHGTSAIFVDAICQQNFDWRVCGVHGTSYGKGSYFARD
AAYSHHYSKSDTQTHTMFLARVLVGEFVRGNASFVRPPAKEGWSNAFYDSCVNSVSDPSIFVIFEKHQVYPEYVI
QYTTSSKPSVTPSILLALGSLFSSRQ

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FIGURE 3489

GAATCTCCTTTAGCCCCGCCCGCCTCCGTAGCTGCCTGAAGTAGTGCAGGGTCAGCCCGCAAGTTGCAGGTCATG

GCGCTGGCTGCTCGACTGTGGCGCCTTCTGCCTTTCCGACGTGGAGCCGCCCCGGGGTCTCGTCTCCCTGCGGGA
CCTTCGGGCAGCCGCGGCATTGCGGCCCCTGCTCGATTCCGCGGCTTCGAGGTAATGGGAAACCCAGGAACTTTC
AACAGAGGCCTTTTACTCTCAGCTTTGTCGTATTTGGGTTTTGAAACTTACCAGGTTATCTCTCAGGCTGCTGTG
GTTCATGCCACAGCCAAAGTTGAAGAAATACTTGAACAAGCAGACTACCTGTATGAAAGCGGAGAAACAGAAAAA
CTTTATCAGTTGCTAACCCAATACAAGGAAAGTGAAGATGCAGAGTTACTGTGGCGTTTGGCACGGGCATCACGT
GATGTAGCTCAGCTTAGCAGAACCTCAGAAGAGGAGAAAAAGCTATTGGTGTATGAAGCCCTAGAGTATGCAAAA
AGAGCACTAGAAAAAAATGAATCAAGTTTTGCATCTCATAAGTGGTATGCAATCTGCCTTAGTGATGTTGGAGAT
TATGAAGGCATCAAGGCTAAAATTGCAAATGCATATATCATCAAGGAGCATTTTGAGAAAGCAATTGAACTGAAC
CCTAAAGATGCTACTTCAATTCACCTTATGGGTATTTGGTGCTATACATTTGCCGAAATGCCTTGGTATCAAAGA
AGAATTGCTAAAATGCTGTTTGCAACTCCTCCTAGTTCCACCTATGAGAAGGCCTTAGGCTACTTTCACAGGGCA
GAACAAGTGGATCCAAACTTCTACAGCAAAAACTTACTTCTTTTAGGAAAGACATACTTGAAACTACACAACAAA
AAGCTTGCTGCTTTCTGGCTAATGAAAGCCAAGGACTATCCAGCACACACAGAGGAGGATAAACAGATACAGACA
GAAGCTGCTCAGTTGCTTACAAGTTTCAGTGAGAAGAATTGAGAACTTTTCAGAGAAGATTTATGAAATAGCTAA
TAAACATTGCCTTTTCTTTTAATTCTAAACTTAATATATGAACTATAACTGTTCTACGGCTTTTTAAATGTTGTG
ACCATTTAACCGTGTAAATATAAAATATTCTAGGCTTCTTCACAAATAATAGGGTAAAATAAATAATCGCCATAA
GAGTGGTAGAAATAAA

FIGURE 3490

MALAARLWRLLPFRRGAAPGSRLPAGPSGSRGIAAPARFRGFEVMGNPGTFNRGLLLSALSYLGFETYQVISQAA
VVHATAKVEEILEQADYLYESGETEKLYQLLTQYKESEDAELLWRLARASRDVAQLSRTSEEEKKLLVYEALEYA
KRALEKNESSFASHKWYAICLSDVGDYEGIKAKIANAYIIKEHFEKAIELNPKDATSIHLMGIWCYTFAEMPWYQ
RRIAKMLFATPPSSTYEKALGYFHRAEQVDPNFYSKNLLLLGKTYLKLHNKKLAAFWLMKAKDYPAHTEEDKQIQ
TEAAQLLTSFSEKN

FIGURE 3491

AGCCGAGACGGTGCAGGGCCGGAGAAGCACCTTCACTCCCAGCCTGCGCCCCGATGCTGCGCGTTCTGTGCCTCC
TGCGCCCCTGGAGGCCCCTTCGGGCCCGCGGCTGCGCTTCCGACGGGGCGGCCGGGGGCTCAGAGATCCAAGTGC
GCGCCCTGGCGGGTCCGGACCAAGGGATCACTGAGATTCTGATGAACAGACCTTCTGCCCGCAATGCCTTGGGGA
ATGTCTTCGTCAGTGAGCTGCTGGAAACTCTGGCCCAGCTGCGGGAGGACCGGCAAGTGCGTGTCCTGCTCTTCA
GAAGTGGAGTGAAGGGCGCGTTCTGTGCAGGTGCAGACCTGAAGGAGCGGGAACAGATGAGTGAAGCAGAGGTGG
GGGTGTTTGTCCAGCGACTCCGGGGCCTGATGAATGACATCGCTTCCTCGGCAGTCATGGGACTGATTGAGACCA
CGCGAGGGCTCCTCCCGGGGGCAGGAGGGACTCAGAGGCTGCCCCGTTGTCTGGGGGTGGCCCTGGCGAAGGAGC
TCATCTTCACGGGCCGACGACTGAGTGGAACTGAGGCCCACGTACTGGGGCTGGTGAATCACGCTGTGGCCCAGA
ACGAGGAGGGGGACGCCGCCTACCAGCGGGCACGAGCACTGGCCCAGGAGATCCTGCCCCAGGCCCCCATTGCCG
TGCGGCTGGGCAAAGTAGCCATTAACCGAGGAACGGAGGTGGACATTGCATCTGGGATGGCCATTGAAGGGATGT
GCTATGCCCAGAATATTCCAACCCGGGACCGGCTAGAGGGCATGGCAGCCTTCAGGGAGAAGCGGACTCCCAAAT
TTGTTGGCAAATGACCCCCATTTTAACCTTCAGCATGGGAGATGCATGCCCTGAAGAGCAGGATCCAGAAGGAAG
ATTTGTGGCCAGATTGCCTTCATCATTTCACCTCTCCAGACTTCCATTTCTTCACAAGGATGATGATGGAAATAA
AATGACTGGCGTGATGCCTGGAACCAAGGTGCTGATCCTACCACCTACTGCTACCTTCCTTAGCTTCACCCTGGC
TAGAAATAATCACGAGGGTTGGGTTTGCTTTGGAAAATGCCTGTCTCTCTACTTGAATGATAAAGAATTAAATTA
G

FIGURE 3492

MLRVLCLLRPWRPLRARGCASDGAAGGSEIQVRALAGPDQGITEILMNRPSARNALGNVFVSELLETLAQLREDR
QVRVLLFRSGVKGAFCAGADLKEREQMSEAEVGVFVQRLRGLMNDIASSAVMGLIETTRGLLPGAGGTQRLPRCL
GVALAKELIFTGRRLSGTEAHVLGLVNHAVAQNEEGDAAYQRARALAQEILPQAPIAVRLGKVAINRGTEVDIAS
GMAIEGMCYAQNIPTRDRLEGMAAFREKRTPKFVGK

FIGURE 3493

GGGATAGCCGGACGGGGATCTGAGCTGGCAGGATGAATGTGGGGGTGGCACACAGCGAAGTAAACCCCAACACCC
GAGTGATGAATAGCCGAGGCATCTGGCTGGCCTACATCATCTTGGTAGGATTGCTGCATATGGTTCTACTCAGCA
TCCCCTTCTTCAGCATTCCTGTTGTCTGGACCCTGACCAACGTCATCCATAACCTGGCTACGTATGTCTTCCTTC
ATACGGTGAAAGGGACACCCTTTGAGACTCCTGACCAAGGAAAGGCCCGGCTACTGACACACTGGGAGCAAATGG
ACTATGGGCTCCAGTTTACCTCTTCCCGCAAGTTCCTCAGCATCTCTCCTATTGTGCTCTATCTCCTGGCCAGCT
TCTATACCAAGTATGATGCTGCGCACTTCCTCATCAACACAGCCTCATTGCTAAGTGTACTGCTGCCGAAGTTGC
CCCAGTTCCATGGGGTTCGTGTCTTTGGCATCAACAAATACTGAGGGATGGGTTTTGGGACAGCTCCATGGGCAT
GGGGAAGGCACTGAAACAGAGGACTATAAAACATCCTTCTCTTATTCTCCATACTGTCTTCTACACCTTTAAAGC
CTGAGAACTATACAACCTTTCCCAGACTCCCAAGAAGAGAAGAGATTGGCAAATGGGGCTCCTGGGCCCAGTCCT
GCTAGTGGCAAGTTTCTTTGAATCAGGAAGGCAGGTGAGGTAAGGGCCAAATCACTCTCCTCCATAGCAGGAAGC
CATTTGGGCAGCTTCTTTGGTGATTACATCTTTCCATATCTTTTACACTTACCACCTTCCAGCTCTGTTTTGCTG
TGTATTTTTCTTACAATAATTTTTTTCAGCTATAGCTGCAGTTTAATCAGGATGGGTAGAGAGCTGTCCTCATAA
GGCTGGGGGTGGGAAGATGGAATACTGACCTAATGTATAAAACTTAAAACAATTCTCCAATCCCCTCTCCTTTGG
TCCAGTAGGAGGTGCCCTTCACTCTAAGCTTAACACTTAGTAGGGAAGAGATTCTCAAATGAGAAAAAGGGCTCC
GGCTATATGGGCAACAAAGAGGGAAGATACAGGTTGCCAGTTATACATTTATAGAAAGATAATCCCCTGGCTTTA
AATAGTCATGTACATACAAATATGAACAAACTTAAAAAAAAAAATACAAACCCTTGGATCACATGGGGGCTTCTGG
GAACCCCCGTATTCTTCCCCCTCACCCAAGGGCAGTGGGCATGAATCTACTTTTTAAAAATGATTAATTTTGACA
AAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3494

MNVGVAHSEVNPNTRVMNSRGIWLAYIILVGLLHMVLLSIPFFSIPVVWTLTNVIHNLATYVFLHTVKGTPFETP
DQGKARLLTHWEQMDYGLQFTSSRKFLSISPIVLYLLASFYTKYDAAHFLINTASLLSVLLPKLPQFHGVRVFGI
NKY

FIGURE 3495

GCTGCTATGGAGGCGCTGGCCATGGGTTCCCGGGCGCTGCGGCTCTGGCTGGTCGCACCCGGTGGCGGGATCAAA
TGGAGATTTATAGCAACATCGCCAGCTTCTCAGCTGTCACCGACAGAATTGACAGAAATGCGGAATGATCTCTTT
AATAAAGAGAAAGCCAGGCAGTTATCATTAACTCCCCGAACTGAGAAGATAGAAGTTAAGCATGTGGGGAAACTG
ACCCCGGTACTGTCTTCGTGATGAATAAAAACATTTCAACTCCCTACAGTTGTGCCATGCATTTAAGCGAGTGGT
ATTGCAGGAAGTCCATTCTGGCTCTGGTGGATGGACAGCCTTGGGACATGTATAAGCCTTTAACAAAGTCCTGTG
AAATTAAATTTCTTACTTTCAAAGATTGTGATCCAGGAGAAGTGAATGAGGCATATTGGCGTTCCTGTGCTATGA
TGATGGGCTGTGTGATAGAGAGGGCATTCAAAGATGAATATATGGTCAATTTGGTCAGAGCTCCAGAAGTTCCTG
TAATTTCTGGTGCCTTCTGTTATGACGTAGTTTTGGATAGCAAACTTGATGAGTGGATGCCAACAAAAGAGAACT
TACGTTCCTTCACAAAGGATGCTCATGCTTTAATTTATAAAGATCTTCCATTTGAAACTCTGGAAGTTGAAGCAA
AAGTGGCATTGGAAATATTTCAACACAGCAAGTACAAAGTAGATTTCATAGAAGAGAAGGCATCTCAGAACCCTG
AGAGAATAGTCAAGCTACACAGAATAGGTGACTTCATTGATGTGAGTGAGGGCCCTCTTATTCCAAGAACAAGTA
TTTGTTTCCAGTATGAAGTGTCAGCAGTTCACAATCTTCAACCCACCCAGCCAAGTCTCATACGAAGATTCCAGG
GTGTGTCTTTACCTGTTCACTTAAGAGCACATTTTACAATATGGGATAAGCTATTGGAAAGATCTCGGAAAATGG
TAACTGAAGATCAAAGTAAAGCAACAGAGGAATGTACATCTACCTAATAACTTTCTAAAATTTAAATATGTATAA
TAAAATAAATGTTTTAAATATAAAAAAAAAAAAAAAAAAA

FIGURE 3496

MNKNISTPYSCAMHLSEWYCRKSILALVDGQPWDMYKPLTKSCEIKFLTFKDCDPGEVNEAYWRSCAMMMGCVIE
RAFKDEYMVNLVRAPEVPVISGAFCYDVVLDSKLDEWMPTKENLRSFTKDAHALIYKDLPFETLEVEAKVALEIF
QHSKYKVDFIEEKASQNPERIVKLHRIGDFIDVSEGPLIPRTSICFQYEVSAVHNLQPTQPSLIRRFQGVSLPVH
LRAHFTIWDKLLERSRKMVTEDQSKATEECTST

FIGURE 3497

CGGTGCTAGCGACACGGGAGTGGCAAACGCATCCTCTTGCCGTTCCCGGTGTTTGGGCCTTGCCTGTGACGGTGG
GAAAAGAAAATGGCCTTGCTGTGCTACAACCGGGGCTGCGGTCAGCGCTTCGATCCTGAGACCAATTCCGACGAT
GCTTGCACATACCACCCAGGTGTTCCGGTCTTTCACGATGCATTAAAGGGTTGGTCTTGCTGTAAGAGAAGAACA
ACTGATTTTTCTGATTTCTTAAGCATTGTAGGCTGTACAAAAGGTAGACATAATAGTGAGAAGCCACCTGAGCCA
GTCAAACCTGAAGTCAAGACTACTGAGAAGAAGGAGCTATGTGAATTAAAACCCAAATTTCAGGAACACATCATT
CAAGCCCCTAAGCCAGTAGAAGCAATAAAAAGACCAAGCCCAGATGAACCAATGACAAATTTGGAATTAAAAATA
TCTGCCTCCCTAAAACAAGCACTTGATAAACTTAAACTGTCATCAGGGAATGAAGAAAATAAGAAAGAAGAAGAC
AATGATGAAATTAAGATTGGGACCTCATGTAAGAATGGAGGGTGTTCAAAGACATACCAGGGTCTAGAGAGTCTA
GAAGAAGTCTGTGTATATCATTCTGGAGTACCTATTTTCCATGAGGGGATGAAATACTGGAGCTGTTGTAGAAGA
AAAACTTCTGATTTTAATACATTCTTAGCCCAAGAGGGCTGTACAAAAGGGAAACACATGTGGACTAAAAAAGAT
GCTGGGAAAAAAGTTGTTCCATGTAGACATGACTTGCATCAGACTGGAGGTGAAGTTACCATTTCAGTATATGCT
AAAAACTCACTTCCAGAACTTAGCCGAGTAGAAGCAAATAGCACATTGTTAAATGTCATTATTGTATTTGAAGGA
GAGAAGGAATTTGATCAAAATGTGAAATTATGGGGTGTGATTGATGTAAAGCGAAGTTATGTAACTATGACTGCA
ACAAAGATTGAAATCACTATGAGAAAAGCTGAACCGATGCAGTGGGCAAGCCTTGAACTGCCTGCAGCTAAAAAG
CAGGAAAAACAAAAAGATGACACAACAGATTGAGTGGGAGATGGAAGGAAGGCTATTACATTATTTCCGAATTTT
TAATACTGTGTGAAGTGGTGGCTTGCTGCTGTAATCTTTTGTTTTGTTGTTGTGTTACTGAATGTGGCATTTCAG
GGTTAACATTAGGTTCTTAAAAGCCAAAGTCAGTTTGTCTTTTTGTGCCTCTCATCTTTCTTTTGTGTTATGTAA
GATTGATTATTCATTTCTCCCTACTGGTAGGAACCATAGTTGTGTCCTATACTTGAAGAGGCTGGAAAGTAGCCC
ATAACCATAATTGCAGTATTTCTTTGTATTTCTCTGTTAAGCAAAGAAATATTAAGGAACATTTTTTTTATGTTT
TTGTATTATTCCATAATTAGTAAAGCAAGATGAAATGTCAAATTTTAATCAGTTTTTTCATGGATTTGTGTTCTT
ACAGTACTTGAAAATATTTAAGGAAGAGATGAAGCTCTGCAGTTTTTTCTATGTGGGATGATTACTTTTTTAAGG
AGGATTAATTCTGAGGTAGTATAGTAACTAAAGGGGAATATATGAATTGTTTAACAAATTAGAATTTGTTTACAA
CTACTTGAATTTTTAAATTATGTCAAAACTTACATTACTTGCCAAGCAGTATGATGTTATAGGAAACATAAATAA
GATTACAGAGGTATCAATTTGGTTAAAATTCACCATTTTATAAGACTAAGCAATAATCTTAACAACCTCTTTCCT
GAATATTTAAATGTGTTTGTATGGTGTTATGACTAATTGTTACTGATTTAGAGACTAAGCCCTCTTAAAACCTTT
AGTTAAATATAAAAAGAAATTATATATATCTTGCCTCCCTGATGGAAAACTATATAAAATTGTAGACTTAAAAGG
TTTGTGGAAATACATTAGGATATCAGAAAACTAAATATATGGAGTTGCTTTATGACTATTACATGTTAAATAAAA
ATAGCTTAATTGTTAAAAAAAAAAAAAAAAAA

FIGURE 3498

MALLCYNRGCGQRFDPETNSDDACTYHPGVPVFHDALKGWSCCKRRTTDFSDFLSIVGCTKGRHNSEKPPEPVKP
EVKTTEKKELCELKPKFQEHIIQAPKPVEAIKRPSPDEPMTNLELKISASLKQALDKLKLSSGNEENKKEEDNDE
IKIGTSCKNGGCSKTYQGLESLEEVCVYHSGVPIFHEGMKYWSCCRRKTSDFNTFLAQEGCTKGKHMWTKKDAGK
KVVPCRHDLHQTGGEVTISVYAKNSLPELSRVEANSTLLNVIIVFEGEKEFDQNVKLWGVIDVKRSYVTMTATKI
EITMRKAEPMQWASLELPAAKKQEKQKDDTTD

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FIGURE 3499

CGGAAGCAGGAAGTGAGTTTGCGAACGGAGCAGCTGCTGCAGGGCCC**ATG**GCGGACACCCAGTACATCCTGCCCA
ATGACATCGGCGTGTCTAGCCTGGACTGCCGTGAGGCCTTCCGCCTGCTGTCACCCACAGAGCGCCTCTATGCCT
ACCACCTGTCCCGTGCCGCCTGGTACGGAGGCCTGGCTGTGCTGCTTCAGACCTCCCCTGAGGCCCCCTACATCT
ATGCTCTGCTCAGCCGCCTCTTCCGCGCCCAGGACCCCGACCAGCTGCGCCAACATGCCCTGGCTGAAGGCCTTA
CCGAGGAGGAGTATCAGGCGTTCCTGGTCTATGCCGCGGGTGTTTACTCCAACATGGGCAACTACAAGTCCTTTG
GTGACACCAAGTTTGTTCCCAACTTGCCCAAGGAAAAGCTGGAACGGGTGATCCTAGGGAGTGAGGCTGCTCAGC
AGCACCCAGAAGAAGTCAGGGGCCTCTGGCAGACCTGCGGGGAGCTTATGTTCTCTCTGGAGCCAAGGCTTCGAC
ACCTCGGACTGGGGAAGGAGGGAATCACCACCTATTTCTCTGGGAATTGTACCATGGAAGATGCCAAATTGGCCC
AGGACTTTCTGGACTCACAGAACCTCAGTGCCTACAACACCCGGCTCTTCAAAGAGGTCGATGGAGAAGGGAAGC
CCTACTACGAGGTGCGGCTGGCTTCTGTGCTTGGCTCAGAGCCTTCCCTGGACTCTGAGGTGACTTCCAAGCTGA
AGAGCTATGAATTCCGGGGAAGCCCTTTCCAGGTGACCCGGGGGGACTACGCGCCCATCCTCCAGAAGGTGGTGG
AGCAGCTGGAGAAAGCCAAGGCCTATGCAGCCAACAGCCACCAGGGGCAGATGCTGGCCCAGTATATAGAGAGCT
TCACCCAGGGCTCCATCGAGGCCCACAAGAGGGGCTCCCGCTTCTGGATCCAGGACAAAGGCCCCATCGTGGAGA
GTTACATCGGGTTCATCGAGAGCTACCGCGACCCCTTTGGTTCCCGAGGAGAATTTGAAGGTTTCGTAGCTGTGG
TGAACAAGGCCATGAGTGCCAAGTTTGAGCGGCTGGTGGCGAGCGCAGAGCAGCTGCTGAAGGAGCTGCCCTGGC
CCCCAACCTTTGAGAAGGACAAGTTCCTCACCCCTGACTTCACCTCCCTGGATGTTCTCACCTTCGCTGGCTCCG
GCATCCCTGCCGGCATCAACATCCCCAACTACGATGATCTGAGGCAGACGGAAGGCTTTAAGAACGTGTCGCTGG
GGAATGTGCTGGCTGTGGCCTACGCCACGCAGCGGGAGAAGCTTACCTTTCTGGAGGAGGATGACAAGGACCTGT
ACATCCTCTGGAAGGGGCCCTCCTTCGATGTGCAGGTGGGCCTGCACGAGCTGCTGGGCCATGGCAGTGGCAAGC
TCTTCGTACAGGACGAAAAAGGAGCATTCAACTTTGACCAGGAAACAGTGATCAACCCAGAGACGGGCGAGCAGA
TTCAGAGCTGGTATCGGAGCGGGGAGACCTGGGATAGCAAGTTCAGCACCATCGCCTCCAGCTACGAAGAGTGCC
GGGCTGAGAGCGTGGGTCTCTACCTCTGTCTCCACCCGCAAGTGCTGGAGATCTTTGGCTTTGAGGGGGCTGATG
CGGAGGACGTGATCTACGTGAACTGGCTCAACATGGTTCGGGCCGGGCTGCTCGCTCTGGAGTTCTACACACCTG
AGGCCTTCAACTGGCGACAGGCCCATATGCAGGCCCGGTTTGTGATCCTGAGAGTCTTGCTGGAGGCTGGCGAGG
GACTCGTTACCATCACTCCCACCACAGGCTCCGATGGGCGCCCAGATGCCCGGGTCCGCCTCGACCGCAGCAAGA
TCCGGTCTGTGGGCAAGCCTGCTCTAGAGCGCTTCCTGCGGAGACTTCAGGTGCTGAAGTCCACAGGGGATGTGG
CCGGAGGGCGGGCCCTGTACGAGGGGTATGCAACGGTCACTGATGCGCCCCCCGAGTGCTTCCTCACCCTCAGGG
ACACGGTGCTGCTGCGTAAGGAATCTCGGAAGCTCATTGTTCAGCCCAACACTCGCCTTGAAGGCTCAGACGTGC
AGCTTCTGGAATACGAGGCGTCAGCTGCTGGCCTCATCCGATCCTTCTCTGAGCGTTTCCCAGAGGATGGACCCG
AGTTGGAGGAGATCCTCACACAGCTGGCCACAGCCGATGCCCGATTCTGGAAGGGCCCCAGTGAGGCCCCATCTG
GCCAAGCT**TGA**GGAAGATGTGTGGCCTTGCCCCCAATTCCATCAGACCAAGGCTGCAAGTGGCCCTCCATTCGTG
TGTGTATTTAGGGGCTGGGGAGGGGGAGGGGCAGGAGCTTGGACCTTGGTACTACCTCAGCTGAGGGTGGTGACA
CAACCCCTTCCATTTGTCAGCACTTTCCAGCCTGCCAATTGCTTCCCCTCTGTGATCTCATTTCATCTGCACTGC
CATACGTGGAGTGAGCAAGACAGGGCTTACCATCCTGTCTACCAGATGAGGAAATGGCAGTTCTGAGAAGTCACT
GGTCTAGATCCCGCAGGTGGCACGTGACAGCTAGGGTTCAAAACGTTCTCACCAAATCCAATGCTCCTCACATAT
TAATTTTATAACCAGACAAATAAATATTAGAGACAACCAAAAAAAAAAAAAAAAAAAA

FIGURE 3500

MADTQYILPNDIGVSSLDCREAFRLLSPTERLYAYHLSRAAWYGGLAVLLQTSPEAPYIYALLSRLFRAQDPDQL
RQHALAEGLTEEEYQAFLVYAAGVYSNMGNYKSFGDTKFVPNLPKEKLERVILGSEAAQQHPEEVRGLWQTCGEL
MFSLEPRLRHLGLGKEGITTYFSGNCTMEDAKLAQDFLDSQNLSAYNTRLFKEVDGEGKPYYEVRLASVLGSEPS
LDSEVTSKLKSYEFRGSPFQVTRGDYAPILQKVVEQLEKAKAYAANSHQGQMLAQYIESFTQGSIEAHKRGSRFW
IQDKGPIVESYIGFIESYRDPFGSRGEFEGFVAVVNKAMSAKFERLVASAEQLLKELPWPPTFEKDKFLTPDFTS
LDVLTFAGSGIPAGINIPNYDDLRQTEGFKNVSLGNVLAVAYATQREKLTFLEEDDKDLYILWKGPSFDVQVGLH
ELLGHGSGKLFVQDEKGAFNFDQETVINPETGEQIQSWYRSGETWDSKFSTIASSYEECRAESVGLYLCLHPQVL
EIFGFEGADAEDVIYVNWLNMVRAGLLALEFYTPEAFNWRQAHMQARFVILRVLLEAGEGLVTITPTTGSDGRPD
ARVRLDRSKIRSVGKPALERFLRRLQVLKSTGDVAGGRALYEGYATVTDAPPECFLTLRDTVLLRKESRKLIVQP
NTRLEGSDVQLLEYEASAAGLIRSFSERFPEDGPELEEILTQLATADARFWKGPSEAPSGQA

FIGURE 3501

GGGGGAAGATGGCGGACGTGCTTAGCGTCCTGCGACAGTACAACATCCAGAAGAAGGAGATTGTGGTGAAGGGAG
ACGAAGTGATCTTCGGGGAGTTCTCCTGGCCCAAGAATGTGAAGACCAACTATGTTGTTTGGGGGACTGGAAAGG
AAGGCCAACCCAGAGAGTACTACACATTGGATTCCATTTTATTTCTACTTAATAACGTGCACCTTTCTCATCCTG
TTTATGTCCGACGTGCAGCTACTGAAAATATTCCTGTGGTTAGAAGACCTGATCGAAAAGATCTACTTGGATATC
TCAATGGTGAAGCGTCAACATCGGCAAGTATAGACAGAAGCGCTCCCTTAGAAATAGGTCTTCAGCGATCTACTC
AAGTCAAACGAGCTGCAGATGAAGTTTTAGCAGAAGCAAAGAAACCACGAATTGAGGATGAAGAGTGTGTGCGCC
TTGATAAAGAGAGATTGGCTGCCCGTTTGGAGGGTCACAAAGAAGGGATTGTACAGACTGAACAGATTAGGTCTT
TGTCTGAAGCTATGTCAGTGGAAAAAATTGCTGCAATCAAAGCCAAAATTATGGCTAAGAAAAGATCTACTATCA
AGACTGATCTAGATGATGACATAACTGCCCTTAAACAGAGGAGTTTTGTGGATGCTGAGGTAGATGTGACCCGAG
ATATTGTCAGCAGAGAGAGAGTATGGAGGACACGAACAACTATCTTACAAAGCACAGGAAAGAATTTTTCCAAGA
ACATTTTTGCAATTCTTCAATCTGTAAAAGCCAGAGAAGAAGGGCGTGCACCTGAACAGCGACCTGCCCCAAATG
CAGCACCTGTGGATCCCACTTTGCGCACCAAACAGCCTATCCCAGCTGCCTATAACAGATACGATCAGGAAAGAT
TCAAAGGAAAAGAAGAAACGGAAGGCTTCAAAATTGACACTATGGGAACCTACCATGGTATGACACTGAAATCTG
TAACGGAGGGTRCATCTGCCCGGAAGACTCAGACTCCTGCAGCCCAGCCAGTACCAAGACCAGTTTCTCAAGCAA
GACCTCCCCCAAATCAGAAGAAAGGATCTCGAACACCCATTATCATAATTCCTGCAGCTACCACCTCTTTAATAA
CCATGCTTAATGCAAAAGACCTTCTACAGGACCTGAAATTTGTCCCATCAGATGAAAAGAAGAAACAAGGTTGTC
AACGAGAAAATGAAACTCTAATACAAAGAAGAAAAGACCAGATGCAACCAGGGGGCACTGCAATTAGTGTTACAG
TACCTTATAGAGTAGTAGACCAGCCCCTTAAACTTATGCCTCAAGACTGGGACCGCGTTGTAGCCGTTTTTGTGC
AGGGTCCTGCATGGCAGTTCAAAGGTTGGCCATGGCTTTTGCCTGATGGATCACCAGTTGATATATTTGCTAAAA
TTAAAGCCTTCCATCTGAAGTATGATGAAGTTCGTCTGGATCCAAATGTTCAGAAATGGGATGTAACAGTATTAG
AACTCAGCTATCACAAACGTCATTTGGATAGACCAGTGTTCTTACGGTTTTGGGAAACATTGGACAGGTACATGG
TAAAGCATAAATCGCACTTGAGATTCTGAATTATTTGGCTCCTCCATTTCTGGAAATTGAGACTCAAGCTTTATG
AATTTATCAAGAACTTAAAAATGAAGAAGGTCACAGATTGATCTTTTATAAGACCTTATTTGATGCTTTGTGCTT
CAAGGAGATGATACCTGTCATCCATATAAGCAAACTTTTTGGCTTACAACTATTTTTTTAATATTAGCCTTCTAG
TCTGTAATGGAAATTGTATATTTTGATAGAAGTTTTTTCTCCATTGGTTAAATTAGCATTACTTAAAATTTGTTT
CTTTAGAAAATAAATGCAGGTTATAAATGTGTGTATATTTAGAGATTATAAGGCTCTCTGAGCCATCTTCTGATT
TTTCATTGCTCTATAATTCTTTTTACTGAAAATACTATGTTATGAATGGTATTAAATTTTAGTCTCTGGAACATC
CAAAACCAAGCAAAGGGATGTGACTATTTTGAATGAATCAGAATGTCAACTTGTATGTACACTATATCTACACTT
ACTCATTATTTAAAAAGAATAATGAAAAATCTAGATCAATTCTTCAATTTGATTGAACTGTTCAGCCTTTTCAAG
ATTTCTTTATTTACAAATGATTACATTTAAATGAATGTACATTCTTCTCACTGACTTTGGTGATTTTGAAACCTA
GAATGATGTGTTTCTATCTGTAATATCTTTCCATTTGAAAAAAATCTCAAAACACAGATTAAAACCAC

FIGURE 3502

MADVLSVLRQYNIQKKEIVVKGDEVIFGEFSWPKNVKTNYVVWGTGKEGQPREYYTLDSILFLLNNVHLSHPVYV
RRAATENIPVVRRPDRKDLLGYLNGEASTSASIDRSAPLEIGLQRSTQVKRAADEVLAEAKKPRIEDEECVRLDK
ERLAARLEGHKEGIVQTEQIRSLSEAMSVEKIAAIKAKIMAKKRSTIKTDLDDDITALKQRSFVDAEVDVTRDIV
SRERVWRTRTTILQSTGKNFSKNIFAILQSVKAREEGRAPEQRPAPNAAPVDPTLRTKQPIPAAYNRYDQERFKG
KEETEGFKIDTMGTYHGMTLKSVTEGXSARKTQTPAAQPVPRPVSQARPPPNQKKGSRTPIIIIPAATTSLITML
NAKDLLQDLKFVPSDEKKKQGCQRENETLIQRRKDQMQPGGTAISVTVPYRVVDQPLKLMPQDWDRVVAVFVQGP
AWQFKGWPWLLPDGSPVDIFAKIKAFHLKYDEVRLDPNVQKWDVTVLELSYHKRHLDRPVFLRFWETLDRYMVKH
KSHLRF

FIGURE 3503A

CGATAACGATTTGTGTTGTGAGAGGCGCAAGCTGCGATTTCTGCTGAACTTGGAGGCATTTCTACGACTTTTCTC
TCAGCTGAGGCTTTTCCTCCGACCCTGATGCTCTTCAATTCGGTGCTCCGCCAGCCCCAGCTTGGCGTCCTGAGA
AATGGATGGTCTTCACAATACCCTCTTCAATCCCTTCTGACTGGTTATCAGTGCAGTGGTAATGATGAACACACT
TCTTATGGAGAAACAGGAGTCCCAGTTCCTCCTTTTGGATGTACCTTCTCTTCTGCTCCCAATATGGAACATGTA
CTAGCAGTTGCCAATGAAGAAGGCTTTGTTCGATTGTATAACACAGAATCACAAAGTTTCAGAAAGAAGTGCTTC
AAAGAATGGATGGCTCACTGGAATGCCGTCTTTGACCTGGCCTGGGTTCCTGGTGAACTTAAACTTGTTACAGCA
GCAGGTGATCAAACAGCCAAATTTTGGGACGTAAAAGCTGGTGAGCTGATTGGAACATGCAAAGGTCATCAATGC
AGCCTCAAGTCAGTTGCCTTTTCTAAGTTTGAGAAAGCTGTATTCTGTACGGGTGGAAGAGATGGCAACATTATG
GTCTGGGATACCAGGTGCAACAAAAAAGATGGGTTTTATAGGCAAGTGAATCAAATCAGTGGAGCTCACAATACC
TCAGACAAGCAAACCCCTTCAAAACCCAAGAAGAAACAGAATTCAAAAGGACTTGCTCCTTCTGTGGATTTCCAG
CAAAGTGTTACTGTGGTCCTCTTTCAAGACGAGAATACCTTAGTCTCAGCAGGAGCTGTGGATGGGATAATCAAA
GTATGGGATTTACGTAAGAATTATACTGCTTATCGACAAGAACCCATAGCATCCAAGTCTTTCCTGTACCCAGGT
AGCAGCACTCGAAAACTTGGATATTCAAGTCTGATTTTGGATTCCACTGGCTCTACTTTATTTGCTAATTGCACA
GACGATAACATCTACATGTTTAATATGACTGGGTTGAAGACTTCTCCAGTGGCTATTTTCAATGGACACCAGAAC
TCTACCTTTTATGTAAAATCCAGCCTTAGTCCAGATGACCAGTTTTTAGTCAGTGGCTCAAGTGATGAAGCTGCC
TACATATGGAAGGTCTCCACACCCTGGCAACCTCCTACTGTGCTCCTGGGTCATTCTCAAGAGGTCACGTCTGTG
TGCTGGTGTCCATCTGACTTCACAAAGATTGCTACCTGTTCTGATGACAATACACTAAAAATCTGGCGCTTGAAT
AGAGGCTTAGAGGAGAAACCAGGAGGTGATAAACTTTCCACGGTGGGTTGGGCCTCTCAGAAGAAAAAAGAGTCA
AGACCTGGCCTAGTAACAGTAACGAGTAGCCAGAGTACTCCTGCCAAAGCCCCCAGGGTAAAGTGCAATCCATCC
AATTCTTCCCCGTCATCCGCAGCTTGTGCCCCAAGCTGTGCTGGAGACCTCCCTCTTCCTTCAAATACTCCTACG
TTCTCTATTAAAACCTCTCCTGCCAAGGCCCGGTCTCCCATCAACAGAAGAGGCTCTGTCTCCTCCGTCTCTCCC
AAGCCACCTTCATCTTTCAAGATGTCGATTAGAAACTGGGTGACCCGAACACCTTCCTCATCACCACCCATCACT
CCACCTGCTTCGGAGACCAAGATCATGTCTCCGAGAAAAGCCCTTATTCCTGTGAGCCAGAAGTCATCCCAAGCA
GAGGCTTGCTCTGAGTCTAGAAATAGAGTAAAGAGGAGGCTAGACTCAAGCTGTCTGGAGAGTGTGAAACAAAAG
TGTGTGAAGAGTTGTAACTGTGTGACTGAGCTTGATGGCCAAGTTGAAAATCTTCATTTGGATCTGTGCTGCCTT
GCTGGTAACCAGGAAGACCTTAGTAAGGACTCTCTAGGTCCTACCAAATCAAGCAAAATTGAAGGAGCTGGTACC
AGTATCTCAGAGCCTCCGTCTCCTATCAGTCCGTATGCTTCAGAAAGCTGTGGAACGCTACCTCTTCCTTTGAGA
CCTTGTGGAGAAGGGTCTGAAATGGTAGGCAAAGAGAATAGTTCCCCAGAGAATAAAAACTGGTTGTTGGCCATG
GCAGCCAAACGGAAGGCTGAGAATCCATCTCCACGAAGTCCGTCATCCCAGACACCCAATTCCAGGAGACAGAGC
GGAAAGACATTGCCAAGCCCGGTCACCATCACGCCCAGCTCCATGAGGAAAATCTGCACATACTTCCATAGAAAG
TCCCAGGAGGACTTCTGTGGTCCTGAACACTCAACAGAATTATAGATTCTAATCTGAGTGAGTTACTGAGCTTTG
GTCCACTAAAACAAGCTGAGCTTTGGTCCACTAAAACAAGATGAAAAATACAAGAGTGACTCTATAACTCTGGTC
TTTAAGAAAGCTGCCTTTTCATTTTTAGACAAAATCTTTTCAACGCTGAAATGTACCTAATCTGGTTCTACTACC
ATAATGTATATGCAGCTTCCCGAGGATGAATGCTGTGTTTAAATTTCATAAAGTAAATTTGTCACTCTAGCATTT
TGAATGAATAGTCTTCACTTTTTAAATTATTCATCTTCTCTATAATAATGACATCCCAGTTCATGGAGGCAAAAA
ACAAGTTTCTTGTTATCCTGAAACTTTCTATGCTCAGTGGAAAGTATCTGCCAGCCACAGCATGAGGCCTGTGAA
GGCTGACTGAGAAATCCTCTGCTGAAGACCCCTGGTTCTGTTCTGCCTCCAACATGTATAATTTTATTTGAAATA
CATAATCTTTTCACTATGCTTTTGTGGGGTTTTTTTTAAGTATGTGTAAAAATGTGATGCTCAGATAAGTACATT
TATATCAGTTCAGTGTTAAAATGCAGTCTCTTGAGTTAAAGTCATCTTTATTTTAAATGCAGTGATAAATGTCAA
CTCTTCGGAGAAACTAGGAGAACAACAACAGAAAGCTGTGTTTGTCTTTTTTCTCTCAAATATATCTCCCGTATG
AGATTTCAGGTCCCCATGTTTTCACCAAGCAATCTGCTATGTCAGCCAACCCAACATCACTTTCTACAGGAGGTT
ATGATTTTTGCCATTTACTAGAGGAAGATGTTTTATGAAATCAATTTGGGGTTTGAATTCAGGTGCAGTCATCAG
TTCTTTAGGGGCTGCAATGTTTTAAAAAAAATAAGTCATCAGATTTTAAGAAAAAAGTGATGATTTCTTATTGAT
ATTTTTGTAACAGAATATAGCTCTTAACTGAAAATCCAGAACCAGAAACATAAATCTTGAGTTTCTTTTCATGTA
CATAAAAAGCAATAGCCTTTTAGTATAGATAGCCCTGAGCCAAAAAGTAATAGAATTTTCTCTAGATATTTAATA
CAGAGAGTGTATAGACTGACTCTAAGTTAATAATGTGCAAAATATCTTAAACATCCCTCCCCTTATTCAACAATT
ATGTATCAGTGATCTTGAACCATTGTTTTATATTTTTCACCTTTGTAACCTCATGGAAAGAGGCTTTACATACTT
TCTATGTACTATTTACTTAGAAGGGAGCCCCCTTCCAGTCATGAAACTTCATTTGTTTTATCCATATCCCTGAGG

FIGURE 3503B

ACTGTGTAGACTTTATGTCAGTTCTGTGTAGACTTTATGTCAGTTTTTGTCATTATTTGAAAATCTATTCTGACA
ACTTTTTAATTCCTTTGATCTTATAAGTTAAAGCTGTAACAACTGAAATTGCATGGATCAAGTAAGCATAGTTTT
ATCCAGGGAGAAAAATAAAAGGAAGCCATAGAATTGCTCTGGTCAAAACCAAGCACACCATAGCCTTAACTGAAT
ATTTAGGAAATCTGCCTAATCTGCTTATATTTGGTGTTTGTTTTTTGACTGTTGGGCTTTGGGAAGATGTTATTT
ATGACCAATATCTGCCAGTAACGCTGTTTATCTCACTTGCTTTGAAAGCCAATGGGGGAAAAAAATCCATGAAAA
AAAAAAGATTGATAAAGTAGATGATTTTGTTTGTATCCCTACCCATCTCCTGGCAGCCCTACTGAGTGAAATTGG
GATACATTTGGCTGTCAGAAATTATACCGAGTCTACTGGGTATAACATGTCTCACTTGGAAAGCTAGTACTTTTA
AATGGGTGCCAAAGGTCAACTGTAATGAGATAATTATCCCTGCCTGTGTCCATGTCAGACTTTGAGCTGATCCTG
AATAATAAAGCCTTTTACCTT

FIGURE 3504

MLFNSVLRQPQLGVLRNGWSSQYPLQSLLTGYQCSGNDEHTSYGETGVPVPPFGCTFSSAPNMEHVLAVANEEGF
VRLYNTESQSFRKKCFKEWMAHWNAVFDLAWVPGELKLVTAAGDQTAKFWDVKAGELIGTCKGHQCSLKSVAFSK
FEKAVFCTGGRDGNIMVWDTRCNKKDGFYRQVNQISGAHNTSDKQTPSKPKKKQNSKGLAPSVDFQQSVTVVLFQ
DENTLVSAGAVDGIIKVWDLRKNYTAYRQEPIASKSFLYPGSSTRKLGYSSLILDSTGSTLFANCTDDNIYMFNM
TGLKTSPVAIFNGHQNSTFYVKSSLSPDDQFLVSGSSDEAAYIWKVSTPWQPPTVLLGHSQEVTSVCWCPSDFTK
IATCSDDNTLKIWRLNRGLEEKPGGDKLSTVGWASQKKKESRPGLVTVTSSQSTPAKAPRVKCNPSNSSPSSAAC
APSCAGDLPLPSNTPTFSIKTSPAKARSPINRRGSVSSVSPKPPSSFKMSIRNWVTRTPSSSPPITPPASETKIM
SPRKALIPVSQKSSQAEACSESRNRVKRRLDSSCLESVKQKCVKSCNCVTELDGQVENLHLDLCCLAGNQEDLSK
DSLGPTKSSKIEGAGTSISEPPSPISPYASESCGTLPLPLRPCGEGSEMVGKENSSPENKNWLLAMAAKRKAENP
SPRSPSSQTPNSRRQSGKTLPSPVTITPSSMRKICTYFHRKSQEDFCGPEHSTEL

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FIGURE 3505

ACTTCCGGAATCTCTCGGCGTGTGAGCTTGGTTGTCCTACCAAAGCCAGCGTTTCGGCTCGCGTGCGCCGGCCTA
GTTTGCTCGCGCCCTCACGCGCTTTGGGTTTCCCGGTCTC**ATG**GCCGGCCTGACCTTATTTGTGGGCCGCCTCCC
GCCCTCGGCCCGCAGTGAGCAGCTGGAGGAACTGTTCAGTCAGGTGGGGCCGGTGAAGCAGTGCTTCGTGGTGAC
TGAAAAAGGGAGTAAGGCATGTCGAGGCTTTGGCTATGTCACTTTTTCAATGCTGGAAGATGTTCAGAGGGCCCT
CAAGGAGATTACCACCTTTGAAGGTTGCAAGATCAACGTGACTGTTGCCAAGAAAAAACTGAGGAACAAGACAAA
GGAAAAGGGGAAAAATGAAAACTCAGAGTGCCCAAAGAAGGAGCCGAAGGCTAAAAAAGCCAAAGTGGCAGATAA
GAAAGCCAGATTAATTATTCGGAACCTGAGCTTTAAGTGTTCAGAAGATGACTTGAAGACAGTATTTGCTCAATT
TGGAGCTGTCCTGGAAGTAAATATCCCTAGGAAACCAGATGGGAAGATGCGCGGTTTTGGTTTTGTTCAGTTCAA
AAACCTCCTAGAAGCAGGTAAAGCTCTCAAAGGCATGAACATGAAAGAGATAAAAGGCCGGACAGTGGCTGTGGA
TTGGGCCGTGGCAAAGGATAAATATAAAGATACACAGTCTGTTTCTGCTATAGGTGAGGAAAAGAGCCATGAATC
TAAACATCAGGAATCAGTTAAAAAGAAGGGCAGAGAGGAAGAGGATATGGAAGAGGAAGAAAACGATGATGATGA
CGATGATGATGATGAAGAAGATGGGGTTTTTGATGATGAAGATGAAGAGGAAGAGAATATAGAATCAAAGGTGAC
CAAGCCTGTGCAAATTCAGAAGAGAGCAGTCAAGAGACCAGCCCCTGCAAAAAGCAGTGATCATTCTGAGGAGGA
CAGTGACCTAGAGGAAAGCGATAGTATTGATGATGGAGAGGAACTGGCTCAGAGTGATACCAGCACTGAGGAGCA
AGAGGATAAAGCTGTGCAAGTCTCAAACAAAAAGAAGAGGAAATTACCCTCTGATGTGAATGAAGGGAAAACTGT
TTTTATCAGAAATCTGTCCTTTGACTCAGAAGAAGAAGAACTTGGGGAGCTTCTCCAACAGTTTGGAGAACTCAA
ATATGTCCGCATTGTCTTGCATCCAGACACAGAGCATTCTAAAGGTTGTGCATTTGCCCAGTTCATGACTCAAGA
AGCAGCTCAGAAATGCCTTCTAGCTGCTTCTCCAGAGAATGAGGCTGGTGGGCTTAAACTGGATGGCCGGCAGCT
CAAGGTTGACTTGGCGGTGACCCGTGATGAGGCTGCAAAGCTTCAGACGACGAAGGTGAAGAAGCCGACTGGCAC
CCGGAATCTCTATCTGGCCCGAGAAGGCTTGATTCGTGCTGGGACGAAGGCTGCAGAGGGTGTGAGTGCTGCTGA
TATGGCCAAAAGAGAACGGTTTGAGCTGCTGAAGCATCAGAAACTCAAGGACCAGAATATCTTTGTCTCCCGAAC
CAGGCTCTGCCTGCACAATCTCCCAAAGGCTGTAGATGACAAACAGCTCAGAAAGCTGCTGCTGAGTGCTACTAG
TGGAGAGAAAGGGGTGCGCATCAAGGAGTGTAGAGTGATGCGAGACCTCAAAGGAGTTCATGGGAACATGAAGGG
TCAGTCCCTGGGCTACGCCTTTGCGGAGTTCCAAGAGCACGAGCATGCCCTGAAAGCCCTCCGCCTCATCAACAA
CAATCCAGAAATCTTTGGGCCTCTGAAGAGACCAATAGTGGAGTTCTCTTTAGAAGATCGAAGAAAACTTAAAAT
GAAGGAATTAAGGATCCAGCGCAGCTTGCAAAAAATGAGATCCAAGCCTGCAACTGGTGAGCCTCAGAAGGGGCA
ACCAGAGCCTGCAAAAGACCAGCAACAGAAGGCAGCTCAACACCACACAGAGGAACAAAGCAAGGTGCCCCCAGA
GCAGAAGAGAAAGGCGGGCTCTACCTCATGGACCGGGTTCCAGACCAAGGCTGAAGTGGAGCAGGTGGAGCTGCC
TGATGGAAAGAAGAGAAGAAAGGTCCTGGCGCTCCCCTCACACCGAGGCCCCAAAATCAGGTTGCGGGACAAAGG
CAAAGTGAAGCCCGTCCATCCCAAAAAGCCAAAGCCACAGATAAACCAGTGGAAGCAGGAGAAGCAGCAATTATC
GTCCGAGCAGGTATCTAGGAAAAAAGCTAAGGGAAATAAGACGGAAACCCGCTTCAACCAGCTGGTCGAACAATA
TAAGCGGAAATTATTGGGACCTTCTAAAGGAGCACCTCTTGCAAAGAGGAGCAAATGGTTTGATAGT**TGA**TGATG
GCAGCAGGCTGGGTAAGAAGCTGGGTTGTGTACTTTCTGGTGACACTCCTGGGCTCCTCCCCATCCCCCGTGTCT
CTCACTGAGGGAAAGAAAATCCCCAAGGGCACTGCCACTGTGCTCGGAGGTGCCCTGGACTGTGTACATCTGAAC
TTTGGTCCATCCTTTGATGTGTGGTTCGTTAGCCACAAAGAGAAATATCTGAAAGTCAACATGATGCTTCTTGCA
TATTATCCAGATTATTGTATGAAGTTGTGTCTATAATTATTACCAATTTTTTATTCTTTATTTCTCAAATGGAAA
CACCTGAAAAAGCATTCTGGAGTGCTGAATTTTTAAGATGTATATTTTGTTAAGCATATTCTCTAAATGAGATAT
TGTGTGGCTTTTTAGTAACAACGTCATTTCTAAT

FIGURE 3506

MAGLTLFVGRLPPSARSEQLEELFSQVGPVKQCFVVTEKGSKACRGFGYVTFSMLEDVQRALKEITTFEGCKINV
TVAKKKLRNKTKEKGKNENSECPKKEPKAKKAKVADKKARLIIRNLSFKCSEDDLKTVFAQFGAVLEVNIPRKPD
GKMRGFGFVQFKNLLEAGKALKGMNMKEIKGRTVAVDWAVAKDKYKDTQSVSAIGEEKSHESKHQESVKKKGREE
EDMEEEENDDDDDDDEEDGVFDDEDEEEENIESKVTKPVQIQKRAVKRPAPAKSSDHSEEDSDLEESDSIDDGE
ELAQSDTSTEEQEDKAVQVSNKKKRKLPSDVNEGKTVFIRNLSFDSEEEELGELLQQFGELKYVRIVLHPDTEHS
KGCAFAQFMTQEAAQKCLLAASPENEAGGLKLDGRQLKVDLAVTRDEAAKLQTTKVKKPTGTRNLYLAREGLIRA
GTKAAEGVSAADMAKRERFELLKHQKLKDQNIFVSRTRLCLHNLPKAVDDKQLRKLLLSATSGEKGVRIKECRVM
RDLKGVHGNMKGQSLGYAFAEFQEHEHALKALRLINNNPEIFGPLKRPIVEFSLEDRRKLKMKELRIQRSLQKMR
SKPATGEPQKGQPEPAKDQQQKAAQHHTEEQSKVPPEQKRKAGSTSWTGFQTKAEVEQVELPDGKKRRKVLALPS
HRGPKIRLRDKGKVKPVHPKKPKPQINQWKQEKQQLSSEQVSRKKAKGNKTETRFNQLVEQYKRKLLGPSKGAPL
AKRSKWFDS

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FIGURE 3507

GAACACCAGCGAGCTGGTCTCCAGCGAGGTCTACCTGCTCAGTGCCTTGGCTGCTCTGCAGAAGGTTGTGGAGAC
TCTCCCGCACTTCATCAGCCCCTATCTGGAAGGCATTCTCTCCCAGGTGATTCATCTGGAGAAAATCACTAGTGA
AATGGGTTCTGCGTCACAGGCTAATATCCGTCTCACATCTCTTAAAAAGACACTGGCTACCACACTTGCACCCCG
AGTCCTGTTGCCCGCCATCAAAAAAACTTACAAGCAGATTGAGAAGAACTGGAAGAATCACATGGGTCCGTTTAT
GAGCATCTTGCAAGAGCATATTGGGGCGATGAAGAAGGAAGAGCTCACCTCCCATCAGTCTCAGCTAACCGCCTT
TTTCCTGGAGGCCCTGGACTTCCGAGCCCAGCACTCTGAGAACGATCTGGAGGAAGTTGGAAAAACGGAAAATTG
TATCATTGACTGTCTAGTAGCCATGGTTGTCAAACTTTCCGAGGTCACATTCAGGCCCCTGTTCTTCAAGCTGTT
TGATTGGGCTAAAACAGAAGATGCCCCAAAGGACAGGTTGTTGACATTTTACAACTTGGCAGATTGCATTGCTGA
AAAGCTGAAAGGGCTTTTTACTCTGTTTGCCGGCCACTTAGTGAAGCCTTTTGCTGACACCTTGGACCAGGTGAA
CATCTCCAAAACAGATGAAGCATTTTTTGACTCTGAAAATGACCCTGAAAAGTGCTGCTTGCTGTTGCAGTTTAT
TTTGAACTGTTTATACAAAATCTTCCTTTTTGATACCCAGCATTTTATAAGTAAAGAGAGAGCAGGAGCCTTGAT
GATGCCTCTGGTGGATCAGCTGGAAAACAGGCTTGGGGGAGAAGAGAAATTCCAGGAACGGGTGACAAAGCACCT
GATACCATGCATCGCACAGTTTTCAGTGGCCATGGCGGATGACTCTCTTTGGAAACCACTGAACTACCAGATTCT
GCTAAAGACGAGAGACTCCTCGCCTAAGGTTCGATTTGCTGCTTTGATTACTGTGTTAGCACTGGCTGAAAAACT
AAAGGAGAATTATATTGTCTTGCTACCAGAATCCATTCCTTTCTTAGCAGAGTTGATGGAAGATGAATGTGAAGA
AGTAGAACATCAGTGCCAAAAGACTATTCAGCAACTGGAAACTGTCCTGGGAGAGCCACTCCAGAGCTATTTCTA
AGACTTTCTGTGGTGTTTCATACTCTACTCAGAGTTCACACTCATATTTCATATTTTTATTTTTGGGTGTTGGGT
GCCATGTTACTTTTGGTGCCTTAATACACCTACTTGGATTACTTACAAATGTTTTATCACTTCGTTACAAAATCC
CCACCTGGCTTGTGCTGCCACATAAGCCTCTCCTGCCTATCGTATAGAGCTGCAGAAAGAGTAAATGATACACGG
TATTTTTAAAAAAAAAAAAAAA

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FIGURE 3508

MGSASQANIRLTSLKKTLATTLAPRVLLPAIKKTYKQIEKNWKNHMGPFMSILQEHIGAMKKEELTSHQSQLTAF
FLEALDFRAQHSENDLEEVGKTENCIIDCLVAMVVKLSEVTFRPLFFKLFDWAKTEDAPKDRLLTFYNLADCIAE
KLKGLFTLFAGHLVKPFADTLDQVNISKTDEAFFDSENDPEKCCLLLQFILNCLYKIFLFDTQHFISKERAGALM
MPLVDQLENRLGGEEKFQERVTKHLIPCIAQFSVAMADDSLWKPLNYQILLKTRDSSPKVRFAALITVLALAEKL
KENYIVLLPESIPFLAELMEDECEEVEHQCQKTIQQLETVLGEPLQSYF

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FIGURE 3509

GATCGCGGAGTCGGTGCTTTAGTACGCCGCTGGCACCTTTACTCTCGCCGGCCGCGCGAACCCGTTTGAGCTCGG
TATCCTAGTGCACACGCCTTTGCAAGCGACGGCGCCATGAGTCTGACTTCCAGTTCCAGCGTACGAGTTGAATGG
ATCGCAGCAGTTACCATTGCTGCTGGGACAGCTGCAATTGGTTATCTAGCTTACAAAAGATTTTATGTTAAAGAT
CATCGAAATAAAGCTATGATAAACCTTCACATCCAGAAAGACAACCCCAAGATAGTACATGCTTTTGACATGGAG
GATTTGGGAGATAAAGCTGTGTACTGCCGTTGTTGGAGGTCCAAAAAGTTCCCATTCTGTGATGGGGCTCACACA
AAACATAACGAAGAGACTGGAGACAATGTGGGCCCTCTGATCATCAAGAAAAAAGAAACTTAAATGGACACTTTT
GATGCTGCAAATCAGCTTGTCGTGAAGTTACCTGATTGTTTAATTAGAATGACTACCACCTCTGTCTGATTCACC
TTCGCTGGATTCTAAATGTGGTATATTGCAAACTGCAGCTTTCACATTTATGGCATTTGTCTTGTTGAAACATCG
TGGTGCACATTTGTTTAAACAAAAAAAAAAAAAAAA

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FIGURE 3510

MSLTSSSSVRVEWIAAVTIAAGTAAIGYLAYKRFYVKDHRNKAMINLHIQKDNPKIVHAFDMEDLGDKAVYCRCW
RSKKFPFCDGAHTKHNEETGDNVGPLIIKKKET

FIGURE 3511A

GCCTTTTCCCTCCGGCTCGGGAGCGTCTCGCTTGCGCCCCGGGCCCGCGGCGCCCGCGCGGCTGCGAGCCTCGGG
TGGCCGCGTGCCGGCTCCAGGAAGCCGGAGAGGGCGCGGCGGCCAGGATGGCGCGGCACGGGCCGTGCGGCTAGA
CGGGAGCCGAGGGAACCGCCGGCTCGCGCCCTCCGTTCTTTCCCGGAGCCGGCTTCACGCAGGGCCGGGAACGGC
CGTGCCTCTGGGATCCGCCTTCGCTGACGCCGGGCACCTACCTGGACGCGAGCGAGCGAG**ATG**CCCAACCCCAAA
AACAGCAAAGGCGGCCGCAAAAACAAGCGCGCCAACAGCAGCGGCGACGAGCAGGAAAATGGAGCCGGGGCCCTG
GCAGCGGCGGGCGCGGCGGGAGCGGCGGCCGGGGGGGCCCTGGCGGCGGCGGCCGGTTGCGGGGCGGCGGCGGCG
GGCGCGCCGGGCGCCGGAGGCGCGGCGGGCGCCGGAGGCGCGGGGACTGGCGCCGCGAACGCTGCGGCCGCCGCG
GGGGCTGCGGCCGCGGGCGATGCCAAAAACGAAGCCCCATGTGCCACTCCCCTGATCTGCAGCTTCGGTAGGCCG
GTGGACCTGGAGAAGGACGACTACCAGAAGGTGGTGTGCAACAACGAGCACTGCCCCTGCAGCACCTGGATGCAC
CTGCAGTGCTTCTACGAGTGGGAGAGCAGCATCCTCGTCCAGTTCAACTGCATCGGCCGCGCGCGCAGCTGGAAC
GAGAAGCAATGCCGCCAGAACATGTGGACAAAGAAGGGCTACGACCTGGCCTTCCGCTTCTGCTCTTGCCGCTGT
GGCCAGGGCCACTTGAAGAAGGACACAGACTGGTATCAGGTGAAGCGGATGCAGGACGAGAAAAAGAAGAAGTCT
GGCTCCGAGAAGAACACAGGGAGGCCTCCTGGTGAGGCGGCGGAGGAGGCAAAAAAGTGCAGGCCCCCAAATAAG
CCCCAGAAAGGCCCAAGCCACGACCTCCCCCGCCGGCATTCCATGGACCGGCAGAACTCCCAGGAGAAGGCAGTG
GGTGCCGCAGCCTACGGTGCCCGTTCCCCCGGTGGCTCCCCGGGCCAGTCCCCACCCACGGGCTACTCCATCCTC
TCTCCTGCCCACTTCAGCGGCCCCCGCTCCTCCAGATACCTCGGGGAGTTCTTAAAGAACGCCATCCATCTGGAG
CCTCACAAGAAGGCCATGGCTGGGGGCCATGTGTTCAGAAATGCCCACTTTGATTACAGCCCTGCGGGGTTGGCA
GTTCACAGGGGGGGACACTTCGACACCCCCGTGCAGTTCCTTCGGCGGCTGGACCTCTCCGAACTCCTCACTCAC
ATCCCCAGGCATAAGCTGAACACTTTCCACGTGCGCATGGAAGACGATGCCCAAGTGGGCCAGGGGGAAGACTTG
CGGAAGTTCATTCTGGCCGCGCTCAGTGCCAGCCACAGAAACGTGGTAAACTGTGCCCTGTGCCACCGGGCGCTC
CCGGTGTTCGAACAGTTCCCACTGGTGGATGGAACTTTGTTCCTAAGCCCGTCGAGACATGATGAGATCGAATAT
GATGTTCCTTGTCACCTTCAAGGGAGACTCATGCATCTGTATGCCGTGTGCGTGGACTGCCTGGAAGGGGTTCAC
AAGATCATCTGCATCAAGTGTAAGTCACGGTGGGATGGCAGCTGGCACCAGCTGGGCACTATGTACACCTACGAC
ATCCTGGCTGCCTCTCCATGTTGTCAGGCCCGCCTGAACTGTAAGCACTGTGGGAAGCCGGTGATCGACGTGAGG
ATCGGGATGCAGTACTTCTCCGAATATAGCAACGTCCAGCAGTGTCCACACTGTGGGAACCTGGACTACCACTTC
GTGAAGCCATTTTCCTCCTTCAAAGTTCTCGAAGCTTAT**TGA**TGAAAGCTTTGCTTTAGTAATAGCTATTTTATT
GATATTATTACTTTATTACATATCTTTTATAGGGAAACATTCTGTGACATTAATTTCCTTTCTAATTTAAAGGAG
AGTTACTTTGTTGTATGTGTGCCACTAAAATAGGGGCTGCCCTTGCCCTGTCTTGATTCCCGAGTGTTAATCTGT
GGTTTTGACCAGAGCCCAGATGGGTAATCCTGTGCATTTGGGTTGGGGTTCACTCTTACCAAGAATCTTTGATGC
AGCTTTAAGATGGTGGGGAGGATGGGGTGAATTTAGGAAAGGAATTTGTGGTTATAAACTAAGAGCTTGATAGGA
GTTGGAAGGAAACTCTTACTAAAATGTTAACTTTCTAAAAACCTTCTTTTAGATCTTCCTTGGGCCTTTGGAAAA
ATATGTGACAAGTGAATGTAAGTCTGTGCCTGGAGAGCTAATAGTGCATTAGTCTATCTCAGCCTAGTGTTCTGC
AGCACACATGGGCAGGCAGTTTACTCACACTGACAGGTGACCTGAAAGTGGCACAAGTGCTGTTTCTATCACTAT
TGTAATTTGCCAGTTCATTTTTCATGCTGAAAGTAATATCCAAATTGTAAGACATATGAAAGATATTAGTGTTGC
AAATATGTTTAGGTAAACTGACCTATAACAGAATATGTGAAATGAATTTGGAAATAATGCAAGAAGGCAGAACTC
AATCATTTAAATTGTGTCTTTGAAGTTGGTAATATAGCTTTTAAGGAGAACCCATGAATAACCTGATTTGGGCAG
TGATGATTTATTACAGGTTGCACTGTTGAAGTGTCATTTGGTGTCAGGTTCTTCTCACAGGTAAATCTTTCAGCC
ACAGAATCTAACTGGTGAGCTTCAGAACCAATAATTGCCACATTTATTGTCCTCAAAATTGCTTATGGCCATGTT
TAACCAATTAATTCTGAGTTTCCAAAATCAAAGATTTGACCTTAAGAGGGAAGGGAAAAAAGTGTGAAAGGATGA
TGAAGAAAATAATTTTACTATTTCTTTTAAAAGTATGTTTTGGAAAATCAATGATTTTAATGCATAGCAGTATGT
TTGAAAAATAGACCATTCTAAAAAGCCCATGATACCTTACTGTTGATGAAAAAGGATGATCATATATATAGAACT
TGATTAGTCAGAGCATTGGGCATTCCAAAATACAGCCTTTGGTTCAGTAGATTTTAATGCTTTAAATAGACTGAC
GTCGCATACCCTTATAGAATTGGAATATGATTTCTCAAAAATTAATTTGATAATTTCATGTATGATGTGCATATA
TGCTAAAAGAATGCAGAAAATCATTTTATGAATAGCCAAATTTGGGGTTGATGTGAACATTTTATGTTACTCATT
TGGTTTATACTTTTTTTTTTTTTTTTTAACTGTGTGGTTTTTCTTTTCAGAAGTATTTAGGCAATATTGCACGT
GAGTTTCAGTTCTTTTTTTCTTTTTTTTGAGATGGAGTCTCACTCTTGTCACCCAGGCTGGAGTGCAGTAGTGCG
ATCTCAGCTCACTGCAACCTCTGCCTCCTGGATTCAAGCGATTCTCCTGTCCCAGCCTCCCAGGTAGCTGGGACT
ATAGGCACGTGCCACCACACCCGGCTAATTTTTTGTATTTTTAGTAGAGACAGCGTTTCACCATGTTAGCTAGGA

FIGURE 3511B

TGGTCTAGATCTCCTGACCTTGTGATCTGCCTGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGTCACT
GCGCCTGGCCAAGTTTCAGTTCTATATGAAGTATTTGATGTTTTGTTTGAAACAATACAGCATTAAAGAACCAAT
GTTATTCACTAATATCATTCATCTTTCAGTTTGGATGATTTGGTTTGCTGCATCTAGGTCGGTGTTTGATCATCT
GAAAAAACATTTCAGTGGGAAGAAATGCATAAAATGCCTATAAGAAGTAGAAAGTCATTGAACTGACAGTGTTTG
ATGCAACTAAAAGAGGATTGTAAGCATAGCTTTCTGCAAACTTGTCTTTAATGCACAAAGCTGTAGTGGTGAATT
AACTATCTCCTTATTGATTCTCTCCTGTACCCAGATGCAAAAAGTGCTAAGTTTCTCTTGTCCTCGTAATACCAT
TTGGATTTTATTTCTGAATTTAAATAGTAAAATATTTATGATGCTGATCTTTAACCCACCTAAAATTTTATAGTG
AAACCTGCTTTATATTGTTGTTCTGAAGCTTACAATTGACCTATACATTGCATTCAGCAAGCTCCTGAATTTAGA
ACTGCCGTCAGTGTAGTGTATGCTGTGTTCCATGTTGCCTTTTTAGATGGCTTTCTACCCCCTGAACAATAAATA
GGATGAGGTTTTACTGTAATTGGGTAAAGTTTACTCTTGGACATTATTTCGATGCTAAAGTAAGGATTCTGTGGA
TGTTACTTAAAGAGAAAAGCATAAGAGCATGAAGCATATCTGGGAATATCTTTTGCCTTTAAGACGATTCATTCT
TGTCTAGAGGGAAAATCTGGCTGATTTGGGAATAAAATATAATCGAATATTCAACACCATGAAGATAAATCTTAT
TTTGGAAATCTACTGACCTTAATACCCCAAGCTTGCCCTGAATACTTTGATTGGAATTGGAATATATCAAAAAAG
GTTAGTATTTTTGTTGTAGTTAGGATACTAAAAGGATATTAGTTACCCAAGAGATCCAATTTGTTTTTCTGATGA
ATAGTGTTCAGTAAAATGAAGCAGTCTTAAGAGTGACTAATAATTTCAAAGTGATTTTTCGTCTATTCTTAATAT
TTTTTAATTATTTATTTTTAAGAGTTTTATACCTTGAGCAGATACAATGATCTGCTTTAGTGAGAGGACAATTTC
TGATTGATTGTTTTCTCTTCAGGCCATCTCACCTCTTCATTCTCTTGTTACATTTGAAGCAGTTGATATAATGGG
TTTATACTTTAAAAGATAGACATGGTGCCATGAAGTTGGGGAGTTGGGTGAATTATCCCATTCTAGTTACAGAGG
AGCTTTCCTTAAATGCCCTTTAACTTCTAGGTTTTGTTCAAGAAGTTCATTTTCTGAGTAAAAGTTATTTTCATA
TATGTTGGGGGAAAATTAACTCATCTAAAAAGAATCTTATTAGGTATTTGAACTCTAAAACTAACAGATAAGACA
GATATGTACCTTATTAGAGCACCAGAACTAATTTGCTAAGTCTTTTGTTTAGTCCTGCAAGACTGATGCTTAATA
CACAGTCTGTTCTCCTGTGTCTAGGTCAGGAACTCCAGTTTGCTTTTCTGTTTTGTGTCCTGGTAGCAGCTGTTG
AGTAACTTTCATTGGAGGTTGGGAAGGAAGTGAGGAGAAAGTGTTCTTGTTTAGTGTTTTATTTCCTATAATAGG
ATGCTGCCTAACCCAGTTCATCTCTATGTCCTGTTCACTGAATATTCCGGGTAATTGAAAGAAAATATAATGGAT
GGGCTCCATTAAAACCAGCTCAAAAATAAATTCTTGTCAGTAAAGATTTCTTGTCAAGATGTCTTGGATTGCACT
TTTGTTGAGGAAAGACAGTGTAAATAGTTAAAGAATGTTGATAAAATTGAAACATTTGGTTGTGGAATTGTGTGT
GGTTTTAGAGGGTTTCTGTTTGTGAAATGTATGTATTAAAAATAATAAAATTCCAGAAACTAAAAAAAAAAAAAA
AAAAAAAAA

FIGURE 3512

MPNPKNSKGGRKNKRANSSGDEQENGAGALAAAGAAGAAAGGALAAAAGCGAAAAGAPGAGGAAGAGGAGTGAAN
AAAAAGAAAAGDAKNEAPCATPLICSFGRPVDLEKDDYQKVVCNNEHCPCSTWMHLQCFYEWESSILVQFNCIGR
ARSWNEKQCRQNMWTKKGYDLAFRFCSCRCGQGHLKKDTDWYQVKRMQDEKKKKSGSEKNTGRPPGEAAEEAKKC
RPPNKPQKGPSHDLPRRHSMDRQNSQEKAVGAAAYGARSPGGSPGQSPPTGYSILSPAHFSGPRSSRYLGEFLKN
AIHLEPHKKAMAGGHVFRNAHFDYSPAGLAVHRGGHFDTPVQFLRRLDLSELLTHIPRHKLNTFHVRMEDDAQVG
QGEDLRKFILAALSASHRNVVNCALCHRALPVFEQFPLVDGTLFLSPSRHDEIEYDVPCHLQGRLMHLYAVCVDC
LEGVHKIICIKCKSRWDGSWHQLGTMYTYDILAASPCCQARLNCKHCGKPVIDVRIGMQYFSEYSNVQQCPHCGN
LDYHFVKPFSSFKVLEAY

FIGURE 3513

CCTGGCGCTCTGCGTTTCGTGACCTTGTCCAGTAGAAGGCTATTTAATTTTCACAACTGCTTGAATTTTGACATA
CAAGATGAAGCAAGATGCCTCAAGAAATGCTGCCTACACTGTGGATTGTGAAGATTATGTGCATGTGGTAGAATT
TAATCCCTTTGAGAATGGGGATTCAGGAAACCTAATTGCATATGGTGGCAATAATTATGTGGTCATTGGCACGTG
TACGTTTCAGGAAGAAGAAGCAGACGTTGAAGGCATTCAGTATAAAACACTTCGAACATTTCACCATGGAGTCAG
GGTTGATGGCATAGCTTGGAGCCCAGAGACTAGACTTGATTCATTGCCTCCAGTAATCAAATTTTGTACTTCAGC
TGCTGATATGAAAATTAGATTATTTACTTCAGATCTTCAGGATAAAAATGAATATAAGGTTTTAGAGGGCCATAC
CGATTTCATTAATGGTTTGGTGTTTGATCCCAAAGAAGGCCAAGAAATTGCAAGTGTGAGTGACGATCACACCTG
CAGGATTTGGAACTTGGAAGGAGTGCAAACAGCTCATTTTGTTCTTCATTCTCCTGGCATGAGTGTGTGCTGGCA
TCCTGAGGAGACTTTTAAGCTAATGGTTGCAGAGAAGAATGGAACAATCCGGTTTTATGATCTTTTGGCCCAACA
GGCTATTTTATCTCTTGAATCAGAACAAGTGCCATTAATGTCAGCACACTGGTGCTTAAAAAACACCTTCAAAGT
TGGAGCCGTTGCAGGAAATGATTGGTTAATTTGGGATATTACTCGGTCCAGTTATCCTCAAAATAAGAGACCTGT
TCACATGGATCGAGCCTGCTTATTCAGGTGGTCCACAATTAGTGAAAATCTGTTTGCAACCACTGGTTATCCTGG
CAAAATGGCAAGCCAGTTTCAAATTCATCATTTAGGACACCCTCAGCCCATCCTCATGGGTTCTGTAGCCGTTGG
ATCTGGACTGTCCTGGCATCGAACTCTCCCTCTGTGTGTAATTGGAGGAGACCACAAGCTGTTGTTTTGGGTGAC
TGAAGTATAAAGTGTTTTCTGTACCTTAGATTCACAAACTTTGTATTTTTAGTACATATTTTGAAGAATTTCTAT
AGTACATATTTTGAAGAATTTTTATATCAAATATACCGTATACTTTAGAAAATGTCTCAGTTGCTTTTATTAAAT
AAAATGTTGATGGTTTGAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3514

MKIRLFTSDLQDKNEYKVLEGHTDFINGLVFDPKEGQEIASVSDDHTCRIWNLEGVQTAHFVLHSPGMSVCWHPE
ETFKLMVAEKNGTIRFYDLLAQQAILSLESEQVPLMSAHWCLKNTFKVGAVAGNDWLIWDITRSSYPQNKRPVHM
DRACLFRWSTISENLFATTGYPGKMASQFQIHHLGHPQPILMGSVAVGSGLSWHRTLPLCVIGGDHKLLFWVTEV

FIGURE 3515

GTCTCTTCCTCGCTCCCTCTCTTTCTCTCCTCCCTCTGCCTTCCCAGTGCATAAAGTCTCTGTCGCTCCCGGAAC
TTGTTGGCAATGCCTATTTTTTGGCTTTCCCCCGCGTTCTCTAAACTAACTATTTAAAGGTCTGCGGTCGCAAAT
GGTTTGACTAAACGTAGG**ATG**GGACTTAAGTTGAACGGCAGATATATTTCACTGATCCTCGCGGTGCAAATAGCG
TATCTGGTGCAGGCCGTGAGAGCAGCGGGCAAGTGCGATGCGGTCTTCAAGGGCTTTTCGGACTGTTTGCTCAAG
CTGGGCGACAGCATGGCCAACTACCCGCAGGGCCTGGACGACAAGACGAACATCAAGACCGTGTGCACATACTGG
GAGGATTTCCACAGCTGCACGGTCACAGCCCTTACGGATTGCCAGGAAGGGGCGAAAGATATGTGGGATAAACTG
AGAAAAGAATCCAAAAACCTCAACATCCAAGGCAGCTTATTCGAACTCTGCGGCAGCGGCAACGGGGCGGCGGGG
TCCCTGCTCCCGGCGTTCCCGGTGCTCCTGGTGTCTCTCTCGGCAGCTTTAGCGACCTGGCTTTCCTTC**TGA**GCG
TGGGGCCAGCTCCCCCCGCGCGCCCACCCACACTCACTCCATGCTCCCGGAAATCGAGAGGAAGATCCATTAGTT
CTTTGGGGACGTTGTGATTCTCTGTGATGCTGAAAACACTCATATAGGATTGTGGGAAATCCTGATTCTCTTTTT
TATTTCGTTTGATTTCTTGTGTTTTATTTGCCAAATGTTACCAATCAGTGAGCAAGCAAGCACAGCCAAAATCGG
ACCTCAGCTTTAGTCCGTCTTCACACACAAATAAGAAAACGGCAAACCCACCCCATTTTTTAATTTTATTATTAT
TAATTTTTTTTGTTGGCAAAAGAATCTCAGGAACGGCCCTGGGCCACCTACTATATTAATCATGCTAGTAACATG
AAAAATGATGGGCTCCTCCTAATAGGAAGGCGAGGAGAGGAGAAGGCCAGGGGAATGAATTCAAGAGAGATGTCC
ACGGCCGAAACATACGGTGAATAATTCACGCTCACGTCGTTCTTCCACAGTATCTTGTTTTGATCATTTCCACTG
CACATTTCTCCTCAAGAAAAGCGAAAGGACAGACTGTTGGCTTTGTGTTTGGAGGATAGGAGGGAGAGAGGGAAG
GGGCTGAGGAAATCTCTGGGGTAAGAGTAAAGGCTTCCAGAAGACATGCTGCTATGGTCACTGAGGGGTTAGCTT
TATCTGCTGTTGTTGATGCATCCGTCCAAGTTCACTGCCTTTATTTTCCCTCCTCCCTCTTGTTTTAGCTGTTAC
ACACACAGTAATACCTGAATATCCAACGGTATAGATCACAAGGGGGGGATGTTAAATGTTAATCTAAAATATAGC
TAAAAAAAGATTTTGACATAAAAGAGCCTTGATTTTAAAAAAAAAAGAGAGAGAGATGTAATTTAAAAAGTTTAT
TATAAATTAAATTCAGCAAAAAAAGATTTGCTACAAAGTATAGAGAAGTATAAAATAAAAGTTATTGTTTGAAAA
AAAAAAAAAAAAA

3959/8433

FIGURE 3516

MGLKLNGRYISLILAVQIAYLVQAVRAAGKCDAVFKGFSDCLLKLGDSMANYPQGLDDKTNIKTVCTYWEDFHSC
TVTALTDCQEGAKDMWDKLRKESKNLNIQGSLFELCGSGNGAAGSLLPAFPVLLVSLSAALATWLSF

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FIGURE 3517

GCACGAGGGAAGAGGGTGATCCGACCCGGGGAAGGTCGCTGGGCAGGGCGAGTTGGGAAAGCGGCAGCCCCCGCC
GCCCCCGCAGCCCCTTCTCCTCCTTTCTCCCACGTCCTATCTGCCTCTCGCTGGAGGCCAGGCCGTGCAGCATCG
AAGACAGGAGGAACTGGAGCCTCATTGGCCGGCCCGGGGCGCCGGCCTCGGGCTTAAATAGGAGCTCCGGGCTCT
GGCTGGGACCCGACCGCTGCCGGCCGCGCTCCCGCTGCTCCTGCCGGGTG**ATG**GAAAACCCCAGCCCGGCCGCCG
CCCTGGGCAAGGCCCTCTGCGCTCTCCTCCTGGCCACTCTCGGCGCCGCCGGCCAGCCTCTTGGGGGAGAGTCCA
TCTGTTCCGCCAGAGCCCCGGCCAAATACAGCATCACCTTCACGGGCAAGTGGAGCCAGACGGCCTTCCCCAAGC
AGTACCCCCTGTTCCGCCCCCCTGCGCAGTGGTCTTCGCTGCTGGGGGCCGCGCATAGCTCCGACTACAGCATGT
GGAGGAAGAACCAGTACGTCAGTAACGGGCTGCGCGACTTTGCGGAGCGCGGCGAGGCCTGGGCGCTGATGAAGG
AGATCGAGGCGGCGGGGGGAGGCGCTGCAGAGCGTGCACGCGGTGTTTTCGGCGCCCGCCGTCCCCAGCGGCACCG
GGCAGACGTCGGCGGAGCTGGAGGTGCAGCGCAGGCACTCGCTGGTCTCGTTTGTGGTGCGCATCGTGCCCAGCC
CCGACTGGTTCGTGGGCGTGGACAGCCTGGACCTGTGCGACGGGGACCGTTGGCGGGAACAGGCGGCGCTGGACC
TGTACCCCTACGACGCCGGGACGGACAGCGGCTTCACCTTCTCCTCCCCCAACTTCGCCACCATCCCGCAGGACA
CGGTGACCGAGATAACGTCCTCCTCTCCCAGCCACCCGGCCAACTCCTTCTACTACCCGCGGCTGAAGGCCCTGC
CTCCCATCGCCAGGGTGACACTGGTGCGGCTGCGACAGAGCCCCAGGGCCTTCATCCCTCCCGCCCCAGTCCTGC
CCAGCAGGGACAATGAGATTGTAGACAGCGCCTCAGTTCCAGAAACGCCGCTGGACTGCGAGGTCTCCCTGTGGT
CGTCCTGGGGACTGTGCGGAGGCCACTGTGGGAGGCTCGGGACCAAGAGCAGGACTCGCTACGTCCGGGTCCAGC
CCGCCAACAACGGGAGCCCCTGCCCCGAGCTCGAAGAAGAGGCTGAGTGCGTCCCTGATAACTGCGTC**TAA**GACC
AGAGCCCCGCAGCCCCTGGGGCCCCCGGAGCCATGGGGTGTCGGGGGCTCCTGTGCAGGCTCATGCTGCAGGCGG
CCGAGGCACAGGGGGTTTCGCGCTGCTCCTGACCGCGGTGAGGCCGCGCCGACCATCTCTGCACTGAAGGGCCCT
CTGGTGGCCGGCACGGGCATTGGGAAACAGCCTCCTCCTTTCCCAACCTTGCTTCTTAGGGGCCCCCGTGTCCCG
TCTGCTCTCAGCCTCCTCCTCCTGCAGGATAAAGTCATCCCCAAGGCTCCAGCTACTCTAAATTATGGTCTCCTT
ATAAGTTATTGCTGCTCCAGGAGATTGTCCTTCATCGTCCAGGGGCCTGGCTCCCACGTGGTTGCAGATACCTCA
GACCTGGTGCTCTAGGCTGTGCTGAGCCCACTCTCCCGAGGGCGCATCCAAGCGGGGGCCACTTGAGAAGTGAAT
AAATGGGGCGGTTTCGGAAGCGTCAGTGTTTCCATGTTATGGATCTCTCTGCGTTTGAATAAAGACTATCTCTGT
TGCTCAC

FIGURE 3518

MENPSPAAALGKALCALLLATLGAAGQPLGGESICSARAPAKYSITFTGKWSQTAFPKQYPLFRPPAQWSSLLGA
AHSSDYSMWRKNQYVSNGLRDFAERGEAWALMKEIEAAGEALQSVHAVFSAPAVPSGTGQTSAELEVQRRHSLVS
FVVRIVPSPDWFVGVDSLDLCDGDRWREQAALDLYPYDAGTDSGFTFSSPNFATIPQDTVTEITSSSPSHPANSF
YYPRLKALPPIARVTLVRLRQSPRAFIPPAPVLPSRDNEIVDSASVPETPLDCEVSLWSSWGLCGGHCGRLGTKS
RTRYVRVQPANNGSPCPELEEEAECVPDNCV

FIGURE 3519

CTTACGGCAGTCTCGCGGGATTTCCCCCTCTCGCGGGAATTATTTGAACGTTCGAGCGGTAAATACTCCCTGGGG
CTGTCATAGAAGACTCCTCGGAGAGCGCTGCCTCTGGGTTGGCGGGCTGGCAGGCTGTAGCCGAGCGCGGGCAGG
ACTCGTCCCGGCAGGGTTCCAGAGCC**ATG**GGAGCGGAAAGGAGGCTGCTGTCGATTAAGGAGGCCTTTCGGCTGG
CGCAGCAGCCGCACCAGAACCAGGCGAAGCTGGTGGTGGCGCTGAGCCGCACCTACCGCACGATGGATGATAAGA
CAGTTTTTCATGAGGAGTTCATTCATTACCTTAAATATGTTATGGTGGTCTATAAACGTGAACCAGCTGTGGAGA
GGGTAATAGAATTTGCAGCAAAGTTTGTTACCTCATTTCACCAATCAGATATGGAAGATGATGAGGAAGAGGAAG
ATGGTGGCCTTTTAAATTATTTGTTTACTTTTCTCTTAAAGTCTCATGAAGCAAACAGCAATGCAGTGAGATTTA
GAGTGTGCCTGCTCATAAACAAGCTTTTGGGAAGTATGCCAGAAAATGCTCAGATTGATGATGATGTGTTTGATA
AAATTAATAAAGCCATGCTTATTAGATTGAAAGATAAGATTCCAAATGTGAGAATACAGGCAGTTCTGGCGCTTT
CACGACTTCAGGATCCCAAGGATGATGAATGCCCAGTGGTTAATGCATATGCTACTTTGATTGAAAATGATTCAA
ATCCAGAAGTTAGACGGGCAGTGTTATCATGTATTGCACCATCAGCAAAGACTTTGCCAAAAATTGTAGGGCGCA
CCAAGGATGTGAAAGAGGCTGTCAGAAAGCTGGCTTATCAGGTTTTAGCTGAAAAGGTTCATATGAGAGCTATGT
CCATTGCTCAGAGAGTAATGCTCCTTCAACAAGGTCTTAATGACAGATCAGATGCTGTGAAACAAGCTATGCAGA
AGCATCTTCTTCAAGGCTGGTTACGGTTCTCTGAAGGAAATATCTTAGAGTTGCTCCATCGGTTGGATGTAGAAA
ATTCTTCTGAAGTGGCAGTCTCTGTTCTCAATGCCTTGTTTTCAATAACTCCTCTCAGTGAACTGGTGGGACTCT
GTAAAAACAATGATGGCAGGAAATTGATTCCAGTGGAAACATTAACTCCTGAAATTGCTTTGTATTGGTGTGCCC
TTTGTGAATATTTGAAATCAAAAGGAGATGAAGGTGAAGAATTTTTAGAGCAGATTTTGCCAGAGCCTGTAGTAT
ATGCAGACTATTTATTGAGTTACATCCAGAGCATTCCAGTTGTTAATGAAGAACACAGAGGTGATTTTTCCTATA
TTGGAAATTTGATGACAAAAGAATTCATAGGTCAACAATTGATTCTAATTATTAAGTCTTTGGATACCAGTGAAG
AAGGAGGAAGAAAAAAACTGCTGGCTGTTTTACAGGAGATTCTTATTTTACCCACAATCCCAATATCCCTGGTTT
CTTTTCTTGTTGAAAGACTACTCCACATCATTATAGATGATAATAAGAGAACACAAATTGTTACAGAAATTATCT
CAGAGATTCGGGCGCCCATTGTTACTGTTGGTGTTAATAACGATCCAGCTGATGTAAGAAAGAAAGAACTCAAGA
TGGCTGAAATAAAAGTTAAGCTTATCGAAGCCAAAGAAGCTTTGGAAAATTGCATTACCTTACAGGATTTTAATC
GGGCATCAGAATTAAAAGAAGAAATAAAAGCATTAGAAGATGCCAGAATAAACCTTTTGAAAGAGACAGAGCAAC
TTGAAATTAAAGAAGTCCACATAGAGAAGAATGATGCTGAAACATTGCAGAAATGTCTTATTTTATGCTATGAAC
TGTTGAAGCAGATGTCCATTTCAACAGGCTTAAGTGCAACCATGAATGGAATCATCGAATCTTTGATTCTTCCTG
GAATAATAAGTATTCATCCTGTTGTAAGAAACCTGGCTGTTTTATGCTTGGGATGCTGTGGACTACAGAATCAGG
ATTTTGCAAGGAAACACTTCGTATTACTATTGCAGGTTTTGCAAATTGATGATGTCACAATAAAAATAAGTGCTT
TAAAGGCAATCTTTGACCAACTGATGACGTTCGGGATTGAACCATTTAAAACTAAAAAAATCAAAACACTTCATT
GTGAAGGTACAGAAATAAACAGTGATGATGAGCAAGAATCAAAAGAAGTTGAAGAGACTGCTACAGCTAAGAATG
TTCTGAAACTCCTTTCTGATTTCTTAGATAGTGAGGTATCTGAACTTAGGACTGGAGCTGCAGAAGGACTAGCCA
AGCTGATGTTCTCTGGGCTTTTGGTCAGCAGCAGGATTCTTTCTCGTCTTATTTTGTTATGGTACAATCCTGTGA
CTGAAGAGGATGTTCAACTTCGACATTGCCTAGGCGTGTTCTTCCCCGTGTTTGCTTATGCAAGCAGGACTAATC
AGGAATGCTTTGAAGAAGCTTTTCTTCCAACCCTGCAAACACTGGCCAATGCCCCTGCATCTTCTCCTTTAGCTG
AAATTGATATCACAAATGTTGCTGAGTTACTTGTAGATTTGACAAGACCAAGTGGATTAAATCCTCAGGCCAAGA
CTTCCCAAGATTATCAGGCCTTAACAGTACATGACAATTTGGCTATGAAAATTTGCAATGAGATCTTAACAAGTC
CGTGCTCGCCAGAAATTCGAGTCTATACAAAAGCCTTGAGTTCTTTAGAACTCAGTAGCCATCTTGCAAAAGATC
TTCTGGTTCTATTGAATGAGATTCTGGAGCAAGTAAAAGATAGGACATGTCTGAGAGCTTTGGAGAAAATCAAGA
TTCAGTTAGAAAAAGGAAATAAAGAATTTGGTGACCAAGCTGAAGCAGCACAGGATGCCACCTTGACTACAACTA
CTTTCCAAAATGAAGATGAAAAGAATAAAGAAGTATATATGACTCCACTCAGGGGTGTAAAAGCAACCCAAGCAT
CAAAGTCTACTCAGCTAAAGACTAACAGAGGACAGAGAAAAGTGACAGTTTCAGCTAGGACGAACAGGAGGTGTC
AGACTGCTGAAGCCGACTCTGAAAGTGATCATGAAGTTCCAGAACCAGAATCAGAAATGAAGATGAGACTACCAA
GACGAGCCAAAACCGCAGCACTAGAAAAAAGTAAACTTAACCTTGCCCAATTTCTCAATGAAGATCTAAGT**TAG**G
AAAGACGATGGAGGTGGAATCCTTTAAGATTATGTCCAGTTATTTGCTTTAATAAAGAAGAAGTTACCCTTGTCA
AAATCAGAGAAAAAAAAAAAAAAAA

FIGURE 3520

MGAERRLLSIKEAFRLAQQPHQNQAKLVVALSRTYRTMDDKTVFHEEFIHYLKYVMVVYKREPAVERVIEFAAKF
VTSFHQSDMEDDEEEEDGGLLNYLFTFLLKSHEANSNAVRFRVCLLINKLLGSMPENAQIDDDVFDKINKAMLIR
LKDKIPNVRIQAVLALSRLQDPKDDECPVVNAYATLIENDSNPEVRRAVLSCIAPSAKTLPKIVGRTKDVKEAVR
KLAYQVLAEKVHMRAMSIAQRVMLLQQGLNDRSDAVKQAMQKHLLQGWLRFSEGNILELLHRLDVENSSEVAVSV
LNALFSITPLSELVGLCKNNDGRKLIPVETLTPEIALYWCALCEYLKSKGDEGEEFLEQILPEPVVYADYLLSYI
QSIPVVNEEHRGDFSYIGNLMTKEFIGQQLILIIKSLDTSEEGGRKKLLAVLQEILILPTIPISLVSFLVERLLH
IIIDDNKRTQIVTEIISEIRAPIVTVGVNNDPADVRKKELKMAEIKVKLIEAKEALENCITLQDFNRASELKEEI
KALEDARINLLKETEQLEIKEVHIEKNDAETLQKCLILCYELLKQMSISTGLSATMNGIIESLILPGIISIHPVV
RNLAVLCLGCCGLQNQDFARKHFVLLLQVLQIDDVTIKISALKAIFDQLMTFGIEPFKTKKIKTLHCEGTEINSD
DEQESKEVEETATAKNVLKLLSDFLDSEVSELRTGAAEGLAKLMFSGLLVSSRILSRLILLWYNPVTEEDVQLRH
CLGVFFPVFAYASRTNQECFEEAFLPTLQTLANAPASSPLAEIDITNVAELLVDLTRPSGLNPQAKTSQDYQALT
VHDNLAMKICNEILTSPCSPEIRVYTKALSSLELSSHLAKDLLVLLNEILEQVKDRTCLRALEKIKIQLEKGNKE
FGDQAEAAQDATLTTITFQNEDEKNKEVYMTPLRGVKATQASKSTQLKTNRGQRKVTVSARTNRRCQTAEADSES
DHEVPEPESEMKMRLPRRAKTAALEKSKLNLAQFLNEDLS

FIGURE 3521

CTTACGGCAGTCTCGCGGGATTTCCCCCTCTCGCGGGAATTATTTGAACGTTCGAGCGGTAAATACTCCCTGGGG
CTGTCATAGAAGACTCCTCGGAGAGCGCTGCCTCTGGGTTGGCGGGCTGGCAGGCTGTAGCCGAGCGCGGGCAGG
ACTCGTCCCGGCAGGGTTCCAGAGCC**ATG**GGAGCGGAAAGGAGGCTGCTGTCGATTAAGGAGGCCTTTCGGCTGG
CGCAGCAGCCGCACCAGAACCAGGCGAAGCTGGTGGTGGCGCTGAGCCGCACCTACCGCACGATGGATGATAAGA
CAGTTTTTCATGAGGAGTTCATTCATTACCTTAAATATGTTATGGTGGTCTATAAACGTGAACCAGCTGTGGAGA
GGGTAATAGAATTTGCAGCAAAGTTTGTTACCTCATTTCACCAATCAGATATGGAAGATGATGAGGAAGAGGAAG
ATGGTGGCCTTTTAAATTATTTGTTTACTTTTCTCTTAAAGTCTCATGAAGCAAACAGCAATGCAGTGAGATTTA
GAGTGTGCCTGCTCATAAACAAGCTTTTGGGAAGTATGCCAGAAAATGCTCAGATTGATGATGATGTGTTTGATA
AAATTAATAAAGCCATGCTTATTAGATTGAAAGATAAGATTCCAAATGTGAGAATACAGGCAGTTCTGGCGCTTT
CACGACTTCAGGATCCCAAGGATGATGAATGCCCAGTGGTTAATGCATATGCTACTTTGATTGAAAATGATTCAA
ATCCAGAAGTTAGACGGGCAGTGTTATCATGTATTGCACCATCAGCAAAGACTTTGCCAAAAATTGTAGGGCGCA
CCAAGGATGTGAAAGAGGCTGTCAGAAAGCTGGCTTATCAGGTTTTAGCTGAAAAGGTTCATATGAGAGCTATGT
CCATTGCTCAGAGAGTAATGCTCCTTCAACAAGGTCTTAATGACAGATCAGATGCTGTGAAACAAGCTATGCAGA
AGCATCTTCTTCAAGGCTGGTTACGGTTCTCTGAAGGAAATATCTTAGAGTTGCTCCATCGGTTGGATGTAGAAA
ATTCTTCTGAAGTGGCAGTCTCTGTTCTCAATGCCTTGTTTTCAATAACTCCTCTCAGTGAACTGGTGGGACTCT
GTAAAAACAATGATGGCAGGAAATTGATTCCAGTGGAAACATTAACTCCTGAAATTGCTTTGTATTGGTGTGCCC
TTTGTGAATATTTGAAATCAAAAGGAGATGAAGGTGAAGAATTTTTAGAGCAGATTTTGCCAGAGCCTGTAGTAT
ATGCAGACTATTTATTGAGTTACATCCAGAGCATTCCAGTTGTTAATGAAGAACACAGAGGTGATTTTTCCTATA
TTGGAAATTTGATGACAAAAGAATTCATAGGTCAACAATTGATTCTAATTATTAAGTCTTTGGATACCAGTGAAG
AAGGAGGAAGAAAAAAACTGCTGGCTGTTTTACAGGAGATTCTTATTTTACCCACAATCCCAATATCCCTGGTTT
CTTTTCTTGTTGAAAGACTACTCCACATCATTATAGATGATAATAAGAGAACACAAATTGTTACAGAAATTATCT
CAGAGATTCGGGCGCCCATTGTTACTGTTGGTGTTAATAACGATCCAGCTGATGTAAGAAAGAAAGAACTCAAGA
TGGCTGAAATAAAAGTTAAGCTTATCGAAGCCAAAGAAGCTTTGGAAAATTGCATTACCTTACAGGATTTTAATC
GGGCATCAGAATTAAAAGAAGAAATAAAAGCATTAGAAGATGCCAGAATAAACCTTTTGAAAGAGACAGAGCAAC
TTGAAATTAAAGAAGTCCACATAGAGAAGAATGATGCTGAAACATTGCAGAAATGTCTTATTTTATGCTATGAAC
TGTTGAAGCAGATGTCCATTTCAACAGGCTTAAGTGCAACCATGAATGGAATCATCGAATCTTTGATTCTTCCTG
GAATAATAAGTATTCATCCTGTTGTAAGAAACCTGGCTGTTTTATGCTTGGGATGCTGTGGACTACAGAATCAGG
ATTTTGCAAGGAAACACTTCGTATTACTATTGCAGGTTTTGCAAATTGATGATGTCACAATAAAAATAAGTGCTT
TAAAGGCAATCTTTGACCAACTGATGACGTTCGGGATTGAACCATTTAAAACTAAAAAAATCAAAACACTTCATT
GTGAAGGTACAGAAATAAACAGTGATGATGAGCAAGAATCAAAAGAAGTTGAAGAGACTGCTACAGCTAAGAATG
TTCTGAAACTCCTTTCTGATTTCTTAGATAGTGAGGTATCTGAACTTAGGACTGGAGCTGCAGAAGGACTAGCCA
AGCTGATGTTCTCTGGGCTTTTGGTCAGCAGCAGGATTCTTTCTCGTCTTATTTTGTTATGGTACAATCCTGTGA
CTGAAGAGGATGTTCAACTTCGACATTGCCTAGGCGTGTTCTTCCCCGTGTTTGCTTATGCAAGCAGGACTAATC
AGGAATGCTTTGAAGAAGCTTTTCTTCCAACCCTGCAAACACTGGCCAATGCCCCTGCATCTTCTCCTTTAGCTG
AAATTGATATCACAAATGTTGCTGAGTTACTTGTAGATTTGACAAGACCAAGTGGATTAAATCCTCAGGCCAAGA
CTTCCCAAGATTATCAGGCCTTAACAGTACATGACAATTTGGCTATGAAAATTTGCAATGAGATCTTAACAAGTC
CGTGCTCGCCAGAAATTCGAGTCTATACAAAAGCCTTGAGTTCTTTAGAACTCAGTAGCCATCTTGCAAAAGATC
TTCTGGTTCTATTGAATGAGATTCTGGAGCAAGTAAAAGATAGGACATGTCTGAGAGCTTTGGAGAAAATCAAGA
TTCAGTTAGAAAAAGGAAATAAAGAATTTGGTGACCAAGCTGAAGCAGCACAGGATGCCACCTTGACTACAACTA
CTTTCCAAAATGAAGATGAAAAGAATAAAGAAGTATATATGACTCCACTCAGGGGTGTAAAAGCAACCCAAGCAT
CAAAGTCTACTCAGCTAAAGACTAACAGAGGACAGAGAAAAGTGACAGTTTCAGCTAGGACGAACAGGAGGTGTC
AGACTGCTGAAGCCGACTCTGAAAGTGATCATGAAGTTCCAGAACCAGAATCAGAAATGAAGATGAGACTACCAA
GACGAGCCAAAACCGCAGCACTAGAAAAAAGTAAACTTAACCTTGCCCAATTTCTCAATGAAGATCTAAGT**TAG**G
AAAGACGATGGAGGTGGAATCCTTTAAGATTATGTCCAGTTATTTGCTTTAATAAAGAAGAAGTTACCCTTGTCA
AAATCAGAGAAAAAAAAAAAAAAAA

FIGURE 3522

MGAERRLLSIKEAFRLAQQPHQNQAKLVVALSRTYRTMDDKTVFHEEFIHYLKYVMVVYKREPAVERVIEFAAKF
VTSFHQSDMEDDEEEEDGGLLNYLFTFLLKSHEANSNAVRFRVCLLINKLLGSMPENAQIDDDVFDKINKAMLIR
LKDKIPNVRIQAVLALSRLQDPKDDECPVVNAYATLIENDSNPEVRRAVLSCIAPSAKTLPKIVGRTKDVKEAVR
KLAYQVLAEKVHMRAMSIAQRVMLLQQGLNDRSDAVKQAMQKHLLQGWLRFSEGNILELLHRLDVENSSEVAVSV
LNALFSITPLSELVGLCKNNDGRKLIPVETLTPEIALYWCALCEYLKSKGDEGEEFLEQILPEPVVYADYLLSYI
QSIPVVNEEHRGDFSYIGNLMTKEFIGQQLILIIKSLDTSEEGGRKKLLAVLQEILILPTIPISLVSFLVERLLH
IIIDDNKRTQIVTEIISEIRAPIVTVGVNNDPADVRKKELKMAEIKVKLIEAKEALENCITLQDFNRASELKEEI
KALEDARINLLKETEQLEIKEVHIEKNDAETLQKCLILCYELLKQMSISTGLSATMNGIIESLILPGIISIHPVV
RNLAVLCLGCCGLQNQDFARKHFVLLLQVLQIDDVTIKISALKAIFDQLMTFGIEPFKTKKIKTLHCEGTEINSD
DEQESKEVEETATAKNVLKLLSDFLDSEVSELRTGAAEGLAKLMFSGLLVSSRILSRLILLWYNPVTEEDVQLRH
CLGVFFPVFAYASRTNQECFEEAFLPTLQTLANAPASSPLAEIDITNVAELLVDLTRPSGLNPQAKTSQDYQALT
VHDNLAMKICNEILTSPCSPEIRVYTKALSSLELSSHLAKDLLVLLNEILEQVKDRTCLRALEKIKIQLEKGNKE
FGDQAEAAQDATLTTTTFQNEDEKNKEVYMTPLRGVKATQASKSTQLKTNRGQRKVTVSARTNRRCQTAEADSES
DHEVPEPESEMKMRLPRRAKTAALEKSKLNLAQFLNEDLS

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FIGURE 3523

CCGGACTGCGGAAGGATGGAGCTGGCCGCCGGAAGCTTCTCGGAGGAGCAGTTCTGGGAGGCCTGCGCCGAGCTC
CAGCAGCCCGCTCTGGCCGGGGCCGACTGGCAGCTCCTAGTGGAGACCTCGGGCATCAGCATCTACCGGCTGCTG
GACAAGAAGACTGGACTTCATGAGTATAAAGTCTTTGGTGTTCTGGAGGACTGCTCACCAACTCTACTGGCAGAC
ATCTATATGGACTCAGATTACAGAAAACAATGGGACCAGTATGTTAAAGAACTCTATGAACAAGAATGCAACGGA
GAGACTGTGGTCTACTGGGAAGTGAAGTACCCTTTTCCCATGTCCAACAGAGACTATGTCTACCTTCGGCAGCGG
CGAGACCTGGACATGGAAGGGAGGAAGATCCATGTGATCCTGGCCCGGAGCACCTCCATGCCTCAGCTTGGCGAG
AGGTCTGGGGTGATCCGGGTGAAGCAATACAAGCAGAGCCTGGCGATTGAGAGTGACGGCAAGAAGGGGAGCAAA
GTTTTCATGTATTACTTCGATAACCCGGGTGGCCAAATTCCGTCCTGGCTCATTAACTGGGCCGCCAAGAATGGA
GTTCCTAACTTCTTGAAAGACATGGCAAGAGCCTGTCAGAACTACCTCAAGAAAACCTAAGAAAGAGAACTGGGA
ACATTGCATCCATGGGTTGATGTCTCTGGAAGTGCAACCACCCAATGTCTCTGGAAGTGCCACCTGGAAGTGCCA
CCTGGAAGTGTCTCTGGAAGAGCACCCACCACTGTTCAGCCTTCCCCTGCTGTTTCTGTCTTCAGAGGCCTACAC
ACTACCACATCCTTTCTAAGCATGTTTGCCTGACATCCAGCTCACTCGTCTGCTTCCTTTCTCGCTCCCCCCATC
CTGGGCTGGGCTGCCTTCTTCTACAGTTCAATATGGGGCAGACTAGGGAAACCTTTGCTTGCTTACTATTAGGAG
GGGAAGTCTTCAGTAGGGAACACGATCATTCCATTGTGCAATTTTACGGGGATGGGTGGGCGGAGGGACACAACA
AAATTTAAGAATGACTATTTGGGCGGGCTGGCTCTTTTGCAGCTTGTGATTTCTTCCAGCTTGGGAGGGGCTGCT
GGAAGTGGCATTTCGTTCAGAGCTGACTTTCAGTGCACCCAAACTGGATGACGTGCCAATGTCCATTTGCCTTAT
GCTTTGTGGAGCTGATTAGGCTGGGATTTGAGGTGATAATCCAGTAAGTCTTTCCTCGTTCCTACTTGTGGAGGA
TCAGTAGCTGTTATGATGCCAGACCATTTGGAGAAGTATCAGAGGCCTGACCGGACACATAATACGACAACCACA
TTTTTCCTCATCATCCATGAGGAAATGGATGATTTCTCTTTTCCATATGTCACTGGGGGAAAGGCTGCCTGTACC
TCTCAAGCTTTGCATTTTACTGGAAACTGAGGCGTCAAGATGGCTGTGGCAGCTAGCAAAAGCAAAGATGCTTTG
TGCATAGCCTTGTGAAAAAGTATCTTTCTATGCAATAAGATGAATTTTCCTCCCAGAATATTTAGAAATGTAGAA
GGGATAACAGTTCACAGCCAGGTAAAATTTAACTGGTGGCTTAATGACTCTGCACCTTTTTCTCAGGAATTCTGC
CTAAGTTGTCTGCCTTTTCTACCACCAAAAAGACTTTTAGTTTTCTATGCTTTCTCCTGAATTTTGGTAGGGTAA
GTATTTCTATGTCAAAGGCACAGCCTTGATGATCTCAGGGAAAAATTTTAATCACTGTGTATAATGATACTGAAC
CTTGATTAATAACAGAAATTCAGGATGTAAAGCCACAGAATGGGATTTATTAATGTGGGATACCTCAGACTGTTT
GTTTTCTTTCTGGGAAGAAAAGTGTGTTCTATAATGAATAAATATAGAGTGGTTTTT

FIGURE 3524

MELAAGSFSEEQFWEACAELQQPALAGADWQLLVETSGISIYRLLDKKTGLHEYKVFGVLEDCSPTLLADIYMDS
DYRKQWDQYVKELYEQECNGETVVYWEVKYPFPMSNRDYVYLRQRRDLDMEGRKIHVILARSTSMPQLGERSGVI
RVKQYKQSLAIESDGKKGSKVFMYYFDNPGGQIPSWLINWAAKNGVPNFLKDMARACQNYLKKT

FIGURE 3525

GCTGGAGCCGGGCCGGGGCG**ATG**TGGAGCGCGGGCCGCGGCGGGGCTGCCTGGCCGGTGCTGTTGGGGCTGCTGC
TGGCGCTGTTAGTGCCGGGCGGTGGTGCCGCCAAGACCGGTGCGGAGCTCGTGACCTGCGGGTCGGTGCTGAAGC
TGCTCAATACGCACCACCGCGTGCGGCTGCACTCGCACGACATCAAATACGGATCCGGCAGCGGCCAGCAATCGG
TGACCGGCGTAGAGGCGTCGGACGACGCGAATAGCTACTGGCGGATCCGCGGCGGCTCGGAGGGCGGGTGCCCGT
GCGGGTCCCCGGTGCGCTGCGGGCAGGCGGTGAGGCTCACGCATGTGCTTACGGGCAAGAACCTGCACACGCACC
ACTTCCCGTCGCCGCTGTCCAACAACCAGGAGGTGAGTGCCTTTGGGGAAGACGGCGAGGGCGACGACCTGGACC
TATGGACAGTGCGCTGCTCTGGACAGCACTGGGAGCGTGAGGCTGCTGTGCGCTTACAGCATGTGGGCACCTCTG
TGTTCCTGTCAGTCACGGGTGAGCAGTATGGAAGCCCCATCCGTGGGCAGCATGAGGTCCACGGCATGCCCAGTG
CCAACACGCACAATACGTGGAAGGCCATGGAAGGCATCTTCATCAAGCCTAGTGTGGAGCCCTCTGCAGGTCACG
ATGAACTC**TGA**GTGTGTGGATGGATGGGTGGATGGAGGGTGGCAGGTGGGGCGTCTGCAGGGCCACTCTTGGCAG
AGACTTTGGGTTTGTAGGGGTCCTCAAGTGCCTTTGTGATTAAAGAATGTTGGTCTATGA

FIGURE 3526

MWSAGRGGAAWPVLLGLLLALLVPGGGAAKTGAELVTCGSVLKLLNTHHRVRLHSHDIKYGSGSGQQSVTGVEAS
DDANSYWRIRGGSEGGCPCGSPVRCGQAVRLTHVLTGKNLHTHHFPSPLSNNQEVSAFGEDGEGDDLDLWTVRCS
GQHWEREAAVRLQHVGTSVFLSVTGEQYGSPIRGQHEVHGMPSANTHNTWKAMEGIFIKPSVEPSAGHDEL

FIGURE 3527

CTTCGCGCACCTC**ATG**GAATCCCTTCTGCAGCACCTGGATCGCTTTTCCGAGCTTCTGGCGGTCTCAAGCACTAC
CTACGTCAGCACCTGGGACCCCGCCACCGTGCGCCGGGCCTTGCAGTGGGCGCGCTACCTGCGCCACATCCATCG
GCGCTTTGGTCGGCATGGCCCCATTCGCACGGCTCTGGAGCGGCGGCTGCACAACCAGTGGAGGCAAGAGGGCGG
CTTTGGGCGGGGTCCAGTTCCGGGATTAGCGAACTTCCAGGCCCTCGGTCACTGTGACGTCCTGCTCTCTCTGCG
CCTGCTGGAGAACCGGGCCCTCGGGGATGCAGCTCGTTACCACCTGGTGCAGCAACTCTTTCCCGGCCCGGGCGT
CCGGGACGCCGATGAGGAGACACTCCAAGAGAGCCTGGCCCGCCTTGCCCGCCGGCGGTCTGCGGTGCACATGCT
GCGCTTCAATGGCTATAGAGAGAACCCAAATCTCCAGGAGGACTCTCTGATGAAGACCCAGGCGGAGCTGCTGCT
GGAGCGTCTGCAGGAGGTGGGGAAGGCCGAAGCGGAGCGTCCCGCCAGGTTTCTCAGCAGCCTGTGGGAGCGCTT
GCCTCAGAACAACTTCCTGAAGGTGATAGCGGTGGCGCTGTTGCAGCCGCCTTTGTCTCGTCGGCCCCAAGAAGA
GTTGGAACCCGGCATCCACAAATCACCTGGAGAGGGGAGCCAAGTGCTAGTCCACTGGCTTCTGGGGAATTCGGA
AGTCTTTGCTGCCTTTTGTCGCGCCCTCCCAGCCGGGCTTTTGACTTTAGTGACTAGCCGCCACCCAGCGCTGTC
TCCTGTCTATCTGGGTCTGCTAACAGACTGGGGTCAACGTTTGCACTATGACCTTCAGAAAGGCATTTGGGTTGG
AACTGAGTCCCAAGATGTGCCCTGGGAGGAGTTGCACAATAGGTTTCAAAGCCTCTGTCAGGCCCCTCCACCTCT
GAAAGATAAAGTTCTAACTGCCCTGGAGACCTGTAAAGCGCAGGATGGAGATTTTGAAGTACCTGGTCTTAGCAT
CTGGACAGACCTCTTATTAGCTCTTCGTAGTGGTGCATTTAGGAAAAGACAAGTTTTGGGTCTCAGCGCAGGCCT
CAGTTCTGTA**TAG**GCAATGCTGTGTTATTACTTGAATATAGAATATATAGTTTACAAAATGAAAATTACAATGTT
CTCACCAAATATATGCCTTCGTGTGTCCAAAGTATAATTATTTTAGATGCTAATTTTGAATAGTTTATTAAACAG
TTATAAATATGCAAAGTAGCTGGCATGTAGTGTCACGGATTTTCTGGATAGAGGAAGTGATTGGAAGTATTCCAC
TTAAAGCCATGGAATTAGCAATAGTTTGCTTTTTAATAGAAGGCCCATTTGTAAGAATGTTGAAAATATGTGTAC
CGTTTAAAGAAAAAGCAGCTTTAAAGTGACAAACAAAATACCCTTTTTCTTTTAGTATGGTTTATTTTTCTAGGT
TTTCTGTCCCTCCCTCAGTAGTGAAGAGTTTTCTTTATTCCTGGCAGTGTCAGGAATATTGGTTTGAAAAGCTGT
TGGCCTATCTGGAGTTTGGCCTTGTTAACCTAGTATTCTAACCAGTTAACCAGCCTTAGTATGCATTAAAATTGT
ATTGTTCAGAAAGTTTGTTTCTCATTTTCTGCAAATTCTTACTTTGAAAATGAATCACCACATAGTATGTCCCTT
TAAAGCATTGACGCACAGACAAATGTTTAAAGCACAGTAAATACAAATATATGCCTTTGGATACTAAATTAATGC
TTGATGATAAAAGAATCAAACTTTTTTTTTTTTGAGATGGAGTCTCGCTCTGTCACCCAGTCTGGAGTGCAGTGG
TGTGATCACTGCTCAGTGCAACCTCTGCCTCCCAGGATCAAGCAATTCTGACTCAGCCTCCCAAGTAGCTGGGAT
TACAGGTGCAGGCCACCATGCCCGGCTAATTTTTTGTATTTTTAGTAGAGACGGGGTTTCACCATGCTGGCCAGG
CTGGTCTCAAACACCTGACCTTGTGATCCGTCCGCCTTGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCAC
CGCGCCTGGCCAAAACAACATTTTAAGTAGAAGATCCAGGTTTTAGTGCAGCTTCTGCCGTTAACTAGGTTAATA
AATCACAACCTTGGGGCCACAGTTGCCTTATATGTAAATGAAGTGTTTAGAATAAAATAGTTAAATTTCCTTATT
TTTCCCTTGGTGGCTGCCCTGTGGAAACAGTTTAGAATATTTGTTTTGTGTGTAGGAACCTAGTTGTGTTAGTTT
ACCTGGGTGTTCCACAGCTGATAGTGATTGCCTTGAATAAATTCAAGGGCAATTTATTCATTTTTACTAGGGAGA
TAGACCTTTACAGCAATCAAGATATTTTTGTCCATATCCAGGTTAGCTGGTAAGAGGATTTTTTTGGAGAAAAAA
AATGATATTTAGAAAGTTAATTTCTAATTCCGGAATGGAATAAAAACAATATGAGTAGTGTAATCTTGTAGAAAA
AGAGTTGTATAATCTTGTAGAATTTCTCATTCTGTGGTACAACCCAGGGGTAAACTATTATTCCAGTAGTCAGTA
CACTTTTCTAGATAAATCTTGAGTGAAAACCAGCAATTTCTTTTTCCTTGTGGTCTGATTCCTTTTTCTAATCCA
TGAAGGCCATCTTGTAGATTACATTTATCATTAATGCAAGAATAAAGACAATTCCTCCTGTCAGTTGCGTGAATT
TTTTTTAAGAAACAACCCAGTGAAGAGTTCTACCATAGCAAGGCCTAATGTTAGCTTTAGCTTTAGAAAATAACA
GTTTGTGAACTTACTTCCCTATATTTGCAGCTGTATCTCACACTATGATTTACAATAAAATTGTAAAGATTGACA
AT

FIGURE 3528

MESLLQHLDRFSELLAVSSTTYVSTWDPATVRRALQWARYLRHIHRRFGRHGPIRTALERRLHNQWRQEGGFGRG
PVPGLANFQALGHCDVLLSLRLLENRALGDAARYHLVQQLFPGPGVRDADEETLQESLARLARRRSAVHMLRFNG
YRENPNLQEDSLMKTQAELLLERLQEVGKAEAERPARFLSSLWERLPQNNFLKVIAVALLQPPLSRRPQEELEPG
IHKSPGEGSQVLVHWLLGNSEVFAAFCRALPAGLLTLVTSRHPALSPVYLGLLTDWGQRLHYDLQKGIWVGTESQ
DVPWEELHNRFQSLCQAPPPLKDKVLTALETCKAQDGDFEVPGLSIWTDLLLALRSGAFRKRQVLGLSAGLSSV

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FIGURE 3529

ACCTCCGGAAACCGTAGATTCCGGGCGGTCGGAGCCGCCGGGAGCTGTAGTTCTCCCGCGGCTCAGAGAAGTAGG
CAGAGAGCGGACCTGGCGGCCGGGCAGC**ATG**GCGGGGCTGGAGCTCTTGTCGGACCAGGGCTACCGGGTGGACGG
GCGGCGCGCCGGGGAGCTGCGCAAGATCCAGGCGCGGATGGGCGTGTTCGCGCAGGCTGACGGCTCGGCCTACAT
TGAGCAGGGCAACACCAAGGCACTGGCTGTGGTCTACGGCCCGCACGAGATCCGGGGCTCCCGGGCTCGAGCCCT
GCCGGACAGGGCCCTAGTGAACTGTCAATATAGTTCAGCGACCTTCAGCACAGGTGAGCGCAAGCGACGGCCACA
TGGGGACCGTAAGTCCTGTGAGATGGGCCTGCAGCTCCGCCAGACTTTCGAAGCAGCCATCCTCACACAGCTGCA
CCCACGCTCCCAGATTGATATCTATGTGCAGGTGCTACAGGCAGATGGTGGGACCTATGCAGCTTGTGTGAATGC
AGCCACGCTGGCAGTGCTGGATGCCGGGATACCCATGAGAGACTTTGTGTGTGCGTGCTCAGCTGGCTTCGTGGA
CGGCACAGCCCTGGCGGACCTCAGCCATGTGGAGGAAGCAGCTGGTGGCCCCCAGCTGGCCCTGGCCCTGCTGCC
AGCCTCAGGACAGATTGCGCTGCTTGAGATGGATGCCCGGCTGCACGAGGACCACCTGGAGCGGGTGTTGGAGGC
TGCTGCCCAGGCTGCCCGAGATGTGCACACCCTCTTAGATCGAGTGGTCCGGCAGCATGTGCGTGAGGCCTCTAT
CTTGCTGGGGGAC**TGA**CCACCCAGCCACCCATGTCCAGAATAAACCCTCCTTGCCCACACXAAAAAAAAAA

FIGURE 3530

MAGLELLSDQGYRVDGRRAGELRKIQARMGVFAQADGSAYIEQGNTKALAVVYGPHEIRGSRARALPDRALVNCQ
YSSATFSTGERKRRPHGDRKSCEMGLQLRQTFEAAILTQLHPRSQIDIYVQVLQADGGTYAACVNAATLAVLDAG
IPMRDFVCACSAGFVDGTALADLSHVEEAAGGPQLALALLPASGQIALLEMDARLHEDHLERVLEAAAQAARDVH
TLLDRVVRQHVREASILLGD

FIGURE 3531

GCTGTTGAGAAGCTACCCGCGGGGTTGTAGACCTCGGACCTCATGGCAGAGATAATTCAGGAACGCATAGAAGAT
CGGCTCCCGGAATTGGAACAGCTGGAGCGCATTGGACTGTTCAGTCATGCGGAGATTAAGGCTATCATTAAGAAG
GCTTCCGATCTAGAGTACAAAATCCAGAGAAGAACCCTTTTCAAGGAAGACTTTATCAATTATGTTCAATATGAA
ATTAATCTTTTGGAGCTGATCCGGAGAAGAAGAACACGCATTGGATATTCATTTAAGAAGGATGAGATTGAGAAT
TCTATTGTACACCGGGTACAAGGTGTTTTCCAGCGTGCCTCAGCAAAATGGAAAGACGATGTTCAACTTTGGCTC
TCCTATGTGGCTTTTTGTAAGAAGTGGGCTACTAAAACTCGACTTAGCAAGGTATTCTCTGCCATGTTGGCGATT
CATTCCAACAAACCAGCTTTGTGGATTATGGCAGCCAAATGGGAAATGGAAGATCGATTGTCTTCAGAAAGCGCA
AGGCAACTATTTCTTCGCGCACTGCGCTTTCATCCAGAGTGCCCAAAACTTTATAAAGAATACTTTAGGATGGAG
CTGATGCATGCTGAAAAACTGAGGAAGGAGAAGGAAGAATTTGAAAAAGCCAGTATGGATGTGGAGAATCCTGAT
TATTCTGAAGAAATCCTTAAGGGCGAGTTGGCATGGATCATCTACAAAAATTCTGTAAGCATAATTAAAGGTGCA
GAATTTCACGTGTCACTGCTTTCGATTGCACAGCTATTTGACTTTGCCAAAGATCTACAAAAAGAGATTTATGAT
GACCTTCAGGCTCTACACACAGATGATCCTCTCACTTGGGATTATGTGGCAAGGCGAGAATTAGAGATTGAGTCA
CAGACAGAAGAGCAGCCTACAACGAAACAAGCCAAAGCAGTGGAGGTCGGCCGGAAGGAGGAGAGGTGCTGTGCT
GTGTATGAAGAGGCAGTGAAGACTCTGCCAACAGAGGCCATGTGGAAGTGTTACATCACCTTTTGCTTGGAAAGA
TTTACTAAGAAGTCAAATAGTGGGTTCCTTAGAGGGAAGAGGTTGGAAAGAACCATGACTGTATTCAGGAAGGCA
CATGAACTGAAGCTTCTGTCAGAATGCCAATACAAGCAGTTGAGTGTTTCGTTGCTGTGTTATAACTTCCTGAGG
GAAGCTCTGGAAGTGGCAGTAGCTGGAACTGAATTGTTTAGAGACTCTGGGACAATGTGGCAGCTGAAGCTGCAG
GTGCTGATCGAGTCAAAGAGCCCTGACATAGCCATGCTTTTTGAAGAAGCCTTTGTGCACCTGAAACCCCAGGTT
TGTCTGCCATTGTGGATTTCCTGGGCAGAGTGGAGTGAAGGTGCCAAAAGCCAAGAAGACACTGAGGCAGTCTTT
AAGAAAGCTCTCTTAGCTGTCATAGGTGCCGACTCAGTAACCCTGAAGAATAAGTACCTGGATTGGGCTTATCGA
AGTGGTGGCTACAAAAAGGCCAGAGCTGTGTTTAAAAGTTTACAGGAGAGCCGACCATTTTCAGTTGACTTTTTC
AGGAAAATGATTCAGTTTGAAAAGGAGCAAGAATCCTGCAATATGGCGAACATAAGAGAATATTATGAGAGAGCT
TTGAGAGAGTTTGGATCCGCAGATTCTGATCTTTGGATGGATTATATGAAAGAAGAATTGAACCACCCCCTTGGT
AGACCTGAGAACTGTGGACAGATCTACTGGCGAGCGATGAAAATGTTGCAGGGAGAGTCAGCAGAGGCATTTGTA
GCTAAACATGCTATGCATCAGACTGGCCATTTATGAAGATGAAGAATACCGTCCGCTTTGTGAAATAGTATTGCA
AGCCAGCCCCGTGGGCAAATTTGTATTGAGTCCATCTGTAATTTGCTCAGTGATGGCAGACAAGATGGCTGTCTG
GTTTTGAGACACACACTTTAATTTTATGTTAACTTGTTAAATCTTTTTAAAAATTAAAAAATTTTTATGATTGAA
AAAAAA

FIGURE 3532

MAEIIQERIEDRLPELEQLERIGLFSHAEIKAIIKKASDLEYKIQRRTLFKEDFINYVQYEINLLELIRRRRTRI
GYSFKKDEIENSIVHRVQGVFQRASAKWKDDVQLWLSYVAFCKKWATKTRLSKVFSAMLAIHSNKPALWIMAAKW
EMEDRLSSESARQLFLRALRFHPECPKLYKEYFRMELMHAEKLRKEKEEFEKASMDVENPDYSEEILKGELAWII
YKNSVSIIKGAEFHVSLLSIAQLFDFAKDLQKEIYDDLQALHTDDPLTWDYVARRELEIESQTEEQPTTKQAKAV
EVGRKEERCCAVYEEAVKTLPTEAMWKCYITFCLERFTKKSNSGFLRGKRLERTMTVFRKAHELKLLSECQYKQL
SVSLLCYNFLREALEVAVAGTELFRDSGTMWQLKLQVLIESKSPDIAMLFEEAFVHLKPQVCLPLWISWAEWSEG
AKSQEDTEAVFKKALLAVIGADSVTLKNKYLDWAYRSGGYKKARAVFKSLQESRPFSVDFFRKMIQFEKEQESCN
MANIREYYERALREFGSADSDLWMDYMKEELNHPLGRPENCGQIYWRAMKMLQGESAEAFVAKHAMHQTGHL

FIGURE 3533

GCCCGGAGAGCCGCATCTATTGGCAGCTTTGTTATTGATCAGAAACTGCTCGCCGCCGACTTGGCTTCCAGTCTG
GCTGCGGGCAACCCTTGAGTTTTCGCCTCTGTCCTGTCCCCCGAACTGACAGGTGCTCCCAGCAACTTGCTGGGG
ACTTCTCGCCGCTCCCCCGCGTCCCCACCCCCTCATTCCTCCCTCGCCTTCACCCCCACCCCCACCACTTCGCCA
CAGCTCAGGATTTGTTTAAACCTTGGGAAACTGGTTCAGGTCCAGGTTTTGCTTTGATCCTTTTCAAAAACTGGA
GACACAGAAGAGGGCTCTAGGAAAAAGTTTTGGATGGGATTATGTGGAAACTACCCTGCGATTCTCTGCTGCCAG
AGCAGGCTCGGCGCTTCCACCCCAGTGCAGCCTTCCCCTGGCGGTGGTGAAAGAGACTCGGGAGTCGCTGCTTCC
AAAGTGCCCGCCGTGAGTGAGCTCTCACCCCAGTCAGCCAA**ATG**AGCCTCTTCGGGCTTCTCCTGCTGACATCTG
CCCTGGCCGGCCAGAGACAGGGGACTCAGGCGGAATCCAACCTGAGTAGTAAATTCCAGTTTTCCAGCAACAAGG
AACAGAACGGAGTACAAGATCCTCAGCATGAGAGAATTATTACTGTGTCTACTAATGGAAGTATTCACAGCCCAA
GGTTTCCTCATACTTATCCAAGAAATACGGTCTTGGTATGGAGATTAGTAGCAGTAGAGGAAAATGTATGGATAC
AACTTACGTTTGATGAAAGATTTGGGCTTGAAGACCCAGAAGATGACATATGCAAGTATGATTTTGTAGAAGTTG
AGGAACCCAGTGATGGAACTATATTAGGGCGCTGGTGTGGTTCTGGTACTGTACCAGGAAAACAGATTTCTAAAG
GAAATCAAATTAGGATAAGATTTGTATCTGATGAATATTTTCCTTCTGAACCAGGGTTCTGCATCCACTACAACA
TTGTCATGCCACAATTCACAGAAGCTGTGAGTCCTTCAGTGCTACCCCCTTCAGCTTTGCCACTGGACCTGCTTA
ATAATGCTATAACTGCCTTTAGTACCTTGGAAGACCTTATTCGATATCTTGAACCAGAGAGATGGCAGTTGGACT
TAGAAGATCTATATAGGCCAACTTGGCAACTTCTTGGCAAGGCTTTTGTTTTTGGAAGAAAATCCAGAGTGGTGG
ATCTGAACCTTCTAACAGAGGAGGTAAGATTATACAGCTGCACACCTCGTAACTTCTCAGTGTCCATAAGGGAAG
AACTAAAGAGAACCGATACCATTTTCTGGCCAGGTTGTCTCCTGGTTAAACGCTGTGGTGGGAACTGTGCCTGTT
GTCTCCACAATTGCAATGAATGTCAATGTGTCCCAAGCAAAGTTACTAAAAAATACCACGAGGTCCTTCAGTTGA
GACCAAAGACCGGTGTCAGGGGATTGCACAAATCACTCACCGACGTGGCCCTGGAGCACCATGAGGAGTGTGACT
GTGTGTGCAGAGGGAGCACAGGAGGA**TAG**CCGCATCACCACCAGCAGCTCTTGCCCAGAGCTGTGCAGTGCAGTG
GCTGATTCTATTAGAGAACGTATGCGTTATCTCCATCCTTAATCTCAGTTGTTTGCTTCAAGGACCTTTCATCTT
CAGGATTTACAGTGCATTCTGAAAGAGGAGACATCAAACAGAATTAGGAGTTGTGCAACAGCTCTTTTGAGAGGA
GGCCTAAAGGACAGGAGAAAAGGTCTTCAATCGTGGAAAGAAAATTAAATGTTGTATTAAATAGATCACCAGCTA
GTTTCAGAGTTACCATGTACGTATTCCACTAGCTGGGTTCTGTATTTCAGTTCTTTCGATACGGCTTAGGGTAAT
GTCAGTACAGGAAAAAAACTGTGCAAGTGAGCACCTGATTCCGTTGCCTTGCTTAACTCTAAAGCTCCATGTCCT
GGGCCTAAAATCGTATAAAATCTGGATTTTTTTTTTTTTTTTGCTCATATTCACATATGTAAACCAGAACATTC
TATGTACTACAAACCTGGTTTTTAAAAAGGAACTATGTTGCTATGAATTAAACTTGTGTCGTGCTGATAGGACAG
ACTGGATTTTTCATATTTCTTATTAAAATTTCTGCCATTTAGAAGAAGAGAACTACATTCATGGTTTGGAAGAGA
TAAACCTGAAAAGAAGAGTGGCCTTATCTTCACTTTATCGATAAGTCAGTTTATTTGTTTCATTGTGTACATTTT
TATATTCTCCTTTTGACATTATAACTGTTGGCTTTTCTAATCTTGTTAAATATATCTATTTTTACCAAAGGTATT
TAATATTCTTTTTTATGACAACTTAGATCAACTATTTTTAGCTTGGTAAATTTTTCTAAACACAATTGTTATAGC
CAGAGGAACAAAGATGATATAAAATATTGTTGCTCTGACAAAAATACATGTATTTCATTCTCGTATGGTGCTAGA
GTTAGATTAATCTGCATTTTAAAAAACTGAATTGGAATAGAATTGGTAAGTTGCAAAGACTTTTTGAAAATAATT
AAATTATCATATCTTCCATTCCTGTTATTGGAGATGAAAATAAAAAGCAACTTATGAAAGTAGACATTCAGATCC
AGCCATTACTAACCTATTCCTTTTTTGGGGAAATCTGAGCCTAGCTCAGAAAAACATAAAGCACCTTGAAAAAGA
CTTGGCAGCTTCCTGATAAAGCGTGCTGTGCTGTGCAGTAGGAACACATCCTATTTATTGTGATGTTGTGGTTTT
ATTATCTTAAACTCTGTTCCATACACTTGTATAAATACATGGATATTTTTATGTACAGAAGTATGTCTCTTAACC
AGTTCACTTATTGTACTCTGGCAATTTAAAAGAAAATCAGTAAAATATTTTGCTTGTAAAATGCTTAATATCGTG
CCTAGGTTATGTGGTGACTATTTGAATCAAAAATGTATTGAATCATCAAATAAAAGAATGTGGCTATTTTGGGGA
GAAAATT

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FIGURE 3534

MSLFGLLLLTSALAGQRQGTQAESNLSSKFQFSSNKEQNGVQDPQHERIITVSTNGSIHSPRFPHTYPRNTVLVW
RLVAVEENVWIQLTFDERFGLEDPEDDICKYDFVEVEEPSDGTILGRWCGSGTVPGKQISKGNQIRIRFVSDEYF
PSEPGFCIHYNIVMPQFTEAVSPSVLPPSALPLDLLNNAITAFSTLEDLIRYLEPERWQLDLEDLYRPTWQLLGK
AFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPSK
VTKKYHEVLQLRPKTGVRGLHKSLTDVALEHHEECDCVCRGSTGG

FIGURE 3535

TCGGGCCACGCCAGATCTCAGGATGATGGGGCGCAGCCCTGGGTTTGCCATGCAGCACATCGTGGGTGTGCCCCA
CGTACTGGTTCGGAGGGGCCTCCTTGGAAGGGACCTCTTC**ATG**ACCAGGACTCTCTGCAGCCCAGGCCCAAGCCA
GCCCGGAGAGAAAAGACCTGAGGAGGTGGCCCTGGGGCTGCACCACCGCCTCCCAGCACTGGGAAGAGCCCTGGG
GCACAGCATTCAGCAACGAGCGACCTCCACAGCCAAGACTTGGTGGGACAGATATGAAGAGTTTGTTGGACTCAA
CGAGGTTCGAGAGGCCCAGGGAAAGGTGACAGAGGCTGAGAAAGTGTTCATGGTGGCTCGAGGGCTTGTCCGAGA
GGCTCGGGAGGACTTGGAAGTTCACCAGGCCAAGCTGAAGGAGGTGAGGGACCGCTTGGACCGTGTCTCCAGGGA
GGACAGTCAGTACTTGGAACTGGCTACTCTCGAGCACAGGATGCTGCAGGAGGAGAAGAGGCTTCGCACAGCCTA
TCTGCGTGCAGAAGACTCTGAGCGAGAGAAGTTCTCCCTCTTCTCTGCAGCTGTGCGGGAAAGTCATGAGAAGGA
GCGCACAAGGGCTGAGAGGACCAAGAACTGGTCCCTCATTGGCTCAGTCCTGGGGGCCCTGATTGGTGTGGCTGG
CTCCACCTATGTGAACCGTGTGCGACTACAGGAGCTGAAGGCTTTACTCCTGGAGGCGCAGAAGGGGCCTGTGAG
TCTCCAAGAGGCCATTCGAGAACAGGCGTCTAGCTACTCCCGCCAGCAGAGGGACCTCCACAATCTCATGGTGGA
CTTGAGGGGCCTGGTACATGCTGCTGGGCCAGGGCAGGACTCTGGGTCACAGGCAGGTAGTCCCCCGACCAGAGA
CAGAGATGTAGATGTCCTTTCAGCTGCCTTGAAAGAGCAGCTTAGTCATTCCAGGCAAGTCCATTCATGTCTAGA
AGGCTTACGAGAGCAGCTTGATGGCCTAGAAAAGACTTGTAGCCAAATGGCTGGGGTGGTTCAGCTTGTAAAGTC
TGCAGCACACCCAGGCCTGGTGGAACCAGCAGACGGGGCTATGCCCAGCTTCTTGCTGGAGCAGGGGAGCATGAT
CTTGGCACTGTCAGACACGGAGCAGAGACTAGAAGCCCAAGTCAACAGGAACACCATCTATAGCACCCTGGTCAC
CTGTGTGACATTTGTGGCCACACTGCCTGTGCTCTACATGCTATTCAAAGCCAGC**TAA**CCCCTGGCCCCTCCTCC
AGAGGGTCTGAGGCAATAGCTGTGAATGTGGATTTAAGTAGAGAATCGTAGCAATGAAGCGAGCCTTTGGGGGCA
TGTACAACCTCAATCTGAAGGAGCAGTATCTGTGTGGCTCACCAGCAGGCATGCTTCGCTTTGTAGACAAGGTTC
ATTTACATTAATTATCAAAACTTTGTGCTAATGTCCAATTAAAATATCCTGAGTTTTATTATTTAAAAAAAAAAA
AAAA

FIGURE 3536

MTRTLCSPGPSQPGEKRPEEVALGLHHRLPALGRALGHSIQQRATSTAKTWWDRYEEFVGLNEVREAQGKVTEAE
KVFMVARGLVREAREDLEVHQAKLKEVRDRLDRVSREDSQYLELATLEHRMLQEEKRLRTAYLRAEDSEREKFSL
FSAAVRESHEKERTRAERTKNWSLIGSVLGALIGVAGSTYVNRVRLQELKALLLEAQKGPVSLQEAIREQASSYS
RQQRDLHNLMVDLRGLVHAAGPGQDSGSQAGSPPTRDRDVDVLSAALKEQLSHSRQVHSCLEGLREQLDGLEKTC
SQMAGVVQLVKSAAHPGLVEPADGAMPSFLLEQGSMILALSDTEQRLEAQVNRNTIYSTLVTCVTFVATLPVLYM
LFKAS

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FIGURE 3537

ATGCTGGGTACGCTGCGCGCCATGGAGGGCGAGGACGTGGAAGACGACCAGCTGCTGCAGAAGCTCAGGGCCAGT
CGCCGCCGCTTCCAGAGGCGCATGCAGCGGCTGATAGAGAAGTACAACCAGCCCTTCGAGGACACCCCGGTGGTG
CAAATGGCCACGCTGACCTACGAGACGCCACAGGGATTGAGAATTTGGGGTGGAAGACTAATAAAGGAAAGAAAC
AAAGGAGAGATCCAGGACTCCTCCATGAAGCCCGCGGACAGGACAGATGGCTCCGTGCAAGCTGCAGCCTGGGGT
CCTGAGCTTCCCTCGCACCGCACAGTCCTGGGAGCCGATTCAAAAAGCGGTGAGGTCGATGCCACGTCAGACCAG
GAAGAGTCAGTTGCTTGGGCCTTAGCACCTGCAGTGCCTCAAAGCCCTTTGAAAAATGAATTAAGAAGGAAATAC
TTGACCCAAGTGGATATACTGCTACAAGGTGCAGAGTATTTTGAGTGTGCAGGTAACAGAGCTGGAAGGGATGTA
CGTGTGACTCCGCTGCCTTCACTGGCCTCACCTGCCGTGCCTGCCCCCGGATACTGCAGTCGTATCTCCGGAAAG
AGTCCTGGTGACCCAGCGAAACCAGCTTCATCTCCCAGAGAATGGGATCCTTTGCATCCTTCCTCCACAGACATG
GCCTTAGTACCTAGAAATGACAGCCTCTCCCTACAAGAGACCAGTAGCAGCAGCTTCTTAAGCAGCCAGCCCTTT
GAAGATGATGACATTTGCAATGTGACCATCAGTGACCTGTACGCAGGGATGCTGCACTCCATGAGCCGGCTGTTG
AGCACAAAGCCATCAAGCATCATCTCCACCAAAACGTTCATCATGCAAAACTGGAACTGCAGGAGGAGGCACAGA
TATAAGAGCAGGATGAACAAAACATATTGCAAAGGAGCCAGACGTTCTCAGAGGAGCTCCAAGGAGAACTTCATA
CCCTGCTCTGAGCCTGTGAAAGGGACAGGGGCATTAAGAGATTGCAAGAACGTATTAGATGTTTCTTGCCGTAAG
ACAGGTTTAAAATTGGAAAAAGCTTTTCTTGAAGTCAACAGACCCCAAATCCATAAGTTAGATCCAAGTTGGAAG
GAGCGCAAAGTGACACCCTCGAAGTATTCTTCCTTGATTTACTTCGACTCCAGTGCAACATATAATCTTGATGAG
GAAAATAGATTTAGGACATTAAAATGGTTAATTTCTCCTGTAAAAATAGTTTCCAGACCAACAATACGACAGGGC
CATGGAGAGAACCGTCAGAGGGAGATTGAAATCCGATTTGATCAGCTTCATCGGGAATATTGCCTGAGTCCCAGG
AACCAGCCTCGCCGGATGTGCCTCCCGGACTCCTGGGCCATGAACATGTACAGAGGGGGTCCTGCGAGTCCTGGT
GGCCTTCAGGGCTTAGAAACCCGCAGGCTGAGTTTACCTTCCAGCAAAGCAAAAGCAAAAAGTTTAAGTGAGGCT
TTTGAAAACCTAGGCAAAAGATCTCTGGAAGCAGGTAGGTGCCTGCCCAAGAGCGATTCATCTTCATCACTTCCA
AAGACCAACCCCACACACAGCGCAACTCGCCCGCAGCAGACATCTGACCTTCACGTTCAGGGAAATAGTTCTGGA
ATATTTAGAAAGTCAGTGTCACCCAGCAAAACTCTTTCAGTCCCAGATAAAGAAGTGCCAGGCCACGGAAGGAAT
CGTTACGATGAAATTAAAGAAGAATTTGACAAGCTTCATCAAAAGTATTGCCTCAAATCTCCTGGGCAGATGACA
GTGCCTTTATGTATTGGAGTGTCTACAGATAAAGCAAGTATGGAAGTTCGATATCAAACAGAAGGCTTCTTAGGA
AAATTAAATCCAGACCCTCACTTCCAGGGTTTCCAGAAGTTGCCATCATCACCCCTGGGGTGCAGAAAAAGTCTA
CTGGGCTCAACTGCAATTGAGGCTCCTTCATCTACATGTGTTGCTCGTGCCATCACGAGGGATGGCACGAGGGAC
CATCAGTTCCCTGCAAAAAGACCCAGGCTATCAGAACCCCAGGGCTCCGGACGCCAGGGCAATTCCCTGGGTGCC
TCAGATGGGGTGGACAACACCGTCAGACCGGGAGACCAGGGCAGCTCTTCACAGCCCAACTCAGAAGAGAGAGGA
GAGAACACGTCTTACAGGATGGAAGAGAAAAGTGATTTCATGCTAGAAAAATTGGAAACTAAAAGTGTGTAGCTA
GGTTATTTCGGAGTGTTATTTATCTTCCCACTTGCTCTCTGTTTGTATTTTTGTTTTGTTTTTGATTCTTGAGAC
TGTGAGGACTTGGTTGACTTCTCTGCCCTTAAAGTAAATATTAGTGAAATTGGTTCCATCAGAGATAACCTCGAG
TTCTTGGTGTAGAAATTATGTGAATAAAGTTGCTCAATTAGAAAAAAAAAAAAAAAAAAAA

FIGURE 3538

MLHSMSRLLSTKPSSIISTKTFIMQNWNCRRRHRYKSRMNKTYCKGARRSQRSSKENFIPCSEPVKGTGALRDCK
NVLDVSCRKTGLKLEKAFLEVNRPQIHKLDPSWKERKVTPSKYSSLIYFDSSATYNLDEENRFRTLKWLISPVKI
VSRPTIRQGHGENRQREIEIRFDQLHREYCLSPRNQPRRMCLPDSWAMNMYRGGPASPGGLQGLETRRLSLPSSK
AKAKSLSEAFENLGKRSLEAGRCLPKSDSSSSLPKTNPTHSATRPQQTSDLHVQGNSSGIFRKSVSPSKTLSVPD
KEVPGHGRNRYDEIKEEFDKLHQKYCLKSPGQMTVPLCIGVSTDKASMEVRYQTEGFLGKLNPDPHFQGFQKLPS
SPLGCRKSLLGSTAIEAPSSTCVARAITRDGTRDHQFPAKRPRLSEPQGSGRQGNSLGASDGVDNTVRPGDQGSS
SQPNSEERGENTSYRMEEKSDFMLEKLETKSV

FIGURE 3539

TCGCTTTGTGATTCTTGATCCGGAACTTTGTCACCCAGGAACCCCGGAAGAGGTAGCTCACGCGATAGAAACGTG
TTCGCTTGCCCAGAAGAAGGGAAGGCGCGAGTGAGGAAAGGAGGTACTGTAGATGCCCTCCAAATCCTTGGTTAT
GGAATATTTGGCTCATCCCAGTACACTCGGCTTGGCTGTTGGAGTTGCTTGTGGCATGTGCCTGGGCTGGAGCCT
TCGAGTATGCTTTGGGATGCTCCCCAAAAGCAAGACGAGCAAGACACACACAGATACTGAAAGTGAAGCAAGCAT
CTTGGGAGACAGCGGGGAGTACAAGATGATTCTTGTGGTTCGAAATGACTTAAAGATGGGAAAAGGGAAAGTGGC
TGCCCAGTGCTCTCATGCTGCTGTTTCAGCCTACAAGCAGATTCAAAGAAGAAATCCTGAAATGCTCAAACAATG
GGAATACTGTGGCCAGCCCAAGGTGGTGGTCAAAGCTCCTGATGAAGAAACCCTGATTGCATTATTGGCCCATGC
AAAAATGCTGGGACTGACTGTAAGTTTAATTCAAGATGCTGGACGTACTCAGATTGCACCAGGCTCTCAAACTGT
CCTAGGGATTGGGCCAGGACCAGCAGACCTAATTGACAAAGTCACTGGTCACCTAAAACTTTACTAGGTGGACTT
TGATATGACAACAACCCCTCCATCACAAGTGTTTGAAGCCTGTCAGATTCTAACAACAAAAGCTGAATTTCTTCA
CCCAACTTAAATGTTCTTGAGATGAAAATAAAACCTATTCCCATGTTCTAAAAAAA

FIGURE 3540

MPSKSLVMEYLAHPSTLGLAVGVACGMCLGWSLRVCFGMLPKSKTSKTHTDTESEASILGDSGEYKMILVVRNDL
KMGKGKVAAQCSHAAVSAYKQIQRRNPEMLKQWEYCGQPKVVVKAPDEETLIALLAHAKMLGLTVSLIQDAGRTQ
IAPGSQTVLGIGPGPADLIDKVTGHLKLY

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FIGURE 3541

GGCACGAGGGCACCGCAGGAGCAACGGTTGGTCCTGCGGCTGTGATGTCGGTGTTGAGGCCCCTGGACAAGCTGC
CCGGCCTGAACACGGCCACCATCTTGCTGGTGGGCACGGAGGATGCTCTTCTGCAGCAGCTGGCGGACTCGATGC
TCAAAGAGGACTGCGCCTCCGAGCTGAAGGTCCACTTGGCAAAGTCCCTCCCTTTGCCCTCCAGTGTGAATCGGC
CCCGAATTGACCTGATCGTGTTTGTGGTTAATCTTCACAGCAAATACAGTCTCCAGAACACAGAGGAGTCCCTGC
GCCATGTGGATGCCAGCTTCTTCTTGGGGAAGGTGTGTTTCCTCGCCACAGGTGCTGGGCGGGAGAGCCACTGCA
GCATTCACCGGCACACCGTGGTGAAGCTGGCCCACACCTATCAAAGCCCCCTGCTCTACTGTGACCTGGAGGTGG
AAGGCTTTAGGGCCACCATGGCGCAGCGCCTGGTGCGCGTGCTGCAGATCTGTGCTGGCCACGTGCCCGGTGTCT
CAGCTCTGAACCTGCTGTCCCTGCTGAGAAGCTCTGAGGGCCCCTCCCTGGAGGACCTGTGAGGGTGGCTGGCCC
CTGGGCTGCCCCTTCTCATGGCTTCGTGCTGACTCCATAAACATTCTCTGTTGAGGATGTCCAGTCAGGGCTTGA
CAGGCCCAGGCTCAGCCCGCCGTGGCTGGGAAGGTTCCCTGCAGTGCCAGTGCTGCAGCAGGGAGAGCTGGGCAG
AAGCAGCGAGGGGGCCCAGCTGGCGAGACTGTAGCCCCCTCCCACTCCCACACTCACTCTTGCAGAGCCTGTGTC
TTTAAGCAGCTGGCGTGTTACATCTCCATTTAAGGTTTCCTTTGAACAAAAGGTCTGTGGCTAAAAAAAGTTTAA
AAATCAAAAAAAAAAAAAAAAA

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FIGURE 3542

MSVLRPLDKLPGLNTATILLVGTEDALLQQLADSMLKEDCASELKVHLAKSLPLPSSVNRPRIDLIVFVVNLHSK
YSLQNTEESLRHVDASFFLGKVCFLATGAGRESHCSIHRHTVVKLAHTYQSPLLYCDLEVEGFRATMAQRLVRVL
QICAGHVPGVSALNLLSLLRSSEGPSLEDL

FIGURE 3543

TCTTCGGACCTAGGCTGCCCTGCCGTCATGTCGCAAGGGATCCTTTCTCCGCCAGCGGGCTTGCTGTCCGATGAC
GATGTCGTAGTTTCTCCCATGTTTGAGTCCACAGCTGCAGATTTGGGGTCTGTGGTACGCAAGAACCTGCTATCA
GACTGCTCTGTCGTCTCTACCTCCCTAGAGGACAAGCAGCAGGTTCCATCTGAGGACAGTATGGAGAAGGTGAAA
GTATACTTGAGGGTTAGGCCCTTGTTACCTTCAGAGTTGGAACGACAGGAAGATCAGGGTTGTGTCCGTATTGAG
AATGTGGAGACCCTTGTTCTACAAGCACCCAAGGACTCGTTTGCCCTGAAGAGCAATGAACGGGGAATTGGCCAA
GCCACACACAGGTTCACCTTTTCCCAGATCTTTGGGCCAGAAGTGGGACAGGCATCCTTCTTCAACCTAACTGTG
AAGGAGATGGTAAAGGATGTACTCAAAGGGCAGAACTGGCTCATCTATACATATGGAGTCACTAACTCAGGGAAA
ACCCACACGATTCAAGGTACCATCAAGGATGGAGGGATTCTCCCCCGGTCCCTGGCGCTGATCTTCAATAGCCTC
CAAGGCCAACTTCATCCAACACCTGATCTGAAGCCCTTGCTCTCCAATGAGGTAATCTGGCTAGACAGCAAGCAG
ATCCGACAGGAGGAAATGAAGAAGCTGTCCCTGCTAAATGGAGGCCTCCAAGAGGAGGAGCTGTCCACTTCCTTG
AAGAGGAGTGTCTACATCGAAAGTCGGATAGGTACCAGCACCAGCTTCGACAGTGGCATTGCTGGGCTCTCTTCT
ATCAGTCAGTGTACCAGCAGTAGCCAGCTGGATGAAACAAGTCATCGATGGGCACAGCCAGACACTGCCCCACTA
CCTGTCCCGGCAAACATTCGCTTCTCCATCTGGATCTCATTCTTTGAGATCTACAACGAACTGCTTTATGACCTA
TTAGAACCGCCTAGCCAACAGCGCAAGAGGCAGACTTTGCGGCTATGCGAGGATCAAAATGGCAATCCCTATGTG
AAAGATCTCAACTGGATTCATGTGCAAGATGCTGAGGAGGCCTGGAAGCTCCTAAAAGTGGGTCGTAAGAACCAG
AGCTTTGCCAGCACCCACCTCAACCAGAACTCCAGCCGCAGTCACAGCATCTTCTCAATCAGGATCCTACACCTT
CAGGGGGAAGGAGATATAGTCCCCAAGATCAGCGAGCTGTCACTCTGTGATCTGGCTGGCTCAGAGCGCTGCAAA
GATCAGAAGAGTGGTGAACGGTTGAAGGAAGCAGGAAACATTAACACCTCTCTACACACCCTGGGCCGCTGTATT
GCTGCCCTTCGTCAAAACCAGCAGAACCGGTCAAAGCAGAACCTGGTTCCCTTCCGTGACAGCAAGTTGACTCGA
GTGTTCCAAGGTTTCTTCACAGGCCGAGGCCGTTCCTGCATGATTGTCAATGTGAATCCCTGTGCATCTACCTAT
GATGAAACTCTTCATGTGGCCAAGTTCTCAGCCATTGCTAGCCAGCTTGTGCATGCCCCACCTATGCAACTGGGA
TTCCCATCCCTGCACTCGTTCATCAAGGAACATAGTCTTCAGGTATCCCCCAGCTTAGAGAAAGGGGCTAAGGCA
GACACAGGCCTTGATGATGATATTGAAAATGAAGCTGACATCTCCATGTATGGCAAAGAGGAGCTCCTACAAGTT
GTGGAAGCCATGAAGACACTGCTTTTGAAGGAACGACAGGAAAAGCTACAGCTGGAGATGCATCTCCGAGATGAA
ATTTGCAATGAGATGGTAGAACAGATGCAACAGCGGGAACAGTGGTGCAGTGAACATTTGGACACCCAAAAGGAA
CTATTGGAGGAAATGTATGAAGAAAAACTAAATATCCTCAAGGAGTCACTGACAAGTTTTTACCAAGAAGAGATT
CAGGAGCGGGATGAAAAGATTGAAGAGCTAGAAGCTCTCTTGCAGGAAGCCAGACAACAGTCAGTGGCCCATCAG
CAATCAGGGTCTGAATTGGCCCTACGGCGGTCACAAAGGTTGGCAGCTTCTGCCTCCACCCAGCAGCTTCAGGAG
GTTAAAGCTAAATTACAGCAGTGCAAAGCAGAGCTAAACTCTACCACTGAAGAGTTGCATAAGTATCAGAAAATG
TTAGAACCACCACCCTCAGCCAAGCCCTTCACCATTGATGTGGACAAGAAGTTAGAAGAGGGCCAGAAGAAATATA
AGGCTGTTGCGGACAGAGCTTCAGAAACTTGGTGAGTCTCTCCAATCAGCAGAGAGAGCTTGTTGCCACAGCACT
GGGGCAGGAAAACTTCGTCAAGCCTTGACCACTTGTGATGACATCTTAATCAAACAGGACCAGACTCTGGCTGAA
CTGCAGAACAACATGGTGCTAGTGAAACTGGACCTTCGGAAGAAGGCAGCATGTATTGCTGAGCAGTATCATACT
GTGTTGAAACTCCAAGGCCAGGTTTCTGCCAAAAAGCGCCTTGGTACCAACCAGGAAAATCAGCAACCAAACCAA
CAACCACCAGGGAAGAAACCATTCCTTCGAAATTTACTTCCCCGAACACCAACCTGCCAAAGCTCAACAGACTGC
AGCCCTTATGCCCGGATCCTACGCTCACGGCGTTCCCCTTTACTCAAATCTGGGCCTTTTGGCAAAAAGTACTAA

GGCTGTGGGGAAAGAGAAGAGCAGTCATGGCCCTGAGGTGGGTCAGCTACTCTCCTGAAGAAATAGGTCTCTTTT
ATGCTTTACCATATATCAGGAATTATATCCAGGATGCAATACTCAGACACTAGCTTTTTTCTCACTTTTGTATTA
TAACCACCTATGTAATCTCATGTTGTTGTTTTTTTTTATTTACTTATATGATTTCTATGCACACAAAAACAGTTA
TATTAAAGATATTATTGTTCACATTTTTTATTGAAAAAAAAAAAAAA

FIGURE 3544

MSQGILSPPAGLLSDDDVVVSPMFESTAADLGSVVRKNLLSDCSVVSTSLEDKQQVPSEDSMEKVKVYLRVRPLL
PSELERQEDQGCVRIENVETLVLQAPKDSFALKSNERGIGQATHRFTFSQIFGPEVGQASFFNLTVKEMVKDVLK
GQNWLIYTYGVTNSGKTHTIQGTIKDGGILPRSLALIFNSLQGQLHPTPDLKPLLSNEVIWLDSKQIRQEEMKKL
SLLNGGLQEEELSTSLKRSVYIESRIGTSTSFDSGIAGLSSISQCTSSSQLDETSHRWAQPDTAPLPVPANIRFS
IWISFFEIYNELLYDLLEPPSQQRKRQTLRLCEDQNGNPYVKDLNWIHVQDAEEAWKLLKVGRKNQSFASTHLNQ
NSSRSHSIFSIRILHLQGEGDIVPKISELSLCDLAGSERCKDQKSGERLKEAGNINTSLHTLGRCIAALRQNQQN
RSKQNLVPFRDSKLTRVFQGFFTGRGRSCMIVNVNPCASTYDETLHVAKFSAIASQLVHAPPMQLGFPSLHSFIK
EHSLQVSPSLEKGAKADTGLDDDIENEADISMYGKEELLQVVEAMKTLLLKERQEKLQLEMHLRDEICNEMVEQM
QQREQWCSEHLDTQKELLEEMYEEKLNILKESLTSFYQEEIQERDEKIEELEALLQEARQQSVAHQQSGSELALR
RSQRLAASASTQQLQEVKAKLQQCKAELNSTTEELHKYQKMLEPPPSAKPFTIDVDKKLEEGQKNIRLLRTELQK
LGESLQSAERACCHSTGAGKLRQALTTCDDILIKQDQTLAELQNNMVLVKLDLRKKAACIAEQYHTVLKLQGQVS
AKKRLGTNQENQQPNQQPPGKKPFLRNLLPRTPTCQSSTDCSPYARILRSRRSPLLKSGPFGKKY

FIGURE 3545

CTGTCATTCATGCTTTGGAAAAGTTTACTGTATATACATTAGACATTCCTGTTCTTTTTGGAGTTAGTACTACAT
CCCCTGAAGAAACATGTGCCCAGGTGATTCGTGAAGCTAAGAGAACAGCACCAAGTATAGTGTATGTTCCTCATA
TCCACGTGTGGTGGGAAATAGTTGGACCGACACTTAAAGCCACATTTACCACATTATTACAGAATATTCCTTCAT
TTGCTCCAGTTTTACTACTTGCAACTTCTGACAAACCCCATTCCGCTTTGCCAGAAGAGGTGCAAGAATTGTTTA
TCCGTGATTATGGAGAGATTTTTAATGTCCAGTTACCGGATAAAGAAGAACGGACAAAATTTTTTGAAGATTTAA
TTCTAAAACAAGCTGCTAAGCCTCCTATATCAAAAAAGAAAGCAGTTTTGCAGGCTTTGGAGGTACTCCCAGTAG
CACCACCACCTGAGCCAAGATCACTGACAGCAGAAGAAGTGAAACGACTAGAAGAACAAGAAGAAGATACATTTA
GAGAACTGAGGATTTTCTTAAGAAATGTTACACATAGGCTTGCTATTGACAAGCGATTCCGAGTGTTTACTAAGC
CTGTTGACCCTGATGAGGTTCCTGATTATGTCACTGTAATAAAGCAACCA**ATG**GACCTTTCATCTGTAATCAGTA
AAATTGATCTACACAAGTATCTGACTGTGAAAGACTATTTGAGAGATATTGATCTAATCTGTAGTAATGCCTTAG
AATACAATCCAGATAGAGATCCTGGAGATCGTCTTATTAGGCATAGAGCCTGTGCTTTAAGAGATACTGCCTATG
CCATAATTAAAGAAGAACTTGATGAAGACTTTGAGCAGCTCTGTGAAGAAATTCAGGAATCTAGAAAGAAAAGAG
GTTGTAGCTCCTCCAAATATGCCCCGTCTTACTACCATGTGATGCCAAAGCAAAATTCCACTCTTGTTGGTGATA
AAAGATCAGACCCAGAGCAGAATGAAAAGCTAAAGACACCGAGTACTCCTGTGGCTTGCAGCACTCCTGCTCAGT
TGAAGAGGAAAATTCGCAAAAAGTCAAACTGGTACTTAGGCACCATAAAAAAGCGAAGGAAGATTTCACAGGCAA
AGGATGATAGCCAGAATGCCATAGATCACAAAATTGAGAGTGATACAGAGGAAACTCAAGACACAAGTGTAGATC
ATAATGAGACCGGAAACACAGGAGAGTCTTCGGTGGAAGAAAATGAAAAACAGCAAAATGCCTCTGAAAGCAAAC
TGGAATTGAGAAATAATTCAAATACTTGTAATATAGAGAATGAGCTTGAAGACTCTAGGAAGACTACAGCATGTA
CAGAATTGAGAGACAAGATTGCTTGTAATGGAGATGCTTCTAGCTCTCAGATAATACATATTTCTGATGAAAATG
AAGGAAAAGAAATGTGTGTTCTGCGAATGACTCGAGCTAGACGTTCCCAGGTAGAACAGCAGCAGCTCATCACTG
TTGAAAAGGCTTTGGCAATTCTTTCTCAGCCTACACCCTCACTTGTTGTGGATCATGAGCGATTAAAAAATCTTT
TGAAGACTGTTGTTAAAAAAAGTCAAAACTACAACATATTTCAGTTGGAAAATTTGTATGCAGTAATCAGCCAAT
GTATTTATCGGCATCGCAAGGACCATGATAAAACATCACTTATTCAGAAAATGGAGCAAGAGGTAGAAAACTTCA
GTTGTTCCAGA**TGA**TGATGTCATGGTATCGAGTATTCTTTATATTCAGTTCCTATTTAAGTCATTTTTGTCATGT
CCGCCTAATTGATGTAGTATGAAACCCTGCATCTTTAAGGAAAAGATTAAAATAGTAAAATAAAAGTATTTAAAC
TTTCCTGATATTTATGTACATATTAAGATAAATGTCATGTGTAAGATAACTGATAAATA

FIGURE 3546

MDLSSVISKIDLHKYLTVKDYLRDIDLICSNALEYNPDRDPGDRLIRHRACALRDTAYAIIKEELDEDFEQLCEE
IQESRKKRGCSSSKYAPSYYHVMPKQNSTLVGDKRSDPEQNEKLKTPSTPVACSTPAQLKRKIRKKSNWYLGTIK
KRRKISQAKDDSQNAIDHKIESDTEETQDTSVDHNETGNTGESSVEENEKQQNASESKLELRNNSNTCNIENELE
DSRKTTACTELRDKIACNGDASSSQIIHISDENEGKEMCVLRMTRARRSQVEQQQLITVEKALAILSQPTPSLVV
DHERLKNLLKTVVKKSQNYNIFQLENLYAVISQCIYRHRKDHDKTSLIQKMEQEVENFSCSR

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FIGURE 3547

GGCACGAGGCAGGCGCTGACGAGGAGCCCGGCTGAGGGAGGATGCGCCGCTGACGCCTGCGGGAGCCGCGCGCCT
GGGGCGGGAGGATGCTCCAGAGGGGCCTCTGGCCGTGGCGCACGCGGCTGCTGCCGACCCCTGGCACCTGGCGCC
CAGCGCGCCCGTGGCCGCTGCCGCCTCCGCCCCAGGTTTTGCGTGTGAAGCTGTGTGGAAATGTGAAATACTACC
AGTCACACCATTATAGTACCGTGGTGCCACCTGATGAAATAACAGTTATTTATAGACATGGCCTTCCCTTGGTAA
CACTTACCTTGCCATCTAGAAAAGAACGTTGTCAATTCGTAGTCAAACCA**ATG**TTGTCAACAGTTGGTTCATTCC
TTCAGGACCTACAAAATGAAGATAAGGGTATCAAAACTGCAGCCATCTTCACAGCAGATGGCAACATGATTTCAG
CTTCTACCTTGATGGATATTTTGCTAATGAATGATTTTAAACTTGTCATTAATAAAATAGCATATGATGTGCAGT
GTCCAAAGAGAGAAAAACCAAGTAATGAGCACACTGCTGAGATGGAACACATGAAATCCTTGGTTCACAGACTAT
TTACAATCTTGCATTTAGAAGAGTCTCAGAAAAAGAGAGAGCACCATTTACTGGAGAAAATTGACCACCTGAAGG
AACAGCTGCAGCCCCTTGAACAGGTGAAAGCTGGAATAGAAGCTCATTCGGAAGCCAAAACCAGTGGACTCCTGT
GGGCTGGATTGGCACTGCTGTCCATTCAGGGTGGGGCACTGGCCTGGCTCACGTGGTGGGTGTACTCCTGGGATA
TCATGGAGCCAGTTACATACTTCATCACATTTGCAAATTCTATGGTCTTTTTTGCATACTTTATAGTCACTCGAC
AGGATTATACTTACTCAGCTGTTAAGAGTAGGCAATTTCTTCAGTTCTTCCACAAGAAATCAAAGCAACAGCACT
TTGATGTGCAGCAATACAACAAGTTAAAAGAAGACCTTGCTAAGGCTAAAGAATCCCTGAAACAGGCGCGTCATT
CTCTCTGTTTGCAAATGCAAGTAGAAGAACTCAATGAAAAGAAT**TAA**TCTTACAGTTTTAAATGTCGTCAGATTT
TCCATTATGTATTGATTTTGCAACTTAGGATGTTTTTGAGTCCCATGGTTCATTTTGATTGTTTAATCTTTGTTA
TTAAATTCTTGTAAAACAGAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3548

MLSTVGSFLQDLQNEDKGIKTAAIFTADGNMISASTLMDILLMNDFKLVINKIAYDVQCPKREKPSNEHTAEMEH
MKSLVHRLFTILHLEESQKKREHHLLEKIDHLKEQLQPLEQVKAGIEAHSEAKTSGLLWAGLALLSIQGGALAWL
TWWVYSWDIMEPVTYFITFANSMVFFAYFIVTRQDYTYSAVKSRQFLQFFHKKSKQQHFDVQQYNKLKEDLAKAK
ESLKQARHSLCLQMQVEELNEKN

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FIGURE 3549

CGGGCGCAGAAGCCCCTCCTCGGCGTCCTGGTCCCGGCCGTGCCCGCGGTGTCCCGGGAGGAAGGGGCGGGCCGG
GGGTCGGGAGGAGTCACGTGCCCCCTCCCGCCCCAGGTCGTCCTCTCAGC**ATG**GGGGTCCCGCGGCCTCAGCCCT
GGGCGCTGGGGCTCCTGCTCTTTCTCCTTCCTGGGAGCCTGGGCGCAGAAAGCCACCTCTCCCTCCTGTACCACC
TTACCGCGGTGTCCTCGCCTGCCCCGGGGACTCCTGCCTTCTGGGTGTCCGGCTGGCTGGGCCCGCAGCAGTACC
TGAGCTACAATAGCCTGCGGGGCGAGGCGGAGCCCTGTGGAGCTTGGGTCTGGGAAAACCAGGTGTCCTGGTATT
GGGAGAAAGAGACCACAGATCTGAGGATCAAGGAGAAGCTCTTTCTGGAAGCTTTCAAAGCTTTGGGGGGAAAAG
GTCCCTACACTCTGCAGGGCCTGCTGGGCTGTGAACTGGGCCCTGACAACACCTCGGTGCCCACCGCCAAGTTCG
CCCTGAACGGCGAGGAGTTCATGAATTTCGACCTCAAGCAGGGCACCTGGGGTGGGGACTGGCCCGAGGCCCTGG
CTATCAGTCAGCGGTGGCAGCAGCAGGACAAGGCGGCCAACAAGGAGCTCACCTTCCTGCTATTCTCCTGCCCGC
ACCGCCTGCGGGAGCACCTGGAGAGGGGCCGCGGAAACCTGGAGTGGAAGGAGCCCCCCTCCATGCGCCTGAAGG
CCCGACCCAGCAGCCCTGGCTTTTCCGTGCTTACCTGCAGCGCCTTCTCCTTCTACCCTCCGGAGCTGCAACTTC
GGTTCCTGCGGAATGGGCTGGCCGCTGGCACCGGCCAGGGTGACTTCGGCCCCAACAGTGACGGATCCTTCCACG
CCTCGTCGTCACTAACAGTCAAAAGTGGCGATGAGCACCACTACTGCTGCATTGTGCAGCACGCGGGGCTGGCGC
AGCCCCTCAGGGTGGAGCTGGAATCTCCAGCCAAGTCCTCCGTGCTCGTGGTGGGAATCGTCATCGGTGTCTTGC
TACTCACGGCAGCGGCTGTAGGAGGAGCTCTGTTGTGGAGAAGGATGAGGAGTGGGCTGCCAGCCCCTTGGATCT
CCCTTCGTGGAGACGACACCGGGGTCCTCCTGCCCACCCCAGGGGAGGCCCAGGATGCTGATTTGAAGGATGTAA
ATGTGATTCCAGCCACCGCC**TGA**CCATCCGCCATTCCGACTGCTAAAAGCGAATGTAGTCAGGCCCCTTTCATGC
TGTGAGACCTCCTGGAACACTGGCATCTCTGAGCCTCCAGAAGGGGTTCTGGGCCTAGTTGTCCTCCCTCTGGAG
CCCCGTCCTGTGGTCTGCCTCAGTTTCCCCTCCTAATACATATGGCTGTTTTCCACCTCGATAATATAACACGAG
TTTGGGCCCGAAAAA

FIGURE 3550

MGVPRPQPWALGLLLFLLPGSLGAESHLSLLYHLTAVSSPAPGTPAFWVSGWLGPQQYLSYNSLRGEAEPCGAWV
WENQVSWYWEKETTDLRIKEKLFLEAFKALGGKGPYTLQGLLGCELGPDNTSVPTAKFALNGEEFMNFDLKQGTW
GGDWPEALAISQRWQQQDKAANKELTFLLFSCPHRLREHLERGRGNLEWKEPPSMRLKARPSSPGFSVLTCSAFS
FYPPELQLRFLRNGLAAGTGQGDFGPNSDGSFHASSSLTVKSGDEHHYCCIVQHAGLAQPLRVELESPAKSSVLV
VGIVIGVLLLTAAAVGGALLWRRMRSGLPAPWISLRGDDTGVLLPTPGEAQDADLKDVNVIPATA

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FIGURE 3551

GCGGACGGTGAGTGGGGATGGACTGGAGTTGAAGAGCTCGAGATGAAGGGCTTGAGGGCGTGTGTTATTTGTTTT
CTTCAAGCATTTGGTCGAGATTAAGAATTAAAA**ATG**TCATCCAAACAAGAAATAATGAGTGACCAGCGGTTTAGA
CGGGTTGCAAAGGACCCGAGATTTTGGGAAATGCCAGAAAAGGATCGAAAAGTCAAAATTGACAAGAGATTTCGA
GCCATGTTTCATGACAAGAAGTTCAAGTTGAACTATGCCGTGGATAAAAGAGGGCGCCCCATTAGCCATAGCACT
ACAGAGGATTTGAAGCGTTTTTACGACCTTTCAGATTCTGATTCCAATCTCTCTGGTGAAGATAGCAAAGCATTG
AGTCAAAAGAAAATAAAGAAGAAAAAAACCCAGACTAAAAAAGAAATCGATTCAAAAAATCTAGTTGAGAAAAAG
AAAGAAACCAAGAAGGCTAATCACAAGGGTTCTGAAAATAAAACTGATTTAGATAATTCTATAGGAATTAAAAAA
ATGAAAACCTCATGTAAATTTAAGATAGATTCAAACATAAGTCCGAAGAAGGATAGCAAAGAATTTACACAAAAA
AATAAGAAAGAGAAAAAAAACATTGTTCAACATACTACAGACTCTTCTCTCGAAGAAAAACAAAGGACATTAGAC
TCAGGCACCTCTGAAATTGTGAAATCTCCCAGAATCGAGTGTTCTAAGACAAGAAGAGAAATGCAATCAGTGGTT
CAACTCATAATGACAAGAGACAGTGATGGTTATGAAAACTCAACAGATGGTGAAATGTGTGACAAAGATGCTCTG
GAGGAAGATTCAGAAAGCGTTAGTGAAATAGGAAGTGATGAGGAATCTGAAAATGAAATTACAAGTGTTGGTAGA
GCTTCAGGTGATGACGATGGAAGTGAAGATGATGAAGAGGAGGATGAAGATGAAGAGGAGGATGAAGATGAGGAT
AGTGAGGATGATGATAAAAGTGACAGTGGCCCTGATCTTGCAAGGGGTAAAGGAAATATAGAAACTAGTTCTGAA
GATGAAGATGATACGGCAGATTTGTTTCCAGAAGAATCTGGTTTTGAGCATGCTTGGAGAGAATTAGATAAAGAT
GCTCCTCGTGCTGATGAGATTACACGTCGATTAGCAGTTTGTAACATGGACTGGGATAGATTAAAGGCAAAAGAT
TTGCTGGCTCTGTTCAATTCATTTAAACCCAAAGGAGGTGTAATATTTTCCGTCAAGATATATCCTTCAGAATTT
GGAAAGGAGAGGATGAAGGAAGAGCAAGTTCAAGGACCAGTAGAGCTATTAAGTATTCCTGAAGATGCCCCAGAA
AAAGACTGGACGTCTAGAGAAAAATTGAGAGATTATCAATTCAAACGACTGAAGTACTATTATGCAGTAGTAGAC
TGTGATTCTCCGGAAACAGCTAGTAAAATTTATGAGGATTGTGATGGCCTGGAATTTGAAAGTAGTTGTTCTTTC
ATAGATCTAAGGTTTATACCAGATGATATTACTTTTGATGATGAGCCTAAGGATGTAGCCTCAGAAGTGAATTTA
ACAGCATATAAACCAAAATATTTCACTTCTGCTGCAATGGGAACATCAACGGTGGAAATCACTTGGGATGAGACT
GATCATGAAAGAATTACAATGCTCAACAGGAAGTTTAAAAAGGAAGAGCTTTTGGACATGGATTTTCAAGCCTAC
TTAGCTTCCTCTAGTGAAGATGAAGAGGAGATAGAAGAGGAGCTACAAGGTGATGATGGAGTCAATGTAGAAGAA
GATGGGAAAACAAAGAAAAGTCAGAAGGATGATGAAGAACAAATTGCTAAATACAGGCAGCTCTTGCAGGTTATT
CAAGAAAAAGAAAAGAAAGGCAAAGAAAATGATATGGAAATGGAAATTAAATGGGTTCCAGGTCTTAAAGAAAGT
GCAGAAGAGATGGTCAAAAACAAATTGGAAGGAAAGGATAAACTGACCCCTTGGGAACAATTTTTAGAGAAGAAG
AAAGAGAAAAAAAGACTGAAAAGGAAACAGAAGGCTCTTGCTGAAGAGGCCAGTGAAGAGGAACTTCCCTCTGAT
GTTGATTTGAATGACCCATACTTTGCTGAAGAAGTTAAACAAATAGGTATAAATAAAAAATCGGTAAAATCTGCA
AAAGATGGCACATCTCCAGAAGAAGAAATTGAAATAGAAAGACAAAAGGCTGAAATGGCTTTGCTTATGATGGAT
GAGGACGAGGACAGTAAGAAACACTTCAATTACAACAAGATTGTGGAGCACCAGAATCTGAGCAAAAAGAAGAAA
AAGCAGCTCATGAAAAAGAAGGAATTAATAGAGGATGACTTTGAGGTAAATGTTAACGATGCACGGTTTCAGGCA
ATGTACACTTCCCACTTGTTCAATTTGGACCCCTCAGATCCCAATTTCAAGAAAACAAAAGCTATGGAAAAAATC
CTTGAGGAGAAGGCCCGGCAAAGAGAACGGAAAGAACAAGAACTTACTCAGGCAATAAAGAAAAAAGAGAGTGAG
ATTGAAAAGGAATCACAAAGGAAGTCCATTGATCCTGCTTTGTCAATGTTGATTAAATCTATAAAAACCAAAACA
GAGCAGTTTCAAGCAAGAAAAAAGCAAAAAGTCAAA**TAA**CTGGATGTTACTTATTTTTGAACTGAATACATCTTT
TCCTAAAATGTACAAAAATAATAGGAGGGAATATTTATTGGGAACAAAGCTATCTTTCAAGAACATGAATAAAAT
CTTTTTCTGGACATAGTAAAATTTTTCTCCATAAATAATTGTACTTAATTGTGGATGACTGACAAATTTTTATTG
TATATTCCTACAGATCAGTCATAATTAAATTACCTGCATTATAGGGTTTATAAAATTTTTATATTTTACAATGTT
CAGTTCTAACTAGTGGAAAGTTACTCTAGCTTTTTAAAAGGCTGTTTACAATTCTGTGTAAAAATAGAGCAGTAT
CTACTCAAGTTTGTGTAAATGTTAGGGATAATTTGAAAAATATATATATTTAATACATTAATTTCTCTGGAAGCA
GGAGGCATGTTTAAATAACTATTAAAATAATTTATTTTTCTAGCCATAAAGGATGGAAGTCAAGAACTTTTTGTT
GTTTAGTCATGTTAAGTATAGTTTATGAAATTAACTTGTAAATAAAAGTGTAAAATATTTTCATTA

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FIGURE 3552

MSSKQEIMSDQRFRRVAKDPRFWEMPEKDRKVKIDKRFRAMFHDKKFKLNYAVDKRGRPISHSTTEDLKRFYDLS
DSDSNLSGEDSKALSQKKIKKKKTQTKKEIDSKNLVEKKKETKKANHKGSENKTDLDNSIGIKKMKTSCKFKIDS
NISPKKDSKEFTQKNKKEKKNIVQHTTDSSLEEKQRTLDSGTSEIVKSPRIECSKTRREMQSVVQLIMTRDSDGY
ENSTDGEMCDKDALEEDSESVSEIGSDEESENEITSVGRASGDDDGSEDDEEEDEDEEEDEDEDSEDDDKSDSGP
DLARGKGNIETSSEDEDDTADLFPEESGFEHAWRELDKDAPRADEITRRLAVCNMDWDRLKAKDLLALFNSFKPK
GGVIFSVKIYPSEFGKERMKEEQVQGPVELLSIPEDAPEKDWTSREKLRDYQFKRLKYYYAVVDCDSPETASKIY
EDCDGLEFESSCSFIDLRFIPDDITFDDEPKDVASEVNLTAYKPKYFTSAAMGTSTVEITWDETDHERITMLNRK
FKKEELLDMDFQAYLASSSEDEEEIEEELQGDDGVNVEEDGKTKKSQKDDEEQIAKYRQLLQVIQEKEKKGKEND
MEMEIKWVPGLKESAEEMVKNKLEGKDKLTPWEQFLEKKKEKKRLKRKQKALAEEASEEELPSDVDLNDPYFAEE
VKQIGINKKSVKSAKDGTSPEEEIEIERQKAEMALLMMDEDEDSKKHFNYNKIVEHQNLSKKKKKQLMKKKELIE
DDFEVNVNDARFQAMYTSHLFNLDPSDPNFKKTKAMEKILEEKARQRERKEQELTQAIKKKESEIEKESQRKSID
PALSMLIKSIKTKTEQFQARKKQKVK

FIGURE 3553

GGGAGCTGCCGGGAGTTGGAGCCTGCGGAGTTCGAGACCATGCTGCTGTTCTGCCCCGGCTGCGGGAACGGGCTG
ATCGTGGAGGAGGGACAACGCTGCCACCGCTTCGCCTGCAACACGTGCCCCTACGTGCACAACATCACCCGCAAG
GTAACAAATCGGAAGTACCCAAAACTGAAAGAAGTGGATGATGTGCTTGGTGGAGCAGCTGCCTGGGAGAATGTT
GACTCTACTGCAGAGTCGTGTCCCAAATGCGAACATCCTCGTGCTTACTTCATGCAGCTTCAGACCCGCTCTGCA
GATGAGCCGATGACCACCTTCTACAAGTGCTGCAATGCTCAGTGTGGACACCGCTGGAGGGATTAGGGCCAGGAT
GGCCCAGCTGCCCTAGTGTGTGCTTGCCTTGTCCCTCGGGGTAGATGCTTAGCTGGCAGTATGAGTTGTGTGTCC
TGAGGGTCTTTGCTAGTGTGGTGGAAAGATAAACCTTTTGAGGTGAAGAGCCAGGGGGTCAGGAAATATGGCCTA
TCTGCCAGGCAGGGTGGATGAAGTCATGAATGTCTGGGAGTTTTTCTGTGTGGGGAGGAGACAGAGACCCATAAC
TAAATATGCTCTGTGTAAAGTCCTATTCTTTCATCTTCCACTTTATTGGCAGTTGACATTCCCTTACTCCCAATC
AACACTCTTAAATATTTGTACTGTTTGTAAAACTTAGTACATGTCCCTAAATATTTAACTGTTACTTGTAAACTT
GTGTAATTTATTATTTATTTTAATCAAAATTCTGAATATTTCATTT

FIGURE 3554

MLLFCPGCGNGLIVEEGQRCHRFACNTCPYVHNITRKVTNRKYPKLKEVDDVLGGAAAWENVDSTAESCPKCEHP
RAYFMQLQTRSADEPMTTFYKCCNAQCGHRWRD

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FIGURE 3555

GACAGGTCTGTGAAGCAGGCAGGTTGCTCAGCTGCCCCCGGAGCGGTTCCTCCACCTGAGGCAGACTCCACGTCG
GCTGGC**ATG**AGCCGGCGCCCCTGCAGCTGCGCCCTACGGCCACCCCGCTGCTCCTGCAGCGCCAGCCCCAGCGCA
GTGACAGCCGCCGGGCGCCCTCGACCCTCGGATAGTTGTAAAGAAGAAAGTTCTACCCTTTCTGTCAAAATGAAG
TGTGATTTTAATTGTAACCATGTTCATTCCGGACTTAAACTGGTAAAACCTGATGACATTGGAAGACTAGTTTCC
TACACCCCTGCATATTTGGAAGGTTCCTGTAAAGACTGCATTAAAGACTATGAAAGGCTGTCATGTATTGGGTCA
CCGATTGTGAGCCCTAGGATTGTACAACTTGAAACTGAAAGCAAGCGCTTGCATAACAAGGAAAATCAACATGTG
CAACAGACACTTAATAGTACAAATGAAATAGAAGCACTAGAGACCAGTAGACTTTATGAAGACAGTGGCTATTCC
TCATTTTCTCTACAAAGTGGCCTCAGTGAACATGAAGAAGGTAGCCTCCTGGAGGAGAATTTCGGTGACAGTCTA
CAATCCTGCCTGCTACAAATACAAAGCCCAGACCAATATCCCAACAAAAACTTGCTGCCAGTTCTTCATTTTGAA
AAAGTGGTTTGTTCAACATTAAAAAAGAATGCAAAACGAAATCCTAAAGTAGATCGGGAGATGCTGAAGGAAATT
ATAGCCAGAGGAAATTTTAGACTGCAGAATATAATTGGCAGAAAAATGGGCCTAGAATGTGTAGATATTCTCAGC
GAACTCTTTCGAAGGGGACTCAGACATGTCTTAGCAACTATTTTAGCACAACTCAGTGACATGGACTTAATCAAT
GTGTCTAAAGTGAGCACAACTTGGAAGAAGATCCTAGAAGATGATAAGGGGGCATTCCAGTTGTACAGTAAAGCA
ATACAAAGAGTTACCGAAAACAACAATAAATTTTCACCTCATGCTTCAACCAGAGAATATGTTATGTTCAGAACC
CCACTGGCTTCTGTTCAGAAATCAGCAGCCCAGACTTCTCTCAAAAAAGATGCTCAAACCAAGTTATCCAATCAA
GGTGATCAGAAAGGTTCTACTTATAGTCGACACAATGAATTCTCTGAGGTTGCCAAGACATTGAAAAAGAACGAA
AGCCTCAAAGCCTGTATTCGCTGTAATTCACCTGCAAAATATGATTGCTATTTACAACGGGCAACCTGCAAACGA
GAAGGCTGTGGATTTGATTATTGTACGAAGTGTCTCTGTAATTATCATACTACTAAAGACTGTTCAGATGGCAAG
CTCCTCAAAGCCAGTTGTAAAATAGGTCCCCTGCCTGGTACAAAGAAAAGCAAAAAGAATTTACGAAGATTG**TGA**

TCTCTTATTAAATCAATTGTTACTGATCATGAATGTTAGTTAGAAAATGTTAGGTTTTAACTTAAAAAAAATTGT
ATTGTGATTTTCAATTTTATGTTGAAATCGGTGTAGTATCCTGAGGTTTTTTTCCCCCCAGAAGATAAAGAGGAT
AGACAACCTCTTAAAATATTTTTACAATTTAATGAGAAAAAGTTTAAAATTCTCAATACAAATCAAACAATTTAA
ATATTTTAAGAAAAAAGGAAAAGTAGATAGTGATACTGAGGGTAAAAAAAAAAATTGATTCAATTTTATGGTAAAG
GAAACCCATGCAATTTTACCTAGACAGTCTTAAATATGTCTGGTTTTCCATCTGTTAGCATTTCAGACATTTTAT
GTTCCTCTTACTCAATTGATACCAACAGAAATATCAACTTCTGGAGTCTATTAAATGTGTTGTCACCTTTCTAAA
GCTTTTTTTCATTGTGTGTATTTCCCAAGAAAGTATCCTTTGTAAAAACTTGCTTGTTTTCCTTATTTCTGAAAT
CTGTTTTAATATTTTTGTATACATGTAAATATTTCTGTATTTTTTATATGTCAAAGAATATGTCTCTTGTATGTA
CATATAAAAATAAATTTTGCTCAATAAAATTGTAAGCTTAAAAAAAAAAAAAAAAAA

FIGURE 3556

MSRRPCSCALRPPRCSCSASPSAVTAAGRPRPSDSCKEESSTLSVKMKCDFNCNHVHSGLKLVKPDDIGRLVSYT
PAYLEGSCKDCIKDYERLSCIGSPIVSPRIVQLETESKRLHNKENQHVQQTLNSTNEIEALETSRLYEDSGYSSF
SLQSGLSEHEEGSLLEENFGDSLQSCLLQIQSPDQYPNKNLLPVLHFEKVVCSTLKKNAKRNPKVDREMLKEIIA
RGNFRLQNIIGRKMGLECVDILSELFRRGLRHVLATILAQLSDMDLINVSKVSTTWKKILEDDKGAFQLYSKAIQ
RVTENNNKFSPHASTREYVMFRTPLASVQKSAAQTSLKKDAQTKLSNQGDQKGSTYSRHNEFSEVAKTLKKNESL
KACIRCNSPAKYDCYLQRATCKREGCGFDYCTKCLCNYHTTKDCSDGKLLKASCKIGPLPGTKKSKKNLRRL

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FIGURE 3557

GGCGCTCGCAGAGCCGGAAAGAAGTGCTGTAAGGGACGCTCGGGGGACGCTGTTCCTGAGGTGTCGCCGCCTCCC
TGTCCTCGCCCTCCGCGGTGGGGGAGAAACCCAGGAGCGAAGCCCAGAGCCCGCGGCGCGGCCGGCGGACGAACG
AGCGCGCAGCAGCCGGTGCGCGGCCGCGGCGAGGGCGGGGGAAGAAAAACACCCTGTTTCCTCTCCGGCCCCCAC
CGCGGATCATGTACCAGGATTATCCCGGGAACTTTGACACCTCGTCCCGGGGCAGCAGCGGCTCTCCTGCGCACG
CCGAGTCCTACTCCAGCGGCGGCGGCGGCCAGCAGAAATTCCGGGTAGATATGCCTGGCTCAGGCAGTGCATTCA
TCCCCACCATCAACGCCATCACGACCAGCCAGGACCTGCAGTGGATGGTGCAGCCCACAGTGATCACCTCCATGT
CCAACCCATACCCTCGCTCGCACCCCTACAGCCCCCTGCCGGGCCTGGCCTCTGTCCCTGGACACATGGCCCTCC
CAAGACCTGGCGTGATCAAGACCATTGGCACCACCGTGGGCCGCAGGAGGAGAGATGAGCAGCTGTCTCCTGAAG
AGGAGGAGAAGCGTCGCATCCGGCGGGAGAGGAACAAGCTGGCTGCAGCCAAGTGCCGGAACCGACGCCGGGAGC
TGACAGAGAAGCTGCAGGCGGAGACAGAGGAGCTGGAGGAGGAGAAGTCAGGCCTGCAGAAGGAGATTGCTGAGC
TGCAGAAGGAGAAGGAGAAGCTGGAGTTCATGTTGGTGGCTCACGGCCCAGTGTGCAAGATTAGCCCCGAGGAGC
GCCGATCGCCCCCAGCCCCTGGGCTGCAGCCCATGCGCAGTGGGGGTGGCTCGGTGGGCGCTGTAGTGGTGAAAC
AGGAGCCCCTGGAAGAGGACAGCCCCTCGTCCTCGTCGGCGGGGCTGGACAAGGCCCAGCGCTCTGTCATCAAGC
CCATCAGCATTGCTGGGGGCTTCTACGGTGAGGAGCCCCTGCACACCCCCATCGTGGTGACCTCCACACCTGCTG
TCACTCCGGGCACCTCGAACCTCGTCTTCACCTATCCTAGCGTCCTGGAGCAGGAGTCACCCGCATCTCCCTCCG
AATCCTGCTCCAAGGCTCACCGCAGAAGCAGTAGCAGCGGGGACCAATCATCAGACTCCTTGAACTCCCCCACTC
TGCTGGCTCTGTAACCCAGTGCACCTCCCTCCCCAGCTCCGGAGGGGGTCCTCCTCGCTCCTCCTTCCCAGGGAC
CAGCACCTTCAAGCGCTCCAGGGCCGTGAGGGCAAGAGGGGGACCTGCCACCAGGGAGCTTCCTGGCTCTGGGGG
ACCCAGGTGGGACTTAGCAGTGAGTATTGGAAGACTTGGGTTGATCTCTTAGAAGCCATGGGACCTCCTCCCTCA
TTCATCTTGCAAGCAAATCCCATTTCTTGAAAAGCCTTGGAGAACTCGGTTTGGTAGACTTGGACATCTCTCTGG
CTTCTGAAGAGCCTGAAGCTGGCCTGGACCATTCCTGTCCCTTTGTTACCATACTGTCTCTGGAGTGATGGTGTC
CTTCCCTGCCCCACCACGCATGCTCAGTGCCTTTTGGTTTCACCTTCCCTCGACTTGACCCTTTCCTCCCCCAGC
GTCAGTTTCACTCCCTCTTGGTTTTTATCAAATTTGCCATGACATTTCATCTGGGTGGTCTGAATATTAAAGCTC
TTCATTTCTGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3558

MYQDYPGNFDTSSRGSSGSPAHAESYSSGGGGQQKFRVDMPGSGSAFIPTINAITTSQDLQWMVQPTVITSMSNP
YPRSHPYSPLPGLASVPGHMALPRPGVIKTIGTTVGRRRRDEQLSPEEEEKRRIRRERNKLAAAKCRNRRRELTE
KLQAETEELEEEKSGLQKEIAELQKEKEKLEFMLVAHGPVCKISPEERRSPPAPGLQPMRSGGGSVGAVVVKQEP
LEEDSPSSSSAGLDKAQRSVIKPISIAGGFYGEEPLHTPIVVTSTPAVTPGTSNLVFTYPSVLEQESPASPSESC
SKAHRRSSSSGDQSSDSLNSPTLLAL

FIGURE 3559A

CTCGTGGAGGCTGAGATTGCTTCACCTGTGGTATCAGACATCACAACATGGGGCTCACCAAGCAGTACCTACGCT
ATGTTGCTAGTGCGGTCTTTGGCGTTATCGGCAGCCAAAAAGGTAATATTGTCTTTGTGACACTTCGTGGTGAGA
AAGGACGTTATGTGGCAGTACCAGCTTGTGAACACGTTTTCATCTGGGACTTAAGGAAAGGAGAGAAGATTCTTA
TCCTTCAGGGGCTTAAACAAGAAGTTACTTGCTTATGCCCCTCCCCAGATGGGCTACACTTAGCTGTTGGGTATG
AGGATGGGTCGATCCGAATCTTCAGTCTCCTGAGTGGGGAAGGAAATGTGACCTTCAATGGTCACAAAGCAGCTA
TCACTACCTTGAAGTATGATCAGCTAGGAGGCAGACTGGCATCTGGGTCCAAGGACACAGATATTATTGTATGGG
ATGTGATCAATGAAAGTGGTCTGTACCGTCTAAAGGGGCACAAGGATGCCATCACACAAGCATTGTTTCTACGAG
AAAAGAACCTGCTAGTTACTAGTGGGAAAGATACCATGGTGAAATGGTGGGACCTTGATACTCAGCACTGCTTTA
AAACAATGGTTGGCCACCGGACTGAGGTATGGGGGTTGGTTCTGTTGTCAGAAGAAAAGCGACTCATCACTGGGG
CCTCAGACAGTGAACTGAGGGTATGGGACATAGCTTATCTGCAAGAGATTGAAGACCCGGAAGAACCAGACCCCA
AGAAAATCAAAGGATCTTCTCCTGGAATACAAGATACTCTTGAGGCAGAGGATGGTGCCTTTGAGACGGATGAAG
CCCCTGAGGATCGAATCCTTTCATGCAGAAAAGCTGGTTCCATAATGCGGGAAGGAAGAGACAGAGTTGTAAACC
TTGCAGTCGACAAGACAGGCAGGATTCTTGCTTGCCATGGAACTGACTCTGTGCTAGAATTGTTTTGTATCCTTT
CCAAAAAGGAAATTCAGAAGAAAATGGATAAGAAGATGAAGAAAGCTAGAAAGAAAGCAAAATTACATTCTAGCA
AAGGAGAGGAGGAAGATCCTGAGGTTAATGTTGAAATGAGTCTGCAAGATGAAATCCAGCGGGTGACTAATATAA
AAACTTCTGCCAAAATCAAGTCCTTTGACTTGATTCATTCACCTCACGGAGAGTTAAAGGCTGTCTTCCTGCTGC
AGAACAACCTGGTGGAATTGTATTCACTGAATCCATCCTTGCCTACTCCTCAGCCTGTCAGGACAAGCAGAATCA
CTATTGGGGGTCATCGCAGTGATGTGCGGACTTTGTCATTCAGCTCAGACAATATTGCTGTTCTTTCAGCTGCAG
CTGATTCCATTAAAATATGGAACAGGTCTACACTGCAGTGTATTCGCACAATGACCTGTGAATATGCACTTTGCT
CATTCTTTGTACCTGGTGATAGACAGGTAGTCATAGGAACAAAGACAGGGAAGCTGCAGCTTTATGACTTGGCTT
CAGGGAATCTGCTGGAGACAATAGATGCACATGATGGAGCTTTATGGTCCATGTCCCTCTCTCCAGATCAGCGTG
GCTTTGTGACAGGTGGTGCAGATAAATCTGTCAAATTCTGGGATTTTGAGTTAGTGAAAGATGAAAATAGTACCC
AAAAGAGACTTTCTGTGAAGCAAACCCGAACTTTGCAACTAGATGAAGATGTTCTGTGTGTCAGTTACTCTCCCA
ATCAAAAGCTATTGGCTGTGTCTTTGCTGGACTGTACTGTGAAAATTTTCTACGTTGATACTTTAAAGTTTTTTC
TGTCACTGTATGGACACAAACTGCCTGTTATATGCATGGACATCTCTCATGATGGAGCACTCATAGCAACTGGCT
CCGCTGATAGGAATGTGAAAATCTGGGGTTTGGACTTTGGGGACTGCCACAAGTCTCTCTTTGCACATGATGACA
GTGTGATGTACCTACAGTTTGTACCCAAGTCTCACCTCTTCTTCACTGCCGGAAAAGATCATAAGATTAAACAGT
GGGATGCAGACAAATTTGAACACATACAGACTCTGGAGGGTCATCACCAGGAAATATGGTGTTTGGCTGTAAGCC
CCAGTGGAGACTATGTTGTATCATCGTCCCATGACAAATCTCTGAGACTTTGGGAGAGAACAAGGGAGCCTCTTA
TTCTTGAGGAAGAAAGGGAGATGGAAAGAGAAGCAGAATATGAGGAGAGTGTGGCCAAAGAAGACCAACCAGCAG
TTCCAGGAGAGACTCAAGGTGACAGTTACTTTACTGGAAAGAAAACTATTGAAACAGTGAAAGCAGCTGAGAGGA
TTATGGAGGCTATTGAGTTGTACCGAGAAGAAACTGCAAAAATGAAGGAACACAAAGCCATTTGTAAAGCTGCAG
GGAAAGAGGTTCCACTTCCCAGCAACCCCATCCTAATGGCTTATGGCAGTATCTCACCTTCAGCTTATGTATTAG
AGATTTTTAAAGGGATCAAGTCGAGTGAGCTGGAAGAATCTCTACTTGTGCTGCCTTTCTCTTATGTCCCAGACA
TTCTTAAACTCTTTAACGAATTCATTCAGCTGGGCTCTGATGTTGAACTTATATGCCGGTGCCTCTTCTTCCTCC
TTAGGATTCACTTTGGACAGATCACTAGCAATCAAATGCTTGTGCCAGTGATAGAAAAATTAAGGGAAACAACTA
TTTCAAAAGTCAGCCAAGTCCGGGATGTTATCGGCTTCAATATGGCTGGTCTTGATTATCTCAAGAGGGAATGCG
AGGCAAAAAGTGAAGTTATGTTTTTTGCTGATGCTACTAGCCACTTGGAAGAGAAGAAGAGGAAGAGGAAAAAGA
GGGAGAAGTTGATTCTAACGTTGACTTAGAACTGAAATGTGGTATCTTTTTTTTTTCAACTTTTTCCTTTAAAGG
ACTCCTAAACTAAGCACAGAAGAGTTGGCGTCATCTTAAAAATACCAAATAACAGAAGATCGCATTGCAGATGAT
ATCAGGATGTGGTTTCCAGCTTTGCCTGATGGAATTCCAACATGAGATTATGGGCTGGGCTCCATTTCTTGGACT
TAAAATGCATTATTAGTTTAAAAACTTTCTGTGCTCTCAAAGCTTGAGCCTTGCAGCTCAAGCTTGTTGTTCCCT
TTATATTCTAGCAGGGAATAAATAATTGTTTTAATTAGGTATTTGTTTCATTGGAGTTGAAATTAACATTTCAAA
AGTTTTTCGTATTTTTTTATGGCAGATGATTTGTCATTTATTTATATTAGGTTTTACTGCCTATTGAGACAACCA
GGTGCATAATTGATTGCCCTTTGGCCATAAAAATGCAGTGTCATGGATCTTAGAGCTAAAAAGGACTGTAAAAAT
TACCCAGAACAGCGTCCTCAGACTTAACCTTCTGCAAGTTATGTCTGTATATAAGAAGATTCTAATTGCTAACTG
TTTATACTTTTCTGAATAAAATAGTTGTTTCTAATTAAAAAGTAGCCAAGCTAAGATGCCTGGCTGGGCTTCTGA
GGAATTAATACACTTCGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTATGTGTATGTACACATACATATA

FIGURE 3559B

TATAGTTGACACTTGAAAAATGCAGGTGGTAGGGGCACTGACCCACCCCTACGCCCCGCACAGTCAAAAATCTGC
ATATAACTTTTGATTCCCCAAAGTCTTAAGTACTAGTAGCCTGTTATTGACTGGGAGCCTGACTGATGTATTATA
TATATTGTATACTGTATTCTTAAAGTAAGCTAGAGAAAAGAAAATGTTACTTAGAAAATCATAAGGAAGAGAAAA
TATATTTACTGTGTTTATCAATACT

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FIGURE 3560

MGLTKQYLRYVASAVFGVIGSQKGNIVFVTLRGEKGRYVAVPACEHVFIWDLRKGEKILILQGLKQEVTCLCPSP
DGLHLAVGYEDGSIRIFSLLSGEGNVTFNGHKAAITTLKYDQLGGRLASGSKDTDIIVWDVINESGLYRLKGHKD
AITQALFLREKNLLVTSGKDTMVKWWDLDTQHCFKTMVGHRTEVWGLVLLSEEKRLITGASDSELRVWDIAYLQE
IEDPEEPDPKKIKGSSPGIQDTLEAEDGAFETDEAPEDRILSCRKAGSIMREGRDRVVNLAVDKTGRILACHGTD
SVLELFCILSKKEIQKKMDKKMKKARKKAKLHSSKGEEEDPEVNVEMSLQDEIQRVTNIKTSAKIKSFDLIHSPH
GELKAVFLLQNNLVELYSLNPSLPTPQPVRTSRITIGGHRSDVRTLSFSSDNIAVLSAAADSIKIWNRSTLQCIR
TMTCEYALCSFFVPGDRQVVIGTKTGKLQLYDLASGNLLETIDAHDGALWSMSLSPDQRGFVTGGADKSVKFWDF
ELVKDENSTQKRLSVKQTRTLQLDEDVLCVSYSPNQKLLAVSLLDCTVKIFYVDTLKFFLSLYGHKLPVICMDIS
HDGALIATGSADRNVKIWGLDFGDCHKSLFAHDDSVMYLQFVPKSHLFFTAGKDHKIKQWDADKFEHIQTLEGHH
QEIWCLAVSPSGDYVVSSSHDKSLRLWERTREPLILEEEREMEREAEYEESVAKEDQPAVPGETQGDSYFTGKKT
IETVKAAERIMEAIELYREETAKMKEHKAICKAAGKEVPLPSNPILMAYGSISPSAYVLEIFKGIKSSELEESLL
VLPFSYVPDILKLFNEFIQLGSDVELICRCLFFLLRIHFGQITSNQMLVPVIEKLRETTISKVSQVRDVIGFNMA
GLDYLKRECEAKSEVMFFADATSHLEEKKRKRKKREKLILTLT

FIGURE 3561

GTTGACGTGTTCGACTTTCCTGATAATTCTGATGTCTCAAGCATTGGCAGGCTGGGTGAAAATGAGAAAGATGAA
GAAACTTATGAGACCTTTGATCCTCCTTTACATAGCACAGCTATATATGCTGATGAAGAAGAATTCTCCAAACAT
TGTGGACTGTCTCTCTCTTCAACTCCTCCAGGAAAAGAAGCAAAAAGAAGTTCAGACACTTCTGGAAATGAAGCA
AGTGAAATCGAATCTGTAAAAATTAGTGCAAAAAAGCCAGGAAGAAAGCTCAGGCCCATTAGTGATGACTCTGAA
AGCATTGAAGAAAGTGATACAAGGAGAAAAGTTAAATCAGCAGAGAAAATAAGTACACAACGTCATGAGGTTATT
CGAACCACAGCGTCTTCAGAACTTTCAGAGAAACCAGCTGAGTCTGTCACTTCTAAAAAGACAGGACCCCTTAGT
GCCCAGCCCTCTGTTGAAAAAGAGAACTTGGCAATAGAAAGTCAATCGAAAACTCAGAAAAAAGGGAAGATATCT
CATGACAAAAGGAAGAAATCAAGAAGTAAAGCCATAGGCTCAGATACTTCTGACATTGTGCACATTTGGTGTCCA
GAAGGA**ATG**AAAACCAGTGACATCAAGGAGTTGAATATTGTTTTGCCTGAATTTGAGAAAACCCACCTAGAGCAT
CAACAAAGAATAGAATCTAAAGTTTGTAAGGCAGCCATCGCCACATTTTATGTTAATGTTAAAGAACAATTCATC
AAAATGCTTAAAGAAAGCCAGATGTTGACAAATCTGAAAAGGAAGAATGCTAAGATGATTTCAGATATCGAAAAG
AAAAGGCAGCGTATGATTGAAGTCCAGGATGAACTGCTTCGGTTAGAGCCACAGCTGAAACAACTACAAACAAAA
TATGATGAACTTAAAGAGAGAAAGTCCTCCCTTAGGAATGCAGCATATTTCTTATCTAATTTAAAACAGCTTTAT
CAAGATTATTCAGATGTTCAAGCTCAAGAACCAAACGTAAAGGAAACGTATGATTCATCCAGCCTTCCAGCTCTG
TTATTTAAAGCAAGAACACTTCTGGGAGCCGAAAGCCATCTGCGAAATATCAACCATCAGTTAGAGAAGCTCCTT
GACCAGGGA**TGA**GAAGAGCAGTCTACTAAAATGTGCCTATAGGAAGACTAGTCTCATGCTGTTACCTTCTGAAAC
TGTACCTTTATAAATCAATTGTTTTGCAAAGAAGTTATGGCCTACTTAGAATCTAAAATTTGTTATTCAAATTAA
ATGGCTGTGAACAATGTTAAATAGCATCAGTTTGTCCAATAGTTTTAAAGGCCATAATCATCTTTTCTGGTTAAT
ATCTTGAGTAATTTTAAAATGTTGACACCTTAATCGGTCCCAGGTATGAGCTATAATAAACTTGTAAAATTAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3562

MKTSDIKELNIVLPEFEKTHLEHQQRIESKVCKAAIATFYVNVKEQFIKMLKESQMLTNLKRKNAKMISDIEKKR
QRMIEVQDELLRLEPQLKQLQTKYDELKERKSSLRNAAYFLSNLKQLYQDYSDVQAQEPNVKETYDSSSLPALLF
KARTLLGAESHLRNINHQLEKLLDQG

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FIGURE 3563

AATTATATATTTTTACTCTATGTTTCTCTACATGTTTTTTTCTTTCCGTTGCTGGCGGAAGAGGCACGTGCGCTG
CTGAATGGAGCTGGTCGCTGGTTGCTACGAGCAGGTCCTCTTTGGGTTCGCTGTACACCCGGAGCCCAAGGCTTG
CGGCGACCACGAGCAATGGACTCTTGTGGCTGACTTCACTCACCATGCTCACACTGCCTCCTTGTCAGCAGTAGC
TGTAAATAGTCGTTTTGTGGTCACTGGGAGCAAAGATGAAACAATTCACATTTATGACATGAAAAAGAAGATTGA
GCATGGGGCTCTAGTGCATCACAGTGGTACAATAACTTGCCTGAAATTCTATGGCAACAGGCATTTAATCAGTGG
AGCGGAAGATGGACTCATCTGTATCTGGGATGCAAAGAAATGGGAATGCCTGAAGTCAATTAAAGCTCACAAAGG
ACAGGTGACCTTCCTTTCTATTCACCCATCTGGCAAGTTGGCCCTGTCGGTTGGTACAGATAAAACTTTAAGAAC
GTGGAATCTTGTAGAAGGAAGATCAGCATTCATAAAAAATATAAAACAAAATGCTCACATAGTAGAATGGTCCCC
AAGAGGAGAGCAGTATGTAGTTATCATACAGAATAAAATAGACATCTATCAGCTTGACACTGCATCCATTAGTGG
CACCATCACAAATGAAAAGAGAATTTCCTCTGTTAAATTTCTTTCAGAGTCTGTCCTTGCAGTGGCTGGAGATGA
AGAAGTTATAAGGTTTTTTGACTGTGATTCACTAGTGTGCCTCTGCGAATTTAAAGCTCATGAAAACAGGGTAAA
GGACATGTTCAGTTTTGAAATTCCAGAGCATCATGTTATTGTTTCAGCATCGAGTGATGGTTTCATCAAAATGTG
GAAGCTTAAGCAGGATAAGAAAGTTCCCCCATCTTTACTCTGTGAAATAAACACTAATGCCAGGCTGACGTGTCT
TGGAGTGTGGCTAGACAAAGTGGCAGACATGAAAAGCCTTCCTCCAGCTGCAGAGCCTTCTCCTGTAAGTAAAGA
ACAGTCCAAAATTGGCAAAAAGGAGCCTGGTGACACAGTGCACAAAGAAGAAAAGCGGTCAAAACCTAACACAAA
GAAACGCGGTTTAACAGGTGACAGTAAGAAAGCAACAAAAGAAAGTGGCCTGATATCAACCAAGAAGAGGAAAAT
GGTAGAAATGTTGGAAAAGAAGAGGAAAAAGAAGAAAATAAAAACAATGCAGTGAATCACAGATGTCTCCTGAAA
GAACTCTTTTAGATGAAATCATTCTACTCAAATGTACCTTAATTTTTTTTTTTCCCTGAGTAAAAGCAAGAAATT
TCTTCCTTTGGAAAAAATATATATATTAAAAAACCACTTTTAGATGGTTTTTTTTAAAAAAAAAAAAAAAACTGG
TAAAATTACTTTTGGCAGACAGTGTTTTATGAATTATGTATCATGTTGATATATAATATGTTAATGTGTCATGTA
ATTTTTACTTTGTACAAAGCAAATAAAGATCTTTCTCAAAAAAAAAAAAAAAAA

FIGURE 3564

MELVAGCYEQVLFGFAVHPEPKACGDHEQWTLVADFTHHAHTASLSAVAVNSRFVVTGSKDETIHIYDMKKKIEH
GALVHHSGTITCLKFYGNRHLISGAEDGLICIWDAKKWECLKSIKAHKGQVTFLSIHPSGKLALSVGTDKTLRTW
NLVEGRSAFIKNIKQNAHIVEWSPRGEQYVVIIQNKIDIYQLDTASISGTITNEKRISSVKFLSESVLAVAGDEE
VIRFFDCDSLVCLCEFKAHENRVKDMFSFEIPEHHVIVSASSDGFIKMWKLKQDKKVPPSLLCEINTNARLTCLG
VWLDKVADMKSLPPAAEPSPVSKEQSKIGKKEPGDTVHKEEKRSKPNTKKRGLTGDSKKATKESGLISTKKRKMV
EMLEKKRKKKKIKTMQ

FIGURE 3565

AGCAGGTTTCGAATGCTCTTTACTTCCTTTGTGGAGCAAAAGAAAAAAGCAGGAGTATTTGAACAAATCACTAAG
ACTCATGGAACAATTATTGGCATTACTTCAGGGATTGTCTTGGTCCTTCTCATTATTTCTATTTTAGTACAAGTG
AAACAGCCTCGAAAAAAGGTCATGGCTTGCAAAACCGCTTTTAATAAAACCGGGTTCCAAGAAGTGTTTGATCCT
CCTCATTATGAACTGTTTTCACTAAGGGACAAAGAGATTTCTGCAGACCTGGCAGACTTGTCGGAAGAATTGGAC
AACTACCAGAGGATGCGGCGCTCCTCCACCGCCTCCCGCTGCATCCACGACCACCACTGTGGGTCGCAGGCCTCC
AGCGTCAAACAAAGCAGGACCAACCTCAGTTCCATGGAGCTTCCTCTCCGAAATGACTTTGCACAACCACAGCCA
ATGAAAACATTTAATAGCACCTTCAAGAAAAGTAGTTACACTTTCAAACAGGGACATGAGTGCCCTGAGCAGGCC
CTGGAAGACCGAGTAATGGAGGAGATTCCCTGTGAAATTTATGTCAGGGGGCGAGAAGATTCTGCACAAGCATCC
ATATCCATTGACTTCTAATCTTCTGCTAATGGTGATGTGAATTCTTAGGGTGTGTACGTACGCAGCCTCCAGGGC
ACCATACTGTTTCCAGCAGCCAACCCTTTTCTCCCATCACAACTACGAAGACCTTGATTTACCGTTAACCTATTG
TATGGTGATGTTTTTATTCTCTCAGGCAGTCTATATATGTTAAACCAATCAAGGAACTTACTCTATTCAGTGGAA
ACAATAATCATCTCTATTGCTTGGTGTCATTTATAGGAAGCACTGCCAGTTAAAGAGCATTAGAAGAGGTGGTTG
GATGGAGCCAGGCTCAGGCTGCCTCTTCGTTTTAGCAACAAGAAGACTGCTCTTGACTGATAACAGCTCTGTCAA
TATTTTGATGCCACAATAAACTTGATTTTTCTTTACATTCCTTTTATTTTTCCTTTCTCTAAATTTAATTTGTTT
TATAAGCCTATCGTTTTACCATTTCATTTTCTTACATAAGTACAAGTGGTTAATGTACCACATACTTCAGTATAG
GCATTTGTTCTTGAGTGTGTCAAAATACAGCTAGTTACTGTGCCAATTAAGACCCAGTTGTATTTCACCCATCTG
TTTCTTCTTGGCTAATCTCTGTACTTCTGCCTTTTAATTACTGGGCCCTTATTCCTTATTTTCTGTGAGAAATAA
TAGATGATATGATTTATTACCTTTCAATTATATTTTTCTCAGTTATACTAGAAAATTTCATAATCCTGGGATATA
TGTACCATTGTCAGCTATGACTAAAAATTTGAAAAAGATAAAAATTTCTAGCAAGCCTTTGAAGTTTACCAAGTA
TAGTCACATTCAGTGACAGCCCATTCATTCCAGTAAAGAATCATTTCATTCACTTTGGGAGAGGCCTATAATTAC
ATTTATTTGCAATGTTTCTCTTCGCTAGATTGTTACATAGCTCCCATTCTGTTGGTTTTGCTTACAGCATATGGT
AACCAAGGTTAGATGCCAGTTAAAATTCCTTAGAAATTGGATGAGCCTTGAGATTGCTTCTTAACTGGGACATGA
CATTTTTCTAGCTCTTATCAAGAATAACAACTTCCACTTTTTTTTAAACTGCACTTTTGACTTTTTTTATGGTAT
AAAAACAATAATTTATAAACATAAAAGCTCATTGTGTTTTTTAGACTTTTGATATTATTTGATACTGTACAAACT
TTATTAAATCAAGATGAAAGACCTACAGGACAGATTCCTTTCAGTGTTCACATCAGTGGCTTTGTATGCAAATAT
GCTGTGTTGGACCTGGACGCTATAACTTATTGTAAAGACCTTGGAAATGTGGACATAAGCTCTTTCTTTCCTTTT
GTTACTGTATTTAGTTTGTGATAAATTTTTCACTGTGTGATATTTATGCTCTAAATCACTACACAAATCCCATAT
TAAAATATACATTGTACCTGACCCTTTAATCATGTTATTTATGCCACCAAGGTTGTGGATCTTAAGGTATGTATG
GAAAGGAACTCATTTATCAAATTGTAAGTAATACAGACATGCCATTTAAAAGAGGTAAATTCTTGTTTTCTATAT
TTTGTTAGTAAATTCTCAATGAAATAAGTTGAAGTTTCACTGGATTTCATTAACTTTTAAATATTACATATATGT
GTTTTCTCAGATTAGTGAAAATTGTGACCTTAAATTTAATACACATATACTGCCTCAG

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FIGURE 3566

MLFTSFVEQKKKAGVFEQITKTHGTIIGITSGIVLVLLIISILVQVKQPRKKVMACKTAFNKTGFQEVFDPPHYE
LFSLRDKEISADLADLSEELDNYQRMRRSSTASRCIHDHHCGSQASSVKQSRTNLSSMELPLRNDFAQPQPMKTF
NSTFKKSSYTFKQGHECPEQALEDRVMEEIPCEIYVRGREDSAQASISIDF

FIGURE 3567

GATTGGAAGCAGAGGAAGCTGAAGAAAAGTAATGTAGTTTCCTTAAAGGCATACAAAGGACTGGCAGAAGTCGCT
GTGAAGAGCTTGTGTGAGCTGTTGGTGGCACTACCTCATTTTAACTTTCACAACAACATCATCGTATTGATTGTC
CCTCTC**ATG**AATGACATGTCAAAATTGATATCTGAAATGTGTTGTGAAGCTGTGAAGAAACTCTTTAAGCAAGAT
AAATTAGGCCAAGCTTCTCTTGGTGTAATTAAAGTGATTTCTGGTTTTGTGAAGGGCAGAAATTACGAAGTTAGG
CCAGAGATGTTAAAAACATTTTTATGCCTAAGAATCAAGGAAGTAGAAGTGAAAAAAGATACAGAAGACATTAAT
AAACCAAAAAAAATTTATGACTTTCAAAGAAAAGAGAAAATCTCTATCAAGAATGCAGAGAAAGTGGAAGAAAGCA
GAAGAGAAACTAGCGCGAGAGCTTCGAGAGGCAGAAGCTTCAGAGAGTACTGAGAAAAAACTTAAACTGCACACA
GAGACTCTGAATATTGTGTTTGTAACCTACTTCAGAATATTGAAGAAGGCCCAGAGGTCACCTCTCCTGCCAGCA
GTTCTAGAAGGTCTTGCCAAGTTTGCTCACCTTATAAATGTGGAATTTTTTGATGATCTGTTAGTAGTTCTTCAT
ACTCTCATTGAGTCTGGTGACCTAAGCTATCAAGAAAGTCTTCACTGTGTCCAGACTGCTTTTCATATTCTTTCT
GGACAAGGTGATGTTCTGAATATTGATCCATTGAAATTCTACACACATCTCTACAAAACACTGTTCAAATTACAT
GCAGGTGCTACCAATGAAGGTGTTGAGATTGTACTCCAGTGCCTTGATGTCATGCTAACTAAGCGCAGAAAGCAA
GTTTCTCAGCAGCGAGCTCTTGCCTTCATCAAACGCCTTTGTACCCTTGCTCTTCATGTTCTTCCAAATTCAAGT
ATTGGCATTTTAGCAACTACCAGAATATTAATGCATACTTTCCCCAAAACAGATCTACTGCTTGACAGTGAATCT
CAGGGAAGTGGAGTTTTCCTTCCTGAACTGGATGAGCCTGAGTACTGCAATGCTCAGAACACTGCTCTGTGGGAA
CTGCATGCTCTGCGGAGGCATTATCATCCCATAGTGCAGAGATTTGCAGCCCACCTGATCGCTGGAGCACCTTCT
GAAGGCTCTGGAGCACTCAAACCAGAGTTGAGTCGAAGATCTGCTACTGAACTTTTTGAGGCATATAGCATGGCA
GAAATGACATTCAATCCTCCTGTTGAATCTTCAAACCCCAAAATAAAGGGTAAATTTTTACAAGGGGATTCATTT
TTGAATGAAGATTTAAATCAGCTAATCAAAAGATACTCCAGTGAAGTTGCTACTGAATCGCCTCTGGATTTCACG
AAATATTTGAAAACATCACTACAC**TAG**TAGAGGAATGAAGTCAGTGGACTTTCTTGTATATTTGTGTGTGCAGAT
GTACATAAAGATGAGTTGTTAACTTAGGATCTTTTCTTTTTATACAAGGAAAGCTTCCTAAGAATGTCTAGGAAG
AAGAGGAAGAATGACCCTTTGCATGGCACAGGGTTCTGCCCCTATTCTGAATATGTCATTCCATCAAGGAGATCA
AAAGCCTTTTTTTCTCCCCAGTATTTGGAAATTACTTTCTTGATGATGCTGCCTTTTAAAAGCTTCACGTACATT
ATAGTTTTTTAAAAAAATCTTTGGACTGGATCTTACTGAAGTGCAGTTGCTATATTAAAATTAGGGCATAGAGCA
CAGAAAAATCAAGACCATGAGAAGACATTTTACCATTTAGCTACTTTTTATAACTAAATACTCTTTAAATATTTT
TATTTCAATACTGTGGATGGAAATGAGAAGCATTCTAAATTTGAGTTAATATATTTTTATGAAGATATTTGAGAA
AAGAAAAAAATAGCTTGTATTCAGGTTCATTGGCTTTTGCTGGATGATCCACCTAAAGAAGTTACCTAATTTGGC
CTTTTAAAAAAGGTGTTAGTGTTTATTATAGCTACTTTCAAGGAAAGTTTGAATATGATTCTAGTCTCTAAAGTT
CTTCACGTTTTCTGACATTCCCTGGAGGGTGACTGGGGAAGAATTGCTCCAGGGTAGAAGAACCAGGCCCAAGAC
TTTACCATTCTGATCTAGAGACAAAGGATACTCAATGAGGAGCTTTTTTCCCCTCTTGGAACAGGTAAAATGCTT
TTTCTTATTAATATAATTATAAAACAGTATTTTATGTAACAGCTATTCCCATATTCTAGGAGTGGCCTAAGAAAT
GCGTGTTTCAGTGACTAGATTATAAATATTCTCTATTGTGAATAGTTGAATAAAACAGCTGTTTTTTTCTGCTTC
T

FIGURE 3568

MNDMSKLISEMCCEAVKKLFKQDKLGQASLGVIKVISGFVKGRNYEVRPEMLKTFLCLRIKEVEVKKDTEDINKP
KKFMTFKEKRKSLSRMQRKWKKAEEKLARELREAEASESTEKKLKLHTETLNIVFVTYFRILKKAQRSPLLPAVL
EGLAKFAHLINVEFFDDLLVVLHTLIESGDLSYQESLHCVQTAFHILSGQGDVLNIDPLKFYTHLYKTLFKLHAG
ATNEGVEIVLQCLDVMLTKRRKQVSQQRALAFIKRLCTLALHVLPNSSIGILATTRILMHTFPKTDLLLDSESQG
SGVFLPELDEPEYCNAQNTALWELHALRRHYHPIVQRFAAHLIAGAPSEGSGALKPELSRRSATELFEAYSMAEM
TFNPPVESSNPKIKGKFLQGDSFLNEDLNQLIKRYSSEVATESPLDFTKYLKTSLH

FIGURE 3569

AAACCCAAAGCGGCCGCCGTAGGCGAAGGTGAAGATGGCTGCCTCTGCCTTTGCTGGTGCAGTGAGAGCAGCTTC
AGGAATCCTACGGCCCCTGAATATTTTGGCATCTTCAACCTACCGCAACTGTGTCAAGAATGCCTCTCTTATTTC
TGCATTGTCCACTGGACGTTTTAGTCATATTCAGACACCAGTTGTTTCCTCCACTCCCAGACTTACCACATCTGA
GAGAAACCTGACATGTGGGCATACCTCAGTGATCCTTAATAGAATGGCCCCCGTGCTTCCAAGTGTCCTGAAGCT
GCCAGTCAGATCTCTAACATACTTCAGTGCAAGAAAAGGCAAGAGAAAGACCGTGAAAGCTGTCATCGATAGGTT
TCTTCGACTTCATTGTGGCCTTTGGGTGAGGAGAAAGGCTGGCTATAAGAAAAAATTATGGAAAAAGACACCTGC
AAGGAAGAAGCGATTGAGGGAATTTGTATTCTGCAATAAAACCCAGAGTAAACTCTTAGATAAAATGACGACGTC
CTTCTGGAAGAGGCGAAACTGGTACGTTGATGATCCTTATCAGAAGTATCATGATCGAACAAACCTGAAAGTATA
GATCAGAAGTTTCACTTGTTTCTCAGTTATTGGATATGTATCTTTGTGTACATATCTTTGCAAAAATGGATAAGT
ACAAAACTTGATGTAAATTGTACCAATGAATACGTAAACATACAGTGACAACATTAAACTTAGAAAAGTTTTAAA
ACTTAATGGATCAGACTTTGCCAGATTTGGTTAGGGAAACAGAAATTTAGAATGGTGCATTATTTTTAACAAATG
GTATTGGCTTAACTAGTTGTTTCAGTTATGCTCTTTTAGTTGCAAGGAATCTCAAGTGGGACAAACATAAAAAGA
CTCAAAAGCTACAAGTTAGCTCAAGCAATGTGACATTATTTCAAGGATATGTGCCAGGGAATTCAGGAACCACCT
CACCAACCCCATCTCCCACTCAGAAATCACCTCCCAGCCTCAGGAAGAGTAGAAATTGGGTGGTGCTCCTCAGCA
GGGGAAGGTGGATGTTTAGGCTTGGGCTCTGCATGCATGTGACTTGCTTCTTTTTGCATTGTTAACTCCATTCTC
TCTATTCACCAACTTCTCTACACAGCTTTTGCATACTTACAGTTTCTGTTCCTTTGTAATAACTTTAACTTGCAC
CTTTGAGGTTCTTTTCTACATGATGACCTTCAGCTCCTGCTGCTAGTCTCCAATTGCCAAGGGAATTTAACTGGG
CCAGACTACCTTTTTATACTAGGTCTGGTTGGGTCATTGTCTAGAGTAGGGATTGGCTGTCCTTAAGTCAGGAGC
CCGCTTTGTATTAGCAGGTTTGCATGCAGCAAAAAAACAGTTATGTGAGCAGTTTCACTTGGAGGTTCACATGGG
GTGGCAGCACACTTAACATCTAACACACCAGGTTCATTGTGTTCATAACACTTGTCATTTACTGTAACAACATTT
TTTCATAGGAGAGTAAATAGCCCTTCAGCATGCTCATTCATGAAACAGAAGAGGCTGTACAAGTGAAGACAAGGG
CTTTTTATGCAAGTTTTGAAAGATAGGTATTTATTTTTTCTAGAGACAGGAGTTTTGCTCTGTTGCCCAGGCTGG
AGTGCAGTGGTGCAATCATAGCTCATTGAAGCCTCGCACTCCTGGGCTCAAGTGGTCCTCCTGCCTCAGCTTACT
GAGTAAGGATATGTATTTCTTAAAAGTTAGTTTATCCACTTCAGATTTCATGTTTTCATTTGTAAGGATAAACTT
TTCCCACAAATTTTCAACAATCATTGTAGAAACTAAGGGGGAGAAAGTAATCTCAGTTGTTTTAGAAACGAAAAA
GTTAAGCATTGTTTACTTGAAGTGGGCAGGGAAGCAGCACTGAGTAAAGTTCAATTGAGTGGTTACAGTCTAGGG
CAGTGGTTCCCAACTCTCCGATCAGAATCATCTGGGAAGCATTTTCAAACAGCAAAGTACTTTGAAAACCATTAT
TAAATAGAATTATGCATGAATTACTGTTTCAGATCCTTTAATGTGGTAGTTGGTAATAATAAGATGAAATTCCTC
TGTTGTTAGTAAAATTATGAAATTGAAGTTCTGCAGCATGTCAGGCCAGGATTATTAGGGAGATTCCTCGAAACT
AGTGTGTGTTTATTAAAAGGAGAAAGGATAACAATAGAATGTTCTAAAACCAGAAGTCCAAGTGCGTGTCTACTT
ATGGGACCAATAAATAAAGAACAGACATTTGATTTGAGGTGAGGTAAAAGCCTGAAACATGGAATGGCATTCTGT
TTTGATGGATTTTCATTTCTTCGCACTTCTGAGACGGCAAAGCCAACCACTTAGAAGCCTTCCACATCTTTGTCA
CCTGCCTGGCTCCTGCTCTCTGATGTACCTCTGGGTAGTGAGATGGAAATGGTGCCTGCAGAAGTTGGGGAGAAG
GATACTTTTGCACAGCCTCCATGATGTCTTTATTGCAAATATGGATGACAAGGGTCTCTGTTACAGGGGCCTCAG
AGCACCTTCGTTTCTCCTCTAGACCAGGGACAGGTGTAGAGATAAGGACTGGCAACCAGAGCCTCAGCATCCAAA
GATGGACTGAAGTGGGATGGCTGACAGGCACATAACTTACGGGAAAGGGAATTTCATACATACGATTTTTGTTTT
GTGGGTAGGAGGGCTTATCATCAACACTGATTTTATAATCTGACAATAAATGTCTTTCATTAAAGAGTTTACCTA
AATGAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3570

MAASAFAGAVRAASGILRPLNILASSTYRNCVKNASLISALSTGRFSHIQTPVVSSTPRLTTSERNLTCGHTSVI
LNRMAPVLPSVLKLPVRSLTYFSARKGKRKTVKAVIDRFLRLHCGLWVRRKAGYKKKLWKKTPARKKRLREFVFC
NKTQSKLLDKMTTSFWKRRNWYVDDPYQKYHDRTNLKV

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FIGURE 3571

GGCGCCGGGGGACACGTTGGCTGCGTTTTCGGCGGGCCTCCCGGGTACAAAA**ATG**GCTGTGGCTAGCGATTTCTA
CCTGCGCTACTACGTAGGGCACAAGGGCAAGTTTGGGCACGAGTTTCTGGAGTTCGAATTTCGGCCGGACGGAAA
GCTTAGATATGCCAACAACAGCAATTACAAAAATGATGTGATGATCAGAAAAGAGGCTTATGTGCACAAGAGTGT
AATGGAAGAACTGAAGAGAATTATTGATGACAGTGAAATTACAAAAGAAGATGATGCTTTGTGGCCTCCCCCTGA
TAGGGTTGGCCGACAGGAGCTTGAAATTGTAATTGGAGATGAGCACATATCTTTTACCACATCAAAAATAGGTTC
TCTTATTGATGTAAATCAGTCAAAGGATCCTGAAGGCCTTCGAGTATTTTACTATTTGGTACAAGACTTGAAATG
TTTAGTTTTCAGTCTTATTGGATTACACTTCAAGATTAAACCAATT**TAA**ATTGTATGTTTTCAGGCTGTTTGTAT
ATTTAATTAAGGGATGGGAGGGGTTATTTGTCATTTACAGTATTGGGGTTTTTATGAATGTGAAGCAAACAAAAA
AAATTTGTATGTAAACTGAAAATAAGAAAATACATTAGCAAGCTTAATGGTTATCCTTACTTGAGTCCACATGGG
TTGGACAGTCCCCACACACATTAAATTCTGTAAATGAAAGCCACCTTTTGTTAAAAATTTGCTCTAATAAAACAT
ACCAAATCCTGGTTGCAGAGTAGTTTTTTGTTTTTTCCAGGAGGCTATGTCTCTAATTCACTTTAGAGATAATAA
GAAATTGTTCTGGTAGATACATCCTGTGACAGAAGATACTTTAGGTGGAACTATGTAGCCAGATTCCCATCCATG
AAAGGCAAGTGTAGATTGTCCCTTATTTCCTTCATACATGATTGGATTTAATTTTGGGGGGCTTATACAAGGTCT
AGTTTTTTTTTACAGTTATGACAAACCCCTCAGGGATTATTCACATTTAAATATTTTCAGTTACAAGCAGTGAGG
TCCTAAAGTGTTACAAGAGTACAGTCTACCCCATGTTAGGCATATCTTTGATTATGTCTTTATTCCTTATTTCAC
AATGTATTTGGTGTGTAGGGGAGGGGGGAGAACTAAATGAGTTTTCAGCTTTATAAATTGTTAAACATTTAGACA
AACATATATGTATGTATGAATGTACATAAATATTTTTAACTCCTATTGACCACGAGTCTCACTTCAGTTTCCCAG
TTCCTTTCAACCTCTTTCTGATAGATTTCCTCTTTCATTACTTTTAGTAACCATGTTCCTTGTTTCCTTTTATTC
TTCCATCTGAAGCCCCACTCTTAAAAAGTTGCACTGTTCCAGTAGTTATAATCCACTTGCCCTAGGAACAAGTTA
GCACTGAATTTTGGGTGGAATAATTAGTTTCTGAAGGCTTGCCAGGACCCCTGAGCAGGTAGGCTCTAGAGTCGG
GCAGTCCAATAACTTTTTTGCAATAATGGAAACGTCCTATGTGCAGTCCAATAGGGTAGCAACTGGCCAAATGAG
GCCTACTGATTACTTGAGGTGTGCCTTGTATAACTGAATTTATGGTGCTATTTAAACAATTTTTTTCTAACGTGA
AAAGGATAAAACATAAAAAACTCTTGAGAACTATAAAGTGAACACCTATATGCCTACCCCTACCTAGATTCTATA
CTTAACATCTTTTTTACTGTAATATCTCTATTATAATAAATCTTGGTTTTTCACTTAACTGGTGTAATTGGTGCC
AATAAACTACTTTTTTTGTAGTGCTATTTAATTTTGATTAAATTTAGATAGCCACGTGTCTAGCGGCTACCGTTT
GGACAGTATAGCTCTAGAGCATGGCTTGGTAACCTGTTTGCCATGGAGCACTAGATGGTCCTTTTCACTCCTCAA
AATGCATGCCCATTGCCTTCAGGTTTGCCATGGAAAGTCAAATGATTTCCACTTCATTATGCAAGTACGCTATCA
TCTTCAGGTCTTTTGTATGTAAAATGTTTCTGTTCCAGTTGTAGACCTTGATGATTGTGCAGTATGAAATCGTAT
TGTAATTTTCTTGCATTTAGATGTCAACCTCAGAAACAGGAACAATCGTCTTTTGAACTTCCAGTAGGCCCACAG
TTGTTGGTTGTTCCTCAAAACAGGTTGTGGCTCCTGTTGAATAAGATGATCCATTAAAAACTGAACAAGGTTGAG
GAGAAATAGTGCTTACGTTGAAAAATCTTTAAGTCTTTGTCCCCGTTCTCTAACTTCCTTACGTTTTCGTTTATT
TAGCTCCATCCCCACTATCTACTAGAATTTCTCATATTTAAACCAAGATGGGAGACTAGGTCATTAGGAAAATAT
TACCGTCTACAATTTTCTTATACTTTGATCTGTCTTTTATTTGATTGTAAGTTGCTGATGGACAGTGATCATTAG
AAACTGAATTTTGTATAATACTAGTTTTATATGAAACTAGATATTTATTGCGCTCAGGTTATGTTCCTTTTACCT
CCTTCCTTAATAAAGAGACCACTTGAAAT

FIGURE 3572

MAVASDFYLRYYVGHKGKFGHEFLEFEFRPDGKLRYANNSNYKNDVMIRKEAYVHKSVMEELKRIIDDSEITKED
DALWPPPDRVGRQELEIVIGDEHISFTTSKIGSLIDVNQSKDPEGLRVFYYLVQDLKCLVFSLIGLHFKIKPI

FIGURE 3573

TGTACTTTTATTTTACACAGAAACACTGCCTTTTTATTTATATGTACTGTTTTATCTGGCCCCAGGTAGAAACTT
TTATCTATTCTGAGAAAACAAGCAAGTTCTGAGAGCCAGGGTTTTCCTACGTAGGATGAAAAGATTCTTCTGTGT
TTATAAAATATAAACAAAGATTCATGATTTATAAATGCCATTTATTTATTGATTCCTTTTTTCAAAATCCAAAAA
GAAATGATGTTGGAGAAGGGAAGTTGAACGAGCATAGTCCAAAAAGCTCCTGGGGCGTCCAGGCCGCGCCCTTTC
CCCGACGCCCACCCAACCCCAAGCCAGCCCGGCCGCTCCACCAGCATCACCTGCCTGTTAGGAGAAGCTGCATCC
AGAGGCAAACGGAGGCAAAGCTGGCTCACCTTCCGCACGCGGATTAATTTGCATCTGAAATAGGAAACAAGTGAA
AGCATATGGGTTAGATGTTGCCATGTGTTTTAGATGGTTTCTTGCAAGCATGCTTGTGAAAATGTGTTCTCGGAG
TGTGTATGCCAAGAGTGCACCCATGGTACCAATCATGAATCTTTGTTTCAGGTTCAGTATTATGTAGTTGTTCGT
TGGTTATACAAGTTCTTGGTCCCTCCAGAACCACCCCGGCCCCCTGCCCGTTCTTGAAATGTAGGCATCATGC**AT**
GTCAAACATGAGATGTGTGGACTGTGGCACTTGCCTGGGTCACACACGGAGGCATCCTACCCTTTTCTGGGGAAA
GACACTGCCTGGGCTGACCCCGGTGGCGGCCCCAGCACCTCAGCCTGCACAGTGTCCCCCAGGTTCCGAAGAAGA
TGCTCCAGCAACACAGCCTGGGCCCCAGCTCGCGGGACCCGACCCCCCGTGGGCTCCCGTGTTTTGTAGGAGACT
TGCCAGAGCCGGGCACATTGAGCTGTGCAACGCCGTGGGCTGCGTCCTTTGGTCCTGTCCCCGCAGCCCTGGCGG
GGGGCATGCGGTCGGGCAGGGGCTGGAGGGAGGCGGGGGCTGCCCTTGGGCCACCCCTCCTAGTTTGGGAGGAGC
AGATTTTTGCAATACCAAGTATAGCCTATGGCAGAAAAAATGTCTG**TAA**ATATGTTTTTAAAGGTGGATTTTGTT
TAAAAAATCTTAATGAATGAGTCTGTTGTGTGTCATGCCAGTGAGGGACGTCAGACTTGGCTCAGCTCGGGGAGC
CTTAGCCGCCCATGCACTGGGGACGCTCCGCTGCCGTGCCGCCTGCACTCCTCAGGGCAGCCTCCCCCGGCTCTA
CGGGGGCCGCGTGGTGCCATCCCCAGGGGGCATGACCAGATGCGTCCCAAGATGTTGATTTTTGCTGTGTTTTAT
AAAATAGAGTGTAGTTTACAGAAAAAGACTTTAAAAGTGATCTACATGAGGAACTGTAGATGATGTATTTTTTTC
ATCTTTTTTGTTAACTGATTTGCAATAAAAATGATACTGATGGTGAAAAAAAAAAAAAAAAA

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FIGURE 3574

MSNMRCVDCGTCLGHTRRHPTLFWGKTLPGLTPVAAPAPQPAQCPPGSEEDAPATQPGPQLAGPDPPWAPVFCRR
LARAGHIELCNAVGCVLWSCPRSPGGGHAVGQGLEGGGGCPWATPPSLGGADFCNTKYSLWQKKCL

FIGURE 3575

GGCACGAGGAGGGGTTGAGGCTGCCTGACCCCAGCCTAATGGGGTAGGTAGGCCTTGGGAAGTGGAGCATGGGGG
CAAAGGATCCAAGCATTGAGCCTTCATCCTCTATTCCCCATCCAGTGGGGTGCCGAGGCTCAGGCAGCATGACGA
CGGAGACCTTTGTGAAGGATATCAAGCCTGGGCTCAAGAATCTGAACCTTATCTTCATTGTGCTGGAGACAGGCC
GAGTGACCAAGACAAAGGACGGGCATGAGGTTCGGACCTGCAAAGTGGCGGACAAAACAGGCAGCATCAATATCT
CTGTCTGGGACGATGTTGGCAATCTGATCCAGCCTGGGGACATTATCCGGCTCACCAAAGGGTACGCTTCAGTTT
TCAAAGGTTGTCTGACACTATATACTGGCCGTGGGGGTGATCTGCAGAAGATTGGAGAATTCTGTATGGTTTATT
CTGAGGTTCCTAACTTCAGTGAGCCAAACCCAGAGTACAGCACCCAGCAGGCACCCAACAAGGCGGTGCAGAACG
ACAGCAACCCTTCAGCTTCCCAGCCTACCACTGGACCCTCTGCTGCCTCTCCAGCCTCTGAGAACCAGAATGGGA
ATGGACTGAGTGCCCCACCAGGTCCCGGTGGTGGCCCACATCCCCCTCATACTCCCTCCCACCCACCCAGCACCC
GAATCACTCGAAGCCAGCCCAACCACACACCTGCAGGCCCGCCTGGCCCTTCCAGCAACCCTGTTAGTAACGGCA
AAGAAACCCGGAGGAGCAGCAAGAGATAGCATGACATTCTTTCTTCCTGCCACCAACCACATCCCAAGTGTCCCC
TGGAGAGCAAGATAGCCTTCCACTGATTGGCTGGTGTAGCAGTATTTTAGCCACTGAACTTCAGTGGAGGGTGGT
GAGCAGTGTCCTTATCCACCCTAATCTCATACTCCCTCATTGTCCAGCTGAACTACCTGTCCCCTGGGAGTCAGG
ACCCTCTGCCTGCTCTCTTTCCTCTTTAGAAATGGCAGTTACTGGCTGGGCGCAGTGGCTCACGCTTGTAATCCC
AGCACTTTGGGAAGCCGAGGTGGGCGGATCACCTGAGGTCGGGAGTTCAAGACCAGCCTGACCAACATGGAGAAA
CCCCGTGTCTACTAAAAATACAGAATTAGCCAGGCATGGTGGCGTATGCCTGTAATCCCAGCTACTTAGGAGGCT
GAGGCAGGAGAATCTCTTGAAACCGGGAGGCGGAGGTTGAGGTGAGCCGAAATTGCACCATTGCACTCCAGCCTG
GGCAATAAGAGCGAAACTCCATCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3576

MTTETFVKDIKPGLKNLNLIFIVLETGRVTKTKDGHEVRTCKVADKTGSINISVWDDVGNLIQPGDIIRLTKGYA
SVFKGCLTLYTGRGGDLQKIGEFCMVYSEVPNFSEPNPEYSTQQAPNKAVQNDSNPSASQPTTGPSAASPASENQ
NGNGLSAPPGPGGGPHPPHTPSHPPSTRITRSQPNHTPAGPPGPSSNPVSNGKETRRSSKR

FIGURE 3577

GTTGCCGCTGCGCACCTGGCTCAGGTGAGCTGCCCCGCCCCCGCCCGGCGCGAGCCCCAGGTCCTGGCAGCAGCC
CCTGACCTGTCCAGGTGCCCTGTCCAGCTGACTGCAAGGACAGAGAGGAGTCCTGCCCAGCTCTTGGATCAGTCT
GCTGGCCGAGGAGCCCGGTGGAGCCAGGGGTGACCCTGGAGCCCAGCCTGCCCCGAGGAGGCCCCGGCTCAGAGC
CATGCCAGGTGTCTGTGATAGGGCCCCTGACTTCCTCTCCCCGTCTGAAGACCAGGTGCTGAGGCCTGCCTTGGG
CAGCTCAGTGGCTCTGAACTGCACGGCTTGGGTAGTCTCTGGGCCCCACTGCTCCCTGCCTTCAGTCCAGTGGCT
GAAAGACGGGCTTCCATTGGGAATTGGGGGCCACTACAGCCTCCACGAGTACTCCTGGGTCAAGGCCAACCTGTC
AGAGGTGCTTGTGTCCAGTGTCCTGGGGGTCAACGTGACCAGCACTGAAGTCTATGGGGCCTTCACCTGCTCCAT
CCAGAACATCAGCTTCTCCTCCTTCACTCTTCAGAGAGCTGGCCCTACAAGCCACGTGGCTGCGGTGCTGGCCTC
CCTCCTGGTCCTGCTGGCCCTGCTGCTGGCCGCCCTGCTCTATGTCAAGTGCCGTCTCAACGTGCTGCTCTGGTA
CCAGGACGCGTATGGGGAGGTGGAGATAAACGACGGGAAGCTCTACGACGCCTACGTCTCCTACAGCGACTGCCC
CGAGGACCGCAAGTTCGTGAACTTCATCCTAAAGCCGCAGCTGGAGCGGCGTCGGGGCTACAAGCTCTTCCTGGA
CGACCGCGACCTCCTGCCGCGCGCTGAGCCCTCCGCCGACCTCTTGGTGAACCTGAGCCGCTGCCGACGCCTCAT
CGTGGTGCTTTCGGACGCCTTCCTGAGCCGGGCCTGGTGCAGCCACAGCTTCCGGGAGGGCCTGTGCCGGCTGCT
GGAGCTCACCCGCAGACCCATCTTCATCACCTTCGAGGGCCAGAGGCGCGACCCCGCGCACCCGGCGCTCCGCCT
GCTGCGCCAGCACCGCCACCTGGTGACCTTGCTGCTCTGGAGGCCCGGCTCCGTGACTCCTTCCTCCGATTTTTG
GAAAGAAGTGCAGCTGGCGCTGCCGCGGAAGGTGCGGTACAGGCCGGTGGAAGGAGACCCCCAGACGCAGCTGCA
GGACGACAAGGACCCCATGCTGATTCTTCGAGGCCGAGTCCCTGAGGGCCGGGCCCTGGACTCAGAGGTGGACCC
GGACCCTGAGGGCGACCTGGGTGTCCGGGGGCCTGTTTTTGGAGAGCCATCAGCTCCACCGCACACCAGTGGGGT
CTCGCTGGGAGAGAGCCGGAGCAGCGAAGTGGACGTCTCGGATCTCGGCTCGCGAAACTACAGTGCCCGCACAGA
CTTCTACTGCCTGGTGTCCAAGGATGATATGTAGCTCCCACCCCAGAGTGCAGGATCATAGGGACAGCGGGGGCC
AGGGCAGCGGCGTCGCTCCTCTGCTCAACAGGACCACAACCCCTGCCAGCAGCCCTGGGACCCTGCCAGCAGCCC
TGGGAAAAGGCTGTGGCCTCAGGGCGCCTCCCAGTGCCAGAAAATAAAGTCCTTTTGGATTCTGAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3578

MPGVCDRAPDFLSPSEDQVLRPALGSSVALNCTAWVVSGPHCSLPSVQWLKDGLPLGIGGHYSLHEYSWVKANLS
EVLVSSVLGVNVTSTEVYGAFTCSIQNISFSSFTLQRAGPTSHVAAVLASLLVLLALLLAALLYVKCRLNVLLWY
QDAYGEVEINDGKLYDAYVSYSDCPEDRKFVNFILKPQLERRRGYKLFLDDRDLLPRAEPSADLLVNLSRCRRLI
VVLSDAFLSRAWCSHSFREGLCRLLELTRRPIFITFEGQRRDPAHPALRLLRQHRHLVTLLLWRPGSVTPSSDFW
KEVQLALPRKVRYRPVEGDPQTQLQDDKDPMLILRGRVPEGRALDSEVDPDPEGDLGVRGPVFGEPSAPPHTSGV
SLGESRSSEVDVSDLGSRNYSARTDFYCLVSKDDM

FIGURE 3579

TAGTTATTAAAGTTCCTATGCAGCTCCGCCTCCGTCCGGCCTCATTTCCTCAAAAAATCCCTGCTTTCCCCGCTC
GCCACGCCCTCCTGCTACCCGGCTTTAAAGCTAGTGAGGCACAGCCTGCGGGGAACGTAGCTAGCTGCAAGCAGA
GGCCGGC**ATG**ACCACCGAGCAGCGACGCAGCCTGCAAGCCTTCCAGGATTATATCCGGAAGACCCTGGACCCTAC
CTACATCCTGAGCTACATGGCCCCCTGGTTTAGGGAGGAAGAGGTGCAGTATATTCAGGCTGAGAAAAACAACAA
GGGCCCAATGGAGGCTGCCACACTTTTTCTCAAGTTCCTGTTGGAGCTCCAGGAGGAAGGCTGGTTCCGTGGCTT
TTTGGATGCCCTAGACCATGCAGGTTATTCTGGACTTTATGAAGCCATTGAAAGTTGGGATTTCAAAAAAATTGA
AAAGTTGGAGGAGTATAGATTACTTTTAAAACGTTTACAACCAGAATTTAAAACCAGAATTATCCCAACCGATAT
CATTTCTGATCTGTCTGAATGTTTAATTAATCAGGAATGTGAAGAAATTCTACAGATTTGCTCTACTAAGGGGAT
GATGGCAGGTGCAGAGAAATTGGTGGAATGCCTTCTCAGATCAGACAAGGAAAACTGGCCCAAAACTTTGAAACT
TGCTTTGGAGAAAGAAAGGAACAAGTTCAGTGAACTGTGGATTGTAGAGAAAGGTATAAAAGATGTTGAAACAGA
AGATCTTGAGGATAAGATGGAAACTTCTGACATACAGATTTTCTACCAAGAAGATCCAGAATGCCAGAATCTTAG
TGAGAATTCATGTCCACCTTCAGAAGTGTCTGATACAAACTTGTACAGCCCATTTAAACCAAGAAATTACCAATT
AGAGCTTGCTTTGCCTGCTATGAAAGGAAAAAACACAATAATATGTGCTCCTACAGGTTGTGGAAAAACCTTTGT
TTCACTGCTTATATGTGAACATCATCTTAAAAAATTCCCACAAGGACAAAAGGGGAAAGTTGTCTTTTTTGCGAA
TCAGATCCCAGTGTATGAACAGCAGAAATCTGTATTCTCAAAATACTTTGAAAGACATGGGTATAGAGTTACAGG
CATTTCTGGAGCAACAGCTGAGAATGTCCCAGTGGAACAGATTGTTGAGAACAATGACATCATCATTTTAACTCC
ACAGATTCTTGTGAACAACCTTAAAAAGGGAACGATTCCATCACTATCCATCTTTACTTTGATGATATTTGATGA
ATGCCACAACACTAGTAAACAACACCCGTACAATATGATCATGTTTAATTATCTAGATCAGAAACTTGGAGGATC
TTCAGGCCCACTGCCCCAGGTCATTGGGCTGACTGCCTCGGTTGGTGTTGGGGATGCCAAAAACACAGATGAAGC
CTTGGATTATATCTGCAAGCTGTGTGCTTCTCTTGATGCGTCAGTGATAGCAACAGTCAAACACAATCTGGAGGA
ACTGGAGCAAGTTGTTTATAAGCCCCAGAAGTTTTTCAGGAAAGTGGAATCACGGATTAGCGACAAATTTAAATA
CATCATAGCTCAGCTGATGAGGGACACAGAGAGTCTGGCAAAGAGAATCTGCAAAGACCTCGAAAACTTATCTCA
AATTCAAAATAGGGAATTTGGAACACAGAAATATGAACAATGGATTGTTACAGTTCAGAAAGCATGCATGGTGTT
CCAGATGCCAGACAAAGATGAAGAGAGCAGGATTTGTAAAGCCCTGTTTTTATACACTTCACATTTGCGGAAATA
TAATGATGCCCTCATTATCAGTGAGCATGCACGAATGAAAGATGCTCTGGATTACTTGAAAGACTTCTTCAGCAA
TGTCCGAGCAGCAGGATTCGAAGAGATTGAGCAAGATCTTACTCAGAGATTTGAAGAAAAGCTGCAGGAACTAGA
AAGTGTTTCCAGGGATCCCAGCAATGAGAATCCTAAACTTGAAGACCTCTGCTTCATCTTACAAGAAGAGTACCA
CTTAAACCCAGAGACAATAACAATTCTCTTTGTGAAAACCAGAGCACTTGTGGACGCTTTAAAAAATTGGATTGA
AGGAAATCCTAAACTCAGTTTTCTAAAACCTGGCATATTGACTGGACGTGGCAAAACAAATCAGAACACAGGAAT
GACCCTCCCGGCACAGAAGTGTATATTGGATGCATTCAAAGCCAGTGGAGATCACAATATTCTGATTGCCACCTC
AGTTGCTGATGAAGGCATTGACATTGCACAGTGCAATCTTGTCATCCTTTATGAGTATGTGGGCAATGTCATCAA
AATGATCCAAACCAGAGGCAGAGGAAGAGCAAGAGGTAGCAAGTGCTTCCTTCTGACTAGTAATGCTGGTGTAAT
TGAAAAAGAACAAATAAACATGTACAAAGAAAAAATGATGAATGACTCTATTTTACGCCTTCAGACATGGGACGA
AGCAGTATTTAGGGAAAAGATTCTGCATATACAGACTCATGAAAAATTCATCAGAGATAGTCAAGAAAAACCAAA
ACCTGTCCCTGATAAGGAAAATAAAAAACTGCTCTGCAGAAAGTGCAAAGCCTTGGCATGTTACACAGCTGACGT
AAGAGTGATAGAGGAATGCCATTACACTGTGCTTGGAGATGCTTTTAAGGAATGCTTTGTGAGTAGACCACATCC
CAAGCCAAAGCAGTTTTCAAGTTTTGAAAAAAGAGCAAAGATATTCTGTGCCCGACAGAACTGCAGCCATGACTG
GGGAATCCATGTGAAGTACAAGACATTTGAGATTCCAGTTATAAAAATTGAAAGTTTTGTGGTGGAGGATATTGC
AACTGGAGTTCAGACACTGTACTCGAAGTGGAAGGACTTTCATTTTGAGAAGATACCATTTGATCCAGCAGAAAT
GTCCAAA**TGA**TATCAGGTCCTCAATCTTCAGCTACAGGGAATGAGTAACTTTGAGTGGAGAAGAAACAAACATAG
TGGGTATAATCATGGATCGCTTGTACCCCTGTGAAAATATATTTTTTAAAAATAAAAAAAAAAAA

FIGURE 3580

MTTEQRRSLQAFQDYIRKTLDPTYILSYMAPWFREEEVQYIQAEKNNKGPMEAATLFLKFLLELQEEGWFRGFLD
ALDHAGYSGLYEAIESWDFKKIEKLEEYRLLLKRLQPEFKTRIIPTDIISDLSECLINQECEEILQICSTKGMMA
GAEKLVECLLRSDKENWPKTLKLALEKERNKFSELWIVEKGIKDVETEDLEDKMETSDIQIFYQEDPECQNLSEN
SCPPSEVSDTNLYSPFKPRNYQLELALPAMKGKNTIICAPTGCGKTFVSLLICEHHLKKFPQGQKGKVVFFANQI
PVYEQQKSVFSKYFERHGYRVTGISGATAENVPVEQIVENNDIIILTPQILVNNLKKGTIPSLSIFTLMIFDECH
NTSKQHPYNMIMFNYLDQKLGGSSGPLPQVIGLTASVGVGDAKNTDEALDYICKLCASLDASVIATVKHNLEELE
QVVYKPQKFFRKVESRISDKFKYIIAQLMRDTESLAKRICKDLENLSQIQNREFGTQKYEQWIVTVQKACMVFQM
PDKDEESRICKALFLYTSHLRKYNDALIISEHARMKDALDYLKDFFSNVRAAGFEEIEQDLTQRFEEKLQELESV
SRDPSNENPKLEDLCFILQEEYHLNPETITILFVKTRALVDALKNWIEGNPKLSFLKPGILTGRGKTNQNTGMTL
PAQKCILDAFKASGDHNILIATSVADEGIDIAQCNLVILYEYVGNVIKMIQTRGRGRARGSKCFLLTSNAGVIEK
EQINMYKEKMMNDSILRLQTWDEAVFREKILHIQTHEKFIRDSQEKPKPVPDKENKKLLCRKCKALACYTADVRV
IEECHYTVLGDAFKECFVSRPHPKPKQFSSFEKRAKIFCARQNCSHDWGIHVKYKTFEIPVIKIESFVVEDIATG
VQTLYSKWKDFHFEKIPFDPAEMSK

FIGURE 3581

AAAAAGGAACTGGGATCGCGCCGCGGCGGTTCCTGTCCTTACAGTTGCGCTGCCCAGGGACCGATGTTGCGCGAG
GAAAATGCGGGACGCCCAGGTCGGTGCTCGGCCCAGACTTATGCCCGTGTTTTCACAGCCCACACTCGTGCCCGA
AGCCCCTTACCCCGCCCCGGGCTGTGGTCTGTGGGCTGTGGGACGAGCTGCGGCGCGGGCCATTTCTGAGCAGTG
GAGGTTTCAAGTAATCCACTAACAACCAGTTCCAAATTCTGTCATCAAATCCTGTGCTGCTGTTCCTCGTGGTAA
TAGATGCATATTATTTCTTTTATTTAAAAGAAATGAATGTGACTAGTATTGCATTAAGAGCTGGAACTTGGCTTT
TAGCTGCATGGCATGTTAAAGTACCTCCGATGTGGCTGGAAGCTTGTATTAACTGGATTCAAGAAGAAAATAATA
ATGTTAACTTGAGTCAGGCCCAAATGAATAAACAAGTGTTTGAGCAGTGGCTCCTTACTGATCTGAGGGATTTGG
AGCATCCTCTTTTACCCGATGGCATTTTAGAAATTCCAAAAGGAGAATTAAATGGATTTTATGCTCTGCAGATTA
ATTCCTTGGTTGATGTAAGTCAGCCTGCATACTCCCAGATACAGAAGTTGAGAGGAAAGAATACAACAAATGATC
TAGTTACAGCTGAAGCACAAGTAACCCCAAAACCTTGGGAAGCAAAGCCTTCACGAATGTTGATGCTGCAGCTAA
CTGATGGAATCGTACAAATACAGGGAATGGAATATCAGCCTATTCCAATTCTTCATAGTGATCTTCCTCCAGGTA
CAAAAATTTTGATTTATGGAAATATATCTTTCCGTCTTGGTGTTCTCTTATTGAAACCAGAAAACGTGAAAGTGT
TAGGAGGTGAAGTAGATGCTCTTTTAGAAGAATATGCCCAAGAAAAAGTACTTGCAAGATTAATAGGGGAACCTG
ATCTTGTAGTTTCAGTCATACCAAACAATTCTAACGAAAACATTCCCAGAGTTACAGATGTTCTAGATCCTGCAT
TAGGTCCTTCTGATGAAGAACTCTTGGCAAGTCTTGATGAAAATGATGAGCTTACAACAAATAATGACACTTCCT
CAGAACGATGTTTCACCACAGGTAGTTCCTCAAATACCATTCCCACAAGACAGTCAAGTTTTGAGCCAGAATTTG
TTATTTCTCCAAGACCAAAAGAGGAACCATCAAACCTATCTATACATGTAATGGATGGAGAATTAGATGACTTTT
CACTGGAGGAGGCCTTGCTTTTAGAAGAAACTGTCCAGAAAGAACAGATGGAAACTAAGGAATTGCAACCATTGA
CTTTTAACAGAAATGCCGATCGAAGTATAGAGAGATTTTCACATAATCCTAATACTACGAATAACTTTTCTTTGA
CTTGCAAAAATGGAAACAATAATTGGAGTGAAAAAAATGTATCTGAACAAATGACTAATGAAGACAAATCATTTG
GTTGTCCATCTGTTAGAGACCAAAACAGGAGTATTTTTTCAGTTCATTGTAATGTACCCTTAGCCCATGATTTTA
CAAATAAAGAAAAGAACTTAGAGACAGATAATAAAATAAAACAAACCAGCAGTTCAGATAGCCATTCCTTAAATA
ATAAAATATTAAATAGAGAGGTGGTCAACTATGTACAGAAAAGGAGTTCACAAATTTCTAATGAAAATGATTGTA
ATTTACAGAGTTGTTCTTTAAGATCATCAGAGAATAGCATTAATCTTTCTATTGCCATGGATTTGTATTCTCCAC
CCTTTGTCTATTTGTCTGTTCTAATGGCCAGCAAACCAAAGGAAGTTACAACAGTGAAAGTGAAAGCATTTATTG
TAACCTTAACTGGAAATCTCTCAAGTTCTGGTGGTATTTGGAGTATAACTGCAAAGGTGTCTGATGGTACTGCAT
ATCTAGATGTAGACTTTGTGGATGAAATACTTACTAGCTTGATAGGGTTCTCAGTACCAGAAATGAAACAGTCAA
AAAAGGATCCTCTTCAATACCAAAAGTTCCTGGAAGGGTTGCAGAAATGTCAAAGAGATCTAATAGATTTGTGCT
GTCTAATGACTATTTCATTTAATCCTTCCTTGTCTAAAGCAATGGTACTGGCATTACAAGATGTTAATATGGAAC
ACCTTGAGAATCTAAAGAAGCGGTTAAATAAATAATTAAACTAAAATAGTATTAGGAACAATTAAAAACAACAAG
GAAATATTTAGAATTTGTTCACAATTTTACTTATGATACTTTGTGTAAAAAGGAAAAATGAAATTTCATAGCTTA
TTTCAGTTTAATTTTAAAGTGTTTAATCATGTTTGTTATATGTGGAGCTTTTGAAAATAAGTTAATCTTTTTTTT
TTTTTTTAATGTCAGGGTATTGCTCTGTTGCCCAGGCTAGAGTGCAGTGGCATGATCATAGGTTATTGCATCAAC
CTCTTGAGCTCAAGCGATCCTCCTGCCTTAGCCTCTTGAGTTGCTGGGACTATAGGCATGTACCACCATGCCCAG
CTAATTTATAATTACTATTATTGTTTTGTAGGGACAGAGTTTTGCTATGTTGCCCAGATTGGTCTCAAACTCCTG
GCCTCTCACTCCTGCCGTCATGGCCTCCAAAGTTTAATTTTTTTAAAAGTAACTGTTAGATGGAGGAATATGGTG
ACCCACTATTGTTGAGAAATTTGTTTTCCACTTGTCACGTCACATAAGATGATTGCTAAAATATTGTACTGGTGT
TCGGTGGTGAGTCATATTTTTGAAAGTTAATAATTATAAATAGGTAATTTCCTTCTAATATGTTGGTACTGTCTA
TGGCCATACCACCCTGAACATGCCTGAGCTTGTCATAATATGTTGAGTACCCAAAAGATTTGTTTATATTGTTAA
TCTTAGGGAAAAAAAATTAAAATCCAGTAGATCAGAACATCAGGCTTTCAGATACAAATTGATTTACTGGTTTTT
ATTTTGCTGATTATAATATTTGGTATATTTAAGGTAATCTAGTTAACTAGATGCTATTTCATAGATTATATTGAA
TGATTTAAAACTTTATTTTCAAGGATAGTTTATTTTAAATGGCATATTGAAAACATCATTATTAAGATCCAGTAG
GTAGGACATTTATTGGATTAAAATGAAGCATTTATCTATGTCTTTAGGTGTCATTGTTCCCTTTCTGAATTAGCT
GTACATATAAGCCTTCCTTTGGTTTTAAGTACTGATTTTTTTTTAAAAAAAGAGGGACTGTTTACCATTCTTCCA
CTGTGCTGTTATAAAGTTGTATTTGAAAGGTAATGTTGTTTTTATTAATCTTTTGTCTTAAAATAATTTAAAGTG
CTTTGAATTTTAAAACATTAAACAAATCCTTAAATAAC

FIGURE 3582

MNVTSIALRAGTWLLAAWHVKVPPMWLEACINWIQEENNNVNLSQAQMNKQVFEQWLLTDLRDLEHPLLPDGILE
IPKGELNGFYALQINSLVDVSQPAYSQIQKLRGKNTTNDLVTAEAQVTPKPWEAKPSRMLMLQLTDGIVQIQGME
YQPIPILHSDLPPGTKILIYGNISFRLGVLLLKPENVKVLGGEVDALLEEYAQEKVLARLIGEPDLVVSVIPNNS
NENIPRVTDVLDPALGPSDEELLASLDENDELTTNNDTSSERCFTTGSSSNTIPTRQSSFEPEFVISPRPKEEPS
NLSIHVMDGELDDFSLEEALLLEETVQKEQMETKELQPLTFNRNADRSIERFSHNPNTTNNFSLTCKNGNNNWSE
KNVSEQMTNEDKSFGCPSVRDQNRSIFSVHCNVPLAHDFTNKEKNLETDNKIKQTSSSDSHSLNNKILNREVVNY
VQKRSSQISNENDCNLQSCSLRSSENSINLSIAMDLYSPPFVYLSVLMASKPKEVTTVKVKAFIVTLTGNLSSSG
GIWSITAKVSDGTAYLDVDFVDEILTSLIGFSVPEMKQSKKDPLQYQKFLEGLQKCQRDLIDLCCLMTISFNPSL
SKAMVLALQDVNMEHLENLKKRLNK

FIGURE 3583

AGTCTTGGCGGAGGTGACCAAAGCCACGTAATGTCCGTAGTTCGCTCATCCGTCCATGCCAGATGGATTGTGGGG
AAGGTGATTGGGACAAAAATGCAAAAGACTGCTAAAGTGAGAGTGACCAGGCTTGTTCTGGATCCCTATTTATTA
AAGTATTTTAATAAGCGGAAAACCTACTTTGCTCACGATGCCCTTCAGCAGTGCACAGTTGGGGATATTGTGCTT
CTCAGAGCTTTACCTGTTCCACGAGCAAAGCATGTGAAACATGAACTGGCTGAGATCGTTTTCAAAGTTGGAAAA
GTCATAGATCCAGTGACAGGAAAGCCCTGTGCTGGAACTACCTACCTGGAGAGTCCGTTGAGTTCGGAAACCACC
CAGCTAAGCAAAAATCTGGAAGAACTCAATATCTCTTCAGCACAGTGAAGCGGGAGTGGAAGAAGGATCTAAAGG
GAAAAACTGACATGTTTATGTTATGGAAAAAGAAATTTTTCTAAGTTTCATCACAAACTGTGTCCAGTTTCTCTG
TGGTGTTTATGAAATAGCTAAAAGCAAATGAAGTAAAGGGCATACTATGGTTTTTCACAAAAAAAAAAAAAAAAA

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FIGURE 3584

MSVVRSSVHARWIVGKVIGTKMQKTAKVRVTRLVLDPYLLKYFNKRKTYFAHDALQQCTVGDIVLLRALPVPRAK
HVKHELAEIVFKVGKVIDPVTGKPCAGTTYLESPLSSETTQLSKNLEELNISSAQ

FIGURE 3585

CAGATGTCCAGTTCCAGATGCCTGGACCCAGAGTGTGGGGGAAATATCTCTGGAGAAGCCCTCACTCCAAAGGCT
GTCCAGGCGCAATGTGGTGGCTGCTTCTCTGGGGAGTCCTCCAGGCTTGCCCAACCCGGGGCTCCGTCCTCTTGG
CCCAAGAGCTACCCCAGCAGCTGACATCCCCCGGGTACCCAGAGCCGTATGGCAAAGGCCAAGAGAGCAGCACGG
ACATCAAGGCTCCAGAGGGCTTTGCTGTGAGGCTCGTCTTCCAGGACTTCGACCTGGAGCCGTCCCAGGACTGTG
CAGGGGACTCTGTCACAATCTCATTCGTCGGTTCGGATCCAAGCCAGTTCTGTGGTCAGCAAGGCTCCCCTCTGG
GCAGGCCCCCTGGTCAGAGGGAGTTTGTATCCTCAGGGAGGAGTTTGCGGCTGACCTTCCGCACACAGCCTTCCT
CGGAGAACAAGACTGCCCACCTTCACAAGGGCTTTCTGGCCCTCTACCAAACCGTGGCTGTGAACTATAGTCAGC
CCATCAGCGAGGCCAGCAGGGGCTCTGAGGCCATCAACGCACCTGGAGACAACCCTGCCAAGGTCCAGAACCACT
GCCAGGAGCCCTATTATCAGGCCGCGGCAGCAGGGGCACTCACCTGTGCAACCCCAGGGACCTGGAAAGACAGAC
AGGATGGGGAGGAGGTTCTTCAGTGTATGCCTGTCTGCGGACGGCCAGTCACCCCCATTGCCCAGAATCAGACGA
CCCTCGGTTCTTCCAGAGCCAAGCTGGGCAACTTCCCCTGGCAAGCCTTCACCAGTATCCACGGCCGTGGGGGCG
GGGCCCTGCTGGGGGACAGATGGATCCTCACTGCTGCCCACACCGTCTACCCCAAGGACAGTGTTTCTCTCAGGA
AGAACCAGAGTGTGAATGTGTTCTTGGGCCACACAGCCATAGATGAGATGCTGAAACTGGGGAACCACCCTGTCC
ACCGTGTCGTTGTGCACCCCGACTACCGTCAGAATGAGTCCCATAACTTTAGCGGGGACATCGCCCTCCTGGAGC
TGCAGCACAGCATCCCCCTGGGCCCCAACGTCCTCCCGGTCTGTCTGCCCGATAATGAGACCCTCTACCGCAGCG
GCTTGTTGGGCTACGTCAGTGGGTTTGGCATGGAGATGGGCTGGCTAACTACTGAGCTGAAGTACTCGAGGCTGC
CTGTAGCTCCCAGGGAGGCCTGCAACGCCTGGCTCCAAAAGAGACAGAGACCCGAGGTGTTTTCTGACAATATGT
TCTGTGTTGGGGATGAGACGCAAAGGCACAGTGTCTGCCAGGGGGACAGTGGCAGCGTCTATGTGGTATGGGACA
ATCATGCCCATCACTGGGTGGCCACGGGCATTGTGTCCTGGGGCATAGGGTGTGGCGAAGGGTATGACTTCTACA
CCAAGGTGCTCAGCTATGTGGACTGGATCAAGGGAGTGATGAATGGCAAGAATTGACCCTGGGGGCTTGAACAGG
GACTGACCAGCACAGTGGAGGCCCCAGGCAACAGAGGGCCTGGAGTGAGGACTGAACACTGGGGTAGGGGTTGGG
GGTGGGGGGTTGGGGGAGGCAGGGAAATCCTATTCACATCACTGTTGCACCAAGCCACTGCAAGAGAAACCCCCA
CCCGGCAAGCCCGCCCCATCCCAGACAGGAAGCAGAGTCCCACAGACCGCTCCTCCTCACCCTCTACCTCCCTGT
GCTCATGCACTAGGCCCCGGGAAGCCTGTACATCTCAACAACTTTCGCCTTGAATGTCCTTAGAACCACCTTCCC
CTACTTCATCTGTTGACACAGCTTTTATACTCACCTGTGGAAGAGTCAGCTACTCACCCGCTATTAGAGTATGGA
GGAAGGGGTTTTCATTGCATTGCATTTCTGAAACATTCCTAAGACCCTTTAGTTGACCTTCAAATATTCAAGCTA
TTCTGCAGCTCCAAGATGCAATTATAGAAACAGCTCCTTTTTTATTTTATGTCCTCTATATGCCAGGTGCTTCAC
CTGTTATTTCACTTAATCCTCATACCATATTTGCAAAGGATGTGTTATTATCTATGTGTGACAAATGAGGAAACT
GAGGCTCAGGGGATAAAGGGACTTGCCCAAGTCCCACAGCTGGTGTGTGACTGCAGAGACTGTGCTCTTCCCAGT
GTGCTGCAATACTTCTCAACCCTCCTCTAACCTGCTGTGTCACCCGCTTTCCCTCCCAGCCCCCACATCCTTACC
ATTTTCCCTCCCTGGGAATTCCTGCTTCTGCGAAAATGGTATCCTCTAGCTCACACTTTCCTAATGGCCCCATCT
CCTGCAGAAGCCAGGTGAGCCCAGCACTGGACTGAAGTTCTTGCAGACACCCCACCTGTGCCCCTATCATCAGGG
GAACTGCTCCACCTGAGAGGACCAACTCTTTAATTTTTAGTAAAACCTGAAGGTGATGGGCCGGGCGCAGTGGCT
CACGCCTGTAATCCCAACACCTTAGGAGTCCGAGGTGGGTGGATCACGAGGTCAGGAGATCCAGCCCATCCTGGC
CAACATGGTGAAACCCCATCTCTACTAAAAATACAAAAATTAGCCGGGCGTGGTGACACGTGCCTGTAGTCCCAG
CTACTCGGGAGGCTGAGGCAGGAGAATCACTTGAACCTGGGAGGCGGAGGTTGCAGTGAGCTAAGATCACGCCAC
TGCACTCCAGCCTGCGGACAGACCAAGACTTCATCCCCCCCAAAAAAAAAAAGATTGGAGGTGATTTACAGTGAAA
GACACAAATAAAATACAACTGTTCAATGGAAATAGAAAATAAACACCATAAAAGAGAGAAGAGAGGTAATTTGTT
AGCATCAAGAGTCAAGTTGCTATATGGTCAAAGGTTAAATTTATCTCTAAAAAATGGCAGGATTCAAAGTTGTAC
ATACATGTGATTACTTCTGTTTTTTACACCCACATACAGTACAAAAGATTATTAAAAATATTCCCAAAAGGCAGG
TGCAATGATGCACACTTATACCCCCAGCCACTCAGGAGGCTGATGCAAGAGGATCGCTTGAGCCCAGGAGTTGAA
GTCCAGCCTAAGCAACATAGTGAAACCCCATCTCCAAAAATATAATAATAATTCTCTCAAAATACTAAACAGAGG
TGGTTTTATTGATAAGATTTTGGCTGTTTGGTTTTCCACTATTCTCTATTGGCTAAAATTTGTTTAATGAGCATG
AAATGTTTTTATTTTATTTTGCTTATTTTTATGATTGCAAAAAATGATATGAGTTTCTCCCTGCCAAGGCAAAAA
ATATATATATATACCTATAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3586

MPGPRVWGKYLWRSPHSKGCPGAMWWLLLWGVLQACPTRGSVLLAQELPQQLTSPGYPEPYGKGQESSTDIKAPE
GFAVRLVFQDFDLEPSQDCAGDSVTISFVGSDPSQFCGQQGSPLGRPPGQREFVSSGRSLRLTFRTQPSSENKTA
HLHKGFLALYQTVAVNYSQPISEASRGSEAINAPGDNPAKVQNHCQEPYYQAAAAGALTCATPGTWKDRQDGEEV
LQCMPVCGRPVTPIAQNQTTLGSSRAKLGNFPWQAFTSIHGRGGGALLGDRWILTAAHTVYPKDSVSLRKNQSVN
VFLGHTAIDEMLKLGNHPVHRVVVHPDYRQNESHNFSGDIALLELQHSIPLGPNVLPVCLPDNETLYRSGLLGYV
SGFGMEMGWLTTELKYSRLPVAPREACNAWLQKRQRPEVFSDNMFCVGDETQRHSVCQGDSGSVYVVWDNHAHHW
VATGIVSWGIGCGEGYDFYTKVLSYVDWIKGVMNGKN

FIGURE 3587

AAATGCAGAGAAGAATGGGCAAAGACCAAAGACCCAACTGCTGCCCTCAGAAAACTACCTGTCAAAAGGTGTGTG
GAAGGGCAGCTGCTTCGAGGACTTTCAAAATATGGAATGAAGAATATAGTCTCTGCATTTGGCATAATACCCAGA
AATAATCGCTTAATGTATATTCATAGCTACCAAAGCTATGTGTGGAATAACATGGTAAGCAAGAGGATAGAAGAC
TATGGACTAAAACCTGTTCCAGGGGACCTCGTTCTCAAAGGAGCCACAGCCACCTATATTGAGGAAGATGATGTT
AATAATTACTCTATCCATGATGTGGTAATGCCCTTGCCTGGTTTCGATGTTATCTACCCAAAGCATAAAATTCAA
GAAGCCTACAGGGAAATGCTCACAGCTGACAATCTTGATATTGACAACATGAGACACAAAATTCGAGATTATTCC
TTGTCAGGGGCCTACCGAAAGATCATTATTCGTCCTCAGAATGTTAGCTGGGAAGTCGTTGCATATGATGATCCC
AAAATTCCACTTTTCAACACAGATGTGGACAACCTAGAAGGGAAGACACCACCAGTTTTTGCTTCTGAAGGCAAA
TACAGGGCTCTGAAAATGGATTTTTCTCTACCCCCTTCTACTTACGCCACCATGGCCATTCGAGAAGTGCTAAAA
ATGGATACCAGTATCAAGAACCAGACGCAGCTGAATACAACCTGGCTTCGCTGAGCAGTACCTTGTCCACAGATT
AGAAAACGTACACAAGTGTTTGCTTCCTGGCTCCCTGTGCATTTTTGTCTTAGTTCAGACTCATATATGGATTTC
AAATCTTTGTAATAAAAATTATTTGTATTTTTAAGTTTTTATTAGCTTAAAGAAATAATTTGCAATATTTGTACA
TGTACACAAATCCTGAGGTTCTTAATTTTAGCTCAGAATATAAATTAGTCAAAATACACTTCAGGTGCTTAAATC
AGAGTAAAATGTCAGCTTTACAATAATAAAAAAAGGACTTTGGTTTAAAGTAGCAGGTTTAGGTTTTGCTACATT
CTCAAAAGACAGCAGGAGTATTTGACACATCTGTGATGGAGTATACAACAATGCATTTTAAGAGCAAATGCAACA
AAACAAATCTGGACTATGGATAAATAATTTGAGAGCTGCCACCCACACAAATATAAATACAGTACTCATGCTGACTG
AAATAATAAGACATCTACAAATTTATAAACAAAAAGTGATTGTCATTATCCTGCTTATGTACTAGATTCAGGCAA
GCATTATAGACTTTTTGGTTGCGGTGGCTTTTGCATTTATATTATCAATGCCTTGCAGGAACGTTGCATTGATAG
GCCCATTTTATTTTTTTATTTTTTTTTTCGAGACAGGATCTCACTCTGTAGCACAGGCTGGATTGCAGTGCAATC
CTGCAATTCTCAATCTTGCACTGCAGCCTCGACCTCCCAGGCTCCAGTGACTCTCCCACCTCAGCCTCCTAAGTA
GCTGGGAGTACAGGCGCGCACCACCACGCCTAGCTGATTTTTGTATTTTTTTGTAGAGACGGGGGTTTGGCCATG
TTGCCGAGGCTAACTCCTGGGATTACAGGCATGAGCTGTGCTGGCCGGGTTTTTTTTCTTGATGTAAACGTGTA
CAGCTGTTTTATTAGTTAAGGTCTAATTTTTACTCTAGGTGCCTTTTATGTTCAGAACTCTTTCCACTGGACTGG
TATTTGCTCAAAAATAAATAATGGTAGAGAAGAAAACTATAAAAATGGACAAGGCTTTCTTCTATCAGTAGCGTT
TACCCTTTGTCACCAGTGGCTTTGGTATTTCCATGTCTGGCATTGCATAAACTTCTCTGGTGTGAAAGGATAAAT
ATGCCTTTCTAAAGTTGTATATCAAAATTGTATCAATTTTTATTTTCTATGATTTCTAGAAACAAATGTAATAAA
TATTTTTAAAATCTCCTTTCTACTGGTTATGTAAATAAATCAAATAAATATATCAAAAAAAAAAAAAAAAA

FIGURE 3588

MKNIVSAFGIIPRNNRLMYIHSYQSYVWNNMVSKRIEDYGLKPVPGDLVLKGATATYIEEDDVNNYSIHDVVMPL
PGFDVIYPKHKIQEAYREMLTADNLDIDNMRHKIRDYSLSGAYRKIIIRPQNVSWEVVAYDDPKIPLFNTDVDNL
EGKTPPVFASEGKYRALKMDFSLPPSTYATMAIREVLKMDTSIKNQTQLNTTWLR

FIGURE 3589

AATCTGTGGTTTTTGCTCAAAACTCAGTCTATCTGGATGCGTTGAATTATAGACAGATGTCTGGCCGTGCTGGAA
GAAGAGGTCAAGACCTGATGGGAGATGTATATTTCTTTGATATTCCATTCCCCAAAATAGGAAAACTCATAAAAT
CCAATGTTCCTGAGCTGAGAGGACACTTCCCTCTCAGCATAACCCTGGTCCTGCGACTCATGCTGCTGGCTTCCA
AGGGAGATGACCCAGAGGATGCCAAGGCAAAGGTGCTATCAGTGCTAAAGCATTCATTGCTGTCCTTCAAGCAAC
CCAGAGTCATGGACATGTTAAAACTTTACTTCCTGTTTTCTTTGCAGTTCCTGGTGAAAGAGGGCTATTTAGATC
AAGAAGGTAATCCTATGGGGTTTGCTGGACTTGTGTCACATTTGCATTATCATGAACCTTCTAATCTTGTTTTTG
TGAGTTTTCTTGTAAATGGCCTCTTCCATGATCTCTGTCAGCCAACCAGGAAAGGCTCAAAACATTTTTCTCAAG
ACGTTATGGAAAAGCTAGTATTAGTATTGGCACATCTCTTTGGAAGAAGATATTTTCCACCAAAGTTCCAGGATG
CACACTTCGAGTTTTATCAATCAAAGGTGTTCCTTGATGATCTCCCTGAGGATTTTAGTGATGCTTTAGATGAAT
ATAACATGAAAATTATGGAGGACTTTACCACTTTCCTACGAATTGTTTCCAAACTGGCTGATATGAATCAGGAAT
ATCAACTCCCATTGTCAAAAATCAAATTCACAGGTAAAGAATGTGAAGACTCTCAACTCGTATCTCATTTGATGA
GCTGCAAGGAAGGAAGAGTAGCAATTTCACCATTTGTTTGTCTGTCTGGGAACTTTGATGATGATTTGCTTCGAC
TAGAAACTCCAAACCATGTTACTCTAGGCACAATCGGTGTCAATCGCTCTCAGGCTCCAGTGCTGTTGTCACAGA
AATTTGATAACCGAGGAAGGAAAATGTCGCTTAATGCCTATGCACTGGATTTCTACAAACATGGTTCCTTGATAG
GATTAGTCCAGGATAACAGGATGAATGAAGGAGATGCTTATTATTTGTTGAAGGATTTTGCACTCACCATTAAAT
CTATCAGTGTTTCCTTGCGTGAGCTATGTGAAAATGAAGACGACAACGTTGTCTTAGCCTTTGAACAACTGAGTA
CAACTTTTTGGGAAAAGTTAAACAAAGTCTAAAAACAAAGTCTATGCAAACCACTCAAAAATAATTCCATAGTAG
TTTTTCAGGTCACGTTTTTGATTCTTATGCTTCTTGCCAGAAATACATTATGATAAAGTGGAAATACATTACGAT
GAAGTGGAAAGAGCAAACACTTTGGAATCAAACAGAGTTGCAATCAAACCTGCCATGTTCTGTCATGAATACTCA
CAAATTATTTAGTATACCTGAATCTTGGTTTCTTTTTATAACTGAGTAATAATGGTTACATCTCAGGTAGTTTGA
GGATTGACTAAAAAAATGCGAGAATGTTGTATGTGACTGAATAACAATTTTTACTCTGCGAAGCCAAAGTAAATA
TAATATTATCAGTAACTTTATCCCCAGTGTCAGTATTTATAAAATGTTTATTAAGGCTAGAAAAAATGAATACAA
TATCCTGAAGGTGAAATATATTCTCTTCAATTAGCATAAATATGATTTACATAAGTTAGCTATACAGCTATTGAG
ATAGTACTTTCTAGTAAACTTAAACTACTTTTTAAACATACATTTTGTGTTGATTTAACAAAAATATAGAGAATG
ATTTGCTTTATTGTAATTGTATATAAGTGACTGGAAAAGCACAAAGAAATAAAGTGGGTTCGATCTGTTTACCAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3590

MSGRAGRRGQDLMGDVYFFDIPFPKIGKLIKSNVPELRGHFPLSITLVLRLMLLASKGDDPEDAKAKVLSVLKHS
LLSFKQPRVMDMLKLYFLFSLQFLVKEGYLDQEGNPMGFAGLVSHLHYHEPSNLVFVSFLVNGLFHDLCQPTRKG
SKHFSQDVMEKLVLVLAHLFGRRYFPPKFQDAHFEFYQSKVFLDDLPEDFSDALDEYNMKIMEDFTTFLRIVSKL
ADMNQEYQLPLSKIKFTGKECEDSQLVSHLMSCKEGRVAISPFVCLSGNFDDDLLRLETPNHVTLGTIGVNRSQA
PVLLSQKFDNRGRKMSLNAYALDFYKHGSLIGLVQDNRMNEGDAYYLLKDFALTIKSISVSLRELCENEDDNVVL
AFEQLSTTFWEKLNKV

FIGURE 3591

AGAGAGCTGTTTACTAGGCACGACTGCGAAGGCAAGGGGGCACCAGCTCAGGACTGCATCTGCCTGCCATTTCCC
TTCCACTCCTCCTTTCTGGAGTCTGACATTAGAAAGCCAGCGAGAAGGAAGATTCAAACAACCAACCCTGATTTC
CTGCTTCTCCTTTTCATGAGTGTTCCTGTGGTCTCTGCACCTCCTTTCTGTCCCCCGGCAGAGGGCAGTAGAGATG
GCCGGCCCAAGGCCTCGGTGGCGCGACCAGCTGCTGTTCATGAGCATCATAGTCCTCGTGATTGTGGTCATCTG
CCTGATGTTATACGCTCTTCTCTGGGAGGCTGGCAACCTCACTGACCTGCCCAACCTGAGAATCGGCTTCTATAA
CTTCTGCCTGTGGAATGAGGACACCAGCACCCTACAGTGTCACCAGTTCCCTGAGCTGGAAGCCCTGGGGGTGCC
TCGGGTTGGCCTGGGCCTGGCCAGGCTTGGCGTGTACGGGTCCCTGGTCCTCACCCTCTTTGCCCCCCAGCCTCT
CCTCCTAGCCCAGTGCAACAGTGATGAGAGAGCGTGGCGGCTGGCAGTGGGCTTCCTGGCTGTGTCCTCTGTGCT
GCTGGCAGGCGGCCTGGGCCTCTTCCTCTCCTATGTGTGGAAGTGGGTCAGGCTCTCCCTCCCGGGGCCTGGGTT
TCTAGCTCTGGGCAGCGCCCAGGCCTTACTCATCCTCTTGCTTATAGCCATGGCTGTGTTCCCTCTGAGGGCTGA
GAGGGCTGAGAGCAAGCTTGAGAGCTGCTAAAGGCTTACGTGATTGCAAGGGTTCAGTTCCAACCATAGTCAGAG
GTGGCACATCTGCTCAGCCATCTCATTTTACAGCTAACGCTGATCTCCAGCTCCAGCGATGGAACCCACTACAGA
GGAGGTGGGGCCCCTGTGTCAAAGAGGCCGAGGGGCAGCAAGGGCAGCCAGGGCACCTGTGACTTCTTAGTACAA
GATTGTCTGTCCTTCAGGACTTCCAAGGCTCCCAAAGACTCCCTAAACCATGCAGCTCATTGTCACACCAATTCC
TGCTTTAATTAATGGATCTGAGCAAATCTTCCTCTAGCTTCAGGAGGGTGGGGAGGGAGTGATTGCCGTCATGGG
GCCAGACTTCCAGGCTGATTTGCCAAATGCCAAAATGAAACCTAGCAAAGAACTTACGGCAACAAACGAGGACAT
TAAAAGAGCGAGCACCTCAGTGTCTCTGGGGACATGGTTAAGGAGCTTCCACTCAGCCCACCATAGTGAGTGGGC
CGCCATAAGCCATCACTGGAACTCCAACCCCAGAGGTCCAGGAGTGATCTCTGAGTGACTCAACAAAGACAGGAC
ACATGGGGTACAAAGACAAGGCTTGACTGCTTCAAAGCTTCCCTGGACCTGAAGCCAGACAGGGCAGAGGCGTCC
GCTGACAAATCACTCCCATGATGAGACCCTGGAGGACTCCAAATCCTCGCTGTGAACAGGACTGGACGGTTGCGC
ACAAACAAACGCTGCCACCCTCCACTTCCCAACCCAGAACTTGGAAAGACATTAGCACAACTTACGCATTGGGGA
ATTGTGTGTATTTTCTAGCACTTGTGTATTGGAAAACCTGTATGGCAGTGATTTATTCATATATTCCTGTCCAAA
GCCACACTGAAAACAGAGGCAGAGACATGT

FIGURE 3592

MAGPRPRWRDQLLFMSIIVLVIVVICLMLYALLWEAGNLTDLPNLRIGFYNFCLWNEDTSTLQCHQFPELEALGV
PRVGLGLARLGVYGSLVLTLFAPQPLLLAQCNSDERAWRLAVGFLAVSSVLLAGGLGLFLSYVWKWVRLSLPGPG
FLALGSAQALLILLLIAMAVFPLRAERAESKLESC

FIGURE 3593

GGCGCGCTTTCAAACGCTCAGGTTTCCTACCTTCCGGCTGCTTGGGAACTTCTTTCTTGCCCGCCAAGCCCGCAG
CCACCCGGGCGCGGCGGGACTCCTAGACCCGGCGCTGCGATGAAGAGGACCCGCGACGAGGTGGATGCGACGCTG
CAGATCGCCAAGCTGAATGCGGCCGAGCTGCTGCCGGCGGTGCACTGCCTGGGCTTCGGCCCTGGGGCCAGCGGC
GCTGCAGCCGGCGACTTCTGCCTGCTGGAGCTGGAGCCCACGCTGTGCCAGCAGCTGGAGGATGGACACAGTCTT
GTGATTCGTGGTGATAAAGACGAGCAAGCTGTGCTGTGCAGTAAAGACAAAACATACGACTTGAAGATAGCAGAC
ACTTCCAATATGTTGCTTTTCATTCCTGGTTGTAAAACTCCGGACCAGTTGAAGAAGGAAGATTCACACTGTAAC
ATTATTCACACTGAGATCTTTGGTTTTTCTAATAATTATTGGGAATTAAGAAGACGTAGACCCAAGTTAAAGAAG
CTAAAGAAACTTTTGATGGAAAATCCATATGAAGGACCTGACAGTCAAAAAGAGAAGGATTCAAATAGCTCAAAA
TATACAACTGAAGATTTGCTTGATCAAATTCAGGCAAGTGAGGAAGAAATAATGACCCAATTACAAGTTCTAAAT
GCCTGTAAGATTGGAGGTTATTGGAGGATTCTTGAATTTGATTATGAGATGAAACTTCTGAATCATGTAACTCAG
CTTGTGGATTCTGAATCATGGTCTTTTGGTAAAGTTCCTTTGAACACATGCCTTCAGGAACTCGGACCATTGGAG
CCAGAGGAAATGATAGAACACTGTCTTAAATGTTATGGGAAGAAATATGTAGATGAAGGCGAAGTTTATTTTGAG
TTGGATGCTGATAAAATATGTAGAGCAGCAGCACGAATGCTACTTCAGAATGCGGTGAAATTCAATCTCGCTGAG
TTTCAAGAAGTGTGGCAGCAGAGTGTTCCTGAAGGAATGGTAACTAGTCTTGATCAGCTTAAGGGTTTAGCGCTG
GTGGATAGACACTCGAGACCAGAAATCATATTTTTGCTGAAAGTAGATGATTTACCTGAGGATAATCAGGAACGT
TTTAATAGCCTTTTCTCTCTAAGGGAGAAGTGGACAGAAGAAGATATTGCTCCATATATTCAAGATTTGTGTGGA
GAGAAGCAAACCATAGGTGCATTACTCACTAAATATTCTCGTTCTTCGATGCAAAATGGTGTTAAAGTTTATAAT
TCGAGAAGACCCATTTCTTAAAAGAACAACAGTCTTTTCTTCAGGACTCAAGTTGCTTTATAAAGTTGCTGGATA
CAAGAAAAATAACTTGTACTTTTATTTCTGACTTTTAGAAACCTAGTCTTCTAAGGCATTTTTCTCCTCATCTTA
AGCATTTTGAAACTACTGTTATTTCTTAAATGTTATAGGATGTAGCTTTAAAATTATATTTGTACTATGTACACA
GTGTAAACAAGGACAAAAGAATTCTTTCCTATATTATGTCTGAGGTCTCTATGATTTATTTAAAGTTTGGCTTTT
TATATTTAAAATGTCATTTCTTTACTTAGGATTTGATGTTCTAATCATTAATACACTTAAGTTTTCCAGAGAACT
AAATAGTAATAGTTTCATAGAAGAGAACTATTTATTCACTTAAATATCATTTCTCAAGTGAGTGAGTTCCCCTCT
ACTTTTAGCCTTCCACCCAAACTGGAAGCCTCTAGGTGCTATCAATTATTTATATCCATCGTTTACATCCATGAA
ATTGGCTGAATAATTACTCCTCTGCCTGGCGTAGACATGTGCTTTGGGAAAAAAACGAGTTTATAATCCTATAAT
GAAGAATACTGGCACAGGCAATGCTCACTCGAAAACTTCAAGTAATTTCTAGTTGGTTTTGGAATGCTTGATAAA
GTTCCTTTACAGCTTTATTTTCCTGATTTGTTTTGGTTTAGATCAAAGTTCAAATTAATTTTAACTTAGCTAATG
AACTCATCACCAGGACAGTTGGAGGGGGTAGGCCGAGGTTAAATGGTCCACGTTTCAAAAATGTTAATGGCTAAT
CCATAATTAAAGAAGGTTTAACTGTTACTGAAGTTTACAAGTTTTATTGTCATGAACATGAAATACAAACACGAT
GGCTTCGAAATGTCTTTCAATAAATGTTTCTGCATTTAAAAAAAAAAAAAAAAAAAA

FIGURE 3594

MKRTRDEVDATLQIAKLNAAELLPAVHCLGFGPGASGAAAGDFCLLELEPTLCQQLEDGHSLVIRGDKDEQAVLC
SKDKTYDLKIADTSNMLLFIPGCKTPDQLKKEDSHCNIIHTEIFGFSNNYWELRRRRPKLKKLKKLLMENPYEGP
DSQKEKDSNSSKYTTEDLLDQIQASEEEIMTQLQVLNACKIGGYWRILEFDYEMKLLNHVTQLVDSESWSFGKVP
LNTCLQELGPLEPEEMIEHCLKCYGKKYVDEGEVYFELDADKICRAAARMLLQNAVKFNLAEFQEVWQQSVPEGM
VTSLDQLKGLALVDRHSRPEIIFLLKVDDLPEDNQERFNSLFSLREKWTEEDIAPYIQDLCGEKQTIGALLTKYS
RSSMQNGVKVYNSRRPIS

FIGURE 3595

CTTTTTGCAGTACCTGCTGCGGCCGCTTTCGGCATGGAGGAAATTTATGCGAAGTTTGTGTCCCAGAAAATCAGC
AAAACCCGCTGGCGACCGCTGCCTCCGGGAAGTTTACAGACCGCGGAGACGTTCGCTACAGGATCTTGGGACAAT
GAGGAAAATTATATTTCACTGTGGTCTATTGGAGATTTTGGAAACTTGGACTCTGATGGAGGGTTTGAAGGAGAC
CATCAGTTATTGTGTGATATCAGACACCATGGTGATGTAATGGATTTACAGTTTTTTGACCAGGAAAGAATTGTC
GCTGCTTCATCAACAGGATGTGTAACAGTTTTCCTTCACCATCCAAATAACCAGACTCTGTCAGTCAACCAGCAG
TGGACTACAGCTCACTACCACACAGGCCCTGCAGTCCTTCCTATAGCAGTGCACCATGTACAGGTGTTGTGTGCA
ACAACCCAGAAATCGTTACAGTTGGAGAGGATGGTCGAATAAATCTCTTCAGAGCTGATCACAAGGAAGCTGTAA
GAACCATAGACAATGCAGATAGTAGTACACTCCATGCTGTAACCTTTCTTCGAACTCCTGAGATTCTTACTGTAA
ATTCAATTGGACAGTTGAAAATATGGGATTTCAGACAACAAGGAAATGAGCCTTCTCAGATATTGTCACTTGACT
GGTGACCGAGTGCCACTCCACTGTGTTGATAGACATCCCAACCAACAGCATGTTGTAGCTACTGGTGGCCAAGAT
GGAATGTTGAGTATTTGGGATGTTAGACAAGGTACTATGCCCGTATCTCTGCTGAAGGCTCATGAAGCTGAAATG
TGGGAAGTTCACTTTCACCCATCCAACCCAGAACATCTTTTTACCTGCTCTGAAGATGGATCCCTCTGGCACTGG
GATGCTTCCACAGATGTACCTGAAAAGTCGGCACTCTTTCACCAAGGAGGAAGAAGCAGTACTTTTTTGTCTCAT
AGCATTAGTAACCAAGCTAATGTTCACCAGTCTGTCATTAGCTCCTGGCTCAGCACTGATCCTGCAAAAGACCGA
ATTGAAATCACAAGCTTACTTCCCAGTAGGTCTCTGTCTGTGAACACTTTGGATGTTTTAGGTCCTTGTCTTGTT
TGTGGAACCGATGCAGAAGCAATTTATGTTACTAGACATCTTTTTTCGTAGAAGTACTATAATTATAAGATTTCA
GATAGAACATGCAATTAGCCTTTTGAAATCCAACTTCTGTGCAAAATTTTAGTATCAGAAAATACGAGATTTGCA
GGGGAAACATCAGTAAACTACCATTAATGTCAATGCCCAGTTTTGACTTTTGTTAGCCTGACACTCCCAAACAGT
TGTAGAATCCGATAGATGACTGATGGCAAAAGATTGTGAACATGTGGAAGAAAATCAGTGGGATTCTGGTGCTGA
TGAATAGGTTGCCTTCAGAGTATTATTGACAGACAGCTTGTGGAACTAATTCTTTATTTTTGATGTTGTGGGAAT
TAACACATCAATGGTGGTTATGGGAACTACCAATGGGTTCCTACAATTTTTATCAGTAGTATGTGGCATATACAC
CTTCCTAGTGGCAGTTGCCAATGTTAATGATTATTCTTTTTATTGCAAGTATTTCCTATGATCCTTCCACACTTT
ATTTCCTTAATAATAATAAACTTTTTCAGAAAGAATTGAGTAGAGCAAAAATGACAAAGATGTGTAGCTGTGTTC
AATTTTTTTTTTTTTTTTTTTTGAGGCAGAGTCTTGCTCTGCTGGAGTGCGGTGGTGCAGTCTCGGCTCACTGCA
ACCTCCACCTCCCGGGTTCAAGCAGTTCTCCTGCCTCAGTCTCCTGAGTGGCTGGAACTACGGGTGTGCGCCACC
ACGCCCAGCTAATTTTTGTAATTTTAGTGGAGATGGGGTTTCACTGTGTTGGCCAGGCTGGTCTTGAACTGACCT
CATGATCCACCTGCCTCAGCCTCCCAAAATGCTGGGATTACAGGCTTGAGCCACTGCTCCCGGCTGATTTTTGTA
TTAGTAGAGACGACAGGGTTTCACCATGTTGGCCAGGGCTGGTCTCGAACTCCTGACCACAGGTAATCAGCCCGC
CTCGGCCTCCAAAGTGCTGTGATTACAGGTGTGAGCCACTGCACCCGGCCTGAAATTTTTTTAAGGTGAAAATGT
TTTGACAAGTTCCTTTTTCAGAATAGGTTTTTGAGCAGAACTCTTTCAGCTTGTTAGACCCAACTTTGCTTTTGT
TTAGCTTCACAGCATAGCTGAAAGTTGCCAAACTGGACATTGTGCAATAAAGTAGAATTCTATATTGATAAGCAA
ACTATTTCCAAACTAAAAATGTGATAGATAAAAGTGTGATTAATCAAATGATATGATCAGAGTAAAGAATTTTGC
CATTTTGATCCTTTTACTTTGTTTTAGCCACCTATAGTGTTACCAACCATCTTTATCCTTGTCTGCAGGGATAAT
AATGAACTAATGTAGTGTTTTAAGATAATTTAATGATACTATCTTTCCAAACTTTGTTAGATTTTAAATGTATTA
TTGACCTGAGACCTTAATGACAAATCACTGCTATTAGACAATTGAAGTGTTCATTTACTTTGTAATTCCAATAAT
CATAGTTATGGAATTATGGTAAGGTTTTGCTTTTCTGTCCTAATAAATATGTATATTTTTTGAGATGGAGTTTTG
CTCTTGTTGCTGAGGCAGGAGAATTGCTCAAACCCGGGAGGCAGAGGTTGCAGTGACCCAAGATCGTGCCACTTC
ACTCCAGCCTGGGCAAAAGAGCAAAACGCCATCTCAAAAAAATATACATATATAAGGAGATAAAGTTTCCCATTT
TCCAATACAGTTTCACATTTGAACAGCCCTAATTGATACAACTTTATGGCAGGGTTTTAGTGTGTGAGTGGGATC
CAGAACACTCAATCCTGTAAAAGGGTACAGTCCTATTGTATGTTAACACACTGATGATGTGAGCCTGTGAGATGA
GCCAATCACCAGTTGTTATGTTCGAATCTGCTTTGTGTTGGGACGCTTTAATGTCAGGGTTTCACTAAATAAATG
AATTTTCATATACTGAACTGAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3596

MSLLRYCHLTGDRVPLHCVDRHPNQQHVVATGGQDGMLSIWDVRQGTMPVSLLKAHEAEMWEVHFHPSNPEHLFT
CSEDGSLWHWDASTDVPEKSALFHQGGRSSTFLSHSISNQANVHQSVISSWLSTDPAKDRIEITSLLPSRSLSVN
TLDVLGPCLVCGTDAEAIYVTRHLFS

FIGURE 3597

GTGACCGGAGGCGAGAAACCCCGCCTCGGCACCCTGACGCAGCGCAGGACCCGCCCCGCGCGTGACGCCAGCGTC
AGGCCAGCCCCGGC**ATG**CTCTGCGGCCGCCCGCGGTCCAGCTCCGACAACAGGAATTTTCTCCGAGAGCGGGCCG
GGCTCAGTTCAGCTGCTGTCCAGACCCGGATCGGCAACAGTGCCGCCTCCAGACGTTCTCCTGCCGCTCGCCCGC
CCGTCCCAGCGCCCCCAGCCCTCCCGCGAGGGCGCCCCGGGACGGAAGGATCCACCAGTCTGTCGGCGCCCGCCG
TTCTCGTGGTCGCCGTCGCCGTCGTCGTGGTGGTAGTCTCCGCCGTCGCCTGGGCCATGGCCAATTACATCCACG
TCCCTCCCGGCTCCCCGGAGGTGCCCAAGCTGAACGTCACCGTTCAGGATCAGGAGGAGCATCGCTGCCGGGAGG
GGGCCCTGAGCCTCCTGCAACACCTGCGGCCTCACTGGGACCCCCAGGAGGTGACCCTGCAGCTCTTCACAGATG
GAATCACAAATAAACTTATTGGCTGTTACGTGGGAAACACCATGGAGGATGTAGTCCTGGTGAGAATTTATGGCA
ATAAGACTGAGTTATTAGTCGATCGAGATGAGGAAGTAAAGAGTTTTCGAGTGTTGCAGGCTCATGGGTGTGCAC
CACAACTCTACTGTACCTTCAATAATGGACTATGCTATGAATTTATACAAGGAGAAGCACTGGATCCAAAGCATG
TCTGCAACCCAGCCATTTTCAGGCTAATAGCTCGTCAGCTTGCTAAAATCCATGCTATTCATGCACACAATGGCT
GGATCCCCAAATCTAATCTTTGGCTAAAGATGGGAAAGTATTTCTCTCTCATTCCCACAGGATTTGCAGATGAAG
ACATTAATAAAAGGTTCCTAAGTGATATCCCAAGCTCTCAGATTCTCCAGGAAGAGATGACTTGGATGAAGGAGA
TTCTTTCCAACCTGGGCTCACCTGTTGTGCTTTGCCATAATGACCTATTGTGTAAGAATATAATCTACAATGAGA
AACAAGGTGATGTACAGTTCATTGATTATGAATATTCTGGATACAACTACCTGGCATATGATATTGGAAATCATT
TCAATGAATTTGCAGGTGTGAGTGATGTAGACTATAGTCTGTATCCAGATAGAGAACTACAGAGTCAGTGGCTGC
GTGCTTACCTTGAAGCCTACAAAGAATTTAAGGGCTTTGGGACTGAAGTTACTGAAAAGGAGGTAGAAATACTCT
TCATTCAAGTCAATCAGTTTGCATTGGCTTCTCATTTCTTTTGGGGATTGTGGGCTTTGATTCAAGCCAAATACT
CCACTATTGAGTTTGATTTCCTTGGGTATGCAATTGTTCGTTTTAACCAGTACTTTAAAATGAAGCCTGAGGTTA
CTGCATTAAAAGTGCCTGAG**TAA**AGAAGAGATTTAATTATTCTCCAGTAGCTGAGCAATGCTTGTGAATCTTTTC
TTAAGAAATCCCAAAAAGCCAATATTAGTTAAAATTCTGTTGTTTAATTTGGTTATCTTGCTTTATAAATTATGC
CTCTAAACAATCAAATCTATTTTTGAAATAGACTGAATGATGTCAAGAAATATACCTACTGCTATCCGTATGTGG
TGGATTAGAAATGTGTTAAATCTGCAAAAGGTATAAAGATGTCAGTTTAATTTCTTTGATAATTTAACCTATGTT
GTATGTGAATTATTTATTATAAACTTAGCACGATTCTGTGACTGTTTTTCTCTGTTTCACGTTCGTTGAGTGTAA
GCAATGAAAATGTCCCAAATAAGTTTTTTAAGTTTTACTTTAATAAGATTAATTTCAGTAAACATTCTAGTTGTT
CAGTGTAACCTTTTTATCTTGATGCATTGTAAGTAAAATGAATCATTTACTCTTGAAATGCCAGTCATTGACTGA
TGTAGATAATTTAGGATTTTCATATAAAAATAGCTGTTTAGGAAGGTGAAATACATTCACTGTCTCTGTTGGTGG
TACATCTTGTTGAATTCAATATTAGAAAGTATTTCTTTTTGGGGTAATATAACTTAGAATTAAATCCCTGTTTCT
CTATGTAGTCTGGCAGTATAAATATAAATATTTACCATATAATCTTGGAATAAGTATTAGTTAATGTTACCAAAA
TCTGTATTAAATAATGTTTTCAAATGCTAAAAAAAAAAAAAAAAAA

FIGURE 3598

MLCGRPRSSSDNRNFLRERAGLSSAAVQTRIGNSAASRRSPAARPPVPAPPALPRGRPGTEGSTSLSAPAVLVVA
VAVVVVVVSAVAWAMANYIHVPPGSPEVPKLNVTVQDQEEHRCREGALSLLQHLRPHWDPQEVTLQLFTDGITNK
LIGCYVGNTMEDVVLVRIYGNKTELLVDRDEEVKSFRVLQAHGCAPQLYCTFNNGLCYEFIQGEALDPKHVCNPA
IFRLIARQLAKIHAIHAHNGWIPKSNLWLKMGKYFSLIPTGFADEDINKRFLSDIPSSQILQEEMTWMKEILSNL
GSPVVLCHNDLLCKNIIYNEKQGDVQFIDYEYSGYNYLAYDIGNHFNEFAGVSDVDYSLYPDRELQSQWLRAYLE
AYKEFKGFGTEVTEKEVEILFIQVNQFALASHFFWGLWALIQAKYSTIEFDFLGYAIVRFNQYFKMKPEVTALKV
PE

FIGURE 3599

TTTGGTGCAGTTTAGCATGTTCCTCTGTGTTCTGCATCTCCTGTAGTGTAATGTTCAAGCTCAGAAATGCCTTAT
GTGGATCGTCAGAATCGCATTTGTGGTTTTCTAGACATTGAAGAAAATGAAAACAGTGGGAAATTTCTTCGAAGG
TACTTCATACTGGATACCAGAGAAGATAGTTTCGTGTGGTACATGGATAATCCACAGAACCTACCTTCTGGATCA
TCACGTGTTGGAGCCATTAAGCTTACCTACATTTCAAAGGTTAGCGATGCTACTAAGCTAAGGCCAAAGGCGGAG
TTCTGTTTTGTTATGAATGCAGGAATGAGGAAGTACTTCCTACAAGCCAATGATCAGCAGGACCTAGTGGAATGG
GTAAATGTGTTAAACAAAGCTATAAAAATTACAGTACCAAAGCAGTCAGACTCACAGCCTAATTCTGATAACCTA
AGTCGCCATGGTGAATGTGGGAAAAAGCAAGTGTCTTACAGAACTGATATTGTTGGTGGCGTACCCATCATTACT
CCCACTCAGAAAGAAGAAGTAAATGAATGTGGTGAAAGTATTGACAGAAATAATCTGAAACGGTCACAAAGCCAT
CTTCCTTACTTTACTCCTAAACCACCTCAAGATAGTGCGGTTATCAAAGCTGGATATTGTGTAAAACAAGGAGCA
GTGATGAAAAACTGGAAGAGAAGATATTTTCAATTGGATGAAAACACAATAGGCTACTTCAAATCTGAACTGGAA
AAGGAACCTCTTCGCGTAATACCACTTAAAGAGGTTCATAAAGTCCAGGAATGTAAGCAAAGCGACATAATGATG
AGGGACAACCTCTTTGAAATTGTAACAACGTCTCGAACTTTCTATGTGCAGGCTGATAGCCCTGAAGAGATGCAC
AGTTGGATTAAAGCAGTCTCTGGCGCCATTGTAGCACAGCGGGGTCCCGGCAGATCTGCGTCTTCTGAGCATCCC
CCCGGTCCTTCAGAATCCAAACACGCTTTCCGTCCTACCAACGCAGCCGCCGCCACCTCACATTCCACAGCCTCT
CGCAGCAACTCTTTGGTCTCAACCTTTACCATGGAGAAGCGAGGATTTTACGAGTCTCTTGCCAAGGTCAAGCCA
GGGAACTTCAAGGTCCAGACTGTCTCTCCAAGAGAACCAGCTTCCAAAGTGACTGAACAAGCTCTGTTAAGACCT
CAAAGTAAAAATGGCCCTCAGGAAAAAGATTGTGACCTAGTAGACTTGGACGATGCGAGCCTTCCGGTCAGTGAC
GTGTGAGGCAGAAGCGCACGGAGCCTGCCTGCCTCTGCCGTCCTCAGTTACCTTTCATGAGGCTTCTAGCCAAAG
ATGATAAAGGGGGAAATGGTTTTTAGTGCGTATATTATACTGCCTCTTAGGTGTACTCTT

FIGURE 3600

MPYVDRQNRICGFLDIEENENSGKFLRRYFILDTREDSFVWYMDNPQNLPSGSSRVGAIKLTYISKVSDATKLRP
KAEFCFVMNAGMRKYFLQANDQQDLVEWVNVLNKAIKITVPKQSDSQPNSDNLSRHGECGKKQVSYRTDIVGGVP
IITPTQKEEVNECGESIDRNNLKRSQSHLPYFTPKPPQDSAVIKAGYCVKQGAVMKNWKRRYFQLDENTIGYFKS
ELEKEPLRVIPLKEVHKVQECKQSDIMMRDNLFEIVTTSRTFYVQADSPEEMHSWIKAVSGAIVAQRGPGRSASS
EHPPGPSESKHAFRPTNAAAATSHSTASRSNSLVSTFTMEKRGFYESLAKVKPGNFKVQTVSPREPASKVTEQAL
LRPQSKNGPQEKDCDLVDLDDASLPVSDV

FIGURE 3601

ACGAGGATCCGGTGTTCCAACCCAGGGGGAAAAATGCGGCCTTTGACTGAAGAGGAGACCCGTGTCATGTTTGAG
AAGATAGCGAAATACATTGGGGAGAATCTTCAACTGCTGGTGGACCGGCCCGATGGCACCTACTGTTTCCGTCTG
CACAACGACCGGGTGTACTATGTGAGTGAGAAGATTATGAAGCTGGCCGCCAATATTTCCGGGGACAAGCTGGTG
TCGCTGGGGACCTGCTTTGGAAAATTCACTAAAACCCACAAGTTTCGGTTGCACGTCACAGCTCTGGATTACCTT
GCACCTTATGCCAAGTATAAAGTTTGGATAAAGCCTGGTGCAGAGCAGTCCTTCCTGTATGGGAACCATGTGTTG
AAATCTGGTCTGGGTCGAATCACTGAAAATACTTCTCAGTACCAGGGCGTGGTGGTGTACTCCATGGCAGACATC
CCTTTGGGTTTTGGGGTGGCAGCCAAATCTACACAAGACTGCAGAAAAGTAGACCCCATGGCGATTGTGGTATTT
CATCAAGCAGACATTGGGGAATATGTGCGGCATGAAGAGACGTTGACTTAAAACGAAGCCATTCCAAGGACAGAC
GGCTGTATGGAAAGGCCGAGCTTTGTTTCCTGTGTTTGTGTGGACTCCACCATCATGTTGAATTTTGTCAACACT
CTGGCCTCTTCAGGGACTTCTTATTTACTGTACTCTCTATCACTGACAAATGCAGGCTGGATTCTTATTATATAC
AGAGATGGCTCAAAAATGGGGTTTCAGATCTTTGTGACGAAATAGAATACTGTTTCATATTTGAATCAGAGGGCT
TCTTGTTCTGAGAAATAGGTTCAAAATCATTGGAACCAGGAACAAGAATAGCTTATTGTTATCTGTGATAACACT
GTTTTCTAAACACAAGGATTTTCTTTTTTATTAATATGCAACATAGACATTGCCATAACAGAATAATAAACCACA
TGTGGGGTTTTAAAAATGAAATTTGGCTAATAGGAGCAATTCAGCTATTTTTCTATACAGTAATTGGTGTGTGGT
ATAGAAGAAAAACGGGTTCAAACCCCACTTCTGCCACCTACCAGCTATATGGCCTTGAATGAGTCATTCAGCTTT
AATAAGGTTCATTTTCTTCTGTTTAAAAAGACACAAAACTTGAAAATCAGCTTTGGCCATCTACCTGAGAATTAG
AAAGTCTGATTTTTGGAATTAGAAATCATGATTGTAGGCTGGGCACAGTGTCGCGCCTGTAATCCCAGCACTTTG
GGAGGCCAAGGCGGACGGATCACTTGAGGTTAGGAGTTTGAGACCAGCCTGGCCAACATGGTGAAACCCCATCTC
TACTAAAAAAAAA

FIGURE 3602

MRPLTEEETRVMFEKIAKYIGENLQLLVDRPDGTYCFRLHNDRVYYVSEKIMKLAANISGDKLVSLGTCFGKFTK
THKFRLHVTALDYLAPYAKYKVWIKPGAEQSFLYGNHVLKSGLGRITENTSQYQGVVVYSMADIPLGFGVAAKST
QDCRKVDPMAIVVFHQADIGEYVRHEETLT

FIGURE 3603

AATCACCGCCCATAGGGAAGGAGGTCGGCAGTGTGAGGAGCTGCTATGGTGCTGAGTTTCCTGGTAGAGCCGGCC
GAGCTGAGGCGGTCGCGGCC**ATG**AAGGCGGGTGCCACGTCTATGTGGGCTTCGTGCTGTGGGCTGCTGAATGAAG
TCATGGGAACTGGAGCTGTCAGGGGCCAGCAGTCAGCATTTGCAGGAGCCACCGGTCCATTCAGATTTACACCAA
ACCCTGAGTTTTCCACCTACCCACCAGCAGCTACGGAAGGGCCCAACATAGTTTGTAAAGCCTGTGGGCTTTCAT
TTTCAGTCTTTAGAAAGAAGCATGTTTGCTGTGACTGCAAGAAGGATTTTTGCTCCGTTTGTTCAGTCTTACAAG
AAAATCTCCGTAGATGTTCTACTTGTCACTTATTACAAGAGACAGCATTTCAGCGCCCTCAGTTAATGCGACTGA
AGGTGAAGGACCTGCGGCAGTATCTCATTCTGAGAAATATACCCATAGATACTTGTCGTGAGAAAGAAGACTTGG
TGGATCTAGTACTGTGCCATCATGGACTAGGCTCTGAGGACGACATGGACACAAGCAGTCTGAATTCTTCAAGGT
CCCAGACTTCTAGCTTTTTTACACGTTCGTTTTTTTCAAACTGTACAGCCCCCTCTGCTACTATGTCTTCGTTTC
AGGGAGAGCTTATGGATGGAGACCAAACATCCAGATCTGGAGTGCCGGCACAGGTACAAAGTGAAATCACTTCAG
CAAACACAGAAGATGATGATGACGACGATGATGAGGATGATGATGATGAAGAAGAAGACGCAGAGGATCGGAACC
CCGGGCTCTCCAAGGAGAGAGTGAGAGCTTCACTGTCTGACTTGTCAAGCCTTGATGATGTGGAAGGAATGAGCG
TGCGCCAGCTGAAGGAAATTCTGGCTCGGAATTTTGTCAACTATTCTGGCTGTTGTGAAAAATGGGAACTGGTAG
AGAAAGTAAACCGGTTATACAAAGAGAATGAAGAAAACCAAAAGTCCTATGGCGAGCGGCTGCAGCTGCAGGATG
AGGAAGACGACAGCCTGTGTCGCATCTGCATGGATGCCGTCGTCGACTGTGTCCTACTGGAGTGTGGGCACATGG
TTACCTGCACCAAGTGCGGCAAGCGCATGAGTGAGTGTCCCATCTGCCGGCAGTATGTGGTGCGAGCCGTGCACG
TGTTCAAGTCC**TGA**AACAGGCTCCCCTCACCAGGACAGTCACCCCCAAACTTGACCCCCAACATTTCAATGCACA
GAAGGGACTGGAAAGTTATGTTCAAAGGCTGAAGCTATTTTAAAACATTATTTTGACTACTAAGTGGGGACAGAA
AGATCCATCCTGAGTTGTGGAAACATTGGTCCATGCCGTGAGCCTGTCTGCCTGTGGACACGTGAGCTTCCCGGG
CTCAGCTGGGCTTTATCACACATCCCGTGAACACTCATTGAAGTCAGCCTGTTTGCGCCATGTGGGCATCAGCCA
CTGCTGTCTTGGGAGGACACTTATCCTGTTCTCTTATTTCCCCTTCATCCTATTTTTAACTTAAACTGCTCAGAT
GTTTGAAACTTCTGTCCTCTTTGGATGAGATCAGTGTCCACAAGTGGCCGACATGGAACATGCTGAGCAGTGGCT
CCTCTGAATGTTCACTTTATTAGTCATGTATATTTTAAATGCTAACATTTGATGAATGTAAGTTTCCACATTGTT
GCTGTTTCTGCATTTAAACATAATTGGGAACAACTGACATTCTCTAGTCGACTGCCAGGGCCTTAGACTCCACAT
GTCCATTTTTGTTCAGGTATAGCTTTTTATAGCAAGGGCTGCATCTAGCTTCTTTTATTAGAAGTGTGTGTGCTA
AATTCCTTATTAATGTGTAATCAGTTTACATTGTTTTGTATAGTGAAGGTGTATTTTCAGTGCTACCCGCTAGCT
GATTTTAACTTTAGGAATAAAATTAGTTTTAAAAGCTTTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3604

MKAGATSMWASCCGLLNEVMGTGAVRGQQSAFAGATGPFRFTPNPEFSTYPPAATEGPNIVCKACGLSFSVFRKK
HVCCDCKKDFCSVCSVLQENLRRCSTCHLLQETAFQRPQLMRLKVKDLRQYLILRNIPIDTCREKEDLVDLVLCH
HGLGSEDDMDTSSLNSSRSQTSSFFTRSFFSNCTAPSATMSSFQGELMDGDQTSRSGVPAQVQSEITSANTEDDD
DDDDEDDDDEEEDAEDRNPGLSKERVRASLSDLSSLDDVEGMSVRQLKEILARNFVNYSGCCEKWELVEKVNRLY
KENEENQKSYGERLQLQDEEDDSLCRICMDAVVDCVLLECGHMVTCTKCGKRMSECPICRQYVVRAVHVFKS

FIGURE 3605

GGAAGAAAACCTGAAAAAGACCCCAAAGAAGAATATGAAAATGGTAACTGGAGCCGTAGCGTCGGTGCTGGAAGA
CGAGGCCACAGACACTTCTGATAGTGAAGGAAGCTGTGGATCGGAAAAGGACCACTTTTATTCTGATGATGACGC
AATAGAAGCTGACAGTGAGGGTGATGCTGAGCCCTGTGACAAAGAAAATGAAAATGATGGAGAATCAAGTGTTGG
GACTAATATGGGCTGGGCAGATGCTATGGCTAAAGTCCTCAACAAGAAAACTCCTGAAAGTAAACCTACTATTCT
GGTCAAAAATAAGAAGCTGGAAAAGGAAAAAGAAAAGTTAAAGCAAGAAAGACTAGAGAAAATAAAACAGCGTGA
TAAGAGGCTGGAGTGGGAAATGATGTGCAGAGTAAAGCCAGATGTTGTCCAAGACAAAGAGACAGAGAGAAATCT
TCAGAGAATTGCAACAAGGGGTGTGGTGCAATTATTTAATGCTGTTCAGAAACATCAAAAGAATGTTGATGAAAA
GGTTAAGGAAGCTGGAAGTTCTATGAGAAAGCGTGCTAAGTTGATATCAACTGTTTCCAAGAAAGATTTCATCAG
TGTTTTGAGAGGGATGGATGGAAGTACAAATGAGACTGCTTCAAGCAGGAAGAAACCAAAAGCCAAACAGACTGA
AGTGAAATCAGAAGAAGGCCCAGGTTGGACGATCCTACGTGATGATTTCATGATGGGAGCATCTATGAAAGACTG
GGACAAGGAAAGTGATGGGCCAGATGACAGCAGACCAGAATCTGCAAGTGACTCTGATACATAAAGCATCATAGG
AAATACAATTGCAGTCGTTTTATTTTTTCTAGAAAAATATGTCATCCTCTGATAGTTGGGGAATTATAAGGATAC
CATTTGTAAGAAAGCCAAAAGACTTTTGCCAGATTTCATATTTCCCCTTTTCATGTACACTTTATATATACTTCA
TTAAAATTATATTTTAAACCCTTGTATAATTTTAAGCATTGTTCCTCAGAACATTTGTAAAAGGATATATTTCTG
CTTGACCAGCGAGATGTGCATTTTGCCAGGATCATATTGGTCATGTCTATTGGTGTATTATTTCAGTATCACCAA
TGTTTTCAGAAATACAGTACTAATTCATCATTAAACTCTTTGAAGTTAATATTTTTCTGCCTTCTAACTTATAGA
CTCAACTATGTATCTGTAGTTTTTGGGAATGGTTGGTGTTTTTTGCTTTGTGTTGGGAAGTTATTGAGAAAACCT
ATATAATAAAATTTAAAATTATAGTTTTTCAAA

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FIGURE 3606

MKMVTGAVASVLEDEATDTSDSEGSCGSEKDHFYSDDDAIEADSEGDAEPCDKENENDGESSVGTNMGWADAMAK
VLNKKTPESKPTILVKNKKLEKEKEKLKQERLEKIKQRDKRLEWEMMCRVKPDVVQDKETERNLQRIATRGVVQL
FNAVQKHQKNVDEKVKEAGSSMRKRAKLISTVSKKDFISVLRGMDGSTNETASSRKKPKAKQTEVKSEEGPGWTI
LRDDFMMGASMKDWDKESDGPDDSRPESASDSDT

FIGURE 3607

AGACCCGACGCCCGGGGTCCTCGAAGACGCGTCCGCCGCCGTGCCCGTCGCCATGAACCGCTTCAGGGTGTCCAA
GTTCCGGCACACCGAGGCTCGGCCGCCCCGCCGCGAGTCCTGGATCAGTGACATTCGAGCAGGAACCGCCCCTTC
ATGCAGGAACCACATCAAATCAAGCTGCAGCTTGATCGCCTTCAACTCCGACCGTCCTGGTGTACTGGGCATTGT
GCCTCTGCAAGGCCAAGGAGAGGACAAGCGACGCGTGGCCCACCTGGGCTGCCATTCAGACCTAGTCACCGACTT
GGACTTCTCGCCCTTTGATGACTTCCTCCTGGCCACAGGCTCGGCTGACAGGACGGTAAAACTCTGGCGACTGCC
AGGGCCTGGCCAGGCCCTGCCCTCAGCACCCGGGGTGGTGCTGGGCCCCGAGGACCTCCCAGTGGAGGTACTGCA
GTTCCACCCCACCTCTGACGGCATTCTGGTGAGCGCAGCAGGCACCACTGTGAAGGTCTGGGACGCAGCCAAGCA
GCAGCCCCTGACAGAGCTGGCAGCCCATGGGGACCTGGTGCAGAGCGCCGTCTGGAGCCGAGATGGAGCCCTGGT
GGGCACGGCGTGCAAGGACAAGCAGCTGCGGATCTTTGACCCCAGAACAAAGCCGCGGGCCTCTCAGAGCACGCA
GGCCCATGAGAACAGCAGGGATAGCCGGCTGGCATGGATGGGCACCTGGGAGCACCTTGTGTCTACTGGATTCAA
CCAGATGCGTGAGCGCGAAGTGAAGCTGTGGGACACGCGGTTCTTCTCCAGCGCCCTGGCCTCCCTCACCTTGGA
CACCTCGCTTGGGTGTCTCGTGCCTCTGCTGGACCCTGACTCTGGGCTCCTGGTCCTGGCAGGAAAGGGCGAGAG
GCAGCTGTACTGTTACGAGGTGGTCCCGCAGCAGCCGGCGCTGAGCCCAGTGACCCAGTGTGTCCTGGAGAGCGT
GCTGCGTGGGGCTGCCCTTGTGCCCCGGCAGGCGCTGGCCGTCATGGGCTGCGAGGTACTCCGCGTCCTACAGCT
GAGCGACACAGCCATCGTGCCCATCGGCTACCATGTGCCCCGCAAGGCTGTGGAGTTCCACGAGGACCTGTTCCC
GGACACTGCCGGCTGTGTGCCTGCCACCGACCCCCATGGCTGGTGGGCTGGGGACAACCAGCAGGTGCAGAAGGT
CAGCCTCAACCCCGCCTGCCGGCCCCACCCGAGCTTCACTTCCTGTCTGGTGCCCCCTGCGGAGCCCCTCCCTGA
CACAGCCCAGCCTGCGGTGATGGAGACACCCGTGGGTGATGCAGACGCAAGCGAGGGTTTCTCTTCCCCTCCCAG
TTCGCTGACCTCGCCCTCCACGCCCTCCAGCCTGGGGCCCTCACTCTCCAGCACCAGTGGCATCGGGACCAGCCC
CAGTTTGAGGTCGCTGCAGAGCCTGCTGGGCCCCAGTTCCAAGTTCCGCCATGCTCAGGGCACTGTCCTGCACCG
AGACAGCCACATCACCAACCTCAAGGGGCTCAACCTCACCACACCTGGTGAGAGTGACGGCTTCTGTGCCAACAA
GCTGCGTGTGGCCGTGCCGCTGCTCAGCAGCGGGGGACAGGTGGCTGTGCTTGAGCTACGGAAGCCTGGCCGCCT
GCCCGACACGGCACTGCCCACGCTGCAGAATGGGGCAGCTGTGACTGATCTGGCCTGGGACCCCTTTGACCCCCA
TCGCCTCGCTGTGGCTGGTGAGGACGCCAGGATCCGACTGTGGCGGGTACCCGCAGAGGGCCTGGAAGAGGTGCT
CACCACGCCAGAGACTGTGCTCACAGGCCACACGGAGAAGATCTGCTCCCTGCGCTTCCACCCACTGGCAGCCAA
TGTGCTGGCCTCGTCCTCCTATGACCTCACTGTTCGCATCTGGGACCTTCAGGCTGGAGCTGATCGGCTGAAGCT
GCAGGGCCACCAAGACCAGATCTTCAGCCTGGCCTGGAGTCCTGATGGGCAGCAGCTGGCCACTGTCTGCAAGGA
TGGGCGTGTGCGGGTCTACAGGCCCCGGAGTGGCCCTGAGCCCCTGCAGGAAGGCCCAGGGCCCAAGGGAGGACG
CGGAGCTCGCATTGTCTGGGTATGTGATGGTCGCTGTCTGCTGGTGTCTGGCTTTGACAGCCAAAGTGAGCGCCA
GCTGCTCCTATATGAAGCTGAGGCCCTGGCCGGCGGACCCTTGGCAGTGTTGGGCCTGGACGTGGCTCCCTCAAC
CCTGCTGCCCAGCTACGACCCAGACACTGGCCTGGTGCTCCTGACCGGCAAGGGCGACACCCGTGTATTCCTGTA
CGAGCTGCTCCCCGAGTCCCCTTTCTTCCTGGAGTGCAACAGCTTCACGTCGCCTGACCCCCACAAGGGCCTCGT
CCTCCTGCCTAAGACGGAGTGCGACGTGCGGGAAGTGGAGCTGATGCGGTGCCTGCGGCTGCGTCAGTCCTCCCT
GGAGCCTGTGGCCTTCCGGCTGCCCCGAGTCCGGAAAGAGTTCTTCCAGGATGACGTGTTCCCAGACACGGCTGT
GATCTGGGAGCCTGTGCTCAGTGCCGAGGCCTGGCTGCAAGGCACTAATGGGCAGCCCTGGCTTCTCAGCCTGCA
GCCTCCTGACATGAGCCCAGTGAGCCAAGCCCCCCGAGAGGCCCCTGCTCGTCGGGCCCCATCCTCAGCGCAGTA
CCTGGAAGAAAAGTCTGACCAGCAAAAGAAGGAGGAGCTGCTGAATGCCATGGTGGCAAAACTGGGGAACCGGGA
GGACCCACTCCCCCAGGACTCCTTTGAAGGCGTGGACGAGGACGAGTGGGACTAGCCTGCGCCCCCGTCACCTCC
ACCTCACCTGTGCTGCCACTTCCTAGTGCACACCTCACGGCTCATCCTCAAGCTGGAAGATACCTCTCTGGCCCC
GGCACATGTCACCCCTGCACTCCTGCCTTCCCGTGGGCACTTCCACATCCTCTGGGCCTCTGGCAGTTCCCAGGG
ACTGTTTTCACCTCTGCTGTCTCTGGGGTCAGCTGCTGCTCATCAGCTGCCCGCTAGCATGTGGCCAGGGGTGCA
GGGTGGCGGGGGGTCAGCAGCATGTCCCTGGGCAGGCCCTGGGCACCCTGTCTCCCCTGGTCTCACTGCTGACCT
GGGCTGGTCCCAGCCTGGATTGGCCTCATCCAGGATCTTTGGTCACCCCACGCTGCCCCATCTTGCCTGCTGTTC
CAGTTCTGGTCAAGGGCCTTGGGGGCTGGCCCCCCACCAGGCCTTCTAGAGCAGCACCAGTCTCAGGGCCCTGGG
ACCAGCTGCCCTACTTCCCAGGTTTGTAGCCAGGAGAAGGGGGCATCACAGAGCTGATGGTCCAATAAGGGGGGT
GTGAGCCCCGCAGGGACTGGCCCGCACCTGCCTTGGATGTTTTCAGCAATTAAACTTTTTTAAGCTGGCAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3608

MNRFRVSKFRHTEARPPRRESWISDIRAGTAPSCRNHIKSSCSLIAFNSDRPGVLGIVPLQGQGEDKRRVAHLGC
HSDLVTDLDFSPFDDFLLATGSADRTVKLWRLPGPGQALPSAPGVVLGPEDLPVEVLQFHPTSDGILVSAAGTTV
KVWDAAKQQPLTELAAHGDLVQSAVWSRDGALVGTACKDKQLRIFDPRTKPRASQSTQAHENSRDSRLAWMGTWE
HLVSTGFNQMREREVKLWDTRFFSSALASLTLDTSLGCLVPLLDPDSGLLVLAGKGERQLYCYEVVPQQPALSPV
TQCVLESVLRGAALVPRQALAVMGCEVLRVLQLSDTAIVPIGYHVPRKAVEFHEDLFPDTAGCVPATDPHGWWAG
DNQQVQKVSLNPACRPHPSFTSCLVPPAEPLPDTAQPAVMETPVGDADASEGFSSPPSSLTSPSTPSSLGPSLSS
TSGIGTSPSLRSLQSLLGPSSKFRHAQGTVLHRDSHITNLKGLNLTTPGESDGFCANKLRVAVPLLSSGGQVAVL
ELRKPGRLPDTALPTLQNGAAVTDLAWDPFDPHRLAVAGEDARIRLWRVPAEGLEEVLTTPETVLTGHTEKICSL
RFHPLAANVLASSSYDLTVRIWDLQAGADRLKLQGHQDQIFSLAWSPDGQQLATVCKDGRVRVYRPRSGPEPLQE
GPGPKGGRGARIVWVCDGRCLLVSGFDSQSERQLLLYEAEALAGGPLAVLGLDVAPSTLLPSYDPDTGLVLLTGK
GDTRVFLYELLPESPFFLECNSFTSPDPHKGLVLLPKTECDVREVELMRCLRLRQSSLEPVAFRLPRVRKEFFQD
DVFPDTAVIWEPVLSAEAWLQGTNGQPWLLSLQPPDMSPVSQAPREAPARRAPSSAQYLEEKSDQQKKEELLNAM
VAKLGNREDPLPQDSFEGVDEDEWD

FIGURE 3609

GAGCAATGATGTAGCCACCTCCTAACCTTCCCTTCTTGAACCCCCAGGTCCCCTCTTGCTGTTGGCTGCACATCA
GGAAGGCTGTGATGGGAATGAAGGTGAAAACTTGGAGATTTCACTTCAGTCATTGCTTCTGCCTGCAAGATCATC
CTTTAAAAGTAGAGAAGCTGCTCTGTGTGGTGGTTAACTCCAAGAGGCAGAACTCGTTCTAGAAGGAAATGGATG
CAAGCAGCTCCGGGGGGCCCCAAACGCATGCTTCCTGTGATCTAGCCCAGGGAAGCCCTTCCGTGGGGGCCCCGGC
TTTGAGGGATGCCACCGGTTCTGGACGCATGGCTGATTCTGAATGATGATGGTTCGCCGGGGGCTGCTTGCGTGG
ATTTCCCGGGTGGTGGTTTTGCTGGTGCTCCTCTGCTGTGCTATCTCTGTCCTGTACATGTTGGCCTGCACCCCA
AAAGGTGACGAGGAGCAGCTGGCACTGCCCAGGGCCAACAGCCCCACGGGGAAGGAGGGGTACCAGGCCGTCCTT
CAGGAGTGGGAGGAGCAGCACCGCAACTACGTGAGCAGCCTGAAGCGGCAGATCGCACAGCTCAAGGAGGAGCTG
CAGGAGAGGAGTGAGCAGCTCAGGAATGGGCAGTACCAAGCCAGCGATGCTGCTGGCCTGGGTCTGGACAGGAGC
CCCCCAGAGAAAACCCAGGCCGACCTCCTGGCCTTCCTGCACTCGCAGGTGGACAAGGCAGAGGTGAATGCTGGC
GTCAAGCTGGCCACAGAGTATGCAGCAGTGCCTTTCGATAGCTTTACTCTACAGAAGGTGTACCAGCTGGAGACT
GGCCTTACCCGCCACCCCGAGGAGAAGCCTGTGAGGAAGGACAAGCGGGATGAGTTGGTGGAAGCCATTGAATCA
GCCTTGGAGACCCTGAACAATCCTGCAGAGAACAGCCCCAATCACCGTCCTTACACGGCCTCTGATTTCATAGAA
GGGATCTACCGAACAGAAAGGGACAAAGGGACATTGTATGAGCTCACCTTCAAAGGGGACCACAAACATGAATTC
AAACGGCTCATCTTATTTCGACCATTCGGCCCCATCATGAAAGTGAAAAATGAAAAGCTCAACATGGCCAACACG
CTTATCAATGTTATCGTGCCTCTAGCAAAAAGGGTGGACAAGTTCCGGCAGTTCATGCAGAATTTCAGGGAGATG
TGCATTGAGCAGGATGGGAGAGTCCATCTCACTGTTGTTTACTTTGGGAAAGAAGAAATAAATGAAGTCAAAGGA
ATACTTGAAAACACTTCCAAAGCTGCCAACTTCAGGAACTTTACCTTCATCCAGCTGAATGGAGAATTTTCTCGG
GGAAAGGGACTTGATGTTGGAGCCCGCTTCTGGAAGGGAAGCAACGTCCTTCTCTTTTTCTGTGATGTGGACATC
TACTTCACATCTGAATTCCTCAATACGTGTAGGCTGAATACACAGCCAGGGAAGAAGGTATTTTATCCAGTTCTT
TTCAGTCAGTACAATCCTGGCATAATATACGGCCACCATGATGCAGTCCCTCCCTTGGAACAGCAGCTGGTCATA
AAGAAGGAAACTGGATTTTGGAGAGACTTTGGATTTGGGATGACGTGTCAGTATCGGTCAGACTTCATCAATATA
GGTGGGTTTGATCTGGACATCAAAGGCTGGGGCGGAGAGGATGTGCACCTTTATCGCAAGTATCTCCACAGCAAC
CTCATAGTGGTACGGACGCCTGTGCGAGGACTCTTCCACCTCTGGCATGAGAAGCGCTGCATGGACGAGCTGACC
CCCGAGCAGTACAAGATGTGCATGCAGTCCAAGGCCATGAACGAGGCATCCCACGGCCAGCTGGGCATGCTGGTG
TTCAGGCACGAGATAGAGGCTCACCTTCGCAAACAGAAACAGAAGACAAGTAGCAAAAAAACATGAACTCCCAGA
GAAGGATTGTGGGAGACACTTTTTCTTTCCTTTTGCAATTACTGAAAGTGGCTGCAACAGAGAAAAGACTTCCAT
AAAGGACGACAAAAGAATTGGACTGATGGGTCAGAGATGAGAAAGCCTCCGATTTCTCTCTGTTGGGCTTTTTAC
AACAGAAATCAAAATCTCCGCTTTGCCTGCAAAAGTAACCCAGTTGCACCCTGTGAAGTGTCTGACAAAGGCAGA
ATGCTTGTGAGATTATAAGCCTAATGGTGTGGAGGTTTTGATGGTGTTTACAATACACTGAGACCTGTTGTTTTG
TGTGCTCATTGAAATATTCATGATTTAAGAGCAGTTTTGTAAAAAAATTCATTAGCATGAAAGGCAAGCATATTTC
TCCTCATATGAATGAGCCTATCAGCAGGGCTCTAGTTTCTAGGAATGCTAAAATATCAGAAGGCAGGAGAGGAGA
TAGGCTTATTATGATACTAGTGAGTACATTAAGTAAAATAAAATGGACCAGAAAAGAAAAGAAACCATAAATATC
GTGTCATATTTTCCCCAAGATTAACCAAAAATAATCTGCTTATCTTTTTGGTTGTCCTTTTAACTGTCTCCGTTT
TTTTCTTTTATTTAAAAATGCACTTTTTTTCCCTTGTGAGTTATAGTCTGCTTATTTAATTACCACTTTGCAAGC
CTTACAAGAGAGCACAAGTTGGCCTACATTTTTATATTTTTTAAGAAGATACTTTGAGATGCATTATGAGAACTT
TCAGTTCAAAGCATCAAATTGATGCCATATCCAAGGACATGCCAAATGCTGATTCTGTCAGGCACTGAATGTCAG
GCATTGAGACATAGGGAAGGAATGGTTTGTACTAATACAGACGTACAGATACTTTCTCTGAAGAGTATTTTCGAA
GAGGAGCAACTGAACACTGGAGGAAAAGAAAATGACACTTTCTGCTTTACAGAAAAGGAAACTCATTCAGACTGG
TGATATCGTGATGTACCTAAAAGTCAGAAACCACATTTTCTCCTCAGAAGTAGGGACCGCTTTCTTACCTGTTTA
AATAAACCAAAGTATACCGTGTGAACCAAACAATCTCTTTTCAAAACAGGGTGCTCCTCCTGGCTTCTGGCTTCC
ATAAGAAGAAATGGAGAAAAATATATATATATATATATATATATTGTGAAAGATCAATCCATCTGCCAGAATCTAGT
GGGATGGAAGTTTTTGCTACATGTTATCCACCCCAGGCCAGGTGGAAGTAACTGAATTATTTTTTAAATTAAGCA
GTTCTACTCGATCACCAAGATGCTTCTGAAAATTGCATTTTATTACCATTTCAAACTATTTTTTAAAAATAAATA
CAGTTAACATAGAGTGGTTTCTTCATTCATGTGAAAATTATTAGCCAGCACCAGATGCATGAGCTAATTATCTCT
TTGAGTCCTTGCTTCTGTTTGCTCACAGTAAGCTCATTGTTTAAAAGCTTC

FIGURE 3610

MESYSVTQAGVQWHELCSLQPSPPRFREMCIEQDGRVHLTVVYFGKEEINEVKGVLENTSKAANFRNFTFIQLNG
EFSRGKGLDVGARFWKGSNVLLFFCDVDIYFTSEFLNTCRLNTQPGKKVFYPVLFSQYNPGIIYGHHDAVPPLEQ
QLVIKKETGFWRDFGFGMTCQYRSDFINIGGFDLDIKGWGGEDVHLYRKYLHSNLIVVRTPVRGLFHLWHEKRCM
DELTPEQYKMCMQSKAMNEASHGQLGMLVFRHEIEAHLRKQKQKTSSKKT

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FIGURE 3611

ATCGGAAAAGCACCTTGAGTTACTGGCTTCCCCTTTACCTATTCCATCAACCTTCCTTCCACACAGTAGTACTCC
CGCTTTGCATCTTACAGTTCAGAGGCTAAAGTTGCCACCACCACAGGGATCTTCTGAGAGCTGCACAGTTAACAT
CCCACAACAACCACCCGGAAGCCTGAGCATCGCATCACCAAACACTGCCTTTATTCCTATCCATAACCCAGGTAG
TTTCCCAGGCTCTCCTGTTGCTACCACGGACCCCATCACAAAATCTGCATCCCAAGTGGTAGGACTCAATCAAATT
GGTGCCTCAAATTGAGGGAAACACAGGGACAGTCCCTCAGCCTACCAATGTGAAGGTAGTTCTTCCAGCAGCTGG
CCTCTCAGCTGCTCAGCCACCAGCTTCCTACCCCTTACCAGGCTCTCCCCTTGCTGCCGGCGTGTTACCCAGCCA
GAACTCCAGTGTGCTCAGCACAGCAGCAACTTCTCCCCAGCCAGCGAGCGCAGGTATCAGCCAGGCCCAGGCAAC
TGTTCCTCCTGCAGTTCCTACCCACACCCCAGGCCCTGCCCCGAGCCCAAGCCCTGCCTTGACACACAGTACCGC
GCAGAGTGACAGCACCTCTTACATCAGTGCTGTGGGGAACACGAACGCTAATGGGACAGTAGTGCCACCGCAGCA
GATGGGCTCAGGTCCTTGTGGTTCTTGTGGGCGAAGGTGCAGCTGTGGGACCAATGGAAACCTTCAGCTAAATAG
TTACTATTATCCTAATCCAATGCCTGGACCAATGTACCGAGTCCCTTCATTCTTTACTCTGCCATCCATTTGCAA
TGGCAGCTACCTCAACCAAGCACATCAGAGCAATGGAAACCAACTTCCTTTTTTTCTGCCTCAGACTCCATATGC
AAATGGACTGGTACATGACCCAGTCATGGGGAGCCAAGCCAACTATGGCATGCAGCAGATGGCAGGATTTGGGAG
ATTCTATCCTGTATATCCAGCACCTAACGTAGTTGCCAACACCAGTGGTTCGGGGCCCAAGAAGAATGGGAATGT
CTCATGTTACAATTGTGGTGTAAGCGGACACTACGCACAGGACTGTAAGCAGTCGTCCATGGAGGCCAATCAACA
AGGCACTTACAGACTGAGATACGCACCTCCCCTCCCCCCTTCTAATGATACGTTGGATTCTGCAGACTGAAACGA
GTAAAGCTTGCCTACTTAATACACTCAAGTGTGGGGAGTCATGGGGTGTGGAGGGGAGGAAAGGAAAGGTATTTT
GTTTCTTTGTCTATACATTTCCTAGATTTCTATGCAGTTGGGATTTTTCATTTCTCTTGTACCAATGTCCAAAAC
AAGAAAGAATGCAATGCTTTTGAGCCTCTGGTCTCCTGGTTCAACAACAGGCTTATATGTATGATACATGTAATT
TAAACCTTCAGACAAACTTAAATGTTGGTGCGTGCTTTTTTTTTTTTTTACACTGAATACTTGCTGTGTGCAATG
TTTACTGAATCTTTAAAACTGTGTATTTGACCTTTTTTTTACAACACTGGTGACAGTCATATGGTTTTGAAAAAA
AAAAGAAATTTTGCTTCTTCCCAGCTTTTCTCACTTTCACCCTAAACGACACTTCCTCCCCAGCCAGCCTCACTC
TGTCTCCGGCCCGCAGCAGGAGCAGCCAGCAGTGCATTCACCCCACTTTTGTAAACTGCTCTGCATATAAACCAA
GGGCAGAATGTTTCACCCTGATCTTATGGGAGGAATCGAACTCCCAAAATAGTGTGTATATATGTAATAAACAGC
GTCACGTAAATACATATATGCAGTGCTTGTTGTCCAAATAGAAATGAAAATAAGTGGAAGAGAGAGGAAGAAGTC
AACCATATGAAACTGAAAAAATATGACGTACGAAATGGACAAAAAGCTTTTTCTGAAACCAACTTTTTACTTCCA
TCATCCTTTTTTAGCCTGTTGCTTCAGAGAGACACAAAGTGAACACACTGGTGTGAATGTCGCTCTCTGTGTGCT
TGTGTTTGTAATGAAAGTCTACAGCCAATTTTACTTGTCTACCACCGTGTTGTGCTCAAAGAGACACTACTTGAG
TGAAGATTTCTTCTTTCCCTGTACCAGCTGTTACAGTGTTACGTTGTGTTTAAAATGTGTATGGTTTATTGCAAT
CTGAACAGAGCTATGGGTTTCTACCATAAGTCAGGTTGTTTGTTCCCTAACCTGTCTCTCGTAGCAAAGTCACTT
TTATAACAGTTTACCACTATGCTTGATTATAATGTGAAAGGCGGAATTCTGAGTGTGTTAAGATGGTATTAATCA
TGTCGGTGTCATGTCACTAAGTTTAATGCTGCTGTTTTTAAAAAAAAAAAAAGTTTTTTTAAAAAGCCAATCTAT
GTACTAAATTGCTTCCAGGTAATTTTTGATTTCCTAAAGTGCACTGAGGTTATCTGGAAGATTGGGTGTATTTTT
TGGTGACTGCTGCATTCATCAGCAATGAACAGTTTCCACTGTATAGTCCTAGGGGTCAGGGGGTGGGGGTTTCAT
TTTCCATTCCTCAGCACAGAGCAGAAATGATAGATTTTTATTGTTTGGAGTAACGTTGGTATGCAGCAGAGGAAC
ATAAACATTTGGTCTTGGTTCAGAAGCCTAACAGATTGCTAGACAAGAGAAAAAACTTGAAGAAAAAAGAAGCTT
AATTTCATGCTTCATAAGTAGCATTTATATTTATAGCACCAATGTACATTTTGAAACTTTCTTTCAGGGGTGGGA
GTTATGGGGAAGGGGTGGGTGTGAAGGGGTAGATGAAAGCTTTAATTTAGAAAGAAAGTTCAAGTAAAGGAAATT
ATTTTGATTAAATATATTTTATTTGATCTGGGTATTTTTGGACCACATTATTAAATTAATTGTTAAGCTGCAGTT
GAGTTGTTCAAGTGAGAGTTTTGATAAGCCACTTATGGGCCGCGTTGTGAATCACTTGCCAGTTGTACTTTATGG
AGCTTATTTTATGATTTAAAATACTGTACTGTACATAGGAGGTATGTTACCTTCTCCTTATTTGTATGTTTACCA
TATACTTTGATATTTGAAATGTTATGTACTGGAAAGGCCACTTATATTTCTAGAACAGATTGGATTTTATGCAAC
CTTTTTTCCTTGAATTAACAGCAATAAAAAAATGAAAAACAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3612

MVPQIEGNTGTVPQPTNVKVVLPAAGLSAAQPPASYPLPGSPLAAGVLPSQNSSVLSTAATSPQPASAGISQAQA
TVPPAVPTHTPGPAPSPSPALTHSTAQSDSTSYISAVGNTNANGTVVPPQQMGSGPCGSCGRRCSCGTNGNLQLN
SYYYPNPMPGPMYRVPSFFTLPSICNGSYLNQAHQSNGNQLPFFLPQTPYANGLVHDPVMGSQANYGMQQMAGFG
RFYPVYPAPNVVANTSGSGPKKNGNVSCYNCGVSGHYAQDCKQSSMEANQQGTYRLRYAPPLPPSNDTLDSAD

FIGURE 3613

ATTTTGAGGACCGGGCTGGTGCGACTATACTACTGCCGGATGGCAAATCCGGGATCTCGGCTCCGAGAGGCTCAT
CTGGCAAAAGGGCGCGGAAACCACGGGGGCCCTGAGACTGAGTGGTCCCTATCCCACTTCTCTCTGGGGCGGCGC
TGTAGCCAGCGGCTGACAGGCGCAGCGAAAGGCAGCCCTCTGCTAAGGGTCCCAGCACC**ATG**GAGGACCCGAACC
CTGAAGAGAACATGAAGCAGCAGGATTCACCCAAGGAGAGAAGTCCCCAGAGCCCAGGAGGCAACATCTGCCACC
TGGGGGCCCCGAAGTGCACCCGCTGCCTCATCACCTTCGCAGATTCCAAGTTCCAGGAGCGTCACATGAAGCGGG
AGCACCCAGCGGACTTCGTGGCCCAGAAGCTGCAGGGGGTCCTCTTCATCTGCTTCACCTGCGCCCGCTCCTTCC
CCTCCTCCAAAGCCCTAATCACCCACCAGCGCAGCCACGGTCCAGCCGCCAAGCCCACCCTGCCGGTTGCAACCA
CTACTGCCCAGCCCACCTTCCCTTGTCCTGACTGTGGCAAGACCTTTGGGCAGGCTGTTTCTCTGAGGCGGCACC
GCCAGATGCATGAGGTCCGTGCCCCTCCTGGCACCTTCGCCTGCACAGAGTGCGGTCAGGACTTTGCTCAGGAAG
CAGGGCTGCATCAACACTACATTCGGCATGCCCGGGGGGGAGCTC**TGA**GTGCAGCTTAAGCCTCTCCACGGTGACG
GGTGGCTCTGTGGCTGGTAGGACTCACCCATGATATGGGGTGCAGGAACTCTGGGGGCCCTGAAGGATTTGCTTC
CCTCCCCTGGGAAGGCAGAGGGCTCTTAATAAAGAGGACCCAGAAGATTCTTATTTAGAGCTTCAGTCTTTGGAG
CACACAGGGCCTTCGTGAGACAGTGAAATCAGATAATAATGAGATCTTTTGTTAAAAAAAAAAAAAAATGGGAAGG
GAGTGCGGGAGAGAAATGGTTTGTGTCTCCCTTATTCCCAGTTAAATACCTAGCTGCAGATTGTGCCATCACCCT
TCATTCTTCCCAGATGGATGCCATGGGCTATGGGAGCAAATTGCCCTGGACCTTTGCCTGAATGGGGGCAGGAAA
GGTGAGGTGTTGCTGGCCTGTAATGCCACCAGGTGAGTTCCAGATGTGGAGCAACTTGGGCTTTTGGGGATGGGG
CAGCAAAGTTGGGAGCTGGACCCCAATTGAGTGGGGGTAGCAATTGGAGTCCTTGTGTCTCTTTTCCACCCCCTG
CCATCCTCACTTAGAGGGGCCATGGCACTAGATGGCACTAGTCCCCCGATAATTTATGTCTCGTTGAAATAATTT
TGTATATCATTCTAGTCCTGAAATATTTTTTTCATATGTGTAGGTGAAATGGTATGAATAAGCTAACAGGAATAG
TATCTAAAAACAGAAAACATCCATATTAAAATGTCTAAACAGGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3614

MEDPNPEENMKQQDSPKERSPQSPGGNICHLGAPKCTRCLITFADSKFQERHMKREHPADFVAQKLQGVLFICFT
CARSFPSSKALITHQRSHGPAAKPTLPVATTTAQPTFPCPDCGKTFGQAVSLRRHRQMHEVRAPPGTFACTECGQ
DFAQEAGLHQHYIRHARGEL

FIGURE 3615

GCAGCAGCCGGGTGGGAAGGCTCAAGATGGCGTGCTTGTTGGAGACCCCAATCCGCATGAGCGTCCTTTCGGACC
AGGAATGAAAGTTACTGGGAGATAACTTCGAAGGATTTTGCAACAAATTCGAGCTGTCCGACTCTGAGAATGGAA
GTAACAGCTAGCAGTCGCCACTATGTTGACAGGCTATTTGACCCTGATCCCCAGAAAGTTCTACAAGGTGTCATA
GACATGAAAAATGCTGTAATTGGAAACAACAAGCAGAAAGCCAATCTCATTGTTTTAGGAGCTGTTCCAAGATTG
TTGTACTTGCTTCAGCAAGAAACCTCAAGCACAGAGCTGAAAACTGAATGTGCAGTGGTGTTGGGAAGTCTTGCT
ATGGGTACTGAAAACAATGTCAAGTCTCTACTGGACTGCCATATTATCCCTGCCTTATTGCAAGGACTACTGTCC
CCAGACCTGAAGTTTATTGAAGCTTGCCTCCGATGCCTGCGTACCATCTTTTTCACCAGTCCTGTCACTCCAGAG
GAGCTACTGTATACAGATGCCACAGTGATACCACACCTCATGGCACTGCTTAGCAGGTCCCGCTATACCCAGGAG
TACATCTGTCAGATCTTCTCACACTGCTGTAAAGGGCCAGATCATCAAACAATTTTATTTAACCACGGTGCAGTT
CAGAATATTGCTCACCTACTAACCTCACTGTCCTACAAAGTTCGAATGCAAGCACTGAAATGTTTCTCAGTTTTA
GCTTTTGAAAACCCCCAGGTATCGATGACCCTGGTAAATGTTTTGGTTGATGGAGAATTGTTACCACAGATTTTT
GTGAAGATGTTACAGAGGGATAAGCCTATTGAGATGCAGCTCACATCAGCAAAATGTTTAACTTACATGTGTAGA
GCTGGAGCAATTCGGACAGATGATAACTGTATTGTATTAAAGACATACCCTGGTTGGTCGAATGTGCAGTAAGGA
GAGATTACTAGAGGAGAGAGTTGAAGGAGCTGAGACACTGCCTATCTGATGAACCAGATGTTGAGCTACAGAGAA
TCGCTAGCATAACTGATCACCTCATGCCATGCTTGCTGATTATTTCAAGTATCCCAGCTCAGTGAGTGCCATCAC
TGATATTAAAAGGCTTGATCATGATTTAAAACATGCTCACGAACTCCGCCAGGCTGCATTCAAGCTCTATGCCTC
TCTTGGAGCAAATGATGAAGACATCCGGAAGAAGGTGAGTCTGGGAGAGGGGCGTCCCCAGTCCTGACAGCCAGC
AGCAGGAGTGACGTCAACCTGAAGTCGTGGTGAAGAGCACTACAGTGACTGTGAATATATAAAGCAGAGTGACTA
AGCATATTGAAGAATGAATGGACCCGGATTTGGGGGTTGTTGTTGTTTTAGACCATAGAGTGGCATGCCGGTGCT
TGAATGCAAATACTGGCGTGCTTTTTGTGTCATTAATATGAATTATTATGTTGCACATTTTGGCATGGTGTTCTG
ATAAAAATCCAATTCTAGCACTGTGAAGCTTCAGACCCCTTGAAAGTCCTACCATTAGAATTGTAAATGTTATTT
ATGGAAATACCTTCCAATGCTATTGAGAAATTCAAATCTCTATTGTATATTGTTCTTTGATATGTGGCTTAGTTT
TATGTTTGATTTTTTTTGCTACTGGCAAGTTTAATGTGAATAAATCTTTGTGGAATGATGATTTTATGTTTAGTG
AGTGGTCATCTGAATTTTCCAGCTCCCAGAAATGTATGCACTGGTATAGCACCTATGTTACTAAGCCTTAGTCTA
CACTGAACTCATGTTCTGATGAGAATACTTCTAGATGAGGAGTATAGTGGTAAGTAAGCTCTGACTTGGCTCCTT
CCACATATCCAAAAAGCTGGAACTTACCACTCAAAAACATGTATAACCTAATAAATTCTACACAAGGCTTTCAAG
ACCATCAGAGAGCAAACCACATGTTCTGTCTTGAGGAGCCATAGCAGAAAGAGCAAATTAGTCATTATTTACTGA
ACATGATGATTTACTAAATCTCTCCATCTGCATTAGTATTTTAAGGAGCACTGTGAGAGAAATCACAAAGTATTA
GAGTTTACCATGATTCAGAGAAGTTCTTCAGGCCTGTAGAAAGAGGAGTATGGAACAACCTTACATTTGTTGAAA
TAACTTGAAAAGGAACCATTTCTTGAAGAAACTGAAGTAATAGCAATAAGATTTGATGTGTGAGTAGCTTTGATT
TAAAATCAATGCAAAAAGCACAACTAATAAATTGAATGTTTCCATGTACCTCACTTTATTTCAGTTAACAAGATA
CTTTGACTTGAAGTGTTTTTAGTGTATCCCTATGAAAATCATTTTTGGTACATCTAAGTTTTCACTTATAAACTG
TTATTTCAAAGCAAACATACTAGTGATATATATATGATTTATGGATGTTGACGCCAATGTTCAGTTTGGGTACGT
TGGTGTATTGCAAGGGGAGAGGCTTTTATAACAATAGATTTGAACATTTTTAAAAAATTGGACTGTGTAACTTAA
ATACACAATTATTTGGTTTAGGATGGTTATTAGGGCCCATTAGAAACAGGAGAAGTATTTTACCCATTCTTAAAG
CTCTAAAAAAACCATCTCATGGACTGAAAGGTAGATAGACAGATGGACCACAATGGGAAATAGGATGTCCATTTGT
ACTTCTTTGTACTTTTTTGTTAATAAACTGTTTTGGAATTAATGGCTTAATTTGTGATATCATGTTCTAGAAATA
CCTGCAACATGACAGTCTAATCAGTAGTCTATTAAAACTTGTATTCATAATGTGTATAATTTCCTGGTAAGGCTA
ACTCCTGATCGTTTCTGTAGAAAGATGAC

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FIGURE 3616

MEVTASSRHYVDRLFDPDPQKVLQGVIDMKNAVIGNNKQKANLIVLGAVPRLLYLLQQETSSTELKTECAVVLGS
LAMGTENNVKSLLDCHIIPALLQGLLSPDLKFIEACLRCLRTIFFTSPVTPEELLYTDATVIPHLMALLSRSRYT
QEYICQIFSHCCKGPDHQTILFNHGAVQNIAHLLTSLSYKVRMQALKCFSVLAFENPQVSMTLVNVLVDGELLPQ
IFVKMLQRDKPIEMQLTSAKCLTYMCRAGAIRTDDNCIVLKTYPGWSNVQ

FIGURE 3617

ACGAGGGACGCAGCCATGGCGGAGGCGGCTTTGGAAGCCGTGCGGAGCGAGTTACGAGAATTCCCGGCCGCTGCA
AGGGAGCTCTGCGTGCCTCTTGCTGTGCCCTACCTGGACAAACCCCCAACTCCGCTCCACTTCTACCGGGACTGG
GTCTGCCCCAACAGGCCGTGCATTATCCGCAACGCTCTGCAGCACTGGCCGGCCCTCCAGAAGTGGTCCCTCCCC
TATTTCAGAGCCACAGTGGGCTCCACAGAGGTGAGTGTGGCCGTGACCCCAGATGGTTACGCGGATGCCGTGAGA
GGGGATCGCTTCATGATGCCAGCTGAGCGCCGCCTGCCCCTGAGCTTCGTGCTGGATGTGCTGGAGGGCCGGGCC
CAGCACCCTGGAGTCCTCTATGTGCAGAAGCAGTGCTCCAACCTGCCCAGCGAGCTGCCCCAGCTGCTGCCTGAT
CTGGAATCCCATGTGCCCTGGGCCTCCGAAGCCCTGGGAAAGATGCCCGATGCTGTGAACTTCTGGCTGGGGGAG
GCGGCTGCAGTGACTTCTTTGCACAAGGACCACTATGAGAACCTCTACTGCGTGGTCTCAGGAGAGAAGCATTTC
CTGTTCCATCCGCCCAGCGACCGGCCCTTCATCCCCTATGAGCTGTACACGCCGGCAACCTACCAGCTAACTGAA
GAGGGCACCTTTAAGGTGGTGGATGAAGAGGCCATGGAGAAGGCAGAGGTGTCCAGGACCTGCCTGCTCACGGTT
CGTGTCCTGCAGGCCCATCGCCTACCCTCTAAGGACCTAGTGACCCCCTCTGACTGCTACGTGACTCTCTGGCTG
CCCACGGCCTGCAGCCACAGGCTCCAGACACGCACGGTCAAGAACAGCAGTAGCCCTGTCTGGAACCAGAGCTTT
CACTTCAGGATCCACAGGCAGCTCAAGAATGTCATGGAACTGAAAGTCTTTGACCAGGACCTGGTGACCGGAGAT
GACCCTGTGTTGTCAGTACTGTTTGATGCGGGGACTCTGCGGGCTGGGGAGTTCCGGCGCGAGAGCTTCTCACTG
AGCCCTCAGGGTGAGGGGCGCCTGGAAGTTGAATTTCGCCTGCAGAGTCTGGCTGACCGTGGCGAGTGGCTCGTC
AGCAATGGCGTTCTGGTGGCCCGGGAGCTCTCCTGCTTGCACGTTCAACTGGAGGAGACAGGAGACCAGAAGTCC
TCAGAGCACAGAGTTCAGCTTGTGGTTCCTGGGTCCTGTGAGGGTCCGCAGGAGGCCTCTGTGGGCACTGGCACC
TTCCGCTTCCACTGCCCAGCCTGCTGGGAGCAGGAGCTGAGTATTCGCCTGCAGGATGCCCCCGAGGAGCAACTA
AAGGCGCCACTGAGTGCCCTGCCCTCTGGTCAAGTGGTGAGGCTTGTCTTCCCCACGTCCCAGGAGCCCCTGATG
AGAGTGGAGCTGAAAAAAGAAGCAGGACTGAGGGAGCTGGCCGTGCGACTGGGCTTCGGGCCCTGTGCAGAGGAG
CAGGCCTTCCTGAGCAGGAGGAAGCAGGTGGTGGCCGCGGCCTTGAGGCAGGCCCTGCAGCTGGATGGAGACCTG
CAGGAGGATGAGATCCCAGTGGTAGCTATTATGGCCACTGGTGGTGGGATCCGGGCAATGACTTCCCTGTATGGG
CAGCTGGCTGGCCTGAAGGAGCTGGGCCTCTTGGATTGCGTCTCCTACATCACCGGGGCCTCGGGCTCCACCTGG
GCCTTGGCCAACCTTTATGAGGACCCAGAGTGGTCTCAGAAGGACCTGGCAGGGCCCACTGAGTTGCTGAAGACC
CAGGTGACCAAGAACAAGCTGGGTGTGCTGGCCCCCAGCCAGCTGCAGCGGTACCGGCAGGAGCTGGCCGAGCGT
GCCCGCTTGGGCTACCCAAGCTGCTTCACCAACCTGTGGGCCCTCATCAACGAGGCGCTGCTGCATGATGAGCCC
CATGATCACAAGCTCTCAGATCAACGGGAGGCCCTGAGTCATGGCCAGAACCCTCTGCCCATCTACTGTGCCCTC
AACACCAAAGGGCAGAGCCTGACCACTTTTGAATTTGGGGAGTGGTGCGAGTTCTCTCCCTACGAGGTCGGCTTC
CCCAAGTACGGGGCCTTCATCCCCTCTGAGCTCTTTGGCTCCGAGTTCTTTATGGGGCAGCTGATGAAGAGGCTT
CCTGAGTCCCGCATCTGCTTCTTAGAAGGTATCTGGAGCAACCTGTATGCAGCCAACCTCCAGGACAGCTTATAC
TGGGCCTCAGAGCCCAGCCAGTTCTGGGACCGCTGGGTCAGGAACCAGGCCAACCTGGACAAGGAGCAGGTCCCC
CTTCTGAAGATAGAAGAACCACCCTCAACAGCCGGCAGRATAGCTGAGTTTTTCACCGATCTTCTGACGTGGCGT
CCACTGGCCCAGGCCACACATAATTTCCTGCGTGGCCTCCATTTCCACAAAGACTACTTTCAGCATCCTCACTTC
TCCACATGGAAAGCTACCACTCTGGATGGGCTCCCCAACCAGCTGACACCCTCGGAGCCCCACCTGTGCCTGCTG
GATGTTGGCTACCTCATCAATACCAGCTGCCTGCCCCTCCTGCAGCCCACTCGGGACGTGGACCTCATCCTGTCA
TTGGACTACAACCTCCACGGAGCCTTCCAGCAGTTGCAGCTCCTGGGCCGGTTCTGCCAGGAGCAGGGGATCCCG
TTCCCACCCATCTCGCCCAGCCCCGAAGAGCAGCTCCAGCCTCGGGAGTGCCACACCTTCTCCGACCCCACCTGC
CCCGGAGCCCCTGCGGTGCTGCACTTTCCTCTGGTCAGCGACTCCTTCCGGGAGTACTCGGCCCCTGGGGTCCGG
CGGACACCCGAGGAGGCGGCAGCTGGGGAGGTGAACCTGTCTTCATCGGACTCTCCCTACCACTACACGAAGGTG
ACCTACAGCCAGGAGGACGTGGACAAGCTGCTGCACCTGACACATTACAATGTCTGCAACAACCAGGAGCAGCTG
CTGGAGGCTCTGCGCCAGGCAGTGCAGCGGAGGCGGCAGCGCAGGCCCCACTGATGGCCGGGGCCCCTGCCACCC
CTAACTCTCATTCATTCCCTGGCTGCTGAGTTGCAGGTGGGAACTGTCATCACGCAGTGCTTCAGAGCCTCGGGC
TCAGGTGGCACKGTCCCAGGGTCCAGGCTGAGGGCTGGGAGCTCCCTTGCGCCTCAGCAGTTTGCAGTGGGGTAA
GGAGGCCAAGCCCATTTGTGTAATCACCCAAAACCCCCCGGCCTGTGCCTGTTTTCCCTTCTGCGCTACCTTGAG
TAGTTGGAGCACTTGATACATCACAGACTCATACAAAAAAAAAAAAAAAAAA

FIGURE 3618

MAEAALEAVRSELREFPAAARELCVPLAVPYLDKPPTPLHFYRDWVCPNRPCIIRNALQHWPALQKWSLPYFRAT
VGSTEVSVAVTPDGYADAVRGDRFMMPAERRLPLSFVLDVLEGRAQHPGVLYVQKQCSNLPSELPQLLPDLESHV
PWASEALGKMPDAVNFWLGEAAAVTSLHKDHYENLYCVVSGEKHFLFHPPSDRPFIPYELYTPATYQLTEEGTFK
VVDEEAMEKAEVSRTCLLTVRVLQAHRLPSKDLVTPSDCYVTLWLPTACSHRLQTRTVKNSSSPVWNQSFHFRIH
RQLKNVMELKVFDQDLVTGDDPVLSVLFDAGTLRAGEFRRESFSLSPQGEGRLEVEFRLQSLADRGEWLVSNGVL
VARELSCLHVQLEETGDQKSSEHRVQLVVPGSCEGPQEASVGTGTFRFHCPACWEQELSIRLQDAPEEQLKAPLS
ALPSGQVVRLVFPTSQEPLMRVELKKEAGLRELAVRLGFGPCAEEQAFLSRRKQVVAAALRQALQLDGDLQEDEI
PVVAIMATGGGIRAMTSLYGQLAGLKELGLLDCVSYITGASGSTWALANLYEDPEWSQKDLAGPTELLKTQVTKN
KLGVLAPSQLQRYRQELAERARLGYPSCFTNLWALINEALLHDEPHDHKLSDQREALSHGQNPLPIYCALNTKGQ
SLTTFEFGEWCEFSPYEVGFPKYGAFIPSELFGSEFFMGQLMKRLPESRICFLEGIWSNLYAANLQDSLYWASEP
SQFWDRWVRNQANLDKEQVPLLKIEEPPSTAGXIAEFFTDLLTWRPLAQATHNFLRGLHFHKDYFQHPHFSTWKA
TTLDGLPNQLTPSEPHLCLLDVGYLINTSCLPLLQPTRDVDLILSLDYNLHGAFQQLQLLGRFCQEQGIPFPPIS
PSPEEQLQPRECHTFSDPTCPGAPAVLHFPLVSDSFREYSAPGVRRTPEEAAAGEVNLSSSDSPYHYTKVTYSQE
DVDKLLHLTHYNVCNNQEQLLEALRQAVQRRRQRRPH

FIGURE 3619

GTGCGCGTGCGCTTGAGAGCGTCATCGCCCCCGACTGTGGAGAAGTGTCCGGGGTAGCCCCGTTACAGGAATGTG
TTTCTGATCATCTGAATCTTAATCATGTCCAACTGCCTGCAAAATTTCCTGAAAATTACAAGCACTCGTCTTCTA
TGTTCAAGATTATGCCAACAGTTAAGAAGTAAAAGGAAGTTTTTCGGAACTGTGCCAATATCCAGATTGCATAGG
CGAGTTGTCATTACAGGCATTGGCTTAGTGACTCCTCTTGGTGTTGGAACTCACCTGGTTTGGGATCGTCTTATC
GGAGGAGAGAGTGGAATTGTTTCACTGGTTGGTGAAGAGTATAAGAGTATCCCTTGCAGTGTTGCTGCTTATGTG
CCAAGAGGTAGTGATGAAGGTCAGTTCAATGAACAAAACTTTGTGTCCAAATCAGATATCAAGTCCATGTCTTCT
CCCACCATCATGGCCATTGGGGCTGCAGAATTAGCCATGAAGGATTCTGGCTGGCATCCTCAGTCAGAAGCTGAT
CAAGTGGCTACTGGTGTTGCAATTGGCATGGGAATGATTCCTCTTGAAGTTGTTTCTGAAACTGCTTTGAATTTT
CAGACAAAAGGTTACAATAAAGTTAGCCCATTTTTTGTCCCTAAGATTCTGGTCAATATGGCAGCAGGCCAGGTC
AGCATTCGATATAAACTCAAGGGCCCAAATCATGCAGTATCCACAGCCTGTACCACAGGAGCTCATGCTGTGGGA
GACTCATTTAGATTTATAGCCCATGGTGATGCTGATGTGATGGTGGCTGGAGGTACAGATTCTTGTATTAGCCCT
TTATCTCTTGCTGGGTTTTCCAGAGCCCGGGCTCTGAGCACAAACTCAGATCCCAAGTTGGCATGTCGACCATTT
CATCCAAAGAGAGATGGTTTTGTAATGGGAGAAGGTGCAGCTGTGCTGGTGCTGGAAGAATATGAACATGCTGTT
CAAAGAAGAGCCCGGATCTATGCAGAAGTTTTGGGCTATGGACTCTCAGGTGATGCTGGTCACATAACTGCCCCT
GATCCTGAAGGAGAAGGTGCCTTAAGGTGTATGGCTGCTGCTTTAAAAGATGCAGGTGTGCAGCCTGAGGAGATA
TCCTATATCAATGCACATGCTACTTCCACACCATTGGGAGATGCTGCTGAAAACAAAGCTATCAAACATCTCTTC
AAAGACCATGCATATGCCCTTGCAGTTTCCTCAACTAAGGGAGCAACAGGACATCTGCTGGGAGCTGCAGGGGCA
GTCGAGGCAGCTTTTACCACATTAGCTTGTTATTATCAAAAACTACCACCTACTTTAAACCTGGATTGTTCGGAA
CCAGAATTTGATCTCAACTATGTTCCACTAAAGGCACAGGAATGGAAAACTGAGAAAAGATTTATTGGCCTCACC
AATTCCTTTGGTTTTGGTGGTACTAATGCAACACTTTGTATTGCTGGACTGTAGAACATATAATTTGTAATTAAA
TACTGATTTTTAAATGCTAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3620

MSNCLQNFLKITSTRLLCSRLCQQLRSKRKFFGTVPISRLHRRVVITGIGLVTPLGVGTHLVWDRLIGGESGIVS
LVGEEYKSIPCSVAAYVPRGSDEGQFNEQNFVSKSDIKSMSSPTIMAIGAAELAMKDSGWHPQSEADQVATGVAI
GMGMIPLEVVSETALNFQTKGYNKVSPFFVPKILVNMAAGQVSIRYKLKGPNHAVSTACTTGAHAVGDSFRFIAH
GDADVMVAGGTDSCISPLSLAGFSRARALSTNSDPKLACRPFHPKRDGFVMGEGAAVLVLEEYEHAVQRRARIYA
EVLGYGLSGDAGHITAPDPEGEGALRCMAAALKDAGVQPEEISYINAHATSTPLGDAAENKAIKHLFKDHAYALA
VSSTKGATGHLLGAAGAVEAAFTTLACYYQKLPPTLNLDCSEPEFDLNYVPLKAQEWKTEKRFIGLTNSFGFGGT
NATLCIAGL

FIGURE 3621

AGCGCGCGACTTTTTGAAAGCCAGGAGGGTTCGAATTGCAACGGCAGCTGCCGGGCGTATGTGTTGGTGCTAGAG
GCAGCTGCAGGGTCTCGCTGGGGGCCGCTCGGGACCAATTTTGAAGAGGTACTTGGCCACGACTTATTTTCACCT
CCGACCTTTCCTTCCAGGCGGTGAGACTCTGGACTGAGAGTGGCTTTCACAATGGAAGGGATCAGTAATTTCAAG
ACACCAAGCAAATTATCAGAAAAAAAGAAATCTGTATTATGTTCAACTCCAACTATAAATATCCCGGCCTCTCCG
TTTATGCAGAAGCTTGGCTTTGGTACTGGGGTAAATGTGTACCTAATGAAAAGATCTCCAAGAGGTTTGTCTCAT
TCTCCTTGGGCTGTAAAAAAGATTAATCCTATATGTAATGATCATTATCGAAGTGTGTATCAAAAGAGACTAATG
GATGAAGCTAAGATTTTGAAAAGCCTTCATCATCCAAACATTGTTGGTTATCGTGCTTTTACTGAAGCCAATGAT
GGCAGTCTGTGTCTTGCTATGGAATATGGAGGTGAAAAGTCTCTAAATGACTTAATAGAAGAACGATATAAAGCC
AGCCAAGATCCTTTTCCAGCAGCCATAATTTTAAAAGTTGCTTTGAATATGGCAAGAGGGTTAAAGTATCTGCAC
CAAGAAAAGAAACTGCTTCATGGAGACATAAAGTCTTCAAATGTTGTAATTAAAGGCGATTTTGAAACAATTAAA
ATCTGTGATGTAGGAGTCTCTCTACCACTGGATGAAAATATGACTGTGACTGACCCTGAGGCTTGTTACATTGGC
ACAGAGCCATGGAAACCCAAAGAAGCTGTGGAGGAGAATGGTGTTATTACTGACAAGGCAGACATATTTGCCTTT
GGCCTTACTTTGTGGGAAATGATGACTTTATCGATTCCACACATTAATCTTTCAAATGATGATGATGATGAAGAT
AAAACTTTTGATGAAAGTGATTTTGATGATGAAGCATACTATGCAGCGTTGGGAACTAGGCCACCTATTAATATG
GAAGAACTGGATGAATCATACCAGAAAGTAATTGAACTCTTCTCTGTATGCACTAATGAAGACCCTAAAGATCGT
CCTTCTGCTGCACACATTGTTGAAGCTCTGGAAACAGATGTCTAGTGATCATCTCAGCTGAAGTGTGGCTTGCGT
AAATAACTGTTTATTCCAAAATATTTACATAGTTACTATCAGTAGTTATTAGACTCTAAAATTGGCATATTTGAG
GACCATAGTTTCTTGTTAACATATGGATAACTATTTCTAATATGAAATATGCTTATATTGGCTATAAGCACTTGG
AATTGTACTGGGTTTTCTGTAAAGTTTTAGAAACTAGCTACATAAGTACTTTGATACTGCTCATGCTGACTTAAA
ACACTAGCAGTAAAACGCTGTAAACTGTAACATTAAATTGAATGACCATTACTTTTATTAATGATCTTTCTTAAA
TATTCTATATTTTAATGGATCTACTGACATTAGCACTTTGTACAGTACAAAATAAAGTCTACATTTGTTTAAAAC
ACTGAACCTTTTGCTGATGTGTTTATCAAATGATAACTGGAAGCTGAGGAGAATATGCCTCAAAAAGAGTAGCTC
CTTGGATACTTCAGACTCTGGTTACAGATTGTCTTGATCTCTTGGATCTCCTCAGATCTTTGGTTTTTGCTTTAA
TTTATTAAATGTATTTTCCATACTGAGTTTAAAATTTATTAATTTGTACCTTAAGCATTTCCCAGCTGTGTAAAA
ACAATAAAACTCAAATAGGATGATAAAGAATAAAGGACACTTTGGGTACCAGAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3622

MEGISNFKTPSKLSEKKKSVLCSTPTINIPASPFMQKLGFGTGVNVYLMKRSPRGLSHSPWAVKKINPICNDHYR
SVYQKRLMDEAKILKSLHHPNIVGYRAFTEANDGSLCLAMEYGGEKSLNDLIEERYKASQDPFPAAIILKVALNM
ARGLKYLHQEKKLLHGDIKSSNVVIKGDFETIKICDVGVSLPLDENMTVTDPEACYIGTEPWKPKEAVEENGVIT
DKADIFAFGLTLWEMMTLSIPHINLSNDDDDEDKTFDESDFDDEAYYAALGTRPPINMEELDESYQKVIELFSVC
TNEDPKDRPSAAHIVEALETDV

FIGURE 3623

ATGCTGCTGAAAGAGTACCGGATCTGCATGCCGCTCACCGTAGACGAGTACAAAATTGGACAGCTGTACATGATC
AGCAAACACAGCCATGAACAGAGTGACCGGGGAGAAGGGGTGGAGGTCGTCCAGAATGAGCCCTTTGAGGACCCT
CACCATGGCAATGGGCAGTTCACCGAGAAGCGGGTGTATCTCAACAGCAAACTGCCTAGTTGGGCTAGAGCTGTT
GTCCCCAAAATATTTTATGTGACAGAGAAGGCTTGGAACTATTATCCCTACACAATTACAGAATACACATGTTCC
TTTCTGCCGAAATTCTCCATTCATATAGAAACCAAGTATGAGGACAACAAAGGAAGCAATGACACCATTTTCGAC
AGTGAAGCCAAAGACGTGGAGAGAGAAGTTTGCTTTATTGATATTGCCTGCGATGAAATTCCAGAGCGCTACTAC
AAAGAATCCGAGGATCCTAAGCACTTCAAGTCAGAGAAGACAGGACGGGGACAGTTGAGGGAAGGCTGGAGAGAT
AGTCATCAGCCTATCATGTGCTCCTACAAGCTGGTGACTGTGAAGTCTGAGGTCTGGGGGCTTCAGACCAGAGTG
GAACAATTTGTACACAAGGTGGTCCGAGACATTCTGCTGATTGGACATAGACAGGCTTTTGCATGGGTTGATGAG
TGGTATGACATGACAATGGATGAAGTCCGAGAATTTGAACGAGCCACTCAGGAAGCCACCAACAAGAAAATCGGC
ATTTTCCCACCTGCAATTTCTATCTCCAGCATCCCCCTGCTGCCTTCTTCCGTCCGCAGTGCGCCTTCTAGTGCT
CCATCCACCCCTCTCTCCACAGACGCACCCGAATTTCTGTCCGTTCCCAAAGATCGGCCCCGGAAAAAGTCTGCC
CCAGAAACTCTCACACTTCCAGACCCTGAGAAAAAAGCCACCCTGAATTTACCCGGCATGCACTCTTCAGATAAG
CCATGTCGGCCCAAATCTGAGTAACTTTATATAAATATCTCATGGGGTTTTATATTTTCATTTGTTGTTGTTGTT
TTTTTTTAAGAATCTTCTGATAGAGAAAAAGACTGCTTTGTCACTCAAACATGTTCCTTCGACCTTTCAGTGTG

FIGURE 3624

MLLKEYRICMPLTVDEYKIGQLYMISKHSHEQSDRGEGVEVVQNEPFEDPHHGNGQFTEKRVYLNSKLPSWARAV
VPKIFYVTEKAWNYYPYTITEYTCSFLPKFSIHIETKYEDNKGSNDTIFDSEAKDVEREVCFIDIACDEIPERYY
KESEDPKHFKSEKTGRGQLREGWRDSHQPIMCSYKLVTVKSEVWGLQTRVEQFVHKVVRDILLIGHRQAFAWVDE
WYDMTMDEVREFERATQEATNKKIGIFPPAISISSIPLLPSSVRSAPSSAPSTPLSTDAPEFLSVPKDRPRKKSA
PETLTLPDPEKKATLNLPGMHSSDKPCRPKSE

FIGURE 3625A

TTTTGGCTGCCTCTGTCGGTCTGTTCAGTTACCACGTGAACCGCCGACGGAGACCCGTAGTGGGGGAGGCGGCGG
CAGCGTTAAGTGAGAAAGGAAAAAAGACAACGAGGAAAAAGGAGGTGTCCGGGTAGGGCAACGCGGCGACACCCG
AGGCCTGGTGGTGGCGGCGGATCGAGATATTCAAGGCTGAAGCAGCTACGGAACGGCAGCGGCGGCGGTCGGACA
AACTGACTGACCGAGCCGGGTGGTGGCGGGAGCAGCGGGAGCAGCCGGAACG**ATG**CCGGCCGTGAGCCTCCCGCC
CAAGGAGAATGCGCTCTTCAAGCGGATCTTGAGGTGTTATGAACATAAACAGTATAGAAATGGATTGAAATTCTG
TAAACAAATACTTTCTAATCCCAAATTTGCAGAGCATGGAGAAACCTTGGCTATGAAAGGATTAACATTGAACTG
TTTGGGGAAAAAGGAAGAAGCTTATGAATTGGTTCGTAGAGGTTTGAGAAATGACTTGAAGAGTCATGTGTGTTG
GCACGTTTATGGCCTTCTTCAGAGGTCAGACAAGAAGTATGATGAAGCCATTAAGTGTTACAGAAATGCACTAAA
ATGGGATAAAGACAATCTTCAAATCTTAAGGGACCTTTCCTTACTACAGATTCAAATGCGAGATCTTGAGGGTTA
CAGGGAAACGAGGTATCAGTTACTTCAGCTTCGACCTGCGCAGAGAGCATCATGGATTGGTTATGCTATTGCTTA
CCATTTATTAGAAGATTATGAAATGGCAGCAAAGATTTTAGAAGAATTTAGGAAAACACAACAGACATCCCCTGA
CAAGGTGGATTATGAATATAGTGAACTACTCTTATATCAGAATCAAGTTCTTCGGGAAGCAGGTCTCTATAGAGA
AGCTTTGGAACATCTTTGTACCTATGAAAAGCAGATTTGTGATAAACTTGCTGTAGAAGAAACCAAAGGGGAACT
TCTGTTGCAACTATGTCGTTTGGAAGATGCTGCAGATGTTTATAGAGGATTGCAAGAGAGAAATCCTGAAAACTG
GGCCTATTACAAAGGCTTGGAAAAAGCACTCAAGCCAGCTAATATGTTAGAACGGCTAAAAATTTATGAGGAAGC
CTGGACTAAATATCCCAGGGGACTGGTGCCAAGAAGGCTGCCGTTAAACTTTTTATCTGGTGAGAAGTTTAAAGA
ATGTTTGGATAAGTTCCTAAGGATGAATTTCAGCAAGGGTTGCCCACCAGTCTTCAATACTTTAAGATCATTATA
CAAAGACAAAGAAAAGGTGGCAATCATAGAAGAGTTAGTAGTAGGTTATGAAACCTCTCTAAAAAGCTGCCGGTT
ATTTAACCCCAATGATGATGGAAAGGAGGAACCACCAACCACATTACTTTGGGTCCAGTACTACTTGGCACAACA
TTATGACAAAATTGGTCAGCCATCTATTGCTTTGGAGTACATAAATACTGCTATTGAAAGTACACCTACATTAAT
AGAACTCTTTCTCGTGAAAGCTAAAATCTATAAGCATGCTGGAAATATTAAAGAAGCTGCAAGGTGGATGGATGA
GGCCCAGGCCTTGGACACAGCAGACAGATTTATCAACTCCAAATGTGCAAAATACATGCTAAAAGCCAACCTGAT
TAAAGAAGCTGAAGAAATGTGCTCAAAGTTTACAAGGGAAGGAACATCAGCGGTAGAGAATTTGAATGAAATGCA
GTGCATGTGGTTCCAAACAGAATGTGCCCAGGCTTATAAAGCAATGAATAAATTTGGTGAAGCACTTAAGAAATG
TCATGAGATTGAGAGACATTTTATAGAAATCACTGATGACCAGTTTGACTTTCATACATACTGTATGAGGAAGAT
TACCCTTAGATCATATGTGGACTTATTAAAACTAGAAGATGTACTTCGACAGCATCCATTTTACTTCAAGGCAGC
AAGAATTGCTATAGAGATCTATTTGAAGCTTCATGACAACCCCCTTACAGATGAGAATAAAGAACACGAAGCTGA
TACAGCAAACATGTCTGACAAAGAGCTAAAGAAGCTACGTAATAAACAAAGAAGAGCTCAAAAGAAAGCCCAGAT
AGAAGAAGAGAAAAAAAATGCAGAAAAAGAAAAGCAGCAGAGAAATCAGAAAAAGAAGAAGGATGATGATGATGA
GGAGATAGGAGGTCCAAAAGAAGAACTTATTCCAGAGAAACTGGCCAAGGTTGAAACTCCATTGGAAGAAGCTAT
TAAATTTTTAACACCGTTGAAGAACTTGGTGAAGAACAAGATAGAGACTCATCTTTTTGCCTTTGAGATTTACTT
TAGGAAAGAAAAGTTTCTTTTGATGCTACAATCAGTAAAGAGGGCATTTGCTATTGATTCTAGTCATCCCTGGCT
TCATGAGTGTATGATTCGTCTCTTTAATACTGCAGTGTGTGAAAGTAAAGATTTATCTGATACAGTTAGAACAGT
ATTAAAACAAGAAATGAATCGTCTTTTTGGAGCAACGAATCCAAAGAATTTTAATGAAACTTTTCTGAAAAGGAA
TTCTGATTCATTGCCACACAGATTATCAGCTGCCAAAATGGTATATTACTTAGATCCTTCTAGTCAGAAGCGAGC
TATAGAGTTGGCAACAACACTTGATGAATCTCTCACTAACAGAAACCTCCAGACATGTATGGAGGTATTGGAAGC
CTTGTATGATGGTAGCCTAGGAGACTGTAAAGAAGCTGCTGAAATTTATAGAGCAAATTGTCATAAGCTTTTCCC
TTATGCTTTGGCTTTCATGCCTCCTGGATATGAAGAGGATATGAAGATCACAGTTAATGGAGATAGTTCTGCAGA
AGCTGAAGAACTGGCCAATGAAATT**TGA**ACATCACTAAACAAGCAAATGGAATGACTTTGGACCATATCTAGTAT
ATAATATTTTTGTCACGCACCTGCTGCATTGCTCTAACTTACACAGAATGAGAGGAGTAAATGTTCTTGCCTTCA
AATAGTGTTTTACGTTTTTTATCCTGCTGAAAAAGTATATATAAAATATCTAACATTACAGGATAGAGGTTCAGT
TTCTTAAAAAATTAAAGCTGCTAAAATTGAGTGGTTAAAAAAGATACCTTATCCTATTCCTCCCCACCCACCCAT
GTTTTTAAACTAATTTATATAAAATCTGGAGGCTGTTACAGCTAACAAAGCAGGTGTGTGGCAGAAATATTACTT
TAAATTTGTCTTGTGAGATTTTACTATATCTCAGACAGCATAAATGCTGTTTTAGCACTGGATTCTTTCACTGAG
CACAAAGAGTTGTTGGGGCTTTAGCATCTGACTGATTTTGTTACGGGGTTGATTCTGACCATAGGAAGTATGCAA
TGTGAATCACTATTTACAGAGAAACCTACAACAGATGCTTGATGTTGTAGAAACTGGGACATATAGATACCAAGC
AAAATTATAAGAAACCTATAAGGTGTTCAATACGCTTGTGTTTCCAAAATTCACTGTACATGATCAGTTTGGTGT
TCTTGTACCACAGTTTTTAACTGAAGGAACCAGTTGTAACAGTCTCAATTTTAACTAAAACTTGAAGAACTAAAA

FIGURE 3625B

CAACAATGCAAACCTTTCAGCATTGTTTGGCCAAACTTGTTAAAACTGTAATGCAAGAACCAAATGCACTGTGAT
GTGGCACCAACTAATTAGCAAGCATGAATTTTTCACCCAAGAGTGAAAAAAGGAAAATCTACCATGGCTTGAAGT
TAAAGAGCAGAACTCCTGACTACCATTCTATGACTGATCAAAAGACTAATAGTTAAAAACCTCAGCAGGCCTTGT
TCACGATATGCAGAAAAAAAAGTGCTGCAGTTTAGATACCTCTGGAATTTTTCCACAGTGTCACAGGTTTGTAAT
ACTTGAAGCCCTACATTTCTAAGAATATATTTCTTGCTCAGTTGTTTCAGGCAAGCCCAAGACTTTGTAATTTTT
AAAGGGCCCAAGATTTTTTTTTTTTTTTTTTTTTTCAAATAACAGACCAGCTTCTTTTTCTTGCAGTTACAGATGT
AATTTCCTTTTTGTTGTCAAACATAAGGTACCAAATATGATGCAATAAATTGTTTTGAAAAACAGTTGTGTGAAT
ATTTCAACTAATCTGTGTTGGGCTTCTGTGAAATACACAGGTGGAAACAGAGGTGCAAGCCAGAGGCAATGTAAT
ATGCTGTAAGGCTAGTGCAGATGGGAGCTTTTTAGAAGGGGCTAAGTGCTGGTGTCAGGGAAATTCCATAATGAA
GTAGAATGCTGCTCCTGCATTAAGATTTCATTGAGGGCAAGGCTGGTGGCAGGTACTATGAATGTAATTCATAAT
TTAAAAGGAAAACTAAAAACTATTTTGATTTGGGAAAATGAGCCTTAATTTGTTAAACCTATACACTGAGAACTA
GCCTCAGGCTTAATATTCTCATTGCATTTGCAAGATCTGAGCAAATAAGATTAAGTAAAACAAATCAATTGTATA
TATAATTGACCTTTTTGTGGAACATGTAGTTTATAGAAAGTATACTCTAAAGGGAATTTGCCGAAGACCTTTTAC
TGATTGAACAGTTGTGCTACAATCAACTTTTCATAGTACATGACCTGCATTCCACATCTCAGTCTAACAGTTTAG
TAGTGATGTAAAGAGAAGTACAAACCGAACTCCAGTGCTTTGTTATGTTTTATTAACTGGCCCTGTCTCAGGAAC
ATCTTAACAGATGGCAAAAAAACAAAAACTTTTTTTCAACTCCTATGAGTGGCAACTGAAGTTCTTATTGTTGGG
AAAGAACACTAGTCCTACCTCTGCCACTAATGAGGTGTTTGGAGGAGGTACCAGCCATATAATAGGGGGTGTATG
TGTGAATTTTGTTTAAACTCTACTGTATATTGAAATGAAATTCATTTATTTGTCTTGACAATGTTCAAATGATGT
AGATTGTCTTAGAATGAATATTCATAAGTACTCAGAACTCTTAAGATGCAGATGCCACCCGTGAGGAGCTAAATT
CCTAATGTGTATTGTATTCCAACCCAATTTTACTGGAACTATTGAATAAATCTTTTATTTTCTTTCAGGTTTACT
TGATAGTGGATACATTGGTGTCAGAGGACCTTGACTGGGTTCATTTTATGTCCAGACATCACCCCTGAAACACTG
TACTGTACTATCTTGCTCTGAGTAGTATCAACTGGATCGTCTCATATTTGCCTCATTCATCCTATTAATTTCAAA
TGATACTGTGGGGGAAAAACAGGGTTAGAAAAACAAGTGGAAAAAATGGAGTGATGTTGTAATCTAAACAAGTGC
CTTATGTTTATTGCTAAGAACTGGTGTTACCAACCCTTTTGAGAAGAAAGGGTCTCTTGACCTGTATTAACATAG
GAAAGTAAAGTTCTTTTTGTTTTTCTTTATAAGCTACTCTTGTCATTTCTCGTTGAAAAACTAAAATCTGACTAG
GTTAGTTTACTCAGCTTTAATTAGATAGTTGAGTCATATATTTTCAACATTTTTCTGTATCGTATTTATTATGCA
CAAAAATAAAGTGTGATCTCTAAT

FIGURE 3626

MPAVSLPPKENALFKRILRCYEHKQYRNGLKFCKQILSNPKFAEHGETLAMKGLTLNCLGKKEEAYELVRRGLRN
DLKSHVCWHVYGLLQRSDKKYDEAIKCYRNALKWDKDNLQILRDLSLLQIQMRDLEGYRETRYQLLQLRPAQRAS
WIGYAIAYHLLEDYEMAAKILEEFRKTQQTSPDKVDYEYSELLLYQNQVLREAGLYREALEHLCTYEKQICDKLA
VEETKGELLLQLCRLEDAADVYRGLQERNPENWAYYKGLEKALKPANMLERLKIYEEAWTKYPRGLVPRRLPLNF
LSGEKFKECLDKFLRMNFSKGCPPVFNTLRSLYKDKEKVAIIEELVVGYETSLKSCRLFNPNDDGKEEPPTTLLW
VQYYLAQHYDKIGQPSIALEYINTAIESTPTLIELFLVKAKIYKHAGNIKEAARWMDEAQALDTADRFINSKCAK
YMLKANLIKEAEEMCSKFTREGTSAVENLNEMQCMWFQTECAQAYKAMNKFGEALKKCHEIERHFIEITDDQFDF
HTYCMRKITLRSYVDLLKLEDVLRQHPFYFKAARIAIEIYLKLHDNPLTDENKEHEADTANMSDKELKKLRNKQR
RAQKKAQIEEEKKNAEKEKQQRNQKKKKDDDDEEIGGPKEELIPEKLAKVETPLEEAIKFLTPLKNLVKNKIETH
LFAFEIYFRKEKFLLMLQSVKRAFAIDSSHPWLHECMIRLFNTAVCESKDLSDTVRTVLKQEMNRLFGATNPKNF
NETFLKRNSDSLPHRLSAAKMVYYLDPSSQKRAIELATTLDESLTNRNLQTCMEVLEALYDGSLGDCKEAAEIYR
ANCHKLFPYALAFMPPGYEEDMKITVNGDSSAEAEELANEI

FIGURE 3627

AGAGTCGGGTAGACGGCAGCGGGAGCGGTGGCGTCTCCCCGCCTTCCCTCCCTCCCGGGCCTGGGCGCCCAGCCG
GACAGGTGAGCGGCAGCCAGGTGAGCGCGCCCACCTGCGCCTCTCCGCGCGGCCCGCCCTCCCCGGCGCCGGGCT
CCTCTCCGCGCCCCTGTCGGCGCGGAACCCTGGCCTCGTCCGCGGCCCAGCTCCCTGGAGCCTCGCATCAGCGGG
GGCGCCCCCGCGAGCTGCGCTCTCCCCGGCCGGAGCGCTCCTCCTCCAGCCCCCAGCCCGCAGGGTACTTTGCCC
TCGGAGCGAAGGAGGCTCCAGAACTGGTAGAGCCGGGCCATCGGGCTGGGCACCTCCCCGCGGCGCCCGCAGCGC
GGAGTCCACTGACCGGCTCAAAGGT**ATG**GCGTTGACGGTGGATGTGGCCGGGCCAGCGCCCTGGGGCTTCCGTAT
CACAGGGGGCAGGGATTTCCACACGCCCATCATGGTGACTAAGGTGGCCGAGCGGGGCAAAGCCAAGGACGCTGA
CCTCCGGCCTGGAGACATAATCGTGGCCATCAACGGGGAAAGCGCGGAGGGCATGCTGCATGCCGAGGCCCAGAG
CAAGATCCGCCAGAGCCCCTCGCCCCTGCGGCTGCAGCTGGACCGGTCTCAGGCTACGTCTCCAGGGCAGACCAA
TGGGGACAGCTCCTTGGAAGTGCTGGCGACTCGCTTCCAGGGCTCCGTGAGGACATACACTGAGAGTCAGTCCTC
CTTAAGGTCCTCCTACTCCAGCCCAACCTCCCTCAGCCCGAGGGCCGGCAGCCCCTTCTCACCACCACCCTCTAG
CAGCTCCCTCACTGGAGAGGCGGCCATCAGCCGCAGCTTCCAGAGTCTGGCATGTTCCCCGGGCCTCCCCGCTGC
TGACCGCCTGTCCTACTCAGGCCGCCCTGGAAGCCGACAGGCCGGCCTCGGCCGCGCTGGCGACTCGGCGGTGCT
GGTGCTGCCGCCTTCCCCGGGCCCTCGTTCCTCCAGGCCCAGCATGGACTCGGAAGGGGGAAGCCTCCTCCTGGA
CGAGGACTCGGAAGTCTTCAAGATGCTGCAGGAAAATCGCGAGGGACGGGCGGCCCCCCGACAGTCCAGCTCCTT
TCGGCTCTTGCAGGAAGCCCTGGAGGCTGAGGAGAGAGGTGGCACGCCAGCCTTCTTGCCCAGCTCACTGAGCCC
CCAGTCCTCCCTGCCCGCCTCCAGGGCCCTGGCCACCCCTCCCAAGCTCCACACTTGTGAGAAGTGCAGTACCAG
CATCGCGAACCAGGCTGTGCGCATCCAGGAGGGCCGGTACCGCCACCCCGGCTGCTACACCTGTGCCGACTGTGG
GCTGAACCTGAAGATGCGCGGGCACTTCTGGGTGGGTGACGAGCTGTACTGTGAGAAGCATGCCCGCCAGCGCTA
CTCCGCACCTGCCACCCTCAGCTCTCGGGCC**TGA**GCCCGCCATGCCCTCAGCCTGCCTCACTGCTGGGCCAGGGT
CATGCCTATATAAGTTGGCATGGCAGGGACAATGGTGGGCAGTTGCTCTTACATGAGCTAAGTTTGGAGACCTGA
GGCCCCTTTGTCCTCGCTGGGTGGGCCAAGGTCTGGGACCTGTCTTGGACTGTGGGAGACTCACCCTCACCTTGC
CAGGCCTCTCCCCTGCAGGACTGGCATTGCACTAGTCTGAGGTGGCCACTGCCTTTGATCAACCTTTGTGTGCGA
GGGTCTAAGTAGGGTCGAACACAGAAGTGGGAAGGAGAGGGGTGGGCCAGGGGCTAATGGTGTCACTGTGTAAAG
TTTTTGACATACTAGCTCTATAAATATATGAATATGGACAAAAT

FIGURE 3628

MALTVDVAGPAPWGFRITGGRDFHTPIMVTKVAERGKAKDADLRPGDIIVAINGESAEGMLHAEAQSKIRQSPSP
LRLQLDRSQATSPGQTNGDSSLEVLATRFQGSVRTYTESQSSLRSSYSSPTSLSPRAGSPFSPPPSSSSLTGEAA
ISRSFQSLACSPGLPAADRLSYSGRPGSRQAGLGRAGDSAVLVLPPSPGPRSSRPSMDSEGGSLLLDEDSEVFKM
LQENREGRAAPRQSSSFRLLQEALEAEERGGTPAFLPSSLSPQSSLPASRALATPPKLHTCEKCSTSIANQAVRI
QEGRYRHPGCYTCADCGLNLKMRGHFWVGDELYCEKHARQRYSAPATLSSRA

FIGURE 3629

AGGCCTGCGCTTCCGCTCGCGAGGGGGAGGCGGGACCCGCGAGGAGTCGCGCGGAGGACGGAGGCCACGATACCT
GCGTGGCTGGGGCTGCGGGCTCCGGGGTCACCACCCTGGGCGACCCGGAGGTGGCGCCTCCGCCGGCCGCAGCTG
GAGAGGAGCGTGTCCCCAAGCCGGGGGAGCAGGACTTGAGCAGGCACGCGGGGTCACCGCCGGGCAGCGTGGAGG
AGCCATCTCCTGGAGGAGAAAACTCACCTGGTGGCGGAGGCTCCCCTTGTTTGTCCTCCCGGAGCCTGGCGTGGG
GTTCTTCTGCGGGAAGAGAGAGTGCGCGCGGAGATAGCAGTGTGGAAACACGCGAGGAGTCGGAGGGCACGGGCG
GCCAGCGCTCAGCCTGCGCC**ATG**GGTGGTCCCGGGACCAAGAGCGGGGAGCCTTTGTGTCCTCCGTTACTGTGTA
ATCAGGACAAAGAAACCTTGACTCTGCTCATTCAGGTGCCTCGGATCCAGCCGCAAAGTCTTCAAGGAGATTTGA
ATCCCCTCTGGTACAAATTACGCTTCTCCGCACAAGACTTAGTTTATTCCTTCTTTTTGCAATTTGCTCCAGAGA
ATAAATTGAGTACCACAGAACCTGTGATTAGCATTTCTTCAAACAATGCAGTGATAGAACTGGCAAAATCTCCAG
AGAGCCATGGACATTGGAGAGAGTGGTATTATGGTGTAAACAACGATTCTTTGGAGGAAAGGTTATTTGTCAATG
AAGAAAATGTTAATGAGTTTCTTGAAGAGGTCCTGAGCTCTCCATTCAAACAGTCTATGTCCTTGACCCCACCAT
TAATTGAAGTTCTTCAAGTTACTGATAATAAGATTCAAATTAATGCAAAGTTGCAAGAATGTAGTAACTCTGATC
AGCTACAAGGAAAGGAGGAAAGAGTAAATGAAGAAAGTCATCTAACTGAAAAGGAATATATAGAACATTGTAACA
CCCCTACAACTGATTCTGATTCATCTATAGCAGTTAAAGCACTACAAATAGATAGCTTTGGTTTAGTTACATGCT
TTCAACAAGAGTCTCTTGATGTTTCTCAAATGATACTTGGAAAATCTCAGCAACCTGAGTCAAAAATGCAATCTG
AATTTATAAAAGAAAAAAGTGCTACTTGTTCAAATGAGGAAAAAGATAACTTAAACGAGTCAGTAATAACTGAAG
AGAAAGAAACAGATGGAGATCACCTATCTTCATTACTGAACAAAACTACGGTTCACAATATACCTGGATTCGACA
GCATAAAAGAAACCAATATGCAGGATGGTAGTGTGCAGGTCATTAAAGATCATGTGACCAATTGTGCATTCAGTT
TTCAGAATTCTTTGCTATATGATTTGGAT**TAA**TTCTATATAATTTTGGACTTTTAAATATTAAGGTTAAAAAATA
CCTGTATCTAAAATTGATTCTGTTAACTGTTGTCTTAAAACTAAAGGTATTAAAGTATAAAATTAAAATTTGCAA
TTTTTTTAAAAAAATTGCAATTTTGATTCTCATGGGGGAAATTGGAGATAATTTTTTTTTTTTTTGCCTCTGGAG
TTTAAAGTTTCCTTATGGAGATAAGTTTTGTGATTCCTGTAATAGATGTGTATGTTTTCTATTTGAGAGTTAAAA
CATTTGAGAGTTAAAACATTTAGTTTTAATACAACCTATGTATATATACTTCTGTGTTAAATTTTGCTTTGTCAT
TAATAAAATTTAAAAATATTCACT

FIGURE 3630

MGGPGTKSGEPLCPPLLCNQDKETLTLLIQVPRIQPQSLQGDLNPLWYKLRFSAQDLVYSFFLQFAPENKLSTTE
PVISISSNNAVIELAKSPESHGHWREWYYGVNNDSLEERLFVNEENVNEFLEEVLSSPFKQSMSLTPPLIEVLQV
TDNKIQINAKLQECSNSDQLQGKEERVNEESHLTEKEYIEHCNTPTTDSDSSIAVKALQIDSFGLVTCFQQESLD
VSQMILGKSQQPESKMQSEFIKEKSATCSNEEKDNLNESVITEEKETDGDHLSSLLNKTTVHNIPGFDSIKETNM
QDGSVQVIKDHVTNCAFSFQNSLLYDLD

FIGURE 3631

AGTTCCCAGCTGTCCGAAAGGTCTTCGGAACTTCGGCTCTAAAGCGTTCCTCAGCGCCATCCGCCCGGAAACACG
AGCGACAGAGAAAAGGTCCGCGAGGCCGGCAGACTCCAGAGTGGCTGGGTCCGAGCGCGGGGCGGGTTGCCGAAG
GGCCTCGGCCTGGGCTGCGTGCTGGAGAGCGGGGACGGGGCCGACTCACCAGAGGCTGCAGCAACAGGTCCACTT
TGCTCTCCAGTCTCTTTCTCCGACACCGCTGAGGCGGTTTCCCACCGACTTCCTTTCCATACAGCACCGGCAGGC
ACCGGGGTGAAGGGTCATAAAA**ATG**GCGCTGGCCGCTCGTTTGCTACCCCAGTTCCTGCACTCTCGGTCGCTGCC
CTGCGGGGCCGTCCGACTCCGGACTCCTGCTGTGGCCGAGGTGAGGCTGCCGTCGGCCACACTTTGCTACTTCTG
CCGCTGTCGCCTCGGCTTGGGAGCGGCGTTATTTCCACGAAGCGCTAGGGCCTTGGCAGCCTCGGCGCTACCTGC
CCAGGGCTCCCGGTGGCCAGTGCTCAGCAGCCCGGGACTCCCCGCAGCCTTCGCTTCTTTCCCTGCCTGCCCTCA
GCGCAGCTACAGCACGGAGGAGAAGCCCCAGCAGCACCAGAAAACCAAGATGATCGTCCTGGGATTCTCCAACCC
CATCAACTGGGTTAGGACTCGAATTAAGGCCTTCCTTATCTGGGCCTATTTCGACAAAGAGTTCAGCATCACAGA
GTTCTCCGAGGGAGCGAAGCAGGCTTTTGCTCATGTATCCAAGTTGCTGTCACAGTGTAAATTTGATCTGTTGGA
AGAACTTGTGGCCAAAGAGGTGCTACATGCATTGAAAGAAAAGGTTACTTCACTACCTGACAACCATAAAAATGC
CCTTGCTGCTAACATAGATGAAATTGTATTTACATCAACAGGAGGCATCTCCATTTACTATGATGAGAAAGGAAG
GAAGTTTGTTAACATCCTGATGTGCTTTTGGTATCTAACCAGTGCCAACATCCCCAGTGAAACTTTAAGAGGAGC
CAGTGTATTCCAGGTTAAGTTGGGGAATCAGAATGTGGAAACTAAACAACTTCTTAGTGCAAGCTATGAGTTTCA
GAGGGAGTTCACACAAGGAGTAAAGCCTGACTGGACCATTGCACGGATTGAACACTCAAAATTATTAGAA**TAA**TT
TTCTTGGAAAAATCAGCTTATGGACTTTAGCAGTTGCTGTGAAAAACTAAGGAAGAAAAATTTTGGGGTCATTTG
ATCTTCACTTAATCTAAGTCTGTGAATTACTTTTATATTATTTTGAAATACTCCTTGCAGTATATTGGCATGATA
CAGTAAAAGCATTTTCCACAGATTGTTATCACCTTCTTTAAAAGAAGTCAAAATTTAAAAAATACAATAGCACGT
TGTTGGTGTCATATTCAATAACATTTCCAATGCTACATATAATTTTATAGACATAATAAAGAAGGTATTGAAAAA
ACTAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3632

MALAARLLPQFLHSRSLPCGAVRLRTPAVAEVRLPSATLCYFCRCRLGLGAALFPRSARALAASALPAQGSRWPV
LSSPGLPAAFASFPACPQRSYSTEEKPQQHQKTKMIVLGFSNPINWVRTRIKAFLIWAYFDKEFSITEFSEGAKQ
AFAHVSKLLSQCKFDLLEELVAKEVLHALKEKVTSLPDNHKNALAANIDEIVFTSTGGISIYYDEKGRKFVNILM
CFWYLTSANIPSETLRGASVFQVKLGNQNVETKQLLSASYEFQREFTQGVKPDWTIARIEHSKLLE

FIGURE 3633

CCCCAAATCTGCAGATGTGAATCCCAAGTACCAGTGTGATCTGGTGTCTAAAAACGGGAATGATGTATATCGCTA
TCCCAGTCCACTTCATGCTGTGGCTGTGCAGAGCCCAATGTTTCTCCTTTGTCTGACGGGCAACCCTCTGAGGGA
AGAGGACAGGCTTGGAAACCATGCCAGTGACATTTGCGGTGGATCTGAGCTAGATGCCGTCAAAACAGACAGTTC
CTTACCGTCCCCAAGCAGTCTGTGGTCTGCTTCCCATCCTTCATCCAGCAAGAAAATGGATGGCTACATTCTGAG
CCTGGTCCAGAAAAAAACACACCCTGTAAGGACCAACAAACCAAGAACCAGCGTGAACGCTGACCCCACGAAAGG
GCTTCTGAGGAACGGGAGCGTTTGTGTCAGAGCCCCGGGCGGTGTCTCACAGGGCAACAGTGTGAACCTTAAGAA
TTCGAAACAGGCGTGTCTGCCCTCTGGCGGGATACCTTCTCTGAACAATGGGACATTCTCCCCACCGAAGCAGTG
GTCGAAAGAATCAAAGGCCGAACAAGCCGAAAGCAAGAGGGTGCCCCTGCCAGAGGGCTGCCCCTCAGGCGCTGC
CTCCGACCTTCAGAGTAAGCACCTGCCAAAAACGGCCAAGCCAGCCTCGCAAGAACATGTTCGGTGTTCCGCCAT
TGGGACAGGGGAGTCCCCTAAGGAAAGCGCTCAGCTCTCAGGGGCCTCTCCAAAAGAGAGTCCTAGCAGAGGCCC
TGCCCCGCCGCAGGAGAACAAAGTTGTACAGCCCCTGAAAAAGATGTCACAGAAAAACAGCCTGCAGGGCGTCCC
CCCGGCCACTCCTCCCCTGCTGTCTACAGCTTTCCCCGTGGAAGAGAGGCCTGCCTTGGATTTCAAGAGCGAGGG
CTCTTCCCAAAGCCTGGAGGAAGCGCACCTGGTCAAGGCCCAGTTTATCCCGGGGCAGCAGCCCAGTGTCAGGCT
CCACCGGGGCCACAGGAACATGGGCGTCGTGAAGAACTCCAGCCTGAAGCACCGCGGCCCAGCCCTCCAGGGGCT
GGAGAACGGCTTGCCCACCGTCAGGGAGAAAACGCGGGCCGGGAGCAAGAAGTGTCGCTTCCCAGATGACTTGGA
TACAAATAAGAAACTCAAGAAAGCCTCCTCCAAGGGGAGGAAGAGTGGGGGCGGGCCCGAGGCTGGTGTTCCCGG
CAGGCCCGCGGGCGGGGGCCACAGGGCGGGGAGCAGGGCGCATGGCCACGGACGGGAGGCGGTGGTGGCCAAACC
TAAGCACAAGCGAACTGACTACCGGCGGTGGAAGTCCTCGGCCGAGATTTCCTACGAAGAGGCCCTGAGGAGGGC
CCGGCGCGGTCGCCGGGAGAATGTGGGGCTGTACCCCGCGCCTGTGCCTCTGCCCTACGCCAGCCCCTACGCCTA
CGTGGCTAGCGACTCCGAGTACTCGGCCGAGTGCGAGTCCCTGTTCCACTCCACCGTGGTGGACACCAGTGAGGA
CGAGCAGAGCAATTACACCACCAACTGCTTCGGGGACAGCGAGTCGAGTGTGAGCGAGGGCGAGTTCGTGGGGGA
GAGCACAACCACCAGCGACTCTGAAGAAAGCGGGGGCTTAATTTGGTCCCAGTTTGTCCAGACTCTGCCCATTCA
AACGGTAACGGCCCCAGACCTTCACAACCACCCCGCAAAAACCTTTGTCAAAATTAAGGCCTCACATAACCTCAA
GAAGAAGATCCTCCGCTTTCGGTCTGGCTCTTTGAAACTGATGACGACGGTTTGAGTGACATCATTGGTGTAGAA
AGTTTGTGTGTTTTTTTTTCTTCTCCCTAGTTGCCAAAATTAAAAAGGTGGTGTTTTCATTTTTGTATAATACTT
TAATGGAATGCTTTTTAAAAAAATATAAAACCAAGGTAAATTATTGTTTCATCTTCACGTATGGATGCTAGTGCC
TTTAATGGAAGGTAAAGAATGTTTTGCTAGTTAGAAGTACATATTGAGGTTTTAATGGTGGTGATAGTGAGTTTT
GTGGCACCAGCTGTTTTTTATTTTAAACTTTCTGAGCATCCGGCAAGGTACAGGTTTTGATGTTCAAGTTTTATT
GGGATAAGATCTTTTGATCCCAAGGTCAGGTGGATGGAATTTTTGGATTTATATTTGTTCCTTGAGTCTTCAGGG
CAGTGTCTCCATGAGGGTTTTCCTGTTGAGGGGCACCACATACAATAGTGTGAAGTAGGTATGAGGGGCAGTCAT
TGTATTCTATAGTTTTTTTATGTAGTCTACATTTCTCAGATGTATCCCCATTCGGTTTTATTCTCAGAACTGTTA
CTAGACTCATGACTTGGAGGCCAAACCTTAAATCCAGAGATAGCAGCCTCGATAGGGACCTTAAAAGGATTCACA
AAAACTTTTGCCACACTTGGTGCCTAGGCCCTGTTCCTAATAACCCCTTCTAGGGCCGTTTATCCAACATTTAGA
TGCCTTCTTTTCCCTCCCTAATTTGTAGCCAGTCCAACCTTTCATTCCTTGGAGGATTTAGTTTTGGGATAAAAT
TTTGGTCCTTGGGCACAGAGACATTCACTATTAATGAAGTAACCCTTGGGCATGACTCCAATCCCAGAATTGCTC
ACTGAGCGCTATGCCACCGAAGCGTTGACCTGAACATATTAGTGCAATCCAGTCCAGATTGGACCTTTGATCCTA
TGTGGAAGGGCTGTTTTTTTAAGAAAAAATTTTTGGTAAACAGTATTGTGTAAAATTGCTTTTTGTATACCAATAT
ATGCATGTTTTGTGCATGAGTAGTACTTGTGTTGATACTCCTGTTGATGTTAAATTACTATATAATATAAACAGT
ATGTGTTTTTATATATCATTGTGTAAATTTAATATAACATATGCAGTAATAAACCATTTGTTTTACTGCTGTTAA
GTTTGTTATTTGGGTATAAAACCAGATGTTTACACCTGTAAAAAAAAAAAAAAAAA

FIGURE 3634

MFLLCLTGNPLREEDRLGNHASDICGGSELDAVKTDSSLPSPSSLWSASHPSSSKKMDGYILSLVQKKTHPVRTN
KPRTSVNADPTKGLLRNGSVCVRAPGGVSQGNSVNLKNSKQACLPSGGIPSLNNGTFSPPKQWSKESKAEQAESK
RVPLPEGCPSGAASDLQSKHLPKTAKPASQEHVRCSAIGTGESPKESAQLSGASPKESPSRGPAPPQENKVVQPL
KKMSQKNSLQGVPPATPPLLSTAFPVEERPALDFKSEGSSQSLEEAHLVKAQFIPGQQPSVRLHRGHRNMGVVKN
SSLKHRGPALQGLENGLPTVREKTRAGSKKCRFPDDLDTNKKLKKASSKGRKSGGGPEAGVPGRPAGGGHRAGSR
AHGHGREAVVAKPKHKRTDYRRWKSSAEISYEEALRRARRGRRENVGLYPAPVPLPYASPYAYVASDSEYSAECE
SLFHSTVVDTSEDEQSNYTTNCFGDSESSVSEGEFVGESTTTSDSEESGGLIWSQFVQTLPIQTVTAPDLHNHPA
KTFVKIKASHNLKKKILRFRSGSLKLMTTV

FIGURE 3635

CGCGGGGCCAGGGCGGCGGCCCCCAGGGAGTTGGCAGGATGGCAGAGGGCAAGGCAGGCGGCGCGGCCGGCCTCT
TCGCCAAGCAGGTGCAGAAGAAGTTTAGCAGGGCCCAGGAGAAGGTGCTGCAGAAATTGGGGAAAGCTGTAGAAA
CCAAAGATGAACGATTTGAACAAAGCGCTAACAACTTCTACCAACAACAGGCAGAAGGCCACAAGCTGTACAAGG
ACCTGAAGAACTTCCTTAGTGCAGTCAAAGTGATGCATGAAAGTTCAAAAAGAGTGTCAGAAACCCTGCAGGAGA
TCTACAGCAGCGAGTGGGATGGTCATGAGGAGCTGAAGGCCATCGTATGGAATAATGATCTCCTTTGGGAAGACT
ACGAGGAGAAACTGGCTGACCAGGCTGTAAGGACCATGGAAATCTATGTTGCCCAGTTCAGTGAAATTAAGGAGA
GAATTGCCAAGCGGGGTCGGAAACTCGTGGACTATGACAGTGCCCGACACCACCTGGAGGCAGTGCAGAATGCCA
AGAAGAAAGATGAGGCCAAGACTGCCAAGGCAGAGGAAGAGTTCAACAAAGCCCAGACTGTGTTTGAAGATCTGA
ACCAAGAACTACTAGAGGAGCTGCCTATTCTTTATAATAGTCGTATTGGCTGCTATGTGACCATCTTCCAAAACA
TTTCCAACTTGAGGGATGTCTTCTACAGGGAAATGAGCAAGCTGAACCACAATCTCTACGAGGTGATGAGCAAAC
TGGAGAAGCAACATTCCAATAAAGTCTTTGTGGTGAAGGGACTGTCAAGCAGCAGCAGGCGCTCTTTAGTCATTT
CTCCCCCAGTTCGAACAGCTACAGTCTCCAGTCCTCTTACCTCACCTACTAGTCCCTCTACACTTTCCTTGAAGA
GTGAGAGTGAATCTGTCTCAGCAACTGAAGATCTGGCACCTGATGCAGCCCAAGGGGAAGACAATTCTGAGATCA
AGGAGCTCTTAGAAGAGGAGGAAATAGAGAAGGAAGGATCTGAAGCAAGCTCCTCTGAGGAAGATGAGCCTCTAC
CAGCCTGCAATGGCCCCGCCCAGGCCCAGCCCTCTCCTACCACTGAAAGGGCCAAGTCCCAGGAGGAAGTTCTCC
CCAGCTCCACAACTCCATCACCAGGCGGAGCCCTGAGCCCTTCAGGGCAGCCTTCATCATCTGCCACAGAAGTAG
TCCTCCGAACCCGCACCGCAAGTGAAGGATCTGAACAACCAAAGAAGAGAGCCTCTATCCAGAGGACCTCAGCAC
CCCCTAGTAGGCCTCCTCCACCCAGAGCCACTGCAAGCCCCAGGCCCTCCTCAGGGAACATACCTTCCAGCCCTA
CAGCCTCTGGAGGGGGTTCACCCACCAGCCCTAGGGCCTCCTTGGGGACTGGGACTGCAAGTCCTAGGACCTCCC
TAGAGGTCTCTCCTAATCCAGAACCACCAGAGAAGCCAGTAAGAACTCCTGAGGCCAAAGAAAATGAAAACATCC
ACAATCAGAACCCTGAAGAACTTTGTACTTCCCCCACCTTAATGACATCTCAGGTTGCTTCAGAGCCTGGAGAGG
CAAAGAAGATGGAAGACAAGGAAAAGGATAATAAGCTTATCTCAGCTGACTCCTCGGAGGGCCAAGACCAGCTTC
AAGTCTCCATGGTACCAGAAAACAACAACCTCACAGCACCTGAACCTCAAGAAGAGGTATCCACAAGTGAAAATC
CACAACTCTGAAGAGAAACTACCAAGACTCCTCCTGCCCCAAACCTCGCCAGAGAAGCTCTTCAACCAGAGGGTA
TAGGTCAGAGGGATATAAGAGCCAGCATCCATCCCTGGGTTCTCAGTAGGAATGCTGGTGCTGTCTAAAGACCTG
GCATTAATGGAGGCGGAGGAGCAGCCTTACGGGAGGGATGGAGGGAGGCAGGCTGGGGAGAAGAGAACATTAGAC
TCAGGGAATATTTAATTCTGGTTTTAGCATTATTAGAATAAGACTTTATACATTAACTAAAGTGGAGCTTTAATC
ACTATAAAAAGCAAAAGTATCTATAGACACAGACACTTGCCTATACAGAGACATAACCACACACACTCAGAGGAT
AGTGAACAAATCTGTCTTTGACTTACGACCCATTTTGCAAGACTTAAAGCCGGAAGAACACATTTTCAGATTGTT
AAATAAAGTCTGATTCTGACTAAAAAAAAAA

FIGURE 3636

MAEGKAGGAAGLFAKQVQKKFSRAQEKVLQKLGKAVETKDERFEQSANNFYQQQAEGHKLYKDLKNFLSAVKVMH
ESSKRVSETLQEIYSSEWDGHEELKAIVWNNDLLWEDYEEKLADQAVRTMEIYVAQFSEIKERIAKRGRKLVDYD
SARHHLEAVQNAKKKDEAKTAKAEEEFNKAQTVFEDLNQELLEELPILYNSRIGCYVTIFQNISNLRDVFYREMS
KLNHNLYEVMSKLEKQHSNKVFVVKGLSSSSRRSLVISPPVRTATVSSPLTSPTSPSTLSLKSESESVSATEDLA
PDAAQGEDNSEIKELLEEEEIEKEGSEASSSEEDEPLPACNGPAQAQPSPTTERAKSQEEVLPSSTTPSPGGALS
PSGQPSSSATEVVLRTRTASEGSEQPKKRASIQRTSAPPSRPPPPRATASPRPSSGNIPSSPTASGGGSPTSPRA
SLGTGTASPRTSLEVSPNPEPPEKPVRTPEAKENENIHNQNPEELCTSPTLMTSQVASEPGEAKKMEDKEKDNKL
ISADSSEGQDQLQVSMVPENNNLTAPEPQEEVSTSENPQL

FIGURE 3637

GAAGAAGTGCTAAGTTTTATAAGCACGATGGAAACCCTGCCTGACACTATGGCAGCAGGAGCTTTACAACGAATT
TGTGAAGTGGAAAAAAAGGATGGTGATCAAGGGCTGCCAAAAGAAATACTGGAGAATAGCATCTTTCAAGCTTTA
TGCTTTCAGTTTGAAAAGGAGCCCTCACAGCTGTCAAACACTAGTTTAGTGACTGCTTTGCAAGCTCTGATTCTG
TTGCATGTGGATCCTCAAAGTAGCCTGTTGCTGAACCTGGTGGCAGAATGCCAAAATCGTCTCAGAAAAGGTGGC
ATGGAAGTTCGCAATCTTTGTATTCTTGGGGAAAGTCTGATTACACTGCACAGTTCAGGTTGTGTGACACTAGAA
CTCATTATAAATCAACTTCAAGGTGAAAAATTGGAAACATTTACCCCGGAGGATATTGTGGCCCTTTATAGAATC
TTGCAGGCATGTACTGAAAAAGTGGATGAACACCAAACATTTTTAAATAAGATAAACAACTTTTCCCTATCAATA
GTTTCCAACCTGAGTCCTAAATTGATTAGCCAAATGCTCACTGCCCTGGTGGTTCTTGATCAAAGTCAAGCATTT
CCTCTGATTATAAAATTGGGCAAATATGTCGTGAGGCATGTCCCACATTTCACTAACGAGGAGCTTAGGAGAGTC
TTGGAGGCGTTCATATATTTTGGGCACCATGACACATTTTTTACAAAAGCCCTAGAGCATCGTGTAGCTGCGGTG
TGCCTCACGTTGGATCCTGAAGTTGTCTGCAGGGTCATGGAGTACTGCAGTAGAGAACTGATTCTTTCAAAACCC
ATCCTCAACGCAGTGGCAGAAACTTTTGTTTGCCAAACAGAAAAATTTTCACCTCGTCAGATTTCTGCGTTAATG
GAACCATTTGGGAAACTCAATTATTTGCCACCAAATGCCTCTGCTTTATTTAGAAAGCTGGAAAACGTGCTATTC
ACTCATTTCAATTATTTTCCACCCAAATCATTATTGAAACTTCTTCATTCATGTTCACTTAATGAATGCCATCCA
GTCAACTTTCTGGCAAAAATATTCAAGCCTCTTTTCCTTCAACGGCTGCAAGGTAAAGAATCTCATTTGGACACA
TTGAGTCGGGCACAACTGACCCAACTTTTCTTAGCCTCAGTCCTGGAATGCCCTTTCTATAAGGGTCCAAAACTC
CTTCCTAAATATCAAGTGAAGTCATTTCTTACCCCATGCTGTTCCCTGGAGACCCCTGTGGATTCTCAGCTTTAT
AGATATGTGAAGATTGGGCTGACTAACCTTTTAGGAGCAAGATTATATTTTGCTCCAAAAGTGTTGACACCCTAT
TGTTATACAATAGATGTTGAAATTAAATTAGATGAAGAAGGATTTGTATTGCCATCCACAGCTAATGAAGATATC
CATAAAAGGATAGCACTGTGTATTGATGGTCCAAAAAGGTTTTGCTCCAATAGCAAACACTTACTGGGGAAAGAA
GCTATTAAACAAAGACACCTACAGTTACTCGGTTATCAAGTTGTTCAGATCCCCTATCATGAGATTGGGATGCTA
AAATCAAGACGTGAATTGGTGGAATATTTACAAAGAAAACTGTTTTCTCAAAACACTGTTCATTGGTTGCAAGAA
TGAATACTGACTTCAGAACTCAAACAATGGAAGAACTTGCATTTTTATGGAACTCAGTATTAAAAGAAAAATATA
ATGTGAATTAGCCACTTTGCAGAATATGTTCTAGACTGGTGATCTGAAAGCATCTGTAGTTTTCCTTATACTATG
TATACATTTATTGTGGTAAAATTTAAAATTAATTTTAATTTAATACTAGTGTCATAGATACTTTTTGTACATCAA
ACAATTGATCATGTGCTGTAAAGGAATTCAATGAATAAATGTTATTTTTAAGTAAAAAAAAAAAAAAA

FIGURE 3638

METLPDTMAAGALQRICEVEKKDGDQGLPKEILENSIFQALCFQFEKEPSQLSNTSLVTALQALILLHVDPQSSL
LLNLVAECQNRLRKGGMEVRNLCILGESLITLHSSGCVTLELIINQLQGEKLETFTPEDIVALYRILQACTEKVD
EHQTFLNKINNFSLSIVSNLSPKLISQMLTALVVLDQSQAFPLIIKLGKYVVRHVPHFTNEELRRVLEAFIYFGH
HDTFFTKALEHRVAAVCLTLDPEVVCRVMEYCSRELILSKPILNAVAETFVCQTEKFSPRQISALMEPFGKLNYL
PPNASALFRKLENVLFTHFNYFPPKSLLKLLHSCSLNECHPVNFLAKIFKPLFLQRLQGKESHLDTLSRAQLTQL
FLASVLECPFYKGPKLLPKYQVKSFLTPCCSLETPVDSQLYRYVKIGLTNLLGARLYFAPKVLTPYCYTIDVEIK
LDEEGFVLPSTANEDIHKRIALCIDGPKRFCSNSKHLLGKEAIKQRHLQLLGYQVVQIPYHEIGMLKSRRELVEY
LQRKLFSQNTVHWLQE

FIGURE 3639

TTTCACCTCAGCAAGGCCAGGGGATCTGCACGTTGTGTTAGACATGGCTAAAGTAGCTGATACCATCCTGTTCCT
CCTTGATCCACTAGAAGGCTGGGACAGCACCGGTGATTACTGTCTTTCCTGCCTCTTTGCTCAGGGCCTTCCGAC
CTATACACTAGCTGTCCAGGGGATTTCTGGCCTCCCACTGAAGAAACAAATAGATACCAGGAAGAAGCTAAGTAA
AGCAGTGGAGAAGCGCTTTCCGCATGACAAACTCCTCTTGTTAGACACTCAACAGGAGGCAGGGATGCTGCTTAG
GCAGTTGGCTAACCAGAAGCAACAGCATCTTGCTTTTCGAGATCGGCGGGCCTACCTATTTGCCCATGCTGTTGA
TTTTGTTCCTAGTGAAGAGAATAACTTGGTGGGCACCTTGAAAATTTCAGGCTATGTTCGAGGGCAGACTCTGAA
TGTCAATAGGTTGCTGCATATCGTTGGATATGGTGATTTCCAGATGAAACAGATAGATGCCCCCGGAGACCCTTT
CCCTTTAAATCCTAGAGGAATTAAACCCCAAAAGGACCCAGACATGGCAATGGAGATTTGTGCTACGGATGCTGT
AGATGATATGGAAGAAGGTCTTAAAGTCCTAATGAAGGCAGACCCTTGTAGACAGGAATCCTTGCAAGCAGAGGT
TATCCCAGATCCAATGGAGGGAGAGCAAACCTGGCCCACTGAGGAGGAGCTGAGCGAGGCAAAGGATTTCTTGAA
GGAAAGTTCTAAGGTGGTAAAGAAGGTCCCCAAAGGAACATCCAGTTACCAAGCTGAATGGATTTTGGATGGTGG
CAGCCAAAGTGGTGGGGAAGGAGATGAATATGAATATGATGATATGGAACATGAGGATTTTATGGAGGAGGAATC
TCAGGATGAGAGTAGTGAAGAAGAGGAAGAATATGAAACTATGACTATTGGGGAGTCTGTGCATGATGATCTGTA
TGATAAGAAAGTAGATGAAGAAGCTGAGGCAAAAATGTTGGAGAAATATAAACAAGAAAGACTGGAAGAGATGTT
TCCAGATGAAGTGGACACGCCCCGTGATGTGGCTGCTCGAATTCGATTTCAGAAATACAGAGGCCTTAAGAGCTT
CCGGACATCTCCATGGGATCCTAAGGAAAACCTTCCTCAAGATTATGCTCGAATATTTCAGTTTCAGAACTTTAC
TAACACTAGGAAAAGCATCTTTAAAGAGGTTGAAGAAAAAGAGGTTGAAGGAGCTGAGGTTGGCTGGTATGTCAC
ACTTCATGTCTCTGAAGTCCCCGTCTCAGTGGTCGAGTGCTTCAGGCAAGGAACACCCTTGATTGCATTTTCTTT
ACTACCTCATGAACAGAAGATGTCAGTATTGAATATGGTGGTGAGGCGTGACCCTGGCAACACTGAACCTGTGAA
AGCCAAGGAGGAGCTCATATTTCACTGTGGATTCAGGCGCTTCCGAGCCTCACCTTTATTCTCTCAGCACACTGC
AGCGGACAAACATAAATTGCAGAGATTCCTGACTGCTGACATGGCCCTGGTGGCGACAGTCTATGCGCCAATCAC
TTTTCCTCCTGCATCTGTGCTGCTTTTCAAGCAGAAAAGCAATGGAATGCACAGCCTCATTGCTACAGGCCATCT
TATGTCAGTAGATCCAGACAGAATGGTCATCAAGAGAGTTGTTCTGAGTGGTCATCCTTTCAAAATTTTTACTAA
GATGGCAGTAGTACGTTACATGTTCTTCAACAGAGAGGATGTGCTGTGGTTTAAACCAGTGGAACTGAGAACGAA
GTGGGGCCGGAGAGGACATATCAAGGAACCTTTAGGTACCCATGGCCACATGAAATGCAGCTTTGATGGGAAGCT
AAAATCTCAAGACACAGTACTGATGAACCTGTATAAACGAGTCTTCCCCAAATGGACTTATGATCCATATGTACC
AGAACCAGTACCCTGGCTGAAAAGTGAGATTTCTTCAACAGTGCCTCAAGGGGGCATGGAGTAATGGATTCAAAG
AGATTCTGTCCTACCGGTGCCAGTCAGTACTCCAGGGATGGGAGGCACAAGTTGTGATTGGGCAAAGTTTATTTT
CTATGTCAGCCTGTCAGTCCACTGCCCCATTTTGCAAGACTTTTTTTTAGCCTTGACAAAATGTCTCAGTTAAGT
ATAAAAGTTTTTCCACTACTTAGTCCAAAAAAAACTATTAAATCTTAATGAAAT

FIGURE 3640

MAKVADTILFLLDPLEGWDSTGDYCLSCLFAQGLPTYTLAVQGISGLPLKKQIDTRKKLSKAVEKRFPHDKLLLL
DTQQEAGMLLRQLANQKQQHLAFRDRRAYLFAHAVDFVPSEENNLVGTLKISGYVRGQTLNVNRLLHIVGYGDFQ
MKQIDAPGDPFPLNPRGIKPQKDPDMAMEICATDAVDDMEEGLKVLMKADPCRQESLQAEVIPDPMEGEQTWPTE
EELSEAKDFLKESSKVVKKVPKGTSSYQAEWILDGGSQSGGEGDEYEYDDMEHEDFMEEESQDESSEEEEEYETM
TIGESVHDDLYDKKVDEEAEAKMLEKYKQERLEEMFPDEVDTPRDVAARIRFQKYRGLKSFRTSPWDPKENLPQD
YARIFQFQNFTNTRKSIFKEVEEKEVEGAEVGWYVTLHVSEVPVSVVECFRQGTPLIAFSLLPHEQKMSVLNMVV
RRDPGNTEPVKAKEELIFHCGFRRFRASPLFSQHTAADKHKLQRFLTADMALVATVYAPITFPPASVLLFKQKSN
GMHSLIATGHLMSVDPDRMVIKRVVLSGHPFKIFTKMAVVRYMFFNREDVLWFKPVELRTKWGRRGHIKEPLGTH
GHMKCSFDGKLKSQDTVLMNLYKRVFPKWTYDPYVPEPVPWLKSEISSTVPQGGME

FIGURE 3641

GCGCGCCGGCCTGAGAGCCCTGTGGACAACCTCGTCATTGTCAGGCACAGAGCGGTAGACCCTGCTTCTCTAAGT
GGGCAGCGGACAGCGGCACGCACATTTCACCTGTCCCGCAGACAACAGCACCATCTGCTTGGGAGAACCCTCTCC
CTTCTCTGAGAAAGAAAG**ATG**TCGAATGGGTATTCCACAGACGAGAATTTCCGCTATCTCATCTCGTGCTTCAGG
GCCAGGGTGAAAATGTACATCCAGGTGGAGCCTGTGCTGGACTACCTGACCTTTCTGCCTGCAGAGGTGAAGGAG
CAGATTCAGAGGACAGTCGCCACCTCCGGGAACATGCAGGCAGTTGAACTGCTGCTGAGCACCTTGGAGAAGGGA
GTCTGGCACCTTGGTTGGACTCGGGAATTCGTGGAGGCCCTCCGGAGAACCGGCAGCCCTCTGGCCGCCCGCTAC
ATGAACCCTGAGCTCACGGACTTGCCCTCTCCATCGTTTGAGAACGCTCATGATGAATATCTCCAACTGCTGAAC
CTCCTTCAGCCCACTCTGGTGGACAAGCTTCTAGTTAGAGACGTCTTGGATAAGTGCATGGAGGAGGAACTGTTG
ACAATTGAAGACAGAAACCGGATTGCTGCTGCAGAAAACAATGGAAATGAATCAGGTGTAAGAGAGCTACTAAAA
AGGATTGTGCAGAAAGAAAACTGGTTCTCTGCATTTCTGAATGTTCTTCGTCAAACAGGAAACAATGAACTTGTC
CAAGAGTTAACAGGCTCTGATTGCTCAGAAAGCAATGCAGAGATTGAGAATTTATCACAAGTTGATGGTCCTCAA
GTGGAAGAGCAACTTCTTTCAACCACAGTTCAGCCAAATCTGGAGAAGGAGGTCTGGGGCATGGAGAATAACTCA
TCAGAATCATCTTTTGCAGATTCTTCTGTAGTTTCAGAATCAGACACAAGTTTGGCAGAAGGAAGTGTCAGCTGC
TTAGATGAAAGTCTTGGACATAACAGCAACATGGGCAGTGATTCAGGCACCATGGGAAGTGATTCAGATGAAGAG
AATGTGGCAGCAAGAGCATCCCCGGAGCCAGAACTCCAGCTCAGGCCTTACCAAATGGAAGTTGCCCAGCCAGCC
TTGGAAGGGAAGAATATCATCATCTGCCTCCCTACAGGGAGTGGAAAAACCAGAGTGGCTGTTTACATTGCCAAG
GATCACTTAGACAAGAAGAAAAAAGCATCTGAGCCTGGAAAAGTTATAGTTCTTGTCAATAAGGTACTGCTAGTT
GAACAGCTCTTCCGCAAGGAGTTCCAACCATTTTTGAAGAAATGGTATCGTGTTATTGGATTAAGTGGTGATACC
CAACTGAAAATATCATTTCCAGAAGTTGTCAAGTCCTGTGATATTATTATCAGTACAGCTCAAATCCTTGAAAAC
TCCCTCTTAAACTTGGAAAATGGAGAAGATGCTGGTGTTCAATTGTCAGACTTTTCCCTCATTATCATTGATGAA
TGTCATCACACCAACAAAGAAGCAGTGTATAATAACATCATGAGGCATTATTTGATGCAGAAGTTGAAAAACAAT
AGACTCAAGAAAGAAAACAAACCAGTGATTCCCCTTCCTCAGATACTGGGACTAACAGCTTCACCTGGTGTTGGA
GGGGCCACGAAGCAAGCCAAAGCTGAAGAACACATTTTAAAACTATGTGCCAATCTTGATGCATTTACTATTAAA
ACTGTTAAAGAAAACCTTGATCAACTGAAAAACCAAATACAGGAGCCATGCAAGAAGTTTGCCATTGCAGATGCA
ACCAGAGAAGATCCATTTAAAGAGAAACTTCTAGAAATAATGACAAGGATTCAAACTTATTGTCAAATGAGTCCA
ATGTCAGATTTTGGAACTCAACCCTATGAACAATGGGCCATTCAAATGGAAAAAAAAGCTGCAAAAAAAGGAAAT
CGCAAAGAACGTGTTTGTGCAGAACATTTGAGGAAGTACAATGAGGCCCTACAAATTAATGACACAATTCGAATG
ATAGATGCGTATACTCATCTTGAAACTTTCTATAATGAAGAGAAAGATAAGAAGTTTGCAGTCATAGAAGATGAT
AGTGATGAGGGTGGTGATGATGAGTATTGTGATGGTGATGAAGATGAGGATGATTTAAAGAAACCTTTGAAACTG
GATGAAACAGATAGATTTCTCATGACTTTATTTTTTGAAAACAATAAAATGTTGAAAAGGCTGGCTGAAAACCCA
GAATATGAAAATGAAAAGCTGACCAAATTAAGAAATACCATAATGGAGCAATATACTAGGACTGAGGAATCAGCA
CGAGGAATAATCTTTACAAAAACACGACAGAGTGCATATGCGCTTTCCCAGTGGATTACTGAAAATGAAAAATTT
GCTGAAGTAGGAGTCAAAGCCCACCATCTGATTGGAGCTGGACACAGCAGTGAGTTCAAACCCATGACACAGAAT
GAACAAAAAGAAGTCATTAGTAAATTTCGCACTGGAAAAATCAATCTGCTTATCGCTACCACAGTGGCAGAAGAA
GGTCTGGATATTAAAGAATGTAACATTGTTATCCGTTATGGTCTCGTCACCAATGAAATAGCCATGGTCCAGGCC
CGTGGTCGAGCCAGAGCTGATGAGAGCACCTACGTCCTGGTTGCTCACAGTGGTTCAGGAGTTATCGAACATGAG
ACAGTTAATGATTTCCGAGAGAAGATGATGTATAAAGCTATACATTGTGTTCAAAATATGAAACCAGAGGAGTAT
GCTCATAAGATTTTGGAATTACAGATGCAAAGTATAATGGAAAAGAAAATGAAAACCAAGAGAAATATTGCCAAG
CATTACAAGAATAACCCATCACTAATAACTTTCCTTTGCAAAAACTGCAGTGTGCTAGCCTGTTCTGGGGAAGAT
ATCCATGTAATTGAGAAAATGCATCACGTCAATATGACCCCAGAATTCAAGGAACTTTACATTGTAAGAGAAAAC
AAAGCACTGCAAAAGAAGTGTGCCGACTATCAAATAAATGGTGAAATCATCTGCAAATGTGGCCAGGCTTGGGGA
ACAATGATGGTGCACAAAGGCTTAGATTTGCCTTGTCTCAAAATAAGGAATTTTGTAGTGGTTTTCAAAAATAAT
TCAACAAAGAAACAATACAAAAAGTGGGTAGAATTACCTATCACATTTCCCAATCTTGACTATTCAGAATGCTGT
TTATTTAGTGATGAGGAT**TAG**CACTTGATTGAAGATTCTTTTAAAATACTATCAGTTAAACATTTAATATGATTA
TGATTAATGTATTCATTATGCTACAGAACTGACATAAGAATCAATAAAATGATTGTTTTACTCTGAAAAAAAAAA
AAAAA

FIGURE 3642

MSNGYSTDENFRYLISCFRARVKMYIQVEPVLDYLTFLPAEVKEQIQRTVATSGNMQAVELLLSTLEKGVWHLGW
TREFVEALRRTGSPLAARYMNPELTDLPSPSFENAHDEYLQLLNLLQPTLVDKLLVRDVLDKCMEEELLTIEDRN
RIAAAENNGNESGVRELLKRIVQKENWFSAFLNVLRQTGNNELVQELTGSDCSESNAEIENLSQVDGPQVEEQLL
STTVQPNLEKEVWGMENNSSESSFADSSVVSESDTSLAEGSVSCLDESLGHNSNMGSDSGTMGSDSDEENVAARA
SPEPELQLRPYQMEVAQPALEGKNIIICLPTGSGKTRVAVYIAKDHLDKKKKASEPGKVIVLVNKVLLVEQLFRK
EFQPFLKKWYRVIGLSGDTQLKISFPEVVKSCDIIISTAQILENSLLNLENGEDAGVQLSDFSLIIIDECHHTNK
EAVYNNIMRHYLMQKLKNNRLKKENKPVIPLPQILGLTASPGVGGATKQAKAEEHILKLCANLDAFTIKTVKENL
DQLKNQIQEPCKKFAIADATREDPFKEKLLEIMTRIQTYCQMSPMSDFGTQPYEQWAIQMEKKAAKKGNRKERVC
AEHLRKYNEALQINDTIRMIDAYTHLETFYNEEKDKKFAVIEDDSDEGGDDEYCDGDEDEDDLKKPLKLDETDRF
LMTLFFENNKMLKRLAENPEYENEKLTKLRNTIMEQYTRTEESARGIIFTKTRQSAYALSQWITENEKFAEVGVK
AHHLIGAGHSSEFKPMTQNEQKEVISKFRTGKINLLIATTVAEEGLDIKECNIVIRYGLVTNEIAMVQARGRARA
DESTYVLVAHSGSGVIEHETVNDFREKMMYKAIHCVQNMKPEEYAHKILELQMQSIMEKKMKTKRNIAKHYKNNP
SLITFLCKNCSVLACSGEDIHVIEKMHHVNMTPEFKELYIVRENKALQKKCADYQINGEIICKCGQAWGTMMVHK
GLDLPCLKIRNFVVVFKNNSTKKQYKKWVELPITFPNLDYSECCLFSDED

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FIGURE 3643

CGCCCGGGCAGGTTAGAATTCAGCGACCGCTTAATTCTAGGCTCAGTCCCGACGTGGAACTCAGCAGCGGAGGCT
GGACGCTTGCATGGCGCTTGAGAGATTCCATCGTGCCTGGCTCACATAAGCGCTTCCTGGAAGTGAAGTCGTGCT
GTCCTGAACGCGGGCCAGGCAGCTGCGGCCTGGGGGTTTTGGAGTGATCACGA**ATG**AGCAAGGCGTTTGGGCTCC
TGAGGCAAATCTGTCAGTCCATCCTGGCTGAGTCCTCGCAGTCCCCGGCAGATCTTGAAGAAAAGAAGGAAGAAG
ACAGCAACATGAAGAGAGAGCAGCCCAGAGAGCGTCCCAGGGCCTGGGACTACCCTCATGGCCTGGTTGGTTTAC
ACAACATTGGACAGACCTGCTGCCTTAACTCCTTGATTCAGGTGTTCGTAATGAATGTGGACTTCACCAGGATAT
TGAAGAGGATCACGGTGCCCAGGGGAGCTGACGAGCAGAGGAGAAGCGTCCCTTTCCAGATGCTTCTGCTGCTGG
AGAAGATGCAGGACAGCCGGCAGAAAGCAGTGCGGCCCCTGGAGCTGGCCTACTGCCTGCAGAAGTGCAACGTGC
CCTTGTTTGTCCAACATGATGCTGCCCAACTGTACCTCAAACTCTGGAACCTGATTAAGGACCAGATCACTGATG
TGCACTTGGTGGAGAGACTGCAGGCCCTGTATACGATCCGGGTGAAGGACTCCTTGATTTGCGTTGACTGTGCCA
TGGAGAGTAGCAGAAACAGCAGCATGCTCACCCTCCCACTTTCTCTTTTTGATGTGGACTCAAAGCCCCTGAAGA
CACTGGAGGACGCCCTGCACTGCTTCTTCCAGCCCAGGGAGTTATCAAGCAAAAGCAAGTGCTTCTGTGAGAACT
GTGGGAAGAAGACCCGTGGGAAACAGGTCTTGAAGCTGACCCATTTGCCCCAGACCCTGACAATCCACCTCATGC
GATTCTCCATCAGGAATTCACAGACGAGAAAGATCTGCCACTCCCTGTACTTCCCCCAGAGCTTGGATTTCAGCC
AGATCCTTCCAATGAAGCGAGAGTCTTGTGATGCTGAGGAGCAGTCTGGAGGGCAGTATGAGCTTTTTGCTGTGA
TTGCGCACGTGGGAATGGCAGACTCCGGTCATTACTGTGTCTACATCCGGAATGCTGTGGATGGAAAATGGTCTT
GCTTCAATGACTCCAATATTTGCTTGGTGTCCTGGGAAGACATCCAGTGTACCTACGGAAATCCTAACTACCACT
GGCAGGAAACTGCATATCTTCTGGTTTACATGAAGATGGAGTGC**TAA**TGGAAATGCCCAAAACCTTCAGAGATTG
ACACGCTGTCATTTTCCATTTCCGTTCCTGGATCTACGGAGTCTTCTAAGAGATTTTGCAATGAGGAGAAGCATT
GTTTTCAAACTATATAACTGACCTTATTTATAATTAGGGATATTATCAAAATATGTAACCATGAGGCCCCTCAGG
TCCTGATCAGTCAGAATGGATGCTTTCACCAGCAGACCCGGCCATGTGGCTGCTCGGTCCTGGGTGCTCGCTGCT
GTGCAAGACATTAGCCCTTTAGTTATGAGCCTGTGGGAACTTCAGGGGTTCCCAGTGGGGAGAGCAGTGGCAGTG
GGAGGCATCTGGGGGCCAAAGGTCAGTGGCAGGGGGTATTTCAGTATTATACAACTGCTGTGACCAGACTTGTAT
ACTGGCTGAATATCAGTGCTGTTTGTAATTTTTCACTTTGAGAACCAACATTAATTCCATATGAATCAAGTGTTT
TGTAACTGCTATTCATTTATTCAGCAAATATTTATTGAGCATCTCTTCTCCATAAGATAGTGTGATAAACACGGT
CATGAATAAAGTTATTTTCCCCGAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3644

MSKAFGLLRQICQSILAESSQSPADLEEKKEEDSNMKREQPRERPRAWDYPHGLVGLHNIGQTCCLNSLIQVFVM
NVDFTRILKRITVPRGADEQRRSVPFQMLLLLEKMQDSRQKAVRPLELAYCLQKCNVPLFVQHDAAQLYLKLWNL
IKDQITDVHLVERLQALYTIRVKDSLICVDCAMESSRNSSMLTLPLSLFDVDSKPLKTLEDALHCFFQPRELSSK
SKCFCENCGKKTRGKQVLKLTHLPQTLTIHLMRFSIRNSQTRKICHSLYFPQSLDFSQILPMKRESCDAEEQSGG
QYELFAVIAHVGMADSGHYCVYIRNAVDGKWSCFNDSNICLVSWEDIQCTYGNPNYHWQETAYLLVYMKMEC

FIGURE 3645

ATCCCAACTGCGCCTGAGACCTTGTTTCACCTCCTGATGTGCTGGGTGTGGTTAGGCCTCGAGCCGGGAGCTATT
TGCCTCCCAGGAGGAAGCCAGGGCAGGGTTCCGCGGGGAATGGCGGTGAGGGAGCCACTCGGGACGCGGAGGCCC
TAAAATGAAGAAGCTTCGGCCTGAGGCTTCGGGAGCGGCGAGCAGTGTCTCCGTTGCTTCCTGTGCCTTGGCCTT
CCAGCCATGTGGTACCTGCTAGGGAGCAGTGGTCCCAAAGTGACGTGAGAGGCTGTACGCTGTTGTGAAAATGAC
CAAGAAGAAGGCTTCACAAGTCACGAGATGGCAGTTTTGGAGCCAGAAGTGCTCTCCGTGCACACTACCTGGAGG
ACAAGAGGAAGTAACCTCAAGAATAGAATTCCTTTTGGGGAAGAAAGAGCTGGCCTTCAGGAAAAGCATCCCGGA
GGAGGAAGAAGAAGTGTTATACGTCCTAAAGTAAGGTTTCAGGCCAGCATCCTTCAGAAAAAGCATCCCCGAGGA
GGAAGACGAATCGTTAAACATCTTAGGTCAGCTTTACCAGTGAGGAAACCGACACTGTGAGCTCTAGCCTCTCGG
AATTTGTCTTCTTCAGTGGAAACCCCGAGAAGACTGATCAGTTCTTCAGTTCTAAAACA**ATG**GCCCAGGGTTTGG
TGACGTTCGCCGACGTAGCCATAGACTTTTCTCAGGAGGAGTGGGCCTGTCTGAACTCTGCTCAGAGGGACCTGT
ACTGGGACGTGATGCTGGAGAACTACAGTAACTTGGTCTCACTGGATTTGGAGTCAGCATATGAAAATAAGAGTT
TACCTACAAAAAAAAACATTCATGAAATAAGGGCTTCCAAAAGGAATTCAGATAGAAGAAGTAAATCCCTTGGCC
GTAACTGGATATGTGAAGGTACGCTTGAAAGACCACAGCGCTCCAGAGGGAGGTATGTCAATCAGATGATCATCA
ATTATGTCAAAAGGCCTGCTACTAGAGAAGGCACCCCTCCTAGAACACATCAGAGACATCATAAGGAGAATTCCT
TTGAATGTAAGGACTGTGGGAAGGCCTTTAGTCGTGGCTATCAACTTAGTCAACATCAGAAAATCCATACTGGTG
AGAAACCTTATGAATGTAAAGAATGTAAGAAGGCCTTCCGTTGGGGCAATCAGCTTACTCAACATCAAAAAATTC
ATACTGGGGAGAAGCCCTACGAATGTAAAGACTGTGGGAAGGCTTTTCGATGGGGCTCAAGCCTCGTTATTCATA
AGAGGATTCATACTGGTGAAAAACCCTATGAATGTAAAGACTGTGGAAAGGCCTTTCGGCGTGGTGATGAGCTCA
CTCAGCACCAGAGATTCCACACTGGGGAGAAAGACTACGAATGCAAAGACTGTGGGAAGACCTTTAGCCGTGTGT
ATAAACTTATTCAGCACAAGAGAATTCATAGTGGGGAGAAGCCTTACGAGTGTAAAGACTGTGGGAAGGCTTTTA
TTTGTGGTTCAAGCCTCATTCAGCATAAAAGAATTCACACAGGTGAGAAACCCTATGAATGTCAAGAATGTGGGA
AGGCCTTTACTCGAGTCAATTACCTTACTCAGCATCAGAAGATCCACACCGGTGAGAAGCCTCACGAATGTAAGG
AGTGTGGGAAGGCCTTTCGCTGGGGTTCGAGCCTCGTTAAGCACGAGAGGATACATACGGGCGAGAAGCCGTACA
AGTGCACAGAATGTGGGAAGGCCTTCAATTGTGGCTATCACCTCACTCAGCACGAGAGAATCCACACAGGCGAAA
CCCCGTATAAATGTAAGGAGTGTGGGAAGGCTTTCATTTATGGATCGAGCCTCGTGAAACATGAGAGAATTCATA
CCGGGGTGAAACCCTATGGGTGTACAGAATGTGGGAAGAGCTTTAGTCACGGCCATCAGCTTACACAACATCAGA
AAACGCACAGTGGGGCGAAATCCTACGAATGTAAGGAGTGCGGGAAGGCATGTAACCACCTAAACCATCTCCGAG
AACATCAGAGGATCCACAACAGT**TGA**AGAGCCTTTTGAACGCAGTAGCCCGCTCGTATCTATGGTTTCGCTTTCC
ACAGTTTGTTACCTGCAGTCAACTGCAGTTCAAAAATATTAAATGGAAAATTCCAGAAATAAAGAATTTTAAGTC
TCAAAAAAAAAAAAAAAAAAA

FIGURE 3646

MAQGLVTFADVAIDFSQEEWACLNSAQRDLYWDVMLENYSNLVSLDLESAYENKSLPTKKNIHEIRASKRNSDRR
SKSLGRNWICEGTLERPQRSRGRYVNQMIINYVKRPATREGTPPRTHQRHHKENSFECKDCGKAFSRGYQLSQHQ
KIHTGEKPYECKECKKAFRWGNQLTQHQKIHTGEKPYECKDCGKAFRWGSSLVIHKRIHTGEKPYECKDCGKAFR
RGDELTQHQRFHTGEKDYECKDCGKTFSRVYKLIQHKRIHSGEKPYECKDCGKAFICGSSLIQHKRIHTGEKPYE
CQECGKAFTRVNYLTQHQKIHTGEKPHECKECGKAFRWGSSLVKHERIHTGEKPYKCTECGKAFNCGYHLTQHER
IHTGETPYKCKECGKAFIYGSSLVKHERIHTGVKPYGCTECGKSFSHGHQLTQHQKTHSGAKSYECKECGKACNH
LNHLREHQRIHNS

FIGURE 3647

GGCGGCGGCGGCGGCGGCGAAGAACTGTTCCTTCCACCTCTTCAGCCCCGGCAGGACGGGGGCGGCCGCCGCGAA
CCCGGGGCGGGGACAGCACGCAGCCTCGAGGCGCGCACCCCCGCCCGGCAGCGGCCCCGACACCCGGGGCGAGCG
GGAAAACGGCAACGGCGGCGGCGGCGGCGGCGGCGGGGGAAGGATGCAGGGGAAGAAGCCGGGCGGTTCGTCGGG
CGGCGGCCGGAGCGGCGAGCTGCAGGGGGACGAGGCGCAGAGGAACAAGAAAAAGAAAAAGAAGGTGTCCTGCTT
TTCCAACATCAAGATCTTCCTGGTGTCCGAGTGCGCCCTGATGCTGGCGCAGGGCACGGTGGGCGCCTACCTGGT
GAGCGTCCTGACCACCCTGGAGCGTAGGTTCAACCTGCAGAGCGCTGACGTGGGTGTGATCGCTAGCAGCTTCGA
GATCGGGAACCTGGCGCTCATCCTCTTCGTGAGCTACTTCGGGGCACGCGGGCACCGGCCGCGCCTGATCGGCTG
CGGCGGCATCGTCATGGCGCTGGGCGCGCTGCTGTCGGCGCTGCCCGAGTTCCTGACCCACCAGTACAAGTACGA
GGCGGGCGAGATCCGCTGGGGCGCCGAGGGCCGCGACGTCTGCGCAGCCAACGGCTCGGGCGGCGACGAGGGGCC
CGACCCCGACCTCATCTGCCGCAACCGGACGGCTACCAACATGATGTACTTGCTGCTCATTGGGGCCCAGGTGCT
CCTGGGCATCGGTGCTACCCCTGTGCAGCCCCTGGGCGTCTCCTACTACGACGACCACGTGCGGAGGAAGGACTC
CTCGCTCTATATAGGAATCCTGTTCACGATGCTGGTATTTGGACCAGCCTGCGGGTTTATCCTGGGCTCTTTCTG
TACCAAAATCTACGTGGATGCGGTCTTCATTGACACAAGTAACCTGGACATCACTCCGGACGACCCCCGCTGGAT
CGGAGCCTGGTGGGGTGGCTTTCTGCTCTGCGGTGCCTTACTCTTCTTCTCTTCCCTCTTGATGTTTGGGTTTCC
ACAGTCCCTGCCCCCGCACTCAGACCCCGCCATGGAAAGCGAGCAGGCCATGCTCTCCGAAAGAGAATACGAGAG
ACCCAAGCCCAGCAACGGGGTCCTGAGGCACCCCCTGGAGCCAGACAGCAGTGCCTCCTGTTTCCAGCAGCTGAG
AGTGATCCCGAAGGTCACCAAGCACCTGCTCTCAAACCCTGTGTTCACCTGCATCATCCTGGCCGCCTGCATGGA
GATTGCAGTGGTGGCTGGCTTCGCTGCCTTTTTGGGGAAGTACCTGGAGCAGCAGTTTAACCTCACCACCTCTTC
TGCCAACCAGCTGCTTGGGATGACTGCGATCCCGTGTGCTTGTCTGGGTATCTTCCTGGGAGGTCTTTTGGTGAA
GAAGCTCAGCCTGTCTGCCCTGGGGGCCATTCGGATGGCCATGCTCGTCAACCTGGTGTCCACTGCTTGCTACGT
CTCCTTCCTCTTCCTGGGCTGCGACACTGGCCCTGTGGCTGGGGTTACTGTTCCCTATGGAAACAGCACAGCACC
TGGCTCAGCCCTGGACCCCTACTCGCCCTGCAATAATAACTGTGAATGCCAAACCGATTCCTTCACTCCAGTGTG
TGGGGCAGATGGCATCACCTACCTGTCTGCCTGCTTTGCTGGCTGCAACAGCACGAATCTCACGGGCTGTGCGTG
CCTCACCACCGTCCCTGCTGAGAACGCAACCGTGGTTCCTGGAAAATGCCCCAGTCCTGGGTGCCAAGAGGCCTT
CCTCACTTTCCTCTGTGTGATGTGTATCTGCAGCCTGATCGGTGCCATGGCACAGACACCCTCAGTCATCATCCT
CATCAGGACAGTCAGCCCTGAACTCAAGTCTTACGCTTTGGGAGTTCTTTTTCTCCTCCTTCGTTTGTTGGGCTT
CATCCCTCCACCCCTCATCTTCGGGGCTGGCATCGACTCCACCTGCCTGTTCTGGAGCACGTTCTGTGGGGAGCA
AGGCGCCTGCGTCCTCTACGACAATGTGGTCTACCGATACCTGTATGTCAGCATCGCCATCGCGCTCAAATCCTT
CGCCTTCATCCTGTACACCACCACGTGGCAGTGCCTGAGGAAAAACTATAAACGCTACATCAAAAACCACGAGGG
CGGGCTGAGCACCAGTGAGTTCTTTGCCTCTACTCTGACCCTAGACAACCTGGGGAGGGACCCTGTGCCCGCAAA
CCAGACACATAGGACAAAGTTTATCTATAACCTGGAAGACCATGAGTGGTGTGAAAACATGGAGTCCGTTTTATA**TA**
GTGACTAAAGGAGGGCTGAACTCTGTATTAGTAATCCAAGGGTCATTTTTTTCTTAAAAAAAGAAAAAAAGGTTC
CAAAAAAAACCAAAACTCAGTACACACACACAGGCACAGATGCACACACACGCAGACAGACACACCGACTTTGTC
CTTTTTCTCAGCATCAGAGCCAGACAGGATTCAGAATAAGGAGAGAATGACATCGTGCGGCAGGGTCCTGGAGGC
CACTCGCGCGGCTGGGCCACAGAGTCTACTTTGAAGGCACCTCATGGTTTTCAGGATGCTGACAGCTGCAAGCAA
CAGGCACTGCCAAATTCAGGGAACAGTGGTGGCCAGCTTGGAGGATGGACATTTCTGGATACACATACACATACA
AAACAGAAAACATTTTTTAAAAGAAGTTTCCTAAAATAAA

FIGURE 3648

MQGKKPGGSSGGGRSGELQGDEAQRNKKKKKKVSCFSNIKIFLVSECALMLAQGTVGAYLVSVLTTLERRFNLQS
ADVGVIASSFEIGNLALILFVSYFGARGHRPRLIGCGGIVMALGALLSALPEFLTHQYKYEAGEIRWGAEGRDVC
AANGSGGDEGPDPDLICRNRTATNMMYLLLIGAQVLLGIGATPVQPLGVSYYDDHVRRKDSSLYIGILFTMLVFG
PACGFILGSFCTKIYVDAVFIDTSNLDITPDDPRWIGAWWGGFLLCGALLFFSSLLMFGFPQSLPPHSDPAMESE
QAMLSEREYERPKPSNGVLRHPLEPDSSASCFQQLRVIPKVTKHLLSNPVFTCIILAACMEIAVVAGFAAFLGKY
LEQQFNLTTSSANQLLGMTAIPCACLGIFLGGLLVKKLSLSALGAIRMAMLVNLVSTACYVSFLFLGCDTGPVAG
VTVPYGNSTAPGSALDPYSPCNNNCECQTDSFTPVCGADGITYLSACFAGCNSTNLTGCACLTTVPAENATVVPG
KCPSPGCQEAFLTFLCVMCICSLIGAMAQTPSVIILIRTVSPELKSYALGVLFLLLRLLGFIPPPLIFGAGIDST
CLFWSTFCGEQGACVLYDNVVYRYLYVSIAIALKSFAFILYTTTWQCLRKNYKRYIKNHEGGLSTSEFFASTLTL
DNLGRDPVPANQTHRTKFIYNLEDHEWCENMESVL

FIGURE 3649

AGAGAGGGGTGCAAGATCCTGATTTTTCAGGAGTTCAAGCGACAATGGCAGCCCAATACGGCAGTATGAGCTTCA
ACCCCAGCACACCAGGGGCCAGTTATGGGCCTGGAAGGCAAGAGCCCAGAAATTCCCAATTGAGAATTGTGTTAG
TGGGTAAAACCGGAGCAGGAAAAAGTGCAACAGGAAACAGCATCCTTGGCCGGAAAGTGTTTCATTCTGGCACTG
CAGCAAAATCCATTACCAAGAAGTGTGAGAAACGCAGCAGCTCATGGAAGGAAACAGAACTTGTCGTAGTTGACA
CACCAGGCATTTTCGACACAGAGGTGCCCAATGCTGAAACGTCCAAGGAGATTATTCGCTGCATTCTTCTGACCT
CCCCAGGGCCTCATGCTCTGCTTCTGGTGGTTCCACTGGGCCGTTACACTGAGGAAGAGCACAAAGCCACAGAGA
AGATCCTGAAAATGTTTGGAGAGAGGGCTAGAAGTTTCATGATTCTCATATTCACCCGGAAAGATGACTTAGGTG
ACACCAATTTGCATGACTACTTAAGGGAAGCTCCAGAAGACATTCAAGACTTGATGGACATTTTCGGTGACCGCT
ACTGTGCGTTAAACAACAAGGCAACAGGCGCTGAGCAGGAGGCCCAGAGGGCACAGTTGCTGGGCCTGATCCAGC
GCGTGGTGAGGGAGAACAAGGAAGGCTGCTACACTAATAGGATGTACCAAAGGGCGGAGGAGGAGATCCAGAAGC
AAACACAAGCAATGCAAGAACTCCACAGAGTGGAGCTGGAGAGAGAGAAAGCGCGGATAAGAGAGGAGTATGAAG
AGAAAATCAGAAAGCTGGAAGATAAAGTGGAGCAGGAAAAGAGAAAGAAGCAAATGGAGAAGAAACTAGCAGAAC
AGGAGGCTCACTATGCTGTAAGGCAGCAAAGGGCAAGAACGGAAGTGGAGAGTAAGGATGGGATACTTGAATTAA
TCATGACAGCGTTACAGATTGCTTCCTTTATTTTGTTACGTCTGTTCGCGGAAGATTAAACTTAATGAAAATCTG
TTTGTATTTTCTGCATATTCTCTGGCAACCTTGCCCCATACTTACTTATTTAGCATAGTCGAGTGCTCTAGTTTC
TGTCTCTCAGGCACTCGTAACTAAGGACCACCATTGGCCATTGGTAGATGTTTGATTGACTTAACAAGAGAGGGA
CAAATTTTCAATTTGTGAAACTCCAAAGCAGAAAGTATTGGTGCTTGCTACCTTGTGAATTCTTCCTTAGACATG
CAGAGAAAATGTATGCAAGAGACCAAAAAAGATGGCTCCAAGCTATGTCATGTTACCTGTAATAAAATCTTTTCTT
CTAGATTCTCTCTATGTTGGCAGATAATCTCCCCTTGTAGCTTCCACTCACTTATTCTTGCATTCAGAGTCACAA
TGATCATCTTACCCATGTGGTTTTTGAGAAAGAAAGATCAATTCTTTGTTTGCAGTGGGTAATCTTAGAGATGGA
GATGATTGTAGAATTATTCCTAGATGAGTGTCAATTTATTTAATTCCATTGTCATATAAGGAGTCAAATTGTTTC
TTATCATTTGTTCATTGAAGAACAGAGACCTGTCTGGAAAATCGATCTCTACAAATTCAATTAAATAATGATCCC
CAAATGCTGAAAAAGTGAAATACAGCAATTCAACAGATAATAGAGCAATGTTTAGTATATTCAGCTGTATCTGTA
GAAACTCTTTGACGAACCTCAATTTAACCAATTTGATGAATACCCAGTTCTCTTCTTTTCTAGAGAAAGATAGTT
GCAACCTCACCTCCCTCACTCAACACTTTGAATACTTATTGTTTGGCAGGTCATCCACACACTTCTGCCCCCACT
GCATTGAATTTTTTGCTTATGTTGTTTATAATAAAACTTTTCAATTATCTC

FIGURE 3650

MAAQYGSMSFNPSTPGASYGPGRQEPRNSQLRIVLVGKTGAGKSATGNSILGRKVFHSGTAAKSITKKCEKRSSS
WKETELVVVDTPGIFDTEVPNAETSKEIIRCILLTSPGPHALLLVVPLGRYTEEEHKATEKILKMFGERARSFMI
LIFTRKDDLGDTNLHDYLREAPEDIQDLMDIFGDRYCALNNKATGAEQEAQRAQLLGLIQRVVRENKEGCYTNRM
YQRAEEEIQKQTQAMQELHRVELEREKARIREEYEEKIRKLEDKVEQEKRKKQMEKKLAEQEAHYAVRQQRARTE
VESKDGILELIMTALQIASFILLRLFAED

FIGURE 3651

GTGTTTTCTGCGTGAGAGGAAAAGATGCTAGAACCACAGGAGAATGGCGTGATTGACCTACCAGATTATGAGCAT
GTAGAAGATGAAACTTTTCCTCCTTTCCCACCTCCAGCCTCTCCAGAGAGACAAGATGGTGAAGGAACTGAGCCT
GATGAAGAGTCAGGAAATGGAGCACCTGTTCCTGTACCTCCAAAGAGAACAGTTAAAAGAAATATACCCAAGCTG
GATGCTCAGAGATTAATTTCAGAGAGAGGACTTCCAGCCTTAAGGCATGTATTTGATAAGGCAAAATTCAAAGGT
AAAGGTCATGAGGCTGAAGACTTGAAGATGCTAATCAGACACATGGAGCACTGGGCACATAGGCTATTCCCTAAA
CTGCAGTTTGAGGATTTTATTGACAGAGTTGAATACCTGGGAAGTAAAAAGGAAGTTCAGACCTGTTTAAAACGA
ATTCGACTTGATCTCCCTATTTTACATGAAGATTTTGTTAGCAATAATGATGAAGTTGCGGAGAATAATGAACAT
GATGTCACTTCTACTGAATTAGATCCCTTTCTGACAAACTTATCTGAAAGTGAGATGTTTGCTTCTGAGTTAAGT
AGAAGCCTAACAGAAGAGCAACAACGAAGAATTGAGAGAAATAAACAACTGGCCTTGGAAAGAAGGCAGGCAAAG
CTGCTGAGTAATAGTCAGACCCTAGGAAATGATATGTTAATGAATACACCCAGGGCACACACGGTTGAAGAGGTT
AATACTGATGAGGATCAAAAGGAGGAGTCAAATGGATTAAACGAAGACATTCTGGACAATCCATGTAATGATGCT
ATTGCCAATACTTTAAATGAAGAGGAAACACTGCTGGACCAGTCTTTTAAAAATGTGCAACAGCAACTTGATGCT
ACATCCAGAAATATTACTGAAGCTAGATAAGTTTCCATTAAGAGAAAATGTATCTGTTAAGTCATCGTCCTGCAA
GCTTGGCGTTACTATGTATTTTTTCTTCTTGGAGTGAAAATCCTTAGATAGTAAAACTGTTATAGATTATTGTTT
AAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3652

MLEPQENGVIDLPDYEHVEDETFPPFPPPASPERQDGEGTEPDEESGNGAPVPVPPKRTVKRNIPKLDAQRLISE
RGLPALRHVFDKAKFKGKGHEAEDLKMLIRHMEHWAHRLFPKLQFEDFIDRVEYLGSKKEVQTCLKRIRLDLPIL
HEDFVSNNDEVAENNEHDVTSTELDPFLTNLSESEMFASELSRSLTEEQQRRIERNKQLALERRQAKLLSNSQTL
GNDMLMNTPRAHTVEEVNTDEDQKEESNGLNEDILDNPCNDAIANTLNEEETLLDQSFKNVQQQLDATSRNITEA
R

FIGURE 3653

GTAACGGATGGTGCGCCAACGTGAGAGGAAACCCGTGCGCGGCTGCGCTTTCCTGTCCCCAAGCCGTTCTAGACG
CGGATGAAGTGCAAAACAAACTTCTCCATAGAGGAGTTGTTGCAAAGTTCCAGTTTATACCAAACAGTAATCAGA
TTCCATTGGAAGCTAAAGATTTTGAGAGCCTTTTGTACTATATGCAACTAACTTGATTTCAAGCTTGGGAACTTT
TAAAAAAAACATTAAAGCAAAATGAAAAATGCTTTCTGAAAGCAGCTCCTTTTTGAAAGGTGTGATGCTTGGAAG
CCATTTTCTGTGCTTTGATCCACTAATGCTAAGGACACATTAGGATTGGTCATGGAAATAGAATGCACCACCATG
AGCATCATCACCTACAAGCTCCTAACAAAGAAGATATCTTGAAAATTTCAGAGGATGAGCGCATGGAGCTCAGTA
AGAGCTTTCGAGTATACTGTATTATCCTTGTAAAACCCAAAGATGTGAGTCTTTGGGCTGCAGTAAAGGAGACTT
GGACCAAACACTGTGACAAAGCAGAGTTCTTCAGTTCTGAAAATGTTAAAGAGTTTGAGTCAATTAATATGGACA
CAAATGACATGTGGTTAATGATGAGAAAAGCTTACAAATACGCCTTTGATAAGTATAGAGACCAATACAACTGGT
TCTTCCTTGCACGCCCCACTACGTTTGCTATCATTGAAAACCTAAAGTATTTTTTGTTAAAAAAGGATCCATCAC
AGCCTTTCTATCTAGGCCACACTATAAAATCTGGAGACCTTGAATATGTGGGTATGGAAGGAGGAATTGTCTTAA
GTGTAGAATCAATGAAAAGACTTAACAGCCTTCTCAATATCCCAGAAAAGTGTCCTGAACAGGGAGGGATGATTT
GGAAGATATCCGAAGATAAACAGCTAGCAGTTTGCCTGAAATATGCTGGAGTATTTGCAGAAAATGCAGAAGATG
CTGATGGAAAAGATGTATTTAATACCAAATCTGTTGGGCTTTCTATTAAAGAGGCAATGACTTATCACCCCAACC
AGGTAGTAGAAGGCTGTTGTTCAGATATGGCTGTTACTTTTAATGGACTGACTCCAAATCAGATGCATGTGATGA
TGTATGGGGTATACCGCCTTAGGGCATTTGGGCATATTTTCAATGATGCATTGGTTTTCTTACCTCCAAATGGTT
CTGACAATGACTGAGAAGTGGTAGAAAAGCGTGAATATGATCTTTGTATAGGACGTGTGTTGTCATTATTTGTAG
TAGTAACTACATATCCAATACAGCTGTATGTTTCTTTTTCTTTTCTAATTTGGTGGCACTGGTATAACCACCCAT
TAAAGTCAGTAGTACATTTTTAAATGAGGGTGGTTTTTTTCTTTAAAACACATGAACATTGTAAATGTGTTGGAA
AAAAGTGTTTTAAGAATAATAATTTTGCAAATAAACTATTAATAAATATTATATGTGATAAATTCTAACC

FIGURE 3654

MHHHEHHHLQAPNKEDILKISEDERMELSKSFRVYCIILVKPKDVSLWAAVKETWTKHCDKAEFFSSENVKEFES
INMDTNDMWLMMRKAYKYAFDKYRDQYNWFFLARPTTFAIIENLKYFLLKKDPSQPFYLGHTIKSGDLEYVGMEG
GIVLSVESMKRLNSLLNIPEKCPEQGGMIWKISEDKQLAVCLKYAGVFAENAEDADGKDVFNTKSVGLSIKEAMT
YHPNQVVEGCCSDMAVTFNGLTPNQMHVMMYGVYRLRAFGHIFNDALVFLPPNGSDND

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FIGURE 3655

GGCGCCTTCCTGGAGCGCGGGGAGATGTAAAGATAGACAAATAATTTTCCCAATGAGACTGTAGAAGAGAGAGCA
ATTGGCCAATGAGGACTGCGGGGCGGGACCCTGTGCCGCGGCGGAGTCCAAGATGGCGGCGTGCGGTTCCGCTGT
GTGAAACGAGCGCGGGGCGGCGGGTTACTCAGCTCCGCGGAGACGACCTCCGACGACCCGCAACAATGAAGGGAA
AAGAGCGCTCGCCAGTGAAGGCCAAACGCTCCCGTGGTGGTGAGGACTCGACTTCCCGCGGTGAGCGGAGCAAGA
AGTTAGGGGGCTCTGGTGGCAGCAATGGGAGCAGCAGCGGAAAGACCGATAGCGGCGGTGGGTCGCGGCGGAGTC
TCCTCCTGGACAAGTCCAGCAGTCGAGGTGGCAGCCGCGAGTATGATACCGGTGGGGGCAGCTCCAGTAGCCGCT
TGCATAGTTATAGCTCCCCGAGCACCAAAAATTCTTCGGGCGGGGGCGAGTCGCGCAGCAGCTCCCGGGGTGGAG
GCGGGGAGTCACGTTCCTCTGGGGCCGCCTCCTCAGCTCCCGGCGGCGGGGACGGCGCGGAATACAAGACTCTGA
AGATAAGCGAGTTGGGGTCCCAGCTTAGTGACGAAGCGGTGGAGGACGGCCTGTTTCATGAGTTCAAACGCTTCG
GTGATGTAAGTGTGAAAATCAGTCATCTGTCGGGTTCTGGCAGCGGGGATGAGCGGGTAGCCTTTGTGAACTTCC
GGCGGCCAGAGGACGCGCGGGCGGCCAAGCATGCCAGAGGCCGCCTGGTGCTCTATGACCGGCCTCTGAAGATAG
AAGCTGTGTATGTGAGCCGGCGCCGCAGCCGCTCCCCTTTAGACAAAGATACTTATCCTCCATCAGCCAGTGTGG
TCGGGGCCTCTGTAGGTGGTCACCGGCACCCCCCTGGAGGTGGTGGAGGCCAGAGATCACTTTCCCCTGGTGGCG
CTGCTTTGGGATACAGAGACTACCGGCTGCAGCAGTTGGCTCTTGGCCGCCTGCCCCCTCCACCTCCGCCACCAT
TGCCTCGAGACCTGGAGAGAGAAAGAGACTACCCGTTCTATGAGAGAGTGCGCCCTGCATACAGTCTTGAGCCAA
GGGTGGGAGCTGGAGCAGGTGCTGCTCCTTTCAGAGAAGTGGATGAGATTTCACCCGAGGATGATCAGCGAGCTA
ACCGGACGCTCTTCTTGGGCAACCTAGACATCACTGTAACGGAGAGTGATTTAAGAAGGGCGTTTGATCGCTTTG
GAGTCATCACAGAAGTAGATATCAAGAGGCCTTCTCGCGGCCAGACTAGTACTTACGGCTTTCTCAAATTTGAGA
ACTTAGATATGTCTCACCGGGCCAAATTAGCAATGTCTGGCAAAATTATAATTCGGAATCCTATCAAAATTGGTT
ATGGTAAAGCTACACCCACCACCCGCCTCTGGGTGGGAGGCCTGGGACCTTGGGTTCCTCTTGCTGCCCTGGCAC
GAGAATTTGATCGATTTGGCACCATACGCACCATAGACTACCGAAAAGGTGATAGTTGGGCATATATCCAGTATG
AAAGCCTGGATGCAGCGCATGCTGCCTGGACCCATATGCGGGGCTTCCCACTTGGTGGCCCAGATCGACGCCTTA
GAGTAGACTTTGCCGACACCGAACATCGTTACCAGCAGCAGTATCTGCAGCCTCTGCCCTTGACTCATTATGAGC
TGGTGACAGATGCTTTTGGACATCGGGCACCAGACCCTTTGAGGGGTGCTCGGGATAGGACACCACCCTTACTAT
ACAGAGATCGTGATAGGGACCTTTATCCTGACTCTGATTGGGTGCCACCCCCACCCCCAGTCCGAGAACGCAGCA
CTCGGACTGCAGCTACTTCTGTGCCTGCTTATGAGCCACTGGATAGCCTAGATCGCAGGCGGGATGGTTGGTCCT
TGGACCGGGACAGAGGTGATCGAGATCTGCCCAGCAGCAGAGACCAGCCTAGGAAGCGAAGGCTGCCTGAGGAGA
GTGGAGGACGTCATCTGGATAGGTCTCCTGAGAGTGACCGCCCACGAAAACGTCACTGCGCTCCTTCTCCTGACC
GCAGTCCAGAATTGAGCAGTAGCCGGGATCGTTACAACAGCGACAATGATCGATCTTCCCGTCTTCTCTTGGAAA
GGCCCTCTCCAATCAGAGACGGACGAGGTAGTTTGGAGAAGAGCCAGGGTGACAAGCGAGACCGTAAAAACTCTG
CATCAGCTGAACGAGATAGGAAGCACCGGACAACTGCTCCCACTGAGGGAAAAAGCCCTCTGAAAAAAGAAGACC
GCTCTGATGGGAGTGCACCTAGCACCAGCACTGCTTCCTCCAAGCTGAAGTCCCCGTCCCAGAAACAGGATGGGG
GGACAGCCCCTGTGGCATCAGCCTCTCCCAAACTCTGTTTGGCCTGGCAGGGCATGCTTCTACTGAAGAACAGCA
ACTTTCCTTCCAACATGCATCTGTTGCAGGGTGACCTCCAAGTGGCTAGTAGTCTTCTTGTGGAGGGTTCAACTG
GAGGCAAAGTGGCCCAGCTCAAGATCACTCAGCGTCTCCGTTTGGACCAGCCCAAGTTGGATGAAGTAACTCGAC
GCATCAAAGTAGCAGGGCCCAATGGTTATGCCATTCTTTTGGCTGTGCCTGGAAGTTCTGACAGCCGGTCCTCCT
CTTCCTCAGCTGCATCAGACACTGCCACTTCTACTCAGAGGCCACTTAGGAACCTTGTGTCCTATTTAAAGCAAA
AGCAGGCAGCCGGGGTGATCAGCCTCCCTGTGGGGGGCAACAAAGACAAGGAAAACACCGGGGTCCTTCATGCCT
TCCCACCTTGTGAGTTCTCCCAGCAGTTCCTGGATTCCCCTGCCAAGGCACTGGCCAAATCTGAAGAAGATTACC
TGGTCATGATCATTGTCCGTGGGTTTGGTTTTCAGATAGGAGTTAGGTATGAGAACAAGAAGAGAGAAAACTTGG
CGCTGACCCTGTTATAGTGGTTATAGTGGTGTCCCTAAAGGGAGGAAATGATTTCAGCAAAACTGGTTGAACAGC
GGATGAAGATATGGAATTCAAAGCTCTAATGGACCTTTTTGAAGAGAAGTTGTGGCTTATGTGGAGTTTACATGG
GCCTCTGATGGAAGAAAGCTAATCTGTTTAGTATTTGTGCATTTTACTAAAATGGCAGCTTAAAGTTGTGTATCT
GCTATTGTGATGCCAATGCCGGTGTTTTAAGTGGAAAAAAAATGACCTCTTTGATTTGTGCTGTGTACACAAGAT
TTCTGGAAAAGTAAAGAAAAACCCTTTTTATGGCTCACACAGCTTAAGAGTAGCTGTCTCTCAAACGTGCGCTCA
CAGTTGAGCTGCTTTTGTTTTATTCTAAATAAATTGTTTCTTTTGAGG

FIGURE 3656

MRTAGRDPVPRRSPRWRRAVPLCETSAGRRVTQLRGDDLRRPATMKGKERSPVKAKRSRGGEDSTSRGERSKKLG
GSGGSNGSSSGKTDSGGGSRRSLLLDKSSSRGGSREYDTGGGSSSSRLHSYSSPSTKNSSGGGESRSSSRGGGGE
SRSSGAASSAPGGGDGAEYKTLKISELGSQLSDEAVEDGLFHEFKRFGDVSVKISHLSGSGSGDERVAFVNFRRP
EDARAAKHARGRLVLYDRPLKIEAVYVSRRRSRSPLDKDTYPPSASVVGASVGGHRHPPGGGGGQRSLSPGGAAL
GYRDYRLQQLALGRLPPPPPPPLPRDLERERDYPFYERVRPAYSLEPRVGAGAGAAPFREVDEISPEDDQRANRT
LFLGNLDITVTESDLRRAFDRFGVITEVDIKRPSRGQTSTYGFLKFENLDMSHRAKLAMSGKIIIRNPIKIGYGK
ATPTTRLWVGGLGPWVPLAALAREFDRFGTIRTIDYRKGDSWAYIQYESLDAAHAAWTHMRGFPLGGPDRRLRVD
FADTEHRYQQQYLQPLPLTHYELVTDAFGHRAPDPLRGARDRTPPLLYRDRDRDLYPDSDWVPPPPPVRERSTRT
AATSVPAYEPLDSLDRRRDGWSLDRDRGDRDLPSSRDQPRKRRLPEESGGRHLDRSPESDRPRKRHCAPSPDRSP
ELSSSRDRYNSDNDRSSRLLLERPSPIRDGRGSLEKSQGDKRDRKNSASAERDRKHRTTAPTEGKSPLKKEDRSD
GSAPSTSTASSKLKSPSQKQDGGTAPVASASPKLCLAWQGMLLLKNSNFPSNMHLLQGDLQVASSLLVEGSTGGK
VAQLKITQRLRLDQPKLDEVTRRIKVAGPNGYAILLAVPGSSDSRSSSSSAASDTATSTQRPLRNLVSYLKQKQA
AGVISLPVGGNKDKENTGVLHAFPPCEFSQQFLDSPAKALAKSEEDYLVMIIVRGFGFQIGVRYENKKRENLALT
LL

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FIGURE 3657A

CAGTCGCGCGCGGTGCAGTCGGGAGGTGGAGGCACCGGCTGCATTGTTTTCGGGATCGAGGGGTGAGGGCGCTAT
GGCACCCGGCTGCAAAACTGAGTTACGCAGCGTGACAAATGGTCAGTCTAACCAACCAAGTAATGAAGGTGATGC
CATCAAAGTTTTTGTGCGAATTCGTCCTCCTGCAGAAAGATCTGGGTCAGCTGATGGAGAGCAGAACTTATGCTT
ATCTGTGCTGTCCTCCACGAGTCTCCGGCTGCACTCCAACCCTGAGCCCAAGACCTTCACGTTTGATCATGTTGC
AGATGTGGATACCACTCAGGAATCTGTATTTGCAACTGTGGCTAAAAGCATTGTGGAGTCTTGCATGAGCGGTTA
TAATGGTACCATCTTTGCATATGGACAGACTGGCTCAGGGAAGACATTTACTATGATGGGACCATCTGAATCTGA
TAATTTTTCTCATAACCTGAGAGGAGTAATCCCACGAAGTTTTGAATATTTGTTTTCCTTAATTGATCGTGAAAA
AGAAAAGGCTGGAGCTGGAAAGAGTTTCCTTTGTAAGTGTTCCTTTATTGAAATCTACAACGAGCAGATATATGA
TCTACTGGACTCTGCATCGGCTGGACTGTACTTAAGGGAGCATATCAAGAAGGGAGTCTTTGTTGTTGGTGCGGT
GGAGCAGGTGGTAACCTCAGCTGCTGAAGCCTATCAGGTGCTGTCTGGAGGATGGAGGAATAGACGTGTGGCATC
AACATCAATGAACAGAGAATCGTCTAGGTCTCATGCCGTCTTTACAATTACAATAGAGTCAATGGAGAAAAGTAA
TGAGATTGTGAATATACGGACCTCCCTACTCAACCTGGTGGATTTAGCAGGATCTGAAAGGCAAAAAGATACCCA
TGCAGAAGGGATGAGATTGAAGGAAGCAGGTAACATAAATCGATCATTGAGCTGCCTGGGCCAAGTGATTACAGC
ACTTGTCGACGTGGGTAATGGAAAACAGAGACATGTTTGCTACAGAGACTCCAAACTTACCTTCTTACTACGGGA
TTCCCTTGGAGGTAATGCCAAAACAGCCATAATTGCAAATGTTCATCCTGGATCCAGGTGTTTTGGGGAAACCCT
ATCAACACTTAACTTTGCTCAAAGAGCCAAGCTGATTAAAAACAAGGCAGTAGTAAATGAAGACACCCAAGGAAA
TGTGAGCCAGCTCCAAGCTGAAGTGAAGAGGCTCAAAGAACAACTGGCGGAGCTTGCTTCAGGACAGACACCACC
AGAAAGCTTCCTGACCAGAGACAAAAAGAAGACTAACTATATGGAGTATTTCCAGGAAGCAATGTTATTCTTTAA
GAAATCTGAACAGGAAAAGAAGTCTCTGATAGAAAAAGTTACCCAATTAGAAGACCTCACCCTCAAAAAGGAAAA
ATTTATTCAATCTAATAAAATGATTGTGAAATTCCGAGAGGATCAAATAATACGCTTGGAAAAGCTCCACAAGGA
ATCCCGGGGAGGTTTTCTGCCTGAGGAGCAGGATCGTTTGCTCTCAGAATTAAGGAATGAGATTCAAACTCTGCG
AGAACAAATAGAGCACCACCCCAGAGTTGCAAAGTATGCTATGGAAAATCATTCCCTCAGGGAGGAGAATAGAAG
ACTGAGATTATTAGAGCCTGTGAAAAGAGCTCAAGAAATGGATGCCCAGACCATTGCAAAACTAGAAAAAGCTTT
CTCTGAAATAAGTGGCATGGAGAAAAGTGACAAAAATCAGCAAGGATTTTCACCTAAAGCTCAGAAAGAGCCATG
TTTGTTTGCAAACACTGAGAAGTTAAAAGCACAACTCCTGCAAATTCAGACAGAGCTGAATAATTCAAAGCAAGA
ATATGAAGAATTCAAAGAACTTACTAGGAAAAGGCAGCTAGAATTGGAATCAGAGCTTCAGTCTTTGCAAAAAGC
GAACCTTAATCTTGAAAACCTTTTGGAAGCAACAAAAGCCTGCAAGCGGCAAGAAGTTTCTCAGCTGAATAAAAT
TCATGCTGAAACACTTAAGATTATAACTACACCAACCAAGGCCTACCAACTTCATTCCCGACCAGTACCAAAATT
AAGCCCTGAAATGGGAAGCTTTGGCTCTCTATACACTCAGAATTCTAGCATATTAGATAATGATATATTAAATGA
GCCAGTTCCTCCTGAGATGAATGAACAAGCTTTTGAGGCCATTTCTGAAGAGCTTAGAACAGTGCAGGAACAAAT
GAGTGCTCTTCAAGCCAAACTGGATGAAGAAGAGCATAAAAACCTAAAGCTTCAGCAGCATGTTGACAAACTGGA
ACATCATTCTACCCAAATGCAGGAGCTTTTCTCATCAGAAAGAATTGATTGGACCAAACAGCAGGAAGAGCTTCT
CTCACAGTTGAATGTCCTTGAAAAGCAGCTTCAAGAGACTCAAACTAAAAATGACTTTTTGAAAAGTGAGGTACA
TGACCTGCGAGTAGTCCTTCATTCTGCTGACAAGGAGCTTTCTTCAGTGAAATTGGAATATAGTTCATTCAAAAC
GAATCAGGAGAAAGAATTCAACAAACTTTCTGAAAGACACATGCATGTACAGCTTCAATTAGATAATCTCAGGTT
AGAAAACGAAAAGCTGCTTGAGAGCAAAGCCTGCCTACAGGATTCCTATGACAACTTACAAGAAATAATGAAATT
TGAGATTGACCAACTTTCAAGAAACCTCCAAAACTTCAAAAAAGAAAATGAAACTCTGAAATCTGATCTGAATAA
TTTGATGGAGCTTCTTGAGGCAGAAAAAGAACGCAATAACAAATTATCATTACAGTTTGAAGAAGATAAAGAAAA
CAGTTCTAAAGAAATCTTAAAAGTTCTTGAGGCTGTACGTCAGGAGAAACAGAAAGAGACGGCCAAGTGTGAGCA
GCAGATGGCAAAAGTACAGAAACTAGAAGAGAGCTTGCTTGCTACTGAAAAAGTGATCAGTTCCCTGGAAAAGTC
TAGAGATTCTGATAAGAAAGTTGTAGCTGACCTCATGAACCAGATCCAGGAGCTAAGAACATCGGTCTGTGAGAA
AACAGAAACTATAGACACCCTGAAACAAGAACTGAAGGACATAAATTGCAAATACAACTCTGCTTTGGTTGACAG
AGAAGAGAGCAGAGTGTTGATCAAGAAGCAGGAAGTGGATATTCTGGATCTGAAAGAAACCCTTAGGCTGAGAAT
ACTTTCTGAGGACATAGAGAGGGATATGCTCTGTGAGGACCTGGCTCATGCCACTGAGCAGCTGAACATGCTCAC
AGAGGCCTCAAAAAAACACTCGGGGCTGCTGCAGTCTGCCCAGGAAGAACTGACCAAGAAGGAAGCCCTGATTCA
GGAACTTCAGCACAAGCTAAACCAAAAGAAAGAGGAAGTAGAACAGAAGAAGAATGAATATAACTTCAAAATGAG
GCAACTAGAACATGTGATGGATTCTGCTGCTGAGGATCCCCAGAGTCCTAAGACACCACCTCACTTTCAAACACA
TTTGGCAAAACTCCTGGAAACACAAGAACAAGAGATAGAAGATGGAAGAGCCTCTAAGACTTCTTTGGAACACCT

FIGURE 3657B

TGTAACAAAGCTAAATGAAGACAGAGAAGTCAAAAATGCTGAAATCCTCAGAATGAAGGAGCAGTTGCGTGAAAT
GGAAAACCTACGCCTGGAAAGTCAGCAGTTAATAGAGAAAAACTGGCTCCTGCAAGGTCAGCTGGATGATATTAA
AAGACAAAAGGAAAACAGTGATCAGAATCATCCAGATAATCAACAGCTGAAGAATGAACAAGAAGAAAGTATCAA
AGAAAGACTTGCAAAAAGTAAAATAGTTGAAGAAATGCTGAAAATGAAAGCAGACCTAGAAGAAGTCCAAAGTGC
CCTTTACAACAAAGAGATGGAATGCCTTAGAATGACTGATGAAGTCGAACGAACCCAAACTTTGGAGTCTAAAGC
ATTCCAGGAAAAAGAACAACTGAGATCAAAGCTGGAAGAAATGTATGAAGAAAGAGAGAGAACATCCCAGGAGAT
GGAAATGTTAAGGAAGCAGGTGGAGTGTCTTGCTGAGGAAAATGGAAAGTTGGTAGGTCACCAAAATTTGCATCA
GAAGATTCAGTACGTAGTGCGACTAAAGAAGGAAAATGTCAGGCTTGCTGAGGAGACAGAAAAGTTGCGTGCCGA
AAATGTATTTTTAAAAGAAAAGAAAAGAAGTGAATCTTGAGGATTCCGGTCAGCTACCTAGGCATCACCTTGTTT
GAAGATGTTTCTTCTCTTTTACAAGTAAGACCTACTCCTGGCCACTTAGGAGAGCTGAATTTATGGACCTTAATT
ATTAAATGTTTATAAGGTGGTGGTAACCACCTCAAGTTTCTGATGAACATTCTGCATCCATATACACCCTGTGAC
AGTCAGCAGTCTGCTATTAAGTGGCCTACTTCAAGGCTTTGAATCAACTTAAGGGAAAACCTTTTGTCTTTGTAA
AAATAAAAGCCTGTAGCTAAGGTTTACAGTGGACATTAGCCAGATCATTTTCTTCTTAGATTATGCCATAATCTC
CTTTGATTCTTATGGAAGTTCTAACAATATATGGTGGTTCCAACACCTGCAGTGAGTTTAATGACTGACTTAGTA
GCAGGTACAAGAAGCAAACTTGTTAATATAGATTATTTTTGTATTCTTACTTTAGGTATTTTACTTGAGCATTTT
CCATGACTGTAAATAAAGCCATTTTTTAAGATAAAAAAAAAAAAAAAAA

FIGURE 3658

MAPGCKTELRSVTNGQSNQPSNEGDAIKVFVRIRPPAERSGSADGEQNLCLSVLSSTSLRLHSNPEPKTFTFDHV
ADVDTTQESVFATVAKSIVESCMSGYNGTIFAYGQTGSGKTFTMMGPSESDNFSHNLRGVIPRSFEYLFSLIDRE
KEKAGAGKSFLCKCSFIEIYNEQIYDLLDSASAGLYLREHIKKGVFVVGAVEQVVTSAAEAYQVLSGGWRNRRVA
STSMNRESSRSHAVFTITIESMEKSNEIVNIRTSLLNLVDLAGSERQKDTHAEGMRLKEAGNINRSLSCLGQVIT
ALVDVGNGKQRHVCYRDSKLTFLLRDSLGGNAKTAIIANVHPGSRCFGETLSTLNFAQRAKLIKNKAVVNEDTQG
NVSQLQAEVKRLKEQLAELASGQTPPESFLTRDKKKTNYMEYFQEAMLFFKKSEQEKKSLIEKVTQLEDLTLKKE
KFIQSNKMIVKFREDQIIRLEKLHKESRGGFLPEEQDRLLSELRNEIQTLREQIEHHPRVAKYAMENHSLREENR
RLRLLEPVKRAQEMDAQTIAKLEKAFSEISGMEKSDKNQQGFSPKAQKEPCLFANTEKLKAQLLQIQTELNNSKQ
EYEEFKELTRKRQLELESELQSLQKANLNLENLLEATKACKRQEVSQLNKIHAETLKIITTPTKAYQLHSRPVPK
LSPEMGSFGSLYTQNSSILDNDILNEPVPPEMNEQAFEAISEELRTVQEQMSALQAKLDEEEHKNLKLQQHVDKL
EHHSTQMQELFSSERIDWTKQQEELLSQLNVLEKQLQETQTKNDFLKSEVHDLRVVLHSADKELSSVKLEYSSFK
TNQEKEFNKLSERHMHVQLQLDNLRLENEKLLESKACLQDSYDNLQEIMKFEIDQLSRNLQNFKKENETLKSDLN
NLMELLEAEKERNNKLSLQFEEDKENSSKEILKVLEAVRQEKQKETAKCEQQMAKVQKLEESLLATEKVISSLEK
SRDSDKKVVADLMNQIQELRTSVCEKTETIDTLKQELKDINCKYNSALVDREESRVLIKKQEVDILDLKETLRLR
ILSEDIERDMLCEDLAHATEQLNMLTEASKKHSGLLQSAQEELTKKEALIQELQHKLNQKKEEVEQKKNEYNFKM
RQLEHVMDSAAEDPQSPKTPPHFQTHLAKLLETQEQEIEDGRASKTSLEHLVTKLNEDREVKNAEILRMKEQLRE
MENLRLESQQLIEKNWLLQGQLDDIKRQKENSDQNHPDNQQLKNEQEESIKERLAKSKIVEEMLKMKADLEEVQS
ALYNKEMECLRMTDEVERTQTLESKAFQEKEQLRSKLEEMYEERERTSQEMEMLRKQVECLAEENGKLVGHQNLH
QKIQYVVRLKKENVRLAEETEKLRAENVFLKEKKRSES

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FIGURE 3659

GCCTGACGCGGCGTTGCGTCCCCCGGGAGCTGCGCTAGGCGAACGGCTGCGGCGCTTTGTGCTCCAGTCGCTCCT
AACGCTCCCTGGCCCGGCCGGGGCCGCGCAGTTAGGGCATCTGAGGCGGGGAGAAGCGGCGGGGAGACGCCGGCT
GCCAGC**ATG**TCGCTGCCTCCGGAGAAAGCCTCCGAGCTGAAGCAGCTCATCCACCAGCAGCTGAGCAAGATGGAT
GTCCATGGTAGAATAAGAGAAATCCTTGCTGAGACTATACGGGAAGAATTGGCACCTGATCAACAGCATTTATCA
ACAGAAGATTTGATCAAAGCCCTTAGACGTCGAGGAATCATTGACGATGTGATGAAAGAACTTAATTTTGTTACT
GACAGTGTTGAGCAAGAACTCCCTTCCTCTCCAAAACAACCTATTTGTTTTGATAGACAATCGACATTAAAAAAA
ACTAATATTGATCCAACACGGAGGTATCTTTACCTTCAGGTTTTGGGTGGAAAAGCTTTCTTGGAACATCTGCAA
GAACCTGAGCCTTTACCTGGACAAGTTTGTTCAACGTTTACTTTATGTTTACATTATCGAAACCAACGTTTTCGT
TCTAAACCTGTTCCATGTGCCTGTGAACCAGATTTTCATGATGGCTTTTTACTTGAAGTACACAGAGAAAGCTTG
GGTGATGGAACTAGAATGGCTGATTCAACAACAATGTTATCAATAAGTGATCCAATTCATATGGTGCTAATCAAA
ACAGACATATTTGGTGAGACGACTTTAGTAGCATCATATTTTCTGGAATGGCGATCGGTTTTGGGCTCAGAAAAT
GGAGTGACCAGTCTGACTGTGGAACTTATGGGTGTAGGCACAGAATCAAAAGTTTCTGTGGGAATTTTAAATATA
AAACTTGAAATGTATCCACCACTCAATCAAACGTTATCTCAAGAAGTAGTGAACACACAGCTTGCTTTGGAACGT
CAGAAAACTGCAGAGAAAGAGCGATTATTTCTTGTATATGCTAAGCAGTGGTGGAGAGAATATTTGCAAATTCGA
CCCTCACACAACTCACGACTGGTTAAGATTTTTGCACAGGATGAAAATGGGATAAATAGACCAGTCTGTTCCTAT
GTTAAACCACTTCGAGCTGGACGGCTTCTTGATACTCCAAGGCAAGCAGCAAGATTTGTTAATGTCCTTGGTTAT
GAACGAGCCCCTGTTATTGGAGGAGGAGGTAAACAGGAGCAGTGGTGCACTCTGCTGGCCTTTCTCTGTAGAAAC
AAGGGTGACTGTGAAGATCACGCTAACCTTCTGTGCAGCCTTCTTCTTGGATATGGATTAGAAGCCTTTGTTTGT
GTTGGGACCAAGGCAAAAGGAGTACCTCATGCATGGGTTATGACTTGTGGAACTGATGGGGCCATCACTTTTTGG
GAGAGTTTAACAGGACACAGGTACATCCATAAACCTACCAATCCTGATGAACCTCCAGTTGCTGAACAGCCCAAA
CCACTGTACCCATATCGAACAATTGGTTGTGTTTTCAACCATCAGATGTTCCTGGGAAATTGTCAACCCTCTGAT
GCAGTAGAAACCTGTGTATTTGATTTGAACGATGAATCCAAATGGAAACCCATGAGTGAGGAAGCAATTAAATCT
GTGTGTGCTCCTGGAGCTACAACATCCCTTCCTCCCTTTCCACCTCTGTGTGCATCCACAATTGACGCGTCAGTA
ACAAGTAATGAAATTGAAATGCAGCTGAGGCTCCTGGTGTCAGAACACAGGAAGGATCTTGGCCTCACTACTGTT
TGGGAAGACCAGCTCTCCTACCTTTTATCACCAGCTTTGGCTTCTTATGAATTTGAGCGTACAACAAGTATATCA
GCAGGCAATGAAGAATTTCAAGATGCCATAAGAAGGGCTGTACCTGATGGTCACACATTTAAAGGGTTCCCAATA
CATTTTGTGTATAGAAATGCAAGACGTGCATTTGCCACATGTCTTCGATCTCCTTTCTGTGAAGAAATAATCTGT
TGCCGTGGAGACCAAGTGCGACTGGCAGTTCGTGTCCGAGTATTTACTTACCCTGAATCTGCATGTGCTGTTTGG
ATCATGTTTGCTTGTAAATATCGCTCGGTATTA**TAG**GGCCAATATTTATATAAGATTTATACCTGTGTTTAATTG
GAATTTTACACATTGTACATTACTTAGCTATTTAGAGGTTTGTTATTTTAAAATCACAATCTGGCTTGAATGGCA
TACTTCAATTTTGTATATACTTGACTGGTAATGTTTAAAAAAAATCATGCATTCCTTTAAAAATTAAGGCTGAAA
AACTTGTATAAATCTCCCTGGAATTTAGTATAAATTAAGTGTATATTCTATTTTAATAAATGCTACTTTGTTTAC
AGTTATCAGTAGTTTAAATATTAATATAAAATGCATTCAGTTTTCTTTACACAAACAGGTAATCAAAGAGATGTT
TGTCTAAGGGTTTGAGCCCTAGACAAATCAGTATGATCATTACTTTTCACAGGTTAATGGAATTATTTTATACAG
ATTAGGAGAAATTAACCTCATGACAGATTTATTTATTGCATTGGTGAAAATAAATGTTAATGAATTACCACTTTT
GTGGTTTATTCGTGGTCCTTGGGATATTTGAGACTGTCCAGAAATTTATGGTTGGACCTTGAAGCAAGAGTAGGA
AAAAACTAATACCAGAAAAGCATAAATATTAATAACCTCATATGAAAGTACATGAATCATTTAGAAATATTTATC
ACTGTGATTTGTTGTAAAAATGAATTGGGTATTTTAGAAAAACTTTATTATACCTCTTTGTTATGATACTGATAA
ATTGTGATCTTGCAGTCGAAAAAAAAAAAAAAA

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FIGURE 3660

MSLPPEKASELKQLIHQQLSKMDVHGRIREILAETIREELAPDQQHLSTEDLIKALRRRGIIDDVMKELNFVTDS
VEQELPSSPKQPICFDRQSTLKKTNIDPTRRYLYLQVLGGKAFLEHLQEPEPLPGQVCSTFTLCLHYRNQRFRSK
PVPCACEPDFHDGFLLEVHRESLGDGTRMADSTTMLSISDPIHMVLIKTDIFGETTLVASYFLEWRSVLGSENGV
TSLTVELMGVGTESKVSVGILNIKLEMYPPLNQTLSQEVVNTQLALERQKTAEKERLFLVYAKQWWREYLQIRPS
HNSRLVKIFAQDENGINRPVCSYVKPLRAGRLLDTPRQAARFVNVLGYERAPVIGGGGKQEQWCTLLAFLCRNKG
DCEDHANLLCSLLLGYGLEAFVCVGTKAKGVPHAWVMTCGTDGAITFWESLTGHRYIHKPTNPDEPPVAEQPKPL
YPYRTIGCVFNHQMFLGNCQPSDAVETCVFDLNDESKWKPMSEEAIKSVCAPGATTSLPPFPPLCASTIDASVTS
NEIEMQLRLLVSEHRKDLGLTTVWEDQLSYLLSPALASYEFERTTSISAGNEEFQDAIRRAVPDGHTFKGFPIHF
VYRNARRAFATCLRSPFCEEIICCRGDQVRLAVRVRVFTYPESACAVWIMFACKYRSVL

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FIGURE 3661

AAAAAACAACCATTTCCTCTCTGCTGAGAGCCAGGGAAGGCGAGCTCTGCGCACACGGGCGTCCCTGCAGCAGCC
ACTCTGCTTTCCAGGACCGGCCAACTGCCCTGGAGGCATCCACACAGGGGCCCAGGCAGCACAGAGGAGCTGTGA
ACCCGCTCCACACCGGCCACCCTGCCCGGAGCCTGGCACTCACAGCAGGCCGGTGCTAAGGAGTGTGGCGCGGGC
TCGACTCCCACTGCTGCCGGCCTCCCGAGTGACTCTGTTTTCCACTGCTGCAGGCGAGAAGAGGCACGCGCGGCA
CAGGCCGGCCTCCGCTTCCCGGGAAGACGGCGCACTCCTGGCCCTGGGTTCTTGCTGCTGCCCACCCTCTGCTCC
CTGGGATGGGCCCCGAGGCGAGCAGCTTCAGCACAGGCCTGGCCCTGCTCCAGGTGCAGGAAGGAGGATAAGGCC
GGGCCGAGAGGCGGCACACCTGGACCATCCCATGGGCCTCCGCCCGCGCCGCCCCGAGGATGAGTGGTGATGTCC
TCTAGCCACCCCTAGCAGCGTCGGCTCTCCCTGGACGTGCGGCCGCGGACTGGGACTTGGCTTTCTCCGGATAAG
CGGCGGCACCGGCGTCAGCG**ATG**ACCGTGCAGAGACTCGTGGCCGCGGCCGTGCTGGTGGCCCTGGTCTCACTCA
TCCTCAACAACGTGGCGGCCTTCACCTCCAACTGGGTGTGCCAGACGCTGGAGGATGGGCGCAGGCGCAGCGTGG
GGCTGTGGAGGTCCTGCTGGCTGGTGGACAGGACCCGGGGAGGGCCGAGCCCTGGGGCCAGAGCCGGCCAGGTGG
ACGCACATGACTGTGAGGCGCTGGGCTGGGGCTCCGAGGCAGCCGGCTTCCAGGAGTCCCGAGGCACCGTCAAAC
TGCAGTTCGACATGATGCGCGCCTGCAACCTGGTGGCCACGGCCGCGCTCACCGCAGGCCAGCTCACCTTCCTCC
TGGGGCTGGTGGGCCTGCCCCTGCTGTCACCCGACGCCCCGTGCTGGGAGGAGGCCATGGCCGCTGCATTCCAAC
TGGCGAGTTTTGTCCTGGTCATCGGGCTCGTGACTTTCTACAGAATTGGCCATACACCAACCTGTCCTGGTCCTG
CTACC**TGA**ACATTGGCGCCTGCCTTCTGGCCACGCTGGCGGCAGCCATGCTCATCTGGAACATTCTCCACAAGAG
GGAGGACTGCATGGCCCCCCGGGTGATTGTCATCAGCCGCTCCCTGACAGCGCGCTTTCGCCGTGGGCTGGACAA
TGACTACGTGGAGTCACCATGCTGAGTCGCCCTTCTCAGCGTTCCATCGATGCACACCTGCTATCGTGGAACAGC
CTAGAAACCAAGGGACTCCACCACCAAGTCACTTCCCCTGCTCGTGCAGAGGCACGGGATGAGTCTGGGTGACCT
CTGCGCCATGCGTGCGAGACACGTGTGCGTTTACTGTTATGTCGGTCATATGTCTGTACGTGTCGTGGGCCAACC
TCGTTCTGCCTCCAGCTTTCCTGGTTAGCGCAACGCGGCTCCACGACCACACGCACTTCAGGGTGGAAGCTGGAA
GCTGAGACACAGGTTAGGTGGCGCGAGGCTGCCCTGCGCTCCGCTTTGCTTTGGGATTAATTTATTCTGCATCTG
CTGAGAGGGGCACCCCAGCCATATCTTACACTTTGGTAAAGCAGAAAACCAGGAAAATTTTCTTAAAATATCCAC
AATATTCCTTGAGTGAGTCAGAATCTATAGCCGGTTAGTGATGGTTTCAGGCAGAATCGTGTTCGTGTCTGTTTT
GCTCGATTCCTTTCCTAAGTTAAATAAATGCAAGCCTCTGAACTTCTGTCTATAAAAAAAAAAAAAAAAA

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FIGURE 3662

MTVQRLVAAAVLVALVSLILNNVAAFTSNWVCQTLEDGRRRSVGLWRSCWLVDRTRGGPSPGARAGQVDAHDCEA
LGWGSEAAGFQESRGTVKLQFDMMRACNLVATAALTAGQLTFLLGLVGLPLLSPDAPCWEEAMAAAFQLASFVLV
IGLVTFYRIGHTPTCPGPAT

FIGURE 3663

AGTCGCTGTTTGGGACGCTGGGTGTGCGGTGTTCTGTCTCCGCTCCCGTTTCGCTGTCACAGCCCGTTCCTTCCC
GGAGCCCGGGACAGGCTGGGCGCGCGCCCGTGTGAGTGAGCGGGACTCAGGGCAGAAGTGTCCCCTCACTGCGTT
TTTTTTTCCTTTTATCCAAAGAACGGGGCAGTTAGTACGCTTGCCTTCCTGTCGCCCGGTTGGGAGCGGGGTTGG
TGTGCGGAGTGGTTCGCCTTTTTTTCTTTAGAACTTGTGAGCCTTTTTTTTTTTTTTTTTCTTTCCTTTTTTT
AGGCTCAGTGCTGTCCGGGCTGGTTTGCCCGGTCCCTGACTAACGGCTTTCTGCCCCTTCTCTCGCCACCCCTGC
CCAAGGTCGCCCCTCTGCCTTCGCCCCTGTCCCGGGAGGGTGGGAAGCTTTGACCCCGCCCTGCCCACTCGCGTC
TCCGCAGCCGTAGCCGCGCCTGTCCCAATATGAATAGGGTCAACGACCCACTTATTTTTATAAGAGATATTAAGC
CCGGACTGAAAAACTTAAATGTCGTCTTTATTGTCCTGGAGATAGGACGCGTGACCAAAACCAAAGACGGCCATG
AAGTGAGATCGTGCAAAGTAGCAGATAAAACGGGCAGCATCACTATTTCCGTGTGGGATGAGATCGGAGGTCTTA
TACAGCCAGGGGATATTATTCGGTTGACCAGAGGGTATGCATCCATGTGGAAAGGATGTCTGACACTTTATACTG
GAAGGGGTGGTGAACTTCAAAAAATTGGGGATCTAGGTGCGGTGCAGGCAGCCGCAATGCGAGATTCCATACACT
ACTACCCTGGTAATGATCTCCACCCTGACCTGGAGGAGCCATCCTCTCTAGGGGTGTAAGATTTTGTATGGTTTA
TTCAGAAGTGCCAAATTTCAGTGAACCCAACCCAGATTATCGAGGACAGCAGAACAAAGGGGCACAGAGTGAACA
GAAGAATAATTCCATGAATAGTAATATGGGTACAGGTACATTTGGACCAGTGGGAAATGGTGTTCACACTGGCCC
TGAATCAAGGGAACACCAGTTTTCACATGCTGGCAGAAGCAATGGCCGGGGACTTATAAATCCACAACTACAAGG
AACAGCTAGTAATCAAACAGTGATGACCACAATAAGTAATGGCAGGGACCCTCGGAGAGCCTTTAAAAGATGACC
TATGCTAAATACTCATGTGTAGTTTTTATACTACATGCCCTACTTGAACACTTATTGCACTTTTATTTATTGTTA
ACTGTGAAAAGTACGTCCTTTATTGGGTTTCCTTTTATATTCTTGGTTTGTTAAGAAGAATGGTTTGTTTTTATA
GCAAAACTGTTAAGCTGCTCGAGTCTCCTGTTGAAGAATGGGAACACTGAAAAGTAGGGGCATTTATTTTTAGAG
TAAAAAGATTATTGGATAGCCTTTAAAAAACCTGCACCCATTTCATGGGTGAGTTACTTAAGACATCAGCTTTAT
AGCCTCTATGAGTCTATCTTCTGTATAAGTTTTGTAATATTTAACATAAGGCTTAATGGGAGATGTTCTTTTGTC
TTGTATTCAGATATTGCCAACTAAAGCAATAACCATCAAAAAACACAAGAACTTGTCAATGCTAGCAGTAATTTT
TGAGTGTTTGTGGCTCTCGGAATGATTGACTTCGTTCAGTGACTACTATTAAGATTTTCCAAGGACTGACTCATC
CCAAATTTTTGTTGTATTACCAAAAAAACAGATTCCTTATCAGAATTTGGAATAGAATGTGATCTCTATTGCAAC
AAGTAATTTTAAAAGAAAGCTACATTTATTTTAGAGTAGTGCTCCTAACATGTATTATCAACTTTGTGGATTACA
TTGGAGGAAAATTTAAAACTGGGGCCTTGAATATTTATTTTTTGAAACTACCATGTTAAATACTGAAGTATAATT
TGGGGGAGTTATAAAGTTATGATAAACATTCATCTGATTATTTTAAACAATAGTTGTGGTAGATAAACATACTGG
AGGTGAGTAAAATTGAATTCATATAGTAACATGCAGTCTGAAGTCCTAGTTACTTAATAGGTACTCAGCCTGGAG
TGAAAATCCTGGGTACTGACTTTGAGAGGAGTGAGTGTGCATGTTGTCAAAGTTTCTGAACACAGTTCACATAGC
CTTATTAGCAAAAGTTTTAAGAAATGGCTCTATCAAAGAAGCAATTGCAGCTTTATTCAGAAATATAAAAGTGGA
ATTTATGTACATGTCATAAGTGGTACCCACTTCCCCTTTTTACTGTAGGGTGGATAACTCTTAGGATTTAACTCT
TTGAATATTATCTCTTGAATAAAGCATGTGTTAATGTTAACAAACCTACGTAATTTTTGCCCTTTCAATGACTTA
CAGTGGAGAGCCAGTACATCTTAACTACTGTTGTAGTGATGGTATCAACCTCATGGTTACTTAGCTCTGCATTTG
TTGCTTTGTTTTTTTTCCACTTCAAATCACAAAATAAGTAGATTTTGTTTTCTGAAAACTCCATAGCATTTGAAT
ACAAAAAGTTGTGCCAGATTGTTTGCCCTAATTCACTGTGTTTAACAAATATTTCAGTACACACTATGTATTAGG
CACTGTGTGGAAAGTGTTAAGGGGTAGACAAGATACCGAATAATCTCCACAAGTTTATTTGTGGTCTATAGTACT
TTTGTAACTGGGGTTACAAAAATTATAGAAATTTTTTTCCTTTGTTCATATGCATATTCATGATTATAATTTGGC
TTTGTTTGTGATTAATGTTTTCTTAAGATTTTCACATTATAGAATACCTCAAAAGAAGTTGTCTAAGGACTGGGA
TAGAGAGTATGTTTCATAAAATTGTAGATGTTTAGAATTTTTAAAAACCCTACAAATTAGTATATGATTGTTTTA
TATAAGTAAGATAGGAGCAACACTTTAAATTATTTGTGGGAGAATACAGCATTAAAGGTGATTTTAAAAGAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3664

MNRVNDPLIFIRDIKPGLKNLNVVFIVLEIGRVTKTKDGHEVRSCKVADKTGSITISVWDEIGGLIQPGDIIRLT
RGYASMWKGCLTLYTGRGGELQKIGDLGAVQAAAMRDSIHYYPGNDLHPDLEEPSSLGV

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FIGURE 3665

GTCGACTACCAGAAAATACTTTCAACATAAATGAACTCTCCAACTTATTAAACTTTTATATAGATAGAGGAAGAC
AGCTCTTTCGGGATAACCACCTGATACCTGCAGAAACCCCCAGTCCTGTTATTTTCAGTGATTTTCCATTTATCT
TTAATTCGCTATCCAAAATTAAATTATTGCAAGCTGATTCACATATAAAGATGCAGATGTCAGAAAAGAAAGCAT
ACATGCTTATGCATGAAACAATTCTGCAAAAAAAGGATGAATTTCCTCCATCACCCAGATTTATACTTAGAGTCA
GACGAAGTCGCCTGGTTAAAGATGCTCTGCGTCAATTAAGTCAAGCTGAAGCTACTGACTTCTGCAAAGTATTAG
TGGTTGAATTTATTAATGAAATTTGTCCTGAGTCTGGAGGGGTTAGTTCAGAGTTCTTCCACTGTATGTTTGAAG
AGATGACCAAGCCAGAATATGGAATGTTCATGTATCCTGAAATGTGTTCCTGCATGTGGTTTCCTGCCAAGCCTA
AACCTGAGAAGAAAAGATATTTCCTCTTTGGAATGCTGTGTGGACTCTCCTTATTCAATTTAAATGTTGCTAACC
TTCCTTTCCCACTGGCTCTGTATAAAAAACTTCTGGACCAAAAGCCATCATTGGAAGATTTAAAAGAACTCAGTC
CTCGGTTGGGGAAGAGTTTGCAAGAAGTTCTAGATGATGCTGCTGATGACATTGGAGATGCGCTCTGCATACGCT
TTTCTATACACTGGGACCAAAATGATGTTGACTTAATTCCAAATGGGATCTCCATACCTGTGGACCAAACCAACA
AGAGAGACTATGTTTCTAAGTATATTGATTACATTTTCAACGTCTCTGTAAAAGCAGTTTATGAGGAATTTCAGA
GAGGATTTTATAGAGTCTGTGAGAAGGAGATACTTAGACATTTCTACCCTGAAGAACTAATGACAGCAATCATTG
GAAATACTGATTATGACTGGAAACAGTTTGAACAGAATTCAAAGTATGAGCAAGGATACCAAAAATCACATCCTA
CTATACAGTTGTTTTGGAAGGCTTTCCACAAGCTAACCTTGGATGAAAAGAAAAAATTCCTCTTTTTCCTTACAG
GACGTGATAGGCTGCATGCAAGAGGCATACAGAAAATGGAAATAGTATTTCGCTGTCCTGAAACTTTCAGTGAAA
GAGATCACCCAACATCAATAACTTGTCATAATATTCTCTCCCTCCCTAAGTATTCTACAATGGAAAGAATGGAGG
AAGCACTCCAAGTAGCCATCAACAACAACAGAGGATTTGTCTCACCCATGCTCACACAGTCATAATCACCTCTGA
GAGACTCAGGGTGGGCTTTCTCACACTTGGATCCTTCTGTTCTTCCTTACACCTAAATAATACAAGAGATTAATG
AATAGTGGTTAGAAGTAGTTGAGGGAGAGATTGGGGGAATGGGGAGATGATGATGATGGTCAAAGGGTGCAAAAT
CTCACACAAGACTGAGGCAGGAGAATAGGGTACAGAGATAGGGATCTAAGGATGACTTGGACACACTCCCTGGCA
CTGAAGAGTCTGAACACTGGCCTGTGATTGGTCCATTCCAGGACCTTCATTTGCATAAGGTATCAAACCACATCA
GCCTCTGATTGGCCATGGGCCAGACCTGCACTCTGGCCAATGATTGGTTCATTCCAGGACATTCATTTGCATAAG
GAGTCAAACCACACCAGTCTTGGATTGGCTGTGAGCCAATTCACCTCAGTCTCTAATTGGCTGTGAGTCAGTCTT
TCATTTACATAGGGTGTAACCATCAAGAAACCTCTACAGGGTACTTAAGCCCCAGAAGATTTTGCTACCAGGGCT
CTTGAGCCACTTGCTCTAGCCCACTCCCACCCTGTGGAATGTACTTTCACTTTTGCTGCTTCACTGCCTTGTGCT
CCAATAAATCCACTCCTTCACCACCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3666

MQMSEKKAYMLMHETILQKKDEFPPSPRFILRVRRSRLVKDALRQLSQAEATDFCKVLVVEFINEICPESGGVSS
EFFHCMFEEMTKPEYGMFMYPEMCSCMWFPAKPKPEKKRYFLFGMLCGLSLFNLNVANLPFPLALYKKLLDQKPS
LEDLKELSPRLGKSLQEVLDDAADDIGDALCIRFSIHWDQNDVDLIPNGISIPVDQTNKRDYVSKYIDYIFNVSV
KAVYEEFQRGFYRVCEKEILRHFYPEELMTAIIGNTDYDWKQFEQNSKYEQGYQKSHPTIQLFWKAFHKLTLDEK
KKFLFFLTGRDRLHARGIQKMEIVFRCPETFSERDHPTSITCHNILSLPKYSTMERMEEALQVAINNNRGFVSPM
LTQS

FIGURE 3667

GGGGAAGTCGAGGCGGGAGTGACTCTGCTTCCGTTTCTGGTTTTGCTCTAGTGTTTGGGTTTCTTCGCGGCTGCT
CAAGATGAACCGACTCTTCGGGAAAGCGAAACCCAAGGCTCCGCCGCCCAGCCTGACTGGCTGCATTGGCACGGT
GGACAGTAGAGCAGAATCCATTGACAAGAAGATTTCTCGATTGGATGCTGAGCTAGTGAAGTATAAGGATCAGAT
CAAGAAGATGAGAGAGGGTCCTGCAAAGAATATGGTCAAGCAGAAAGCCTTGCGAGTTTTAAAGCAAAAGAGGAT
GTATGAGCAGCAGCGGGACAATCTTGCCCAACAGTCATTCAACATGGAACAAGCCAATTATACCATCCAGTCTTT
GAAGGACACCAAGACCACGGTTGATGCTATGAAACTGGGAGTAAAGGAAATGAAGAAGGCATACAAGCAAGTGAA
GATCGACCAGATTGAGGATTTACAAGACCAGCTAGAGGATATGATGGAAGATGCAAATGAAATCCAAGAAGCACT
GAGTCGCAGTTATGGCACCCCAGAACTGGATGAAGATGATTTAGAAGCAGAGTTGGATGCACTAGGTGATGAGCT
TCTGGCTGATGAAGACAGTTCTTATTTGGATGAGGCAGCATCTGCACCTGCAATTCCAGAAGGTGTTCCCACTGA
TACAAAAAACAAGGATGGAGTTCTGGTGGATGAATTTGGATTGCCACAGATCCCTGCTTCATAGATTTGCATCAT
TCAAGCATATCTTGTAAAACAAACACATATTATGGGACTAGGAAATATTTATCTTTCCAAATTTGCCATAACAGA
TTTAGGTTTCTTTCCTTTCTTTGAAGGAAAGTTTAATTACATTGCTCTTTTATTTTTTCCATTAAGAGACTCATT
GCTTGGGAAATGCTTTCTTCGTACTAAAATTTGATTCCTTTTTTTCTTATGAAAAACGAACTCAGTTTAAAAGTA
TTTTTAGCTCGTATGACTTGTTTTCATTCATTAATAATAATTTGAAATAAAACTAAGGAAATGGAATCTTAAAAG
TCTATGACAGTGTAACTCTACAGTCTCAAAATGACCTGATAAATTGATAAGACAAAGATGAGATTATTGGGGCTG
TTCATATTATGATTCAGAATCATTTTCTATTGTGGTATTATAGGTTGGTTAAAGTGATGGCCTTTTTGATGGGTT
TTGTTGTGTCTTGTGAACAAGTCGTTACTGTGTCCATTATTGGAATGGAATTATCACTACTGTATCATGAGTGGG
TATTTTGATTCTATGGTTCCCTCAGTATTACATCTTGACTTGTAATCAATTATGAATATTTCTTGATATTTAATG
TATAGGACATTTATTTATACTCAATAAATATTTTTCAAAAGGAAAAAAAAAAAAAATCAAAAAAAAAAAAAAAAAA
AAAAAAAAA

FIGURE 3668

MNRLFGKAKPKAPPPSLTGCIGTVDSRAESIDKKISRLDAELVKYKDQIKKMREGPAKNMVKQKALRVLKQKRMY
EQQRDNLAQQSFNMEQANYTIQSLKDTKTTVDAMKLGVKEMKKAYKQVKIDQIEDLQDQLEDMMEDANEIQEALS
RSYGTPELDEDDLEAELDALGDELLADEDSSYLDEAASAPAIPEGVPTDTKNKDGVLVDEFGLPQIPAS

FIGURE 3669

CTGTATGGCCACACCCTCACCCCTGAGCAGCCCGGGGGGCCACAGCAAGAGGTACAC**ATG**CTGTGGACACCAGCA
CCCCCAGACCTGACCCTTGGGGAAGGTGAGGAGGCTAGGACGTGGGACTTCCTGACAGCAGTGGGCGGCAGCCAG
GCTGAGGCTCAGGCCTGCCTCACTGAGGCCCTGCAGCTGCAGGCCAGGGGAGCTCTGTATACGGCTCACGCACAG
GCCTGGGCCCAGCTCTGGGTAGAATGTGGCTTGGACGTGGTGGGGCCCCTGCAGCTGCGCCAGGCCCTGCGTGGC
TCCCTCTACTACCTGCTCAGTGCCCTGCCCCAGCCCAAGGCCCCAGGATACATCTGCCATGGCCTCAGTCCTGGG
GGCCTCTCCAATGGGAGCCGTGAGGAATGCTACTGGGGCCACGTCTTCTGGGACCAGGACCTCTGGATGTTCCCG
AGTATCCTGATGTTCCACCCAGAAGCCGCCAGGGCCATCCTGGAGTACCGCATCCGCACGCTGGACGGGGCCCTG
GAGAACGCCCAGAACCTGGGCTACCAGGGAGCCAAGTTTGCCTGGGAGAGTGCAGACTCCGGCCTAGAGGTTTGC
CCTGAGGACATTTACGGAGTCCAGGAGGTCCACGTCAACGGGGCCGTGGTGTTGGCCTTCGAGCTGTACTACCAT
ACCACCCAGGACCTGCAGCTATTTCGAGAGGCTGGTGGCTGGGACGTGGTCAGGGCTGTGGCCGAGTTTTGGTGC
AGTCGTGTTGAGTGGAGCCCCAGGGAGGAAAAGTACCACCTGAGGGGAGTCATGTCCCCCGACGAGTACCACTCA
GGGGTCAACAACTCTGTGTACACCAACGTCCTGGTCCAGAACAGCCTGCGCTTTGCTGCTGCCCTGGCCCAGGAC
CTGGGTCTTCCCATCCCCAGCCAGTGGCTGGCGGTGGCTGACAAGATCAAGGTACCCTTTGACGTGGAGCAGAAC
TTCCACCCGAAGTTCCAGCTCCGAGTTCCCTGGGAGGACTTTTTCAGATGT**TAG**GGACCCGCTCCAGAGCCCCCT
CTGGGTCACCCTGGGTTCCTCCAGCCAGGCTCTCAGGGAAGGTCCATGCTGCTTGGCCTGAGTTCAAGGCTTTCT
GCCTGTAGCCTGGACTCCCGTGGACCCCCGTGGGCAGGTGGCTTCCCCGTGGCATCTCCACACCGCCTCTGCCTG
CCCCTGTGGACTGATGCTATCGCGCACGGTCCCACGACCCCACCCCGAGCTCCTGAAGCCGGGGTCTGAGCCTGC
ATCACCTCTGGCCTCTCATCCCCCACTCTCCTGAGAGCAGTGGTCACAGCGGCCGGCCGCTCTGCTGAGAAGGCA
GAGAGGCAGGCTCAGGCCTCAGCGTGGACAGCAGGGATAAGGGGCACGAAGGACGGGGACTCGGCCCCTTCAGAA
TTCCTCAGGACTCTCAGGTGCAGCTTTGCCAAAAAGGAACTTTTCATGTCATGCAGTTGAGGGGACTTAGTCTCA
ATCCCAGGCTCCTCTTGACTCTGGGCAGCTTTAATCAGGTTGGGCAGCCTCTGCTACAGCGTGGAGTGGGATGGC
TCTCTTCCCTCAGCCACGCCGCTTGTGAGGACAGAGGTGGGGGAGTGGGAAGTGGGAAGTCACCAGAGAACAGGA
GAGGGATTTGAGGGCGAGACCCCAGCGCTCTCCACGGACCAGCCAGAGGGACTGGAGCCAGGTGTGCATGGGTCC
AAGGCCCTGGCCCTGCCCAGCCTCTGTCTTGGGAGCTCAGCCCCAGGGTTCGGTCGTCAGCAGTTTCCCAAGAAC
AAGATGTGATGGCATCTGCTGCTGAAACCCTGATGAGGACCAGGCCCCCTGCACCGCTGTCAGCCTGAGGAATTA
AAGCTTTGGTGCTGGGAAGAGCAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3670

MLWTPAPPDLTLGEGEEARTWDFLTAVGGSQAEAQACLTEALQLQARGALYTAHAQAWAQLWVECGLDVVGPLQL
RQALRGSLYYLLSALPQPKAPGYICHGLSPGGLSNGSREECYWGHVFWDQDLWMFPSILMFHPEAARAILEYRIR
TLDGALENAQNLGYQGAKFAWESADSGLEVCPEDIYGVQEVHVNGAVVLAFELYYHTTQDLQLFREAGGWDVVRA
VAEFWCSRVEWSPREEKYHLRGVMSPDEYHSGVNNSVYTNVLVQNSLRFAAALAQDLGLPIPSQWLAVADKIKVP
FDVEQNFHPKFQLRVPWEDFFRC

FIGURE 3671

GGCACGAGGGGGACGTGCGGCCCAGCGAGTTGGTCGGTCCCGGGGTCACCCGCTACGGGAAGCAGGCCTCGCCAC
AGACTAAGAAAAATGGCTTTGTCAGCCCAACAGATACCCAGATGGTTTAACTCAGTTAAGTTGAGGAGCCTCATT
AATGCTGCACAACTCACAAAACGTTTTACTAGACCAGCAAGAACACTGTTACATGGCTTTTCTGCTCAGCCTCAG
ATATCCTCTGACAATTGCTTTCTCCAGTGGGGATTTAAGACTTACAGGACTTCCTCCTTATGGAATAGTTCCCAG
TCTACTAGCTCAAGTAGTCAGGAGAATAATTCTGCCCAAAGCAGTCTGCTTCCTTCC**ATG**AATGAACAGTCACAG
AAGACACAAAATATATCCAGCTTTGATTCTGAGCTGTTTCTAGAAGAACTGGATGAATTGCCTCCATTGTCTCCA
ATGCAGCCAATTTCAGAGGAAGAGGCTATTCAGATTATTGCAGACCCTCCATTGCCACCAGCTTCATTCACACTT
CGAGACTATGTGGATCATTCTGAGACTCTGCAGAAGTTGGTTCTTCTAGGCGTGGATTTGTCCAAGATAGAAAAA
CATCCAGAAGCAGCAAACCTCCTTCTGAGACTGGATTTTGAAAAAGACATTAAGCAAATGCTTCTGTTTCTTAAA
GATGTGGGTATAGAGGATAACCAACTGGGAGCATTCCTGACAAAAAATCATGCAATTTTCTCTGAAGACCTTGAA
AATCTGAAGACCAGGGTGGCTTATCTGCATTCAAAAAATTTCAGTAAAGCAGATGTTGCACAGATGGTCAGAAAA
GCACCATTTTTGCTGAACTTTTCAGTGGAAAGACTGGATAACAGATTGGGATTTTTTCAGAAAGAACTTGAACTT
AGTGTGAAGAAGACTAGAGATCTGGTAGTTCGTCTCCCAAGGCTGCTAACTGGAAGTCTGGAACCCGTGAAAGAA
AATATGAAGGTTTATCGTCTTGAACTTGGTTTTAAACATAACGAAATTCAACATATGATCACCAGAATCCCAAAG
ATGTTAACTGCAAATAAAATGAAACTTACCGAGACGTTTGATTTTGTGCACAATGTGATGAGCATTCCCCACCAC
ATCATTGTCAAGTTCCCACAGGTATTTAATACAAGGCTGTTTAAGGTCAAAGAAAGACACTTGTTTCTTACCTAT
TTAGGAAGAGCACAGTATGATCCAGCAAAACCTAACTACATCTCTTTGGACAAACTAGTATCTATTCCTGATGAA
ATATTTTGTGAAGAGATTGCCAAAGCATCAGTACAGGACTTTGAAAAATTCTTAAAAACGCTT**TAG**ATTTTTATG
TATGTTAAAATGCAGTATTGTAAAGTGAATATATATATGAATAAATGAATATATTTTTAAATGCCAAAAAAAAAA
AAAAAAAA

FIGURE 3672

MNEQSQKTQNISSFDSELFLEELDELPPLSPMQPISEEEAIQIIADPPLPPASFTLRDYVDHSETLQKLVLLGVD
LSKIEKHPEAANLLLRLDFEKDIKQMLLFLKDVGIEDNQLGAFLTKNHAIFSEDLENLKTRVAYLHSKNFSKADV
AQMVRKAPFLLNFSVERLDNRLGFFQKELELSVKKTRDLVVRLPRLLTGSLEPVKENMKVYRLELGFKHNEIQHM
ITRIPKMLTANKMKLTETFDFVHNVMSIPHHIIVKFPQVFNTRLFKVKERHLFLTYLGRAQYDPAKPNYISLDKL
VSIPDEIFCEEIAKASVQDFEKFLKTL

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FIGURE 3673

AGTTTCAGTTTCCATTTCTGATTTCTGCTCTCTGCGCTGAGCACAGCGGCACCAGGCTGAGCTAAGCAGGGCCGC
CTTGGGCAGGCCTACGTGGTGGTGCAGGCGAGACCCAGGCTGGGCAAGGCGCAGTTTCAGTTTCCATCTTGGGTC
TCTGAGCTGAGCAGAGTGGCACCAGGCTGAGTTAAGTGGGACTGCCCTGGGCAGACCTACCTACTAGAGCAGAATT
GGAGCTTCGGTCCTACCAATGGGAGGTGATCATGCCTGCCCTGGAGGGCAAGAATATCATCATCTGGCTGCCCAC
GGGTGCCGGGAAGACCCGGGCGGCTGCTTATGTGGCCAAGCGGCACCTAGAGACTGTGGATGGAGCCAAGGTGGT
TGTATTGGTCAACAGGGTGCACCTGGTGACCCAGCATGGTGAAGAGTTCAGGCGCATGCTGGATGGACGCTGGAC
CGTGACAACCCTGAGTGGGGACATGGGACCACGTGCTGGCTTTGGCCACCTGGCCCGGTGCCATGACCTGCTCAT
CTGCACAGCAGAGCTTCTGCAGATGGCACTGACCAGCCCCGAGGAGGAGGAGCACGTGGAGCTCACTGTCTTCTC
CCTGATCGTGGTGGATGAGTGCCACCACACGCACAAGGACACCGTCTACAACGTCATCATGAGCCAGTACCTAGA
ACTTAAACTCCAGAGGGCACAGCCGCTACCCCAGGTGCTGGGTCTCACAGCCTCCCCAGGCACTGGCGGGGCCTC
CAAACTCGATGGGGCCATCAACCACGTCCTGCAGCTCTGTGCCAACTTGGACACGTGGTGCATCATGTCACCCCA
GAACTGCTGCCCCCAGCTGCAGGAGCACAGCCAACAGCCTTGCAAACAGTACAACCTCTGCCACAGGCGCAGCCA
GGATCCGTTTGGGGACTTGCTGAAGAAGCTCATGGACCAAATCCATGACCACCTGGAGATGCCTGAGTTGAGCCG
GAAATTTGGGACGCAAATGTATGAGCAGCAGGTGGTGAAGCTGAGTGAGGCTGCGGCTTTGGCTGGGCTTCAGGA
GCAACGGGTGTATGCGCTTCACCTGAGGCGCTACAATGACGCGCTGCTCATCCATGACACCGTCCGCGCCGTGGA
TGCCTTGGCTGCGCTGCAGGATTTCTATCACAGGGAGCACGTCACTAAAACCCAGATCCTGTGTGCCGAGCGCCG
GCTGCTGGCCCTGTTCGATGACCGCAAGAATGAGCTGGCCCACTTGGCAACTCATGGCCCAGAGAATCCAAAACT
GGAGATGCTGGAAAAGATCCTGCAAAGGCAGTTCAGTAGCTCTAACAGCCCTCGGGGTATCATCTTCACCCGCAC
CCGCCAAAGCGCACACTCCCTCCTGCTCTGGCTCCAGCAGCAACAGGGCCTGCAGACTGTGGACATCCGGGCCCA
GCTACTGATTGGGGCTGGGAACAGCAGCCAGAGCACCCACATGACCCAGAGGGACCAGCAAGAAGTGATCCAGAA
GTTCCAAGATGGAACCCTGAACCTTCTGGTGGCCACGAGTGTGGCGGAGGAGGGGCTGGACATCCCACATTGCAA
TGTGGTGGTGCGTTATGGGCTCTTGACCAATGAAATCTCCATGGTCCAGGCCAGGGGCCGTGCCTGGGCCGATCA
GAGTGTATACGCGTTTGTAGCAACTGAAGGTAGCCGGGAGCTGAAGCGGGAGCTGATCAACGAGGCGCTGGAGAC
GCTAATGGAGCAGGCAGTGGCTGCTGTGCAGAAAATGGACCAGGCCGAGTACCAGGCCAAGATCCGGGATCTGCA
GCAGGCAGCCTTGACCAAGCGGGCGGCCCAGGCAGCCCAGCGGGAGAACCAGCGGCAGCAGTTCCCAGTGGAGCA
CGTGCAGCTACTCTGCATCAACTGCATGGTGGCTGTGGGCCATGGCAGCGACCTGCGGAAGGTGGAGGGCACCCA
CCATGTCAATGTGAACCCCAACTTCTCGAACTACTATAATGTCTCCAGGGATCCTGTGGTCATCAACAAAGTCTT
CAAGGACTGGAAGCCTGGGGGTGTCATCAGCTGCAGGAACTGTGGGGAGGTCTGGGGTCTGCAGATGATCTACAA
GTCAGTGAAGCTGCCAGTGCTCAAAGTCCGCAGCATGCTGCTGGAGACCCCTCAGGGGCGGATCCAGGCCAAAAA
GTGGTCCCGCGTGCCCTTCTCCGTGCCTGACTTTGACTTCCTGCAGCATTGTGCCGAGAACTTGTCGGACCTCTC
CCTGGACTGACCACCTCATTGCTGCAGTGCCCGGTTTGGGCTGTAGGGGGCGGGAGAGTCTGCAGCAGACTCCAG
GCCCCTCCTTCCTGAATCATCAGCTGTGGGCATCAGGCCCACCAGCCACACAGGAGTCCTGGGCACCCTGGCTTA
GGCTCCCGCAATGGGAAAACAACCGGAGGGCCAGAGCTTAGTCCAGACCTACCTTGTACGCACATAGACATTTTC
ATATGCACTGGATGGAGTTAGGGAAACTGAGGCAAAAGAATTTGCCATACTGTACTCAGAATCACGACATTCCTT
CCCTACCAAGGCCACTTCTATTTTTTGAGGCTCCTCATAAAAATAAATGAAAAAATGGGATAG

FIGURE 3674

MELRSYQWEVIMPALEGKNIIIWLPTGAGKTRAAAYVAKRHLETVDGAKVVVLVNRVHLVTQHGEEFRRMLDGRW
TVTTLSGDMGPRAGFGHLARCHDLLICTAELLQMALTSPEEEEHVELTVFSLIVVDECHHTHKDTVYNVIMSQYL
ELKLQRAQPLPQVLGLTASPGTGGASKLDGAINHVLQLCANLDTWCIMSPQNCCPQLQEHSQQPCKQYNLCHRRS
QDPFGDLLKKLMDQIHDHLEMPELSRKFGTQMYEQQVVKLSEAAALAGLQEQRVYALHLRRYNDALLIHDTVRAV
DALAALQDFYHREHVTKTQILCAERRLLALFDDRKNELAHLATHGPENPKLEMLEKILQRQFSSSNSPRGIIFTR
TRQSAHSLLLWLQQQQGLQTVDIRAQLLIGAGNSSQSTHMTQRDQQEVIQKFQDGTLNLLVATSVAEEGLDIPHC
NVVVRYGLLTNEISMVQARGRAWADQSVYAFVATEGSRELKRELINEALETLMEQAVAAVQKMDQAEYQAKIRDL
QQAALTKRAAQAAQRENQRQQFPVEHVQLLCINCMVAVGHGSDLRKVEGTHHVNVNPNFSNYYNVSRDPVVINKV
FKDWKPGGVISCRNCGEVWGLQMIYKSVKLPVLKVRSMLLETPQGRIQAKKWSRVPFSVPDFDFLQHCAENLSDL
SLD

FIGURE 3675

GCCCGCCCGCGCCCCGACCAGCCCGGCCTCGGGCAGCCACTCACCGGTGTCCCCGTCCGCGTCCTTCCTCCCCGG
GTCCCGGCC**ATG**GCGCTGAGTGAACCCATCCTGCCGTCCTTCTCCACTTTCGCCAGCCCGTGCCGCGAGCGCGGC
CTGCAGGAGCGCTGGCCGCGCGCCGAACCCGAGTCCGGCGGCACCGACGACGACCTCAACAGCGTGCTGGACTTC
ATCCTGTCCATGGGGCTGGATGGCCTGGGCGCCGAGGCCGCCCCGGAGCCGCCGCCGCCGCCCCCGCCGCCTGCG
TTCTATTACCCCGAACCCGGCGCGCCCCCGCCCTACAGCGCCCCCGCGGGTGGCCTGGTGTCTGAGCTGCTGCGA
CCCGAGCTGGATGCGCCGCTGGGGCCCGCACTGCACGGCCGCTTTCTGCTGGCGCCGCCCGGCCGCCTGGTCAAG
GCCGAGCCCCCTGAAGCGGACGGCGGCGGCGGCTACGGCTGCGCCCCCGGGCTGACCCGTGGACCGCGCGGCCTC
AAGCGCGAGGGCGCCCCGGGCCCGGCGGCTTCGTGCATGCGAGGTCCCGGGGGCCGCCCCCCGCCGCCGCCCGAC
ACACCGCCGCTCAGCCCCGACGGCCCCGCGCGCCTGCCCGCGCCCGGTCCGCGCGCCTCCTTCCCGCCGCCTTTC
GGTGGCCCTGGTTTCGGCGCGCCCGGGCCCGGCCTGCATTACGCGCCGCCTGCGCCCCCAGCCTTCGGTCTCTTC
GACGACGCGGCCGCCGCCGCGGCAGCCCTGGGCCTGGCGCCCCCCGCCGCCCGCGGTCTCCTCACGCCGCCTGCG
TCCCCGCTGGAGCTGCTGGAGGCCAAGCCAAAGCGCGGCCGCCGCTCTTGGCCCCGCAAACGCACCGCCACTCAC
ACCTGCAGCTACGCGGGCTGCGGCAAGACCTACACCAAGAGTTCGCATCTGAAGGCGCATCTGCGCACGCACACA
GGTGAGAAGCCCTACCACTGCAACTGGGACGGCTGCGGCTGGAAGTTTGCGCGCTCAGACGAGCTCACGCGCCAC
TACCGAAAGCACACGGGCCACCGGCCATTCCAGTGCCATCTGTGCGATCGTGCCTTTTCGCGCTCCGATCACCTG
GCGCTGCACATGAAACGGCACATG**TAG**CCGGGACGCCCCCGCCCACCTGCGGCGGGCCGTGGCGGGTCCCACGCG
CCGGGCGCGGCCCCCTCCCAAACTGTGACTGGTATTTATTGGACCCAGAGAACCGGGCCGGGCACAGCGTGGCTA
CAGAGGGTCTCCCTCGATGACGACGACGACGACGCCACCACCCCAGCCCCCGTCTGTGACTGAAGGCCCGGTGGG
AAAAGACCACGATCCTCCTTGACGAGTTTTGTTTTTCAAAATGGTGCAATAATTTAAGTGGCATCTTCTCTCCCA
CCGGGTCTACACTAGAGGATCGAGGCTTGTGATGCCTTGTGAGAAATAAGGGCCTTAATTTGTACTGTCTGCGGC
ATTTTTTATAATATTGTATATAGTGACTGACAAATATTGTATTACTGTACATAGAGAGACAGGTGGGCATTTTTG
GGCTACCTGGTTCGTTTTTATAAGATTTTGCTGGGTTGGTTTTTTTTTTAATTAAAAAGTTTTGCATCTTTT

FIGURE 3676

MALSEPILPSFSTFASPCRERGLQERWPRAEPESGGTDDDLNSVLDFILSMGLDGLGAEAAPEPPPPPPPPAFYY
PEPGAPPPYSAPAGGLVSELLRPELDAPLGPALHGRFLLAPPGRLVKAEPPEADGGGGYGCAPGLTRGPRGLKRE
GAPGPAASCMRGPGGRPPPPPDTPPLSPDGPARLPAPGPRASFPPPFGGPGFGAPGPGLHYAPPAPPAFGLFDDA
AAAAAALGLAPPAARGLLTPPASPLELLEAKPKRGRRSWPRKRTATHTCSYAGCGKTYTKSSHLKAHLRTHTGEK
PYHCNWDGCGWKFARSDELTRHYRKHTGHRPFQCHLCDRAFSRSDHLALHMKRHM

FIGURE 3677

GTCTGTAGGTTAAGGGAGAAG**ATG**GCGGCGCTAGGGGAACCCGTGCGGCTGGAGAGAGATATTTGTAGAGCAATT
GAATTATTGGAAAAACTACAAAGGAGTGGAGAAGTACCACCACAGAAACTTCAGGCTTTGCAAAGAGTCCTTCAA
AGTGAATTCTGCAATGCTGTGAGAGAGGTATATGAACATGTCTATGAGACTGTGGACATCAGTAGCAGTCCTGAA
GTGAGAGCGAACGCTACTGCAAAGGCTACTGTTGCTGCATTTGCTGCCAGTGAAGGACATTCTCATCCTCGAGTT
GTTGAGCTACCAAAAACAGAAGAGGGCCTTGGATTCAATATTATGGGAGGCAAAGAACAAAACTCTCCAATCTAT
ATATCCCGAATAATTCCAGGTGGAATTGCTGATAGACATGGGGGCCTCAAACGTGGAGATCAACTCCTCTCTGTT
AATGGAGTGAGTGTTGAAGGAGAACATCATGAAAAAGCTGTAGAACTGCTGAAAGCCGCACAAGGAAAGGTTAAA
TTAGTGGTACGATACACACCCAAAGTCTTAGAAGAAATGGAGTCGCGCTTTGAAAAAATGAGATCAGCAAAACGC
AGGCAACAGACC**TAA**TACATTTCAAAACTTGATATTTCATTTTGCGTTTTAGCTAGAGAAGTTTTCCTTGTGACT
TACTAATGGCTGCAATGCCAATGATTGTAAGAAAACAAACAAATTTATCATGAAATTCTCCTTGTCATTTTATAA
ATGCCTATTTTAACATCATTTATGGTTCCAGAGATGCATACACTTTTTTCTGACAAGAAAAAGTAAAAGGTGATG
AGGGCAATTCTGTCCTACTGTTTTTACAGGCCTTTTTCAAATGCAGATTTTGTCATAAAGTTGTTATAGATTTTT
TAAAATGCTTTTTTAATATTAAAATGTACTTTTACATTCTTAATCTTTTTTTAGAAAGGAAAAGTTTTCTTCATT
TAGCTGCTGATTTAAAAGTAAAGTTCTCCAATTCTTTTTTTTTGCTTACTCTATTTTTTTTAACCTGTGAAATTT
CTTTACAGTTTTCCAAGAAATTAAGCATAACAGTCTCATCTACGGCAGTTCATTACACTGTCAATGTTAACATCA
TTGCTGCATTTTGTACTTTGAACACACACATAATATATATAACCAGTGGTAAATCATGACTCAGTACAGTGCAAG
TTTTTTCACTTTTACTTAAACATAATATATAATGGATATTCATTTATACTGATTTATGAAAGTAAGTTTTTAAAC
ACTGAAACAATCATTGCTAAAATACATATTCTTAATATTTGAGCATTGAGGCAAGAGGATGTAATTGATAGCATT
ACTTATTACATCCCTATTTATGTTCAACCGTACATCAAATTATAAATGCAAAACAGGTTCAGATTTCATCTTTTG
TGATTTCTTTTAAATACTATTCATTTTTATTTAAATGCACAGTATTTCCCCTATATTTTAGTCCTTCCATTCCTA
GAGACAAACCAGTTATTTGGTGGTGGGAAGTAGCTGAAGCAAAGAAGGAAAAGTAATACCTTTAACCTCACTAGC
TTCAAGAGTAGACATTCTTACTAGCTCAATTTAAATAATTGATTTTAAATAGGAAGAAAAGAGGATATATTTAAG
ATACATAGAAATTATGATGCGAAGTATTCATGAGAATCTGTAGATTCCATCAAAATAAGTAGGAACTCATACTAA
AATTGTTGGATTTAAAGAGGCAACTTTTGTTTATGATTCAAATATGGGAATTTGAGAAATATTTCATTTGTCCAC
TGGATGTCACTATTTTACTAAAAGGCAGCTATTAGTGTGGGACTGTGACTGAGGTCTTAAAGACTGAAAGAGTTG
GGGTTCATTTTCTGTTACAACTTACAGGAACATTTGTACTTTAAGAAAAATTTAAGTGACAAATGTTAGAAGATG
ATGGATTGAAAAATATAAGTAATTTGGCATATTGACCCTATATAAAAAAGTGGGCATTTTGTAACATTCCTTCAG
GAAGAATAGAATTGTATGCTTTTTTCTGCATGTTTGTGATCACTGTGAGTCTCAGATGATTATTCCAGTTTTCAA
TGATTTTTCAAAATAAAAGTCAATCAGCATTGTTATTTATCATTAAGGTATTGAACACTGGATTGCATGGTTGAA
TGTGTCTTTAATTCACTACAAAATGTGCTTGTTATTGATAGGATCATGTTGTTAAATTGTAAATTTTCAAAATTA
ATTGATGTTTTAAAAATGTTGAGACCAAAGTAGTATAGAAGTATGGACTTAATTTAATTGTAAAATTATTAGAGG
TATTTGTTGTAGAGCTTTATATATTAAAGAGAGGTATTGGTGCATAT

FIGURE 3678

MAALGEPVRLERDICRAIELLEKLQRSGEVPPQKLQALQRVLQSEFCNAVREVYEHVYETVDISSSPEVRANATA
KATVAAFAASEGHSHPRVVELPKTEEGLGFNIMGGKEQNSPIYISRIIPGGIADRHGGLKRGDQLLSVNGVSVEG
EHHEKAVELLKAAQGKVKLVVRYTPKVLEEMESRFEKMRSAKRRQQT

FIGURE 3679

GGCACGAGGCCGCCTTCTGCATCGCGGCTTCGGCGGCTTCCACCTAGACACCTAACAGTCGCGGAGCCGGCCGCG
TCGTGAGGGGGTCGGCACGGGGAGTCGGGCGGTCTTGTGCATCTTGGCTACCTGTGGGTCGAAGATGTCGGACAT
CGGAGACTGGTTCAGGAGCATCCCGGCGATCACGCGCTATTGGTTCGCCGCCACCGTCGCCGTGCCCTTGGTCGG
CAAACTCGGCCTCATCAGCCCGGCCTACCTCTTCCTCTGGCCCGAAGCCTTCCTTTATCGCTTTCAGATTTGGAG
GCCAATCACTGCCACCTTTTATTTCCCTGTGGGTCCAGGAACTGGATTTCTTTATTTGGTCAATTTATATTTCTT
ATATCAGTATTCTACGCGACTTGAAACAGGAGCTTTTGATGGGAGGCCAGCAGACTATTTATTCATGCTCCTCTT
TAACTGGATTTGCATCGTGATTACTGGCTTAGCAATGGATATGCAGTTGCTGATGATTCCTCTGATCATGTCAGT
ACTTTATGTCTGGGCCCAGCTGAACAGAGACATGATTGTATCATTTTGGTTTGGAACACGATTTAAGGCCTGCTA
TTTACCCTGGGTTATCCTTGGATTCAACTATATCATCGGAGGCTCGGTAATCAATGAGCTTATTGGAAATCTGGT
TGGACATCTTTATTTTTTCCTAATGTTCAGATACCCAATGGACTTGGGAGGAAGAAATTTTCTATCCACACCTCA
GTTTTTGTACCGCTGGCTGCCCAGTAGGAGAGGAGGAGTATCAGGATTTGGTGTGCCCCCTGCTAGCATGAGGCG
AGCTGCTGATCAGAATGGCGGAGGCGGGAGACACAACTGGGGCCAGGGCTTTCGACTTGGAGACCAGTGAAGGGG
CGGCCTCGGGCAGCCGCTCCTCTCAAGCCACATTTCCTCCCAGTGCTGGGTGCGCTTAACAACTGCGTTCTGGCT
AACACTGTTGGACCTGACCCACACTGAATGTAGTCTTTCAGTACGAGACAAAGTTTCTTAAATCCCGAAGAAAAA
TATAAGTGTTCCACAAGTTTCACGATTCTCATTCAAGTCCTTACTGCTGTGAAGAACAAATACCAACTGTGCAAA
TTGCAAAACTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAA

FIGURE 3680

MSDIGDWFRSIPAITRYWFAATVAVPLVGKLGLISPAYLFLWPEAFLYRFQIWRPITATFYFPVGPGTGFLYLVN
LYFLYQYSTRLETGAFDGRPADYLFMLLFNWICIVITGLAMDMQLLMIPLIMSVLYVWAQLNRDMIVSFWFGTRF
KACYLPWVILGFNYIIGGSVINELIGNLVGHLYFFLMFRYPMDLGGRNFLSTPQFLYRWLPSRRGGVSGFGVPPA
SMRRAADQNGGGGRHNWGQGFRLGDQ

FIGURE 3681A

CAGCGCTGCTCCCCGGGCGCTCCTCCCCGGGCGCTCCTCCCCAGGCCTCCCGGGCGCTTGGATCCCGGCCATCTC
CGCACCCTTCAAGTGGGTGTGGGTGATTTCCTGGCGGGGGGAGCAGCCAGGTGAGCCCAAGATGCTGCTGCGCTC
GAAGCCTGCGCTGCCGCCGCCGCTGATGCTGCTGCTCCTGGGGCCGCTGGGTCCCCTCTCCCCTGGCGCCCTGCC
CCGACCTGCGCAAGCACAGGACGTCGTGGACCTGGACTTCTTCACCCAGGAGCCGCTGCACCTGGTGAGCCCCTC
GTTCCTGTCCGTCACCATTGACGCCAACCTGGCCACGGACCCGCGGTTCCTCATCCTCCTGGGTTCTCCAAAGCT
TCGTACCTTGGCCAGAGGCTTGTCTCCTGCGTACCTGAGGTTTGGTGGCACCAAGACAGACTTCCTAATTTTCGA
TCCCAAGAAGGAATCAACCTTTGAAGAGAGAAGTTACTGGCAATCTCAAGTCAACCAGGATATTTGCAAATATGG
ATCCATCCCTCCTGATGTGGAGGAGAAGTTACGGTTGGAATGGCCCTACCAGGAGCAATTGCTACTCCGAGAACA
CTACCAGAAAAAGTTCAAGAACAGCACCTACTCAAGAAGCTCTGTAGATGTGCTATACACTTTTGCAAACTGCTC
AGGACTGGACTTGATCTTTGGCCTAAATGCGTTATTAAGAACAGCAGATTTGCAGTGGAACAGTTCTAATGCTCA
GTTGCTCCTGGACTACTGCTCTTCCAAGGGGTATAACATTTCTTGGGAACTAGGCAATGAACCTAACAGTTTCCT
TAAGAAGGCTGATATTTTCATCAATGGGTCGCAGTTAGGAGAAGATTTTATTCAATTGCATAAACTTCTAAGAAA
GTCCACCTTCAAAAATGCAAAACTCTATGGTCCTGATGTTGGTCAGCCTCGAAGAAAGACGGCTAAGATGCTGAA
GAGCTTCCTGAAGGCTGGTGGAGAAGTGATTGATTCAGTTACATGGCATCACTACTATTTGAATGGACGGACTGC
TACCAGGGAAGATTTTCTAAACCCTGATGTATTGGACATTTTTATTTCATCTGTGCAAAAAGTTTTCCAGGTGGT
TGAGAGCACCAGGCCTGGCAAGAAGGTCTGGTTAGGAGAAACAAGCTCTGCATATGGAGGCGGAGCGCCCTTGCT
ATCCGACACCTTTGCAGCTGGCTTTATGTGGCTGGATAAATTGGGCCTGTCAGCCCGAATGGGAATAGAAGTGGT
GATGAGGCAAGTATTCTTTGGAGCAGGAAACTACCATTTAGTGGATGAAAACTTCGATCCTTTACCTGATTATTG
GCTATCTCTTCTGTTCAAGAAATTGGTGGGCACCAAGGTGTTAATGGCAAGCGTGCAAGGTTCAAAGAGAAGGAA
GCTTCGAGTATACCTTCATTGCACAAACACTGACAATCCAAGGTATAAAGAAGGAGATTTAACTCTGTATGCCAT
AAACCTCCATAATGTCACCAAGTACTTGCGGTTACCCTATCCTTTTTCTAACAAGCAAGTGGATAAATACCTTCT
AAGACCTTTGGGACCTCATGGATTACTTTCCAAATCTGTCCAACTCAATGGTCTAACTCTAAAGATGGTGGATGA
TCAAACCTTGCCACCTTTAATGGAAAAACCTCTCCGGCCAGGAAGTTCACTGGGCTTGCCAGCTTTCTCATATAG
TTTTTTTGTGATAAGAAATGCCAAAGTTGCTGCTTGCATCTGAAAATAAAATATACTAGTCCTGACACTGAATTT
TTCAAGTATACTAAGAGTAAAGCAACTCAAGTTATAGGAAAGGAAGCAGATACCTTGCAAAGCAACTAGTGGGTG
CTTGAGAGACACTGGGACACTGTCAGTGCTAGATTTAGCACAGTATTTTGATCTCGCTAGGTAGAACACTGCTAA
TAATAATAGCTAATAATACCTTGTTCCAAATACTGCTTAGCATTTTGCATGTTTTACTTTTATCTAAAGTTTTGT
TTTGTTTTATTATTTATTTATTTATTTATTTTGTGACGGAGAGAGATTCCATCTCAAAAAAACAAGTTATTAAAA
ATGTATATGAATGCTCCTAATATGGTCAGGAAGCAAGGAAGCGAAGGATATATTATGAGTTTTAAGAAGGTGCTT
AGCTGTATATTTATCTTTCAAAATGTATTAGAAGATTTTAGAATTCTTTCCTTCATGTGCCATCTCTACAGGCAC
CCATCAGAAAAAGCATACTGCCGTTACCGTGAAACTGGTTGTAAAAGAGAAACTATCTATTTGCACCTTAAAAGA
CAGCTAGATTTTGCTGATTTTCTTCTTTCGGTTTTCTTTGTCAGCAATAATATGTGAGAGGACAGATTGTTAGAT
ATGATAGTATAAAAAATGGTTAATGACAATTCAGAGGCGAGGAGATTCTGTAAACTTAAAATTACTATAAATGAA
ATTGATTTGTCAAGAGGATAAATTTTAGAAAACACCCAATACCTTATAACTGTCTGTTAATGCTTGCTTTTTCTC
TACCTTTCTTCCTTGTTTCAGTTGGGAAGCTTTTGGCTGCAAGTAACAGAAACTCCTAATTCAAATGGCTTAAGC
AATAAGGAAATGTATATTCCCACATAACTAGACGTTCAAACAGGCCAGGCTCCAGCACTTCAGTACGTCACCAGG
GGATCTGGGTTCTTCCCAGCTCTCTGCTCTGCCATCTTTAGCGCTGGCTTCATTCTCAGACTCTGGTAGCATGAT
GGCTGTAGCTGTTTCATGGGCCCCTTCAAACCTCATAGCAACCAGAGGAAGAAAATGAGCCATTTTTTGAGTCTC
CTTCATAGACTTGAATAACTCTTTTTCAGAGCTTCTCACAGCAAACCTCTCCTCATGTCTCCTCATGTCTTATTG
TTCAGAAATGGGTAATGTGGCCATTTCACCAGTCACTGCCAACAACAACGAGGTTCCTATAATTGTCTCTGAGTA
ACCCTTTGGAATGGAGAGGGTGTTGGTCAGTCTACAAACTGAACACTGCAGTTCTGCGCTTTTTACCAGTGAAAA
AATGTAATTATTTTCCCCTCTTAAGGATTAATATTCTTCAAATGTATGCCTGTTATGGATATAGTATCTTTAAAA
TTTTTTATTTTAATAGCTTTAGGGGTACACACTTTTTGCTTACAGGGGTGAATTGTGTAGTGGTGAAGACTCGGC
TTTTAATGTACTTGTCACCTGAGTGATGTACATTGTACCCAATAGGTAATTTTTCATCCATTACCCTCCTTCCGC
CCTCTTCCCTTCTGAGTCTCCAACATCCCTTATACCACTGTGTATGTTCTTGTGTACCTACAGCTAAGCTTCCAC
TTATAAGTGAGAACATGCAGTATTTGGTTTTCCATTCCTGAGTTACTTCCCTTAGGATAACAGCCCCCAGTTCCG
TCCAAGTTGCTGCAAAATACATTATTCTTCTTTATGGCTGAGTAATAGTCCATGGTACATATATACCACATTTTC
TTTATCCACTTATCAGTTGATGGACACTTAGGTTAATTCCATTCAATTTCATTCAATTTAAGTATATTTGTAAGG

FIGURE 3681B

AGCTAAAGCTGAAAATTAAATTTTAGATCTTTCAATACTCTTAAATTTTATATGTAAGTGGTTTTTATATTTTCA
CATTTGAAATAAAGTAATTTTTATAACCTTGAAAAAAAAAAAAAAAAAAAA

FIGURE 3682

MLLRSKPALPPPLMLLLLGPLGPLSPGALPRPAQAQDVVDLDFFTQEPLHLVSPSFLSVTIDANLATDPRFLILL
GSPKLRTLARGLSPAYLRFGGTKTDFLIFDPKKESTFEERSYWQSQVNQDICKYGSIPPDVEEKLRLEWPYQEQL
LLREHYQKKFKNSTYSRSSVDVLYTFANCSGLDLIFGLNALLRTADLQWNSSNAQLLLDYCSSKGYNISWELGNE
PNSFLKKADIFINGSQLGEDFIQLHKLLRKSTFKNAKLYGPDVGQPRRKTAKMLKSFLKAGGEVIDSVTWHHYYL
NGRTATREDFLNPDVLDIFISSVQKVFQVVESTRPGKKVWLGETSSAYGGGAPLLSDTFAAGFMWLDKLGLSARM
GIEVVMRQVFFGAGNYHLVDENFDPLPDYWLSLLFKKLVGTKVLMASVQGSKRRKLRVYLHCTNTDNPRYKEGDL
TLYAINLHNVTKYLRLPYPFSNKQVDKYLLRPLGPHGLLSKSVQLNGLTLKMVDDQTLPPLMEKPLRPGSSLGLP
AFSYSFFVIRNAKVAACI

FIGURE 3683

TCGTGCCGCCTTTGCCCGCTTCTGTGGACTGTTCGAACGCCCAGGGGTGGGCCAAACCCGTTTCTTAGGAAACCA
GGAATCCAGGGAAGGCAGAATGGCTTCCTTTGGGTGGAAGAGGAAAATTGGTGAGAAGGTCTCAAAGGTCACTTC
CCAGCAGTTTGAAGCTGAAGCTGCTGATGAGAAGGATGTAGTTGACAACGATGAAGGGAACTGGCTTCATGCCAT
TAAACGTAGGAAAGAAATTCTTCTTGAAGGCTGTGCTGAGAAAAGTAAACAGCTGAAGGATGAAGGAGCCAGTTT
GGCTGAAAATAAAAGATATCGGGAGGCAATTCAGAAGTGGGATGAAGCACTACAGTTAACTCCAAATGATGCTAC
CCTATACGAGATGAAATCACAGGTGCTAATGTCTCTTCATGAAATGTTCCCAGCAGTACATGCAGCAGAAATGGC
CGTCCAGCAAAATCCACATTCATGGGAGTCTTGGCAGACTTTGGGACGTGCTCAACTTGGTTTAGGAGAGATAAT
CCTGGCAATTCGAAGTTTTCAAGTAGCCCTTCACATCTATCCAATGAACCCTGAAATATGGAAAGAAGACCTCTC
TTGGGCAAGAACGCTCCAGGAGCAGCAGAAGGTAGCACAGAGGATTAAAAAAAGTGAAGCACCAGCTGAAGTAAC
ACACTTTTCACCAAAGTCAATTCCAGACTATGACTTTGAAAGTGATGAGATTGTTGCTGTTTGTGCAGCTATTGC
TGAGAAAGAGAAGACAGTTTCAGCAAATAAAACAATGGTTATTGTGTCTGCTTCTGGGGCCATAGAGACTGTAAC
TGAAAAGGAGGATGGTGCTACACCACCAGATGGCTCTGTTTTTATCAAAGCCCGATGAAGCAGTATGCATAGGAT
TATTTGAATCTGTCTTTTTGATTGCCTCTTGAAGTTTTGACATAGAGACATTTACTCTGGAGATAGATAGGAGAA
CTCCTGGTTGTAAAATATGTTTTTCAGATGAGGCATATAAAAACTAAAATGGCAGGATTATTGTATAGTGTTTGG
AATATGCTTTGATAAGTTATGATTTATATTTCTCAAGGTTAAAATTCTGAGTAAAATGGTCTTTGATTAATAAAC
TTAGTTTAATCTGAATATGTAAATGAATACATTTTAAAGACAAAACTTGAAAAATGTATTCTTGAATAGTGAATA
ATTTGATCAATGTTACTGAAATGCTGTCTCAACTTTTGTTTTATGATAAAGGAAGTGTGTGATTTCCCTCCCTCT
GAGAAATATACTGCGCTTAATATTTGCTGTCTTTTTCTTGCTTCATTAGAGTAAGTCTGTCAGAAAGCTTGAATA
TTTTTGACATTCATTTTGATTCAAAGTTGTCATTTGGTTATATGTGGAATCTTTGAAAGTTTGGCTGAAAATGCA
CACAAATGTGTACATTCTGAACATTTTCTGAAGTTTCTCTTAATTCTGATTTGTGTTTCTGTTTTGACTTTGAAG
TTGTAACAATGATAGTTGTCTCCTTCAGTATTTGGTAAAAGTGTAAAGTATTGATAAATATGAGAATGATGGTTT
TATTTTTTAATTGTTACAGTAAGTAATCCTTACCACAAATGAGCTATTTTTAAAATATGCATTTTTAAATGAATG
GCTTTTACAGATAGGTTAATGACAATTGTACTGCTATATTATCCCAGTCAAAACCAATACTTTCTTTTCTTTATT
TTACAAAGCTTTAAAAACCCTGGAAACAACTTACTTCTTGCTTGTGTCTTTCCATTTGATGACTGGGAATTACTT
TTCTAGATAACTTTTTTTGAAACTACTCAGTGAAATGAAAAATAATTACAATTTTAAATAGCTAATTATATCTTT
CTAAAAATAAAAAAGTAGGGCTGTTATTAGAGTGCCAATGAATAAATAACTTAAGCACAAAATACATAGAAATTG
GAATGTGATTTATAGTACAATCTCATGAGTATGAAAAGGCTATATTAAAAAAAATTTTATTGAAAGTCCACAGTC
ATATTCACAAACCAATACTGTCATTGCTAATCTGAACTATTATTTTTATACTATATATTGTAGTACAATAATATA
GAACTGTTGGGTTCTGTTACTTCTGACACTCAGGAAGATACTATTGGTGTATTAATTTTATCTTTCTTAGAGATG
AAAGTAGCCCGCTTTATGTTAAAGATCTTACTACTGTTGGAGCTTATAAGTAATGATCTACATTTTTTATGAAGA
TGGTTTTTAAAACTTTTGTTTTATTGGAATGCATATCTCTTTTCAGGGTTGGAGAAATTAGCACTTGCCTTGAAA
AGATATTATTTCCTTAAGTTATATCATCAGAAAATTAGCTCTGGTTAGAGAGGTTAGTTTCAGAGTGCTCCAAAA
AATATGTTAATTATTTTATTTTGTTTAATAAAGAACATTCTCAAAACGTAAATAGGTATCTAGAGAAGTGAGTAC
TCAACATTTGGTATATTGTTTTGAGTAATGGATGTTTGTTTTTTGTGTAATTTGTGAATAAATAGTTTTTTTCTG

FIGURE 3684

MASFGWKRKIGEKVSKVTSQQFEAEAADEKDVVDNDEGNWLHAIKRRKEILLEGCAEKSKQLKDEGASLAENKRY
REAIQKWDEALQLTPNDATLYEMKSQVLMSLHEMFPAVHAAEMAVQQNPHSWESWQTLGRAQLGLGEIILAIRSF
QVALHIYPMNPEIWKEDLSWARTLQEQQKVAQRIKKSEAPAEVTHFSPKSIPDYDFESDEIVAVCAAIAEKEKTV
SANKTMVIVSASGAIETVTEKEDGATPPDGSVFIKAR

FIGURE 3685

CCGCAGCCATGACCCCGCAGCTTCTCCTGGCCCTTGTCCTCTGGGCCAGCTGCCCGCCCTGCAGTGGAAGGAAAG
GGCCCCCAGCAGCTCTGACACTGCCCCGGGTGCAATGCCGAGCCTCTCGGTACCCGATCGCCGTGGATTGCTCCT
GGACCCTGCCGCCTGCTCCAAACTCCACCAGCCCCGTGTCCTTCATTGCCACGTACAGGCTCGGCATGGCTGCCC
GGGGCCACAGCTGGCCCTGCCTGCAGCAGACGCCAACGTCCACCAGCTGCACCATCACGGATGTCCAGCTGTTCT
CCATGGCTCCCTACGTGCTCAATGTCACCGCCGTCCACCCCTGGGGCTCCAGCAGCAGCTTCGTGCCTTTCATAA
CAGAGCACATCATCAAGCCCGACCCTCCAGAAGGCGTGCGCCTAAGCCCCCTCGCTGAGCGCCAGCTACAGGTGC
AGTGGGAGCCTCCCGGGTCCTGGCCCTTCCCAGAGATCTTCTCACTGAAGTACTGGATCCGTTACAAGCGTCAGG
GAGCTGCGCGCTTCCACCGGGTGGGGCCCATTGAAGCCACGTCCTTCATCCTCAGGGCTGTGCGGCCCCGAGCCA
GGTACTACGTCCAAGTGGCGGCTCAGGACCTCACAGACTACGGGGAACTGAGTGACTGGAGTCTCCCCGCCACTG
CCACAATGAGCCTGGGCAAGTAGCAAGGGCTTCCCGCTGCCTCCAGACAGCACCTGGGTCCTCGCCACCCTAAGC
CCCGGGACACCTGTTGGAGGGCGGATGGGATCTGCCTAGCCTGGGCTGGAGTCCTTGCTTTGCTGCTGCTGAGCT
GCCGGGCAACCTCAGATGACCGACTTTTCCCTTTGAGCCTCAGTTTCTCTAGCTGAGAAATGGAGATGTACTACT
CTCTCCTTTACCTTTACCTTTACCACAGTGCAGGGCTGACTGAACTGTCACTGTGAGATATTTTTTATTGTTTAA
TTAGAAAAGAATTGTTGTTGGGCTGGGCGCAGTGGATCGCACCTGTAATCCCAGTCACTGGGAAGCCGACGTGGG
AGGGTAGCTTGAGGCCAGGAGCTCGAAACCAGTCCGGGCCACACAGCAAGACCCCATCTCTAAAAAATTAATATA
AATATAAAATAAAAAAAAAAAAA

FIGURE 3686

MTPQLLLALVLWASCPPCSGRKGPPAALTLPRVQCRASRYPIAVDCSWTLPPAPNSTSPVSFIATYRLGMAARGH
SWPCLQQTPTSTSCTITDVQLFSMAPYVLNVTAVHPWGSSSSFVPFITEHIIKPDPPEGVRLSPLAERQLQVQWE
PPGSWPFPEIFSLKYWIRYKRQGAARFHRVGPIEATSFILRAVRPRARYYVQVAAQDLTDYGELSDWSLPATATM
SLGK

FIGURE 3687

GGCACGAGGGCGGGTGGGAAGCCGTGTCTCGCAGTCGTGGACTCGTGCAGCTGGGGCGTCCGCAGCCGCTCGTCA
CCCGCGTGATGCTGTTTCTGGCGTTGGGCAGCCCGTGGGCGGTCGAACTGCCTCTCTGCGGAAGGAGGACTGCAT
TGTGTGCGGCCGCCGCGCTCCGAGGTCCCCGGGCCTCTGTCTCCCGGGCGTCCTCCAGCAGCGGGCCTTCGGGGC
CGGTAGCCGGCTGGAGTACGGGGCCTTCGGGAGCCGCGCGCCTTCTCCGGCGTCCGGGTCGAGCGCAGATCCCTG
TTTATTGGGAAGGATATGTTCGATTCTTAAATACGCCATCTGACAAATCAGAAGATGGAAGGCTAATTTATACTG
GCAATATGGCCCGAGCAGTGTTTGGTGTGAAATGTTTCTCTTATTCTACGAGTCTGATTGGCCTTACATTTCTGC
CATACATTTTTACACAAAATAATGCTATTTCTGAAAGTGTGCCTCTGCCTATTCAAATCATATTCTATGGCATCA
TGGGAAGCTTTACGGTGATCACCCCAGTGCTGCTTCACTTTATTACAAAAGGCTATGTCATTCGATTGTACCATG
AGGCCACAACAGACACTTATAAAGCCATTACCTACAATGCTATGCTTGCAGAAACGAGTACAGTGTTTCACCAGA
ATGATGTGAAGATTCCAGATGCTAAACATGTATTTACCACATTTTATGCTAAAACAAAATCACTGTTAGTTAATC
CAGTGCTCTTTCCAAACCGTGAAGACTATATCCATCTAATGGGTTATGACAAAGAAGAATTTATTTTGTATATGG
AAGAAACCAGTGAAGAGAAACGGCATAAAGATGACAAATGAGCCTATTTGTTAGTGTTCGTGCTCAAATGTGATT
TACGTTTTAATGTATAATAATAAAATTGCCTTTTGCATTCCGTTAGTGACTGATTGTTAAAAATAATTTGAAATT
ATCAAAGCTTTTAATTTCCAGAGAATGATGTTTGTTTATAATAAAACAAGCTATGTTTGAAAACCAAAATGTAGT
ATCTACCATTCGTGTTTTAGAAAGGTATGTGAATAAATATGTTCATGCTAGTATAAGAGTTCTGTGTTACTGTGG
TTGACTCTAAACTGGGGATCTGATGTCAGTAGCAAATGGGAGAGTTGCTTTATTCTTTGTGTATGGATTTTTCTA
AGTGTATAAATATTTTCCGACATTAAAAGACATTTTCTCTTTGAGGAAGACACAGTCATAGGTGGTGCGGAGCTG
TGGTCCACCTGCTCCTGCTCCTGACTCACTGCTCTTTGCTGTTGCCTGAGGACCAAGTCTGTCAGGAAGCTGGCT
AGGAAGCCTTGCAGCAGCCATGGCTTTTAAACATACCAGAAAAACACCCGTGGAGTCAGAGGTGGCAATTCACCG
AATTCATATCACTCTAACGAGTTGCAACGTAAAATCCCTGGATAAGGTGTGTGCTGACTTGATCTGAGGAGCAAA
GGAAAAGAATCAGTGAAAGGACCAGTTTGAATGCCTACCAAGACTTTGAGAATCACTACAAGAAAAACTTACGGT
GAAGGTTCTAAGGCATGGGATCGTTTCCAGATGAGAATCCACAAGCGACTCATTGACTTGCGCAGTCCTCAGATA
GTTAAGCAGATTACTTCCATCAGTATTGAGCCAGGAGTTGAGATGGAAGTCACCATTGCAAATGCTTAAGTCAAC
TGTTTTCATAAATTGATTACCAGTTGTTAAAAAATTTTCAAAAAACCGCAAAATTTCAAGAAATTCACAAATTAT
GGGAGCAGTTTTAAGTCTTCTTTGGTTCAGAACACAGGTTTTTGCCTAACCCCTGGCATGATTGCCCATAAGAAC
ATACATGTACAGTTGAACTGGTGGTTAGCTATACGGGAAATGGTAAGTAGTGTTGTCTTCAGTATCTTAATTTGT
TTCTGCAACTGTGCACTCCTCCCTTGGTGGCACCCTATGGGTGTAGGAAAACCACTGTTATTAAACAGGTGAAAA
ATAAAAAATTTTTCAAAAAAAAAAAAAAAAAAA

FIGURE 3688

MARAVFGVKCFSYSTSLIGLTFLPYIFTQNNAISESVPLPIQIIFYGIMGSFTVITPVLLHFITKGYVIRLYHEA
TTDTYKAITYNAMLAETSTVFHQNDVKIPDAKHVFTTFYAKTKSLLVNPVLFPNREDYIHLMGYDKEEFILYMEE
TSEEKRHKDDK

FIGURE 3689

CGGAATTGGTGGGTTCTTGGTCTCACTGAGTTCTAGAATGAAGCTGCAGACCCTCGCAGTGAGTGTTACAGCTCT
TAAGGCTCTCTGACTGCCACCCCTGCCTGCCTGCCCGGCCCTGCACAACATGCAGCCCTCCGGCCTCGAGGGTCC
CGGCACGTTTGGTCGGTGGCCTCTGCTGAGTCTGCTGCTCCTGCTGCTGCTGCTCCAGCCTGTAACCTGTGCCTA
CACCACGCCAGGCCCCCCCAGAGCCCTCACCACGCTGGGCGCCCCCAGAGCCCACACCATGCCGGGCACCTACGC
TCCCTCGACCACACTCAGTAGTCCCAGCACCCAGGGCCTGCAAGAGCAGGCACGGGCCCTGATGCGGGACTTCCC
GCTCGTGGACGGCCACAACGACCTGCCCCTGGTCCTAAGGCAGGTTTACCAGAAAGGGCTACAGGATGTTAACCT
GCGCAATTTCAGCTACGGCCAGACCAGCCTGGACAGGCTTAGAGATGGCCTCGTGGGCGCCCAGTTCTGGTCAGC
CTATGTGCCATGCCAGACCCAGGACCGGGATGCCCTGCGCCTCACCCTGGAGCAGATTGACCTCATACGCCGCAT
GTGTGCCTCCTATTCTGAGCTGGAGCTTGTGACCTCGGCTAAAGCTCTGAACGACACTCAGAAATTGGCCTGCCT
CATCGGTGTAGAGGGTGGCCACTCGCTGGACAATAGCCTCTCCATCTTACGTACCTTCTACATGCTGGGAGTGCG
CTACCTGACGCTCACCCACACCTGCAACACACCCTGGGCAGAGAGCTCCGCTAAGGGCGTCCACTCCTTCTACAA
CAACATCAGCGGGCTGACTGACTTTGGTGAGAAGGTGGTGGCAGAAATGAACCGCCTGGGCATGATGGTAGACTT
ATCCCATGTCTCAGATGCTGTGGCACGGCGGGCCCTGGAAGTGTCACAGGCACCTGTGATCTTCTCCCACTCGGC
TGCCCGGGGTGTGTGCAACAGTGCTCGGAATGTTCCTGATGACATCCTGCAGCTTCTGAAGAAGAACGGTGGCGT
CGTGATGGTGTCTTTGTCCATGGGAGTAATACAGTGCAACCCATCAGCCAATGTGTCCACTGTGGCAGATCACTT
CGACCACATCAAGGCTGTCATTGGATCCAAGTTCATCGGGATTGGTGGAGATTATGATGGGGCCGGCAAATTCCC
TCAGGGGCTGGAAGACGTGTCCACATACCCGGTCCTGATAGAGGAGTTGCTGAGTCGTGGCTGGAGTGAGGAAGA
GCTTCAGGGTGTCCTTCGTGGAAACCTGCTGCGGGTCTTCAGACAAGTGGAAAAGGTACAGGAAGAAAACAAATG
GCAAAGCCCCTTGGAGGACAAGTTCCCGGATGAGCAGCTGAGCAGTTCCTGCCACTCCGACCTCTCACGTCTGCG
TCAGAGACAGAGTCTGACTTCAGGCCAGGAACTCACTGAGATTCCCATACACTGGACAGCCAAGTTACCAGCCAA
GTGGTCAGTCTCAGAGTCCTCCCCCCACATGGCCCCAGTCCTTGCAGTTGTGGCCACCTTCCCAGTCCTTATTCT
GTGGCTCTGATGACCCAGTTAGTCCTGCCAGATGTCACTGTAGCAAGCCACAGACACCCCACAAAGTTCCCCTGT
TGTGCAGGCACAAATATTTCTTGAAATAAATGTTTTGGACATAGAAAAAA

FIGURE 3690

MQPSGLEGPGTFGRWPLLSLLLLLLLLQPVTCAYTTPGPPRALTTLGAPRAHTMPGTYAPSTTLSSPSTQGLQEQ
ARALMRDFPLVDGHNDLPLVLRQVYQKGLQDVNLRNFSYGQTSLDRLRDGLVGAQFWSAYVPCQTQDRDALRLTL
EQIDLIRRMCASYSELELVTSAKALNDTQKLACLIGVEGGHSLDNSLSILRTFYMLGVRYLTLTHTCNTPWAESS
AKGVHSFYNNISGLTDFGEKVVAEMNRLGMMVDLSHVSDAVARRALEVSQAPVIFSHSAARGVCNSARNVPDDIL
QLLKKNGGVVMVSLSMGVIQCNPSANVSTVADHFDHIKAVIGSKFIGIGGDYDGAGKFPQGLEDVSTYPVLIEEL
LSRGWSEEELQGVLRGNLLRVFRQVEKVQEENKWQSPLEDKFPDEQLSSSCHSDLSRLRQRQSLTSGQELTEIPI
HWTAKLPAKWSVSESSPHMAPVLAVVATFPVLILWL

FIGURE 3691

CAGGTCCCCCAGACCATCCGAACCAGCCGCCCATGATGACCTGCGAGAGACTCCCATGCCCCACTGCAGGCCTGG
GCCCCCTCAGGGAGGAAGCGATGAAGCCAGGGGCAGCCTCCAGTCCCTTGCAGCAGGTCCCCGCCCCGCCACTGC
CTGCGAAGAAGAACCTTCCCACTGCCCCTCCCAGACGCCGCGTTTCCGAGAGGGTGTCCTTAGAAGACCAAAGTC
CGGGGATGGCGGCAGAGGGGGACCAGCTCAGCCTGCCTCCCCAAGGGACCTCAGACGGCCCTGAGGACACGCCCC
GGGAGAGCACGGAGCAAGGCCAGGACACAGAGGTGAAAGCCAGCGATCCTCACAGCATGCCAGAGCTGCCCAGGA
CAGCCAAACAACCCCCAGTCCCGCCCCCCAGGAAAAAACGGATCTCTCGACAACTGGCCTCGACCCTCCCAGCTC
CCTTAGAGAACGCTGAGCTCTGCACACAGGCG**ATG**GCCTTGGAGACACCCACGCCGGGTCCACCCAGAGAGGGCC
AAAGCCCTGCTTCTCAGGCTGGGACTCAGCACCCTCCTGCCCAGGCCACTGCCCATTCCCAGAGCTCTCCAGAGT
TCAAGGGCTCCCTGGCCTCCCTCTCAGACAGCTTGGGGGTGTCTGTCATGGCCACCGACCAGGACTCCTACTCCA
CCAGCAGCACGGAGGAGGAGCTGGAGCAGTTCAGCAGCCCCAGCGTGAAGAAGAAGCCCTCCATGATCCTGGGCA
AGGCTCGGCACCGGCTGAGCTTTGCCAGTTTCAGCAGCATGTTCCACGCTTTCCTCTCCAACAACCGCAAGCTGT
ACAAGAAGGTGGTGGAGCTGGCGCAGGACAAGGGCTCGTACTTTGGCAGCCTGGTGCAGGACTACAAGGTGTACA
GCCTGGAGATGATGGCGCGCCAGACCTCCAGCACGGAGATGCTGCAGGAGATTCGCACCATGATGACCCAGCTCA
AGAGCTACCTGCTGCAGAGCACCGAGCTCAAGGCCCTGGTGGACCCCGCCCTGCACTCCGAGGAGGAGCTCGAAG
CAATTGTAGAGTCTGCCTTGTACAAATGTGTCCTGAAGCCCCTGAAGGAAGCCATCAACTCATGCCTGCATCAGA
TCCACAGCAAGGATGGTTCGCTGCAGCAGCTCAAGGAGAACCAGTTAGTGATCCTGGCCACCACCACCACTGACC
TAGGTGTGACCACCAGCGTGCCGGAGGTGCCCATGATGGAGAAGTTCCTGCAGAAGTTCACCAGCATGCACAAGG
CCTACTCACCTGAGAAGAAGATCTCCATCCTGCTCAAGACCTGCAAACTCATCTACGACTCCATGGCCCTCGGCA
ACCCAGGGAAGCCCTATGGGGCGGATGACTTCCTGCCTGTGCTCATGTATGTGCTGGCCCGCAGCAACCTCACGG
AGATGCTTCTCAATGTGGAGTACATGATGGAGCTCATGGACCCCGCCCTGCAGCTGGGGGAGGGTTCCTACTATC
TGACCACCACCTACGGGGCCCTGGAGCACATCAAGAGCTACGACAAGATCACGGTGACCCGGCAGCTGAGTGTGG
AGGTGCAGGACTCCATCCACCGCTGGGAGCGCCGGCGTACTCTCAACAAGGCCCGGGCCTCCCGCTCCTCCGTAC
AGGACTTCATCTGCGTGTCGTACCTGGAGCCCGAGCAGCAGGCGCGGACGCTGGCGTCGCGGGCGGACACCCAGG
CCCAGGCGCTGTGCGCGCAGTGCGCGGAGAAGTTCGCGGTGGAGCGGCCGCAGGCGCACCGGCTGTTCGTGCTGG
TGGACGGGCGCTGCTTCCAGCTGGCGGACGACGCGCTGCCGCACTGCATCAAGGGCTACCTGCTGCGCAGCGAGC
CCAAGCGCGACTTCCACTTTGTCTACCGGCCCCTGGACGGTGGTGGCGGCGGCGGCGGGAGCCCGCCCTGCCTGG
TGGTGCGGGAGCCCAACTTCCTG**TGA**GGCCCTCCCGGGGCGCCTCCCCTCACCCCCAGGCGCACGTCTGGCCCCG
CCTCTGGCTGCGCACTCCCGACCGCGACGTCCACGCAGCAGAGGGACATGGGCCATTCCATGACGTGCCCAGGCC
AACGTCGCAGGACAGTTGTGAAAATAACATGACGCTCGTCCAAGGCCACTTCCTGAGGGCAAGTCCTAATAGCCC
TGAGACACCGAGACGGCATGTTCTTCATTAGACGGAAAGGGAAACTGAGGCTCAGGAGAGAGGCGCTCCAGGCCG
CTGCAGCCAACAAACCGGCGCCCTCTTCACACGTAGCTCCTCAGGCCATTCCCCATGAGTCCCCCACACCCACCC
CATCCTCGGTCTTTGCAAAGAAGGGCCCGAGCTTAGTTTCCCCAGGACTGGCCTAGGAAGGAGCACCGGCCACAG
CTGCTCCCCGTGCCACTCAGGGTGGACCCAGCATCTCAGGAGCACCTCAGGGTGTCGGTTAAGAGACAGGCCTCC
ACCCCTGCACCAGAGCCTGCTCTTAGCTCCCGGTGCCCCCAGACCCCGCAGCTCTGTGCCCGGCAAGAAGCAGCT
AGACACACGCCAGGGCGCCAAGCACGGCCAGCTCCGCGGACCCATGGACAAGCCCAGCCCCGCCTCAGGGAAAAC
AGGGCCTTTCCCTACAGGACACGCCCCAGAGCTGTGGCAGATTGCAGGAGCCATCGTGTGGGGAGAATTTAATAA
AAGCCCTTTTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAA

FIGURE 3692

MALETPTPGPPREGQSPASQAGTQHPPAQATAHSQSSPEFKGSLASLSDSLGVSVMATDQDSYSTSSTEEELEQF
SSPSVKKKPSMILGKARHRLSFASFSSMFHAFLSNNRKLYKKVVELAQDKGSYFGSLVQDYKVYSLEMMARQTSS
TEMLQEIRTMMTQLKSYLLQSTELKALVDPALHSEEELEAIVESALYKCVLKPLKEAINSCLHQIHSKDGSLQQL
KENQLVILATTTTDLGVTTSVPEVPMMEKFLQKFTSMHKAYSPEKKISILLKTCKLIYDSMALGNPGKPYGADDF
LPVLMYVLARSNLTEMLLNVEYMMELMDPALQLGEGSYYLTTTYGALEHIKSYDKITVTRQLSVEVQDSIHRWER
RRTLNKARASRSSVQDFICVSYLEPEQQARTLASRADTQAQALCAQCAEKFAVERPQAHRLFVLVDGRCFQLADD
ALPHCIKGYLLRSEPKRDFHFVYRPLDGGGGGGGSPPCLVVREPNFL

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FIGURE 3693

CTCGACAACTGGCCTCGACCCTCCCAGCTCCCTTAGAGAACGCTGAGCTCTGCACACAGGCGATGGCCTTGGAGA
CACCCACGCCGGGTCCACCCAGAGAGGGCCAAAGCCCTGCTTCTCAGGCTGGGACTCAGCACCCTCCTGCCCAGG
CCACTGCCCATTCCCAGAGCTCTCCAGAGTTCAAGGGCTCCCTGGCCTCCCTCTCAGACAGCTTGGGGGTGTCTG
TCATGGCCACCGACCAGGACTCCTACTCCACCAGCAGCACGGAGGAGGAGCTGGAGCAGTTCAGCAGCCCCAGCG
TGAAGAAGAAGCCCTCCATGATCCTGGGCAAGGCTCGGCACCGGCTGAGCTTTGCCAGTTTCAGCAGCATGTTCC
ACGCTTTCCTCTCCAACAACCGCAAGCTGTACAAGAAGGTGGTGGAGCTGGCGCAGGACAAGGGCTCGTACTTTG
GCAGCCTGGTGCAGGACTACAAGGTGTACAGCCTGGAGATGATGGCGCGCCAGACCTCCAGCACGGAGATGCTGC
AGGAGATTCGCACCATGATGACCCAGCTCAAGAGCTACCTGCTGCAGAGCACCGAGCTCAAGGCCCTGGTGGACC
CCGCCCTGCACTCCGAGGAGGAGCTCGAAGCAATTGTAGAGTCTGCCTTGTACAAATGTGTCCTGAAGCCCCTGA
AGGAAGCCATCAACTCATGCCTGCATCAGATCCACAGCAAGGATGGTTCGCTGCAGCAGCTCAAGGAGAACCAGT
TAGTGATCCTGGCCACCACCACCACTGACCTAGGTGTGACCACCAGCGTGCCGGAGGTGCCCATGATGGAGAAGA
TCCTGCAGAAGTTCACCAGCATGCACAAGGCCTACTCACCTGAGAAGAAGATCTCCATCCTGCTCAAGACCTGCA
AACTCATCTACGACTCCATGGCCCTCGGCAACCCAGGGAAGCCCTATGGGGCGGATGACTTCCTGCCTGTGCTCA
TGTATGTGCTGGCCCGCAGCAACCTCACGGAGATGCTTCTCAATGTGGAGTACATGATGGAGCTCATGGACCCCG
CCCTGCAGCTGGGGGAGGGTTCCTACTATCTGACCACCACCTACGGGGCCCTGGAGCACATCAAGAGCTACGACA
AGATCACGGTGACCCGGCAGCTGAGTGTGGAGGTGCAGGACTCCATCCACCGCTGGGAGCGCCGGCGTACTCTCA
ACAAGGCCCGGGCCTCCCGCTCCTCCGTACAGGACTTCATCTGCGTGTCGTACCTGGAGCCCGAGCAGCAGGCGC
GGACGCTGGCGTCGCGGGCGGACACCCAGGCCCAGGCGCTGTGCGCGCAGTGCGCGGAGAAGTTCGCGGTGGAGC
GGCCGCAGGCGCACCGGCTGTTCGTGCTGGTGGACGGGCGCTGCTTCCAGCTGGCGGACGACGCGCTGCCGCACT
GCATCAAGGGCTACCTGCTGCGCAGCGAGCCCAAGCGCGACTTCCACTTTGTCTACCGGCCCCTGGACGGTGGTG
GCGGCGGCGGCGGGAGCCCGCCCTGCCTGGTGGTGCGGGAGCCCAACTTCCTGTGAGGCCCTCCCGGGGCGCCTC
CCCTCACCCCCAGGCGCACGTCTGGCCCCGCCTCTGGCTGCGCACTCCCGACCGCGACGTCCACGCAGCAGAGGG
ACATGGGCCATTCCATGACGTGCCCAGGCCAACGTCGCAGGACAGTTGTGAAAATAACATGACGCTCGTCCAAGG
CCACTTCCTGAGGGCAAGTCCTAATAGCCCTGAGACACCGAGACGGCATGTTCTTCATTAGACGGAAAGGGAAAC
TGAGGCTCAGGAGAGAGGCGCTCCAGGCCGCTGCAGCCAACAAACCGGCGCCCTCTTCACACGTAGCTCCTCAGG
CCATTCCCCATGAGTCCCCCACACCCACCCCATCCTCGGTCTTTGCAAAGAAGGGCCCGAGCTTAGTTTCCCCAG
GACTGGCCTAGGAAGGAGCACCGGCCACAGCTGCTCCCCGTGCCACTCAGGGTGGACCCAGCATCTCAGGAGCAC
CTCAGGGTGTCGGTTAAGAGACAGGCCTCCACCCCTGCACCAGAGCCTGCTCTTAGCTCCCGGTGCCCCCAGACC
CCGCAGCTCTGTGCCCGGCAAGAAGCAGCTAGACACACGCCAGGGCGCCAAGCACGGCCAGCTCCGCGGACCCAT
GGACAAGCCCAGCCCCGCCTCAGGGAAAACAGGGCCTTTCCCTACAGGACACGCCCCAGAGCTGTGGCAGATTGC
AGGAGCCATCGTGTGGGGAGAATTTAATAAAAGCCCTTTTGAAAATGAAAAAAAAAAAAAAAAAA

FIGURE 3694

MALETPTPGPPREGQSPASQAGTQHPPAQATAHSQSSPEFKGSLASLSDSLGVSVMATDQDSYSTSSTEEELEQF
SSPSVKKKPSMILGKARHRLSFASFSSMFHAFLSNNRKLYKKVVELAQDKGSYFGSLVQDYKVYSLEMMARQTSS
TEMLQEIRTMMTQLKSYLLQSTELKALVDPALHSEEELEAIVESALYKCVLKPLKEAINSCLHQIHSKDGSLQQL
KENQLVILATTTTDLGVTTSVPEVPMMEKILQKFTSMHKAYSPEKKISILLKTCKLIYDSMALGNPGKPYGADDF
LPVLMYVLARSNLTEMLLNVEYMMELMDPALQLGEGSYYLTTTYGALEHIKSYDKITVTRQLSVEVQDSIHRWER
RRTLNKARASRSSVQDFICVSYLEPEQQARTLASRADTQAQALCAQCAEKFAVERPQAHRLFVLVDGRCFQLADD
ALPHCIKGYLLRSEPKRDFHFVYRPLDGGGGGGGSPPCLVVREPNFL

FIGURE 3695

TATTTTGTCAGATGTGTTGAACCTCGATTAAGATTGCATTATGACATTCTTGAAGACCGAGTTCCATCAGGACTT
ATTGTTGACTACCACAATCTGTTGTCTCAATGTGAGGAGAGTTACAGGAAATTTTTAAATCTGAGAAGCAGTTTG
TCAAATTGTAACTCTGACTCCGAGCAGGAAAATATCTCCATGGTGGAAGGGTTAAAATTGTATTCGGAGATGGAA
CAGTTGAAACAAAAGCTGAAACTCATTGAGAATCCTTTGTTGAGGTATGTGTTTGGTTATCAGAAGAATTCTAAC
ATCCAAGCAAAGGGTGTCCGTTCCAGCGGTCAGAAGATCACTCATGTGGTCTCCTCCACCATGATGGCTGGTCTC
CTGCGGTCCCTGCTTACGGACAGGCTTTGCCAGGAGCCTGGTGAGGAAGAAAGAGAAATTCAGTTCCATAGTGAT
CCATTGTCTGCTATAAATGCCTGCTTCGAAGGTGACACTGTTATTGTTTGTCCTGGCCATTATGTGGTACATGGC
ACTTTCTCCATTGCTGACTCCATTGAGTTGGAAGGATATGGCCTACCAGATGACATTGTGATAGAAAAGAGGGGC
AAAGGCGACACTTTTGTGGACTGCACTGGTGCTGATATTAAAATCTCAGGCATAAGATTTGTTCAGCATGATGCT
GTAGAGGGAATCTTAATTGCTCACCGTGGTAAGACTACGCTGGAAAACTGTGTGCTGCAGTGTGAGACGACCGGA
GTCACAGTGCGGACATCAGCAGAGTTTCTAATGAAGAACTCGGATTTATATGGCGCCAAGGGTGCTGGTATAGAA
ATCTACCCTGGGAGTCAGTGCACCCTGAGTGACAATGGGATCCATCACTGCAAGGAAGGGATCCTCATTAAGGAC
TTCTTAGATGAACATTATGACATTCCCAAGATATCCATGGTGAATAATATAATACATAATAATGAAGGTTATGGT
GTTGTCTTGGTGAAACCTACAATCTTCTCTGACCTGCAAGAAAATGCTGAAGATGGAACTGAAGAAAATAAAGCG
CTTAAAATTCAGACAAGTGGAGAGCCAGATGTGGCTGAAAGAGTGGATCTAGAAGAGCTGATTGAGTGTGCAACT
GGTAAAATGGAGCTTTGTGCAAGAACTGACCCTTCTGAGCAAGTCGAGGGAAATTGTGAAATTGTAAATGAACTA
ATTGCTGCCTCCACACAGAAAGGCCAGATAAAGAAGAAAAGGTTGAGTGAACTGGGGATCACGCAAGCTGATGAC
AACTTAATGTCACAGGAGATGTTTGTTGGGATTGTGGGGAACCAGTTCAAGTGGAATGGGAAAGGTAGTTTTGGC
ACATTTCTTTTCTGACTACAGTGATGTAAGTAGATAGCAAAATACTGGATTTTGCACATGCTGCCCTAAGAATCA
CTGCTGCCATTGTAGTTTGCTGTATTGTCTGTATTTTATATTTGATTATTTGGGCTTGAGTGAAAGGTAGATTTA
TTTCCATTTGCAGGTGTTGCACATAAAACACTCCCTCTTTATAAGAAAAATCATAAATGCATATAAAATAGAAAA
TATTTGGAGATTGCTTATCTGAAAGTCTTGCTTTCTTATACACATGGTTCTCTCATATTAAGCCTGGTGGTTACT
TTTTAGTGTAATTACCTTTAGCACTTCAAAGACGAGGAAGTAAGGAAGGGAATGCAAGACTAGTGCATAAAAATG
CAATAGGTGTCATATGTACAGCATTCTTCTTAGAGTTGCCTTTTCATCCCAATTACAGTGAGTCTGATTTCCATC
CTGTATTTGCATAATACTTGTCTTAAAATAAAAGCTTTTATGATTGGGAATTTATCTGCCTAATCAGACTTATTA
TTGAGACGTCAATGGGACGCATTTTTCTGTTGAGCTATGCAGTCGTCAAAACAGCGATAGACAGCATAGGAGGTT
TGAAGCAGAAATGAAATGTGTTATTCAGAGCCAATGTTGTACATAGAGCATTTTCACTATTGCTGAATGGGAATG
ATTAAAAACAAGGTATTTTTCGGGCCAGGCGGTGGCTCACGCTTGTAATCGCAGCACTTTGGGAGGCTGAGGCAG
GAGGATCACTTGAGCCCAGGAGTTCAAGACTAGCCTAGGCAACATAGTGAGACCCTGTCTCTACTAAAAATAAAT
TTAAAAAAAATTAGCTGAGTGTGGTGGTGCATGCATGTAGTTCCAGCTACTCAGGAGGCTGAGGCTAGAGGATCC
TTGAGCCCAGGAGGTTGAGGCTGCAGTGAGGTGTGATTGCGCCACTGCATTCCAGCTTGGGCGACAGAGCGAGAC
CCAGTCTCAAAAAAAAAAAAAAAAGTATTTTTCTCTTACCGTTACAGTATTCTGATTATATTACTGACACAGTCAA
AATGATTAACTGTACAACCTGTATCTGCTGGGTGTTCTTGTTATCATATTGTAAAACAGCTTTAAAAATATTTAT
ATTTTAAAAACTGTATGTGACATTAATATGCCTAATGATTAAAATTATAGTGATGAAATAAAAAAAAAAAAAAAA
AAAAA

FIGURE 3696

MVEGLKLYSEMEQLKQKLKLIENPLLRYVFGYQKNSNIQAKGVRSSGQKITHVVSSTMMAGLLRSLLTDRLCQEP
GEEEREIQFHSDPLSAINACFEGDTVIVCPGHYVVHGTFSIADSIELEGYGLPDDIVIEKRGKGDTFVDCTGADI
KISGIRFVQHDAVEGILIAHRGKTTLENCVLQCETTGVTVRTSAEFLMKNSDLYGAKGAGIEIYPGSQCTLSDNG
IHHCKEGILIKDFLDEHYDIPKISMVNNIIHNNEGYGVVLVKPTIFSDLQENAEDGTEENKALKIQTSGEPDVAE
RVDLEELIECATGKMELCARTDPSEQVEGNCEIVNELIAASTQKGQIKKKRLSELGITQADDNLMSQEMFVGIVG
NQFKWNGKGSFGTFLF

FIGURE 3697A

TTGGGAAACCCCTACCTGTCTGTACCTGTAGGTCTTTTCTCTGGGGTCTGGAAGAAGAATCCTTCAATATCTTGC
CTTCTGGTAATCTGAGAGCAGGGCGAGAAAAGGAAGATCAGAGTTCCACCCTTAAATCTGTAGGTTTTCACTCCC
CCACTCTCCTTTGCAGTCCCGTGGAGTCTCCATCTGAGCCCTTTCCTAGTCCAGGCATCCCGATGTTGGTGGATG
GCCCATCTGAGCGGCCAGCCCTGTGCTTCTTGCTGTTGGCTGTGGCAATGTCTTTCTTCGGCTCAGCTCTATCCA
TAGATGAAACACGGGCGCATCTGTTGTTGAAAGAAAAGATGATGCGGCTCGGGGGGCGGCTGGTGCTGAACACCA
AGGAGGAGCTGGCCAATGAGAGGCTCATGACGCTCAAAATCGCTGAGATGAAGGAGGCCATGAGGACCCTGATAT
TCCCACCCAGCATGCACTTTTTCCAGGCCAAGCATCTCATTGAGAGAAGTCAAGTGTTTAATATTCTAAGGATGA
TGCCAAAAGGGGCTGCCTTGCACCTCCATGACATTGGCATCGTGACTATGGACTGGCTGGTGAGGAATGTCACCT
ACAGGCCTCACTGCCACATCTGTTTCACCCCAAGGGGGATCATGCAGTTCAGATTTGCTCACCCAACTCCCCGTC
CATCAGAAAAATGTTCCAAGTGGATTCTGCTGGAGGATTATCGGAAGCGGGTGCAGAACGTCACTGAGTTTGATG
ACAGCTTGCTGAGGAATTTCACTCTGGTGACCCAGCACCCGGAGGTGATTTACACAAACCAAAATGTTGTCTGGT
CGAAATTTGAAACCATCTTCTTCACCATCTCTGGTCTCATCCATTACGCACCAGTGTTCAGAGACTATGTCTTCC
GGAGCATGCAGGAGTTCTACGAGGACAACGTGCTCTACATGGAGATCAGAGCCAGGCTGCTGCCGGTGTATGAGC
TCAGTGGAGAGCACCATGACGAAGAGTGGTCAGTGAAGACTTACCAGGAAGTAGCTCAGAAGTTTGTGGAAACTC
ACCCTGAGTTTATTGGAATCAAAATCATTTATTCGGATCACAGATCCAAAGATGTGGCTGTCATCGCAGAATCCA
TCCGAATGGCCATGGGGCTCCGAATCAAGTTCCCCACGGTGGTGGCAGGGTTTGACCTGGTGGGGCATGAGGACA
CTGGCCACTCCTTGCGTGACTACAAGGAAGCTCTGATGATCCCCGCCAAGGATGGCGTTAAGCTGCCTTACTTCT
TCCACGCCGGAGAAACAGACTGGCAGGGTACTTCCATAGACAGGAACATTCTGGATGCTCTGATGCTGAACACTA
CCAGAATCGGCCATGGATTTGCTTTGAGCAAACACCCCGCAGTCAGGACTTACTCCTGGAAAAAGGACATCCCCA
TAGAAGTCTGTCCCATCTCTAACCAGGTGCTGAAACTGGTGTCTGACTTGAGGAACCACCCTGTAGCCACTCTGA
TGGCCACTGGGCACCCCATGGTGATCAGCTCTGATGACCCAGCTATGTTTGGTGCCAAAGGCTTGTCCTATGATT
TCTATGAGGTCTTCATGGGCATTGGGGGGATGAAGGCTGACCTGAGGACCCTCAAACAGCTGGCCATGAACTCTA
TCAAGTACAGTACCCTGTTGGAGAGTGAGAAAAATACTTTCATGGAAATCTGGAAGAAGAGATGGGATAAGTTCA
TAGCAGATGTGGCTACAAAGTGAGGAGAAGCTAGCCAGCCCTCTACAAGCTGTCTTCTTGCACACGCTGTCACTT
CCTCTCACTCGTTCTTGAATCAGCTCCATGTGCCCATGAAATCAATGGCCTCTGTATGGAGCGACCCTGTGAGAA
GCACTTGGCTGGCTGAGCAAATTCATCCTCTGGAAATATTCTCTCTCAGCCACAGTGACATTGACCCTCTTGGTT
TTCTCCTCTCTCTGGCCATTTCTTCCAGTTTCCCTATTTCAGAGTCTTCTCCTCTCTCTGATCTCTGTGCTGTTT
CCTCAGGACTCAGTCCTGGGCTCTCTTCTATTCTGGTCTCTTTATTTTTTTATTTTTGTATTTTTTCGAGATGGA
GTTTTGCTCTTGTTGCCCAGGCTGGAGTACAATGGTGCGATCTCAGCTCAGTGCAACCTCCGCCACCCGGGTTCA
GGCAATTCTCTTGCATCAGCCTCCCGAGTAGTTGGAATTATAGGCATGTGCCACCACACCCAGCTGATTTTTGCA
TTTTTAGTAGAGACAGGTTTTCACCATGTTGGCGAGCTGGTATCCAACTCTTGACCTCAGGTGATCCACTCGCCC
CTTGGCTCCCAAAGTGCTGGAATTACAGGCGTTAGCCACCATGCCTGGCCTATTCTGGTCTCTTTAACTCTCTCC
TCTTTATTTCTCTTCTCTCTCTGTACACTTTTCCTGGGTGGTCTCATCCATTCCTTTGCTTTTTCATACCATTTA
TTTGTTAATGATTCCCACATTTATTTATGCACTTGGAGAGCTCACAGGAATCTCAGAAACTGATGAGGTACAATT
CTGAACCCTCAGTCTCTTCCCTTTAAACCTTTCTTTTTCTCTACTTTAATTTTTCTAAAGAGTGTCTTGCTATGT
TGCCCAGGCTGGTCTCCAACTCAAGTGATCCTCCTGCCGCAGTCTCCCGAAGTGCTGGGATTACTGACATGAGCC
ACCACACTCAGCCCTTTAAACCTTTCCCTGGCCTTTCCCATAGCTGGTGAAGGACACCTCCATCCATTCCACGCA
GTTGCTCAAAGCAGAAATTTTCAGTGCAAGTCTTGATGCTGCGCCGTCCCCCACTCCCTACATCAGAACGCATCC
CTCATCTGGACTCCAGCGGTGGCTTCTTGATGCTGCGCGGTCCCCCACTCCCTACATCAGAATGCATCCCGCATC
CAGACTCCAGCGGTGGTGCTCTACCTGCACGCTGTTGCCAAGTCCAAGCTACCATACTCCTGCCTGAGCTATGAC
AACAGCCTCCTCACTGATCTCCCCTTTCTTCCCTTTGCCTCCTCCAGCTCATTTTTCACAGTGTAGAATGACATT
TTGTTTGTTTGTTTTGTTTTGTTTGAGATGGAGTCTCGTTCTGTTGCCCAGGGTGGAGTGCAGCGGTGCGATCTC
GGCTCACTGCAACTTCCACTCCCGGGTTCAAGCGGATTCTCGTGCCTCAGCCTCCTGAGTAGCTGGGATTACAGG
CATGCACCACCATGCCCGGATAATTTTTGTATTTTTAGTAGAGATGGGGTTTCACTATGTTGGCCAGGCTGGTCT
CGAACACCTGACTTCGTGGTCCACCCGCCTTCGGCCTCCCAAAGCACTGGGATTACAGGCGTGAGCCACCCGGCC
TGGCCTAGAATGACTTTTAAAAGATCAAATTAAATCAGGTCACTCCTTTGCTTACAACGCAGTGCGTTTAGAGGT
ACACCCCATGTCTCCACAGGGCATACAGCATCCGATTTAATCTGGATCCATTCCGGCGCTTCCTCTCCCAGTCAC
CCAGAGGGCCCCAACCCCGGCGGCCCTTTCTTCCTCAAATGTCCTCGGCTCTATACCGTGCCTGGGTCTTTTCTC

FIGURE 3697B

TTTCTCTCTGCCTGGAACATTCCTTCTTTCCCCTTTTGTCTTGCCCACTCCTGTTTACCCTTCAAGTTTCAAGTT
CATGTCACTGTCTCAGAGAGGTTTTCCTGTGCTCGCCCTGTTTCTCTCAGGAAGCCTTGCTCTTTTCCATCATGC
CTCTAATCACAGCTTATAATCGGATATTTATTTCTGTGTCTACAGTCTTGCCCTGCCAGACTGTAAGCCCCATGT
GGGCAGGCGCTCATGATTGTTTCTGATTGTTTCACGCATGCTGCTAACCCAGAGCCTGGGCCCAAAGCTAGTTAG
TACTCAATAAACAATGCATTGAAAAAAAAAAAAAAAAAXTA

FIGURE 3698

MLVDGPSERPALCFLLLAVAMSFFGSALSIDETRAHLLLKEKMMRLGGRLVLNTKEELANERLMTLKIAEMKEAM
RTLIFPPSMHFFQAKHLIERSQVFNILRMMPKGAALHLHDIGIVTMDWLVRNVTYRPHCHICFTPRGIMQFRFAH
PTPRPSEKCSKWILLEDYRKRVQNVTEFDDSLLRNFTLVTQHPEVIYTNQNVVWSKFETIFFTISGLIHYAPVFR
DYVFRSMQEFYEDNVLYMEIRARLLPVYELSGEHHDEEWSVKTYQEVAQKFVETHPEFIGIKIIYSDHRSKDVAV
IAESIRMAMGLRIKFPTVVAGFDLVGHEDTGHSLRDYKEALMIPAKDGVKLPYFFHAGETDWQGTSIDRNILDAL
MLNTTRIGHGFALSKHPAVRTYSWKKDIPIEVCPISNQVLKLVSDLRNHPVATLMATGHPMVISSDDPAMFGAKG
LSYDFYEVFMGIGGMKADLRTLKQLAMNSIKYSTLLESEKNTFMEIWKKRWDKFIADVATK

FIGURE 3699A

TTTTCTTGCTTTTCTTCCCTTTTTTTTCTTTTTGCAAACAAAACAAAAAACAGCATAGAAGAAAGAGCAAAATAA
AGAAGAAGAAGAGGAGGAAGAGAGGGAAAGAGAGGAAGGGAAAAAAAAACACCAACCCGGGCAGAGGAGGAGGTGC
GGCGGCGGCGGCGGCGGCGGCAGCGGCGGCAGCGGCGCGGCGGCGGCTCGGACCCCCTCCCCCGGCTCCCCCCAT
CAGTGCAGCTCTCCGGGCGATGCCAGAATAGATGCCGGGGCAATGTCCCGCCGCAAACAGGGCAACCCGCAGCAC
TTGTCCCAGAGGGAGCTCATCACCCCAGAGGCTGACCATGTGGAGGCCGCCATCCTCGAAGAAGACGAGGGTCTG
GAGATAGAGGAGCCAAGTGGCCTGGGGCTGATGGTGGGTGGCCCCGACCCTGACCTGCTCACCTGTGGCCAGTGT
CAAATGAACTTCCCCTTGGGGGACATCCTGGTTTTTATAGAGCACAAAAGGAAGCAGTGTGGCGGCAGCTTGGGT
GCCTGCTATGACAAGGCCCTGGACAAGGACAGCCCGCCACCCTCCTCACGCTCCGAGCTCAGGAAAGTGTCCGAG
CCGGTGGAGATCGGGATCCAAGTCACCCCCGACGAAGATGACCACCTGCTCTCACCCACGAAAGGCATCTGTCCC
AAGCAGGAGAACATTGCAGGTAAAGATGAGCCTTCCAGCTACATTTGCACAACATGCAAGCAGCCCTTCAACAGC
GCGTGGTTCCTGCTGCAGCACGCGCAGAACACGCACGGCTTCCGCATCTACCTGGAGCCCGGGCCGGCCAGCAGC
TCGCTCACGCCGCGGCTCACCATCCCGCCGCCGCTCGGGCCGGAGGCCGTGGCGCAGTCCCCGCTCATGAATTTC
CTGGGCGACAGCAACCCCTTCAACCTGCTGCGCATGACGGGCCCCATCCTGCGGGACCACCCGGGCTTCGGCGAG
GGCCGCCTGCCGGGCACGCCGCCTCTCTTCAGTCCCCCGCCGCGCCACCACCTGGACCCGCACCGCCTCAGTGCC
GAGGAGATGGGGCTCGTCGCCCAGCACCCCAGTGCCTTCGACCGAGTCATGCGCCTGAACCCCATGGCCATCGAC
TCGCCCGCCATGGACTTCTCGCGGCGGCTCCGCGAGCTGGCGGGCAACAGCTCCACGCCGCCGCCCGTGTCCCCG
GGCCGCGGCAACCCTATGCACCGGCTCCTGAACCCCTTCCAGCCCAGCCCCAAGTCCCCGTTCCTGAGCACGCCG
CCGCTGCCGCCCATGCCCCCTGGCGGCACGCCGCCCCCGCAGCCGCCAGCCAAGAGCAAGTCGTGCGAGTTCTGC
GGCAAGACCTTCAAGTTCCAGAGCAATCTCATCGTGCACCGGCGCAGTCACACGGGCGAGAAGCCCTACAAGTGC
CAGCTGTGCGACCACGCGTGCTCGCAGGCCAGCAAGCTCAAGCGCCACATGAAGACGCACATGCACAAGGCCGGC
TCGCTGGCCGGCCGCTCCGACGACGGGCTCTCGGCCGCCAGCTCCCCCGAGCCCGGCACCAGCGAGCTGGCGGGC
GAGGGCCTCAAGGCGGCCGACGGTGACTTCCGCCACCACGAGAGCGACCCGTCGCTGGGCCACGAGCCGGAGGAG
GAGGACGAGGAGGAGGAGGAGGAGGAGGAGCTGCTACTGGAGAACGAGAGCCGGCCCGAGTCGAGCTTCAGC
ATGGACTCGGAGCTGAGCCGCAACCGCGAGAACGGCGGTGGTGGGGTGCCCGGGGTCCCGGGCGCGGGGGGCGGC
GCGGCCAAGGCGCTGGCTGACGAGAAGGCGCTGGTGCTGGGCAAGGTCATGGAGAACGTGGGCCTAGGCGCACTG
CCGCAGTACGGCGAGCTCCTGGCCGACAAGCAGAAGCGCGGCGCCTTCCTGAAGCGTGCGGCGGGCGGCGGGGAC
GCGGGCGACGACGACGACGCGGGCGGCTGCGGGGACGCGGGCGCGGGCGGCGCGGTCAACGGGCGCGGGGGCGGC
TTCGCGCCAGGCACCGAGCCCTTCCCCGGGCTCTTCCCGCGCAAGCCCGCGCCGCTGCCCAGCCCCGGGCTCAAC
AGCGCCGCCAAGCGCATCAAGGTGGAGAAGGACCTGGAGCTGCCGCCCGCCGCGCTCATCCCGTCCGAGAACGTG
TACTCGCAGTGGCTGGTGGGCTACGCGGCGTCGCGGCACTTCATGAAGGACCCCTTCCTGGGCTTCACGGACGCA
CGACAGTCGCCCTTCGCCACGTCGTCCGAGCACTCGTCCGAGAACGGCAGCCTGCGCTTCTCCACGCCGCCCGGG
GACCTGCTGGACGGCGGCCTCTCGGGCCGCAGCGGCACGGCCAGCGGAGGCAGCACCCCGCACCTGGGCGGCCCG
GGCCCCGGGCGGCCCAGCTCCAAGGAGGGCCGCCGCAGCGACACGTGCGAGTACTGCGGCAAGGTGTTCAAGAAC
TGCAGCAACTTGACGGTGCACCGGCGGAGCCACACCGGCGAGCGGCCTTACAAGTGCGAGCTGTGCAACTACGCG
TGCGCGCAGAGCAGCAAGCTCACGCGCCACATGAAGACGCACGGGCAGATCGGCAAGGAGGTGTACCGCTGCGAC
ATCTGCCAGATGCCCTTCAGCGTCTACAGCACCCTGGAGAAACACATGAAAAAGTGGCACGGCGAGCACTTGCTG
ACTAACGACGTCAAAATCGAGCAGGCCGAGAGGAGCTAAGCGCGCGGGCCCCGGCGCCCCGCACCTGTACAGTGG
AACCGTTGCCAACCGAGAGAATGCTGACCTGACTTGCCTCCGTGTCACCGCCACCCCGCACCCCGCGTGTCCCCG
GGGCCCAGGGGAGGCGGCACTCCAACCTAACCTGTGTCTGCGAAGTCCTATGGAAACCCGAGGGTTGATTAAGGC
AGTACAAATTGTGGAGCCTTTTAACTGTGCAATAATTTCTGTATTTATTGGGTTTTGTAATTTTTTTGGCATGTG
CAGGTACTTTTTATTATTATTTTTTCTGTTTGAATTCCTTTAAGAGATTTTGTTGGGTATCCATCCCTTCTTTGT
TTTTTTTTTAACCCGGTAGTAGCCTGAGCAATGACTCGCAAGCAATGTTAGAGGGGAAGCATATCTTTTAAATTA
TAATTTGGGGGGAGGGGTGGTGCTGCTTTTTTGAAATTTAAGCTAAGCATGTGTAATTTCTTGTGAAGAAGCCAA
CACTCAAATGACTTTTAAAGTTGTTTACTTTTTCATTCCTTCCTTTTTTTTGTCCTGAAATAAAAAGTGGCATGC
AGTTTTTTTTTTAATTATTTTTTAATTTTTTTTTTGGTTTTTGTTTTTGGGGGTGGGGGGTGTGGATGTACAGCGG
ATAACAATCTTTCAAGTCGTAGCACTTTGTTTCAGAACTGGAATGGAGATGTAGCACTCATGTCGTCCCGAGTCA
AGCGGCCTTTTCTGTGTTGATTTCGGCTTTCATATTACATAAGGGAAACCTTGAGTGGTGGTGCTGGGGGAGGCA
CCCCACAGACTCAGCGCCGCCAGAGATAGGGTTTTTGGAGGGCTCCTCTGGGAAATGGCCCGACAGCATTCTGAG

FIGURE 3699B

GTTGTGCATGACCAGCAGATACTATCCTGTTGGTGTGCCCTGGGGTGCCATGGCTGCTATTCGCTGTAGATTAGG
CTACATAAAATGGGCTGAGGGTACCTTTTTGGGGAGATGGGGTGGCCTGCAGTGACACAGAAAGGAAGAAACTAG
CGGTGTTCTTTTAGGCGTTTTCTGGCTTGACGGCTTCTCTCTTTTTTTAAATCACCCCCACCACATAAATCTCAA
ATCCTATGTTGCTACAAGGGGTCATCCATCATTTCCCAAGCAGACGAATGCCCTAATTAATTGAAGTTAGTGTTC
TCTCATTTAATGCACACTGATGATATTGTAGGGATGGGTGGGGTGGGGATCTTGCAAATTTCTATTCTCTTTTAC
TGAAAAAGCAGGGGATGAGTTCCATCAGAAGGTGCCCAGCGCTACTTCCCAGGTTTTTATTTTTTTTTTCCTATC
TCATTAGGTTGGAAGGTACTAAATATTGAACTGTTAAGATTAGACATTTGAATTCTGTTGACCCGCACTTTAAAG
CTTTTGTTTGCATTTAAATTAAATGGCTTCTAAACAAGAAATTGCAGCATATTCTTCTCTTTGGCCCAGAGGTGG
GTTAAACTGTAAGGGACAGCTGAGATTGAGTGTCAGTATTGCTAAGCGTGGCATTCACAATACTGGCACTATAAA
GAACAAAATAAAATAATAATTTATAGGACAGTTTTTCTACTGCCATTCAATTTGATGTGAGTGCCTTGAAAACTG
ATCTTCCTATTTGAGTCTCTTGAGACAAATGCAAAACTTTTTTTTTGAAATGAAAAGACTTTTTAAAAAAGTAAA
ACAAGAAAAGTACATTCTTTAGAAACTAACAAAGCCACATTTACTTTAAGTAAAAAAAAAAAAAAATTCTGGTTGA
AGATAGAGGATATGAAATGCCATAAGACCCAATCAAATGAAGAAATAAACCCAGCACAACCTTGGACATCCATTA
GCTGAATTATCCTCAGCCCCTTTTGTTTTTGGGACAACGCTGCTTAGATATGGAGTGGAGGTGATTTACTGCTGA
ATTAAAACTCAAGTGACACAAGTTACAAGTTGATATCGTTGAATGAAAAGCAAAACAAAAACAATTCAGGAACAA
CGGCTAATTTTTTCTAAAGTTAAATTTAGTGCACTCTGTCTTAAAAATACGTTTACAGTATTGGGTACATACAAG
GGTAAAAAAAAAAATTGTGTGTATGTGTGTTGGAGCGATCTTTTTTTTTCAAAGTTTGCTTAATAGGTTATACAAA
AATGCCACAGTGGCCGCGTGTATATTGTTTTCTTTTGGTGACGGGGTTTTAGTATATATTATATATATTAAAATT
TCTTGATTACTGTAAAAGTGGACCAGTATTTGTAATAATCGAGAATGCCTGGGCATTTTACAAAACAAGAAAAAA
AATACCCTTTTCTTTTCCTTGAAAATGTTGCAGTAAAATTTAAATGGTGGGTCTATAAATTTGTTCTTGTTACAG
TAACTGTAAAGTCGGAGTTTTAGTAAATTTTTTTCTGCCTTGGGTGTTGAATTTTTATTTCAAAAAAAATGTATA
GAAACTTGTATTTGGGGATTCAAAGGGGATTGCTACACCATGTAGAAAAAGTATGTAGAAAAAAAGTGCTTAATA
TTGTTATTGCTTTGCAGAAAAAAAAAAAATCACATTTCTGACCTGTACTTATTTTTCTCTTCCCGCCTCCCTCTG
GAATGGATATATTGGTTGGTTCATATGATGTAGGCACTTGCTGTATTTTTACTGGAGCTCGTAATTTTTTAACTG
TAAGCTTGTCCTTTTAAAGGGATTTAATGTACCTTTTTGTTAGTGAATTTGGAAATAAAAAGAAAAAAAAAACAA
AAACAAACAGGCTGCCATAATATATTTTTTTAATTTGGCAGGATAAAATATTGCAAAAAAAACACATTTGTATGT
TAAGTCCTATTGTACAGGAGAAAAAGGGTTGTTTGACAACCTTTGAGAAAAAGAAACAAAAGGAAGTAGTTAAAT
GCTTTGGTTCACAAATCATTTAGTTGTATATATTTTTTGTCGGAATTGGCCTACACAGAGAACCGTTCGTGTTGG
GCTTCTCTCTGAACGCCCCGAACCTTGCATCAAGGCTCCTTGGTGTGGCCACAGCAGACCAGATGGGAAATTATT
TGTGTTGAGTGGAAAAAAATCAGTTTTTGTAAAGATGTCAGTAACATTCCACATCGTCCTCCCTTTCTCTAAGAG
GCCATCTCTAAGATGTCAGATGTAGAGGAGAGAGAGCGAGAGAACATCTTCCTTCTCTACCATCACTCCTGTGGC
GGTCACCACCACCACCTCTCCCGCCCTTACCAGCAGAAAGCAATGCAAACTGAGCTGCTTTAGTCCTTGAGAAAT
TGTGAAACAAACACAAATATCATAAAAGGAGCTGGTGATTCAGCTGGGTCCAGGTGAAGTGACCTGCTGTTGAGA
CCGGTACAAATTGGATTTCAGGAAGGAGACTCCATCACAGCCAGGACCTTTCGTGCCATGGAGAGTGTTGGCCTC
TTGTCTTTCTTCCCTGCTTTGCTGCTTTGCTCTCTGAAACCTACATTCCGTCAGTTTCCGAATGCGAGGGCCTGG
GATGAATTTGGTGCCTTTCCATATCTCGTTCTCTCTCCTTCCCCTGCGTTTCCTCTCCATCCTTCATCCTCCATT
GGTCCTTTTTTTTTCTTTCATTTTTTATTTAATTTCTTTTCTTCCTGTCTGTTCCTCCCCTAATCCTCTATTTTA
TTTTTATTTTTTGTAAAGCCAAGTAGCTTTAAGATAAAGTGGTGGTCTTTTGGATGAGGGAATAATGCATTTTTA
AATAAAATACCAATATCAGGAAGCCATTTTTTATTTCAGGAAATGTAAGAAACCATTATTTCAGGTTATGAAAGT
ATAACCAAGCATCCTTTTGGGCAATTCCTTACCAAATGCAGAAGCTTTTCTGTTCGATGCACTCTTTCCTCCTTG
CCACTTACCTTTGCAAAGTTAAAAAAAAGGGGGGAGGGAATGGGAGAGAAAGCTGAGATTTCAGTTTCCTACTGC
AGTTTCCTACCTGCAGATCCAGGGGCTGCTGTTGCCTTTGGATGCCCCACTGAGGTCCTAGAGTGCCTCCAGGGT
GGTCTTCCTGTAGTCATAACAGCTAGCCAGTGCTCACCAGCTTACCAGATTGCCAGGACTAAGCCATCCCAAAGC
ACAAGCATTGTGTGTCTCTGTGACTGCAGAGAAGAGAGAATTTTGCTTCTGTTTTGTGTTTAAAAAACCAACACG
GAAGCAGATGATCCCGAGAGAGAGGCCTCTAGCATGGGTGACCCAGCCGACCTCAGGCCGGTTTCCGCACTGCCA
CAACTTTGTTCAAAGTTGCCCCCAATTGGAACCTGCCACTTGGCATTAGAGGGTCTTTCATGGGGAGAGAAGGAG
ACTGAATTACTCTAAGCAAAATGTGAAAAGTAAGGAAATCAGCCTTTCATCCCGGTCCTAAGTAACCGTCAGCCG
AAGGTCTCGTGGAACACAGGCAAACCCGTGATTTTGGTGCTCCTTGTAACTCAGCCCTGCAAAGCAAAGTCCCAT

FIGURE 3699C

TGATTTAAGTTGTTTGCATTTGTACTGGCAAGGCAAAATATTTTTATTACCTTTTCTATTACTTATTGTATGAGC
TTTTGTTGTTTACTTGGAGGTTTTGTCTTTTACTACAAGTTTGGAACTATTTATTATTGCTTGGTATTTGTGCTC
TGTTTAAGAAACAGGCACTTTTTTTTTATTATGGATAAAATGTTGAGATGACAGGAGGTCATTTCAATATGGCTTA
GTAAAATATTTATTGTTCCTTTATTCTCTGTACAAGATTTTGGGCCTCTTTTTTTCCTTAATGTCACAATGTTGA
GTTCAGCATGTGTCTGCCATTTCATTTGTACGCTTGTTCAAAACCAAGTTTGTTCTGGTTTCAAGTTATAAAAAT
AAATTGGACATTTAACTTGATCTCCAAA

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FIGURE 3700

MSRRKQGNPQHLSQRELITPEADHVEAAILEEDEGLEIEEPSGLGLMVGGPDPDLLTCGQCQMNFPLGDILVFIE
HKRKQCGGSLGACYDKALDKDSPPPSSRSELRKVSEPVEIGIQVTPDEDDHLLSPTKGICPKQENIAGPCRPAQL
PAVAPIAASSHPHSSVITSPLRALGALPPCLPLPCCSARPVSGDGTQGEGQTEAPFGCQCQLSGKDEPSSYICTT
CKQPFNSAWFLLQHAQNTHGFRIYLEPGPASSSLTPRLTIPPPLGPEAVAQSPLMNFLGDSNPFNLLRMTGPILR
DHPGFGEGRLPGTPPLFSPPPRHHLDPHRLSAEEMGLVAQHPSAFDRVMRLNPMAIDSPAMDFSRRLRELAGNSS
TPPPVSPGRGNPMHRLLNPFQPSPKSPFLSTPPLPPMPPGGTPPPQPPAKSKSCEFCGKTFKFQSNLIVHRRSHT
GEKPYKCQLCDHACSQASKLKRHMKTHMHKAGSLAGRSDDGLSAASSPEPGTSELAGEGLKAADGDFRHHESDPS
LGHEPEEEDEEEEEEEEELLLENESRPESSFSMDSELSRNRENGGGGVPGVPGAGGGAAKALADEKALVLGKVME
NVGLGALPQYGELLADKQKRGAFLKRAAGGGDAGDDDDAGGCGDAGAGGAVNGRGGGFAPGTEPFPGLFPRKPAP
LPSPGLNSAAKRIKVEKDLELPPAALIPSENVYSQWLVGYAASRHFMKDPFLGFTDARQSPFATSSEHSSENGSL
RFSTPPGDLLDGGLSGRSGTASGGSTPHLGGPGPGRPSSKEGRRSDTCEYCGKVFKNCSNLTVHRRSHTGERPYK
CELCNYACAQSSKLTRHMKTHGQIGKEVYRCDICQMPFSVYSTLEKHMKKWHGEHLLTNDVKIEQAERS

FIGURE 3701

TTGCTGAGTACCCAGAGTTGCGAGGAGTTTTTTAACTGATTTAGCCAGGTGGCAATCATGAGTGAATGGATGAAG
AAAGGCCCCTTAGAATGGCAAGATTACATTTACAAAGAGGTCCGAGTGACAGCCAGTGAGAAGAATGAGTATAAA
GGATGGGTTTTAACTACAGACCCAGTCTCTGCCAATATTGTCCTTGTGAACTTCCTTGAAGATGGCAGCATGTCT
GTGACCGGAATTATGGGACATGCTGTGCAGACTGTTGAAACTATGAATGAAGGGGACCATAGAGTGAGGGAGAAG
CTGATGCATTTGTTCACGTCTGGAGACTGCAAAGCATACAGCCCAGAGGATCTGGAAGAGAGAAAGAACAGCCTA
AAGAAATGGCTTGAGAAGAACCACATCCCCATCACTGAACAGGGAGACGCTCCAAGGACTCTCTGTGTGGCTGGG
GTCCTGACTATAGACCCACCATATGATCCAGAAAATTGCAGCAGCTCTAATGAGATTATTCTGTCGCGTGTTCAG
GATCTTATTGAAGGACATCTTACAGCTTCCCAATGAGAGGCCAGGAAGTGTGAACATACTGATAGAAAAAGACTA
TATTTTATCCCTCATAAAATGTTTTAAATGTAAAAAAAAAAAAAAA

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FIGURE 3702

MSEWMKKGPLEWQDYIYKEVRVTASEKNEYKGWVLTTDPVSANIVLVNFLEDGSMSVTGIMGHAVQTVETMNEGD
HRVREKLMHLFTSGDCKAYSPEDLEERKNSLKKWLEKNHIPITEQGDAPRTLCVAGVLTIDPPYDPENCSSSNEI
ILSRVQDLIEGHLTASQ

FIGURE 3703

GCCGGCTCCAGTTAGAGCTCGGGTCTCCTCGCCACAGCTCCGAGTCTTTCGTTCTGGGAGGCCCAGGCGGCTTCG
CGTTCTGAGAATAAACAGAACCTCTGTTGCTCTGCGACTTGCAGGCACTGGGAGATTCGTAGCTAAGACGCCAGG
GCATCCCGGAAGCTGGGAAATGGGACTGTTGACATTCAGGGATGTGGCCGTAGAATTCTCTTTGGAGGAGTGGGA
ACACCTGGAACCAGCTCAGAAGAATTTGTATCAGGATGTGATGTTAGAAAACTACAGAAACCTGGTCTCTCTGGG
TCTTGTTGTCTCTAAGCCGGACCTGATCACCTTTTTGGAACAAAGGAAAGAGCCTTGGAATGTGAAGAGTGAGGA
GACAGTAGCCATCCAGCCAGATGTGTTTTCGCATTATAACAAGGACCTGTTGACAGAGCACTGCACAGAAGCTTC
ATTCCAAAAAGTGATATCGAGGAGACATGGGAGCTGTGATCTTGAGAATTTACATTTAAGAAAAAGGTGGAAAAG
GGAGGAGTGTGAAGGGCACAATGGATGTTATGATGAAAAGACTTTTAAATATGATCAATTTGATGAATCCTCTGT
TGAAAGTTTGTTTCACCAGCAAATACTTTCTTCTTGTGCCAAAAGCTATAACTTTGATCAATATAGGAAGGTCTT
TACTCATTCATCATTGCTTAATCAACAAGAGGAAATAGATATTTGGGGAAAACATCACATATATGATAAAACTTC
AGTGTTATTTAGGCAGGTCTCTACTCTAAATAGTTACCGAAATGTTTTTATTGGAGAGAAAAATTATCATTGCAA
TAATTCTGAAAAAACCTTGAACCAAAGCTCAAGCCCTAAAAATCATCAGGAAAATTATTTTCTAGAAAAACAATA
CAAATGTAAAGAATTTGAGGAAGTCTTTCTTCAGAGTATGCATGGGCAAGAGAAACAAGAACAGTCTTACAAATG
TAATAAATGTGTAGAAGTTTGTACCCAGTCATTAAAACATATTCAACATCAGACCATCCATATCAGAGAAAACTC
ATATAGCTATAACAAATATGATAAAGATCTTAGTCAGTCATCAAATCTTAGAAAGCAGATAATCCATAATGAAGA
GAAACCATACAAATGTGAAAAATGTGGGGATAGCTTAAACCATAGTTTGCACCTTACTCAACATCAGATCATTCC
TACCGAAGAGAAACCCTATAAATGGAAAGAATGTGGCAAGGTCTTTAACCTTAACTGTAGTTTATACCTTACTAA
ACAGCAGCAAATTGATACTGGAGAAAACCTTTACAAATGTAAAGCATGTAGCAAATCTTTTACTCGTTCCTCCAA
TCTTATTGTGCATCAGAGAATTCACACTGGAGAGAAACCATACAAATGTAAAGAATGTGGCAAAGCCTTTCGCTG
TAGTTCATACCTTACTAAACATAAGCGAATTCATACTGGAGAGAAACCTTATAAATGTAAAGAATGTGGAAAAGC
TTTTAACCGTAGTTCATGCCTTACTCAACATCAGACAACTCATACAGGAGAAAAACTTTACAAATGTAAAGTATG
TAGCAAATCTTATGCTCGTTCTTCAAATCTTATTATGCATCAGAGAGTTCATACTGGAGAGAAGCCTTATAAATG
TAAAGAATGTGGCAAAGTCTTTAGCCGTAGTTCTTGCCTTACTCAACATCGGAAAATTCATACTGGAGAAAATCT
TTACAAATGCAAAGTATGTGCTAAACCTTTTACTTGTTTCTCAAATCTTATTGTGCATGAGAGAATTCATACTGG
AGAGAAACCCTATAAATGTAAAGAATGTGGCAAAGCCTTTCCTTATAGTTCACACCTTATTCGACATCATCGAAT
TCATACTGGAGAAAAACCATACAAATGTAAAGCATGTAGCAAATCTTTTAGTGACTCCTCAGGTCTTACTGTGCA
TCGGCGAACTCATACTGGAGAGAAACCCTATACATGTAAAGAATGTGGCAAAGCCTTTAGTTATAGTTCAGATGT
TATTCAGCATCGGAGAATTCATACTGGCCAGAGACCCTACAAATGTGAAGAATGTGGCAAAGCCTTCAACTATAG
GTCATACCTCACTACACATCAGAGAAGTCATACTGGAGAGAGACCCTACAAATGTGAAGAATGTGGCAAAGCCTT
CAACTATAGGTCATACCTCACTACACATCGGAGAAGACATACTGGAGAGAGACCCTACAAATGTGATGAATGTGG
TAAAGCCTTCAGCTATAGGTCATACCTCACTACACATCGGAGAAGTCATAGTGGAGAGAGACCCTACAAATGTGA
AGAATGTGGCAAAGCCTTTAACTCTAGGTCATACCTCATTGCACATCAGAGAAGTCATACTAGAGAAAAACTTTA
AAAATGTAAAACATGGAGCAGATTTTTTACTTGTTACCCATGTCTTATTGTGCATCAGATAATTTATATGGGAGT
GAAACCCTACAAATGTTAAGAATGTGGCATAACCTTTAACTATTTTCAAGCCTTACACAATAGCAGAGAATATAA
ACTGAAAAAATCCATACAAATATTAAAAATGTGGCAAATTATTTTAAACTGTGCTCAACCCTTACTCAAGATAAT
CCATACTAGAGAAACACTATAGATGTAAAAATGTGAAAAGTTTTATTCAAAATATCAAACTTATGAGTCACCTAG
GGGTTCATAGAAAAAGGAAGTTTGCAGATGCAATAAATGTGAGGAAGTATTTAATAAAAAATGAAGTCTAAATGT
GTCAGAGAATTTATGTGAGAAAGGACTAAAGCACAGACACTTTCAGCCTTTATACTAAATAAGAGTATTTTTTGT
ACAGAATAATCTAAAGGCAAAATAATTAGATAATTTATTTGCTTATATGTTTTAAAGTAGCAAGAACATTGATGT
TTTGACAGGTATATTTCATAGATACTTCATTTGTATTTACAGTATTTGAGGTTTTTGGAAAGCAAATATTATTTA
TATAATTCAGCTTTCAAATCTGTTGCTGCTTTTCCTTAATCCGTGGTGTTCATGTGAAAATATGTGTTCTGTTTT
TTTTTCTGCATCAGAACAATGTGAGGTCATTCTACGTTAATATCATTAATATCAGCATTTTTCATGGAAGTTTAA
TGCCAAATGTAAAACACATGAAAATTTTTAAAAATATGCTCTTTGTGTTTGANTCATTAAACAGTAATATGTGTA
AACATATAGTACATATTTAGGGCATTAGTATTCTATACTAAAGTAAAAGAGGAATATTCTGAATTTATTTATTAC
ATCAATTGCTCCTTAAGTAGAAAAACACTGGTCAGTTATTTAAAATACTGGCATACCTTTATAGTACAATGAAGT
AGTAATCTTGGAATATTATTTG

FIGURE 3704

PAPVRARVSSPQLRVFRSGRPRRLRVLRINRTSVALRLAGTGRFVAKTPGHPGSWEMGLLTFRDVAVEFSLEEWE
HLEPAQKNLYQDVMLENYRNLVSLGLVVSKPDLITFLEQRKEPWNVKSEETVAIQPDVFSHYNKDLLTEHCTEAS
FQKVISRRHGSCDLENLHLRKRWKREECEGHNGCYDEKTFKYDQFDESSVESLFHQQILSSCAKSYNFDQYRKVF
THSSLLNQQEEIDIWGKHHIYDKTSVLFRQVSTLNSYRNVFIGEKNYHCNNSEKTLNQSSSPKNHQENYFLEKQY
KCKEFEEVFLQSMHGQEKQEQSYKCNKCVEVCTQSLKHIQHQTIHIRENSYSYNKYDKDLSQSSNLRKQIIHNEE
KPYKCEKCGDSLNHSLHLTQHQIIPTEEKPYKWKECGKVFNLNCSLYLTKQQQIDTGENLYKCKACSKSFTRSSN
LIVHQRIHTGEKPYKCKECGKAFRCSSYLTKHKRIHTGEKPYKCKECGKAFNRSSCLTQHQTTHTGEKLYKCKVC
SKSYARSSNLIMHQRVHTGEKPYKCKECGKVFSRSSCLTQHRKIHTGENLYKCKVCAKPFTCFSNLIVHERIHTG
EKPYKCKECGKAFPYSSHLIRHHRIHTGEKPYKCKACSKSFSDSSGLTVHRRTHTGEKPYTCKECGKAFSYSSDV
IQHRRIHTGQRPYKCEECGKAFNYRSYLTTHQRSHTGERPYKCEECGKAFNYRSYLTTHRRRHTGERPYKCDECG
KAFSYRSYLTTHRRSHSGERPYKCEECGKAFNSRSYLIAHQRSHTREKL

FIGURE 3705

AGCCGAGGGCTGCACAAAGACCTTCCTGGCCTGCCCCAGACAGAGCTGAGGACCCCTGGCCGTGGGCTTGGGCCT
CGGCTTCACAGGATGGGGCTGCCAGTGTCCTGGGCCCCTCCTGCCCTCTGGGTTCTAGGGTGCTGCGCCCTGCTC
CTCTCGCTGTGGGCGCTGTGCACAGCCTGCCGCAGGCCCGAGGACGCTGTAGCCCCCAGGAAGAGGGCGCGGAGG
CAGCGGGCGAGGCTGCAGGGCAGTGCGACGGCGGCGGAAGCGTCCCTACTGAGGCGGACCCACCTCTGCTCCCTC
AGCAAGTCGGACACCAGACTGCACGAGCTGCACCGGGGCCCGCGCAGCAGCAGGGCCCTGCGGCCTGCCAGCATG
GATCTCCTGCGCCCACACTGGCTGGAGGTGTCCAGGGACATCACCGGACCGCAGGCAGCCCCCTCTGCCTTCCCA
CACCAGGAGCTGCCCCGGGCTCTGCCGGCAGCTGCAGCCACCGCAGGGTGCGCTGGCCTCGAGGCCACCTATTCC
AACGTGGGGCTGGCGGCCCTTCCCGGGGTCAGCCTGGCGGCCAGCCCTGTGGTGGCCGAGTATGCCCGCGTCCAG
AAGCGCAAAGGGACCCATCGCAGTCCCCAAGAGCCACAGCAGGGGAAGACTGAGGTGACCCCGGCCGCTCAGGTG
GACGTCCTGTACTCCAGGGTCTGCAAGCCTAAAAGGAGGGACCCAGGACCCACCACAGACCCGCTGGACCCCAAG
GGCCAGGGAGCGATTCTGGCCCTGGCGGGTGACCTGGCCTACCAGACCCTCCCGCTCAGGGCCCTGGATGTGGGC
AGCGGCCCCCTGGAAAACGTGTATGAGAGCATCCGGGAGCTGGGGGACCCTGCTGGCAGGAGCAGCACGTGCGGG
GCTGGGACGCCCCCTGCTTCCAGCTGCCCCAGCCTAGGGAGGGGCTGGAGACCCCTCCCTGCCTCCCTGCCCTGA

ACACTCAAGGACCTGTGCTCCTTCCTCCAGAGTGAGGCCCGTCCCCCGCCCCGCCCCGCCTCACAGCTGACAGCG
CCAGTCCCAGGTCCCCGGGCTGCCAGCCCGTGAGGTCCGTGAGGTCCTGGCCGCTCTGACAGCCGCGGCCTCCCC
GGGCTCCAGAGAAGGCCCGCGTCTAAATAAAGCGCCAGCGCAGGATGAAAGCGAAAAAAAAAAAAAAAAAA

FIGURE 3706

MGLPVSWAPPALWVLGCCALLLSLWALCTACRRPEDAVAPRKRARRQRARLQGSATAAEASLLRRTHLCSLSKSD
TRLHELHRGPRSSRALRPASMDLLRPHWLEVSRDITGPQAAPSAFPHQELPRALPAAAATAGCAGLEATYSNVGL
AALPGVSLAASPVVAEYARVQKRKGTHRSPQEPQQGKTEVTPAAQVDVLYSRVCKPKRRDPGPTTDPLDPKGQGA
ILALAGDLAYQTLPLRALDVGSGPLENVYESIRELGDPAGRSSTCGAGTPPASSCPSLGRGWRPLPASLP

FIGURE 3707

GGCACGAGGCACCTCGCTCGCAGCCTCCCCAGCGCAGCAGCCCGGCTGTGGGCCTGCGGCAGCCGGGTCTTCCTG
GTCCCCACCTCCTGGGGCCGACGGGCGGCAGGAAGGGGCTCGGCGGGACGCGCCGTCAGGGACCTGAGGAGGAAC
AACGGAACGCGTTCGGAACGGCCTGGACTCCCGAGACTCACCCGACTCGTGGCCACACCGGGAGAACTGAAGCGG
CAGTAGCCGGCGGAGACGCCCGACCCGAAGGCCGGCTGCTAGGGAGCAGACAGCTGAACCGCTTGCCAGACGCCG
AAACCCAGTGACGCCCTCCACCGCTCCACCGTGCTCCCGGCTCCCCGCCCCCGCCGCCCGCGGGCCCCAAGGCGC
ATGCGCCGCCTGTCCTGGAGGGGCCCATTTCCGTCCGTCGTGGGGGGAGGCACAGTGAGTCCACTGGGGCACGGC
AGCGTCTAAGCCACAAGCCGAGCACATAAGCCAGGTCCTAACGGAGCCTATGTGTAAGTCCACTACTGGTGCAAG
GTTGCACACTTCTAAGAAGAGCGGCGTGGGGGGCTCGGCGACCTTCGCTTCAGTCGCTCCCCCGTGCAGTCCCCT
GTGCCCAAGACACAGCCTGATGCTTGTGCTCCGGTGGGCGGAGCTTGGAGGCGGCGGGAACTGCAATTGGTGGCT
TTGAAGGCGCGGCGAGCGGGAACAGCTCTTGAGGAGTGAGACTGCAGGAGATGTGGGCCGTGCCAAAGAGATGGA
TGAGACTGTTGCTGAGTTCATCAAGAGGACCATCTTGAAAATCCCCATGAATGAACTGACAACAATCCTGAAGGC
CTGGGATTTTTTGTCTGAAAATCAACTGCAGACTGTAAATTTCCGACAGAGAAAGGAATCTGTAGTTCAGCACTT
GATCCATCTGTGTGAGGAAAAGCGTGCAAGTATCAGTGATGCTGCCCTGTTAGACATCATTTATATGCAATTTCA
TCAGCACCAGAAAGTTTGGGATGTTTTTCAGATGAGTAAAGGACCAGGTGAAGATGTTGACCTTTTTGATATGAA
ACAATTTAAAAATTCGTTCAAGAAAATTCTTCAGAGAGCATTAAAAAATGTGACAGTCAGCTTCAGAGAAACTGA
GGAGAATGCAGTCTGGATTCGAATTGCCTGGGGAACACAGTACACAAAGCCAAACCAGTACAAACCTACCTACGT
GGTGTACTACTCCCAGACTCCGTACGCCTTCACGTCCTCCTCCATGCTGAGGCGCAATACACCGCTTCTGGGTCA
GGAGTTAGAAGCTACTGGGAAAATCTACCTCCGACAAGAGGAGATCATTTTAGATATTACCGAAATGAAGAAAGC
TTGCAATTAGTGAACATGAAAGGAAAATAAAAATTCCTCACAGTCAAAAAAAAAAAAAAAAAAA

FIGURE 3708

MDETVAEFIKRTILKIPMNELTTILKAWDFLSENQLQTVNFRQRKESVVQHLIHLCEEKRASISDAALLDIIYMQ
FHQHQKVWDVFQMSKGPGEDVDLFDMKQFKNSFKKILQRALKNVTVSFRETEENAVWIRIAWGTQYTKPNQYKPT
YVVYYSQTPYAFTSSSMLRRNTPLLGQELEATGKIYLRQEEIILDITEMKKACN

FIGURE 3709A

GTGGGATAAAGGAATGAGGTTCAGAAAGGGGCAGGGAGTTGCCCGCAGCCGCACCGCACGTCTTCAGCCCGACCG
TTGTCCTGACCTCTCTGTCCCGTCCCCTGCCCAGTCTCACC**ATG**GCCTTCTGGACACAGCTGATGCTGCTGCTCT
GGAAGAATTTCATGTATCGCCGGAGACAGCCGGTCCAGCTCCTGGTCGAATTGCTGTGGCCTCTCTTCCTCTTCT
TCATCCTGGTGGCTGTTCGCCACTCCCACCCGCCCCTGGAGCACCATGAATGCCACTTCCCAAACAAGCCACTGC
CATCGGCGGGCACCGTGCCCTGGCTCCAGGGTCTCATCTGTAATGTGAACAACACCTGCTTTCCGCAGCTGACAC
CGGGCGAGGAGCCCGGGCGCCTGAGCAACTTCAACGACTCCCTGGTCTCCCGGCTGCTAGCCGATGCCCGCACTG
TGCTGGGAGGGGCCAGTGCCCACAGGACGCTGGCTGGCCTAGGGAAGCTGATCGCCACGCTGAGGGCTGCACGCA
GCACGGCCCAGCCTCAACCAACCAAGCAGTCTCCACTGGAACCACCCATGCTGGATGTCGCGGAGCTGCTGACGT
CACTGCTGCGCACGGAATCCCTGGGGTTGGCACTGGGCCAAGCCCAGGAGCCCTTGCACAGCTTGTTGGAGGCCG
CTGAGGACCTGGCCCAGGAGCTCCTGGCGCTGCGCAGCCTGGTGGAGCTTCGGGCACTGCTGCAGAGACCCCGAG
GGACCAGCGGCCCCCTGGAGTTGCTGTCAGAGGCCCTCTGCAGTGTCAGGGGACCTAGCAGCACAGTGGGCCCCT
CCCTCAACTGGTACGAGGCTAGTGACCTGATGGAGCTGGTGGGGCAGGAGCCAGAATCCGCCCTGCCAGACAGCA
GCCTGAGCCCCGCCTGCTCGGAGCTGATTGGAGCCCTGGACAGCCACCCGCTGTCCCGCCTGCTCTGGAGACGCC
TGAAGCCTCTGATCCTCGGGAAGCTACTCTTTGCACCAGATACACCTTTTACCCGGAAGCTCATGGCCCAGGTCA
ACGGGACCTTCGAGGAGCTCACCCTGCTGAGGGATGTCCGGGAGGTGTGGGAGATGCTGGGACCCCGGATCTTCA
CCTTCATGAACGACAGTTCCAATGTGGCCATGCTGCAGCGGCTCCTGCAGATGCAGGATGAAGGAAGAAGGCAGC
CCAGACCTGGAGGCCGGGACCACATGGAGGCCCTGCGATCCTTTCTGGACCCTGGGAGCGGTGGCTACAGCTGGC
AGGACGCACACGCTGATGTGGGGCACCTGGTGGGCACGCTGGGCCGAGTGACGGAGTGCCTGTCCTTGGACAAGC
TGGAGGCGGCACCCTCAGAGGCAGCCCTGGTGTCGCGGGCCCTGCAACTGCTCGCGGAACATCGATTCTGGGCCG
GCGTCGTCTTCTTGGGACCTGAGGACTCTTCAGACCCCACAGAGCACCCAACCCCAGACCTGGGCCCCGGCCACG
TGCGCATCAAAATCCGCATGGACATTGACGTGGTCACGAGGACCAATAAGATCAGGGACAGGTTTTGGGACCCTG
GCCCAGCCGCGGACCCCCTGACCGACCTGCGCTACGTGTGGGGCGGCTTCGTGTACCTGCAAGACCTGGTGGAGC
GTGCAGCCGTCCGCGTGCTCAGCGGCGCCAACCCCCGGGCCGGCCTCTACCTGCAGCAGATGCCCTATCCGTGCT
ATGTGGACGACGTGTTCCTGCGTGTGCTGAGCCGGTCGCTGCCGCTCTTCCTGACGCTGGCCTGGATCTACTCCG
TGACACTGACAGTGAAGGCCGTGGTGCGGGAGAAGGAGACGCGGCTGCGGGACACCATGCGCGCCATGGGGCTCA
GCCGCGCGGTGCTCTGGCTAGGCTGGTTCCTCAGCTGCCTCGGGCCCTTCCTGCTCAGCGCCGCACTGCTGGTTC
TGGTGCTCAAGCTGGGAGACATCCTCCCCTACAGCCACCCGGGCGTGGTCTTCCTGTTCTTGGCAGCCTTCGCGG
TGGCCACGGTGACCCAGAGCTTCCTGCTCAGCGCCTTCTTCTCCCGCGCCAACCTGGCTGCGGCCTGCGGCGGCC
TGGCCTACTTCTCCCTCTACCTGCCCTACGTGCTGTGTGTGGCTTGGCGGGACCGGCTGCCCGCGGGTGGCCGCG
TGGCCGCGAGCCTGCTGTCGCCCGTGGCCTTCGGCTTCGGCTGCGAGAGCCTGGCTCTGCTGGAGGAGCAGGGCG
AGGGCGCGCAGTGGCACAACGTGGGCACCCGGCCTACGGCAGACGTCTTCAGCCTGGCCCAGGTCTCTGGCCTTC
TGCTGCTGGACGCGGCGCTCTACGGCCTCGCCACCTGGTACCTGGAAGCTGTGTGCCCAGGCCAGTACGGGATCC
CTGAACCATGGAATTTTCCTTTTCGGAGGAGCTACTGGTGCGGACCTCGGCCCCCCAAGAGTCCAGCCCCTTGCC
CCACCCCGCTGGACCCAAAGGTGCTGGTAGAAGAGGCACCGCCCGGCCTGAGTCCTGGCGTCTCCGTTCGCAGCC
TGGAGAAGCGCTTTCCTGGAAGCCCGCAGCCAGCCCTGCGGGGGCTCAGCCTGGACTTCTACCAGGGCCACATCA
CCGCCTTCCTGGGCCACAACGGGGCCGGCAAGACCACCACCCTGTCCATCTTGAGTGGCCTCTTCCCACCCAGTG
GTGGCTCTGCCTTCATCCTGGGCCACGACGTCCGCTCCAGCATGGCCGCCATCCGGCCCCACCTGGGCGTCTGTC
CTCAGTACAACGTGCTGTTTGACATGCTGACCGTGGACGAGCACGTCTGGTTCTATGGGCGGCTGAAGGGTCTGA
GTGCCGCTGTAGTGGGCCCCGAGCAGGACCGTCTGCTGCAGGATGTGGGGCTGGTCTCCAAGCAGAGTGTGCAGA
CTCGCCACCTCTCTGGTGGGATGCAACGGAAGCTGTCCGTGGCCATTGCCTTTGTGGGCGGCTCCCAAGTTGTTA
TCCTGGACGAGCCTACGGCTGGCGTGGATCCTGCTTCCCGCCGCGGTATTTGGGAGCTGCTGCTCAAATACCGAG
AAGGTCGCACGCTGATCCTCTCCACCCACCACCTGGATGAGGCAGAGCTGCTGGGAGACCGTGTGGCTGTGGTGG
CAGGTGGCCGCTTGTGCTGCTGTGGCTCCCCACTCTTCCTGCGCCGTCACCTGGGCTCCGGCTACTACCTGACGC
TGGTGAAGGCCCGCCTGCCCCTGACCACCAATGAGAAGGCTGACACTGACATGGAGGGCAGTGTGGACACCAGGC
AGGAAAAGAAGAATGGCAGCCAGGGCAGCAGAGTCGGCACTCCTCAGCTGCTGGCCCTGGTACAGCACTGGGTGC
CCGGGGCACGGCTGGTGGAGGAGCTGCCACACGAGCTGGTGCTGGTGCTGCCCTACACGGGTGCCCATGACGGCA
GCTTCGCCACACTCTTCCGAGAGCTAGACACGCGGCTGGCGGAGCTGAGGCTCACTGGCTACGGGATCTCCGACA
CCAGCCTCGAGGAGATCTTCCTGAAGGTGGTGGAGGAGTGTGCTGCGGACACAGATATGGAGGATGGCAGCTGCG

FIGURE 3709B

GGCAGCACCTATGCACAGGCATTGCTGGCCTAGACGTAACCCTGCGGCTCAAGATGCCGCCACAGGAGACAGCGC
TGGAGAACGGGGAACCAGCTGGGTCAGCCCCAGAGACTGACCAGGGCTCTGGGCCAGACGCCGTGGGCCGGGTAC
AGGGCTGGGCACTGACCCGCCAGCAGCTCCAGGCCCTGCTTCTCAAGCGCTTTCTGCTTGCCCGCCGCAGCCGCC
GCGGCCTGTTCGCCCAGATCGTGCTGCCTGCCCTCTTTGTGGGCCTGGCCCTCGTGTTCAGCCTCATCGTGCCTC
CTTTCGGGCACTACCCGGCTCTGCGGCTCAGTCCCACCATGTACGGTGCTCAGGTGTCCTTCTTCAGTGAGGACG
CCCCAGGGGACCCTGGACGTGCCCGGCTGCTCGAGGCGCTGCTGCAGGAGGCAGGACTGGAGGAGCCCCCAGTGC
AGCATAGCTCCCACAGGTTCTCGGCACCAGAAGTTCCTGCTGAAGTGGCCAAGGTCTTGGCCAGTGGCAACTGGA
CCCCAGAGTCTCCATCCCCAGCCTGCCAGTGTAGCCAGCCCGGTGCCCGGCGCCTGCTGCCCGACTGCCCGGCTG
CAGCTGGTGGTCCCCCTCCGCCCCAGGCAGTGACCGGCTCTGGGGAAGTGGTTCAGAACCTGACAGGCCGGAACC
TGTCTGACTTCCTGGTCAAGACCTACCCGCGCCTGGTGCGCCAGGGCCTGAAGACTAAGAAGTGGGTGAATGAGG
TCAGGTACGGAGGCTTCTCGCTGGGGGGCCGAGACCCAGGCCTGCCCTCGGGCCAAGAGTTGGGCCGCTCAGTGG
AGGAGTTGTGGGCGCTGCTGAGTCCCCTGCCTGGCGGGGCCCTCGACCGTGTCCTGAAAAACCTCACAGCCTGGG
CTCACAGCCTGGACGCTCAGGACAGTCTCAAGATCTGGTTCAACAACAAAGGCTGGCACTCCATGGTGGCCTTTG
TCAACCGAGCCAGCAACGCAATCCTCCGTGCTCACCTGCCCCCAGGCCGGGCCCGCCACGCCCACAGCATCACCA
CACTCAACCACCCCTTGAACCTCACCAAGGAGCAGCTGTTTGAGGCTGCATTGATGGCCTCCTCGGTGGACGTCC
TCGTCTCCATCTGTGTGGTCTTTGCCATGTCCTTTGTCCCGGCCAGCTTCACTCTTGTCCTCATTGAGGAGCGAG
TCACCCGAGCCAAGCACCTGCAGCTCATGGGGGGCCTGTCCCCCACCCTCTACTGGCTTGGCAACTTTCTCTGGG
ACATGTGTAACTACTTGGTGCCAGCATGCATCGTGGTGCTCATCTTTCTGGCCTTCCAGCAGAGGGCATATGTGG
CCCCTGCCAACCTGCCTGCTCTCCTGCTGTTGCTACTACTGTATGGCTGGTCGATCACACCGCTCATGTACCCAG
CCTCCTTCTTCTTCTCCGTGCCCAGCACAGCCTATGTGGTGCTCACCTGCATAAACCTCTTTATTGGCATCAATG
GAAGCATGGCCACCTTTGTGCTTGAGCTCTTCTCTGATCAGAAGCTGCAGGAGGTGAGCCGGATCTTGAAACAGG
TCTTCCTTATCTTCCCCCACTTCTGCTTGGGCCGGGGGCTTATTGACATGGTGCGGAACCAGGCCATGGCTGATG
CCTTTGAGCGCTTGGGAGACAGGCAGTTCCAGTCACCCCTGCGCTGGGAGGTGGTCGGCAAGAACCTCTTGGCCA
TGGTGATACAGGGGCCCCTCTTCCTTCTCTTCACACTACTGCTGCAGCACCGAAGCCAACTCCTGCCACAGCCCA
GGGTGAGGTCTCTGCCACTCCTGGGAGAGGAGGACGAGGATGTAGCCCGTGAACGGGAGCGGGTGGTCCAAGGAG
CCACCCAGGGGGATGTGTTGGTGCTGAGGAACTTGACCAAGGTATACCGTGGGCAGAGGATGCCAGCTGTTGACC
GCTTGTGCCTGGGGATTCCCCCTGGTGAGTGTTTTGGGCTGCTGGGTGTGAATGGAGCAGGGAAGACGTCCACGT
TTCGCATGGTGACGGGGGACACATTGGCCAGCAGGGGCGAGGCTGTGCTGGCAGGCCACAGCGTGGCCCGGGAAC
CCAGTGCTGCGCACCTCAGCATGGGATACTGCCCTCAATCCGATGCCATCTTTGAGCTGCTGACGGGCCGCGAGC
ACCTGGAGCTGCTTGCGCGCCTGCGCGGTGTCCCGGAGGCCCAGGTTGCCCAGACCGCTGGCTCGGGCCTGGCGC
GTCTGGGACTCTCATGGTACGCAGACCGGCCTGCAGGCACCTACAGCGGAGGGAACAAACGCAAGCTGGCGACGG
CCCTGGCGCTGGTTGGGGACCCAGCCGTGGTGTTTCTGGACGAGCCGACCACAGGCATGGACCCCAGCGCGCGGC
GCTTCCTTTGGAACAGCCTTTTGGCCGTGGTGCGGGAGGGCCGTTCAGTGATGCTCACCTCCCATAGCATGGAGG
AGTGTGAAGCGCTCTGCTCGCGCCTAGCCATCATGGTGAATGGGCGGTTCCGCTGCCTGGGCAGCCCGCAACATC
TCAAGGGCAGATTCGCGGCGGGTCACACACTGACCCTGCGGGTGCCCGCCGCAAGGTCCCAGCCGGCAGCGGCCT
TCGTGGCGGCCGAGTTCCCTGGGTCGGAGCTGCGCGAGGCACATGGAGGCCGCCTGCGCTTCCAGCTGCCGCCGG
GAGGGCGCTGCGCCCTGGCGCGCGTCTTTGGAGAGCTGGCGGTGCACGGCGCAGAGCACGGCGTGGAGGACTTTT
CCGTGAGCCAGACGATGCTGGAGGAGGTATTCTTGTACTTCTCCAAGGACCAGGGGAAGGACGAGGACACCGAAG
AGCAGAAGGAGGCAGGAGTGGGAGTGGACCCCGCGCCAGGCCTGCAGCACCCCAAACGCGTCAGCCAGTTCCTCG
ATGACCCTAGCACTGCCGAGACTGTGCTCTGAGCCTCCCTCCCCTGCGGGGCCGCGGGGAGGCCCTGGGAATGGC
AAGGGCAAGGTAGAGTGCCTAGGAGCCCTGGACTCAGGCTGGCAGAGGGGCTGGTGCCCTGGAGAAAATAAAGAG
AAGGCTGGAGAGAAGCCGTGGTGGTGAAA

FIGURE 3710

MAFWTQLMLLLWKNFMYRRRQPVQLLVELLWPLFLFFILVAVRHSHPPLEHHECHFPNKPLPSAGTVPWLQGLIC
NVNNTCFPQLTPGEEPGRLSNFNDSLVSRLLADARTVLGGASAHRTLAGLGKLIATLRAARSTAQPQPTKQSPLE
PPMLDVAELLTSLLRTESLGLALGQAQEPLHSLLEAAEDLAQELLALRSLVELRALLQRPRGTSGPLELLSEALC
SVRGPSSTVGPSLNWYEASDLMELVGQEPESALPDSSLSPACSELIGALDSHPLSRLLWRRLKPLILGKLLFAPD
TPFTRKLMAQVNRTFEELTLLRDVREVWEMLGPRIFTFMNDSSNVAMLQRLLQMQDEGRRQPRPGGRDHMEALRS
FLDPGSGGYSWQDAHADVGHLVGTLGRVTECLSLDKLEAAPSEAALVSRALQLLAEHRFWAGVVFLGPEDSSDPT
EHPTPDLGPGHVRIKIRMDIDVVTRTNKIRDRFWDPGPAADPLTDLRYVWGGFVYLQDLVERAAVRVLSGANPRA
GLYLQQMPYPCYVDDVFLRVLSRSLPLFLTLAWIYSVTLTVKAVVREKETRLRDTMRAMGLSRAVLWLGWFLSCL
GPFLLSAALLVLVLKLGDILPYSHPGVVFLFLAAFAVATVTQSFLLSAFFSRANLAAACGGLAYFSLYLPYVLCV
AWRDRLPAGGRVAASLLSPVAFGFGCESLALLEEQGEGAQWHNVGTRPTADVFSLAQVSGLLLLDAALYGLATWY
LEAVCPGQYGIPEPWNFPFRRSYWCGPRPPKSPAPCPTPLDPKVLVEEAPPGLSPGVSVRSLEKRFPGSPQPALR
GLSLDFYQGHITAFLGHNGAGKTTTLSILSGLFPPSGGSAFILGHDVRSSMAAIRPHLGVCPQYNVLFDMLTVDE
HVWFYGRLKGLSAAVVGPEQDRLLQDVGLVSKQSVQTRHLSGGMQRKLSVAIAFVGGSQVVILDEPTAGVDPASR
RGIWELLLKYREGRTLILSTHHLDEAELLGDRVAVVAGGRLCCCGSPLFLRRHLGSGYYLTLVKARLPLTTNEKA
DTDMEGSVDTRQEKKNGSQGSRVGTPQLLALVQHWVPGARLVEELPHELVLVLPYTGAHDGSFATLFRELDTRLA
ELRLTGYGISDTSLEEIFLKVVEECAADTDMEDGSCGQHLCTGIAGLDVTLRLKMPPQETALENGEPAGSAPETD
QGSGPDAVGRVQGWALTRQQLQALLLKRFLLARRSRRGLFAQIVLPALFVGLALVFSLIVPPFGHYPALRLSPTM
YGAQVSFFSEDAPGDPGRARLLEALLQEAGLEEPPVQHSSHRFSAPEVPAEVAKVLASGNWTPESPSPACQCSQP
GARRLLPDCPAAAGGPPPPQAVTGSGEVVQNLTGRNLSDFLVKTYPRLVRQGLKTKKWVNEVRYGGFSLGGRDPG
LPSGQELGRSVEELWALLSPLPGGALDRVLKNLTAWAHSLDAQDSLKIWFNNKGWHSMVAFVNRASNAILRAHLP
PGRARHAHSITTLNHPLNLTKEQLFEAALMASSVDVLVSICVVFAMSFVPASFTLVLIEERVTRAKHLQLMGGLS
PTLYWLGNFLWDMCNYLVPACIVVLIFLAFQQRAYVAPANLPALLLLLLLYGWSITPLMYPASFFFSVPSTAYVV
LTCINLFIGINGSMATFVLELFSDQKLQEVSRILKQVFLIFPHFCLGRGLIDMVRNQAMADAFERLGDRQFQSPL
RWEVVGKNLLAMVIQGPLFLLFTLLLQHRSQLLPQPRVRSLPLLGEEDEDVARERERVVQGATQGDVLVLRNLTK
VYRGQRMPAVDRLCLGIPPGECFGLLGVNGAGKTSTFRMVTGDTLASRGEAVLAGHSVAREPSAAHLSMGYCPQS
DAIFELLTGREHLELLARLRGVPEAQVAQTAGSGLARLGLSWYADRPAGTYSGGNKRKLATALALVGDPAVVFLD
EPTTGMDPSARRFLWNSLLAVVREGRSVMLTSHSMEECEALCSRLAIMVN

FIGURE 3711

CTAAGACAGGTGCAGACGTATGTCGGCTTTGGCGTATCCATCAAGCTTTATATTGCTTTGATTATGATTTGGAGG
AAAGTGGAGAAATTAAAGATATGTTACTTGAGTGCTTCATAAATATTAATTATATCAAGAAAGAAGAGGGAAGAA
GATTTCTTAGTTGTCTCTTCAACTGGAATATCAACTTCATCAAAATGATCCACGGGACCATTAAAAACCAGTTAC
AGGGATTACAAAAGTCTTTGATGGTATACATTGCAGAAATTTATTTCAGAGCTTGGAAAAAGGCTTCAGGGAAAA
TACTGGAGGCGATTGAAAATGATTGCATCCAGGACTTCATGTTTCACGGGATACACCTTCCGAGGAGGTCTCCAG
TGCATTCCAAAGTGCGGGAGGTTCTGAGTTACTTTCACCATCAAAAGAAAGTTCGGCAGGGAGTGGAAGAGATGC
TTTATAGATTATATAAGCCCATCCTTTGGAGAGGATTAAAGGCCAGAAACTCTGAAGTTCGATCAAATGCTGCAT
TGTTGTTTGTTGAAGCATTTCCTATTAGGGATCCAAACCTTCATGCTATTGAAATGGATAGTGAAATCCAGAAAC
AGTTTGAAGAGCTCTATAGCCTTTTAGAAGATCCTTACCCGATGGTCCGTTCCACAGGGATCCTTGGTGTTTGTA
AAATAACTTCTAAGTACTGGGAAATGATGCCCCCGACCATTCTTATTGACCTCCTGAAGAAGGTGACTGGGGAAC
TGGCATTTGACACGAGCTCAGCTGATGTTCGTTGTTCTGTCTTTAAGTGTCTGCCAATGATTTTGGACAACAAAC
TGAGCCACCCATTGTTAGAGCAGCTCCTTCCAGCTCTCAGATACAGTCTCCACGACAATTCGGAGAAAGTGAGGG
TAGCTTTTGTGGACATGCTGTTGAAGATCAAAGCTGTGAGGGCTGCTAAGTTTTGGAAAATATGTCCCATGGAGC
ACATTCTGGTTCGTCTGGAAACTGATTCTCGACCTGTGTCTCGGCGCCTGGTGAGCCTCATCTTTAATTCTTTCC
TGCCTGTGAATCAGCCGGAGGAGGTCTGGTGCGAGCGCTGTGTCACCCTGGTGCAGATGAACCACGCCGCTGCCA
GGAGGTTCTATCAGTACGCCCACGAACACACCGCCTGCACCAACATAGCAAAGCTGATTCACGTTATTCGTCATT
GCTTAAATGCCTGTATCCAGAGGGCAGTGAGAGAGCCTCCAGAGGACGAGGAGGAAGAGGACGGAAGGGAGAAGG
AGAATGTGACTGTTCTGGACAAAACACTGTCAGTAAACGATGTTGCATGCATGGCAGGTTTACTAGAAATCATTG
TGATTCTCTGGAAAAGTATTGACAGAAGTATGGAAAATAATAAAGAGGCCAAACTTTACACGATTAACAAGTTTG
CCTCTGTGCTTCCAGAGTATCTGAAAGTATTTAAGGATGATCGCTGCAAGATCCCTTTATTCATGCTAATGTCCT
TTATGCCGGCCTCTGCTGTCCCCCCATTCAGCTGTGGTGTGATTTCCACGCTGAGAAGCCGGGAGGAGGGCGCTG
TGGACAAGAGCTACTGCACTTTGTTGGATTGCCTCTGCTCCTGGGGGCAAGTGGGGCACATTCTGGAGCTTGTTG
ACAACTGGCTGCCCACAGAGCATGCCCAGGCCAAGAGCAACACAGCTTCTAAAGGTAGGGTGCAGATCCATGACA
CACGCCCAGTCAAACCTGAATTGGCATTGGTCTACATTGAGTATCTGCTGACTCATCCAAAGAACCGCGAGTGCT
TGCTCTCTGCTCCTCGGAAGAAACTTAACCATCTTTTGAAAGCCCTTGAAACGTCAAAGGCAGATCTGGAGTCAC
TTCTGCAGACACCGGGTGGGAAGCCTCGTGGCTTCAGTGAAGCAGCTGCCCCGCGAGCCTTTGGTCTCCACTGTC
GCCTGAGCATCCATCTTCAGCACAAGTTCTGCTCAGAAGGAAAGGTGTATTTGTCCATGTTGGAAGACACTGGCT
TTTGGTTAGAAAGCAAAATTTTATCTTTTATTCAAGATCAAGAAGAAGACTACCTGAAGCTTCATAGGGTCATTT
ATCAGCAAATTATCCAGACCTACCTGACTGTGTGTAAAGATGTTGTTATGGTAGGCCTTGGTGACCATCAGTTTC
AGATGCAACTCTTACAGCGGAGTCTTGGAATCATGCAAACAGTGAAGGGATTTTTTTATGTTTCATTACTTCTTG
ACATTCTGAAAGAGATAACTGGAAGTTCCTTGATTCAGAAAACAGATTCAGATGAAGAAGTTGCAATGCTGTTGG
ACACAGTCCAGAAAGTATTTCAGAAAATGTTGGAATGTATTGCACGGAGCTTCAGGAAGCAGCCGGAAGAAGGCC
TGCGGCTGCTTTATTCTGTTCAGAGGCCTCTTCATGAGTTCATTACTGCTGTTCAGTCTCGGCACACAGACACCC
CTGTGCACCGGGGTGTACTTTCTACTCTGATCGCTGGGCCTGTGGTTGAGATAAGTCACCAGCTACGGAAGGTTT
CTGACGTAGAAGAGCTTACCCCTCCAGAGCATCTTTCTGATCTTCCACCATTTTCAAGGTGTTTAATAGGAATAA
TAATAAAGTCTTCGAATGTGGTCAGGTCATTTTTGGATGAATTAAAGGCATGTGTGGCTTCTAATGATATTGAAG
GCATTGTGTGCCTCACGGCTGCTGTGCATATTATCCTGGTTATTAATGCAGGTAAACATAAAAGCTCAAAAGTGA
GGGAGGTTGCAGCCACTGTTCACAGAAAACTAAAGACATTCATGGAAATTACTTTGGAAGAGGATAGCATTGAAA
GATTTCTCTATGAATCATCATCAAGAACTCTGGGAGAACTTTTGAATTCATAACCAAGCCAACATCTCCAGACAT
GTAAAAATAGGGAAAAGTGATTCAAATTGAAATGCCTGTGTATTTTCCTATTGTTTTTAATGTTAATAACCCATA
TAATAGGGAAAGGGTGGGATTTTTTTGTGGGAATGTGGGAAGGTGGGGGTTATGGAGGAGATAACTCAAAACTTC
TTCAATTTTGCCTAGTGCCTGCGTAAATAATATATTTAATATAAAGGACTCCAGGTATAAATGGTGTAGAAATCC
ATGATTCCAAGAAAAAACACTTTTCTAGCAAACCTGGTTGTTTTTAAAATGACTTTTATATATGTAATATTGCTT
GGAAACTATGAGTAATAAAGCAATGACAACAAAAAAAAAAAAAA

FIGURE 3712

MLLECFININYIKKEEGRRFLSCLFNWNINFIKMIHGTIKNQLQGLQKSLMVYIAEIYFRAWKKASGKILEAIEN
DCIQDFMFHGIHLPRRSPVHSKVREVLSYFHHQKKVRQGVEEMLYRLYKPILWRGLKARNSEVRSNAALLFVEAF
PIRDPNLHAIEMDSEIQKQFEELYSLLEDPYPMVRSTGILGVCKITSKYWEMMPPTILIDLLKKVTGELAFDTSS
ADVRCSVFKCLPMILDNKLSHPLLEQLLPALRYSLHDNSEKVRVAFVDMLLKIKAVRAAKFWKICPMEHILVRLE
TDSRPVSRRLVSLIFNSFLPVNQPEEVWCERCVTLVQMNHAAARRFYQYAHEHTACTNIAKLIHVIRHCLNACIQ
RAVREPPEDEEEEDGREKENVTVLDKTLSVNDVACMAGLLEIIVILWKSIDRSMENNKEAKLYTINKFASVLPEY
LKVFKDDRCKIPLFMLMSFMPASAVPPFSCGVISTLRSREEGAVDKSYCTLLDCLCSWGQVGHILELVDNWLPTE
HAQAKSNTASKGRVQIHDTRPVKPELALVYIEYLLTHPKNRECLLSAPRKKLNHLLKALETSKADLESLLQTPGG
KPRGFSEAAAPRAFGLHCRLSIHLQHKFCSEGKVYLSMLEDTGFWLESKILSFIQDQEEDYLKLHRVIYQQIIQT
YLTVCKDVVMVGLGDHQFQMQLLQRSLGIMQTVKGFFYVSLLLDILKEITGSSLIQKTDSDEEVAMLLDTVQKVF
QKMLECIARSFRKQPEEGLRLLYSVQRPLHEFITAVQSRHTDTPVHRGVLSTLIAGPVVEISHQLRKVSDVEELT
PPEHLSDLPPFSRCLIGIIIKSSNVVRSFLDELKACVASNDIEGIVCLTAAVHIILVINAGKHKSSKVREVAATV
HRKLKTFMEITLEEDSIERFLYESSSRTLGELLNS

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FIGURE 3713

AGAGACTCAGACGGCGGAGCCTGGAGGAGCCCACGCAGTCTGTTCCCGGCACCCGGTGCGTGTGAAGGGACTTGA
GGGCAGCGAGATGGAATCAGCAAGAGAAAACATCGACCTTCAACCTGGAAGCTCCGACCCCAGGAGCCAGCCCAT
CAACCTGAACCATTACGCCACCAAGAAGAGCGTGGCGGAGAGCATGCTGGACGTGGCCCTGTTCATGTCCAACGC
CATGCGGCTGAAGGCGGTGCTGGAGCAGGGACCATCCTCTCACTACTACACCACCCTGGTCACCCTCATCAGCCT
CTCTCTGCTCCTGCAGGTGGTCATCGGTGTCCTGCTCGTGGTCATTGCACGGCTGAACCTGAATGAGGTAGAAAA
GCAGTGGCGACTCAACCAGCTCAACAACGCAGCCACCATCTTGGTCTTCTTCACTGTGGTCATCAATGTTTTCAT
TACAGCCTTCGGGGCACATAAAACAGGGTTCCTGGCTGCCAGGGCCTCAAGGAATCCTCTCTGAATGCAGCCTGG
GACCCAGGTTCTGGGCCTGGAACTTCTGCCTCCTTCCTCCGTGATCTGCCAGGCTCGTGGGCACTTTCCACAGCC
CAGGAGAGCTTCTGAAAGGACAGTATAGCTGCCCTTGCTCCCTACCCACAGCACCTGAGTTAAAAAGTGATTTTT
ATGTTATTGGTCTAAGGGACTTCCATCTTGGTCTGAAGTCCTGAGCTCAGACGCAGGTACTGCCAGCCATACCTT
CCTGGTAGCATCTGCTGGACCTAAGTAAGGCATGTCTGTCTAAGGCCAAGTCTGCCCGGCTTAAGGATGCTGGTT
CTGACTCTACCCCACTGCTTCCTTCTGCTCCAGGCCTCAATTTTCCCTTCTTGTAAAATGGAATCTATATCTATA
AAGGTTTCTTCAAATCCAAAAAAAAAAAAAAAAAAAAAGTTGGGGGACAGGGGTCTGGGTTTGGCTCCAGGTGGGA
ACAAGGCCTGGTAAAGTTGTTTGTGTCTGGCCCACAGTGACTCTCTGTGCACGACTCAACTGCCAAGGGCATCAC
TGGCCAATTCTTGGATTTAGGGATTGGCTAGGAGTTGCTGGGGTCCACTCCTGGGCCTGCCCCAGCTCCTTGCCC
AGGGAGAGGGAAAGAGTTAACGGTGTGGGCCACTCCAGCTTGCCCTTCCACTGCCACTCACTGGGGTGAGGCTGG
GGGTCAGCTTGGTGAGGATTGGGGCTTCTAGATTGTCTAGGCAGGAGGTGAAACTTAGGCCAGAGTCAGATTTGA
GCTGAGCCAGGGGAGGCCTTGGCAACCTACTTCTACTCAGATTTCATTGCTGGATGCGGAAGGGGTAGGCCCAAA
ATATATACAGGATCTTACTGTCCCTTGAAGCCCAGCCACAAGTGTTGGAGCTGCAGAGAGACCCCAAAGGTAGTA
GATTGTGCCAGATACAAATGGGTCCCATCCAGTGCTTCATACTCCTTCAGTCACTATCCCAGACAGTGAGCCCCA
GATCTCCTAGCTCTGGCTTCTGTGTCCCACACGGCCTGTTCCCAGCTTCTCTCCTGGTTCCCTTGTTACGGATTC
ATTTATCCATTCAGTGTTTCCTGGGCCTCTGCTCAGAGGCAGGTCACCACTGGGCCCTGTGGATCAATGCAAGAT
GACAAAGGCTTTTTTTTTTTTTTTTTTTTTTTTTTTTGAGGAGTTTCGCTCTTGTTGGCTAGGCTGGAGTAA
AATGGTGCGATCTCGGCTCACTGCACCTCCGCCTCCCAGGTTCAAGCGATTTTCCTGCCTCAGCCTCCCGAGTAG
CTGGGGTTACAGGCATGCACCACCATGCCTGGCTAATTTTCTGTATTTTTAGTAGAGACGGGGTTTCTCCATGTT
GGTCAGGCTGGTCTTGAACTCCTGACCTCAGGTGATCTGCCCGTCTCGGCCTCCCAAAGTGCTGGGATTACCGGC
ATGAGCCACTGCGCCTGGCCGACAAAGGCTTTGATATCAGAATGAACTGTCAAGGGAGGTGCTGGAGAGGGATTA
ACCTGTGCTGCCTGGGACCCTCAGGGTCTTAGGTTGGGGAGTGTGAATAGGAGTTTGCAGATGGAGAATAGGAAG
GGCATTCCAGGCAGAGGGAAACCTGTGCAGAGACCAAGAGGTGTGGAAGGAAAAGTGGGGTTGGGGCTGGGTGGT
CTGGATTATGGCCTGGATGCAATAAAGTACTGTGACAGTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAA

FIGURE 3714

MESARENIDLQPGSSDPRSQPINLNHYATKKSVAESMLDVALFMSNAMRLKAVLEQGPSSHYYTTLVTLISLSLL
LQVVIGVLLVVIARLNLNEVEKQWRLNQLNNAATILVFFTVVINVFITAFGAHKTGFLAARASRNPL

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FIGURE 3715

AGCTGTTTCCCTGTGGGTCGGGTTGGACTGACTTTTGACAGTCAGCCTTCGGCTGCGGAGGGGGCTCGGCGGCGG
CCGGCGGAGAAAGTTGCTCCGAGAAGAGGCTGGGTCGAGCTGGGCCGAGCCGGGCGCGCAGGGCGGGCGTCGCGG
GCGTCCCGGGCGGACGCGGCGCGGAGACTGCCGGCGCGTCCCGGGGGTTCCGATTTGAAGACCTTGCTTCTCATC
ACCCACTGGATTATGCCCCAGGCTTCCCTACCCAATGATCCTCTTGCAACACGCCGTGCTTCCTCCACCTAAGCA
GCCCTCACCCTCGCCTCCTATGTCAGTGGCCACCAGGTCTACAGGAACCTTGCAGCTTCCACCACAGAAGCCTTT
TGGGCAGGAGGCTTCCTTGCCTCTTGCAGGGGAAGAAGAGTTATCGAAGGGAGGGGAGCAAGACTGTGCCCTGGA
GGAGCTATGTAAGCCCCTGTACTGCAAACTCTGCAATGTCACCTTGAACTCTGCACAGCAAGCCCAGGCTCATTA
TCAGGGTAAAAATCATGGTAAGAAACTCCGAAATTACTATGCAGCAAATAGCTGTCCTCCTCCTGCTAGAATGAG
CAATGTGGTCGAGCCTGCAGCTACTCCAGTTGTTCCAGTCCCTCCGCAGATGGGCTCCTTTAAGCCAGGAGGCCG
AGTGATCCTGGCCACGGAGAATGATTACTGTAAGCTCTGTGATGCCTCCTTCAGTTCCCCAGCTGTGGCTCAGGC
TCACTATCAAGGGAAGAATCATGCCAAGAGGCTGCGGCTGGCGGAAGCTCAGAGTAACTCATTCTCGGAATCCTC
AGAGCTGGGTCAACGGCGGGCCAGGAAAGAAGGGAATGAGTTTAAGATGATGCCTAACAGGAGAAATATGTATAC
AGTACAGAATAATTCAGCAGGTCCTTACTTCAATCCCCGCTCTCGGCAGAGAATTCCACGTGATCTGGCCATGTG
TGTTACTCCAAGTGGCCAGTTTTACTGCTCAATGTGTAATGTTGGAGCTGGCGAAGAGATGGAATTCCGGCAGCA
TTTAGAGAGCAAGCAACATAAGAGCAAGGTGTCTGAACAGCGGTACAGGAATGAGATGGAGAATCTGGGATATGT
ATAGTGATTATCATATTAAGATAGAGCAGCTTTTCCTGCCTGTTGTTTGCCTTTTGTCAACTTGCCCTGCTTTGT
GGTCTTTTTGATATGAGTACATTCCTCTGCTTAATGTTAATACATGTAACCCACAGTGGTACCATGAGATGTCAA
AACCTGGGGGCCCGGGGGCGGGGCGGGGGGAGGTGGGTGTGAAGAACGTGCTTCTTAGGTCATAACGCTTTTGCA
GGGTCAATGGTGTTGAGCCGCTCATAGCATGTGACCTACCTACCCCATCAGAAATAACTTTTTATCTTGCTCAAG
TTCTGGTCAACTAGTAGCCTGACGGCTTAGAACTTTGACTATTTAAAAGTTTCATTTTCTTTTGCAATTTTAGTT
TTATGTACTGTTAAAGAATTGTACTGAATTCTTTTTAGATCACAGTAAAAATAGGTTGGCAGAGATTTCAGTTTC
CCAGGGCTTAACCAGAACCGCCACCTCAATGCATTGTCAGTAGAATACATTATTAGAAACTGTTAAGGTCTTTCC
CGGGACATTTTTTTCTGCCATTTTCTTTTGCAATTGTAGTTTTATGTACTGTTAAAGAATTGTATTGAATTCTTT
TTAGATCAAAGTAAAAATAGGTCAGCAGAGATTTCAGTTTCCCAGGGCTTAACCAGAACCGCCACCTCAATGCAT
TGTCAGTAGGATACATTATTAGAAACTGTTAGGGTCTTTCCCAGGACATTTTTTTTTCTGTATCATGTCTCCCCA
TCATTGAAGCGCAAATTTTCTTGAATTCAAATACTCCCAATGAGCTTGTATACTTCCAAACAGCTAAACTTGATT
TCCAGTTGTGGATTTCACACATATAATTGCCGCCTTCTTCCCTCCTCTTTTTTCCCCCCTAGTTGAATCAGCTTG
TCTAACAAGCCCATTTTCATGCCCCAGCTGTGCTGTGGGTTTTCCAAGCCTCATATTTGAATATTCAATGAGTTT
AAGATGGATATGATTTCAAAAAATAGGGCCGGGCGCGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCG
AAGCAGGCGGATCACGAGGTCAGGAGGTCGAGATCATCCTGGCTAACACAGTGAAACCCCATCTCTACTAAAAAT
ACAAAACATTAGCCGGGCGTGGTGGTGGGTGCCTGTAGTCCCAGCTACTCTGGAGGCTGAGGCAGGAGAATGGCG
TGAACCCGGGAGGCGGAGCTTGCAGTGAGCCGAGATCGCGCCACTGCACTCCAGCCTGGGTGACAGAGCGAGACT
CCGTCTCAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3716

MILLQHAVLPPPKQPSPSPPMSVATRSTGTLQLPPQKPFGQEASLPLAGEEELSKGGEQDCALEELCKPLYCKLC
NVTLNSAQQAQAHYQGKNHGKKLRNYYAANSCPPPARMSNVVEPAATPVVPVPPQMGSFKPGGRVILATENDYCK
LCDASFSSPAVAQAHYQGKNHAKRLRLAEAQSNSFSESSELGQRRARKEGNEFKMMPNRRNMYTVQNNSAGPYFN
PRSRQRIPRDLAMCVTPSGQFYCSMCNVGAGEEMEFRQHLESKQHKSKVSEQRYRNEMENLGYV

FIGURE 3717

TTGCGGCCGCCAACGCCGCCCGGACTGGAGCCCTGACATTGCTGCGCTCGGGGGGCTCCAGGCAGCCCGTATCGG
GGCCTTTATTTCTCGTCGGCGGCGCCCTGCACCGCGCCTCGCAAAGCCAAACACCAGAGCACCCTAGAAGGTTTA
ACTAAAAGAATGCTCATGTTTGACCCAGTTCCTGTCAAGCAAGAGGCCATGGACCCTGTCTCAGTGTCATACCCA
TCTAATTACATGGAATCCATGAAGCCTAACAAGTATGGGGTCATCTACTCCACACCATTGCCTGAGAAGTTCTTT
CAGACCCCAGAAGGTCTGTCGCACGGAATACAGATGGAGCCAGTGGACCTCACGGTGAACAAGCGGAGTTCACCC
CCTTCGGCTGGGAATTCGCCCTCCTCTCTGAAGTTCCCGTCCTCACACCGGAGAGCCTCGCCTGGGTTGAGCATG
CCTTCTTCCAGCCCACCGATAAAAAAATACTCACCCCCTTCTCCAGGCGTGCAGCCCTTCGGCGTGCCGCTGTCC
ATGCCACCAGTGATGGCAGCTGCCCTCTCGCGGCATGGAATACGGAGCCCGGGGATCCTGCCCGTCATCCAGCCG
GTGGTGGTGCAGCCCGTCCCCTTTATGTACACAAGTCACCTCCAGCAGCCTCTCATGGTCTCCTTATCGGAGGAG
ATGGAAAATTCCAGTAGTAGCATGCAAGTACCTGTAATTGAATCATATGAGAAGCCTATATCACAGAAAAAAATT
AAAATAGAACCTGGGATCGAACCACAGAGGACAGATTATTATCCTGAAGAAATGTCACCCCCCTTAATGAACTCA
GTGTCCCCCCCGCAAGCATTGTTGCAAGAGAATCACCCTTCGGTCATCGTGCAGCCTGGGAAGAGACCTTTACCT
GTGGAATCCCCGGATACTCAAAGGAAGCGGAGGATACACAGATGTGATTATGATGGATGCAACAAAGTGTACACT
AAAAGCTCCCACTTGAAAGCACACAGAAGAACACACACAGGAGAAAAACCCTACAAATGTACATGGGAAGGGTGC
ACATGGAAGTTTGCTCGGTCTGATGAACTAACAAGACATTTCCGAAAACATACTGGAATCAAACCTTTCCAGTGC
CCGGACTGTGACCGCAGCTTCTCCCGTTCTGACCATCTTGCCCTCCATAGGAAACGCCACATGCTAGTCTGATTG
CCTCTGTGTCCTGCCTCAGCGTGACTCCCCACTCACTTGGCTCTCTCTCTGTCCTGCCTCCCATTATCTAACACA
TTTTTTACATGTACATTTTAATTTGATTCAGCTGGTCTGAATCTCTGAATTTATATCATCCAAAACTTCCATATG
GTCAGTAGTAGATGTTCTCTAATCCTCCCTCTCCTTACCACGGGTCAGACCTAAAGAATGTGAACACTTTTTTTT
TTTTTTTCTGGGGATGCTAAGCAAACCCTTCTTACAGATACGTTTAATGTAATAAGAACAAGGGAACATGTAAAC
TAACATAACCAATTGTCAGTTCTCCATGTATTCCTCAAAAGAATGTCAGAGTAAATGTATTAGAAATACAGTATC
CAGACTGCTAGTCCTTGCCAGAGACATTCTTACCTCTGCCCTGTGATCATATTTTATGCTTGACAGCGAAAACAA
GTGTGGCCCCTTGCACCGGTTAGCTAGAAGTACAGCCAGATTTCAAGCTAGTGCAATCACCTCTTCCGCCAATTT
TTTACAAATCTTGTCAACCTGGATCTTACACTTCATCTGAATTCAGTTCTTTGCCCTCCTTCGCGCCTGCAGCTC
ATATGGAAGTCTTTGCCACCAAT

FIGURE 3718

MLMFDPVPVKQEAMDPVSVSYPSNYMESMKPNKYGVIYSTPLPEKFFQTPEGLSHGIQMEPVDLTVNKRSSPPSA
GNSPSSLKFPSSHRRASPGLSMPSSSPPIKKYSPPSPGVQPFGVPLSMPPVMAAALSRHGIRSPGILPVIQPVVV
QPVPFMYTSHLQQPLMVSLSEEMENSSSSMQVPVIESYEKPISQKKIKIEPGIEPQRTDYYPEEMSPPLMNSVSP
PQALLQENHPSVIVQPGKRPLPVESPDTQRKRRIHRCDYDGCNKVYTKSSHLKAHRRTHTGEKPYKCTWEGCTWK
FARSDELTRHFRKHTGIKPFQCPDCDRSFSRSDHLALHRKRHMLV

FIGURE 3719A

GGCGGCTCCGGCGCAGACCTTGGAGAGCACAGCTGCCGGCCCGCGAGCCAGCCTCGGTTCCCGCGGCCCGCCGAG
GCTCGGAGCCATCCAGCGACCCGGCGACCGGCCTCAGGCCCCGCC**ATG**GGGAAGACCAACAGCAAGCTGGCCCCC
GAGGTGCTGGAGGACCTTGTTCAGAACACTGAGTTCAGCGAGCAGGAGCTGAAGCAGTGGTACAAGGGCTTCCTG
AAGGACTGCCCCAGCGGCATCCTCAACCTGGAGGAGTTTCAGCAGCTCTACATCAAGTTCTTCCCCTACGGCGAC
GCCTCCAAGTTCGCGCAGCACGCTTTCCGCACCTTCGACAAGAACGGCGACGGCACCATCGACTTCCGGGAGTTC
ATCTGCGCCCTGTCGGTCACCTCCCGCGGCAGCTTCGAGCAGAAGCTCAACTGGGCCTTTGAGATGTACGACCTG
GACGGCGACGGGCGAATCACGCGCCTGGAGATGCTGGAGATCATCGAGGCAATCTACAAGATGGTGGGCACCGTG
ATCATGATGCGCATGAACCAGGACGGGCTCACGCCCCAGCAGCGTGTGGACAAGATCTTCAAGAAGATGGACCAG
GATAAGGACGACCAGATTACATTGGAGGAGTTCAAGGAGGCAGCCAAGAGTGACCCATCCATTGTGTTGCTGCTG
CAGTGTGACATGCAGAAG**TAG**AAGCTGGTGAGGGGCAGGGTCCCTGGCCAGAAGGGGCATGGCCACCTCCCAACC
TGATGACCTCTCTGGCTGGCCTCCCAGGAGGAGGGACACTCCAGCCCCCCTCTCTGGCCCACCCAGTCCTCTGCC
CAAGCCCTTCCTCCCCTCCATCAAGATCTTTGAGGGACCACCTCACCCTGCAAAAGAGACAGGTCCTCCAGTACC
CTGTCTTCTAGCCCCACCTCCCACTTGGCCAGAACCAATGTCCATTGGGCATAGGGGAGTTGGCTTTTGCCCCAG
GAGGTGAGGTTAAGGAGTTGGGGGCCTGGGGTTCTGGTTAGGAATTCTCTTGATCCTGGGATTATGCTTTATAGG
ATGTGGTCCCACAGGCCTGTCACAGGGCCAAATTGGGTCTGTCCATTCCTGAGGCTCCAGATCCCATAAAGGGGG
TCTCTTCCCCATCCCTTCTACTCTACCTGGCCCTTCCAGCCCCAGCCTTTGGAGCGTTCATTCAGTCCTTTCTTC
AGCTAATGATTACTGAGCACCTGTTTGGTGCTAAGGATATGGTCATTTACAAGACACATCTTGTGCCCTCTGGAA
GCTCATAGGGTTGTGAGGCAAACTTCCAGCCGTCAGGGTCTCAGCTAAGCAGAAGGTGCTGGAAGGCTGGTTAGT
CTGGGAGGAGCTATTTCATCTTCCAGCTCAGCTCCACACAAAGCTGCAGAAGGACGAAATGAAAAGCATTTGGAA
GTTTAGGAGCCACGTGAGTGAAAGTTTTAAGAAAAATGAAATTTATGTCATACTTATTTTTTTAGTACCCTTTAA
AGGAGCTACAGTCATTTTATTATTTCAGGAGGTTAAAATATACTCTATATTACTTGGTTTATTATAAAATGATTA
AATGAATAGAGAAAATATTAATTTTCAAGGGGAAAAAACCTGAGAAGAAAGGGAGAAAAGACCATGAAATTTACC
AGATAACACTTTTTAAGACTAAGTCCTGAGCTGCCACTCTCAGCAGTTTTTGCTGCTTCAGCTCTTCCTTTTTAT
TACCTTTTTCAATTCAACAAGCAACTTTCTGCTACATACTTACTCCGGTTGGGTGCTGACTTCAGGGACAGGAAA
AAGCAAGGTTTGCAAAGAGTGAAACTAGTGTATATTCCGTATCTTGGTAGTTCGTTTCTGGATTGGGTTTAGTTT
CAGAACTGGACTTGTTCCTTCACTGCCACAGAATCAGAAAGAGCTAGAAGAAAAGGCTCACCTGGCCACTGTTTA
GGCACCCAGACATAATTTATGGACGAAATGCCTAAAAATGTGCCAGGCATGCTCTGTTTGAGAGGCTTTTTCTAA
CCCCAAATCTTAGATCTGCCAGGTAGTTCAACATCTTCCAAGTGTGCTGGTTCTGCTTTCCAATGCCTGCTTCCC
AATTTTGGATCCATGAGCTATACAGCTGCATGCTTTGACTGCCGGAAAAATTAATCTTGCTTCTTCATCAGGTCT
TTCTCCTGTACTTGTGATCAGAAATTACCTTTGACGTGCAGTGACAGTTGATTTCCTCTTGAACTGCCGGTGAAA
ACAGTCTAGTACACAGGTGCTGTCAGCCCAGGGTGGGAGCAGGAAATGATTGCTGAGCCCGGGGCAGGGGAATTG
CATCTGCAGGAAAGAGATGCAGCATGCTCCTCACTCCTGAGTGCCCACCTGTCCTGCTTCTCTGCAGGTGAAAAC
TCTGGGGGATGCTGATCAATAGAGCTTGGTCCCAAGCTCTACTGGGCCCTTGGAGGTAGCAAGGCCACTGGGTTG
CTATCCTCTTGATGGGGATAGCAACCACTGGTTTGCAACCACTGGGTTGCTATCCTTTTGCTATCCTCTTGCTCA
TGACCAGCCATATGGTGAGGCTGGGGAGTTCACATCCTCAGGCAGGAACTAGCAGTTGTTTATCCAGCAATGCCT
CAAGGATGTTGCATTGCTCCCAGGAGCTGGCTATTAGGTATGTCTTGTGCGGTCAGTCAGCATCACAGACACATA
GATGCTCACCAGCCTGGCTTAGCTGGGACCTAAATCTTCTGGTGAAAAGCTTTTCACTAAGTGAGGTTCCTTCCC
TGCAAATGCTGAATCTAGCCTAATTCGCAACCACACAGAATTTCATGGCTTTCAAAGGCTTGCCATGTGCCCCAT
CTCATTCTATACTCACATCCCATGGAGGTGAGGATTTTCACTTCTTTTCTCTAGACTTGGAAGCTGAGATTCAGA
GAGGAAGCATCCCTTGTGCAAGATCACATAGTCAGGAGGTGACACAGGGCTAAGACTTGAACCAAGGCTCTAAGA
GGATTTCTTCTTTTCAGAGTCTCTTCCCTGTCCATTTCTGTGACTAAGCTGTGCAGAGGTTGACAGCAGGGCAAG
TTACATTGATATTCATCCTTTATAGGCTTCCTGCTAAAAAGCTTCTGAGATTGTGGTCTTCCAAAAAAAATAGGA
GCTTGGTTGAAGTCCCCACATTTTCAAGCACTCAGTGTTCTGCCTCTGGCAGCTGTGCTAACAGCTCAGTGCTGT
CCTGGGAGTCCTCTGACTCAGAACCCTCGAAGCATCCTGCATTGTCTTTACCCACCATCATCGTCACTAAGAGAA
ACATGCCTACCCATGAAGGCGTGTTTGATTACTCCAGGCTTCTGGACACACATACCCATGGGTGATTTTTGCTCC
TCAGGCCCAATATTCTCAGACAGCCCAGCAGTGTGAACACACAATGCCAGGCCAGGAACTGGGACCACCATCTTG
CTGATGGAAGGAACAACAGGTGGCCCAGGACATGCTCCTGCATACTCCTGGGTGTCCCAGGGACTGTGTGCTCAG
GAGCACTGTGGTAGAGCACTGGCCCTGCCTTGAGAAGAGACACAGGTCTCCCGTCCCTGCACCAGCTGAGAGAGA

FIGURE 3719B

CTTGCCACAAAGCACAAGGCTGGCAGAGATTTATGTATGACTTGCACAGACACAAAAATATACAGACAATCAAAA
CATTGATATATTCAAACTCTCCTTTAAATTCCAATCTTATTGCAACAACTCTGTGAATTGCAAGGTCCCAGAATC
TGCCTTCTCACATACTCTACCCTCATTCATCCTTTTGGGCTAATTGATGAGCATCTTATTTCTTATCTCTAAAAA
TTATCAGCAAAGGCTACTTCAGATGGCCACTTTAGTCCTTTCAGCTGTAGTCAGGATTATTTAACTTACCTGTAT
ATCAAAAGTGAAGAAAAAGTTAGTTCATAAGTAAAGGCACTAAATCCTTTCCTGACAATGGCAGAGTCTCTAGAG
GTAGAAATTTGCCTTGCTGCAGAGAGAGAAGGAATGGCGTGGGATGGGGGAAAGAAAAGAAAGAGAAGAAGAGAA
GAAGCTGGGGTCTCCAGGCAGGGTAGTAAGCTGACACTAAATATTTTTTACACAAAAATGTATTGAAGCAACAAA
TATTTCCTGAAGATCCACCCTGGGTGAGGCTTTGAGCTGACTTTAGAGATCACTGTGGGGTCAAGAATGTCTTAC
ATGTTTTATTCATCATTCTTGAAAAAAGAAATAATTCAAACCTTGGAATTAAAAAGTCAGAAAAACAAAAAAAAA
AAAAAAAAAA

FIGURE 3720

MGKTNSKLAPEVLEDLVQNTEFSEQELKQWYKGFLKDCPSGILNLEEFQQLYIKFFPYGDASKFAQHAFRTFDKN
GDGTIDFREFICALSVTSRGSFEQKLNWAFEMYDLDGDGRITRLEMLEIIEAIYKMVGTVIMMRMNQDGLTPQQR
VDKIFKKMDQDKDDQITLEEFKEAAKSDPSIVLLLQCDMQK

FIGURE 3721

CCCGCTTCTGGAGTGTTATCGTCACCATGTCCCTAATGGTCTCGGCTGGCCGGGGCCTGGGGGCCGTGTGGTCCC
CAACCCACGTGCAGGTGACGGTGCTGCAGGCGCGGGGCCTGCGGGCCAAGGGCCCCGGGGGCACGAGCGACGCGT
ACGCGGTGATCCAGGTGGGCAAGGAGAAGTACGCCACCTCCGTGTCGGAGCGCAGCCTGGGCGCGCCCGTGTGGC
GCGAGGAGGCCACCTTCGAGCTGCCATCGCTGCTGTCCTCCGGACCCGCGGCCGCCGCCACCCTGCAGCTCACCG
TGCTGCACCGCGCGCTGCTCGGCCTCGACAAGTTCCTGGGCCGCGCCGAGGTGGACCTGCGGGATCTGCACCGCG
ACCAGGGCCGCAGGAAGACGCAGTGGTATAAGTTGAAATCCAAACCAGGAAAGAAGGACAAGGAGCGAGGAGAAA
TTGAGGTTGACATCCAGTTTATGAGAAACAACATGACTGCCAGCATGTTTGACCTTTCTATGAAAGACAAGTCTC
GGAATCCATTTGGAAAGCTGAAGGACAAGATCAAGGGGAAGAATAAGGACAGTGGGTCAGACACCGCCTCCGCCA
TCATCCCTAGCACGACACCTTCGGTCGACAGTGATGATGAGTCTGTGGTTAAAGACAAGAAAAAGAAATCAAAGA
TCAAGACCTTACTTTCCAAGTCAAATTTGCAGAAGACGCCTCTTTCCCAGTCCATGTCTGTCCTGCCGACTTCAA
AGCCAGAAAAAGTGCTGCTTCGTCCCGGAGACTTTCAGTCCCAGTGGGATGAAGATGACAATGAGGATGAGTCCT
CCTCGGCCTCGGATGTCATGTCTCACAAGAGAACAGCGAGTACGGATCTTAAGCAACTGAACCAGGTCAACTTTA
CCCTTCCCAAGAAGGAAGGACTTTCCTTTCTTGGTGGCCTTCGGTCTAAGAATGATGTCCTTTCCCGCTCTAATG
TCTGCATCAATGGGAACCATGTTTACCTGGAGCAGCCCCAACCCACCGGTGAGATCAAGGATAGCAGCCCGTCCT
CCTCCCCATCCCCCAAGGGTTTCAGAAAGAAAACATTGTTCTCTTCTACAGAGAACCTGGCGGCTGGGTCTTGGA
AGGAGCCTGCTGAAGGAGGTGGGCTGTCTACTGACAGGGATGTCTCCGAATCTTCCACCAAGGACTCCTTGAAGT
CTATGACCTTGCCGACCTACCGACCTGCCCCACTGATCAGTGGGGACCTCAGGGAAAAAATGGCCCCCGCAAACT
CAGAGGCCACAAAAGAAGCTAAGGAGAGCAAGAAGCCAGAGAGCAGGAGGTCCTCTTTGCTGTCTCTGATGACGG
GGAAGAAGGATGTGGCTAAGGGCAGTGAAGGTGAAAACCTTCTCACGGTCCCAGGGAGGGAGAAGGAAGGCATGC
TGATGGGGGTTAAGCCGGGGGAGGACGCATCGGGGCCTGCTGAAGACCTTGTGAGAAGATCTGAGAAAGATACTG
CAGCTGTTGTCTCCAGACAGGGCAGCTCCCTGAACCTCTTTGAAGATGTGCAGATCACAGAACCAGAAGCTGAGC
CAGAGTCCAAGTCTGAACCGAGACCTCCAATTTCCTCTCCGAGGGCTCCCCAGACCAGAGCTGTCAAGCCCCGAC
TTCATCCTGTGAAGCCAATGAATGCCACGGCCACCAAGGTTGCTAACTGCAGCTTGGGAACTGCCACCATCATCA
GTGAGAACTTGAACAATGAGGTCATGATGAAGAAATACAGCCCCTCGGACCCTGCATTTGCATATGCGCAGCTGA
CCCACGATGAGCTGATTCAGCTGGTCCTCAAACAGAAGGAAACGATAAGCAAGAAGGAGTTCCAGGTCCGCGAGC
TGGAAGACTACATTGACAACCTGCTTGTCAGGGTCATGGAAGAAACCCCCAATATCCTCCGCATCCCGACTCAGG
TTGGCAAAAAAGCAGGAAAGATGTAAATCAGCAGAAAAAAAACACCGAGACGTTTCTGTGACTTCACTTTCACCT
GCTCCAGGGGTCAAGGACTTGCCTTGCCTGATAACCAGCCAGCAGGCTCCGAATCACCATCTCCCTCACATGTTA
TCCGGCAAGAGT

FIGURE 3722

MSLMVSAGRGLGAVWSPTHVQVTVLQARGLRAKGPGGTSDAYAVIQVGKEKYATSVSERSLGAPVWREEATFELP
SLLSSGPAAAATLQLTVLHRALLGLDKFLGRAEVDLRDLHRDQGRRKTQWYKLKSKPGKKDKERGEIEVDIQFMR
NNMTASMFDLSMKDKSRNPFGKLKDKIKGKNKDSGSDTASAIIPSTTPSVDSDDESVVKDKKKKSKIKTLLSKSN
LQKTPLSQSMSVLPTSKPEKVLLRPGDFQSQWDEDDNEDESSSASDVMSHKRTASTDLKQLNQVNFTLPKKEGLS
FLGGLRSKNDVLSRSNVCINGNHVYLEQPQPTGEIKDSSPSSSPSPKGFRKKTLFSSTENLAAGSWKEPAEGGGL
STDRDVSESSTKDSLKSMTLPTYRPAPLISGDLREKMAPANSEATKEAKESKKPESRRSSLLSLMTGKKDVAKGS
EGENLLTVPGREKEGMLMGVKPGEDASGPAEDLVRRSEKDTAAVVSRQGSSLNLFEDVQITEPEAEPESKSEPRP
PISSPRAPQTRAVKPRLHPVKPMNATATKVANCSLGTATIISENLNNEVMMKKYSPSDPAFAYAQLTHDELIQLV
LKQKETISKKEFQVRELEDYIDNLLVRVMEETPNILRIPTQVGKKAGKM

FIGURE 3723

TTCCTCAGAAACGAGCAAACCTGAAAGCTACTCTCTCAGCTTCAGAGGGAAAAA**ATG**GTTGTAGATTTCTGGACT
TGGGAGCAGACATTTCAAGAACTAATCCAAGAGGCAAAACCCCGGGCCACATGGACGCTGAAGTTGGATGGCAAC
CTTCAGCTAGACTGCCTGGCTCAAGGGTGGAAGCAATACCAACAGAGAGCATTTGGCTGGTTCCGGTGTTCCTCC
TGCCAGCGAAGTTGGGCTTCCGCCAAGTTGCAGATTCTGTGCCACACGTACTGGGAGCACTGGACATCCCAGGGT
CAGGTGCGTATGAGGCTCTTTGGCCAAAGGTGCCAGAAGTGCTCCTGGTCCCAATATGAGATGCCTGAGTTCTCC
TCGGATAGCACCATGAGGATTCTGAGCAACCTGGTGCAGCATATACTGAAGAAATACTATGGAAATGGCATGAGG
AAGTCTCCAGAAATGCCAGTAATCCTGGAAGTGTCCCTGGAAGGATCCCATGACACAGCCAATTGTGAGGCATGC
ACTTTGGGCATATGTGGACAGGGCTTAAAAAGCTACATGACAAAGCCGTCCAAATCCCTACTCCCCCACCTAAAG
ACTGGGAATTCCTCACCTGGAATTGGTGCTGTGTACCTCGCAAACCAAGCCAAGAACCAGTCAGATGAGGCAAAA
GAGGCTAAGGGGAGTGGGTATGAGAAATTAGGGCCCAGTCGAGACCCAGATCCACTGAACATCTGTGTCTTTATT
TTGCTGCTTGTATTTATTGTAGTCAAATGCTTTACATCAGAA**TGA**TGAAAATAGGCTTGCCACTTTCTCTTATTT
TAATTCCATGGTAGTCAATGAACTGGCTGCCACTTTAATATAACTGAAAATTCATTTTGAGACCAAGCAGGATCA
AGTTTGTAGAATAAACACTGGTTTCCTAGCTATCCTCTGAAAACAGTATGAAACATGACCAAGTACATAATGGAT
TTAGTAATAAATATTGTCGAATTGCTAAAAAAAAAAAAA

FIGURE 3724

MVVDFWTWEQTFQELIQEAKPRATWTLKLDGNLQLDCLAQGWKQYQQRAFGWFRCSSCQRSWASAKLQILCHTYW
EHWTSQGQVRMRLFGQRCQKCSWSQYEMPEFSSDSTMRILSNLVQHILKKYYGNGMRKSPEMPVILEVSLEGSHD
TANCEACTLGICGQGLKSYMTKPSKSLLPHLKTGNSSPGIGAVYLANQAKNQSDEAKEAKGSGYEKLGPSRDPDP
LNICVFILLLVFIVVKCFTSE

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FIGURE 3725

AAAATTTGAAGACAAGATGGGCACCTACTCTACAATTCTGATAAAAACAGAGGTCATCGAATGTGGGAACTACTG
TGGAGTACGCATCATTCACTCTTTGATTGCAGAGTTCTCACTGGAAGAATTGAAGAAAAGCTATCACCTGAATAA
AAGTCAAATTATGTTGGATATGCTAACTGAGAATTTGTTCTTCGATACTGGTATGGGAAAAAGTAAATTTTTGCA
AGATATGCACACACTCCTACTCACAAGACACCGCGATGAACATGAAGGTGAAACAGGAAATTGGTTTTCCCCATT
TATTGAAGCATTACATAAAGATGAAGGAAATGAAGCAGTTGAAGCTGTATTGCTTGAAAGTATCCATCGGTTCAA
CCCAAATGCATTCATTTGCCAAGCGTTGGCAAGACATTTCTACATTAAAAAGAAGGACTTTGGCAATGCTCTAAA
CTGGGCAAAACAAGCAAAAATCATAGAACCTGACAATTCTTATATCTCAGATACACTGGGTCAAGTCTACAAAAG
TAAAATAAGATGGTGGATAGAGGAAAACGGAGGAAACGGGAACATTTCAGTTGATGATCTAATTGCTCTTTTGGA
TTTAGCAGAACATGCCTCAAGTGCATTCAAAGAATCTCAACAGCAAAGTGAAGATAGAGAGTATGAAGTGAAGGA
AAGATTGTATCCGAAGTCAAAAAGGCGGTATGATACTTACAATATAGCTGGTTATCAAGGAGAGATAGAAGTTGG
GCTTTACACAATCCAAATTCTCCAGCTCATTCCTTTTTTTGATAATAAAAATGAGCTATCTAAAAGATATATGGT
CAATTTTGTATCAGGAAGTAGTGATATTCCAGGGGATCCAAACAATGAATATAAATTAGCCCTCAAAAACTATAT
TCCTTATTTAACTAAATTGAAATTTTCTTTGAAAAAGTCCTTTGATTTTTTTGATGAATACTTTGTCCTGCTAAA
ACCCAGGAACAATATTAAGCAAAATGAAGAGGCCAAAACTCGGAGAAAGGTGGCTGGATATTTTAAGAAATATGT
AGATATATTTTGTCTCTTAGAAGAATCACAAAACAACACAGGTCTTGGATCAAAGTTCAGTGAGCCACTTCAAGT
AGAGAGATGCAGGAGAAACCTAGTAGCTTTAAAAGCAGACAAGTTTTCTGGGCTCTTGGAATATCTTATCAAAAG
TCAAGAGGATGCTATAAGCACTATGAAATGTATAGTGAACGAATATACTTTTCTCTTAGAACAATGCACTGTCAA
AATCCAGTCAAAAGAAAAGCTAAATTTCATCTTGGCCAACATTATTCTCTCCTGTATCCAACCTACCTCCAGATT
AGTAAAGCCAGTTGAAAAACTAAAAGATCAGCTTCGAGAAGTCTTGCAACCAATAGGACTGACTTATCAGTTTTC
AGAACCGTATTTTCTAGCTTCCCTCTTATTCTGGCCAGAAAATCAACAACTAGATCAACATTCTGAACAAATGAA
AGAGTATGCTCAAGCACTAAAAAATTCTTTCAAGGGGCAATATAAACATATGCATCGTACAAAGCAACCAATTGC
ATATTTCTTTCTTGGAAAAGGTAAAAGACTGGAAAGACTTGTTCACAAAGGAAAAATTGACCAGTGCTTTAAGAA
GACACCAGATATTAATTCCTTGTGGCAGAGTGGAGATGTGTGGAAGGAGGAAAAAGTCCAAGAACTTTTGCTTCG
TTTACAAGGTCGAGCTGAAAACAATTGTTTATATATAGAATATGGAATCAATGAAAAAATCACAATACCCATCAC
TCCCGCTTTTTTAGGTCAACTTAGAAGTGGCAGAAGCATAGAGAAGGTGTCTTTTTACCTGGGATTTCCCATTGG
AGGCCCACTTGCTTATGACATTGAAATTGTTTAAGAGCCTGATATTCTTCCTCCAAGAATTTGATCTCAGTACCC
ATTTAATTTTTTTGGACTCAAGATCTATGCTTTAAACCGGCAAGGTTATAGATACAGCCTCTAGCTCTTCAGATC
TGTACATGCAGTATTTAATTTCCTCTTAAACATGTTATGAGTTCTACAAGGACAATAGTGAAAAAGGAAGGAGTG
AGATATATGAAAAGTAGCAAATATGTTCCTTGGTTTGGTTAACATCATTGATGACAAAATAATAAGGAGCTATGA
CTGGAGTCAGGAGAAGTTAGTGTAATAAGCTGGCTACACAGAACCCCACTACTTACCAGGCATGGATTGAAGAAG
ATTGTCTACTCAAATGGCATTTAGACATTAGAATGTCTGGGAAAATATTTCTCAAAGACAGCAAAAACCTCTCAA
ACTGAGGAGCAACATTTATTCTTACTAAGCAGATCATCAATGTATCATGTGCTTGGCACTCAAGGATCTTCCAAA
ACAGAGGACCAACCAGTCTTCTGAAGGTCATGCCCACAGAAGTCATCGGACCTTACCAAAGTAGGTTGGAGAATT
AGATTGCCTTTTCATGCAGTGAGATTCAGTTAAGCAAAAATGAAATTTGTCTCTATAGCTAATTAGCTTATCAAC
TCCCCTCCAAACAAACAATTAAAAAAAAAACATACAGACACTCAAATTCCACAAGCTAATGAACAAAAGGGACTC
TTGTGAGAAGACTAATGAGTCCCTCATCCAGAAGATGCCAATGTACTGGCAGATTAACATACAACCTATGTTTTG
AACAAAAACAACCAGCGATACGTAATCAAAATGTAATTTTCCCCTAATAAAATTATGGATATGGGCAGTCATCAA
TGGCTGCCAAAACCATTAAGTGGAAAGCTGATTAAAAAACAAAAATTTCTAATGGATTTATCAAACTGTCCCAAA
TCCTGATAAATATTAACATCACAGAGGAAGACCAGACATTATGGGCCTGGAAGTACTATAGGAGTGCACACATCA
CCCGTGACATGGTCTTGCCAAATAATTAAACCTGAATTTGATCAGGTCTCTGGATCTTATTTGCAATTCAAAAGA
AATTTTAAAAAAATCCTACTAACACCACCACAAATATGCAATCAGCAATATCCAGAAAGGGGAAATTCACAGGAC
AAAAACCTGGTTTTCTTTTTTGGTTTCTTCAACCAAAAAAGAAAGAAATTGCAAAGGACCAAAAAAATGTTGGGG
AATCTATACATTATAAGGGACTTAACAACTAAAGGGCAACATATAGACTTTAGATCCTAATTTGAGCAAAATCTA
AAATCAATTATTAGGCAATCAGAAAAATTTGAACACAGACTAGATATTTGAGGATATTAAGGTACTATATTATTG
AAGATTCCATGGTTATGTTTTTTAAAGAGTTCATGCCTTTTAGAGATACATACTAAAGTATTTGTAAATAAATGA
CATGATCTAGAAAAAAAAAAAAAAAA

FIGURE 3726

MGTYSTILIKTEVIECGNYCGVRIIHSLIAEFSLEELKKSYHLNKSQIMLDMLTENLFFDTGMGKSKFLQDMHTL
LLTRHRDEHEGETGNWFSPFIEALHKDEGNEAVEAVLLESIHRFNPNAFICQALARHFYIKKKDFGNALNWAKQA
KIIEPDNSYISDTLGQVYKSKIRWWIEENGGNGNISVDDLIALLDLAEHASSAFKESQQQSEDREYEVKERLYPK
SKRRYDTYNIAGYQGEIEVGLYTIQILQLIPFFDNKNELSKRYMVNFVSGSSDIPGDPNNEYKLALKNYIPYLTK
LKFSLKKSFDFFDEYFVLLKPRNNIKQNEEAKTRRKVAGYFKKYVDIFCLLEESQNNTGLGSKFSEPLQVERCRR
NLVALKADKFSGLLEYLIKSQEDAISTMKCIVNEYTFLLEQCTVKIQSKEKLNFILANIILSCIQPTSRLVKPVE
KLKDQLREVLQPIGLTYQFSEPYFLASLLFWPENQQLDQHSEQMKEYAQALKNSFKGQYKHMHRTKQPIAYFFLG
KGKRLERLVHKGKIDQCFKKTPDINSLWQSGDVWKEEKVQELLLRLQGRAENNCLYIEYGINEKITIPITPAFLG
QLRSGRSIEKVSFYLGFPIGGPLAYDIEIV

FIGURE 3727A

GCGGCCGCAGCCTGAGCCAGGGCCCCCTCCCTCGTCAGGACCGGGGCAGCAAGCAGGCCGGGGGCAGGTCCGGGC
ACCCACCATGCGAGGCGAGCTCTGGCTCCTGGTGCTGGTGCTCAGGGAGGCTGCCCGGGCGCTGAGCCCCCAGCC
CGGAGCAGGTCACGATGAGGGCCCAGGCTCTGGATGGGCTGCCAAAGGGACCGTGCGGGGCTGGAACCGGAGAGC
CCGAGAGAGCCCTGGGCATGTGTCAGAGCCGGACAGGACCCAGCTGAGCCAGGACCTGGGTGGGGGCACCCTGGC
CATGGACACGCTGCCAGATAACAGGACCAGGGTGGTGGAGGACAACCACAGCTATTATGTGTCCCGTCTCTATGG
CCCCAGCGAGCCCCACAGCCGGGAACTGTGGGTAGATGTGGCCGAGGCCAACCGGAGCCAAGTGAAGATCCACAC
AATACTCTCCAACACCCACCGGCAGGCTTCGAGAGTGGTCTTGTCCTTTGATTTCCCTTTCTACGGGCATCCTCT
GCGGCAGATCACCATAGCAACTGGAGGCTTCATCTTCATGGGGGACGTGATCCATCGGATGCTCACAGCTACTCA
GTATGTGGCGCCCCTGATGGCCAACTTCAACCCTGGCTACTCCGACAACTCCACAGTTGTTTACTTTGACAATGG
GACAGTCTTTGTGGTTCAGTGGGACCACGTTTATCTCCAAGGCTGGGAAGACAAGGGCAGTTTCACCTTCCAGGC
AGCTCTGCACCATGACGGCCGCATTGTCTTTGCCTATAAAGAGATCCCTATGTCTGTCCCGGAAATCAGCTCCTC
CCAGCATCCTGTCAAAACCGGCCTATCGGATGCCTTCATGATTCTCAATCCATCCCCGGATGTGCCAGAATCTCG
GCGAAGGAGCATCTTTGAATACCACCGCATAGAGCTGGACCCCAGCAAGGTCACCAGCATGTCGGCCGTGGAGTT
CACCCCATTGCCGACCTGCCTGCAGCATAGGAGCTGTGACGCCTGCATGTCCTCAGACCTGACCTTCAACTGCAG
CTGGTGCCATGTCCTCCAGAGATGCTCCAGTGGCTTTGACCGCTATCGCCAGGAGTGGATGGACTATGGCTGTGC
ACAGGAGGCAGAGGGCAGGATGTGCGAGGACTTCCAGGATGAGGACCACGACTCAGCCTCCCCTGACACTTCCTT
CAGCCCCTATGATGGAGACCTCACCACTACCTCCTCCTCCCTCTTCATCGACAGCCTCACCACAGAAGATGACAC
CAAGTTGAATCCCTATGCAGGAGGAGACGGCCTTCAGAACAACCTGTCCCCCAAGACAAAGGGCACTCCTGTGCA
CCTGGGCACCATCGTGGGCATCGTGCTGGCAGTCCTCCTCGTGGCGGCCATCATCCTGGCTGGAATTTACATCAA
TGGCCACCCCACATCCAATGCTGCGCTCTTCTTCATCGAGCGTAGACCTCACCACTGGCCAGCCATGAAGTTTCG
CAGCCACCCTGACCATTCCACCTATGCGGAGGTGGAGCCCTCGGGCCATGAGAAGGAGGGCTTCATGGAGGCTGA
GCAGTGCTGAGAACACCAAGTCTCCCCTTTGAAGACTTTGAGGCCACAGAAAAGACAGTTAAAGCAAAGAAGAGA
AGTGACTTTTCCTGGCCTCTCCCAGCATGCCCTGGGCTGAGATGAGATGGTGGTTTATGGCTCCAGAGCTGCTGT
TCGCTTCGTCAGCACACCCCGAATATTGAAGAGGGGGCCAAAAAACAACCACATGGATTTTTTATAGGAACAACA
ACCTAATCTCATCCTGTTTTGATGCAAGGGTTCTCTTCTGTGTCTTGTAACCATGAAACAGCAGAAGAACTAACA
TAACTAACTCCATTTTTGTTTAAGGGGCCTTTACCTATTCCTGCACCTAGGCTAGGATAACTTTAGAGCACTGAC
ATAAAACGCAAAAACAGGAATCATGCCGTTTGCAAAACTAACTCTGGGATTAAAGGGGAAGCATGTAAACAGCTA
ACTGTTTTTGTTAAAGATTTATAGGAATGAGGAGGTTTGGCTATTGTCACATGACAGACTGTTAGCCAAGGACAA
AGAAGTTCTGCAAACCTCCCCTGGACCCTTGCTGGTGTCCAGATGTCTGCGGTTGTCAGCCCCTTCCTTTCCCCC
GACCTAAACATAAAAGACAAGGCAAAGCCCGCATAATTTTAAGACGGTTCTTTAGGACATTAGTCCACCATCTTC
TTGGTTTGCTGGCTCTCCGAAATAAAGTCCCTTTCCTTGCTCCAACTCCTTGTCTCTCAACGTATTGGCTATGAC
GCAGCAAGCAGAATGAATTTGGACTCAGTTACAGGCTGTCAATGGTCTGCTCTGTAGCAGTCTCAGAGCCTCCCC
GACCCACTACCTGGAGATAGCCAGATAGCCAGATGCCCTGCTCCTGGCCACCTTTAAAGCCCCTGCATATGACAC
AGGTTAACTAAAGTCAAGATTGGGGCTGCTGCATTCCAGGTTCCCTAGACTCACAAGCTGGTCCTTGGCCAGGTG
CAGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCTGAGGCAGGCGGATCACCTGAAGTCAGAAGTTTGAGA
CCAGCCTGGCCAACATAATTAAAATGTCTCTACTAAAAATACAAAAAATTAGCTGGGTGTGGTGACGCTTGCCTG
TATCCCAGCTACTCAGGAAGCTGAGACACGAGAATCACTTGAACCTGGGAGGCAGAGGTTGCAGTGAGCTCAGAT
AGTGCCACTGCACTCCAGCCTGGGTGACAGAGCGAGACTCCGTCTCAAAAAAAAAAAAAAGAAAGCAGAACCTCAT
GGCTATAGAGTTGGCATTTTAGCCCCAGCTTCTGTAGCTCTGAAAGCCTAAAGAAGGTATTCTCTCCATCTGTTA
AACACAGTATAGTGGCTCTCAGCCCTTGGGGCATGTTATCATGGGAGGGAAGTCAAATAAGAGGAGAGAAAAGAA
CTCAAGGGGGAAACTGCATTTTTAGGCTTTGCTCTCTTACCTTGCCCTTTCTACTCAGAACCAATAACTTCTGCA
TCAAAACATGTTACAGCCTGCATCAAGGGCTTTACCCCAACCTGCAGCCCAGCCTTCCCTGGGTGAGCTTGCTAT
GCGCAGCCACATTTACCATGTGGGGCTCCCTATTCTGATGGCCTGTTCGGTGCCGGGTTTACTCACTGCCCTGTT
CTGATGTCAGTGCCTGTACATACCTCCAAAGGCAGGACTTGCCTGATAAATATTTTTCCTCCTCTGAACTGGATT
TTATAGGCATTAAAGACAAGTCGGGTGGCTAGAGGGCTCCTTGAGACATACCTAGCAGGGAACTGCAGGTGGATT
CTGTTGAGAGGCAAAGCACCTGAGTGGTTGGGACACAGGCAGCTGGCATGGGAGGGACTTTTTTTGAGACAGGGT
CTCACTGTGTCGCCCAGGGCAAGGATGCCCAAAGACACCAGGTTGGAGAGGCACCTGCCAACTACTTGCTTTCCC
TGGAGCCTGCATGTGCCTGTGGGGTGGGGAGGCGTAGGGGTCTACGGCTGCCTGAGATGGGTGTGCACAGTGTGT

FIGURE 3727B

GAAGTACCTACCTCCTTGCCTTGCTGGACTGTCAGCCAGTCGCAGGGCCGGCCACAAGACCCATGTCTCCATCTG
GTCATACTCCATAGCTACCAAGTTAACCTGCTCTAAACTTTGGAGAACTGGATCTGTCCAATAAACGCTTATTTG
GCCAAGCCTGATGGCTCGTGCCTGTACTCCCAGCACTTTGGGAGGCTGAGGTGGGAGGGTTGCTTGAGCCCAGGG
GTTTGAGACCAGCTTGGGCAACAACAACAAAAATGCCAGGTGTGGTGGGGTGCACCTGTAGTCCCAGCTACTAGG
GAGGCTGAGCCAGGAGGATCACTTGAGCCCGGGAGGTTGAGGCTGCAGTGGGGGGTCATAATCATGCCACTGTAC
TCCAGCCTGGGTGACAGAGTGAGACCCTGTCTCCGAAAAAAAAAAAAAAAAAAGAACGGAAAAAGAAATGCTTAC
ATTGTCAGGGATCCTGTAGACAATCATTAACTCTATGAGATGCTTGGTTCTATTTTTTTGGGAGACTTTGTCCAA
GTGTTTTGGCTTAAGAAATCCATAGGCCTCTCTTGGTGACACATCTCTAGTACTTTTTGTCATAAACAAACAGGC
CATCTGCCGCCAAATACATCCACTCCCCATGCCACTGACATCCTATGGGTCAGCCAGGCTTGCTTTGACTGAGGC
CGAGGCATCTGGAACTTTCTCTGCCTGCAGGGGCTAGCAGCAGAGGCTTCACCGCATCACCACCCCTTCCTCCAC
TCCTGACATTCTTTCCCTTCAGGGATCCAAAATGGTTGGCCGAGCTCCCAGTGGGAAAACGTGTGCTAGAGTTGG
GGAGTGAGATGAGTGGTGCTGTCCATGGAATCAGGCCACAGCAGGAACTGCCCCACTGGCCATTTGAGACACACA
CAGGTGGTAAATGCTCTGCTGGTGGGCTGTGCTTCCCTCATTCAGAGAGCTCTGTTACAGCCCACTGTGTCCTTT
AGAAGCTTGAAAGGAACCCAACTCTTTGCTGCACTGTCCTTTTTCTTCCTCAAATTCAGACCCTCCTTCCACCGG
CACCCCCCTACTCCACCCTCAGCTCTTCCTTGCCTGGTTTATCAAGCAGAGCTGAGGCCCCACGTTTCCAACTCT
GATTGTCACTTGCATCTTCACAAAGGATAAACCACGGAGCAACTGGAAAACCATCAGCCAAGCGTTCGGATGAGT
CTGGTTATTGGTCCACCCCCGACCAGATTCCCTTACACTTAACTCACTTCTTTCTTTGGCAATGACCCTCATGAC
ATGTATAAATGGGTATGACTAAGAAGAGGCTGTGATCTAACATTTATTTGCTGCCATTTTTTACTCTGGGGAGAA
GCAGCCCCAACTCATCACTGGGAAAGAACTCCCCCTGCAAACCAGCTAAATTTGATAATTTAAACCCCCTGCCCC
TAAAACTTCTCACAGAGCTGGGGAGTTGGTGGCAACTTTCCAAGTCAAGGTCTTGCTTAGAAAGTCCTTCACTAC
ATGGCCAGGTGCAGTGGCTCACGCCTGTAGTCCCAGGTACTTGGGAGCCTGAGGCAGGAGGATTGCTTGAGCTCA
GGAGTTCAAGGCTGCAGAGAGCTATGATCATCCCACTGCATTTGTTTAAAAATAAATTTTTAAAATTTGTGTGTT
TTATCAGGGGTCTCCTGTACAGTGTATCTGTGTATGTTTGTGTGTGTGTTTGTATACAGCCTTGTTTAATGTTTT
GAGCAATAAGATATGCACACACAGGTATTTTGTTGCTAAAGAGATTGGACAAGGTTGTAGCTGTGCTCAGGCTTC
AGCTTGGTTTGTTAAATTGAGAGATAAACAATGACAAGAGCTGCCAGCCAACCACACTATTCAAAAAGCAAAGTG
TTCACCACTAAAGCTAACCATTCATCTGGTTGCAGGCAAGGCTAAGGCTCTCTCTCCTCTAGTTCCTGGAACAGA
CTCACAGATTGGCATGAAGCACTGATCAGGGGCTGCACTCAGACTCCCTGGCCAAGCAAACCTACACCAGAAGAG
TCAGTGTCACAGATATGATGCGGCCAATCTCTGTCTCCAAAAACCTACCTGAACTTAATGGTAGAATTCAAAGAT
CTGGGGACTGAGGGCACCCAGCCTTCTAAAACACAATGTATTCATGTGTTTAGTGTAAACTCTCTGCATGGATTC
TCAGTGTTAATAATAAAAGGAAGCATTCTTTTACAACTCCTGCTGTGTGCAAAAGAAAGTGCAAAGGATTTGGAG
TGGCATTCCGAAGATCACCACACATACCTTGGTTCTGATGGCTGCTGAACTCCGACTTCTTCGCTGAGACATGAC
TGTGGGAACAGCCTCCAGCTATCTGCTCATCAGAGGTGCTTTCCTCAACCTCCTGCACCACCTCCAAGAGAAACA
GCCTAAAAAGAAACCCCAGCTGTTTACTTATATTGGTCTGTAAATCCCTGGAAGTAAACCCCATGCATTTTTATC
TACTGTCTGAGGACATACAATAAATCTGAGAAAGTCTATGCTGTCAAAAAAAAAAAAAAAAAAA

FIGURE 3728

MRGELWLLVLVLREAARALSPQPGAGHDEGPGSGWAAKGTVRGWNRRARESPGHVSEPDRTQLSQDLGGGTLAMD
TLPDNRTRVVEDNHSYYVSRLYGPSEPHSRELWVDVAEANRSQVKIHTILSNTHRQASRVVLSFDFPFYGHPLRQ
ITIATGGFIFMGDVIHRMLTATQYVAPLMANFNPGYSDNSTVVYFDNGTVFVVQWDHVYLQGWEDKGSFTFQAAL
HHDGRIVFAYKEIPMSVPEISSSQHPVKTGLSDAFMILNPSPDVPESRRRSIFEYHRIELDPSKVTSMSAVEFTP
LPTCLQHRSCDACMSSDLTFNCSWCHVLQRCSSGFDRYRQEWMDYGCAQEAEGRMCEDFQDEDHDSASPDTSFSP
YDGDLTTTSSSLFIDSLTTEDDTKLNPYAGGDGLQNNLSPKTKGTPVHLGTIVGIVLAVLLVAAIILAGIYINGH
PTSNAALFFIERRPHHWPAMKFRSHPDHSTYAEVEPSGHEKEGFMEAEQC

FIGURE 3729

GTTGGTTCTGTGCGCCTCAGAGTTGGAGCACACAGCTGTATTAAAAAGGCAAATCGAAGGCCGGGCGCGGTGACT
CACGCCTGTCATCCTAGCACTTTGGGAGGCCGAGGCGGCTGAATCACTTGAGGTTAGGAGTTTGAGATCAGCCCG
GGCAACATGGTGAAACCCCGTCTCTACAAAAATAGAAAAATTAGCCGAGCGTGATGGTGGATGCCTGTAATCCTA
GCTCCTCGGGAGGCTAAGGAGTATA**ATG**TCTCAGGAAGGCGATTATGGGAGGTGGACCATATCTAGTAGTGATGA
AAGTGAGGAAGAAAAGCCAAAACCAGACAAGCCATCTACCTCTTCTCTTCTCTGTGCCAGGCAAGGAGCAGCAAA
TGAGCCCAGGTACACCTGTTCCGAGGCCCAGAAAGCTGCACACAAGAGGAAAATATCACCTGTGAAATTCAGCAA
TACAGATTCAGTTTTACCTCCCAAAAGGCAGAAAAGCGGTTCCCAGGAGGACCTCGGCTGGTGTCTGTCCAGCAG
TGATGATGAGCTGCAACCAGAAATGCCGCAGAAGCAGGCTGAGAAAGTGGTGATCAAAAAGGAGAAAGACATCTC
TGCTCCCAATGACGGCACTGCCCAAAGAACTGAAAATCATGGCGCTCCCGCCTGCCACAGGCTCAAAGAGGAGGA
AGACGAGTATGAGACATCAGGGGAGGGCCAGGACATTTGGGACATGCTGGATAAAGGGAACCCCTTCCAGTTTTA
CCTCACTAGAGTCTCTGGAGTTAAGCCAAAGTATAACTCTGGAGCCCTCCACATCAAGGATATTTTATCTCCTTT
ATTTGGGACGCTTGTTTCTTCAGCTCAGTTTAACTACTGCTTTGACGTGGACTGGCTCGTAAAACAGTATCCACC
AGAGTTCAGGAAGAAGCCAATCCTGCTTGTGCATGGTGATAAGCGAGAGGCTAAGGCTCACCTCCATGCCCAGGC
CAAGCCTTACGAGAACATCTCTCTCTGCCAGGCAAAGTTGGATATTGCGTTTGGAACACACCACACGAAAATGAT
GCTGCTGCTCTATGAAGAAGGCCTCCGGGTTGTCATACACACCTCCAACCTCATCCATGCTGACTGGCACCAGAA
AACTCAAGGAATATGGTTGAGCCCCTTATACCCACGAATTGCTGATGGAACCCACAAATCTGGAGAGTCGCCAAC
ACATTTTAAAGCTGATCTCATCAGTTACTTGATGGCTTATAATGCCCCTTCTCTCAAGGAGTGGATAGATGTCAT
TCACAAGCACGATCTCTCTGAAACAAATGTTTATCTTATTGGTTCAACCCCAGGACGCTTTCAAGGAAGTCAAAA
AGATAATTGGGGACATTTTAGACTTAAGAAGCTTCTGAAAGACCATGCCTCATCCATGCCTAACGCAGAGTCCTG
GCCTGTCGTAGGTCAGTTTTCAAGCGTTGGCTCCTTGGGAGCCGATGAATCAAAGTGGTTATGTTCTGAGTTTAA
AGAGAGCATGCTGACACTGGGGAAGGAAAGCAAGACTCCAGGAAAAAGCTCTGTTCCTCTTTACTTGATCTATCC
TTCTGTGGAAAATGTGCGGACCAGTTTAGAAGGATATCCTGCTGGGGGCTCTCTTCCCTATAGCATCCAGACAGC
TGAAAAACAGAATTGGCTGCATTCCTATTTTCACAAATGGTCAGCTGAGACTTCTGGCCGCAGCAATGCCATGCC
ACATATTAAGACATATATGAGGCCTTCTCCAGACTTCAGTAAAATTGCTTGGTTCCTTGTCACAAGCGCAAATCT
GTCCAAGGCTGCCTGGGGAGCATTGGAGAAGAATGGCACCCAGCTGATGATCCGCTCCTACGAGCTCGGGGTCCT
TTTCCTCCCTTCAGCATTTGGTCTAGACAGTTTCAAAGTGAAACAGAAGTTCTTCGCTGGCAGCCAGGAGCCAAT
GGCCACCTTTCCTGTGCCATATGATTTGCCTCCAGAACTGTATGGAAGTAAAGATCGGCCATGGATATGGAACAT
TCCTTATGTCAAAGCACCGGATACGCATGGGAACATGTGGGTGCCCTCC**TGA**GAATCTTGAGGCACTGTGAAATT
TAAGTGTAAGACATTGAGCCACAAACATGGAATCTCTTCTTTGTACTGGATGTCCACTTCCCTTAAAGTCTTATT
TGCACCCTTACAAAATCTTTCCAAAGGTCACTCTTATGAATGGATGTTGGTTATACTTTTAATGGACATTAACAT
TCCTAATAAAGTATTAGTTTCTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAA

FIGURE 3730

MSQEGDYGRWTISSSDESEEEKPKPDKPSTSSLLCARQGAANEPRYTCSEAQKAAHKRKISPVKFSNTDSVLPPK
RQKSGSQEDLGWCLSSSDDELQPEMPQKQAEKVVIKKEKDISAPNDGTAQRTENHGAPACHRLKEEEDEYETSGE
GQDIWDMLDKGNPFQFYLTRVSGVKPKYNSGALHIKDILSPLFGTLVSSAQFNYCFDVDWLVKQYPPEFRKKPIL
LVHGDKREAKAHLHAQAKPYENISLCQAKLDIAFGTHHTKMMLLLYEEGLRVVIHTSNLIHADWHQKTQGIWLSP
LYPRIADGTHKSGESPTHFKADLISYLMAYNAPSLKEWIDVIHKHDLSETNVYLIGSTPGRFQGSQKDNWGHFRL
KKLLKDHASSMPNAESWPVVGQFSSVGSLGADESKWLCSEFKESMLTLGKESKTPGKSSVPLYLIYPSVENVRTS
LEGYPAGGSLPYSIQTAEKQNWLHSYFHKWSAETSGRSNAMPHIKTYMRPSPDFSKIAWFLVTSANLSKAAWGAL
EKNGTQLMIRSYELGVLFLPSAFGLDSFKVKQKFFAGSQEPMATFPVPYDLPPELYGSKDRPWIWNIPYVKAPDT
HGNMWVPS

FIGURE 3731

GGAGCCCATGATTTCCTGGAAGAGCCCTAGAGCTTTGCTTTTTCTCTCCTGCAGCACTTAACCGAAACCAGTTTT
GCAATCAATTCCTGTTCAAAGGCCACCCTACTCTTCCTATCCGTCTTTCTCCAGCCCAGACACTCACAGCCCCCT
GCCAGACCAGGGGACCTCGGAGAGGCAAGGACAGAGGTTCAGGATCTTCCTCTCCCTCGGGACCCAAGGCCACAA
AGGAGAGCTCCGTGGAGAGAAGAAAATCATTTGACTCCTGGGGACACAGATTTGCTGCCACAGAGGCTGATGGAC
AACCAGGCGGAGAGAGAAAGTGAGGCTGGTGTTGGTTTGCAAAGGGATGAGGATGACGCTCCTCTGTGTGAAGAC
GTGGAGCTACAAGACGGAGATCTGTCCCCCGAAGAAAAAATATTTTTGAGAGAATTTCCCAGATTGAAAGAAGAT
CTGAAAGGGAACATTGACAAGCTCCGTGCCCTCGCAGACGATATTGACAAAACCCACAAGAAATTCACCAAGGCT
AACATGGTGGCCACCTCTACTGCTGTCATCTCTGGAGTGATGAGCCTCCTGGGTTTAGCCCTTGCCCCAGCAACA
GGAGGAGGAAGCCTGCTGCTCTCCACCGCTGGTCAAGGTTTGGCAACAGCAGCTGGGGTCACCAGCATCGTGAGT
GGTACGTTGGAACGCTCCAAAAATAAAGAAGCCCAAGCACGGGCGGAAGACATACTGCCCACCTACGACCAAGAG
GACAGGGAGGATGAGGAAGAGAAGGCAGACTATGTCACAGCTGCTGGAAAGATTATCTATAATCTTAGAAACACC
TTGAAGTATGCCAAGAAAAACGTCCGTGCATTTTGGAAACTCAGAGCCAACCCACGCTTGGCCAATGCTACCAAG
CGTCTTCTGACCACTGGCCAAGTCTCCTCCCGGAGCCGCGTGCAGGTGCAAAAGGCCTTTGCGGGAACAACACTG
GCGATGACCAAAAATGCTCGCGTGCTGGGAGGTGTGATGTCCGCCTTCTCCCTTGGCTATGACTTGGCCACTCTC
TCAAAGGAATGGAAGCACCTGAAGGAAGGAGCAAGGACAAAGTTTGCGGAAGAGTTGAGAGCCAAGGCCTTGGAG
CTGGAGAGGAAACTCACAGAACTCACCCAGCTCTACAAGAGCTTGCAGCAGAAAGTGAGGTCAAGGGCCAGAGGG
GTGGGGAAGGATTTAACTGGGACCTGCGAAACCGAGGCTTACTGGAAGGAGTTAAGGGAGCATGTGTGGATGTGG
CTGTGGCTGTGTGTGTGTCTGTGTGTCTGTGTGTATGTACAGTTTACATGAATGTTCCTCAGGACATGGCATACA
ATGGCCTTGGAGGTCCAAATAATATCAAGTACATCTTGGAGATGAGGGTGCCTGTCCTGGACAGACCTCGGCATG
CCTTCTGTTTCTCCTTCAATGCTCCTTAAGGCCTATGTGCTGGGAAAAGGGTCTTCCCTGTTTGTTTGTTTGTTT
GTTTGTTTGTTTGTTTTGAGACTCCAGTCTGGGTGTCAGAATGAGACCCCATCTCAAAAAAAAAAAAAAAAAAAA
AAAAGAAGAAGAATACAGTCATGTATCTCTTGGTGACAGGGACGCATTCTGATAAATGTGTCATTAGGCAATTGC
ATTGTAGTGTGATTATCACAGATTGTACTTATACAAAACTTAGATGGCATAGCCTACTGCATACCTAGGCTATAT
GGGAGAGCCTATTGCTCCCAGGCTACGCACCTGTACAGCATGTGACTACTGAATACTATAGGCAATTGCAGCACA
ATGGGAAATATTTGTGTATCTAAACATATGTAAACAGAGAAAAAGGAAAGTAAAAATATGGCATAAAAGATAAGA
ATTGGCTCTCCTGTACAGGGCACTTACTACGAATGGAGCTTGCAGGGCTGAGAGTTGCTCCAGATGAGTCAGTGA
GTGGTGAATGAATGTGAAGGCCTAGGGCATTACTGTATACTACTGTAGGCTTTATAAACACAGCACACTTAGGGT
ACACAAAATGCATATTAAAACATTTTCTTCCTTCAGTATATTAGGCAATAGGAATTTTTCAAGTCCACTATAAAT
CTTATCAAACCATGGTTGTATATGCAGTTGACCGAAACATTGTTATTGGACACATAACTATAGTTGAAAGAATAA
GCAAAAAGTCTATCTAGGTGTGCTGTCTTGAGCAACTTTTAATTATTCTCCTGTCCTGCAATATGAGTTAATCTT
CTCTGATCGATGTAGATTCCAGGAAGGGGTGTCCAGGACAATTACCTTCCTTCTGGAGAAACTTCCCTTAATCAA
ATAAGAGAACTTCAAAGAAAATCCCTCCCTGTGCTTTGGAAGGGAAGGGAGGTGGGCAGCAGTGGGTCAGAGATA
GACCTTTGTTCTCTTATTTCTGAGGCCCTTCAGTCTCCTTTATTCAAAGCACTCAGCATGCCAAAGCACCCTATT
TTAGGGTATCTTTTTCTGAGCCCTAAACACTGTGTTGGGGATGTCAACTGTGACAGGAAAATATCTTGGGGCCCC
AGAATCACTAAGGAAAACTCAAGCTTAGGGAAACTTCTTAGGGCAAACCCACCTCCCACTCTATTCAAAGTTATC
TCTCTGCTCACTGAGATAGATACATATCTGATTGCCTCCTTTGGAAAGGCTAATCAGAAACTCAAAAGAATGCAA
CTGTTTGTGTCTCACCTATCTGTGACCTGGAAGCTCCCTCCCCACTGAACCAATGTTCTTCTTACATATATTGAT
TAATGTCTTATGTCTCCCTAAAATGTATAAAACCAAGGTATGCCCCAACCATCTTGGCCACATGTCATCAGGACT
TCCTGAGTCTGTGTCACAGTGTGTCCTCAACCTTGGCAAAATAAACTTTCTAAATTAACTGAGACCTGTCTCGGA
TTTTCTGGGTTCACATTTTGGAAACCATGAATGGATTCTGGGTGGAGATGCCCCTGACCCTTGACAAATCTATCG
GTGCTTGGTACCAGCATGAGCTAACTTTATGGCTCAAACCAATAGGACAATTTGCTGAGGTCTGAGAGGACTCCC
TCCAGAAAATCCCTGATCTCTTAAAATTTGGTA

FIGURE 3732

MDNQAERESEAGVGLQRDEDDAPLCEDVELQDGDLSPEEKIFLREFPRLKEDLKGNIDKLRALADDIDKTHKKFT
KANMVATSTAVISGVMSLLGLALAPATGGGSLLLSTAGQGLATAAGVTSIVSGTLERSKNKEAQARAEDILPTYD
QEDREDEEEKADYVTAAGKIIYNLRNTLKYAKKNVRAFWKLRANPRLANATKRLLTTGQVSSRSRVQVQKAFAGT
TLAMTKNARVLGGVMSAFSLGYDLATLSKEWKHLKEGARTKFAEELRAKALELERKLTELTQLYKSLQQKVRSRA
RGVGKDLTGTCETEAYWKELREHVWMWLWLCVCLCVCVYVQFT

FIGURE 3733A

CCGGGCCGCCCGCGTGCCCAAGCCCACGTGAGAGGGCAGGACGCCTGAGAGCTTGAGGCCACACGAGGCTGTGGA
GCGGCGTGACTCAAACGTGGCGCGCATCAGCTCGCACACTTCCAAACCTCGCGATAGCTACTGGCCCTGGGCGAG
CCGTTGGGATTGCGCTTGCGCACAGCGTGTCTTCTGGATCGCCATACCTACCCTGTGGTCCTCATCTTCCTGGCC
TCATAGCTCCTCCTCGCCAAGCATGTCTTCCCCGTTGCAAAGAGCTGTGGGAGATACCAAGAGGGCCTTGTCTGC
ATCTTCTAGTTCCTCTGCCAGTCTACCCTTTGATGACAGGGACTCAAACCATACCTCAGAGGGGAATGGCGACTC
TTTGTTAGCTGATGAAGACACTGACTTTGAAGACAGCTTGAATCGCAATGTGAAGAAGAGAGCAGCAAAACGACC
ACCGAAAACAACACCGGTGGCAAAACATCCAAAGAAAGGGTCCCGAGTGGTACATCGTCATAGCCGGAAACAGTC
AGAGCCACCAGCCAATGATCTTTTCAATGCTGTGAAAGCCGCCAAAAGTGACATGCAGTCTTTGGTAGATGAGTG
GCTGGATAGCTACAAGCAAGACCAGGATGCAGGATTTCTGGAGCTTGTTAACTTTTTCATCCAATCTTGCGGATG
TAAAGGCATTGTGACCCCTGAGATGTTCAAGAAGATGTCCAACTCAGAGATCATCCAGCACCTAACAGAGCAGTT
TAATGAGGACTCGGGGGACTACCCTCTCATAGCTCCAGGTCCATCCTGGAAGAAGTTCCAGGGCAGCTTCTGTGA
ATTTGTGAGGACATTGGTCTGTCAGTGCCAGTACAGCCTCCTCTATGATGGCTTCCCTATGGACGACCTCATCTC
CCTGCTCACTGGCCTCTCAGACTCACAAGTCCGCGCCTTCCGTCACACTAGCACCCTGGCTGCTATGAAACTGAT
GACCTCCCTGGTAAAAGTTGCCCTCCAACTGAGTGTGCACCAAGATAACAATCAGCGTCAGTATGAGGCTGAAAG
AAACAAGGGGCCAGGGCAGAGGGCACCTGAGCGGCTGGAGAGCCTGTTGGAGAAACGCAAAGAGCTCCAAGAGCA
TCAAGAGGAGATTGAGGGGATGATGAATGCCCTCTTCAGGGGTGTCTTTGTTCATCGGTACAGGGATGTCCTTCC
TGAGATCCGTGCTATCTGCATTGAGGAAATTGGGTGTTGGATGCAAAGCTACAGCACGTCTTTCCTCACCGACAG
CTATTTAAAATATATTGGTTGGACTCTGCATGATAAGCACCGAGAAGTCCGCGTGAAGTGCGTGAAGGCTCTGAA
AGGGCTGTACGGTAACCGGGACCTGACCGCACGCCTGGAGCTCTTCACCAGCCGCTTCAAGGACCGGATGGTTTC
CATGATCATGGACAGAGAGTACAGTGTGGCAGTGGAGGCCGTCAGATTACTGATACTTATACTTAAGAACATGGA
AGGGTTGCTGACGGACGCGGATTGTGAGAGCGTCTACCCCGTTGTGTATCCTTCTAATCGAGGCCTGGCTTCTGC
CGCAGGCGAATTTCTGTACTGGAAACTTTTCTACCCTGAGTGCGAGATAAGAACGATGGGTGGAAGAGAGCAACG
CCAGAGCCCAGGCGCCCAGAGGACTTTCTTCCAGCTTCTGCTGTCCTTCTTTGTGGAGAGCGAGCTCCATGACCA
CGCTGCTTACTTAGTAGACAGTCTGTGGGACTGTGCAGGGGCTCGGCTGAAGGACTGGGAGGGTCTGACAAGCCT
GCTGCTGGAGAAGGACCAGAACCTGGGTGATGTGCAGGAGAGCACACTGATAGAAATCCTTGTGTCCAGTGCCCG
GCAAGCTTCAGAGGGGCACCCGCCTGTGGGCCGGGTCACTGGGAGGAAGGGCTTAACCTCTAAGGAGCGCAAGAC
CCAAGCCGATGACAGGGTGAAGTTGACTGAGCACCTCATCCCCCTGCTGCCCCAGCTCCTGGCCAAGTTCTCAGC
TGATGCAGAGAAGGTCACTCCCCTGCTCCAGCTTCTCAGCTGCTTTGACCTCCACATCTACTGCACTGGGCGCTT
GGAGAAGCACCTGGAGCTGTTCCTGCAGCAACTCCAGGAGGTGGTGGTGAAGCATGCAGAGCCAGCGGTGCTTGA
GGCTGGGGCGCATGCCCTCTACCTGCTCTGTAATCCCGAATTCACTTTCTTCAGCCGGGCGGACTTTGCCCGCAG
CCAGCTAGTAGATTTGCTGACTGACCGCTTCCAGCAGGAGCTTGAAGAGCTGTTACAGTCGTCCTTCCTAGATGA
GGATGAGGTATATAATCTGGCAGCCACTCTGAAACGCCTCTCTGCCTTCTACAACACTCATGACCTGACTCGCTG
GGAGCTCTATGAGCCATGTTGCCAACTCCTGCAGAAGGCTGTGGACACAGGAGAGGTTCCTCACCAGGTTATCCT
GCCAGCCTTGACTCTTGTCTATTTTTCCATTCTCTGGACACTAACCCACATTTCTAAATCAGATGCTTCCCAGAA
GCAGCTGTCGAGTTTGAGGGACAGAATGGTGGCCTTCTGTGAACTCTGCCAGAGTTGCCTCTCAGATGTGGATAC
TGAGATCCAGGAGCAGGCTTTTGTCTTATTAAGTGATCTACTTCTCATCTTTAGCCCTCAGATGATAGTTGGGGG
CCGTGATTTCCTTAGGCCACTTGTCTTTTTTCCTGAAGCTACTCTCCAGTCTGAGCTAGCCAGCTTCCTCATGGA
CCACGTCTTCATCCAGCCGGGAGACCTGGGCAGTGGTGATTCCCAGGAGGATCATTTACAGATAGAGCGGCTACA
CCAGCGGCGCCGCCTCCTAGCCGGGTTCTGCAAGCTGTTGCTTTATGGGGTGCTGGAGATGGATGCAGCCTCAGA
TGTTTTCAAACACTACAACAAGTTCTACAATGACTATGGTGACATTATCAAGGAAACATTAACTAGAGCAAGGCA
GATTGACCGAAGTCATTGTTCCCGAATCCTGCTGCTGAGCCTXAAGCAGCTGTACACAGAACTGCTGCAGGAGCA
TGGGCCCCAGGGCCTGAATGAGCTTCCTGCCTTCATCGAGATGAGGGACCTGGCCCGGAGGTTTGCCTTGAGTTT
TGGACCCCAGCAGCTGCAGAACCGTGACCTCGTGGTCATGCTACACAAGGAAGGCATCCAGTTCTCCTTGTCTGA
GCTTCCTCCAGCTGGCTCCTCCAATCAGCCTCCAAATCTGGCATTCCTGGAGCTCCTTTCAGAGTTTTCCCCCCG
ACTCTTCCATCAGGACAAGCAGCTTTTGCTGTCCTATCTAGAAAAGTGCCTGCAGCATGTCTCCCAGGCACCTGG
CCATCCCTGGGGCCCAGTCACCACCTACTGCCACTCCCTCAGCCCTGTGGAGAACACAGCAGAGACCAGCCCTCA
GGTCCTCCCCAGCTCCAAGAGGAAGCGCGTTGAAGGGCCTGCCAAGCCTAACAGAGAGGACGTCTCCTCGTCCCA
GGAAGAAAGTCTGCAGCTGAACAGCATCCCGCCCACGCCCACCCTCACCTCCACAGCTGTGAAGAGCAGGCAGCC

FIGURE 3733B

CCTGTGGGGGTTGAAAGAGATGGAGGAAGAAGATGGCTCAGAGTTGGATTTTGCCCAGGGGCAGCCCGTCGCAGG
CACCGAGAGGTCAAGGTTCTTGGGTCCACAATATTTCCAGACTCCACACAACCCTTCAGGTCCTGGCCTGGGCAA
CCAGCTGATGCGACTCAGCCTTATGGAAGAGGACGAGGAAGAAGAGTTAGAAATCCAGGATGAGTCAAATGAAGA
ACGGCAGGATACAGACATGCAAGCAAGTAGCTACTCTTCCACCAGTGAGCGCGGGCTGGACCTCTTAGATTCTAC
AGAGCTGGATATTGAGGATTTC**TGA**CAGGACTCTGGGCCCCTCCCCAGCTCCACTCCCTACCTCAAGAATGTGAC
CATTTGGAAAAGGCAAAGAGAAAAGGAGCAAAATGAAGCATTCCCCCAGGCTTCAGCCCTGGGCTCTGAGGGGAA
AGAGTTGGGCATTGTTTTTCTAACCTAACCTTTCCCTCTGGGGTAGAGAAGCCGAGAGACCCTGTCCTCCCTAAT
GCACTGTGGCCCAGTCCCCTTGCCTTTTTCCTGTTCTGTTTGGAGTGGAGAAGGGCAGCACCTCTGTGTTTAATG
GAAATAGCCCATAGTCTCCTGGATTTTTGGAACATCTTTCTCAGCCTATTTTGTGTCCTAATGATTCGCTCAATA
AACATGTTTGAATCC

FIGURE 3734

MSSPLQRAVGDTKRALSASSSSSASLPFDDRDSNHTSEGNGDSLLADEDTDFEDSLNRNVKKRAAKRPPKTTPVA
KHPKKGSRVVHRHSRKQSEPPANDLFNAVKAAKSDMQSLVDEWLDSYKQDQDAGFLELVNFFIQSCGCKGIVTPE
MFKKMSNSEIIQHLTEQFNEDSGDYPLIAPGPSWKKFQGSFCEFVRTLVCQCQYSLLYDGFPMDDLISLLTGLSD
SQVRAFRHTSTLAAMKLMTSLVKVALQLSVHQDNNQRQYEAERNKGPGQRAPERLESLLEKRKELQEHQEEIEGM
MNALFRGVFVHRYRDVLPEIRAICIEEIGCWMQSYSTSFLTDSYLKYIGWTLHDKHREVRVKCVKALKGLYGNRD
LTARLELFTSRFKDRMVSMIMDREYSVAVEAVRLLILILKNMEGLLTDADCESVYPVVYPSNRGLASAAGEFLYW
KLFYPECEIRTMGGREQRQSPGAQRTFFQLLLSFFVESELHDHAAYLVDSLWDCAGARLKDWEGLTSLLLEKDQN
LGDVQESTLIEILVSSARQASEGHPPVGRVTGRKGLTSKERKTQADDRVKLTEHLIPLLPQLLAKFSADAEKVTP
LLQLLSCFDLHIYCTGRLEKHLELFLQQLQEVVVKHAEPAVLEAGAHALYLLCNPEFTFFSRADFARSQLVDLLT
DRFQQELEELLQSSFLDEDEVYNLAATLKRLSAFYNTHDLTRWELYEPCCQLLQKAVDTGEVPHQVILPALTLVY
FSILWTLTHISKSDASQKQLSSLRDRMVAFCELCQSCLSDVDTEIQEQAFVLLSDLLLIFSPQMIVGGRDFLRPL
VFFPEATLQSELASFLMDHVFIQPGDLGSGDSQEDHLQIERLHQRRRLLAGFCKLLLYGVLEMDAASDVFKHYNK
FYNDYGDIIKETLTRARQIDRSHCSRILLLSLKQLYTELLQEHGPQGLNELPAFIEMRDLARRFALSFGPQQLQN
RDLVVMLHKEGIQFSLSELPPAGSSNQPPNLAFLELLSEFSPRLFHQDKQLLLSYLEKCLQHVSQAPGHPWGPVT
TYCHSLSPVENTAETSPQVLPSSKRKRVEGPAKPNREDVSSSQEESLQLNSIPPTPTLTSTAVKSRQPLWGLKEM
EEEDGSELDFAQGQPVAGTERSRFLGPQYFQTPHNPSGPGLGNQLMRLSLMEEDEEEELEIQDESNEERQDTDMQ
ASSYSSTSERGLDLLDSTELDIEDF

FIGURE 3735

GAAAACATTTTGCTGAAAATATAAGCAAACATCGGCCTTGTCCTCCTTGTGTTCATACACTGTGGAAGCTTTTCT
CTGCCTCCTCCGTGAGAGTGCGTGGCCGGGAGACCAGAAACGTGGTCCTTTCTCTTGCCTGTGAGCTGGTGCAGA
GATGGAGGAAGAAGAATATGAACAAATTCCCCAGGAGAATCCCCCAGAAGAGCTGTCCCAGGATCCTGTGCTGGA
GCTGTCAGGAGGTCTCGCCAGAGGTGGCAGACGCTATCTGCCAAGCCATCGTCTTATCCGCCCCAGGGCCCCACG
CCGTGCTCCTGGTGACACAACTGGGCCGGTTCACGGATGAGGATCAGCAGGTGGTCAGGCGCCTGCAGGAGGTCT
TTGGAGTGGGGGTTCTGGGTCACACCATCCTGGTGTTCACCCGGAAGGAAGACCTGGCTGGCAGCTCCCTGGAAG
ACTATGTGCGAGAGACCAACAACCAGGCCCTTGCCTGGCTGGATGTGACCCTTGCACGGCGCCATTGCGGCTTCA
ACAACAGGGCACAGGGGGAGGAGCAGGAGGCCCAACTGCGAGAGCTCATGGAGAAAGTTGAAGCCATTATGTGGG
AAAACGAAGGAGATTATTACAGCAACAAGGCTTACCAATATACCCAGCAAAACTTTCGGCTGAAAGAACTACAGG
AAAGGCAAGTAAGCCAGGGCCAAGGCTCTGAGGACGTGCCTGGTGAGGAGTCTTGGCTGGAAGGACTGTCCCAGA
TCCAGAAGGAATCTGAGGAAGCCCACAGATGCCTGCTGGGGAAGGCTGACCTTTGAGCCTGTGCTGGACTTGAGC
CAAGGACACCATCAGCCTTTGCACCCCCCTGTGTCCAGCCCTCTGTTTCTCTTTCCATCCCATGGAGTGCTTCCC
AGTCTCCAGGTCATGACGTCTGGTGTAGGAAGAGGGGCATGGGGCTTGAGGACAGGGTCCAGCATGCCCAGATCA
CATTCCAGTTCCTTCATTCCTTCTTCCAGAACATCTGGGTCCTCCCTCCTCTGTGCCCCAACAGCACGCTGTCTT
CCTATTGGACCTTCTATCTCATTGGCATTGCCTTTCATGAGTTACTTGTCTATACTCTGATAGAACCAAAGTTTC
TTGAGGGCAGGCCTGTATCTTTTACTTCTGTGTAACTTCCACAGCTTTTGACTGCATTGGAGTCATGCAGTCACG
TTTGGTGCGGCAACTCCATGCAAGCTGTTGACCAGATGACTTCTCATCTCTCCCCACACCATGATGGTTTAAGGT
GCCTGTTGTGTCTGGTGGAGACAGTGCTGGGAGATGATCAGAAATCTCAGGGCACAGCCTCAGGTCTACCTGGAC
ACTCATCCACTGTTGGAGATGCTCAACAGCTAGACACAGATGCTCACAGCCGACCTGTGGCCTCTTGCTCTGAAG
CCATCCCCCATCTTCCCTAGACACAGCAGACATCTGAGAAAGCTTCAGCATTTCTCTTGCTAACAGATTCAGAAA
AGTGTCTCAAAGCAGAGCACAGAGTTATTTGGTGTTTGCTGAAGACAGCCTTTGTGCCACAATCACTTATTAAAT
AAGCGATCAATTTCCCATTGAACTGAACATGCAACATTTATCATACATTCAGCTCTCATTCACACTCCTTAAGAT
TTGGTCAGAATTTTTATTTCTGTTCATGTCTTCTACTTTTCTACTCCTGTATGAATAAAATATTGATTTGATTAC
AGTGGCTTTGACTATAATGTGGGAGCCAATTTTTGCCTCAGTCTTCATTTTTATATTTACCTTGTTATTCTCAGG
CATTTTTTTCTTCTATGTGAGAGTTAAAATCATTCTGTAATTTCCCCCCAAAATCATATTGGTATTCTAGTTGGC
AATGTCTTACATTTATGTTAAGTTTGAGGGAATTGGTAGTTCAAGTATAAGTTAATTAAGGCCATTTTATTTCTA
AGTGAACAGACTTGAAACTCCAGAGCTACTGAAGTAAAAGTTAGAATCATTTGCATTTTCATTCAGATAGGAGAT
AATTTTGTAAATTTTGATGCTATTATTTTAACTCTATTAGCTTAAGTAATGTCATAATAGAAAACACAAGCATTT
GACCAAATGAGATCCATTCAGCGACTAACTGGCAAGGCACTCAAAACATGTCATTCATTAAATGTTGTTTTTATT
TACCTCAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3736

MNKFPRRIPQKSCPRILCWSCQEVSPEVADAICQAIVLSAPGPHAVLLVTQLGRFTDEDQQVVRRLQEVFGVGVL
GHTILVFTRKEDLAGSSLEDYVRETNNQALAWLDVTLARRHCGFNNRAQGEEQEAQLRELMEKVEAIMWENEGDY
YSNKAYQYTQQNFRLKELQERQVSQGQGSEDVPGEESWLEGLSQIQKESEEAHRCLLGKADL

FIGURE 3737A

AGAGTGCTGATTTAGAAGAATACAAATC**ATG**GCTGAAAATAGTGTATTAACATCCACTACTGGGAGGACTAGCTT
GGCAGACTCTTCCATTTTTGATTCTAAAGTTACTGAGATTTCCAAGGAAAACTTACTTATTGGATCTACTTCATA
TGTAGAAGAAGAGATGCCTCAGATTGAAACAAGAGTGATATTGGTTCAAGAAGCTGGAAAACAAGAAGAACTTAT
AAAAGCCTTAAAGGACATTAAAGTGGGCTTTGTAAAGATGGAGTCAGTGGAAGAATTTGAAGGTTTGGATTCTCC
GGAATTTGAAAATGTATTTGTAGTCACGGACTTTCAGGATTCTGTCTTTAATGACCTCTACAAGGCTGATTGTAG
AGTTATTGGACCACCAGTTGTATTAAATTGTTCACAAAAAGGAGAGCCTTTGCCATTTTCATGTCGCCCGTTGTA
TTGTACAAGTATGATGAATCTAGTACTATGCTTTACTGGATTTAGGAAAAAAGAAGAACTAGTCAGGTTGGTGAC
ATTGGTCCATCACATGGGTGGAGTTATTCGAAAAGACTTTAATTCAAAAGTTACACATTTGGTGGCAAATTGTAC
ACAAGGAGAAAAATTCAGGGTTGCTGTGAGTCTAGGTACTCCAATTATGAAGCCAGAATGGATTTATAAAGCTTG
GGAAAGGCGGAATGAACAGGATTTCTATGCAGCAGTTGATGACTTTAGAAATGAATTTAAAGTTCCTCCATTTCA
AGATTGTATTTTAAGTTTCCTGGGATTTTCAGATGAAGAGAAAACCAATATGGAAGAAATGACTGAAATGCAAGG
AGGTAAATATTTACCGCTTGGAGATGAAAGATGCACTCACCTTGTAGTTGAAGAGAATATAGTAAAAGATCTTCC
CTTTGAACCTTCAAAGAAACTTTATGTTGTCAAGCAAGAGTGGTTCTGGGGAAGCATTCAAATGGATGCCCGAGC
TGGAGAAACTATGTATTTATATGAAAAGGCAAATACTCCTGAGCTCAAGAAATCAGTGTCAATGCTTTCTCTAAA
TACCCCTAACAGCAATCGCAAACGACGTCGTTTAAAAGAAACACTTGCTCAGCTTTCAAGAGAGACAGACGTGTC
ACCATTTCCACCCCGTAAGCGCCCATCAGCTGAGCATTCCCTTTCCATAGGGTCACTCCTAGATATCTCCAACAC
ACCAGAGTCTAGCATTAACTATGGAGACACCCCAAAGTCTTGTACTAAGTCTTCTAAAAGCTCCACTCCAGTTCC
TTCAAAGCAGTCAGCAAGGTGGCAAGTTGCAAAAGAGCTTTATCAAACTGAAAGTAATTATGTTAATATATTGGC
AACAATTATTCAGTTATTTCAAGTACCATTGGAAGAGGAAGGACAACGTGGTGGACCTATCCTTGCACCAGAGGA
GATTAAGACTATTTTTGGTAGCATCCCAGATATCTTTGATGTACACACTAAGATAAAGGATGATCTTGAAGACCT
TATAGTTAATTGGGATGAGAGCAAAAGCATTGGTGACATTTTTCTGAAATATTCAAAAGATTTGGTAAAAACCTA
CCCTCCCTTTGTAAACTTCTTTGAAATGAGCAAGGAAACAATTATTAAATGTGAAAAACAGAAACCAAGATTTCA
TGCTTTTCTCAAGATAAACCAAGCAAAACCAGAATGTGGACGGCAGAGCCTTGTTGAACTTCTTATCCGACCAGT
ACAGAGGTTACCCAGTGTTGCATTACTTTTAAATGATCTTAAGAAGCATACAGCTGATGAAAATCCAGACAAAAG
CACTTTAGAAAAAGCTATTGGATCACTGAAGGAAGTAATGACGCATATTAATGAGGATAAGAGAAAAACAGAAGC
TCAAAAGCAAATTTTTGATGTTGTTTATGAAGTAGATGGATGCCCAGCTAATCTTTTATCTTCTCACCGAAGCTT
AGTACAGCGGGTTGAAACAATTTCTCTAGGTGAGCACCCCTGTGACAGAGGAGAACAAGTAACTCTCTTCCTCTT
CAATGATTGCCTAGAGATAGCAAGAAAACGGCACAAGGTTATTGGCACTTTTAGGAGTCCTCATGGCCAAACCCG
ACCCCCAGCTTCTCTTAAGCATATTCACCTAATGCCTCTTTCTCAGATTAAGAAGGTATTGGACATAAGAGAGAC
AGAAGATTGCCATAATGCTTTTGCCTTGCTTGTGAGGCCACCAACAGAGCAGGCAAATGTGCTACTCAGTTTCCA
GATGACATCAGATGAACTTCCAAAAGAAAACTGGCTAAAGATGCTGTGTCGACATGTAGCTAACACCATTTGTAA
AGCAGATGCTGAGAATCTTATTTATACTGCTGATCCAGAATCCTTTGAAGTAAATACAAAAGATATGGACAGTAC
ATTGAGTAGAGCATCAAGAGCAATAAAAAAAGACTTCAAAAAAGGTTACAAGAGCATTCTCTTTCTCCAAAACTCC
AAAAAGAGCTCTTCGAAGGGCTCTTATGACATCCCACGGCTCAGTGGAGGGAAGAAGTCCTTCCAGCAATGATAA
GCATGTAATGAGTCGTCTTTCTAGCACATCATCATTAGCAGGTATCCCTTCTCCCTCCCTTGTCAGCCTTCCTTC
CTTCTTTGAAAGGAGAAGTCATACGTTAAGTAGATCTACAACTCATTTGATA**TGA**AGCGTTACCAAAATCTTAAA
TTATAGAAATGTATAGACACCTCATACTCAAATAAGAAACTGACTTAAATGGTACTTGTAATTAGCACTTGGTGA
AAGCTGGAAGGAAGATAAATAACACTAAACTATGCTATTTGATTTTTCTTCTTGAAAGAGTAAGGTTTACCTGTT
ACATTTTCAAGTTAATTCATGTAAAAAATGATAGTGATTTTGATGTAATTTATCTCTTGTTTGAATCTGTCATTC
AAAGGCCAATAATTTAAGTTGCTATCAGCTGATATTAGTAGCTTTGCAACCCTGATAGAGTAAATAAATTTTATG
GGCGGGTGCCAAATACTGCTGTGAATCTATTTGTATAGTATCCATGAATGAATTTATGGAAATAGATATTTGTGC
AGCTCAATTTATGCAGAGATTAAATGACATCATAATACTGGATGAAAACTTGCATAGAATTCTGATTAAATAGTG
GGTCTGTTTCACATGTGCAGTTTGAAGTATTTAAATAACCACTCCTTTCACAGTTTATTTTCTTCTCAAGCGTTT
TCAAGATCTAGCATGTGGATTTTAAAAGATTTGCCCTCATTAACAAGAATAACATTTAAAGGAGATTGTTTCAAA
ATATTTTTGCAAATTGAGATAAGGACAGAAAGATTGAGAAACATTGTATATTTTGCAAAAACAAGATGTTTGTAG
CTGTTTCAGAGAGAGTACGGTATATTTATGGTAATTTTATCCACTAGCAAATCTTGATTTAGTTTGATAGTGTGT
GGAATTTTATTTTGAAGGATAAGACCATGGGAAAATTGTGGTAAAGACTGTTTGTACCCTTCATGAAATAATTCT
GAAGTTGCCATCAGTTTTACTAATCTTCTGTGAAATGCATAGATATGCGCATGTTCAACTTTTTATTGTGGTCTT

FIGURE 3737B

ATAATTAAATGTAAAATTGAAAATTCATTTGCTGTTTCAAAGTGTGATATCTTTCACAATAGCCTTTTTATAGTC
AGTAATTCAGAATAATCAAGTTCATATGGATAAATGCATTTTTATTTCCTATTTCTTTAGGGAGTGCTACAAATG
TTTGTCACTTAAATTTCAAGTTTCTGTTTTAATAGTTAACTGACTATAGATTGTTTTCTATGCCATGTATGTGCC
ACTTCTGAGAGTAGTAAATGACTCTTTGCTACATTTTAAAAGCAATTGTATTAGTAAGAACTTTGTAAATAAATA
CCTAAAACCCAAGTGT

FIGURE 3738

MAENSVLTSTTGRTSLADSSIFDSKVTEISKENLLIGSTSYVEEEMPQIETRVILVQEAGKQEELIKALKDIKVG
FVKMESVEEFEGLDSPEFENVFVVTDFQDSVFNDLYKADCRVIGPPVVLNCSQKGEPLPFSCRPLYCTSMMNLVL
CFTGFRKKEELVRLVTLVHHMGGVIRKDFNSKVTHLVANCTQGEKFRVAVSLGTPIMKPEWIYKAWERRNEQDFY
AAVDDFRNEFKVPPFQDCILSFLGFSDEEKTNMEEMTEMQGGKYLPLGDERCTHLVVEENIVKDLPFEPSKKLYV
VKQEWFWGSIQMDARAGETMYLYEKANTPELKKSVSMLSLNTPNSNRKRRRLKETLAQLSRETDVSPFPPRKRPS
AEHSLSIGSLLDISNTPESSINYGDTPKSCTKSSKSSTPVPSKQSARWQVAKELYQTESNYVNILATIIQLFQVP
LEEEGQRGGPILAPEEIKTIFGSIPDIFDVHTKIKDDLEDLIVNWDESKSIGDIFLKYSKDLVKTYPPFVNFFEM
SKETIIKCEKQKPRFHAFLKINQAKPECGRQSLVELLIRPVQRLPSVALLLNDLKKHTADENPDKSTLEKAIGSL
KEVMTHINEDKRKTEAQKQIFDVVYEVDGCPANLLSSHRSLVQRVETISLGEHPCDRGEQVTLFLFNDCLEIARK
RHKVIGTFRSPHGQTRPPASLKHIHLMPLSQIKKVLDIRETEDCHNAFALLVRPPTEQANVLLSFQMTSDELPKE
NWLKMLCRHVANTICKADAENLIYTADPESFEVNTKDMDSTLSRASRAIKKTSKKVTRAFSFSKTPKRALRRALM
TSHGSVEGRSPSSNDKHVMSRLSSTSSLAGIPSPSLVSLPSFFERRSHTLSRSTTHLI

FIGURE 3739

GAAATGAACCTCTCTTATTGATTTTTATTGGCCTAGAGCCAGGAGTACTGCATTCAGTTGACTTTCAGGGTAAAA
AGAAAACAGTCCTGGTTGTTGTCATCATAAACATATGGACCAGTGTGATGGTGAAATGAGATGAGGCTCCGCAAT
GGAACTGTAGCCACTGCTTTAGCATTTATCACTTCCTTCCTTACTTTGTCTTGGTATACTACATGGCAAAATGGG
AAAGAAAAACTGATTGCTTATCAACGAGAATTCCTTGCTTTGAAAGAACGTCTTCGAATAGCTGAACACAGAATC
TCACAGCGCTCTTCTGAATTAAATACGATTGTGCAACAGTTCAAGCGTGTAGGAGCAGAAACAAATGGAAGTAAG
GATGCGTTGAATAAGTTTTCAGATAATACCCTAAAGCTGTTAAAGGAGTTAACAAGCAAAAAATCTCTTCAAGTG
CCAAGTATTTATTATCATTTGCCTCATTTATTGAAAAATGAAGGAAGTCTTCAACCTGCTGTACAGATTGGCAAC
GGAAGAACAGGAGTTTCAATAGTCATGGGCATTCCCACAGTGAAGAGAGAAGTTAAATCTTACCTCATAGAAACT
CTTCATTCCCTTATTGATAACCTGTATCCTGAAGAGAAGTTGGACTGTGTTATAGTAGTCTTCATAGGAGAGACA
GATATTGATTATGTACATGGTGTTGTAGCCAACCTGGAGAAAGAATTTTCTAAAGAAATCAGTTCTGGCTTGGTG
GAAGTCATATCACCCCCTGAAAGCTATTATCCTGACTTGACAAACCTAAAGGAGACATTTGGAGACTCCAAAGAA
AGAGTAAGATGGAGAACAAAGCAAAACCTAGATTACTGTTTTCTAATGATGTATGCTCAAGAAAAGGGCATATAT
TACATTCAGCTTGAAGATGATATTATTGTCAAACAAAATTATTTTAATACCATAAAAAATTTTGCACTTCAACTT
TCTTCTGAGGAATGGATGATTCTAGAGTTTTCCCAGCTGGGCTTCATTGGTAAAATGTTTCAAGCGCCGGATCTT
ACTCTGATTGTAGAATTCATATTCATGTTTTACAAGGAGAAACCCATTGATTGGCTCCTGGACCATATTCTCTGG
GTGAAAGTCTGCAACCCTGAAAAAGATGCAAAACATTGTGATAGACAGAAAGCAAATCTGCGAATTCGCTTCAGA
CCTTCCCTTTTCCAACATGTTGGTCTGCACTCATCACTATCAGGAAAAATCCAAAAACTCACGGATAAAGATTAT
ATGAAACCATTACTTCTTAAAATCCATGTAAACCCACCTGCGGAGGTATCTACTTCCTTGAAGGTCTACCAAGGG
CATACGCTGGAGAAAACTTACATGGGAGAGGATTTCTTCTGGGCTATCACACCGATAGCTGGAGACTACATCTTG
TTTAAATTTGATAAACCAGTCAATGTAGAAAGTTATTTGTTCCATAGCGGCAACCAAGAACATCCTGGAGATATT
CTGCTAAACACAACTGTGGAAGTTTTGCCTTTTAAGAGTGAAGGTTTGGAAATAAGCAAAGAAACCAAAGACAAA
CGATTAGAAGATGGCTATTTCAGAATAGGAAAATTTGAGAATGGTGTTGCAGAAGGAATGGTGGATCCAAGTCTC
AATCCCATTTCAGCCTTTCGACTTTCAGTTATTCAGAATTCTGCTGTTTGGGCCATTCTTAATGAGATTCATATT
AAAAAAGCCACCAACTGATCATCTGAGAAACCAACACATTTTTTCCTGTGAATTTGTTAATTAAAGATAGTTAAG
CATGTATCTTTTTTTTATTTCTACTTGAACACTACCTCTTGTGAAGTCTACTGTAGATAAGACGATTGTCATTTC
CACTTGGAAAGTGAATCTCCCATAATAATTGTATTTGTTTGAAACTAAGCTGTCCTCAGATTTTAACTTGACTCA
AACATTTTTCAATTATGACAGCCTGTTAATATGACTTGTACTATTTTGGTATTATACTAATACATAAGAGTTGTA
CATATTGTTACATTCTTTAAATTTGAGAAAAACTAATGTTACATACATTTTATGAAGGGGGTACTTTTGAGGTTC
ACTTATTTTACTATT

FIGURE 3740

MRLRNGTVATALAFITSFLTLSWYTTWQNGKEKLIAYQREFLALKERLRIAEHRISQRSSELNTIVQQFKRVGAE
TNGSKDALNKFSDNTLKLLKELTSKKSLQVPSIYYHLPHLLKNEGSLQPAVQIGNGRTGVSIVMGIPTVKREVKS
YLIETLHSLIDNLYPEEKLDCVIVVFIGETDIDYVHGVVANLEKEFSKEISSGLVEVISPPESYYPDLTNLKETF
GDSKERVRWRTKQNLDYCFLMMYAQEKGIYYIQLEDDIIVKQNYFNTIKNFALQLSSEEWMILEFSQLGFIGKMF
QAPDLTLIVEFIFMFYKEKPIDWLLDHILWVKVCNPEKDAKHCDRQKANLRIRFRPSLFQHVGLHSSLSGKIQKL
TDKDYMKPLLLKIHVNPPAEVSTSLKVYQGHTLEKTYMGEDFFWAITPIAGDYILFKFDKPVNVESYLFHSGNQE
HPGDILLNTTVEVLPFKSEGLEISKETKDKRLEDGYFRIGKFENGVAEGMVDPSLNPISAFRLSVIQNSAVWAIL
NEIHIKKATN

FIGURE 3741

AGCGGCGCAAGCGGCGGCGGCCACTGCCACGTATTCCCGGCAGTGGTGGCGGGGGCGGCGGCGGCGCCCGCGGGC
AGGAATAACTCAAGTCACCTGTACTGGAAATCAGTTTGCTGAAATTAATCAACGATTCTTGAAGTTGAAGAAAAG
GAGGTTCCAGCCTTGGCAAGAGGAGTGTGGCCCTTCCTGGAATCCCTCTGGACACACCCTCCTAGCATCCTCTAG
GAAAGATGCGGCAGCTCAAAGGGAAGCCCAAGAAGGAGACCTCCAAGGACAAGAAGGAGCGGAAGCAAGCCATGC
AGGAGGCCCGGCAGCAGATCACTACAGTGGTGCTGCCCACGCTGGCCGTGGTCGTGCTCTTGATCGTGGTGTTTG
TGTACGTGGCCACGCGCCCCACCATCACCGAGTGAGCCCCGCAGCCGGCTGCGGACCCCATCGGCAGGGAGAGGA
AGGCGCGGGAGGGGGACGCAAACAAAAAAATGGCTTTCATATTCAGAGATGTTCATGTTGCTGAGCTGTAAGCAG
GAGCACCCTGTCTTCTCTGGTCTTTGACTTGATTAAAGTATCTCCGCTTTCTTGGGAGGGAATAGGGGATGTTTT
ATCAGTGAATGTGCCATACACCTTATGGTCCACTTCATGTGCCTTTCAGACTTCAAAGCGCGCGCGCATGTGTGT
GTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGCTTCTTTTTCTCTCCTAAAAATCGATAAGTAGCTCCACCTGA
AGAGGGATGGAACCTCTGGGTCAGGAAACAGCTGGAATCCACACTCACCTCATTCCCATTGTTTGGATCATGCTT
CTTTCCAACACGTGTTCACAATCTCCAAAGGGACTGTATTTCTTCTCTGTGCTTAATGTGATTTGAAATATGTTG
AATCAAAGTGAAATATTTATTTTTTGAATAAAGGAGATAATAGCCTTAAAAAA

FIGURE 3742

MRQLKGKPKKETSKDKKERKQAMQEARQQITTVVLPTLAVVVLLIVVFVYVATRPTITE

FIGURE 3743

CAAAGGTCAGAGGTAAAGAAGTCATGGCGGCGCTGTGTCGGACCCGTGCTGTGGCTGCCGAGAGCCATTTTCTGC
GAGTGTTTCTCTTCTTCAGGCCCTTTCGGGGTGTAGGCACTGAGAGTGGATCCGAAAGTGGTAGTTCCAATGCCA
AGGAGCCTAAGACGCGCGCAGGCGGTTTCGCGAGCGCGTTGGAGCGGCACTCGGAGCTTCTACAGAAGGTGGAGC
CCCTACAGAAGGGTTCTCCAAAAAATGTGGAATCCTTTGCATCTATGCTGAGACATTCTCCTCTTACACAGATGG
GACCTGCAAAGGATAAACTGGTCATTGGACGGATCTTTCATATTGTGGAGAATGATCTGTACATAGATTTTGGTG
GAAAGTTTCATTGTGTATGTAGAAGACCAGAAGTGGATGGAGAGAAATACCAGAAAGGAACCAGGGTCCGGTTGC
GGCTATTAGATCTTGAACTTACGTCTAGGTTCCTGGGAGCAACAACAGATACAACTGTACTAGAGGCTAATGCAG
TTCTCTTGGGAATCCAGGAGAGTAAAGACTCAAGATCGAAAGAAGAACATCATGAAAAATAAATGAACTTTGCTT
AGTGGATTGACTCCTTTGCTGAAGTCAGTTATTCATCAAGAATGCAATTAGACTAATTGTGAATAAATGATTGAA
TGAAGATATAATAAATAAAAGCTATAATTATAAAAAAAAAAAAAAAAAA

FIGURE 3744

MAALCRTRAVAAESHFLRVFLFFRPFRGVGTESGSESGSSNAKEPKTRAGGFASALERHSELLQKVEPLQKGSPK
NVESFASMLRHSPLTQMGPAKDKLVIGRIFHIVENDLYIDFGGKFHCVCRRPEVDGEKYQKGTRVRLRLLDLELT
SRFLGATTDTTVLEANAVLLGIQESKDSRSKEEHHEK

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FIGURE 3745

CCCAAATATATATTTAATCTTGTGGTTCAAATAAGCTTTTGGCTCACATCTAAGCACATCATAAAGAACGCTGTA
GAAGAGGTGACATGATGAGGCGGGAAGACGAGGAAGAGGAGGGAACAATGATGAAGGCAAAAGGGGACTTAGAGA
TGAAGGAGGAGGAAGAGATTAGTGAGACAGGAGAACTGGTTGGCCCTTTTGTGAGTGCTATGCCCACTCCAATGC
CCCACAACAAGGGCACCCGGTTCTCTGAGGCATGGGAATATTTCCACCTAGCTCCTGCTCGTGCTGGGCACCATC
CCAACCAGTATGCCACCTGCCGCCTGTGTGGCAGGCAGGTGAGCCGTGGCCCTGGGGTCAACGTGGGCACCACTG
CACTGTGGAAGCATCTGAAAAGCATGCACAGAGAGGAGCTGGAGAAGAGTGGCCATGGTCAGGCTGGGCAGCGCC
AGGATCCAAGGCCCCACGGGCCCCAGCTCCCCACAGGCATTGAGGGTAACTGGGGTAGGCTCCTGGAGCAGGTGG
GCACCATGGCTTTGTGGGCCAGCCAAAGGGAAAAGGAGGTGCTTAGGAGGGAAAGGGCAGTGGAATGGCGGGAGA
GGGCTGTGGAAAAAAGGGAGCGAGCCCTGGAGGAGGTGGAAAGGGCCATCCTGGAGATGAAGTGGAAGGTGAGGG
CTGAGAAGGAGGCATGCCAGCGGGAGAAAGAGCTGCCTGCAGCAGTACATCCCTTCCATTTTGTTTAAATTGGGC
TTGGAGAATCTATTCTGAAAACATTGACTCTAGACTTGTAGAAAAGAGCCATTTTAGTTTCAACTCAAATGTAAA
GCAAAGTAGTTTGGTGACATTTTGCTTTTATGTGAAATAGTGCACAGTATGAGTTAATCTGAGCAGGTCTGAATT
GACCAAATGCTTATCTACGAGGTTCCTAGAGCTCTGCTGACCCTTGGCCGAAACTCTAAAATGTACCTATTAAAG
ATAAATGCTTCTACCAAAGTAAAACTCTGTGAGTTGTTTCAGGGCAGAATGTACCAGCCAGTCAGCGTTGTTTAA
CAAAATAATCAGATTTTTGCCTAGCACTCGGTTTTGGTGGAGCTGACGATTTTGAGGGCTGAGGCTGGTTAGGTA
GCTGGAATGTGCCTATGTGACCAGCTCACTTGCAGACACCCTGCCGGAAGCAGAGCTTAATCTTCCTAGGACTGA
GGTCTTAGCACATGTACTGGTGGAGTTTCCAGACCACCAGTATGAATAAAAGCTTGTTCTGTGTGACCCAGCAAG
TGGAAGGACAAAGAACTGTGAGCCTCAGATCTTTGGACCTTTCCAATGCGTCTCTTTCTCCTGTTATTGCTGCAA
TGTATTTTCTTGCTTATATTAAAGTTGTTTCATCAGTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3746

MRREDEEEEGTMMKAKGDLEMKEEEEISETGELVGPFVSAMPTPMPHNKGTRFSEAWEYFHLAPARAGHHPNQYA
TCRLCGRQVSRGPGVNVGTTALWKHLKSMHREELEKSGHGQAGQRQDPRPHGPQLPTGIEGNWGRLLEQVGTMAL
WASQREKEVLRRERAVEWRERAVEKRERALEEVERAILEMKWKVRAEKEACQREKELPAAVHPFHFV

FIGURE 3747

GCGTCGGGGGAGGACAACAAAGGGCCGCGGGCGGCGGGCAGTGGTGTCCCAGTCTCCCGGTGCTTCCCTGAGGCT
GAGGCGCCCGGCCTCCCGCCCGCCGCGCTCCAG**ATG**AAGTGTGAGCACTGCACGCGCAAGGAATGTAGTAAGAAA
ACAAAAACTGATGACCAAGAGAATGTGTCAGCCGATGCACCGAGTCCAGCCCAGGAAAATGGAGAGAAGGGAGAA
TTCCACAAGTTGGCTGATGCCAAGATATTTTTGAGCGACTGCCTGGCATGTGACAGCTGTATGACTGCAGAGGAA
GGAGTCCAACTTTCCCAGCAAAATGCCAAGGACTTCTTCCGCGTTCTGAACCTTAACAAGAAATGTGATACCTCA
AAGCACAAAGTGCTGGTAGTGTCTGTGTGTCCTCAATCTTTGCCTTATTTTGCTGCTAAATTCAACCTCAGTGTA
ACTGATGCATCCAGAAGACTCTGTGGTTTCCTCAAAAGTCTTGGGGTGCACTATGTATTTGATACGACGATAGCT
GCGGATTTTAGTATCCTGGAGAGTCAAAAAGAATTCGTGCGTCGCTATCGCCAGCACAGTGAGGAGGAACGCACC
CTGCCCATGCTGACCTCTGCCTGTCCTGGCTGGGTCCGATACGCCGAGCGGGTGCTGGGTCGCCCCATCACTGCC
CACCTCTGCACCGCCAAGTCCCCCCAGCAGGTCATGGGCTCTTTGGTGAAGGATTATTTCGCCAGACAGCAGAAC
CTGTCTCCAGAGAAGATTTTCCACGTCATTGTGGCCCCTTGTTATGACAAGAAGCTGGAGGCTCTTCAGGAAAGC
CTTCCCCCTGCTTTGCATGGCTCCCGGGGCGCTGACTGCGTGTTAACATCAGAAATTAGCCAGGCGTGGTGGTGC
ACACCTGTGATCACAGCTACTCGGGAGGCTGCGGCAAGAGAATCACTTGAACCCGGGAGGCAGAGGTTACAGCGA
GACAAGATTGCACCACTGGACTCCAGCCTGGGCGGCGGAGGTGAAATTGCTCAAATAATGGAGCAAGGTGACCTC
TCAGTGAGAGATGCTGCCGTCGACACTCTGTTTGGAGACTTGAAGGAGGACAAAGTGACGCGTCATGATGGAGCC
AGCTCAGACGGGCACCTGGCACACATCTTCAGACATGCGGCCAAGGAGCTGTTCAACGAGGATGTGGAGGAGGTC
ACTTACCGAGCCCTGAGAAACAAAGACTTCCAAGAGGTCACCCTTGAGAAGAACGGAGAGGTGGTGTTACGCTTT
GCTGCAGCCTATGGCTTTCGAAACATCCAGAACATGATCCTGAAGCTTAAGAAGGGCAAGTTCCCATTCCACTTT
GTGGAGGTCCTCGCCTGTGCTGGAGGATGCTTAAATGGCAGAGGCCAAGCCCAGACTCCAGACGGACATGCGGAT
AAGGCCCTGCTGCGGCAGATGGAAGGCATTTACGCTGACATCCCTGTGCGGCGTCCGGAGTCCAGTGCACACGTG
CAGGAGCTGTACCAGGAGTGGCTGGAGGGGATCAACTCCCCCAAGGCCCGAGAGGTGCTGCATACCACGTACCAG
AGCCAGGAGCGTGGCACACACAGCCTGGACATCAAGTGG**TGA**AGTCAGGCCAGGGCCTTCCAGCTGCTCTTGGGG
CCAGAGCCAAGAGCCTCTCAGTAGAGGGAGGGGCTGCCCTGAGTGGAGTATTAAAGACACTTAAGAAAACCGCTC
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3748

MKCEHCTRKECSKKTKTDDQENVSADAPSPAQENGEKGEFHKLADAKIFLSDCLACDSCMTAEEGVQLSQQNAKD
FFRVLNLNKKCDTSKHKVLVVSVCPQSLPYFAAKFNLSVTDASRRLCGFLKSLGVHYVFDTTIAADFSILESQKE
FVRRYRQHSEEERTLPMLTSACPGWVRYAERVLGRPITAHLCTAKSPQQVMGSLVKDYFARQQNLSPEKIFHVIV
APCYDKKLEALQESLPPALHGSRGADCVLTSEISQAWWCTPVITATREAAARESLEPGRQRLQRDKIAPLDSSLG
GGGEIAQIMEQGDLSVRDAAVDTLFGDLKEDKVTRHDGASSDGHLAHIFRHAAKELFNEDVEEVTYRALRNKDFQ
EVTLEKNGEVVLRFAAAYGFRNIQNMILKLKKGKFPFHFVEVLACAGGCLNGRGQAQTPDGHADKALLRQMEGIY
ADIPVRRPESSAHVQELYQEWLEGINSPKAREVLHTTYQSQERGTHSLDIKW

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FIGURE 3749

GCGCGCAGCTGGTTCCCGCTCTGCAGCGCAACGCCTGAGGCAGTGGGCGCGCTCAGTCCCGGGACCAGGCGTTCT
CTCCTCTCGCCTCTGGGCCTGGGACCCGCAAAGCGGCG**ATG**GAGCGGAGGTCGCGGAGGAAGTCGCGGCGCAACG
GGCGCTCGACCGCGGGCAAGGCCGCCGCGACCCAGCCCGCGAAGTCTCCGGGCGCACAGCTCTGGCTCTTTCCCA
GCGCCGCGGGCCTCCACCGCGCGCTGCTCCGGAGGGTGGAGGTGACGCGCCAACTCTGCTGCTCGCCGGGGCGCC
TCGCGGTCTTGGAACGCGGCGGGGCGGGCGTCCAGGTTCACCAGCTGCTCGCCGGGAGCGGCGGCGCCCGGACGC
CGAAATGCATTAAATTAGGAAAAAACATGAAGATACATTCCGTGGACCAAGGAGCAGAGCACATGCTGATTCTCT
CATCAGATGGAAAACCATTTGAGTATGACAACTATAGCATGAAACATCTAAGGTTTGAAAGCATTTTACAAGAAA
AAAAAATAATTCAGATCACATGTGGAGATTACCATTCTCTTGCACTCTCAAAAGGCGGTGAGCTTTTTGCCTGGG
GACAGAACCTGCATGGGCAGCTTGGAGTTGGAAGGAAATTTCCCTCAACCACCACACCACAGATTGTGGAGCACC
TCGCAGGAGTACCCTTGGCTCAGATTTCTGCCGGAGAAGCCCACAGCATGGCCTTATCCATGTCTGGCAACATTT
ATTCATGGGGAAAAAATGAATGTGGACAACTAGGCCTGGGCCACACTGAGAGTAAAGATGATCCATCCCTTATTG
AAGGACTAGACAATCAGAAAGTTGAATTTGTCGCTTGTGGTGGCTCTCACAGTGCCCTACTCACACAGGATGGGC
TGCTGTTTACTTTCGGTGCTGGAAAACATGGGCAACTTGGTCATAATTCAACACAGAATGAGCTAAGACCCTGTT
TGGTGGCTGAGCTTGTTGGGTATAGAGTGACTCAGATAGCATGTGGAAGGTGGCACACACTTGCCTATGTTTCTG
ATTTGGGAAAGGTCTTTTCCTTTGGTTCTGGAAAAGATGGACAACTGGGAAATGGTGGAACACGTGACCAGCTGA
TGCCGCTTCCAGTGAAAGTATCATCAAGTGAAGAACTCAAACTTGAAAGCCATACCTCAGAAAAGGAGTTAATAA
TGATTGCTGGAGGGAATCAAAGCATTTTGCTCTGGATAAAGAAAGAGAATTCATATGTTAATCTGAAGAGGACAA
TTCCTACTCTGAATGAAGGGACTGTAAAGAGATGGATTGCTGATGTGGAGACTAAACGGTGGCAGAGCACAAAAA
GGGAAATCCAAGAGATATTTTCATCTCCTGCTTGTCTAACTGGAAGTTTTTTAAGGAAAAGAAGAACTACAGAAA
TGATGCCTGTTTATTTGGACTTAAATAAAGCAAGAAACATCTTCAGGGAGTTAACCCAAAAGGACTGGATTACTA
ACATGATAACCACCTGCCTCAAAGATAATCTGCTCAAAAGACTTCCATTTCATTCTCCACCCCAAGAAGCTTTAG
AAATTTTCTTCCTTCTCCCAGAATGTCCTGTGATGCATATTTCCAACAACTGGGAGAGCCTTGTGGTTCCATTTG
CAAAGGTTGTTTGTAAAATGAGTGACCAGTCTTCACTGGTTCTGGAAGAGTATTGGGCAACTCTGCAAGAATCCA
CTTTCAGCAAACTGGTCCAGATGTTTAAAACAGCCGTCATATGCCAGTTGGATTACTGGGATGAAAGTGCTGAGG
AGAATGGTAATGTTCAAGCTCTCCTAGAAATGTTGAAGAAGCTGCACAGGGTAAACCAGGTGAAATGTCAACTAC
CTGAAAGTATTTTCCAAGTAGACGAACTCTTGCACCGTCTCAATTTTTTTGTAGAAGTATGCAGAAGGTACTTGT
GGAAAATGACTGTGGACGCTTCAGAAAATGTACAATGCTGCGTCATATTCAGTCACTTTCCATTTATCTTTAATA
ATCTGTCGAAAATTAAACTACTACATACAGACACACTTTTAAAAATAGAGAGTAAAAAACATAAAGCTTATCTTA
GGTCGGCAGCAATTGAGGAAGAAAGAGAGTCTGAATTCGCTTTGAGGCCCACGTTTGATCTAACAGTCAGAAGGA
ATCACTTGATTGAGGATGTTTTGAATCAGCTAAGTCAATTTGAGAATGAAGACCTGAGGAAAGAGTTATGGGTTT
CATTTAGTGGAGAAATTGGGTATGACCTCGGAGGAGTCAAGAAAGAGTTCTTCTACTGTCTGTTTGCAGAGATGA
TCCAGCCGGAATATGGGATGTTCATGTATCCTGAAGGGGCTTCCTGCATGTGGTTTCCTGTCAAGCCTAAATTTG
AGAAGAAAAGATACTTCTTTTTTGGGGTTCTATGTGGACTTTCCCTGTTCAATTGCAATGTTGCCAACCTCCCTT
TCCCACTGGCACTGTTTAAGAAACTTTTGGACCAAATGCCATCATTGGAAGACTTGAAAGAACTCAGTCCTGATT
TGGGAAAGAATTTGCAAACACTTCTGGATGATGAAGGTGATAACTTTGAGGAAGTATTTTACATCCATTTTAATG
TGCACTGGGACAGAAACGACACAAACTTAATTCCTAATGGAAGTAGCATAACTGTCAACCAGACTAACAAGAGAG
ACTATGTTTCTAAGTATATCAATTACATTTTCAACGACTCTGTAAAGGCGGTTTATGAAGAATTTCGGAGAGGAT
TTTATAAAATGTGCGACGAAGACATTATCAAATTATTCCACCCCGAAGAACTGAAGGATGTGATTGTTGGAAATA
CAGATTATGATTGGAAAACATTTGAAAAGAATGCACGTTATGAACCAGGATATAACAGTTCACATCCCACCATAG
TGATGTTTTGGAAGGCTTTCCACAAATTGACTCTGGAAGAAAAGAAAAAATTCCTTGTATTTCTTACAGGAACTG
ACAGACTACAAATGAAAGATTTAAATAATATGAAAATAACATTTTGCTGTCCTGAAAGTTGGAATGAAAGAGACC
CTATAAGAGCACTGACATGTTTCAGTGTCCTCTTCCTCCCTAAATATTCTACAATGGAAACAGTTGAAGAAGCGC
TTCAAGAAGCCATCAACAACAACAGAGGATTTGGC**TGA**CCAGCTTGCTTGTCCAACAGCCTTATTTTGTTGTTGT
TATCGTTGTTGTTGTTGTTGTTGTTGTTTCTCTACTTTGTTTTGTTTTAGGCTTTTAGCAGCCTGAAGCCAT
GGTTTTTCATTTCTGTCTCTAGTGATAAGCAGGAAAGAGGGATGAAGAAGAGGGTTTACTGGCCGGTTAGAACCC
GTGACTGTATTCTCTCCCTTGGATACCCCTATGCCTACATCATATTCCTTACCTCTTTTGGGAAATATTTTTCAA
AAATAAAATAACCGAAAAACTAAAAAAAGAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3750

MERRSRRKSRRNGRSTAGKAAATQPAKSPGAQLWLFPSAAGLHRALLRRVEVTRQLCCSPGRLAVLERGGAGVQV
HQLLAGSGGARTPKCIKLGKNMKIHSVDQGAEHMLILSSDGKPFEYDNYSMKHLRFESILQEKKIIQITCGDYHS
LALSKGGELFAWGQNLHGQLGVGRKFPSTTTPQIVEHLAGVPLAQISAGEAHSMALSMSGNIYSWGKNECGQLGL
GHTESKDDPSLIEGLDNQKVEFVACGGSHSALLTQDGLLFTFGAGKHGQLGHNSTQNELRPCLVAELVGYRVTQI
ACGRWHTLAYVSDLGKVFSFGSGKDGQLGNGGTRDQLMPLPVKVSSSEELKLESHTSEKELIMIAGGNQSILLWI
KKENSYVNLKRTIPTLNEGTVKRWIADVETKRWQSTKREIQEIFSSPACLTGSFLRKRRTTEMMPVYLDLNKARN
IFRELTQKDWITNMITTCLKDNLLKRLPFHSPPQEALEIFFLLPECPVMHISNNWESLVVPFAKVVCKMSDQSSL
VLEEYWATLQESTFSKLVQMFKTAVICQLDYWDESAEENGNVQALLEMLKKLHRVNQVKCQLPESIFQVDELLHR
LNFFVEVCRRYLWKMTVDASENVQCCVIFSHFPFIFNNLSKIKLLHTDTLLKIESKKHKAYLRSAAIEEERESEF
ALRPTFDLTVRRNHLIEDVLNQLSQFENEDLRKELWVSFSGEIGYDLGGVKKEFFYCLFAEMIQPEYGMFMYPEG
ASCMWFPVKPKFEKKRYFFFGVLCGLSLFNCNVANLPFPLALFKKLLDQMPSLEDLKELSPDLGKNLQTLLDDEG
DNFEEVFYIHFNVHWDRNDTNLIPNGSSITVNQTNKRDYVSKYINYIFNDSVKAVYEEFRRGFYKMCDEDIIKLF
HPEELKDVIVGNTDYDWKTFEKNARYEPGYNSSHPTIVMFWKAFHKLTLEEKKKFLVFLTGTDRLQMKDLNNMKI
TFCCPESWNERDPIRALTCFSVLFLPKYSTMETVEEALQEAINNNRGFG

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FIGURE 3751

AAAAGGCCCACTTTGGGGGATAATGCTGAGGGACACTATGAAATCTTGGAATGATAGCCAGTCAGATCTGTGTAG
CACTGACCAAGAAGAGGAAGAAGAGATGATTTTTGGTGAAAATGAAGATGATTTGGATGAGATGATGGATTTAAG
TGATCTGCCTACCTCACTTTTTGCTTGCAGCGTCCATGAAGCAGTGTTTGAGGCACGAGAGCAGAAGGAAAGATT
TGAAGCACTCTTCACCATCTATGATGACCAGGTTACTTTTCAGCTGTTTAAAAGCTTTAGAAGAGTCAGAATAAA
TTTCAGCAAACCTGAAGCGGCAGCAAGAGCGCGAATAGAACTCCACGAAACAGACTTCAATGGGCAGAAGCTAAA
GCTATATTTTGCACAGGTGCAGATGTCCGGCGAAGTGCGGGACAAGTCCTATCTCCTGCCGCCCCAGCCTGTCAA
GCAGTTCCTCATCTCCCCTCCAGCCTCTCCCCCAGTGGGGTGGAAGCAGAGCGAAGATGCGATGCCTGTTATAAA
TTATGATTTACTCTGTGCTGTTTCCAAATTGGGACCAGGAGAGAAATATGAACTTCACGCGGGAACAGAGTCGAC
ACCCAGCGTGGTGGTTCATGTCTGTGAAAGTGAAACTGAAGAGGAAGAAGAGACAAAAAACCCCAAACAGAAAAT
TGCCCAGACAAGGCGCCCCGACCCTCCGACCGCAGCGTTGAATGAGCCCCAGACCTTTGATTGCGCGCTGTGAGG
CCCTTGGTTGTGGTGCGAGGCGGCTGCCCTGGTGGGCTCTGGCCATGGCGCTCTGTGCCTGCGGCCGATGCGTTG
CTG

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FIGURE 3752

MLRDTMKSWNDSQSDLCSTDQEEEEEMIFGENEDDLDEMMDLSDLPTSLFACSVHEAVFEAREQKERFEALFTIY
DDQVTFQLFKSFRRVRINFSKPEAAARARIELHETDFNGQKLKLYFAQVQMSGEVRDKSYLLPPQPVKQFLISPP
ASPPVGWKQSEDAMPVINYDLLCAVSKLGPGEKYELHAGTESTPSVVVHVCESETEEEEETKNPKQKIAQTRRPD
PPTAALNEPQTFDCAL

FIGURE 3753

AGTGTGGTTTTAGTTTTTCCTAAGAAGTGGCGTGGTTTGGGGCTTTATATCCGGGAGGAGCATATGTACGCAAAT
CCTGGGGCGTTTGCAAACCCGGATCCGGGGCGTCTGGCCCCATGCCCGGCCGGGCGTTTGAGGGCTACTGCCACG
CAGCGTTTCTGGAGCCTGCCGGCTGGTGCCCTGGTGGCCTTTATCTCTGTCCCCCTTTGTCCTCTTTATCTCAGG
CTCTCCAGGAGGCCGGGGGGCCCACTCCGCCTATCGCTCCCCTCGGCTACGCTGCCACTCCAATGCCCCGCAGGT
CGCGAGCTGCTGTTCTTTCGAAGGCGCCGGAGAACCAGGGGCGTCCCGCGCCACCTCTGACTCGGAGCAGCGCCG
AGCACTGACGCTCCCGCCCTTGGGCAAGGACGCCAGTGCGCCCGCGCGCGTCCCTCTGCGCGGCAGCCCGTCGCG
GGCCCTCAAGGGGAAGCCCAGGCCAGGATGGCCCCGGGTCGCGCGGTGGCCGGGCTCCTGTTGCTGGCGGCCGCC
GGCCTCGGAGGAGTGGCGGAGGGGCCAGGGCTAGCCTTCAGCGAGGATGTGCTGAGCGTGTTCGGCGCGAATCTG
AGCCTGTCGGCGGCGCAGCTCCAGCACTTGCTGGAGCAGATGGGAGCCGCCTCCCGCGTGGGCGTCCCGGAGCCT
GGCCAGCTGCACTTCAACCAGTGTTTAACTGCTGAAGAGATCTTTTCCCTTCATGGCTTTTCAAATGCTACCCAA
ATAACCAGCTCCAAATTCTCTGTCATCTGTCCAGCAGTCTTACAGCAATTGAACTTTCACCCATGTGAGGATCGG
CCCAAGCACAAAACAAGACCAAGTCATTCAGAAGTTTGGGGATATGGATTCCTGTCAGTGACGATTATTAATCTG
GCATCTCTCCTCGGATTGATTTTGACTCCACTGATAAAGAAATCTTATTTCCCAAAGATTTTGACCTTTTTTGTG
GGGCTGGCTATTGGGACTCTTTTTTCAAATGCAATTTTCCAACTTATTCCAGAGGCATTTGGATTTGATCCCAAA
GTCGACAGTTATGTTGAGAAGGCAGTTGCTGTGTTTGGTGGATTTTACCTACTTTTCTTTTTTGAAAGAATGCTA
AAGATGTTATTAAAGACATATGGTCAGAATGGTCATACCCACTTTGGAAATGATAACTTTGGTCCTCAAGAAAAA
ACTCATCAACCTAAAGCATTACCTGCCATCAATGGTGTGACATGCTATGCAAATCCTGCTGTCACAGAAGCTAAT
GGACATATCCATTTTGATAATGTCAGTGTGGTATCTCTACAGGATGGAAAAAAAGAGCCAAGTTCATGTACCTGT
TTGAAGGGGCCCAAACTGTCAGAAATAGGGACGATTGCCTGGATGATAACGCTCTGCGATGCCCTCCACAATTTC
ATCGATGGCCTGGCGATTGGGGCTTCCTGCACCTTGTCTCTCCTTCAGGGACTCAGTACTTCCATAGCAATCCTA
TGTGAGGAGTTTCCCCACGAGTTAGGAGACTTTGTGATCCTACTCAATGCAGGGATGAGCACTCGACAAGCCTTG
CTATTCAACTTCCTTTCTGCATGTTCCTGCTATGTTGGGCTAGCTTTTGGCATTTTGGTGGGCAACAATTTCGCT
CCAAATATTATATTTGCACTTGCTGGAGGCATGTTCCTCTATATTTCTCTGGCAGATATGTTTCCAGAGATGAAT
GATATGCTGAGAGAAAAGGTAACTGGAAGAAAAACCGATTTCACCTTCTTCATGATTCAGAATGCTGGAATGTTA
ACTGGATTCACAGCCATTCTACTCATTACCTTGTATGCAGGAGAAATCGAATTGGAGTAATAGAAAATGGAAGAT
GGTGTTGTTAATAAAGGCATTTAATAGATAAAAACATCTCCAAAAAGGATTTTGAAGCTGATCCTATTTAGTTAA
AAAGATAATTTTGCTTTCAACTGTAGGTCCAGAAAACTAATTATTGGCATCAGTCTGTGAAATAGTCCATTATTT
GTTGTTAAAAATGCTTCAAAAGGTTTTCAGTGTCAGTCTGAGATGCCTGGTATATAGGAGCCTTTGGGAAATACT
TATTTTTCAGTATTCCATGCATATTAGATATCACCATGAAGCAAGAGACATGCATTCTATAATCATGTAGACACT
CAGACTCAGGGGAAAATACAAGTTATATCCTGAAAGCCTTTAAAACTCTATGGTAGGATCAAAGATTCAAATGGT
TTCAGAGAGGTTTTATTTCAATTAATTTGTTCTAGTGCTTTCAAGAGCAAGTACATCAAAATGTAGAAGGTAAAA
TGTATGCAACACTAATATAAATTATTCCAAGTCTTTAAGGAGCCAAAGAAAAAAAAGATTTCTCACAGCTTTTTG
TTCTGTTTTGTATTTCAATTAGGAACTTGCAGTATTATTTTGAAAACCATTCTAAAATAATAGGAGTTAGGAAAT
AAATAAAGTTTTGCTAGCCCTGCTAAGTTCAGGCTTAGAGGCTTATCGCTAAGTXTAAACTTCACCAGATTCCAC
GAAAAGCTGGATAGCTTTTTTTCTGACTTATGTTGTGGTTGCACCCCTCACAAATGGCAGAACAGTATGTAAAGC
TGGTAACACCTCGGTTTCAGTGCACCATGTGTTTGCTTTGTGAAGGTGAAGAATATGTTGGTTTAGAGAAAGAAA
TTGGATGTAATTTTATGCAATTTACTTTTAAAGACAAACATAACTATTTAGCAGAGAATATTTTAATAAATGCAA
AACAACAGCTGGACTGCTGTACATCAAGGACAGATTAACTGGAAAACATATGTTCCTTATGTGTGATTGAGAGCC
ATTCAGAAAAGACTTCCTTTGTGTTCAGCCTATACTTTTCCATATGGTATACCTTGAAAAAAATTAGCACACCAT
GGTTATTTTTCTACCTTTTATAAAAGACAGAGCCTGTTTACTCATTTAGAAGATAGAGAAAATTGGTCTAAAATT
GAACATCCTAGATTCACACTCCCAAGTCACTTAAGGTGATTTGATGGTGAGGAAAATGATTGACAAAGCCCAACA
ATGATCTCAGGAATTACATTTTCCAACAGACCAAAAAATGTTTTCATGTAGCAGCAATGCAGATTTGGTGAATAT
TTAATATATATTTTAGTATGTATTTCACTTTATGACTGACAATTAAAAAATATTGTTTGGCCAAATAGTAAACAC
CCTTTTGAAACCATGAAAAAA

FIGURE 3754

MAPGRAVAGLLLLAAAGLGGVAEGPGLAFSEDVLSVFGANLSLSAAQLQHLLEQMGAASRVGVPEPGQLHFNQCL
TAEEIFSLHGFSNATQITSSKFSVICPAVLQQLNFHPCEDRPKHKTRPSHSEVWGYGFLSVTIINLASLLGLILT
PLIKKSYFPKILTFFVGLAIGTLFSNAIFQLIPEAFGFDPKVDSYVEKAVAVFGGFYLLFFFERMLKMLLKTYGQ
NGHTHFGNDNFGPQEKTHQPKALPAINGVTCYANPAVTEANGHIHFDNVSVVSLQDGKKEPSSCTCLKGPKLSEI
GTIAWMITLCDALHNFIDGLAIGASCTLSLLQGLSTSIAILCEEFPHELGDFVILLNAGMSTRQALLFNFLSACS
CYVGLAFGILVGNNFAPNIIFALAGGMFLYISLADMFPEMNDMLREKVTGRKTDFTFFMIQNAGMLTGFTAILLI
TLYAGEIELE

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FIGURE 3755

AGCCGCCACACTTTCCCAAGCCCGCAGGCGCCCCCCCCAACACCAGCGCTGCACCCCCGACCCATTCCCCGCGGC
CCCCTCCAGGAGAAAAA**ATG**AAACCAGACTGGCCGAGGAGGGGGGCGGCAGGGACCAGGGTGCGGAGCAGAGGTG
AGGGAGACGGGACTTACTTTGCGAGGCGCGGTGCAGGGCGCCGCCGACGAGAAATAAAGGCCCCGATACGGGCTG
CCTGGAGCCCCCCGAGCGCAGCAATGTCAGGGCTCCAGTCCGGGCGGCGTTGGCGGCCGCAGGGGACGGGGACGG
GCGCGCGTGCGGCGGGCGCTCTCGCTGCGCTCCGGCTCGGGCCCCGGCTCCGCGCGGCTCCGCTCCTGGCTCCCC
TCTGGCTCCTGGCACCAACTCCGGACAGTCACATGACGCCGGCGCCGCTCGCTCTGCGAGCCTCCCGGGGCTGGC
GGGAGAATAACTTGTCTGACTACCAGTATTCTTGGATGCAGAAGTGC**TGA**AGATGAGCACACACACGTACGGAGA
ATTTCTGGAGAATTCAGCTGCTCAGAACAAGAACTGAGATCCAGAGAGATGATGACTTTGCCCATAGACCAAACA
AAGAAATACATGTTTCAGTCCTGTGTCCTCCTGCTATGTGTGTCCGGAATTGGTGGGTTCTTGGTCTCACTGACT
CCAAGAATGAAGCTGCGGACCCTCGCGGACCGTGTGTGAATGCCTGCTCTGTGAGCCCTCAGAATCTACTGGCTG
AATGAGTGCGTGGAGGAAATGTGCTCAGAGCTGCTGTGTGTCATCCTGTGTTTGAAGTGCTCCTGCAGCTATCAT
TCATCCAGTTAAGAATTTGAAGAAGTGTGTGCACAAAGACGGAGTCTCACTCTGTTGCCCAGGCTGGAGTGCAGT
GGCACAATCTCGGCTCACTGCAACCTCTACCTCCTGGATTCAAGCGGTTTTCCTGCCTCAGCCTCCAGAGTAACA
GGGATTACAGGCATACTCCACCTTGCCCTGCTGATTTTGTATTTTTAGTAGAGACAAGAGTTTCACCATGTTGGC
CAGGCTGGTCTTGAACTCCTGACCTCAAGTGATCCACTGCCTCAGCCTCCCAAAGTGCTGGGATTATAGGCGTGA
GCCACTGCGCCTGGCCAAATGCTCTACTTTTTAATCAATGTTTTCCAAAATAGGGATTTTTGCTATGTGCTTTAG
AAATTAGAGAACAAACGGTGATAATATATGCTAAACTTAAAATTAGTATGCCTCCTTTTATAGACAACAAGAACT
TTGTCACTTCCCAGTTTGTCTTGTCATTCAGGAGGCTCAGAGCTACGATCTGTGCCCACTCGTGCTGCCTCTTCT
TAACTTTGATTTCCTGAAGCAGCGATTTCATCTCCGTTTCCCCTCATCACCTGTTCTTTTAACTGTTTAAAAACA
GCATTACATGTTGTTGCAAGTGGCCTCAAATTCTTTTTGGTAGAAGGGAAATTGTAATCCATGAGAAGAAAAAAA
TTTTCCTAACTATTCTCAGGTGTGTTTAAGGGCTGCATTCCATGATGCTATCAGTGCCTTCTTTCAGCTCACAGG
ATATCGGCCATGTTAATGAGTCTGATGTTGCTAGTATCACAGGCACCGGAAAATATGCACATTATGCTGGAGCAT
TAGAATGCAACAGAAAGAGCCCTGGGCTTGGAGTATGCAGAACTGGTTCTTGTTACAACTCCTCTTACTAGTGGG
CTCTGGAAGAAAACACATTGAATTCATGATCATGGTTAACCTTTGGAGAGAGAGAGGAGACCAGGATGAAGGAGC
CAGTCGAAGATCCTGTTCAAGTGTACACTGAGCCAGCAGGTTCACCAGAAAGCTATTGAGCGTTTGCTGGAACAC
ATTATGCAGGGTGAATTTCTTCTGGAATGTTGCCAAGGATTTTTTATGCTTCTGTGGCAGGCATTTCTTGAACAT
TGTCATTTAGCCAAGCAAAGAAGATTTTCTTAAAGGATAGAAAGTGTTTAAAAATTTTTGTTTGTTTGAAGATAG
GTTAAATGGCTATATGATCTCAGGATAAGACAGAGAAAATCACTTATTTCTCTAAGTGATCTGATTAGGTTAGTG
ATGTTTTGCCTTTAAACAGATTCATCATTATTCCTAAAGTATTGCTGTATTAATACTGTCTTCTAGAAAGTATCC
ACCAGTGCCTACTTTTCTTCGATATCATTAGCTGTTTTTCGAAACTGAATTTGCTCTTCAGAGATTTCTCATATG
TTTGCGTATAAGGAACTACTGGTAATAGCCAAGAAAATTTGGAGGTGCAGAGAACATGCTGAAACAGAATTTTTC
ACTTTCAATTCTAGAACTATGCCATAAAAAAAAAGGAAAATGT

FIGURE 3756

MKPDWPRRGAAGTRVRSRGEGDGTYFARRGAGRRRREIKAPIRAAWSPPSAAMSGLQSGRRWRPQGTGTGARAAG
ALAALRLGPRLRAAPLLAPLWLLAPTPDSHMTPAPLALRASRGWRENNLSDYQYSWMQKC

FIGURE 3757

GAATTCCGGCTCCCGCGGCTGCAGGCGCGCGCCTAGAGTGCCTGGCGGGCTCCGGCTTCCGCGTCCGCCCCGGCC
CCGGTCCAGACTTAGTCTTCAGCTCCGCGCCCGCTCCGCCGCGGCCCACCGCGCCCGCCGGCAGCCGAGCCCCCA
GCGACGCCCGCACAGCTCCGGGTGCCCAGACAGGGGGCCATGCCGTGCCGGAGGGAGGAGGAAGAGGAAGCCGGC
GAGGAGGCGGAGGGGGAGGAAGAGGAGGAGGACAGCTTCCTCCTACTGCAGCAGTCAGTGGCGCTGGGCAGCTCG
GGCGAGGTGGACCGGCTGGTGGCCCAGATCGGCGAGACGCTGCAGCTGGACGCGGCGCAXGACAGCCCGGCCTCG
CCGTGCGGGCCCCCGGGGGCGCCGCTGCGGGCCCCGGGGCCCCTGGCTGCGGCGGTGCCGGCGGACAAGGCCAGG
TCCCCGGCGGTGCCGCTGCTGCTGCCGCCCGCGTTGGCGGAGACTGTGGGCCCGGCGCCCCCTGGGGTCCTGCGC
TGCGCCCTGGGGGACCGCGGCCGCGTGCGGGGCCGCGCTGCGCCCTACTGCGTGGCCGAGCTCGCCACAGGCCCC
AGCGCGCTGTCCCCACTGCCCCCTCAGGCCGACCTTGATGGGCCTCCGGGAGCTGGCAAGCAGGGCATCCCGCAG
CCGCTGTCGGGTCCGTGCCGGCGAGGATGGCTCCGGGGCGCCGCCGCCTCCCGCCGCCTGCAGCAGCGACGCGGG
TCCCAACCAGAAACCCGCACAGGCGACGACGACCCGCACCGGCTTCTGCAGCAGCTAGTGCTCTCTGGAAACCTC
ATCAAGGAGGCCGTGCGAAGGCTTCATTCGCGACGGCTGCAGTTACGTGCAAAGCTTCCCCAACGCCCGCTCCTG
GGACCTCTGTCGGCCCCGGTGCATGAACCCCCTTCGCCTCGCAGCCCTCGCGCGGCCTGCAGTGACCCTGGCGCC
TCCGGGAGGGCGCAGCTCAGAACTGGCGACGGCGTTCTTGTGCCTGGCAGCTAACACGCCCGGGGTGGCCACAGC
GCCAGCCTCAGACTGGAGGGCAAGGGGTTCCCTTGAGGGCTGCAGTTCTACTCAGGCTGGTGGAGAACTCTGGCT
TTTGGAAGCGAGAGTAAAAAGCTAATGACGAGGAACCGAAAAATCGCGAGTGTTTCGCGGGTAACTGGGGTTGAG
GGCCAAAATATTTGGAATGAAGGACTTGGCCCTATTTAAGGCAGATTTTACAGAGCGCACCTCAAACGTACAAGT
CAGTAGGACTCCTTATTTGGCGTGACCCGACCTGGCCGCGGAGCCTGCATTTCCTCGCAGCCTCTCAGTGCCCTC
CAGCCCCGCGACCATGTGGCCACAATCCACGCTTCTCCGGATCGCGGTGCGCCGGAACCACGGAGGATGATGCCA
GTTACTTGCTTTACCTTTTCAGGGCTGGCTCCTGATCCACTTTGGGGGAGGAGAACATGAGTAGATAATTTCAGG
GTGCAGCCCAATCTGCCAGACTTAAAAAAACCATCTTGTGTCTTTGGAGGTGCTGCTTAATATCAAACATGCGGT
GCCATGAAGGGACCCTTTGGGGGTTGAATAGGAGTTAACCCCTGCGCTCTCTTTGCAACTGTCTCTCTTCTCAGA
GTGGTGGGGGAAGGCTGTACGACACGGGTGGGGAAAGGAGGTGGGGGCGGGGAGTATTGAATGGTGGTGGAAGGG
TAGAGAGGCGCGGAGTGAACCCCACGCCCTGTCTAAAGTGTATTTTCAGAGCCGGCCCGCCTCTCCTCGGTTCAA
GGTCACTGTTTCCTGGGCACGCACTGGGTTGCGGGACAGAGTAGCCAGTTTCTGCCGGTGCTCGGAGAAGAGCGC
AGTGTTTTGCAAGTGCTGGAGTCTCCTGAGGACACGCGCGTCGCCGCCACCGCGGGTGTGGGAAAGCGCGGACGT
GCTGGGCGTCTGTGCTTCGGTAGGCGACCACCGCCCCTGGCCGCGCTCCGGGCTTTCACGGAAACTCCCGAGACC
GGGCCCTGGGTTCCTCCTCTCCTACTCGGCTCTGCAGTCCTACTCAAGCGGGTGGCTCTGGGATCCTGGGGGCCT
GGGTTGGGGGCTAGGGAGACGCCATGTGATGGACACTCCAGGGACACACAGCCTAGCACAGCAGCTTATAATGGG
CTCTCCGGGGCCATTTGCAATAACAGCTGCAATTCCCTGGATAGACGAGTTGATTTCCTCCCTCTGCCCCTCCCC
CAGCCATGCCAGCTGGCCTTTGTAAGTGCAGGAAACCGAGTAGAAAATGTGACCCTCCAAATGGAGAAGCTGCCA
GCTTTGCCATTGTGAACCATGGTGAAGTGCTTGGAACATACTGTTCACTCACTCTAAAGGCGCTGAGACTGTGCT
GTTGTTCTCGTTTTTATAGTCAATGGCTTGTTCATCATCCAGATGTGGCTACTGACATATCTACACTTCGCACCG
GAGTGTCTGGAATTGTGGCTATCCTGATTATAGGATTTTAACTTAACTGAAATGCCTGCTTTGAATAAATGTGTT
GGGTTTTT

FIGURE 3758

MPCRREEEEEAGEEAEGEEEEEDSFLLLQQSVALGSSGEVDRLVAQIGETLQLDAAXDSPASPCGPPGAPLRAPG
PLAAAVPADKARSPAVPLLLPPALAETVGPAPPGVLRCALGDRGRVRGRAAPYCVAELATGPSALSPLPPQADLD
GPPGAGKQGIPQPLSGPCRRGWLRGAAASRRLQQRRGSQPETRTGDDDPHRLLQQLVLSGNLIKEAVRRLHSRRL
QLRAKLPQRPLLGPLSAPVHEPPSPRSPRAACSDPGASGRAQLRTGDGVLVPGS

FIGURE 3759

GGCTGCCGGGGAGGCCAGAGCGTGGAGCGCTGCGCGGCGCGGCGGCCGGGCCCTCGAGACGGGGACGGACACACC
AGCCCCTCAGATACCACTTGGCCACTCCCGCTGAGGCCACTCCCACTGCGTGGCTGAAGCCTCGAGGTCACCAGG
CGGAGGCGCGGAGATGCCCCTGCATCAGCTGGGGGGACAAGCCGCTCACCTTCCCCAGCCCCAACTCAGCCATGGA
AAACGGGCTTGACCACACCCCACCCAGCAGGAGGGCATCCCCGGGCACACCCCTGAGCCCCGGCTCCCTCCGCTC
CGCTGCCCATAGCCCCCTGGACACCAGCAAGCAGCCCCTCTGCCAGCTCTGGGCCGAGAAGCATGGCGCCCGGGG
GACCCATGAGGTGCGGTACATCTCGGCCGGGCAGAGCGTGGCGTGCGGCTGGTGGGCCTTCGCACCGCCGTGCCT
GCAGGTCCTCAACACGCCCAAGGGCATCCTGTTCTTCCTGTGTGCGGCCGCATTCCTGCAGGGGATGACTGTGAA
TGGCTTCATCAACACAGTCATCACCTCCCTGGAGCGCCGCTATGACCTGCACAGCTACCAGAGCGGGCTCATCGC
CAGCTCCTACGACATTGCCGCCTGCCTCTGCCTCACCTTCGTCAGCTACTTCGGGGGCTCAGGGCACAAGCCGCG
CTGGCTGGGCTGGGGCGTGCTGCTTATGGGCACGGGTTCGCTGGTGTTCGCGCTGCCCCACTTCACGGCTGGCCG
CTATGAGGTGGAGTTGGACGCGGGTGTCAGGACGTGCCCTGCCAACCCCGGCGCGGTGTGTGCGGACAGCACCTC
GGGCCTGTCCCGCTACCAGCTGGTCTTCATGCTGGGCCAGTTCCTGCATGGCGTGGGTGCCACACCCCTCTACAC
GCTGGGCGTCACCTACCTGGATGAGAACGTCAAGTCCAGCTGCTCGCCCGTCTACATTGCCATCTTCTACACAGC
GGCCATCCTGGGCCCAGCTGCCGGCTACCTGATTGGAGGTGCCCTGCTGAATATCTACACGGAAATGGGCCGACG
GACGGAGCTGACCACCGAGAGCCCACTGTGGGTCGGCGCCTGGTGGGTCGGCTTCCTGGGCTCTGGGGCCGCTGC
TTTCTTCACCGCCGTTCCCATCCTTGGTTACCCTCGGCAGCTGCCAGGCTCCCAGCGCTACGCGGTCATGAGAGC
GGCGGAAATGCACCAGTTGAAGGACAGCAGCCGTGGGGAGGCGAGCAACCCGGACTTTGGGAAAACCATCAGAGA
CCTGCCTCTCTCCATCTGGCTCCTGCTGAAGAACCCCACGTTCATCCTGCTCTGCCTGGCCGGGGCCACCGAGGC
CACTCTCATCACCGGCATGTCCACGTTCAGCCCCAAGTTCTTGGAGTCCCAGTTCAGCCTGAGTGCCTCAGAAGC
TGCCACCTTGTTTGGGTACCTGGTGGTGCCAGCGGGTGGTGGCGGCACCTTCCTGGGCGGCTTCTTTGTGAACAA
GCTCAGGCTCCGGGGCTCCGCGGTCATCAAGTTCTGCCTGTTCTGCACCGTTGTCAGCCTGCTGGGCATCCTCGT
CTTCTCACTGCACTGCCCCAGTGTGCCCATGGCGGGCGTCACAGCCAGCTACGGCGGGAGCCTCCTGCCCGAAGG
CCACCTGAACCTAACGGCTCCCTGCAACGCTGCCTGCAGCTGCCAGCCAGAACACTACAGCCCTGTGTGCGGCTC
GGACGGCCTCATGTACTTCTCACTGTGCCACGCAGGGTGCCCTGCAGCCACGGAGACGAATGTGGACGGCCAGAA
GGTGTACCGAGACTGTAGCTGTATCCCTCAGAATCTTTCCTCTGGTTTTGGCCATGCCACTGCAGGGAAATGCAC
TTCAACTTGTCAGAGAAAGCCCCTCCTTCTGGTTTTCATATTCGTTGTAATTTTCTTTACATTCCTCAGCAGCAT
TCCTGCACTAACGGCAACTCTACGATGTGTCCGTGACCCTCAGAGATCCTTTGCCCTGGGAATCCAGTGGATTGT
AGTTAGAATACTAGGGGGCATCCCGGGGCCCATCGCCTTCGGCTGGGTGATCGACAAGGCCTGTCTGCTGTGGCA
GGACCAGTGTGGCCAGCAGGGCTCCTGCTTGGTGTACCAGAATTCGGCCATGAGCCGCTACATACTCATCATGGG
GCTCCTGTACAAGGTGCTGGGCGTCCTCTTCTTTGCCATAGCCTGCTTCTTATACAAGCCCCTGTCGGAGTCTTC
AGATGGCCTGGAAACTTGTCTGCCCAGCCAGTCCTCAGCCCCTGACAGTGCCACAGATAGCCAGCTCCAGAGCAG
CGTCTGACCACCGCCCGCGCCCACCCGGCCACGGCGGGCACTCAGCATTTCCTGATGACAGAACAGTGCCGTTGG
GTGATGCAATCACACGGGAACTTCTATTTGACCTGCAACCTTCTACTTAACCTGTGGTTTAAAGTCGGCTGTGAC
CTCCTGTCCCCAGAGCTGTACGGCCCTGCAGTGGGTGGGAGGAACTTGCATAAATATATATTTATGGACACACAG
TTTGCATCAGAACGTGTTTATAGAATGTGTTTTATACCCGATCGTGTGTGGTGTGCGTGAGGACAAACTCCGCAG
GGGCTGTGAATCCCACTGGGAGGGCGGCGGGCCTGCAGCCCGAGGAAGGCTTGTGTGTCCTCAGTTAAAACTGTG
CATATCGAAATATATTTTGTTATTTAAGCCTGAAAAAAAAAAAAAAAAAA

FIGURE 3760

MPLHQLGDKPLTFPSPNSAMENGLDHTPPSRRASPGTPLSPGSLRSAAHSPLDTSKQPLCQLWAEKHGARGTHEV
RYISAGQSVACGWWAFAPPCLQVLNTPKGILFFLCAAAFLQGMTVNGFINTVITSLERRYDLHSYQSGLIASSYD
IAACLCLTFVSYFGGSGHKPRWLGWGVLLMGTGSLVFALPHFTAGRYEVELDAGVRTCPANPGAVCADSTSGLSR
YQLVFMLGQFLHGVGATPLYTLGVTYLDENVKSSCSPVYIAIFYTAAILGPAAGYLIGGALLNIYTEMGRRTELT
TESPLWVGAWWVGFLGSGAAAFFTAVPILGYPRQLPGSQRYAVMRAAEMHQLKDSSRGEASNPDFGKTIRDLPLS
IWLLLKNPTFILLCLAGATEATLITGMSTFSPKFLESQFSLSASEAATLFGYLVVPAGGGGTFLGGFFVNKLRLR
GSAVIKFCLFCTVVSLLGILVFSLHCPSVPMAGVTASYGGSLLPEGHLNLTAPCNAACSCQPEHYSPVCGSDGLM
YFSLCHAGCPAATETNVDGQKVYRDCSCIPQNLSSGFGHATAGKCTSTCQRKPLLLVFIFVVIFFTFLSSIPALT
ATLRCVRDPQRSFALGIQWIVVRILGGIPGPIAFGWVIDKACLLWQDQCGQQGSCLVYQNSAMSRYILIMGLLYK
VLGVLFFAIACFLYKPLSESSDGLETCLPSQSSAPDSATDSQLQSSV

FIGURE 3761A

CTTTCCGACACTCTTTGGGAAGAGAATCTCTAATGACGGCAACAGTGGAGAACCTAACGTTCCAGAAGGACACTT
TGGGAAATGCTGTTGACAAAAACAGGCGCCACGGCTCGACAGAGCCACTCGTCCTCGCCTGGTCATCCCAGTTCC
GGAGGCTGACCTGGGGATGCGCCCTGGACGCCCTGCACCGCAGTCCTTGCGTCGCTGCTAGTCAGCACGGCGTTA
CCCACCTCATCCGCAGCTCCAGGACGCCGCACTCCACGCGCTGCCGCAAGGAGGACGCGCAGCCTGGTCACCATG
GAAACGGTGCCGCCTCCGTCACGGCTCAAGCGAGAGGTCAAAGGTCAGTCCTGCAAGTTCCGCTTCCGGTTCCGA
GATCCTGTTTGTTTTCTGAAAGCTTTGTGGTTTCGGTGAGCTCTCAGAGCCGATTTCTAGCGTCCGTGCCGGGGA
CAGGTGTCCAGAGGTCGACTGCTGCAGACATGGCGGCCTCCACCGCGGCCGGGAAGCAGCGGATTCCCAAAGTGG
CCAAGGTGAAAAACAAAGCCCCGGCTGAGGTACAGATAACTGCTGAACAACTCCTAAGAGAGGCTAAAGAAAGAG
AACTTGAGCTTCTTCCACCTCCACCTCAACAGAGAATCACAGATGAAGAAGAATTAAATGATTATAAACTAAGGA
AAAGGAAGACTTTTGAAGATAATATAAGAAAAAACAGGACTGTGATTAGTAACTGGATAAAATACGCACAATGGG
AAGAAAGCCTAAAGGAGATTCAAAGGGCTCGATCCATATACGAGCGTGCTTTAGATGTAGACTACCGAAATATTA
CACTCTGGCTGAAATACGCAGAAATGGAAATGAAGAATCGCCAAGTCAACCATGCTCGAAATATCTGGGACCGGG
CCATAACAACGCTGCCTCGAGTTAATCAGTTCTGGTACAAGTACACGTACATGGAGGAAATGTTGGGAAACGTTG
CCGGTGCCCGGCAGGTGTTTGAGCGCTGGATGGAGTGGCAGCCTGAGGAGCAAGCCTGGCACTCCTACATCAACT
TTGAGCTGAGATACAAAGAGGTGGATCGGGCCCGCACCATTTATGAGCGATTTGTCCTCGTGCACCCTGATGTTA
AGAACTGGATCAAGTATGCCCGCTTTGAAGAAAAACATGCTTATTTTGCCCATGCACGGAAAGTGTATGAGAGAG
CTGTGGAATTCTTTGGAGATGAACATATGGATGAGCACCTTTATGTTGCCTTTGCCAAGTTTGAAGAAAATCAGA
AAGAGTTTGAAAGGGTACGAGTGATTTACAAGTATGCCCTGGACAGAATTTCAAAACAAGATGCCCAAGAACTCT
TTAAAAATTATACCATCTTTGAGAAGAAGTTTGGTGATAGGCGGGGTATTGAAGATATCATTGTGAGCAAACGGA
GATTCCAGTACGAAGAAGAAGTGAAGGCGAATCCACACAATTATGATGCATGGTTTGATTACTTGCGCTTGGTAG
AAAGTGACGCAGAAGCTGAAGCCGTGAGAGAAGTCTATGAAAGGGCCATTGCCAATGTCCCACCCATTCAGGAGA
AGAGGCACTGGAAGCGCTACATTTATCTTTGGATCAACTATGCACTCTATGAAGAATTGGAGGCAAAGGATCCTG
AGAGGACAAGACAGGTGTATCAAGCCTCTTTGGAACTAATTCCTCACAAAAAGTTCACATTTGCCAAAATGTGGA
TACTGTATGCACAGTTTGAAATACGACAGAAGAATCTGTCATTAGCCAGAAGAGCATTGGGAACTTCCATAGGCA
AATGTCCAAAGAACAAATTATTTAAAGTTTACATAGAATTGGAGCTACAGCTTCGAGAATTTGACAGATGCCGGA
AGCTTTATGAAAAGTTCCTGGAATTTGGACCTGAAAATTGTACCTCATGGATTAAATTCGCTGAATTAGAGACAA
TCCTTGGTGATATTGACAGAGCACGGGCAATCTATGAATTAGCCATCAGTCAGCCACGTTTAGACATGCCAGAGG
TGCTTTGGAAATCATATATTGATTTTGAAATTGAGCAGGAAGAAACAGAAAGAACACGAAACCTTTACCGGCGGT
TGCTTCAACGGACGCAGCATGTCAAGGTATGGATCAGCTTTGCTCAGTTTGAGTTGTCTTCAGGAAAAGAAGGAA
GTTTGACTAAATGCAGACAAATTTATGAAGAAGCTAACAAAACCATGCGAAACTGTGAAGAAAAGGAAGAGAGAC
TTATGCTGCTGGAATCTTGGCGAAGTTTTGAAGAAGAATTTGGAACAGCTTCAGATAAGGAGAGAGTAGACAAAC
TCATGCCAGAGAAAGTCAAGAAGAGAAGAAAGGTCCAGACTGATGATGGGTCTGATGCAGGCTGGGAAGAATACT
TTGATTACATCTTTCCAGAAGATGCTGCCAACCAACCTAACCTCAAACTCCTGGCCATGGCCAAACTGTGGAAGA
AACAGCAGCAGGAAAAGGAGGATGCTGAGCACCATCCAGATGAGGACGTCGATGAGAGTGAATCCTGATCTTTTT
TTCATAGACAAATGTTTTGTTATTTTTATAAATTAATTGTTTGGAACTCTTGTGACTCCTGGAAGTTCTTATATA
TTTCACCAGTAAGAAATTGATTGGTATCTTTGATGGCTACTTTTTAAGTTATTTTTTAAATGCTCTTGGGTTAGC
TAGGGGTAGGGATTGCAAGTAAAGGACTTTTTTAACTGCTGGATTTGTTTTTCCAACTGAGTCCAAACTTTTCTA
ATGTCTGTCCACATCATGCATTAGGAAATGTAATTAAGGTAACATTCTACAGTTACTTTTCATGTCATACCCATA
AAGATAGTTTATGCATTCATCTGAAATGTGTAACTTTTTCATGTCTTCAGAGTCACAGACTTGAGTTCATTTCCC
AGCTCTGCCACTCATGATTATATAACTTAATTTTCATTTTCCTCATTCACAAAATGGGCCAATAGTTTGACAGCT
CATTTTGAAGATTACATTATAAAAGGAATATACCTGGTGGGTGCATAGTAAGTGCTCAGTAAATTGTTTGTTCTA
AGCCACTTTTAAAAATGGTTTCATTCCTTGTAGAATTGAATGCGAGTGGATTAATAATTTACCTTACTTTCTTAC
TAGTGTCCAGTTATATTGTTTTTTAGAACAACACTTGGAAAATAATTTGCAGTGATTATATTTCTGAACAAGGTT
CAGAAAACATTGTTTACTAAGAATTTAATCTAATAATTTCAGTTAGGCGCTCATCAGTTCTCCAGAGTGGTTGAG
TTTGTAATACCTTGTTTAAAGAATAATGGCTTGTTCACGTGTGTGCTATGAAAAATGATGTCCCATGTTCACATA
AATTTGGGAAATTCTGGACTAAGACTTAAGTCTCGTTAATCAAATCTCTTTATAGTTAGGCTTCTGTATATTATG
TATCTCCAGTAGCAATGTTGCCATATTATTTATTTCCCAAACTTAGTGGACAATGGAGTCATTTCTACCTAGAGT
ACCAGTAAACATCTCCCAGTGTGCTATAGTAGAAAATGTCTACTCCTCACTGCTGACATGTTAAACTTACTCTTG

FIGURE 3761B

GTTTAGAGCATGTGTAGAAACACCTAAGGTAGCTCTATGCTAAATAATGAAGAGTAGCACAAGAATGAATGTATT
TGCTGATACGTTGCTCACATTCTCAAGCAAAAATTCAACTGCATTAACCGATCTGAGAGTTTTCCTTTAACCTGG
ACTGTGTTTCTCAAGCACATTTTTTCTTTGTTCACTGCCCAAGGACTAGAACTGTATTTTTAAGGTTGTTTTCCC
CTAAAAGGACCTTTAGTAAGCAAATTTATTATTAAATGTGCACATCTTATTCACCCAAGGGAATAAAAGCTACTT
CGT

FIGURE 3762

MTATVENLTFQKDTLGNAVDKNRRHGSTEPLVLAWSSQFRRLTWGCALDALHRSPCVAASQHGVTHLIRSSRTPH
STRCRKEDAQPGHHGNGAASVTAQARGQRSVLQVPLPVPRSCLFSESFVVSVSSQSRFLASVPGTGVQRSTAADM
AASTAAGKQRIPKVAKVKNKAPAEVQITAEQLLREAKERELELLPPPPQQRITDEEELNDYKLRKRKTFEDNIRK
NRTVISNWIKYAQWEESLKEIQRARSIYERALDVDYRNITLWLKYAEMEMKNRQVNHARNIWDRAITTLPRVNQF
WYKYTYMEEMLGNVAGARQVFERWMEWQPEEQAWHSYINFELRYKEVDRARTIYERFVLVHPDVKNWIKYARFEE
KHAYFAHARKVYERAVEFFGDEHMDEHLYVAFAKFEENQKEFERVRVIYKYALDRISKQDAQELFKNYTIFEKKF
GDRRGIEDIIVSKRRFQYEEEVKANPHNYDAWFDYLRLVESDAEAEAVREVYERAIANVPPIQEKRHWKRYIYLW
INYALYEELEAKDPERTRQVYQASLELIPHKKFTFAKMWILYAQFEIRQKNLSLARRALGTSIGKCPKNKLFKVY
IELELQLREFDRCRKLYEKFLEFGPENCTSWIKFAELETILGDIDRARAIYELAISQPRLDMPEVLWKSYIDFEI
EQEETERTRNLYRRLLQRTQHVKVWISFAQFELSSGKEGSLTKCRQIYEEANKTMRNCEEKEERLMLLESWRSFE
EEFGTASDKERVDKLMPEKVKKRRKVQTDDGSDAGWEEYFDYIFPEDAANQPNLKLLAMAKLWKKQQQEKEDAEH
HPDEDVDESES

FIGURE 3763

GAAATCTGTACGAACTATTCAGGCTGCTTTTAGAGGCATGAAAGTTAGACAAAAATTGAAAAATGTATCAGAGGA
AAAGATGGCAGCCATTGTTAACCAATCTGCACTCTGCTGTTACAGAAGCAAAACTCAGTATGAAGCTGTTCAAAG
TGAAGGTGTTATGATTCAAGAGTGGTATAAAGCTTCTGGCCTTGCTTGTTCACAGGAAGCAGAGTATCATTCTCA
AAGTAGGGCTGCAGTAACAATTCAAAAAGCTTTTTGTAGAATGGTCACAAGAAAACTGGAAACACAGAAATGTGC
TGCCCTACGGATTCAGTTCTTCCTTCAGATGGCTGTGTATCGGAGAAGATTTGTTCAGCAGAAAAGAGCTGCTAT
CACTTTACAGCATTATTTTAGGACGTGGCAAACCAGAAAACAGTTTTTACTATATAGAAAAGCAGCAGTGGTTTT
ACAAAATCACTACAGAGCATTTCTGTCTGCAAAACATCAAAGACAAGTCTATTTACAGATCAGAAGCAGTGTTAT
CATTATTCAAGCTAGAAGTAAAGGATTTATACAGAAACGGAAGTTTCAGGAAATTAAAAATAGCACCATAAAAAT
TCAGGCTATGTGGAGGAGATATAGAGCCAAGAAATATTTATGTAAAGTGAAAGCTGCCTGCAAGATTCAAGCCTG
GTATAGATGTTGGAGAGCACACAAAGAATATCTAGCTGTATTAAAAGCTGTTAAAATTATTCAAGGTTGCTTCTA
TACCAAACTAGAGAGAACACGGTTTTTGAATGTGAGAGCATCAGCAATTATCATTCAGAGAAAATGGAGAGCTAT
ACTTCCTGCAAAGATAGCTCATGAACACTTCTTAATGATAAAAAGACATCGAGCTGCTTGTTTGATCCAAGCACA
TTATAGAGGATATAAAGGAAGGCAGGTCTCTCTTCGGCAGAAATCTGCTGCTTTGATCATACAAAAATATATACG
AGCCAGGGAGGCTGGAAAGCATGAAAGGATAAAATATATTGAATTTAAAAAATCTACAGTTATCCTACAAGCACT
GGTGCGTGGTTGGCTAGTACGAAAAAGATTTTTAGAACAGAGAGCCAAAATTCGACTTCTTCACTTCACTGCAGC
TGCATATTATCACCTGAATGCTGTTAGAATTCAAAGAGCCTATAAACTTTACCTGGCTGTGAAGAATGCTAACAA
GCAGGTTAATTCAGTCATCTGTATTCAGAGATGGTTTCGAGCAAGATTACAAGAAAAGAGATTTATTCAGAAATA
TCATAGCATCAAAAAGATTGAGCATGAAGGTCAAGAATGTCTGAGCCAGCGAAATAGGGCTGCATCAGTAATACA
GAAAGCAGTGCGCCATTTTCTCCTCCGTAAAAAGCAGGAAAAATTCACTAGTGGAATCATTAAAATTCAGGCATT
ATGGAGAGGCTATTCTTGGAGGAAGAAAAATGATTGTACAAAAATTAAAGCTATACGACTAAGTCTTCAAGTTGT
TAATAGGGAGATTCGAGAAGAAAACAAACTCTACAAAAGAACTGCACTTGCACTTCATTACCTTTTGACATATAA
GCACCTTTCTGCCATTCTTGAGGCCTTAAAACACCTAGAGGTAGTTACTAGATTGTCTCCACTTTGTTGTGAGAA
CATGGCCCAGAGTGGAGCAATTTCTAAAATATTTGTTTTGATCCGAAGTTGTAATCGCAGTATTCCTTGTATGGA
AGTCATCAGATATGCTGTGCAAGTCTTGCTTAATGTATCTAAGTATGAGAAAACTACTTCAGCAGTTTATGATGT
AGAAAATTGTATAGATATACTATTGGAGCTTTTGCAGATATACCGAGAAAAGCCTGGTAATAAAGTTGCAGACAA
AGGCGGAAGCATTTTTACAAAAACTTGTTGTTTGTTGGCTATTTTACTGAAGACAACAAATAGAGCCTCTGATGT
ACGAAGTAGGTCCAAAGTTGTTGACCGTATTTACAGTCTCTACAAACTTACAGCTCATAAACATAAAATGAATAC
TGAAAGAATACTTTACAAGCAAAAGAAGAATTCTTCTATAAGCATTCCTTTTATCCCAGAAACACCTGTAAGGAC
CAGAATAGTTTCAAGACTTAAGCCAGATTGGGTTTTGAGAAGAGATAACATGGAAGAAATCACAAATCCCCTGCA
AGCTATTCAAATGGTGATGGATACGCTTGGCATTCCTTATTAGTAAATGTAAACATTTTCAGTATGTATAGTGTA
AAGAAATATTAAAGCCAATCATGAGTACGTAAAGTGATTTTTGCTCTCTGTGTACAACTTTTAAAATCTGACTTT
GTTTTAAAAAAACATAAACTGTTCATTACATTCTTCATTTTTATCATTTATAGTTTTATGCATGTAATAAACTAA
TATGTCATAAGATG

FIGURE 3764

MKVRQKLKNVSEEKMAAIVNQSALCCYRSKTQYEAVQSEGVMIQEWYKASGLACSQEAEYHSQSRAAVTIQKAFC
RMVTRKLETQKCAALRIQFFLQMAVYRRRFVQQKRAAITLQHYFRTWQTRKQFLLYRKAAVVLQNHYRAFLSAKH
QRQVYLQIRSSVIIIQARSKGFIQKRKFQEIKNSTIKIQAMWRRYRAKKYLCKVKAACKIQAWYRCWRAHKEYLA
VLKAVKIIQGCFYTKLERTRFLNVRASAIIIQRKWRAILPAKIAHEHFLMIKRHRAACLIQAHYRGYKGRQVSLR
QKSAALIIQKYIRAREAGKHERIKYIEFKKSTVILQALVRGWLVRKRFLEQRAKIRLLHFTAAAYYHLNAVRIQR
AYKLYLAVKNANKQVNSVICIQRWFRARLQEKRFIQKYHSIKKIEHEGQECLSQRNRAASVIQKAVRHFLLRKKQ
EKFTSGIIKIQALWRGYSWRKKNDCTKIKAIRLSLQVVNREIREENKLYKRTALALHYLLTYKHLSAILEALKHL
EVVTRLSPLCCENMAQSGAISKIFVLIRSCNRSIPCMEVIRYAVQVLLNVSKYEKTTSAVYDVENCIDILLELLQ
IYREKPGNKVADKGGSIFTKTCCLLAILLKTTNRASDVRSRSKVVDRIYSLYKLTAHKHKMNTERILYKQKKNSS
ISIPFIPETPVRTRIVSRLKPDWVLRRDNMEEITNPLQAIQMVMDTLGIPY

FIGURE 3765

GAGTTCGGGGCCAGCAGCCGTCTACCCGGTGTCGCGTTCTGTGTTGTGGCGGCCCTGGATCCGGCGTCAGGGCGA
CCGGGCGGACGAGGTGGAGCCAGAGTCTGTCAGGCGGGTTGGTGAAGGGCGCGGGGCCGGGCACGGCGTTGGGAG
TGCGCGGCAGGGACCGGCCAGGCGGGCTGCAGGCACCTCAGAGCCCGGGACACCCCCTCAACGTCCGCAGGCGCG
ATGAAGGCACTGATCTTAGTGGGGGGCTATGGGACGCGGCTACGGCCGCTGACGCTGAGCACCCCGAAGCCACTG
GTGGACTTCTGCAATAAGCCCATCTTGCTGCACCAAGTGGAGGCGCTAGCCGCGGCAGGCGTGGACCACGTGATC
CTGGCCGTGAGCTACATGTCGCAGGTGCTGGAGAAGGAAATGAAGGCACAGGAGCAGAGGCTGGGAATCCGAATC
TCCATGTCCCATGAAGAGGAGCCTTTGGGGACAGCTGGGCCCCTGGCGCTGGCCCGTGACCTACTCTCTGAGACT
GCAGACCCTTTCTTCGTCCTCAACAGTGACGTGATCTGCGATTTCCCCTTCCAAGCCATGGTGCAGTTCCACCGG
CACCATGGCCAGGAGGGCTCCATCCTGGTGACCAAGGTGGAGGAACCCTCCAAGTACGGTGTGGTGGTGTGTGAG
GCTGACACAGGCCGCATTCACCGGTTCGTGGAGAAGCCACAGGTGTTTGTGTCCAATAAGATCAACGCAGGCATG
TACATCCTGAGCCCTGCAGTGCTGCGGCGCATCCAGCTGCAGCCTACGTCCATTGAGAAGGAGGTCTTCCCCATT
ATGGCCAAGGAGGGGCAGCTATATGCCATGGAGTTACAGGGCTTCTGGATGGACATTGGGCAGCCCAAGGACTTC
CTCACTGGCATGTGCCTCTTCCTGCAGTCACTGAGGCAGAAGCAGCCTGAGCGGCTGTGCTCAGGCCCTGGCATT
GTGGGCAACGTGCTGGTGGACCCAAGTGCCCGCATCGGCCAGAACTGCAGCATTGGCCCCAATGTGAGCCTGGGA
CCTGGCGTGGTGGTCGAAGATGGTGTGTGTATCCGGCGGTGCACGGTGCTGCGGGATGCCCGGATCCGTTCCCAT
TCCTGGCTTGAGTCCTGCATTGTGGGCTGGCGCTGCCGCGTGGGTCAGTGGGTAAGCCTGTGGGCTGGGCTGGGT
GGGGAGAGGGGCGGGGAGTGTGCCTGCCTCCCTGACAAGGCCTATCCTCTCCTGGAGGTACGCATGGAGAACGTG
ACAGTGCTGGGTGAGGACGTCATAGTTAATGATGAGCTCTACCTCAACGGAGCCAGCGTGCTGCCCCACAAGTCT
ATTGGCGAGTCAGTGCCAGAGCCTCGTATCATCATG**TGA**GGGGATGCAGTGGGGCTGGCCGAGCCCCGGTTTTCC
CATCAGCAAGGGGAGTGCTGGCCTGACACATCAGAAGACCCTGGACTTGTCATTATTTGTCTGGGGGGCACTGGG
TGAAGCTGAAGCTGTTGGACACCTGCCTTCTCATGTGGACATCATCTGGCAGGATCCCTGCTGGGCACACCCCAC
AAACCCCACTCCCTCAAGAAGGGCCAGGGCCAGGGCTGTATGGAATAATAATTTAATGCTCACTGTGAAAAAAAA
AAAAAAAAAAAAA

FIGURE 3766

MKALILVGGYGTRLRPLTLSTPKPLVDFCNKPILLHQVEALAAAGVDHVILAVSYMSQVLEKEMKAQEQRLGIRI
SMSHEEEPLGTAGPLALARDLLSETADPFFVLNSDVICDFPFQAMVQFHRHHGQEGSILVTKVEEPSKYGVVVCE
ADTGRIHRFVEKPQVFVSNKINAGMYILSPAVLRRIQLQPTSIEKEVFPIMAKEGQLYAMELQGFWMDIGQPKDF
LTGMCLFLQSLRQKQPERLCSGPGIVGNVLVDPSARIGQNCSIGPNVSLGPGVVVEDGVCIRRCTVLRDARIRSH
SWLESCIVGWRCRVGQWVSLWAGLGGERGGECACLPDKAYPLLEVRMENVTVLGEDVIVNDELYLNGASVLPHKS
IGESVPEPRIIM

FIGURE 3767A

ATGCCCGGGCCCCGAGGGGCTGCTGGCGGCCTGGCCCCTGAGATGCGCGGGGCGGGGGCGGCGGGGCTGCTGGCG
CTGCTGCTGCTGCTGCTGCTGCTGCTGCTGGGCCTGGGCGGCAGGGTCGAGGGGGGGCCGGCCGGCGAGCGGGGC
GCAGGCGGGGGCGGGGCGCTGGCCCGCGAGCGCTTCAAGGTGGTCTTTGCGCCGGTGATCTGCAAGCGGACCTGT
CTCAAGGGCCAGTGTCGGGACAGTTGTCAGCAGGGCTCCAACATGACGCTCATCGGAGAGAACGGCCACAGCACA
GACACGCTCACGGGCTCCGGCTTCCGCGTGGTGGTGTGCCCTCTCCCCTGCATGAATGGCGGCCAGTGCTCCTCG
CGAAACCAGTGCCTGTGTCCCCCGGACTTCACTGGGCGCTTCTGCCAGGTGCCCGCAGGAGGAGCCGGTGGGGGT
ACCGGCGGCTCAGGCCCCGGCCTGAGCAGGACAGGGGCCCTGTCCACAGGGGCGCTGCCGCCCCTGGCTCCGGAG
GGCGACTCTGTGGCCAGCAAGCACGCCATCTACGCCGTCCAGGTGATCGCTGACCCTCCTGGGCCCGGGGAGGGG
CCTCCTGCCCAGCACGCAGCCTTCCTGGTGCCCCTAGGCCCGGGACAGATCTCAGCAGAAGTGCAGGCCCCGCCC
CCCGTGGTGAATGTGCGCGTCCATCACCCGCCCGAGGCCTCAGTCCAGGTGCACCGCATTGAGAGCTCGAACGCC
GAGAGCGCAGCCCCCTCCCAGCACCTGCTGCCGCACCCCAAGCCCTCGCACCCCCGGCCGCCCACCCAGAAGCCC
CTGGGCCGCTGCTTTCAGGACACTCTGCCCAAGCAGCCGTGTGGCAGCAACCCCCTCCCCGGCCTCACCAAGCAG
GAAGACTGCTGCGGTAGCATCGGCACTGCCTGGGGCCAGAGCAAGTGCCACAAGTGTCCCCAGCTGCAGTACACA
GGAGTGCAGAAGCCAGGGCCTGTACGTGGGGAAGTGGGCGCTGACTGTCCCCAGGGCTACAAGAGGCTTAACAGC
ACCCACTGCCAGGACATCAACGAGTGCGCAATGCCGGGCGTGTGTCGCCATGGTGACTGCCTCAACAACCCTGGC
TCCTATCGCTGTGTCTGCCCACCTGGCCATAGTTTAGGCCCCTCCCGTACACAGTGCATTGCAGACAAACCGGAG
GAGAAGAGCCTGTGTTTCCGCCTGGTGAGCCCTGAGCACCAGTGCCAGCACCCACTGACCACCCGCCTGACCCGC
CAGCTCTGCTGCTGCAGTGTCGGCAAGGCCTGGGGCGCGCGGTGTCAGCGCTGCCCAACAGATGGCACCGCTGCG
TTCAAGGAGATCTGCCCAGCTGGGAAGGGATACCACATTCTCACCTCCCACCAGACGCTCACCATTCAGGGCGAG
AGTGACTTTTCCCTTTTCCTGCACCCTGACGGGCCACCCAAGCCCCAGCAGCTTCCGGAGAGCCCTAGCCAGGCT
CCACCACCTGAGGACACAGAGGAAGAGAGAGGGGTGACCACGGACTCACCGGTGAGTGAGGAGAGGTCAGTGCAG
CAGAGCCACCCAACTGCCACCACGACTCCTGCCCGGCCCTACCCCGAGCTGATCTCCCGTCCCTCGCCCCCGACC
ATGCGCTGGTTCCTGCCGGACTTGCCTCCTTCCCGCAGCGCCGTAGAGATCGCTCCCACTCAGGTCACAGAGACT
GATGAGTGCCGACTGAACCAGAACATCTGTGGCCACGGAGAGTGCGTGCCGGGCCCCCCTGACTACTCCTGCCAC
TGCAACCCCGGCTACCGGTCACATCCCCAGCACCGCTACTGCGTGGATGTGAACGAGTGCGAGGCAGAGCCCTGT
GGCCCGGGGAGGGGCATCTGCATGAACACCGGCGGCTCCTACAATTGCCACTGCAACCGCGGCTACCGCCTGCAC
GTGGGCGCCGGGGGGCGCTCGTGCGTGGACCTGAACGAATGCGCCAAGCCCCACCTGTGCGGCGACGGCGGCTTC
TGCATCAACTTTCCCGGTCACTACAAGTGCAACTGCTACCCCGGCTACCGGCTCAAAGCCTCCCGGCCTCCTGTG
TGCGAAGACATCGACGAGTGCCGGGACCCAAGCTCTTGCCCGGATGGCAAATGCGAGAACAAGCCCGGGAGCTTC
AAGTGCATCGCCTGTCAGCCTGGCTACCGCAGCCAGGGGGGCGGGGCCTGTCGCGACGTGAACGAGTGCGCCGAG
GGCAGCCCCTGCTCGCCTGGCTGGTGCGAGAACCTCCCGGGCTCCTTCCGCTGCACCTGTGCCCAGGGCTACGCG
CCCGCGCCCGACGGCCGCAGTTGCTTGGATGTGGACGAGTGTGAGGCTGGGGACGTGTGTGACAATGGCATCTGC
AGCAACACGCCAGGATCTTTCCAGTGTCAGTGCCTCTCTGGCTACCATCTGTCCAGGGACCGGAGCCACTGCGAG
GACATTGATGAGTGTGACTTCCCTGCAGCCTGCATTGGGGGTGACTGCATCAATACCAATGGCTCCTACAGATGT
CTTTGCCCCCAGGGGCATCGGCTGGTGGGTGGCAGGAAATGCCAAGACATAGATGAGTGCAGCCAGGACCCGAGC
CTGTGCCTTCCCCATGGGGCCTGCAAGAACCTTCAGGGCTCCTATGTGTGTGTCTGCGATGAGGGCTTCACTCCC
ACCCAGGACCAGCACGGTTGTGAGGAGGTGGAGCAGCCCCACCACAAGAAGGAGTGCTACCTGAACTTCGATGAC
ACAGTGTTCTGCGACAGCGTATTGGCCACCAACGTGACCCAGCAGGAGTGCTGCTGCTCTCTGGGGGCCGGCTGG
GGCGACCACTGCGAAATCTACCCCTGCCCAGTCTACAGCTCAGCCGAGTTCCACAGCCTCTGCCCAGACGGAAAG
GGCTACACCCAGGACAACAACATCGTCAACTACGGCATCCCAGCCCACCGTGACATCGACGAGTGCATGTTGTTC
GGGTCGGAGATTTGCAAGGAGGGCAAGTGCGTGAACACGCAGCCTGGCTACGAGTGCTACTGCAAGCAGGGCTTC
TACTACGACGGGAACCTGCTGGAATGCGTGGACGTGGACGAGTGCCTGGACGAGTCCAACTGCCGGAACGGAGTG
TGTGAGAACACGCGCGGCGGCTACCGCTGTGCCTGCACGCCCCCTGCCGAGTACAGTCCCGCGCAGCGCCAGTGC
CTGAGCCCGGAAGAGATGGAGCGTGCCCCGGAGCGGCGCGACGTGTGCTGGAGCCAGCGCGGAGAGGACGGCATG
TGCGCTGGCCCCCTGGCCGGGCCTGCCCTCACCTTCGACGACTGCTGCTGCCGCCAGGGCCGCGGCTGGGGCGCC
CAATGCCGACCGTGCCCGCCGCGCGGCGCGGGGTCCCATTGCCCGACATCGCAGAGCGAGAGCAATTCCTTCTGG
GACACAAGCCCCCTGCTGTTGGGGAAGCCCCCAAGAGATGAGGACAGTTCAGAGGAGGATTCAGACGAGTGTCGC
TGCGTGAGTGGCCGCTGCGTGCCGCGGCCGGGCGGCGCCGTGTGCGAGTGTCCCGGCGGCTTCCAGCTCGACGCC

FIGURE 3767B

TCCCGCGCCCGCTGCGTGGATATCGACGAGTGCCGAGAGCTGAACCAGCGCGGGCTGCTGTGCAAGAGCGAGCGC
TGCGTGAACACCAGCGGCTCCTTCCGCTGCGTCTGCAAAGCCGGCTTCGCGCGCAGCCGCCCGCACGGGGCCTGC
GTTCCCCAGCGCCGCCGCTGACGCCGCCGACGCCGCCCTCGGCCCAGACCTCGGTGATCACTGAGGGATTTCCGC
GAGCTCGGCCTCACTTCTGCCCCGACTTGTGGCTCGGACCCAGGGACCTTCAGGGCCCGCAGACCCTCCCGGCGC
CTTGAGACCCGAGGCGCCCCTACCGGCCCCCCTCCCCGGTTAGCGGGCGGTTGTAAGGTCTCCGGCGGGCGCTGC
CTGCCTTCCTCCCAGAGGGTGTTTCCTAGAAACTGATAAATCAGATCGTGCCTCTTTACCCTTGGCTTTCGAAAA
AAAAAAAAAAAAAA

FIGURE 3768

MPGPRGAAGGLAPEMRGAGAAGLLALLLLLLLLLLGLGGRVEGGPAGERGAGGGGALARERFKVVFAPVICKRTC
LKGQCRDSCQQGSNMTLIGENGHSTDTLTGSGFRVVVCPLPCMNGGQCSSRNQCLCPPDFTGRFCQVPAGGAGGG
TGGSGPGLSRTGALSTGALPPLAPEGDSVASKHAIYAVQVIADPPGPGEGPPAQHAAFLVPLGPGQISAEVQAPP
PVVNVRVHHPPEASVQVHRIESSNAESAAPSQHLLPHPKPSHPRPPTQKPLGRCFQDTLPKQPCGSNPLPGLTKQ
EDCCGSIGTAWGQSKCHKCPQLQYTGVQKPGPVRGEVGADCPQGYKRLNSTHCQDINECAMPGVCRHGDCLNNPG
SYRCVCPPGHSLGPSRTQCIADKPEEKSLCFRLVSPEHQCQHPLTTRLTRQLCCCSVGKAWGARCQRCPTDGTAA
FKEICPAGKGYHILTSHQTLTIQGESDFSLFLHPDGPPKPQQLPESPSQAPPPEDTEEERGVTTDSPVSEERSVQ
QSHPTATTTPARPYPELISRPSPPTMRWFLPDLPPSRSAVEIAPTQVTETDECRLNQNICGHGECVPGPPDYSCH
CNPGYRSHPQHRYCVDVNECEAEPCGPGRGICMNTGGSYNCHCNRGYRLHVGAGGRSCVDLNECAKPHLCGDGGF
CINFPGHYKCNCYPGYRLKASRPPVCEDIDECRDPSSCPDGKCENKPGSFKCIACQPGYRSQGGGACRDVNECAE
GSPCSPGWCENLPGSFRCTCAQGYAPAPDGRSCLDVDECEAGDVCDNGICSNTPGSFQCQCLSGYHLSRDRSHCE
DIDECDFPAACIGGDCINTNGSYRCLCPQGHRLVGGRKCQDIDECSQDPSLCLPHGACKNLQGSYVCVCDEGFTP
TQDQHGCEEVEQPHHKKECYLNFDDTVFCDSVLATNVTQQECCCSLGAGWGDHCEIYPCPVYSSAEFHSLCPDGK
GYTQDNNIVNYGIPAHRDIDECMLFGSEICKEGKCVNTQPGYECYCKQGFYYDGNLLECVDVDECLDESNCRNGV
CENTRGGYRCACTPPAEYSPAQRQCLSPEEMERAPERRDVCWSQRGEDGMCAGPLAGPALTFDDCCCRQGRGWGA
QCRPCPPRGAGSHCPTSQSESNSFWDTSPLLLGKPPRDEDSSEEDSDECRCVSGRCVPRPGGAVCECPGGFQLDA
SRARCVDIDECRELNQRGLLCKSERCVNTSGSFRCVCKAGFARSRPHGACVPQRRR

FIGURE 3769

AAGGCTATTATTACCACCACTGAGTGGCTTAAATAATCCTGTCAACAGCAATCGCCCATTTCCAAAGCCATGGTG
AAACATCTCTGTGCTAATTTCTTTTGTTTTGTTTCCTAATTTTTTTTTTTTTGGCAGGTGGTGGGAAATAATCTTT
GTCTTCTTTGGAGTAAACCTTCAACACCGGATTTTTTCTTTTAATTATGGATGTAAACCCCAATATCCCCATAAT
TTACATTGGGTCTCGACCAATTGCCTAATTATAAGAGGATATATTTAGGCTCTTATTTCATCCACACAAAAACTT
GTGTAACAGGTAGTTGGAAACATCTGAGGCACCACTTTGATTCTGTTTTGGATGGTCATGTTTTTTCTCCTCCGT
TTCCCCAGCATGTCTGCCACCATCCTCATGCACTGCTTCCAAGTGCCTGGGAGCCTTTATGAGCGTCCCTAAACC
TAAAAGAATCCAGAGGCGGGGCTCGG**ATG**AACCCTCGAGATAAGCAAGTGAGCCGCTTCTCCCCTCTAAAGGATG
TTTACACGTGGGTGGCACTCGCTGGAATCCAGCGCTCGGGCAGCCCTGGGAGGACGCGCTCAGCTGCGAGGAGGA
TGGAGAGCAATACATCATCATCTTTGGAGAATTTAGCGACGGCGCCTGTGAACCAGATCCAAGAAACAATTTCTG
ATAATTGTGTGGTGATTTTCTCAAAAACATCCTGTTCTTACTGTACAATGGCAAAAAAGCTTTTCCATGACATGA
ATGTTAACTATAAAGTGGTGGAACTGGACCTGCTTGAATATGGAAACCAGTTCCAAGATGCTCTTTACAAAATGA
CTGGTGAAAGAACTGTTCCAAGAATATTTGTCAATGGTACTTTTATTGGAGGTGCAACTGACACTCATAGGCTTC
ACAAAGAAGGAAAATTGCTCCCACTAGTTCATCAGTGTTATTTAAAAAAAAGTAAGAGGAAAGAATTTCAG**TGA**T
GTTTATACTAATAAGTTTGCTAGTACAGTGTCAGTTATTTAAAGTGGTAATGCCCGATAATGTCTTTTAAATGTT
TGAGGATGTTTTAAATACATGCATTGTCTTCACGAAGAAGATGTAAAAATAATGAACAATAAATTGCGGTGGAAA
CCTAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3770

MNPRDKQVSRFSPLKDVYTWVALAGIQRSGSPGRTRSAARRMESNTSSSLENLATAPVNQIQETISDNCVVIFSK
TSCSYCTMAKKLFHDMNVNYKVVELDLLEYGNQFQDALYKMTGERTVPRIFVNGTFIGGATDTHRLHKEGKLLPL
VHQCYLKKSKRKEFQ

FIGURE 3771

GAAGCAGCAGGTACCCCCTCCACATCCCTAGGGCTCTGTGATGTAGGCAGAGGCCCGTGGGAGTCAGCATGCCGC
GTGGCTGGGCCGCCCCCTTGCTCCTGCTGCTGCTCCAGGGAGGCTGGGGCTGCCCCGACCTCGTCTGCTACACCG
ATTACCTCCAGACGGTCATCTGCATCCTGGAAATGTGGAACCTCCACCCCAGCACGCTCACCCTTACCTGGCAAG
ACCAGTATGAAGAGCTGAAGGACGAGGCCACCTCCTGCAGCCTCCACAGGTCGGCCCACAATGCCACGCATGCCA
CCTACACCTGCCACATGGATGTATTCCACTTCATGGCCGACGACATTTTCAGTGTCAACATCACAGACCAGTCTG
GCAACTACTCCCAGGAGTGTGGCAGCTTTCTCCTGGCTGAGAGCATCAAGCCGGCTCCCCCTTTCAACGTGACTG
TGACCTTCTCAGGACAGTATAATATCTCCTGGCGCTCAGATTACGAAGACCCTGCCTTCTACATGCTGAAGGGCA
AGCTTCAGTATGAGCTGCAGTACAGGAACCGGGGAGACCCCTGGGCTGTGAGTCCGAGGAGAAAGCTGATCTCAG
TGGACTCAAGAAGTGTCTCCCTCCTCCCCCTGGAGTTCCGCAAAGACTCGAGCTATGAGCTGCAGGTGCGGGCAG
GGCCCATGCCTGGCTCCTCCTACCAGGGGACCTGGAGTGAATGGAGTGACCCGGTCATCTTTCAGACCCAGTCAG
AGGAGTTAAAGGAAGGCTGGAACCCTCACCTGCTGCTTCTCCTCCTGCTTGTCATAGTCTTCATTCCTGCCTTCT
GGAGCCTGAAGACCCATCCATTGTGGAGGCTATGGAAGAAGATATGGGCCGTCCCCAGCCCTGAGCGGTTCTTCA
TGCCCCTGTACAAGGGCTGCAGCGGAGACTTCAAGAAATGGGTGGGTGCACCCTTCACTGGCTCCAGCCTGGAGC
TGGGACCCTGGAGCCCAGAGGTGCCCTCCACCCTGGAGGTGTACAGCTGCCACCCACCACGGAGCCCGGCCAAGA
GGCTGCAGCTCACGGAGCTACAAGAACCAGCAGAGCTGGTGGAGTCTGACGGTGTGCCCAAGCCCAGCTTCTGGC
CGACAGCCCAGAACTCGGGGGGCTCAGCTTACAGTGAGGAGAGGGATCGGCCATACGGCCTGGTGTCCATTGACA
CAGTGACTGTGCTAGATGCAGAGGGGCCATGCACCTGGCCCTGCAGCTGTGAGGATGACGGCTACCCAGCCCTGG
ACCTGGATGCTGGCCTGGAGCCCAGCCCAGGCCTAGAGGACCCACTCTTGGATGCAGGGACCACAGTCCTGTCCT
GTGGCTGTGTCTCAGCTGGCAGCCCTGGGCTAGGAGGGCCCCTGGGAAGCCTCCTGGACAGACTAAAGCCACCCC
TTGCAGATGGGGAGGACTGGGCTGGGGGACTGCCCTGGGGTGGCCGGTCACCTGGAGGGGTCTCAGAGAGTGAGG
CGGGCTCACCCCTGGCCGGCCTGGATATGGACACGTTTGACAGTGGCTTTGTGGGCTCTGACTGCAGCAGCCCTG
TGGAGTGTGACTTCACCAGCCCCGGGGACGAAGGACCCCCCCGGAGCTACCTCCGCCAGTGGGTGGTCATTCCTC
CGCCACTTTCGAGCCCTGGACCCCAGGCCAGCTAATGAGGCTGACTGGATGTCCAGAGCTGGCCAGGCCACTGGG
CCCTGAGCCAGAGACAAGGTCACCTGGGCTGTGATGTGAAGACACCTGCAGCCTTTGGTCTCCTGGATGGGCCTT
TGAGCCTGATGTTTACAGTGTCTGTGTGTGTGTGTGCATATGTGTGTGTGTGCATATGCATGTGTGTGTGTGTGT
GTGTCTTAGGTGCGCAGTGGCATGTCCACGTGTGTGTGTGATTGCACGTGCCTGTGGGCCTGGGATAATGCCCAT
GGTACTCCATGCATTCACCTGCCCTGTGCATGTCTGGACTCACGGAGCTCACCCATGTGCACAAGTGTGCACAGT
AAACGTGTTTGTGGTCAACAGATGACAACAGCCGTCCTCCCTCCTAGGGTCTTGTGTTGCAAGTTGGTCCACAGC
ATCTCCGGGGCTTTGTGGGATCAGGGCATTGCCTGTGACTGAGGCGGAGCCCAGCCCTCCAGCGTCTGCCTCCAG
GAGCTGCAAGAAGTCCATATTGTTCCTTATCACCTGCCAACAGGAAGCGAAAGGGGATGGAGTGAGCCCATGGTG
ACCTCGGGAATGGCAATTTTTTGGGCGGCCCCTGGACGAAGGTCTGAATCCCGACTCTGATACCTTCTGGCTGTG
CTACCTGAGCCAAGTCGCCTCCCCTCTCTGGGCTAGAGTTTCCTTATCCAGACAGTGGGGAAGGCATGACACACC
TGGGGGAAATTGGCGATGTCACCCGTGTACGGTACGCAGCCCAGAGCAGACCCTCAATAAACGTCAGCTTCCTTC
CTTCTGCGGCCAGAGCCGAGGCGGGCGGGGGTGAGAACATCAATCGTCAGCGACAGCCTGGGCACCCGCGGGGCC
GTCCCGCCTGCAGAGGGCCACTCGGGGGGGTTTCCAGGCTTAAAATCAGTCCGTTTCGTCTCTTGGAAACAGCTC
CCCACCAACCAAGATTTCTTTTTCTAACTTCTGCTACTAAGTTTTTAAAAATTCCCTTTATGCACCCAAGAGATA
TTTATTAAACACCAATTACGTAGCAGGCCATGGCTCATGGGACCCACCCCCCGTGGCACTCATGGAGGGGGCTGC
AGGTTGGAACTATGCAGTGTGCTCCGGCCACACATCCTGCTGGGCCCCCTACCCTGCCCCAATTCAATCCTGCCA
ATAAATCCTGTCTTATTTGTTCATCCTGGAGAATTGA

FIGURE 3772

MPRGWAAPLLLLLLQGGWGCPDLVCYTDYLQTVICILEMWNLHPSTLTLTWQDQYEELKDEATSCSLHRSAHNAT
HATYTCHMDVFHFMADDIFSVNITDQSGNYSQECGSFLLAESIKPAPPFNVTVTFSGQYNISWRSDYEDPAFYML
KGKLQYELQYRNRGDPWAVSPRRKLISVDSRSVSLLPLEFRKDSSYELQVRAGPMPGSSYQGTWSEWSDPVIFQT
QSEELKEGWNPHLLLLLLLVIVFIPAFWSLKTHPLWRLWKKIWAVPSPERFFMPLYKGCSGDFKKWVGAPFTGSS
LELGPWSPEVPSTLEVYSCHPPRSPAKRLQLTELQEPAELVESDGVPKPSFWPTAQNSGGSAYSEERDRPYGLVS
IDTVTVLDAEGPCTWPCSCEDDGYPALDLDAGLEPSPGLEDPLLDAGTTVLSCGCVSAGSPGLGGPLGSLLDRLK
PPLADGEDWAGGLPWGGRSPGGVSESEAGSPLAGLDMDTFDSGFVGSDCSSPVECDFTSPGDEGPPRSYLRQWVV
IPPPLSSPGPQAS

FIGURE 3773

ATGATCATCCCCTCTCTAGAGGAGCTGGACTCCCTCAAGTACAGTGACCTGCAGAACTTAGCCAAGAGTCTGGGT
CTCCGGGCCAACCTGAGGGCAACCAAGTTGTTAAAAGCCTTGAAAGGCTACATTAAACATGAGGCAAGAAAAGGA
AATGAGAATCAGGATGAAAGTCAAACTTCTGCATCCTCTTGTGATGAGACTGAGATACAGATCAGCAACCAGGAA
GAAGCTGAGAGACAGCCACTTGGCCATGTCACCAAAACAAGGAGAAGGTGCAAGACTGTCCGTGTGGACCCTGAC
TCACAGCAGAATCATTCAGAGATAAAAATAAGTAATCCCACTGAATTCCAGAATCATGAAAAGCAGGAAAGCCAG
GATCTCAGAGCTACTGCAAAAGTTCCTTCTCCACCAGACGAGCACCAAGAAGCTGAGAATGCTGTTTCCTCAGGT
AACAGAGATTCAAAGGTACCTTCAGAAGGAAAGAAATCTCTCTACACAGATGAGTCATCCAAACCTGGAAAAAAT
AAAAGAACTGCAATCACTACTCCAAACTTTAAGAAGCTTCATGAAGCTCATTTTAAGGAAATGGAGTCCATTGAT
CAATATATTGAGAGAAAAAAGAAACATTTTGAAGAACACAATTCCATGAATGAACTGAAGCAGCCCATCAATAAG
GGAGGGGTCAGGACTCCAGTACCTCCAAGAGGAAGACTCTCTGTGGCTTCTACTCCCATCAGCCAACGACGCTCG
CAAGGCCGGTCTTGTGGCCCTGCAAGTCAGAGTACCTTGGGTCTGAAGGGGTCACTCAAGCGCTCTGCTATCTCT
GCAGCTAAAACGGGTGTCAGGTTTTCAGCTGCTACTAAAGATAATGAGCATAAGCGTTCACTGACCAAGACTCCA
GCCAGAAAGTCTGCACATGTGACCGTGTCTGGGGGCACCCCAAAAGGCGAGGCTGTGCTTGGGACACACAAATTA
AAGACCATCACGGGGAATTCTGCTGCTGTTATTACCCCATTCAAGTTGACAACTGAGGCAACGCAGACTCCAGTC
TCCAATAAGAAACCAGTGTTTGATCTTAAAGCAAGTTTGTCTCGTCCCCTCAACTATGAACCACACAAAGGAAAG
CTAAAACCATGGGGGCAATCTAAAGAAAATAATTATCTAAATCAACATGTCAACAGAATTAACTTCTACAAGAAA
ACTTACAAACAACCCCATCTCCAGACAAAGGAAGAGCAACGGAAGAAACGCGAGCAAGAACGAAAGGAGAAGAAA
GCAAAGGTTTTGGGAATGCGAAGGGGCCTCATTTTGGCTGAAGAT**TAA**

FIGURE 3774

MIIPSLEELDSLKYSDLQNLAKSLGLRANLRATKLLKALKGYIKHEARKGNENQDESQTSASSCDETEIQISNQE
EAERQPLGHVTKTRRRCKTVRVDPDSQQNHSEIKISNPTEFQNHEKQESQDLRATAKVPSPPDEHQEAENAVSSG
NRDSKVPSEGKKSLYTDESSKPGKNKRTAITTPNFKKLHEAHFKEMESIDQYIERKKKHFEEHNSMNELKQPINK
GGVRTPVPPRGRLSVASTPISQRRSQGRSCGPASQSTLGLKGSLKRSAISAAKTGVRFSAATKDNEHKRSLTKTP
ARKSAHVTVSGGTPKGEAVLGTHKLKTITGNSAAVITPFKLTTEATQTPVSNKKPVFDLKASLSRPLNYEPHKGK
LKPWGQSKENNYLNQHVNRINFYKKTYKQPHLQTKEEQRKKREQERKEKKAKVLGMRRGLILAED

FIGURE 3775

GGATAAAAGCAAGTTTAAAACAAAAATTAGGAGGTTGTATGATATAGCTAATGTTCTGAGTAGCCTGGATCTTAT
CAAGAAAGTTCATGTTACAGAGGAAAGAGGCCGAAAACCAGCTTTCAAATGGACCGGCCCAGAAATCAGTCCAAA
TACCAGTGGCTCCAGCCCAGTCATTCATTTTACTCCCTCTGATTTGGAGGTGAGACGGTCTTCAAAAGAGAACTG
TGCCAAAAACCTCTTTTCCACACGTGGGAAACCAAACTTTACTCGACACCCATCTCTTATCAAATTGGTAAAGAG
TATAGAAAGTGATCGGAGAAAGATAAATTCTGCGCCCAGTAGCCCTATCAAGACCAACAAAGCTGAGAGTTCTCA
GAATTCTGCACCCTTCCCAAGTAAA**ATG**GCTCAGCTCGCAGCTATTTGTAAAATGCAGTTAGAAGAGCAATCAAG
TGAATCCAGACAGAAAGTGAGAGTACAGCTGGCAAGATCTGGACCCTGCAAACCAGTAGCCCCTCTGGACCCCCC
AGTGAATGCTGAGATGGAGCTGACAGCACCGTCCCTCATCCAGCCCCTGGGAATGGTTCCCCTGATCCCCAGCCC
CTTGTCATCAGCAGTGCCCCTGATCCTACCTCAGGCCCCTTCAGGCCCATCCTATGCCATCTACCTGCAGCCCAC
TCAAGCCCACCAAAGTGTGACGCCACCCCAAGGCCTGAGCCCAACGGTGTGCACCACCCACTCTTCTAAAGCTAC
TGGCTCAAAAGACTCCACAGATGCCACCACTGAGAAGGCAGCCAATGATACCTCAAAGGCCAGTGCCTCTACCAG
GCCTGGAAGCTTGCTGCCAGCACCAGAGAGGCAAGGGGCAAAGAGCCGAACCAGGGAGCCAGCTGGAGAAAGAGG
CTCAAAGAGGGCAAGCATGCTCGAGGACAGTGGTTCCAAAAAGAAATTTAAAGAGGACCTAAAAGGACTTGAAAA
TGTCTCCGCAACCTTGTTCCCATCAGGATACCTAATCCCTCTCACGCAGTGCTCATCCCTGGGGGCAGAGTCCAT
TTTGTCTGGTAAAGAAAACTCAAGTGCTCTTTCCCCAAACCACAGGATTTACAGCTCCCCAATTGCAGGTGTTAT
TCCAGTGACATCATCTGAACTCACTGCTGTTAATTTTCCCTCTTTTCATGTAACACCGTTGAAGCTAATGGTCTC
ACCAACTTCCGTGGCAGCCGTACCTGTCGGGAACAGCCCGGCTCTCGCTTCAAGCCACCCTGTTCCCATCCAGAA
CCCAAGCTCAGCCATTGTAAACTTCACCCTGCAGCACCTGGGACTCATCTCACCCAATGTGCAGTTGTCTGCCAG
CCCTGGGTCTGGAATCGTTCCTGTGTCTCCAAGAATAGAGTCTGTTAATGTCGCACCAGAAAATGCAGGCACTCA
GCAAGGAAGGGCCACCAACTATGACTCACCAGTCCCAGGCCAGAGCCAGCCAAATGGACAATCAGTTGCTGTGAC
AGGGGCACAACAGCCTGTTCCTGTGACACCCAAAGGGTCACAATTAGTGGCCGAAAGTTTCTTCCGTACCCCAGG
TGGACCCACCAAGCCAACCAGCTCATCCTGCATGGATTTTGAGGGTGCTAATAAAACCTCCTTAGGAACTCTCTT
TGTCCCACAGCGAAA**ACT**GGAAGTCTCAACAGAGGATGTCCAT**TAA**TCAACAGATGTTGGCTTAGTTTAATTTTC
TAAAGAGTTGTTTAATAGAGAAAATGTACACAGACTGATTTGGAGAACACATTCTCTGAAAATACTGTAAATACG
TTGGGGATTTGTTCAATGTGAAATCAGATAGTTGTTTTCATACATATATATATATACACACACACACACACACAC
ACACACACACATATATTTGTATAAAGCTAAGTTTAGCTTTCAATCCTACAAAATAAAAGTAAAATGTTGAACTCT
AAGATATATTAACTTCTAGGGGGAAAAATCCATTATTTTAGCTATGCCTATACTATTATGCAAAGTAACTGTATT
AAAGTTTACTTCCCTCTAAGCAAATATGCTTGACATGCCTAACACAGCATTCCCTTAAACATTTTGCACAAAGAA
AATGCTGTGTGATGTATAATGTTGTATTTTTAAATAGGGGTATAGCTATATTTTTTGTAATTTCTTTAATCTGTT
GTTGCAGTGTATCTTTTTGTAAAGTTTGCAACAATCCTCAATCAAGTCTATGGAAAAATTATTTATAAAATGTAT
TTTTAATCATAAGTTGTTCAAATTAAAACTTTTCTAAAAAATAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3776

MAQLAAICKMQLEEQSSESRQKVRVQLARSGPCKPVAPLDPPVNAEMELTAPSLIQPLGMVPLIPSPLSSAVPLI
LPQAPSGPSYAIYLQPTQAHQSVTPPQGLSPTVCTTHSSKATGSKDSTDATTEKAANDTSKASASTRPGSLLPAP
ERQGAKSRTREPAGERGSKRASMLEDSGSKKKFKEDLKGLENVSATLFPSGYLIPLTQCSSLGAESILSGKENSS
ALSPNHRIYSSPIAGVIPVTSSELTAVNFPSFHVTPLKLMVSPTSVAAVPVGNSPALASSHPVPIQNPSSAIVNF
TLQHLGLISPNVQLSASPGSGIVPVSPRIESVNVAPENAGTQQGRATNYDSPVPGQSQPNGQSVAVTGAQQPVPV
TPKGSQLVAESFFRTPGGPTKPTSSSCMDFEGANKTSLGTLFVPQRKLEVSTEDVH

FIGURE 3777A

CTGCTGACTGTTTCTTCGGATGCATTTTTTGGTGTGCTCTTGAGGGATTAAATGCAAAGAGATCACACCATGGAC
TACAAGGAAAGCTGCCCAAGTGTAAGCATTCCCAGCTCCGATGAACACAGAGAGAAAAAGAAGAGGTTTACTGTT
TATAAAGTTCTGGTTTCAGTGGGAAGAAGTGAATGGTTTGTCTTCAGGAGATATGCAGAGGTTGATAAACTTTAT
AACACTTTAAAAAAACAGTTTCCTGCTATGGCCCTGAAGATTCCTGCCAAGAGAATATTTGGTGATAATTTTGAT
CCAGATTTTATTAAACAAAGACGAGCAGGACTAAACGAATTCATTCAGAACCTAGTTAGGTATCCAGAACTTTAT
AACCATCCAGATGTCAGAGCATTCCTTCAAATGGACAGTCCAAAACACCAGTCAGGTCCATCTGAAGATGAGGAT
GAAAGAAGTTCTCAGAAGCTACACTCTACCTCACAGAACATCAACCTGGGACCGTCTGGAAATCCTCATGCCAAA
CCAACTGACTTTGATTTCTTAAAAGTTATTGGAAAAGGCAGCTTTGGCAAGGTTCTTCTTGCAAAACGGAAACTG
GATGGAAAAGTTTATGCTGTCAAAGTGTTACAGAAAAAAATAGTTCTCAACAGAAAAGAGCAAAAACATATTATG
GCTGAACGTAATGTGCTCTTGAAAAATGTGAAACATCCGTTTTTGGTTGGATTGCATTATTCCTTCCAAACAACT
GAAAAGCTTTATTTTGTTCTGGATTTTGTTAATGGAGGGGAGCTTTTTTTCCACTTACAAAGAGAACGGTCCTTT
CCTGAGCACAGAGCTAGGTTTTACGCTGCTGAAATTGCTAGTGCATTGGGTTACTTACATTCCATCAAAATAGTA
TACAGAGACTTGAAACCAGAAAATATTCTTGTGGATTCAGTAGGACATGTTGTCTTAACAGATTTTGGGCTTTGT
AAAGAAGGAATTGCTATTTCTGACACCACTACCACATTTTGTGGGACACCAGAGTATCTTGCACCTGAAGTAATT
AGAAAACAGCCCTATGACAATACCGTAGATTGGTGGTGCCTTGGGGCTGTTCTGTATGAAATGCTGTATGGATTG
CCTCCTTTTTATTGCCGAGATGTTGCTGAAATGTATGACAATATCCTTCACAAACCCCTAAGTTTGAGGCCAGGA
GTGAGTCTTAGAGCCTGGTCCATTCTGGAAGAACTCCTAGAAAAAGACAGGCAAAATCGACTTGGTGCCAAGGAA
GACTTTCTTGAAATTCAGAATCATCCTTTTTTTGAATCACTCAGCTGGGCTGACCTTGTACAAAAGAAGATTCCA
CCACCATTTAATCCTAATGTGGCTGGACCAGATGATATCAGAAACTTTGACACAGCATTTACAGAAGAAACAGTT
CCATATTCTGTGTGTGTATCTTCTGACTATTCTATAGTGAATGCCAGTGTATTGGAGGCAGATGATGCATTCGTT
GGTTTCTCTTATGCACCTCCTTCAGAAGACTTATTTTTGTGAGCAGTTGCCATACAGAAACCATTGAGCAAAATA
AGTCTATAGATGGGACTGAAACTTCTATTTGTGTGAATATATTCAAATATGTATAACTAGTGCCTCATTTTTATA
TGTAATGATGAAAACTATGAAAAAATGTATTTTCTTCTATGTGCAAGAAAAATAGGGCATTTCAAAGAGCTGTTT
TGATTAAAATTTATATTCTTGTTTAATAAGCTTATTTTTAAACAATTTAAAAGCTATTATTCTTAGCATTAACCT
ATTTTTAAAGAAACCTTTTTGCTATTGACTGTTTTTTCCCTCTAAGTTTACACTAACATCTACCCAAGATAGACT
GTTTTTTAACAGTCAATTTCAGTTCAGCTAACATATATTAATACCTTTGTAACTCTTTGCTATGGCTTTTGTTAT
CACACCAAAACTATGCAATTGGTACATGGTTGTTTAAGAAGAAACCGTATTTTTCCATGATAAATCACTGTTTGA
AATATTTGGTCATGGTATGATCGAAATGTAAAAGCATAATTAACACATTGGCTGCTAGTTAACAATTGGAATAAC
TTTATTCTGCAGATCATTTAAGAAGTAACAGGCCGGGCGCGGGTTGTCACGCCTGTAATCCCAGCACTTTGGGAG
GCTGAGGCGGGCAGATCACCTGAGGTCAGGAGTTGGAGACCAGCCTGACCAACATGGACAAACCCCGTCTCTACT
AAAAATACAAAATTGGCAGGGTGTGGTGCACATGCCTATAATCCCAGCTACTTGGGAGGCTAAGGCAGGAGAATC
GCTTGAACCCGGGAGGCGGAGGTTGCAGTGAGCCGAGATCGCACCATTGCACTCCTGCCTGGGCAACAAGAGTGA
AACTCCATCTCCAAAAAAAAAAAAGGAAAAAGTAACAAAAGGAAATTATTTGTTTTTGAAATACCAGTTCAACTTT
GTGGATTATTTTTCCTCTGAAGGAAAAGAAAAGGCTTAATGGTTAGGATTTTTAAGTATTCCCAAAGATCTGAAG
GGTAATAAAATGTACTGGATTTTTTAAGGTGGTACCAAAAATGAATGTCTGTCATATATTTATATTACAAATACA
TTATATTTATGTTCTATTCATCTTTTGAATGTTTAGTATGCTATTAAGTCATTCTGAATCTTTGTATTTGCTTTT
GCAAATAGGTATTTCAAAGCTCTTTTCCTAACTGGTTAAGTAAAATAAAAAATTGAGCTTTCTAGAATATTTGCC
TAATTGGGAATTAAAAAGTAAAATAATAGGCCAGGCATGGTGGCTCATGCCTATAAGCACCCTGGGAGGCCGAGG
CAGGCAGATTATTTGAGCTCAGGAGTTTGAGACCATCCTGGGCAACATGGCGAAACCCTATCTCTACAAAAAATA
CAAAAATTAGCCAGACATGGTGGCACATGCCTTTAGTCCCAGCTACTCAGGAGGCTGAAGTTGGAGGATGGCTTG
AGCCCACGAGATGGAAGTTGCAGTGAACTGAAATTGTGCCACTGCACTTTTCAGCCTGGGTGCCACAGCGAGACC
CTAGTTAAGAGAAAAAAAAAGTAAAAACAAATTGTGGGTCAAAGTAAATGTATACAGTTTTATTACAATGTAACA
AAAGTTGAAAATCGGGCCCGGAATTTATCCAATTTCAGATATATCTTAGAAAAAGCACAGGAAACAGACCTTAAA
ATTGTAACCTACCAACTAACTTACATGCTTATAAAAGTAAAGGAGAATAACTGGCCGGGCACGGTGGCTCATGCC
TATAAAATTCCAGCACTTTGGGAGGCCAAGGCAGGAGGATCACTTGAGCCTATGAGTTCAAGACCAGCCTAGGCA
ATGTAGTGACACCTCATTTCTATTTATTTTAAAAAAAAGAGAGAGTAACTACAGAAGAACTTTAAAAAATAAAAA
ATAAGCTTACCTTGGATTCTTGGCTTAGAGTAGAGGTTTTTTTTAAGTTATGGAGGAAACATTTTTGTAAAAGTT
TAATGACCCACTTTAGATGCTCCAAGAACAAGCATCCCTTCCATGTATGTCTTGAGAAAGAAATCACAGAAGCAT

FIGURE 3777B

TTCTCACCAATACTCTTTGGCTTAAAATGTTCAGCAGAATTGGGCAGTGGGGGTGACTTTTCTTATATTAATAAT
ATTTACATCCAATACACTGAATCTTCCTTTAGAGGTAAGACTTTAATATCTATACTGTAAATATTTGGTTTATTT
GGCACTACTGTAAGTTTTGTTTTTCACAAAGCTCTTATTATGAAGCAAAATAAAAATTCTAGTTTCTTGTATGAT
TTTTTGTACTCATTCATTCCTGTTAAGCTGCCAAAAATTAAAGTGCAATATTGTATATTTTTAAGAACAAATTTA
AAATAGAATTTTGATGTTTCTCAGATCACAAGAAATACAAATCTATATAGTATAATAAAATCAGCAAAAGATCAA
AAAAAAAAA

FIGURE 3778

MQRDHTMDYKESCPSVSIPSSDEHREKKKRFTVYKVLVSVGRSEWFVFRRYAEVDKLYNTLKKQFPAMALKIPAK
RIFGDNFDPDFIKQRRAGLNEFIQNLVRYPELYNHPDVRAFLQMDSPKHQSGPSEDEDERSSQKLHSTSQNINLG
PSGNPHAKPTDFDFLKVIGKGSFGKVLLAKRKLDGKVYAVKVLQKKIVLNRKEQKHIMAERNVLLKNVKHPFLVG
LHYSFQTTEKLYFVLDFVNGGELFFHLQRERSFPEHRARFYAAEIASALGYLHSIKIVYRDLKPENILVDSVGHV
VLTDFGLCKEGIAISDTTTTFCGTPEYLAPEVIRKQPYDNTVDWWCLGAVLYEMLYGLPPFYCRDVAEMYDNILH
KPLSLRPGVSLRAWSILEELLEKDRQNRLGAKEDFLEIQNHPFFESLSWADLVQKKIPPPFNPNVAGPDDIRNFD
TAFTEETVPYSVCVSSDYSIVNASVLEADDAFVGFSYAPPSEDLFL

FIGURE 3779

CAGTCTTGTTTCGGGTTCCGGCTGCGTTGGGCTTGCGTGCGGCTCGCTAAGACTATGGCGTCCGGGCCTCATTCG
ACAGCTACTGCTGCCGCAGCCGCCTCATCGGCCGCCCCAAGCGCGGGCGGCTCCAGCTCCGGGACGACGACCACG
ACGACGACCACGACGGGAGGGATCCTGATCGGCGATCGCCTGTACTCGGAAGTTTCACTTACCATCGACCACTCT
CTGATTCCGGAGGAGAGGCTCTCGCCCACCCCATCCATGCAGGATGGGCTCGACCTGCCCAGTGAGACGGACTTA
CGCATCCTGGGCTGCGAGCTCATCCAGGCCGCCGGCATTCTCCTCCGGCTGCCGCAGGTGGCGATGGCAACGGGG
CAGGTGTTGTTTCATCGTTTTTTCTACTCCAAATCTTTCGTCAAACACAGTTTCGAGATTGTTGCTATGGCTTGT
ATTAATCTTGCATCAAAAATCGAAGAAGCACCTAGAAGAATAAGAGATGTGATTAATGTATTCCACCACCTCCGC
CAGTTAAGAGGAAAAAGGACTCCAAGCCCCCTGATCCTTGATCAGAACTACATTAACACCAAAAATCAAGTTATC
AAAGCAGAGAGGAGGGTGCTAAAGGAGTTGGGATTTTGTGTTCATGTCAAGCATCCTCATAAGATCATTGTTATG
TATTTACAAGTCTTAGAATGTGAACGTAATCAAACCCTGGTTCAAACTGCCTGGAATTACATGAATGACAGTCTT
CGAACCAATGTGTTTGTTCGATTTCAACCAGAGACTATAGCATGTGCTTGCATCTACCTTGCAGCTAGAGCACTT
CAGATTCCGTTGCCAACTCGTCCCCATTGGTTTCTTCTTTTTGGTACTACAGAAGAGGAAATCCAGGAAATCTGC
ATAGAAACACTTAGGCTTTATACCAGAAAAAAGCCAAACTATGAATTACTGGAAAAAGAAGTAGAAAAAAGAAAA
GTAGCCTTACAAGAAGCCAAATTAAAAGCAAAGGGATTGAATCCGGATGGAACTCCAGCCCTTTCAACCCTGGGT
GGATTTTCTCCAGCCTCCAAGCCATCATCACCAAGAGAAGTAAAAGCTGAAGAGAAATCACCAATCTCCATTAAT
GTGAAGACAGTCAAAAAAGAACCTGAGGATAGACAACAGGCTTCCAAAAGCCCTTACAATGGTGTAAGAAAAGAC
AGCAAGAGAAGTAGAAATAGCAGAAGTGCAAGTCGATCGAGGTCAAGAACACGATCACGTTCTAGATCACATACT
CCAAGAAGACACTATAATAATAGGCGGAGTCGATCTGGAACATACAGCTCGAGATCAAGAAGCAGGTCCCGCAGT
CACAGTGAAAGCCCTCGAAGACATCATAATCATGGTTCTCCTCACCTTAAGGCCAAGCATACCAGAGATGATTTA
AAAAGTTCAAACAGACATGGTCATAAAAGGAAAAAATCTCGTTCTCGATCTCAGAGCAAGTCTCGGGATCACTCA
GATGCAGCCAAGAAACACAGGCATGAAAGGGGACATCATAGGGACAGGCGTGAACGATCTCGCTCCTTTGAGAGG
TCCCATAAAAGCAAGCACCATGGTGGCAGTCGCTCAGGACATGGCAGGCACAGGCGCTGACTTTGTCTTCCTTTG
AGCCTGCATCAGTTCTTGGTTTTGCCTATCTACCAGTGTGATGTATGGACTCAATCAAAAACATTAAACGCAAAA
CTGATTAGGATTTGATTTCTTGAAACCCTCTAGGTCTCTAGAACACTGAGGACAGTTTCTTTTGAAAAGAACTAT
GTTAATTTTTTTGCACATTAAAATGCCCTAGCAGTATCTAATTAAAAACCATGGTCAGGTTCAATTGTACTTTAT
TATAGTTGTGTATTGTTTATTGCTATAAGAACTGGAGCGTGAATTCTGTAAAAATGTATCTTATTTTTATACAGA
TAAAATTGCAGACACTGTTCTATTTAAGTGGTTATTTGTTTAAATGATGGTGAATACTTTCTTAACACTGGTTTG
TCTGCATGTGTAAAGATTTTTACAAGGAAATAAAATACAAATCTTGTTTTT

FIGURE 3780

MASGPHSTATAAAAASSAAPSAGGSSSGTTTTTTTTTGGILIGDRLYSEVSLTIDHSLIPEERLSPTPSMQDGLD
LPSETDLRILGCELIQAAGILLRLPQVAMATGQVLFHRFFYSKSFVKHSFEIVAMACINLASKIEEAPRRIRDVI
NVFHHLRQLRGKRTPSPLILDQNYINTKNQVIKAERRVLKELGFCVHVKHPHKIIVMYLQVLECERNQTLVQTAW
NYMNDSLRTNVFVRFQPETIACACIYLAARALQIPLPTRPHWFLLFGTTEEEIQEICIETLRLYTRKKPNYELLE
KEVEKRKVALQEAKLKAKGLNPDGTPALSTLGGFSPASKPSSPREVKAEEKSPISINVKTVKKEPEDRQQASKSP
YNGVRKDSKRSRNSRSASRSRSRTRSRSRSHTPRRHYNNRRSRSGTYSSRSRSRSRSHSESPRRHHNHGSPHLKA
KHTRDDLKSSNRHGHKRKKSRSRSQSKSRDHSDAAKKHRHERGHHRDRRERSRSFERSHKSKHHGGSRSGHGRHR
R

FIGURE 3781A

GGGGGCAGACGGCCGAAGAGCCAGGTGTGCCAGGGACCTATGGCAGCAGGGCTGAACGTGCCCGCTCCAGCCTCT
CCAGTGCTGGGAGAGACCTCTAGATGGTGCAGGTGAGTTTGCAATGAGGGAAAGCCCCTCGGCAAGGACTGAGTT
TCCAAACTTGCAGACAGGGCAGGGAGCGGTCAAGGAAGAGTTCCCGGGAAGCCCTTTAAACGGAAAGGAAGCGGG
GCTAGTGTCAGAGAGGTGTGCCAGGTCCCAGGCAGCCCTGCTGACCCCTAAGGACATAGAGTACCTGCTTCTGAG
AGGGCTGCCACGGTGGCCACCTGTGAAGCCTGTCACCCAGAACTGGATGGTACCTGACTTTCTTCATAGACCCAT
CTTCTGCTGGGACTGAAGCTGACCTCCAACAGAAGCCAGGTGAGCCCTTGGGAGAGG**ATG**GCCCATGTGGGGGAC
TGCACGCAGACGCCCTGGCTCCCCGTCCTGGTGGTGTCTCTGATGTGCTCAGCCCGAGCGGAATACTCAAACTGC
GGTGAGAACGAGTACTACAACCAGACTACGGGGCTGTGCCAGGAGTGCCCCCCGTGTGGGCCGGGAGAGGAGCCC
TACCTGTCCTGTGGCTACGGCACCAAAGACGAGGACTACGGCTGCGTCCCCTGCCCGGCGGAGAAGTTTTCCAAA
GGAGGCTACCAGATATGCAGGCGTCACAAAGACTGTGAGGGCTTCTTCCGGGCCACCGTGCTGACACCAGGGGAC
ATGGAGAATGACGCTGAGTGTGGCCCTTGCCTCCCTGGCTACTACATGCTGGAGAACAGACCGAGGAACATCTAT
GGCATGGTCTGCTACTCCTGCCTCCTGGCACCCCCCAACACCAAGGAATGTGTGGGAGCCACTTCAGGAGCTTCT
GCCAACTTCCCTGGCACCTCGGGCAGCAGCACCCTGTCTCCCTTCCAGCACGCCCACAAAGAACTCTCAGGCCAA
GGACACCTGGCCACTGCCCTGATCATTGCAATGTCCACCATCTTCATCATGGCCATCGCCATCGTCCTCATCATC
ATGTTCTACATCCTGAAGACAAAGCCCTCTGCCCCAGCCTGTTGCACCAGCCACCCGGGGAAGAGCGTGGAGGCC
CAAGTGAGCAAGGACGAGGAGAAGAAAGAGGCCCCAGACAACGTGGTGATGTTCTCCGAGAAGGATGAATTTGAG
AAGCTGACAGCAACTCCAGCAAAGCCCACCAAGAGCGAGAACGATGCCTCATCCGAGAATGAGCAGCTGCTGAGC
CGGAGCGTCGACAGTGATGAGGAGCCCGCCCCTGACAAGCAGGGCTCCCCGGAGCTGTGCCTGCTGTCGCTGGTT
CACCTGGCCAGGGAGAAGTCTGCCACCAGCAACAAGTCAGCCGGGATTCAAAGCCGGAGGAAAAAGATCCTCGAT
GTGTATGCCAACGTGTGTGGAGTCGTGGAAGGTCTTAGCCCCACGGAGCTGCCATTTGATTGCCTCGAGAAGACT
AGCCGAATGCTCAGCTCCACGTACAACTCTGAGAAGGCTGTTGTGAAAACGTGGCGCCACCTCGCCGAGAGCTTC
GGCCTGAAGAGGGATGAGATTGGGGGCATGACAGACGGCATGCAACTCTTTGACCGCATCAGCACGGCAGGCTAC
AGCATCCCTGAGCTACTCACAAAACTGGTGCAGATTGAGCGGCTGGATGCTGTGGAGTCCTTGTGTGCAGACATA
CTGGAGTGGGCGGGGGTTGTGCCACCTGCCTCCCAGCCACATGCTGCATCC**TGA**AAAGCATGCCTGTGGGCTGTC
CTCCCAGGACAAGCCAAGGATCCAACGAGGGCTCTGGAGCTGTGAGTGGTGCCAAAAGACTGCCAAGAATCAAGG
CTTTTGTGATATGTCACCGTATGCCTTAGGATGTTCAAGGAGCCAGACGAAATAAGGCCTGTCTTCCAATTTAAC
CAAAGATAAAGGACTAGAGCCGGGATACTTTCAGATGCTCGCCTGTACCTCACCAGGCAGAGTAAATATCTACTC
ACTCATACAGCCAGCCCACCAGCCCACCATTAACTCACTGAACAATGAGACAATGTTGAGGACTCAAATGAATCA
AACCCCGTGGGAATGACAGAAGTGAAGAATCTGGTCCCTGTCTTTAAGGAGTTTGCACTCCAGTAGAAGACAGAA
GGAACGTATGTTTACAAACCACTTCACTGGAAGACGTCAAACAAGCTGAATGAAGGGGCGCTTAGAAAACGTTAA
TAGAAGTTCTAAGCGGGAGATGACTCCCTACTGGGATGATGAAGGATGGCATCCTAGTGAAGAAGCAGCTCAAAC
ATTTTGATAAAATGGCAACAAAATGCAGACACCCTGCTCCAGGTATTATTTCAGGTTTAGTACAAGTCTGTTAAT
ACCCTATGTGGTTTCATTAGGATAACTTTTTACCTATCCTTGAGGTCATCCATATTCTTACAGGCCTTCCAGTCA
ATAATGGAAGAGCTCACTCTATACAAAACCAATATGCAAGGCATGTGTTTGTCCAAGCAATTGGATGTGTGCAGT
AGCCAATTTCATTTACTGCATTACTCTTTGGCCTGGGAACCCTGTGGTCTGCACTACATGTGAATGGCCTTCCAC
TTCAGTCTTAGGCAGATTTGACCTTTTAGGGGCAGCAATGCTGAAGGACACAGCAATTTAAATTATAATGTGTCA
GGCTGTGTTTTCACTTCAAACATGTATGAGTAGTCAGCTGTAATTAGAGAAATGATGACTTCCTAAGAGTTCAGC
CACGCATAATTCTAGATTTCAAGAGCATCTAAGACTTGTGGATTAGCCTCATGGCATGAGAGTTTCAGACTCAGC
CTTCTGAGCCAGTCAGGGAAAGTGGAGTTCTGCAGCGCAAATGAGAGCCTGGGCTTGGTGTCGAGGGAGCTGGCT
TCTAGTTGTGCCACCTTGGGCCTTGTCTTTTCCTCTCTCTGCCTCAGTTTCTCGTCTGCCAATGAGATGTTAGTT
AGTGATTCTATAATTGGGGCAGGTAGGGTTCAGGTGAGCAAAAAGAAAGTGGAGCTATAGGAAATGCCAGGCCTT
TGAGGTGCTCTATGGAAGTCAACACAGTGTGGTTTGTCCATTTAAATGGGAATAAAAACAGAAAAACTCAGACTT
GGCATTTTCACAATAACTGCAATGGTTTGACATAACATTTATAGGCAGAAAGTTAATAAACTGGCATTGTTCTTG
GCATATTATTGTACTATCCCTGTAACTGCCAAGAGCTCAGGAGCCAGGCTAGTGATCACACCAGGGGTTAGAGTT
CACTGCTGAACTCCCTGATGGCAGGTCTGTGTTTATTACTACATTAAAACAAAGTCTCTGACTTATAAAGCGAGG
TCGTAAAAATTACAAGTTGCATGACTGAAAAAATGCTTTAGGGGGAAAATCAGTCATATCTTTAACACCAACAAG
CAATTTCCCACCAACGAATGTAGTACATACTGTGAGAGGATCATAATGAGGTCCTGAATATTTAATATCATCATT
TACTGTGTCTGTTTGCTGCTGTTTTTCGAACCTATTTGGTTTACCCTGCAAGCTAAATACTCCACGGCAGAGCTT

FIGURE 3781B

AATTATCCTTTTAATTCCTCTTTGAAATCCTGTGGTGCCCCCTTCCCCCTGCCTTGTGATGATGATGAGTGAGTC
TCCCCTTAATTAGACTGCAAATGTCACTTGTGATGAGTGTGCCATTCCAGGATAACAGCTTGCACCCTCCTCAGA
ATGTTTTCAGCGAAAGAGTGGGGTGGCTGTTCTCTGCTCCTGGTGCTTTGGCCTCATTTCACACTATTAGAATTC
TGGGGCTGTAAGGCCAGCCAGTGTCAGCTCATGTTCCATTGGCTCTCCACCTGCCATTTTTAGGGAGCTATTCCT
TATATAGTTACAAATTCCCTTGTCATTTACTTATTTGGAAACATGGGATTTACTCTGACAAGCTTTAGCCTATGT
TATGGGATTCAGAACAATGAGATCATAATAATTCTCACTGACCAAAGCTGGGACTCCATCCTGCCATTTTTGTGT
GGAGATATTCATAATTCTGCAATACTTTAAAACATTTAGAAAACACCCCAGGGTAGGTCTGTGGCCCTTAGACAG
TGAAGTCTTAATTGTCAATATTATTTTTGTCTAATTCTGTATATATATAACTTATTATATTTTATAATCTCAATA
AACACATTAATAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3782

MAHVGDCTQTPWLPVLVVSLMCSARAEYSNCGENEYYNQTTGLCQECPPCGPGEEPYLSCGYGTKDEDYGCVPCP
AEKFSKGGYQICRRHKDCEGFFRATVLTPGDMENDAECGPCLPGYYMLENRPRNIYGMVCYSCLLAPPNTKECVG
ATSGASANFPGTSGSSTLSPFQHAHKELSGQGHLATALIIAMSTIFIMAIAIVLIIMFYILKTKPSAPACCTSHP
GKSVEAQVSKDEEKKEAPDNVVMFSEKDEFEKLTATPAKPTKSENDASSENEQLLSRSVDSDEEPAPDKQGSPEL
CLLSLVHLAREKSATSNKSAGIQSRRKKILDVYANVCGVVEGLSPTELPFDCLEKTSRMLSSTYNSEKAVVKTWR
HLAESFGLKRDEIGGMTDGMQLFDRISTAGYSIPELLTKLVQIERLDAVESLCADILEWAGVVPPASQPHAAS

FIGURE 3783

ACGTTTAAAGCTGAGCGACCCAGTGCCACTGGAGACGGTCAGCTTCTCCACTCAGGCTCCTCCAGCCCGAGCCAG
AAGACCCCCTCCCCCATAATTCTGGGGGCCGATGGAAGGGAGCCGAGTCAGATCGCGAGGTACCCATAGCCGACA
GACCGGAGCGACAGGGAGTTGCCATAAGCCCCGCCCCTAGGAGTGATCGGAAAGCCTCACCCATCCGGGTGAGGA
ACCCGGAGGGACCGCCTCCGGGCGGAGCCCGCCGACCATGGCTACGCCCCTGGTGGCGGGTCCCGCAGCTCTACG
CTTCGCCGCCGCGGCTAGCTGGCAGGTTGTGCGCGGACGCTGCGTGGAACATTTTCCGCGAGTACTGGAGTTTCT
GCGATCTCTGCGCGCTGTTGCCCCTGGCTTGGTTCGCTACCGGCACCACGAACGCCTTTGTATGGGCCTAAAGGC
CAAGGTGGTGGTGGAGCTGATCCTGCAGGGCCGGCCTTGGGCCCAAGTCCTGAAAGCCCTGAATCACCACTTTCC
AGAATCTGGACCTATAGTGCGGGATCCCAAGGCTACAAAGCAGGATCTGAGGAAGATTTTGGAGGCACAGGAAAC
TTTTTACCAGCAGGTGAAGCAGCTGTCAGAGGCTCCTGTGGATTTGGCCTCGAAGCTGCAGGAACTTGAACAAGA
GTATGGGGAACCCTTTCTGGCTGCCATGGAAAAGCTGCTTTTTGAGTACTTGTGTCAGCTGGAGAAAGCACTGCC
TACACCGCAGGCACAGCAGCTTCAGGATGTGCTGAGTTGGATGCAGCCTGGAGTCTCTATCACCTCTTCTCTTGC
CTGGAGACAATATGGTGTGGACATGGGGTGGCTGCTTCCAGAGTGCTCTGTTACTGACTCAGTGAACCTGGCTGA
GCCCATGGAACAGAATCCTCCTCAGCAACAAAGACTAGCACTCCACAATCCCCTGCCAAAAGCCAAGCCTGGCAC
ACATCTTCCTCAGGGACCATCTTCAAGGACGCACCCAGAACCTCTAGCTGGCCGACACTTCAATCTGGCCCCTCT
AGGCCGACGAAGAGTTCAGTCCCAATGGGCCTCCACTAGGGGAGGCCATAAGGAGCGCCCCACAGTCATGCTGTT
TCCCTTTAGGAATCTCGGCTCACCAACCCAGGTCATATCTAATCCTGAGAGCAAGGAAGAACATGCGATATACAC
AGCAGACCTAGCCATGGGCACAAGAGCACCCTCCAATGGGAAGTATAAGGGTCCATACCAGACCCTGGGGGGAAG
GGCTCTGAAGGAGAACCCAGTTGACTTGCCTGCCACAGAGCAAAAGGAGTGAGTGGAACAGAGTTGCTTCTTAAT
AGGAGCACATTCTTTGCCTGCCTTCCCTTCATCCTATCCTCTTTGCTTGCTCTCACCTCAGGAATTGCTTGGATT
GATACATGGACCCCCTGAGACTATCATTATTACCTCCTAGGGCCAGGAAGCCAGGTAGGTAGTCTGAGTCAGGAT
TGGATCAACAGCCTCCTCTCTTGGGGACTCTCAAGAGCCTGTGTTCATCTAGAAGTAGTAGTTTGATTCTGGTTT
CCCTCATACAGTGTGTCCTCCGTCTCTGTGCAGCTCCGTCATTACCATAGGGGACTTGGTTTTAGACTCTGATGA
GGAAGAAAATGGCCAGGGGGAAGGAAAGGTGAGTGGGAAGGAGCAGAAAGCTGGGAAAGGGGATGGGTAGAACAA
GACTGAGAAATCCACATGCTTCAGAATTCAGAGGGTTCAGGGAATGGTTTCGGATAGTAGGCTCTCCCTGCTCCC
TTCTATACAGGAATCTCTGGAAAACTATCAGAAGACAAAGTTTGACACCTTGATACCCACTTTTTGTGAATACCT
ACCCCCTTCTGGCCACGGTGCCATACCTGTTTCTTCCTGTGACTGTAGAAACAGTTCTAGACCTTTGTGATAGAA
CTAAAATGCTCTCTGTACTCTAGTCTCCTGCCTCCTCAGTTCTGCAAGTAGTTTAGTAGGAATGAAGTGGAAGTC
CAGGCTTGGATTGCCTAACTACACTGCTAAAAATATTTGTAATCCTTAATAATTAAACTTTGGATTTGTT

FIGURE 3784

MATPLVAGPAALRFAAAASWQVVRGRCVEHFPRVLEFLRSLRAVAPGLVRYRHHERLCMGLKAKVVVELILQGRP
WAQVLKALNHHFPESGPIVRDPKATKQDLRKILEAQETFYQQVKQLSEAPVDLASKLQELEQEYGEPFLAAMEKL
LFEYLCQLEKALPTPQAQQLQDVLSWMQPGVSITSSLAWRQYGVDMGWLLPECSVTDSVNLAEPMEQNPPQQQRL
ALHNPLPKAKPGTHLPQGPSSRTHPEPLAGRHFNLAPLGRRRVQSQWASTRGGHKERPTVMLFPFRNLGSPTQVI
SNPESKEEHAIYTADLAMGTRAPSNGKYKGPYQTLGGRALKENPVDLPATEQKE

FIGURE 3785

GCACACTGAAGAGTACGTCTTCGGGTCTACCCCTAATCACATAATGGCTGTGTTTAATCAGAAGTCTGTCTCGGA
CATGATTAAAGAGTTTCGAAAAAATTGGCGTGCTCTTTGTAACTCTGAGAGAACTACTCTATGTGGTGCAGACTC
CATGCTCTTGGCATTGCAGCTTTCTATGGCAGAGAACAACAAACAGTGGAGAATTTACAGTCTCTCTCAGTGATG
TTTTATTGACATGGAAATACTTGCTCCATGAGAAATTGAACTTACCAGTTGAAAACATGGACGTGACTGACCATT
ATGAGGACGTTAGGAAGATTTATGATGATTTCTTGAAGAACAGTAATATGTTAGATCTGATTGATGTTTATCAAA
AATGTAGGGCTTTGACTTCTAATTGTGAAAATTATAACACAGTATCTCCTAGTCAACTACTGGATTTTCTGTCTG
GCAAACAGTATGCAGTAGGTGATGAAACTGATCTTTCTATACCAACATCACCAACAAGTAAATACAACCGTGATA
ATGAAAAGGTGCAGCTGCTAGCAAGGAAAATTATCTTTTCATATTTAAATCTGCTAGTGAATTCAAAGAATGACC
TGGCTGTGGCTTATATTCTCAATATTCCTGATAGAGGACTAGGAAGAGAAGCCTTCACTGATTTGAAACATGCTG
CTCGAGAGAAACAAATGTCTATCTTTTTGGTGGCCACGTCTTTTATTAGAACAATAGAGCTTGGAGGGAAAGGAT
ATGCACCACCACCATCAGATCCTTTAAGGACACATGTAAAGGGATTGTCTAATTTTATTAATTTCATTGACAAAT
TAGATGAGATTCTTGGAGAAATACCAAACCCAAGCATTGCAGGGGGTCAAATACTGTCAGTGATAAAGATGCAAC
TGATTAAAGGCCAAAACAGCAGGGATCCTTTTTGCAAAGCAATAGAGGAAGTTGCTCAGGATTTGGATTTGAGGA
TTAAAAATATTATCAATTCTCAAGAAGGTGTTGTAGCTCTTAGCACCACTGACATCAGTCCTGCTCGGCCAAAAT
CTCATGCCATAAACCATGGTACTGCATACTGTGGCAGAGATACTGTGAAAGCCTTATTAGTTCTTTTGGACGAAG
AAGCAGCTAATGCTCCTACCAAAAACAAAGCAGAGCTTTTATATGATGAGGAAGACACAATCCATCATCATGGAA
CGTCTATTCTTACACTTTTTAGGTCTCCCACACAGGTGAATAATTTGATAAAACCCCTAAGAGAACGCATCTGTG
TGTCAATGCAAGAGAAAAAAATTAAGATGAAGCAAACTTTAATTAGATCCCAATTTGCTTGTACTTATAAAGATG
ACTACATGATAAGCAAGGATAATTGGAATAATGTTAATTTAGCATCAAAGCCTTTGTGTGTTCTTTACATGGAAA
ATGACCTTTCTGAGGGTGTAAATCCATCTGTTGGAAGATCAACAATTGGAACGAGTTTTGGAAATGTTCATCTGG
ACAGAAGTAAAAATGAAAAAGTATCAAGAAAATCAACCAGTCAGACAGGAAATAAAAGCTCAAAAAGGAAACAGG
TGGATTTGGATGGTGAAAATATTCTCTGTGATAATAGAAATGAACCACCTCAACATAAAAATGCTAAAATACCTA
AGAAATCAAATGATTCACAGAATAGATTGTACGGCAAACTAGCTAAAGTAGCAAAAAGTAATAAATGTACTGCCA
AGGACAAGTTGATTTCTGGCCAGGCAAAGTTAACTCAGTTTTTTAGACTATAAATTTGTGTCTTATATGCTTTAG
GTTTATGCATCTATAAACCATTCACCAAAGACATGCTTAATTTTTAAGAGATCAAGGTGTAAATTATGATGATTT
ATTATTTTGGTCTACAGTGTATGTAAGGTTAGTATGTTAAGCACTGTTTTTGACTTTTTAAAAATACCTTAGATG
CAAATTTATAGGAGAAAAAACACTTTCAGATAAGAGGTGTTTGCTGGGATGGAAGAACTACCTGGCATGTAAGAA
ATATCGTCAGTCGTCCTAATGCATATTGTGACTGTTTGCATATACTTCTGTTTATAAAAGTATCAGTTTTACTTT
TCAGAGGATTTGTAAGAATCATTTAAATTTTCATTGAAATAAACGACAAGTCACATTGAAAAAAAAAAAAAAAAA

FIGURE 3786

MDVTDHYEDVRKIYDDFLKNSNMLDLIDVYQKCRALTSNCENYNTVSPSQLLDFLSGKQYAVGDETDLSIPTSPT
SKYNRDNEKVQLLARKIIFSYLNLLVNSKNDLAVAYILNIPDRGLGREAFTDLKHAAREKQMSIFLVATSFIRTI
ELGGKGYAPPPSDPLRTHVKGLSNFINFIDKLDEILGEIPNPSIAGGQILSVIKMQLIKGQNSRDPFCKAIEEVA
QDLDLRIKNIINSQEGVVALSTTDISPARPKSHAINHGTAYCGRDTVKALLVLLDEEAANAPTKNKAELLYDEED
TIHHHGTSILTLFRSPTQVNNLIKPLRERICVSMQEKKIKMKQTLIRSQFACTYKDDYMISKDNWNNVVNLASKPL
CVLYMENDLSEGVNPSVGRSTIGTSFGNVHLDRSKNEKVSRKSTSQTGNKSSKRKQVDLDGENILCDNRNEPPQH
KNAKIPKKSNDSQNRLYGKLAKVAKSNKCTAKDKLISGQAKLTQFFRL

FIGURE 3787

GGGGATTTGGCTAGAAGGCTGGGCCGGCAGCGGTTGTGAGGAGTTAGCTCGCGGCATTGCAGGCTCTGAGAGGAG
GGGACCCGGTTCCCGGGTGAGTGTCCAGGC**ATG**CCAGCGGAACGGCCCGCGGGCAGCGGCGGCTCGGAGGCTCCA
GCAATGGTTGAACAACTGGACACTGCTGTGATTACCCCGGCCATGCTAGAAGAGGAAGAACAGCTTGAAGCTGCT
GGACTAGAGAGAGAGCGGAAGATGCTGGAAAAGGCTCGCATGTCTTGGGATAGAGAGTCGACAGAAATTCGGTAC
CGTAGACTTCAACATTTGCTTGAAAAAAGCAATATCTACTCCAAATTTTTATTGACGAAAATGGAACAGCAACAA
TTAGAGGAACAGAAGAAGAAAGAAAAATTGGAGAGAAAAAAGGAGTCTTTAAAAGTTAAAAAGGGTAAAAATTCA
ATTGATGCAAGTGAAGAGAAGCCAGTTATGAGGAAAAAAAGAGGAAGAGAAGATGAATCATACAATATTTCAGAG
GTCATGTCAAAAGAGGAAATTTTGTCTGTGGCTAAAAAAAATAAAAAGGAGAATGAGGATGAAAACTCCTCCTCT
ACTAATCTCTGTGTGGAAGATCTTCAGAAAAATAAAGATTCGAATAGTATAATTAAAGATAGATTGTCTGAAACG
GTTAGGCAGAATACTAAATTCTTTTTTGACCCAGTCCGGAAGTGTAATGGTCAGCCAGTACCTTTTCAACAACCA
AAGCACTTCACTGGAGGAGTGATGCGATGGTACCAAGTAGAAGGCATGGAATGGCTTAGGATGCTTTGGGAAAAT
GGAATTAATGGCATTTTAGCAGATGAAATGGGATTGGGTAAGACAGTTCAGTGCATTGCTACTATTGCATTGATG
ATTCAGAGAGGAGTACCAGGACCTTTTCTTGTCTGTGGCCCTTTGTCTACACTTCCTAACTGGATGGCTGAATTC
AAAAGATTTACACCAGATATCCCTACAATGTTATATCATGGAACCCAGGAGGAACGTCAAAAATTGGTAAGAAAT
ATTTACAAACGGAAAGGGACTTTGCAGATTCATCCTGTGGTAATCACGTCATTTGAAATAGCCATGAGAGACCGA
AATGCGTTACAGCATTGCTATTGGAAATACTTAATAGTAGATGAAGGACACAGGATTAAGAATATGAAGTGCCGT
CTAATCAGGGAGTTAAAACGATTCAATGCTGATAACAAACTTCTTTTGACTGGTACTCCCTTGCAAAACAATTTA
TCAGAACTTTGGTCATTGCTAAACTTTTTGTTGCCAGATGTATTTGATGACTTGAAAAGCTTTGAGTCTTGGTTT
GACATCACTAGTCTTTCTGAAACTGCTGAAGATATTATTGCTAAAGAAAGAGAACAGAATGTATTGCATATGCTG
CACCAGATTTTAACACCTTTCTTATTGAGAAGACTGAAGTCTGATGTTGCTCTTGAAGTTCCTCCTAAACGAGAA
GTAGTCGTTTATGCTCCACTTTCAAAGAAGCAGGAGATCTTTTATACAGCCATTGTGAACCGTACAATTGCAAAC
ATGTTTGGATCCAGTGAGAAAGAAACAATTGAGTTAAGTCCTACTGGTCGACCAAAACGACGAACTAGAAAATCA
ATAAATTACAGCAAAATAGATGATTTCCCTAATGAATTGGAAAAACTGATCAGTCAAATACAGCCAGAGGTGGAC
CGAGAAAGAGCTGTTGTGGAAGTGAATATCCCTGTAGAATCTGAAGTTAATCTGAAGCTGCAGAATATAATGATG
CTACTTCGTAAATGTTGTAATCATCCATATTTGATTGAATATCCTATAGACCCTGTTACACAAGAATTTAAGATC
GATGAAGAATTGGTAACAAATTCTGGGAAGTTCTTGATTTTGGATCGAATGCTGCCAGAACTAAAAAAAAAGAGGT
CACAAGGTGCTGCTTTTTTCACAAATGACAAGCATGTTGGACATTTTGATGGATTACTGCCATCTCAGAGATTTC
AACTTCAGCAGGCTTGATGGGTCCATGTCTTACTCAGAGAGAGAAAAAAACATGCACAGCTTCAACACGGATCCA
GAGGTGTTTATCTTCTTAGTGAGTACACGAGCTGGTGGCCTGGGCATTAATCTGACTGCAGCAGATACAGTTATC
ATTTATGATAGTGATTGGAACCCCCAGTCGGATCTTCAGGCCCAGGATAGATGTCATAGAATTGGTCAGACAAAG
CCAGTTGTTGTTTATCGCCTTGTTACAGCAAATACTATCGATCAGAAAATTGTGGAAAGAGCAGCTGCTAAAAGG
AAACTGGAAAAGTTGATCATCCATAAAAATCATTTCAAAGGTGGTCAGTCTGGATTAAATCTGTCTAAGAATTTC
TTAGATCCTAAGGAATTAATGGAATTATTAAAATCTAGAGATTATGAAAGGGAAATAAAAGGATCAAGAGAGAAG
GTCATTAGTGATAAAGATCTAGAGTTGTTGTTAGATCGAAGTGATCTTATTGATCAAATGAATGCTTCAGGACCA
ATTAAAGAGAAGATGGGGATATTCAAGATATTAGAAAATTCTGAAGATTCCAGTCCTGAATGTTTGTTT**TAA**AGT
GGAGCTCAAGAATAGCTTTTAAAAGTTCTTATTTACATCTAGTGATTTCCCTGTATTGGGTTTGAAATACTGATT
GTCCACTTCACCTTTTTTATTATATCAGTTGACATGTAACTAGTACCATGCGTACTTAAATAGATGGTAATTTTC
TGAGCCTTACCAAGAACAAAGAAGTATCCATATTAAGTTTAGATTTTCAGTTAATTTTTGAGACTGAGTAGTATT
CTTGGATACAGGCTGATGTGTACTTAACCACTTCCAGATTTATACAGTCTTCCTGTGGAAGTTTAGTAAATGTCT
TTTTCCCTCCTTTCTTCTAGTAATGCAGTTCATGGGCTTTAGGTACTTCAGTTATGAAGTAGGCTTTTCATGGGG
AGAGATTGGGATTATGCTTTCTGTTGTTTAAGAAACTGTTTGATTTTAGAGTCTATTTCTATGAGATAGTTTACC
AAATAAATGTTCCTTATAAGATGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAA

FIGURE 3788

MPAERPAGSGGSEAPAMVEQLDTAVITPAMLEEEEQLEAAGLERERKMLEKARMSWDRESTEIRYRRLQHLLEKS
NIYSKFLLTKMEQQQLEEQKKKEKLERKKESLKVKKGKNSIDASEEKPVMRKKRGREDESYNISEVMSKEEILSV
AKKNKKENEDENSSSTNLCVEDLQKNKDSNSIIKDRLSETVRQNTKFFFDPVRKCNGQPVPFQQPKHFTGGVMRW
YQVEGMEWLRMLWENGINGILADEMGLGKTVQCIATIALMIQRGVPGPFLVCGPLSTLPNWMAEFKRFTPDIPTM
LYHGTQEERQKLVRNIYKRKGTLQIHPVVITSFEIAMRDRNALQHCYWKYLIVDEGHRIKNMKCRLIRELKRFNA
DNKLLLTGTPLQNNLSELWSLLNFLLPDVFDDLKSFESWFDITSLSETAEDIIAKEREQNVLHMLHQILTPFLLR
RLKSDVALEVPPKREVVVYAPLSKKQEIFYTAIVNRTIANMFGSSEKETIELSPTGRPKRRTRKSINYSKIDDFP
NELEKLISQIQPEVDRERAVVEVNIPVESEVNLKLQNIMMLLRKCCNHPYLIEYPIDPVTQEFKIDEELVTNSGK
FLILDRMLPELKKRGHKVLLFSQMTSMLDILMDYCHLRDFNFSRLDGSMSYSEREKNMHSFNTDPEVFIFLVSTR
AGGLGINLTAADTVIIYDSDWNPQSDLQAQDRCHRIGQTKPVVVYRLVTANTIDQKIVERAAAKRKLEKLIIHKN
HFKGGQSGLNLSKNFLDPKELMELLKSRDYEREIKGSREKVISDKDLELLLDRSDLIDQMNASGPIKEKMGIFKI
LENSEDSSPECLF

FIGURE 3789

GCGCGCCACGGCAGGAAAGGGCGGTCCTGCGCTGTGGCCCACGCTCGCTCCCGCTGTCGGACTCTGGGCCTGGAC
CGCGCGTGGCCGGCGCCAAAAGCGAGAGGCATGAGCGCGCGCCCGGGCCAGTGAACTGCTCGGGGATGGACTGCG
GCTCGGTCGGCGGCCAGAGGACCCAGCGCCTGCCCGGCCGCCAGCGGCTTCTCTTCTTGCCCGTGGGCCTCAGCG
GAAGACCGGGCGGCAGCGAAACCTCAGCACGCCGCTGCCCCTCTGCGCTCTCCGACGGTCTGGGGGCGCTGCGCC
CTCGCGCCCCGGCGGCCCGCGGCGGCGTGTCACGTGCCTCACCGCTGCTCCTCCTCCTGCTAGTGCCCTCCCCGC
GCTTGGCCGCCGCAGCCCCGCGCCGGCAGCTCGGGGACTGGGAGCGCTCGCGCCTCGGGTATGCCGCACCCCCGG
CCGGGCGCAGCGGCGCGTGGAGGTGCTCACCGGGCGTCGCCGCTGCCGCCGGCGCCCTTCCCCAGTACCACGGCC
CGGCGCCTGCACTCGTTTCCTGCAGGAGAGAGCTAAGCTTGTCTGCTGGATCCCTGCAGCTGGAGCGCAAAAGGA
GAGATTTCACCTCTTCTGGGAGCAGGAAACTCTACTTCGACACTCATGCCTTAGTGTGCTTACTGGAAGACAATG
AATCTCACTCTTTCATCCAGGCTGGAGTGCAGTGGCACAGTCTTGGCCTACTGCAACCCCCACCTCCCGGTTTCA
AGCGATCCTCCCACCTCATCCTCCTGAGTAGCTGGGATTACAGGCATGCACCACCACACCTGGATAATTTTTCTG
TATTTTTACTAGAGACGGGGTTTCACCATGTTGGCCAGGCTGGTCTCAAACTGCTGACCTCAAGTGATCCACCCA
CCTTGGCCTCCTAAAGTGCTGGGATTACAGGCGTGAACCACTGTGTCCAGTTGCCAAACCTAATTATGTTTAAAC
ATGAACTCTTTTTTTAATTAAAATTTTTTAAAATTTTATTTACATTAAAATGGAGATGGGATCACTATGTTGCCC
ATGCTGGTTCTGAACTCCTGGGCTCAAAGATCCTCCCGCCTTGGTCTCCCAGAGTGTTAGGATTACAGGCGTGAG
CCACCACACCCAGCCAGTGAACTCTTCTTAATAAAACTTTAAAATTTGGCAAAAGTTTAGTTTGAGTTTTTAAAA
ACTAGGAAGACAGACGAGAAAAAAGAAAACAGAGTCAGAGCTAAACAATGTTAACATTTTGGGTTTGCTACTCAA
CAAGCAGAAATCATTGTGTCTGCATTGGTCAAGATCCTGGAGGCCAACATGGACATCGTCTACAAAGATATGGTC
ACCAAGATGCAGCAGGAAATCACTTTTCAGCAAGTAATGTCTCAGATTGCGAATGTGAAAAAGGATATGATTATT
TTGGAGAAGAGTGAATTTTCAGCCCTCAGAGCAGAAAATGAGAAAATAAAACTCGAACTACATCAGTTAAAACAA
CAAGTAATGGATGAAGTGATCAAAGTCCGAACAGATACCAAATTAGACTTCAACCTAGAAAAGAGCAGAGTAAAA
GAATTGTATTCATTGAACGAAAAGAAGCTGCTGGAATTGAGAACAGAAATAGTGGCATTGCATGCCCAGCAAGAT
CGGGCCCTTACCCAGACAGACAGGAAGATCGAAACTGAGGTTGCTGGCCTCAAAACCATGCTTGAGTCACACAAG
CTTGATAATATTAAATATTTAGCAGGGTCTATATTTACGTGCCTAACAGTAGCTCTGGGATTTTATCGCCTGTGG
ATCTAATAAAGTGTCTATTTAAAGTGAAAAAAAAAAAAAAAA

FIGURE 3790

MDCGSVGGQRTQRLPGRQRLLFLPVGLSGRPGGSETSARRCPSALSDGLGALRPRAPAARGGVSRASPLLLLLLV
PSPRLAAAAPRRQLGDWERSRLGYAAPPAGRSGAWRCSPGVAAAAGALPQYHGPAPALVSCRRELSLSAGSLQLE
RKRRDFTSSGSRKLYFDTHALVCLLEDNESHSFIQAGVQWHSLGLLQPPPPGFKRSSHLILLSSWDYRHAPPHLD
NFSVFLLETGFHHVGQAGLKLLTSSDPPTLAS

FIGURE 3791

ATACTTAGAGCTAGAGGAGAGGCCCCTACACATGTCCACCATCATCCTTCGGGCTCATTTAACACTTACTATTTC
TATACTGTAAATGGCAACAAGATTTTCCCTACCTCAACCTGACTTTGAGCAGGAGCTGTTGCTGGCTAAGCAGCC
TGAACAATTCAC**ATG**CTCAGAACAGAGCCTACTCGACCCCCTCCCTCCCAGAGCAGTCGGCCCCAGAAGAAGGAG
AGACGGTTCAACGTGCTCAACCAAATATTCTGCAAAAACAAGAAAGAAGAGCAGAGAGCCCATCAGAAGGATCCC
AGCAGGGACCGATACAGAGAGGAGGACACCTCAGAAGTCAATGACATCATCACCACCTTTGATAGCATCGTGGGT
ACCAACTGCCAAGAACAGCCTGGTGATCAGGTGGCTATGGTTGAATTTAAGAAGAAAACCTCAGACAATTCAAAA
TATCTCTTACCAGAAAAGAAACCGCTGGCCCGTAAGGGGCTTCCACCAATCAGAACGCAGAGTCTCCCACCCATC
ACCCTGGGCAATAACTTCCTAACAGCCTCCCATAGGGCCACTTCCCATGCAGGCCTGAGCTCTGCTCCTCATCAT
ATGGCCCAGCGATCTCAGAAAAGTCGAAGTGAGCAGGATTTATTAAATAACAGAACTGGCTGCCAGATGTTACTA
GATAACCCCTGGAAGAGTGATTCTAATCAGGTATTTTCCTACAAAGTTTGGACTGTGTCTTCTTCTGATAAGCTG
CTGGACAGATTGCTCAGTGTCCGGCCTGGTCACCAAGAGGTCTCCGTGCCACCACACCTTCGCCATCTACATAAT
CCATCATCAGGACAAAATTTTCAGCATCTTTCCCCAAACAGACACAAAATCAGGGATCTTCCTTTCACTCGGAAC
AACCTAGCTCCCCTACCAGATCAAAAATTTCTATCTGGAGAACCTCTGCGGACAAACCGAGTGCTTCCTGCAATT
CCAAGTCAACGAAGACACAGCACAGCAGCAGAAGAGAGTGAACATTCTGCCAACCCCACCAGTGATGAAAAT**TAA**

CTGTGGGCCACTCGCTGCAGAAATGTAGATGAATATGTATTTTCAACTCTCAAAGGACAAGATTACTCCAGTTTG
TAAGAACGAAGACCAATTTAGTAAGCTGCATTCTATAAGCCATCAGTTTTATAACTCGAAATTCTTTATTCCAAA
TAAAGATACTCCCTAAATAAGCACTTAGAATATTTGGGTGTGCATATTAAGTCTGTGAATTTCTGTGACTTCCAC
ATGCCAAAATTAAAAGACAAAATATGTTATCAGTAGGAAAACTGAGCTATGTTTGGTTTGCTTTGTGGCATGTGC
ACTGTTTTTTTGTTATTGTTCTTTGGTTGTTTTTTTGCTGAATGATTTTATGTTTTGGGAAAAAAAGTACGCTTT
GCTGAATAAAAGCAAAAAACAAAACAAAAAAAAAACCACATCCCAGACAAACATGTCTTCACATTTATTGTCATT
CTAACTTGAACTAATGAAACCTATTTAAAAATAAATTCCTATGATCAGTCAC

FIGURE 3792

MLRTEPTRPPPSQSSRPQKKERRFNVLNQIFCKNKKEEQRAHQKDPSRDRYREEDTSEVNDIITTFDSIVGTNCQ
EQPGDQVAMVEFKKKTSDNSKYLLPEKKPLARKGLPPIRTQSLPPITLGNNFLTASHRATSHAGLSSAPHHMAQR
SQKSRSEQDLLNNRTGCQMLLDNPWKSDSNQVFSYKVWTVSSSDKLLDRLLSVRPGHQEVSVPPHLRHLHNPSSG
QNFQHLSPNRHKIRDLPFTRNNLAPLPDQKFLSGEPLRTNRVLPAIPSQRRHSTAAEESEHSANPTSDEN

FIGURE 3793

GCCGTCATCTCTAAGAAACAACCATACCACTGAATGCTACTGTGTACTTACAAACCACACTCATATTCGTCACGT
CATTTCATCTTCACCCCCACCTCCAAATGAGGCTTGAAATGAGATGAGATGTTCCTCCCTCCCCTTTCAACCATG
GACCTCACACTGTGGACTTCCTCTTAGAGCCTCTGAGTTAGGTACCCAAGCCAAGGCACAATGTCCCTGCCCCCC
ATAAGACTGCCCAGCCCCTATGGCTCTGATCGGCTGGTACAGCTAGCAGCCAGGCTCCGGCCAGCACTCTGTGAT
ACTCTGATCACCGTAGGGAGCCAGGAGTTCCCCGCCCACAGCCTGGTGCTAGCAGGTGTCAGCCAGCAGCTGGGC
CGCAGGGGCCAGTGGGCTCTGGGAGAAGGCATCAGCCCTTCTACCTTTGCCCAGCTCCTGAACTTTGTGTATGGG
GAGAGTGTAGAGCTGCAGCCTGGAGAGCTAAGGCCCCTTCAGGAGGCGGCCAGGGCCTTGGGAGTGCAGTCCCTG
GAAGAGGCATGCTGGAGGGCTCGAGGGGACAGGGCTAAAAAGCCAGATCCAGGCCTGAAGAAACATCAGGAGGAG
CCAGAGAAACCCTCAAGGAATCCTGAGAGAGAACTGGGGGACCCTGGAGAGAAGCAGAAACCAGAACAGGTTTCT
AGAACTGGTGGGAGAGAACAGGAGATGTTGCACAAGCACTCGCCACCAAGAGGCAGACCCGAGATGGCAGGAGCA
ACGCAGGAGGCTCAGCAGGAACAGACCAGGTCAAAGGAGAAACGCCTCCAAGCCCCTGTTGGCCAAAGGGGAGCA
GATGGGAAGCATGGAGTGCTCACGTGGTTGAGGGAAAATCCAGGGGGCTCTGAGGAAAGTCTGCGCAAGCTCCCT
GGCCCCCTTCCCCCAGCAGGCTCCCTGCAAACCAGCGTCACCCCTAGGCCCTCGTGGGCTGAGGCCCCTTGGTTG
GTGGGGGGCCAGCCTGCCCTGTGGAGCATCCTGCTGATGCCGCCCAGATATGGCATTCCCTTCTACCATAGCACC
CCCACCACTGGAGCCTGGCAGGAGGTCTGGCGGGAACAGAGGATCCCACTGTCCCTAAATGCCCCCAAAGGGCTC
TGGAGCCAGAACCAGTTGGCCTCCTCCAGCCCTACCCCAGGTTCCCTCCCCCAGGGCCCCGCACAGCTCAGCCCT
GGGGAGATGGAAGAGTCTGATCAGGGGCACACAGGCGCACTTGCAACCTGTGCGGGTCATGAGGACAAGGCAGGC
TGCCCACCTCGCCCGCACCCTCCCCCGGCCCCTCCTGCTCGGTCTCGGCCCTATGCGTGCTCTGTCTGTGGAAAG
AGGTTTTCACTCAAGCATCAGATGGAGACGCACTACCGAGTCCACACAGGAGAGAAGCCCTTCTCCTGTAGCCTT
TGTCCTCAGCGCTCCCGGGACTTCTCGGCCATGACCAAGCACCTGCGGACACACGGGGCCGCTCCGTACCGCTGC
TCCCTGTGCGGGGCCGGCTGTCCCAGCCTGGCCTCCATGCAGGCGCACATGCGCGGTCACTCGCCCAGCCAACTC
CCGCCCGGATGGACCATCCGCTCCACCTTCCTCTACTCCTCCTCGAGGCCGTCTCGGCCCTCGACCTCTCCCTGT
TGTCCTTCTTCCTCCACCACCTGACGGGGTGTCGGTAGCGTCTTAGCCAAGAGTCCAATTAAAGAACGAAAAGCG
GGCCGGCTCGGCTTCTGACCTGGCACCGCTGCTACGGCGGCCTAGCAAATTCCGCCCCAGAAGCGCCCCAGGAAG
GGCGCCGAGTGCCCTCTCCTGGACGATCGCGGGTCGCAGAAGCCCAGGCCAGCGAGCCCTACAGAGTGAGGACAC
TGAAGTGTGCAGGAGCGAAGGTTAACAGTAGGGGAGATTGTCGATCTCATCACCATAATAAAGAGTTTCCTGTGC
CCTCCCTTCA

FIGURE 3794

MSLPPIRLPSPYGSDRLVQLAARLRPALCDTLITVGSQEFPAHSLVLAGVSQQLGRRGQWALGEGISPSTFAQLL
NFVYGESVELQPGELRPLQEAARALGVQSLEEACWRARGDRAKKPDPGLKKHQEEPEKPSRNPERELGDPGEKQK
PEQVSRTGGREQEMLHKHSPPRGRPEMAGATQEAQQEQTRSKEKRLQAPVGQRGADGKHGVLTWLRENPGGSEES
LRKLPGPLPPAGSLQTSVTPRPSWAEAPWLVGGQPALWSILLMPPRYGIPFYHSTPTTGAWQEVWREQRIPLSLN
APKGLWSQNQLASSSPTPGSLPQGPAQLSPGEMEESDQGHTGALATCAGHEDKAGCPPRPHPPPAPPARSRPYAC
SVCGKRFSLKHQMETHYRVHTGEKPFSCSLCPQRSRDFSAMTKHLRTHGAAPYRCSLCGAGCPSLASMQAHMRGH
SPSQLPPGWTIRSTFLYSSSRPSRPSTSPCCPSSSTT

FIGURE 3795

GAATTCCGGCAAAATGCATGACAGTAACAATGTGGAGAAAGACATTACACCATCTGAATTGCCTGCAAACCCAGG
TTGTCTGCATTCAAAAGAGCATTCTATTAAAGCTACCTTAATTTGGCGCTTATTTTTCTTAATCATGTTTCTGAC
AATCATAGTGTGTGGAATGGTTGCTGCTTTAAGCGCAATAAGAGCTAACTGCCATCAAGAGCCATCAGTATGTCT
TCAAGCTGCATGCCCAGAAAGCTGGATTGGTTTTCAAAGAAAGTGTTTCTATTTTTCTGATGACACCAAGAACTG
GACATCAAGTCAGAGGTTTTGTGACTCACAAGATGCTGATCTTGCTCAGGTTGAAAGCTTCCAGGAACTGAATTT
CCTGTTGAGATATAAAGGCCCATCTGATCACTGGATTGGGCTGAGCAGAGAACAAGGCCAACCATGGAAATGGAT
AAATGGTACTGAATGGACAAGACAGTTTCCTATCCTGGGAGCAGGAGAGTGTGCCTATTTGAATGACAAAGGTGC
CAGTAGTGCCAGGCACTACACAGAGAGGAAGTGGATTTGTTCCAAATCAGATATACATGTCTAGATGTTACAGCA
AAGCCCCAACTAATCTTTAGAAGCATATTGGAACTGATAACTCCATTTTAAAATGAGCAAAGAATTTATTTCTTA
TACCAACAGGTATATGAAAATATGCTCAATATCACTAATAACTGGGAAAATACAAATCAAAATCATAGTAAAATA
TTACCTGTTTTCATGGTGCTAATATTACCTGTTCTCCCACTGCTAATGACATACCCGAGAATGAGTAATTTATAA
ATAAAAGAGATTTAATTGAAAAAAA

FIGURE 3796

MHDSNNVEKDITPSELPANPGCLHSKEHSIKATLIWRLFFLIMFLTIIVCGMVAALSAIRANCHQEPSVCLQAAC
PESWIGFQRKCFYFSDDTKNWTSSQRFCDSQDADLAQVESFQELNFLLRYKGPSDHWIGLSREQGQPWKWINGTE
WTRQFPILGAGECAYLNDKGASSARHYTERKWICSKSDIHV

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FIGURE 3797

ATGAGGTGAACTGCATTAACCTAAAGTGCTGCAGAGATAAACTTAAAGCAGGAAGCAACATACCATGAATGTACT
GCAAGGGAACACATTTGTGTCATGTGAAGAGACATGACAAAAACAGCCCTCCTTAAATTATTTGTGGCAATAGTG
ATCACATTCATTTTAATTTTGCCGGAATATTTCAAGACACCGAAAGAAAGAACATTGGAGCTATCATGTCTGGAA
GTGTGTTTGCAATCTAATTTTACCTATTCACTCTCCTCCTTAAATTTTTCTTTTGTGACTTTTCTGCAACCAGTA
AGGGAAACTCAGATTATCATGAGAATCTTTCTAAATCCCTCCAATTTTCGTAACTTCACCAGGACTTGCCAAGAC
ATCACAGGTGAATTTAAAATGTGCTCCTCGTGTTTGGTTTGTGAGTCTAAAGGAAACATGGATTTTATTTCTCAG
GAACAAACATCAAAAGTTCTTATCAGGAGAGGATCAATGGAAGTGAAAGCAAATGATTTTCATTCACCTTGTCAG
CACTTTAACTTCAGTGTAGCTCCTCTGGTTGACCACTTGGAGGAATATAACACTACCTGTCATCTAAAAAACCAC
ACTGGAAGATCAACAATCATGGAGGATGAGCCAAGCAAGGAGAAATCGATAAACTACACTTGTAGAATCATGGAA
TACCCGAATGATTGTATACACATTTCTTTGCACCTGGAGATGGATATAAAAAATATCACTTGTTCCATGAAGATC
ACTTGGTATATTTTAGTTCTATTAGTTTTTATATTTTTGATCATCCTCACTATCCGCAAAATACTTGAAGGCCAG
AGAAGAGTGCAAAAGTGGCAGAGTCATAGAGACAAACCTACATCTGTTCTCTTAAGAGGAAGTGATTCGGAGAAA
CTGAGAGCATTGAATGTGCAGGTTCTTTCAGCAGAGACCACGCAGAGGCTGCCTTTGGATCAAGTCCAGGAAGTG
CTTCCCCCAATTCCAGAACTATAAGTTACTTCCACAGTGCATCAGTGAGATCAATATACACGAATATCCCCGGGC
AAGTTGGACCGAGCCCTTTGAAGAATACTCAGAAGTTTATTTTGTGAATGAGTAGACTGGAAAATGTTTGTGTCC
AGCTGAGGATGCACAGTTGGAAAGCAGGAGGAATGCTGACTGGTTGATGAAAACTAGCTTAAGAGCATTCATTCG
CTCCATGAGATCAAGGGAACAAGAGTGTTTGCAAGAAGCCATTATGAGTCATGGAAAAAAAGATGATGAAACCCA
TGGAAACAGCAAGAGAATTCCCACTCTCTCTCTTCTTAAAAAAAATCTATCATTATACAGCACAGAGTGGAGCCA
AGTTTTTAATTTTGAGGAACCAAAAACAGGATCAAATATGAAAACCCTTTCTTTTATTGGGCCACATTGTAGATG
CTGATTTGATAATTGTTTCCTATGCAGATAGATTATTTTTATTTCACAGATTATTTAAAAGGGAAGAGGGCCTGG
TTGTTTATTTATATGTTTGTTTGCATTTATGAATCTTGCTGCCTTTTAGCACCAGGATGTTTTTAAAAAAATTCA
AAGAGGCCAGGCGCAGTGGCTCATGCCTGTAATCCCAGCACTTTGGGATTCTGAGGTGGGAGGATCATGAGGTCA
AGGGATCGAGACCATCCTGGCCAACATGGTGAAACCCTGTCTCTACTAAAAACACAAAAATTAGCTGGGTGTGGT
GGTGCGCGCCTGTAGTCCCAGCTCCTCAGGAGGCTGAGGCAGGAGAATCACTTGAACCTGGCAGGCAGAGTTTGC
AGTGAACCAAGATCACGCCACTGCATTACAGCCTGGTGCAGAGCAAGACTCTGTCTCAAAAAAAAAAAAAAAAAA
AAAAA

FIGURE 3798

MTKTALLKLFVAIVITFILILPEYFKTPKERTLELSCLEVCLQSNFTYSLSSLNFSFVTFLQPVRETQIIMRIFL
NPSNFRNFTRTCQDITGEFKMCSSCLVCESKGNMDFISQEQTSKVLIRRGSMEVKANDFHSPCQHFNFSVAPLVD
HLEEYNTTCHLKNHTGRSTIMEDEPSKEKSINYTCRIMEYPNDCIHISLHLEMDIKNITCSMKITWYILVLLVFI
FLIILTIRKILEGQRRVQKWQSHRDKPTSVLLRGSDSEKLRALNVQVLSAETTQRLPLDQVQEVLPPIPEL

FIGURE 3799

GCAGGGGGACAGTTGTTAGTGTTGCACTCTGAAAGAGCTGTTGGTTAATTCCTGCCTTCCTCCCTTTTCCCAGTC
CACTTCGACTGCTCAGGGAAGTACAGATGTCGCTCATCCTTTAAGTGTATCGAGCTGATAGCTCGATGTGACGGA
GTCTCGGATTGCAAAGACGGGGAGGACGAGTACCGCTGTGTCCGGGTGGGTGGTCAGAATGCCGTGCTCCAGGTG
TTCACAGCTGCTTCGTGGAAGACCATGTGCTCCGATGACTGGAAGGGTCACTACGCAAATGTTGCCTGTGCCCAA
CTGGGTTTCCCAAGCTATGTGAGTTCAGATAACCTCAGAGTGAGCTCGCTGGAGGGGCAGTTCCGGGAGGAGTTT
GTGTCCATCGATCACCTCTTGCCAGATGACAAGGTGACTGCATTACACCACTCAGTATATGTGAGGGAGGGATGT
GCCTCTGGCCACGTGGTTACCTTGCAGTGCACAGCCTGTGGTCATAGAAGGGGCTACAGCTCACGCATCGTGGGT
GGAAACATGTCCTTGCTCTCGCAGTGGCCCTGGCAGGCCAGCCTTCAGTTCCAGGGCTACCACCTGTGCGGGGGC
TCTGTCATCACGCCCCTGTGGATCATCACTGCTGCACACTGTGTTTATGACTTGTACCTCCCCAAGTCATGGACC
ATCCAGGTGGGTCTAGTTTCCCTGTTGGACAATCCAGCCCCATCCCACTTGGTGGAGAAGATTGTCTACCACAGC
AAGTACAAGCCAAAGAGGCTGGGCAATGACATCGCCCTTATGAAGCTGGCCGGGCCACTCACGTTCAATGAAATG
ATCCAGCCTGTGTGCCTGCCCAACTCTGAAGAGAACTTCCCCGATGGAAAAGTGTGCTGGACGTCAGGATGGGGG
GCCACAGAGGATGGAGCAGGTGACGCCTCCCCTGTCCTGAACCACGCGGCCGTCCCTTTGATTTCCAACAAGATC
TGCAACCACAGGGACGTGTACGGTGGCATCATCTCCCCCTCCATGCTCTGCGCGGGCTACCTGACGGGTGGCGTG
GACAGCTGCCAGGGGGACAGCGGGGGGCCCCTGGTGTGTCAAGAGAGGAGGCTGTGGAAGTTAGTGGGAGCGACC
AGCTTTGGCATCGGCTGCGCAGAGGTGAACAAGCCTGGGGTGTACACCCGTGTCACCTCCTTCCTGGACTGGATC
CACGAGCAGATGGAGAGAGACCTAAAAACCTGAAGAGGAAGGGGACAAGTAGCCACCTGAGTTCCTGAGGTGATG
AAGACAGCCCGATCCTCCCCTGGACTCCCGTGTAGGAACCTGCACACGAGCAGACACCCTTGGAGCTCTGAGTTC
CGGCACCAGTAGCAGGCCCGAAAGAGGCACCCTTCCATCTGATTCCAGCACAACCTTCAAGCTGCTTTTTGTTTT
TTGTTTTTTTGAGGTGGAGTCTCGCTCTGTTGCCCAGGCTGGAGTGCAGTGGCGAAATCCCTGCTCACTGCAGCC
TCCGCTTCCCTGGTTCAAGCGATTCTCTTGCCTCAGCTTCCCCAGTAGCTGGGACCACAGGTGCCCGCCACCACA
CCCAACTAATTTTTGTATTTTTAGTAGAGACAGGGTTTCACCATGTTGGCCAGGCTGCTCTCAAACCCCTGACCT
CAAATGATGTGCCTGCTTCAGCCTCCCACAGTGCTGGGATTACAGGCATGGGCCACCACGCCTAGCCTCACGCTC
CTTTCTGATCTTCACTAAGAACAAAAGAAGCAGCAACTTGCAAGGGCGGCCTTTCCCACTGGTCCATCTGGTTTT
CTCTCCAGGGGTCTTGCAAAATTCCTGACGAGATAAGCAGTTATGTGACCTCACGTGCAAAGCCACCAACAGCCA
CTCAGAAAAGACGCACCAGCCCAGAAGTGCAGAACTGCAGTCACTGCACGTTTTCATCTCTAGGGACCAGAACCA
AACCCACCCTTTCTACTTCCAAGACTTATTTTCACATGTGGGGAGGTTAATCTAGGAATGACTCGTTTAAGGCCT
ATTTTCATGATTTCTTTGTAGCATTTGGTGCTTGACGTATTATTGTCCTTTGATTCCAAATAATATGTTTCCTTC
CCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3800

MGENDPPAVEAPFSFRSLFGLDDLKISPVAPDADAVAAQILSLLPLKFFPIIVIGIIALILALAIGLGIHFDCSG
KYRCRSSFKCIELIARCDGVSDCKDGEDEYRCVRVGGQNAVLQVFTAASWKTMCSDDWKGHYANVACAQLGFPSY
VSSDNLRVSSLEGQFREEFVSIDHLLPDDKVTALHHSVYVREGCASGHVVTLQCTACGHRRGYSSRIVGGNMSLL
SQWPWQASLQFQGYHLCGGSVITPLWIITAAHCVYDLYLPKSWTIQVGLVSLLDNPAPSHLVEKIVYHSKYKPKR
LGNDIALMKLAGPLTFNGTSGSLCGSAALPLFQEDLQLLIEAFL

FIGURE 3801

AGCCATATGGGGGATACGCCAGCAACAGACGCCGGCCGCCAAGATCTGCATCCCTAGGCCACGCTAAGACCCTGG
GGAAGAGCGCAGGAGCCCGGGAGAAGGGCTGGAAGGAGGGGACTGGACGTGCGGAGAATTCCCCCCTAAAAGGCA
GAAGCCCCCGCCCCCACCCTCGAGCTCCGCTCGGGCAGAGCGCCTGCCTGCCTGCCGCTGCTGCGGGCGCCCACC
TCGCCCAGCC**ATG**CCAGGCCCGGCCACCGACGCGGGGAAGATCCCTTTCTGCGACGCCAAGGAAGAAATCCGTGC
CGGGCTCGAAAGCTCTGAGGGCGGCGGCGGCCCGGAGAGGCCAGGCGCGCGCGGGCAGCGGCAGAACATCGTCTG
GAGGAATGTCGTCCTGATGAGCTTGCTCCACTTGGGGGCCGTGTACTCCCTGGTGCTCATCCCCAAAGCCAAGCC
ACTCACTCTGCTCTGGGCCTACTTCTGCCTCCTCCTGGCCGCTCTGGGTGTGACAGCTGGTGCCCATCGCTTGTG
GAGCCACAGGTCCTACCGGGCCAAGCTGCCTCTGAGGATATTTCTGGCTGTCGCCAACTCCATGGCTTTCCAGAA
TGACATCTTCGAGCGGTCCAGGGACCACCGAGCCCACCACAAGTACTCAGAGACGGATGCTGACCCCCACAATGC
CCGCCGGGGCTTCTTCTTCTCCCATATTGGGTGGCTGTTTGTTCGCAAGCATCGAGATGTTATTGAGAAGGGGAG
AAAGCTTGACGTCACTGACCTGCTTGCTGATCCTGTGGTCCGGATCCAGAGAAATACACAGCACATCCAGAAAGA
AGGAAGAGCTCTCAATCAAGAGGCAGCGTGTGAGATGCTTCGTGAGTGGCATCAAGGGCATATATTGAAAGTCAC
CCTTCCCGGATTACACATTTTAGCTTTGTTACATACTCATTGTAACCACTCCGAAAAGTGCTGCTTGATGCTGCG
TGCTCTTTCTGTGTCCCTGGAGGTATTC**TGA**AGGTCAGAAGAGAGATATACAACAGCGAGGCTTGGTGATAACGT
ATAGAATAACAGACGGGGACTCCACACCCAGGCCTTTTTTAACGGTGTGAAGCATAGACAGAGCTGCAGTCTGTG
CTAACATTAGGTTATTTATTGATTCAATCAGTTGACACAAGGAGGCAGCTACGGGGAGGTAAAATATGGTCCTAA
AATCAAAAAGATTTCAGTTTTGTCATTCTGTCTCTGAGATTCTATTTCCACATCTAGAGCAGGGTAATAATGATA
CCTACCTTACAAAATTATTGGGAGAATACATTAGTTAATATATGTGAAAGTATGGAGGAGATGTGCAATAAATAT
TTGTGTTATTAACTACACATACAGCACTCTATAGGAGATATTCCATTTATAAAAACTTTAGGTTCTAAAAACCTG
TACACGTTGATTATTTTTGTAAGTCAAAAGTGATTAAGAGGAGTTTAAGCTATCATTTCCAGATGTATTTCTATA
AATAAAAACATAAGTATATTCAGTTGATTTGGGGTGGAGAGTTCCATAGATGTCTGTTAGGTCCGCTTGGTCCAG
AGCTGAGTTCAAGTCCTGAATATCCTTGTTAATTTTCTGTCTTGTTGATCTGTCTAATATTGACAGTGGGGTATT
AAAGTCTCCCACTATTATTATATGGGAGTCTAAGTCTCCTTGTAGGTCTCTAAGAACTTGCTTTATGAATCTGGG
TGCTCCTGTATTAGGTGCATACATATTTAGGATAGTTAGCTCTTCTTGCTGCATTGATCCCATTACCATTATATA
ATGCCCTTCTTTGTCTTTTTTGATCTTTGTTGGTTTAAAGTCTGTTTTATTAGAGACTAGGATTGCAACCCCTGC
TATTTTTTTTTTTTTTTTTTGCTTGATAAATATTCCTGTATCCCTTTATTTTGAGCCTATATGTGTCTTTGCACGT
GAGGTGGGTCTCCTGAATACAGCACACCGATGGGTTTTGACTCTAAAAAAAAAAAAAAAAAAAAAAAAAAA .

FIGURE 3802

MPGPATDAGKIPFCDAKEEIRAGLESSEGGGGPERPGARGQRQNIVWRNVVLMSLLHLGAVYSLVLIPKAKPLTL
LWAYFCLLLAALGVTAGAHRLWSHRSYRAKLPLRIFLAVANSMAFQNDIFERSRDHRAHHKYSETDADPHNARRG
FFFSHIGWLFVRKHRDVIEKGRKLDVTDLLADPVVRIQRNTQHIQKEGRALNQEAACEMLREWHQGHILKVTLPG
LHILALLHTHCNHSEKCCLMLRALSVSLEVF

FIGURE 3803

TCCAAAGAATGTTGCTACAGAGACACAATTGAAAGGTGGTCAGCATTCTCAAGCTGCTCCAGTGAAATGGATTTT
CCAAGATAATCTACAGCCTTTTACGCCATCTCTTGTTCCTGTTAAGTCTTCAAATAATGTGGCTTCAAAGATTTT
AAAAACTTTTGTAGATAGGAAAAATTTGGGAGATAATACTATAAATATGCCACCATTGAGTACCATCGATCCTAG
TGGGACGCGATCCAAAAATATGCCTATTAAAGATAATGCTTTGGTTATGTTTAATGGGAAAGTCTATCTGTTGGC
TAAAAAGGGGACAGATGTTCTGCCATCACAAATTGACCAACAGAATTCTGTTTCTCCTGATACTCCAGTAAGAAA
AGACACGTTACAGACAGTGAGTTCAAGTCCAGTCACAGAAATATCCAGAGAGGTTGTAAATATTGTTTTGGCTAA
AAGTAAATCTTCCCAGATGGAGACAAAATCACTTTCCAATACCCAGCTTGCTTCCATGGCCAATCTAAGGGCAGA
GAAGAATAAAGTGGAGAAACCATCTCCTTCTACCACAAATCCACATATGAACCAATCCAGTAACTACTTAAAACA
GAGTAAGACTTTATTCACAAATCCAATCTTTCCAGTTGGATTTAGTACAGGACACAATGCCCCCAGAAAAGTAAC
AGCCGTCATTTATGCTAGAAAAGGAAGTGTCCTCCAGAGCATAGAGAAAATAAGTTCCTCTGTTGATGCAACAAC
TGTTACTTCACAACAGTGTGTTTTCAGAGACCAAGAACCAAAGATCCATAATGAGATGGCATCAACATCAGATAA
AGGTGCCCAAGGAAGAAATGACAAGAAAGATTCTCAAGGAAGAAGTAATAAGGCATTACATCTGAAGAGTGATGC
TGAATTTAAAAAGATATTTGGCCTTACTAAGGATTTGAGAGTGTGCCTTACTCGAATTCCTGACCATTTGACCTC
TGGAGAAGGTTTCGATTCCTTTAGCAGTTTGGTAAAGAGTGGTACTTACAAAGAGACAGAGTTTATGGTGAAGGA
AGGAGAGAGAAAACAGCAGAATTTTGATAAGAAAAGAAAAGCAAAAACTAATAAGAAGATGGATCACATAAAGAA
GAGAAAAACAGAGAATGCTTATAACGCAATCATAAATGGGGAAGCTAATGTCACCGGTTCCCAACTCCAGTATTT
TACCAACTTCAGATGTGTCACAACATAACATTCTCACGAGTCACAGCAAAACCAGACAAGAAAAGAGAACTGAGA
TGGAATACTATACCCATGAGAAGCAAGAGAAAGGCACTTTGAATTCAAATGCAGCTTATGAACAAAGTCATTTCT
TCAATAAAAATTATACCGAAGATATTTTCCCAGTGACACCACCGGAGTTAGAAGAAACCATTCGAGATGAAAAAA
TAAGAAGACTTAAGCAGGTGCTGAGAGAGAAAGAAGCAGCTCTTGAAGAAATGCGTAAGAAGATGCACCAAAAAT
AAAATCTCCTGTAAAGACTTCAGTGAAATAGCTGTTTTTTAAAATATACTTCAGCATTAATAAGTTAATTGTAGG
TGTGTTCTGAAAGTGTCTTTGAATATGAAGCTTGTTTTTTCATCAGTCGATTGTACAACTTTAAGGAATACAGAA
AAGGTTGATTCACATATGACTTGTGAATAATTTACATGGGGTATCTATACCTTTGTCTTAGATACCTTTTTTTGG
AAGGATAAATTTTATATTTTTCTATTATTTTAACTAGAATTCTCCAAGTTTGAATATTTGGGCAGGGTTTTTGTT
ATTGTTTGTATCTTTACCTAAATTGCTCAGGCATTATTCCAGCAGTAGATAGTGACTGTGTATTACTGAAATTTT
ACAATTCAAGAGAGGAAATCAGCTCCAAACTTAGCTTTTCCAGTGGATTTGTATATGTACTTGCTTTATCTCTTT
ACCCTTAAAATGATGATACCTTGTATTCACCATTGTTTTTTTTAATGTCGTGAAATAATATGTATTATGGCAACA
TTATTTAAACATTCAAACATTTCTCAAGAATGAGCAACATTTGTAACTTTACAATGTAATTTTATATAATCCAAA
GGTATTTTAGAATTC

FIGURE 3804

MPPLSTIDPSGTRSKNMPIKDNALVMFNGKVYLLAKKGTDVLPSQIDQQNSVSPDTPVRKDTLQTVSSSPVTEIS
REVVNIVLAKSKSSQMETKSLSNTQLASMANLRAEKNKVEKPSPSTTNPHMNQSSNYLKQSKTLFTNPIFPVGFS
TGHNAPRKVTAVIYARKGSVLQSIEKISSSVDATTVTSQQCVFRDQEPKIHNEMASTSDKGAQGRNDKKDSQGRS
NKALHLKSDAEFKKIFGLTKDLRVCLTRIPDHLTSGEGFDSFSSLVKSGTYKETEFMVKEGERKQQNFDKKRKAK
TNKKMDHIKKRKTENAYNAIINGEANVTGSQLQYFTNFRCVTT

FIGURE 3805

TCTCTCACTCGGTGCCGCTGCCTAGGGGCTGTAGAGGTCGCGCCGCTCCTGCTGGGGCCTGCCCACGCCAAGGAC
CTGCCTCTGTCGCCTCCTCTTCTATTGCCCAGTTTCCCCAGCCAGAACATCCCCTGAAGATGGCAGAGGAGAGCA
GCTGTACCAGGGATTGCATGTCCTTCAGCGTGCTCAACTGGGATCAGGTTAGCCGGCTGCATGAGGTCCTCACTG
AAGTTGTACCTATCCACGGACGAGGCAACTTTCCAACCTTGGAGATAACTCTGAAGGACATCGTCCAGACCGTCC
GCAGTCGGCTGGAGGAGGCAGGCATCAAAGTGCACGACGTCCGGCTGAATGGCTCCGCAGCTGGCCACGTTTTGG
TCAAAGATAATGGCTTGGGCTGCAAAGACCTGGACCTAATCTTCCATGTGGCTCTTCCAACAGAGGCAGAATTTC
AGCTGGTTAGAGATGTGGTTCTGTGTTCCCTTCTGAACTTCCTGCCAGAGGGTGTGAACAAGCTCAAAATCAGTC
CAGTCACTCTGAAGGAGGCATATGTGCAGAAGCTAGTGAAGGTTTGCACGGACACTGTCCGCTGGAGCCTGATCT
CCCTCTCCAACAAGAACGGGAAGAACGTGGAGCTGAAGTTTGTCGACTCCATTCGGCGTCAGTTTGAGTTCAGTG
TGGACTCTTTCCAAATCATCCTGGATTCTTTGCTTTTCTTCTATGACTGTTCCAATAATCCCATCTCTGAGCACT
TCCACCCCACCGTGATTGGGGAGAGCATGTACGGGGACTTTGAGGAAGCTTTTGACCATCTGCAGAACAGACTGA
TCGCCACCAAGAACCCAGAAGAAATCAGAGGCGGGGGACTTCTCAAGTACAGCAACCTTCTTGTGCGGGACTTCA
GGCCCACAGACCAGGAAGAAATCAAAACTCTAGAGCGCTACATGTGCTCCAGGTTCTTCATCGACTTCCCGGACA
TCCTTGAACAGCAGAGGAAGTTGGAGACTTACCTTCAAAACCACTTCGCTGAAGAAGAGAGAAGCAAGTACGACT
ACCTCATGATCCTTCGCAGGGTGGTGAACGAGAGCACCGTGTGTCTCATGGGGCATGAACGCAGGCAGACTCTGA
ACCTCATCTCCCTCCTGGCCTTGCGTGTGCTGGCGGAACAAAACATCATCCCCAGTGCCACCAACGTCACCTGTT
ACTACCAGCCGGCCCCTTACGTCAGTGATGGCAACTTCAGCAACTACTACGTTGCCCATCCTCCAGTCACCTACA
GCCAGCCTTACCCTACCTGGCTGCCCTGTAACTAACCTTGAGACCTGAGGGTTTCCACAGTGGGAACCCCAATAG
GGCTAGGGCTCTCAGGTAGGGGAGCCTCCTTCTAGATGTAGGCATTTGGCTTTTAAAGGGGAACTCAGCTCTGAT
TCTGCTTTTTTTTTTTTTTTCCTTTGTGTACCCATTGGAATGGGTCTACAGTGTATCATGAGCCAACCCTCAAA
GGACCCGTATTACAGTGCCACGTTGGAAAACGCTACAGGAAGCATGACCTATCCACATCTTTCCAAGATAGACAC
TAACATGTCATGTCCCAAACATTAGCACGTGGGGGTTGAGCTCTGTGCAGTAATCGAGATTGGGAGAATTTGGGC
AGCGCGTGAGAAGTGCTAAGCTACTTGTTTTCTCACTTGAGCCCGGGTAGGCTGTGTTGGCCCTCACTTGGGATT
CTCAGCAGTTACATGAAAGTTGTGCTGATAATCTCTTCTCTTGTACCAATTTTAGTCAGGCAGAAAATGGTAAAC
ATGAGGGTGCTCTTGTGACTTAATTTTTGTTCAAGGGACTAAATTGCTTATGTTTATTCCCTGTCAGCGGAGTGG
AGAATGTCATTCATCAATAAACCAAAGCCAATAGCTGGAGAATTGAGATCTGGTTGAAAGTGGTTTATGGTTTAC
ATGCTGTACTATCCTGAGGAATTGCGAGATATTGCTGAGGGGAAAAAAAAAATGACCTTTTCTTGAAATGTAACTT
GAAAACAAAATAAAATGTGGAACATAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3806

MAEESSCTRDCMSFSVLNWDQVSRLHEVLTEVVPIHGRGNFPTLEITLKDIVQTVRSRLEEAGIKVHDVRLNGSA
AGHVLVKDNGLGCKDLDLIFHVALPTEAEFQLVRDVVLCSLLNFLPEGVNKLKISPVTLKEAYVQKLVKVCTDTV
RWSLISLSNKNGKNVELKFVDSIRRQFEFSVDSFQIILDSLLFFYDCSNNPISEHFHPTVIGESMYGDFEEAFDH
LQNRLIATKNPEEIRGGGLLKYSNLLVRDFRPTDQEEIKTLERYMCSRFFIDFPDILEQQRKLETYLQNHFAEEE
RSKYDYLMILRRVVNESTVCLMGHERRQTLNLISLLALRVLAEQNIIPSATNVTCYYQPAPYVSDGNFSNYYVAH
PPVTYSQPYPTWLPCN

FIGURE 3807

GGGGGTGGCGGGGACGCGAGTGGCGGCCGCGGGGCCCCGGACAAGGGTCCGCAGAGCTGCAGCCTTCGAGGGCCA
GCCCTCTCCGAGTCCGGGGCTGGGTCCCACCAGTGACAAGGCGGCAGCCCCGCGCACACCAAAGAGAAAGCGGCT
GTGGCGGCAGCGGCAGCCCCAGCCATGCTGTGTTATGTGACGAGGCCGGACGCGGTGCTGATGGAGGTGGAGGTG
GAGGCGAAAGCCAACGGCGAGGACTGCCTCAACCAGGTGTGCAGGCGACTGGGAATCATAGAAGTTGACTATTTT
GGACTGCAATTTACGGGTAGCAAAGGTGAAAGTTTATGGCTAAACCTGAGAAACCGGATCTCCCAGCAGATGGAT
GGGCTAGCCCCTTACAGGCTTAAACTTAGAGTCAAGTTCTTCGTGGAGCCTCATCTCATCTTACAGGAGCAGACT
AGGCATATCTTTTTCTTGCACATCAAGGAGGCCCTCTTGGCAGGCCACCTCTTGTGTTCCCCAGAGCAGGCAGTG
GAACTCAGTGCCCTCCTGGCCCAGACCAAGTTTGGAGACTACAACCAGAACACTGCCAAGTATAACTATGAGGAG
CTCTGTGCCAAGGAGCTCTCCTCTGCCACCTTGAACAGCATTGTTGCAAAACATAAGGAGTTGGAGGGGACCAGC
CAGGCTTCAGCTGAATACCAAGTTTTGCAGATTGTGTCGGCAATGGAAAACTATGGCATAGAATGGCATTCTGTG
CGGGATAGCGAAGGGCAGAGACTGCTCATTGGGGTTGGACCTGAAGGAATCTCAATTTGTAAAGATGACTTTAGC
CCAATTAATAGGATAGCTTATCCTGTGGTGCAGATGGCCACCCAGTCAGGAAAGAATGTATATTTGACGGTCACC
AAGGAATCTGGGAACAGCATCGTGCTCTTGTTTAAAATGATCAGCACCAGGGCGGCCAGCGGGCTCTACCGAGCG
ATAACAGAGACGCACGCATTCTACAGGTGTGACACAGTGACCAGCGCCGTGATGATGCAGTATAGCCGTGACTTG
AAGGGCCACTTGGCATCTCTGTTTCTGAATGAAAACATTAACCTTGGCAAGAAATATGTCTTTGATATTAAAAGA
ACATCAAAGGAGGTGTATGACCATGCCAGGAGGGCTCTGTACAATGCTGGCGTTGTGGACCTCGTTTCAAGAAGC
AACCAGAGCCCTTCACACTCGCCTCTGAAGTCCTCAGAAAGCAGCATGAACTGCAGCAGCTGCGAGGGCCTCAGC
TGCCAGCAGACCCGGGTGCTGCAGGAGAAGCTACGCAAGCTGAAGGAAGCCATGCTGTGCATGGTGTGCTGCGAG
GAGGAGATCAACTCCACCTTCTGTCCCTGTGGCCACACTGTGTGCTGTGAGAGCTGCGCCGCCCAGCTACAGTCA
TGTCCCGTCTGCAGGTCGCGTGTGGAGCATGTCCAGCACGTCTATCTGCCAACGCACACCAGTCTTCTCAATCTG
ACTGTAATCTAATCTGTTGTGCTTTTGTTGGACTTGGCATGTTTCCATGAACTGCACTATTATAAACTATTAAAA
TGATAGATGTTGGAGAAAGTAATTATTCCAACACCCATCTGCCCATGCGATGTTAAAAAA

FIGURE 3808

MLCYVTRPDAVLMEVEVEAKANGEDCLNQVCRRLGIIEVDYFGLQFTGSKGESLWLNLRNRISQQMDGLAPYRLK
LRVKFFVEPHLILQEQTRHIFFLHIKEALLAGHLLCSPEQAVELSALLAQTKFGDYNQNTAKYNYEELCAKELSS
ATLNSIVAKHKELEGTSQASAEYQVLQIVSAMENYGIEWHSVRDSEGQRLLIGVGPEGISICKDDFSPINRIAYP
VVQMATQSGKNVYLTVTKESGNSIVLLFKMISTRAASGLYRAITETHAFYRCDTVTSAVMMQYSRDLKGHLASLF
LNENINLGKKYVFDIKRTSKEVYDHARRALYNAGVVDLVSRSNQSPSHSPLKSSESSMNCSSCEGLSCQQTRVLQ
EKLRKLKEAMLCMVCCEEEINSTFCPCGHTVCCESCAAQLQSCPVCRSRVEHVQHVYLPTHTSLLNLTVI

FIGURE 3809

GGAAGCTCAGCAGTGTCCACTGTCGCCATTCCTTGGCCATAGAAAACAATGTATTTGAATTTTGATGTAAGCATA
GCAAATTGAAGATGAAGATGACACGTTGATTTCTTGTTTGAAATTAACCAAGTCCCGAGAAAAGAAAGTGAATAG
TGTTAGCACGAGGAGGAAGGAAGAA**ATG**GAGATTAGATTGGATACTCTTTCTGCATCACTGGGTAGATCCAGCAC
TTTAAATGACTGCAACTTGGAAGATAAATTAGCTTGGTATGAAGGTGAAGCTTACATGTGGCATCACTGGAAGCC
TTTTCCTGAAAACCCTCTCTGGACATGTCTTGATTTCCAAATAGCACAAGTTGGACCCTGGGACTACTGCTCCTC
TTGTATTCGCCACACACGTCTCAAGTCTTCCTGCTCAGATATGGATCTCCTACATTCATGGCGAAGCAGCAGTTT
TGGGAATTTCGATCGTTTTCGGAATAATTCTTTATCAAAACCAGATGATTCAACTGAGGCACATGAAGGAGATCC
CACAAATGGAAGTGGAGAACAAAGTAAAACTTCAAATAATGGAGGCGGTTTGGGTAAAAAAATGAGAGCTATTTC
ATGGACAATGAAGAAAAAAGTGGGTAAAAAGTACATCAAAGCCCTTTCTGAGGAAAAGGATGAGGAAGATGGAGA
GAATGCCCACCCATATAGAAACAGTGACCCTGTGATTGGGACCCACACAGAGAAGGTGTCCCTCAAAGCCAGTGA
CTCCATGGATAGTCTCTACAGTGGACAGAGCTCATCAAGTGGCATAACAAGCTGTTCAGATGGTACAAGTAACCG
GGACAGCTTTCGACTGGATGACGATGGCCCCTATTCAGGACCATTCTGTGGCCGTGCCAGAGTGCATACGGATTT
CACGCCAAGTCCCTATGACACTGACTCCCTCAAAATCAAGAAAGGAGACATCATAGACATTATTTGCAAAACACC
AATGGGGATGTGGACAGGAATGTTGAACAATAAAGTGGGAAACTTCAAATTCATTTATGTGGATGTCATCTCAGA
AGAGGAAGCAGCCCCCAAGAAAATAAAGGCAAACCGAAGGAGTAACAGCAAAAAATCCAAGACTCTGCAGGAGTT
CCTAGAGAGGATTCATCTGCAGGAATACACCTCAACACTTTTGCTCAATGGTTATGAGACTCTAGAAGATTTAAA
AGATATAAAAGAGAGTCACCTCATTGAATTAAATATTGAAAACCCAGATGACAGAAGAAGGTTACTATCAGCTGC
TGAAAACTTCCTTGAAGAAGAAATTATTCAAGAGCAAGAAAATGAACCTGAGCCCCTATCCTTGAGCTCAGACAT
CTCCTTAAATAAGTCACAGTTAGATGACTGCCCAAGGGACTCTGGTTGCTATATCTCATCAGGAAATTCAGATAA
TGGCAAAGAGGATCTGGAGTCTGAAAATCTGTCTGACATGGTACATAAGATTATTATCACAGAGCCAAGTGAC**TG**
AACACGCATTCCCAACTATATATCTACAGATGCATTCCATTTTAACTCTTCTTGAGCTAAAACGTCAAATAGGAG
AGGAAGATAAGATAAATATTTGTAAATAAAACCTAAAGTTTAAATGTTTTAATCTGAATAATTGTACATAAAATT
TTGTATCTCTAACATTCCAAATTACTGTCAATAAAATATATATTTATTATTTTAAATGCTATGTGTTAATATTTC
ACTTGCTTGTATTAGAAAGGCAAAATGTAAGACTTTGGTATGTGTGACATATGCTTTATTTGGCTTTATTTTACA
AGTACAGTATCTGCAAAAAACAAAGTAACCTTTTTTCATACCTGCCAGTTTTGAATTTATATATGTTATTGAACA
AATAGTAATAGAGGATTCGCTGTTGAAACAAGTTGTCCAAGCAATGTTATATTCATTTTTATACTTATTGGGAAA
GTGTGAGTTAATATTGGACACATTTTATCCTGATCCACAGTGGAGTTTTAGTAATTATATTTTGTTGATTTCTTC
ATTTTGTTTTCTGGTATAAAAGTAGAGATAATGTGTAGTCACTTCTGATTTAGTGAAACCAATTGTAATAATTGT
GGAAATGTTTTGTCTTTAAGTGTAAATATTTTAAAATTTGACATACCCTAATGTTAATAATAAAAAGAACTATTT
GCATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3810

MEIRLDTLSASLGRSSTLNDCNLEDKLAWYEGEAYMWHHWKPFPENPLWTCLDFQIAQVGPWDYCSSCIRHTRLK
SSCSDMDLLHSWRSSSFGNFDRFRNNSLSKPDDSTEAHEGDPTNGSGEQSKTSNNGGGLGKKMRAISWTMKKKVG
KKYIKALSEEKDEEDGENAHPYRNSDPVIGTHTEKVSLKASDSMDSLYSGQSSSSGITSCSDGTSNRDSFRLDDD
GPYSGPFCGRARVHTDFTPSPYDTDSLKIKKGDIIDIICKTPMGMWTGMLNNKVGNFKFIYVDVISEEEAAPKKI
KANRRSNSKKSKTLQEFLERIHLQEYTSTLLLNGYETLEDLKDIKESHLIELNIENPDDRRRLLSAAENFLEEEI
IQEQENEPEPLSLSSDISLNKSQLDDCPRDSGCYISSGNSDNGKEDLESENLSDMVHKIIITEPSD

FIGURE 3811

GGGGCAGACGTGGGACGGGAAGGACGGCTGCCGGGACTGGCGCGCGGGGACACTGGGCCGACGCGTGGAGTAGCG
GGGAGAGCGGGAAGCCTGAGGGGGCGGGGCCGGCGCGAGGCCGTGGGTGCGGCACGAGGATGCCGGCGGCGGGAC
AGCGCCCGTAGGCAGCCCCACGGGCAGGGCGCGCGGGCGGGGCGGGGCGGGCCGGGCCAGAGGAGCTCCCGGCATG
GTCGCAAGGGCTCCCGGCCGCCGGCAGCGTCCTGCAGAGGAGCGTCGCGGCGCCCGGGAACCAGCCGCAGCCGCA
GCCGCAGCAGCAGAGCCCTGAGGATGATGACAGGAAGGTCCGAAGGAGAGAAAAAAACCGAGTTGCTGCTCAGAG
AAGTCGGAAGAAGCAGACCCAGAAGGCTGACAAGCTCCATGAGGAATATGAGAGCCTGGAGCAAGAAAACACCAT
GCTGCGGAGAGAGATCGGGAAGCTGACAGAGGAGCTGAAGCACCTGACAGAGGCACTGAAGGAGCACGAGAAGAT
GTGCCCGCTGCTGCTCTGCCCTATGAACTTTGTGCCAGTGCCTCCCCGGCCGGACCCTGTGGCCGGCTGCTTGCC
CCGATGAAGCCGGGGACACTCCTCTGCCCAGCAAGGAGCCTTGGTCATTTTCATACCTGGGAGGAAGGCTTTTCC
TTCACAATTGTATACAGGGGGCACCTGTGGCCAGGCCTCCTCCTGGGAGCTCCAGGACCAGCCAGCTGTGTTCCC
TGCAGACTGGGCTCAGCCCGACATCCAACAGGCGCCAAACTCACAGAGCCCTTGTGCAGATCCAGCATGGAGGCC
ACCCTCAGGAGTGACTTCTCATCCACCCTGGCAGCTAGTAGGTTCTGCTGTTATGCAGAGCCATTTCCTCTAGAA
TTTGGATAATAAAGATGCTTATTGTCTCTCCCTTCTCCAGTTCTGGGAATTTACAGGCACAATACACTTCCTTTT
CCTGG

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FIGURE 3812

MSQGLPAAGSVLQRSVAAPGNQPQPQPQQQSPEDDDRKVRRREKNRVAAQRSRKKQTQKADKLHEEYESLEQENT
MLRREIGKLTEELKHLTEALKEHEKMCPLLLCPMNFVPVPPRPDPVAGCLPR

FIGURE 3813A

GTGCTGGGCCGCGGGCCGAAGGAGTCGCCAGGGCTGCGTAGGCTTGTGGCGCGCCCGCGGAGAGGCCGGGGCTCT
GACGCCCGCTCTGCGGCTTCGGTGTTTGAACAGGCCACAGTCCAGGAGCGCTTACATTCAGGAGCTCCGCGTAGC
ACCTGCCCAACCAAACTCAGCCCTCCGTTAAGATCCTGGTTCCATGCCGCAGTAGGACAGCAGGCCCAAGTCTGC
ACATCCCAGTGATGCACCATGCCAATAGTGGATAAGTTGAAGGAGGCCCTGAAACCCGGCCGCAAGGACTCGGCT
GATGATGGAGAACTGGGGAAGCTTCTTGCCTCCTCTGCCAAGAAGGTCCTTTTACAGAAAATCGAGTTCGAGCCA
GCCAGCAAGAGCTTCTCCTACCAGCTGGAGGCCTTAAAGAGCAAATATGTGTTGCTCAACCCCAAAACAGAGGGA
GCTAGTCGCCACAAGAGTGGAGATGACCCACCGGCCAGGAGACGGGGCAGTGAGCACACGTATGAGAGCTGTGGT
GACGGAGTCCCAGCCCCGCAGAAAGTGCTTTTCCCCACGGAGCGACTGTCTCTGAGGTGGGAGCGGGTCTTCCGC
GTGGGCGCAGGACTCCACAACCTTGGCAACACCTGCTTTCTCAATGCCACCATCCAGTGCTTGACCTACACACCA
CCTCTAGCCAACTACCTGCTCTCCAAGGAGCATGCTCGCAGCTGCCACCAGGGAAGCTTCTGCATGCTGTGTGTC
ATGCAGAACCACATTGTCCAGGCCTTCGCCAACAGCGGCAACGCCATCAAGCCCGTCTCCTTCATCCGAGACCTG
AAAAAGATAGCCCGACACTTCCGCTTTGGGAACCAGGAGGACGCGCATGAGTTCCTGCGGTACACCATCGACGCC
ATGCAGAAAGCCTGCCTGAATGGCTGTGCCAAGTTGGATCGTCAAACGCAGGCTACTACCTTGGTCCATCAAATT
TTTGGAGGGTATCTCAGATCACGCGTGAAGTGCTCCGTGTGCAAGAGCGTCTCGGACACCTACGACCCCTACTTG
GACGTCGCGCTGGAGATCCGGCAAGCTGCGAATATTGTGCGTGCTCTGGAACTTTTTGTGAAAGCAGATGTCCTG
AGTGGAGAGAATGCCTACATGTGTGCTAAATGCAAGAAGAAGGTTCCAGCCAGCAAGCGCTTCACCATCCACAGA
ACATCCAACGTCTTAACCCTTTCCCTCAAGCGTTTTGCCAACTTCAGCGGGGGGAAGATCACCAAGGATGTAGGC
TATCCGGAATTCCTCAACATACGTCCGTATATGTCCCAGAATAATGGTGATCCTGTCATGTATGGACTCTATGCT
GTCCTGGTGCACTCGGGCTACAGCTGCCATGCCGGGCACTATTACTGCTACGTGAAGGCAAGCAATGGACAGTGG
TACCAGATGAATGATTCCTTGGTCCATTCCAGCAACGTCAAGGTGGTTCTGAACCAGCAGGCCTACGTGCTGTTC
TATCTGCGAATTCCAGGCTCTAAGAAAAGTCCCGAGGGCCTCATCTCCAGGACAGGCTCCTCCTCCCTTCCCGGC
CGCCCGAGTGTGATTCCAGATCACTCCAAGAAGAACATCGGCAATGGGATTATTTCCTCCCCACTGACTGGAAAG
CGACAAGACTCTGGGACGATGAAGAAGCCGCACACCACTGAAGAGATTGGTGTGCCCATATCCAGGAATGGCTCC
ACCCTGGGCCTGAAGTCCCAGAACGGCTGCATTCCTCCAAAGCTGCCCTCGGGGTCCCCTTCCCCCAAACTCTCC
CAGACACCCACACACATGCCAACCATCCTAGACGACCCTGGAAAGAAGGTGAAGAAGCCAGCTCCTCCACTGCCA
ACGGGCATGGGCTGAAGGGGAACGACGAGAGCGCTGGCCTCGACAGGAGGGGCTCCAGCAGCTCCAGCCCAGAGC
ACTCGGCCAGCAGCGACTCCACCAAGGCCCCCCAGACCCCCAGGAGTGGAGCGGCCCATCTCTGCGATTCTCAGG
AAACGAACTGTTCCACCGCTGGCCACTCCAAAACGCCGCCAAGTGGAGCAGATTCTAAGACGGTGAAGCTGAAGT
CCCCTGTCCTGAGCAACACCACCACTGAGCCTGCAAGCACCATGTCTCCTCCACCAGCCAAAAAACTGGCCCTTT
CTGCCAAGAAGGCCAGCACCCTGTGGAGGGCGACCGGCAATGACCTCCGTCCACCTCCCCCCTCACCATCCTCCG
ACCTCACCCACCCCATGAAAACCTCTCACCCCGTCGTTGCCTCCACTTGGCCCGTCCATAGAGCCAGGGCTGTGT
CACCTGCTCCCCAATCATCCAGCCGCCTGCAACCCCCCTTCAGCCCCCACCCCACATTGCTGTCCAGTACCCCCA
AGCCCCCAGGGACGTCAGAACCACGGAGCTGCTCCTCCATCTCGACGGCGCTGCCTCAGGTCAACGAGGACCTTG
TGTCCCTTCCACACCAGTTGCCAGAGGCCAGTGAGCCCCCCCGGAGCCCCTCTGAGAAGAGGAAAAAGACCTTTG
TGGGAGAGCCGCAGAGGCTGGGCTCAGAGACGTGCCCCCCACAGCACATCAGGGAGGCCACTGCGGCTCCCCACG
GGAAGAGGAAGAGGAAGAAGAAGAAGCGCCCGGAGGACACAGCTGCCAGCGCCCTGCAGGAGGGGCAGACACAGA
GACAGCCTGGGAGCCCCATGTACAGGAGGGAGGGCCAGGCACAGCTGCCCGCTGTCAGACGGCAGGAAGATGGCA
CACAGCCACAGGTGAATGGCCAGCAGGTGGGATGTGTTACGGACGGCCACCACGCGAGCAGCAGGAAGCGGAGGA
GGAAAGGAGCAGAAGGTCTTGGTGAAGAAGGCGGCCTGCACCAGGACCCACTTCGGCACAGCTGCTCTCCCATGG
GTGATGGTGATCCAGAGGCCATGGAAGAGTCTCCAAGGAAAAAGAAAAAAAGAAAGCAGGAGACACAGCGGGCAG
TAGAAGAGGATGGGCATCTCAAATGCCCAAGGAGTGCCAAGCCCCAAGATGCTGTTGTCCCCGAGTCCAGCAGCT
GCGCACCATCCGCGAATGGCTGGTGTCCTGGGGACCGCATGGGGCTGAGCCAGGCCCCTCCTGTGTCTTGGAATG
GAGAGCGGGAGTCTGATGTGGTCCAGGAACTGCTCAAATACTCATCTGATAAAGCTTACGGGAGAAAAGTTCTGA
CCTGGGATGGCAAGATGTCGGCGGTCAGTCAGGATGCTATTGAAGACAGCAGACAGGCCCGGACTGAGACCGTGG
TTGATGACTGGGACGAAGAGTTTGACCGAGGGAAGGAAAAGAAAATTAAAAAATTTAAGAGAGAGAAGAGGAGAA
ACTTCAACGCCTTCCAGAAACTTCAGACTCGACGGAACTTCTGGTCTGTGACTCACCCAGCAAAGGCTGCCAGCC
TCAGCTATCGCCGCTGACTGTGCCCCTGTGGAAGGAGATGATCAAGCGGTGCTGATTCACGAGAGTGGAAGCCTC
CAGAGCTTGGGGCTTTCTGGCTGCTCTTCATTGACCTGTGTGTTCCCAGCACACGAACAGCGCCCCTAACGGAGA

FIGURE 3813B

TTTGTTCAGCGACTGAATATACACCTGTAAACGAGTAGCATGTATACATTGATTTTGATTACAAATGGTTCTGTA
TTATATACCACCGTTCTGACTGCTTTTTTCACTTATAGCTTGGAAATTGTCTTCTGTTGGTAATACAGAAATCTG
TTTCAGTCAC

FIGURE 3814

MPIVDKLKEALKPGRKDSADDGELGKLLASSAKKVLLQKIEFEPASKSFSYQLEALKSKYVLLNPKTEGASRHKS
GDDPPARRRGSEHTYESCGDGVPAPQKVLFPTERLSLRWERVFRVGAGLHNLGNTCFLNATIQCLTYTPPLANYL
LSKEHARSCHQGSFCMLCVMQNHIVQAFANSGNAIKPVSFIRDLKKIARHFRFGNQEDAHEFLRYTIDAMQKACL
NGCAKLDRQTQATTLVHQIFGGYLRSRVKCSVCKSVSDTYDPYLDVALEIRQAANIVRALELFVKADVLSGENAY
MCAKCKKKVPASKRFTIHRTSNVLTLSLKRFANFSGGKITKDVGYPEFLNIRPYMSQNNGDPVMYGLYAVLVHSG
YSCHAGHYYCYVKASNGQWYQMNDSLVHSSNVKVVLNQQAYVLFYLRIPGSKKSPEGLISRTGSSSLPGRPSVIP
DHSKKNIGNGIISSPLTGKRQDSGTMKKPHTTEEIGVPISRNGSTLGLKSQNGCIPPKLPSGSPSPKLSQTPTHM
PTILDDPGKKVKKPAPPLPTGMG

FIGURE 3815

AGAACAGACGTTTGAACAGAGCAGGCTTCTGAGGTCTCCAAAATGCCTGTCCCAGCCTCCTGGCCCCATCCTCCT
GGTCCTTTCCTGCTTCTGACTCTACTGCTGGGACTTACAGAAGTGGCAGGTGAGGAGGAGCTACAGATGATTCAG
CCTGAGAAGCTCCTGTTGGTCACAGTTGGAAAGACAGCCACTCTGCACTGCACTGTGACCTCCCTGCTTCCCGTG
GGACCCGTCCTGTGGTTCAGAGGAGTTGGACCAGGCCGAGAATTAATCTACAATCAAAAAGAAGGCCACTTCCCC
AGGGTAACAACAGTTTCAGACCTCACAAAGAGAAACAACATGGACTTTTCCATCCGCATCAGTAGCATCACCCCA
GCAGATGTCGGCACATACTACTGTGTGAAGTTTCGAAAAGGGAGCCCTGAGAACGTGGAGTTTAAGTCTGGACCA
GGCACTGAGATGGCTTTGGGTGCCAAACCCTCTGCCCCCGTGGTATTGGGCCCTGCGGCGAGGACCACACCTGAG
CATACAGTGAGTTTCACCTGTGAGTCCCATGGCTTCTCTCCCAGAGACATCACCCTGAAATGGTTCAAAAATGGG
AATGAGCTCTCAGACTTCCAGACCAACGTGGACCCCACAGGACAGAGTGTGGCCTACAGCATCCGCAGCACAGCC
AGGGTGGTACTGGACCCCTGGGACGTTCGCTCTCAGGTCATCTGCGAGGTGGCCCATGTCACCTTGCAGGGGGAC
CCTCTTCGTGGGACTGCCAACTTGTCTGAGGCCATCCGAGTTCCACCCACCTTGGAGGTTACTCAACAGCCCATG
AGGGCGGGGAACCAGGTAAACGTCACCTGCCAGGTGAGGAAGTTCTACCCCCAGAGCCTACAGCTGACCTGGTTG
GAGAATGGAAACGTGTGCCAGAGAGAAACAGCCTCGACCCTTACAGAGAACAAGGATGGTACCTACAACTGGACA
AGCTGGTTCCTGGTGAACATATCTGACCAAAGGGATGATGTGGTCCTCACCTGCCAGGTGAAGCATGATGGGCAG
CTGGCGGTCAGCAAACGCCTTGCCCTGGAGGTCACAGTCCACCAGAAGGACCAGAGCTCAGATGCTACCCCTGGC
CCGGCATCATCTCTTACTGCGCTGCTCCTCATAGCTGTCCTCCTGGGCCCCATCTATGTCCCCTGGAAGCAGAAG
ACCTGACTCTCCTTCCTTCCTCCCCTGCCACGTGGGACCCTCATCTCTGCTGCCTCCTTCCTTTCCTGAGAGGCT
CAGCTTGAGAGAATGAGCCAGTGAGAAGCTTCTCTAGACTTGGCTCCAAACATCTCCCCTCCCAAGACATCTGCC
TGCCCACAGGCTCCTGTTGCTCCTTCACACAGACCTGGATGCCCCAGAGCAAGGTCTTCATTCATGGTCCTGAGC
AGGGGCCATGGGATTGGGCTCTGGGCACTGACTTAACGGCACCTCCCTAGAAGGCGAGAAACATGCCAAATCTAA
ACACACCAGGACTCCCATCCATCGCCTTGAGACTGACCGTAAACCACAGACGCTCTCCAGGTTCTCAAGAGTTAT
CCTGCCTTCCAGATTCCTGCCTATCCCAACTCCCCAGCCTTGTTGAGGTTCTCTATTGCCTCTTGAATACAAATG
CACTCCCAAAGTGGTTTTAAGAAAATAAAAAGATTATCCTTCCAAA

FIGURE 3816

MIQPEKLLLVTVGKTATLHCTVTSLLPVGPVLWFRGVGPGRELIYNQKEGHFPRVTTVSDLTKRNNMDFSIRISS
ITPADVGTYYCVKFRKGSPENVEFKSGPGTEMALGAKPSAPVVLGPAARTTPEHTVSFTCESHGFSPRDITLKWF
KNGNELSDFQTNVDPTGQSVAYSIRSTARVVLDPWDVRSQVICEVAHVTLQGDPLRGTANLSEAIRVPPTLEVTQ
QPMRAGNQVNVTCQVRKFYPQSLQLTWLENGNVCQRETASTLTENKDGTYNWTSWFLVNISDQRDDVVLTCQVKH
DGQLAVSKRLALEVTVHQKDQSSDATPGPASSLTALLLIAVLLGPIYVPWKQKT

FIGURE 3817

ATTGATTAAAAAGAGATTGCCCTGCAAGGTAAATCAGTTAAAACCAACCTCTCCTGCCCTGAGTGGATAGGTAGG
GTTAGGGTTGCCAGATGTCACGAAGTTACAGGATGCTCAGTTTTAAGGTATATCCCTTATACTATAAGGGTTATA
GTAAAAAATATTCATTATGTGAAATTCAAATATAACTGGGTATCAGGTATTCTATGTGGCAACCCTAGGTAGGGG
AGCACAGGTTAGGCAAGCGATTAGAAGATTTGCAGCCTCCAAAGTTTCTGCACCTCGATGGGACACTAGAACAGG
AAGGCTCCTGGGCCTTTCTGGCTCTGGGAATGAAGCGTGGAAAACCCTCCTTAGGCGGGCGCAGTGCTTCAAGTA
GCCAAGCTCTGACTTCCGAGGGAAGAAAGGAGGCCATGGGCCTCTGCCAGAGCCATGCTCTGCACTCTGGGGTCA
GCAGAGTTCAAAACGACCTGCAACGTCTGGCGCTTAGCTCCTAAAGAGGTCTCCAGTCCAGCGCCGACGGCCAGC
GGCTAGAGGCCGTCCGCCCGACTCCAAGATGGCGCCCGCCACAGCTGCCAGGTGTTAAGATGGCGGCGCGGGGCC
GCGCCCGCGCTCCCAGGCTCTCCTCCCCCAGCCTTCCTCCGGCTGGCAGCACGACTCGCGTAGCCGTGCGCCGAT
TGCCTCTCGGCCTGGGCA**ATG**GTCCCGGCTGCCGGTCGACGACCGCCCCGCGTCATGCGGCTCCTCGGCTGGTGG
CAAGTATTGCTGTGGGTGCTGGGACTTCCCGTCCGCGGCGTGGAGGTTGCAGAGGAAAGTGGTCGCTTATGGTCG
GAGGAGCAGCCTGCTCACCCTCTCCAGGTGGGGGCTGTGTACCTGGGTGAGGAGGAGCTCCTGCATGACCCGATG
GGCCAGGACAGGGCAGCAGAAGAGGCCAATGCGGTGCTGGGGCTGGGCACCCAAGGCGATCACATGGTGATGCTG
TCTGTGATTCCTGGGGAAGCTGAGGACAAAGTGAGTTCAGAGCCTAGCGGCGTCACCTGTGGTGCTGGAGGAGCG
GAGGACTCAAGGTGCAACGTCCGAGAGAGCCTTTTCTCTCTGGATGGCGCTGGAGCACACTTCCCTGACAGAGAA
GAGGAGTATTACACAGAGCCAGAAGTGGCGGAATCTGACGCAGCCCCGACAGAGGACTCCAATAACACTGAAAGT
CTGAAATCCCCAAAGGTGAACTGTGAGGAGAGAAACATTACAGGATTAGAAAATTTCACTCTGAAAATTTTAAAT
ATGTCACAGGACCTTATGGATTTTCTGAACCCAAACGGTAGTGACTGTACTCTAGTCCTGTTTTACACCCCGTGG
TGCCGCTTTTCTGCCAGTTTGGCCCCTCACTTTAACTCTCTGCCCCGGGCATTTCCAGCTCTTCACTTTTTGGCA
CTGGATGCATCTCAGCACAGCAGCCTTTCTACCAGGTTTGGCACCGTAGCTGTTCCTAATATTTTATTATTTCAA
GGAGCTAAACCAATGGCCAGATTTAATCATACAGATCGAACACTGGAAACACTGAAAATCTTCATTTTTAATCAG
ACAGGTATAGAAGCCAAGAAGAATGTGGTGGTAACTCAAGCCGACCAAATAGGCCCTCTTCCCAGCACTTTGATA
AAAAGTGTGGACTGGTTGCTTGTATTTTCCTTATTCTTTTTAATTAGTTTTATTATGTATGCTACCATTCGAACT
GAGAGTATTCGGTGGCTAATTCCAGGACAAGAGCAGGAACATGTGGAG**TAG**TGATGGTCTGAAAGAAGTTGGAAA
GAGGAACTTCAATCCTTCGTTTCAGAAATTAGTGCTACAGTTTCATACATTTTCTCCAGTGACGTGTTGACTTGA
AACTTCAGGCAGATTAAAAGAATCATTTGTTGAACAACTGAATGTATAAAAAAAATTATAAACTGGTGTTTTAAC
TAGTATTGCAATAAGCAAATGCAAAAATATTCAATAGATGCACTATTCTTGTTTTTACTGCATGAACGTAATCCA
GTATTTGGAAAGTAATCCAGTTTGAAATGTGAAGATGTATTCCGGCAGAATAGTGAGTAGAATGACATGCTTACT
ATACAGAAGGCAAAAATAGGACTCTCAGGTAATAGTTTAAGGAAACCCTTGATTCCTTATATATGTTTAAGAAGG
TTAGCTTTCTGTTTCTTTGCAGTTTTTCTTCTAGAGTCCATAGCAGGAAAGTATGTAACCAGAATTGGTTAGTGT
GACCCCCTCAAGTAGCAAGTGATGGAAAATAAGAGTCAAATACCTTGATGTTTGTGATCTCTAACTCAAAAAATT
TGAAGTGTTTTAAGTTGTTTCTGGGTAAGGGAGATGTTAGGAGAAAGGAAATGCTGTAACTAAAGCTCAATTATT
ATCAGTTCTATGCTAACGTATACATTTTAATCATAGTTACCTAAGCAGCATGCATTAATTGAACCTTAAAATGTT
CCCAGCAGGCTGGTCTCAAACTGCTGACTTCAGGTGATCCACCCGCCTCGGCCTCCCAAGGTGTTGGGATTGCAG
GTGTGAGCCACTGCGCCTGGCCTAAACAAACTTTTTGAAAAGCTGTTTCTAAAAGATTCCTTAAATTCAGATATG
ACAGCTAATTACCTCATCATAAATTACTTTTATACTAATTGTTTCCAGGGTTTTAGAGTAGTTGAATGTTTATTT
CACAAGGCACCCTAAATTCTATAGAAATAAAACCTCAGATGAGTCTC

FIGURE 3818

MVPAAGRRPPRVMRLLGWWQVLLWVLGLPVRGVEVAEESGRLWSEEQPAHPLQVGAVYLGEEELLHDPMGQDRAA
EEANAVLGLGTQGDHMVMLSVIPGEAEDKVSSEPSGVTCGAGGAEDSRCNVRESLFSLDGAGAHFPDREEEYYTE
PEVAESDAAPTEDSNNTESLKSPKVNCEERNITGLENFTLKILNMSQDLMDFLNPNGSDCTLVLFYTPWCRFSAS
LAPHFNSLPRAFPALHFLALDASQHSSLSTRFGTVAVPNILLFQGAKPMARFNHTDRTLETLKIFIFNQTGIEAK
KNVVVTQADQIGPLPSTLIKSVDWLLVFSLFFLISFIMYATIRTESIRWLIPGQEQEHVE

FIGURE 3819

AAGACCGTCCCGGATGGCCTCGGGGACTGCCAGTGTGTGGAGGTGAGCTCCGGGATTGCCGGCATTCCCGCTTCT
GCTGGTTGCTTCATGCTGCAGGCTGCGGCCGTCAGCCCTCGCTCGCATTGGTGGCGCTGAGGTGCCGGGGCAGCA
AGTGAC**ATG**TCGTCGGGCCTCCGCGCCGCTGACTTCCCCCGCTGGAAGCGCCACATCTCGGAGCAACTGAGGCGC
CGGGACCGGCTGCAGAGACAGGCGTTCGAGGAGATCATCCTGCAGTATAACAAATTGCTGGAAAAGTCAGATCTT
CATTCAGTGTTGGCCCAGAAACTACAGGCTGAAAAGCATGACGTACCAAACAGGCACGAGATAAGTCCCGGACAT
GATGGCACATGGAATGACAATCAGCTACAAGAAATGGCCCAACTGAGGATTAAGCACCAAGAGGAACTGACTGAA
TTACACAAGAAACGTGGGGAGTTAGCTCAACTGGTGATTGACCTGAATAACCAAATGCAGCGGAAGGACAGGGAG
ATGCAGAAAGAGCTTGCAGAAGCAGCAAAGGAACCTCTACCAGTCGAACAGGATGATGACATTGAGGTCATTGTG
GATGAAACTTCTGATCACACAGAAGAGACCTCTCCTGTGCGAGCCATCAGCAGAGCAGCCACTAAGCGACTCTCG
CAGCCTGCTGGAGGCCTTCTGGATTCTGTCACTAATATCTTTGGGAGACGCTCTGTCTCTTCCTTCCCAGTCCCC
CAGGACAATGTGGATACTCATCCTGGTTCTGGTAAAGAAGTGAGGGTACCAGCTACTGCCTTGTGTGTCTTCGAT
GCACATGATGGGGAAGTCAACGCTGTGCAGTTCAGTCCAGGTTCCCGGTTACTGGCCACTGGAGGCATGGACCGC
AGGGTTAAGCTTTGGGAAGTATTTGGAGAAAAATGTGAGTTCAAGGGTTCCCTATCTGGCAGTAATGCAGGAATT
ACAAGCATTGAATTTGATAGTGCTGGATCTTACCTCTTAGCAGCTTCAAATGATTTTGCAAGCCGAATCTGGACT
GTGGATGATTATCGATTACGGGTAAGACCCAGT**TAA**GAAAGTTAGTGCAATCTCCAAACTTCATGTGGTGTTATC
AAGGCACAAACTGGCAGGTGCTTAATTAGGGGACTTTGTTTTCCCAAAAATCATGCTTGATTCACCCTGCCCTTC
CTTTCCTCCTTGGGGAAATCTGTGTTTCCACTTTATACTCTTTGTCCAAAACTCAGTTTCAAAATATTTGCAATG
GGACCCTCACATTTGCATGAAAACCTTGGAATACTCTTCATAAGGACTAAATACTTTGGTAGATAGCAATTTTGG
CTTAATGGCACAGAACTTAGCAACAGCATGTGAATTGTGATTCCTGTGGGCTCTAAAACCTAATTACCTAAAGTG
GGATATAGAAGTACAAATGGATGTATCATAGGGATAAGACAATTCTGAAACAAAAACTCCAAGCTGAGAAAGAGG
GGACAGGTGTCAGAGCAGGGAGAAATGATTGGATGTTGAGGAAAGCTGCATTTGAACCAAAACTTGCCAAGAATT
CTCTTGGCATCTGACAGAGAGACCAAAACTTGGTTGTATCATTTTTGATTGGGGCAGGGGGCGGAGGGCGAAGCA
TGTAACTTAATTTGCAGACATTTTTTTTCCCCATAAGCCTGAAGGAATCATCACATAAGCTTATTAAATACAAGC
TATTGAAAGATATAATGGAGGATGAATTTGGCATTAGTAGGCATTTTACT

FIGURE 3820

MSSGLRAADFPRWKRHISEQLRRRDRLQRQAFEEIILQYNKLLEKSDLHSVLAQKLQAEKHDVPNRHEISPGHDG
TWNDNQLQEMAQLRIKHQEELTELHKKRGELAQLVIDLNNQMQRKDREMQKELAEAAKEPLPVEQDDDIEVIVDE
TSDHTEETSPVRAISRAATKRLSQPAGGLLDSVTNIFGRRSVSSFPVPQDNVDTHPGSGKEVRVPATALCVFDAH
DGEVNAVQFSPGSRLLATGGMDRRVKLWEVFGEKCEFKGSLSGSNAGITSIEFDSAGSYLLAASNDFASRIWTVD
DYRLRVRPS

FIGURE 3821

CGGGAATCCCTGCAGCTGAGCCTGTCTCTCACGGGACCGGGAAGCTGGAGAGAGCCCCAACCCTGCCCGCTGGGG
CCGAGCTCCCTGCTCCTGCAGCAGTCCCATGCCCCACACTCTGAGTCTGCCCTATCCACAGCTGCTGGGCCTCTC
TGTGGCCACC**ATG**GTGACTCTTACCTACTTCGGGGCCCACTTTGCTGTCATCCGCCGAGCGTCCCTGGAGAAGAA
CCCGTACCAGGCTGTGCACCAATGGGCCTTCTCTGCGGGGTTGAGCCTGGTGGGCCTCCTGACTCTGGGAGCCGT
GCTGAGCGCTGCAGCCACCGTGAGGGAGGCCCAGGGCCTCATGGCAGGGGGCTTCCTGTGCTTCTCCCTGGCGTT
CTGCGCACAGGTGCAGGTGGTGTTCTGGAGACTCCACAGCCCCACCCAGGTGGAGGACGCCATGCTGGACACCTA
CGACCTGGTATATGAGCAGGCGATGAAAGGTACGTCCCACGTCCGGCGGCAGGAGCTGGCGGCCATCCAGGACGT
GTTTCTGTGCTGTGGGAAGAAGTCTCCTTTCAGCCGTCTGGGGAGCACAGAGGCTGACCTGTGTCAGGGAGAGGA
GGCGGCGAGAGAGGACTGCCTTCAGGGCATCCGGAGCTTCCTGAGGACACACCAGCAGGTCGCCTCCAGCCTGAC
CAGCATCGGCCTGGCCCTCACGGTGTCCGCCTTGCTCTTCAGCTCCTTCCTGTGGTTTGCCATCCGCTGTGGCTG
CAGCTTGGACCGCAAGGGCAAATACACCCTGACCCCACGAGCATGTGGCCGCCAGCCCCAGGAGCCCAGCCTCTT
GAGATGCTCCCAGGGTGGACCCACACATTGTCTCCACTCCGAAGCAGTTGCTATTGGTCCAAGAGGATGCTCGGG
TAGTCTTCGGTGGCTGCAGGAGAGCGATGCTGCGCCTCTGCCCCTCTCCTGCCACCTGGCTGCCCACAGAGCTCT
CCAGGGCAGAAGTCGCGGTGGGCTCAGTGGGTGCCCTGAGCGGGGTCTCTCAGACTGACGTCAGGCCTTGGTGGG
CTGCACTCTCACCTGGAGGCTCCGGGGAAGCATCTGCCTCCAGGACCATTCAGGCTGTTGACAAGTCAACTCCTC
ATGGCTGTAGGACTGAGGTTCCCAAGTCCTTGTCCCTGGTCCTGTGGTCCCTCCACCTTCAAACCAGCAATGGTG
CATTGAGCAAATTGTGGTCAAATATACATCACATCAAATTTACCATCTTAAAAAAA

FIGURE 3822

MVTLTYFGAHFAVIRRASLEKNPYQAVHQWAFSAGLSLVGLLTLGAVLSAAATVREAQGLMAGGFLCFSLAFCAQ
VQVVFWRLHSPTQVEDAMLDTYDLVYEQAMKVSVLWEEVSFQPSGEHRG

FIGURE 3823

AGAGATGGGGACGGAGGCCACAGAGCAGGTTTCCTGGGGCCATTACTCTGGGGATGAAGAGGACGCATACTCGGC
TGAGCCACTGCCGGAGCTTTGCTACAAGGCCGATGTCCAGGCCTTCAGCCGGGCCTTCCAACCCAGTGTCTCCCT
GACCGTGGCTGCGCTGGGTCTGGCCGGCAATGGCCTGGTCCTGGCCACCCACCTGGCAGCCCGACGCGCAGCGCG
CTCGCCCACCTCTGCCCACCTGCTCCAGCTGGCCCTGGCCGACCTCTTGCTGGCCCTGACTCTGCCCTTCGCGGC
AGCAGGGGCTCTTCAGGGCTGGAGTCTGGGAAGTGCCACCTGCCGCACCATCTCTGGCCTCTACTCGGCCTCCTT
CCACGCCGGCTTCCTCTTCCTGGCCTGTATCAGCGCCGACCGCTACGTGGCCATCGCGCGAGCGCTCCCAGCCGG
GCCGCGGCCCTCCACTCCCGGCCGCGCACACTTGGTCTCCGTCATCGTGTGGCTGCTGTCACTGCTCCTGGCGCT
GCCTGCGCTGCTCTTCAGCCAGGATGGGCAGCGGGAAGGCCAACGACGCTGTCGCCTCATCTTCCCCGAGGGCCT
CACGCAGACGGTGAAGGGGGCGAGCGCCGTGGCGCAGGTGGCCCTGGGCTTCGCGCTGCCGCTGGGCGTCATGGT
AGCCTGCTACGCGCTTCTGGGCCGCACGCTGCTGGCCGCCAGGGGGCCCGAGCGCCGGCGTGCGCTGCGCGTCGT
GGTGGCTCTGGTGGCGGCCTTCGTGGTGCTGCAGCTGCCCTACAGCCTCGCCCTGCTGCTGGATACTGCCGATCT
ACTGGCTGCGCGCGAGCGGAGCTGCCCTGCCAGCAAACGCAAGGATGTCGCACTGCTGGTGACCAGCGGCTTGGC
CCTCGCCCGCTGTGGCCTCAATCCCGTTCTCTACGCCTTCCTGGGCCTGCGCTTCCGCCAGGACCTGCGGAGGCT
GCTACGGGGTGGGAGCTCGCCCTCAGGGCCTCAACCCCGCCGCGGCTGCCCCCGCCGGCCCCGCCTTTCTTCCTG
CTCAGCTCCCACGGAGACCCACAGTCTCTCCTGGGACAACTAGGGCTGCGAATCTAGAGGAGGGGGCAGGCTGAG
GGTCGTGGGAAAGGGGAGTAGGTGGGGGAACACTGAGAAAGAGGCAGGGACCTAAAGGGACTACCTCTGTGCCTT
GCCACATTAAATTGATAACATGGAAATGAAAAAAAAAAAAAAAA

FIGURE 3824

MGTEATEQVSWGHYSGDEEDAYSAEPLPELCYKADVQAFSRAFQPSVSLTVAALGLAGNGLVLATHLAARRAARS
PTSAHLLQLALADLLLALTLPFAAAGALQGWSLGSATCRTISGLYSASFHAGFLFLACISADRYVAIARALPAGP
RPSTPGRAHLVSVIVWLLSLLLALPALLFSQDGQREGQRRCRLIFPEGLTQTVKGASAVAQVALGFALPLGVMVA
CYALLGRTLLAARGPERRRALRVVVALVAAFVVLQLPYSLALLLDTADLLAARERSCPASKRKDVALLVTSGLAL
ARCGLNPVLYAFLGLRFRQDLRRLLRGGSSPSGPQPRRGCPRRPRLSSCSAPTETHSLSWDN

FIGURE 3825

GGCTCCGGGGGTGGCGGTCGGACAGTGTCTAGCACGCTCAGTCCGGGCTTGGGGCCCCGCGGCGGAGAAGGAGGT
AGAGGGGGCGGCGGCGGCGGCGGCGGTGGTGGCGGCACC**ATG**TTCTTCACTCAGTTAATCTCTGGAACCTGGCG
TTTTATGTCTTCATGGTCTTTCTGGCAACCCTGGGGCTGTGGGATGTCTTCTTCGGCTTCGAGGAGAATAAGTGC
AGTATGAGCTACATGTTTGAGTACCCGGAGTATCAGAAAATAGAACTTCCAAAGAAACTGGCAAAACGCTATCCC
GCATATGAGTTGTATCTTTATGGAGAGGGATCCTATGCTGAAGAACACAAAATTCTCCCTTTGACGGGTATTCCA
GTTCTCTTTCTTCCTGGTAATGCTGGAAGTTATAAGCAAGTTCGTTCTATTGGCTCCATTGCACTTAGAAAAGCA
GAGGACATTGACTTCAAGTACCACTTTGACTTCTTTAGTGTGAACTTCAATGAAGAACTGGTGGCTTTGTATGGT
GGAAGTCTTCAGAAGCAGACCAAGTTTGTACATGAATGTATTAAAACAATTCTCAAACTCTATAAGGGTCAAGAA
TTTGCTCCAAAAAGTGTGGCAATAATTGGTCATTCTATGGGTGGCCTTGTTGCAAGAGCATTGCTTACACTGAAA
AATTTTAAGCATGATCTGATAAATCTTCTTATTACACAAGCCACACCTCATGTTGCTCCTGTGATGCCATTAGAT
CGTTTCATTACAGATTTTTATACGACTGTAAACAACTATTGGATTCTAAATGCTCGACACATAAATTTAACCACA
CTTTCTGTAGCTGGAGGATTCCGGGATTACCAAGTTCGTTCAGGATTGACTTTTCTACCAAAATTAAGCCATCAT
ACCAGTGCCTTATCTGTTGTGAGTTCAGCAGTGCCTAAGACCTGGGTCTCAACAGACCACCTCTCCATTGTGTGG
TGTAAACAATTGCAGTTGACTACAGTTCGAGCATTCTTTGATCTTATTGGTGCTGATACTAAACAAATAACTCAA
AATTCCAAGAAGAAACTGTCAGTTTTGTATCACCACTTTATAAGACACCCATCAAAACATTTTGAGGAAAATCCA
GCTATAATTTCTGACTTAACAGGGACATCTATGTGGGTTCTAGTAAAAGTGTCCAAATGGACCTATGTAGCTTAC
AACGAATCTGAGAAGATATATTTTACATTTCCTCTTGAAAATCATAGAAAAATCTACACTCATGTCTATTGTCAG
AGCACTATGCTGGATACAAATAGTTGGATTTTTGCTTGCATAAACAGCACTTCTATGTGCCTGCAAGGGGTTGAT
TTATCATGGAAAGCTGAACTGCTGCCAACAATTAAGTATCTGACATTAAGACTTCAAGACTATCCATCTTTGTCT
CATCTTGTTGTTTATGTACCATCTGTTCGTGGAAGTAAGTTTGTTGTAGATTGTGAATTCTTTAAAAAAGAGAAA
AGATACATACAGCTTCCTGTAACTCATCTTTTTTCCTTTGGATTGTCTTCAAGGAAAGTGGTGTTAAATACAAAT
GGCCTATACTACAATCTAGAGCTTCTGAACTTTGGACAGATATACCAAGCTTTTAAAATCAACGTGGTAAGCAAG
TGCTCAGCAGTCAAAGAAGAAATAACCAGTATCTATAGACTTCATATTCCTTGGTCTTATGAAGATTCACTAACC
ATTGCACAGGCTCCATCTTCCACAGAAATTTCTCTGAAACTCCATATTGCTCAACCAGAAAACAATACCCATGTG
GCATTATTTAAAATGTACACGTCATCAGACTGTCGGTACGAGGTGACAGTTAAGACTTCCTTTTCACAAATACTT
GGACAGGTTGTTGCT**TAG**AATATGCTACCATGTTGGATAAAGAAGCCAAACCATACAAAGTTGATCCTTTTGTAA
TTATCATTAAGTTTCTGTTGGGGTAAGTTTTATTATCTGTGATAATGATTTTAATTGTGTTTTACATGTAACATT
ATATTTGGTTCCATAATGCAATATAAATTTTCATACAGATTTGGCAGTTGACTTGTTTCATTAAATGAGGTTTTT
TTTTTTCTCTTAGGCAAAGGTCTAATAAGTATATCAATGTCTACTTCAATAGTATCATTTCAAAAGTAATTATTC
ACTTTATGTATATCAGTCTAAACTTAGACTGCCTTTAATGTTTGTAAATAGGTGTATATGGTCCATGATCTGTGA
GTATCCTAGATTCAAACGCAAATCATTACAGGGTATTGATGAAACAGTGCCTCTCTGATCACTTTTAAAAGTATA
TTTTAGACCTCTCTACCCTAGTTAACATTCCATTCTTAATTTAGTCACATTTTCAGATTTTTGGTTAAGCATCAA
TATGTAGATCTTTTTTTCCATCATTACAACTAACTTGGCTTTCT

FIGURE 3826

MFLHSVNLWNLAFYVFMVFLATLGLWDVFFGFEENKCSMSYMFEYPEYQKIELPKKLAKRYPAYELYLYGEGSYA
EEHKILPLTGIPVLFLPGNAGSYKQVRSIGSIALRKAEDIDFKYHFDFFSVNFNEELVALYGGSLQKQTKFVHEC
IKTILKLYKGQEFAPKSVAIIGHSMGGLVARALLTLKNFKHDLINLLITQATPHVAPVMPLDRFITDFYTTVNNY
WILNARHINLTTLSVAGGFRDYQVRSGLTFLPKLSHHTSALSVVSSAVPKTWVSTDHLSIVWCKQLQLTTVRAFF
DLIGADTKQITQNSKKKLSVLYHHFIRHPSKHFEENPAIISDLTGTSMWVLVKVSKWTYVAYNESEKIYFTFPLE
NHRKIYTHVYCQSTMLDTNSWIFACINSTSMCLQGVDLSWKAELLPTIKYLTLRLQDYPSLSHLVVYVPSVRGSK
FVVDCEFFKKEKRYIQLPVTHLFSFGLSSRKVVLNTNGLYYNLELLNFGQIYQAFKINVVSKCSAVKEEITSIYR
LHIPWSYEDSLTIAQAPSSTEISLKLHIAQPENNTHVALFKMYTSSDCRYEVTVKTSFSQILGQVVA

FIGURE 3827

GGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAATCTCACTCATTTGTTCATATATTGGTCTCTG
AGGTCCCTTCTAGGCTCTGACAACTGGAAACTCTGAAAATAGACATATTGATGTCTTTGACTGTTGGAAACCTTG
CAGAGCAAGAATTTGTAACCATTGCACGTCACTACCGTGTGCCTGAGGGCACATGTTCAGATATGGATTTCTTAA
TCGCACTGGCCCACGAAAAGTTCAAGAAAAATATGTTTGAGAATTTCGACACTTTCATTTATTCCTGTGTGTATG
AAGATCGAGAAAAAAAAAATGTATTACCCACCAAAGACATTAAAAGGCTGTGCAAATCCTCCAGATTACCTTTGA
GTGATGATCTTCTAGAATCCTTATTGTCAAGGTTTGAAGACAGTGAAAAACAAATAGATTATAAGTCATTTTTCT
CTGCCCTGAACTGGAGAAAGAATCCAGCGCCTGAATTGCAACCAGCATCATACCTTAAAGAGAGATGTGAAGATG
TTTGGCTTGGTATGCCATCACCTATTCCTGCGAAATACATTGACTACTGGACCTTTTTGAAGGACGCGTTTGGCT
TAGAGGAGGAATAACCATGCCAGTTTTGGTCAATTCTCTATGATTTACTTCTCTCATTTTGCCACATTTACTTTA
GTAGATATAATTTCATTAAAAACAAAAAAGAAACAAGGTTTATATTAAATGGAAATCCATAAACCACAATTAATC
CTATTTTGTCATGTTAGTTTTACAGAACATCATGTTACATTGCCGACGTACTGTTACTATTTAAAATGCCATCTT
AAAACATGTTGAATATTTTTATTATATGTATGGTTTATTAATACCAAAAAATCTTCTGATAATTTTTGATCCAAC
ATAATTTGATTCATTACTATATGAACAGAAAATGACTTTTGAAGGTTATACATGACAATACAAAATCAAATTATA
TCACAGCAATAAGTTGTGATTCTATTAAACATTTTTGAAACCTTTTTGACACGTTTATTACTTACATAATTAAGT
TTTGTAGCAACCCACCTCATCAAAATAATTCTTAAACCTCTCTAGAGTAAATATATTTATCTTTTGAACTTAGTA
AAGCTATGGGAAGAAAAAGAACCTCCAACACACACACACACACACACACACACGCACGTGCACACACACTGGAAA
CATATGCAGTATTTATATTTGTAATGCCCTTTTTTCTATCTAAAGTCAGCTTGTTAGCCTAGGAATATATGCATG
TGTGTATAATTATAGTTTGACCAAAACTTTATTATGTCTAAAATATTTACAAATGTGAAAGCTGAAGATTTTGAG
ATTTTTGTTTTTTTTTTGGTTTGTTTTACACACACATCCCACGCGCCCCACCCTAGAGGTTTAAATATTCAGAAA
CTACAACATTTTTCCCCTGCATTTTTCTAGTTCTATTTTTATTTTTCTTCAGCAGAACTCTTGTCATGTAGTGTA
CATTTGATTAAAACCCATAGCCATGTAAAAAAAAAAAAAAAAA

FIGURE 3828

MSLTVGNLAEQEFVTIARHYRVPEGTCSDMDFLIALAHEKFKKNMFENFDTFIYSCVYEDREKKNVLPTKDIKRL
CKSSRLPLSDDLLESLLSRFEDSEKQIDYKSFFSALNWRKNPAPELQPASYLKERCEDVWLGMPSPIPAKYIDYW
TFLKDAFGLEEE

FIGURE 3829

ATTTCATGTTATACTTAATAAAACAAAACATACCTGTATACACACACATTCACTCACATTGAAGATGCAAGATGA
AGAAAGATACATGACATTGAATGTACAGTCAAAGAAAAGGAGTTCTGCCCAAACATCTCAACTTACATTTAAAGA
TTATTCAGTGACGTTGCACTGGTATAAAATCTTACTGGGAATATCTGGAACCGTGAATGGTATTCTCACTTTGAC
TTTGATCTCCTTGATCCTGTTGGTTTCTCAGGGAGTATTGCTAAAATGCCAAAAAGGAAGTTGTTCAAATGCCAC
TCAGTATGAGGACACTGGAGATCTAAAAGTGAATAATGGCACAAGAAGAAATATAAGTAATAAGGACCTTTGTGC
TTCGAGATCTGCAGACCAGACAGTACTATGCCAATCAGAATGGCTCAAATACCAAGGGAAGTGTTATTGGTTCTC
TAATGAGATGAAAAGCTGGAGTGACAGTTATGTGTATTGTTTGGAAAGAAAATCTCATCTACTAATCATACATGA
CCAACTTGAAATGGCTTTTATACAGAAAAACCTAAGACAATTAAACTACGTATGGATTGGGCTTAACTTTACCTC
CTTGAAAATGACATGGACTTGGGTGGATGGTTCTCCAATAGATTCAAAGATATTCTTCATAAAGGGACCAGCTAA
AGAAAACAGCTGTGCTGCCATTAAGGAAAGCAAAATTTTCTCTGAAACCTGCAGCAGTGTTTTCAAATGGATTTG
TCAGTATTAGAGTTTGACAAAATTCACAGTGAAATAATCAATGATCACTATTTTTGGCCTATTAGTTTCTAATAT
TAATCTCCAGGTGTAAGATTTTAAAGTGCAATTAAATGCCAAAATCTCTTCTCCCTTCTCCCTCCATCATCGACA
CTGGTCTAGCCTCAGAGTAACCCCTGTTAACAAACTAAAATGTACACTTCAAAATTTTTACGTGATAGTATAAAC
CAATGTGACTTCATGTGATCATATCCAGGATTTTTATTCGTCGCTTATTTTATGCCAAATGTGATCAAATTATGC
CTGTTTTTCTGTATCTTGCGTTTTAAATTCTTAATAAGGTCCTAAACAAAATTTCTTATATTTCTAATGGTTGAA
TTATAATGTGGGTTTATACATTTTTTACCCTTTTGTCAAAGAGAATTAACTTTGTTTCCAGGCTTTTGCTACTCT
TCACTCAGCTACAATAAACATCCTGAATGTTTTCTTAAAAAA

FIGURE 3830

MQDEERYMTLNVQSKKRSSAQTSQLTFKDYSVTLHWYKILLGISGTVNGILTLTLISLILLVSQGVLLKCQKGSC
SNATQYEDTGDLKVNNGTRRNISNKDLCASRSADQTVLCQSEWLKYQGKCYWFSNEMKSWSDSYVYCLERKSHLL
IIHDQLEMAFIQKNLRQLNYVWIGLNFTSLKMTWTWVDGSPIDSKIFFIKGPAKENSCAAIKESKIFSETCSSVF
KWICQY

FIGURE 3831A

GAAGGCGTCCCGGCATCGGCCAAGATTCTACATTGCTCATCTGGGCATCTGAGCCTCCTTCGAAGTTTCCTGTCA
CAACTGTCCTCTTGACAGCATGGATGAGGAGGAAGACAATCTGTCTCTGCTGACCGCACTGCTGGAAGAAAATGA
GTCAGCCTTGGATTGTAATTCAGAAGAAAATAACTTCTTGACGCGGGAAAATGGCGAGCCCGACGCATTTGATGA
GCTCTTTGATGCCGACGGCGACGGTGAATCTTATACAGAAGAGGCTGATGATGGAGAAACAGGAGAGACAAGAGA
CGAAAAGGAAAATCTGGCCACTCTCTTTGGAGATATGGAGGACTTAACAGATGAAGAAGAAGTTCCCGCATCACA
GTCAACTGAAAATAGGGTCCTCCCTGCTCCTGCCCCCAGGCGAGAGAAAACGAATGAAGAGTTGCAAGAGGAATT
AAGGAATTTGCAAGAGCAAATGAAGGCCTTACAAGAGCAGCTAAAAGTAACAACAATTAAACAGACAGCAAGCCC
AGCCCGTCTGCAAAAATCCCCTGAGAAGTCTCCCCGGCCACCTCTTAAGGAGAGGAGAGTTCAGAGAATTCAGGA
GTCAACATGCTTTTCTGCGGAGCTTGATGTCCCTGCGCTACCAAGAACCAAGAGGGTGGCTCGAACACCAAAGCC
TTCACCTCCAGATCCCAAAAGCTCATCTTCAAGGATGACAAGTGCACCCTCCCAACCCCTACAGACGATTTCTCG
GAACAAACCTAGTGGGATAACTAGAGGTCAAATTGTGGGGACCCCAGGAAGTTCTGGGGAAACGACTCAACCCAT
CTGTGTGGAAGCCTTCTCTGGTCTGCGGCTCAGGCGGCCTCGAGTATCCTCCACAGAAATGAACAAGAAAATGAC
CGGCCGAAAACTGATCAGACTGTCTCAGATCAAGGAAAAGATGGCCAGAGAGAAGCTGGAAGAAATAGATTGGGT
GACATTTGGGGTTATATTGAAGAAGGTTACGCCACAGAGTGTGAATAGTGGAAAAACCTTCAGCATATGGAAACT
GAATGATCTTCGTGACCTGACACAATGTGTGTCCTTGTTCTTATTTGGAGAAGTTCACAAAGCGCTCTGGAAGAC
GGAGCAGGGGACTGTCGTAGGGATCCTCAATGCCAACCCCATGAAGCCCAAGGATGGTTCAGAGGAGGTGTGTTT
ATCTATCGATCATCCTCAGAAGGTCTTAATTATGGGTGAAGCTCTTGACCTGGGAACCTGTAAAGCCAAGAAGAA
GAATGGAGAGCCGTGCACGCAGACTGTGAATTTGCGTGACTGTGAGTACTGTCAGTACCATGTCCAGGCTCAGTA
CAAGAAGCTCAGTGCAAAGCGTGCGGATCTGCAGTCCACCTTCTCTGGAGGACGAATTCCAAAGAAGTTTGCCCG
CAGAGGCACCAGCCTCAAAGAACGGCTGTGCCAAGATGGCTTTTACTACGGAGGGGTTTCTTCTGCCTCGTATGC
AGCTTCAATTGCAGCAGCTGTGGCTCCTAAGAAGAAGATTCAAACCACTCTGAGTAATCTGGTTGTTAAGGGCAC
AAACTTGATCATCCAGGAAACACGGCAAAAACTCGGAATACCCCAGAAGAGCCTGTCTTGCTCTGAGGAGTTCAA
GGAACTGATGGACCTGCCGACGTGTGGAGCCAGGAACTTAAAACAACATTTAGCCAAAGCCTCAGCTTCAGGGAT
TATGGGGAGCCCAAAACCAGCCATCAAGTCCATCTCGGCCTCAGCACTCTTGAAGCAACAGAAGCAGCGGATGTT
GGAGATGAGGAGAAGGAAATCAGAAGAAATACAGAAGCGATTTCTGCAGAGCTCAAGTGAAGTTGAGAGCCCAGC
TGTGCCATCTTCATCAAGACAGCCCCCTGCTCAGCCTCCACGGACAGGATCCGAGTTCCCCAGGCTGGAGGGAGC
CCCGGCCACAATGACGCCCAAGCTGGGGCGAGGTGTCTTGGAAGGAGATGATGTTCTCTTTTATGATGAGTCACC
ACCACCAAGACCAAAACTGAGTGCTTTAGCAGAAGCCAAAAAGTTAGCTGCTATCACCAAATTAAGGGCAAAAGG
CCAGGTTCTTACAAAAACAAACCCAAACAGCATTAAGAAGAAACAAAAGGACCCTCAGGACATCCTGGAGGTGAA
GGAACGTGTAGAAAAAAACACCATGTTTTCTTCTCAAGCTGAGGATGAATTGGAGCCTGCCAGGAAAAAAAGGAG
AGAACAACTTGCCTATCTGGAATCTGAGGAATTTCAGAAAATCCTAAAAGCAAAATCAAAACACACAGGCATCCT
GAAAGAGGCCGAGGCTGAGATGCAGGAGCGCTACTTTGAGCCACTGGTGAAAAAAGAACAAATGGAAGAAAAGAT
GAGAAACATCAGAGAAGTGAAGTGCCGTGTCGTGACATGCAAGACGTGCGCCTATACCCACTTCAAGCTGCTGGA
GACCTGCGTCAGTGAGCAGCATGAATACCACTGGCATGATGGTGTGAAGAGGTTTTTCAAATGTCCCTGTGGAAA
CAGAAGCATCTCCTTGGACAGACTCCCGAACAAGCACTGCAGTAACTGTGGCCTCTACAAATGGGAACGGGACGG
AATGCTAAAGGTATGCCATTTGCGTACTAATTTTTGACTCCTTTTAGTGACCCATGCTAATAATGTGGAACCATC
TCCTATTAAAATATTTTCATTTTTCTAGGAAAAGACTGGTCCAAAGATAGGAGGAGAAACTCTGTTACCAAGAGG
AGAAGAACATGCTAAATTTCTGAACAGCCTTAAATAACCCGAACTTCAGACATTTTCCCACAGACTTCCTGGCCT
CCTGTGACTCTGGAAAGCAAAGGATTGGCTGTGTATTGTCCATTGATTCCTGATTGACGCCGTCAAAAACAAATG
CTTGTTAAGCCCATAAGCTTTGCCTGCTTACTTTCTGCCATTGGGTTGGTTTGATACCACATTTAACATTGACAT
TTAAGTGGAAAACCAAGTTATCATTGTCTTTTCTAAGCTCAGTGTGGATGATTGCATTACTTCATTCACTGAAGT
TTTTGCCCAAAAATTGGAAGGTAAACAGAGAGCTATGTTTCTGTATCTTTTGGTTATAGAGTGTTCACTTCTTTA
TCATAACAAAATTCTAGTGTTTATACGAACACCCAGAGGCAAAAGAATTTGGCTTAATTCTCACTCCAGGTAAGT
AGCTTAACTTCTGGGCTTCAGTTTTCTCATCTGTAAAATCAGGAAGATTGGACTAAGTGATCCTGAAATGTATTT
TTTAGCACTGGATTTCTACAAATAATAAAACTTTCCCATCTAGATAATGATGATCACATAGTCTTGATGTACGGA
CATTAAAAGCCAGATTTCTTCATTCAATTCTGTTATCTCTGTTTTACTCTTTGAAATTGATCAAGCCACTGAATC
ACTTTGCATTTCAGTTTATATATAGAGAGAGAAAGAAGGCTGTCTGCTCTTACATTATTGTGGAGCCCTGTGATA
GAAATATGTAAAATCTCATATTATTTTTTTTTTAATTTTTTTATTTTTTATGACAGGGTCTCACTATGTCACCCT

FIGURE 3831B

GGCTGGAGTGCAGTAGTGCGATCGCGGCACACTGCAGCCTTGGCTTCCCTGGGCTCAAGCAGTCCTCCCACCTCA
GTCTCCCAAATAGCTAGGACTACAGGCGTGCGTGACCAAGCCCAGCTAATTTTTGCATTTTTTGTAGAGATGGGG
TTTTGCCATGTTGCTCAGGCTGGTCTCAAACTCCTGAGCACTAGCAATCCACCCACCTCTGTTTCCAAAAAAAAA
AAAAAAATGAAAGGTCAACCCCTATGCAAATTACCACAGCAAAGGTTTCATTCAGGAGATTCTTCCATCTGGGCA
ACCTGGTTTTCCAAATATCATTTGACCTAAGTGAATGTTGATACTAGCTAAAGATTGGGTAAATTGGTTGAATTA
TTGTATTGAAGCTTGAGCTGTAGCTAAAAGTAATTTAGGTTTCCCCTAAGATGTTATTATGTTAGGGACATAACA
CTTTTGGGAGGTTGTTGTGGGAGATGGTTGATTTAGGTTTTCAAAAGCTAGAAATAAAATTTACATGCCTTAGAT
TTCATAAAATTCTGCTCTAATTGGGTGGAAGGTGCTGTATCTAACTTGTGTTCCTCCTAAGGTTATGTCCTAATA
ACTATTCTTTTAGGAGTATACTTCTACTTTATAGAAGGTTGCTTTTCTTTTTAATTTTTTCTAACAAAGAAAAGA
ATAAAGTATTTATTAATAAGAACCAGAAAGCACTTGAAACTGATGTTTTTAATGGCTCATTTAGGGTAGATTTAT
TTATCTCATTAACTTAAAACAGCTATGTGTATGAAATAGGTCACAACAGAACTTGAACACCAGGTTGGTGTCTGA
GCAATCCCTTTCTTATGGGAAAAACAATGTTCTTGTTTGAACAGAGGGTATCATTGCAGTCAGTATTCACGTGTA
TATTGTTATATAAGTTGTATAATATGCTTGTAAAGGCTGAGGGTGAGCTGTATCTGGATGCCTTTTTACAATTTG
ATTTTAACTTTTAAAATAAATTTAAAACATAAAAAAAAAAAAA

FIGURE 3832

MDEEEDNLSLLTALLEENESALDCNSEENNFLTRENGEPDAFDELFDADGDGESYTEEADDGETGETRDEKENLA
TLFGDMEDLTDEEEVPASQSTENRVLPAPAPRREKTNEELQEELRNLQEQMKALQEQLKVTTIKQTASPARLQKS
PEKSPRPPLKERRVQRIQESTCFSAELDVPALPRTKRVARTPKPSPPDPKSSSSRMTSAPSQPLQTISRNKPSGI
TRGQIVGTPGSSGETTQPICVEAFSGLRLRRPRVSSTEMNKKMTGRKLIRLSQIKEKMAREKLEEIDWVTFGVIL
KKVTPQSVNSGKTFSIWKLNDLRDLTQCVSLFLFGEVHKALWKTEQGTVVGILNANPMKPKDGSEEVCLSIDHPQ
KVLIMGEALDLGTCKAKKKNGEPCTQTVNLRDCEYCQYHVQAQYKKLSAKRADLQSTFSGGRIPKKFARRGTSLK
ERLCQDGFYYGGVSSASYAASIAAAVAPKKKIQTTLSNLVVKGTNLIIQETRQKLGIPQKSLSCSEEFKELMDLP
TCGARNLKQHLAKASASGIMGSPKPAIKSISASALLKQQKQRMLEMRRRKSEEIQKRFLQSSSEVESPAVPSSSR
QPPAQPPRTGSEFPRLEGAPATMTPKLGRGVLEGDDVLFYDESPPPRPKLSALAEAKKLAAITKLRAKGQVLTKT
NPNSIKKKQKDPQDILEVKERVEKNTMFSSQAEDELEPARKKRREQLAYLESEEFQKILKAKSKHTGILKEAEAE
MQERYFEPLVKKEQMEEKMRNIREVKCRVVTCKTCAYTHFKLLETCVSEQHEYHWHDGVKRFFKCPCGNRSISLD
RLPNKHCSNCGLYKWERDGMLKVCHLRTNF

FIGURE 3833

ACGCGGGGATTCTGTGTAATTCCTATCCACAGTCACTTCTGTTCATTTTTAATGAAAACCTATTGCTGTTATTTT
CTATTATGAGTTAACGGTGATGTGTGTTTTTTAAATTTTGTATACTTGCTCTCACCCTAAAATATACCTTAAGAG
ACTTTTCCCCTGTTTTTCTTTCTGCTTTCCAAGACTCCAGGAAAAACAGCTTCCATGGCACATTTTGTACAGGGC
ACATCTAGAATGATTGCCGCAGAAAGTTCTACGGAGCATAAAGAGTGTGCTGAACCATCAACAAGAAAGAACTTG
ATGAATTCTCTTGAACAAAAGATAAGGTGTTTGGAAAAACAAAGAAAAGAGCTCCTGGAAGTTAACCAGCAATGG
GATCAGCAATTTAGAAGTATGAAAGAGTTATATGAAAGAAAGGTAGCAGAGCTGAAGACGAAACTGGACGCCGCG
GAAAGATTCCTCAGCACGCGGGAGAAGGATCCGCATCAGAGGCAGAGAAAGGACGACAGGCAGAGAGAGGACGAC
AGGCAGCGCGACCTGACCCGGGACCGGCTGCAGCGGGAGGAGAAGGAAAAGGAACGCCTAAATGAAGAATTACAT
GAATTGAAAGAAGAGAATAAACTTTTAAAGGGAAAAAATACTCTTGCGAACAAGGAAAAGGAACATTACGAATGT
GAAATAAAACGCCTCAATAAGGCTCTTCAGGATGCCTTGAATATCAAGTGTTCATTTTCCGAGGACTGTTTGAGG
AAGTCTCGAGTGGAATTCTGCCATGAGGAGATGAGAACAGAAATGGAAGTTCTGAAGCAGCAGGTGCAAATATAC
GAAGAAGACTTCAAAAAGGAACGATCGGATCGAGAGAGACTTAATCAAGAGAAAGAGGAGCTACAGCAAATTAAT
GAAACTTCCCAATCCCAGTTGAACAGGCTGAATTCCCAGATAAAAGCTTGTCAGATGGAGAAAGAAAAACTAGAA
AAGCAATTAAAACAGATGTATTGCCCACCCTGTAACTGCGGCTTGGTTTTCCACCTGCAAGATCCATGGGTACCA
ACAGGCCCTGGAGCTGTGCAGAAGCAACGGGAGCACCCACCAGACTGTCAGTGGTATGCTCTTGACCAGCTTCCG
CCAGATGTACAACACAAGGCAAATGGTTTATCCTCAGTAAAGAAAGTCCATCCGTAGAAGTACACACTAACAGAG
AGAGACAACAGGCAACGAGGGAGCGTGGCTGAGGACCCTCTTCTTTGTTTATACTGAGGCTTGTTTCTGCCACAA
AGGCACATCATCTACCCTGTTATTTGTGCCTGGTCATGTTTTCCTTTGGTATGAATACAGGAAAAGGCTTCTGAC
AGCTAAGATCCTGATCAAATTGGAGGAGCCAGTTATTATACAACCAAATACAACTTCCAGTTTCCTTGAAATGAG
ACTTGGCAGATGGATGATGCACGACTCCCTGAAAATCTCTTCAGCATATTGCTGTTGGATGCACAAAAATGATTC
TATGATTTAGGCAACTCAGTGTTTGCTGCAGGGATATTGTATGTTGATTTAAAGTGCATATGTGTGTGTGTGTGT
GTGTGTGTGTGTGTTTCCTGGGGTAAAAATTTCTGCAGTTGTAAACGTTTAACATTGCTCCCATTCTTCTTCC
ACAGGGCCTTAGTTCTTTAGCTATTTGACTACATATTGTTGACCTCAGTGATCCTAAACGTAGAATTGAAGAGGT
GTATATACCTCGTTAAATTAAATAAGTGGTTCAATCTGAATAAGATGGTTAATTGGAAGCTATTCCTTAGACAGA
TCATTTCTTTAAGATGGTGAGAAATTGTGCGCCTGCATCACAAGACTTGATTATGAAAGATAAAGTCTTGGGCTG
GGTGCAGTGGCTCATGCCTATAATCCCAGCACTTTGGGAGGCTGAGGCAGGTGGATTGCTTTGAGGCCAGGAGTT
CTAGACCAGCCTGGCCAGCATGGTGAAACCCCATCTCTACTATAAATACAAAAATTAGCCAGGCTCGTGGCACAC
ACCTATAAACCCAGCTACTCAGGAGGCTTGAGGCGGGAGGATCACTTGAGCCCAGGGAGGCAGAGGTTGCTGTAA
GTTGAGATCGCCACTGCACTCCAGCCTGGGAAATAGAGTGAGCAAGACTCAGTGCCCCCTACCCACCCACTCCAC
ACCACCAAAAAAAAAAAAAAAAAAAAAAAAGGAAGACAAAGTCCTGATGGGATGATGATGGCTATATGGCTATGCTG
TGTCCATATATACTTACAGAAATATTTCAGACATATGGATTTATAGTTAAATCTGTGTTTTTCCTTCCTATGGAT
TTGATTAATTTTAATGAAAAACTTAATTCTGACTCCTCAAGCCAATTAAAATGAAAATGGAATTTATTTAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3834

MAHFVQGTSRMIAAESSTEHKECAEPSTRKNLMNSLEQKIRCLEKQRKELLEVNQQWDQQFRSMKELYERKVAEL
KTKLDAAERFLSTREKDPHQRQRKDDRQREDDRQRDLTRDRLQREEKEKERLNEELHELKEENKLLKGKNTLANK
EKEHYECEIKRLNKALQDALNIKCSFSEDCLRKSRVEFCHEEMRTEMEVLKQQVQIYEEDFKKERSDRERLNQEK
EELQQINETSQSQLNRLNSQIKACQMEKEKLEKQLKQMYCPPCNCGLVFHLQDPWVPTGPGAVQKQREHPPDCQW
YALDQLPPDVQHKANGLSSVKKVHP

FIGURE 3835A

CTCCAGTCCGCATGCTCAGTAGCTGCTGCCGGCCGGGCTGCGGGGCGGCGTCCGCTGCGCGCCTACGGGCTGCGG
TGGCGGCCGCCGCGGCACCCGGCAGGGCCCGCCAGTCCCCGCTTCCCTGCTCCAGAGCCGCCGCCTGGGCCGGGG
CAGGGCGGGCCCGGGGCTCCTCCATGCTGCCAGCCGCCGGGCTGCGGAGCCGACCAAGTGGCTCCTGCG**ATG**GCG
GCGGAAGAGGAGGCTGCGGCGGGAGGTAAAGTGTTGAGAGAGGAGAACCAGTGCATTGCTCCTGTGGTTTCCAGC
CGCGTGAGTCCAGGGACAAGACCAACAGCTATGGGGTCTTTCAGCTCACACATGACAGAGTTTCCACGAAAACGC
AAAGGAAGTGATTCAGACCCATCCCAAGTGGAAGATGGTGAACACCAAGTTAAAATGAAGGCCTTCAGAGAAGCT
CATAGCCAAACTGAAAAGCGGAGGAGAGATAAAATGAATAACCTGATTGAAGAACTGTCTGCAATGATCCCTCAG
TGCAACCCCATGGCGCGTAAACTGGACAAACTTACAGTTTTAAGAATGGCTGTTCAACACTTGAGATCTTTAAAA
GGCTTGACAAATTCTTATGTGGGAAGTAATTATAGACCATCATTTCTTCAGGATAATGAGCTCAGACATTTAATC
CTTAAGACTGCAGAAGGCTTCTTATTTGTGGTTGGATGTGAAAGAGGAAAAATTCTCTTCGTTTCTAAGTCAGTC
TCCAAAATACTTAATTATGATCAGGCTAGTTTGACTGGACAAAGCTTATTTGACTTCTTACATCCAAAAGATGTT
GCCAAAGTAAAGGAACAACTTTCTTCTTTTGATATTTCACCAAGAGAAAAGCTAATAGATGCCAAAACTGGTTTG
CAAGTTCACAGTAATCTCCACGCTGGAAGGACACGTGTGTATTCTGGCTCAAGACGATCTTTTTTCTGTCGGATA
AAGAGTTGTAAAATCTCTGTCAAAGAAGAGCATGGATGCTTACCCAACTCAAAGAAGAAAGAGCACAGAAAATTC
TATACTATCCATTGCACTGGTTACTTGAGAAGCTGGCCTCCAAATATTGTTGGAATGGAAGAAGAAAGGAACAGT
AAGAAAGACAACAGTAATTTTACCTGCCTTGTGGCCATTGGAAGATTACAGCCATATATTGTTCCACAGAACAGT
GGAGAGATTAATGTGAAACCAACTGAATTTATAACCCGGTTTGCAGTGAATGGAAAATTTGTCTATGTAGATCAA
AGGGCAACAGCGATTTTAGGATATCTGCCTCAGGAACTTTTGGGAACTTCTTGTTATGAATATTTTCATCAAGAT
GACCACAATAATTTGACTGACAAGCACAAAGCAGTTCTACAGAGTAAGGAGAAAATACTTACAGATTCCTACAAA
TTCAGAGCAAAAGATGGCTCTTTTGTAACTTTAAAAAGCCAATGGTTTAGTTTCACAAATCCTTGGACAAAAGAA
CTGGAATATATTGTATCTGTCAACACTTTAGTTTTGGGACATAGTGAGCCTGGAGAAGCATCATTTTTACCTTGT
AGCTCTCAATCATCAGAAGAATCCTCTAGACAGTCCTGTATGAGTGTACCTGGAATGTCTACTGGAACAGTACTT
GGTGCTGGTAGTATTGGAACAGATATTGCAAATGAAATTCTGGATTTACAGAGGTTACAGTCTTCTTCATACCTT
GATGATTCGAGTCCAACAGGTTTAATGAAAGATACTCATACTGTAAACTGCAGGAGTATGTCAAATAAGGAGTTG
TTTCCACCAAGTCCTTCTGAAATGGGGGAGCTAGAGGCTACCAGGCAAAACCAGAGTACTGTTGCTGTCCACAGC
CATGAGCCACTCCTCAGTGATGGTGCACAGTTGGATTTCGATGCCCTATGTGACAATGATGACACAGCCATGGCT
GCATTTATGAATTACTTAGAAGCAGAGGGGGGCCTGGGAGACCCTGGGGACTTCAGTGACATCCAGTGGACCCTC
TAGCCTTTGATTTTTAACTCCAAAAATGAGAAACATTTTAAAGCATTATTTACGAAAAAACTGTCTCAACTATTC
TTAAGTACTGTATTGATATTGTTTGTATCTTTTATTAATGTTCTACCACTTTTTATAGATTTGCATCTTCCTGTC
ACAGGGATGTGGGGAAATACGTTTTCCTCCCAAGAGAACCAAGTTTATTATAGACTCCTTTATTCAGTGAAATGG
CTTATAATCCACTAGTTGCCATATTTTTGCTAAAATATTTCTAACCAAGAATACTACTTACATATTGTTTTGGCT
TTGTTTTATTTTTGATGCAGTTTTTTTTAGTTGAGGTAATGTAATATATTGATGTTTTCCTTTGTGTCTAAGATT
GATTTATAATAGTAGGTTTGTATAATTTGGAACATTTTCCATGCCTTGCGAATTTCCTTAATTGAGGATAGGGCT
TACACACTTTAAGAAAACAGTGAGTACTTGAACATTTAAAGGGACAGTGCAATTTATAGTCATAATCACATTGAA
TACTGTATTTGATCTTTGGAGACTTAGGCAAGCACAGAGCTGGGATATTTATGCTCAGTTGAGCACTTTAAGATG
AATTTTAAGTGAGATGATTTCTTGCTTAAAACTCAGAAAGTCAAAAGAGTTTCAGCTTTCCTTACAGAAAAGGAA
GGATCTTGGGCCCTAGATCTTGGGGATTAACCTCTGCATATAAGATTTACTCTTAATAGGCCAGACGTGGTGCTC
ACGCCTGTAATCCCAGTACTTTGGGAGGCTGAGACGGGCAGATCACTTGAGGTCAGGAGTTCAAGACCAGCCTGG
CCAATATGGTGAAACCCCGTTTCTACTAAAAATACAAAAAAAATTACCCAGGCACTCACTCTTGAGGTAACTAAC
CAACTCCCACGATAATGACAGTCCATTCATGAGCGCAAAGGCCTCATGACCTAATGGCACACACCTGTAATCCCA
ACTGCTTGGGAGGCTGAGGCGAGAGGATTGCTTGAACCTGGGAGGCAGAGGTTGCAGTGAGCCGAGATCGCACCA
CTGCACTCCAGTCTGGGCAACAGAGTGAGACTTCATCTCAAAAAAAGTAAAAAAAAAAGATTTAATATAATCACTG
AAGATCTCTATTATAGATAGATTAGGTTTTTGACATTGGAAACATACTTAGGGATAGATTTGTCCTAAAGGAAAA
AAGTAGGCCCGGGCAGATTAAATGTCTTGTGTAAAGTCACACATTAAATTCAGTCACACATTAAATTCATAGAGT
TTTAAATGTTTAATGTATATAAACCAGTTTCTTTATACACATTTGGGAAAACATTGGTCTCACAGATTAAATGAT
TAACTAACTGACCCAGGAACTAGTTGTAGCTTTCTAAGTAATTAGGCAATTACAGTTATTGCCTGTAACCAAAGG
TAATAAAACAAAATGACAAGTACATGTTTAAAATTATGAGGCAATGAGAAATAATTTAAAAACCAATTTTCTAGT
TATAATTTAAAATTTGGAGAGCATTTTTAACAGTAATTAATCCAGAGGTGGCTCAAATTGAGTATAAGAATTAAG

FIGURE 3835B

ATTATTTAAAATACTGCATGTCTACCTTCTCGGGGATCATACTTTATAACACTTTCTGCTTCAGTAGCTCTTCAT
AGCTTGCCAAGTATGCTCCCATATTTTCTCTCTCGTGCCTCGCAAATGAAAGTCAGATAGGCTGGGAACTCATGG
GGCAGCCCTCAGACTTCAATGTGGGCTTCAAATCCAGTTTCCTGTTCTATATGGTGCTACATCTTTCCAGAAAAT
TTCCCTCAGAGCCCCTCGCCAAAACAAAGCATTATTTTGACCCTGCATGCTATTTCTTTAGCTGTAGGTGATAGA
TTAGAACTTCTGTCAGACATGTTAATGACAAACATACCAACAGACAATAACCAAAGCAAATGTTTCCTTCAAGTG
TGAAATGTGCAGGGGCTCGTGGGCAAGGATGTATTGGCACACTGTCCTCTTGAACTGATAGTGTCCCAGCAATGT
TGGAGGTTGGCACCATTCCTGGTCCGACACTTGAGGACCTGAGAGACATCAGGTTTAGAATGAGCCAAAGAAATC
CTACAAGATGGGGAGAATTGGTGTGCAGCAGCCTAAGTGTTATAGTTAAGTCTAAAGAAGTATGAAAGATCCCCT
GTGTTCTCTAAATTGAGCAGAGGGGCCTGCCTACCAATATCACTTTTTAGGGGACTGAACCATTGCAGGTTAGAC
TTGGCTTCCAAAGAGTCTGCCTAAGCCAGGGGTGGCAGGGTAGGCCATCATAGCTGGATGGCCTCAAAAGCAGAT
GGGGGCAGACTTGCCCTCGTGATGCCAGGATTTGAGAGGCAGAGTTTCTAGAGGGAGACCAGTGCTGCCTCTCAC
AGTGGCAGTTTTTTCTCTTTGCAAGAGGAGGGGCTGTTCAATTCCATAGACCAGTGGGCAGATAGCCAGTTGAAT
ACTCTGTGCATGGTTTGATCCTTTATTAGTTCGCTCTAATATTTTTCTGTAGATCCTTTTGTCCTGGACTCAAAA
TCTAATCCATGCATTGTATGATACCGTAGCTCTCCTAAGGTTTGTGTTTCCTTCAAAATGTTTTAGTTTTCTTCA
ACTAAATTTGATTTTTGCTGTTAGAAGTGACATATTTTTATGGTATACACTATGTTCCTTTTTTCTACTGCGAGT
CAATTTTTTGAATTTTCGTGAGAAAGAATATATCTACAAATTGCACGAAAGTATCATAAAAACAGTACTCTAGAG
CAGCGCTGTCCAATAGAAATATAATCTGAGCCACATGTATAATTTTATTTTCTTCTAGCCACATTAAAGAAGTAA
AAAGATACAAGTAGAACTAATTTTAATGTTTTAATTCAGTATATCCAAAATATCATTTGAACATGTAATTAATAT
AAAATTATTAATGTGATATTTTACATTCTTTTGGTAATACTAGTCTTCAAAATCTGGTATGTATCTTACATTGAT
AGCACATCTCACTTTGTACTAGCCACATTGCAAGTGCTCAGTAGCCACATGTGGCTAGTGGCTACTGCACTGGAC
AGCACAGTTCTAGGTTCCACCCTAACACCCAAGTCCTGTGGATTAGAATCCCAGAATCAGAGCTGGAAGTAAACA
TAGAGATCAAACCTCCTTTTAAAAATGAGGACGCTGAGGCACAGAGTTTAAATGGCTTGCATGAGGTCATACAGC
TAAATTCAGCCTCAACAGGGTCTTCTGATTCCAGGCACTCTTCCCACTCCACTACATTACTGTAGTGGTAATTCT
TAGGGTTAAAAAAAGTGTAGAGTAGGCCGGGCGCAGTGGCTCATGCCTGTAATCCCAGCACTTTGGGAGGCCGAA
GTGGGCGGATCACGAGGTCAGGAGATCGAGACCATCCTGGCCAACATGGTGAAACCCCGTCTCTACTGAAAATAC
AAAGCAAAATTAGCCAGGTGTGGTGGCGGGCGCCTGTGGTCCCAGCTGCTCTGGAGGCTGAGGCAGAATGGCGTG
AACCCAGGAGGCAGAGATGGCAGTGAGCCAAGATCGCGCCACTGCACCCCAGCCTGGGCGACAGAGCGAGACTCC
ATCTCAAAAAAAAAAAAAAAAAAAAAAGAAAAGAAAAGAAAAGTCTAGAGAACATTATATTAAGTGGTTATTATT
GAAGTAGACCAAAGTTTATACCATAAGGATATTTTTCCTTAAATACCATGTTTGAAGAACAATTATTTATTGATC
CTTGAATCTGTAAGATCAAATAACAAGTCTCTATCCATGTTACCAAATTTAACCTTTTGAAAATAATAAACTTTA
AAATATCAGATGTGTTATTACAGGATGATACTTGGAATCAAGTGAAATGAGTTATATGGTCATCACTAAATTTAG
AAATCTATTGTGAAACAAAGACAAACAGGAAAGTACAGAATAGAGACTTTTAGTAAATAAATGGAATTTAAAAGA
AAGTGTTTATTTACAGTGTCACGACAGAAAAGGATGTCTTTGTTGTCATAGTCTTTGAGGGATCTCCGTAAAATC
TGGGGCACAGGTACAAGAAATAGCCAATATTTAGTTCCCAGACCATGTTTAGTAGTGTCCAGTTTCAGATCATGC
TGCCAAGAGGTATCTCCCCCTCAGGTGGGTCATCACTGAGCCCTGGAATTGGAGACTCATACTTGCCCAGCACAA
TGTTACGGGCAGACAGGCCGACATCTATGATTAGCTAGAAGCCATAAAGAAAAGCTGCTAAGTGGCCACTAGGTG
CCACTTTTCTGTTTTTGTAATGCTTTCATTAGCAGATCTTTTTTTTCCAAGCTCCATGGGGCCTATGAGAGGCAT
TTATGATTTTTGTGCCTACAATAAGTCAGCCTGTCTGGTGTGAGTTGTTTTATGAGAAATGCTTTCCAAGGGAGG
TCTAGGAAGATCCTGACACATAAGAACTTTGGCTTAGAGAGCTTTCCAGGTGTAGTGCCAATAAAAACTGACCTG
GAAAGAAAACCTGCCCAGCACGGAACATGCTTTCTGAACTCACTTGAGAGTGTATGGTGTATGTCACTTCTCATA
TATTCTTGAGTTTAGATTTGTCTTTTATACAATTTTTAGCTCTTTTCCAGTTCACTTGTGCTCGTCTGTATATTG
GTATTTTTAAATTTTTGTGGTAAATAATGAAAAGAGTGAAATTATATTTTATAATTACTCATTTGTAGTTTTTTT
TTTTAATTTAATAAACTTCCTCCAAAAAGTGCTCCCTTAAAA

FIGURE 3836

MAAEEEAAAGGKVLREENQCIAPVVSSRVSPGTRPTAMGSFSSHMTEFPRKRKGSDSDPSQVEDGEHQVKMKAFR
EAHSQTEKRRRDKMNNLIEELSAMIPQCNPMARKLDKLTVLRMAVQHLRSLKGLTNSYVGSNYRPSFLQDNELRH
LILKTAEGFLFVVGCERGKILFVSKSVSKILNYDQASLTGQSLFDFLHPKDVAKVKEQLSSFDISPREKLIDAKT
GLQVHSNLHAGRTRVYSGSRRSFFCRIKSCKISVKEEHGCLPNSKKKEHRKFYTIHCTGYLRSWPPNIVGMEEER
NSKKDNSNFTCLVAIGRLQPYIVPQNSGEINVKPTEFITRFAVNGKFVYVDQRATAILGYLPQELLGTSCYEYFH
QDDHNNLTDKHKAVLQSKEKILTDSYKFRAKDGSFVTLKSQWFSFTNPWTKELEYIVSVNTLVLGHSEPGEASFL
PCSSQSSEESSRQSCMSVPGMSTGTVLGAGSIGTDIANEILDLQRLQSSSYLDDSSPTGLMKDTHTVNCRSMSNK
ELFPPSPSEMGELEATRQNQSTVAVHSHEPLLSDGAQLDFDALCDNDDTAMAAFMNYLEAEGGLGDPGDFSDIQW
TL

FIGURE 3837

CGGCCCGCTGGAGAGGAAGCCCGAGAGCTGCCGCGCGCCTGCCGGACGAGGGCGTAGAAGCCAGGCGTCAGAGCC
CGGGCTCCGGTGGGGTCCCCCACCCGGCCCTCGGGTCCCCCGCCCCCTGCTCCCTGCCCATCCCAGCCCACGCGA
CCCTCTCGCGCGCGGAGGGGCGGGTCCTCGACGGCTACGGGAAGGTGCCAGCCCGCCCCCGG**ATG**GGCATCGTGGA
GCCGGGTTGCGGAGACATGCTGACGGGCACCGAGCCGATGCCGGGGAGCGACGAGGGCCGGGCGCCTGGCGCCGA
CCCGCAGCACCGCTACTTCTACCCGGAGCCGGGCGCGCAGGACGCGGACGAGCGTCGCGGGGGCGGCAGCCTGGG
GTCTCCCTACCCGGGGGGCGCCTTGGTGCCCGCCCCGCCGAGCCGCTTCCTTGGAGCCTACGCCTACCCGCCGCG
ACCCCAGGCGGCCGGCTTCCCCGGCGCGGGCGAGTCCTTCCCGCCGCCCGCGGACGCCGAGGGCTACCAGCCGGG
CGAGGGCTACGCCGCCCCGGACCCGCGCGCCGGGCTCTACCCGGGGCCGCGTGAGGACTACGCGCTACCCGCGGG
ACTGGAGGTGTCGGGGAAACTGAGGGTCGCGCTCAACAACCACCTGTTGTGGTCCAAGTTTAATCAGCACCAGAC
AGAGATGATCATCACCAAGCAGGGACGGCGGATGTTCCCATTCCTGTCATTTACTGTGGCCGGGCTGGAGCCCAC
CAGCCACTACAGGATGTTTGTGGACGTGGTCTTGGTGGACCAGCACCACTGGCGGTACCAGAGCGGCAAGTGGGT
GCAGTGTGGAAAGGCCGAGGGCAGCATGCCAGGAAACCGCCTGTACGTCCACCCGGACTCCCCCAACACAGGAGC
GCACTGGATGCGCCAGGAAGTTTCATTTGGGAAACTAAAGCTCACAAACAACAAGGGGGCGTCCAACAATGTGAC
CCAGATGATTGTGCTCCAGTCCCTCCATAAGTACCAGCCCCGGCTGCATATCGTTGAGGTGAACGACGGAGAGCC
AGAGGCAGCCTGCAACGCTTCCAACACGCATATCTTTACTTTCCAAGAAACCCAGTTCATTGCCGTGACTGCCTA
CCAGAATGCCGAGATTACTCAGCTGAAAATTGATAATAACCCCTTTGCCAAAGGATTCCGGGAGAACTTTGAGTC
CATGTACACATCTGTTGACACCAGCATCCCCTCCCCGCCTGGACCCAACTGTCAATTCCTTGGGGGAGATCACTA
CTCTCCTCTCCTACCCAACCAGTATCCTGTTCCCAGCCGCTTCTACCCCGACCTTCCTGGCCAGGCGAAGGATGT
GGTTCCCCAGGCTTACTGGCTGGGGGCCCCCCGGGACCACAGCTATGAGGCTGAGTTTCGAGCAGTCAGCATGAA
GCCTGCATTCTTGCCCTCTGCCCCTGGGCCCACCATGTCCTACTACCGAGGCCAGGAGGTCCTGGCACCTGGAGC
TGGCTGGCCTGTGGCACCCCAGTACCCTCCCAAGATGGGCCCGGCCAGCTGGTTCCGCCCTATGCGGACTCTGCC
CATGGAACCCGGCCCTGGAGGCTCAGAGGGACGGGGACCAGAGGACCAGGGTCCCCCCTTGGTGTGGACTGAGAT
TGCCCCCATCCGGCCGGAATCCAGTGATTCAGGACTGGGCGAAGGAGACTCTAAGAGGAGGCGCGTGTCCCCCTA
TCCTTCCAGTGGTGACAGCTCCTCCCCTGCTGGGGCCCCTTCTCCTTTTGATAAGGAAGCTGAAGGACAGTTTTA
TAACTATTTTCCCAAC**TGA**GCAGATGACATGATGAAAGGAACAGAAACAGTGTTATTAGGTTGGAGGACACCGAC
TAATTTGGGAAACGGATGAAGGACTGAGAAGGCCCCCGCTCCCTCTGGCCCTTCTCTGTTTAGTAGTTGGTTGGG
GAAGTGGGGCTCAAGAAGGATTTTGGGGTTCACCAGATGCTTCCTGGCCCACGATGAAACCTGAGAGGGGTGTCC
CCTTGCCCCATCCTCTGCCCTAACTACAGTCGTTTACCTGGTGCTGCGTCTTGCTTTTGGTTTCCAGCTGGAGAA
AAGAAGACAAGAAAGTCTTGGGCATGAAGGAGCTTTTTGCATCTAGTGGGTGGGAGGGGTCAGGTGTGGGACATG
GGAGCAGGAGACTCCACTTTCTTCCTTTGTACAGTAACTTTCAACCTTTTCGTTGGCATGTGTGTTAATCCCTGA
TCCAAAAAGAACAAATACACGTATGTTATAACCATCAGCCCGCCAGGGTCAGGGAAAGGACTCACCTGACTTTGG
ACAGCTGGCCTGGGCTCCCCCTGCTCAAACACAGTGGGGATCAGAGAAAAGGGGCTGGAAAGGGGGGAATGGCCC
ACATCTCAAGAAGCAAGATATTGTTTGTGGTGGTTGTGTGTGGGTGTGTGTTTTTTCTTTTTCTTTCTTTTTATT
TTTTTTGAATGGGGGAGGCTATTTATTGTACTGAGAGTGGTGTCTGGATATATTCCTTTTGTCTTCATCACTTTC
TGAAAATAAACATAAAACTGTTAAAAAAAAAAAAAAAAA

FIGURE 3838

MGIVEPGCGDMLTGTEPMPGSDEGRAPGADPQHRYFYPEPGAQDADERRGGGSLGSPYPGGALVPAPPSRFLGAY
AYPPRPQAAGFPGAGESFPPPADAEGYQPGEGYAAPDPRAGLYPGPREDYALPAGLEVSGKLRVALNNHLLWSKF
NQHQTEMIITKQGRRMFPFLSFTVAGLEPTSHYRMFVDVVLVDQHHWRYQSGKWVQCGKAEGSMPGNRLYVHPDS
PNTGAHWMRQEVSFGKLKLTNNKGASNNVTQMIVLQSLHKYQPRLHIVEVNDGEPEAACNASNTHIFTFQETQFI
AVTAYQNAEITQLKIDNNPFAKGFRENFESMYTSVDTSIPSPPGPNCQFLGGDHYSPLLPNQYPVPSRFYPDLPG
QAKDVVPQAYWLGAPRDHSYEAEFRAVSMKPAFLPSAPGPTMSYYRGQEVLAPGAGWPVAPQYPPKMGPASWFRP
MRTLPMEPGPGGSEGRGPEDQGPPLVWTEIAPIRPESSDSGLGEGDSKRRRVSPYPSSGDSSSPAGAPSPFDKEA
EGQFYNYFPN

FIGURE 3839

ACCGTCTTCCGCCGCACGTGGATTCAGCGCGATGCCCAAATCCAAGCGCGACAAGAAAGTCTCCTTAACCAAAAC
TGCCAAGAAAGGCTTGGAATTGAAACAAAACCTGATAGAAGAGCTTCGGAAATGTGTGGACACCTACAAGTACCT
TTTCATCTTCTCTGTGGCCAACATGAGGAACAGCAAGCTGAAGGACATCCGGAACGCCTGGAAGCACAGCCGGAT
GTTCTTTGGCAAAAACAAGGTGATGATGGTGGCCTTGGGTCGGAGCCCATCTGATGAATACAAAGACAACCTGCA
CCAGGTCAGCAAAAGGTTGAGGGGTGAGGTGGGTCTCCTGTTCACCAACCGCACAAAGGAAGAGGTGAATGAGTG
GTTCACGAAATACACAGAAATGGACTACGCCCGAGCTGGTAACAAAGCAGCTTTCACTGTGAGCCTGGATCCAGG
GCCCCTGGAGCAGTTCCCCCACTCCATGGAGCCACAGCTCAGGCAGCTGGGCCTGCCCACCGCCCTCAAGAGAGG
TGTGGTGACTCTGCTGTCTGACTACGAGGTGTGCAAGGAGGGCGATGTGCTGACCCCAGAGCAGGCTCGCGTCCT
GAAGCTTTTTGGGTATGAGATGGCTGAATTCAAGGTGACCATCAAATACATGTGGGATTCACAGTCGGGAAGGTT
CCAGCAGATGGGAGACGACTTGCCAGAGAGCGCATCTGAGTCCACAGAAGAGTCAGACTCAGAAGATGATGACTG
AAAGGGACTCGGGACTGAAGGTCTCCTGGAAGCTTCTGGGTCTCACTGGACCATCAGGACTGCTGCCGCCCCTCT
GGAGAGAGCAGCTTTTTATTTGTCTGTAGACAGGGAACATGATGGGCACTGACCTCCTGTAAAGAATAAAACTGT
GGGCCGGGCGCGGTGGCTCACGCCTGGAATCCCAGCACTTTGGGAAGCCGAGGTGGGCAGATCATAAGGTCAGGA
GATTAAGACCATCCTGGCTAACACGGTGAAACCCCGTCTCTACTAAAAATAGAAAAAAAAACTAGTTGGGCATAG
TGGCATGTGCCTGTAGTCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATCACTTGAACCCGGGAGGTGGAGGTTG
CCGTGAGTTGAGATTGGACCACTGCTCTCCAGCCTGGGCAACAGAGTAAAACTCTGTCCC

FIGURE 3840

MPKSKRDKKVSLTKTAKKGLELKQNLIEELRKCVDTYKYLFIFSVANMRNSKLKDIRNAWKHSRMFFGKNKVMMV
ALGRSPSDEYKDNLHQVSKRLRGEVGLLFTNRTKEEVNEWFTKYTEMDYARAGNKAAFTVSLDPGPLEQFPHSME
PQLRQLGLPTALKRGVVTLLSDYEVCKEGDVLTPEQARVLKLFGYEMAEFKVTIKYMWDSQSGRFQQMGDDLPES
ASESTEESDSEDDD

FIGURE 3841

GAGGCGGGAGGATGAAGTTGATTGACTATGGTCTCTCCGGCTACCAGGAAGAGTCTGCCGAAGGTGAAGGCCATG
GACTTCATCACCTCCACAGCCATCCTGCCCCTGCTGTTCGGCTGCCTGGGCGTCTTCGGCCTCTTCCGGCTGCTG
CAGTGGGTGCGCGGGAAGGCCTACCTGCGGAATGCTGTGGTGGTGATCACAGGCGCCACCTCAGGGCTGGGCAAA
GAATGTGCAAAAGTCTTCTATGCTGCGGGTGCTAAACTGGTGCTCTGTGGCCGGAATGGTGGGGCCCTAGAAGAG
CTCATCAGAGAACTCACCGCTTCTCATGCCACCAAGGTGCAGACACACAAGCCTTACTTGGTGACCTTCGACCTC
ACAGACTCTGGGGCCATAGTTGCAGCAGCAGCTGAGATCCTGCAGTGCTTTGGCTATGTCGACATACTTGTCAAC
AATGCTGGGATCAGCTACCGTGGTACCATCATGGACACCACAGTGGATGTGGACAAGAGGGTCATGGAGACAAAC
TACTTTGGCCCAGTTGCTCTAACGAAAGCACTCCTGCCCTCCATGATCAAGAGGAGGCAAGGCCACATTGTCGCC
ATCAGCAGCATCCAGGGCAAGATGAGCATTCCTTTTCGATCAGCATATGCAGCCTCCAAGCACGCAACCCAGGCT
TTCTTTGACTGTCTGCGTGCCGAGATGGAACAGTATGAAATTGAGGTGACCGTCATCAGCCCCGGCTACATCCAC
ACCAACCTCTCTGTAAATGCCATCACCGCGGATGGATCTAGGTATGGAGTTATGGACACCACCACAGCCCAGGGC
CGAAGCCCTGTGGAGGTGGCCCAGGATGTTCTTGCTGCTGTGGGGAAGAAGAAGAAAGATGTGATCCTGGCTGAC
TTACTGCCTTCCTTGGCTGTTTATCTTCGAACTCTGGCTCCTGGGCTCTTCTTCAGCCTCATGGCCTCCAGGGCC
AGAAAAGAGCGGAAATCCAAGAACTCCTAGTACTCTGACCAGCCAGGGCCAGGGCAGAGAAGCAGCACTCTTAGG
CTTGCTTACTCTACAAGGGACAGTTGCATTTGTTGAGACTTTAATGGAGATTTGTCTCACAAGTGGGAAAGACTG
AAGAAACACATCTCGTGCAGATCTGCTGGCAGAGGACAATCAAAAACGACAACAAGCTTCTTCCCAGGGTGAGGG
GAAACACTTAAGGAATAAATATGGAGCTGGGGTTTAACACTAAAAACTAGAAATAAACATCTCAAACAGTAAGAG
TTGTAGTCTTCCAGGACTAGAACCTTGTGTCCTTTGAATTCTCGCCCTGCCAGCTCCTAGAAATAGTTTCAATCT
TGGAATCAGATGTTATGTCACCTGAAA

FIGURE 3842

GGGGGGAGAGGTAGAGATGAGACAAGAGGTAGAGGGGAGAGGTAGAGGTAGCCACGAGCTGATAATTACAGACAA
GAGATGCGGAGTATGTGGGGGCTCATTATCCTGCATAGTCTATCTTTGTATATCTTTGAACTTTTCAAGAATAAA
AAAGCTTAAAAAGTATACATGGCCTGGTCCTACCAGAGACTCACCCAATGCCAGCCTCCAGCCAGGGAGAGCCAA
GTTTGCATTTTCACACGCATCTCACACTCCTCTGCACTCTCAACTTGGAGAGCTCCAAACAGGGAAACCCCAAGC
CTTGCTGGCTTCTGCCAACCCCCTGAGCAGAAGCATGGGTCCCCCTGATCACCACCTCACCACCCTCATCCTGAT
CTCACTGTACACTCCCTTTCCTGGTCTGCTAAGTAGCGGGTGTTTTCCTTGACACTAACGCTACAGCTAGACCAC
GGTGGGCTTGGCAACAGGTGTCTTCCCAGATGCTGGCGTTACCGCTAGACCAAGGAGCCCTCTGGTGGCCCCGTC
CGGGCATAACAGAAAGCTCGCACTCTTGTCTTCTGGTCACTCCTCACTGTCCCCTTCAGCCTCCTATCTCTGTAT
GGCCTGGTGTTTCCTAGGTTATGATTGTAGAGCGAGGATTATTATAATATTGGAATAAAGAATAATTACTACAAA
CTAATGATTAATGATTCATATATAATCATATCTAAGATCTATATCTAGTATAACTATTCTTATTTTATATATTTT
ATTATACTGGAACAGCTCGTGCCCTCGGTCTCTTGCCTCGGCACCTGGGTGGCTTGCTGCCCACATCCACCAAGT
GCACTTTGGGAGGCTGAGGCTGGAGGACTGCTGGAGGCCAGGAGTTCAATACCAGCCTGGGCAACATAGGGAGAC
CCCCCCCCCACCATCTCC

FIGURE 3843

MRQEVEGRGRGSHELIITDKRCGVCGGSLSCIVYLCISLNFSRIKKLKKYTWPGPTRDSPNASLQPGRAKFAFSH
ASHTPLHSQLGELQTGKPQALLASANPLSRSMGPPDHHLTTLILISLYTPFPGLLSSGCFP

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FIGURE 3844

TTTTTTTTTTCCTGTGTCAGCAAGATCAGTCTTCATGAAATCCTGCTAAATTCCCTGTGAAATATAATAAGCTTA
AGACATTTTAGAGAACCAAATGCTGTTTATGATACAGTTTAGTAGAGTTGTAATATATTTCAGCACAGAATTTTA
GAATACTATGGGGGCTGATTTTCAATTTTGTAAGAGAAATTATGAGCATAGTTTATATAGTCTTTTATTTGTAAT
TGTTTACGTGATTTCAGAAGTAATATGCTTAAGTTATTCTAATGTTTTTAAAGCTAGAGAGTCTGAAAAGAGGGA
AGAAGAAAGAAAAGTGTTTAAATTGATCTCTTTTGAATTTAAAATGCATATTAAGTATAACTAGAACATAAAATG
AAGAATTTAAATTCTCATCTTATTCCTAGAATTATACCTATAATATGTATCATTACTTATAACAATTCATATTTT
AATTTTGCATGGCACATAATCTCTTCTGTGAGTTGGATTTTTAGGTGGTGGGAATTTAAGCATAAATTCTCATAA
CTTTCTTGGGGTCAATTTAATATTAATAAGTGTAGTAAGTAATAATACCCAGCTTGAGACCTCATGTACTTGTTG
CATTTGGATTTAAAGCTCATTTCCTATAGAAGAGCTGTAGAAATCAGTCATGTAGTTTCATAAACTCCTTCATGC
TTGTTAATAATTTTCAAGAATCTTAAAATAAATTACAGGAATATTGTTATGAAGTAGTAGAAGCAGTATGGTATA
GGGGAGAAAGTGATTGTAGTTGGGATCTGAGGATAGTCTTTACTTTGCTATTAACTAGCTGTGTGACCTTGGGCA
AGTTGCTTATCTCTGCTTCAGTTCCATAAACTAAGAATTACAGAGCTGAACCGGATCTTGGAAGCAATCTAGTAC
AAACCTCTCATTTTACAGATGAGGAAGCAGATAATTTGCACAGGCTTTCACTGTAAGACAGTTGGGCCCAAAATT
CAGTTTTCTGACTCTCAGGTTGGTTTTTTTTTTCCATTATACTTTACAGCCTCTTTTCATCTGTAAAATGAGAGC
ATTGGATTAGAGGCTCTCAAAGGTCTCTTCCAGCTCAAAAATATTGTCATTCCTGTGACATTAGTCGTAATATAA
TTTATTAGGGGAAAGTTTGTAGCTTTTATTTATTGGTGAAAGAAATGTTTCTTGAAGAGGCAGTATAACCTTTGC
AAGGTTATATTTTGTTTTTTTAAGAGAATATCATCAGGCGAGGTGCTATGTCTCAGGCCTGTAATCCCAGCTTTG
GGAGACCAAGGCAAGAGGATTGCTTGAGTCCAGGAGTTTGAGACTAGCCTGATCC

FIGURE 3845

MGADFQFCKRNYEHSLYSLLFVIVYVISEVICLSYSNVFKARESEKREEERKVFKLISFEFKMHIKYN

FIGURE 3846

GGCACGAGGGCCAGGAACGCCAGCCGTTCACGCGTTCGGTCCTCCTTGGCTGACTCACCGCCCTCGCCGCCGCAC
CATGGACGCCCCCAGGCAGGTGGTCAACTTTGGGCCTGGTCCCGCCAAGCTGCCGCACTCAGTGTTGTTAGAGAT
ACAAAAGGAATTATTAGACTACAAAGGAGTTGGCATTAGTGTTCTTGAAATGAGTCACAGGTCATCAGATTTTGC
CAAGATTATTAACAATACAGAGAATCTTGTGCGGGAATTGCTAGCTGTTCCAGACAACTATAAGGTGATTTTTCT
GCAAGGAGGTGGGTGCGGCCAGTTCAGTGCTGTCCCCTTAAACCTCATTGGCTTGAAAGCAGGAAGGTGTGCGGA
CTATGTGGTGACAGGAGCTTGGTCAGCTAAGGCCGCAGAAGAAGCCAAGAAGTTTGGGACTATAAATATCGTTCA
CCCTAAACTTGGGAGTTATACAAAAATTCCAGATCCAAGCACCTGGAACCTCAACCCAGATGCCTCCTACGTGTA
TTATTGCGCAAATGAGACGGTGCATGGTGTGGAGTTTGACTTTATACCCGATGTCAAGGGAGCAGTACTGGTTTG
TGACATGTCCTCAAACTTCCTGTCCAAGCCAGTGGATGTTTCCAAGTTTGGTGTGATTTTTGCTGGTGCCCAGAA
GAATGTTGGCTCTGCTGGGGTCACCGTGGTGATTGTCCGTGATGACCTGCTGGGGTTTGCCCTCCGAGAGTGCCC
CTCGGTCCTGGAATACAAGGTGCAGGCTGGAAACAGCTCCTTGTACAACACGCCTCCATGTTTCAGCATCTACGT
CATGGGCTTGGTTCTGGAGTGGATTAAAAACAATGGAGGTGCCGCGGCCATGGAGAAGCTTAGCTCCATCAAATC
TCAAACAATTTATGAGATTATTGATAATTCTCAAGGATTCTACGTTTGTCCAGTGGAGCCCCAAAATAGAAGCAA
GATGAATATTCCATTCCGCATTGGCAATGCCAAAGGAGATGATGCTTTAGAAAAAAGATTTCTTGATAAAGCTCT
TGAACTCAATATGTTGTCCTTGAAAGGGCATAGGTCTGTGGGAGGCATCCGGGCCTCTCTGTATAATGCTGTCAC
AATTGAAGACGTTCAGAAGCTGGCCGCCTTCATGAAAAAATTTTTGGAGATGCATCAGCTATGAACACATCCTAA
CCAGGATATACTCTGTTCTTGAACAACATACAAAGTTTAAAGTAACTTGGGGATGGCTACAAAAAGTTAACACAG
TATTTTTCTCAAATGAACATGTTTATTGCAGATTCTTCTTTTTTGAAAGAACAACAGCAAAACATCCACAACTCT
GTAAAGCTGGTGGGACCTAATGTCACCTTAATTCTGACTTGAACTGGAAGCATTTTAAGAAATCTTGTTGCTTTT
CTAACAAATTCCCGCGTATTTTGCCTTTGCTGCTACTTTTTCTAGTTAGATTTCAAACTTGCCTGTGGACTTAAT
AATGCAAGTTGCGATTAATTATTTCTGGAGTCATGGGAACACACAGCACAGAGGGTAGGGGGGCCCTCTAGGTGC
TGAATCTACACATCTGTGGGGTCTCCTGGGTTCAGCGGCTGTTGATTCAAGGTCAACATTGACCATTGGAGGAGT
GGTTTAAGAGTGCCAGGCGAAGGGCAAACTGTAGATCGATCTTTATGCTGTTATTACAGGAGAAGTGACATACTT
TATATATGTTTATATTAGCAAGGTCTGTTTTTAATACCATATACTTTATATTTCTATACATTTATATTTCTAATA
ATACAGTTATCACTGATATATGTAGACACTTTTAGAATTTATTAAATCCTTGACCTTGTGCATTATAGCATTCCA
TTAGCAAGAGTTGTACCCCCTCCCCAGTCTTCGCCTTCCTCTTTTTAAGCTGTTTTATGAAAAAGACCTAGAAGT
TCTTGATTCATTTTTACCATTCTTTCCATAGGTAGAAGAGAAAGTTGATTGGTTGGTTGTTTTTCAATTATGCCA
TTAAACTAAACATTTCTGTTAAATTACCCTATCCTTTGTTCTCTACTGTTTTCTTTGTAATGTATGACTACGAGA
GTGATACTTTGCTGAAAAGTCTTTCCCCTATTGTTTATCTATTGTCAGTATTTTATGTTGAATATGTAAAGAACA
TTAAAGTCCTAAAACATCTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3847

MDAPRQVVNFGPGPAKLPHSVLLEIQKELLDYKGVGISVLEMSHRSSDFAKIINNTENLVRELLAVPDNYKVIFL
QGGGCGQFSAVPLNLIGLKAGRCADYVVTGAWSAKAAEEAKKFGTINIVHPKLGSYTKIPDPSTWNLNPDASYVY
YCANETVHGVEFDFIPDVKGAVLVCDMSSNFLSKPVDVSKFGVIFAGAQKNVGSAGVTVVIVRDDLLGFALRECP
SVLEYKVQAGNSSLYNTPPCFSIYVMGLVLEWIKNNGGAAAMEKLSSIKSQTIYEIIDNSQGFYVCPVEPQNRSK
MNIPFRIGNAKGDDALEKRFLDKALELNMLSLKGHRSVGGIRASLYNAVTIEDVQKLAAFMKKFLEMHQL

FIGURE 3848

GTGCAGAAAGCACCGTCTTTTACTAGAAGAAGACAATAAAATGTTGGTCAATGAACTGAATCATTCGAAAGAAAA
AGAATGCCAATATGAAAAAGAGAAAGCAGAAAGAGAAGTAGCTGTGAGACAGCTTCAACAAAAACGAGATGATGT
CTTAAACAAAGGATCAGCAACAAAAGCTCTGCTGGATGCTTCATCGCGTCACTGCACCTATTTAGAAAATGGGAT
GCAGGATTCAAGGAAGAAATTAGACCAGATGAGAAGTCAATTTCAAGAAATACAGGATCAACTTACAGCTACTAT
AAGATGTACTAAGGAGATGGATGGCGACACACAAAAGCTTGAAGTAGAACATGTGATGATGAGAAAAATTATTAA
AAAACAGGATGACCAAATTGAGCGGCTTGAGAAAATCCTGCAGCATTCAAGTTTGATGCTGCAGGTGTTTGAGAG
CTAGATGAAGATATGGACATTTCTGGAATTAAGAGCCCCCTCTACATTGAGCACAAGACAGTGACGAATCCACAT
TCTTCAGCCAGAAAGTCACCTCTGAGAGCCAAATGTCTGACTATAGAAAGGAGAGTCAAAGAATGATAACGACAT
CTCAGGAAAATTGTGAAAATAATCAGCAGCCGGATGTGGATAACCCTTTCAAATTTCTCCTGGGGCCTCCAACCA
CCCCCACTGGTGTTCTCCTGCTGACAGTGATTTCAATTTTTTCTGGGCTGGAGCTCCCTGATGGAGGGGCAGGCC
ACCATCTTTGCTGTTTTTGCAACTTAGCCACTTCAGCCTTCAGTCTTTGGAGTGTCCAAGGAGACCAGGGGGTGA
TGTGGACCCTCAGCATAGCACAGCTGCTCTATAAAGATGAGGCCAGACTGCTTTTTTGAGCACTTTCCCAATGCC
ATTCCTCCTCACTGGGCAAAACCTCCAAACTGGGGTCTCCAGCCACCTCCTACAGGTGTGTTTGGGCCAGCAACA
AGTTCATTCATACCTCCCTAGGGCAAAGCTTCCAAAGGGAGCGGTAGGCTGCCATCTTTGCTGTTTCACAGGCTT
CACTGATGATAACTCCAGGTACTGGAAAATCTGAGGCTACTAGAGACTGGAGCGGGCCCTGGGCATACTGCAGCA
GCCCTATGGAAAAGTGGCCAGACTGTTACCTGGGTTCCCATTCCTATATCTTCTCACTAGGCAAGTCTTGCAGGC
CTGGGCCTCTACCTAACCCCCCCTACCAGAACTGTTGAGCCAGTAGCAACTCAGCCACTCCCTGGAGAGAGCCTC
CAGGGGCAACTGAAAGCCTCTCTGCCACTGCTTCTGCAGTGGAACTGTCCTTGCTACCCTCAGACTGATGAAGGA
GCTAACACCCTTATCTACACCTTCAACAAGCTTTAATTGACCAAAGCCCATCTCTCATGGGTTCTACACACTCCC
CACTGCTCATGACAGGGAACCCCTGGATTGGCCCCCACAGCACGAATTCTCCATCCTGATTGCTGATTGCAGTAA
ACAGTTGCTGTATTCTCCAGGGGTGGTGGAACTCTGAGGAGACAAACAAAAGACCCTTGGCTACAACCACTACTA
ATGTCCCTTCCTCTTCTGCCTCAAAGTTAGGAAAGAAATATAAACACTGAGATTGCCCCAGAGCTGCAGTGGGCA
GCCTAGGAGTGCCAAGCCATGACCTACAGCCAGCACTCAAGGGGGAGAGAAGCACATTTTCAGATCATTGAGAGG
GAACATGGCTGCAACTGTAAGGAAACATAGGGGAGCCACATGACCAAGCAAGAGTCTACCAACTGACCAGTAAGC
CCAAGTGCCACCTACTGGATCACATCCCAAAGCTTCAGCATCAAAAATACCCTACTAATATACTCCCCTCTGAAA
CCAGAAATGAGAAGTCAGCTTCAAATAAAGACCCTGCACAAAGCCTCAGCCTGGTGAAAACATCCGAAAATAAGT
CTACGGACTGTACTCAATCTACACTGCAATTAAAGGAAAACCCATAGGTGGAAATGAGAAGAAACCAATGCAAGA
ACTCCAGTAACTCAAATGGCCTCTGTGTCATATGTCCTTCTAACAACCACACCAGTTCTCCAACAAGAGTTCTTA
ACCTGGATGAACTGTCTGGAATTACATAAATATAATTCAGAATATGGATAGGAAAAAAAATCATCAAGACTCAGG
AGAATGGCAAAACCCAATCCAAGGAAAATAAGAATAACAGTAAAGTGTTACAGGAGCTGAAGGATAAAGTAGCTG
GTATAATAAAAAAGAACCTAACCGATCTGAAAGCGCCGAAGAACACAATACAAGAATTCCACAATGCAATCACAA
GTATTAACAGCAGAAAAAAAAACCTGAGGAACGAATCTCAGAACTTGAAGATTGGTTCTCTAAAATAAGATGGAC
AAAAAAAAAAAAAAAAAA

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FIGURE 3849

MLVNELNHSKEKECQYEKEKAEREVAVRQLQQKRDDVLNKGSATKALLDASSRHCTYLENGMQDSRKKLDQMRSQ
FQEIQDQLTATIRCTKEMDGDTQKLEVEHVMMRKIIKKQDDQIERLEKILQHSSLMLQVFES

FIGURE 3850

GTGACATTGAGCTCACCAGCGCCACCGTCCCCGGCGAAGTTCTGCGCTGGTCGGCGGAGAGCAAGTGGCCATGGG
GAGCCTCAGCGGTCTGCGCCTGGCAGCAGGAAGCTGTTTTAGGTTATGTGAAAGAGATGTTTCCTCATCTCTAAG
GCTTACCAGAAGCTCTGATTTGAAGAGAATAAATGGATTTTGCACAAAACCACAGGAAAGTCCCGGAGCTCCATT
CCCGCACTTACAACAGAGTGCCTTTACACAAACCTACGGATTGGCAGAAAAAGATCCTCATATGGTCAGGTCGCT
TCAAAAGGAAGATGAAATCCCAGAGACTGTCTCGTTGGAGATGCTTGATGCTGCAAAGAACAAGATGCGAGTGAA
GATCAGCTATCTAATGATTGCCCTGACGGTGGTAGGATGCATCTTTCATTGGTTATTGAGGGCAAGAAGCTTGCC
CAAAGACCGAGACTTTAACCAGCTTGGACCTTTAGAAAAGAAAGCTCGTCTGAAAGAAGGAAGCAGCTATGAAGG
CCAAAACAGATTACCAAAGGTATCCGTGTTGGTTGGGATTTTGAAAATCCAGGAATTATGTTTTAACGTGCCTGT
ATTAAAAAGGATGTGGTATGAGGATCCATTTCATAAAGTATGATTTGCCCAAACCTGTACCATTTCCGTATTTCT
GCTGTAGAAGTAGAAATAAATTTTCTTAAATAATGACTGTGTTTTATTGTTTTGATCCAAGTCAAGTGTAGCCTC
TCAGCCTTTTGGAGAAAAATGAAACAATTTATTTCAACTTGAATACCAACTCTTCAGAGAAGCAGGTACCATATC
TTACTTCTCTTCCCATTATCAAAGTAACCTCTCCACAGGCGAACTCATTTTGAGGAGATAAGGAAGGCCAGTTGA
GTATATGGCCCAGGTGCAGCTTGGAGGGCCAGCCTTCTCAAATGTCCTGGTGTACTGGTGGGGAGGCTGCCCCCT
AATAGAGCGAGCGCTGAGAAGCAGCCAGACCACATTCTATAATCTTTGAACATGCTGGCAGATGGAGGCTTTTAG
GAGAATAGTTTTTTAAACATTCTGACAAGGTCCAGCCAGGAATTTCTAAGGACTTAGAAATCCCAGTGTCATGGA
GTTGCTTGGGGGTCAACACAAGTCACCTCTTAGCTTCATGCCTTAGAATTCTCAACTGGGCTGTTTTTCTTACCA
CCTGAGAAACTAAAT

FIGURE 3851

MGSLSGLRLAAGSCFRLCERDVSSSLRLTRSSDLKRINGFCTKPQESPGAPFPHLQQSAFTQTYGLAEKDPHMVR
SLQKEDEIPETVSLEMLDAAKNKMRVKISYLMIALTVVGCIFHWLLRARSLPKDRDFNQLGPLEKKARLKEGSSY
EGQNRLPKVSVLVGILKIQELCFNVPVLKRMWYEDPFHKV

FIGURE 3852

GCCCCCGAGCAGGAGCCGGTGCGAGCGGAGCAGAGCCGAGGTCGGGCCGCGAGCGGAGCCGGCTGAGCGGGCGCC
GAGCTCCCGCC**ATG**GCCCGGAACACGCTGTCCTCGCGCTTCCGCCGGGTGGACATCGACGAATTTGACGAGAACA
AATTTGTGGACGAGCAGGAGGAGGCGGCGGCGGCGGCGGAGCCAGGCCCGGACCCGAGCGAGGTGGACGGGC
TCCTGCGGCAAGGGGACATGCTTCGGGCATTCCATGCAGCCTTGCGGAACTCTCCCGTCAACACCAAGAATCAAG
CTGTGAAGGAGCGAGCCCAGGGCGTGGTGCTGAAAGTGCTCACAAACTTCAAGAGCAGTGAGATTGAGCAGGCTG
TGCAGTCACTGGACAGAAACGGCGTTGACTTGTTAATGAAGTACATTTATAAAGGCTTTGAGAAGCCCACAGAAA
ATAGCAGCGCAGTGTTACTCCAGTGGCACGAAAAGGCCTTAGCAGTAGGAGGACTAGGCTCCATTATAAGAGTTC
TTACAGCAAGAAAGACTGTT**TAA**AAAAAATAAAAAGACTCATGTTACCTTGAGAAGAATTCTGGATGCCCAGGCT
GGTGAAGAAGGGATTGACAATGGACCATCTTCCTAGGAACTCCCAAGTAAACTATTTCAGGACATGTATCTGCTG
AAATGTATTTTATTTTCAAGGTGGAGGGGAAAATCGTCTGTTTCCTAAATCCTGTTTAGGATCTGATAGTCTATG
CCTTTGTCTCCGAGTACTGCAGAACTGACATTTTGACGGTCTACCAGCGTGGCGGCTGGTGTTGGTCAGATGCAC
CTGTGTGCACTGGGGGAGGGATGGTTTGGGCAGGTGCAGATCCAAGGGCTGTGGTAAACGGGAGAGCTTGTGTTT
TTGAAGTGGAAAAAAACCCAAGAGTTTGTACAGACATCCTGTCTTCCCAGAGAAGGTGGACACTCTTGGGCTCAT
TGTAAAGTGCCTGCTGCATCAATAAAGCTCTTGGCTTATTAGTCTATACAAAAAAAAAAAAAAAAA

FIGURE 3853

MARNTLSSRFRRVDIDEFDENKFVDEQEEAAAAAAEPGPDPSEVDGLLRQGDMLRAFHAALRNSPVNTKNQAVKE
RAQGVVLKVLTNFKSSEIEQAVQSLDRNGVDLLMKYIYKGFEKPTENSSAVLLQWHEKALAVGGLGSIIRVLTAR
KTV

FIGURE 3854

CTAAAGTGGAGCCCAGCGGCGGGTGTGAGAGTCCGTAAGGAGCAGCTTCCAGGATCCTGAGATCCGGAGCAGCCG
GGGTCGGAGCGGCTCCTCAAGAGTTACTGATCTATGAAATGGCAGAGAATGGAAAAAATTGTGACCAGAGACGTG
TAGCAATGAACAAGGAACATCATAATGGAAATTTCACAGACCCCTCTTCAGTGAATGAAAAGAAGAGGAGGGAGC
GGGAAGAAAGGCAGAATATTGTCCTGTGGAGACAGCCGCTCATTACCTTGCAGTATTTTTCTCTGGAAATCCTTG
TAATCTTGAAGGAATGGACCTCAAAATTATGGCATCGTCAAAGCATTGTGGTGTCTTTTTTACTGCTGCTTGCTG
TGCTTATAGCTACGTATTATGTTGAAGGAGTGCATCAACAGTATGTGCAACGTATAGAGAAACAGTTTCTTTTGT
ATGCCTACTGGATAGGCTTAGGAATTTTGTCTTCTGTTGGGCTTGGAACAGGGCTGCACACCTTTCTGCTTTATC
TGGGTCCACATATAGCCTCAGTTACATTAGCTGCTTATGAATGCAATTCAGTTAATTTTCCCGAACCACCCTATC
CTGATCAGATTATTTGTCCAGATGAAGAGGGCACTGAAGGAACCATTTCTTTGTGGAGTATCATCTCAAAAGTTA
GGATTGAAGCCTGCATGTGGGGTATCGGTACAGCAATCGGAGAGCTGCCTCCATATTTCATGGCCAGAGCAGCTC
GCCTCTCAGGTGCTGAACCAGATGATGAAGAGTATCAGGAATTTGAAGAGATGCTGGAACATGCAGAGTCTGCAC
AAGACTTTGCCTCCCGGGCCAAACTGGCAGTTCAAAAACTAGTACAGAAAGTTGGATTTTTTGGAATTTTGGCCT
GTGCTTCAATTCCAAATCCTTTATTTGATCTGGCTGGAATAACGTGTGGACACTTTCTGGTACCTTTTTGGACCT
TCTTTGGTGCAACCCTAATTGGAAAAGCAATAATAAAAATGCATATCCAGAAAATTTTTGTTATAATAACATTCA
GCAAGCACATAGTGGAGCAAATGGTGGCTTTCATTGGTGCTGTCCCCGGCATAGGTCCATCTCTGCAGAAGCCAT
TTCAGGAGTACCTGGAGGCTCAACGGCAGAAGCTTCACCACAAAAGCGAAATGGGCACACCACAGGGAGAAAACT
GGTTGTCCTGGATGTTTGAAAAGTTGGTCGTTGTCATGGTGTGTTACTTCATCCTATCTATCATTAACTCCATGG
CACAAAGTTATGCCAAACGAATCCAGCAGCGGTTGAACTCAGAGGAGAAAACTAAATAAGTAGAGAAAGTTTTAA
ACTGCAGAAATTGGAGTGGATGGGTTCTGCCTTAAATTGGGAGGACTCCAAGCCGGGAAGGAAAATTCCCTTTTC
CAACCTGTATCAATTTTTACAACTTTTTTCCTGAAAGCAGTTTAGTCCATACTTTGCACTGACATACTTTTTCCT
TCTGTGCTAAGGTAAGGTATCCACCCTCGATGCAATCCACCTTGTGTTTTCTTAGGGTGGAATGTGATGTTCAGC
AGCAAACTTGCAACAGACTGGCCTTCTGTTTGTTACTTTCAAAAGGCCCACATGATACAATTAGAGAATTCCCAC
CGCACAAAAAAAGTTCCTAAGTATGTTAAATATGTCAAGCTTTTTAGGCTTGTCACAAATGATTGCTTTGTTTTC
CTAAGTCATCAAAATGTATATAAATTATCTAGATTGGATAACAGTCTTGCATGTTTATCATGTTACAATTTAATA
TTCCATCCTGCCCAACCCTTCCTCTCCCATCCTCAAAAAAGGGCCATTTTATGATGCATTGCACACCCTCTGGGG
AAATTGATCTTTAAATTTTGAGACAGTATAAGGAAAATCTGGTTGGTGTCTTACAAGTGAGCTGACACCATTTTT
TATTCTGTGTATTTAGAATGAAGTCTTGAAAAAAACTTTATAAAGACATCTTTAATCATTCCAAAATTGTGTCCG
TTTTCTTGAGCGTTTTGATTTTTTACTTTTAGCTTATACCAGCTGAATGGCAGCCTTGCCTAATCCACCTACAAC
AAGAATTTCTTAAGCTTTCTTTTATTTGCATGAGAGAGCCACTACCAAGGCATGTTTTGTTATGCTGAAACTGGG
CTGCTGCATACTGCTAAATGGCACCTCTGGGATTGGCCTACCTGGGGATTTCTTGGTTTGTGAAAACAGGAGAGG
AGAAATATCTCATACAAGTGAAAGGATACTGGAGAGAGAAATTACCCATTTCTAAAAAAAAACCACACTCTGTCG
TATCTGTGTTAATGTTTTCTAGCATGTACTCTGGTTTCAACAGACACAAATTTATATGTTAACCCAGTTTTCTTG
CCGTTCTGTAAGTGTTTTATTCTTAGTGTGATTTTTTTCCATTGGGATGTTTTTGATTGAACTTGTTCATTTTGT
TTTGCTTGGGAGGAAAATAAACAATTTTACTTTTTTCCTTAAAAAAAAAAAAAAA

FIGURE 3855

MAENGKNCDQRRVAMNKEHHNGNFTDPSSVNEKKRREREERQNIVLWRQPLITLQYFSLEILVILKEWTSKLWHR
QSIVVSFLLLLAVLIATYYVEGVHQQYVQRIEKQFLLYAYWIGLGILSSVGLGTGLHTFLLYLGPHIASVTLAAY
ECNSVNFPEPPYPDQIICPDEEGTEGTISLWSIISKVRIEACMWGIGTAIGELPPYFMARAARLSGAEPDDEEYQ
EFEEMLEHAESAQDFASRAKLAVQKLVQKVGFFGILACASIPNPLFDLAGITCGHFLVPFWTFFGATLIGKAIIK
MHIQKIFVIITFSKHIVEQMVAFIGAVPGIGPSLQKPFQEYLEAQRQKLHHKSEMGTPQGENWLSWMFEKLVVVM
VCYFILSIINSMAQSYAKRIQQRLNSEEKTK

FIGURE 3856A

CTCTGGCTTTCTGTTTTCTACTAACAGGATTTGGTCACTGGTTCTTCATCTTTTGTCTGTTGCACGCATCCCGCC
CTCCCCACTTGCTTCCCCACTCCTTGGATCCAGCCCTGTGGGCATTCACGTCAGTTCTCTGACCCCGCCGTGAGC
CCCGCTCCGGGTCCCCGGGCGGGCTTGGCACGGAGGCGGTAACTATGGAGAATATGGCGGAGGAGGAGCTGCTGC
CCCTGGAGAAGGAGGAGGTGGAGGTGGCCCAGGTCCAGGTCCCGACCCCGGCCCGGGACTCGGCTGGGGTCCCAG
CTCCGGCCCCGGATTCGGCTCTGGACTCGGCTCCGACTCCGGCCTCGGCTCCAGCCCCAGCCCCTGCCCTGGCCC
AGGCTCCGGCCCTGTCCCCGTCCCTAGCCTCTGCCCCTGAGGAGGCTAAAAGCAAGAGACACATCTCAATTCAAA
GGCAGCTTGCTGATCTAGAGAATTTAGCTTTTGTAACTGATGGAAATTTTGACTCTGCCAGCTCATTGAACTCAG
ATAATCTTGATGCAGGCAACAGACAGGCTTGTCCATTGTGCCCTAAGGAAAAATTCAGAGCTTGTAATAGCCATA
AGCTTCGTCGTCACCTCCAGAATTTACACTGGAAAGTCTCAGTTGAATTTGAAGGTTACAGGATGTGCATCTGTC
ACTTACCTTGTCGACCAGTGAAACCAAACATTATTGGAGAACAGATAACCAGTAAAATGGGAGCCCATTATCATT
GTATCATTTGTTCAGCAACAATCACCAGAAGAACTGATATGCTAGGACATGTTAGGCGCCACATGAATAAAGGAG
AGACTAAATCTAGTTATATTGCAGCTTCCACTGCTAAACCACCTAAGGAAATTTTGAAAGAGGCAGACACGGATG
TACAAGTTTGTCCCAACTATTCTATACCTCAGAAAACAGATTCCTATTTTAACCCCAAAATGAAACTAAATCGGC
AGCTAATATTCTGTACATTGGCTGCTTTGGCTGAGGAACGAAAACCTTTGGAATGTCTAGATGCTTTTGGAGCCA
CTGGGATAATGGGATTACAGTGGGCAAAACATCTTGGAAATGCAGTCAAAGTTACAATCAATGACTTGAATGAAA
ATTCTGTGACACTGATTCAGGAAAACTGCCATTTAAACAAATTGAAAGTGGTGGTGGACAGTAAGGAAAAGGAAA
AGAGTGATGATATTCTTGAAGAAGGAGAGAAAAATCTTGGTAATATTAAGGTGACCAAAATGGATGCCAATGTAC
TGATGCATTTGAGATCTTTTGATTTCATACATCTAGACCCTTTTGGAACATCAGTGAATTATCTAGATTCTGCAT
TCAGAAATATAAGAAACCTTGGCATAGTGTCAGTGACTTCTACAGATATCAGTTCTTTATATGCCAAGGCACAGC
ATGTTGCCCGGCGTCACTACGGATGTAACATTGTCCGAACTGAATATTACAAGGAACTAGCAGCCAGAATTGTTG
TAGCTGCAGTGGCAAGAGCTGCAGCCCGATGCAACAAAGGCATAGAAGTACTGTTTGCAGTGGCTCTGGAACATT
TTGTGTTGGTAGTTGTGAGAGTTTTGAGGGGACCTACTTCAGCAGATGAAACAGCCAAGAAGATTCAATACCTGA
TCCATTGTCAGTGGTGTGAAGAGAGAATTTTTCAGAAGGATGGTAATATGGTAGAAGAAAACCCATATAGACAGC
TGCCTTGTAACTGTCATGGAAGCATGCCTGGAAAGACAGCAATAGAACTTGGACCTCTGTGGTCAAGTTCCCTTT
TCAATACTGGATTCCTCAAAAGAATGCTATTTGAATCTCTTCACCATGGTTTGGATGACATTCAGACCCTAATAA
AGACATTAATCTTTGAATCAGAGTGTACGCCTCAAAGTCAGTTTTCAATTCATGCATCTTCAAATGTCAACAAGC
AAGAAGAAAATGGTGTATTTATTAAAACTACAGATGACACCACAACAGATAATTACATTGCACAAGGAAAGAGAA
AAAGTAATGAAATGATCACAAATTTAGGCAAGAAGCAAAAGACTGATGTCAGTACTGAACATCCTCCCTTTTATT
ACAACATTCACAGACACAGCATTAAAGGAATGAATATGCCAAAGTTAAAAAAGTTTTTGTGCTATTTATCTCAAG
CAGGCTTTCGAGTAAGCCGAACTCATTTTGACCCAATGGGTGTACGCACAGATGCACCTCTGATGCAGTTTAAAT
CTATCCTTTTAAAGTACAGCACCCCCACCTACACTGGAGGACAGTCAGAAAGCCATGTCCAGTCAGCATCTGAAG
ATACAGTAACTGAAAGAGTTGAAATGTCAGTGAATGACAAAGCAGAAGCAAGTGGCTGCAGAAGATGGTAAACGT
AGAGAAGAATTGGTTCTCAGGTGTCTGTATAGATGGCCTAATAGTTCTCTATACCMACTGTAGTTCTTTTTCTGT
TCTTTCAATTCAGTAGAGTAAAAATAAAAAACAGTGTCATTTTCATTCAGAAMTGAGCAGTTCTACTTAGCTGGT
TTGGAGCTTGCTTTCCAGTTTTTTTGTTTTAAGGCAXACTTAAAATTTTAATGGACACATTTCATATGAAGCCAA
GTCTCACTGAGATCACCCTACTGCTTAATAATTCAGAAAATTTTCACATGCAAAGTGTTTGGAATTTTATGTATG
TTATGAAAGCCATCTTTTACAATTCTTAATCACATCTCTGCCTAAACTGATTCATGATGTTTATGTTTTCCTGTT
TGTAGTGYACAAAATGAAGCTGAAGGCTCACATGTTAAAATGACCCTGAATAGAATAGGAAGAACAGTGTTCTTA
CAGGTCATAATGTATTTCACAATTAAAAAACTAAAATATGTACCCATTTTTAAGAAATCAYACTTCTCTCCACAT
TGATCTTTTCATTTCTTACTAGCTTTTAAGAAATTAAATACTTGCCTGAGATAGAAATACTTTATTTTTGTAACT
TTAAGGTCTAAATGACTAAACTTCAAAGTAAGATTTTGTCAGAATAAATTGAGACCATTAATCYAATATAATACT
TGTTCATGAGCACTGAAATCCTGAAGAGGAGAGATTTGGTTATAAATTAAAAAGGTTGGGTGATCTTAAGTGCCT
CAGTTAATGCACGTACAGTATTCATTTGGTTGGTTGTACTACCTCTCAGAAGTAAAATTTGTCACCTTATGGAAT
GAGAGTTTTTGGGTTTGGGGGTTGTTTTTTTGTTGTTGCTTGGTTTGGTATTTTTGGTTTTGTGTGTATTTGTAT
AAATTTTCTGTATAATTAGCCCAGGCTGATGTAACTATAAAAATTAGTTGAAAAAAAAAATATTGTTTCCTTAAT
GGAATTCTCACTTCATTTGAATATAAGATTTTGGATGAAAGGATTTGGTATAAAGTTTGGGTTTTTGTCTCAAGG
ATTTGATCCATATTTATCCCTAAATATTTCTTAAGGXATGTAXCTTTTTATAACCATTAAGTGGGGGGAAGGGGG
TGGAGGGGGTGGTAATAATTATAACTGAAAGGTTTAAATATACTACCTAAGAAAAAAGTACTTCTGTGACATATA

FIGURE 3856B

CAAAAAAATCTAGTGGATAGGCATTAGATGAATAGAGAATATTAATTTTGCAGAAATGAAGGAAAATCTCTTCGT
GCTAGTACAGCGTATTCCCAAGAGAGTTTATTTTCCTTTCTCCAATTAATGTGGTCATAAATTTCGGTAAAATCA
AGAAATAGGTGAAGTGCAAGCTAGTTTCTATAATGACCATTAAAAAAATTCTGCTGTGTAATTCTTGCCAGTTAA
AATTATAACTTGCAAATGAGCAGAATAAATGAGGTTTTTTTCAATTAAAAATTACTATAAATCCAGGAGGCAAAC
TATTTTAGCACTCAGATTATCTGATTTAATACATATTATTGRATTATCAGTCTCAAATTTTGCTAAATGCTTATC
MGCMTGRAATATGTTGATCAGTGATGAGTTGGGCTTAATGCAAAGATCCTAATTTAATAAAGAAACCTGTAAATT
ACTGTTAMMWAAAAWATATGTGTATATTAATTTCACATATAAAGGTAGATTTTTCAAAGAAAAATTTGGTAGGCG
GTAGTTTAGAACTCTGATCAGGTACTACATCAACCAAAAGAGGAAATACTTTAAAAATTCCTTTTAGCAACCTGA
GCAATCTTATTCTCGTAACAATAGTAGTAATTTGGGACATTGCAAATGTTTATCATGTTGTAAAGTAGCATCAGT
TGTATCCTTTCATTAAAACTTGATAAACAAAAGAAMRARWWAARRAAACCA

FIGURE 3857

MENMAEEELLPLEKEEVEVAQVQVPTPARDSAGVPAPAPDSALDSAPTPASAPAPAPALAQAPALSPSLASAPEE
AKSKRHISIQRQLADLENLAFVTDGNFDSASSLNSDNLDAGNRQACPLCPKEKFRACNSHKLRRHLQNLHWKVSV
EFEGYRMCICHLPCRPVKPNIIGEQITSKMGAHYHCIICSATITRRTDMLGHVRRHMNKGETKSSYIAASTAKPP
KEILKEADTDVQVCPNYSIPQKTDSYFNPKMKLNRQLIFCTLAALAEERKPLECLDAFGATGIMGLQWAKHLGNA
VKVTINDLNENSVTLIQENCHLNKLKVVVDSKEKEKSDDILEEGEKNLGNIKVTKMDANVLMHLRSFDFIHLDPF
GTSVNYLDSAFRNIRNLGIVSVTSTDISSLYAKAQHVARRHYGCNIVRTEYYKELAARIVVAAVARAAARCNKGI
EVLFAVALEHFVLVVVRVLRGPTSADETAKKIQYLIHCQWCEERIFQKDGNMVEENPYRQLPCNCHGSMPGKTAI
ELGPLWSSSLFNTGFLKRMLFESLHHGLDDIQTLIKTLIFESECTPQSQFSIHASSNVNKQEENGVFIKTTDDTT
TDNYIAQGKRKSNEMITNLGKKQKTDVSTEHPPFYYNIHRHSIKGMNMPKLKKFLCYLSQAGFRVSRTHFDPMGV
RTDAPLMQFKSILLKYSTPTYTGGQSESHVQSASEDTVTERVEMSVNDKAEASGCRRW

FIGURE 3858

ACGATGAAGTCAGTGAGGAGGAGGAATAGTAATTGTCAATGAGCTTTTAATACCAAGATACACCCCCTGCCCCCA
AAGAAGAGTCCTCTTTTAGGGAATCAGAACCTTCATTGTCCTAGAAGCTGAAAGATTCTTGGAACATTTTAGCTT
TTACTCTCAACTTGCTGTTCTCTTTACATTCCTTAAGTTAGACTTTCGGGTGTGGCTTCTCTCTCAGGGGTAACA
TTTACTTCCATTTTCTAGACCGAACCAAAAGTCTTCTGCAGAATCTCCCACCGAGTGTGGTAAGAAGGAAGGACA
AAAGGCTTTAGGATATAAATTTCATGTTACAGAGCATGTCATTGTCAAAGGAAATCTGTGGCCCTGAGATTTTAA
GAACATAAAATGTGACATTTGATATTTCTCCAGCCCAGGGAAGTAAGATGGTTAGCAATGGTTGCCTTAATCAAA
TGGTCCCATTTTTAACCCCAAAGGAAGTGCCCACAGCAAGAGGTTTGTGTGATGCACTTATGTCCTCCGGTGAGG
AAAGGGGGCCACATATGAAAGGCCCCTTAGGTCAGATCCTGAGAGTAGCACATTTGAGTGCAGATTCCTGGGCCC
CACCTCAAACCTACTAATTCTGAATCTCTGGGAATAGGGCCAGGAAATCTGCCCTTTCTACAAACTACCCAAGTT
GTTCTGTTGCACATCAATGTTTGGGAACCACTGCTGTAAGGGAATCATTCTGGTCACCTTGAGCTTTGAGCTACC
ACTAAGCCATGAAAGAAAATACATCATACAGGGAAGAGAGAAGGGAGGAGGTTCCAAGTAGTAACTGGCAGATCC
TCCTGTCTGGAGGTACCACCTTCTATTCTGGTTTCTGACTTTTCCTTCTTGATGACCATAGATGTGTTCCAGAGG
CAAAAGAGACACATTATCCCAGATGGCAGAACATGCTTTCAAAACATATAAAATGTCAAAGTTCCAGATCCTTCT
ACATCTTTAGTCCTGTCTGAGGATGGTAGCTGGCTCTCTGTAGCTGATAGATGGCTAGAGTTCCATCCAAATCCT
TGACCACGACTTCATGGAGATTTGAATAATCTATTTGATGAGATTTCTATTTCAATAACCCACCTCTCTCACCCC
ACATTCATATCCCTAAATTTGACCCTCTGGGCCGAGTCACATTACCTTCAGGAGACTTGATCCCAGTAGACTGAG
GTCTTCCCTTTCAGCAGAAAGATTTCATTTCCCTGGCTTGCCAGTGGCACTGATTTCCGAACACCCAATGAGTTT
AATATTCTTTCCTCCTTGGCATTACTGCCCCAGCCGCTTTTTTTTTTTTTTTGTGTGTGTCTAATAACCAGGAAA
AAAATAAAGCTTAGGTTTTAAAAAGTTTTAAAAATAATCTGTTTCAGAAACTGTCAAATGTACCATATTTGTATT
AAGAGTTGTTGGGAATTTTTGTACAATGAATTTACATTTATTTATGGTGACATATTTACGCTTGTGATCAAATAA
TGATGTTAAATTCTTAAATCATATTTGCTATGCAGCTGAAGATGATATTTTGATTTGTATTTTGGGGGTACCTGT
GTTGAGTTGATAAACATTTCCATCTTCATTAAAACTGCTTCCAAACTAAAAAAAAAAAA

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FIGURE 3859

MVSNGCLNQMVPFLTPKEVPTARGLCDALMSSGEERGPHMKGPLGQILRVAHLSADSWAPPQTY

FIGURE 3860

GGGACGCGAGCGGGATCCAAACTTCCGGTGCCTGCAGAGCTCGGAGCGGCGGAGGCAGAGACCGAGGCTGCACCG
GCAGAGGCTGCGGGGCGGACGCGCGGGCCGGCGCAGCCATGGTGAAGATTAGCTTCCAGCCCGCCGTGGCTGGCA
TCAAGGGCGACAAGGCTGACAAGGCGTCGGCGTCGGCCCCTGCGCCGGCCTCGGCCACCGAGATCCTGCTGACGC
CGGCTAGGGAGGAGCAGCCCCCACAACATCGATCCAAGAGGGGGGGCTCAGTGGGCGGCGTGTGCTACCTGTCGA
TGGGCATGGTCGTGCTGCTCATGGGCCTCGTGTTCGCCTCTGTCTACATCTACAGATACTTCTTCCTTGCGCAGC
TGGCCCGAGATAACTTCTTCCGCTGTGGTGTGCTGTATGAGGACTCCCTGTCCTCCCAGGTCCGGACTCAGATGG
AGCTGGAAGAGGATGTGAAAATCTACCTCGACGAGAACTACGAGCGCATCAACGTGCCTGTGCCCCAGTTTGGCG
GCGGTGACCCTGCAGACATCATCCATGACTTCCAGCGGGGTCTGACTGCGTACCATGATATCTCCCTGGACAAGT
GCTATGTCATCGAACTCAACACCACCATTGTGCTGCCCCCTCGCAACTTCTGGGAGCTCCTCATGAACGTGAAGA
GGGGGACCTACCTGCCGCAGACGTACATCATCCAGGAGGAGATGGTGGTCACGGAGCATGTCAGTGACAAGGAGG
CCCTGGGGTCCTTCATCTACCACCTGTGCAACGGGAAAGACACCTACCGGCTCCGGCGCCGGGCAACGCGGAGGC
GGATCAACAAGCGTGGGGCCAAGAACTGCAATGCCATCCGCCACTTCGAGAACACCTTCGTGGTGGAGACGCTCA
TCTGCGGGGTGGTGTGAGGCCCTCCTCCCCCAGAACCCCCTGCCGTGTTCCTCTTTTCTTCTTTCCGGCTGCTCT
CTGGCCCTCCTCCTTCCCCCTGCTTAGCTTGTACTTTGGACGCGTTTCTATAGAGGTGACATGTCTCTCCATTCC
TCTCCAACCCTGCCCACCTCCCTGTACCAGAGCTGTGATCTCTCGGTGGGGGGCCCATCTCTGCTGACCTGGGTG
TGGCGGAGGGAGAGGCGATGCTGCAAAGTGTTTTCTGTGTCCCACTGTCTTGAAGCTGGGCCTGCCAAAGCCTGG
GCCCACAGCTGCACCGGCAGCCCAAGGGGAAGGACCGGTTGGGGGAGCCGGGCATGTGAGGCCCTGGGCAAGGGG
ATGGGGCTGTGGGGGCGGGGCGGCATGGGCTTCAGAAGTATCTGCACAATTAGAAAAGTCCTCAGAAGCTTTTTC
TTGGAGGGTACACTTTCTTCACTGTCCCTATTCCTAGACCTGGGGCTTGAGCTGAGGATGGGACGATGTGCCCAG
GGAGGGACCCACCAGAGCACAAGAGAAGGTGGCTACCTGGGGGTGTCCCAGGGACTCTGTCAGTGCCTTCAGCCC
ACCAGCAGGAGCTTGGAGTTTGGGGAGTGGGGATGAGTCCGTCAAGCACAACTGTTCTCTGAGTGGAACCAAAGA
AGCAAGGAGCTAGGACCCCCAGTCCTGCCCCCCAGGAGCACAAGCAGGGTCCCCTCAGTCAAGGCAGTGGGATGG
GCGGCTGAGGAACGGGGCAGGCAAGGTCACTGCTCAGTCACGTCCACGGGGGACGAGCCGTGGGTTCTGCTGAGT
AGGTGGAGCTCATTGCTTTCTCCAAGCTTGGAACTGTTTTGAAAGATAACACAGAGGGAAAGGGAGAGCCACCTG
GTACTTGTCCACCCTGCCTCCTCTGTTCTGAAATTCCATCCCCCTCAGCTTAGGGGAATGCACCTTTTTCCCTTT
CCTTCTCACTTTTGCATGTTTTTACTGATCATTCGATATGCTAACCGTTCTCAGCCCTGAGCCTTGGAGAGGAGG
GCTGTAACGCCTTCAGTCAGTCTCTGGGGATGAAACTCTTAAATGCTTTGTATATTTTCTCAATTAGATCTCTTT
TCAGAAGTGTCTATAGAACAATAAAAATCTTTTACTTCTG

FIGURE 3861

MVKISFQPAVAGIKGDKADKASASAPAPASATEILLTPAREEQPPQHRSKRGGSVGGVCYLSMGMVVLLMGLVFA
SVYIYRYFFLAQLARDNFFRCGVLYEDSLSSQVRTQMELEEDVKIYLDENYERINVPVPQFGGGDPADIIHDFQR
GLTAYHDISLDKCYVIELNTTIVLPPRNFWELLMNVKRGTYLPQTYIIQEEMVVTEHVSDKEALGSFIYHLCNGK
DTYRLRRRATRRRINKRGAKNCNAIRHFENTFVVETLICGVV

FIGURE 3862

GCGGCCGCC**ATG**GCGGAGAATTGGAAGAACTGCTTCGAGGAGGAGCTCATCTGCCCTATCTGCCTGCACGTTTTC
GTGGAGCCAGTGCAGCTGCCGTGCAAACACAACTTCTGCCGGGGCTGCATCGGCGAGGCGTGGGCCAAGGACAGC
GGCCTCGTACGCTGCCCAGAGTGCAACCAGGCCTACAACCAGAAGCCGGGCCTGGAGAAGAACCTGAAGCTCACC
AACATCGTGGAGAAGTTCAATGCCCTGCACGTGGAGAAGCCGCCGGCGGCGCTGCACTGCGTGTTCTGCCGCCGC
GGCCCCCCGCTGCCCGCGCAGAAGGTCTGCCTGCGCTGCGAGGCGCCCTGCTGCCAGTCCCACGTGCAGACGCAC
CTGCAGCAGCCCTCCACCGCCCGCGGGCACCTCCTGGTGGAGGCGGACGACGTGCGGGCCTGGAGCTGCCCGCAG
CACAACGCCTACCGCCTCTACCACTGCGAGGCCGAGCAGGTGGCCGTGTGCCAGTACTGCTGCTACTACAGCGGC
GCGCGTCAGGGACACTCGGTGTGCGACGTGGAGATCCGAAGGAATGAAATCCGGAAGATGCTCATGAAGCAGCAG
GACCGGCTGGAGGAGCGAGAGCAGGACATTGAGGACCAGCTGTACAAACTCGAGTCAGACAAGCGCCTGGTGGAG
GAGAAAGTGAACCAACTGAAGGAGGAAGTTCGGCTGCAGTACGAGAAGCTGCACCAGCTGCTGGACGAGGACCTG
CGGCAGACAGTGGAGGTCCTAGACAAGGCCCAGGCCAAGTTCTGCAGCGAGAACGCAGCGCAGGCGCTGCACCTC
GGGGAGCGCATGCAGGAGGCCAAGAAGCTGCTGGGCTCCCTGCAGCTGCTCTTTGATAAGACGGAGGATGTCAGC
TTCATGAAGAACACCAAGTCTGTGAAAATCCTGATGGACAGGACCCAGACCTGCACGAGCAGCAGCCTTTCCCCC
ACTAAGATCGGCCACCTGAACTCCAAGCTCTTCCTGAACGAAGTGGCCAAGAAGGAGAAGCAGCTGCGGAAAATG
CTAGAAGGCCCCTTCAGCACGCCGGTGCCCTTCCTGCAGAGTGTCCCCCTGTACCCTTGCGGCGTGAGCAGCTCT
GGGGCGGAAAAGCGCAAGCACTCAACGGCCTTCCCAGAGGCCAGTTTCCTAGAGACGTCGTCGGGCCCTGTGGGC
GGCCAGTACGGGGCGGCGGGCACAGCCAGCGGTGAGGGCCAGTCTGGGCAGCCCCTGGGGCCCTGCAGCTCCACG
CAGCACTTGGTGGCCCTGCCGGGCGGCGCCCAACCAGTGCACTCAAGCCCCGTGTTCCCCCCATCGCAGTATCCC
AATGGCTCCGCCGCCCAGCAGCCCATGCTCCCCCAGTATGGCGGCCGCAAGATTCTCGTCTGTTCTGTGGACAAC
TGTTACTGTTCTTCCGTGGCCAACCATGGCGGCCACCAGCCCTACCCCCGCTCCGGCCACTTTCCCTGGACAGTG
CCCTCGCAGGAGTACTCACACCCGCTCCCGCCCACACCCTCCGTCCCCCAGTCCCTTCCCAGCCTGGCGGTCAGA
GACTGGCTTGACGCCTCCCAGCAGCCCGGCCACCAGGATTTCTACAGGGTGTATGGGCAGCCGTCCACCAAACAC
TACGTGACGAGC**TAA**CGCCACGCAGGCGGCGGGGCGCTGGGGAATCTTCCTCCCCAGCCCCCGGGCTCGGGAGTT
ATGCATCCAGAGACCTGCCCTTCTACCTTCCTCGCCTCCCCTCTTCCTCATTCCATTGCCCCAGGTCTTTTCCTT
TTGGATTTTGTTTTGGTTTTGGCTTTGTTTTTGATTTTTTTTTATTATGAATCTCCTGGACGCAGAGGTGACAGT
GGGAGCTGGCCTGGGCCAGGACGGCAGGTGGCCCTGGAGATGGGAAAGTGTCTGTGTCGAGGCGCTGAGCTCTCT
CTCTGTTTCTCCTTTTTTCCTCTACTCCTTCCCCTTCACACCCCCGTGGCTGGAAGGAACCTCGGCTTCCCTGAA
AGCTTGGGGGTCCCACCCTTCTTACCCCACCCGGGAGGAACGCCCAGGGCCCCGGGCTTGTTTCTCCTCTTGTTT
TCCTTTTGGGCAGTTTGATCACTGATCGAGTAAGGAATGACCTTTAGATTGTGCGACTTTTGTTTTTGTTTTTTT
AAATTTTTTTAAACCAAGAATGATTTCTCCTGCTTCCTTCTCCTCACCATCTTCCCAGACGGAGTTCAAAGGCCA
CTTCTCAAGCAGCTTTTGGCACCTTCAGCCTCAGAGTGGAATCTTTTAAAGACAGGACCCCTATGTCCAGGAAAG
GGGAAAAGGAACTTTGCCAATGATAGTGACCACAGCAAAAGCAAATAATAATAATATTAATAATAATAAAGAGAA
ATAAAATAATAAAATAAAAAACAATAGCACAGCCCTTGTTGAGGTCAGCAGGGAGGAGGGGCTGCCCGGAGTTGG
GTCCTTGCCTGGATTTTGACACAGCAACTTCCTGTAGTGAGCACTTTGTATGAATCGTGGACTTCCTGTTCTCAA
GGCGCAGGTATTTATTCTGTATCTGTCTAGCGCACACACCAAAATCCAACCTTCTAATAAACATGATGGCGCAGT
CCCAAAAAAAAAAAAAAAAA

FIGURE 3863

MAENWKNCFEEELICPICLHVFVEPVQLPCKHNFCRGCIGEAWAKDSGLVRCPECNQAYNQKPGLEKNLKLTNIV
EKFNALHVEKPPAALHCVFCRRGPPLPAQKVCLRCEAPCCQSHVQTHLQQPSTARGHLLVEADDVRAWSCPQHNA
YRLYHCEAEQVAVCQYCCYYSGARQGHSVCDVEIRRNEIRKMLMKQQDRLEEREQDIEDQLYKLESDKRLVEEKV
NQLKEEVRLQYEKLHQLLDEDLRQTVEVLDKAQAKFCSENAAQALHLGERMQEAKKLLGSLQLLFDKTEDVSFMK
NTKSVKILMDRTQTCTSSSLSPTKIGHLNSKLFLNEVAKKEKQLRKMLEGPFSTPVPFLQSVPLYPCGVSSSGAE
KRKHSTAFPEASFLETSSGPVGGQYGAAGTASGEGQSGQPLGPCSSTQHLVALPGGAQPVHSSPVFPPSQYPNGS
AAQQPMLPQYGGRKILVCSVDNCYCSSVANHGGHQPYPRSGHFPWTVPSQEYSHPLPPTPSVPQSLPSLAVRDWL
DASQQPGHQDFYRVYGQPSTKHYVTS

FIGURE 3864A

GACAGAAGTGAATGGGAATGGAGAGGCCGGCGGCCCGGGAGCCGCATGGGCCCGACGCGCTGCGGCGCTTCCAGG
GACTGCTGCTGGACCGCCGAGGCCGGCTGCACCGCCAGGTGCTGCGCCTGCGCGAGGTGGCCCGGCGCCTGGAGC
GCCTGCGCAGGCGCTCCCTCGTAGCCAACGTGGCCGGCAGCTCGCTGAGCGCAACGGGCGCCCTCGCCGCCATCG
TGGGGCTCTCGCTCAGCCCGGTCACCCTGGGGACCTCGCTGCTGGTGTCGGCCGTGGGGCTGGGGGTGGCCACAG
CCGGAGGGGCCGTCACCATCACGTCCGATCTCTCGCTGATCTTCTGCAACTCCCGGGAGCTGCGGAGGGTGCAGG
AGATCGCGGCCACCTGCCAGGACCAGATGCGAGAGATCCTGAGCTGCCTCGAGTTTTTCTGCCGCTGGCAGGGCT
GCGGGGACCGCCAGCTGCTGCAGTGCGGGAGGAACGCCTCCATCGCCCTGTACAATTCTGTCTACTTCATCGTCT
TCTTTGGCTCACGTGGCTTCCTCATCCCCAGGCGGGCGGAGGGGGACACCAAGGTTAGCCAGGCCGTGCTGAAGG
CCAAGATTCAGAAACTGGCCGAGAGCCTGGAGTCCTGCACCGGGGCTCTGGACGAACTCAGCGAGCAGCTGGAGT
CTCGGGTTCAGCTCTGCACCAAGTCCAGTCGTGGCCACGACCTCAAGATCTCTGCTGACCAGCGTGCAGGGCTGT
TTTTCTGAGAACATCCTTTCCCCCTAATGACCGAGGCCAGCAAATCATCCTCATGGGATGCTCCAGAATTTGTAG
CTCCCTTAGGAAAACACCAAGCTGGGTTAGGAGCCGAAGGCAAAGGATGAGAAAAACTGTTTTTGAAGTGGGCAG
GTCCCCAAAGCCCTTCTTTTCCCATCACTGTGACATCTGCCTGGGCTTGAGTGCTACGGACTTTTCAGTCTTCCT
AGTGGAAAAATGTGACCCAAAAACTCCTTTTCCTTTATCAAAAACTTTCTGTCTAAACACAGCTGGGCAGGCACT
CCTGTTTTAAAGTTATTTCGGGGTCCCTGACCCTGCCCTGGTGGCTTGGCCTGAGACTGGAGAGAGTGCCATCCT
CTGGGTCCTCTCCAAGTCCTACTAGTCTTTGAAGTCCTCAAAATGTGCGTGAGGAAGGCATTTGCCTCTATTCCA
GAATTTCTGATACAAAGAACTCCAGAATCCAGAGCAAATCAGCCCTTCTCTGAACGTTGTAGGATGGTTCAGAAC
CCAGAGAGGACCCTGGTGCTGATATCTCCTCCTCTTCCCTTTCCCCTCAGCTTACTTACTCCCAGATGCGGCCTG
GGTATGAAGTAGGCCTTTCCTGAGTGGCTCCCAATCCAGTCCTCCAAGTACTCAGAGGGGAAGCCCGTGAAGCCG
TCATCTAAGTCCTGCTCCCTCACATGAAGCTGAGGGCCAGATAGATGGAGCGACTGCCAACTTCATTTCCCGACA
TCATTGTGTTCAGAAGAGAGTGATGGGTTTTGAGTTAGACAGTCCTGGGCTTGAGACAGGCTTTGTCACTACTGT
GTGAGTGTAGCCACCTAATCTCTCTGAGACTGTGTAAAACAAAGATGATAAAATCTCACCCTGTTGTGAGATATT
AAATGAGCCAAAGTGCCTAGCATGATGGTGCTGGCTCATATAGTGTAGTCCCTGGAATGGCAAATTAACATCACC
CAGGAACTTGTTAGAAAGGCAAATTCTTGGACACAACCCTCCTGATTTATGGAATCAGAAACTCTGGCTGTGGGG
CCCAGCAACCTGAGTTTAAACAATTTCTCTGGGTGGTTCTGCGGCACACTAAGGTTTGAAAATCACTACAACAAA
TGCTAACTTCTAATCCCCTTGATGAGCTTTCACGAAGTCTCACGGCTTCTCTAGGGACTCCATGGTCTTCAGAGT
CGTTCACAGATGACCAAGGACAGACTGTGTCCCAGAAGCCAAAATGAGAGAGAGAGAGAGAGCACGCGTACGTGC
ACCCTGGGGCAGTGTCTCACCGTATGAATAAGGGATGTAACACTAAAAGCCCATTAGGGGGCAGTGTTTCCCGCC
TGTTGTAGAAACTGGTACAGAAAGGATCCTATATGAAGTTCCTGAAACTGACCTTTGTCTATTATTACCTTCTCT
GAAAAGTGCCAGTCCATGTATTTTTTATTTATTTTAAGTTTGTAATTTAATTTTTAATTATTGTTTAGTGTTTGC
ATTTAATTTTATTTAATCACCACATTTAGAAAATAATAAGAGCAAGTTTCTAAATGGGAGACTGCTGAGGCTCTT
TGCAAGAGATGAGATTAAGTTTGAGTTTCTAAGGCAGGGCATGAGCTGGAAATAGCATTGCTTTCCTTGATTGTC
TCTCTCCTTCAGGGAGATTCTTTTTCTCTAGTGTTTTAAGTGATCCTTTGAAGTAAGTGTGGAGAGTCTTGAATG
GCAAGACCAGGAGCTGAGTTTAAGCTTGTAATGGAAGCTTGCATTGTGGGATATATAACTGAGGAAGCATATTTA
TCCTGAAGGTATTTTGCCAGAAGGTATCACTTGACCTGGAAAAGGAATCTATTTAGTTCAGGAAAGATAAAAAGT
TTAGAGGTATGTGAAGGAAGCACTTAGAACTTGCAAGCCTGATGTCCTATCAAGTTATGTCTTCTGGGTGACAGA
CAAAATAGCTTGTCTTATGGTGGTGATGTGTTGCATTTTCACTTTGGGGTCTGTAAGAAACTGTCAGTGAAAATA
TGTACAATTCCTTCAATTTCCATTCTTAACAACTGTAATGTTGAAAAATAAGTTGAAAAGTCTTTGGGACCATAC
ATGCAAAAACGGTGCCTCTGTTACTTAATTATTTAATATTCTATAAATGTACCCAATCTGTCCGCACCCTTCCCA
GTGATGGGGCAGTATGTCTGAGGAAGTATAATTTCAGTACTGGGGTCGGGGAGAGGAGGTGATGTTTCTACATTT
TTATTTTTTCTATAAATTGCAATTGGTCTGTATGCTGGTTTATTTTGAAATTTATATTGGTTTCTTTTCAAGCTG
GTGTCATCTCCTAGACTGTTTCACCCAGATGCTAGCATTTTTTTTTTTTTTGAGACAGAGTCTCACTCTGTCACC
TAGGCTGGAGTTGCAGTGGTTTGATCTCGGCTCACTGCAACCTCCGACTCCTGGGTTCAAGCAATTCTTCTGCCT
CAGCCTCCTGAGTAGCTGGGATTACAGATGTGCACCAGCACACCCGGCTAATTTTTTGTATTTTTAGTAGAGACA
GGGTTTCGCCATGTTGGCCAGGCTGGTCTTGAACTCCTGGCCTTATGTGATCCGCCCACCTTGGCTTCCCAAAGT
GCTGGGATTACAGGCATGAGCCACCTCGCCTGGCCAGATGCTAGCATTTTAGATCAAACAATTCATTTTAGATGA
ATTGTTTTGTTTCACAATCATTTTAAATCATTTTAGAATGTACTTCACATTATTAGTTGTGTTATGGCATAAAGG
TACAACCATTCCCTAACTCCATCTTTTATTAATGCTTAAGTTTAAATTATATTCTTCCAATGCCTAAGCTATTCC

FIGURE 3864B

CTAGAATTAAACTGGGCACTTTTGGAAGCAGCAACAGTAACAGCAGCAGCAAACTTTTCCTCTCATATTTTGGGT
GTATCAAAAGTTCTAGACTTTTGAAGTTATGATTTCAGTGGCCCACTTTATTTCTAAGGAAGAGTGTCTACTTTG
GAACGATACTTTGCACATAGTAGGAACTCAAGAAATACATTTGAATAATTATAATTAACTGTTTAGCTATCTTAA
TGAGAATTTGTTGACAACAAAAGATCATCCATCGCCTTATGTGTGAGTAAGATTGGAGCCTCTATCAAGATTTAG
TCAAGTTCAGTTAGATTGATTCTAGAAACAAATATTTATTTCTTTCTTTTACGGGGATGTGAATAAGGCTTTTCC
TTAAGGCCTTCATTCTTTAAACAAACAGGTTGAAATGGTATGTTGTAAAAGAGAAGACGGGAGAGAGGTATTTAG
ATGATAAGTGTACTTCACAAAAATGCCAAAGTTTGAAAAATAGGTATGTTTGTTCTAAATGTTTAAGTGCTTCTC
TGTTAGGTTCTGGGGCTTGCAATCATTTGAATTGTTCTGTTTCACAATAAAGGAGATTCACTGGGTTCTGCATTT
TCAGGATTCAATAGAACTGCTCCATTAAAAAAATAATCCTTAGCAAGCATTCGAATCCTAACTGCTTTGATGCAC
TTGCCCTCGGGCACCTGTCATTTCCAATATGGTAGGTGTCAAAGTCAAAAGTATTTACTGGGAGAAAAAAGAGAG
GAGTGGTTGTAGAAGTCTCCCTAAATCAGACATGTCAAGCAATCAGCCAACGTGGTGTATTTCTCATTCAATATT
TTAGTGTGAATTGAGACACTGAGATAAAGACATCGTGCAGAGATAAATGGGGATACAGTTAAATGTAGCAACTCT
TGAGTTCATTTTTTCCCACTGTAGCAAAATTAATGCTTTCTCTTTATTGAAATAAATTGCTCATTCCTCCAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAGG

FIGURE 3865

MGMERPAAREPHGPDALRRFQGLLLDRRGRLHRQVLRLREVARRLERLRRRSLVANVAGSSLSATGALAAIVGLS
LSPVTLGTSLLVSAVGLGVATAGGAVTITSDLSLIFCNSRELRRVQEIAATCQDQMREILSCLEFFCRWQGCGDR
QLLQCGRNASIALYNSVYFIVFFGSRGFLIPRRAEGDTKVSQAVLKAKIQKLAESLESCTGALDELSEQLESRVQ
LCTKSSRGHDLKISADQRAGLFF

FIGURE 3866

GTTTCTGGGAAGGGAGA**ATG**GCGGCGCCCGGGCTGCGGCTGGGAGCGGGGAGACTCTTTGAAATGCCTGCGGTGC
TAGAGCGACTGAGCCGCTATAATAGCACGTCCCAAGCTTTTGCTGAGGTGCTGCGGCTGCCGAAGCAGCAGCTGA
GGAAGCTGCTGTACCCGCTGCAGGAAGTAGAGCGGTTCCTCGCCCCCTACGGGAGGCAAGACCTTCACCTGCGTA
TCTTTGACCCAAGCCCGGAGGACATAGCCAGGGCGGACAACATCTTCACGGCCACTGAACGGAACCGCATCGACT
ACGTCAGCTCCGCCGTCCGTATCGACCACGCCCCGGACCTTCCGCGGCCAGAGGTGAGAGGCGATTCTACGGTTC
ACCTGCGCGCCGGCGTCACAGCGCTACCGCTTCCTGGCCGTCCGGCTCGCGGTGTGTTTTATAGGCAGAGCAATG
TTGGAAAATCATCTCTAATCAAGCTTTATTTTCACTGGCCCCTGAGGTTGAAGTCAGAGTCTCCAAAAAACCAGG
ACACACAAGAAAATGAATTTTTCAAAGTTGGAAAACATTTTACAGTGGTGGACATGCCAGGTTATGGCTTTAGAG
CACCTGAAGATTTTGTTGACATGGTAGAGACCTATCTAAAAGAACGAAGGAACTTGAAGAGAACATTTTTATTAG
TGGATAGCGTTGTTGGAATTCAAAAAACAGACAATATTGCCATAGAAATGTGTGAAGAATTTGCATTACCTTATG
TGATTGTATTAACAAAAATTGACAAATCTTCCAAGGGACATCTTTTAAAACAAGTGCTTCAGATCCAGAAATTTG
TTAACATGAAAACTCAAGGATGTTTTCCTCAGTTGTTTCCTGTAAGTGCTGTGACCTTTTCTGGAATCCACCTGT
TGAGATGCTTTATAGCCAGTGTAACAGGAAGTCTTGAC**TAA**TGGTTCCCGGTTTAGCTGAAGATTCAAAAAAAAA
AAAAAAAAAAAAAAAAAAAA

FIGURE 3867

MAAPGLRLGAGRLFEMPAVLERLSRYNSTSQAFAEVLRLPKQQLRKLLYPLQEVERFLAPYGRQDLHLRIFDPSP
EDIARADNIFTATERNRIDYVSSAVRIDHAPDLPRPEVRGDSTVHLRAGVTALPLPGRPARGVFYRQSNVGKSSL
IKLYFHWPLRLKSESPKNQDTQENEFFKVGKHFTVVDMPGYGFRAPEDFVDMVETYLKERRNLKRTFLLVDSVVG
IQKTDNIAIEMCEEFALPYVIVLTKIDKSSKGHLLKQVLQIQKFVNMKTQGCFPQLFPVSAVTFSGIHLLRCFIA
SVTGSLD

FIGURE 3868

ACACAGGAAGCTGAGCCGGCTTGGGGCCCAGCATACACAGGCCCCCAGGACCCCTGGGGAGAGGGCCCCGCTGGG
CTGGCCCTGCAGGGACCATGGAATCCAGAGCTGAAGGGGGCTCCCCTGCTGTGTTTGATTGGTTCTTCGAAGCGG
CCTGCCCTGCCTCCCTGCAGGAGGATCCCCCCATCCTGCGGCAGTTCCCTCCAGACTTCAGGGACCAGGAAGCTA
TGCAGATGGTGCCTAAATTCTGCTTCCCTTTTGATGTGGAAAGGGAGCCCCCCAGCCCCGCCGTGCAGCATTTCA
CCTTCGCCCTCACAGACCTTGCCGGCAACCGCAGATTTGGTTTCTGCCGCCTGCGGGCGGGTACCCAGAGCTGTC
TCTGCATCCTCAGCCACCTGCCTTGGTTCGAGGTGTTTTACAAGCTATTGAACACAGTGGGAGACCTCCTAGCCC
AGGACCAAGTCACCGAGGCAGAGGAACTTCTTCAAAATCTGTTTCAGCAGTCCCTGTCTGGGCCCCAGGCCTCAG
TGGGGCTTGAGCTGGGCAGCGGAGTGACGGTCTCCAGCGGGCAGGGTATCCCCCCCCCCTACCCGGGGGAATAGCA
AGCCGCTTTCCTGCTTCGTGGCCCCGGACTCCGGCCGCCTGCCATCCATCCCTGAGAACAGGAACCTAACGGAGC
TGGTGGTGGCCGTGACTGACGAGAACATCGTGGGGCTGTTCGCGGCGCTCCTGGCCGAGAGAAGAGTCCTGCTCA
CCGCCAGCAAACTCAGCACCCTGACCTCGTGCGTCCACGCGTCCTGCGCGCTCCTGTACCCCATGCGCTGGGAGC
ACGTGCTGATCCCCACGCTGCCCCCACACCTGCTGGACTACTGCTGCGCGCCCATGCCCTACCTCATTGGAGTGC
ACGCCAGTCTCGCCGAGAGAGTACGAGAAAAAGCCCTGGAGGACGTCGTGGTGCTGAACGTGGACGCCAATACCT
TGGAGACGACCTTTAACGACGTGCAGGCGCTGCCTCCAGACGTGGTGTCCCTGCTGAGGCTCCGGCTCAGGAAGG
TCGCCCTGGCCCCCGGGGAAGGGGTGTCCCGTCTCTTCCTCAAAGCCCAGGCCCTGCTCTTCGGGGGGTACCGCG
ACGCACTCGTCTGCAGCCCGGGCCAGCCAGTGACCTTCAGTGAGGAAGTCTTCTTGGCCCAGAAGCCTGGGGCAC
CTCTGCAGGCCTTCCACCGGCGGGCTGTGCACCTGCAGCTGTTCAAACAGTTCATCGAAGCCCGGCTGGAGAAGC
TCAACAAGGGGGAGGGCTTCTCAGATCAATTCGAGCAGGAGATCACTGGCTGCGGGGCCTCCCCAGGGGCCCTTC
GATCCTATCAGCTCTGGGCCGACAATCTAAAGAAAGGTGGTGGCGCCCTCCTGCACTCAGTCAAGGCCAAGACCC
AACCAGCCGTCAAGAACATGTACCGCTCGGCCAAGAGTGGCTTGAAGGGGGTGCAGAGCCTTCTAATGTATAAGG
ATGGGGACTCTGTCCTGCAGAGGGGGGGCTCTCTGAGGGCCCCAGCCCTCCCCAGCCGCTCAGACCGCCTGCAGC
AACGCCTCCCAATCACTCAGCACTTTGGAAAGAACCGGCCCCTTCGCCCCAGCAGGAGACGCCAGCTGGAAGAGG
GAACTTCCGAGCCCCCAGGGGCGGGGACACCCCCACTGAGCCCTGAGGATGAGGGGTGCCCGTGGGCAGAAGAAG
CTCTGGACAGCAGCTTCTTGGGGTCTGGAGAAGAACTGGATTTGTTGAGCGAGATTCTGGACAGTCTTAGCATGG
GAGCCAAGAGCGCAGGCAGCCTGAGACCGAGCCAGAGTTTAGACTGCTGTCACAGAGGAGACCTGGACAGCTGCT
TCAGCCTGCCCAACATACTAAGATGGCAACCAGACGATAAGAAACTACCAGAGCCGGAGCCCCAGCCCCTTTCCC
TGCCATCCCTGCAAAATGCCTCGTCTTTGGATGCCACCAGCTCTTCAAAGGACTCCAGGTCCCAGCTGATACCCT
CAGAGTCCGACCAAGAAGTCACGTCTCCATCCCAGTCCTCAACAGCTTCTGCAGACCCAAGCATCTGGGGGGACC
CCAAACCCTCTCCTCTCACAGAGCCCCTAATTCTTCATCTCACCCCTTCCCACAAGGCAGCTGAAGATTTTACAG
CCCAGGAAAACCCCACTCCCTGGCTCTCCACTGCACCCACTGAGCCCAGCCCTCCAGAAAGCCCCCAAATTCTGG
CCCCCACAAAGCCCAACTTTGATATAGCCTGGACGTCCCAGCCCCTTGATCCTTCCTCAGACCCCAGTTCTCTGG
AGGACCCCAGAGCCCGGCCTCCCAAAGCCCTGCTGGCAGAGCGCGCTCACCTCCAGCCACGGGAGGAACCAGGAG
CCCTGAATTCCCCTGCTACACCCACCAGCAACTGTCAAAAGTCCCAGCCCAGCAAGCCGGCCCAGAGTCGCTGATT
CTTAAGAAGTGCTTTGAGGGTTAAGAATCAGGGGTCCAAGAGAGACCCCAGTCCCTCAATAAAGCCACAAGAGCC
CAAAAAAGCTGGTTTTTTTCCTGGTGAATTTCTCTGGTGCCCTCACTCTGCTCGGAAATCCATCCCACCCACCTC
TGTCCCTCCAAGGGCAGCCTCTCTAACTGGCTCCTAGCAGGGAATTCCAGGAAGCCTCCTGGTCTTCTAGAATCC
TGGCAACCTTACAATTCCTCTCGGCATTTGTCACTTCCATCTCAGCTAATGCACCCACCAGCTCAAACACACCAA
TAAAGCTTTTGTTACTCTCAAAAAAAAAAAAAAAAA

FIGURE 3869

MESRAEGGSPAVFDWFFEAACPASLQEDPPILRQFPPDFRDQEAMQMVPKFCFPFDVEREPPSPAVQHFTFALTD
LAGNRRFGFCRLRAGTQSCLCILSHLPWFEVFYKLLNTVGDLLAQDQVTEAEELLQNLFQQSLSGPQASVGLELG
SGVTVSSGQGIPPPTRGNSKPLSCFVAPDSGRLPSIPENRNLTELVVAVTDENIVGLFAALLAERRVLLTASKLS
TLTSCVHASCALLYPMRWEHVLIPTLPPHLLDYCCAPMPYLIGVHASLAERVREKALEDVVVLNVDANTLETTFN
DVQALPPDVVSLLRLRLRKVALAPGEGVSRLFLKAQALLFGGYRDALVCSPGQPVTFSEEVFLAQKPGAPLQAFH
RRAVHLQLFKQFIEARLEKLNKGEGFSDQFEQEITGCGASPGALRSYQLWADNLKKGGGALLHSVKAKTQPAVKN
MYRSAKSGLKGVQSLLMYKDGDSVLQRGGSLRAPALPSRSDRLQQRLPITQHFGKNRPLRPSRRRQLEEGTSEPP
GAGTPPLSPEDEGCPWAEEALDSSFLGSGEELDLLSEILDSLSMGAKSAGSLRPSQSLDCCHRGDLDSCFSLPNI
LRWQPDDKKLPEPEPQPLSLPSLQNASSLDATSSSKDSRSQLIPSESDQEVTSPSQSSTASADPSIWGDPKPSPL
TEPLILHLTPSHKAAEDFTAQENPTPWLSTAPTEPSPPESPQILAPTKPNFDIAWTSQPLDPSSDPSSLEDPRAR
PPKALLAERAHLQPREEPGALNSPATPTSNCQKSQPSKPAQSR

FIGURE 3870

CTGTGAGTGACACACGCTGAGTGGGGTGAAGGGAA**ATG**CTGGTGAATTTCATTTTGAGGTGTGGGTTGCTGTTAG
TCACTCTGTCTCTTGCCATTGCCAAGCACAAGCAATCTTCCTTCACCAAAAGTTGTTACCCAAGGGGAACATTGT
CCCAAGCTGTTGACGCTCTCTATATCAAAGCAGCATGGCTCAAAGCAACGATTCCAGAAGACCGCATAAAAAATA
TACGATTATTAAAAAAGAAAACAAAAAAGCAGTTTATGAAAAACTGTCAATTTCAAGAACAGCTTCTGTCCTTCT
TCATGGAAGACGTTTTTGGTCAACTGCAATTGCAAGGCTGCAAGAAAATACGCTTTGTGGAGGACTTTCATAGCC
TTAGGCAGAAATTGAGCCACTGTATTTCCTGTGCTTCATCAGCTAGAGAGATGAAATCCATTACCAGGATGAAAA
GAATATTTTATAGGATTGGAAACAAAGGAATCTACAAAGCCATCAGTGAACTGGATATTCTTCTTTCCTGGATTA
AAAAATTATTGGAAAGCAGTCAG**TAA**ACCAAAGCCAAGTACATTGATTTTACAGTTATTTTGAAATACAATAAGA
ACTGCTAGAAATATGTTTATAACAGTCTATTTCTTTTAAAAACTTTTTAACATAATACTGACGGCATGTTAGGTG
ATTCAGAATAGACAAGAAGGATTTAGTAAATTAACGTTTTGGATATAAGTTGTCACTAATTTGCACATTTTCTGT
GTTTTCAAATAATGTTTCCATTCTGAACATGTTTTGTCATTCACAAGTACATTGTGTCAACTTAATTTAAAGTAT
GTAACCTGAATTAACTCGTGTAATATTTGTGTGTGGAGTGGGATGTGGGGGGTGGAGGGGGAATGACAGATTTCT
GGAATGCAATGTAATGTTACTGAGACTTAAATAGATGTTATGTATATGATTGTCTGTTTAAGTGTTTGAAAATTG
TTAATTATGCCCAGTGTGAACTTAGTACTTAACACATTTTGATTTTAATTAAATAAATTGGGTTTCCTTCTC

FIGURE 3871

MLVNFILRCGLLLVTLSLAIAKHKQSSFTKSCYPRGTLSQAVDALYIKAAWLKATIPEDRIKNIRLLKKKTKKQF
MKNCQFQEQLLSFFMEDVFGQLQLQGCKKIRFVEDFHSLRQKLSHCISCASSAREMKSITRMKRIFYRIGNKGIY
KAISELDILLSWIKKLLESSQ

FIGURE 3872

CTGCACAGGGAGTTTGTCTTGTGCAAACAATTTCCAAGGCAGCGTTTTCTTCCCTGCCTGGGAGTGCAGGGCTCA
GCGCCTTCACTTTGGAACTGACTCAGAGACCTAAAGAAGCCCACCTGGCCAGCGGGAAGGGGGGCCGCCGCCGCC
TCCCGGTTTTGGGCAGCCCTGGCCAGCTCCCTGTGGCCTTGGAGGACTTCCACCGGGCAGGCGTTCCCATGATGC
CAGGCTACCAGGCGCGGGGGATTCCTGCAGGCCGGCGCTGCTTTTCTTAGAACCCCCTTTCTAGAAAAGTACACC
TGGAGGTTTTGCTTCAAAGAGAGGAGAGGCAGCAGC**ATG**GCGAGTGTCCTGTCCCGACGCCTTGGAAAGCGGTCC
CTCCTGGGAGCCCGGGTGTTGGGACCCAGTGCCTCGGAGGGGCCCTCGGCTGCCCCACCCTCGGAGCCACTGCTA
GAAGGGGCCGCTCCCCAGCCTTTCACCACCTCTGATGACACCCCCTGCCAGGAGCAGCCCAAGGAAGTCCTTAAG
GCTCCCAGCACCTCGGGCCTTCAGCAGGTGGCCTTTCAGCCTGGGCAGAAGGTTTATGTGTGGTACGGGGGTCAA
GAGTGCACAGGACTGGTGGAGCAGCACAGCTGGATGGAGGGTCAGGTGACCGTCTGGCTGCTGGAGCAGAAGCTG
CAGGTCTGCTGCAGGGTGGAGGAGGTGTGGCTGGCAGAGCTGCAGGGCCCCTGTCCCCAGGCACCACCCCTGGAG
CCCGGAGCCCAGGCCCTGGCCTACAGGCCCGTCTCCAGGAACATCGATGTCCCAAAGAGGAAGTCGGACGCAGTG
GAAATGGATGAGATGATGGCGGCCATGGTGCTGACGTCCCTGTCCTGCAGCCCTGTTGTACAGAGTCCTCCCGGG
ACCGAGGCCAACTTCTCTGCTTCCCGTGCGGCCTGCGACCCATGGAAGGAGAGTGGTGACATCTCGGACAGCGGC
AGCAGCACTACCAGCGGTCACTGGAGTGGGAGCAGTGGTGTCTCCACCCCCTCGCCCCCCCACCCCCAGGCCAGC
CCCAAGTATTTGGGGGATGCTTTTGGTTCTCCCCAAACTGATCATGGCTTTGAGACCGATCCTGACCCTTTCCTG
CTGGACGAACCAGCTCCACGAAAAAGAAAGAACTCTGTGAAGGTGATGTACAAGTGCCTGTGGCCAAACTGTGGC
AAAGTTCTGCGCTCCATTGTGGGCATCAAACGACACGTCAAAGCCCTCCATCTGGGGGACACAGTGGACTCTGAT
CAGTTCAAGCGGGAGGAGGATTTCTACTACACAGAGGTGCAGCTGAAGGAGGAATCTGCTGCTGCTGCTGCTGCT
GCTGCCGCAGGCACCCCAGTCCCTGGGACTCCCACCTCCGAGCCAGCTCCCACCCCCAGCATGACTGGCCTGCCT
CTGTCTGCTCTTCCACCACCTCTGCACAAAGCCCAGTCCTCCGGCCCAGAACATCCTGGCCCGGAGTCCTCCCTG
CCCTCAGGGGCTCTCAGCAAGTCAGCTCCTGGGTCCTTCTGGCACATTCAGGCAGATCATGCATACCAGGCTCTG
CCATCCTTCCAGATCCCAGTCTCACCACACATCTACACCAGTGTCAGCTGGGCTGCTGCCCCCTCCGCCGCCTGC
TCTCTCTCTCCGGTCCGGAGCCGGTCGCTAAGCTTCAGCGAGCCCCAGCAGCCAGCACCTGCGATGAAATCTCAT
CTGATCGTCACTTCTCCACCCCGGGCCCAGAGTGGTGCCAGGAAAGCCCGAGGGGAGGCTAAGAAGTGCCGCAAG
GTGTATGGCATCGAGCACCGGGACCAGTGGTGCACGGCGTGCCGGTGGAAGAAGGCCTGCCAGCGCTTTCTGGAC
TGAGCTGTGCTGCAGGTTCTACTCTGTTCCTGGCCCTGCCGGCAGCCACTGACAAGAGGCCAGTGTGTCACCAGC
CCTCAGCAGAAACCGAAAGAGAAAGAACGGAAACACGGAGTTTGGGCTCTGTTGGCTAAGGTGTAACACTTAAAG
CAATTTTCTCCCATTGTGCGAACATTTTATTTTTTAAAAAAAA

FIGURE 3873

MASVLSRRLGKRSLLGARVLGPSASEGPSAAPPSEPLLEGAAPQPFTTSDDTPCQEQPKEVLKAPSTSGLQQVAF
QPGQKVYVWYGGQECTGLVEQHSWMEGQVTVWLLEQKLQVCCRVEEVWLAELQGPCPQAPPLEPGAQALAYRPVS
RNIDVPKRKSDAVEMDEMMAAMVLTSLSCSPVVQSPPGTEANFSASRAACDPWKESGDISDSGSSTTSGHWSGSS
GVSTPSPPHPQASPKYLGDAFGSPQTDHGFETDPDPFLLDEPAPRKRKNSVKVMYKCLWPNCGKVLRSIVGIKRH
VKALHLGDTVDSDQFKREEDFYYTEVQLKEESAAAAAAAAAGTPVPGTPTSEPAPTPSMTGLPLSALPPPLHKAQ
SSGPEHPGPESSLPSGALSKSAPGSFWHIQADHAYQALPSFQIPVSPHIYTSVSWAAAPSAACSLSPVRSRSLSF
SEPQQPAPAMKSHLIVTSPPRAQSGARKARGEAKKCRKVYGIEHRDQWCTACRWKKACQRFLD

FIGURE 3874

TGCACAAGCAGAATCTTCAGAACAGGTTCTCCTTCCCCAGTCACCAGTTGCTCGAGTTAGAATTGTCTGCAATGG
CCGCCCTGCAGAAATCTGTGAGCTCTTTCCTTATGGGGACCCTGGCCACCAGCTGCCTCCTTCTCTTGGCCCTCT
TGGTACAGGGAGGAGCAGCTGCGCCCATCAGCTCCCACTGCAGGCTTGACAAGTCCAACTTCCAGCAGCCCTATA
TCACCAACCGCACCTTCATGCTGGCTAAGGAGGCTAGCTTGGCTGATAACAACACAGACGTTCGTCTCATTGGGG
AGAAACTGTTCCACGGAGTCAGTATGAGTGAGCGCTGCTATCTGATGAAGCAGGTGCTGAACTTCACCCTTGAAG
AAGTGCTGTTCCCTCAATCTGATAGGTTCCAGCCTTATATGCAGGAGGTGGTGCCCTTCCTGGCCAGGCTCAGCA
ACAGGCTAAGCACATGTCATATTGAAGGTGATGACCTGCATATCCAGAGGAATGTGCAAAAGCTGAAGGACACAG
TGAAAAAGCTTGGAGAGAGTGGAGAGATCAAAGCAATTGGAGAACTGGATTTGCTGTTTATGTCTCTGAGAAATG
CCTGCATTTGACCAGAGCAAAGCTGAAAAATGAATAACTAACCCCCTTTCCCTGCTAGAAATAACAATTAGATGC
CCCAAAGCGATTTTT

FIGURE 3875

MAALQKSVSSFLMGTLATSCLLLLALLVQGGAAAPISSHCRLDKSNFQQPYITNRTFMLAKEASLADNNTDVRLI
GEKLFHGVSMSERCYLMKQVLNFTLEEVLFPQSDRFQPYMQEVVPFLARLSNRLSTCHIEGDDLHIQRNVQKLKD
TVKKLGESGEIKAIGELDLLFMSLRNACI

FIGURE 3876

TTTACTTCCTGCGTCCCCGGACGCCGTATGTGGAAAGGCGAACCCTGAGTGGAGGATGTTCCCGCTGCCTAAAGA
ATGATTGACTGTGACTGCACTTTTGTGAGATTATAAATATACCACGGAGGGTAACGAAGCTACAGAAGAATGGAA
GAAGACAGCCTGGAAGACTCAAACCTTTTTCCAAAAGTTTGGCATTCTGAGATGACGGTGTCAGCGACAGGCGAA
CCACCTAGTGCCGTCGAAGAAGAAGGAATACCTAACGAAACAGACATAGAAATCATGCCAGAAATCCCGGAAACT
CTAGAGCCACTGTCCCTTCCAGATGTGCTGAGGATCTCGGCAGTTCTGGAGGACACCACAGACCAGCTCTTTATT
CTGAACTACATCATGCCCGTTCAGTACGATGGGAGACAGAGCATCTGCGTGAAAAGCAGAGAATTGAATCTAGAA
GGAACGAATCTAGACAAACTTGCAATGGGCCTCAACATGACAAAAATACTCAGTCCGTTACTACCTGTGGAAGGA
CCCAATTTGCCTGATTTCACACCCAGAGGCCGGTTCGCTGTGGAGTTTAACAAAATGCAGGATCTTGTCTTCAAA
AAACCTACAAGGCAGACCATCATGACTACGGAGACACTGAAGAAAATTCACATTGATAGGCAGTTTTTCAGCGAT
GTGATTGCAGATACCATTAAGGAGTTGCAAGATTCGGCCACTTACAACAGTCTCCTGCAAGCTTTGAGCAAAGAG
AGGGAAAACAAAATGCATTTCTATGACATCATTGCCAGGGAGGAAAAAGGAAGAAAACAGATAATATCACTTCAA
AAACAGCTAATTAATGTCAAAAAGGAATGGCAATTTGAAGTCCAGAGTCAGAATGAGTATATTGCTAACCTCAAG
GACCAACTGCAAGAGATGAAGGCAAAATCCAACTTGGAGAATCGCTACATGAAAACCAATACCGAGCTGCAGATT
GCCCAGACCCAGAAAAAGTGTAACAGAACAGAGGAACTCTTGGTGGAAGATTTTGAGAAACTCAGGATGAAAACC
GAAGAAGAGGCCCGGACTCATACAGAGATTGAAATGTTCCTTAGAAAGGAGCAGCAGAAACTTGAGGAGAGGCTG
GAGTTCTGGATGGAGAAATACGATAAGGACACAGAAATGAAACAGAATGAACTAAATGCTCTCAAAGCCACAAAG
GCCAGTGTCTTAGCACACCTTCAAGACCTGGCAAAGATGATAAGAGAGTATGAACAGGTCATCATTGAAGATCGT
ATAGAAAAGGAGAGGAGCAAGAAGAAGGTAAAACAGGATCTCTTGGAATTAAAGAGCGTTATAAAGCTCCAGGCC
TGGTGGCGAGGCACTATGATACGGAGAGAAATTGGTGGTTTCAAGATGCCTAAAGACAAAGTTGATAGCAAGGAT
TCAAAAGGCAAAGGTAAAGGCAAGGATAAGAGGAGAGGCAAGAAGAAGTGACCAAGTTCTCTTTTGTGTTTTCTG
CTGGTATTCTGGAGGTGGGAAGGACTTGGAGAGAGTTAAGAAACACCTGGTACCTCAAAGATGACTCATCTACAG
GTTGTTTCCTATTGAGACTTTCCCAGGGAAGCCTGATTTCACTTTGCCTGTTAATTTCACTCTGCCTGTTAGGTG
GGTTTTCAAACCCTGATTTAGGATTACACCATTGACTTAGGGCTTCCTCATACCTTGCTGGGAAGAAGTTTCTAG
TAGTCCTGTGAAGATTCATTCTTCTTGCTCTTTCTCAGCAGAACAAAGGAGTTCACTGGCTTAGCTACAGTGACG
CATTGAAACTTGAGTAATTCCTGTAATGTCAGATTTTGATTTTACCCAATTTGTCTGTAGTGAAAAAACTCTTAT
GAGCAAAAGTATTCAGTAGGAATTACAATATGATGTTATTAGCTGTCCAGCATAATATATACACAGCAAAGTTTT
AATAAATGTTGGTTCCTGCCTGCCTTTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3877

MEEDSLEDSNLFPKVWHSEMTVSATGEPPSAVEEEGIPNETDIEIMPEIPETLEPLSLPDVLRISAVLEDTTDQL
FILNYIMPVQYDGRQSICVKSRELNLEGTNLDKLAMGLNMTKILSPLLPVEGPNLPDFTPRGRFAVEFNKMQDLV
FKKPTRQTIMTTETLKKIHIDRQFFSDVIADTIKELQDSATYNSLLQALSKERENKMHFYDIIAREEKGRKQIIS
LQKQLINVKKEWQFEVQSQNEYIANLKDQLQEMKAKSNLENRYMKTNTELQIAQTQKKCNRTEELLVEDFEKLRM
KTEEEARTHTEIEMFLRKEQQKLEERLEFWMEKYDKDTEMKQNELNALKATKASVLAHLQDLAKMIREYEQVIIE
DRIEKERSKKKVKQDLLELKSVIKLQAWWRGTMIRREIGGFKMPKDKVDSKDSKGKGKGKDKRRGKKK

FIGURE 3878

GTCTGGAATCAAGCGAACCATCAAAGAAACCGACCCTGATTACGAGGATGTATCTGTGGCCCTTCCAAATAAGCG
GCATAAAGCAATTGAGAATTCAGCTCGAGATGCTGCTGTGCAGAAGATTGAGACTATTATCAAAGAACAGTTTGC
TCTTGAAATGAAGAATAAGGAACATGAAATTGAAGTCATTGACCAGCGACTGATTGAAGCAAGAAGGATGATGGA
TAAACTGCGTGCCTGCATTGTAGCAAACTACTATGCTTCTGCAGGTCTTCTAAAAGTTTCTGAGGGATCAAAGAC
ATGTGATACGATGGTTTTTAATCATCCTGCTATCAAGAAATTTTTGGAATCACCATCTAGGTCATCATCTCCTGC
CAATCAGAGAGCAGAAACACCATCAGCCAATCATTCAGAAAGTGATTCTTTATCTCAGCACAATGACTTCTTATC
TGACAAAGATAATAACAGCAATATGGATATAGAGGAAAGACTCTCAAACAACATGGAGCAGAGACCAAGCCGAAA
TACTGGAAGGGATACTTCTAGAATTACTGGCTCCCATAAAACAGAACAGCGGAATGCTGATCTCACAGATGAGAC
TTCACGACTTTTTGTAAAGAAAACAATAGTAGTGGGCAATGTGTCCAAGTATATACCTCCGGATAAGAGGGAAGA
AAATGACCAGTCAACTCATAAGTGGATGGTATATGTCCGAGGGTCCCGTAGAGAACCCAGCATTAATCATTTTGT
CAAGAAGGTTTGGTTCTTCCTTCATCCTAGCTATAAACCAAATGACCTTGTGGAAGTTAGAGAGCCTCCTTTTCA
CCTGACCAGAAGAGGCTGGGGTGAGTTTCCCGTCAGAGTTCAAGTTCATTTTAAGGACAGCCAGCTCAAACCACT
CAGCGTAAACACATCTGGAGGGGTGCAGACGATCCTGATGCCTGTGAATAAAGTGGTTCAGTCATTTTCTACCAG
CAAGCCACCTGCCATTCTGCCTGTAGCTGCCCCAACTCCAGTTGTCCCCAGCTCTGCTCCAGCAGCTGTTGCAAA
AGTGAAGACTGAACCAGAAACACCTGGACCGAGTTGCCTCTCTCAGGAGGGTCAGACAGCAGTGAAAACAGAAGA
AAGTTCTGAGCTGGGAAACTATGTCATTAAGATAGACCATTTAGAAACTATCCAGCAACTCCTAACTTAGTAAAG
AAGATTCCATTAATCACTGCAAAAAGTGAAGATGCCAGCTGCTTTTCTGCAAAGTCTGTGGAGCAGTACTATGGC
TGGAACATTGGAAAAAGGAGAGCCGCTGAGTGGCAAAGAGCAATGACAATGCGAAAAGTCTTACAAGAAATCCTG
GAGAAGAATCCGAGATTTCACCACCTGACTCCCCTCAAAACCAAGCACATCGCTCACTGGTGCCGCTGTCATGGC
TACACCCCACCGGACCCTGAGAGCCTGAGGAATGACGGGGACTCCATCGAGGACGTGCTGACCCAGATCGACAGC
GAGCCCGAGTGCCCATCATCATTCTCCTCTGCTGACAACCTCTGCCGCAAACTGGAGGACCTGCAACAGTTCCAG
CCCTGGTGACAGAGGAGACCCCGTCTCAAAAATTGATTGATCAATTCAGCATCTGAGGGCTGCAAGTACAGAAGG
AATCTATTCTCAGCAGGGCATAGGGCACGCACTGGCTTAACAGTTTAGTATATAAGGCTCAAATAGTCTATACCT
GAACTGCTATAAGCAAGGTCGATAGGGAAGTGGATAGATTGCTTCAGCAAAGTGAACTGTGAGATCTCCAGGACA
GAGGGAGAAAGATCTGATCCAAATGAGAACAGATTGGTTATTGCAGGTATCACAGCCTAAAGAAATTATCTTTTT
GCAAAAGAAATATTAAATGATTTAGCAGTCTCCACGTGTGTTAATGTTTCAAACGTGTATCATAATGTGTATAAT
TGTGTAACAAAATTGTCTACAATAAATCTTTTGGTATTTGT

FIGURE 3879

MKNKEHEIEVIDQRLIEARRMMDKLRACIVANYYASAGLLKVSEGSKTCDTMVFNHPAIKKFLESPSRSSSPANQ
RAETPSANHSESDSLSQHNDFLSDKDNNSNMDIEERLSNNMEQRPSRNTGRDTSRITGSHKTEQRNADLTDETSR
LFVKKTIVVGNVSKYIPPDKREENDQSTHKWMVYVRGSRREPSINHFVKKVWFFLHPSYKPNDLVEVREPPFHLT
RRGWGEFPVRVQVHFKDSQLKPLSVNTSGGVQTILMPVNKVVQSFSTSKPPAILPVAAPTPVVPSSAPAAVAKVK
TEPETPGPSCLSQEGQTAVKTEESSELGNYVIKIDHLETIQQLLT

FIGURE 3880A

TGCAGCCATGCTGAATCACTGTTGCTGATCAGATTTCCCACTGGTCTGCTGGGAGAATCAAGAACAGAACTAGGA
TCCCCGAGTGCATACACAGTTCAGCAGCTACCACCCTGGCTGGGCCTCACACAATGGAGGGTGAAAGTGTCAAGC
TGAGCTCCCAGACTCTGATACAGGCTGGGGATGATGAGAAGAACCAGAGGACGATCACTGTCAACCCTGCCCACA
TGGGGAAAGCATTCAAGGTTATGAATGAACTGCGGAGTAAACAGCTGTTGTGTGACGTGATGATTGTGGCAGAAG
ATGTCGAGATAGAAGCCCACCGTGTGGTCCTGGCAGCCTGCAGCCCCTACTTCTGTGCGATGTTCACAGGTGACA
TGTCTGAGAGTAAAGCCAAAAAGATAGAAATCAAGGACGTGGATGGGCAGACGCTGAGTAAGCTGATTGACTACA
TCTATACTGCTGAAATCGAGGTGACTGAAGAGAATGTCCAGGTGCTGCTCCCGGCAGCCAGCTTGCTGCAGCTCA
TGGATGTTCGGCAGAACTGCTGTGACTTCCTGCAGTCTCAGTTGCATCCCACCAATTGCCTGGGCATCCGTGCGT
TTGCAGATGTACACACCTGCACTGACCTTCTGCAGCAGGCCAATGCCTACGCAGAGCAGCACTTTCCAGAGGTGA
TGCTAGGAGAAGAATTTCTTAGCCTGAGTCTGGACCAGGTGTGCAGCTTGATATCCAGCGACAAGCTGACCGTTT
CTTCAGAAGAGAAGGTGTTTGAAGCTGTGATCTCATGGATCAATTATGAGAAAGAAAACCGTTTAGAGCACATGG
CAAAGCTGATGGAACATGTCCGACTTCCTCTCTTACCTAGGGACTACCTAGTCCAAACGGTTGAAGAAGAAGCTT
TGATAAAGAATAACAACACCTGTAAAGACTTCCTCATTGAGGCCATGAAATACCATCTCCTCCCTCTGGATCAGA
GACTATTGATTAAGAACCCAAGGACCAAGCCCAGGACTCCAGTCAGCCTTCCCAAGGTCATGATTGTGGTTGGCG
GCCAGGCACCCAAGGCAATCCGCAGTGTGGAGTGCTATGATTTCGAGGAGGACCGGTGGGATCAGATTGCTGAGC
TTCCTTCCAGAAGATGCAGAGCAGGTGTGGTGTTCATGGCTGGCCACGTGTATGCCGTGGGAGGGTTTAATGGCT
CACTGCGGGTGCGGACAGTGGATGTGTATGACGGCGTGAAGGACCAGTGGACGTCCATTGCCAGCATGCAGGAGC
GCCGGAGCACACTGGGCGCAGCGGTGCTCAATGACTTGCTCTACGCAGTGGGAGGCTTTGATGGCAGTACTGGCC
TAGCATCGGTGGAAGCCTACAGCTACAAGACCAACGAGTGGTTCTTTGTGGCCCCGATGAACACGCGGCAGAGCA
GTGTGGGTGTGGGCGTTGTGGAGGGGAAGCTATATGCTGTTGGGGGTTATGATGGAGCTTCCCGCCAGTGTCTGA
GCACTGTGGAACAGTACAACCCAGCGACCAATGAATGGATATACGTGGCGGACATGAGCACCCGCCGCAGTGGCG
CAGGGGTTGGAGTGCTTAGCGGACAGCTGTACGCCACAGGTGGGCATGATGGGCCTTTGGTGAGGAAGAGCGTTG
AGGTTTACGATCCTGGAACAAATACCTGGAAGCAAGTGGCAGACATGAACATGTGCCGGCGCAACGCAGGGGTCT
GTGCAGTAAATGGGCTCCTGTATGTGGTTGGAGGGGATGATGGATCCTGCAACTTGGCTTCGGTGGAGTACTACA
ATCCTGTCACTGACAAATGGACGCTGCTTCCAACGAACATGAGCACGGGGCGGAGCTATGCAGGTGTTGCCGTGA
TTCACAAGTCCTTGTGACCCAAACTCCTACTGCCAGGAGGTGGAGGAAGGAGCAGGTGCTGCCTGTGACTCTGAA
CAGCAGGACCTTGGTGACTGGATTCAACTTGCTTGGGAGGGTCTGTGCTGCTGTGAGAACCGCTCTCCTCTGACT
TGGCAGACTGGTGTTGTTCATCGCAGTGTGGACACCATTACCCACCCCCGTTCCCCTGAGGTGCTCTGGCCTATG
CCCTGAGCAAGGGGGGTCTTGACATCCCCAGGCAGCACCTTTGGGCTTTGTTTTGGTGTTTCTACAGGGACAATA
CAGACCCTGGAGTGTGTGTGTGTGTGTGTAGACCATGGTGTTTCTCTATGTTTCTCTAAGTTGGGGGGTGAGC
GTGTGTGACAGTCTACTGGATTTCTTTACTACTGATCCTTTCGCTGTGTTAAAAATCAAGTCACAGAGACCTCTC
TTCTGGATTTGTCCCATGGGGACCCTGAGACTACTAAAGCTGCTTTCTTCTGAAGGTCCAGTTGGACAGTCTGGG
AATGTCCAGAAATAACCAGTGAGAGGGGCAGTTCTCTGGCCACACCCACTTATGTACTTTAACTACTGTGACTTT
GTCTGCAGAAGAGCTGGAAAATTCTCGAAGCTGCACCGTGTCCTCTGTGTGCTAGAATAAGGGACAAATGGGTTC
CCTGTGCTTCTCAGCTCACTGTTTTTCCTTGAGTTCTCCTACAGGAAGCAGATGAGAACTGCCCAGTCTTCAGGT
TTAGGCCATTGGTCTTTGATGTCATAGATTCCAGGCCTGGGAGGTGTTATGTCTCTTCAGCTGGGAAAACTAGCT
CTTCAGAGAAGCCTCGGGTAACACTGAAAAACAAAACAAAACAAAACAAAAACAGGAAAAAAACAAAAAACCAAA
GTGGTAAGGATTCAGTTCCTGCCTATAATGGTCTCAGAGAGGGTCCTACTTTTAGGTTTTCCCAGGACAGGACAG
TCCCCATTTATACTTATTATCCCAGTTTAATTATTCACAGCACCCCATTTTACTCAGAAGTGTTCTGGTCTGGAG
GATAAATAAGAGGTCACCCTCCTCCAGACCCAAAGATAGATTTGTGCCTGTGTTGGATGGGGTCGTGTGTGATTC
AGATGGACATTGGATGGCTTCAAAGGAATATACCACTAGAGCTGGCCCTTGGCACTTTGTGACAGTGGTCAAGTC
TGTCTAATGTCCTTGTCTTCTTTTTCTTGTGCTTTCCCCCTATTCCAGGGTGTGCACCCTCTCCCCAACCCCCAA
GAACCCCACTACTGCTTTCCCTGTGAGGTAGGAGATATCAGTGGGTCTTGGATTTGAGGCTTCCTAAGATGTGCT
TGCATTTTAAAAAGGGAGCTTGGTGAGAGCTTTGCTAATTCACAGGTAAAAATTATTAACAATAGAACTTCAAGC
ATCTTGAGGAGCGGGCATTTGAGGGGGCATGGAGTAATTTGTATTTAAAAAACCTTAAAGTTGTGCTGTTCCTAA
ACTAGCAAATTGCTCATGCTGAAATTTCTGGCATAAGCAGGGGAAGTCTTGTGTCTGGAGAATAGTCTCATACCT
TGCAGTCTGGGACACCCTCCCTACTTTGAGAATCCACCTACAGGAAGCCAAGGAACTTTATAAATCCTGATGTTG
GACTTCTGATACGACTGGGCTACTTCCAAGCAGGTGCTGCAGGAGATTGGCATCCCCCAGCCCCTGCAGTTAGAA

FIGURE 3880B

ACCCCGAAGTCTTCCCAGCCAGTGAGCCACTTTGTGTATTTACTGTATATTTATTGTGCCCTAAATGTGCAACTC
TCCTAAAGACAAAACTTCTCTTTCTGATGTTAAGCACATGTTACTTCAACAAGATGCTTGGAGAACAACAAGGTA
CCCAGAATTTTTAGAAGCCTTCAGAAGAGGCTAAAATATCCAGCTTTGGGGGACCTGGAAGAAATGTCTCCAAAG
GAAGCAAGGCATGTTTTAGTTGAGTGCTCTGGTCTCACTATGAAGTGGGGATGACTGTGGCTTCATAACTCTACC
TGGCTGTGGGTTGGAAGCTGATGGAATGAGAAATGTCCTTTCTCCTTCTCTGAGGAAATTTTGAGACTTGTTTCG
GTGTGTCTGTGTGATGGGGATGAGGCTGGGGTTGGGATCTGATGTATGCCATTCACAGAAGCTCTCAATTTCAGA
TGATAGGTGAATTCCCTGCCCCTCCCCCACCACTGAGAAGCTAGACTTTCATGCGGGAGAGGCTACTTTTATGTG
TCGTCTTCCGGGGAAGGGTCCCTCCACTGAAAGCTAGCCAGTCATGTTTTCTGTTTTTGGATTTTTGCAATTGGT
TTCACCTCATGTCTCCCTCCCTACAAAGCACTGCCTCTACTGGGCGTGCTGCCAAGGCCATGTGCACTCCATCCT
CATGTATCCTTTTTCACGGGGACCAGAACACTGGTACGTCATCACCAAAGCCAATCTGCTCTAGCTGCCCACAGA
TGCCACCAAAACCTGCTATCTCTTCATCACCAGGTACGATTCTCTTTCCACAGTGGACACAGCAGGCTATTTTCT
AGTTTGTGCTGGTCACGTGGTAGATGAAGCCTCTTACTGCCCCACTTAGGGTGGCCACGGCTGCTTGTGAATGCA
GCTTTGCCAGTGGCATATCTGTCATCTGATTGCGGTGGTGAAATGGAATTGAGGCCCAAGGTTAGAAGCAGCCGA
GACGCCACTTGGATACTGATTTGAACAATGTAGAAGTCAGATTCTGAATTCCAAAGTTATTTCTCATAAGTACCC
AATGGCATCTCTCCATCTACAAAGTTGCAGTATTATGCAAATAAAACTGACCTCATTTTCTGCTATGCAATAAGA
ATACTTAATTCTAGTTCCCGACAAGCCAGTTGCAATATCCCCTAAGATGCTTTTTGAGCTGTCTTACTTTGATAT
CTGTTGTGTAACGTTTGTATATTTCTGAGCCAGATCCTTTCAAAGATTGCCTTTTTATAAAATTGAAGCTATAGC
TTTTAGGCTAAAATTTTAACGTAGATATTTTTATAAGATATTTTTTTCAAGAGTTTGAATCGCTTTTTATTGTCC
ATGGTAATGAAATGTTGTGTTCTTTGCATCATTCACTCTCAAACGTAGTTCATGCCTGTAGCTCTCTTCCTTTTG
TTTCTCACCCTTCAGAAACATATTTTTCAGTAGCTCCAGGTAGATGAGCCTTTTTTTTTTTTTTTTAAATACCA
TATTCAAGGGAGTCTGCTGAATTTTAAAACGCAGTCACTGGTGTTTCTTGAATTGCTAGGGACTGATGTTATGTT
CGACTCAGCACTTGCCCGTCTGTATTGATTGTGTCTTTTTTTTTTTTTTTGGAGTCTGCTTTCTGTGGGGGTGAG
GCCGGGCTGTCTCGTGGTGGCTCCCACTGACGGGCACTGAGCCTGGTACCCTGTGGCATGGAGAAGCCTCAGGGA
AAGGCCTGCCCCCCCAGCACATACTCCCATAGTGTCCTAGGTCCAGCCGACCATTCCTTATTCTCTTCTATCTCC
TTGTTGATCTGAAGCTTCCAATAGCTTGAGGCCTTTGCTGCTGGATGATGCCCTTTTTGGGAGCATCTTGTCTCT
AACCTTTAAAAGAGGGGTCAATCCTCATGATCCCTGTGTGTTAAGCATATGCTTTGCAGGTGCTCACACTACACT
TACAACTTGCTTCTTGAGCTATGTCTCTACTCCAGGCTCTGTTTTGTGTATTTATCTGCCATTTGCATCATGGTT
TTTAAAATTTATTATTATTATTATTATTGTTGGGACAGGTGCCATTTAAATTGCCTCCATGCTCCCCATTTGCAC
CTAGCTGGATCAAGTTGGGAGGCTGAGCAAACTCATATTCCAGTTAGTTGGAGTTTTTAAAGGCTCTGTTTGCCT
GGAGAAGCAAGGAGGTTAGAATGTAATTTTTTTAAGCGTTTGCACTATTTAGAGTCCTAAGCCCCTCATGTTCAG
CTGTGCTGTGTTTCTACTGACCAAGCAGGAGAGCCAGCAGCACTTCCAGCATTTGGGAATGGAAGAGATTTCTTC
TGTAGTGGATAATTACAGCCTCATAGCCCCTGTGCAGCCTTCGTCATGGGACTCAGTGACTCATGGATATAGCAT
CAGCCATGGCAGGAATGCACAGGACTGTGGCATTTGCAGCATCAAATCACCCTAGTGCCATGTTTGGTTATGAGA
TTGTAAATTATTCGCTCCCCCGTCCTCCCCTCCCCTCATTTTCAGTGGCAATAGAGGACCCTTGTTGTACTTCTT
GTTTAATTTGCATATTATGTGTAAAATGCTTTCGTTGAAAGAAAACTGAAGACACTGAATGTGTATGTCTGTGTG
GGTGCTCTGTCCCTGTGGTTGTCATAGCCAGTCAGACTTGATCACTGACACCCCGTACAACATATTGCATAGGTA
AGATCCTCGATCTGGTGTTCTCTGCGTGGCTGTTAGGGACTGTATATCTTGTAAAAGAACACTTGTCACATGCTT
GATCAGTTACAGCAATAGCTGAAGAAACATTTCCTCAAATGTATTATTTTAACAGGAATCATGTTCTAATTTCCC
ATCCTTTAATTTTAATAAAAGCTGAACTGTGTGAA

FIGURE 3881

MEGESVKLSSQTLIQAGDDEKNQRTITVNPAHMGKAFKVMNELRSKQLLCDVMIVAEDVEIEAHRVVLAACSPYF
CAMFTGDMSESKAKKIEIKDVDGQTLSKLIDYIYTAEIEVTEENVQVLLPAASLLQLMDVRQNCCDFLQSQLHPT
NCLGIRAFADVHTCTDLLQQANAYAEQHFPEVMLGEEFLSLSLDQVCSLISSDKLTVSSEEKVFEAVISWINYEK
ENRLEHMAKLMEHVRLPLLPRDYLVQTVEEEALIKNNNTCKDFLIEAMKYHLLPLDQRLLIKNPRTKPRTPVSLP
KVMIVVGGQAPKAIRSVECYDFEEDRWDQIAELPSRRCRAGVVFMAGHVYAVGGFNGSLRVRTVDVYDGVKDQWT
SIASMQERRSTLGAAVLNDLLYAVGGFDGSTGLASVEAYSYKTNEWFFVAPMNTRQSSVGVGVVEGKLYAVGGYD
GASRQCLSTVEQYNPATNEWIYVADMSTRRSGAGVGVLSGQLYATGGHDGPLVRKSVEVYDPGTNTWKQVADMNM
CRRNAGVCAVNGLLYVVGGDDGSCNLASVEYYNPVTDKWTLLPTNMSTGRSYAGVAVIHKSL

FIGURE 3882

TCCCTGTCCTGCGCCCGCGCGCCCCGGGAGCCTACCCAGCACGCGCTCCGCGCCCACTGGTTCCCTCCAGCCGCC
GCCGTCCAGCCGAGTCCCCACTCCGGAGTCGCCGCTGCCGCGGGGACATGGTCCTCTGCGTTCAGGGGTGAGCAC
CCCCTTGTAAGCTCAGGGCTACTGTTGGGTGTCAGGGAACAAAGTTTTAGACTGCTGCGCTCCAAAGCGGGCACA
CACATGTACCTAGAACACACCAGCCACTGTCCCCACCATGATGATGACACAGCCATGGACACACCCCTGCCCAGA
CCTCGTCCTTTGCTGGCTGTGGAGCGGACTGGGCAGCGGCCCCTGTGGGCCCCGTCCCTGGAACTGCCCAAGCCA
GTCATGCAGCCCTTGCCTGCTGGGGCCTTCCTCGAGGAGGTGGCAGAGGGTACCCCAGCCCAGACAGAGAGTGAG
CCAAAGGTGCTGGACCCAGAGGAGGATCTGCTGTGCATAGCCAAGACCTTCTCCTACCTTCGGGAATCTGGCTGG
TATTGGGGTTCCATTACGGCCAGCGAGGCCCGACAACACCTGCAGAAGATGCCAGAAGGCACGTTCTTAGTACGT
GACAGCACGCACCCCAGCTACCTGTTCACGCTGTCAGTGAAAACCACTCGTGGCCCCACCAATGTACGCATTGAG
TATGCCGACTCCAGCTTCCGTCTGGACTCCAACTGCTTGTCCAGGCCACGCATCCTGGCCTTTCCGGATGTGGTC
AGCCTTGTGCAGCACTATGTGGCCTCCTGCACTGCTGATACCCGAAGCGACAGCCCCGATCCTGCTCCCACCCCG
GCCCTGCCTATGCCTAAGGAGGATGCGCCTAGTGACCCAGCACTGCCTGCTCCTCCACCAGCCACTGCTGTACAC
CTAAAACTGGTGCAGCCCTTTGTACGCAGAAGCAGTGCCCGCAGCCTGCAACACCTGTGCCGCCTTGTCATCAAC
CGTCTGGTGGCCGACGTGGACTGCCTGCCACTGCCCCGGCGCATGGCCGACTACCTCCGACAGTACCCCTTCCAG
CTCTGACTGTACGGGGCAATCTGCCCACCCTCACCCAGTCGCACCCTGGAGGGGACATCAGCCCCAGCTGGACTT
GGGCCCCCACTGTCCCTCCTCCAGGCATCCTGGTGCCTGCATACCTCTGGCAGCTGGCCCAGGAAGAGCCAGCAA
GAGCAAGGCATGGGAGAGGGGAGGTGTCACACAACTTGGAGGTAAATGCCCCCAGGCCGCATGTGGCTTCATTAT
ACTGAGCCATGTGTCAGAGGATGGGGAGACAGGCAGGACCTTGTCTCACCTGTGGGCTGGGCCCAGACCTCCACT
CGCTTGCCTGCCCTGGCCACCTGAACTGTATGGGCACTCTCAGCCCTGGTTTTTCAATCCCCAGGGTCGGGTAGG
ACCCCTACTGGCAGCCAGCCTCTGTTTCTGGGAGGATGACATGCAGAGGAACTGAGATCGACAGTGACTAGTGAC
CCCTTGTTGAGGGGTAAGCCAGGCTAGGGGACTGCACAATTATACACTATTTATTTATTTATTCTCCTTGGGGGTT
GGTGTCAGGGGCGAGCCAACCCCACCTCTATGCCCTGAGCCCTGGTAGTCCAGAGACCCCAACTCTGCCCTGGCT
TCTCTGGTTCTTCCCTGTGGAAAGCCCATCCTGAGACATCTTGCTGGAACCAAGGCAATCCTGGATGTCCTGGTA
CTGACCCACCCGTCTGTGAATGTGTCCACTCTCTTCTGCCCCCAGCCATATTTGGGGAGGATGGACAACTACAAT
AGGTAAGAAAATGCAGCCGGAGCCTCAGTCCCCAGCAGAGCCTGTGTCTCACCCCCTCACAGGACAGAGCTGTAT
CTGCATAGAGCTGGTCTCACTGTGGCGCAGGCCCCGGGGGGAGTGCCTGTGCTGTCAGGAAGAGGGGGTGCTGGT
TTGAGGGCCACCACTGCAGTTCTGCTAGGTCTGCTTCCTGCCCAGGAAGGTGCCTGCACATGAGAGGAGAGAAAT
ACACGTCTGATAAGACTTCATGAAATAATAATTATAGCAAAGAACAGTTTGGTGGTCTTTTCTCTTCCACTGATT
TTTCTGTAATGACATTATACCTTTATTACCTCTTTATTTTATTACCTCTATAATAAAATGATACCTTTTTCATGT
AAAAAAAAAAAAAAAA

FIGURE 3883

MVLCVQGPRPLLAVERTGQRPLWAPSLELPKPVMQPLPAGAFLEEVAEGTPAQTESEPKVLDPEEDLLCIAKTFS
YLRESGWYWGSITASEARQHLQKMPEGTFLVRDSTHPSYLFTLSVKTTRGPTNVRIEYADSSFRLDSNCLSRPRI
LAFPDVVSLVQHYVASCTADTRSDSPDPAPTPALPMPKEDAPSDPALPAPPPATAVHLKLVQPFVRRSSARSLQH
LCRLVINRLVADVDCLPLPRRMADYLRQYPFQL

FIGURE 3884

TTTTTGTCCTTTTGGGACTCTAAGTGGGTCAAGAAGCAAAAACATCCATGTGTTGTTTGGGGGGAATTGGCACCA
TTTTTTCCTGACTATGTTTCAATTAACTAAAGAATAAATGATGAAGAAATTCTCCTTGTAGCACAACTGTATGCT
GTGTAAATTGGTGTGAGCTCAAAGCCCAGTCATGTGTTTTACCTGTGGGTGACTCTGTTGTAGAATGGTCATATT
ACTGCATATGTTATC**ATG**ACAACTTGTGAGTTTGAGTTTATATTTCTCAAAGAACAAGTTACCCGTATATGCAAC
ATTGCGCCATTAAAAGCTTATTTCTCTGTACACAAAATGGGTAAAATCTTGAAAAAACTTAGTAATTTCTCATTC
CTAACACACAGACAGAGTCTCACTCTGTCACCCAGGCTGGAGTGCAGTGGCGCAATCTCGGCTCACTGCAACCTC
CACCTCCTGGGTTCAAGCAATTCTGCTGCCTCAGCCTCCCGAGTAGCTGGGACTACAGGTGCATGCCACCACGCC
CAGCTAATTTTTGTATTTTTAGTAGAGACGGGGTTTCACCATGTTGGCCAGGATGGTCTCGGTCTCCTGACCTCG
TGATCTGCCTGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACTGCGCCCAGCCAACACTAGTCAT
TTTTATTTTTTCACTGAACATTGATCAATACTCTAAAATGTTTGTCATCCTTTAGAATAATGGGAATTAAAGTTG
AGCAGTTTTCCGTCTCTACCAAATCCTTCACCACAAGCAGCATTCTATTACAGTATGAAGAATTGTCTCATATGT
TAAAACTGTACTTTTCTCTAACCTTTCTCTCACTCCTACAAGGCCCTTTTCTCAAATCATATTTCTGAGAGAAAT
GTATGGTTCTTTCTCACAGGCCTGCTGATTTGTAACTGTGCCATCGAATAGAGCAATTAGATCCATCAGACCTTT
TTCCCCTCATTAGGTTCAGTGGAACCATTCTGGTTAAAACAGCATGAACTGAACTCAGTTTACATTCATATTCTA
TGGGCAATACCATTTGGTTTTTGGAACTGTTTATCTGCTGTTCCCTATCAAGTATTAATGTAGGGATGTCACTCA
GGCTGCGTTGCACTGGGCTGAGTTCAACTGCGACGCTCTCACTGACGCGTGCTTACATGTGCTTCTCACTTCCGG
AGCACAGGCAGGTGGCTGCGGGGTCCCAGCTCTGAATGGATGCCCATGATGCAACTGGGGCAGCCCTTGCTTTTT
GCTTGCTCTCCCACAGAAACCTTTGTCCTTGCAACTTTATCCTTTGTCCCGATTGGGTCCCAGATACACAAAATG
TACAAATGTAAACTTGCTCATTTTATTAAAATTCTTTTAGTTCTTTGTTCTTTCTGTAATTTTTTAAAATAAAAA
TTGCCTTGATGGAGTGATGGTTTTCACTCGCACCATAAAAAAAAAAAAAAAAA

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FIGURE 3885

MTTCEFEFIFLKEQVTRICNIAPLKAYFSVHKMGKILKKLSNFSFLTHRQSLTLSPRLECSGAISAHCNLHLLGS
SNSAASASRVAGTTGACHHAQLIFVFLVETGFHHVGQDGLGLLTS

FIGURE 3886

GXCCCTCGACGGCXTGCAGCCGGGAGAGCCATGGCGGGGGCCGCAGCGGGCGGCAGAGGCGGAGGTGCCTGGGGG
CCGGGGCGCGGAGGGGCCGGGGGGCTCCGGCGGGGCTGCTCTCCCCCAGCCCCCGCCGGCTCCCCCCGGGCTGGG
CTGCAGCCGCTCAGGGCCACGATCCCCTTCCAGCTGCAGCAGCCGCACCAGCGCCGGGACGGGGGTGGCCGTGCA
GCCAGCGTCCCATGCTCGGTGGCCCCAGAAAAGTCAGTGTGTAGGCCTCAGCCACTTCAGGTCCGGCGTACATTC
TCCCTGGACACCATCCTCAGCTCCTACCTTCTGGGCCAGTGGCCACGAGATGCTGATGGGGCCTTCACCTGCTGC
ACCAATGACAAGGCCACCCAGACGCCCCTGTCCTGGCAAGAGCTAGAAGGTGAGCGTGCCAGTTCCTGTGCACAC
AAGCGCTCAGCATCCTGGGGCAGCACAGACCACCGAAAAGAGATTTCCAAGTTGAAGCAACAACTGCAGAGGACG
AAGCTGAGCCGCAGTGGGAAAGAGAAGGAGCGAGGTTCACCACTCCTAGGGGACCACGCAGTGCGGGGAGCACTG
AGGGCGTCCCCTCCCAGCTTCCCCTCAGGGTCCCCTGTCTTGCGACTCAGCCCCTGCCTGCACAGGAGCCTGGAA
GGGCTCAACCAAGAGCTGGAGGAGGTATTTGTGAAGGAGCAGGGAGAAGAGGAGCTGCTGAGGATCCTTGATATC
CCTGATGGGCACCGGGCCCCAGCTCCTCCCCAGAGTGGCAGCTGTGATCATCCCCTCCTCCTCCTGGAGCCTGGC
AACCTTGCCAGCTCTCCTTCCATGTCCTTGGCATCTCCCCAGCCTTGTGGCCTGGCCAGTCATGAGGAACATCGG
GGTGCCGCCGAGGAGCTGGCATCCACCCCCAACGACAAAGCCTCCTCTCCAGGACACCCAGCCTTTCTTGAAGAT
GGCAGCCCATCTCCAGTCCTTGCCTTTGCTGCCTCCCCTCGACCTAATCATAGCTACATCTTCAAACGGGAGCCC
CCAGAAGGCTGTGAGAAAGTGCGTGTGTTTGAAGAAGCCACGTCTCCAGGTCCTGACCTGGCCTTCCTGACTTCC
TGTCCTGACAAGAACAAAGTCCATTTCAACCCGACTGGCTCAGCCTTCTGCCCCGTCAACCTGATGAAGCCCCTC
TTCCCCGGCATGGGCTTCATCTTCCGTAACTGCCCCTCAAACCCGGGATCTCCCCTTCCCCCGGCCAGCCCCAGG
CCACCACCTCGGAAGGATCCGGAAGCCTCCAAGGCCTCCCCACTGCCATTCGAGCCATGGCAGCGCACCCCACCA
TCAGAAGAGCCTGTGCTTTTCCAGAGCTCCCTGATGGTCTGAGGGTCCCACCCCTGCCCCACTTTACCATAGAGA
CCAGTGCCTTGGTGGCAGGTCCCTCCCCAGGTCCCCTGAGATGGGGTATGGAGGGGCCCTTCCCTCTCGGCCTTC
GAGCACTTTCTTTCACTTACTGTGTCAAAGCCCTGGGTCCTCTTTTTGATGGGCACCGGCCCCTCTGAACGTGAT
GGGACCTGCCTTCTCCACTAGTAGCTGGGCAGCTCACAATTCACACCTGTGTACCTGCCACATCCCTCACTTGGT
GGAAAACACCCAGAAGGTCTTGAGTCCCCCACCCCTGGGTGTCAGTCCAAATGACTGTATAGGAGGCCCTTATTT
TTGTCACAGAGCAAGCTGGCCATGAACGAAGGAGAGAAGACGCCACAGATTTCCTTCCCTCTCCTCCAGGAGACC
ATAAGATAGATCCCCCATCCTCTCAGCCCTATTCCCATGCCTCCCTCTCATTGGAGGAGCTGACCAAAGCAGCCC
TAACGGGCCATAACACTTGACCAATTCAGCTGCTGGCAGAGGGAGGAAACAAGTGTTTTCCCAAGTGGCATTTTC
ATCTCGCTTTCACCCTGACTAAAGATTGTCTTAAGTAGCAGCCCAGCCCGCCCAGCCCCAGGTGGGTAGTGGGGA
GGAGAGCTGGCATTCCTCCAGGTGGCAAATGGCGACTCTATACTCTCCGCCCGCCCCAGGGCTGGATGGATTAGA
AAAATCCCTATTTTTCTTGTATCGATGTAGAGACTCTATTTTCTCCCAAAGACACTATTTTTGCAGCTGTTTGAA
GTTTGTATATTTTCCGTACTGCAGAGCTTACACAAAATTGAAGAATGTTAATGTTCGAGTTTTCTTATCTTGTGT
TTAGAGGTTGTTTTTTGCAGATCTTGGTGTTAATAGACCAAATAAATAAATAAATATTCCCAGCAAAAAAAAAAG
TCGAC

FIGURE 3887

MAGAAAGGRGGGAWGPGRGGAGGLRRGCSPPAPAGSPRAGLQPLRATIPFQLQQPHQRRDGGGRAASVPCSVAPE
KSVCRPQPLQVRRTFSLDTILSSYLLGQWPRDADGAFTCCTNDKATQTPLSWQELEGERASSCAHKRSASWGSTD
HRKEISKLKQQLQRTKLSRSGKEKERGSPLLGDHAVRGALRASPPSFPSGSPVLRLSPCLHRSLEGLNQELEEVF
VKEQGEEELLRILDIPDGHRAPAPPQSGSCDHPLLLLEPGNLASSPSMSLASPQPCGLASHEEHRGAAEELASTP
NDKASSPGHPAFLEDGSPSPVLAFAASPRPNHSYIFKREPPEGCEKVRVFEEATSPGPDLAFLTSCPDKNKVHFN
PTGSAFCPVNLMKPLFPGMGFIFRNCPSNPGSPLPPASPRPPPRKDPEASKASPLPFEPWQRTPPSEEPVLFQSS
LMV

FIGURE 3888

CTGGCCTGGGCCTGAAGTGAGTGAGAGGCACATGAAGAGAAGTATTCAAGTATTTATACAGATAGGAATCAAGAT
AATCAACAATGTCTGTCACTGAGGAAGACCTGTGCCACCATATGAAAGTAGTAGTTCGTGTACGTCCGGAAAACA
CTAAAGAAAAAGCAGCTGGATTTCATAAAGTGGTTCATGTTGTGGATAAACATATCCTAGTTTTTGATCCCAAAC
AAGAAGAAGTCAGTTTTTTCCATGGAAAGAAAACTACAAATCAAAATGTTATAAAGAAACAAAATAAGGATCTTA
AATTTGTATTTGATGCTGTTTTTGATGAAACGTCAACTCAGTCAGAAGTTTTTGAACACACTACTAAGCCAATTC
TTCGTAGTTTTTTGAATGGATATAATTGCACAGTACTTGCCTATGGTGCCACTGGTGCTGGGAAGACCCACACTA
TGCTAGGATCAGCTGATGAACCTGGAGTGATGTATCTAACAATGTTACACCTTTACAAATGCATGGATGAGATTA
AAGAAGAGAAAATATGTAGTACTGCAGTTTCATATCTGGAGGTATATAATGAACAGATTCGTGATCTCTTAGTAA
ATTCAGGGCCACTTGCTGTCCGGGAAGATACCCAAAAAGGGGTGGTCGTTCATGGACTTACTTTACACCAGCCCA
AATCCTCAGAAGAAATTTTACATTTATTGGATAATGGAAACAAAAACAGGACACAACATCCCACTGATATGAATG
CCACATCTTCTCGTTCTCATGCTGTTTTCCAAATTTACTTGCGACAACAAGACAAAACAGCAAGTATCAATCAAA
ATGTCCGTATTGCCAAGATGTCACTCATTGACCTGGCAGGATCTGAGCGAGCAAGTACTTCCGGTGCTAAGGGGA
CCCGATTTGTAGAAGGCACAAATATTAATAGATCACTTTTAGCTCTTGGGAATGTCATCAATGCCTTAGCAGATT
CAAAGAGAAAGAATCAGCATATCCCTTACAGAAATAGTAAGCTTACTCGCTTGTTAAAGGATTCTCTTGGAGGAA
ACTGTCAAACTATAATGATAGCTGCTGTTAGTCCTTCCTCTGTATTCTACGATGACACATATAACACTCTTAAGT
ATGCTAACCGGGCAAAGGACATTAAATCTTCTTTGAAGAGCAATGTTCTTAATGTCAATAATCATATAACTCAAT
ATGTAAAGATCTGTAATGAGCAGAAGGCAGAGATTTTATTGTTAAAAGAAAAACTAAAAGCCTATGAAGAACAGA
AAGCCTTCACTAATGAAAATGACCAAGCAAAGTTAATGATTTCAAACCCTCAGGAAAAAGAAATCGAAAGGTTTC
AAGAAATCCTGAACTGCTTGTTCCAGAATCGAGAAGAAATTAGACAAGAATATCTGAAGTTGGAAATGTTACTTA
AAGAAAATGAACTTAAATCATTCTACCAACAACAGTGCCATAAACAAATAGAAATGATGTGTTCTGAAGACAAAG
TAGAAAAGGCCACTGGAAAACGAGATCATAGACTTGCAATGTTGAAAACTCGTCGCTCCTACCTGGAGAAAAGGA
GGGAGGAGGAATTGAAGCAATTTGATGAGAATACTAATTGGCTCCATCGTGTCGAAAAAGAAATGGGACTCTTAA
GTCAAAACGGTCATATTCCAAAGGAACTCAAGAAAGATCTTCATTGTCACCATTTGCACCTCCAGAACAAAGATT
TGAAAGCACAAATTAGACATATGATGGATCTAGCTTGTCTTCAGGAACAGCAACACAGGCAGACTGAAGCAGTAT
TGAATGCTTTACTTCCAACCCTAAGAAAACAATATTGCACATTAAAAGAAGCCGGCCTGTCAAATGCTGCTTTTG
AATCTGACTTCAAAGAGATCGAACATTTGGTAGAGAGGAAAAAAGTGGTAGTTTGGGCTGACCAAACTGGCGAAC
AACCAAAGCAAAACGATCTACCCGGGATTTCTGTTCTTATGACCTTTTCACAACTTGGACCAGTTCAGCCTATTC
CTTGTTGCTCATCTTCAGGTGGAACTAATCTGGTTAAGATTCCTACAGAAAAAAGAACTCGGAGAAAACTAATGC
CATCTCCCTTGAAAGGACAGCATACTCTAAAGTCTCCACCATCTCAAAGTGTGCAGCTCAATGATTCTCTTAGCA
AAGAACTTCAGCCTATTGTATATACACCAGAAGACTGTAGAAAAGCTTTTCAAAATCCGTCTACAGTAACCTTAA
TGAAACCATCATCATTTACTACAAGTTTTCAGGCTATCAGCTCAAACATAAACAGTGATAATTGTCTGAAAATGT
TGTGTGAAGTAGCTATCCCTCATAATAGAAGAAAAGAATGTGGACAGGAGGACTTGGACTCTACATTTACTATAT
GTGAAGACATCAAGAGCTCGAAGTGTAAATTACCCGAACAAGAATCACTACCAAATGATAACAAAGACATTTTAC
AACGGCTTGATCCTTCTTCATTCTCAACTAAGCATTCTATGCCTGTACCAAGCATGGTGCCATCCTACATGGCAA
TGACTACTGCTGCCAAAAGGAAACGGAAATTAACAAGTTCTACATCAAACAGTTCGTTAACTGCAGACGTAAATT
CTGGATTTGCCAAACGTGTTCGACAAGATAATTCAAGTGAGAAGCACTTACAAGAAAACAAACCAACAATGGAAC
ATAAAAGAAACATCTGTAAAATAAATCCAAGCATGGTTAGAAAATTTGGAAGAAATATTTCAAAAGGAAATCTAA
GATAAAATCACTTCAAAACCAAGCAAAATGAAGTTGATCAAATCTGCTTTTCAAAGTTTATCCAATACCCTTTCAA
AAATATATTTAAAATCTTTGAAAGAAGACCCATCTTAAAGCTAAGTTTACCCAAGTACTTTCAGCAAGCAGAAAA
ATGAAACTCTTTGTTTTCTTCTTTTGTGTTCTAAAAAAATAAAATTTCAAAAGAAAAGGTTGTCTTTTAAGTTTT
TTAAATATTTGTTGCCTTTTAAAATCCCTGAGTGTAAGTTACCATGGTGGCAGCTTAGTTTTACTATGCCACAAC
AAGTTGACTAGGACATTTTAGTAAATGGTAGTGAGTTAAATTATCTTTATTATTTTTTAAAAATAAGAATTTAGA
AGTGGTAAAATTATGGCCCAAGATGTATTTGGTTCTCTATTATGTTTTGATACATTATTTTAATCATATATATGA
CTTTCCTTTTCAAAAATACTTTAATGTACAAGTGTAAATATATGTGCCCATAAAATCATTGTAAATATTATTTAG
TCATCACAAATAAAATATTGTCCCTTGCTACTTGATATATTAAAGATGTAGATTTTAAAGTGAAAAAAAAAAAAA
AAAA

FIGURE 3889

MSVTEEDLCHHMKVVVRVRPENTKEKAAGFHKVVHVVDKHILVFDPKQEEVSFFHGKKTTNQNVIKKQNKDLKFV
FDAVFDETSTQSEVFEHTTKPILRSFLNGYNCTVLAYGATGAGKTHTMLGSADEPGVMYLTMLHLYKCMDEIKEE
KICSTAVSYLEVYNEQIRDLLVNSGPLAVREDTQKGVVVHGLTLHQPKSSEEILHLLDNGNKNRTQHPTDMNATS
SRSHAVFQIYLRQQDKTASINQNVRIAKMSLIDLAGSERASTSGAKGTRFVEGTNINRSLLALGNVINALADSKR
KNQHIPYRNSKLTRLLKDSLGGNCQTIMIAAVSPSSVFYDDTYNTLKYANRAKDIKSSLKSNVLNVNNHITQYVK
ICNEQKAEILLLKEKLKAYEEQKAFTNENDQAKLMISNPQEKEIERFQEILNCLFQNREEIRQEYLKLEMLLKEN
ELKSFYQQQCHKQIEMMCSEDKVEKATGKRDHRLAMLKTRRSYLEKRREEELKQFDENTNWLHRVEKEMGLLSQN
GHIPKELKKDLHCHHLHLQNKDLKAQIRHMMDLACLQEQQHRQTEAVLNALLPTLRKQYCTLKEAGLSNAAFESD
FKEIEHLVERKKVVVWADQTGEQPKQNDLPGISVLMTFSQLGPVQPIPCCSSSGGTNLVKIPTEKRTRRKLMPSP
LKGQHTLKSPPSQSVQLNDSLSKELQPIVYTPEDCRKAFQNPSTVTLMKPSSFTTSFQAISSNINSDNCLKMLCE
VAIPHNRRKECGQEDLDSTFTICEDIKSSKCKLPEQESLPNDNKDILQRLDPSSFSTKHSMPVPSMVPSYMAMTT
AAKRKRKLTSSTSNSSLTADVNSGFAKRVRQDNSSEKHLQENKPTMEHKRNICKINPSMVRKFGRNISKGNLR

FIGURE 3890

GCTGAAGTGAAAACGAGACCAAGGTCTAGCTCTACTGTTGGTACTTATGAGATCCAGTCCTGGCAACATGGAGAG
GATTGTCATCTGTCTGATGGTCATCTTCTTGGGGACACTGGTCCACAAATCAAGCTCCCAAGGTCAAGATCGCCA
CATGATTAGAATGCGTCAACTTATAGATATTGTTGATCAGCTGAAAAATTATGTGAATGACTTGGTCCCTGAATT
TCTGCCAGCTCCAGAAGATGTAGAGACAAACTGTGAGTGGTCAGCTTTTTCCTGTTTTCAGAAGGCCCAACTAAA
GTCAGCAAATACAGGAAACAATGAAAGGATAATCAATGTATCAATTAAAAAGCTGAAGAGGAAACCACCTTCCAC
AAATGCAGGGAGAAGACAGAAACACAGACTAACATGCCCTTCATGTGATTCTTATGAGAAAAAACCACCCAAAGA
ATTCCTAGAAAGATTCAAATCACTTCTCCAAAAGATGATTCATCAGCATCTGTCCTCTAGAACACACGGAAGTGA
AGATTCCTGAGGATCTAACTTGCAGTTGGACACTATGTTACATACTCTAATATAGTAGTGAAAGTCATTTCTTTG
TATTCCAAGTGGAGGAGCCCTATTAAATTATATAAAGAAATA

FIGURE 3891

MRSSPGNMERIVICLMVIFLGTLVHKSSSQGQDRHMIRMRQLIDIVDQLKNYVNDLVPEFLPAPEDVETNCEWSA
FSCFQKAQLKSANTGNNERIINVSIKKLKRKPPSTNAGRRQKHRLTCPSCDSYEKKPPKEFLERFKSLLQKMIHQ
HLSSRTHGSEDS

FIGURE 3892

TGGTTCGTTTATTCCTGGGGTTGTCATATC**ATG**GCTTATAATGACACAGACAGAAACCAGACTGAGAAGCTCCTA
AAAAGAGTACGAGAACTGGAGCAAGAGGTGCAAAGACTTAAAAAGGAACAGGCCAAAAATAAGGAGGACTCAAAC
ATTAGAGAAAATTCAGCAGGAGCTGGAAAAACTAAGCGTGCATTTGATTTCAGTGCTCATGGCCGAAGACACGTA
GCCCTAAGAATAGCCTATATGGGCTGGGGATACCAGGGCTTTGCTAGTCAGGAAAACACAAATAATACCATTGAA
GAGAAACTGTTTGAAGCTCTAACCAAGACTCGACTAGTAGAAAGCAGACAGACATCCAACTATCACCGATGTGGG
AGAACAGATAAAGGAGTTAGTGCCTTTGGACAGGTGATCTCACTTGACCTTCGCTCTCAGTTTCCAAGGGGCAGG
GATTCCGAGGACTTTAATGTAAAAGAGGAGGCTAATGCTGCTGCTGAAGAGATCCGTTATACCCACATTCTCAAT
CGGGTACTCCCTCCAGACATCCGTATATTGGCCTGGGCCCCTGTAGAACCAAGCTTCAGTGCTAGGTTCAGCTGC
CTTGAGCGGACTTACCGCTATTTTTTCCCTCGTGCTGATTTAGATATTGTAACCATGGATTATGCAGCTCAGAAG
TATGTTGGCACCCATGATTTCAGGAACTTGTGTAAAATGGATGTAGCCAACGGTGTGATTAATTTTCAGAGGACT
ATTCTATCTGCTCAAGTACAGCTAGTGGGCCAGAGCCCAGGTGAGGGGAGATGGCAAGAACCTTTCCAGTTATGT
CAGTTTGAAGTGACTGGCCAGGCATTCCTTTATCATCAAGTCCGATGTATGATGGCTATCCTCTTTCTGATTGGC
CAAGGAATGGAGAAGCCAGAGATTATTGATGAGCTGCTGAATATAGAGAAAAATCCCCAAAAGCCTCAATATAGT
ATGGCTGTAGAATTTCCTCTAGTCTTATATGACTGTAAGTTTGAAAATGTCAAGTGGATCTATGACCAGGAGGCT
CAGGAGTTCAATATTACCCACCTACAACAACTGTGGGCTAATCATGCTGTCAAAACTCACATGTTGTATAGTATG
CTACAAGGACTGGACACTGTTCCAGTACCCTGTGGAATAGGACCAAAGATGGATGGAATGACAGAATGGGGAAAT
GTTAAGCCCTCTGTCATAAAGCAGACCAGTGCCTTTGTAGAAGGAGTGAAGATGCGCACATATAAGCCCCTCATG
GACCGTCCTAAATGCCAAGGACTGGAATCCCGGATCCAGCATTTTGTACGTAGGGGACGAATTGAGCACCCACAT
TTATTCCATGAGGAAGAAACAAAAGCCAAAAGGGACTGTAATGACACACTAGAGGAAGAGAATACTAATTTGGAG
ACACCAACGAAGAGGGTCTGTGTTGACACAGAAATTAAAAGCATCATT**TAA**CCATAGACAATTTGCCAGGATCTA
GGAACCACCTAATGGTAGGTGGACAGAAAAGGAAAAAAAAAAAAAATTTACTTGCAAGTACTAGGAATTCAGATGA
TCAGCTCTTAAAAAAAAAAAAAAAAGCAAAAAGACTAAAGCCCTATTAAGGAAGTTATTGCTTTAATAAGAAATTT
CAAATATTCTCTTATCCCGGTCCAAAAGGATTAAGCGATTAAAGAACGTAAAATGGAGATGTATTTACATACACC
TGGAAACCTGTGCCTTGTATTCAAATTCATTAAAGCCTAATCCTGCAAGAA

FIGURE 3893

MAYNDTDRNQTEKLLKRVRELEQEVQRLKKEQAKNKEDSNIRENSAGAGKTKRAFDFSAHGRRHVALRIAYMGWG
YQGFASQENTNNTIEEKLFEALTKTRLVESRQTSNYHRCGRTDKGVSAFGQVISLDLRSQFPRGRDSEDFNVKEE
ANAAAEEIRYTHILNRVLPPDIRILAWAPVEPSFSARFSCLERTYRYFFPRADLDIVTMDYAAQKYVGTHDFRNL
CKMDVANGVINFQRTILSAQVQLVGQSPGEGRWQEPFQLCQFEVTGQAFLYHQVRCMMAILFLIGQGMEKPEIID
ELLNIEKNPQKPQYSMAVEFPLVLYDCKFENVKWIYDQEAQEFNITHLQQLWANHAVKTHMLYSMLQGLDTVPVP
CGIGPKMDGMTEWGNVKPSVIKQTSAFVEGVKMRTYKPLMDRPKCQGLESRIQHFVRRGRIEHPHLFHEEETKAK
RDCNDTLEEENTNLETPTKRVCVDTEIKSII

FIGURE 3894

CTTCTGTGTGTGCACATGTGTAATACATATCTGGGATCAAAGCTATCTATATAAAGTCCTTGATTCTGTGTGGGT
TCAAACACATTTCAAAGCTTCAGGATCCTGAAAGGTTTTGCTCTACTTCCTGAAGACCTGAACACCGCTCCCATA
AAGCCATGGCTTGCCTTGGATTTCAGCGGCACAAGGCTCAGCTGAACCTGGCTACCAGGACCTGGCCCTGCACTC
TCCTGTTTTTTCTTCTCTTCATCCCTGTCTTCTGCAAAGCAATGCACGTGGCCCAGCCTGCTGTGGTACTGGCCA
GCAGCCGAGGCATCGCCAGCTTTGTGTGTGAGTATGCATCTCCAGGCAAAGCCACTGAGGTCCGGGTGACAGTGC
TTCGGCAGGCTGACAGCCAGGTGACTGAAGTCTGTGCGGCAACCTACATGATGGGGAATGAGTTGACCTTCCTAG
ATGATTCCATCTGCACGGGCACCTCCAGTGGAAATCAAGTGAACCTCACTATCCAAGGACTGAGGGCCATGGACA
CGGGACTCTACATCTGCAAGGTGGAGCTCATGTACCCACCGCCATACTACCTGGGCATAGGCAACGGAACCCAGA
TTTATGTAATTGATCCAGAACCGTGCCCAGATTCTGACTTCCTCCTCTGGATCCTTGCAGCAGTTAGTTCGGGGT
TGTTTTTTTATAGCTTTCTCCTCACAGCTGTTTCTTTGAGCAAAATGCTAAAGAAAAGAAGCCCTCTTACAACAG
GGGTCTATGTGAAAATGCCCCCAACAGAGCCAGAATGTGAAAAGCAATTTCAGCCTTATTTTATTCCCATCAATTT
GAGAAACCATTATGAAGAAGAGAGTCCATATTTCAATTTCCAAGAGCTGAGGCAATTCTAACTTTTTTGCTATCC
AGCTATTTTTATTTGTTTGTGCATTTGGGGGGAATTCATCTCTCTTTAATATAAAGTTGGATGCGGAACCCAAAT
TACGTGTACTACAATTTAAAGCAAAGGAGTAGAAAGACAGAGCTGGGATGTTTCTGTCACATCAGCTCCACTTTC
AGTGAAAGCATCACTTGGGATTAATATGGGGATGCAGCATTATGATGTGGGTCAAGGAATTAAGTTAGGGAATGG
CACAGCCCAAAGAAGGAAAAGGCAGGGAGCGAGGGAGAAGACTATATTGTACACACCTTATATTTACGTATGAGA
CGTTTATAGCCGAAATGATCTTTTCAAGTTAAATTTTATGCCTTTTATTTCTTAAACAAATGTATGATTACATCA
AGGCTTCAAAAATACTCACATGGCTATGTTTTAGCCAGTGATGCTAAAGGTTGTATTGCATATATACATATATAT
ATATATATATATATATATATATATATATATATATATATATATTTTAATTTGATAGTATTGTGCATAGAGCCACGTAT
GTTTTTGTGTATTTGTTAATGGTTTGAATATAAACACTATATGGCAGTGTCTTTCCACCTTGGGTCCCAGGGAAG
TTTTGTGGAGGAGCTCAGGACACTAATACACCAGGTAGAACACAAGGTCATTTGCTAACTAGCTTGGAAACTGGA
TGAGGTCATAGCAGTGCTTGATTGCGTGGAATTGTGCTGAGTTGGTGTTGACATGTGCTTTGGGGCTTTTACACC
AGTTCCTTTCAATGGTTTGCAAGGAAGCCACAGCTGGTGGTATCTGAGTTGACTTGACAGAACACTGTCTTGAAG
ACAATGGCTTACTCCAGGAGACCCACAGGTATGACCTTCTAGGAAGCTCCAGTTCGATGGGCCCAATTCTTACAA
ACATGTGGTTAATGCCATGGACAGAAGAAGGCAGCAGGTGGCAGAATGGGGTGCATGAAGGTTTCTGAAAATTAA
CACTGCTTGTGTTTTTAACTCAATATTTTCCATGAAAATGCAACAACATGTATAATATTTTTAATTAAATAAAAA
TCTGTGGTGGTCGTTTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3895

MACLGFQRHKAQLNLATRTWPCTLLFFLLFIPVFCKAMHVAQPAVVLASSRGIASFVCEYASPGKATEVRVTVLR
QADSQVTEVCAATYMMGNELTFLDDSICTGTSSGNQVNLTIQGLRAMDTGLYICKVELMYPPPYYLGIGNGTQIY
VIDPEPCPDSDFLLWILAAVSSGLFFYSFLLTAVSLSKMLKKRSPLTTGVYVKMPPTEPECEKQFQPYFIPIN

FIGURE 3896

ATGGCGGCCTCAGCAGCGCGAGGTGCTGCGGCGCTGCGTAGAAGTATCAATCAGCCGGTTGCTTTTGTGAGAAGA
ATTCCTTGGACTGCGGCGTCGAGTCAGCTGAAAGAACACTTTGCACAGTTCGGCCATGTCAGAAGGTGCATTTTA
CCTTTTGACAAGGAGACTGGCTTTCACAGAGGTTTGGGTTGGGTTCAGTTTTCTTCAGAAGAAGGACTTCGGAAT
GCACTACAACAGGAAAATCATATTATAGATGGAGTAAAGGTCCAGGTTCACACTAGAAGGCCAAAACTTCCGCAA
ACATCTGATGATGAAAAGAAAGATTTTTGA

FIGURE 3897

MAASAARGAAALRRSINQPVAFVRRIPWTAASSQLKEHFAQFGHVRRCILPFDKETGFHRGLGWVQFSSEEGLRN
ALQQENHIIDGVKVQVHTRRPKLPQTSDDEKKDF

FIGURE 3898

GGCACGAGGCCACGAGCTGTTGTGCATCCAGAGGTGGAATTGGGGCCCGGCATTCCCTCCTCGTCCCGGGCTGGC
CCTTGCCCCCACCCTGCAACTCCTGGTTGAGATGGGCTCAGCCAAGAGCGTCCCAGTCACACCAGCGCGGCCTCC
GCCGCACAACAAGCATCTGGCTCGAGTGGCGGACCCCCGTTCACCTAGTGCTGGCATCCTGCGCACTCCCATCCA
GGTGGAGAGCTCTCCACAGCCAGGCCTACCAGCAGGGGAGCAACTGGAGGGTCTTAAACATGCCCAGGACTCAGA
TCCCCGCTCTCCTACTCTTGGTATTGCACGGACACCTATGAAGACCAGCAGTGGAGACCCCCCAAGCCCACTGGT
GAAACAGCTGAGTGAAGTATTTGAAACTGAAGACTCTAAATCAAATCTTCCCCCAGAGCCTGTTCTGCCCCCAGA
GGCACCTTTATCTTCTGAATTGGACTTGCCTCTGGGTACCCAGTTATCTGTTGAGGAACAGATGCCACCTTGGAA
CCAGACTGAGTTCCCCTCCAAACAGGTGTTTTCCAAGGAGGAAGCAAGACAGCCCACAGAAACCCCTGTGGCCAG
CCAGAGCTCCGACAAGCCCTCAAGGGACCCTGAGACTCCCAGATCTTCAGGTTCTATGCGCAATAGATGGAAACC
AAACAGCAGCAAGGTACTAGGGAGATCCCCCCTCACCATCCTGCAGGATGACAACTCCCCTGGCACCCTGACACT
ACGACAGGGTAAGCGGCCTTCACCCCTAAGTGAAAATGTTAGTGAACTAAAGGAAGGAGCCATTCTTGGAACTGG
ACGACTTCTGAAAACTGGAGGACGAGCATGGGAGCAAGGCCAGGACCATGACAAGGAAAATCAGCACTTTCCCTT
GGTGGAGAGCTAGGCCCTGCATGGCCCCAGCAATGCAGTCACCCAGGGCCTGGTGATATCTGTGTCCTCTCACCC
CTTCTTTCCCAGGGATACTGAGGAATGGCTTGTTTTCTTAGACTCCTCCTCAGCTACCAAACTGGGACTCACAGC
TTTATTGGGCTTTCTTTGTGTCTTGTGTGTTTCTTTTATATTAAAGGAAGTAATTTTAAATGTTACTTTAAAAAG
GTAAAAAAAAAAAAAAAAAAAA

FIGURE 3899

MGSAKSVPVTPARPPPHNKHLARVADPRSPSAGILRTPIQVESSPQPGLPAGEQLEGLKHAQDSDPRSPTLGIAR
TPMKTSSGDPPSPLVKQLSEVFETEDSKSNLPPEPVLPPEAPLSSELDLPLGTQLSVEEQMPPWNQTEFPSKQVF
SKEEARQPTETPVASQSSDKPSRDPETPRSSGSMRNRWKPNSSKVLGRSPLTILQDDNSPGTLTLRQGKRPSPLS
ENVSELKEGAILGTGRLLKTGGRAWEQGQDHDKENQHFPLVES

FIGURE 3900

TGCTCCGTCTCACAGGGATCTTTTTGTATATTTGGCTTAGCATCATACATTTGCCATGTTGTTTCATCATCTGCC
TAATTTACTGTTTTTGAATATTTCATTTGTCTCTACTAAAAATACAAAAATTGTTTAGCTCTGTTTTTCATAATA
GAAATAGAAAAGGTAAAATTGCTTTTCTTCTGAAAAGAACAAGTATTGTTCATCCAAGAAGGGTTTTTGTGACTG
AATCAGCAGTGCCTGCCCTAGTCATAGCTGTGCTTCAAAAACCTCAGCATGATTAGTGTTGGAGCAAAACAAGGA
AGCAAAGCAAATACTGTTTTTGAAATTCTATCTGTTGCTTGAACTATTTTGTAATAATTAAACTTTGATGTTGAG
AAATCACAACTTTATTGTACACTTCATTGCAACTTGAAATTCATGGTCTTAAAGTGAGATTTGAATTTCTATTGA
GCGCCTTTAAAAAAGTAATACCAAACCCCAAAAACAACTGATATAATTACTCAAGAAATATTTGCAACATTAGTT
TTTTTCCAGCATCAG

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FIGURE 3901

MISVGAKQGSKANTVFEILSVA

FIGURE 3902

GTTCAGGTCCCGCGACCGCTACCCGCACCCTAAATCCCAGAGGTTGGCCCCCTGAGGTGTGAGTGAAATGAGCTT
TTGCTTTATTTTCCAAGTTTCTCTCTCACCTTCAGGGGCATTCTTCGGGGGTGCATCAGAGGGAGGGCAGAGCCT
GAGGATCTAAGCGAAGGCTTCCCCGGTGTAATTTCCTGGGCTGTTTGTGAGGAGAGATCGAATTCGCCTCCTGCT
CTCAGGCCTCTCTGCTCCTGTCTTTTGTTTGG**ATG**CCGGCGCTGCTGCCTGTGGCCTCCCGCCTTTTGTTGCTAC
CCCGAGTCTTGCTGACCATGGCCTCTGGAAGCCCTCCGACCCAGCCCTCGCCGGCCTCGGATTCCGGCTCTGGCT
ACGTTCCGGGCTCGGTCTCTGCAGCCTTTGTTACTTGCCCCAACGAGAAGGTCGCCAAGGAGATCGCCAGGGCCG
TGGTGGAGAAGCGCCTAGCAGCCTGCGTCAACCTCATCCCTCAGATTACATCCATCTATGAGTGGAAAGGGAAGA
TCGAGGAAGACAGTGAGGTGCTGATGATGATTAAAACCCAAAGTTCCTTGGTCCCAGCTTTGACAGATTTTGTTC
GTTCTGTGCACCCTTACGAAGTGGCCGAGGTAATTGCATTGCCTGTGGAACAGGGGAACTTTCCGTACCTGCAGT
GGGTGCGCCAGGTCACAGAGTCAGTTTCTGACTCTATCACAGTCCTGCCA**TGA**TGAGCCCTGTTCCTGCTCATCA
TGAAGATCCCCGCGATACTTCAACGCCTTCTGACTTCCAGGTGATGACTGGGCCCCCAATAAATCCCGTCTTTGG
GTCTCTCTGCCAAAAAAAAAAAAAAA

FIGURE 3903

MPALLPVASRLLLLPRVLLTMASGSPPTQPSPASDSGSGYVPGSVSAAFVTCPNEKVAKEIARAVVEKRLAACVN
LIPQITSIYEWKGKIEEDSEVLMMIKTQSSLVPALTDFVRSVHPYEVAEVIALPVEQGNFPYLQWVRQVTESVSD
SITVLP

FIGURE 3904

ACTGGGGCCCACAGTCAGACATGAGCCACTGGTGGGACAGAAATAGGCTCCTGGTTCTGTGTGATCCAXAGTTGG
TGCTTTTCTGTCTATCCCTAGCTGTTGGTCACCACCAGCTTTCTGCATATTTTCTCACGGTGCCTCTCATTTCCC
AGAGCCGCCTGGAGCCCAAGGCTGTACACGTGCCCTGTGCTGATTCTCTGCCTAGGAAAGGACC**ATG**CAGCTAGA
GATCAAAGTGGCCCTGAACTTCATCATCTCCTACTTGTACAACAAGCTGCCCCGGCGCCGGGCAGACCTGTTTGG
GGAGGAGCTAGAGCGGCTTTTGAAAAAGAAATATGAAGGCCACTGGTACCCTGAGAAGCCACTGAAAGGCTCTGG
CTTCCGCTGTGTTCACATTGGGGAGATGGTGGACCCCGTGGTGGAGCTGGCCGCCAAGCGGAGTGGCCTGGCAGT
GGAAGATGTGCGGGCCAATGTGCCTGAGGAGCTGAGTGTCTGGATTGATCCCTTTGAGGTGTCCTACCAGATTGG
TGAGAAGGGAGCTGTGAAAGTGCTGTACCTGGATGACAGTGAGGGTTGCGGTGCCCCAGAGCTGGACAAGGAGAT
CAAGAGCAGCTTCAACCCTGACGCCCAGGTGTTCGTGCCCATTGGCAGCCAGGACAGCTCCCTGTCCAACTCCCC
ATCGCCATCCTTTGGCCAGTCACCCAGCCCTACCTTCATTCCCCGCTCCGCTCAGCCCATCACCTTCACCACCGC
CTCCTTCGCTGCCACCAAATTTGGCTCCACTAAGATGAAGAAGGGGGGCGGGGCAGCAAGTGGTGGGGGTGTAGC
CAGCAGTGGGGCGGGTGGCCAGCAGCCACCACAGCAGCCTCGCATGGCCCGCTCACCCACCAACAGCCTGCTGAA
GCACAAGAGCCTCTCTCTGTCTATGCATTCACTGAACTTCATCACGGCCAACCCGGCCCCTCAGTCCCAGCTCTC
ACCCAATGCCAAGGAGTTCGTGTACAACGGTGGTGGCTCACCCAGCCTCTTCTTTGATGCGGCCGATGGCCAGGG
CAGCGGCACCCCAGGCCCGTTTGGAGGCAGTGGGGCTGGCACCTGCAACAGCAGCAGCTTTGACATGGCCCAGGT
ATTTGGAGGTGGTGCCAACAGCCTCTTCCTGGAGAAGACACCCTTTGTGGAAGGCCTCAGCTACAACCTGAACAC
CATGCAGTATCCCAGCCAGCAGTTCCAGCCCGTGGTGCTGGCCAAC**TGA**CCATCTACCTGCCCGTGGGGCCAGGA
GCACCCAAGACCACAGAAAAGAGAAAGGAAAGGCCAAAAAAAAGAGGAAAAGAAAAAAAAAAAAA

FIGURE 3905

MQLEIKVALNFIISYLYNKLPRRRADLFGEELERLLKKKYEGHWYPEKPLKGSGFRCVHIGEMVDPVVELAAKRS
GLAVEDVRANVPEELSVWIDPFEVSYQIGEKGAVKVLYLDDSEGCGAPELDKEIKSSFNPDAQVFVPIGSQDSSL
SNSPSPSFGQSPSPTFIPRSAQPITFTTASFAATKFGSTKMKKGGGAASGGGVASSGAGGQQPPQQPRMARSPTN
SLLKHKSLSLSMHSLNFITANPAPQSQLSPNAKEFVYNGGGSPSLFFDAADGQGSGTPGPFGGSGAGTCNSSSFD
MAQVFGGGANSLFLEKTPFVEGLSYNLNTMQYPSQQFQPVVLAN

FIGURE 3906A

GCGGCCGCTGAATTCTAGGGCGGAGCGAAGAGAACCGGTCGCGGCAATCCTAGCGCGCAGCAGCAGCAGCAGCAG
CAGCACCCGCATCCGCTGCGGGAGTCCGAGCCGGAACCACACCCAAGTAGCTGCCCTTTCCTCTTCTGTCATCTC
ACCGCCCCACCACAGACCGCGTTCCCCGAGGAAACCGGCCGCCCACGCCCGGAGCATCCTCCCCTGTTGAGCGGG
CGCTGACGGACCCGGCGGC**ATG**ATGCGGCTGCGAGGCTCGGGGATGCTGCGGGACCTGCTCCTGCGGTCGCCCGC
CGGCGTGAGCGXGACTCTGCGGCGGGCACAGCCCTTGGTCACCCTGTGCCGGCGTCCCCGAGGCGGGGGACGGCC
GGCCGCGGGCCCGGCTGCCGCCGCGCGACTCCACCCGTGGTGGGGCGGGGGCGGCTGGCCGGCGGAGCCCCTCGC
GCGGGGCCTGTCCAGCTCTCCTTCGGAGATCTTGCAGGAGCTGGGCAAGGGGAGCACGCATCCCCAGCCCGGGGT
GTCGCCACCCGCTGCCCCGGCGGCGCCCGGCCCCAAGGACGGCCCCGGGGAGACGGACGCGTTTGGCAACAGCGA
GGGCAAAGAGCTGGTGGCCTCAGGTGAAAACAAAATAAAACAGGGTCTGTTACCTAGCTTGGAAGATTTGCTGTT
CTATACAATTGCTGAAGGACAAGAGAAAATACCTGTTCATAAATTTATTACAGCACTCAAATCTACAGGATTGCG
AACGTCTGATCCCAGGTTGAAAGAGTGTATGGATATGTTAAGATTAACTCTTCAAACAACATCAGATGGTGTCAT
GCTAGACAAAGATCTTTTTAAAAAATGTGTTCAGAGCAACATTGTTTTGTTGACACAAGCATTTAGAAGAAAGTT
TGTGATTCCTGACTTTATGTCTTTTACCTCACACATTGATGAGTTATATGAAAGTGCTAAAAAGCAGTCTGGAGG
AAAGGTTGCAGATTATATTCCTCAACTGGCCAAATTCAGTCCCGATTTGTGGGGTGTGTCTGTTTGTACAGCAGA
TGGACAGAGGCATTCTACTGGAGATACCAAAGTTCCCTTCTGTCTTCAGTCCTGTGTAAAACCTTTGAAATATGC
CATTGCTGTTAATGATCTTGGAACTGAATATGTGCATCGATATGTTGGAAAAGAGCCGAGTGGACTAAGATTCAA
CAAACTATTTTTGAATGAAGATGATAAACCACATAATCCTATGGTAAATGCTGGAGCAATTGTTGTGACTTCACT
AATAAAGCAAGGAGTAAATAATGCTGAAAAATTTGACTATGTCATGCAGTTTTTGAATAAGATGGCTGGTAATGA
ATATGTTGGATTCAGTAATGCAACGTTTCAGTCTGAAAGAGAAAGTGGAGATCGAAATTTTGCAATAGGATATTA
CTTAAAAGAAAAGAAGTGTTTTCCAGAAGGCACAGACATGGTTGGTATATTAGACTTCTACTTCCAGCTGTGCTC
CATTGAAGTGACTTGTGAATCAGCCAGTGTGATGGCTGCGACACTGGCTAATGGTGGTTTCTGCCCAATTACTGG
TGAAAGAGTACTGAGCCCTGAAGCAGTTCGAAATACATTGAGTTTGATGCATTCCTGTGGCATGTATGACTTCTC
AGGGCAGTTTGCTTTCCATGTTGGTCTTCCTGCAAAATCTGGAGTTGCTGGGGGCATTCTTTTAGTTGTCCCCAA
TGTTATGGGTATGATGTGCTGGTCTCCTCCTCTGGATAAGATGGGCAACAGTGTTAAGGGAATTCACTTTTGTCA
CGATCTTGTTTCTCTGTGTAATTTCCATAACTATGATAATTTGAGACACTTTGCAAAAAAACTTGATCCTCGAAG
AGAAGGTGGTGATCAAAGGCATTCCTTTGGACCATTGGACTATGAAAGTCTCCAACAAGAACTTGCTTTAAAAGA
GACAGTATGGAAAAAAGTGTCACCTGAGTCAAATGAGGACATCTCTACAACTGTAGTATATAGAATGGAAAGTCT
GGGAGAGAAAAGC**TAA**AGAAATGGGTTCTAGTTTCAGAATGTTTCTTCATTTAATCTTTCAAACATCTTTAGCTT
TTTTTTGCAAGTTATAAATATTTATTTGAGGTATTTTTTGTTCTCAATCTTGGGTGCTGGAGCCATAAAGCTTTT
TTTTCCTTTTAATCTTTGTATAAAGGCAGTAGATTAAGAAGTGCATTTGTTGGTCTTTAAAAAGTATTTACAAGT
ACATAAATTTGCTTTATTTTTAAAAATACAAAAAGGAAAAATTTAAATTTTTTTTGATGTAATTAAAATGTTAAC
TATGTGGTCAGATAATCCCATTTTACAATAGTAACAGAAAATTGTAATTCTTAGTTCTAAAATTCACAAATTAAA
CTCATAAGCTTTGTTGCATTTTGTTTTTTCTTTTCCATTTTTAAAACTAATGTGATGTCTTTAGTGGCAATAGAA
GGTACTTCTATGCTAAATACAAAACTAAAAAGGCAAAATAATGAACCCCAAATTATTTTATTTAAAATAGCAGTG
GATTATAAAATTAGCTTGTGTTTACATTTATGCCATTTTTGGTGATAGATTGGCTTTACATTTTAAAAAATTTAT
TTAAAAATTTATCAAATGCTTTAAAATATGACTCCTACTTTTTTTATTTTGCAACTCCTCTGTTCTGTCAGAGTT
GTTATATACAGGAGTGTCTTATGTTACTAAAACATTCCAGCCAAAGAATTTCAGATGTGAGATAATGATGTTTCA
TCAATAAAAAGCTATAATGGTTAGTTACTCAGAAGGAGAAACAGTGAGTGTCTTCAAGTGAATTGTTCACCTAAA
CAATTTTATTTTCATATTATCCACATAACTTTTTCTATGTTATATTTAAATATGAATGGCAAATTTTGGTTTTTA
GCTTTTACATTTTATTATCTTAATTTTATAAATGCTAATATTTCTTTTGTGATAAGTTATAGCATCTCATAAAGT
TTGTTCTATTTGAAGTTTTTTAGAGTACTTGAGAAATGAATTTAGTCTGCAGGTAGTAAGTATGCTACTAAAATA
CGTTAGATCTAAATCCTTTTATTTGGTATAAAAATGCAATATTGAGAATCAAAACTTGTTTTTAAGAGAACTATA
GATTCTACACAACCTGATTTCAAGTAATTATTCATAGTATTTATAGTTGTCTTGGCAAAGTGATTGTAAAATTCT
GTAGGACCTATTCACACTTCTTCCTTCTTCCATATACTTCTCTGGTTTTCCCCATAGTTCCCCTATAATTTCAAG
TTTGTTGAAACCTGTTAATTTTAGTGGGGGATTAGAAGAAAAACTTGGTGGTTTCTTAGCATGATGGTGTATGTA
TGTGGTAATGGAAAGTCTGTAAAAGTAAATATAGTGTAGXAAAAAAGATTTCACTGAGTATTTTAGATACTAGTG
XAAATAAAGATAGAAAATCTTGATCATAATGTCTTAAGTTTGGGAACTGTGATATTAAGAAAAGAAATTCCCTTC
TAGAGGTGCTGGCCAAAAAGCCTTTTGGGCTAACTTAAGTATTAAATTTATATATTTAAATAATTATATTTTAAG

FIGURE 3906B

TTGTAGAGGATTTTCCCAAGGATTTTATGCTTACTTGAATGTTCTTTGAATGTTCAGATGCATATCCTAAXCTGG
ATGCTTCTCAAGGCCTTACTGCATATTTGTGTTGCATATTTATGTTAGTTGCACCAGGGCCATTTGTAGTTTGGG
CAACCGAATGCCTTAATTGGAAAAAAGGCATTGTGGTTTCCCCTATTATCTAAATTGTTACATTTTACCATTTCA
TTCCGAAGTTGGTTTTACTTTATTAAATGAAGATTTAGTTTTCATATCGTATACXTAGCTGTATAGATTTCAAAA
TTAGGTTGTTAATTTGTGTCACTTACTATTTTTGTGTTGGTAATGCTTTAAATGCATACTTAAAAATGAAGTACT
GTTATCTAAGCTACTGTGTTTAGAAAATGTTAAGAATGAGCAGAAATTTTTATAGAAAAGATAAACGGAAGAAGA
GATAAGATACTGCGAATAGGCCCTCAAACTTAAAAAAGAAAAAACTTTGCCAGTTTTAAGGACATATTTTGATTC
TTTCAGTATCTTAACACCTTTTTAAACAAAGTTCTTGATAGTACCACTATTATTGGGTTTGTTTTATGCCATTAT
TGATTCTTGATATTCAAGCATTTACAATGTAGCATATTTGATTTTCTTTTTTCTTTCTTTTTTTGGCATGTTTTT
AGCATAAATGTTGCATTTTATCTTAGTGTTTGGATGAAAACATTTGTGTTGTTTAGCTTTCATTTGCTTTGTATA
TTTAATAATGTACCTTTATTTTCCAGTATGCCTACATTTTGTATTGCACAATAAATTTATTTTAAGCTGAAAAAA
AAAAAAAAAAAAA

FIGURE 3907

MMRLRGSGMLRDLLLRSPAGVSXTLRRAQPLVTLCRRPRGGGRPAAGPAAAARLHPWWGGGGWPAEPLARGLSSS
PSEILQELGKGSTHPQPGVSPPAAPAAPGPKDGPGETDAFGNSEGKELVASGENKIKQGLLPSLEDLLFYTIAEG
QEKIPVHKFITALKSTGLRTSDPRLKECMDMLRLTLQTTSDGVMLDKDLFKKCVQSNIVLLTQAFRRKFVIPDFM
SFTSHIDELYESAKKQSGGKVADYIPQLAKFSPDLWGVSVCTADGQRHSTGDTKVPFCLQSCVKPLKYAIAVNDL
GTEYVHRYVGKEPSGLRFNKLFLNEDDKPHNPMVNAGAIVVTSLIKQGVNNAEKFDYVMQFLNKMAGNEYVGFSN
ATFQSERESGDRNFAIGYYLKEKKCFPEGTDMVGILDFYFQLCSIEVTCESASVMAATLANGGFCPITGERVLSP
EAVRNTLSLMHSCGMYDFSGQFAFHVGLPAKSGVAGGILLVVPNVMGMMCWSPPLDKMGNSVKGIHFCHDLVSLC
NFHNYDNLRHFAKKLDPRREGGDQRHSFGPLDYESLQQELALKETVWKKVSPESNEDISTTVVYRMESLGEKS

FIGURE 3908

GTGACTGTGGAGTTTGAATTGGGTGGCGGTTGACTGTAGAGCCGCTCTCTCTCACTGGCACAGCGAGGTTTTGCT
CAGCCCTTGTCTCGGGACCGCAGCCTCCGCCGAGCGCCATGGCTCCTAGGAAGGGCAGTAGTCGGGTGGCCAAGA
CCAACTCCTTACGGAGGCGGAAGCTCGCCTCCTTTCTGAAAGACTTCGACCGTGAAGTGGAAATACGAATCAAGC
AAATTGAGTCAGACAGGCAGAACCTCCTCAAGGAGGTGGATAACCTCTACAACATCGAGATCCTGCGGCTCCCCA
AGGCTCTGCGCGAGATGAACTGGCTTGACTACTTCGCCCTTGGAGGAAACAAACAGGCCCTGGAAGAGGCGGCAA
CAGCTGACCTGGATATCACCGAAATAAACAAACTAACAGCAGAAGCTATTCAGACACCCCTGAAATCTGCCAAAA
CACGAAAGGTAATACAGGTAGATGAAATGATAGTGGAAGAGGAAGAAGAAGAAGAAAATGAACGTAAGAATCTTC
AAACTGCAAGAGTCAAAAGGTGTCCTCCATCCAAGAAGAGAACTCAGTCCATACAAGGAAAAGGAAAAGGGAAAA
GGTCAAGCCGTGCTAACACTGTTACCCCAGCCGTGGGCCGATTGGAGGTGTCCATGGTCAAACCAACTCCAGGCC
TGACACCCAGGTTTGACTCAAGGGTCTTCAAGACCCCTGGCCTGCGTACTCCAGCAGCAGGAGAGCGGATTTACA
ACATCTCAGGGAATGGCAGCCCTCTTGCTGACAGCAAAGAGATCTTCCTCACTGTGCCAGTGGGCGGCGGAGAGA
GCCTGCGATTATTGGCCAGTGACTTGCAGAGGCACAGTATTGCCCAGCTGGATCCAGAGGCCTTGGGAAACATTA
AGAAGCTCTCCAACCGTCTCGCCCAAATCTGCAGCAGCATACGGACCCACAAATGAGACACCAAAGTTGACAGGA
TGGACTTTTAATGGGCACTTCTGGGACCCTGAAGAGACTTCTTCCCTTCAGGCTTATTGTTTGAGTGTGAAGTTC
CAGAGCAAGGAGCCATGTTCCTCTAAGGGAATTCAGGAATTCAGACGTGCTAGTCCCACACCAGTTAGGTAGAGC
TGTCTGTTCACCCTCCCATCCCAGCTGATCCCAGTCACTGCTTGCTGGGGCCATGCCATGGAAGCTTCCCATCAG
TCTCCCAGCTGAATCCTCCCTGCTCTCTGAGCTGCTGCCTTTTGCCTCCTGCAACTCAACATCCTCTTCACCCTG
CCCTGCCTGCAGTTGAGGGGGCGAAGAAGAACCCTGTGTTCTCAGGAAGACTGCCTCCACCACCGCTACCCAGAG
AACCTCTGCATCTGGCATTTCTGCTCTCTATGCTTGAGACCGGGAGGTTTAGGCTCAGATAAGTGAGCTCTGGGC
CATGAGAGGGTAGGTCCAGAAGGTGGGGGGAACTGTACAGATCAGCAGAGCAGGACAGTTGGCAGCAGTGACCTC
AGTAGGGAACATGTCCGTCTACCCTCTCGCACTCATGACACCTCCCCCTACCAGCCCTCCTCTTCCTCCTCCTCC
TCCTCCTGTGGGAGGTGGTCAGTGGGACTTAGGGATCTTTCACCTGCTGTGCCCAGTAGTTCTGAAGTCTGCTTG
TGGAGCAGTGTTTTATGTTTATCCCTGTTTACTGAAGACCAAATACTGGTTTGGAGACAACTTCCATGTCTTGCT
CTTCTACCTCCCTAGTTAGTGGAAATTTGGATAAGGGAACTGTAGGGCCCAGATTCTGGAGGTTTTATGTCATTG
GCCACAGAATAACTGTCTCTAAGCTATCCATGGTCCAGTGGTCCCTGCCAAGTCTGTAGACTTCAGAGAGCACTT
CTCTCTTATGGGGTTCATGGGAACAGGGGCGGGTGTGACTTGCTTGGTGGCCTCATTCCATGTGTGCCTGTGCCT
GGGGCATGGACTTTGTTAAGCAGAGTCAGCAGTGAGGTCCTCATTCTCCAGCCAGCCTCTCTGCCCTGGAGAATC
ATGTGCTATGTTCTAAGAATTTGAGAACTAGAGTCCTCATCCCCAGGCTTGAAGGCACATGGCTTTCTCATGTAG
GGCTCTCTGTGGTATTTGTTATTATTTTGCAACAAGACCATTTTAGTAAAACAGTCCTGTTCAAGTTGTATTCTT
TTAAGTTCTTTTATTCTCCTTTCCCTGAGATTTTTGTATATATTGTTCTGAGTAATGGTATCTTTGAGCTGATTG
TTCTAATCAGAGCTGGTACCTACTTTCAATAAATTCTGGTTTTGTGTTTTCTTCTGT

FIGURE 3909

MAPRKGSSRVAKTNSLRRRKLASFLKDFDREVEIRIKQIESDRQNLLKEVDNLYNIEILRLPKALREMNWLDYFA
LGGNKQALEEAATADLDITEINKLTAEAIQTPLKSAKTRKVIQVDEMIVEEEEEEENERKNLQTARVKRCPPSKK
RTQSIQGKGKGKRSSRANTVTPAVGRLEVSMVKPTPGLTPRFDSRVFKTPGLRTPAAGERIYNISGNGSPLADSK
EIFLTVPVGGGESLRLLASDLQRHSIAQLDPEALGNIKKLSNRLAQICSSIRTHK

FIGURE 3910

GCGGCCGGCGGCGTCTCCTCCCGGGACGCTGAGGGGCCCGAGGAGACCGTGAGGCTCTGGCCTGCAGCTCGCGCC
GCCATGGACGCTGCCGAGGTCGAATTCCTCGCCGAGAAGGAGCTGGTTACCATTATCCCCAACTTCAGTCTGGAC
AAGATCTACCTCATCGGGGGGGACCTGGGGCCTTTTAACCCTGGTTTACCCGTGGAAGTGCCCCTGTGGCTGGCG
ATTAACCTGAAACAAAGACAGAAATGTCGCCTGCTCCCTCCAGAGTGGATGGATGTAGAAAAGTTGGAGAAGATG
AGGGATCATGAACGAAAGGAAGAAACTTTTACCCCAATGCCCAGCCCTTACTACATGGAACTTACGAAGCTCCTG
TTAAATCATGCTTCAGACAACATCCCGAAGGCAGACGAAATCCGGACCCTGGTCAAGGATATGTGGGACACTCGT
ATAGCCAAACTCCGAGTGTCTGCTGACAGCTTTGTGAGACAGCAGGAGGCACATGCCAAGCTGGATAACTTGACC
TTGATGGAGATCAACACCAGCGGGACTTTCCTCACACAAGCGCTCAACCACATGTACAAACTCCGCACGAACCTC
CAGCCTCTGGAGAGTACTCAGTCTCAGGACTTCTAGAGAAAGGCCTGGTGCAGGCGGCTTGCTGGGGGATGTGAG
CGCTCAGGATGTGATGAGGTACTCGTGGTTCTGGAGCTCTAGAAACACTTCTGATGCATGAAAAATGTGTGATGG
TGCAAGGAATGGATTCAGGATGTTGTTGGAGAAACAAGTTTGTGATTAGTCCTTAAAACTTAGCTCCCTGGGACA
TTCTTCAATTCCACATCTGTTTCTAGAAACCAGCCCTTTTTCCCCCCACTTTTGAGAAATAAAAAAGCCTTAGGT
AAATAAGTCATTCTCCCTAGCAGAGCCACTTGGGTCTCCTGCATGGAAGCCGTCACACTTGGGCAGGTGTTCAGT
GACTGGTAGGTGTAGATACAGCAGGAGTGGCCATGTGGTCCACGGCTTTTTACCCCTTCTTGATCCTGATTTCTT
GGGCTGAATTTAGACTCTCTCACAGAGGTGGCTCACAGAGAAGGATGGCAGATGGTGCAGCCAACAATGCTGACC
GGTGCTTATCCTCTAAGCCCTGATCCACAATAAAAATGGACCCAACTCAAAAAAAAA

FIGURE 3911

MDAAEVEFLAEKELVTIIPNFSLDKIYLIGGDLGPFNPGLPVEVPLWLAINLKQRQKCRLLPPEWMDVEKLEKMR
DHERKEETFTPMPSPYYMELTKLLLNHASDNIPKADEIRTLVKDMWDTRIAKLRVSADSFVRQQEAHAKLDNLTL
MEINTSGTFLTQALNHMYKLRTNLQPLESTQSQDF

FIGURE 3912

GCGGAGCGAGGCTGGAGGCGCGGGAGGGCAGCGAGAGGTTCGCGGGTGCAGCGCACAGGAGACCATGTCCGGGGG
CAGCAGCTGCAGCCAGACCCCAAGCCGGGCCATCCCCGCCACTCGCCGGGTGGTGCTCGGCGACGGCGTGCAGCT
CCCGCCCGGGGACTACAGCACGACCCCCGGCGGCACGCTCTTCAGCACCACCCCGGGAGGTACCAGGATCATCTA
TGACCGGAAATTCCTGATGGAGTGTCGGAACTCACCTGTGACCAAAACACCCCCAAGGGATCTGCCCACCATTCC
GGGGGTCACCAGCCCTTCCAGTGATGAGCCCCCCATGGAAGCCAGCCAGAGCCACCTGCGCAATAGCCCAGAAGA
TAAGCGGGCGGGCGGTGAAGAGTCACAGTTTGAGATGGACATTTAAAGCACCAGCCATCGTGTGGAGCACTACCA
AGGGGCCCCTCAGGGCCTTCCTGGGAGGAGTCCCACCAGCCAGGCCTTATGAAAGTGATCATACTGGGCAGGCGT
TGGCGTGGGGTCGGACACCCCAGCCCTTTCTCCCTCACTCAGGGCACCTGCCCCCTCCTCTTCGTGAACACCAGC
AGATACCTCCTTGTGCCTCCACTGATGCAGGAGCTGCCACCCCAAGGGGAGTGACCCCTGCCAGCACACCCTGCA
GCCAAGGGCCAGGAAGTGGACAAGAACGAACCCTTCCTTCCGAATGATCAGCAGTTCCAGCCCCTCGCTGCTGGG
GGCGCAACCACCCCTTCCTTAGGTTGATGTGCTTGGGAAAGCTCCCTCCCCCTCCTTCCCCAAGAGAGGAAATAA
AAGCCACCTTCGCCCTAGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3913

MSGGSSCSQTPSRAIPATRRVVLGDGVQLPPGDYSTTPGGTLFSTTPGGTRIIYDRKFLMECRNSPVTKTPPRDL
PTIPGVTSPSSDEPPMEASQSHLRNSPEDKRAGGEESQFEMDI

FIGURE 3914

AAGATCTAAAAACGGACATCTCCACCGTGGGTGGCTCCTTTTTCTTTTTCTTTTTTTCCCACCCTTCAGGAAGTG
GACGTTTCGTTATCTTCTGATCCTTGCACCTTCTTTTGGGGAAACGGGGCCCTTCTGCCCAGATCCCCTCTCTTT
TCTCGGAAAACAAACTACTAAGTCGGCATCCGGGGTAACTACAGTGGAGAGGGTTTCCGCGGAGACGCGCCGCCG
GACCCTCCTCTGCACTTTGGGGAGGCGTGCTCCCTCCAGAACCGGCGTTCTCCGCGCGCAAATCCCGGCGACGCG
GGGTCGCGGGGTGGCCGCCGGGGCAGCCTCGTCTAGCGCGCGCCGCGCAGACGCCCCCGGAGTCGCCAGCTACCG
CAGCCCTCGCCGCCCAGTGCCCTTCGGCCTCGGGGCGGGCGCCTGCGTCGGTCTCCGCGAAGCGGGAAAGCGCGG
CGGCCGCCGGGATTCGGGCGCCGCGGCAGCTGCTCCGGCTGCCGGCCGGCGGCCCCGCGCTCGCCCGCCCCGCTT
CCGCCCGCTGTCCTGCTGCACGAACCCTTCCAACTCTCCTTTCCTCCCCCACCCTTGAGTTACCCCTCTGTCTTT
CCTGCTGTTGCGCGGGTGCTCCCACAGCGGAGCGGAGATTACAGAGCCGCCGGGATGCCCCAACTCTCCGGAGGA
GGTGGCGGCGGCGGGGGGGACCCGGAACTCTGCGCCACGGACGAGATGATCCCCTTCAAGGACGAGGGCGATCCT
CAGAAGGAAAAGATCTTCGCCGAGATCAGTCATCCCGAAGAGGAAGGCGATTTAGCTGACATCAAGTCTTCCTTG
GTGAACGAGTCTGAAATCATCCCGGCCAGCAACGGACACGAGGTGGCCAGACAAGCACAAACCTCTCAGGAGCCC
TACCACGACAAGGCCAGAGAACACCCCGATGACGGAAAGCATCCAGATGGAGGCCTCTACAACAAGGGACCCTCC
TACTCGAGTTATTCCGGGTACATAATGATGCCAAATATGAATAACGACCCATACATGTCAAATGGATCTCTTTCT
CCACCCATCCCGAGAACATCAAATAAAGTGCCCGTGGTGCAGCCATCCCATGCGGTCCATCCTCTCACCCCCCTC
ATCACTTACAGTGACGAGCACTTTTCTCCAGGATCACACCCGTCACACATCCCATCAGATGTCAACTCCAAACAA
GGCATGTCCAGACATCCTCCAGCTCCTGATATCCCTACTTTTTATCCCTTGTCTCCGGGTGGTGTTGGACAGATC
ACCCCACCTCTTGGCTGGCAAGGTCAGCCTGTATATCCCATCACGGGTGGATTCAGGCAACCCTACCCATCCTCA
CTGTCAGTCGACACTTCCATGTCCAGGTTTTCCCATCATATGATTCCCGGTCCTCCTGGTCCCCACACAACTGGC
ATCCCTCATCCAGCTATTGTAACACCTCAGGTCAAACAGGAACATCCCCACACTGACAGTGACCTAATGCACGTG
AAGCCTCAGCATGAACAGAGAAAGGAGCAGGAGCCAAAAAGACCTCACATTAAGAAGCCTCTGAATGCTTTTATG
TTATACATGAAAGAAATGAGAGCGAATGTCGTTGCTGAGTGTACTCTAAAAGAAAGTGCAGCTATCAACCAGATT
CTTGGCAGAAGGTGGCATGCCCTCTCCCGTGAAGAGCAGGCTAAATATTATGAATTAGCACGGAAAGAAAGACAG
CTACATATGCAGCTTTATCCAGGCTGGTCTGCAAGAGACAATTATGGTAAGAAAAAGAAGAGGAAGAGAGAGAAA
CTACAGGAATCTGCATCAGGTACAGGTCCAAGAATGACAGCTGCCTACATCTGAAACATGGTGGAAAACGAAGCT
CATTCCCAACGTGCAAAGCCAAGGCAGCGACCCCAGGACCTCTTCTGGAGATGGAAGCTTGTTGAAAACCCAGAC
TGTCTCCACGGCCTGCCCAGTCGACGCCAAAGGAACACTGACATCAATTTTACCCTGAGGTCACTGCTAGAGACG
CTGATCCATAAAGACAATCACTGCCAACCCCTCTTTCGTCTACTGCAAGAGCCAAGTTCCAAAATAAAGCATAAA
AAGGTTTTTTAAAAGGAAATGTAAAAGCACATGAGAATGCTAGCAGGCTGTGGGGCAGCTGAGCAGCTTTTCTCC
CCCCATATCTGCGTGCACTTCCCAGAGCATCTTGCATCCAAACCTGTAACCTTTCGGCAAGGACGGTAACTTGGC
TGCATTTGCCTGTCATGCGCAACTGGAGCCAGCAACCAGCTATCCATCAGCACCCCAGTGGAGGAGTTCATGGAA
GAGTTCCCTCTTTGTTTCTGCTTCATTTTTCTTTCTTTTCTTTTCTCCTAAAGCTTTTATTTAACAGTGCAAAAG
GATCGTTTTTTTTTGCTTTTTTAAACTTGAATTTTTTTAATTTACACTTTTTAGTTTTAATTTTCTTGTATATTT
TGCTAGCTATGAGCTTTTAAATAAAATTGAAAGTTCTGGAAAAGTTTGAAATAATGACATAAAAAGAAGCCTTCT
TTTTCTGAGACAGCTTGTCTGGTAAGTGGCTTCTCTGTGAATTGCCTGTAACACATAGTGGCTTCTCCGCCCTTG
TAAGGTGTTCAGTAGAGCTAAATAAATGTAATAGCCAAACCCCACTCTGTTGGTAGCAATTGGCAGCCCTATTTC
AGTTTATTTTTTCTTCTGTTTTCTTCTTTTCTTTTTTTAAACAGTAAACCTTAACAGATGCGTTCAGCAGACTGG
TTTGCAGTGAATTTTCATTTCTTTCCTTATCACCCCCTTGTTGTAAAAAGCCCAGCACTTGAATTGTTATTACTT
TAAATGTTCTGTATTTGTATCTGTTTTTATTAGCCAATTAGTGGGATTTTATGCCAGTTGTTAAAATGAGCATTG
ATGTACCCATTTTTTAAAAAAGCAAGCACAGCCTTTGCCCAAAACTGTCATCCTAACGTTTGTCATTCCAGTTTG
AGTTAATGTGCTGAGCATTTTTTTAAAAGAAGCTTTGTAATAAAACATTTTTAAAAATTGTCATTTAAAAAAAAA
AAAAAAAAA

FIGURE 3915

MPQLSGGGGGGGGDPELCATDEMIPFKDEGDPQKEKIFAEISHPEEEGDLADIKSSLVNESEIIPASNGHEVARQ
AQTSQEPYHDKAREHPDDGKHPDGGLYNKGPSYSSYSGYIMMPNMNNDPYMSNGSLSPPIPRTSNKVPVVQPSHA
VHPLTPLITYSDEHFSPGSHPSHIPSDVNSKQGMSRHPPAPDIPTFYPLSPGGVGQITPPLGWQGQPVYPITGGF
RQPYPSSLSVDTSMSRFSHHMIPGPPGPHTTGIPHPAIVTPQVKQEHPHTDSDLMHVKPQHEQRKEQEPKRPHIK
KPLNAFMLYMKEMRANVVAECTLKESAAINQILGRRWHALSREEQAKYYELARKERQLHMQLYPGWSARDNYGKK
KKRKREKLQESASGTGPRMTAAYI

FIGURE 3916

CTCGCCGAGATGACCTGGGCACCTCTGCGTTGAATCGGCAAATACTGATCAAGCCGCATTTATTCTGCTCTCAGG
AACTCTAAGTCTAGCAGAGAAGATGAGGCGGTAGAAGTTCATCAATGGCTTGGCTGGAGGACAAGCAAATTGAGG
ACATTGGCAACGGAGTGATCAAAATGATAGATCATGAGGCCTAAAATGAATAAGGAAAGAAGAGAAGTGGCAGAG
GCTGAGAACAGAAAGAGAGGGTGGAGGGGCTGTAAATCTTGAAGATTAGGGTATAATATGAGTATATGGGTAAGA
ATTGGAAGAATTGTGTAGGAGGCAGTAGTCAAAAAGTAGAAGCAGTTTGGAAGAGTAGTTACAAATATCAAGAGC
CAGGTGGCTAAAAGGTGGAGCTATAGGTCATTGAAGCTCAAGAAACTGAGTCTCTAGGGCATTGGTTAAGTCATC
TGTCTAGACTTCAAAGTTGTCTAGGATGATAATTCAGAAGACTGATCTGTGCCAAAGTCACAGGTTTTTCACGAC
TGAAAACAACATAGCAAAATAAGCCAAG**ATG**TCTGTGGATCCAATGACCTACGAGGCCCAGTTCTTTGGCTTCAC
GCCACAAACGTGCATGCTTCGGATCTACATTGCATTTCAAGACTACCTATTTGAAGTGATGCAGGCCGTTGAACA
GGTTATTCTGAAGAAGCTGGATGGCATCCCAGACTGTGACATTAGCCCAGTGCAGATTCGCAAATGCACAGAGAA
GTTTCTTTGCTTCATGAAAGGACATTTTGATAACCTTTTTAGCAAAATGGAGCAACTGTTTTTGCAGCTGATTTT
ACGTATTCCCTCAAACATCTTGCTTCCTGAAGATAAATGTAAGGAGACACCTTATAGTGAGGAAGATTTTCAGCA
TCTCCAGAAAGAAATTGAACAGTTACAGGAGAAGTACAAGACTGAATTATGTACTAAGCAGGCCCTTCTTGCAGA
ATTAGAAGAGCAAAAAATTGTTCAGGCCAAACTCAAACAGACGTTGACTTTCTTTGATGAGCTTCATAATGTTGG
CAGAGATCATGGGACTAGTGATTTTAGGGAGAGTTTAGTATCCCTGGTTCAGAACTCCAGAAAACTACAGAACAT
TAGAGACAATGTGGAAAAGGAATCGAAACGACTGAAAATATCT**TAA**TTGCTCAGTAGTCAAAAGGAGGAGCCTGT
CAAAAAGTAGAATCATAAGGACTGTTCAAACCATAAGGACTGTTCAAATCATACCAGTGACTGTTCAAACCAACC
ATACTTTTTATTAGATTTGCTTTGTCAACTCTTTCTTGTATTCTGTGTTTTCCTCTTTTTTGGTCCACTTTGCTG
AGGTATGAAGTGTACTACTTTGAACTAGGCTGAAGCATCTGAGTCTTCTAATAAGTGGGAAGGGATCCAACAAAG
AAGCCATGACCAGTTAAAGATATTTGCAGAGTTACACCTTGGTCATAAGTCCTTTGTGACCTTGATTATTTTGGC
TTACTCTTTGGATGAGACCAGACAAGAAAAGGATTAAACGGGTGGCTCCTTTAATATTATTATTATTGTTTTTGA
GACAAGGTCCCTTTCTGTCACCCAGGTTAGAGTAGATTTCAGTGGCACAATCTTGGCTCACTGCAACCTCTGTGT
CCTGGGCTCAAGTGATCCTCCTGCCTCAGCCTCCCAAGTAGCTAGGACCACAGGTGCGTGTCACCATGCTTGGCT
AATTTTTTTGCAGAAACGAGGCCTCACTATATTGTCCAGGCTGAGTGGCTCTTTTATTAACCAGTCATTACACTG
CGGAACAGCCAACATAGAGTACTTGCTCTCGTCCTGTGAATTTTCTTTCATGAGGGAGTCAATATGTAGTGGAAA
GAAGCATGTAGCAAAAAAGACAACCTTGATCTTTAATAAAAAAGAAGTTGGTTTATTTCCAAAATAAATCCCCTG
ACAAAAAACCTGGTGATGTTAAGCAATTGACTGTCTTAGAGTCCAGCAGAAGACCTTAGACAAAAAAAGCAGAAC
CCACTGGAGTAGAAAAGGAAGCATGTAGCATATACTCAGTAGTGAAATTTAATTTTACTGACTGTTAGGTATCTA
TGCCAATTTGTTTTCATACTTCAGTTGGTTTTGGAATCTGCCTTATACCTAATATTTATTTATTCACACTCATAA
GCATCAAATATTTAATGCCCTCAGTGGGAAATTTGTGTTTAAACTCAATGGAATCTAATATTTCTTTATGTCGTT
AGTCCCTGTAAAATGTTAGGTCACCCAAGGAAAGGGGAGAAATAGCAATGGTTGTTCCTAAGGTATTGCTTGCCC
TCCATGTCTTCCTAAAGAGCAGAACTTGGAGTTTCTCCTTTATGTAGAGAAGAAGTAACTTAGGGTGTATTTGCA
ATGAAATATTCATAGATATTGAAAGCTTGTGTTTACATGAAATATGTTTATTATCAAGAAGTCCTTTTTCCAATT
CTGTACATTAAATATATGTGTTTTAAAAAAAAAA

FIGURE 3917

MSVDPMTYEAQFFGFTPQTCMLRIYIAFQDYLFEVMQAVEQVILKKLDGIPDCDISPVQIRKCTEKFLCFMKGHF
DNLFSKMEQLFLQLILRIPSNILLPEDKCKETPYSEEDFQHLQKEIEQLQEKYKTELCTKQALLAELEEQKIVQA
KLKQTLTFFDELHNVGRDHGTSDFRESLVSLVQNSRKLQNIRDNVEKESKRLKIS

FIGURE 3918

GGCACGAGGATTTCCTCATCGTCAAGCTTTGTTCCTCGTGGGGGCTAGAAATCTCTTTCCAGTTCCAGATTGTGA
AGGGTTCCTGAGTAAGCAGCGTGTCTCCATCCCCCTCTCTAGGGGCTCTTGGATGGACCTTGCACTCTAGAAGGG
ACAATGGACTTCTGGCTTTGGCCACTTTACTTCCTGCCAGTATCGGGGGCCCTGAGGATCCTCCCAGAAGTAAAG
GTAGAGGGGGAGCTGGGCGGATCAGTTACCATCAAGTGCCCACTTCCTGAAATGCATGTGAGGATATATCTGTGC
CGGGAGATGGCTGGATCTGGAACATGTGGTACCGTGGTATCCACCACCAACTTCATCAAGGCAGAATACAAGGGC
CGAGTTACTCTGAAGCAATACCCACGCAAGAATCTGTTCCTAGTGGAGGTAACACAGCTGACAGAAAGTGACAGC
GGAGTCTATGCCTGCGGAGCGGGCATGAACACAGACCGGGGAAAGACCCAGAAAGTCACCCTGAATGTCCACAGT
GAATACGAGCCATCATGGGAAGAGCAGCCAATGCCTGAGACTCCAAAATGGTTTCATCTGCCCTATTTGTTCCAG
ATGCCTGCATATGCCAGTTCTTCCAAATTCGTAACCAGAGTTACCACACCAGCTCAAAGGGGCAAGGTCCCTCCA
GTTCACCACTCCTCCCCCACCACCCAAATCACCCACCGCCCTCGAGTGTCCAGAGCATCTTCAGTAGCAGGTGAC
AAGCCCCGAACCTTCCTGCCATCCACTACAGCCTCAAAAATCTCAGCTCTGGAGGGGCTGCTCAAGCCCCAGACG
CCCAGCTACAACCACCACACCAGGCTGCACAGGCAGAGAGCACTGGACTATGGCTCACAGTCTGGGAGGGAAGGC
CAAGGATTTCACATCCTGATCCCGACCATCCTGGGCCTTTTCCTGCTGGCACTTCTGGGGCTGGTGGTGAAAAGG
GCCGTTGAAAGGAGGAAAGCCCTCTCCAGGCGGGCCCGCCGACTGGCCGTGAGGATGCGCGCCCTGGAGAGCTCC
CAGAGGCCCCGCGGGTCGCCGCGACCGCGCTCCCAAAACAACATCTACAGCGCCTGCCCGCGGCGCGCTCGTGGA
GCGGACGCTGCAGGCACAGGGGAGGCCCCCGTTCCCGGCCCCGGAGCGCCGTTGCCCCCCGCCCCGCTGCAGGTG
TCTGAATCTCCCTGGCTCCATGCCCCATCTCTGAAGACCAGCTGTGAATACGTGAGCCTCTACCACCAGCCTGCC
GCCATGATGGAGGACAGTGATTCAGATGACTACATCAATGTTCCTGCCTGACAACTCCCCAGCTATCCCCCAACC
CCAGGCTCGGACTGTGGTGCCAAGGAGTCTCATCTATCTGCTGATGTCCAATACCTGCTTCATGTGTTCTCAGAG
CCCTCATCACTTCCCATGCCCCATCTCGACTCCCATCCCCATCTATCTGTGCCCTGAGCATGGCTCTGCCCCCAG
GTCGTCTTGCACACCTTGGCAGCCCCCTGTAGTTGACAGGTAAGCTGTAGGCATGTAGAGCAATTGTCCCAATGC
CACTTGCTTCCTTTCCAAGCCGTCGAACAGACTGTGGGATTTGCAGAGTGTTTCTTCCATGTCTTTGACCACAGG
GTTGTTGCTGCCCAGGCTCTAGATCACATGGCATCAGGCTGGGGCAGAGGCATAGCTATTGTCTCGGGCATCCTT
CCCAGGGTTGGGTCTTACACAAATAGAAGGCTCTTGCTCTGAGTTATGTGACATGCCTCAGCCCCATGGACTAAG
CAGGGGTCTGGTATAAAAACACTCCTGGAAACGCCTTTGCCCTGATCCAAATGTTAGCACTTGCTAGTGAACGTC
TACTTATCTCAAGTTCTATGCTAAAGGCAATTTATCTTGATGTGATGATAAACCAAACTTATTAGCAAGATATGC
ATATATATCAAAAAAAAAAAAAAAAA

FIGURE 3919

MDFWLWPLYFLPVSGALRILPEVKVEGELGGSVTIKCPLPEMHVRIYLCREMAGSGTCGTVVSTTNFIKAEYKGR
VTLKQYPRKNLFLVEVTQLTESDSGVYACGAGMNTDRGKTQKVTLNVHSEYEPSWEEQPMPETPKWFHLPYLFQM
PAYASSSKFVTRVTTPAQRGKVPPVHHSSPTTQITHRPRVSRASSVAGDKPRTFLPSTTASKISALEGLLKPQTP
SYNHHTRLHRQRALDYGSQSGREGQGFHILIPTILGLFLLALLGLVVKRAVERRKALSRRARRLAVRMRALESSQ
RPRGSPRPRSQNNIYSACPRRARGADAAGTGEAPVPGPGAPLPPAPLQVSESPWLHAPSLKTSCEYVSLYHQPAA
MMEDSDSDDYINVPA

FIGURE 3920

GGCACGAGGATTTCCTCATCGTCAAGCTTTGTTCCTCGTGGGGGCTAGAAATCTCTTTCCAGTTCCAGATTGTGA
AGGGTTCCTGAGTAAGCAGCGTGTCTCCATCCCCCTCTCTAGGGGCTCTTGGATGGACCTTGCACTCTAGAAGGG
ACAATGGACTTCTGGCTTTGGCCACTTTACTTCCTGCCAGTATCGGGGGCCCTGAGGATCCTCCCAGAAGTAAAG
GTAGAGGGGGAGCTGGGCGGATCAGTTACCATCAAGTGCCCACTTCCTGAAATGCATGTGAGGATATATCTGTGC
CGGGAGATGGCTGGATCTGGAACATGTGGTACCGTGGTATCCACCACCAACTTCATCAAGGCAGAATACAAGGGC
CGAGTTACTCTGAAGCAATACCCACGCAAGAATCTGTTCCTAGTGGAGGTAACACAGCTGACAGAAAGTGACAGC
GGAGTCTATGCCTGCGGAGCGGGCATGAACACAGACCGGGGAAAGACCCAGAAAGTCACCCTGAATGTCCACAGT
GAATACGAGCCATCATGGGAAGAGCAGCCAATGCCTGAGACTCCAAAATGGTTTCATCTGCCCTATTTGTTCCAG
ATGCCTGCATATGCCAGTTCTTCCAAATTCGTAACCAGAGTTACCACACCAGCTCAAAGGGGCAAGGTCCCTCCA
GTTCACCACTCCTCCCCCACCACCCAAATCACCCACCGCCCTCGAGTGTCCAGAGCATCTTCAGTAGCAGGTGAC
AAGCCCCGAACCTTCCTGCCATCCACTACAGCCTCAAAAATCTCAGCTCTGGAGGGGCTGCTCAAGCCCCAGACG
CCCAGCTACAACCACCACACCAGGCTGCACAGGCAGAGAGCACTGGACTATGGCTCACAGTCTGGGAGGGAAGGC
CAAGGATTTCACATCCTGATCCCGACCATCCTGGGCCTTTTCCTGCTGGCACTTCTGGGGCTGGTGGTGAAAAGG
GCCGTTGAAAGGAGGAAAGCCCTCTCCAGGCGGGCCCGCCGACTGGCCGTGAGGATGCGCGCCCTGGAGAGCTCC
CAGAGGCCCCGCGGGTCGCCGCGACCGCGCTCCCAAAACAACATCTACAGCGCCTGCCCGCGGCGCGCTCGTGGA
GCGGACGCTGCAGGCACAGGGGAGGCCCCCGTTCCCGGCCCCGGAGCGCCGTTGCCCCCCGCCCCGCTGCAGGTG
TCTGAATCTCCCTGGCTCCATGCCCCATCTCTGAAGACCAGCTGTGAATACGTGAGCCTCTACCACCAGCCTGCC
GCCATGATGGAGGACAGTGATTCAGATGACTACATCAATGTTCCTGCCTGACAACTCCCCAGCTATCCCCCAACC
CCAGGCTCGGACTGTGGTGCCAAGGAGTCTCATCTATCTGCTGATGTCCAATACCTGCTTCATGTGTTCTCAGAG
CCCTCATCACTTCCCATGCCCCATCTCGACTCCCATCCCCATCTATCTGTGCCCTGAGCATGGCTCTGCCCCCAG
GTCGTCTTGCACACCTTGGCAGCCCCCTGTAGTTGACAGGTAAGCTGTAGGCATGTAGAGCAATTGTCCCAATGC
CACTTGCTTCCTTTCCAAGCCGTCGAACAGACTGTGGGATTTGCAGAGTGTTTCTTCCATGTCTTTGACCACAGG
GTTGTTGCTGCCCAGGCTCTAGATCACATGGCATCAGGCTGGGGCAGAGGCATAGCTATTGTCTCGGGCATCCTT
CCCAGGGTTGGGTCTTACACAAATAGAAGGCTCTTGCTCTGAGTTATGTGACATGCCTCAGCCCCATGGACTAAG
CAGGGGTCTGGTATAAAAACACTCCTGGAAACGCCTTTGCCCTGATCCAAATGTTAGCACTTGCTAGTGAACGTC
TACTTATCTCAAGTTCTATGCTAAAGGCAATTTATCTTGATGTGATGATAAACCAAACTTATTAGCAAGATATGC
ATATATATCAAAAAAAAAAAAAAAAA

FIGURE 3921

MDFWLWPLYFLPVSGALRILPEVKVEGELGGSVTIKCPLPEMHVRIYLCREMAGSGTCGTVVSTTNFIKAEYKGR
VTLKQYPRKNLFLVEVTQLTESDSGVYACGAGMNTDRGKTQKVTLNVHSEYEPSWEEQPMPETPKWFHLPYLFQM
PAYASSSKFVTRVTTPAQRGKVPPVHHSSPTTQITHRPRVSRASSVAGDKPRTFLPSTTASKISALEGLLKPQTP
SYNHHTRLHRQRALDYGSQSGREGQGFHILIPTILGLFLLALLGLVVKRAVERRKALSRRARRLAVRMRALESSQ
RPRGSPRPRSQNNIYSACPRRARGADAAGTGEAPVPGPGAPLPPAPLQVSESPWLHAPSLKTSCEYVSLYHQPAA
MMEDSDSDDYINVPA

FIGURE 3922

AAAATGGTGGTGTTCGGGTATGAGGCTGGGACTAAGCCAAGGGATTCAGGTGTGGTGCCGGTGGGAACTGAGGAA
GCGCCCAAGGAAATGAAACACGATTTCCAAAATGAACTTAATCTTTCATGAGAAACTGAGGATAGAGATGTCAAT
AAGCAGCCACTGTTTCCACCTCCCCACCTGAAGAGCTAGGAGCGCCCAAGCTTTCGGTTCTGAGCTCGGACTAAG
CCATGTGGATTCAGGTGTGGATGACGGTGGGAACTGAGGAAGCGCCCAAGGTTTTCAAGATGGCAGCATCTATGC
ATGGTCAGCCCAGTCCTTCTCTAGAAGATGCAAAACTCAGAAGACCAATGGTCATAGAAATCATAGAAAAAAATT
TTGACTATCTTAGAAAAGAAATGACACAAAATATATATCAAATGGCGACATTTGGAACAACAGCTGGTTTCTCTG
GAATATTCTCAAACTTCCTGTTCAGACGCTGCTTCAAGGTTAAACATGATGCTTTGAAGACATATGCATCATTGG
CTACACTTCCATTTTTGTCTACTGTTGTTACTGACAAGCTTTTTGTAATTGATGCTTTGTATTCAGATAATATAA
GCAAGGAAAACTGTGTTTTCAGAAGCTCACTGATTGGCATAGTTTGTGGTGTTTTCTATCCCAGTTCTTTGGCTT
TTACTAAAAATGGACGCCTGGCAACCAAGTATCATACCGTTCCACTGCCACCAAAAGGAAGGGTTTTAATCCATT
GGATGACGCTTTGTCAAACACAAATGAAATTAATGGCGATTCCTCTAGTCTTTCAGATTATGTTTGGAATATTAA
ATGGTCTATACCATTATGCAGTATTTGAAGAGACACTTGAGAAAACTATACATGAAGAGTAACCAAAAAAATGAA
TGGTTGCTAACTTAGCAAAATGAAGTTTCTATAAAGAGGACTCAGGCATTGCTGAAAGAGTTAAAAGTAACTGTG
AACAAATAATTTGTTCTGTGCCTTTTGCCTGGTATATAGCAAATACTCAAAAAGTATTCAATAATTCAATCAATA
AATATAAGTTTCATCTTACACGTAAGATACAGGTCTTATCTCCTGATGGTGTGTCCATTTTGCCTGGTATATAAC
AGATAATAAATATCCAGTGTCAATAAATGTAACAATAAAAAAAAAAA

FIGURE 3923

MWIQVWMTVGTEEAPKVFKMAASMHGQPSPSLEDAKLRRPMVIEIIEKNFDYLRKEMTQNIYQMATFGTTAGFSG
IFSNFLFRRCFKVKHDALKTYASLATLPFLSTVVTDKLFVIDALYSDNISKENCVFRSSLIGIVCGVFYPSSLAF
TKNGRLATKYHTVPLPPKGRVLIHWMTLCQTQMKLMAIPLVFQIMFGILNGLYHYAVFEETLEKTIHEE

FIGURE 3924

GAGGAACATGATTTTATTGGTTCTTTCAGTTCACCACATCCGACTCGCGTCTCGGCCCTGGCCCGCCTTGCGGAC
CTTAAAGCAGTCAGTCCAGGGTTTGGGGGAAACGTGCTCACCCGACGGCAGCTCACAGGACCCCGGAGAGTCCTG
GCATGGTATCTCGGTCCGGACTCTCCGCTGGGCCCACGAAGGAGAAAGGCTGCCTCGGATTCCTGCGCCCAAGCC
AAGGTCCGGCGCCCACGGAGGCAAGTCCGGTCTCACGGTGACCTCCCGCTGGCGCCGCCTTCGCCGCCAACCATC
CAGTTCTTCCTCCAGGCCACGTTCTCCTGCGTGGTCGCTGCCTCCTGCAGAGTGGCCAGCAATAGCTGCTGGGTC
CTGGCCGCCTCCTCCCTGCTCCTTGGGTCCTGCAGTGGCATCTCCTGAGGGCAGGAAGGGGAGTTCGCAGGAGCT
CCAGTCCGGGGCTCTCCACCCGCCCACCCTTCCTCGGGACTACCAGTTGCTTCTACCTTTAGCATTTCCTGCTTC
CGCCGCTCTCCCGGGGTCACGATAACGAGGAGCGCGTAGCCCACGCCAGCCCCTGCGCCCAGCATTGCGACTGAG
ATCAGCATTTTCCGCAAGGAATCCATGGCCGCCTGCACAGCCAGCGGAGCGCCCACGGGAGCTCCCCGCAGCCGC
AAGCTGTTGCCGCGCGGTCTCACTACCCCTTGGCGCAGGCTAGAGCGCCCTATAGCAGAAACCATAGATAAGCGG
CCGGCTAGAGAGGACCTGCTCGAGGAAACGTTTGGAATCCGGAGCGCTTGGATCTCAGGTTTAGCTGAGGGGGTT
GAGGTGTCCAAGAAGTGCTGGCACCAAGGGCTGAGCGCGGGGACCCTGTGTCCTCAATTCCGGGGTGGGATTGCT
AGGGGGAGAGTGCGTGTCTTCATGGTTGCCGTGGGTTTTATGATTGCCCATTTTTCTGTCTTCCGACGTTTCCCG
ATCAGTAGAGGCCCGAGCTGTGCTCTGTGGTTTCCTGCAGTCACCCGCGAGTTTTCAACACAGCGCATGGAGGGC
ATCTACACACATACACATCCCTCTCCATCCCCTCAACTCTGGAACAAACACTCAAAGTCAAGTATACTGGTTGGA
GAAATGGGTAATAGTTACTTATCTTTAACATTTATTTTACAAACAACCTATTCCTTTTCTCGTCATGGTACACAC
TTGGTATTGTTTGGGTTTTTTTTTGGTTTTGTTGTTGTTGTTAGTGTGTGGGCGTGGTTTTGTTTGTTTTTGGAG
ACAAGGTCTCGCTCTGTCGCCCAGGGCTGGAGTGCAGTGGCGCGATCATGGCTCACTGAAGCCTCGACTTCCAGG
GCCCAAGCGATCCTCCTGCCTCAACCTCCCGGATAGCTGGGATTACAGGCGTGCACCACCACGCCCGGCTGGTAT
TGCTTTTTGTTTTGCTTCGTTTTCTTTTTTGCTTTTTGAGACAGAGTCTCACTCTGTTGCCCAGCTGGAGTGCAG
TGGCGTGATCTCGGCTCACTGCAAGCTCTGCCTCCCGGGTTCACGCCATTCTCCTGCCTCAGCCTCCCGAGTAGC
TGGGACTACAGGCGCCCGCCACCACGGCCGGCTAATTTTTTGTATTTTTAGTAGAGAAAGAGTTTCACTATGTAG
GTCAGGCTGGTCTCGAACTCCTGACCTCGTGATCCGCCCAATCCGCCCACCTCGGCCTCCCAAAGTGCTGGGATT
ACAGGTGTGAGCCACCGCGCCCGGCTGTTTTGCTTTGTTTTCAACCACTAAAAGGCTGGATTCGTGTAACATACT
GAATTCTGCTTTACAGAAGAAAACACCTCTTAGCTGTGTGACTGATTATAGGCAAGTTCTTGTGCCCCGGTTTCT
GCATCAGAAAATGAAGCTTATAACAACAGTACTTGTCTCACAGTTTTAGGATAATTAAATTAGTTATATGTAAAG
CAATTAAAACAGCTCCTGCCAAAGAGTAAACACCATATAAATATTCATTAAATAACATACAAACATACCAGGTTG
GGAAAAATCAGTAAGCATAGGAGTCAGGAAATTCCAAGTTGGTTATCACAACTCTTGGCCCACAGGGCTTTAATC
CAGGTGCCCTTGTCTCCTACCCTTGTTGCCATCCCAGTGTCTCCAGGGAGTAAGTAGAAATAAAGATCCTATCTC
ACCTCTTGGGCATTTTCCCCTGCCCTGAAAGCGTATAATCGCTTAGCACAGTCGGTGCTTAAGGGGCCAGGCTCC
AAAGAAGATTAAAGGAACAGTTTGTGGGGTGCACTGGGCAGCAGTACTCTCCTCTGAGTTCAATCATCTTGCACT
CTAAGAATCACCACCATGGCCCTTGTGCCAGGGAGAAGCAAGGAGGATGGGCTTTGGACTAGAAATAGCCCAGGC
TCCTCCCAGCATCCAGAAAGTCCCAGGCTGCCCAACCCTCTCTGGGACAGAGGAAAAATTGGCAAGGTTGAAGGT
CACCAGCACATTCAGGATTTCTCTCAAAAGTCCCATCTGCCGTCTATTGTGGTGGAATCCAGTGAGGTGAATGAA
GAGAGTGGGGATCTCCATTTGCCCCATGAGGAGCTGCTGCTGCTCACTGATGGTGAGGAAGAGGATGCTGAGGCC
TTCTTCCAAGACCAAAGTGAAGAGCCAGGCTGGGCTTGGAGCCCACAGGACCCTAGAAGTCCTTTAAGAACATTT
AACGCTGGACTCAGCTGGGGGCAGGACCAGG**ATG**AAGAAGATGCTTGTTGGATTCTTGAGGACACAGCATGTCTG
GAAGCCACCAACCACTGTCCCTTCTGGGACTCAACAGGCTCCCGTGTTTGTAGAAGTGGCTTTGTGGAATATTCC
CATCTCCTGCCTCCTAATAGCTTTGAGGGAGCTGAAGAAGAAGCTGTTCAAACGCCGGCGGGTGTTGAATCGGGA
GCGGCGTCTGAGGCACCGGGTGGTCGGGGCTGTGATAGACCAAGGGCTGATCACGCGGCACCACCTCAAGAAGCG
GGCGTCCAGTGCACGTGCCAACATTACACTGTCAGGGAAGAAGCGCAGAAAACTCCTCCAGCAGATCCGGCTTGC
CCAGAAAGAGAAGACAGCCATGGAAGTGGAAGCCCCTTCAAAGCCAGCCAGGACTAGTGAACCACAGCTCAAAAG
GCAAAAGAAGACAAAAGCCCCCCAGGATGTAGAAATGAAGGACCTTGAAGATGAGAGC**TAA**ACCTCTTCCACTAG
AAGATTCTCAACTGGAGCCAGCCTTCAGACTCAGTGGTTGTTTCAGAGGACTTTGACAAAAGCAAGGCCCCTTTT
CACTCTCCAGATTTCCTCCTACCTAATGGCCTACTGACCTCCCCTAGAGGGATGTCTTTGGGAGGGAAGAAGGTA
CAGAAGAAAGATTGGAGAAGGGCCTCTCTAGCAGTCAACTCCATTTGTAATAAAGCCCTAGCACTCTGAAAAAAA
AAAAAAAAAAAA

FIGURE 3925

MKKMLVGFLRTQHVWKPPTTVPSGTQQAPVFVEVALWNIPISCLLIALRELKKKLFKRRRVLNRERRLRHRVVGA
VIDQGLITRHHLKKRASSARANITLSGKKRRKLLQQIRLAQKEKTAMEVEAPSKPARTSEPQLKRQKKTKAPQDV
EMKDLEDES

FIGURE 3926

GCGCTCCTGCTCTTAGGAAGCCTGGGAAGGACCGGTGTGCTAGGAGATGATCGGGGAAAGCATAGTCCCCTGTCT
GTGGCACCAGACACTCCCGACTGTGCGCTGACTCTCCCCGCCCAGCCAGCAGCCTTTTCCAGAGAGGCTGTGGTC
CATAGCCTCTGTTCGTTTTCACTGCAGGACCAGGCACGAAAGTTAAAACAAA**ATG**AAGATTTTTTCTGAATCTCA
TAAAACAGTGTTTGTTGTGGATCACTGCCCTTATATGGCAGAATCTTGCAGGCAGCATGTCGGGTTTGATATGCT
GGTGAAGAATAGAACCCAAGGAATCATTCCTTTGGCCCCCATATCTAAATCATTGTGGCCTTGCTCAGTAGAATC
TTCCATGGAATATTGTAGAATAATGTATGATATATTTCCTTTCAAAAAGCCGGTGAATTTTATTGTGAGTGACTC
TGGAGCACATGTTTTAAATTCTTGGACTCAAGAAGACCAAAATTTACAGGAGCTAATGGCAGCATTAGCCGCTGT
TGGGCCTCCTAATCCTCGGGCAGATCCAGAGTGCTGCAGTATTCTGCATGGCCTTGTTGCAGCAGTGGAAACTCT
CTGCAAAATTACTGAATACCAACATGAGGCTCGTACTCTACTCATGGAGAATGCAGAACGTGTTGGAAATAGAGG
ACGAATAATCTGTATTACTAATGCAAAAAGTGATAGTCATGTGCGAATGCTTGAAGACTGTGTCCAGGAAACGAT
TCATGAACATAACAAGCTTGCTGCAAATTCAGATCATCTCATGCAGATTCAAAAATGTGAGTTGGTCTTGATCCA
CACCTACCCAGTTGGTGAAGACAGCCTTGTATCTGATCGTTCTAAAAAAGAGTTGTCCCCGGTTTTAACCAGTGA
AGTTCATAGTGTTCGTGCAGGACGGCATCTTGCTACCAAATTGAATATTTTAGTACAGCAACATTTTGACTTGGC
TTCAACTACTATTACAAATATTCCAATGAAGGAAGAACAGCATGCTAACACATCTGCCAATTATGATGTGGAGCT
ACTTCATCACAAAGATGCACATGTAGATTTCCTGAAAAGTGGTGATTCGCATCTAGGTGGCGGCAGTCGAGAAGG
CTCGTTTAAAGAAACAATAACATTAAAGTGGTGTACACCAAGGACAAATAACATTGAATTACACTATTGTACTGG
AGCTTATCGGATTTCACCTGTAGATGTAAATAGTAGACCTTCCTCCTGCCTTACTAATTTTCTTCTAAATGGTCG
TTCTGTTTTATTGGAACAACCACGAAAGTCAGGTTCTAAAGTCATTAGTCATATGCTTAGTAGCCATGGAGGAGA
GATTTTTTTGCACGTCCTTAGCAGTTCTCGATCCATTCTAGAAGATCCACCTTCAATTAGTGAAGGATGTGGAGG
AAGAGTTACAGACTACCGGATTACAGATTTTGGTGAATTTATGAGGGAAAACAGATTAACTCCTTTTCTAGACCC
CAGATATAAAATCGATGGAAGTCTTGAGGTCCCTTTGGAACGAGCAAAAGATCAGTTAGAAAAACATACCCGTTA
CCGGCCTATGATCATTTCACAAACCACCATTTTTAACATGCAAGCGGTAGTTCCATTAGCCAGTGTTATTGTGAA
AGAATCTCTGACAGAAGAAGATGTGTTAAACTGTCAAAAAACAATATACAACTTAGTTGATATGGAAAGAAAAAA
TGATCCTCTACCTATTTCCACAGTTGGTACAAGAGGAAAGGGCCCTAAAAGAGATGAACAATACCGTATCATGTG
GAATGAATTAGAAACCCTTGTCAGAGCCCATATCAACAACTCAGAGAAACATCAAAGAGTCTTGGAATGTCTGAT
GGCATGCAGGAGCAAACCCCCAGAAGAGGAAGAACGAAAGAAACGAGGAAGAAAGAGGGAAGACAAAGAGGACAA
GTCAGAGAAAGCAGTGAAAGATTATGAACAGGAAAAGTCTTGGCAAGACTCAGAGAGATTAAAAGGAATCTTAGA
GCGTGGAAAAGAAGAATTGGCTGAAGCTGAGATTATAAAAGATTCGCCTGATTCCCCAGAACCTCCAAACAAAAA
ACCCCTTGTTGAAATGGATGAAACTCCACAAGTGGAAAAATCAAAAGGGCCAGTGTCGTTATTATCCTTGTGGAG
TAATAGAATCAATACTGCCAATTCCAGAAAACATCAGGAATTTGCTGGACGTTTGAACTCTGTTAATAACAGAGC
TGAACTATATCAACATCTTAAAGAGGAAAATGGGATGGAGACAACAGAAAATGGAAAAGCCAGCCGGCAG**TGA**AG
AGTGACTTGAAGAACTAAATTTAGCATATTGCAAAAATATTTTGTGCGGAATTCGATATAAGTACTTTTACAGCA
GGATGGTATAGTTATGTTGCCTGGACTGGTTTTTACATTTTTAAAATATTTCAGCTGTCATTTTTGTACTAATTA
TAAAATTGGCACATAATTCAAAAATATACATTTGAGATGATTTGTCCTCCCAAATTATACAAGTTTATTTTATGG
TATAAAGTGTTCTCTCTGGAAATGTTTTTAAAAAAATTCTTAGGCTTCTCTTTGCGAAATAAAACTATTGAAATA
TTTGAAATGC

FIGURE 3927

MKIFSESHKTVFVVDHCPYMAESCRQHVGFDMLVKNRTQGIIPLAPISKSLWPCSVESSMEYCRIMYDIFPFKKP
VNFIVSDSGAHVLNSWTQEDQNLQELMAALAAVGPPNPRADPECCSILHGLVAAVETLCKITEYQHEARTLLMEN
AERVGNRGRIICITNAKSDSHVRMLEDCVQETIHEHNKLAANSDHLMQIQKCELVLIHTYPVGEDSLVSDRSKKE
LSPVLTSEVHSVRAGRHLATKLNILVQQHFDLASTTITNIPMKEEQHANTSANYDVELLHHKDAHVDFLKSGDSH
LGGGSREGSFKETITLKWCTPRTNNIELHYCTGAYRISPVDVNSRPSSCLTNFLLNGRSVLLEQPRKSGSKVISH
MLSSHGGEIFLHVLSSSRSILEDPPSISEGCGGRVTDYRITDFGEFMRENRLTPFLDPRYKIDGSLEVPLERAKD
QLEKHTRYRPMIISQTTIFNMQAVVPLASVIVKESLTEEDVLNCQKTIYNLVDMERKNDPLPISTVGTRGKGPKR
DEQYRIMWNELETLVRAHINNSEKHQRVLECLMACRSKPPEEEERKKRGRKREDKEDKSEKAVKDYEQEKSWQDS
ERLKGILERGKEELAEAEIIKDSPDSPEPPNKKPLVEMDETPQVEKSKGPVSLLSLWSNRINTANSRKHQEFAGR
LNSVNNRAELYQHLKEENGMETTENGKASRQ

FIGURE 3928

GAAGCAGCAGGTACCCCCTCCACATCCCTAGGGCTCTGTGATGTAGGCAGAGGCCCGTGGGAGTCAGCATGCCGC
GTGGCTGGGCCGCCCCCTTGCTCCTGCTGCTGCTCCAGGGAGGCTGGGGCTGCCCCGACCTCGTCTGCTACACCG
ATTACCTCCAGACGGTCATCTGCATCCTGGAAATGTGGAACCTCCACCCCAGCACGCTCACCCTTACCTGGCAAG
ACCAGTATGAAGAGCTGAAGGACGAGGCCACCTCCTGCAGCCTCCACAGGTCGGCCCACAATGCCACGCATGCCA
CCTACACCTGCCACATGGATGTATTCCACTTCATGGCCGACGACATTTTCAGTGTCAACATCACAGACCAGTCTG
GCAACTACTCCCAGGAGTGTGGCAGCTTTCTCCTGGCTGAGAGCATCAAGCCGGCTCCCCCTTTCAACGTGACTG
TGACCTTCTCAGGACAGTATAATATCTCCTGGCGCTCAGATTACGAAGACCCTGCCTTCTACATGCTGAAGGGCA
AGCTTCAGTATGAGCTGCAGTACAGGAACCGGGGAGACCCCTGGGCTGTGAGTCCGAGGAGAAAGCTGATCTCAG
TGGACTCAAGAAGTGTCTCCCTCCTCCCCCTGGAGTTCCGCAAAGACTCGAGCTATGAGCTGCAGGTGCGGGCAG
GGCCCATGCCTGGCTCCTCCTACCAGGGGACCTGGAGTGAATGGAGTGACCCGGTCATCTTTCAGACCCAGTCAG
AGGAGTTAAAGGAAGGCTGGAACCCTCACCTGCTGCTTCTCCTCCTGCTTGTCATAGTCTTCATTCCTGCCTTCT
GGAGCCTGAAGACCCATCCATTGTGGAGGCTATGGAAGAAGATATGGGCCGTCCCCAGCCCTGAGCGGTTCTTCA
TGCCCCTGTACAAGGGCTGCAGCGGAGACTTCAAGAAATGGGTGGGTGCACCCTTCACTGGCTCCAGCCTGGAGC
TGGGACCCTGGAGCCCAGAGGTGCCCTCCACCCTGGAGGTGTACAGCTGCCACCCACCACGGAGCCCGGCCAAGA
GGCTGCAGCTCACGGAGCTACAAGAACCAGCAGAGCTGGTGGAGTCTGACGGTGTGCCCAAGCCCAGCTTCTGGC
CGACAGCCCAGAACTCGGGGGGCTCAGCTTACAGTGAGGAGAGGGATCGGCCATACGGCCTGGTGTCCATTGACA
CAGTGACTGTGCTAGATGCAGAGGGGCCATGCACCTGGCCCTGCAGCTGTGAGGATGACGGCTACCCAGCCCTGG
ACCTGGATGCTGGCCTGGAGCCCAGCCCAGGCCTAGAGGACCCACTCTTGGATGCAGGGACCACAGTCCTGTCCT
GTGGCTGTGTCTCAGCTGGCAGCCCTGGGCTAGGAGGGCCCCTGGGAAGCCTCCTGGACAGACTAAAGCCACCCC
TTGCAGATGGGGAGGACTGGGCTGGGGGACTGCCCTGGGGTGGCCGGTCACCTGGAGGGGTCTCAGAGAGTGAGG
CGGGCTCACCCCTGGCCGGCCTGGATATGGACACGTTTGACAGTGGCTTTGTGGGCTCTGACTGCAGCAGCCCTG
TGGAGTGTGACTTCACCAGCCCCGGGGACGAAGGACCCCCCCGGAGCTACCTCCGCCAGTGGGTGGTCATTCCTC
CGCCACTTTCGAGCCCTGGACCCCAGGCCAGCTAATGAGGCTGACTGGATGTCCAGAGCTGGCCAGGCCACTGGG
CCCTGAGCCAGAGACAAGGTCACCTGGGCTGTGATGTGAAGACACCTGCAGCCTTTGGTCTCCTGGATGGGCCTT
TGAGCCTGATGTTTACAGTGTCTGTGTGTGTGTGTGCATATGTGTGTGTGTGCATATGCATGTGTGTGTGTGTGT
GTGTCTTAGGTGCGCAGTGGCATGTCCACGTGTGTGTGTGATTGCACGTGCCTGTGGGCCTGGGATAATGCCCAT
GGTACTCCATGCATTCACCTGCCCTGTGCATGTCTGGACTCACGGAGCTCACCCATGTGCACAAGTGTGCACAGT
AAACGTGTTTGTGGTCAACAGATGACAACAGCCGTCCTCCCTCCTAGGGTCTTGTGTTGCAAGTTGGTCCACAGC
ATCTCCGGGGCTTTGTGGGATCAGGGCATTGCCTGTGACTGAGGCGGAGCCCAGCCCTCCAGCGTCTGCCTCCAG
GAGCTGCAAGAAGTCCATATTGTTCCTTATCACCTGCCAACAGGAAGCGAAAGGGGATGGAGTGAGCCCATGGTG
ACCTCGGGAATGGCAATTTTTTGGGCGGCCCCTGGACGAAGGTCTGAATCCCGACTCTGATACCTTCTGGCTGTG
CTACCTGAGCCAAGTCGCCTCCCCTCTCTGGGCTAGAGTTTCCTTATCCAGACAGTGGGGAAGGCATGACACACC
TGGGGGAAATTGGCGATGTCACCCGTGTACGGTACGCAGCCCAGAGCAGACCCTCAATAAACGTCAGCTTCCTTC
CTTCTGCGGCCAGAGCCGAGGCGGGCGGGGGTGAGAACATCAATCGTCAGCGACAGCCTGGGCACCCGCGGGGCC
GTCCCGCCTGCAGAGGGCCACTCGGGGGGGTTTCCAGGCTTAAAATCAGTCCGTTTCGTCTCTTGGAAACAGCTC
CCCACCAACCAAGATTTCTTTTTCTAACTTCTGCTACTAAGTTTTTAAAAATTCCCTTTATGCACCCAAGAGATA
TTTATTAAACACCAATTACGTAGCAGGCCATGGCTCATGGGACCCACCCCCCGTGGCACTCATGGAGGGGGCTGC
AGGTTGGAACTATGCAGTGTGCTCCGGCCACACATCCTGCTGGGCCCCCTACCCTGCCCCAATTCAATCCTGCCA
ATAAATCCTGTCTTATTTGTTCATCCTGGAGAATTGA

FIGURE 3929

MPRGWAAPLLLLLLQGGWGCPDLVCYTDYLQTVICILEMWNLHPSTLTLTWQDQYEELKDEATSCSLHRSAHNAT
HATYTCHMDVFHFMADDIFSVNITDQSGNYSQECGSFLLAESIKPAPPFNVTVTFSGQYNISWRSDYEDPAFYML
KGKLQYELQYRNRGDPWAVSPRRKLISVDSRSVSLLPLEFRKDSSYELQVRAGPMPGSSYQGTWSEWSDPVIFQT
QSEELKEGWNPHLLLLLLLVIVFIPAFWSLKTHPLWRLWKKIWAVPSPERFFMPLYKGCSGDFKKWVGAPFTGSS
LELGPWSPEVPSTLEVYSCHPPRSPAKRLQLTELQEPAELVESDGVPKPSFWPTAQNSGGSAYSEERDRPYGLVS
IDTVTVLDAEGPCTWPCSCEDDGYPALDLDAGLEPSPGLEDPLLDAGTTVLSCGCVSAGSPGLGGPLGSLLDRLK
PPLADGEDWAGGLPWGGRSPGGVSESEAGSPLAGLDMDTFDSGFVGSDCSSPVECDFTSPGDEGPPRSYLRQWVV
IPPPLSSPGPQAS

FIGURE 3930

GAGGGCGCGATCCTGGCGTCCCCCGACGGCCTGGGGCCCCAATCCAGAGGCCTGGGTGGGAGGGGACCAAGGGTG
TAGTAAGGAAGCGCCTTTTGCTGGAGGGCAACGGACCGGGGCGGGGAGTCGGGAGACCAGAGTGGGAGGAAGGCG
GGGAGTCCAGGTTCCGCCCCGGAGCCGACTTCCTCCTGGTCGGCGGCTGCAGCGGGGTGAGCGGCGGCAGCGGCC
GGGGATCCTGGAGCC**ATG**GGGCGCGCGCGCGACGCCATCCTGGATGCGCTGGAGAACCTGACCGCCGAGGAGCTC
AAGAAGTTCAAGCTGAAGCTGCTGTCGGTGCCGCTGCGCGAGGGCTACGGGCGCATCCCGCGGGGCGCGCTGCTG
TCCATGGACGCCTTGGACCTCACCGACAAGCTGGTCAGCTTCTACCTGGAGACCTACGGCGCCGAGCTCACCGCT
AACGTGCTGCGCGACATGGGCCTGCAGGAGATGGCCGGGCAGCTGCAGGCGGCCACGCACCAGGGCTCTGGAGCC
GCGCCAGCTGGGATCCAGGCCCCTCCTCAGTCGGCAGCCAAGCCAGGCCTGCACTTTATAGACCAGCACCGGGCT
GCGCTTATCGCGAGGGTCACAAACGTTGAGTGGCTGCTGGATGCTCTGTACGGGAAGGTCCTGACGGATGAGCAG
TACCAGGCAGTGCGGGCCGAGCCCACCAACCCAAGCAAGATGCGGAAGCTCTTCAGTTTCACACCAGCCTGGAAC
TGGACCTGCAAGGACTTGCTCCTCCAGGCCCTAAGGGAGTCCCAGTCCTACCTGGTGGAGGACCTGGAGCGGAGC
TGAGGCTCCTTCCCAGCAACACTCCGGTCAGCCCCTGGCAATCCCACCAAATCATCCTGAATCTGATCTTTTTAT
ACACAATATACGAAAAGCCAGCTTGAAAAAAAAAAA

FIGURE 3931

MGRARDAILDALENLTAEELKKFKLKLLSVPLREGYGRIPRGALLSMDALDLTDKLVSFYLETYGAELTANVLRD
MGLQEMAGQLQAATHQGSGAAPAGIQAPPQSAAKPGLHFIDQHRAALIARVTNVEWLLDALYGKVLTDEQYQAVR
AEPTNPSKMRKLFSFTPAWNWTCKDLLLQALRESQSYLVEDLERS

FIGURE 3932

CAGTGCCAGGCTGGAGGCGGCAGCGGTTGGAGGCTTCGCCCGGCTTTGCAGCGGGGACTTCGGCGGCGGCGCCTC
AGGCACCTCGGCCCGGACACG**ATG**AGGCGAGTGGTACGACAGAGCAAGTTTCGGCATGTATTTGGGCAAGCGGTG
AAAAATGACCAGTGCTATGATGACATCCGGGTTTCTCGTGTGACCTGGGATAGTTCCTTTTGTGCTGTCAATCCC
AGATTTGTTGCCATAATCATAGAGGCAAGTGGGGGAGGAGCGTTCCTTGTCCTCCCTCTGCACAAGACTGGTCGA
ATTGACAAATCTTACCCTACAGTATGTGGCCACACAGGACCAGTGCTGGACATAGACTGGTGCCCACATAACGAT
CAGGTCATTGCCAGCGGTTCAGAGGACTGCACGGTCATGGTATGGCAGATCCCAGAAAATGGACTCACCCTTTCC
CTGACTGAACCTGTGGTGATTTTGGAAGGCCACTCAAAGAGAGTCGGCATCGTGGCTTGGCATCCAACGGCCCGC
AATGTGCTTCTTAGTGCAGGCTGTGATAATGCCATTATCATCTGGAATGTGGGAACAGGGGAAGCCCTTATAAAC
TTGGACGATATGCATTCAGACATGATTTACAATGTGAGCTGGAACCGGAATGGCAGTCTGATCTGCACAGCTTCC
AAAGACAAGAAAGTGAGAGTCATTGATCCCAGGAAACAAGAGATTGTTGCTGAGAAGGAGAAAGCACATGAAGGA
GCAAGACCCATGAGAGCCATCTTCCTGGCCGATGGCAATGTCTTCACCACTGGGTTCAGCCGCATGAGCGAGCGG
CAGCTGGCTCTCTGGAATCCGAAAAATATGCAGGAACCAATTGCTCTTCATGAGATGGACACTAGCAATGGGGTG
TTGCTGCCTTTCTATGACCCTGACACCAGCATCATTTACTTATGTGGAAAGGGTGACAGCAGTATTCGCTATTTT
GAGATCACGGATGAATCCCCGTACGTCCACTACCTCAACACATTCAGCAGCAAGGAGCCTCAGAGAGGGATGGGT
TACATGCCCAAGAGGGGACTTGATGTTAACAAATGTGAGATTGCCAGATTCTTCAAACTTCATGAGAGAAAGTGT
GAACCTATTATTATGACTGTTCCCAGGAAGTCTGACCTTTTCCAAGATGACCTGTATCCTGACACAGCGGGGCCA
GAGGCCGCGCTGGAGGCAGAAGAGTGGTTCGAAGGCAAGAATGCAGACCCAATCCTCATCTCCTTGAAGCACGGG
TACATTCCAGGCAAAAACAGGGATCTCAAGGTGGTCAAGAAGAACATTCTGGATAGCAAGCCCACTGCAAACAAG
AAGTGCGACCTGATCAGCATCCCCAAGAAAACCACAGACACGGCCAGTGTGCAAAATGAAGCCAAGTTGGATGAG
ATTTTAAAAGAGATCAAATCTATAAAAGACACAATCTGCAATCAAGATGAGCGTATTTCCAAGTTAGAACAGCAG
ATGGCAAAGATAGCAGCC**TGA**AGGTCCCACCCCCACCCCTACAGAAAAAATGGGAGCAAGAACTTGTGCTTGGGA
GCTGGTTATTGGTGTGGTCCTAGGGAGGGCGGAAAGGGAGGCACTGCCATTTGGAGACATTCCATTTCAGATTTG
TCAACCAGCGATAGGCCACATTCCAGTAAGAACTCAATTTGTCTCCCAAATTTGCAGAAACAAAACGTGATTTAA
AAGCTGAGCTTTTTATCAGAAAGCTTTTTTGATGTTTTAAGTGTTATGTGACTTGTTGAACTTTTTAAAAAGTGC
TACTTTTAAAATCCCAGATACTCTGAATTTTAGAAAACAAACTAATTCTGATTGTGTCGTGCCCAAGTACCCTTT
TTTTTTTAATGAATAGGGACCAATGCCACATTGCTTTTTATATTTCTTTCTTTTTTAATGTTGCCAAAACCAAAA
GTAGCTTTGTTTTCCTTTGTATTTTGCTACTTTGCAGTATTTGTGTGTGTGGTTTTTTTTCCTTAATTTGAAAGG
GACAGCACTGTGTATGTTTATAAACTAAATGAAGATAAGATATTATTTTGTATAAACATTCATCTGAGAACAATC
AAAGCAGTAGCCACATGGTGCTGGCTCCTTTGCAGCACAAACCTGGTCATTTTGATGACTGTACAACAGGAAGAC
TTGAAAAATCACGTGGATTCATATTACCACCGCTCTCATTTCATGGAGTCTTCTGATCAAAAAAGCTCACGTCGT
ATTTCTTCTTTTCCTTTCTCTTTTCTAGAAATTGGGTGTTTGTACCAGAATGGAATTTTGCTTCTCGGTTATCCT
GTGCTTCAGATGATTATAATCTAACCC

FIGURE 3933

MRRVVRQSKFRHVFGQAVKNDQCYDDIRVSRVTWDSSFCAVNPRFVAIIIEASGGGAFLVLPLHKTGRIDKSYPT
VCGHTGPVLDIDWCPHNDQVIASGSEDCTVMVWQIPENGLTLSLTEPVVILEGHSKRVGIVAWHPTARNVLLSAG
CDNAIIIWNVGTGEALINLDDMHSDMIYNVSWNRNGSLICTASKDKKVRVIDPRKQEIVAEKEKAHEGARPMRAI
FLADGNVFTTGFSRMSERQLALWNPKNMQEPIALHEMDTSNGVLLPFYDPDTSIIYLCGKGDSSIRYFEITDESP
YVHYLNTFSSKEPQRGMGYMPKRGLDVNKCEIARFFKLHERKCEPIIMTVPRKSDLFQDDLYPDTAGPEAALEAE
EWFEGKNADPILISLKHGYIPGKNRDLKVVKKNILDSKPTANKKCDLISIPKKTTDTASVQNEAKLDEILKEIKS
IKDTICNQDERISKLEQQMAKIAA

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FIGURE 3934

AGGGGCGGGCCCGGCGCGCGCGGGAAGTCTCTGTAGGGCGGCCGGCTACCCTCAGCCGCCGCGCGTCATGGCCCT
TTCGGTGCCCGGCTACTCACCGGGCTTCCGAAAGCCGCCCGAGGTAGTGCGGCTCCGACGGAAAAGGGCCCGGAG
CCGTGGAGCTGCCGCCTCCCCGCCCCGTGAGCTGACGGAGCCGGCGGCCCGCCGAGCCGCCCTGGTGGCGGGGCT
GCCTCTTCGCCCTTTCCCTGCTGCGGGGGGCAGAGGCGGTGGCAGCGGCGGCGGCCCGGCCGCTGCTCGGAGGAA
CCCCTTCGCCCGCCTGGACAACCGACCGCGGGTCGCCGCGGAGCCCCCCGACGGGCCGGCCCGCGAGCAGCCGGA
GGCCCCGGTCCCGTTTTTAGATTCTAATCAAGAAAATGATTTGCTATGGGAAGAGAAGTTTCCTGAAAGAACAAC
TGTTACTGAATTACCTCAGACTTCACATGTATCATTCTCCGAGCCTGATATTCCGTCCTCAAAAAGTACTGAGTT
ACCTGTGGACTGGAGTATTAAAACGCGACTCCTTTTCACCTCTTCTCAACCCTTTACCTGGGCAGATCATTTGAA
AGCACAGGAAGAAGCTCAAGGTCTTGTCCAGCATTGTAGGGCAACAGAAGTTACTTTGCCTAAAAGTATACAGGA
TCCCAAACTCTCCTCTGAGCTCCGTTGTACCTTCCAGCAGAGCCTTATCTATTGGCTCCACCCTGCTTTGTCTTG
GCTACCACTGTTCCCTCGTATTGGAGCTGATAGAAAAATGGCTGGAAAGACAAGTCCTTGGTCAAATGATGCAAC
CCTGCAGCATGTTTTAATGAGTGACTGGTCTGTGAGCTTTACTTCTCTATATAATTTGCTGAAGACAAAACTTTG
CCCCTATTTCTACGTTTGTACCTATCAGTTTACTGTCCTGTTCCGAGCAGCAGGATTAGCTGGAAGTGACTTAAT
CACAGCTCTCATATCTCCAACAACTCGAGGTTTAAGAGAAGCTATGAGAAATGAAGGTATTGAATTTTCTCTGCC
TTTAATAAAAGAAAGTGGCCATAAGAAGGAGACAGCATCTGGAACAAGCTTGGGATATGGGGAGGAGCAAGCCAT
CAGTGATGAGGATGAAGAGGAAAGTTTTTCCTGGCTGGAAGAGATGGGTGTGCAAGATAAAATTAAAAAGCCAGA
CATACTTTCTATCAAGCTGCGTAAAGAGAAACATGAAGTACAAATGGATCACAGACCTGAATCTGTTGTGTTGGT
AAAAGGAATCAACACCTTTACATTGCTCAATTTTTTGATTAACTCTAAGAGTTTAGTTGCTACCTCAGGTCCACA
GGCAGGACTTCCTCCAACCCTCTTGTCCCCTGTTGCTTTCCGAGGTGCCACAATGCAAATGCTTAAGGCACGGAG
TGTGAATGTGAAGACACAAGCTCTTTCTGGATACAGAGACCAATTTAGTTTGGAGATTACAGGTCCTATCATGCC
TCATTCTCTGCATTCACTGACCATGCTGCTCAAATCTTCACAGAGTGGATCTTTCTCTGCAGTACTGTATCCACA
CGAGCCAACTGCTGTATTTAACATCTGCCTGCAAATGGACAAAGTACTTGATATGGAGGTTGTTCATAAGGAGCT
TACTAACTGTGGTTTGCACCCTAACACTCTGGAGCAACTTAGTCAAATACCGTTACTTGGGAAATCATCTTTACG
GAATGTGGTGCTGAGAGACTACATTTATAATTGGAGATCCTGAACACCAAAGTAAGCCTAAAAGGAATCTTTGAG
GAAAAAAGCCTTCTAGCAAGGAAATTCAAGATTCTTGAAGTTGAAGGAATATACTGAAATGTTTATAAACATAAC
TTTTACTACAGTAGCATCTAAGGTTTTAAATGTGTTTTACTATTTTCAGATTAGATTTTTAGATATAAAGATGAA
AAACTCAGATAACTCAAATGAGATATCTATATCCCTACAACCTAATTGTATATTGAGCAGAAACTGAATTAATAT
GCTTCCTTGCAAATGGGAAATCACATAGCAGTTACCCCATGGCATTGTGACTAATGGCATCAGGGCAAAAATATG
TTACTTTACGATTTACCTGTTAGCAGGTTCTTGTTTCATAAAGGTAGAAAATAAATACAGACAACATCTAAAAAA
AAAAAAAAAAAAA

FIGURE 3935

MALSVPGYSPGFRKPPEVVRLRRKRARSRGAAASPPRELTEPAARRAALVAGLPLRPFPAAGGRGGGSGGGPAAA
RRNPFARLDNRPRVAAEPPDGPAREQPEAPVPFLDSNQENDLLWEEKFPERTTVTELPQTSHVSFSEPDIPSSKS
TELPVDWSIKTRLLFTSSQPFTWADHLKAQEEAQGLVQHCRATEVTLPKSIQDPKLSSELRCTFQQSLIYWLHPA
LSWLPLFPRIGADRKMAGKTSPWSNDATLQHVLMSDWSVSFTSLYNLLKTKLCPYFYVCTYQFTVLFRAAGLAGS
DLITALISPTTRGLREAMRNEGIEFSLPLIKESGHKKETASGTSLGYGEEQAISDEDEEESFSWLEEMGVQDKIK
KPDILSIKLRKEKHEVQMDHRPESVVLVKGINTFTLLNFLINSKSLVATSGPQAGLPPTLLSPVAFRGATMQMLK
ARSVNVKTQALSGYRDQFSLEITGPIMPHSLHSLTMLLKSSQSGSFSAVLYPHEPTAVFNICLQMDKVLDMEVVH
KELTNCGLHPNTLEQLSQIPLLGKSSLRNVVLRDYIYNWRS

FIGURE 3936

GGGGGACTCGAGAGCTAGCTGAGCGAATGGGCCGGCGACTGTGGAGTTAGCGTCCTCAATGTGGACGCCCTGAGC
TCCCATTAGGAGCCGCTGGCTGCGGCAGCAGGGGACTAGCGTGAAAGTTGGCTAAAAAAAAGAAAAGAACATGGA
GGCAGATATAATCACAAATCTTCGATGCAGGCTCAAAGAGGCTGAAGAAGAGCGACTAAAAGCTGCACAGTATGG
TTTACAACTAGTAGAGAGTCAAAATGAATTACAGAATCAATTGGATAAATGTCGTAATGAAATGATGACCATGAC
TGAGAGTTATGAACAAGAAAAATATACCCTTCAAAGAGAAGTTGAACTCAAGAGTCGAATGTTAGAAAGTTTGAG
CTGCGAATGTGAAGCTATTAAACAACAACAAAAAATGCACCTGGAGAAATTGGAAGAACAACTAAGCAGAAGCCA
TGGACAGGAAGTGAATGAACTAAAAACTAAGATAGAAAAACTGAAAGTGGAATTAGATGAAGCCAGGCTTAGTGA
AAAGCAGCTGAAGCACCAAGTAGATCATCAGAAGGAACTCCTCTCTTGTAAATCAGAGGAACTGCGCGTAATGTC
TGAACGTGTGCAGGAAAGCATGTCTTCAGAGATGCTGGCTCTTCAAATTGAGCTGACAGAAATGGAGAGTATGAA
GACCACCCTCAAAGAAGAAGTGAATGAACTACAATACAGACAAGAACAGCTAGAACTTCTTATTACTAACCTAAT
GCGCCAGGTAGACCGGCTTAAAGAGGAAAAAGAGGAGCGAGAGAAAGAAGCAGTTTCTTACTATAATGCCCTAGA
GAAAGCTCGTGTAGCAAATCAAGATCTTCAGGTACAGTTGGACCAGGCACTCCAGCAAGCCTTGGATCCCAATAG
TAAAGGCAACTCTTTGTTTGCAGAGGTGGAAGATCGAAGGGCAGCAATGGAACGTCAGCTTATCAGTATGAAAGT
CAAGTATCAGTCACTAAAGAAGCAAAATGTATTTAACAGAGAACAGATGCAGAGAATGAAGTTACAAATTGCCAC
GTTGCTACAGATGAAAGGGTCTCAAACTGAATTTGAGCAGCAGGAACGGTTGCTTGCCATGTTGGAGCAGAAGAA
TGGTGAAATAAAACATCTTTTAGGTGAAATTAGAAATCTGGAGAAATTTAAGAATTTATATGACAGTATGGAATC
TAAGCCTTCAGTCGACTCTGGTACTCTGGAAGATAACACCTATTATACAGATTTACTTCAGATGAAGCTGGATAA
CTTAAACAAAGAAATTGAAAGCACTAAAGGTGAATTGTCCATACAGCGAATGAAAGCATTATTTGAGAGCCAGCG
GGCTCTAGATATTGAGCGAAAACTTTTTGCAAATGAAAGATGCCTCCAGCTTTCAGAAAGTGAAAATATGAAACT
GAGAGCTAAACTAGATGAATTGAAACTAAAATATGAACCTGAAGAGACAGTTGAAGTGCCTGTACTGAAAAAGAG
GCGTGAGGTGCTCCCTGTGGATATAACCACCGCTAAAGATGCATGTGTCAACAACAGTGCTCTCGGGGGAGAAGT
TTATCGATTACCGCCTCAGAAAGAGGAGACACAGTCCTGCCCTAACAGTTTAGAAGATAACAACTTGCAATTAGA
AAAATCAGTTTCTATACACACACCAGTAGTCAGTCTCTCTCCTCACAAAAATCTGCCCGTGGATATGCAGCTGAA
GAAGGAAAAGAAATGTGTGAAACTCATAGGAGTTCCCGCTGACGCTGAGGCCTTAAGTGAAAGAAGTGGAAACAC
CCCTAACTCTCCCAGGTTAGCTGCTGAATCAAAGCTTCAAACAGAAGTTAAAGAAGGAAAAGAAACTTCAAGCAA
ATTGGAAAAAGAAACTTGTAAGAAATCACACCCTATTCTATATGTGTCTTCTAAATCTACTCCAGAGACCCAGTG
CCCTCAACAGTAAAGACTTTTCTTTAATAAGAGTACGGTGCCACTTGCCTCAAAAGTTACTATGGTGCTTAAGAT
TGTCTTGATCTGACATATATCACCTTCTGGGTTATTTACTCATTGTGCCAGGACCTGGCATTTTCATGTGCCTTT
GACCAAGTGTTCAGAATTTGCTTGACTCTAACCTGGAGAGCTTCTTAAGTGATGCCCCTTCATGGAGCTTCTATG
ACAGTGAATAAACTATTAATTGAAGGAAAATGTTATAATTAATGTATCTATTTGCTGCATTGTATATGGATTAAA
TGATAAAAAAACAAGTAATCTACCCTCAGAGCCATGTATTTGAGAATGCTTCAATCATATTTTCCTATGTACTTTT
TTTTATAAACTTAGTTTTAGACTATGTTGTAAAAATGGGAAGGTTGTAAACTATGTTGTAAAAATAGGAAATGTG
GCTTAAAATATATACATTATATTGTTTCAGGATTTTGTCAGTGTTTAAAGAACCAATGTTCATCTTTGTATTTAT
ATACATGATTTAAATTTTGTCTAAAATTTTAAATAAAACTGCAGTGATTTATCCGTAAAAAAAAAAAAAAAAAAA
AAAAAAAAAA

FIGURE 3937

MEADIITNLRCRLKEAEEERLKAAQYGLQLVESQNELQNQLDKCRNEMMTMTESYEQEKYTLQREVELKSRMLES
LSCECEAIKQQQKMHLEKLEEQLSRSHGQEVNELKTKIEKLKVELDEARLSEKQLKHQVDHQKELLSCKSEELRV
MSERVQESMSSEMLALQIELTEMESMKTTLKEEVNELQYRQEQLELLITNLMRQVDRLKEEKEEREKEAVSYYNA
LEKARVANQDLQVQLDQALQQALDPNSKGNSLFAEVEDRRAAMERQLISMKVKYQSLKKQNVFNREQMQRMKLQI
ATLLQMKGSQTEFEQQERLLAMLEQKNGEIKHLLGEIRNLEKFKNLYDSMESKPSVDSGTLEDNTYYTDLLQMKL
DNLNKEIESTKGELSIQRMKALFESQRALDIERKLFANERCLQLSESENMKLRAKLDELKLKYEPEETVEVPVLK
KRREVLPVDITTAKDACVNNSALGGEVYRLPPQKEETQSCPNSLEDNNLQLEKSVSIHTPVVSLSPHKNLPVDMQ
LKKEKKCVKLIGVPADAEALSERSGNTPNSPRLAAESKLQTEVKEGKETSSKLEKETCKKSHPILYVSSKSTPET
QCPQQ

FIGURE 3938

GCCGGCGTCTCCTGGCTGCCGTCACTTCCGGTTCTCTGTCAGTCGCGAGCGAACGACCAAGAGGGTGTTCGACTG
CTAGAGCCGAGCGAAGCGXTXGCCTAAATCAAAGGAACTTGTTTCTTCAAGCTCTTCTGGCAGTGATTCTGACAG
TGAGGTTGACAAAAAGTTAAAGAGGAAAAAGCAAGTTGCTCCAGAAAAACCTGTAAAGAAACAAAAGACAGGTGA
GACTTCGAGAGCCCTGTCATCTTCTAAACAGAGCAGCAGCAGCAGAGATGATAACATGTTTCAGATTGGGAAAAT
GAGGTACGTTAGTGTTCGCGATTTTAAAGGCAAAGTGCTAATTGATATTAGAGAATATTGGATGGATCCTGAAGG
TGAAATGAAACCAGGAAGAAAAGGTATTTCTTTAAATCCAGAACAATGGAGCCAGCTGAAGGAACAGATTTCTGA
CATTGATGATGCAGTAAGAAAACTGTAAAATTCGAGCCATATAAATAAAACCTGTACTGTTCTAGTTGTTTTAAT
CTGTCTTTTTACATTGGCTTTTGTTTTCTAAATGTTCTCCAAGCTATTGTATGTTTGGATTGCAGAAGAATTTGT
AAGATGAATACTTTTTTTTAATGTGCATTATTAAAAATATTGAGTGAAGCTAATTGTCAACTTTATTAAGGATTA
CTTTGTCTGCCCACCACCTAGTGTAAAATAAAATCAAGTAATACAATCTTAACTGTTGTGGCCTTTTTTGATCAT
AAGAGTTGGTACTGTTTAAGGCCAAAAGTAACAGTTTTTATAGATCTTTTAGTTTCAACTCAGCTTTTACAATAA
AAAGGATTTGTATTGCATTGAGTTTATAAACTTTTGGTTTGTGAACTTCATATTTGATCTTTTCTCTTCCAATCA
AATGTCTAGGCTTGTTTGACTTCCACCCCCAATGGTTTTTCACTCTTTTTATTTACTTCATTTTCCTTTAATAAC
TTAATCTCTTCATGTTCAGTTTTTACTTCACTCTTTATTCTTTTCTTTGATTATGGTATGCTTATTTGGAAAGTC
AGTGAAACTGTCAAAATGTTATCTCAATAAGATACTTATATGAGAACTACAATCACCGAATCTACTGTATTCAAT
ATTAGCAGATCTAATTTGATAAACAACATGGCTTGTGTGAAAACTGAGCAGGTGTTTGTTTACCCATAGTGTTCT
GTGTAGTTATTGCTTAGTCTGCAGAAAATAATGACTTAGATGAGATGTCTGACTTGCTTTCACTTATTAAACATG
TTCACCATGGGATGATGTCTGTAACATCAGATATTGTTCAACTAGACTAGGATTTAATAAAAATTGTGAAAGCTT
ACTGGCCTAACATTTTATTTTATAATATTGGGTATGAATTATATGTAGCCAGAGATGTCATTAAGCTTTACTGTT
ATAGTAGGTAATATGGTTAGTTTGTAGGGAAAAGAGCATATGAGCACATGCTTGTGTATTTTGGCCTTTGCCCCA
GTAGAACAGACCAATGGCATTCTAGACTTGATGATACTAAGTTTTAGCAGACACTAGTAAGTGGTTTGTATTTAA
CCATACTGATGAAGCAGACAGATTGAGGCACAGATTTTAGTGGCTTTGTGGCAATAAATAGGGCATGGTGTGCCT
TAGGAAAAGAATGTTTATAAAGGGAATTATAACTGAAATTAAAGGAGGCGGCAGTGAAGAGGAAATAATYCTCTT
CTATCTAAATGATATACATATGATATTTTGAGATTTTTATAACAGCAGTGGAACACAATTCTAGGTAGAGTAGAA
AAAGGAAAGTTTTAAAGACATATAAAAGATTCTTGTTGACAAATTATTTTTGGTAGCAAATCTCAAATGGTTACC
TGCTATTAAGGTCTGCCATATTAGAGTTTTGCACTATTTTGCTACCAAGTXTGATTCATACATCTAAAACATTTT
GTAGTTACTTGTCAAGGACTTAATTTGAAAATCATTTGCCAGGCCACATAGTTATCAATTTTTTTTTCTATCAGC
TATTCTGTTGTATTTCTAAAACATTTTTTAGATGACTTTTTAAAGTATATTTAGCAGTAACCTTATGAGGTTCAA
ATTGGTAAATCTCTTGTAATTTAGCCTTCATCGAATAATAGGTACCAGTGTATTAAAAATGTGTATTTTTTGCAG
CCCCTTGAACCAGAGTAGGTTCAGAGAAACTCCCAAAGTTTGTACTTTAGACACATCAWGCTTGATTGGTAACTT
CCCTCCTTTTTTGGGGAACATGTTTGTGTCCTATTAACTTAATTGGATAGATTTTTAAATATTTCTTATTTTTGG
CACACGGAAAGGGTAGTTCGAGTACAGAACTTTGATTTTTGGTGTAGATGCAGAGGGAATGATGGGTAAATTTCC
TAGGTTTATGTGAATTTAGGGGGTGTATGCATTTTGAAACAATCTACTAACAGATGGTGCTGAAATCTATTACCT
ACATGTTTTCTAGTTGTTCAGCATTATGTTAATGAAGCCTCCATATAAGGAGTGTTTCTCTGGCACAGTTGGTAA
GTTGACTGCTAACTTCATTTAAATGTGTTACTGGATATGCAGTATACTGAAATTATTAATCAGTTTGTGTATAGG
AAAAGAGAACTGGGTTAAAAGCAAATTAACTTGTTCTGAAAAGAAAGTATAGATTAATTTTGTTTTCTGTTTAAA
TTTTATCTCCTTGGTAAAGATTTTTTTTTCCTGGGCAGAAAACTTGGGCATTTTTAGGCGTAGATACCTTACCTT
ACAATGCCAAAATGAATTTAATTCCAGTACTCAGGTTTTTCCCTTTAACAGACTCTATGTGTATCAGGGCTTTCT
AATGGGTTTTTCCTCTTCGTTTTTAAAATGTGAGTAGCATTTGACCAATTTCCAGTGCTCTTARCATTTTACTTA
AAGAACAACCACTACAAAAGAAAATCTTTGTAATTTGATTGTCTTTTGCTTTGCTTCATTAATGCCTAAGAACTT
AAGAATACTCCTACCTCATTAGCTACTCAAGATGCTGTGACGATCAAATCTATTCTACATAATGCGTTTAGAAAC
AAAGACTTGGGTGAAAAATGAAATAAGTATATTCTGACTTGGCTATTGAGGGGAAAATTCAGTATTAAGTGTTCC
TCACAGGAGATATGTTAGCAGAATACTATAAAAGTTTGAAATTTTTAAAAAGTAAAAGTACTTAAATTTAGGTAT
CTCTCCTGAAATTCTTTGCAGTTCATTTTTTATGGCAGTTAATCCAGTGAAACACTCAAAAGTTTTTTTTTTTT
AAAAGTGTTTTTCCAGATAAACTGTAGGGTGAACATTCACATAATCACAAATATGTAATTCTGTAATTGTGGAAT
GCTTGTATGCTTTGTTTTCGTACATCTTCCATGGAGATGTCTGAATATAATACTCCATCTGTGAATATTTTAAAT
GTTGAAATAAAAGTAAGAAATGTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AA

FIGURE 3939

AGATCATTGTGGCCCTCAAATCCGAGGAGGACAGCGGCAGAGTCGCCTCCTACATCATGGCCTTCACGCTGGACG
GGCGCTTCCTGTTGCCGGAGACCAAGATCGGAAGCGTGAAATACGAAGGCATCGAGTTCATTTAACTCAAAACGG
AAACACTGAGCAAGGCCATCAGGACTCAGCTTTTATAAAAACAAGAGGAGTGCACTTTTGTTTTGTTTTGTTCTT
TTTGGAACTGTGCCTGGGTTGGAGGTCTGGACAGGGAGCCCAGTCCCGGGCCCCATAGTGGTGCGGGCACTGGAC
CCCCGGGCCCCACGGAGGCCGCGGTCTGAACTGCTTTCCATGCTGCCATCTGGTGGTGATTTCGGTCACTTCAGG
CATTGACTCAAGGCCTGCCTAACTGGCTGGGTCGTTTCTTCCATCCGACCTCGTTTCTTTTCTTTCCTATGTTCT
TTTGTTCAGTGAATATCCCTAGAGCTCCTACCATATGTCAGGCCCTATGCCTCACCCTGAGAACGCAGTGAGCAT
GAGGTGGACCTGTTTGCTGGGAACCCCAGGTCACCCCCTTTTCTTCCTACTCTGTGCCTGGAGCATCATGTCCAC
CCCTGCAGATCCTTGGAAAAGAAAATGTTTATGTTGCAGGGTATTGCATGGTCACGAGTGAGGGCAGGCCCCTGG
GGACACATCTGCCCACAGCTGCACAGGCCAGGGCGCAGGCACATCTGTTGGTTCTCAGGCCTCAGATAAAACCAT
CTCCGCATCATATGGCCAGTGACCGCTTTCTCCCTTCAAGAAAATTCTGTGGCTGTGCAGTACTTTGAAGTTTTA
ATTATTAACCTGCTTTAATTAAAGCAGTTTCCTTTCTTATAAAGTGGAATCACCAAATCTTATCACACAGAGCAC
AGTCCTGTAGTTACCCAGCCCGCTCCAGCAGTGCGGGAGATTGTAAGGAAGCGGTGGCGGCTGGTGAAGCAAGTC
TCACATGTCGGCGTTCTTGGCCAATGGATACAAAGATAAAGAAAATGTTGCCTTTTTCTAGGAACTGTCAGAAAT
CCTCATGCCTTTCAAGACTTCTGTGAATGACTTGAATTTTTTATTCCCTGCCTAGGGTCTGTGAACGAGGCCTGT
CTCTTCCCTGGGGTTTCTTTCCATGGCCTTTATTTCTCCTCTTCCAGTGGGAGTTTTGCAGGCTCTTCTCTGTGG
AAACTTCACGAGCGTTGGCTGGGCCTCGGCTTCGCTGGAGTGTACTCCAGGGTGAAGGCAGAGTGGGATTTGAGA
CCCAGGTTAGGCACGACCCAGGCTGAGAAGGGACGTTTCCATCATTCACAGTGCCCTCCCCACAGCACTACCTCA
CCCCGACCCCCACCCTCACTCCTACCCCACCCCGCGATCGTCAGGGGTGCCACGGTGGGCCGGAGGGTGCCGGCT
CTGGCTGTCCCTGTGCCGGTCCCTCACAAACCTCTCCCCCTTTGAAACTCAAGCACAGCTGCGAGGAGGGCAGCG
AGGAGGGACCCCTCTCTCATGGTTGTCTCTTTCCCCCGCTATGTCATAGGTAGTGGAGGAAGCGAAGGAAGTGAA
CGCTGAATGTGACGCATTTCTGAAGAGCTCAGCTGTCACCGGGCATAGCCTGGAAGCCCCAAGTCTGTTCTGACT
TTGCCTGGCTGTCTCCTTGACCCGCCTCCTAGATCATTGTCCTTGATGTCCAGGCTGGGTCATTTAAAATAGAGA
TGCAATCAGGAAGGTTGGGGGACTTGGGACTGTGGCTGAATTGAGACCTTGCTGATGTATTCATGTCAGCACCTG
AGTCACAGCCCAGGTGCCCGGAAGCAGCCTCTTCGCATAGGCAGTGATTTGCGATTACTTTAAAGCTCACCTTTT
TTTCTTCCCCTCTCTGTTCGCTGCTGTCAGCATAATGATTGTGTTCCTTCCCTATGGGATCCATCTGTTTTGTAA
ACAATAAAGCGTCTGAGGGAGTGTAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3940

CGGACGCGTGGGGAGAGGCTGTTTACCAGAACAGCATAACAAGGGCAGGTCTGACTGCAAGGCTGGGACTGGGAG
GCAGAGCCGCCGCCAAGGGGGCCTCGGTTAAACACTGGTCGTTCAATCACCTGCAAGACGAAGGAGGCAAGGATG

CTGTTGGCCTGGGTACAAGCATTCCTCGTCAGCAACATGCTCCTAGCAGAAGCCTATGGATCTGGAGGCTGTTTC
TGGGACAACGGCCACCTGTACCGGGAGGACCAGACCTCCCCCGCGCCGGGCCTCCGCTGCCTCAACTGGCTGGAC
GCGCAGAGCGGGCTGGCCTCGGCCCCCGTGTCGGGGGCCGGCAATCACAGTTACTGCCGAAACCCGGACGAGGAC
CCGCGCGGGCCCTGGTGCTACGTCAGTGGCGAGGCCGGCGTCCCTGAGAAACGGCCTTGCGAGGACCTGCGCTGT
CCAGAGACCACCTCCCAGGCCCTGCCAGCCTTCACGACAGAAATCCAGGAAGCGTCTGAAGGGCCAGGTGCAGAT
GAGGTGCAGGTGTTCGCTCCTGCCAACGCCCTGCCCGCTCGGAGTGAGGCGGCAGCTGTGCAGCCAGTGATTGGG
ATCAGCCAGCGGGTGCGGATGAACTCCAAGGAGAAAAAGGACCTGGGAACTCTGGGCTACGTGCTGGGCATTACC
ATGATGGTGATCATCATTGCCATCGGAGCTGGCATCATCTTGGGCTACTCCTACAAGAGGGGGAAGGATTTGAAA
GAACAGCATGATCAGAAAGTATGTGAGAGGGAGATGCAGCGAATCACTCTGCCCTTGTCTGCCTTCACCAACCCC
ACCTGTGAGATTGTGGATGAGAAGACTGTCGTGGTCCACACCAGCCAGACTCCAGTTGACCCTCAGGAGGGCAGC
ACCCCCCTTATGGGCCAGGCCGGGACTCCTGGGGCCTGAGCCCCCCCAGTGGGCAGGAGCCCATGCAGACACTGG
TGCAGGACAGCCCACCCTCCTACAGCTAGGAGGAACTACCACTTTGTGTTCTGGTTAAAACCCTACCACTCCCCC
GCTTTTTTGGCGAATCCTAGTAAGAGTGACAGAAGCAGGTGGCCCTGTGGGCTGAGGGTAAGGCTGGGTAGGGTC
CTAACAGTGCTCCTTGTCCATCCCTTGGAGCAGATTTTGTCTGTGGATGGAGACAGTGGCAGCTCCCACAGTGAT
GCTGCTGCTAAGGGCTTCCAAACATTGCCTGCACCCCTGGAACTGAACCAGGGATAGACGGGGAGCTCCCCCAGG
CTCCTCTGTGCTTTACTAAGATGGCCTCAGTCTCCACTGTGGGCTTGAGTGGCATACACTGTTATTCATGGTTAA
GGTAAAGCAGGTCAAGGGATGGCATTGAAAAAATATATTTAGTTTTTAAAATATTTGGGATGGAACTCCCTACTG
ACCTCTGAGAACTGGAAACGAGTTTGTACAGAAGTCAGAACTTTGGGTTGGGAATGAGATCTAGGTTGTGGCTGC
TGGTATGCTTCAGCTTGCTGGCAATGATGTGCCTTGACAACCGTGGGCCAGGCCTGGGCCCAGGGACTCTTCCTG
TTTCATAAGGAAAGGAAGAATTGCACTGAGCATTCCACTTAGGAAGAGGATAGAGAAGGATCTGCTCCGCCTTTG
GCCACAGGAGCAGAGGCAGACCTGGGATGCCCCAGTTTCTCTTCAGGGATGGATAGTGACCTGTCTTCATTTTGC
ACAGGTAAGAGAGTAGTTAGCTAACCTATGGGAATTATACTGTGGGGCCTTGTGAGCTGCTTCTAAGAGGCTAAC
CTGGAAACTAAGCTCAGAGGCAAGGTAATAAAGCACTTCAGGGCTTGCTCCCCAAGTGGGCCTGATTTAGCAGGT
GGTCCTGCGGGCGTCCAGGTCAGCACCTTCCTGTAGGGCACTGGGGCTAGGGTCACAGCCCCTAACTCATAAAGC
AATCAAAGAACCATTAGAAAGGGCTCATTAAGCCTTTTGGACACAGGACCCCAGAGAGGAAAAAGTGACTTGCCC
AAGGTCGTAAGCAAGCTACTGGCATGGCAAGAGCCCAGCTTCCTGACGGAGCGCAACATTTCTCCACTGCACTGT
GCTAGCAGCTCAGCAGGGCCTCTAACCTGTGATGTCACACTCAAGAGGCCTTGGCAGCTCCTAGCCATAGAGCTT
CCTTTCCAGAACCCTTCCACTGCCCAATGTGGAGACAGGGGTTAGTGGGGCTTTCTATGGAGCCATCTGCTTTGG
GGACCTAGACCTCAGGTGGTCTCTTGGTGTTAGTGATGCTGGAGAAGAGAATATTACTGGTTTCTACTTTTCTAT
AAAGGCATTTCTCTATATACATGTTTTATATACCTCATTCTGACACCTGCATATAGTGTGGGAAATTGCTCTGCA
TTTGACTTAATTAAAAAAAAAAAAAAA

FIGURE 3941

MLLAWVQAFLVSNMLLAEAYGSGGCFWDNGHLYREDQTSPAPGLRCLNWLDAQSGLASAPVSGAGNHSYCRNPDE
DPRGPWCYVSGEAGVPEKRPCEDLRCPETTSQALPAFTTEIQEASEGPGADEVQVFAPANALPARSEAAAVQPVI
GISQRVRMNSKEKKDLGTLGYVLGITMMVIIIAIGAGIILGYSYKRGKDLKEQHDQKVCEREMQRITLPLSAFTN
PTCEIVDEKTVVVHTSQTPVDPQEGSTPLMGQAGTPGA

FIGURE 3942

CGGACGCGTGGGGAGAGGCTGTTTACCAGAACAGCATAACAAGGGCAGGTCTGACTGCAAGGCTGGGACTGGGAG
GCAGAGCCGCCGCCAAGGGGGCCTCGGTTAAACACTGGTCGTTCAATCACCTGCAAGACGAAGGAGGCAAGG**ATG**

CTGTTGGCCTGGGTACAAGCATTCCTCGTCAGCAACATGCTCCTAGCAGAAGCCTATGGATCTGGAGGCTGTTTC
TGGGACAACGGCCACCTGTACCGGGAGGACCAGACCTCCCCCGCGCCGGGCCTCCGCTGCCTCAACTGGCTGGAC
GCGCAGAGCGGGCTGGCCTCGGCCCCCGTGTCGGGGGCCGGCAATCACAGTTACTGCCGAAACCCGGACGAGGAC
CCGCGCGGGCCCTGGTGCTACGTCAGTGGCGAGGCCGGCGTCCCTGAGAAACGGCCTTGCGAGGACCTGCGCTGT
CCAGAGACCACCTCCCAGGCCCTGCCAGCCTTCACGACAGAAATCCAGGAAGCGTCTGAAGGGCCAGGTGCAGAT
GAGGTGCAGGTGTTCGCTCCTGCCAACGCCCTGCCCGCTCGGAGTGAGGCGGCAGCTGTGCAGCCAGTGATTGGG
ATCAGCCAGCGGGTGCGGATGAACTCCAAGGAGAAAAAGGACCTGGGAACTCTGGGCTACGTGCTGGGCATTACC
ATGATGGTGATCATCATTGCCATCGGAGCTGGCATCATCTTGGGCTACTCCTACAAGAGGGGGAAGGATTTGAAA
GAACAGCATGATCAGAAAGTATGTGAGAGGGAGATGCAGCGAATCACTCTGCCCTTGTCTGCCTTCACCAACCCC
ACCTGTGAGATTGTGGATGAGAAGACTGTCGTGGTCCACACCAGCCAGACTCCAGTTGACCCTCAGGAGGGCAGC
ACCCCCCTTATGGGCCAGGCCGGGACTCCTGGGGCC**TGA**GCCCCCCCAGTGGGCAGGAGCCCATGCAGACACTGG
TGCAGGACAGCCCACCCTCCTACAGCTAGGAGGAACTACCACTTTGTGTTCTGGTTAAAACCCTACCACTCCCCC
GCTTTTTTGGCGAATCCTAGTAAGAGTGACAGAAGCAGGTGGCCCTGTGGGCTGAGGGTAAGGCTGGGTAGGGTC
CTAACAGTGCTCCTTGTCCATCCCTTGGAGCAGATTTTGTCTGTGGATGGAGACAGTGGCAGCTCCCACAGTGAT
GCTGCTGCTAAGGGCTTCCAAACATTGCCTGCACCCCTGGAACTGAACCAGGGATAGACGGGGAGCTCCCCCAGG
CTCCTCTGTGCTTTACTAAGATGGCCTCAGTCTCCACTGTGGGCTTGAGTGGCATACACTGTTATTCATGGTTAA
GGTAAAGCAGGTCAAGGGATGGCATTGAAAAAATATATTTAGTTTTTAAAATATTTGGGATGGAACTCCCTACTG
ACCTCTGAGAACTGGAAACGAGTTTGTACAGAAGTCAGAACTTTGGGTTGGGAATGAGATCTAGGTTGTGGCTGC
TGGTATGCTTCAGCTTGCTGGCAATGATGTGCCTTGACAACCGTGGGCCAGGCCTGGGCCCAGGGACTCTTCCTG
TTTCATAAGGAAAGGAAGAATTGCACTGAGCATTCCACTTAGGAAGAGGATAGAGAAGGATCTGCTCCGCCTTTG
GCCACAGGAGCAGAGGCAGACCTGGGATGCCCCAGTTTCTCTTCAGGGATGGATAGTGACCTGTCTTCATTTTGC
ACAGGTAAGAGAGTAGTTAGCTAACCTATGGGAATTATACTGTGGGGCCTTGTGAGCTGCTTCTAAGAGGCTAAC
CTGGAAACTAAGCTCAGAGGCAAGGTAATAAAGCACTTCAGGGCTTGCTCCCCAAGTGGGCCTGATTTAGCAGGT
GGTCCTGCGGGCGTCCAGGTCAGCACCTTCCTGTAGGGCACTGGGGCTAGGGTCACAGCCCCTAACTCATAAAGC
AATCAAAGAACCATTAGAAAGGGCTCATTAAGCCTTTTGGACACAGGACCCCAGAGAGGAAAAAGTGACTTGCCC
AAGGTCGTAAGCAAGCTACTGGCATGGCAAGAGCCCAGCTTCCTGACGGAGCGCAACATTTCTCCACTGCACTGT
GCTAGCAGCTCAGCAGGGCCTCTAACCTGTGATGTCACACTCAAGAGGCCTTGGCAGCTCCTAGCCATAGAGCTT
CCTTTCCAGAACCCTTCCACTGCCCAATGTGGAGACAGGGGTTAGTGGGGCTTTCTATGGAGCCATCTGCTTTGG
GGACCTAGACCTCAGGTGGTCTCTTGGTGTTAGTGATGCTGGAGAAGAGAATATTACTGGTTTCTACTTTTCTAT
AAAGGCATTTCTCTATATACATGTTTTATATACCTCATTCTGACACCTGCATATAGTGTGGGAAATTGCTCTGCA
TTTGACTTAATTAAAAAAAAAAAAAAA

FIGURE 3943

MLLAWVQAFLVSNMLLAEAYGSGGCFWDNGHLYREDQTSPAPGLRCLNWLDAQSGLASAPVSGAGNHSYCRNPDE
DPRGPWCYVSGEAGVPEKRPCEDLRCPETTSQALPAFTTEIQEASEGPGADEVQVFAPANALPARSEAAAVQPVI
GISQRVRMNSKEKKDLGTLGYVLGITMMVIIIAIGAGIILGYSYKRGKDLKEQHDQKVCEREMQRITLPLSAFTN
PTCEIVDEKTVVVHTSQTPVDPQEGSTPLMGQAGTPGA

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FIGURE 3944

ACAACTGCTAAAGCTCCAGAGACACGAGCGTGTGTGGCAGCAAGAGCCGCCAGTTCGGGACCACCGCAGCTGGGG
TGGCAGCGGCGCAGGAGGGGTCGCGGGGCGGGAGTGGTGAGCGCAGGCGGCAGGGGTCTGGGAAAGACGAAGTCG
CTATTTGCTGTCTGAGCGCGCTCGCAGCTCCTGGAAGTGTTGCCGCCTCTCGGTTTCGCTCTCGCTCGCTGCGCT
CCTAGAAGGGGCGGCCGCCTCCAGGACTGACCAGGGCCAAGTGGCGCTCGGCGGGCACTACATGGCGGAGGGTGA
AGGGTACTTCGCCATGTCTGAGGACGAGCTGGCCTGCAGCCCCTACATCCCCCTAGGCGGCGACTTCGGCGGCGG
CGACTTCGGCGGCGGCGACTTCGGCGGCGGCGACTTCGGCGGCGGCGACTTCGGCGGTGGCGGCAGCTTCGGTGG
GCATTGCTTGGACTATTGCGAAAGCCCTACGGCGCACTGCAATGTGCTGAACTGGGAGCAAGTGCAGCGGCTGGA
CGGCATCCTGAGTGAGACCATTCCGATTCACGGGCGCGGCAACTTCCCCACGCTCGAGCTGCAGCCGAGCCTGAT
CGTGAAGGTGGTGCGGCGGCGCCTGGCCGAGAAGCGCATTGGCGTCCGCGACGTGCGCCTCAACGGCTCGGCAGC
CAGCCATGTCCTGCACCAGGACAGCGGCCTGGGCTACAAGGACCTGGACCTCATCTTCTGCGCCGACCTGCGCGG
GGAAGGGGAGTTTCAGACTGTGAAGGACGTCGTGCTGGACTGCCTGTTGGACTTCTTACCCGAGGGGGTGAACAA
AGAGAAGATCACACCACTCACGCTCAAGGAAGCTTATGTGCAGAAAATGGTTAAAGTGTGCAATGACTCTGACCG
ATGGAGTCTTATATCCCTGTCAAACAACAGTGGCAAAAATGTGGAACTGAAATTTGTGGATTCCCTCCGGAGGCA
GTTTGAATTCAGTGTAGATTCTTTTCAAATCAAATTAGACTCTCTTCTGCTCTTTTATGAATGTTCAGAGAACCC
AATGACTGAGACATTTCACCCCACAATAATCGGGGAGAGCGTCTATGGCGATTTCCAGGAAGCCTTTGATCACCT
TTGTAACAAGATCATTGCCACCAGGAACCCAGAGGAAATCCGAGGGGGAGGCCTGCTTAAGTACTGCAACCTCTT
GGTGAGGGGCTTTAGGCCCGCCTCTGATGAAATCAAGGCCCTTCAAAGGTACATGTGTTCCAGGTTTTTCATCGA
CTTCTCAGACATTGGAGAGCAGCAGAGAAAACTGGAGTCCTATTTGCAGAACCACTTTGTGGGATTGGAAGACCG
CAAGTATGAGTATCTCATGACCCTTCATGGAGTGGTAAATGAGAGCACAGTGTGCCTGATGGGACATGAAAGAAG
ACAGACTTTAAACCTTATCACCATGCTGGCTATCCGGGTGTTAGCTGACCAAAATGTCATTCCTAATGTGGCTAA
TGTCACTTGCTATTACCAGCCAGCCCCCTATGTAGCAGATGCCAACTTTAGCAATTACTACATTGCACAGGTTCA
GCCAGTATTCACGTGCCAGCAACAGACCTACTCCACTTGGCTACCCTGCAATTAAGAATCATTTAAAAATGTCCT
GTGGGGAAGCCATTTCAGACAAGACAGGAGAGAAAAAAAAAAAAAAAAAAA

FIGURE 3945

MAEGEGYFAMSEDELACSPYIPLGGDFGGGDFGGGDFGGGDFGGGDFGGGGSFGGHCLDYCESPTAHCNVLNWEQ
VQRLDGILSETIPIHGRGNFPTLELQPSLIVKVVRRRLAEKRIGVRDVRLNGSAASHVLHQDSGLGYKDLDLIFC
ADLRGEGEFQTVKDVVLDCLLDFLPEGVNKEKITPLTLKEAYVQKMVKVCNDSDRWSLISLSNNSGKNVELKFVD
SLRRQFEFSVDSFQIKLDSLLLFYECSENPMTETFHPTIIGESVYGDFQEAFDHLCNKIIATRNPEEIRGGGLLK
YCNLLVRGFRPASDEIKALQRYMCSRFFIDFSDIGEQQRKLESYLQNHFVGLEDRKYEYLMTLHGVVNESTVCLM
GHERRQTLNLITMLAIRVLADQNVIPNVANVTCYYQPAPYVADANFSNYYIAQVQPVFTCQQQTYSTWLPCN

FIGURE 3946

GGGCCCCCCCWCGWKTTTTTTTTTTTTTTTTTTAATTAGGATAATGCCTTTATTAACGAGAATGAAACGTTCATT
CCTCCTTCCACTCCTTCTCGTTGGTTTTCTGGACACAGCTCACCTGATCCTGCTAGAAACGTTGTCAGTCTGCTT
GTGGCTTCCCTCCTTGATTGACTCACGCTGTGTGATGTCTTGAGAAGTATCTATCCACTTCATGTGAATGAGCAC
TCCAATATCAGCCAACATCAATCATTCTTACCTAAAGAATAATAAGAAAAAGTTAATATAAAAGACAAGGGTATA
AAATAAAGGTTTGAAAATGCTAGTCAACTTCAAAATTTAAAGAGTAAAAATCCAGAGATAAAGATTGGGGGTAAG
TTACAGCATAAAAAAATAGGAAGAAACTTCATGGTGGGGGGGAAATCTAAAATTATTCTTACATAAAATAAGTAG
ACACCTGAATTAGAATGAAAACTGTATTTTCTTTAAAATGTAAAAGCCTGACTCTCAGTTTCACCAGTCTGAGCA
CAAGTTTGACTGCAACCCAAAATATACTATCCCTTATGTGAAGGTATGTGACAACGTTGACCTCACCAAATGAGT
TTTAACATCAGCTCTTTTTTCATATGAAAGCACATACCCTGCTCCCCATTCAAGTATGTCTTCCATTGTCAGGCA
GGCTGACCACCTTCAGCAGGAGTCCTCCAAGAGTGCCCAACTCCCCTTCCCACAGTACACAACGCTGTAGTTGTT
GTCCTGCAATCCTTTGTATTTACCTCATTCTTTCCCATCTAAGTCCTCACTGAGTTTTAAAGTTAGGGCTGGAAA
AGCTATGCCTTACTGGGACAGCAAGGAACCAATTTTTTTCTGAGGGAGAAGACATTCACCTTCACTATATGCCTG
GCAGGGCCACAGTGCACAAAACAAAGATCAGCCTTCATTCAAGTTCCAGGTTTTTCTTCCTCCCTGAATGATTAC
TGCAAAGGGTATATGAAGTAAGAGTTCCCTGTTGCACATGTACCATCCATAAGGGATACTATATCGTTTTGCATT
CTTCCCCCCATTCTCCACATTGTCCTATCTTAAGTCCAAGCCCTTTTCACTCTCAAAAAAAAAAAAAAAAATATTT
TTTTCAGCACTGGTGTTCAAAAGCAACGTTTTTATGGTTAATGGTTTACCAGCAACTGTTGAGATTTCCAGTTGA
GTCTTAAAAATTGCCAATCATTATCTAGCAGCAATGACAGATGATTAGGAGCAGTCAAATCCTCTGAATTCTTTC
CCTAATAGGCAGCCATTTGAGAACTGCACTAGCTGACATCACTAAAACATTATCAGCTAAAGCCAAAACCAAATA
AAGGCCCAGACCAACATCCTGGCTCTCTAAAACCTGTCCAAAATCATTAAGTGAAAGGCAGTAAATGCAGGACTG
TGGATCATGTCACTGCAGCTGACAATGATTAACAATAGGAGACATGCAACCCCCATTAAGGTTAAAAGTCCAAAA
CTAGTCACACGCATCTCTTTATTGGGGAAAAGTGAGACTATTATGCATTCTTGGTAGGTTTGCAACCTTGCATGA
AGAGCACCCATTGCATTTCTTTCATCTTTCAGAAAGCACCGGTATCTGTTCCAAGGGCCTAACAGTACGAAAATA
CATTCTGGCATCACACCTCTGAACCCAAGACTGTTCTCATTAAAAATAATTTTGGTTTGTAACAAAATTATGAAA
TACAATGCAAGCACCTCGGTATAGCATTATTACTGAAACCACTTAATTCCCAGCTTTTTGAGTTTTTTAAAAAAA
CCCACTGCACTAAGATTCACAATTCATTGCTACATACAAATTAAAGCTAGTAAGAACACACTAACGTCACAAGTT
TCTCATTCTAAAGTGCAAAAGCCTAATCATCTGAAAGTGAACAGGGTAA

FIGURE 3947

MKRSFLLPLLLVGFLDTAHLILLETLSVCLWLPSLIDSRCVMS

FIGURE 3948

ACTCGCGGGTAACTTGCTTTTGGGAGCCAGCGGTATGGCGTCGGGCTGCAAGATTGGCCCGTCCATCCTCAACAG
CGACCTGGCCAATTTAGGGGCCGAGTGCCTCCGGATGCTAGACTCTGGGGCCGATTATCTGCACCTGGACGTAAT
GGACGGAC**ATG**CACATGATGGTGTCCAAGCCAGAACAGTGGGTAAAGCCAATGGCTGTAGCAGGAGCCAATCAGT
ACACCTTTCATCTCGAGGCTACTGAGAACCCAGGGGCTTTGATTAAAGACATTCGGGAGAATGGGATGAAGTCTT
GCTCTGTCACCCAGGCTGAAGTGCAGTGGCACAGTCAGGGCCCATTGCAGGTTGGCCTTGCCATCAAACCAGGAA
CCTCAGTTGAGTATTTGGCACCATGGGCTAATCAGATAGATATGGCCTTGGTTATGACAGTGGAACCGGGGTTTG
GAGGGCAGAAATTCATGGAAGATATGATGCCAAAGGTTCACTGGTTGAGGACCCAGTTCCCATCTTTGGATATAG
AGGTCGATGGTGGAGTAGGTCCTGACACTGTCCATAAATGTGCAGAGGCAGGAGCTAACATGATTGTGTCTGGCA
GTGCTATTATGAGGAGTGAAGACCCCAGATCTGTGATCAATCTATTAAGAAATGTTTGCTCAGAAGCTGCTCAGA
AACGTTCTCTTGATCGG**TGA**AACCATAAGGAGCCCAGTGTTCCTGTTCATGAAATCTCCCTTTTACTGGAAAACA
GGAATATTGACTACCAAATCACAATGCAATTGAAGCCGTACTGCTTTTTTGAGCAGTTATTCATTCCAGTGATTA
AAACTGATTGTGCAGAATATTCTAAGAGGTCAGAAATTGGTGTGTATAACTACATTTTTAGTGATGCAATTTATT
GATTAGTGAGTAAGATACTGTTTTTATTGAGAGATTTGATTTTTATAAAGTAAAAATACGGCTGCATTAGGGTTA
CAAACAGAAAAGTGTCTTAATGTCTAAGGAGGGCATATTAGCTACACTACAAAAACAAATTTTGTCTGTACTTCT
GAAAAGAATTTTGTTGTTTCTCAGCTGTTTTCCAAAAGCAAAGGAAGTCTTTATGGTTTTTTTCTATTTCATGTT
ATTGTGATTTGTTTATAAGTTTGGGTGGGGTGCATACCATATTCTTGGTTCTTAAAATCTATCACTTTTCACCTT
ATACTTGATGTGTGAAAACTATAAAAACAATGTGTGAAACCCAGGGGTTCTAAAATACAAGCATAGATTTTATCA
GGGTGTTTTGTCAAAGCAGGTTATTCAGTGATTCCTCCCCACCATTCTTAAGAACGTTAAATAATGCTGTTGTGT
TAGCTCTGAGTAGAAAGGAAAAAGTAAAACCTCTGTTTGGAGGTAATATTGGGTTGAATTCTGACTGCCCCTTTC
TAGCTGGACCTTTAACAAATCACCCAATCTTTTTTGTGTTTCTCTAAAGTCATTTATACATTAAATGTAATTATA
GCAACTGTGGGGTTCTGTTGAGAATTAAGAGCTAACACTATATATGTAAAGTTTCCAGTACTAGTCCCAGAATTT
AGAATATGCTCAACACAAAGTAAACAGCATTATATAAGTTTATATTTTTGTGAGTTATAAAGTACTTTGATATAT
TCTCATTAAATCTGTAAATCACCTCTATAAGTAAGTGGTAATAATAAAGCAGATATTTTTGTCCCCATTTAAAAA
ATGAAGAAATTAATGCTTAATAGGGTGGTACCCTGGAAAGGATCTGGGAAGTGGTAGAATTTCTGGTCTGTACTT
TTACAAATGGAGCCCTTGGGAGGTGGGTTAGGTAAAAGAAGCTTTTTACTTAACGTTGTCTTATTTCCAGTCTAA
TTTTACGCTGTAGCAGAACCAGATGGCTGAGAAAATTCTGGAACTATGGATCTTGACCCCAAGGATATATTATTT
TATTCCAAGAAAGATCAGGTAGGCGAAAAGATGACAGGATACAGAGTCAATCCATAAACTAAATATTTATAACTG
TTCTGAATTATACAGAGTCTAAAAATATGTGTCAGCTACTTCATTCCTGTAAATACTCTTGCTGTGTTATAAATA
TGGCAAGAAATAAACATGACCAATATCAAT

FIGURE 3949

MHMMVSKPEQWVKPMAVAGANQYTFHLEATENPGALIKDIRENGMKSCSVTQAEVQWHSQGPLQVGLAIKPGTSV
EYLAPWANQIDMALVMTVEPGFGGQKFMEDMMPKVHWLRTQFPSLDIEVDGGVGPDTVHKCAEAGANMIVSGSAI
MRSEDPRSVINLLRNVCSEAAQKRSLDR

FIGURE 3950

ACGCGTCCGCCGGAGCGGGCCATGGACGCGCTCAAGTCGGCGGGGCGGGCGCTGATCCGGAGCCCCAGCTTGGCC
AAGCAGAGCTGGGGGGGCGGTGGCCGGCACCGCAAGCTGCCTGAGAACTGGACAGACACGCGGGAGACGCTGCTG
GAGGGGATGCTGTTCAGCCTCAAGTACCTGGGCATGACGCTAGTGGAGCAGCCCAAGGGTGAGGAGCTGTCGGCC
GCCGCCATCAAGAGGATCGTGGCTACAGCTAAGGCCAGTGGGAAGAAGCTGCAGAAGGTGACTCTGAAGGTGTCG
CCACGGGGAATTATCCTGACAGACAACCTCACCAACCAGCTCATTGAGAACGTGTCCATATACAGGATCTCCTAT
TGCACAGCAGACAAGATGCACGACAAGGTGTTTGCATACATCGCCCAGAGCCAGCACAACCAGAGCCTCGAGTGC
CACGCCTTCCTCTGCACCAAGCGGAAGATGGCACAGGCTGTTACCCTCACCGTAGCCCAGGCCTTCAAAGTCGCC
TTTGAGTTTTGGCAGGTGTCCAAGGAAGAGAAAGAGAAGAGGGACAAAGCCAGCCAAGAGGGAGGGGACGTCCTG
GGGGCCCGCCAAGACTGCACCCCCCCCTTGAAGAGCTTGGTCGCCACTGGGAACCTGCTGGACTTAGAGGAGACG
GCTAAGGCCCCGCTGTCCACGGTCAGCGCCAACACCACCAACATGGACGAGGTGCCGCGGCCACAAGCCTTGAGT
GGCAGCAGTGTTGTCTGGGAGCTGGATGATGGCCTGGATGAAGCGTTTTCGAGGCTTGCCCAGTCTCGGACAAAC
CCTCAGGTCCTGGACACTGGCCTGACAGCCCAGGACATGCATTACGCCCAGTGCCTCTCGCCTGTCGACTGGGAC
AAGCCTGACAGCAGCGGCACAGAGCAGGATGACCTCTTCAGCTTCTGAGGGCCCGGGGCCAGCCGGACACAAGCG
GCCCTGACACGTGATGGACCAAAGCCACCTGCTGCGGGGGAGCCAGTTCTGGGGCCCGCCTGCCACCTCTCCCAG
CCCTCAGCATTGTCAGCCTGAAGATCAGAGCTGCAGCCAGTCAGGCAGGGGAGAGATTTTTCTTTTAAGCCCTGC
TCTTTCTCTGAGAACCAAAAGATGCCTTGAATATTTATTCAGTGACTTCTGGCTTATGCTCAGAAGCCAGTCTGC
GTCAGGCACGTCTCCTGCTGCGTGACATGTGCAGTGCTGTAATCGGCTCCCGCTTGCTCTCCTGGAGCAAGCTCT
GCCCTGGCTGTGGGTATCAGGACTGTGACCAAAGCATTTCTAGTCCCTTCTCTCTTTCTAAGGACCCAAATTTCC
CTGGGGGCATCCTGCTTCCTGAAAGCTGTTGGATTTCAGTGATTTTTCCCCCCACCCCCCAGCACAGGAGAGCAC
CCACAGCCGCAGAAGGGGAATGTGTCCTCCTGCTCTGCTTCCTCAGGGCCCAGCAGGCGGGGGTTTGAGCCCTGG
ACCCCAGGCTCTTAGAGACTAAGGGGCAGCTCCTGACCAAAGACGATACAGCTTGGCACTTTAAAGCATTAACAG
CAGGTGTGACCCTGAGGGCTCCTCCATGGTGCTGCATTGAGTCCAGCTTTCCTTCTGCCCTTCCTCCAGGAGAAG
GGGCCCAAGGTCCCCGTGGATGGTCTCCACCTGTGCTTGGAACCAGTGTAACTGGCTGCTCCCTGCTCCCAGGGA
CTGACACGGGGATCATCTCTGTGACCGCCCTCCGTCGGGCCCCTGCCTGCCTTCTCCCCTCCACGCAAGGCTGTG
CTCTTCCTCTGGTTTCTGTGTGTCCGTTTGAGTGTCTGCGCCCCGCCTCCCCATACTTCCTGGGATGATGTGTGA
AACCTGACACCTAGATTTATTTGGAAATATTCTATGACCACTTTACAGATGAGGAAACTGAGGCCTCAAGCGTGG
AGGGGTAGAGTGAAGAGTAGAACCCAGGTCTGATGCCAAAGCTGCTTTCTTCTCTGCCTCCTCCTCACGCAACTC
ACACCTCCTTTTCTTCTAGCTTTGTTGTCCTCCCAGGAACCAAAAAACCCCAGCTATTTTCTGACCAAAATGTGT
TTCATAACAAACCATCTGGTGCCTTTCCACACAGAACTGGCAGGAGCCTCGTGTCCTGCTAGCTGTCTCTCTTGT
TGATTTCCGTGAAAATGCAAGTGTTTGAAGTCTGCTCATTCCGAGGGTGAAACAAAATCCAACCCTGTCAGAATC
ATGCTGTTCTCTTTGCTGACACTGTGACCCTGGGTCGGGACAGACCAGCAGCAATCTGTCTTTAGAATCGCTTTC
CTTCCTCCCCTTTTGCCCCCGTGGGGCTCCCGGCATCCTGAAAGCCAGCAAAGCCTCCAGCATCTTTTCCATCCT
GAGGTGCCTCCCAGTGGCCTGGCTTGTCGGAGCAAGTTTCATCAGCCCTAGGGAAAACACGGCCCTCCTGGGAAC
CTCCTTACCTGGAGTAACCGGACACCTTAGACGGAGGTGCCTGAGGGTGGGGTGGGATTTGCAGGGTCATTATCA
GAACATGAGGATAACTTCCTTGCCCCTGCTCTGTAGCCACCTCCTTGGCACCGGCCTCTATTTGTCATAAGGCGG
CGTGGGCGAGGCCTGACACAGGCCAGCCTTGGCACGAGGGGGGCCAGGGGTTCTGAGAAGCGCTGCCCTGTGAGA
GCCACGCTGGCCTTCGTCTCCATCTCTGGTTGACGGGCTGTCCGTGTGCCTCCTGTGTGTCTGCAGACAAGTCTT
GCTGTGCTTTATTTGTGAAACTTTAATGAGGAAAAAACAAATAATAAATGTTCTCGTTTTGAAACTCAAAAAAAA
AAAAAAAAAGGGCGGCCGC

FIGURE 3951A

AAGGATCCAAGTGTCACGGGGTCTGGGCAATGCAGGACGGGAGGGGCTGCGTGAGTGAGTACAGAAGGGAAATGA
GTGAGGGGGCATGGGATCTCAGAGAAAATCAGGGACCTCTGAGCAAAGTGGAAAGGACGACCGCCGCAGCTCCTC
GGGCCGTAGCTCGACCCCGCCTTCCCTTTTCCGCAGAATCCTCGCCTTGGCTGCAGCAGCGCGCTGCCCCCACTG
GCCGGCGTGCCGTGATCGATCGCAGGCTGCGTCAGGACCTCCCGGCGTATAAATAGGGGTGGCAGAACGGCGCCG
AGCCGCACACAGCCATCCATCCTCCCCCTTCCCTCTCTCCCCTGTCCTCTCTCTCCGGGCTCCCACCGCCGCCGG
GGAGCACCGGCCGCCAACCAATGAGTTCCTTCAGCTACGAGCCGTACTACTCGACCTCCTACAAGCGGCGCTACG
TGGAGACGCCCCGGGTGCATATCAGCGTGCGCAGCGGCTACAGCACCGCACGCTCAGCTTACTCAAGCTACTCGG
CGCCGGTGTCTTCCTCGCTGTCCGTGCGCCGCAGCTACTCCTCCAGCTCTGGATCGTTGATGCCCAGTCTGGAGA
ACCTCGACCTGAGCCAGGTAGCCGCCATCAGCAACGACCTCAAGTCCATCCGCACGCAGGAGAAGGCGCAGCTCC
AGGACCTCAATGACCGCTTCGCCAGCTTCATCGAGCGCGTGCACGAGCTGGAGCAGCAGAACAAGGTCCTGGAAG
CCGAGCTGCTGGTGCTGCGCCAGAAGCACTCCGAGCCATCCCGCTTCCGGGCGCTGTACGAGCAGGAGATCCGCG
ACCTGCGCCTAGCGGCGGAAGATGCCACCACCAACGAGAAGCAAGCGCTCCGAGGCGAGCGCGAAGAAGGGCTGG
AGGAGACCCTGCGCAACCTGCAGGCGCGCTATGAAGAGGAGGTGCTGAGCCGCGAGGACGCCGAGGGCCGGCTGA
TGGAACGCCGCAAAGGCGCCGACGAGGCGGCGCTCGCTCGCGCCGAGCTCGAGAAGCGCATCGACAGCTTGATGG
ACGAAATCTCTTTTCTGAAGAAAGTGCACGAAGAGGAGATCGCCGAACTGCAGGCGCAGATCCAGTACGCGCAGA
TCTCCGTGGAGATGGACGTGACCAAGCCCGACCTTTCCGCCGCGCTCAAGGACATCCGCGCGCAGTACGAGAAGC
TGGCCGCCAAGAACATGCAGAACGCTGAGGAATGGTTCAAGAGCCGCTTCACGGTGCTGACCGAGAGCGCCGCCA
AGAACACCGACGCCGTGCGCGCCGCCAAGGACGAGGTGTCGGAGAGCCGTCGTCTGCTCAAGGCCAAGACCCTGG
AAATCGAAGCATGCCGGGGCATGAATGAAGCGCTGGAGAAGCAGCTGCAGGAGCTGGAGGACAAGCAGAACGCCG
ACATCAGCGCTATGCAGGTGCGGCACGGCCAGAAACACAGGGGGGCGGGGAACTCGAGCAAGGGGGGGAGTTGGT
GCGCCCAGAAAGCGAAACCAGGGGTGGTGCGGCTGCCCAGCTCTTAGGGATAGGGCTTGGCTCCTTGGCCACTGT
GTGGAGGGGTGGGGCTCTTGAGGGGCGTGAGTGCGGGCGCCACTGTAGTCCGGGAGTGACTGCTCCGCGTGCTGC
ACCGGCGTTCCGCATTAAAGCTGCCCGACCCTTGTTGGGTGGGGAGGGGAAGACGTGGGAATTGGGCGTTGCCTC
CGACTGCAGTGAGATCAGCTCTCTACTGACCTGCGTTGACCACGAGTTACTTTGCAGCGACTATCGGATCGTCTA
GTTAATAAATAGTACGAGTGAACTAACTCTCAATTAATTCTGAAGGATTACTGTGACCAGCATGCTTTATGACTA
GTTTTACCAACCACCTCCCTTCCTTTATTTAGTAGGTAGACAGGAAAATAGTCAACATTGTTTTAGGTAGTTAAC
TAGTGATGTTCATAGTAAACCATTTCCTTTTACCTTTTTTTTTTCTTTTTTTCTTTATGTGTAAAATCTTCTACA
ACATTTCTGTTTAAACATCTCCATCTTCTGGGGAGTAGAAAAAATACAATTTTAAAAAGATCTCCATTTTAAAAC
ATCTCCGTCTTCTGGGGAGTAGAAATTTTTTTCTTCTTCTGGGGAGTAGAAAAAATAATTTAGATACATAGGAAA
TATTTCATAGAAAATAATTTTTTTCTTTTTTTTGTTTACATCTGGTATTTTCTTCTCATAAAGAAAGGCATTAGT
TTCCTGGCATGTAACCCAGCTAAAGAAGAGTAATCAGTGAATGAGAGACACAGTTTTTCTATCAACTTAGTCTGT
TTTTCTATCAACTTAGTCTGTTTGCATGCATTTTATGATGATCATTAAACAGTATTAAGTAAAGAAACAGAAGAA
CAGAATTTTCGTCCATCTTTTTTTTCATCTCAGGCTTCATGAACTTGGGTATTTTAGGCATGAAGGTTTTTCAAA
AGATACAGGAAGTTATTCTAGGAGAGATTTTATCAAAGTGTGCACCTTGATTTTAATCGAAACTAGGCCTTTGCA
ACTACACTACAGTAAAATAATAGAAGGGATTTATGCTCGGATTTTTTTTTTGTTTTATTTTTGTCTTCAAACAGG
ACACGATCAACAAATTAGAAAATGAATTGAGGACCACAAAGAGTGAAATGGCACGATACCTAAAAGAATACCAAG
ACCTCCTCAACGTGAAGATGGCTTTGGATATTGAGATTGCTGCTTACAGGTGAAAATAGAGGGGCAAAGACAGCA
GCCATTAAACCTTAGGAAGAAAATCAGATCCCATTTAAAGTTATGTTGGATCAGAAACCTTCAATAATAGTCCTT
TTGAAATAATGAAGTGTTAGTTTTTGGCTTCTTCCAAGAAGAGGGTATTTAGATATATAAGAATTTAACCCTGTA
ATTAGAGTCCTGTTTTTATCTTGTCATTACACTTTAAATCTAATAGGAGTGATTTATTTATATTTTTTCTGGTCT
CCATCAAAAGATCCCCAGGCATTAAGTATTGATAAATCCCAGCCCTGCTCCTGCTTGCCTTTGTGTTTAGGGTAC
TCAGAGCAAGTTGTGAAACACAGGTGTTTTTTAACCTCACCTTGCACCTGCATCCCCAGGAAACTCTTGGAAGGC
GAGGAGACCCGACTCAGTTTCACCAGCGTGGGAAGCATAACCAGTGGCTACTCCCAGAGCTCCCAGGTCTTTGGC
CGATCTGCCTACGGCGGTTTACAGACCAGCTCCTATCTGATGTCCACCCGCTCCTTCCCGTCCTACTACACCAGC
CATGTCCAAGAGGAGCAGACCGAAGTGGAGGAAACCATTGAGGCGTCTAAGGCTGAGGAAGCCAAGGATGAGCCC
CCCTCTGAAGGAGAAGCCGAGGAGGAGGAGAAGGACAAGGAAGAGGCCGAGGAAGAGGAGGCAGCTGAAGAGGAA
GAAGGTATGATAAGAAAAAACCCCTGCAACTTCAAGTGTAAACTGGGTGTGGAGATTTGTTAGGAGGTGGATAAG
ACAAATGAAGCCTTGCTCATTTATTCATATATGACATTAGAATCATAAATAAATTTTCTGTTTGTTTAGCAAAAC

FIGURE 3951B

TTTCCTAAGGCATCTACTCTGAATGAGGTGATTGGTCAAAATTTTCATTTTTTAATATAATCATTTAACACAGCA
GGTTGGTGTCCTAAAGAACAAAAATAGATACCAGACACATAATGAAAGAAATATTGAGGTTAAGTCTTGGAGAGG
AGCAGAGCTTCCCATACCTAGAAGTGATCTCATTCGATTTAAATATGTGTTCAGTGGCAAATTATTCATGGCAAG
CTTTGTCTGTTACATGTGCTTTTGGAGAGAGTGGAGCTGGGAGGTTTTGGTAGCATTCTGACAGTTGTGTTTGCA
AATAAAACCTTTGCAGACATGTTTTGACTGGACTTACCCTGGATTTGCATTTTGTACATTTTCTTTTTATGTTAA
AGCTGCCAAGGAAGAGTCTGAAGAAGCAAAAGAAGAAGAAGAAGGAGGTGAAGGTGAAGAAGGAGAGGAAACCAA
AGAAGCTGAAGAGGAGGAGAAGAAAGTTGAAGGTGCTGGGGAGGAACAAGCAGCTAAGAAGAAAGATTGAACCCC
CATTTCCTTAATTATTTCAGGAATAATTCTCCCGAAATCAGGTCAACCCCATCACCAACCAACCAACCAGTTGAG
TTCCAGATTCTATGTGAATTAAAAAGTCAATATATGTATAATTCTGAGATGACTTAGGTTGGACATTCAATGTTG
TGCTATGAATTTCCTCTTTATGCAGAGTATCTGTTTGCTTGCAGAGTGGCTTTCGGCTTGCTGCCAGCCTGTGCA
TGGTCCACGCTTATGAGTTCAGGATCTACGGCAATGTGAATCATTCAGATGTTTACAATAAAAAACACCACATGA
GTAAATGAATTCACTAATGTTAATGTTAAACTTCATGGAAAAGTAGTCCTTTGAACCTTCGGTGGTTAGCAATTA
AAGACCCTGAGTTATGTGCAATAAATAGTAAATAAAGTTATACCGAATGATGTATTTTTTGCCGTGGTTGTTACC
TAATTAAAATACCTTAAAGATGGCACCAATATAAAGTGTGTGCCAGTGAACTATTGACCTCCAATTTTTTAAAAA
GCCGAAATTTTAACAATTACCAATACTTTTTT

FIGURE 3952

MSSFSYEPYYSTSYKRRYVETPRVHISVRSGYSTARSAYSSYSAPVSSSLSVRRSYSSSSGSLMPSLENLDLSQV
AAISNDLKSIRTQEKAQLQDLNDRFASFIERVHELEQQNKVLEAELLVLRQKHSEPSRFRALYEQEIRDLRLAAE
DATTNEKQALRGEREEGLEETLRNLQARYEEEVLSREDAEGRLMERRKGADEAALARAELEKRIDSLMDEISFLK
KVHEEEIAELQAQIQYAQISVEMDVTKPDLSAALKDIRAQYEKLAAKNMQNAEEWFKSRFTVLTESAAKNTDAVR
AAKDEVSESRRLLKAKTLEIEACRGMNEALEKQLQELEDKQNADISAMQVRHGQKHRGAGNSSKGGSWCAQKAKP
GVVRLPSS

FIGURE 3953

CACAAAGGCACCAAACCACAAAACGTCACACGTAAACATCATACGTGGCAACCACAAGCCAATCAGTTGGATATT
TCATTCATTGGTATACATATGGACTGTAAGGTGTCTTTCAGGTTGCAGAAAAGATGGAAAAAAGGACATGTGCAC
TCTGCCCCAAAGATGTCGAATATAATGTCCTGTACTTTGCACAATCAGAGAATATAGCTGCTCATGAGAATTGTT
TGCTGTATTCTTCAGGACTTGTGGAATGTGAGGATCAGGATCCACTTAATCCTGATAGAAGTTTTGATGTGGAAT
CAGTAAAGAAAGAAATCCAGAGAGGAAGGAAGTTGAAATGCAAATTTTGTCATAAAAGAGGAGCCACCGTGGGAT
GTGATTTAAAAAACTGTAACAAGAATTACCACTTTTTCTGTGCCAAGAAGGACGACGCAGTTCCACAGTCTGATG
GAGTTCGAGGAATTTATAAACTGCTTTGCCAGCAACATGCTCAATTCCCGATCATCGCTCAAAGTGCTAAATTTT
CAGGAGTGAAAAGAAAAAGAGGAAGGAAGAAACCCCTCTCAGGCAATCATGTACAGCCACCCGAAACAATGAAAT
GTAATACATTCATAAGACAAGTGAAAGAAGAGCATGGCAGACACACAGATGCAACTGTGAAAGTTCCTTTTCTTA
AGAAATGCAAGGGAAGCAGGACTTCTTAATTACTTACTTGAAGAAATATTAGACAAAGTTCATTCAATTCCAGAA
AAACTCATGGATGAGACTTACTTCAGAATCAGACTATGAAGAAATCGGGAGTGCACTTTTTGACTGTAGATTGTT
CGAAGACACATTTGTAAATTTTCAAGCAGCAATAGAGAAAAAAATTCATGCATCTCAACAAAGGTGGCAGCAGTT
GAAGGAAGAGATTGAGCTACTTCAGGACTTAAAACAAACCTTGTGCTCTTTTCAAGAAAATAGAGATCTTATGTC
AAGTTCTACATCAATATCATCCCTGTCTTATTAGGGATTACCATTTCCTAAGCCAAGAGTCATGTCAAATTGCAA
TCAGGCTCAAAACCAGAGACCAGGCTGTGAAATCCACACATCTTTAGAACTAGTCGTCTCCTCTTGGCCTCAGCA
GCTCTTCCCTGTTCTTACTGGTTGACATTTTGATCACTCTTTGCACACTCTTGTGTTTTTTGCTCACTGTCACAC
TCCCAGCACCTAGTATGCTCAGTAAATGTTTGTGGAATAAGTGCATAAAATGTTCTTAACCTTTGATTCTACTTA
CAGCCCATGATAGCCTCTTAGATATAATAAATTTGGATTATACTAAAA

FIGURE 3954

MEKRTCALCPKDVEYNVLYFAQSENIAAHENCLLYSSGLVECEDQDPLNPDRSFDVESVKKEIQRGRKLKCKFCH
KRGATVGCDLKNCNKNYHFFCAKKDDAVPQSDGVRGIYKLLCQQHAQFPIIAQSAKFSGVKRKRGRKKPLSGNHV
QPPETMKCNTFIRQVKEEHGRHTDATVKVPFLKKCKGSRTS

FIGURE 3955

GGCACGAGGGGCGGCGGAGCCGACTCGTCGCGGCCGAGGCGCACGCGGTCCGCGCCGGCGTCAGTCTGGGATTGG
CCGGCCCGCGACTTCCTCCGCCCCCTGCCAATCGCCGGGGACGACTTCCGTGGGTTTTTCCGGCTCTCCCGCGTC
GCTAAGGAGCGACGGGCTGTCGGCCAGACCCCGAGTTCTCGGTGCGCTCAGCGGCCGCCGACGCTAGGAGGCCGC
GCTCCGCCCCCGCTACC**ATG**AGGCCCCGGAAAGCCTTCCTGCTCCTGCTGCTCTTGGGGCTGGTGCAGCTGCTGG
CCGTGGCGGGTGCCGAGGGCCCGGACGAGGATTCTTCTAACAGAGAAAATGCCATTGAGGATGAAGAGGAGGAGG
AGGAGGAAGATGATGATGAGGAAGAAGACGACTTGGAAGTTAAGGAAGAAAATGGAGTCTTGGTCCTAAATGATG
CAAACTTTGATAATTTTGTGGCTGACAAAGACACAGTGCTGCTGGAGTTTTATGCTCCATGGTGTGGACATTGCA
AGCAGTTTGCTCCGGAATATGAAAAAATTGCCAACATATTAAAGGATAAAGATCCTCCCATTCCTGTTGCCAAGA
TCGATGCAACCTCAGCGTCTGTGCTGGCCAGCAGGTTTGATGTGAGTGGCTACCCCACCATCAAGATCCTTAAGA
AGGGGCAGGCTGTAGACTACGAGGGCTCCAGAACCCAGGAAGAAATTGTTGCCAAGGTCAGAGAAGTCTCCCAGC
CCGACTGGACGCCTCCACCAGAAGTCACGCTTGTGTTGACCAAAGAGAACTTTGATGAAGTTGTGAATGATGCAG
ATATCATTCTGGTGGAGTTTTATGCCCCATGGTGTGGACACTGCAAGAAACTTGCCCCCGAGTATGAGAAGGCCG
CCAAGGAGCTCAGCAAGCGTTCTCCTCCAATTCCCCTGGCAAAGGTCGACGCCACCGCAGAAACAGACCTGGCCA
AGAGGTTTGATGTCTCTGGCTATCCCACCCTGAAAATTTTCCGCAAAGGAAGGCCTTATGACTACAACGGCCCAC
GAGAAAAATATGGAATCGTTGATTACATGATCGAGCAGTCCGGGCCTCCCTCCAAGGAGATTCTGACCCTGAAGC
AGGTCCAGGAGTTCCTGAAGGATGGAGACGATGTCATCATCATCGGGGTCTTTAAGGGGGAGAGTGACCCAGCCT
ACCAGCAATACCAGGATGCCGCTAACAACCTGAGAGAAGATTACAAATTTCACCACACTTTCAGCACAGAAATAG
CAAAGTTCTTGAAAGTCTCCCAGGGGCAGTTGGTTGTAATGCAGCCTGAGAAATTCCAGTCCAAGTATGAGCCCC
GGAGCCACATGATGGACGTCCAGGGCTCCACCCAGGACTCGGCCATCAAGGACTTCGTGCTGAAGTACGCCCTGC
CCCTGGTTGGCCACCGCAAGGTGTCAAACGATGCTAAGCGCTACACCAGGCGCCCCCTGGTGGTCGTCTACTACA
GTGTGGACTTCAGCTTTGATTACAGAGCTGCAACTCAGTTTTGGCGGAGCAAAGTCCTAGAGGTGGCCAAGGACT
TCCCTGAGTACACCTTTGCCATTGCGGACGAAGAGGACTATGCTGGGGAGGTGAAGGACCTGGGGCTCAGCGAGA
GTGGGGAGGATGTCAATGCCGCCATCCTGGACGAGAGTGGGAAGAAGTTCGCCATGGAGCCAGAGGAGTTTGACT
CTGACACCCTCCGCGAGTTTGTCACTGCTTTCAAAAAAGGAAAACTGAAGCCAGTCATCAAATCCCAGCCAGTGC
CCAAGAACAACAAGGGACCCGTCAAGGTCGTGGTGGGAAAGACCTTTGACTCCATTGTGATGGACCCCAAGAAGG
ACGTCCTCATCGAGTTCTACGCACCATGGTGCGGGCACTGCAAGCAGCTAGAGCCCGTGTACAACAGCCTGGCCA
AGAAGTACAAGGGCCAAAAGGGCCTGGTCATCGCCAAGATGGACGCCACTGCCAACGACGTCCCCAGCGACCGCT
ATAAGGTGGAGGGCTTCCCCACCATCTACTTCGCCCCCAGTGGGGACAAAAAGAACCCAGTTAAATTTGAGGGTG
GAGACAGAGATCTGGAGCATTTGAGCAAGTTTATAGAAGAACATGCCACAAAACTGAGCAGGACCAAGGAAGAGC
TT**TGA**AGGCCTGAGGTCTGCGGAAGGTGGGAGGAGGCAGACACCCTGCGTGGCCCATGGTCGGGGCGTCCACGCC
GAGGCCGGCAACAAACGACAGTATCTCGGATTCCTTTTTTTTTTTTTTTAATTTTTTATACTTTGGTGTTTCAC
TTCATGCTCTGAATACTGAATAACCATGAATGACTGAATAGTTTAGTCCAGATTTTTACAGAGGATACATCTATT
TTTATCATTATTTGGGGTTTGAAAAATTTTTTTTTACACCTTCTAATTTCTTTATTTCTCAAAGCAGATAATTCT
TCTGTGTGAAAATGTTTTCTTTTTTTAATTTAAGGTTTAAAATTCCTTTGCCAAATCATGTTGATTTTGCTCTTT
GCTTTTTCGTTGTCTGAGAAATTGTTGGCGTAGATTTGGCTTCTGGTATGTGTTTCTGATTGCTTCCTGTTGAGC
ACAAAGTGAGAGCTGCCACTGAGCAGCCCTGCCAGGGGTGCTGTTTCAGGCTGGGCATCGCCAGGCGGCCTCCCT
GCAAACCAAGGGCTGGGGGCAAAGGGGCATGATCCAGGGTCCCCCAGGGTGGGCTCAGCTCCAGGGAGAGGCCAC
CCACGTGGCAGCCCCACCTCTTGAGAGCCCCCAGTGCCGGAGCAGAAAGGACCCTGGACCCAGAGGCAGATACTG
CGGGGTGGTAGAAAAGGTAGAGTAGGCTGTGGCAATGGAATAAAACACGATTAAAAACGTTAAAAAAAAAAAAAA
AAAAA

FIGURE 3956

MRPRKAFLLLLLLGLVQLLAVAGAEGPDEDSSNRENAIEDEEEEEEEDDDEEEDDLEVKEENGVLVLNDANFDNF
VADKDTVLLEFYAPWCGHCKQFAPEYEKIANILKDKDPPIPVAKIDATSASVLASRFDVSGYPTIKILKKGQAVD
YEGSRTQEEIVAKVREVSQPDWTPPPEVTLVLTKENFDEVVNDADIILVEFYAPWCGHCKKLAPEYEKAAKELSK
RSPPIPLAKVDATAETDLAKRFDVSGYPTLKIFRKGRPYDYNGPREKYGIVDYMIEQSGPPSKEILTLKQVQEFL
KDGDDVIIIGVFKGESDPAYQQYQDAANNLREDYKFHHTFSTEIAKFLKVSQGQLVVMQPEKFQSKYEPRSHMMD
VQGSTQDSAIKDFVLKYALPLVGHRKVSNDAKRYTRRPLVVVYYSVDFSFDYRAATQFWRSKVLEVAKDFPEYTF
AIADEEDYAGEVKDLGLSESGEDVNAAILDESGKKFAMEPEEFDSDTLREFVTAFKKGKLKPVIKSQPVPKNNKG
PVKVVVGKTFDSIVMDPKKDVLIEFYAPWCGHCKQLEPVYNSLAKKYKGQKGLVIAKMDATANDVPSDRYKVEGF
PTIYFAPSGDKKNPVKFEGGDRDLEHLSKFIEEHATKLSRTKEEL

FIGURE 3957

GCGGCGGCCAGGGGGGAGCCGGGGCGGCCGTTGCGGGGCGCGCTCTCGAGAGGCGGCGGCGGCCAGGGTGTCCCG
TCGGTCTCGGCGCCGGGAAGAGGCGGTGGCGCTGCCCGCGGTGGCGGGGGTTGGCGACGGAGCGCGTTGGTGCCA
GGACCGGGGTCCGAGGCGCGCTCTCCGCCCACAGAAATGAGCCGTCAGACTGCTACAGCATTACCTACCGGTACC
TCGAAGTGTCCACCATCCCAGAGGGTGCCTGCCCTGACTGGCACAACTGCATCCAACAATGACTTGGCGAGTCTT
TTTGAGTGTCCAGTCTGCTTTGACTATGTGTTACCGCCCATTCTTCAATGTCAGAGTGGCCATCTTGTTTGTAGC
AACTGTCGCCCAAAGCTCACATGTTGTCCAACTTGCCGGGGCCCTTTGGGATCCATTCGCAACTTGGCTATGGAG
AAAGTGGCTAATTCAGTACTTTTCCCCTGTAAATATGCGTCTTCTGGATGTGAAATAACTCTGCCACACACAGAA
AAAGCAGACCATGAAGAGCTCTGTGAGTTTAGGCCTTATTCCTGTCCGTGCCCTGGTGCTTCCTGTAAATGGCAA
GGCTCTCTGGATGCTGTAATGCCCCATCTGATGCATCAGCATAAGTCCATTACAACCCTACAGGGAGAGGATATA
GTTTTTCTTGCTACAGACATTAATCTTCCTGGTGCTGTTGACTGGGTGATGATGCAGTCCTGTTTTGGCTTTCAC
TTCATGTTAGTCTTAGAGAAACAGGAAAAATACGATGGTCACCAGCAGTTCTTCGCAATCGTACAGCTGATAGGA
ACACGCAAGCAAGCTGAAAATTTTGCTTACCGACTTGAGCTAAATGGTCATAGGCGACGATTGACTTGGGAAGCG
ACTCCTCGATCTATTCATGAAGGAATTGCAACAGCCATTATGAATAGCGACTGTCTAGTCTTTGACACCAGCATT
GCACAGCTTTTTGCAGAAAATGGCAATTTAGGCATCAATGTAACTATTTCCATGTGTTGAAATGGCAATCAAACA
TTTTCTGGCCAGTGTTTAAAACTTCAGTTTCACAGAAAATAAGGCACCCATCTGTCTGCCAACCTAAAACTCTTT
CGGTAGGTGGAAGCTAGACACATGAAGGTAAATAAAAAGAAAGGCTGTTAAATACAGGAAACAGTTGCATGTAGT
AACACTAATATATTTAAAAATAAGTCAACAGTAAACCACTGAAAAAATATATGTATATACACCCAAGATGGGCAT
CTTTTGTATTAAGAAAGGAAGCATTGTAAAATAATTCTGAGTTTTGTGTTTGTTGTAGATTGATTGTATTGTTGA
AAAAGTTTGTTTTTGCCGTGGGAGTGTGTGCCTGCGTGGGTGTGTGCGTGTTGGTTTTTCCTTAACTGACAAGCC
ATCTTGAGTGGTCATGGGCCACTGCTTTTCCCTTTGTGAGTCAATACATAGTGCTGCTGTGTGCTTTTTTTGTGT
GTATTTGCTAATTTTTATTAATTTTAGTTTTTCATTAAATAAATTTGACTTTTCTGTAATTCAGGTTTTTCCTTT
TTTTGTACCATTTTAAAGTTAGTATCTTTTGATATGCATATTTGTTTATGGTAAAAAATTTATAACGTGTTCAAT
ATTTTCTTTTCCCCCATTAATCAGTTCATTAGAAATATTTTAAAATCAGCTATTTTGTGAAGCCATGAGTTCCAG
AAAGTAAAGGTGACATCGGAAAAATAATCCCAAGCTATTTAAAGCATCTATAAGGTGCTCTCTTTCTGTCTTCTA
CAGATGAGTCACACCTTTGAGCTTAATCTTGAAGGTTAGAGATAAATTGATTTTTATAAATACTGCAAATCAGGC
TTTTGTTTCCTTTTTCAGATATCTTGGACAAATCACATATTTTAAAATTTGTTCTTGTATTTATTGGTTTTGCAG
AAGAAGGCATCGTCATGCACAGTATTTGTAATTAAAAGCAAATCATTTGTTTAAAAAGGCAGTTTGCAAAAAATG
TTTTTGGTCTTTTATAATTCTCA

FIGURE 3958

MSRQTATALPTGTSKCPPSQRVPALTGTTASNNDLASLFECPVCFDYVLPPILQCQSGHLVCSNCRPKLTCCPTC
RGPLGSIRNLAMEKVANSVLFPCKYASSGCEITLPHTEKADHEELCEFRPYSCPCPGASCKWQGSLDAVMPHLMH
QHKSITTLQGEDIVFLATDINLPGAVDWVMMQSCFGFHFMLVLEKQEKYDGHQQFFAIVQLIGTRKQAENFAYRL
ELNGHRRRLTWEATPRSIHEGIATAIMNSDCLVFDTSIAQLFAENGNLGINVTISMC

FIGURE 3959

TCGAGGCGACCGCGACAGTGGTGGGGGACGCTGCTGAGTGGAAGAGAGCGCAGCCCGGCCACCGGACCTACTTAC
TCGCCTTGCTGATTGTCTATTTTTGCGTTTACAACTTTTCTAAGAACTTTTGTATACAAAGGAACTTTTTAAAAA
AGACGCTTCCAAGTTATATTTAATCCAAAGAAGAAGGATCTCGGCCAATTTGGGGTTTTGGGTTTTGGCTTCGTT
TCTTCTCTTCGTTGACTTTGGGGTTCAGGTGCCCCAGCTGCTTCGGGCTGCCGAGGACCTTCTGGGCCCCCACAT
TAATGAGGCAGCCACCTGGCGAGTCTGAC**ATG**GCTGTCAGCGACGCGCTGCTCCCATCTTTCTCCACGTTCGCGT
CTGGCCCGGCGGGAAGGGAGAAGACACTGCGTCAAGCAGGTGCCCCGAATAACCGCTGGCGGGAGGAGCTCTCCC
ACATGAAGCGACTTCCCCCAGTGCTTCCCGGCCGCCCCTATGACCTGGCGGCGGCGACCGTGGCCACAGACCTGG
AGAGCGGCGGAGCCGGTGCGGCTTGCGGCGGTAGCAACCTGGCGCCCCTACCTCGGAGAGAGACCGAGGAGTTCA
ACGATCTCCTGGACCTGGACTTTATTCTCTCCAATTCGCTGACCCATCCTCCGGAGTCAGTGGCCGCCACCGTGT
CCTCGTCAGCGTCAGCCTCCTCTTCGTCGTCGCCGTCGAGCAGCGGCCCTGCCAGCGCGCCCTCCACCTGCAGCT
TCACCTATCCGATCCGGGCCGGGAACGACCCGGGCGTGGCGCCGGGCGGCACGGGCGGAGGCCTCCTCTATGGCA
GGGAGTCCGCTCCCCCTCCGACGGCTCCCTTCAACCTGGCGGACATCAACGACGTGAGCCCCTCGGGCGGCTTCG
TGGCCGAGCTCCTGCGGCCAGAATTGGACCCGGTGTACATTCCGCCGCAGCAGCCGCAGCCGCCAGGTGGCGGGC
TGATGGGCAAGTTCGTGCTGAAGGCGTCGCTGAGCGCCCCTGGCAGCGAGTACGGCAGCCCGTCGGTCATCAGCG
TCAGCAAAGGCAGCCCTGACGGCAGCCACCCGGTGGTGGTGGCGCCCTACAACGGCGGGCCGCCGCGCACGTGCC
CCAAGATCAAGCAGGAGGCGGTCTCTTCGTGCACCCACTTGGGCGCTGGACCCCCTCTCAGCAATGGCCACCGGC
CGGCTGCACACGACTTCCCCCTGGGGCGGCAGCTCCCCAGCAGGACTACCCCGACCCTGGGTCTTGAGGAAGTGC
TGAGCAGCAGGGACTGTCACCCTGCCCTGCCGCTTCCTCCCGGCTTCCATCCCCACCCGGGGCCCAATTACCCAT
CCTTCCTGCCCGATCAGATGCAGCCGCAAGTCCCGCCGCTCCATTACCAAGAGCTCATGCCACCCGGTTCCTGCA
TGCCAGAGGAGCCCAAGCCAAAGAGGGGAAGACGATCGTGGCCCCGGAAAAGGACCGCCACCCACACTTGTGATT
ACGCGGGCTGCGGCAAAACCTACACAAAGAGTTCCCATCTCAAGGCACACCTGCGAACCCACACAGGTGAGAAAC
CTTACCACTGTGACTGGGACGGCTGTGGATGGAAATTCGCCCGCTCAGATGAACTGACCAGGCACTACCGTAAAC
ACACGGGGCACCGCCCGTTCCAGTGCCAAAAATGCGACCGAGCATTTTCCAGGTCGGACCACCTCGCCTTACACA
TGAAGAGGCATTTT**TAA**ATCCCAGACAGTGGATATGACCCACACTGCCAGAAGAGAATTCAGTATTTTTTACTTT
TCACACTGTCTTCCCGATGAGGGAAGGAGCCCAGCCAGAAAGCACTACAATCATGGTCAAGTTCCCAACTGAGTC
ATCTTGTGAGTGGATAATCAGGAAAAATGAGGAATCCAAAAGACAAAAATCAAAGAACAGATGGGGTCTGTGACT
GGATCTTCTATCATTCCAATTCTAAATCCGACTTGAATATTCCTGGACTTACAAAATGCCAAGGGGGTGACTGGA
AGTTGTGGATATCAGGGTATAAATTATATCCGTGAGTTGGGGGAGGGAAGACCAGAATTCCCTTGAATTGTGTAT
TGATGCAATATAAGCATAAAAGATCACCTTGTATTCTCTTTACCTTCTAAAAGCCATTATTATGATGTTAGAAGA
AGAGGAAGAAATTCAGGTACAGAAAACATGTTTAAATAGCCTAAATGATGGTGCTTGGTGAGTCTTGGTTCTAAA
GGTACCAAACAAGGAAGCCAAAGTTTTCAAACTGCTGCATACTTTGACAAGGAAAATCTATATTTGTCTTCCGAT
CAACATTTATGACCTAAGTCAGGTAATATACCTGGTTTACTTCTTTAGCATTTTTATGCAGACAGTCTGTTATGC
ACTGTGGTTTCAGATGTGCAATAATTTGTACAATGGTTTATTCCCAAGTATGCCTTAAGCAGAACAAATGTGTTT
TTCTATATAGTTCCTTGCCTTAATAAATATGTAATATAAATTTAAGCAAACGTCTATTTTGTATATTTGTAAACT
ACAAAGTAAAATGAACATTTTGTGGAGTTTGTATTTTGCATACTCAAGGTGAGAATTAAGTTTTAAATAAACCTA
TAATATTTTATCTG

FIGURE 3960

MAVSDALLPSFSTFASGPAGREKTLRQAGAPNNRWREELSHMKRLPPVLPGRPYDLAAATVATDLESGGAGAACG
GSNLAPLPRRETEEFNDLLDLDFILSNSLTHPPESVAATVSSSASASSSSSPSSSGPASAPSTCSFTYPIRAGND
PGVAPGGTGGGLLYGRESAPPPTAPFNLADINDVSPSGGFVAELLRPELDPVYIPPQQPQPPGGGLMGKFVLKAS
LSAPGSEYGSPSVISVSKGSPDGSHPVVVAPYNGGPPRTCPKIKQEAVSSCTHLGAGPPLSNGHRPAAHDFPLGR
QLPSRTTPTLGLEEVLSSRDCHPALPLPPGFHPHPGPNYPSFLPDQMQPQVPPLHYQELMPPGSCMPEEPKPKRG
RRSWPRKRTATHTCDYAGCGKTYTKSSHLKAHLRTHTGEKPYHCDWDGCGWKFARSDELTRHYRKHTGHRPFQCQ
KCDRAFSRSDHLALHMKRHF

FIGURE 3961

GCGGAGGCGGCAGAGGCTGCCCGGGCGGCGGCGGGGGCCGGCGGCGCGGGACGCGGGCCGGGTAGCGCCGGGCCG
AGCGCGGAGCCATGGGCCGGGCTGGCACCGGGACCGGGGGCGAGGCGGTGGCCGCGGTGGTGGCGGGGCCGCTGC
TGCTGCTGCTGCTTGCCCGGCCCCCGCCTGCCTCCGCCGGCTACAGCGGGAAGAGCGAGGTGGGGCTGGTGTCCG
AGCACTTCTCACAGGCCCCGCAGAGGCTGTCCTTCTACAGCTGGTATGGCAGTGCCAGGCTCTTCCGCTTCCGCG
TGCCCCCAGATGCTGTGCTTCTACGCTGGCTCCTGCAGGTCTCCCGGGAGAGCGGCGCTGCCTGCACCGACGCGG
AGATCACCGTGCACTTCCGTTCCGGCGCCCCTCCGGTCATCAACCCGCTGGGCACCAGCTTCCCGGACGACACCG
CGGTGCAGCCCTCCTTCCAGGTCGGGGTGCCGCTGAGCACCGCACCGAGAAGCAATGCCTCCGTCAACGTTTCCC
ACCCGGCCCCCGGGGACTGGTTCGTGGCCGCCCACCTGCCCCCCTCATCCCAGAAGATCGAGTTGAAGGGCTTGG
CTCCCACCTGTGCCTACGTCTTCCAGCCTGAACTGCTGGTCACGCGGGTGGTCGAGATTTCCATCATGGAGCCGG
ACGTGCCCCTTCCTCAGACCCTCCTCTCCCATCCCAGCTACCTCAAGGTCTTTGTCCCCGATTACACGCGGGAGC
TTCTGCTGGAGCTGCGGGACTGCGTGTCCAATGGGAGCCTGGGCTGCCCCGTGCGTCTCACCGTGGGCCCGGTCA
CCCTGCCTAGCAACTTCCAGAAGGTGCTCACCTGCACCGGTGCCCCCTGGCCCTGCCGCCTGCTGCTGCCCTCAC
CGCCCTGGGACCGGTGGCTGCAAGTGACAGCTGAGAGCCTGGTGGGGCCCCTCGGGACAGTGGCTTTCAGTGCTG
TAGCTGCCCTCACAGCTTGCAGGCCACGGAGCGTGACCGTCCAGCCCCTTCTGCAGAGCAGCCAAAACCAGAGCT
TCAATGCCTCCTCTGGTCTGCTGTCCCCGAGCCCCGACCACCAGGACCTGGGCAGGAGTGGCAGGGTGGACCGCA
GCCCCTTCTGCCTCACAAACTACCCAGTCACGCGGGAGGACATGGACGTGGTGTCGGTGCACTTCCAGCCCCTGG
ACAGGGTCTCGGTGAGGGTGTGTTCGGACACGCCCTCCGTGATGCGGCTGCGCCTGAACACCGGCATGGACAGCG
GGGGTTCCCTCACCATCTCCCTGCGGGCCAACAAGACAGAGATGCGGAACGAGACCGTCGTAGTGGCCTGCGTGA
ATGCTGCCTCGCCCTTCCTTGGCTTCAATACTTCGCTCAACTGCACCACAGCCTTCTTCCAGGGCTACCCTTTGT
CTCTGAGCGCCTGGTCTCGCAGGGCCAACCTCATCATCCCCTACCCAGAGACAGACAACTGGTACCTCTCCCTGC
AGCTCATGTGCCCTGAGAATGCTGAGGACTGTGAGCAGGCTGTGGTCCACGTGGAGACCACCTTGTACCTGGTGC
CCTGTTTGAACGATTGTGGACCCTATGGCCAGTGCCTCCTGCTCCGCAGACACAGCTACCTGTATGCCAGCTGCA
GCTGCAAGGCAGGCTGGCGTGGGTGGAGCTGCACGGACAACAGCACAGCCCAGACGGTGGCCCAGCAGAGGGCGG
CCACACTGCTGCTCACGCTCAGCAACCTCATGTTCCTGGCCCCCATCGCCGTCTCAGTGCGGCGATTCTTCCTGG
TGGAGGCCTCCGTCTACGCCTACACCATGTTCTTCTCCACGTTCTACCACGCCTGCGACCAGCCCGGGGAGGCGG
TGCTGTGCATCCTCAGCTACGACACGCTGCAGTACTGCGACTTCTTGGGCTCCGGGGCGGCCATCTGGGTCACCA
TCCTGTGCATGGCACGGCTCAAGACAGTCCTGAAATACGTGCTGTTTCTTCTGGGTACACTGGTCATCGCCATGT
CCTTGCAGCTGGACCGCAGGGACATGTGGAACATGCTGGGGCCCTGCCTCTTTGCCTTCGTGATCATGGCCTCCA
TGTGGGCTTACCGCTGCGGGCACCGGCGCCAGTGCTACCCCACCTCGTGGCAGCGCTGGGCCTTCTACCTCCTGC
CCGGCGTCTCTATGGCCTCTGTGGGCATCGCCATCTACACCTCCATGATGACTAGCGACAACTACTACTACACCC
ACAGCATCTGGCACATCCTGCTGGCCGGGAGCGCAGCCTTGCTGCTGCCGCCACCTGACCAGCCCGCCGAGCCCT
GGGCCTGCTCGCAGAAATTCCCCTGCCACTATCAGATCTGCAAGAACGATCGGGAGGAACTGTACGCAGTGACGT
GACACTGGCCTGGGGACAGCTGCTGCTCTGATGACCTCTTCAGCCAGGAGCTGTATCGAGGGGGAGGCGCCTGGT
CCAGCCCTGGACAGATTGATTTCCAGCTGAATAAATTGGCCTAGATACCCTCTTAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAA

FIGURE 3962

MGRAGTGTGGEAVAAVVAGPLLLLLLARPPPASAGYSGKSEVGLVSEHFSQAPQRLSFYSWYGSARLFRFRVPPD
AVLLRWLLQVSRESGAACTDAEITVHFRSGAPPVINPLGTSFPDDTAVQPSFQVGVPLSTAPRSNASVNVSHPAP
GDWFVAAHLPPSSQKIELKGLAPTCAYVFQPELLVTRVVEISIMEPDVPLPQTLLSHPSYLKVFVPDYTRELLLE
LRDCVSNGSLGCPVRLTVGPVTLPSNFQKVLTCTGAPWPCRLLLPSPPWDRWLQVTAESLVGPLGTVAFSAVAAL
TACRPRSVTVQPLLQSSQNQSFNASSGLLSPSPDHQDLGRSGRVDRSPFCLTNYPVTREDMDVVSVHFQPLDRVS
VRVCSDTPSVMRLRLNTGMDSGGSLTISLRANKTEMRNETVVVACVNAASPFLGFNTSLNCTTAFFQGYPLSLSA
WSRRANLIIPYPETDNWYLSLQLMCPENAEDCEQAVVHVETTLYLVPCLNDCGPYGQCLLLRRHSYLYASCSCKA
GWRGWSCTDNSTAQTVAQQRAATLLLTLSNLMFLAPIAVSVRRFFLVEASVYAYTMFFSTFYHACDQPGEAVLCI
LSYDTLQYCDFLGSGAAIWVTILCMARLKTVLKYVLFLLGTLVIAMSLQLDRRDMWNMLGPCLFAFVIMASMWAY
RCGHRRQCYPTSWQRWAFYLLPGVSMASVGIAIYTSMMTSDNYYYTHSIWHILLAGSAALLLPPPDQPAEPWACS
QKFPCHYQICKNDREELYAVT

FIGURE 3963A

GACACACGGTTCTCCCACTGCACATCCCATTTAGGCCCAAATGTGACTCTCCCTCCCTGTCCCATCCCTAAGACA
TGAGAACAAGGTACAGGGAACTGGACAATTTGCCCTCCCAGAGAAGAAGCAGGCACAGGGCCATGTTTTGGTCTG
NCAGCAAGACCCAAGCACCGGGGCTTGCAAGAGGTGCTGTTTGGGAATAAAGAACCTCTCCTCTCCCTTGGGTTA
ATCCGCTAGCAGGGACAGCCTTGTGACCTCTCCATGATCCCAGTCTGGGGCTGCCAGCTCACATTCCTGGCACAC
AGCCATCCATCCTCCCCCTTCCCTCTCTCCCCTGTCCTCTCTCTCCGGGCTCCCACCGCCGCCGCGGGCCGGGGA
GCCACCGGCCGCCACC**ATG**AGTTCCTTCAGCTACGAGCCGTACTACTCGACCTCCTACAAGCGGCGCTACGTGGA
GACGCCCCGGGTGCACATCTCCAGCGTGCGCAGCGGCTACAGCACCGCACGCTCAGCTTACTCCAGCTACTCGGC
GCCGGTGTCTTCCTCGCTGTCCGTGCGCCGCAGCTACTCCTCCAGCTCTGGATCGTTGATGCCCAGTCTGGAGAA
CCTCGACCTGAGCCAGGTAGCCGCCATCAGCAACGACCTCAAGTCCATCCGCACGCAGGAGAAGGCGCAGCTCCA
GGACCTCAATGACCGCTTCGCCAGCTTCATCGAGCGCGTGCACGAGCTGGAGCAGCAGAACAAGGTCCTGGAAGC
CGAGCTGCTGGTGCTGCGCCAGAAGCACTCCGAGCCATCCCGCTTCCGGGCGCTGTACGAGCAGGAGATCCGCGA
CCTGCGCCTGGCGGCGGAAGATGCCACCAACGAGAAGCAGGCGCTCCAGGGCGAGCGCGAAGGGCTGGAGGAGAC
CCTGCGCAACCTGCAGGCGCGCTATGAAGAGGAGGTGCTGAGCCGCGAGGACGCCGAGGGCCGGCTGATGGAAGC
GCGCAAAGGCGCCGACGAGGCGGCGCTCGCTCGCGCCGAGCTCGAGAAGCGCATCGACAGCTTGATGGACGAAAT
CTCTTTTCTGAAGAAAGTGCACGAAGAGGAGATCGCCGAACTGCAGGCGCAGATCCAGTACGCGCAGATCTCCGT
GGAGATGGACGTGACCAAGCCCGACCTTTCCGCCGCGCTCAAGGACATCCGCGCGCAGTACGAGAAGCTGGCCGC
CAAGAACATGCAGAACGCTGAGGAATGGTTCAAGAGCCGCTTCACCGTGCTGACCGAGAGCGCCGCCAAGAACAC
CGACGCCGTGCGCGCCGCCAAGGACGAGGTGTCCGAGAGCCGTCGTCTGCTCAAGGCCAAGACCCTGGAAATCGA
AGCATGCCGGGGCATGAATGAAGCGCTGGAGAAGCAGCTGCAGGAGCTGGAGGACAAGCAGAACGCCGACATCAG
CGCTATGCAGGACACGATCAACAAATTAGAAAATGAATTGAGGACCACAAAGAGTGAAATGGCACGATACCTAAA
AGAATACCAAGACCTCCTCAACGTGAAGATGGCTTTGGATATTGAGATTGCAGCTTACAGGAAACTCTTGGAAGG
CGAGGAGACCCGACTCAGTTTCACCAGCGTGGGAAGCATAACCAGTGGCTACTCCCAGAGCTCCCAGGTCTTTGG
CCGATCTGCCTACGGCGGTTTACAGACCAGCTCCTATCTGATGTCCACCCGCTCCTTCCCGTCCTACTACACCAG
CCATGTCCAAGAGGAGCAGATCGAAGTGGAGGAAACCATTGAGGCTGCCAAGGCTGAGGAAGCCAAGGATGAGCC
CCCCTCTGAAGGAGAAGCCGAGGAGGAGGAGAAGGACAAGGAAGAGGCCGAGGAAGAGGAGGCAGCTGAAGAGGA
AGAAGCTGCCAAGGAAGAGTCTGAAGAAGCAAAAGAAGAAGAAGAAGGAGGTGAAGGTGAAGAAGGAGAGGAAAC
CAAAGAAGCTGAAGAGGAGGAGAAGAAAGTTGAAGGTGCTGGGGAGGAACAAGCAGCTAAGAAGAAAGAT**TGA**AC
CCCCATTTCCTTAATTATTTCAGGAATAATTCTCCCGAAATCAGGTCAACCCCATCACCAACCAACCAACCAGTT
GAGTTCCAGATTCTATGTGAATTAAAAAGTCAATATATGTATAATTCTGAGATGACTTAGGTTGGACATTCAATG
TTGTGCTATGAATTTCCTCTTTATGCAGAGTATCTGTTTGCTTGCAGAGTGGCTTTCTGGCTTGCTGCCAGCCTG
TGCATGGTCCACGCTTATGAGTTCAGGATCTACGGCAATGTGAATCATTCAGATGTTTACAATAAAAAACACCAC
ATGAGTAAATGAATTCACTAATGTTAATGTTAAACTTCATGGAAAAATAGTCCTTTGAACCTTCGGTGGTTAGCA
ATTAAAGACCCTGAGTTATGTGCAATAAATAGTAAATAAAGTTATACCGAATGATGTATTTTTTGCTGTGGTTGT
TACTTAATTAAAATACCTTAAAGATGGCACCAATATAAAGTATATACCAGTGGACTATTGACCTCCAATTTTTTA
AAAAGTTGAAATTTTAACAATTACCAATACTTTTTTTTCTTCCTTCAATTGGAAATTCTGAGGGATACAGTTATG
TCATGATTACTTGTGAAATCTCTCCCCACAAAAATTTTACTGATAATAAACATGAGTAAATGAGAAAGTCTATAA
ATAACAATACACTTTGCCTCATAACACGTGTTGTGTTAGGTTTTGGGATGGCTTTCTAGGGAGCAATTCTGAAAT
TACTTGACAGATACACTCTTTATGGTAAACAGGTCATTTCAGAGTCTAGAGTGCTAACCATTACACTATGGAACC
ATGATAAATAGGTCATTTCAAACTGATATGTCACAATGCAATATGGATAGAATATGAATCCCATACATTCATCCC
TATAACTGCATTTTAAAATATAGTCTAAATATCATGGGAGGAGGTTAAAACCTGAGAACATGGTACAATAAGAAG
GAATAATTTTTTATCTATATATAATTTCAGGAGAAGGGATTAAAACTACCAAAGGTTATTTGCCACTCCACTGCA
AACATGTTGCCTGCAATCCTGAGCTCATGATTTAGTGTGTTGTTAAGCGTAATTCTGTTGCCTCAAGTAAATACC
ACTTAATGCTACACATTTTTAAACCTTTAAAAGCTACAGACACAAGTAATGAAATTATGAGTCACTTAAGGGGGG
AGGTAATATGCTTGTATGTTACATTGACATTGCTCTGCATGTCTCTACTGGGAAATATTTGGATTTCAATGATAG
CTTGACTGGTTGGACATTGCATCAAATACACGCCCCATGTATCCTTTCTGTCGTAAAGTTAAGAACGCTCTTGCA
TTTGATGTGGAATAAATATAGATGATATTACTATCTGCTATTCTGCCTTTGTTCTGAAACAATTGCTTTGTCAGC
TAATTTCATTCAATATTTGTTTTTTAGACGATCTCTATAAGTTATTAATTTAACCTGAAACCAAAGTGGTCTCCA
TTTAAAGTTACTTAATCCCTTTGTACCACCTATTTCTAGTTAAATATATGTTGCTATGCAAATAGGTAAAGTGCT

FIGURE 3963B

TCCTTGCCATGATGGTAATGGATTGGAACTATGAAGGCTCTCAGTGTATTGGCTTCTGTAAAGATGAGGCGTCTC
CTCAGAAACAAAACTTTTCACATTTCTGCTTACTAGACCTGGGTTGATGTACATGGTAAGTCTCAAACAGATGCA
AGCTATGTGCAAAAAGTAACTTTAGCCAAATGGAAATAGCTGGATGCTTTGAGAATTACTTGGTTGAAGTAAGAA
AACTGTACCATCCTCTATCCTGTGTGCCATAATAAAATAGTAAAAAACCTAAAAAAA

FIGURE 3964

MSSFSYEPYYSTSYKRRYVETPRVHISSVRSGYSTARSAYSSYSAPVSSSLSVRRSYSSSSGSLMPSLENLDLSQ
VAAISNDLKSIRTQEKAQLQDLNDRFASFIERVHELEQQNKVLEAELLVLRQKHSEPSRFRALYEQEIRDLRLAA
EDATNEKQALQGEREGLEETLRNLQARYEEEVLSREDAEGRLMEARKGADEAALARAELEKRIDSLMDEISFLKK
VHEEEIAELQAQIQYAQISVEMDVTKPDLSAALKDIRAQYEKLAAKNMQNAEEWFKSRFTVLTESAAKNTDAVRA
AKDEVSESRRLLKAKTLEIEACRGMNEALEKQLQELEDKQNADISAMQDTINKLENELRTTKSEMARYLKEYQDL
LNVKMALDIEIAAYRKLLEGEETRLSFTSVGSITSGYSQSSQVFGRSAYGGLQTSSYLMSTRSFPSYYTSHVQEE
QIEVEETIEAAKAEEAKDEPPSEGEAEEEEKDKEEAEEEEAAEEEEAAKEESEEAKEEEEGGEGEEGEETKEAEE
EEKKVEGAGEEQAAKKKD

FIGURE 3965A

ATTAATTTTAAGTTTCATGATTTTGAAACATGGAAGTGGCGATTCGAAGATTCCTTTGGAGTGGATCCATATAAT
GTGTTAATGGTACTTCTTTGTCTGCTCTGCATCGTGGTTTTAGTGGCTACTGAGCTGTGGACATATGTACGTTGG
TACACTCAGTTGAGACGTGTTTTAATCATCAGCTTTCTGTTCAGTTTGGGATGGAATTGGATGTATTTATATAAG
CTAGCTTTTGCACAGCATCAGGCTGAAGTCGCCAAGATGGAGCCATTAAACAATGTGTGTGCCAAAAAGATGGAC
TGGACTGGAAGTATCTGGGAATGGTTTAGAAGTTCATGGACCTATAAGGATGACCCATGCCAAAAATACTATGAG
CTCTTACTAGTCAACCCTATTTGGTTGGTCCCACCAACAAAGGCACTTGCAGTTACATTCACCACATTTGTAACG
GAGCCATTGAAGCATATTGGAAAAGGAACTGGGGAATTTATTAAAGCACTCATGAAGGAAATTCCAGCGCTGCTT
CATCTTCCAGTGCTGATAATTATGGCATTAGCCATCCTGAGTTTCTGCTATGGTGCTGGAAAATCAGTTCATGTG
CTGAGACATATAGGCGGTCCTGAGAGCGAACCTCCCCAGGCACTTCGGCCACGGGATAGAAGACGGCAGGAGGAA
ATTGATTATAGACCTGATGGTGGAGCAGGTGATGCCGATTTCCATTATAGGGGCCAAATGGGCCCCACTGAGCAA
GGCCCTTATGCCAAAACGTATGAGGGTAGAAGAGAGATTTTGAGAGAGAGAGATGTTGACTTGAGATTTCAGACT
GGCAACAAGAGCCCTGAAGTGCTCCGGGCATTTGATGTACCAGACGCAGAGGCACGAGAGCATCCCACGGTGGTA
CCCAGTCATAAATCACCTGTTTTGGATACAAAGCCCAAGGAGACAGGTGGAATCCTGGGGGAAGGCACACCGAAA
GAAAGCAGTACTGAAAGCAGCCAGTCGGCCAAGCCTGTCTCTGGCCAAGACACATCAGGGAATACAGAAGGTTCA
CCCGCAGCGGAAAAGGCCCAGCTCAAGTCTGAAGCCGCAGGCAGCCCAGACCAAGGCAGCACATACAGCCCCGCA
AGAGGTGTGGCTGGACCACGTGGACAGGATCCGGTCAGCAGCCCCTGTGGCTAGAGGAACACCAGCACAAACGAC
AGCCTCAAGTCTCCTTCGAGCTTTATATCCATTTGGGGATGAAGTCTACTTTGACAGCTAGCAAGGCGACATGCA
ACTGTTGTTGAATGATGACAGCAATTCAGGAAAGACTTAAATATGAAAGCAAATTGAACACATCGGGTGTTTGTT
ATCAGAAAAGAGATGAGATGAGATAAGACTTGTTTATTGACTAGCCAATATGTCATTAAAATTAAGGTTTATATT
GTGAAGCTTTTTTGAAATTTTACTTTTTTTTTGAGAGTTTTGCTCTGTCACCCAGGCTGGAGTGAGGTGGTACAAT
CTCGGCTCACTGCAACCTCCACCTCCCAGGTTCAAGAGATTCTCCTGCCTCAGTCTCCCGAGTAGCTAGGATTAC
AGATGTGCATCACCATGCCTGGCTAATTTTTGTATTTTTTAGTAGAGATGGGGTTTCACCATGTTGGTCAGGCTG
GTCTCGAACTCCTGACCTCAAGTGACCCGCCCTTGTCGGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCATT
GTGCCCAGCCTATATAGTGTGAAGCTTTTAGGAAAATCAGAACAGGGTAGACAGCTGTTAAAAACAATGTTTAAA
TGGAATAATGTTGAATGTTTACAGGCTGTAAGAACTATTGTATACACAAAATAATACACAAAGTTTGTACTTTGT
GTACAAATACAAATTTGTACTTTGTGTACAAATAATACAAAAAGTTTGTATACACAAACTTTTTACGTTGTGGTT
TGGTATATTGTCTTAACTGAATTTTCTTATAAGAACCCCATGAAACTTACCTGAGTTTTTAAAATGCTATCCAGG
ACATCATACCTTATAGTATACATGAAACATAATGTAATCCAGGTTGTAATTTAGAACTTTTTTTTTTTTTTAGCT
GAGCACTTAATGTAATTAATTCCAGGTTATGACTCTTAAAAAACATTGGCCATTAGAGAAATAGTTCTATTTGCC
CATCCAAATCACCTGAATGACTTTTTGAAAGAATAGGGGTCCACATCCCCAGATCCCATCCCAGCTGTGCACAGT
CTGAAGCAAGCAGAGTGAAACAAGTTGGCAACTTGTTCCAAGCGTGGGCCTTTGCAGTCTGTGATCCAGTGTTAC
TCCAGGTCCCAGTCTGTCCCATACTTGTCTTTTGCTACAGTTAGTTAGTTACTTTGTTATCATCCCCTTGTAAAC
TGCCTTCAATATCTGGGATAAGGAAGACAAAGCTTAATGACAACTAAGGTTCTAGCTGACATCTTTCTTTCATAT
TTAATTTTTGTGAGTTTTCATCTGTTTTCTGTTTGTTTATGTGTCCTAGGTTCTTGACCTAACCACATGGGTTTT
GTTTTTTGTTTTTATATTAGAACTTAGAAAAGTTTGTTTTACAGCAGTATTATGGAACAGAAGAGACCATTTTAA
ATAATTTTTTTAAACAGCCCAAAACACACAAAAGATACTTGTTTTCTAGAGACAGGGTCTTGCTCTGTCACCCAG
GCTGGAGTGCAGTGGCACGATCATAGCTCAGTGCAGCCTCCACCTCCTGGGCTCAAGTGGTCCTCCTGCCTCAGC
CTCTTAAGCAGTTGGGACTACAGGTGTGTGCCAGCATGCTTGCTGTTTTTTTTTTTTTTTGAGACAGAGTCTTGC
TCTGTCACTCAGGCTGGAGTCCAGTGGCTTGGTCTCAGCTCACTGCAATCTCTGCCTCCCAGGGGTTCAAGTGAT
TCTCCTGCCTCAGCCTCCCAAGTAGCTGAAACTACAGGCGCATGCCACCATGCCCAGCTAATTTTTGTATTTTTA
GTAGAGACAGGGTTTCACTATGTTGGCCAGGCTGGTCTCAAACTCCCGACCTCAAGTGATCCGCCCGCTTCGGCC
TCCCAAAGTGCTGGGATTACAGGTGTGAGCCACTGCGCCTGGCTGCTGATTTATTTTTCATAGACACGGGGGTCT
ATGTTGCCCAGGTTGGTCTTGAACTCCTAGCCTCAAGCGATCCTCCTGCCTCAGCCTCCCAATGTGCTGGGATTA
CAGGAATGAGCCACCATGCCCAGCCCAAGAAGTAGAGTTTCTTTTATACTGACTTTGGCCTAAAAAAACAGATTT
TCATGGAGGAAAAAAAAACCTAGATTTTTAGTAAGACTATTTTATATACTTTTTTACATTGATCAAGTACATTAT
TTTTACCAAACAACATTGTTTCCCACTACATCCATGGTTATGTATAAAAAAACGCCATTGTCAATTAAGATGTTA
AAAAATTATTTCCATAAGAGTATTAAATTCTAATCTATGATTCACTTAACTTCCTACTTTATAAACACTAGGTAA
AGTAATCTCACAAGCTGCCAAAGAACACATCCCAAGCAGTAATCACAGACGATGAAGCACCTTACAGGACCCCTC

FIGURE 3965B

CACCCTCAAACGCGCATGTCCAGAGAAGTATTAATGCCTTAATAGACTACTGAAGGTTAACTATTTACATCATTC
TAAAAATATTTTAAGCTGTATTACAGTGCTATAAATTCTCCTTTTAAGGAAAAAAGTAATAGATTGTTTCCTTAC
CGTGTTTGAAAGGAAAAAAAATAAATCCATAGTAACTAATGGTCTGCCGATTTTTTCCCTGAATTTTTAAACTCC
AACAAAGCATTATTTTGCAAAAAGTCCTTTAGCCCAAAGTCAGTGTCTCTGTTTTGATCTCTTTGTAAAAGAACT
CTCTGTTCATCCATTCTCTTTCCCTGGGACCGTAAAATAAGGCTGAAAAAGTCTTCATCTGGTACTGTCGGACCC
TTTGTGGTAGCAGGTGGTGGAGCACATCTTTGATCATCTAATCTGGATCCCTAGAAGTTTATGAGAGAGATTAAA
AGACATACTGTGGGAAAGAAAGCACCAAGCTATGTTAAATCTCTCAGTCACAACAAGAAAACGCAGTTGTAAACT
TTTATTTGGGGCTTCTCAGAAATTAATCTTTGTTTTTATATTGTTCTCTTTAGTTCCCAGCCTGATTTCTGAAAG
AAATAATCTTTAAACCTG

FIGURE 3966

AAGCCGTGCGCTCCCGGGCTGCGAGGTCTGGCTAGGCTACGGGCCACGCGCCGCCGCCGCTGCCGCCGCCACTGT
CCTCTTCGGAGGCGCGGGCCCGACGGAAACC**ATG**TTGTGGCTCGCAGCATCGCGGCGGACCACAAGGATCTCAT
CCACGATGTCTCTTTCGACTTCCACGGGCGGCGGATGGCAACCTGCTCCAGCGATCAGAGCGTTAAGGTCTGGGA
TAAAAGTGAAAGTGGTGATTGGCATTGTACAGCTAGCTGGAAGACACATAGTGGATCTGTATGGCGTGTGACATG
GGCCCATCCTGAATTTGGGCAAGTTTTGGCTTCCTGTTCTTTTGACCGAACAGCTGCTGTATGGGAAGAAATAGT
AGGAGAATCAAATGATAAACTGCGAGGACAGAGCCACTGGGTTAAAAGGACAACTCTGGTGGATAGCAGAACATC
TGTTACTGATGTGAAGTTTGCTCCCAAGCACATGGGTCTTATGTTAGCAACCTGTTCCGCAGATGGTATAGTAAG
AATCTATGAGGCACCAGATGTTATGAATCTCAGCCAGTGGTCTTTGCAGCATGAGATCTCATGTAAGCTAAGCTG
TAGTTGCATTTCTTGGAACCCTTCAAGCTCTCGTGCTCATTCCCCCATGATCGCCGTAGGAAGTGATGACAGTAG
CCCCAACGCAATGGCCAAGGTTCAGATTTTTGAATATAATGAAAACACCAGGAAATATGCAAAAGCTGAAACTCT
TATGACAGTCACTGATCCTGTTCATGATATTGCATTCGCTCCAAATTTGGGAAGATCTTTCCATATTCTAGCAAT
AGCGACCAAAGATGTGAGAATTTTTACATTAAAGCCTGTGAGGAAAGAACTGACTTCCTCTGGTGGGCCAACAAA
GTTTGAAATCCATATAGTGGCTCAGTTCGATAATCATAATTCTCAGGTCTGGCGAGTGAGTTGGAATATAACAGG
AACGGTGCTAGCATCTTCAGGAGATGATGGGTGTGTAAGATTGTGGAAAGCTAATTATATGGACAATTGGAAGTG
TACTGGTATTTTGAAAGGTAATGGGAGCCCAGTCAATGGGAGTTCTCAGCAGGGAACCTCAAATCCTTCCCTAGG
TTCAAATATTCCAAGTCTTCAGAATTCATTAAATGGATCTTCTGCTGGCAGAAAGCACAGC**TGA**GACAAGCTAAC
TGGAGTAACTTTGCTGTTTTGCTGCTTGTTGCATGCACACTGGAATGGAAAGCGAGCTCCCTTTTCCCCTTCCCC
AGCGCCGTTTGACCTCTCCCAAGGATACACCAGCAGCCTGCTTACTACTAAACGCAATCCAAAAGGCCTTTAAAA
ATACAGTGTATATTTTTTGTACTAGTCAGTTTATTGACACTATTTGAAACTTTTGAAATATAAACGGAGAGGCTT
TCTGTTGAGACATTGTCACCAAAACAATTTTTTGAAATGTTCCTGAAACTAATTTGGGTTTAAAGATTAAAAGGG
TTGTTACCATTCTTATCTGAGTAGTTGGGAGGAGGGGAATACCACTTTAGTTCATTTGGAAAATATAGACATATT
TCTTTTGCTTTCTTAAAACAGCTTAAAATGATGAACTTTTATAATTTTAATTTGAAGATTGAATAAATATTTTTT
ATAAAGATTGTTTTGAGTGCTGATTTGTTTACTTTTTGTAGATTTGCTTTATCCATGATATTCAGTACAACTCTG
TCATTTCTTTGTAATATTTAAAAAATATTAGTAAAGGAGTGAATTAATAAAGTAGTAATAGTAAAATGAAAGGAA
CTTGACTGTACAGTTTGTAGCCCAGGTTAAGGCATTTGGGTATTGTTTCATTTAACCAATTTGGGGACTAAGATG
GGAAACACTTTTTTTATTAAGTTTTTAATTCATAGTCACTAAAGAGATAAATGTTTCTTATATACATTTGTGTAT
TTTTATGGTGTTATTTATTCCATGGCTTAGCTTCCTTCAAATCAAAATTTGGACACACACTATTAAGAGAAGCCA
TTAAAATTTTACTAAAATTGTGCATGTAAATTAATTGTCAGCATTCCATGTCTCAAGATTTTCTTAATTTAGTTC
GCTGTTTAAATTAATTCATGTCCTGTAAAGTTCTGACCTTGATAACAAAGCTATAAATATTTAAGTTTGCTAATA
TGCGTAAGTATTATCGGTAAGTTACAAGATGGAAGAAGAATAACAGTAGGGCACAGTCATTCTGTGAATCCTTTT
ACTTATCAAAATTTGGTAGCTATTCTAAGGCTTTTGCAGAAAAATAAGTGTTCAATGTTTGTAGTTCTTCAAAAG
CATGTTGCAGTAGCCAGCCATACTATGTGTATTCCCAGTATCATGTACGCACTAAAAAAAATGTGTGCTTGCTGC
TGCTGTGAGTGAACCATTGCTTAAGATAAAAAACTTAACTAGATCTGTAAATGTACAGAATAGCATCAGATGTTT
CTGAGAGATTAGGAAAATGTTTTGAATTTATAAAATTAATGTTTTTCTTTGTAACATTTATATATATTTTTTAAC
ATTTTAAGTTTAACAGATTGTATTCCTTTCAAGTTTCTATACTTGCTTAAGCAATCTTGATTTGAGTAAGGGTCT
TGATTTGTGCTATTATGTTCTGTTAGTTTTGGCATGAATATACTAAAGCTTTTTTTTTTTTTTTAGCATGTGTT
TTCTCCTCTTTGGTTCTCTTTGTATTTACTACTTTTCTCTTTTTCTTGTGTTTTTTTTTTCCTGTTTTTGTTTTG
TTTGGTGTTTTGTTCCTGTCTTCATTGTTTCAGGTATTTCTTTACCCCTCTGGATTCCCCACGGGCTGGATCGAG
ATGGTCCAGTTATGCCCAGCTCCTTCCTCCTCCTCCTCCTCCTCTGGTAGAGCACTCTTGCGATGCTGACACTGC
CAACCTCCAGTATCCTCACCCTCGCAGACGATATCTCTCTCGGCCTCTTAATCCCTTACCTGAGAATGAAGGGAT
TTAAAACACTGATTTAACATTGAAAGGCCTTATTCAAGTGCTTGTAAATGCTTTCATTTCTGGCTGCTTTTTGTT
TTTCATTTTCTTTCAGAAGATTTTTCTAACTTAGGGTCTGTCTTGCATGTATTACAACCAGAATACAGTGTTTGG
AACCTAAATCTGTTTGTGCGTCTGCATCAAAGGAACATTTGCTTCACTGGGTGATAACCTTTGATGAAATGAGAT
ATGTCCAAGTAACGTTAACTGTGAAGTTACACACAGTAGCTGACTTCAAAGTGCCTGTTCCTGTAAATTTTATTT
TAAACTGTTACCATAGTCTTAAGTTGTTTATGCTTTATCAGACTGGCTAATGTGAAAGCATAATATTATGAAGTT
TATTCTGCCTTATGAGACCTTAAAAAATGGATTTCATTTTACAGGCTAATGTTGTAACTGACTAGTATGTAAAAT
AAATCATTCCTGTGTATAAAGCAGCAAAACCTAAAAAAAAAA

FIGURE 3967

MFVARSIAADHKDLIHDVSFDFHGRRMATCSSDQSVKVWDKSESGDWHCTASWKTHSGSVWRVTWAHPEFGQVLA
SCSFDRTAAVWEEIVGESNDKLRGQSHWVKRTTLVDSRTSVTDVKFAPKHMGLMLATCSADGIVRIYEAPDVMNL
SQWSLQHEISCKLSCSCISWNPSSSRAHSPMIAVGSDDSSPNAMAKVQIFEYNENTRKYAKAETLMTVTDPVHDI
AFAPNLGRSFHILAIATKDVRIFTLKPVRKELTSSGGPTKFEIHIVAQFDNHNSQVWRVSWNITGTVLASSGDDG
CVRLWKANYMDNWKCTGILKGNGSPVNGSSQQGTSNPSLGSNIPSLQNSLNGSSAGRKHS

FIGURE 3968

GATCAATGGTATTTTAGCTGAAGCTATGGAATGTTTTTTGCAGTATGTTTATACTGGAAAGGTGAAGATCACTAC
AGAGAATGTACAGTATCTCTTTGAGACATCAAGCCTCTTTCAGATTAGTGTTCTCCGTGATGCATGTGCCAAGTT
CTTGGAGGAGCAACTTGATCCTTGTAATTGCTTAGGAATCCAGCGCTTTGCTGATACCCATTCACTCAAAACACT
CTTCACAAAATGCAAAAATTTTGCGTTACAGACTTTTGAGGATGTATCCCAGCACGAAGAATTTCTTGAGCTTGA
CAAAGATGAACTTATTGATTATATTTGTAGTGATGAACTTGTTATTGGTAAAGAGGAGATGGTTTTTGAAGCCGT
CATGCGTTGGGTCTATCGTGCCGTTGATCTGAGAAGACCACTGTTACACGAGCTCCTGACACATGTGAGACTCCC
TCTGTTGCATCCCAACTACTTTGTTCAAACAGTTGAAGTGGACCAATTGATCCAGAATTCTCCTGAGTGTTATCA
GTTGTTGCATGAAGCAAGACGGTACCACATACTTGGGAATGAAATGATGTCCCCAAGGACTAGGCCACGCAGGTC
CACTGGCTATTCTGAGGTGATAGTTGTCGTTGGAGGATGTGAGCGAGTTGGAGGATTTAATCTTCCATACACTGA
GTGCTACGATCCTGTAACAGGAGAATGGAAGTCTTTGGCTAAGCTTCCAGAATTTACCAAATCAGAGTATGCAGT
CTGTGCTCTAAGGAATGACATTCTTGTTTCAGGTGGAAGAATCAACAGCCGTGATGTCTGGATTTATAACTCACA
GTTAAATATTTGGATCAGAGTTGCCTCTCTCAATAAAGGCAGATGGCGTCACAAAATGGCTGTCCTCCTTGGTAA
AGTATATGTTGTCGGTGGCTATGATGGGCAAAACAGACTTAGCAGCGTAGAATGTTATGATTCCTTTTCAAATCG
ATGGACTGAAGTTGCTCCCCTTAAGGAAGCCGTGAGTTCTCCTGCAGTGACTAGCTGTGTAGGCAAACTGTTTGT
GATTGGTGGAGGACCTGATGATAATACTTGTTCTGATAAGGTTCAATCTTATGATCCAGAAACCAATTCTTGGCT
ACTTCGTGCAGCTATCCGAATTGCCAAAAGGTGTATAACAGCTGTATCCCTAAACAACCTGATCTATGTTGCCGG
TGGACTGACCAAGGCAATATACTGTTACGATCCAGTTGAAGATTACTGGATGCACGTACAGAATACATTCAGCCG
TCAGGTAATAACATGAAGCAGTACAAAAGAAAAATAAATCTAAGAGGGACCAAGTACATAATCATTATTAATACA
CTGGAATTTCAATTTTAAAATATTTCAGGCTGGGCGTGGTGGCTCACGCCTGTGGTCCCAGCACTTTGGGAGGCC
GAGGTGGATAGATCACTTGAGGTCAGGAGTTCAAGACCAGCCTGGCTAATATGGTGAAACCCCGTCTCTACTAAA
AAATTATGGCCAGGCGTGGTGGTTCATGCCTGTAATCCCAGCACTTTGGGAGGCTGAGGCAGGCCAATCACCTGA
GGTCGGGAGTTCGAGACCAGCCTGACCAACATGGAGAAACCCCGTCTCTGCTAAAAATACAAAATTAGCTGGGCG
TGGTGGCGCATTGCCTGTAATCCCAGCTACTAGGGAGGCTGCGGCAGGAGAATTGCTTGAACCCGGGAGGTGGAG
GTCGCGGTGAGCCGAGATCGAGCCATTGCACTCCAGCCTGGACAGCAGGAGCGAAACTCCGTCTCAAAAATAAAT
AAAAAAAAAAAAAAAA

FIGURE 3969

MECFLQYVYTGKVKITTENVQYLFETSSLFQISVLRDACAKFLEEQLDPCNCLGIQRFADTHSLKTLFTKCKNFA
LQTFEDVSQHEEFLELDKDELIDYICSDELVIGKEEMVFEAVMRWVYRAVDLRRPLLHELLTHVRLPLLHPNYFV
QTVEVDQLIQNSPECYQLLHEARRYHILGNEMMSPRTRPRRSTGYSEVIVVVGGCERVGGFNLPYTECYDPVTGE
WKSLAKLPEFTKSEYAVCALRNDILVSGGRINSRDVWIYNSQLNIWIRVASLNKGRWRHKMAVLLGKVYVVGGYD
GQNRLSSVECYDSFSNRWTEVAPLKEAVSSPAVTSCVGKLFVIGGGPDDNTCSDKVQSYDPETNSWLLRAAIRIA
KRCITAVSLNNLIYVAGGLTKAIYCYDPVEDYWMHVQNTFSRQVIT

FIGURE 3970

TTTCACCTCAGCAAGGCCAGGGGATCTGCACGTTGTGTTAGACATGGCTAAAGTAGCTGATACCATCCTGTTCCT
CCTTGATCCACTAGAAGGCTGGGACAGCACCGGTGATTACTGTCTTTCCTGCCTCTTTGCTCAGGGCCTTCCGAC
CTATACACTAGCTGTCCAGGGGATTTCTGGCCTCCCACTGAAGAAACAAATAGATACCAGGAAGAAGCTAAGTAA
AGCAGTGGAGAAGCGCTTTCCGCATGACAAACTCCTCTTGTTAGACACTCAACAGGAGGCAGGGATGCTGCTTAG
GCAGTTGGCTAACCAGAAGCAACAGCATCTTGCTTTTCGAGATCGGCGGGCCTACCTATTTGCCCATGCTGTTGA
TTTTGTTCCTAGTGAAGAGAATAACTTGGTGGGCACCTTGAAAATTTCAGGCTATGTTCGAGGGCAGACTCTGAA
TGTCAATAGGTTGCTGCATATCGTTGGATATGGTGATTTCCAGATGAAACAGATAGATGCCCCCGGAGACCCTTT
CCCTTTAAATCCTAGAGGAATTAAACCCCAAAAGGACCCAGACATGGCAATGGAGATTTGTGCTACGGATGCTGT
AGATGATATGGAAGAAGGTCTTAAAGTCCTAATGAAGGCAGACCCTTGTAGACAGGAATCCTTGCAAGCAGAGGT
TATCCCAGATCCAATGGAGGGAGAGCAAACCTGGCCCACTGAGGAGGAGCTGAGCGAGGCAAAGGATTTCTTGAA
GGAAAGTTCTAAGGTGGTAAAGAAGGTCCCCAAAGGAACATCCAGTTACCAAGCTGAATGGATTTTGGATGGTGG
CAGCCAAAGTGGTGGGGAAGGAGATGAATATGAATATGATGATATGGAACATGAGGATTTTATGGAGGAGGAATC
TCAGGATGAGAGTAGTGAAGAAGAGGAAGAATATGAAACTATGACTATTGGGGAGTCTGTGCATGATGATCTGTA
TGATAAGAAAGTAGATGAAGAAGCTGAGGCAAAAATGTTGGAGAAATATAAACAAGAAAGACTGGAAGAGATGTT
TCCAGATGAAGTGGACACGCCCCGTGATGTGGCTGCTCGAATTCGATTTCAGAAATACAGAGGCCTTAAGAGCTT
CCGGACATCTCCATGGGATCCTAAGGAAAACCTTCCTCAAGATTATGCTCGAATATTTCAGTTTCAGAACTTTAC
TAACACTAGGAAAAGCATCTTTAAAGAGGTTGAAGAAAAAGAGGTTGAAGGAGCTGAGGTTGGCTGGTATGTCAC
ACTTCATGTCTCTGAAGTCCCCGTCTCAGTGGTCGAGTGCTTCAGGCAAGGAACACCCTTGATTGCATTTTCTTT
ACTACCTCATGAACAGAAGATGTCAGTATTGAATATGGTGGTGAGGCGTGACCCTGGCAACACTGAACCTGTGAA
AGCCAAGGAGGAGCTCATATTTCACTGTGGATTCAGGCGCTTCCGAGCCTCACCTTTATTCTCTCAGCACACTGC
AGCGGACAAACATAAATTGCAGAGATTCCTGACTGCTGACATGGCCCTGGTGGCGACAGTCTATGCGCCAATCAC
TTTTCCTCCTGCATCTGTGCTGCTTTTCAAGCAGAAAAGCAATGGAATGCACAGCCTCATTGCTACAGGCCATCT
TATGTCAGTAGATCCAGACAGAATGGTCATCAAGAGAGTTGTTCTGAGTGGTCATCCTTTCAAAATTTTTACTAA
GATGGCAGTAGTACGTTACATGTTCTTCAACAGAGAGGATGTGCTGTGGTTTAAACCAGTGGAACTGAGAACGAA
GTGGGGCCGGAGAGGACATATCAAGGAACCTTTAGGTACCCATGGCCACATGAAATGCAGCTTTGATGGGAAGCT
AAAATCTCAAGACACAGTACTGATGAACCTGTATAAACGAGTCTTCCCCAAATGGACTTATGATCCATATGTACC
AGAACCAGTACCCTGGCTGAAAAGTGAGATTTCTTCAACAGTGCCTCAAGGGGGCATGGAGTAATGGATTCAAAG
AGATTCTGTCCTACCGGTGCCAGTCAGTACTCCAGGGATGGGAGGCACAAGTTGTGATTGGGCAAAGTTTATTTT
CTATGTCAGCCTGTCAGTCCACTGCCCCATTTTGCAAGACTTTTTTTTAGCCTTGACAAAATGTCTCAGTTAAGT
ATAAAAGTTTTTCCACTACTTAGTCCAAAAAAAACTATTAAATCTTAATGAAAT

FIGURE 3971

MAKVADTILFLLDPLEGWDSTGDYCLSCLFAQGLPTYTLAVQGISGLPLKKQIDTRKKLSKAVEKRFPHDKLLLL
DTQQEAGMLLRQLANQKQQHLAFRDRRAYLFAHAVDFVPSEENNLVGTLKISGYVRGQTLNVNRLLHIVGYGDFQ
MKQIDAPGDPFPLNPRGIKPQKDPDMAMEICATDAVDDMEEGLKVLMKADPCRQESLQAEVIPDPMEGEQTWPTE
EELSEAKDFLKESSKVVKKVPKGTSSYQAEWILDGGSQSGGEGDEYEYDDMEHEDFMEEESQDESSEEEEEYETM
TIGESVHDDLYDKKVDEEAEAKMLEKYKQERLEEMFPDEVDTPRDVAARIRFQKYRGLKSFRTSPWDPKENLPQD
YARIFQFQNFTNTRKSIFKEVEEKEVEGAEVGWYVTLHVSEVPVSVVECFRQGTPLIAFSLLPHEQKMSVLNMVV
RRDPGNTEPVKAKEELIFHCGFRRFRASPLFSQHTAADKHKLQRFLTADMALVATVYAPITFPPASVLLFKQKSN
GMHSLIATGHLMSVDPDRMVIKRVVLSGHPFKIFTKMAVVRYMFFNREDVLWFKPVELRTKWGRRGHIKEPLGTH
GHMKCSFDGKLKSQDTVLMNLYKRVFPKWTYDPYVPEPVPWLKSEISSTVPQGGME

FIGURE 3972

CTCTTTCCCTTCGGTGTGCCACTGAAGATCCTGGTGTCGCCATGGGCCGCCGCCCCGCCCGTTGTTACCGGTATT
GTAAGAACAAGCCGTACCCAAAGTCTCGCTTCTGCCGAGGTGTCCCTGATGCCAAGATTCGCATTTTTGACCTGG
GGCGGAAAAAGGCAAAAGTGGATGAGTTTCCGCTTTGTGGCCACATGGTGTCAGATGAATATGAGCAGCTGTCCT
CTGAAGCCCTGGAGGCTGCCCGAATTTGTGCCAATAAGTACATGGTAAAAAGTTGTGGCAAAGATGGCTTCCATA
TCCGGGTGCGGCTCCACCCCTTCCACGTCATCCGCATCAACAAGATGTTGTCCTGTGCTGGGGCTGACAGGCTCC
AAACAGGCATGCGAGGTGCCTTTGGAAAGCCCCAGGGCACTGTGGCCAGGGTTCACATTGGCCAAGTTATCATGT
CCATCCGCACCAAGCTGCAGAACAAGGAGCATGTGATTGAGGCCCTGCGCAGGGCCAAGTTCAAGTTTCCTGGCC
GCCAGAAGATCCACATCTCAAAGAAGTGGGGCTTCACCAAGTTCAATGCTGATGAATTTGAAGACATGGTGGCTG
AAAAGCGGCTCATCCCAGATGGCTGTGGGGTCAAGTACATCCCCAGTCGTGGCCCTCTGGACAAGTGGCGGGCCC
TGCACTCATGAGGGCTTCCAATGTGCTGCCCCCCTCTTAATACTCACCAATAAATTCTACTTCCTGTCCACCTAT
GTCTTTGTATCTACATTCTTGACGGGGAAGGAACTTCCTCTGGGAACCTTTGGGTCATTGCCCTTTCACTTCAGA
AACAGGTTGACAACTCAGCCCTGCTCATGAGGCAGCAAACCCTGCAAAGGGCTGGGACTGGTGGCCTTATGTCAG
TTGTCTACTCTGGAGCTTGACTTGGACCTCCCCAGGTCCTAGGCAGTAGGTTGAAAAACACTGAAGTGCTTTTCA
TGAAGCACAGCTGCAGCAAAGCCTTGCAATCCCAGGCTGGGGTCAGCCTACAGTTGTGTTGCTTATTACAACACA
TGCGGACCAAGAGGGGCTTGTGGGCTAGAGGCTGACCAGCAGCGTTTATTTAGCAAGGGTAGGTGTGCATCACAT
TGGGCTTGTTCTCACCCATCTGGTTTGGCCATTCCTCCTTGGTGGGAATCATCCAGGTACTGCTGAGGTCACCTG
CGATTTGCCCCATTTCCTATCTCTAGCAACCTCCTGGGCCCCATGCCCCCACCCCTTCTAGAACCTGCATTCCCA
GGGCCTTCACCACCTGACCAAAGGTCTAGGCTAACCTTTGGTCATTTGTAACAAGACCTCGGAACAGACACGTGT
GTGGCATGGTTTGGCCTGGGGATCTTAGATGTCTGACCTGAACTATTGTAGAACAGCGCTGGCTTTTGGGGGAGC
AGCAAAAATGAGAGGAGTGCTAGGTGGGTGGCCTGAGCATCTGTATCCAGGGACAGGACTCCAAAGGCTTTTGGT
CCCAGAGCTGGGGTATGTTGGCCCCAGCCCCCAGCCTGTGGCTCCCAAAAGGCCTCTGGTTTTTTGTAATCTCAG
TTTACAGCCATTTCTTAGGTTTTTAATTACCTTTATTTTATTTTGCCAAACATACCTGGGAATACCTTTTATTTT
TTTTTTACCTTGGGGTGATGGTTCCAAACCATAAATGTGATTATAGTTAACACATGACCCTTCTAGCGTCCCAGC
CAGTGTTTTTCCTGACCTCTCTTCTTTGGAGAGGAGGATGGAAGGGAGGGGTCCGGCATGCTGCTGGCATTTTGC
TGTGTCCTGCAGCCCCTTTCCGGGACACCTGGGTTCACACAGCTTTTTAGCTTACATAACTGGTGCAGATTTTCT
GTGTGGAGATGTTGCCTTGACCAGCCTTGGCTGGACTTTACCAGGCATGCAGAAGCCTGTACCAACACAGACTAC
AGCACCCAGGAGGTGCGAGTGTGGCTGCTCAGCGGTTATAACAGGCCTGACTGCATTGTTCACCGGATTATAATG
AGCCAAAATGTTTCCCGGTGTTTGCTGGTTTCAGGGAAGGAGTTTGATATAGCAGATTAACCACCCTCCTTGTAG
CTATTGGGGCTTAATGGTTTCCTGGTGATTCTTACCAATCCACAATAAACATGGCCCATTGGCATATCTGCAAAA
AAAAAAAAAAAAA

FIGURE 3973

MGRRPARCYRYCKNKPYPKSRFCRGVPDAKIRIFDLGRKKAKVDEFPLCGHMVSDEYEQLSSEALEAARICANKY
MVKSCGKDGFHIRVRLHPFHVIRINKMLSCAGADRLQTGMRGAFGKPQGTVARVHIGQVIMSIRTKLQNKEHVIE
ALRRAKFKFPGRQKIHISKKWGFTKFNADEFEDMVAEKRLIPDGCGVKYIPSRGPLDKWRALHS

FIGURE 3974

GAAGGAGGGACGGCCGGTCCCGTCAGTCAGGCAGCGGGAGCCGCCGGGAGCGGATGGCGGCGGCCGTAGCGGCTC
CACTCGCCGCCGGGGGTGAGGAGGCGGCAGCCACGACCTCCGTGCCCGGGTCTCCAGGTCTGCCGGGGAGACGCA
GTGCAGAGCGGGCCCTAGAGGAGGCCGTGGCCACCGGGACCCTGAACCTGTCTAACCGGCGCTTGAAGCACTTCC
CCCGGGGCGCGGCCCGTAGCTACGACCTGTCAGACATCACCCAGGCTGACCTGTCCCGGAACCGGTTTCCCGAGG
TGCCCGAGGCGGCGTGCCAGCTGGTGTCCCTGGAGGGCCTGAGCCTCTACCACAATTGCCTGAGATGCCTGAACC
CAGCCTTGGGGAATCTCACAGCCCTCACCTACCTCAACCTCAGCCGAAACCAGCTGTCGCTGCTGCCACCCTACA
TCTGCCAGCTGCCCCTGAGGGTCCTCATCGTCAGCAACAACAAGCTGGGAGCCCTGCCCCCTGACATCGGCACCC
TGGGAAGCCTGCGACAGCTTGACGTGAGCAGCAACGAGCTCCAATCCCTGCCCTCGGAACTGTGTGGCCTCTCTT
CCCTGCGGGACCTCAATGTCCGGAGGAACCAGCTCAGTACGCTGCCCGAAGAGCTGGGGGACCTCCCTCTGGTCC
GCCTGGATTTCTCCTGTAACCGCGTCTCCCGAATCCCAGTCTCCTTCTGCCGCCTGAGGCACCTGCAGGTCATTC
TGCTGGACAGCAACCCTCTGCAGAGTCCACCTGCCCAGGTCTGCCTGAAGGGGAAACTTCACATCTTCAAGTATT
TGTCCACAGAGGCCGGGCAGCGTGGGTCGGCCCTGGGGGACCTGGCCCCTTCTCGGCCCCCGAGTTTCAGTCCCT
GCCCTGCAGAGGATCTATTTCCGGGACATCGGTACGATGGTGGGCTGGACTCAGGCTTCCACAGCGTTGATAGTG
GCAGCAAGAGGTGGTCTGGAAATGAGTCAACAGATGAATTTTCAGAGCTGTCATTCCGGATCTCAGAGCTGGCCC
GGGAGCCCCGGGGGCCCAGAGAACGCAAGGAGGATGGCTCAGCGGACGGAGACCCTGTGCAGATTGACTTCATCG
ACAGCCATGTCCCCGGGGAGGATGAAGAGCGAGGCACTGTGGAGGAGCAGCGACCACCCGAATTAAGCCCTGGGG
CAGGGGACAGGGAGAGGGCACCAAGCAGCAGGCGGGAGGAGCCGGCAGGGGAGGAGCGGCGGCGCCCGGACACCT
TGCAGCTGTGGCAGGAGCGGGAACGGCGGCAGCAGCAGCAGAGCGGGGCGTGGGGGGCCCCGAGGAAGGATAGCC
TCTTGAAGCCAGGGCTCAGGGCTGTTGTGGGAGGGGCCGCCGCCGTGTCCACTCAAGCCATGCACAACGGCTCGC
CTAAGTCCAGTGCCTCCCAAGCAGGGGCTGCAGCGGGGCAGGGAGCCCCCGCCCCTGCCCCTGCCTCCCAAGAGC
CCCTTCCCATAGCTGGACCAGCGACAGCACCTGCTCCACGGCCACTTGGCTCCATTCAGAGACCAAACAGCTTCC
TCTTCCGTTCCTCCTCTCAGAGTGGCTCAGGCCCTTCCTCACCAGACTCTGTCCTGAGACCTCGGCGGTACCCCC
AGGTTCCAGATGAGAAGGACTTAATGACTCAGCTGCGCCAGGTCCTTGAGTCCCGGCTGCAGCGGCCCCTGCCTG
AGGACCTGGCCGAGGCTCTGGCCAGTGGGGTCATCCTGTGCCAGCTGGCCAACCAGCTACGGCCGCGCTCCGTGC
CCTTCATCCATGTGCCCTCCCCTGCTGTGCCAAAACTCAGTGCCCTCAAGGCTCGGAAGAATGTGGAGAGTTTTC
TAGAAGCCTGTCGAAAAATGGGGGTGCCTGAGGCTGACCTGTGCTCGCCCTCGGATCTCCTCCAGGGCACTGCCC
GGGGGCTGCGGACCGCGCTGGAGGCCGTGAAGCGGGTGGGGGGCAAGGCCCTACCGCCCCTCTGGCCCCCCTCTG
GTCTGGGCGGCTTCGTCGTCTTCTACGTGGTCCTCATGCTGCTGCTCTATGTCACCTACACTCGGCTCCTGGGTT
CCTAGGCCCCAAAATCGGCCCTCCCTCACCCCTTTCCCTTCCTCTCTATTTATAAGGTCCCTGCTCCACCCGACC
CCACCTGCGGTGCCTTCAGCCCCAACCAAAGACACTAGTGCACCCCCTTCACAGACACTGACCTCAGAGGCCCCA
CTCTGGTGCCCCCAGACCCTGGGCCCCCAGCCTCTGGCCTCCCTCCAGTAGCCCCACGAGTCCCCACCTCTCAGT
GCTGACGGTGCCTTCATGTCCCCGCCGGCCCTGCCCCTGCCCTCTGTACCCCGTGAGGGGTGGCAGGAGCTGGAG
TCTCCCCCTTCCTCCTGTGCCCCTCCCCTTCCCCCCCCAACAGCTGCTATGGGGGGGCTAAATTATCTCTATTTTG
TAGAGAGGATCTATATTTGTAGGGGTTCGGGGCCCAGGCCGGGTCCCTATCTCTGTGTATAAACTGTACAGACCG
TGAAAAAAAAAAAAAAAAA

FIGURE 3975

MAAAVAAPLAAGGEEAAATTSVPGSPGLPGRRSAERALEEAVATGTLNLSNRRLKHFPRGAARSYDLSDITQADL
SRNRFPEVPEAACQLVSLEGLSLYHNCLRCLNPALGNLTALTYLNLSRNQLSLLPPYICQLPLRVLIVSNNKLGA
LPPDIGTLGSLRQLDVSSNELQSLPSELCGLSSLRDLNVRRNQLSTLPEELGDLPLVRLDFSCNRVSRIPVSFCR
LRHLQVILLDSNPLQSPPAQVCLKGKLHIFKYLSTEAGQRGSALGDLAPSRPPSFSPCPAEDLFPGHRYDGGLDS
GFHSVDSGSKRWSGNESTDEFSELSFRISELAREPRGPRERKEDGSADGDPVQIDFIDSHVPGEDEERGTVEEQR
PPELSPGAGDRERAPSSRREEPAGEERRRPDTLQLWQERERRQQQQSGAWGAPRKDSLLKPGLRAVVGGAAAVST
QAMHNGSPKSSASQAGAAAGQGAPAPAPASQEPLPIAGPATAPAPRPLGSIQRPNSFLFRSSSQSGSGPSSPDSV
LRPRRYPQVPDEKDLMTQLRQVLESRLQRPLPEDLAEALASGVILCQLANQLRPRSVPFIHVPSPAVPKLSALKA
RKNVESFLEACRKMGVPEADLCSPSDLLQGTARGLRTALEAVKRVGGKALPPLWPPSGLGGFVVFYVVLMLLLYV
TYTRLLGS

FIGURE 3976

GGTTTTXTGGXXGGGGGTTTTCAACXCXGGCTCTTGTTCTTTTTGCAGGACCCATCGATTCGAATTCGGCACGAG
CATCAGTATGCTTATGGATTTGATGACAGGCATAGCCTGGGCATATCACCTCATTGGTAAAGGGCTAGAGCCTTT
CTTTTTTATGGCACTTCTTTTTTTGAGATAGGGTCTTACTCTGTCACCCTGGCTAGAGTACACTGGTACAATCAC
GGCTCAATGTAGGCTTAACCTCCTGGGCTCAGGTGTATGTCACTATGCCCGGCTACTTTTTGTATTTTTTGGTAG
AGACGGCTTCGCCACGTTGCCCAGGCTGCAAGCGATATGCCTAGGCTCAAGCGATCTGCCCACCTCAACTTCCGG
AAGTGCTGAGATTACAGGTGTGAGCCACTGCACCCAGCCTTTGCTTTATTTTTTATTTTTTGAGAGGTATGATTC
TTTCTAGAGATTTTTTCTCATGGCTACTATTAGATCAGGAATGGGTGATTGGAGATTATTAGATTCTAGGTTAAC
TTCTACCACTTTACCCTAATACATAAAACTTTTTCCTAAATXAATGATGGAAGGAATXAAXXXXAXCXXCCXCXT
XXCCXCTAXTACAAAAXCXCTAGCCCTTAXAACXTTTXGXXAGCTXXXTTXXCCTXXXTXTCCCXTXXTCXXXCC
CCXXCCTXXTTXTXCCXXXCTXXCTCXAXCCCCACXAXTTXCXXTXTXXXCTXCXXAATAXATTXCXCXCXTXXC
TCCTCAXXXXCTXXTCXXXXCTCXX

FIGURE 3977

ATTCCTTCCATCATTTATTTAGGAAAAAGTTTTATGTATTAGGGTAAAGTGGTAGAAGTTAACCTAGAATCTAAT
AATCTCCAATCACCCATTCCTGATCTAATAGTAGCCATGAGAAAAAATCTCTAGAAAGAATCATACCTCTCAAAA
AATAAAAAATAAAACAAAGGCTGGGTGCAGTGGCTCACACCTGAGCCCAGGAGGTTAAGCCTACATTGAGCCGTG
ATTGTACCAGTGTACTCTAGCCAGGGTGACAGAGTAAGACCCTATCTCAAAAAAAGAAGTGCCATAAAAAAGAAA
GGCTCTAGCCCTTTACCAATGAGGTGATATGCCCAGGCTATGCCTGTCATCAAATCCATTAACCTTCCTGGTGAT
GGCCATGAGAAAGTCCAGCACACAAACCATGCCCCAGACTGCATCTGTGCATACACAGAGTAAAAGCCCTGCTGC
TATACTATAAAATGGCACCTGAAAATAATCTCTACGGTATGTTTGAAAATTGGCAG

FIGURE 3978

CGTGCAGGTCACATGCCCATGAAAGCAAACCTATTGGTGAGAAAGCTTAAGAGGTATCATTTTCATCCCCTGTAT
TCCCTCATCCCCTCTCCCGGTGTGTCCTGCCCTGGAGGCCCCCAACTTGCTCTTTGTTTTTGTCCCTCTTGTCCC
TGCCCTGCAGCATCCCACAGGTCTGTGACTGTTTTCCTATTTGCTTTCCAGCTGCTGATGCAAGGAATCCCCTGG
GCTCCCGTCCACTCCACTGCTGACCAGCCCATTCGCCTGTGCTGAGTCTTCCTGCAGGCCTTTCCTTGCCTCTGT
GGGACCCTGTGGGGGTCCATCCGGCTGGAGAAGAAAAGCCTCTCATGCTAACGTTGCAGACCCCAGAGGGTGAGA
GAAAGGGGGACTTCATTCAGTCTTGAAACCTGTGTGCTCAGCCCCCAAGGCATCAGGAATTCTTCCTGCCCAGAG
AATCAAGGCAGCTTCATTTTTTTCGTACCTTGGTCAGTGGTTCTCAACCTTTTTGTTATCAAGGCACTTTTTGTT
GTACATATGTCCTGTTGCCCCCTGCATTTTTATCTGCCAAACTGTACTGATGGAGTAACCATTGACTTTTCCCTT
CCTAAATTAAGGAAGACGTCTATGATGGAGTGTACAATAAAATCAGTGTCCCAATGATTCGTATGATGTCATCAA
CAACCAATCAGAGCTTCTGATCAGCATGAGATAATCAGTGTGACCACAATGAGTTGATAAAATTTCAGCATGAAA
AGAT

FIGURE 3979

RAGHMPMKANLLVRKLKRYHFHPLYSLIPSPGVSCPGGPQLALCFCPSCPCPAASHRSVTVFLFAFQLLMQGIPW
APVHSTADQPIRLC

FIGURE 3980

GGCACGAGGGATGGCGGCAGCGGCGCTGGGGAGGGCGAGGCGGAGGCGGCAAAACGGGCGGTCGAGCAGAACGTG
TAGCCGCGTCCCCTCCAGTCCGCTCCGGGCAGCTGCTGATGCAAGGAATCCCCTGGGCTCCCGTCCACTCCACTG
CTGACCAGCCCATTCGCCTGTGCTGAGTCTTCCTGCAGGCCTTTCCTTGCCTCTGTGGGACCCTGTGGGGGTCCA
TCCGGCTGGAGAAGAAAAGCCTCTCATGCTAACGTTGCAGACCCCAGAGGGTCCTGTGTGGGTGTGGAG**ATG**GCC
AATGAGAATCACGGCAGCCCCCGGGAGGAAGCGTCCCTGCTGAGTCACTCCCCAGGTACCTCCAATCAGAGCCAG
CCCTGTTCTCCAAAGCCAATCCGCCTGGTTCAGGACCTCCCAGAGGAGCTGGTGCATGCAGGCTGGGAGAAGTGC
TGGAGCCGGAGGGAGAATCGTCCCTACTACTTCAACCGATTCACCAACCAGTCCCTGTGGGAGATGCCCGTGCTG
GGGCAGCACGATGTGATTTCGGACCCTTTGGGGCTGAATGCGACCCCACTGCCCCAAGACTCAAGCTTGGTGGAA
ACTCCCCCGGCTGAGAACAAGCCCAGAAAGCGGCAGCTCTCGGAAGAGCAGCCAAGCGGCAATGGTGTGAAGAAG
CCCAAGATTGAAATCCCAGTGACACCCACAGGCCAGTCGGTGCCCAGCTCCCCCAGTATCCCAGGAACCCCAACG
CTGAAGATGTGGGGTACGTCCCCTGAAGATAAACAGCAGGCAGCTCTCCTACGACCCACTGAGGTCTACTGGGAC
CTGGACATCCAGACCAATGCTGTCATCAAGCACCGGGGGCCTTCAGAGGTGCTGCCCCCGCATCCCGAAGTGGAA
CTGCTCCGCTCTCAGCTCATCCTGAAGCTTCGGCAGCACTATCGGGAGCTGTGCCAGCAGCGAGAGGGCATTGAG
CCTCCACGGGAGTCTTTCAACCGCTGGATGCTGGAGCGCAAGGTGGTAGACAAAGGATCTGACCCCCTGTTGCCC
AGCAACTGTGAACCAGTCGTGTCACCTTCCATGTTTCGTGAAATCATGAACGACATTCCTATCAGGTTATCCCGA
ATCAAGTTCCGGGAGGAAGCCAAGCGCCTGCTCTTTAAATATGCGGAGGCCGCCAGGCGGCTCATCGAGTCCAGG
AGTGCATCCCCTGACAGTAGGAAGGTGGTCAAATGGAATGTGGAAGACACCTTTAGCTGGCTTCGGAAGGACCAC
TCAGCCTCCAAGGAGGACTACATGGATCGCCTGGAGCATCTGCGGAGGCAGTGTGGCCCCCACGTCTCGGCCGCA
GCCAAGGACTCCGTGGAAGGCATCTGCAGTAAGATCTACCACATCTCCCTGGAGTACGTCAAACGGATCCGAGAG
AAGCACCTTGCCATCCTCAAGGAAAACAACATCTCAGAGGAGGTGGAGGCCCCTGAGGTGGAGCCCCGCCTAGTG
TACTGCTACCCAGTCCGGCTGGCTGTGTCTGCACCGCCCATGCCCAGCGTGGAGATGCACATGGAGAACAACGTG
GTCTGCATCCGGTATAAGGGAGAGATGGTCAAGGTCAGCCGCAACTACTTCAGCAAGCTGTGGCTCCTTTACCGC
TACAGCTGCATTGATGACTCTGCCTTTGAGAGGTTCCTGCCCCGGGTCTGGTGTCTTCTCCGACGGTACCAGATG
ATGTTCGGCGTGGGCCTCTACGAGGGGACTGGCCTGCAGGGATCGCTGCCTGTGCATGTCTTTGAGGCCCTCCAC
CGACTCTTTGGCGTCAGCTTCGAGTGCTTCGCCTCACCCCTCAACTGCTACTTCCGCCAGTACTGTTCTGCCTTC
CCCGACACAGACGGCTACTTTGGCTCCCGCGGGCCCTGCCTAGACTTTGCTCCACTGAGTGGTTCATTTGAGGCC
AACCCTCCCTTCTGCGAGGAGCTCATGGATGCCATGGTCTCTCACTTTGAGAGACTGCTTGAGAGCTCACCGGAG
CCCCTGTCCTTCATCGTGTTCATCCCTGAGTGGCGGGAACCCCCAACACCAGCGCTCACCCGCATGGAGCAGAGC
CGCTTCAAACGCCACCAGTTGATCCTGCCTGCCTTTGAGCATGAGTACCGCAGTGGCTCCCAGCACATCTGCAAG
AAGGAGGAAATGCACTACAAGGCCGTCCACAACACGGCTGTGCTCTTCCTACAGAACGACCCTGGCTTTGCCAAG
TGGGCGCCGACGCCTGAACGGCTGCAGGAGCTGAGTGCTGCCTACCGGCAGTCAGGCCGCAGCCACAGCTCTGGT
TCTTCCTCATCGTCCTCCTCGGAGGCCAAGGACCGGGACTCGGGCCGTGAGCAGGGTCCTAGCCGCGAGCCTCAC
CCCACT**TAA**CATATCCTGCGGGGAGGAGGAGCCCCAGGGGTGCTAGTCTGGACTGCTGGGACTCGGGCCCCTGGG
GCCTCAGAGGGACCCCGGCTGCCACTGACATATGAAGATTATGGTTCTGCCAGGGCTCCCCTCCCTGCCTGTCCC
CAAGTCCTCACCTCAAACTCCCTCCAAGTCCCATGTATATAGGTCCTGATGCCTTCCCAACCCCGCCCCTCACCC
TGTTGCCACCTTGTTTCATTTGTAAAAGGAAATACAGAAACCCCCCCAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 3981

MANENHGSPREEASLLSHSPGTSNQSQPCSPKPIRLVQDLPEELVHAGWEKCWSRRENRPYYFNRFTNQSLWEMP
VLGQHDVISDPLGLNATPLPQDSSLVETPPAENKPRKRQLSEEQPSGNGVKKPKIEIPVTPTGQSVPSSPSIPGT
PTLKMWGTSPEDKQQAALLRPTEVYWDLDIQTNAVIKHRGPSEVLPPHPEVELLRSQLILKLRQHYRELCQQREG
IEPPRESFNRWMLERKVVDKGSDPLLPSNCEPVVSPSMFREIMNDIPIRLSRIKFREEAKRLLFKYAEAARRLIE
SRSASPDSRKVVKWNVEDTFSWLRKDHSASKEDYMDRLEHLRRQCGPHVSAAAKDSVEGICSKIYHISLEYVKRI
REKHLAILKENNISEEVEAPEVEPRLVYCYPVRLAVSAPPMPSVEMHMENNVVCIRYKGEMVKVSRNYFSKLWLL
YRYSCIDDSAFERFLPRVWCLLRRYQMMFGVGLYEGTGLQGSLPVHVFEALHRLFGVSFECFASPLNCYFRQYCS
AFPDTDGYFGSRGPCLDFAPLSGSFEANPPFCEELMDAMVSHFERLLESSPEPLSFIVFIPEWREPPTPALTRME
QSRFKRHQLILPAFEHEYRSGSQHICKKEEMHYKAVHNTAVLFLQNDPGFAKWAPTPERLQELSAAYRQSGRSHS
SGSSSSSSSEAKDRDSGREQGPSREPHPT

FIGURE 3982

AAGGCTGTGGACCCCAGAGAAGGTGGCAGGTGGCCCCCCTAGGAGAGCTCTGGGCACATTCGAATCTTCCCAAAC
TCCAATAATAAAAATTCGAAGACTTTGGCAGAGAGTGTGTGTGTGTGTGTATGGTTGTTGGGCGTAGGACAGGTT
TCGGGGATGCGCGGTACGCGGTACCACCCCTCGGAGGCCCCCACCCCCAGACGCCCAGGCCGCCTCCCCACTCCC
CCTCAAGCAGCCCCAGCCGGGGACTTTCCGTCGCGGGGAAGGGGCGGGGACCCTGAGCGAAAGGTGCGGAGGCGG
CCTGCCGGGGTGGTTCGGCTTCCCGTTGCCGCCTCGGGCGCTGTACCCAGAGCTCGAAGAGGAGCAGCGCGGCCG
CGCGGACCCGGCAAGGCTGGGCCGGACTCGGGGCTCCCGAGGGACGCCATGCGGGGAGGCAGGGGCGCCCCTTTC
TGGCTGTGGCCGCTGCCCAAGCTGGCGCTGCTGCCTCTGTTGTGGGTGCTTTTCCAGCGGACGCGTCCCCAGGGC
AGCGCCGGGCCACTGCAGTGCTACGGAGTTGGACCCTTGGGCGACTTGAACTGCTCGTGGGAGCCTCTTGGGGAC
CTGGGAGCCCCCTCCGAGTTACACCTCCAGAGCCAAAAGTACCGTTCCAACAAAACCCAGACTGTGGCAGTGGCA
GCCGGACGGAGCTGGGTGGCCATTCCTCGGGAACAGCTCACCATGTCTGACAAACTCCTTGTCTGGGGCACTAAG
GCAGGCCAGCCTCTCTGGCCCCCCGTCTTCGTGAACCTAGAAACCCAAATGAAGCCAAACGCCCCCCGGCTGGGC
CCTGACGTGGACTTTTCCGAGGATGACCCCCTGGAGGCCACTGTCCATTGGGCCCCACCTACATGGCCATCTCAT
AAAGTTCTGATCTGCCAGTTCCACTACCGAAGATGTCAGGAGGCGGCCTGGACCCTGCTGGAACCGGAGCTGAAG
ACCATACCCCTGACCCCTGTTGAGATCCAAGATTTGGAGCTAGCCACTGGCTACAAAGTGTATGGCCGCTGCCGG
ATGGAGAAAGAAGAGGATTTGTGGGGCGAGTGGAGCCCCATTTTGTCCTTCCAGACACCGCCTTCTGCTCCAAAA
GATGTGTGGGTATCAGGGAACCTCTGTGGGACGCCTGGAGGAGAGGAACCTTTGCTTCTATGGAAGGCCCCAGGG
CCCTGTGTGCAGGTGAGCTACAAAGTCTGGTTCTGGGTTGGAGGTCGTGAGCTGAGTCCAGAAGGAATTACCTGC
TGCTGCTCCCTAATTCCCAGTGGGGCGGAGTGGGCCAGGGTGTCCGCTGTCAACGCCACAAGCTGGGAGCCTCTC
ACCAACCTCTCTTTGGTCTGCTTGGATTCAGCCTCTGCCCCCCGTAGCGTGGCAGTCAGCAGCATCGCTGGGAGC
ACGGAGCTACTGGTGACCTGGCAACCGGGGCCTGGGGAACCACTGGAGCATGTAGTGGACTGGGCTCGAGATGGG
GACCCCCTGGAGAAACTCAACTGGGTCCGGCTTCCCCCTGGGAACCTCAGTGCTCTGTTACCAGGGAATTTCACT
GTCGGGGTCCCCTATCGAATCACTGTGACCGCAGTCTCTGCTTCAGGCTTGGCCTCTGCATCCTCCGTCTGGGGG
TTCAGGGAGGAATTAGCACCCCTAGTGGGGCCAACGCTTTGGCGACTCCAAGATGCCCCTCCAGGGACCCCCGCC
ATAGCGTGGGGAGAGGTCCCAAGGCACCAGCTTCGAGGCCACCTCACCCACTACACCTTGTGTGCACAGAGTGGA
ACCAGCCCCTCCGTCTGCATGAATGTGAGTGGCAACACACAGAGTGTCACCCTGCCTGACCTTCCTTGGGGTCCC
TGTGAGCTGTGGGTGACAGCATCTACCATCGCTGGACAGGGCCCTCCTGGTCCCATCCTCCGGCTTCATCTACCA
GATAACACCCTGAGGTGGAAAGTTCTGCCGGGCATCCTATTCTTGTGGGGCTTGTTCCTGTTGGGGTGTGGCCTG
AGCCTGGCCACCTCTGGAAGGTGCTACCACCTAAGGCACAAAGTGCTGCCCCGCTGGGTCTGGGAGAAAGTTCCT
GATCCTGCCAACAGCAGTTCAGGCCAGCCCCACATGGAGCAAGTACCTGAGGCCCAGCCCCTTGGGGACTTGCCC
ATCCTGGAAGTGGAGGAGATGGAGCCCCCGCCGGTTATGGAGTCCTCCCAGCCCGCCCAGGCCACCGCCCCGCTT
GACTCTGGGTATGAGAAGCACTTCCTGCCCACACCTGAGGAGCTGGGCCTTCTGGGGCCCCCCAGGCCACAGGTT
CTGGCCTGAACCACACGTCTGGCTGGGGGCTGCCAGCCAGGCTAGAGGGATGCTCATGCAGGTTGCACCCCAGTC
CTGGATTAGCCCTCTTGATGGATGAAGACACTGAGGACTCAGAGAGGCTGAGTCACTTACCTGAGGACACCCAGC
CAGGCAGAGCTGGGATTGAAGGACCCCTATAGAGAAGGGCTTGGCCCCCATGGGGAAGACACGGATGGAAGGTGG
AGCAAAGGAAAATACATGAAATTGAGAGTGGCAGCTGCCTGCCAAAATCTGTTCCGCTGTAACAGAACTGAATTT
GGACCCCAGCACAGTGGCTCACGCCTGTAATCCCAGCACTTTGGCAGGCCAAGGTGGAAGGATCACTTAGAGCTA
GGAGTTTGAGACCAGCCTGGGCAATATAGCAAGACCCCTCACTACAAAAATAAAACATCAAAAACAAAAACAATT
AGCTGGGCATGATGGCACACACCTGTAGTCCGAGCCACTTGGGAGGCTGAGGTGGGAGGATCGGTTGAGCCCAGG
AGTTCGAAGCTGCAGGGACCTCTGATTGCACCACTGCACTCCAGGCTGGGTAACAGAATGAGACCTTATCTCAAA
AATAAACAAACTAATAAAAAGCAAAAAAAAAAAAAAAAGAAAAGAAAAAACACTGCATTTGGGCACCATCTCAGC
TCCCTTGCATCCAGGTGCAGCATGGACTGAGTTCTTGACAACAGAATGTGGTCAGAAGTGACATATGCCAACACG
GGGTCTGGGTGGGGGCTCCCCCACATCCTTTCCTTGCCTATGAGCTGGAACATAACACATGCCTATGATCCAGCT
TTGGTCATACCCAAGGGGAAGGTGGAGCAAGAAATGAAAAGGAACCTGAATCCCTGAATGACTGCATGGATAGAA
CCACTAAGAAAAATAAACTTTTATATTTTTATA

FIGURE 3983

MRGGRGAPFWLWPLPKLALLPLLWVLFQRTRPQGSAGPLQCYGVGPLGDLNCSWEPLGDLGAPSELHLQSQKYRS
NKTQTVAVAAGRSWVAIPREQLTMSDKLLVWGTKAGQPLWPPVFVNLETQMKPNAPRLGPDVDFSEDDPLEATVH
WAPPTWPSHKVLICQFHYRRCQEAAWTLLEPELKTIPLTPVEIQDLELATGYKVYGRCRMEKEEDLWGEWSPILS
FQTPPSAPKDVWVSGNLCGTPGGEEPLLLWKAPGPCVQVSYKVWFWVGGRELSPEGITCCCSLIPSGAEWARVSA
VNATSWEPLTNLSLVCLDSASAPRSVAVSSIAGSTELLVTWQPGPGEPLEHVVDWARDGDPLEKLNWVRLPPGNL
SALLPGNFTVGVPYRITVTAVSASGLASASSVWGFREELAPLVGPTLWRLQDAPPGTPAIAWGEVPRHQLRGHLT
HYTLCAQSGTSPSVCMNVSGNTQSVTLPDLPWGPCELWVTASTIAGQGPPGPILRLHLPDNTLRWKVLPGILFLW
GLFLLGCGLSLATSGRCYHLRHKVLPRWVWEKVPDPANSSSGQPHMEQVPEAQPLGDLPILEVEEMEPPPVMESS
QPAQATAPLDSGYEKHFLPTPEELGLLGPPRPQVLA

FIGURE 3984

GCGAAGTGAAGGGTGGCCCAGGTGGGGCCAGGCTGACTGAATGTATCTCCTAGCTATGGACTAAATAATACATGG
GGGGAAATAAACAAGTATTCATGAGGGTGAAAATGTGACCCAGCAGGAAAATTACAACTATTTTCAATTGACGTT
GAATAGGATGAGTCATGGAATTTAAGTGATTTACTGAAGATTATACTACTGGTAGATAGAAGAGCTAAAGAAAGA
TGGATACTATGATGCTGAATGTGCGGAATCTGTTTGAGCAGCTTGTGCGCCGGGTGGAGATTCTCAGTGAAGGAA
ATGAAGTCCAATTTATCCAGTTGGCGAAGGACTTTGAGGATTTCCGTAAAAAGTGGCAGAGGACTGACCATGAGC
TGGGGAAATACAAGGATCTTTTGATGAAAGCAGAGACTGAGCGAAGTGCTCTGGATGTTAAGCTGAAGCATGCAC
GTAATCAGGTGGATGTAGAGATCAAACGGAGACAGAGAGCTGAGGCTGACTGCGAAAAGCTGGAACGACAGATTC
AGCTGATTCGAGAGATGCTCATGTGTGACACATCTGGCAGCATTCAACTAAGCGAGGAGCAAAAATCAGCTCTGG
CTTTTCTCAACAGAGGCCAACCATCCAGCAGCAATGCTGGGAACAAAAGACTATCAACCATTGATGAATCTGGTT
CCATTTTATCAGATATCAGCTTTGACAAGACTGATGAATCACTGGATTGGGACTCTTCTTTGGTGAAGACTTTCA
AACTGAAGAAGAGAGAAAAGAGGCGCTCTACTAGCCGACAGTTTGTTGATGGTCCCCCTGGACCTGTAAAGAAAA
CTCGTTCCATTGGCTCTGCAGTAGACCAGGGGAATGAATCCATAGTTGCAAAAACTACAGTGACTGTTCCCAATG
ATGGCGGGCCCATCGAAGCTGTGTCCACTATTGAGACTGTGCCATATTGGACCAGGAGCCGAAGGAAAACAGGTA
CTTTACAACCTTGGAACAGTGACTCCACCCTGAACAGCAGGCAGCTGGAGCCAAGAACTGAGACAGACAGTGTGG
GCACGCCACAGAGTAATGGAGGGATGCGCCTGCATGACTTTGTTTCTAAGACGGTTATTAAACCTGAATCCTGTG
TTCCATGTGGAAAGCGGATAAAATTTGGCAAATTATCTCTGAAGTGTCGAGACTGTCGTGTGGTCTCTCATCCAG
AATGTCGGGACCGCTGTCCCCTTCCCTGCATTCCTACCCTGATAGGAACACCTGTCAAGATTGGAGAGGGAATGC
TGGCAGACTTTGTGTCCCAGACTTCTCCAATGATCCCCTCCATTGTTGTGCATTGTGTAAATGAGATTGAGCAAA
GAGGTCTGACTGAGACAGGCCTGTATAGGATCTCTGGCTGTGACCGCACAGTAAAAGAGCTGAAAGAGAAATTCC
TCAGAGTGAAAACTGTACCCCTCCTCAGCAAAGTGGATGATATCCATGCTATCTGTAGCCTTCTAAAAGACTTTC
TTCGAAACCTCAAAGAACCTCTTCTGACCTTTCGCCTTAACAGAGCCTTTATGGAAGCAGCAGAAATCACAGATG
AAGACAACAGCATAGCTGCCATGTACCAAGCTGTTGGTGAACTGCCCCAGGCCAACAGGGACACATTAGCTTTCC
TCATGATTCACTTGCAGAGAGTGGCTCAGAGTCCACATACTAAAATGGATGTTGCCAATCTGGCTAAAGTCTTTG
GCCCTACAATAGTGGCCCATGCTGTGCCCAATCCAGACCCAGTGACAATGTTACAGGACATCAAGCGTCAACCCA
AGGTGGTTGAGCGCCTGCTTTCCTTGCCTCTGGAGTATTGGAGTCAGTTCATGATGGTGGAGCAAGAGAACATTG
ACCCCCTACATGTCATTGAAAACTCAAATGCCTTTTCAACACCACAGACACCAGATATTAAAGTGAGTTTACTGG
GACCTGTGACCACTCCTGAACATCAGCTTCTCAAGACTCCTTCATCTAGTTCCCTGTCACAGAGAGTCCGTTCCA
CCCTCACCAAGAACACTCCTAGATTTGGGAGCAAAAGCAAGTCTGCCACTAACCTAGGACGACAAGGCAACTTTT
TTGCTTCTCCAATGCTCAAGTGAAGTCACATCTGCCTGTTACTTCCCAGCATTGACTGACTATAAGAAAGGACAC
ATCTGTACTCTGCTCTGCAGCCTCCTGTACTCATTACTACTTTTAGCATTCTCCAGGCTTTTACTCAAGTTTAAT
TGTGCATGAGGGTTTTATTAAAACTATATATATCTCCCCTTCCTTCTCCTCAAGTCACATAATATCAGCACTTTG
TGCTGGTCATTGTTGGGAGCTTTTAGATGAGACATCTTTCCAGGGGTAGAAGGGTTAGTATGGAATTGGTTGTGA
TTCTTTTTGGGGAAGGGGGTTATTGTTCCTTTGGCTTAAAGCCAAATGCTGCTCATAGAATGATCTTTCTCTAGT
TTCATTTAGAACTGATTTCCGTGAGACAATGACAGAAACCCTACCTATCTGATAAGATTAGCTTGTCTCAGGGTG
GGAAGTGGGAGGGCAGGGCAAAGAAAGGATTAGACCAGAGGATTTAGGATGCCTCCTTCTAAGAACCAGAAGTTC
TCATTCCCCATTATGAACTGAGCTATAATATGGAGCTTTCATAAAAATGGGATGCATTGAGGACAGAACTAGTGA
TGGGAGTATGCGTAGCTTTGATTTGGATGATTAGGTCTTTAATAGTGTTGAGTGGCACAACCTTGTAAATGTGAA
AGTACAACTCGTATTTATCTCTGATGTGCCGCTGGCTGAACTTTGGGTTCATTTGGGGTCAAAGCCAGTTTTTCT
TTTAAAATTGAATTCATTCTGATGCTTGGCCCCCATACCCCCAACCTTGTCCAGTGGAGCCCAACTTCTAAAGGT
CAATATATCATCCTTTGGCATCCCAACTAACAATAAAGAGTAGGCTATAAGGGAAGATTGTCAATATTTTGTGGT
AAGAAAAGCTACAGTCATTTTTTCTTTGCACTTTGGATGCTGAAATTTTTCCCATGGAACATAGCCACATCTAGA
TAGATGTGAGCTTTTTCTTCTGTTAAAATTATTCTTAATGTCTGTAAAAACGATTTTCTTCTGTAGAATGTTTGA
CTTCGTATTGACCCTTATCTGTAAAACACCTATTTGGGATAATATTTGGAAAAAAAGTAAATAGCTTTTTCAAAA
TGAAAAAAAAAA

FIGURE 3985

MDTMMLNVRNLFEQLVRRVEILSEGNEVQFIQLAKDFEDFRKKWQRTDHELGKYKDLLMKAETERSALDVKLKHA
RNQVDVEIKRRQRAEADCEKLERQIQLIREMLMCDTSGSIQLSEEQKSALAFLNRGQPSSSNAGNKRLSTIDESG
SILSDISFDKTDESLDWDSSLVKTFKLKKREKRRSTSRQFVDGPPGPVKKTRSIGSAVDQGNESIVAKTTVTVPN
DGGPIEAVSTIETVPYWTRSRRKTGTLQPWNSDSTLNSRQLEPRTETDSVGTPQSNGGMRLHDFVSKTVIKPESC
VPCGKRIKFGKLSLKCRDCRVVSHPECRDRCPLPCIPTLIGTPVKIGEGMLADFVSQTSPMIPSIVVHCVNEIEQ
RGLTETGLYRISGCDRTVKELKEKFLRVKTVPLLSKVDDIHAICSLLKDFLRNLKEPLLTFRLNRAFMEAAEITD
EDNSIAAMYQAVGELPQANRDTLAFLMIHLQRVAQSPHTKMDVANLAKVFGPTIVAHAVPNPDPVTMLQDIKRQP
KVVERLLSLPLEYWSQFMMVEQENIDPLHVIENSNAFSTPQTPDIKVSLLGPVTTPEHQLLKTPSSSSLSQRVRS
TLTKNTPRFGSKSKSATNLGRQGNFFASPMLK

FIGURE 3986

ATAATCTTCATTCCTGGGTTCTCCACTTCAATAGTCGTGGCAGTGCTGCTGAATTTGCAGTTTTTCACATCATGA
CCAGGATTCTGGAAGCTACAAACAGTTTGTTTTTACCTCTGCCTCCTGGTTTTCATACTCTGCACACCATCCTCG
GGGTCCAGTGTCTCCCTTTGCATAACCTGCTGCATTGCATTGACAGTGGAGTGTTGCTTCTCACTGAAACAGCTG
TCATAAGGCTCATGAAAGATCTGGATAATACAGAGAAAAATGAAAAACTGAAATTCAGTATCATTGTGCGGCTTC
CTCCGCTTATTGGGCAGAAGATTTGTAGACTTTGGGATCATCCTATGAGTTCTAACATCATTTCGCGGAACCACG
TGACGCGACTGCTTCAGAACTATAAGAAACAGCCTCGGAATTCTATGATTAACAAGTCATCGTTCAGTGTAGAAT
TTCTGCCTCTGAACTACTTCATTGAAATTCTGACAGATATAGAGTCCTCCAATCAAGCCCTGTATCCTTTTGAAG
GACATGACAATGTGGATGCAGAATTTGTAGAGGAAGCAGCTCTGAAACACACCGCGATGCTTTTAGGCTTATGAA
AAAGAAAACGCAATTGGATCTGCTGCTGCCATTTTAATCTTGCTCATTAACCTTACTCCTCTGAGAATTCTTTAA
CAATATTTAAAATTGGTAACAAAAATAGTTTAGCCATAATTGTTTAGCCATGTGAGTTTCAGGTTGGTACACGTT
CAGACAGAACTGCTGTATCACATTCCAATTTTGAATAGCCAGTGAGCAATCAAGTGTAGAGAAATGATAAATGGC
CTAAGAAGGCATACAGTGGCATAAACGATGCTCTTCCTAGTAGCTTAATAGGCCCACAAGCTAGTTTCTGTTGCA
CTCTGAAATAAAATATGCTTTAAAAATGTAGGGAACAGTGCTTAGAAAAGCAAAAACTAGGTGTGTCATTGAAAT
AATAGGCATAAAAATTAAATGTTACATAAGAACACTATTTGGAAAGAGGGTCCTTTTAAAAACTGAATTTGTACT
AAATCAGATTTGCCATGTCCAGTACAGAATAATTTGTACTTAGTATTTGCAGCAGGGTTTGTCTTTGTGAATTCA
GATGAAACATATTTATTTTTTTTTATTTATAAAAGGTTGATTTAGGAATATTTTGTCAGTCATTAAAAAACCTGA
AAACATAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3987

GCAGAGGAGGCGGCGGAACACCCCGGGTTGGTCGGGTTTCCAAGGGCTGACCCGAGCTCCAGCACTTTTTCCGCG
CCTGATTTTTCAGAGCTCTTCAGAAACCAGGCTGCTTTCAGGAACATTGCTGTGGATTCCCAGGGCCTATTCCAC
TAGAAGCAAG**ATG**GCTGAACTCAATACTCATGTGAATGTCAAGGAAAAGATCTATGCAGTTAGATCAGTTGTTCC
CAACAAAAGCAATAATGAAATAGTCCTGGTGCTCCAACAGTTTGATTTTAATGTGGATAAAGCCGTGCAAGCCTT
TGTGGATGGCAGTGCAATTCAAGTTCTAAAAGAATGGAATATGACAGGAAAAAAGAAGAACAATAAAAGAAAAAG
AAGCAAGTCCAAGCAGCATCAAGGCAACAAAGATGCTAAAGACAAGGTGGAGAGGCCTGAGGCAGGGCCCCTGCA
GCCGCAGCCACCACAGATTCAAAACGGCCCCATGAATGGCTGCGAGAAGGACAGCTCGTCCACAGATTCTGCTAA
CGAAAAACCAGCCCTTATCCCTCGTGAGAAAAAGATCTCGATACTTGAGGAACCTTCAAAGGCACTTCGTGGGGT
CACAGAAGGCAACAGACTACTGCAACAGAAACTATCCTTAGATGGGAACCCCAAACCTATACATGGAACAACAGA
GAGGTCAGATGGCCTACAGTGGTCAGCTGAGCAGCCTTGTAACCCAAGCAAGCCTAAGGCAAAAACATCTCCTGT
TAAGTCCAATACCCCTGCAGCTCATCTTGAAATAAAGCCAGATGAGTTGGCAAAGAAAAGAGGCCCAAATATTGA
GAAATCAGTGAAGGATTTGCAACGCTGCACCGTTTCTCTAACTAGATATCGCGTCATGATTAAGGAAGAAGTGGA
TAGTTCCGTGAAGAAGATCAAAGCTGCCTTTGCTGAATTACACAACTGCATCATTGACAAAGAAGTTTCATTAAT
GGCAGAAATGGATAAAGTTAAAGAAGAAGCCATGGAAATCCTGACTGCTCGTCAGAAGAAAGCAGAAGAACTAAA
GAGACTCACTAACCTTGCCAGTCAGATGGCAGAGATGCAGCTGGCCGAACTCAGGGCAGAAATTAAGCACTTTGT
CAGCGAGCGTAAATATGACGAGGAGCTCGGGAAAGCTGCCCGGTTTTCCTGTGACATCGAACAGCTGAAGGCCCA
AATCATGCTCTGCGGAGAAATTACACATCCAAAGAACAACTATTCCTCAAGAACTCCCTGCAGCTCCCTGCTGCC
TCTGCTGAATGCGCACGCAGCAACCTCTGGGAAACAGAGTAACTTTTCCCGAAAATCATCCACTCACAATAAGCC
CTCTGAAGGCAAAGCGGCAAACCCCAAAATGGTGAGCAGTCTCCCCAGCACCGCCGACCCCTCTCACCAGACCAT
GCCGGCCAACAAGCAGAATGGATCTTCTAACCAAAGACGGAGATTTAATCCACAGTATCATAACAACAGGCTAAA
TGGGCCTGCCAAGTCGCAGGGCAGTGGGAATGAAGCCGAGCCACTGGGAAAGGGCAACAGCCGCCACGAACACAG
AAGACAGCCGCACAACGGCTTCCGGCCCAAAAACAAAGGCGGTGCCAAAAATCAAGAGGCTTCCTTGGGGATGAA
GACCCCCGAGGCCCCGGCCCATTCTGAAAAGCCCCGGCGAAGGCAGCACGCTGCAGACACCTCGGAGGCCAGGCC
CTTCCGGGGTAGTGTCGGTAGGGTTTCACAGTGCAATCTCTGCCCCACGAGAATAGAAGTTTCCACAGATGCAGC
AGTTCTCTCAGTCCCGGCTGTGACGTTGGTGGCC**TGA**GCTAGGAGGAAAAAGAGCAGTTTTCACTCAGTTTTGGT
TCCCTGCCCGAGGTGCTGACCCAATTCGCTGCCAAAAGAGTGTCAATCAGAATATACAAATCCCGTATGGTTGTG
TCATCCTCTCTTAATCATTTTTACTAATTCTAATAATCAGCTCTAGCTTGCTTCATAATTTTCATGGCTTTGCTT
GATCTGTTGATGCTTTCTCTCATCAAGACTTTGCAGCATTTTAGCCAGGCAGTATTTACTCATTATTAGGAAAAT
CAAGATGTGGCTGAAGATCAGAGGCTCAGTTAGCAACCTGTGTTGTAGCAGTGATGTCAGTCCATAGATTGTCTT
TAGAGAGTTAATGTTACAAAAAAGAATTCTTAATAATCAGACAAACATGATCTGCTGAGGACACATGCGCTTTTG
TAGAATTTAACATCTGGTGTTTTTCTGAAAAAATATATATACATATATTGCTTTATTTGAAACAAATTAAAATAT
GCTGCATTTGAAAAAAAAAAAAAAAAAAA

FIGURE 3988

MAELNTHVNVKEKIYAVRSVVPNKSNNEIVLVLQQFDFNVDKAVQAFVDGSAIQVLKEWNMTGKKKNNKRKRSKS
KQHQGNKDAKDKVERPEAGPLQPQPPQIQNGPMNGCEKDSSSTDSANEKPALIPREKKISILEEPSKALRGVTEG
NRLLQQKLSLDGNPKPIHGTTERSDGLQWSAEQPCNPSKPKAKTSPVKSNTPAAHLEIKPDELAKKRGPNIEKSV
KDLQRCTVSLTRYRVMIKEEVDSSVKKIKAAFAELHNCIIDKEVSLMAEMDKVKEEAMEILTARQKKAEELKRLT
NLASQMAEMQLAELRAEIKHFVSERKYDEELGKAARFSCDIEQLKAQIMLCGEITHPKNNYSSRTPCSSLLPLLN
AHAATSGKQSNFSRKSSTHNKPSEGKAANPKMVSSLPSTADPSHQTMPANKQNGSSNQRRRFNPQYHNNRLNGPA
KSQGSGNEAEPLGKGNSRHEHRRQPHNGFRPKNKGGAKNQEASLGMKTPEAPAHSEKPRRRQHAADTSEARPFRG
SVGRVSQCNLCPTRIEVSTDAAVLSVPAVTLVA

FIGURE 3989

ACAAACTACTCCCTGAGATCCTACAATCCGCTTCATTTCTAACTGCTAATGGGGCCTTGTATATGGCTTTCTTTT
GCATTTTAAGGAAGATACTTGGAAAATTCTACTCATGGACTCCTGGCTTTGGTGCCGCTCTGCCAGCATCTTATG
TGGCCATTCTCATTGAAAGAAAAAGCAGGAGAGGGCTGCTCACAATTTATATGGCCAACTTGGTCCTTTTGTTTT
GCATCACAGCTGCCATGTACATGTTCTTTTTCAGGTGCAAGGATGGCTTGAAAGGATTTACATTTTCTGCACTTA
GGTTCATTGTAGGGAAGGAAGAAATTCCCACACATTCTTTTTCACCAGAGGCAGCATATGCAAAAGTGGAACAAA
AGAGAGAGCAACATGAGGAAAAACCCAGAAGAATGAATATGATTGGTCTAGTCAGGAAATTTGTGGATTCAATAT
GCAAACATGGACCAAGGCATAGATGTTGCAAACATTATGAAGATAATTGCATCTCTTATTGCATTAAAGGTTTCA
TCAGAATGTTTAGCGTGGGGTACTTGATCCAGTGCTGCCTCCGAATCCCTTCTGCATTTAGGCATCTGTTTACAC
AGCCATCTCGGCTACTTTCTCTCTTCTACAATAAAGAAAACTTCCAGCTTGGAGCTTTTCTTGGCTCTTTTGTTA
GTATATACAAGGGTACTAGTTGCTTCCTGCGCTGGATCAGAAACTTAGATGATGAACTACATGCTATTATAGCTG
GATTTTTGGCAGGTACATCAATGATGTTTTATAAAAGCACAACAATTTCCATGTATTTAGCGTCCAAATTGGTAG
AGACAATGTATTTCAAAGGCATTGAAGCAGGGAAGGTTCCCTATTTTCCTCATGCAGATACTATCATCTATTCCA
TCTCTACAGCAATTTGCTTCCAGGCAGCTGTCATGGAAGTTCAGACTTTGAGACCATCTTACTGGAAGTTCCTTT
TAAGACTCACCAAGGGCAAATTTGCTGTCATGAACCGAAAAGTCCTTGATGTTTTTGGTACTGGTGCATCTAAAC
ACTTTCAGGATTTCATCCCCAGGTTGGATCCAAGATACACAACTGTAACACCAGAGTTGCCCACAGAGTTTTCCTG
AAGATGACTGTAACTTATTAATGTGACTAAATGTTTCATCTTGAAGAGTTAATTATGTTGAACACAAAGGAGGG
GGCCCAAGCTCGAACTTCAGTGTTATTTCAGTTAGAGATACTCTTTTCATTTGTTTTGTTTTTCTTATGAATCAG
AAATTCAGAAGCTTTTTAGGAAGATGTTGCTTAATAATTAAGCTTCCTCCATAGCCAGAATAAGATTCTGGATCA
CTGTAGTGACTGACATTATATATTATTGATCAAATTATGTCCACAAGCAATATTATATAATCTACGTAGAAGTGT
AATAACAAACAAGAGTACACTTAAAATTACTTTAAAAGATGTCTTTAGTTCATTCCAATATAATTCTTGATTAAA
ATTAGGATTATTTCTACATTTTAGGATTTACAAAGGATCACGGGTACATGGGTTTGGTCTATATATTTTTTTAAA
GTTTTGAATTGGTATCTGTAGTAGTGGAATGTTATAGATTTGAAGTAACTCTCCACGGACAGTGCTGCTTTCGTG
TAGAGCAATTTAATTGGAGAAGTGGCCATTCTTACTTCAGGGATGCAAAGATGGGTCTCATACCATTTGGATAAA
TGTCGTGGTATCCATGCTTTTTTTCAACTAATAACATCATCTCTCTTCATGACCAGTTAATTGGGCTATTTGGCA
GCCCAGTGAACCTATGTACTAATGGCAAGTTAGGGGCAAATGGAAATGGACACATCCGTTAAAGTTGAAATGTAT
GTTTTAATCTTTCACAGAAGTATTACACTTGAATATTTAAAAACAAAACTTTTAAACTTCCTATAGGTTTATGAT
GTTTGTTTTCATTTATATGGACATAATCCTTCATAGCTCAGTTTATATGCCATTGTTGTATTAGAAGGGATCAAA
ATCCTATGGAACAAAGTAGTCTTGGCAAGTTGGCAGTTTGTGTCCTCTCAGCTGTTTAACTTATGTAATGGATGT
TTTGCACCTGAAAACACTATAAAAATCCAGTGGTTGTTTAAAAAGTCCATTTGTCACTAATTCCATTCAGGTTCT
CCAACCTTCTTCTTGAATATCATTGTCACCATTTATACTGTTAGAATAAAGAGGTGACACCATAAAGTCCTGCTG
ATAATGAGAGTAGTTCAGGACAGCTGTGATTGAAATATGGTCGCTATTTACAGTTTTTCAGGGAAAAGTTATACT
TTTCTATGTTAATAAAGAGCTGAAGTGGTCTACAGTTAATGTGACATGTAGGGATGATGATATTTTTAAAATACA
TTTTGTTGCTAAAAAGTTGTTAGGCCAGTGCAAATTATGCAGTAGAACTTGTGTTGCAAAAGGAATTATAACCCA
TACTTTAAAAATGCTTAATCCCTCATATTCAATTTCATCAAGCCTTGTATACTTCTGCTTAAATGTAATTCAATC
CTTGGTTGTTATGGCAAACAGAAACCCAACAAAAAGACAGACTCTGGTACTATGGTAACAGAGCCACTTTATCAT
TTGGTCAAAATTTGACATTATGATTAGCTTTGTAGAACTGACCTGTTTATTTGGCAATGCTGTTAAAGGATCATT
TCGGTTTCAGACTTCAAAGTTGATTAATAAATTTAATCTTAACTTTTTATTCACTGGAATCAAAACGATGGTTGG
TACTGTGTTTACTGTTTAAAATGAAGTACTAAAGCCCTGAGAACTGCACCTCATTTTCTTTATCCAGAAATTGTG
CTTATATATTTTCCTGTCAGGTTTAAAAAGATGTTTTAATTCATAAATTATTGTTTTCATTGACATTAAAGGACT
GTGATATTGAAAAAAAAAAAAAAAAAA

FIGURE 3990

MAFFCILRKILGKFYSWTPGFGAALPASYVAILIERKSRRGLLTIYMANLVLLFCITAAMYMFFFRCKDGLKGFT
FSALRFIVGKEEIPTHSFSPEAAYAKVEQKREQHEEKPRRMNMIGLVRKFVDSICKHGPRHRCCKHYEDNCISYC
IKGFIRMFSVGYLIQCCLRIPSAFRHLFTQPSRLLSLFYNKENFQLGAFLGSFVSIYKGTSCFLRWIRNLDDELH
AIIAGFLAGTSMMFYKSTTISMYLASKLVETMYFKGIEAGKVPYFPHADTIIYSISTAICFQAAVMEVQTLRPSY
WKFLLRLTKGKFAVMNRKVLDVFGTGASKHFQDFIPRLDPRYTTVTPELPTEFS

FIGURE 3991

GGCGGGCAGAAGTTGGAAACATGCGGCTGTCGGTCGCTGCAGCGATCTCCCATGGCCGCGTATTTCGCCGTATGG
GCCTCGGTCCCGAGTCCCGCATCCATCTGTTGCGGAACTTGCTCACAGGGCTGGTGCGGCACGAACGCATCGAGG
CACCATGGGCGCGTGTGGACGAAATGAGGGGCTACGCGGAGAAGCTCATCGACTATGGGAAGCTGGGAGACACTA
ACGAACGAGCCATGCGCATGGCTGACTTCTGGCTCACAGAGAAGGATTTGATCCCAAAGCTGTTTCAAGTACTGG
CCCCTCGGTACAAAGATCAAACTGGGGGCTACACAAGAATGCTGCAGATCCCAAATCGGAGTTTGGATCGGGCCA
AGATGGCAGTGATCGAGTATAAAGGGAATTGCCTCCCACCCCTGCCTCTGCCTCGCAGAGACAGCCACCTTACAC
TCCTAAACCAGCTGCTGCAGGGTTTGCGGCAGGACCTCAGGCAAAGCCAGGAAGCAAGCAACCACAGCTCCCACA
CAGCTCAAACACCAGGGATTTAACTGGATCTGAAGAGTCTGCAGCCCTTAATCAGTACCCATGATCACAGGCCTT
TGGAGCACTTTTACTCTCTGAGAAGAACTGGAGCTAGAGATGTAAAATGGACAGTCTTGATGGGGTTGAGAACCT
TCTGGGGAGCCAGATGACCCTCTCTTTGCACAATAGATAAAAGTCTTTATATGAATATATATAAATTTATTTATT
TTTTCCTTCCTGTGGGATTTCTGGAGAATGAGAATTATCCAAATGCTCAGTCTACCTGAGATAGTAAATTCATGG
CTTATGCTTCTGGTCCTTAAATTTGGGTTATTTTTGGTTAGTG

FIGURE 3992

MRLSVAAAISHGRVFRRMGLGPESRIHLLRNLLTGLVRHERIEAPWARVDEMRGYAEKLIDYGKLGDTNERAMRM
ADFWLTEKDLIPKLFQVLAPRYKDQTGGYTRMLQIPNRSLDRAKMAVIEYKGNCLPPLPLPRRDSHLTLLNQLLQ
GLRQDLRQSQEASNHSSHTAQTPGI

FIGURE 3993

AGCGCGCGGAAGAAAAACCAGCAAGAAGGCGGCGGGGGAAGATGGCGGTCCTGGGGTAGAGTTTGCAAGCTTTCT
GACTAGGCTAGTCGAGTAACTATTCGGGTCATGGCGTCAAACTCAACTAAGTCTTTCCTGGCAGATGCCGGCTAT
GGCGAACAGGAACTGGATGCCAACTCTGCCCTTATGGAATTGGACAAAGGCCTAAGATCTGGCAAACTTGGTGAA
CAGTGTGAAGCAGTTGTTCGCTTTCCCAGACTTTTTCAGAAGTATCCATTCCCTATTCTTATCAATTCTGCATTC
CTAAAGTTAGCTGATGTTTTCAGAGTTGGAAATAATTTCCTGAGGCTATGTGTTCTTAAAGTTACCCAACAAAGT
GAGAAACATTTGGAGAAGATTCTAAATGTGGATGAATTTGTGAAGAGAATTTTTTCTGTGATTCATAGTAATGAT
CCTGTGGCAAGAGCCATCACCCTCCGGATGTTGGGAAGTCTGGCATCAATAATTCCTGAGAGGAAGAATGCTCAT
CATAGTATTCGTCAGAGTTTAGATTCACATGATAATGTAGAAGTTGAAGCTGCTGTTTTTGCTGCTGCAAACTTC
TCTGCACAGTCAAAGGATTTTGCTGTAGGAATCTGTAACAAAATCAGTGAAATGATTCAAGGTTTAGCGACACCA
GTAGACTTGAAGCTAAAATTGATACCCATTCTACAGCACATGCACCATGATGCAATCTTGGCTTCCAGTGCTCGT
CAGCTTTTACAACAGCTGGTCACATCCTATCCGTCCACCAAAATGGTGATTGTGTCTTTGCACACTTTCACTCTG
CTTGCAGCGTCATCTTTGGTTGATACACCTAAGCAGATTCAGCTTCTGTTGCAGTATTTGAAGAATGATCCCAGG
AAGGCAGTAAAGAGACTTGCTATTCAAGATCTGAAATTACTTGCTAATAAAACACCACATACTTGGAGTAGGGAG
AATATTCAGGCACTTTGTGAGTGTGCCCTCCAGACTCCTTATGACAGCTTAAAACTAGGGATGTTGTCTGTCCTT
TCCACACTATCAGGGACCATCGCCATCAAACATTACTTCAGTATAGTTCCAGGAAATGTGAGTTCTTCTCCCAGA
TCTTCTGATTTAGTCAAATTAGCCCAAGAGTGCTGTTACCATAATAACAGGGGCATTGCAGCTCATGGAGTTAGA
GTCCTAACTAATATAACTGTTTCTTGTCAAGAAAAGGATCTTTTGGCACTGGAACAAGATGCTGTCTTTGGCCTG
GAATCCCTACTGGTACTTTGTAGTCAAGATGATAGTCCAGGTGCTCAGGCCACTTTAAAGATTGCTCTAAACTGT
ATGGTGAAGTTGGCCAAGGGCAGGCCCCATCTTAGCCAGTCAGTAGTTGAGACCTTGTTGACTCAATTGCACAGT
GCTCAAGACGCTGCCCGGATTTTGATGTGCCATTGCCTGGCAGCCATTGCCATGCAACTGCCGGTGCTGGGTGAT
GGGATGCTTGGTGACCTCATGGAGCTGTACAAGGTGATTGGACGATCAGCCACAGACAAGCAACAAGAACTTCTG
GTGAGTTTGGCTACTGTGATTTTTGTTGCAAGTCAGAAGGCATTGTCTGTGGAAAGTAAGGCAGTAATTAAGCAG
CAGCTTGAAAGTGTCTCCAATGGATGGACTGTATACCGTATTGCCAGACAGGCTTCCAGAATGGGTAATCATGAC
ATGGCCAAAGAGCTTTATCAGAGTTTGCTGACTCAGGTTGCCTCAGAACATTTCTACTTCTGGCTAAATAGTTTG
AAGGAGTTTTCACATGCAGAACAGTGTCTCACTGGGTTGCAAGAGGAAAATTATAGTTCAGCACTTTCTTGCATT
GCTGAATCTTTAAAATTCTATCACAAAGGGATTGCTTCCTTAACAGCAGCTAGTACACCACTGAATCCTTTAAGC
TTTCAGTGTGAATTTGTAAAACTCAGGATTGACCTTTTACAAGCCTTCTCTCAACTTATCTGTACTTGTAATAGC
CTGAAGACAAGCCCACCACCTGCAATTGCCACAACAATTGCCATGACCTTAGGAAATGACCTCCAGAGGTGTGGT
CGCATCTCCAATCAGATGAAACAGTCCATGGAAGAATTTCGAAGCCTTGCTTCTCGATATGGAGATCTTTACCAG
GCATCTTTTGATGCTGACTCAGCAACTTTGAGGAATGTTGAACTACAGCAGCAGAGCTGTTTACTGATATCTCAT
GCAATAGAAGCCCTGATTTTGGATCCAGAATCAGCAAGTTTCCAGGAATATGGATCTACTGGAACAGCCCATGCT
GATAGTGAATATGAAAGAAGAATGATGTCTGTATATAATCATGTCTTGGAGGAGGTAGAATCACTCAATCGGAAA
TATACCCCTGTTTCTTATATGCACACAGCATGCCTCTGCAATGCCATCATTGCTTTGCTGAAAGTTCCCCTTTCT
TTCCAGAGATATTTTTTCCAGAAACTACAGTCTACCAGCATCAAGCTTGCTCTGTCACCATCGCCCCGGAATCCT
GCAGAGCCCATTGCTGTCCAGAATAACCAGCAGCTGGCGCTAAAGGTAGAGGGAGTGGTTCAGCACGGATCTAAA
CCAGGACTCTTCCGCAAAATTCAGTCTGTCTGTCTGAATGTTTCTTCCACACTGCAGAGTAAATCTGGACAAGAC
TACAAGATACCCATTGACAACATGACCAATGAGATGGAGCAAAGGGTTGAACCTCATAATGATTACTTCAGTACT
CAATTTCTGTTGAACTTTGCTATCCTTGGAACACACAACATTACAGTGGAATCTTCTGTGAAAGATGCCAATGGT
ATAGTATGGAAGACTGGTCCCAGAACTACCATATTTGTAAAATCCCTGGAAGACCCTTATTCCCAGCAAATTCGC
TTACAACAGCAGCAAGCCCAGCAGCCATTACAGCAGCAGCAGCAACGCAATGCCTACACACGGTTTTAACCATGG
AATGAATGCACTGCAGACTCTCAAGAGATCAATCAAATTGCCAGAAACAGTTTGGTTTTTCATATGGAATAAGTA
TTAAAGTTACAGTGTAGTTCATTTATTCATTGATTTTTGTAATGTAATATTCTGGAAAAAATTTTGTTTTCTTAA
AAATTTTGTCTGACAGCTGGGCGTGGTTGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCTGAGGTGGGCGGCT
CACGAGGAGATCAAGACCATCCTGGCTAACACAGTGAAACCCCGTCTCCACTAAAAAATACAAAAAAATTAGCCA
AGCATGGTGGCAGGCGCCTGTAGTCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATGGTGTGAACCTGGGAGGCG
GAGCTTGCAGTGAGCCGAGACTGTGCTCCAGCCTGGGCGACAGAGCGAGACTCCGTCTCAAAAAAATAAATAAAT
ACATTTTGTCTGG

FIGURE 3994

MASNSTKSFLADAGYGEQELDANSALMELDKGLRSGKLGEQCEAVVRFPRLFQKYPFPILINSAFLKLADVFRVG
NNFLRLCVLKVTQQSEKHLEKILNVDEFVKRIFSVIHSNDPVARAITLRMLGSLASIIPERKNAHHSIRQSLDSH
DNVEVEAAVFAAANFSAQSKDFAVGICNKISEMIQGLATPVDLKLKLIPILQHMHHDAILASSARQLLQQLVTSY
PSTKMVIVSLHTFTLLAASSLVDTPKQIQLLLQYLKNDPRKAVKRLAIQDLKLLANKTPHTWSRENIQALCECAL
QTPYDSLKLGMLSVLSTLSGTIAIKHYFSIVPGNVSSSPRSSDLVKLAQECCYHNNRGIAAHGVRVLTNITVSCQ
EKDLLALEQDAVFGLESLLVLCSQDDSPGAQATLKIALNCMVKLAKGRPHLSQSVVETLLTQLHSAQDAARILMC
HCLAAIAMQLPVLGDGMLGDLMELYKVIGRSATDKQQELLVSLATVIFVASQKALSVESKAVIKQQLESVSNGWT
VYRIARQASRMGNHDMAKELYQSLLTQVASEHFYFWLNSLKEFSHAEQCLTGLQEENYSSALSCIAESLKFYHKG
IASLTAASTPLNPLSFQCEFVKLRIDLLQAFSQLICTCNSLKTSPPPAIATTIAMTLGNDLQRCGRISNQMKQSM
EEFRSLASRYGDLYQASFDADSATLRNVELQQQSCLLISHAIEALILDPESASFQEYGSTGTAHADSEYERRMMS
VYNHVLEEVESLNRKYTPVSYMHTACLCNAIIALLKVPLSFQRYFFQKLQSTSIKLALSPSPRNPAEPIAVQNNQ
QLALKVEGVVQHGSKPGLFRKIQSVCLNVSSTLQSKSGQDYKIPIDNMTNEMEQRVEPHNDYFSTQFLLNFAILG
THNITVESSVKDANGIVWKTGPRTTIFVKSLEDPYSQQIRLQQQQAQQPLQQQQQRNAYTRF

FIGURE 3995

GTGACCGGAGGCGAGAAACCCCGCCTCGGCACCCTGACGCAGCGCAGGACCCGCCCCGCGCGTGACGCCAGCGTC
AGGCCAGCCCCGGC**ATG**CTCTGCGGCCGCCCGCGGTCCAGCTCCGACAACAGGAATTTTCTCCGAGAGCGGGCCG
GGCTCAGTTCAGCTGCTGTCCAGACCCGGATCGGCAACAGTGCCGCCTCCAGACGTTCTCCTGCCGCTCGCCCGC
CCGTCCCAGCGCCCCCAGCCCTCCCGCGAGGGCGCCCCGGGACGGAAGGATCCACCAGTCTGTCGGCGCCCGCCG
TTCTCGTGGTCGCCGTCGCCGTCGTCGTGGTGGTAGTCTCCGCCGTCGCCTGGGCCATGGCCAATTACATCCACG
TCCCTCCCGGCTCCCCGGAGGTGCCCAAGCTGAACGTCACCGTTCAGGATCAGGAGGAGCATCGCTGCCGGGAGG
GGGCCCTGAGCCTCCTGCAACACCTGCGGCCTCACTGGGACCCCCAGGAGGTGACCCTGCAGCTCTTCACAGATG
GAATCACAAATAAACTTATTGGCTGTTACGTGGGAAACACCATGGAGGATGTAGTCCTGGTGAGAATTTATGGCA
ATAAGACTGAGTTATTAGTCGATCGAGATGAGGAAGTAAAGAGTTTTCGAGTGTTGCAGGCTCATGGGTGTGCAC
CACAACTCTACTGTACCTTCAATAATGGACTATGCTATGAATTTATACAAGGAGAAGCACTGGATCCAAAGCATG
TCTGCAACCCAGCCATTTTCAGGCTAATAGCTCGTCAGCTTGCTAAAATCCATGCTATTCATGCACACAATGGCT
GGATCCCCAAATCTAATCTTTGGCTAAAGATGGGAAAGTATTTCTCTCTCATTCCCACAGGATTTGCAGATGAAG
ACATTAATAAAAGGTTCCTAAGTGATATCCCAAGCTCTCAGATTCTCCAGGAAGAGATGACTTGGATGAAGGAGA
TTCTTTCCAACCTGGGCTCACCTGTTGTGCTTTGCCATAATGACCTATTGTGTAAGAATATAATCTACAATGAGA
AACAAGGTGATGTACAGTTCATTGATTATGAATATTCTGGATACAACTACCTGGCATATGATATTGGAAATCATT
TCAATGAATTTGCAGGTGTGAGTGATGTAGACTATAGTCTGTATCCAGATAGAGAACTACAGAGTCAGTGGCTGC
GTGCTTACCTTGAAGCCTACAAAGAATTTAAGGGCTTTGGGACTGAAGTTACTGAAAAGGAGGTAGAAATACTCT
TCATTCAAGTCAATCAGTTTGCATTGGCTTCTCATTTCTTTTGGGGATTGTGGGCTTTGATTCAAGCCAAATACT
CCACTATTGAGTTTGATTTCCTTGGGTATGCAATTGTTCGTTTTAACCAGTACTTTAAAATGAAGCCTGAGGTTA
CTGCATTAAAAGTGCCTGAG**TAA**AGAAGAGATTTAATTATTCTCCAGTAGCTGAGCAATGCTTGTGAATCTTTTC
TTAAGAAATCCCAAAAAGCCAATATTAGTTAAAATTCTGTTGTTTAATTTGGTTATCTTGCTTTATAAATTATGC
CTCTAAACAATCAAATCTATTTTTGAAATAGACTGAATGATGTCAAGAAATATACCTACTGCTATCCGTATGTGG
TGGATTAGAAATGTGTTAAATCTGCAAAAGGTATAAAGATGTCAGTTTAATTTCTTTGATAATTTAACCTATGTT
GTATGTGAATTATTTATTATAAACTTAGCACGATTCTGTGACTGTTTTTCTCTGTTTCACGTTCGTTGAGTGTAA
GCAATGAAAATGTCCCAAATAAGTTTTTTAAGTTTTACTTTAATAAGATTAATTTCAGTAAACATTCTAGTTGTT
CAGTGTAACCTTTTTATCTTGATGCATTGTAAGTAAAATGAATCATTTACTCTTGAAATGCCAGTCATTGACTGA
TGTAGATAATTTAGGATTTTCATATAAAAATAGCTGTTTAGGAAGGTGAAATACATTCACTGTCTCTGTTGGTGG
TACATCTTGTTGAATTCAATATTAGAAAGTATTTCTTTTTGGGGTAATATAACTTAGAATTAAATCCCTGTTTCT
CTATGTAGTCTGGCAGTATAAATATAAATATTTACCATATAATCTTGGAATAAGTATTAGTTAATGTTACCAAAA
TCTGTATTAAATAATGTTTTCAAATGCTAAAAAAAAAAAAAAAAAA

FIGURE 3996

MLCGRPRSSSDNRNFLRERAGLSSAAVQTRIGNSAASRRSPAARPPVPAPPALPRGRPGTEGSTSLSAPAVLVVA
VAVVVVVVSAVAWAMANYIHVPPGSPEVPKLNVTVQDQEEHRCREGALSLLQHLRPHWDPQEVTLQLFTDGITNK
LIGCYVGNTMEDVVLVRIYGNKTELLVDRDEEVKSFRVLQAHGCAPQLYCTFNNGLCYEFIQGEALDPKHVCNPA
IFRLIARQLAKIHAIHAHNGWIPKSNLWLKMGKYFSLIPTGFADEDINKRFLSDIPSSQILQEEMTWMKEILSNL
GSPVVLCHNDLLCKNIIYNEKQGDVQFIDYEYSGYNYLAYDIGNHFNEFAGVSDVDYSLYPDRELQSQWLRAYLE
AYKEFKGFGTEVTEKEVEILFIQVNQFALASHFFWGLWALIQAKYSTIEFDFLGYAIVRFNQYFKMKPEVTALKV
PE

FIGURE 3997

GGGATTACAGGCGTGAGCCACTGTGCCTGACCCACTCACCTGTCATTGTAGTACTTAAGATGCCTTGTTCATTTA
TTGTGCCTGTGCAATAAATACACCTTGATTTGAGTTTACAAAGATTCTCAGCAGTTGGTGGTCATCCTCATCTCC
TGGGCGGGGGCCTCCTGGTGTGGCCAGTATCTGAATTAGTCTCATAACTCATGTTCACTTTTTAAAATCGGAGCT
TCCCAGACCTCAGTTTTGTTTTGTTATTTTCCATTATCTGCAGCTGTCTCCTTTCCCCTCTCTCACCTATACTCT
ACTGATCAGTGACTGCTGGCTCCTTTGTTACCCATCCTTCTCTTTCTCCACATTTTTTCTCTTCTCATCCCTTTC
AGTTCTGGACTGTTTCCTTCTTCCTCCCTGTCTTTCATTTAGTCATTCATTGAATGTACTTACTAAGCACATATA
GCATAATCAGGCTGTGTTGGGTAGGCATCCCGAGTTCTATGAGATAAAGAAAGAATGGGATATGATTACCAATTT
TAAGAAGCATCTAAAACAACCTGTTATGTTTTAGCAAATTGCCCCCAAAGGACCCATTAGGGAGGAAAACGTTCA
TGTCCTTTTTGCGTATCATCTCAAGCAGTACCCATGATGGCTGGGATCCCAGAACCCACCTTTGAGAATGCTGCC
GTATTTGCGTGTGGTTGACAAGGTTGGGCCAGACACTCAGGAAATAGGGTTGTCGTCCTACCTCCCCCACTAACT
TCCTGTAAGAACTTCAGCCCCTCTCAGGACCTTTTTCTTTACCAATAAAATTCAGAAATTGGGCTCAATCAGTAA
TTCCCAAGTTATTTTCCAAAGAACATGAATTTTGTGGAACTTTAATAGATATC**ATG**CAAAAAAAAAATGTGGGAGG
GATTGTTCCATGGTCAAATGGTCTTGGAAATAACTCGTTTAAACAAAAATAAAACTGTTTCTTTACCCACAAA

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FIGURE 3998

MQKKMWEGLFHGQMVLEITRLNKNKTVSLPT

FIGURE 3999

GCGTCGACAAAAAAAAAAATTGGAGTTTTACAGATAACCACATCTTATTCTGGGAAAGGATTTGAAGCAAGTTGG
GTTTTATATTTGGCTGTACTTGTCCTCTTCAGCAGTATAATAAGCCCCTTAAGGCTGAAGTAACCTTATTCCTAT
TGTTTAGTAGCTAATAGCATGCTTTTGATATGCTTATGATCATACTAATAATTTAATATTTGAATTGTATGGAAG
TACAATTCAGTATCATTTTACATATGGTATATTGTGATGCTGTATCATATTTTATGTTACGGTTTATAAGAAAAG
CTCCTAGGTATAAAATGCTACATAGCAGGAACTTGGTTTTTCAATGTTATTATTTCCTACTGTTTTTGACGTAAC
GGCAATAAAATTTGTTTGAACCAAAATGGACTTAACAATTATTTGTACAACTCAGTATTGTCTAAATATCATATT
GTTAAATCTAGGTTTCTTGAATTCTCCATCAAGCCTGGTCATGTCATGTAGCATTTGGTGTCTCACCATGCCCAA
CAGATATTTTGTGGGAGGATGGAGTTGATCTTCCTCATGTTAAAAGATTGAAGGGAGTGTTCTGACTTAATTGAT
AACAGTCTTTCATAACTTCACAAATTTTTGAGAATGACCCAAGGCTAACTGTGGGAAAAATTCACATAAAAACAT
AGCCTATCTATGAGGAGCAAAACTATATTTCAGTTGTGGGCTTTACATTTCATTTAACCCTCTTAACTGTCCTGT
GAAATGGGTTACAGCTTATTTTATAGATGAGGAAGTGAAGTTTAGATAAGTTAGGGATTGGAT

FIGURE 4000

ASTKKKIGVLQITTSYSGKGFEASWVLYLAVLVLFSSIISPLRLK

FIGURE 4001

AATACCTTTTCTGGTTTTATTTCTAAAATCAATCCTATTTCTCTAACACCAAAGCAGTTCTTGCTATCAGCAGAT
CAATCAGCCCTCTCTTTGAGCAGCCTCATACAGAGCTTACTGCATTACTCTGCAGTGGATGGTCACCAGACGTGA
TTAACAAGTGCCTTTCTAACAGTTTCTAGTATGTGAGTGTCTGCAGCACTTGATTTTCTCCAGCTGCAGTTGCAA
CGCCTTTGTCAGAGAACAAAGGAGAAGAATTTTCATCCATCCTAGCTCCCAGAGGTGCCTGGAATCTAACTTTAC
AGAAAGCATTAAATACTGATCCTTTTCTTCTCCTTTTATCCATTTGAAGACAGGGATCTTCTGCTGAGCATTTCA
GATATACCCTGCTCTGTGTAATGCCCAACGATTTTTCATTAGCTGGGAGCTGTTTTAGGGACATTTTACAGGTTA
ATGACTGTGGGAGAGGAGAATAAAATCAAAACTGCAAGAACCCATTTTTGTCTTCATAAGCATTGCATTTTAAAA
TACGAGGGCTTGAAGACTTCTCAGAAGAGACACTCACTACTGGAGTTAAAGTTATATGAAGTCCCTGAGCCCTTA
ATCATCCAAGACTGGACCTAAGCAGTCCTCTTCGTTTGTAGTCTCTTTCAATATCTGCTTATCAAGGACAACGAG
AATATCTTAGTCTACTAATTAATCTTTTTTTATCACCATAGTCTACCAAGAAAGAAAGCTGATAAGATAATAAAG
ATGATTCATTCCTCAGAGTAGG

FIGURE 4002

MTVGEENKIKTARTHFCLHKHCILKYEGLKTSQKRHSLLELKLYEVPEPLIIQDWT

FIGURE 4003

CTACGCGCGGGGCGGGTGCTGCTTGCTGCAGGCTCTGGGGAGTCGCCATGCCTACAACACAGCAGTCCCCTCAGG
ATGAGCAGGAAAAGCTCTTGGATGAAGCCATACAGGCTGTGAAGGTCCAGTCATTCCAAATGAAGAGATGCCTGG
ACAAAAACAAGCTTATGGATGCTCTAAAACATGCTTCTAATATGCTTGGTGAACTCCGGACTTCTATGTTATCAC
CAAAGAGTTACTATGAACTTTATATGGCCATTTCTGATGAACTGCACTACTTGGAGGTCTACCTGACAGATGAGT
TTGCTAAAGGAAGGAAAGTGGCAGATCTCTACGAACTTGTACAGTATGCTGGAAACATTATCCCAAGGCTTTACC
TTTTGATCACAGTTGGAGTTGTATATGTCAAGTCATTTCCTCAGTCCAGGAAGGATATTTTGAAAGATTTGGTAG
AAATGTGCCGTGGTGTGCAACATCCCTTGAGGGGTCTGTTTCTTCGAAATTACCTTCTTCAGTGTACCAGAAATA
TCTTACCTGATGAAGGAGAGCCAACAGATGAAGAAACAACTGGTGACATCAGTGATTCCATGGATTTTGTACTGC
TCAACTTTGCAGAAATGAACAAGCTCTGGGTGCGAATGCAGCATCAGGGACATAGCCGAGATAGAGAAAAAAGAG
AACGAGAAAGACAAGAACTGAGAATTTTAGTGGGAACAAATTTGGTGCGCCTCAGTCAGTTGGAAGGTGTAAATG
TGGAACGTTACAAACAGATTGTTTTGACTGGCATATTGGAGCAAGTTGTAAACTGTAGGGATGCTTTGGCTCAAG
AATATCTCATGGAGTGTATTATTCAGGTTTTCCCTGATGAATTTCACCTCCAGACTTTGAATCCTTTTCTTCGGG
CCTGTGCTGAGTTACACCAGAATGTAAATGTGAAGAACATAATCATTGCTTTAATTGATAGATTAGCTTTATTTG
CTCACCGTGAAGATGGACCTGGAATCCCAGCGGATATTAAACTTTTTGATATATTTTCACAGCAGGTGGCTACAG
TGATACAGTCTAGACAAGACATGCCTTCAGAGGATGTTGTATCTTTACAAGTCTCTCTGATTAATCTTGCCATGA
AATGTTACCCTGATCGTGTGGACTATGTTGATAAAGTTCTAGAAACAACAGTGGAGATATTCAATAAGCTCAACC
TTGAACATATTGCTACCAGTAGTGCAGTTTCAAAGGAACTCACCAGACTTTTGAAAATACCAGTTGACACTTACA
ACAATATTTTAACAGTCTTGAAATTAAAACATTTTCACCCACTCTTTGAGTACTTTGACTACGAGTCCAGAAAGA
GCATGAGTTGTTATGTGCTTAGTAATGTTCTGGATTATAACACAGAAATTGTCTCTCAAGACCAGGTGGATTCCA
TAATGAATTTGGTATCCACGTTGATTCAAGATCAGCCAGATCAACCTGTAGAAGACCCTGATCCAGAAGATTTTG
CTGATGAGCAGAGCCTTGTGGGCCGCTTCATTCATCTGCTGCGCTCTGAGGACCCTGACCAGCAGTACTTGATTT
TGAACACAGCACGAAAACATTTTGGAGCTGGTGGAAATCAGCGGATTCGCTTCACACTGCCACCTTTGGTATTTG
CAGCTTACCAGCTGGCTTTTCGATATAAAGAGAATTCTAAAGTGGATGACAAATGGGAAAAGAAATGCCAGAAGA
TTTTTTCATTTGCCCACCAGACTATCAGTGCTTTGATCAAAGCAGAGCTGGCAGAATTGCCCTTAAGACTTTTTC
TTCAAGGAGCACTAGCTGCTGGGGAAATTGGTTTTGAAAATCATGAGACAGTCGCATATGAATTCATGTCCCAGG
CATTTTCTCTGTATGAAGATGAAATCAGCGATTCCAAAGCACAGCTAGCTGCCATCACCTTGATCATTGGCACTT
TTGAAAGGATGAAGTGCTTCAGTGAAGAGAATCATGAACCTCTGAGGACTCAGTGTGCCCTTGCTGCATCCAAAC
TTCTAAAGAAACCTGATCAGGGCCGAGCTGTGAGCACCTGTGCACATCTCTTCTGGTCTGGCAGAAACACGGACA
AAAATGGGGAGGAGCTTCACGGAGGCAAGAGGGTAATGGAGTGCCTAAAAAAAGCTCTAAAAATAGCAAATCAGT
GCATGGACCCCTCTCTACAAGTGCAGCTTTTTATAGAAATTCTGAACAGATATATCTATTTTTATGAAAAGGAAA
ATGATGCGGTAACAATTCAGGTTTTAAACCAGCTTATCCAAAAGATTCGAGAAGACCTCCCGAATCTTGAATCCA
GTGAAGAAACAGAGCAGATTAACAAACATTTTCATAACACACTGGAGCATTTGCGCTTGCGGCGGGAATCACCAG
AATCCGAGGGGCCAATTTATGAAGGTCTCATCCTTTAAAAAGGAAATAGCTCACCATACTCCTTTCCATGTACAT
CCAGTGAGGGTTTTATTACGCTAGGTTTCCCTTCCATAGATTGTGCCTTTCAGAAATGCTGAGGTAGGTTTCCCA
TTTCTTACCTGTGATGTGTTTTACCCAGCACCTCCGGACACTCACCTTCAGGACCTTAATAAAATTATTCACTTG
GTAAGTGTTCAAGTCTTTCTGATCACCCCAAGTAGCATGACTGATCTGCAATTTAAAATTCCTGTGATCTGTAAA
AAAAAAA

FIGURE 4004

MPTTQQSPQDEQEKLLDEAIQAVKVQSFQMKRCLDKNKLMDALKHASNMLGELRTSMLSPKSYYELYMAISDELH
YLEVYLTDEFAKGRKVADLYELVQYAGNIIPRLYLLITVGVVYVKSFPQSRKDILKDLVEMCRGVQHPLRGLFLR
NYLLQCTRNILPDEGEPTDEETTGDISDSMDFVLLNFAEMNKLWVRMQHQGHSRDREKRERERQELRILVGTNLV
RLSQLEGVNVERYKQIVLTGILEQVVNCRDALAQEYLMECIIQVFPDEFHLQTLNPFLRACAELHQNVNVKNIII
ALIDRLALFAHREDGPGIPADIKLFDIFSQQVATVIQSRQDMPSEDVVSLQVSLINLAMKCYPDRVDYVDKVLET
TVEIFNKLNLEHIATSSAVSKELTRLLKIPVDTYNNILTVLKLKHFHPLFEYFDYESRKSMSCYVLSNVLDYNTE
IVSQDQVDSIMNLVSTLIQDQPDQPVEDPDPEDFADEQSLVGRFIHLLRSEDPDQQYLILNTARKHFGAGGNQRI
RFTLPPLVFAAYQLAFRYKENSKVDDKWEKKCQKIFSFAHQTISALIKAELAELPLRLFLQGALAAGEIGFENHE
TVAYEFMSQAFSLYEDEISDSKAQLAAITLIIGTFERMKCFSEENHEPLRTQCALAASKLLKKPDQGRAVSTCAH
LFWSGRNTDKNGEELHGGKRVMECLKKALKIANQCMDPSLQVQLFIEILNRYIYFYEKENDAVTIQVLNQLIQKI
REDLPNLESSEETEQINKHFHNTLEHLRLRRESPESEGPIYEGLIL

FIGURE 4005

GGCTATGGACGCGCGGGGCGGGTGCTGCTTGCTGCAGGCTCTGGGGAGTCGCCATGCCTACAACACAGCAGTCCC
CTCAGGATGAGCAGGAAAAGCTCTTGGATGAAGCCATACAGGCTGTGAAGGTCCAGTCATTCCAAATGAAGAGAT
GCCTGGACAAAAACAAGCTTATGGATGCTCTAAAACATGCTTCTAATATGCTTGGTGAACTCCGGACTTCTATGT
TATCACCAAAGAGTTACTATGAACTTTATATGGCCATTTCTGATGAACTGCACTACTTGGAGGTCTACCTGACAG
ATGAGTTTGCTAAAGGAAGGAAAGTGGCAGATCTCTACGAACTTGTACAGTATGCTGGAAACATTATCCCAAGGC
TTTACCTTTTGATCACAGTTGGAGTTGTATATGTCAAGTCATTTCCTCAGTCCAGGAAGGATATTTTGAAAGATT
TGGTAGAAATGTGCCGTGGTGTGCAACATCCCTTGAGGGGTCTGTTTCTTCGAAATTACCTTCTTCAGTGTACCA
GAAATATCTTACCTGATGAAGGAGAGCCAACAGATGAAGAAACAACTGGTGACATCAGTGATTCCATGGATTTTG
TACTGCTCAACTTTGCAGAAATGAACAAGCTCTGGGTGCGAATGCAGCATCAGGGACATAGCCGAGATAGAGAAA
AAAGAGAACGAGAAAGACAAGAACTGAGAATTTTAGTGGGAACAAATTTGGTGCGCCTCAGTCAGTTGGAAGGTG
TAAATGTGGAACGTTACAAACAGATTGTTTTGACTGGCATATTGGAGCAAGTTGTAAACTGTAGGGATGCTTTGG
CTCAAGAATATCTCATGGAGTGTATTATTCAGGTTTTCCCTGATGAATTTCACCTCCAGACTTTGAATCCTTTTC
TTCGGGCCTGTGCTGAGTTACACCAGAATGTAAATGTGAAGAACATAATCATTGCTTTAATTGATAGATTAGCTT
TATTTGCTCACCGTGAAGATGGACCTGGAATCCCAGCGGATATTAAACTTTTTGATATATTTTCACAGCAGGTGG
CTACAGTGATACAGTCTAGACAAGACATGCCTTCAGAGGATGTTGTATCTTTACAAGTCTCTCTGATTAATCTTG
CCATGAAATGTTACCCTGATCGTGTGGACTATGTTGATAAAGTTCTAGAAACAACAGTGGAGATATTCAATAAGC
TCAACCTTGAACATATTGCTACCAGTAGTGCAGTTTCAAAGGAACTCACCAGACTTTTGAAAATACCAGTTGACA
CTTACAACAATATTTTAACAGTCTTGAAATTAAAACATTTTCACCCACTCTTTGAGTACTTTGACTACGAGTCCA
GAAAGAGCATGAGTTGTTATGTGCTTAGTAATGTTCTGGATTATAACACAGAAATTGTCTCTCAAGACCAGGTGG
ATTCCATAATGAATTTGGTATCCACGTTGATTCAAGATCAGCCAGATCAACCTGTAGAAGACCCTGATCCAGAAG
ATTTTGCTGATGAGCAGAGCCTTGTGGGCCGCTTCATTCATCTGCTGCGCTCTGAGGACCCTGACCAGCAGTACT
TGATTTTGAACACAGCACGAAAACATTTTGGAGCTGGTGGAAATCAGCGGATTCGCTTCACACTGCCACCTTTGG
TATTTGCAGCTTACCAGCTGGCTTTTCGATATAAAGAGAATTCTAAAGTGGATGACAAATGGGAAAAGAAATGCC
AGAAGATTTTTTCATTTGCCCACCAGACTATCAGTGCTTTGATCAAAGCAGAGCTGGCAGAATTGCCCTTAAGAC
TTTTTCTTCAAGGAGCACTAGCTGCTGGGGAAATTGGTTTTGAAAATCATGAGACAGTCGCATATGAATTCATGT
CCCAGGCATTTTCTCTGTATGAAGATGAAATCAGCGATTCCAAAGCACAGCTAGCTGCCATCACCTTGATCATTG
GCACTTTTGAAAGGATGAAGTGCTTCAGTGAAGAGAATCATGAACCTCTGAGGACTCAGTGTGCCCTTGCTGCAT
CCAAACTTCTAAAGAAACCTGATCAGGGCCGAGCTGTGAGCACCTGTGCACATCTCTTCTGGTCTGGCAGAAACA
CGGACAAAAATGGGGAGGAGCTTCACGGAGGCAAGAGGGTAATGGAGTGCCTAAAAAAAGCTCTAAAAATAGCAA
ATCAGTGCATGGACCCCTCTCTACAAGTGCAGCTTTTTATAGAAATTCTGAACAGATATATCTATTTTTATGAAA
AGGAAAATGATGCGGTAACAATTCAGGTTTTAAACCAGCTTATCCAAAAGATTCGAGAAGACCTCCCGAATCTTG
AATCCAGTGAAGAAACAGAGCAGATTAACAAACATTTTCATAACACACTGGAGCATTTGCGCTTGCGGCGGGAAT
CACCAGAATCCGAGGGGCCAATTTATGAAGGTCTCATCCTTTAAAAAGGAAATAGCTCACCATACTCCTTTCCAT
GTACATCCAGTGAGGGTTTTATTACGCTAGGTTTCCCTTCCATAGATTGTGCCTTTCAGAAATGCTGAGGTAGGT
TTCCCATTTCTTACCTGTGATGTGTTTTACCCAGCACTCCGGACACTCACCTTCAGGACCTTAATAAAATTATTC
ACTTGGTAAGTGTTCAAGTCTTTCTGATCACCCCAAGTAGCATGACTGATCTGCAATTTAAAATTCCTGTGATCT
GTAGCACTTATCTTGGCTACTAATGAAGCTCTCCTTTTTTTTGTTTGTTTGTTTGCTTCATTGTTGATTGTGTAT
TTTCTTCATTCCTGGGGAGTACTAACCCAAAAGCGTCTGTCTCTTGTTTTCTAGTCCAGTTTGAGATTAATTTAG
AAGAAAGGAATACTGTATGTGAAATTCATCTTGGGCTTTCCCCTAAATTGCAAGATAAGGCCATGTGTAAGATTT
TCCCTAAAACTAGAATATATTAATGCATGTTTGAGAATTTTAAAGCACCATGGTCAAAACCAGAAGCTATATTTT
GCATATTTGGACTCAGCCATCCATTAAGAACCCATGTTGTCCTCTGGACATATTTATCAATATAATTGGGTTTTA
AATAGTATAAAAGAAAACTTGTGATCTATATAATTTATGTATCACCTTCATTGTAAATTTAGCAGGAAATGCATC
ACAATTATGATTTTTTTTTTTGCACCAGTGAAACAATAAAGATGCTATTAACAAAAAA

FIGURE 4006

MPTTQQSPQDEQEKLLDEAIQAVKVQSFQMKRCLDKNKLMDALKHASNMLGELRTSMLSPKSYYELYMAISDELH
YLEVYLTDEFAKGRKVADLYELVQYAGNIIPRLYLLITVGVVYVKSFPQSRKDILKDLVEMCRGVQHPLRGLFLR
NYLLQCTRNILPDEGEPTDEETTGDISDSMDFVLLNFAEMNKLWVRMQHQGHSRDREKRERERQELRILVGTNLV
RLSQLEGVNVERYKQIVLTGILEQVVNCRDALAQEYLMECIIQVFPDEFHLQTLNPFLRACAELHQNVNVKNIII
ALIDRLALFAHREDGPGIPADIKLFDIFSQQVATVIQSRQDMPSEDVVSLQVSLINLAMKCYPDRVDYVDKVLET
TVEIFNKLNLEHIATSSAVSKELTRLLKIPVDTYNNILTVLKLKHFHPLFEYFDYESRKSMSCYVLSNVLDYNTE
IVSQDQVDSIMNLVSTLIQDQPDQPVEDPDPEDFADEQSLVGRFIHLLRSEDPDQQYLILNTARKHFGAGGNQRI
RFTLPPLVFAAYQLAFRYKENSKVDDKWEKKCQKIFSFAHQTISALIKAELAELPLRLFLQGALAAGEIGFENHE
TVAYEFMSQAFSLYEDEISDSKAQLAAITLIIGTFERMKCFSEENHEPLRTQCALAASKLLKKPDQGRAVSTCAH
LFWSGRNTDKNGEELHGGKRVMECLKKALKIANQCMDPSLQVQLFIEILNRYIYFYEKENDAVTIQVLNQLIQKI
REDLPNLESSEETEQINKHFHNTLEHLRLRRESPESEGPIYEGLIL

FIGURE 4007

CCGCTCCGCTCCGCTCGGCCCCGCGCCGCCCGTCAACATGATCCGCTGCGGCCTGGCCTGCGAGCGCTGCCGCTG
GATCCTGCCCCTGCTCCTACTCAGCGCCATCGCCTTCGACATCATCGCGCTGGCCGGCCGCGGCTGGTTGCAGTC
TAGCGACCACGGCCAGACGTCCTCGCTGTGGTGGAAATGCTCCCAAGAGGGCGGCGGCAGCGGGTCCTACGAGGA
GGGCTGTCAGAGCCTCATGGAGTACGCGTGGGGTAGAGCAGCGGCTGCCATGCTCTTCTGTGGCTTCATCATCCT
GGTGATCTGTTTCATCCTCTCCTTCTTCGCCCTCTGTGGACCCCAGATGCTTGTCTTCCTGAGAGTGATTGGAGG
TCTCCTTGCCTTGGCTGCTGTGTTCCAGATCATCTCCCTGGTAATTTACCCCGTGAAGTACACCCAGACCTTCAC
CCTTCATGCCAACCSTGCTGTCACTTACATCTATAACTGGGCCTACGGCTTTGGGTGGGCAGCCACGATTATCCT
GATYGGCTGTGCCTTCTTCTTCTGCTGCCTCCCCAACTACGAAGATGACCTTCTGGGCAATGCCAAGCCCAGGTA
CTTCTACACATCTGCCTAACTTGGGAATGAATGTGGGAGAAAATCGCTGCTGCTGAGATGGACTCCAGAAGAAGA
AACTGTTTCTCCAGGCGACTTTGAACCCATTTTTTGGCAGTGTTCATATTATTAAACTAGTCAAAAATGCTAAAA
TAATTTGGGAGAAAATATTTTTTAAGTAGTGTTATAGTTTCATGTTTATCTTTTATTATGTTTTGTGAAGTTGTG
TCTTTTCACTAATTACCTATACTATGCCAATATTTCCTTATATCTATCCATAACATTTATACTACATTTGTAAGA
GAATATGCACGTGAAACTTAACACTTTATAAGGTAAAAATGAGGTTTCCAAGATTTAATAATCTGATCAAGTTCT
TGTTATTTCCAAATAGAATGGACTCGGTCTGTTAAGGGCTAAGGAGAAGAGGAAGATAAGGTTAAAAGTTGTTAA
TGACCAAACATTCTAAAAGAAATGCAAAAAAAAAGTTTATTTTCAAGCCTTCGAACTATTTAAGGAAAGCAAAAT
CATTTCCTAAATGCATATCATTTGTGAGAATTTCTCATTAATATCCTGAATCATTCATTTCAGCTAAGGCTTCAT
GTTGACTCGATATGTCATCTAGGAAAGTACTATTTCATGGTCCAAACCTGTTGCCATAGTTGGTAAGGCTTTCCT
TTAAGTGTGAAATATTTAGATGAAATTTTCTCTTTTAAAGTTCTTTATAGGGTTAGGGTGTGGGAAAATGCTATA
TTAATAAATCTGTAGTGTTTTGTGTTTATATGTTCAGAACCAGAGTAGACTGGATTGAAAGATGGACTGGGTCTA
ATTTATCATGACTGATAGATCTGGTTAAGTTGTGTAGTAAAGCATTAGGAGGGTCATTCTTGTCACAAAAGTGCC
ACTAAAACAGCCTCAGGAGAATAAATGACTTGCTTTTCTAAATCTCAGGTTTATCTGGGCTCTATCATATAGACA
GGCTTCTGATAGTTTGCAACTGTAAGCAGAAACCTACATATAGTTAAAATCCTGGTCTTTCTTGGTAAACAGATT
TTAAATGTCTGATATAAAACATGCCACAGGAGAATTCGGGGATTTGAGTTTCTCTGAATAGCATATATATGATGC
ATCGGATAGGTCATTATGATTTTTTACCATTTCGACTTACATAATGAAAACCAATTCATTTTAAATATCAGATTA
TTATTTTGTAAGTTGTGGAAAAAGCTAATTGTAGTTTTCATTATGAAGTTTTCCCAATAAACCAGGTATTCTAAA
AAAAAAAAAAAAAA

FIGURE 4008

MIRCGLACERCRWILPLLLLSAIAFDIIALAGRGWLQSSDHGQTSSLWWKCSQEGGGSGSYEEGCQSLMEYAWGR
AAAAMLFCGFIILVICFILSFFALCGPQMLVFLRVIGGLLALAAVFQIISLVIYPVKYTQTFTLHANXAVTYIYN
WAYGFGWAATIILXGCAFFFCCLPNYEDDLLGNAKPRYFYTSA

FIGURE 4009A

GGCGGAAGCACGATCTCCGGCAGCGGCCTGGGAACTCTTAGCTGAGCAGGCGAGAGCATCATGGATACCGACTTA
TATGATGAGTTTGGGAATTATATTGGACCAGAGCTTGATTCTGATGAAGATGATGATGAATTGGGTAGAGAGACC
AAAGATCTTGATGAGATGGATGATGATGACGACGACGATGACGTAGGAGATCATGACGATGACCACCCTGGGATG
GAGGTGGTGCTGCATGAGGACAAGAAGTACTACCCAACAGCCGAGGAGGTGTATGGTCCTGAGGTGGAGACCATA
GTTCAAGAGGAAGACACTCAGCCTCTCACAGAACCCATTATTAAGCCAGTGAAAACCAAGAAATTCACTCTGATG
GAGCAGACATTACCTGTTACGGTGTATGAGATGGATTTCTTGGCGGATCTGATGGATAACTCAGAGCTCATCAGA
AATGTGACCCTTTGTGGACATCTCCACCATGGCAAGACATGTTTTGTGGATTGTTTAATTGAACAGACTCACCCG
GAAATCAGAAAGCGCTATGACCAAGATCTGTGCTATACTGACATCCTCTTCACAGAGCAAGAGAGAGGTGTAGGC
ATCAAAAGCACTCCTGTGACAGTGGTCTTGCCAGACACCAAAGGAAAATCTTATCTCTTCAATATCATGGACACT
CCAGGACATGTGAATTTCTCTGATGAGGTCACAGCTGGCTTGCGCATCTCAGATGGAGTGGTCCTTTTCATTGAT
GCTGCTGAGGGGGTGATGCTGAACACAGAGCGGCTGATCAAGCATGCGGTGCAGGAGAGGCTGGCAGTCACTGTG
TGCATCAACAAGATTGACCGGCTGATCCTGGAGCTGAAGCTGCCTCCAACTGATGCTTATTACAAGCTGCGCCAC
ATTGTGGATGAGGTCAATGGATTAATAAGCATGTATTCCACTGATGAGAACCTGATCCTTTCCCCACTCCTGGGT
AACGTCTGCTTCTCCAGCTCCCAGTACAGCATCTGCTTCACGCTGGGCTCCTTTGCCAAGATCTATGCCGACACC
TTTGGTGACATTAATTACCAAGAATTTGCTAAAAGACTCTGGGGTGACATCTACTTCAACCCTAAGACGCGAAAG
TTCACCAAAAAGGCCCCAACTAGCAGCTCCCAGAGAAGTTTCGTGGAGTTTATCTTGGAGCCTCTTTATAAGATC
CTCGCCCAGGTTGTAGGTGACGTGGACACCAGCCTCCCACGGACCCTAGACGAGCTTGGCATCCACCTGACGAAG
GAGGAGCTGAAGCTGAACATCCGCCCCTTGCTCAGGCTGGTCTGCAAAAAGTTCTTTGGCGAGTTCACAGGCTTT
GTGGACATGTGTGTGCAGCATATCCCTTCTCCAAAGGTGGGCGCCAAGCCCAAGATTGAGCACACCTACACCGGT
GGTGTGGACTCCGACCTCGGCGAGGCTATGAGTGACTGTGACCCTGATGGCCCCCTGATGTGCCACACTACTAAG
ATGTACAGCACAGATGATGGAGTCCAGTTTCACGCCTTTGGCCGGGTGCTGAGTGGCACCATTCATGCTGGGCAG
CCTGTGAAGGTACTGGGGGAGAACTACACCCTGGAGGATGAGGAAGACTCCCAGATATGCACCGTGGGCCGCCTT
TGGATCTCTGTGGCCAGGTACCACATCGAGGTGAACCGTGTTCCTGCTGGCAACTGGGTTCTGATTGAAGGTGTT
GATCAACCAATTGTGAAGACAGCAACCATAACCGAACCCCGAGGCAATGAGGAGGCTCAGATTTTCCGACCCTTG
AAGTTCAATACCACATCTGTTATCAAGATTGCTGTGGAGCCAGTCAACCCCTCAGAGCTGCCCAAGATGCTTGAT
GGCCTGCGCAAGGTCAACAAGAGCTATCCATCCCTCACCACCAAGGTGGAGGAGTCTGGCGAGCATGTGATCCTG
GGCACTGGGGAGCTCTACCTGGACTGTGTGATGCATGATTTGCGGAAGATGTACTCAGAGATAGACATCAAGGTG
GCTGACCCAGTTGTCACGTTTTGTGAGACGGTGGTGGAAACATCCTCCCTCAAGTGCTTTGCTGAAACGCCTAAT
AAGAAGAACAAGATCACCATGATTGCTGAGCCTCTTGAGAAGGGCCTGGCAGAGGACATAGAGAATGAGGTGGTC
CAGATTACGTGGAACAGGAAGAAGCTGGGAGAGTTCTTCCAGACCAAGTACGATTGGGATCTGCTGGCTGCCCGT
TCCATCTGGGCTTTTGGCCCTGATGCGACTGGCCCCAACATTCTGGTGGATGATACTCTGCCCTCTGAGGTGGAC
AAGGCTCTTCTTGGTTCAGTGAAGGACAGCATCGTTCAAGGTTTCCAGTGGGGAACCAGGGAGGGCCCCCTCTGT
GATGAATTGATTCGGAATGTCAAGTTTAAGATCCTGGATGCGGTGGTTGCCCAGGAGCCCCTGCACCGGGGCGGG
GGCCAGATCATCCCCACAGCCAGGAGAGTCGTCTACTCTGCCTTCCTCATGGCTACTCCTCGTCTGATGGAGCCT
TACTACTTTGTAGAGGTCCAGGCCCCTGCAGATTGCGTCTCTGCAGTTTATACCGTCCTGGCCAGGCGCAGGGGG
CACGTGACTCAGGATGCACCCATCCCAGGCTCCCCTCTGTACACCATCAAAGCTTTTATCCCGGCCATCGACTCT
TTTGGCTTTGAGACTGATCTCCGGACTCACACCCAGGGACAAGCCTTTTCTCTGTCTGTCTTCCACCACTGGCAG
ATTGTGCCTGGTGATCCCCTGGACAAGAGCATTGTCATCCGCCCCTTGGAGCCACAGCCAGCTCCTCACCTGGCC
CGGGAATTCATGATCAAAACCCGCCGTAGGAAGGGCCTCAGTGAAGATGTGAGCATCAGCAAATTCTTCGATGAT
CCTATGTTGCTGGAACTTGCCAAACAGGATGTTGTGCTCAATTACCCCATGTGAGTGCGTGGACTCCTGGGAGCT
CCTGCTCCCTACAGTGGGCTGCAACTCCTGTACTTGAAGCTGAGACCTCATATGACGTGGCCTTCGTGTTGTCAG
AGAGTGTCTGGAAGCTGCTGTTGCCATCTTGAACAACTCACCAACCTCCAACCCAGAGCCCCAGTGAGAGAGGAG
CATTTGGCCTCCTGCTTCCTTCTGTGGCCTCTGCCGGGCTCCATTCCCAAGGAAAAGAGAGGAGCTTGGGCTCAC
AGAAAGAGAAGGGGATGAAACCCCAAGGGGCCCTATCTTTGGGATTTACATGGAATTTTATTTTCTACAAGTTTG
ACCTTAGCCATGGTTTGCAAGTGAACAGAACATTCTGACCTCTGTCTTGCTCTGCTCCTTTCATCCTCGTCTCCC
CTGCCCCATCTGGTGCTTACATTCTGAATATATGTCATCTCCCAAGAGGCTTCACTGCCTCTGCTTCCAGCTGCA
GCCTCCTTCCTGCCTGGGTCCCCAGGGAAGCCGCCTGCCTTTTAATTCAGTGTTCCCATGAGCGCCAAGGCCCCA
TTATTGCCCCCTTGCTCCCACTCCATGCTGCTTCTGGGTGGGACCTAAGATGGCTTGGGAGTTGTTGGGTTCCTG

FIGURE 4009B

CGATCAGAAGTCTACCCCACCACCTCCTCAGGAAACTGCTGCCTCCCCTAAGAATCTTCCTTGCCCTGGAGTAGG
GGGCCAGAGCACTTTGATTTCCAGCCATTTACTCCAAGTCCTCTCCCCAGCTACCACCAGTCCCTTACTCTGTTC
TCCCCCAGTGAAAAAGAGTCTGTTGATTTTCCTC

FIGURE 4010

MDTDLYDEFGNYIGPELDSDEDDDELGRETKDLDEMDDDDDDDDVGDHDDDHPGMEVVLHEDKKYYPTAEEVYGP
EVETIVQEEDTQPLTEPIIKPVKTKKFTLMEQTLPVTVYEMDFLADLMDNSELIRNVTLCGHLHHGKTCFVDCLI
EQTHPEIRKRYDQDLCYTDILFTEQERGVGIKSTPVTVVLPDTKGKSYLFNIMDTPGHVNFSDEVTAGLRISDGV
VLFIDAAEGVMLNTERLIKHAVQERLAVTVCINKIDRLILELKLPPTDAYYKLRHIVDEVNGLISMYSTDENLIL
SPLLGNVCFSSSQYSICFTLGSFAKIYADTFGDINYQEFAKRLWGDIYFNPKTRKFTKKAPTSSSQRSFVEFILE
PLYKILAQVVGDVDTSLPRTLDELGIHLTKEELKLNIRPLLRLVCKKFFGEFTGFVDMCVQHIPSPKVGAKPKIE
HTYTGGVDSDLGEAMSDCDPDGPLMCHTTKMYSTDDGVQFHAFGRVLSGTIHAGQPVKVLGENYTLEDEEDSQIC
TVGRLWISVARYHIEVNRVPAGNWVLIEGVDQPIVKTATITEPRGNEEAQIFRPLKFNTTSVIKIAVEPVNPSEL
PKMLDGLRKVNKSYPSLTTKVEESGEHVILGTGELYLDCVMHDLRKMYSEIDIKVADPVVTFCETVVETSSLKCF
AETPNKKNKITMIAEPLEKGLAEDIENEVVQITWNRKKLGEFFQTKYDWDLLAARSIWAFGPDATGPNILVDDTL
PSEVDKALLGSVKDSIVQGFQWGTREGPLCDELIRNVKFKILDAVVAQEPLHRGGGQIIPTARRVVYSAFLMATP
RLMEPYYFVEVQAPADCVSAVYTVLARRRGHVTQDAPIPGSPLYTIKAFIPAIDSFGFETDLRTHTQGQAFSLSV
FHHWQIVPGDPLDKSIVIRPLEPQPAPHLAREFMIKTRRRKGLSEDVSISKFFDDPMLLELAKQDVVLNYPM

FIGURE 4011

GGGGGGAAACGGAAGTGAGCGGCGGGGTCGACTGACGGTAACGGGGCAGAGAGGCTGTTCGCAGAGCTGCGGAAG
ATGAATGCCAGAGGACTTGGATCTGAGCTAAAGGACAGTATTCCAGTTACTGAACTTTCAGCAAGTGGACCTTTT
GAAAGTCATGATCTTCTTCGGAAAGGTTTTTCTTGTGTGAAAAATGAACTTTTGCCTAGTCATCCCCTTGAATTA
TCAGAAAAAAATTTCCAGCTCAACCAAGATAAAATGAATTTTTCCACACTGAGAAACATTCAGGGTCTATTTGCT
CCGCTAAAATTACAGATGGAATTCAAGGCAGTGCAGCAGGTTCAGCGTCTTCCATTTCTTTCAAGCTCAAATCTT
TCACTGGATGTTTTGAGGGGTAATGATGAGACTATTGGATTTGAGGATATTCTTAATGATCCATCACAAAGCGAA
GTCATGGGAGAGCCACACTTGATGGTGGAATATAAACTTGGTTTACTGTAATAGTGTGCTGTTCATGGAAACCGA
GGGCTGCATCTTGTTTATAGTCATCTTTGTACTGTAATTTGATGTACACAACATTAAAAGTACTGACACCTGAGA
ATTTCTGCTCAAGTAGTATCAGTGATCATTTAAAATTTGGAGGGGTCTTTGGTTTACAGCCATGTGACAATTAAA
AGCACTAAAGGGAGATCATGTTAAAGCTCTTAATTTATATTAAAACAGTAGCCTTTGTCTTTAAAAAAGTTGTTG
CTCATGAATATTATAAAATGATCTACAGGTTTCAATTCAACCTGTTTCTAGGTTTTTTTGTAAATTTAGTTTTGA
TTAAGCATTATAAGCATTTGAGTCTATAAACTTTATAGTAGCATCTTTCAGAATAAACATTTTTAATTGATTTCA
GTGGCAACTCTCAAATTGATTACAATATGAGATATATCAGTGTCGTCCATTAACACTCATAAGAATAATATTTAC
TGTGTCAGTGCTATTTTAGGATTATAGTTATTGTTTGATTATTTCAGGTTGAAAAGTAGAAGTTCCAAGGTTTTG
ATTTTGGTCTGGTCTTTAAGTGAAAAATTAAAGCAACCAGTAGATGTAGGTTAAACTTTTACTTCATAGACTTAA
TATGTGATTAATATATTGCCAAGCAACACTGTTAAAGAAAAGTAAAACTCATTTTTTCTTGTTCTTAATTTATAT
ATTACAAGATACTGTAAGGTATTCTTTATGAAGTTGATATATAAAAATTTACATTTTTAGAACATTAGTGAATGG
ATCATCTTTTACAATTAAAAGTATATTTTGATTATCAGTTTCTTAGCAAAAAAAAAAAAAAAAAAAAAAAAAAA
AA

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FIGURE 4012

MNARGLGSELKDSIPVTELSASGPFESHDLLRKGFSCVKNELLPSHPLELSEKNFQLNQDKMNFSTLRNIQGLFA
PLKLQMEFKAVQQVQRLPFLSSSNLSLDVLRGNDETIGFEDILNDPSQSEVMGEPHLMVEYKLGLL

FIGURE 4013

CGGGAGCGTGGGGTATCTCGAGGTGCCGGGTTGCAGGCGCTCAGGGGCGCTAGGGTTTGAGGCCTGCTTTCTGCT
CGCGCCAGCAGAGCACTACCTGAGGCAGCGAGGCGCAGCGAGCCTAGCCTCCCCGCGCCCTGGGCAGTGTGGCCA
TGGAGAATCAGGTGTTGACGCCGCATGTCTACTGGGCTCAGCGACACCGCGAGCTATATCTGCGCGTGGAGCTGA
GTGACGTACAGAACCCTGCCATCAGCATCACTGAAAACGTGCTGCATTTCAAAGCTCAAGGACATGGTGCCAAAG
GAGACAATGTCTATGAATTTCACCTGGAGTTCTTAGACCTTGTGAAACCAGAGCCTGTTTACAAACTGACCCAGA
GGCAGGTAAACATTACAGTACAGAAGAAAGTGAGTCAGTGGTGGGAGAGACTCACAAAGCAGGAAAAGCGACCAC
TGTTTTTGGCTCCTGACTTTGATCGTTGGCTGGATGAATCTGATGCGGAAATGGAGCTCAGAGCTAAGGAAGAAG
AGCGCCTAAATAAACTCCGACTGGAAAGCGAAGGCTCTCCTGAAACTCTTACAAACTTAAGGAAAGGATACCTGT
TTATGTATAATCTTGTGCAATTCTTGGGATTCTCCTGGATCTTTGTCAACCTGACTGTGCGATTCTGTATCTTGG
GAAAAGAGTCCTTTTATGACACATTCCATACTGTGGCTGACATGATGTATTTCTGCCAGATGCTGGCAGTTGTGG
AAACTATCAATGCAGCAATTGGAGTCACTACGTCACCGGTGCTGCCTTCTCTGATCCAGCTTCTTGGAAGAAATT
TTATTTTGTTTATCATCTTTGGCACCATGGAAGAAATGCAGAACAAAGCTGTGGTTTTCTTTGTGTTTTATTTGT
GGAGTGCAATTGAAATTTTCAGGTACTCTTTCTACATGCTGACGTGCATTGACATGGATTGGAAGGTGCTCACAT
GGCTTCGTTACACTCTGTGGATTCCCTTATATCCACTGGGATGTTTGGTGGAAGCTGTCTCAGTGATTCAGTCCA
TTCCAATATTCAATGAGACCGGACGATTCAGTTTCACATTGCCATATCCAGTGAAAATCAAAGTTAGATTTTCCT
TTTTTCTTCAGATTTATCTTATAATGATATTTTTAGGTTTATACATAAATTTTCGTCACCTTTATAAACAGCGCA
GACGGCGCTATGGAAAAAAAAGAAAAAGATCCACTAAAAAGAAAGATTTAGATGGCTTCTTGCCAGTTTGAGCCT
AATCTGATTCTTACAGTTTTACCTTCTTGAACCAATGTAAAAGTTTTTTTAATGTTAAATGATTAAATTCTCAGT
GAGGCTATCTTCCTTTTCCCCAGTAACATTCCTGAATTTACTGTTATCTTATTGTAGTACTTGCATGACATGGAT
TCCTGATATCTGATGAGAGGTTCATTCTTGTGTATTCAGTTAATGACACCAAAAGGCTCAGCCCACCCCAACCCT
ATCTCATGTTCAGTCTGTCTAATACATGCCAGAGATTTTTTTTTCAAAAAGTGCTTTATCCCTACAATGTACTGA
CAGTTCTTACAGTTGAGGATTTGGTTCTTTTCAGCTAATTGCTTGGTGGATTAAAAAAAGCAAGACTAATGTCAA
CTCTAATGGAAGGCTGGTTAAAAGTGGACTCAGGCAAGG

FIGURE 4014

MENQVLTPHVYWAQRHRELYLRVELSDVQNPAISITENVLHFKAQGHGAKGDNVYEFHLEFLDLVKPEPVYKLTQ
RQVNITVQKKVSQWWERLTKQEKRPLFLAPDFDRWLDESDAEMELRAKEEERLNKLRLESEGSPETLTNLRKGYL
FMYNLVQFLGFSWIFVNLTVRFCILGKESFYDTFHTVADMMYFCQMLAVVETINAAIGVTTSPVLPSLIQLLGRN
FILFIIFGTMEEMQNKAVVFFVFYLWSAIEIFRYSFYMLTCIDMDWKVLTWLRYTLWIPLYPLGCLVEAVSVIQS
IPIFNETGRFSFTLPYPVKIKVRFSFFLQIYLIMIFLGLYINFRHLYKQRRRRYGKKRKRSTKKKDLDGFLPV

FIGURE 4015

AGGCGCTCAGGAGCGCTAGGGTTTGAGGCCTGCTTTCTGCTCGCGCCAGCAGAGCACTACCTGAGGCAGCGAGGC
GCAGCGAGCCTAGCCTCCCCGCGCCCTGGGCAGTGTGGCCATGGAGAATCAGGTGTTGACGCCGCATGTCTACTG
GGCTCAGCGACACCGCGAGCTATATCTGCGCGTGGAGCTGAGTGACGTACAGAACCCTGCCATCAGCATCACTGA
AAACGTGCTGCATTTCAAAGCTCAAGGACATGGTGCCAAAGGAGACAATGTCTATGAATTTCACCTGAAGTTCTT
AGACCTTGTGAAACCAGAGCCTGTTTACAAACTGACCCAGAGGCAGGTAAACATTACAGTACAGAAGAAAGTGAG
TCAGTGGTGGGAGAGACTCACAAAGCAGGAAAAGCGACCACTGTTTTTGGCTCCTGACTTTGATCGTTGGCTGGA
TGAATCTGATGCGGAAATGGAGCTCAGAGCTAAGGAAGAAGAGCGCCTAAATAAACTCCGACTGGAAAGCGAAGG
CTCTCCTGAAACTCTTACAAACTTAAGGAAAGGATACCTGTTTATGTATAATCTTGTGCAATTCTTGGGATTCTC
CTGGATCTTTGTCAACCTGACTGTGCGATTCTGTATCTTGGGAAAAGAGTCCTTTTATGACACATTCCATACTGT
GGCTGACATGATGTATTTCTGCCAGATGCTGGCAGTTGTGGAAACTATCAATGCAGCAATTGGAGTCACTACGTC
ACCGGTGCTGCCTTCTCTGATCCAGCTTCTTGGAAGAAATTTTATTTTGTTTATCATCTTTGGCACCATGGAAGA
AATGCAGAACAAAGCTGTGGTTTTCTTTGTGTTTTATTTGTGGAGTGCAATTGAAATTTTCAGGTACTCTTTCTA
CATGCTGACGTGCATTGACATGGATTGGAAGGTGCTCACATGGCTTCGTTACACTCTGTGGATTCCCTTATATCC
ACTGGGATGTTTGGCGGAAGCTGTCTCAGTGATTCAGTCCATTCCAATATTCAATGAGACCGGACGATTCAGTTT
CACATTGCCATATCCAGTGAAAATCAAAGTTAGATTTTCCTTTTTTCTTCAGATTTATCTTATAATGATATTTTT
AGGTTTATACATAAATTTTCGTCACCTTTATAAACAGCGCAGACGGCGCTATGGACAAAAAAAGAAAAAGATCCA
CTAAAAAAGAAAGATTTAGATGGCTTCTTGCCAGTTTGAGCCTAATCTGATTCTTACAGTTTTACCTTCTTGAACC
AATGTAAAAGTTTTTTTAATGTTAAATGATTAAATTCTCAGTGAGGCTATCTTCCTTTTCCCCAGTAACATTCCT
GAATTTACTGTTATCTTATTGTAGTACTTGCATGACATGGATTCCTGATATCTGATGAGAGGTTCATTCTTGTGT
ATTCAGTTAATGACACCAAAAGGCTCAGCCCACCCCAACCCTATCTCATGTTCAGTCTGTCTAATACATGCCAGA
GATTTTTTTTTCAAAAAGTGCTTTATCCCTACAATGTACTGACAGTTCTTACAGTTGAGATTTGTTCTTTTCAGC
TATTGCTTGTGAAAAAAAGCAAGACTATGTCACTCTATAGAAGGCTGTTAAAGTGACTCAGGCAGGAATTAATTA
TTCTGTACCTAAGGGGTTACTTGTTTAATGGGATGGCATTGACTTTTTGAAAATCAAGTGGACTGAGTCATTGAT
AAAACATTTCTAAGAGTGGGGCTAGAGAACATACTTTACATCTGACATCCTTTGGCCTAACAACATCTATTATTA
TAGTGCTCAGCAGTGTGGGCATTGAAGAGGCGCAGAATGCTTTGAAAGAAACTAATCAGAATCTTGGAACATCAT
GATCATGCCATTCTTAAGTAAATCAACTATTTTCAACACTGAAGAAAAATGAAACATTATTTAGAAAACAATGAG
ATTACAAGTTCCAAACTCAGCCAGGAATGTGGCTCACACCTGTAATCCCAGCACTTTGGGACACCTAGGTGGGAG
CATCGCTTGAAGCCAGGAGTTCAAGACCAGCTTGGGCAACGTAGTGAGACCCCTATCTCTACAAAAAATAAAAAA
ATTAGCTGGGTGTGATGGCACACACCTGTTGTCCCAGCTACTCAAGAAGCTGAGATGGGAGGATCCTGAGCTCAG
GAGGTCAAGGCTGCAGTGAGCCGAGATTGTGCCACTGCACTGCAGCTGGGGTGACAGTGCAAGACCCTGTCTCAA
ACCAAACCAAACCACACACACACAAACACACATACACACACACACACGAGGTCCAAATGGTAGCAGGGATCCA
AAGGGAACACAGTATGTAGGTCAAACTGGCAGTAACAGTGTACAGCCTTTGACAAACTAGAAATATTAGAGTAGG
CCAAACACACCTCCAAACTGTAAGGCTGTGCACAAACATAAAAAATGGCAGCCTTCCATCTCCTGCACTGGCTGA
GTCCATTTACTTGTGTACTTGTTCTAGTGAGTGGTGGGACTGTACATTTTTGAATAGACCTCAAAAATACTTCAT
TCTGCTGCTGTTCAGTTGGCTTTTTAAACCTGTCTGCAGTAGGACACTGAAAACAGCAAGAACTTCGGGGTGAAC
ACCCGCTGATCCTTTAACAAGGATTTCTGGCAGGAAACTCACAAAAAGGAGAACTGAAAATTTAGACATACAGTT
GGCCATTGTAAAAAACATCAGTTTCCTCTCATACATTCCAAGTAAACCAAGTAAAATAAGTGTTGGAGTAACACT
TGCATAAAAGAATTTAAGGAGTGATAGCTCTTTCTGTTCTGCCATTCCCAACATTCCTGGGGGAAAGGAGACTCA
ATGAGTTAATACTATTTCACTGAGCCCAAGATGGAAACTTGGTTTGACCTAAAACATCTGATTAATATAGGCTAG
CTGATTTCTTAAAAATTCGTTGCATTGAAGGATATTTTGCATGTCTGTAACACCTGTCAATACTTGTTTGTATTG
ATTTCTGATATTCTTGCAGCTGACTACGTGTAATTGGGCAGATCAGCTTTGCAGTAGATTATGCTGCATCCTCGT
GGCAAAATTCTGTATTCTTAGTGATTGTTACAAACCCCTTTATTGCTGTCTGAGAAAGTGAAAGATTGTGTATTT
CTATTAAAACATTTACAATC

FIGURE 4016

MENQVLTPHVYWAQRHRELYLRVELSDVQNPAISITENVLHFKAQGHGAKGDNVYEFHLKFLDLVKPEPVYKLTQ
RQVNITVQKKVSQWWERLTKQEKRPLFLAPDFDRWLDESDAEMELRAKEEERLNKLRLESEGSPETLTNLRKGYL
FMYNLVQFLGFSWIFVNLTVRFCILGKESFYDTFHTVADMMYFCQMLAVVETINAAIGVTTSPVLPSLIQLLGRN
FILFIIFGTMEEMQNKAVVFFVFYLWSAIEIFRYSFYMLTCIDMDWKVLTWLRYTLWIPLYPLGCLAEAVSVIQS
IPIFNETGRFSFTLPYPVKIKVRFSFFLQIYLIMIFLGLYINFRHLYKQRRRRYGQKKKKIH

FIGURE 4017

CCAGGGCCTGACTAAACCTGGAGACTCGGGTGGCCGAGGGGCTTCATACCAGCTGAAGAGCGACAAGCCGCTGGC
AGCCGCGGATCTCACCGCCGCTCAGGGTTTTTAGAACTTCAGCCATAAAAATGGGCAGAATTTTCCTTGATCATA
TCGGTGGTACCCGTCTGTTTTCTTGTGCAAACTGTGATACGATCCTGACCAACCGCTCAGAACTCATCTCCACTC
GTTTCACAGGCGCCACTGGCAGAGCATTTCTTTTTAACAAGGTAGTTAACCTGCAGTACAGCGAAGTTCAAGATC
GGGTCATGCTCACTGGCCGCCACATGGTTCGAGATGTGAGCTGCAAAAACTGCAATAGCAAACTGGGATGGATCT
ATGAGTTTGCCACTGAAGACAGCCAGCGATATAAGGAAGGCCGCGTGATCCTGGAACGTGCTCTAGTTCGAGAGA
GTGAGGGCTTTGAGGAGCATGTACCATCTGATAACTCTTGAAGATACAGAGAGAAATCCATCTTTTCCCAGGTCT
CCTTCACTGAAAACAAAAATCTACTTACATACACTGTCACCTTAGCATCAGAGTCGGATTAATGAACTGCGGAAC
AAGAGGTTGTGAGAATCTAAGATGGAACCTTTCTTTCTTTCTTTCTTTTTTTTTAAATTTTGTATTTTCCATCCA
ACAGCAGTGTGTAGAGAGAATATTATGCAGATGCCGTTAATTTTTTACCCTATGTTTACATCTTGAGGCAGCAGA
GTCTGTCTGCAGCTATGTGGTGAGCTATGTAAGGAAAAAAATCTGGGCTGTTAGAGTGAAAAAGTGTGTTTTATG
TCAATTGTGAAAGGAAAATGTTAGGAGTATGGTTTTTAAACTTGGGCTTCATTTTAAACTTTTTTTTTTAAACCC
AGTTATTTCACTTGATTTGCTAGCTTCAGAGAAGAGATCCGAATCTGTGCCCAGCGCTAAAGGCTCAGTGTTAGC
ATGGCTTGTGCTGGCCGGTGTGCCATATTCTTGTTGGAGATGAACCGTAGCACCAGAGCCCATTCTTCCTTGTCA
GTCTTGGCCCAAAGATGTCACCATTCCTAGTTATTTGTCACCACATAATTGGTGTTGATTGGAAACTTTTTCTGA
GATGGGACAGAACTGCTGGGTTGTCTTTTTCCATGTAACTTAAGCATAGTAATATAAATAAAGTAATAGTTGGAT
GCTTTTGGTCCTGTGTTGCTTTTAAAAACACCTTATAAAAGAGGAGAGTATTTGATAAGCAATTTTCATAGTAGT
AAAGTTTTTTTTCATCTCTTAAACTAAATTGACCATGCATATAATATTCTTTGTTTAAATGAAAGCATACTGTTG
AAACCCGCAGTGTTGCATTTAGAAAACAGTTGAACAGAATGTCAATGTGCATTCATGCAAAAAAACATTTAATCT
GCATCTGTTTTAGAAAAGGGGGAAATGAAGCAACTTGTCTAAAAATACTGCTTTACAAAGCATTTCAGCCTTTCC
CCCTCAGTTTTGCATTGATTTTTTGACAAGTCTGTAGAGCCTAATAGTTTCCATCAAAGGCCTAGATCTCTTATT
TAGCATTTTTTTCAGCTCTTCTCTCAGAAGTTCAGCTGTTGAAACGAAAACTGTACTTTGTACCCTCACATACAA
AGGGATCAAATTTGACCTGGTGTTATTTTAGCCCCAAATTTATGACATTACACAATATTAAAATGTAAATGTTTC
TTTACCCAAACTACTTCTAGATATTCTAGTATTTGCTTCTGGTGGAATTAAATGACGGTAAAATTGGCTAATTAT
TTGAATGAATGAATGGATGGATGTTTTGCATGCTCAATTTCTAGGTCCTTTGTCTAGAAAGGAAATTTGCCTCAG
TTGAATTAGTGAAATATTTCTGTCGTTGATATTAAAAGTGACTTCTGAGTACAGTTAAGTTCCTCCTATTTGCCA
CTGGGCTGTTGGTTAGAAGCATAGGTAACTGATTAAGTAGGTATGATACTGCATTTGAAATAAGTGGACACAAAC
TATCCTTTCTCCACCATGGACTCAATCTGAGAACAACAGCATTCATTTCCATTCATTTCCATACTGGCTTTTGAT
TATATGCAGATTCCTAGTAGCATGCCTTACCTACAGCACTATGTGCATTTGCTGTCACAATAAAGTATATTTTGT
CTTGCAAA

FIGURE 4018

MGRIFLDHIGGTRLFSCANCDTILTNRSELISTRFTGATGRAFLFNKVVNLQYSEVQDRVMLTGRHMVRDVSCKN
CNSKLGWIYEFATEDSQRYKEGRVILERALVRESEGFEEHVPSDNS

FIGURE 4019

GAGAGGCGCCCAGGCGGCGGCGGCGGCGGCCCAGCTTCTTCTTTCCTCGCACAGCCAGGCGGCCCCTGCTCGAGT
CCCGCGTCGCCATGGCCGCGGTTCCCGAGTTGCTGCAGCAGCAGGAGGAGGACCGCAGCAAGCTGAGATCTGTAT
CTGTGGACCTGAATGTTGATCCCTCGCTTCAGATTGACATACCTGATGCGCTCAGTGAGAGAGACAAAGTCAAAT
TTACAGTGCACACAAAGACCACACTGCCCACGTTTCAGAGCCCAGAGTTTTCTGTTACAAGGCAACATGAAGACT
TTGTGTGGCTACATGACACTCTTATTGAAACAACAGACTATGCTGGGCTTATTATTCCACCTGCTCCTACGAAGC
CCGACTTTGATGGTCCTCGAGAGAAGATGCAGAAACTGGGAGAAGGTGAAGGGTCTATGACCAAAGAAGAATTTG
CCAAGATGAAACAAGAACTGGAAGCTGAGTATCTCGCTGTGTTTAAGAAGACTGTGTCCTCCCATGAAGTCTTTC
TTCAGCGGCTTTCTTCTCACCCTGTTCTCAGTAAAGATCGCAACTTTCATGTTTTCCTGGAATATGATCAGGATC
TAAGTGTTAGGCGGAAAAATACTAAAGAGATGTTTGGTGGCTTCTTCAAAAGTGTGGTGAAAAGTGCTGATGAAG
TCCTTTTTACTGGAGTTAAGGAGGTAGATGACTTCTTTGAGCAAGAGAAGAACTTCCTTATTAACTATTACAATA
GGATCAAAGATTCTTGTGTGAAAGCTGACAAAATGACCAGATCTCATAAAAATGTTGCCGATGACTATATCCACA
CCGCAGCCTGCTTACATAGCCTGGCTTTAGAAGAGCCCACAGTCATCAAAAAGTACCTATTGAAGGTTGCTGAGC
TATTTGAAAAACTAAGGAAAGTAGAGGGTCGAGTTTCATCAGATGAAGATTTGAAGCTAACAGAGCTCCTCCGAT
ACTACATGCTCAACATTGAAGCTGCTAAGGATCTCTTATACAGACGCACCAAAGCCCTCATTGACTATGAGAACT
CAAACAAAGCTCTGGATAAGGCCCGGTTAAAGAGCAAAGACGTCAAGTTGGCTGAGGCACACCAGCAGGAGTGCT
GCCAGAAATTTGAACAACTTTCCGAATCTGCAAAAGAAGAACTGATAAATTTCAAACGGAAGAGAGTGGCAGCAT
TTAGAAAGAATCTAATTGAAATGTCTGAACTGGAAATAAAACATGCCAGGAACAATGTCTCCCTTTTGCAGAGCT
GTATTGACTTGTTCAAGAATAACTGATATGCCTTCACTCAGAAGAAAAGAAATGAATGTGAAAGAAAGCCAAGCA
TCACTTGCACTTAAATCATTACCACGGAAGATATATTAGCTTCAACTTTAGTTTAAAATTATGTGAATAAATATT
TTGATTTCTACAAATCTTAACATTTAACCATGTTGGTTTAAAAATATTATTGCTTGCTACTTGGACATAACTAAT
TTTTCCTTGTGCATTTAATACCTCTGGGCAGAATCCAAATACTGGGTTCTCCCGTAGTTCGTCTTTAGTTACTAA
GAAAGGGTGTAGGACACATTAGCCTTCTGGAAACAAGTAGAAGCCATCACCTGGCCCATGTCCCTACAAACCCAT
GATTGTCAGGGAGGTGCCAGTTACAGCAGGTGATTCAGCTACTTGAGGTCGGTAACAGACCTTCCATTCCTCACT
GAAGGTGGGGTTTGTGTTTTTGTTTTGCCCTGTTACTCCACTGGTAGTCATCTGGTGTTTGTACTATAACAACAG
CAAGAAAATCTCATTTATCTTTATATACTCTTTGCACCTCCTTTTTTTAGTCGAGATATAAATATTTGAGGGGAG
AGAAATATCTACAGGTATATATGGAAACAAATAATGTGGTCTGCTTTATAAGATGGCCAGATCTACATTAGGAAA
AGTATAAGCCCCCTCCCTAATGGCCGCTGGGGGGTGAGGGCGGTGTGTTGTATGTCTTTGGGTGTTTGTTTTTTT
ATAAAGCATATAATAAAATAATCGTGCTACTAA

FIGURE 4020

MAAVPELLQQQEEDRSKLRSVSVDLNVDPSLQIDIPDALSERDKVKFTVHTKTTLPTFQSPEFSVTRQHEDFVWL
HDTLIETTDYAGLIIPPAPTKPDFDGPREKMQKLGEGEGSMTKEEFAKMKQELEAEYLAVFKKTVSSHEVFLQRL
SSHPVLSKDRNFHVFLEYDQDLSVRRKNTKEMFGGFFKSVVKSADEVLFTGVKEVDDFFEQEKNFLINYYNRIKD
SCVKADKMTRSHKNVADDYIHTAACLHSLALEEPTVIKKYLLKVAELFEKLRKVEGRVSSDEDLKLTELLRYYML
NIEAAKDLLYRRTKALIDYENSNKALDKARLKSKDVKLAEAHQQECCQKFEQLSESAKEELINFKRKRVAAFRKN
LIEMSELEIKHARNNVSLLQSCIDLFKNN

FIGURE 4021

CCGCGGGTCGGGCTCTGTGTCAGCAGCCGGGCGGGCGCTCGGGCGGGACATGGCAGCCTGTACAGCCCGGCGGGC
CCTGGCCGTGGGCAGCCGCTGGTGGTCCCGGTCGCTGACTGGGGCCCGGTGGCCAAGGCCGCTCTGTGCGGCGGC
CGGAGCTGGAGCCTTCTCGCCAGCGTCGACCACGACGACGCGGAGGCACCTCTCGTCCCGAAACCGACCAGAGGG
CAAAGTGTTGGAGACAGTTGGTGTGTTTGAGGTGCCAAAACAGAATGGAAAATATGAGACCGGGCAGCTTTTCCT
TCATAGCATTTTTGGCTACCGAGGTGTCGTCCTGTTTCCCTGGCAGGCCAGACTGTATGACCGGGATGTGGCTTC
TGCAGCTCCAGAAAAAGCAGAGAACCCTGCTGGCCATGGCTCCAAGGAGGTGAAAGGCAAAACTCACACTTACTA
TCAGGTGCTGATTGATGCTCGTGACTGCCCACATATATCTCAGAGATCTCAGACAGAAGCTGTGACCTTCTTGGC
TAACCATGATGACAGTCGGGCCCTCTATGCCATCCCAGGCTTGGACTATGTCAGCCATGAAGACATCCTCCCCTA
CACCTCCACTGATCAGGTTCCCATCCAACATGAACTCTTTGAAAGATTTCTTCTGTATGACCAGACAAAAGCACC
TCCTTTTGTGGCTCGGGAGACGCTAAGGGCCTGGCAAGAGAAGAATCACCCCTGGCTGGAGCTCTCCGATGTTCA
TCGGGAAACAACTGAGAACATACGTGTCACTGTCATCCCCTTCTACATGGGCATGAGGGAAGCCCAGAATTCCCA
CGTGTACTGGTGGCGCTACTGTATCCGTTTGGAGAACCTTGACAGTGATGTGGTACAGCTCCGGGAGCGGCACTG
GAGGATATTCAGTCTCTCTGGCACCTTGGAGACAGTGCGAGGCCGAGGGGTAGTGGGCAGGGAACCAGTGTTATC
CAAGGAGCAGCCTGCGTTCCAGTATAGCAGCCACGTCTCACTGCAGGCTTCCAGTGGGCACATGTGGGGCACGTT
CCGCTTTGAAAGACCTGATGGCTCCCACTTTGATGTTCGGATTCCTCCCTTCTCCCTGGAAAGCAATAAAGATGA
GAAGACACCACCCTCAGGCCTTCACTGGTAGGCCAGCTGAGGCCCCAAGTGCCCAGGCTTGGTCACCGGGAAGAA
CAACTCTCATCCCACAATTGCTGCAGAACTCTTCTCTCCCCATCATGGGCCACAGTGGGTCTCTTAATTTGATTG
TGGGGTTCTTTTTGTGGGGAGGGGTGGTATAACTTTTCTTCAGAAGACCCATGTGGGACACCTCCAAGGCTGGCC
TCCTCATAAGCCCTGCCTACACCATGTTCCAGTAAACCTCTCCACCAAGGAACTGTGTTCAGCTGCCACAGGCCT
GGAGGAGTTTCCTGGCCTGTCACGTGAGGTTTGATCAGTAAACCAGTGCACGCTTGGCCACCCTTGCCATTTCTG
CTCCCAGAGTCTCAGGCTCCCCTTCTGACCCAGTGTGCGCCCTTGACTGCTTTCTTTGCTGCCCTTCCAGGGAGC
TGCCCCCCTGGTAGGGCATGTGCCTGTTTCCCTCTCAGCCTGGAGGCTGGCTGGACATCTCCTAGGGTCACTGTG
CCTCTCAGCTAGTTGGCGGGGGTGCTGGACTGGACTCTTGTTCACTTTACCTTCTGCCAAATGCAGAGAGGGAGG
CCAGTGTCAGGGTCGGAGTGGCCTGGCTCTTAGCACTGACCGACCATTGCCATTTCTGGCCTCGCTAGGCCCAGG
AGAGGAGGGAGGCAAGCCAGTCGGGTTTCCTGGAGCAATGGGTGTGCCAGCCCTCAGCATGACTCTGCCAAGCAT
CCAGACCACAAATGCAGGAATTTGGCTGAGGAGCAGCTTTAGGTATGGATTGATGACTAAGTCAAGCTACTTCCT
GAGCTTCTCTCAGATTTCCAAGAGCCAGAGATGAATTGTGCTGCATCTTGCCCCAATTCTTAGGATTTCTTTTCC
TCCGCCACTGCAGTGATTGTTAGAGGTAGTTTTCTTGAATTAATATTAAATCACAGTTCCAGCCCTGTAAAAAAA

FIGURE 4022

MAACTARRALAVGSRWWSRSLTGARWPRPLCAAAGAGAFSPASTTTTRRHLSSRNRPEGKVLETVGVFEVPKQNG
KYETGQLFLHSIFGYRGVVLFPWQARLYDRDVASAAPEKAENPAGHGSKEVKGKTHTYYQVLIDARDCPHISQRS
QTEAVTFLANHDDSRALYAIPGLDYVSHEDILPYTSTDQVPIQHELFERFLLYDQTKAPPFVARETLRAWQEKNH
PWLELSDVHRETTENIRVTVIPFYMGMREAQNSHVYWWRYCIRLENLDSDVVQLRERHWRIFSLSGTLETVRGRG
VVGREPVLSKEQPAFQYSSHVSLQASSGHMWGTFRFERPDGSHFDVRIPPFSLESNKDEKTPPSGLHW

FIGURE 4023

GTGAAGAGAGGCGCGGCGTGACTGAGCTACGGTTCTGGCTGCGTCCTAGAGGCATCCGGGGCAGTAAAACCGCTG
CGATCGCGGAGGCGGCGGCCAGGCCGAGAGGCAGGCCGGGCAGGGGTGTCGGACGCAGGGCGCTGGGCCGGGTTT
CGGCTTCGGCCACAGCTTTTTTTCTCAAGGTGCAATGAAAGCCTTCCACACTTTCTGTGTTGTCCTTCTGGTGTT
TGGGAGTGTCTCTGAAGCCAAGTTTGATGATTTTGAGGATGAGGAGGACATAGTAGAGTATGATGATAATGACTT
CGCTGAATTTGAGGATGTCATGGAAGACTCTGTTACTGAATCTCCTCAACGGGTCATAATCACTGAAGATGATGA
AGATGAGACCACTGTGGAGTTGGAAGGGCAGGATGAAAACCAAGAAGGAGATTTTGAAGATGCAGATACCCAGGA
GGGAGATACTGAGAGTGAACCATATGATGATGAAGAATTTGAAGGTTATGAAGACAAACCAGATACTTCTTCTAG
CAAAAATAAAGACCCAATAACGATTGTTGATGTTCCTGCACACCTCCAGAACAGCTGGGAGAGTTATTATCTAGA
AATTTTGATGGTGACTGGTCTGCTTGCTTATATCATGAATTACATCATTGGGAAGAATAAAAACAGTCGCCTTGC
ACAGGCCTGGTTTAACACTCATAGGGAGCTTTTGGAGAGCAACTTTACTTTAGTGGGGGATGATGGAACTAACAA
AGAAGCCACAAGCACAGGAAAGTTGAACCAGGAGAATGAGCACATCTATAACCTGTGGTGTTCTGGTCGAGTGTG
CTGTGAGGGCATGCTTATCCAGCTGAGGTTCCTCAAGAGACAAGACTTACTGAATGTCCTGGCCCGGATGATGAG
GCCAGTGAGTGATCAAGTGCAAATAAAAGTAACCATGAATGATGAAGACATGGATACCTACGTATTTGCTGTTGG
CACACGGAAAGCCTTGGTGCGACTACAGAAAGAGATGCAGGATTTGAGTGAGTTTTGTAGTGATAAACCTAAGTC
TGGAGCAAAGTATGGACTGCCGGACTCTTTGGCCATCCTGTCAGAGATGGGAGAAGTCACAGACGGAATGATGGA
TACAAAGATGGTTCACTTTCTTACACACTATGCTGACAAGATTGAATCTGTTCATTTTTCAGACCAGTTCTCTGG
TCCAAAAATTATGCAAGAGGAAGGTCAGCCTTTAAAGCTACCTGACACTAAGAGGACACTGTTGTTTACATTTAA
TGTGCCTGGCTCAGGTAACACTTACCCAAAGGATATGGAGGCACTGCTACCCCTGATGAACATGGTGATTTATTC
TATTGATAAAGCCAAAAAGTTCCGACTCAACAGAGAAGGCAAACAAAAAGCAGATAAGAACCGTGCCCGAGTAGA
AGAGAACTTCTTGAAACTGACACATGTGCAAAGACAGGAAGCAGCACAGTCTCGGCGGGAGGAGAAAAAAAGAGC
AGAGAAGGAGCGAATCATGAATGAGGAAGATCCTGAGAAACAGCGCAGGCTGGAGGAGGCTGCATTGAGGCGTGC
AAAAAAGAAGTTGGAAAAGAAGCAAATGAAAATGAAACAAATCAAAGTGAAAGCCATGTAAAGCCATCCCAGAGA
TTTGAGTTCTGATGCCACCTGTAAGCTCTGAATTCACAGGAAACATGAAAAACGCCAGTCCATTTCTCAACCTTA
AATTTCAGACAGTCTTGGGCAACTGAGAAATCCTTATTTCATCATCTACTCTGTTTGGGGTTTGGGGTTTTACAG
AGATTGAAGATACCTGGAAAGGGCTCTGTTTCAAGAATTTTTTTTTCCAGATAATCAAATTATTTTGATTATTTT
ATAAAAGGAATGATCTATGAAATCTGTGTAGGTTTTAAATATTTTAAAAATTATAATACAAATCATCAGTGCTTT
TAGTACTTCAGTGTTTAAAGAAATACCATGAAATTTATAGGTAGATAACCAGATTGTTGCTTTTTGTTTAAACCA
AGCAGTTGAAATGGCTATAAAGACTGACTCTAAACCAAGATTCTGCAAATAATGATTGGAATTGCACAATAAACA
TTGCTTGATGTTTTCTTGTATGTCTACATTAAACTTGAGAAAAAGTAAAAATTAGAACACTGTATGTAGTAATGA
AATTTCAGGGACCCAGAACATAATGTAGTATATGTTTTTAGGTGGGAGATGCTGATAACAAAATTAATAGGAAGT
CTGTAGGCATTAGGATACTGACATGTACATGGAAAATTCTAGGGACAGGAGCATCATTTTTTCCTTACCTGATAC
CACGAACCAGTGACAACGTGAATGCTGTATTTTAAGTGGTTGTATGTTTATTTTCTTGAGTAACAAATGCATGAA
AAATTAATGCTTCACCTAGGTAAGATCATTGGTCTGTGTGAAATCACAAATGTTTTTTCCTTCTTGGTTGCTGCA
GCCTGGGTGGATGTTCATGGAGAAGCTCTGTTCTCTATATTATGGCTGTGTGCCGTTGCTTCTCCCTCTGCTTTT
ATCTTTTCCACAGTTGAGGCTGGGTATGTTCTTTCAAAGAAATGGCCATGAATATGTGTAAGTATACTTTTGAAA
ATGAGCTTTCCTAAACTATTGAGAGTTCTTTCCACCTCTTGCGGAACCAACTCTTGGAGGAGAGGCCCATGTATC
TGCACGAGCACTTAGCTTGTTCAGATCTCTGCATTTTATAAATGCTTCTTACCAAGAAAGCATTTTTAGGTCATT
GCTTGTACCAGGTAATTTTTGCCGGGGATGGGTAAGGGTTGGGTTTTCTGGTGGGAGTGGGGTGGTGGGTATTTT
TTGTTGATGCTTTAGTGCAGGCCTGTTCTGAGGCAATAACAAGTTGCTGTGAAAACAGCATGTGCTGCTGCCTTT
GTAACTGCATGGAAACTTTTCACATGGGTTTTTCTCCAAGTTAATACAGAAATATGTAAACTGAGAGATGCAAAT
GTAATATTTTTAACAGTTCATGAAGTTGTTATTAAAATAACTAACATAAAACTTAATTACTTTAATATTATATAA
TTATAGTAGTGGCCTTGTTTTACAAACCTTTAAATTACATTTTAGAAATCAAAGTTGATAGTCTTAGTTATCTTT
TGAGTAAGAAAAGCTTTCCTAAAGTCCCATACATTTGGACCATGGCAGCTAATTTTGTAACTTAAGCATTCATAT
GAACTACCTATGGACATCTATTAAAGTGATTGACAAAATCTCAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4024

MKAFHTFCVVLLVFGSVSEAKFDDFEDEEDIVEYDDNDFAEFEDVMEDSVTESPQRVIITEDDEDETTVELEGQD
ENQEGDFEDADTQEGDTESEPYDDEEFEGYEDKPDTSSSKNKDPITIVDVPAHLQNSWESYYLEILMVTGLLAYI
MNYIIGKNKNSRLAQAWFNTHRELLESNFTLVGDDGTNKEATSTGKLNQENEHIYNLWCSGRVCCEGMLIQLRFL
KRQDLLNVLARMMRPVSDQVQIKVTMNDEDMDTYVFAVGTRKALVRLQKEMQDLSEFCSDKPKSGAKYGLPDSLA
ILSEMGEVTDGMMDTKMVHFLTHYADKIESVHFSDQFSGPKIMQEEGQPLKLPDTKRTLLFTFNVPGSGNTYPKD
MEALLPLMNMVIYSIDKAKKFRLNREGKQKADKNRARVEENFLKLTHVQRQEAAQSRREEKKRAEKERIMNEEDP
EKQRRLEEAALRRAKKKLEKKQMKMKQIKVKAM

FIGURE 4025A

GGCACGAGCGAGGTTCGGGCTGGTTGTTCCGTTGCGAGCTGCAGCTGCGATCTCTGTGGTAGGCCCAGAAGTGTA
TGCTGACTTGTAAAGTGAAGAAGCCAGTGGTGCTGCGGGTGTTCTTTTGGGGTAGTGTCTGGGATCCAGTACGAG
TTGAATCATTGTTCAAATAAGGTGTAATTGAAAAGTGATCCTCTCTTCAGAGATGTCAAAAACAAACAAATCCAA
GTCTGGATCTCGCTCTTCTCGCTCAAGATCTGCATCAAGATCTCGTTCTCGTTCATTTTCGAAGTCTCGGTCCCG
AAGCCGATCTCTCTCTCGTTCAAGGAAGCGCAGGCTGAGTTCTAGGTCTCGTTCCAGATCATATTCTCCAGCTCA
TAACAGAGAAAGAAACCACCCAAGAGTATATCAGAATCGGGATTTCCGAGGTCACAACAGAGGCTATAGAAGGCC
CTATTATTTCCGTGGGCGTAACAGAGGCTTTTATCCATGGGGCCAATATAACCGAGGAGGCTATGGAAACTACCG
CTCAAATTGGCAGAATTACCGGCAAGCATACAGTCCTCGTCGAGGCCGTTCAAGATCCCGGTCCCCAAAGAGAAG
GTCCCCTTCACCAAGGTCCAGGAGCCATTCTAGAAACTCTGATAAGTCGTCTTCTGACCGGTCAAGGCGCTCCTC
ATCCTCCCGTTCTTCCTCCAACCATAGCCGAGTTGAATCTTCTAAGCGCAAGTCTGCAAAGGAGAAAAAGTCCTC
TTCTAAGGATAGCCGGCCATCTCAGGCTGCCGGGGATAACCAGGGAGATGAGGTCAAGGAGCAGACATTCTCTGG
AGGCACCTCTCAAGATACAAAAGCATCTGAGAGCTCGAAGCCATGGCCAGATGCCACCTACGGCACTGGTTCTGC
ATCACGGGCCTCAGCAGTTTCTGAGCTGAGTCCTCGGGAGCGAAGCCCAGCTCTCAAAAGCCCCCTCCAGTCTGT
GGTGGTGAGGCGGCGGTCACCCCGTCCTAGCCCCGTGCCAAAACCTAGTCCTCCACTTTCCAGCACATCCCAGAT
GGGCTCAACTCTGCCGAGTGGTGCCGGGTATCAGTCTGGGACACACCAAGGTCAGTTCGACCATGGTTCTGGGTC
CCTGAGTCCATCCAAAAAGAGCCCTGTGGGTAAGAGTCCACCATCCACTGGCTCCACATATGGCTCATCTCAGAA
GGAGGAGAGTGCTGCTTCAGGAGGAGCAGCCTATACAAAGAGGTATCTAGAAGAGCAGAAGACAGAGAATGGAAA
AGATAAGGAACAGAAACAAACAAATACCGATAAAGAAAAAATAAAAGAGAAAGGGAGCTTCTCTGACACAGGCTT
GGGTGATGGAAAAATGAAATCTGATTCTTTTGCTCCCAAAACTGATTCTGAGAAGCCTTTTCGGGGCAGTCAGTC
TCCCAAAAGGTATAAGCTCCGAGATGACTTTGAGAAGAAGATGGCTGACTTCCACAAGGAGGAGATGGATGATCA
AGATAAGGACAAAGCTAAGGGAAGAAAGGAATCTGAGTTTGATGATGAACCCAAATTTATGTCTAAAGTCATAGG
TGCAAACAAAAACCAGGAGGAGGAGAAGTCAGGCAAATGGGAGGGCCTGGTATATGCACCTCCAGGGAAGGAAAA
GCAGAGAAAAACAGAGGAGCTGGAGGAGGAGTCTTTCCCAGAGAGATCCAAAAAGGAAGATCGGGGCAAGAGAAG
CGAAGGTGGGCACAGGGGCTTTGTGCCTGAGAAGAATTTCCGAGTGACTGCTTATAAAGCAGTCCAGGAGAAAAG
CTCATCACCTCCCCCAAGAAAGACCTCTGAGAGCCGAGACAAGCTGGGAGCGAAAGGAGATTTTCCCACAGGAAA
GTCTTCCTTTTCCATTACTCGAGAGGCACAGGTCAATGTCCGGATGGACTCTTTTGATGAGGACCTCGCACGACC
CAGTGGCTTATTGGCTCAGGAACGCAAGCTTTGCCGAGATCTAGTCCATAGCAACAAAAAGGAACAGGAGTTTCG
TTCCATTTTCCAGCACATACAATCAGCTCAGTCTCAGCGTAGCCCCTCAGAACTGTTTGCCCAACATATAGTGAC
CATTGTTCACCATGTTAAAGAGCATCACTTTGGGTCCTCAGGAATGACATTACATGAACGCTTTACTAAATACCT
AAAGAGAGGAACTGAGCAGGAGGCAGCCAAAAACAAGAAAAGCCCAGAGATACACAGGAGAATAGACATTTCCCC
CAGTACATTCAGAAAACATGGTTTGGCTCATGATGAAATGAAAAGTCCCCGGGAACCTGGCTACAAGGCTGAGGG
AAAATACAAAGATGATCCTGTTGATCTCCGCCTTGATATTGAACGTCGTAAAAAACATAAGGAGAGAGATCTTAA
ACGAGGTAAATCGAGAGAATCAGTGGATTCCCGAGACTCCAGTCACTCAAGGGAAAGGTCAGCTGAAAAAACAGA
GAAAACTCATAAAGGATCAAAGAAACAGAAGAAGCATCGGAGAGCAAGAGACAGGTCCAGATCCTCCTCCTCTTC
CTCCCAGTCATCTCACTCCTACAAAGCAGAAGAGTACACTGAAGAGACAGAGGAAAGAGAGGAGAGCACCACGGG
CTTTGACAAATCAAGACTGGGGACCAAAGACTTTGTGGGTCCAAGTGAAAGAGGAGGTGGCAGAGCTCGAGGAAC
CTTTCAGTTTCGAGCCAGAGGAAGAGGCTGGGGCAGAGGCAACTACTCTGGGAACAATAACAACAACAGCAACAA
CGATTTTCAAAAAAGAAACCGGGAAGAGGAGTGGGACCCAGAGTACACACCCAAAAGCAAGAAGTATTACTTGCA
TGATGACCGTGAAGGCGAAGGCAGTGACAAGTGGGTGAGCCGGGGCCGGGGCCGAGGAGCCTTTCCTCGGGGTCG
GGGCCGGTTCATGTTCCGGAAATCAAGTACCAGCCCCAAGTGGGCCCATGACAAGTTCAGTGGGGAGGAAGGGGA
GATTGAAGACGACGAGAGTGGGACAGAGAACCGAGAAGAGAAGGACAATATACAGCCCACAACCGAGTAGGGGCC
ACCCTTGACGGGATTCCTGCCCAGGGGAGAGAGGCGCTGGGAAGATGGCTGGTGAGGAGCTTAACAGAGGAACCT
CAAGAAGATTCTGAAAATCCTACCCCCACCCCCCACCAGCCGCACAGATTGTACTACCGCGAGAGGCATCCCTGG
CGCTGTCTCCCACTGGACAGAGGAGGCTGGCCATGGGGCCCAGGGGTCAGGCCCAGCTTTTGAGCAGAATACAAC
GCATTGGGCTTTAGCTGTTTTTCTCATTTGTTGGTGTGTGGGGTGGGGGCAGGGGTAGGGCGGGAGAGCGATGCT
TGGATTTTTGTTTCCTATTAGAAACCAACAGTTTTGTTCTAATTTCATTTCATTTGGAGCTAAGATGACTAATTT
GATGATTTTCGATCTCTTTTCCCCTGTCCTGATTTTAAAAGCCCCCTCCTTTTTTTTTTTTTTTTTCTTTTTTT
AGGCATATGTAGTAATATTAGAAACATTTAATTTGGGAAACTTTGATTCTTGAAAGAGAAAACAAAAGCATGTGA

FIGURE 4025B

ATAAACTTTGCTCGTGCC

FIGURE 4026

MSKTNKSKSGSRSSRSRSASRSRSRSFSKSRSRSRSLSRSRKRRLSSRSRSRSYSPAHNRERNHPRVYQNRDFRG
HNRGYRRPYYFRGRNRGFYPWGQYNRGGYGNYRSNWQNYRQAYSPRRGRSRSRSPKRRSPSPRSRSHSRNSDKSS
SDRSRRSSSSRSSSNHSRVESSKRKSAKEKKSSSKDSRPSQAAGDNQGDEVKEQTFSGGTSQDTKASESSKPWPD
ATYGTGSASRASAVSELSPRERSPALKSPLQSVVVRRRSPRPSPVPKPSPPLSSTSQMGSTLPSGAGYQSGTHQG
QFDHGSGSLSPSKKSPVGKSPPSTGSTYGSSQKEESAASGGAAYTKRYLEEQKTENGKDKEQKQTNTDKEKIKEK
GSFSDTGLGDGKMKSDSFAPKTDSEKPFRGSQSPKRYKLRDDFEKKMADFHKEEMDDQDKDKAKGRKESEFDDEP
KFMSKVIGANKNQEEEKSGKWEGLVYAPPGKEKQRKTEELEEESFPERSKKEDRGKRSEGGHRGFVPEKNFRVTA
YKAVQEKSSSPPPRKTSESRDKLGAKGDFPTGKSSFSITREAQVNVRMDSFDEDLARPSGLLAQERKLCRDLVHS
NKKEQEFRSIFQHIQSAQSQRSPSELFAQHIVTIVHHVKEHHFGSSGMTLHERFTKYLKRGTEQEAAKNKKSPEI
HRRIDISPSTFRKHGLAHDEMKSPREPGYKAEGKYKDDPVDLRLDIERRKKHKERDLKRGKSRESVDSRDSSHSR
ERSAEKTEKTHKGSKKQKKHRRARDRSRSSSSSSQSSHSYKAEEYTEETEEREESTTGFDKSRLGTKDFVGPSER
GGGRARGTFQFRARGRGWGRGNYSGNNNNNSNNDFQKRNREEEWDPEYTPKSKKYYLHDDREGEGSDKWVSRGRG
RGAFPRGRGRFMFRKSSTSPKWAHDKFSGEEGEIEDDESGTENREEKDNIQPTTE

FIGURE 4027

ATATGATCCGCTCGGCTTCCTGGGTCTGGCTGCTGCCGCCCGCCGGTGTCCGCCCGTGTCGCGCCGGGGCACCAA
GGAGCCGTTGGAGGGTCCGGGCGGAGGCCCGCTCGTGTGGAAGTCGTCGACGCCGCCGCTCGTCCGTCCTCCCGT
CCGTTCTCGCTCCCGGCCGCCATC**ATG**CTGGCGCTCATCTCCCGCCTGCTGGACTGGTTCCGTTCGCTCTTCTGG
AAGGAAGAGATGGAGCTGACGCTCGTGGGGCTGCAGTACTCGGGCAAGACCACCTTCGTCAATGTCATCGCGTCA
GGTCAATTCAGTGAAGATATGATACCCACAGTGGGCTTCAACATGAGGAAGGTAACTAAAGGTAACGTCACAATA
AAGATCTGGGACATAGGAGGACAACCCCGATTTCGAAGCATGTGGGAGCGGTATTGCAGAGGAGTCAATGCTATT
GTTTACATGATAGATGCTGCAGATCGTGAAAAGATAGAAGCTTCCCGAAATGAGCTACATAATCTTCTAGATAAA
CCACAGTTACAAGGAATTCCAGTGCTAGTGCTTGGAAACAAGAGAGATCTTCCTAATGCCTTGGATGAGAAACAG
CTAATTGAAAAAATGAATCTGTCTGCTATTCAGGATAGAGAAATTTGCTGCTATTCAATTTCTTGCAAAGAAAAG
GATAATATAGATATCACACTTCAGTGGCTTATTCAGCATTCAAAATCTAGAAGAAGC**TGA**AGCATCTCTTGAAGT
CTTCCAGTCCTTCTTGGCTATAATCCTAGAATTATTGTCCGTTCCTCTGAAGTAATTCCCAGAATACGGTCCTTC
CTAAACCCCAGAAATTGCCTTTTTCAGAGTCTATTTCTCATGTGCACTGCTGAAGATGAATATCCCTAATCCTTC
ATAAAGAATCAGCTAGAGTTGTCATGATAAAGTCAGCACACACAAAAAGGCTTCTTACACATACCAAAAAAAATG
TCTTAAACCATGTGTAGAGCTTTAAAAACAGAAAAAAAACCCCATATACTTATGACCATCTTAAATCAAGAAAAT
TGCATATTTCCATTCTGGTCTTTCTGGGCCAGATTTTTATATTGGTTTTCAGTAAATGTCTATCTATAATATTTC
ATTATAGAGTCCAGTAGCTTAATACTGACACTGACTTGATACAGCACGAAGTTTCTAGTGCCACACACAGTATTT
AGAAAACCTTTAGGCGTGAATGACTCATGTGGGATATATGTAAACATAATGTTTATTTTATCTCACAAATGCATG
TGAAATGTATAATTACATCTTAGGAATCCAAAATGGTCTGCAGAGAGTGAGCGGAGGCACCAGATCAATGTTGGT
TCTTTGCACTGGTGAGATTCTGCCTGATGAATATTAAAGATATCCTGCTTTCTGAGAACTCTATCACCAGATGGC
AGTTGGGATATGGGAGGAACTAAAGCATCCTGTTTTGTATCTGTCCAGATCATTATTTCTGTCTCTTGTTTTTTC
TTCCTGGTTCAGGATACTTTTTTAAGGGGTTGAGAATTGAAGATTTTCCAAAAGCGTTCATGAATTTAGAGCATT
CCACCCAATATAATAAAACCTGTTAAGAATGTCAGTCTTTGTTCAAACATCTGTTTGTTCTATCTCCAGTCATTA
AATCAGTGCTGCTGCATGACACTCTTAACTCCTGACTTTTTATATCCAGTCATAAAGTTGACTTTCAGCACAAAA
GATACTTATAAACAAATAAAAAATTTTTATTTTTCTCTCTTACTGATGTAAGCTTTGGCACTCTTTTGACTGGTG
CCATTAGACATCTTGATTATTGTGACAACTCTAGACCTGCCTGCTTTATCTAATGTAATCATGCTCAATGTCTAC
AGGTTGTTTAATAATCAGTCACACAGAGAACTGAGGAACTGATGCTGTTTGTTTGCTTCTATGATACAGAGATGT
CTAAAAACTTCAAATGGACATGTTTTGTAGTTTAGCGACTTCCGTATACATAAAGGGACATATTAATACTGGTTC
ATTTGTAAATTATTATTCATATAGACCACTGTAGTAGATAAAACTCTATGGTACACCTGCTTATGTGTTGCCTCA
CACTGTGTGTGATTTTGTTTCTTTTGTTAAGCAGCACTTATGTAGACTGCATTTCCAAATGTGTTGAGCACTCGG
AGTGTAGTCAACAGTAAGTTCTTTTAATGAATATCAGTTTTAATTTATAGACTGCCATGGCCTTAAAAATATTCT
GTACAATATACTGCACTGTGTTGCACAGACACTACTTGCTTTTCTCCATTCATATTTTTATGAGTAGAATCTGGG
CTTTTAAATTTCTCTTCTTATTCTTTGAAGCATGTTGCATACTACCCTGGTGGGATGGATGGTTCTGTAAATGAA
GGGATATTTAAACTTGCTACTGTTGTTCAACACCATTAATGGTCAGTGTGAACCATTACAAAGAATGTGGCAACT
TGCTTGTGCCTAAAAGGAGGAATTGGAACTAGAATGTGTGACTCTGTGGGGACTGCATAGGTTTGTTAATTGACC
TATAGCTAAACCTTAATGTGTTTGTGTGTCTATACATTGCTTTCCGCATTTCAAGACATCCAGACGCTATTACCA
ACATTTTCCTGTGCATTAACCTCTGCATGTGAAAACTTTTAACAGTTACTGAACTATGTAAATATGTGAATTTTT
TTATTTAGGTGGATGCATTTTTTGTCTGTTTACTGCTCTTCTCAGCTTTATTCAATAAACTTGCATTTTAAGGGT
TGTATTGGCAATTTTAACTTAAAATGTGCATCATGATGGAAGGTGCAGACTTTTTTGGAAGTTTCCGAGAGGAGG
GTCTATAGACCATTTGTCAGAAATCAGATCAGCCCTCAAAGAATGGGGTCTGTGGGCTAGTTAAAATAGAAATAA
ACTTTTAAAATATCCACAG

FIGURE 4028

MLALISRLLDWFRSLFWKEEMELTLVGLQYSGKTTFVNVIASGQFSEDMIPTVGFNMRKVTKGNVTIKIWDIGGQ
PRFRSMWERYCRGVNAIVYMIDAADREKIEASRNELHNLLDKPQLQGIPVLVLGNKRDLPNALDEKQLIEKMNLS
AIQDREICCYSISCKEKDNIDITLQWLIQHSKSRRS

FIGURE 4029

GAGCGGCACAGACGAGATCTCGATCGAAGGCGAGATGGCGGACGTGCTAGATCTTCACGAGGCTGGGGGCGAAGA
TTTCGCCATGGATGAGGATGGGGACGAGAGCATTCACAAACTGAAAGAAAAAGCGAAGAAACGGAAGGGTCGCGG
CTTTGGCTCCGAGGGGTCCCGAGCGCGGATGCGTGAGGATTATGACAGCGTGGAGCAGGATGGCGATGAACCCGG
ACCACAACGCTCTGTTGAAGGCTGGATTCTCTTTGTAACTGGAGTCCATGAGGAAGCCACCGAAGAAGACATACA
CGACAAATTCGCAGAATATGGGGAAATTAAAAACATTCATCTCAACCTCGACAGGCGAACAGGATATCTGAAGGG
GTATACTCTAGTTGAATATGAAACATACAAGGAAGCCCAGGCTGCTATGGAGGGACTCAATGGCCAGGATTTGAT
GGGACAGCCCATCAGCGTTGACTGGTGTTTTGTTCGGGGTCCACCAAAAGGCAAGAGGAGAGGTGGCCGAAGACG
CAGCAGAAGTCCAGACCGGAGACGTCGCTGACAGGTCCTCTGTTGTCCAGGTGTTCTCTTCAAGATTCCATTTGA
CCATGCAGCCTTGGACAAATAGGACTGGGGTGGAACTTGCTGTGTTTATATTTAATCTCTTACCGTATATGCGTA
GTATTTGAGTTGCGAATAAATGTTCCATTTTTGTTTTCTAC

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FIGURE 4030

MADVLDLHEAGGEDFAMDEDGDESIHKLKEKAKKRKGRGFGSEGSRARMREDYDSVEQDGDEPGPQRSVEGWILF
VTGVHEEATEEDIHDKFAEYGEIKNIHLNLDRRTGYLKGYTLVEYETYKEAQAAMEGLNGQDLMGQPISVDWCFV
RGPPKGKRRGGRRRSRSPDRRRR

FIGURE 4031A

TGAGGCGCGGGAGGCCCGCGCCCCGCGGCTCGCTGTGCGTGGGAGGGCGCGAGCGAACGCGGGCGAGGAGCGGCC
GAGCCGCTGAAGAGGAGCTGGGCGCCGGCCGCCCGGCCGCGCTCGGCCCGCGGATCGCCTCCGCCCGGTCTTCGC
CGGCCCCGGCCCCTGGCGAG**ATG**CCGTGTGGGGAGGATTGGCTCAGCCACCCGCTGGGAATCGTGCAGGGATTCT
TCGCCCAAAATGGAGTTAATCCTGACTGGGAGAAGAAAGTAATTGAGTATTTTAAGGAAAAGCTGAAGGAAAATA
ATGCTCCTAAGTGGGTACCATCACTGAACGAAGTTCCCCTTCATTATTTGAAACCTAATAGTTTTGTGAAATTTC
GTTGCATGATTCAGGATATGTTTGACCCTGAGTTTTACATGGGAGTTTATGAAACGGTTAACCAAAACACAAAAG
CACATGTTCTTCATTTTGGAAAATATAGAGATGTAGCAGAGTGTGGGCCTCAACAAGAACTTGATTTAAACTCTC
CACGAAATACCACTTTGGAAAGACAGACTTTCTATTGTGTTCCGGTGCCTGGGGAATCTACGTGGGTAAAAGAAG
CCTATGTTAATGCAAACCAAGCTCGAGTCAGTCCCTCAACATCCTACACTCCTAGTCGCCACAAGAGGAGTTATG
AAGATGATGACGATATGGACCTACAGCCCAATAAGCAGAAAGACCAACATGCAGGTGCCAGACAAGCAGGGAGTG
TTGGTGGTCTTCAATGGTGTGGAGAGCCAAAACGTTTAGAAACTGAAGCTTCTACTGGGCAACAGCTGAACTCTC
TGAACTTGTCTTCTCCTTTTGATTTGAATTTTCCATTGCCAGGAGAGAAGGGCCCTGCATGCCTTGTGAAGGTTT
ATGAAGATTGGGATTGTTTCAAAGTAAATGACATTCTTGAGCTATATGGCATACTGTCTGTGGATCCTGTGCTGA
GTATACTGAATAATGATGAAAGGGATGCCTCTGCACTGCTGGATCCGATGGAGTGCACAGACACAGCAGAGGAGC
AGAGAGTACACAGTCCTCCTGCTTCATTAGTGCCGAGAATTCATGTGATCTTAGCCCAGAAGTTGCAACACATCA
ACCCATTATTGCCTGCCTGCCTTAACAAAGAGGAGAGCAAAACCTGTAAGTTTGTTTCAAGTTTCATGTCCGAAT
TGTCTCCAGTCAGAGCAGAACTTCTTGGGTTCCTTACTCATGCCCTTCTGGGGGATAGTTTGGCTGCTGAATACC
TTATATTACATCTCATCTCCACAGTATATACAAGAAGAGATGTCCTTCCACTAGGAAAATTTACAGTTAACTTGA
GTGGTTGCCCACGGAATAGTACCTTCACAGAACACTTGTATCGAATTATTCAACATCTTGTTCCAGCATCTTTTC
GTCTGCAGATGACTATAGAGAACATGAACCATTTGAAATTCATTCCCCACAAAGACTACACAGCCAATCGCTTGG
TCAGTGGGCTCCTCCAGCTGCCCAGCAATACTTCCCTTGTAATCGATGAGACTCTCCTGGAACAGGGGCAGCTGG
ATACCCCAGGTGTTCATAATGTGACAGCCCTGAGCAACCTCATAACGTGGCAGAAGGTGGATTATGACTTCAGCT
ACCATCAGATGGAATTCCCCTGCAATATTAACGTTTTCATTACTTCGGAGGGGAGGTCACTCCTCCCGGCAGACT
GCCAGATTCACTTACAGCCCCAGCTAATTCCACCAAACATGGAGGAGTACATGAACAGCCTTCTCTCAGCGGTGC
TGCCTTCCGTGCTGAACAAATTCCGCATTTATCTAACTCTTTTGAGATTCTTGGAATATAGCATATCTGATGAAA
TAACCAAGGCAGTTGAAGATGACTTTGTGGAAATGCGGAAGAACGACCCTCAGAGCATCACTGCTGATGATCTTC
ACCAGCTGCTCGTGGTGGCTCGGTGTCTGTCTCTCAGTGCTGGTCAGACAACGCTGTCAAGAGAACGATGGCTGA
GAGCAAAGCAGCTAGAGTCTTTAAGAAGAACGAGGCTTCAGCAGCAAAAATGTGTGAATGGAAATGAACTT**TAA**A
GATGTAATACCTATGAAGAGTAATGGGCAAACTGTAGCCACATAATTGTAAAATTCAGATATTCATTTATACCAC
ATTGTTTTATAGGTAATTTCTATCACAAACCAGTGACATTTCCTGAAATCAAGCCTGGTAACACCTGATGTTTAT
ATGATATTCAGTAAGGACTTTTACCTTACTGATTTCATGGAGCTTTTGAAGTTTGTTTTATAATAATTATATAAA
TTAGTAATGATGTAAAAAAAGTATTTGATATTAAAAGTTTAATATTGATAATGTTGCTGATTGTACCATTTCCTT
AGCTTCAGCTGAGTCATAGGCCAGACTGTTGAAATGCTGAAATGAAGAAGGTTGTTGCAGTTTCAAAGTCAGAGG
AATCGTGCTTCGGATTTCTTATGTTTTCTAGTTCTCTGTTTTTCCAGTTCACAGTGGGTTGGGGTGCATTCAGTA
GTCCATCTTTGGGGAACGGAGGCGTACTTGCCATTGATTCACATGACTACATGAAATTCTGTACTGTCATTTCCC
AGATGTTTGGCCACAGAAACTTTTTCCCACTTAACATTTGTTAACAGCCTGCAAAACTAAACTTGTACATGGCAG
TGGTTCCCAGACTTTTGTATTTTATGGACCGGTAGTAATATTTCCAAAAATCTGGGGTACTATAAGGTTGCCAAT
TTACCTTGCCAAGTAATCCGAATAAATCACTGTATTATCACCATTTTTTTCATAAAAGGAAAGGACAATCTATCT
CTGAATAAGAGGAGTCCTTTAAACGGAATGAATGTGGCTTTTGGGGGCAAAAGAAACCAAGACACTACATTGTCT
TTATTTTCTCCTATCCCAGTGCATTTGAGAACCATGCATAAGGGAATGCTGTGCTACAAAGCTGTGCCCAAATAT
GAAAACAAAATAGGAAACTTAAAAAGCAATACCCCCTTTAGAAAGTTTTTATTTTCTTAAATGTCATTGAGTTGC
TTTGATTCTATTGGATTTTTGGCATTTTTTATGGGATCATCAGTTGGTTCCAAGTATGTTAGATCAGCTAACATC
TGCTACTCCAGTAACAGCCTCGTACAACTGCAGGTAGGTTTTCTCCAGACCAATTAGTTTTAATAGAGCAAACTA
ACAACAGACTGTAGTAGCATGGTTATGGCAACCAGAATCTTCAGAAAGGTTAGGACATTACTTTTTAAGCTGTCA
GTGGTATCAAATAACTTACCTAGTTGGAGGCAGATAAAGGATCCCTTACGTTTTTTCCTATAAGGCCTAAATTGA
AATTGTTAACCAAGGAAACAGGGTCAGCCTTGAAAAATCAAGGAATTCATTGTACCTAATAACTGAAGTAAAAAT
AACTAGTTGTTCAACTTTTCCTAAACTCAAATCTATTTTTATAAACAAATGTAAATAATGTTTATATTAGAGTTG
AACTGGTTTTCATTTTTATAACTGGTAGACTAGACCTTCCTTAAACTTTTAGAAATAAAATGAAGGCTTCACTGG

FIGURE 4031B

ATTTGTGAGGATAAAATACATTTTCTTTAATTGTCCTAGAGCAAAGTACATTAGTCACCATGTGTTTTTTGTGCC
AATGTAACTTGTAATTTACCAAAGAAAAATACATACATTGCTTGGTCTTGCAGAAAAGTTCCCTTGAAAGAACCT
TTCCAATAAATAAAACGTCCCAAATTAGCAGTACCTTGGGCTGTTTTTCATGAGTAAGAAGATTCACCATCCCAT
GTGATCTGTGTGGAAAAAGACCATGTCCTCTTGGTGGAAGACATGAGAGAGCTGAACTGAAGTGGAGGAGGTGGT
GCAAGAGGGACCTTCCTGCTCAAGGCCCGCCCAGGCAGCGGAATAGAGTGCAGTGCTTGGCTGCAGAAACCCTTT
GTCCCTCACCTATATATACACGGACAGTCAAGTTTGTTGCTCTAACGTAAGGCACAGCGTTAATCCTGTATGGCC
AGGAAACTGAGTAGACTCCTGTGTAACCCTGTTTGGAACTTTGCCTTCTTAAAATGATTTTTC

FIGURE 4032

MPCGEDWLSHPLGIVQGFFAQNGVNPDWEKKVIEYFKEKLKENNAPKWVPSLNEVPLHYLKPNSFVKFRCMIQDM
FDPEFYMGVYETVNQNTKAHVLHFGKYRDVAECGPQQELDLNSPRNTTLERQTFYCVPVPGESTWVKEAYVNANQ
ARVSPSTSYTPSRHKRSYEDDDDMDLQPNKQKDQHAGARQAGSVGGLQWCGEPKRLETEASTGQQLNSLNLSSPF
DLNFPLPGEKGPACLVKVYEDWDCFKVNDILELYGILSVDPVLSILNNDERDASALLDPMECTDTAEEQRVHSPP
ASLVPRIHVILAQKLQHINPLLPACLNKEESKTCKFVSSFMSELSPVRAELLGFLTHALLGDSLAAEYLILHLIS
TVYTRRDVLPLGKFTVNLSGCPRNSTFTEHLYRIIQHLVPASFRLQMTIENMNHLKFIPHKDYTANRLVSGLLQL
PSNTSLVIDETLLEQGQLDTPGVHNVTALSNLITWQKVDYDFSYHQMEFPCNINVFITSEGRSLLPADCQIHLQP
QLIPPNMEEYMNSLLSAVLPSVLNKFRIYLTLLRFLEYSISDEITKAVEDDFVEMRKNDPQSITADDLHQLLVVA
RCLSLSAGQTTLSRERWLRAKQLESLRRTRLQQQKCVNGNEL

FIGURE 4033A

AAAGATCTTTTTTTTTTTTTTTTCTTTTTTTTTCGGCGGAGATCCTCGTTGGGGCTGGGAAACTCCTGCAAAACT
CGAGACCAGGAAGCCAGCCCGCACCCCAACCCCCACCAAAGCCACCTACTCTTCTTCTGTGGGAGGCCAGTCCAC
ATCCGCTCTCACCCGAGAGAGATATTCAGCTGGATCCAAAGTGACTGATGAAGGGAAGGAAATCATGTCAAGCGA
AGCCTTGAAAAAGCTGCCCTGAGACGGTGTCCCGCCGAAAGAATGTTGGCTCAATTAAGAAACATCAGGGAGATA
AATTCAACCCAGTGTGTCTAAAA**ATG**ACTACAAAACGAAGTTTGTTTGTGCGGTTGGTACCATGTCGCTGTCTAC
GAGGGGAAGAGGAGACTGTCACTACTCTTGATTATTCTCATTGCAGCTTAGAACAAGTTCCGAAAGAGATTTTTA
CTTTTGAAAAAACCTTGGAGGAACTCTATTTAGATGCTAATCAGATTGAAGAGCTTCCAAAGCAACTTTTTAACT
GTCAGTCTTTACACAAGCTGAGTTTGCCAGACAATGATTTAACAACGTTACCAGCATCCATTGCAAACCTTATTA
ATCTCAGGGAACTGGATGTCAGCAAGAATGGAATACAGGAGTTTCCAGAAAATATAAAAAATTGTAAAGTTTTGA
CAATTGTGGAGGCCAGTGTAAACCCTATTTCCAAGCTCCCTGATGGATTTTCTCAGCTGTTAAACCTAACCCAGT
TGTATCTGAATGATGCTTTTCTTGAGTTCTTGCCAGCAAATTTTGGCAGATTAACTAAACTCCAAATATTAGAGC
TTAGAGAAAACCAGTTAAAAATGTTGCCTAAAACTATGAATAGACTGACCCAGCTGGAAAGATTGGATTTGGGAA
GTAACGAATTCACGGAAGTGCCTGAAGTACTTGAGCAACTAAGTGGATTGAAAGAGTTTTGGATGGATGCTAATA
GACTGACTTTTATTCCAGGGTTTATTGGTAGTTTGAAACAGCTCACATATTTGGATGTTTCTAAAAATAATATTG
AAATGGTTGAAGAAGGAATTTCAACATGTGAAAACCTTCAAGACCTCCTATTATCAAGCAATTCACTTCAGCAGC
TTCCTGAGACTATTGGTTCGTTGAAGAATATAACAACGCTTAAAATAGATGAAAACCAGTTAATGTATCTGCCAG
ACTCTATAGGAGGGTTAATATCAGTAGAAGAACTGGATTGTAGTTTCAATGAGGTTGAAGCTTTGCCTTCATCTA
TTGGGCAGCTTACTAACTTAAGAACTTTTGCTGCTGATCATAATTACTTACAGCAGTTGCCCCCAGAGATTGGAA
GCTGGAAAAATATAACTGTGCTGTTTCTCCATTCCAATAAACTTGAGACACTTCCAGAGGAAATGGGTGATATGC
AAAAATTAAAAGTCATTAATTTAAGTGATAATAGATTAAAGAATTTACCCTTTAGCTTTACAAAGCTACAGCAAT
TGACAGCTATGTGGCTCTCAGATAATCAGTCCAAACCCCTGATACCTCTTCAAAAAGAAACTGATTCAGAGACCC
AGAAAATGGTGCTTACCAACTACATGTTCCCTCAACAGCCAAGGACTGAGGATGTTATGTTTATATCAGATAATG
AAAGTTTTAACCCTTCATTGTGGGAGGAACAGAGGAAACAGCGGGCTCAAGTTGCATTTGAATGTGATGAAGACA
AAGATGAAAGGGAGGCACCTCCCAGGGAGGGAAATTTAAAAAGATATCCAACACCATACCCAGATGAGCTTAAGA
ATATGGTCAAAACTGTTCAAACCATTGTACATAGATTAAAAGATGAAGAGACCAATGAAGACTCAGGAAGAGATT
TGAAACCACATGAAGATCAACAAGATATAAATAAAGATGTGGGTGTGAAGACCTCAGAAAGTACTACTACAGTAA
AAAGCAAAGTTGATGAAAGAGAAAAATATATGATAGGAAACTCTGTACAGAAGATCAGTGAACCTGAAGCTGAGA
TTAGTCCTGGGAGTTTACCAGTGACTGCAAATATGAAAGCCTCTGAGAACTTGAAGCATATTGTTAACCATGATG
ATGTTTTTGAGGAATCTGAAGAACTTTCTTCTGATGAAGAGATGAAAATGGCGGAGATGCGACCACCATTAATTG
AAACCTCTATTAACCAGCCAAAAGTCGTAGCACTTAGTAATAACAAAAAAGATGATACAAAGGAAACAGATTCTT
TATCAGATGAAGTTACACACAATAGCAATCAGAATAACAGCAATTGTTCTTCTCCATCTCGGATGTCTGATTCAG
TTTCTCTTAATACTGATAGTAGTCAAGACACCTCACTCTGCTCTCCAGTGAAACAAACTCATATTGATATTAATT
CCAAAATCAGGCAAGAAGATGAAAATTTTAACAGCCTTTTACAAAATGGAGATATTTTAAACAGTTCAACAGAGG
AAAAGTTCAAAGCTCATGATAAAAAAGATTTTAACTTACCTGAATATGATTTGAATGTTGAAGAGCGATTAGTTC
TAATTGAGAAAAGTGTTGACTCAACAGCCACAGCTGATGACACTCACAAATTAGATCATATCAATATGAATCTTA
ATAAACTTATAACTAATGATACATTTCAACCAGAGATCATGGAAAGATCAAAAACACAGGATATTGTGCTTGGAA
CAAGCTTTTTAAGCATTAATTCTAAAGAGGAAACTGAGCACTTGGAAAATGGAAACAAGTATCCTAATTTGGAAT
CCGTAAATAAGGTAAATGGACATTCTGAGGAAACTTCCCAGTCTCCTAATAGGACTGAACCACATGACAGTGATT
GTTCTGTTGACTTAGGTATTTCCAAAAGCACTGAAGATCTCTCCCCTCAGAAAAGTGGTCCAGTTGGATCTGTTG
TGAAATCTCATAGCATAACTAATATGGAGATTGGAGGGCTAAAAATCTATGATATTCTTAGTGATAATGGACCTC
AGCAGCCAAGTACAACCGTTAAAATCACATCTGCTGTTGATGGAAAAAATATAGTCAGGAGCAAGTCTGCCACAC
TGTTGTATGATCAACCATTGCAGGTATTTACTGGTTCTTCCTCATCTTCTGATTTAATATCAGGAACAAAGGCAA
TTTTCAAGTTTGATTCAAATCATAATCCCGAAGAGCCAAATATAATAAGAGGCCCCACAAGTGGCCCACAATCTG
CACCTCAAATATATGGTCCTCCACAGTATAATATCCAATACAGTAGCAGTGCTGCAGTCAAAGACACTTTGTGGC
ACTCCAAACAAAATCCCCAAATAGACCATGCCAGTTTTCCTCCTCAGCTCCTTCCTAGATCAGAGAGCACAGAAA
ATCAAAGTTATGCTAAACATTCTGCCAATATGAATTTCTCTAATCATAACAATGTTCGAGCTAATACTGCATACC
ATTTACATCAGAGACTTGGCCCAGCAAGACATGGGGAAATGTGGGCCATCTCACCAAACGACCGACTTATTCCTG
CAGTAACTCGAAGTACAATCCAGCGACAAAGTAGTGTGTCCTCCACAGCCTCTGTAAATCTTGGTGATCCAGGCT

FIGURE 4033B

CTACAAGGCGGGCTCAGATTCCTGAAGGAGATTATTTATCATACAGAGAGTTCCACTCAGCGGGAAGAACTCCTC
CAATGATGCCAGGATCACAGAGACCCCTTTCTGCACGAACATACAGCATAGATGGTCCAAATGCATCAAGACCTC
AGAGTGCTCGACCCTCTATTAATGAAATACCAGAGAGAACTATGTCAGTTAGTGATTTCAATTATTCACGGACTA
GTCCTTCAAAAAGACCAAATGCAAGGGTTGGTTCTGAGCATTCTTTATTAGATCCTCCAGGAAAAAGTAAAGTTC
CTCGTGACTGGAGAGAACAAGTACTTCGACATATTGAAGCCAAAAAGTTAGAAAAGATGCCTTTGAGTAATGGAC
AGATGGGCCAGCCTCTCAGGCCTCAGGCAAATTATAGTCAAATACATCACCCCCCTCAGGCATCTGTGGCAAGGC
ATCCCTCTAGAGAACAACTAATTGATTACTTGATGCTGAAAGTGGCCCACCAGCCTCCATATACACAGCCCCATT
GTTCTCCTAGACAAGGCCATGAACTGGCAAAACAAGAGATTCGAGTGAGGGTTGAAAAGGATCCAGAACTTGGAT
TTAGCATATCAGGTGGTGTCGGGGGTAGAGGAAACCCATTCAGACCTGATGATGATGGTATATTTGTAACAAGGG
TACAACCTGAAGGACCAGCATCAAAATTACTGCAGCCAGGTGATAAAATTATTCAGGCTAATGGCTACAGTTTTA
TAAATATTGAACATGGACAAGCAGTGTCCTTGCTAAAAACTTTCCAGAATACAGTTGAACTCATCATTGTACGAG
AAGTTTCCTCATAAGCACTGTGGACAAAAAAAAGCGGGGAAGACAGCAAGATTTATTGGAAGATACTTACAGGGGA
AATTAATATTTTGACTATTTTTATATATAAAGAAGAACTCAAAAAATTATGTTCAAATTTGTACATTAATGAAAT
AATGGATAAAGGAGACTGTTGAATTCATACCATATAAAACTTGTTAGGTTTTTAAACATAGCAATCAAGGCTACA
AAAACAAACCTGTGTTGTTTTTGTATAGATTGTAGGTTTATTTTTGGATTTCATATACATGACTGAACTGTGTGC
AAGGCAATAGTTAGCCTTGATTTTAGCCCAGAGACAGATGGCAGAGCTATCTCTCTCATAGCTTTTATGCCCTTA
TTTTTATTCAACTGGTATTAATGTTTTTCTCCTGAAACTACTTTTTTTGATGTGGGCAAGAGATTTGAAGTGTTG
GCTTTTGCTATGTGCATATTGAATTGAAGAGTGAGTAGGTGAAGGTGGTGCTGGTGGGTTCACTTTCCAAGGCCA
GACTAAAACAGTTATTTTCTATAAAAATCTGGAAGCAAAGAATGGGGATGGGGAGAGCTACGTGGTAGTATGTTT
TTATTAGGAGAATAATGCAATAAAATATGTAATGTCTTTTTTATAAAGCAAAAAAGACAATAATTGCATTTATGA
GCTCGGCAGGATCTGTTCTTGTCATAGCCATTGACTATACATTTGCTACTGGTGATTCAGTTTTTAATTTTTTAG
TCACAGGAAATTTTTAACTCTACTGTAGATGCATGTCCATGCATTTTCTGTGTTATGGAAATCCACTGATTTTTT
TTTTTTTTTCAAATGGTGGTACTTGCAATCTGTTTTATAATTAGTGCTCCATTTAAATCTAATTTATAATTTTTA
TTTTAAGCAGCAAATGAAACAAAAATGGCCAGTTTTAAGATTGTGTTGCCTGTAACACAAAATGTTACGAAGGTT
TAGGAAAGCCTCTTTGATTTTTGTTTGGCCTTGCATTGGCCCTTGGTAAAGTAAAAGGAAACAGTACACTTGGAG
CTAGGAAACCAAAGCAAGCTTTGTGAAACTGGCACAGTGATAGAGAATTGCTGTGGAGAGTTATAGAGCAAAGGG
ATGGGTCCTTGAGGCCTGCCAGTGTGTAAAGGTGTTCAAATAAAGGGCTGTTTCTACAGGTAACATTAAATGTGA
ACTCAACACTTCCAGAGTCTTTAAAGGGTTTCTATGTGTATCAGTGTAATAGTGTTTTACCACCAACTGCCTTTC
TTTGTTCCTAGTTACTGTAACAAATATTTGATGATAGAGGTTTATTAATTTTGTTTATCCAGACCATTAATTTTA
TTTGTTTTTGTCTATGTAATCAAATAAAATTTGAGTAACATGTAATGGTAAGGATTAATGCATGGTTATTTGGAC
CAGAAAAAAGTGCCATAGAAGACCAATAACTGTTTAGTTGAGGCTAGTCTGGAACCTTTCATTAGAGCAATATTT
GGTTATTGCACTTCATTTTTATTTACTAAGAAATGCAATTTGGGAATTTTTAATCTGTTATGCTTTGTTTATCAA
CCTTGATTTTAATTAAGACTTTTATAAGACTAGCTTAAAACACCAACCAACATTATTTTTGCAAAAGTGAGTTGG
ACTCACTTTCCATTCTTGCTAGTCAGAGTAAGTAGGCAGCACTTTTAAAAATATGTGAACTCAAATATTGCACTT
CTTTCAAGATGTTATCAATTGGTTATTGTACTGTATAGTTTTAATAATTTTGATTGAAACCCTTTAACAACTCTT
TGTAAATTTTAACTCATTTTAGTTGATTTTCAGTACTATTTACATAGGAATTGATTTTTATGGATATAGTAGAAG
AAATGTGCTGTATTTTGATAAAATTCACTTATTGTATGTGTGTTGTAATCTAAAAAAAAAAAGAATGACAAACAG
CTTCTTTAAGACAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4034

MTTKRSLFVRLVPCRCLRGEEETVTTLDYSHCSLEQVPKEIFTFEKTLEELYLDANQIEELPKQLFNCQSLHKLS
LPDNDLTTLPASIANLINLRELDVSKNGIQEFPENIKNCKVLTIVEASVNPISKLPDGFSQLLNLTQLYLNDAFL
EFLPANFGRLTKLQILELRENQLKMLPKTMNRLTQLERLDLGSNEFTEVPEVLEQLSGLKEFWMDANRLTFIPGF
IGSLKQLTYLDVSKNNIEMVEEGISTCENLQDLLLSSNSLQQLPETIGSLKNITTLKIDENQLMYLPDSIGGLIS
VEELDCSFNEVEALPSSIGQLTNLRTFAADHNYLQQLPPEIGSWKNITVLFLHSNKLETLPEEMGDMQKLKVINL
SDNRLKNLPFSFTKLQQLTAMWLSDNQSKPLIPLQKETDSETQKMVLTNYMFPQQPRTEDVMFISDNESFNPSLW
EEQRKQRAQVAFECDEDKDEREAPPREGNLKRYPTPYPDELKNMVKTVQTIVHRLKDEETNEDSGRDLKPHEDQQ
DINKDVGVKTSESTTTVKSKVDEREKYMIGNSVQKISEPEAEISPGSLPVTANMKASENLKHIVNHDDVFEESEE
LSSDEEMKMAEMRPPLIETSINQPKVVALSNNKKDDTKETDSLSDEVTHNSNQNNSNCSSPSRMSDSVSLNTDSS
QDTSLCSPVKQTHIDINSKIRQEDENFNSLLQNGDILNSSTEEKFKAHDKKDFNLPEYDLNVEERLVLIEKSVDS
TATADDTHKLDHINMNLNKLITNDTFQPEIMERSKTQDIVLGTSFLSINSKEETEHLENGNKYPNLESVNKVNGH
SEETSQSPNRTEPHDSDCSVDLGISKSTEDLSPQKSGPVGSVVKSHSITNMEIGGLKIYDILSDNGPQQPSTTVK
ITSAVDGKNIVRSKSATLLYDQPLQVFTGSSSSSDLISGTKAIFKFDSNHNPEEPNIIRGPTSGPQSAPQIYGPP
QYNIQYSSSAAVKDTLWHSKQNPQIDHASFPPQLLPRSESTENQSYAKHSANMNFSNHNNVRANTAYHLHQRLGP
ARHGEMWAISPNDRLIPAVTRSTIQRQSSVSSTASVNLGDPGSTRRAQIPEGDYLSYREFHSAGRTPPMMPGSQR
PLSARTYSIDGPNASRPQSARPSINEIPERTMSVSDFNYSRTSPSKRPNARVGSEHSLLDPPGKSKVPRDWREQV
LRHIEAKKLEKMPLSNGQMGQPLRPQANYSQIHHPPQASVARHPSREQLIDYLMLKVAHQPPYTQPHCSPRQGHE
LAKQEIRVRVEKDPELGFSISGGVGGRGNPFRPDDDGIFVTRVQPEGPASKLLQPGDKIIQANGYSFINIEHGQA
VSLLKTFQNTVELIIVREVSS

FIGURE 4035

TGTTCTTGAGCCCAGCTTCTTCTCGTCTCCCACCCCAGCTTCCCGGCATTGGAAGAAGGGACCGTCCTCTTCCTT
GTCTTGGCCACCCAAATCCTGGTATCGAAAGGGTTGAACGGACCGGAAGTGTGCAGCAGCGACGGGTCCCCAGCT
AATCGACGCCGGAAGTAGCAATTACTAGACAAGCATTCCGCCGCCGGCTTCGCTATGGCGGCAATTCCCCCAGAT
TCCTGGCAGCCACCCAACGTTTACTTGGAGACCAGCATGGGAATCATTGTGCTGGAGCTGTACTGGAAGCATGCT
CCAAAGACCTGTAAGAACTTTGCTGAGTTGGCTCGTCGAGGTTACTACAATGGCACAAAATTCCACAGAATTATC
AAAGACTTCATGATCCAAGGAGGTGACCCAACAGGGACAGGTCGAGGTGGTGCATCTATCTATGGCAAACAGTTT
GAAGATGAACTTCATCCAGACTTGAAATTCACGGGGGCTGGAATTCTCGCAATGGCCAATGCGGGGCCAGATACC
AATGGCAGCCAGTTCTTTGTGACCCTCGCCCCCACCCAGTGGCTTGACGGCAAACACACCATTTTTGGCCGAGTG
TGTCAGGGCATAGGAATGGTGAATCGCGTGGGAATGGTAGAAACAAACTCCCAGGACCGCCCTGTGGACGACGTG
AAGATCATTAAGGCATACCCTTCTGGGTAGACTTGCTACCCTCTTGAGCAGCTCTTCTGAGATGGCCCCAGTGAA
CCAGCTTCTAGATGACATAGAATGACATGTAATGCTAAATTTCATTTTGGCTTTGCAAGTCATGAAGCTTAGGAG
GCCTGGCATCTTGGGTGAGTTAGAGATGGAAGTACATTTTAATAGGATGCTTCTTTTCTCTTCCCCCAGTGCCTA
GGTTGCCAGAGCATTTGCACAAATGCCCCTGTTTATCAATAGGTGACTACTTACTACACATGAACCATAATGCTG
CTTCTTGTGCATGTCTGCTCTGATATACGTCGAACAATGTAGCAGCCACTGTCATTTCTCAGTGGTTTTGCCTAA
CCAAACTTCTTCCTAAGGAGATTTATATTCTGGCCTACACAGCAGTCCTTGATGGCTGACAGCCACAGAATTCCA
AACCAAGTAGTGTCTGTCAGCCCTCTTAACTCTGTGCACGCCCTATTTCAGTCTTTTACATTTGTTCTTCTAGGG
AATGTATGCATCTCTATATATATTTTCCCTCTCAAAACCAGAACATCAACAGTGCTGTTTCTGACACTTCAGACA
TCCCACGCAAAGCCACATTGAATTTTTGCCAAATGAAAAACACATCCAACAATCAAGTTTCTAAGAAGGTGTCAA
GTGGGGAATAATAATAATGTATAATAATCAAGAAATTAGTTTATTAAAAGGAAGCAGAAGCATTGACCATTTTTT
CCCAGAGAAGAGGAGAAATCTGTAGTGAGCAAAGGACAGACCATGAATCCTCCTTGAGAAGTAGTACTCTCAGAA
AGGAGAAGCGCCACTCAAGTTCTTTTAACCCAAGACTTTAGAGAAATTAGGTCCAAGATTTTTATATGTTCAGTT
GTTTATGTATAAAAATAACTTTCTGGATTTTGTGGGGAGGAGCAGGAGAGGAAGGAAGTTAATACCTATGTAATA
CATAGAAACTTCCACAATAAAATGCCATTGATGGTTGAAAAAAAAAAAAAAAAAA

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FIGURE 4036

MAAIPPDSWQPPNVYLETSMGIIVLELYWKHAPKTCKNFAELARRGYYNGTKFHRIIKDFMIQGGDPTGTGRGGA
SIYGKQFEDELHPDLKFTGAGILAMANAGPDTNGSQFFVTLAPTQWLDGKHTIFGRVCQGIGMVNRVGMVETNSQ
DRPVDDVKIIKAYPSG

FIGURE 4037

CTCGGCTTCTCCAGCTTCGGTAGGAGAGGATCCGGCGCCGAATCACTGACTGGCACAGGTGTTGGGAAAATGATC
CACAGTCTATTTCTCATAAACTGTTCCGGTGACATATTTCTAGAGAAGCACTGGAAGAGCGTTGTGAGCCAGTCT
GTCTGTGATTATTTCTTTGAAGCTCAAGAGAAAGCTGCTGATGTTGAAAATGTACCACCTGTCATTTCAACACCT
CACCACTACCTCATCAGTATCTACCGGGATAAGCTCTTCTTTGTATCTGTCATACAGACCGAAGTGCCACCTCTC
TTTGTAATTGAGTTCCTACATCGAGTTGCTGACACTTTTCAGGACTACTTTGGTGAGTGTTCAGAGGCTGCAATT
AAGGATAATGTGGTCATAGTATATGAACTCTTAGAAGAAATGTTAGACAATGGATTTCCACTGGCTACCGAATCT
AACATTTTGAAAGAATTGATTAAACCACCAACAATTCTACGCTCTGTTGTCAACTCTATTACAGGCAGTAGTAAT
GTTGGGGACACACTCCCCACCGGGCAGCTGTCCAACATACCATGGCGTCGGGCAGGGGTAAAGTACACAAACAAT
GAAGCCTATTTTGATGTTGTTGAAGAAATAGACGCAATTATAGATAAATCAGGATCTACAGTCTTTGCAGAAATT
CAGGGGGTCATTGATGCTTGCATTAAACTATCTGGAATGCCTGATCTCTCCCTTTCTTTCATGAACCCTAGGCTT
CTGGATGATGTCAGCTTTCACCCCTGCATCCGGTTCAAGCGTTGGGAATCTGAAAGAGTTTTGTCATTTATTCCT
CCAGATGGAAATTTCCGACTCATATCATACCGTGTCAGCTCACAAAATCTAGTGGCAATACCAGTGTATGTGAAA
CATAGTATCAGCTTTAAGGAGAACAGTTCTTGCGGCAGATTTGATATAACAATTGGACCAAAGCAGAATATGGGG
AAAACTATTGAAGGAATTACAGTGACAGTTCACATGCCAAAAGTTGTGCTGAACATGAACCTGACACCCACACAA
GGCAGCTATACATTTGATCCAGTCACCAAGGTACTAACATGGGATGTGGGAAAAATTACTGCACAAAAGCTCCCA
AGTCTTAAAGGACTGGTAAATTTACAGTCTGGAGCCCCCAAACCAGAAGAGAATCCGAGCCTCAACATACAGTTT
AAGATCCAGCAGCTTGCTATTTCAGGCTTAAAAGTAAACCGTTTGGACATGTATGGGGAGAAATATAAGCCATTT
AAAGGAGTCAAATACGTCACGAAAGCTGGAAAGTTCCAAGTGAGGACATGAGAAGAGGCCAAAATTCCTCAGGAC
CAGTTTGTTTTCCAAGTGTCATTACGATGTATCACTATTAGGTACCAAGTGAGTGGGAATACATATTCTAGTTAA
AGCATTTGTGTCTAGCTACACACCGCTAACAAAGTTACTTAGTTATCAATGTAGGATTCTTAAGGAGCTTTAAGC
TAAGGAAACCTTTTAGTGACTTAGCTTATTTTGTATCTTTTCACTTAGGAAGATTTTGGAGGTGATTTTTTTCCA
TAGGAGGATACCATCTGGCGGCTGCACATTGTAACAGTAAAGGCAGAAAGCTGTAGTGATAACCTCTCTCCTAAA
AGAGTTAACTGGTCTCATCCAGCAGAAGCTATCTTAAATCTGTGATGTGTCAGGTGCAGCCAAATATCACACCTT
CTGATCTTAGCCATCCCAAACCAGTATCTGTCCCAAGAGAGGAAATTCCCCCCACCCCCAGAAGTTTACAGAAAA
CTGCCTCTTCAAGTGTTTGCCTTATTCAGCTTTTCACTTGTGCCATTAAGCAAGCACTGTAGCAAAAGCCACTTC
CACATGGCCCTGGCAGGGAGCACTGCTGCTCCATGCTCCATTCTCACTGTACTTGGTATTGTATTTTTTATAAAT
AAGATTTTTATGTAAAGCTTAGAATTTGATTTACAGGGACCTTGCTGCAGTAAATACCATCTCAATTTTGTGCCA
CTGGTTCAGCTGTTAGCACAGTAAAAAAATCATTTGTATCAAAGGGGCAAATGCTTTATTAAGGTAGTAAAAGGG
AACATTACTTCTGCTTTTAGGAAGTTACTGCAAGCACAAGCATTTGTGCTTTTAAGCAAATTAAAGTAGTAAAAG
AAAAACTTAAGTGAAACCTTTGCCATCTTCATGTTTTATAATATAAAGCTTACCCAACACCAGTTAAGCCATGGT
TAACCTAAATGCCTCATGCCCCAGTTCAGCAAAAGGAGGAAAATGTGCCTGCCTCACAGTCATCAGTCTTTTTAA
ATCTTTTTTGTTGTTGTTCTTAAGGGTTTGAATTTGTCTGCATTCCTTGTCTTTAGGGGAAATTCCCTTTTCATA
TTGTGTGCTTCCCAAAGCTATAGTCATAGATTTCTTCCAGAAACTATTGTCATAATTGTCACTGGAGTGCTTAAA
TATACGTACTATACTGACAAAATACATGGAAGTGAGTTATAATGAGGCAGAAACAAAATCCTCGGTAACATTGAT
GATACTCTACCGATCACCGTGGTTTTGGAAAGTCAGTCAACAGTTGTATTATTGCACTCAATTTCATTGTGACAT
TTTATTTAACTTCTTCATCTTGGTGGTCCTTGCCCAGTTATTTTGCCTCATTAGACATCAAGAAATGGAGAAAGA
CTGAAAGTTAATATCTTAAGTGCTTGTTCTTCATGTTTCCTTCTTGTTATTTATGCTATTCTCTTTGTGGCTCCA
TTCTTCTTTCAATCTTCTCAGCTTATAACCGTCTTTCCCTTATGCTAAGGATAGCCCTTACACTCATCCCATCTA
TGCTGTCAAGGGCTGCTGGTTGGTGCTGGTACAAGGAGCCCACTCAGCAGTTTTCTTACCTTTGCCTGCCCTGCC
TTTCATGGAATAAGAAAGGCAACGTTTTGCAGCTTCCAAATTTCTGAAGAAACTAATCTCAGATTGGCAGTTAAA
GTCAAAATGTTGCCAAATATTTATTCCTTTTGCCTAAGTTTGGCTACCCGGTTCAATTGCTTTTTATTTTTAATG
TCTTGACTCTTCAGAGTTCGTACCTCAAAAGAACAATGAGAACATTTGCTTTGCTTTCTGCTGAATCCCTAATCT
CAACAATCTATACCTGGACTGTCCAGTTCTCCTCCTGTGCTATCTTCTCTTCTATCCAAGTAGAATGTATGCCAG
GAGCTCCTTCCCTCTAGCAATTTCTACTAAAATGTCCAAGTAGAATGTTTCCTTTTACAATCAAATTACTGTATT
TATTAATTTGCTAGAATCCAGTAAATCATTTTGGTAGCTCTGGCTGTGCTATCAATAAAAAGATGAAAGCAAAAA
AAAAAAAAAAAAAAA

FIGURE 4038

MIHSLFLINCSGDIFLEKHWKSVVSQSVCDYFFEAQEKAADVENVPPVISTPHHYLISIYRDKLFFVSVIQTEVP
PLFVIEFLHRVADTFQDYFGECSEAAIKDNVVIVYELLEEMLDNGFPLATESNILKELIKPPTILRSVVNSITGS
SNVGDTLPTGQLSNIPWRRAGVKYTNNEAYFDVVEEIDAIIDKSGSTVFAEIQGVIDACIKLSGMPDLSLSFMNP
RLLDDVSFHPCIRFKRWESERVLSFIPPDGNFRLISYRVSSQNLVAIPVYVKHSISFKENSSCGRFDITIGPKQN
MGKTIEGITVTVHMPKVVLNMNLTPTQGSYTFDPVTKVLTWDVGKITPQKLPSLKGLVNLQSGAPKPEENPSLNI
QFKIQQLAISGLKVNRLDMYGEKYKPFKGVKYVTKAGKFQVRT

FIGURE 4039

ACCACGCGTCTCATCCATGGCTTCCGCGGACTCGCGCCGGGTGGCAGATGGCGGCGGTGCCGGGGGCACCTTCCA
GCCCTACCTAGACACCTTGCGGCAGGAGCTGCAGCAGACGGACCCAACGCTGTTGTCAGTAGTGGTGGCGGTTCT
TGCGGTGCTGCTGACGCTAGTCTTCTGGAAGTTAATCCGGAGCAGAAGGAGCAGTCAGAGAGCTGTTCTTCTTGT
TGGCCTTTGTGATTCCGGGAAAACGTTGCTCTTTGTCAGGTTGTTAACAGGCCTTTATAGAGACACTCAGACGTC
CATTACTGACAGCTGTGCTGTATACAGAGTCAACAATAACAGGGGCAATAGTCTGACCTTGATTGACCTTCCCGG
CCATGAGAGTTTGAGGCTTCAGTTCTTAGAGCGGTTTAAGTCTTCAGCCGGGGCTATTGTGTTTGTTGTGGATAG
TGCAGCATTCCAGCGAGAGGTGAAAGATGTGGCTGAGTTTCTGTATCAAGTCCTCATTGACAGTATGGGTCTGAA
GAATACACCATCATTCTTAATAGCCTGCAATAAGCAAGATATTGCAATGGCAAAATCAGCAAAGTTAATTCAACA
GCAGCTGGAGAAAGAACTCAACACCTTACGAGTTACCCGTTCTGCTGCCCCCAGCACACTGTACAGTTCCAGCAC
TGCCCCTGCTCAGCTGGGGAAGAAAGGCAAAGAGTTTGAATTCTCACAGTTGCCCCTCAAAGTGGAGTTCCTGGA
GTGCAGTGCCAAGGGTGGAAGAGGGGACGTGGGCTCTGCTGACATCCAGGACTTGGAGAAATGGCTGGCTAAAAT
TGCCTGAGAGGCAGCTCTAAAGCACAAGACCTGGATGTGTGACACACAGTTTTGGAAAAAGGTCTGTGGTAGTCT
GGAGTTGATGAGGAAGGGGTACAAGATGTGGTTAGAAACATTTCTTTGTTCTGGAAACAAAGTACTGTTGAAACC
AGCTTGGAATTTTTTTTTTTTTTTTTTTTAAGTTCAGTTCTCCCTTATGGCTGCCTTTCAAACAAGTACCTTTTA
TCTGATGCCTGTATCTTCCCTTTGTTAAGGTGTAACTTGATGTAGGGTCAAGGTTTTTGTGACAACAGGCAGACT
CCACACAGAGAGGATATGATGAGAATATGGCCATCACCTGAAAAGTTTTCTTATCTTCTGTGCTTTTGGTCCCTG
GAAACAAATCCGCCTATGTATGAAGCTAGTTGATTTCCAGTTGCACTATTTCCAGTTGCCTCTGAAGTTCACAGG
CAATACATTGTCTAGTCCTTTGCGAATTTCTCTGATTTGTGGGCACAGTTATGAAGTTTCCCCACATGTGAAGAC
AGGTACAAAATAGCAGAGCCAAGCAGACAGTGGGTCTATTCTTCATTAGCTCAGTGACTTGTCCACACTCGTCTT
AGCACTTACGTTTCAAAAGCTTGTCACAAACCCTTGGAGTCATTCCCAGATAATAGAACTGGAAATGATAAATCC
CCTAATGCCAAGGGTCTAGTGTGTTCTTAGTGGTTATACTGGGAAGTGTGTGGAGATTTAGGTGCTGCTCTGCTG
CTCTGGATGGCTGAAGGCTCCTGGGCCATCTTCATGTGCTGCTTGAAGAGCTCCTATTTTGTACTCCTGGCTAGA
ATGCTGTGGAACAAATACAAAGTGAAAAAAGTTCTCTGTAGATTTCTGAAGTGCATATTCATTGATGCCAAGAAA
AAAAAAAAGTTGCCTTTTTG

FIGURE 4040

MASADSRRVADGGGAGGTFQPYLDTLRQELQQTDPTLLSVVVAVLAVLLTLVFWKLIRSRRSSQRAVLLVGLCDS
GKTLLFVRLLTGLYRDTQTSITDSCAVYRVNNNRGNSLTLIDLPGHESLRLQFLERFKSSAGAIVFVVDSAAFQR
EVKDVAEFLYQVLIDSMGLKNTPSFLIACNKQDIAMAKSAKLIQQQLEKELNTLRVTRSAAPSTLYSSSTAPAQL
GKKGKEFEFSQLPLKVEFLECSAKGGRGDVGSADIQDLEKWLAKIA

FIGURE 4041

GAAGGCTGCCTCGCTGGTCCGAATTCGGTGGCGCCACGTCCGCCCGTCTCCGCCTTCTGCATCGCGGCTTCGGCG
GCTTCCACCTAGACACCTAACAGTCGCGGAGCCGGCCGCGTCGTGAGGGGGTCGGCACGGGGAGTCGGGCGGTCT
TGTGCATCTTGGCTACCTGTGGGTCGAAGATGTCGGACATCGGAGACTGGTTCAGGAGCATCCCGGCGATCACGC
GCTATTGGTTCGCCGCCACCGTCGCCGTGCCCTTGGTCGGCAAACTCGGCCTCATCAGCCCGGCCTACCTCTTCC
TCTGGCCCGAAGCCTTCCTTTATCGCTTTCAGATTTGGAGGCCAATCACTGCCACCTTTTATTTCCCTGTGGGTC
CAGGAACTGGATTTCTTTATTTGGTCAATTTATATTTCTTATATCAGTATTCTACGCGACTTGAAACAGGAGCTT
TTGATGGGAGGCCAGCAGACTATTTATTCATGCTCCTCTTTAACTGGATTTGCATCGTGATTACTGGCTTAGCAA
TGGATATGCAGTTGCTGATGATTCCTCTGATCATGTCAGTACTTTATGTCTGGGCCCAGCTGAACAGAGACATGA
TTGTATCATTTTGGTTTGGAACACGATTTAAGGCCTGCTATTTACCCTGGGTTATCCTTGGATTCAACTATATCA
TCGGAGGCTCGGTAATCAATGAGCTTATTGGAAATCTGGTTGGACATCTTTATTTTTTCCTAATGTTCAGATACC
CAATGGACTTGGGAGGAAGAAATTTTCTATCCACACCTCAGTTTTTGTACCGCTGGCTGCCCAGTAGGAGAGGAG
GAGTATCAGGATTTGGTGTGCCCCCTGCTAGCATGAGGCGAGCTGCTGATCAGAATGGCGGAGGCGGGAGACACA
ACTGGGGCCAGGGCTTTCGACTTGGAGACCAGTGAAGGGGCGGCCTCGGGCAGCCGCTCCTCTCAAGCCACATTT
CCTCCCAGTGCTGGGTGCACTTAACAACTGCGTTCTGGCTAACACTGTTGGACCTGACCCACACTGAATGTAGTC
TTTCAGTACGAGACAAAGTTTCTTAAATCCCGAAGAAAAATATAAGTGTTCCACAAGTTTCACGATTCTCATTCA
AGTCCTTACTGCTGTGAAGAACAAATACCAACTGTGCAAATTGCAAAACTGACTACATTTTTTGGTGTCTTCTCT
TCTCCCCTTTCCGTCTGAATAATGGGTTTTAGCGGGTCCTAATCTGCTGGCATTGAGCTGGGGCTGGGTCACCAA
ACCCTTCCCAAAAGGACCTTATCTCTTTCTTGCACACATGCCTCTCTCCCACTTTTCCCAACCCCCACATTTGCA
ACTAGAAAAAGTTGCCCATAAAATTGCTCTGCCCTTGACAGGTTCTGTTATTTATTGACTTTTGCCAAGGCTGGT
CACAACAATCATATTCACGTTATTTTCCCCTTTTGGTGGCAGAACTGTTACCAATAGGGGGAGAAGACAGCCACG
GATGAAGCGTTTCTCAGCTTTTGGAATTGCTTCGACTGACATCCGTTGTTAACCGTTTGCCACTCTTCAGATATT
TTTTATAAAAAAAAGTACCACTGAGTTCATGAGGGCCACAGATTGGTTATTAATGAGATACGAGGGTTGGTGCTGG
GTGTTTGTTTCCTGAGCTAAGTGATCAAGACTGTAGTGGAGTTGCAGCTAACATGGGTTAGGTTTAAACCATGGG
GGATGCACCCCTTTGCGTTTCATATGTAGCCCTACTGGCTTTGTGTAGCTGGAGTAGTTGGGTTGCTTTGTGTTA
GGAGGATCCAGATCATGTTGGCTACAGGGAGATGCTCTCTTTGAGAGGTCCTGGGCATTGATTCCCATTTCAATC
TCATTCTGGATATGTGTTCATTGAGTAAAGGAGGAGAGACCCTCATACGCTATTTAAATGTCACTTTTTTGCCTA
TCCCCCGTTTTTTGGTCATGTTTCAATTAATTGTGAGGAAGGCGCAGCTCCTCTCTGCACGTAGATCATTTTTTA
AAGCTAATGTAAGCACATCTAAGGGAATAACATGATTTAAGGTTGAAATGGCTTTAGAATCATTTGGGTTTGAGG
GTGTGTTATTTTGAGTCATGAATGTACAAGCTCTGTGAATCAGACCAGCTTAAATACCCACACCTTTTTTTCGTA
GGTGGGCTTTTCCTATCAGAGCTTGGCTCATAACCAAATAAAGTTTTTTGAAGGCCATGGCTTTTCACACAGTTA
TTTTATTTTATGACGTTATCTGAAAGCAGACTGTTAGGAGCAGTATTGAGTGGCTGTCACACTTTGAGGCAACTA
AAAAGGCTTCAAACGTTTTGATCAGTTTCTTTTCAGGAAACATTGTGCTCTAACAGTATGACTATTCTTTCCCCC
ACTCTTAAACAGTGTGATGTGTGTTATCCTAGGAAATGAGAGTTGGCAAACAACTTCTCATTTTGAATAGAGTTT
GTGTGTACTTCTCCATATTTAATTTATATGATAAAATAGGTGGGGAGAGTCTGAACCTTAACTGTCATGTTTTGT
TGTTCATCTGTGGCCACAATAAAGTTTACTTGTAAAATTTTAGAGGCCATTACTCCAATTATGTTGCACGTACAC
TCATTGTACAGGCGTGGAGACTCATTGTATGTATAAGAATATTTCTGACAGTGAGTGACCCGGAGTCTCTGGTGT
ACCCTCTTACCAGTCAGCTGCCTGCGAGCAGTCATTTTTTCCTAAAGGTTTACAAGTATTTAGAACTTTTCAGTT
CAGGGCAAAATGTTCATGAAGTTATTCCTCTTAAACATGGTTAGGAAGCTGATGACGTTATTGATTTTGTCTGGA
TTATGTTTCTGGAATAATTTTACCAAAACAAGCTATTTGAGTTTTGACTTGACAAGGCAAAACATGACAGTGGAT
TCTCTTTACAAATGGAAAAAAAAAATCCTTATTTTGTATAAAGGACTTCCCTTTTTGTAAACTAATCCTTTTTAT
TGGTAAAAATTGTAAATTAAAATGTGCAACTTG

FIGURE 4042

MSDIGDWFRSIPAITRYWFAATVAVPLVGKLGLISPAYLFLWPEAFLYRFQIWRPITATFYFPVGPGTGFLYLVN
LYFLYQYSTRLETGAFDGRPADYLFMLLFNWICIVITGLAMDMQLLMIPLIMSVLYVWAQLNRDMIVSFWFGTRF
KACYLPWVILGFNYIIGGSVINELIGNLVGHLYFFLMFRYPMDLGGRNFLSTPQFLYRWLPSRRGGVSGFGVPPA
SMRRAADQNGGGGRHNWGQGFRLGDQ

FIGURE 4043

GGCACTGCAGCACCAGCCGTCTGCAGCTCCGGCCGCCACTTGCGCCTCTCCAGCCTCCGCAGGCCCAACCGCCGC
CAGCACCATGGCCAGCACCATTTCCGCCTACAAGGAGAAGATGAAGGAGCTGTCGGTGCTGTCGCTCATCTGCTC
CTGCTTCTACACACAGCCGCACCCCAATACCGTCTACCAGTACGGGGACATGGAGGTGAAGCAGCTGGACAAGCG
GGCCTCAGGCCAGAGCTTCGAGGTCATCCTCAAGTCCCCTTCTGACCTGTCCCCAGAGAGCCCTATGCTCTCCTC
CCCACCCAAGAAGAAGGACACCTCCCTGGAGGAGCTGCAAAAGCGGCTGGAGGCAGCCGAGGAGCGGAGGAAGAC
GCAGGAGGCGCAGGTGCTGAAGCAGCTGGCGGAGCGGCGCGAGCACGAGCGCGAGGTGCTGCACAAGGCGCTGGA
GGAGAATAACAACTTCAGCCGCCAGGCGGAGGAGAAGCTCAACTACAAGATGGAGCTCAGCAAGGAGATCCGCGA
GGCACACCTGGCCGCACTGCGCGAGCGGCTGCGCGAGAAGGAGCTGCACGCGGCCGAGGTGCGCAGGAACAAGGA
GCAGCGAGAAGAGATGTCGGGCTAAGGGCCCGGGACGGGCGGCGCCCATCCTGCGACAGAACACGTTCGGGTTTT
GGTTTTGTTTCGTTCACCTCTGTCTAGATGCAACTTTTGTTCCTCCTCCCCCACCCCCGCCCCCAGCTTCATGCT
TCTCTTCCGCACTCAGCCGCCCTGCCCTGTCCTCGTGGTGAGTCGCTGACCACGGCTTCCCCTGCAGGAGCCGCC
GGGCGTGAGACGCGGTCCCTCGGTGCAGACACCAGGCCGGGCGCGGCTGGGTCCCCCGGGGGCCCTGTGAGAGAG
GTGGCGGTGACCGTGGTAAACCCAGGGCGGTGGCGTGGGATCACGGGTCCTTACGCTGGGCTGTCTGGTCAGCAC
GTGCAGGTCAGGGCAGGTCCTCTGAGCCGGCGCCCCTGGCCAGCAGGCGAGGCTACAGTACCTGCTGTCTTTCCA
GGGGGAAGGGGCTCCCCATGAGGGAGGGGCGACGGGGGAGGGGGGTGATGGTGCCTGGGAGCCTGCGTGTGCAGC
CGGTGCTTGTTGAACTGGCAGGCGGGTGGGTGGGGGCTGCAGCTTTCCTTAATGTGGTTGCACAGGGGTCCTCTG
AGACCACCTGGCGTGAGGTGGACACCCTGGGCCTTCCTGGAAGCCTGCAGTTGGGGGCCTGCCCTGAGTCTGCTG
GGGAGTGGGCATTCTCTGCCAGGGACCCATGAGCAGGCTGCATGGTCTAGAGGTTGTGGGCAGCATGGACAGTCC
CCCACTCAGAAGTGCAAGAGTTCCAAAGAGCCTCTGGCCCAGGCCCCTCCCCACCAGGGCTTTGCAGATGTCCTT
GAAAGACCCACCCTAGAGCCCTTTGGAGTGCTGGCCCCTCCTGTGCCCTCTGCCCTGGTGGAAGCGGCAGCCACA
AGTCCTCCTCAGGGAGCCCCAAGGGGGATTTTGTGGGACCGCTGCCCACAGATCCAGGTGTTGGAAGGGCAGCGG
GTAAGGTTCCCAAGCCAGCCCCAACACCCTTCCCACTTGGCACCCAGAGGGGGCTGTGGGTGGAGGCCTGACTCC
AGGCCTCTCCTGCCCACACCCTCTGGGCTGAGTTCCTTCTTTCCCTTGGACGCCCAGTGCTGGCCTTGGAGGACG
GTCAGCTGGAGGATGGCGGTGGGGGAGGCTGTCTTTGTACCACTGCAGCATCCCCCACTTCTCCACGGAAGCCCC
ATCCCAAAGCTGCTGCCTGGCCCCTTGCTGTAAAGTGTGAAGGGGGCGGCTGAGTTCTCTTAGGACCCAGAGCCA
GGGCCCTCAACTTCCATCCTGCGGGAGGCCTTGGCCGGGCACTGCCAGTGTCTTCCAGAGTCACACCCAGGGACC
ACGGGAGGATCCTGACCCCTGCAGGGCTCAGGGGTCAGCAGGGACCCACTGCCCCATCTCCCTCTCCCCACCAAG
ACAGCCCCAGAAGGAGCAGCCAGCTGGGATGGGAACCCAAGGCTGTCCACATCTGGCTTTTGTGGGACTCAGAAA
GGGAAGCAGAACTGAGGGCTGGGATATTCCTCATGGTGGCAGCGCTCATAGCGAAAGCCTACTGTAATATGCACC
CATCTCATCCACGTAGTAAAGTGAACTTAAAAATTCAATCAAATGAACAATTAAATAAACACCTGTGTGTTTAAG
ACATG

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FIGURE 4044

MASTISAYKEKMKELSVLSLICSCFYTQPHPNTVYQYGDMEVKQLDKRASGQSFEVILKSPSDLSPESPMLSSPP
KKKDTSLEELQKRLEAAEERRKTQEAQVLKQLAERREHEREVLHKALEENNNFSRQAEEKLNYKMELSKEIREAH
LAALRERLREKELHAAEVRRNKEQREEMSG

FIGURE 4045A

GCCGGGGGTGAGGGCTCGCGCTCCGGGAGCTGCACGGGGCTGCGTGGAAAGAGCGCCGAGCGGTGGCGTCGTTGT
CGCCCCCTCCTCGTCGGGAAGAATCGTTTGGTCTCCTGCCGTGCCCGGTTCGTATTCCCTACTCCCTGCCACGAG
CCGCCCCGTCCGGGATCCTCCACCCGTCCAAAGTTGTGAGGGGGCGCCGGGCGTGCTCGCGGATCGGCGGCCGCG
GGCGTGCGGAGGGCTGGACGAGCCCTGGAGCGCCAGGAATCCCAGTCAGAAGTTCCAGCCTGCCACTGTTCTCTG
ATGCCATGCCAGCACCAACTCAACTGTTTTTTCCTCTCATCCGTAACTGTGAACTGAGCAGGATCTATGGCACTG
CATGTTACTGCCACCACAAACATCTCTGTTGTTCCTCATCGTACATTCCTCAGAGTCGACTGAGATACACACCTC
ATCCAGCATATGCTACCTTTTGCAGGCCAAAGGAGAACTGGTGGCAGTACACCCAAGGAAGGAGATATGCTTCCA
CACCACAGAAATTTTACCTCACACCTCCACAAGTCAATAGCATCCTTAAAGCTAATGAATACAGTTTCAAAGTGC
CAGAATTTGACGGCAAAAATGTCAGTTCTATCCTTGGATTTGACAGCAATCAGCTGCCTGCAAATGCACCCATTG
AGGACCGGAGAAGTGCAGCAACCTGCTTGCAGACCAGAGGGATGCTTTTGGGGGTTTTTGATGGCCATGCAGGTT
GTGCTTGTTCCCAGGCAGTCAGTGAAAGACTCTTTTATTATATTGCTGTCTCTTTGTTACCCCATGAGACTTTGC
TAGAGATTGAAAATGCAGTGGAGAGCGGCCGGGCACTGCTACCCATTCTCCAGTGGCACAAGCACCCCAATGATT
ACTTTAGTAAGGAGGCATCCAAATTGTACTTTAACAGCTTGAGGACTTACTGGCAAGAGCTTATAGACCTCAACA
CTGGTGAGTCGACTGATATTGATGTTAAGGAGGCTCTAATTAATGCCTTCAAGAGGCTTGATAATGACATCTCCT
TGGAGGCGCAAGTTGGTGATCCTAATTCTTTTCTCAACTACCTGGTGCTTCGAGTGGCATTTTCTGGAGCCACTG
CTTGTGTGGCCCATGTGGATGGTGTTGACCTTCATGTGGCCAATACTGGCGATAGCAGAGCCATGCTGGGTGTGC
AGGAAGAGGACGGCTCATGGTCAGCAGTCACGCTGTCTAATGACCACAATGCTCAAAATGAAAGAGAACTAGAAC
GGCTGAAATTGGAACATCCAAAGAGTGAGGCCAAGAGTGTCGTGAAACAGGATCGGCTGCTTGGCTTGCTGATGC
CATTTAGGGCATTTGGAGATGTAAAGTTCAAATGGAGCATTGACCTTCAAAAGAGAGTGATAGAATCTGGCCCAG
ACCAGTTGAATGACAATGAATATACCAAGTTTATTCCTCCTAATTATCACACACCTCCTTATCTCACTGCTGAGC
CAGAGGTAACTTACCACCGATTAAGGCCACAGGATAAGTTTCTGGTGTTGGCTACTGATGGGTTGTGGGAGACTA
TGCATAGGCAGGATGTGGTTAGGATTGTGGGTGAGTACCTAACTGGCATGCATCACCAACAGCCAATAGCTGTTG
GTGGCTACAAGGTGACTCTGGGACAGATGCATGGCCTTTTAACAGAAAGGAGAACCAAAATGTCCTCGGTATTTG
AGGATCAGAACGCAGCAACCCATCTCATTCGCCACGCTGTGGGCAACAACGAGTTTGGGACTGTTGATCATGAGC
GCCTCTCTAAAATGCTTAGTCTTCCTGAAGAGCTTGCTCGAATGTACAGAGATGACATTACAATCATTGTAGTTC
AGTTCAATTCTCATGTTGTAGGGGCGTATCAAAACCAAGAATAGTGAGTGGCTCTTTCACTGGCAATTCTCAAAT
GATACACATTTAAAGGGCAGATTTTTTAAAAAGATACTACTATAATAAACATTTCCAGTTGGTCATTCTAAGCAT
TTACCCTTTTGATACTCTAGCTAGTCAGGTACTCCAAATTGACTTTGCAGCAGGGTGGCAGGGTCAGGAGAGTCT
GGTCCTGCCTAGCTCAGATTTCATGGCACCTGCACTTGAAGCAAGTCACTTCTTTATCACAGGTGTCTTGAAACA
TTAGCTTCTTTTACCAACCTGAGAAAATTAGGATGACCTGGCAAATAAGATCTTGAATAGGCCAAAAGCAAGTAT
CTTGCTGTGTGTAGTCTCTTGGTTAAAGTGAAGAAACAGTACTGTTCACACCTTTCTTCACTGAGATTCCAGTGT
ACATGAGAACATATATTTATTGCATGATTTTCTAGATACACAGTCTATGCATTATTCATATACATTTATTTTAGC
CTAAAGTGGTTTTCAAATCCAGTTCTTCAAGCCATAAATGACCAAGATCCAAGCAATCTGAATTTGTTTTTGTGA
TTATTTGACTGGAATGCTTCTTAAGTGGAATAACTATACTCCGTTATCCACCCGATTTCCTAATGTAATTGAAAC
ATTTTCTATTTTGCCACACACTTGGAGACAATAAGGGTTTTTAGTTTTATCTACTCTTCTATTGAAGTTAAAGAA
AGAAAAAAAGATTTTTTTATTTGTATTAATGAAAAGCTTTAGTTTAAAATAAGGAGATCCAGAATAAAAAGAAGA
GACTGATCTCTTCAATTATTGTCATCTGTAGCCACCAGCACATCACTCTTATGTAATCCCCAAAGGCTTGGCATG
CCGTAAGTGTGTGGTGGGTAGACTGCTGCCGGGGAATCGTACTTCTTATTTAGTAATGATAAGACTTTTCATTAT
TTTTGGAATTTTAAAGATGACATAAATAAGTTTAAATATCAATTTGGGGAGTAAGGTTTAATATTGCCATCGGGT
ATTGAGACAGGAGGAAGTTTCTGTTTTTCTCCATTTAGACATAGGTCAATTAAAATATTTGGGTTTAAAATGACT
AAATGCTTTAAACATATTGTAGCTTAAGATATATGTGTTAAGATATATACATGAGAAACTTTAAAAGGTAACTAC
TGTGCATGCCTGATGCTTAATAGAATACTTAGTGGCATCAAATGTTTGCAGCAGTCTCCATAATTATATTCAGTC
CCTTCTAATACTGTATCAATGTAAATGAAATAAATATATTCAAATTGGCTTTTTGATATGCATCAAGTGGCATTT
TGTTCCTGTGTTTAATAGTGATCTGTATACAGCTGTGCACATATTGTCATCACTTATTCTAGCATCACTGTTAAG
GCTGTGATTATGTTTGATATTCACCTGGATTTTAATACAAGCCAATATCAGCTTCCCATTGTGTAATAACTTGGG
TGTTTAGGAGTCTTTTCACATTTTTTGGGGATATGAACTAGATGTTCAAGAACTCCTTCTGGACTGTGGATACTG
AATCAGTGTACTATTGGCTGCAGAATTTGTTTCAATTGAAAATAGACTCAGGAAGATTGCTGCTCAGAATATCAT
ATAATGTTTATTTTTTGAGGTGTTTTTGTTTTTATTTGTGTGTTTTTTTTTTAAGTCAGCTTGGAACTTTTTTCC

FIGURE 4045B

TGGGTAGTATTTGGGAGAGGGAAAGGCTGTACTATATATTTATTTCTAAATGTTTTGACTGGGCATTTTTCTTTT
AATGAAATATGTGGACTGCTCTAGCAAACCCTATTTTCAGCTACTATTTGAATATTCTTGAACACCACCACTGAA
GAGTTTCATATACACCAAATAATGTCTCATCTCTATAGTACAGGGAATATAAAATTGGTTTCCTGTGGTCATGAT
CAAGATAGTAGTATTATTACACAAGAAACTTGGTCTGCAGTCTGGAAGCTTGTCTGCTCTATAGAAATGAAAATG
CAGCATGAAGTTGACATTGTGGAAATGAAAGTAATTGGGTATTAGAAATCTGAAAGTACTGTCATCTAAAAGCAA
TTGTGATTTTATTGTAATTGGTTGTCACTGTTGTACGGTGTCTAGAATTAAAGAATACATGTAAACTTTCATGGT
ATTTAGCCTTTCTTAAATTTTTTTAAAATTTAAACTTTCTAACCTATGTATTCAACTTCTGTATTTATATTTAAT
CAGTGGTTCATGTTATATAATACACCCTTAACTAGTTAAATGGAATGTTGGTATGGTACAGAGTACCATATTGCT
AAGAAAACTGTCTTATAAAAGATGTATATGTGTGAAGACATGAAAGTTTAATGTACAGAATGGTTGGAGAAATGC
CTATGGTGAATTAAAGCTTCATATCTGCTTTCCTAGTCTCGAGTCTAG

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FIGURE 4046

MPAPTQLFFPLIRNCELSRIYGTACYCHHKHLCCSSSYIPQSRLRYTPHPAYATFCRPKENWWQYTQGRRYASTP
QKFYLTPPQVNSILKANEYSFKVPEFDGKNVSSILGFDSNQLPANAPIEDRRSAATCLQTRGMLLGVFDGHAGCA
CSQAVSERLFYYIAVSLLPHETLLEIENAVESGRALLPILQWHKHPNDYFSKEASKLYFNSLRTYWQELIDLNTG
ESTDIDVKEALINAFKRLDNDISLEAQVGDPNSFLNYLVLRVAFSGATACVAHVDGVDLHVANTGDSRAMLGVQE
EDGSWSAVTLSNDHNAQNERELERLKLEHPKSEAKSVVKQDRLLGLLMPFRAFGDVKFKWSIDLQKRVIESGPDQ
LNDNEYTKFIPPNYHTPPYLTAEPEVTYHRLRPQDKFLVLATDGLWETMHRQDVVRIVGEYLTGMHHQQPIAVGG
YKVTLGQMHGLLTERRTKMSSVFEDQNAATHLIRHAVGNNEFGTVDHERLSKMLSLPEELARMYRDDITIIVVQF
NSHVVGAYQNQE

FIGURE 4047

ATGGAAGGATCCGAGCCTGTGGCCGCCCATCAGGGGGAAGAGGCGTCCTGTTCTTCCTGGGGGACTGGCAGCACA
AATAAAAATTTGCCCATTATGTCAACAGCATCTGTGGAAATCGATGATGCATTGTATAGTCGACAGAGGTACGTT
CTTGGAGACACAGCAATGCAGAAGATGGCCAAGTCCCATGTTTTCTTAAGTGGGATGGGTGGTCTTGGTTTGGAA
ATTGCAAAGAATCTTGTTCTTGCAGGGATTAAGGCAGTTACAATTCATGATACAGAAAAATGCCAAGCATGGGAT
CTAGGAACCAACTTCTTTCTCAGTGAAGATGATGTTGTTAATAAGAGAAACAGGGCTGAAGCTGTACTTAAACAT
ATTGCAGAACTAAATCCATACGTTCATGTCACATCATCTTCTGTTCCTTTCAATGAGACCACAGATCTCTCCTTT
TTAGATAAATACCAGTGTGTAGTATTGACTGAGATGAAACTTCCATTGCAGAAGAAGATCAATGACTTTTGCCGT
TCTCAGTGCCCTCCAATTAAGTTTATCAGTGCAGATGTACATGGAATTTGGTCAAGGTTATTTTGTGATTTCGGT
GATGAATTTGAAGTTTTAGATACAACAGGAGAAGAACCAAAAGAAATTTTCATTTCAAACATAACGCAAGCAAAT
CCTGGCATTGTTACTTGCCTTGAAAATCATCCTCACAAACTGGAGACAGGACAATTCCTAACATTTCGAGAAATT
AATGGAATGACAGGTTTAAATGGATCTATACAACAAATAACGGTGATATCGCCATTTTCTTTTAGTATTGGTGAC
ACCACAGAACTGGAACCATATTTACATGGAGGCATAGCTGTCCAAGTTAAGACTCCTAAAACAGTTTTTTTTGAA
TCACTGGAGAGGCAGTTAAAACATCCAAAGTGCCTTATTGTGGATTTTAGCAACCCTGAGGCACCTTTAGAGATT
CACACAGCTATGCTTGCCTTGGACCAGTTTCAGGAGAAATACAGTCGCAAGCCAAATGTTGGATGCCAACAAGAT
TCAGAAGAACTGTTGAAACTAGCAACATCTATAAGTGAAACCTTGGAAGAGAAGCCTGATGTAAATGCTGACATT
GTGCATTGGCTCTCTTGGACTGCCCAAGGCTTTTTATCTCCACTTGCTGCAGCAGTAGGAGGTGTTGCCAGCCAA
GAAGTATTGAAAGCTGTAACAGGAAAATTTTCTCCTTTGTGCCAGTGGTTATATCTTGAAGCAGCAGATATTGTT
GAATCACTAGGCAAACCTGAATGTGAAGAATTTCTCCCACGAGGAGATAGATATGATGCCTTAAGAGCTTGCATT
GGAGACACTTTGTGTCAGAAACTGCAAAATTTAAACATCTTCTTAGTAGGGTGTGGAGCCATAGGCTGTGAAATG
TTGAAAAATTTTGCTTTACTTGGTGTTGGCACAAGCAAAGAGAAAGGAATGATTACAGTTACAGATCCTGACTTG
ATAGAGAAATCCAACTTAAATAGACAGTTCCTATTTCGTCCTCATCACATACAGAAACCTAAAAGCTACACTGCT
GCTGATGCTACTCTGAAAATAAATTCTCAAATAAAGATAGATGCACACCTGAACAAAGTATGTCCAACCACTGAG
ACCATTTACAATGATGAGTTCTATACTAAACAAGATGTAATTATTACAGCATTAGATAATGTGGAAGCCAGGAGA
TACGTAGACAGTCGTTGCTTAGCAAATCTAAGGCCTCTTTTAGATTCTGGAACAATGGGCACTAAGGGACACACT
GAAGTTATTGTACCGCATTTGACTGAGTCTTACAATAGTCATCGGGATCCCCCAGAAGAGGAAATACCATTTTGT
ACTCTAAAATCCTTTCCAGCTGCTATTGAACATACCATACAGTGGGCAAGAGATAAGTTTGAAAGTTCCTTTTCC
CACAAACCTTCATTGTTTAACAAATTTTGGCAAACCTATTCATCTGCAGAAGAAGTCTTACAGAAGATACAGAGT
GGACACAGTTTAGAAGGCTGTTTTCAAGTTATAAAGTTACTTAGCAGAAGACCTAGAAATTGGTCCCAGTGTGTA
GAATTAGCAAGATTAAAGTTTGAAAAATATTTTAACCATAAGGCTCTTCAGCTTCTTCACTGTTTCCCTCTGGAC
ATACGATTAAAAGATGGCAGTTTATTTTGGCAGTCACCAAAGAGGCCACCCTCTCCAATAAAATTTGATTTAAAT
GAGCCTTTGCACCTCAGTTTCCTTCAGAATGCTGCAAAACTATATGCTACAGTATATTGTATTCCATTTGCAGAA
GAGGACTTATCAGCAGATGCCCTCTTGAATATTCTTTCAGAAGTAAAGATTCAGGAATTCAAGCCTTCCAATAAG
GTTGTTCAAACAGATGAAACTGCAAGGAAACCAGACCATGTTCCTATTAGCAGTGAAGATGAGAGGAATGCAATT
TTCCAACTAGAAAAGGCTATTTTATCTAATGAAGCCACCAAAAGTGACCTTCAGATGGCAGTGCTTTCATTTGAA
AAAGATGATGATCATAATGGACACATAGATTTCATCACAGCTGCATCAAATCTTCGTGCCAAAATGTACAGCATT
GAACCAGCTGACCGTTTCAAAACAAAGCGCATAGCTGGTAAAATTATACCTGCTATAGCAACAACCACTGCTACA
GTTTCTGGCTTGGTTGCCTTGGAGATGATCAAAGTAACTGGTGGCTATCCATTTGAAGTTTACAAAAATTGTTTT
CTTAACTTAGCCATTCCAATTGTAGTATTTACAGAGACAACTGAAGTAAGGAAAACTAAAATCAGAAATGGAATA
TCATTTACAATTTGGGATCGATGGACCGTACATGGAAAAGAAGATTTCACCCTCTTGGATTTCATAAATGCAGTC
AAAGAGAAGTATGGAATTGAGCCAACAATGGTGGTACAGGGAGTCAAAATGCTTTATGTTCCTGTAATGCCTGGT
CATGCAAAAAGATTGAAGTTAACAATGCATAAACTTGTAAAACCTACTACTGAAAAGAAATATGTGGATCTTACT
GTGTCATTTGCTCCAGACATTGATGGAGATGAAGATTTGCCGGGACCTCCAGTAAGATACTACTTCAGTCATGAC
ACTGATTAA

FIGURE 4048

MEGSEPVAAHQGEEASCSSWGTGSTNKNLPIMSTASVEIDDALYSRQRYVLGDTAMQKMAKSHVFLSGMGGLGLE
IAKNLVLAGIKAVTIHDTEKCQAWDLGTNFFLSEDDVVNKRNRAEAVLKHIAELNPYVHVTSSSVPFNETTDLSF
LDKYQCVVLTEMKLPLQKKINDFCRSQCPPIKFISADVHGIWSRLFCDFGDEFEVLDTTGEEPKEIFISNITQAN
PGIVTCLENHPHKLETGQFLTFREINGMTGLNGSIQQITVISPFSFSIGDTTELEPYLHGGIAVQVKTPKTVFFE
SLERQLKHPKCLIVDFSNPEAPLEIHTAMLALDQFQEKYSRKPNVGCQQDSEELLKLATSISETLEEKPDVNADI
VHWLSWTAQGFLSPLAAAVGGVASQEVLKAVTGKFSPLCQWLYLEAADIVESLGKPECEEFLPRGDRYDALRACI
GDTLCQKLQNLNIFLVGCGAIGCEMLKNFALLGVGTSKEKGMITVTDPDLIEKSNLNRQFLFRPHHIQKPKSYTA
ADATLKINSQIKIDAHLNKVCPTTETIYNDEFYTKQDVIITALDNVEARRYVDSRCLANLRPLLDSGTMGTKGHT
EVIVPHLTESYNSHRDPPEEEIPFCTLKSFPAAIEHTIQWARDKFESSFSHKPSLFNKFWQTYSSAEEVLQKIQS
GHSLEGCFQVIKLLSRRPRNWSQCVELARLKFEKYFNHKALQLLHCFPLDIRLKDGSLFWQSPKRPPSPIKFDLN
EPLHLSFLQNAAKLYATVYCIPFAEEDLSADALLNILSEVKIQEFKPSNKVVQTDETARKPDHVPISSEDERNAI
FQLEKAILSNEATKSDLQMAVLSFEKDDDHNGHIDFITAASNLRAKMYSIEPADRFKTKRIAGKIIPAIATTTAT
VSGLVALEMIKVTGGYPFEVYKNCFLNLAIPIVVFTETTEVRKTKIRNGISFTIWDRWTVHGKEDFTLLDFINAV
KEKYGIEPTMVVQGVKMLYVPVMPGHAKRLKLTMHKLVKPTTEKKYVDLTVSFAPDIDGDEDLPGPPVRYYFSHD
TD

FIGURE 4049A

CTCAGGAGGTTTTTCAGAGTGGAATCATTCCTTCAGATACTGACTTTCGTATCTACAGGGATTTTGGGAACATTC
CAGGAATAGACTTAGCTTTTATTGAGAATGGATACATTTATCACACCAAGTATGACACAGCGGACAGAATTCTAA
CAGATTCCATTCAGAGAGCAGGTGACAACATTTTAGCAGTTCTTAAGCATCTAGCTACATCTGATATGCTGGCTG
CTGCTTCTAAGTATCGACATGGAAACATGGTCTTCTTTGATGTGCTGGGCCTGTTTGTCATTGCCTACCCCTCTC
GTATTGGCTCAATCATAAACTACATGGTGGTAATGGGTGTTGTTTTGTACCTGGGCAAAAAATTTTTGCAGCCCA
AACATAAGACTGGTAACTACAAGAAGGACTTCTTGTGTGGACTTGGCATCACTTTGATCAGCTGGTTCACTAGCC
TTGTTACCGTTCTCATTATAGCAGTGTTCATCTCTCTTATTGGACAGTCTCTCTCATGGTATAACCACTTCTATG
TCTCCGTTTGTCTGTATGGAACTGCAACTGTAGCCAAAATAATACTTATACATACTCTTGCGAAAAGATTTTATT
ACATGAATGCCAGTGCCCAGTATCTGGGAGAAGTATTTTTTGACATTTCGCTGTTTGTCCATTGCTGTTTTCTTG
TTACCCTCACTTACCAAGGACTTTGCTCGGCGTTTATTAGTGCTGTCTGGGTAGCATTCCCATTGCTCACAAAGC
TCTGTGTGCATAAGGACTTCAAGCAGCATGGTGCCCAAGGAAAATTTATTGCTTTTTACCTTTTGGGGATGTTTA
TTCCTTATCTTTATGCATTGTACCTCATCTGGGCAGTATTTGAGATGTTTACCCCTATCCTCGGGAGAAGTGGTT
CTGAAATCCCACCTGATGTTGTGCTGGCATCCATTTTGGCTGGCTGTACAATGATTCTCTCGTCCTATTTTATTA
ACTTCATCTACCTTGCCAAGAGCACAAAAAAAACCATGCTAACTTTAACTTTGGTATGTGCAATTACATTCCTCC
TTGTTTGCAGTGGAACATTTTTTCCATATAGCTCCAATCCTGCTAATCCGAAGCCAAAGAGAGTGTTTCTTCAGC
ATATGACTAGAACATTCCATGACTTGGAAGGAAATGCAGTTAAACGGGACTCTGGAATATGGATCAATGGGTTTG
ATTATACTGGAATTTCTCACATAACCCCTCACATTCCTGAGATCAATGATAGTATCCGAGCTCACTGTGAGGAGA
ATGCACCTCTTTGTGGTTTTCCTTGGTATCTTCCAGTGCACTTTCTGATCAGGAAAAACTGGTATCTTCCTGCCC
CAGAAGTTTCTCCAAGAAATCCTCCTCATTTCCGACTCATATCCAAAGAACAGACACCTTGGGATTCTATAAAAT
TGACTTTTGAAGCAACAGGACCAAGCCATATGTCCTTCTATGTTCGAGCCCACAAAGGGTCAACACTTTCTCAGT
GGTCTCTTGGCAATGGCACCCCAGTCACAAGTAAAGGAGGAGACTACTTTGTCTTTTACTCCCATGGACTCCAGG
CCTCTGCATGGCAGTTCTGGATAGAAGTGCAGGTTTCAGAAGAACATCCTGAAGGAATGGTCACCGTGGCCATTG
CTGCCCACTATCTGTCTGGGGAAGACAAGAGATCCCCTCAACTGGATGCTCTGAAGGAAAAGTTCCCAGATTGGA
CATTTCCCTCTGCCTGGGTGTGCACCTACGATCTCTTTGTATTTTAATCTTGTGGATGAGCTCTAAGTACATGCC
CAGTGGATACTCCATGTGACATGGTTTCTCCCTATGTTACGTGGATGTTTGTAACGTAAGTCAATGAATTTTAAT
GATCATATGTTCAAAGAGCTTTCTGGGTTAACGCTTTTCAGGGCCAAGCACTATAAGGGTTTAGCTGTGGCGCAG
TGATGCATGGCCTGTTGACACTTGAAAATGCCAGTCTTTTGGCACTTCAGCACATGTGGGTACTGCCACTACACA
CACGTCATTTTATATGACCTTAAGGACAAAGCCAACAATCTACTTCAATAGCTGCCCCTTTAGGATCAAGAAAGA
TGTACACTGTCAGAGCATTGTTAATGAGACAAAAGTTGTTTCCAATTTAAGCCCCAAAACCATTTGTTGTATTAG
TGGATGGTGGGTAAAATATCATTCACTGAGGTAATGATTCCCCTTGAGAATATAACTCTGTGTAGGTCACTGGAA
AGTGATTGCCATAGGGCTGGGAGAGAAGCATTGCACTCTTGAGGCTGTAGCCTGTGTCAAGCTGTTTCTTCAGGC
AGCCTCTCAAATGTGCTTTGTCTCTCTGTGCTGAGGCCTGGACCCTGTGCTGAGCTGGTGACTCACTGTCCTGAC
AAGTGGACACACAGATGCACTGCTGTGCTGCTTTCCTGAGGTGGTTTTCTATGCCTGTTTTCCTCTGAAACATGT
CTGTTACCCCTCTCCATCTTACCAAGTTGAAAAGGGGAATATTTGGCCACATACCCCTCTGGTTTTCGTAGGTTC
TTTTGGTTCAGAATATTGTTTGTGCCAGTACATGACCTTAACTTCCTTCCTCAGAGCACTGAGCTGCCATCTGGG
CTATTCTGGGGTAAAAGGAAGGCTGGGAGTGGTGGGAATTTTATAAATATTTATTCTCTTTTCTTTGTTTCATAG
GAGTCTTGTGTTATACAAGGTTAGTCCTTCATGGTATAATCTTACTGATGCACTGGGCCTATCTTTTTGTTTTCC
AGCCAGTTGAATAGATTAGTTTTTCTCAGTAACTTACTATCCAGCAGACTGGCTTTCCTGAGACTTGAGGTTGTG
GCTTATACTGGAATGAGACCACTGTACGTGTAGGTGGTTCAGATCCTGCGTAATGGCAGCATGAGGACTTAAAAG
GTGGTTTTCATTTTGAAGATGGCTATGTAGCTTGTAAGGTGTATCACAGCAGTACCTCTCATGGCTTTTTGGTTC
CAGCAGTGAGGGCATTGGTGAGATCAATGGTAAACTGTGCAAGCTTTCTTTTTATCATTAGGAAATGTGAAACGT
TGGACAAATTTTGAGTTTTAACAAGGACAAAAAGTTGAAAGAAAAGGCACAGTTAACAAAAAAGGGTGGCTAGAT
TTATCTTGGGTGATGGAGGAAATGAGAGAGGAATGCTCTTGAAAGGTGGTCTGTGGATCTGTCTGAATAGAAAGA
GCACAGTAAGTATGCATTGCCGGAGAAAACGTCCTTGAAGCTGCTTGTCTCATGTGTATGATGTGCTTTTTAAAT
CATGCCCCTCGTTGCCTGCCTAATCTGTGACTCCCTAAAAACTAACTGGGCCCATGTAGATGGGGCTGCAACCAG
AGCTGAATAACATGTTAGGCTCACACATGCATCAGCACTGCACACTGGAATCATTGCTCTTCCTGGACTTTGTAG
AAATCAGTCTCAAGTGCTTCAAGAGTCTGGCTCCTGCTACTTTTATCTGTCAGGTAGCACATAAGGTTTGCAGGG
TTTATATTTTGTATAGAATCACAGTTGTGGAGAAAAAGTAATAATTTCTCAATGAATTTTAAAAATGGGCCTATT

FIGURE 4049B

TTCTATCCCCGTGGTTCATCTGATATAATTAGTGTTCCCTGTGAATTCCCCCCCTCTATGGGAAGGATGCCTTTA
CTCTTTATCAGTAATAAATTATGACTGTTTTCATATTGCCTTAGGGTTATTTCCCTGTGTAAACCATTGTCTTTT
GTTTTGGTTTTCTTTAGCATTATGAAGCTTTGGTATTGTACAAGGTCAGTAGTAAGATGCTCACTAGTCTCAGGG
CTTGTGTAATATTCTGGGAGGTCATTTAAATGCCAGAAATGGTCAAGCAATTATACACAGTATTTATGACTCTGT
TAAGCATACCGTTTGTCTGTCACATTAGTAGATTCTGAGATTAAAAAAAATTTTTAAAGAGTGATCATTTAAATA
ATTTCTAAAAGGGTCTTTTCAAGCTCTAACAAAGTCACTAACAAATGCATTATTTTCTACAGAATTAGATGTTAG
TAGTACAGTACTGCATATTCAGGGAAAAAGTGTGAGGAATTGATTTCAAAATAGTTCGTTCTTGTGTTTGACCTA
AGAATGATTGTCGCATGAAGTGTTTGTTTTTACAGTTTAGCATATATAAACAAACATGATAGGATTCCTTAAGAT
GTTACCACCCAGGGGGCCACAAGCCAGCCTGCTGTCTCAGGAAGCTGTAGAAGGAGTGTTTGTCAATTTCTTGTC
ACTGGTTTGCTGACTTACTGAGGATTAATTGTTGCCTTACAATGTTACTGAAATAAACTGTTTAATAT

FIGURE 4050

TGGATTTGGTGATTCTACAAAAAAAGACACTGAGGTTGAGACCTTGAAGCATGACACTGCTGCAGTCGATCGTTC
CGTCAAGCGTCTTTTCAAAGTTCGGAGTGATCTTGATTTTGCTGAGCAACTGTGGTGCAAAATGAGCAGTAGTGT
GATTTCATACCAAGACTTGGTGAAGTGTTTCACATTGATCATCCAGAGTCTACAACGTGGTGATATACAGCCATG
GCTCCATAGTGGAAGTAACAGTTTACTAAGTAAGCTCATTCATCAGTCTTATCATGGAACCATGGACACAGTTTC
TCTCAGTGGGACTATTCCAGTTCAAATGCTTTTGGAAATTGGTTTGGACAAACTAAAGAAAGATTATATCAGTTT
TTTCATAGGTCAGGAACTTGCATCTTTGAATCATTTGGAATACTTCATTGCTCCATCAGTAGATATACAAGAACA
GGTTTATCGTGTCCAAAAACTCCACCATATTCTAGAAATATTAGTCAGTTGCATGCCTTTCATTAAATCTCAACA
TGAACTCCTCTTTTCTTTAACACAGATCTGCATAAAGTATTACAAACAAAATCCTCTTGATGAGCAACACATTTT
TCAGCTGCCAGTCAGACCAACTGCTGTAAAGAACTTATATCAAAGTGAGAAGCCACAGAAATGGAGAGTGGAAAT
ATATAGTGGTCAAAAGAAGATTAAGACAGTTTGGCAACTGAGTGACAGCTCACCCATAGACCATCTGAATTTTCA
CAAACCTGATTTTTCGGAATTAACACTAAACGGTAGCCTGGAAGAAAGGATATTCTTTACTAACATGGTTACCTG
CAGCCAGGTGCATTTCAAGTGAAGTGTGCTGATGAAGTCCTCTATAAGCACAAGCCAAAAAGAGAAAGAGAAAAA
AAGGTAATTATTGTAGAACCTGAAAACAGCAATGTATGGAAACCCTCAAAGCAGAAAAGGGAGGAAGATCCTGAA
GATTCTCTTATGAAGCTCCAAAATTGATAATCCTGTCTCAGCTCTGCCTCCTCAGGAGGAGCATTAGTAGAACAG
CAGTGATGAGGACACAGAGGGAGCAGACAGTGGGTACCACGATCTCCGTAACCATTTGCATGTGACTTAGCAAGG
GCTCTGAAATGACAAAGAGAACGAGCACCACAAATGAGAACAGGATCATTTTAGTAAATACAGCTTTATCCCAAA
AGCTTTAACTGTATTGGGAAAACTTAAAAAATAGCATCCTCAAATTTTCTGATTCTTATTTGCCATGAAATAGAA
CTTAGTAAATTAAATGTTATTTGAAAATGTTATAAGAGCTTTGTAAATATTTCAGAAAATATGGGATAAATGCCT
GAATTTGGTTCTTCTACAGGTGCTATAATAAAGTCCATCTCTCAATACTTATACTTTCTAAATTCATCTCAGAAT
ATTAGCAGCCATATTCCACAGTTCCTATAATTTTTACTGGGGGGGATTTGTGATAGGAAAGTCCTTGGGAAACAT
TTCCAATCTTTCAAAATATTATTGTGTATCTTAAGAAGTATAGGAACTTGTATGTTGAAATGTTGTATGGTAGTT
CTTGTATAGTTAAATAATAATCTTTTTAAGAGTTAATGATAAGCATATGTTATGTGCATTATTAATAAAATAGTG
GCCACTTAGGTAATACCCACTTTTATCTTGTGTGCTGGGTACTCTGGTTACTGAGATAAATAAGGCACTGGACAT
CCTCACGTGGAGTTCACAGGCTCATCAGTGAATTCTGTACCACATTTCAACCTTGTTTATTTTAGTTTAATGGAA
TATACATTCTTAGTATTGCCTGATTATTTAAATTTGTTGAGGGGGATTGCATGTTGCTTTATTGGCCTGTAAAAA
TAGCTAGTTTGGTAAGATTTGGTCTCGCACCTTCCATCTTTGCTACCACATTAAAGATGAGCTTGTTAAAAAGGA
AAGCATATTTCTCTGATTGCCCTTATGGAGAAATAAAGATAAAATTCAAAGAAAC

FIGURE 4051

MSSSVISYQDLVKCFTLIIQSLQRGDIQPWLHSGSNSLLSKLIHQSYHGTMDTVSLSGTIPVQMLLEIGLDKLKK
DYISFFIGQELASLNHLEYFIAPSVDIQEQVYRVQKLHHILEILVSCMPFIKSQHELLFSLTQICIKYYKQNPLD
EQHIFQLPVRPTAVKNLYQSEKPQKWRVEIYSGQKKIKTVWQLSDSSPIDHLNFHKPDFSELTLNGSLEERIFFT
NMVTCSQVHFK

FIGURE 4052

TGTGAAGTCAACTTTATCCCAGACAGTTCCATCCAAGGGAGAATTAAGTAGAGAAATTTGTCTGCAATCTCAATC
TAAAGACAAATCTACGACACCAGGAGGAACAGGAATTAAGCCTTTCCTGGAACGCTTTGGAGAGCGTTGTCAAGA
ACATAGCAAAGAAAGTCCAGCTCGTAGCACACCCCACAGAACCCCCATTATTACTCCAAATACAAAGGCCATCCA
AGAAAGATTATTCAAGCAAGACACATCTTCATCTACTACCCATTTAGCACAACAGCTCAAGCAGGAACGTCAAAA
AGAACTAGCATGTCTTCGTGGCCGATTTGACAAGGGCAATATATGGAGTGCAGAAAAAGGCGGAAACTCAAAAAG
CAAACAACTAGAAACCAAACAGGAAACTCACTGTCAGAGCACTCCCCTCAAAAAACACCAAGGTGTTTCAAAAAC
TCAGTCACTTCCAGTAACAGAAAAGGTGACCGAAAACCAGATACCAGCCAAAAATTCTAGTACAGAACCTAAAGA
AGTGATACGTGAAATTGAG**ATG**AGTGTGGATGATGATGATATCAATAGTTCGAAAGTAATTAATGACCTCTTCAG
TGATGTCCTAGAGGAAGGTGAACTAGATATGGAGAAGAGCCAAGAGGAGATGGATCAAGCATTAGCAGAAAGCAG
CGAAGAACAGGAAGATGCACTGAATATCTCCTCAATGTCTTTACTTGCACCATTGGCACAAACAGTTGGTGTGGT
AAGTCCAGAGAGTTCAGTGTCCACACCTAGACTGGAATTGAAAGACACCAGCAGAAGTGATGAAAGTCCAAAACC
AGGAAAATTCCAAAGAACTCGTGTCCCTCGAGCTGAATCTGGTGATAGCCTTGGTTCTGAAGATCGTGATCTTCT
TTACAGCATTGATGCATATAGATCTCAAAGATTCAAAGAAACAGAACGTCCATCAATAAAGCAGGTGATTGTTCG
GAAGGAAGATGTTACTTCAAAACTGGATGAAAAAAATAATGCCTTTCCTTGTCAAGTTAATATCAAACAGAAAAT
GCAGGAACTCAATAACGAAATAAATATGCAACAGACAGTGATCTATCAAGCTAGCCAGGCTCTTAACTGCTGTGT
TGATGAAGAACATGGAAAAGGGTCCCTAGAAGAAGCTGAAGCAGAAAGACTTCTTCTAATTGCAACTGGGAAGAG
AACACTTTTGATTGATGAATTGAATAAATTGAAGAACGAAGGACCTCAGAGGAAGAATAAGGCTAGTCCCCAAAG
TGAATTTATGCCATCCAAAGGATCAGTTACTTTGTCAGAAATCCGCTTGCCTCTAAAAGCAGATTTTGTCTGCAG
TACGGTTCAGAAACCAGATGCAGCAAATTACTATTACTTAATTATACTAAAAGCAGGAGCTGAAAATATGGTAGC
CACACCATTAGCAAGTACTTCAAACTCTCTTAACGGTGATGCTCTGACATTCACTACTACATTTACTCTGCAAGA
TGTATCCAATGACTTTGAAATAAATATTGAAGTTTACAGCTTGGTGCAAAAGAAAGATCCCTCAGGCCTTGATAA
GAAGAAAAAAACATCCAAGTCCAAGGCTATTACTCCAAAGCGACTCCTCACATCTATAACCACAAAAAGCAACAT
TCATTCTTCAGTCATGGCCAGTCCAGGAGGTCTTAGTGCTGTGCGAACCAGCAACTTCGCCCTTGTTGGATCTTA
CACATTATCATTGTCTTCAGTAGGAAATACTAAGTTTGTTCTGGACAAGGTCCCCTTTTTATCTTCTTTGGAAGG
TCATATTTATTTAAAAATAAAATGTCAAGTGAATTCCAGTGTTGAAGAAAGAGGTTTTCTAACCATATTTGAAGA
TGTTAGTGGTTTTGGTGCCTGGCATCGAAGATGGTGTGTTCTTTCTGGAAACTGTATATCTTATTGGACTTATCC
AGATGATGAGAAACGCAAGAATCCCATAGGAAGGATAAATCTGGCTAATTGTACCAGTCGTCAGATAGAACCAGC
CAACAGAGAATTTTGTGCAAGACGCAACACTTTTGAATTAATTACTGTCCGACCACAAAGAGAAGATGACCGGGA
GACTCTTGTCAGCCAATGCAGGGACACACTCTGTGTTACCAAGAACTGGCTGTCTGCAGATACTAAAGAAGAGCG
GGATCTCTGGATGCAAAAACTCAATCAAGTTCTTGTTGATATTCGCCTCTGGCAACCTGATGCTTGCTACAAACC
TATTGGAAAGCCT**TAA**ACCGGGAAATTTCCATGCTATCTAGAGGTTTTTGATGTCATCTTAAGAAACACACTTAA
GAGCATCAGATTTACTGATTGCATTTTATGCTTTAAGTACGAAAGGGTTTGTGCCAATATTCACTACGTATTATG
CAGTATTTATATCTTTTGTATGTAAAACTTTAACTGATTTCTGTCATTCATCAATGAGTAGAAGTAAATACATTA
TAGTTGATTTTGCTAAATCTTAATTTAAAAGCCTCATTTTCCTAGAAATCTAATTATTCAGTTATTCATGACAAT
ATTTTTTTAAAAGTAAGAAATTCTGAGTTGTCTTCTTGGAGCTGTAGGTCTTGAAGCAGCAACGTCTTTCAGGGG
TTGGAGACAGAAACCCATTCTCCAATCTCAGTAGTTTTTTCGAAAGGCTGTGATCATTTATTGATCGTGATATGA
CTTGTTACTAGGGTACTGAAAAAAATGTCTAAGGCCTTTACAGAAACATTTTTAGTAATGAGGATGAGAACTTTT
TCAAATAGCAAATATATATTGGCTTAAAGCATGAGGCTGTCTTCAGAAAAGTGATGTGGACATAGGAGGCAATGT
GTGAGACTTGGGGGTTCAATATTTTATATAGAAGAGTTAATAAGCACATGGTTTACATTTACTCAGCTACTATAT
ATGCAGTGTGGTGCACATTTTCACAGAATTCTGGCTTCATTAAGATCATTATTTTTGCTGCGTAGCTTACAGACT
TAGCATATTAGTTTTTTCTACTCCTACAAGTGTAAATTGAAAAATCTTTATATTAAAAAAGTAAACTGTTATGAA
GCTGCTATGTACTAATAATACTTTGCTTGCCAAAGTGTTTGGGTTTTGTTGTTGTTTGTTTGTTTGTTTTTT
GGTTCATGAACAACAGTGTCTAGAAACCCATTTTGAAAGTGGAAAATTATTAAGTCACCTATCACCTTTAAACGC
CTTTTTTTAAAATTATAAAATATTGTAAAGCAGGGTCTCAACTTTTAAATACACTTTGAACTTCTTCTCTGAATT
ATTAAAGTTCTTTATGACCTCATTTATAAACACTAAATTCTGTCACCTCCTGTCATTTTATTTTTTATTCATTCA
AATGTATTTTTTCTTGTGCATATTATAAAAATATATTTTATGAGCTCTTACTCAAATAAATACCTGTAAATGTCT
AAAGG

FIGURE 4053

MSVDDDDINSSKVINDLFSDVLEEGELDMEKSQEEMDQALAESSEEQEDALNISSMSLLAPLAQTVGVVSPESSV
STPRLELKDTSRSDESPKPGKFQRTRVPRAESGDSLGSEDRDLLYSIDAYRSQRFKETERPSIKQVIVRKEDVTS
KLDEKNNAFPCQVNIKQKMQELNNEINMQQTVIYQASQALNCCVDEEHGKGSLEEAEAERLLLIATGKRTLLIDE
LNKLKNEGPQRKNKASPQSEFMPSKGSVTLSEIRLPLKADFVCSTVQKPDAANYYYLIILKAGAENMVATPLAST
SNSLNGDALTFTTTFTLQDVSNDFEINIEVYSLVQKKDPSGLDKKKKTSKSKAITPKRLLTSITTKSNIHSSVMA
SPGGLSAVRTSNFALVGSYTLSLSSVGNTKFVLDKVPFLSSLEGHIYLKIKCQVNSSVEERGFLTIFEDVSGFGA
WHRRWCVLSGNCISYWTYPDDEKRKNPIGRINLANCTSRQIEPANREFCARRNTFELITVRPQREDDRETLVSQC
RDTLCVTKNWLSADTKEERDLWMQKLNQVLVDIRLWQPDACYKPIGKP

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FIGURE 4054

GCGGCAATC**ATG**GCGCCACCTGTGAGATACTGCATCCCCGGCGAACGTCTGTGTAACTTGGAGGAGGGCAGCCCG
GGCAGCGGCACCTACACCCGCCACGGCTACATCTTTTCGTCGCTTGCCGGCTGTCTGATGAAGAGCAGCGAGAAT
GGCGCGCTTCCAGTGGTGTCTGTAGTGAGAGAAACAGAGTCCCAGTTACTGCCAGATGTGGGAGCTATTGTAACC
TGTAAGGTCTCTAGCATCAATTCACGCTTTGCCAAAGTACACATCCTGTATGTGGGGTCCATGCCTCTTAAGAAC
TCTTTTCGAGGAACTATCCGCAAGGAAGATGTCCGAGCAACTGAAAAAGACAAGGTTGAAATTTATAAGAGTTTC
CGCCCAGGTGACATTGTCTTGGCCAAAGTGATCTCCTTAGGTGATGCACAGTCCAACTACCTGCTAACCACCGCC
GAGAACGAGCTGGGAGTGGTGGTAGCCCACAGTGAGTCAGGTATCCAGATGGTTCCCATCAGCTGGTGTGAGATG
CAGTGCCCTAAGACCCACACTAAAGAATTCCGGAAAGTAGCCCGAGTACAACCCGAATTCTTGCAGACC**TAA**GAA
GCCACTTTTTACCCTATGGAAGGGGGTAAGCTGTTCCTGAGTATAACACCAAGATGCTGCTGTCTTTATTCAAAC
ACCTGGCGTCGGCCAACAGCCACTTCCAGAAAAATCTTCCAGTTTACGCTGTAGATGGAACATGTTTCTGTGAAC
CTATCAGTGGATTTCATTCTCTTGAGTAATAAATCTTATCTTTTCAAGGCACCAACAAACAAAACTGTGATATTG
GAAATAGCCTATCCCTCCTGACAGTCCTTATAAATACATATTTTTTGCTATGATAAAACTTTTTTACTAAAAGGA
TGTTATAGAGTCTGTTGTCTTAAGCAGAGAAAGACATCTAAATGGTGTCAGGACATTTCAGTACTTCTGCTTATT
GAGTACTTACTGTGCTAGGCACTGAGTCAGGTGCTTTACATACGTCCCCTTCATTTAGGTACATTGTGATTTAAT
GAAAATTTGAGGACACGTGGTGATACAGATAGCATGTGAGGCAGGCATGGTGGCTCATGTTTGTAAATCCCAGCA
CTTTGGGAAGGCCGAGTTGGTTTTGAACTCCTGGCCTCCCAAGGTGCTGATAGTACAGGCATGAACCACTGTGCT
TGGCCTTTTAAAATTTTGTAGAGATGCAGTCTTACTATGTTGCCCAGGCTGTCTCAAACTCCTGGCCTCAAGTGG
TCCTCCTGCCTTGGCCTCCCAAAATGTTGCAATTACAGGCATGAGCACTGTGCTTGGCAAGCTAAGGAGGATTTT
CACTAGCAGTTTCATTTGACAATACCAATCTAGAGGTGAGCTTCTCAATCTTTAATGTGTATCCAAATCACCTGG
GGAATAGATGCCGATTCTGAAACAGGTCTGGAGTGAGACCTGAGGTTCTGCATGTATAACAAGCTCCCAGGGGGT
CCAGCTGTCA

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FIGURE 4055

MAPPVRYCIPGERLCNLEEGSPGSGTYTRHGYIFSSLAGCLMKSSENGALPVVSVVRETESQLLPDVGAIVTCKV
SSINSRFAKVHILYVGSMPLKNSFRGTIRKEDVRATEKDKVEIYKSFRPGDIVLAKVISLGDAQSNYLLTTAENE
LGVVVAHSESGIQMVPISWCEMQCPKTHTKEFRKVARVQPEFLQT

FIGURE 4056A

GGAAAAAGTATGTCGGCAAGTCAGCTGGTTTCCCAGTGCAGGACGCGCTGACAGCTCGAGTGAGCGGACTGCCCA
GGACTTCGGAACTAGACGAGTTCTGTAGAAATCCTGTCAAAGAATATGAAGAAAAACAGAGAAAGATTCTGCAAT
AGAGAGAGAGAATTTGTATATAAATTTAAAGTAGGAAGTCAGTGCTTAGAACTGAGAGTGCCACTCAAATTTCCT
GTTCAAGAGAATGCCAGTCATTTGCATGGACGTCTGATGCTGCTGCACAGTTTACCGTGCTTTATAGAAAAAGAC
TTAAAAGAAGCTCTGACTCAGTTTATAGAAGAAGAATCCCTCAGCGATTATGATAGAGATGCTGAAGCATCCCTG
GCAGCTGTGAAATCAGGTGAAGTAGATTTACATCAGCTGGCGAGTACATGGGCCAAAGCTTATGCTGAGACCACG
TTAGAGCATGCAAGGCCTGAAGAACCCAGCTGGGATGAAGATTTTGCAGATGTGTACCATGACTTAATTCATTCT
CCTGCCTCTGAAACTCTCTTAAATTTGGAACATAATTACTTTGTTAGTATCTCATAACTGATTGGTGAAAGAGAT
GTGGAGCTGAAAAAATTACGAGAGAGACAAGGTATTGAAATGGAAAAAGTCATGCAGGAATTGGGAAAATCACTG
ACAGATCAAGATGTAAATTCACTGGCTGCTCAGCATTTTGAATCCCAGCAAGACCTAGAAAATAAATGGTCGAAT
GAATTAAAACAATCAACTGCCATCCAAAAACAAGAGTATCAAGAATGGGTAATAAAACTTCACCAAGACCTAAAA
AACCCCAACAACAGCTCCCTTAGTGAGGAAATTAAAGTTCAGCCAAGTCAGTTCAGAGAATCTGTAGAAGCAATT
GGAAGGATTTATGAGGAACAGAGAAAGTTAGAAGAAAGTTTTACCATTCACTTAGGAGCCCAGTTGAAGACCATG
CATAATTTGAGATTGCTGAGAGCAGATATGCTGGACTTCTGTAAGCATAAAAGAAATCATCGAAGTGGTGTGAAA
CTTCATCGGCTCCAAACAGCTCTGTCACTTTATTCTACATCTCTCTGTGGCCTGGTTTTACTAGTAGATAATCGA
ATTAATTCATATAGTGGTATTAAAAGAGATTTTGCCACAGTTTGCCAAGAATGCACTGACTTCCATTTCCCCCGA
ATTGAAGAGCAATTAGAAGTTGTCCAACAGGTGGTACTTTATGCTAGAACCCAGCGCAGGAGTAAATTGAAAGAA
TCACTTGATTCTGGAAACCAAAATGGAGGAAATGATGATAAGACTAAGAATGCTGAGAGGAACTATTTAAATGTT
TTACCTGGGGAATTTTATATTACACGGCATTCTAATCTCTCAGAAATCCATGTTGCTTTCCATCTCTGTGTGGAT
GACCATGTGAAATCGGGAAACATCACTGCTCGTGATCCTGCCATTATGGGACTCCGAAATATACTCAAAGTTTGC
TGTACCCATGACATCACAACAATAAGCATTCCTCTCTTGCTGGTACATGATATGTCAGAGGAAATGACTATACCC
TGGTGCTTAAGGAGAGCGGAACTTGTGTTCAAGTGTGTCAAAGGTTTCATGATGGAAATGGCTTCATGGGATGGA
GGAATTTCTAGGACAGTGCAATTTCTAGTACCACAGAGTATTTCTGAAGAAATGTTTTATCAACTTAGTAACATG
CTTCCCCAGATCTTCCGAGTATCATCAACACTCACTCTGACATCCAAGCACTAAACCCTTATAGATTGACATGCT
GGCAGAAGATGATTGTTAAACTCTCCAGGAACTTGTGCTATGCTGGGAATCTGTCAAGCAAAAGATGCCCAGAAA
GAGAACTTGCAGCTCAATCCACAAATCAAGATACATGTGTGTGAAACCATTCCAAAAATTTATATACTGCACAAA
CTGGTGATCAACCCCTAACTTAAACACTTAAAGTCTCTTTATGAATTTCTCTTTTTTTCTTCTCTGTGTTACCTG
TGAATATTAGTAATCTAAAACTTTTTATTTATCACACATGGACACTTGGGAAAGGAAACTTGATTATATTTACAT
GGAGGCATTTGACTTTTTCAAGAGGCTTGACTCGTCTCAGGTGCAATCCTTAATTAAACATACAAACAAAATTTT
CCTTTTACTTTCTTTGCCAAAACAAAATGTAAAAGCACTGAAATATACATTGCAAGTACAAATTTCCTGTGAAAA
TCTTTTTATAGAAACACAAATGTATAAGACAAATGTGCTTGTTCTTTTAAATTCTCCTGTTTCAGAATCTCTTTT
TAATCTACTCCTAAGGATGTACAAGTTAGAGTCAGAAGACGTTTTGGATTTTTTCCCTCTCTCTCATCCTCCCGC
TGTGCCCTTGCACTTGCATATTAATAACATTTCATGGACTGGGAAATAGTGTTCTTTTTTGCAAGCTTGATGTCA
AGTTAGTCTAAACCAGCACCTGGCAGTATTTTAGTGCTCATCAACATTGTGACAATCACACAAGGAAGATCATTT
CTACATTTCTGTCCTCCCTGCGTTCTCAGCTTGCTTAACCATTCCTCTACCTCTTGCATTTTTTTGCGGATAAAT
GTATCCCCATTTCTGCTTCTCTGTTTCCCCTCCTTTTCCATTGTTTTTCCTTATGGTACTACTTTCTCAGGTGCT
ACATATCATATATTTGTCCCATCTATAACATATTTAAATGCTATAAGTAGTAACTCCATTAAACAAAGGCATTTA
CAAAAGCACACAGGTGTTTAGAAAAGCAATAGTTTCATCAATTCCAAGTTATGTGGATATTGTAACTGGCCACAA
GAATGAAATGGAGGGCATTTGGTGTCATAAGATGGCATGTCTTGATGACAAGAAACAAAACGCCCTTCATTAATA
TGCCTCAGTGTAATAACTATTATAGAAACTGTTGGCAAGCAGAGTGCTTTCCTATAACAGAATGTGTCTTAATTT
TCTACTCGAGGGAAAGGTTTGTCCAGGTAACAACACTAAAGACAACCCTAAGAACACCCACTCCAGCAGTATGTC
CATTAGACACTAAAACTCTCCAAATTATTTGTCAGGGAGCCTGGCGATTCTGCCAAGAAGGCAGGTGTTTTGCCC
TTAGAGCCTATACAGTTCTCTTGGAGAAATTGTCTTTCAGGCACCACTGTTAATCACTGAGACTGATTCTAATGC
AAAGCAGGGAAGACAGAGGCAGAAACCAGGAGAGTGGTAGATCAGTGCAGCCCAGATATCGGAATGGAGGAGCAA
AGTTTCATTCACGGATGTTTGTTGAATGCTGCTGCCCAACTCTTCCTTTGTCACCTCTAGGCTATTCCACTAAGT
TACTTATAAACTGGTGGCTTTAACTGAGGGCTGTGTAAAGGTACTATTTGGCATGTGAAGTCAGGATAAATTTAT
CGAATGTCCGTTTTCCACATGCAACTGTGTTACAGAAGTAGTAAAATTGGAAGAATCATGTTTATGGTGTTACCA
CTGATGGAAACACACAAACACCAAGCTAATAATAAATATATAACTTAAAAAGCTAATTATATGCACTGAAATGGT

FIGURE 4056B

GGGAATTTTAGTGATGCAGTAATTGAGGAGTCTGGAGTTTTGTATTTGGACCAAGAATTATGAGATGAGGATCTT
TTTCTGAGTGTTCTAAAGGGCTTCTTGAGGGGGAGTGGTTTAAAGCACTTCATGAATGATGTGAAGAAGGTACCT
TGGGCTGAGACAGCATTCTAGGTACAGATGGCACTCTGTTCAACCAACTGTGGATGGAAAATATTCTGAAAAAAA
ATACAATAAAAATTTTAAAAATACAATATAACATCTGTTTACATGGC

FIGURE 4057

KKYVGKSAGFPVQDALTARVSGLPRTSELDEFCRNPVKEYEEKQRKIFCNREREFVYKFKVGSQCLELRVPLKFP
VQENASHLHGRLMLLHSLPCFIEKDLKEALTQFIEEESLSDYDRDAEASLAAVKSGEVDLHQLASTWAKAYAETT
LEHARPEEPSWDEDFADVYHDLIHSPASETLLNLEHNYFVSISXLIGERDVELKKLRERQGIEMEKVMQELGKSL
TDQDVNSLAAQHFESQQDLENKWSNELKQSTAIQKQEYQEWVIKLHQDLKNPNNSSLSEEIKVQPSQFRESVEAI
GRIYEEQRKLEESFTIHLGAQLKTMHNLRLLRADMLDFCKHKRNHRSGVKLHRLQTALSLYSTSLCGLVLLVDNR
INSYSGIKRDFATVCQECTDFHFPRIEEQLEVVQQVVLYARTQRRSKLKESLDSGNQNGGNDDKTKNAERNYLNV
LPGEFYITRHSNLSEIHVAFHLCVDDHVKSGNITARDPAIMGLRNILKVCCTHDITTISIPLLLVHDMSEEMTIP
WCLRRAELVFKCVKGFMMEMASWDGGISRTVQFLVPQSISEEMFYQLSNMLPQIFRVSSTLTLTSKH

FIGURE 4058

CAACGAGTTGTAGCCGCGGAGAGCAGGCGTCGATGCTGGCGCCCAAAGCCTCCAGCCTGAGAGTCGCCTCACTCG
TGTGACGACAGAGTTTCACTCCTGTTACCCAGGCTGGAGGACAGTGATGTGATCTCGGGTCACCACAACCTCCGC
CTCCCGGATTCAGGCGATTCTCATGCCTCAGCCTCCCGAGTAGCTCAGATTACAGGCATGTGCCACCACGCCCGG
CTAATTTTGTATTTTCAGTCGAGACGGGGTTTCCCCATGTTGGTCAGGCTGGTCTTGAATTCCCGACCTCAGGTG
ATCTGTTCGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAACCACTGCACCCGGCGAGGCATTTTTTACT
GTCTACAGAAACTTATTGTAATTCATTTTTCCTCACTCCAGTAGTAAGAATTATACCAAATTGAAAAGATATGAA
TGAGTATCCTAAAAAAAGAAAAAGGAAGACTCTACACCCTTCTCGTTATTCAGATTCCTCTGGAATAAGCAGAAT
TGCAGATGGATTCAATGGAATTTTCTCTGATCATTGTTACAGTGTCTGTTCTATGAGACAGCCAGATTTAAAATA
TTTTGACAACAAAGATGATGATTCTGATACCGAGACGTCAAATGACTTGCCAAAATTTGCAGATGGAATCAAGGC
CAGAAACAGAAATCAGAACTACCTGGTTCCCAGTCCTGTACTTAGAATTCTAGACCACACTGCCTTTTCTACAGA
AAAATCTGCTGATATTGTAATTTGTGATGAAGAGTGTGACTCACCTGAATCAGTCAACCAGCAAACCCAAGAGGA
GAGTCCTATAGAAGTTCACACTGCTGAAGATGTTCCAATTGCTGTAGAAGTGCATGCGATTTCTGAGGATTATGA
TATAGAGACAGAAAACAATTCCTCTGAGAGTCTCCAAGACCAAACTGATGAAGAACCGCCAGCTAAACTTTGTAA
AATTCTTGACAAGAGCCAAGCTTTGAATGTGACTGCCCAGCAGAAATGGCCTTTACTGAGAGCTAATAGCAGTGG
CCTCTATAAATGTGAACTTTGTGAGTTTAACAGCAAATATTTTTCTGACTTAAAGCAGCATATGATCCTGAAGCA
TAAACGTACTGATTCAAATGTGTGTCGAGTATGCAAGGAAAGTTTCTCTACCAATATGCTTCTGATAGAACATGC
CAAACTGCATGAAGAGGATCCCTACATTTGTAAATACTGTGATTATAAGACAGTAATTTTTGAGAACCTCAGCCA
GCACATTGCAGACACCCATTTTAGTGATCACCTCTATTGGTGTGAACAGTGTGATGTACAGTTCTCCTCAAGCAG
TGAACTCTACCTACATTTCCAGGAGCACAGCTGTGATGAACAGTACTTGTGTCAGTTCTGTGAACATGAAACTAA
TGATCCAGAAGACTTGCATAGCCATGTGGTAAATGAGCATGCATGTAAATTAATAGAGTTAAGTGATAAGTATAA
CAATGGTGAACATGGACAATATAGCCTCTTAAGCAAAATTACCTTTGACAAATGTAAAAACTTCTTTGTATGTCA
AGTATGTGGTTTTCGGAGTAGACTTCACACAAATGTTAACAGGCATGTTGCTATTGAACATACAAAAATTTTTCC
TCATGTTTGTGATGACTGTGGGAAAGGCTTTTCAAGTATGCTAGAATATTGCAAGCATTTAAATTCACATTTATC
TGAAGGGATTTATTTATGTCAATATTGTGAATATTCAACAGGACAAATTGAAGATCTTAAAATTCATCTAGATTT
CAAGCATTCAGCTGACTTGCCTCATAAATGTAGTGACTGCTTGATGAGGTTTGGAAATGAAAGGGAATTAATAAG
TCACCTTCCAGTCCATGAGACAACTTGATTATTCTCTTTAACTTACAGAATGTTAGTTTAAAATAATAAATTCAT
CCTTTTTTTGGAGATGATTAAATGGATGATTGTAAACACAACTTATGAAATCTGCCTTTAACAAGTAACTTTTTT
AAATTATAAAATTTTATTGGCATTGCTCCATTTTCTGTATATAAATATATCTTTAATGTGGTATTTTCAATTGCG
TGATAGTTTGTAGTTTCAACCACTCTTGGTGACTGTCATCCTGTTTCTTCCATATTCTCTGATTTCATGAATTGA
AAAGAAACAAATGTATTGAAGAAGTGAGCTACAGTTTTCCTTCCTTAACCATGGGTGCTAGTAACTTTTTAAAAC
TCAAGACAAGATTAGTTTTTTATGTGTGAAGTCATTAAATTATTACACGACCAGAACTAAAATGCAATATACAGT
TAAGTCCACGGATACTCCCATTAATGAGAAATAACACTAGGAAGCCACTATTACAGGAAGAAAAGATTTGGTTTT
CATGGCAGTCTGTTTTTTTAAAAAAAAATTTTTGAGCCACTATCTATTGTTGAATATTTTAAGATGGGATGAGGG
AGGAACTAATAAGGGCTTACACAATAAAAAATAACTATATCATAACTCATTCATAACTTGATGTTTCATTTTCTG
TTGAGGAACCATAAATTCATTCACAGACTTAATATTTTTTTCTTAGAGATGGTCTCGTTCTGTTGTCCAGGATGG
AGTGCAGTGGTTGATCATAGCTCCCGGGCCGTAGTCTCCCAGGCTCGAGCAATCCTCCCACTTCACCCTCCTGCA
TAGCTAGGACTACAGGCATGTGGCACCATGCCCGCTAAGTTTTTAAATTTCTTGTAGAGATGAGATCTCGCTATG
TTGCCCAGGCCAGTCTCAAACTCCTGGACTCAAGCAATCCTCCCACCTTGGCCTTCCAAATCACTGGGATTATAG
GCATGAGCCATTATGCCTGACTCTTGCCCAAATTTCTGATGTCAAATTGTTCATTGACAGAAAACCCACTGAAGT
ATTTAAAGTTAGGAAGATCTGGGAGATAGGGGTTGCTGGCATGAAAATGTATAACTTACAACATTTATTAATAAA
ATGATAAATTAGC

FIGURE 4059

MNEYPKKRKRKTLHPSRYSDSSGISRIADGFNGIFSDHCYSVCSMRQPDLKYFDNKDDDSDTETSNDLPKFADGI
KARNRNQNYLVPSPVLRILDHTAFSTEKSADIVICDEECDSPESVNQQTQEESPIEVHTAEDVPIAVEVHAISED
YDIETENNSSESLQDQTDEEPPAKLCKILDKSQALNVTAQQKWPLLRANSSGLYKCELCEFNSKYFSDLKQHMIL
KHKRTDSNVCRVCKESFSTNMLLIEHAKLHEEDPYICKYCDYKTVIFENLSQHIADTHFSDHLYWCEQCDVQFSS
SSELYLHFQEHSCDEQYLCQFCEHETNDPEDLHSHVVNEHACKLIELSDKYNNGEHGQYSLLSKITFDKCKNFFV
CQVCGFRSRLHTNVNRHVAIEHTKIFPHVCDDCGKGFSSMLEYCKHLNSHLSEGIYLCQYCEYSTGQIEDLKIHL
DFKHSADLPHKCSDCLMRFGNERELISHLPVHETT

FIGURE 4060

AATAACCTGGAGCCGGCGGCGTAGGTTGGCTCTTTAGGGCTTCACCCCGAAGCTCCACCTTCGCTCCCGTCTTTC
TGGAAACACCGCTTTGATCTCGGCGGTGCGGGACAGGTACCTCCCGGCTGCTGCGGGTGCCCTGGATCCAGTCGG
CTGCACCAGGCGAGCGAGACCCTTCCCTGGTGGAGGCTCAGAGTTCCGGCAGGGTGCATCCGGCCTGTGTGTGGC
GCGAGGCAGGGAAGCCGGTACCCGGGTCCTGGCCCCAGCGCTGACGTTTTCTCTCCCCTTTCTTCTCTCTTCGCG
GTTGCGGCGTCGCAGACGCTAGTGTGAGCCCCC**ATG**GCAGATACGACCCCGAGCGGCCCCCAAGGGGCGGGCGCT
GTGCAATTCATGATGACCAATAAACTGGACACGGCAATGTGGCTTTCTCGCTTGTTCACAGTTTACTGCTCTGCT
CTGTTTGTTCTGCCTCTTCTTGGGTTGCATGAAGCAGCAAGCTTTTACCAACGTGCTTTGCTGGCAAATGCTCTT
ACCAGTGCTCTGAGGCTGCATCAAAGATTACCACACTTCCAGTTAAGCAGAGCATTCCTGGCCCAGGCTTTGTTA
GAGGACAGCTGCCACTACCTGTTGTATTCACTCATCTTTGTAAATTCCTATCCAGTTACAATGAGTATCTTCCCA
GTCTTGTTATTCTCTTTGCTTCATGCTGCCACATATACGAAAAAGGTCCTTGACGCAAGGGGCTCAAATAGTTTA
CCTCTGCTGAGATCTGTCTTGGACAAATTAAGTGCTAATCAACAAAATATTCTGAAATTCATTGCTTGCAATGAA
ATATTCCTGATGCCTGCGACAGTTTTTATGCTTTTTAGTGGTCAAGGAAGTTTGCTCCAACCTTTTATATACTAT
AGATTTCTTACCCTTCGATATTCGTCTCGAAGAAACCCATATTGTCGGACCTTATTTAATGAACTGAGGATTGTT
GTTGAACACATAATAATGAAACCTGCTTGCCCACTGTTTGTGAGAAGACTTTGTCTCCAGAGCATTGCCTTTATA
AGCAGATTGGCACCAACAGTTCCA**TAG**TTTAACATCTAGTTAAGCTACAAATATAGTATAAGCATTATTAGCAGC
TGGTACTTCTGCTAGGGGTTGTAAATTCCAGGTGTTACACTGACCTCAATCCAATTTACATAATTTACATAAATG
CATCTCGGTGGAAAAATAATCATTTTCTTGGCATGTTAAATCAAGCTTAAAAAGTTTTGAGAAAATTTTACTGTG
CTGTGTTGCTAATGGTTAAAGAAGTCTGTATCTAGTGATAAATATACCAGTTTTTTTAAAAAGATGCTGTTGTGC
CTATATCATGAAGTACATTAATTTCTCATGTAAAAAAAATAGCTCTAAAATTTGTTTCAACCTAATTGGTAACCT
GAGTTTATATCTGGCATGAATTCATTATGGTGATACACATATGTGAATTCAGTACATTTTGAGACAGTATTCTAC
CATTCAGTAATTTTGGTTAATGATTTTAACACTTCTCAGTGTATTTAATTTCAAATTGTTTTTTTAATTGGTTTT
ATGCTGCTTTGTTAGGACAGATGTGTTTTGAATGTACCATTATAAGAAGAATTCTATGTATCTTAAACTATGATC
TTCTAAAATTTTATTTCCGTAAGTACTTCTGTGGCCTTGAGTATTTTTTAAAAGGCTCAACTGTAAGCCTCTTAG
CCAGTTGGATAAATATTTGGGGTCACCTAGCCATTGAAAGCAGAAAGCAGTAGTGACACAGCTTTCCCTTCAAAG
AGCCATTGAGAAACATTTCTCAAACAGGAAATCCTTCTTTTACTAATGTGGACATATAGATTATTCGTATTATAG
TTTGTAGAACTACCTAGTTCAGAATCTTGACTGCCAGTTTTCTTGGTTTCTTAGGCTTGAATTTTCATAGACAAT
TGCAACAGTTTAGATGCCTTTTGAAAGGAATGTAATGAAGATTCAGCATCTGACTATATGTGTGTCTATCCTGAA
ATAATAATGGAGAGTATACTGTAGATTACATGTTTACCCATCAAATCTGACTTAAAAGGTTAAATGGAAGGTTTT
ATAGGTAAGGTAATTGATTGGGAATGGGGTAGGGGGAGGAGTTGTGGGGGAATAATGTGCATTTCAGTCTCAACG
CATAGATAAATTTAGGGGAATTGGATGCATTATTCAACTTTGATTTGGGTTGTAAAATGTGTTAAATCCTGTTCA
TTGAACTCCCATCAACTCTTATGAAATTCATGCTGATCTTCATTACCGTTGCATGATTGGAAATGTTTAAAACAT
TGTACAGTTTTAGTATAGAGAAATGTAATGGTTTTTGTGACCAGTTTCTGTCTGCATGTAATTTGGATTTCTCAA
ATACATTCATTAGTAATTTATCAGTAACATTAGTTTTATTTTTGTTCATCTCCTTATCTATAAAAAGGGGATATT
CTTAGGATAAATACATGAAAAATTATACTTGATAGCTTAACTATAATCAGCTATTTTTGTATTTTTGTAATATTT
GTCCACTAAGCTGGAGAAGCAGCCTCATACAGTTGATTTTGTGTATGTGGCTAGTCTTATTGTCACTATGTAAGT
AATCCAATGGTTTTAGAAACTAAACTTTCTAGAGCAATAAAATGACTATAATGTTAAGT

FIGURE 4061

MADTTPSGPQGAGAVQFMMTNKLDTAMWLSRLFTVYCSALFVLPLLGLHEAASFYQRALLANALTSALRLHQRLP
HFQLSRAFLAQALLEDSCHYLLYSLIFVNSYPVTMSIFPVLLFSLLHAATYTKKVLDARGSNSLPLLRSVLDKLS
ANQQNILKFIACNEIFLMPATVFMLFSGQGSLLQPFIYYRFLTLRYSSRRNPYCRTLFNELRIVVEHIIMKPACP
LFVRRLCLQSIAFISRLAPTVP

FIGURE 4062

GCACGAGCCCCGGGCTGCCGGCGCGGGCGCCGCGGCACGTCCACAGGCTGGGTCGCGAGGTGGCGATCGCTGAGA
GGCAGGAGGGCCGAGGCGGGCCTGGGAGGCGGCCCGGAGGTGGGGCGCCGCTGGGGCCGGCCCGCACGGGCTTCA
TCTGAGGGCGCACGGCCCGCGACCGAGCGTGCGGACTGGCCTCCCAAGCGTGGGGCGACAAGCTGCCGGAGCTGC
AATGGGCCGCGGCTGGGGATTCTTGTTTGGCCTCCTGGGCGCCGTGTGGCTGCTCAGCTCGGGCCACGGAGAGGA
GCAGCCCCCGGAGACAGCGGCACAGAGGTGCTTCTGCCAGGTTAGTGGTTACTTGGATGATTGTACCTGTGATGT
TGAAACCATTGATAGATTTAATAACTACAGGCTTTTCCCAAGACTACAAAAACTTCTTGAAAGTGACTACTTTAG
GTATTACAAGGTAAACCTGAAGAGGCCGTGTCCTTTCTGGAATGACATCAGCCAGTGTGGAAGAAGGGACTGTGC
TGTCAAACCATGTCAATCTGATGAAGTTCCTGATGGAATTAAATCTGCGAGCTACAAGTATTCTGAAGAAGCCAA
TAATCTCATTGAAGAATGTGAACAAGCTGAACGACTTGGAGCAGTGGATGAATCTCTGAGTGAGGAAACACAGAA
GGCTGTTCTTCAGTGGACCAAGCATGATGATTCTTCAGATAACTTCTGTGAAGCTGATGACATTCAGTCCCCTGA
AGCTGAATATGTAGATTTGCTTCTTAATCCTGAGCGCTACACTGGTTACAAGGGACCAGATGCTTGGAAAATATG
GAATGTCATCTACGAAGAAAACTGTTTTAAGCCACAGACAATTAAAAGACCTTTAAATCCTTTGGCTTCTGGTCA
AGGGACAAGTGAAGAGAACACTTTTTACAGTTGGCTAGAAGGTCTCTGTGTAGAAAAAAGAGCATTCTACAGACT
TATATCTGGCCTACATGCAAGCATTAATGTGCATTTGAGTGCAAGATATCTTTTACAAGAGACCTGGTTAGAAAA
GAAATGGGGACACAACATTACAGAATTTCAACAGCGATTTGATGGAATTTTGACTGAAGGAGAAGGTCCAAGAAG
GCTTAAGAACTTGTATTTTCTCTACTTAATAGAACTAAGGGCTTTATCCAAAGTGTTACCATTCTTCGAGCGCCC
AGATTTTCAACTCTTTACTGGAAATAAAATTCAGGATGAGGAAAACAAAATGTTACTTCTGGAAATACTTCATGA
AATCAAGTCATTTCCTTTGCATTTTGATGAGAATTCATTTTTTGCTGGGGATAAAAAAGAAGCACACAAACTAAA
GGAGGACTTTCGACTGCATTTTAGAAATATTTCAAGAATTATGGATTGTGTTGGTTGTTTTAAATGTCGTCTGTG
GGGAAAGCTTCAGACTCAGGGTTTGGGCACTGCTCTGAAGATCTTATTTTCTGAGAAATTGATAGCAAATATGCC
AGAAAGTGGACCTAGTTATGAATTCCATCTAACCAGACAAGAAATAGTATCATTATTCAACGCATTTGGAAGAAT
TTCTACAAGTGTGAAAGAATTAGAAAACTTCAGGAACTTGTTACAGAATATTCATTAAAGAAAACAAGCTGATAT
GTGCCTGTTTCTGGACAATGGAGGCGAAAGAGTGGAATTTCATTCAAAGGCATAATAGCAATGACAGTCTTAAGC
CAAACATTTTATATAAAGTTGCTTTTGTAAAGGAGAATTATATTGTTTTAAGTAAACACATTTTTAAAAATTGTG
TTAAGTCTATGTATAATACTACTGTGAGTAAAAGTAATACTTTAATAATGTGGTACAAATTTTAAAGTTTAATAT
TGAATAAAAGGAGGATTATCAAATTCATATATGATAAAAGTGAATGTTCTAAGTCTCTCAAACTAGCGTTTTATG
TAATAATATGTAATATAAATAAAACTATGGTAAATGTGACAAGCATTTAATAGGAAAATGCTAAGGAGGCCTCAT
AAATGACCCATAATTACCAACGTAGAATTTTTCAGTACATTTAGGGTTGCTGGATTTAGCAAATAAAAATAAAGA
TTGCCCAGTTAGATTTGAATTTCAGATAAACAATTAGTTTTTTAATATTTTACATGGAATATTTGGAAAATACTT
ATACTAAAAAATTATTTGTTTGAAATTCACATTTAACTGGGAGTCTTGTATTTTATCTGGCAATCCTAAAATACA
TTGGTATGAAACAAATCACTTTTAGAAGTATATTGCTATTTTGATTGGGTTGTTTTTGTGTGTAGAAACGTACAA
TAACAACTCAAAGGCACAGGAGATTTCTAAACATTGTGAAAAGTTGAATAGATTATATATTTATTCTCATAATAC
TTTCACTAATACTAAATAAAATTTGGGGAACACTTTTTATTTTTATATAATTTCCAATTTACAGAAAAGTTTCAA
AAATAGTACAAAGAGCTCTCTTACCCAGATTCACTAATTGTTCATACGTGCTTTATCTTTCATGCTTTCTCTGTA
CACACACACACACACACAAATTTTTCCTCAATCATTTGAAAGTCAGTTATAGGCATCATGCCCCTTAAACCCTAA
ATACTTCAGTGTGTAATACTGAATAATTACTAAAAATGATTTTCTCAGAAAAAAAAAACTCCCACAATTCTGGAAC
TATAATACTGTAAGCCTTAGAATAAATAATACTTTCAAGTTCCAATCTAAAGTTCTTTTTGAGTTTTGTTGCCCG
TTTTATGCTTGATGTGTATAGTAATAGGGTAGGCTATTTATTTTATTAAAATTTTTTTTAGAGACAAGGTTTTGC
TGTGTTGCCCAAGCTGGAACTTGAACGACTGGGCTGAAGTGATCTTCCCACCTCAGCCTCCCAAGTAGCTGGGAA
TACAGGTGTCTGCCACCATACCCAGTTTCATTTTTGTTTTTTATACCCGAAGTTCATTTCCTTTGTCTCCCTAAA
ACTGAACTGTAATTTTGGGAGGTTTTCATTAGTGGAAGCTCTTCATTTATAAAGCTATTTGAAGGGGTTTAGGAA
TTTATATCACATGGTAATTGTAGAGAAAAAGAAGCTATATACCTCAAAATCGTGCCCTCTTTACATATGTCTTAT
CAGGTATAACATGTTGAAATGTCACATTAGTAGTAAAGTGGGGTTTATTTATATAGTGGTTAAGAAATGTCAGTT
TACACTGCTGTATACTTCTTCTTCTGTGTCCCTAAGGCCTGGTACAGTGCCAAGCACATACTTGGTATCCAATAA
ATATTTGTTGGATGAAAAAAAAAAAAAAAAAAA

FIGURE 4063

MGRGWGFLFGLLGAVWLLSSGHGEEQPPETAAQRCFCQVSGYLDDCTCDVETIDRFNNYRLFPRLQKLLESDYFR
YYKVNLKRPCPFWNDISQCGRRDCAVKPCQSDEVPDGIKSASYKYSEEANNLIEECEQAERLGAVDESLSEETQK
AVLQWTKHDDSSDNFCEADDIQSPEAEYVDLLLNPERYTGYKGPDAWKIWNVIYEENCFKPQTIKRPLNPLASGQ
GTSEENTFYSWLEGLCVEKRAFYRLISGLHASINVHLSARYLLQETWLEKKWGHNITEFQQRFDGILTEGEGPRR
LKNLYFLYLIELRALSKVLPFFERPDFQLFTGNKIQDEENKMLLLEILHEIKSFPLHFDENSFFAGDKKEAHKLK
EDFRLHFRNISRIMDCVGCFKCRLWGKLQTQGLGTALKILFSEKLIANMPESGPSYEFHLTRQEIVSLFNAFGRI
STSVKELENFRNLLQNIH

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FIGURE 4064A

CGATAACGATTTGTGTTGTGAGAGGCGCAAGCTGCGATTTCTGCTGAACTTGGAGGCATTTCTACGACTTTTCTC
TCAGCTGAGGCTTTTCCTCCGACCCTGATGCTCTTCAATTCGGTGCTCCGCCAGCCCCAGCTTGGCGTCCTGAGA
AATGGATGGTCTTCACAATACCCTCTTCAATCCCTTCTGACTGGTTATCAGTGCAGTGGTAATGATGAACACACT
TCTTATGGAGAAACAGGAGTCCCAGTTCCTCCTTTTGGATGTACCTTCTCTTCTGCTCCCAATATGGAACATGTA
CTAGCAGTTGCCAATGAAGAAGGCTTTGTTCGATTGTATAACACAGAATCACAAAGTTTCAGAAAGAAGTGCTTC
AAAGAATGGATGGCTCACTGGAATGCCGTCTTTGACCTGGCCTGGGTTCCTGGTGAACTTAAACTTGTTACAGCA
GCAGGTGATCAAACAGCCAAATTTTGGGACGTAAAAGCTGGTGAGCTGATTGGAACATGCAAAGGTCATCAATGC
AGCCTCAAGTCAGTTGCCTTTTCTAAGTTTGAGAAAGCTGTATTCTGTACGGGTGGAAGAGATGGCAACATTATG
GTCTGGGATACCAGGTGCAACAAAAAAGATGGGTTTTATAGGCAAGTGAATCAAATCAGTGGAGCTCACAATACC
TCAGACAAGCAAACCCCTTCAAAACCCAAGAAGAAACAGAATTCAAAAGGACTTGCTCCTTCTGTGGATTTCCAG
CAAAGTGTTACTGTGGTCCTCTTTCAAGACGAGAATACCTTAGTCTCAGCAGGAGCTGTGGATGGGATAATCAAA
GTATGGGATTTACGTAAGAATTATACTGCTTATCGACAAGAACCCATAGCATCCAAGTCTTTCCTGTACCCAGGT
AGCAGCACTCGAAAACTTGGATATTCAAGTCTGATTTTGGATTCCACTGGCTCTACTTTATTTGCTAATTGCACA
GACGATAACATCTACATGTTTAATATGACTGGGTTGAAGACTTCTCCAGTGGCTATTTTCAATGGACACCAGAAC
TCTACCTTTTATGTAAAATCCAGCCTTAGTCCAGATGACCAGTTTTTAGTCAGTGGCTCAAGTGATGAAGCTGCC
TACATATGGAAGGTCTCCACACCCTGGCAACCTCCTACTGTGCTCCTGGGTCATTCTCAAGAGGTCACGTCTGTG
TGCTGGTGTCCATCTGACTTCACAAAGATTGCTACCTGTTCTGATGACAATACACTAAAAATCTGGCGCTTGAAT
AGAGGCTTAGAGGAGAAACCAGGAGGTGATAAACTTTCCACGGTGGGTTGGGCCTCTCAGAAGAAAAAAGAGTCA
AGACCTGGCCTAGTAACAGTAACGAGTAGCCAGAGTACTCCTGCCAAAGCCCCCAGGGTAAAGTGCAATCCATCC
AATTCTTCCCCGTCATCCGCAGCTTGTGCCCCAAGCTGTGCTGGAGACCTCCCTCTTCCTTCAAATACTCCTACG
TTCTCTATTAAAACCTCTCCTGCCAAGGCCCGGTCTCCCATCAACAGAAGAGGCTCTGTCTCCTCCGTCTCTCCC
AAGCCACCTTCATCTTTCAAGATGTCGATTAGAAACTGGGTGACCCGAACACCTTCCTCATCACCACCCATCACT
CCACCTGCTTCGGAGACCAAGATCATGTCTCCGAGAAAAGCCCTTATTCCTGTGAGCCAGAAGTCATCCCAAGCA
GAGGCTTGCTCTGAGTCTAGAAATAGAGTAAAGAGGAGGCTAGACTCAAGCTGTCTGGAGAGTGTGAAACAAAAG
TGTGTGAAGAGTTGTAACTGTGTGACTGAGCTTGATGGCCAAGTTGAAAATCTTCATTTGGATCTGTGCTGCCTT
GCTGGTAACCAGGAAGACCTTAGTAAGGACTCTCTAGGTCCTACCAAATCAAGCAAAATTGAAGGAGCTGGTACC
AGTATCTCAGAGCCTCCGTCTCCTATCAGTCCGTATGCTTCAGAAAGCTGTGGAACGCTACCTCTTCCTTTGAGA
CCTTGTGGAGAAGGGTCTGAAATGGTAGGCAAAGAGAATAGTTCCCCAGAGAATAAAAACTGGTTGTTGGCCATG
GCAGCCAAACGGAAGGCTGAGAATCCATCTCCACGAAGTCCGTCATCCCAGACACCCAATTCCAGGAGACAGAGC
GGAAAGACATTGCCAAGCCCGGTCACCATCACGCCCAGCTCCATGAGGAAAATCTGCACATACTTCCATAGAAAG
TCCCAGGAGGACTTCTGTGGTCCTGAACACTCAACAGAATTATAGATTCTAATCTGAGTGAGTTACTGAGCTTTG
GTCCACTAAAACAAGCTGAGCTTTGGTCCACTAAAACAAGATGAAAAATACAAGAGTGACTCTATAACTCTGGTC
TTTAAGAAAGCTGCCTTTTCATTTTTAGACAAAATCTTTTCAACGCTGAAATGTACCTAATCTGGTTCTACTACC
ATAATGTATATGCAGCTTCCCGAGGATGAATGCTGTGTTTAAATTTCATAAAGTAAATTTGTCACTCTAGCATTT
TGAATGAATAGTCTTCACTTTTTAAATTATTCATCTTCTCTATAATAATGACATCCCAGTTCATGGAGGCAAAAA
ACAAGTTTCTTGTTATCCTGAAACTTTCTATGCTCAGTGGAAAGTATCTGCCAGCCACAGCATGAGGCCTGTGAA
GGCTGACTGAGAAATCCTCTGCTGAAGACCCCTGGTTCTGTTCTGCCTCCAACATGTATAATTTTATTTGAAATA
CATAATCTTTTCACTATGCTTTTGTGGGGTTTTTTTTAAGTATGTGTAAAAATGTGATGCTCAGATAAGTACATT
TATATCAGTTCAGTGTTAAAATGCAGTCTCTTGAGTTAAAGTCATCTTTATTTTAAATGCAGTGATAAATGTCAA
CTCTTCGGAGAAACTAGGAGAACAACAACAGAAAGCTGTGTTTGTCTTTTTTCTCTCAAATATATCTCCCGTATG
AGATTTCAGGTCCCCATGTTTTCACCAAGCAATCTGCTATGTCAGCCAACCCAACATCACTTTCTACAGGAGGTT
ATGATTTTTGCCATTTACTAGAGGAAGATGTTTTATGAAATCAATTTGGGGTTTGAATTCAGGTGCAGTCATCAG
TTCTTTAGGGGCTGCAATGTTTTAAAAAAAATAAGTCATCAGATTTTAAGAAAAAAGTGATGATTTCTTATTGAT
ATTTTTGTAACAGAATATAGCTCTTAACTGAAAATCCAGAACCAGAAACATAAATCTTGAGTTTCTTTTCATGTA
CATAAAAAGCAATAGCCTTTTAGTATAGATAGCCCTGAGCCAAAAAGTAATAGAATTTTCTCTAGATATTTAATA
CAGAGAGTGTATAGACTGACTCTAAGTTAATAATGTGCAAAATATCTTAAACATCCCTCCCCTTATTCAACAATT
ATGTATCAGTGATCTTGAACCATTGTTTTATATTTTTCACCTTTGTAACCTCATGGAAAGAGGCTTTACATACTT
TCTATGTACTATTTACTTAGAAGGGAGCCCCCTTCCAGTCATGAAACTTCATTTGTTTTATCCATATCCCTGAGG

FIGURE 4064B

ACTGTGTAGACTTTATGTCAGTTCTGTGTAGACTTTATGTCAGTTTTTGTCATTATTTGAAAATCTATTCTGACA
ACTTTTTAATTCCTTTGATCTTATAAGTTAAAGCTGTAACAACTGAAATTGCATGGATCAAGTAAGCATAGTTTT
ATCCAGGGAGAAAAATAAAAGGAAGCCATAGAATTGCTCTGGTCAAAACCAAGCACACCATAGCCTTAACTGAAT
ATTTAGGAAATCTGCCTAATCTGCTTATATTTGGTGTTTGTTTTTTGACTGTTGGGCTTTGGGAAGATGTTATTT
ATGACCAATATCTGCCAGTAACGCTGTTTATCTCACTTGCTTTGAAAGCCAATGGGGGAAAAAAATCCATGAAAA
AAAAAAGATTGATAAAGTAGATGATTTTGTTTGTATCCCTACCCATCTCCTGGCAGCCCTACTGAGTGAAATTGG
GATACATTTGGCTGTCAGAAATTATACCGAGTCTACTGGGTATAACATGTCTCACTTGGAAAGCTAGTACTTTTA
AATGGGTGCCAAAGGTCAACTGTAATGAGATAATTATCCCTGCCTGTGTCCATGTCAGACTTTGAGCTGATCCTG
AATAATAAAGCCTTTTACCTT

FIGURE 4065

MLFNSVLRQPQLGVLRNGWSSQYPLQSLLTGYQCSGNDEHTSYGETGVPVPPFGCTFSSAPNMEHVLAVANEEGF
VRLYNTESQSFRKKCFKEWMAHWNAVFDLAWVPGELKLVTAAGDQTAKFWDVKAGELIGTCKGHQCSLKSVAFSK
FEKAVFCTGGRDGNIMVWDTRCNKKDGFYRQVNQISGAHNTSDKQTPSKPKKKQNSKGLAPSVDFQQSVTVVLFQ
DENTLVSAGAVDGIIKVWDLRKNYTAYRQEPIASKSFLYPGSSTRKLGYSSLILDSTGSTLFANCTDDNIYMFNM
TGLKTSPVAIFNGHQNSTFYVKSSLSPDDQFLVSGSSDEAAYIWKVSTPWQPPTVLLGHSQEVTSVCWCPSDFTK
IATCSDDNTLKIWRLNRGLEEKPGGDKLSTVGWASQKKKESRPGLVTVTSSQSTPAKAPRVKCNPSNSSPSSAAC
APSCAGDLPLPSNTPTFSIKTSPAKARSPINRRGSVSSVSPKPPSSFKMSIRNWVTRTPSSSPPITPPASETKIM
SPRKALIPVSQKSSQAEACSESRNRVKRRLDSSCLESVKQKCVKSCNCVTELDGQVENLHLDLCCLAGNQEDLSK
DSLGPTKSSKIEGAGTSISEPPSPISPYASESCGTLPLPLRPCGEGSEMVGKENSSPENKNWLLAMAAKRKAENP
SPRSPSSQTPNSRRQSGKTLPSPVTITPSSMRKICTYFHRKSQEDFCGPEHSTEL

FIGURE 4066

GTGCACCGTCGGCAACCTGCTTCCTGGAACCGTGTATCGCTTCCGGGTGAGGGCTCTGAATGATGGAGGGTATGG
TCCCTATTCTGATGTCTCAGAAATTACCACTGCTGCAGGGCCTCCTGGACAATGCAAAGCACCTTGTATTTCTTG
TACACCTGATGGATGTGTCTTAGTGGGTTGGGAGAGTCCTGATAGTTCTGGTGCTGACATCTCAGAGTACAGGTT
GGAATGGGGAGAAGATGAAGAATCCTTAGAACTCATTTATCATGGGACAGACACCCGTTTTGAAATAAGAGACCT
GTTGCCTGCTGCACAGTATTGCTGTAGACTACAGGCCTTCAATCAAGCAGGGGCAGGGCCGTACAGTGAACTTGT
CCTTTGCCAGACGCCAGCGTCTGCCCCTGACCCCGTCTCCACTCTCTGTGTCCTGGAGGAGGAGCCCCTTGATGC
CTACCCTGATTCACCTTCTGCGTGCCTTGTACTGAACTGGGAAGAGCCGTGCAATAACGGATCTGAAATCCTTGC
TTACACCATTGATCTAGGAGACACTAGCATTACCGTGGGCAACACCACCATGCATGTTATGAAAGATCTCCTTCC
AGAAACCACCTACCGGATCAGAATTCAGGCTATAAATGAAATTGGAGCTGGACCATTTAGTCAGTTCATTAAAGC
AAAAACTCGGCCATTACCACCCTTGCCTCCTAGGCTAGAATGTGCTGCTGCTGGTCCTCAGAGCCTGAAGCTAAA
ATGGGGAGACAGTAACTCCAAGACACATGCTGCTGAGGACATTGTGTACACACTACAGCTGGAGGACAGAAACAA
GAGGTTTATTTCAATCTACAGAGGACCCAGCCACACCTACAAGGTCCAGAGACTGACGGAATTCACATGCTACTC
CTTCAGAATCCAGGCAGCAAGCGAGGCTGGAGAAGGGCCCTTCTCAGAAACCTATACCTTCAGCACAACCAAAAG
TGTCCCCCCCCACCATCAAAGCACCTCGAGTAACACAGTTAGAAGGAAATTCATGTGAAATTTTATGGGAGACGGT
ACCATCAATGAAAGGTGACCCTGTTAACTACATTCTGCAGGTATTGGTTGGAAGAGAATCTGAGTACAAACAGGT
GTACAAGGGAGAAGAAGCCACATTCCAAATCTCAGGCCTCCAGACCAACACAGACTACAGGTTCCGCGTATGTGC
GTGTCGTCGCTGTTTAGACACCTCTCAGGAGCTAAGCGGAGCCTTCAGCCCCTCTGCGGCTTTTGTATTACAACG
AAGTGAGGTCATGCTTACAGGGGACATGGGGAGCTTAGATGATCCCAAAATGAAGAGCATGATGCCTACTGATGA
ACAGTTTGCAGCCATCATTGTGCTTGGCTTTGCAACTTTGTCCATTTTATTTGCCTTTATATTACAGTACTTCTT
AATGAAGTAAACCCAACAAAACTAGAGGTATGAATTAATGCTACACATTTTAATACACACATTTATTCAGATACT
CCCCTTTTTAAAGCCCTTTTGTTTTTTGATTTATATACTCTGTTTTACAGATTTAGCTAGAAAAAAAATGTCAGT
GTTTTGGTGCACCTTTTTGAAATGCAAAACTAGGAAAAGGTTAAACTGGATTTTTTTTTTTAAAAAAAAGAAAAA
AAAAGAAGAAAAGTATACCAGATACCAAAAGCCAGCTTTCTTATGTTTTCCTTTAAATTTTCAGATTTACCTTCA
TTCTGTTTTCACTGATGTCTTTTGCAAGCCTTTGATTTTTTTTTTTTTTGTTACAGTTTAGTAATTTATATTCAC
CAGTCACTTCATATGTCTTGAACATCTGTATCTGTAAACATGAATCACCGTGTGTGTACTTACAGGGCTAGGATT
TCAGTGTTGTCAGAGTATTACCACACAGCAACAGCAACATACAGAAGATATGTTCACTCAGATAAGACTGCCCTA
AACAACCATTTTGTCACTCAGTTATTTAACTGTGTTTAGCTCATTTAAATCAAAATGTGTACTTTAATCTAAAAT
GTTTTAATAATCTGTATTTCTTATAATTTTAACACTATGAGCTGCCTGTATAAGAAATCAAGTAACCAGAATGCA
CCTATAAATTATGGAGCATTGTAGATTTTACCACATCAATTCATAGCAGTAACTTTAAGAGGGCATTGTGCAATA
GTTAGTTGTTTTCTTGTTCAGCTATTTTAAAGGCTGCTTTAACTTGTTTGTTTGTCTTTGTATATAACTACTTCT
AATCTAATCACTAGAGTTATTATATTCTGTTATGTTTGACCAGAATTATATGACAAGAACTGGTGACAGTTTAGT
GCCTCTGCCCATTGTCCATGATTTACACTAATTGTGAGCAGTCTTCTTATGTGTCAGCTCATTATTTTTGAAACA
TTTGCCTTTAGGCTGTTCTTTGAGGTATCAATGAAGTGATTGAATTTCAATACCTTAATTCAGTGCACATAATAC
TAATGTAACAGCAGATGAAAATTGATAAAACCCAAAAGAGAGTCATCTAAATTTGTAGTTCCTATTTCTGTGGGT
TTGCCTGGCCATGGTTGGAGAGGGAATGGTGTTTGATGGTAAACACAGGGTGTTTGGGGATCAAGGAGCCTAGAT
TCTCTCCCTGGATCTGTCACTAACTTGCTGCGTGACCTGAACACGTCACTTTACCTCTCTGTGCCTCAGTTTTCC
CATGCATGAAAAATAAAATAAAATAAAATAAAACGGGGATTCTAATGTTAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACAAAAAAAAAAAAAAAAA

FIGURE 4067

AGCTGGAGGAGGCCTGTCGCAGGCTAGCTGAGGTGTCGAAGCCCCCAAAGCAGCGGTGCTGTGTGGCCAGTCAGC
AGAGGGACAGGAATCATTCGGCCACTGTTCAGACGGGAGCCACACCCTTCTCCAATCCAAGCCTGGCTCCAGAAG
ATCACAAAGAGCCAAAGAAACTGGCAGGTGTCCACGCGCTCCAGGCCAGTGAGTTGGTTGTCACTTACTTTTTCT
GTGGGGAAGAAATTCCATACCGGAGGATGCTGAAGGCTCAGAGCTTGACCCTGGGCCACTTTAAAGAGCAGCTCA
GCAAAAAGGGAAATTATAGGTATTACTTCAAAAAAGCAAGCGATGAGTTTGCCTGTGGAGCGGTGTTTGAGGAGA
TCTGGGAGGATGAGACGGTGCTCCCGATGTATGAAGGCCGGATTCTGGGCAAAGTGGAGCGGATCGATTGAGCCC
TGGGGTCTGGCTTTGGTGAACTGTTGGAGCCCGAAGCTCTTGTGAACTGTCTTGGCTGTGAGCAACTGCGACAAA
ACATTTTGAAGGAAAATTAAACCAATGAAGAAGACAAAGTCTAAGGAAGAATCGGCCAGTGGGCCTTCGGGAGGG
CGGGGGGAGGTTGATTTTCATGATTCATGAGCTGGGTACTGACTGAGATAAGAAAAGCCTGAACTATTTATTAAA
AACATGACCACTCTTGGCTATTGAAGATGCTGCCTGTATTTGAGAGACTGCCATACATAATATATGACTTCCTAG
GGATCTGAAATCCATAAACTAAGAGAAACTGTGTATAGCTTACCTGAACAGGAATCCTTACTGATATTTATAGAA
CAGTTGATTTCCCCCATCCCCAGTTTATGGATATGCTGCTTTAAACTTGGAAGGGGGAGACAGGAAGTTTTAATT
GTTCTGACTAAACTTAGGAGTTGAGCTAGGAGTGCGTTCATGGTTTCTTCACTAACAGAGGAATTATGCTTTGCA
CTACGTCCCTCCAAGTGAAGACAGACTGTTTTAGACAGACTTTTTAAAATGGTGCCCTACCATTGACACATGCAG
AAATTGGTGCGTTTTGTTTTTTTTTTTTCCTATGCTGCTCTGTTTTGTCTTAAAGGTCTGAGGGTTGACCATGTT
GCGTCATCATCAACATTTGGGGGGTTGTGTTGGATGGGATGATCTGTTGCAGAGGGAGAGGCAGGGAACCCTGCT
CCTTCGGGCCCCAGGTTGATCCTGTGACTGAGGCTCCCCCTCATGTAGCCTCCCCAGGCCCAGGGCCCTGAGGCC
TGCTAGAATCACTGCCGCTGTGCTTTCGTGGAAATGACAGTTCCTTGTTTTTTTTGTTTCTGTTTTTGTTTTACA
TTAGTCATTGGACCACAGCCATTCAGGAACTACCCCCTGCCCCACAAAGAAATGAACAGTTGTAGGGAGACCCAG
CAGCACCTTTCCTCCACACACCTTCATTTTGAGTTCGGGTTTTTGTGTTAAGTTAATCTGTACATTCTGTTTGCC
ATTGTTACTTGTACTATACATCTGTATATAGTGTACGGCAAAAGAGTATTAATCCACTATCTCTAGTGCTTGACT
TTAAATCAGTACAGTACCTGTACCTGCACGGTCACCCGCTCCGTGTGTCGCCCTATATTGAGGGCTCAAGCTTTC
CCTTGTTTTTTGAAAGGGGTTTATGTATAAATATATTTTATGCCTTTTTATTACAAGTCTTGTACTCAATGACTT
TTGTCATGACATTTTGTTCTACTTATACTGTAAATTATGCATTATAAAGAGTTCATTTAAGGAAAATTACTTGGT
ACAATAATTATTGTAATTAAGAGATGTAGCCTTTATTAAAATTTTATATTTTTCAAAAAAAAA

FIGURE 4068

CTGTCTGGCGTCCTGACATCTACTTTGCATCAGTGTCAGAAACATTTGAAACAAAGGTTGATGACTACAGTCAAG
AGTGGGCAGCTCAAACAGAGAAGAGTTATGAGAAATCAGAGCTTTCTCTCGACAGGTTGAGGACCTTGCTGCAGC
TGAAGTGGCAGCGCTCACTGTGTGAGCCGGGCGAGGCTGTGGGCCTGCTGGCTGCCCAGAGCATCGGAGAGCCCT
CCACCCAGATGACCCTCAACACCTTCCACTTTGCAGGCAGAGGCGAGATGAACGTCACCCTGGGCATTCCAAGGT
TGCGGGAGATTCTCATGGTGGCCAGCGCCAACATCAAGACACCCATGATGAGCGTGCCCGTGCTCAACACCAAGA
AAGCCCTGAAGAGAGTGAAAAGCCTGAAGAAGCAACTCACCAGGGTGTGCTTGGGGGAGGTGTTGCAGAAAATTG
ACGTCCAGGAGTCCTTCTGTATGGAAGAAAAACAGAACAAATTCCAGGTGTACCAGCTGCGGTTTCAGTTCCTGC
CACATGCATATTACCAGCAGGAGAAGTGCCTGAGACCCGAGGACATCCTGCGCTTCATGGAAACAAGATTCTTTA
AACTTCTGATGGAATCCATCAAAAAGAAGAATAATAAAGCATCAGCTTTCAGGAACGTAAACACTCGAAGAGCTA
CACAGCGGGATCTGGACAACGCTGGGGAGTTGGGGAGGAGTCGGGGAGAGCAGGAGGGTGATGAGGAAGAGGAGG
GGCACATTGTGGATGCTGAAGCTGAGGAGGGGGACGCCGATGCCTCTGATGCCAAACGCAAGGAGAAGCAGGAGG
AGGAGGTTGATTATGAGAGTGAGGAAGAGGAGGAGAGGGAGGGCGAGGAGAACGACGATGAAGACATGCAGGAGG
AACGAAATCCCCACAGGGAAGGTGCTCGAAAGACCCAAGAGCAAGATGAAGAGGTGGGCTTAGGCACTGAGGAGG
ACCCGTCCCTTCCCGCCCTCCTGACGCAGCCCCGGAAACCCACCCACAGCCAGGAGCCCCAGGGGCCCGAGGCCA
TGAAGCGCCGGGTCCAGGCTGTGCGTGAGATCCACCCGTTCATAGATGACTACCAGTACGACACCGAGGAGAGCC
TGTGGTGCCAGGTGACAGTGAAGCTCCCTCTGATGAAGATCAACTTTGACATGAGCTCCCTGGTAGTATCTTTGG
CCCATGGTGCCGTCATCTATGCGACCAAGGGCATCACTCGGTGCCTCCTGAATGAAACAACCAACAATAAGAACG
AGAAGGAGCTTGTGCTAAACACAGAAGGAATCAACCTCCCAGAGCTATTCAAGTATGCAGAGGTCCTGGATCTGC
GCCGCCTCTACTCCAACGACATCCACGCCATAGCCAACACGTATGGCATTGAGGCCGCGCTGCGGGTGATCGAGA
AGGAGATCAAGGATGTGTTTGCCGTGTATGGCATCGCGGTCGACCCTCGCCATCTCTCCCTGGTTGCTGATTATA
TGTGCTTCGAGGGTGTTTACAAGCCACTGAATCGCTTTGGGATCCGGTCAAACTCTTCCCCGCTACAGCAGATGA
CATTTGAAACCAGCTTCCAGTTTCTGAAGCAAGCCACCATGCTGGGATCCCACGATGAGCTGAGGTCTCCTTCTG
CCTGCCTTGTGGTCGGGAAGGTCGTCAGGGGCGGGACAGGCCTGTTCGAGCTCAAGCAGCCTCTGAGATAGCAGC
TACCCCGGCACCATCTGCCCAGCTCCAAGGACCCTTGGTGAGGGCGTGGCCCAGCCTGCCTTCTGCATGAGAGGA
CCAGGAGACTGGAATCCAGGGCAGTTCCAAGTGACAGTACAGAGCACAGCAGCGACCTTGGGCCTGAAAGCAGTG
GGCCTCTGAGCTGGGCCAGCTTCACCTGGAAAGTGACAGAGTTGCTCATCCTTGCCCCTCCCTGTCTCTGGATTT
TTATCAAGGTTTACCAAGTCTTCTGAGTCCCCCTGAGATGGCTGGGGCCTCACATGTGCTGCAGGAGGCCTCTGT
GGCATAACCCCTAAGGAGAAGTCCTGATTCACGATTCACTGAGAAGACCAAGGGGAAGCCATGCTTTGCTGCTGG
GGACCCCAGGCACCTCCAGAGTAGGGAAGCGGGGTTCTTTTGCTGTGAGTGGCCAGGGACAACAGACAAGATTCC
TGGGGGCTCCCGATGAGCAGGAACGTGGAGCCTGCTGCCCAAGGCCTGCTCCTTCCGGCTGCTCCAGCCCCTGGG
GGCAGAGTCCACAAAGAGTCCCCATCAAGACTTCTTCCCTGAGTCAAGTACAGCGTAGCATAGTCCTCCACCCAC
CCAACCTCTCTGCCTGGCCAGGGTCCTGGCCCTGCCACTGTGTGGCGAGGTGTCCTTCTAGACCACATCAGCCCC
AAGGCTGGGAGCAGTCGCTCCAGGGCCGCAGCAGTTCACTCCCACACATAGAACCCAGGTCACTGCTGGGGCGAT
TGAACAGGTTGCCTGGCTTTTCTCTGCTGTCAGTTTGGTGTGGAGGCCTATGTTCTGCCCCATACACCCCACAGG
CCCTGCTTATGGGAAGGAACACAGGCCTCCAGCCCAGAGGACTGTGCCGCCCTGTTCTTGGCCGTCCACGTTTCC
TCTCCCTCTAGCACCAGCAATACATTTCCCTGGCATGGACAGAAAAGACAGAGAGGACTTATACAAAGGCTTTGT
AAAACCAGAGGCTAGCTTCTATCTTTGTCTACTGTTATTTCAGCTCAGGGCGGGTAATTAACATCATTGGAACTA
GCTATTAGGAAAGAAAAAAAACTTGGTTTTTTTTACAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4069

MTLNTFHFAGRGEMNVTLGIPRLREILMVASANIKTPMMSVPVLNTKKALKRVKSLKKQLTRVCLGEVLQKIDVQ
ESFCMEEKQNKFQVYQLRFQFLPHAYYQQEKCLRPEDILRFMETRFFKLLMESIKKKNNKASAFRNVNTRRATQR
DLDNAGELGRSRGEQEGDEEEEGHIVDAEAEEGDADASDAKRKEKQEEEVDYESEEEEEREGEENDDEDMQEERN
PHREGARKTQEQDEEVGLGTEEDPSLPALLTQPRKPTHSQEPQGPEAMKRRVQAVREIHPFIDDYQYDTEESLWC
QVTVKLPLMKINFDMSSLVVSLAHGAVIYATKGITRCLLNETTNNKNEKELVLNTEGINLPELFKYAEVLDLRRL
YSNDIHAIANTYGIEAALRVIEKEIKDVFAVYGIAVDPRHLSLVADYMCFEGVYKPLNRFGIRSNSSPLQQMTFE
TSFQFLKQATMLGSHDELRSPSACLVVGKVVRGGTGLFELKQPLR

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FIGURE 4070

CAGATAGGCGACACGCGGCGGGCGCTGAGGCGGGAATGGCTGCTGTACTGCAGCGCGTCGAGCGGCTGTCCAATC
GAGTCGTGCGTGTGTTGGGCTGTAACCCGGGTCCCATGACCCTCCAAGGCACCAACACCTACCTAGTGGGGACCG
GCCCCAGGAGAATCCTCATTGACACTGGAGAACCAGCAATTCCAGAATACATCAGCTGTTTAAAGCAGGCTCTAA
CTGAATTTAACACAGCAATCCAGGAAATTGTAGTGACTCACTGGCACCGAGATCATTCTGGAGGCATAGGAGATA
TTTGTAAAAGCATCAATAATGACACTACCTATTGCATTAAAAAACTCCCACGGAATCCTCAGAGAGAAGAAATTA
TAGGAAATGGAGAGCAACAATATGTTTATCTGAAAGATGGAGATGTGATTAAGACTGAGGGAGCCACTCTAAGAG
TTCTATATACCCCTGGCCACACTGATGATCACATGGCTCTACTCTTAGAAGAGGAAAATGCTATCTTTTCTGGAG
ATTGCATCCTAGGGGAAGGAACAACGGTATTTGAAGACCTCTATGATTATATGAACTCTTTAAAAGAGTTATTGA
AAATCAAAGCTGATATTATATATCCAGGACATGGCCCAGTAATTCATAATGCTGAAGCTAAAATTCAACAATACA
TTTCTCACAGAAATATTCGAGAGCAGCAAATTCTTACATTATTTCGTGAGAACTTTGAGAAATCATTTACAGTAA
TGGAGCTTGTAAAAATTATTTACAAGAATACTCCTGAGAATTTACATGAAATGGCTAAACATAATCTCTTACTTC
ATTTGAAAAAACTAGAAAAAGAAGGAAAAATATTTAGCAACACAGATCCTGACAAGAAATGGAAAGCTCATCTTT
AGTTTCAGATTAAAGAAAGCTTTGTTTTATTTTGCTTTGAGAGAATGGTATGTTTTCTTAACTATAGGTTATTTT
ATAGAGAATATAAAAGTATAAAACATTAAAAATAACCCTAGATATACTTTAAAATAATGTTATATTTATGCTAAA
ATATGTAAATTACACTATACAACCATATGATAGGTTATTTCTCTAACCTTGTCTTCTAACGTTTTACCAAAAATT
CATAATCTAATAGTTTATCAGTTTTCAATAGATTAAATAAAATGATTACTTTAAAAATAATAAAATTTATCTAAT
TTAAAGTTGATATTATTTTTGGCCGTTAGTTATCTATTACTAGTGATCAGTTATACTGTTTTCTATAGCTACTTT
ATTTAACAGCACAGATTTCTATGCACCTTTACTCTTTCCTCAACCCTTGTCTCTATCTGTACATAATTGCTTTGT
CTTGATGTTTCTATCAACTATATCATGACTATCTATTGGTTCCATAACTCTGTATCATGTGTATTTTCTTATTCT
GGTATACCACAAATGATTCATGCAAATGAATTTTTGGTGATTGAAAAATATTAAATTCCCAATTTAAAGTATTAT
ATGATA

FIGURE 4071

MAAVLQRVERLSNRVVRVLGCNPGPMTLQGTNTYLVGTGPRRILIDTGEPAIPEYISCLKQALTEFNTAIQEIVV
THWHRDHSGGIGDICKSINNDTTYCIKKLPRNPQREEIIGNGEQQYVYLKDGDVIKTEGATLRVLYTPGHTDDHM
ALLLEEENAIFSGDCILGEGTTVFEDLYDYMNSLKELLKIKADIIYPGHGPVIHNAEAKIQQYISHRNIREQQIL
TLFRENFEKSFTVMELVKIIYKNTPENLHEMAKHNLLLHLKKLEKEGKIFSNTDPDKKWKAHL

FIGURE 4072

TTTGCAAAGGCTGTTTGCTTTTCATGTCTATAGGTCTGTCATTGTCCTTTTTCAAAGCATTTCTGAAGTTATTCC
TACTTGGATATAGTTAATGGAATTGGCTTAATTTGATGACATAATAAATCACTTATAAAATTTTAAATATCAAGT
GAAAATTTAGAAAGGCCATTACTATTCTATAAACCTTATAAACTTGCTCTGGGAGAATGCATTCTAAATTATATA
TAGTGTTTCAGCTCCCATTGTGGGTGTTCATAGTCTTCTAGGGAACAGATAAACTTAAGTATTCAATTCACTCTT
GGGCATTTTTTCTTTAATATAGGGCTTTTTAGCCTATTTTTGGGAAAACTGCTTTTCTTCTGAGGAACCTTATTC
TGGAATGTCATCCACTTTACCCAAACCXTTCTAAGGTCCAGAGGCTAACCXAGGTACTGGTTTAGG

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FIGURE 4073

GACAAACCCCATTCCGCTTTGCCAGAAGAGGTGCAAGAATTGTTTATCCGTGATTATGGAGAGATTTTTAATGTC
CAGTTACCGGATAAAGAAGAACGGACAAAATTTTTTGAAGATTTAATTCTAAAACAAGCTGCTAAGCCTCCTATA
TCAAAAAAGAAAGCAGTTTTGCAGGCTTTGGAGGTACTCCCAGTAGCACCACCACCTGAGCCAAGATCACTGACA
GCAGAAGAAGTGAAACGACTAGAAGAACAAGAAGAAGATACATTTAGAGAACTGAGGATTTTCTTAAGAAATGTT
ACACATAGGCTTGCTATTGACAAGCGATTCCGAGTGTTTACTAAGCCTGTTGACCCTGATGAGGTTCCTGATTAT
GTCACTGTAATAAAGCAACCA**ATG**GACCTTTCATCTGTAATCAGTAAAATTGATCTACACAAGTATCTGACTGTG
AAAGACTATTTGAGAGATATTGATCTAATCTGTAGTAATGCCTTAGAATACAATCCAGATAGAGATCCTGGAGAT
CGTCTTATTAGGCATAGAGCCTGTGCTTTAAGAGATACTGCCTATGCCATAATTAAAGAAGAACTTGATGAAGAC
TTTGAGCAGCTCTGTGAAGAAATTCAGGAATCTAGAAAGAAAAGAGGTTGTAGCTCCTCCAAATATGCCCCGTCT
TACTACCATGTGATGCCAAAGCAAAATTCCACTCTTGTTGGTGATAAAAGATCAGACCCAGAGCAGAATGAAAAG
CTAAAGACACCGAGTACTCCTGTGGCTTGCAGCACTCCTGCTCAGTTGAAGAGGAAAATTCGCAAAAAGTCAAAC
TGGTACTTAGGCACCATAAAAAAGCGAAGGAAGATTTCACAGGCAAAGGATGATAGCCAGAATGCCATAGATCAC
AAAATTGAGAGTGATACAGAGGAAACTCAAGACACAAGTGTAGATCATAATGAGACCGGAAACACAGGAGAGTCT
TCGGTGGAAGAAAATGAAAAACAGCAAAATGCCTCTGAAAGCAAACTGGAATTGAGAAATAATTCAAATACTTGT
AATATAGAGAATGAGCTTGAAGACTCTAGGAAGACTACAGCATGTACAGAATTGAGAGACAAGATTGCTTGTAAT
GGAGATGCTTCTAGCTCTCAGATAATACATATTTCTGATGAAAATGAAGGAAAAGAAATGTGTGTTCTGCGAATG
ACTCGAGCTAGACGTTCCCAGGTAGAACAGCAGCAGCTCATCACTGTTGAAAAGGCTTTGGCAATTCTTTCTCAG
CCTACACCCTCACTTGTTGTGGATCATGAGCGATTAAAAAATCTTTTGAAGACTGTTGTTAAAAAAAGTCAAAAC
TACAACATATTTCAGTTGGAAAATTTGTATGCAGTAATCAGCCAATGTATTTATCGGCATCGCAAGGACCATGAT
AAAACATCACTTATTCAGAAAATGGAGCAAGAGGTAGAAAACTTCAGTTGTTCCAGA**TGA**TGATGTCATGGTATC
GAGTATTCTTTATATTCAGTTCCTATTTAAGTCATTTTTGTCATGTCCGCCTAATTGATGTAGTATGAAACCCTG
CATCTTTAAGGAAAAGATTAAAATAGTAAAATAAAAGTATTTAAACTTTCCTGATATTTATGTACATATTAAGAT
AAATGTCATGTGTAAGATAACTGATAAATATTGGAACTTTGCTAGAACAAGACCCTGTAGTAATAGTAATAATAG
TTGAAGTTTGGCCAACTCTTAATAAAGTTATTTTGGTAACTAAAAAAAAAAAAAAAAAAAA

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FIGURE 4074

MDLSSVISKIDLHKYLTVKDYLRDIDLICSNALEYNPDRDPGDRLIRHRACALRDTAYAIIKEELDEDFEQLCEE
IQESRKKRGCSSSKYAPSYYHVMPKQNSTLVGDKRSDPEQNEKLKTPSTPVACSTPAQLKRKIRKKSNWYLGTIK
KRRKISQAKDDSQNAIDHKIESDTEETQDTSVDHNETGNTGESSVEENEKQQNASESKLELRNNSNTCNIENELE
DSRKTTACTELRDKIACNGDASSSQIIHISDENEGKEMCVLRMTRARRSQVEQQQLITVEKALAILSQPTPSLVV
DHERLKNLLKTVVKKSQNYNIFQLENLYAVISQCIYRHRKDHDKTSLIQKMEQEVENFSCSR

FIGURE 4075

TTTATAGTTAAAAATAGGAAAGATTTAATTAAAGCAACAGATAGTTCAGACCCATTGAAACCCTATCAAGACTTC
ATTATAGATGTAAGTATATGCTAGGCTTGGTCAGAAATATGAAGTATCGTCACGAATTTAGAATTAATTTATTAA
AACTAAGATCTACAAATCTGTGAATTTTACTTATTTTAAATGAAAAAATTTATGTTGAGTATTTAAATTTTAGGA
TAAGATTGGAAGTGGATGTTTTCATGTGTGACGAAACTAAATGTTTGATTTTGACACGTAGTCTAGGGAACCTGA
TGCAACTACTCGTGTATGTGAACTACTGAAGTACCAAGGAGAGCACTGTCTCCTAAAGGAAATGCAGCAGTGGTC
CATTCCTCCATTTCCTGTAAGTGGCCATGACATCAGAAAAGTGGGCATTTCTTCAGGAAAAGAAATTGGGGCTCT
ATTACAACAGTTGCGAGAACAGTGGAAAAAAAGTGGTTACCAAATGGAAAAAGATGAACTTCTGAGTTACATAAA
GAAGACCTAAAACTGATGGCTACTAAAAAGCAGAGCATTTCTGGTAAGACTAAATTTTCTCCCCTCCCTCTTAAT
GAGGTTTTAGAGACTACACCAGAATAAAAGACAGTTTAGGGGACCTCTATAGAACAACAAGGGTCTTATTTTGTG
AATTATATATTTCAAGAACTAAACAGAGATCCACCTTTCTGGATCTGATTTATATCACTGAAATGTACAGTTCTT
TTGGAATAGTTTCACCTGAGAAAACATAGTTGGCTATTATCTATCTTAACCTGTTCAGGCTTTTAAAAAAAACTG
TTTTTGCATAGGGTAGTACTAAGATCTTAAAAAGTGGTAACTGTCTTGAAGAAAAAACGTTTATTGTTTGTTTGC
AATTGAAATAACAGGGTTACCTTAACAATGACTGTCCATGATGTGTCAGTTCTTATCTGAATTCCAAAATAAACC
TGTGCTTAAAAAAGAAATAATTGACCAAGTAAGTTTGCATAAAATGTGAATACTAAATGTGTCCCCAGTTGCTGG
CATTCATATGTACAGGATTTGTTCTAGCAAGCTATGCTTCAGTATGTGGTTGATATTTTTCTGTCACAATGATTT
CTTTATGCATGCAGAGCCTGGGAAAGTCATGGGATTAACTTGAGGGTCACTATTGAGCCTATTAATTAATTATTG
TTTTAATAAAACAAACATTGGTATTGGAAGATAAATATGTTTATGTGGTATCTGACAATGTGTATTAGGTGTCAT
ATACAATGGTAATATGCCTGTCTTTAAAGTGTTATTTTATTAATTAAAAGGAT**ATG**GCTATTATTATATATTCTC
TAAAGAAAGATTTATTCTCTAAAGATTTGAGTCCTAAATGCTTTCATCAGGTAAATAAAATGTATAATAC

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FIGURE 4076

MAIIIYSLKKDLFSKDLSPKCFHQVNKMYN

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FIGURE 4077

GGCACGAGGATTATTTTTGGTGATTAATTTTCTGGGGGGGACTGGGACGCGGGGCCCGGCGGCGCGGCCCCGCAT
CGCAGCGGCCGGGCAGCGGGGCCTGGGACGCGCCCCGAGGAGGAGCGGGGCGGCGCAGGCGGAGAGAACATTGAA
AGTATTCTCTAAGCTATTTGAAGAGAGTGACTAAATGCACCTGGGTCAGGCTGTCTGTGGGTATGAAGTGGTTGG
GAGAATCCAAGAAC**ATG**GTGGTGAATGGCAGGAGAAATGGAGGCAAGTTGTCTAATGACCATCAGCAGAATCAAT
CAAAATTACAGCACACGGGGAAGGACACCCTGAAGGCTGGCAAAAATGCAGTCGAGAGGAGGTCGAACAGATGTA
ATGGTAACTCGGGATTTGAAGGACAGAGTCGCTATGTACCATCCTCTGGAATGTCCGCCAAGGAACTCTGTGAAA
ATGATGACCTAGCAACCAGTTTGGTTCTTGATCCCTATTTAGGTTTTCAAACACACAAAATGAATACTAGCGCCT
TTCCTTCGAGGAGCTCAAGGCATTTTTCAAAATCTGACAGTTTTTCTCACAACAACCCTGTGAGATTTAGGCCTA
TTAAAGGAAGGCAGGAAGAACTAAAGGAAGTAATTGAACGTTTTAAGAAAGATGAACACTTGGAGAAAGCCTTCA
AATGTTTGACTTCAGGCGAATGGGCACGGCACTATTTTCTCAACAAGAATAAAATGCAGGAGAAATTATTCAAAG
AACATGTATTTATTTATTTGCGAATGTTTGCAACTGACAGTGGATTTGAAATATTGCCATGTAATAGATACTCAT
CAGAACAAAATGGAGCCAAAATAGTTGCAACAAAAGAGTGGAAACGAAATGACAAAATAGAATTACTGGTGGGTT
GTATTGCCGAACTTTCAGAAATTGAGGAGAACATGCTACTTAGACATGGAGAAAACGACTTCAGTGTCATGTACT
CCACAAGGAAAAACTGTGCTCAACTCTGGCTGGGTCCTGCTGCGTTTATAAACCATGATTGCAGACCTAATTGTA
AGTTTGTGTCAACTGGTCGAGATACAGCATGTGTGAAGGCTCTAAGAGACATTGAACCTGGAGAAGAAATTTCTT
GTTATTATGGAGATGGGTTCTTTGGAGAAAATAATGAGTTCTGCGAGTGTTACACTTGCGAAAGACGGGGCACTG
GTGCTTTTAAATCCAGAGTGGGACTGCCTGCGCCTGCTCCTGTTATCAATAGCAAATATGGACTCAGAGAAACAG
ATAAACGTTTAAATAGGCTTAAAAAGTTAGGTGACAGCAGCAAAAATTCAGACAGTCAATCTGTCAGCTCTAACA
CTGATGCAGATACCACTCAGGAAAAAAACAATGCAAGTAAG**TAA**GGGAGATTTGATAAGCATATCTTTTAAAAGT
ATTTTCACACAATTTGCTTTATAAAGTGTGCTTCAGTAGTTTTAAACTTTTAAATACTCAGAGAGACTGGGACTT
GTGAGCTTTGGCTGCACTTCAAGGCTCTAGACGTGATTTGAGTAGAGGCACAGTCTGTATCCCATCTCTAACTTC
AGTACCGTCCTCTAGACTATTTTTCTTGAATACCTTGGTAACTGGATATGAGTTCTTCATCATATGTTCCAAGGT
CATCATATGTTTTAAACATTTTCAAGGTGTTAGAGACTGTGATGATGTCGCTAAGTCCTGCAAGAAGACAAAAGG
ACTGAGTAGAATTAAATTAGACTCTATACATTCCAGTGCCTAGCCAGTTTGTTAGAAAAGATGATGGACTTGGGG
AATTCATAGCTTCTGGCCTTAAGGCTTCCACCTTTTCATTGCTTGCTGACCTTTTTCAAAACGAACTGACTCAGT
TCAGCAGACCACCAGTACCAGACTCAGAATTGTGATAGAGGAGCATTTTGAACAGTGCCGTATTGTGACATGCTG
TATTGGCTACTCCAGAAAGTAGGAGTAAAGATGGAAAGGAGAAAGAAGCAACCTCTGAGATTCCAGTGGTGTGTG
GGGGCAAGATCTGATGGAAACTGAAAAAGAGAACGAAGACTAAACAAAGAGAAAGGAAAGAGAAGAAACCCTAAA
TGGGCAAAGGAAAGCACATCCTGTTTGCGGAGCTTTGAAATATTGGAACCATTTCTAATTGCTCCTGTTTTTCTG
GGTAACACCAGTTTTCTGTAGTTGCCACTAAAGCAGTAGACTCTTGAGTCTCACTTGTCTCTGAGAGAGACAGAA
GTTAGAAAGTTTTGACTTGGCGATTCCGAAAGTATGCCTTTGTTGGCACTTAAATGTCCAGTGAGACTTCTTGGC
ACCTTAGAGCCCTCTGAGATACTGATTATTTTAGGTTCTTCTCCCTACTTTCAGATGTTTTCAGCCCAACACTGG
GTGCTCTCTTCCACTACAGAGAATCCTGAAGAAAAGGGAAGGTGTTTCCCATGATGGTGAATGTCACTGCCATGA
ATTCCTGAATCTACCTGCTGCTGGGAGTCAGAGTCCAAGCATAACCCGTGTAGCATAAAAGCAGCGCTGTAGCCC
TATTCCAGTCTTTTTCGTTAATGTCCAGAGTGAACAACAAGAGTTAGTCAATCATTAACTGTTGACTGTTGATTC
TCATAATAAATGCAGCATAACGACAAAAAAAAAAAAAAAAAA

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FIGURE 4078

MVVNGRRNGGKLSNDHQQNQSKLQHTGKDTLKAGKNAVERRSNRCNGNSGFEGQSRYVPSSGMSAKELCENDDLA
TSLVLDPYLGFQTHKMNTSAFPSRSSRHFSKSDSFSHNNPVRFRPIKGRQEELKEVIERFKKDEHLEKAFKCLTS
GEWARHYFLNKNKMQEKLFKEHVFIYLRMFATDSGFEILPCNRYSSEQNGAKIVATKEWKRNDKIELLVGCIAEL
SEIEENMLLRHGENDFSVMYSTRKNCAQLWLGPAAFINHDCRPNCKFVSTGRDTACVKALRDIEPGEEISCYYGD
GFFGENNEFCECYTCERRGTGAFKSRVGLPAPAPVINSKYGLRETDKRLNRLKKLGDSSKNSDSQSVSSNTDADT
TQEKNNASK

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FIGURE 4079A

GGGGAAGATGGCGGCTGCTCCTTTGGAGGAGCGGGATTGAGAGGATCGGGGTGGGGAGACCAAACAAGAGAGACA
TTTCTGGCTCTGAAGGCGAACGCTTCGCTGGCCATTTAGGAGCTCTGCTCAAAGCCAGACGTATCCTAGAAGGAA
AACATCACCATGGCTACAGAAATTGGTTCTCCTCCTCGTTTTTTCCATATGCCAAGGTTCCAGCACCAGGCACCT
CGACAGCTGTTTTATAAGCGACCTGATTTTGCACAACAGCAAGCAATGCAACAGCTTACTTTTGATGGAAAACGA
ATGAGAAAAGCTGTGAACCGAAAAACCATAGACTACAATCCATCTGTAATTAAGTATTTGGAGAACAGAATATGG
CAAAGAGACCAGAGAGATATGCGGGCAATTCAGCCTGATGCAGGTTATTACAATGATCTGGTCCCACCTATAGGA
ATGTTGAATAATCCTATGAATGCAGTAACAACAAAATTTGTTCGGACATCAACAAATAAAGTAAAGTGTCCTGTA
TTTGTTGTTAGGTGGACTCCAGAAGGAAGACGCTTGGTCACTGGAGCTTCTAGTGGGGAGTTTACCCTGTGGAAT
GGACTCACTTTCAATTTTGAAACAATATTACAGGCTCACGACAGCCCAGTGAGGGCCATGACGTGGTCACATAAT
GACATGTGGATGTTGACAGCAGACCACGGAGGATATGTGAAATATTGGCAGTCGAACATGAACAACGTCAAGATG
TTCCAGGCACATAAGGAGGCGATTAGAGAGGCCAGTTTCTCACCCACGGATAATAAATTTGCTACATGCTCTGAT
GACGGCACTGTTAGAATCTGGGACTTTCTTCGTTGCCATGAGGAAAGAATTCTCCGAGGGCATGGTGCTGATGTG
AAATGTGTAGACTGGCATCCAACCAAAGGGTTAGTTGTTTCAGGAAGTAAAGATAGTCAACAGCCAATCAAGTTC
TGGGATCCCAAGACTGGGCAGAGTCTTGCAACACTTCATGCCCATAAAAACACAGTAATGGAAGTGAAATTAAAC
CTCAATGGCAATTGGCTACTCACAGCATCACGTGATCATCTCTGTAAACTTTTTGATATCAGAAACCTAAAAGAA
GAGCTTCAAGTCTTCCGAGGTCATAAGAAAGAAGCCACAGCTGTGGCCTGGCATCCTGTTCATGAAGGACTTTTT
GCCAGTGGAGGGTCTGATGGTTCTTTGTTATTCTGGCATGTTGGGGTAGAGAAGGAAGTGGGTGGGATGGAGATG
GCTCACGAAGGGATGATCTGGAGTCTGGCTTGGCATCCTCTTGGGCATATTCTCTGCTCAGGCTCAAATGACCAT
ACTAGCAAATTCTGGACTCGAAACCGACCAGGTGATAAAATGCGAGATCGATATAATCTAAACCTTTTACCTGGA
ATGTCTGAAGATGGAGTAGAATATGATGACCTCGAACCTAATAGCCTGGCAGTAATTCCAGGAATGGGAATACCA
GAACAACTAAAATTAGCTATGGAACAAGAACAGATGGGGAAAGATGAATCAAATGAAATTGAAATGACAATTCCA
GGTTTAGATTGGGGAATGGAGGAAGTGATGCAAAAGGATCAGAAAAAAGTACCTCAGAAGAAAGTTCCTTATGCA
AAACCCATTCCTGCTCAGTTCCAGCAGGCTTGGATGCAAAATAAAGTTCCAATTCCTGCTCCAAATGAGGTGCTG
AATGACAGAAAAGAAGACATTAAATTGGAAGAGAAGAAAAAAACACAAGCAGAAATTGAGCAAGAAATGGCTACA
TTACAATATACTAACCCACAACTTCTGGAGCAACTTAAAATTGAAAGACTTGCACAGAAACAAGTTGAGCAAATT
CAGCCTCCTCCCTCATCTGGCACCCCTCTCCTCGGACCCCAGCCTTTTCCAGGACAAGGTCCAATGTCTCAGATT
CCTCAAGGTTTTCAACAGCCCCATCCATCTCAGCAGATGCCAATGAACATGGCTCAAATGGGGCCTCCAGGTCCA
CAGGGACAGTTTAGGCCTCCTGGACCCCAGGGACAAATGGGACCACAAGGTCCTCCACTGCATCAGGGAGGTGGG
GGGCCACAAGGATTCATGGGACCACAGGGGCCCCAGGGCCCGCCCCAGGGGTTGCCACGGCCTCAGGACATGCAT
GGGCCCCAAGGAATGCAGAGGCATCCTGGACCTCATGGCCCTTTGGGACCTCAAGGGCCACCTGGACCACAAGGT
AGTTCTGGTCCTCAAGGTCATATGGGTCCTCAGGGTCCACCTGGCCCACAGAGTCACATAGGCCCCCAAGGCCCG
CCTGGCCCTCAGGGTCACTTGGGCCCACAGGGGCCTCCGGGTACTCAAGGTATGCAGGGACCACCTGGTCCCAGA
GGAATGCAAGGGCCTCCTCATCCTCATGGGATCCAAGGCGGACCAGGGTCTCAAGGGATCCAAGGTCCTGTGTCT
CAGGGACCTCTGATGGGATTGAATCCAAGAGGAATGCAGGGGCCTCCAGGCCCCCGGGAGAACCAGGGTCCTGCT
CCCCAAGGGATGATTATGGGCCACCCGCCTCAAGAGATGAGAGGACCTCACCCTCCAGGTGGACTACTGGGACAC
GGCCCTCAGGAAATGAGAGGTCCTCAGGAGATCCGAGGCATGCAGGGGCCTCCACCCCAAGGATCAATGCTGGGA
CCTCCCCAGGAATTGCGAGGGCCTCCAGGCTCACAAAGTCAGCAGGGGCCGCCCCAGGGCTCTTTAGGACCTCCA
CCCCAGGGTGGCATGCAAGGACCCCCCGGACCTCAGGGACAGCAGAACCCAGCAAGAGGGCCACATCCATCTCAA
GGGCCAATACCATTCCAGCAACAGAAAACGCCTCTGCTAGGTGATGGGCCCCGGGCCCCCTTCAACCAGGAAGGA
CAGAGCACAGGCCCCCCACCCCTGATACCAGGCCTAGGGCAGCAGGGAGCACAAGGTCGCATTCCCCCTCTGAAC
CCCGGACAAGGACCTGGCCCCAACAAAGGTGACTCCCGCGGCCCTCCAAACCATCACATGGGCCCGATGTCAGAG
AGGCGGCATGAGCAGAGCGGCGGGCCTGAGCATGGGCCCGAGAGGGGGCCTTTCCGGGGTGGCCAGGACTGCAGG
GGTCCCCCTGATAGGCGTGGCCCTCACCCAGACTTCCCCGATGACTTCAGCAGACCAGATGACTTCCACCCTGAC
AAGCGCTTTGGCCACCGGTTACGTGAATTTGAGGGGCGAGGAGGACCTTTACCGCAAGAAGAGAAGTGGAGGCGA
GGGGGCCCTGGGCCTCCGTTTCCCCCTGATCACAGGGAATTCAGCGAGGGGGATGGCCGGGGTGCAGCCCGAGGC
CCTCCGGGGGGCATGGGAAGGCCGCAGGCCCGGAGATGAACGTTTCCCCCGGGATCCCGAGGACCCACGTTTTCGA
GGGCGCAGAGAAGAAAGTTTCAGAAGAGGAGCCCCGCCGAGGCATGAGGGCCGTGCTCCCCCCAGAGGAAGGGAT
GGTTTTCCTGGTCCTGAAGACTTTGGTCCAGAGGAGAATTTTGATGCTTCTGAGGAAGCGGCCCGAGGACGAGAT

FIGURE 4079B

CTCAGAGGTCGAGGTCGGGGTACCCCACGAGGAGGAAGGAAGGGTTTACTTCCCACTCCTGACGAGTTCCCTCGC
TTTGAAGGAGGGCGGAAGCCAGATTCCTGGGATGGAAACAGAGAGCCTGGGCCAGGTCATGAACATTTTCGTGAT
ACTCCCCGCCCTGATCATCCCCCTCACGACGGTCATTCCCCAGCCAGCAGAGAACGCTCCTCTTCTCTCCAAGGC
ATGGACATGGCATCCCTACCTCCCCGAAAGCGCCCCTGGCATGATGGCCCAGGCACTTCTGAGCACAGAGAGATG
GAGGCCCCAGGAGGCCCTTCTGAAGACCGAGGAGGCAAAGGCCGAGGGGGCCCAGGACCTGCTCAGAGAGTGCCC
AAATCTGGGCGTTCCAGCTCCTTAGACGGAGAGCACCACGATGGATACCACAGAGATGAACCTTTTGGGGGCCCT
CCAGGCAGTGGCACCCCTTCTCGAGGGGGCCGGAGTGGCAGTAACTGGGGTAGAGGGAGTAACATGAACTCTGGC
CCGCCGAGGCGAGGAGCTTCACGGGGTGGTGGAAGGGGTCGGTAGAAGCTGGAACTGAGTACCCTGAGGCCTTTT
TGGACAGTATGTAAGAACTTTTTGTGGACTCACCAAGAGAAACAAAAGGAAGCCTGCACCATTGTAGCCCTGAAC
TTTTTTTTGGGCACCTGAATCCCAGGAACCCTCAATGAGGTTTTCAAGATGAAGAGACTGCTGCCAGCTACCAGC
CTGGCTGGCCCTGTCCTGTCCACCCTCATTGCCCCAACTCCCATGTTGTTTTGTGAAGATAAAAGCTGGGATCTT
TTTCTTTTTTTTTAAGTCTCACAAGACATGGGGCATTTCCACAAATTTAAGTTCCTGTCCATTTGGAAATTTGTT
TTTATGTGTACAGTTTGTCAGAGAAAAACAAAGTTTTTGTATGAATACAGAATGTGATTTACGCAAGAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4080

MATEIGSPPRFFHMPRFQHQAPRQLFYKRPDFAQQQAMQQLTFDGKRMRKAVNRKTIDYNPSVIKYLENRIWQRD
QRDMRAIQPDAGYYNDLVPPIGMLNNPMNAVTTKFVRTSTNKVKCPVFVVRWTPEGRRLVTGASSGEFTLWNGLT
FNFETILQAHDSPVRAMTWSHNDMWMLTADHGGYVKYWQSNMNNVKMFQAHKEAIREASFSPTDNKFATCSDDGT
VRIWDFLRCHEERILRGHGADVKCVDWHPTKGLVVSGSKDSQQPIKFWDPKTGQSLATLHAHKNTVMEVKLNLNG
NWLLTASRDHLCKLFDIRNLKEELQVFRGHKKEATAVAWHPVHEGLFASGGSDGSLLFWHVGVEKEVGGMEMAHE
GMIWSLAWHPLGHILCSGSNDHTSKFWTRNRPGDKMRDRYNLNLLPGMSEDGVEYDDLEPNSLAVIPGMGIPEQL
KLAMEQEQMGKDESNEIEMTIPGLDWGMEEVMQKDQKKVPQKKVPYAKPIPAQFQQAWMQNKVPIPAPNEVLNDR
KEDIKLEEKKKTQAEIEQEMATLQYTNPQLLEQLKIERLAQKQVEQIQPPPSSGTPLLGPQPFPGQGPMSQIPQG
FQQPHPSQQMPMNMAQMGPPGPQGQFRPPGPQGQMGPQGPPLHQGGGGPQGFMGPQGPQGPPQGLPRPQDMHGPQ
GMQRHPGPHGPLGPQGPPGPQGSSGPQGHMGPQGPPGPQSHIGPQGPPGPQGHLGPQGPPGTQGMQGPPGPRGMQ
GPPHPHGIQGGPGSQGIQGPVSQGPLMGLNPRGMQGPPGPRENQGPAPQGMIMGHPPQEMRGPHPPGGLLGHGPQ
EMRGPQEIRGMQGPPPQGSMLGPPQELRGPPGSQSQQGPPQGSLGPPPQGGMQGPPGPQGQQNPARGPHPSQGPI
PFQQQKTPLLGDGPRAPFNQEGQSTGPPPLIPGLGQQGAQGRIPPLNPGQGPGPNKGDSRGPPNHHMGPMSERRH
EQSGGPEHGPERGPFRGGQDCRGPPDRRGPHPDFPDDFSRPDDFHPDKRFGHRLREFEGRGGPLPQEEKWRRGGP
GPPFPPDHREFSEGDGRGAARGPPGAWEGRRPGDERFPRDPEDPRFRGRREESFRRGAPPRHEGRAPPRGRDGFP
GPEDFGPEENFDASEEAARGRDLRGRGRGTPRGGRKGLLPTPDEFPRFEGGRKPDSWDGNREPGPGHEHFRDTPR
PDHPPHDGHSPASRERSSSLQGMDMASLPPRKRPWHDGPGTSEHREMEAPGGPSEDRGGKGRGGPGPAQRVPKSG
RSSSLDGEHHDGYHRDEPFGGPPGSGTPSRGGRSGSNWGRGSNMNSGPPRRGASRGGGRGR

FIGURE 4081

GTGAGGCTGGCGGTGGCGACAACCGAGGAGGAGGGGCGGGACGCCGTGGAGCACGGCGACCGGCTGAGCGTC**ATG**

GAGGGCTCAGGGGAGCAGCCGGGCCCACAACCACAGCATCCCGGAGACCACCGCATCCGCGACGGCGACTTCGTG
GTGCTGAAACGTGAAGATGTGTTTAAAGCAGTACAAGTCCAGCGGAGAAAAAAAGTAACTTTCGAAAAACAGTGG
TTCTACCTGGATAACGTCATTGGCCATAGTTATGGAACTGCATTTGAAGTGACCAGTGGAGGAAGTCTACAGCCC
AAGAAGAAGAGGGAAGAGCCTACTGCAGAGACTAAAGAAGCGGGCACTGATAATCGAAATATAGTTGATGATGGG
AAATCTCAGAAACTTACTCAAGATGACATAAAAGCTTTGAAGGACAAGGGCATTAAAGGAGAGGAAATAGTTCAG
CAGTTAATTGAAAATAGTACAACATTCCGAGACAAGACAGAATTTGCCCAAGATAAATATATTAAAAAGAAGAAA
AAAAAATATGAAGCCATCATTACTGTTGTGAAGCCATCCACCCGTATTCTTTCAATTATGTATTATGCAAGAGAA
CCTGGAAAAATTAACCACATGAGATACGATACACTAGCCCAGATGTTGACGTTGGGAAATATCCGTGCTGGCAAC
AAAATGATTGTGATGGAAACGTGTGCAGGCTTGGTGCTGGGTGCAATGATGGAACGAATGGGAGGTTTTGGCTCC
ATTATTCAGCTATACCCTGGAGGAGGACCTGTTCGGGCAGCAACAGCATGTTTTGGATTTCCCAAATCTTTTCTC
AGTGGTCTTTATGAATTCCCTCTCAACAAAGTGGACAGTCTTCTACATGGAACATTTTCTGCCAAGATGTTATCT
TCAGAGCCAAAAGACAGTGCTTTGGTTGAAGAAAGTAATGGCACACTGGAGGAAAAACAGGCTTCTGAACAAGAG
AATGAAGACAGCATGGCAGAGGCCCCAGAGAGCAACCACCCAGAAGACCAGGAAACAATGGAAACAATTTCTCAA
GATCCAGAACATAAGGGGCCTAAAGAGAGAGGAAGCAAAAAAGATTATATTCAGGAAAAACAGAGGAGACAAGAA
GAGCAGAGGAAAAGACATTTAGAGGCTGCCGCTCTGCTGAGTGAAAGAAACGCAGATGGTTTAATTGTAGCTAGT
CGTTTCCACCCCACTCCCCTGCTGCTGTCTTTGCTGGACTTTGTGGCCCCTTCAAGGCCGTTTGTGGTCTACTGT
CAGTACAAAGAGCCTCTGTTGGAATGCTACACAAAACTGCGGGAGAGGGGAGGGGTCATCAACCTCAGGCTGTCT
GAAACCTGGCTCAGAAATTATCAGGTTTTGCCAGATCGAAGTCATCCTAAACTGCTGATGAGTGGAGGTGGGGGT
TATCTTCTCTCCGGCTTCACCGTTGCCATGGACAACCTTAAAGCAGACACCAGCCTCAAATCTAATGCAAGCACT
TTAGAATCACACGAGACTGAGGAGCCTGCAGCTAAAAAACGAAAATGCCCAGAGTCTGACTCT**TAA**CCCTTTTGA
GAATTGCTCTGAATTTTGTTCTCAGGCATTATACAGTTAGTAATTAAACTTTAAATGCCATTACTACTTGTTTTT
TCATATCCCAAGAATAAGAACATGTCTATGTACCCGTTTCTAGGAAGGAGGAGTATATGCCTTTTGTCTATTTCT
GACACAGATGCATTTGGTCTGTCAAAACTGCAACCATGGGGTATGTAGTATGACCAACTGCATTTAACAAAACTC
CTCTAAGTACTTCTAAATATTCTGTGCAAATATCTTGAGAACTTCAACATCCTAAAAATGTGTTTCTACAAGACT
TTATATTTTAAGCTAAGTGGAATAATACAACGTAACTAAAACATGGCGGGTACCGAAAGGAGGGCAATTCATGGA
AGAAATTTCCTCTGTTCATTCCGTTCTCTTCAACCTAAGCAATATGGATGTGTGAGTGTGTGATTTATTATGGTA
CCAAAAATGTCCACCTTCTTTCCTGCAGCGGAATAAGCTTTTTTGAAATGCTGAGGTTTTATTTTAATAGTTGAC
AACCTGGGAAAGTTCTGAGTATTTATTTTACTGCTCTTTTTTGTGCATAGAAAGGTTTAGTAGGGTACTTTTTTG
CATTAATTTGCCAATACTCTTATTCTTTGTTCTAAATAAAGTGACTAGAATTTTTGTGTACTATTCAATTAAAGG
AAAAAAAAAAAAAAAAAAAAA

FIGURE 4082

MEGSGEQPGPQPQHPGDHRIRDGDFVVLKREDVFKAVQVQRRKKVTFEKQWFYLDNVIGHSYGTAFEVTSGGSLQ
PKKKREEPTAETKEAGTDNRNIVDDGKSQKLTQDDIKALKDKGIKGEEIVQQLIENSTTFRDKTEFAQDKYIKKK
KKKYEAIITVVKPSTRILSIMYYAREPGKINHMRYDTLAQMLTLGNIRAGNKMIVMETCAGLVLGAMMERMGGFG
SIIQLYPGGGPVRAATACFGFPKSFLSGLYEFPLNKVDSLLHGTFSAKMLSSEPKDSALVEESNGTLEEKQASEQ
ENEDSMAEAPESNHPEDQETMETISQDPEHKGPKERGSKKDYIQEKQRRQEEQRKRHLEAAALLSERNADGLIVA
SRFHPTPLLLSLLDFVAPSRPFVVYCQYKEPLLECYTKLRERGGVINLRLSETWLRNYQVLPDRSHPKLLMSGGG
GYLLSGFTVAMDNLKADTSLKSNASTLESHETEEPAAKKRKCPESDS

FIGURE 4083

TTTACATAAGCAACCAGTGGAGCCCTTGCCTGGGTTTAAATCAGCGAAACCA**ATG**GTATTTGCAGGAATGTATCC
TCTAGACCAATCTGAATATAACAATCTGAAGAGTGCTATAGAAAAACTGACTTTAAATGATTCCAGTGTGACCGT
TCATCGGGATAGTAGCCTTGCTCTGGGTGCTGGCTGGAGGCTAGGATTTCTTGGACTTTTGCACATGGAAGTTTT
CAACCAGCGACTGGAGCAAGAATATAATGCTTCTGTTATTTTAACAACCCCTACTGTTCCATATAAAGCTGTACT
GTCATCATCAAAATTGATAAAGGAACATAGAGAAAAAGAAATTACAATTATCAATCCTGCACAATTCCCCGATAA
ATCAAAAGTAACAGAATATTTGGAGCCAGTTGTTTTGGGCACTATTATCACACCAGATGAATACACTGGAAAAAT
AATGATGCTTTGCGAGGCTCGAAGAGCAGTTCAGAAGAATATGATATTTATTGATCAAAATAGAGTTATGCTTAA
ATATCTCTTTCCTTTGAATGAAATTGTGGTAGATTTTTATGACTCTTTGAAATCCCTATCTTCTGGATATGCTAG
TTTTGATTACGAAGATGCAGGCTACCAGACTGCAGAACTTGTAAAAATGGATATTCTACTGAATGGAAATACTGT
AGAGGAGCTAGTAACTGTTGTACACAAAGACAAAGCTCATTCAATTGGCAAAGCCATATGTGAACGGCTGAAGGA
TTCTCTTCCTAGGCAACTGTTTGAGATAGCAATTCAAGCTGCTATTGGAAGTAAAATCATTGCAAGAGAAACTGT
GAAAGCCTATAGGAAAAACGTTTTGGCAAAATGTTATGGTGGTGATATTACCCGAAAAATGAAGCTTTTGAAGAG
ACAAGCAGAAGGGAAAAAAAAAGCTGAGGAAAATTGGCAACGT**TGA**AGTTCCAAAAGATGCTTTTATAAAAGTTC
TGAAAACACAATCTTCTAAATAATTGGTGGGAAAACAAAGAATTTTCATTGCAATTTGTAATATGCTGACAACAG
AAAGAAAATTATAAAATTTGCTTGTTACTTTCAGGGTATTCAGGTTCAAATAACCTACTAGTCTTTCGTTGAAAG
GGAGTAGTTAGTGGGTAGGCAAGAGCTTAGATTTTGAAGCCATGTTGCCTGTTCTCAAATATCTGTTCCAACCAC
TCACTAGTAAGGTGACCGTGGCCAGATTAACCTTTGTTTCCTCTTCAGTAAAATCGAGATTATACTACTACCTAC
ATAAGTTGTTGTTGTGAAGATTAAATGAGGTAATACGTTAAATATTCAGAGGTGCAAGACACATAGTAAGCACTC
AATTGTAACTACAGTTAAGTCCTTAAATGCCATCGAAAGGTTCTTAGAAACTGACTTTAAGCAAAATGACACGTA
GCACAATGTTCTTGAATGATGTCATTTCCTTAAGTGGTTTGTAACATCGATGAGGAAAAAAAATTGGTTTATGCG
TCATTTCATTTTATTTTTATTTATTTTTTGAGACAGAGTCTTGCCCTGTCGCCCAGGCTGGAGTGCAATGGCACA
ATCTCGACTCACTGCAACCTCTGCCTCCTGGGTTCAAGAGATTCTCCTGCCTCAGCCTCCATTACAGGCGTGCAC
CACCATGCTCGGCTAATTTTTTGTATCTTTAGTAGAGTCGGGGTTTCACCATGTTGGCCAGGCTGGTCTTGAACT
CCTGACCTCGTGATCCACCCACCGTGGCCTCCCAAAGTGCTGATTACAGGTGTGAGCCACCATGCCCAGCCATGT
CATTTCATTTAAAGTCACAATTTCCATGAATCTCAACAAGTGAGGACCTGCTATATTTTGTTGCATGCAGTTTTT
CTTTACGGACACTAAAAGGCCCCATACTTAAGATTCCATCTACTTTAAGTTTAAAGGATTTTCAGAATCACCTTA
AGTGTCAAATTTGTTAGCAGGATTAATTGATATGAATTCACTTATTAAACAGTAAACTCAAATAACATAGACATC
AAATAACAGACATCTGCTCTAGTTAATGATAAAATGTTTATAGATTTTATCAGGTGGTTAGTTTGAAACTAAATG
GTTTACATCTAAATTAAGGGCAGGAGCTGTCTTTCAGACATTCAAAACGCATTTGTGTAAAATGACAGGTGTTTG
GTATTACCAGGAACTCATAATGACATTTTAATAATTATTGTCTAAATTTCATAATCGAAGCGATTTTAGAGTAGT
TAACTTGAGATTTCACAGCCAGTAAATGGCTGTATTTCTCCAGAGCTCTCAGCTCCCATGTTTATTCAGCCAACG
AACAAACCAGACTGCAGACTGTATTAGAGCAAGACAACATCATTTAGCCATTGATTTTTATCTTCTACCTTGAAT
GAATTGAATGAAGAAAATGTCTTTTAGGGATAAACACTATCAAGGATGAATTTTATACTAAGGTTATATGAAAGA
AAAATCTCAAAACCACTAAGCCAAAGGGAAGTCAAGCTGGGAACTGATTGAGGCAAACCTGCCTCCCATTTTATT
CCTAAATAAGACAGCCACAAAGATAAAATTTGCTCACAAGGGAATTCCTTATGGACAAAGAACTCAAAGTCTTCA
CATGAAACAAATGCATAAATGATTGCTTTCTCTGTTTCATGTTTCACTAAGCCAGATTAAGGTATAACTGACTAT
TCCTCTACTCTCCTCTCACATGTAAATTGTATATTCAGTGAAAGGCTAATCAGAAACTCAAAAAAATGCAACCCT
TTCTCTCTTACCTGCCTATGCTTGAAGCCCCCGCCCCTCTTCAAGTTGTCCTGCCTTTCAAGACCAATGTACACC
TTACACATACTGATTGATGTCTCATGTCTCTCTAAAATGTGTAAAACCAAGCTGTGCCCCAACCACCTTGGGCAC
ATGTGGTGAGGACCTCCTGAGGCTGTGTCATGGGCACACCTTAACCCTGGGAAAATAAACTTTCTAAACTGAAAA
AAAAAAAAAAAA

FIGURE 4084

MVFAGMYPLDQSEYNNLKSAIEKLTLNDSSVTVHRDSSLALGAGWRLGFLGLLHMEVFNQRLEQEYNASVILTTP
TVPYKAVLSSSKLIKEHREKEITIINPAQFPDKSKVTEYLEPVVLGTIITPDEYTGKIMMLCEARRAVQKNMIFI
DQNRVMLKYLFPLNEIVVDFYDSLKSLSSGYASFDYEDAGYQTAELVKMDILLNGNTVEELVTVVHKDKAHSIGK
AICERLKDSLPRQLFEIAIQAAIGSKIIARETVKAYRKNVLAKCYGGDITRKMKLLKRQAEGKKKAEENWQR

FIGURE 4085

AGCAGGTTTCGAATGCTCTTTACTTCCTTTGTGGAGCAAAAGAAAAAAGCAGGAGTATTTGAACAAATCACTAAG
ACTCATGGAACAATTATTGGCATTACTTCAGGGATTGTCTTGGTCCTTCTCATTATTTCTATTTTAGTACAAGTG
AAACAGCCTCGAAAAAAGGTCATGGCTTGCAAAACCGCTTTTAATAAAACCGGGTTCCAAGAAGTGTTTGATCCT
CCTCATTATGAACTGTTTTCACTAAGGGACAAAGAGATTTCTGCAGACCTGGCAGACTTGTCGGAAGAATTGGAC
AACTACCAGAGGATGCGGCGCTCCTCCACCGCCTCCCGCTGCATCCACGACCACCACTGTGGGTCGCAGGCCTCC
AGCGTCAAACAAAGCAGGACCAACCTCAGTTCCATGGAGCTTCCTCTCCGAAATGACTTTGCACAACCACAGCCA
ATGAAAACATTTAATAGCACCTTCAAGAAAAGTAGTTACACTTTCAAACAGGGACATGAGTGCCCTGAGCAGGCC
CTGGAAGACCGAGTAATGGAGGAGATTCCCTGTGAAATTTATGTCAGGGGGCGAGAAGATTCTGCACAAGCATCC
ATATCCATTGACTTCTAATCTTCTGCTAATGGTGATGTGAATTCTTAGGGTGTGTACGTACGCAGCCTCCAGGGC
ACCATACTGTTTCCAGCAGCCAACCCTTTTCTCCCATCACAACTACGAAGACCTTGATTTACCGTTAACCTATTG
TATGGTGATGTTTTTATTCTCTCAGGCAGTCTATATATGTTAAACCAATCAAGGAACTTACTCTATTCAGTGGAA
ACAATAATCATCTCTATTGCTTGGTGTCATTTATAGGAAGCACTGCCAGTTAAAGAGCATTAGAAGAGGTGGTTG
GATGGAGCCAGGCTCAGGCTGCCTCTTCGTTTTAGCAACAAGAAGACTGCTCTTGACTGATAACAGCTCTGTCAA
TATTTTGATGCCACAATAAACTTGATTTTTCTTTACATTCCTTTTATTTTTCCTTTCTCTAAATTTAATTTGTTT
TATAAGCCTATCGTTTTACCATTTCATTTTCTTACATAAGTACAAGTGGTTAATGTACCACATACTTCAGTATAG
GCATTTGTTCTTGAGTGTGTCAAAATACAGCTAGTTACTGTGCCAATTAAGACCCAGTTGTATTTCACCCATCTG
TTTCTTCTTGGCTAATCTCTGTACTTCTGCCTTTTAATTACTGGGCCCTTATTCCTTATTTTCTGTGAGAAATAA
TAGATGATATGATTTATTACCTTTCAATTATATTTTTCTCAGTTATACTAGAAAATTTCATAATCCTGGGATATA
TGTACCATTGTCAGCTATGACTAAAAATTTGAAAAAGATAAAAATTTCTAGCAAGCCTTTGAAGTTTACCAAGTA
TAGTCACATTCAGTGACAGCCCATTCATTCCAGTAAAGAATCATTTCATTCACTTTGGGAGAGGCCTATAATTAC
ATTTATTTGCAATGTTTCTCTTCGCTAGATTGTTACATAGCTCCCATTCTGTTGGTTTTGCTTACAGCATATGGT
AACCAAGGTTAGATGCCAGTTAAAATTCCTTAGAAATTGGATGAGCCTTGAGATTGCTTCTTAACTGGGACATGA
CATTTTTCTAGCTCTTATCAAGAATAACAACTTCCACTTTTTTTTAAACTGCACTTTTGACTTTTTTTATGGTAT
AAAAACAATAATTTATAAACATAAAAGCTCATTGTGTTTTTTAGACTTTTGATATTATTTGATACTGTACAAACT
TTATTAAATCAAGATGAAAGACCTACAGGACAGATTCCTTTCAGTGTTCACATCAGTGGCTTTGTATGCAAATAT
GCTGTGTTGGACCTGGACGCTATAACTTATTGTAAAGACCTTGGAAATGTGGACATAAGCTCTTTCTTTCCTTTT
GTTACTGTATTTAGTTTGTGATAAATTTTTCACTGTGTGATATTTATGCTCTAAATCACTACACAAATCCCATAT
TAAAATATACATTGTACCTGACCCTTTAATCATGTTATTTATGCCACCAAGGTTGTGGATCTTAAGGTATGTATG
GAAAGGAACTCATTTATCAAATTGTAAGTAATACAGACATGCCATTTAAAAGAGGTAAATTCTTGTTTTCTATAT
TTTGTTAGTAAATTCTCAATGAAATAAGTTGAAGTTTCACTGGATTTCATTAACTTTTAAATATTACATATATGT
GTTTTCTCAGATTAGTGAAAATTGTGACCTTAAATTTAATACACATATACTGCCTCAG

FIGURE 4086

MLFTSFVEQKKKAGVFEQITKTHGTIIGITSGIVLVLLIISILVQVKQPRKKVMACKTAFNKTGFQEVFDPPHYE
LFSLRDKEISADLADLSEELDNYQRMRRSSTASRCIHDHHCGSQASSVKQSRTNLSSMELPLRNDFAQPQPMKTF
NSTFKKSSYTFKQGHECPEQALEDRVMEEIPCEIYVRGREDSAQASISIDF

FIGURE 4087

AAACCCAAAGCGGCCGCCGTAGGCGAAGGTGAAGATGGCTGCCTCTGCCTTTGCTGGTGCAGTGAGAGCAGCTTC
AGGAATCCTACGGTCCCTGAATATTTTGACATCTTCAACCTACCGCAACTGTGTCAAGAATGCCTCTCTTATTTC
TGCATTGTCCACTGGACGTTTTAGTCATATTCAGACACCAGTTGTTTCCTCCACTCCCAGACTTACCACATCTGA
GAGAAACCTGACATGTGGGCATACCTCAGTGATCCTTAATAGAATGGCCCCCGTGCTTCCAAGTGTCCTGAAGCT
GCCAGTCAGATCTCTAACATACTTCAGTGCAAGAAAAGGCAAGAGAAAGACCGTGAAAGCTGTCATCGATAGGTT
TCTTCGACTTCATTGTGGCCTTTGGGTGAGGAGAAAGGCTGGCTATAAGAAAAAATTATGGAAAAAGACACCTGC
AAGGAAGAAGCGATTGAGGGAATTTGTATTCTGCAATAAAACCCAGAGTAAACTCTTAGATAAAATGACGACGTC
CTTCTGGAAGAGGCGAAACTGACGGCAAAGCCAACCACTTAGAAGCCTTCCACATCTTTGTCACCTGCCTGGCTC
CTGCTCTCTGATGTACCTCTGGGTAGTGAGATGGAAATGGTGCCTGCAGAAGTTGGGGAGAAGGATACTTTTGCA
CAGCCTCCATGATGTCTTTATTGCAAATATGGATGACAAGGGTCTCTGTTACAGGGGCCTCAGAGCACCTTCGTT
TCTCCTCTAGACCAGGGACAGGTGTAGAGATAAGGACTGGCAACCAGAGCCTCAGCATCCAAAGATGGACTGAAG
TGGGATGGCTGACAGGCACATAACTTACGGGAAAGGGAATTTCATACATACGATTTTTGTTTTGTGGGTAGGAGG
GCTTATCATCAACACTGATTTTATAATCTGACAATAAATGTCTTTCATTAAAGAGTTTAAAAACAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAA

FIGURE 4088

MAASAFAGAVRAASGILRSLNILTSSTYRNCVKNASLISALSTGRFSHIQTPVVSSTPRLTTSERNLTCGHTSVI
LNRMAPVLPSVLKLPVRSLTYFSARKGKRKTVKAVIDRFLRLHCGLWVRRKAGYKKKLWKKTPARKKRLREFVFC
NKTQSKLLDKMTTSFWKRRN

FIGURE 4089

AGGTTCGAATCTCCGCCGCTTCGCGGTTGCTTCTCAACGTCCGGGCCGCATCTCGGCGGCGGCGAGGGCTGAGCG
CGGGAGCTGCCTCCGAGCCGGAGCCCCAGCCCTAGGCCCTGCGCGAGCTGCCCCGCCCTACCCCCTCCAGCGTCC
TGTCGCCTCCTCGCCCGACTTCGGCCTGTCCCTCTCTCGCGCGCTCAGTCCTCGCTCTTCGCCCCCCGCAGCTAT
CGGCACTCGGTCTCCCGCGCCTGGCGGGCTCCGCCCGAGCCTCTGGGCCC**ATG**GCCAAGCGGCGTGCGGCCGAGC
CGGTGACGTTCCACGTGCCTTGGAAGCGGCTCCTGCTTTGCGACTTCGCTGAGCAGCCGCCGCCACCGCCTCTCT
GGATCCGGCCGCCCGGGGTCGCGCATGCTGGGCAGCTCCTCGGCGTCCCAGAGCAGCACCGAAAGCGCAAAATCG
ACGCAGGGACCATGGCAGAGCCCTCGGCTTCGCCCAGCAAGCGCCGTGACAGCGGGGACAACAGCGCCCCGAGCG
GCCAGGAGCGTGAGGACCACGGTCTGGAGACAGGCGATCCGCCGCTGCCGCCGCCGCCCGTACTGCCGGGGCCGG
GGGAGGAGCTCCCGGGCGCCCGGCTCCCGGGGGGCGGTGGCGACGACGGGGCGGGGCGCGCAGGACCCCCGCGGG
GAGACTGGGGGGTCGCATCGTGCCAGCACAATGAAGAATTTTGGCAGTATAATACCTTCCAATACTGGAGGAATC
CTTTGCCTCCTATTGATCTGGCAGACATTGAAGATTTAAGTGAAGACACCCTGACAGAAGCAACACTTCAGGGCA
GGAATGAAGGGGCTGAGGTTGACATGGAGTCC**TGA**TGTAAGGAGCCGAAGCAGTGGGATTGGCTGATTTGAGGAG
ATGTCTCTAAGTGAATTCTCGTATTCTTAAGGGAAAAGTTATTTTCCATACTTGAAGTTATATTTCCAAACCTGA
GAAATGAAGAAAGATTGTTCTGACATTAAATACCTACAGTTACTACTGAACCTCTTAATAAGGATTTGTCAAGGA
TAGAGTACAGTTGTAGGGGAAGTATTTTATGTATGCATTCTTAGAGCAAAAAGTTTTGTTTAAATTCTAGAATTG
AAGGTACTGATCTTATAAAAAGAAATTCTAGCAGTTTTAGAAATAGGTGGGAAAAACTCAAATATTCCTCCTATC
TGCACCAAAAAGTTTATTTGTGGTATATAAAATGAATATTGTTTTATAATAACTTGTTAATAAAGTACTTTCTAA
TACATTCTATTGACTCTGTTAGTTGAACAAATAGCTGACTTGAACATCTATGCAAACTTAAGATGGGCGGGATTG
TTGTAAAAGCTATTGTTTTAAAAGAGCTTTCTAAATGTAAAGTAGTGATAATTTCAATTTGGGTAGCGTGTTTGC
AAAGCTTCCAATATTTGATGTTGGTTAAGCTCTACTATGGGCAACTGAAGATGGATAAAGAAAAATGAAAACTGA
ATCGGTGCCTGCTTCCCCCTGTTTTCCCAGGATTAGAGGAAAAAATTTATTGTATAATCAGCTTCTTGGTTTTGA
ATTGCTTCGAGGCATGGTTTTATTCCTTATTACTTTAGACCTGTAGTTTTCAACACTGACAGCACTTTAAAAATC
TTTGCCTGGGCCTCACTCTTGAGAGATTCTCATTTAATAGTTCTGAGGTGGGTCTTGGATATAACTATTTTTTTA
AACACCTGTCCTGTTTCCCTCCATTCCTCTCATGTGCAGACAGGGTTGAGAACCAGTAGACTAATGGTCGTTTTT
CCTGTTTAAAGGAGATAACTAATTTGAGCTGAAGCAATGCTTCTTAATTAGCTTTGTTTTTGTTTTGCTCTGTTG
GTGGCTTTGTTACAACTGAATTATTGTGTTATTACTATTTCATTGTTAAAGAAATAAAGTAAGCAATTTGT

FIGURE 4090

MAKRRAAEPVTFHVPWKRLLLCDFAEQPPPPPLWIRPPGVAHAGQLLGVPEQHRKRKIDAGTMAEPSASPSKRRD
SGDNSAPSGQEREDHGLETGDPPLPPPPVLPGPGEELPGARLPGGGGDDGAGRAGPPRGDWGVASCQHNEEFWQY
NTFQYWRNPLPPIDLADIEDLSEDTLTEATLQGRNEGAEVDMES

FIGURE 4091

AAAGATGAAGAGAGCAGGATTTGTAAAGCCCTGTTTTTATACACTTCACATTTGCGGAAATATAATGATGCCCTC
ATTATCAGTGAGCATGCACGAATGAAAGATGCTCTGGATTACTTGAAAGACTTCTTCAGCAATGTCCGAGCAGCA
GGATTCGATGAGATTGAGCAAGATCTTACTCAGAGATTTGAAGAAAAGCTGCAGGAACTAGAAAGTGTTTCCAGG
GATCCCAGCAATGAGAATCCTAAACTTGAAGACCTCTGCTTCATCTTACAAGAAGAGTACCACTTAAACCCAGAG
ACAATAACAATTCTCTTTGTGAAAACCAGAGCACTTGTGGACGCTTTAAAAAATTGGATTGAAGGAAATCCTAAA
CTCAGTTTTCTAAAACCTGGCATATTGACTGGACGTGGCAAAACAAATCAGAACACAGGAATGACCCTCCCGGCA
CAGAAGTGTATATTGGATGCATTCAAAGCCAGTGGAGATCACAATATTCTGATTGCCACCTCAGTTGCTGATGAA
GGCATTGACATTGCACAGTGCAATCTTGTCATCCTTTATGAGTATGTGGGCAATGTCATCAAAATGATCCAAACC
AGAGGCAGAGGAAGAGCAAGAGGTAGCAAGTGCTTCCTTCTGACTAGTAATGCTGGTGTAATTGAAAAAGAACAA
ATAAACATGTACAAAGAAAAAATGATGAATGACTCTATTTTACGCCTTCAGACATGGGACGAAGCAGTATTTAGG
GAAAAGATTCTGCATATACAGACTCATGAAAAATTCATCAGAGATAGTCAAGAAAAACCAAAACCTGTACCTGAT
AAGGAAAATAAAAAACTGCTCTGCAGAAAGTGCAAAGCCTTGGCATGTTACACAGCTGACGTAAGAGTGATAGAG
GAATGCCATTACACTGTGCTTGGAGATGCTTTTAAGGAATGCTTTGTGAGTAGACCACATCCCAAGCCAAAGCAG
TTTTCAAGTTTTGAAAAAAGAGCAAAGATATTCTGTGCCCGACAGAACTGCAGCCATGACTGGGGAATCCATGTG
AAGTACAAGACATTTGAGATTCCAGTTATAAAAATTGAAAGTTTTGTGGTGGAGGATATTGCAACTGGAGTTCAG
ACACTGTACTCGAAGTGGAAGGACTTTCATTTTGAGAAGATACCATTTGATCCAGCAGAAATGTCCAAATGATAT
CAGGTCCTCAATCTTCAGCTACAGGGAATGAGTAACTTTGAGTGGAGAAGAAACAAACATAGTGGGTATAATCAT
GGATCGCTTGTACCCCTGTGAAAATATATTTTTTAAAAATATCTTTAGCAGTTTGTACTATATTATATATGCAAA
GCACAAATGAGTGAATCACAGCACTGAGTATTTTGTAGGCCAACAGAGCTCATAGTACTTGGGAAAAATTAAAAA
GCCTCATTTCTAGCCTTCTTTTTAGAGTCAACTGCCAACAAACACACAGTAATCACTCTGTACACACTGGGATAG
ATGAATGAATGGAATGTTGGGAATTTTTATCTCCCTTTGTCTCCTTAACCTACTGTAAACTGGCTTTTGCCCTTA
ACAATCTACTGAAATTGTTCTTTTGAAGGTTACCAGTGACTCTGGTTGCCAAATCCACTGGGCACTTCTTAACCT
TCTATTTGACCTCTGCGCATTTGGCCCTGTTGAGCACTCTTCTTGAAGCTCTCCCTGGGCTTCTCTCTCTTCTAG
TTCTATTCTAGTCTTTTTTTATTGAGTCCTCCTCTTTGCTGATCCCTTCCAAGGGTTCAATATATATACATGTAT
ATACTGTACATATGTATATGTAACTAATATGCATACATACAGGTATGTATATGTAATGGTTATATGTACTCATGT
TCCTGGTGTAGCAACGTGTGGTATGGCTACACAGAGAACATGAGAACATAAAGCCATTTTTGTGCTTACTACCAA
AGGCTGTCCACTGTAGAGTTGCTGTATGTAGCAATGTGTATCCACTCTACGGTGGTCAGCTTTTAGTAGAGAGCA
TAAAAATGATAAAATACTTCTTGAAAACTTAGTTTACTATACATCTTGCCCTATTAATATGTTCTCTTAACGTGT
GCCATTGTTCTCTTTGACCATTTTCCTATAATGATGTTGATGTTCAACACCTGGACTGAATGTCTGTTCTCAGAT
CCCTTGGATGTTACAGATGAGGCAGTCTGACTGTCCTTTCTACTTGAAAGATTAGAATATGTATCCAAATGGCAT
TCACGTGTCACTTAGCAAGGTTTGCTGATGCTTCAAAGAGCTTAGTTTGCGGTTTCCTGGACGTGGAAACAAGTA
TCTGAGTTCCCTGGAGATCAACGGGATGAGGTGTTACAGCTGCCTCCCTCTTCATGCAATCTGGTGAGCAGTGGT
GCAGGCGGGGAGCCAGAGAAACTTGCCAGTTATATAACTTCTCTTTGGCTTTTCTTCATCTGTAAAACAAGGATA
ATACTGAACTGTAAGGGTTAGTGGAGAGTTTTTAATTAAAAGAATGTGTGAAAAGTACATGACACAGTAGTTGCT
TGATAATAGTTACTAGTAGTAGTATTCTTACTAAGACCCAATACAAATGGATTATTTAAACCAAAAAAAAAAAAA
AAAAAAAA

FIGURE 4092

ATCGGAAAAGCACCTTGAGTTACTGGCTTCCCCTTTACCTATTCCATCAACCTTCCTTCCACACAGTAGTACTCC
CGCTTTGCATCTTACAGTTCAGAGGCTAAAGTTGCCACCACCACAGGGATCTTCTGAGAGCTGCACAGTTAACAT
CCCACAACAACCACCCGGAAGCCTGAGCATCGCATCACCAAACACTGCCTTTATTCCTATCCATAACCCAGGTAG
TTTCCCAGGCTCTCCTGTTGCTACCACGGACCCCATCACAAAATCTGCATCCCAAGTGGTAGGACTCAATCAAATT
GGTGCCTCAAATTGAGGGAAACACAGGGACAGTCCCTCAGCCTACCAATGTGAAGGTAGTTCTTCCAGCAGCTGG
CCTCTCAGCTGCTCAGCCACCAGCTTCCTACCCCTTACCAGGCTCTCCCCTTGCTGCCGGCGTGTTACCCAGCCA
GAACTCCAGTGTGCTCAGCACAGCAGCAACTTCTCCCCAGCCAGCGAGCGCAGGTATCAGCCAGGCCCAGGCAAC
TGTTCCTCCTGCAGTTCCTACCCACACCCCAGGCCCTGCCCCGAGCCCAAGCCCTGCCTTGACACACAGTACCGC
GCAGAGTGACAGCACCTCTTACATCAGTGCTGTGGGGAACACGAACGCTAATGGGACAGTAGTGCCACCGCAGCA
GATGGGCTCAGGTCCTTGTGGTTCTTGTGGGCGAAGGTGCAGCTGTGGGACCAATGGAAACCTTCAGCTAAATAG
TTACTATTATCCTAATCCAATGCCTGGACCAATGTACCGAGTCCCTTCATTCTTTACTCTGCCATCCATTTGCAA
TGGCAGCTACCTCAACCAAGCACATCAGAGCAATGGAAACCAACTTCCTTTTTTTCTGCCTCAGACTCCATATGC
AAATGGACTGGTACATGACCCAGTCATGGGGAGCCAAGCCAACTATGGCATGCAGCAGATGGCAGGATTTGGGAG
ATTCTATCCTGTATATCCAGCACCTAACGTAGTTGCCAACACCAGTGGTTCGGGGCCCAAGAAGAATGGGAATGT
CTCATGTTACAATTGTGGTGTAAGCGGACACTACGCACAGGACTGTAAGCAGTCGTCCATGGAGGCCAATCAACA
AGGCACTTACAGACTGAGATACGCACCTCCCCTCCCCCCTTCTAATGATACGTTGGATTCTGCAGACTGAAACGA
GTAAAGCTTGCCTACTTAATACACTCAAGTGTGGGGAGTCATGGGGTGTGGAGGGGAGGAAAGGAAAGGTATTTT
GTTTCTTTGTCTATACATTTCCTAGATTTCTATGCAGTTGGGATTTTTCATTTCTCTTGTACCAATGTCCAAAAC
AAGAAAGAATGCAATGCTTTTGAGCCTCTGGTCTCCTGGTTCAACAACAGGCTTATATGTATGATACATGTAATT
TAAACCTTCAGACAAACTTAAATGTTGGTGCGTGCTTTTTTTTTTTTTTACACTGAATACTTGCTGTGTGCAATG
TTTACTGAATCTTTAAAACTGTGTATTTGACCTTTTTTTTACAACACTGGTGACAGTCATATGGTTTTGAAAAAA
AAAAGAAATTTTGCTTCTTCCCAGCTTTTCTCACTTTCACCCTAAACGACACTTCCTCCCCAGCCAGCCTCACTC
TGTCTCCGGCCCGCAGCAGGAGCAGCCAGCAGTGCATTCACCCCACTTTTGTAAACTGCTCTGCATATAAACCAA
GGGCAGAATGTTTCACCCTGATCTTATGGGAGGAATCGAACTCCCAAAATAGTGTGTATATATGTAATAAACAGC
GTCACGTAAATACATATATGCAGTGCTTGTTGTCCAAATAGAAATGAAAATAAGTGGAAGAGAGAGGAAGAAGTC
AACCATATGAAACTGAAAAAATATGACGTACGAAATGGACAAAAAGCTTTTTCTGAAACCAACTTTTTACTTCCA
TCATCCTTTTTTAGCCTGTTGCTTCAGAGAGACACAAAGTGAACACACTGGTGTGAATGTCGCTCTCTGTGTGCT
TGTGTTTGTAATGAAAGTCTACAGCCAATTTTACTTGTCTACCACCGTGTTGTGCTCAAAGAGACACTACTTGAG
TGAAGATTTCTTCTTTCCCTGTACCAGCTGTTACAGTGTTACGTTGTGTTTAAAATGTGTATGGTTTATTGCAAT
CTGAACAGAGCTATGGGTTTCTACCATAAGTCAGGTTGTTTGTTCCCTAACCTGTCTCTCGTAGCAAAGTCACTT
TTATAACAGTTTACCACTATGCTTGATTATAATGTGAAAGGCGGAATTCTGAGTGTGTTAAGATGGTATTAATCA
TGTCGGTGTCATGTCACTAAGTTTAATGCTGCTGTTTTTAAAAAAAAAAAAAAGTTTTTTTAAAAAGCCAATCTAT
GTACTAAATTGCTTCCAGGTAATTTTTGATTTCCTAAAGTGCACTGAGGTTATCTGGAAGATTGGGTGTATTTTT
TGGTGACTGCTGCATTCATCAGCAATGAACAGTTTCCACTGTATAGTCCTAGGGGTCAGGGGGTGGGGGTTTCAT
TTTCCATTCCTCAGCACAGAGCAGAAATGATAGATTTTTATTGTTTGGAGTAACGTTGGTATGCAGCAGAGGAAC
ATAAACATTTGGTCTTGGTTCAGAAGCCTAACAGATTGCTAGACAAGAGAAAAAACTTGAAGAAAAAAGAAGCTT
AATTTCATGCTTCATAAGTAGCATTTATATTTATAGCACCAATGTACATTTTGAAACTTTCTTTCAGGGGTGGGA
GTTATGGGGAAGGGGTGGGTGTGAAGGGGTAGATGAAAGCTTTAATTTAGAAAGAAAGTTCAAGTAAAGGAAATT
ATTTTGATTAAATATATTTTATTTGATCTGGGTATTTTTGGACCACATTATTAAATTAATTGTTAAGCTGCAGTT
GAGTTGTTCAAGTGAGAGTTTTGATAAGCCACTTATGGGCCGCGTTGTGAATCACTTGCCAGTTGTACTTTATGG
AGCTTATTTTATGATTTAAAATACTGTACTGTACATAGGAGGTATGTTACCTTCTCCTTATTTGTATGTTTACCA
TATACTTTGATATTTGAAATGTTATGTACTGGAAAGGCCACTTATATTTCTAGAACAGATTGGATTTTATGCAAC
CTTTTTTCCTTGAATTAACAGCAATAAAAAAATGAAAAACAAAAAAAAAAAAAAAAAAAAA

FIGURE 4093

MVPQIEGNTGTVPQPTNVKVVLPAAGLSAAQPPASYPLPGSPLAAGVLPSQNSSVLSTAATSPQPASAGISQAQA
TVPPAVPTHTPGPAPSPSPALTHSTAQSDSTSYISAVGNTNANGTVVPPQQMGSGPCGSCGRRCSCGTNGNLQLN
SYYYPNPMPGPMYRVPSFFTLPSICNGSYLNQAHQSNGNQLPFFLPQTPYANGLVHDPVMGSQANYGMQQMAGFG
RFYPVYPAPNVVANTSGSGPKKNGNVSCYNCGVSGHYAQDCKQSSMEANQQGTYRLRYAPPLPPSNDTLDSAD

FIGURE 4094A

ATTTTTGGCTGCCTCTGTCGGTCTGTTCAGTTACCACGTGAACCGCCGACGGAGACCCGTAGTGGGGGAGGCGGC
GGCAGCGTTAAGTGAGAAAGGAAAAAAGACAACGAGGAAAAAGGAGGTGTCCGGGTAGGGCAACGCGGCGACACC
CGAGGCCTGGTGGTGGCGGCGGATCGAGATATTCAAGGCTGAAGCAGCTACGGAACGGCAGCGGCGGCGGTCGGA
CAAACTGACTGACCGAGCCGGGTGGTGGCGGGAGCAGCGGGAGCAGCCGGAACG**ATG**CCGGCCGTGAGCCTCCCG
CCCAAGGAGAATGCGCTCTTCAAGCGGATCTTGAGGTGTTATGAACATAAACAGTATAGAAATGGATTGAAATTC
TGTAAACAAATACTTTCTAATCCCAAATTTGCAGAGCATGGAGAAACCTTGGCTATGAAAGGATTAACATTGAAC
TGTTTGGGGAAAAAGGAAGAAGCTTATGAATTGGTTCGTAGAGGTTTGAGAAATGACTTGAAGAGTCATGTGTGT
TGGCACGTTTATGGCCTTCTTCAGAGGTCAGACAAGAAGTATGATGAAGCCATTAAGTGTTACAGAAATGCACTA
AAATGGGATAAAGACAATCTTCAAATCTTAAGGGACCTTTCCTTACTACAGATTCAAATGCGAGATCTTGAGGGT
TACAGGGAAACGAGGTATCAGTTACTTCAGCTTCGACCTGCGCAGAGAGCATCATGGATTGGTTATGCTATTGCT
TACCATTTATTAGAAGATTATGAAATGGCAGCAAAGATTTTAGAAGAATTTAGGAAAACACAACAGACATCCCCT
GACAAGGTGGATTATGAATATAGTGAACTACTCTTATATCAGAATCAAGTTCTTCGGGAAGCAGGTCTCTATAGA
GAAGCTTTGGAACATCTTTGTACCTATGAAAAGCAGATTTGTGATAAACTTGCTGTAGAAGAAACCAAAGGGGAA
CTTCTGTTGCAACTATGTCGTTTGGAAGATGCTGCAGATGTTTATAGAGGATTGCAAGAGAGAAATCCTGAAAAC
TGGGCCTATTACAAAGGCTTGGAAAAAGCACTCAAGCCAGCTAATATGTTAGAACGGCTAAAAATTTATGAGGAA
GCCTGGACTAAATATCCCAGGGGACTGGTGCCAAGAAGGCTGCCGTTAAACTTTTTATCTGGTGAGAAGTTTAAA
GAATGTTTGGATAAGTTCCTAAGGATGAATTTCAGCAAGGGTTGCCCACCAGTCTTCAATACTTTAAGATCATTA
TACAAAGACAAAGAAAAGGTGGCAATCATAGAAGAGTTAGTAGTAGGTTATGAAACCTCTCTAAAAAGCTGCCGG
TTATTTAACCCCAATGATGATGGAAAGGAGGAACCACCAACCACATTACTTTGGGTCCAGTACTACTTGGCACAA
CATTATGACAAAATTGGTCAGCCATCTATTGCTTTGGAGTACATAAATACTGCTATTGAAAGTACACCTACATTA
ATAGAACTCTTTCTCGTGAAAGCTAAAATCTATAAGCATGCTGGAAATATTAAAGAAGCTGCAAGGTGGATGGAT
GAGGCCCAGGCCTTGGACACAGCAGACAGATTTATCAACTCCAAATGTGCAAAATACATGCTAAAAGCCAACCTG
ATTAAAGAAGCTGAAGAAATGTGCTCAAAGTTTACAAGGGAAGGAACATCAGCGGTAGAGAATTTGAATGAAATG
CAGTGCATGTGGTTCCAAACAGAATGTGCCCAGGCTTATAAAGCAATGAATAAATTTGGTGAAGCACTTAAGAAA
TGTCATGAGATTGAGAGAAAATCACTGATGACCAGTTTGACTTTCATACATACTGTA**TGA**GGAAGATTACCCTTA
GATCATATGTGGACTTATTAAAACTAGAAGATGTACTTCGACAGCATCCATTTTACTTCAAGGCAGCAAGAATTG
CTATAGAGATCTATTTGAAGCTTCATGACAACCCCCTTACAGATGAGAATAAAGAACACGAAGCTGATACAGCAA
ACATGTCTGACAAAGAGCTAAAGAAGCTACGTAATAAACAAAGAAGAGCTCAAAAGAAAGCCCAGATAGAAGAAG
AGAAAAAAAATGCAGAAAAAGAAAAGCAGCAGAGAAATCAGAAAAAGAAGAAGGATGATGATGATGAGGAGATAG
GAGGTCCAAAAGAAGAACTTATTCCAGAGAAACTGGCCAAGGTTGAAACTCCATTGGAAGAAGCTATTAAATTTT
TAACACCGTTGAAGAACTTGGTGAAGAACAAGATAGAGACTCATCTTTTTGCCTTTGAGATTTACTTTAGGAAAG
AAAAGTTTCTTTTGATGCTACAATCAGTAAAGAGGGCATTTGCTATTGATTCTAGTCATCCCTGGCTTCATGAGT
GTATGATTCGTCTCTTTAATACTGCAGTGTGTGAAAGTAAAGATTTATCTGATACAGTTAGAACAGTATTAAAAC
AAGAAATGAATCGTCTTTTTGGAGCAACGAATCCAAAGAATTTTAATGAAACTTTTCTGAAAAGGAATTCTGATT
CATTGCCACACAGATTATCAGCTGCCAAAATGGTATATTACTTAGATCCTTCTAGTCAGAAGCGAGCTATAGAGT
TGGCAACAACACTTGATGAATCTCTCACTAACAGAAACCTCCAGACATGTATGGAGGTATTGGAAGCCTTGTATG
ATGGTAGCCTAGGAGACTGTAAAGAAGCTGCTGAAATTTATAGAGCAAATTGTCATAAGCTTTTCCCTTATGCTT
TGGCTTTCATGCCTCCTGGATATGAAGAGGATATGAAGATCACAGTTAATGGAGATAGTTCTGCAGAAGCTGAAG
AACTGGCCAATGAAATTTGAACATCACTAAACAAGCAAATGGAATGACTTTGGACCATATCTAGTATATAATATT
TTTGTCACGCACCTGCTGCATTGCTCTAACTTACACAGAATGAGAGGAGTAAATGTTCTTGCCTTCAAATAGTGT
TTTACGTTTTTTATCCTGCTGAAAAAGTATATATAAAATATCTAACATTACAGGATAGAGGTTCAGTTTCTTAAA
AAATTAAAGCTGCTAAAATTGAGTGGTTAAAAAAGATACCTTATCCTATTCCTCCCCACCCACCCATGTTTTTAA
ACTAATTTATATAAAATCTGGAGGCTGTTACAGCTAACAAAGCAGGTGTGTGGCAGAAATATTACTTTAAATTTG
TCTTGTGAGATTTTACTATATCTCAGACAGCATAAATGCTGTTTTAGCACTGGATTCTTTCACTGAGCACAAAGA
GTTGTTGGGGCTTTAGCATCTGACTGATTTTGTTACGGGGTTGATTCTGACCATAGGAAGTATGCAATGTGAATC
ACTATTTACAGAGAAACCTACAACAGATGCTTGATGTTGTAGAAACTGGGACATATAGATACCAAGCAAAATTAT
AAGAAACCTATAAGGTGTTCAATACGCTTGTGTTTCCAAAATTCACTGTACATGATCAGTTTGGTGTTCTTGTAC
CACAGTTTTTAACTGAAGGAACCAGTTGTAACAGTCTCAATTTTAACTAAAACTTGAAGAACTAAAACAACAATG

FIGURE 4094B

CAAACCTTTCAGCATTGTTTGGCCAAACTTGTTAAAACTGTAATGCAAGAACCAAATGCACTGTGATGTGGCACC
AACTAATTAGCAAGCATGAATTTTTCACCCAAGAGTGAAAAAAGGAAAATCTACCATGGCTTGAAGTTAAAGAGC
AGAACTCCTGACTACCATTCTATGACTGATCAAAAGACTAATAGTTAAAAACCTCAGCAGGCCTTGTTCACGATA
TGCAGAAAAAAAAAGTGCTGCAGTTTAGATACCTCTGGAATTTTTCCACAGTGTCACAGGTTTGTAATACTTGAAG
CCCTACATTTCTAAGAATATATTTCTTGCTCAGTTGTTTCAGGCAAGCCCAAGACTTTGTAATTTTTAAAGGGCC
CAAGATTTTTTTTTTTTTTTTTTTTTCAAATAACAGACCAGCTTCTTTTTCTTGCAGTTACAGATGTAATTTCCT
TTTTGTTGTCAAACATAAGGTACCAAATATGATGCAATAAATTGTTTTGAAAAACAGTTGTGTGAATATTTCAAC
TAATCTGTGTTGGGCTTCTGTGAAATACACAGGTGGAAACAGAGGTGCAAGCCAGAGGCAATGTAATATGCTGTA
AGGCTAGTGCAGATGGGAGCTTTTTAGAAGGGGCTAAGTGCTGGTGTCAGGGAAATTCCATAATGAAGTAGAATG
CTGCTCCTGCATTAAGATTTCATTGAGGGCAAGGCTGGTGGCAGGTACTATGAATGTAATTCATAATTTAAAAGG
AAAACTAAAAACTATTTTGATTTGGGAAAATGAGCCTTAATTTGTTAAACCTATACACTGAGAACTAGCCTCAGG
CTTAATATTCTCATTGCATTTGCAAGATCTGAGCAAATAAGATTAAGTAAAACAAATCAATTGTATATATAATTG
ACCTTTTTGTGGAACATGTAGTTTATAGAAAGTATACTCTAAAGGGAATTTGCCGAAGACCTTTTACTGATTGAA
CAGTTGTGCTACAATCAACTTTTCATAGTACATGACCTGCATTCCACATCTCAGTCTAACAGTTTAGTAGTGATG
TAAAGAGAAGTACAAACCGAACTCCAGTGCTTTGTTATGTTTTATTAACTGGCCCTGTCTCAGGAACATCTTAAC
AGATGGCAAAAAAACAAAAACTTTTTTTCAACTCCTATGAGTGGCAACTGAAGTTCTTATTGTTGGGAAAGAACA
CTAGTCCTACCTCTGCCACTAATGAGGTGTTTGGAGGAGGTACCAGCCATATAATAGGGGGTGTATGTGTGAATT
TTGTTTAAACTCTACTGTATATTGAAATGAAATTCATTTATTTGTCTTGACAATGTTCAAATGATGTAGATTGTC
TTAGAATGAATATTCATAAGTACTCAGAACTCTTAAGATGCAGATGCCACCCGTGAGGAGCTAAATTCCTAATGT
GTATTGTATTCCAACCCAATTTTACTGGAACTATTGAATAAATCTTTTATTTTCTTTCAGGTTTACTTGATAGTG
GATACATTGGTGTCAGAGGACCTTGACTGGGTTCATTTTATGTCCAGACATCACCCCTGAAACACTGTACTGTAC
TATCTTGCTCTGAGTAGTATCAACTGGATCGTCTCATATTTGCCTCATTCATCCTATTAATTTCAAATGATACTG
TGGGGGAAAAACAGGGTTAGAAAAACAAGTGGAAAAAATGGAGTGATGTTGTAATCTAAACAAGTGCCTTATGTT
TATTGCTAAGAACTGGTGTTACCAACCCTTTTGAGAAGAAAGGGTCTCTTGACCTGTATTAACATAGGAAAGTAA
AGTTCTTTTTGTTTTTCTTTATAAGCTACTCTTGTCATTTCTCGTTGAAAAACTAAAATCTGACTAGGTTAGTTT
ACTCAGCTTTAATTAGATAGTTGAGTCATATATTTTCAACATTTTTCTGTATCGTATTTATTATGCACAAAAATA
AAGTGTGATCTCTAAT

FIGURE 4095

MPAVSLPPKENALFKRILRCYEHKQYRNGLKFCKQILSNPKFAEHGETLAMKGLTLNCLGKKEEAYELVRRGLRN
DLKSHVCWHVYGLLQRSDKKYDEAIKCYRNALKWDKDNLQILRDLSLLQIQMRDLEGYRETRYQLLQLRPAQRAS
WIGYAIAYHLLEDYEMAAKILEEFRKTQQTSPDKVDYEYSELLLYQNQVLREAGLYREALEHLCTYEKQICDKLA
VEETKGELLLQLCRLEDAADVYRGLQERNPENWAYYKGLEKALKPANMLERLKIYEEAWTKYPRGLVPRRLPLNF
LSGEKFKECLDKFLRMNFSKGCPPVFNTLRSLYKDKEKVAIIEELVVGYETSLKSCRLFNPNDDGKEEPPTTLLW
VQYYLAQHYDKIGQPSIALEYINTAIESTPTLIELFLVKAKIYKHAGNIKEAARWMDEAQALDTADRFINSKCAK
YMLKANLIKEAEEMCSKFTREGTSAVENLNEMQCMWFQTECAQAYKAMNKFGEALKKCHEIERKSLMTSLTFIHT
V

FIGURE 4096

CTTCCAGAGAGCAATATGGCTGGTTCCCCAACATGCCTCACCCTCATCTATATCCTTTGGCAGCTCACAGGGTCA
GCAGCCTCTGGACCCGTGAAAGAGCTGGTCGGTTCCGTTGGTGGGGCCGTGACTTTCCCCCTGAAGTCCAAAGTA
AAGCAAGTTGACTCTATTGTCTGGACCTTCAACACAACCCCTCTTGTCACCATACAGCCAGAAGGGGGCACTATC
ATAGTGACCCAAAATCGTAATAGGGAGAGAGTAGACTTCCCAGATGGAGGCTACTCCCTGAAGCTCAGCAAACTG
AAGAAGAATGACTCAGGGATCTACTATGTGGGGATATACAGCTCATCACTCCAGCAGCCCTCCACCCAGGAGTAC
GTGCTGCATGTCTACGAGCACCTGTCAAAGCCTAAAGTCACCATGGGTCTGCAGAGCAATAAGAATGGCACCTGT
GTGACCAATCTGACATGCTGCATGGAACATGGGGAAGAGGATGTGATTTATACCTGGAAGGCCCTGGGGCAAGCA
GCCAATGAGTCCCATAATGGGTCCATCCTCCCCATCTCCTGGAGATGGGGAGAAAGTGATATGACCTTCATCTGC
GTTGCCAGGAACCCTGTCAGCAGAAACTTCTCAAGCCCCATCCTTGCCAGGAAGCTCTGTGAAGGTGCTGCTGAT
GACCCAGATTCCTCCATGGTCCTCCTGTGTCTCCTGTTGGTGCCCCTCCTGCTCAGTCTCTTTGTACTGGGGCTA
TTTCTTTGGTTTCTGAAGAGAGAGAGACAAGAAGAGTACATTGAAGAGAAGAAGAGAGTGGACATTTGTCGGGAA
ACTCCTAACATATGCCCCCATTCTGGAGAGAACACAGAGTACGACACAATCCCTCACACTAATAGAACAATCCTA
AAGGAAGATCCAGCAAATACGGTTTACTCCACTGTGGAAATACCGAAAAAGATGGAAAATCCCCACTCACTGCTC
ACGATGCCAGACACACCAAGGCTATTTGCCTATGAGAATGTTATCTAGACAGCAGTGCACTCCCCTAAGTCTCTG
CTCAAAAAAAAAACAATTCTCGGCCCAAAGAAAACAATCAGAAGAATTCACTGATTTGACTAGAAACATCAAGGA
AGAATGAAGAACGTTGACTTTTTTCCAGGATAAATTATCTCTGATGCTTCTTTAGATTTAAGAGTTCATAATTCC
ATCCACTGCTGAGAAATCTCCTCAAACCCAGAAGGTTTAATCACTTCATCCCAAAAATGGGATTGTGAATGTCAG
CAAACCATAAAAAAAGTGCTTAGAAGTATTCCTATAGAAATGTAAATGCAAGGTCACACATATTAATGACAGCCT
GTTGTATTAATGATGGCTCCAGGTCAGTGTCTGGAGTTTCATTCCATCCCAGGGCTTGGATGTAAGGATTATACC
AAGAGTCTTGCTACCAGGAGGGCAAGAAGACCAAAACAGACAGACAAGTCCAGCAGAAGCAGATGCACCTGACAA
AAATGGATGTATTAATTGGCTCTATAAACTATGTGCCCAGCACTATGCTGAGCTTACACTAATTGGTCAGACGTG
CTGTCTGCCCTCATGAAATTGGCTCCAAATGAATGAACTACTTTCATGAGCAGTTGTAGCAGGCCTGACCACAGA
TTCCCAGAGGGCCAGGTGTGGATCCACAGGACTTGAAGGTCAAAGTTCACAAAGATGAAGAATCAGGGTAGCTGA
CCATGTTTGGCAGATACTATAATGGAGACACAGAAGTGTGCATGGCCCAAGGACAAGGACCTCCAGCCAGGCTTC
ATTTATGCACTTGTGCTGCAAAAGAAAAGTCTAGGTTTTAAGGCTGTGCCAGAACCCATCCCAATAAAGAGACCG
AGTCTGAAGTCACATTGTAAATCTAGTGTAGGAGACTTGGAGTCAGGCAGTGAGACTGGTGGGGCACGGGGGGCA
GTGGGTACTTGTAAACCTTTAAAGATGGTTAATTCATTCAATAGATATTTATTAAGAACCTATGCGGCCCGGCAT
GGTGGCTCACACCTGTAATCCCAGCACTTTGGGAGGCCAAGGTGGGTGGGTCATCTGAGGTCAGGAGTTCAAGAC
CAGCCTGGCCAACATGGTGAAACCCCATCTCTACTAAAGATACAAAAATTTGCTGAGCGTGGTGGTGTGCACCTG
TAATCCCAGCTACTCGAGAGGCCAAGGCATGAGAATCGCTTGAACCTGGGAGGTGGAGGTTGCAGTGAGCTGAGA
TGGCACCACTGCACTCCGGCCTAGGCAACGAGAGCAAAACTCCAATACAAACAAACAAACAAACACCTGTGCTAG
GTCAGTCTGGCACGTAAGATGAACATCCCTACCAACACAGAGCTCACCATCTCTTATACTTAAGTGAAAAACATG
GGGAAGGGGAAAGGGGAATGGCTGCTTTTGATATGTTCCCTGACACATATCTTGAATGGAGACCTCCCTACCAAG
TGATGAAAGTGTTGAAAAACTTAATAACAAATGCTTGTTGGGCAAGAATGGGATTGAGGATTATCTTCTCTCAGA
AAGGCATTGTGAAGGAATTGAGCCAGATCTCTCTCCCTACTGCAAAACCCTATTGTAGTAAAAAAGTCTTCTTTA
CTATCTTAATAAAACAGATATTGTGAGATTCAAAAAAAAAAAAAAA

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FIGURE 4097

MAGSPTCLTLIYILWQLTGSAASGPVKELVGSVGGAVTFPLKSKVKQVDSIVWTFNTTPLVTIQPEGGTIIVTQN
RNRERVDFPDGGYSLKLSKLKKNDSGIYYVGIYSSSLQQPSTQEYVLHVYEHLSKPKVTMGLQSNKNGTCVTNLT
CCMEHGEEDVIYTWKALGQAANESHNGSILPISWRWGESDMTFICVARNPVSRNFSSPILARKLCEGAADDPDSS
MVLLCLLLVPLLLSLFVLGLFLWFLKRERQEEYIEEKKRVDICRETPNICPHSGENTEYDTIPHTNRTILKEDPA
NTVYSTVEIPKKMENPHSLLTMPDTPRLFAYENVI

FIGURE 4098

TTTGCTAAAGCCACCATAAAGGAAATAGTTGTGTGGCCCATGTTGAGGCCAGACATCTTTACTGGTTTAAGGGGA
CCCCCTAAAGGAATTTTGCTCTTTGGTCCTCCTGGGACTGGTAAAACTCTAATTGGCAAGTGCATTGCTAGTCAG
TCTGGGGCAACATTCTTTAGCATCTCTGCTTCATCCTTAACTTCTAAATGGGTAGGTGAGGGGGAGAAAATGGTC
CGTGCATTGTTTGCTGTTGCAAGGTGTCAGCAACCAGCTGTGATATTTATTGACGAAATTGATTCCTTGTTATCT
CAACGGGGAGATGGTGAGCATGAATCTTCTAGAAGGATAAAAACAGAATTTTTAGTTCAATTAGATGGAGCAACA
ACATCTTCTGAAGATCGTATCCTAGTGGTGGGAGCAACAAATCGGCCACAAGAAATTGATGAGGCTGCCCGGAGA
AGATTGGTGAAAAGGCTTTATATTCCCCTCCCAGAAGCTTCAGCCAGGAAACAGATAGTAATTAATCTAATGTCC
AAAGAGCAGTGTTGCCTCAGTGAAGAAGAAATTGAACAGATTGTACAGCAGTCTGATGCGTTTTCAGGAGCAGAC
ATGACACAGCTTTGCAGGGAGGCTTCTCTTGGTCCTATTCGCAGTTTACAAACTGCTGACATTGCTACCATAACA
CCGGATCAAGTTCGACCCATAGCTTACATTGATTTTGAAAATGCTTTTAGAACTGTGCGACCTAGTGTTTCTCCA
AAAGATTTAGAGCTTTATGAAAACTGGAACAAAACTTTTGGTTGTGGAAAGTAAGTGGGATACTTGGAATCAAGG
CATCTCTGTAGTACAGTCTTCTTTATTTTTTAGCATAGAAAGTTGGGGATGTGTTAATTGTATTTTTAAGAATAT
ATTCTAAGTTCTGTACTTCAAATAATAGCACAGATTTTACATCTGATTGACATAGTGTATGTTAATGTAAGTTTT
GCTTTCCAGTGATTACCTGATACGTAAGCCTATTTGAACAAAGTGAGAATGAACTTTTGTTTCTAAGAAGTCTTT
ATCTTGAAGCTATATAACATGAAAAGTGAGCTCAAATTTTTTTTAGTTGAAGATTACATATAAAGTTGTGTCTGA
TTAATATTCATCTTTTATTGAAGAAAGTGCCTTCTGATGGCCACATAATTCTTAATGTCAGCTAGTATAATGGTT
TACATTTGGACAAAGTATTGCTTAGTGTTATTTAAGTAGATTTAAGATCTCAAAGCTAAAGTGCCAATTTTTACT
TTCTTCAGCCAATTTGTTACCTCTTTTATGGTTTTAAATTTTTATCAGGACTAACATTTTCAGAAATAGCAAGGT
GTGATCTAGTATTAGATTCACAGAACTGAAAGGTTAATTAAGAATGTTGGTTATTTTCACGGGAGCGTGTGATAT
TTAACATTAATATTTTATTTGACACTACAGCCTGTAATACTGCTCTCTTTCAAAAACAAGTTTTCAGATTTTTAT
AACAGACCCATTTTGTTTTATGAAACATGTTCATTACAGAAACATGAGAAAATAGAGATAAGTAAAAAGAATAAA
AGTCACTATTATCCTACCACTTTGCGGGACACACTATTAATATTTAAGCATAGATTCTTCCAGATGTTTTGTTTT
ATACAGCAGTAGGATTGTGTAATGTATTCTCTCTTGTAGCCTATTCTTCAAAGCGTATCTTCACTTTCCATGTTA
ACATAAATGTCCTTTTATGATTGTCTAGGATTCCATGGATGGATGGAATATAATTGAGTCATCTGGTAGAGCGCA
TATAGGACAGGACGCTAGGTTGTTTATCTTTTGTTTATTGTAAAGGAACTATGTGGGATGCATTTGGTGATCTTT
TTAAAAAATGTATAAATTTCTTGAGTAATTCCTGGATTAAAGAATATGCACTTCTT

FIGURE 4099

MLRPDIFTGLRGPPKGILLFGPPGTGKTLIGKCIASQSGATFFSISASSLTSKWVGEGEKMVRALFAVARCQQPA
VIFIDEIDSLLSQRGDGEHESSRRIKTEFLVQLDGATTSSEDRILVVGATNRPQEIDEAARRRLVKRLYIPLPEA
SARKQIVINLMSKEQCCLSEEEIEQIVQQSDAFSGADMTQLCREASLGPIRSLQTADIATITPDQVRPIAYIDFE
NAFRTVRPSVSPKDLELYENWNKTFGCGK

FIGURE 4100

GCAGGCTGCTGTCTCACAGAGCGAGAAGGTGTCAGGAGCAGCCCAGTTGTGTCTCTCTCTCTACCTCTGTGAAGG
GCGCGA**ATG**GGCAGAGCAGAACTTCTAGAAGGGAAGATGAGCACCCAGGATCCCTCAGATCTGTGGAGCAGATCC
GATGGAGAGGCTGAGCTGCTCCAGGACTTGGGGTGGTATCACGGCAACCTCACACGCCATGCTGCTGAAGCTCTT
CTCCTCTCAAATGGATGTGACGGCAGCTACCTTCTGAGGGACAGCAATGAGACCACCGGGCTGTACTCTCTCTCT
GTGAGGGCCAAAGATTCTGTTAAACACTTTCATGTTGAATATACTGGATATTCATTTAAATTTGGCTTTAATGAA
TTCTCATCTTTGAAGGATTTTGTCAAGCATTTTGCAAATCAGCCTTTGATTGGAAGCGAGACAGGCACTCTGATG
GTTCTAAAACATCCCTACCCAAGAAAAGTGGAAGAACCCTCCATTTATGAATCTGTCCGGGTTCACACAGCAATG
CAGACAGGAAGAACAGAAGATGACCTTGTGCCCACAGCACCTTCTCTGGGCACCAAAGAAGGTTACCTCACCAAA
CAGGGAGGCCTGGTCAAGACCTGGAAAACAAGATGGTTTACTCTGCACAGGAATGAACTGAAATACTTCAAAGAC
CAGATGTCACCAGAACCAATTCGGATCCTAGACCTAACAGAATGTTCAGCTGTACAATTCGATTATTCACAAGAA
AGGGTAAACTGTTTTTGTTTGGTATTTCCATTCAGGACATTTTATCTCTGTGCAAAGACCGGAGTAGAAGCTGAT
GAGTGGATCAAGATATTACGCTGGAAATTGGTCAAGGACAAAAGCTGTATTTTGTCTGCTCTCTGTATATCTCCC
GAGGAGAAGACTGATCACAAA**TAA**GAAAACAGCTCAACCAAGGGGAAGGCACGATCCGATCTCGGTCGTTCATCT
TTAAATAGATCTTTCTTGCCAAGGAATGCTCTGGCCCAGGAGCAAGGTGGAATGTTTCCCTGACGCTGTGATCTG
CAGCAGGCTTCAAATGAAAACCGACTAAGGATTTTCTTTCAAAAACAAATCAGAAGCAGATGCTGATTGGGACCC
ATATACCACGTTGCTGACTCACGTTGCTGCCCTTCCATGATGTTGCCATCTCCTTGAGAACACTGAAGCAATCAC
CATTCTGATAGAAAGTGCTTAAACCACCACTCTTAGGTCTGCTCACTCTTAGAACACACAATGGAAGAGGAAGGG
TTTTTGTTTTCACTCATTGTGGTCCCCAAGCCTATTGACACTAGTTGCCTAGAGTCCCACTGTGAGTCATGGTCA
GCCTGTCTGACATCCAGGTTGTGCTATTAACCAAGAAGGAAACAGATACTTGGAGGCTTAGATGACTTCTGCAGG
ATTTATATTCAGATAGAAAACATCAAATATTTTCAGGGGAGAGGTTTTTTTTTTTAATTTTTCCCCCTTTATACA
AAAAAAAAGAACATTTCCAAAACTAAAATAGAAAATGCTTGTGGCATTTATTTTCTCTTTTTAAAAGGTTCAGAA
ATTTGGCAGGTCCTTTGCTTCTAATGACAAAACTGTGAGAGCTAGATGTCCTATGGGCAATTAGGTAGTATAATA
AAGGTAAATGAAGGTACAATTTTTAAACCATTATTTTCACCCTGTTGGGGTAAATGTTTTAAAGAGTGAGAAAAC
ATAAATTGAGAAAGGGTGATAAAGTAATAGATAACTTTTAGTTTAATAATAATTATTGTTATTATACTACTAATA
ATAGAGCACTTGTAAGCACTAAGTTATCTTTATCCAACATTTCTCCAAATGGACTGAAAGAAACTTTTCAAGGAC
AGTGTATTATAACAATCCCTTTCCCAGAATTAGTTGTATAGGGTTGGCCCAAGAGATGTAAGAAAAATCTCGCAT
TGCTCCCTAAGCACCCTGGGCCTTATTAAAGAGCAACTTCTATTTCCAGTCGGGGGAGTAACACTAAAGCTACAA
GAAATATGTAATAATGATAGGTAATAATGTGTTCCAAAGCTTTTTCAAACTAGAATAAGGAGGCAAATAGAAGAA
TGAGATACTGATGTCCACAGTTCATTGGCAGAATCTAACCCCTTCTGTTATCTTTTTTAATACTATTTTTGTTTA
GATAGAAGTTTCAAAGAAGATAAAAATGCTTGAAGAGCCTGAGAGTAAAAAGATTATGCTGCAAAGCTATGATAT
AAACTGCTCTTGCAGTCCAAAGGGATACCTGATTAAAGAAGTTTCTTATTTAAACATCTCAGACGCAAAAATTAC
ATTAAATTTTTGTATATTTCAACAACATTTTAAATGTATTTTGTTATGTTTGTATTATATAGGATAAAGCAAATG
TCAAGTTAAAATGTATTGTGTTGTTTGTAAAGTAAGAAGTTACTGGCCAGGAGCGGCGGCTCATGCCTGTAATCC
CAGGACTTTGGTAGGCCAAGACAAGCAGATCACTTGAGGTCAGGAGTTCAACATCAGCCTGGCCAACATGATGAA
ACCTTGTCTTTACTAAAAATACAAAAATTAGCTGGGCATGGTGGCAGGCGCCTGTAATCCCAGCTACTCAGGAGG
CTGAGGCAGGAGAATTGCTTGAACCCGGGAGGTGGAGGTTGCAGTGAACCAAGATCGCGGCGCTGCACTCTAGCC
TGGGTGACAGAGTCAGACTCCGTCCCAAAAAAACAAACAAACAAAACAAAACAAAAAAAACAGAAGTTACAAATG
AATACTCACGGATATGTATAGTTTTATGTTTGTTTTCTTAGAAACAAATGTGTTTCTTTGGGTGGGTAATATTGT
GTTTTACTATGTTTACCTTTTATAAAACATAACCTGTTTATTTATATTCTTTGGCTTTGTTTATTAAAAAGCATG
ATTTTGCTGTGCATGTACCATTTTG

FIGURE 4101

MGRAELLEGKMSTQDPSDLWSRSDGEAELLQDLGWYHGNLTRHAAEALLLSNGCDGSYLLRDSNETTGLYSLSVR
AKDSVKHFHVEYTGYSFKFGFNEFSSLKDFVKHFANQPLIGSETGTLMVLKHPYPRKVEEPSIYESVRVHTAMQT
GRTEDDLVPTAPSLGTKEGYLTKQGGLVKTWKTRWFTLHRNELKYFKDQMSPEPIRILDLTECSAVQFDYSQERV
NCFCLVFPFRTFYLCAKTGVEADEWIKILRWKLVKDKSCILSALCISPEEKTDHK

FIGURE 4102

GCAGGCTGCTGTCTCACAGAGCGAGAAGGTGTCAGGAGCAGCCCAGTTGTGTCTCTCTCTCTACCTCTGTGAAGG
GCGCGA**ATG**GGCAGAGCAGAACTTCTAGAAGGGAAGATGAGCACCCAGGATCCCTCAGATCTGTGGAGCAGATCC
GATGGAGAGGCTGAGCTGCTCCAGGACTTGGGGTGGTATCACGGCAACCTCACACGCCATGCTGCTGAAGCTCTT
CTCCTCTCAAATGGATGTGACGGCAGCTACCTTCTGAGGGACAGCAATGAGACCACCGGGCTGTACTCTCTCTCT
GTGAGGGCCAAAGATTCTGTTAAACACTTTCATGTTGAATATACTGGATATTCATTTAAATTTGGCTTTAATGAA
TTCTCATCTTTGAAGGATTTTGTCAAGCATTTTGCAAATCAGCCTTTGATTGGAAGCGAGACAGGCACTCTGATG
GTTCTAAAACATCCCTACCCAAGAAAAGTGGAAGAACCCTCCATTTATGAATCTGTCCGGGTTCACACAGCAATG
CAGACAGGAAGAACAGAAGATGACCTTGTGCCCACAGCACCTTCTCTGGGCACCAAAGAAGGTTACCTCACCAAA
CAGGGAGGCCTGGTCAAGACCTGGAAAACAAGATGGTTTACTCTGCACAGGAATGAACTGAAATACTTCAAAGAC
CAGATGTCACCAGAACCAATTCGGATCCTAGACCTAACAGAATGTTCAGCTGTACAATTCGATTATTCACAAGAA
AGGGTAAACTGTTTTTGTTTGGTATTTCCATTCAGGACATTTTATCTCTGTGCAAAGACCGGAGTAGAAGCTGAT
GAGTGGATCAAGATATTACGCTGGAAATTGGTCAAGGACAAAAGCTGTATTTTGTCTGCTCTCTGTATATCTCCC
GAGGAGAAGACTGATCACAAA**TAA**GAAAACAGCTCAACCAAGGGGAAGGCACGATCCGATCTCGGTCGTTCATCT
TTAAATAGATCTTTCTTGCCAAGGAATGCTCTGGCCCAGGAGCAAGGTGGAATGTTTCCCTGACGCTGTGATCTG
CAGCAGGCTTCAAATGAAAACCGACTAAGGATTTTCTTTCAAAAACAAATCAGAAGCAGATGCTGATTGGGACCC
ATATACCACGTTGCTGACTCACGTTGCTGCCCTTCCATGATGTTGCCATCTCCTTGAGAACACTGAAGCAATCAC
CATTCTGATAGAAAGTGCTTAAACCACCACTCTTAGGTCTGCTCACTCTTAGAACACACAATGGAAGAGGAAGGG
TTTTTGTTTTCACTCATTGTGGTCCCCAAGCCTATTGACACTAGTTGCCTAGAGTCCCACTGTGAGTCATGGTCA
GCCTGTCTGACATCCAGGTTGTGCTATTAACCAAGAAGGAAACAGATACTTGGAGGCTTAGATGACTTCTGCAGG
ATTTATATTCAGATAGAAAACATCAAATATTTTCAGGGGAGAGGTTTTTTTTTTTAATTTTTCCCCCTTTATACA
AAAAAAAAGAACATTTCCAAAACTAAAATAGAAAATGCTTGTGGCATTTATTTTCTCTTTTTAAAAGGTTCAGAA
ATTTGGCAGGTCCTTTGCTTCTAATGACAAAACTGTGAGAGCTAGATGTCCTATGGGCAATTAGGTAGTATAATA
AAGGTAAATGAAGGTACAATTTTTAAACCATTATTTTCACCCTGTTGGGGTAAATGTTTTAAAGAGTGAGAAAAC
ATAAATTGAGAAAGGGTGATAAAGTAATAGATAACTTTTAGTTTAATAATAATTATTGTTATTATACTACTAATA
ATAGAGCACTTGTAAGCACTAAGTTATCTTTATCCAACATTTCTCCAAATGGACTGAAAGAAACTTTTCAAGGAC
AGTGTATTATAACAATCCCTTTCCCAGAATTAGTTGTATAGGGTTGGCCCAAGAGATGTAAGAAAAATCTCGCAT
TGCTCCCTAAGCACCCTGGGCCTTATTAAAGAGCAACTTCTATTTCCAGTCGGGGGAGTAACACTAAAGCTACAA
GAAATATGTAATAATGATAGGTAATAATGTGTTCCAAAGCTTTTTCAAACTAGAATAAGGAGGCAAATAGAAGAA
TGAGATACTGATGTCCACAGTTCATTGGCAGAATCTAACCCCTTCTGTTATCTTTTTTAATACTATTTTTGTTTA
GATAGAAGTTTCAAAGAAGATAAAAATGCTTGAAGAGCCTGAGAGTAAAAAGATTATGCTGCAAAGCTATGATAT
AAACTGCTCTTGCAGTCCAAAGGGATACCTGATTAAAGAAGTTTCTTATTTAAACATCTCAGACGCAAAAATTAC
ATTAAATTTTTGTATATTTCAACAACATTTTAAATGTATTTTGTTATGTTTGTATTATATAGGATAAAGCAAATG
TCAAGTTAAAATGTATTGTGTTGTTTGTAAAGTAAGAAGTTACTGGCCAGGAGCGGCGGCTCATGCCTGTAATCC
CAGGACTTTGGTAGGCCAAGACAAGCAGATCACTTGAGGTCAGGAGTTCAACATCAGCCTGGCCAACATGATGAA
ACCTTGTCTTTACTAAAAATACAAAAATTAGCTGGGCATGGTGGCAGGCGCCTGTAATCCCAGCTACTCAGGAGG
CTGAGGCAGGAGAATTGCTTGAACCCGGGAGGTGGAGGTTGCAGTGAACCAAGATCGCGGCGCTGCACTCTAGCC
TGGGTGACAGAGTCAGACTCCGTCCCAAAAAAACAAACAAACAAAACAAAACAAAAAAAACAGAAGTTACAAATG
AATACTCACGGATATGTATAGTTTTATGTTTGTTTTCTTAGAAACAAATGTGTTTCTTTGGGTGGGTAATATTGT
GTTTTACTATGTTTACCTTTTATAAAACATAACCTGTTTATTTATATTCTTTGGCTTTGTTTATTAAAAAGCATG
ATTTTGCTGTGCATGTACCATTTTG

FIGURE 4103

MGRAELLEGKMSTQDPSDLWSRSDGEAELLQDLGWYHGNLTRHAAEALLLSNGCDGSYLLRDSNETTGLYSLSVR
AKDSVKHFHVEYTGYSFKFGFNEFSSLKDFVKHFANQPLIGSETGTLMVLKHPYPRKVEEPSIYESVRVHTAMQT
GRTEDDLVPTAPSLGTKEGYLTKQGGLVKTWKTRWFTLHRNELKYFKDQMSPEPIRILDLTECSAVQFDYSQERV
NCFCLVFPFRTFYLCAKTGVEADEWIKILRWKLVKDKSCILSALCISPEEKTDHK

FIGURE 4104

ATTATGAAGATCAGGGTGATGACCAGTTAAATGTATTTGGAGAGGACACTATGGAGGTTTCATGGAAGATTTGA
GAAAGTGTAAAATTATTTTCATAATTGGTGGTCCTGGCTCTGGCAAAGGCACACAGTGTGAAAAGCTGGTGGAAA
AATATGGATTTACACATCTCTCAACTGGCGAGCTCCTGCGTGAGGAACTGGCATCAGAATCTGAAAGAAGCAAAT
TGATCAGAGACATTATGGAACGTGGAGACCTGGTGCCCTCAGGCATCGTTTTGGAGCTCCTGAAGGAGGCCATGG
TGGCCAGCCTCGGGGACACCAGGGGCTTCCTGATTGACGGCTATCCTCGGGAGGTGAAGCAAGGGGAAGAGTTCG
GACGCAGGATTGGAGACCCACAGTTGGTGATCTGTATGGACTGCTCGGCAGACACCATGACCAACCGCCTTCTCC
AAAGGAGCCGGAGCAGCCTGCCTGTGGACGACACCACCAAGACCATCGCCAAGCGCCTAGAAGCCTACTACCGAG
CGTCCATCCCCGTGATCGCCTACTACGAGACAAAAACACAGCTACACAAGATAAATGCAGAGGGAACACCAGAGG
ACGTTTTTCTTCAACTCTGCACAGCTATTGACTCTATTATTTTCTGAAGGCAAAAATGCATGTTTGTTAGAATGG
AAACAGAAAAACATTAAAAAGTTCATTCCTTAACACAATGTTTCAAGTTAAACCTTTTGTGTCACCGCCCCCCAC
CAACCACCACCTCCTAAATCCTGACAGCACTGTTTGCTTCCCAGCTAGACCTGTGTGAGAGGTGTCTGGAAATCA
TGCATGGTGTATTTGGGACTATATCAACCTATTCTCCACACTTCAGACAACTGTCTGCACTCACGGCACGCACAC
TTTGTATCATGCAGGCCACACTCAGAGCTAGTCAGTACATGAACAGTGGTGCGGTGCCAGTCTGTGTCCGTTGTG
ATCACAGGCCTTGCTAGACCCTGATCATCTGGTTCTCCTCTCATTAAGCATCCCTAACCCCCAGTCACACCTTCC
TCTTACATACTGTTCCCCAATGGAGGCCCCTGGCATAGGGGACAGCCCTGGGCATCTTCCTTTGGTGTCTGGCTG
TTTTGTCAACTCTCATCCACTGGTGGCTCAGAGCCATAAGGTGGGTTGATTACACAATGCCTTGTACATGATATA
GAGGCATCAAGCAAGTAAAATTTGACAGAAATTTTAAAATATGAAGATGTATAGCTTTCCCAAGATGATGGTAAA
ACCCAGGTTAGTCATCAGTAACCTTCTCTATTATTATTATTTTTTAGAAACTTGGAATACTGTCATTATGGCTAA
GAGAACAAATCTGATAAATTGTGTAACCTAGTCTCTTCTCTACATGGTGATGCATTTCAGCAATTATAAATTAAT
ATAAATGACCAAAAGTAACTTAAAAGCATGAGATATTTGCTATTTCATTCATTGGGCACATATCAAATTATAATT
TTGATTTTAAATGGTCACCCATGTATTTGTTGCCAAGCAAGTAAAAAAATACCCTAACAAACCTGATGTGGGTGG
GAGGGGCATGTCAGTAAGTGGTGTGTTCAATGTGTTTGTTTCATATGGGCCCTTTCCAGGAGTTTGCAAACCTTG
TCATACCCATATGCAAAACTGTGTTTCCTTGCATTAAACCAGTGAAGTTTGGGTTCTCTTTTGTGCTATCAATCA
GTTGTAAAATCAGAGCTTCTTATATATTCTACTGGAATAACTGCATCTTCCACTCAGTCACTACAAAAAAGCATA
GTTTCAGTTTGCATGAATTTTTTTTTTTTTCTTCAATGGTTGTGCAGATAAGGATCCATTTCTGGGATAGAATTG
TATTTTTTAAGTCATTTTTTTTTCTTGAAATGGATATGTACAAATAAAATTAAATGGAAGACAGGATAAAAAAAA
AAAAAAAAAAAAAAAAAAAA

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FIGURE 4105

MGGFMEDLRKCKIIFIIGGPGSGKGTQCEKLVEKYGFTHLSTGELLREELASESERSKLIRDIMERGDLVPSGIV
LELLKEAMVASLGDTRGFLIDGYPREVKQGEEFGRRIGDPQLVICMDCSADTMTNRLLQRSRSSLPVDDTTKTIA
KRLEAYYRASIPVIAYYETKTQLHKINAEGTPEDVFLQLCTAIDSIIF

FIGURE 4106

CGTGGTTTCCGGAACTTCGCCCGCGTCTCTGGGCTTTTGCTCTGTCAGGCTGGTGGCGTTTTGGTGTCTTCGTTT
GTTATGGCCGCTGCTGTCGCTATGGAGACAGATGATGCTGGAAATCGACTTCGGTTTCAGTTGGAGTTGGAATTT
GTGCAATGTTTAGCCAACCCAAATTACCTTAATTTTCTTGCCCAAAGAGGTTACTTCAAAGACAAAGCTTTTGTT
AATTATCTTAAATACTTGCTTTACTGGAAAGACCCAGAATATGCCAAGTATCTAAAGTACCCTCAGTGTTTACAC
ATGTTAGAGCTGCTCCAATATGAACACTTCCGAAAGGAGCTGGTGAATGCTCAGTGTGCGAAATTTATTGATGAA
CAGCAGATTCTACATTGGCAGCACTATTCCCGGAAGCGGATGCGCCTTCAGCAAGCCTTGGCAGAGCAGCAACAG
CAAAATAACACATCGGGAAAATGAAAAACTGGATACAAACGAGGCACTTAATACATGTATATAATGTATTTCTTT
TGTACAGTGAAGACAAAAAAAAATGAAAACTCTTCCTATCTACCTTTATTATGGTAGCCCCTAGAACCTTTAGTGT
GCTTTTTCATCCAACTTTTTATTGTTAATAGACTATTTCTGTTAAACCTGAATTGTTCTTTGATTTCCCTGTGGA
TTTGTAAGGTGTTTTTCTTTTTTACGCATTTAGCATAATCAGCTGATTAAGAATGGAAAAGTTAGGTGCTTTAGA
CCAAATAAGGCACTGGGGCATGGGGTAGGGGTGGGCCACCAAGTATACTGAATTCTAAGGCTAGCTGTTCCTGAC
ATATAGTAGGGCAAGACCATCTCCTGGAACCTTACTGTCTCAGATCAACTACTCTACCACTCTACTCTAAGATGT
AGTGAGAGTAGCGGAGTCACTGACCTCTTTAAATCATAGGACAGGAACTGCATAAAGGTTCTTGAATTCTGCAGG
ACAGGAAATAACTGTATTACCTGCTTTGCAAGGTGGCTTTAAGAATCACTGAATCACTGTGGCCTCACTTGACCT
AGTCATGGCAGGACAACTAGTGGTTAGTTACTAACTGGACTCTTGACTTTAGAACAAACATGAGGAGCCTCAAAT
ACTTGTGTTCATTTGGGAAAGCTACCATTGATTTGGGAGGTACCACAAACCAGGTGCTATGTTAAGTGCTT

FIGURE 4107

MAAAVAMETDDAGNRLRFQLELEFVQCLANPNYLNFLAQRGYFKDKAFVNYLKYLLYWKDPEYAKYLKYPQCLHM
LELLQYEHFRKELVNAQCAKFIDEQQILHWQHYSRKRMRLQQALAEQQQQNNTSGK

FIGURE 4108

AGTCGCTGTTTGGGACGCTGGGTGTGCGGTGTTCTGTCTCCGCTCCCGTTTCGCTGTCACAGCCCGTTCCTTCCC
GGAGCCCGGGACAGGCTGGGCGCGCGCCCGTGTGAGTGAGCGGGACTCAGGGCAGAAGTGTCCCCTCACTGCGTT
TTTTTTTCCTTTTATCCAAAGAACGGGGCAGTTAGTACGCTTGCCTTCCTGTCGCCCGGTTGGGAGCGGGGTTGG
TGTGCGGAGTGGTTCGCCTTTTTTTCTTTAGAACTTGTGAGCCTTTTTTTTTTTTTTTTTCTTTCCTTTTTTT
AGGCTCAGTGCTGTCCGGGCTGGTTTGCCCGGTCCCTGACTAACGGCTTTCTGCCCCTTCTCTCGCCACCCCTGC
CCAAGGTCGCCCCTCTGCCTTCGCCCCTGTCCCGGGAGGGTGGGAAGCTTTGACCCCGCCCTGCCCACTCGCGTC
TCCGCAGCCGTAGCCGCGCCTGTCCCAATATGAATAGGGTCAACGACCCCACTTATTTTTATAAGAGATATTAAGC
CCGGACTGAAAAACTTAAATGTCGTCTTTATTGTCCTGGAGATAGGACGCGTGACCAAAACCAAAGACGGCCATG
AAGTGAGATCGTGCAAAGTAGCAGATAAAACGGGCAGCATCACTATTTCCGTGTGGGATGAGATCGGAGGTCTTA
TACAGCCAGGGGATATTATTCGGTTGACCAGAGGGTATGCATCCATGTGGAAAGGATGTCTGACACTTTATACTG
GAAGGGGTGGTGAACTTCAAAAAATTGGGGATCTAGGTGCGGTGCAGGCAGCCGCAATGCGAGATTCCATACACT
ACTACCCTGGTAATGATCTCCACCCTGACCTGGAGGAGCCATCCTCTCTAGGGGTGTAAGATTTTGTATGGTTTA
TTCAGAAGTGCCAAATTTCAGTGAACCCAACCCAGATTATCGAGGACAGCAGAACAAAGGGGCACAGAGTGAACA
GAAGAATAATTCCATGAATAGTAATATGGGTACAGGTACATTTGGACCAGTGGGAAATGGTGTTCACACTGGCCC
TGAATCAAGGGAACACCAGTTTTCACATGCTGGCAGAAGCAATGGCCGGGGACTTATAAATCCACAACTACAAGG
AACAGCTAGTAATCAAACAGTGATGACCACAATAAGTAATGGCAGGGACCCTCGGAGAGCCTTTAAAAGATGACC
TATGCTAAATACTCATGTGTAGTTTTTATACTACATGCCCTACTTGAACACTTATTGCACTTTTATTTATTGTTA
ACTGTGAAAAGTACGTCCTTTATTGGGTTTCCTTTTATATTCTTGGTTTGTTAAGAAGAATGGTTTGTTTTTATA
GCAAAACTGTTAAGCTGCTCGAGTCTCCTGTTGAAGAATGGGAACACTGAAAAGTAGGGGCATTTATTTTTAGAG
TAAAAAGATTATTGGATAGCCTTTAAAAAACCTGCACCCATTTCATGGGTGAGTTACTTAAGACATCAGCTTTAT
AGCCTCTATGAGTCTATCTTCTGTATAAGTTTTGTAATATTTAACATAAGGCTTAATGGGAGATGTTCTTTTGTC
TTGTATTCAGATATTGCCAACTAAAGCAATAACCATCAAAAAACACAAGAACTTGTCAATGCTAGCAGTAATTTT
TGAGTGTTTGTGGCTCTCGGAATGATTGACTTCGTTCAGTGACTACTATTAAGATTTTCCAAGGACTGACTCATC
CCAAATTTTTGTTGTATTACCAAAAAAACAGATTCCTTATCAGAATTTGGAATAGAATGTGATCTCTATTGCAAC
AAGTAATTTTAAAAGAAAGCTACATTTATTTTAGAGTAGTGCTCCTAACATGTATTATCAACTTTGTGGATTACA
TTGGAGGAAAATTTAAAACTGGGGCCTTGAATATTTATTTTTTGAAACTACCATGTTAAATACTGAAGTATAATT
TGGGGGAGTTATAAAGTTATGATAAACATTCATCTGATTATTTTAAACAATAGTTGTGGTAGATAAACATACTGG
AGGTGAGTAAAATTGAATTCATATAGTAACATGCAGTCTGAAGTCCTAGTTACTTAATAGGTACTCAGCCTGGAG
TGAAAATCCTGGGTACTGACTTTGAGAGGAGTGAGTGTGCATGTTGTCAAAGTTTCTGAACACAGTTCACATAGC
CTTATTAGCAAAAGTTTTAAGAAATGGCTCTATCAAAGAAGCAATTGCAGCTTTATTCAGAAATATAAAAGTGGA
ATTTATGTACATGTCATAAGTGGTACCCACTTCCCCTTTTTACTGTAGGGTGGATAACTCTTAGGATTTAACTCT
TTGAATATTATCTCTTGAATAAAGCATGTGTTAATGTTAACAAACCTACGTAATTTTTGCCCTTTCAATGACTTA
CAGTGGAGAGCCAGTACATCTTAACTACTGTTGTAGTGATGGTATCAACCTCATGGTTACTTAGCTCTGCATTTG
TTGCTTTGTTTTTTTTCCACTTCAAATCACAAAATAAGTAGATTTTGTTTTCTGAAAACTCCATAGCATTTGAAT
ACAAAAAGTTGTGCCAGATTGTTTGCCCTAATTCACTGTGTTTAACAAATATTTCAGTACACACTATGTATTAGG
CACTGTGTGGAAAGTGTTAAGGGGTAGACAAGATACCGAATAATCTCCACAAGTTTATTTGTGGTCTATAGTACT
TTTGTAACTGGGGTTACAAAAATTATAGAAATTTTTTTCCTTTGTTCATATGCATATTCATGATTATAATTTGGC
TTTGTTTGTGATTAATGTTTTCTTAAGATTTTCACATTATAGAATACCTCAAAAGAAGTTGTCTAAGGACTGGGA
TAGAGAGTATGTTTCATAAAATTGTAGATGTTTAGAATTTTTAAAAACCCTACAAATTAGTATATGATTGTTTTA
TATAAGTAAGATAGGAGCAACACTTTAAATTATTTGTGGGAGAATACAGCATTAAAGGTGATTTTAAAAGAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4109

MNRVNDPLIFIRDIKPGLKNLNVVFIVLEIGRVTKTKDGHEVRSCKVADKTGSITISVWDEIGGLIQPGDIIRLT
RGYASMWKGCLTLYTGRGGELQKIGDLGAVQAAAMRDSIHYYPGNDLHPDLEEPSSLGV

FIGURE 4110

AGATGACCGTGCCAGAGATCCAGAGGTGTAACCTGGCCAGTGTGATGCTTCAGCTTCTAGCAATGAAAGTCCCAA
ATGTGCTCACCTTTGACTTCATGTCGAAGCCATCTCCAGATCACATTCAGGCGGCCATTGCCCAACTGGACCTGT
TAGGTGCTCTTGAACATAAGGATGACCAGCTTACCCTGACTCCAATGGGAAGAAAGATGGCAGCATTTCCTTTAG
AACCCAAATTTGCCAAAACCATCCTCATGTCCCCCAAATTCCACTGTACAGAGGAGATCCTGACCATTGTCTCCC
TGCTGTCTGTGGACAGCGTCCTCCACAACCCTCCTTCCCGGCGAGAGGAAGTGCAAGGGGTCCGCAAGAAGTTCA
TATCCAGCGAGGGGGATCACATGACCCTGCTCAATATCTATCGGACCTTCAAAAACCTAGGCGGAAATAAGGATT
GGTGCAAAGAGAATTTTGTCAACAGCAAGAATATGACGCTGGTAGCAGAAGTCAGAGCACAGCTGAGGGACATCT
GCTTAAAGATGTCAATGCCAATCGCATCATCCCGAGGAGACGTGGAGAGTGTCCGCCGCTGCCTGGCTCACAGCC
TCTTCATGAGCACCGCCGAGCTTCAGCCAGATGGCACCTATGCCACCACGGACACCCACCAGCCAGTGGCCATCC
ACCCGTCGTCTGTCCTCTTCCACTGCAAGCCGGCCTGCGTCGTGTACACTGAGCTGCTCTACACCAACAAGTGCT
ACATGCGGGACCTCTGCGTCATAGATGCACAGTGGCTGTACGAGGCTGCCCCTGAGTACTTTAGGAGGAAGCTGA
GAACCGCCAGAAACTGAGCCGCCCCAGGATGCCGCCAGAATCACTGGTCCCTGGAAGCTTGGACTACAGTTGTCC
TTACAGCAGGCTTCCAGGTTGGCGCTTAGAGAAGCCTTGGAATCAGCTGAAGGTGCCTGACTTCCAGGAGCGTGA
AAGCATCTTTGCTCAACTCCTGGGACTGAACCATATAGACATGGACATATCATTTGTACCTGGAAACCTCAAAAT
TATGCTTTTGGTTCTTACTGGGTGACTTTGACTTAATTTAACACCTGAGCCTCAGTTTTCTCATCTGCCAAATGG
GAGTAATAATAATAATCCTTATAAAATTGGGTTCATAAAGTTTAGAGAAAAGGAATGGAAAGTACCCAGAACTAT
GCCTGGAGCACGCACGACACACGTACAGTGAGTTGGGAGCCGTTAGGCTGAATGTTACTGCTTGCCATATGATGT
GAAGTACAGCAATATCCCAAGTTCTTGTGACTGAGGGAGATTTTCTGGAAGGGCCACAGGAGGTTGCGGAGCTTG
GATGTTGCCCTTAGTTCTTGTTTAATGTCTCTCTGAATGCAGTTTTAAAATAGAAAACAAAACTGACTTCTGTAG
AAGTTTCCAGAGGGAGGTGCTGTTATCTCGTACCTCCTGGGATGGCGATCCCTACTGAACGCTTGTGTCTCAGGG
TGGACCACTCTGTGTCTGTCTCCAAGCAGAGACCAGTAAAGGAGCCTCCTGGTCCTCAGTGCGTGACCCTGTCAG
TGCTTTCAGGAGACATGCAAGCTTCCTGGGTGAAGGTTGATTTGTACCTTCTGAATCCTGTCACGTGTAGACATG
GGAAACTGACCTATCAGTGTTTTGTGTGTGTAGGTGACTCCCACATACACAGTTGCCATTTTTCTCTCTAACTGG
GCACCAGTGAACATGCGGGCATGAGGAGTGACTGTGTACCATTTCAGCTGTTTCTTTTCGGGCAGTCCCCTGGTC
AGAGGGGGTGGGGGTGGGGGAGGGGAGAGGGGTACCTAGAACCCAGAGAACATTGGCTTATGCCAGATACCACAC
CACATCTGGGCTTACATTCTTGTATCTTTTTTGGTGTGTGGGCGGGGGGGGTGGGGGGCAGTTCAGTGAAGTCTA
GAAGACCTGCTGGACAAATTCTAAAAGAGCTAGAGCTGTAACACTTATTCTTGCATCTTATTAATTTTCTATGAT
ATTTTTTCCTTCTTCGTAGGGACTTGGGACAATCTGGCTTTGCTGCTTTCCAACTGCTAGGCACCTCTCTCTAAC
CCTCATTGTCAGAGGGAATTGGAGGATATCCACGGTCTGTTCCTGTTCTGATATTCTGAGCAGAGAAAAGGCACT
AACGGTTCCTCTTAGCTATTTAATTATCAGAAGCAAGTAATCTTTCCCCAGATAATATTTTGCCCTAGAAGAAGC
CGTGATTTAGCTCTTTTATTGTGCTTACTTGGTCCAAATACATCTGTGGGGGTGTTTTGTCATTTCTTAATGAATG
AATCATAGTTATAACCAGGGGCCAAGCTGCCCAAGAGGCTCTTCAGAGATCATGGATGCTCTCTTTCTGGAAGCT
GTGGCCTGATGGAGCAGCCCCATTCCAGGGTCCCATCTGTCCGGAGTTGTGTATGTCAAGTCCGGCTCAGTCTTT
ATTTCCAACACTAGCCGTGGTCCTGTGCAGTCAAGCTCTCAGCTAGTGTTTAGGGCTGTCTGTCAGAAATGGTTA
TACGTGGGCAAAAGAAGATCTGACAGCTCCTATATACCTTATCTTACTGAATTCTTAAACTTTGAACCAGTTCTT
CCACTTACTGACTTGTTACCACTGCTGACTTTCTGAAAAGTTTTCCAGTTTTTGTTTTTTGTTTTTTGTTTTCCA
GTAGGGGGTTAGAATGTTTAGTCCTACTTAGTAAGAAAAATATTGTATTTTTAATCATTCATAGTGCTGGTAAAA
AAAAAAAAAAAAAAAAA

FIGURE 4111

MTVPEIQRCNLASVMLQLLAMKVPNVLTFDFMSKPSPDHIQAAIAQLDLLGALEHKDDQLTLTPMGRKMAAFPLE
PKFAKTILMSPKFHCTEEILTIVSLLSVDSVLHNPPSRREEVQGVRKKFISSEGDHMTLLNIYRTFKNLGGNKDW
CKENFVNSKNMTLVAEVRAQLRDICLKMSMPIASSRGDVESVRRCLAHSLFMSTAELQPDGTYATTDTHQPVAIH
PSSVLFHCKPACVVYTELLYTNKCYMRDLCVIDAQWLYEAAPEYFRRKLRTARN

FIGURE 4112

CAGCCCACCTCTTGCATCGTCACCTACAGGTATCTAAGCAATGGATCCAAGCCCTGGAGGTTGGTGAGAGCCATG
TATTACCCCTAGATGAAATTGGACAAGAGACCATGACCGTAACCCTCCTCGATGCCAATCACTGTCCTGGTTCTG
TCATGTTTCTCTTTGAAGGATATTTTGGAACCATCCTCTACACAGGTGATTTTCGATACACACCATCCATGCTAA
AGGAGCCAGCCCTGACACTGGGGAAACAGATCCATACTTTATACCTAGACAACACCAATTGCAATCCAGCCCTGG
TTCTTCCTTCCCGACAAGAAGCTGCCCACCAGATTGTCCAGCTCATTCGAAAACACCCACAACATAACATAAAGA
TTGGACTCTACAGCCTGGGAAAGGAATCACTGCTGGAGCAGCTGGCCCTGGAGTTTCAGACCTGGGTGGTATTGA
GTCCTCGGCGCCTGGAGTTGGTACAGCTACTGGGCCTGGCAGATGTGTTCACAGTGGAGGAGAAGGCTGGCCGCA
TCCATGCAGTAGACCATATGGAGACCTGCCATTCCAACATGCTGCGTTGGAACCAGACCCACCCTACGATTGCTA
TCCTTCCCACAAGCCGAAAAATCCACAGCTCCCACCCTGATATCCACGTCATCCCTTACTCTGACCATTCCTCTT
ACTCCGAGCTTCGTGCCTTTGTCGCAGCACTGAAGCCTTGCCAGGTGGTGCCCATTGTAAGTCGGCGGCCCTGTG
GAGGCTTTCAGGACAGTCTGAGCCCCAGGATCTCCGTGCCCCTGATTCCGGACTCTGTACAGCAATACATGAGTT
CTTCCTCTAGAAAACCAAGCCTTCTCTGGCTGTTAGAAAGGAGGCTAAAGAGGCCGAGAACCCAAGGTGTTGTGT
TTGAATCCCCTGAGGAAAGTGCTGATCAATCTCAAGCTGACAGAGACTCAAAGAAGGCCAAGAAAGAGAAACTTT
CTCCCTGGCCTGCGGACCTTGAAAAGCAGCCTTCCCACCATCCTTTGCGGATCAAGAAGCAGTTGTTCCCAGATC
TCTATAGCAAAGAATGGAACAAGGCAGTGCCTTTCTGTGAGTCTCAAAAGAGGGTGACTATGTTGACGGCCCCAC
TGGGATTTTCAGTGCACTTAAGGTCTACAGATGAGGAGTTTATTTCTCAAAAAACCAGGGAGGAAATTGGTTTAG
GGTCCCCCTTGGTACCCATGGGAGATGATGATGGAGGTCCAGAAGCCACAGGGAATCAGAGTGCCTGGATGGGCC
ATGGTTCTCCCCTGTCCCACAGCAGCAAGGGCACCCCTCTTCTAGCTACTGAATTCAGGGGTCTAGCACTCAAAT
ATCTTCTGACTCCAGTGAACTTTTTCCAGGCAGGGTATTCTTCCAGGAGATTTGACCAGCAAGTGGAAAAATACC
ATAAACCCTGCTGAAGACAGGAGAGTACAGAATGACAACATTGAGCCCACACTGCAGTTTTGAAGATAGTAACTG
ATGGCTGGTGGGAAAGAGTTTGTTTTTGGGGCCTACTTTTCTATCTTTACAAGACTCTTATGGGCCCACCGTGGA
GCAGCACTTCCCAAAACTTGTTCACTGGGGTCCTCGTGCCTATGGAATCCTTCTTTTTATAACTAAGTTTAAGAA
ATACTTTTTTTATAAAATCTTTGGAGTATGCGTGAGCAAATTAAAAGTTCTTTGAAGTCCTACAGTAACTTAATC
TGTTTAACCTTGTTTAACCCAGTATTTCTCAAACTTTTGTGAACATGCAATCATCTTATGTGGGTACAGAAAGAG
GTAAAGAGTCTGAATCAAAAAGGACCAGGTTATTGCTGTTGCTGTTTTGTGGTGTCATGAGCCATTCTCCATGTC
CCCTTCTCCCTCTTCTCAGATCAAAATCCCTAGGGAGTTCTATTTTTAAAATTATGAACTATGGCGCTGCATGCT
TCAATCCTGAACGTCACTGACTTGCTGTGACCATCCAAATAATTTTCCTGTCTCTGCCTCTGGGAGGGAACAGGA
AGCGATGAAGAGGTCTTGGAACAGTAGTGAAAATTCTACCTCTATGTCCTTCATGAGGATGTGCAGTATCCCAGT
ATCACTGGGATCCATGTGGAACAGAGCCAGCTGGGGGGTTGGGCAGCTCTCTCCAAGGCAGTACCTAGAGCCCAG
CTGAACAACAAGGCTTTGGGTGTGAAGGGACTCCCCAGCCTGGAGACCCTATTTGGCTGAAACAGTTACAAAATA
TCAAATGTGTTGTCAGATATTCCTCCAATTGTTCACATAGCTGGGATATTTGTTGCTCCCCTCACCCCTTGGATT
ATGTAGGGAGCCAGTGCACACAGCCTGTTTGTTTTAGTATCCAAGGAAGAGACCAAGGAGCCAGCTGGCGGGAAG
GGGTGGGGGTGTGCAGTCTGCCCTGTCCTTCTGCTCATAACCTGACAAAATGCCAAACTAGTAAGCAGGATAGCT
GATACCACGGCTATGAGGGAGTAGGCTCCGAGAGGGCACAGACTTGTGGAGCTGGGCGTCTGGATCAAAACTGCT
TTGGGATGGAACCTCGAGCCCTAGCAGTGAAGAAGATTCCATTTCTTGTCCAGGGGATTTAAAAGAGTTTTCTGC
TTTGAGAGAGAAATAGAGAGTTTAGAAAGCAATTGCTCTTGGGAAAGCTATACACAGCTCTGTTTTGTCAATGAC
CTTTGTTGTAAGTCTCCCAACGTCCTATTAGGAGCCACAGCAGGTGAGGCATTTGGTGCAGCAGGAAACATGGGG
ACTGCCTAGGCTCGAATCTGTGGCACCCTGAGCAATTACTTAAATTGTGGAGCCTAGTTCCTCATCTGTAAGATG
GACTTGAGATTCCTACCTCTCATGATTACTATGGAGATTGAATAATTGGTAAAATTCTCCTAGCTCAGTGACTGC
CACAGGATGGGTCTTTCAGATTTTGGTTCTCTTTAGCTTCTGGTTCTTGAAAGAAATTGATCTGTATATAACATA
AGAAACTTTGAAAGTC

FIGURE 4113

MTVTLLDANHCPGSVMFLFEGYFGTILYTGDFRYTPSMLKEPALTLGKQIHTLYLDNTNCNPALVLPSRQEAAHQ
IVQLIRKHPQHNIKIGLYSLGKESLLEQLALEFQTWVVLSPRRLELVQLLGLADVFTVEEKAGRIHAVDHMETCH
SNMLRWNQTHPTIAILPTSRKIHSSHPDIHVIPYSDHSSYSELRAFVAALKPCQVVPIVSRRPCGGFQDSLSPRI
SVPLIPDSVQQYMSSSSRKPSLLWLLERRLKRPRTQGVVFESPEESADQSQADRDSKKAKKEKLSPWPADLEKQP
SHHPLRIKKQLFPDLYSKEWNKAVPFCESQKRVTMLTAPLGFSVHLRSTDEEFISQKTREEIGLGSPLVPMGDDD
GGPEATGNQSAWMGHGSPLSHSSKGTPLLATEFRGLALKYLLTPVNFFQAGYSSRRFDQQVEKYHKPC

FIGURE 4114A

TTTTCTTGCTTTTCTTCCCTTTTTTTTCTTTTTGCAAACAAAACAAAAAACAGCATAGAAGAAAGAGCAAAATAA
AGAAGAAGAAGAGGAGGAAGAGAGGGAAAGAGAGGAAGGGAAAAAAAAACACCAACCCGGGCAGAGGAGGAGGTGC
GGCGGCGGCGGCGGCGGCGGCAGCGGCGGCAGCGGCGCGGCGGCGGCTCGGACCCCCTCCCCCGGCTCCCCCCAT
CAGTGCAGCTCTCCGGGCGATGCCAGAATAGATGCCGGGGCAATGTCCCGCCGCAAACAGGGCAACCCGCAGCAC
TTGTCCCAGAGGGAGCTCATCACCCCAGAGGCTGACCATGTGGAGGCCGCCATCCTCGAAGAAGACGAGGGTCTG
GAGATAGAGGAGCCAAGTGGCCTGGGGCTGATGGTGGGTGGCCCCGACCCTGACCTGCTCACCTGTGGCCAGTGT
CAAATGAACTTCCCCTTGGGGGACATCCTGGTTTTTATAGAGCACAAAAGGAAGCAGTGTGGCGGCAGCTTGGGT
GCCTGCTATGACAAGGCCCTGGACAAGGACAGCCCGCCACCCTCCTCACGCTCCGAGCTCAGGAAAGTGTCCGAG
CCGGTGGAGATCGGGATCCAAGTCACCCCCGACGAAGATGACCACCTGCTCTCACCCACGAAAGGCATCTGTCCC
AAGCAGGAGAACATTGCAGGTAAAGATGAGCCTTCCAGCTACATTTGCACAACATGCAAGCAGCCCTTCAACAGC
GCGTGGTTCCTGCTGCAGCACGCGCAGAACACGCACGGCTTCCGCATCTACCTGGAGCCCGGGCCGGCCAGCAGC
TCGCTCACGCCGCGGCTCACCATCCCGCCGCCGCTCGGGCCGGAGGCCGTGGCGCAGTCCCCGCTCATGAATTTC
CTGGGCGACAGCAACCCCTTCAACCTGCTGCGCATGACGGGCCCCATCCTGCGGGACCACCCGGGCTTCGGCGAG
GGCCGCCTGCCGGGCACGCCGCCTCTCTTCAGTCCCCCGCCGCGCCACCACCTGGACCCGCACCGCCTCAGTGCC
GAGGAGATGGGGCTCGTCGCCCAGCACCCCAGTGCCTTCGACCGAGTCATGCGCCTGAACCCCATGGCCATCGAC
TCGCCCGCCATGGACTTCTCGCGGCGGCTCCGCGAGCTGGCGGGCAACAGCTCCACGCCGCCGCCCGTGTCCCCG
GGCCGCGGCAACCCTATGCACCGGCTCCTGAACCCCTTCCAGCCCAGCCCCAAGTCCCCGTTCCTGAGCACGCCG
CCGCTGCCGCCCATGCCCCCTGGCGGCACGCCGCCCCCGCAGCCGCCAGCCAAGAGCAAGTCGTGCGAGTTCTGC
GGCAAGACCTTCAAGTTCCAGAGCAATCTCATCGTGCACCGGCGCAGTCACACGGGCGAGAAGCCCTACAAGTGC
CAGCTGTGCGACCACGCGTGCTCGCAGGCCAGCAAGCTCAAGCGCCACATGAAGACGCACATGCACAAGGCCGGC
TCGCTGGCCGGCCGCTCCGACGACGGGCTCTCGGCCGCCAGCTCCCCCGAGCCCGGCACCAGCGAGCTGGCGGGC
GAGGGCCTCAAGGCGGCCGACGGTGACTTCCGCCACCACGAGAGCGACCCGTCGCTGGGCCACGAGCCGGAGGAG
GAGGACGAGGAGGAGGAGGAGGAGGAGGAGGAGCTGCTACTGGAGAACGAGAGCCGGCCCGAGTCGAGCTTCAGC
ATGGACTCGGAGCTGAGCCGCAACCGCGAGAACGGCGGTGGTGGGGTGCCCGGGGTCCCGGGCGCGGGGGGCGGC
GCGGCCAAGGCGCTGGCTGACGAGAAGGCGCTGGTGCTGGGCAAGGTCATGGAGAACGTGGGCCTAGGCGCACTG
CCGCAGTACGGCGAGCTCCTGGCCGACAAGCAGAAGCGCGGCGCCTTCCTGAAGCGTGCGGCGGGCGGCGGGGAC
GCGGGCGACGACGACGACGCGGGCGGCTGCGGGGACGCGGGCGCGGGCGGCGCGGTCAACGGGCGCGGGGGCGGC
TTCGCGCCAGGCACCGAGCCCTTCCCCGGGCTCTTCCCGCGCAAGCCCGCGCCGCTGCCCAGCCCCGGGCTCAAC
AGCGCCGCCAAGCGCATCAAGGTGGAGAAGGACCTGGAGCTGCCGCCCGCCGCGCTCATCCCGTCCGAGAACGTG
TACTCGCAGTGGCTGGTGGGCTACGCGGCGTCGCGGCACTTCATGAAGGACCCCTTCCTGGGCTTCACGGACGCA
CGACAGTCGCCCTTCGCCACGTCGTCCGAGCACTCGTCCGAGAACGGCAGCCTGCGCTTCTCCACGCCGCCCGGG
GACCTGCTGGACGGCGGCCTCTCGGGCCGCAGCGGCACGGCCAGCGGAGGCAGCACCCCGCACCTGGGCGGCCCG
GGCCCCGGGCGGCCCAGCTCCAAGGAGGGCCGCCGCAGCGACACGTGCGAGTACTGCGGCAAGGTGTTCAAGAAC
TGCAGCAACTTGACGGTGCACCGGCGGAGCCACACCGGCGAGCGGCCTTACAAGTGCGAGCTGTGCAACTACGCG
TGCGCGCAGAGCAGCAAGCTCACGCGCCACATGAAGACGCACGGGCAGATCGGCAAGGAGGTGTACCGCTGCGAC
ATCTGCCAGATGCCCTTCAGCGTCTACAGCACCCTGGAGAAACACATGAAAAAGTGGCACGGCGAGCACTTGCTG
ACTAACGACGTCAAAATCGAGCAGGCCGAGAGGAGCTAAGCGCGCGGGCCCCGGCGCCCCGCACCTGTACAGTGG
AACCGTTGCCAACCGAGAGAATGCTGACCTGACTTGCCTCCGTGTCACCGCCACCCCGCACCCCGCGTGTCCCCG
GGGCCCAGGGGAGGCGGCACTCCAACCTAACCTGTGTCTGCGAAGTCCTATGGAAACCCGAGGGTTGATTAAGGC
AGTACAAATTGTGGAGCCTTTTAACTGTGCAATAATTTCTGTATTTATTGGGTTTTGTAATTTTTTTGGCATGTG
CAGGTACTTTTTATTATTATTTTTTCTGTTTGAATTCCTTTAAGAGATTTTGTTGGGTATCCATCCCTTCTTTGT
TTTTTTTTTAACCCGGTAGTAGCCTGAGCAATGACTCGCAAGCAATGTTAGAGGGGAAGCATATCTTTTAAATTA
TAATTTGGGGGGAGGGGTGGTGCTGCTTTTTTGAAATTTAAGCTAAGCATGTGTAATTTCTTGTGAAGAAGCCAA
CACTCAAATGACTTTTAAAGTTGTTTACTTTTTCATTCCTTCCTTTTTTTTGTCCTGAAATAAAAAGTGGCATGC
AGTTTTTTTTTTAATTATTTTTTAATTTTTTTTTTGGTTTTTGTTTTTGGGGTGGGGGGTGTGGATGTACAGCGG
ATAACAATCTTTCAAGTCGTAGCACTTTGTTTCAGAACTGGAATGGAGATGTAGCACTCATGTCGTCCCGAGTCA
AGCGGCCTTTTCTGTGTTGATTTCGGCTTTCATATTACATAAGGGAAACCTTGAGTGGTGGTGCTGGGGGAGGCA
CCCCACAGACTCAGCGCCGCCAGAGATAGGGTTTTTGGAGGGCTCCTCTGGGAAATGGCCCGACAGCATTCTGAG

FIGURE 4114B

GTTGTGCATGACCAGCAGATACTATCCTGTTGGTGTGCCCTGGGGTGCCATGGCTGCTATTCGCTGTAGATTAGG
CTACATAAAATGGGCTGAGGGTACCTTTTTGGGGAGATGGGGTGGCCTGCAGTGACACAGAAAGGAAGAAACTAG
CGGTGTTCTTTTAGGCGTTTTCTGGCTTGACGGCTTCTCTCTTTTTTTAAATCACCCCCACCACATAAATCTCAA
ATCCTATGTTGCTACAAGGGGTCATCCATCATTTCCCAAGCAGACGAATGCCCTAATTAATTGAAGTTAGTGTTC
TCTCATTTAATGCACACTGATGATATTGTAGGGATGGGTGGGGTGGGGATCTTGCAAATTTCTATTCTCTTTTAC
TGAAAAAGCAGGGGATGAGTTCCATCAGAAGGTGCCCAGCGCTACTTCCCAGGTTTTTATTTTTTTTTTCCTATC
TCATTAGGTTGGAAGGTACTAAATATTGAACTGTTAAGATTAGACATTTGAATTCTGTTGACCCGCACTTTAAAG
CTTTTGTTTGCATTTAAATTAAATGGCTTCTAAACAAGAAATTGCAGCATATTCTTCTCTTTGGCCCAGAGGTGG
GTTAAACTGTAAGGGACAGCTGAGATTGAGTGTCAGTATTGCTAAGCGTGGCATTCACAATACTGGCACTATAAA
GAACAAAATAAAATAATAATTTATAGGACAGTTTTTCTACTGCCATTCAATTTGATGTGAGTGCCTTGAAAACTG
ATCTTCCTATTTGAGTCTCTTGAGACAAATGCAAAACTTTTTTTTTGAAATGAAAAGACTTTTTAAAAAAGTAAA
ACAAGAAAAGTACATTCTTTAGAAACTAACAAAGCCACATTTACTTTAAGTAAAAAAAAAAAAAAATTCTGGTTGA
AGATAGAGGATATGAAATGCCATAAGACCCAATCAAATGAAGAAATAAACCCAGCACAACCTTGGACATCCATTA
GCTGAATTATCCTCAGCCCCTTTTGTTTTTGGGACAACGCTGCTTAGATATGGAGTGGAGGTGATTTACTGCTGA
ATTAAAACTCAAGTGACACAAGTTACAAGTTGATATCGTTGAATGAAAAGCAAAACAAAAACAATTCAGGAACAA
CGGCTAATTTTTTCTAAAGTTAAATTTAGTGCACTCTGTCTTAAAAATACGTTTACAGTATTGGGTACATACAAG
GGTAAAAAAAAAATTGTGTGTATGTGTGTTGGAGCGATCTTTTTTTTTCAAAGTTTGCTTAATAGGTTATACAAA
AATGCCACAGTGGCCGCGTGTATATTGTTTTCTTTTGGTGACGGGGTTTTAGTATATATTATATATATTAAAATT
TCTTGATTACTGTAAAAGTGGACCAGTATTTGTAATAATCGAGAATGCCTGGGCATTTTACAAAACAAGAAAAAA
AATACCCTTTTCTTTTCCTTGAAAATGTTGCAGTAAAATTTAAATGGTGGGTCTATAAATTTGTTCTTGTTACAG
TAACTGTAAAGTCGGAGTTTTAGTAAATTTTTTTCTGCCTTGGGTGTTGAATTTTTATTTCAAAAAAAATGTATA
GAAACTTGTATTTGGGGATTCAAAGGGGATTGCTACACCATGTAGAAAAAGTATGTAGAAAAAAAGTGCTTAATA
TTGTTATTGCTTTGCAGAAAAAAAAAAAATCACATTTCTGACCTGTACTTATTTTTCTCTTCCCGCCTCCCTCTG
GAATGGATATATTGGTTGGTTCATATGATGTAGGCACTTGCTGTATTTTTACTGGAGCTCGTAATTTTTTAACTG
TAAGCTTGTCCTTTTAAAGGGATTTAATGTACCTTTTTGTTAGTGAATTTGGAAATAAAAAGAAAAAAAAAACAA
AAACAAACAGGCTGCCATAATATATTTTTTTAATTTGGCAGGATAAAATATTGCAAAAAAAACACATTTGTATGT
TAAGTCCTATTGTACAGGAGAAAAAGGGTTGTTTGACAACCTTTGAGAAAAAGAAACAAAAGGAAGTAGTTAAAT
GCTTTGGTTCACAAATCATTTAGTTGTATATATTTTTTGTCGGAATTGGCCTACACAGAGAACCGTTCGTGTTGG
GCTTCTCTCTGAACGCCCCGAACCTTGCATCAAGGCTCCTTGGTGTGGCCACAGCAGACCAGATGGGAAATTATT
TGTGTTGAGTGGAAAAAAATCAGTTTTTGTAAAGATGTCAGTAACATTCCACATCGTCCTCCCTTTCTCTAAGAG
GCCATCTCTAAGATGTCAGATGTAGAGGAGAGAGAGCGAGAGAACATCTTCCTTCTCTACCATCACTCCTGTGGC
GGTCACCACCACCACCTCTCCCGCCCTTACCAGCAGAAAGCAATGCAAACTGAGCTGCTTTAGTCCTTGAGAAAT
TGTGAAACAAACACAAATATCATAAAAGGAGCTGGTGATTCAGCTGGGTCCAGGTGAAGTGACCTGCTGTTGAGA
CCGGTACAAATTGGATTTCAGGAAGGAGACTCCATCACAGCCAGGACCTTTCGTGCCATGGAGAGTGTTGGCCTC
TTGTCTTTCTTCCCTGCTTTGCTGCTTTGCTCTCTGAAACCTACATTCCGTCAGTTTCCGAATGCGAGGGCCTGG
GATGAATTTGGTGCCTTTCCATATCTCGTTCTCTCTCCTTCCCCTGCGTTTCCTCTCCATCCTTCATCCTCCATT
GGTCCTTTTTTTTTCTTTCATTTTTTATTTAATTTCTTTTCTTCCTGTCTGTTCCTCCCCTAATCCTCTATTTTA
TTTTTATTTTTTGTAAAGCCAAGTAGCTTTAAGATAAAGTGGTGGTCTTTTGGATGAGGGAATAATGCATTTTTA
AATAAAATACCAATATCAGGAAGCCATTTTTTATTTCAGGAAATGTAAGAAACCATTATTTCAGGTTATGAAAGT
ATAACCAAGCATCCTTTTGGGCAATTCCTTACCAAATGCAGAAGCTTTTCTGTTCGATGCACTCTTTCCTCCTTG
CCACTTACCTTTGCAAAGTTAAAAAAAAGGGGGGAGGGAATGGGAGAGAAAGCTGAGATTTCAGTTTCCTACTGC
AGTTTCCTACCTGCAGATCCAGGGGCTGCTGTTGCCTTTGGATGCCCCACTGAGGTCCTAGAGTGCCTCCAGGGT
GGTCTTCCTGTAGTCATAACAGCTAGCCAGTGCTCACCAGCTTACCAGATTGCCAGGACTAAGCCATCCCAAAGC
ACAAGCATTGTGTGTCTCTGTGACTGCAGAGAAGAGAGAATTTTGCTTCTGTTTTGTGTTTAAAAAACCAACACG
GAAGCAGATGATCCCGAGAGAGAGGCCTCTAGCATGGGTGACCCAGCCGACCTCAGGCCGGTTTCCGCACTGCCA
CAACTTTGTTCAAAGTTGCCCCCAATTGGAACCTGCCACTTGGCATTAGAGGGTCTTTCATGGGGAGAGAAGGAG
ACTGAATTACTCTAAGCAAAATGTGAAAAGTAAGGAAATCAGCCTTTCATCCCGGTCCTAAGTAACCGTCAGCCG
AAGGTCTCGTGGAACACAGGCAAACCCGTGATTTTGGTGCTCCTTGTAACTCAGCCCTGCAAAGCAAAGTCCCAT

FIGURE 4114C

TGATTTAAGTTGTTTGCATTTGTACTGGCAAGGCAAAATATTTTTATTACCTTTTCTATTACTTATTGTATGAGC
TTTTGTTGTTTACTTGGAGGTTTTGTCTTTTACTACAAGTTTGGAACTATTTATTATTGCTTGGTATTTGTGCTC
TGTTTAAGAAACAGGCACTTTTTTTTATTATGGATAAAATGTTGAGATGACAGGAGGTCATTTCAATATGGCTTA
GTAAAATATTTATTGTTCCTTTATTCTCTGTACAAGATTTTGGGCCTCTTTTTTTCCTTAATGTCACAATGTTGA
GTTCAGCATGTGTCTGCCATTTCATTTGTACGCTTGTTCAAAACCAAGTTTGTTCTGGTTTCAAGTTATAAAAAT
AAATTGGACATTTAACTTGATCTCCAAA

FIGURE 4115

MSRRKQGNPQHLSQRELITPEADHVEAAILEEDEGLEIEEPSGLGLMVGGPDPDLLTCGQCQMNFPLGDILVFIE
HKRKQCGGSLGACYDKALDKDSPPPSSRSELRKVSEPVEIGIQVTPDEDDHLLSPTKGICPKQENIAGKDEPSSY
ICTTCKQPFNSAWFLLQHAQNTHGFRIYLEPGPASSSLTPRLTIPPPLGPEAVAQSPLMNFLGDSNPFNLLRMTG
PILRDHPGFGEGRLPGTPPLFSPPPRHHLDPHRLSAEEMGLVAQHPSAFDRVMRLNPMAIDSPAMDFSRRLRELA
GNSSTPPPVSPGRGNPMHRLLNPFQPSPKSPFLSTPPLPPMPPGGTPPPQPPAKSKSCEFCGKTFKFQSNLIVHR
RSHTGEKPYKCQLCDHACSQASKLKRHMKTHMHKAGSLAGRSDDGLSAASSPEPGTSELAGEGLKAADGDFRHHE
SDPSLGHEPEEEDEEEEEEEEELLLENESRPESSFSMDSELSRNRENGGGGVPGVPGAGGGAAKALADEKALVLG
KVMENVGLGALPQYGELLADKQKRGAFLKRAAGGGDAGDDDDAGGCGDAGAGGAVNGRGGGFAPGTEPFPGLFPR
KPAPLPSPGLNSAAKRIKVEKDLELPPAALIPSENVYSQWLVGYAASRHFMKDPFLGFTDARQSPFATSSEHSSE
NGSLRFSTPPGDLLDGGLSGRSGTASGGSTPHLGGPGPGRPSSKEGRRSDTCEYCGKVFKNCSNLTVHRRSHTGE
RPYKCELCNYACAQSSKLTRHMKTHGQIGKEVYRCDICQMPFSVYSTLEKHMKKWHGEHLLTNDVKIEQAERS

FIGURE 4116

TATATCAATACACCAGTGGCTGAAATTATCATGAAACCAAATGTTGGACAAGGCAGCACAAGTGTGCAAACAGCT
ATGGAAAGTGAACTCGGAGAGTCTAGTGCCACAATCAATAAAAGACTCTGCAAAAGTACAATAGAACTTTCAGAA
AATTCTTTACTTCCAGCTTCTTCTATGTTGACTGGCACACAAAGTAAGGCTGTTGCTTTCAATGCATGCAATATT
AACTTTGAGTGTTTACTAACTCTGTGTTTTGCTTACCTGGCTTTTCTTCCTTGAAGTTGCTTTTTTTTTTCCTCC
AAGAGGAATTATTTAAAAAGACTTTAGTCTGTGACATAACCAAGATTTATTCTGTTTACCTAAGGAACTTATTTT
CTTTTTTGCAATTTCATTTATTCTGAGTCACTTTATTTGTAATAAGTGAAGAATTTTAATACTTAGAAATAAGTT
GTAAAGAAAATAATGAGAATCTTACCATGCTTTAGAGGAACGTAATTTCTAGAAATAGTTAAAAGATGAAATACT
AAGATATTATTTTACCTTCTTTATATAGCTGTATATACTGGTAGT**ATG**AAAGCAACTAGTGTCATTGATGATTTT
TTGGGGGGGTATTTTTGTATTCTAGGCTTGCTGCAACCTCATTTAGAGAGGGTTGCCATCGATGCTCTACAGTTA
TGTTGTTTGTTACTTCCCCCACCAAATCGTAGAAAGCTTCAACTTTTAATGCGTATGATTTCCCGAATGAGTCAA
AATGTTGATATGCCCAAACTTCATGATGCAATGGGTACGAGGTCACTGATGATACATACCTTTTCTCGATGTGTG
TTATGCTGTGCTGAAGAAGTGGATCTTGATGAGCTTCTTGCTGGAAGATTAGTTTCTTTCTTAATGGATCATCAT
CAGGAAATTCTTCAAGTACCCTCTTACTTACAGACTGCAGTGGAAAAACATCTTGACTACTTAAAAAAGGGACAT
ATTGAAAATCCTGGAGATGGACTATTTGCTCCTTTGCCAACTTACTCATACTGTAAGCAGATTAGTGCTCAGGAG
TTTGATGAGCAAAAAGTTTCTACCTCTCAAGCTGCAATTGCAGAACTTTTAGAAAATATTATTAAAAACAGGAGT
TTACCTCTAAAGGAGAAAAGAAAAAAACTAAAACAGTTTCAGAAGGAATATCCTTTGATATATCAGAAAAGATTT
CCAACCACGGAGAGTGAAGCAGCACTTTTTGGTGACAAACCTACAATCAAGCAACCAATGCTGATTTTAAGAAAA
CCAAAGTTCCGTAGTCTAAGA**TAA**CTAACTGAATTAAAAATTATGTAATACTTGTGGAACTTTGATAAATGAAGC
CATATCTGAGAATGTAGCTACTCAAAAGGAAGTCTGTCATTAATAAGGTATTTCTAAATAAACACATTATGTAAG
GAAGTGCCAAAATAGTTATCAATGTGAGACTCTTAGGAAACTAACTAGATCTCAATTGAGAGCACATAACAATAG
ATGATACCAAATACTTTTTGTTTTTAACACAGCTATCCAGTAAGGCTATCATGATGTGTGCTAAAATTTTATTTA
CTTGAATTTTGAAAACTGAGCTGTGTTAGGGATTAAACTATAATTCTGTTCTTAAAAGAAAATTTATCTGCAAAT
GTGCAAGTTCTGAGATATTAGCTAATGAATTAGTTGTTTGGGGTTACTTCTTTGTTTCTAAGTATAAGAATGTGA
AGAATATTTGAAAACTCAATGGAATAATTCTCAGCTGCCAAATGTTGCACTCTTTTATATATTCTTTTTCCACTT
TTGATCTATTTATATATATGTATGTGTTTTTAAAATATGTGTATATTTTATCAGATTTGGTTTTGCCTTAAATAT
TATCCCCAATTGCTTCAGTCATTCATTTGTTCAGTATATATATTTTGAATTCTAGTTTTCATAATCTATTAGAAG
ATGGGGATATAAAAGAAGTATAAGGCAATCATATATTCATTCAAAAGATATTTATTTAGCAACTGCTATGTGCCT
TTCGTTGTTCCAGATATGCAGAGACAATGATAAATAAAACATATAATCTCTTCCATAAGGTATTTATTTTTTAAT
CAAGGGAGATACACCTATCAGATGTTTAAAATAACAACACTACCCACTGAAATCAGGGCATATAGAATCATTCAG
CTAAAGAGTGACTTCTATGATGATGGAACAGGTCTCTAAGCTAGTGGTTTTCAAACTGGTACACATTAGACTCAC
CCGAGGAATTTTAAAACAGCCTATATGCCCAGGGCCTAACTTACACTAATTAAATCTGAATTTTGGGGATGTTGT
ATAGGGATTAGTATTTTTTTTAATCTAGGTGATTCCAATATTCAGCCAACTGTGAGAATCAATGGCCTAAATGCT
TTTTATAAACATTTTTATAAGTGTCAAGATAATGGCACATTGACTTTATTTTTCATTGGAAGAAAATGCCTGCC
AAGTATAAATGACTCTCATCTTAAAACAAGGTTCTTCAGGTTTCTGCTTGATTGACTTGGTACAAACTTGAAGCA
AGTTGCCTTCTAATTTTTACTCCAAGATTGTTTCATATCTATTCCTTAAGTGTAAAGAAATATATAATGCATGGT
TTGTAATAAAATCTTAATGTTTAATGACTGTT

FIGURE 4117

MKATSVIDDFLGGYFCILGLLQPHLERVAIDALQLCCLLLPPPNRRKLQLLMRMISRMSQNVDMPKLHDAMGTRS
LMIHTFSRCVLCCAEEVDLDELLAGRLVSFLMDHHQEILQVPSYLQTAVEKHLDYLKKGHIENPGDGLFAPLPTY
SYCKQISAQEFDEQKVSTSQAAIAELLENIIKNRSLPLKEKRKKLKQFQKEYPLIYQKRFPTTESEAALFGDKPT
IKQPMLILRKPKFRSLR

FIGURE 4118A

AGAAGGCGTCCCGGCATCGGCCAAGATTCTACATTGCTCATCTGGGCATCTGAGCCTCCTTCGAAGTTTCCTGTC
ACAACTGTCCTCTTGACAGC**ATG**GATGAGGAGGAAGACAATCTGTCTCTGCTGACCGCACTGCTGGAAGAAAATG
AGTCAGCCTTGGATTGTAATTCAGAAGAAAATAACTTCTTGACGCGGGAAAATGGCGAGCCCGACGCATTTGATG
AGCTCTTTGATGCCGACGGCGACGGTGAATCTTATACAGAAGAGGCTGATGATGGAGAAACAGGAGAGACAAGAG
ACGAAAAGGAAAATCTGGCCACTCTCTTTGGAGATATGGAGGACTTAACAGATGAAGAAGAAGTTCCCGCATCAC
AGTCAACTGAAAATAGGGTCCTCCCTGCTCCTGCCCCCAGGCGAGAGAAAACGAATGAAGAGTTGCAAGAGGAAT
TAAGGAATTTGCAAGAGCAAATGAAGGCCTTACAAGAGCAGCTAAAAGTAACAACAATTAAACAGACAGCAAGCC
CAGCCCGTCTGCAAAAATCCCCTGAGAAGTCTCCCCGGCCACCTCTTAAGGAGAGGAGAGTTCAGAGAATTCAGG
AGTCAACATGCTTTTCTGCGGAGCTTGATGTCCCTGCGCTACCAAGAACCAAGAGGGTGGCTCGAACACCAAAGG
CTTCACCTCCAGATCCCAAAAGCTCATCTTCAAGGATGACAAGTGCACCCTCCCAACCCCTACAGACGATTTCTC
GGAACAAACCTAGTGGGATAACTAGAGGTCAAATTGTGGGGACCCCAGGAAGTTCTGGGGAAACGACTCAACCCA
TCTGTGTGGAAGCCTTCTCTGGTCTGCGGCTCAGGCGGCCTCGAGTATCCTCCACAGAAATGAACAAGAAAATGA
CCGGCCGAAAACTGATCAGACTGTCTCAGATCAAGGAAAAGATGGCCAGAGAGAAGCTGGAAGAAATAGATTGGG
TGACATTTGGGGTTATATTGAAGAAGGTTACGCCACAGAGTGTGAATAGTGGAAAAACCTTCAGCATATGGAAAC
TGAATGATCTTCGTGACCTGACACAATGTGTGTCCTTGTTCTTATTTGGAGAAGTTCACAAAGCGCTCTGGAAGA
CGGAGCAGGGGACTGTCGTAGGGATCCTCAATGCCAACCCCATGAAGCCCAAGGATGGTTCAGAGGAGGTGTGTT
TATCTATCGATCATCCTCAGAAGGTCTTAATTATGGGTGAAGCTCTTGACCTGGGAACCTGTAAAGCCAAGAAGA
AGAATGGAGAGCCGTGCACGCAGACTGTGAATTTGCGTGACTGTGAGTACTGTCAGTACCATGTCCAGGCTCAGT
ACAAGAAGCTCAGCGCAAAGCGTGCGGATCTGCAGTCCACCTTCTCTGGAGGACGAATTCCAAAGAAGTTTGCCC
GCAGAGGCACCAGCCTCAAAGAACGGCTGTGCCAAGATGGCTTTTACTACGGAGGGGTTTCTTCTGCCTCGTATG
CAGCTTCAATTGCAGCAGCTGTGGCTCCTAAGAAGAAGATTCAAACCACTCTGAGTAATCTGGTTGTTAAGGGCA
CAAACTTGATCATCCAGGAAACACGGCAAAAACTCGGAATACCCCAGAAGAGCCTGTCTTGCTCTGAGGAGTTCA
AGGAACTGATGGACCTGCCGACGTGTGGAGCCAGGAACTTAAAACAACATTTAGCCAAAGCCACAGCTTCAGGGA
TTATGGGGAGCCCAAAACCAGCCATCAAGTCCATCTCGGCCTCAGCACTCTTGAAGCAACAGAAGCAGCGGATGT
TGGAGATGAGGAGAAGGAAATCAGAAGAAATACAGAAGCGATTTCTGCAGAGCTCAAGTGAAGTTGAGAGCCCAG
CTGTGCCATCTTCATCAAGACAGCCCCCTGCTCAGCCTCCACGGACAGGATCCGAGTTCCCCAGGCTGGAGGGAG
CCCCGGCCACAATGACGCCCAAGCTGGGGCGAGGTGTCTTGGAAGGAGATGATGTTCTCTTTTATGATGAGTCAC
CACCACCAAGACCAAAACTGAGTGCTTTAGCAGAAGCCAAAAAGTTAGCTGCTATCACCAAATTAAGGGCAAAAG
GCCAGGTTCTTACAAAAACAAACCCAAACAGCATTAAGAAGAAACAAAAGGACCCTCAGGACATCCTGGAGGTGA
AGGAACGTGTAGAAAAAAACACCATGTTTTCTTCTCAAGCTGAGGATGAATTGGAGCCTGCCAGGAAAAAAAGGA
GAGAACAACTTGCCTATCTGGAATCTGAGGAATTTCAGAAAATCCTAAAAGCAAAATCAAAACACACAGGCATCC
TGAAAGAGGCCGAGGCTGAGATGCAGGAGCGCTACTTTGAGCCACTGGTGAAAAAAGAACAAATGGAAGAAAAGA
TGAGAAACATCAGAGAAGTGAAGTGCCGTGTCGTGACATGCAAGACGTGCGCCTATACCCACTTCAAGCTGCTGG
AGACCTGCGTCAGTGAGCAGCATGAATACCACTGGCATGATGGTGTGAAGAGGTTTTTCAAATGTCCCTGTGGAA
ACAGAAGCATCTCCTTGGACAGACTCCCGAACAAGCACTGCAGTAACTGTGGCCTCTACAAATGGGAACGGGACG
GAATGCTAAAGGAAAAGACTGGTCCAAAGATAGGAGGAGAAACTCTGTTACCAAGAGGAGAAGAACATGCTAAAT
TTCTGAACAGCCTTAAA**TAA**CCCGAACTTCAGACATTTTCCCACAGACTTCCTGGCCTCCTGTGACTCTGGAAAG
CAAAGGATTGGCTGTGTATTGTCCATTGATTCCTGATTGACGCCGTCAAAAACAAATGCTTGTTAAGCCCATAAG
CTTTGCCTGCTTACTTTCTGCCATTGGGTTGGTTTGATACCACATTTAACATTGACATTTAAGTGGAAAACCAAG
TTATCATTGTCTTTTCTAAGCTCAGTGTGGATGATTGCATTACTTCATTCACTGAAGTTTTTGCCCAAAAATTGG
AAGGTAAACAGAGAGCTATGTTTCTGTATCTTTTGGTTATAGAGTGTTCACTTCTTTATCATAACAAAATTCTAG
TGTTTATACGAACACCCAGAGGCAAAAGAATTTGGCTTAATTCTCACTCCAGGTAAGTAGCTTAACTTCTGGGCT
TCAGTTTTCTCATCTGTAAAATCAGGAAGATTGGACTAAGTGATCCTGAAATGTATTTTTTAGCACTGGATTTCT
ACAAATAATAAAACTTTCCCATCTAGATAATGATGATCACATAGTCTTGATGTACGGACATTAAAAGCCAGATTT
CTTCATTCAATTCTGTTATCTCTGTTTTACTCTTTGAAATTGATCAAGCCACTGAATCACTTTGCATTTCAGTTT
ATATATATAGAGAGAAAGAAGGTGTCTGCTCTTACATTATTGTGGAGCCCTGTGATAGAAATATGTAAAATCTCA
TATTATTTTTTTTTTAATTTTTTTATTTTTTATGACAGGGTCTCACTATGTCACCCTGGCTGGAGTGCAGTAGTG
CGATCGCGGCACACTGCAGCCTTGGCTTCCCTGGGCTCAAGCAGTCCTCCCACCTCAGTCTCCCAAATAGCTAGG

FIGURE 4118B

ACTACAGGCGTGCGTGACCAAGCCCAGCTAATTTTTGCATTTTTTGTAGAGATGGGGTTTTGCCATGTTGCTCAG
GCTGGTCTCAAACTCCTGAGCACTAGCAATCCACCCACCTCTGTTT

FIGURE 4119

MDEEEDNLSLLTALLEENESALDCNSEENNFLTRENGEPDAFDELFDADGDGESYTEEADDGETGETRDEKENLA
TLFGDMEDLTDEEEVPASQSTENRVLPAPAPRREKTNEELQEELRNLQEQMKALQEQLKVTTIKQTASPARLQKS
PEKSPRPPLKERRVQRIQESTCFSAELDVPALPRTKRVARTPKASPPDPKSSSSRMTSAPSQPLQTISRNKPSGI
TRGQIVGTPGSSGETTQPICVEAFSGLRLRRPRVSSTEMNKKMTGRKLIRLSQIKEKMAREKLEEIDWVTFGVIL
KKVTPQSVNSGKTFSIWKLNDLRDLTQCVSLFLFGEVHKALWKTEQGTVVGILNANPMKPKDGSEEVCLSIDHPQ
KVLIMGEALDLGTCKAKKKNGEPCTQTVNLRDCEYCQYHVQAQYKKLSAKRADLQSTFSGGRIPKKFARRGTSLK
ERLCQDGFYYGGVSSASYAASIAAAVAPKKKIQTTLSNLVVKGTNLIIQETRQKLGIPQKSLSCSEEFKELMDLP
TCGARNLKQHLAKATASGIMGSPKPAIKSISASALLKQQKQRMLEMRRRKSEEIQKRFLQSSSEVESPAVPSSSR
QPPAQPPRTGSEFPRLEGAPATMTPKLGRGVLEGDDVLFYDESPPPRPKLSALAEAKKLAAITKLRAKGQVLTKT
NPNSIKKKQKDPQDILEVKERVEKNTMFSSQAEDELEPARKKRREQLAYLESEEFQKILKAKSKHTGILKEAEAE
MQERYFEPLVKKEQMEEKMRNIREVKCRVVTCKTCAYTHFKLLETCVSEQHEYHWHDGVKRFFKCPCGNRSISLD
RLPNKHCSNCGLYKWERDGMLKEKTGPKIGGETLLPRGEEHAKFLNSLK

FIGURE 4120

CTTCAGAACAGGTTCTCCTTCCCCAGTCACCAGTTGCTCGAGTTAGAATTGTCTGCAATGGCCGCCCTGCAGAAA
TCTGTGAGCTCTTTCCTTATGGGGACCCTGGCCACCAGCTGCCTCCTTCTCTTGGCCCTCTTGGTACAGGGAGGA
GCAGCTGCGCCCATCAGCTCCCACTGCAGGCTTGACAAGTCCAACTTCCAGCAGCCCTATATCACCAACCGCACC
TTCATGCTGGCTAAGGAGGCTAGCTTGGCTGATAACAACACAGACGTTCGTCTCATTGGGGAGAAACTGTTCCAC
GGAGTCAGTATGAGTGAGCGCTGCTATCTGATGAAGCAGGTGCTGAACTTCACCCTTGAAGAAGTGCTGTTCCCT
CAATCTGATAGGTTCCAGCCTTATATGCAGGAGGTGGTGCCCTTCCTGGCCAGGCTCAGCAACAGGCTAAGCACA
TGTCATATTGAAGGTGATGACCTGCATATCCAGAGGAATGTGCAAAAGCTGAAGGACACAGTGAAAAAGCTTGGA
GAGAGTGGAGAGATCAAAGCAATTGGAGAACTGGATTTGCTGTTTATGTCTCTGAGAAATGCCTGCATTTGACCA
GAGCAAAGCTGAAAAATGAATAACTAACCCCCTTTCCCTGCTAGAAATAACAATTAGATGCCCCAAAGCGATTTT
TTTTAACCAAAAGGAAGATGGGAAGCCAAACTCCATCATGATGGGTGGATTCCAAATGAACCCCTGCGTTAGTTA
CAAAGGAAACCAATGCCACTTTTGTTTATAAGACCAGAAGGTAGACTTTCTAAGCATAGATATTTATTGATAACA
TTTCATTGTAACTGGTGTTCTATACACAGAAAACAATTTATTTTTTAAATAATTGTCTTTTTCCATAAAAAAGAT
TACTTTCCATTCCTTTAGGGGAAAAAACCCCTAAATAGCTTCATGTTTCCATAATCAGTACTTTATATTTATAAA
TGTATTTATTATTATTATAAGACTGCATTTTATTTATATCATTTTATTAATATGGATTTATTTATAGAAACATCA
TTCGATATTGCTACTTGAGTGTAAGGCTAATATTGATATTTATGACAATAATTATAGAGCTATAACATGTTTATT
TGACCTCAATAAACACTTGGATATCCCAAAAAAAAAAAAAA

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FIGURE 4121

MAALQKSVSSFLMGTLATSCLLLLALLVQGGAAAPISSHCRLDKSNFQQPYITNRTFMLAKEASLADNNTDVRLI
GEKLFHGVSMSERCYLMKQVLNFTLEEVLFPQSDRFQPYMQEVVPFLARLSNRLSTCHIEGDDLHIQRNVQKLKD
TVKKLGESGEIKAIGELDLLFMSLRNACI

FIGURE 4122

CTCGAAAAGGCCCCATGTGGGCAGGGGGTGTGGCAGGAGCTCCCAGCACTGGAGACCCACGGACTCAACCCAGTT
ACCTCACATGGGGCCTTTTCTGAGCAAGGTCTCGAAAGCGCAGGCCGCCCTGGCTGAGCAGCACCGCCCTTTCCC
AGCTGCACTCGCCCTGTGGACAGCCCCGACACACCACTTTCCTGAGGCTGTCGCTCACTCAGATTGTCCGTTTGC
TATGCCGAATGCAGCCAAAATTCCTTTTTACAATTTGTGATGCCTTACCGATTTGATCTTAATCCTGTATTTAAA
GTTTTCTAACACTGCCTTATACTGTGTTTCTCTTTTTGGGGGAGCTTAACTGCTTGTTGCTCCCTGTCGTCTGCA
CCATAGTAAATGCCACAAGGGTAGTCGAACACCTCTCTGGCCCCTAGACCTATCTGGGGACAGGCTGGCTCAGCC
TGTCTCCAGGGCTGCTGCGGCCCAGCCCCGAGCCTGCCCCACGTGGCGCGCCTCTGTCTGATCAGCACCTTCCTG
GAGGACGGCATCCGTATGTGGTTCCAGTGGAGCGAGCAGCGCGACTACATCGACACCACCTGGAACTGCGGCTAC
CTGCTGGCCTCGTCCTTCGTCTTCCTCAACTTGCTGGGACAGCTGACTGGCTGCGTCCTGGTGTTGAGCAGGAAC
TTCGTGCAGTACGCCTGCTTCGGGCTCTTTGGAATCATAGCTCTGCAGACGATTGCCTACAGCATTTTATGGGAC
TTGAAGTTTTTG**ATG**AGGAACCTGGCCCTGGGAGGAGGCCTGTTGCTGCTCCTAGCAGAATCCCGTTCTGAAGGG
AAGAGCATGTTTGCGGGCGTCCCCACCATGCGTGAGAGCTCCCCCAAACAGTACATGCAGCTCGGAGGCAGGGTC
TTGCTGGTTCTGATGTTCATGACCCTCCTTCACTTTGACGCCAGCTTCTTTTCTATTGTCCAGAACATCGTGGGC
ACAGCTCTGATGATTTTAGTGGCCATTGGTTTTAAAACCAAGCTGGCTGCTTTGACTCTTGTTGTGTGGCTCTTT
GCCATCAACGTATATTTCAACGCCTTCTGGACCATTCCAGTCTACAAGCCCATGCATGACTTCCTGAAATACGAC
TTCTTCCAGACCATGTCGGTGATTGGGGGCTTGCTCCTGGTGGTGGCCCTGGGCCCTGGGGGTGTCTCCATGGAT
GAGAAGAAGAAGGAGTGG**TAA**CAGTCACAGATCCCTACCTGCCTGGCTAAGACCCGTGGCCGTCAAGGACTGGTT
CGGGGTGGATTCAACAAAACTGCCAGCTTTTATGTATCCTCTTCCCTTCCCCTCCCTTGGTAAAGGCACAGATGT
TTTGAGAACTTTATTTGCAGAGACACCTGAGAATCGATGGCTCAGTCTGCTCTGGAGCCACAGTCTGGCGTCTGA
CCCTTCAGTGCAGGCCAGCCTGGCAGCTGGAAGCCTCCCCCACGCCGAGGCTTTGGAGTGAACAGCCCGCTTGGC
TGTGGCATCTCAGTCCTATTTTTGAGTTTTTTTGTGGGGGTACAGGAGGGGGCCTTCAAGCTGTACTGTGAGCAG
ACGCATTGGTATTATCATTCAAAGCAGTCTCCCTCTTATTTGTAAGTTTACATTTTTAGCGGAAACTACTAAATT
ATTTTGGGTGGTTCAGCCAAACCTCAAAACAGTTAATCTCCCTGGTTTAAAATCACACCAGTGGCTTTGATGTTG
TTTCTGCCCCGCATTGTATTTTATAGGAATAGTGAAAACATTTAGGGACACCCAAAGAATGATGCAGTATTAAAG
GGGTGGTAGAAGCTGCTGTTTATGATAAAAGTCATCGGTCAGAAAATCAGCTTGGATTGGTGCCAAGTGTTTTAT
TGGGTAACACCCTGGGAGTTTTAGTAGCTTGAGGCAAGGTGGAGGGGCAAGAAGTCCTTGGGGAAGCTGCTGGTC
TGGGTGCTGCTGGCCTCCAAGCTGGCAGTGGGAAGGGCTAGTGAGACCACACAGGGGTAGCCCCAGCAGCAGCAC
CCTGCAAGCCAGCCTGGCCAGCTGCTCAGACCAGCTTGCAGAGCCGCAGCCGCTGTGGGCAGGGGGTGTGGCAGG
AGCTCCCAGCACTGGAGACCCACGGACTCAACCCAGTTACCTCACATGGGGCCTTTTCTGAGCAAGGTCTCGAAA
GCGCAGGCCGCCCTGGCTGAGCAGCACCGCCCTTTCCCAGCTGCACTCGCCCTGTGGACAGCCCCGACACACCAC
TTTCCTGAGGCTGTCGCTCACTCAGATTGTCCGTTTGCTATGCCGAATGCAGCCAAAATTCCTTTTTACAATTTG
TGATGCCTTACCGATTTGATCTTAATCCTGTATTTAAAGTTTTCTAACACTGCCTTATACTGTGTTTCTCTTTTT
GGGGGAGCTTAACTGCTTGTTGCTCCCTGTCGTCTGCACCATAGTAAATGCCACAAGGGTAGTCGAACACCTCTC
TGGCCCCTAGACCTATCTGGGGACAGGCTGGCTCAGCCTGTCTCCAGGGCTGCTGCGGCCCAGCCCCGAGCCTGC
CTCCCTCTTGGCCTCTCATCCATTGGCTCTGCAGGGCAGGGGTGAGGCAGGTTTCTGCTCATAAGTGCTTTTGGA
AGTCACCTACCTTTTTAACACAGCCGAACTAGTCCCAACGCGTTTGCAAATATTCCCCTGGTAGCCTACTTCCTT
ACCCCCGAATATTGGTAAGATCGAGCAATGGCTTCAGGACATGGGTTCTCTTCTCCTGTGATCATTCAAGTGCTC
ACTGCATGAAGACTGGCTTGTCTCAGTGTTTCAACCTCACCAGGGCTGTCTCTTGGTCCACACCTCGCTCCCTGT
TAGTGCCGTATGACAGCCCCCATCAAATGACCTTGGCCAAGTCACGGTTTCTCTGTGGTCAAGGTTGGTTGGCTG
ATTGGTGGAAAGTAGGGTGGACCAAAGGAGGCCACGTGAGCAGTCAGCACCAGTTCTGCACCAGCAGCGCCTCCG
TCCTAGTGGGTGTTCCTGTTTCTCCTGGCCCTGGGTGGGCTAGGGCCTGATTCGGGAAGATGCCTTTGCAGGGAG
GGGAGGATAAGTGGGATCTACCAATTGATTCTGGCAAAACAATTTCTAAGATTTTTTTGCTTTATGTGGGAAACA
GATCTAAATCTCATTTTATGCTGTATTTTATATCTTAGTTGTGTTTGAAAACGTTTTGATTTTTGGAAACACATC
AAAATAAATAATGGCGTTTGTTGTATGCAGTGTGATCCTATAGCGTTGCCCAGCCTGAATGGGGCTCCCCTCAGG
ATGCCAGTGAGCGAGGTTACTTCTCTAGGCTTCTCTGAAGACCACTCAGAAGCCATGTCCAGAGAGAATTAGTCC
CTCAGAGTCCCTGCTGCTTCCTGGGTGTGGGGGACAGACTCCCTCAGCCCTGCCTTAGAGGGCAGCAGATGTCAT
GAGACAAGGATAAGTGGGTAGAGAAGACACTGGGGACAACCCGATCATTCAGAGGACACACGGTTTGATCAGGAG
CGGGGGAAATATCTGAAGGCTTTCTCGAAACTTCACGGCATGTGCT

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FIGURE 4123

MRNLALGGGLLLLLAESRSEGKSMFAGVPTMRESSPKQYMQLGGRVLLVLMFMTLLHFDASFFSIVQNIVGTALM
ILVAIGFKTKLAALTLVVWLFAINVYFNAFWTIPVYKPMHDFLKYDFFQTMSVIGGLLLVVALGPGGVSMDEKKK
EW

FIGURE 4124A

GCTGACGGTTGCTGCACACACAGTCCCCACGTCAGATCCTGAGCTTGCAGGGGAGAGCTCCGTCGGGCTGGGAAG
CGCCAGCCCTGGTTTGCAACAGCACACATGCGCTGTCCAGAGCCTGGGGCCTCCTCCTGCTGCTCTGGAGATTTT
CGGATAACTGTAAACGTGATCTTACTATTCAGTCAACCATGTGGCCCTCTAGGTGTGGCACCCTGGCTGTCACCT
AAGCCAACCCTTGTTCTGTCAGGGTACTCTGGGCGTCACTGGGCAGGCTGGGAGGTCCAGGCCCTTGGCACCTCA
GCCATGTGTGACCTGCAGGCTGGGGTCAAGTCTTGGCATTGCACCATCAGGTCTGCGAAGCCTAGGGGAACCCCT
TCCCGCTGGGTTTAATATAGCCATTTGTAAGGTGAGGGGTTGGACCAGAGCAGCGGAGATGCCTGGCAAAGTGCA
GCGGTGCCTCAGGAGGGAGGCTGCTGCTGGCATGTCGTGGGCAGACATGTCGTGCGTCATAGCCTGCAGCACCCA
GGATGACCCACGGCAAAGAGTGGCCTGGCCTCAGATGCCAGTAGTGCTGAGGTGCAGAAACGTTGGATAGATGAC
CTCTAAGTGCCTTTTCAGATGTCATTCTGTGATTCCAACTTGTAAATGCCTTTGACCGAAAAGAGCAGCTCTGTG
TCTTGTGGCAGTGCCACCTTGGAAGACTGTAGTTGCCTGCCGAGGCACTGGGGGAAATCACGGTAGCAGAGTGTT
AGGGCTGCTGCCCTATAGGATCTGCCCCAGAGGGCCTAACGTCAAGTCATGCATCTCCGGGACTGATCCTTGGAT
TGTTGCATGTGTCCAGACTCACAGGGTAGCGCTCAGGAGCAAGCACTGAGAGCCCCCTAGTCTGCCCTGGGAAGG
CACCGGGGCTGACAAGAGCTCTTGCCTTCCACAGCGTCTGTTCCTCACACACCCCGCCCAAGGACGTGCCTGGCA
GCGGCCTGGTGCTCCCCGCCGCAGCCACCTCACCCTTGGGTTTCTGTGGCCCTGCAGTTCCTCCGTGTCACAAAG
CAGTACCTGCCCCACGTGGCGCGCCTCTGTCTGATCAGCACCTTCCTGGAGGACGGCATCCGTATGTGGTTCCAG
TGGAGCGAGCAGCGCGACTACATCGACACCACCTGGAACTGCGGCTACCTGCTGGCCTCGTCCTTCGTCTTCCTC
AACTTGCTGGGACAGCTGACTGGCTGCGTCCTGGTGTTGAGCAGGAACTTCGTGCAGTACGCCTGCTTCGGGCTC
TTTGGAATCATAGCTACTGCAGACGATTGCCTTACAGCATTTTATGGGACTTGAAGTTTTTGATGAGGAACCTGG
GCCCTGGGAGGAGGCCTGTGCTGCTCCTAGCAGAATCCCGTTCTGAAGGGAAGAGCATGTTTGCGGGCGTCCCCA
CCATGCGTGAGAGCTCCCCCAAACAGTACATGCAGCTCGGAGGCAGGGTCTTGCTGGTTCTGATGTTCATGACCC
TCCTTCACTTGGACGCCAGCTTCTTTTCTATGTCCAGAACATCGTGGGCACAGCTCTGATGATTTTAGTGGCCAT
TGGTTTTAAAACCAAGCTGGCTGCTTTGACTCTTGTTGTGCGGCTCTTTGCCATCAACGTATATTTCAACGCCTT
CTGGACCATTCCAGTCTACAAGCCCATGCATGACTTCCTGAAATACGACTTCTTCCAGACCATGTCGGTGATTGG
GGGCTTGCTCCTGGTGGTGGCCCTGGGCCCTGGGGGTGTCTCCATGGATGAGAAGAAGAAGGAGTGGTAACAGTC
ACAGATCCCTACCTGCCTGGCTAAGACCCGTGGCGTCAAGGACTGGTTCGGGGTGGATTCAACAAAAACTGCAGC
TTTTATGTATCCTCTTCCCTTCCCCTCCCTTGGTAAAGGCACAGATGTTTTGAGAACTTTATTTGCAGAGACACC
TGAGAATCGATGGCTCAGTCTGCTCTGGAGCCACAGTCTGGCGTCTGACCCTTCAGTGCAGGCCAGCCTGGCAGC
TGGAAGCCTCCCCCACGCCGAGGCTTTGGAGTGAACAGCCCGCTTGGCTGTGGCATCTCAGTCCTATTTTTGAGT
TTTTTTGTGGGGGTACAGGAGGGGGCCTTCAAGCTGTACTGTGAGCAGACGCATTGGTATTATCATTCAAAGCAG
TCTCCCTCTTATTTGTAAGTTTACATTTTTAGCGGAAACTACTAAATTATTTTGGGTGGTTCAGCCAAACCTCAA
AACAGTTAATCTCCCTGGTTTAAAATCACACCAGTGGCTTTGATGTTGTTTCTGCCCCGCATTGTATTTTATAGG
AATACTGAAAACATTTAGGGACACCCAAAGAATGATGCAGTATTAAAGGGGTGGTAGAAGCTGCTGTTTATGATA
AAAGTCATCGGTCAGAAAATCAGCTTGGATTGGTGCCAAGTGTTTTATTGGGTAACACCCTGGGAGTTTTAGTAG
CTTGAGGCAAGGTGGAGGGGCAAGAAGTCCTTGGGGAAGCTGCTGGTCTGGGTGCTGCTGGCCTCCAAGCTGGCA
GTGGGAAGGGCTAGTGAGACCACACAGGGGTAGCCCCAGCAGCAGCACCCTGCAAGCCAGCCTGGCCAGCTGCTC
AGACCAGCTTGCAGAGCCGCAGCCGCTGTGGGCAGGGGGTGTGGCAGGAGCTCCCAGCACTGGAGACCCACGGAC
TCAACCCAGTTACCTCACATGGGGCCTTTTCTGAGCAAGGTCTCGAAAGCGCAGGCCGCCCTGGCTGAGCAGCAC
CGCCCTTTCCCAGCTGCACTCGCCCTGTGGACAGCCCCGACACACCACTTTCCTGAGGCTGTCGCTCACTCAGAT
TGTCCGTTTGCTATGCCGAATGCAGCCAAAATTCCTTTTTACAATTTGTGATGCCTTACCGATTTGATCTTAATC
CTGTATTTAAAGTTTTCTAACACTGCCTTATACTGTGTTTCTCTTTTTGGGGGAGCTTAACTGCTTGTTGCTCCC
TGTCGTCTGCACCATAGTAAATGCCACAAGGGTAGTCGAACACCTCTCTGGCCCCTAGACCTATCTGGGGACAGG
CTGGCTCAGCCTGTCTCCAGGGCTGCTGCGGCCCAGCCCCGAGCCTGCCTCCCTCTTGGCCTCTCATCCATTGGC
TCTGCAGGGCAGGGGTGAGGCAGGTTTCTGCTCATAAGTGCTTTTGGAAGTCACCTACCTTTTTAACACAGCCGA
ACTAGTCCCAACGCGTTTGCAAATATTCCCCTGGTAGCCTACTTCCTTACCCCCGAATATTGGTAAGATCGAGCA
ATGGCTTCAGGACATGGGTTCTCTTCTCCTGTGATCATTCAAGTGCTCACTGCATGAAGACTGGCTTGTCTCAGT
GTTTCAACCTCACCAGGGCTGTCTCTTGGTCCACACCTCGCTCCCTGTTAGTGCCGTATGACAGCCCCCATCAAA
TGACCTTGGCCAAGTCACGGTTTCTCTGTGGTCAAGGTTGGTTGGCTGATTGGTGGAAAGTAGGGTGGACCAAAG
GAGGCCACGTGAGCAGTCAGCACCAGTTCTGCACCAGCAGCGCCTCCGTCCTAGTGGGTGTTCCTGTTTCTCCTG

FIGURE 4124B

GCCCTGGGTGGGCTAGGGCCTGATTCGGGAAGATGCCTTTGCAGGGAGGGGAGGATAAGTGGGATCTACCAATTG
ATTCTGGCAAAACAATTTCTAAGATTTTTTGCTTTATGTGGGAAACAGATCTAAATCTCATTTTATGCTGTATTT
TATATCTTAGTTGTGTTTGAAAACGTTTGATTTTGGAAACACATCAAAATAAATAATGGC

FIGURE 4125

LTVAAHTVPTSDPELAGESSVGLGSASPGLQQHTCAVQSLGPPPAALEIFG

FIGURE 4126

GGCGGAGAGGGCCGGCCGCCGGCACATTCCTGTGGAGGCCGCAGCGGGTGCGGCGCCGACGGGAGGAGCAGCGAG
CGAGCGACGAACGCCGAGCCGAGCCTCCCGCCGTCGCCATGGGCCAGAACGACCTGATGGGCACGGCCGAGGACT
TCGCCGACCAGTTCCTCCGTGTCACAAAGCAGTACCTGCCCCACGTGGCGCGCCTCTGTCTGATCAGCACCTTCC
TGGAGGACGGCATCCGTATGTGGTTCCAGTGGAGCGAGCAGCGCGACTACATCGACACCACCTGGAACTGCGGCT
ACCTGCTGGCCTCGTCCTTCGTCTTCCTCAACTTGCTGGGACAGCTGACTGGCTGCGTCCTGGTGTTGAGCAGGA
ACTTCGTGCAGTACGCCTGCTTCGGGCTCTTTGGAATCATAGCTCTGCAGACGATTGCCTACAGCATTTTATGGG
ACTTGAAGTTTTTGATGAGGAACCTGGCCCTGGGAGGAGGCCTGTTGCTGCTCCTAGCAGAATCCCGTTCTGAAG
GGAAGAGCATGTTTGCGGGCGTCCCCACCATGCGTGAGAGCTCCCCCAAACAGTACATGCAGCTCGGAGGCAGGG
TCTTGCTGGTTCTGATGTTCATGACCCTCCTTCACTTTGACGCCAGCTTCTTTTCTATTGTCCAGAACATCGTGG
GCACAGCTCTGATGATTTTAGTGGCCATTGGTTTTAAAACCAAGCTGGCTGCTTTGACTCTTGTTGTGTGGCTCT
TTGCCATCAACGTATATTTCAACGCCTTCTGGACCATTCCAGTCTACAAGCCCATGCATGACTTCCTGAAATACG
ACTTCTTCCAGACCATGTCGGTGATTGGGGGCTTGCTCCTGGTGGTGGCCCTGGGCCCTGGGGGTGTCTCCATGG
ATGAGAAGAAGAAGGAGTGGTAACAGTCACAGATCCCTACCTGCCTGGCTAAGACCCGTGGCCGTCAAGGACTGG
TTCGGGGTGGATTCAACAAAACTGCCAGCTTTTATGTATCCTCTTCCCTTCCCCTCCCTTGGTAAAGGCACAGAT
GTTTTGAGAACTTTATTTGCAGAGACACCTGAGAATCGATGGCTCAGTCTGCTCTGGAGCCACAGTCTGGCGTCT
GACCCTTCAGTGCAGGCCAGCCTGGCAGCTGGAAGCCTCCCCCACGCCGAGGCTTTGGAGTGAACAGCCCGCTTG
GCTGTGGCATCTCAGTCCTATTTTTGAGTTTTTTTGTGGGGGTACAGGAGGGGGCCTTCAAGCTGTACTGTGAGC
AGACGCATTGGTATTATCATTCAAAGCAGTCTCCCTCTTATTTGTAAGTTTACATTTTTAGCGGAAACTACTAAA
TTATTTTGGGTGGTTCAGCCAAACCTCAAAACAGTTAATCTCCCTGGTTTAAAATCACACCAGTGGCTTTGATGT
TGTTTCTGCCCCGCATTGTATTTTATAGGAATACTGAAAACATTTAGGGACACCCAAAGAATGATGCAGTATTAA
AGGGGTGGTAGAAGCTGCTGTTTATGATAAAAGTCATCGGTCAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AA

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FIGURE 4127

MGQNDLMGTAEDFADQFLRVTKQYLPHVARLCLISTFLEDGIRMWFQWSEQRDYIDTTWNCGYLLASSFVFLNLL
GQLTGCVLVLSRNFVQYACFGLFGIIALQTIAYSILWDLKFLMRNLALGGGLLLLLAESRSEGKSMFAGVPTMRE
SSPKQYMQLGGRVLLVLMFMTLLHFDASFFSIVQNIVGTALMILVAIGFKTKLAALTLVVWLFAINVYFNAFWTI
PVYKPMHDFLKYDFFQTMSVIGGLLLVVALGPGGVSMDEKKKEW

FIGURE 4128

CGGCCTCAGAAAGCCGAGTGAGGAGTTGGCCGTAGTGAGAGGGACCGATCCCTTGGGGCCGCCGGCGGCGAGGCC
GAGCCGCTCCTCCCA**ATG**GCGAAGAAGACGTACGACCTGCTTTTCAAGCTGCTCCTGATCGGGGATTCCGGAGTG
GGGAAGACCTGCGTCCTTTTTCGTTTTTCGGATGATGCCTTCAATACTACCTTTATTTCCACCATAGGAATAGAC
TTCAAGATCAAAACAGTTGAATTACAAGGAAAGAAGATCAAGCTACAGATATGGGATACAGCAGGCCAGGAGCGA
TTTCACACCATCACAACCTCCTACTACAGAGGCGCAATGGGTATCATGCTAGTATATGACATCACCAATGGTAAA
AGTTTTGAAAACATCAGCAAATGGCTTAGAAACATAGATGAGCATGCCAATGAAGATGTGGAAAGAATGTTACTA
GGAAACAAGTGTGATATGGACGACAAAAGAGTTGTACCTAAAGGAAAAGGAGAACAGATTGCAAGGGAGCATGGT
ATTAGGTTTTTTGAGACTAGTGCAAAAGCAAATATAAACATCGAAAAGGCGTTCCTCACGTTAGCTGAAGATATC
CTTCGAAAGACCCCTGTAAAAGAGCCCAACAGTGAAAATGTAGATATCAGCAGTGGAGGAGGCGTGACAGGCTGG
AAGAGCAAATGCTGC**TGA**GCATTCTCCTGTTCCATCAGTTGCCATCCACTACCCCGTTTTCTCTTCTTGCTGCAA
AATAAACCACTCTGTCCATTTTTAACTCTAAACAGATATTTTTGTTTCTCATCTTAACTATCCAAGCCACCTATT
TTATTTGTTCTTTCATCTGTGACTGCTTGCTGACTTTATCATAATTTTCTTCAAACAAAAAAATGTATAGAAAAA
TCATGTCTGTGACTTCATTTTTAAATGTACTTGCTCAGCTCAACTGCATTTCAGTTGTATTATAGTCCAGTTCTT
ATCAACATTAAAACCTATAGCAATCATTTCAAATCTATTCTGCAAATTGTATAAGAATAAAGTTAGAATTAACAA
TTTTATTTTGTACAACAGTGGAATTTTCTGTCATGGATAATGTGCTTGAGTCCCTATAATCTATAGACATGTGAT
AGCAAAAGAAACAAACAAAAGCCAGGAAAACACTCATTTTCGCCTTGAATATGTAAATGGGATTAATTTTGTCCT
GTGCCTTATGTGGAAAGGGACTTCTTTGGGTTTTCCTTTTTTGTTCTGGTGGAAGCATGTGCAGGGAGACCATAT
CATCCAAACCATAAACCCATTAAAATGTTTGTGGTTTGCTTGGCTGTAATTTTCAAAGTAGTTAATTGAGGACAA
AGGGTAATGCAGAAGTGATAGCTTTGGTTTGCTGAGTCTTGTTTTAAGTGGCCTTGATATTTAAAACTATTCCTG
CCACCATTTCTTCTCCTTGGCCACTTCTTCCTTGCGTCTCCCTGCATGCTGCTTTATTTGCTTCTCCCTCCCCAA
CCACCTCATGGTATATTTAAGAGTGAAAGGGACAAACTAGTAGGTTTGTCAAGTTTAATATAAAGCACTGATGTA
ACTTGCTAGGTAAACGGAAAGATAAGTTCTAACTGCCTACTATCCAATGTCAGTTAATTGGTGTCTTCCCCCCTC
ATTTGCTCTCTTCCCTAAAATGTGTCCCAGATGCCTTCATTTGCTGTTTTACTTCTATGTTCTGCTTTTCCTCCT
CTCTTTGTTCCCTTCCTGTCTATCCATTGAGTTTATGAAATGGAAGAGTTAACTGCATGCACTAGTGTTTGGAGG
GTGTTGTGGTTTGTCTTTCTAATTAGGTGTATAGCCTATTCACTTTCCTAGGAATAAATCTCTTAACCTAAATTT
GAGTAGTCTGCATTTTGGCAACTCCTCTAAGCAGCTTGGTAGCCTAAGTACAGGTTGTTTTTTTAAAAAAGGAAA
AGCAGGAAGGAGGAGTGAATTTTATTAACATGTTTGCCAAATGTATTGAGATTTGGCCTCTGAAGAACACTTTTT
CAGTGTTAAGTTTCTTTACCTTAAGATTCCGAAATACTTTAGAATATTATTAATTTTAAGTCCTGTCTTTACATC
CTTTTGGAAAACTTGTATTACCATGAGTTTGGAAAAAGGACAACGAAAGGCTTTTCATGTAAAGATAAGATCTTT
AGCTATCTCTAACCCTGTCCTTTTTTCACTGCATTTTTTCTAGTTTTGCTTCATTGCTTATCATTAGGATAGGGT
AAGTGAAGTTTGCTATGCTGCTAGCATCCTAAGATGATACCTTTGTTGAAAGAATTGTGAATAGCATGATTCATT
TCTAGCAGAGGCTGAGTTTAGGACAGCAGCTTCCATTGAGAAGTCTTTCTGTGTCGTGAATAGCATTTTAATGAC
CTCTTGGCTCACATAAGCAAACAACATAGGGACGTATCTGCTATGAAAATCCACAAATTTTTCAGATAGTGCCCT
AAAAACAATTTTATATGCCTCACTGGTTGTTATTCTTAGGTTATTCCCACACTTGACTTTATCATTGTTTACTAC
TAGTAAAAAGCAGCATTGCCAAATAATCCCTAATTTTCCACTAAAAATATAATGAAATGATGTTAAGCTTTTTGA
AAAGTTTAGGTTAAACCTACTGTTGTTAGATTAATGTATTTGTTGCTTCCCTTTATCTGGAATGTGGCATTAGCT
TTTTTATTTTAACCCTCTTTAATTCTTATTCAATTCCATGACTTAAGGTTGGAGAGCTAAACACTGGGATTTTTG
GATAACAGACTGACAGTTTTGCATAATTATAATCGGCATTGTACATAGAAAGGATATGGCTACCTTTTGTTAAAT
CTGCACTTTCTAAATATCAAAAAAGGGAAATGAAGTATAAATCAATTTTTGTATAATCTGTTTGAAACATGAGTT
TTATTTGCTTAATATTAGCTTTGCCCCTTTTCTGTAAGTCTCTTGGGATCCTGTGTAGAAGCTGTTCTCATTAAA
CACCAAACAGTTAAGTCCATTCTCTGGTACTAGCTACAAATTCGGTTTCATATTCTACTTAACAATTTAAATAAA
CTGAAATATTTCTAGATGGTCTACTTCTGTTCATATAAAAACAAAACTTGATTTCCAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAA

FIGURE 4129

MAKKTYDLLFKLLLIGDSGVGKTCVLFRFSDDAFNTTFISTIGIDFKIKTVELQGKKIKLQIWDTAGQERFHTIT
TSYYRGAMGIMLVYDITNGKSFENISKWLRNIDEHANEDVERMLLGNKCDMDDKRVVPKGKGEQIAREHGIRFFE
TSAKANINIEKAFLTLAEDILRKTPVKEPNSENVDISSGGGVTGWKSKCC

FIGURE 4130

CGGCCTCAGAAAGCCGAGTGAGGAGTTGGCCGTAGTGAGAGGGACCGATCCCTTGGGGCCGCCGGCGGCGAGGCC
GAGCCGCTCCTCCCAATGGCGAAGAAGACGTACGACCTGCTTTTCAAGCTGCTCCTGATCGGGGATTCCGGAGTG
GGGAAGACCTGCGTCCTTTTTCGTTTTTCGGATGATGCCTTCAATACTACCTTTATTTCCACCATAGGAATAGAC
TTCAAGATCAAAACAGTTGAATTACAAGGAAAGAAGATCAAGCTACAGATATGGGATACAGCAGGCCAGGAGCGA
TTTCACACCATCACAACCTCCTACTACAGAGGCGCAATGGGTATCATGCTAGTATATGACATCACCAATGGTAAA
AGTTTTGAAAACATCAGCAAATGGCTTAGAAACATAGATGAGCATGCCAATGAAGATGTGGAAAGAATGTTACTA
GGAAACAAGTGTGATATGGACGACAAAAGAGTTGTACCTAAAGGAAAAGGAGAACAGATTGCAAGGGAGCATGGT
ATTAGGTTTTTTGAGACTAGTGCAAAAGCAAATATAAACATCGAAAAGGCGTTCCTCACGTTAGCTGAAGATATC
CTTCGAAAGACCCCTGTAAAAGAGCCCAACAGTGAAAATGTAGATATCAGCAGTGGAGGAGGCGTGACAGGCTGG
AAGAGCAAATGCTGCTGAGCATTCTCCTGTTCCATCAGTTGCCATCCACTACCCCGTTTTCTCTTCTTGCTGCAA
AATAAACCACTCTGTCCATTTTTAACTCTAAACAGATATTTTTGTTTCTCATCTTAACTATCCAAGCCACCTATT
TTATTTGTTCTTTCATCTGTGACTGCTTGCTGACTTTATCATAATTTTCTTCAAACAAAAAAATGTATAGAAAAA
TCATGTCTGTGACTTCATTTTTAAATGTACTTGCTCAGCTCAACTGCATTTCAGTTGTATTATAGTCCAGTTCTT
ATCAACATTAAAACCTATAGCAATCATTTCAAATCTATTCTGCAAATTGTATAAGAATAAAGTTAGAATTAACAA
TTTTATTTTGTACAACAGTGGAATTTTCTGTCATGGATAATGTGCTTGAGTCCCTATAATCTATAGACATGTGAT
AGCAAAAGAAACAAACAAAAGCCAGGAAAACACTCATTTTCGCCTTGAATATGTAAATGGGATTAATTTTGTCCT
GTGCCTTATGTGGAAAGGGACTTCTTTGGGTTTTCCTTTTTTGTTCTGGTGGAAGCATGTGCAGGGAGACCATAT
CATCCAAACCATAAACCCATTAAAATGTTTGTGGTTTGCTTGGCTGTAATTTTCAAAGTAGTTAATTGAGGACAA
AGGGTAATGCAGAAGTGATAGCTTTGGTTTGCTGAGTCTTGTTTTAAGTGGCCTTGATATTTAAAACTATTCCTG
CCACCATTTCTTCTCCTTGGCCACTTCTTCCTTGCGTCTCCCTGCATGCTGCTTTATTTGCTTCTCCCTCCCCAA
CCACCTCATGGTATATTTAAGAGTGAAAGGGACAAACTAGTAGGTTTGTCAAGTTTAATATAAAGCACTGATGTA
ACTTGCTAGGTAAACGGAAAGATAAGTTCTAACTGCCTACTATCCAATGTCAGTTAATTGGTGTCTTCCCCCCTC
ATTTGCTCTCTTCCCTAAAATGTGTCCCAGATGCCTTCATTTGCTGTTTTACTTCTATGTTCTGCTTTTCCTCCT
CTCTTTGTTCCCTTCCTGTCTATCCATTGAGTTTATGAAATGGAAGAGTTAACTGCATGCACTAGTGTTTGGAGG
GTGTTGTGGTTTGTCTTTCTAATTAGGTGTATAGCCTATTCACTTTCCTAGGAATAAATCTCTTAACCTAAATTT
GAGTAGTCTGCATTTTGGCAACTCCTCTAAGCAGCTTGGTAGCCTAAGTACAGGTTGTTTTTTTAAAAAAGGAAA
AGCAGGAAGGAGGAGTGAATTTTATTAACATGTTTGCCAAATGTATTGAGATTTGGCCTCTGAAGAACACTTTTT
CAGTGTTAAGTTTCTTTACCTTAAGATTCCGAAATACTTTAGAATATTATTAATTTTAAGTCCTGTCTTTACATC
CTTTTGGAAAACTTGTATTACCATGAGTTTGGAAAAAGGACAACGAAAGGCTTTTCATGTAAAGATAAGATCTTT
AGCTATCTCTAACCCTGTCCTTTTTTCACTGCATTTTTTCTAGTTTTGCTTCATTGCTTATCATTAGGATAGGGT
AAGTGAAGTTTGCTATGCTGCTAGCATCCTAAGATGATACCTTTGTTGAAAGAATTGTGAATAGCATGATTCATT
TCTAGCAGAGGCTGAGTTTAGGACAGCAGCTTCCATTGAGAAGTCTTTCTGTGTCGTGAATAGCATTTTAATGAC
CTCTTGGCTCACATAAGCAAACAACATAGGGACGTATCTGCTATGAAAATCCACAAATTTTTCAGATAGTGCCCT
AAAAACAATTTTATATGCCTCACTGGTTGTTATTCTTAGGTTATTCCCACACTTGACTTTATCATTGTTTACTAC
TAGTAAAAAGCAGCATTGCCAAATAATCCCTAATTTTCCACTAAAAATATAATGAAATGATGTTAAGCTTTTTGA
AAAGTTTAGGTTAAACCTACTGTTGTTAGATTAATGTATTTGTTGCTTCCCTTTATCTGGAATGTGGCATTAGCT
TTTTTATTTTAACCCTCTTTAATTCTTATTCAATTCCATGACTTAAGGTTGGAGAGCTAAACACTGGGATTTTTG
GATAACAGACTGACAGTTTTGCATAATTATAATCGGCATTGTACATAGAAAGGATATGGCTACCTTTTGTTAAAT
CTGCACTTTCTAAATATCAAAAAAGGGAAATGAAGTATAAATCAATTTTTGTATAATCTGTTTGAAACATGAGTT
TTATTTGCTTAATATTAGCTTTGCCCCTTTTCTGTAAGTCTCTTGGGATCCTGTGTAGAAGCTGTTCTCATTAAA
CACCAAACAGTTAAGTCCATTCTCTGGTACTAGCTACAAATTCGGTTTCATATTCTACTTAACAATTTAAATAAA
CTGAAATATTTCTAGATGGTCTACTTCTGTTCATATAAAAACAAAACTTGATTTCCAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAA

FIGURE 4131

MAKKTYDLLFKLLLIGDSGVGKTCVLFRFSDDAFNTTFISTIGIDFKIKTVELQGKKIKLQIWDTAGQERFHTIT
TSYYRGAMGIMLVYDITNGKSFENISKWLRNIDEHANEDVERMLLGNKCDMDDKRVVPKGKGEQIAREHGIRFFE
TSAKANINIEKAFLTLAEDILRKTPVKEPNSENVDISSGGGVTGWKSKCC

FIGURE 4132A

CCGGTTCCCGCGGTCGCAGCTCCAGCCGCCTCCTCCGCGCAGCCGCCGCCTCAGCTGCTCGCTCTGTGGGTCGGT
CCTCTCCGGCACTTGGGCTCCAGTCGCGCCCTCCAAGCCCTTCAGGCCGCCCCAGTGTCCTCCTCCTTCTCCGGC
CAGACCCAGCCCCGCGAAG**ATG**GTGGACCGCGAGCAACTGGTGCAGAAAGCCCGGCTGGCCGAGCAGGCGGAGCG
CTACGACGACATGGCCGCGGCCATGAAGAACGTGACAGAGCTGAATGAGCCACTGTCGAATGAGGAACGAAACCT
TCTGTCTGTGGCCTACAAGAACGTTGTGGGGGCACGCCGCTCTTCCTGGAGGGTCATCAGTAGCATTGAGCAGAA
GACATCTGCAGACGGCAATGAGAAGAAGATTGAGATGGTCCGTGCGTACCGGGAGAAGATAGAGAAGGAGTTGGA
GGCTGTGTGCCAGGATGTGCTGAGCCTGCTGGATAACTACCTGATCAAGAATTGCAGCGAGACCCAGTACGAGAG
CAAAGTGTTCTACCTGAAGATGAAAGGGGACTACTACCGCTACCTGGCTGAAGTGGCCACCGGAGAGAAAAGGGC
GACGGTGGTGGAGTCCTCCGAGAAGGCCTACAGCGAAGCCCACGAGATCAGCAAAGAGCACATGCAGCCCACCCA
CCCCATCCGATTAGGCCTGGCTCTTAACTACTCCGTCTTCTACTATGAGATCCAGAACGCCCCAGAGCAAGCGTG
CCACTTGGCCAAGACCGCGTTCGACGACGCCATCGCCGAGCTTGACACCCTCAACGAGGACTCCTACAAGGACTC
CACGCTCATCATGCAGCTCCTCCGCGACAACCTCACGCTCTGGACGAGCGACCAGCAGGACGACGATGGCGGCGA
AGGCAACAAT**TAA**GGCCCCAGGGGAACTGGCAGCGCACGCGGATGCTACTACTGCAGTCTTTATTTTTTCCCAT
GAGTTGGGGGTCGGGTGGGGGAGGGAAAGGGAGGGATGACCTTCCCAGGGAGAAACCCACGACCTGTCCTGTCTT
TGATCGCCTCTTTGACATTTTTGCCAAAATACCACTAGTGGAAAGTCAGGCTAGCTGTGCTGGTATTGGAATAGC
AGCCTCACACTGGCGTCTGGACTGTTCTGTAGATTCATGCAAGTGGAGCTGTCTGTCTCTAATTTAACTTATTGC
TAGATAATAGGGTTTTCAGATGAAAAGAAAACTTAAAGAGGAATGGCCCTCATTCAGTAAGTTCTGTGGTTCCAG
TAAGGATTTTTATGTACATACGCTCTCGTCTCTCGTTTTGGGTACTTTCTATCTCATCTGTCTCGGCTCTGCATG
TTTTCCAGGGTGTAGCCTACAGACATGGAACAGTGTAAATCCCAGACTGACAGACTTAGAACCTGAGGTCTCATT
CATCCTTATGGTTTAGGCCTTGCCAGTTTTCCGAAGTCTCTGATTAGTTGACAGTATTAACACTAAATTGCAGTT
TACAGTATTTCTACATTACAGCCATATGTAACATCAAGCCATCGATTGTGTACTTTTCCTTTGCTAGTTGTTTGG
GCTTTAACATCCTTATTCAGCCTTATCCAGGTTGGTTTTGCTGTTGATCGGTCTCCTAGGCTAAATGAGAATGAA
AGCGACTTCAGGTTTTTGGTTCATAGGTGCTCGGCAGGTGGCTGTGGGATTTTTTTTTTTGGTCCTTCTTTCCTC
TTAACGTAAATCCACCACCAAAATTATTAATCCTCTTGAGAGAAACGTGAAACGCCACAAAAATAGAGAAAATTC
AGGTCTGTATGTCATGGATCGTGTTGGTATTTTCAGAGAACATCCCGCTTCTGAAGCTGCTGCAGCTCCCTCCTC
AGGGATCACACTGCCGTCACCCACTCTGCACTGGGGCGTTTCCTACTGCGCCTCGTGCTGGCGGACGCAGCTGGG
TGCAGAAGCTGTGGGGTCGGAGAGGCGTTTGGAGAAGGTCTGTGGTGCAGTGTGTGAAAATTCAGGTGCTAGAAG
CCTACTGGTAGAAAAACCCAAAAGGAAGAGCTATATCCTTAACCATTCTGTCCAATTTCGGGAGCCTTGTCAGTG
TGTCAGTTTTTCCTCCCCGAAGACACTCCTTCCCCAAGTAATTGTAGGAAGATAAAAAAACTGTTACCAGATAAC
AAACACTTAACTCCTATTTGACCAGAACTTTTTCCTCTCGAGATAGTTTTTTCTTTTTAATGAAAAAAGCATAGG
AATTGGAGATTGGCTTGTCTCACGCAGCCAGTGCACATTTGGAATTGACGGAAACAACGTTGCTATTTCCACCCA
TTTGTTTTCGGCAGCCTTAAGGCCCTCATTCTCATTTCGGGTGAATCTGTCTATCTGTGAACGTGGCCCGCATGT
GCATTCTTTTTTTTATATATATAAAGTCAGTGACGAGGCACTCCCGAGACGTGTAATGACACCACACTTGTTTTC
TTTGTTTCTTTGTTTTATTTAGGCAAGAAGAGGTGTGAGTAATTGAGGAAAAACTGACAGATGCTTTTGCTAATA
CCAAAATTGAGCTTACAATTAGGAACTGAGTATGTGTAACAGGATACAGGTGACAGTGAAGATAGAAGAACCACG
ATGACCACAGACTCAATGTGCTCTGTAACATCGCACAGTTTACCCAGCATGACTTTCCTTAGGAGGCCCCCTCCT
CACGCTAGAGTAAAAGTCCCAGTTAAGTGAAGCCTACCAGAAGAACTAGTAGAAGAAGCTTTGCCGCTTTTGTGC
CTCTCACAGGCGCCTAAAGTCATTGCCATGGGAGGAAGACGATTTGGGGGGGGAGGGGGGGGGCAGGGTAGGTGG
GGCTTTCCCTAATTTATCTTCATGTCCAGTGAGCAGTGTTGCGTTTTTCCTTGTAGCATTTGGAAATGATTTACT
GGAATTACAAAACCTATTTTTCCTTTAAATTTCAGCTTTGGCTCTGGCTGCTTTTTAGAATAATGCAAGATAAAA
ATCACACCTGAGGGCTGAAAACGGAGAGGGAATGGGAGACTTGATATTTAAGCAGCTTGAATGGTTTTTCTTTTC
TTTATTTTTAAAGAAATGCACTTGCCTATGATACTGTCTCTCCAGTGAAATGATTACTCCTCCATTACTCTATTG
ATACAATATTGTGCATGCTAGTGTTGTATTTCTATACAGTAGCTTGAAATTGATTAACTTATACTGTAGGTGTTA
TGTATTCCTATGACAAAAAAAATTAAGTCTTCAAATTTTTTAAAGGTTTTTTTTTTTTAATTTAATTTTTCCTTT
TGGGGGTAAAGTTTGCTCTACCAAATAGTGATTGTAACAAATTGATCTGTTTTGGATGTTGCTATAGTGACATGC
AGTTATATATTTTGTTTTTAAAAGGGGGGGAGCAAAAGAAACACCAGTGTTAGCTTAATCTTAATGTCTGGTGTT
TGTCATGGTGAAATTATAACTATTACAGTGTTGGAGAACAACAAATATGTTCTCTGAATGAGCCTTTGTGCTTTT
TGTCATGTTATGCAGTGAACTATTTTTAAGGTCTAATCAGTGATTATTTTTCCAGCTCCGTGTTTCTCTAAGGAA

FIGURE 4132B

TTATTTCACACACGGACCATCTTTAGCAGTTTCCTCAGTGATGGAATATCATGAATGTGAGTCATTATGTAGCTG
TCGTACATTGAGCAAATAAACTTACAGATCTGACGCC

FIGURE 4133

MVDREQLVQKARLAEQAERYDDMAAAMKNVTELNEPLSNEERNLLSVAYKNVVGARRSSWRVISSIEQKTSADGN
EKKIEMVRAYREKIEKELEAVCQDVLSLLDNYLIKNCSETQYESKVFYLKMKGDYYRYLAEVATGEKRATVVESS
EKAYSEAHEISKEHMQPTHPIRLGLALNYSVFYYEIQNAPEQACHLAKTAFDDAIAELDTLNEDSYKDSTLIMQL
LRDNLTLWTSDQQDDDGGEGNN

FIGURE 4134

GGAGGAAGCGGTGGCTGCTGCGGATGTCGGTGTGAGCGAGCGGCGCCTGAACACACGGCGGCTGCCGAGCGCCTG
ACCCGGGCCTGCGCCAGAGCCTGCACCGAGCTCCGGGGCCCCACACCCGCTACGGTGGCCCTGCGCCCGTTGCTA
CTGAGGCGGCGTGCTCTGCATTCTTCGCTGTCCAGGCCTGCCGGCTCTGGTGTCTGCTGGCTCCTCCTTGCTCGC
CTGCTCCCTCCTGCTTGCCTGAGTCACCGCCGCCGCCGCCGCCACAGCCATGGCCGAGAGTGGTGAAAGCGGCGG
TCCTCCGGGCTCCCAGGATAGCGCCGCCGGAGCCGAAGGTGCTGGCGCCCCCGCGGCCGCTGCCTCCGCGGAGCC
CAAAATCATGAAAGTCACCGTGAAGACCCCGAAGGAAAAGGAGGAATTCGCCGTGCCCGAGAATAGCTCCGTCCA
GCAGTTTAAGGAAGAAATCTCTAAACGTTTTAAATCACATACTGACCAACTTGTGTTGATATTTGCTGGAAAAAT
TTTGAAAGATCAAGATACCTTGAGTCAGCATGGAATTCATGATGGACTTACTGTTCACCTTGTCATTAAAACACA
AAACAGGCCTCAGGATCATTCAGCTCAGCAAACAAATACAGCTGGAAGCAATGTTACTACATCATCAACTCCTAA
TAGTAACTCTACATCTGGTTCTGCTACTAGCAACCCTTTTGGTTTAGGTGGCCTTGGGGGACTTGCAGGTCTGAG
TAGCTTGGGTTTGAATACTACCAACTTCTCTGAACTACAGAGTCAGATGCAGCGACAACTTTTGTCTAACCCTGA
AATGATGGTCCAGATCATGGAAAATCCCTTTGTTCAGAGCATGCTCTCAAATCCTGACCTGATGAGACAGTTAAT
TATGGCCAATCCACAAATGCAGCAGTTGATACAGAGAAATCCAGAAATTAGTCATATGTTGAATAATCCAGATAT
AATGAGACAAACGTTGGAACTTGCCAGGAATCCAGCAATGATGCAGGAGATGATGAGGAACCAGGACCGAGCTTT
GAGCAACCTAGAAAGCATCCCAGGGGGATATAATGCTTTAAGGCGCATGTACACAGATATTCAGGAACCAATGCT
GAGTGCTGCACAAGAGCAGTTTGGTGGTAATCCATTTGCTTCCTTGGTGAGCAATACATCCTCTGGTGAAGGTAG
TCAACCTTCCCGTACAGAAAATAGAGATCCACTACCCAATCCATGGGCTCCACAGACTTCCCAGAGTTCATCAGC
TTCCAGCGGCACTGCCAGCACTGTGGGTGGCACTACTGGTAGTACTGCCAGTGGCACTTCTGGGCAGAGTACTAC
TGCGCCAAATTTGGTGCCTGGAGTAGGAGCTAGTATGTTCAACACACCAGGAATGCAGAGCTTGTTGCAACAAAT
AACTGAAAACCCACAACTGATGCAAAACATGTTGTCTGCCCCCTACATGAGAAGCATGATGCAGTCACTAAGCCA
GAATCCTGACCTTGCTGCACAGATGATGCTGAATAATCCCCTATTTGCTGGAAATCCTCAGCTTCAAGAACAAAT
GAGACAACAGCTCCCAACTTTCCTCCAACAAATGCAGAATCCTGATACACTATCAGCAATGTCAAACCCTAGAGC
AATGCAGGCCTTGTTACAGATTCAGCAGGGTTTACAGACATTAGCAACGGAAGCCCCGGGCCTCATCCCAGGGTT
TACTCCTGGCTTGGGGGCATTAGGAAGCACTGGAGGCTCTTCGGGAACTAATGGATCTAACGCCACACCTAGTGA
AAACACAAGTCCCACAGCAGGAACCACTGAACCTGGACATCAGCAGTTTATTCAGCAGATGCTGCAGGCTCTTGC
TGGAGTAAATCCTCAGCTACAGAATCCAGAAGTCAGATTTCAGCAACAACTGGAACAACTCAGTGCAATGGGATT
TTTGAACCGTGAAGCAAACTTGCAAGCTCTAATAGCAACAGGAGGTGATATCAATGCAGCTATTGAAAGGTTACT
GGGCTCCCAGCCATCATAGCAGCATTTCTGTATCTTGAAAAAATGTAATTTATTTTTGATAACGGCTCTTAAACT
TTAAAATACCTGCTTTATTTCATTTTGACTCTTGGAATTCTGTGCTGTTATAAACAAACCCAATATGATGCATTT
TAAGGTGGAGTACAGTAAGATGTGTGGGTTTTTCTGTATTTTTCTTTTCTGGAACAGTGGGAATTAAGGCTACTG
CATGCATCACTTCTGCATTTATTGTAATTTTTTAAAAACATCACCTTTTATAGTTGGGTGACCAGATTTTGTCCT
GCATCTGTCCAGTTTATTTGCTTTTTAAACATTAGCCTATGGTAGTAATTTATGTAGAATAAAAGCATTAAAAAG
AAGCAAATCATTTGCACTCTATAATTTGTGGTACAGTATTGCTTATTGTGACTTTGGCATGCATTTTTGCAAACA
ATGCTGTAAGATTTATACTACTGATAATTTTGTTTTATTTGTATACAATATAGAGTATGCACATTTGGGACTGCA
TTTCTGGAAACATACTGCAATAGGCTCTCTGAGCAAAACACCTGTAACTAAAAAAGTGAAGATAAGAAAATACTC
TTAAAGCTGAGTATTTCCTAATTGTATAGAATCTTACAGCATCTTTGACAAACATCTCCCAGCAAAAGTGCCGGT
TAGTCAGGTTTGTTGAAAATACAGTAGAAAAGCTGATTCTGGTTATCTCTTTAAGGACAATTAATTGTACAGACA
CATAATGTAACATTGTCTCAACATTCATTCACAGATTGACTGTAAATTACCTTAATCTTTGTGCAGACTGAAGGA
ACACTGTAGTATACCCCAAAGTGCATTTGCCTAGGACTTCTCAGCTTCTCCCATAGGTAGTTTAACAGGCATTAA
AATTTGTAATTGAAATGTTGCTTTCACTCAAAAAAAAAAAAAAAAAAAA

FIGURE 4135

MAESGESGGPPGSQDSAAGAEGAGAPAAAASAEPKIMKVTVKTPKEKEEFAVPENSSVQQFKEEISKRFKSHTDQ
LVLIFAGKILKDQDTLSQHGIHDGLTVHLVIKTQNRPQDHSAQQTNTAGSNVTTSSTPNSNSTSGSATSNPFGLG
GLGGLAGLSSLGLNTTNFSELQSQMQRQLLSNPEMMVQIMENPFVQSMLSNPDLMRQLIMANPQMQQLIQRNPEI
SHMLNNPDIMRQTLELARNPAMMQEMMRNQDRALSNLESIPGGYNALRRMYTDIQEPMLSAAQEQFGGNPFASLV
SNTSSGEGSQPSRTENRDPLPNPWAPQTSQSSSASSGTASTVGGTTGSTASGTSGQSTTAPNLVPGVGASMFNTP
GMQSLLQQITENPQLMQNMLSAPYMRSMMQSLSQNPDLAAQMMLNNPLFAGNPQLQEQMRQQLPTFLQQMQNPDT
LSAMSNPRAMQALLQIQQGLQTLATEAPGLIPGFTPGLGALGSTGGSSGTNGSNATPSENTSPTAGTTEPGHQQF
IQQMLQALAGVNPQLQNPEVRFQQQLEQLSAMGFLNREANLQALIATGGDINAAIERLLGSQPS

FIGURE 4136

GGAGGAAGCGGTGGCTGCTGCGGATGTCGGTGTGAGCGAGCGGCGCCTGAACACACGGCGGCTGCCGAGCGCCTG
ACCCGGGCCTGCGCCAGAGCCTGCACCGAGCTCCGGGGCCCCACACCCGCTACGGTGGCCCTGCGCCCGTTGCTA
CTGAGGCGGCGTGCTCTGCATTCTTCGCTGTCCAGGCCTGCCGGCTCTGGTGTCTGCTGGCTCCTCCTTGCTCGC
CTGCTCCCTCCTGCTTGCCTGAGTCACCGCCGCCGCCGCCGCCACAGCCATGGCCGAGAGTGGTGAAAGCGGCGG
TCCTCCGGGCTCCCAGGATAGCGCCGCCGGAGCCGAAGGTGCTGGCGCCCCCGCGGCCGCTGCCTCCGCGGAGCC
CAAAATCATGAAAGTCACCGTGAAGACCCCGAAGGAAAAGGAGGAATTCGCCGTGCCCGAGAATAGCTCCGTCCA
GCAGTTTAAGGAAGAAATCTCTAAACGTTTTAAATCACATACTGACCAACTTGTGTTGATATTTGCTGGAAAAAT
TTTGAAAGATCAAGATACCTTGAGTCAGCATGGAATTCATGATGGACTTACTGTTCACCTTGTCATTAAAACACA
AAACAGGCCTCAGGATCATTCAGCTCAGCAAACAAATACAGCTGGAAGCAATGTTACTACATCATCAACTCCTAA
TAGTAACTCTACATCTGGTTCTGCTACTAGCAACCCTTTTGGTTTAGGTGGCCTTGGGGGACTTGCAGGTCTGAG
TAGCTTGGGTTTGAATACTACCAACTTCTCTGAACTACAGAGTCAGATGCAGCGACAACTTTTGTCTAACCCTGA
AATGATGGTCCAGATCATGGAAAATCCCTTTGTTCAGAGCATGCTCTCAAATCCTGACCTGATGAGACAGTTAAT
TATGGCCAATCCACAAATGCAGCAGTTGATACAGAGAAATCCAGAAATTAGTCATATGTTGAATAATCCAGATAT
AATGAGACAAACGTTGGAACTTGCCAGGAATCCAGCAATGATGCAGGAGATGATGAGGAACCAGGACCGAGCTTT
GAGCAACCTAGAAAGCATCCCAGGGGGATATAATGCTTTAAGGCGCATGTACACAGATATTCAGGAACCAATGCT
GAGTGCTGCACAAGAGCAGTTTGGTGGTAATCCATTTGCTTCCTTGGTGAGCAATACATCCTCTGGTGAAGGTAG
TCAACCTTCCCGTACAGAAAATAGAGATCCACTACCCAATCCATGGGCTCCACAGACTTCCCAGAGTTCATCAGC
TTCCAGCGGCACTGCCAGCACTGTGGGTGGCACTACTGGTAGTACTGCCAGTGGCACTTCTGGGCAGAGTACTAC
TGCGCCAAATTTGGTGCCTGGAGTAGGAGCTAGTATGTTCAACACACCAGGAATGCAGAGCTTGTTGCAACAAAT
AACTGAAAACCCACAACTGATGCAAAACATGTTGTCTGCCCCCTACATGAGAAGCATGATGCAGTCACTAAGCCA
GAATCCTGACCTTGCTGCACAGATGATGCTGAATAATCCCCTATTTGCTGGAAATCCTCAGCTTCAAGAACAAAT
GAGACAACAGCTCCCAACTTTCCTCCAACAAATGCAGAATCCTGATACACTATCAGCAATGTCAAACCCTAGAGC
AATGCAGGCCTTGTTACAGATTCAGCAGGGTTTACAGACATTAGCAACGGAAGCCCCGGGCCTCATCCCAGGGTT
TACTCCTGGCTTGGGGGCATTAGGAAGCACTGGAGGCTCTTCGGGAACTAATGGATCTAACGCCACACCTAGTGA
AAACACAAGTCCCACAGCAGGAACCACTGAACCTGGACATCAGCAGTTTATTCAGCAGATGCTGCAGGCTCTTGC
TGGAGTAAATCCTCAGCTACAGAATCCAGAAGTCAGATTTCAGCAACAACTGGAACAACTCAGTGCAATGGGATT
TTTGAACCGTGAAGCAAACTTGCAAGCTCTAATAGCAACAGGAGGTGATATCAATGCAGCTATTGAAAGGTTACT
GGGCTCCCAGCCATCATAGCAGCATTTCTGTATCTTGAAAAAATGTAATTTATTTTTGATAACGGCTCTTAAACT
TTAAAATACCTGCTTTATTTCATTTTGACTCTTGGAATTCTGTGCTGTTATAAACAAACCCAATATGATGCATTT
TAAGGTGGAGTACAGTAAGATGTGTGGGTTTTTCTGTATTTTTCTTTTCTGGAACAGTGGGAATTAAGGCTACTG
CATGCATCACTTCTGCATTTATTGTAATTTTTTAAAAACATCACCTTTTATAGTTGGGTGACCAGATTTTGTCCT
GCATCTGTCCAGTTTATTTGCTTTTTAAACATTAGCCTATGGTAGTAATTTATGTAGAATAAAAGCATTAAAAAG
AAGCAAATCATTTGCACTCTATAATTTGTGGTACAGTATTGCTTATTGTGACTTTGGCATGCATTTTTGCAAACA
ATGCTGTAAGATTTATACTACTGATAATTTTGTTTTATTTGTATACAATATAGAGTATGCACATTTGGGACTGCA
TTTCTGGAAACATACTGCAATAGGCTCTCTGAGCAAAACACCTGTAACTAAAAAAGTGAAGATAAGAAAATACTC
TTAAAGCTGAGTATTTCCTAATTGTATAGAATCTTACAGCATCTTTGACAAACATCTCCCAGCAAAAGTGCCGGT
TAGTCAGGTTTGTTGAAAATACAGTAGAAAAGCTGATTCTGGTTATCTCTTTAAGGACAATTAATTGTACAGACA
CATAATGTAACATTGTCTCAACATTCATTCACAGATTGACTGTAAATTACCTTAATCTTTGTGCAGACTGAAGGA
ACACTGTAGTATACCCCAAAGTGCATTTGCCTAGGACTTCTCAGCTTCTCCCATAGGTAGTTTAACAGGCATTAA
AATTTGTAATTGAAATGTTGCTTTCACTCAAAAAAAAAAAAAAAAAAAA

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FIGURE 4137

MAESGESGGPPGSQDSAAGAEGAGAPAAAASAEPKIMKVTVKTPKEKEEFAVPENSSVQQFKEEISKRFKSHTDQ
LVLIFAGKILKDQDTLSQHGIHDGLTVHLVIKTQNRPQDHSAQQTNTAGSNVTTSSTPNSNSTSGSATSNPFGLG
GLGGLAGLSSLGLNTTNFSELQSQMQRQLLSNPEMMVQIMENPFVQSMLSNPDLMRQLIMANPQMQQLIQRNPEI
SHMLNNPDIMRQTLELARNPAMMQEMMRNQDRALSNLESIPGGYNALRRMYTDIQEPMLSAAQEQFGGNPFASLV
SNTSSGEGSQPSRTENRDPLPNPWAPQTSQSSSASSGTASTVGGTTGSTASGTSGQSTTAPNLVPGVGASMFNTP
GMQSLLQQITENPQLMQNMLSAPYMRSMMQSLSQNPDLAAQMQNPDTLSAMSNPRAMQALLQIQQGLQTLATEAP
GLIPGFTPGLGALGSTGGSSGTNGSNATPSENTSPTAGTTEPGHQQFIQQMLQALAGVNPQLQNPEVRFQQQLEQ
LSAMGFLNREANLQALIATGGDINAAIERLLGSQPS

FIGURE 4138

CTCATTCGTTCCCAGCAGGCCCTGCGCGCGGCAACATGGCGGGGTCCAGGTGGAGGTCTTGAGGCTATCAGATCG
GTATGGCATTGGCGTCCGGGCCCGCAAGGCGGGCGCTAGCTGGCTCCGGGCAGCTCGGCCTTGGGGGCTTCGGGG
CCCCGAGACGCGGGGCGTATGAGTGGGGCGTGCGCTCCACGCGGAAGTCGGAGCCTCCTCCCCTGGATAGGGTGT
ACGAGATCCCTGGACTGGAGCCCATCACCTTTGCGGGGAAGATGCACTTCGTGCCCTGGCTGGCGCGGCCGATCT
TTCCGCCCTGGGACCGCGGCTACAAGGACCCAAGGTTCTACCGCTCGCCCCCTCTTCACGAGCATCCGCTGTACA
AAGACCAGGCCTGCTATATCTTTCACCACCGTTGCCGCCTTCTCGAGGGTGTAAAGCAGGCCCTCTGGCTCACCA
AGACCAAGTTAATAGAAGGCCTTCCCGAGAAAGTGCTTAGCCTTGTTGATGATCCAAGGAACCACATAGAGAACC
AAGACGAGTGCGTTCTGAATGTGATCTCTCACGCCCGTCTCTGGCAGACCACTGAGGAAATCCCCAAGAGAGAGA
CCTACTGCCCGGTCATCGTGGACAACCTAATACAGCTGTGTAAATCTCAGATTCTCAAGCATCCTTCTCTGGCCA
GGAGGATCTGTGTCCAAAACTCCACGTTTTCTGCTACCTGGAACCGAGAGTCTCTTCTCCTTCAAGTCCGTGGTT
CTGGTGGAGCCCGACTGAGCACTAAGGATCCTCTGCCCACCATCGCCTCCAGAGAGGAGATTGAAGCTACTAAGA
ATCATGTTCTAGAGACCTTCTACCCCATATCACCCATCATCGATCTTCATGAATGCAATATTTATGATGTGAAAA
ATGACACAGGATTCCAGGAAGGCTATCCTTACCCCTATCCCCATACCCTGTACTTACTGGACAAAGCCAATTTAC
GACCACACCGCCTTCAACCAGATCAGCTGCGGGCCAAGATGATCCTGTTTGCTTTTGGCAGTGCCCTGGCTCAGG
CCCGGCTCCTCTATGGGAATGATGCCAAGGTCTTGGAGCAGCCCGTGGTGGTGCAGAGCGTGGGCACGGATGGAC
GTGTCTTCCATTTCCTAGTGTTTCAACTGAATACCACAGACCTGGACTGTAACGAGGGTGTCAAGAATTTGGCCT
GGGTGGACTCAGACCAGCTCCTCTATCAGCATTTTTGGTGTCTCCCAGTGATCAAAAAGAGAGTGGTTGTGGAAC
CTGTTGGGCCAGTTGGTTTCAAGCCAGAGACATTCAGAAAGTTTTTAGCTCTATATTTGCATGGTGCTGCGTGAG
CGGAGGACCCCTCTGAATCCTGAAACCCCTCTTGCCTCTCTTCCACGGAAGAGGGCCTGGGCCCCGTGGAGCCTC
AGTGCCCGTTTGGCCTGCTGCTCTCGCTGACAATAAAGAGCCCTTGCGTTGCAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAA

FIGURE 4139

MALASGPARRALAGSGQLGLGGFGAPRRGAYEWGVRSTRKSEPPPLDRVYEIPGLEPITFAGKMHFVPWLARPIF
PPWDRGYKDPRFYRSPPLHEHPLYKDQACYIFHHRCRLLEGVKQALWLTKTKLIEGLPEKVLSLVDDPRNHIENQ
DECVLNVISHARLWQTTEEIPKRETYCPVIVDNLIQLCKSQILKHPSLARRICVQNSTFSATWNRESLLLQVRGS
GGARLSTKDPLPTIASREEIEATKNHVLETFYPISPIIDLHECNIYDVKNDTGFQEGYPYPYPHTLYLLDKANLR
PHRLQPDQLRAKMILFAFGSALAQARLLYGNDAKVLEQPVVVQSVGTDGRVFHFLVFQLNTTDLDCNEGVKNLAW
VDSDQLLYQHFWCLPVIKKRVVVEPVGPVGFKPETFRKFLALYLHGAA

FIGURE 4140

AGCAGTGGCCCAAAGAGGAGCAGCAGACAAGAGTGCAGTGGTGGCTGCCGCCGCACCAGCCTCAGTGGCAGATGA
CACACCACCCCCCGAGCGTCGGAACAAGAGCGGTATCATCAGTGAGCCCCTCAACAAGAGCCTGCGCCGCTCCCG
CCCGCTCTCCCACTACTCTTCTTTTGGCAGCAGTGGTGGTAGTGGCGGTGGCAGCATGATGGGCGGAGAGTCTGC
TTGACAAGGCCACTGCGGCTGCAGCCTGGCCTTCCCTGTTGGCCAATGGGATGACCTGGCGGCGGCC**ATG**GCGGT
GGACAAAAGCAACCCTACCTCAAAGCACAAAAGTGGTGCTGTGGCCAGCCTGCTGAGCAAGGCAGAGCGGGCCAC
GGAGCTGGCAGCCGAGGGACAGCTGACGCTGCAGCAGTTTGCGCAGTCCACAGAGATGCTGAAGCGCGTGGTGCA
GGAGCATCTCCCGCTGATGAGCGAGGCGGGTGCTGGCCTGCCTGACATGGAGGCTGTGGCAGGTGCCGAAGCCCT
CAATGGCCAGTCCGACTTCCCCTACCTGGGCGCTTTCCCCATCAACCCAGGCCTCTTCATTATGACCCCGGCAGG
TGTGTTCCTGGCCGAGAGCGCGCTGCACATGGCGGGCCTGGCTGAGTACCCCATGCAGGGAGAGCTGCCTCTGCC
ATCAGCTCCGGCAAGAAGAAGCGGAAACGCTGCGGCATTGTGCGCGCCCTGCCGGCGGCGCATCAACTGCGAGCA
GTGCAGCAGTTGTAGGAATCGAAAGACTGGCCATCAGATTTGCAAATTCAGAAAATGTGAGGAACTCAAAAAGAA
GCCTTCCGCTGCTCTGGAGAAGGTGATGCTTCCGACGGGAGCCGCCTTCCGGTGGTTTCAG**TGA**CGGCGGCGGAA
CCCAAAGCTGCCCTCTCCGTGCAATGTCACTGCTCGTGTGGTCTCCAGCAAGGGATTCGGGCGAAGACAAACGGA
TGCACCCGTCTTTAGAACCAAAAATATTCTCTCACAGATTTCATTCCTGTTTTTATATATATATTTTTTGTTGTC
GTTTTAACATCTCCACGTCCCTAGCATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4141

MAVDKSNPTSKHKSGAVASLLSKAERATELAAEGQLTLQQFAQSTEMLKRVVQEHLPLMSEAGAGLPDMEAVAGA
EALNGQSDFPYLGAFPINPGLFIMTPAGVFLAESALHMAGLAEYPMQGELPLPSAPARRSGNAAALCAPCRRRIN
CEQCSSCRNRKTGHQICKFRKCEELKKKPSAALEKVMLPTGAAFRWFQ

FIGURE 4142

CTCTCACGCAGCCAACATGGCTCCAGTGGAGCACGTTGTGGCGGATGCTGGGGCTTTCCTGCGGCATGCGGCTCT
GCAGGACATCGGGAAGAACATTTACACCATCCGGGAGGTGGTCACTGAGATTCGGGACAAGGCCACACGCAGGCG
GCTCGCTGTCCTGCCCTACGAGCTGCGGTTCAAGGAGCCCTTACCGGAATACGTGCGGCTGGTGACTGAGTTTTC
AAAGAAAACAGGAGACTACCCCAGCCTCTCTGCCACGGACATCCAAGTGCTTGCACTCACATACCAGTTGGAAGC
AGAGTTTGTTGGGGTGTCTCACCTAAAACAAGAACCACAGAAGGTTAAGGTGAGCTCATCGATTCAGCACCCAGA
AACACCTCTGCACATTTCTGGTTTCCATCTGCCCTACAAGCCTAAACCCCCACAAGAAACAGAAAAAGGACACTC
AGCTTGTGAGCCTGAGAACCTGGAATTTAGTTCCTTCATGTTCTGGAGAAACCCTTTGCCCAACATCGATCATGA
ACTGCAGGAGCTGCTGATTGACAGAGGTGAGGACGTTCCAAGTGAGGAGGAGGAGGAGGAAGAAAACGGGTTTGA
AGACAGAAAAGATGACAGCGATGACGACGGGGGTGGCTGGATAACCCCCAGTAACATCAAGCAGATCCAGCAGGA
GCTGGAGCAGTGTGACGTCCCCGAGGACGTGCGGGTTGGCTGCCTGACCACAGACTTCGCCATGCAGAATGTTCT
GCTGCAGATGGGGCTGCACGTGCTGGCGGTGAACGGCATGCTGATTCGTGAGGCCCGGAGCTACATCTTGCGCTG
CCATGGCTGTTTCAAGACAACGTCTGACATGAGCCGAGTGTTCTGCTCACACTGTGGGAACAAGACCCTGAAGAA
AGTGTCCGTGACCGTCAGCGACGACGGCACCCTGCACATGCACTTCTCCCGCAACCCCAAGGTGCTGAACCCCCG
CGGCCTCCGGTACTCGCTTCCCACTCCCAAAGGGGGCAAATACGCCATCAACCCCCATCTCACCGAGGATCAGCG
CTTCCCTCAGCTGCGACTCTCCCAAAAGGCCAGGCAGAAAACCAACGTGTTCGCCCCTGACTACATCGCCGGGGT
GTCACCCTTTGTCGAGAATGACATCTCCAGCCGCTCAGCTACCCTGCAGGTCCGGGACAGCACCTTGGGAGCTGG
GCGGAGACGCTTAAATCCCAACGCTTCCAGAAAGAAGTTTGTGAAGAAAAGGTGAAGAGCGAGTTCCCGCAGGCA
AATTGGATGGGCGTCTGGCCGCCGTGGAGTTCCGGTGACCCATTTCCCCAGCCGTGTCGTCTCCAGGACCACCCG
ATGGAAATAACAGGCGGGCTTCACGGTGCGGCTCTGTCCGCCCATGCCCCGCTGGGTCTGCAGGGAACTGGACTG
TCCCATGGCCTGTGAGCACCGGAGCGCCTGGCTGCCTGCCAAGGAAGTGCAATTGCATAAAAACAGAAAGAACAA
CGCCCTGGAGCCAATCTTCAAGAAAGGAATTTCCAAAGGATAATATTTTTCTAATAAATGCGGCTGCAACCTCCT
GTGCATTTAATTAAATAGGCCAAATTTTTGCTGCTTAGGTCATCTCAAGGCTGATACTTGAGCTGTGTGCCCAGA
GATCATGCATTTAGATTTATATTTTTGCCAGAAAATACAAGGTTATAATAAAACTAAGAACTACCAAAAAAAAAA
AAAAAAAA

FIGURE 4143

MAPVEHVVADAGAFLRHAALQDIGKNIYTIREVVTEIRDKATRRRLAVLPYELRFKEPLPEYVRLVTEFSKKTGD
YPSLSATDIQVLALTYQLEAEFVGVSHLKQEPQKVKVSSSIQHPETPLHISGFHLPYKPKPPQETEKGHSACEPE
NLEFSSFMFWRNPLPNIDHELQELLIDRGEDVPSEEEEEEENGFEDRKDDSDDDGGGWITPSNIKQIQQELEQCD
VPEDVRVGCLTTDFAMQNVLLQMGLHVLAVNGMLIREARSYILRCHGCFKTTSDMSRVFCSHCGNKTLKKVSVTV
SDDGTLHMHFSRNPKVLNPRGLRYSLPTPKGGKYAINPHLTEDQRFPQLRLSQKARQKTNVFAPDYIAGVSPFVE
NDISSRSATLQVRDSTLGAGRRRLNPNASRKKFVKKR

FIGURE 4144

CGGGAGTAGAGATGGCCGCGCTTGCACCGCTGCCCCCGCTCCCCGCACAGTTCAAGAGCATACAGCATCATCTGA
GGACGGCTCAGGAGCATGACAAGCGAGACCCTGTGGTGGCTTATTACTGTCGTTTATACGCAATGCAGACTGGAA
TGAAGATCGATAGTAAAACTCCTGAATGTCGCAAATTTTTATCAAAGTTAATGGATCAGTTAGAAGCTCTAAAGA
AGCAGTTGGGTGATAATGAAGCTATTACTCAAGAAATAGTGGGCTGTGCCCATTTGGAGAATTATGCTTTGAAAA
TGTTTTTGTATGCAGACAATGAAGATCGTGCTGGACGATTTCACAAAAACATGATCAAGTCCTTCTATACTGCAA
GTCTTTTGATAGATGTCATAACAGTATTTGGAGAACTCACTGATGAAAATGTGAAACACAGGAAGTATGCCAGAT
GGAAGGCAACATACATCCATAATTGTTTAAAGAATGGGGAGACTCCTCAAGCAGGCCCTGTTGGAATTGAAGAAG
ATAATGATATTGAAGAAAATGAAGATGCTGGAGCAGCCTCTCTGCCCACTCAGCCAACTCAGCCATCATCATCTT
CAACTTATGACCCAAGCAACATGCCATCAGGCAACTATACTGGAATACAGATTCCTCCGGGTGCACACGCTCCAG
CTAATACACCAGCAGAAGTGCCTCACAGCACAGGTGTAGCAAGTAATACTATCCAACCTACTCCACAGACTATAC
CTGCCATTGATCCCGCACTTTTCAATACAATTTCCCAGGGGGATGTTCGTCTAACCCCAGAAGACTTTGCTAGAG
CTCAGAAGTACTGCAAATATGCTGGCAGTGCTTTGCAGTATGAAGATGTAAGCACTGCTGTCCAGAATCTACAAA
AGGCTCTCAAGTTACTGACGACAGGCAGAGAATGAAGCCTTTGTATGACAGACCCATGTATTTTTGGCATGAGGA
ACTAACAGTCCATTACTCTATCTTCAGCCTATCAGGATCACAGTTTTCATTGTCCATTTACTAGATTCAATCGTC
TCTGAGTATATAGGGCTGATGTTAGCAAGACCCTAAAAATGTCCATTGAACCCTGCTTCAAAAAATGAAAACACA
CCTCTATAAAATGTGTACTGGGAATAAGCTTTGTATTTACATACATTAGGGGAATTTTTTAAAATCTGTAATGTT
TGGACAAACAGATGATATTACTTTGCTATAAAATTATAAATGTAACTTTTAATAAAGATAGCCAGAATATTCTAA
ATTAGAAATTACGTTTTTGTTTCCCTCAAGACATAAAACAAATATAAACATTCTAAACTGCTGGATGAATCTGAA
AAGACATTAAGTTCAAATTTTAATTTATTCTCATATTAAATATAACTCCATTAAAAGTTTAAAATTTCATGGGAG
AAAATATAATAAGGTAAAGAGGTAGAATCACTTTCAGACTTAAGAATAATGTTGATTTCCCAAGTGCTTTACCTT
ATCTGTTAAAGCGTAAGATGAATTGGTATTTGCTTCATAGGCAGTTTGACTGCATGTATTAGAGAATGAAAAGAA
GATATTTGTAGTAATGCCTGGAAACTTGGTGCTTTAAATTAAGGTACTCCTCTGCTGCTGTAGAATGGATTCCAC
ACAGTGGATAGCTATGGGTGATTCAGAGTATTATGTTTAGATTCCCATTTGTTAAGTTTATAAGTTTTGTGGGGA
ATTATGAACTTACTGTGTACTACCTGCATTTGTGCTGTGTGAAAAATAAATACAAGGATTCGTTTAGCTAATTCA
ACTAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4145

MAALAPLPPLPAQFKSIQHHLRTAQEHDKRDPVVAYYCRLYAMQTGMKIDSKTPECRKFLSKLMDQLEALKKQLG
DNEAITQEIVGCAHLENYALKMFLYADNEDRAGRFHKNMIKSFYTASLLIDVITVFGELTDENVKHRKYARWKAT
YIHNCLKNGETPQAGPVGIEEDNDIEENEDAGAASLPTQPTQPSSSSTYDPSNMPSGNYTGIQIPPGAHAPANTP
AEVPHSTGVASNTIQPTPQTIPAIDPALFNTISQGDVRLTPEDFARAQKYCKYAGSALQYEDVSTAVQNLQKALK
LLTTGRE

FIGURE 4146A

CGGGGCCGAGGCGGAGGAGCGGCCGCCGCGCCGGGGCCCAGCCGGAGCCGCCGCCCTCGCCCTTGCCTTTGCCTG
CGCGGCTCAGAATCACCATCCGCGGCGGGGAGACGAGCCGGCCGTCCCGGGCCGGGGGACCCGCCCGCCATGGCC
ACCAAGGCTCGGGTTATGTATGATTTTGCTGCTGAACCTGGAAATAATGAACTGACGGTTAATGAAGGAGAAATC
ATCACAATCACAAATCCGGATGTAGGTGGAGGATGGCTGGAAGGAAGAAACATCAAAGGAGAACGAGGGCTGGTT
CCCACAGACTACGTTGAAATTTTACCCAGTGATGGAAAAGATCAATTTTCTTGTGGAAATTCAGTGGCTGACCAA
GCCTTCCTTGATTCTCTCTCAGCCAGCACAGCTCAGGCCAGTTCGTCGGCTGCCAGCAACAATCACCAGGTTGGC
AGTGGCAATGACCCCTGGTCAGCCTGGAGTGCCTCCAAATCTGGGAACTGGGAAAGCTCAGAAGGCTGGGGGGCC
CAGCCAGAGGGGGCTGGAGCCCAAAGAAACACAAACACTCCCAACAACTGGGACACTGCCTTCGGCCACCCCCAG
GCCTACCAAGGACCAGCAACTGGTGATGATGATGACTGGGATGAAGACTGGGATGGGCCCAAATCCTCTTCCTAC
TTTAAGGATTCAGAGTCAGCTGATGCAGGCGGCGCTCAGCGAGGAAACAGTCGTGCTAGTTCCTCATCCATGAAA
ATTCCCCTTAACAAATTTCCTGGATTTGCGAAACCTGGCACGGAACAGTATTTGTTGGCCAAACAACTAGCAAAA
CCCAAAGAGAAAATTCCCATCATTGTTGGAGATTATGGCCCAATGTGGGTTTATCCTACCTCTACTTTTGACTGT
GTGGTAGCAGATCCCAGGAAAGGCTCCAAAATGTATGGTCTAAAGAGCTACATCGAATATCAGCTAACACCTACT
AACACTAATCGATCTGTAAACCACAGGTATAAGCACTTTGACTGGTTATATGAGCGTCTCCTGGTTAAGTTTGGG
TCAGCCATTCCAATCCCTTCTCTTCCAGACAAACAAGTCACAGGCCGCTTTGAAGAGGAATTTATCAAAATGCGC
ATGGAGAGACTTCAGGCCTGGATGACCAGGATGTGTCGCCATCCAGTAATCTCAGAAAGTGAAGTTTTCCAGCAG
TTCCTAAATTTCCGAGATGAGAAGGAATGGAAAACTGGAAAGAGGAAGGCCGAGAGAGATGAGCTGGCGGGAGTC
ATGATATTTTCCACCATGGAACCAGAGGCACCTGACTTGGACTTAGTAGAAATAGAGCAGAAGTGCGAGGCTGTG
GGGAAGTTCACCAAGGCCATGGATGACGGCGTGAAGGAGCTGCTGACGGTGGGGCAGGAGCACTGGAAGCGCTGC
ACGGGCCCATTACCCAAGGAATATCAGAAGATAGGAAAGGCCTTGCAGAGTTTGGCCACAGTGTTCAGTTCCAGT
GGCTATCAAGGTGAAACAGATCTCAATGATGCAATAACAGAAGCAGGAAAGACTTATGAAGAAATTGCCAGTCTC
GTGGCAGAACAGCCAAAGAAAGATCTCCATTTCCTGATGGAATGTAATCACGAGTATAAAGGTTTTCTTGGCTGC
TTCCCTGACATCATTGGCACTCACAAGGGAGCAATAGAAAAAGTGAAAGAAAGTGACAAACTAGTTGCAACAAGT
AAAATCACCCTACAAGACAAACAGAACATGGTGAAGAGAGTCAGCATCATGTCTTACGCGTTGCAAGCTGAGATG
AATCACTTTCACAGTAACCGGATCTATGATTACAACAGTGTCATCCGCCTGTACCTGGAGCAGCAAGTGCAATTT
TACGAAACGATTGCAGAAAAGCTGAGGCAGGCCCTCAGCCGCTTTCCAGTGATGTAGGACAGAACGGGCCTTGAA
GAGAATGCCGCGTGCTTTCTCCTGACTTGGGGCAATGCAATTCAAAACTTTTTTCCCCTATTATTCAGAAAAAAA
AGGAAACAAAACCAAAAAGAAAGAGTTGCAAAAAACTGCATTTATTTTATTAGCCACCCTAAATGCGTCAGTTAT
TTAGGGATGGTCTTTTGTTCATTTCCGCATCCATTATTTAAACCAGTGGAAATTGTCTCTATTTTTGGAAAGTAC
TTAAAAGTTACCAGAATTTTCAATGGAAAATGAGGGGTTTCTCCCCACTGATATTTTACATAGAGTCATAATTTA
TATGTCTTATAAATTATAAGTCTTATATAATTTATAAGTCTCCCACAATCTTCCAGTTCTTACCCAGTGTCAGAT
AATTAATTACTAATTACTTTCTTAAAAACATGAACTATGCCAGAATAAAAAATATCTATGTTTGTATATTTTTAT
AACTCCTTTCAGTCCTCTGGGGCTCCTGTCATTGAGGGAAGTCGTTACGCCTTTCACTGCCACAGTTACAGCTCA
AGTGCTTACACTTCAAGAGGGAGGACGCTGGGGGCCCCTGGGGTGACTAGTGCCATCGTGGGTGTGTGGGCAGGT
GGGCCATCCCATGTCCCTCCAGGGGACCCCACAGCCTGGCAGATGAGCAGATACCCCTGGCCACCCATGTCCTCA
GCGACATTTCTGATGTGCTGCTCTTATGTGAGGACCAGTGCTTTCTCTCTTTGCACTTCCTTCCTAATCTTGGTT
AAGGCATGTTTTATGCCATGAAGAATACATTAGAAGAATTGAGGGACTTTGTAGAGAATTTTGTGGCTTTGGTCC
GACGGGTGAGTGGCTGTGCGGAGGCCTGTGTTCGGGAGGGCCTGGGGGAAGGAGGGCACCCAGCACCCCGGCGTC
TCTGGCCCTTTCTTATTCTTTGGCTCCTCATCCACCGTGATGAGAAGCGCTGCTGTGGCCACGGCACACTGCTTG
GCTTGGGTGGCGGGTTCATGGCCAGTTGGTGTCATCAGCAAAGAGAAAAAGCACAGGTTAGCTCCCCATTAGATG
GAAAAGTGTAGGGACTGAGAAGGGCTGCAGCCTCAGCAGTGTACAGAGTCCCCGGCGCTCTGAGGTTGGAGAGAA
AGAACAGACCAGCGCCCTTCCTGACTACATCCGAAACTTCACACAGGGTGTTTCTGAGCACCAGCACTTCCAGCG
CTTCACTTAACGGCATAAAGCAAAACAGGACCTTGGCACACCGTCAGCTCGAACTCAACACTGGCAGCCACCGTC
TCACCCCTGCGGAGGAGCGCTCCCGTCTCCCACAGGTGCCTTACCGCGTTCCCTCCCGCTGCTTTCATTTTTCTG
ACCTTAATAATTACGGGAAATGGAAAGTCTGGGCCAGCATCAATAAAATGACACCAAAAATAAGTAGATGAAATC
AAATGAATATGAGAACATCTTGTTCTTCAATATCACGGGTTTTTGTTAATGTTTCATAAGTAATTCTCCCCACTT
GATTTTTCTTCTATAAAATCCCATAGAACAATGTTTATGCTATAGCCATTTAATATATGTACAAATTGTAAAGAA
TATGTATAAATGTTTTACACGAATGTAAGAGCATGTAGAAGCCAACATATAAATAAATTGTTTAAAAAAACTGTA

FIGURE 4146B

CAGTAAATTCTCAAATCACTTTTTCAAAACACTTTTTGGACTTTGTGTGTGATTTTTGTTGTTGTTGTTAAGTAC
TTTTTATTCCAGCTGCTGAAAATGGTCCAGGTAATGAATTCTTCCCCAAATCCTATTTCTTCTGACATGAATTCA
TCATTTCAGTTCCGTAGGTCAAGTGTTGCGGTCCGGGAAGCGTATCATAACCACCTGGGAAGTTGCCAATGAAGC
AGACAAGTCTCCCAGTGTCTGACTCTCGGATATTTGGATTTGACTGGTGTGAGGCAAAGTGAAAAAGGGATGGGG
GAAATGGAGATGGCACGGGCTCCTCAGAGCGTGGTAGCCGACTTGAGGAAAAGCAGAGGGAATGTGAAAGAAAAT
AAGAGAATCCACGGGATTTGATGCCTGGAAGATTCTCCTTCAAGTGGCAACATGGCATATATATCCTTCTCCGGG
GAGTCACATGCACCATTTGGTTCTTAGATACGTTGATGTTTTGATTTTTAATGATTTGTATCAACCTGTAGGTAC
CACAGAAGAGCTGTAGTCATACAATCACATAACTTTTACAAATATAGTGG

FIGURE 4147

MATKARVMYDFAAEPGNNELTVNEGEIITITNPDVGGGWLEGRNIKGERGLVPTDYVEILPSDGKDQFSCGNSVA
DQAFLDSLSASTAQASSSAASNNHQVGSGNDPWSAWSASKSGNWESSEGWGAQPEGAGAQRNTNTPNNWDTAFGH
PQAYQGPATGDDDDWDEDWDGPKSSSYFKDSESADAGGAQRGNSRASSSSMKIPLNKFPGFAKPGTEQYLLAKQL
AKPKEKIPIIVGDYGPMWVYPTSTFDCVVADPRKGSKMYGLKSYIEYQLTPTNTNRSVNHRYKHFDWLYERLLVK
FGSAIPIPSLPDKQVTGRFEEEFIKMRMERLQAWMTRMCRHPVISESEVFQQFLNFRDEKEWKTGKRKAERDELA
GVMIFSTMEPEAPDLDLVEIEQKCEAVGKFTKAMDDGVKELLTVGQEHWKRCTGPLPKEYQKIGKALQSLATVFS
SSGYQGETDLNDAITEAGKTYEEIASLVAEQPKKDLHFLMECNHEYKGFLGCFPDIIGTHKGAIEKVKESDKLVA
TSKITLQDKQNMVKRVSIMSYALQAEMNHFHSNRIYDYNSVIRLYLEQQVQFYETIAEKLRQALSRFPVM

FIGURE 4148

AGTTCGACACACCATGCCGACTGTCAGCGTGAAGCGTGATCTGCTCTTCCAAGCCCTGGGCCGCACCTACACTGA
CGAAGAATTTGATGAACTATGTTTTGAATTTGGTCTGGAGCTTGATGAAATTACATCTGAGAAGGAAATAATAAG
TAAAGAACAAGGTAATGTAAAGGCAGCAGGAGCCTCTGATGTTGTTCTTTACAAAATTGACGTCCCTGCCAATAG
ATATGATCTCCTGTGTCTGGAAGGATTGGTTCGAGGACTTCAGGTCTTCAAAGAAAGGATAAAGGCTCCAGTGTA
TAAACGGGTAATGCCTGATGGAAAAATCCAGAAATTGATTATCACAGAAGAGACAGCTAAGATACGTCCTTTTGC
GGTAGCAGCAGTTCTCCGTAATATAAAGTTTACTAAAGATCGATATGACAGCTTCATTGAACTTCAGGAGAAATT
ACATCAGAATATTTGCAGGAAAAGAGCACTGGTTGCCATTGGTACCCATGATTTGGACACTTTGTCGGGCCCATT
TACTTATACTGCAAAGCGTCCTTCAGATATCAAATTCAAGCCTCTAAATAAGACCAAGGAGTATACAGCCTGTGA
ACTGATGAACATATACAAGACTGACAATCACCTGAAACATTATTTACATATCATTGAAAACAAACCCCTGTATCC
AGTTATCTATGATAGCAATGGTGTCGTCCTTTCAATGCCTCCCATCATCAATGGGGATCATTCCAGAATAACAGT
AAATACTAGAAATATTTTTATTGAATGCACGGGAACTGACTTTACTAAGGCAAAAATAGTTCTTGATATTATTGT
CACCATGTTCAGTGAATATTGTGAGAATCAATTTACGGTCGAAGCTGCTGAAGTGGTTTTTCCTAATGGAAAATC
ACATACCTTTCCAGAATTAGCTTACCGAAAGGAGATGGTGAGAGCTGACCTAATTAACAAAAAAGTTGGAATCAG
AGAAACTCCAGAAAATCTTGCCAAACTTCTGACCAGGATGTATTTAAAATCAGAAGTCATAGGTGATGGGAATCA
GATTGAGATTGAAATCCCTCCAACCAGAGCTGACATTATCCATGCATGTGATATTGTAGAAGATGCAGCTATTGC
TTATGGATATAACAACATTCAGATGACTCTCCCGAAAACTTACACCATAGCTAATCAATTTCCTCTTAATAAGCT
CACTGAACTTCTCCGACATGACATGGCAGCCGCTGGCTTCACTGAAGCACTTACCTTTGCCCTGTGCTCCCAAGA
AGATATTGCTGATAAACTAGGTGTGGATATCTCTGCAACAAAGGCAGTCCACATAAGTAATCCTAAAACAGCTGA
ATTTCAGGTGGCACGCACTACCCTTCTTCCTGGCCTCCTGAAGACCATAGCAGCAAATCGTAAGATGCCCCTTCC
ACTGAAACTGTTTGAAATCTCTGACATTGTAATAAAAGATTCTAATACAGATGTAGGTGCAAAAAACTACAGACA
TCTCTGTGCTGTTTATTACAACAAGAATCCTGGGTTTGAGATCATTCATGGGCTGCTGGACAGAATTATGCAGTT
GCTCGATGTGCCTCCTGGTGAAGACAAGGGGGGATATGTGATCAAAGCATCAGAAGGGCCTGCTTTCTTCCCCGG
GCGATGTGCAGAGATCTTTGCCAGGGTTCAAAGCGTCGGGAAGCTTGGGGTCCTTCATCCTGACGTTATCACCAA
ATTTGAGCTGACCATGCCCTGCTCCTCCCTAGAAATCAATATTGGACCCTTTTTGTGAAGATTGGTCTCTGTGGT
GTGATTCTCTTCCCAGGTGTCCCTTTCTCCTCCCCTAGTGTCCTTAAGTCCTCCTCCACAGGGAACATCTATTTG
GGCTTTGATGTTTAATAAAGTAGAAAGCACTGTCTGGCTGTGTGGGTAGAGACCATCCTTTCCCTGCATATTAGG
CCAGCTTGTGCCATATACCAGTGTGGTGTCTGTGTGTGAAGCTGCATTGTTGGGTAAAAGCCCCGTGGAGTGCTG
GAGAAATGCACTAGCAGAGTGCAGGATCTGTTCTGAAAGGCAGACGTGCTCCTCAGACATCAGAACATCACATTG
GAACGGATTACTCCTGCATAACAAGATCCCATTTCTTTCCTTATTGATAAAACAAGATAATCGATGAGAATTCAT
GTTGCATGAGTTCGAGATAACTGAGGGGTTTAGCTTTGATTTTCTACATTTGACATGTATTCATCATTGAGAAAC
ACTAAAATAACAATATTTTTAGAAAACGTTTAAGAATCAATTATGGTCCAACAATTATAGCTTCTGAGGTCAGTT
TAAAGTGAAAGAAAAATCTGTAATACAAGGATTCAAAATATGTGAGGGTGCATAGGTATTTTTTACTCTATCTGT
GATACTCTAAGATAGAGTACATGCAACAAAGATCTGTTCTGCTGTAAGAGTTAAAATGGACAAGTATTGATATCA
ATGCAGTATGAACATTAGGAAACAATGAGAAGCTTATTTTTGCCATAGGCCATACATGTTACTGTAATCAGTCAG
TTATAAAATCATGGTTTTAAATACTTAATTGAGCTACTAGTTTCTCTATTGTCCCAGGGAGATATTAGACCTCTC
TTTTTCTGAAGCTAAGCTTCAGCCAATCCTCCTTGTTTTATATCCTAATTTCCTTTCTTACTTCAATCTAGAATT
CTCCAGTAGGTACCATCTCTGGAAAAAAGCTGGGTCTCATGTTTGAGACAAGTTCCCAGGTACTATTGAAGTAAT
AAGAAATATGATAAAATATAATACTTTAAAGTCCCAGTAGAAATAGCTAACAAAGGCTGGGTGCGCTGTGGCTCA
TGCCTGTAATCCTAGCACTTTGGGAGGCTGAGGTGGGCAGATCACTTGAGGCCAATAGTTCGAGATCAGCCTGAC
CAACATGATGAAATGCCATCTCCACTAAAAATATAAAAATTAGCCAGGCATGGTGGTGTGGGCCTGCAGTCCCAG
CTACCTGGGAGGCTGAGTCAGGAAAATCTCTTGAACCAGGAGGTGGACGTTGCAGTGATCCCAGATTGTGCCACT
GCCCTCCAGCCTGGGTGACAGAGTGAGATTCTGTCTACAAAAA

FIGURE 4149

MPTVSVKRDLLFQALGRTYTDEEFDELCFEFGLELDEITSEKEIISKEQGNVKAAGASDVVLYKIDVPANRYDLL
CLEGLVRGLQVFKERIKAPVYKRVMPDGKIQKLIITEETAKIRPFAVAAVLRNIKFTKDRYDSFIELQEKLHQNI
CRKRALVAIGTHDLDTLSGPFTYTAKRPSDIKFKPLNKTKEYTACELMNIYKTDNHLKHYLHIIENKPLYPVIYD
SNGVVLSMPPIINGDHSRITVNTRNIFIECTGTDFTKAKIVLDIIVTMFSEYCENQFTVEAAEVVFPNGKSHTFP
ELAYRKEMVRADLINKKVGIRETPENLAKLLTRMYLKSEVIGDGNQIEIEIPPTRADIIHACDIVEDAAIAYGYN
NIQMTLPKTYTIANQFPLNKLTELLRHDMAAAGFTEALTFALCSQEDIADKLGVDISATKAVHISNPKTAEFQVA
RTTLLPGLLKTIAANRKMPLPLKLFEISDIVIKDSNTDVGAKNYRHLCAVYYNKNPGFEIIHGLLDRIMQLLDVP
PGEDKGGYVIKASEGPAFFPGRCAEIFARVQSVGKLGVLHPDVITKFELTMPCSSLEINIGPFL

FIGURE 4150

AGACTATCTTTCTAGACAAGGCAGTTGAGGAGGAGGGAGCGCTTGAGGGGGACTGGCCTGGCGTGCACTCCGCAC
CTCGGGGACATTATTGCGCGTGGAACGGCTGCTTTTGGAAGGCACAACTTCCTGAATGGACCATGACTCCCACCA
AAGATCCCTGTCTCTGATTCACCAAACAGCTTCAACCCTGAAACCAGGACGAGAAGTTGACAACATCTGAGTGGA
CAGCTAATTGACCTAAGACTTCAGACCAGACTATTGCCCAGAAGAAAAG**ATG**TTTGGTTTTCACAAGCCAAAGAT
GTACCGAAGTATAGAGGGCTGCTGTATTTGCAGAGCTAAGTCCTCCAGTTCTCGATTCACTGACAGTAAACGCTA
TGAAAAGGACTTCCAGAGCTGTTTTGGATTGCATGAGACTCGTTCAGGAGACATCTGCAATGCCTGTGTCCTGCT
TGTGAAAAGATGGAAGAAGTTGCCAGCAGGATCAAAAAAAAACTGGAATCATGTGGTAGATGCAAGGGCTGGACC
CAGTCTAAAGACTACATTGAAACCAAAGAAAGTGAAAACTCTATCTGGGAACAGGATAAAAAGCAACCAGATCAG
TAAACTGCAGAAGGAATTTAAACGTCATAATTCTGATGCTCACAGTACCACCTCAAGTGCCTCCCCAGCTCAATC
TCCTTGTTACAGTAACCAGTCAGATGACGGCTCAGATACAGAGATGGCTTCTGGTTCTAACAGAACACCAGTTTT
TTCCTTTTTAGATCTCACTTACTGGAAAAGACAGAAGATATGTTGTGGGATCATCTATAAAGGCCGTTTTGGGGA
AGTCCTCATTGACACACATCTCTTCAAGCCTTGCTGCAGCAATAAGAAAGCAGCTGCTGAGAAGCCAGAGGAGCA
GGGGCCAGAGCCTCTGCCCATCTCCACTCAGGAGTGG**TGA**CTGAGGTTTTTATGTAGAAGGGGAACAAAAAAAAA
AATCTGAATTTTGAAAAACCACAAAGCTACAAACTGACCCTCTTTTTTTTTTTTTTTTTGAGACGGAGTTTTG
CTCTTGTTACCCAGGCTGGAGTGCAGTGGCGTGATCTTGGCTCACTGCAACTTCCGTCTCCCGGGTTCAAGTGAT
TCTCCTGCCTCAGCCTCCCAAGTAGCTGGGTTTATAGGTGCCCGCCACCAGACCCGGCTAATTTTTTAGTTTTAG
TAGAGACGGGGTTTCACCACGTTGGCCAGGCTGGTCTTAAATGACCCTCTTATTTTTAACTTGGATACCTGCTAT
TCTGCCAAAAGACAATTTCTAGAGTAGTTTTGAATGGGTTGATTTCCCCCACTCCCACAAACTCTGAAGCCAGTG
TCTAGCTTACTAAAAAAAGAGTTGTATATAATATTTAAGATGCTGAGTATTTCATAGGAAAGCTGAATGCTGCTG
TAAAGTGCTCTTTAAGTCTTTTTTTTTTTAATCCCCTTCTAATGAATGAAACTAGGGGAATTTCAGGGGACAGAG
ATGGGATTTGTTGTATGATAAACTGTATGTAGTTTTTAGTCTTTCTGTTTTGAGAAGCAGTGGTTGGGGCATTTT
TAAGATGGCTGGCTACTCTTGTTTTCCCTCATGATAATAAATTTGTCATAACTCAGTAACATGAACTTGCCCCTA
GAGGTAGTTGTTAATAATTTTGAAATATTAAGGTCTTGCCAAGCTTCTGATGATTCACACCTGTACTACTGATTA
TTAAGCAGGACAGACTGAGCTTTCTGTTGCAAATACCTTGGAGGAGAAAGTAATTTCTAAATATACAGAGAGGTA
ACTTGACTATATATGTTGCATCCTGTGCCTCCCTTCATATTAATATTTGATAAAGATTTTAATTTATGTAAAACT
TCTAAAGCAGAATCAAAGCTCCTCTTGGGGAAATGGCAAGTCTTTAGGATAGGCAAGACCCTGTATGAATAGTAC
CAAAGCATTACCGCATGGTAGAGAACACACTCGATTAAAAATGTTAAGCTATCTGAAAAATAAAATGTGCAAGTC
TTCAGGATGGCACAAAACAAAGGTTAATGCTTCTTGGGGCACATTTCTTAGAGGGCTTGCTGAGTGTGTAAATAT
AATCGACTTTTGTTTGTGTTACATGACTTCTGTGACTTCATTGAAAATCTGCACAATTCAGTTTCAGCTCTGGAT
TACTTCAGTTGACCTTTGTGAAGGTTTTTATCTGTGTAGAATGGGTGTTTGACTTGTTTTAGCCTATTAAATTTT
TATTTTCTTTCACTCTGTATTAAAAGTAAAACTTACTAAAAGAAAAGAGGTTTGTGTTCACATTAAATGGTTTTG
GTTTGGCTTCTTTTAGTCAGGCTTTCTGAACATTGAGATATCCTGAACTTAGAGCTCTTCAATCCTAAGATTTTC
ATGAAAAGCCTCTCACTTGAACCCAAACCAGAGTACTCTTACTGCCTCTTTTCTAAATGTTCAGGAAAAGCATTG
CCAGTTCAGTCTTTTCAAAATGAGGGAGAAACATTTGCCTGCCTTGTAATAACAAGACTCAGTGCTTATTTTTTA
AACTGCATTTTAAAAATTGGATAGTATAATAACAATAAGGAGTAAGCCACCTTTTATAGGCACCCTGTAGTTTTA
TAGTTCTTAATCTAAACATTTTATATTTCCTTCTTTTGGAAAAAACCTACATGCTACAAGCCACCATATGCACAG
ACTATACAGTGAGTTGAGTTGGCTCTCCCACAGTCTTTGAGGTGAATTACAAAAGTCCAGCCATTATCATCCTCC
TGAGTTATTTGAAATGATTTTTTTTGTACATTTTGGCTGCAGTATTGGTGGTAGAATATACTATAATATGGATCA
TCTCTACTTCTGTATTTATTTATTTATTACTAGACCTCAACCACAGTCTTCTTTTTCCCCTTCCACCTCTCTTTG
CCTGTAGGATGTACTGTATGTAGTCATGCACTTTGTATTAATATATTAGAAATCTACAGATCTGTTTTGTACTTT
TTATACTGTTGGATACTTATAATCAAAACTTTTACTAGGGTATTGAATAAATCTAGTCTTACTAGAAAAAAAAAA
AAAAGAAAAAAAAAAAAAAAAA

FIGURE 4151

MFGFHKPKMYRSIEGCCICRAKSSSSRFTDSKRYEKDFQSCFGLHETRSGDICNACVLLVKRWKKLPAGSKKNWN
HVVDARAGPSLKTTLKPKKVKTLSGNRIKSNQISKLQKEFKRHNSDAHSTTSSASPAQSPCYSNQSDDGSDTEMA
SGSNRTPVFSFLDLTYWKRQKICCGIIYKGRFGEVLIDTHLFKPCCSNKKAAAEKPEEQGPEPLPISTQEW

FIGURE 4152

CTGGAAGGGCTGGGGCGGCGCTTGGGGCGGCCCAGCCGCCGCCTCCCGTTCTCCCCTCCGCAGCGGCGGCGGTGG
CGGAGAAGGAACTCGACACGCACCGACCGCCCTCCCGCCCCAGCCGAAGCGGAAGCTGTAGCCCGCTCTGGGCCG
GGGCCATGGGCGCCCCGCGCCGCCCGGGTC**ATG**AGGACGGAGGCGGAGGCAGCGGGGCCGCCGCTCGAGCCCGGG
GACTTTGTGCAACTGCCTGTGCCCGTCATCCAGCAGCTCTACCACTGGGACTGTGGCCTGGCCTGCTCCAGGATG
GTGCTGCGGTACCTGGGCCAGCTGGACGACAGTGAGTTTGAGAGAGCCCTGCAGAAGCTGCAGCTGACCAGGAGC
ATCTGGACCATCGACCTGGCCTACCTGATGCACCACTTTGGCGTGAGGCACCGCTTCTGTACCCAGACCCTGGGT
GTCGACAAGGGCTACAAGAACCAGTCCTTCTACAGGAAGCACTTTGACACAGAAGAGACCCGGGTGAATCAGCTG
TTTGCACAAGCAAAGGCCTGCAAGGTGCTGGTGGAGAAATGCACAGTGAGTGTGAAGGACATCCAGGCGCACCTG
GCTCAGGGCCATGTGGCCATCGTGCTGGTGAACTCGGGGGTGCTGCACTGTGACCTGTGCTCCAGCCCTGTCAAG
TACTGCTGCTTCACCCCCAGTGGCCACCACTGCTTCTGCCGCACTCCTGACTACCAGGGCCACTTCATCGTGCTG
CGTGGCTACAACCGGGCCACTGGCTGCATCTTCTACAACAACCCAGCCTATGCCGACCGAATGTGCAGCACCAGC
ATCAGTAACTTTGAGGAGGCCAGAACCAGCTATGGCACAGATGAGGACATCCTCTTTGTCTACTTGGACAGC**TGA**

CAGCAGGAGCCTGGTGCGCCTAGGCCCTCGGACCCCATCCCCACCCCAGCCGGGCCCGCTCAGGACGCCCAGGAG
TACCCATGCACAGCAGCTGTGGGGTGTGGGCATCTTCAGGTGGTGTTCTGGTAAAATCGTTAGAATAGCTGTATG
AAGGAAACCAGTGGGAGGAAATGAAGTTTTCAGGATGGTGGGATGTGATTTAGACAGTGCACATGCTGTTAGGGC
TGTCACTAGGGAGTGGCCTTCATGGAGGGTGGTAACAGCACCTCAGTCCAGCCAAAATGTTTAGAAACACTCAGT
CTCTGGTCCCAGAGGATGGCTTCTCAGGGCATGCCACAAGTTAAAGGTCACCTTCCTGAAAGATGAATGAGAAAG
CTGCCCATTCTCAAGACTCATCTGCCTAGGGAGGGTCACAGAGGCAGGATGTAAGACACACTGTGTTGCATTCTT
GCACAAGTCATGAAAATGGAGCCAGAGAGCCTGGACATCAGGGACTTTTGCCCACAGCACATGACACCGACAGCT
GCCCAGCCTGTTCACATGCTGGGGACCAGCACAGCACCTGAAGCCATGTGGGACAGTTGGGCTTTGTTCATTCTA
GCCACGGGGATGAAAGGGATCTTTTGCATTGCAGAGATTTTATATATATTTTGTTTGTAATGAGCCATTCTCAAT
AAACATTATTCTCACTGC

FIGURE 4153

MRTEAEAAGPPLEPGDFVQLPVPVIQQLYHWDCGLACSRMVLRYLGQLDDSEFERALQKLQLTRSIWTIDLAYLM
HHFGVRHRFCTQTLGVDKGYKNQSFYRKHFDTEETRVNQLFAQAKACKVLVEKCTVSVKDIQAHLAQGHVAIVLV
NSGVLHCDLCSSPVKYCCFTPSGHHCFCRTPDYQGHFIVLRGYNRATGCIFYNNPAYADRMCSTSISNFEEARTS
YGTDEDILFVYLDS

FIGURE 4154

GCTCCGGGAGACTTCCGGCAGGGCGGGCGCGGGGTCTTGGCGAACGGTCTTCGGAAGCGGCGGCGGCGCGATGAC
CACGCTACGGGCCTTTACCTGCGACGACCTGTTCCGCTTCAACAACATTAACTTGGATCCACTTACAGAAACTTA
TGGGATTCCTTTCTACCTACAATACCTCGCCCACTGGCCAGAGTATTTCATTGTTGCAGAGGCACCTGGTGGAGA
ATTAATGGGTTATATTATGGGTAAAGCAGAAGGCTCAGTAGCTAGGGAAGAATGGCACGGGCACGTCACAGCTCT
GTCTGTTGCCCCAGAATTTCGACGCCTTGGTTTGGCTGCTAAACTTATGGAGTTACTAGAGGAGATTTCAGAAAG
AAAGGGTGGATTTTTTGTGGATCTCTTTGTAAGAGTATCTAACCAAGTTGCAGTTAACATGTACAAGCAGTTGGG
CTACAGTGTATATAGGACGGTCATAGAGTACTATTCGGCCAGCAACGGGGAGCCTGATGAGGACGCTTATGATAT
GAGGAAAGCACTTTCCAGGGATACTGAGAAGAAATCCATCATACCATTACCTCATCCTGTGAGGCCTGAAGACAT
TGAATAACCCTGGGCAGTGGTTCTTAGGCAGATACTCTAGATGCTTTATGGACAATATTATTTTCATTGGATGAT
TCTGGAGCTCTATTAGGAGAAAAGTAATCATTTTAGGTCTTAAAGACTTCAAGAAAATACAGGTTATCAATTTAT
TTTAAATCTCATTGTTTCCAGTTAGCAATATCATACCTATTAAAGCTGTTCATTGTAACAAAATTCAATCAAAAA
GGCAGCTAGGTCAGAAGGAAACATACCACTCTCATGGTTCATAGTATTCACTGTATGTATGCTAGGGAAAAGACT
TGCTCCAGTCTCCTCCTCAGTTCTGTGCCTGAGAACCACTGCTGCATATATTTGTTTTTAAATTTTGTATTGAAC
TGTTAATTGAAGCTTTAAAAGCATATATGAAATGTATAAATCTAAGATGTATAATACATTATTGACTCTAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4155

MTTLRAFTCDDLFRFNNINLDPLTETYGIPFYLQYLAHWPEYFIVAEAPGGELMGYIMGKAEGSVAREEWHGHVT
ALSVAPEFRRLGLAAKLMELLEEISERKGGFFVDLFVRVSNQVAVNMYKQLGYSVYRTVIEYYSASNGEPDEDAY
DMRKALSRDTEKKSIIPLPHPVRPEDIE

FIGURE 4156

ACGCGTCCGAGCTGGCTCAGGGCGTCCGCTAGGCTCGGACGACCTGCTGAGCCTCCCAAACCGCTTCCATAAGGC
TTTGCCTTTCCAACTTCAGCTACAGTGTTAGCTAAGTTTGGAAAGAAGGAAAAAAGAAAATCCCTGGGCCCCTTT
TCTTTTGTTCTTTGCCAAAGTCGTCGTTGTAGTCTTTTTGCCCAAGGCTGTTGTGTTTTTAGAGGTGCTATCTCC
AGTTCCTTGCACTCCTGTTAACAAGCACCTCAGCGAGAGCAGCAGCAGCGATAGCAGCCGCAGAAGAGCCAGCGG
GGTCGCCTAGTGTC**ATG**ACCAGGGCGGGAGATCACAACCGCCAGAGAGGATGCTGTGGATCCTTGGCCGACTACC
TGACCTCTGCAAAATTCCTTCTCTACCTTGGTCATTCTCTCTCTACTTGGGGAGATCGGATGTGGCACTTTGCGG
TGTCTGTGTTTCTGGTAGAGCTCTATGGAAACAGCCTCCTTTTGACAGCAGTCTACGGGCTGGTGGTGGCAGGGT
CTGTTCTGGTCCTGGGAGCCATCATCGGTGACTGGGTGGACAAGAATGCTAGACTTAAAGTGGCCCAGACCTCGC
TGGTGGTACAGAATGTTTCAGTCATCCTGTGTGGAATCATCCTGATGATGGTTTTCTTACATAAACATGAGCTTC
TGACCATGTACCATGGATGGGTTCTCACTTCCTGCTATATCCTGATCATCACTATTGCAAATATTGCAAATTTGG
CCAGTACTGCTACTGCAATCACAATCCAAAGGGATTGGATTGTTGTTGTTGCAGGAGAAGACAGAAGCAAACTAG
CAAATATGAATGCCACAATACGAAGGATTGACCAGTTAACCAACATCTTAGCCCCCATGGCTGTTGGCCAGATTA
TGACATTTGGCTCCCCAGTCATCGGCTGTGGCTTTATTTCGGGATGGAACTTGGTATCCATGTGCGTGGAGTACG
TCCTGCTCTGGAAGGTTTACCAGAAAACCCCAGCTCTAGCTGTGAAAGCTGGTCTTAAAGAAGAGGAAACTGAAT
TGAAACAGCTGAATTTACACAAAGATACTGAGCCAAAACCCCTGGAGGGAACTCATCTAATGGGTGTGAAAGACT
CTAACATCCATGAGCTTGAACATGAGCAAGAGCCTACTTGTGCCTCCCAGATGGCTGAGCCCTTCCGTACCTTCC
GAGATGGATGGGTCTCCTACTACAACCAGCCTGTGTTTCTGGCTGGCATGGGTCTTGCTTTCCTTTATATGACTG
TCCTGGGCTTTGACTGCATCACCACAGGGTACGCCTACACTCAGGGACTGAGTGGTTCCATCCTCAGTATTTTGA
TGGGAGCATCAGCTATAACTGGAATAATGGGAACTGTAGCTTTTACTTGGCTACGTCGAAAATGTGGTTTGGTTC
GGACAGGTCTGATCTCAGGATTGGCACAGCTTTCCTGTTTGATCTTGTGTGTGATCTCTGTATTCATGCCTGGAA
GCCCCCTGGACTTGTCCGTTTCTCCTTTTGAAGATATCCGATCAAGGTTCATTCAAGGAGAGTCAATTACACCTA
CCAAGATACCTGAAATTACAACTGAAATATACATGTCTAATGGGTCTAATTCTGCTAATATTGTCCCGGAGACAA
GTCCTGAATCTGTGCCCATAATCTCTGTCAGTCTGCTGTTTGCAGGCGTCATTGCTGCTAGAATCGGTCTTTGGT
CCTTTGATTTAACTGTGACACAGTTGCTGCAAGAAAATGTAATTGAATCTGAAAGAGGCATTATAAATGGTGTAC
AGAACTCCATGAACTATCTTCTTGATCTTCTGCATTTCATCATGGTCATCCTGGCTCCAAATCCTGAAGCTTTTG
GCTTGCTCGTATTGATTTCAGTCTCCTTTGTGGCAATGGGCCACATTATGTATTTCCGATTTGCCCAAAATACTC
TGGGAAACAAGCTCTTTGCTTGCGGTCCTGATGCAAAAGAAGTTAGGAAGGAAAATCAAGCAAATACATCTGTTG
TT**TGA**GACAGTTTAACTGTTGCTATCCTGTTACTAGATTATATAGAGCACATGTGCTTATTTTGTACTGCAGAAT
TCCAATAAATGGCTGGGTGTTTTGCTCTGTTTTTACCACAGCTGTGCCTTGAGAACTAAAAGCTGTTTAGGAAAC
CTAAGTCAGCAGAAATTAACTGATTAATTTCCCTTATGTTGAGGCATGGAAAAAAAATTGGAAAAGAAAAACTCA
GTTTAAATACGGAGACTATAATGATAACACTGAATTCCCCTATTTCTCATGAGTAGATACAATCTTACGTAAAAG
AGTGGTTAGTCACGTGAATTCAGTTATCATTTGACAGATTCTTATCTGTACTAGAATTCAGATATGTCAGTTTTC
TGCAAAACTCACTCTTGTTCAAGACTAGCTAATTTATTTTTTTGCATCTTAGTTATTTTTAAAAACAAATTCTTC
AAGTATGAAGACTAAATTTTGATAACTAATATTATCCTTATTGATCCTATTGATCTTAAGGTATTTACATGTATG
TGGAAAAACAAAACACTTAACTAGAATTCTCTAATAAGGTTTATGGTTTAGCTTAAAGAGCACCTTTGTATTTTT
ATTATCAGATGGGGCAACATATTGTATGAAGCATATGTAGCACTTCACAGCATGGTTATCATGTAAGCTGCAGGT
AGAAGCAAAGCTGTAAAGTAGATTTATCACACAATGACTGCATACAGACTTCAAATATGTCAATAGTTTGGTCAT
AGAACCTAGAAGCCAAAAGCCACACAGAAGGGCAAGAATCCCAATTTAACTCATGTTATCATCATTAGTGATCTG
TGTTGTAGAACATGAGGGTGTAAGCCTTCAGCCTGGCAAGTTACATGTAGAAAGCCCACACTTGTGAAGGTTTTG
TTTTACAAATCACTTGATTTAACACACTCAGGTAGAATATTTTTATTTTTACTGTTTTATACCCAGAAGTTATTT
CTACATTGTTCTACAGCAAGAATATTCATAAAAGTATCCCTTTCAAATGCCTTTGAGAAGAATAGAAGAAAAAAA
GTTTGTATATATTTTAAAAAATTGTTTTAAAAGTCAGTTTGCAACATGTCTGTACCAAGATGGTACTTTGCCTTA
ACCGTTTATATGCACTTTCATGGAGACTGCAATACGTTGCTATGAGCACTTTCTTTATCCTTGGAGTTTAATCCT
TTGCTTCATCTTTCTACAGTATGACATAATGATTTGCTATGTTGTAAAATCTTTGTAAAAAATTTCTATATAAAA
ATATTTTGAAAATCTTAAAAAAAAAAAAAAAAA

FIGURE 4157

MTRAGDHNRQRGCCGSLADYLTSAKFLLYLGHSLSTWGDRMWHFAVSVFLVELYGNSLLLTAVYGLVVAGSVLVL
GAIIGDWVDKNARLKVAQTSLVVQNVSVILCGIILMMVFLHKHELLTMYHGWVLTSCYILIITIANIANLASTAT
AITIQRDWIVVVAGEDRSKLANMNATIRRIDQLTNILAPMAVGQIMTFGSPVIGCGFISGWNLVSMCVEYVLLWK
VYQKTPALAVKAGLKEEETELKQLNLHKDTEPKPLEGTHLMGVKDSNIHELEHEQEPTCASQMAEPFRTFRDGWV
SYYNQPVFLAGMGLAFLYMTVLGFDCITTGYAYTQGLSGSILSILMGASAITGIMGTVAFTWLRRKCGLVRTGLI
SGLAQLSCLILCVISVFMPGSPLDLSVSPFEDIRSRFIQGESITPTKIPEITTEIYMSNGSNSANIVPETSPESV
PIISVSLLFAGVIAARIGLWSFDLTVTQLLQENVIESERGIINGVQNSMNYLLDLLHFIMVILAPNPEAFGLLVL
ISVSFVAMGHIMYFRFAQNTLGNKLFACGPDAKEVRKENQANTSVV

FIGURE 4158

GCCGCTTTTTTTTTTTCTCATCTGCCATTTGTGTGTCTTAGATGGGTTTTAATTGCATGAATGTGGCTAATGTG
GTTCTCAGAAATTGGTCAGTATGGCCCGACATAGCTTCTGCTCTGTCTTGCTGACTCAATACCTTTAGGATTTGT
ATCAGAGTTTGGATACTAGTGTTAGTGGTGGTGTCACCACTACTTAATTGGGAGATAATGAAACCAATCATGGAT
GCTGTTTTTATTGGGCATGTCATCTAAGAGAGGAGAAATAGCTGGGTTTTGGGTCTAATTATGAATAAGGACTGA
TTCAGAAAACGAGTTTATGGTAGGTAGACTAAAGTTTCACATCAGACTGTACCATTGTGATTTAGACCTATCTAA
AATTCAGAGCATATCATCTGGGCTACCTCAGGGTCACCACCCATGTATTGGGCTTAGTCAGGATTGACAGATACA
TTCTCAGCTGGCCTGTCATATAAAACATACTGTCATTGAGCTTAAGCTCCGCTTGTTCTGAGGTTTCACCTCCAT
GTGTTTCATTGGTGCAAAAGTGGATCTCTTAGTTGGTCACTTAATTCTTTCTTTTTCAGAAAGATAGTATGTTCA
CTGGTATATTTGGTCACTCTTAGAACCTTCCTTCACATTGTTTTTTATGGGACCCATGAATGGTTAGCCTTTCTT
TTCTATTGTAGAAGGAAATAAATAGGAGTAAAAAGACCATTGTAGTAAATAAGTTCAAGGGGAACTTGGGACCAG
AAACCACTGTTATGTACAAAAAAATGGCAAATTCAATAAACTCAAATTTAAAATAATTTTTAAATTAACAGTTATT
GATAAATTTTATATTTTATACAAATAGATTGCTTAGAATGGTTCTCAAGAATTATAAGAGAAATGAACTCACAGT
ACAAAAATTTTATAATTACTATACTTGTGTTTTGTTTGGGGGCTGGGAAATGTATTTTTACATTGTAGCCAATCA
TTTTATATTTGTCAATTTAAATCTTATGGGTCTTTTTTTTTTTATCTCTCTTGATGTCAGATTTTATAGTCTTTT
TAAATAAATCCATTTAATTAAAACGTTAAAAAA

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FIGURE 4159

MINFIFYTNRLLRMVLKNYKRNELTVQKFYNYYTCVLFGGWEMYFYIVANHFIFVNLNLMGLFFFISLDVRFYSL
FK

FIGURE 4160

GGAACAAAAGCTGGAGCTCCACCGCGGTGGCGGCCGCTCTAGAACTAGTGGATCCCCCGGGCTGCAGGAATTCGG
CACGAGCAGAAGAGGGGGCTAGCTAGCTGTCTCTGCGGACCAGGGGAGACCCCGCGCCCCCCCGGTGTGAGGCGG
CCTCACAGGGCCGGGTGGGCTGGCGAGCCGACGCGGCGGCGGAGGAGGCTGTGAGGAGTGTGTGGAACAGGACCC
GGGACAGAGGAACC**ATG**GCTCCGCAGAACCTGAGCACCTTTTGCCTGTTGCTGCTATACCTCATCGGGGCGGTGA
TTGCCGGACGAGATTTCTATAAGATCTTGGGGGTGCCTCGAAGTGCCTCTATAAAGGATATTAAAAAGGCCTATA
GGAAACTAGCCCTGCAGCTTCATCCCGACCGGAACCCTGATGATCCACAAGCCCAGGAGAAATTCCAGGATCTGG
GTGCTGCTTATGAGGTTCTGTCAGATAGTGAGAAACGGAAACAGTACGATACTTATGGTGAAGAAGGATTAAAAG
ATGGTCATCAGAGCTCCCATGGAGACATTTTTTCACACTTCTTTGGGGATTTTGGTTTCATGTTTGGAGGAACCC
CTCGTCAGCAAGACAGAAATATTCCAAGAGGAAGTGATATTATTGTAGATCTAGAAGTCACTTTGGAAGAAGTAT
ATGCAGGAAATTTTGTGGAAGTAGTTAGAAACAAACCTGTGGCAAGGCAGGCTCCTGGCAAACGGAAGTGCAATT
GTCGGCAAGAGATGCGGACCACCCAGCTGGGCCCTGGGCGCTTCCAAATGACCCAGGAGGTGGTCTGCGACGAAT
GCCCTAATGTCAAACTAGTGAATGAAGAACGAACGCTGGAAGTAGAAATAGAGCCTGGGGTGAGAGACGGCATGG
AGTACCCCTTTATTGGAGAAGGTGAGCCTCACGTGGATGGGGAGCCTGGAGATTTACGGTTCCGAATCAAAGTTG
TCAAGCACCCAATATTTGAAAGGAGAGGAGATGATTTGTACACAAATGTGACAATCTCATTAGTTGAGTCACTGG
TTGGCTTTGAGATGGATATTACTCACTTGGATGGTCACAAGGTACATATTTCCCGGGATAAGATCACCAGGCCAG
GAGCGAAGCTATGGAAGAAAGGGGAAGGGCTCCCCAACTTTGACAACAACAATATCAAGGGCTCTTTGATAATCA
CTTTTGATGTGGATTTTCCAAAAGAACAGTTAACAGAGGAAGCGAGAGAAGGTATCAAACAGCTACTGAAACAAG
GGTCAGTGCAGAAGGTATACAATGGACTGCAAGGATAT**TGA**GAGTGAATAAAATTGGACTTTGTTTAAAATAAGT
GAATAAGCGATATTTATTATCTGCAAGGTTTTTTTGTGTGTGTTTTTGTTTTTATTTTCAATATGCAAGTTAGGC
TTAATTTTTTTATCTAATGATCATCATGAAATGAATAAGAGGGCTTAAGAATTTGTCCATTTGCATTCGGAAAAG
AATGACCAGCAAAAGGTTTACTAATACGTCTCCCTTTGGGGATTTAATGTCTGGTGCTGCCGCCTGAGTTTCAAG
AATTAAAGCTGCAAGAGGACTCCAGGAGCAAAAGAAACACAATATAGAGGGTTGGAGTTGTTAGCAATTTCATTC
AAAATGCCAACTGGAGAAGTCTGTTTTTAAATACATTTTGTTGTTATTTTT

FIGURE 4161

MAPQNLSTFCLLLLYLIGAVIAGRDFYKILGVPRSASIKDIKKAYRKLALQLHPDRNPDDPQAQEKFQDLGAAYE
VLSDSEKRKQYDTYGEEGLKDGHQSSHGDIFSHFFGDFGFMFGGTPRQQDRNIPRGSDIIVDLEVTLEEVYAGNF
VEVVRNKPVARQAPGKRKCNCRQEMRTTQLGPGRFQMTQEVVCDECPNVKLVNEERTLEVEIEPGVRDGMEYPFI
GEGEPHVDGEPGDLRFRIKVVKHPIFERRGDDLYTNVTISLVESLVGFEMDITHLDGHKVHISRDKITRPGAKLW
KKGEGLPNFDNNNIKGSLIITFDVDFPKEQLTEEAREGIKQLLKQGSVQKVYNGLQGY

FIGURE 4162A

AGCTGTCGTGCCTCGTGGTCCCGGGACTGCAGTGGTGTGCGCTCTCGGCGCGTGGCGCTAGGCATGGCGATGGAT
CAAGTAAACGCGCTGTGCGAGCAGCTGGTGAAAGCGGTGACGGTCATGATGGACCCCAACTCCACCCAGCGCTAC
CGGCTGGAAGCCCTCAAGTTTTGTGAGGAGTTTAAAGAAAAGTGTCCTATCTGTGTCCCCTGTGGCTTGAGGTTG
GCTGAGAAAACACAAGTTGCCATCGTCAGACATTTTGGCCTTCAGATCCTGGAACACGTTGTCAAGTTTCGGTGG
AACGGCATGTCTCGATTGGAGAAGGTGTATCTGAAGAACAGTGTCATGGAGCTGATTGCAAATGGAACATTGAAC
ATTTTGGAAGAGGAGAACCATATTAAAGATGCTCTGTCTCGAATTGTAGTGGAAATGATCAAGCGAGAGTGGCCA
CAGCATTGGCCTGACATGCTAATAGAATTGGACACTCTTTCCAAACAAGGGGAAACACAGACAGAATTGGTGATG
TTTATCCTTTTGCGACTGGCAGAGGATGTAGTGACTTTTCAGACACTTCCCCCTCAAAGAAGAAGGGACATCCAG
CAAACATTAACCCAGAACATGGAAAGGATCTTCAGTTTTCTGCTTAACACACTTCAAGAAAATGTAAACAAGTAT
CAGCAAGTGAAGACAGATACTTCTCAGGAGTCAAAGGCGCAAGCAAACTGTCGAGTAGGAGTTGCAGCACTGAAT
ACTCTAGCAGGCTATATTGACTGGGTGTCTATGAGTCACATCACTGCTGAAAACTGTAAACTCCTGGAGATACTG
TGTTTGCTGTTGAATGAACAGGAACTTCAGTTGGGAGCCGCTGAGTGTCTTCTCATTGCAGTCAGCAGAAAAGGC
AAGTTGGAAGACCGGAAGCCCTTGATGGTCTTATTTGGAGATGTTGCCATGCATTATATACTCTCCGCCGCACAG
ACTGCTGATGGAGGAGGTTTGGTAGAAAAACACTACGTCTTTCTGAAGAGGCTCTGTCAGGTGTTGTGTGCGCTG
GGCAATCAGCTGTGTGCATTGCTGGGTGCAGATTCTGATGTAGAAACACCATCAAACTTTGGAAAATACCTGGAA
TCTTTTCTTGCTTTCACAACCCATCCAAGTCAGTTTCTACGCTCTTCAACTCAGATGACTTGGGGAGCCCTCTTC
AGGCATGAAATCCTGTCCCGTGATCCTTTGCTATTAGCAATAATACCAAAATATCTTCGTGCTTCCATGACTAAC
TTGGTCAAGATGGGCTTTCCTTCTAAAACAGACAGCCCTAGCTGTGAATATTCTCGGTTTGATTTTGATAGCGAT
GAGGACTTCAATGCTTTCTTCAACTCCTCCCGAGCACAACAAGGAGAGGTGATGAGGTTGGCATGTCGTTTGGAT
CCCAAAACTAGCTTCCAGATGGCTGGGGAGTGGCTAAAGTATCAACTATCAACTTTTCTTGATGCTGGTTCTGTG
AATTCTTGTTCTGCAGTTGGAACTGGAGAAGGAAGCCTCTGTTCCGTCTTCTCACCTTCATTCGTGCAGTGGGAA
GCCATGACTCTTTTTTTGGAAAGTGTTATCACCCAGATGTTTCGAACACTAAATAGAGAAGAAATTCCTGTTAAT
GATGGAATAGAGCTATTGCAGATGGTTCTGAACTTTGATACCAAGGATCCCCTCATCCTGTCCTGCGTCCTTACT
AATGTCTCTGCACTCTTTCCATTTGTCACCTACAGACCAGAGTTCCTGCCCCAGGTCTTCTCTAAGCTATTTTCA
TCTGTCACTTTTGAAACTGTTGAAGAAAGTAAGGCCCCCAGAACCCGGGCAGTGAGGAATGTGAGGAGGCATGCT
TGTTCCTCCATCATCAAGATGTGTCGTGACTACCCCCAGCTTGTGCTGCCCAATTTTGACATGCTTTATAACCAT
GTGAAGCAACTCCTCTCCAATGAGCTACTCCTGACACAAATGGAGAAGTGTGCCCTCATGGAAGCCCTGGTTCTC
ATTAGCAACCAATTTAAGAACTACGAGCGTCAGAAGGTGTTCCTAGAGGAGCTGATGGCACCAGTGGCCAGCATC
TGGCTTTCTCAAGACATGCACAGAGTGCTGTCAGATGTTGATGCTTTCATTGCGTATGTGGGTACAGATCAGAAG
AGCTGTGACCCAGGCCTGGAGGATCCGTGTGGCTTAAACCGTGCACGAATGAGCTTTTGTGTATACAGCATTCTG
GGTGTGGTGAAACGAACTTGCTGGCCCACTGACCTAGAAGAGGCCAAAGCTGGGGGATTTGTGGTGGGTTATACA
TCCAGTGGAAATCCAATCTTCCGTAACCCCTGCACAGAGCAGATTCTGAAACTTCTTGACAATTTGCTTGCGCTT
ATAAGAACCCACAATACATTATATGCACCAGAAATGCTAGCCAAAATGGCAGAGCCTTTCACCAAGGCTCTGGAT
ATGCTTGACGCGGAAAAATCTGCTATATTAGGATTACCTCAACCTCTCTTGGAACTCAATGACTCTCCTGTCTTC
AAAACCGTCTTGGAAAGAATGCAGCGTTTCTTCTCTACCCTCTATGAAAACTGTTTTCATATCCTAGGGAAGGCA
GGCCCTTCCATGCAGCAAGACTTCTATACTGTGGAGGACCTTGCTACCCAGCTTCTCAGCTCAGCCTTTGTCAAC
TTGAACAATATTCCTGACTACCGACTCAGACCCATGCTTCGTGTCTTTGTAAAGCCTCTGGTGCTCTTCTGTCCC
CCAGAGCACTATGAAGCCCTGGTATCCCCCATCCTCGGACCTCTTTTCACCTACCTCCATATGAGGCTTTCTCAG
AAATGGCAAGTTATCAACCAAAGGAGCCTGCTGTGTGGAGAAGATGAGGCTGCAGATGAAAACCCAGAGTCTCAA
GAGATGCTGGAGGAGCAACTGGTGAGGATGTTAACCCGAGAAGTCATGGACCTAATCACGGTTTGCTGTGTTTCA
AAGAAGGGTGCTGACCACAGTAGTGCTCCCCCAGCAGATGGAGACGATGAAGAAATGATGGCCACAGAGGTCACC
CCCTCAGCTATGGCAGAGCTTACAGACCTGGGCAAATGTCTGATGAAGCATGAGGATGTTTGTACAGCGCTATTA
ATTACAGCCTTCAATTCCCTGGCCTGGAAAGATACTCTGTCCTGCCAGAGGACAACCTCACAGCTCTGCTGGCCT
CTCCTCAAACAAGTGCTGTCAGGGACACTGCTCGCAGATGCAGTTACGTGGCTTTTCACCAGTGTGCTGAAAGGC
TTACAGATGCACGGGCAGCACGACGGGTGCATGGCTTCCCTGGTCCATCTGGCCTTCCAGATATATGAGGCACTG
CGCCCCAGGTACCTGGAGATAAGAGCTGTAATGGAGCAAATCCCTGAAATACAGAAGGACTCACTGGACCAGTTT
GACTGCAAGCTTTTAAACCCCTCCCTGCAGAAAGTGGCTGACAAGCGCCGAAAGGACCAATTCAAACGCCTCATT
GCTGGTTGCATTGGGAAACCCTTGGGAGAGCAGTTCCGAAAAGAAGTTCACATTAAGAATCTTCCCTCACTTTTC

FIGURE 4162B

AAAAAAACAAAGCCAATGCTGGAGACGGAGGTGCTGGACAATGATGGGGGTGGCCTGGCCACCATCTTTGAACCC
TGAATCAAGCTTTTGGGCATCCTTCCTCGGCCTTTCTTGTCATCTCTTCTTTCCCTTTGTAGCCGATCTCTAGGC
CCTTCTTGCACTGCCACCTCACTTTCCACCACTGTCAGCCTGGAAAGAGATCCAGGTCTGGAGCTGGAGAGAACA
GGCCCTGTGCAGGACCAGAAGTAATTATACTAAAGTATCAAGAAAGGGAGTTAGGGCTTAAACTATTCTGTCTAG
ATGTCCCAGATAGTTCCCATTCTACTTGGAGATTTGGCTTTTCCAAGAAAAGCTAGAGCAGAGCAGCCCTTCTCC
CACAAGCCCTCCCACCCCCGTGCAGCCACATACCTGTACAGAATGGTAACTAAGGGTGCTGTGCCCAACCCTGCG
ACTAGCAAGGCTCGCAGCAAGAGCACAGCCCTCAACTACTTGTGCCAGAGTTTCTCTTGGACCACTCCAACTCCC
ACTGAGCCCTTTTGCTGCTGGGCTGGCAGGAAACTTTCCCCACTCCCTAAGGGGCATGTCTGGGTTAGGTGCTAA
GTGCTGAAGAGAACTTGGTCAGTTCTCTCAACTTTGCTTTGGGCAAGAATCTGGTCACCTGATGGGATCCATGGT
ACAGGCTACTGCTAAACTTGGCACAGTATCAAGTATAGTACCTCCAAGGACCAGGGCTGGGAAGTCTTTAGTGCT
AACATCCCCTTTAGAGTTCACACATCTTGCCCTTCCATGAATGACCCCTCAGTCTGGCCTCCCCAGCCTCAAGGT
CCACTCAGGCACAAGAGCCACAGTACCCTAGATAGTGTCACATGACACCGTTGTCATCCAAGGATAATACAGACC
AACTAGGCTACATCTGTGATGAGCAGCTAGCAAAGCCGCTGGTCTTCTCCTAGGACTAAGTCCAGGTGCCTTCCA
CAATCTCATGGTCTTTCAGGTCCCTGGTTACTTTTCTCAAAGGCCATTTCCAAAAGAATACATGCCTTCACATCA
CAACCTGTACTGTGAGTCCATTCTAGAGGTCACTGAAAGGCCCTGTAAAGAGAGGACATGGATACGGGACCTGGC
CCTGAGGTTATTACTGGCCGTAAGGCAGAGTTAATCCATACAGAAACCAGTGTGTCCATGTGCTCTGCACAAAAA
CAGACCTGTTGTCCATCCAGTCCACTGACAAGAGGGTTTCCCCGAGAGCCGAAGTGGACTGAAGCTACAGTTTTT
AGCTGGTGCGGGCCACAGGCAGGGTCAGATTGAGAAGAAGCAAAGCTGGGGAAGCAGAAGTTGGGAGTCTTGTGT
TGCTCCCTCTTCCTGTGTGGTGCTCTGGGTTTCTGTGGATCGTGAAGGCGATCTCAAGAGTGTTTCCCTCCAAAC
CTGATAGCTGCCTATTCCTGTCTGGTTGGGGCTGTGGAGGATGTAGTTGTATTTATTGCATTGTAATATTTTTAA
CATCCTGTGACTTCATGCTAGAAATTTTCTATTGTTTATAGAAACTTTTTGTAGAAACATTAACTCTAAAGCACA
TCTGCATGTCAGTAAAAATCTCAGTTTCGTACAGAAAAAAAAAAAAAAAAAAAAA

FIGURE 4163

MAMDQVNALCEQLVKAVTVMMDPNSTQRYRLEALKFCEEFKEKCPICVPCGLRLAEKTQVAIVRHFGLQILEHVV
KFRWNGMSRLEKVYLKNSVMELIANGTLNILEEENHIKDALSRIVVEMIKREWPQHWPDMLIELDTLSKQGETQT
ELVMFILLRLAEDVVTFQTLPPQRRRDIQQTLTQNMERIFSFLLNTLQENVNKYQQVKTDTSQESKAQANCRVGV
AALNTLAGYIDWVSMSHITAENCKLLEILCLLLNEQELQLGAAECLLIAVSRKGKLEDRKPLMVLFGDVAMHYIL
SAAQTADGGGLVEKHYVFLKRLCQVLCALGNQLCALLGADSDVETPSNFGKYLESFLAFTTHPSQFLRSSTQMTW
GALFRHEILSRDPLLLAIIPKYLRASMTNLVKMGFPSKTDSPSCEYSRFDFDSDEDFNAFFNSSRAQQGEVMRLA
CRLDPKTSFQMAGEWLKYQLSTFLDAGSVNSCSAVGTGEGSLCSVFSPSFVQWEAMTLFLESVITQMFRTLNREE
IPVNDGIELLQMVLNFDTKDPLILSCVLTNVSALFPFVTYRPEFLPQVFSKLFSSVTFETVEESKAPRTRAVRNV
RRHACSSIIKMCRDYPQLVLPNFDMLYNHVKQLLSNELLLTQMEKCALMEALVLISNQFKNYERQKVFLEELMAP
VASIWLSQDMHRVLSDVDAFIAYVGTDQKSCDPGLEDPCGLNRARMSFCVYSILGVVKRTCWPTDLEEAKAGGFV
VGYTSSGNPIFRNPCTEQILKLLDNLLALIRTHNTLYAPEMLAKMAEPFTKALDMLDAEKSAILGLPQPLLELND
SPVFKTVLERMQRFFSTLYENCFHILGKAGPSMQQDFYTVEDLATQLLSSAFVNLNNIPDYRLRPMLRVFVKPLV
LFCPPEHYEALVSPILGPLFTYLHMRLSQKWQVINQRSLLCGEDEAADENPESQEMLEEQLVRMLTREVMDLITV
CCVSKKGADHSSAPPADGDDEEMMATEVTPSAMAELTDLGKCLMKHEDVCTALLITAFNSLAWKDTLSCQRTTSQ
LCWPLLKQVLSGTLLADAVTWLFTSVLKGLQMHGQHDGCMASLVHLAFQIYEALRPRYLEIRAVMEQIPEIQKDS
LDQFDCKLLNPSLQKVADKRRKDQFKRLIAGCIGKPLGEQFRKEVHIKNLPSLFKKTKPMLETEVLDNDGGGLAT
IFEP

FIGURE 4164A

GCGCGAGTTGCTGCTAACGCTCCTCCTCCAGCTTCCCACCCCCGCCGCCCGCCGCGGCCCGGTACCAACGGGTGG
TCTCGCCGAGGGAGCTGTCGTGCCTCGTGGTCCCGGGACTGCAGTGGTGTGCGCTCTCGGCGCGTGGCGCTAGGC
ATGGCGATGGATCAAGTAAACGCGCTGTGCGAGCAGCTGGTGAAAGCGGTGACGGTCATGATGGACCCCAACTCC
ACCCAGCGCTACCGGCTGGAAGCCCTCAAGTTTTGTGAGGAGTTTAAAGAAAAGTGTCCTATCTGTGTCCCCTGT
GGCTTGAGGTTGGCTGAGAAAACACAAGTTGCCATCGTCAGACATTTTGGCCTTCAGATCCTGGAACACGTTGTC
AAGTTTCGGTGGAACGGCATGTCTCGATTGGAGAAGGTGTATCTGAAGAACAGTGTCATGGAGCTGATTGCAAAT
GGAACATTGAACATTTTGGAAGAGGAGAACCATATTAAAGATGCTCTGTCTCGAATTGTAGTGGAAATGATCAAG
CGAGAGTGGCCACAGCATTGGCCTGACATGCTAATAGAATTGGACACTCTTTCCAAACAAGGGGAAACACAGACA
GAATTGGTGATGTTTATCCTTTTGCGACTGGCAGAGGATGTAGTGACTTTTCAGACACTTCCCCCTCAAAGAAGA
AGGGACATCCAGCAAACATTAACCCAGAACATGGAAAGGATCTTCAGTTTTCTGCTTAACACACTTCAAGAAAAT
GTAAACAAGTATCAGCAAGTGAAGACAGATACTTCTCAGGAGTCAAAGGCGCAAGCAAACTGTCGAGTAGGAGTT
GCAGCACTGAATACTCTAGCAGGCTATATTGACTGGGTGTCTATGAGTCACATCACTGCTGAAAACTGTAAACTC
CTGGAGATACTGTGTTTGCTGTTGAATGAACAGGAACTTCAGTTGGGAGCCGCTGAGTGTCTTCTCATTGCAGTC
AGCAGAAAAGGCAAGTTGGAAGACCGGAAGCCCTTGATGGTCTTATTTGGAGATGTTGCCATGCATTATATACTC
TCCGCCGCACAGACTGCTGATGGAGGAGGTTTGGTAGAAAAACACTACGTCTTTCTGAAGAGGCTCTGTCAGGTG
TTGTGTGCGCTGGGCAATCAGCTGTGTGCATTGCTGGGTGCAGATTCTGATGTAGAAACACCATCAAACTTTGGA
AAATACCTGGAATCTTTTCTTGCTTTCACAACCCATCCAAGTCAGTTTCTACGCTCTTCAACTCAGATGACTTGG
GGAGCCCTCTTCAGGCATGAAATCCTGTCCCGTGATCCTTTGCTATTAGCAATAATACCAAAATATCTTCGTGCT
TCCATGACTAACTTGGTCAAGATGGGCTTTCCTTCTAAAACAGACAGCCCTAGCTGTGAATATTCTCGGTTTGAT
TTTGATAGCGATGAGGACTTCAATGCTTTCTTCAACTCCTCCCGAGCACAACAAGGAGAGGTGATGAGGTTGGCA
TGTCGTTTGGATCCCAAAACTAGCTTCCAGATGGCTGGGGAGTGGCTAAAGTATCAACTATCAACTTTTCTTGAT
GCTGGTTCTGTGAATTCTTGTTCTGCAGTTGGAACTGGAGAAGGAAGCCTCTGTTCCGTCTTCTCACCTTCATTC
GTGCAGTGGGAAGCCATGACTCTTTTTTTGGAAAGTGTTATCACCCAGATGTTTCGAACACTAAATAGAGAAGAA
ATTCCTGTTAATGATGGAATAGAGCTATTGCAGATGGTTCTGAACTTTGATACCAAGGATCCCCTCATCCTGTCC
TGCGTCCTTACTAATGTCTCTGCACTCTTTCCATTTGTCACCTACAGACCAGAGTTCCTGCCCCAGGTCTTCTCT
AAGCTATTTTCATCTGTCACTTTTGAAACTGTTGAAGAAAGTAAGGCCCCCAGAACCCGGGCAGTGAGGAATGTG
AGGAGGCATGCTTGTTCCTCCATCATCAAGATGTGTCGTGACTACCCCCAGCTTGTGCTGCCCAATTTTGACATG
CTTTATAACCATGTGAAGCAACTCCTCTCCAATGAGCTACTCCTGACACAAATGGAGAAGTGTGCCCTCATGGAA
GCCCTGGTTCTCATTAGCAACCAATTTAAGAACTACGAGCGTCAGAAGGTGTTCCTAGAGGAGCTGATGGCACCA
GTGGCCAGCATCTGGCTTTCTCAAGACATGCACAGAGTGCTGTCAGATGTTGATGCTTTCATTGTGTATGTGGGT
ACAGATCAGAAGAGCTGTGACCCAGGCCTGGAGGATCCGTGTGGCTTAAACCGTGCACGAATGAGCTTTTGTGTA
TACAGCATTCTGGGTGTGGTGAAACGAACTTGCTGGCCCACTGACCTAGAAGAGGCCAAAGCTGGGGGATTTGTG
GTGGGTTATACATCCAGTGGAAATCCAATCTTCCGTAACCCCTGCACAGAGCAGATTCTGAAACTTCTTGACAAT
TTGCTTGCGCTTATAAGAACCCACAATACATTATATGCACCAGAAATGCTAGCCAAAATGGCAGAGCCTTTCACC
AAGGCTCTGGATATGCTTGACGCGGAAAAATCTGCTATATTAGGATTACCTCAACCTCTCTTGGAACTCAATGAC
TCTCCTGTCTTCAAAACCGTCTTGGAAAGAATGCAGCGTTTCTTCTCTACCCTCTATGAAAACTGTTTTCATATC
CTAGGGAAGGCAGGCCCTTCCATGCAGCAAGACTTCTATACTGTGGAGGACCTTGCTACCCAGCTTCTCAGCTCA
GCCTTTGTCAACTTGAACAATATTCCTGACTACCGACTCAGACCCATGCTTCGTGTCTTTGTAAAGCCTCTGGTG
CTCTTCTGTCCCCCAGAGCACTATGAAGCCCTGGTATCCCCCATCCTCGGACCTCTTTTCACCTACCTCCATATG
AGGCTTTCTCAGAAATGGCAAGTTATCAACCAAAGGAGCCTGCTGTGTGGAGAAGATGAGGCTGCAGATGAAAAC
CCAGAGTCTCAAGAGATGCTGGAGGAGCAACTGGTGAGGATGTTAACCCGAGAAGTCATGGACCTAATCACGGTT
TGCTGTGTTTCAAAGAAGGGTGCTGACCACAGTAGTGCTCCCCCAGCAGATGGAGACGATGAAGAAATGATGGCC
ACAGAGGTCACCCCCTCAGCTATGGCAGAGCTTACAGACCTGGGCAAATGTCTGATGAAGCATGAGGATGTTTGT
ACAGCGCTATTAATTACAGCCTTCAATTCCCTGGCCTGGAAAGATACTCTGTCCTGCCAGAGGACAACCTCACAG
CTCTGCTGGCCTCTCCTCAAACAAGTGCTGTCAGGGACACTGCTCGCAGATGCAGTTACGTGGCTTTTCACCAGT
GTGCTGAAAGGCTTACAGATGCACGGGCAGCACGACGGGTGCATGGCTTCCCTGGTCCATCTGGCCTTCCAGATA
TACGAGGCACTGCGCCCCAGGTACCTGGAGATAAGAGCTGTAATGGAGCAAATCCCTGAAATACAGAAGGACTCA
CTGGACCAGTTTGACTGCAAGCTTTTAAACCCCTCCCTGCAGAAAGTGGCTGACAAGCGCCGAAAGGACCAATTC

FIGURE 4164B

AAACGCCTCATTGCTGGTTGCATTGGGAAACCCTTGGGAGAGCAGTTCCGAAAAGAAGTTCACATTAAGAATCTT
CCCTCACTTTTCAAAAAAACAAAGCCAATGCTGGAGACGGAGGTGCTGGACAATGATGGGGGTGGCCTGGCCACC
ATCTTTGAACCCTGAATCAAGCTTTTGGGCATCCTTCCTCGGCCTTTCTTGTCATCTCTTCTTTCCCTTTGTAGC
CGATCTCTAGGCCCTTCTTGCACTGCCACCTCACTTTCCACCACTGTCAGCCTGGAAAGAGATCCAGGTCTGGAG
CTGGAGAGAACAGGCCCTGTGCAGGACCAGAAGTAATTATACTAAAGTATCAAGAAAGGGAGTTAGGGCTTAAAC
TATTCTGTCTAGATGTCCCAGATAGTTCCCATTCTACTTGGAGATTTGGCTTTTCCAAGAAAAGCTAGAGCAGAG
CAGCCCTTCTCCCACAAGCCCTCCCACCCCCGTGCAGCCACATACCTGTACAGAATGGTAACTAAGGGTGCTGTG
CCCAACCCTGCGACTAGCAAGGCTCGCAGCAAGAGCACAGCCCTCAACTACTTGTGCCAGAGTTTCTCTTGGACC
ACTCCAACTCCCACTGAGCCCTTTTGCTGCTGGGCTGGCAGGAAACTTTCCCCACTCCCTAAGGGGCATGTCTGG
GTTAGGTGCTAAGTGCTGAAGAGAACTTGGTCAGTTCTCTCAACTTTGCTTTGGGCAAGAATCTGGTCACCTGAT
GGGATCCATGGTACAGGCTACTGCTAAACTTGGCACAGTATCAAGTATAGTACCTCCAAGGACCAGGGCTGGGAA
GTCTTTAGTGCTAACATCCCCTTTAGAGTTCACACATCTTGCCCTTCCATGAATGACCCCTCAGTCTGGCCTCCC
CAGCCTCAAGGTCCACTCAGGCACAAGAGCCACAGTACCCTAGATAGTGTCACATGACACCGTTGTCATCCAAGG
ATAATACAGACCAACTAGGCTACATCTGTGATGAGCAGCTAGCAAAGCCGCTGGTCTTCTCCTAGGACTAAGTCC
AGGTGCCTTCCACAATCTCATGGTCTTTCAGGTCCCTGGTTACTTTTCTCAAAGGCCATTTCCAAAAGAATACAT
GCCTTCACATCACAACCTGTACTGTGAGTCCATTCTAGAGGTCACTGAAAGGCCCTGTAAAGAGAGGACATGGAT
ACGGGACCTGGCCCTGAGGTTATTACTGGCCGTAAGGCAGAGTTAATCCATACAGAAACCAGTGTGTCCATGTGC
TCTGCACAAAAACAGACCTGTTGTCCATCCAGTCCACTGACAAGAGGGTTTCCCCGAGAGCCGAAGTGGACTGAA
GCTACAGTTTTTAGCTGGTGCGGGCCACAGGCAGGGTCAGATTGAGAAGAAGCAAAGCTGGGGAAGCAGAAGTTG
GGAGTCTTGTGTTGCTCCCTCTTCCTGTGTGGTGCTCTGGGTTTCTGTGGATCGTGAAGGCGATCTCAAGAGTGT
TTCCCTCCAAACCTGATAGCTGCCTATTCCTGTCTGGTTGGGGCTGTGGAGGATGTAGTTGTATTTATTGCATTG
TAATATTTTTAACATCCTGTGACTTCATGCTAGAAATTTTCTATTGTTTATAGAAACTTTTTGTAGAAACATTAA
CTCTAAAGCACATCTGCATGTCAGTAAAAATCTCAGTTTCGTACAG

FIGURE 4165

CTCGTGACAATCTTCGGGTGCCCTTCGAGAGAAAAGGGGAGGATGCCACTGGAGTCATCCTCTTCAATGCCACTA
TCCTTCCCATCTCTCTTACCCTCAGTACCACACAATACTAACCCTTCCCCTCCTCTGATGTCTTACATCACCTCC
CAGGAGATGAAGTGTATTCTTCACTGGTTTGCCAATTGGTCAGGTCCCCAGCGTGAACGTTTCCTAGAGGACCTG
GTAGCTAAGGCAGTGCCAGAAAAATTACAACCACTGCTGGATAGTCTGGAGCAGCTTAGTGTGTCTGGGGCAGAC
CGACCACCTTCTATCTTTGAGTGCCAGCTACATCTTTGGGATCAGTGGTTTCGAGGCTGGGCTGAGCAGGAGCGC
AATGAATTTGTCAGACAGCTGGAGTTCAGTGAGCCAGACTTCGTGGCAAAGTTTTACCAAGCAGTGGCTGCTACA
GCTGGTAAGGACTGATAGGCATTCAGACCAAAGAAGATAACCATAGCTGATGGAGCCATGACTCTCTACAATGAT
AACTCAATTCAAATGTGTTGCCTAAAGCTCTGGAACTGGTATTCCAACCAGCTGACCGAACTCACTGACCAGTAC
AGGCATGGTTATTTCAACATTAATAGCATGTCAACTGGACTCCTATTTGTAAATGTTATCAATCTAAGCAATCCA
GCTCATCAGTCTACTAGTTTGCTTCTTTCCGAGAGATGTCAAGTCCTCAAGAATTTGATGGCTTCTTCTGCAGCT
ATAACCACAAGGAACCTACACATTGTAACTCAAGTCCACTGCTGGCTCATGAAATGTGTAAAGTAGAACCCTCCT
TCCCGAGAAATAAGACAGGACAATAAAAGGTGGCGTTTTTGTACTTTACCTGGATTCCATTGGCTGGTTTTACCA
CTCCTATCAGATTGTAGTGTAATTGTGTGATACGCAAACCATTAGTTTTCCCAGTGATGATTTAATAAAATTATG
AAAAATCAGGAGAGGGAGATAATTAGTTGCTTCCTCCTTCACACTGTTTGAATCGAACTCGCGGTGACTTTTTTT
TTTTTTTAAAAACATGGGTTGTCACTTAAGTTTGGAGTGCAGTGGCATGATCATCAGTGAGCGTGAGATCACTGT
GACCTCAAATTCTAGGCTGAAGTAATCTTTCTGCCTCAGTCTCCTGAGTATCTAGGACTACAGGCCCGCACAACA
ATATCTGGCTAATTTTTAAATTATTCTGTAGATACAGGGGTCATGCTACGTTTTCTAGTCTGGTCTTGAACTGCT
GGCCTCAAGCGATCCATTCTCACCTTGGCCTCCCAAAGTGCTGGGATTACAGGCATGAACCATCATACCTGGCCT
TTTTCTAAGGCATATGTATGTGATATTCTTGGAACTGGTAGCAGGTGTTCCTATTCTGTAAGTTTGCTTTACAAC
AATACGAAAATAAGTGACAATTTACAGGTTGAACAATTTATTTTTGTACCAAAATAAAGAATGGATCTTTAGAAC
TGTAAAACTTCACCCTTTTTTCATTGCCAGGCTATATAATATTGACAACCGGGGAAAGAGGCATTCCAAAGAAAG
TAGAAATTAAGTATACACAATAGATTTTCCATCCAGTTGTCTCACAAGAAATTATTCTCTTCCTTACCCCCTGTC
ATGTTCTGGGCAACATCATACCTCCCTTATTCCTCTAACTGGGACCCTTGTGCTGTGGAGCTCTGGTGAATGGTA
AGAGGCAGATGGTCTCACAGGAAGAGTGGCTCTTTTCTGGTAGGCTGTGGTTCCCATTACACCCACCAGGATTAG
CAGCATTAGGCAGAGTCCCATGGACAGCCTTAGGTGGGTCATGGAGGGATTATGGTCTGAAGTAACCAGCAACCT
AGGAACATAGAAGGTAATATTTGGCATGGAATAATGCCTAGCCTTAGTAGATAAAGCGGCATTACCTTTTTTTTT
TTTTTTTTTTGGAGACAAGGTCTTGGTCTGTTGCCCAGGCTGGAGTGCAGTGGTGTGATCTTGGCTCACCGTAAT
CTCCGCCTCCCAGGCTCAAGCAATTCTCCTGCCTCAACCTTCCGAATAGCTGGGACTACAGGCGCACGCCGCACC
ACCACGTCTGGCTAAGGGGCTTTACCCTTAAAGATAGAGCTCATGAAGCCCCGCCTCATCCAAGCATTAAGCTAA
ACAGGAAATCATTAAGAGGGACTATCGAACCTTAAAGTAGAAATAAGATCAAGATCTAAGTCTTCTAGCATCTTA
TATTATTGGAAGAAGACCTAACTTGGCAGCAAGGGAAGTGGCTTAAGGGAAGAGTCAGTCTATGTTCTTTAGGTA
GCTAGACACAATCCCTAACAGTGCTTAAGAAAGGAAGGGGGCTGGGAGTGGTGGCAGTGGCTCCCAGCACTTTGG
GAGGCAGAGGCCGGTGGGTTGCTTTAGCTCAGGAGTTGGAGACAAGCCTGGGCAACATGGTGAAACTGTCTCTAT
CAAAAATACAAAAATTAGCTGGCATGGTGGTGTGCACCTGTAGTCCCAGCTACTTGGGAGGCTGAGGTGGGGGAA
TCACTTGAGCCTAGGGAGGTCGAGGCCACAGTGAGCTGAGATCACCCCACTGCATTCCAGCCTGGGTGACAGAGC
GAGACCCTGTCTCAAAAAAGAAGAAGAAAAAGGTGGGGGGAGGGGACTAAGATCCCTATGTCCTAGAGATGGGGG
AATGTGTTATTGTATGGGAGGAGGGAGTCAGGTAGTGACGGGACTGGATGATCGTGTTAGGGATCTTTGTTCTCT
GAAACGCAACCCTGTCTAGGACAATATACACGTGAGTGAGTGCTTAATAAATTTAATTTCAAACAAAAAAAAAAA
AAAAA

FIGURE 4166

MPLESSSSMPLSFPSLLPSVPHNTNPSPPLMSYITSQEMKCILHWFANWSGPQRERFLEDLVAKAVPEKLQPLLD
SLEQLSVSGADRPPSIFECQLHLWDQWFRGWAEQERNEFVRQLEFSEPDFVAKFYQAVAATAGKD

FIGURE 4167

GGCACGAGGGCCAGGAACGCCAGCCGTTCACGCGTTCGGTCCTCCTTGGCTGACTCACCGCCCTCGCCGCCGCAC
C**ATG**GACGCCCCCAGGCAGGTGGTCAACTTTGGGCCTGGTCCCGCCAAGCTGCCGCACTCAGTGTTGTTAGAGAT
ACAAAAGGAATTATTAGACTACAAAGGAGTTGGCATTAGTGTTCTTGAAATGAGTCACAGGTCATCAGATTTTGC
CAAGATTATTAACAATACAGAGAATCTTGTGCGGGAATTGCTAGCTGTTCCAGACAACTATAAGGTGATTTTTCT
GCAAGGAGGTGGGTGCGGCCAGTTCAGTGCTGTCCCCTTAAACCTCATTGGCTTGAAAGCAGGAAGGTGTGCGGA
CTATGTGGTGACAGGAGCTTGGTCAGCTAAGGCCGCAGAAGAAGCCAAGAAGTTTGGGACTATAAATATCGTTCA
CCCTAAACTTGGGAGTTATACAAAAATTCCAGATCCAAGCACCTGGAACCTCAACCCAGATGCCTCCTACGTGTA
TTATTGCGCAAATGAGACGGTGCATGGTGTGGAGTTTGACTTTATACCCGATGTCAAGGGAGCAGTACTGGTTTG
TGACATGTCCTCAAACTTCCTGTCCAAGCCAGTGGATGTTTCCAAGTTTGGTGTGATTTTTGCTGGTGCCCAGAA
GAATGTTGGCTCTGCTGGGGTCACCGTGGTGATTGTCCGTGATGACCTGCTGGGGTTTGCCCTCCGAGAGTGCCC
CTCGGTCCTGGAATACAAGGTGCAGGCTGGAAACAGCTCCTTGTACAACACGCCTCCATGTTTCAGCATCTACGT
CATGGGCTTGGTTCTGGAGTGGATTAAAAACAATGGAGGTGCCGCGGCCATGGAGAAGCTTAGCTCCATCAAATC
TCAAACAATTTATGAGATTATTGATAATTCTCAAGGATTCTACGTTTGTCCAGTGGAGCCCCAAAATAGAAGCAA
GATGAATATTCCATTCCGCATTGGCAATGCCAAAGGAGATGATGCTTTAGAAAAAAGATTTCTTGATAAAGCTCT
TGAACTCAATATGTTGTCCTTGAAAGGGCATAGGTCTGTGGGAGGCATCCGGGCCTCTCTGTATAATGCTGTCAC
AATTGAAGACGTTCAGAAGCTGGCCGCCTTCATGAAAAAATTTTTGGAGATGCATCAGCTA**TGA**ACACATCCTAA
CCAGGATATACTCTGTTCTTGAACAACATACAAAGTTTAAAGTAACTTGGGGATGGCTACAAAAAGTTAACACAG
TATTTTTCTCAAATGAACATGTTTATTGCAGATTCTTCTTTTTTGAAAGAACAACAGCAAAACATCCACAACTCT
GTAAAGCTGGTGGGACCTAATGTCACCTTAATTCTGACTTGAACTGGAAGCATTTTAAGAAATCTTGTTGCTTTT
CTAACAAATTCCCGCGTATTTTGCCTTTGCTGCTACTTTTTCTAGTTAGATTTCAAACTTGCCTGTGGACTTAAT
AATGCAAGTTGCGATTAATTATTTCTGGAGTCATGGGAACACACAGCACAGAGGGTAGGGGGGCCCTCTAGGTGC
TGAATCTACACATCTGTGGGGTCTCCTGGGTTCAGCGGCTGTTGATTCAAGGTCAACATTGACCATTGGAGGAGT
GGTTTAAGAGTGCCAGGCGAAGGGCAAACTGTAGATCGATCTTTATGCTGTTATTACAGGAGAAGTGACATACTT
TATATATGTTTATATTAGCAAGGTCTGTTTTTAATACCATATACTTTATATTTCTATACATTTATATTTCTAATA
ATACAGTTATCACTGATATATGTAGACACTTTTAGAATTTATTAAATCCTTGACCTTGTGCATTATAGCATTCCA
TTAGCAAGAGTTGTACCCCCTCCCCAGTCTTCGCCTTCCTCTTTTTAAGCTGTTTTATGAAAAAGACCTAGAAGT
TCTTGATTCATTTTTACCATTCTTTCCATAGGTAGAAGAGAAAGTTGATTGGTTGGTTGTTTTTCAATTATGCCA
TTAAACTAAACATTTCTGTTAAATTACCCTATCCTTTGTTCTCTACTGTTTTCTTTGTAATGTATGACTACGAGA
GTGATACTTTGCTGAAAAGTCTTTCCCCTATTGTTTATCTATTGTCAGTATTTTATGTTGAATATGTAAAGAACA
TTAAAGTCCTAAAACATCTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4168

MDAPRQVVNFGPGPAKLPHSVLLEIQKELLDYKGVGISVLEMSHRSSDFAKIINNTENLVRELLAVPDNYKVIFL
QGGGCGQFSAVPLNLIGLKAGRCADYVVTGAWSAKAAEEAKKFGTINIVHPKLGSYTKIPDPSTWNLNPDASYVY
YCANETVHGVEFDFIPDVKGAVLVCDMSSNFLSKPVDVSKFGVIFAGAQKNVGSAGVTVVIVRDDLLGFALRECP
SVLEYKVQAGNSSLYNTPPCFSIYVMGLVLEWIKNNGGAAAMEKLSSIKSQTIYEIIDNSQGFYVCPVEPQNRSK
MNIPFRIGNAKGDDALEKRFLDKALELNMLSLKGHRSVGGIRASLYNAVTIEDVQKLAAFMKKFLEMHQL

FIGURE 4169

GCAGTGCGGCGCGGCTCCGGTTCCCGGCGGCCCTCGCGGCAGGTTTCGGGCTTCAGGACAATTCGTGATGGCGGG
GGCTGGTTCCGCCGCTGTATCGGGGGCAGGGACCCCGGTGGCGGGGCCCACAGGCCGCGACCTTTTCGCCGAAGG
GCTGCTGGAGTTCCTGCGACCCGCTGTGCAGCAGCTCGACTCTCACGTACACGCCGTCAGAGAGAGCCAGGTAGA
GCTCCGGGAACAAATTGACAACCTAGCCACAGAACTGTGCCGCATAAATGAGGATCAGAAGGTGGCCCTGGATCT
TGACCCCTATGTTAAGAAGCTACTTAATGCCCGGCGACGCGTTGTCTTGGTTAACAACATTCTACAGAATGCTCA
GGAACGACTGAGACGGCTAAACCACAGTGTTGCCAAGGAAACAGCCCGCAGGAGAGCAATGCTGGATTCGGGAAT
TTACCCCCCTGGCTCCCCAGGCAAATAACAGATGAGCCTATGGACTCAGTAGCACAAGTACTGTTCCCCAGCTGC
CTTGTTTCAACAGACATGCAAAGATCCTAGGAGACAGTCCCCATAGACCTTCAGACATTAAAAAGGGAGCCGTAC
AGTTTGTTTGAAGCACTTCGTCTTACCCATTTATGTAGGGGCCCCAGGAAACCTACACACAGCCAGAATGAGGTT
CCCAAAGGACTTACATTAATTATGGCTCTTGCTTCCTTTCACAAATGAGCTGAGGCCTCTACTTTTTTTTTTAAG
CTGCATACGTGAGGCTTACCTTCTTCAGGACTAGTTAACCAGAGGGGCTTCCTTTGTATGTTACATGCCTGGTTA
CATGGGCCTGGACAGCATGTCCTCTACCTGTGACTTCTCATTTTCCTGTTTACACTGGGGATTTGGAGGGGGCAG
GCAAAGTCAAAGTGAATGACCTCTGTCCACCCACTTTTTTATTGCACTGGCTTGAATACAGTAGCAGTGTTGATA
GAATCATTTTATTCAATAAATACTTAAAATGAAAAAAAAAAAAAAA

FIGURE 4170

MAGAGSAAVSGAGTPVAGPTGRDLFAEGLLEFLRPAVQQLDSHVHAVRESQVELREQIDNLATELCRINEDQKVA
LDLDPYVKKLLNARRRVVLVNNILQNAQERLRRLNHSVAKETARRRAMLDSGIYPPGSPGK

FIGURE 4171

GGGATTTGTTATTGCGAATGATGTGGACAACAAGCGCTGCTACCTGCTCGTCCATCAAGCCAAGAGGCTGAGCAG
CCCCTGCATC**ATG**GTGGTCAACCATGATGCCTCCAGCATACCCAGGCTCCAGATAGATGTGGACGGCAGGAAAGA
GATCCTCTTCTATGATCGAATTTTATGTGATGTCCCTTGCAGTGGAGACGGCACTATGAGAAAAAACATTGATGT
TTGGAAAAAGTGGACCACCTTAAATAGCTTGCAGCTACATGGCTTACAGCTGCGGATTGCAACACGCGGGGCTGA
ACAGCTGGCTGAAGGTGGAAGGGTGGTGTATTCCACGTGTTCACTAAACCCTATTGAGGATGAAGCAGTCATAGC
ATCTTTACTGGAAAAAAGTGAAGGTGCTTTGGAGCTTGCTGATGTGTCTAATGAACTGCCAGGGCTGAAGTGGAT
GCCTGGAATCACACAGTGGAAGGTAATGACGAAAGATGGGCAGTGGTTTACAGACTGGGACGCTGTTCCTCACAG
CAGACACACCCAGATCCGACCTACCATGTTCCCTCCGAAGGACCCAGAAAAGCTGCAGGCCATGCACCTGGAGCG
ATGCCTTAGGATATTACCCCATCATCAGAATACTGGAGGGTTTTTTGTGGCAGTATTGGTGAAAAAATCTTCAAT
GCCGTGGAATAAACGTCAGCCAAAGCTTCAGGGTAAATCTGCAGAGACCAGAGAAAGCACACAGCTGAGCCCTGC
AGATCTCACAGAAGGGAAACCCACAGATCCCTCTAAGCTGGAAAGTCCGTCATTCACAGGAACTGGTGACACAGA
AATAGCTCATGCAACTGAGGATTTAGAGAATAATGGCAGTAAGAAAGATGGCGTGTGTGGTCCTCCTCCATCAAA
GAAAATGAAGTTATTTGGATTTAAAGAAGATCCATTTGTATTTATTCCTGAAGATGACCCATTATTTCCACCTAT
TGAGAAATTTTATGCTTTGGATCCTTCATTCCCAAGGATGAATTTGTTAACTCGGACTACAGAAGGGAAGAAAAG
GCAGCTCTACATGGTTTCTAAGGAGTTGCGGAATGTGCTGCTGAATAACAGTGAGAAGATGAAGGTTATTAACAC
GGGGATCAAAGTCTGGTGTAGAAATAACAGCGGTGAAGAGTTTGACTGTGCTTTCCGGCTGGCACAGGAGGGAAT
ATATACATTGTATCCATTTATTAACTCAAGAATTATTACTGTATCAATGGAAGATGTTAAGATACTGTTGACCCA
GGAAAATCCCTTTTTTAGAAAACTCAGCAGTGAGACCTACAGTCAAGCAAAGGACCTGGCAAAGGGAAGCATCGT
GCTGAAGTATGAACCAGATTCTGCGAATCCAGACGCTCTACAGTGTCCCATCGTCTTATGCGGATGGCGGGGAAA
GGCCTCCATTCGAACTTTTGTGCCCAAGAATGAACGGCTTCACTATCTCAGGATGATGGGGCTGGAGGTATTGGG
AGAAAAGAAGAAGGAAGGGGTTATCCTCACAAATGAGAGTGCAGCCAGCACCGGACAGCCAGACAATGACGTGAC
TGAGGGACAGAGAGCAGGAGAGCCCAACAGCCCAGATGCAGAAGAGGCCAACAGTCCAGACGTGACAGCAGGCTG
TGACCCGGCGGGGGTCCATCCACCCCGG**TGA**GCAGGCCCAAGGCAGCGGGGGCCCACACCCCTCACACGCAAAAC
TGGCTTCTTCTGGTCACTGGTGTCTGAAACCAAATCCAGAGCAGCCTGTGGCCTGTAAAGCATATATTTCTAGTG
ACTGCAGACTGGTGGGATCATAGGAGCCTTCTGAATGACCAGGACTGCTTTCTTTGGAGCTGATGAAAATGTACT
CTTTTAGCGTGTTAGAAATCACTTGTTTTATTTTGTTTTCTTTGGCCAAGCTGGGTCTAGTGTTTCTTTTGCTGG
GAATAGACTTTCAAAAGTTGTACTTCTATCAAGAAACAAAACTGCCCTTGCAGAAATTTCAGGTCTTTTGTTAAG
CCTGTATTGGTCTTAAGGTGCAGTATTTTTTAAATTATTATTTATAGAAAGAATCTATAAATTCTTGGGGAAGTG
TGTTATAAGCTTTAATAATTACATTGAGCTGCACCTCAGTGGTGTGTCATTAACATGCAGTGGGGTTAATATCTG
AGGCCTCAGATGACTTTGTGCCTTTTGGAATAAAGGGTAAAATAAACTCTCCCAGAGTAAGAGCTGTATCGTGAA
TTGTCATACTAATTATTGAGGGGGACTTATGTGCTTTTATTGAATGGAGTGCTTTACAATTTTTATTTTTAAATG
GGGTTGGGATCCTTGGAATATTTCAATAAAATTGATAAAATATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4172

MVVNHDASSIPRLQIDVDGRKEILFYDRILCDVPCSGDGTMRKNIDVWKKWTTLNSLQLHGLQLRIATRGAEQLA
EGGRVVYSTCSLNPIEDEAVIASLLEKSEGALELADVSNELPGLKWMPGITQWKVMTKDGQWFTDWDAVPHSRHT
QIRPTMFPPKDPEKLQAMHLERCLRILPHHQNTGGFFVAVLVKKSSMPWNKRQPKLQGKSAETRESTQLSPADLT
EGKPTDPSKLESPSFTGTGDTEIAHATEDLENNGSKKDGVCGPPPSKKMKLFGFKEDPFVFIPEDDPLFPPIEKF
YALDPSFPRMNLLTRTTEGKKRQLYMVSKELRNVLLNNSEKMKVINTGIKVWCRNNSGEEFDCAFRLAQEGIYTL
YPFINSRIITVSMEDVKILLTQENPFFRKLSSETYSQAKDLAKGSIVLKYEPDSANPDALQCPIVLCGWRGKASI
RTFVPKNERLHYLRMMGLEVLGEKKKEGVILTNESAASTGQPDNDVTEGQRAGEPNSPDAEEANSPDVTAGCDPA
GVHPPR

FIGURE 4173

TGCCGGCGTCCCCGAGGCGGGGGACGGCCGGCCGCGGGCCCGGCTGCCGCCGCGCGACTCCACCCGTGGTGGGGC
GGGGGCGGCTGGCCGGCGGAGCCCCTCGCGCGGGGCCTGTCCAGCTCTCCTTCGGAGATCTTGCAGGAGCTGGGC
AAGGGGAGCACGCATCCCCAGCCCGGGGTGTCGCCACCCGCTGCCCCGGCGGCGCCCGGCCCCAAGGACGGCCCC
GGGGAGACGGACGCGTTTGGCAACAGCGAGGGCAAAGAGCTGGTGGCCTCAGGTGAAAACAAAATAAAACAGGGT
CTGTTACCTAGCTTGGAAGATTTGCTGTTCTATACAATTGCTGAAGGACAAGAGAAAATACCTGTTCATAAATTT
ATTACAGCACTCAAATCTACAGGATTGCGAACGTCTGATCCCAGGTTGAAAGAGTGTATGGATATGTTAAGATTA
ACTCTTCAAACAACATCAGATGGTGTCATGCTAGACAAAGATCTTTTTAAAAAATGTGTTCAGAGCAACATTGTT
TTGTTGACACAAGCATTTAGAAGAAAGTTTGTGATTCCTGACTTTATGTCTTTTACCTCACACATTGATGAGTTA
TATGAAAGTGCTAAAAAGCAGTCTGGAGGAAAGGTTGCAGATTATATTCCTCAACTGGCCAAATTCAGTCCCGAT
TTGTGGGGTGTGTCTGTTTGTACAGCAGATGGACAGAGGCATTCTACTGGAGATACCAAAGTTCCCTTCTGTCTT
CAGTCCTGTGTAAAACCTTTGAAATATGCCATTGCTGTTAATGATCTTGGAACTGAATATGTGCATCGATATGTT
GGAAAAGAGCCGAGTGGACTAAGATTCAACAAACTATTTTTGAATGAAGATGATAAACCACATAATCCTATGGTA
AATGCTGGAGCAATTGTTGTGACTTCACTAATAAAGCAAGGAGTAAATAATGCTGAAAAATTTGACTATGTCATG
CAGTTTTTGAATAAGATGGCTGGTAATGAATATGTTGGATTCAGTAATGCAACGTTTCAGTCTGAAAGAGAAAGT
GGAGATCGAAATTTTGCAATAGGATATTACTTAAAAGAAAAGAAGTGTTTTCCAGAAGGCACAGACATGGTTGGT
ATATTAGACTTCTACTTCCAGCTGTGCTCCATTGAAGTGACTTGTGAATCAGCCAGTGTGATGGCTGCGACACTG
GCTAATGGTGGTTTCTGCCCAATTACTGGTGAAAGAGTACTGAGCCCTGAAGCAGTTCGAAATACATTGAGTTTG
ATGCATTCCTGTGGCATGTATGACTTCTCAGGGCAGTTTGCTTTCCATGTTGGTCTTCCTGCAAAATCTGGAGTT
GCTGGGGGCATTCTTTTAGTTGTCCCCAATGTTATGGGTATGATGTGCTGGTCTCCTCCTCTGGATAAGATGGGC
AACAGTGTTAAGGGAATTCACTTTTGTCACGATCTTGTTTCTCTGTGTAATTTCCATAACTATGATAATTTGAGA
CACTTTGCAAAAAAACTTGATCCTCGAAGAGAAGGTGGTGATCAAAGGCATTCCTTTGGACCATTGGACTATGAA
AGTCTCCAACAAGAACTTGCTTTAAAAGAGACAGTATGGAAAAAAGTGTCACCTGAGTCAAATGAGGACATCTCT
ACAACTGTAGTATATAGAATGGAAAGTCTGGGAGAGAAAAGC**TAA**AGAAATGGGTTCTAGTTTCAGAATGTTTCT
TCATTTAATCTTTCAAACATCTTTAGCTTTTTTTTGCAAGTTATAAATATTTATTTGAGGTATTTTTTGTTCTCA
ATCTTGGGTGCTGGAGCCATAAAGCTTTTTTTTCCTTTTAATCTTTGTATAAAGGCAGTAGATTAAGAAGTGCAT
TTGTTGGTCTTTAAAAAGTATTTACAAGTACATAAATTTGCTTTATTTTTAAAAATACAAAAAGGAAAAATTTAA
ATTTTTTTTGATGTAATTAAAATGTTAACTATGTGGTCAGATAATCCCATTTTACAATAGTAACAGAAAATTGTA
ATTCTTAGTTCTAAAATTCACAAATTAAACTCATAAGCTTTGTTGCATTTTGTTTTTTCTTTTCCATTTTTAAAA
CTAATGTGATGTCTTTAGTGGCAATAGAAGGTACTTCTATGCTAAATACAAAACTAAAAAGGCAAAATAATGAAC
CCCAAATTATTTTATTTAAAATAGCAGTGGATTATAAAATTAGCTTGTGTTTACATTTATGCCATTTTTGGTGAT
AGATTGGCTTTACATTTTAAAAAATTTATTTAAAAATTTATCAAATGCTTTAAAATATGACTCCTACTTTTTTTA
TTTTGCAACTCCTCTGTTCTGTCAGAGTTGTTATATACAGGAGTGTCTTATGTTACTAAAACATTCCAGCCAAAG
AATTTCAGATGTGAGATAATGATGTTTCATCAATAAAAAGCTATAATGGTTAGTTACTCAGAAGGAGAAACAGTG
AGTGTCTTCAAGTGAATTGTTCACCTAAACAATTTTATTTTCATATTATCCACATAACTTTTTCTATGTTATATT
TAAATATGAATGGCAAATTTTGGTTTTTAGCTTTTACATTTTATTATCTTAATTTTATAAATGCTAATATTTCTT
TTGTGATAAGTTATAGCATCTCATAAAGTTTGTTCTATTTGAAGTTTTTTAGAGTACTTGAGAAATGAATTTAGT
CTGCAGGTAGTAAGTATGCTACTAAAATACGTTAGATCTAAATCCTTTTATTTGGTATAAAAATGCAATATTGAG
AATCAAAACTTGTTTTTAAGAGAACTATAGATTCTACACAACCTGATTTCAAGTAATTATTCATAGTATTTATAG
TTGTCTTGGCAAAGTGATTGTAAAATTCTGTAGGACCTATTCACACTTCTTCCTTCTTCCATATACTTCTCTGGT
TTTCCCCATAGTTCCCCTATAATTTCAAGTTTGTTGAAACCTGTTAATTTTAGTGGGGGATTAGAAGAAAAACTT
GGTGGTTTCTTAGCATGATGGTGTATGTATGTGGTAATGGAAAGTCTGTAAAAGTAAATATAGTGTAGXAAAAAA
GATTTCACTGAGTATTTTAGATACTAGTGXAAATAAAGATAGAAAATCTTGATCATAATGTCTTAAGTTTGGGAA
CTGTGATATTAAGAAAAGAAATTCCCTTCTAGA

FIGURE 4174

LSSSPSEILQELGKGSTHPQPGVSPPAAPAAPGPKDGPGETDAFGNSEGKELVASGENKIKQGLLPSLEDLLFYT
IAEGQEKIPVHKFITALKSTGLRTSDPRLKECMDMLRLTLQTTSDGVMLDKDLFKKCVQSNIVLLTQAFRRKFVI
PDFMSFTSHIDELYESAKKQSGGKVADYIPQLAKFSPDLWGVSVCTADGQRHSTGDTKVPFCLQSCVKPLKYAIA
VNDLGTEYVHRYVGKEPSGLRFNKLFLNEDDKPHNPMVNAGAIVVTSLIKQGVNNAEKFDYVMQFLNKMAGNEYV
GFSNATFQSERESGDRNFAIGYYLKEKKCFPEGTDMVGILDFYFQLCSIEVTCESASVMAATLANGGFCPITGER
VLSPEAVRNTLSLMHSCGMYDFSGQFAFHVGLPAKSGVAGGILLVVPNVMGMMCWSPPLDKMGNSVKGIHFCHDL
VSLCNFHNYDNLRHFAKKLDPRREGGDQRHSFGPLDYESLQQELALKETVWKKVSPESNEDISTTVVYRMESLGE
KS

FIGURE 4175

AAAAAAAAAAAAGAGGGAGGTGGCGGCAGCGGCTAGCGGACTCGAGTCTCAACCGGGCTGAGGCGGACACTTCTG
TGGAGCGAAGCAGTGGGAGCATCGAGCACTAGAGGCGGCACCGGGATCCCCGGCTCCGGGGAGGGGGGCGCCGGA
CCGGGAGGAGGGGAGGGGGCG**ATG**CTGGAAGCCATGGCGGAGCCCAGTCCCGAAGATCCACCTCCGACCCTTAAG
CCAGAGACTCAGCCACCAGAGAAACGGCGGAGAACAATTGAGGATTTCAACAAATTCTGCAGTTTTGTTTTGGCA
TATGCTGGTTACATTCCCCCTAGCAAAGAGGAAAGTGACTGGCCAGCCTCTGGCTCCAGCTCTCCATTGCGAGGA
GAGAGTGCGGCCGACAGTGATGGCTGGGACTCGGCCCCCTCAGATCTTCGAACCATCCAGACTTTTGTTAAGAAA
GCAAAGTCATCCAAGAGAAGGGCAGCTCAAGCAGGTCCCACCCAGCCAGGACCCCCAAGGTCCACTTTCTCTCGT
CTGCAGGCCCCCGACAGTGCTACCTTGCTTGAGAAGATGAAGCTCAAGGACTCTCTCTTTGATCTGGATGGGCCC
AAAGTGGCATCTCCTTTGTCCCCCACATCCCTGACACATACCTCCCGGCCCCCTGCTGCTCTTACCCCCGTGCCC
CTTTCCCAGGGGGACCTCTCCCATCCTCCTCGAAAGAAGGACCGAAAGAACCGAAAGTTGGGGCCAGGAGCTGGG
GCTGGCTTTGGGGTGCTTCGGAGGCCTCGGCCAACTCCTGGGGATGGGGAAAAGAGATCTCGAATCAAGAAGAGC
AAGAAGCGGAAGTTAAAAAAGGCAGAACGGGGGGATAGACTCCCACCTCCTGGGCCTCCCCAGGCACCCCCAGTG
ATACAGACTCTGAAGAGGAGGAGGAAGAGGAGGAAGAGGAAGAAGAAGAAGAGATGGCAACAGTGG**TAG**GGGGTG
AAGCCCCAGTCCCTGTGCTGCCAACACCCCCTGAGGCTCCTAGGCCCCCTGCCACAGTGCACCCTGAAGGAGTCC
CTCCTGCTGACAGTGAAAGCAAGGAGGTGGGCAGCACTGAAACAAGCCAAGATGGAGATGCCAGCTCCAGTGAAG
GCGAGATGCGGGTCATGGACGAGGACATCATGGTAGAATCAGGTGATGACTCATGGGATCTGATCACATGTTACT
GTCGAAAGCCCTTTGCAGGGCGGCCCATGATTGAGTGCAGCCTGTGTGGGACGTGGATCCACCTCTCCTGTGCTA
AGATTAAGAAGACCAACGTCCCCGACTTCTTTTATTGCCAGAAATGCAAGGAACTGAGGCCAGATGCCCGGCGGT
TAGGGGGGCCCCCCAAATCTGGAGAGCCCTGATGGCACCAACTTTAGCCTGGAACTTCCAAATGACAACATGATT
TGGGAACTGAGCCTCAGGGTCCTCAGCCTATCCCCTGGAGCTTGGATACTGTCTGCACTTCAAGGCAGGAATTCT
CAAGGGAGACTTGTTTGAAAATGAGTGTCTCACTTTCCCACCCTATCCTTCCTCCCCACTCTGTGGACTTGAAAT
TGAATCCATTACGGTTGGGGATGGGAGGCTGTCTGTGTCCCGACACATAATCTCTGTCTCTTGGACCTGCCACCA
TCACTTTCTGGGTCAGGATTGGAATTGGGATGGAATGGGACAGTTGTCTATAAAACTCTAGTGTAAATATTAGCA
CTCCCCTCCCTCATCTTTTCTTCTATTTCACTCCCCATTTATTTTCTTCTACACCGGTTGTATTTTTAATTTTGG
ACTTCCCCTATTGGGCATGGCAGCTCAAAGGTGGAGTACTAGAGCCTGGCCAAGTGAGGAAGGAAAGCAGAAAGG
TGACGATTCTCACTCACCTCTTTTGTTTTTAATAATATCGGCCGCTGTTTGTACAGACAGCCTGCGTGTTGTAAA
TAAAGCAGGGTGGGCTCTTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4176

MLEAMAEPSPEDPPPTLKPETQPPEKRRRTIEDFNKFCSFVLAYAGYIPPSKEESDWPASGSSSPLRGESAADSD
GWDSAPSDLRTIQTFVKKAKSSKRRAAQAGPTQPGPPRSTFSRLQAPDSATLLEKMKLKDSLFDLDGPKVASPLS
PTSLTHTSRPPAALTPVPLSQGDLSHPPRKKDRKNRKLGPGAGAGFGVLRRPRPTPGDGEKRSRIKKSKKRKLKK
AERGDRLPPPGPPQAPPVIQTLKRRRKRRKRKKKKRWQQW

FIGURE 4177

GTCTGTAATCCGTGTCTCCAGTAGTAGCTGCAGTGACTGTAGGTATCGGTGTTCCTATTATGTTAGCTTATGTCT
ATGGCGTAGTTCCAATTTCTCTTTGTCGAAGCGGAGGTTGTGGAGTCTCAGCAGGCAATGGAAAAGGAGTTAGGA
TTGAATTTGATGATGAAAATGATATAAATGTTGGTGGAACTAACACAGCTGTAGACACAACATCAGTAGCAGAAG
CAAGACACAACCCAAGCATAGGGGAGGGAAGTGTTGGTGGGCTGACTGGCAGTTTGAGTGCAAGTGGAAGCCACA
TGGATCGAATAGGAGCCATCCGAGACAACCTGAGTGAAACGGCCAGCACCATGGCACTAGCTGGAGCCAGTATAA
CGGGGAGTCTGTCAGGAAGTGCCATGGTAAACTGTTTTAACAGGTTGGAAGTACAAGCAGATGTACAGAAAGAAC
GGTACAGTCTAAGTGGAGAATCTGGCACAGTCAGCTTGGGAACAGTTAGTGATAATGCCAGCACCAAAGCAATGG
CAGGATCCATTCTGAATTCCTACATCCCATTGGACAAAGAAGGCAACAGTATGGAGGTGCAAGTAGATATTGAGT
CAAAGCCATCCAAATTCAGGCACAACAGTGGAAGCAGTAGTGTGGATGATGGCAGTGCCACCCGAAGTCATGCTG
GCGGTTCATCCAGTGGCTTGCCTGAAGGTAAATCTAGTGCCACCAAGTGGTCCAAAGAAGCAACAGCAGGGAAAA
AATCAAAAAGTGGTAAACTGAGGAAAAAGGGTAACATGAAGATAAATGAGACGAGAGAGGACATGGATGCACAGT
TGTTAGAACAACAAAGCACGAACTCAAGTGAATTTGAGGCTCCATCCCTCAGTGACAGTATGCCTTCTGTAGCAG
ATTCTCACTCTAGTCATTTTTCTGAATTTAGTTGTTCTGACCTAGAAAGCATGAAAACTTCTTGTAGTCATGGTT
CCAGTGATTATCACACCCGCTTTGCTACTGTTAACATTCTTCCTGAGGTAGAAAATGACCGTCTGGAAAATTCCC
CACATCAGTGTAGCATTTCTGTGGTTACCCAAACTGCTTCCTGTTCAGAAGTTTCACAGTTGAATCATATTGCTG
AAGAACATGGTAACAATGGAATAAAACCTAATGTTGATTTATATTTTGGCGATGCACTAAAAGAAACAAATAACA
ACCACTCACATCAGACAATGGAATTAAAAGTTGCAATTCAGACTGAAATTTAGGCCCATAAATGCTGCAGAATAA
TTACCACTGTACAACCGTGTTTGGAGCTGGTTGAACTACATGTGACTACTTAAGTTTCAGGTTACCAGCAAAAGC
CGGGTTTCATTATCATAATGCAGATACATTTTCTGTGTTCAGCAAGGCATTGTGTGTCATGTGGATCTTAGTTAC
CAAACTATGAAGTGAAGGCTTTAAAAGTGCATTATTTTAAGGATAATAAATTTGAAGAGCAAAGCATGTTTTGTG
TGTTTGCCACAAAACATTGCTTGAAGCACATACTTAGATAGAAATTGGTCTTAATTTATATAATCAATATAAAAT
ACTAATGCAATTCTACAGCATTCAAATGAAGAAAACTTGAGGCTTTAGGGATAAGTGGTTAGTGATATTTTATTG
AAACCACTAAAGAGATAAGTTTAAAAGAACTGCATAGGTTACTCTCAGTATATGATACTCTGTAACATTTCTATT
TATATCGGCATAAATTTCATTTTTTTTCTTCATATGCAATGTGGTTATATAAAGCTTAATGCAGCTCATTTGCTA
CCATTTGGATACTTAGACACTTTGAGCAAGATTGTGGCAGTTTTTGCACAACTTTGAAATAGAAATACCTGGTAC
TCTATCTTGTTTATTGTTGATGCCATCTTAGAGGAAAAAATGTAAAGGTAAGTAATTAAGCATATGACAGCAACA
AATAAGATACATAAAACTACAAAATAAAGTCCCATTAGGTTATAAGTATTACAAAAAATCCACCTTTCTCTAAGG
GGAAGTTTGTACCCCATTGATTCTTGGTGCCTTTGGGATCGACTGGGTTTTAATGGCCTAGTTATTTGAGGATTT
TGCTGTGTTGTTTTCCATGTCTTCTCTGGTCACCTTGGATTATATATAAAAATACAGGAAATAGGTAAACATGAA
TGTGATTAATAATGCTGAAAAAGTATTAGCCTACCAAAGACACACTCAGGCTTTAGTGAATAACTTTACATAACC
TCAGTTTTTAACACATGCATATCTTCTCCAACCATGAAATCAAAGCACGGTGCAGAACTTGTACCAAGTACAAAA
GGTCCATGTATGATTAGCATTATTTTCTTTTGCTTTTGTTTATGGACAATGTTCAGCTGACATAAGCAGAAGTTG
GCCAAAATACTGCCTGTACTGTTAATTTCCTGTATAATTCACTTAAATAAAAGCAGGTTAACCTCAAAAAAAAAA
AAAAAAAA

FIGURE 4178

MLAYVYGVVPISLCRSGGCGVSAGNGKGVRIEFDDENDINVGGTNTAVDTTSVAEARHNPSIGEGSVGGLTGSLS
ASGSHMDRIGAIRDNLSETASTMALAGASITGSLSGSAMVNCFNRLEVQADVQKERYSLSGESGTVSLGTVSDNA
STKAMAGSILNSYIPLDKEGNSMEVQVDIESKPSKFRHNSGSSSVDDGSATRSHAGGSSSGLPEGKSSATKWSKE
ATAGKKSKSGKLRKKGNMKINETREDMDAQLLEQQSTNSSEFEAPSLSDSMPSVADSHSSHFSEFSCSDLESMKT
SCSHGSSDYHTRFATVNILPEVENDRLENSPHQCSISVVTQTASCSEVSQLNHIAEEHGNNGIKPNVDLYFGDAL
KETNNNHSHQTMELKVAIQTEI

FIGURE 4179

CGGATGGGGCGTAGGTGGGCGGTGCGCCCACAGCTGCCTGGGTAAGGCCCAAGATGGCTGTCTTCGCCTTAGTAC
TCGTGTGAAGTTGGCGGGGACGGTTCCTGTCATCTTCTTGGGCTTATTTGGTGTGCTGTTGAAGGGGGGAGACTA
GAGAA**ATG**GCAGGGAACCTCTTATCCGGGGCAGGTAGGCGCCTGTGGGACTGGGTGCCTCTGGCGTGCAGAAGCT
TCTCTCTTGGTGTGCCTAGATTGATCGGTATAAGGCTCACTCTCCCGCCCCCCAAAGTGGTTGATCGTTGGAACG
AGAAAAGGGCCATGTTCGGAGTGTATGACAACATCGGGATCCTGGGAAACTTTGAAAAGCACCCCAAAGAACTGA
TCAGGGGGCCCATATGGCTTCGAGGTTGGAAAGGGAATGAATTGCAACGTTGTATCCGAAAGAGGAAAATGGTTG
GAAGTAGAATGTTCGCTGATGACCTGCACAACCTTAATAAACGCATCCGCTATCTCTACAAACACTTTAACCGAC
ATGGGAAGTTTCGA**TAG**AAGAGAAAGCTGAGAACTTCGGAAAAGGCTCATCTGTCACCCTGGAGAAGGGAAACTG
TACTTTTCCCTGTGAGGAAACGGCTTTGTATTTTCTCTGTAATAAAATGGGGCTTCTTTGGAAAAAAAAAAAAAA
A

FIGURE 4180

MAGNLLSGAGRRLWDWVPLACRSFSLGVPRLIGIRLTLPPPKVVDRWNEKRAMFGVYDNIGILGNFEKHPKELIR
GPIWLRGWKGNELQRCIRKRKMVGSRMFADDLHNLNKRIRYLYKHFNRHGKFR

FIGURE 4181

AAGCACTTCCTGTCTGCGGCATACAAAATGTATGGCACGGAATTTTAAGCTTACTGAGCTTTATAAACACGTCAC
ATTCACACATTCAAGACACACACTGGATATTCGGATAAAAACAAACAAACAAAAAACAGGCTAAATACCCATTCC
CCTCAATAACTTGGATAAGATACCTAAAAAAGGTCGACTTCGGTACCTTTCTGTCTTCTCCCCTCTCGCTATTTG
CCTACACTGGCTTCCTCACCTCCACTTTTTCTCACGTTTATCTGAGCGAAAACAAGCACGGTTCGGCAGCCTCCT
TTCCCAGCCCTACCTTTGTGCTGCAAAAGCGAAAATTCAAAAGCCAAGTACAATAGGAGACCGCCCACCCTGGCT
CCCTCGTGACACGAGGGAGCGCGAAGCGGAGGGCGCCTCGCGGCAGGAGCGGGATTTCCGGGGTCACGGGAACCG
GCAGGGGAACGGGATAAAGTTCCTGGAGAAAGGAAAGGAGAGCGTGGGATAGTAAAAGAGAAGACGCGGAGAAGA
GGAGAGGACCTACAAGAACGGAGGACAGGGGCGCACGATGGTCCCGGGGGGAGCGGAAACAAAGGCACGCAAAAC
GGAAAAGCGTGTGTAGGGGAGCGGAAAAGGAAGTCACCACCGTGGCCTGCGACGAAATGGCGAAAAGTCTTTTGA
AGACAGCCTCTCTGTCTGGAAGGACAAAATTGCTACATCAAACAGGATTGTCACTTTATAGTACATCCCATGGAT
TTTATGAGGAAGAAGTGAAAAAAACACTTCAGCAGTTTCCTGGTGGATCCATTGACCTTCAGAAGGAAGACAATG
GCATTGGCATTCTTACTCTGAACAATCCAAGTAGAATGAATGCCTTTTCAGGTGTTATGATGCTACAACTTCTGG
AAAAAGTAATTGAATTGGAAAATTGGACAGAGGGGAAAGGCCTCATTGTCCGTGGGGCAAAAAATACTTTCTCTT
CAGGATCTGATCTGAATGCTGTGAAATCACTAGGAACTCCAGAGGATGGAATGGCCGTATGCATGTTCATGCAAA
ACACCTTAACAAGATTTATGAGACTTCCTTTAATAAGTGTTGCGCTGGTTCAAGGTTGGGCATTGGGTGGAGGAG
CAGAATTTACTACAGCATGTGATTTCAGGTTAATGACTCCAGAGAGTAAGATCAGATTCGTCCACAAAGAGATGG
GCATAATACCAAGCTGGGGTGGCACCACCCGGCTAGTTGAAATAATCGGAAGTAGACAAGCTCTCAAAGTGTTGA
GTGGGGCCCTTAAACTGGATTCAAAAAATGCTCTAAACATAGGAATGGTTGAAGAGGTCTTGCAGTCTTCAGATG
AAACTAAATCTCTAGAAGAGGCACAAGAATGGCTAAAGCAATTCATCCAAGGGCCACCGGAAGTAATTAGAGCTT
TGAAAAAATCTGTTTGTTCAGGCAGAGAGCTATATTTGGAGGAAGCATTACAGAACGAAAGAGATCTTTTAGGAA
CAGTTTGGGGTGGGCCTGCAAATTTAGAGGCTATTGCTAAGAAAGGAAAATTTAATAAA**TAA**TTGGTTTTTCGTG
TGGATGTACTCCAAGTAAAGCTCCAGTGACTAATATGTATAAATGTTAAATGATATTAAATATGAACATCAGAAT
TACTTTGAAGGCTACTATTAATATGCAGACTTACTTTTAATCATTTGAATATCTGAACTCATTTACCTCATTTCT
TGCCAATTACTCACTTGGGTATTTACTGCGTAATCTGGAACATTTAGCTAAAATATACACTTTTGGCTTAAAAAT
TATTGCTGTCAATTCCAATAATAATTCTTAGCTTATAACCAAAGAGCAGTGTTTAAAAGGAGAGCTTCTATACAA
AACCTATTCCTGGCGTTACTTTTCATACAATTTTTGTTCTGTTTTACCTGGAAATAATTTACCAAAATAACTGAG
TGTTGCTGCTAAAGAACAAAAGTGGGGAGGTATCAGGGAACAAGAAAACAAGAAAGGGTATGATCAATCATTTTC
TTCTGCTCCAAACAGCTGGAGTAAAATTCATGGGAAATGGCCCTTCATTTAAAAAAAGATGTACCTCACTACCCA
CTACAAATTTGGAACTTTGTTCTTTTCAATAATTAGTTTTCTATTGTAAATTACCTACTAAACAGTGGTAGCCAT
GACATGGAAAGTCAACTGATTCTACAATTGGACATTCATTTGTGTGCCCTGGAATTTCCAACTAGTAATAAACAA
CTACTGTTGATGTAGTTTTAAACCACTTGAAGGGACTCATGAAGCATCCTGCAACATAAATTTGCATTTTTACAT
CAGATTTCTTTTTTTTCCTGAAAAACAACTAACCTTCTAACAACTATCTTTCAAAAGTAAATGTAATAAAAATGC
ACAACATAAAATGTTTATGATCCCAGCAATACACTTTTTAAAAAATGTGAAAGTCAAAGAATTAAGTTCTAGTTC
TGACTCATCACAAGAGGTCAAAAGTATTTGCTACTGTAACATTCAATTCACATTTGAGAATCATGGTAAAAATAA
CTTGCATTTGCCTTACCATCATGATCCTACTGTTGAGTTAGGAAAATATGGTTAGACAGACTCACATTACTTTTT
TTCAGAGGTAAACTCTAGATTACTGTGTCAACCCAATACTATTTGGCCATAGATGTAAAAACTACCAAATAAAAG
TGGATTTTGTGGTCTACAACATTTTGTGTAAAGTGAATTCATGTCTGCTAACACCGTTAAGTCTG

FIGURE 4182

STSCLRHTKCMARNFKLTELYKHVTFTHSRHTLDIRIKTNKQKTGXIPIPLNNLDKIPKKGRLRYLSVFSPLAIC
LHWLPHLHFFSRLSERKQARFGSLLSQPYLCAAKAKIQKPSTIGDRPPWLPRDTREREAEGASRQERDFRGHGNR
QGNGIKFLEKGKESVGSKREDAEKRRGPTRTEDRGARWSRGERKQRHAKRKSVCRGAEKEVTTVACDEMAKSLLK
TASLSGRTKLLHQTGLSLYSTSHGFYEEEVKKTLQQFPGGSIDLQKEDNGIGILTLNNPSRMNAFSGVMMLQLLE
KVIELENWTEGKGLIVRGAKNTFSSGSDLNAVKSLGTPEDGMAVCMFMQNTLTRFMRLPLISVALVQGWALGGGA
EFTTACDFRLMTPESKIRFVHKEMGIIPSWGGTTRLVEIIGSRQALKVLSGALKLDSKNALNIGMVEEVLQSSDE
TKSLEEAQEWLKQFIQGPPEVIRALKKSVCSGRELYLEEALQNERDLLGTVWGGPANLEAIAKKGKFNK

FIGURE 4183

GGCACGAGCGGCACGAGCGGAGGGCGCCTCGCGGCAGGAGCGGGATTTCCGGGGTCACGGGAACCGGCAGGGGAA
CGGGATAAAGTTCCCGGAGAAAGGAAAGGAGAGCGTGGGATAGTAAAAGAGAAGACGCGGAGAAGAGGAGAGGAC
CTACAAGAACGGAGGACAGGGGCGCACGATGGTCCCGGGGGGAGCGGAAACAAAGGCACGCAAAACGGAAAAGCG
TGTGTAGGGGAGCGGAAAAGGAAGTCACCACCGTGGCCTGCGACGAA**ATG**GCGAAAAGTCTTTTGAAGACAGCCT
CTCTGTCTGGAAGGACAAAATTGCTACATCAAACAGGATTGTCACTTTATAGTACATCCCATGGATTTTATGAGG
AAGAAGTGAAAAAAACACTTCAGCAGTTTCCTGGTGGATCCATTGACCTTCAGAAGGAAGACAATGGCATTGGCA
TTCTTACTCTGAACAATCCAAGTAGAATGAATGCCTTTTCAGGTGTTATGATGCTACAACTTCTGGAAAAAGTAA
TTGAATTGGAAAATTGGACAGAGGGGAAAGGCCTCATTGTCCGTGGGGCAAAAAATACTTTCTCTTCAGGATCTG
ATCTGAATGCTGTGAAAATCACCATAGGAATCTCCCAGAGGAGACTTCCTTTAATAAGTGTTGCGCTGGTTCAAG
GTTGGGCATTGGGTGGAGGAGCAGAATTTACTACAGCATGTGATTTCAGGTTAATGACTCCAGAGAGTAAGATCA
GATTCGTCCACAAAGAGATGGGCATAATACCAAGCTGGGGTGGCACCACCCGGCTAGTTGAAATAATCGGAAGTA
GACAAGCTCTCAAAGTGTTGAGTGGGGCCCTTAAACTGGATTCAAAAAATGCTCTAAACATAGGAATGGTTGAAG
AGGTCTTGCAGTCTTCAGATGAAACTAAATCTCTAGAAGAGGCACAAGAATGGCTAAAGCAATTCATCCAAGGGC
CACCGGAAGTAATTAGAGCTTTGAAAAAATCTGTTTGTTCAGGCAGAGAGCTATATTTGGAGGAAGCATTACAGA
ACGAAAGAGATCTTTTAGGAACAGTTTGGGGTGGGCCTGCAAATTTAGAGGCTATTGCTAAGAAAGGAAAATTTA
ATAAA**TAA**TTGGTTTTTCGTGTGGATGTACTCCAAGTAAAGCTCCAGTGACTAATATGTATAAATGTTAAATGAT
ATTAAATATGAACATCAGTTAAAAAAAAAATTCTTTAAGGCTACTATTAATATGCAGACTTACTTTTAATCATTT
GAAATCTGAACTCATTTACCTCATTTCTTGCCAATTACTCCCTTGGGTATTTACTGCGTAATTGGAACATTTACT
AAAATAACACTTTTGGCTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4184

MAKSLLKTASLSGRTKLLHQTGLSLYSTSHGFYEEEVKKTLQQFPGGSIDLQKEDNGIGILTLNNPSRMNAFSGV
MMLQLLEKVIELENWTEGKGLIVRGAKNTFSSGSDLNAVKITIGISQRRLPLISVALVQGWALGGGAEFTTACDF
RLMTPESKIRFVHKEMGIIPSWGGTTRLVEIIGSRQALKVLSGALKLDSKNALNIGMVEEVLQSSDETKSLEEAQ
EWLKQFIQGPPEVIRALKKSVCSGRELYLEEALQNERDLLGTVWGGPANLEAIAKKGKFNK

FIGURE 4185

ACTCCCGCCTTCATTTCCCATCGTGCTGAGGCGGGTGGCATGGCGGAGAAGGATGACACCGGAGTTTGACGAAGA
GGTGGTTTTTGAGAATTCTCCACTTTACCAATACTTACAGGATCTGGGACACACAGACTTTGAAATATGTTCTTC
TTTGTCACCAAAAACAGAAAAATGCACAACAGAGGGACGACAAAAGCCTCCTACAAGAGTCCTACCAAAAGGATC
TCTCAGTGCTATTTGCCTTCATTAGCTTGCTCGTT**ATG**CTTCCCGCTTGGTGGATTGTGTCTTCCTGGCTGGTAT
GGGGAGTGATTCTATTTGTGTATCTGGTCATAAGAGCTTTGAGATTATGGAGGACAGCCAAACTACAAGTGACCC
TAAAAAAATACAGCGTTCATTTGGAAGATATGGCCACAAACAGCCGAGCTTTTACTAACCTCGTGAGAAAAGCTT
TACGTCTCATTCAAGAAACCGAAGTGATTTCCAGAGGATTTACACTGGTCAGTGCTGCTTGCCCATTTAATAAAG
CTGGACAGCATCCAAGTCAGCATCTCATCGGTCTTCGGAAAGCTGTCTACCGAACTCTAAGAGCCAACTTCCAAG
CAGCAAGGCTAGCTACCCTATATATGCTGAAAAACTACCCCCTGAACTCTGAGAGTGACAATGTAACCAACTACA
TCTGTGTGGTGCCTTTTAAAGAGCTGGGCCTTGGACTTAGTGAAGAGCAGATTTCAGAAGAGGAAGCACATAACT
TTACAGATGGCTTCAGCCTGCCTGCATTGAAGGTTTTGTTCCAACTCTGGGTGGCACAGAGTTCAGAGTTCTTCA
GACGGGTAATAATTCTTGAAGATGAACTTGAAAAGCTTGTTTGTACTAAAGAAACACAAGAACTAGTGTCAGAGG
CTTATCCCATCCTAGAACAGAAATTAAAGTTGATTCAGCCCCACGTTCAAGCAAGCAACAATTGCTGGGAAGAGG
CCATTTCTCAGGTCGACAAACTGCTACGAAGAAATACAGATAAAAAAGGCAAGCCTGAAATAGCATGTGAAAACC
CACATTGTACAGTAGTACCTTTGAAGCAGCCTACTCTACACATTGCAGACAAAGATCCAATCCCAGAGGAGCAGG
AATTAGAAGCTTATGTAGATGATATAGATATTGATAGTGATTTCAGAAAGGATGATTTTTATTACTTGTCTCAAG
AAGACAAAGAGAGACAGAAGCGTGAGCATGAAGAATCCAAGAGGGTGCTCCAAGAATTAAAATCTGTGCTGGGAT
TTAAAGCTTCAGAGGCAGAAAGGCAGAAGTGGAAGCAACTTCTATTTAGTGATCATGCCGTGTTGAAATCCTTGT
CTCCTGTAGACCCAGTGGAACCCATAAGTAATTCAGAACCATCAATGAATTCAGATATGGGAAAAGTCAGTAAAA
ATGATACTGAAGAGGAAAGTAATAAATCCGCCACAACAGACAATGAAATAAGTAGGACTGAGTATTTATGTGAAA
ACGCTCTAGAAGGTAAAAATAAAGATAATTCTTCAAATGAAGTCTTCCCCCAAGGAGCAGAAGAAAGAATGTGTT
ACCAATGTGAGAGTGAAGATGAACCACAAGCAGATGGAAGTGGTCTGACCACTGCCCCTCCAACTCCCAGGGACT
CATTACAGCCCTCCATTAAGCAGAGGCTGGCACGGCTACAGCTGTCACCAGATTTTACCTTCACTGCTGGCCTTG
CTGCAGAAGTGGCTGCTAGATCTCTCTCCTTTACCACCATGCAGGAACAGACTTTTGGTGATGAGGAGGAAGAAC
AAATAATAGAAGAAAATAAAAATGAGATAGAAGAAAAG**TAA**GAACCAAGATTCATATGAAGTGATATTAGATTGT
TCCTTTTACAAAAGTGTTTAGCTTCAAGACTGGAAAGGGAATATGAGTGTAAGTTTACTATATATAAAGCTAAGA
TGTGGATTTACAGGAAGAACCCTGGTTTGAATAACTGATCTGAAATTAGTAGTTACCTGTAAATGGCAGATCTTT
TAGGAAAATAAGAGAAAGGTAAGGGCTCTTTTGAATAAACTGCTGTTTTATTTGTGGCACAACTGATCAATCTTG
GAAATTCTTTAAGTATTTTTAATAAGAAATGAATTATCATTTCTTGCCAGAATTTGCTACCTTAAGGTGATTGGG
AAAATTCTGTTGCAAGAACATTAACATTTAGTATGACTCCTTTTTACTGTATTCTTGCAGTTAATAACTGCAGCT
ATTATGTTAATAACAAGTTGTTTGTATTTTATTTTTGTTTATACCAGTCTTAAAGATCCAGGTTCTGAATAAAAA
AATTAATTGATAC

FIGURE 4186

MLPAWWIVSSWLVWGVILFVYLVIRALRLWRTAKLQVTLKKYSVHLEDMATNSRAFTNLVRKALRLIQETEVISR
GFTLVSAACPFNKAGQHPSQHLIGLRKAVYRTLRANFQAARLATLYMLKNYPLNSESDNVTNYICVVPFKELGLG
LSEEQISEEEAHNFTDGFSLPALKVLFQLWVAQSSEFFRRVIILEDELEKLVCTKETQELVSEAYPILEQKLKLI
QPHVQASNNCWEEAISQVDKLLRRNTDKKGKPEIACENPHCTVVPLKQPTLHIADKDPIPEEQELEAYVDDIDID
SDFRKDDFYYLSQEDKERQKREHEESKRVLQELKSVLGFKASEAERQKWKQLLFSDHAVLKSLSPVDPVEPISNS
EPSMNSDMGKVSKNDTEEESNKSATTDNEISRTEYLCENALEGKNKDNSSNEVFPQGAEERMCYQCESEDEPQAD
GSGLTTAPPTPRDSLQPSIKQRLARLQLSPDFTFTAGLAAEVAARSLSFTTMQEQTFGDEEEEQIIEENKNEIEE
K

FIGURE 4187

ATGTTGGTGCTGTTTGAAACGTCTGTGGGTTACGCCATCTTTAAGGTTCTAAATGAGAAGAAACTTCAAGAGGTT
GATAGTTTATGGAAAGAATTTGAAACTCCAGAGAAAGCAAACAAAATAGTAAAGCTAAAACATTTTGAGAAATTT
CAGGATACAGCAGAAGCATTAGCAGCATTCACAGCTCTGATGGAGGGCAAAATCAATAAGCAGCTGAAAAAAGTT
CTGAAGAAAATAGTAAAAGAAGCCCATGAACCGCTGGCAGTAGCTGATGCTAAACTAGGAGGGGTCATAAAGGAA
AAGCTGAATCTCAGTTGTATCCATAGTCCTGTTGTTAATGAACTTATGAGAGGAATTCGTTCACAAATGGATGGA
TTAATCCCTGGGGTAGAACCACGTGAAATGGCAGCTATGTGTCTTGGATTGGCTCACAGCCTGTCTCGATATAGA
TTGAAGTTTAGCGCTGATAAAGTAGACACAATGATTGTTCAGGCAATTTCCTTGTTAGATGACTTGGATAAAGAA
CTAAACAACTACATTATGCGATGTAGAGAATGGTATGGCTGGCATTTCCCTGAATTAGGAAAAATTATTTCAGAT
AATTTAACATACTGCAAGTGTTTACAGAAAGTTGGCGATAGGAAGAACTATGCCTCTGCCAAGCTTTCTGAGTTG
CTGCCAGAAGAAGTTGAAGCAGAAGTGAAAGCAGCTGCAGAGATATCAATGGGAACAGAGGTTTCAGAAGAAGAT
ATTTGCAATATTCTGCATCTTTGCACCCAGGTGATTGAAATCTCTGAATATCGAACCCAGCTCTATGAATATCTA
CAAAATCGAATGATGGCCATTGCACCCAATGTTACAGTCATGGTTGGGGAATTAGTTGGAGCACGGCTTATTGCT
CATGCAGGTTCTCTTTTAAATTTGGCCAAGCATGCAGCTTCTACCGTTCAGATTCTTGGAGCTGAAAAGGCACTT
TTCAGAGCCCTCAAATCTAGACGGGATACCCCTAAGTATGGTCTCATTTATCATGCTTCACTCGTGGGCCAGACA
AGTCCCAAACACAAAGGAAAGATTTCTCGAATGCTGGCAGCCAAAACCGTTTTGGCTATCCGTTATGATGCTTTT
GGTGAGGATTCAAGTTCTGCAATGGGAGTTGAGAACAGAGCCAAATTAGAGGCCAGGTTGAGAACTTTGGAAGAC
AGAGGGATAAGAAAAATAAGTGGAACAGGAAAAGCATTAGCAAAAACAGAAAAATATGAACACAAAAGTGAAGTG
AAGACTTACGATCCTTCTGGTGACTCCACACTTCCAACCTGCTCTAAAAAACGCAAAATAGAACAGGTAGATAAA
GAGGATGAAATTACTGAAAAGAAAGCCAAAAAAGCCAAGATTAAAGTTAAAGTTGAAGAAGAGGAAGAAGAAAAA
GTGGCAGAAGAAGAAGAAACATCTGTGAAGAAGAAGAAGAAAAGGGGTAAAAAGAAACACATTAAGGAAGAACCA
CTTTCTGAGGAAGAACCATGTACCAGCACAGCAATTGCTAGTCCAGAGAAAAAGAAGAAAAAGAAAAAAAAGAGA
GAGAACGAGGATTAA

FIGURE 4188

MLVLFETSVGYAIFKVLNEKKLQEVDSLWKEFETPEKANKIVKLKHFEKFQDTAEALAAFTALMEGKINKQLKKV
LKKIVKEAHEPLAVADAKLGGVIKEKLNLSCIHSPVVNELMRGIRSQMDGLIPGVEPREMAAMCLGLAHSLSRYR
LKFSADKVDTMIVQAISLLDDLDKELNNYIMRCREWYGWHFPELGKIISDNLTYCKCLQKVGDRKNYASAKLSEL
LPEEVEAEVKAAAEISMGTEVSEEDICNILHLCTQVIEISEYRTQLYEYLQNRMMAIAPNVTVMVGELVGARLIA
HAGSLLNLAKHAASTVQILGAEKALFRALKSRRDTPKYGLIYHASLVGQTSPKHKGKISRMLAAKTVLAIRYDAF
GEDSSSAMGVENRAKLEARLRTLEDRGIRKISGTGKALAKTEKYEHKSEVKTYDPSGDSTLPTCSKKRKIEQVDK
EDEITEKKAKKAKIKVKVEEEEEEKVAEEEETSVKKKKKRGKKKHIKEEPLSEEEPCTSTAIASPEKKKKKKKKR
ENED

FIGURE 4189

TGGCACCGGCATCGGCTGACACTGCTGCCTCCAGCTAGTTATTTCGTCCTCTTCCGTTCTTCACCCCTACACCTT
GGAGGTGAACTTCTCACCTGAGGGCTGTAAAGACTCGTTTGAAAATGGAGAGCCAAGAACCAACGGAATCTTCTC
AGAATGGCAAACAGTATATCATTTCAGAGGAGTTAATTTCAGAAGGAAAATGGGTCAAGCTTGAAAAAACAACGT
ACATGGATCCTACTGGTAAAACTAGAACTTGGGAATCAGTGAACGTACCAACCAGGAAAGAGCAGACTGCGGATG
GTGTCGCGGTCATCCCCGTGCTGCAGAGAACACTTCACTATGAGTGTATCGTTCTGGTGAAACAGTTCCGACCAC
CAATGGGGGGCTACTGCATAGAGTTCCCTGCAGGTCTCATAGATGATGGTGAAACCCCAGAAGCAGCTGCTCTCC
GGGAGCTTGAAGAAGAAACTGGCTACAAAGGGGACATTGCCGAATGTTCTCCAGCGGTCTGTATGGACCCAGGCT
TGTCAAACTGTACTATACACATCGTGACAGTCACCATTAACGGAGATGATGCCGAAAACGCAAGGCCGAAGCCAA
AGCCAGGGGATGGAGAGTTTGTGGAAGTCATTTCTTTACCCAAGAATGACCTGCTGCAGAGACTTGATGCTCTGG
TAGCTGAAGAACATCTCACAGTGGACGCCAGGGTCTATTCCTACGCTCTAGCGCTGAAACATGCAAATGCAAAGC
CATTTGAAGTGCCCTTCTTGAAATTTTAAGCCCAAATATGACACTGGCCATTTTTGTAAACGAGACCACCAGGCC
TTCTTCACTAAGACTTTGTATTCAACTTAGTTTAATGTAGATTTGCCATTAGCTTTTTCGTAAAATAAAAGCACA
GAACAGATGTGGTGGTGGTATGGAATTGTAATTACAGGTAGGTTGTGACCTTCCTTTAAATTTGTTATAACTCCA
GCTAAAATTAACAAAGAATATAAATGCAAGTATGTTTACTCCAATTTTTTTAAAGCTCAACAGAGTTAACTACAG
CTCAGTTACTTTTCTAGTCCAGTCTGGAACACAGGGGTATTTGGTATTGAGAAATAGACCTGAGTTCTCAATTAG
GTCA

FIGURE 4190

MESQEPTESSQNGKQYIISEELISEGKWVKLEKTTYMDPTGKTRTWESVNVPTRKEQTADGVAVIPVLQRTLHYE
CIVLVKQFRPPMGGYCIEFPAGLIDDGETPEAAALRELEEETGYKGDIAECSPAVCMDPGLSNCTIHIVTVTING
DDAENARPKPKPGDGEFVEVISLPKNDLLQRLDALVAEEHLTVDARVYSYALALKHANAKPFEVPFLKF

FIGURE 4191

GCCCCCGAGCAGGAGCCGGTGCGAGCGGAGCAGAGCCGAGGTCGGGCCGCGAGCGGAGCCGGCTGAGCGGGCGCC
GAGCTCCCGCC**ATG**GCCCGGAACACGCTGTCCTCGCGCTTCCGCCGGGTGGACATCGACGAATTTGACGAGAACA
AATTTGTGGACGAGCAGGAGGAGGCGGCGGCGGCGGCGGAGCCAGGCCCGGACCCGAGCGAGGTGGACGGGC
TCCTGCGGCAAGGGGACATGCTTCGGGCATTCCATGCAGCCTTGCGGAACTCTCCCGTCAACACCAAGAATCAAG
CTGTGAAGGAGCGAGCCCAGGGCGTGGTGCTGAAAGTGCTCACAAACTTCAAGAGCAGTGAGATTGAGCAGGCTG
TGCAGTCACTGGACAGAAACGGCGTTGACTTGTTAATGAAGTACATTTATAAAGGCTTTGAGAAGCCCACAGAAA
ATAGCAGCGCAGTGTTACTCCAGTGGCACGAAAAGGCCTTAGCAGTAGGAGGACTAGGCTCCATTATAAGAGTTC
TTACAGCAAGAAAGACTGTT**TAA**AAAAAATAAAAAGACTCATGTTACCTTGAGAAGAATTCTGGATGCCCAGGCT
GGTGAAGAAGGGATTGACAATGGACCATCTTCCTAGGAACTCCCAAGTAAACTATTTCAGGACATGTATCTGCTG
AAATGTATTTTATTTTCAAGGTGGAGGGGAAAATCGTCTGTTTCCTAAATCCTGTTTAGGATCTGATAGTCTATG
CCTTTGTCTCCGAGTACTGCAGAACTGACATTTTGACGGTCTACCAGCGTGGCGGCTGGTGTTGGTCAGATGCAC
CTGTGTGCACTGGGGGAGGGATGGTTTGGGCAGGTGCAGATCCAAGGGCTGTGGTAAACGGGAGAGCTTGTGTTT
TTGAAGTGGAAAAAAACCCAAGAGTTTGTACAGACATCCTGTCTTCCCAGAGAAGGTGGACACTCTTGGGCTCAT
TGTAAAGTGCCTGCTGCATCAATAAAGCTCTTGGCTTATTAGTCTATACAAAAAAAAAAAAAAAAA

FIGURE 4192

MARNTLSSRFRRVDIDEFDENKFVDEQEEAAAAAAEPGPDPSEVDGLLRQGDMLRAFHAALRNSPVNTKNQAVKE
RAQGVVLKVLTNFKSSEIEQAVQSLDRNGVDLLMKYIYKGFEKPTENSSAVLLQWHEKALAVGGLGSIIRVLTAR
KTV

FIGURE 4193

ATCTTCAAGTATGGGGTCTGCTGGCTTGTCGCGGCTGCATGGGCTTTTCGCGGTCTATAAGCCCCCGGGGCTAAA
ATGGAAGCACCTGCGGGATACAGTGGAGCTACAACTTCTGAAGGGTCTCAATGCCAGGAAGCCTCCCGCTCCTAA
ACAGCGTGTTCGCTTCTTGCTGGGCCCCATGGAAGGCAGCGAAGAGAAGGAGCTGACCCTCACAGCCACCAGCGT
ACCCTCTTTCATCAACCATCCACTGGTATGTGGACCAGCATTCGCCCATCTCAAGGTTGGCGTGGGACATCGGTT
GGATGCCCAGGCTTCTGGAGTACTTGTGCTCGGCGTGGGACATGGATGCAGGCTCCTCACCGATATGTACAATGC
TCATCTTACCAAGGATTACACAGTGCGTGGCCTCCTGGGCAAAGCTACAGATGACTTCCGTGAGGACGGGAGGCT
GGTAGAGAAGACAACCTATGACCACGTGACCAGAGAGAAGCTGGACCGCATTCTGGCCGTTATCCAAGGCTCCCA
TCAGAAGGCCCTGGTGATGTACTCCAACCTCGACCTGAAGACCCAGGAGGCCTATGAGATGGCCGTGAGAGGCCT
GATCCGGCCCATGAACAAGTCCCCGATGCTGATAACTGGCATCCGATGCCTCTACTTTGCACCTCCGGAATTCCT
CTTAGAGGTGCAGTGCATGCATGAGACGCAGAAAGAGCTGCGGAAGTTGGTTCATGAAATCGGCCTGGAACTAAA
GACCACTGCTGTCTGCACCCAAGTGCGGCGCACGCGCGACGGCTTCTTCACGCTAGACAGTGCCCTCCTGAGGAC
CCAGTGGGACCTAACCAACATCCAGGATGCTATCCGGGCTGCTACCCCTCAGGTAGCTGCAGAGCTGGAGAAGAG
CTTGAGCCCGGGGCTGGACACCAAGCAGCTCCCCAGTCCGGGATGGTCCTGGGACTCCCAGGGCCCGAGCTCTAC
CTTGGGGCTGGAGAGGGGTGCGGGGCAGTGAATGCCCAGGCAGCTCCTGGGGCAGTGGATGGATAAATAGAAGAA
CTGCTATGAGCTGGACCTGATAGCTGTGCAGAAAGTGAGAGCAGGGGCACCTTTTCTACGTAAGACACAAAACTC
AAGCTGTAACAGAAAGGTCAATGGACTTGACCCAACTGAGAAGGAAAAACTTCTGTATGGAGGAAAAGACAGTAA
ACATGACAGACTGATAGAAAGTATTGGCAGACCAGGCGTGGTGGCGGGCACTTGTAATCCCAGCTACTCCCAAGG
CTGAGGCAGGAGAATTGCTTGAGCCCAGGAGTTTAAGGTTGTAGTGCGCTAGACGGCGCCTGTGAATAGCCACTG
CACTCTAGTCTGGGGAACATATGAGACCCCTGCCATCTCAAAAAAAAAAAAAATTCTCAATAAACTATGTGCCCAC
GAAAATTAAAAATT

FIGURE 4194

MGSAGLSRLHGLFAVYKPPGLKWKHLRDTVELQLLKGLNARKPPAPKQRVRFLLGPMEGSEEKELTLTATSVPSF
INHPLVCGPAFAHLKVGVGHRLDAQASGVLVLGVGHGCRLLTDMYNAHLTKDYTVRGLLGKATDDFREDGRLVEK
TTYDHVTREKLDRILAVIQGSHQKALVMYSNLDLKTQEAYEMAVRGLIRPMNKSPMLITGIRCLYFAPPEFLLEV
QCMHETQKELRKLVHEIGLELKTTAVCTQVRRTRDGFFTLDSALLRTQWDLTNIQDAIRAATPQVAAELEKSLSP
GLDTKQLPSPGWSWDSQGPSSTLGLERGAGQ

FIGURE 4195

GGGGGTGGCGGGGACGCGAGTGGCGGCCGCGGGGCCCCGGACAAGGGTCCGCAGAGCTGCAGCCTTCGAGGGCCA
GCCCTCTCCGAGTCCGGGGCTGGGTCCCACCAGTGACAAGGCGGCAGCCCCGCGCACACCAAAGAGAAAGCGGCT
GTGGCGGCAGCGGCAGCCCCAGCC**ATG**CTGTGTTATGTGACGAGGCCGGACGCGGTGCTGATGGAGGTGGAGGTG
GAGGCGAAAGCCAACGGCGAGGACTGCCTCAACCAGGTGTGCAGGCGACTGGGAATCATAGAAGTTGACTATTTT
GGACTGCAATTTACGGGTAGCAAAGGTGAAAGTTTATGGCTAAACCTGAGAAACCGGATCTCCCAGCAGATGGAT
GGGCTAGCCCCTTACAGGCTTAAACTTAGAGTCAAGTTCTTCGTGGAGCCTCATCTCATCTTACAGGAGCAGACT
AGGCATATCTTTTTCTTGCACATCAAGGAGGCCCTCTTGGCAGGCCACCTCTTGTGTTCCCCAGAGCAGGCAGTG
GAACTCAGTGCCCTCCTGGCCCAGACCAAGTTTGGAGACTACAACCAGAACACTGCCAAGTATAACTATGAGGAG
CTCTGTGCCAAGGAGCTCTCCTCTGCCACCTTGAACAGCATTGTTGCAAAACATAAGGAGTTGGAGGGGACCAGC
CAGGCTTCAGCTGAATACCAAGTTTTGCAGATTGTGTCGGCAATGGAAAACTATGGCATAGAATGGCATTCTGTG
CGGGATAGCGAAGGGCAGAGACTGCTCATTGGGGTTGGACCTGAAGGAATCTCAATTTGTAAAGATGACTTTAGC
CCAATTAATAGGATAGCTTATCCTGTGGTGCAGATGGCCACCCAGTCAGGAAAGAATGTATATTTGACGGTCACC
AAGGAATCTGGGAACAGCATCGTGCTCTTGTTTAAAATGATCAGCACCAGGGCGGCCAGCGGGCTCTACCGAGCG
ATAACAGAGACGCACGCATTCTACAGGTGTGACACAGTGACCAGCGCCGTGATGATGCAGTATAGCCGTGACTTG
AAGGGCCACTTGGCATCTCTGTTTCTGAATGAAAACATTAACCTTGGCAAGAAATATGTCTTTGATATTAAAAGA
ACATCAAAGGAGGTGTATGACCATGCCAGGAGGGCTCTGTACAATGCTGGCGTTGTGGACCTCGTTTCAAGAAGC
AACCAGAGCCCTTCACACTCGCCTCTGAAGTCCTCAGAAAGCAGCATGAACTGCAGCAGCTGCGAGGGCCTCAGC
TGCCAGCAGACCCGGGTGCTGCAGGAGAAGCTACGCAAGCTGAAGGAAGCCATGCTGTGCATGGTGTGCTGCGAG
GAGGAGATCAACTCCACCTTCTGTCCCTGTGGCCACACTGTGTGCTGTGAGAGCTGCGCCGCCCAGCTACAGTCA
TGTCCCGTCTGCAGGTCGCGTGTGGAGCATGTCCAGCACGTCTATCTGCCAACGCACACCAGTCTTCTCAATCTG
ACTGTAATC**TAA**TCTGTTGTGCTTTTGTTGGACTTGGCATGTTTCCATGAACTGCACTATTATAAACTATTAAAA
TGATAGATGTTGGAGAAAGTAATTATTCCAACACCCATCTGCCCATGCGATGTTAAAAAA

FIGURE 4196

MLCYVTRPDAVLMEVEVEAKANGEDCLNQVCRRLGIIEVDYFGLQFTGSKGESLWLNLRNRISQQMDGLAPYRLK
LRVKFFVEPHLILQEQTRHIFFLHIKEALLAGHLLCSPEQAVELSALLAQTKFGDYNQNTAKYNYEELCAKELSS
ATLNSIVAKHKELEGTSQASAEYQVLQIVSAMENYGIEWHSVRDSEGQRLLIGVGPEGISICKDDFSPINRIAYP
VVQMATQSGKNVYLTVTKESGNSIVLLFKMISTRAASGLYRAITETHAFYRCDTVTSAVMMQYSRDLKGHLASLF
LNENINLGKKYVFDIKRTSKEVYDHARRALYNAGVVDLVSRSNQSPSHSPLKSSESSMNCSSCEGLSCQQTRVLQ
EKLRKLKEAMLCMVCCEEEINSTFCPCGHTVCCESCAAQLQSCPVCRSRVEHVQHVYLPTHTSLLNLTVI

FIGURE 4197

GCGGCCGCGGGGCCCCGGACAAGGGTCCGCAGAGCTGCAGCCTTCGAGGGCCAGCCCTCTCCGAGTCCGGGGCTG
GGTCCCACCAGTGACAAGGCGGCAGCCCCGCGCACACCAAAGAGAAGGCGGCTGTGGCGGCAGCGGCAGCCCCAG
CCATGCTGTGTTATGTGACGAGGCCGGACGCGGTGCTGATGGAGGTGGAGGTGGAGGCGAAAGCCAACGGCGAGG
ACTGCCTCAACCAGGCATATCTTTTTCTTGCACATCAAGGAGGCCCTCTTGGCAGGCCACCTCTTGTGTTCCCCA
GAGCAGGCAGTGGAACTCAGTGCCCTCCTGGCCCAGACCAAGTTTGGAGACTACAACCAGAACACTGCCAAGTAT
AACTATGAGGAGCTCTGTGCCAAGGAGCTCTCCTCTGCCACCTTGAACAGCATTGTTGCAAAACATAAGGAGTTG
GAGGGGACCAGCCAGGCTTCAGCTGAATACCAATTTTGCCAGATTGTGTCGGCAATGGAAAACTATGGCATAGAA
TGGCATTCTGTGCGGGATAGCGAAGGGCAGAAACTGCTCATTGGGGTTGGACCTGAAGGAATCTCAATTTGTAAA
GATGACTTTAGCCCAATTAATAGGATAGCTTATCCTGTGGTGCAGATGGCCACCCAGTCAGGAAAGAATGTATAT
TTGACGGTCACCAAGGAATCTGGGAACAGCATCGTGCTCTTGTTTAAAATGATCAGCACCAGGGCGGCCACGCGG
CTCTACCGAGCGATAACAGAGACGCACGCATTCTACAGGTGTGACACAGTGACCAGCGCCGTGATGATGCAGTAT
AGCCGTGACTTGAAGGGCCACTTGGCATCTCTGTTTCTGAATGAAAACATTAACCTTGGGCCAAGAAATTATGTC
TTTGATATTTAAAAGAACATCAAAGGAGGTGTATGACCATGCCAGGAGGCTCTGTACAATGCTGGCGTTGTGGAC
CTCGTTTCAAGAACAACCAGAGCCCTTCACACTCGCCTCTGAAGTCCTCAGAAAGCAGCATGAACTGCAGCAGCT
GCGAGGGCCTCAGCTGCCAGCAGACCCGGGTGCTGCAGGAGAAGCTACGCAAGCTGAAGGAAGCCATGCTGTGCA
TGGTGTGCTGCGAGGAGGAGATCAACTCCACCTTCTGTCCCTGTGGCCACACTGTGTGCTGTGAGAGCTGCGCCG
CCCAGCTACAGTCATGTCCCGTCTGCAGGTCGCGTGTGGAGCATGTCCAGCACGTCTATCTGCCAACGCACACCA
GTCTTCTCAATCTGACTGTAATCTAATCTGTTGTGCTTTTGTTGGACTTGGCATGTTTCCATGAACTGCACTATT
ATAAACTATTAAAATGATAGATTGTGGAGAAAGTAATTATTCCAACACCCATCTGCCATGCGATGTTAAAAAAAA
AAAAAAAGGAAGAAAAATAACACAGCTACTCCTCACTGCAAAAACATATCCATGCGTAGAATCAACAACTCCAGT
CATGGGACCAGGAGGAGCTCTGGGACGCAGACACATTCCTTGGATGTTGATTTTTTTTATGATCTAGTAAAGGAA
TAGGTAAAGTCTTTGATGTCAGTGAAGTGGCAACATAGCCAAAAAGTTGGGTACCTTTTAGGAAATGATGTTGTA
AGTCTCCTTAATGTATCCTGAGGTAAGTTTCCTACTGGCAGCAGATTTTGTAAGAATTACTTTTAAGAATTTCAT
TCTTTTTGTATGGTCATGGAGCTCCAACCATTTTTAATAGGAAAGTCTTTTGTAAAATTGTTGTCGTTTTAATGT
CATTTCTGTCTTTATAACTTGATCAAGAATGATTGGAAGGCAAACAGGTTTACAAATCAATTCTGTGACTTTTAA
AAAGTTGACAATGTTGTCAGATTTAAACCAGTGTGGCTAGTAAAAAGCAGCTCACTCAATGTTGGGTGGCTCCCT
ATTCCTTTACGCTCCCCCTATCCCTACCCCACAAGCCTTTCGATTATAAAATACTACCAATCTTGTTATAAGATT
ACTGTGGAGTAGTCAAGTACTCCCCGGGCCTTCTGAGCTGGTGGAATATTTTATTTCAGACTGAAAACAGAGAGC
ACTCTCCTTGGGAAGGGAAAGCGGCTTGCTGAGTGAGAGATGGAGCCTCATGGTGTACAACTGAGGGTAGTTAAC
TCATCACTTCTCCCAAGCACTCGATCCCAGCTTCACCCACTGGTGTTGCTTTGCTTGAACTGTTCAAGCCTTTTA
TAGCCTTACCATAAGTATTTAGATATGGTGTCCTTTTCTGTTTTTGGGGGGGGAGTTTTGTTGTGTTTTTTTAAA
GTAAGTGCTTAAGTATTAACTTTGGGTTGTCCCCTCTGTATGTTTCGAAGGGGTTTTGGTTCTTTTTGCTTCTGT
TTTCTTAAACATGTTTTCCACTCCCACTTGGGCATTTTGGAAGCTGGTCAGCTAGCAGGTTTTCTGGGATGTCGG
GAGACCTAGATGACCTTATCGGGTGCAATACTAGCTAAGGTAAAGCTAGAAACCTACACTGTCACTTTACTGAGA
TTTCTGAGTATACTTTTCATATTGCCTTAATGTAGCAGTAATGTGTTTATGCATTTGTTTCTTTGCACAGACATT
TTGTCAAATATTAAAACTCTACTTTTTTATGGCACATATTAGCATATAAGCCTTTATTCCAAGAGGTATTTATTT
TTTCACTTGTAAAAAAATAATGTTTCCACGTAAAGAACTCTGTTATATCCTAGAGGACTCTGTCTTTTATATTCG
GGATAATAAAGACTTTAAAGCAAAAAAAAAAAAAAAAAA

FIGURE 4198

MENYGIEWHSVRDSEGQKLLIGVGPEGISICKDDFSPINRIAYPVVQMATQSGKNVYLTVTKESGNSIVLLFKMI
STRAATRLYRAITETHAFYRCDTVTSAVMMQYSRDLKGHLASLFLNENINLGPRNYVFDI

FIGURE 4199

CACGAGGGGCTTCCGGGCCCGGACGCCATTTCCAGCGGTTGCTGGTTCTGACGGGTTGTAGTCTGCCAGGACAATGAGTTATGACTACCATCAGAACTGGGGCCGTGATGGGGGTCCCCGCAGCTCCGGTGGGGGCTATGGAGGGGGGCCAGCAGGGGGTCATGGAGGTAACCGAGGCTCCGGAGGAGGCGGCGGCGGCGGAGGGGGTGGTCGAGGCGGCAGGGGCCGGCATCCCGGGCACCTGAAAGGCCGCGAAATCGGCATGTGGTACGCGAAAAAACAGGGGCAGAAGAACAAGGAAGCGGAGAGGCAAGAGAGAGCTGTAGTACACATGGATGAACGACGAGAAGAACAAATTGTACAGTTACTGAATTCTGTTCAAGCGAAGAATGATAAAGAGTCAGAAGCACAGATATCCTGGTTTGCTCCTGAGGATCATGGATACGGTACTGAAGTTTCTACTAAGAACACACCATGCTCAGAGAACAAACTTGACATCCAGGAAAAGAAGTTGATAAATCAAGAAAAAAAAATGTTTAGAATCAGGAACAGATCATATATTGACCGAGATTCTGAGTATCTCTTGCAAGAAAATGAACCAGATGGAACTTTAGACCAAAAATTATTGGAAGATTTACAAAAGAAAAAAAATGACCTTCGGTATATTGAAATGCAGCATTTCAGAGAAAAGCTGCCTTCGTATGGAATGCAAAAGGAATTGGTAAATTTAATTGATAACCATCAGGTAACAGTAATAAGTGGTGAAACTGGTTGTGGCAAAACCACTCAAGTTACTCAGTTCATTTTGGATAACTACATTGAAAGAGGAAAAGGATCTGCTTGCAGAATAGTTTGTACTCAGCCAAGAAGAATTAGTGCCATTTCAGTTGCGGAAAGAGTAGCTGCAGAAAGGGCAGAATCTTGTGGCAGTGGTAATAGTACTGGATATCAAATTCGTCTCCAGAGTCGGTTGCCAAGGAAACAGGGTTCTATCTTATACTGTACAACAGGAATCATCCTTCAGTGGCTCCAGTCAGACCCGTATTTGTCCAGTGTTAGTCATATCGTACTTGATGAAATCCATGAAAGAAATCTGCAGTCAGATGTTTTAATGACTGTTGTTAAAGACCTTCTCAATTTTCGATCTGACTTGAAAGTAATATTGATGAGTGCAACATTGAATGCAGAAAAGTTTTCAGAATATTTTGGTAACTGTCCAATGATACATATACCTGGTTTTACCTTTCCGGTTGTGGAATATCTTTTGGAAGATGTAATTGAAAAAATAAGGTATGTTCCAGAACAAAAAGAACACAGATGCCAGTTTAAGAGGGGTTTCATGCAAGGGCATGTAAATAGACAAGAAAAAGAAGAAAAAGAAGCAATATATAAAGAACGTTGGCCAGATTATGTAAGGGAACTGCGAAGAAGGTATTCTGCAAGTACTGTAGATGTTATAGAAATGATGGAGGATGATAAAGTTGATCTGAATTTGATTGTTGCCCTCATCCGATACATTGTTTTGGAAGAAGAGGATGGTGCGATACTGGTCTTTCTGCCAGGCTGGGACAATATCAGCACTTTACATGATCTCTTGATGTCACAAGTAATGTTTAAATCAGATAAATTTTTAATTATACCTTTACATTCACTGATGCCTACAGTTAACCAGACACAGGTGTTTAAAAGAACCCCTCCTGGTGTTCGGAAAATAGTAATTGCTACCAACATTGCGGAGACTAGCATTACCATAGATGATGTCGTTTATGTGATAGATGGAGGAAAAATAAAAGAGACGCATTTTGATACTCAGAACAATATCAGTACAATGTCCGCTGAGTGGGTTAGTAAAGCTAATGCCAAACAGAGAAAAGGTCGAGCTGGAAGAGTTCAACCTGGTCATTGCTATCATCTGTATAATGGTCTTAGAGCAAGTCTTCTAGATGACTATCAACTGCCAGAAATTTTGAGAACTCCTTTGGAAGAACTTTGTTTACAAATAAAGATTTTAAGGCTAGGTGGAATTGCTTATTTTCTGAGTAGATTAATGGACCCACCATCAAATGAGGCAGTGTTACTCTCCATAAGACACCTGATGGAGCTGAACGCTTTGGATAAACAAGAAGAATTGACACCTCTTGGAGTCCACTTGGCACGATTACCCGTTGAGCCACATATTGGAAAAATGATTCTTTTTGGAGCACTGTTCTGCTGCTTAGACCCAGTACTCACTATTGCTGCTAGTCTCAGTTTCAAAGATCCATTTGTCATTCCACTGGGAAAAGAAAAGATTGCAGATGCAAGAAGAAAGGAATTGGCAAAGGATACTAGAAGTGATCACTTAACAGTTGTGAATGCGTTTGAGGGCTGGGAAGAGGCTAGGCGACGTGGTTTCAGATACGAAAAGGACTATTGCTGGGAATATTTTCTGTCTTCAAACACACTGCAGATGCTGCATAACATGAAAGGACAGTTTGCTGAGCATCTTCTTGGAGCTGGATTTGTAAGCAGTAGAAATCCTAAAGATCCAGAATCTAATATAAATTCAGATAATGAGAAGATAATTAAAGCTGTCATCTGTGCTGGTTTATATCCCAAAGTTGCTAAAATTCGACTAAATTTGGGTAAAAAAAGAAAAATGGTAAAAGTTTACACAAAAACCGATGGCCTGGTTGCTGTTCATCCTAAATCTGTTAATGTGGAGCAAACAGACTTTCACTACAACTGGCTTATCTATCACCTAAAGATGAGAACAAGCAGTATATACTTGTATGACTGCACAGAGGTTTCCCCATACTGTCTCTTGTTTTTTGGAGGTGACATTTCCATCCAGAAGGATAACGATCAGGAAACTATTGCTGTAGATGAGTGGATTGTATTTCAGTCTCCAGCAAGAATTGCCCATCTTGTTAAGGAATTAAGAAAGGAACTAGATATTCTTCTGCAAGAGAAGATTGAAAGTCCTCATCCTGTAGACTGGAATGACACTAAATCCAGAGACTGTGCAGTACTGTCAGCTATTATAGACTTGATCAAAACACAGGAAAAGGCAACTCCCAGGAACTTTCCGCCACGATTCCAGGATGGATATTACAGCTGACAGCTTTTCAGGGGTGGTCTGAAAAGCCAGTTTGACAGCCATTCTTCATCATTGTTTAAATTTTGGCTGGATGCCAAACCCTGGGACATGAACAATTTTCATGTGTAAGGTAGAAGCCTTCAGTAGGTAGTAAAGACTTAATGTGCATGACTTGATGTTATATGTAGAGATATATATATATATATATATACCATAAAAGCAATATGTTCTCTGATCATATACTCTGCTGTGGTCATGCCCACTCTTTGGGAGTATATTCCCTTTATATATATTGAGTATTGTACCACTTGAGAAATTCCTTTGTTCTGTTATACAAAATTAATCTTTCTGCTCATAATGATTGATGATACCACCAGTAAAAATAGGATGTTTACCCCAAAACAAGTGTCAATTAAGAATTTGAACACAACCACATTTTTTAAAATGAAACTTCTATCGGAAGTAAATTAATTTGTTGTAATAAAGTCCAGTATTTAATAAAATGTACAATGTTAAATCTC

FIGURE 4199A

FIGURE 4200

MSYDYHQNWGRDGGPRSSGGGYGGGPAGGHGGNRGSGGGGGGGGGGRGGRGRHPGHLKGREIGMWYAKKQGQKNK
EAERQERAVVHMDERREEQIVQLLNSVQAKNDKESEAQISWFAPEDHGYGTEVSTKNTPCSENKLDIQEKKLINQ
EKKMFRIRNRSYIDRDSEYLLQENEPDGTLDQKLLEDLQKKKNDLRYIEMQHFREKLPSYGMQKELVNLIDNHQV
TVISGETGCGKTTQVTQFILDNYIERGKGSACRIVCTQPRRISAISVAERVAAERAESCGSGNSTGYQIRLQSRL
PRKQGSILYCTTGIILQWLQSDPYLSSVSHIVLDEIHERNLQSDVLMTVVKDLLNFRSDLKVILMSATLNAEKFS
EYFGNCPMIHIPGFTFPVVEYLLEDVIEKIRYVPEQKEHRCQFKRGFMQGHVNRQEKEEKEAIYKERWPDYVREL
RRRYSASTVDVIEMMEDDKVDLNLIVALIRYIVLEEEDGAILVFLPGWDNISTLHDLLMSQVMFKSDKFLIIPLH
SLMPTVNQTQVFKRTPPGVRKIVIATNIAETSITIDDVVYVIDGGKIKETHFDTQNNISTMSAEWVSKANAKQRK
GRAGRVQPGHCYHLYNGLRASLLDDYQLPEILRTPLEELCLQIKILRLGGIAYFLSRLMDPPSNEAVLLSIRHLM
ELNALDKQEELTPLGVHLARLPVEPHIGKMILFGALFCCLDPVLTIAASLSFKDPFVIPLGKEKIADARRKELAK
DTRSDHLTVVNAFEGWEEARRRGFRYEKDYCWEYFLSSNTLQMLHNMKGQFAEHLLGAGFVSSRNPKDPESNINS
DNEKIIKAVICAGLYPKVAKIRLNLGKKRKMVKVYTKTDGLVAVHPKSVNVEQTDFHYNWLIYHLKMRTSSIYLY
DCTEVSPYCLLFFGGDISIQKDNDQETIAVDEWIVFQSPARIAHLVKELRKELDILLQEKIESPHPVDWNDTKSR
DCAVLSAIIDLIKTQEKATPRNFPPRFQDGYYS

FIGURE 4201

CACGAGGGGCTTCCGGGCCCGGACGCCATTTCCAGCGGTTGCTGGTTCTGACGGGTTGTAGTCTGCCAGGACAATG
AGTTATGACTACCATCAGAACTGGGGCCGTGATGGGGGTCCCCGCAGCTCCGGTGGGGGCTATGGAGGGGGGCC
AGCAGGGGGTCATGGAGGTAACCGAGGCTCCGGAGGAGGCGGCGGCGGCGGAGGGGGTGGTCGAGGCGGCAGGGG
CCGGCATCCCGGGCACCTGAAAGGCCGCGAAATCGGCATGTGGTACGCGAAAAAACAGGGGCAGAAGAACAAGGA
AGCGGAGAGGCAAGAGAGAGCTGTAGTACACATGGATGAACGACGAGAAGAACAAATTGTACAGTTACTGAATTC
TGTTCAAGCGAAGAATGATAAAGAGTCAGAAGCACAGATATCCTGGTTTGCTCCTGAGGATCATGGATACGGTAC
TGAAGTTTCTACTAAGAACACACCATGCTCAGAGAACAAACTTGACATCCAGGAAAAGAAGTTGATAAATCAAGA
AAAAAAAATGTTTAGAATCAGGAACAGATCATATATTGACCGAGATTCTGAGTATCTCTTGCAAGAAAATGAACC
AGATGGAACTTTAGACCAAAAATTATTGGAAGATTTACAAAAGAAAAAAAATGACCTTCGGTATATTGAAATGCA
GCATTTCAGAGAAAAGCTGCCTTCGTATGGAATGCAAAAGGAATTGGTAAATTTAATTGATAACCATCAGGTAAC
AGTAATAAGTGGTGAAACTGGTTGTGGCAAAACCACTCAAGTTACTCAGTTCATTTTGGATAACTACATTGAAAG
AGGAAAAGGATCTGCTTGCAGAATAGTTTGTACTCAGCCAAGAAGAATTAGTGCCATTTCAGTTGCGGAAAGAGT
AGCTGCAGAAAGGGCAGAATCTTGTGGCAGTGGTAATAGTACTGGATATCAAATTCGTCTCCAGAGTCGGTTGCC
AAGGAAACAGGGTTCTATCTTATACTGTACAACAGGAATCATCCTTCAGTGGCTCCAGTCAGACCCGTATTTGTC
CAGTGTTAGTCATATCGTACTTGATGAAATCCATGAAAGAAATCTGCAGTCAGATGTTTTAATGACTGTTGTTAA
AGACCTTCTCAATTTTCGATCTGACTTGAAAGTAATATTGATGAGTGCAACATTGAATGCAGAAAAGTTTTCAGA
ATATTTTGGTAACTGTCCAATGATACATATACCTGGTTTTACCTTTCCGGTTGTGGAATATCTTTTGGAAGATGT
AATTGAAAAAATAAGGTATGTTCCAGAACAAAAAGAACACAGATGCCAGTTTAAGAGGGGTTTCATGCAAGGGCA
TGTAAATAGACAAGAAAAAGAAGAAAAAGAAGCAATATATAAAGAACGTTGGCCAGATTATGTAAGGGAACTGCG
AAGAAGGTATTCTGCAAGTACTGTAGATGTTATAGAAATGATGGAGGATGATAAAGTTGATCTGAATTTGATTGT
TGCCCTCATCCGATACATTGTTTTGGAAGAAGAGGATGGTGCGATACTGGTCTTTCTGCCAGGCTGGGACAATAT
CAGCACTTTACATGATCTCTTGATGTCACAAGTAATGTTTAAATCAGATAAATTTTTAATTATACCTTTACATTC
ACTGATGCCTACAGTTAACCAGACACAGGTGTTTAAAAGAACCCCTCCTGGTGTTCGGAAAATAGTAATTGCTAC
CAACATTGCGGAGACTAGCATTACCATAGATGATGTCGTTTATGTGATAGATGGAGGAAAAATAAAAGAGACGCA
TTTTGATACTCAGAACAATATCAGTACAATGTCCGCTGAGTGGGTTAGTAAAGCTAATGCCAAACAGAGAAAAGG
TCGAGCTGGAAGAGTTCAACCTGGTCATTGCTATCATCTGTATAATGGTCTTAGAGCAAGTCTTCTAGATGACTA
TCAACTGCCAGAAATTTTGAGAACTCCTTTGGAAGAACTTTGTTTACAAATAAAGATTTTAAGGCTAGGTGGAAT
TGCTTATTTTCTGAGTAGATTAATGGACCCACCATCAAATGAGGCAGTGTTACTCTCCATAAGACACCTGATGGA
GCTGAACGCTTTGGATAAACAAGAAGAATTGACACCTCTTGGAGTCCACTTGGCACGATTACCCGTTGAGCCACA
TATTGGAAAAATGATTCTTTTTGGAGCACTGTTCTGCTGCTTAGACCCAGTACTCACTATTGCTGCTAGTCTCAG
TTTCAAAGATCCATTTGTCATTCCACTGGGAAAAGAAAAGATTGCAGATGCAAGAAGAAAGGAATTGGCAAAGGA
TACTAGAAGTGATCACTTAACAGTTGTGAATGCGTTTGAGGGCTGGGAAGAGGCTAGGCGACGTGGTTTCAGATA
CGAAAAGGACTATTGCTGGGAATATTTTCTGTCTTCAAACACACTGCAGATGCTGCATAACATGAAAGGACAGTT
TGCTGAGCATCTTCTTGGAGCTGGATTTGTAAGCAGTAGAAATCCTAAAGATCCAGAATCTAATATAAATTCAGA
TAATGAGAAGATAATTAAAGCTGTCATCTGTGCTGGTTTATATCCCAAAGTTGCTAAAATTCGACTAAATTTGGG
TAAAAAAAGAAAAATGGTAAAAGTTTACACAAAAACCGATGGCCTGGTTGCTGTTCATCCTAAATCTGTTAATGT
GGAGCAAACAGACTTTCACTACAACTGGCTTATCTATCACCTAAAGATGAGAACAAGCAGTATATACTTGTATGA
CTGCACAGAGGTTTCCCCATACTGTCTCTTGTTTTTTGGAGGTGACATTTCCATCCAGAAGGATAACGATCAGGA
AACTATTGCTGTAGATGAGTGGATTGTATTTCAGTCTCCAGCAAGAATTGCCCATCTTGTTAAGGAATTAAGAAA
GGAACTAGATATTCTTCTGCAAGAGAAGATTGAAAGTCCTCATCCTGTAGACTGGAATGACACTAAATCCAGAGA
CTGTGCAGTACTGTCAGCTATTATAGACTTGATCAAAACACAGGAAAAGGCAACTCCCAGGAACTTTCCGCCACG
ATTCCAGGATGGATATTACAGCTGACAGCTTTTCAGGGGTGGTCTGAAAAGCCAGTTTGACAGCCATTCTTCATC
ATTGTTTAAATTTTGGCTGGATGCCAAACCCTGGGACATGAACAATTTTCATGTGTAAGGTAGAAGCCTTCAGTA
GGTAGTAAAGACTTAATGTGCATGACTTGATGTTATATGTAGAGATATATATATATATATATATACCATAAAAGC
AATATGTTCTCTGATCATATACTCTGCTGTGGTCATGCCCACTCTTTGGGAGTATATTCCCTTTATATATATTGA
GTATTGTACCACTTGAGAAATTCCTTTGTTCTGTTATACAAAATTAATCTTTCTGCTCATAATGATTGATGATAC
CACCAGTAAAAATAGGATGTTTACCCCAAAACAAGTGTCAATTAAGAATTTGAACACAACCACATTTTTTAAAAT
GAAACTTCTATCGGAAGTAAATTAATTTGTTGTAATAAAGTCCAGTATTTAATAAAATGTACAATGTTAAATCTC

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FIGURE 4201A

FIGURE 4202

MSYDYHQNWGRDGGPRSSGGGYGGGPAGGHGGNRGSGGGGGGGGGGRGGRGRHPGHLKGREIGMWYAKKQGQKNK
EAERQERAVVHMDERREEQIVQLLNSVQAKNDKESEAQISWFAPEDHGYGTEVSTKNTPCSENKLDIQEKKLINQ
EKKMFRIRNRSYIDRDSEYLLQENEPDGTLDQKLLEDLQKKKNDLRYIEMQHFREKLPSYGMQKELVNLIDNHQV
TVISGETGCGKTTQVTQFILDNYIERGKGSACRIVCTQPRRISAISVAERVAAERAESCGSGNSTGYQIRLQSRL
PRKQGSILYCTTGIILQWLQSDPYLSSVSHIVLDEIHERNLQSDVLMTVVKDLLNFRSDLKVILMSATLNAEKFS
EYFGNCPMIHIPGFTFPVVEYLLEDVIEKIRYVPEQKEHRCQFKRGFMQGHVNRQEKEEKEAIYKERWPDYVREL
RRRYSASTVDVIEMMEDDKVDLNLIVALIRYIVLEEEDGAILVFLPGWDNISTLHDLLMSQVMFKSDKFLIIPLH
SLMPTVNQTQVFKRTPPGVRKIVIATNIAETSITIDDVVYVIDGGKIKETHFDTQNNISTMSAEWVSKANAKQRK
GRAGRVQPGHCYHLYNGLRASLLDDYQLPEILRTPLEELCLQIKILRLGGIAYFLSRLMDPPSNEAVLLSIRHLM
ELNALDKQEELTPLGVHLARLPVEPHIGKMILFGALFCCLDPVLTIAASLSFKDPFVIPLGKEKIADARRKELAK
DTRSDHLTVVNAFEGWEEARRRGFRYEKDYCWEYFLSSNTLQMLHNMKGQFAEHLLGAGFVSSRNPKDPESNINS
DNEKIIKAVICAGLYPKVAKIRLNLGKKRKMVKVYTKTDGLVAVHPKSVNVEQTDFHYNWLIYHLKMRTSSIYLY
DCTEVSPYCLLFFGGDISIQKDNDQETIAVDEWIVFQSPARIAHLVKELRKELDILLQEKIESPHPVDWNDTKSR
DCAVLSAIIDLIKTQEKATPRNFPPRFQDGYYS

FIGURE 4203

GGCACGAGGCTGCCGCGCTGTCCGCGTTATCTCCTCCCGGTGAGAACGAACCGCAGTGTCCACCGGCGAGGAGCC
AGCCCTGTCCCGGTCAGAGAAAGACGACGAGGATACCTGGGAGCGGGCGGCGGCCGGGCTGGGCCGCGCCGGTGC
GGGCTGGCGACTCTGCTCCTCCGCTTGCTGCTGTCTCTGGGAACTGGGTGCCAGCGCTGAGGGGCTTCCAGCGGA
CAGGGACCCCCTTCCCCGGCTCCCCTGCCCACCCTGCCGGGGAGGGCGGAAGATGCCGGTGAAGAAGAAGAGAAA
ATCCCCTGGGGTGGCAGCAGCAGTAGCGGAAGACGGAGGCCTCAAAAAGTGTAAAATCTCCAGCTATTGCAGATC
CCAACCCCCTGCTAGACTAATAAGTGGAGAGGAACATTTTTCAAGCAAGAAGTGCCTGGCTTGGTTTTATGAATA
TGCAGGTCCTGATGAAGTTGTAGGGCCAGAAGGAATGGAAAAATTTTGTGAAGACATTGGTGTTGAACCTGAAAA
TATTATTATGTTAGTTTTAGCGTGGAAATTGGAGGCTGAAAGCATGGGATTTTTTACCAAGGAAGAATGGTTAAA
GGGAATGACTTCATTACAGTGTGACTGCACAGAAAAGTTACAAAACAAATTTGACTTTTTGCGCTCACAGTTGAA
TGATATTTCGTCATTTAAGAATATCTACAGATATGCCTTTGATTTTGCAAGGGATAAAGATCAGAGAAGCCTTGA
TATTGATACTGCTAAATCTATGTTAGCTCTTCTGCTTGGGAGGACATGGCCACTGTTTTCAGTATTTTACCAGTA
CCTGGAGCAATCAAAGTATCGTGTTATGAACAAAGATCAATGGTACAATGTATTAGAATTCAGCAGAACAGTCCA
TGCTGATCTTAGTAACTATGATGAAGATGGTGCTTGGCCTGTTCTTCTTGATGAATTTGTTGAGTGGCAAAAAGT
CCGTCAGACATCATAGCAAGAACTATGTGAAGAAAATGCAAACCTTTCAATTCCCACGTGTATACAAGCTAATGT
GATGAGGGGGAAAAAAATCCAACGGGTGCATTTTCATTCATATGAAAGACTTCTCATAGTACTTTTTTTTCCTTT
TTTTAAAGGAGGTTTTTCTTGTTACATGTGATGGGCATTGAGCCACACCTCTTCTTAGACTGAATATTGAAGTTT
TTGTTTTGAGTTATGTTTATAACATTTATTTCAGAACAATAAAGATTCAGATTTGTGAAAAAAAAAAAAAAAAAA
AAAAAAAAAAA

FIGURE 4204

MPVKKKRKSPGVAAAVAEDGGLKKCKISSYCRSQPPARLISGEEHFSSKKCLAWFYEYAGPDEVVGPEGMEKFCE
DIGVEPENIIMLVLAWKLEAESMGFFTKEEWLKGMTSLQCDCTEKLQNKFDFLRSQLNDISSFKNIYRYAFDFAR
DKDQRSLDIDTAKSMLALLLGRTWPLFSVFYQYLEQSKYRVMNKDQWYNVLEFSRTVHADLSNYDEDGAWPVLLD
EFVEWQKVRQTS

FIGURE 4205

TAGTCACGCTCGGTACCAGGCGCAGATCATGGCAGGCAGCCGGCTGGAAACCGTAGGGAGCATCTTCTCTCGGAC
TCGGGACCTGGTTCGGGCCGGGGGTGCTGAAGGAGAAGCCCCTGTGGTTTGACGTATATGACGCCTTTCCCCCGCT
GAGGGAGCCCGTCTTCCAAAGGCCTCGAGTGCGATATGGCAAAGCCAAAGCTCCCATCCAAGACATCTGGTACCA
CGAGGATCGGATTAGAGCGAAGTTTTATTCAGTGTATGGGTCTGGTCAAAGAGCTTTTGATCTATTCAATCCAAA
CTTCAAGTCTACCTGTCAACGGTTTGTGGAGAAGTACACTGAGCTACAGAAACTTGGAGAAACAGATGAAGAGAA
GTTATTTGTGGAAACAGGGAAGGCTTTATTGGCAGAAGGTGTCATTTTAAGACGAGTAGGCGAAGCAAGGACTCA
ACACGGAGGTAGTCACGTTTCCCGGAAATCCGAACACTTGAGTGTCAGACCACAGACTGCGTTGGAAGAAAACGA
GACTCAGAAAGAAGTTCCACAGGACCAGCATTTGGAGGCACCTGCAGACCAGTCGAAAGGTCTCTTGCCTCCCTG
AAGGACCTGTATACTGTGTATGCTGGCATTCACACTCTACTCACTGGCTGAATGTTGAGCTATTTTTAAACAGTT
GAACTGTGTAAATGTTTCTTGATCTCTAAGGTATTATGTTTGCCTTCTCTTAGTTATTTCTGGGTTGTCACAAAG
CTCAGTATCATGGTTTGACAGAAGCAGTTATGTGAACTTTTATGTTAGGACATTACTAAATAAAGAATTCCCTAG
CTGCTTATAAAGTAAATTTACTTTGAATTGTAAATAACATGAAGAAACCTTTATAAAGATTGTTCAAATGGGACT
CAA

FIGURE 4206

MAGSRLETVGSIFSRTRDLVRAGVLKEKPLWFDVYDAFPPLREPVFQRPRVRYGKAKAPIQDIWYHEDRIRAKFY
SVYGSGQRAFDLFNPNFKSTCQRFVEKYTELQKLGETDEEKLFVETGKALLAEGVILRRVGEARTQHGGSHVSRK
SEHLSVRPQTALEENETQKEVPQDQHLEAPADQSKGLLPP

FIGURE 4207

ACGGCGCCCGCCAGGAGCGCCCCCCACTCCCAGGCCAGCCCACCCCGGCGGACCGGGCCCCGCGCGCCCAGGCGA
GGCACTGGGCTCCCTCTGCTCCCCGTGGGCCGCTCCCCGCGTGGGGCCACTGCCCCCGGCCCCCGCCATGGTGCG
GATTTCAAAGCCCAAGACGTTTCAGGCCTACTTGGATGATTGTCACCGGAGGTATAGCTGTGCCCACTGCCGCGC
TCACCTGGCCAACCACGACGACCTCATCTCCAAGTCCTTCCAGGGCAGTCAGGGGCGTGCCTACCTCTTCAACTC
AGTGGTGAACGTGGGCTGCGGGCCAGCCGAGGAGCGGGTGCTGCTGACCGGCCTCCATGCTGTCGCCGACATCCA
CTGCGAGAACTGCAAGACCACTTTGGGCTGGAAATATGAACAGGCCTTTGAGAGCAGCCAGAAGTACAAAGAGGG
GAAGTACATCATTGAACTCAACCACATGATCAAAGACAACGGCTGGGACTGACCCCCGCTCCCCCGACGCATGTG
GCTCCAGCCCGGCCTGGCCGCCAGGGAGCGCCACTGGCTTCCCGCCACCCGAAGGGAGCTCTGGACCCTCAGAGC
CCCTGCAGAGGACGGATCTAGCTCCTGTATATATATTTTATTGCATGCACTGTGACCTTGGGGGGAGAACAGAAG
GGGGACGACGCCCCCGCACCTCCTGCGATCTGGCTGGCTTGGATCTCGTTTTTAACCCGTTCCTGCCCCACCTGC
CCTATAGTTATGGCCTGTGTTCTGCTCTCCTGGTCCCAGTGCACCGTCTGCTCTGTGAACTCCTCCCACCAGGCC
CTTCTTACCCCACGCGTGTCTGTCCCCCTCGTTCTGTAGCGTTTGTACATAATAAAACAATGGAGTGGAGACAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4208

MVRISKPKTFQAYLDDCHRRYSCAHCRAHLANHDDLISKSFQGSQGRAYLFNSVVNVGCGPAEERVLLTGLHAVA
DIHCENCKTTLGWKYEQAFESSQKYKEGKYIIELNHMIKDNGWD

FIGURE 4209

AGAAGGGAAGGTAGACATCAGGTTCTCCCTGGAGACTTTTCGTTTTCATTTACGCTGCGGAAACTGACGTTTTTG
CCTAACACCCCATGTAATGTAAACGTATAGGCTTGAGTACGTGTCCGGCCGCATGTGTAGTGAACCCTAAAGCTT
TCCTAATTGTAGTTAGCATCGTCCCTAAGCGGAACGATTTTCCGTGAACATGATTTGTACTTTTCTACGAGCCGT
ACAGTATACGGAGAAGCTGCACAGGTCCTCGGCAAAGCGATTGCTTTTGCCATACATCGTGCTTAACAAAGCGTA
CTTGAAGACTGAGCCCAGTTTGAGATGTGGGCTTCAATATCAAAAGAAAACGCTGCGACCTAGATGTATTCTTGG
AGTCACCCAGAAAACCATCTGGACGCAGGGACCGAGCCCCCGAAAAGCAAAGGAGGATGGCAGCAAACAAGTGTC
TGTGCACAGGAGTCAGAGAGGGGGAACCGCCGTCCCAACATCACAAAAAGTGAAAGAAGCCGGAAGAGATTTTAC
CTATTTAATAGTGGTGCTTTTTGGAATCAGCATTACAGGTGGCTTGTTTTACACGATTTTCAAAGAACTTTTTTC
TTCATCCAGTCCTAGCAAGATATATGGGAGAGCCTTAGAAAAATGCAGATCACATCCTGAGGTGATCGGTGTCTT
TGGTGAGTCTGTTAAAGGCTATGGGGAGGTGACAAGGCGGGGTCGCCGGCAGCATGTCAGGTTCACTGAATATGT
AAAAGATGGGCTGAAACACACGTGTGTGAAATTCTACATTGAGGGCTCTGAGCCAGGGAAGCAAGGAACGGTGTA
TGCGCAAGTGAAAGAGAACCCAGGAAGTGGTGAATATGATTTTCGATATATATTTGTAGAAATTGAATCTTATCC
TAGAAGAACTATTATCATTGAAGATAATCGATCCCAAGATGATTAATAATCAAGCAAGCAGGTTTCTGATGGATG
TTGAATGGCGTGGACTCGCTACTCCGTTCTTCACAGCTGCCTTCCAGAATGTGTTCAAAAGAAAGACAAGAAGGA
GTGTATGGCTTATAAAGTGAATCTAATACAGTATTTGTTGCATTTAAACAAACTAGACATTTTCTTACGGAAAAA
TTATGAAATACAGCATATTTTATGTTCTCCCATTGACTCAATCATGACAATATTTCTGCTTTAACACCATCTTTC
GTGATTAGAAATGTTTGTTATTGGAAATGTTACACCATGTAAATAAAGGAAATAGATTTTAGTATTGTATTCATT
TTATATTATAGAACTGCATAATGTCTGCAGAATAAAATTAAAACTAACAAATAAAAAAAAAAAAAAAA

FIGURE 4210

MICTFLRAVQYTEKLHRSSAKRLLLPYIVLNKAYLKTEPSLRCGLQYQKKTLRPRCILGVTQKTIWTQGPSPRKA
KEDGSKQVSVHRSQRGGTAVPTSQKVKEAGRDFTYLIVVLFGISITGGLFYTIFKELFSSSSPSKIYGRALEKCR
SHPEVIGVFGESVKGYGEVTRRGRRQHVRFTEYVKDGLKHTCVKFYIEGSEPGKQGTVYAQVKENPGSGEYDFRY
IFVEIESYPRRTIIIEDNRSQDD

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FIGURE 4211

GTGACATTGAGCTCACCAGCGCCACCGTCCCCGGCGAAGTTCTGCGCTGGTCGGCGGAGAGCAAGTGGCCATGGG
GAGCCTCAGCGGTCTGCGCCTGGCAGCAGGAAGCTGTTTTAGGTTATGTGAAAGAGATGTTTCCTCATCTCTAAG
GCTTACCAGAAGCTCTGATTTGAAGAGAATAAATGGATTTTGCACAAAACCACAGGAAAGTCCCGGAGCTCCATT
CCCGCACTTACAACAGAGTGCCTTTACACAAACCTACGGATTGGCAGAAAAAGATCCTCATATGGTCAGGTCGCT
TCAAAAGGAAGATGAAATCCCAGAGACTGTCTCGTTGGAGATGCTTGATGCTGCAAAGAACAAGATGCGAGTGAA
GATCAGCTATCTAATGATTGCCCTGACGGTGGTAGGATGCATCTTTCATTGGTTATTGAGGGCAAGAAGCTTGCC
CAAAGACCGAGACTTTAACCAGCTTGGACCTTTAGAAAAGAAAGCTCGTCTGAAAGAAGGAAGCAGCTATGAAGG
CCAAAACAGATTACCAAAGGTATCCGTGTTGGTTGGGATTTTGAAAATCCAGGAATTATGTTTTAACGTGCCTGT
ATTAAAAAGGATGTGGTATGAGGATCCATTTCATAAAGTATGATTTGCCCAAACCTGTACCATTTCCGTATTTCT
GCTGTAGAAGTAGAAATAAATTTTCTTAAATAATGACTGTGTTTTATTGTTTTGATCCAAGTCAAGTGTAGCCTC
TCAGCCTTTTGGAGAAAAATGAAACAATTTATTTCAACTTGAATACCAACTCTTCAGAGAAGCAGGTACCATATC
TTACTTCTCTTCCCATTATCAAAGTAACCTCTCCACAGGCGAACTCATTTTGAGGAGATAAGGAAGGCCAGTTGA
GTATATGGCCCAGGTGCAGCTTGGAGGGCCAGCCTTCTCAAATGTCCTGGTGTACTGGTGGGGAGGCTGCCCCCT
AATAGAGCGAGCGCTGAGAAGCAGCCAGACCACATTCTATAATCTTTGAACATGCTGGCAGATGGAGGCTTTTAG
GAGAATAGTTTTTTAAACATTCTGACAAGGTCCAGCCAGGAATTTCTAAGGACTTAGAAATCCCAGTGTCATGGA
GTTGCTTGGGGGTCAACACAAGTCACCTCTTAGCTTCATGCCTTAGAATTCTCAACTGGGCTGTTTTTCTTACCA
CCTGAGAAACTAAAT

FIGURE 4212

MGSLSGLRLAAGSCFRLCERDVSSSLRLTRSSDLKRINGFCTKPQESPGAPFPHLQQSAFTQTYGLAEKDPHMVR
SLQKEDEIPETVSLEMLDAAKNKMRVKISYLMIALTVVGCIFHWLLRARSLPKDRDFNQLGPLEKKARLKEGSSY
EGQNRLPKVSVLVGILKIQELCFNVPVLKRMWYEDPFHKV

FIGURE 4213A

AATTCGGGAACGTGCCTGCGCGTGCTTGGATAGTTCATTTAAAGCCCCCATCCCTGCAAGGTGGTGCTTTCTACC
AATATGAATCTTTTCAACCTGGACCGTTTTCGCTTTGAGAAAAGGAATAAGATTGAGGAAGCGCCCGAAGCAACC
CCTCAACCTTCCCAGCCTGGCCCTTCTTCACCAATTTCTCTTAGTGCTGAAGAGGAGAATGCTGAAGGGGAAGTT
AGCAGGGCAAACACTCCTGATTCAGATATAACTGAAAAAACAGAAGATTCTAGTGTTCCAGAAACTCCAGATAAT
GAAAGAAAAGCAAGTATATCATATTTCAAAAATCAAAGAGGAATACAGTATATTGATTTGTCTTCTGATAGTGAA
GATGTCGTTTCCCCAAATTGCTCCAATACAGTTCAAGAGAAAACATTCAACAAAGATACAGTGATTATAGTTTCT
GAGCCATCTGAAGATGAAGAGTCCCAAGGCCTTCCTACCATGGCACGTAGAAATGATGATATTTCAGAACTGGAA
GACCTTTCGGAATTGGAAGACCTTAAAGATGCTAAACTTCAGACTTTGAAGGAACTTTTTCCACAAAGAAGTGAC
AATGATTTACTTAAGTTGATTGAATCAACAAGCACTATGGATGGAGCAATTGCTGCTGCCTTGCTGATGTTTGGT
GATGCAGGTGGTGGGCCCAGGAAAAGAAAATTATCTTCTTCTTCAGAGCCATATGAGGAAGATGAATTTAATGAT
GATCAATCTATAAAAAAGACAAGACTGGATCATGGAGAGGAATCAAATGAGTCTGCAGAATCTAGCAGTAATTGG
GAAAAGCAGGAAAGTATTGTACTGAAATTGCAAAAGGAATTTCCCAATTTTGATAAACAGGAACTTAGAGAAGTA
CTCAAGGAACATGAATGGATGTACACAGAAGCTTTAGAATCTCTAAAAGTGTTTGCAGAAGACCAAGATATGCAA
TATGCATCACAAAGTGAGGTTCCAAATGGAAAAGAAGTTTCTTCAAGAAGTCAAAATTACCCTAAAAATGCAACT
AAAACAAAACTAAAACAGAAATTTTCAATGAAAGCACAAAATGGCTTTAACAAGAAACGTAAAAAAAATGTTTTT
AATCCAAAGAGAGTTGTTGAAGACTCTGAATATGATTCAGGTTCTGATGTCGGTAGTTCACTAGATGAGGACTAT
AGTAGTGGTGAAGAAGTGATGGAGGATGGCTATAAAGGTAAAATTCTTCACTTCCTTCAAGATGCTTCAATTGGT
GAACTTACTTTGATTCCTCAGTGTTCTCAGAAAAAGGCTCAGAAGATAACAGAACTCCGGCCCTTTAATAGTTGG
GAGGCTCTGTTCACAAAGATGTCCAAAACTAATGGCTTATCAGAAGATTTGATATGGCACTGTAAAACACTGATC
CAAGAAAGAGATGTAGTTATAAGGCTTATGAACAAATGTGAAGACATTTCAAATAAATTGACCAAACAAGTTACC
ATGCTTACTGGAAATGGAGGTGGATGGAACATAGAACAACCTTCCATTCTAAACCAAAGTTTGTCACTCAAGCCC
TATCAGAAGGTTGGTTTGAATTGGCTGGCATTGGTACATAAACATGGACTTAATGGCATTTTGGCAGATGAAATG
GGCCTAGGAAAAACTATTCAAGCCATTGCATTTCTGGCATACCTCTATCAGGAGGGTAATAATGGTCCTCATTTG
ATCGTTGTTCCAGCTTCAACTATAGATAACTGGTTAAGGGAAGTTAATTTATGGTGCCCTACTTTGAAGGTCCTC
TGTTACTATGGTTCTCAAGAAGAACGTAAACAAATTAGATTTAACATTCATAGTAGATATGAAGATTACAATGTA
ATTGTGACCACATATAACTGTGCGATCAGCAGTTCTGATGATCGTAGTCTGTTTCGACGGCTGAAACTTAATTAC
GCAATTTTTGATGAGGGCCATATGCTGAAGAATATGGGCTCCATTCGCTACCAGCACCTTATGACAATTAATGCA
AATAACCGTTTGCTGCTCACAGGCACACCTGTACAGAACAATCTGTTAGAACTCATGTCGCTGTTGAATTTTGTT
ATGCCACACATGTTTAGTAGTAGCACCAGTGAAATACGAAGAATGTTTTCCTCTAAGACAAAATCAGCAGATGAG
CAAAGCATATATGAAAAGGAGAGAATAGCACATGCAAAACAAATTATAAAGCCATTTATTCTCAGAAGAGTAAAA
GAAGAGGTTCTCAAGCAGTTACCCCCCAAGAAAGATCGAATTGAGTTGTGTGCAATGTCGGAGAAGCAGGAGCAA
CTCTATTTGGGTCTTTTCAACAGATTGAAAAAATCTATCAATAACTTGGAAAAAAACACAGAAATGTGCAATGTC
ATGATGCAGTTGAGGAAAATGGCCAATCATCCTTTATTACATCGCCAATATTACACAGCTGAAAAACTCAAGGAA
ATGTCTCAGCTTATGCTAAAGGAACCTACACATTGTGAGGCTAACCCTGACCTGATCTTTGAAGATATGGAAGTT
ATGACAGACTTCGAACTACATGTACTTTGTAAACAGTACCGACACATTAATAACTTTCAGTTAGACATGGACTTG
ATTTTAGATTCTGGAAAATTTCGAGTTTTAGGATGCATCTTGTCTGAATTGAAACAGAAGGGTGATAGAGTTGTG
TTATTTAGCCAATTTACCATGATGCTGGATATCTTAGAGGTTCTATTAAAACATCATCAGCATAGGTACCTCAGA
TTAGATGGAAAGACTCAGATTTCTGAAAGGATTCATCTAATTGATGAGTTTAATACCGATATGGATATCTTTGTG
TTTCTGCTATCAACAAAAGCTGGTGGATTAGGAATAAATCTGACTTCAGCAAATGTTGTTATACTTCACGATATT
GACTGTAATCCTTATAATGACAAACAAGCAGAAGATAGATGCCATAGAGTAGGCCAGACTAAAGAAGTACTAGTT
ATAAAACTAATAAGCCAAGGGACGATTGAAGAATCCATGCTAAAAATTAACCAACAGAAATTGAAACTAGAACAG
GATATGACTACAGTAGATGAAGGTGATGAAGGGAGTATGCCAGCAGATATAGCCACATTACTAAAAACATCAATG
GGCCTGTGAAATAAGAACTGTGAACTCTCAATTGATGAGGAAATATCAACTTTGGTGCACTCAAGGACATTTACA
TTTATGATGACCATGGGGGTTTATGAACATTTATAACTTTTTATAATTTCCATATTACATTTCTCATAGTATGGA
CAACTTTTTGCCACTAACTGAATTCTTCAAATACTCACACGTGAAATTTCAAAAAAGAAGCCACAAATATGTAGT
TCTGAAGATGTTGAATAATCATTTTACAAAGCAGTTTTCTGAATGGGGATTAGTTGGTGATTGTTTGTAACAAAT
ATGCTAATGCTTTAGAAATGTCAGTATTTTTGTAATTATTTCTACCTCCAAATATATATATATTGTCTTTCACTG
GATAATGTGTGTAGATTTTTACATGTGCCTTATTTGACAATGCTTATGTCTTGTTTTTGCTTGTCTCATTTGAAG

FIGURE 4213B

TTCTTTTTTATTATGTTAAAGAATGCAGCTGTATAGATTATATAGCTTTCATTTTATTGCTATTTGAAGCAGATG
TTCACCAATGTCAGCAAGAACTCAACCTGAATTTAAAGGTGGCATTCCATATACTAACATCCCCCAGGTCCTCTC
AAGTACTTCTGCTGAAACAAATTTATTTGGCTAGGCACTAAGTTGTTTTCCAGTGAATAGTAACTAAAGAAGCCC
CTACCTTGCTCCATGGATTAATTCCTTCTGTTCATTTTCCAACTGCACTAATTGTGCATATTACTCTGCCTAATC
TTGTGCATGTTTTCATTGATTTCCCTCTCCCGGCTTTTGCTTCTCTTGAAACTGTTGCCCAGTCACTTCTGCTCC
AATTCTCTTCCTCTCTAAATAGTAGTTTAATTACTGCCACATCTCCATGCATCAGCAAAATGTTGGTGACATTTT
TCTAGCCTGGCAGAACAGATTACTTAAAGCTATTTCACTTCAAAGCAGACTGAATGTGACTTCATCTAAAGGCAG
CATTAGGTACTGCATGGAAATAGGTCATTAACTTGAAACTCTTATCAAAATATATTTTACCAGTTTCCAGAATTT
CCAGTACAGGACCGCCTGAAGAGAGAGCCATTGTTCAATTCCAATTCAGTGTGAGTGACAAAGTGAAATTTAGAA
GTGAAGTTGTCTATTTGATATTTAACCCTTATTAAATCTTTCTTTAAATTTCTGCCTGTCAGTCTATATTGCTGT
TTTTATTATACATCAGTTTCTTTGAATAACTTGTGAGTTCCCATGTGTTTTGTTTTTATTATGTAAATATCATTA
TAAATAAACTTATTTATAAATCAAAGATTTGTTAATTTTTGGAAATCATGCTTTTCAAAGCATCCTAACTTGCTA
AGATGCTAGGTAGTACGACCCTCTGGATTTGGAAGGCAAATAAAACTCTTACAGTGATTATTTAGATATTAAAGA
CTGAGAACTCACGGCTTAACCCCAGTCTTGATGGTATATTGAACAGACTGAATATATTTTACCATTACAGGGCTA
AAAGGAGTCTTCGTGTGTTAATACTACCTCCTTGTACATCACTATACCCAAATCAGTTATTCAAATTGTTAGGAA
TTTTACCTTTTAAAATCTCATAATGGATATCTCATGTTTTCTGTATTAATGTATTTTCAATGATAGGCTGTTTCT
TTTTTTGTTGTTATTGTTGTTGTTGTTATATCCATACTTTTATCTCTAATGAAATGTAGTTGGGTTCTTCCTGTA
ATGCGCTATTATGTCTTGGGCTTAATAAAAATATTTGTGATCATAAAAAAAAAAAAAAAA

FIGURE 4214

MNLFNLDRFRFEKRNKIEEAPEATPQPSQPGPSSPISLSAEEENAEGEVSRANTPDSDITEKTEDSSVPETPDNE
RKASISYFKNQRGIQYIDLSSDSEDVVSPNCSNTVQEKTFNKDTVIIVSEPSEDEESQGLPTMARRNDDISELED
LSELEDLKDAKLQTLKELFPQRSDNDLLKLIESTSTMDGAIAAALLMFGDAGGGPRKRKLSSSSEPYEEDEFNDD
QSIKKTRLDHGEESNESAESSSNWEKQESIVLKLQKEFPNFDKQELREVLKEHEWMYTEALESLKVFAEDQDMQY
ASQSEVPNGKEVSSRSQNYPKNATKTKLKQKFSMKAQNGFNKKRKKNVFNPKRVVEDSEYDSGSDVGSSLDEDYS
SGEEVMEDGYKGKILHFLQDASIGELTLIPQCSQKKAQKITELRPFNSWEALFTKMSKTNGLSEDLIWHCKTLIQ
ERDVVIRLMNKCEDISNKLTKQVTMLTGNGGGWNIEQPSILNQSLSLKPYQKVGLNWLALVHKHGLNGILADEMG
LGKTIQAIAFLAYLYQEGNNGPHLIVVPASTIDNWLREVNLWCPTLKVLCYYGSQEERKQIRFNIHSRYEDYNVI
VTTYNCAISSSDDRSLFRRLKLNYAIFDEGHMLKNMGSIRYQHLMTINANNRLLLTGTPVQNNLLELMSLLNFVM
PHMFSSSTSEIRRMFSSKTKSADEQSIYEKERIAHAKQIIKPFILRRVKEEVLKQLPPKKDRIELCAMSEKQEQL
YLGLFNRLKKSINNLEKNTEMCNVMMQLRKMANHPLLHRQYYTAEKLKEMSQLMLKEPTHCEANPDLIFEDMEVM
TDFELHVLCKQYRHINNFQLDMDLILDSGKFRVLGCILSELKQKGDRVVLFSQFTMMLDILEVLLKHHQHRYLRL
DGKTQISERIHLIDEFNTDMDIFVFLLSTKAGGLGINLTSANVVILHDIDCNPYNDKQAEDRCHRVGQTKEVLVI
KLISQGTIEESMLKINQQKLKLEQDMTTVDEGDEGSMPADIATLLKTSMGL

FIGURE 4215

GGCACGAGGGCTGCCTGGCGCTGCGGGCGGCGGGCCATGGTGGTTTGGATTGAGCCGGGCCCGGCCGGGGCGCCG
AGTCGGAGGGGGTGGCAGTGAGCGGCGGCAGAGGCTACGGGGCTCGGTTTGGCTGACTGGGGAGTCGGCAGGCGG
CAGGAACCATGCGAGGCCAGCGGAGCCTGCTGCTGGGCCCGGCCCGCCTCTGCCTCCGCCTCCTTCTGCTGCTGG
GTTACAGGCGCCGCTGTCCACCTCTACTCCGGGGTCTAGTACAGCGCTGGCGCTACGGCAAGGTCTGCCTGCGCT
CCCTGCTCTACAACTCCTTTGGGGGCAGTGACACCGCTGTTGATGCTGCCTTTGAGCCTGTCTACTGGCTGGTAG
ACAACGTGATCCGCTGGTTTGGAGTGGGCAGGAATGATATCGCCACCGTCTCCATCTGTAAGAAGTGCATTTACC
CCAAGCCAGCCCGAACACACCACTGCAGCATCTGCAACAGGTGTGTGCTGAAGATGGATCACCACTGCCCCTGGC
TAAACAATTGTGTGGGCCACTATAACCATCGGTACTTCTTCTCTTTCTGCTTTTTCATGACTCTGGGCTGTGTCT
ACTGCAGCTATGGAAGTTGGGACCTTTTCCGGGAGGCTTATGCTGCCATTGAGACTTATCACCAGACCCCACCAC
CCACCTTCTCCTTTCGAGAAAGGATGACTCACAAGAGTCTTGTCTACCTCTGGTTCCTGTGCAGTTCTGTGGCAC
TTGCCCTGGGTGCCCTAACTGTATGGCATGCTGTTCTCATCAGTCGAGGTGAGACTAGCATCGAAAGGCACATCA
ACAAGAAGGAGAGACGTCGGCTACAGGCCAAGGGCAGAGTATTTAGGAATCCTTACAACTACGGCTGCTTGGACA
ACTGGAAGGTATTCCTGGGTGTGGATACAGGAAGGCACTGGCTTACTCGGGTGCTCTTACCTTCTAGTCACTTGC
CCCATGGGAATGGAATGAGCTGGGAGCCCCCTCCCTGGGTGACTGCTCACTCAGCCTCTGTGATGGCAGTGTGAG
CTGGACTGTGTCAGCCACGACTCGAGCACTCATTCTGCTCCCTATGTTATTTCAAGGGCCTCCAAGGGCAGCTTT
TCTCAGAATCCTTGATCAAAAAGAGCCAGTGGGCCTGCCTTAGGGTACCATGCAGGACAATTCAAGGACCAGCCT
TTTTACCACTGCAGAAGAAAGACACAATGTGGAGAAATCTTAGGACTGACATCCCTTTACTCAGGCAAACAGAAG
TTCCAACCCCAGACTAGGGGTCAGGCAGCTAGCTACCTACCTTGCCCAGTGCTGACCCGGACCTCCTCCAGGATA
CAGCACTGGAGTTGGCCACCACCTCTTCTACTTGCTGTCTGAAAAAACACCTGACTAGTACAGCTGAGATCTTGG
CTTCTCAACAGGGCAAAGATACCAGGCCTGCTGCTGAGGTCACTGCCACTTCTCACATGCTGCTTAAGGGAGCAC
AAATAAAGGTATTCGATTTTTAAAGATAAAAAAAAAAAAAAAAAA

FIGURE 4216

MRGQRSLLLGPARLCLRLLLLLGYRRRCPPLLRGLVQRWRYGKVCLRSLLYNSFGGSDTAVDAAFEPVYWLVDNV
IRWFGVGRNDIATVSICKKCIYPKPARTHHCSICNRCVLKMDHHCPWLNNCVGHYNHRYFFSFCFFMTLGCVYCS
YGSWDLFREAYAAIETYHQTPPPTFSFRERMTHKSLVYLWFLCSSVALALGALTVWHAVLISRGETSIERHINKK
ERRRLQAKGRVFRNPYNYGCLDNWKVFLGVDTGRHWLTRVLLPSSHLPHGNGMSWEPPPWVTAHSASVMAV

FIGURE 4217

CTGCACAGGGAGTTTGTCTTGTGCAAACAATTTCCAAGGCAGCGTTTTCTTCCCTGCCTGGGAGTGCAGGGCTCA
GCGCCTTCACTTTGGAACTGACTCAGAGACCTAAAGAAGCCCACCTGGCCAGCGGGAAGGGGGGCCGCCGCCGCC
TCCCGGTTTTGGGCAGCCCTGGCCAGCTCCCTGTGGCCTTGGAGGACTTCCACCGGGCAGGCGTTCCCATGATGC
CAGGCTACCAGGCGCGGGGGATTCCTGCAGGCCGGCGCTGCTTTTCTTAGAACCCCCTTTCTAGAAAAGTACACC
TGGAGGTTTTGCTTCAAAGAGAGGAGAGGCAGCAGC**ATG**GCGAGTGTCCTGTCCCGACGCCTTGGAAAGCGGTCC
CTCCTGGGAGCCCGGGTGTTGGGACCCAGTGCCTCGGAGGGGCCCTCGGCTGCCCCACCCTCGGAGCCACTGCTA
GAAGGGGCCGCTCCCCAGCCTTTCACCACCTCTGATGACACCCCCTGCCAGGAGCAGCCCAAGGAAGTCCTTAAG
GCTCCCAGCACCTCGGGCCTTCAGCAGGTGGCCTTTCAGCCTGGGCAGAAGGTTTATGTGTGGTACGGGGGTCAA
GAGTGCACAGGACTGGTGGAGCAGCACAGCTGGATGGAGGGTCAGGTGACCGTCTGGCTGCTGGAGCAGAAGCTG
CAGGTCTGCTGCAGGGTGGAGGAGGTGTGGCTGGCAGAGCTGCAGGGCCCCTGTCCCCAGGCACCACCCCTGGAG
CCCGGAGCCCAGGCCCTGGCCTACAGGCCCGTCTCCAGGAACATCGATGTCCCAAAGAGGAAGTCGGACGCAGTG
GAAATGGATGAGATGATGGCGGCCATGGTGCTGACGTCCCTGTCCTGCAGCCCTGTTGTACAGAGTCCTCCCGGG
ACCGAGGCCAACTTCTCTGCTTCCCGTGCGGCCTGCGACCCATGGAAGGAGAGTGGTGACATCTCGGACAGCGGC
AGCAGCACTACCAGCGGTCACTGGAGTGGGAGCAGTGGTGTCTCCACCCCCTCGCCCCCCCACCCCCAGGCCAGC
CCCAAGTATTTGGGGGATGCTTTTGGTTCTCCCCAAACTGATCATGGCTTTGAGACCGATCCTGACCCTTTCCTG
CTGGACGAACCAGCTCCACGAAAAAGAAAGAACTCTGTGAAGGTGATGTACAAGTGCCTGTGGCCAAACTGTGGC
AAAGTTCTGCGCTCCATTGTGGGCATCAAACGACACGTCAAAGCCCTCCATCTGGGGGACACAGTGGACTCTGAT
CAGTTCAAGCGGGAGGAGGATTTCTACTACACAGAGGTGCAGCTGAAGGAGGAATCTGCTGCTGCTGCTGCTGCT
GCTGCCGCAGGCACCCCAGTCCCTGGGACTCCCACCTCCGAGCCAGCTCCCACCCCCAGCATGACTGGCCTGCCT
CTGTCTGCTCTTCCACCACCTCTGCACAAAGCCCAGTCCTCCGGCCCAGAACATCCTGGCCCGGAGTCCTCCCTG
CCCTCAGGGGCTCTCAGCAAGTCAGCTCCTGGGTCCTTCTGGCACATTCAGGCAGATCATGCATACCAGGCTCTG
CCATCCTTCCAGATCCCAGTCTCACCACACATCTACACCAGTGTCAGCTGGGCTGCTGCCCCCTCCGCCGCCTGC
TCTCTCTCTCCGGTCCGGAGCCGGTCGCTAAGCTTCAGCGAGCCCCAGCAGCCAGCACCTGCGATGAAATCTCAT
CTGATCGTCACTTCTCCACCCCGGGCCCAGAGTGGTGCCAGGAAAGCCCGAGGGGAGGCTAAGAAGTGCCGCAAG
GTGTATGGCATCGAGCACCGGGACCAGTGGTGCACGGCGTGCCGGTGGAAGAAGGCCTGCCAGCGCTTTCTGGAC
TGAGCTGTGCTGCAGGTTCTACTCTGTTCCTGGCCCTGCCGGCAGCCACTGACAAGAGGCCAGTGTGTCACCAGC
CCTCAGCAGAAACCGAAAGAGAAAGAACGGAAACACGGAGTTTGGGCTCTGTTGGCTAAGGTGTAACACTTAAAG
CAATTTTCTCCCATTGTGCGAACATTTTATTTTTTAAAAAAAA

FIGURE 4218

MASVLSRRLGKRSLLGARVLGPSASEGPSAAPPSEPLLEGAAPQPFTTSDDTPCQEQPKEVLKAPSTSGLQQVAF
QPGQKVYVWYGGQECTGLVEQHSWMEGQVTVWLLEQKLQVCCRVEEVWLAELQGPCPQAPPLEPGAQALAYRPVS
RNIDVPKRKSDAVEMDEMMAAMVLTSLSCSPVVQSPPGTEANFSASRAACDPWKESGDISDSGSSTTSGHWSGSS
GVSTPSPPHPQASPKYLGDAFGSPQTDHGFETDPDPFLLDEPAPRKRKNSVKVMYKCLWPNCGKVLRSIVGIKRH
VKALHLGDTVDSDQFKREEDFYYTEVQLKEESAAAAAAAAAGTPVPGTPTSEPAPTPSMTGLPLSALPPPLHKAQ
SSGPEHPGPESSLPSGALSKSAPGSFWHIQADHAYQALPSFQIPVSPHIYTSVSWAAAPSAACSLSPVRSRSLSF
SEPQQPAPAMKSHLIVTSPPRAQSGARKARGEAKKCRKVYGIEHRDQWCTACRWKKACQRFLD

FIGURE 4219

GGGCTTCGTGTTCCTGGGTGCTGACCGTGCACTCCCCGCCGCCCGAGGACTTAGAGCTCTGGAAGTAGCTCTCCA
GCTTCCTTCGTACTCGGGGGCCGGACTTGTACACCCGCACGAGGAGCGGGGACGGCGGGCGCAGAAGTGGGCCAC
CATATCTGGAAACTACAGTCTATGCTTTGAAGCGCAAAAGGGAATAAACATTTAAAGACTCCCCCGGGGACCTGG
AGGATGGACTTTTCCATGGTGGCCGGAGCAGCAGCTTACAATGAAAAATCAGGTAGGATTACCTCGCTCTCACTC
TTGTTTCAGAAAGTCTTTGCTCAGATCTTTCCTCAGTGGAGAAAGGGGAATACAGAAGAATGTCTCCCCTACAAG
TGCTCAGAGACTGGTGCTCTTGGAGAAAACTATAGTTGGCAAATTCCCATTAACCACAATGACTTCAAAATTTTA
AAAAATAATGAGCGTCAGCTGTGTGAAGTCCTCCAGAATAAGTTTGGCTGTATCTCTACCCTGGTCTCTCCAGTT
CAGGAAGGCAACAGCAAATCTCTGCAAGTGTTCAGAAAAATGCTGACTCCTAGGATAGAGTTATCAGTCTGGAAA
GATGACCTCACCACACATGCTGTTGATGCTGTGGTGAATGCAGCCAATGAAGATCTTCTGCATGGGGGAGGCCTG
GCCCTGGCCCTGGTAAAAGCTGGTGGATTTGAAATCCAAGAAGAGAGCAAACAGTTTGTTGCCAGATATGGTAAA
GTGTCAGCTGGTGAGATAGCTGTCACGGGAGCAGGGAGGCTTCCCTGCAAACAGATCATCCATGCTGTTGGGCCT
CGGTGGATGGAATGGGATAAACAGGGATGTACTGGAAAGCTGCAGAGGGCCATTGTAAGTATTCTGAATTATGTC
ATCTATAAAAATACTCACATTAAGACAGTAGCAATTCCAGCCTTGAGCTCTGGGATTTTTCAGTTCCCTCTGAAT
TTGTGTACAAAGACTATTGTAGAGACTATCCGGGTTAGTTTGCAAGGGAAGCCAATGATGAGTAATTTGAAAGAA
ATTCACCTGGTGAGCAATGAGGACCCTACTGTTGCTGCCTTTAAAGCTGCTTCAGAATTCATCCTAGGGAAGAGT
GAGCTGGGACAAGAAACCACCCCTTCTTTCAATGCAATGGTCGTGAACAACCTGACCCTCCAGATTGTCCAGGGC
CACATTGAATGGCAGACGGCAGATGTAATTGTTAATTCTGTAAACCCACATGATATTACAGTTGGACCTGTGGCA
AAGTCAATTCTACAACAAGCAGGAGTTGAAATGAAATCGGAATTTCTTGCCACAAAGGCTAAACAGTTTCAACGG
TCCCAGTTGGTACTGGTCACAAAAGGATTTAACTTGTTCTGTAAATATATATACCATGTACTGTGGCATTCAGAA
TTTCCTAAACCTCAGATATTAAAACATGCAATGAAGGAGTGTTTGGAAAAATGCATTGAGCAAAATATAACTTCC
ATTTCCTTTCCTGCCCTTGGGACTGGAAACATGGAAATAAAGAAGGAAACAGCAGCAGAGATTTTGTTTGATGAA
GTTTTAACATTTGCCAAAGACCATGTAAAACACCAGTTAACTGTAAAATTTGTGATCTTTCCAACAGATTTGGAG
ATATATAAGGCTTTCAGTTCTGAAATGGCAAAGAGGTCCAAGATGCTGAGTTTGAACAATTACAGTGTCCCCCAG
TCAACCAGAGAGGAGAAAAGAGAAAATGGGCTTGAAGCTAGATCTCCTGCCATCAATCTGATGGGATTCAACGTG
GAAGAGATGTGTGAGGCCCACGCATGGATCCAAAGAATCCTGAGTCTCCAGAACCACCACATCATTGAGAATAAT
CATATTCTGTACCTTGGGAGAAAGGAACATGACATTTTGTCTCAGCTTCAGAAAACTTCAAGTGTCTCCATCACA
GAAATTATCAGCCCAGGAAGGACAGAGTTAGAGATTGAAGGAGCCCGGGCTGACCTCATTGAGGTGGTTATGAAC
ATTGAAGATATGCTTTGTAAAGTACAGGAGGAAATGGCAAGGAAAAAGGAGCGAGGCCTTTGGCGCTCGTTAGGA
CAGTGGACTATTCAGCAACAAAAAACCCAAGACGAAATGAAAGAAAATATCATATTTCTGAAATGTCCTGTGCCT
CCAACTCAAGAGCTTCTAGATCAAAAGAAACAGTTTGAAAAATGTGGTTTGCAGGTTCTAAAGGTGGAGAAGATA
GACAATGAGGTCCTTATGGCTGCCTTTCAAAGAAAGAAGAAAATGATGGAAGAAAAACTGCACAGGCAACCTGTG
AGCCATAGGCTGTTTCAGCAAGTCCCATACCAGTTCTGCAATGTGGTATGCAGAGTTGGCTTTCAAAGAATGTAC
TCGACACCTTGCGATCCAAAATACGGAGCTGGCATATACTTCACCAAGAACCTCAAAAACCTGGCAGAGAAGGCC
AAGAAAATCTCTGCTGCAGATAAGCTGATCTATGTGTTTGAGGCTGAAGTACTCACAGGCTTCTTCTGCCAGGGA
CATCCGTTAAATATTGTTCCCCCACCACTGAGTCCTGGAGCTATAGATGGTCATGACAGTGTGGTTGACAATGTC
TCCAGCCCTGAAACCTTTGTTATTTTTAGTGGCATGCAGGCTATACCTCAGTATTTGTGGACATGCACCCAGGAA
TATGTACAGTCACAAGATTACTCATCAGGACCAATGAGACCCTTTGCACAGCATCCTTGGAGGGGATTCGCAAGT
GGCAGCCCTGTTGATTAATCTCTACATCATTTTAACAGCTGGTATGGCCTTACCTTGGGTGAACTAACCAAATAA
TGACCATCGATGGCTCAAAGAGTGGCTTGAATATATCCCATGGGTTATCTGTATGGACTGACTGGGTTATTGAAA
GGACTAGCCACATACTAGCATCTTAGTGCCTTTATCTGTCTTTATGTCTTGGGGTTGGGGTAGGTAGATACCAAA
TGAAACACTTTCAGGACCTTCCTTCCTCTTGCAGTTGTTCTTTAATCTCCTTTACTAGAGGAGATAAATATTTTG
CATATAATGAAGAAATTTTTCTAGTATATAACGCAGGCCTTTTATTTTCTAAAATGATGATAGTATAAAAATGTT
AGGATAACAGAATGATTTTAGATTTTCCAGAGAATATTATAAAGTGCTTTAGGTATGAAAATAAATCATCTTTGT
CTGATTAAAAAAAAAAAA

FIGURE 4220

MDFSMVAGAAAYNEKSGRITSLSLLFQKVFAQIFPQWRKGNTEECLPYKCSETGALGENYSWQIPINHNDFKILK
NNERQLCEVLQNKFGCISTLVSPVQEGNSKSLQVFRKMLTPRIELSVWKDDLTTHAVDAVVNAANEDLLHGGGLA
LALVKAGGFEIQEESKQFVARYGKVSAGEIAVTGAGRLPCKQIIHAVGPRWMEWDKQGCTGKLQRAIVSILNYVI
YKNTHIKTVAIPALSSGIFQFPLNLCTKTIVETIRVSLQGKPMMSNLKEIHLVSNEDPTVAAFKAASEFILGKSE
LGQETTPSFNAMVVNNLTLQIVQGHIEWQTADVIVNSVNPHDITVGPVAKSILQQAGVEMKSEFLATKAKQFQRS
QLVLVTKGFNLFCKYIYHVLWHSEFPKPQILKHAMKECLEKCIEQNITSISFPALGTGNMEIKKETAAEILFDEV
LTFAKDHVKHQLTVKFVIFPTDLEIYKAFSSEMAKRSKMLSLNNYSVPQSTREEKRENGLEARSPAINLMGFNVE
EMCEAHAWIQRILSLQNHHIIENNHILYLGRKEHDILSQLQKTSSVSITEIISPGRTELEIEGARADLIEVVMNI
EDMLCKVQEEMARKKERGLWRSLGQWTIQQQKTQDEMKENIIFLKCPVPPTQELLDQKKQFEKCGLQVLKVEKID
NEVLMAAFQRKKKMMEEKLHRQPVSHRLFQQVPYQFCNVVCRVGFQRMYSTPCDPKYGAGIYFTKNLKNLAEKAK
KISAADKLIYVFEAEVLTGFFCQGHPLNIVPPPLSPGAIDGHDSVVDNVSSPETFVIFSGMQAIPQYLWTCTQEY
VQSQDYSSGPMRPFAQHPWRGFASGSPVD

FIGURE 4221

GTCTCCGAGGCTCATGGCGATGCTGGTCCTAGTACCCGGACGAGTTATGCGGCCTCTGGGTGGCCAACTTTGGCG
CTTCTTGCCTCGCGGACTCGAGTTTTGGGGCCCAGCCGAGGGGACTGCGAGAGTCTTGCTGAGGCAGTTCTGCGC
GCGGCAAGCGGAGGCGTGGCGTGCCTCGGGGCGCCCTGGCTATTGCCTGGGAACCCGGCCCCTCAGCACTGCGAG
GCCGCCACCCCCGTGGTCGCAGAAGGGCCCCGGAGACTCCACGCGCCCCTCGAAGCCCGGGCCTGTTTCCTGGAA
GTCTTTAGCAATCACATTTGCTATTGGAGGAGCTTTACTGGCTGGAATGAAGCACGTCAAGAAAGAAAAGGCAGA
GAAGTTAGAGAAGGAACGGCAGCGACACATCGGCAAGCCTTTACTTGGGGGACCGTTTTCCCTCACAACTCATAC
TGGGGAGCGTAAAACTGACAAGGACTACTTGGGTCAGTGGTTATTGATTTATTTTGGCTTCACTCATTGCCCTGA
TGTCTGTCCAGAAGAACTAGAAAAGATGATTCAAGTCGTGGATGAAATAGATAGCATTACAACTCTGCCAGATCT
AACTCCACTTTTCATCAGCATTGACCCAGAGAGGGACACAAAAGAAGCCATCGCAAATTATGTGAAAGAATTTTC
TCCCAAACTGGTTGGCTTGACTGGCACGAGAGAAGAGGTCGATCAAGTGGCCAGAGCATACAGAGTGTATTACAG
CCCTGGCCCCAAGGACGAAGATGAAGACTACATAGTGGATCACACAATAATAATGTACTTGATTGGACCAGATGG
TGAGTTTCTAGATTATTTTGGCCAGAACAAGAGGAAGGGAGAAATAGCTGCTTCAATTGCCACACACATGAGGCC
ATACAGAAAAAAGAGCTAGCCAAAGCAGTGTTGCTGGATGCAGTATTCTCTTGCTAAGAGGAAGGAAACTGTCTC
GCATAGGAGCCTATATAAATATAAACATATATACGTGCACTCTACAGAATGGCCTTCATACCATGAGAACATTTC
TGTTTTGGATGGGGATGTTACCCTTGCGTTCAACCAAAATTGATTCTTGGAACTGTAAAGATTACAACCCAAAGT
CTCCCAGGAAGCTGTGGGGAGACCAGAGGATCAAGCTGAAGTGAAGCCAGTGAAGAGCCCACCTGTGGAAGGACA
TGGCGGGGCGAGGCACAGCCAGTGCATTCCTGCCTGCGAACAGGCCCTCCCAGCAGCTTTGCCGCCTCTCCATCG
TCTTGGGCCCTTGCTCAAATAGCTGTGGGACTGAATTTCACAGAAAAGAATATAATTTCCATAGTGCTCTTGCTT
GCCTCTTCTTGAGTTCTTTGCTCTTCTGAGTTCTTGGTGGCTAATAACAGTCAGATTAGGGTCTCTGCCATTCAG
AGTTGATGCTTGAAAACTTTAGTTTTCCTTATTAATGAATATCACTATCAGATTTGACTAATGAAGAGGAAATCT
ATTGTTTGGGGGAAAAAAAAACATCAGTTTGATTTCTCTAGGGGTTCTTTTATGTGATTTTTAGCTAAGTGGTGTG
CCAGGTTTTCAGTGACATACCAAATGGAAATAAGAGGATATTGATCACGAGTGTGATGCTGAGTACCTTTCTGCA
TATACTGGATTGTACTTTGTGTAAAGTAAACATACTCAGTTTTGCTGTTCAAAAAAAAAAAAAAAAAAA

FIGURE 4222

MAMLVLVPGRVMRPLGGQLWRFLPRGLEFWGPAEGTARVLLRQFCARQAEAWRASGRPGYCLGTRPLSTARPPPP
WSQKGPGDSTRPSKPGPVSWKSLAITFAIGGALLAGMKHVKKEKAEKLEKERQRHIGKPLLGGPFSLTTHTGERK
TDKDYLGQWLLIYFGFTHCPDVCPEELEKMIQVVDEIDSITTLPDLTPLFISIDPERDTKEAIANYVKEFSPKLV
GLTGTREEVDQVARAYRVYYSPGPKDEDEDYIVDHTIIMYLIGPDGEFLDYFGQNKRKGEIAASIATHMRPYRKK
S

FIGURE 4223

AAGCCGTGCGCTCCCGGGCTGCGAGGTCTGGCTAGGCTACGGGCCACGCGCCGCCGCCGCTGCCGCCGCCACTGT
CCTCTTCGGAGGCGCGGGCCCGACGGAAACCATGTTTGTGGCTCGCAGCATCGCGGCGGACCACAAGGATCTCAT
CCACGATGTCTCTTTCGACTTCCACGGGCGGCGGATGGCAACCTGCTCCAGCGATCAGAGCGTTAAGGTCTGGGA
TAAAAGTGAAAGTGGTGATTGGCATTGTACAGCTAGCTGGAAGACACATAGTGGATCTGTATGGCGTGTGACATG
GGCCCATCCTGAATTTGGGCAAGTTTTGGCTTCCTGTTCTTTTGACCGAACAGCTGCTGTATGGGAAGAAATAGT
AGGAGAATCAAATGATAAACTGCGAGGACAGAGCCACTGGGTTAAAAGGACAACTCTGGTGGATAGCAGAACATC
TGTTACTGATGTGAAGTTTGCTCCCAAGCACATGGGTCTTATGTTAGCAACCTGTTCCGCAGATGGTATAGTAAG
AATCTATGAGGCACCAGATGTTATGAATCTCAGCCAGTGGTCTTTGCAGCATGAGATCTCATGTAAGCTAAGCTG
TAGTTGCATTTCTTGGAACCCTTCAAGCTCTCGTGCTCATTCCCCCATGATCGCCGTAGGAAGTGATGACAGTAG
CCCCAACGCAATGGCCAAGGTTCAGATTTTTGAATATAATGAAAACACCAGGAAATATGCAAAAGCTGAAACTCT
TATGACAGTCACTGATCCTGTTCATGATATTGCATTCGCTCCAAATTTGGGAAGATCTTTCCATATTCTAGCAAT
AGCGACCAAAGATGTGAGAATTTTTACATTAAAGCCTGTGAGGAAAGAACTGACTTCCTCTGGTGGGCCAACAAA
GTTTGAAATCCATATAGTGGCTCAGTTCGATAATCATAATTCTCAGGTCTGGCGAGTGAGTTGGAATATAACAGG
AACGGTGCTAGCATCTTCAGGAGATGATGGGTGTGTAAGATTGTGGAAAGCTAATTATATGGACAATTGGAAGTG
TACTGGTATTTTGAAAGGTAATGGGAGCCCAGTCAATGGGAGTTCTCAGCAGGGAACCTCAAATCCTTCCCTAGG
TTCAAATATTCCAAGTCTTCAGAATTCATTAAATGGATCTTCTGCTGGCAGAAAGCACAGCTGAGACAAGCTAAC
TGGAGTAACTTTGCTGTTTTGCTGCTTGTTGCATGCACACTGGAATGGAAAGCGAGCTCCCTTTTCCCCTTCCCC
AGCGCCGTTTGACCTCTCCCAAGGATACACCAGCAGCCTGCTTACTACTAAACGCAATCCAAAAGGCCTTTAAAA
ATACAGTGTATATTTTTTGTACTAGTCAGTTTATTGACACTATTTGAAACTTTTGAAATATAAACGGAGAGGCTT
TCTGTTGAGACATTGTCACCAAAACAATTTTTTGAAATGTTCCTGAAACTAATTTGGGTTTAAAGATTAAAAGGG
TTGTTACCATTCTTATCTGAGTAGTTGGGAGGAGGGGAATACCACTTTAGTTCATTTGGAAAATATAGACATATT
TCTTTTGCTTTCTTAAAACAGCTTAAAATGATGAACTTTTATAATTTTAATTTGAAGATTGAATAAATATTTTTT
ATAAAGATTGTTTTGAGTGCTGATTTGTTTACTTTTTGTAGATTTGCTTTATCCATGATATTCAGTACAACTCTG
TCATTTCTTTGTAATATTTAAAAAATATTAGTAAAGGAGTGAATTAATAAAGTAGTAATAGTAAAATGAAAGGAA
CTTGACTGTACAGTTTGTAGCCCAGGTTAAGGCATTTGGGTATTGTTTCATTTAACCAATTTGGGGACTAAGATG
GGAAACACTTTTTTTATTAAGTTTTTAATTCATAGTCACTAAAGAGATAAATGTTTCTTATATACATTTGTGTAT
TTTTATGGTGTTATTTATTCCATGGCTTAGCTTCCTTCAAATCAAAATTTGGACACACACTATTAAGAGAAGCCA
TTAAAATTTTACTAAAATTGTGCATGTAAATTAATTGTCAGCATTCCATGTCTCAAGATTTTCTTAATTTAGTTC
GCTGTTTAAATTAATTCATGTCCTGTAAAGTTCTGACCTTGATAACAAAGCTATAAATATTTAAGTTTGCTAATA
TGCGTAAGTATTATCGGTAAGTTACAAGATGGAAGAAGAATAACAGTAGGGCACAGTCATTCTGTGAATCCTTTT
ACTTATCAAAATTTGGTAGCTATTCTAAGGCTTTTGCAGAAAAATAAGTGTTCAATGTTTGTAGTTCTTCAAAAG
CATGTTGCAGTAGCCAGCCATACTATGTGTATTCCCAGTATCATGTACGCACTAAAAAAAATGTGTGCTTGCTGC
TGCTGTGAGTGAACCATTGCTTAAGATAAAAAACTTAACTAGATCTGTAAATGTACAGAATAGCATCAGATGTTT
CTGAGAGATTAGGAAAATGTTTTGAATTTATAAAATTAATGTTTTTCTTTGTAACATTTATATATATTTTTTAAC
ATTTTAAGTTTAACAGATTGTATTCCTTTCAAGTTTCTATACTTGCTTAAGCAATCTTGATTTGAGTAAGGGTCT
TGATTTGTGCTATTATGTTCTGTTAGTTTTGGCATGAATATACTAAAGCTTTTTTTTTTTTTTTAGCATGTGTT
TTCTCCTCTTTGGTTCTCTTTGTATTTACTACTTTTCTCTTTTTCTTGTGTTTTTTTTTTCCTGTTTTTGTTTTG
TTTGGTGTTTTGTTCCTGTCTTCATTGTTTCAGGTATTTCTTTACCCCTCTGGATTCCCCACGGGCTGGATCGAG
ATGGTCCAGTTATGCCCAGCTCCTTCCTCCTCCTCCTCCTCCTCTGGTAGAGCACTCTTGCGATGCTGACACTGC
CAACCTCCAGTATCCTCACCCTCGCAGACGATATCTCTCTCGGCCTCTTAATCCCTTACCTGAGAATGAAGGGAT
TTAAAACACTGATTTAACATTGAAAGGCCTTATTCAAGTGCTTGTAAATGCTTTCATTTCTGGCTGCTTTTTGTT
TTTCATTTTCTTTCAGAAGATTTTTCTAACTTAGGGTCTGTCTTGCATGTATTACAACCAGAATACAGTGTTTGG
AACCTAAATCTGTTTGTGCGTCTGCATCAAAGGAACATTTGCTTCACTGGGTGATAACCTTTGATGAAATGAGAT
ATGTCCAAGTAACGTTAACTGTGAAGTTACACACAGTAGCTGACTTCAAAGTGCCTGTTCCTGTAAATTTTATTT
TAAACTGTTACCATAGTCTTAAGTTGTTTATGCTTTATCAGACTGGCTAATGTGAAAGCATAATATTATGAAGTT
TATTCTGCCTTATGAGACCTTAAAAAATGGATTTCATTTTACAGGCTAATGTTGTAACTGACTAGTATGTAAAAT
AAATCATTCCTGTGTATAAAGCAGCAAAACCTAAAAAAAAAA

FIGURE 4224

MFVARSIAADHKDLIHDVSFDFHGRRMATCSSDQSVKVWDKSESGDWHCTASWKTHSGSVWRVTWAHPEFGQVLA
SCSFDRTAAVWEEIVGESNDKLRGQSHWVKRTTLVDSRTSVTDVKFAPKHMGLMLATCSADGIVRIYEAPDVMNL
SQWSLQHEISCKLSCSCISWNPSSSRAHSPMIAVGSDDSSPNAMAKVQIFEYNENTRKYAKAETLMTVTDPVHDI
AFAPNLGRSFHILAIATKDVRIFTLKPVRKELTSSGGPTKFEIHIVAQFDNHNSQVWRVSWNITGTVLASSGDDG
CVRLWKANYMDNWKCTGILKGNGSPVNGSSQQGTSNPSLGSNIPSLQNSLNGSSAGRKHS

FIGURE 4225

GCGCGCAGCGCTGGTACCCCGTTGGTCCGCGCGTTGCTGCGTTGTGAGGGGTGTCAGCTCAGTGCATCCCAGGCA
GCTCTTAGTGTGGAGCAGTGAACTGTGTGTGGTTCCTTCTACTTGGGGATCATGCAGAGAGCTTCACGTCTGAAG
AGAGAGCTGCACATGTTAGCCACAGAGCCACCCCCAGGCATCACATGTTGGCAAGATAAAGACCAAATGGATGAC
CTGCGAGCTCAAATATTAGGTGGAGCCAACACACCTTATGAGAAAGGTGTTTTTAAGCTAGAAGTTATCATTCCT
GAGAGGTACCCATTTGAACCTCCTCAGATCCGATTTCTCACTCCAATTTATCATCCAAACATTGATTCTGCTGGA
AGGATTTGTCTGGATGTTCTCAAATTGCCACCAAAAGGTGCTTGGAGACCATCCCTCAACATCGCAACTGTGTTG
ACCTCTATTCAGCTGCTCATGTCAGAACCCAACCCTGATGACCCGCTCATGGCTGACATATCCTCAGAATTTAAA
TATAATAAGCCAGCCTTCCTCAAGAATGCCAGACAGTGGACAGAGAAGCATGCAAGACAGAAACAAAAGGCTGAT
GAGGAAGAGATGCTTGATAATCTACCAGAGGCTGGTGACTCCAGAGTACACAACTCAACACAGAAAAGGAAGGCC
AGTCAGCTAGTAGGCATAGAAAAGAAATTTCATCCTGATGTTTAGGGACTTGTCCTGGTTCATCTTAGTTAATG
TGTTCTTTGCCAAGGTGATCTAAGTTGCCTACCTTGAATTTTTTTTTAAATATATTTGATGACATAATTTTTGTG
TAGTTTATTTATCTTGTACATATGTATTTTGAAATCTTTTAAACCTGAAAAATAAATAGTCATTTAATGTTGAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4226

MQRASRLKRELHMLATEPPPGITCWQDKDQMDDLRAQILGGANTPYEKGVFKLEVIIPERYPFEPPQIRFLTPIY
HPNIDSAGRICLDVLKLPPKGAWRPSLNIATVLTSIQLLMSEPNPDDPLMADISSEFKYNKPAFLKNARQWTEKH
ARQKQKADEEEMLDNLPEAGDSRVHNSTQKRKASQLVGIEKKFHPDV

FIGURE 4227

AGTCGCCTCCGGAGGAAGGAAGAAGAGGACGCCGGGCGCGCAGCTCGGTGCTGATTATCACAACTGTTTGGTGAC
CTACTTCACTGACCTGTGAGGATTCCTTCCCTTCAAGTACTGGATTCTTGATCTTTCTGCATCATCAAGAATGGA
AACAGACTGTAATCCCATGGAGCTAAGCAGTATGTCAGGATTTGAAGAAGGTTCAGAGCTGAACGGTTTTGAAGG
AACTGACATGAAAGACATGAGGCTCGAAGCTGAAGCAGTTGTAAATGATGTTCTCTCTGCTGTTAACAACATGTT
TGTCTCGAAAAGCCTGCGGTGTGCGGATGATGTGGCCTATATCAATGTGGAAACAAAGGAAAGAAACAGATATTG
CCTAGAACTCACTGAAGCAGGGCTCAAGGTGGTAGGCTATGCTTTTGACCAGGTAGATGATCATTTACAGACTCC
CTACCATGAAACAGTCTACTCCTTGTTGGATACACTCAGCCCCGCCTACCGAGAAGCATTTGGAAACGCACTGCT
TCAAAGACTGGAAGCTTTGAAAAGAGATGGACAGTCATGACTACACTTTTTCCTTTCAGAGGGGCTGGTGCTGGT
ACAGAATGTTGATACAAAGCTTAAAATTCTTGCATATGGTCATAGAAAATGCATCTTTGGTTTTGTGTTTTTATC
ACTTGCTTCCAACTTAGGCTTTTGGCTCAGAAGATTATTGAATAATGATTTGTCTTAGTTTCTGTTTCAGTAAGG
GAATTCTGAGGCCGTTGCTATGATACCATCATTAAGACATTCACATGTCTTCATATAATATCTCTTCATTTCAAA
TCCTAATCACTATTTCATACTATTACAGGGCTTTGATGCTGCCAGCACTGTCTTTTACATAGGAAATTCTAGATT
TGCACAGTAATAGAGGAATTAGAAGTACCTAACTATACACTTTGATTCAGCCTGCTAAATCAGGGGTTCAATACT
AGCTTGGACAAACTTTGTAGTAATTAATTGCTACCAGCCTTATTGGAAACAAATTATCAACTAGTTTCCCCTGCA
CAAATTTTGAAATTCACTGCTTCACTTAATCTATTTATATTACTAATAATGGATTAATAAAGATGAATTAATTAT
ATATTACTTAACTAGTATTAAATGAAAAACAGGGACTGAAATAGTTCTGTATTCCGTGTTTGCAACAGCCAGCCA
ACTAAGCAGAGGATAAACCGTTAGCAAATGAATGTAATAATTACTCATTTCCAAGATATCTAAGCACATAAGCAA
ATACAGGAACAGACTTCATTCTTTTTCTTAACAAAAAAGCATCTTCAGTGTGTGATTTAAAAGAAAGAAGACTCT
GGTTTCCTAGAAAACAATATTTTGGCCTGTGTTGATTCTTATTCTGAATGTGTGTTTACATAATGTACAGTATAT
ATTCAGAAAGTATTTTTGCTTCAACGTTTACTTTCTATGATGTAGTGCTTTGGTATTCCTACAGCACCCCACCTT
CCCCAACAGATGTACAGTGTTCAGTCTCCATTCGAAATCTACAATGTAATATGAGTGCATTGTATGGGTTTGAAA
CCAAAGGATGAATGAAGCATTCAGAGACTTAATATTTGAAAAAGGAATAGTCAGTATTTTATATTTTATTACAGG
TACTGATATTTATAAATTTAATAAACTGTACCATGCTGCTGCATGTTTTCAAGTACATGTTGAACAGTAAGGATT
GGGGAGTTGTTTTTTAATGGTCACCTAAAGCAGCTGCTATAGAAATGTTGAACTAAAATTTTGCATCTGGTCATA
CCTTCATGCATTTATCATTTGCAGATATTTTTCCATCATTATTAAAAAACAGGAACTTTTAGGCTCTGAAGATCA
TGTGGACCAGAGCAAATTAAAGTTCAGTTTGTGTCACAATTCATTGCCAGACTTCATTGGAATGCTTTGTTTGAT
GATGTATGTTCATTCTCAGCTTTATTTTCAGATGCTTAACTGGGCAATGAAGTCTAACTTCAGGTTGAACTTTCT
CATGTTTAATCTCAGGCTAAATGTAAATGATATTTGTAAAGTTTGAATAAAATTCTGTTTACTCATTTTGAGTTA
GTATGAAAAAAAGTGATTGTATGTTTAAGAATTGAAATTGTTCATTTTGTGATAAATGATTAATTCCAAAAAAAA
AAAAAAAAA

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FIGURE 4228

METDCNPMELSSMSGFEEGSELNGFEGTDMKDMRLEAEAVVNDVLSAVNNMFVSKSLRCADDVAYINVETKERNR
YCLELTEAGLKVVGYAFDQVDDHLQTPYHETVYSLLDTLSPAYREAFGNALLQRLEALKRDGQS

FIGURE 4229

AACAATAGGAAACGTCAAAATTGGGATAGTCGGCAGTTCTGGCCCCTGCAGCTGGAGGTACCCTGAGTTCTGAGG
GTCGTAGTGCTGTTTCTGGTATTCTCATCGCGGTCACCTCTACCGGTGTGGACAAGTAAAGTTTGAATCAGCTTC
TCCATGGCCTGGGCACCAGTTCCCGGCTGAGCCATTTTCCTTTTGGCTAAAAGTCCCCGCCCAGAGGCCAATTCG
TCGCGGCGGCGGTGGAGATCGCAGGTCGCTCAGGCTTGCAGATGGGTCAAGGGTTGTGGAGAGTGGTCAGAAACC
AGCAGCTGCAACAAGAAGGCTACAGTGAGCAAGGCTACCTCACCAGAGAGCAGAGCAGGAGAATGGCTGCGAGCA
ACATTTCTAACACCAATCATCGTAAACAAGTCCAAGGAGGCATTGACATATATCATCTTTTGAAGGCAAGGAAAT
CGAAAGAACAGGAAGGATTCATTAATTTGGAAATGTTGCCTCCTGAGCTAAGCTTTACCATCTTGTCCTACCTGA
ATGCAACTGACCTTTGCTTGGCTTCATGTGTTTGGCAGGACCTTGCGAATGATGAACTTCTCTGGCAAGGGTTGT
GCAAATCCACTTGGGGTCACTGGTCCATATACAATAAGAACCCACCTTTAGGATTTTCTTTTAGAAAAGTGTATA
TGCAGCTGGATGAAGGCAGCCTCACCTTTAATGCCAACCCAGATGAGGGAGTGAACTACTTTATGTCCAAGGGTA
TCCTGGATGATTCGCCAAAGGAAATAGCAAAGTTTATCTTCTGTACAAGAACACTAAATTGGAAAAAACTGAGAA
TCTATCTTGATGAAAGGAGAGATGTCTTGGATGACCTTGTAACATTGCATAATTTTAGAAATCAGTTCTTGCCAA
ATGCACTGAGAGAATTTTTTCGTCATATCCATGCCCCTGAAGAGCGTGGAGAGTATCTTGAAACTCTTATAACAA
AGTTCTCACATAGATTCTGTGCTTGCAACCCTGATTTAATGCGAGAACTTGGCCTTAGTCCTGATGCTGTCTATG
TACTGTGCTACTCTTTGATTCTACTTTCCATTGACCTCACTAGCCCTCATGTGAAGAATAAAATGTCAAAAAGGG
AATTTATTCGAAATACCCGTCGCGCTGCTCAAAATATTAGTGAAGATTTTGTAGGGCATCTTTATGACAATATCT
ACCTTATTGGCCATGTGGCTGCATAAAAAGCACAATTGCTAGGACTTCAGTTTTTACTTCAGACTAAAGCTACCC
AAGGACTTAGCAGATATGGGGGTTACATCAGTGCTGGTCATTGTAGCCTGAGTATACAATCAAGCTTCAGTGTGC
AACCTTTTTTTCTTTTGCCATTTTCTATTTTAGTAATTTCCTTGGGGAACTAAATAATTTTGCAGAATTTTTCCT
AATTTTGTTTATCACGTTTTGCACAAAGCAGAGCCACTGTCTAACACAGCTGTTAACGAATGATAAACTGACATT
ATACTCTAAAAGATGGTGTATTTGTGCATTAGATTTGCCTGAAAAACTTTATCCATTTCCATTCTTTATACAAAT
ACCATGTAATGTGTACATATTTAACTAAAGAGATTTATAGTCATAATTATTTTATTGTAAAGATTTTAACTAAAG
TTTTTCCTTTTCTCTCAAACTGAGTTCTGAAATTTATTTGATTCTGATCTGAAACTATTGTCTTCGTAAAAGTTA
GATCTGACTTCAGACAGAAACCAATACCAGCTTCCTTTTCCTTTAAACTTTGAAGAGTGTTGATTTGTTACTATA
TTACTATGCAAAACTGGCAGTTATTTTTATAATATAAATTTATAATTTGATTTTTTATTTTAAAAACTGGGTTAA
TCAAGTCTCGGTAAGTCCTTTAAACCATTTAGGATTTTTAAAACATCAAAATTTATGATTTACATTCATAGGAAT
AAAATAAAATATTATTAGAACTCTGGTAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4230

MGQGLWRVVRNQQLQQEGYSEQGYLTREQSRRMAASNISNTNHRKQVQGGIDIYHLLKARKSKEQEGFINLEMLP
PELSFTILSYLNATDLCLASCVWQDLANDELLWQGLCKSTWGHWSIYNKNPPLGFSFRKVYMQLDEGSLTFNANP
DEGVNYFMSKGILDDSPKEIAKFIFCTRTLNWKKLRIYLDERRDVLDDLVTLHNFRNQFLPNALREFFRHIHAPE
ERGEYLETLITKFSHRFCACNPDLMRELGLSPDAVYVLCYSLILLSIDLTSPHVKNKMSKREFIRNTRRAAQNIS
EDFVGHLYDNIYLIGHVAA

FIGURE 4231

GTCGCGACCCTGGTCCGGACCTGACCTGAATTGCGACCCCAACCTGGACTGCTCCCCTGACCGCAACCCCTACCC
CCGCCCACCAGTATGGCCCGGCACGTGTTCCTAACGGGGCCCCCAGGAGTTGGAAAAACAACATTGATCCATAAA
GCCAGTGAGGTTTTAAAATCCTCTGGTGTGCCTGTTGATGGATTTTATACCGAAGAAGTCAGACAGGGAGGGAGA
AGAATAGGATTCGATGTCGTCACGTTGTCCGGCACCCGGGGGCCTTTATCGAGAGTTGGGTTAGAGCCTCCACCT
GGAAAACGTGAATGCCGAGTTGGGCAGTATGTGGTCGACCTGACTTCTTTTGAGCAGTTGGCACTACCCGTCTTG
AGGAATGCCGACTGCAGCAGTGGCCCAGGGCAAAGAGTGTGCGTCATCGATGAGATTGGGAAGATGGAGCTCTTC
AGTCAGCTTTTCATTCAAGCTGTTCGTCAGACGCTGTCTACCCCAGGGACTATAATCCTTGGCACAATCCCAGTT
CCTAAAGGAAAGCCACTGGCTCTTGTAGAAGAAATCAGAAACAGAAAGGATGTGAAGGTGTTTAATGTCACCAAG
GAAAACAGAAACCACCTTCTGCCAGATATCGTGACGTGCGTGCAGAGCAGCAGGAAGTGAAGACACGTGCATTCC
TGCCTTCCGTGAAGGAGTGCCCAGTTCAAGAGGAGCCTGATGGAGCCCTGCCTGTCGAGGCTGTATGCCTATGGG
GTTATGGAACCTTGTGGGCTTTTCTAGAGAAAACTCAACAGCTGTTTCCCATAAAATGTTTAAAAGATCAAATTA
GCCTTAATGCTGGATTGTCTGTACAAGATTAACTATCCATTGTGGCTTATCTATGCTTAAAGATTTCTTGTTTAT
TTAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4232

MARHVFLTGPPGVGKTTLIHKASEVLKSSGVPVDGFYTEEVRQGGRRIGFDVVTLSGTRGPLSRVGLEPPPGKRE
CRVGQYVVDLTSFEQLALPVLRNADCSSGPGQRVCVIDEIGKMELFSQLFIQAVRQTLSTPGTIILGTIPVPKGK
PLALVEEIRNRKDVKVFNVTKENRNHLLPDIVTCVQSSRK

FIGURE 4233

AGCGGATTTCCGCCTCCGGGTGGCGCTTCCCGGTGTCGTGTTCTGGAAGCTTAGCGGTCACCATGGAGCTGCTGG
GAGAGTACGTCGGGCAGGAAGGGAAGCCGCAGAAGCTGCGGGTGTCCTGTGAGGCGCCGGGTGACGGCGACCCTT
TCCAGGGCCTGTTGTCTGGCGTGGCCCAGATGAAGGACATGGTAACGGAATTATTCGACCCTCTGGTACAGGGGG
AAGTGCAGCACCGGGTGGCGGCGGCTCCAGACGAGGACTTGGACGGTGATGATGAAGATGATGCAGAAGATGAAA
ATAACATTGATAACAGAACTAACTTCGATGGACCATCTGCAAAACGGCCAAAAACACCGTCTTAACAATAGCCTT
CATGACATTTAAAAGATGGCTGTTGTATCCTTATTGTCACACTAGGACATTTAAGGAAGACTTATGCTCTAATTT
GGAAAAAGCATTTGTGTTGTTCTCCTGGGACAATTTTGTCAAAGAGAAAACTGGTTTTTCTGTTTCTAGCAAAGA
TAGTAAAGGCTTAGAAATAAAATCTGTTTTCTTGAGAAATAAATTTCAGACCCTGGAAGGAAAATAGAACACTTC
ATAATGTATAAAATCCTCTAAGTTGGCAACTGAATTTTTATCATTGTTTTCTATTTTTAAAATAATCATTGATTT
GTGTGATGTCTACATCTTTTAACTTCTGGTTCTGTTATAAAGAGTACATGTCACGGTTCATAGGCAGTAACATTT
CAGAGAACTGACATGAACAAGTAGTGAAAATTGGGCATTAAATATAAAAATAACAGTTCTTCATAAACAGAAGGA
AAATAAGGAAATAGAAATACCAACGAGAAAGGAGAGTCCTTGAAAGAGACCCAAGGAAACCCTGAATTCATACCC
ACGTCAAATATGCACATATCCTGAGATGATGCCACTTTGATGAATGTGCATTAGTCTGATTTATCATGTACCTTA
AGAGAGCCAGATGGGGTATGTTTTTGTGCTGTGATATGGTATTTATACAGGTACAAATATAAGGCCTTAAGTAAA
CAATCTGCATTGATTACAATTTGGATATTTCCTCTCCTCCTGTAGCCATACTTTGATTTTGCTTTAAAAAGATTA
TTGAATCCTTTTAAAAATATATATTCCTAAAATATGAAAAAAAAAAAAAAA

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FIGURE 4234

MTFKRWLLYPYCHTRTFKEDLCSNLEKAFVLFSWDNFVKEKTGFSVSSKDSKGLEIKSVFLRNKFQTLEGK

FIGURE 4235

GGCACGAGGGCTGCTTGCACTCTGAATTTGGGCTATTCAGGTAGTGTGCTCAAAGTTGAAACCGCATACAGCACA
ACTCAAGTTTGCATCAGACTGGGAAGCGAACTTAAGCCAGCGGTGCGTGGCCCAGGAGTGGGAAAGGAAATGGAT
GCCTGAAGTGGAAGAGGTGGTGCAGAGGGGGCACCGCCC**ATG**CTGCCCTGCTTCCAACTGCTGCGCATAGGGGGC
GGCAGGGGCGGTGATCTCTACACCTTCCACCCCCCCGCCGGGGCTGGCTGCACCTATCGCTTGGGCCACAGGGCC
GACCTGTGTGATGTGGCCCTGCGGCCCCAGCAGGAGCCTGGCCTCATCTCTGGGATCCACGCCGAACTGCATGCC
GAGCCCCGGGGTGATGACTGGAGGGTCAGCCTGGAAGACCACAGCAGCCAAGGTACTTTGGTCAATAATGTCCGA
CTCCCAAGAGGTCACAGGCTGGAATTGAGTGATGGAGACCTCCTGACCTTTGGCCCTGAAGGGCCCCCAGGAACC
AGCCCCTCGGAGTTCTACTTCATGTTCCAACAAGTACGAGTCAAGCCTCAGGACTTTGCTGCCATTACCATCCCA
CGGTCTAGGGGAGAAGCCCGGGTTGGGGCTGGTTTCCGGCCTATGCTGCCCTCCCAGGGGGCTCCACAGCGGCCT
CTCAGCACCTTCTCCCCTGCCCCCAAGGCCACACTGATCCTAAACTCCATAGGCAGCCTCAGCAAGCTCCGGCCC
CAGCCCCTCACCTTCTCCCCTAGTTGGGGTGGACCAAAGAGCCTGCCTGTTCCCGCCCCACCTGGGGAAGTGGGG
ACCACGCCTTCTGCTCCACCCCAACGCAATCGGAGGAAATCTGTTCACCGAGTGTTGGCGGAACTGGATGATGAG
AGTGAGCCTCTTGAGAACCCGCCACCGGTCCTTATGGAGCCCAGGAAGAAACTCCGTGTAGACAAAGCCCCACTG
ACTCCCACTGGAAATCGACGTGGCCGTCCTCGGAAGTACCCAGTGAGCGCTCCCATGGCTCCCCCTGCAGTTGGG
GGCGGGGAGCCCTGTGCAGCTCCTTGTTGCTGCCTGCCCCAGGAAGAGACAGTGGCCTGGGTTCAGTGTGATGGC
TGTGACGTCTGGTTCCATGTGGCCTGTGTTGGCTGCAGCATCCAGGCTGCCAGGGAGGCCGACTTCCGATGCCCA
GGGTGCCGGGCTGGCATTCAGACC**TAA**GGTCCACCGCCAAGGCACCATCGGACACACCTGCCCATGAGTAGACAC
AGCAGCGAGCAAATAGGTCTGATAAATACCCCCCTTCCCTTCCCTCCCCAGGAGGGAATGACTACAGGGAAGAAG
GATGGATTGATGTGGACTCATTCAGGGCCTGGAGCAGACCCTGGTGGCCAAGACAGAAGAGATGGTTTCCTGCCA
AAGATATTGCCACCTCCAGGAAATTGCCAGTGAGCTGGAAGTTCCCACTATTACAAGCCATAAGGCCATGTTGCC
ATGGACACCAGAATATCTGTAGTCAGAGCACCTATCAGTTGCAAAAGCCATGCCTGCAACCGATGGAAAATGTAA
GAGGGAGTTCTTAAGGTTCTTGATGGCATCACCCAAGGCATTCTGGGAAAACCTAGGGCCTGGCCCCAAAACTTC
CCTACTCTGTGGCTAGTCCTGCTGCCAACAAAATCGTAGCGACCTGGCTTTTCACAGCTTTGCTTTTATTTCCAA
GTCAAGGACAAGCCGCTTCATTCACTCCTGGGCATTTACTCTTCTTGTGGGTCTGTGATATTCCTTGCTTTCCAG
GGAGAATGTGCTTGGCAAGGTCTGGAGAACTAATTCAGAATCTTAGGGGAAGGGGAGAGATGGAAATACAAACCT
GCTTACTGGAAAGGTGCAAATATATGGGTTGAGCTGGAGGTAGGAATACAGGTAATTAAGGTTTCTGGTTTAAGG
GAAAACAGATCTATTGCCATTTAAATAAGGTAACTGGGATTTGGTTAAGTTCACAAAGTTAGCAGAAGATTTATT
TACAGGCTTCACCTGTACTGTCAGGGCAAGAGAAAGCCTGGTAAACCAGCTACAGCAGTTTACCAGTGTGATGGC
TGTGACACAGCTCCACTCCACGGGTGGACACAGCAGAGGGCAACTGGGCTGGCCTGGTTCAGTGTGAATCAAACC
GCTTAACCCACACATGGTACATGTGATTTTCTTTTGTGAGCCTTACACCAAGCCAAACTATTGTCAAAGCATCAT
TTCTATAGAAATAAAGCCTTATCTTGACCTGTTCTATTAAAAAAAAAAAAAAAAAAAA

FIGURE 4236

MLPCFQLLRIGGGRGGDLYTFHPPAGAGCTYRLGHRADLCDVALRPQQEPGLISGIHAELHAEPRGDDWRVSLED
HSSQGTLVNNVRLPRGHRLELSDGDLLTFGPEGPPGTSPSEFYFMFQQVRVKPQDFAAITIPRSRGEARVGAGFR
PMLPSQGAPQRPLSTFSPAPKATLILNSIGSLSKLRPQPLTFSPSWGGPKSLPVPAPPGEVGTTPSAPPQRNRRK
SVHRVLAELDDESEPLENPPPVLMEPRKKLRVDKAPLTPTGNRRGRPRKYPVSAPMAPPAVGGGEPCAAPCCCLP
QEETVAWVQCDGCDVWFHVACVGCSIQAAREADFRCPGCRAGIQT

FIGURE 4237

AGATGGCGCGGAGCGGGAGGCGGCCCTGGAGCGACCCCGGAGGACTAAGCGGGAACGGGACCAGCTGTACTACGA
GTGCTACTCGGACGTTTCGGTCCACGAGGAGATGATCGCGGACCGCGTCCGCACCGATGCCTACCGCCTGGGTAT
CCTTCGGAACTGGGCAGCACTGCGAGGCAAGACGGTACTGGACGTGGGCGCGGGCACCGGCATTCTGAGCATCTT
CTGTGCCCAGGCCGGGGCCCGGCGCGTGTACGCGGTAGAGGCCAGCGCCATCTGGCAACAGGCCCGGGAGGTGGT
GCGGTTCAACGGGCTGGAGGACCGGGTGCACGTCCTGCCGGGACCAGTGGAGACTGTAGAGTTGCCGGAACAGGT
GGATGCCATCGTGAGCGAGTGGATGGGCTACGGACTCCTGCACGAGTCCATGCTGAGCTCCGTCCTCCACGCGCG
AACCAAGTGGCTGAAGGAGGGCGGTCTTCTCCTGCCGGCCTCCGCCGAGCTCTTCATAGCCCCCATCAGCGACCA
GATGCTGGAATGGCGCCTGGGCTTCTGGAGCCAGGTGAAGCAGCACTATGGTGTGGACATGAGCTGCCTGGAGGG
CTTCGCCACGCGCTGTCTCATGGGCCACTCGGAGATCGTTGTGCAGGGATTGTCCGGCGAGGACGTGCTGGCCCG
GCCGCAGCGCTTTGCTCAGCTAGAGCTCTCCCGCGCCGGCTTGGAGCAGGAGCTGGAGGCCGGAGTGGGCGGGCG
CTTCCGCTGCAGCTGCTATGGCTCGGCGCCCATGCATGGCTTTGCCATCTGGTTCCAGGTGACCTTCCCTGGAGG
GGAGTCGGAGAAACCCCTGGTGCTGTCCACCTCGCCTTTTCACCCGGCCACTCACTGGAAACAGGCGCTCCTCTA
CCTGAACGAGCCGGTGCAAGTGGAGCAAGACACGGACGTTTCAGGAGAGATCACGCTGCTGCCCTCCCGGGACAA
CCCCCGTCGCCTGCGCGTGCTGCTGCGCTACAAAGTGGGAGACCAGGAGGAGAAGACCAAAGACTTTGCCATGGA
GGACTGAGCGTTGCCTTTTCTCCCAGCTACCTCCCAAAGCAGCCTGACCTGCGTGGGAGAGGCGTAGCGAGGTCG
GAGGGGAAAGGGAGATCCCACGTGCAAGTAGGGGGAATATCTCCCCCTTTTCCCTCATAGCCTCTAGGGAGGGAG
AGTGACTTCATTCTCCATTTGAAGAGATTCTTCTGGTGATGTTTACTTAAAAAGTGATCCCCCTCAACAACGGAT
ACAGCGTGCTTATTATTGGGCATTTAGCCTCAAAAGCATGTAGTACCAAGCACTTGTATTTCCGTATATTTTGTT
TCGCGGGGGAGTGAGGGGGAAGAACACGGATGAAAATGTCAGTTTTTGAAGGGTCCATGCACATCCCTGACACCT
CACACCTTATCTAAGTCTGAAGCTGGGGAGAAAGGGGTTCATTTAGACTTCATACATTTCCAGTACGACTTTAGT
ATCTCTCCAGAGCCATATTTTCTCAGTCCGAATTAATTCCCCCTCCCTAGGTGCCTGTAGGCTATGGTACTTCTT
CCTCATTGTTTTCTAGGTAAACTTCACTACTGGTAATTAAGGGGAAGGATATGAGGAAGCAGTTTAAATAGCCCT
GTTCTCATTACTCTGACCACATACATCATAGGGTGCTAAAGTTGATGAACACATTAATCCGTTAAGTAAAATGGA
CTTTGTAATTGTACAGCATACCTAAGAAACTCAGAAGGTGCATTTAAGAGAGAGACCTGAAAGAAATAGTATGGA
TTTTTAAAAATTCTTGTCTCTACTATTATAACCAAAAAATATTTCTTGTATGTCCCATAAAAATATTTGTGTAAT
TCTTATGAAACAGGCTGGTAGAGGAGGTTTCTGAGCCTAGCCCAAGGGCTTATTCATCACCATGGGTAAATTATT
TAAACTCACTTAATTAAGGAAAATATTTTCCCAGCTAGAAAAGTATACTCATTCTCATTTAAACTCTCTCATTTG
GAGGGATCATGTGAGTTGGCCTACTTACAAGTAGTGAAAGTTCCCTTTTCAGTTTTGTTTTGTTTTGTTTTGTTT
TTCTCTTTCACTCAGCCAAATGTGAAAGTTGTGAATTTAGGAAAATCACTTGTAATGAAGTGTGAATCTTGTTAT
CAAATTTATTTCTCTGATGTTTCCTTCCTTATCCTTGTAGCCAATAAAACATTGACATTCTCACGTTTTATAGAT
GAGGTAAAAAGTCTTGTGTGCTGTGAGTTATAATGCTTTTGCCTTTTTAATATTATTAGTTCTTAAGTGTTACAG
CCCCTTCAGAATATAACTTCAGGACAATTCAAACTATGCTTAATGTATGATTTTCGAGCTTCTGTATGCTAAGAA
AATAGGTGTGAAAAACTGGTGTTCTGAAATAGCCTAACATTTATTGTAATTCTGAATTTTCTGCCCTTTTATTCA
TTGCATATTAAAGTATTAGAGTATAAAAACT

FIGURE 4238

MIADRVRTDAYRLGILRNWAALRGKTVLDVGAGTGILSIFCAQAGARRVYAVEASAIWQQAREVVRFNGLEDRVH
VLPGPVETVELPEQVDAIVSEWMGYGLLHESMLSSVLHARTKWLKEGGLLLPASAELFIAPISDQMLEWRLGFWS
QVKQHYGVDMSCLEGFATRCLMGHSEIVVQGLSGEDVLARPQRFAQLELSRAGLEQELEAGVGGRFRCSCYGSAP
MHGFAIWFQVTFPGGESEKPLVLSTSPFHPATHWKQALLYLNEPVQVEQDTDVSGEITLLPSRDNPRRLRVLLRY
KVGDQEEKTKDFAMED

FIGURE 4239

GTGACGACAACAGGGACAAGGACTCCGAGAAGACCAAGAGGTGGTCCAAGCCCAGGAAGCGCTCCCTGATGGAGA
TGGAGGGGAAGGAGGATGCCCTTTAAGGTGCTGAAGTGCATGTACTGTGGACACTCCTTTGAGTCCTTGCAGGAC
CTCAGCGTCCACATGATCAAAACCAAGCATTACCAGAAAGTGCCTCTGAAGGAGCCAGTGCCAGCCATCACCAAA
CTGGTCCCCTCCACCAAAAAGCGGGCGCTTCAGGACCTGGCGCCCCCCTGCTCCCCTGAGCCAGCAGGAATGGCC
GCAGAGGTGGCCCTGAGTGAGTCAGCCAAGGATCAGAAAGCAGCGAACCCGTACGTCACGCCCAATAACCGCTAT
GGCTACCAGAATGGCGCCAGCTACACCTGGCAGTTTGAGGCCCGCAAGGCGCAGATCCTCAAGTGCATGGAGTGT
GGCAGCTCCCACGACACGCTGCAGCAGCTCACCGCCCACATGATGGTCACCGGGCACTTCCTGAAAGTGACCACC
TCGGCTTCTAAGAAGGGCAAGCAGTTGGTGCTGGACCCTGTGGTGGAAGAGAAGATCCAGTCCATCCCACTACCG
CCCACCACCCACACGCGGCTGCCGGCCTCCAGCATCAAAAAGCAGCCCGACTCTCCCGCGGGGTCCACGACTTCT
GAAGAAAAGAAAGAGCCAGAGAAGGAGAAGCCGCCTGTGGCTGGCGACGCGGAGAAGATCAAGGAGGAGAGTGAG
GACAGCTTGGAGAAATTTGAGCCCAGCACCCTGTACCCGTACCTGCGTGAGGAGGACCTGGACGACAGCCCCAAG
GGAGGGCTGGACATTCTCAAGTCCCTGGAGAATACCGTCTCCACGGCCATTAGCAAAGCTCAGAATGGTGCGCCC
TCATGGGGTGGCTACCCCAGCATCCATGCAGCCTACCAGCTCCCGGGCACCGTGAAGCCACTGCCGGCGGCCGTG
CAGAGCGTGCAGGTGCAGCCGTCCTATGCTGGCGGCGTGAAGTCGCTGTCTTCCGCCGAGCACAACGCCCTCCTG
CACTCCCCAGGGAGCCTCACGCCCCCACCGCACAAGAGCAACGTGTCTGCCATGGAGGAGCTGGTGGAGAAGGTC
ACGGGCAAGGTCAACATCAAGAAGGAGGAGAGACCCCCTGAGAAGGAGAAGAGCTCCCTGGCCAAGGCTGCGTCC
CCCATAGCAAAAGAGAATAAAGATTTCCCGAAAACGGAGGAAGTCAGCGGCAAACCACAGAAGAAGGGCCCTGAG
GCCGAGACTGGGAAGGCCAAAAAGGAGGGACCGCTGGACGTTCACACCCCAAATGGCACAGAGCCTCTCAAAGCA
AAGGTCACCAACGGCTGTAACAACCTGGGGATCATCATGGACCACTCACCGGAGCCTTCCTTCATCAACCCGCTG
AGCGCTTTGCAGTCCATCATGAACACCCACCTGGGCAAGGTGTCCAAGCCCGTGAGTCCCTCGCTGGACCCGCTG
GCGATGCTGTACAAGATCAGCAACAGCATGCTGGACAAGCCGGTGTACCCCGCCACCCCTGTGAAGCAGGCCGAT
GCCATCGACCGCTACTATTATGAAAACAGCGACCAGCCCATTGACTTAACCAAGTCCAAGAACAAGCCGCTGGTG
TCCAGCGTGGCTGATTCGGTGGCATCACCTCTGCGGGAGAGCGCACTCATGGACATCTCCGACATGGTGAAAAAC
CTCACAGGCCGCCTGACGCCCAAGTCCTCCACGCCCTCCACAGTTTCAGAGAAGTCCGATGCTGATGGCAGCAGC
TTTGAGGAGGCGTTGGACGAGCTGTCACCGGTCCACAAGAGGAAGGGCCGGCAGTCCAACTGGAACCCGCAGCAC
CTTCTCATCCTGCAGGCCCAGTTCGCCTCGAGCTTGCGGGAGACCACAGAGGGCAAGTACATCATGTCGGACTTG
GGCCCGCAGGAGAGGGTGCACATCTCGAAGTTTACTGGGCTCTCCATGACCACCATCAGCCACTGGCTGGCCAAT
GTGAAGTACCAGTTGAGGAGGACAGGGGGAACGAAATTCCTAAAGAACCTGGACACAGGGCATCCTGTTTTCTTT
TGCAACGATTGTGCCTCTCAGTTCAGAACTGCTTCTACATACATAAGTCATTTGGAGACACACTTGGGCTTCAGC
CTGAAGGATCTCTCCAAGCTGCCACTCAATCAGATTCAAGAACAGCAGAATGTTTCGAAAGTCCTCACCAACAAA
ACTCTGGGCCCACTGGGGGCCACCGAGGAAGACTTGGGCTCCACATTCCAATGTAAGCTCTGCAACCGGACTTTT
GCGAAGCAAGCACGCAGTCAAACTGCACCTTAGTAAGACCCACGGCAAGTCTCCCGAGGACCACCTGATCTATGT
GACTGAGTTGGAGAAACAGTAGCGTCCAGGTATGCAAGAGACCGCGGAACATTGCACTAAACGTCGTCGAGCTGC
ACTAGGCCTGGCCTGAGCCTCTGAAATCAGTCTTTCCTTTGTTGCTGGCCCGCCTCTCTGGACCTTGGTTTTCTT
ACACATATTTTGTATATTTATATGCTCTCTGTCCGATCTGTGCATGTTATTTTTCTTTTTCCGTGAGTCAAAGTC
TGACCTTTATTCTCAACATCTGTTTTTGGTGTTAAGCTATCTTTTGTAGGAAATAGTGGGGCACACTACTCAGAG
ACATTATTTAGCAGTAAAGAAAGACACAAATAACAATGATAAAAAGACATCCTAAAATGGTGAAGTTGCCATGAC
AATAAAGGTCATAGAACCTGGTAGTGTCAAATTTAACCCTTTGAGGACTGTAATTGCATTTCTGTGCCTTTCACT
TGAAAAAA

FIGURE 4240

MAAEVALSESAKDQKAANPYVTPNNRYGYQNGASYTWQFEARKAQILKCMECGSSHDTLQQLTAHMMVTGHFLKV
TTSASKKGKQLVLDPVVEEKIQSIPLPPTTHTRLPASSIKKQPDSPAGSTTSEEKKEPEKEKPPVAGDAEKIKEE
SEDSLEKFEPSTLYPYLREEDLDDSPKGGLDILKSLENTVSTAISKAQNGAPSWGGYPSIHAAYQLPGTVKPLPA
AVQSVQVQPSYAGGVKSLSSAEHNALLHSPGSLTPPPHKSNVSAMEELVEKVTGKVNIKKEERPPEKEKSSLAKA
ASPIAKENKDFPKTEEVSGKPQKKGPEAETGKAKKEGPLDVHTPNGTEPLKAKVTNGCNNLGIIMDHSPEPSFIN
PLSALQSIMNTHLGKVSKPVSPSLDPLAMLYKISNSMLDKPVYPATPVKQADAIDRYYYENSDQPIDLTKSKNKP
LVSSVADSVASPLRESALMDISDMVKNLTGRLTPKSSTPSTVSEKSDADGSSFEEALDELSPVHKRKGRQSNWNP
QHLLILQAQFASSLRETTEGKYIMSDLGPQERVHISKFTGLSMTTISHWLANVKYQLRRTGGTKFLKNLDTGHPV
FFCNDCASQFRTASTYISHLETHLGFSLKDLSKLPLNQIQEQQNVSKVLTNKTLGPLGATEEDLGSTFQCKLCNR
TFAKQARSQTAP

FIGURE 4241

GGCACGAGGCTCGCGGGGGGCTTGTGGGTCCTCCTCCCCCTCCCACTGACAACTGCCCCAACTGCTCTTCCCGCC
CCGGTCACAGTGAAAATGTAGACGGGGTCGTTGTCCACTATGTTAGGTCTTAATGGTGGGAGGACGCCCGAGTGC
TCGGCCCGTTTCACCCCGAGGAGGAAGGACACTGGGTCATGACGCCATCAGAGGGCGCCAGAGCAGGGACCGGAC
GCGAGTTGGAG**ATG**TTGGACTCGCTGTTGGCCTTGGGCGGCCTGGTGCTGCTTCGGGATTCCGTGGAGTGGGAGG
GGCGCAGTCTCTTGAAGGCGCTTGTCAAGAAATCTGCACTGTGTGGGGAGCAAGTGCATATCCTGGGCTGTGAAG
TGAGCGAGGAAGAGTTTCGTGAAGGTTTTGACTCTGATATCAACAATCGGCTGGTTTACCATGACTTCTTCAGAG
ACCCTCTCAACTGGTCAAAAACTGAGGAGGCCTTTCCTGGGGGGCCGCTGGGAGCCTTGAGAGCCATGTGCAAGA
GGACAGATCCTGTTCCTGTCACCATTGCTCTCGATTCACTCAGCTGGCTGCTACTTCGCCTTCCCTGCACCACAC
TCTGCCAGGTCCTGCATGCTGTGAGCCATCAGGACTCTTGTCCTGGTGACAGCTCCTCAGTGGGGAAAGTGAGTG
TGCTGGGCTTGCTACATGAAGAGCTTCATGGACCAGGCCCTGTGGGAGCTCTCAGCAGCCTTGCTCAGACTGAGG
TGACCCTGGGCGGTACCATGGGCCAGGCCTCGGCCCACATCCTGTGTCGGAGGCCCCGACAGCGCCCAACTGACC
AGACTCAGTGGTTCTCCATCCTTCCGGACTTCAGCCTGGATCTCCAAGAGGGGCCCTCTGTAGAGTCCCAGCCCT
ACTCCGATCCTCATATACCCCCGGTGGATCCCACAACTCATTTGACCTTTAACCTTCACCTGTCCAAGAAAGAGA
GAGAAGCCAGAGATAGCCTGATCCTGCCCTTCCAGTTCAGTTCTGAAAAACAGCAGGCTCTCCTGCGGCCTAGGC
CAGGGCAGGCTACCAGCCACATCTTCTATGAGCCAGATGCTTATTATGACCTGGACCAAGAAGACCCAGATGACG
ACCTGGATATT**TGA**CTGGCCAGATTTGATTAGATTGTAATTGGAGGGGGCGCGGGAAGACTTTGGGCCCAGAACC
ATCTTTCTATTGTTTGTGTTAGCCTTACCCTGTCCCTGCCCCACCTTGGTTCCCCTTGTCTATGGAGCCCCGCCT
TGTGAGCCAGGAAGCAGCGTCTCATCAGGACAGAAGGTAGGATGAAGACATGGGGTAATGTGAGAGAGTAGAACA
CCCCCGTACCTAATAAAAATCTTTATTTTTTTATTAAAAAAAAAAAAAAAAAAA

FIGURE 4242

MLDSLLALGGLVLLRDSVEWEGRSLLKALVKKSALCGEQVHILGCEVSEEEFREGFDSDINNRLVYHDFFRDPLN
WSKTEEAFPGGPLGALRAMCKRTDPVPVTIALDSLSWLLLRLPCTTLCQVLHAVSHQDSCPGDSSSVGKVSVLGL
LHEELHGPGPVGALSSLAQTEVTLGGTMGQASAHILCRRPRQRPTDQTQWFSILPDFSLDLQEGPSVESQPYSDP
HIPPVDPTTHLTFNLHLSKKEREARDSLILPFQFSSEKQQALLRPRPGQATSHIFYEPDAYYDLDQEDPDDDLDI

FIGURE 4243A

ATCACAGCTTGGTGCTGGGGCTCAGCATGGCCAGGTGGCTAACCAGGGCTTGGTGTCAACTACATTTGGGATGAT
GACACTTGGAGGACACAGAGCCACTGTGCAGCAGGAGTCGCCACTGCTAACAGCCAGAGTGTCCCAGAAGCTTTT
GTTGACAATTCCAGTTTCCGAACAAAACATTTCGGCAATGGTGAGGGCTTCGATCCCTTCTCTGATTTGCTGTCA
GCCATGAACGGATGGATGTGATGCCTGCTAGCCAAAAGGCTTCCCTCTGTGTGTTGCAGTCCTGTGGCATTATGC
ATGCCCCCTCCCAGTGACCCCAGGCTTTTTATGGCTGTGAGACACGTTAAAATTTCAGGGGTAAGACGTGACCTT
TTGAGGTGACTATAACTGAAGATTGCTTTACAGAAGCCAAAAAAGGTTTTTGAGTC**ATG**ATGCAAGAATCTGGGA
CTGAGACAAAAAGTAACGGTTCAGCCATCCAGAATGGGTCGGGCGGCAGCAACCACTTACTAGAGTGCGGCGGTC
TTCGGGAGGGGCGGTCCAACGGAGAGACGCCGGCCGTGGACATCGGGGCAGCTGACCTCGCCCACGCCCAGCAGC
AGCAGCAACAGGCACTTCAGGTGGCAAGACAGCTCCTTCTTCAGCAGCAACAGCAGCAGCAAGTTAGTGGATTAA
AATCTCCCAAGAGGAATGACAAACAACCAGCTCTTCAGGTTCCCGTGTCAGTGGCTATGATGACACCTCAAGTTA
TCACTCCCCAGCAAATGCAGCAGATCCTCCAGCAACAAGTGCTGAGCCCTCAGCAGCTCCAGGTTCTCCTCCAGC
AGCAGCAGGCCCTCATGCTTCAACAGCAGCAGCTTCAAGAGTTTTATAAAAAACAACAGGAACAGTTGCAGCTTC
AACTTTTACAACAACAACATGCTGGAAAACAGCCTAAAGAGCAACAGCAGGTGGCTACCCAGCAGTTGGCTTTTC
AGCAGCAGCTTTTACAGATGCAGCAGTTACAGCAGCAGCACCTCCTGTCTTTGCAGCGCCAAGGCCTTCTGACAA
TTCAGCCCGGGCAGCCTGCCCTTCCCCTTCAACCTCTTGCTCAAGGCATGATTCCAACAGAACTGCAGCAGCTCT
GGAAAGAAGTGACAAGTGCTCATACTGCAGAAGAAACCACAGGCAACAATCACAGCAGTTTGGATCTGACCACGA
CATGTGTCTCCTCCTCTGCACCTTCCAAGACCTCCTTAATAATGAACCCACATGCCTCTACCAATGGACAGCTCT
CAGTCCACACTCCCAAAAGGGAAAGTTTGTCCCATGAGGAGCACCCCCATAGCCATCCTCTCTATGGACATGGTG
TATGCAAGTGGCCAGGCTGTGAAGCAGTGTGCGAAGATTTCCAATCATTTCTAAAACATCTCAACAGTGAGCATG
CGCTGGACGATAGAAGTACAGCCCAATGTAGAGTACAAATGCAGGTTGTACAGCAGTTAGAGCTACAGCTTGCAA
AAGACAAAGAACGCCTGCAAGCCATGATGACCCACCTGCATGTGAAGTCTACAGAACCCAAAGCCGCCCCTCAGC
CCTTGAATCTAGTATCAAGTGTCACTCTCTCCAAGTCCGCATCGGAGGCTTCTCCACAGAGCTTACCTCATACTC
CAACGACCCCAACCGCCCCCCTGACTCCCGTCACCCAAGGCCCCTCTGTCATCACAACCACCAGCATGCACACGG
TGGGACCCATCCGCAGGCGGTACTCAGACAAATACAACGTGCCCATTTCGTCAGCAGATATTGCGCAGAACCAAG
AATTTTATAAGAACGCAGAAGTTAGACCACCATTTACATATGCATCTTTAATTAGGCAGGCCATTCTCGAATCTC
CAGAAAAGCAGCTAACACTAAATGAGATCTATAACTGGTTCACACGAATGTTTGCTTACTTCCGACGCAACGCGG
CCACGTGGAAGAATGCAGTGCGTCATAATCTTAGTCTTCACAAGTGTTTTGTGCGAGTAGAAAACGTTAAAGGGG
CAGTATGGACAGTGGATGAAGTAGAATTCCAAAAACGAAGGCCACAAAAGATCAGTGGTAACCCTTCCCTTATTA
AAAACATGCAGAGCAGCCACGCCTACTGCACACCTCTCAATGCAGCTTTACAGGCTTCAATGGCTGAGAATAGTA
TACCTCTATACACTACCGCTTCCATGGGAAATCCCACTCTGGGCAACTTAGCCAGCGCAATACGGGAAGAGCTGA
ACGGGGCAATGGAGCATACCAACAGCAACGAGAGTGACAGCAGTCCAGGCAGATCTCCTATGCAAGCCGTGCATC
CTGTACACGTCAAAGAAGAGCCCCTCGATCCAGAGGAAGCTGAAGGGCCCCTGTCCTTAGTGACAACAGCCAACC
ACAGTCCAGATTTTGACCATGACAGAGATTACGAAGATGAACCAGTAAACGAGGACATGGAG**TGA**CTATCGGGGC
GGGCCAACCCCGAGAATGAAGATTGGAAAAAGGAAAAAAAAAAAACACGTCAAAAGTTAGCAGTGAAATTGTTCT
CCATTTGTTGTACAGTCTGGAGGATTTTCACTACGTTTTGACAACTCTGAAATGTGTTAACTCTTAGTGCCATCA
AGAACCCCATTTGGGAGTATTTTTGATTTTTCTACTTTTTGTTGAAAAAAGGAATTTGTACTCTGTGCATTGGAT
GGACTTGTTTGGTACTTGGGATTTTCCTCTCTTAACCGTCAACATCAGTGTTGTAAATTTGCTAAACTGATTCAC
TTTTAGCAGCAGACTTTGAACTGCAGTCCTGCCAACGTTGGACACTGAGGACGCCCGACAGAGCTTGTGCACCTA
AGCTGCAGACCAAGCCTTTGCCCAGAATTTAAGGATTCCAATGGACGACCTATTTGCACAGTACTGCATGTTGAT
TATCACTGCCTTTACTCCTTTTTTTTTTTTTTTTTTTTTTTGCTTCCAGTTGGGATGGGGAAGGCCTTTGTGTG
TGTATTGGGGGGAGGGGTTAAAAAATAATTATCCCAAACTTTTTAATGTATTGCTTTTTTTTTTTTTTCCTTCT
ACTATACCATTTTAAGTTCTGACCTCAGGCCTCCATTTGGGCCGATGGCCTCTTGGAGGCTTAAAGTTTTCTGTA
CCTTGTGATGAATGTTAATAGGTGTTTTTATTATACAAAGCTGAATGTCATTTCTCGTTTGTAGCTTTCTGTCAC
TCATTCCATCTTCCTTCAGACATCACCACGTTTCTCTAAAGTCAGAAAACATTCCGTTTTGGTCTTTTTCAAAAA
GGTCCCAAATGCTGCACTCTACACATGAAGGCCCTCTCACACAGACGTGACGTCCTGCCAGAAAGAGAATGAATG
ACAGAAAAAAAAAAAGAGAGACAAACTCTAGGAACAATGCCGATTCATTCCACGCAGCAGTATTGGGGGTGGTTCG
GGGGAGGGGTGTTTCGGATTTTCTTTTTTTCTTTTCTTTTATTTTTTTTTTTTTGCAGCAACCATTAATAAATGC
CACCACATTCTACCAGCACAAGGAAACATAGGCAGCACTGAAAAAAAAAAAAAAAGCTCATATTAATTAGACTGAC

FIGURE 4243B

AATATGGCCTTGGAAGGCTCTCCCTTGTGGAACCAAGTTGCCATGGGCCTTGGGTGCTCTGCGATAACGGGTGTG
GGTTGGTTTTGTTTGCAAAATGGCCAAAAAAAAAACCGGCTTCCCCGAGCAGCTGCCCTGAAAGTAGGGGTGGCG
GCGGCGGCGCTGAGTTTATACATTAGTTCAGACCTACTTGGTGGCATTAAACTGTTTGAATGCAAATTCGATTTC
AGATTGAACTTGTTAAGGGAGTTAACGAGGGCTGAGTTCAGCAAATGCTAAAGTGTTAATTTCAAATATGCAAAT
TTGGTACTGCAGTTTGTTATGCAATATTATATCACCAACCCAGTATCACAAAAACTCATAGAAGATATCATGTAG
GCCCTGGGCTTTGGGGGGGTCCCAAACATGGTATGCAGAAATGTGATGGTTACAGGTCAGTACAACCTCAGTCCT
TAGAACCCCTCCACACTTCAGCTCTGCACCCACTTTCCTGTCATTTATTTATATAGGACTGTAGTTTTTTTTAGT
TCGAGAGCCTTTCGAAGCTTAATTTATATTCTTTCTTTGTACCTTTTTTCTAAAATTACCAAAGATATTACACAA
AGGTAAATTATGTTCTCTGTTTTATGCTTTATCTGATGAAGCCAAATATCCTCTTATTGTTGATCAAAGGAGGCA
AAAGAATTTAGAGGCAAATGACAAGCGATAGGCTATTGCAACCTGAGAAAGAGAACTGCTCCTTCATCGTAAATT
TAGAAGACCAAGTAGATAATGGAACCAAAGTTGTACTTTTTTCTAGTAGTTATTTTTCCTTTTTCTTTTTGTGTA
CCTCTACAGAGACCAAAACTCATTCTCTTAAAGAGATTTTATGGGGCTACTGCAGATAAAAATAGGACACAATAT
TAAAGGAGCTACAGAAGGAAGGGAGTCCCATCTCAAAAAAAAAATGAATGTATGCCACTGCAATTAGAGTATCCA
ATAAAGGAGACAGTTTAGAGTCAGGACAGAAAAGCTTCCATAATTGAACTAGATTACATAATAGTATTTCTAGAA
AAAGAGATATTTTTAGATTGTATGCCACTTTTGTTTAAGAACTGTGCTGTGATCACTGTATTAATTTTGGTTTAT
CTTGGCATATATCCTTCAGTTTGTTTTTATTTTTAATTTTTCCTTTTTTTCCGATTAGGCTTTGGTCAGCATTTT
TCATTTAAAGAAAAGTAACACTCCCATCCACTCATAAGCTTGGTACAAAAACTTCTCTGGCAGTTACTTTTGAAG
CTTCACTCTGCTTTCTGTATAAAGGGCAGTCTGTGGTCACGCAAGACTTAAAAAAAAAAAAAAAAAAAAAAAAA
AAAA

FIGURE 4244

MMQESGTETKSNGSAIQNGSGGSNHLLECGGLREGRSNGETPAVDIGAADLAHAQQQQQQALQVARQLLLQQQQQ
QQVSGLKSPKRNDKQPALQVPVSVAMMTPQVITPQQMQQILQQQVLSPQQLQVLLQQQQALMLQQQQLQEFYKKQ
QEQLQLQLLQQQHAGKQPKEQQQVATQQLAFQQQLLQMQQLQQQHLLSLQRQGLLTIQPGQPALPLQPLAQGMIP
TELQQLWKEVTSAHTAEETTGNNHSSLDLTTTCVSSSAPSKTSLIMNPHASTNGQLSVHTPKRESLSHEEHPHSH
PLYGHGVCKWPGCEAVCEDFQSFLKHLNSEHALDDRSTAQCRVQMQVVQQLELQLAKDKERLQAMMTHLHVKSTE
PKAAPQPLNLVSSVTLSKSASEASPQSLPHTPTTPTAPLTPVTQGPSVITTTSMHTVGPIRRRYSDKYNVPISSA
DIAQNQEFYKNAEVRPPFTYASLIRQAILESPEKQLTLNEIYNWFTRMFAYFRRNAATWKNAVRHNLSLHKCFVR
VENVKGAVWTVDEVEFQKRRPQKISGNPSLIKNMQSSHAYCTPLNAALQASMAENSIPLYTTASMGNPTLGNLAS
AIREELNGAMEHTNSNESDSSPGRSPMQAVHPVHVKEEPLDPEEAEGPLSLVTTANHSPDFDHDRDYEDEPVNED
ME

FIGURE 4245

GTCAATCACCTCAGATCTCTCAAGCAGTCCAGCCTACGCAACAGTACTCCACCTCTGCGCCTGTGCGGGGAGGGT
AAGGCGGGGCCAGCAACTTCCTCAGCTGGAGGGAGAGCGCACGGTGGAGCCGCCAGTTGAGAAGGACTCTGATCC
GGCTCAGCTTTCCAATCAGCTGCGGAAGGAGCCACGCTTTCGGGGGTTGCAAGATGGCGGCCACCAGTGGAACTG
ATGAGCCGGTTTCCGGGGAGTTGGTGTCTGTGGCACATGCGCTTTCTCTCCCAGCAGAGTCGTATGGCAACGATC
CTGACATTGAGATGGCTTGGGCCATGAGAGCAATGCAGCATGCTGAAGTCTATTACAAGCTGATTTCATCAGTTG
ACCCACAGTTCCTGAAACTCACCAAAGTAGATGACCAAATTTACTCTGAGTTCCGGAAAAATTTTGAGACCCTTA
GGATAGATGTGTTGGACCCAGAAGAACTCAAGTCAGAATCAGCCAAAGAGAAGTGGAGGCCATTCTGCTTGAAGT
TTAATGGGATTGTTGAAGACTTCAACTATGGTACTTTGCTGCGACTAGATTGTTCTCAGGGCTACACTGAGGAAA
ACACCATCTTTGCCCCCAGGATACAATTCTTTGCCATTGAAATTGCTCGGAACCGGGAAGGCTATAACAAAGCTG
TTTATATCAGTGTTCAGGACAAAGAAGGAGAGAAAGGAGTCAACAATGGAGGAGAAAAAAGAGCTGACAGTGGAG
AAGAAGAGAACACCAAGAATGGAGGAGAGAAAGGAGCTGATAGTGGAGAAGAAAAAGAGGAAGGAATCAACAGAG
AAGACAAAACTGACAAAGGAGGAGAAAAAGGGAAAGAAGCTGACAAAGAAATCAACAAAAGTGGTGAAAAAGCTA
TGTAAGGTATACAGGGAACAGCACTCTAGAAGCTATGACTCAATTGAGACTACAAGTACCACGGTGCTACTTGCA
CAGACCCCTTTGGTTAAATGTAAATTCTTGTACAATTGAAGGATACGCAGAAGGACATCTTTCTAGTCTAACAGT
CAGGAGCTGCTCTGGTCATTCCCTTGTATGAACTGGTCTAAAGACTGTTAGTGGGGTGTTAGTTGATTTTCCTG
GTATACTGTTTCTTGGCTGACACTACTGGTCAAGTAAGAAATTTGTAAATAAATTTCTTTTGGTTCTTATAAAAA
AAAAAAAAAAAAAA

FIGURE 4246

MAATSGTDEPVSGELVSVAHALSLPAESYGNDPDIEMAWAMRAMQHAEVYYKLISSVDPQFLKLTKVDDQIYSEF
RKNFETLRIDVLDPEELKSESAKEKWRPFCLKFNGIVEDFNYGTLLRLDCSQGYTEENTIFAPRIQFFAIEIARN
REGYNKAVYISVQDKEGEKGVNNGGEKRADSGEEENTKNGGEKGADSGEEKEEGINREDKTDKGGEKGKEADKEI
NKSGEKAM

FIGURE 4247

GGCACGAGGCTAAACCTTCACCCCTGAGCACGCTCAGTGAGACTGGTCATGCAAGCATTTACAGTGCCATGCTCC
TCAAGCCGATTTTTTCTTGTAGAAATGTTGCCCTATTTGTCTTCTCCAATGTATGGTATGTTATTTTATTTTATT
ATTTTATTTTATTTTATTTTATTTTATCGAGGGGGGGTACGATACCTGCCATTTAAGAAAATGAATAGAAAATTT
TAAAACCCGAGAAATGGGGGAAAAAAAATCAGTGCACAAGAATTGGGCTGGTTAGGCCCAGCACCACACTGAAGT
GGGCTCAGTGGTTTTTGGAGTGAAGAAGCCTTACTCCCTGCACATTCCCTCATGCTCCCACACAAGTCCAGCAAT
GGAAATGCTTGGGTTCCTCTTGCTTTGTCAGGGGACTCAGGAGTCGACCAAGGGAAACCATTTGGCCCCGTGAGG
AATGGGCATTGTCAGTATCCGTCCTGAACGGGGCCTAGTCAGGAAGCGGTCTAGAAGTGTACGGTCACGGTCGCC
TCATGAAAGTGTGTAGCAGGTGGCTCTCAGGAAAAATACCAAGTCTGGATCATCCATGTGGCAGCTTTGCATAGG
GAGAGGATAGCTCCGAACTGGAACTGAACTGCCTTCTCTGCACGCTTGACCAAAGCAGTGATGAGGGCGGCCAGT
ACCTGCGGTGTGCGTGGTAGGTTTAAAGAAAAGGGAATGTTTTCTGCTGAGTGTTTCCTTTGTCCTTGGGCTGCT
CGAGCTGGACAGTAGGTAACCACTGTTTTCAAGGACCAGCCCAATTTCTCTGGCTTGGTTCGGAGTTCGTTTCAT
CCCTAGCTGTGAGTGCCTTTTGGTCTGGAAAGTTGGCTTGTCTCATAATACCCACAGCTAGGACATTCTCTCTGT
AATTATGAATTGTCCTTGTTTTACATTAAAAGAGAATGTCTTTGATCACTAGAGTCTGTCGGTGTTGGATTATTT
CCACTGTGAGATTCTTAAAACTTTTTTGCTTCATAATAATAAAACAACTCATGTTAGAGACCCTTTCAACATGAA
AGGTTTGTAGTTGAGACATTACATATATTTTATTGTTTATAATAAAAATCATCTATACAAAAGAAGTCCTGGGTG
TTAATATTTTGCACAAGATCTGTTTTCCATGATGTGTTGACATCTACAATTTCACTAACTGTTGACGTTATTTTC
TATTGAGATTCTGGAGCCTAGGGAGCTATGTGTTCTTTTTGTTCATTTCGTTCTTACTTCCCTGAAGCAAGAGAC
TATATGGCCTTCAGTGCAAAGACTTCAGACCAATTCTTTGTATTACACTTGGTTGCCTCTTGGCTATATAACTTC
TGAGTGCAAATCATTGAACACTTTAACGAAGTATTGTAGAGAATAAATCATAATGGATAAAAAAAAAAAAAAAAA
AAAAA

FIGURE 4248

MGIVSIRPERGLVRKRSRSVRSRSPHESV

FIGURE 4249

GCGGAGCCGGGGCTGGAGAGCGGCGACCACTGCGGATCTCGGAAGGAAGAAATGATGTAAATCACTCATCCAAAC
TTTAAGGTCAAAGGTGAGAAGGAAGGTCAGGAAGAACATGGCCTGGCCAAATGTTTTTCAAAGAGGGTCTCTGCT
GTCCCAGTTCAGCCATCATCATGTTGTAGTGTTCCTGCTCACTTTCTTCAGTTATTCGTTGCTCCATGCTTCACG
AAAAACATTTAGCAATGTCAAAGTCAGTATCTCTGAGCAGTGGACCCCAAGTGCTTTTAACACGTCAGTTGAGCT
GCCTGTGGAGATCTGGAGCAGCAACCATTTGTTCCCCAGTGCAGAGAAAGCGACTCTTTTCCTCGGCACACTGGA
TACCATTTTCCTCTTCTCCTATGCTGTGGGCCTATTCATCAGTGGCATCGTTGGGGATCGGTTGAATTTGCGATG
GGTTCTGTCTTTTGGCATGTGCTCTTCTGCATTAGTGGTGTTTGTCTTTGGTGCGCTCACAGAATGGCTGCGTTT
CTACAACAAATGGCTGTACTGCTGCCTGTGGATTGTGAACGGCCTGCTGCAGTCCACTGGTTGGCCCTGTGTGGT
TGCTGTTATGGGCAACTGGTTTGGGAAAGCCGGACGAGGAGTTGTTTTTGGTCTCTGGAGTGCCTGTGCTTCGGT
GGGCAACATTTTGGGAGCGTGCCTAGCTTCTTCTGTTCTTCAGTATGGTTATGAGTATGCCTTTCTGGTGACGGC
GTCTGTGCAGTTTGCTGGTGGGATCGTTATCTTCTTTGGACTCCTGGTGTCACCAGAAGAAATTGGTCTCTCGGG
TATTGAGGCAGAAGAAAACTTTGAAGAAGACTCACACAGGCCATTAATTAATGGTGGTGAAAATGAAGACGAATA
TGAGCCGAATTATTCAATCCAAGATGATAGTTCTGTTGCCCAAGTCAAGGCGATAAGCTTCTACCAGGCATGTTG
CCTTCCTGGAGTCATACCGTACTCACTGGCCTACGCCTGCTTGAAGTTAGTGAATTACTCCTTCTTCTTCTGGCT
CCCCTTTTATCTGAGTAACAACTTCGGCTGGAAGGAGGCGGAAGCCGACAAGCTGTCCATTTGGTACGACGTTGG
AGGGATCATAGTATTTAGTGTCTCTGATCCGGGACAAGCTAGGATGGATGTGGGTTTTCTACTTTTTCATTCTCA
TGACAAGTTGTACAATTGTGTTTATCTCGCCATTAATAGTGAGGGAAATATTCTCTCTCGTGCTAAGGAGACAGG
CTCACATATTGAGGGAGTGACCGGTGCCCGCGAGACAGAAAGAACAATGTCAGCCACATCAGGACCGCTGGGGCT
TCGAGTCTGCCCTAATTTGGGTTTGTCTAGGAGCTCCAGCCTGATCTTGGATTGTCAGGCGTCTCTCAACACTGC
CAGCCACCTGAGATGCTGACCAGCAGTGAAGGCTGCACTAGTTTTCTACACTACAGGAATTACTGTTGATGATTT
TTGCTGTTGTTTCATGAATGTGCCGAGTGACTTCTGACTCTGCCAGCATCTTTGACCTCTGACTCTGCCCGCGTC
TTTGTTTGGCCTATTGAGGTTTAGCGTTTTAACCTTAACTGTTGTTTTGGACTTGAACTTTCTCTAGCCTTGAAA
ATGGAGTGAACAGGAGGCAAAGCCACGCGTGGTTTGTGTTGGTGGTATGTTCCACAAATGGAAGAGATCATTGCA
TTTTGCTTTGGTAATGAGTTTACAGAGAGTGGGTCATCTTTGAAGCATCAAATCCTGATCAAATGCTCAAGCTGG
ACCGAGCTGCAAGCCTGCCTTGGACAAAGAATCCCTCTGTTCACTGTGGTGGGAAAGATCACACTACATGCCTGT
TGATTGGCTCAGTCACTCTGTGTCTGATCTAAACGTCATTCAGCCCTAGAAGCATGAATTGCTTCAAATTATTGT
CAACTTGTTCTCTTCCATTTTCATTCAAATTAACTTTGACTCCTGGAAGTATTGAGTCTTCCTTTCAAGGACCAT
AAGGTACATCAGTTATCTTGAACATTCTGACGTGTAAAGGACCATAAGGTACATCATTTATCTTGAACATTCCGA
CGTGTAACTCACAGCCGAAGCACTCCATCCCAGATTTGTTGTCTGGGAACTTTAGGATCCTCTAGGAAGCTAATC
TGCTTAGTCTATTTTTAGAGGATTGATCTCTGGCACAACCAGCTTCCTGGAGTTACCTCAGCAGAAGACTAGAAT
TAGAGAAAAGGGAAAGACCTTTTCTTCTAGTAAGTGTCAAGTACAGATGCTCTTTGACTTATGATGGGGTTATGT
CCCAGTAAACCCATTGGAAGTCAAATGCATTTAATACCCCTGACTGGACACCACAGCTTAGCCTCGTCCACCCTA
AATGTACTCAGAACACTTAGAATTGCCCACAGTTGGGCAGAATCATCTAACACAAACTCTATTTTATAATCGAGT
GTTGAATATATCATGTAATTTATTGAATATTGTACATTATGTTGAAATTGCAACCATTTCACACCATTGTAAAGT
CCAAAAATCAGAAGCTGAGGACTGTCTGTACATGACATTGAATCACATGAATGGATTACTAGGGCCTGAGGGGTG
TCCGTTCTTTAGAAAAATGTAGAGTATATATATCTTCAGGGCTGTGAATTCCATACTAGTTATCAATATTTTAAG
ATCATTCTGTATATACATATTTTAAATTATGCAAGCAAACTAGGAGGAGAATGTGCAATTTTGAGGGATACCTAA
TTTGCATTCGGTTAGGGGATATTTTTCAACCTCTTGCTTTATACTCTGATATGGGGTGTGTTTATGAACTTGTTA
ATGTTATTTAATCATGCAGATTTCCAATCAGTGTATTGCTCATTTACTGACAAAAAGGGAAAATACGAAACACAG
AAAGGGAAAATAAACTGACTTTTATAATGAAAAAAAAAAAAAAAAAA

FIGURE 4250

MAWPNVFQRGSLLSQFSHHHVVVFLLTFFSYSLLHASRKTFSNVKVSISEQWTPSAFNTSVELPVEIWSSNHLFP
SAEKATLFLGTLDTIFLFSYAVGLFISGIVGDRLNLRWVLSFGMCSSALVVFVFGALTEWLRFYNKWLYCCLWIV
NGLLQSTGWPCVVAVMGNWFGKAGRGVVFGLWSACASVGNILGACLASSVLQYGYEYAFLVTASVQFAGGIVIFF
GLLVSPEEIGLSGIEAEENFEEDSHRPLINGGENEDEYEPNYSIQDDSSVAQVKAISFYQACCLPGVIPYSLAYA
CLKLVNYSFFFWLPFYLSNNFGWKEAEADKLSIWYDVGGIIVFSVSDPGQARMDVGFLLFHSHDKLYNCVYLAIN
SEGNILSRAKETGSHIEGVTGARETERTMSATSGPLGLRVCPNLGLSRSSSLILDCQASLNTASHLRC

FIGURE 4251

GGCACGAGGCCACGAGCTGTTGTGCATCCAGAGGTGGAATTGGGGCCCGGCATTCCCTCCTCGTCCCGGGCTGGC
CCTTGCCCCCACCCTGCAACTCCTGGTTGAGATGGGCTCAGCCAAGAGCGTCCCAGTCACACCAGCGCGGCCTCC
GCCGCACAACAAGCATCTGGCTCGAGTGGCGGACCCCCGTTCACCTAGTGCTGGCATCCTGCGCACTCCCATCCA
GGTGGAGAGCTCTCCACAGCCAGGCCTACCAGCAGGGGAGCAACTGGAGGGTCTTAAACATGCCCAGGACTCAGA
TCCCCGCTCTCCTACTCTTGGTATTGCACGGACACCTATGAAGACCAGCAGTGGAGACCCCCCAAGCCCACTGGT
GAAACAGCTGAGTGAAGTATTTGAAACTGAAGACTCTAAATCAAATCTTCCCCCAGAGCCTGTTCTGCCCCCAGA
GGCACCTTTATCTTCTGAATTGGACTTGCCTCTGGGTACCCAGTTATCTGTTGAGGAACAGATGCCACCTTGGAA
CCAGACTGAGTTCCCCTCCAAACAGGTGTTTTCCAAGGAGGAAGCAAGACAGCCCACAGAAACCCCTGTGGCCAG
CCAGAGCTCCGACAAGCCCTCAAGGGACCCTGAGACTCCCAGATCTTCAGGTTCTATGCGCAATAGATGGAAACC
AAACAGCAGCAAGGTACTAGGGAGATCCCCCCTCACCATCCTGCAGGATGACAACTCCCCTGGCACCCTGACACT
ACGACAGGGTAAGCGGCCTTCACCCCTAAGTGAAAATGTTAGTGAACTAAAGGAAGGAGCCATTCTTGGAACTGG
ACGACTTCTGAAAACTGGAGGACGAGCATGGGAGCAAGGCCAGGACCATGACAAGGAAAATCAGCACTTTCCCTT
GGTGGAGAGCTAGGCCCTGCATGGCCCCAGCAATGCAGTCACCCAGGGCCTGGTGATATCTGTGTCCTCTCACCC
CTTCTTTCCCAGGGATACTGAGGAATGGCTTGTTTTCTTAGACTCCTCCTCAGCTACCAAACTGGGACTCACAGC
TTTATTGGGCTTTCTTTGTGTCTTGTGTGTTTCTTTTATATTAAAGGAAGTAATTTTAAATGTTACTTTAAAAAG
GTAAAAAAAAAAAAAAAAAAAA

FIGURE 4252

MGSAKSVPVTPARPPPHNKHLARVADPRSPSAGILRTPIQVESSPQPGLPAGEQLEGLKHAQDSDPRSPTLGIAR
TPMKTSSGDPPSPLVKQLSEVFETEDSKSNLPPEPVLPPEAPLSSELDLPLGTQLSVEEQMPPWNQTEFPSKQVF
SKEEARQPTETPVASQSSDKPSRDPETPRSSGSMRNRWKPNSSKVLGRSPLTILQDDNSPGTLTLRQGKRPSPLS
ENVSELKEGAILGTGRLLKTGGRAWEQGQDHDKENQHFPLVES

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FIGURE 4253

CGTTCCCCAACCCTGCCCTCTCTCATGACCCCGCTCCGGGATTATGGCCGGGACTGGGCTGCTGGCGCTGCGGAC
GCTGCCAGGGCCCAGCTGGGTGCGAGGCTCGGGCCCTTCCGTGCTGAGCCGCCTGCAGGACGCGGCCGTGGTGCG
GCCTGGCTTCCTGAGCACGGCAGAGGAGGAGACGCTGAGCCGAGAACTGGAGCCCGAGCTGCGCCGCCGCCGCTA
CGAATACGATCACTGGGACGCGGCCATCCACGGCTTCCGAGAGACAGAGAAGTCGCGCTGGTCAGAAGCCAGCCG
GGCCATCCTGCAGCGCGTGCAGGCGGCCGCCTTTGGCCCCGGCCAGACCCTGCTCTCCTCCGTGCACGTGCTGGA
CCTGGAAGCCCGCGGCTACATCAAGCCCCACGTGGACAGCATCAAGTTCTGCGGGGCCACCATCGCCGGCCTGTC
TCTCCTGTCTCCCAGCGTTATGCGGCTGGTGCACACCCAGGAGCCGGGGGAGTGGCTGGAACTCTTGCTGGAGCC
GGGCTCCCTCTACATCCTTAGGGGCTCAGCCCGTTATGACTTCTCCCATGAGATCCTTCGGGATGAAGAGTCCTT
CTTTGGGGAACGCCGGATTCCCCGGGGCCGGCGCATCTCCGTGATCTGCCGCTCCCTCCCTGAGGGCATGGGGCC
AGGGGAGTCTGGACAGCCGCCCCCAGCCTGCTGACCCCCAGCTTTCTACAGACACCAGATTTGTGAATAAAGTTG
GGGAATGGACAGCCTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4254

MAGTGLLALRTLPGPSWVRGSGPSVLSRLQDAAVVRPGFLSTAEEETLSRELEPELRRRRYEYDHWDAAIHGFRE
TEKSRWSEASRAILQRVQAAAFGPGQTLLSSVHVLDLEARGYIKPHVDSIKFCGATIAGLSLLSPSVMRLVHTQE
PGEWLELLLEPGSLYILRGSARYDFSHEILRDEESFFGERRIPRGRRISVICRSLPEGMGPGESGQPPPAC

FIGURE 4255A

AGCAGCGCTCATGGCGAAGAGGCTTAAGGCCACAAAACCGTGGGACAGCAGGAGGAAGAGAAGCCAGGTATCTCC
ACTCCAGCTGCCCTGCCTCAGACTCCTCAGTTTCGCACGTGAGGATCGTCTTGCAGGCACTGACTGGAGATGGAA
TCCTAAAGCATAGGTGAAGCGGAAATCCTCCTTCAGGGAGAGCCCACTGAGGAAGCCAGCGGCTAGCACGAGGCA
GGACAGGATACCTCCCTCTTCGCCCACGGCGGCCTCTCTGTCATAGTAGCCACCGTTCTGCCACTCATGCAGCTT
TCTAAGACACCTCTCGGTTCCCCAGCGCTTTCAGTGGGGCGGCCGGCCACTCCCGAGGGTTGCAAGAGGAGGCCC
GGGGTGCTGAGCCAGCCTCGCTGCCCCCGCGTAGAAAGCCGGCCCGCCGGCGAGAGCCAGCCTAAGGCGCGGACA
ACCAACGAGGTGTCAGGCTCGGCAGGGGATTGCTTCTGTCTGGGGCCCGGCCGAGGTTGCGTTCGTGCCTCGCGC
GCACACGCTCCGCGTTCACTCAGCCAATCCGGTGCTACTCGCGCGCCCAGGAGCGATCCGCGGTCCTACTCAGGC
TGGGCCGGCTCCTTCCCGCTCCCAATACTCAGCACCCGAGCTCTCACTCCTCCCCTCACTCTCCACGAGTTCCAC
GCCTAGGGGTGTAGCTCCGCCCTTGTCCCCGAGTCCGCCCCCGCAACCTCCAGAGCGTGTGCTATCCTTTCCTCT
CAGTCCTGCCATCTAGCTGCCTTGGGTCTCGCGCTCCGCAGAGCGTTCCGACACTCTCCGGCCTCGTTCTGCCGC
CTCCGCGCGCTCTCCCCGTGCGGCCACCGCGCCCCCCAAGCTTGCCTCCTTCTTGCCGGACTTGGGGCCGCGCGC
CCTGACTCCTTCCCCTCCCGCGGACCCGCGCACTCCCGGCGCGGCCTCTCCCCCACGCAGGCCACCGTGCACTCT
GTGGCCTCCCCCTCCTTCCCCGCTCTCCTCGCGCTTCTCTGGCTCCCTAGCTGTCGCGCTCTCCTCGGCGAGCGC
GCTCCCGGCCCGCGCGCTCCGGGCTCCGGTTTCTCCCGGCTCCTGTCAGTGCGGTGACTGCGCTGGGAAACATGG
CGACCGAGGGAATGATCCTTACTAACCACGACCATCAAATCCGTGTCGGAGTCCTTACAGTGAGTGATAGTTGCT
TCAGGAATCTTGCAGAAGACCGCAGTGGGATAAATCTCAAAGATCTCGTACAAGATCCTTCTTTGTTGGGTGGGA
CTATATCAGCATACAAGATAGTACCAGATGAAATAGAAGAAATCAAGGAAACCCTGATAGATTGGTGTGATGAAA
AGGAACTTAATTTGATATTAACAACTGGAGGAACAGGATTTGCACCACGAGATGTCACTCCAGAGGCCACAAAAG
AAGTAATAGAACGGGAAGCACCAGGGATGGCCCTGGCAATGCTGATGGGATCACTTAATGTTACACCTCTGGGCA
TGCTCTCTAGGCCTGTATGTGGAATCAGAGGGAAAACGCTCATAATTAACCTGCCAGGTAGCAAGAAAGGATCTC
AGGAATGCTTTCAATTCATACTGCCAGCTCTACCTCATGCCATTGACCTTTTACGTGATGCCATTGTAAAAGTAA
AGGAGGTGCATGATGAACTTGAAGATTTGCCTTCCCCACCTCCCCCTCTTTCCCCTCCTCCTACTACCAGCCCCC
ATAAACAGACAGAAGACAAAGGAGTTCAATGTGAGGAAGAGGAAGAAGAGAAGAAAGACAGTGGTGTTGCTTCAA
CAGAAGATAGTTCCTCATCACATATAACTGCAGCAGCCATTGCTGCCAAGATTCCAGACTCCATCATTTCTCGTG
GTGTTCAGGTGCTCCCACGAGACACAGCCTCCCTCAGCACTACTCCTTCAGAATCGCCTCGTGCTCAGGCTACAT
CTCGCCTCTCTACAGCTTCCTGCCCAACACCAAAAGTCCAGTCCAGGTGCAGCAGCAAGGAGAACATTCTCAGAG
CCAGTCACAGTGCTGTCGATATCACCAAGGTGGCTAGAAGACATCGCATGTCTCCTTTTCCTCTGACATCTATGG
ACAAAGCCTTTATCACAGTCCTGGAGATGACTCCGGTGCTTGGGACAGAAATCATCAATTACCGAGATGGAATGG
GGCGAGTCCTTGCTCAAGATGTATATGCAAAAGACAATTTACCCCCCTTCCCAGCATCAGTAAAAGATGGCTATG
CTGTCCGAGCTGCTGATGGCCCAGGAGATCGTTTCATCATTGGGGAATCCCAAGCTGGTGAACAGCCAACTCAGA
CAGTAATGCCAGGACAAGTCATGCGGGTTACAACAGGTGCTCCAATACCCTGCGGTGCTGATGCAGTAGTACAAG
TGGAAGATACCGAACTTATCAGGGAATCAGATGATGGCACTGAAGAACTTGAAGTGCGAATTCTGGTGCAAGCTC
GGCCAGGCCAAGATATCAGACCCATCGGCCATGACATTAAAAGAGGGGAATGTGTTTTGGCCAAAGGAACCCACA
TGGGCCCCTCAGAGATTGGTCTTCTGGCAACTGTAGGTGTCACAGAGGTTGAAGTTAATAAGTTTCCAGTGGTTG
CAGTCATGTCAACAGGGAATGAGCTGCTAAATCCTGAAGATGACCTCTTACCAGGGAAGATTCGAGACAGCAATC
GTTCAACTCTTCTAGCAACAATTCAGGAACATGGTTACCCCACGATCAACTTGGGTATTGTAGGAGACAACCCAG
ATGACTTACTCAATGCCTTGAATGAGGGTATCAGTCGTGCTGATGTCATCATCACATCAGGGGGTGTATCCATGG
GGGAAAAGGACTATCTCAAGCAGGTGCTGGACATTGATCTTCATGCTCAGATCCATTTTGGCAGGGTTTTTATGA
AACCAGGCTTGCCAACAACATTTGCAACTTTGGATATTGATGGTGTAAGAAAAATAATCTTTGCACTACCTGGGA
ATCCTGTATCGGCTGTGGTCACCTGCAATCTCTTTGTTGTGCCTGCACTGAGGAAAATGCAGGGCATCTTGGATC
CTCGGCCAACCATCATCAAAGCAAGGTTATCATGTGATGTAAAACTTGATCCTCGTCCAGAATACCATCGGTGTA
TACTAACTTGGCATCACCAAGAACCACTACCTTGGGCACAGAGTACAGGTAATCAAATGAGCAGCCGTCTGATGA
GCATGCGCAGTGCCAATGGATTGTTGATGCTACCTCCAAAGACAGAACAGTACGTGGAGCTCCACAAAGGCGAGG
TGGTGGATGTCATGGTCATTGGACGGCTATGATGGTCACCAGCAGGAGAAAGCTTTGATGCATGTCCACATATCA
TTGACTGTATCCTGTAATATGCAACGGCACAGCTAGTTTTCCCGATTTGGATAAAAGTTGATCTGTATAGTCAAC
ATCTTGAACTATATTTCAAATGAATTTAAATATCTTTTAAAGAAAAAAACACCTAAAAATAAATCTTAACAGAAA
ATTCTGTTCTGATTATATCAAGGCAAATTTTTCCTTTCTTGCAAATTGCTTTGTGTGTTCAATGCTAGGTCTGAT

FIGURE 4255B

AGCGATAGCTTTTAGTAGACAGCGGTAGGTGCCTGCAGAACTTGTGTTTTTCTCATCTTTAAAATACAACTACTT
ATGCTCTTAAATCAAGGCTGTCTGCTTATTTATACTAGCGTAGGCAACACTTGGATTTCCCTTCTTAGTATGCTT
CATAACTGCTTTACAGAGAGCTTTTGCTTGTTCTTTCTCATGTATCTCGTGTTTATGTGCACAGTGCCAAAAGAA
GACTGACTGGGTGGAGGCTCTGCCTTGCCTCAAGAACCATCCCCTGCAGAGCATCCAGGGAGGTTTCTCGCCCCA
ATAGCCTCACGGCACAGTACTCTTGGGCAGTAACTGGACACCTTTTATTTGAAGAAACAAACTGAAGAAAAAATG
CTTCCTTAAGTGCTGACAGCCTTTTTAACCAATACATTTAAAATTGTACAGAACAAAAAAATAAAATCAAAGACT
GATCTTGTACAGATATTAGTGTTACCAGCATTCATGTGGAAATCAAGAGCAAAGACAAAATAATGTTAAACAATT
CTGTACCATAACATTTTCTGTAATGATACTGAAACTTAATGAATAAAAAAATTCCTTGATCATTATTT

FIGURE 4256

MATEGMILTNHDHQIRVGVLTVSDSCFRNLAEDRSGINLKDLVQDPSLLGGTISAYKIVPDEIEEIKETLIDWCD
EKELNLILTTGGTGFAPRDVTPEATKEVIEREAPGMALAMLMGSLNVTPLGMLSRPVCGIRGKTLIINLPGSKKG
SQECFQFILPALPHAIDLLRDAIVKVKEVHDELEDLPSPPPPLSPPPTTSPHKQTEDKGVQCEEEEEEKKDSGVA
STEDSSSSHITAAAIAAKIPDSIISRGVQVLPRDTASLSTTPSESPRAQATSRLSTASCPTPKVQSRCSSKENIL
RASHSAVDITKVARRHRMSPFPLTSMDKAFITVLEMTPVLGTEIINYRDGMGRVLAQDVYAKDNLPPFPASVKDG
YAVRAADGPGDRFIIGESQAGEQPTQTVMPGQVMRVTTGAPIPCGADAVVQVEDTELIRESDDGTEELEVRILVQ
ARPGQDIRPIGHDIKRGECVLAKGTHMGPSEIGLLATVGVTEVEVNKFPVVAVMSTGNELLNPEDDLLPGKIRDS
NRSTLLATIQEHGYPTINLGIVGDNPDDLLNALNEGISRADVIITSGGVSMGEKDYLKQVLDIDLHAQIHFGRVF
MKPGLPTTFATLDIDGVRKIIFALPGNPVSAVVTCNLFVVPALRKMQGILDPRPTIIKARLSCDVKLDPRPEYHR
CILTWHHQEPLPWAQSTGNQMSSRLMSMRSANGLLMLPPKTEQYVELHKGEVVDVMVIGRL

FIGURE 4257

GGCACGAGGCCCAGGTAATTTGAGCAAAGGCCACAGTGAACTCCGGCGTGGCTGAGGAAGGAGGAGGCACCCACA
GGCTGCTGGGAGGAGAGCATAAGGCTCAAAATGGAAAATCATAAATCCAATAATAAGGAAAACATAACAATTGTT
GATATATCCAGAAAAATTAACCAGCTTCCAGAAGCAGAAAGGAATCTACTTGAAAATGGATCGGTTTATGTTGGA
TTAAATGCTGCTCTTTGTGGCCTCATAGCAAACAGTCTTTTTCGACGCATCTTGAATGTGACAAAGGCTCGCATA
GCTGCTGGCTTACCAATGGCAGGGATACCTTTTCTTACAACAGACTTAACTTACAGATGTTTTGTAAGTTTTCCT
TTGAATACAGGTGATTTGGATTGTGAAACCTGTACCATAACACGGAGTGGACTGACTGGTCTTGTTATTGGTGGT
CTATACCCTGTTTTCTTGGCTATACCTGTAAATGGTGGTCTAGCAGCCAGGTATCAATCAGCTCTGTTACCACAC
AAAGGGAACATCTTAAGTTACTGGATTAGAACTTCTAAGCCTGTCTTTAGAAAGATGTTATTTCCTATTTTGCTC
CAGACTATGTTTTCAGCATACCTTGGGTCTGAACAATATAAACTACTTATAAAGGCCCTTCAGTTATCTGAACCT
GGCAAAGAAATTCACTGATTTTAAACAAATATGTAAACAAAAATAAAATGGTAAAAACAGAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4258

MENHKSNNKENITIVDISRKINQLPEAERNLLENGSVYVGLNAALCGLIANSLFRRILNVTKARIAAGLPMAGIP
FLTTDLTYRCFVSFPLNTGDLDCETCTITRSGLTGLVIGGLYPVFLAIPVNGGLAARYQSALLPHKGNILSYWIR
TSKPVFRKMLFPILLQTMFSAYLGSEQYKLLIKALQLSEPGKEIH

FIGURE 4259

GCTTTCCAGTGGACCTGGGCTGTTGTTGCGGTTGTTTTCCTTCTCTCCGTGCAACGCTGGCAAGTCTCAAAGTCG
CCACAGAAACATGCCCCTGATTCAGTGCCTCTGCTTAGCTGTAACATGTTAATCAGAACTACCTGGCATCTTCCT
GAACAAGACTTTCAATAGGGGCCAGTATGCTTCGCTTCATCCAGAAGTTTTCTCAAGCATCTTCAAAGATACTGA
AGTACTCTTTCCCAGTGGGACTAAGAACCAGCAGAACAGATATACTTTCTCTCAAGATGTCTCTCCAGCAAAACT
TTTCCCCATGTCCAAGGCCTTGGCTTTCCTCTCATTTCCAGCGTATATGAGCAAGACACAGTGCTATCATACATC
CCCCTGCAGCTTTAAAAAGCAGCAGAAGCAAGCACTTCTAGCCAGACCCTCAAGCACCATCACTTACCTAACTGA
CAGCCCAAAGCCAGCATTATGTGTAACTCTGGCAGGACTAATCCCCTTCGTTGCTCCACCACTGGTCATGCTGAT
GACAAAAACTTATATTCCCATATTAGCTTTTACTCAGATGGCTTATGGAGCCAGTTTCCTATCTTTCTTGGGTGG
GATCAGATGGGGTTTTGCTCTACCAGAAGGTAGTCCAGCCAAACCAGACTACCTTAATTTAGCTAGCAGTGCAGC
TCCTCTTTTCTTTTCATGGTTTGCCTTCCTTATTTCTGAAAGACTTAGTGAAGCCATAGTCACAGTAATAATGGG
TATGGGAGTAGCATTCCACCTTGAACTTTTTCTCTTACCACATTATCCCAACTGGTTTAAAGCCCTGAGGATAGT
AGTCACTTTATTGGCCACTTTTTCATTTATAATCACTTTAGTAGTTAAAAGTAGTTTTCCAGAAAAAGGACATAA
GAGACCTGGTCAAGTATAAAAAAATATAAAAGTCTGGGAAGTGAGGAGCACCTCTGCCCAGCTGCTGCCCCGTCTG
GGAAGTGAGGAGCGCCTCTGCCTGGCCGCCTGACCATCTGGGAAGTGTGACAAGCGCCTCTGCCCGGCCGCTGTG
CAACCTTCCACGTGTGAAGTGACAGCCTTGTGTGTGATCTTTTCTGTCTTCCCCAAGTTTGCATTTTCGACATTA
AAGTTTACTTTTTAGTTAAAAGTTTAAAAATATATATATAAATACACTGTAGATAACATTTGTATGCCAGCTACA
CCTTTTTCTACTTCTGTTTGGCTTTTTTTCCCCACACCAATGGTAATTTATCTTCACAGATTGTTCTTCATTTCT
AGAAATTGTTACTTCATGGTAATTACTTGAGCAAAAGCTTGAAAATCCCTGACAAGTACTTTTCATCTCATAGTA
TATTAGTTTTCACTCAGTCATTTTATGAATAATATAGTTATCCACTTAAACATTTCAATATTTTAACCATCTTGA
AAATTAAAGATTAAAAATCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4260

MSKALAFLSFPAYMSKTQCYHTSPCSFKKQQKQALLARPSSTITYLTDSPKPALCVTLAGLIPFVAPPLVMLMTK
TYIPILAFTQMAYGASFLSFLGGIRWGFALPEGSPAKPDYLNLASSAAPLFFSWFAFLISERLSEAIVTVIMGMG
VAFHLELFLLPHYPNWFKALRIVVTLLATFSFIITLVVKSSFPEKGHKRPGQV

FIGURE 4261

ATAAAAATAGACTATATATAGTCTTTGAATTCATTTATTTTAAATAAATGAATAAAATAAAATAAAAAAGAATAT
TCAGTCGTTGGCACATAAACTATGTTCTCTTCTGTCATTTCAGGGTAGGAGTCAATGAAGACATCTTAGTCTTAA
CAAGTTACAGATAATCTCTGACTGGCATGTTTTCTGCTTCTAGCTTGGAGCTAAATGCTGCTCATGCTGAAAAGA
ATAATGTCTATTTCTTTGTTTGGGTATTAGCTCTATTTTGATCTATAGCACAGTTTTGTAATTCAGATCATCACC
CCTGCACTTTGTACCACATGGGCGTATTCTTTCTTCCCAGTCATTGCTGCAATTATCTTGTCTGTTCTTTGTGTA
ATATGTTCTGTGTGAGCCTCTGCATTAAACTCGATTTCTTGGGCAATTATGGAAATTCCAGTGTGGCTGCAGTTT
AACTTTGCACTCTCTATGCATATGAGGTTTCCTAAATAAATGAGGAGTAGCATAGTTTAAAATATATATATCTTA
TAACTTTCTACAACAAAGAATTATTGAGTCCAAATGTCATCAGTGCTCATTTTGAGATACCCTGCTATCGATGGT
CGCTACAAACCAGGAAATACTCAAGTTATTATGTGTATACATTGGTTTTAGTTTTATGAAACAATTTACCTTCAT
GATCTCATAGTTAAAATTGTAATAAATTTAGGAATATAAAGGATCAATATGGGAAGCAAAATTTCTAAAGGCAGT
TTCTGTTGTTTTAATTAGTATTTGTGTAGTTCAAACCAGGAAGGATTTGACTATCATTAGATTTTGCTTAACTTT
ATGAAAGCTAAAATATTCTCTGTTATAAAGGGGCAACTCCATCTGGTCCTATAGCATCTTTACTACTGATTTTTT
TTTGTTTAATTTGAAAATGCAAAGAATTGTTAAATGTTCTTAAATGTTCTCACTACAAAAAAAGAAAAAAGATAA
CTACGTGAGGTGATGGATATGTTAATTAGCTGGATTGTGGTAATCATTTTGGAATGTATATGTATATCAAAACAT
GTAGTACACCCTAAATATATATAATTTTTATTTGTCAAATATACCTCAATAAAGAAANNAAAAAATCGAAAAAAA

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FIGURE 4262

KNRLYIVFEFIYFK

4755/8433

FIGURE 4263A

GGCGGCCGCGGCAGGGCGGGCGCCGCGCGGAGGCAGGGCGGGCGTATTCAATGGAAGTGTGTTACCAGCTGCCGG
TACTGCCCCTGGACAGGCCGGTCCCCCAGCACGTCCTCAGCCGCCGAGGAGCCATCAGCTTCAGCTCCAGCTCCG
CTCTCTTCGGCTGCCCCAATCCCCGGCAGCTCTCTCAGAGGCGTGGAGCTATTTCCTATGACAGTTCTGATCAGA
CTGCATTATACATTCGTATGCTAGGAGATGTACGTGTAAGGAGCCGAGCAGGATTTGAATCAGAAAGAAGAGGTT
CTCACCCATATATTGATTTTCGTATTTTCCACTCTCAATCTGAAATTGAAGTGTCTGTCTCTGCAAGGAATATCA
GAAGGCTACTAAGTTTCCAGCGATATCTTAGATCTTCACGCTTTTTTCGTGGTACTGCGGTTTCAAATTCCCTAA
ACATTTTAGATGATGATTATAATGGACAAGCCAAGTGTATGCTGGAAAAAGTTGGAAATTGGAATTTTGATATCT
TTCTATTTGATAGACTAACAAATGGAAATAGTCTAGTAAGCTTAACCTTTCATTTATTTAGTCTTCATGGATTAA
TTGAGTACTTCCATTTAGATATGATGAAACTTCGTAGATTTTTAGTTATGATTCAAGAAGATTACCACAGTCAAA
ATCCTTACCATAACGCAGTCCACGCTGCGGATGTTACTCAGGCCATGCACTGTTACTTAAAGGAACCTAAGCTTG
CCAATTCTGTAACTCCTTGGGATATCTTGCTGAGCTTAATTGCAGCTGCCACTCATGATCTGGATCATCCAGGTG
TTAATCAACCTTTCCTTATTAAAACTAACCATTACTTGGCAACTTTATACAAGAATACCTCAGTACTGGAAAATC
ACCACTGGAGATCTGCAGTGGGCTTATTGAGAGAATCAGGCTTATTCTCACATCTGCCATTAGAAAGCAGGCAAC
AAATGGAGACACAGATAGGTGCTCTGATACTAGCCACAGACATCAGTCGCCAGAATGAGTATCTGTCTTTGTTTA
GGTCCCATTTGGATAGAGGTGATTTATGCCTAGAAGACACCAGACACAGACATTTGGTTTTACAGATGGCTTTGA
AATGTGCTGATATTTGTAACCCATGTCGGACGTGGGAATTAAGCAAGCAGTGGAGTGAAAAAGTAACGGAGGAAT
TCTTCCATCAAGGAGATATAGAAAAAAAATATCATTTGGGTGTGAGTCCACTTTGCGATCGTCACACTGAATCTA
TTGCCAACATCCAGATTGGTTTTATGACTTACCTAGTGGAGCCTTTATTTACAGAATGGGCCAGGTTTTCCAATA
CAAGGCTATCCCAGACAATGCTTGGACACGTGGGGCTGAATAAAGCCAGCTGGAAGGGACTGCAGAGAGAACAGT
CGAGCAGTGAGGACACTGATGCTGCATTTGAGTTGAACTCACAGTTATTACCTCAGGAAAATCGGTTATCATAACC
CCCCAGAACCAGTGGGACAAACTGCCTCCTGGAGGTTTTTAGAAATGTGAAATGGGGTCTTGAGGTGAGAGAACT
TAACTCTTGACTGCCAAGGTTTCCAAGTGAGTGATGCCAGCCAGCATTATTTATTTCCAAGATTTCCTCTGTTGG
ATCATTTGAACCCACTTGTTAATTGCAAGACCCGAACATACAGCAATATGAATTTGGCTTTCATGTGAAACCTTG
AATATAAAGCCCAGCAGGAGAGAATCCGAAAGGAGTAACAAAGGAAGTTTTGATATGTGCCACGACTTTTTCAAA
GCATCTAATCTTCAAAACGTCAAACTTGAATTGTTCAGCAACAATCTCTTGGAATTTAACCAGTCTGATGCAACA
ATGTGTATCTTGTACCTTCCACTAAGTTCTCTCTGAGAAAATGGAAATGTGAAGTGCCCAGCCTCTGCTGCCTCT
GGCAAGACAATGTTTACAAATCAACTCTGAAAATATTGGTTCTAAATTGCCTTGGAGCATGATTGTGAAGGAACC
ACTCAAACAAATTTAAAGATCAAACTTTAGACTGCAGCTCTTTCCCCCTGGTTTGCCTTTTTCTTCTTTGGATGC
CACCAAAGCCTCCCATTTGCTATAGTTTTATTTCATGCACTGGAAACTGAGCATTTATCGTAGAGTACCGCCAAG
CTTTCACTCCAGTGCCGTTTGGCAATGCAATTTTTTTTAGCAATTAGTTTTTAATTTGGGGTGGGAGGGGAAGAA
CACCAATGTCCTAGCTGTATTATGATTCTGCACTCAAGACATTGCATGTTGTTTTCACTACTGTACACTTGACCT
GCACATGCGAGAAAAAGGTGGAATGTTTAAAACACCATAATCAGCTCAGGTATTTGCCAATCTGAAATAAAAGTG
GGATGGGAGAGCGTGTCCTTCAGATCAAGGGTACTAAAGTCCCTTTCGCTGCAGTGAGTGAGAGGTATGTTGTGT
GTGAATGTACGGATGTGTGTTTGGTGATGTTTGTGCATGTGTGACGTGCATGTTATGTTTCTCCATGTGGGCAAA
GATTTGAAAGTAAGCTTTTATTTATTATTTTAGAATGTGACATAATGAGCAGCCACACTCGGGGGAGGGGAAGGT
TGGTAGGTAAGCTGTAACAGATTGCTCCAGTTGCCTTAAACTATGCACATAGCTAAGTGACCAAACTTCTTGTTT
TGATTTGAAAAAAGTGCATTGTTTTCTTGTCCCTCCCTTTGATGAAACGTTACCCTTTGACGGGCCTTTTGATGT
GAACAGATGTTTTCTAGGACAAACTATAAGGACTAATTTTAAACTTCAAACATTCCACTTTTGTAATTTGTTTTA
AATTGTTTTATGTATAGTAAGCACAACTGTAATCTAGTTTTAAGAGAAACCGGTGCTTTCTTTTAGTTCATTTGT
ATTTCCCTTGTTACTGTAAAAGACTGTTTATTAATTGTTTACAGTTTGTTGCAACAGCCATTTTCTTGGGAGAAA
GCTTGAGTGTAAAGCCATTTGTAAAAGGCTTTGCCATACTCATTTTAATATGTGCCTGTTGCTGTTAACTTTTGA
TGAATAAAAACCTATCTTTTCATGAAACTTCTCTCTATACAAATTGAAATACATAATGCTTTCTGGTTCTTCTTC
AAACCAAAACTTGTCAAATTCATAGACAAGATAACAGTAAAACTGATGAAAGTGTTCCATTGTTGGTATACCAGG
AACAAGGTTATAGAGATGAAACTTCAAAGCTTCACTCTTCAGTAAGCTATAAGCCATCTCTGTAAGATTGATTCC
AACTATTGCATAAGAATACCCTAATTTTGGATGATTTGAACGGGAAAGAATCTGATGAGCTTCACTAGTGTAATT
TTCACTGAAATACACAAGATTGATTAACCCAAGTATGCCCATGCCTCTGAAGTCTGTCTTGGGATCATCACCCTG
AAAACCAATTTCAGCCCACTGCTTGGAGATTCTAGCGTTTAACTTCTTCGTGGGCATTAGAAGATTCCAAAGCTT
CATGAGTAGCTCTTCATGCTGTAGGTTATCAGAATCATATGGCCTTTTCCTCACACTTTCTACATCCAAATACAG

FIGURE 4263B

CTGTTTATAACCAGTTATCTGCAGTAAGCACATCTTCATGCATATTTTAAAACTGGCATCCTTCTCAGGGTTAAT
ATTCTTTTCCTTCATAATATCATCTACATATTTGTCCACTTCACTCTGAACAACATGTGTCGCCTTCTGTAAAAC
CTTATTCTTGGAGTATGTCAAGGAATTTTCTATCCTGTGTGTCCTTTGTGCACCTACATAGGTATCAAATATTCG
CTGCAATTCACACTTCCCAGTCATCTGTCGTAATAGCCATTTCATCCAAAATCGAAAAAAGTGCCCATAGAAGAA
CTCCCACAAAGAAATAAACATTTTTTTTTCCTCACAGGAGCGGAAGAACTAGGGGGAGCAGGAGCTGCAATGCGG
CCGC

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FIGURE 4264

MEVCYQLPVLPLDRPVPQHVLSRRGAISFSSSSALFGCPNPRQLSQRRGAISYDSSDQTALYIRMLGDVRVRSRA
GFESERRGSHPYIDFRIFHSQSEIEVSVSARNIRRLLSFQRYLRSSRFFRGTAVSNSLNILDDDYNGQAKCMLEK
VGNWNFDIFLFDRLTNGNSLVSLTFHLFSLHGLIEYFHLDMMKLRRFLVMIQEDYHSQNPYHNAVHAADVTQAMH
CYLKEPKLANSVTPWDILLSLIAAATHDLDHPGVNQPFLIKTNHYLATLYKNTSVLENHHWRSAVGLLRESGLFS
HLPLESRQQMETQIGALILATDISRQNEYLSLFRSHLDRGDLCLEDTRHRHLVLQMALKCADICNPCRTWELSKQ
WSEKVTEEFFHQGDIEKKYHLGVSPLCDRHTESIANIQIGFMTYLVEPLFTEWARFSNTRLSQTMLGHVGLNKAS
WKGLQREQSSSEDTDAAFELNSQLLPQENRLS

FIGURE 4265

TCCCTGTCCTGCGCCCGCGCGCCCCGGGAGCCTACCCAGCACGCGCTCCGCGCCCACTGGTTCCCTCCAGCCGCC
GCCGTCCAGCCGAGTCCCCACTCCGGAGTCGCCGCTGCCGCGGGGACATGGTCCTCTGCGTTCAGGGGTGAGCAC
CCCCTTGTAAGCTCAGGGCTACTGTTGGGTGTCAGGGAACAAAGTTTTAGACTGCTGCGCTCCAAAGCGGGCACA
CACATGTACCTAGAACACACCAGCCACTGTCCCCACCATGATGATGACACAGCCATGGACACACCCCTGCCCAGA
CCTCGTCCTTTGCTGGCTGTGGAGCGGACTGGGCAGCGGCCCCTGTGGGCCCCGTCCCTGGAACTGCCCAAGCCA
GTCATGCAGCCCTTGCCTGCTGGGGCCTTCCTCGAGGAGGTGGCAGAGGGTACCCCAGCCCAGACAGAGAGTGAG
CCAAAGGTGCTGGACCCAGAGGAGGATCTGCTGTGCATAGCCAAGACCTTCTCCTACCTTCGGGAATCTGGCTGG
TATTGGGGTTCCATTACGGCCAGCGAGGCCCGACAACACCTGCAGAAGATGCCAGAAGGCACGTTCTTAGTACGT
GACAGCACGCACCCCAGCTACCTGTTCACGCTGTCAGTGAAAACCACTCGTGGCCCCACCAATGTACGCATTGAG
TATGCCGACTCCAGCTTCCGTCTGGACTCCAACTGCTTGTCCAGGCCACGCATCCTGGCCTTTCCGGATGTGGTC
AGCCTTGTGCAGCACTATGTGGCCTCCTGCACTGCTGATACCCGAAGCGACAGCCCCGATCCTGCTCCCACCCCG
GCCCTGCCTATGCCTAAGGAGGATGCGCCTAGTGACCCAGCACTGCCTGCTCCTCCACCAGCCACTGCTGTACAC
CTAAAACTGGTGCAGCCCTTTGTACGCAGAAGCAGTGCCCGCAGCCTGCAACACCTGTGCCGCCTTGTCATCAAC
CGTCTGGTGGCCGACGTGGACTGCCTGCCACTGCCCCGGCGCATGGCCGACTACCTCCGACAGTACCCCTTCCAG
CTCTGACTGTACGGGGCAATCTGCCCACCCTCACCCAGTCGCACCCTGGAGGGGACATCAGCCCCAGCTGGACTT
GGGCCCCCACTGTCCCTCCTCCAGGCATCCTGGTGCCTGCATACCTCTGGCAGCTGGCCCAGGAAGAGCCAGCAA
GAGCAAGGCATGGGAGAGGGGAGGTGTCACACAACTTGGAGGTAAAATGCCCCCAGGCCGCATGTGGCTTCATTA
TACTGAGCCATGTGTCAGAGGATGGGGAGACAGGCAGGACCTTGTCTCACCTGTGGGCTGGGCCCAAACCTCCAC
TCGCTTGCCTGCCCTGGCCACCTGAACTGTATGGGCACTCTCAGCCCTGGTTTTTCAATCCCCAGGGTCGGTAGG
ACCCCTACTGGCAGCCAGCCTCTGTTTCTGGGAGGATGACATGCAGAGGAACTGAGATCGACAGTGACTAGTGAC
CCCTTGTTGAGGGGTAAGCCAGGCTAGGGGACTGCACAATTATACACTATTTATTTATTTATTCTCCTTGGGGTT
GGTGTCAGGGGCAAACCAACCCCACCTCTATGCCCTGAGCCCTGGTAGTCCAAAGACCCCAACTCTGCCCTGGCT
TCTCTGGTTCTTCCCTGTGGAAAGCCCATCCTGAGACATCTTGCTGGAACCAAGGCAATCCTGGATGTCCTGGTA
CTGACCCACCCCTCTGTGAATGTGTCCACTCTCTTCTGCCCCCAGCCATATTTGGGGAGGATGGACAACTACAAT
AGGTAAGAAAATGCAGCCGGAGCCTCAGTCCCCAGCAGAGCCTGTGTCTCACCCCCTCACAGGACAGAGCTGTAT
CTGCATAAAGCTGGTCTCACTGTGGCGCAGGCCCCGGGGGGAGTGCCTGTGCTGTCAGGAAAAGGGGGTGCTGGT
TTGAGGGCCACCACTGCAGTTCTGCTAGGTCTGCTTCCTGCCCAGGAAGGTGCCTGCACATGAAAGGAGAGAAAT
ACACGTCTGATAAGACTTCATGAAATAATAATTATAGCAAAGAACAGTTTGGTGGTCTTTTCTCTTCCACTGATT
TTTCTGTAATGAACATTATACCTTTATTACCTCTTTATTTTATTACCTCTATAATAAAATGATACCTT

FIGURE 4266

MDTPLPRPRPLLAVERTGQRPLWAPSLELPKPVMQPLPAGAFLEEVAEGTPAQTESEPKVLDPEEDLLCIAKTFS
YLRESGWYWGSITASEARQHLQKMPEGTFLVRDSTHPSYLFTLSVKTTRGPTNVRIEYADSSFRLDSNCLSRPRI
LAFPDVVSLVQHYVASCTADTRSDSPDPAPTPALPMPKEDAPSDPALPAPPPATAVHLKLVQPFVRRSSARSLQH
LCRLVINRLVADVDCLPLPRRMADYLRQYPFQL

FIGURE 4267

GGAATGGGGCGGGACTTCCAGTAGGAGGCGGCAAGTTTGAAAAGTGATGACGGTTGACGTTTGCTGATTTTTGAC
TTTGCTTGTAGCTGCTCCCCGAACTCGCCGTCTTCCTGTCGGCGGCCGGCACTGTAGATTAACAGGAAACTTCCA
AGATGGAAACTTTGTCTTTCCCCAGATATAATGTAGCTGAGATTGTGATTCATATTCGCAATAAGATCTTAACAG
GAGCTGATGGTAAAAACCTCACCAAGAATGATCTTTATCCAAATCCAAAGCCTGAAGTCTTGCACATGATCTACA
TGAGAGCCTTACAAATAGTATATGGAATTCGACTGGAACATTTTTACATGATGCCAGTGAACTCTGAAGTCATGT
ATCCACATTTAATGGAAGGCTTCTTACCATTCAGCAATTTAGTTACTCATCTGGACTCATTTTTGCCTATCTGCC
GGGTGAATGACTTTGAGACTGCTGATATTCTATGTCCAAAAGCAAAACGGACAAGTCGGTTTTTAAGTGGCATTA
TCAACTTTATTCACTTCAGAGAAGCATGCCGTGAAACGTATATGGAATTTCTTTGGCAATATAAATCCTCTGCGG
ACAAAATGCAACAGTTAAACGCCGCACACCAGGAGGCATTAATGAAACTGGAGAGACTTGATTCTGTTCCAGTTG
AAGAGCAAGAAGAGTTCAAGCAGCTTTCAGATGGTATTCAGGAGCTACAACAATCACTAAATCAGGATTTTCATC
AAAAAACGATAGTGCTGCAAGAGGGAAATTCCCAAAAGAAGTCAAATATTTCAGAGAAAACCAAGCGTTTGAATG
AACTAAAATTGTTGGTGGTTTCTTTGAAAGAAATACAAGAGAGTTTGAAAACAAAAATTGTGGATTCTCCAGAGA
AGTTAAAGAATTATAAAGAAAAAATGAAAGATACGGTCCAGAAGCTTAAAAATGCCAGACAAGAAGTGGTGGAGA
AATATGAAATCTATGGAGACTCAGTTGACTGCCTGCCTTCATGTCAGTTGGAAGTGCAGTTATATCAAAAGAAAA
TACAGGACCTTTCAGATAATAGGGAAAAATTAGCCAGTATCTTAAAGGAGAGCCTGAACTTGGAGGACCAAATTG
AGAGTGATGAGTCAGAACTGAAGAAATTGAAGACTGAAGAAAATTCGTTCAAAAGACTGATGATTGTGAAGAAGG
AAAAACTTGCCACAGCACAATTCAAAATAAATAAGAAGCATGAAGATGTTAAGCAATACAAACGCACAGTAATTG
AGGATTGCAATAAAGTTCAAGAAAAAAGAGGTGCTGTCTATGAACGAGTAACCACAATTAATCAAGAAATCCAAA
AAATTAAACTTGGAATTCAACAACTAAAAGATGCTGCTGAAAGGGAGAAACTGAAGTCCCAGGAAATATTTCTAA
ACTTGAAAACTGCTTTGGAGAAATACCACGACGGTATTGAAAAGGCAGCAGAGGACTCCTATGCTAAGATAGATG
AGAAGACAGCTGAACTGAAGAGGAAGATGTTCAAAATGTCAACCTGATTAACAAAATTACATGTCTTTTTGTAAA
TGGCTTGCCATCTTTTAATTTTCTATTTAGAAAGAAAAGTTGAAGCGAATGGAAGTATCAGAAGTACCAAATAAT
GTTGGCTTCATCAGTTTTTATACACTCTCATAAGTAGTTAATAAGATGAATTTAATGTAGGCTTTTATTAATTTA
TAATTAAAATAACTTGTGCAGCTATTCATGTCTCTACTCTGCCCCTTGTTGTAAATAGTTTGAGTAAAACAAAAC
TAGTTACCTTTGAAATATATATATTTTTTTCTGTTAAAAAAAAAAAAAAAAAAAAA

FIGURE 4268

METLSFPRYNVAEIVIHIRNKILTGADGKNLTKNDLYPNPKPEVLHMIYMRALQIVYGIRLEHFYMMPVNSEVMY
PHLMEGFLPFSNLVTHLDSFLPICRVNDFETADILCPKAKRTSRFLSGIINFIHFREACRETYMEFLWQYKSSAD
KMQQLNAAHQEALMKLERLDSVPVEEQEEFKQLSDGIQELQQSLNQDFHQKTIVLQEGNSQKKSNISEKTKRLNE
LKLLVVSLKEIQESLKTKIVDSPEKLKNYKEKMKDTVQKLKNARQEVVEKYEIYGDSVDCLPSCQLEVQLYQKKI
QDLSDNREKLASILKESLNLEDQIESDESELKKLKTEENSFKRLMIVKKEKLATAQFKINKKHEDVKQYKRTVIE
DCNKVQEKRGAVYERVTTINQEIQKIKLGIQQLKDAAEREKLKSQEIFLNLKTALEKYHDGIEKAAEDSYAKIDE
KTAELKRKMFKMST

FIGURE 4269A

CCTGCGGCTCCCCCGGCTTTCGGAGCCCGGGGGCGGCCTGTGGCGCGCGGAGCCCGCGCCGGACTGCGCCTCTTT
GGACCTTGAGGGGAAACATGCGTTTGCSKWGGATCRWTTGAAATTCTGAGKYTRGGATMCSMGSCCGCCYGCCTG
MYTCKKCCGMSSCGCGGGYTTTTTCSTATTTTTCCTTTTGCTTTTTTTCCTTTTCTCCCTCCGGGTCTCCTTTTT
GACTCCCTCCCCCTTTATGCTCGCCCAGCCCTCCCCCTGCTGCTGAGAAGTGGGGGAGGGTCTCGGCCTCCAGGT
TCCCGCCCCACCGGGGCCCGGGCGAGC**ATG**GGGGGCAAGCAGAGCACGGCGGCCCGCTCCCGGGGCCCCTTCCCG
GGGGTCTCCACCGATGACAGCGCCGTGCCGCCGCCGGGAGGGGCGCCCCATTTCGGGCACTACCGGACGGGCGGC
GGGGCCATGGGGCTGCGCAGCCGCTCGGTCAGCTCGGTGGCAGGCATGGGCATGGACCCCAGCACGGCCGGGGGG
GTGCCCTTTGGCCTCTACACCCCCGCCTCCCGGGGCACCGGCGACTCCGAGAGGGCGCCCGGCGGCGGAGGGTCT
GCGTCCGACTCCACCTATGCCCATGGCAATGGTTACCAGGAGACGGGCGGCGGTCACCATAGAGACGGGATGCTG
TACCTGGGCTCCCGAGCCTCGCTGGCGGATGCTCTACCTCTGCACATCGCACCCAGGTGGTTCAGCTCGCATAGT
GGTTTCAAGTGCCCCATTTGCTCCAAGTCTGTGGCTTCTGACGAGATGGAAATGCACTTTATAATGTGTTTGAGC
AAACCTCGCCTCTCCTACAACGATGATGTGCTGACTAAAGACGCGGGTGAGTGTGTGATCTGCCTGGAGGAGCTG
CTGCAGGGGGACACGATAGCCAGGCTGCCCTGCCTGTGCATCTATCACAAAAGCTGCATAGACTCGTGGTTTGAA
GTGAACAGATCTTGTCCGGAACACCCTGCGGAC**TGA**CCTGCGGGCTTGCTTGCTGACTCCTCTCAAAGGGACAGA
GCGCCCCTGCTCCAGGGAGGAGGCTCACCGGACCCTGGGGCAGAGCTGAGCTTGGGACACCAGCGGGAACAGGGC
ACCCCTTCTGCACTGACTTCCAGATCATGGTTCTCCCTTCCTCCCTGAGGACACCAAATTGGATGAGAGCAAGTT
TGAGAGAAGAATGAATCAACTGCTATCCTTCCCCTCACCCCTCAGCCCAGGAGGGAAAGGGCATTTTCTTTTTCA
TCTTTGAAAGGCATTGTGGGTCTGTCTTTAAAGTGTTTACAAAAAAAAAATTATATAAAAAAAAAGTCTAGTGTCG
ACTGGTGTTTTCCCTCGTGATGTTTACAGCTTGCTGTTTGCTGCCCAGCCATAACCCACTCAGTGACAGACGAAC
ACAGCTAAGGCCTCGCTGCCAGCCTTCTGACGGCGGGCGAGCACACGGTCTCTTCCCCTGCCCCAACTGGCCCTC
TCCACCACCAACTTCTCTACTTTGGGTTTGTTTGGTTTTTTCCCTCTATTTTTCTGGCTGGTTTTTTGCTCTTTT
CTCCCCTTGAGACCCTAATATCTTGACTTCATTGCCAAAAAACAACCCATTGAGAACTTTCTTCCTACTGATCCC
ATCTCTTTTCCCTTCTTTCCTCCTGGTTCCGGTCAGTTCAGAGGATTTAACAATCACAAGTGTCCTGCAAAAATG
CCTGAACATTATTCTTAGGCCCTCGTGGATTTTTTTTTTTCAGAAAACTTAAACAAAAAAAGACTTACTAAGAAA
TATGTACAGCTACCCCTGTTTTCAGGCACTATGTTTGAGAACATTTTAGCCATTGATGTTCACACGTGGCATCAG
CCCATGCAAGATAGGTTTCTGTATTTATATATTAAAATACAAAAAAAAAACTTATAAAATGTTTAAAAAAATGTTC
AAAGCTTGGGAGAAAAGCTTTCTTCATTAGTCAAGGTGTTTTGATATGGTATTAAAATGTCTAATAAAAGATGGC
ACTGCGTGATTTTATTTTAATGRAAGTGTTATACAATCAAGAAATGGGGGCAAGGGSCTGCCCCCCACTCCCTCA
CCTACCTCCTTAGCATTCCTTCAGGCTGCTACTCGGGGCTCCAGGTGTGTGAATTGGTCCTCAGATAGTCAGGCC
TGGGTGGAGGGAGTGGCAAGTCARGCGTGCCTCCTACAAGCTTCCTAACCTCTTAAGCATCATGGAACCAGTCAG
CCCTCTGTGGAGTCATTGTGCCGGACCTCTGAAAAGATCTGCAGGGGCCAARATGTTGCARCCACCSGAGGCTGC
ARGGWTYGTGGGTTCTTCCAGGTGTGGGCCCAGCCCCCCTCCTTYCAGCCTTTGCTCCCCATCCCACGTTCCACT
CKCCCTGCCTGGTGKTTGCGTCTCAGTGCTTGAMTCACGGGCATGCTTCATTGAGGCCCAGGAAGAGGCCCTGGT
TTGGGGCTGTGCCAGCTTCAGAGCCCTTGAACCAGAACCAACTGCTCAGGCTCACAAAAGTTGGCAAAATGCGGG
CTGGGCAGGCAGCTCGGGGCAGGGAGCAGCAGTGCAGGCCTGGCCTGTGXTCCCCGTGCCCAGCGGGYCSCGGAG
CAGCATTCCAGAGCCTCCTGCAGAGCCAGCGAAGGAAAGCTCTAGAGGGAGACGACTCCACCGCCTCTCTGCTCT
GACCCTTCTCAGGCCCGCCTGATGTGCTGGACCATCCCCCTGCTGCCACGGCCCCTGGCTCCGCAGTCACCCTCC
ATCAGATGCTTCCAGAAGCACCTACTCTGTGCAAGGGCATTCACAACAGGCCAGTGGGCAAACGTGAGCCAGGGC
CAGCGGAGAAACACTAAAGAAGACTTCGGTGGTTCAGAGCCTGGGTCTCAGCGCGGGACCCGTCTGGGGTTGAAG
ACCTTKGGGGCTKTTGTGAGTYGGTGGCAGGAACGTGGGCTYTAGAMTGTGCATTCAGGCTCTCCTACTTGGCAG
AATGATCTTGGGGAAACGACTTCATCTGAACTTCAGATATTTCACATGTGAAGCGGGGACAAAACCATGCAGCTC
AGAGGTCCCTGTGGGGGCTGGGGGAGCTGCCCTGCAGGTCTTGGCACATGCACAGCAGGCTCCCCATAGCTTTGT
CACCACAAAGGGCACTGTTCTATTCACAGCACCTCCTGCTTCTGCCTGGCAACTGTGTCTCCCTGTGCTATATTT
AATTCCACCAGCAAAGCTGKCGGAGGCAGGGCCCAGCCTGAAAGGAGATCTCCTTGCCTGACCCCTGGGACCTGG
GAAATGGAGGCTTCATGTGCCCGCCTTGSSKYTTAAAGCCTGCTGGCTTTGGCAGTGCCATGGGTGAGCCGAGCA
GCTGTGAGGTGGGTGGGGCAGGGCTGTAGCCACGCCGGGTGCTATTCCAGGCTCTAGGGGCTGGTGCTCATCCCC
ACCCCCAGCGACTTCCGTCCTACCTGGCATGCTGCAGCCCTCTGCCGGCTGTGGTGTCCTGAATTTGGACCCAGG
TTGCCTGCTCTTGTTGTGGGGGTGGGATTGGGGCTGTCTGTGTTTCCCAGGTGGAGCTCATGTTTGTGATCCTCT

FIGURE 4269B

ATCTGGACAGCTCTCCAGAATCCTGTGTTGCCCCTGTTCTGCCTTTCTGGGATGGGAGAGAAGGTGAGGGAGCCG
GCGAGCCAGGTTCTACCCTCTCTGCTAAGGGCCTAGCACGCTTTGATGAGGTTCCTGGACGTGAGACCCTCACAA
AGACCAACCATTCCTCTAATAGCCATTTAACGGTACTGCAGTTCATGGGAAAATGTCCTCATTCTTAGGAGATAG
ATGCTGGATTATATAGGTGAATGCCTTCAAGAAATGTGTAATTTAATTCCAAATAGTTCCCCCCAAAATACACAA
AGCAAATAAGGCCAAAATGTTCATTGTTGAATCTGCAGTGGCTGGTATTTCAGTGAACAGTGTACTTGTTCTTTC
AACTTTTCTGTATGTTTGGAATTTTTCTTAATAAAAGATTGTGGGAAATGGTCATTTGCTGAGCGCCTCCTAGTT
GCCAGGCACTGGAGGGCGCATCAAAGAAGAGTCCTACCCAGGAGGGAGAGCGCAGCTGCTGCAGGATTCTCGCCT
GGAAGAGTGGGTGGCTGGCTGGCTGGCTGGAAGGGGAGGGGCGAGAGGGCTGTCTCGGTGATGAGCACACGCGTG
CTGGGGTGGTTTGGGGAGAGGGCTGAGATTTGTCACCAGTGAGCCCTTGGCACGGTCTCTGCTCCCCACCAGGGC
AGCACGGGACAGAAACGTCACGGAGGAGTAGCCTC

FIGURE 4270

MGGKQSTAARSRGPFPGVSTDDSAVPPPGGAPHFGHYRTGGGAMGLRSRSVSSVAGMGMDPSTAGGVPFGLYTPA
SRGTGDSERAPGGGGSASDSTYAHGNGYQETGGGHHRDGMLYLGSRASLADALPLHIAPRWFSSHSGFKCPICSK
SVASDEMEMHFIMCLSKPRLSYNDDVLTKDAGECVICLEELLQGDTIARLPCLCIYHKSCIDSWFEVNRSCPEHP
AD

FIGURE 4271A

CCTGCGGCTCCCCCGGCTTTCGGAGCCCGGGGGCGGCCTGTGGCGCGCGGAGCCCGCGCCGGACTGCGCCTCTTT
GGACCTTGAGGGGAAACATGCGTTTGCSKWGGATCRWTTGAAATTCTGAGKYTRGGATMCSMGSCCGCCYGCCTG
MYTCKKCCGMSSCGCGGGYTTTTTCSTATTTTTCCTTTTGCTTTTTTTCCTTTTCTCCCTCCGGGTCTCCTTTTT
GACTCCCTCCCCCTTTATGCTCGCCCAGCCCTCCCCCTGCTGCTGAGAAGTGGGGGAGGGTCTCGGCCTCCAGGT
TCCCGCCCCACCGGGGCCCGGGCGAGC**ATG**GGGGGCAAGCAGAGCACGGCGGCCCGCTCCCGGGGCCCCTTCCCG
GGGGTCTCCACCGATGACAGCGCCGTGCCGCCGCCGGGAGGGGCGCCCCATTTCGGGCACTACCGGACGGGCGGC
GGGGCCATGGGGCTGCGCAGCCGCTCGGTCAGCTCGGTGGCAGGCATGGGCATGGACCCCAGCACGGCCGGGGGG
GTGCCCTTTGGCCTCTACACCCCCGCCTCCCGGGGCACCGGCGACTCCGAGAGGGCGCCCGGCGGCGGAGGGTCT
GCGTCCGACTCCACCTATGCCCATGGCAATGGTTACCAGGAGACGGGCGGCGGTCACCATAGAGACGGGATGCTG
TACCTGGGCTCCCGAGCCTCGCTGGCGGATGCTCTACCTCTGCACATCGCACCCAGGTGGTTCAGCTCGCATAGT
GGTTTCAAGTGCCCCATTTGCTCCAAGTCTGTGGCTTCTGACGAGATGGAAATGCACTTTATAATGTGTTTGAGC
AAACCTCGCCTCTCCTACAACGATGATGTGCTGACTAAAGACGCGGGTGAGTGTGTGATCTGCCTGGAGGAGCTG
CTGCAGGGGGACACGATAGCCAGGCTGCCCTGCCTGTGCATCTATCACAAAAGCTGCATAGACTCGTGGTTTGAA
GTGAACAGATCTTGTCCGGAACACCCTGCGGAC**TGA**CCTGCGGGCTTGCTTGCTGACTCCTCTCAAAGGGACAGA
GCGCCCCTGCTCCAGGGAGGAGGCTCACCGGACCCTGGGGCAGAGCTGAGCTTGGGACACCAGCGGGAACAGGGC
ACCCCTTCTGCACTGACTTCCAGATCATGGTTCTCCCTTCCTCCCTGAGGACACCAAATTGGATGAGAGCAAGTT
TGAGAGAAGAATGAATCAACTGCTATCCTTCCCCTCACCCCTCAGCCCAGGAGGGAAAGGGCATTTTCTTTTTCA
TCTTTGAAAGGCATTGTGGGTCTGTCTTTAAAGTGTTTACAAAAAAAAAATTATATAAAAAAAAAGTCTAGTGTCG
ACTGGTGTTTTCCCTCGTGATGTTTACAGCTTGCTGTTTGCTGCCCAGCCATAACCCACTCAGTGACAGACGAAC
ACAGCTAAGGCCTCGCTGCCAGCCTTCTGACGGCGGGCGAGCACACGGTCTCTTCCCCTGCCCCAACTGGCCCTC
TCCACCACCAACTTCTCTACTTTGGGTTTGTTTGGTTTTTTCCCTCTATTTTTCTGGCTGGTTTTTTGCTCTTTT
CTCCCCTTGAGACCCTAATATCTTGACTTCATTGCCAAAAAACAACCCATTGAGAACTTTCTTCCTACTGATCCC
ATCTCTTTTCCCTTCTTTCCTCCTGGTTCCGGTCAGTTCAGAGGATTTAACAATCACAAGTGTCCTGCAAAAATG
CCTGAACATTATTCTTAGGCCCTCGTGGATTTTTTTTTTTCAGAAAACTTAAACAAAAAAAGACTTACTAAGAAA
TATGTACAGCTACCCCTGTTTTCAGGCACTATGTTTGAGAACATTTTAGCCATTGATGTTCACACGTGGCATCAG
CCCATGCAAGATAGGTTTCTGTATTTATATATTAAAATACAAAAAAAAACTTATAAAATGTTTAAAAAAATGTTC
AAAGCTTGGGAGAAAAGCTTTCTTCATTAGTCAAGGTGTTTTGATATGGTATTAAAATGTCTAATAAAAGATGGC
ACTGCGTGATTTTATTTTAATGRAAGTGTTATACAATCAAGAAATGGGGGCAAGGGSCTGCCCCCCACTCCCTCA
CCTACCTCCTTAGCATTCCTTCAGGCTGCTACTCGGGGCTCCAGGTGTGTGAATTGGTCCTCAGATAGTCAGGCC
TGGGTGGAGGGAGTGGCAAGTCARGCGTGCCTCCTACAAGCTTCCTAACCTCTTAAGCATCATGGAACCAGTCAG
CCCTCTGTGGAGTCATTGTGCCGGACCTCTGAAAAGATCTGCAGGGGCCAARATGTTGCARCCACCSGAGGCTGC
ARGGWTYGTGGGTTCTTCCAGGTGTGGGCCCAGCCCCCCTCCTTYCAGCCTTTGCTCCCCATCCCACGTTCCACT
CKCCCTGCCTGGTGKTTGCGTCTCAGTGCTTGAMTCACGGGCATGCTTCATTGAGGCCCAGGAAGAGGCCCTGGT
TTGGGGCTGTGCCAGCTTCAGAGCCCTTGAACCAGAACCAACTGCTCAGGCTCACAAAAGTTGGCAAAATGCGGG
CTGGGCAGGCAGCTCGGGGCAGGGAGCAGCAGTGCAGGCCTGGCCTGTGXTCCCCGTGCCCAGCGGGYCSCGGAG
CAGCATTCCAGAGCCTCCTGCAGAGCCAGCGAAGGAAAGCTCTAGAGGGAGACGACTCCACCGCCTCTCTGCTCT
GACCCTTCTCAGGCCCGCCTGATGTGCTGGACCATCCCCCTGCTGCCACGGCCCCTGGCTCCGCAGTCACCCTCC
ATCAGATGCTTCCAGAAGCACCTACTCTGTGCAAGGGCATTCACAACAGGCCAGTGGGCAAACGTGAGCCAGGGC
CAGCGGAGAAACACTAAAGAAGACTTCGGTGGTTCAGAGCCTGGGTCTCAGCGCGGGACCCGTCTGGGGTTGAAG
ACCTTKGGGGCTKTTGTGAGTYGGTGGCAGGAACGTGGGCTYTAGAMTGTGCATTCAGGCTCTCCTACTTGGCAG
AATGATCTTGGGGAAACGACTTCATCTGAACTTCAGATATTTCACATGTGAAGCGGGGACAAAACCATGCAGCTC
AGAGGTCCCTGTGGGGGCTGGGGGAGCTGCCCTGCAGGTCTTGGCACATGCACAGCAGGCTCCCCATAGCTTTGT
CACCACAAAGGGCACTGTTCTATTCACAGCACCTCCTGCTTCTGCCTGGCAACTGTGTCTCCCTGTGCTATATTT
AATTCCACCAGCAAAGCTGKCGGAGGCAGGGCCCAGCCTGAAAGGAGATCTCCTTGCCTGACCCCTGGGACCTGG
GAAATGGAGGCTTCATGTGCCCGCCTTGSSKYTTAAAGCCTGCTGGCTTTGGCAGTGCCATGGGTGAGCCGAGCA
GCTGTGAGGTGGGTGGGGCAGGGCTGTAGCCACGCCGGGTGCTATTCCAGGCTCTAGGGGCTGGTGCTCATCCCC
ACCCCCAGCGACTTCCGTCCTACCTGGCATGCTGCAGCCCTCTGCCGGCTGTGGTGTCCTGAATTTGGACCCAGG
TTGCCTGCTCTTGTTGTGGGGGTGGGATTGGGGCTGTCTGTGTTTCCCAGGTGGAGCTCATGTTTGTGATCCTCT

FIGURE 4271B

ATCTGGACAGCTCTCCAGAATCCTGTGTTGCCCCTGTTCTGCCTTTCTGGGATGGGAGAGAAGGTGAGGGAGCCG
GCGAGCCAGGTTCTACCCTCTCTGCTAAGGGCCTAGCACGCTTTGATGAGGTTCCTGGACGTGAGACCCTCACAA
AGACCAACCATTCCTCTAATAGCCATTTAACGGTACTGCAGTTCATGGGAAAATGTCCTCATTCTTAGGAGATAG
ATGCTGGATTATATAGGTGAATGCCTTCAAGAAATGTGTAATTTAATTCCAAATAGTTCCCCCCAAAATACACAA
AGCAAATAAGGCCAAAATGTTCATTGTTGAATCTGCAGTGGCTGGTATTTCAGTGAACAGTGTACTTGTTCTTTC
AACTTTTCTGTATGTTTGGAATTTTTCTTAATAAAAGATTGTGGGAAATGGTCATTTGCTGAGCGCCTCCTAGTT
GCCAGGCACTGGAGGGCGCATCAAAGAAGAGTCCTACCCAGGAGGGAGAGCGCAGCTGCTGCAGGATTCTCGCCT
GGAAGAGTGGGTGGCTGGCTGGCTGGCTGGAAGGGGAGGGGCGAGAGGGCTGTCTCGGTGATGAGCACACGCGTG
CTGGGGTGGTTTGGGGAGAGGGCTGAGATTTGTCACCAGTGAGCCCTTGGCACGGTCTCTGCTCCCCACCAGGGC
AGCACGGGACAGAAACGTCACGGAGGAGTAGCCTC

FIGURE 4272

MGGKQSTAARSRGPFPGVSTDDSAVPPPGGAPHFGHYRTGGGAMGLRSRSVSSVAGMGMDPSTAGGVPFGLYTPA
SRGTGDSERAPGGGGSASDSTYAHGNGYQETGGGHHRDGMLYLGSRASLADALPLHIAPRWFSSHSGFKCPICSK
SVASDEMEMHFIMCLSKPRLSYNDDVLTKDAGECVICLEELLQGDTIARLPCLCIYHKSCIDSWFEVNRSCPEHP
AD

FIGURE 4273

TCGCTAGAACTGCGTCTCGCGACCCAGGGCCGGTTTCCGGAGGACAGCCAACAAGCGATGCTGCCGCCGCCGTTT
CCTGATTGGTTGTGGGTGGCTACCTCTTCGTTCTGATTGGCCGCTAGTGAGCAAGATGCTGAGCAAGGGTCTGAA
GCGGAAACGGGAGGAGGAGGAGGAGAAGGAACCTCTGGCAGTCGACTCCTGGTGGCTAGATCCTGGCCACGCAGC
GGTGGCACAGGCACCCCCGGCCGTGGCCTCTAGCTCCCTCTTTGACCTCTCAGTGCTCAAGCTCCACCACAGCCT
GCAGCAGAGTGAGCCGGACCTGCGGCACCTGGTGCTGGTCGTGAACACTCTGCGGCGCATCCAGGCGTCCATGGC
ACCCGCGGCTGCCCTGCCACCTGTGCCTAGCCCACCTGCAGCCCCCAGTGTGGCTGACAACTTACTGGCAAGCTC
GGACGCTGCCCTTTCAGCCTCCATGGCCAGCCTCCTGGAGGACCTCAGCCACATTGAGGGCCTGAGTCAGGCTCC
CCAACCCTTGGCAGACGAGGGGCCACCAGGCCGTAGCATCGGGGGAGCAGCGCCCAGCCTGGGTGCCTTGGACCT
GCTGGGCCCAGCCACTGGCTGTCTACTGGACGATGGGCTTGAGGGCCTGTTTGAGGATATTGACACCTCTATGTA
TGACAATGAACTTTGGGCACCAGCCTCTGAGGGCCTCAAACCAGGCCCTGAGGATGGGCCGGGCAAGGAGGAAGC
TCCGGAGCTGGACGAGGCCGAATTGGACTACCTCATGGATGTGCTGGTGGGCACACAGGCACTGGAGCGACCGCC
GGGGCCAGGGCGCTGAGCCCTCGTGCTGGAATGGTTGTCTGGTATCTGAACTGAGCCTGCTGGCTGGACCAACTG
TCCTCGAAAAGACACAGCTGGCTTCCCTAGTACAGAGAACAGGGCTTGGGCCACTTTGGAGAGACAGAATCTAGT
CCTGGGCAACTTCACATCCGTCCTCCTGTCTCAGGGCTGGCAGGGGGAGCCTGGAATTACCCCCTAGTGATGGAA
TGACAGGGTCTGGTGGGGACTGAATTCCCTGGCCCTGGGGTCATAGCTTGGGCTGTTCCTTCTCTGATACGGGAA
GAGACCCCAATCAGATTTTTCAAATTAAAGCCAGTCCTGGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAA

FIGURE 4274

MLSKGLKRKREEEEEKEPLAVDSWWLDPGHAAVAQAPPAVASSSLFDLSVLKLHHSLQQSEPDLRHLVLVVNTLR
RIQASMAPAAALPPVPSPPAAPSVADNLLASSDAALSASMASLLEDLSHIEGLSQAPQPLADEGPPGRSIGGAAP
SLGALDLLGPATGCLLDDGLEGLFEDIDTSMYDNELWAPASEGLKPGPEDGPGKEEAPELDEAELDYLMDVLVGT
QALERPPGPGR

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FIGURE 4275

ACGAGGATCCGGGTTCCAACCCAGGGGGAAAA**ATG**CGGCCTTTGACTGAAGAGGAGACCCGTGTCATGTTTGAGA
AGATAGCGAAATACATTGGGGAGAATCTTCAACTGCTGGTGGACCGGCCCGATGGCACCTACTGTTTCCGTCTGC
ACAACGACCGGGTGTACTATGTGAGTGAGAAGATTATGAAGCTGGCCGCCAATATTTCCGGGGACAAGCTGGTGT
CGCTGGGGACCTGCTTTGGAAAATTCACTAAAACCCACAAGTTTCGGTTGCACGTCACAGCTCTGGATTACCTTG
CACCTTATGCCAAGGGTTTTGGGGTGGCAGCCAAATCTACACAAGACTGCAGAAAAGTAGACCCCATGGCGATTG
TGGTATTTCATCAAGCAGACATTGGGGAATATGTGCGGCATGAAGAGACGTTGACT**TAA**AACGAAGCCATTCCAA
GGACAGACGGCTGTATGGAAAGGCCGAGCTTTGTTTCCTGTGTTTGTGTGGACTCCACCATCATGTTGAATTTTG
TCAACACTCTGGCCTCTTCAGGGACTTCTTATTTACTGTACTCTCTATCACTGACAAATGCAGGCTGGATTCTTA
TTATATACAGAGATGGCTCAAAAATGGGGTTTCAGATCTTTGTGACGAAATAGAATACTGTTTCATATTTGAATC
AGAGGGGCTTCTTGTTCTGAGAAATAGGTTCAAAATCATTGGAACCAGGAACAAGAATAGCTTATTGTTATCTGT
GATAACACTGTTTTCTAAACACAAGGATTTTCTTTTTTATTAATATGCAACATAGACATTGCCATAACAGAATAA
TAAACCACATGTGGGGTTTTAAAAATGAAATTTGGCTAATAGGAGCAATTCAGCTATTTTTCTATACAGTAATTG
GTGTGTGGTATAGAAGAAAAACGGGTTCAAACCCCACTTCTGCCACCTACCAGCTATATGGCCTTGAATGAGTCA
TTCAGCTTTAATAAGGTTCATTTTCTTCTGTTTAAAAAGACACAAAACTTGAAAATCAGCTTTGGCCATCTACCT
GAGAATTAGAAAGTCTGATTTTTGGAATTAGAAATCATGATTGTAGGCTGGGCACAGTGGCTCGCGCCTGTAATC
CCAGCACTTTGGGAGGCCAAGGCGGACGGATCACTTGAGGTTAGGAGTTTGAGACCAGCCTGGCCAACATGGTGA
AACCCCATCTCTACTAAAAAAAAAAAAAAATTAGGTGTGGTGACACATGGCTGTGGTCCTAGTTACTTGGGAGGC
TGAGGCAGGAGAATGGCTTGAACTGGGGAAGCAGAGCTTGCAGTGAGCCAAGATGGTGCCATTGCACTCCAGCCT
GGGCGTGACAGAGTGAGACTCCATCTGATTGTAAAGCATCTAGTACAGTGTCCAGTGCCTTGGAAATGATAGGTA
TGGAATAAATGGTAATTATTTTTATATTATATATATTATGTATTCCTGTTATTAAGTGTAGAGTTTTATGAGTAT
AATTTGATTTTATTACCTTCTTTTTTACAAGCTGTTTTCTCAGTATTTTTCTTGGATGGGATGACGCTAGGCTGG
AAAGTTTTTTTCATCACTATGATTTTATAAAACAATTTTTTCTATGAACCTTTACTTACTTGACTGGATTGGACT
AAAAGCACTGATCAGAGGCCACGACATAAAAATTCAGTCCCTTTGTCCTTCCCCGTGCCTCCCAAAGTTACTTTA
AGATCCTTAGAATATTTCTTTAAATATTTTATAGACAAAAAATTTAAAGACTATCTGTATTGCAAAATTAAACTA
TTTCTTTAATGAATATATTGCTTATTTTAAGTTCCAAAGGTGAAGTCTTTAAGAATAAAACATTACCAACTCCTG
CTTTTATATGTAAAAAACAAAAAAAAAAAAAAAAAAAA

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FIGURE 4276

MRPLTEEETRVMFEKIAKYIGENLQLLVDRPDGTYCFRLHNDRVYYVSEKIMKLAANISGDKLVSLGTCFGKFTK
THKFRLHVTALDYLAPYAKGFGVAAKSTQDCRKVDPMAIVVFHQADIGEYVRHEETLT

FIGURE 4277

AACAGATCTTCATGAATGTCGCTATCTTTGAGGATGAAGTTTTTGCTGGAGTTACCACACACCAGGAACTCTTTC
CACACAGCCTGCTGAGTGTGATTGCCAACTTCATCCCTTTCTCTGATCTCAACCAGAGTCCACGGAACATGTACC
AATGCCAGATGGGTAAGCAAACTATGGGCTTTCCACTTCTCACTTATCAAGACCGATCGGATAACAAACTGTATC
GTCTTCAGACTCCTCAGAGTCCCTTGGTGAGACCCTCCATGTATGATTATTATGACATGGATAACTATCCAATTG
GGACCAATGCCATCGTTGCTGTGATTTCTTACACTGGCTATGATATGGAAGATGCCATGATTGTGAATAAGGCCT
CTTGGGAACGAGGCTTTGCCCATGGAAGTGTCTACAAGTCTGAGTTCATAGACCTCTCTGAAAAAATTAAACAAG
GAGATAGTAGCCTGGTGTTTGGCATCAAACCTGGTGACCCACGCGTTCTGCAGAAGTTAGATGACGATGGATTGC
CGTTTATAGGAGCAAAACTGCAGTACGGAGATCCGTATTACAGCTACCTCAACCTCAACACCGGGGAAAGTTTTG
TGATGTACTATAAGAGTAAAGAAAATTGTGTTGTGGATAACATCAAAGTGTGCAGTAATGACACTGGGAGTGGAA
AATTCAAGTGTGTTTGCATCACTATGAGAGTGCCTCGGAACCCAACTATCGGAGATAAATTTGCCAGTCGCCATG
GGCAGAAGGGCATTTTAAGCAGATTGTGGCCGGCTGAGGACATGCCTTTTACTGAGAGTGGGATGGTCCCAGACA
TTCTGTTCAATCCCCATGGTTTTCCATCCCGCATGACCATTGGGATGTTAATTGAGAGTATGGCCGGGAAGTCTG
CAGCTTTGCATGGTCTCTGCCATGATGCTACACCCTTCATCTTCTCAGAGGAGAACTCGGCCTTAGAATACTTTG
GTGAGATGTTAAAGGCTGCTGGCTACAATTTCTATGGCACCGAGAGGTTATATAGTGGCATCAGTGGGCTAGAAC
TGGAAGCAGACATCTTCATAGGAGTGGTTTATTATCAGCGCTTACGCCATATGGTCTCAGACAAATTTCAAGTAA
GGACAACTGGAGCCCGAGACAGAGTCACCAACCAGCCTATTGGGGGAAGAAATGTCCAGGGTGGAATCCGTTTTG
GGGAGATGGAACGGGATGCGCTTTTAGCTCATGGTACATCTTTTCTCCTTCATGACCGCCTCTTCAACTGCTCAG
ATCGGTCGGTAGCCCATGTGTGTGAAGTGTGGCAGTTTACTCTCTCCACTGTTGGAGAAGCCACCCCCTTCTTGG
TCTGCCATGCGCAACAGAAAATACAACTGTACTCTGTGTAGTCGCAGTGACACTATCGATACTGTTTCTGTGCCT
TATGTTTTTCGGTATTTTGTAGCTGAACTGGCAGCTATGAACATCAAAGTGAAACTGGATGTTGTTTAACTTGAT
GTTGACCTTTTGGATTAAGGGGACTATCAGATTAAAGCAAAATGTAATTTTAATTCAATGAAGATATCATTACCA
GGTTACTCTTGAGATTTTTCAACGGTGTTAGAACTCTCAACCAAGACCTGAAAACCAAGTATGCAAGGTTTCTGA
ATCTCTCTGGTAGATTAACTATTGACAATGATTTTCTGTTATCTTTGTTCAAAAAGTTCATGTCTTCTCAAAATA
TGAAATATTGATAAATGGAAGAGCATACGGTGACAAGTCTCCTTTCCAACCCCAGGTTCCCTACACCCTGCTCTC
AGCAGGCAGTGAGTGTCACACACCTGTTAATCCATCTTGAGCAGGACAGTACTATACAAATAGAATGCAAGCTGT
AATGTAATTTTATATTTTCTTATAGCCACGTTGAAGTAAAAACAAACAGGTACAGTGTTTTTTACCAGCTTTATA
GAAGTACAGTTGTTACATATTTAATGAATACAATTTGATGGGTCTGACTATATGCACACACCTTTGATACCATCA
CCACAATCAGGGTAATAAACATACCTGTCATCTCCACAAGTTTCCTCCTGCCCCTTTGTTTTTTGCTTTTTGGTT
GCTGTTGAGTTTTTGTTTTGTCTTCTGTGGTAAGAACACTTAACTCAAGACCTACCCTCTTAACAAATCTTTAAG
TGCACGATATAGTATTGTTAATTCCAGGCACCATGTTGTACAACAGATCTTTAGACCTTACTTGTCTTGCATAAC
TGAAGCTTTATACCTGTTGAACAACTCTCCATTTCCCTGGCCCCTAGCAACCACCCTTCTACCCTGTTTCTATGA
GTTTGACTATTACAGATATCTCATATAGTGGGATCATGCAATATTTGTCCTGTGACTGGCTTATTTCACTTAGCA
TAGTGAAATAAGATTCATCCATTTTGGAAGCCAGGCATGGTGCTGTGCATCTATAGTCCCTGCTATTTGAGAGGC
TGAGGTGGGAGGATCATTTGAGTGCAGGAGTTCAAGGACAGCCTGGGTAATATAGGAAGACCCTGTCTTGAAGAC
CCTGACCTCAAGTGATCCACCCACCTCGGCCTCCGAAAGTGCTAGGATTACAGGTGTGAGCCACTGTGCCTGGCC
TCCGGTGAGTATTTTATATTTAGTCTACACTTCCATACTTGGCTTTTTTCTGCTTTTATGTTGATCTGCTTTCAT
AGCAGTGTGTAGAGTGCCACTTATGTTTTCTTTCTTGTGTACAGTATTTTATTGTATGGATTTACCATCCCCTGT
GTATTTAAGTTGTTCCATTCTTTGGCCATTATAACTTTTTTCTGCAAATATTCTGGTGACTTATCTTTGGCCATT
ATAAACTGTTGATAATAAAAAAAAAAAAAAAA

FIGURE 4278

MNVAIFEDEVFAGVTTHQELFPHSLLSVIANFIPFSDLNQSPRNMYQCQMGKQTMGFPLLTYQDRSDNKLYRLQT
PQSPLVRPSMYDYYDMDNYPIGTNAIVAVISYTGYDMEDAMIVNKASWERGFAHGSVYKSEFIDLSEKIKQGDSS
LVFGIKPGDPRVLQKLDDDGLPFIGAKLQYGDPYYSYLNLNTGESFVMYYKSKENCVVDNIKVCSNDTGSGKFKC
VCITMRVPRNPTIGDKFASRHGQKGILSRLWPAEDMPFTESGMVPDILFNPHGFPSRMTIGMLIESMAGKSAALH
GLCHDATPFIFSEENSALEYFGEMLKAAGYNFYGTERLYSGISGLELEADIFIGVVYYQRLRHMVSDKFQVRTTG
ARDRVTNQPIGGRNVQGGIRFGEMERDALLAHGTSFLLHDRLFNCSDRSVAHVCEVWQFTLSTVGEATPFLVCHA
QQKIQLYSV

FIGURE 4279A

CTCTGGCTTTCTGTTTTCTACTAACAGGATTTGGTCACTGGTTCTTCATCTTTTGTCTGTTGCACGCATCCCGCC
CTCCCCACTTGCTTCCCCACTCCTTGGATCCAGCCCTGTGGGCATTCACGTCAGTTCTCTGACCCCGCCGTGAGC
CCCGCTCCGGGTCCCCGGGCGGGCTTGGCACGGAGGCGGTAACTATGGAGAATATGGCGGAGGAGGAGCTGCTGC
CCCTGGAGAAGGAGGAGGTGGAGGTGGCCCAGGTCCAGGTCCCGACCCCGGCCCGGGACTCGGCTGGGGTCCCAG
CTCCGGCCCCGGATTCGGCTCTGGACTCGGCTCCGACTCCGGCCTCGGCTCCAGCCCCAGCCCCTGCCCTGGCCC
AGGCTCCGGCCCTGTCCCCGTCCCTAGCCTCTGCCCCTGAGGAGGCTAAAAGCAAGAGACACATCTCAATTCAAA
GGCAGCTTGCTGATCTAGAGAATTTAGCTTTTGTAACTGATGGAAATTTTGACTCTGCCAGCTCATTGAACTCAG
ATAATCTTGATGCAGGCAACAGACAGGCTTGTCCATTGTGCCCTAAGGAAAAATTCAGAGCTTGTAATAGCCATA
AGCTTCGTCGTCACCTCCAGAATTTACACTGGAAAGTCTCAGTTGAATTTGAAGGTTACAGGATGTGCATCTGTC
ACTTACCTTGTCGACCAGTGAAACCAAACATTATTGGAGAACAGATAACCAGTAAAATGGGAGCCCATTATCATT
GTATCATTTGTTCAGCAACAATCACCAGAAGAACTGATATGCTAGGACATGTTAGGCGCCACATGAATAAAGGAG
AGACTAAATCTAGTTATATTGCAGCTTCCACTGCTAAACCACCTAAGGAAATTTTGAAAGAGGCAGACACGGATG
TACAAGTTTGTCCCAACTATTCTATACCTCAGAAAACAGATTCCTATTTTAACCCCAAAATGAAACTAAATCGGC
AGCTAATATTCTGTACATTGGCTGCTTTGGCTGAGGAACGAAAACCTTTGGAATGTCTAGATGCTTTTGGAGCCA
CTGGGATAATGGGATTACAGTGGGCAAAACATCTTGGAAATGCAGTCAAAGTTACAATCAATGACTTGAATGAAA
ATTCTGTGACACTGATTCAGGAAAACTGCCATTTAAACAAATTGAAAGTGGTGGTGGACAGTAAGGAAAAGGAAA
AGAGTGATGATATTCTTGAAGAAGGAGAGAAAAATCTTGGTAATATTAAGGTGACCAAAATGGATGCCAATGTAC
TGATGCATTTGAGATCTTTTGATTTCATACATCTAGACCCTTTTGGAACATCAGTGAATTATCTAGATTCTGCAT
TCAGAAATATAAGAAACCTTGGCATAGTGTCAGTGACTTCTACAGATATCAGTTCTTTATATGCCAAGGCACAGC
ATGTTGCCCGGCGTCACTACGGATGTAACATTGTCCGAACTGAATATTACAAGGAACTAGCAGCCAGAATTGTTG
TAGCTGCAGTGGCAAGAGCTGCAGCCCGATGCAACAAAGGCATAGAAGTACTGTTTGCAGTGGCTCTGGAACATT
TTGTGTTGGTAGTTGTGAGAGTTTTGAGGGGACCTACTTCAGCAGATGAAACAGCCAAGAAGATTCAATACCTGA
TCCATTGTCAGTGGTGTGAAGAGAGAATTTTTCAGAAGGATGGTAATATGGTAGAAGAAAACCCATATAGACAGC
TGCCTTGTAACTGTCATGGAAGCATGCCTGGAAAGACAGCAATAGAACTTGGACCTCTGTGGTCAAGTTCCCTTT
TCAATACTGGATTCCTCAAAAGAATGCTATTTGAATCTCTTCACCATGGTTTGGATGACATTCAGACCCTAATAA
AGACATTAATCTTTGAATCAGAGTGTACGCCTCAAAGTCAGTTTTCAATTCATGCATCTTCAAATGTCAACAAGC
AAGAAGAAAATGGTGTATTTATTAAAACTACAGATGACACCACAACAGATAATTACATTGCACAAGGAAAGAGAA
AAAGTAATGAAATGATCACAAATTTAGGCAAGAAGCAAAAGACTGATGTCAGTACTGAACATCCTCCCTTTTATT
ACAACATTCACAGACACAGCATTAAAGGAATGAATATGCCAAAGTTAAAAAAGTTTTTGTGCTATTTATCTCAAG
CAGGCTTTCGAGTAAGCCGAACTCATTTTGACCCAATGGGTGTACGCACAGATGCACCTCTGATGCAGTTTAAAT
CTATCCTTTTAAAGTACAGCACCCCCACCTACACTGGAGGACAGTCAGAAAGCCATGTCCAGTCAGCATCTGAAG
ATACAGTAACTGAAAGAGTTGAAATGTCAGTGAATGACAAAGCAGAAGCAAGTGGCTGCAGAAGATGGTAAACGT
AGAGAAGAATTGGTTCTCAGGTGTCTGTATAGATGGCCTAATAGTTCTCTATACCMACTGTAGTTCTTTTTCTGT
TCTTTCAATTCAGTAGAGTAAAAATAAAAAACAGTGTCATTTTCATTCAGAAMTGAGCAGTTCTACTTAGCTGGT
TTGGAGCTTGCTTTCCAGTTTTTTTGTTTTAAGGCAXACTTAAAATTTTAATGGACACATTTCATATGAAGCCAA
GTCTCACTGAGATCACCCTACTGCTTAATAATTCAGAAAATTTTCACATGCAAAGTGTTTGGAATTTTATGTATG
TTATGAAAGCCATCTTTTACAATTCTTAATCACATCTCTGCCTAAACTGATTCATGATGTTTATGTTTTCCTGTT
TGTAGTGYACAAAATGAAGCTGAAGGCTCACATGTTAAAATGACCCTGAATAGAATAGGAAGAACAGTGTTCTTA
CAGGTCATAATGTATTTCACAATTAAAAAACTAAAATATGTACCCATTTTTAAGAAATCAYACTTCTCTCCACAT
TGATCTTTTCATTTCTTACTAGCTTTTAAGAAATTAAATACTTGCCTGAGATAGAAATACTTTATTTTTGTAACT
TTAAGGTCTAAATGACTAAACTTCAAAGTAAGATTTTGTCAGAATAAATTGAGACCATTAATCYAATATAATACT
TGTTCATGAGCACTGAAATCCTGAAGAGGAGAGATTTGGTTATAAATTAAAAAGGTTGGGTGATCTTAAGTGCCT
CAGTTAATGCACGTACAGTATTCATTTGGTTGGTTGTACTACCTCTCAGAAGTAAAATTTGTCACCTTATGGAAT
GAGAGTTTTTGGGTTTGGGGGTTGTTTTTTTGTTGTTGCTTGGTTTGGTATTTTTGGTTTTGTGTGTATTTGTAT
AAATTTTCTGTATAATTAGCCCAGGCTGATGTAACTATAAAAATTAGTTGAAAAAAAAAATATTGTTTCCTTAAT
GGAATTCTCACTTCATTTGAATATAAGATTTTGGATGAAAGGATTTGGTATAAAGTTTGGGTTTTTGTCTCAAGG
ATTTGATCCATATTTATCCCTAAATATTTCTTAAGGXATGTAXCTTTTTATAACCATTAAGTGGGGGGAAGGGGG
TGGAGGGGGTGGTAATAATTATAACTGAAAGGTTTAAATATACTACCTAAGAAAAAAGTACTTCTGTGACATATA

FIGURE 4279B

CAAAAAAATCTAGTGGATAGGCATTAGATGAATAGAGAATATTAATTTTGCAGAAATGAAGGAAAATCTCTTCGT
GCTAGTACAGCGTATTCCCAAGAGAGTTTATTTTCCTTTCTCCAATTAATGTGGTCATAAATTTCGGTAAAATCA
AGAAATAGGTGAAGTGCAAGCTAGTTTCTATAATGACCATTAAAAAAATTCTGCTGTGTAATTCTTGCCAGTTAA
AATTATAACTTGCAAATGAGCAGAATAAATGAGGTTTTTTTCAATTAAAAATTACTATAAATCCAGGAGGCAAAC
TATTTTAGCACTCAGATTATCTGATTTAATACATATTATTGRATTATCAGTCTCAAATTTTGCTAAATGCTTATC
MGCMTGRAATATGTTGATCAGTGATGAGTTGGGCTTAATGCAAAGATCCTAATTTAATAAAGAAACCTGTAAATT
ACTGTTAMMWAAAAWATATGTGTATATTAATTTCACATATAAAGGTAGATTTTTCAAAGAAAAATTTGGTAGGCG
GTAGTTTAGAACTCTGATCAGGTACTACATCAACCAAAAGAGGAAATACTTTAAAAATTCCTTTTAGCAACCTGA
GCAATCTTATTCTCGTAACAATAGTAGTAATTTGGGACATTGCAAATGTTTATCATGTTGTAAAGTAGCATCAGT
TGTATCCTTTCATTAAAACTTGATAAACAAAAGAAMRARWWAARRAAACCA

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FIGURE 4280

MENMAEEELLPLEKEEVEVAQVQVPTPARDSAGVPAPAPDSALDSAPTPASAPAPAPALAQAPALSPSLASAPEE
AKSKRHISIQRQLADLENLAFVTDGNFDSASSLNSDNLDAGNRQACPLCPKEKFRACNSHKLRRHLQNLHWKVSV
EFEGYRMCICHLPCRPVKPNIIGEQITSKMGAHYHCIICSATITRRTDMLGHVRRHMNKGETKSSYIAASTAKPP
KEILKEADTDVQVCPNYSIPQKTDSYFNPKMKLNRQLIFCTLAALAEERKPLECLDAFGATGIMGLQWAKHLGNA
VKVTINDLNENSVTLIQENCHLNKLKVVVDSKEKEKSDDILEEGEKNLGNIKVTKMDANVLMHLRSFDFIHLDPF
GTSVNYLDSAFRNIRNLGIVSVTSTDISSLYAKAQHVARRHYGCNIVRTEYYKELAARIVVAAVARAAARCNKGI
EVLFAVALEHFVLVVVRVLRGPTSADETAKKIQYLIHCQWCEERIFQKDGNMVEENPYRQLPCNCHGSMPGKTAI
ELGPLWSSSLFNTGFLKRMLFESLHHGLDDIQTLIKTLIFESECTPQSQFSIHASSNVNKQEENGVFIKTTDDTT
TDNYIAQGKRKSNEMITNLGKKQKTDVSTEHPPFYYNIHRHSIKGMNMPKLKKFLCYLSQAGFRVSRTHFDPMGV
RTDAPLMQFKSILLKYSTPTYTGGQSESHVQSASEDTVTERVEMSVNDKAEASGCRRW

FIGURE 4281

GTGGCCTCGAGGTGGTGGCAGGGCCGCCCCCTGCAGTCCGGAGACGAACGCACGGACCGGGCCTCCGGAGGCAGG
TTCGGCTGGAAGGAACCGCTCTCGCTTCGTCCTACACTTGCGCAAATGTCTCCGAGCTTACTCACATAGCATATT
GGTATATCAAAATGAAATGCAAGGAACCAAAAATAACATAATTGAAGGCAGTAAAAGTGAAATTAAATAGGAAGA
TCATCAGTCAAGGAAGACCCACTGGAGAGGACAGAAAATGAAGCAGTGTTTTATCATGTGTATTTCAGCAGGTCT
TCTTGAAATTTAACTAAAAATATGACTGCTCTCTCTTCAGAGAACTGCTCTTTTCAGTACCAGTTACGTCAAACA
AACCAGCCCCTAGACGTTAACTATCTGCTATTCTTGATCATACTTGGGAAAATATTATTAAATATCCTTACACTA
GGAATGAGAAGAAAAAACACCTGTCAAAATTTTATGGAATATTTTTGCATTTCACTAGCATTCGTTGATCTTTTA
CTTTTGGTAAACATTTCCATTATATTGTATTTCAGGGATTTTGTACTTTTAAGCATTAGGTTCACTAAATACCAC
ATCTGCCTATTTACTCAAATTATTTCCTTTACTTATGGCTTTTTGCATTATCCAGTTTTCCTGACAGCTTGTATA
GATTATTGCCTGAATTTCTCTAAAACAACCAAGCTTTCATTTAAGTGTCAAAAATTATTTTATTTCTTTACAGTA
ATTTTAATTTGGATTTCAGTCCTTGCTTATGTTTTGGGAGACCCAGCCATCTACCAAAGCCTGAAGGCACAGAAT
GCTTATTCTCGTCACTGTCCTTTCTATGTCAGCATTCAGAGTTACTGGCTGTCATTTTTCATGGTGATGATTTTA
TTTGTAGCTTTCATAACCTGTTGGGAAGAAGTTACTACTTTGGTACAGGCTATCAGGATAACTTCCTATATGAAT
GAAACTATCTTATATTTTCCTTTTTCATCCCACTCCAGTTATACTGTGAGATCTAAAAAAATATTCTTATCCAAG
CTCATTGTCTGTTTTCTCAGTACCTGGTTACCATTTGTACTACTTCAGGTAATCATTGTTTTACTTAAAGTTCAG
ATTCCAGCATATATTGAGATGAATATTCCCTGGTTATACTTTGTCAATAGTTTTCTCATTGCTACAGTGTATTGG
TTTAATTGTCACAAGCTTAATTTAAAAGACATTGGATTACCTTTGGATCCATTTGTCAACTGGAAGTGCTGCTTC
ATTCCACTTACAATTCCTAATCTTGAGCAAATTGAAAAGCCTATATCAATAATGATTTGTTAATATTATTAATTA
AAAGTTACAGCTGTCATAAGATCATAATTTTATGAACAGAAAGAACTCAGGACATATTAAAAAATAAACTGAACT
AAAACAACTTTTGCCCCCTGACTGATAGCATTTCAGAATGTGTCTTTTGAAGGGCTATACCAGTTATTAAATAGT
GTTTTATTTTAAAAACAAAATAATTCCAAGAAGTTTTTATAGTTATTCAGGGACACTATATTACAAATATTACTT
TGTTATTAACACAAAAAGTGATAAGAGTTAACATTTGGCTATACTGATGTTTGTGTTACTCAAAAAAACTACTGG
ATGCAAACTGTTATGTAAATCTGAGATTTCACTGACAACTTTAAGATATCAACCTAAACATTTTTATTAAATGTT
CAAATGTAAGCAAGAAAAAAAAAA

FIGURE 4282

MTALSSENCSFQYQLRQTNQPLDVNYLLFLIILGKILLNILTLGMRRKNTCQNFMEYFCISLAFVDLLLLVNISI
ILYFRDFVLLSIRFTKYHICLFTQIISFTYGFLHYPVFLTACIDYCLNFSKTTKLSFKCQKLFYFFTVILIWISV
LAYVLGDPAIYQSLKAQNAYSRHCPFYVSIQSYWLSFFMVMILFVAFITCWEEVTTLVQAIRITSYMNETILYFP
FSSHSSYTVRSKKIFLSKLIVCFLSTWLPFVLLQVIIVLLKVQIPAYIEMNIPWLYFVNSFLIATVYWFNCHKLN
LKDIGLPLDPFVNWKCCFIPLTIPNLEQIEKPISIMIC

FIGURE 4283

CAGTTTCATTAGGCTCTGAAGCCATTACAAAGGTTGCTTAACTTCTAATTATTTGATCACTGAGGAAAATCCAGA
AAGCTACACAACACTGAAGGGGTGAAATAAAAGTCCAGCGATCCAGCGAAAGAAAAGAGAAGTGACAGAAACAAC
TTTACCTGGACTGAAGATAAAAGCACAGACAAGAGAACAATGCCCTGGAC**ATG**GCTCCAGAGATCCACATGACAG
GCCCAATGTGCCTCATTGAGAACACTAATGGGGAACTGGTGGCGAATCCAGAAGCTCTGAAAATCCTGTCTGCCA
TTACACAGCCTGTGGTGGTGGTGGCAATTGTGGGCCTCTACCGCACAGGAAAATCCTACCTGATGAACAAGCTAG
CTGGGAAGAATAAGGGCTTCTCTCTGGGCTCCACAGTGAAATCTCACACCAAAGGAATCTGGATGTGGTGTGTGC
CTCACCCCAAAAAGCCAGAACACACCTTAGTCCTGCTTGACACTGAGGGCCTGGGAGATGTAAAGAAGGGTGACA
ACCAGAATGACTCCTGGATCTTCACCCTGGCCGTCCTCCTGAGCAGCACTCTCGTGTACAATAGCATGGGAACCA
TCAACCAGCAGGCTATGGACCAACTGTACTATGTGACAGAGCTGACACATCGAATCCGATCAAAATCCTCACCTG
ATGAGAATGAGAATGAGGATTCAGCTGACTTTGTGAGCTTCTTCCCAGATTTTGTGTGGACACTGAGAGATTTCT
CCCTGGACTTGGAAGCAGATGGACAACCCCTCACACCAGATGAGTACCTGGAGTATTCCCTGAAGCTAACGCAAG
GTAACAGGAAGCTTGCCCAGCTTGAGAAACTACAAGATGAAGAGCTGGACCCTGAATTTGTGCAACAAGTAGCAG
ACTTCTGTTCCTACATCTTTAGCAATTCCAAAACTAAAACTCTTTCAGGAGGCATCAAGGTCAATGGGCCTTGTC
TAGAGAGCCTAGTGCTGACCTATATCAATGCTATCAGCAGAGGGGATCTGCCCTGCATGGAGAACGCAGTCCTGG
CCTTGGCCCAGATAGAGAACTCAGCCGCAGTGCAAAAGGCTATTGCCCACTATGACCAGCAGATGGGCCAGAAGG
TGCAGCTGCCCGCAGAAACCCTCCAGGAGCTGCTGGACCTGCACAGGGTTAGTGAGAGGGAGGCCACTGAAGTCT
ATATGAAGAACTCTTTCAAGGATGTGGACCATCTGTTTCAAAAGAAATTAGCGGCCCAGCTAGACAAAAAGCGGG
ATGACTTTTGTAAACAGAATCAAGAAGCATCATCAGATCGTTGCTCAGCTTTACTTCAGGTCATTTTCAGTCCTC
TAGAAGAAGAAGTGAAGGCGGGAATTTATTCGAAACCAGGGGGCTATTGTCTCTTTATTCAGAAGCTACAAGACC
TGGAGAAAAAGTACTATGAGGAACCAAGGAAGGGGATACAGGCTGAAGAGATTCTGCAGACATACTTGAAATCCA
AGGAGTCTGTGACCGATGCAATTCTACAGACAGACCAGATTCTCACAGAAAAGGAAAAGGAGATTGAAGTGGAAT
GTGTAAAAGCTGAATCTGCACAGGCTTCAGCAAAAATGGTGGAGGAAATGCAAATAAAGTATCAGCAGATGATGG
AAGAGAAAGAGAAGAGTTATCAAGAACATGTGAAACAATTGACTGAGAAGATGGAGAGGGAGAGGGCCCAGTTGC
TGGAAGAGCAAGAGAAGACCCTCACTAGTAAACTTCAGGAACAGGCCCGAGTACTAAAGGAGAGATGCCAAGGTG
AAAGTACCCAACTTCAAAATGAGATACAAAAGCTACAGAAGACCCTGAAAAAAAAAAACCAAGAGATATATGTCGC
ATAAGCTAAAGATC**TAA**ACAACAGAGCTTTTCTGTCATCCTAACCCAAGGCATAACTGAAACAATTTTAGAATTT
GGAACAAGTGTCACTATATTTGATAATAATTAGATCTTGCATCATAACACTAAAAGTTTACAAGAACATGCAGTT
CAATGATCAAAATCATGTTTTTTCCTTAAAAAGATTGTAAATTGTGCAACAAAGATGCATTTACCTCTGTACCAA
CAGAGGAGGGATCATGAGTTGCCACCACTCAGAAGTTTATTCTTCCAGACGACCAGTGGATACTGAGGAAAGTCT
TAGGTAAAAATCTTGGGACATATTTGGGCACTGGTTTGGCCAAGTGTACAATAGGTCCCAATATCAGAAACAACC
ATCCTAGCTTCCTAGGGAAGACAGTGTACAGTTCTCCATTATATCAAGGCTACAAGGTCTATGAGCAATAATGTG
ATTTCTGGACATTGCCCATGGATAATTCTCACTGATGGATCTCAAGCTAAAGCAAACCATCTTATACAGAGATCT
AGAATCTTATATTTTCCATAGGAAGGTAAAGAAATCATTAGCAAGAGTAGGAATTGAATCATAAACAAATTGGCT
AATGAAGAAATCTTTTCTTTCTTGTTCAATTCATCTAGATTATAACCTTAATGTGACACCTGAGACCTTTAGACA
GTTGACCCTGAATTAAATAGTCACATGGTAACAATTATGCACTGTGTAATTTTAGTAATGTATAACATGCAATGA
TGCACTTTAACTGAAGATAGAGACTATGTTAGAAAATTGAACTAATTTAATTATTTGATTGTTTTAATCCTAAAG
CATAAGTTAGTCTTTTCCTGATTCTTAAAGGTCATACTTGAAATCCTGCCAATTTTCCCCAAAGGGAATATGGAA
TTTTTTTTGACTTTCTTTTGAGCAATAAAATAATTGTCTTGCCATTACTTAGTATATGTAGACTTCATCCCAATT
GTCAAACATCCTAGGTAAGTGGTTGACATTTCTTACAGCAATTACAGATTATTTTTGAACTAGAAATAAACTAAA
CTAGAAACAAAAAAAAAAAAAAAAAAA

FIGURE 4284

MAPEIHMTGPMCLIENTNGELVANPEALKILSAITQPVVVVAIVGLYRTGKSYLMNKLAGKNKGFSLGSTVKSHT
KGIWMWCVPHPKKPEHTLVLLDTEGLGDVKKGDNQNDSWIFTLAVLLSSTLVYNSMGTINQQAMDQLYYVTELTH
RIRSKSSPDENENEDSADFVSFFPDFVWTLRDFSLDLEADGQPLTPDEYLEYSLKLTQGNRKLAQLEKLQDEELD
PEFVQQVADFCSYIFSNSKTKTLSGGIKVNGPCLESLVLTYINAISRGDLPCMENAVLALAQIENSAAVQKAIAH
YDQQMGQKVQLPAETLQELLDLHRVSEREATEVYMKNSFKDVDHLFQKKLAAQLDKKRDDFCKQNQEASSDRCSA
LLQVIFSPLEEEVKAGIYSKPGGYCLFIQKLQDLEKKYYEEPRKGIQAEEILQTYLKSKESVTDAILQTDQILTE
KEKEIEVECVKAESAQASAKMVEEMQIKYQQMMEEKEKSYQEHVKQLTEKMERERAQLLEEQEKTLTSKLQEQAR
VLKERCQGESTQLQNEIQKLQKTLKKKTKRYMSHKLKI

FIGURE 4285

CTAGATCCGGGGAAGGGTTTTGCAGAAGTACCCAGAACTGTGTCCAAGGTTTCCTCAGATTTGGGCTGTTCCGCA
GCGGCAGGTCCCGGGAACCAAGGCAACAGACATCTTCCTAGGCTCGCGAGAGCGCCCCCTTGTCCCACGGCTGCT
GGGGCCCCCCCAGTAGCC**ATG**GCTCCGGTGTCCGGCTCACGCAGCCCGGATAGGGAGGCCTCGGGCTCGGGGGGAA
GACGTCGCAGTTCGTCGAAGAGTCCGAAGCCCAGCAAATCTGCCCGCTCCCCGCGGGGCCGCCGCTCTCGCTCGC
ACTCTTGCTCTCGGTCCGGGGACCGGAATGGACTCGCCCATCAGCTGGGTGGCCTCAGCCAAGGCTCCCGAAACC
AGTCCTACCGCTCACGCTCGCGGTCGCGTTCTAGAGAGCGGCCCTCTGCGCCCCGGGGCATCCCCTTCGCTTCTG
CCTCCTCGTCAGTCTATTACGGCAGCTACTCGCGCCCCTACGGGAGCGACAAGCCTTGGCCTAGCCTCCTCGACA
AGGAGAGGGAGGAGAGCCTGCGGCAGAAGAGATTAAGTGAGAGAGAGAGAATTGGAGAATTGGGAGCTCCTGAAG
TATGGGGACTTTCTCCAAAGAATCCTGAACCAGATTCTGATGAACATACACCAGTGGAGGATGAAGAGCCAAAGA
AAAGCACTACTTCAGCTTCTACTTCAGAAGAAGAAAAAAAGAAGAAGTCTAGCCGTTCAAAAGAAAGGTCCAAGA
AAAGGAGAAAGAAAAAATCATCGAAAAGAAAACATAAGAAGTATTCTGAAGATAGCGACAGTGACTCTGATTCTG
AAACAGACTCCAGTGATGAAGATAACAAAAGGAGAGCAAAGAAAGCCAAGAAAAAAGGAAAAGAAGAAGAAACACA
GATCGAAGAAATATAAGAAAAAGAGGTCTAAGAAGAGCAGAAAAGAGTCCAGTGATTCAAGCTCTAAAGAATCCC
AAGAAGAGTTTCTGGAAAATCCCTGGAAGGATCGAACAAAGGCTGAAGAACCATCAGATTTAATTGGCCCAGAGG
CTCCAAAAACACTTACCTCTCAAGATGATAAACCTTTGAACTATGGCCATGCTCTGTTACCTGGTGAAGGTGCAG
CTATGGCTGAATATGTAAAAGCTGGAAAACGTATCCCACGAAGAGGTGAAATTGGCTTGACAAGTGAAGAAATTG
CATCATTTGAATGCTCAGGTTATGTAATGAGTGGTAGCAGGCATCGCCGAATGGAGGCTGTGCGACTGCGAAAAG
AGAACCAGATCTACAGTGCTGATGAGAAGAGAGCCCTTGCATCCTTTAACCAAGAAGAGAGACGAAAGAGAGAGA
ACAAGATTCTGGCCAGTTTTCGAGAAATGGTTTACAGAAAGACCAAAGGGAAGGATGACAAA**TAA**AGATTTTCTG
ATTGTCCAGAAGACATTTTTAACAACAAAAAAGAAAGTCTGGGTTCCACACATACATAGAAAAAGATTATTATGT
TCTGAGAAAGCTTTACAGTGCTACTGTGCCTTCTATTTAATTCTTTCAGTCCTTCAATAAAAAGCTGCTTATTGA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4286

MAPVSGSRSPDREASGSGGRRRSSSKSPKPSKSARSPRGRRSRSHSCSRSGDRNGLAHQLGGLSQGSRNQSYRSR
SRSRSRERPSAPRGIPFASASSSVYYGSYSRPYGSDKPWPSLLDKEREESLRQKRLSERERIGELGAPEVWGLSP
KNPEPDSDEHTPVEDEEPKKSTTSASTSEEEKKKKSSRSKERSKKRRKKKSSKRKHKKYSEDSDSDSDSETDSSD
EDNKRRAKKAKKKEKKKKHRSKKYKKKRSKKSRKESSDSSSKESQEEFLENPWKDRTKAEEPSDLIGPEAPKTLT
SQDDKPLNYGHALLPGEGAAMAEYVKAGKRIPRRGEIGLTSEEIASFECSGYVMSGSRHRRMEAVRLRKENQIYS
ADEKRALASFNQEERRKRENKILASFREMVYRKTKGKDDK

FIGURE 4287

GCAAGAGAGCGGGAAGCCGAGCTGGGCGAGAAGTAGGGGAGGGCGGTGCTCCGCCGCGGTGGCGGTTGCTATCGC
TTCGCAGAACCTACTCAGGCAGCCAGCTGAGAAGAGTTGAGGGAAAGTGCTGCTGCTGGGTCTGCAGACGCGATG

GATAACGTGCAGCCGAAAATAAAACATCGCCCCTTCTGCTTCAGTGTGAAAGGCCACGTGAAGATGCTGCGGCTG
GCACTAACTGTGACATCTATGACCTTTTTTATCATCGCACAAGCCCCTGAACCATATATTGTTATCACTGGATTT
GAAGTCACCGTTATCTTATTTTTCATACTTTTATATGTACTCAGACTTGATCGATTAATGAAGTGGTTATTTTGG
CCTTTGCTTGATATTATCAACTCACTGGTAACAACAGTATTCATGCTCATCGTATCTGTGTTGGCACTGATACCA
GAAACCACAACATTGACAGTTGGTGGAGGGGTGTTTGCACTTGTGACAGCAGTATGCTGTCTTGCCGACGGGGCC
CTTATTTACCGGAAGCTTCTGTTCAATCCCAGCGGTCCTTACCAGAAAAAGCCTGTGCATGAAAAAAAAGAAGTT
TTGTAATTTTATATTACTTTTTAGTTTGATACTAAGTATTAAACATATTTCTGTATTCTTCCAAAAAAAAAAAAA
AAAAAAAAAAAAA

FIGURE 4288

MDNVQPKIKHRPFCFSVKGHVKMLRLALTVTSMTFFIIAQAPEPYIVITGFEVTVILFFILLYVLRLDRLMKWLF
WPLLDIINSLVTTVFMLIVSVLALIPETTTLTVGGGVFALVTAVCCLADGALIYRKLLFNPSGPYQKKPVHEKKE
VL

FIGURE 4289

GCTCTGCACCCCTGCTGCTTCTGCTTTGAAGGCGGAGGCTCCATGTTGTCCCCTCAGCGAGTGGCAGCAGCTGCC
TCAAGAGGAGCAGATGATGCCATGGAGAGCAGCAAGCCTGGTCCAGTGCAGGTTGTTTTGGTTCAGAAAGATCAA
CATTCCTTTGAGCTAGATGAGAAAGCCTTGGCCAGCATCCTCTTGCAGGACCACATCCGAGATCTTGATGTGGTG
GTGGTTTCAGTGGCTGGTGCCTTCCGAAAGGGCAAGTCCTTCATTCTGGATTTTATGCTACGATACTTATATTCT
CAGAAGGAAAGTGGCCATTCAAATTGGTTGGGTGACCCAGAAGAACCGTTAACAGGATTTTCCTGGAGAGGGGGA
TCTGATCCAGAAACCACTGGGATTCAAATCTGGAGTGAAGTTTTCACTGTGGAGAAGCCAGGTGGGAAGAAGGTT
GCAGTTGTTCTGATGGATACCCAGGGGGCATTTGACAGCCAGTCAACTGTGAAAGACTGTGCTGCCATCTTTGCT
CTAAGCACTATGACTAGTTCTGTTCAGATTTATAATTTATCTCAGAACATTCAAGAAGATGATCTTCAACAGCTG
CAGCTCTTCACAGAATACGGTCGTCTGGCAATGGATGAAATTTTCCGAAAGCCTTTCCAGACACTGATGTTTTTG
GTTAGAGATAGGAGTTTCCCTTATGAATATAGCTATGGACTCCAAGGAGGAATGGCATTTTTGGATAAGCGTTTA
CAGGTGAAGGAACATCAACATGAAGAAATTCAGAATGTTCGAAATCACATTCACTCATGTTTCTCCGATGTCACC
TGCTTTCTCTTACCACATCCAGGACTCCAGGTGGCCACAAGCCCTGACTTTGATGGGAAATTAAAAGATATTGCT
GGTGAATTCAAAGAGCAGTTACAGGCACTGATACCGTATGTATTAAACCCATCTAAGTTAATGGAAAAGGAGATC
AATGGCTCAAAGGTCACCTGTCGGGGACTACTGGAGTATTTTAAGGCATATATTAAAATTTATCAAGGAGAAGAT
CTGCCTCACCCCAAGTCCATGCTTCAGGCCACTGCTGAAGCCTACAACTTAGCAGCTGCAGCCTCTGCCAAGGAC
ATTTATTATAACAACATGGAAGAGGTTTGTGGGGGAGAGAAACCTTATTTGTCTCCAGACATTCTAGAGGAGAAG
CACTGCGAATTCAAACAACTTGCTCTGGACCATTTTAAGAAGACCAAGAAGATGGGTGGGAAGGATTTCAGCTTT
CGTTACCAGCAGGAGCTGGAGGAGGAAATCAAGGAATTATATGAGAACTTCTGCAAGCACAATGGTAGCAAGAAC
GTCTTCAGCACCTTCCGAACCCCTGCAGTGCTGTTCACGGGCATTGTAGCTTTGTACATAGCCTCAGGCCTCACT
GGCTTCATAGGTCTTGAGGTTGTAGCCCAGTTGTTCAACTGTATGGTTGGACTACTGTTAATAGCACTCCTCACC
TGGGGCTACATCAGGTATTCTGGTCAATATCGTGAGCTGGGCGGAGCTATTGATTTTGGTGCCGCATATGTGTTG
GAGCAGGCTTCTTCTCATATCGGTAATTCCACTCAGGCCACTGTGAGGGATGCAGTTGTTGGAAGACCATCCATG
GATAAAAAAGCTCAATAGCATCTTAACGTGAAGATCAAACAAGAACACAACAAGCCCCTACTGATTTCTGGGTTT
CTGCCACGGCCACAGGTTCATATCCAGAGGAATGGCAGATCTGAGACGATCCAGGAAGAGCTAAAACATGGCCCT
GTAATAAATGAGCAGACCTCTATAAAAGAAAAAAAAAAAAAAAAAAA

FIGURE 4290

ALHPCCFCFEGGGSMLSPQRVAAAASRGADDAMESSKPGPVQVVLVQKDQHSFELDEKALASILLQDHIRDLDVV
VVSVAGAFRKGKSFILDFMLRYLYSQKESGHSNWLGDPEEPLTGFSWRGGSDPETTGIQIWSEVFTVEKPGGKKV
AVVLMDTQGAFDSQSTVKDCAAIFALSTMTSSVQIYNLSQNIQEDDLQQLQLFTEYGRLAMDEIFRKPFQTLMFL
VRDRSFPYEYSYGLQGGMAFLDKRLQVKEHQHEEIQNVRNHIHSCFSDVTCFLLPHPGLQVATSPDFDGKLKDIA
GEFKEQLQALIPYVLNPSKLMEKEINGSKVTCRGLLEYFKAYIKIYQGEDLPHPKSMLQATAEAYNLAAAASAKD
IYYNNMEEVCGGEKPYLSPDILEEKHCEFKQLALDHFKKTKKMGGKDFSFRYQQELEEEIKELYENFCKHNGSKN
VFSTFRTPAVLFTGIVALYIASGLTGFIGLEVVAQLFNCMVGLLLIALLTWGYIRYSGQYRELGGAIDFGAAYVL
EQASSHIGNSTQATVRDAVVGRPSMDKKAQ

FIGURE 4291

GTCGGTTCCGGGCGTTACCATCGTCCGTGCGCACCGCCCGGCGTCCAGGTGAGTCTCCCATCTGCAGAGACGCGG
ACGCGCCGGCCCGCAGTTGGCCTGCGGAGCGCGGTGGACGGTTTGGCGCCCACCAGGCGATCAATACTTTGGATT
TTTAATTTCTAGATTTGGCAATTCTTCGCTGAAGTCATCATGAGCTTTTTCCAACTCCTGATGAAAAGGAAGGAA
CTCATTCCCTTGGTGGTGTTCATGACTGTGGCGGCGGGTGGAGCCTCATCTTTCGCTGTGTATTCTCTTTGGAAA
ACCGATGTGATCCTTGATCGAAAAAAAAATCCAGAACCTTGGGAAACTGTGGACCCTACTGTACCTCAAAAGCTT
ATAACAATCAACCAACAATGGAAACCCATTGAAGAGTTGCAAAATGTCCAAAGGGTGACCAAATGACGAGCCCTC
GCCTCTTTCTTCTGAAGAGTACTCTATAAATCTAGTGGAAACATTTCTGCACAAACTAGATTCTGGACACCAGTG
TGCGGAAATGCTTCTGCTACATTTTTAGGGTTTGTCTACATTTTTTGGGCTCTGGATAAGGAATTAAAGGAGTGC
AGCAATAACTGCACTGTCTAAAAGTTTGTGCTTATTTTCTTGTAAATTTGAATATTGCATATTGAAATTTTTGTT
TATGATCTATGAATGTTTTTCTTAAAATTTACAAAGCTTTGTAAATTAGATTTTCTTTAATAAAATGCCATTTGT
GCAAGATTTCTCAAAGATTAGGTATATATTTAAATGGAAGAGAAAATATTTTTATGGGAGAAAAATACATTTGAA
CCATGAAATTTCATCTTTTAAATAACATCCAGTACAGATATCTGTGTAAAAAAAAAAAAAA

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FIGURE 4292

MSFFQLLMKRKELIPLVVFMTVAAGGASSFAVYSLWKTDVILDRKKNPEPWETVDPTVPQKLITINQQWKPIEEL
QNVQRVTK

FIGURE 4293

GAATCTCTCGCGGGCAGCAGGGCGCGCGCTGCACGCACAGTACTAGGTCAGGTGGTGCTCCCGGGTGAGGAGCTG
CTCCTGCCGGAACAGGAGGACGCGGAAGGCCCTGGGGGGTGCAGTGGAGCGACCGTTGAGCCTGAATGCTAGAGCG
TGCTCGCGGGTGCGCGTTTGTATGCGGTCCGGGCCTTCGACGCTGTGGGGACCGCCTGCTGGTCACCAAGTGCGG
CCGCCTCCGTCACAAGGAGCCCGGCAGTGGAGGCGGCGGCGGTGTTTACTGGGTGGACTCTCAGCAGAAGCGGTA
TGTTCCAGTAAAAGGAGACCATGTGATTGGCATAGTGACAGCTAAATCTGGAGATATATTCAAAGTTGATGTTGG
AGGGAGTGAGCCAGCTTCTTTGTCTTACTTGTCATTTGAAGGTGCAACTAAAAGAAACAGACCAAATGTGCAGGT
TGGAGATCTCATCTATGGCCAGTTTGTGGTTGCTAATAAAGACATGGAACCAGAGATGGTCTGTATTGACAGCTG
TGGACGAGCCAATGGAATGGGTGTCATTGGACAGGATGGTCTGCTTTTTAAAGTGACTCTGGGCTTAATTAGAAA
GCTATTAGCTCCAGATTGTGAAATCATACAGGAAGTGGGAAAACTCTATCCACTGGAGATAGTATTTGGAATGAA
TGGAAGAATATGGGTTAAGGCAAAAACCATCCAGCAGACTTTAATTTTGGCAAACATTTTAGAAGCTTGTGAACA
CATGACGTCAGATCAAAGAAAACAGATCTTCTCCAGATTGGCAGAAAGTTGATATAGGTGGACTTTTTTACAGGT
CAGTTGAGGCAAAAAACTATGGGTTTTTTCAGGTGAACCTCCCCCATTTAAATACTCAGAAGATAAGGTGTGAAT
GTATGTATTATTAGAGTCCGAAAGTATTTTTATAAGTTACTGGTTTTCACCCACGCTTTTGTGGGAGAGAAAATC
ATTGCAAAATCATTTTTTTTGTTCGGTACAATAAAGTTTACTAAAAAACAAA

FIGURE 4294

MLERARGCAFVCGPGLRRCGDRLLVTKCGRLRHKEPGSGGGGGVYWVDSQQKRYVPVKGDHVIGIVTAKSGDIFK
VDVGGSEPASLSYLSFEGATKRNRPNVQVGDLIYGQFVVANKDMEPEMVCIDSCGRANGMGVIGQDGLLFKVTLG
LIRKLLAPDCEIIQEVGKLYPLEIVFGMNGRIWVKAKTIQQTLILANILEACEHMTSDQRKQIFSRLAES

FIGURE 4295

GAATCTCTCGCGGGCAGCAGGGCGCGCGCTGCACGCACAGTACTAGGTCAGGTGGTGCTCCCGGGTGAGGAGCTG
CTCCTGCCGGAACAGGAGGACGCGGAAGGCCCTGGGGGTGCAGTGGAGCGACCGTTGAGCCTGAATGCTAGAGCG
TGCTCGCGGGTGCGCGTTTGTATGCGGTCCGGGCCTTCGACGCTGTGGGGACCGCCTGCTGGTCACCAAGTGCGG
CCGCCTCCGTCACAAGGAGCCCGGCAGTGGAGGCGGCGGCGGTGTTTACTGGGTGGACTCTCAGCAGAAGCGGTA
TGTTCCAGTAAAAGGAGACCATGTGATTGGCATAGTGACAGCTAAATCTGGAGATATATTCAAAGTTGATGTTGG
AGGGAGTGAGCCAGCTTCTTTGTCTTACTTGTCATTTGAAGGTGCAACTAAAAGAAACAGACCAAATGTGCAGGT
TGGAGATCTCATCTATGGCCAGTTTGTGGTTGCTAATAAAGACATGGAACCAGAGATGGTCTGTATTGACAGCTG
TGGACGAGCCAATGGAATGGGTGTCATTGGACAGGATGGTCTGCTTTTTAAAGTGACTCTGGGCTTAATTAGAAA
GCTATTAGCTCCAGATTGTGAAATCATACAGGAAGTGGGAAAACTCTATCCACTGGAGATAGTATTTGGAATGAA
TGGAAGAATATGGGTTAAGGCAAAAACCATCCAGCAGACTTTAATTTTGGCAAACATTTTAGAAGCTTGTGAACA
CATGACGTCAGATCAAAGAAAACAGATCTTCTCCAGATTGGCAGAAAGTTGATATAGGTGGACTTTTTTACAGGT
CAGTTGAGGCAAAAAACTATGGGTTTTTTCAGGTGAACCTCCCCCATTTAAATACTCAGAAGATAAGGTGTGAAT
GTATGTATTATTAGAGTCCGAAAGTATTTTTATAAGTTACTGGTTTTCACCCACGCTTTTGTGGGAGAGAAAATC
ATTGCAAAATCATTTTTTTTGTTCGGTACAATAAAGTTTACTAAAAAACAAA

FIGURE 4296

MLERARGCAFVCGPGLRRCGDRLLVTKCGRLRHKEPGSGGGGGVYWVDSQQKRYVPVKGDHVIGIVTAKSGDIFK
VDVGGSEPASLSYLSFEGATKRNRPNVQVGDLIYGQFVVANKDMEPEMVCIDSCGRANGMGVIGQDGLLFKVTLG
LIRKLLAPDCEIIQEVGKLYPLEIVFGMNGRIWVKAKTIQQTLILANILEACEHMTSDQRKQIFSRLAES

FIGURE 4297

AGGCAGCAGCAGAGGGAGAGCTCGGGGCTTGGAGGGGAAACAGCGGAAGACCTAAGATTATCGGGAGGGCAGCAG
AGGCAGAGAACGAGGACAGGACCCTTGGCCGTCTTCTTCCAGGGAACGAGAGGTCACAGCCTCGCTCTCCGCTTA
TGCTTCTGGCGCCCCAGCTTAAAGCCGAGGCTGCGGCTGACAAAGGGCTCGCGCCGGTGCCGCCGCCCTTCTCAT
CCGGGCATTCGGGTCCCTGCGAGAAGGAGGGGGAAGGACAGAGGGGGAGGGGAAGGAGCCGGAGGGGCGCACACT
TGGAGCTGAAGCCCTCTCCAGGGCTCCGGGCCGGTGCCCCAACGGACAGAGGTCGAGGAGGACCCGCAGAGGTGG
CAGCGGCCGGGGGCAGGAGGATGGTGCAGAAGGAGAGTCAAGCGACGTTGGAGGAGCGGGAGAGCGAGCTCAGCT
CCAACCCTGCCGCCTCTGCGGGGGCATCGCTGGAGCCGCCGGCAGCTCCGGCACCCGGAGAAGACAACCCCGCCG
GGGCTGGGGGAGCGGCGGTGGCCGGGGCTGCAGGAGGGGCTCGGCGGTTCCTCTGCGGTGTGGTGGAAGGATTTT
ATGGAAGACCTTGGGTTATGGAACAGAGAAAAGAACTCTTTAGAAGGCTCCAGAAATGGGAATTAAATACATACT
TGTATGCCCCAAAAGATGACTACAAACATAGGATGTTTTGGCGAGAGATGTATTCAGTGGAGGAAGCTGAGCAAC
TTATGACTCTCATCTCTGCTGCACGAGAATATGAGATAGAGTTCATCTATGCGATCTCACCTGGATTGGATATCA
CTTTTTCTAACCCCAAGGAAGTATCCACATTGAAACGTAAATTGGACCAGGTTTCTCAGTTTGGGTGCAGATCAT
TTGCTTTGCTTTTTGATGATATAGACCATAATATGTGTGCAGCAGACAAAGAGGTATTCAGTTCTTTTGCTCATG
CCCAAGTCTCCATCACAAATGAAATCTATCAGTACCTAGGAGAGCCAGAAACTTTCCTCTTCTGTCCCACAGAAT
ACTGTGGCACTTTCTGTTATCCAAATGTGTCTCAGTCTCCATATTTAAGGACTGTGGGTGAAAAGCTTCTACCTG
GAATTGAAGTGCTTTGGACAGGTCCCAAAGTTGTTTCTAAAGAAATTCCAGTAGAGTCCATCGAAGAGGTTTCTA
AGATTATTAAGAGAGCTCCAGTAATCTGGGATAACATTCATGCTAATGATTATGATCAGAAGAGACTGTTTCTGG
GCCCGTACAAAGGAAGATCCACAGAACTCATCCCACGGTTAAAAGGAGTCCTCACTAATCCAAATTGTGAATTTG
AAGCCAACTACGTTGCTATCCACACCCTTGCCACCTGGTACAAATCAAACATGAATGGAGTGAGAAAAGATGTAG
TGATGACTGACAGTGAAGATAGTACTGTGTCCATCCAGATAAAATTAGAAAATGAAGGCAGTGATGAAGATATTG
AAACTGATGTACTCTATAGTCCACAGATGGCTCTAAAGCTAGCATTAACAGAATGGTTGCAAGAGTTTGGTGTGC
CTCATCAATACAGCAGTAGGCAAGTTGCACACAGTGGAGCTAAAGCAAGTGTAGTTGATGGGACTCCTTTAGTTG
CAGCACCCTCTTTAAATGCCACAACCGTAGTAACAACAGTTTATCAGGAGCCCATTATGAGCCAGGGAGCAGCCT
TGAGTGGTGAGCCTACTACTCTGACCAAGGAAGAAGAAAAGAAACAGCCTGATGAAGAACCCATGGACATGGTGG
TGGAAAAACAAGAAGAAACGGACCACAAGAATGACAATCAAATACTGAGTGAAATTGTTGAAGCGAAAATGGCAG
AGGAATTGAAACCAATGGACACTGATAAAGAGAGCATAGCTGAATCAAAATCCCCAGAGATGTCCATGCAAGAAG
ATTGTATTAGTGACATTGCCCCCATGCAAACTGATGAACAGACAAACAAGGAGCAGTTTGTGCCAGGTCCAAATG
AAAAGCCTTTGTACACTGCGGAACCAGTGACCCTGGAGGATTTGCAGTTACTTGCTGATCTATTCTACCTTCCTT
ACGAGCATGGACCCAAAGGAGCACAGATGTTACGGGAATTTCAATGGCTTCGAGCAAATAGTAGTGTTGTCAGTG
TCAATTGCAAAGGAAAAGACTCTGAAAAAATTGAAGAATGGCGGTCACGAGCAGCCAAGTTTGAAGAGATGTGTG
GACTAGTGATGGGAATGTTCACTCGGCTCTCCAATTGTGCCAACAGGACAATTCTTTATGACATGTACTCCTATG
TTTGGGATATCAAGAGTATAATGTCTATGGTGAAGTCTTTTGTACAGTGGTTAGGTAGGTGCACCAGGAATAATC
TCTTCTCCTCAAATATATTGTCCCTTTAAAAAAAATTATCCCACAGGGAGAAAAACATTTAGGGAATTGGCACAT
TTCCAAGTCTCTTCAATTCGTTGCCTAGGTTTCTTTCAAAAATAGGCATTATTGAAGACTTGAGATGCAAGTCTT
AGTAAATACATCAAGCACATTAATTTTTCTCCCXTGGGCTAATTCAGCATAAGTATCTTAAAAGTATGTTAGAAA
GTACTGACTTTAACTTGCTCTGACTGAATGCTTTCTGGATGGAACCCTGTATACCACTTTTATCTGATTTGGAGA
TGAGACACTATGAAATGTGACTCCACAAGCTTTCTGCTGCTTGCTGTGTCTTGATAACATTAATGCTATGTTTAA
CAGAACAATTGCTGAAATGACCTAAAGGGCCTGGCAAGAGGAAGCCATCCTCCCAGCCCTGTGCGCATGCGAGCT
TTAGTGTAAGGCTATTCTGGTGCTATTCAGTATTATTTCACGTGGCTTTTTCTTTATCCTTCTACCAAGTATTGG
TTTTACCAGGGGATAGAAATTGTAATCCCCTAAACATCTCTGCTACATTAAATGGACTTTTGTATGTCTCCTTTG
AACACTGATTTTTTTTTTTTAAATTGTCAAACTTGGTAAAAAGCACCAGCATGGCCAAGTTTCTCTAGGGACTTC
ATTTCATTTTCAGGTTTTCAATCCAGCTATAAGGAATATGTAATGGACTTATATACAGCACACAGCAGGCAGCAA
GGCTGACTGACATGTCATAGTTTTCATAGTAGTCACAAATACTATGATGGGTTTCATGGTCTTGGTTGTGAAATA
GATATCTGAAACACCGTGAGCTTAGAATAAAAAGTAGTAGTGAGATTTTCCACTTTCTGCCTGTATACCTTTGAG
CTCTTAAATATTT

FIGURE 4298

MVQKESQATLEERESELSSNPAASAGASLEPPAAPAPGEDNPAGAGGAAVAGAAGGARRFLCGVVEGFYGRPWVM
EQRKELFRRLQKWELNTYLYAPKDDYKHRMFWREMYSVEEAEQLMTLISAAREYEIEFIYAISPGLDITFSNPKE
VSTLKRKLDQVSQFGCRSFALLFDDIDHNMCAADKEVFSSFAHAQVSITNEIYQYLGEPETFLFCPTEYCGTFCY
PNVSQSPYLRTVGEKLLPGIEVLWTGPKVVSKEIPVESIEEVSKIIKRAPVIWDNIHANDYDQKRLFLGPYKGRS
TELIPRLKGVLTNPNCEFEANYVAIHTLATWYKSNMNGVRKDVVMTDSEDSTVSIQIKLENEGSDEDIETDVLYS
PQMALKLALTEWLQEFGVPHQYSSRQVAHSGAKASVVDGTPLVAAPSLNATTVVTTVYQEPIMSQGAALSGEPTT
LTKEEEKKQPDEEPMDMVVEKQEETDHKNDNQILSEIVEAKMAEELKPMDTDKESIAESKSPEMSMQEDCISDIA
PMQTDEQTNKEQFVPGPNEKPLYTAEPVTLEDLQLLADLFYLPYEHGPKGAQMLREFQWLRANSSVVSVNCKGKD
SEKIEEWRSRAAKFEEMCGLVMGMFTRLSNCANRTILYDMYSYVWDIKSIMSMVKSFVQWLGRCTRNNLFSSNIL
SL

FIGURE 4299

GAGGGGTAGAGATGCAGAAAGGCAGAAAGGAGAAAATTCAGGATAACTCTCCTGAGGGGTGAGCCAAGCCCTGCC
ATGTAGTGCACGCAGGACATCAACAAACACAGATAACAGGAAATGATCCATTCCCTGTGGTCACTTATTCTAAAG
GCCCCAACCTTCAAAGTTCAAGTAGTGATATGGATGACTCCACAGAAAGGGAGCAGTCACGCCTTACTTCTTGCC
TTAAGAAAAGAGAAGAAATGAAACTGAAGGAGTGTGTTTCCATCCTCCCACGGAAGGAAAGCCCCTCTGTCCGAT
CCTCCAAAGACGGAAAGCTGCTGGCTGCAACCTTGCTGCTGGCACTGCTGTCTTGCTGCCTCACGGTGGTGTCTT
TCTACCAGGTGGCCGCCCTGCAAGGGGACCTGGCCAGCCTCCGGGCAGAGCTGCAGGGCCACCACGCGGAGAAGC
TGCCAGCAGGAGCAGGAGCCCCCAAGGCCGGCCTGGAGGAAGCTCCAGCTGTCACCGCGGGACTGAAAATCTTTG
AACCACCAGCTCCAGGAGAAGGCAACTCCAGTCAGAACAGCAGAAATAAGCGTGCCGTTCAGGGTCCAGAAGAAA
CAGTCACTCAAGACTGCTTGCAACTGATTGCAGACAGTGAAACACCAACTATACAAAAAGGATCTTACACATTTG
TTCCATGGCTTCTCAGCTTTAAAAGGGGAAGTGCCCTAGAAGAAAAAGAGAATAAAATATTGGTCAAAGAAACTG
GTTACTTTTTTATATATGGTCAGGTTTTATATACTGATAAGACCTACGCCATGGGACATCTAATTCAGAGGAAGA
AGGTCCATGTCTTTGGGGATGAATTGAGTCTGGTGACTTTGTTTCGATGTATTCAAAATATGCCTGAAACACTAC
CCAATAATTCCTGCTATTCAGCTGGCATTGCAAAACTGGAAGAAGGAGATGAACTCCAACTTGCAATACCAAGAG
AAAATGCACAAATATCACTGGATGGAGATGTCACATTTTTTGGTGCATTGAAACTGCTGTGACCTACTTACACCA
TGTCTGTAGCTATTTTCCTCCCTTTCTCTGTACCTCTAAGAAGAAAGAATCTAACAGAAAAAAAAAAAAAAAAA
AAAAAAAAAAA

FIGURE 4300

MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCCLTVVSFYQVAALQGD
LASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAPGEGNSSQNSRNKRAVQGPEETVTQDCLQLI
ADSETPTIQKGSYTFVPWLLSFKRGSALEEKENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELS
LVTLFRCIQNMPETLPNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL

FIGURE 4301

TCTGGGTCCGTCTCGTCGCGTCCGGGTTGTCACTCTCTCGGGTTGTTACTCTGTAGCTTCCCGGCTCGCGAAAGG
GAGGACCTGTCTGGGTCATGGATTTTGAGAATCTTTTCTCAAAACCCCCCAACCCGGCCCTCGGCAAAACGGCCA
CGGACTCTGACGAAAGAATCGATGATGAAATAGATACAGAAGTTGAAGAAACACAAGAAGAGAAAATTAAACTGG
AGTGCGAGCAAATTCCCAAAAAATTTAGACACTCTGCAATATCACCAAAAAGTTCGCTGCATAGAAAATCAAGAA
GTAAGGACTATGATGTATATAGTGATAATGATATCTGCAGTCAGGAATCAGAAGATAATTTTGCCAAAGAGCTTC
AACAGTACATACAAGCCAGAGAAATGGCAAATGCTGCTCAACCTGAAGAATCTACAAAGAAAGAAGGAGTAAAAG
ATACCCCACAGGCTGCTAAACAAAAAAATAAAAATCTTAAAGCTGGTCACAAGAATGGCAAACAGAAGAAAATGA
AGCGAAAATGGCCTGGCCCTGGAAACAAAGGATCAAATGCTTTGCTGAGGAACAGCGGCTCACAGGAAGAGGATG
GTAAACCTAAAGAGAAGCAGCAGCATTTGAGTCAGGCATTCATCAACCAACATACAGTGGAACGCAAGGGAAAAC
AAATTTGTAAATATTTTCTTGAAAGGAAATGTATTAAGGGAGACCAGTGTAAATTTGATCATGATGCAGAGATAG
AAAAGAAAAAGGAAATGTGTAAGTTTTATGTCCAAGGATTTTGTTCCAGAGGTGAAAACTGTCTGTATTTGCATA
ATGAATATCCTTGTAAGTTTTACCATACAGGAACAAAATGTTATCAGGGAGAATACTGCCAGTTTTCTCATGCTC
CACTGACTCCTGAAACACAAGAATTGTTGGCTAAAGTTTTGGATACTGAAAAGAAGTCATGTAAATAAAATAGAC
ATAAAAAGGTAGCAATGTACAGATAAAGAGTACTTTAACGCCCATGCGTGTTCAAGACTGTTCAAGACTGGTGAT
TTGGAGTAGTTTACAAGATTCCTCATTCAGAGTGCCCTCTTGTGTGACTGGGGTGATGTGCAGCTTCCATAATGG
ATGGGACAGAGAGCTGGGATCTAATGTACAAGTGAAGGGCTTGGTCTTCCCTGAGACATTCCAGCCATTGGAATA
GGAGAGGAGCATATATGGCAGAGGTGATGGCTGGTGGGTAAATGTGATAGTAAATTGTAGAAACCTCTTCTGATT
GATTGGATTTCCTTAATAAAATCGGAAGCAAGGTTAGGCTGAGTGAGGGTGAGTAAAGAGGTAGAGGAGGTTTGA
GGAGAGAGAACTGCTCGGAAGACATTGGTAGATGGACCATAAAAACAGAGTTAGTTCTCTTTATGACATTAAATA
GTTTTACAACATATTTTTAATGGTTCACAATTTCATTTTAGGGCTTAAAATAAATTATGGTTCTATGATTTTTTT
AAACCAGTTTCCTATTGTTAGACATTTGTTTCCAGTTTCTTACTATTATAAATAAAGTGAAACAATATCTCTTAC
TATACCATTTCTAAAAAAAA

FIGURE 4302

MDFENLFSKPPNPALGKTATDSDERIDDEIDTEVEETQEEKIKLECEQIPKKFRHSAISPKSSLHRKSRSKDYDV
YSDNDICSQESEDNFAKELQQYIQAREMANAAQPEESTKKEGVKDTPQAAKQKNKNLKAGHKNGKQKKMKRKWPG
PGNKGSNALLRNSGSQEEDGKPKEKQQHLSQAFINQHTVERKGKQICKYFLERKCIKGDQCKFDHDAEIEKKKEM
CKFYVQGFCSRGENCLYLHNEYPCKFYHTGTKCYQGEYCQFSHAPLTPETQELLAKVLDTEKKSCK

FIGURE 4303

GGATTTTCCTTGGTCTTAAGATGGGTAGAAATGTGATGCGACACATGTCTGATGACTTAGGAAGTTATGTTTCTC
TTTCGTGTGATGACTTTTCTTCACAGGAATTAGAGATTTTCATTTGCTCCTTTTCCTCCTCCTGGCTTCAAATGT
TTGTTGCAGAGGCAGTCTTTAAAAAGTTGTGTCTACAGAGCTCTGGCAGTGTTTCTTCTGAGCCACTCTCTCTTC
AGAAAATGGTATATTCCTATTTACCAGCCTTGGGGAAAACTGGTGTGCTTGGGTCTGGAAAGATTCAGGTGTCAA
AGAAAATAGGACAGCGGCCTTGTTTTGACTCTCAGAGAACCTTACTAATGCTGAATGGTACTAAACAAAAACAAG
TCGAAGGGCTGCCAGAGTTACTAGACCTGAACCTTGCTAAATGTTCCTCATCATTAAAAAAATTGAAAAAGAAGT
CAGAAGGAGAATTGTCATGTTCCAAGGAGAATTGCCCCTCTGTAGTTAAAAAGATGAATTTTCACAAGACTAATC
TAAAAGGAGAAACAGCCCTGCATAGAGCTTGCATAAATAACCAAGTGGAGAAATTGATTCTTCTTCTCTCTTTGC
CAGGAATAGACATCAATGTTAAAGACAATGCTGGCTGGACGCCTTTGCATGAAGCCTGTAACTATGGCAACACAG
TGTGTGTCCAGGAAATTTTGCAACGTTGTCCAGAGGTAGATCTGCTCACTCAAGTGGACGGGGTGACTCCTTTGC
ATGATGCACTGTCAAACGGACATGTAGAAATTGGCAAGCTGCTACTACAGCATGGGGGCCCAGTGCTTTTACAAC
AGAGGAATGCTAAGGGAGAATTGCCCTTGGATTATGTGGTTTCACCTCAAATCAAAGAAGAACTGTTTGCTATTA
CAAAAATAGAAGATACAGTGGAGAACTTTCATGCACAAGCAGAGAAACATTTTCATTACCAGCAACTTGAATTTG
GCTCCTTTTTACTTAGTAGGATGTTGCTAAATTTTTGTTCAATTTTTGATTTATCTTCAGAGTTCATTTTAGCTT
CCAAAGGGTTAACTCATCTAAATGAACTGCTTATGGCTTGTAAAAGTCATAAAGAAACCACCAGTGTTCATACTG
ACTGGTTACTGGATCTTTATGCTGGAAATATAAAGACATTGCAGAAACTCCCACACATTCTTAAGGAACTGCCTG
AGAATTTGAAAGTGTGTCCTGGGGTACACACTGAGGCCTTGATGATAACATTGGAAATGATGTGTCGGTCAGTCA
TGGAGTTTTCATGATGATGCTAGAAAGTATGGATTGACTTTCTAAATCTGTTCAGTTTGCATTGGTACTTACTGT
GGACTTCATAGCTTACTGACAGATAGTAATTTGATTTATTTATTGACAGACTTTGCAGCCTTGCTAAATTTTAAA
AGCATTTTTAAAAAAACTTCTACAAAACTCTAGTATGGGCTTCTGACTTTTTCCAGGGTGTAGAATTTGACTCAA
AAGTAAAAATAATTTTGTTTTAGTATATTCTACTTTCATTAATGTTTTTTTGTTCTGAAAGTGATATTATATTGT
ACATGTAAAATTAATTTAAATATTTTTTCAAATAAAAATGTAATGTCCTGTAAAAAAAAAAAAAAAAAA

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FIGURE 4304

MGRNVMRHMSDDLGSYVSLSCDDFSSQELEIFICSFSSSWLQMFVAEAVFKKLCLQSSGSVSSEPLSLQKMVYSY
LPALGKTGVLGSGKIQVSKKIGQRPCFDSQRTLLMLNGTKQKQVEGLPELLDLNLAKCSSSLKKLKKKSEGELSC
SKENCPSVVKKMNFHKTNLKGETALHRACINNQVEKLILLLSLPGIDINVKDNAGWTPLHEACNYGNTVCVQEIL
QRCPEVDLLTQVDGVTPLHDALSNGHVEIGKLLLQHGGPVLLQQRNAKGELPLDYVVSPQIKEELFAITKIEDTV
ENFHAQAEKHFHYQQLEFGSFLLSRMLLNFCSIFDLSSEFILASKGLTHLNELLMACKSHKETTSVHTDWLLDLY
AGNIKTLQKLPHILKELPENLKVCPGVHTEALMITLEMMCRSVMEFS

FIGURE 4305

GGGGATTTGGCTAGAAGGCTGGGCCGGCAGCGGTTGTGAGGAGTTAGCTCGCGGCATTGCAGGCTCTGAGAGGAG
GGGACCCGGTTCCCGGGTGAGTGTCCAGGCATGCCAGCGGAACGGCCCGCGGGCAGCGGCGGCTCGGAGGCTCCA
GCAATGGTTGAACAACTGGACACTGCTGTGATTACCCCGGCCATGCTAGAAGAGGAAGAACAGCTTGAAGCTGCT
GGACTAGAGAGAGAGCGGAAGATGCTGGAAAAGGCTCGCATGTCTTGGGATAGAGAGTCGACAGAAATTCGGTAC
CGTAGACTTCAACATTTGCTTGAAAAAAGCAATATCTACTCCAAATTTTTATTGACGAAAATGGAACAGCAACAA
TTAGAGGAACAGAAGAAGAAAGAAAAATTGGAGAGAAAAAAGGAGTCTTTAAAAGTTAAAAAGGGTAAAAATTCA
ATTGATGCAAGTGAAGAGAAGCCAGTTATGAGGAAAAAAAGAGGAAGAGAAGATGAATCATACAATATTTCAGAG
GTCATGTCAAAAGAGGAAATTTTGTCTGTGGCTAAAAAAAATAAAAAGGAGAATGAGGATGAAAACTCCTCCTCT
ACTAATCTCTGTGTGGAAGATCTTCAGAAAAATAAAGATTCGAATAGTATAATTAAAGATAGATTGTCTGAAACG
GTTAGGCAGAATACTAAATTCTTTTTTGACCCAGTCCGGAAGTGTAATGGTCAGCCAGTACCTTTTCAACAACCA
AAGCACTTCACTGGAGGAGTGATGCGATGGTACCAAGTAGAAGGCATGGAATGGCTTAGGATGCTTTGGGAAAAT
GGAATTAATGGCATTTTAGCAGATGAAATGGGATTGGGTAAGACAGTTCAGTGCATTGCTACTATTGCATTGATG
ATTCAGAGAGGAGTACCAGGACCTTTTCTTGTCTGTGGCCCTTTGTCTACACTTCCTAACTGGATGGCTGAATTC
AAAAGATTTACACCAGATATCCCTACAATGTTATATCATGGAACCCAGGAGGAACGTCAAAAATTGGTAAGAAAT
ATTTACAAACGGAAAGGGACTTTGCAGATTCATCCTGTGGTAATCACGTCATTTGAAATAGCCATGAGAGACCGA
AATGCGTTACAGCATTGCTATTGGAAATACTTAATAGTAGATGAAGGACACAGGATTAAGAATATGAAGTGCCGT
CTAATCAGGGAGTTAAAACGATTCAATGCTGATAACAAACTTCTTTTGACTGGTACTCCCTTGCAAAACAATTTA
TCAGAACTTTGGTCATTGCTAAACTTTTTGTTGCCAGATGTATTTGATGACTTGAAAAGCTTTGAGTCTTGGTTT
GACATCACTAGTCTTTCTGAAACTGCTGAAGATATTATTGCTAAAGAAAGAGAACAGAATGTATTGCATATGCTG
CACCAGATTTTAACACCTTTCTTATTGAGAAGACTGAAGTCTGATGTTGCTCTTGAAGTTCCTCCTAAACGAGAA
GTAGTCGTTTATGCTCCACTTTCAAAGAAGCAGGAGATCTTTTATACAGCCATTGTGAACCGTACAATTGCAAAC
ATGTTTGGATCCAGTGAGAAAGAAACAATTGAGTTAAGTCCTACTGGTCGACCAAAACGACGAACTAGAAAATCA
ATAAATTACAGCAAAATAGATGATTTCCCTAATGAATTGGAAAAACTGATCAGTCAAATACAGCCAGAGGTGGAC
CGAGAAAGAGCTGTTGTGGAAGTGAATATCCCTGTAGAATCTGAAGTTAATCTGAAGCTGCAGAATATAATGATG
CTACTTCGTAAATGTTGTAATCATCCATATTTGATTGAATATCCTATAGACCCTGTTACACAAGAATTTAAGATC
GATGAAGAATTGGTAACAAATTCTGGGAAGTTCTTGATTTTGGATCGAATGCTGCCAGAACTAAAAAAAAGAGGT
CACAAGGTGCTGCTTTTTTCACAAATGACAAGCATGTTGGACATTTTGATGGATTACTGCCATCTCAGAGATTTC
AACTTCAGCAGGCTTGATGGGTCCATGTCTTACTCAGAGAGAGAAAAAAACATGCACAGCTTCAACACGGATCCA
GAGGTGTTTATCTTCTTAGTGAGTACACGAGCTGGTGGCCTGGGCATTAATCTGACTGCAGCAGATACAGTTATC
ATTTATGATAGTGATTGGAACCCCCAGTCGGATCTTCAGGCCCAGGATAGATGTCATAGAATTGGTCAGACAAAG
CCAGTTGTTGTTTATCGCCTTGTTACAGCAAATACTATCGATCAGAAAATTGTGGAAAGAGCAGCTGCTAAAAGG
AAACTGGAAAAGTTGATCATCCATAAAAATCATTTCAAAGGTGGTCAGTCTGGATTAAATCTGTCTAAGAATTTC
TTAGATCCTAAGGAATTAATGGAATTATTAAAATCTAGAGATTATGAAAGGGAAATAAAAGGATCAAGAGAGAAG
GTCATTAGTGATAAAGATCTAGAGTTGTTGTTAGATCGAAGTGATCTTATTGATCAAATGAATGCTTCAGGACCA
ATTAAAGAGAAGATGGGGATATTCAAGATATTAGAAAATTCTGAAGATTCCAGTCCTGAATGTTTGTTTTAAAGT
GGAGCTCAAGAATAGCTTTTAAAAGTTCTTATTTACATCTAGTGATTTCCCTGTATTGGGTTTGAAATACTGATT
GTCCACTTCACCTTTTTTATTATATCAGTTGACATGTAACTAGTACCATGCGTACTTAAATAGATGGTAATTTTC
TGAGCCTTACCAAGAACAAAGAAGTATCCATATTAAGTTTAGATTTTCAGTTAATTTTTGAGACTGAGTAGTATT
CTTGGATACAGGCTGATGTGTACTTAACCACTTCCAGATTTATACAGTCTTCCTGTGGAAGTTTAGTAAATGTCT
TTTTCCCTCCTTTCTTCTAGTAATGCAGTTCATGGGCTTTAGGTACTTCAGTTATGAAGTAGGCTTTTCATGGGG
AGAGATTGGGATTATGCTTTCTGTTGTTTAAGAAACTGTTTGATTTTAGAGTCTATTTCTATGAGATAGTTTACC
AAATAAATGTTCCTTATAAGATGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAA

FIGURE 4306

MPAERPAGSGGSEAPAMVEQLDTAVITPAMLEEEEQLEAAGLERERKMLEKARMSWDRESTEIRYRRLQHLLEKS
NIYSKFLLTKMEQQQLEEQKKKEKLERKKESLKVKKGKNSIDASEEKPVMRKKRGREDESYNISEVMSKEEILSV
AKKNKKENEDENSSSTNLCVEDLQKNKDSNSIIKDRLSETVRQNTKFFFDPVRKCNGQPVPFQQPKHFTGGVMRW
YQVEGMEWLRMLWENGINGILADEMGLGKTVQCIATIALMIQRGVPGPFLVCGPLSTLPNWMAEFKRFTPDIPTM
LYHGTQEERQKLVRNIYKRKGTLQIHPVVITSFEIAMRDRNALQHCYWKYLIVDEGHRIKNMKCRLIRELKRFNA
DNKLLLTGTPLQNNLSELWSLLNFLLPDVFDDLKSFESWFDITSLSETAEDIIAKEREQNVLHMLHQILTPFLLR
RLKSDVALEVPPKREVVVYAPLSKKQEIFYTAIVNRTIANMFGSSEKETIELSPTGRPKRRTRKSINYSKIDDFP
NELEKLISQIQPEVDRERAVVEVNIPVESEVNLKLQNIMMLLRKCCNHPYLIEYPIDPVTQEFKIDEELVTNSGK
FLILDRMLPELKKRGHKVLLFSQMTSMLDILMDYCHLRDFNFSRLDGSMSYSEREKNMHSFNTDPEVFIFLVSTR
AGGLGINLTAADTVIIYDSDWNPQSDLQAQDRCHRIGQTKPVVVYRLVTANTIDQKIVERAAAKRKLEKLIIHKN
HFKGGQSGLNLSKNFLDPKELMELLKSRDYEREIKGSREKVISDKDLELLLDRSDLIDQMNASGPIKEKMGIFKI
LENSEDSSPECLF

FIGURE 4307A

GAAGGCGTCCCGGCATCGGCCAAGATTCTACATTGCTCATCTGGGCATCTGAGCCTCCTTCGAAGTTTCCTGTCA
CAACTGTCCTCTTGACAGCATGGATGAGGAGGAAGACAATCTGTCTCTGCTGACCGCACTGCTGGAAGAAAATGA
GTCAGCCTTGGATTGTAATTCAGAAGAAAATAACTTCTTGACGCGGGAAAATGGCGAGCCCGACGCATTTGATGA
GCTCTTTGATGCCGACGGCGACGGTGAATCTTATACAGAAGAGGCTGATGATGGAGAAACAGGAGAGACAAGAGA
CGAAAAGGAAAATCTGGCCACTCTCTTTGGAGATATGGAGGACTTAACAGATGAAGAAGAAGTTCCCGCATCACA
GTCAACTGAAAATAGGGTCCTCCCTGCTCCTGCCCCCAGGCGAGAGAAAACGAATGAAGAGTTGCAAGAGGAATT
AAGGAATTTGCAAGAGCAAATGAAGGCCTTACAAGAGCAGCTAAAAGTAACAACAATTAAACAGACAGCAAGCCC
AGCCCGTCTGCAAAAATCCCCTGAGAAGTCTCCCCGGCCACCTCTTAAGGAGAGGAGAGTTCAGAGAATTCAGGA
GTCAACATGCTTTTCTGCGGAGCTTGATGTCCCTGCGCTACCAAGAACCAAGAGGGTGGCTCGAACACCAAAGCC
TTCACCTCCAGATCCCAAAAGCTCATCTTCAAGGATGACAAGTGCACCCTCCCAACCCCTACAGACGATTTCTCG
GAACAAACCTAGTGGGATAACTAGAGGTCAAATTGTGGGGACCCCAGGAAGTTCTGGGGAAACGACTCAACCCAT
CTGTGTGGAAGCCTTCTCTGGTCTGCGGCTCAGGCGGCCTCGAGTATCCTCCACAGAAATGAACAAGAAAATGAC
CGGCCGAAAACTGATCAGACTGTCTCAGATCAAGGAAAAGATGGCCAGAGAGAAGCTGGAAGAAATAGATTGGGT
GACATTTGGGGTTATATTGAAGAAGGTTACGCCACAGAGTGTGAATAGTGGAAAAACCTTCAGCATATGGAAACT
GAATGATCTTCGTGACCTGACACAATGTGTGTCCTTGTTCTTATTTGGAGAAGTTCACAAAGCGCTCTGGAAGAC
GGAGCAGGGGACTGTCGTAGGGATCCTCAATGCCAACCCCATGAAGCCCAAGGATGGTTCAGAGGAGGTGTGTTT
ATCTATCGATCATCCTCAGAAGGTCTTAATTATGGGTGAAGCTCTTGACCTGGGAACCTGTAAAGCCAAGAAGAA
GAATGGAGAGCCGTGCACGCAGACTGTGAATTTGCGTGACTGTGAGTACTGTCAGTACCATGTCCAGGCTCAGTA
CAAGAAGCTCAGTGCAAAGCGTGCGGATCTGCAGTCCACCTTCTCTGGAGGACGAATTCCAAAGAAGTTTGCCCG
CAGAGGCACCAGCCTCAAAGAACGGCTGTGCCAAGATGGCTTTTACTACGGAGGGGTTTCTTCTGCCTCGTATGC
AGCTTCAATTGCAGCAGCTGTGGCTCCTAAGAAGAAGATTCAAACCACTCTGAGTAATCTGGTTGTTAAGGGCAC
AAACTTGATCATCCAGGAAACACGGCAAAAACTCGGAATACCCCAGAAGAGCCTGTCTTGCTCTGAGGAGTTCAA
GGAACTGATGGACCTGCCGACGTGTGGAGCCAGGAACTTAAAACAACATTTAGCCAAAGCCTCAGCTTCAGGGAT
TATGGGGAGCCCAAAACCAGCCATCAAGTCCATCTCGGCCTCAGCACTCTTGAAGCAACAGAAGCAGCGGATGTT
GGAGATGAGGAGAAGGAAATCAGAAGAAATACAGAAGCGATTTCTGCAGAGCTCAAGTGAAGTTGAGAGCCCAGC
TGTGCCATCTTCATCAAGACAGCCCCCTGCTCAGCCTCCACGGACAGGATCCGAGTTCCCCAGGCTGGAGGGAGC
CCCGGCCACAATGACGCCCAAGCTGGGGCGAGGTGTCTTGGAAGGAGATGATGTTCTCTTTTATGATGAGTCACC
ACCACCAAGACCAAAACTGAGTGCTTTAGCAGAAGCCAAAAAGTTAGCTGCTATCACCAAATTAAGGGCAAAAGG
CCAGGTTCTTACAAAAACAAACCCAAACAGCATTAAGAAGAAACAAAAGGACCCTCAGGACATCCTGGAGGTGAA
GGAACGTGTAGAAAAAAACACCATGTTTTCTTCTCAAGCTGAGGATGAATTGGAGCCTGCCAGGAAAAAAAGGAG
AGAACAACTTGCCTATCTGGAATCTGAGGAATTTCAGAAAATCCTAAAAGCAAAATCAAAACACACAGGCATCCT
GAAAGAGGCCGAGGCTGAGATGCAGGAGCGCTACTTTGAGCCACTGGTGAAAAAAGAACAAATGGAAGAAAAGAT
GAGAAACATCAGAGAAGTGAAGTGCCGTGTCGTGACATGCAAGACGTGCGCCTATACCCACTTCAAGCTGCTGGA
GACCTGCGTCAGTGAGCAGCATGAATACCACTGGCATGATGGTGTGAAGAGGTTTTTCAAATGTCCCTGTGGAAA
CAGAAGCATCTCCTTGGACAGACTCCCGAACAAGCACTGCAGTAACTGTGGCCTCTACAAATGGGAACGGGACGG
AATGCTAAAGGTATGCCATTTGCGTACTAATTTTTGACTCCTTTTAGTGACCCATGCTAATAATGTGGAACCATC
TCCTATTAAAATATTTTCATTTTTCTAGGAAAAGACTGGTCCAAAGATAGGAGGAGAAACTCTGTTACCAAGAGG
AGAAGAACATGCTAAATTTCTGAACAGCCTTAAATAACCCGAACTTCAGACATTTTCCCACAGACTTCCTGGCCT
CCTGTGACTCTGGAAAGCAAAGGATTGGCTGTGTATTGTCCATTGATTCCTGATTGACGCCGTCAAAAACAAATG
CTTGTTAAGCCCATAAGCTTTGCCTGCTTACTTTCTGCCATTGGGTTGGTTTGATACCACATTTAACATTGACAT
TTAAGTGGAAAACCAAGTTATCATTGTCTTTTCTAAGCTCAGTGTGGATGATTGCATTACTTCATTCACTGAAGT
TTTTGCCCAAAAATTGGAAGGTAAACAGAGAGCTATGTTTCTGTATCTTTTGGTTATAGAGTGTTCACTTCTTTA
TCATAACAAAATTCTAGTGTTTATACGAACACCCAGAGGCAAAAGAATTTGGCTTAATTCTCACTCCAGGTAAGT
AGCTTAACTTCTGGGCTTCAGTTTTCTCATCTGTAAAATCAGGAAGATTGGACTAAGTGATCCTGAAATGTATTT
TTTAGCACTGGATTTCTACAAATAATAAAACTTTCCCATCTAGATAATGATGATCACATAGTCTTGATGTACGGA
CATTAAAAGCCAGATTTCTTCATTCAATTCTGTTATCTCTGTTTTACTCTTTGAAATTGATCAAGCCACTGAATC
ACTTTGCATTTCAGTTTATATATAGAGAGAGAAAGAAGGCTGTCTGCTCTTACATTATTGTGGAGCCCTGTGATA
GAAATATGTAAAATCTCATATTATTTTTTTTTTAATTTTTTTATTTTTTATGACAGGGTCTCACTATGTCACCCT

FIGURE 4307B

GGCTGGAGTGCAGTAGTGCGATCGCGGCACACTGCAGCCTTGGCTTCCCTGGGCTCAAGCAGTCCTCCCACCTCA
GTCTCCCAAATAGCTAGGACTACAGGCGTGCGTGACCAAGCCCAGCTAATTTTTGCATTTTTTGTAGAGATGGGG
TTTTGCCATGTTGCTCAGGCTGGTCTCAAACTCCTGAGCACTAGCAATCCACCCACCTCTGTTTCCAAAAAAAAA
AAAAAAATGAAAGGTCAACCCCTATGCAAATTACCACAGCAAAGGTTTCATTCAGGAGATTCTTCCATCTGGGCA
ACCTGGTTTTCCAAATATCATTTGACCTAAGTGAATGTTGATACTAGCTAAAGATTGGGTAAATTGGTTGAATTA
TTGTATTGAAGCTTGAGCTGTAGCTAAAAGTAATTTAGGTTTCCCCTAAGATGTTATTATGTTAGGGACATAACA
CTTTTGGGAGGTTGTTGTGGGAGATGGTTGATTTAGGTTTTCAAAAGCTAGAAATAAAATTTACATGCCTTAGAT
TTCATAAAATTCTGCTCTAATTGGGTGGAAGGTGCTGTATCTAACTTGTGTTCCTCCTAAGGTTATGTCCTAATA
ACTATTCTTTTAGGAGTATACTTCTACTTTATAGAAGGTTGCTTTTCTTTTTAATTTTTTCTAACAAAGAAAAGA
ATAAAGTATTTATTAATAAGAACCAGAAAGCACTTGAAACTGATGTTTTTAATGGCTCATTTAGGGTAGATTTAT
TTATCTCATTAACTTAAAACAGCTATGTGTATGAAATAGGTCACAACAGAACTTGAACACCAGGTTGGTGTCTGA
GCAATCCCTTTCTTATGGGAAAAACAATGTTCTTGTTTGAACAGAGGGTATCATTGCAGTCAGTATTCACGTGTA
TATTGTTATATAAGTTGTATAATATGCTTGTAAAGGCTGAGGGTGAGCTGTATCTGGATGCCTTTTTACAATTTG
ATTTTAACTTTTAAAATAAATTTAAAACATAAAAAAAAAAAAAA

FIGURE 4308

MDEEEDNLSLLTALLEENESALDCNSEENNFLTRENGEPDAFDELFDADGDGESYTEEADDGETGETRDEKENLA
TLFGDMEDLTDEEEVPASQSTENRVLPAPAPRREKTNEELQEELRNLQEQMKALQEQLKVTTIKQTASPARLQKS
PEKSPRPPLKERRVQRIQESTCFSAELDVPALPRTKRVARTPKPSPPDPKSSSSRMTSAPSQPLQTISRNKPSGI
TRGQIVGTPGSSGETTQPICVEAFSGLRLRRPRVSSTEMNKKMTGRKLIRLSQIKEKMAREKLEEIDWVTFGVIL
KKVTPQSVNSGKTFSIWKLNDLRDLTQCVSLFLFGEVHKALWKTEQGTVVGILNANPMKPKDGSEEVCLSIDHPQ
KVLIMGEALDLGTCKAKKKNGEPCTQTVNLRDCEYCQYHVQAQYKKLSAKRADLQSTFSGGRIPKKFARRGTSLK
ERLCQDGFYYGGVSSASYAASIAAAVAPKKKIQTTLSNLVVKGTNLIIQETRQKLGIPQKSLSCSEEFKELMDLP
TCGARNLKQHLAKASASGIMGSPKPAIKSISASALLKQQKQRMLEMRRRKSEEIQKRFLQSSSEVESPAVPSSSR
QPPAQPPRTGSEFPRLEGAPATMTPKLGRGVLEGDDVLFYDESPPPRPKLSALAEAKKLAAITKLRAKGQVLTKT
NPNSIKKKQKDPQDILEVKERVEKNTMFSSQAEDELEPARKKRREQLAYLESEEFQKILKAKSKHTGILKEAEAE
MQERYFEPLVKKEQMEEKMRNIREVKCRVVTCKTCAYTHFKLLETCVSEQHEYHWHDGVKRFFKCPCGNRSISLD
RLPNKHCSNCGLYKWERDGMLKVCHLRTNF

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FIGURE 4309

AGTTCCCACGGAAAAACTACCATCTCCCCTGCCCACCATGGCAGACGAAATTGATTTCACTACTGGAGATGCCGG
GGCTTCCAGCACTTACCCTATGCAGTGCTCGGCCTTGCGCAAAAACGGCTTCGTGGTGCTCAAAGGACGACCATG
CAAAATAGTGGAGATGTCAACTTCCAAAACTGGAAAGCATGGTCATGCCAAGGTTCACCTTGTTGGAATTGATAT
TTTCACGGGCAAAAAATATGAAGATATTTGTCCTTCTACTCACAACATGGATGTTCCAAATATTAAGAGAAATGA
TTATCAACTGATATGCATTCAAGATGGTTACCTTTCCCTGCTGACAGAAACTGGTGAAGTTCGTGAGGATCTTAA
ACTGCCAGAAGGTGAACTAGGCAAAGAAATAGAGGGAAAATACAATGCAGGTGAAGATGTACAGGTGTCTGTCAT
GTGTGCAATGAGTGAAGAATATGCTGTAGCCATAAAACCCTGCAAATAAACGGAAACATCAGGCATGAACACTGT
TTATGTCTGAATCAACTGCAAAAATAATTTGGTTCTAAGTTGTCACCAAAGCTATAGCCTTCATAAGCAACCTCA
TTTCTTTTTTTAATTGTTTTCAGATTGTGCTGGGTTAGTTTTGCAAGCAATTGATAATTTTTAAAAAATTATCAA
TATGTATAATTTTTTTTGAATTTTGTAGATATGTTTCCTATAATATTCCTGTGGTTTTCAGTATGTCAGTCCAAG
AAACAAACAAGATAGCTTCAGCAGATGTGATTTGTCTGAGCAAATCATTCCTGTGTTTTAGTTAGATGATAAACC
AGGGTTTTAAATCAAACAATGTAGCATAAAGTGGTATTGAAGTACCATATTTAAGTTGAACTGCTCTGCATTAAT
TACAGATTTAATATAAAATGAACTGATTATATATTGGAATTGTTGCACTTTCAGCCTGTGTAGGGCAAACACAAA
TCCTTAAACAAAAATCATGTTATCAAAAACTGTCAGTTATTTTGGTGGCCACATGCAACCATGTGATTACTTTGG
TCATACTATTTACCAAATTGTTGGCAAACTTGATGTAACCTTATATGGTGGTTTTAGTCCCTTCTTATGGTTGGC
AGAAGGGCACTGAACTGTTGGGTGAAAGTTAGTTAGCAAGTAAGATTATAAGGAAGACACAAAAGACAGTGGCAA
AGAGGGTTGATTAAATCTATAAGTTTTTATGTGAGGACTTTGTAAGTCAGCATAAAAATGAAAAGTTGTTTCTCA
GTTGTTTTTGCTTTTAACTTTGCCCCCAACGTTTAAAGGGAGTGATCTGCTTTACATGATACTATGCAATGCTTG
TTTTCCAACTATGTTGAATAAATAGTAATATTTATCAGTAAATACTCCTTTCCAACTTCCTTTTTTTTTTTTTTT
TTTGAGGCATGAGAATTGCTTGAACCCGGGAAGTGAAGGTTGCCGTGAGCTGAGATCACACCACTGCCATAAACA
TGACAGGCTTTTGGACTTTGTATTACCTGTATGTTTTATAATGGATCATGCATAATTTCTCAGGAGAATAAAATG
AGAATTCATATATACGTTCATCTTTCAAGTCAGAGCAATGAGTTGGGAAAAGAGGTGGCATTTCTGATCGGATAA
TGGAATACTCTCATTTATTTTATGACATTCTCTGTCTACTCAGATCATAGTGAAAACTGGAAACAAAAAAAAAAA
CAGCCTCTTCTTGGAAAGTGACAGCAGAAGGTGGCATGGAGCTTGTGTCCTTGGACAACAAATCTGGATATACTA
GGATTAATTATCAGAAGACAGCTCAGGCCAAGTTTTGATCGTTCCATACAGTACCTTGTTTATCTGCTTCTTAAA
GAATCAGCCGAGACACCATAAAAGAAATAGGCTTTTTGTGCCTTTTGCTGTTAATGTTTAATTTACAAACTGTTT
TGGTAAATCTCTTAATGTAAGTAGCTATTTGACTTTGGAATTTTGCATTCGAGGTATACTGTCATTTCTTGAAAT
CTTTTTCTCGTTTAGTTGCTCTGTGGGAAATGTGAGGAAGCCTAAGTTTGTATTTGTAAATTTCTTATGCCATCC
TCTAGTCAAATTTTTTTTCATTGTTTAAAAATACGGAAGTGTTCCAATATAATTTTTTCCTGTACTGGATGGCTA
GGATTCTAGAGAATTGATTATAAAATATTTTCAATACATCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4310

MADEIDFTTGDAGASSTYPMQCSALRKNGFVVLKGRPCKIVEMSTSKTGKHGHAKVHLVGIDIFTGKKYEDICPS
THNMDVPNIKRNDYQLICIQDGYLSLLTETGEVREDLKLPEGELGKEIEGKYNAGEDVQVSVMCAMSEEYAVAIK
PCK

FIGURE 4311

GGGGGCAGAGCTGGCGCTCTAGCCCACGGAGTTGGTTAACTCCTCTCACCGGCCCCTGGAAAGGGTTCCAAGTCC
TTTAGTACCCGACGCTGTCTGGGAATTCCGGGCGTTTCGGCTCCTTGGTCGCAGAGGCAGGAGGCACCCGACCGC
ATGTCTGTCATGGACCTCGCCAATACTTGCTCCAGCTTTCAGTCGGACCTGGATTTCTGTTCAGATTGCGGCTCG
GTCCTGCCTCTGCCCGGGGCTCAGGATACGGTCACCTGTATTCGCTGTGGCTTCAACATCAACGTTCGGGACTTT
GAGGGGAAGGTTGTGAAGACTTCGGTTGTGTTCCACCAACTGGGGACAGCCATGCCTATGTCGGTGGAGGAAGGG
CCTGAGTGCCAGGGACCTGTGGTTGACAGGCGCTGCCCTCGATGTGGTCATGAAGGAATGGCATACCACACCAGA
CAGATGCGTTCAGCCGATGAAGGGCAAACTGTCTTCTACACCTGTACCAACTGCAAGTTCCAGGAGAAGGAAGAC
TCT**TGA**CCTTTTTTCCTGGGCAACTCTACAGTCCCTCCCTCCTTTCGGAAGGTGAAGGATACTGGGTTTTTAGAT
GCCTTGTCCATCCTGTCTGGTTGCAATGTTTTGCTCCCAGAAGAGAATCAGATCATCATGTGGGGATTACCATTG
TTCCTGGAGTACTCCTACCCTTAGTTGAATTTCCTTATTAAAGTTATATTTTTCTATAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAA

FIGURE 4312

MSVMDLANTCSSFQSDLDFCSDCGSVLPLPGAQDTVTCIRCGFNINVRDFEGKVVKTSVVFHQLGTAMPMSVEEG
PECQGPVVDRRCPRCGHEGMAYHTRQMRSADEGQTVFYTCTNCKFQEKEDS

FIGURE 4313

TCGACTACTACTACTAAATTCGCGGCCGCGTCGACCTGGACTTCTCTGGACCACAGTCCTCTGCCAGACCCCTGC
CAGACCCCAGTCCACCATGATCCATCTGGGTCACATCCTCTTCCTGCTTTTGCTCCCAGTGGCTGCAGCTCAGAC
GACTCCAGGAGAGAGATCATCACTCCCTGCCTTTTACCCTGGCACTTCAGGCTCTTGTTCCGGATGTGGGTCCCT
CTCTCTGCCGCTCCTGGCAGGCCTCGTGGCTGCTGATGCGGTGGCATCGCTGCTCATCGTGGGGGCGGTGTTCCT
GTGCGCACGCCCACGCCGCAGCCCCGCCCAAGAAGATGGCAAAGTCTACATCAACATGCCAGGCAGGGGCTGACC
CTCCTGCAGCTTGGACCTTTGACTTCTGACCCTCTCATCCTGGATGGTGTGTGGTGGCACAGGAACCCCCGCCCC
AACTTTTGGATTGTAATAAAACAATTGAAACACCAAAAGAAAAAAAAAAAAAAA

FIGURE 4314

MIHLGHILFLLLLPVAAAQTTPGERSSLPAFYPGTSGSCSGCGSLSLPLLAGLVAADAVASLLIVGAVFLCARPR
RSPAQEDGKVYINMPGRG

FIGURE 4315

CGGCCCAGCTGAGATATGGCAAGCCCCGTTTCCCGCAGGCTCTGTTCCAGGCTGGTATGGGGAGTGATTCTATTT
GTGTATCTGGTCATAAGAGCTTTGAGACTATGGAGGACAGCCAAACTACAAGTGACCCTAAAAAAATACAGCGTT
CATTTGGAAGATATGGCCACAAACAGCCGAGCTTTTACTAACCTCGTGAGAAAAGCTTTACGTCTCATTCAAGAA
ACCGAAGTGATTTCCAGAGGATTTACACTGGTCAGTGCTGCTTGCCCATTTAATAAAGCTGGACAGCATCCAAGT
CAGCATCTCATCGGTCTTCGGAAAGCTGTCTACCGAACTCTAAGAGCCAACTTCCAAGCAGCAAGGCTAGCTACC
CTATATATGCTGAAAAACTACCCCCTGAACTCTGAGAGTGACAATGTAACCAACTACATCTGTGTGGTGCCTTTT
AAAGAGCTGGGCCTTGGACTTAGTGAAGAGCAGATTTCAGAAGAGGAAGCACATAACTTTACAGATGGCTTCAGC
CTGCCTGCATTGAAGGTTTTGTTCCAACTCTGGGTGGCACAGAGTTCAGAGTTCTTCAGACGGTTAGCCCTATTA
CTTTCTACAGCCAATTCACCTCCTGGGCCCTTACTTACTCCAGCACTTCTGCCTCATCGTATCTTATCTGATGTG
ACTCAAGGTCTACCTCATGCTCATTCTGCCTGTTTGGAAGAGCTTAAGCGCAGCTATGAGTTCTATCGGTACTTT
GAAACTCAGCACCAGTCAGTACCGCAGTGTTTATCCAAAACTCAACAGAAGTCAAGAGAACTGAATAATGTTCAC
ACAGCAGTGCGTAGCTTGCAGCTCCATCTGAAAGCATTACTGAATGAGGTAATAATTCTTGAAGATGAACTTGAA
AAGCTTGTTTGTACTAAAGAAACACAAGAACTAGTGTCAGAGGCTTATCCCATCCTAGAACAGAAATTAAAGTTG
ATTCAGCCCCACGTTCAAGCAAGCAACAATTGCTGGGAAGAGGCCATTTCTCAGATCGACAAACTGCTACGAAGA
AATACAGATAAAAAAGGCAAGCCTGAAATAGCATGTGAAAACCCACATTGTACAGTAGTACCTTTGAAGCAGCCT
ACTCTACACATTGCAGACAAAGATCCAATCCCAGAGGAGCAGGAATTAGAAGCTTATGTAGATGATATAGATATT
GATAGTGATTTCAGAAAGGATGATTTTTATTACTTGTCTCAAGAAGACAAAGAGAGACAGAAGCGTGAGCATGAA
GAATCCAAGAGGGTGCTCCAAGAATTAAAATCTGTGCTGGGATTTAAAGCTTCAGAGGCAGAAAGGCAGAAGTGG
AAGCAACTTCTATTTAGTGATCATGGGGTAAAGTCCGCATGGAATTAGAGGGGGAAAGTCTGCACTGGAACCTGC
TGTGGCCATTTTTTTTCTGTTGTTGCTGCTTCTCTAGTGGAGTTACTGCAGCTTAGGGATGGTTCCTGGAAGTGG
ACACATTTTACAAAAACGTTTTTTAAATACACGCCAGCTCTTCGAGAAGCACTTTTTTCCTTCCGTCATGCTTCA
TACTATATTGTATTGTACTAACCCCTCATGCTGGGATGAGCGACTGCCTAGCAAGCAACCCACTGCCTACTAACA
TCAAGAGGGGCTAAATAAAACTGCATTTTCCTTGCAAGGGACAACTTCTACCGTATGAATATATATTATATTTAT
GTATTATATTTTGTACAATAGTTGATCTTGAATGCAGACTTCATTTGTATTTTTCGTGGTACTACAAAATGTGTA
GAAGTTATGGCTTTTCTTTCATTAGGGTCTTGTTAGGTGGTTGGCAAGTAAGTTAAATTGTATGTTGCATTTTTT
TCCATGCTGTTTTAACTTGTAAATATATATGTATACATGTGGAAGATATTATTATTATCTAGATTACTTTAAGCC
TTTTATCTGATGTATTATCAGTGAAAACCATGCTGCTTATTCCCTAATACAATGGTTCTCAAACTTTAGTGTGTA
TCAGAATCAAGATGAGGGCTTGTAAAATATAGCTGGTCCCAACTCCCAGAGTTTCCATTTCAGGAGGTCTGGGAT
CAGGCCCAAGAATTTGCATTTTTAACAAATTCCTAGGTGATAACTGATAATGTTGGTTCAGGGAACACACTTTCA
GAACCACTGCTTTAATATTTTAAATAAGATAATATGTGAGGTGTCATAAAAACCTTCATCAAATCCCTATCTCAT
TTCATTTCTTAGGCATTTTCTCTCTTATAAAGTTTCCTGGATTTATAAATTTTCATTGATTTTACTAGAAAGTTT
TATTTAGCTTTTATTTATTTATTGTTCTTTTTAAGAAAAAAACTGAGAGTTTGAATTAAAAGTTTAAATCATTGC
TAGGTCCTTAGTTATTTTTTTTCTTTTTTCTTTTTTTTTATTTGAAGCCGTGTTGAAATCCTTGTCTCCTGTAGA
CCCAGTGGAACCCATAAGTAATTCAGAACCATCAATGAATTCAGATATGGGAAAAGTCAGTAAAAATGATACTGA
AGAGGAAAGTAATAAXTCCGCCACAACAGACAATGAAATAAGTAGGACTGAGTATTTATGTGAAAACTCTCTAGA
AGGTAAAAATAAAGATAATTCTTCAAATGAAGTCTTCCCCCAAGGAGCAGAAGAAAGAATGTGTTACCAATGTGA
GAGTGAAGATGAACCACAAGCAGATGGAAGTGGTCTGACCACTGCCCCTCCAACTCCCAGGGACTCATTACAGCC
CTCCATTAAGCAGAGGCTGGCACGGCTACAGCTGTCACCAGATTTTACCTTCACTGCTGGCCTTGCTGCAGAAGT
GGCTGCTAGATCTCTCTCCTTTACCACCATGCAGGAACAGACTTTTGGTGATGAGGAGGAAGAACAAATAATAGA
AGAAAATAAAAATGAGATAGAAGAAAAGTAAGAACCAAGATTCATATGAAGTGATATTAGATTGTTCCTTTTACA
AAAGTGTTTAGCTTCAAGACTGGAAAGGGAATATGAGTGTAAGTTTACTATATGTAAAGCTAAGATGTGGATTTA
CAGGAAGAACCCTGGTTTGAATAACTGATCTGAAATTAGTAGTTACCTGTAAATGGCAGATCTTTTAGGAAAATA
AGAGAAAGGTAAGGGCTCTTTTGAATAAACTGCTGTTTTATTTGTGGCACAACTGATCAATCTTGGAAATTCTTT
AAGTATTTTTAATAAGAAATGAATTATCATTTCTTGCCAGAATTTGCTACCTTAAGGTGATTGGGAAAATTCTGT
TGCAAGAACATTAACATTTAGTATGACTCCTTTTTACTGTATTCTTGCAGTTAATAACTGCAGCTATTATGTTAA
TAACAAGTTGTTTGTATTTTATTTTTGTTTATACCAGTCTTAAAGATCCAGGTTCTGAATAAAAAAATTAATTGA
TACAAAAAAAAA

FIGURE 4316

MASPVSRRLCSRLVWGVILFVYLVIRALRLWRTAKLQVTLKKYSVHLEDMATNSRAFTNLVRKALRLIQETEVIS
RGFTLVSAACPFNKAGQHPSQHLIGLRKAVYRTLRANFQAARLATLYMLKNYPLNSESDNVTNYICVVPFKELGL
GLSEEQISEEEAHNFTDGFSLPALKVLFQLWVAQSSEFFRRLALLLSTANSPPGPLLTPALLPHRILSDVTQGLP
HAHSACLEELKRSYEFYRYFETQHQSVPQCLSKTQQKSRELNNVHTAVRSLQLHLKALLNEVIILEDELEKLVCT
KETQELVSEAYPILEQKLKLIQPHVQASNNCWEEAISQIDKLLRRNTDKKGKPEIACENPHCTVVPLKQPTLHIA
DKDPIPEEQELEAYVDDIDIDSDFRKDDFYYLSQEDKERQKREHEESKRVLQELKSVLGFKASEAERQKWKQLLF
SDHGVKSAWN

FIGURE 4317

GGCCAGCGGAAGCCCCTGCGCCCGCGCCATGTCAAAGAAAAAAGGACTGAGTGCAGAAGAAAAGAGAACTCGCAT
GATGGAAATATTTTCTGAAACAAAAGATGTATTTCAATTAAAAGACTTGGAGAAGATTGCTCCCAAAGAGAAAGG
CATTACTGCTATGTCAGTAAAAGAAGTCCTTCAAAGCTTAGTTGATGATGGTATGGTTGACTGTGAGAGGATCGG
AACTTCTAATTATTATTGGGCTTTTCCAAGTAAAGCTCTTCATGCAAGGAAACATAAGTTGGAGGTTCTGGAATC
TCAGTTGTCTGAGGGAAGTCAAAAGCATGCAAGCCTACAGAAAAGCATTGAGAAAGCTAAAATTGGCCGATGTGA
AACGGAAGAGCGAACCAGGCTAGCAAAAGAGCTTTCTTCACTTCGAGACCAAAGGGAACAGCTAAAGGCAGAAGT
AGAAAAATACAAAGACTGTGATCCGCAAGTTGTGGAAGAAATACGCCAAGCAAATAAAGTAGCCAAAGAAGCTGC
TAACAGATGGACTGATAACATATTCGCAATAAAATCTTGGGCCAAAAGAAAATTTGGGTTTGAAGAAAATAAAAT
TGATAGAACTTTTGGAATTCCAGAAGACTTTGACTACATAGACTAAAATATTCCATGGTGGTGAAGGATGTACAA
GCTTGTGAATATGTAAATTT

FIGURE 4318

MSKKKGLSAEEKRTRMMEIFSETKDVFQLKDLEKIAPKEKGITAMSVKEVLQSLVDDGMVDCERIGTSNYYWAFP
SKALHARKHKLEVLESQLSEGSQKHASLQKSIEKAKIGRCETEERTRLAKELSSLRDQREQLKAEVEKYKDCDPQ
VVEEIRQANKVAKEAANRWTDNIFAIKSWAKRKFGFEENKIDRTFGIPEDFDYID

FIGURE 4319

TGAGTAGGGGGCCTGCAGTGTGCTGTGACGCCTGGGAAGGGGATTCTAAGCCATTTCCCATCAGCCATTTACTAA
GTAGCCTGGGGATCTTGTTAAAATGCAGATCCTGATAGATTAGGGCTGGGGTGCTGCCCAAGATTCTACATTTCT
AAGAGTCCCTGGATGACGGTGGCATTCACAGACCACAGCTTCTATGTGAGGGAGAGCAGTTGGGTTTCTGTCTGC
CTGCCGCACCTGATCAGTAGTTAGTGCCTGCATGTGTGGCGGCCAGAATTTTACTTGGGGAGACGCTCGGCTCCT
AGCACCCTCTGTGGTAGGGGTTTTCCAGAGTGTGGGCATTACCCCAACTGTCTCTGCAGACGGCTTCCTGCATGT
TTCCCACAAGCGCTCAGATGGCTGAATTGGCAAGTCTGTGGTGCTGCTCTTTGGGGCCACCTCGTTCTTTGCCTT
TCCCTCCCCTTAGCGATGTGTCCCATCCGTTGCCTACAGTCAAGTCAGTCCACATGTTTAGGCTAAGGTGGGCAT
GACCGAGTGGCCTTCCCCCGGGAAGACCAGTGTCGTAACTGGAATTAAGTTGTGGAACATAAGAGTCAAGGCTCG
TGTCTGCTGTGAACTGGAGTTGAGGGAATGTTTGGGGATCCCACCTGGTATCAGTAAGGGAACCATGGCGACGGC
CAGCCTTGCCCATGTGAGGCATTTGCTTTGTCAGGCCTTCTCAGTAGTGGAGAAGGGAGGAAGGAGAATGCAGCT
CTTTCAGTGCTGTCTAGCAGTGCCCAAGAGCCGTGATTGGGCACCTCACTTAACGTCTAACTTCAGATTCACTCT
TGGGCATTCCTGTCTTCCTCTCCAATCTTGAATGGATGTTGGCTTCGATAATGTCATCCTGAAGTTTCTTTGTCC
ACACAGCCCTGGCTGGTTGTTAATAAGCTGTTAATGCAGCCTTGCACTCAGGAAGCCCTGATGTTTAAAGGAACT
GTGTCTTTGTTCTTCCTCTCTTCCCTCTTTCTCTTAGTCCCACTTTATCTCTTCTTTCTCTTCCTCTCCCTCCTC
CTTTTCCCCTCTCCCTCCTACTCTCCCCCTTTCTCTCCTCCTTCTCTAAGAAACCCAGTCTTAATTCCACACAAT
GCATGCACATGCAGTAGCTTCTCTGCTTGAGTGAGCTGGTGTGATTAGGTTTTCTAAACATGCACATTGGCCTTG
CTACTTGTCCTTTTATTCCCTTCCCACAGACCATAAACCAAGAATTATTTTTATTTGTATTATTTTGATTTTTTT
AAAGTAAAATATTAACTTTTCCTCTTTGAAATAAATTCCCATTTGGAACATCAAAAAAAAAAAAAAAAAAAAAA
AAA

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FIGURE 4320

MTEWPSPGKTSVVTGIKLWNIRVKARVCCELELRECLGIPPGISKGTMATASLAHVRHLLCQAFSVVEKGGRRMQ
LFQCCLAVPKSRDWAPHLTSNFRFTLGHSCLPLQS

FIGURE 4321

GGGCCGAGCCATGCAGGCGTCGCGCGTGGACTACATCGCTCCCTGGTGGGTCGTGTGGCTGCACAGCGTCCCGCA
CGTCGGCCTGCGCCTGCAGCCCGTGAACAGCACCTTCAGCCCCGGCGACGAGAGTTACCAGGAGTCGCTGCTGTT
CCTGGGGCTGGTGGCCGCCGTCTGCCTGGGCCTGAACCTCATCTTCCTTGTGGCTTACCTGGTCTGTGCATGCCA
CTGCCGGCGGGACGATGCGGTGCAGACCAAGCAGCACCACTCCTGCTGCATCACCTGGACGGCCGTGGTGGCCGG
GCTCATCTGCTGTGCTGCGGTGGGCGTTGGTTTCTATGGAAACAGCGAGACCAACGATGGGGCGTACCAGCTGAT
GTACTCCTTGGACGATGCCAACCACACCTTCTCTGGGATCGATGCTCTGGTTTCCGGAACTACCCAGAAGATGAA
GGTGGACCTAGAGCAGCACCTGGCCCGGCTCAGTGAGATCTTTGCTGCCCGGGGCGATTACCTGCAGACCCTGAA
GTTCATACAGCAGATGGCGGGCAGCATTGTTGTTCAGCTCTCAGGACTGCCCGTGTGGAGGGAGGTCACCATGGA
GCTGACCAAGCTATCCGACCAGACTGGCTACGTGGAGTACTACAGGTGGCTCTCCTACCTCCTGCTCTTTATCCT
GGACCTGGTCATCTGCCTCATTGCCTGCCTGGGACTGGCCAAGCGCTCCAAGTGTCTCCTGGCCTCGATGCTGTG
CTGTGGGGCACTGAGCCTGCTCCTCAGTTGGGCATCCCTGGCCGCTGATGGCTCTGCGGCAGTGGCCACCAGTGA
CTTCTGTGTGGCTCCTGACACCTTCATCCTGAACGTCACGGAGGGCCAGATCAGCACAGAGGTGACTCGCTACTA
CCTGTATTGCAGCCAGAGTGGAAGCAGCCCCTTCCAGCAGACCCTGACCACCTTCCAGCGCGCACTTACCACCAT
GCAGATCCAGGTCGCGGGGCTGCTGCAGTTTGCCGTGCCCCTCTTCTCCACTGCAGAGGAAGACCTGCTTGCAAT
CCAGCTCCTGCTGAACTCCTCAGAGTCCAGCCTTCACCAGCTGACCGCCATGGTGGACTGCCGAGGGCTGCACAA
GGATTATCTGGACGCTCTTGCTGGCATCTGCTACGACGGCCTCCAGGGCTTGCTGTACCTTGGCCTCTTCTCCTT
CCTGGCCGCCCTCGCCTTCTCCACCATGATCTGTGCAGGGCCAAGGGCCTGGAAGCACTTCACCACCAGAAACAG
AGACTACGATGACATTGATGATGATGACCCCTTTAACCCCCAAGCCTGGCGCATGGCGGCTCACAGTCCCCCGAG
GGGACAGCTTCACAGCTTCTGCAGCTACAGCAGTGGCCTGGGAAGTCAGACCAGCCTGCAGCCCCCGGCCCAGAC
CATCTCCAACGCCCCTGTCTCCGAGTACATGAACCAAGCCATGCTCTTTGGTAGGAACCCACGCTACGAGAACGT
GCCACTAATCGGGAGAGCCTCCCCTCCGCCTACGTACTCTCCCAGCATGAGAGCCACCTACCTGTCTGTGGCGGA
TGAGCACCTGAGGCACTACGGGAATCAGTTTCCAGCCTAACAGACTTTCGGGGGTTCCTGCCTCCTTTTTCCGTT
CTGGTTTTTAATTAGTGCAAATACAAGCTGCGTTTCTTTAATAGAAACCAAAGGCATCTGGAGCCCGAGAGGCCT
CCTGCTGGGCAGAGGAGCAGCTGGGATTCCCGACCAAAGCCCCAGGGGGTGCAGAAGACTCACCACGCGGGCCAG
CCTCTCTCTTTTGCCCTGCTCTCCACACCAGAAATGCCCCCAGGTGCTTGGCTGCCTCAGAGGTACCATCCCTGA
GCTGGCTGCCTGGCCCTGCTCACCCCTACGCCTCGCCCTTGCCAGGAGGGGAGTGGCAGTGAGGAGGGGGCCAGG
TCAGGCACCACCATCAAGAGAGCTGTGTGTTCTCTCTGGTCCCACAACGATGACTCTGCCTCTTGTCAGCCCAGC
CAAGAGCCCAGACGACCCCTCTGTCCTCGTTCCCTGTCCTCGTTCCCTGCAGGTAACATGAGAAGGGCTGATCAG
GAGATGCTCTTTAAGAAGTTCGCACCCCTGCTGACACCAGAACAAGCCAAATCAGAGTTCCAGGGCCAGACAGGC
TCTTCCTGGGCCACAGAGGGGAGGCATCAGGAAAGCTCTGCAGTGGGGGGCTGGTGGCTCCGGGGCTGGGGGATC
ACAGGCTGGTGAACCCCGGTGGGAACAGAGGTGAAAGCCTGCCACATTCCGCCTGTCTCCCTAACCCTCCATTGC
CTCGCCTCTATTCCAGAATCAATGCTGCAGAATGTGTTAGCTGCAGATAGGCATGGTCTCAGGTATGAACAGACA
CTTTGAAACGACTTTAGGTCTTTCTTTTCTCCAGTGTTTTAAACATGTTGATTATCCAAAGAATTGAAACTCCTA
GCACATCCAGTTTTTACAACAGATTTGCAGCTCATTCCTTACCCTGGTTAGGTCACTACTTTTGCAGATTTTGCT
GGCACTGATCTGGAGATCTGCAGATCTGGAGGAGACGGGAAGGAGTCGATTCTTAAATAAGGATCAGTGAGGCAT
CCTGTCCCAAGCTACTGTTTGGTGGGGATCTGGGTTCATCTCACCCACAGAGGGAGGATCTTTAAGAGGAGAAAA
AAGCCAAGAGGGAAAGCCAGAGTTCCCTGTTCTAGGGGACTAGCCAAATGCCTACATCAGCTGTCCCCTCCCTGT
TGTCTCCAAGTAAGTTTGCCAGAAAAGGTTTTAGCAAAGTGCTACAACTGTGTCTTTATAGGAGGATAGGCCTCT
GCCCTGCCCCACCCCCACCACCTGTCCCCACCCAGTGTCCCAGGCCACAGGAGCTTATTGGCCAGGAGGGAATAA
TGTCCCCCAATACTGCCTGTTGAGGGACCAGAGTTGGGGTCTTTGGTGCTTCCAACCTCCTGCCAACCTGGAGTT
CACAACACCAGAGCCCCACGGCCTCGCACACTGAAGCAGGGGCGTGCGGTGACTCGGTGCTTCTGTTTTGGAAGA
ACCACCTGTCATCAAAACATGGACAGCAGGGTGTTCTCAGCTCCCAGCGAAGCCTCCACAACAGAATGGGGCCAC
AGGGCAGCCGGGACTCCCTGTCTCACCTACATTAACCCATGCATACTGTATGCCATAAACTCACTTTGGTATATC
CGCGTCACATGCAGAGAGGAACTCTGCGACGTCAAAGTGTTGCTTCTTAAAGTTTCATTATTGGCAACTAGAGGG
TTGTTTTTAATGCATGGAAACTAAACAGATTCCTCGGGGAGTTCCTGAAGGAACCAGGTGGGCAAACCTTTGCTT
ATATACATGCGGCCTCACCTGGAAGAGAAATAAACCACTTGTACT

FIGURE 4322

MQASRVDYIAPWWVVWLHSVPHVGLRLQPVNSTFSPGDESYQESLLFLGLVAAVCLGLNLIFLVAYLVCACHCRR
DDAVQTKQHHSCCITWTAVVAGLICCAAVGVGFYGNSETNDGAYQLMYSLDDANHTFSGIDALVSGTTQKMKVDL
EQHLARLSEIFAARGDYLQTLKFIQQMAGSIVVQLSGLPVWREVTMELTKLSDQTGYVEYYRWLSYLLLFILDLV
ICLIACLGLAKRSKCLLASMLCCGALSLLLSWASLAADGSAAVATSDFCVAPDTFILNVTEGQISTEVTRYYLYC
SQSGSSPFQQTLTTFQRALTTMQIQVAGLLQFAVPLFSTAEEDLLAIQLLLNSSESSLHQLTAMVDCRGLHKDYL
DALAGICYDGLQGLLYLGLFSFLAALAFSTMICAGPRAWKHFTTRNRDYDDIDDDDPFNPQAWRMAAHSPPRGQL
HSFCSYSSGLGSQTSLQPPAQTISNAPVSEYMNQAMLFGRNPRYENVPLIGRASPPPTYSPSMRATYLSVADEHL
RHYGNQFPA

FIGURE 4323

CGGCGATGCTGCAGTTCGTCCGGGCCGGGGCGCGGGCCTGGCTTCGGCCTACCGGCAGCCAGGGCCTGAGTTCCC
TGGCGGAAGAGGCAGCGCGTGCGACCGAGAACCCGGAGCAGGTGGCGAGCGAGGGTCTCCCGGAGCCCGTGCTGC
GCAAAGTCGAGCTCCCGGTACCCACTCATCGACGCCCAGTGCAGGCCTGGGTCGAGTCCTTGCGGGGCTTCGAGC
AGGAGCGCGTGGGCCTGGCCGACCTGCACCCCGATGTTTTCGCCACCGCGCCCAGGCTGGACATACTGCACCAGG
TTGCTATGTGGCAGAAGAACTTCAAGAGAATTAGCTATGCCAAGACCAAGACGAGAGCCGAGGTGCGGGGCGGTG
GCCGGAAGCCTTGGCCGCAGAAAGGCACTGGGCGGGCCCGGCATGGCAGCATCCGCTCTCCGCTCTGGCGAGGAG
GAGGTGTTGCCCATGGCCCCCGGGGCCCCACAAGTTACTACTACATGCTGCCCATGAAGGTGCGGGCGCTGGGTC
TCAAAGTGGCACTGACCGTCAAGCTGGCCCAGGACGACCTGCACATCATGGACTCCCTAGAGCTGCCCACCGGAG
ACCCACAGTACCTGACAGAGCTGGCGCACTACCGCCGCTGGGGGGACTCCGTACTCCTCGTGGACTTAACACACG
AGGAGATGCCACAGAGCATCGTGGAGGCCACCTCTAGGCTTAAGACCTTCAACTTGATCCCGGCTGTTGGCCTAA
ATGTGCACAGCATGCTCAAGCACCAGACGCTGGTCCTGACGCTGCCCACCGTCGCCTTCCTGGAGGACAAGCTGC
TCTGGCAGGACTCACGTTACAGACCCCTCTACCCCTTCAGCCTGCCCTACAGCGACTTCCCCCGACCCCTACCCC
ACGCTACCCAGGGCCCAGCGGCCACCCCGTACCACTGTTGATGTGAAGCACCTCTTCTGAGCCAGGCCGAGCCCC
TGGCCGACTTGGGAGCCTCAGGCCCACGCCCACCCTTCGAGGAAGGTGTCACCTGGACCCCTTCATTCCACGGAG
GAAGCTGAGGCCACAGGGAGCGGCCATCGCCATTGGGAAGGGGCGACTCCACGGAGAGCCCAGACGGGCTTCTGC
ATCCATTCCCTCTTTTTGTTTTTAAAATAAATTGTATTTTTGAATCAAGGAGGAAAAAA

FIGURE 4324

MLQFVRAGARAWLRPTGSQGLSSLAEEAARATENPEQVASEGLPEPVLRKVELPVPTHRRPVQAWVESLRGFEQE
RVGLADLHPDVFATAPRLDILHQVAMWQKNFKRISYAKTKTRAEVRGGGRKPWPQKGTGRARHGSIRSPLWRGGG
VAHGPRGPTSYYYMLPMKVRALGLKVALTVKLAQDDLHIMDSLELPTGDPQYLTELAHYRRWGDSVLLVDLTHEE
MPQSIVEATSRLKTFNLIPAVGLNVHSMLKHQTLVLTLPTVAFLEDKLLWQDSRYRPLYPFSLPYSDFPRPLPHA
TQGPAATPYHC

FIGURE 4325

ATGGATGAAGAACCTGAAAGAACTAAGCGATGGGAAGGAGGCTATGAAAGAACATGGGAGATTCTTAAAGAAGAT
GAATCTGGATCACTTAAAGCTACAATAGAAGACATTCTATTCAAGGCAAAGAGAAAAAGAGTATTTGAGCACCAT
GGACAAGTTCGACTTGGAATGATGCGCCACCTTTATGTGGTAGTAGATGGATCAAGAACAATGGAAGACCAAGAT
TTAAAGCCTAATAGACTGACGTGTACTTTAAAGTTGTTGGAATACTTTGTAGAGGAATATTTTGATCAAAATCCT
ATTAGTCAGATTGGAATAATTGTAACTAAGAGTAAAAGAGCTGAAAAATTGACTGAACTTTCAGGAAACCCAAGA
AAACATATAACGTCTTTGAAGAAAGCTGTGGATATGACCTGCCATGGAGAGCCATCTCTTTATAATTCCCTAAGC
ATAGCTATGCAGACTCTAAAACACATGCCTGGACATACAAGTCGAGAAGTACTAATCATCTTTAGCAGCCTTACA
ACTTGCGATCCATCTAATATTTATGATCTAATCAAGACCCTAAAGGCAGCTAAAATTAGAGTATCTGTTATTGGA
TTGTCTGCAGAAGTTCGCGTTTGCACTGTACTTGCTCGTGAAACTGGTGGCACGTACCATGTTATTTTAGATGAA
AGCCATTACAAAGAGTTGCTCACACATCATGTTAGTCCTCCTCCTGCTAGCTCAAGTTCTGAATGCTCACTTATT
CGTATGGGATTTCCTCAGCACACCATTGCTTCTTTATCTGACCAGGATGCAAAACCCTCTTTCAGCATGGCGCAT
TTGGATGGCAATACTGAGCCAGGGCTTACATTAGGAGGCTATTTCTGCCCACAGTGTCGGGCAAAGTACTGTGAG
CTACCTGTTGAATGTAAAATCTGTGGTCTTACTTTGGTGTCTGCTCCCCACTTGGCACGGTCTTACCATCATTTG
TTTCCTTTGGATGCTTTTCAAGAAATTCCCCTAGAAGAATATAATGGAGAAAGATTTTGTTATGGATGTCAGGGG
GAATTGAAAGACCAACATGTTTATGTTTGTGCTGTGTGCCAAAATGTTTTCTGTGTGGACTGTGATGTTTTTGTT
CATGATTCTCTACACTGTTGCCCTGGCTGTATTCATAAGATTCCAGCTCCTTCAGGTGTTTGA

FIGURE 4326

MDEEPERTKRWEGGYERTWEILKEDESGSLKATIEDILFKAKRKRVFEHHGQVRLGMMRHLYVVVDGSRTMEDQD
LKPNRLTCTLKLLEYFVEEYFDQNPISQIGIIVTKSKRAEKLTELSGNPRKHITSLKKAVDMTCHGEPSLYNSLS
IAMQTLKHMPGHTSREVLIIFSSLTTCDPSNIYDLIKTLKAAKIRVSVIGLSAEVRVCTVLARETGGTYHVILDE
SHYKELLTHHVSPPPASSSSECSLIRMGFPQHTIASLSDQDAKPSFSMAHLDGNTEPGLTLGGYFCPQCRAKYCE
LPVECKICGLTLVSAPHLARSYHHLFPLDAFQEIPLEEYNGERFCYGCQGELKDQHVYVCAVCQNVFCVDCDVFV
HDSLHCCPGCIHKIPAPSGV

FIGURE 4327

GGCCGTGCCTTCTCTCGCTTCGGACTGCGCAACGCTGCGCTCTGGGCTGACAGGCGGATAAAACGGTCCCATCAA
GACTGAGAAAAAGCACACCAGCTATTGGCACAGCGTGGGCAGTGGGGCCTACAGGATGACTGACTTAGTCTACAG
AGATCCCGGCGTACTTAAGCAGATGAAGACTCTTAAGATGACAGAAGGTGATTTTTCTGGTGATCGAGGACTTCC
GGGGTAATGACAGTGATGAA**ATG**CAGGGGACCTGGTTGCCCCCAAGTTTCCTGGCAGTGTGTGATACTGAGGAGG
TGAGCTTGTTTCTGGAGCTGTGCTTTAAGATTCATGTTACATGTAAAGCTGTCCTCATTTGTGACTATGGACCTA
TGGAGTTGGGACAATCTCTATGGGAAGCAGAAGGCAAGGACCCCGGTCATTTTAGG**TAG**AAACAACAGCATGCTA
ATGCAAAAAATTATGCAGTGTGCTACTGAACTTCAGAGGTGATCAATAAAAGAAGAATAAAAAGACTAATAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4328

MQGTWLPPSFLAVCDTEEVSLFLELCFKIHVTCKAVLICDYGPMELGQSLWEAEGKDPGHFR

FIGURE 4329

GGAAGTTTGTGGCGGAGGTGAGGCCGAGGTGACTGCAGAGCGGCTCGCGAGAGTCTCCCTCTGTTGCCAGGCTGG
AGTGCAGTGGCGCGATCTCGGCTCACTGCAACCTCCGCCTCCTGAGTTCAAGTGATTCTCCTGCCTCAGCCTCAC
AAGTAGCTGGGACTACAGGGTTTTGGACTGATAAAGCAATGGAAGCCACTGAAGAGCTTTAAGATGAGGATGGCA
TGGAGGGAAGATAAGTCACATAATCAGTTCTGTGATATGAGCAACAATGGACCAGAAGATTTTATCTCTAGCAGC
AGAAAAAACAGCAGACAAACTGCAAGAATTTCTTCAAACCCTGAGAGAAGGTGATTTGACTAATCTCCTTCAGAA
TCAAGCAGTGAAAGGAAAAGTTGCTGGAGCACTCCTGAGAGCCATCTTCAAAGGTTCCCCCTGCTCTGAGGAAGC
TGGAACACTTAGGAGACGTAAGATATACACTTGTTGTATCCAGTTGGTGGAATCGGGGGATTTGCAGAAAGAAAT
AGTGTCTGAGATCATAGGATTACTGATGCTGGAGGCTCACCATTTTCCAGGACCATTATTGGTTGAATTAGCCAA
TGAGTTTATTAGTGCTGTCAGAGAAGGCAGCCTAGTGAATGGAAAATCTTTGGAGTTACTACCTATCATTCTCAC
TGCCCTGGCTACGAAAAAGGAAAATCTGGCTTATGGAAAAGGTGTACTGAGTGGGGAAGAATGTAAGAAACAGTT
GATTAACACCCTGTGTTCTGGCAGGTGGGATCAGCAATATGTAATCCAACTCACCTCC**ATG**TTCAAGGATGTCCC
TCTGACTGCAGAAGAGGTGGAATTTGTGGTGGAAAAAGCATTGAGCATGTTCTCCAAGATGAATCTTCAAGAAAT
ACCACCTTTGGTCTATCAGCTTCTGGTTCTCTCCTCCAAGGGAAGCAGAAAGAGTGTTTTGGAAGGAATCATAGC
CTTCTTCAGTGCACTAGATAAGCAGCACAATGAGGAACAGAGTGGTGACGAG**TGA**GTAATATAGTGTAGAAATAA
AGATCATTTTTACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4330

MFKDVPLTAEEVEFVVEKALSMFSKMNLQEIPPLVYQLLVLSSKGSRKSVLEGIIAFFSALDKQHNEEQSGDE

FIGURE 4331

TTCTCATCCCTGTGCTCAGAGCTCTCAAGCACCCACGATGGCCTTCTCAGGCCGAGCGCGCCCCTGCATTATCCC
AGAGAACGAAGAAATCCCCCGAGCAGCCCTTAACACTGTCCACGAGGCCAATGGGACCGAGGACGAGAGGGCTGT
TTCCAAACTGCAGCGCAGGCACAGTGACGTGAAAGTCTACAAGGAGTTCTGTGACTTTTATGCGAAATTCAACAT
GGCCAACGCCCTGGCCAGCGCCACTTGCGAGCGCTGCAAGGGCGGCTTTGCGCCCGCTGAGACGATCGTGAACAG
TAATGGGGAGCTGTACCATGAGCAGTGTTTCGTGTGCGCTCAGTGCTTCCAGCAGTTCCCAGAAGGACTCTTCTA
TGAGGAACGAACGTGATGGTTAAGCTACCTTCATTAAGCAGCATGACCGCTTCTGAGCTCCTGCTGCCGCATTTA
GGCCCTGTCAGCTGTGAGGCCACTGGTGCTGAGTCAAAGGGAAAAGCTCAGAACAGCCTTGACAGCGAAGAATAA
AGCATGACTCATCTCGTCCTGCCCACCCCTCACACTGGACTATAAATACCCTCCCTGGGTCTGTGTGCTGTTATT
CCAAAAGATGCGATGAATCCCAGAACTAGGCTATTCATGGGCTGTTGCCCAGTTCAAGCTCTATTGGGTCCTGAG
GAAGATTACTATTTTGGCTACATTGTTTATCATTAAAACCAGCCCAGGGATGTGTAAACCTGCATCTGGAGAATA
AGACATTTCTTTTTGGTTAAATGATATTAGAGAAAAAAAAAAACTATCCAAGGCTGCTAACAAATAATCTTCACTT
TCAATTATATCCAGCAATAAGTTGTTCTCCAGAAAAGAAAGCTTGGAAACTTACCCAGTTTGCCTTCCATTTGGG
ACATGACTGATGTGCTTCAGTCTTTGTATAATAAATGCATCTTCGCCCCTATAAAAAAAAAAA

FIGURE 4332

MAFSGRARPCIIPENEEIPRAALNTVHEANGTEDERAVSKLQRRHSDVKVYKEFCDFYAKFNMANALASATCERC
KGGFAPAETIVNSNGELYHEQCFVCAQCFQQFPEGLFYEERT

FIGURE 4333

GGGAAAGAAAATGAGGCCCCAGGACACCTGGGTTCACACCCAGGTCCCCAGCGATGTCTCCACCACCGCTGCTGC
AACCCCTGCTGCTGCTGCTGCCTCTGCTGAATGTGGAGCCTTCCGGGGCCACACTGATCCGCATCCCTCTTCATC
GAGTCCAACCTGGACGCAGGATCCTGAACCTACTGAGGGGATGGAGAGAACCAGCAGAGCTCCCCAAGTTGGGGG
CCCCATCCCCTGGGGACAAGCCCATCTTCGTACCTCTCTCGAACTACAGGGATGTGCAGTATTTTGGGGAAATTG
GGCTGGGAACGCCTCCACAAAACTTCACTGTTGCCTTTGACACTGGCTCCTCCAATCTCTGGGTCCCGTCCAGGA
GATGCCACTTCTTCAGTGTGCCCTGCTGGTTACACCACCGATTTGATCCCAAAGCCTCTAGCTCCTTCCAGGCCA
ATGGGACCAAGTTTGCCATTCAATATGGAACTGGGCGGGTAGATGGAATCCTGAGCGAGGACAAGCTGACTATTG
GTGGAATCAAGGGTGCATCAGTGATTTTCGGGGAGGCTCTCTGGGAGCCCAGCCTGGTCTTCGCTTTTGCCCATT
TTGATGGGATATTGGGCCTCGGTTTTCCCATTCTGTCTGTGGAAGGAGTTCGGCCCCCGATGGATGTACTGGTGG
AGCAGGGGCTATTGGATAAGCCTGTCTTCTCCTTTTACCTCAACAGGGACCCTGAAGAGCCTGATGGAGGAGAGC
TGGTCCTGGGGGGCTCGGACCCGGCACACTACATCCCACCCCTCACCTTCGTGCCAGTCACGGTCCCTGCCTACT
GGCAGATCCACATGGAGCGTGTGAAGGTGGGCCCAGGGCTGACTCTCTGTGCCAAGGGCTGTGCTGCCATCCTGG
ATACGGGCACGTCCCTCATCACAGGACCCACTGAGGAGATCCGGGCCCTGCATGCAGCCATTGGGGGAATCCCCT
TGCTGGCTGGGGAGTACATCATCCTGTGCTCGGAAATCCCAAAGCTCCCCGCAGTCTCCTTCCTTCTTGGGGGGG
TCTGGTTTAACCTCACGGCCCATGATTACGTCATCCAGACTACTCGAAATGGCGTCCGCCTCTGCTTGTCCGGTT
TCCAGGCCCTGGATGTCCCTCCGCCTGCAGGGCCCTTCTGGATCCTCGGTGACGTCTTCTTGGGGACGTATGTGG
CCGTCTTCGACCGCGGGGACATGAAGAGCAGCGCCCGGGTGGGCCTGGCGCGCGCTCGCACTCGCGGAGCGGACC
TCGGATGGGGAGAGACTGCGCAGGCGCAGTTCCCCGGGTGACGCCCAAGTGAAGCGCATGCGCAGCGGGTGGTCG
CGGAGGTCCTGCTACCCAGTAAAAATCCACTATTTCCATTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAA

FIGURE 4334

MSPPPLLQPLLLLLPLLNVEPSGATLIRIPLHRVQPGRRILNLLRGWREPAELPKLGAPSPGDKPIFVPLSNYRD
VQYFGEIGLGTPPQNFTVAFDTGSSNLWVPSRRCHFFSVPCWLHHRFDPKASSSFQANGTKFAIQYGTGRVDGIL
SEDKLTIGGIKGASVIFGEALWEPSLVFAFAHFDGILGLGFPILSVEGVRPPMDVLVEQGLLDKPVFSFYLNRDP
EEPDGGELVLGGSDPAHYIPPLTFVPVTVPAYWQIHMERVKVGPGLTLCAKGCAAILDTGTSLITGPTEEIRALH
AAIGGIPLLAGEYIILCSEIPKLPAVSFLLGGVWFNLTAHDYVIQTTRNGVRLCLSGFQALDVPPPAGPFWILGD
VFLGTYVAVFDRGDMKSSARVGLARARTRGADLGWGETAQAQFPG

FIGURE 4335

CGAGGCTCCGCACCAGCCGCGCTTCTGTCCGCCTGCAGGGCATTCCAGAAAGATGAGGATATTTGCTGTCTTTAT
ATTCATGACCTACTGGCATTTGCTGAACGCATTTACTGTCACGGTTCCCAAGGACCTATATGTGGTAGAGTATGG
TAGCAATATGACAATTGAATGCAAATTCCCAGTAGAAAAACAATTAGACCTGGCTGCACTAATTGTCTATTGGGA
AATGGAGGATAAGAACATTATTCAATTTGTGCATGGAGAGGAAGACCTGAAGGTTCAGCATAGTAGCTACAGACA
GAGGGCCCGGCTGTTGAAGGACCAGCTCTCCCTGGGAAATGCTGCACTTCAGATCACAGATGTGAAATTGCAGGA
TGCAGGGGTGTACCGCTGCATGATCAGCTATGGTGGTGCCGACTACAAGCGAATTACTGTGAAAGTCAATGCCCC
ATACAACAAAATCAACCAAAGAATTTTGGTTGTGGATCCAGTCACCTCTGAACATGAACTGACATGTCAGGCTGA
GGGCTACCCCAAGGCCGAAGTCATCTGGACAAGCAGTGACCATCAAGTCCTGAGTGGTAAGACCACCACCACCAA
TTCCAAGAGAGAGGAGAAGCTTTTCAATGTGACCAGCACACTGAGAATCAACACAACAACTAATGAGATTTTCTA
CTGCACTTTTAGGAGATTAGATCCTGAGGAAAACCATACAGCTGAATTGGTCATCCCAGAACTACCTCTGGCACA
TCCTCCAAATGAAAGGACTCACTTGGTAATTCTGGGAGCCATCTTATTATGCCTTGGTGTAGCACTGACATTCAT
CTTCCGTTTAAGAAAAGGGAGAATGATGGATGTGAAAAAATGTGGCATCCAAGATACAAACTCAAAGAAGCAAAG
TGATACACATTTGGAGGAGACGTAATCCAGCATTGGAACTTCTGATCTTCAAGCAGGGATTCTCAACCTGTGGTT
TAGGGGTTCATCGGGGCTGAGCGTGACAAGAGGAAGGAATGGGCCCGTGGGATGCAGGCAATGTGGGACTTAAAA
GGCCCAAGCACTGAAAATGGAACCTGGCGAAAGCAGAGGAGGAGAATGAAGAAAGATGGAGTCAAACAGGGAGCC
TGGAGGGAGACCTTGATACTTTCAAATGCCTGAGGGGCTCATCGACGCCTGTGACAGGGAGAAAGGATACTTCTG
AACAAGGAGCCTCCAAGCAAATCATCCATTGCTCATCCTAGGAAGACGGGTTGAGAATCCCTAATTTGAGGGTCA
GTTCCTGCAGAAGTGCCCTTTGCCTCCACTCAATGCCTCAATTTGTTTTCTGCATGACTGAGAGTCTCAGTGTTG
GAACGGGACAGTATTTATGTATGAGTTTTTCCTATTTATTTTGAGTCTGTGAGGTCTTCTTGTCATGTGAGTGTG
GTTGTGAATGATTTCTTTTGAAGATATATTGTAGTAGATGTTACAATTTTGTCGCCAAACTAAACTTGCTGCTTA
ATGATTTGCTCACATCTAGTAAAACATGGAGTATTTGTAAAAAAAAAAAAAAA

FIGURE 4336

MRIFAVFIFMTYWHLLNAFTVTVPKDLYVVEYGSNMTIECKFPVEKQLDLAALIVYWEMEDKNIIQFVHGEEDLK
VQHSSYRQRARLLKDQLSLGNAALQITDVKLQDAGVYRCMISYGGADYKRITVKVNAPYNKINQRILVVDPVTSE
HELTCQAEGYPKAEVIWTSSDHQVLSGKTTTTNSKREEKLFNVTSTLRINTTTNEIFYCTFRRLDPEENHTAELV
IPELPLAHPPNERTHLVILGAILLCLGVALTFIFRLRKGRMMDVKKCGIQDTNSKKQSDTHLEET

FIGURE 4337

CCCTTTAAAGGGTGACTCGTCCCACTTGTGTTCTCTCTCCTGGTGCAGAGTTGCAAGCAAGTTTATCAGAGTATC
GCCATGAAGTTCGTCCCCTGCCTCCTGCTGGTGACCTTGTCCTGCCTGGGGACTTTGGGTCAGGCCCCGAGGCAA
AAGCAAGGAAGCACTGGGGAGGAATTCCATTTCCAGACTGGAGGGAGAGATTCCTGCACTATGCGTCCCAGCAGC
TTGGGGCAAGGTGCTGGAGAAGTCTGGCTTCGCGTCGACTGCCGCAACACAGACCAGACCTACTGGTGTGAGTAC
AGGGGGCAGCCCAGCATGTGCCAGGCTTTTGCTGCTGACCCCAAACCTTACTGGAATCAAGCCCTGCAGGAGCTG
AGGCGCCTTCACCATGCGTGCCAGGGGGCCCCGGTGCTTAGGCCATCCGTGTGCAGGGAGGCTGGACCCCAGGCC
CATATGCAGCAGGTGACTTCCAGCCTCAAGGGCAGCCCAGAGCCCAACCAGCAGCCTGAGGCTGGGACGCCATCT
CTGAGGCCCAAGGCCACAGTGAAACTCACAGAAGCAACACAGCTGGGAAAGGACTCGATGGAAGAGCTGGGAAAA
GCCAAACCCACCACCCGACCCACAGCCAAACCTACCCAGCCTGGACCCAGGCCCGGAGGGAATGAGGAAGCAAAG
AAGAAGGCCTGGGAACATTGTTGGAAACCCTTCCAGGCCCTGTGCGCCTTTCTCATCAGCTTCTTCCGAGGGTGA

CAGGTGAAAGACCCCTACAGATCTGACCTCTCCCTGACAGACAACCATCTCTTTTTATATTATGCCGCTTTCAAT
CCAACGTTCTCACACTGGAAGAAGAGAGTTTCTAATCAGATGCAACGGCCCAAATTCTTGATCTGCAGCTTCTCT
GAAGTTTGGAAAAGAAACCTTCCTTTCTGGAGTTTGCAGAGTTCAGCAATATGATAGGGAACAGGTGCTGATGGG
CCCAAGAGTGACAAGCATACACAACTACTTATTATCTGTAGAAGTTTTGCTTTGTTGATCTGAGCCTTCTATGAA
AGTTTAAATATGTAACGCATTCATGAATTTCCAGTGTTCAGTAAATAGCAGCTATGTGTGTGCAAAATAAAAGAA
TGATTTCAGAAAT

FIGURE 4338

MKFVPCLLLVTLSCLGTLGQAPRQKQGSTGEEFHFQTGGRDSCTMRPSSLGQGAGEVWLRVDCRNTDQTYWCEYR
GQPSMCQAFAADPKPYWNQALQELRRLHHACQGAPVLRPSVCREAGPQAHMQQVTSSLKGSPEPNQQPEAGTPSL
RPKATVKLTEATQLGKDSMEELGKAKPTTRPTAKPTQPGPRPGGNEEAKKKAWEHCWKPFQALCAFLISFFRG

FIGURE 4339

TCACTTCACTTTTATTATGAACAAACACAATCTCAGATTAGTACAATTAGCTTCAGAGTTGATATTAATAGAAAT
TATTCCAAAATTATTCTTGTCACAAGTAACTACTATATCCCACATAAAAAGGGAAAAAATCCCACCCAATCACAG
AAAAGGCATCCTCTGTATGTTTCCGTGGCAATGCGTTGTTTATGTATTCTCAAATTTTGTCTGGCTAGTTATCCA
CCGCTTCTCCAATGGATTCATTCAGTTTCTTGGAGAACCATATAGACTAATGACAGCATCTGGGACACACGGACG
TATCAAGTTCATGGTGGACATTCCTATTATAAAAAATACTCAGGTCTTGAGAATTCCTGTGCTGAAGGATCCCAA
AATGCTTTCTAAAAAGCATTAGTCATGCCTCAAAACTGCCCTTTGAGGTAGGTCAGTATTATTATCCCCATTTTA
ACAGAAGGAAAACTGAGGCACCTTATAGTTAAGTGACTTGCCCAGGGTCACACAGCAAGTCAGTGGCACAGTGGT
TGGAGAGGCCCTGGCCTTAACCACCAGCATAACATGGCCACCTCGCTTTTTTAACCTTTCATGATGACCTATTTG
AGCTACACTTACAGAGAATACACCCAAGATACTAGCAAACCAAGGAGAAAATTTTCCATTTTAAATGCTACAACC
ATCTTTTAACCCAAAAAAAAAAAAAAA

FIGURE 4340

MNKHNLRLVQLASELILIEIIPKLFLSQVTTISHIKREKIPPNHRKGILCMFPWQCVVYVFSNFVWLVIHRFSNG
FIQFLGEPYRLMTASGTHGRIKFMVDIPIIKNTQVLRIPVLKDPKMLSKKH

FIGURE 4341

CTCAGCTGCAGCGGCGACTTTCAGTTTCATTTCCACGGACCCTCCTGCCTGGGCCGCAGCCGCCGCCGCGATGCC
CAGTAAGTTCAGCTGCCGGCAGCTCCGGGAGGCGGGCCAGTGTTTCGAGAGTTTCCTGGTCGTTCGGGGACTGGA
CATGGAGACAGATCGCGAGCGGCTGCGGACCATTTATAACCGCGACTTCAAGATCAGCTTTGGGACCCCCGCCCC
TGGCTTCTCCTCCATGCTGTATGGAATGAAGATTGCAAATCTGGCCTACGTCACCAAGACTCGGGTCAGGTTCTT
CAGACTCGACCGCTGGGCCGACGTGCGGTTCCCAGAAAAGAGGAGAATGAAGCTGGGGTCAGATATCAGCAAACA
CCACAAGTCACTGCTAGCCAAGATCTTTTATGACAGGGCTGAGTATCTTCATGGGAAACATGGTGTGGATGTGGA
AGTCCAGGGGCCCCATGAAGCCCGAGATGGGCAGCTCCTTATCCGCCTGGATTTGAACCGCAAAGAGGTGCTGAC
CCTGAGGCTTCGGAATGGCGGAACCCAGTCTGTTACCCTCACTCACCTCTTCCCACTCTGCCGGACACCCCAGTT
TGCTTTCTACAATGAAGACCAGGAGTTGCCCTGTCCACTGGGCCCCGGTGAATGCTATGAACTCCATGTCCATTG
TAAGACCAGCTTTGTGGGCTACTTCCCAGCCACAGTGCTCTGGGAGCTGCTGGGACCTGGGGAGTCGGGTTCAGA
AGGAGCCGGCACATTCTACATTGCCCGCTTCTTGGCTGCCGTCGCCCACAGCCCCCTGGCTGCACAGCTGAAGCC
CATGACTCCCTTCAAGCGGACCCGGATCACCGGAAACCCTGTGGTGACCAATCGGATAGAGGAAGGAGAGAGACC
TGACCGCGCTAAGGGCTATGACCTGGAGTTAAGTATGGCGCTGGGGACATACTACCCACCTCCCCGCCTCAGGCA
GCTGCTCCCCATGCTTCTTCAGGGAACAAGTATCTTCACTGCCCCTAAGGAGATCGCAGAGATCAAGGCCCAGCT
GGAGACAGCCCTGAAGTGGAGGAACTATGAGGTGAAGCTGCGGCTGCTGCTGCACCTGGAGGAACTGCAGATGGA
GCATGATATCCGGCACTATGACCTGGAGTCGGTGCCCATGACCTGGGACCCTGTGGACCAGAACCCCAGGCTGCT
CACGCTGGAGGTTCCTGGAGTGACTGAGAGCCGCCCCTCAGTGCTACGGGGCGACCACCTGTTTGCCCTTTTGTC
CTCGGAGACACACCAGGAGGACCCCATCACATATAAGGGCTTTGTGCACAAGGTGGAATTGGACCGTGTCAAGCT
GAGCTTTTCCATGAGCCTCCTGAGCCGCTTTGTGGATGGGCTGACCTTCAAGGTGAACTTTACCTTCAACCGCCA
GCCGCTGCGAGTCCAGCACCGTGCCCTGGAGCTGACAGGGCGCTGGCTGCTGTGGCCCATGCTCTTTCCTGTGGC
ACCTCGGGACGTCCCGCTGCTGCCCTCAGATGTGAAACTCAAGCTGTACGACCGGAGTCTGGAGTCAAACCCAGA
GCAGCTGCAGGCCATGAGGCACATTGTTACGGGCACCACCCGTCCAGCCCCCTACATCATCTTTGGGCCTCCAGG
CACCGGCAAGACTGTCACGTTAGTGGAGGCAATTAAGCAGGTGGTGAAGCACTTGCCCAAAGCCCACATCTTGGC
CTGCGCTCCATCCAACTCAGGGGCTGACCTACTCTGTCAAAGGCTCCGGGTCCACCTTCCTAGCTCCATCTACCG
CCTCCTGGCCCCCAGCAGGGACATCCGCATGGTACCTGAGGACATCAAGCCCTGCTGCAACTGGGACGCAAAGAA
GGGGGAGTATGTATTTCCCGCCAAGAAGAAGCTGCAGGAATACCGGGTCTTAATTACCACCCTCATCACTGCCGG
CAGGTTGGTCTCGGCCCAGTTTCCCATTGATCACTTCACACACATCTTCATCGATGAGGCTGGCCACTGCATGGA
GCCTGAGAGTCTGGTAGCTATAGCAGGGCTGATGGAAGTAAAGGAAACAGGTGATCCAGGAGGGCAGCTGGTGCT
GGCAGGAGACCCTCGGCAGCTGGGGCCTGTGCTGCGTTCCCCACTGACCCAGAAGCATGGACTGGGATACTCACT
GCTGGAGCGGCTGCTCACCTACAACTCCCTGTACAAGAAGGGCCCTGATGGCTATGACCCCCAGTTCATAACCAA
GCTGCTCCGCAACTACAGGTCTCATCCCACCATCCTGGACATTCCTAACCAGCTCTATTATGAAGGGGAGCTGCA
GGCCTGTGCTGATGTCGTGGATCGAGAACGCTTCTGCCGCTGGGCGGGCCTACCTCGACAGGGCTTTCCCATCAT
CTTTCACGGCGTAATGGGCAAAGATGAGCGTGAAGGCAACAGCCCATCCTTCTTCAACCCTGAAGAGGCTGCCAC
AGTGACTTCCTACCTGAAGCTGCTCCTGGCCCCCTCCTCCAAGAAGGGCAAAGCTCGCCTGAGCCCTCGAAGTGT
GGGCGTCATCTCCCCGTACCGGAAACAGGTGGAGAAAATCCGTTACTGCATCACCAAACTTGACAGGGAGCTTCG
AGGACTGGATGACATCAAGGACTTGAAGGTGGGTTCAGTAGAAGAATTCCAAGGCCAAGAACGAAGCGTCATCCT
CATCTCCACCGTGCGAAGCAGCCAGAGCTTTGTGCAGCTGGATCTGGACTTTAATCTGGGTTTCCTTAAGAACCC
CAAGAGGTTCAATGTAGCTGTGACCCGGGCCAAGGCCCTGCTCATCATCGTGGGGAACCCCCTTCTCCTGGGCCA
TGACCCTGACTGGAAAGTATTCCTGGAGTTCTGTAAAGAAAACGGAGGGTATACCGGGTGTCCCTTCCCTGCCAA
ACTGGACCTGCAACAGGGACAGAATTTACTGCAAGGTCTGAGCAAGCTCAGCCCCTCTACCTCAGGGCCCCACAG
CCATGACTACCTCCCCCAGGAGCGGGAGGGTGAAGGGGGCCTGTCTCTGCAAGTGGAGCCAGAGTGGAGGAATGA
GCTCTGAAGACACAGCACCCAGCCTTCTCGCACCAGCCAAGCCTTAACTGCCTGCCTGACCCTGAACCAGAACCC
AGCTGAACTGCCCCTCCAAGGGACAGGAAGGCTGGGGGAGGGAGTTTACAACCCAAGCCATTCCACCCCCTCCCC
TGCTGGGGAGAATGACACATCAAGCTGCTAACAATTGGGGGAAGGGGAAGGAAGAAAACTCTGAAAACAAAATCT
TGTTCTATGCAAAAAAAAAAAAAAAAAA

FIGURE 4342

MPSKFSCRQLREAGQCFESFLVVRGLDMETDRERLRTIYNRDFKISFGTPAPGFSSMLYGMKIANLAYVTKTRVR
FFRLDRWADVRFPEKRRMKLGSDISKHHKSLLAKIFYDRAEYLHGKHGVDVEVQGPHEARDGQLLIRLDLNRKEV
LTLRLRNGGTQSVTLTHLFPLCRTPQFAFYNEDQELPCPLGPGECYELHVHCKTSFVGYFPATVLWELLGPGESG
SEGAGTFYIARFLAAVAHSPLAAQLKPMTPFKRTRITGNPVVTNRIEEGERPDRAKGYDLELSMALGTYYPPPRL
RQLLPMLLQGTSIFTAPKEIAEIKAQLETALKWRNYEVKLRLLLHLEELQMEHDIRHYDLESVPMTWDPVDQNPR
LLTLEVPGVTESRPSVLRGDHLFALLSSETHQEDPITYKGFVHKVELDRVKLSFSMSLLSRFVDGLTFKVNFTFN
RQPLRVQHRALELTGRWLLWPMLFPVAPRDVPLLPSDVKLKLYDRSLESNPEQLQAMRHIVTGTTRPAPYIIFGP
PGTGKTVTLVEAIKQVVKHLPKAHILACAPSNSGADLLCQRLRVHLPSSIYRLLAPSRDIRMVPEDIKPCCNWDA
KKGEYVFPAKKKLQEYRVLITTLITAGRLVSAQFPIDHFTHIFIDEAGHCMEPESLVAIAGLMEVKETGDPGGQL
VLAGDPRQLGPVLRSPLTQKHGLGYSLLERLLTYNSLYKKGPDGYDPQFITKLLRNYRSHPTILDIPNQLYYEGE
LQACADVVDRERFCRWAGLPRQGFPIIFHGVMGKDEREGNSPSFFNPEEAATVTSYLKLLLAPSSKKGKARLSPR
SVGVISPYRKQVEKIRYCITKLDRELRGLDDIKDLKVGSVEEFQGQERSVILISTVRSSQSFVQLDLDFNLGFLK
NPKRFNVAVTRAKALLIIVGNPLLLGHDPDWKVFLEFCKENGGYTGCPFPAKLDLQQGQNLLQGLSKLSPSTSGP
HSHDYLPQEREGEGGLSLQVEPEWRNEL

FIGURE 4343

GTCTACACCCCCTCCTCACACGCACTTCACCTGGGTCGGGATTCTCAGGTCATGAACGGTCCCAGCCACCTCCGG
GCAGGGCGGGTGAGGACGGGGACGGGGCGTGTCCAACTGGCTGTGGGCTCTTGAAACCCGAGCATGGCACAGCAC
GGGGCGATGGGCGCGTTTCGGGCCCTGTGCGGCCTGGCGCTGCTGTGCGCGCTCAGCCTGGGTCAGCGCCCCACC
GGGGGTCCCGGGTGCGGCCCTGGGCGCCTCCTGCTTGGGACGGGAACGGACGCGCGCTGCTGCCGGGTTCACACG
ACGCGCTGCTGCCGCGATTACCCGGGCGAGGAGTGCTGTTCCGAGTGGGACTGCATGTGTGTCCAGCCTGAATTC
CACTGCGGAGACCCTTGCTGCACGACCTGCCGGCACCACCCTTGTCCCCCAGGCCAGGGGGTACAGTCCCAGGGG
AAATTCAGTTTTGGCTTCCAGTGTATCGACTGTGCCTCGGGGACCTTCTCCGGGGGCCACGAAGGCCACTGCAAA
CCTTGGACAGACTGCACCCAGTTCGGGTTTCTCACTGTGTTCCCTGGGAACAAGACCCACAACGCTGTGTGCGTC
CCAGGGTCCCCGCCGGCAGAGCCGCTTGGGTGGCTGACCGTCGTCCTCCTGGCCGTGGCCGCCTGCGTCCTCCTC
CTGACCTCGGCCCAGCTTGGACTGCACATCTGGCAGCTGAGGAGTCAGTGCATGTGGCCCCGAGAGACCCAGCTG
CTGCTGGAGGTGCCGCCGTCGACCGAAGACGCCAGAAGCTGCCAGTTCCCCGAGGAAGAGCGGGGCGAGCGATCG
GCAGAGGAGAAGGGGCGGCTGGGAGACCTGTGGGTGTGAGCCTGGCCGTCCTCCGGGGCCACCGACCGCAGCCAG
CCCCTCCCCAGGAGCTCCCCAGGCCGCAGGGGCTCTGCGTTCTGCTCTGGGCCGGGCCCTGCTCCCCTGGCAGCA
GAAGTGGGTGCAGGAAGGTGGCAGTGACCAGCGCCCTGGACCATGCAGTTCGGCGGCCGCGGCTGGGCCCTGCAG
GAGGGAGAGAGAGACACAGTCATGGCCCCCTTCCTCCCTTGCTGGCCCTGATGGGGTGGGGTCTTAGGACGGGAG
GCTGTGTCCGTGGGTGTGCAGTGCCCAGCACGGGACCCGGCTGCAGGGGACCTTCAATAAACACTTGTCCAGTGA
AAAAAAAAAAAAA

FIGURE 4344

MAQHGAMGAFRALCGLALLCALSLGQRPTGGPGCGPGRLLLGTGTDARCCRVHTTRCCRDYPGEECCSEWDCMCV
QPEFHCGDPCCTTCRHHPCPPGQGVQSQGKFSFGFQCIDCASGTFSGGHEGHCKPWTDCTQFGFLTVFPGNKTHN
AVCVPGSPPAEPLGWLTVVLLAVAACVLLLTSAQLGLHIWQLRSQCMWPRETQLLLEVPPSTEDARSCQFPEEER
GERSAEEKGRLGDLWV

FIGURE 4345

ACATGCTCTGTGAGGAGATTTCCCTCGATGATGTGCTTCTGAGTGCTCTGCTGAGGAACGATGGAAGTCTGCCC
AGCAGAAGAAAATCTCTGCCAAGCCCAAGCTTGAGTTCCTCTGTCCAAGGCCAGGGACCTGTGACCATGGAAGCA
GAGAGAAGCAAGGCCACAGCCGTGGCCCTGGGCAGTTTCCCGGCAGGTGGCCCGGCCGAGCTGTCGCTGAGACTC
GGGGAGCCATTGACCATCGTCTCTGAGGATGGAGACTGGTGGACGGTGCTGTCTGAAGTCTCAGGCAGAGAGTAT
AACATCCCCAGCGTCCACGTGGCCAAAGTCTCCCATGGGTGGCTGTATGAGGGCCTGAGCAGGGAGAAAGCAGAG
GAACTGCTGTTGTTACCTGGGAACCCTGGAGGGGCCTTCCTCATCCGGGAGAGCCAGACCAGGAGAGGCTCTTAC
TCTCTGTCAGTCCGCCTCAGCCGCCCTGCATCCTGGGACCGGATCAGACACTACAGGATCCACTGCCTTGACAAT
GGCTGGCTGTACATCTCACCGCGCCTCACCTTCCCCTCACTCCAGGCCCTGGTGGACCATTACTCTGAGCTGGCG
GATGACATCTGCTGCCTACTCAAGGAGCCCTGTGTCCTGCAGAGGGCTGGCCCGCTCCCTGGCAAGGATATACCC
CTACCTGTGACTGTGCAGAGGACACCACTCAACTGGAAAGAGCTGGACAGCTCCCTCCTGTTTTCTGAAGCTGCC
ACAGGGGAGGAGTCTCTTCTCAGTGAGGGTCTCCGGGAGTCCCTCAGCTTCTACATCAGCCTGAATGACGAGGCT
GTCTCTTTGGATGATGCCTAGGCCCAAAGGAGAGGCCAAAAGGGAAACCAAGGCTGCACACCTAGAACCCCAATT
CAGCCTCCTGGGCACCCCAGAGGCAAGGCTGTGCACTCAGGGAGGGAGGGTGGGACACAGAGGTGCATCTAGGGT
CCCACCTGTACCCTTGCTCTTTCCTCTCTTAGCCCTTAGAAGTCACCTACTTCCTTCCAGTGCCATGATCCCACC
TGCGACCTCTAGTGCGAGTGCAGAGAAGGTGGGACCAGGGCCAGGGTTCCAAAAAGAGAATAAGCCTCCTGGGGG
GTCTGACCTAGTTAGTTCTTGAGTTTGGGGTTTCCAGTACCATCTGGATGCCCTGCCTGTTGAGCCCCATTCTAC
ATCCCCACCATTAACCAGGCCCCACCCACAAGGTAGAAACAACCCCTAGAGTCAACGAGAAAGTCATTTTCAGAA
AATCTACAAGTCTCGTTGAGACCACCACCATACCTCAGAAGGTAGGACTGTGGCCTAGAAGGGAAAGGAAAGCTG
AGATGGTGTCTTACCGTAGCAGCAGATCTTGGATGGTCCAGGCTCTATGTGACCTCCAGAGCAAAGAGAAAGACT
CGGGACAGTCTAGGTCCTCAAATGTCCCCCATTGAGGACAACAGCCCCAGCTCTTTTTCTTTTTTTTGAGACGGA
GTCTTGCCCTGTTGCCCATGCTGGAGTGCAATGGCACGATCTCAGCTCACTGCAACCTCCATCTCCTGGATTCAA
ACAATTCTCCTGCCTCAGCCTCCAGAATAGCTGGGATTACAGGCGTACACCACCATGCCTGGCTAATTTTTTTGT
ATTTTTAGTAGACATGGGGTTTCACCACATTGGCCAGGCTGGTGTCGAACTCCTGACCTCAGGTGATCCACCCAC
CTTGGCCTCCCAAAGTGCTGGGATTACAGGTGTGAGCCACGGCACCCAGCCTAGCTCTCAGATCTCTATTTCATT
TTGTGGCTTACCATTCCCTAGCACACTGGCCTTGCCATCTTGTGGCCGAATAAAAAATAACACCTCTTAAGTCTA
GCACACTGCAGTGAGGCCAGGCACCTCAGTGCTGGGCAGGGGCATCAGAAGGTGCTAAGCCCTCTCTCCACAATG
CCAAGACGGAGACCACAGCCTACACCAAATCCAGCCCTTGATTTCCCTGCTGCCTCCATAAACAGAAAGAGGTCT
GCTGGATCCGCTAAGGGATCAGGGAGAGGAAGAAAGAGGGATGGGGTGGGAGGCACCCCCTCCAGTGCTCCTACT
GGTTCCCAAGCTACAGGTGGGGTGGGAAAGGCTTTATCAGGTATCATCAACAGGTTCTCAATTAAAGATTTGATT
TATTCAAGTATGTGAAAACATTCTACAATGGAAACTCTTATTAGATGCTGCATGTACTGTGCTATGGACCACGCA
CATACAGCCATGCTGTTTCAGAAGACTTGAAATGCCATTGATAGTTTAAAAACTCTACACCCGATGGAGAATCGA
GGAAGACGATTTAATGTTTCATCTGAATCCAGAGGTGCATCAAATTAAATGACAGCTCCACTTGGCAAAAAAAAA
AAAAAAAAAAAAAA

FIGURE 4346

MGSLPSRRKSLPSPSLSSSVQGQGPVTMEAERSKATAVALGSFPAGGPAELSLRLGEPLTIVSEDGDWWTVLSEV
SGREYNIPSVHVAKVSHGWLYEGLSREKAEELLLLPGNPGGAFLIRESQTRRGSYSLSVRLSRPASWDRIRHYRI
HCLDNGWLYISPRLTFPSLQALVDHYSELADDICCLLKEPCVLQRAGPLPGKDIPLPVTVQRTPLNWKELDSSLL
FSEAATGEESLLSEGLRESLSFYISLNDEAVSLDDA

FIGURE 4347A

ATCACAGCTTGGTGCTGGGGCTCAGCATGGCCAGGTGGCTAACCAGGGCTTGGTGTCAACTACATTTGGGATGAT
GACACTTGGAGGACACAGAGCCACTGTGCAGCAGGAGTCGCCACTGCTAACAGCCAGAGTGTCCCAGAAGCTTTT
GTTGACAATTCCAGTTTCCGAACAAAACATTTCGGCAATGGTGAGGGCTTCGATCCCTTCTCTGATTTGCTGTCA
GCCATGAACGGATGGATGTGATGCCTGCTAGCCAAAAGGCTTCCCTCTGTGTGTTGCAGTCCTGTGGCATTATGC
ATGCCCCCTCCCAGTGACCCCAGGCTTTTTATGGCTGTGAGACACGTTAAAATTTCAGGGGTAAGACGTGACCTT
TTGAGGTGACTATAACTGAAGATTGCTTTACAGAAGCCAAAAAAGGTTTTTGAGTC**ATG**ATGCAAGAATCTGGGA
CTGAGACAAAAAGTAACGGTTCAGCCATCCAGAATGGGTCGGGCGGCAGCAACCACTTACTAGAGTGCGGCGGTC
TTCGGGAGGGGCGGTCCAACGGAGAGACGCCGGCCGTGGACATCGGGGCAGCTGACCTCGCCCACGCCCAGCAGC
AGCAGCAACAGGCACTTCAGGTGGCAAGACAGCTCCTTCTTCAGCAGCAACAGCAGCAGCAAGTTAGTGGATTAA
AATCTCCCAAGAGGAATGACAAACAACCAGCTCTTCAGGTTCCCGTGTCAGTGGCTATGATGACACCTCAAGTTA
TCACTCCCCAGCAAATGCAGCAGATCCTCCAGCAACAAGTGCTGAGCCCTCAGCAGCTCCAGGTTCTCCTCCAGC
AGCAGCAGGCCCTCATGCTTCAACAGCAGCAGCTTCAAGAGTTTTATAAAAAACAACAGGAACAGTTGCAGCTTC
AACTTTTACAACAACAACATGCTGGAAAACAGCCTAAAGAGCAACAGCAGGTGGCTACCCAGCAGTTGGCTTTTC
AGCAGCAGCTTTTACAGATGCAGCAGTTACAGCAGCAGCACCTCCTGTCTTTGCAGCGCCAAGGCCTTCTGACAA
TTCAGCCCGGGCAGCCTGCCCTTCCCCTTCAACCTCTTGCTCAAGGCATGATTCCAACAGAACTGCAGCAGCTCT
GGAAAGAAGTGACAAGTGCTCATACTGCAGAAGAAACCACAGGCAACAATCACAGCAGTTTGGATCTGACCACGA
CATGTGTCTCCTCCTCTGCACCTTCCAAGACCTCCTTAATAATGAACCCACATGCCTCTACCAATGGACAGCTCT
CAGTCCACACTCCCAAAAGGGAAAGTTTGTCCCATGAGGAGCACCCCCATAGCCATCCTCTCTATGGACATGGTG
TATGCAAGTGGCCAGGCTGTGAAGCAGTGTGCGAAGATTTCCAATCATTTCTAAAACATCTCAACAGTGAGCATG
CGCTGGACGATAGAAGTACAGCCCAATGTAGAGTACAAATGCAGGTTGTACAGCAGTTAGAGCTACAGCTTGCAA
AAGACAAAGAACGCCTGCAAGCCATGATGACCCACCTGCATGTGAAGTCTACAGAACCCAAAGCCGCCCCTCAGC
CCTTGAATCTAGTATCAAGTGTCACTCTCTCCAAGTCCGCATCGGAGGCTTCTCCACAGAGCTTACCTCATACTC
CAACGACCCCAACCGCCCCCCTGACTCCCGTCACCCAAGGCCCCTCTGTCATCACAACCACCAGCATGCACACGG
TGGGACCCATCCGCAGGCGGTACTCAGACAAATACAACGTGCCCATTTCGTCAGCAGATATTGCGCAGAACCAAG
AATTTTATAAGAACGCAGAAGTTAGACCACCATTTACATATGCATCTTTAATTAGGCAGGCCATTCTCGAATCTC
CAGAAAAGCAGCTAACACTAAATGAGATCTATAACTGGTTCACACGAATGTTTGCTTACTTCCGACGCAACGCGG
CCACGTGGAAGAATGCAGTGCGTCATAATCTTAGTCTTCACAAGTGTTTTGTGCGAGTAGAAAACGTTAAAGGGG
CAGTATGGACAGTGGATGAAGTAGAATTCCAAAAACGAAGGCCACAAAAGATCAGTGGTAACCCTTCCCTTATTA
AAAACATGCAGAGCAGCCACGCCTACTGCACACCTCTCAATGCAGCTTTACAGGCTTCAATGGCTGAGAATAGTA
TACCTCTATACACTACCGCTTCCATGGGAAATCCCACTCTGGGCAACTTAGCCAGCGCAATACGGGAAGAGCTGA
ACGGGGCAATGGAGCATACCAACAGCAACGAGAGTGACAGCAGTCCAGGCAGATCTCCTATGCAAGCCGTGCATC
CTGTACACGTCAAAGAAGAGCCCCTCGATCCAGAGGAAGCTGAAGGGCCCCTGTCCTTAGTGACAACAGCCAACC
ACAGTCCAGATTTTGACCATGACAGAGATTACGAAGATGAACCAGTAAACGAGGACATGGAG**TGA**CTATCGGGGC
GGGCCAACCCCGAGAATGAAGATTGGAAAAAGGAAAAAAAAAAAACACGTCAAAAGTTAGCAGTGAAATTGTTCT
CCATTTGTTGTACAGTCTGGAGGATTTTCACTACGTTTTGACAACTCTGAAATGTGTTAACTCTTAGTGCCATCA
AGAACCCCATTTGGGAGTATTTTTGATTTTTCTACTTTTTGTTGAAAAAAGGAATTTGTACTCTGTGCATTGGAT
GGACTTGTTTGGTACTTGGGATTTTCCTCTCTTAACCGTCAACATCAGTGTTGTAAATTTGCTAAACTGATTCAC
TTTTAGCAGCAGACTTTGAACTGCAGTCCTGCCAACGTTGGACACTGAGGACGCCCGACAGAGCTTGTGCACCTA
AGCTGCAGACCAAGCCTTTGCCCAGAATTTAAGGATTCCAATGGACGACCTATTTGCACAGTACTGCATGTTGAT
TATCACTGCCTTTACTCCTTTTTTTTTTTTTTTTTTTTTTGCTTCCAGTTGGGATGGGGAAGGCCTTTGTGTG
TGTATTGGGGGGAGGGGTTAAAAAATAATTATCCCAAACTTTTTAATGTATTGCTTTTTTTTTTTTTTCCTTCT
ACTATACCATTTTAAGTTCTGACCTCAGGCCTCCATTTGGGCCGATGGCCTCTTGGAGGCTTAAAGTTTTCTGTA
CCTTGTGATGAATGTTAATAGGTGTTTTTATTATACAAAGCTGAATGTCATTTCTCGTTTGTAGCTTTCTGTCAC
TCATTCCATCTTCCTTCAGACATCACCACGTTTCTCTAAAGTCAGAAAACATTCCGTTTTGGTCTTTTTCAAAAA
GGTCCCAAATGCTGCACTCTACACATGAAGGCCCTCTCACACAGACGTGACGTCCTGCCAGAAAGAGAATGAATG
ACAGAAAAAAAAAAAGAGAGACAAACTCTAGGAACAATGCCGATTCATTCCACGCAGCAGTATTGGGGGTGGTTCG
GGGGAGGGGTGTTTCGGATTTTCTTTTTTTCTTTTCTTTTATTTTTTTTTTTTTGCAGCAACCATTAATAAATGC
CACCACATTCTACCAGCACAAGGAAACATAGGCAGCACTGAAAAAAAAAAAAAAAGCTCATATTAATTAGACTGAC

FIGURE 4347B

AATATGGCCTTGGAAGGCTCTCCCTTGTGGAACCAAGTTGCCATGGGCCTTGGGTGCTCTGCGATAACGGGTGTG
GGTTGGTTTTGTTTGCAAAATGGCCAAAAAAAAAACCGGCTTCCCCGAGCAGCTGCCCTGAAAGTAGGGGTGGCG
GCGGCGGCGCTGAGTTTATACATTAGTTCAGACCTACTTGGTGGCATTAAACTGTTTGAATGCAAATTCGATTTC
AGATTGAACTTGTTAAGGGAGTTAACGAGGGCTGAGTTCAGCAAATGCTAAAGTGTTAATTTCAAATATGCAAAT
TTGGTACTGCAGTTTGTTATGCAATATTATATCACCAACCCAGTATCACAAAAACTCATAGAAGATATCATGTAG
GCCCTGGGCTTTGGGGGGGTCCCAAACATGGTATGCAGAAATGTGATGGTTACAGGTCAGTACAACCTCAGTCCT
TAGAACCCCTCCACACTTCAGCTCTGCACCCACTTTCCTGTCATTTATTTATATAGGACTGTAGTTTTTTTTAGT
TCGAGAGCCTTTCGAAGCTTAATTTATATTCTTTCTTTGTACCTTTTTTCTAAAATTACCAAAGATATTACACAA
AGGTAAATTATGTTCTCTGTTTTATGCTTTATCTGATGAAGCCAAATATCCTCTTATTGTTGATCAAAGGAGGCA
AAAGAATTTAGAGGCAAATGACAAGCGATAGGCTATTGCAACCTGAGAAAGAGAACTGCTCCTTCATCGTAAATT
TAGAAGACCAAGTAGATAATGGAACCAAAGTTGTACTTTTTTCTAGTAGTTATTTTTCCTTTTTCTTTTTGTGTA
CCTCTACAGAGACCAAAACTCATTCTCTTAAAGAGATTTTATGGGGCTACTGCAGATAAAAATAGGACACAATAT
TAAAGGAGCTACAGAAGGAAGGGAGTCCCATCTCAAAAAAAAAAATGAATGTATGCCACTGCAATTAGAGTATCCA
ATAAAGGAGACAGTTTAGAGTCAGGACAGAAAAGCTTCCATAATTGAACTAGATTACATAATAGTATTTCTAGAA
AAAGAGATATTTTTAGATTGTATGCCACTTTTGTTTAAGAACTGTGCTGTGATCACTGTATTAATTTTGGTTTAT
CTTGGCATATATCCTTCAGTTTGTTTTTATTTTTAATTTTTCCTTTTTTTCCGATTAGGCTTTGGTCAGCATTTT
TCATTTAAAGAAAAGTAACACTCCCATCCACTCATAAGCTTGGTACAAAAACTTCTCTGGCAGTTACTTTTGAAG
CTTCACTCTGCTTTCTGTATAAAGGGCAGTCTGTGGTCACGCAAGACTTAAAAAAAAAAAAAAAAAAAAAAAAA
AAAA

FIGURE 4348

MMQESGTETKSNGSAIQNGSGGSNHLLECGGLREGRSNGETPAVDIGAADLAHAQQQQQQALQVARQLLLQQQQQ
QQVSGLKSPKRNDKQPALQVPVSVAMMTPQVITPQQMQQILQQQVLSPQQLQVLLQQQQALMLQQQQLQEFYKKQ
QEQLQLQLLQQQHAGKQPKEQQQVATQQLAFQQQLLQMQQLQQQHLLSLQRQGLLTIQPGQPALPLQPLAQGMIP
TELQQLWKEVTSAHTAEETTGNNHSSLDLTTTCVSSSAPSKTSLIMNPHASTNGQLSVHTPKRESLSHEEHPHSH
PLYGHGVCKWPGCEAVCEDFQSFLKHLNSEHALDDRSTAQCRVQMQVVQQLELQLAKDKERLQAMMTHLHVKSTE
PKAAPQPLNLVSSVTLSKSASEASPQSLPHTPTTPTAPLTPVTQGPSVITTTSMHTVGPIRRRYSDKYNVPISSA
DIAQNQEFYKNAEVRPPFTYASLIRQAILESPEKQLTLNEIYNWFTRMFAYFRRNAATWKNAVRHNLSLHKCFVR
VENVKGAVWTVDEVEFQKRRPQKISGNPSLIKNMQSSHAYCTPLNAALQASMAENSIPLYTTASMGNPTLGNLAS
AIREELNGAMEHTNSNESDSSPGRSPMQAVHPVHVKEEPLDPEEAEGPLSLVTTANHSPDFDHDRDYEDEPVNED
ME

FIGURE 4349A

GAGGGAACGCTCCAGGTAAAGCGCTGGGGGAGGAAGCGACGCCGAGGAGCTACGGTTTCCTCCAGAGGTCTCCGC
CCCTCTGCCCCTATATTCCCAGAGCTCGAGTCTGATCCGGGCCTTGCCGGGCACCCTGGAAAGGCGGGGGGTGATA
GTACAGATGGAGACGCAACTGCAGAGCATTTTCGAAGAGGTGGTGAAAACGGAAGTTATAGAAGAGGCTTTTCCT
GGCATGTTTATGGATACTCCTGAAGATGAGAAAACAAAACTAATTAGCTGTTTGGGGGCCTTCAGACAGTTTTGG
GGTGGTCTTTCTCAGGAGTCTCATGAACAGTGTATCCAGTGGATTGTTAAGTTTATTCATGGTCAGCATAGTCCT
AAAAGAATTTCTTTTCTTTATGACTGCTTAGCAATGGCAGTTGAGACTGGTCTCCTTCCACCCAGGCTGGTTTGT
GAATCCCTGATAAACTCTGACACTCTTGAGTGGGAAAGAACACAGCTTTGGGCCTTAACATTTAAACTGGTTCGG
AAAATAATTGGGGGAGTGGATTACAAGGGTGTTCGAGATCTCTTAAAAGTGATTTTGGAGAAGATTTTGACAATT
CCTAATACAGTGAGCTCTGCTGTTGTACAGCAGCTTCTGGCAGCAAGAGAGGTTATAGCATATATCTTGGAAAGA
AATGCCTGCTTATTACCAGCCTATTTTGCAGTCACTGAGATCAGGAAACTGTATCCTGAAGGCAAACTTCCACAC
TGGTTACTTGGAAACCTAGTATCAGACTTTGTGGATACCTTCAGGCCCACAGCAAGGATAAACTCCATTTGTGGT
CGCTGTAGTCTTCTGCCAGTTGTAAATAATTCGGGTGCCATTTGTAATTCATGGAAACTGGATCCTGCTACTCTT
CGTTTTCCTTTGAAAGGCCTTTTGCCATATGATAAGGATCTGTTTGAACCACAGACTGCTTTGTTGAGATATGTA
TTGGAGCAGCCTTATTCCAGGGATATGGTCTGCAATATGCTAGGTTTAAATAAGCAGACCTTGAACATTGCTCAG
CACAAGCAGCGCTGCCCTGTGCTGGAGGACCAGTTGGTGGATCTGGTTGTTTATGCCATGGAGCGATCTGAGACC
GAGGAGAAGTTTGACGATGGGGGAACAAGCCAACTCCTGTGGCAGCATCTCTCAAGTCAGCTCATTTTCTTTGTG
CTTTTCCAGTTTGCAAGTTTTCCACATATGGTGCTTTCTCTTCATCAGAAGTTAGCAGGGCGAGGACTGATTAAA
GGCAGAGATCATCTTATGTGGGTTCTCCTGCAATTCATTTCTGGAAGTATTCAGAAAAATGCACTAGCTGATTTT
CTCCCTGTGATGAAGCTCTTCGACTTGCTATACCCAGAAAAAGAATATATCCCAGTTCCTGATATTAACAAACCC
CAGTCAACCCATGCCTTTGCAATGACCTGTATTTGGATTCATCTCAATAGAAAAGCTCAAAATGACAACTCCAAG
CTACAGATTCCAATACCTCATTCCCTAAGACTTCACCATGAGTTCCTGCAGCAGAGTCTAAGAAATAAAAGTTTA
CAGATGAATGACTATAAGATTGCTCTATTGTGTAATGCATACTCTACAAATTCAGAATGTTTTACATTACCCATG
GGAGCTCTGGTAGAAACTATTTATGGAAATGGAATTATGAGGATACCTCTCCCTGGAACAAACTGTATGGCTTCA
GGATCTATTACCCCCTTACCTATGAACCTCCTGGATTCACTGACAGTTCATGCCAAAATGAGCCTTATTCACAGC
ATTGCAACCAGGGTGATAAAACTTGCTCATGCAAAGTCCAGTGTGGCCTTGGCTCCAGCCCTAGTGGAAACTTAC
AGTCGTTTATTGGTCTATATGGAAATAGAGTCTTTGGGCATCAAAGGATTTATCAGTCAGCTTTTGCCAACTGTT
TTCAAATCACATGCATGGGGGATCTTACACACACTCCTTGAGATGTTTAGCTACCGGATGCATCATATTCAGCCT
CATTACAGAGTTCAGCTCCTGAGTCATCTTCATACTTTGGCTGCAGTTGCACAAACAAACCAGAACCAGCTCCAT
CTTTGTGTCGAGAGCACTGCTCTCAGGCTTATAACAGCATTAGGTAGCTCAGAGGTACAACCGCAGTTTACACGC
TTCCTTAGTGATCCCAAAACAGTGCTCTCAGCAGAATCTGAAGAACTGAACCGAGCCTTGATATTGACCTTGGCT
AGAGCAACTCATGTAACAGATTTTTTTACAGGCTCTGATTCAATTCAGGGAACTTGGTGTAAAGACATACTTCAG
ACCATCATGAGTTTCACTCCTCATAATTGGGCTTCACACACCCTGAGCTGTTTTCCAGGCCCACTACAGGCATTC
TTCAAACAAAATAATGTGCCTCAGGAAAGCCGTTTTAATCTGAAAAAAAATGTGGAGGAGGAGTATAGGAAGTGG
AAGTCAATGAGCAACGAAAACGACATTATTACCCACTTCTCTATGCAGGGCTCCCCTCCTCTCTTTCTTTGTCTT
CTCTGGAAAATGCTCTTGGAAACAGATCATATTAATCAGATTGGCTATAGAGTATTAGAGAGAATTGGAGCCAGG
GCCTTGGTAGCCCATGTGAGGACATTTGCAGATTTCCTGGTATATGAGTTTTCTACATCAGCAGGGGGTCAGCAA
CTCAATAAATGCATTGAAATTCTTAATGACATGGTATGGAAGTATAACATTGTTACACTGGACAGATTAATTCTC
TGCCTGGCCATGCGTAGTCACGAAGGAAATGAAGCCCAGGTTTGTTATTTCATAATTCAGTTGCTGTTACTCAAA
CCAAACGATTTTAGAAATCGAGTAAGTGACTTTGTGAAGGAAAATTCCCCAGAGCACTGGTTACAGAATGACTGG
CACACCAAGCACATGAATTATCACAAGAAATATCCAGAGAAGTTGTATTTTGAGGGCCTCGCGGAACAGGTGGAT
CCTCCTGTACAGATCCAGTCTCCCTATCTGCCCATCTATTTTGGGAATGTGTGTCTTCGATTCCTTCCAGTATTT
GATATAGTAATCCACAGATTTTTAGAGTTGCTTCCGGTATCCAAATCACTGGAGACTCTACTGGATCATCTAGGA
GGCTTATATAAATTTCATGATCGTCCAGTGACTTATCTGTATAACACTCTGCACTATTATGAAATGCACCTGAGA
GACCGCGCATTTCTCAAACGAAAACTCGTCCATGCGATCATTGGCTCTCTGAAGGATAATCGACCGCAGGGCTGG
TGTCTAAGTGACACTTACCTGAAATGCGCTATGAATGCACGAGAGGAAAATCCTTGGGTTCCAGATGACACCTAC
TATTGCAGATTGATTGGCAGACTAGTCGATACGATGGCTGGCAAATCTCCTGGTCCCTTTCCAAACTGTGACTGG
AGATTCAATGAGTTTCCCAACCCAGCTGCCCATGCTCTCCATGTTACTTGTGTGGAGCTCATGGCCTTGGCAGTT
TCAGGCAAAGAAGTTGGGAATGCCCTTCTAAATGTTGTCCTAAAAAGTCAGCCTTTAGTGCCAAGAGAGAACATT

FIGURE 4349B

ACAGCATGGATGAATGCAATTGGTTTGATCATCACTGCCCTACCAGAGCCATATTGGATTGTTCTTCATGATCGA
ATTGTGAGTGTCATCAGCAGCCCCAGCTTGACGTCTGAAACAGAGTGGGTTGGCTATCCATTCCGCCTCTTTGAT
TTCACTGCCTGTCATCAGTCCTACTCTGAGATGAGTTGTAGCTATACGTTAGCTCTTGCACATGCTGTGTGGCAC
CATTCTAGCATCGGACAACTTTCTCTCATTCCAAAGTTTCTTACTGAAGTACTTCTTCCTATAGTGAAGACCGAA
TTCCAGTTGCTTTATGTATACCATCTTGTTGGACCATTTTTACAAAGATTTCAGCAAGAGAGAACTCGTTGTATG
ATAGAGATTGGTGTGGCGTTTTATGACATGCTGCTGAATGTTGACCAGTGTAGCACCCATTTAAATTACATGGAT
CCCATCTGTGACTTCCTCTATCACATGAAGTATATGTTTACTGGTGACAGCGTGAAAGAGCAAGTAGAGAAGATT
ATCTGTAACTTAAAACCAGCTTTAAAACTTCGTCTTCGATTCATCACACACATTAGCAAGATGGAGCCAGCTGCA
GTGCCTCCACAAGCCATGAACAGTGGGTCTCCAGCACCTCAGTCTAATCAG**TAA**AAAGTCAGAGTACACAGCAAG
GGTTCCAAATTAAGAGGAAGCAAAACGCTGCCCAGATCCTGAGAAACCTGGAGAAAATCAACCTTAGTAGTTTCA
ACTCATACATTGTCTTGTTTGATTTTGTTCTTTGTTTTTTATCCTCTTTAAGCACAGATGCGTGTTGAAGTCTAA
GGTGTTCTGTCATCACACTCTCTTTACTAGAATAAGTGTGCCCAGGCAGAAAAAAAAAAGTGTATTCAATGTTGCT
GGCATGTGTGGATTCACAGCTCGTGGCTGTAAGGAAATCTGGGAGTTTCATAAATCCATTAAAATCCTTTTAGAG
TTGCCAAAAAAAAAAAAAAAAAAAG

FIGURE 4350

METQLQSIFEEVVKTEVIEEAFPGMFMDTPEDEKTKLISCLGAFRQFWGGLSQESHEQCIQWIVKFIHGQHSPKR
ISFLYDCLAMAVETGLLPPRLVCESLINSDTLEWERTQLWALTFKLVRKIIGGVDYKGVRDLLKVILEKILTIPN
TVSSAVVQQLLAAREVIAYILERNACLLPAYFAVTEIRKLYPEGKLPHWLLGNLVSDFVDTFRPTARINSICGRC
SLLPVVNNSGAICNSWKLDPATLRFPLKGLLPYDKDLFEPQTALLRYVLEQPYSRDMVCNMLGLNKQTLNIAQHK
QRCPVLEDQLVDLVVYAMERSETEEKFDDGGTSQLLWQHLSSQLIFFVLFQFASFPHMVLSLHQKLAGRGLIKGR
DHLMWVLLQFISGSIQKNALADFLPVMKLFDLLYPEKEYIPVPDINKPQSTHAFAMTCIWIHLNRKAQNDNSKLQ
IPIPHSLRLHHEFLQQSLRNKSLQMNDYKIALLCNAYSTNSECFTLPMGALVETIYGNGIMRIPLPGTNCMASGS
ITPLPMNLLDSLTVHAKMSLIHSIATRVIKLAHAKSSVALAPALVETYSRLLVYMEIESLGIKGFISQLLPTVFK
SHAWGILHTLLEMFSYRMHHIQPHYRVQLLSHLHTLAAVAQTNQNQLHLCVESTALRLITALGSSEVQPQFTRFL
SDPKTVLSAESEELNRALILTLARATHVTDFFTGSDSIQGTWCKDILQTIMSFTPHNWASHTLSCFPGPLQAFFK
QNNVPQESRFNLKKNVEEEYRKWKSMSNENDIITHFSMQGSPPLFLCLLWKMLLETDHINQIGYRVLERIGARAL
VAHVRTFADFLVYEFSTSAGGQQLNKCIEILNDMVWKYNIVTLDRLILCLAMRSHEGNEAQVCYFIIQLLLLKPN
DFRNRVSDFVKENSPEHWLQNDWHTKHMNYHKKYPEKLYFEGLAEQVDPPVQIQSPYLPIYFGNVCLRFLPVFDI
VIHRFLELLPVSKSLETLLDHLGGLYKFHDRPVTYLYNTLHYYEMHLRDRAFLKRKLVHAIIGSLKDNRPQGWCL
SDTYLKCAMNAREENPWVPDDTYYCRLIGRLVDTMAGKSPGPFPNCDWRFNEFPNPAAHALHVTCVELMALAVSG
KEVGNALLNVVLKSQPLVPRENITAWMNAIGLIITALPEPYWIVLHDRIVSVISSPSLTSETEWVGYPFRLFDFT
ACHQSYSEMSCSYTLALAHAVWHHSSIGQLSLIPKFLTEVLLPIVKTEFQLLYVYHLVGPFLQRFQQERTRCMIE
IGVAFYDMLLNVDQCSTHLNYMDPICDFLYHMKYMFTGDSVKEQVEKIICNLKPALKLRLRFITHISKMEPAAVP
PQAMNSGSPAPQSNQ

FIGURE 4351

CGCCCGCGCGCCCCGGGAGCCTACCCAGCACGCGCTCCGCGCCCACTGGTTCCCTCCAGCCGCCGCCGTCCAGCC
GAGTCCCCACTCCGGAGTCGCCGCTGCCGCGGGGACATGGTCCTCTGCGTTCAGGGACCTCGTCCTTTGCTGGCT
GTGGAGCGGACTGGGCAGCGGCCCCTGTGGGCCCCGTCCCTGGAACTGCCCAAGCCAGTCATGCAGCCCTTGCCT
GCTGGGGCCTTCCTCGAGGAGGTGGCAGAGGGTACCCCAGCCCAGACAGAGAGTGAGCCAAAGGTGCTGGACCCA
GAGGAGGATCTGCTGTGCATAGCCAAGACCTTCTCCTACCTTCGGGAATCTGGCTGGTATTGGGGTTCCATTACG
GCCAGCGAGGCCCGACAACACCTGCAGAAGATGCCAGAAGGCACGTTCTTAGTACGTGACAGCACGCACCCCAGC
TACCTGTTCACGCTGTCAGTGAAAACCACTCGTGGCCCCACCAATGTACGCATTGAGTATGCCGACTCCAGCTTC
CGTCTGGACTCCAACTGCTTGTCCAGGCCACGCATCCTGGCCTTTCCGGATGTGGTCAGCCTTGTGCAGCACTAT
GTGGCCTCCTGCACTGCTGATACCCGAAGCGACAGCCCCGATCCTGCTCCCACCCCGGCCCTGCCTATGCCTAAG
GAGGATGCGCCTAGTGACCCAGCACTGCCTGCTCCTCCACCAGCCACTGCTGTACACCTAAAACTGGTGCAGCCC
TTTGTACGCAGAAGCAGTGCCCGCAGCCTGCAACACCTGTGCCGCCTTGTCATCAACCGTCTGGTGGCCGACGTG
GACTGCCTGCCACTGCCCCGGCGCATGGCCGACTACCTCCGACAGTACCCCTTCCAGCTCTGACTGTACGGGGCA
ATCTGCCCACCCTCACCCAGTCGCACCCTGGAGGGGACATCAGCCCCAGCTGGACTTGGGCCCCCACTGTCCCTC
CTCCAGGCATCCTGGTGCCTGCATACCTCTGGCAGCTGGCCCAGGAAGAGCCAGCAAGAGCAAGGCATGGGAGAG
GGGAGGTGTCACACAACTTGGAGGTAAATGCCCCCAGGCCGCATGTGGCTTCATTATACTGAGCCATGTGTCAGA
GGATGGGGAGACAGGCAGGACCTTGTCTCACCTGTGGGCTGGGCCCAGACCTCCACTCGCTTGCCTGCCCTGGCC
ACCTGAACTGTATGGGCACTCTCAGCCCTGGTTTTTCAATCCCCAGGGTCGGGTAGGACCCCTACTGGCAGCCAG
CCTCTGTTTCTGGGAGGATGACATGCAGAGGAACTGAGATCGACAGTGACTAGTGACCCCTTGTTGAGGGGTAAG
CCAGGCTAGGGGACTGCACAATTATACACTATTTATTTATTTATTCTCCTTGGGGTTGGTGTCAGGGGCGAGCCA
ACCCCACCTCTATGCCCTGAGCCCTGGTAGTCCAGAGACCCCAACTCTGCCCTGGCTTCTCTGGTTCTTCCCTGT
GGAAAGCCCATCCTGAGACATCTTGCTGGAACCAAGGCAATCCTGGATGTCCTGGTACTGACCCACCCGTCTGTG
AATGTGTCCACTCTCTTCTGCGCCCAGCCATATTTGGGGAGGATGGACAACTACAATAGGTAAGAAAATGCAGCC
GGAGCCTCAGTCCCCAGCAGAGCCTGTGTCTCACCCCCTCACAGGACAGAGCTGTATCTGCATAGAGCTGGTCTC
ACTGTGGCGCAGGCCCC

FIGURE 4352

MVLCVQGPRPLLAVERTGQRPLWAPSLELPKPVMQPLPAGAFLEEVAEGTPAQTESEPKVLDPEEDLLCIAKTFS
YLRESGWYWGSITASEARQHLQKMPEGTFLVRDSTHPSYLFTLSVKTTRGPTNVRIEYADSSFRLDSNCLSRPRI
LAFPDVVSLVQHYVASCTADTRSDSPDPAPTPALPMPKEDAPSDPALPAPPPATAVHLKLVQPFVRRSSARSLQH
LCRLVINRLVADVDCLPLPRRMADYLRQYPFQL

FIGURE 4353

GTTTTGCCTGCTAGCATCTCCCTGTAACTCTCCCAATCTTGAGGAGTGATCCCTGTCCCAGCCCCTGGAAAGGGG
CAGGAACGACAAACTCAAAGTCCAGGATGTTCACCATGACAAGAGCCATGGAAGAGGCTCTTTTTCAGCACTTCA
TGCACCAGAAGCTGGGGATCGCCTATGCCATACACAAGCCATTTCCCTTCTTTGAAGGCCTCCTAGACAACTCCA
TCATCACTAAGAGAATGTACATGGAATCTCTGGAAGCCTGTAGAAATTTGATCCCTGTATCCAGAGTGGTGCACA
ACATTCTCACCCAACTGGAGAGGACTTTTAACCTGTCTCTTCTGGTGACATTGTTCAGTCAAATTAACCTGCGTG
AATATCCCAATCTGGTGACGATTTACAGAAGCTTCAAACGTGTTGGTGCTTCCTATGAACGGCAGAGCAGAGACA
CACCAATCCTACTTGAAGCCCCAACTGGCCTAGCAGAAGGAAGCTCCCTCCATACCCCACTGGCGCTGCCCCCAC
CACAACCCCCTCAACCAAGCTGTTCACCCTGTGCGCCAAGAGTCAGTGAGCCTGGAACATCCTCCCAGCAAAGCG
ATGAGATCCTGAGTGAGTCGCCCAGCCCATCTGACCCTGTCCTGCCTCTCCCTGCACTCATCCAGGAAGGAAGAA
GCACTTCAGTGACCAATGACAAGTTAACATCCAAAATGAATGCGGAAGAAGACTCAGAAGAGATGCCCAGCCTCC
TCACTAGCACTGTGCAAGTGGCCAGTGACAACCTGATCCCCCAAATAAGAGATAAAGAAGACCCTCAAGAGATGC
CCCACTCTCCCTTGGGCTCTATGCCAGAGATAAGAGATAATTCTCCAGAACCAAATGACCCAGAAGAGCCCCAGG
AGGTGTCCAGCACACCTTCAGACAAGAAAGGAAAGAAAAGAAAAAGATGTATCTGGTCAACTCCAAAAAGGAGAC
ATAAGAAAAAAAGCCTCCCAAGAGGGACAGCCTCATCTAGACACGGAATCCAAAAGAAGCTCAAAAGGGTGGATC
AGGTTCCTCAAAAGAAAGATGACTCAACTTGTAACTCCACGGTAGAGACAAGGGCCCAAAAGGCGAGAACTGAAT
GTGCCCGAAAGTCGAGATCAGAGGAGATCATTGATGGCACTTCAGAAATGAATGAAGGAAAGAGGTCCCAGAAGA
CGCCTAGTACACCACGAAGGGTCACACAAGGGGCAGCCTCACCTGGGCATGGCATCCAAGAGAAGCTCCAAGTGG
TGGATAAGGTGACTCAAAGGAAAGACGACTCAACCTGGAACTCAGAGGTCATGATGAGGGTCCAAAAGGCAAGAA
CTAAATGTGCCCGAAAGTCCAGATCGAAAGAAAAGAAAAAGGAGAAAGATATCTGTTCAAGCTCAAAAAGGAGAT
TTCAGAAAAATATTCACCGAAGAGGAAAACCCAAAAGTGACACTGTGGATTTTCACTGTTCTAAGCTCCCCGTGA
CCTGTGGTGAGGCGAAAGGGATTTTATATAAGAAGAAAATGAAACACGGATCCTCAGTGAAGTGCATTCGGAATG
AGGATGGAACTTGGTTAACACCAAATGAATTTGAAGTCGAAGGAAAAGGAAGGAACGCAAAGAACTGGAAACGGA
ATATACGTTGTGAAGGAATGACCCTAGGAGAGCTGCTGAAGCGGAAAAACTCGGATGAATGCGAGGTGTGCTGTC
AAGGGGGACAACTTCTCTGCTGCGGTACTTGTCCACGAGTCTTCCATGAGGACTGTCACATCCCCCCTGTGGAAG
CCAAGAGGATGCTGTGGAGTTGCACCTTCTGCAGGATGAAGAGGTCTTCAGGAAGCCAACAGTGCCATCATGTAT
CTAAGACCCTGGAGAGGCAGATGCAGCCTCAGGACCAGCTGATTCGAGATTACGGTGAGCCCTTTCAGGAAGCAA
TGTGGTTGGACCTGGTTAAGGAAAGGCTGATTACGGAAATGTACACGGTGGCATGGTTTGTGCGAGACATGCGCC
TGATGTTTCGCAACCATAAAACATTTTACAAGGCTTCTGACTTTGGCCAGGTAGGACTTGACTTAGAGGCAGAAT
TTGAAAAAGATCTCAAAGACGTGCTCGGTTTTCATGAAGCCAATGACGGCGGTTTCTGGACTCTTCCTTGACCCT
GTTCTGTAAAGACTGAAGCATCCCCACCTCAGGATTCAGCTGATGGGACCCTGGCTTGGACTGTTGATTGCCAGT
GAGTCTGGGATGTAATTGGCTGCCCTCAGGACCCAAACCCAGACACTTCATAGGATTATCACACCCTCCATCTTT
ATTCTTTCTTTTTACCTTTAAAAGTCTATATCTA

FIGURE 4354

MFTMTRAMEEALFQHFMHQKLGIAYAIHKPFPFFEGLLDNSIITKRMYMESLEACRNLIPVSRVVHNILTQLERT
FNLSLLVTLFSQINLREYPNLVTIYRSFKRVGASYERQSRDTPILLEAPTGLAEGSSLHTPLALPPPQPPQPSCS
PCAPRVSEPGTSSQQSDEILSESPSPSDPVLPLPALIQEGRSTSVTNDKLTSKMNAEEDSEEMPSLLTSTVQVAS
DNLIPQIRDKEDPQEMPHSPLGSMPEIRDNSPEPNDPEEPQEVSSTPSDKKGKKRKRCIWSTPKRRHKKKSLPRG
TASSRHGIQKKLKRVDQVPQKKDDSTCNSTVETRAQKARTECARKSRSEEIIDGTSEMNEGKRSQKTPSTPRRVT
QGAASPGHGIQEKLQVVDKVTQRKDDSTWNSEVMMRVQKARTKCARKSRSKEKKKEKDICSSSKRRFQKNIHRRG
KPKSDTVDFHCSKLPVTCGEAKGILYKKKMKHGSSVKCIRNEDGTWLTPNEFEVEGKGRNAKNWKRNIRCEGMTL
GELLKRKNSDECEVCCQGGQLLCCGTCPRVFHEDCHIPPVEAKRMLWSCTFCRMKRSSGSQQCHHVSKTLERQMQ
PQDQLIRDYGEPFQEAMWLDLVKERLITEMYTVAWFVRDMRLMFRNHKTFYKASDFGQVGLDLEAEFEKDLKDVL
GFHEANDGGFWTLP

FIGURE 4355

GGCACGAGGCGGGGAGCCCGGGGCCTGCCAGGCCCGGGCTGCAGCCGCGTCTGATCGCCGAGCGCGCCGCGTAGA
CCTCCGCTCCCCCAGGGGGGGCTGTCGGGGGGCTGTTAGGTGCCTGGATGACAAGTGGACAGTTTAAGCCGGTTC
CTCAGATCCTAATGGAGCTGCCCCCTGCCGAGCAACAGAGGCTCTTTAACGAAGCCGCAGCCATCATCAGGCACC
TGGAGTGGACGGACGCCGTGCAGCTGACCGCGCTGGTCATGGGCAGCGAGGCCCTGCAGCAGCAGCTGCTGGCCA
TGCTGGTGAACTACGTCACCAAGGAGCTGCGGGCCGAGATCCAGTATGATGACTAGGCCGCACCTCCGGGGAGGT
GGGGGGCCCCTTTAAATGACTCTGTGATTCTGAAGAGGTGGCTTGGGAGTTGGGAGAAGCCCAGCGGATGCCCCC
TGGGGAATCTCCACATCATCAGTGTATTACTAGTAATGTCCCGCTGGAGAGGCCACCGCTGTGCAGTGTCATGTT
CCAGAAATTACTGATGAAGCAGCATGTGTTGGTGGCATGTGCACTGGCCTGCCATGACAGCCCTCTGACTGGCCC
CCCAGTGAAGAGTAAAGGCCTGCCTGCCGCAGGCTTCGGAGGCGTCTGCTGAGTCCTCTCACCCGCATGGGTCTG
GGGAAGTGATCACGCTCAGCCGACGGTCTGACCACACTTCATCCTCCCCCCGGGGCCTTCTCATCTTGGGAGATG
ACTCCTCTTCAGAGCACCTGCTGCAGGACTGGATCCCACCCCCCTGCAGGTCCTGGGGTCTCAGGGCCTTGGAGC
AGCCCATGCTGGAATCATGTTTACCTCCTAGTGCAACCGTCCCCTACCCAGGGACTGTCGAATGGCCCCACGGAG
GGGACGGGCGGCCTGCTGAGTGAAGCCACAAATACCGAGTGGACTTGACCCCGGCCCCCACTAGGCTGCACACCT
AGACTCGCCCTGCCAGGGCCTCGCTCTTCCCATCTGAAAAGTCCTGGTAGTTCTTGAGGTTTACTTCTCAAATGA
AATATTTTTAGTAAAAAGTACAGGTATATCTCGGAGATATTGTGGGTTCAGTTCCAGACCACCTCGGTAAAGCCA
ACATCACAATAAAGCAAGGAAGCGCATTGTTTTAGTTTCCCAGTGCATCTAAGTCATGTTTACTGCATATTGCAG
TCCACTAAATGTGCAATAGCATTATGTCTAACAAATGTACAAACCTTAATTTAAAAATATTTACTGTTCAAAATG
CTGACACAGAAACGCAAAGTGAGCACATGCTGTTGGAAAATGGTGCCAAATAGACTTGCCTGATGCCAGGCTGCT
ACAAACCTTCAATTTAAAAAAAAAACACAGTATTCACAAAGCATAGTAGAATGAGGTATGCCTGTATTGCTCTTT
CTGAAGTGGTGTGATATAAACCATCTCTAAGAAATGTTTCTACCCTAAAGATTTCCCCAGTACAGTCAGCTCTCC
GTAACTGTGGTCTCCACATTTAGATCCAACCAGCCTTGGATAGGAAATATTTGAAAAAAGAAATTGCATTGGTAC
TGAACACGTACAGACCTTTTTTTCTTGCCATTATTCCCTAAACAATATGGTGTAGCATATTTACATAGCATTTAT
ATTGTATTTGGTATTATAAGAAATCTAGAGATGATTTAAATTATACAGGAAGGTGTGCGTAGGTTACGTGCAAAC
GCTATGCCATTGCCCATCAGGGACTTGAGCATCCTCAGATGTCGGTGTCTGAGGGTTGAGGTTGCAGTCCTGGAA
CCCATCCCCCATGGATACTGAGGCATAGCTGTACTGTGTGTTTTCACTTTGCTTTCAGAACTACGACTTGAATGT
GATCGATTACAATAAATGTTTTTCTAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4356

MTSGQFKPVPQILMELPPAEQQRLFNEAAAIIRHLEWTDAVQLTALVMGSEALQQQLLAMLVNYVTKELRAEIQY
DD

FIGURE 4357

GGCACGAGGGTTCCCGCCAGGTCCGTGCCGGGCGAGAGAGATGCTGCCCGGCCCGCCTCGGCTTTGAGGCGAGAG
AAGTGTCCCAGACCCATTTCGCCTTGCTGACGGCGTCGAGCCCTGGCCAGACATGTCCACAGGGTTCTCCTTCGG
GTCCGGGACTCTGGGCTCCACCACCGTGGCCGCCGGCGGGACCAGCACAGGCGGCGTTTTCTCCTTCGGAACGGG
AGCGTCTAGCAACCCTTCTGTGGGGCTCAATTTTGGAAATCTTGGAAGTACTTCAACTCCAGCAACTACATCTGC
TCCTTCAAGTGGTTTTGGAACCGGGCTCTTTGGATCTAAACCTGCCACTGGGTTCACTCTAGGAGGAACAAATAC
AGGAATAGCAACAACTATAACTACAGGATTAACTCTGGGAACGCCAGCCACTACATCTGCAGCTACAACAGGCTT
CAGTTTAGGATTCAATAAACCTGCAGCATCTGCCACACCATTTGCTCTACCTATTACCTCTACCTCAGCTAGCGG
TCTGACTCTTTCGTCTGCTCTGACATCAACTCCAGCAGCATCCACAGGATTTACTCTAAATAATTTGGGTGGGAC
AACAGCCACAACTACAACTGCATCAACAGGCCTCTCTTTAGGGGGAGCCTTAGCTGGTTTGGGAGGTTCACTTTT
CCAGAGTACAAACACAGGAACATCAGGACTTGGACAGAATGCTTTAGGGTTGACTTTGGGAACTACAGCAGCTAC
TTCAACTGCAGGCAATGAAGGCCTTGGTGGTATAGATTTCAGTAGCTCCTCAGATAAAAAGAGTGATAAAACGGG
AACAAGACCAGAGGATAGTAAAGCTCTGAAGGATGAAAATCTACCTCCTGTCATCTGCCAGGATGTTGAAAATCT
CCAGAAATTTGTGAAGGAGCAGAAACAAGTTCAAGAAGAAATTAGTAGAATGTCTTCAAAAGCAATGCTTAAGGT
ACAAGAAGATATTAAAGCTCTGAAGCAGCTCCTGTCGTTGGCTGCCAATGGAATACAGAGAAACACTCTCAACAT
TGACAAATTGAAAATAGAAACTGCTCAGGAGTTGAAGAATGCTGAAATAGCTTTAAGAACCCAGAAGACACCACC
TGGACTTCAACATGAATATGCAGCTCCTGCTGACTACTTCAGAATCTTGGTTCAGCAATTTGAGGTACAGCTTCA
GCAGTACAGGCAGCAGATTGAAGAACTAGAAAACCATCTTGCCACTCAAGCAAATAATTCACATATAACCCCTCA
AGATTTGTCAATGGCTATGCAGAAAATTTATCAAACATTTGTAGCTTTAGCGGCACAACTTCAGTCTATTCATGA
AAATGTAAAGGTTCTGAAAGAACAGTACCTTGGCTACAGGAAAATGTTCTTGGGAGATGCTGTTGATGTGTTTGA
AACAAGGCGAGCAGAAGCCAAGAAGTGGCAGAACACACCCAGAGTTACTACTGGACCCACTCCTTTCAGCACCAT
GCCAAACGCAGCAGCCGTTGCCATGGCTGCAACACTTACACAGCAGCAACAGCCTGCTACAGGGCCACAGCCATC
TCTGGGAGTTAGTTTTGGAACGCCATTCGGCTCAGGTATTGGCACTGGCTTGCAATCAAGTGGCTTAGGTTCTTC
AAACCTTGGAGGATTTGGAACTAGCTCTGGTTTTGGATGCAGCACCACAGGGGCCTCCACATTTGGATTTGGAAC
AACAAATAAACCCTCAGGAAGTCTTAGTGCAGGCTTTGGCAGCTCAAGTACATCTGGGTTTAACTTCAGCAATCC
TGGCATCACGGCATCAGCTGGTTTGACTTTTGGGGTGTCCAATCCTGCCTCTGCAGGTTTTGGAACAGGAGGACA
ACTCCTTCAGTTGAAGAAACCTCCAGCTGGAAACAAAAGAGGAAAAAGATAAACATGGGTTGATGTGTTGAGAGA
ATCCATAGCAGCACCGTTCATTCTATGAGTCTATTTTTCTAATGATGCAGTAATTAAATTGCATCCCAGGAGATT
TATAAAGTTTTGATATTTTTCCCTACTCTGGAATTTGAACTTTCTTCATGTTTGCCATACTGAACATCTTTTTTC
TTGTGGAATTTAAAGTCCAGCTGTGTTTTCTTTTTAATTTGATTCTCAGTGTAAGAAATGTTCTGATTACATCAC
TGATTGGTAATGGTTAGAAACCATTAACCTAAAACTTACTATTTAACCTAGTGTTTTTGTTGATGAGGTTTACAT
TATGTGAATACATGCACATTTGTTTCTTATACAGGTGGTGTGAACTCTAGGGCCTATACTAGAATCAATTTGTTC
CTTGTTAAAGGCCTTTTGAATTATACTGCAGGGCATCTTGTGAATATGTATGTAAATATATACAGAATAATACAC
ACAGTTGTGTGTGCATATAAAATACATATTTACGCCAGGCGTGGTGGCTCACGCCTGTAATCCCAGCACTTTGGG
AGGCCGAGGCAGGCGGATCACCTGAGGTCAGGAGTTTGAGACCAGCCTGACATGGTGAAACCCCATCTCTACGAA
AAATACAAAAATTAGCTGGGCATAGTGGCGGGTACCTATAATCCCAGCTACTCGGGAGGCTGAGGCACGAGAATC
ACTTGAAGCCGGGAGGTGGGGGTTGCAGTGAGCCGAGATCACACCACTGCACTCCAGCCTGGGCAACAAGAGCAA
AACTCCGTCTCAAAAAAAAAAAAAAAAAAA

FIGURE 4358

MSTGFSFGSGTLGSTTVAAGGTSTGGVFSFGTGASSNPSVGLNFGNLGSTSTPATTSAPSSGFGTGLFGSKPATG
FTLGGTNTGIATTITTGLTLGTPATTSAATTGFSLGFNKPAASATPFALPITSTSASGLTLSSALTSTPAASTGF
TLNNLGGTTATTTTASTGLSLGGALAGLGGSLFQSTNTGTSGLGQNALGLTLGTTAATSTAGNEGLGGIDFSSSS
DKKSDKTGTRPEDSKALKDENLPPVICQDVENLQKFVKEQKQVQEEISRMSSKAMLKVQEDIKALKQLLSLAANG
IQRNTLNIDKLKIETAQELKNAEIALRTQKTPPGLQHEYAAPADYFRILVQQFEVQLQQYRQQIEELENHLATQA
NNSHITPQDLSMAMQKIYQTFVALAAQLQSIHENVKVLKEQYLGYRKMFLGDAVDVFETRRAEAKKWQNTPRVTT
GPTPFSTMPNAAAVAMAATLTQQQQPATGPQPSLGVSFGTPFGSGIGTGLQSSGLGSSNLGGFGTSSGFGCSTTG
ASTFGFGTTNKPSGSLSAGFGSSSTSGFNFSNPGITASAGLTFGVSNPASAGFGTGGQLLQLKKPPAGNKRGKR

FIGURE 4359

GGGGCGACGTTTAGCGACTATTGCGCCTGCGCCAGCGCCGGCTGCGAGACTGGGGCCGTGGCTGCTGGTCCCGGG
TGATGCTAGGCGGCTCCCTGGGCTCCAGGCTGTTGCGGGGTGTAGGTGGGAGTCACGGACGGTTCGGGGCCCGAG
GTGTCCGCGAAGGTGGCGCAGCCATGGCGGCAGGGGAGAGCATGGCTCAGCGGATGGTCTGGGTGGACCTGGAGA
TGACAGGATTGGACATTGAGAAGGACCAGATTATTGAGATGGCCTGTCTGATAACTGACTCTGATCTCAACATTT
TGGCTGAAGGTCCTAACCTGATTATAAAACAACCAGATGAGTTGCTGGACAGCATGTCAGATTGGTGTAAGGAGC
ATCACGGGAGGTCTGGCCTTACCAAGGCAGTGAAGGAGAGTACAATTACATTGCAGCAGGCAGAGTATGAATTTC
TGTCCTTTGTACGACAGCAGACTCCTCCAGGGCTCTGTCCACTTGCAGGAAATTCAGTTCATGAAGATAAGAAGT
TTCTTGACAAATACATGCCCCAGTTCATGAAACATCTTCATTATAGAATAATTGATGTGAGCACTGTTAAAGAAC
TGTGCAGACGCTGGTATCCAGAAGAATATGAATTTGCACCAAAGAAGGCTGCTTCTCATAGGGCACTTGATGACA
TTAGTGAAAGCATCAAAGAGCTTCAGTTTTACCGAAATAACATCTTCAAGAAAAAAATAGATGAAAAGAAGAGGA
AAATTATAGAAAATGGGGAAAATGAGAAGACCGTGAGTTGATGCCAGTTATCATGCTGCCACTACATCGTTATCT
GGAGGCAACTTCTGGTGGTTTTTTTTTCTCACGCTGATGGCTTGGCAGAGCACCTTCGGTTAACTTGCATCTCCA
GATTGATTACTCAAGCAGACAGCACACGAAATACTATTTTTCTCCTAATATGCTGTTTCCATTATGACACAGCAG
CTCCTTTGTAAGTACCAGGTCATGTCCATCCCTTGGTACATATATGCATTTGCTTTTAAACCATTTCTTTTGTTT
AAATAAATAAATAAGTAAATAAAGCTAGTTCTATTGAAATGCAAAAAAAAAAAAAAAAAAAAA

FIGURE 4360

MLGGSLGSRLLRGVGGSHGRFGARGVREGGAAMAAGESMAQRMVWVDLEMTGLDIEKDQIIEMACLITDSDLNIL
AEGPNLIIKQPDELLDSMSDWCKEHHGRSGLTKAVKESTITLQQAEYEFLSFVRQQTPPGLCPLAGNSVHEDKKF
LDKYMPQFMKHLHYRIIDVSTVKELCRRWYPEEYEFAPKKAASHRALDDISESIKELQFYRNNIFKKKIDEKKRK
IIENGENEKTVS

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FIGURE 4361

ATGGAAGTGTGTTACCAGCTGCCGGTACTGCCCCTGGACAGGCCGGTCCCCCAGCACGTCCTCAGCCGCCGAGGA
GCCATCAGCTTCAGCTCCAGCTCCGCTCTCTTCGGCTGCCCCAATCCCCGGCAGCTCTCTCAGAGGCGTGGAGCT
ATTTCCTATGACAGTTCTGATCAGACTGCATTATACATTCGTATGCTAGGAGATGTACGTGTAAGGAGCCGAGCA
GGATTTGAATCAGAAAGAAGAGGTTCTCACCCATATATTGATTTTCGTATTTTCCACTCTCAATCTGAAATTGAA
GTGTCTGTCTCTGCAAGGAATATCAGAAGGCTACTAAGTTTCCAGCGATATCTTAGATCTTCACGCTTTTTTCGT
GGTACTGCGGTTTCAAATTCCCTAAACATTTTAGATGATGATTATAATGGACAAGCCAAGTGTATGCTGGAAAAA
GTTGGAAATTGGAATTTTGATATCTTTCTATTTGATAGACTAACAAATGGAAATAGTCTAGTAAGCTTAACCTTT
CATTTATTTAGTCTTCATGGATTAATTGAGTACTTCCATTTAGATATGATGAAACTTCGTAGATTTTTAGTTATG
ATTCAAGAAGATTACCACAGTCAAAATCCTTACCATAACGCAGTCCACGCTGCGGATGTTACTCAGGCCATGCAC
TGTTACTTAAAGGAACCTAAGCTTGCCAATTCTGTAACTCCTTGGGATATCTTGCTGAGCTTAATTGCAGCTGCC
ACTCATGATCTGGATCATCCAGGTGTTAATCAACCTTTCCTTATTAAAACTAACCATTACTTGGCAACTTTATAC
AAGAATACCTCAGTACTGGAAAATCACCACTGGAGATCTGCAGTGGGCTTATTGAGAGAATCAGGCTTATTCTCA
CATCTGCCATTAGAAAGCAGGCAACAAATGGAGACACAGATAGGTGCTCTGATACTAGCCACAGACATCAGTCGC
CAGAATGAGTATCTGTCTTTGTTTAGGTCCCATTTGGATAGAGGTGATTTATGCCTAGAAGACACCAGACACAGA
CATTTGGTTTTACAGATGGCTTTGAAATGTGCTGATATTTGTAACCCATGTCGGACGTGGGAATTAAGCAAGCAG
TGGAGTGAAAAAGTAACGGAGGAATTCTTCCATCAAGGAGATATAGAAAAAAAATATCATTTGGGTGTGAGTCCA
CTTTGCGATCGTCACACTGAATCTATTGCCAACATCCAGATTGGTAACTATACATATTTAGATATAGCTGGTTAG

AAAAATGCCACTGTTTTTTATCAAGAAGGGAAATATATTTGAAATATAAAATATTAAAATTATGCTCATTTCTATT
TTTAAAAATAATTTAAGAAATTTTACCCTTGTTTTCCCTTGTTATGGCTCTTCTAATTCTCATTTAATTTTAGGA
TGTAAAAAGTATATTTTTGCAGAACAGGCAGCAGCAATAACTTGTTTCTGTTCTTATGTAAATAAGAATCCATTA
TTCGCTCATGTGGAAGCTTCTTTTGCATCATTTGGGACTGCCATTTAAAAAAGGATAGGTAAACAAAGAAATGAC
AAAAATAAAATAAATAAAATAAAAATGGATAGGTGGTGACCCACTGAGCCTGATCATAATACGAAGACCAGCTTC
TGCCACTGCCTTTCCAGACTCTTACCACTGCCTGTTGATTAAATCTAACTCTTCAACATCCTAGACAGGCCCTTA
TAATCTTGCTTCAAATGCTGTGCAGCCATCTTGCCTCAACTTCCCTCTCATTTGCCTACAGCATCTCGGGACGCT
TCTGTGTTTCCCAAGTATACGCTGTTCTTTCGCTCTTTGTGCTTCGCCAGTGCTTTCCATGTGCCTCGTAGAGTT
ATTTTTCTTGAAGAGGCAGCTCAAATGTCACCTTCTCCAGAAGCTGCTCTCCACTTGCTTTAGGCAGAGTCAGTC
ACTTTTCTTCTAGATTCCAAAGTGCCTGATCCACTTGGTTGTGGATTCCTGGAGCCTAGCACCACACCAGAAGCA
CGAGGCCCTTGAGAACTGTGTGTTGAGTGAACTAATAACTGTATTATAGAAAGCATAATGAAAATGTCCTGTGAC
TGAAGTATGTGTAGCTTGTTGCAGGAGTCACAGGAAAGTTGACTAGGATTGAGTGTGTTGGGCTTTGGGTATAAA
GGAGGGGGATTCTACGGGGGCAGTAGCTCAACAAGGAATAGAGGGAGGAGTGTAATTTTGGTAGCTGGTGTTGAA
TAGGGCCTTTGAGAATCAGACTGAACACAGTGAAATATGTGCCCAAAGTTCAGAAAGATGAAGTTTCCAGAAACT
AAGAAGGTAGCACAATATGTGGCATCATACTCAGAAAGGAAGACCATGCCATGGGGCCAGAAATTCAGAAACGTA
ATTCTTACATTGTGATTGCAATGGATACTCATGAAAGAAAGTGGGTAGTGGCCGATTTGCCTTCAGAGTGACAGG
TAGAGAAGGGAAGAGCGTGTAGAACTGTGGCCATACTTTAGGAGTGTGAGGGATGCTGAATCTCCCAGAGAGCTC
ACACTGGCCAGGAATGCTGAGAGTAGCAGATGCTTTTCTTTTGGGAGGATAGTAAAACAATTTAGAACCAGATAT
GCTTTGTCTTGATTCTCAAGTAGAATAATCTTCAAATGCAAAAGAATACATTAGAAATGGACAAAAGTGGCCAGG
AGCGGTAGCTCATACTTGTAACCCAGCACTTTGGGAAGCCGAGGCGGGCTGATCGCTTGAGGTCAGGAGTTCGAG
ACCAGCCTGGCCAAAATAGTGAAACTCACGTTTCTACTAAAAATACAAAAATTAGCTGGGTGTGATGGCCACTTG
GGAGGCTGAGATAGGAGAATCGCTTGAACCTGGGAGGCAGAGGTTGCAGTGAGCCAATATCGTGCCACTGCATTC
CAGCCTGGGTGACAGAATGAAACTCCATCACTCCATCTCAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4362

MEVCYQLPVLPLDRPVPQHVLSRRGAISFSSSSALFGCPNPRQLSQRRGAISYDSSDQTALYIRMLGDVRVRSRA
GFESERRGSHPYIDFRIFHSQSEIEVSVSARNIRRLLSFQRYLRSSRFFRGTAVSNSLNILDDDYNGQAKCMLEK
VGNWNFDIFLFDRLTNGNSLVSLTFHLFSLHGLIEYFHLDMMKLRRFLVMIQEDYHSQNPYHNAVHAADVTQAMH
CYLKEPKLANSVTPWDILLSLIAAATHDLDHPGVNQPFLIKTNHYLATLYKNTSVLENHHWRSAVGLLRESGLFS
HLPLESRQQMETQIGALILATDISRQNEYLSLFRSHLDRGDLCLEDTRHRHLVLQMALKCADICNPCRTWELSKQ
WSEKVTEEFFHQGDIEKKYHLGVSPLCDRHTESIANIQIGNYTYLDIAG

FIGURE 4363

TCCTTTGGTGCCTTGTGACCAGGGCCCTGATGGTTCATTAGATGGAGCCTTCGAGTCTTAGGGAGTTGCCGCAGG
GTCCCCACAGCGGCTCCCGACGGTTGTGAACCAGCATCCATCCTCCACGGATTCCGGCAACCCGCCTGGCCCTGG
ACGTGTCTCAACTGGCCCGCGTGAGGGGCCGCCCCGGAAATGACGCGCTGCCCCGCTGGCCAAGCGGAAGTGGAG
ATGGCGGAGCTGTACGTGAAGCCGGGCAACAAGGAACGCGGCTGGAACGACCCGCCGCAGTTCTCATACGGGCTG
CAGACCCAGGCCGGCGGACCCAGGCGCTCGCTGCTTACCAAGAGGGTAGCCGCACCCCAGGATGGATCCCCCAGA
GTCCCCGCATCAGAGACTTCTCCTGGGCCTCCCCCAATGGGGCCTCCACCTCCTTCAAGTAAGGCTCCCAGGTCC
CCACCTGTGGGGAGTGGTCCTGCCTCTGGCGTGGAGCCCACAAGTTTCCCAGTCGAGTCTGAGGCTCGACTGATG
GAGGATGTGCTGAGACCTTTGGAACAGGCATTGGAAGACTGCCGTGGCCACACAAGGAAGCAGGTATGTGATGAC
ATCAGCCGACGCCTGGCACTGCTGCAGGAACAGTGGGCTGGAGGAAAGTTGTCAATACCTGTAAAGAAGAGAATG
GCTCTACTGGTGCAAGAGCTTTCAAGCCACCGGTGGGACGCAGCAGATGACATCCACCGCTCCCTCATGGTTGAC
CATGTGACTGAGGTCAGTCAGTGGATGGTAGGAGTTAAAAGATTAATTGCAGAAAAGAGGAGTCTGTTTTCAGAG
GAGGCAGCCAATGAAGAGAAATCTGCAGCCACAGCTGAGAAGAACCATACCATACCAGGCTTCCAGCAGGCTTCA
TAATCCTCGGTTCCCCAGACT

FIGURE 4364

MTRCPAGQAEVEMAELYVKPGNKERGWNDPPQFSYGLQTQAGGPRRSLLTKRVAAPQDGSPRVPASETSPGPPPM
GPPPPSSKAPRSPPVGSGPASGVEPTSFPVESEARLMEDVLRPLEQALEDCRGHTRKQVCDDISRRLALLQEQWA
GGKLSIPVKKRMALLVQELSSHRWDAADDIHRSLMVDHVTEVSQWMVGVKRLIAEKRSLFSEEAANEEKSAATAE
KNHTIPGFQQAS

FIGURE 4365

CAGAAGACTACATTAGTGAGATGTAAGAATTATTAAATATTCCATTTCCGCTTTGGCTACAATTATGAAGAAGTT
GAAGGTACTTCTTTTAGACCACCAGTAAATAATCCTCCTTCAAAAAATAAAAATAAAAGAAAAAGGAAAATCATT
CAGGAAGAAATGACCTGTCTAAAAAAACCTAAGGAAGAATAATAATATAAGAAAGGAAATTTAAAAACATTCCAC
AAGAAGAAAAATTATTGTTTATACTCCTACTTATGGTTATATCTTATATTCTCTATTCAAGTGACCTGTCTTTTA
AAAAGGCAGTGCTGTCTTACCTCTTGCTAGTGGGTTAAATGTTTTCAAAAATTATAGCAGTAGTAGAAGTTTTGT
ATAAAATTTGTCCTTATTTGTTAATTGTATATAAATGTTAATTATTTGATACGAATGTTATGCATTTAGTATGCA
CATTGAAGTCTAAACTGTAGAAGAGTCTAAAACAAGTTCTCTTTTTGCAGATTCACATACTAATGGTTTAATTCT
GTGCTCTGTTTAAAGTACTATTATAACTAGAGTAGATCTGAATGAGGATAACCCTAAAATCATGAGGAATGGAAG
AATGGACCTTGAAACTACCTAGGCTTTTATGCATGGCACCTCTTTATAATGAAGACACTTTTTAAAGTTTTTGTT
TTTGTTTCAATTACCGCTAGATTTTTTTTTCTCTTTTTTTAAAATCCATTTTACTGGAAAGTTGGCCAGCAGAGG
GAGTAGAAATTATTAAAATTCTAGTGTTTGGATTGGGCCCTTCTCTAACAGTACATACTCATTCCCAAAGCAATC
CAAAAACAAAATGTGAACCATTTGGGTTTCAAATGTTAAGAACACTAAATAGCATGATTTAAAAAATGAAAAATG
CTAACACCCAAGAAAAGAAGATATTAAGTGCCTTTTAACAACTCCTAGAGTACAAAATGAGTACATCATAATGCT
GGCTCTTCTACTAATGAACCATCGAGTGATATTGAATAAATTATTTATCTTCTCAGTTTCCTTATCTGTAAATTA
CAATATTAGACTAAGTAAGTTTTTCCAACTCTTCACTACCAATTACCTTAGGCTTTTATAATGCTCCGCCTACTT
CAGTCCCATGTTTCAGAAGCTTTTGTCTATTTTTTAAACTCATTGATTAAATAATGATTAATGCATTCTCCACAT
TTTAATATTGCAAAGGCCCATTGGAGTTTCTGAAGTGGCTCCACAGAATTGAAATAATTTCAAATAACTGTAAAG
GAACTGAAAATCTTCACAGAGATGAAGTGGGGTTTCCATTAGGTGCTTTGAAATTTGATAACAAATCATCAACTT
CCACTGGTCAATATATAGATTTTGGGTGTCTGAGGCCCCAAGATTAGATGCCACTAATCTCCAAAGATTCCCTCC
AATTATGAAATATTTTAATGTCTACTTTTAGAGAGCACTAGCCAGTATATGACCATGTGATTAATTTCTTTTCAC
ACTAGATAAAATTACCTGGTTCAAAAGTGGTTTTTGTTTATTAAATTTGGTAATAAATATATATAATACACAGAC
AGGATAGTTTTTATGCTGAAGTTTTTGGCCAGCTTTAGTTTGAGGACTCCTTGATAAGCTTGCTAAACTTTCAGA
GTGCCCTGAGACACTTCCAGCCATCCCTCCTCCTGCCTTCATTGGGGCAGACTTGCATTGCAGTCTGACAGTAAT
TTTTTTTCTGATTGAGAATTATGTAAATTCAATACAATGTCAGTTTTTAAAAGTCAAAGTTAGATCAAGAGAATA
TTTCAGAGTTTTGGTTTACACATCAAGAAACAGACACACATACCTAGGAAAGATTTACACAATAGATAATCATCT
TAATGTGAAAGATATTTGAAGTATTAATTTTAATATATTAAATATGATTTCTGTTATAGTCTTCTGTATGGAATT
TTGTCACTTAAGATGAGCTGCAAATAAATAATACCTTCAATGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
A

FIGURE 4366

CCGGGCAGGTCTCCTGTGGTTTCCAGCCGCGTGAGTCCAGGGACAAGACCAACAGCTATGGGTCTTTCAGCTCA
CACATGACAGAGTTTCCACGAAAACGCAAAGGAAGTGATTCAGACCCATCCCATCAGAATCCCCTTACCTATCTT
CTTTCAACAAGGATAGAAATATCAGCCTCCAGTGGCAGCAGAGAAGCTCATAGCCAAACTGAAAAGCGGAGGAGA
GATAAAATGAATAACCTGATTGAAGAACTGTCTGCAATGATCCCTCAGTGCAACCCCATGGCGCGTAAACTGGAC
AAACTTACAGTTTTAAGAATGGCTGTTCAACACTTGAGATCTTTAAAAGGCTTGACAAATTCTTATGTGGGAAGT
AATTATAGACCATCATTTCTTCAGGATAATGAGCTCAGACATTTAATCCTTAAGACTGCAGAAGGCTTCTTATTT
GTGGTTGGATGTGAAAGAGGAAAAATTCTCTTCGTTTCTAAGTCAGTCTCCAAAATACTTAATTATGATCAGGCT
AGTTTGACTGGACAAAGCTTATTTGACTTCTTACATCCAAAAGATGTTGCCAAAGTAAAGGAACAACTTTCTTCT
TTTGATATTTCACCAAGAGAAAAGCTAATAGATACCAAAACTGGTTTGCAAGTTCACAGTAATCTCCACGCTGGA
AGGACACGTGTGTATTTTGGCTCAAGACGATCTTTTTTCTGTCGGATAAAGAGTTGTAAAATCTCTGTCAAAGAA
GAGCATGGATGCTTACCCAACTCAAAGAAGAAAGAGCACAGAAAATTCTATACTATCCATTGCACTGGTTACTTG
AGAAGCTGGCCTCCAAATATTGTTGGAATGGAAGAAGAAAGGAACAGTAAGAAAGACAACAGTAATTTTACCTGC
CTTGTGGCCATTGGAAGATTACAGCCATATATTGTTCCACAGAACAGTGGAGAGATTAATGTGAAACCAACTGAA
TTTATAACCCGGTTTGCAGTGAATGGAAAATTTGTCTATGTAGATCAAAGGGCAACAGCGATTTTAGGATATCTG
CCTCAGGAACTTTTGGGAACTTCTTGTTATGAATATTTTCATCAAGATGACCACAATAATTTGACTGACAAGCAC
AAAGCAGTTCTACAGAGTAAGGAGAAAATACTTACAGATTCCTACAAATTCAGAGCAAAAGATGGCTCTTTTGTA
ACTTTAAAAAGCCAATGGTTTAGTTTCACAAATCCTTGGACAAAAGAACTGGAATATATTGTATCTGTCAACACT
TTAGTTTTGGGACATAGTGAGCCTGGAGAAGCATCATTTTTACCTTGTAGCTCTCAATCATCAGAAGAATCCTCT
AGACAGTCCTGTATGAGTGTACCTGGAATGTCTACTGGAACAGTACTTGGTGCTGGTAGTATTGGAACAGATATT
GCAAATGAAATTCTGGATTTACAGAGGTTACAGTCTTCTTCATACCTTGATGATTCGAGTCCAACAGGTTTAATG
AAAGATACTCATACTGTAAACTGCAGGAGTATGTCAAATAAGGAGTTGTTTCCACCAAGTCCTTCTGAAATGGGG
GAGCTAGAGGCTACCAGGCAAAACCAGAGTACTGTTGCTGTCCACAGCCATGAGCCACTCCTCAGTGATGGTGCA
CAGTTGGATTTCGATGCCCTATGTGACAATGATGACACAGCCATGGCTGCATTTATGAATTACTTAGAAGCAGAG
GGGGGCCTGGGAGACCCTGGGGACTTCAGTGACATCCAGTGGACCCTCTAGCCTTTGATTTTTAACTCCAAAAAT
GAGAAACATTTTAAAGCATTTCATTTACGAAAAACTGTCTCAACTATTCTTAAGTACTGTATTGATATTGTTTGT
ATCTTTTATTAATGTTCTACCACTTTTTATAGATTTGCATCTTCCTGTCACAGGGATGTGGGGAAATACGTTTTC
CTCCCAAGAGAACCAAGTT

FIGURE 4367

MGSFSSHMTEFPRKRKGSDSDPSHQNPLTYLLSTRIEISASSGSREAHSQTEKRRRDKMNNLIEELSAMIPQCNP
MARKLDKLTVLRMAVQHLRSLKGLTNSYVGSNYRPSFLQDNELRHLILKTAEGFLFVVGCERGKILFVSKSVSKI
LNYDQASLTGQSLFDFLHPKDVAKVKEQLSSFDISPREKLIDTKTGLQVHSNLHAGRTRVYFGSRRSFFCRIKSC
KISVKEEHGCLPNSKKKEHRKFYTIHCTGYLRSWPPNIVGMEEERNSKKDNSNFTCLVAIGRLQPYIVPQNSGEI
NVKPTEFITRFAVNGKFVYVDQRATAILGYLPQELLGTSCYEYFHQDDHNNLTDKHKAVLQSKEKILTDSYKFRA
KDGSFVTLKSQWFSFTNPWTKELEYIVSVNTLVLGHSEPGEASFLPCSSQSSEESSRQSCMSVPGMSTGTVLGAG
SIGTDIANEILDLQRLQSSSYLDDSSPTGLMKDTHTVNCRSMSNKELFPPSPSEMGELEATRQNQSTVAVHSHEP
LLSDGAQLDFDALCDNDDTAMAAFMNYLEAEGGLGDPGDFSDIQWTL

FIGURE 4368

GCACACACTCATCGAAAAAAATTTGGATTATTAGAAGAGAGAGGTCTGCGGCTTCCACACCGTACAGCGTGGTTT
TTCTTCTCGGTATAAAAGCAAAGTTGTTTTTGATACGTGACAGTTTCCCACAAGCCAGGCTGATCCTTTTCTGTC
AGTCCACTTCACCAAGCCTGCCCTTGGACAAGGACCCG**ATG**CCCAACCCCAGGCCTGGCAAGCCCTCGGCCCCTT
CCTTGGCCCTTGGCCCATCCCCAGGAGCCTCGCCCAGCTGGAGGGCTGCACCCAAAGCCTCAGACCTGCTGGGGG
CCCGGGGCCCAGGGGGAACCTTCCAGGGCCGAGATCTTCGAGGCGGGGCCCATGCCTCCTCTTCTTCCTTGAACC
CCATGCCACCATCGCAGCTGCAGCTGCCCACACTGCCCCTAGTCATGGTGGCACCCTCCGGGGCACGGCTGGGCC
CCTTGCCCCACTTACAGGCACTCCTCCAGGACAGGCCACATTTCATGCACCAGCTCTCAACGGTGGATGCCCACG
CCCGGACCCCTGTGCTGCAGGTGCACCCCCTGGAGAGCCCAGCCATGATCAGCCTCACACCACCCACCACCGCCA
CTGGGGTCTTCTCCCTCAAGGCCCGGCCTGGCCTCCCACCTGGGATCAACGTGGCCAGCCTGGAATGGGTGTCCA
GGGAGCCGGCACTGCTCTGCACCTTCCCAAATCCCAGTGCACCCAGGAAGGACAGCACCCTTTCGGCTGTGCCCC
AGAGCTCCTACCCACTGCTGGCAAATGGTGTCTGCAAGTGGCCCGGATGTGAGAAGGTCTTCGAAGAGCCAGAGG
ACTTCCTCAAGCACTGCCAGGCGGACCATCTTCTGGATGAGAAGGGCAGGGCACAATGTCTCCTCCAGAGAGAGA
TGGTACAGTCTCTGGAGCAGCAGCTGGTGCTGGAGAAGGAGAAGCTGAGTGCCATGCAGGCCCACCTGGCTGGGA
AAATGGCACTGACCAAGGCTTCATCTGTGGCATCATCCGACAAGGGCTCCTGCTGCATCGTAGCTGCTGGCAGCC
AAGGCCCTGTCGTCCCAGCCTGGTCTGGCCCCCGGGAGGCCCCTGACAGCCTGTTTGCTGTCCGGAGGCACCTGT
GGGGTAGCCATGGAAACAGCACATTCCCAGAGTTCCTCCACAACATGGACTACTTCAAGTTCCACAACATGCGAC
CCCCTTTCACCTACGCCACGCTCATCCGCTGGGCCATCCTGGAGGCTCCAGAGAAGCAGCGGACACTCAATGAGA
TCTACCACTGGTTCACACGCATGTTTGCCTTCTTCAGAAACCATCCTGCCACCTGGAAGAACGCCATCCGCCACA
ACCTGAGTCTGCACAAGTGCTTTGTGCGGGTGGAGAGCGAGAAGGGGGCTGTGTGGACCGTGGATGAGCTGGAGT
TCCGCAAGAAACGGAGCCAGAGGCCCAGCAGGTGTTCCAACCCTACACCTGGCCCC**TGA**CCTCAAGATCAAGGAA
AGGAGGATGGACGAACAGGGGCCAAACTGGTGGGAGGCAGAGGTGGTGGGGGCAGGGATGATAGGCCCTGGATGT
GCCCACAGGGACCAAGAAGTGAGGTTTCCACTGTCTTGCCTGCCAGGGCCCCTGTTCCCCCGCTGGCAGCCACCC
CCTCCCCCATCATATCCTTTGCCCCAAGGCTGCTCAGAGGGGCCCCGGTCCTGGCCCCAGCCCCCACCTCCGCCC
CAGACACACCCCCCAGTCGAGCCCTGCAGCCAAACAGAGCCTTCACAACCAGCCACACAGAGCCTGCCTCAGCTG
CTCGCACAGATTACTTCAGGGCTGGAAAAGTCACACAGACACACAAAATGTCACAATCCTGTCCCTCAC

FIGURE 4369

MPNPRPGKPSAPSLALGPSPGASPSWRAAPKASDLLGARGPGGTFQGRDLRGGAHASSSSLNPMPPSQLQLPTLP
LVMVAPSGARLGPLPHLQALLQDRPHFMHQLSTVDAHARTPVLQVHPLESPAMISLTPPTTATGVFSLKARPGLP
PGINVASLEWVSREPALLCTFPNPSAPRKDSTLSAVPQSSYPLLANGVCKWPGCEKVFEEPEDFLKHCQADHLLD
EKGRAQCLLQREMVQSLEQQLVLEKEKLSAMQAHLAGKMALTKASSVASSDKGSCCIVAAGSQGPVVPAWSGPRE
APDSLFAVRRHLWGSHGNSTFPEFLHNMDYFKFHNMRPPFTYATLIRWAILEAPEKQRTLNEIYHWFTRMFAFFR
NHPATWKNAIRHNLSLHKCFVRVESEKGAVWTVDELEFRKKRSQRPSRCSNPTPGP

FIGURE 4370A

TTCCTCCGCGAAGGCTCCTTTGATATTAATAGTGTTGGTGTCTTGAAACTGACGTAATGCGCGGAGACTGAGGTC
CTGACAAGCGATAACATTTCTGATAAAGACCCGATCTTACTGCAATCTCTAGCGTCCTCTTTTTTGGTGCTGCTG
GTTTCTCCAGACCTCGCGTCCTCTCGATTGCTCTCTCGCCTTCCTATTTCTTTTTTTTTTTTTTAAACAAAAAAC
AACACCCCCTCCCCTCTCCCACCCGGCACCGGGCACATCCTTGCTCTATTTCCTTTCTCTTTCTCTCTCTCTCTC
TCTCTTTTTTAATAAGGGTGGGGGAGGGAAAGGGGGGGGAGGCAGGAAAGACCTTTTTCTCTCCCCCCCGCAATA
ATCCAAGATCAACTCTGCAAACAACAGAAGACGGTTCATGGCTTTGGCCGCCGCGCCACCATCTTTCGGGCTGCC
GAGGGTGTTCTTGACGATTAATCAACAGATGTACAGATCAGCTCTCAAAATGTCTTCTGTGTCTTCTGAGCGTCT
TCTAAGACAATTGCATTAGCCTCCTGCTAGTTGACTAATAGAATTAATAATTGTAAAAAGCACTCTAAAGCCACA
TGCCTTATGAAGTCAATGCTGGGTATGATTTTACAAATATGGTCCGGAAAAAGAACCCCCCTCTGAGAAACGTTG
CAAGTGAAGGCGAGGGCCAGATCCTGGAGCCTATAGGTACAGAAAGCAAGGTATCTGGAAAGAACAAAGAATTCT
CTGCAGATCAGATGTCAGAAAATACGGATCAGAGTGATGCTGCAGAACTAAATCATAAGGAGGAACATAGCTTGC
ATGTTCAAGATCCATCTTCTAGCAGTAAGAAGGACTTGAAAAGCGCAGTTCTGAGTGAGAAGGCTGGCTTCAATT
ATGAAAGCCCCAGTAAGGGAGGAAACTTTCCCTCCTTTCCGCATGATGAGGTGACAGACAGAAATATGTTGGCTT
TCTCATTTCCAGCTGCTGGGGGAGTCTGTGAGCCCTTGAAGTCTCCGCAAAGAGCAGAGGCAGATGACCCTCAAG
ATATGGCCTGCACCCCCTCAGGGGACTCACTGGAGACAAAGGAAGATCAGAAGATGTCACCAAAGGCTACAGAGG
AAACAGGGCAAGCACAGAGTGGTCAAGCCAATTGTCAAGGTTTGAGCCCAGTTTCAGTGGCCTCAAAAAACCCAC
AAGTGCCTTCAGATGGGGGTGTAAGACTGAATAAATCCAAAACTGACTTACTGGTGAATGACAACCCAGACCCGG
CACCTCTGTCTCCAGAGCTTCAGGACTTTAAATGCAATATCTGTGGATATGGTTACTACGGCAACGACCCCACAG
ATCTGATTAAGCACTTCCGAAAGTATCACTTAGGACTGCATAACCGCACCAGGCAAGATGCTGAGCTGGACAGCA
AAATCTTGGCCCTTCATAACATGGTGCAGTTCAGCCATTCCAAAGACTTCCAGAAGGTCAACCGTTCTGTGTTTT
CTGGTGTGCTGCAGGACATCAATTCTTCAAGGCCTGTTTTACTAAATGGGACCTATGATGTGCAGGTGACTTCAG
GTGGAACATTCATTGGCATTGGACGGAAAACACCAGATTGCCAAGGGAACACCAAGTATTTCCGCTGTAAATTCT
GCAATTTCACTTATATGGGCAACTCATCCACCGAATTAGAACAACATTTTCTTCAGACTCACCCAAACAAAATAA
AAGCTTCTCTCCCCTCCTCTGAGGTTGCAAAACCTTCAGAGAAAAACTCTAACAAGTCCATCCCTGCACTTCAAT
CCAGTGATTCTGGAGACTTGGGAAAATGGCAGGACAAGATAACAGTCAAAGCAGGAGATGACACTCCTGTTGGGT
ACTCAGTGCCCATAAAGCCCCTCGATTCCTCTAGACAAAATGGTACAGAGGCCACCAGTTACTACTGGTGTAAAT
TTTGTAGTTTCAGCTGTGAGTCATCTAGCTCACTTAAACTGCTAGAACATTATGGCAAGCAGCACGGAGCAGTGC
AGTCAGGCGGCCTTAATCCAGAGTTAAATGATAAGCTTTCCAGGGGCTCTGTCATTAATCAGAATGATCTAGCCA
AAAGTTCAGAAGGAGAGACAATGACCAAGACAGACAAGAGCTCGAGTGGGGCTAAAAAGAAGGACTTCTCCAGCA
AGGGAGCCGAGGATAATATGGTAACGAGCTATAATTGTCAGTTCTGTGACTTCCGATATTCCAAAAGCCATGGCC
CTGATGTAATTGTAGTGGGGCCACTTCTCCGTCATTATCAACAGCTCCATAACATTCACAAGTGTACCATTAAAC
ACTGTCCATTCTGTCCCAGAGGACTTTGCAGCCCAGAAAAGCACCTTGGAGAAATTACTTATCCGTTTGCTTGTA
GAAAAAGTAATTGTTCCCACTGTGCACTCTTGCTTCTGCACTTGTCTCCTGGGGCGGCTGGAAGCTCGCGAGTCA
AACATCAGTGCCATCAGTGTTCATTCACCACCCCTGACGTAGATGTACTCCTCTTTCACTATGAAAGTGTGCATG
AGTCCCAAGCATCGGATGTCAAACAAGAAGCAAATCACCTGCAAGGATCGGATGGGCAGCAGTCTGTCAAGGAAA
GCAAAGAACACTCATGTACCAAATGTGATTTTATTACCCAAGTGGAAGAAGAGATTTCCCGACACTACAGGAGAG
CACACAGCTGCTACAAATGCCGTCAGTGCAGTTTTACAGCTGCCGATACTCAGTCACTACTGGAGCACTTCAACA
CTGTTCACTGCCAGGAACAGGACATCACTACAGCCAACGGCGAAGAGGACGGTCATGCCATATCCACCATCAAAG
AGGAGCCCAAAATTGACTTCAGGGTCTACAATCTGCTAACTCCAGACTCTAAAATGGGAGAGCCAGTTTCTGAGA
GTGTGGTGAAGAGAGAGAAGCTGGAAGAGAAGGACGGGCTCAAAGAGAAAGTTTGGACCGAGAGTTCCAGTGATG
ACCTTCGCAATGTGACTTGGAGAGGGGCAGACATCCTGCGGGGGAGTCCGTCATACACCCAAGCAAGCCTGGGGC
TGCTGACGCCTGTGTCTGGCACCCAAGAGCAGACAAAGACTCTAAGGGATAGTCCCAATGTGGAGGCCGCCCATC
TGGCGCGACCTATTTATGGCTTGGCTGTGGAAACCAAGGGATTCCTGCAGGGGGCGCCAGCTGGCGGAGAGAAGT
CTGGGGCCCTCCCCCAGCAGTATCCTGCATCGGGAGAAAACAAGTCCAAGGATGAATCCCAGTCCCTGTTACGGA
GGCGTAGAGGCTCCGGTGTTTTTTGTGCCAATTGCCTGACCACAAAGACCTCTCTCTGGCGAAAGAATGCAAATG
GCGGATATGTATGCAACGCGTGTGGCCTCTACCAGAAGCTTCACTCGACTCCCAGGCCTTTAAACATCATTAAAC
AAAACAACGGTGAGCAGATTATTAGGAGGAGAACAAGAAAGCGCCTTAACCCAGAGGCACTTCAGGCTGAGCAGC
TCAACAAACAGCAGAGGGGCAGCAATGAGGAGCAAGTCAATGGAAGCCCGTTAGAGAGGAGGTCAGAAGATCATC

FIGURE 4370B

TAACTGAAAGTCACCAGAGAGAAATTCCACTCCCCAGCCTAAGTAAATACGAAGCCCAGGGTTCATTGACTAAAA
GCCATTCTGCTCAGCAGCCAGTCCTGGTCAGCCAAACTCTGGATATTCACAAAAGGATGCAACCTTTGCACATTC
AGATAAAAAGTCCTCAGGAAAGTACTGGAGATCCAGGAAATAGTTCATCCGTATCTGAAGGGAAAGGAAGTTCTG
AGAGAGGCAGTCCTATAGAAAAGTACATGAGACCTGCGAAACACCCAAATTATTCACCACCAGGCAGCCCTATTG
AAAAGTACCAGTACCCACTTTTTGGACTTCCCTTTGTACATAATGACTTCCAGAGTGAAGCTGATTGGCTGCGGT
TCTGGAGTAAATATAAGCTCTCCGTTCCTGGGAATCCGCACTACTTGAGTCACGTGCCTGGCCTACCAAATCCTT
GCCAAAACTATGTGCCTTATCCCACCTTCAATCTGCCTCCTCATTTTTCAGCTGTTGGATCAGACAATGACATTC
CTCTAGATTTGGCGATCAAGCATTCCAGACCTGGGCCAACTGCAAACGGTGCCTCCAAGGAGAAAACGAAGGCAC
CACCAAATGTAAAAAATGAAGGTCCCTTGAATGTAGTAAAAACAGAGAAAGTTGATAGAAGTACTCAAGATGAAC
TTTCAACAAAATGTGTGCACTGTGGCATTGTCTTTCTGGATGAAGTGATGTATGCTTTGCATATGAGTTGCCATG
GTGACAGTGGACCTTTCCAGTGCAGCATATGCCAGCATCTTTGCACGGACAAATATGACTTCACAACACATATCC
AGAGGGGCCTGCATAGGAACAATGCACAAGTGGAAAAAAATGGAAAACCTAAAGAGTAAAACCTTAGCACTTAGC
ACAATTAAATAGAAATAGGTTTTCTTGATGGGAATTCAATAGCTTGTAATGTCTTATGAAGACCTATTAAAAAAA
TACTTCATAGAGCCTGCCTTATCCAACATGAAATTCCCTTCTTTTGTTATTCTTTCTTTTGATGAGTAGGTTACC
AAGATTAAAAAGTGAGATAAATGGTCAATGAGAAAGAATGGAAGATGGTAAACAATCACTTTTTAAAACCTGTTA
AGTCAAAACCATCTTGGCTAATATGTACTGGGGAAATAATCCATAAGAGATATCACCAGACTAGAATTAATATAT
TTATAAAGAAAGAGACCAAAACTGTCTAGAATTTGAAAGGGTTTACATATTATTATACTAAAGCAGTACTGGACT
GGCCATTGGACCATTTGTTCCAAAACCCATAAATTGTTGCCTAAATTTATAATGATCATGAAACCCTAGGCAGAG
GAGGAGAAATTGAAGGTCCAGGGCAATGAAAGAAAAATGGCGCCCTCTCAATTTAGTCTTCTCTCATTGGCCATG
TTTCAGATTTTGACCTAGAAATGCGAGCTGTGGTTAGGCTTGGTTAGAGTGCAGCAAGCAACATGACAGATGGTG
GCACGCTGTTTTTACCCAGCCCTGCCTGTACATACACATGCACACCCTCTCTGATATTTTTGTCCTTTAGATGTT
CAAATACTCAGTAGTCCTTTTGTTTGCGGTTTAGATTCATTTTGTCCACACATGTACCCATTTTAAAAAACAATG
TCCTCGATGCTTCTGTAGTGATTTCATTTTAGCCAGGTATTTCTTTCTTGTGTGTGATGAACCAGTATGGATTTG
CTTTTCTAAGCCTCCTGTTGGTTACTAATCTCACTTGGCACATTATAACTAAAGGAATCCCCTCAATTCAAAAGC
ATAGATGGATACAAATGTCAGACCGTGGGTTTAATTTGTTTAGAACACATGGCATTTCTTCACAAGGTAACCTGC
TGTATTTATTTATTTTCTTTTGGTTAAATATAATTTCCAAACTTTGTGGTCAGGCAGCGTCTAAGGTTACGTTAC
CACAGACTGACAGTTGGTATATGTACCAGCCAATCCCTTCATTAAATGTATACAGATTTAGTTAAGTAGCATTAA
ATAGGATTCTTAGAAGTATGTCCTCATAGAACTTTTAATACTTAAGGCTTTGTAAAAACTATCCATGAAGGGAAA
GCTCCTCAGCATAACTGCTCAGGGAAATAGGGCTAAATAACTGAACATTAAATAATTGGTTAAAGGTGCTGTTAG
TCGAGCCTCAATGCTTGCTACAAGGATGTATGTACAAGGACTGACTTTAATAATTTGCATTATATTGTCCCAACC
AGTAGTTTATTTTTTGCCACGGAGATGTAGAAGATATTACAAGCTACTGGATGCACTGTCAGATTAACTTATTTC
ATTAAAGAAGTTGGGAGAACAAATAGGAAAAAAAAAACTTATTTTTCTAGTAAATATTAATGTATTACATTTCAA
ATAATGGTGCCTGACATATTGAATAATTATTTTCTACAGTGTACGTATGCAACAAAGATATTCCATCATGCATTA
GAGTCAGTTCTGGCTCTGCCTAGCTGTTTACATTTGCAAATGTAGCAAACAAGGTAATGAAGCAACTATTTCTAT
TGCAGTAGATATCCTTTTGTGTGTGTGTGTGTGCATTAAAGTTGTAAACGGTAACATGAAACAAATGAAAGTTCT
TGCTATAATGGTATGGAAAACAAGAAGGAAATGAAAATATTTTTATGCCTACTTAGGAAAAAAAGGGTAGCACTT
ATTCATTCCAAGTACTTTTTTTTTTTTAATTTTTAAGCTCTTAACTCACATTGTTATGCTTAAGATGATAAACAT
ATATCCTCTTTTTATTGCTTTGTCTATGTTTCATATGAAACATTTCAGAAATTATTTTGATAAGTGTTGCTGGAA
TCTGCAACGCTGATTTTTTTTTGCATTCTGTAGTCGCATTTGCACTCCATTTTTACATTAATTCGCAGTTGCTTT
GTATCATTGTTTTGTTTGGGTTTTGTTTCTTTTTCACAGTGCCGGGTCTTCGTTTCTTAAAGTTGGATGGCAGGT
AGAGTTCAACCAGTTCGTGACTGTTGTAGCGAATGAAGTTAAAAAAATGTCTTTCTGATGTTGTGTTGTCATTTT
CATTTTTGCATTTTTTTGTTTGCATATTAAAAAAAGAGAAAAGAGAAAGCAAGAGACAGAAATCAGGACTAAGTC
CTCTGCTTCAGTTTCATTGTTAACGGGCCTTATTCTGATCTCACCTGTCGCGTAGCTCTAATATTCACATAAACT
GAAATAAAGAAGTGGAATGAGGAGCTTTGACATTCAAATTATGTGATGTAATTTATCTTCCTTAGGAATTTTGAT
GGATGCATCTCAAAATGTATAGCCAGACTTGAGAGGTGACAATTAAAGATCTAAAAAAGAGAGGAGATTCCCCCA
AACAACAATATTTAATTTTCTTAGTAAAAAGAATAACAGAATGCATCGTGGCAATCCTTAAGCAACATTATCTAT
GTGGACTGCTTAAATCAGCAAAACACCAGAAGTTTGGTTAACTTGGGCAATATGACAAGTATTACTTTTTGGGCA
AAACTACTCATTAAGCAATTTCTCTAGTGTGTCGGACACAAATAGGTTCTTTATTTTTGGCATGTATGCCTTTTT

FIGURE 4370C

ATTTTCATTCAATTTTTTTTTTTTCTCAGACAGACATAGTAGTATCAACTAGCATTGGAAAATACATATCACTAT
TCTTGGAATATTTATGGTCAGTCTACTTTTTAGTAAAATATTTTTGGATAGCGTTGACACGATAGATCTTATTCC
ATACTTCTTTATTATTGATAATTTTATTTTCATTTTTTGCTTTCATTATTATACATATTTTGGTGGAGAAGAGGT
TGGGCTTTTTTGAAAGAGACAAAAATTTATTATAACACTAAACACTCCTTTTTTGACATATTAAAGCCTTTATTC
CATCTCTCAAGATATATTATAAAATTTATTTTTTTAATTTAAGATTTCTGAATTATTTTATCTTAAATTGTGATT
TTAAACGAGCTATTATGGTACGGAACTTTTTTTAATGAGGAATTTCATGATGATTTAGGAATTTTCTCTCTTGGA
AAAGGCTTCCCCTGTGATGAAAATGATGTGCCAGCTAAAATTGTGTGCCATTTAAAAACTGAAAATATTTTAAAA
TTATTTGTCTATATTCTAAATTGAGCTTTGGATCAAACTTTAGGCCAGGACCAGCTCATGCGTTCTCATTCTTCC
TTTTCTCACTCTTTCTCTCATCACTCACCTCTGTATTCATTCTGTTGTTTGGGATAGAAAAATCATAAAGAGCCA
ACCCATCTCAGAACGTTGTGGATTGAGAGAGACACTACATGACTCCAAGTATATGAGAAAAGGACAGAGCTCTAA
TTGATAACTCTGTAGTTCAAAAGGAAAAGAGTATGCCCAATTCTCTCTACATGACATATTGAGATTTTTTTTAAT
CAACTTTTAAGATAGTGATGTTCTGTTCTAAACTGTTCTGTTTTAGTGAAGGTAGATTTTTATAAAACAAGCATG
GGGATTCTTTTCTAAGGTAATATTAATGAGAAGGGAAAAAAGTATCTTTAACAGCTCTTTGTTGAAGCCTGTGGT
AGCACATTATGTTTATAATTGCACATGTGCACATAATCTATTATGATCCAATGCAAATACAGCTCCAAAAATATT
AAATGTATATATATTTTAAAATGCCTGAGGAAATACATTTTTCTTAATAAACTGAAGAGTCTCAGTATGGCTATT
AAAATAATTATTAGCCTCCTGTTGTGTGGCTGCAAAACATCACAAAGTGACCGGTCTTGAGACCTGTGAACTGCT
GCCCTGTTTAGTAAATAAAATTAATGCATTTCTAGAGGGGGAATATCTGCCATCCAGTGGTGGAAATGTGGAGTA
AAGAAGCTGGTGGTCTGCTTCTGTGCTGTATGCCAGCCTTTTGCCTTAAGTTGAGAGGAGGTCAACTTTAGCTAC
TGTCTTTGGTTTGAGAGCCATGGCAAAAAAAAAAAAAGAAAAAAAGATCAAGTCGTCTTTGGTGAGCCAGTAAGG
TGAAAGCTTGCTGACTGTCCAAGGCACAAGAGAAAATTGAGGAATTGAAATGCAACCTGAGTATCAAACTAAATA
TTCTAATCAAAGGTAGGTACTGTTAGGTGGAATTCTATCAGCAGGCAACTGCAAATGAGAAGAAGATAGAAGGAC
GCCCGTCGGGACTTTGGAGGGCATTGTTATTTTCCCAAAGAAAGACGGCCAAGGGCAGAGGCATGGATTCTTTGC
AGAGCACTTCCTTTTGGTTTTTCAGTACTGTTTCATAGACAGTGGGCTCACATGTTCCTGATAGTGCTGCAGTTG
CTTAGAAAGCATCCCAGTTAATTGCAGTAATTAGAACTTCTGGAATATGCTAGGGCAGAAGTATGTCAAGTATGT
CACATGAAGAAAATGTGAAATTCAAGAGTAATCCACACGTGAGAAACTAGACAATGTACATTCATGTGTTCTCTT
GAAAGGAAAGGGAGAGCTGTAAGCTTCACTCTGTCCTACACCGGAGAAAAGCAGGAATAACTTTACCGTGGAAAT
AATGTTTAGCTTTTATCAGAGAAAATTGTCCTTCTAGAGCATAGAGTCCCAAAACTCAATTCTGGTTTTCCCCTG
TTTTTTTTTTTTTTTTTTTTCCCAACATATGAACTGCAGCATATCACTTTTTCTTTTTGTGCCTCAGGTTCCTCA
CCTGTAAAATTGAAAAATATATGTATTAATAATATTATTAATAATAATAATGGTAATGTAGTACTTGTTTGTAAA
GCACTTTGAGATCCTTGGTTGAAAGGCACCATAGGAGTGCCAAGTATTATTATGTGGCCAAGGGGGTTATTTAAA
CTGTCAGTTCCCAAAGGCCAGGAAAGGTTGGGGTCATTTTTCTTAAAGACGAGCTGTAAATATCAACTAGGCAGC
CAATAGTGTTGACTATGAAGATGCAAAACTATTACTAGGCTGATAAAATCATAGTTTCTTAATGGCTACCAATAA
GGCAAATATCACAATAATAAACGCCAAATTCCTTAGGGCGGACTATTTGACAACCACATGGAAAACTTTGGGGGA
GGCATGAGGGGGGAACATCTCAAAATGCCAATGTAAAATTTAACTTACAGCAATATTCACCAGCAGAAAATGTCT
TTCATATGGAATGATTTCATGTTGCTAAGAAAAAGAATTCAATTTGTAGTCCTGATTTGAATACTAGAATGTTGG
CTATAATAGTTCTGTTCTTACAACACATGAAATTTTTTCGTTTTATTTTATTTTGTTTTCATAGTGCATGTTCAT
TTCTACTCACAAACATGTTCTTGGTGTATTTCTTATGCAAACAATCTTCAGGCAGCAAAGATGTCTGTTACATCT
AAACTTGAATAATAAAGTTTTACCACCAGTTACACA

FIGURE 4371

MVRKKNPPLRNVASEGEGQILEPIGTESKVSGKNKEFSADQMSENTDQSDAAELNHKEEHSLHVQDPSSSSKKDL
KSAVLSEKAGFNYESPSKGGNFPSFPHDEVTDRNMLAFSFPAAGGVCEPLKSPQRAEADDPQDMACTPSGDSLET
KEDQKMSPKATEETGQAQSGQANCQGLSPVSVASKNPQVPSDGGVRLNKSKTDLLVNDNPDPAPLSPELQDFKCN
ICGYGYYGNDPTDLIKHFRKYHLGLHNRTRQDAELDSKILALHNMVQFSHSKDFQKVNRSVFSGVLQDINSSRPV
LLNGTYDVQVTSGGTFIGIGRKTPDCQGNTKYFRCKFCNFTYMGNSSTELEQHFLQTHPNKIKASLPSSEVAKPS
EKNSNKSIPALQSSDSGDLGKWQDKITVKAGDDTPVGYSVPIKPLDSSRQNGTEATSYYWCKFCSFSCESSSSLK
LLEHYGKQHGAVQSGGLNPELNDKLSRGSVINQNDLAKSSEGETMTKTDKSSSGAKKKDFSSKGAEDNMVTSYNC
QFCDFRYSKSHGPDVIVVGPLLRHYQQLHNIHKCTIKHCPFCPRGLCSPEKHLGEITYPFACRKSNCSHCALLLL
HLSPGAAGSSRVKHQCHQCSFTTPDVDVLLFHYESVHESQASDVKQEANHLQGSDGQQSVKESKEHSCTKCDFIT
QVEEEISRHYRRAHSCYKCRQCSFTAADTQSLLEHFNTVHCQEQDITTANGEEDGHAISTIKEEPKIDFRVYNLL
TPDSKMGEPVSESVVKREKLEEKDGLKEKVWTESSSDDLRNVTWRGADILRGSPSYTQASLGLLTPVSGTQEQTK
TLRDSPNVEAAHLARPIYGLAVETKGFLQGAPAGGEKSGALPQQYPASGENKSKDESQSLLRRRRGSGVFCANCL
TTKTSLWRKNANGGYVCNACGLYQKLHSTPRPLNIIKQNNGEQIIRRRTRKRLNPEALQAEQLNKQQRGSNEEQV
NGSPLERRSEDHLTESHQREIPLPSLSKYEAQGSLTKSHSAQQPVLVSQTLDIHKRMQPLHIQIKSPQESTGDPG
NSSSVSEGKGSSERGSPIEKYMRPAKHPNYSPPGSPIEKYQYPLFGLPFVHNDFQSEADWLRFWSKYKLSVPGNP
HYLSHVPGLPNPCQNYVPYPTFNLPPHFSAVGSDNDIPLDLAIKHSRPGPTANGASKEKTKAPPNVKNEGPLNVV
KTEKVDRSTQDELSTKCVHCGIVFLDEVMYALHMSCHGDSGPFQCSICQHLCTDKYDFTTHIQRGLHRNNAQVEK
NGKPKE

FIGURE 4372

CAACTCATGGCGGCGGCGGCGGCGGCGGCAGCTGCTTGGGCGCGGTGCGGTGGTGACTGAGCTACGAGCCTGGCG
GCGGGTGTGCGCCGAGCCCCGGCCCGGCCCGGCCCTCGCGTGCCTCCCAGGCTCCGCACCCCTGATGCTGCGCGG
GTGCTGAGCCCGCTTCGGCCGGGACGATGGTGAAGTATTTCCTGGGCCAGAGCGTGCTCCGGAGTTCCTGGGACC
AAGTGTTCGCCGCCTTCTGGCAGCGGTACCCGAATCCCTATAGCAAACATGTCTTGACGGAAGACATAGTACACC
GGGAGGTGACCCCTGACCAGAAACTGCTGTCCCGGCGACTCCTGACCAAGACCAACAGGATGCCACGCTGGGCCG
AGCGACTATTTCCTGCCAATGTTGCTCACTCGGTGTACGTCCTGGAGGACTCTATTGTGGACCCACAGAATCAGA
CCATGACTACCTTCACCTGGAACATCAACCACGCCCGGCTGATGGTGGTGGAGGAACGATGTGTTTACTGTGTGA
ACTCTGACAACAGTGGCTGGACTGAAATCCGCCGGGAAGCCTGGGTCTCCTCTAGCTTATTTGGTGTCTCCAGAG
CTGTCCAGGAATTTGGTCTTGCCCGGTTCAAAAGCAACGTGACCAAGACTATGAAGGGTTTTGAATATATCTTGG
CTAAGCTGCAAGGCGAGGCCCCTTCCAAAACACTTGTTGAGACAGCCAAGGAAGCCAAGGAGAAGGCAAAGGAGA
CGGCACTGGCAGCTACAGAGAAGGCCAAGGACCTCGCCAGCAAGGCGGCCACCAAGAAGCAGCAGCAGCAGCAAC
AGTTTGTGTAGCCAGTCTACCACCACCACAGCACCCCAGACAGCTAGGCTTAGCCCCTCTGCCCTCCCTTCATTG
TACTTTATCATTAAAAATCAACTTCCAGCCCTGTCTGCTGTCTACGTGGTGGGTTGTGGGGATGCAGTTTGGCAT
CTGCAGTACACCAAGCACATGATTCATGTCTGAGCCAGGTCTGCTTATTCTCCCATTGGGCAGCTGAGGACCGAG
GCACAGAGGTGCGGTGACTTGCCCGGGGCTCCAGGTAGCCTGCAGGTTAACTGGCGGTAAGTGCTAGACTGTAAG
CCCGACAAGGGCAGGGCTTTTGGTTTTGTTCTCTGATGTGTCTCAGTATCTAGCACATAATAGACACTCAATAAA
TACTTGTTGAATTCAAA

FIGURE 4373

MVKYFLGQSVLRSSWDQVFAAFWQRYPNPYSKHVLTEDIVHREVTPDQKLLSRRLLTKTNRMPRWAERLFPANVA
HSVYVLEDSIVDPQNQTMTTFTWNINHARLMVVEERCVYCVNSDNSGWTEIRREAWVSSSLFGVSRAVQEFGLAR
FKSNVTKTMKGFEYILAKLQGEAPSKTLVETAKEAKEKAKETALAATEKAKDLASKAATKKQQQQQQFV

FIGURE 4374

AGCGCAGTATGGCGGGCGGGGCCCGGGAGGTGCTCACACTGCAGTTGGGACATTTTGCCGGTTTCGTGGGCGCGC
ACTGGTGGAACCAGCAGGATGCTGCGCTGGGCCGAGCGACCGATTCCAAGGAGCCCCCGGGAGAGCTGTGCCCCG
ACGTCCTGTATCGTACGGGCCGGACGCTGCACGGCCAGGAGACCTACACGCCGCGACTCATCCTCATGGATCTGA
AGGGTAGTTTGAGCTCCCTAAAAGAGGAAGGTGGACTCTACAGGGACAAACAGTTGGATGCTGCAATAGCATGGC
AGGGGAAGCTCACCACACACAAAGAGGAACTCTATCCCAAGAACCCTTATCTCCAAGACTTTCTGAGTGCAGAGG
GAGTGCTGAGTAGTGATGGTGTCTGGAGGGTCAAATCCATTCCCAATGGCAAAGGTTCCTCACCACTCCCCACCG
CTACAACTCCAAAACCACTTATCCCTACAGAGGCCAGCATCAGGGTCTGGTCAGACTTCCTCAGAGTCCATCTCC
ATCCCCGGAGCATCTGTATGATTCAGAAGTACAACCACGATGGGGAAGCAGGTCGGCTGGAGGCTTTTGGCCAAG
GGGAAAGTGTCCTAAAGGAACCCAAGTACCAGGAAGAGCTGGAGGACAGGCTGCATTTCTACGTGGAGGAATGTG
ACTACTTGCAGGGCTTCCAGATCCTGTGTGACCTGCACGATGGCTTCTCTGGGGTAGGCGCGAAGGCGGCAGAGC
TGCTACAAGATGAATATTCAGGGCGGGGAATAATAACCTGGGGCCTGCTACCTGGTCCCTACCATCGTGGGGAGG
CCCAGAGAAACATCTATCGTCTATTAAACACAGCTTTTGGTCTCGTGCACCTGACTGCTCACAGCTCTCTTGTCT
GCCCCTTGTCCTTGGGTGGGAGCCTGGGCCTGCGACCCGAGCCACCTGTCAGCTTCCCTTACCTGCATTATGATG
CCACTCTGCCCTTCCACTGCAGTGCCATCCTGGCTACAGCCCTGGACACAGTCACTGTTCCTTATCGCCTGTGTT
CCTCTCCAGTTTCCATGGTTCATCTGGCTGACATGCTGAGCTTCTGTGGGAAAAAGGTGGTGACAGCAGGAGCAA
TCATCCCTTTCCCCTTGGCTCCAGGCCAGTCCCTTCCTGATTCCCTGGTGCAGTTTGGAGGAGCCACCCCATGGA
CCCCACTGTCTGCATGTGGGGAGCCTTCTGGAACACGTTGCTTTGCCCAGTCAGTGGTGCTGAGGGGTATAGACA
GAGCATGCCACACAAGCCAGCTCACCCCAGGGACACCTCCACCCTCTGCCCTTCATGCATGTACCACTGGGGAAG
AAATCTTGGCTCAGTATTTACAACAGCAGCAGCCTGGAGTCATGAGTTCTTCCCATCTGCTGCTGACTCCCTGCA
GGGTGGCTCCTCCTTACCCCCACCTCTTCTCAAGCTGCAGTCCACCGGGTATGGTTCTGGATGGTTCCCCCAAGG
GAGCAGCAGTGGAGAGCATCCCAGTGTTTGGGGCACTGTGTTCCTCTTCGTCCCTGCACCAGACCCTGGAAGCCT
TGGCCAGAGACCTCACCAAACTCGACTTGCGGCGCTGGGCCAGCTTCATGGATGCTGGAGTGGAGCACGATGACG
TAGCAGAGCTGCTGCAGGAGCTACAAAGCCTGGCCCAGTGCTACCAGGGTGGTGACAGCCTCGTGGACTAAAGTT
CCCAGTGTGGGAGAAAGGAGCTAGTTTGCAATAAAAACAGCTGGATGCAGGAGCCCAGTGTCTTCATGCAGAGGA
GCTCAATGTCGCGGGACTAGCTACACCAACATATGCACTTTTTACATTTAGAAACACTGTGATTAGACCACAGAA
CAATAAATATGTGCCATCAGACC

FIGURE 4375

MAGGAREVLTLQLGHFAGFVGAHWWNQQDAALGRATDSKEPPGELCPDVLYRTGRTLHGQETYTPRLILMDLKGS
LSSLKEEGGLYRDKQLDAAIAWQGKLTTHKEELYPKNPYLQDFLSAEGVLSSDGVWRVKSIPNGKGSSPLPTATT
PKPLIPTEASIRVWSDFLRVHLHPRSICMIQKYNHDGEAGRLEAFGQGESVLKEPKYQEELEDRLHFYVEECDYL
QGFQILCDLHDGFSGVGAKAAELLQDEYSGRGIITWGLLPGPYHRGEAQRNIYRLLNTAFGLVHLTAHSSLVCPL
SLGGSLGLRPEPPVSFPYLHYDATLPFHCSAILATALDTVTVPYRLCSSPVSMVHLADMLSFCGKKVVTAGAIIP
FPLAPGQSLPDSLVQFGGATPWTPLSACGEPSGTRCFAQSVVLRGIDRACHTSQLTPGTPPPSALHACTTGEEIL
AQYLQQQQPGVMSSSHLLLTPCRVAPPYPHLFSSCSPPGMVLDGSPKGAAVESIPVFGALCSSSSLHQTLEALAR
DLTKLDLRRWASFMDAGVEHDDVAELLQELQSLAQCYQGGDSLVD

FIGURE 4376

GGTCGGGACCGGCAAGATGGCGGCGCGGACAGCGTTCGGTGCTGTGTGCCGGCGCCTCTGGCAGGGATTGGGGAA
TTTTTCTGTAAACACTTCTAAGGGCAATACAGCCAAAAATGGTGGCTTGCTTCTCAGTACCAATATGAAGTGGGT
ACAGTTTTCAAACCTACACGTTGATGTTCCAAAGGATTTGACCAAACCTGTGGTAACAATCTCTGATGAACCAGA
CATATTATATAAGCGCCTCTCGGTTTTGGTGAAAGGTCACGATAAGGCTGTATTGGACAGTTATGAATATTTTGC
TGTGCTTGCTGCTAAAGAACTTGGTATCTCTATTAAAGTACATGAACCTCCAAGGAAAATAGAGCGATTTACTCT
TCTCCAATCAGTGCATATTTACAAGAAGCACAGAGTTCAGTATGAAATGAGAACACTTTACAGATGTTTAGAGTT
AGAACATCTAACTGGAAGCACAGCAGATGTCTACTTGGAATATATTCAGCGAAACTTACCTGAAGGGGTTGCCAT
GGAAGTAACAAAGACACAATTAGAACAGTTACCAGAACACATCAAGGAGCCAATCTGGGAAACACTATCAGAAGA
AAAAGAAGAAAGCAAGTCATAAAGCCTCAGGGAGGCCATTTTTGCCTAAATTTGAAATGAGGGTGGGCCAGATGA
GTATGTTTAAGTGGAGAGTGCTTCCAGCTGAGATGATTTGAGTCTGTCCTAACTGCTCCATTGAGTTCTCGTGCC
CTCATCAGCTGAGGGCAGGGAATGGAACTTTAATGGAAGAACCACTTTTATCTATTCTTTTTATTCATTGTTTCA
GTTCTGATTTCAGCAAACATGAGCAAACCACTTTGACTGAAAGCAGAAAGAGTGAAAATTCTATTTTGTTACGCT
ACTGGTGTTCAATTATTAGTTTGTACCATTTTTAATTTATGTCAGTTGATGCATCTGAAAATAAGTGCTTGGAGT
GTTCGTACCCTTATTTTTTTTTAAGATTCCTAGAAGGAATCTTTGGTTAATTCAGATTGAGCAGTTAAAGTTTTT
GCTATTTACCTTTGTGCAGGCTGGCATATGCTAATTTGGGGGTGGTAACCAACCGATTTTATCTCATGTAAGCAT
TACATTTTGAAGACTGAATATACTTCACAGCAGATCAAACACATTTATGGCATGCACTGACCTCTTCTTGGAGCC
CAGAACTTTATAGAGTTGCCTACCAGGGTTACTGTAATGGAATTTATGATCTTAAGAAATTACTAGTTGTATTAT
TTATCCTATGATTCATTCATTCAATAAGCTTTTACTGCATAAACTTTACATCCAGCACTGTAGTTAAGTACCCAA
AATTGAATAGAAATAATGGCTTTTGAAAATTGCACAAAGCAGGCCAGGCACGGTGGCTCACGCCTGTAATCCCAG
CACTTTGGGAGGCCGAGGCAGGCGGATCACGAGGTCAAGAGATCCAGACCATCCTGGCTAACACGGTGAAACCCC
GTCTCTAATAAAAATACAAAAATTAGCTGGACATGGTGGCACGTGCCTGTAATCCCAGCTACTCAGGAGGCTGAG
GCAGGAGAATCGCGTGAACCCGGGCCCGGTGGAGGCTGCAGTGAGACGAGATCGCGCCACTGCACTCCAGCCTGG
CGACAGAGCGAGACACCGTCTCAAAAAAAAAAAAAAAGAAAATTGTGCAAAGCATAGGTAAATATTTTTCTTTAT
TAAGCTTCTCACTGAGAAGCCCTCTTTATTTTGGTAAATGTCACTCTGTTTGTTAGGAGATGTCTGCTTTTCCAT
GAAATGAAATAGTGGCTAAAGCCCTGAAAGAGGCAAGACTACAATGGGCTGAAACAGTTGGTATAGCAACCCCAG
AGAAGTGCTTCATTTTCTTTTTATAGTAGAAGCAGGTCCATGTCTTTTGTGGTTTCCTGCACATCTTTGGAGTAG
TTATGACTTCTCAGTTTTTCCCCCCTTAAACTGCATTGCCTATTCTTTTTTCCTGACATGCTATCAGGTATCAGT
GTGTTGAATACATAATGCTTGTGTATCAGACTTACGTTACTGTCATCACCATTAAAAGAATTGCAGCCTTGTGCC
CCATGACCTTCA

FIGURE 4377

MAARTAFGAVCRRLWQGLGNFSVNTSKGNTAKNGGLLLSTNMKWVQFSNLHVDVPKDLTKPVVTISDEPDILYKR
LSVLVKGHDKAVLDSYEYFAVLAAKELGISIKVHEPPRKIERFTLLQSVHIYKKHRVQYEMRTLYRCLELEHLTG
STADVYLEYIQRNLPEGVAMEVTKTQLEQLPEHIKEPIWETLSEEKEESKS

FIGURE 4378A

CTCTGCCTTTCCTCTCGCAGCCACCCTTCCTCTCAGACCAGTACGGTGGCCGACGGGAGTCAGACGCTGGGGATG
AATGAAGGATCAACAAACAGTAATAATGACTGAATGTACAAGTCTTCAGTTTGTCAGCCCTTTTGCTTTTGAGGC
AATGCAGAAGGTGGATGTTGTTTGCCTGGCATCTTTAAGTGATCCAGAATTAAGACTTCTTCTGCCCTGTTTGGT
ACGGATGGCACTTTGTGCACCTGCTGACCAGAGCCAAAGCTGGGCTCAGGATAAGAAACTCATCCTTCGCCTTCT
TTCTGGAGTGGAAGCTGTCAACTCCATTGTTGCATTGTTGTCCGTGGACTTTCATGCTTTAGAACAAGATGCCAG
CAAAGAACAGCAGCTTAGGCATAAACTTGGAGGAGGCAGTGGAGAGAGCATCCTGGTATCACAGCTTCAGCATGG
ACTGACGTTAGAGTTTGAACACAGTGATTCACCTCGTCGATTGCGTCTTGTGCTTAGTGAACTGTTGGCAATTAT
GAACAAGGTGTCTGAGTCCAACGGAGAATTTTTTTTCAAGTCTTCTGAACTTTTTGAGAGTCCAGTATATTTGGA
GGAAGCTGCAGATGTACTTTGTATTTTACAAGCAGAGCTCCCTTCCTTGCTCCCTATAGTTGATGTAGCTGAAGC
TTTGCTACATGTTAGAAATGGTGCCTGGTTCTTGTGTCTCTTGGTGGCCAATGTTCCTGATAGTTTTAATGAAGT
TTGTAGGGGCCTGATAAAAAATGGAGAACGACAAGATGAAGAAAGTCTTGGAGGAAGGCGCAGGACAGATGCCTT
ACGCTTCTTGTGTAAAATGAATCCTTCTCAGGCCCTCAAGGTCCGAGGCATGGTGGTGGAAGAATGTCACTTGCC
AGGCCTTGGTGTGGCTTTGACATTGGATCATACTAAAAATGAAGCTTGTGAGGATGGAGTGAGTGACTTGGTTTG
TTTTGTAAGTGGTTTGCTTCTTGGAACAAATGCGAAAGTCCGGACTTGGTTTGGAACTTTTATCCGAAATGGACA
GCAGAGAAAAAGAGAGACCAGCAGTTCTGTCCTTTGGCAGATGAGAAGGCAGCTTCTTCTGGAGTTGATGGGCAT
TCTTCCCACAGTAAGAAGCACCCGAATTGTGGAAGAAGCTGATGTGGATATGGAGCCCAATGTGTCTGTGTATTC
GGGGCTGAAAGAAGAGCATGTTGTGAAAGCCAGTGCACTCTTACGTCTGTACTGTGCTTTGATGGGGATCGCTGG
ACTCAAACCAACTGAAGAAGAAGCTGAGCAATTACTGCAGTTGATGACGAGCCGTCCTCCTGCTACGCCAGCTGG
GGTTCGCTTTGTTTCACTTTCCTTTTGTATGCTACTGGCCTTTTCTACACTTGTCAGTACACCTGAACAGGAGCA
GCTGATGGTGGTGTGGCTAAGTTGGATGATAAAAGAAGAAGCGTATTTTGAGAGTACTTCAGGCGTCTCTGCTTC
TTTTGGGGAGATGTTATTATTGGTGGCTATGTACTTTCACAGCAACCAGCTTAGTGCTATCATTGACTTGGTCTG
TTCCACTTTGGGGATGAAGATTGTAATTAAGCCAAGCTCCTTGAGCAGGATGAAGACAATCTTCACACAGGAAAT
TTTTACTGAGCAGGTTGTCACAGCTCATGCAGTTCGGGTCCCTGTCACCAGCAACCTGAGTGCCAACATTACTGG
ATTTTTGCCTATTCATTGTATTTACCAGCTTCTCAGGAGCCGTTCCTTTACCAAGCACAAAGTGTCAATAAAAGA
TTGGATTTATAGACAGCTGTGTGAAACCTCTACTCCACTTCATCCTCAATTACTTCCTTTGATTGATGTGTACAT
AAATTCTATACTTACTCCTGCGTCGAAATCTAATCCAGAAGCCACAAATCAGCCAGTCACAGAACAGGAGATACT
CAATATTTTCCAAGGAGTCATTGGGGGTGACAACATCCGCCTTAATCAGCGTTTCAGTATCACAGCACAGCTTTT
GGTGCTCTACTATATACTGTCTTATGAAGAGGCTCTTCTAGCAAACACGAAGACTTTAGCTGCCATGCAAAGAAA
GCCCAAATCATATTCTTCTTCTTTAATGGATCAGATTCCTATCAAATTCCTTATTCGACAGGCTCAAGGGCTGCA
GCAGGAGTTGGGAGGGTTGCATTCAGCTTTACTACGTCTCCTTGCTACTAACTACCCACATTTATGTATTGTGGA
TGACTGGATTTGTGAAGAAGAAATCACAGGGACTGATGCCCTGCTACGGCGAATGCTCCTGACTAATAATGCTAA
AAATCATTCTCCCAAACAACTCCAAGAAGCATTTTCAGCTGTCCCAGTAAATCACACACAAGTGATGCAGATTAT
AGAACACTTGACTCTACTCTCTGCCAGTGAACTTATACCATATGCGGAAGTGTTAACATCCAATATGAGCCAGCT
ATTGAATTCAGGGGTTCCACGGAGAATTCTGCAAACAGTCAATAAACTATGGATGGTTCTTAATACTGTGATGCC
TAGAAGGCTATGGGTAATGACGGTTAATGCACTTCAGCCTTCAATAAAGTTTGTACGACAACAAAAGTATACTCA
GAATGACCTGATGATAGATCCTCTCATTGTCCTAAGGTGTGATCAGAGGGTTCACAGATGCCCCCCACTGATGGA
TATTACCCTACACATGTTGAATGGATATCTTCTTGCATCTAAAGCCTACCTTAGTGCTCATCTGAAGGAAACAGA
GCAAGATAGGCCTTCCCAGAATAATACAATTGGTTTAGTTGGACAAACTGATGCTCCGGAAGTTACCAGGGAAGA
ATTGAAAAATGCATTACTGGCCGCTCAGGATAGTGCAGCTGTCCAGATTCTCTTAGAGATTTGCCTACCTACTGA
AGAGGAGAAAGCAAATGGTGTCAATCCAGATAGCTTGTTAAGAAATGTTCAAAGTGTTATTACCACCAGCGCTCC
AAATAAGGGAATGGAGGAAGGAGAAGACAATTTGCTCTGTAACCTTCGAGAAGTTCAGTGCCTTATCTGTTGTCT
CTTGCACCAAATGTACATTGCAGATCCCAACATTGCTAAGCTTGTTCACTTTCAGGGTTATCCATGTGAACTTTT
GCCTCTGACGGTCGCAGGTATTCCATCTATGCACATCTGTCTAGATTTCATACCTGAGCTTATTGCACAGCCAGA
ACTTGAGAAACAGATATTTGCTATCCAGTTGCTTTCTCACTTGTGTATACAATATGCATTACCAAAGTCACTTAG
TGTGGCTCGTTTAGCTGTCAATGTCATGGGAACTTTGTTAACAGTTTTAACACAGGCTAAGCGGTATGCTTTTTT
TATGCCAACTCTGCCAAGTTTGGTCTCTTTTTGTCGAGCATTTCCTCCATTGTATGAGGATATTATGTCTTTGCT
GATCCAAATAGGGCAAGTTTGTGCCTCTGATGTTGCCACTCAGACAAGAGACATTGATCCAATTATTACACGTCT
TCAACAAATAAAGGAGAAACCAAGTGGATGGTCTCAAATCTGTAAAGATTCATCTTATAAAAATGGATCCAGGGA

FIGURE 4378B

CACTGGAAGCATGGATCCTGATGTACAGCTCTGTCACTGTATTGAAAGAACAGTAATTGAAATAATAAATATGAG
TGTTAGTGGAATTTAAAACAAAATTTAAAACAACAAAAAGTTGTTTGCTGCATATACCCAACATGAATCTGCATA
TTAGTAACAACTCTAAACTGAATGGGAACAGTAAAGTATTGTCTTGGAATCACTAAAACAATTCAATTCAACATG
AGTATAGTTTAGAACTTTATGAGAATTATGCTTGCTTGTTTCTGATTGGCACATCTTTGGATCTACTTTGCTGAT
ATGTTTCTATTGTAGCAGCTGAGCTTTTTTTTTTTCCACTGGGAACACATGTAAGAAACTCATTATTGGAAAGGG
AATTTGGCCTTGTATTTAGCTTTTGAAGTGAAGACTGCCATGCCTTTAATTTCTTATAAAAATGAGTCTGTGGGT
AGCCCTAGTGTTTATTTTAACTGTGAGCTTGTAACAGAATGTGACAAAGATGCAAAGATGGGAGAGGAAAAAAGG
GTAAAGGGAAAGGAGAATTAAGGAAATAATAGGAGTTAAAAACACAAGTAGAAATCTCAAAGATTTGCAGTGCAA
GTAATAGTAATGCAAGTTGGAATTCTAGTTCTCAAGAAAGAGTATTGAGAAGACTTTTAAAAAGGCAAGTAGCTT
TTGTAAATGATTTCTGTGGAAATACAGATGAGGATTTAAAGATTTCACATATTTGCTTCAATTTTTATTAATATA
TGAAGCCATATGTTTAAAGAGATACTTGAATAATTTGGAATTTTAAGATACTGGTGTAAAAGTGTTTACAGAAAC
ATCTTTGTTCAAAGAAGAACCTGAGAGATCTCATTTAGTTTTATGTTTTAAATTTATTTTTATAATGCTTTATTA
ACTTACCTAATGCTCAGAGGGGGGGAAATATGTATCAAATTAAATGAAGGTAGAGCAATAAAACCCACTGGATTAA
AGAGCTCTTGGTTTGTCATCAGGATTATAATTCATATCTTACTTTGAGAAGATCTTTGAGTAAGAAAATGCAGTG
TTTGAACCTGAGGAAAAGTTAAAGTGTAGAAAATATTGTCTTGCCGAAGGATTTTGCAGTCCTCTGTCAGTAACT
TCCATTGATTAGGCAGACATATTCAGGTAAACCCTAATCATTAAAAAAAAATTATCAATGTAGAAAGTAATTCCC
TTTTTTCTCTCTGAGATATACCTCAATCACACACTTCCCCACCCCCACTTGAAACAGACCTCTTCACTTGTGTTT
TTTTTTTTTTTTTCCTGAGGTGGAGTCTTCCCCTGTTGCCCAGGCTGGAGTGCAGTGGGATGATCTTGGCTCACT
GCAACTTCTGCCACCTGGGTTCAAGGGATTCTCGTGCCTCAACCTCCTGAGTAGCTGGGACTGCAGGCACGCGCC
ACCTGTATTTTTGTATTTTTAGTAGAGACGGGGGTTTGCCATGTTGCCCAGACTGGTTTTGAACTCCTGGCCTCA
GGTGATCTGCCCACCTTGGCCTCCCAAAGTGCTGGGATTACAGGTGTGAGCCACCGCACCTGGCCAGACCGCTTC
ACTTGTAAAAGAAATTAGGCTAATAAGAAGGTGTAGTTTTTGAGAAATGAAATTTAACTTTAGCCTTTTCACTAG
TAAATAGTCACATCTCATTTTCTTCCTTTGTAAAATGGGGTTACTACTGGCCCTACCTCATATTCTATGAGAATG
AGTTTGTAGCTGTTTCAAATCATGAAGTGCATAGTATCACATGTGATAGAATATTTATAACTTTTTATTAGATGC
TTAATGTTCAATTAAGTAATTTTGATGTGAAAAATAAAAGTAATAAAAGTATCTTAAAAATAGCATAAGAATTTT
CATATTTTTAAACAAGGCAGTTTTGTAGTCCCTTAAGATTAAATACAACTGCTCCTTTTTTTTTTAAACTGAGGC
CTTGCGATATTTTGTGTGAATAGATATGCCCTAGGAGTTCAGAAAAAGTTAAAAGTATGTTTTCTAATTAAATGC
AGTGCACATTCCTGGATCAATATTCAAAGACTGGTCATAACCTGCTGTGTTAAAATAATCACATATGCTCTTTTT
CATCAGATTTGTTGATGATGTAAATAAAATGTGTAAATATATTAGTAAATGTTAATATTCATGTATTTTAAGTTA
AGGTTATAAAATTTGTCACAATGTGTTTTTTTATTCAAGTGAAAACAGATGTGTGCAGCTATTTTGAATATTGGT
TTATAAACATTCATATTCTTTATCAAACAAAAAAAAAAAAAAA

FIGURE 4379

MKDQQTVIMTECTSLQFVSPFAFEAMQKVDVVCLASLSDPELRLLLPCLVRMALCAPADQSQSWAQDKKLILRLL
SGVEAVNSIVALLSVDFHALEQDASKEQQLRHKLGGGSGESILVSQLQHGLTLEFEHSDSPRRLRLVLSELLAIM
NKVSESNGEFFFKSSELFESPVYLEEAADVLCILQAELPSLLPIVDVAEALLHVRNGAWFLCLLVANVPDSFNEV
CRGLIKNGERQDEESLGGRRRTDALRFLCKMNPSQALKVRGMVVEECHLPGLGVALTLDHTKNEACEDGVSDLVC
FVSGLLLGTNAKVRTWFGTFIRNGQQRKRETSSSVLWQMRRQLLLELMGILPTVRSTRIVEEADVDMEPNVSVYS
GLKEEHVVKASALLRLYCALMGIAGLKPTEEEAEQLLQLMTSRPPATPAGVRFVSLSFCMLLAFSTLVSTPEQEQ
LMVVWLSWMIKEEAYFESTSGVSASFGEMLLLVAMYFHSNQLSAIIDLVCSTLGMKIVIKPSSLSRMKTIFTQEI
FTEQVVTAHAVRVPVTSNLSANITGFLPIHCIYQLLRSRSFTKHKVSIKDWIYRQLCETSTPLHPQLLPLIDVYI
NSILTPASKSNPEATNQPVTEQEILNIFQGVIGGDNIRLNQRFSITAQLLVLYYILSYEEALLANTKTLAAMQRK
PKSYSSSLMDQIPIKFLIRQAQGLQQELGGLHSALLRLLATNYPHLCIVDDWICEEEITGTDALLRRMLLTNNAK
NHSPKQLQEAFSAVPVNHTQVMQIIEHLTLLSASELIPYAEVLTSNMSQLLNSGVPRRILQTVNKLWMVLNTVMP
RRLWVMTVNALQPSIKFVRQQKYTQNDLMIDPLIVLRCDQRVHRCPPLMDITLHMLNGYLLASKAYLSAHLKETE
QDRPSQNNTIGLVGQTDAPEVTREELKNALLAAQDSAAVQILLEICLPTEEEKANGVNPDSLLRNVQSVITTSAP
NKGMEEGEDNLLCNLREVQCLICCLLHQMYIADPNIAKLVHFQGYPCELLPLTVAGIPSMHICLDFIPELIAQPE
LEKQIFAIQLLSHLCIQYALPKSLSVARLAVNVMGTLLTVLTQAKRYAFFMPTLPSLVSFCRAFPPLYEDIMSLL
IQIGQVCASDVATQTRDIDPIITRLQQIKEKPSGWSQICKDSSYKNGSRDTGSMDPDVQLCHCIERTVIEIINMS
VSGI

FIGURE 4380

ATGGCAGGCGCTGGTGAGCGCAAAGGCAAGAAGGATGACAATGGCATTGGCACGGCCATTGACTTTGTGCTCTCC
AATGCCCGGCTGGTGCTGGGGGTGGGTGGAGCGGCCATGCTGGGCATCGCCACGCTGGCAGTTAAGCGGATGTAC
GATCGGGCGATCAGTGCCCCTACCAGCCCCACCCGCCTGAGCCATTCGGGGAAAAGGAGCTGGGAAGAACCCAAC
TGGATGGGCTCCCCACGACTGCTGAACAGGGACATGAAGACGGGCCTGAGCCGGTCCTTGCAGACCCTTCCCACA
GACTCCTCCACCTTCGACACAGATACATTCTGCCCGCCCCGGCCCAAGCCAGTGGCCAGGAAGGGCCAGGTAGAC
TTGAAGAAGTCACGACTCCGCATGTCCCTGCAGGAGAAACTTCTTACTTACTACCGGAACCGGGCAGCCATCCCT
GCTGGAGAGCAGGCTCGGGCCAAGCAAGCTGCTGTGGACATATGTGCCGAGCTCCGGAGCTTCCTGCGGGCCAAG
TTGCCTGACATGCCGCTTCGGGACATGTACTTGAGTGGCAGCCTCTACGATGACCTGCAGGTGGTGACAGCTGAC
CACATCCAACTCATTGTGCCCCTTGTGCTGGAGCAGAACCTGTGGTCATGTATTCCTGGTGAAGACACCATCATG
AATGTCCCTGGCTTCTTCCTGGTGCGTCGTGAGAATCCAGAGTACTTTCCTCGTGGGAGCAGTTACTGGGACCGC
TGTGTAGTAGGGGGCTACCTCTCTCCAAAGACAGTCGCAGATACATTTGAGAAGGTAGTGGCTGGCTCCATCAAT
TGGCCAGCCATAGGGTCCCTCTTGGACTATGTGATCCGCCCGGCCCCACCCCCAGAAGCCCTCACACTGGAGGTG
CAGTATGAGCGTGACAAACATCTCTTCATTGACTTCCTGCCATCAGTGACCCTCGGTGACACAGTCTTGGTGGCC
AAACCACACCGGCTAGCCCAGTATGACAACCTGTGGCGGCTGAGCCTGCGTCCCGCGGAGACGGCACGCCTGCGG
GCTCTGGACCAGGCTGACTCGGGCTGCCGATCTCTGTGCCTCAAGATCCTCAAGGCCATATGCAAGTCCACCCCG
GCTCTGGGCCACCTCACTGCCAGCCAGCTAACCAATGTCATCCTCCACTTGGCCCAGGAGGAGGCTGACTGGTCT
CCGGATATGCTGGCCGACCGTTTCCTGCAGGCCTTGAGGGGACTTATCAGCTACTTAGAGGCTGGAGTCCTGCCC
AGTGCCCTAAACCCCAAGGTGAACTTATTTGCAGAGCTCACCCCTGAAGAAATAGACGAATTAGGATACACTCTG
TATTGCTCATTGTCTGAGCCAGAGGTGCTGCTGCAGACGTAG

FIGURE 4381

MAGAGERKGKKDDNGIGTAIDFVLSNARLVLGVGGAAMLGIATLAVKRMYDRAISAPTSPTRLSHSGKRSWEEPN
WMGSPRLLNRDMKTGLSRSLQTLPTDSSTFDTDTFCPPRPKPVARKGQVDLKKSRLRMSLQEKLLTYYRNRAAIP
AGEQARAKQAAVDICAELRSFLRAKLPDMPLRDMYLSGSLYDDLQVVTADHIQLIVPLVLEQNLWSCIPGEDTIM
NVPGFFLVRRENPEYFPRGSSYWDRCVVGGYLSPKTVADTFEKVVAGSINWPAIGSLLDYVIRPAPPPEALTLEV
QYERDKHLFIDFLPSVTLGDTVLVAKPHRLAQYDNLWRLSLRPAETARLRALDQADSGCRSLCLKILKAICKSTP
ALGHLTASQLTNVILHLAQEEADWSPDMLADRFLQALRGLISYLEAGVLPSALNPKVNLFAELTPEEIDELGYTL
YCSLSEPEVLLQT

FIGURE 4382

CTTTGAGCGGAAGTTGGATCACTGAAGCGCCAAAAAAGAATTTAGGGGAAGACCTGATTTTCGCTTGAGGCATTT
TTGCGGCGCTGTGCGCTACAGACACCTTCTGGAAGCTGCGGTGGGGAAACTGAGTTTCCCGAGCCGTTGAGACAG
ATGGGGTTCAGCACCGCGCGGGGACGACAGGAAAGCTGCGGCTGAAGAGAACTGCGGACTTGGCAGGAGTCGCCT
GAGGAGCTAAGATCCCGGAGACTCTTAGCCCCGTGGTGCTTCTCTACGGGAGCGGGGGAGGGAGAATCCGGCCGG
ACAGATCTGCGCGTATCCTGGAGCCGGCCCAGTTGTGAACTAGGAGAGCTTTGGGACCTCTGTCCCAAGCAAGAG
AGATGAATGGAGAGTATAGAGGCAGAGGATTTGGACGAGGAAGATTTCAAAGCTGGAAAAGGGGAAGAGGTGGTG
GGAACTTCTCAGGAAAATGGAGAGAAAGAGAACACAGACCTGATCTGAGTAAAACCACAGGAAAACGTACTTCTG
AACAAACCCCACAGTTTTTGCTTTCAACAAAGACCCCACAGTCAATGCAGTCAACATTGGATCGATTCATACCAT
ATAAAGGCTGGAAGCTTTATTTCTCTGAAGTTTACAGCGATAGCTCTCCTTTGATTGAGAAGATTCAAGCATTTG
AAAAATTTTTCACAAGGCATATTGATTTGTATGACAAGGATGAAATAGAAAGAAAGGGAAGTATTTTGGTAGATT
TTAAAGAACTGACAGAAGGTGGTGAAGTAACTAACTTGATACCAGATATAGCAACTGAACTAAGAGATGCACCTG
AGAAAACCTTGGCTTGCATGGGTTTGGCAATACATCAGGTGTTAACTAAGGACCTTGAAAGGCATGCAGCTGAGT
TACAAGCCCAGGAAGGATTGTCTAATGATGGAGAAACAATGGTAAATGTGCCACATATTCATGCAAGGGTGTACA
ACTATGAGCCTTTGACACAGCTCAAGAATGTCCGAGCAAATTACTATGGAAAATACATTGCTCTAAGAGGGACAG
TGGTTCGTGTCAGTAATATAAAGCCTCTTTGCACCAAGATGGCTTTTCTTTGTGCTGCATGTGGAGAAATTCAGA
GCTTTCCTCTTCCAGATGGAAAATACAGTCTTCCCACAAAGTGTCCTGTGCCTGTGTGTCGAGGCAGGTCATTTA
CTGCTCTCCGCAGCTCTCCTCTCACAGTTACGATGGACTGGCAGTCAATCAAAATCCAGGAATTGATGTCTGATG
ATCAGAGAGAAGCAGGTCGGATTCCACGAACAATAGAATGTGAGCTTGTTCATGATCTTGTGGATAGCTGTGTCC
CGGGAGACACAGTGACTATTACTGGAATTGTCAAAGTCTCAAATGCGGAAGAAGGTTCTCGAAATAAGAATGACA
AGTGTATGTTCCTTTTGTATATTGAAGCAAATTCTATTAGTAATAGCAAAGGACAGAAAACAAAGAGTTCTGAGG
ATGGGTGTAAGCATGGAATGTTGATGGAGTTCTCACTTAAAGACCTTTATGCCATCCAAGAGATTCAAGCTGAAG
AAAACCTGTTTAAACTCATTGTCAACTCGCTTTGCCCTGTCATTTTTGGTCATGAACTTGTTAAAGCAGGTTTGG
CATTAGCACTCTTTGGAGGAAGCCAGAAATACGCAGATGACAAAAACAGAATTCCAATTCGGGGAGACCCCCACA
TCCTTGTTGTTGGAGATCCAGGCCTAGGAAAAAGTCAGATGCTACAGGCAGCGTGCAATGTTGCCCCACGTGGCG
TGTATGTTTGTGGTAACACCACGACCACCTCTGGTCTGACGGTAACTCTTTCAAAAGATAGTTCCTCTGGAGATT
TTGCTTTGGAAGCTGGTGCCCTGGTACTTGGTGATCAAGGTATTTGTGGAATCGATGAATTTGATAAGATGGGGA
ATCAACATCAAGCCTTGTTGGAAGCCATGGAGCAGCAAAGTATTAGTCTTGCTAAGGCTGGTGTGGTTTGTAGCC
TTCCTGCAAGAACTTCCATTATTGCTGCTGCAAATCCAGTTGGAGGACATTACAATAAAGCCAAAACAGTTTCTG
AGAATTTAAAAATGGGGAGTGCACTACTATCCAGATTTGATTTGGTCTTTATCCTGTTAGATACTCCAAATGAGC
ATCATGATCACTTACTCTCTGAACATGTGATTGCAATAAGAGCTGGAAAGCAGAGAACCATTAGCAGTGCCACAG
TAGCTCGTATGAATAGTCAAGATTCAAATACTTCCGTACTTGAAGTAGTTTCTGAGAAGCCATTATCAGAAAGAC
TAAAGGTGGTTCCTGGAGAAACAATAGATCCCATTCCCCACCAGCTATTGAGAAAGTACATTGGCTATGCTCGGC
AGTATGTGTACCCAAGGCTATCCACAGAAGCTGCTCGAGTTCTTCAAGATTTTTACCTTGAGCTCCGGAAACAGA
GCCAGAGGTTAAATAGCTCACCAATCACTACCAGGCAGCTGGAATCTTTGATTCGTCTGACAGAGGCACGAGCAA
GGTTGGAATTGAGAGAGGAAGCAACCAAAGAAGACGCTGAGGATATAGTGGAAATTATGAAATATAGCATGCTAG
GAACTTACTCTGATGAATTTGGGAACCTAGATTTTGAGCGATCCCAGCATGGTTCTGGAATGAGCAACAGGTCAA
CAGCGAAAAGATTTATTTCTGCTCTCAACAACGTTGCTGAAAGAACTTATAATAATATATTTCAATTTCATCAAC
TTCGGCAGATTGCCAAAGAACTAAACATTCAGGTTGCTGATTTTGAAAATTTTATTGGATCACTAAATGACCAGG
GTTACCTCTTGAAAAAAGGCCCAAAAGTTTACCAGCTTCAAACTATGTAAAAGGACXTTCACCAAGTTAGGGCCT
CCTGGGTTTATTGCAGATTAAAGCCATCTCAGTGAAGATATGCGTGCACGCACAGACAGACAGACACACACACAC
ACACACACACACACACACACACACACACACACAGTCAAATACTGTTCTCTGAAAAATGATGTCCCAAAAGTATTATA
ATAGGAAAAAAGCATTAAATATAATAAACTAATTTAAGAAGTGATAAAGTCTCCAGATGCAGTAGCTCACACTGT
AATCACAGTGACTCAGGAGGCTGAGGTGAGAGGATTCCTTGAGGCCAGGGTTCGAGACCAACCTTGGGCAACATA
GCAAGACCCCATTTCTTAAAAAAAAAAAA

FIGURE 4383

MNGEYRGRGFGRGRFQSWKRGRGGGNFSGKWREREHRPDLSKTTGKRTSEQTPQFLLSTKTPQSMQSTLDRFIPY
KGWKLYFSEVYSDSSPLIEKIQAFEKFFTRHIDLYDKDEIERKGSILVDFKELTEGGEVTNLIPDIATELRDAPE
KTLACMGLAIHQVLTKDLERHAAELQAQEGLSNDGETMVNVPHIHARVYNYEPLTQLKNVRANYYGKYIALRGTV
VRVSNIKPLCTKMAFLCAACGEIQSFPLPDGKYSLPTKCPVPVCRGRSFTALRSSPLTVTMDWQSIKIQELMSDD
QREAGRIPRTIECELVHDLVDSCVPGDTVTITGIVKVSNAEEGSRNKNDKCMFLLYIEANSISNSKGQKTKSSED
GCKHGMLMEFSLKDLYAIQEIQAEENLFKLIVNSLCPVIFGHELVKAGLALALFGGSQKYADDKNRIPIRGDPHI
LVVGDPGLGKSQMLQAACNVAPRGVYVCGNTTTTSGLTVTLSKDSSSGDFALEAGALVLGDQGICGIDEFDKMGN
QHQALLEAMEQQSISLAKAGVVCSLPARTSIIAAANPVGGHYNKAKTVSENLKMGSALLSRFDLVFILLDTPNEH
HDHLLSEHVIAIRAGKQRTISSATVARMNSQDSNTSVLEVVSEKPLSERLKVVPGETIDPIPHQLLRKYIGYARQ
YVYPRLSTEAARVLQDFYLELRKQSQRLNSSPITTRQLESLIRLTEARARLELREEATKEDAEDIVEIMKYSMLG
TYSDEFGNLDFERSQHGSGMSNRSTAKRFISALNNVAERTYNNIFQFHQLRQIAKELNIQVADFENFIGSLNDQG
YLLKKGPKVYQLQTM

FIGURE 4384

TTTTCGAGACCGGAAGTGAGTGATCGAAAGCATGGCGTCGGTGGTGTTGGCGCTGAGGACCCGGACAGCCGTTAC
ATCCTTGCTAAGCCCCACTCCGGCTACAGCTCTTGCTGTCAGATACGCATCCAAGAAGTCGGGTGGTAGCTCCAA
AAACCTCGGTGGAAAGTCATCAGGCAGACGCCAAGGCATTAAGAAAATGGAAGGTCACTATGTTCATGCTGGGAA
CATCATTGCAACACAGCGCCATTTCCGCTGGCACCCAGGTGCCCATGTGGGTGTTGGGAAGAATAAATGTCTGTA
TGCCCTGGAAGAGGGGATAGTCCGCTACACTAAGGAGGTCTACGTGCCTCATCCCAGAAACACGGAGGCTGTGGA
TCTGATCACCAGGCTGCCCAAGGGTGCTGTGCTCTACAAGACTTTTGTCCACGTGGTTCCTGCCAAGCCTGAGGG
CACCTTCAAACTGGTAGCTATGCTTTGATGTCCTGTTGAGGCCATCGGACAGAGACTGGAGCCCAGGTGACAGGA
GATGGTGATACCAGAAGTCAAGGGTTGGGGTGGCGACACGGCCTCCCGAGGAAGAGGTCTGCTTGATGGTGACTC
TGCAGGAGACTCTGAAGTGACTGCTGGGAAACCCTTTGGGAGACCTGACCTGGGGCCAAAAATAAAGTGAGCCAG
CGTCATGAACGCATGCTATTTAGGGACAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4385

MASVVLALRTRTAVTSLLSPTPATALAVRYASKKSGGSSKNLGGKSSGRRQGIKKMEGHYVHAGNIIATQRHFRW
HPGAHVGVGKNKCLYALEEGIVRYTKEVYVPHPRNTEAVDLITRLPKGAVLYKTFVHVVPAKPEGTFKLVAML

FIGURE 4386

CGGATGGGGCGTAGGTGGGCGGTGCGCCCACAGCTGCCTGGGTAAGGCCCAAGATGGCTGTCTTCGCCTTAGTAC
TCGTGTGAAGTTGGCGGGGACGGTTCCTGTCATCTTCTTGGGCTTATTTGGTGTGCTGTTGAAGGGGGGAGACTA
GAGAA**ATG**GCAGGGAACCTCTTATCCGGGGCAGGTAGGCGCCTGTGGGACTGGGTGCCTCTGGCGTGCAGAAGCT
TCTCTCTTGGTGTGCCTAGATTGATCGGTATAAGGCTCACTCTCCCGCCCCCCAAAGTGGTTGATCGTTGGAACG
AGAAAAGGGCCATGTTCGGAGTGTATGACAACATCGGGATCCTGGGAAACTTTGAAAAGCACCCCAAAGAACTGA
TCAGGGGGCCCATATGGCTTCGAGGTTGGAAAGGGAATGAATTGCAACGTTGTATCCGAAAGAGGAAAATGGTTG
GAAGTAGAATGTTCGCTGATGACCTGCACAACCTTAATAAACGCATCCGCTATCTCTACAAACACTTTAACCGAC
ATGGGAAGTTTCGA**TAG**AAGAGAAAGCTGAGAACTTCGGAAAAGGCTCATCTGTCACCCTGGAGAAGGGAAACTG
TACTTTTCCCTGTGAGGAAACGGCTTTGTATTTTCTCTGTAATAAAATGGGGCTTCTTTGGAAAAAAAAAAAAAA
A

FIGURE 4387

MAGNLLSGAGRRLWDWVPLACRSFSLGVPRLIGIRLTLPPPKVVDRWNEKRAMFGVYDNIGILGNFEKHPKELIR
GPIWLRGWKGNELQRCIRKRKMVGSRMFADDLHNLNKRIRYLYKHFNRHGKFR

FIGURE 4388A

GAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCCAGTCACCACCAGCCTGA
CCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGCACACCACCATTACATCATCGTGGCAAATTAAA
GAAGGAGGTGGGAAAAGAGGACTTATTGTTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGG
TTGGTGGCTCTGCTGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACA
TCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTA
ATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGATTGCAGTCAGAAGGTTGTAGTTTACGAT
CAAAGCTCCCAAGATGTTGCCTCTCTCTCTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGC
TTCAACTCTGTTCACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAA
TCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCCGAATTCTTCCC
AATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATGCAGCAGAATGGGATTGGTTATGTGTTA
AATGCCAGCAATACCTGTCCAAAGCCTGACTTTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGC
TTTTGTGAGAAAATTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGT
GTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATGAAGAGGATGGAC
ATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAAAAAGACCTACTATATCTCCAAACTTCAATTTTCTGGGC
CAACTCCTGGACTATGAGAAGAAGATTAAGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTG
CACCTGGAGAAGCCAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCA
CCCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTGCCCAGCGTGCCC
AGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTCAGTGGGCTGCACCTGTCCGCAGACAGG
CTGGAAGACAGCAATAAGCTCAAGCGTTCCTTCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCA
GCATCCTTACATGGCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACC
AACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCTGATAAGGAGGAA
GCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAGAGCAAGCGATTGCATTCGGTCAGAACC
AGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCAC
ACCAGCTTCCTTTTCGGCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGG
CACTCGGATATCTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCCACAGAGTCCTCA
CACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCTGCCTACAGCTGCAGCCAGCTGCCCACT
TGCGGAGACCAAGTCTATTCTGTGCGCAGGCGGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCAT
GAAGAGAGCCCCTTTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAG
AACAGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAAATCATTGAGGTC
TCC**TGA**GAAGAAAGACACTTGTGACTTCTATAGACAATTTTTTTTTCTTGTTCACAAAAAAATTCCCTGTAAATC
TGAAATATATATATGTACATACATATATATTTTTGGAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAAC
CCAGTTGTTACTCTCTTAACATCTGCATTTGAGAGATCAGCTAATACTTCTCTCAACAAAAATGGAAGGGCAGAT
GCTAGGATCCCCCCTAGACGGAGGAAAACCATTTTATTCAGTGAATTACACATCCTCTTGTTCTTAAAAAAGCAA
GTGTCTTTGGTGTTGGAGGACAAAATCCCCTACCATTTTCACGTTGTGCTACTAAGAGATCTCAAATATTAGTCT
TTGTCCGGACCCTTCCATAGTACACCTTAGCGCTGAGACTGAGCCAGCTTGGGGGTCAGGTAGGTAGACCCTGTT
AGGGACAGAGCCTAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCACCTGA
CAGCCGAGGGACACGAGCATCACTCTGCTGGACGGACCATTAGGGGCCTTGCCAAGGTCTACCTTAGAGCAAACC
CAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCATATCTGGTAGCCCATTTTCTAGGCATTGTGAATA
GGTAGGTAGCTAGTCACACTTTTCAGACCAATTCAAACTGTCTATGCACAAAATTCCCGTGGGCCTAGATGGAGA
TAATTTTTTTTTCTTCTCAGCTTTATGAAGAGAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACCTGG
CAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTCTTTGTAAATCAAAGAATTGTTTAA
AATGGGATTGTCAATCCTTTAAATAAAGATGAACTTGGTTTCAAGCCAAATGTGAATTTATTTGGGTTGGTAGCA
GAGCAGCAGCACCTTCAAATTCTCAGCCAAAGCAGATGTTTTTGCCCTTTCTGCTTCACTGCATGGATACAGTTG
GTAAAATGTAATAATATGGCAGAATTTTATAGGAAACTTCCTAGGGAGGTAAATTATGGGAAGATTAAGAAAGGT
ACAAATTGCTGAGGAGAAGCAGGAAACCTGTTTCCTTAGTGGCTTTTATCCCCTCGGCATGCGATGGGGCTGATG
TTTCTATAATTGCCTCAGACTTTCACATTTACTAGTAGGGCTGAGAGAGGCTTTAGTGAGGAAGGAATATTCAGA
ATAAAACGGTTGAGAAAGCTGAGAAGACCATTGAGTTTTGATCAGTTGTGAATAGAGTGCAAAGCCATGGCCAAG
CTGTTTTTGGAAACGCTGGCCGGCGTGTCTTCAGTGGAAAAAGCAAATCAAAATGGAGCGAGAGCAAAGGGGCGT

FIGURE 4388B

CCTCAGTCCTCAACCTACAATCACTGTATGGAATCGGTCCTGGCAGCTGAACATAGGAGGTCACTGGAACAAGTG
ATAGTGCAGATTGGCTTTCAAACATCCTCCTGGCTTGAGTTTTATCAGCTACAGTGTGGGTCCTCTTTTGAAGCC
TTAATTCACAACAGCAGCTTTTTGGGGGGTGGGGCTGGGCGGGTGTTGTCATTGTTCTTTCCCTTCCTGTAAGTGT
CGCTAGTTGCTGCCTCGTATCTCAGGTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTGACT
TCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGACCGACTTGGTTATGGGGA
TGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGTGCTATGATGGGGTGTAAAGTGAAGGCAGAAGAG
GGTCAGCCGCATTGTTATGATACTGGGAAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAAT
CTTTAATCAGACATTCTCAAGTTTCACACAGTAGTTTTTGATGTTATGTACACACACACCAAATGTGTAACAGTT
CACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGCTCCTTGCTAACGATGTTT
CAGGAGGTTTGGGGGACTTGGTTTTAATGAGCTTCTGTCATTTAGGGCTTCTCTTGGCCATGGTCCCCTTCCTTC
TGGAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATC
GAGACTGCCGTGGCGAAGGGGTGGCCTCGGAGGCAGGCTCTGGAGCTGCTTGGATGTCTTTAGGTGGGGTGGTGG
CTGGCTCTCTTCAGCATGTAATTGGGGAAACCCTCGTTTCTACTAGGGGTGATACAGATGGTGATTTTAAAGAGC
AAAACTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAGTTAGATGGAAAGACTGTAAA
TGTTTAATATGAATATAGTGTTCTTTTGAAGTAAGGCCAGCTGTTGAACGGTTAAACTGTGCATTTCTCATTTTG
ATGTGTCATGTATGTTAATGTATGAAATGATTAAATAAAATCAAAACTGGTACCTGTTTATACAT

FIGURE 4389

AFEHTTITSSWQIKEGGGKRGLIVVMAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININC
SKLMKRRLQQDKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHLLAGGF
AEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELMQQNGIGYVLNASNTCPKPDF
IPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVK
EKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAA
GQRPVHPASVPSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSED
ALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSGTAQRSLL
SPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSLTSSWYFATESSHFYSASAIYGG
SASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVG
SQSSFSGSMEIIEVS

FIGURE 4390

GGGGACTCCAACGCTGGGTGACATTGAGCTCACCAGCGCCACCGTCCCCGGCGAAGTTCTGCGCTGGTCGGCGGA
GTAGCAAGTGGCCATGGGGAGCCTCAGCGGTCTGCGCCTGGCAGCAGGAAGCTGTTTTAGGTTATGTGAAAGAGA
TGTTTCCTCATCTCTAAGGCTTACCAGAAGCTCTGATTTGAAGAGAATAAATGGATTTTGCACAAAACCACAGGA
AAGTCCCGGAGTTCCATCCCGCACTTACAACAGAGTGCCTTTACACAAACCTACGGATTGGCAGAAAAAGATCCT
CATATGGTCAGGTCGCTTCAAAAAGGAAGATGAAATCCCAGAGACTGTCTCGTTGGAGATGCTTGATGCTGCAAA
GAACAAGATGCGAGTGAAGATCAGCTATCTAATGATTGCCCTGACGGTGGTAGGATGCATCTTCATGGTTATTGA
GGGCAAGAAGGCTGCCCAAAGACACGAGACTTTAACAAGCTTGAACTTAGAAAAGAAAGCTCGTCTGAAAGAGGA
AGCAGCTATGAAGGCCAAAACAGAGTAGCAGAGGTATCCGTGTTGGCTGGATTTTGAAAATCCAGGAATTATGTT
ATAACGTGCCTGTATTAAAAAGGATGTGGTATGAGGATCCATTTCATAAAGTATGATTTGCCCAAACCTGTACCA
TTTCCGTATTTCTGCTGTAGAAGTAGAAATAAATTTTCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4391

MGSLSGLRLAAGSCFRLCERDVSSSLRLTRSSDLKRINGFCTKPQESPGVPSRTYNRVPLHKPTDWQKKILIWSG
RFKKEDEIPETVSLEMLDAAKNKMRVKISYLMIALTVVGCIFMVIEGKKAAQRHETLTSLNLEKKARLKEEAAMK
AKTE

FIGURE 4392

GCTGCTGCACTGACGGCGGGTGCCCGCGCCTCAGAGTTACTGATTTATTCTTGAGATTCCTCTACTCTCGTTATC
TGACCTCATGGATGAACTTCAGGATGTTCAGCTCACAGAGATCAAACCACTTCTAAATGATAAGAATGGTACAAG
AAACTTCCAGGACTTTGACTGTCAGGAACATGATATAGAAACAACTCATGGTGTGGTCCACGTCACTATAAGAGG
CTTACCCAAAGGAAACAGACCAGTTATACTAACATATCATGACATTGGCCTCAACCATAAATCCTGTTTCAATGC
ATTCTTTAACTTTGAGGATATGCAAGAGATCACCCAGCACTTTGCTGTCTGTCATGTGGATGCCCCAGGCCAGCA
GGAAGGTGCACCCTCTTTCCCAACAGGGTATCAGTACCCCACAATGGATGAGCTGGCTGAAATGCTGCCTCCTGT
TCTTACCCACCTAAGCCTGAAAAGCATCATTGGAATTGGAGTTGGAGCTGGAGCTTACATCCTCAGCAGATTTGC
ACTCAACCATCCAGAGCTTGTGGAAGGCCTTGTGCTCATTAATGTTGACCCTTGCGCTAAAGGCTGGATTGACTG
GGCAGCTTCCAAACTCTCTGGCCTGACAACCAATGTTGTGGACATTATTTTGGCTCATCACTTTGGGCAGGAAGA
GTTACAGGCCAACCTGGACCTGATCCAAACCTACAGAATGCATATTGCCCAAGACATCAACCAAGACAACCTGCA
GCTCTTCTTGAATTCCTACAATGGACGCAGAGACCTGGAGATCGAAAGACCCATACTGGGCCAAAATGATAACAA
ATCAAAAACATTAAAGTGTTCTACTTTACTGGTGGTAGGGGACAATTCGCCTGCAGTTGAGGCTGTGGTCGAATG
CAATTCCCGCCTGAACCCTATAAATACAACTTTGCTAAAGATGGCGGACTGTGGGGGACTGCCCCAGGTAGTTCA
GCCTGGGAAGCTCACCGAGGCCTTCAAGTACTTTTTGCAGGGAATGGGCTACATACCATCTGCCAGCATGACTCG
GCTCGCCCGATCACGAACCCACTCAACCTCGAGTAGCCTCGGCTCTGGAGAAAGTCCCTTCAGCCGGTCTGTCAC
CAGCAATCAGTCAGATGGAACTCAAGAATCCTGTGAGTCCCCTGATGTCCTGGACAGACACCAGACCATGGAGGT
GTCCTGCTAAGCAGATGCTCCTCCCCTGGACCATTGCAAGTCCATCCTTCAAATGACCACTCCATAATATAACAT
TTCATCCAGTAAACTGGCCTCTACTATCTTTAACTCATGCATGGCCACTGAACCTCTCTCTAGTAGCCTGGATTT
ATCATTCTCTCTGCCTGCCCACCCCCTTTTTTGTATAGCCCAAGAACCACTTCCATGCCATACTGTAACATTCCA
ACATCTTTAGCTGATCAGATCTCTCCATATCCTCTCTTGCCAGCTTTTTCCCGTGCTCCCCCAACTATGTATCAG
ATAAGATTCTTTGATCCCGACTCTGTGTGTGCGAGCACGCGTGTCTGTGTTTGTGTGTGCATAGTTCTGTGGTTT
TAGACACGCTTTCTTGTAGTGCTTCTGCAAAAAACAAAAAAGGGACTTATTTTGCATTCTCAATGGTGTTTTTAA
GGGAATTAGGCAGAACAGATTTCTAGGTTGGGTAGGCCACTGCATTCTCTTTTGTTTGCAAATTGGTCAACAAAA
TTTGCAAAGTGATTTCAGGAGAGAGCAGCTTTGAGGAATGTGGAAAATCATAATTGCCGTCTGGACCATTGATTG
ATTGTGACCAGTAGCAGAAGGGTGCCTGTTACATAGAGAGGCTCCTTCTGTCCAAATGAATTTCTGTATACTCTT
CTATAAATAAAAGGGAGGAATATATTCTGCTGGAAGCCCATGAACCATCGCTGAGGTTCTGATACAACATAGAGT
TTTTTCCAAGGAGTGAATGTGGTTTAATTACTGGACTCTCTTAGCACAGGAAGGTGGAAACAAAATGCCAGGCCT
CTGCTCTGAAGAGCAAAACTGCTGTCGCTGCAGTATCTGATACCAGACATCCACATATCCACAAGAAGTGCCTCT
TAGGTCTGTGACAGAGAGTGTGTCTCCATTCCTCAGTTCCCAGAAAGGGGAGAGGTTTGGCCTAAAAAGCATGTA
GATGGGGGAGAAATGGGTGGGGGGAGAGGAACAGCCATTAACACAGTATCATGTTTAACAAGTATAGCCTTGATT
TCAGTAGATGTAATGGAAGCCAAATTAAATTGATACAGAACCCATTTCTCAGAGTCTTTTTTTTTTTTTTGAGA
CAGAGTCTCGCTGTTACCCAGGCTGGAGTGCAATGGCGCAAACTTGGCTCACTGCAACCTCTGCCCCCTGGGTTC
AAGCGATTCTCCTGCCTCAGCCTCCCGAGTAGCTGAGACTACAGGCACCTGCCACCATACCCAGCTAAGTTATGT
ATTTTTAGTAGAGATGGAGTTTCACCATGTTGGCCAGGCTGGTCTCAAACTCCTGACCTCAGGTGATCCACCTGC
CTCAGCCTCCCAAAGTGCTGGGATTACAGGCATGAGTCATTGCTCCCAGCCATTAGAAAGATTGTTAATCCTATG
AACTCCCTTTTGTAGGAGAGAAAGGGCCAATCTGTAGGGGTAGCCCTGTCCAGGTAAAGTTGTTTTCAGCCTCAT
GTCTACTGTTAGGTGAGGGAGTCACAGCCAGACAGAGAGTATTGCTGGAGGGTGAGAGAATTGTGGAGACCAACT
ACCACATAGCAAGAGCCCAGCTCTTGGGAGCATTGAGATGTAAGCTCAGGGTTACACAGTTCCAAATCTTGGGAA
GGGGCTTTTCAGACAGACTGTTTGCTTTCTGCTGAGATAAGGAATGCATCACTCTGCCAGAGTATGACTTTTTAC
AGATTATTAAATAAAGCTGCATATGTCTCATTGTTACC

FIGURE 4393

MDELQDVQLTEIKPLLNDKNGTRNFQDFDCQEHDIETTHGVVHVTIGVGAGAYILSRFALNHPELVEGLVLINVD
PCAKGWIDWAASKLSGLTTNVVDIILAHHFGQEELQANLDLIQTYRMHIAQDINQDNLQLFLNSYNGRRDLEIER
PILGQNDNKSKTLKCSTLLVVGDNSPAVEAVVECNSRLNPINTTLLKMADCGGLPQVVQPGKLTEAFKYFLQGMG
YIPSASMTRLARSRTHSTSSSLGSGESPFSRSVTSNQSDGTQESCESPDVLDRHQTMEVSC

FIGURE 4394

CCTGCTCTGTAGAGCCGGCGGCAACCGGGTAGCTTGGCCAGGTTGTGAGGAACCGCAGCGCCCGCAGGACCGGGC
CGCTGAGCCTGCAGCCGCCCCGCGCCGTGACCTGCGACCCTAGACCCCGACTACCCTTTGGCTCAGCCCGCGCGC
CCCAGGCCCGGCCCGGGCGGCGCGACGGGAGGATGAGCGGCGGGCGGCGGAAGGAGGAGCCGCCTCAGCCGCAGC
TGGCCAACGGGGCCCTCAAAGTCTCCGTCTGGAGTAAGGTGCTGCGGAGCGACGCGGCCTGGGAGGATAAGGATG
AATTTTTAGATGTGATCTACTGGTTCCGACAGATCATTGCTGTGGTCCTGGGTGTCATTTGGGGAGTTTTGCCAT
TACGAGGGTTCTTGGGAATAGCAGGATTCTGCCTGATCAATGCAGGAGTCCTGTACCTCTACTTCAGCAATTACC
TACAGATTGATGAGGAAGAATATGGTGGCACGTGGGAGCTCACGAAGGAAGGGTTTATGACCTCTTTTGCCTTGT
TCATGGTCATTTGGATCATCTTTTACACTGCCATCCATTATGACTGATGGTGTACAGCTCCCAAGTGCTCCCTAT
CCAGTCCAAAGGACCCTCTTGATTACAGCACAGGAACTTGATCGTTGGGGAACCCCAGCCCCTTGGAACTTGGAA
GACCCGTGTTTCCTGGACCGCGAATCAGTGTGTTGGGCATCAGTGTTTTCTGCAAGGGTTGTGACCTGAAACTTT
TTAAAAACCACCCACCTTTGGGGAAGCATTTCTGAATTTATCCATCACCAACCATTTCTTCTTGGATACCATCAA
GTAACAGCTATTATTTGCCAAGTGGAGCTGTCATTTAATTTGATGCACCTCTGGATTCAGATGAAACATTAAATT
GTCTTCCTCGATTCTCCATCGGGTGTAGAGTTTTTAAACTATCAATGGCATTTCAAGTCTTCTGAAACAGCATGG
CTGTATGTGCGTGGTCCATAGCACAGTACATGCAGCATCTAATAAGAGTTTCCATTGTAGAATGTTTTCACATAC
TTGAATAAATCAAATCTTTAATTGAGAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4395

MSGGRRKEEPPQPQLANGALKVSVWSKVLRSDAAWEDKDEFLDVIYWFRQIIAVVLGVIWGVLPLRGFLGIAGFC
LINAGVLYLYFSNYLQIDEEEYGGTWELTKEGFMTSFALFMVIWIIFYTAIHYD

FIGURE 4396

TGCTGGCCTGGGGTTGTGGTTGAGGCCGGGTCTCCGCTCCTGTGCCCGGGAAGATGGTGCTAGGTGGTTGCCCGG
TTAGTTACTTACTTCTGTGCGGCCAGGCGGCTTTGCTGCTGGGGAATTTACTTCTGCTGCATTGTGTGTCTCGGA
GCCACTCGCAAAATGCGACCGCTGAGCCTGAGCTCACATCCGCTGGCGCCGCCCAGCCGGAGGGCCCCGGGGGTG
CTGCGAGCTGGGAATATGGCGACCCCCACTCTCCGGTCATCCTCTGCTCTTACCTACCTGATGAATTTATAGAAT
GTGAAGACCCAGTGGATCATGTTGGAAATGCAACTGCATCCCAGGAACTTGGTTATGGTTGTCTCAAGTTCGGCG
GTCAGGCCTACAGCGACGTGGAACACACTTCAGTCCAGTGCCATGCCTTAGATGGAATTGAGTGTGCCAGTCCTA
GGACCTTTCTACGAGAAAATAAACCTTGTATAAAGTATACCGGACACTACTTCATAACCACTTTACTCTACTCCT
TCTTCCTGGGATGTTTTGGTGTGGATCGATTCTGTTTGGGACACACTGGCACTGCAGTAGGGAAGCTGTTGACGC
TTGGAGGACTTGGGATTTGGTGGTTTGTTGACCTTATTTTGCTAATTACTGGAGGGCTGATGCCAAGTGATGGCA
GCAACTGGTGCACTGTTTACTAAAAAAGAGCTGCCATCATGGCCCAGGGAGGCGGGTGAAAGCTCCGTCTTCTGAA
TTCATCTCTACAGGCTCAAAACTCCTCTTTGATATCAGACCTGATGTTATTTTCCTTCTTTTGGAGGGCATTTGT
TTGGTTAAGAAGGCTTCTTTGGACTTTGGAATTTCAACCCAGATTTTACCTTGCAGACGGAATGACAAGCAAAAA
GTGTTGTGGGGAATCAAATTTGTTCCTTTCCTCATGCACAAAACATAAAGGATAGTGGCGAGTTTACAAGCTGTG
GATGGGTTTCCATAGTCTTCCTTTCTGTACATTGCTATATCTTCAGTCCTTTGGAGCAAGTGGACCTAACAAGTT
GAGCAAAATGAATATTTGGATCCATGTTCCTCTTGTGACCCTGAGTCTTCATGCAAGGAGATCTGAAGCTGAACA
ATGAAAATCTTCAGCAGAAATAGAAATGGCCGTGGATTGTAATACACACTGAAATTCTGACTTTCTGAATTTAAA
TGTAGAATAAATTTTACCAACTTGGAAAAAAAAAAAAAAA

FIGURE 4397

MVLGGCPVSYLLLCGQAALLLGNLLLLHCVSRSHSQNATAEPELTSAGAAQPEGPGGAASWEYGDPHSPVILCSY
LPDEFIECEDPVDHVGNATASQELGYGCLKFGGQAYSDVEHTSVQCHALDGIECASPRTFLRENKPCIKYTGHYF
ITTLLYSFFLGCFGVDRFCLGHTGTAVGKLLTLGGLGIWWFVDLILLITGGLMPSDGSNWCTVY

FIGURE 4398

GGCACGAGACAATCCTGACATTTCATTGTTTTGTTACTTGGGGCAGTATTAACCAGTGGCCTTTGTATGTACATT
CATTGCTTACATTTATTGTTTAAGTGGTAGAGTAGCATTTTTATGAACTTCCCTGTTCAGTATTAGTGAAATTGA
CAGATGCGTATATGTAAAGATAGAAAAGAAACGAATACAATTAATTTTTTATTCCTTGAGGCCTATTTATTTGTT
TTGGCCCTGGATCTTTTCTAATCACAATTATATTTCTTTATTTTTGCCTTTGAGCAGTTTCATTTATCTTTGTGG
GCAGGGAAGATTAAATATGAAATTCAGTCCAGTCATTTTGCTACTGGTTAGCTTTAGTTTGAGGCAAGTAAAAAT
TTTTGATTAAAATTAGTTTCTTAAAATTATGCCCTTGCTTTACCAAATAATCAAATTGGCTAAAAAATAAGGGTA
TGTAACTTTGCATTTTGAAGAACAAACCAATAATTTTTCATGAGCCCTACTCGATCTTCTTTAAAGAAGACCTTC
CTAAGAGACAATTAGGGATGAGTTTGATTAATGGGAAATAGCTCTAGGTTAGATTATTTTAAATTCCATACACCA
AGTGATTTAACCACAGTGGCAGTGGCAGTTTCTGAACCGTCAAGTATGAACATCACTTAAAAATTAAAAGATGCT
TAATAATAAACTCTTAATTTTCATTAAGCCAATCTGTAATTCAGAAGAAAAGCATATGTCTGCCATGGGACTATT
GCAGTGCGTCTCCATCAGTGTTAACACAGGAGAGATATGTTATTTTATGTGTATGTCTTAGTTTGGGATATGTGG
TAGTAAGAACATGTCAAGAGTGCTTTCTTCAAACCTGTCAGCTCAACTGAGAAGACAGTTACTTCATTGCTTATT
TTTTCCCTTGTTTTATTGAAATCTGTATCTCATATCCAGTATCTAACACTTTGTAGAGATACTTACATATAATGT
AAGTGCACACCTACCCAGAGGAATGGATAACTGTTAAAGTGTTAATAATAGCTCGTCTTAGTTGATTTCAGCATA
ATTTACATTAGGGAGACCTAAAAAGCACCTTCAAAGTATTAAAAGCACCTTTTTTTTTTCTTTTTCCTAAAAAAG
CAATTAAAATGGTCACTGCTAACATTTATTAAACTTCATGTTAGTTGATGAAACAGCTGGAGGGAAGCTGCCACA
TCTCCTAGCTAAGCAGTCTGACTTACCTGTTGGGAAACAAAGGGATATTGCTCTAAGATTGATTAGGATGATTGT
AGCTAGAGTCTTGAATTCTATCTGTATACGGCAGAGAAACTTTATAGAGTGTAGAGAGGTGAGCGAAAGGATGCA
AAAGCACTTTGAGGGCTTTATAATAATATGCTGCTTGAAAAAAAAAAATGTGTAGTTGATACTCAGTGCATCTCCA
GACATAGTAAGGGGTTGCTCTGACCAATCAGGTGATCATTTTTTCTATCACTTCCCAGGTTTTATGCAAAAATTT
TGTTAAATTCTATAATGGTGATATGCATCTTTTAGGAAAGATATACATTTTTAAAAATCTATTTTATGTAAGAAC
TGACAGAGGAATTTGCTTTGTATAATGCAGGCTGGCTTTACAAAAGCACTGTAGCAAATTTACTACAAGTCTAAA
AGTATACATATATGTTAATAGATATATGTGCAACTAGATATGGACAGCAGTTGTATTTTTTTAAATAAATATTTT
TAACAAAAAAAAAAAAAAAAAAACTCGAGCAAAC**ATG**GCGGCTCCACTAGGGGGTATGTTTTCTGGGCAGCCACCC
GGTCCCCCTCAGGCCCCGCCGGGCCTTCCGGGCCAAGCTTCGCTTCTTCAGGCAGCTCCAGGCGCTCCTAGACCT
TCCAGCAGTACTTTGGTGGACGAGTTGGAGTCATCTTTCGAGGCTTGCTTTGCATCTCTGGTGAGTCAGGACTAT
GTCAATGGCACCGATCAGGAAGAAATTCGAACCGGTGTTGATCAGTGTATCCAGAAGTTTCTGGATATTGCAAGA
CAGACAGAATGTTTTTTCTTACAAAAAAGATTGCAGTTATCTGTCCAGAAACCAGAGCAAGTTATCAAAGAGGAT
GTGTCAGAACTAAGGAATGAATTACAGCGGAAAGATGCACTAGTCCAGAAGCACTTGACAAAGCTGAGGCATTGG
CAGCAGGTGCTGGAGGACATCAACGTGCAGCACAAAAAGCCCGCCGACATCCCTCAGGGCTCCTTGGCCTACCTG
GAGCAGGCATCTGCCAACATCCCTGCACCTCTGAAGCCAACG**TGA**GCAAAGGGCAGAGGCAGTTGGCCTATGAGT
GGGCTGATGCGTGAGGTTGGCCACACATTCCTTCCTGTGGACTTGACATTTTGGAAGAACTCTTTGCCAGATAAT
GAGTTCATTTTAGTTTTATGCTCCCATTGAAAAATTTTCCACTATTTTTATAAGCTGTTAATTTCTTGAGTACTT
TATAACATGTCTGTAGCTTGGATAAACCAAGTAAGTATTTTTTTTTTGTCTTTAGCAAAGTTTAGACTGTGAATA
TGATGACACAGATTCTTTTTTATGGTGGCTTTGCTTGTTTTAAATTTTTGCATGACTTTTCATCTTTTTATGTGT
GTTTCCTGTAGTTTGATCCGAAGGAAAAGAGTATAGTAGCCTGAGAATCAGGAGATGGGAGTTTTAGTCGTAGGC
CTTATGATAATTACCCCGCGGTGGTGTGTAGAAAAGTATGTAAATTTGCTCTGTTTTAAGACTTTGAACTACCTC
AAGAAGAGGAATCTAATACAATATTTGTAATGTTTCCAGAGCTCTCAGAATGAGGATTTTTTTGTAAATAGGTCA
GAAGACGATGGAACTGTCCTGGGTTAGTATAGTAATCTTACAGTAGGATCCTTAGGTTGATGCTGACTTCTGTTT
GGGGTATGTTTATATTTTATGTGGTGTTTACTTTTTTTTTTTGACATAAAAGGATATAGTGGGAGCAGTGATACG
CTAACATTCATTACATTCTGCAGTAATGAATCTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4399

MAAPLGGMFSGQPPGPPQAPPGLPGQASLLQAAPGAPRPSSSTLVDELESSFEACFASLVSQDYVNGTDQEEIRT
GVDQCIQKFLDIARQTECFFLQKRLQLSVQKPEQVIKEDVSELRNELQRKDALVQKHLTKLRHWQQVLEDINVQH
KKPADIPQGSLAYLEQASANIPAPLKPT

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FIGURE 4400

CCCGAGCCCCGCCCCTCCGGGCCCGGGTCGGCGCGCCCAGCCTGCCAGCCGCGCTGCTGCTGCTCCTCCTGCTGT
GGGACCGCTGACCGCGCGGCTGCTCCGCTCTCCCCGCTCCAAGCGCCGATCTGGGCACCCGCCACCAGC**ATG**GAC
GCTCGCCGCGTGCCGCAGAAAGATCTCAGAGTAAAGAAGAACTTAAAGAAATTCAGATATGTGAAGTTGATTTCC
ATGGAAACCTCGTCATCCTCTGATGACAGTTGTGACAGCTTTGCTTCTGATAATTTTGCAAACACGAAACCTAAA
TTCAGGTCAGATATCAGTGAAGAACTGGCAAGTGTTTTTTATGAGGACTCTGATAATGAATCTTTCTGCGGCTTT
TCAGAAAGTGAGGTGCAAGATGTATTAGACCATTGTGGATTTTTACAGAAACCAAGGCCAGATGTCACTAACGAA
CTGGCCGGTATTTTTCATGCCGACTCTGACGATGAATCATTTTGCGGTTTCTCAGAGAGTGAGATACAAGATGGA
ATGAGGCTGCAGTCAGTTCGGGAAGGCTGTAGGACCCGCAGCCAGTGCAGGCACTCTGGACCTCTCAGGGTGGCG
ATGAAGTTTCCAGCGCGGAGTACCAGGGGAGCAACCAACAAAAAAGCAGAGTCCCGCCAGCCCTCAGAGAATTCT
GTGACTGATTCCAACTCCGATTCAGAAGATGAAAGTGGAATGAATTTTTTGGAGAAAAGGGCTTTAAATATAAAG
CAAAACAAAGCAATGCTTGCAAAACTCATGTCTGAATTAGAAAGCTTCCCTGGCTCGTTCCGTGGAAGACATCCC
CTCCCAGGCTCCGACTCACAATCAAGGAGACCGCGAAGGCGTACATTCCCGGGTGTTGCTTCCAGGAGAAACCCT
GAACGGAGAGCTCGTCCTCTTACCAGGTCAAGGTCCCGGATCCTCGGGTCCCTTGACGCTCTACCCATGGAGGAG
GAGGAGGAAGAGGATAAGTACATGTTGGTGAGAAAGAGGAAGACCGTGGATGGCTACATGAATGAAGATGACCTG
CCCAGAAGCCGTCGCTCCAGATCATCCGTGACCCTTCCGCATATAATTCGCCCAGTGGAAGAAATTACAGAGGAG
GAGTTGGAGAACGTCTGCAGCAATTCTCGAGAGAAGATATATAACCGTTCACTGGGCTCTACTTGTCATCAATGC
CGTCAGAAGACTATTGATACCAAAACAAACTGCAGAAACCCAGACTGCTGGGGCGTTCGAGGCCAGTTCTGTGGC
CCCTGCCTTCGAAACCGTTATGGTGAAGAGGTCAGGGATGCTCTGCTGGATCCGAACTGGCATTGCCCGCCTTGT
CGAGGAATCTGCAACTGCAGTTTCTGCCGGCAGCGAGATGGACGGTGTGCGACTGGGGTCCTTGTGTATTTAGCC
AAATATCATGGCTTTGGGAATGTGCATGCCTACTTGAAAAGCCTGAAACAGGAATTTGAAATGCAAGCA**TAA**TAT
CTGGAAAATTTGCTGCCTGCCTTCTACTTCTCAAATCTTTCTTGTAAAAGTTTCCAATTTTTTCACTGAAACCTG
AGTTAAAAATCTTGATGATCAGCCTGTTTCATAAGAAACTCCAATCAAGTTAATCTTAGCAGACATGTGTTTCTG
GAGCATCACAGAAGGTATATTGCTAGTTACACTTTGCCCTCCTGCAGTTTCTTCTCTGCTCCCAACCCCCATCTC
ATAGCATCCCCCTCTATTTCCAATGCTCCTCTCCAACCGCTTAGTTTCTGAATTTCTTTTAAATTACAGTTTTAT
GAAAGCATATTTTATTTACTTGGTGTTGAAATAGCCCTCATAAAACCTAAGCACTTGGAAACACAATAATAGTAT
TAACTAACTAGATCTATTGAATTTCAGAGAAGAGCCTTCTAACTTGTTTACACAAAAACGAGTATGATTTAGCAT
TCATACTAGTTGAAATTTTTAATAGAATCAAGGCACAAAAGTCTTAAAACCATGTGGAAAAATTAGGTAATTATT
GCAGATTGATGTCTCTCAATCCCATGTATTGCGCTTATGTTACAAGTTGTTGTCACAGTTGAGACTTAATTTCTC
CTAATTTCTTCTGCCCGAAGGGTAAGTGGTGCGTCCAGCTTACACAATCATAATTCAAAGGTTGGTGGGCAATGT
AATACTTAATTAAAATAATGATGGAAGAGCTATCTGGAGATTATGAGTAAGCTGATTTGAATTTTCAGTATAAAA
CTTTAGTATAATTGTAGTTTGCAAAGTTTATTTCAGTTCACATGTAAGGTATTGCAAATAAATTCTTGGACAATT
TTGTATGGAAACTTGATATTAAAAACTAGTCTGTGGTTCTTTGCAGTTTCTTGTAAATTTATAAACCAGGCACAA
GGTTCAAGTTTAGATTTTAAGCACTTTTATAACAATGATAAGTGCCTTTTTGGAGATGTAACTTTTAGCAGTTTG
TTAACCTGACATCTCTGCCAGTCTAGTTTCTGGGCAGGTTTCCTGTGTCAGTATTCCCCCTCCTCTTTGCATTAA
TCAAGGTATTTGGTAGAGGTGGAATCTAAGTGTTTGTATGTCCAATTTACTTGCATATGTAAACCATTGCTGTGC
CATTCAATGTTTGATGCATAATTGGACCTTGAATCGATAAGTGTAAATACAGCTTTTGATCTGTAATGCTTTTAT
ACAAAAGTTTATTTTAATAATAAAATGTTTGTTCTAACTTGTCTGCTTTTTTAAAAATAATCTTACTGTACTTAA
TTCTAATTTTTTCCTCATATTTAAATAAAAGGCCATTTCCACCTTTTCT

FIGURE 4401

MDARRVPQKDLRVKKNLKKFRYVKLISMETSSSSDDSCDSFASDNFANTKPKFRSDISEELASVFYEDSDNESFC
GFSESEVQDVLDHCGFLQKPRPDVTNELAGIFHADSDDESFCGFSESEIQDGMRLQSVREGCRTRSQCRHSGPLR
VAMKFPARSTRGATNKKAESRQPSENSVTDSNSDSEDESGMNFLEKRALNIKQNKAMLAKLMSELESFPGSFRGR
HPLPGSDSQSRRPRRRTFPGVASRRNPERRARPLTRSRSRILGSLDALPMEEEEEEDKYMLVRKRKTVDGYMNED
DLPRSRRSRSSVTLPHIIRPVEEITEEELENVCSNSREKIYNRSLGSTCHQCRQKTIDTKTNCRNPDCWGVRGQF
CGPCLRNRYGEEVRDALLDPNWHCPPCRGICNCSFCRQRDGRCATGVLVYLAKYHGFGNVHAYLKSLKQEFEMQA

FIGURE 4402

GGAGTTCGGAGTAGAGATGGCCGCGCTTGCACCGCTGCCCCCGCTCCCCGCACAGTTCAAGAGCATACAGCATCA
TCTGAGGACGGCTCAGGAGCATGACAAGCGAGACCCTGTGGTGGCTTATTACTGTCGTTTATACGCAATGCAGAC
TGGAATGAAGATCGATAGTAAAACTCCTGAATGTCGCAAATTTTTATCAAAGTTAATGGATCAGTTAGAAGCTCT
AAAGAAGCAGTTGGGTGATAATGAAGCTATTACTCAAGAAATAGTGGGCTGTGCCCATTTGGAGAATTATGCTTT
GAAAATGTTTTTGTATGCAGACAATGAAGATCGTGCTGGACGATTTCACAAAAACATGATCAAGTCCTTCTATAC
TGCAAGTCTTTTGATAGATGTCATAACAGTATTTGGAGAACTCACTGATGAAAATGTGAAACACAGGAAGTATGC
CAGATGGAAGGCAACATACATCCATAATTGTTTAAAGAATGGGGAGACTCCTCAAGCAGGCCCTGTTGGAATTGA
AGAAGATAATGATATTGAAGAAAATGAAGATGCTGGAGCAGCCTCTCTGCCCACTCAGCCAACTCAGCCATCATC
ATCTTCAACTTATGACCCAAGCAACATGCCATCAGGCAACTATACTGGAATACAGATTCCTCCGGGTGCACACGC
TCCAGCTAATACACCAGCAGAAGTGCCTCACAGCACAGGTGTAGCAAGTAATACTATCCAACCTACTCCACAGAC
TATACCTGCCATTGATCCCGCACTTTTCAATACAATTTCCCAGGGGGATGTTCGTCTAACCCCAGAAGACTTGCT
AGAGCTCAGAAGTACTGCAAATATGCTGGCAGTGCTTTGCAGTATGAAGATGTAAGCACTGCTGGCCAGAATCTA
CAAAAAGGCTCTCAAGTTACTGACGACAGGCAGAGAATGAAGCCTTTGTATGACAGACCCATGTATTTTTGGTAT
GAGGAACTAACAGTCCATTACTCTATCTTCAGCCTATCAGGATCACAGTTTTAAGGAAGACTTGGTTTTGTTGAA
TATGACAATGAAATCTGTGTGTATCAGATTTTTATTGAAGCATTCATCAGCAGCCTCAACCAGTTTTCATTGTCC
ATTTACTAGATTCAATCGTCTCTGAGTATATAGGGCTGATGTTAGCAAGACCCTAAAAATGTCCATTGAACCCTG
CTTCAAAAAATGAAAACACACCTCTATAAAATGTGTACTGGGAATAAGCTTTGTATTTACATACATTAGGGGAAT
TTTTTAAAATCTGTAATGTTTGGACAAACAGATGATATTACTTTGCTATAAAATTATAAATGTAACTTTTAATAA
AGATAGCCAGAATATTCTAAATTAGAAATTACGTTTTTGTTTCCCTCAAGACATAAACCAAATATAAACATTCTA
AACTGCTGGATGAATCTGAAAAGACATTAAGTTCAAATTTTAATTTATTCTCATATTAAATATAACTCCATTAAA
AGTTTAAAATTTCATGGGAGAAAATATAATAAGGTAAAGAGGTAGAATCACTTTCAGACTTAAGAATAATGTTGA
TTTCCCAAGTGCTTTACCTTATCTGTTAAAGCGTAAGATGAATTGGTATTTGCTTCCATAGGCAGTTTGACTGCC
ATGTATTAGAGAATGAAAAGAAGATATTTGTAGTAATGCCTGGAAACTTGGTGCTTTAAATTAAGGTACTCCTCT
GCTGCTGTAGAATGGATTCCACACAGTGGATAGCTATGGGTGATTCAGAATATTATGTTTAGATTCCCATTTGTT
AAGTTTATAAGTTTTGTGGGGAATTATGAACTTACTGTGTACTACCTGCATTTGTGCTGTGTGAAAAATAAATAC
AAGGATTCGTTTAGCTAATTCAACTTACTACAAAGACAAATGTCTGTTTTTATTTGCCTGCTAGGATTGTCTTTT
TTAAAAGTCATTTTTATTTATAGGAATATGGGTGTTTCTATAGGAAGAAACAGGTTTTTTGTTTTTTGTTTTTTA
AGATAAATTTGACAAAGTTAACTGAAATTTATCTGGTCCATTTTATTCATGCTACTAAGATGGGAATCTTTAAAC
ACAAGGGTCAGCAAGCTTTGGCCCATGGATTGGCCACCTGTTACGTAAATAAAGTTTCTTTG

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FIGURE 4403

MAALAPLPPLPAQFKSIQHHLRTAQEHDKRDPVVAYYCRLYAMQTGMKIDSKTPECRKFLSKLMDQLEALKKQLG
DNEAITQEIVGCAHLENYALKMFLYADNEDRAGRFHKNMIKSFYTASLLIDVITVFGELTDENVKHRKYARWKAT
YIHNCLKNGETPQAGPVGIEEDNDIEENEDAGAASLPTQPTQPSSSSTYDPSNMPSGNYTGIQIPPGAHAPANTP
AEVPHSTGVASNTIQPTPQTIPAIDPALFNTISQGDVRLTPEDLLELRSTANMLAVLCSMKM

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FIGURE 4404

GCCGACTCCTCCCGCTAAGGCGGGAACACGCGGGGCCCAAGATGGCGGCCAGCCGGTACCGGCGTTTTCTTAAGC
TCTGTGAGGAATGGCCAGTGGACGAGACCAAACGGGGCCGGGACTTGGGCGCTTACCTGCGACAGCGGGTAGCAC
AGGCCTTTCGGGAGGGAGAGAATACCCAGGTTGCAGAGCCTGAGGCCTGTGATCAGATGTACGAGAGCTTAGCGC
GACTCCATTCAAACTACTACAAACACAAGTACCCTCGCCCCAGAGACACCAGCTTCAGTGGCCTGTCGTTGGAAG
AGTACAAGCTGATCCTGTCCACAGACACCTTGGAAGAGCTTAAGGAAATAGATAAAGGCATGTGGAAGAAACTGC
AGGAGAAGTTTGCCCCCAAGGGTCCTGAGGAGGATCATAAGGCCTGAGCTCAGGCCTTACCTCGTGCACATACCT
AGGTGTGGAGTCTTGTACATTGCCATCGTCAATAAAACTGCCCCAGTTTCCCCTTGCAAAAAAAAAAAAAAAAAA
AAAAAAAAAA

FIGURE 4405

MAASRYRRFLKLCEEWPVDETKRGRDLGAYLRQRVAQAFREGENTQVAEPEACDQMYESLARLHSNYYKHKYPRP
RDTSFSGLSLEEYKLILSTDTLEELKEIDKGMWKKLQEKFAPKGPEEDHKA

FIGURE 4406

GGGTGGTGGATCTGTCGGTCCCGTTTTCCCGTCGCACGTGGTGGCCACTGTTGGCTTCTGAATGGTTTGCAAGGC
GGATATCCACGCCAAGGCCTTTGGATCGGCCGTGGGTACATCCGTCTGAGCCGTTCCTTTCCATCGCAGAGCGGC
GGCCTCCGGCGGCGCTCTCCAGTCATGGACTACCGGCGGCTTCTCATGAGCCGGGTGGTCCCCGGGCAATTCGAC
GACGCGGACTCCTCTGACAGTGAAAACAGAGACTTGAAGACAGTCAAAGAGAAGGATGACATTCTGTTTGAAGAC
CTTCAAGACAATGTGAATGAGAATGGTGAAGGTGAAATAGAAGATGAGGAGGAGGAGGGTTATGATGATGATGAT
GATGACTGGGACTGGGATGAAGGAGTTGGAAAACTCGCCAAGGGTTATGTCTGGAATGGAGGAAGCAACCCACAG
GCAAATCGACAGACCTCCGACAGCAGTTCAGCCAAAATGTCTACTCCAGCAGACAAGGTCTTACGGAAATTTGAG
AATAAAATTAATTTAGATAAGCTAAATGTTACTGATTCCGTCATAAATAAAGTCACCGAAAAGTCTAGACAAAAG
GAAGCAGATATGTATCGCATCAAAGATAAGGCAGACAGAGCAACTGTAGAACAGGTGTTGGATCCCAGAACAAGA
ATGATTTTATTCAAGATGTTGACTAGAGGAATCATAACAGAGATAAATGGCTGCATTAGCACAGGAAAAGAAGCT
AATGTATACCATGCTAGCACAGCAAATGGAGAGAGCAGAGCAATCAAAATTTATAAAACTTCTATTTTGGTGTTC
AAAGATCGGGATAAATATGTAAGTGGAGAATTCAGATTTCGTCATGGCTATTGTAAAGGAAACCCTAGGAAAATG
GTGAAAACTTGGGCAGAAAAAGAAATGAGGAACTTAATCAGGCTAAACACAGCAGAGATACCATGTCCAGAACCA
ATAATGCTAAGAAGTCATGTTCTTGTCATGAGTTTCATCGGTAAAGATGACATGCCTGCACCACTCTTGAAAAAT
GTCCAGTTATCAGAATCCAAGGCTCGGGAGTTGTACCTGCAGGTCATTCAGTACATGAGAAGAATGTATCAGGAT
GCCAGACTTGTCCATGCAGATCTCAGTGAATTTAACATGCTGTACCACGGTGGAGGCGTGTATATCATTGACGTG
TCTCAGTCCGTGGAGCACGACCACCCACATGCCTTGGAGTTCTTGAGAAAGGATTGCGCCAACGTCAATGATTTC
TTTATGAGGCACAGTGTTGCTGTCATGACTGTGCGGGAGCTCTTTGAATTTGTCACAGATCCATCCATTACACAT
GAGAACATGGATGCTTATCTCTCAAAGGCCATGGAAATAGCATCTCAAAGGACCAAGGAAGAACGGTCTAGCCAA
GATCATGTGGATGAAGAGGTGTTTAAGCGAGCATATATTCCTAGAACCTTGAATGAAGTGAAAAATTATGAGAGG
GATATGGACATAATTATGAAATTGAAGGAAGAGGACATGGCCATGAATGCCCAACAAGATAATATTCTATACCAG
ACTGTTACAGGATTGAAGAAAGATTTGTCAGGAGTTCAGAAGGTCCCTGCACTCCTAGAAAATCAAGTGGAGGAA
AGGACTTGTTCTGATTCAGAAGATATTGGAAGCTCTGAGTGCTCTGACACAGACTCTGAAGAGCAGGGAGACCAT
GCCCGCCCCAAGAAACACACCACGGACCCTGACATTGATAAAAAAGAAAGAAAAAAGATGGTCAAGGAAGCCCAG
AGAGAGAAAAGAAAAAACAAAATTCCTAAACATGTGAAAAAAAGAAAGGAGAAGACAGCCAAGACGAAAAAAGGC
AAATAGAATGAGAACCATATTATGTACAGTCATTTTCCTCAGTTCCTTTTCTCGCCTGAACTCTTAAGCTGCATC
TGGAAGATGGCTTATTGGTTTTAACCAGATTGTCATCGTGGCACTGTCTGTGAAGACGGATTCAAATGTTTTCAT
GTAACTATGTAAAAAGCTCTAAGCTCTAGAGTCTAGATCCAGTCACTGACTCTGTCTGGTGTTGACAGAGGATTT
ATTTAAGCTATTATTTTAATAAAGAACTTTGTACATTTTTATTTTTATATTTTTTTCTCTTACAAATATGTTTTT
GGAAGCATGATAAATGTTTAAATGTAGTCAACATCTGTAACTCTTACATGAGTGTCCAGAGGCACTCATGGGAAA
ATTGGTTTTGCTTTCTTTGTACACACCAGAGACCCATCTGAGGTCATCTGATTATAAGGCCATGTTTATATAAAG
GGAATTTCACCCACAGTTCAGCTGGCTGTTGATTTTCACTGCAACTCTGCCTTTGTGTGTATTGGCGATCATTTG
TAATGCTCTTACACTTCGTCTTTAATGTTCTTTTTGGAGTTAGGACCTCTCAGTTCATAAAGTTTTTTACAATTC
AAAAAAAAAAAAAAAAAAAA

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FIGURE 4407

MSRVVPGQFDDADSSDSENRDLKTVKEKDDILFEDLQDNVNENGEGEIEDEEEEGYDDDDDDWDWDEGVGKLAKG
YVWNGGSNPQANRQTSDSSSAKMSTPADKVLRKFENKINLDKLNVTDSVINKVTEKSRQKEADMYRIKDKADRAT
VEQVLDPRTRMILFKMLTRGIITEINGCISTGKEANVYHASTANGESRAIKIYKTSILVFKDRDKYVSGEFRFRH
GYCKGNPRKMVKTWAEKEMRNLIRLNTAEIPCPEPIMLRSHVLVMSFIGKDDMPAPLLKNVQLSESKARELYLQV
IQYMRRMYQDARLVHADLSEFNMLYHGGGVYIIDVSQSVEHDHPHALEFLRKDCANVNDFFMRHSVAVMTVRELF
EFVTDPSITHENMDAYLSKAMEIASQRTKEERSSQDHVDEEVFKRAYIPRTLNEVKNYERDMDIIMKLKEEDMAM
NAQQDNILYQTVTGLKKDLSGVQKVPALLENQVEERTCSDSEDIGSSECSDTDSEEQGDHARPKKHTTDPDIDKK
ERKKMVKEAQREKRKNKIPKHVKKRKEKTAKTKKGK

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FIGURE 4408

GCTGGAAGCAACAGATGGGGACTGCAGAGGAGGTGGTGGTATTGGGATAGTGCTGCAGCCAAGAACTTAACGACT
GAAAGTAACTGGGATATCTTCATAATTATCTGAAGGTCACAGTGGGAGAACAAAATTAAAAGAACTGAGAAGACT
TACAAGAGAACCTCCTAAGAGTCACCCAAACAATCGGCTGAGAATGAGAAGAGGTTCAAGTGATTCTTGTGCCTC
AGGCTCCCAAGTAGCTGGGACTACAGTAGCTGGGCCAGCACACCCAGAAAGCCTCACATTGTGCAGTGGAGAAGC
TGAGAGAAGAGGAAAAGAGGAGTGGCCAGACTCCCACCACTACCCAGGACCAACTCCTGCTCCTGAATCTTCTGA
TGGGCCCCACAAGGTGACAGTGCTGGCTACA**ATG**CTATCCAGCCGGTGGTGGCCAAGTTCCTGGGGGATCCTAGG
GCTGGGCCCCCGAAGCCCTCCTCGGGGATCCCAGCTCTGTGCCCTCTATGCCTTTACTTATACTGGGGCAGATGG
CCAGCAGGTGTCTCTGGCTGAAGGGGATAGGTTCCTACTGCTTCGAAAGACCAACTCCGACTGGTGGTTGGCAAG
ACGCCTAGAAGCTCCCTCCACCTCTCGACCCATCTTCGTCCCAGCAGCCTATATGATAGAGGAATCCATCCCTTC
CCAGAGTCCAACTACCGTCATCCCCGGCCAATTGCTCTGGACTCCTGGGCCGAAGTTGTTTCATGGTTCCCTGGA
GGAGTTGTCTCAGGCCCTCCCAAGCAGGGCTCAGGCTAGCTCGGAGCAGCCTCCTCCACTTCCCCGCAAAATGTG
TAGGAGCGTCAGCACTGACAATCTGAGCCCCAGCTTTCTGAAGCCTTTCCAGGAAGGACCAAGCGGAAGATCCCT
CTCCCAGGAAGACTTGCCGTCAGAAGCCAGTGCCAGCACAGCAGGCCCCCAGCCCCTCATGTCAGAGCCCCCTGT
GTACTGTAACCTGGTGGACCTTCGCCGCTGTCCTCGGTCCCCACCCCCAGGCCCTGCATGCCCCCTGCTGCAGAG
GCTGGATGCCTGGGAGCAGCACCTGGACCCCAACTCTGGACGCTGCTTCTACATAAATTCACTGACTGGCTGCAA
GTCCTGGAAGCCCCCGCGCCGCAGTCGCAGCGAGACGAACCCTGGCTCCATGGAGGGGACACAGACCCTGAAGAG
GAACAATGATGTCCTGCAACCTCAGGCAAAGGGCTTCAGATCTGACACAGGGACCCCAGAACCGCTTGACCCACA
GGGTTCACTCAGCCTCAGCCAACGCACCTCGCAGCTTGACCCTCCAGCCTTGCAGGCCCCTCGACCTCTGCCGCA
GCTCCTGGACGACCCCCATGAGGTGGAAAAGTCGGGTCTGCTCAACATGACCAAGATTGCCCAAGGGGGGCGCAA
GCTCAGGAAGAACTGGGGCCCGTCTTGGGTGGTGTTAACGGGTAACAGCCTGGTGTTCTACCGAGAGCCACCGCC
GACAGCGCCCTCCTCAGGCTGGGGACCAGCGGGTAGCCGGCCCGAAAGTAGCGTGGACCTGCGCGGGGCGGCCCT
GGCGCACGGCCGCCACCTGTCCAGCCGCCGCAACGTCCTGCACATCCGCACGATCCCTGGCCACGAGTTCCTGCT
GCAGTCGGACCACGAGACAGAGCTGCGAGCCTGGCACCGCGCGCTGCGGACTGTCATCGAGCGGCTGGTTAGATG
GGTGGAGGCCCGGAGGGAGGCTCCGACCGGCCGGGACCAAGGGAGTGGGGATCGGGAGAACCCCCTGGAGCTGCG
TCTGTCGGGCTCTGGACCCGCGGAGCTGAGCGCCGGGGAGGACGAAGAAGAGGAGTCGGAGCTGGTGTCCAAGCC
GCTGCTGCGCCTCAGCAGCCGCCGGAGCTCCATTCGGGGGCCCGAAGGCACCGAGCAGAACCGCGTGCGCAACAA
ACTAAAGCGGCTCATCGCGAAGAGACCGCCCTTACAAAGCCTGCAGGAGCGGGGTCTGCTCCGAGACCAGGTGTT
CGGCTGCCAGTTGGAATCACTCTGCCAGCGGGAAGGAGACACGGTGCCCAGCTTTTTGCGGCTCTGCATTGCTGC
TGTGGATAAAAGAGGTCTAGATGTGGATGGCATTTATCGGGTGAGCGGGAACTTGGCAGTGGTCCAGAAGCTTCG
CTTTCTGGTGGACAGAGAGCGTGCGGTCACCTCCGATGGGAGGTATGTGTTCCCAGAACAGCCAGGACAAGAAGG
TCGGTTAGATTTGGACAGTACTGAGTGGGATGACATTCATGTGGTCACCGGAGCCCTGAAGCTTTTTCTCCGGGA
GCTGCCCCAGCCTCTGGTGCCACCACTGCTGCTGCCCCATTTCCGTGCTGCCCTTGCACTCTCCGAATCAGAGCA
GTGCCTCTCTCAGATACAAGAATTAATAGGCTCAATGCCAAAGCCCAACCATGACACTCTACGGTACCTCCTGGA
GCATTTATGCAGGGTGATAGCACACTCAGATAAGAATCGCATGACACCCCACAACCTGGGAATTGTGTTTGGACC
AACCCTGTTTCGGCCAGAGCAGGAGACATCTGACCCAGCAGCCCATGCTCTCTACCCAGGGCAGCTGGTCCAGCT
GATGCTCACCAACTTCACCAGCCTCTTCCCC**TGA**TGCAGGGAAGGAAGAAGAGAAAACATATTTCCGGTCATCTC
TGGTGGTGAGAGGCTGGTGTTCTGTTTTGAGGATATCCCTTTAAATCTCCCAAATGACTGTCTCTATCTTCATGA
GTGTGACTTGAGGTGTTGGGATGGGTGAGGGAGCTTCTCTAAAGAGGAAAGTGAGTGGATTAACCCCTGCTTCTC
TTCTTGTTCCCTGTTATCATTCCTCCCCAACATAATAATACATAAAGTGGCATGGTATTTTTAAAAAAAAAAAAA
AAAAAAAAAAAA

FIGURE 4409

MLSSRWWPSSWGILGLGPRSPPRGSQLCALYAFTYTGADGQQVSLAEGDRFLLLRKTNSDWWLARRLEAPSTSRP
IFVPAAYMIEESIPSQSPTTVIPGQLLWTPGPKLFHGSLEELSQALPSRAQASSEQPPPLPRKMCRSVSTDNLSP
SFLKPFQEGPSGRSLSQEDLPSEASASTAGPQPLMSEPPVYCNLVDLRRCPRSPPPGPACPLLQRLDAWEQHLDP
NSGRCFYINSLTGCKSWKPPRRSRSETNPGSMEGTQTLKRNNDVLQPQAKGFRSDTGTPEPLDPQGSLSLSQRTS
QLDPPALQAPRPLPQLLDDPHEVEKSGLLNMTKIAQGGRKLRKNWGPSWVVLTGNSLVFYREPPPTAPSSGWGPA
GSRPESSVDLRGAALAHGRHLSSRRNVLHIRTIPGHEFLLQSDHETELRAWHRALRTVIERLVRWVEARREAPTG
RDQGSGDRENPLELRLSGSGPAELSAGEDEEEESELVSKPLLRLSSRRSSIRGPEGTEQNRVRNKLKRLIAKRPP
LQSLQERGLLRDQVFGCQLESLCQREGDTVPSFLRLCIAAVDKRGLDVDGIYRVSGNLAVVQKLRFLVDRERAVT
SDGRYVFPEQPGQEGRLDLDSTEWDDIHVVTGALKLFLRELPQPLVPPLLLPHFRAALALSESEQCLSQIQELIG
SMPKPNHDTLRYLLEHLCRVIAHSDKNRMTPHNLGIVFGPTLFRPEQETSDPAAHALYPGQLVQLMLTNFTSLFP

FIGURE 4410

CTCCGACAACAGGAATTTTCTCCGAGAGCGGGCCGGGCTCAGTTCAGCTGCTGTCCAGACCCGGATCGGCAACAG
TGCCGCCTCCAGACGTTCTCCTGCCGCTCGCCCGCCCGTCCCAGCGCCCCCAGCCCTCCCGCGAGGGCGCCCCGG
GACGGAAGGATCCACCAGTCTGTCGGCGCCCGCCGTTCTCGTGGTCGCCGTCGCCGTCGTCGTGGTGGTAGTCTC
CGCCGTCGCCTGGGCCATGGCCAATTACATCCACGTCCCTCCCGGCTCCCCGGAGGTGCCCAAGCTGAACGTCAC
CGTTCAGGATCAGGAGGAGCATCGCTGCCGGGAGGGGGCCCTGAGCCTCCTGCAACACCTGCGGCCTCACTGGGA
CCCCCAGGAGGTGACCCTGCAGCTCTTCACAGATGGAATCACAAATAAACTTATTGGCTGTTACGTGGGAAACAC
CATGGAGGATGTAGTCCTGGTGAGAATTTATGGCAATAAGACTGAGTTATTAGTCGATCGAGATGAGGAAGTAAA
GAGTTTTCGAGTGTTGCAGGCTCATGGGTGTGCACCACAACTCTACTGTACCTTCAATAATGGACTATGCTATGA
ATTTATACAAGGAGAAGCACTGGATCCAAAGCATGTCTGCAACCCAGCCATTTTCAGTTTATCATCGTTGACTCT
TTGCAAAGGAAAAACTACAAGATGTTTTGGATTAACCGGCTGCAGAGGGTCAAGGCTTCTGCTTAGTTTTTTCTA
GTTAGTGTTTGAGTTGAAGTGTTATACATTTCTTACTGCCGATTGCTTATTACTTAATTGTTCATGTTTTCAGAG
TTCTTGCCTATTAAAATTTTATTAATTTGGTTAACAAAAAAAAAAAAAAAAA

FIGURE 4411

MANYIHVPPGSPEVPKLNVTVQDQEEHRCREGALSLLQHLRPHWDPQEVTLQLFTDGITNKLIGCYVGNTMEDVV
LVRIYGNKTELLVDRDEEVKSFRVLQAHGCAPQLYCTFNNGLCYEFIQGEALDPKHVCNPAIFSLSSLTLCKGKT
TRCFGLTGCRGSRLLLSFF

FIGURE 4412

GGCGGCTGGTGAGCGCCCGCTGGAGGCTGGAGCTTCCGGGCCCTGGAAAGGGGTCCCCGCGCGCCCCGGGTCGGA
GGCAGACCCCTGGGTTTGGGGGACATGGGCATTTGGGGCGCCTGAACCCAAGACCTCTGGATGAGCTGCCCCGTT
CAGACC**ATG**GATCCTGAGGTGACCTTGCTGCTGCAGTGCCCTGGCGGGGGCCTGCCCCAGGAGCAGATACAGGCC
GAGCTGAGCCCCGCCCATGACCGTCGCCCACTGCCAGGTGGGGACGAGGCCATCACTGCCATCTGGGAGACCCGG
CTAAAGGCCCAACCCTGGCTCTTCGACGCCCCCAAGTTCCGCCTGCACTCAGCCACCCTGGCGCCTATTGGCTCT
CGGGGGCCACAGCTGCTCCTGCGCCTGGGCCTTACTTCCTACCGAGACTTCCTGGGCACCAACTGGTCCAGCTCA
GCTGCCTGGCTGCGACAGCAGGGTGCCACCGACTGGGGTGACACGCAGGCCTATCTGGCGGACCCACTGGGGGTG
GGCGCTGCACTAGCCACAGCCGATGACTTCCTTGTCTTCCTGCGCCGCTCCCGGCAGGTGGCTGAGGCCCCTGGG
CTGGTGGACGTACCTGGTGGGCACCCTGAGCCTCAGGCCCTGTGCCCTGGTGGCAGCCCCCAGCACCAGGACCTC
GCTGGGCAGCTGGTGGTACATGAACTCTTTTCCAGTGTCCTTCAGGAGATCTGTGATGAGGTGAACCTGCCGCTG
CTCACCCTGAGCCAGCCCCTGCTGTTGGGCATCGCCCGAAATGAGACCAGTGCTGGCCGAGCCAGTGCCGAGTTC
TATGTCCAGTGCAGCCTGACTTCTGAGCAGGTGAGGAAGCACTACCTGAGTGGGGGACCCGAGGCCCACGAGTCT
ACAGGAATCTTCTTTGTGGAGACACAGAACGTGCGGAGATTGCCCGAGACGGAGATGTGGGCTGAACTCTGCCCC
TCGGCCAAAGGCGCCATCATCCTCTACAACCGGGTTCAGGGAAGTCCCACTGGAGCGGCCCTAGGGTCCCCAGCC
CTACTCCCGCCGCTC**TGA**AAATAATAAACGACTTTATTCTTGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4413

MDPEVTLLLQCPGGGLPQEQIQAELSPAHDRRPLPGGDEAITAIWETRLKAQPWLFDAPKFRLHSATLAPIGSRG
PQLLLRLGLTSYRDFLGTNWSSSAAWLRQQGATDWGDTQAYLADPLGVGAALATADDFLVFLRRSRQVAEAPGLV
DVPGGHPEPQALCPGGSPQHQDLAGQLVVHELFSSVLQEICDEVNLPLLTLSQPLLLGIARNETSAGRASAEFYV
QCSLTSEQVRKHYLSGGPEAHESTGIFFVETQNVRRLPETEMWAELCPSAKGAIILYNRVQGSPTGAALGSPALL
PPL

FIGURE 4414

TAGTTTGCGTTTTCACCTGGTCGCCCGGCGGCCATGGCGGCCGTTCTGAAGCCGGTGCTGCTGGGCCTTCGAGAT
GCGCCGGTGCACGGCAGCCCCACAGGGCCGGGTGCCTGGACTGCTAGCAAGCTGGGCGGCATTCCGGATGCTCTG
CCCACCGTGGCTGCGCCCAGGCCCGTGTGTCAGCGCTGCGGGCAGCCGCTCGCTCTGGTCGTGCAGGTGTATTGC
CCGCTGGAAGGCTCCCCGTTTCACCGTCTGCTGCACGTGTTCGCGTGCGCCTGCCCCGGCTGTAGCACCGGCGGT
GCGCGCAGCTGGAAGGTGTTCCGCTCCCAGTGCCTGCAGGTGCCAGAGAGAGAGGCGCAGGACGCTCAGAAACAG
GGAAACAGCCTTGCAGCTGAGGACTGGTGTGAAGGTGCTGATGACTGGGGAAGTGATACTGAGGAGGGGCCTTCA
CCACAGTTTACCTTGGATTTTGGGAATGATGCCAGCAGTGCCAAAGACGTAGACTGGACTGCTCGGCTCCAAGAC
CTCCGCCTGCAGGATGCTGTCCTGGGTGCTGCCCATCCTGTGCCTCCTGGGCTGCCGCTCTTCCTGCCCTACTAC
ATCTGTGTTGCAGATGAGGATGATTACAGGGACTTTGTCAACCTGGATCATGCCCACAGCCTTCTGAGGGACTAT
CAGCAGAGAGAAGGCATTGCCATGGATCAGTTGCTTTCCCAAAGCCTTCCTAATGATGGTGATGAAAAATATGAG
AAGACCATAATTAAAAGTGGAGATCAGACGTTTTACAAATTCATGAAGCGAATTGCTGCTTGTCAGGAGCAGATT
TTGAGGTATTCCTGGAGTGGAGAGCCACTCTTTTTGACCTGCCCTACATCAGAAGTCACCGAGCTCCCAGCCTGC
AGCCAGTGTGGAGGCCAAAGGATATTTGAGTTTCAGCTTATGCCAGCACTGGTCAGCATGCTCAAGAGTGCTAAT
TTAGGTCTTTCTGTGGAATTTGGAACAATTCTAGTTTACACATGTGAGAAGAGTTGCTGGCCCCCAAATCATCAG
ACTCCCATGGAAGAATTTTGTATTATACAAGAAGACCCAGATGAATTATTGTTTAAGTAGAGCATTTCCTTTTAT
TAATATAAATTAAAACAAATGTTTACATCCAAAAAAAAAAAAAAAAAA

FIGURE 4415

MAAVLKPVLLGLRDAPVHGSPTGPGAWTASKLGGIPDALPTVAAPRPVCQRCGQPLALVVQVYCPLEGSPFHRLL
HVFACACPGCSTGGARSWKVFRSQCLQVPEREAQDAQKQGNSLAAEDWCEGADDWGSDTEEGPSPQFTLDFGNDA
SSAKDVDWTARLQDLRLQDAVLGAAHPVPPGLPLFLPYYICVADEDDYRDFVNLDHAHSLLRDYQQREGIAMDQL
LSQSLPNDGDEKYEKTIIKSGDQTFYKFMKRIAACQEQILRYSWSGEPLFLTCPTSEVTELPACSQCGGQRIFEF
QLMPALVSMLKSANLGLSVEFGTILVYTCEKSCWPPNHQTPMEEFCIIQEDPDELLFK

FIGURE 4416

GGCACGAGGCGTCTCTCTGCCCCCGCCGCTGCCATGGCGGCAGCTCCGCCGCTTTCCAAGGCCGAGTATCTGAAG
CGTTACTTGTCCGGGGCAGATGCCGGCGTCGACCGGGGATCTGAGTCCGGTCGCAAGCGTCGCAAAAAGCGGCCG
AAGCCTGGCGGGGCCGGCGGCAAGGGAATGCGGATTGTGGATGATGATGTGAGCTGGACAGCTATCTCCACAACC
AAACTAGAAAAGGAGGAAGAGGAAGATGATGGAGATTTGCCTGTGGTGGCAGAGTTTGTGGATGAGCGGCCAGAA
GAGGTAAAGCAGATGGAGGCCTTTCGTTCCAGTGCCAAATGGAAGCTTCTGGGAGGCCACAACGAAGACCTACCC
TCAAACAGACATTTTCGTCACGATACCCCGGATTCATCTCCTAGGAGGGTCCGTCATGGTACCCCAGATCCATCT
CCTAGGAAGGACCGTCATGACACCCCGGATCCATCTCCTAGGAGGGCCCGTCATGACACCCCAGATCCTTCTCCC
CTCAGAGGGGCTCGTCATGACTCAGACACATCTCCTCCCAGGAGGATCCGTCATGACTCCTCAGACACTTCACCC
CCAAGGAGGGCCCGTCATGATTCTCCAGATCCTTCTCCCCCAAGGAGGCCTCAGCATAATTCTTCAGGTGCATCT
CCTAGGAGAGTCCGTCATGATTCACCAGATCCCTCTCCTCCTAGGCGAGCCCGTCATGGTTCCTCAGATATCTCT
TCCCCCAGAAGGGTCCATAACAACTCCCCTGACACATCTAGGAGGACTCTTGGCTCTTCAGACACACAGCAACTC
AGAAGGGCCCGTCATGACTCCCCTGATTTGGCTCCTAATGTCACTTATTCCCTGCCCAGAACCAAAAGTGGTAAA
GCCCCAGAAAGAGCCTCTAGCAAGACTTCTCCACATTGGAAGGAGTCAGGAGCCTCCCATTTGTCATTCCCAAAG
AACAGCAAATATGAGTATGACCCTGACATCTCTCCTCCACGAAAAAAGCAAGCAAAATCCCATTTTGGAGACAAG
AAGCAGCTTGATTCCAAAGGTGACTGCCAGAAAGCAACTGATTCAGACCTTTCTTCTCCACGGCATAAACAAAGT
CCAGGGCACCAGGATTCTGATTCAGATCTGTCACCTCCACGGAATAGACCTAGACACCGGAGCTCTGATTCTGAC
CTCTCTCCACCAAGGAGGAGACAGAGGACCAAATCTTCTGATTCTGACCTGTCCCCGCCTCGAAGGAGTCAGCCT
CCTGGAAAGAAGGCTGCACACATGTATTCTGGGGCTAAAACTGGGTTGGTGTTAACTGACATACAGCGAGAACAG
CAGGAGCTCAAGGAACAGGATCAAGAAACCATGGCATTTGAAGCTGAATTTCAATATGCTGAAACCGTATTTCGA
GATAAGTCTGGTCGTAAGAGGAATTTGAAACTCGAACGTTTAGAGCAAAGGAGGAAAGCAGAAAAGGACTCAGAG
AGAGATGAGCTGTATGCCCAGTGGGGAAAAGGGCTTGCCCAGAGCCGGCAACAGCAACAAAATGTGGAGGATGCA
ATGAAAGAGATGCAAAAGCCTCTGGCCCGCTATATTGATGACGAAGATCTGGATAGGATGCTAAGAGAACAGGAA
AGAGAGGGGGACCCTATGGCCAACTTCATCAAGAAGAATAAGGCCAAGGAGAACAAGAATAAAAAAGTGAGACCT
CGCTACAGTGGTCCAGCACCTCCTCCCAACAGATTTAATATCTGGCCTGGATATCGCTGGGACGGAGTGGACAGA
TCCAATGGATTTGAACAGAAGCGCTTTGCCAGGCTTGCCAGCAAGAAGGCAGTGGAGGAACTTGCCTACAAATGG
AGTGTTGAGGATATGTAACTTTCCTGAGGCTGTGGGGGTGGCTGGGCTGTGGTAGTGGGCATAGGCAGCGAGATA
TCCAGTGGTAACAGTTGTCTGTGCTAATAATTGGAGCCCACACAGACCAGCAACTTGTTGAATGCCAGTTTTGAC
CACAGAAGAATATTCGAGACCTGATGTTTGGACTGAGGTACCTGTACTTCTTGGGTGTGACAGCACCGGCTGTTG
CTGGCTTTCAGAGGAAGCATTGATTTCTCATTGACCAGGGTTTGTTCTTGGTAGGGTTTTTCTTTTTCTTTTTTA
AATAAACATGTATTTATTTTTTTAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4417

MAAAPPLSKAEYLKRYLSGADAGVDRGSESGRKRRKKRPKPGGAGGKGMRIVDDDVSWTAISTTKLEKEEEEDDG
DLPVVAEFVDERPEEVKQMEAFRSSAKWKLLGGHNEDLPSNRHFRHDTPDSSPRRVRHGTPDPSPRKDRHDTPDP
SPRRARHDTPDPSPLRGARHDSDTSPPRRIRHDSSDTSPPRRARHDSPDPSPPRRPQHNSSGASPRRVRHDSPDP
SPPRRARHGSSDISSPRRVHNNSPDTSRRTLGSSDTQQLRRARHDSPDLAPNVTYSLPRTKSGKAPERASSKTSP
HWKESGASHLSFPKNSKYEYDPDISPPRKKQAKSHFGDKKQLDSKGDCQKATDSDLSSPRHKQSPGHQDSDSDLS
PPRNRPRHRSSDSDLSPPRRRQRTKSSDSDLSPPRRSQPPGKKAAHMYSGAKTGLVLTDIQREQQELKEQDQETM
AFEAEFQYAETVFRDKSGRKRNLKLERLEQRRKAEKDSERDELYAQWGKGLAQSRQQQQNVEDAMKEMQKPLARY
IDDEDLDRMLREQEREGDPMANFIKKNKAKENKNKKVRPRYSGPAPPPNRFNIWPGYRWDGVDRSNGFEQKRFAR
LASKKAVEELAYKWSVEDM

FIGURE 4418

CCTCGCCCCGCCTACGCGGGAACCCAACCGCGGCGACCGGACGTGCACTCCTCCAGTAGCGGCTGCACGTCGTGC
AATGGCCCGCTATGAGGAGGTGAGCGTGTCCGGCTTCGAGGAGTTCCACCGGGCCGTGGAACAGCACAATGGCAA
GACCATTTTCGCCTACTTTACGGGTTCTAAGGACGCCGGGGGGAAAAGCTGGTGCCCCGACTGCGTGCAGGCTGA
ACCAGTCGTACGAGAGGGGCTGAAGCACATTAGTGAAGGATGTGTGTTCATCTACTGCCAAGTAGGAGAAAAGCC
TTATTGGAAAGATCCAAATAATGACTTCAGAAAAAACTTGAAAGTAACAGCAGTGCCTACACTACTTAAGTATGG
AACACCTCAAAAACTGGTAGAATCTGAGTGTCTTCAGGCCAACCTGGTGGAAATGTTGTTCTCTGAAGATTAAGA
TTTTAGGATGGCAATCATGTCTTGATGTCCTGATTTGTTCTAGTATCAATAAACTGTATACTTGCTTTGAATTCA
TGTTAGCAATAAATGATGTTAAAAAAACTGGCATGTGTCTAAACAATAGAGTGCTATTAAAATGCCCATGAACCT
TTAGTTTGCCTGTAATACATGGATATTTTTAAGATATAAAGAAGTCTTCAGAAATAGCAGTAAAGGCTCAAAGGA
ACGTGATTCTTGAAGGTGACGGTAATACCTAAAAACTCCTAAAGGTGCAGAGC

FIGURE 4419

MARYEEVSVSGFEEFHRAVEQHNGKTIFAYFTGSKDAGGKSWCPDCVQAEPVVREGLKHISEGCVFIYCQVGEKP
YWKDPNNDFRKNLKVTAVPTLLKYGTPQKLVESECLQANLVEMLFSED

FIGURE 4420

GGCGGCTGAGCCTGAGCGGGGATGTAGAGGCGGCGGCAGCAGAGGCGGCACTGGCGGCAAGAGCAGACGCCCGAG
CCGAGCGAGAAGAGCGGCAGAGCCTTATCCCCTGAAGCCGGGCCCCGCGTCCCAGCCCTGCCCAGCCCGCGCCCA
GCCATGCGCGCCGCCTGCTGAGTCCGGGCGCCGCACGCTGAGCCCTCCGCCCGCGAGCCGCGCTCAGCTCGGGGG
TGATTAGTTGCTTTTTGTTGTTTTTTAATTTGGGCCGCGGGGAGGGGGAGGAGGGGCAGGTGCTGCAGGCTCCCC
CCCCTCCCCGCCTCGGGCCAGCCGCGGCGGCGCGACTCGGGCTCCGGACCCGGGCACTGCTGGCGGCTGGAGCGG
AGCGCACCGCGGCGGTGGTGCCCAGAGCGGAGCGCAGCTCCCTGCCCCGCCCCTCCCCCTCGGCCTCGCGGCGAC
GGCGGCGGTGGCGGCTTGGACGACTCGGAGAGCCGAGTGAAGACATTTCCACCTGGACACCTGACCATGTGCCTG
CCCTGAGCAGCGAGGCCCACCAGGCATCTCTGTTGTGGGCAGCAGGGCCAGGTCCTGGTCTGTGGACCCTCGGCA
GTTGGCAGGCTCCCTCTGCAGTGGGGTCTGGGCCTCGGCCCCACCATGTCGAGCCTCGGCGGTGGCTCCCAGGAT
GCCGGCGGCAGTAGCAGCAGCAGCACCAATGGCAGCGGTGGCAGTGGCAGCAGTGGCCCAAAGGCAGGAGCAGCA
GACAAGAGTGCAGTGGTGGCTGCCGCCGCACCAGCCTCAGTGGCAGATGACACACCACCCCCCGAGCGTCGGAAC
AAGAGCGGTATCATCAGTGAGCCCCTCAACAAGAGCCTGCGCCGCTCCCGCCCGCTCTCCCACTACTCTTCTTTT
GGCAGCAGTGGTGGTAGTGGCGGTGGCAGC**ATG**ATGGGCGGAGAGTCTGCTGACAAGGCCACTGCGGCTGCAGCC
GCTGCCTCCCTGTTGGCCAATGGGCATGACCTGGCGGCGGCCATGGCGGTGGACAAAAGCAACCCTACCTCAAAG
CACAAAAGTGGTGCTGTGGCCAGCCTGCTGAGCAAGGCAGAGCGGGCCACGGAGCTGGCAGCCGAGGGACAGCTG
ACGCTGCAGCAGTTTGCGCAGTCCACAGAGATGCTGAAGCGCGTGGTGCAGGAGCATCTCCCGCTGATGAGCGAG
GCGGGTGCTGGCCTGCCTGACATGGAGGCTGTGGCAGGTGCCGAAGCCCTCAATGGCCAGTCCGACTTCCCCTAC
CTGGGCGCTTTCCCCATCAACCCAGGCCTCTTCATTATGACCCCGGCAGGTGTGTTCCTGGCCGAGAGCGCGCTG
CACATGGCGGGCCTGGCTGAGTACCCCATGCAGGGAGAGCTGGCCTCTGCCATCAGCTCCGGCAAGAAGAAGCGG
AAACGCTGCGGCATGTGCGCGCCCTGCCGGCGGCGCATCAACTGCGAGCAGTGCAGCAGTTGTAGGAATCGAAAG
ACTGGCCATCAGATTTGCAAATTCAGAAAATGTGAGGAACTCAAAAAGAAGCCTTCCGCTGCTCTGGAGAAGGTG
ATGCTTCCGACGGGAGCCGCCTTCCGGTGGTTTCAG**TGA**CGGCGGCGGAACCCAAAGCTGCCCTCTCCGTGCAAT
GTCACTGCTCGTGTGGTCTCCAGCAAGGGATTCGGGCGAAGACAAACGGATGCACCCGTCTTTAGAACCAAAAAT
ATTCTCTCACAGATTTCATTCCTGTTTTTATATATATATTTTTTGTTGTCGTTTTAACATCTCCACGTCCCTAGC
ATAAAAAGAAAAAGAAAAAAATTTAAACTGCTTTTTCGGAAGAACAACAACAAAAAAGAGGTAAAGACGAATCTA
TAAAGTACCGAGACTTCCTGGGCAAAGAATGGACAATCAGTTTCCTTCCTGTGTCGATGTCGATGTTGTCTGTGC
AGGAGATGCAGTTTTTGTGTAGAGAATGTAAATTTTCTGTAACCTTTTGAAATCTAGTTACTAATAAGCACTACT
GTAATTTAGCACAGTTTAACTCCACCCTCATTTAAACTTCCTTTGATTCTTTCCGACCATGAAATAGTGCATAGT
TTGCCTGGAGAATCCACTCACGTTCATAAAGAGAATGTTGATGGCGCCGTGTAGAAGCCGCTCTGTATCCATCCA
CGCGTGCAGAGCTGCCAGCAGGGAGCTCACAGAAGGGGAGGGAGCACCAGGCCAGCTGAGCTGCACCCACAGTCC
CGAGACTGGGATCCCCCACCCCAACAGTGATTTTGGAAAAAAAAAATGAAAGTTCTGTTCGTTTATCCATTGCGAT
CTGGGGAGCCCCATCTCGATATTTCCAATCCTGGCTACTTTTCTTAGAGAAAATAAGTCCTTTTTTTCTGGCCTT
GCTAATGGCAACAGAAGAAAGGGCTTCTTTGCGTGGTCCCCTGCTGGTGGGGGTGGGTCCCCAGGGGGCCCCCTG
CGGCCTGGGCCCCCCTGCCCACGGCCAGCTTCCTGCTGATGAACATGCTGTTTGTATTGTTTTAGGAAACCAGGC
TGTTTTGTGAATAAAACGAATGCATGTTTGTGTCACGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAA

FIGURE 4421

MMGGESADKATAAAAAASLLANGHDLAAAMAVDKSNPTSKHKSGAVASLLSKAERATELAAEGQLTLQQFAQSTE
MLKRVVQEHLPLMSEAGAGLPDMEAVAGAEALNGQSDFPYLGAFPINPGLFIMTPAGVFLAESALHMAGLAEYPM
QGELASAISSGKKKRKRCGMCAPCRRRINCEQCSSCRNRKTGHQICKFRKCEELKKKPSAALEKVMLPTGAAFRW
FQ

FIGURE 4422

GGCACGAGGGTCATCGCCGCGGGGCGGAGGCGACAGTGTCTAGCGGGAGCTCCGCGTGTAGCTACGCCGGCCGCC
TGGCTTTGAGACAACGTGATTCTCCGCAGCTGGTCGCCTACCCGTGATGTTCTGCCCACGTCGAGACCTGAGCTG
AAATGGCAGACGATCTCGGAGACGAGTGGTGGGAGAACCAGCCGACTGGAGCAGGCAGCAGCCCAGAAGCATCAG
ATGGTGAAGGAGAAGGAGACACAGAAGTGATGCAGCAGGAGACAGTTCCAGTTCCTGTACCTTCAGAGAAAACCA
AACAGCCTAAAGAATGTTTTTTGATACAACCAAAGGAAAGAAAAGAGAATACCACCAAGACCAGGAAAAGAAGAA
AGAAGAAAATTACTGATGTTCTTGCAAAATCAGAACCAAAACCAGGGTTACCTGAAGACCTACAGAAGCTGATGA
AGGACTATTATAGCAGCAGACGCTTGGTGATTGAATTAGAAGAACTGAACCTGCCAGACTCCTGTTTCCTCAAGG
CCAATGATTTGACTCACAGTCTTTCCTCATACCTAAAAGGAATTTGTCCTAAGTGGGTAAAACTTAGGAAGAACC
ACAGTGAGAAGAAATCGGTCCTGATGCTGATCATCTGCAGCTCGGCCGTCCGAGCCCTGGAGCTCATTAGGTCGA
TGACAGCATTCAGAGGAGACGGCAAAGTTATAAAATTATTTGCAAAGCACATAAAGGTCCAGGCGCAGGTAAAGT
TGCTGGAGAAGCGTGTGGTGCACCTGGGTGTAGGAACTCCGGGGAGAATTAAAGAACTTGTTAAACAAGGTGGCC
TTAATTTGAGCCCCTTAAAATTTCTGGTTTTTGACTGGAACTGGAGAGATCAGAAGTTGAGGAGAATGATGGACA
TTCCCGAGATAAGAAAGGAGGTATTCGAACTTCTGGAAATGGGAGTGCTCAGTCTGTGCAAGTCAGAATCCTTGA
AACTGGGCCTTTTCTAAGTCTGTGTCCTAATGAAGATTCCAGTTTTCACAGTAGAAGTTGCATCTTATTTAATGA
CTCTGATACATTGCAAGCACTCAGTAAATATCAGCAAATAGTTTATGTTAATTGTGTCAACAGATGGATCACTGG
AATGTGGGGATTCTGAAACAGAAATGAAACTGTCCTTTTGACAACTCTCTTATATAATAAAGTATCACCGGCTTG
TGTATGAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4423

MADDLGDEWWENQPTGAGSSPEASDGEGEGDTEVMQQETVPVPVPSEKTKQPKECFLIQPKERKENTTKTRKRRK
KKITDVLAKSEPKPGLPEDLQKLMKDYYSSRRLVIELEELNLPDSCFLKANDLTHSLSSYLKGICPKWVKLRKNH
SEKKSVLMLIICSSAVRALELIRSMTAFRGDGKVIKLFAKHIKVQAQVKLLEKRVVHLGVGTPGRIKELVKQGGL
NLSPLKFLVFDWNWRDQKLRRMMDIPEIRKEVFELLEMGVLSLCKSESLKLGLF

FIGURE 4424

GTCTACACCCCCTCCTCACACGCACTTCACCTGGGTCGGGATTCTCAGGTCATGAACGGTCCCAGCCACCTCCGG
GCAGGGCGGGTGAGGACGGGGACGGGGCGTGTCCAACTGGCTGTGGGCTCTTGAAACCCGAGCATGGCACAGCAC
GGGGCGATGGGCGCGTTTCGGGCCCTGTGCGGCCTGGCGCTGCTGTGCGCGCTCAGCCTGGGTCAGCGCCCCACC
GGGGGTCCCGGGTGCGGCCCTGGGCGCCTCCTGCTTGGGACGGGAACGGACGCGCGCTGCTGCCGGGTTCACACG
ACGCGCTGCTGCCGCGATTACCCGGGCGAGGAGTGCTGTTCCGAGTGGGACTGCATGTGTGTCCAGCCTGAATTC
CACTGCGGAGACCCTTGCTGCACGACCTGCCGGCACCACCCTTGTCCCCCAGGCCAGGGGGTACAGTCCCAGGGG
AAATTCAGTTTTGGCTTCCAGTGTATCGACTGTGCCTCGGGGACCTTCTCCGGGGGCCACGAAGGCCACTGCAAA
CCTTGGACAGACTGCACCCAGTTCGGGTTTCTCACTGTGTTCCCTGGGAACAAGACCCACAACGCTGTGTGCGTC
CCAGGGTCCCCGCCGGCAGAGCCGCTTGGGTGGCTGACCGTCGTCCTCCTGGCCGTGGCCGCCTGCGTCCTCCTC
CTGACCTCGGCCCAGCTTGGACTGCACATCTGGCAGCTGAGGAGTCAGTGCATGTGGCCCCGAGAGACCCAGCTG
CTGCTGGAGGTGCCGCCGTCGACCGAAGACGCCAGAAGCTGCCAGTTCCCCGAGGAAGAGCGGGGCGAGCGATCG
GCAGAGGAGAAGGGGCGGCTGGGAGACCTGTGGGTGTGAGCCTGGCCGTCCTCCGGGGCCACCGACCGCAGCCAG
CCCCTCCCCAGGAGCTCCCCAGGCCGCAGGGGCTCTGCGTTCTGCTCTGGGCCGGGCCCTGCTCCCCTGGCAGCA
GAAGTGGGTGCAGGAAGGTGGCAGTGACCAGCGCCCTGGACCATGCAGTTCGGCGGCCGCGGCTGGGCCCTGCAG
GAGGGAGAGAGAGACACAGTCATGGCCCCCTTCCTCCCTTGCTGGCCCTGATGGGGTGGGGTCTTAGGACGGGAG
GCTGTGTCCGTGGGTGTGCAGTGCCCAGCACGGGACCCGGCTGCAGGGGACCTTCAATAAACACTTGTCCAGTGA
AAAAAAAAAAAAA

FIGURE 4425

MAQHGAMGAFRALCGLALLCALSLGQRPTGGPGCGPGRLLLGTGTDARCCRVHTTRCCRDYPGEECCSEWDCMCV
QPEFHCGDPCCTTCRHHPCPPGQGVQSQGKFSFGFQCIDCASGTFSGGHEGHCKPWTDCTQFGFLTVFPGNKTHN
AVCVPGSPPAEPLGWLTVVLLAVAACVLLLTSAQLGLHIWQLRKTQLLLEVPPSTEDARSCQFPEEERGERSAEE
KGRLGDLWV

FIGURE 4426

CAGAACCAGAAGGTGAAGTCGGGCCCCCTAAGATCAACGGAGAGGCCCAGCCGTGGCTGTCCACATCCACAGAGG
GGCTCAAGATCCCCATGACTCCTACATCCTCTTTTGTGTCTCCGCCACCACCCACTGCCTCACCTCATTCCAACC
GGACCACACCGCCTGAAGCGGCCCAGAATGGCCAGTCCCCCATGGCAGCCCTGATCTTAGTAGCAGACAATGCAG
GGGGCAGTCATGCCTCAAAAGATGCCAACCAGGTTCACTCCACTACCAGGAGGAATAGCAACAGTCCGCCCTCTC
CGTCCTCTATGAACCAAAGAAGGCTGGGCCCCAGAGAGGTGGGGGGCCAGGGAGCAGGCAACACAGGAGGACTGG
AGCCAGTGCACCCTGCCAGCCTCCCGGACTCCTCTCTGGCAACCAGTGCCCCGCTGTGCTGCACCCTCTGCCACG
AGCGGCTGGAGGACACCCATTTTGTGCAGTGCCCGTCCGTCCCTTCGCACAAGTTCTGCTTCCCTTGCTCCAGAC
AAAGCATCAAACAGCAGGGAGCTAGTGGAGAGGTCTATTGTCCCAGTGGGGAAAAATGCCCTCTTGTGGGCTCCA
ATGTCCCCTGGGCCTTTATGCAAGGGGAAATTGCAACCATCCTTGCTGGAGATGTGAAAGTGAAAAAAGAGAGAG
ACTCGTGACTTTTCCGGTTTCAGAAAAACCCAATGATTACCCTTAATTAAAACTGCTTGAATTGTATATATATCT
CCATATATATATATATCCAAGACAAGGGAAATGTAGACTTCATAAACATGGCTGTATAATTTTGATTTTTTTTGA
ATACATTGTGTTTCTATATTTTTTTTGACGACAAAAGGTATGTACTTATAAAGACATTTTTTTCTTTTGTTAACG
TTATTAGCATATCTTTGTGCTTTATTATCCTGGTGACAGTTACCGTTCTATGTAGGCTGTGACTTGCGCTGCTTT
TTTAGAGCACTTGGCAAATCAGAAATGCTTCTAGCTGTATTTGTATGCACTTATTTTAAAAAGAAAAAAGCCAAA
TACATTTTCTGACATTGTAAGATTGCCTTACTGTCTGTCATTCCTTATTGCTGGCCCCTTTCTCAGGCCGGAGGC
CAAGTGGTGGAGAAGGAAAGGAAATGATCGAACGGGCATGTTGTCAAGTGGGCATGCCACTGGGAAATACCACCA
GTTTACCCTGAAACATTGTCCTCAGAGGAGTAGGAAAGTGGATTTTGAATCTCTATTTTGCTCAAAAGTTCAGTT
CCTGAGATACTGATGACTGAGAGTGCTGCTGGGAAATTTTCAGGATTGTGTGGTCTTTTGGGGTTTTTTGTTTTT
TTTTTTTTAAGACAAAGTTGACCGCTGTTCACTGTCCACGTGATCAGTTGTAAGATTACAATGCTGCATGCTAGT
TGGTTACATAAGATACAATTCCAGTGATGGAAGGCGGTTATAATGGATGGTGGTGTGTACAAGATGGCACTGCCA
TCTTTGAGCAGAGCCCAGCTCTGCAGCGCCACTTCATCTTTTTAAACACCCTAGAGGTCTGTTTGTTGTTGCTGT
TGTCCTTTATTTTGAAAGAGTTGCAAGAGAAGTTACAGTCCAGGTGAACTTGGAGATTGTGGGATTGGTTTTGTT
TCTGTTTTGTTTTGTTTATCATTTACCTGTAGTGCTATTGCTGTTGATACTATCACCTATACCCTGTTTCTAGTG
AGTGCTGAATACAGTATGGTACAATGACAGTAACAGCCGCGTGGTGCTGCCAGGACTGCCCTTGGGCATATCAGT
GACAGCCCAAATGTGGGTGGAGGAAACCTGTAATTTCCTTCTTAACATGTGTTTGAAATACCAAGTGAATAATAC
TGTTCTGGAAAAAAAATGATAAACTAGTGGAAATTAAAGAAATTAAGGGTTTTATATAATAGACAGGCCCCACCTC
TCAAAATATTTTTAGAAGTCTTTTTGTAAACTAATTTCTTTTGATCACTATTTTGCATCAGTAAAATGATTTTTT
TAAAACCAATAAATCATCAATTATTAGAAATAGTTGTCTCACAGTGATACTGGTTTTTCTTTTGTGCTGTTATGA
TTTAACATTGACAGGAACACTATTTTAAATCCTTACGTTCAGGTGTTTGTAACTTGGCCTTATAATTAGGCTGAA
TTATGGCTTCAAGGTCTACAATTTATGTGTATGGTTCACAGCCTAGCTTCTATTTACATTTGAAAATACAGATTT
TTACCAACTTTGGATTCTTTTTTAGTTATATGTTTGTCTTTCCTTTTTAAATTGTTCAAAACTATTTTTTAATGG
TCAAGTTACTAACACTTGAAAATCAGATACTGCACCAAATACAGTGTTTTTCCGTAGTGTTTTTAATGAGTGCAC
CTATTACTACTGTGCGAGAATTCATGTTTTACCAGTCATTGTTATATTACAAACAGACTTGCATGATTAACCAGT
TGTTACACTTACTTTTTCAAGTTGGAGTATATATGACTCAGTGCAGACTGGTCTCTCTTATGTGAATGCACACAT
GCAGAAATGCAGAGTCAATTTTACATGCCCATAAAGACATTTGTAAAGAATTCAGCTCTTATGGTCTGTTGTATA
AATGTGTATCTAGGCACTTTGGAATTTGACCTCACAGATGTTACAACTTGATCAGTCGTTTGACCTAATTTGTGG
TAGCTATCTGTATGTTTTGCAATCTTAATACAGACATGCTTTCCAAAAAGATTAATACAGAACCATCCTGCCGTT
TTGGATAAGTCTATCCAGCTGTGGAAAGGGCAACCTGTGGTTTCTCTGTACTGGTGTTTAATGGGGGAAGAATAT
GAACAGCTTTAAAGAGCTGTGTATTGTGGTTACTACTATTAAAAAATAAGATCTGCACGAGTCTGACTGGCCTTT
GGGTGGCCTTTGTGGACGGCTCGTAGCTGGAAAGTGTTGATCTGGGTTTTCTGGCATTCTTTTAAGTTAAAAAGT
TAACATCGGGACATGGGTTTGATCTTTTGTTGTACCTGATGACAGTGCAGAGATTCTCCACAGCTGGATAAAAAT
GTCACAAAGCTACTTACTGTACATGGGCAGTATCAGATTTCAAATCCTAATATTTCAGCTGTGCTTTTAATACTC
AAAATATTAGGGGATGGGGTGTTGAAGCTTTCCCTTTTTTGCTTTTAACAATTTATAGAATTTAACAGATGTACT
GTCTTTCATGTGGCCTCACATTTAAAGTTATGAGAACATACACATGGTTTACAACTTTTACTATATACCTTTCCT
TGGCCACCAAGTATTTTAAAAGTGTGCCACCTTTTAACCTTTACTTTTTTTAAGTTGAAGGTGATACTTTTTCTA
TATATGATGAAACTCATGTCAACTGAAGTGAGTGTAATCTCAGATACCAACATTATTATATTTTAAAATCACGCT
ATGGAAATATCACCTGAATTCTGTCATTTGTCAGATTTACAGTACCTTTTTTTCTTTAACTTTTAGCATTAAATA
AAAATAAAATTGGGAGCACTGAAAAAAAAAAAAAAA

FIGURE 4427A

GGAAGCTCGTATTTACATTTTAAGTGTATCTGGTGAGTGGGCTGGAGCCCTCGTCTGGGCCGGAAAAAAAAAAGC
CCTCCGATCCGTCTTTTAGTTGCTTCTCTTCCTTTTTTCTCTCCGGTTTCTCATCACTCCAACCAGCCGCGACCA
TGCCCAGGAAGAAGGCGGCGGCGGCGGCCTGGGAGGAGCCGAGCTCGGGCAACGGCACTGCCCGCGCCGGGCCCA
GGAAACGCGGCGGCCCGGCGGGCAGGAAGCGCGAGCGGCCCGAGCGCTGCAGTAGCAGCAGCGGCGGCGGCAGCA
GCGGCGACGAGGACGGCCTGGAGCTCGACGGGGCCCCCGGCGGGGGCAAGCGCGCGGCGCGGCCGGCGACAGCAG
GCAAGGCGGGCGGCGCGGCCGTGGTCATCACCGAACCCGAGCACACCAAGGAGCGCGTCAAACTTGAAGGGTCAA
AGTGCAAAGGGCAGCTTTTGATTTTTGGGGCAACCAACTGGGACTTGATTGGTCGAAAAGAAGTGCCTAAACAGC
AAGCTGCTTACCGCAATCTCGGTCAGAATTTGTGGGGGCCCCACAGATATGGGTGCCTGGCGGGGGTCCGGGTGC
GGACAGTGGTCTCGGGCTCGTGTGCTGCACACAGCCTCCTCATCACCACGGAAGGGAAGCTGTGGAGCTGGGGTC
GAAATGAGAAGGGGCAGCTGGGACATGGTGACACCAAGAGAGTAGAAGCCCCTAGACTCATCGAGGGTCTTAGCC
ACGAAGTGATTGTGTCTGCAGCATGTGGGCGGAACCACACCTTGGCCTTGACGGAAACGGGCTCCGTGTTTGCGT
TTGGGGAAAACAAGATGGGGCAGCTGGGCCTTGGCAACCAGACAGACGCTGTTCCCAGCCCCGCGCAGATAATGT
ACAACGGCCAGCCAATTACCAAAATGGCCTGTGGGGCTGAATTCAGTATGATAATGGACTGCAAAGGAAACCTCT
ATTCCTTTGGGTGCCCTGAATATGGTCAGCTGGGACACAACTCAGATGGGAAGTTCATCGCCCGGGCACAGCGGA
TAGAGTACGACTGTGAACTAGTTCCCCGGCGAGTGGCCATCTTCATTGAGAAGACGAAAGATGGACAGATTCTGC
CTGTACCAAACGTGGTTGTACGAGACGTGGCCTGTGGCGCTAACCACACGCTGGTCCTGGACTCCCAGAAGCGAG
TCTTCTCCTGGGGCTTTGGTGGCTATGGCCGGCTGGGCCACGCAGAGCAGAAGGATGAGATGGTCCCCCGCCTGG
TGAAGCTGTTTGACTTCCCTGGGCGTGGGGCTTCCCAGATCTATGCTGGTTACACCTGCTCCTTTGCTGTCAGTG
AAGTGGGTGGTCTGTTTTTCTGGGGGGCCACCAACACCTCCCGTGAATCTACCATGTACCCAAAAGCAGTGCAGG
ACCTCTGCGGCTGGAGAATTCGGAGCCTGGCTTGTGGGAAGAGCAGCATCATTGTGGCCGCCGATGAGAGCACCA
TCAGCTGGGGTCCGTCACCGACCTTTGGGGAACTGGGCTACGGGGACCACAAGCCCAAGTCTTCCACTGCAGCCC
AGGAGGTAAAGACTCTGGATGGCATTTTCTCAGAGCAGGTCGCCATGGGCTACTCACACTCCTTGGTGATAGCAA
GAGATGAAAGTGAGACTGAGAAAGAGAAGATCAAGAAACTGCCAGAATACAACCCCCGAACCCTCTGATGCTCCC
GGAGACTCCTCCGACTCCACACCTCTCGCGGCAGCTGTCATTTCCATGTGCACTGGGACGGGAAGTCAAACGAGG
AATTTAAAAAAGCAAAAGTTGACCGAAGGTGCATTTTTGTTTAGACTCCCTGAGGTTCCGTTTTACACATGATCC
AACGTTAACTACCTTTTTTTCTGTATGCTTTCCAAAGTCCTTTTTTTTCCCTTAATGTTGAATTAAAATACTTGC
TCATAGTTGATTTACCATTCCTACAAAAGAGGCAGAAACTTTGAGCAATCTAGGTTTTTTTTTTTTTTTTAAGT
TTTTTCTTTCTTCCTTTCCTGAATACACTCCCCAAAACACCCCTTTCCAGTTACAATTAGCATCGTGATCCAAGC
AGATGCCACATGGAAGAGGAATCGCCATTTACTCAGAAAAAATGTCCCTTACAGGAACCGGCAGCAGCTAGGCAG
TCACCGGCCCGCCTCCATCCAAAATCACGCTCGCGTGCTTCGGAAGCATCCGGGTCACTCCTTCTCCGCTTTTTC
TTGCAGATGGGCCTAGGCCGGTGTCGGTTCTGTTTCTCCCCTTGGCTGCCTGTACGCCCACAGCCTTCTGGCTGC
GACATTATAGAATCGGCCGTGTCCCCCCTGGTGGGGGATTGGGGATCTGTGTTTAGCCATTTATATCTACTTTAG
CTGTTAAAGAGGTCCAAATGAAAATCAGGTGATTGTGGAACCATGGGGACTTGGGGGTGGGGCAGAGGTGGGAAC
ATTTGTATCAGTTGAGTCAGCTTGGTGGCTCCCTGTGGAGCCAGGGCTGAGCCTTGTCACGCGCACTCGCCAATT
AAGAGATGGACCAGCCAGCAGTCAAGTGCATTCTCCAGTCCTTGCAAGAAGGATCAGCCCTTTCTGTGCCAGCCT
CGATCGCCTTGTGCTTTGGTCTCTTTTTCTCCCCCCCGCCTGGATCCTGCCTCGCGCGGGCCGTCCTGTTGCTGA
GACTCGGGGTACCGTTCTGCTGACCCAGCTCCCTTTAGTCACGTTTGCTTGGCTCTGGTACCAAATAGTTGGGAT
TACCGAAGAGTCCCCTTCCTTGCGTGTCAGCACGGATGCTGTGACTGCCACCTGCGTCCTCGTCAAGTGCCCGAG
CTCGCCGCCGTGTGTGCTGCGCTGAGTGAGTTATGAGGTGCCTTTCCCGGAACCCTCCTCTCGCCTGGACCCAAG
AGAGGCGACAGCTGTGGCTGGGGCTCTTGGTTTCCAGAGGGTCTGGACTGGTTTGGGTGCTTTAAAATAGATATT
TAGTTCAGTGGTGCTTATGGGGGAGATGGGACTAGAACTTAAGTGTGAGACTTGGGTGGATGGGAAAGTTAAATA
TTGGTCTCTTCAAGTTTTTTTTTTCTTTTGCTTTGTTACCACTTGTCACTGTCTCCATGTTAAAATGCCAAAAAT
GATGTAGTTGTTGTTGCTTTTTTCCCTATTTTCCACCCCAGTCGCTCCTTACCGTGACTCCTGCCCTTGGAGGGC
ATGTAGCAGTGTCTGTCCTGCCAGTCCCAAGGCCCTGTGGGAGGAGACTGGCCTGCATCTCTCTAAGACTTAGTC
TGACGCCACGCGCATCTCTTGTTCTGTGTTCAATCAGTAGTCCAGGGGAGAAGCTTCTGCTACTTCAGAGCTTTG
CTAAACTAACCTAATTTGTCCAAATCACCCCAAAACCACCATCTCTGACGTAAGCTTCCATGCGACAGCCTGATC
CGTTTCCCTGGACAGGTCTCTTTCCTGGAATGCAGCCCAGGCACCTGTGCTCCTGGCACCCTTGAGGTCTCTCCT
TTGAGCCGTGGTCACCGAGAGGGTTGAGGACGCAGCACCCGAGGTCCCAGCCTTTGCAGGAGCCTCCCTGGGCTT

FIGURE 4427B

AGCTGGACTTAGATCTTCGGTGGCCTCATGTAAACGTGGCAGCCAGCCTCTTCTAGAACCCTAGCCCAGGGACTG
GAGCAGGAAAGGGACCTTCAAAGTGAAGACTGCCTTGTCCCGCAGCTCCTTCTGGCTTAGATTGAAACATGGGCT
TCCTAATGGGTTAAATCCTTTAAAACAAGGAGTTGTGGGGGAAGGGTGTCGTGCACTCCTAGAGAAAGGTACACA
GTTGCCCGGTTGGGAATGTGCTTGGCGCTGACCCTGCGGGCATCTGACTGGTCTTCCAGCTCAGGAAAAAGAATT
TGAAAGAGGCTTAGCGTGAAGGGGAATCAAAGAGGAGGTTGTGATTTGGTCGAAGGTGCCTGGTTTAGTGCTGTA
ATTGTCTTATTATTTTTTTTATATATATATTTCTTGGAGTAAACATTTTAAAT

FIGURE 4428

ATCCGCTATTGTGCATATAATATTGGGGACCAGTCAGCCATCAATGAACTCATGCAGATGAGATTGAGGTCTGGG
GGCACTGAGGGTCTCTTGGCTGAAAAATTGGAGGCTTTGATCACTCAGACTCGAGCCAAACAGGCAGCTACCATG
AGTGAAGTGGAGTGGAGAGGGAGAACGGTTCCAGTGAAGATTGACAAAGTGCGCATTTTCTTATTAGGACTGGCT
GATAACGAAGCAGCTATTGTCCAGGCTGAAAGCGAAGAAACTAAGGAGCGCCTGTTTGAATCAATGCTCAGCGAG
TGTCGGGACGCCATCCAGGTGGTTCGGGAGGAGCTCAAGCCAGATCAGAAACAGAGAGATTATATCCTTGAAGGA
GAGCCAGGGAAGGTGTCTAATCTTCAATACTTGCATAGCTACCTGACTTACATCAAGCTATCAACGGCAATCAAG
CGTAATGAGAACATGGCCAAAGGTCTGCAGAGGGCTCTGCTGCAGCAGCAGCCAGAGGATGACAGCAAGCGCTCA
CCCCGGCCCCAGGACCTGATCCGACTCTATGACATCATCTTACAGAATCTGGTGGAATTGCTCCAGCTTCCTGGT
TTAGAGGAAGACAAAGCCTTCCAGAAAGAGATAGGCCTCAAGACTCTGGTGTTCAAAGCTTACAGGTGTTTTTTC
ATTGCTCAGTCCTATGTGCTGGTGAAGAAGTGGAGCGAAGCCCTTGTCCTGTATGACAGAGTCCTGAAATATGCA
AATGAAGTAAATTCTGATGCTGGCGCCTTCAAGAACAGCCTAAAGGACCTGCCTGATGTGCAAGAGCTCATCACT
CAAGTGCGGTCAGAGAAGTGCTCCCTGCAGGCCGCAGCCATCCTTGATGCAAACGACGCTCATCAAACAGAGACC
TCCTCCTCCCAAGTCAAGGACAATAAGCCTCTGGTTGAACGGTTTGAGTCCACACCAGGCACAGATGGGGCCTTG
AAACGCTTTGTCATGCTTCTTCAGTACCATGGATTTGAAATGAACTCATCCTTGCTGTGAGCATCCAGGAGCCCT
TGAGAAGTTTATCTATGACTATGAAACTGGCAACGTCACCCCAGAATTACGGTCAGCCTTATTCCCCTTCACCTC
CCAGTGAACGCGAAGTTTCAGACAAGCAGAGAGCTCTATTTTTAGAAGAAATATGTTACACTCAGAAATGATGAA
ACCAAATCTTATATTAAAAGGCAAAGATGACGG

FIGURE 4429

MQMRLRSGGTEGLLAEKLEALITQTRAKQAATMSEVEWRGRTVPVKIDKVRIFLLGLADNEAAIVQAESEETKER
LFESMLSECRDAIQVVREELKPDQKQRDYILEGEPGKVSNLQYLHSYLTYIKLSTAIKRNENMAKGLQRALLQQQ
PEDDSKRSPRPQDLIRLYDIILQNLVELLQLPGLEEDKAFQKEIGLKTLVFKAYRCFFIAQSYVLVKKWSEALVL
YDRVLKYANEVNSDAGAFKNSLKDLPDVQELITQVRSEKCSLQAAAILDANDAHQTETSSSQVKDNKPLVERFES
TPGTDGALKRFVMLLQYHGFEMNSSLL

FIGURE 4430

GGCACGAGGAACCCTTCCTGTTGCCTTAGGGGAACGTGGCTTTCCCTGCAGAGCCGGTGTCTCCGCCTGCGTCCC
TGCTGCAGCAACCGGAGCTGGAGTCGGATCCCGAACGCACCCTCGCCATGGACTCGGCCCTCAGCGATCCGCATA
ACGGCAGTGCCGAGGCAGGCGGCCCCACCAACAGCACTACGCGGCCGCCTTCCACGCCCGAGGGCATCGCGCTGG
CCTACGGCAGCCTCCTGCTCATGGCGCTGCTGCCCATCTTCTTCGGCGCCCTGCGCTCCGTACGCTGCGCCCGCG
GCAAGAATGCTTCAGACATGCCTGAAACAATCACCAGCCGGGATGCCGCCCGCTTCCCCATCATCGCCAGCTGCA
CACTCTTGGGGCTCTACCTCTTTTTCAAAATATTCTCCCAGGAGTACATCAACCTCCTGCTGTCCATGTATTTCT
TCGTGCTGGGAATCCTGGCCCTGTCCCACACCATCAGCCCCTTCATGAATAAGTTTTTTCCAGCCAGCTTTCCAA
ATCGACAGTACCAGCTGCTCTTCACACAGGGTTCTGGGGAAAACAAGGAAGAGATCATCAATTATGAATTTGACA
CCAAGGACCTGGTGTGCCTGGGCCTGAGCAGCATCGTTGGCGTCTGGTACCTGCTGAGGAAGCACTGGATTGCCA
ACAACCTTTTTGGCCTGGCCTTCTCCCTTAATGGAGTAGAGCTCCTGCACCTCAACAATGTCAGCACTGGCTGCA
TCCTGCTGGGCGGACTCTTCATCTACGATGTCTTCTGGGTATTTGGCACCAATGTGATGGTGACAGTGGCCAAGT
TCTTCGAGGCACCAATAAAATTGGTGTTTCCCCAGGATCTGCTGGAGAAAGGCCTCGAAGCAAACAACTTTGCCA
TGCTGGGACTTGGAGATGTCGTCATTCCAGGGATCTTCATTGCCTTGCTGCTGCGCTTTGACATCAGCTTGAAGA
AGAATACCCACACCTACTTCTACACCAGCTTTGCAGCCTACATCTTCGGCCTGGGCCTTACCATCTTCATCATGC
ACATCTTCAAGCATGCTCAGCCTGCCCTCCTATACCTGGTCCCCGCCTGCATCGGTTTTCCTGTCCTGGTGGCGC
TGGCCAAGGGAGAAGTGACAGAGATGTTCAGTTATGAGGAGTCAAATCCTAAGGATCCAGCGGCAGTGACAGAAT
CCAAAGAGGGAACAGAGGCATCAGCATCGAAGGGGCTGGAGAAGAAAGAGAAATGATGCAGCTGGTGCCCGAGCC
TCTCAGGGCCAGACCAGACAGATGGGGGCTGGGCCCACACAGGCGTGCACCGGTAGAGGGCACAGGAGGCCAAGG
GCAGCTCCAGGACAGGGCAGGGGGCAGCAGGATACCTCCAGCCAGGCCTCTGTGGCCTCTGTTTCCTTCTCCCTT
TCTTGGCCCTCCTCTGCTCCTCCCCACACCCTGCAGGCAAAAGAAACCCCCAGCTTCCCCCCTCCCCGGGAGCCA
GGTGGGAAAAGTGGGTGTGATTTTAGATTTTGTATTGTGGACTGATTTTGCCTCACATTAAAAACTCATCCCAT
GGCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4431

MDSALSDPHNGSAEAGGPTNSTTRPPSTPEGIALAYGSLLLMALLPIFFGALRSVRCARGKNASDMPETITSRDA
ARFPIIASCTLLGLYLFFKIFSQEYINLLLSMYFFVLGILALSHTISPFMNKFFPASFPNRQYQLLFTQGSGENK
EEIINYEFDTKDLVCLGLSSIVGVWYLLRKHWIANNLFGLAFSLNGVELLHLNNVSTGCILLGGLFIYDVFWVFG
TNVMVTVAKFFEAPIKLVFPQDLLEKGLEANNFAMLGLGDVVIPGIFIALLLRFDISLKKNTHTYFYTSFAAYIF
GLGLTIFIMHIFKHAQPALLYLVPACIGFPVLVALAKGEVTEMFSYEESNPKDPAAVTESKEGTEASASKGLEKK
EK

FIGURE 4432

ATTTTCCGGGAAGATGGCGGCGCACAAGTCAGGTCCGGCACATGTTTCCGCGGAGCGGACCCAGCAATGACGGAT
GATATCACCTCTTCTTCTCTGGTGAGAGTCTGAGGATAGAGACTTTTTTCTCACCATGAATGTCACCCCAGAGGT
CAAGAGTCGTGGGATGAAGTTTGCTGAGGAGCAGCTGCTAAAGCATGGATGGACTCAAGGCAAAGGCCTCGGCCG
GAAGGAGAATGGTATCACTCAGGCTCTCAGGGTGACACTGAAGCAAGACACTCATGGGGTAGGACATGACCCTGC
CAAGGAGTTCACAAACCACTGGTGGAATGAGCTCTTCAACAAGACTGCGGCCAACTTGGTAGTGGAAACTGGGCA
GGATGGAGTACAGATAAGGAGCCTTTCTAAGGAGACCACCCGTTATAATCATCCCAAGCCCAACTTGCTGTATCA
GAAGTTTGTGAAGATGGCCACATTGACTTCAGGTGGAGAGAAGCCAAACAAAGACTTGGAGAGCTGCAGTGATGA
CGACAACCAGGGGTCCAAGTCCCCAAAGATTCTGACTGATGAGATGCTGCTCCAAGCCTGTGAGGGGCGAACAGC
ACACAAGGCTGCCCGTCTTGGGATCACAATGAAGGCCAAGCTTGCTCGCCTAGAGGCCCAGGAGCAGGCCTTCCT
GGCTCGTCTCAAAGGCCAGGACCCTGGGGCCCCTCAACTGCAGTCAGAGAGCAAGCCCCCCAAAAAAAAAAAAAA
AAA

FIGURE 4433

MNVTPEVKSRGMKFAEEQLLKHGWTQGKGLGRKENGITQALRVTLKQDTHGVGHDPAKEFTNHWWNELFNKTAAN
LVVETGQDGVQIRSLSKETTRYNHPKPNLLYQKFVKMATLTSGGEKPNKDLESCSDDDNQGSKSPKILTDEMLLQ
ACEGRTAHKAARLGITMKAKLARLEAQEQAFLARLKGQDPGAPQLQSESKPPKKKKK

FIGURE 4434

GGCCCAGAACATTGCGGATCGGGTCGGCGCCATTTTGGGACTGAGACTGGTTGTGGGGGAGGGAAAAGCGGCAAA
AGGGGATTATTCAAAGTACCGAAAACCTTCTCCCGGGATCAGGCGCGGCGGCACCCCCAGGCCAGGGGCACCTCT
GGTGGGGCAGAAGGTGATTGAATTACTCAGATATGAAGATCATCATCTAGGTTTTGTGTAAAAGGCCCTGGATAT
TTTAAGTGGCCATTTTGGATTTACAGTGTTTTTGGATAATTTTGCCCCAGAAGTTTATTAAAATTGGCAAGAATC
GTCTGTGAAGTGAATTGATAGTAGTGAACAATTCAGCAAGCTACTTAAAAAGAGACCCAGGCAGCATTTCTTCAG
TATTTTGGTTCAAACGGATTATATAACTGGTTACAGTATTTCAGCTGGTGGTAATTTTTGCCTCCCCTTCCCCCA
CCCCGTTGTTGGGGTTCTTCAGCCGAAACTGAGAGACGTTGATTTGTGTACTGAGTAGTTTCAGCAGTTTCAAAT
GACTGAGTATTGCTGAAGTTTCATGGCAGTTTATTTTTACCTTTATTGAAAGTTTTAGGAATTTTTGACTTCAGC
TCTTTCATGTCACAATGGGACACTTTTTCTGAATGAAGAGATTGAAAGAATACAGAGTTTTTTTCCTTTTATCTT
TTATTTACGTGGAAATTTAAGATGTTGCAGTTTTCCGGCAGCATGGTAGTATTGAGATAGCTATGTGTGTCTCTG
TATATGCTGATGTTTAGGAATGCTCTTCAGATGTGAAATTTTCTTTTTGTTTTTGCTTTTTGGCTCGTAAATTGG
ATATTTCATCTGGAGTGGACAAGTACAACAGTGGCAAGTACATGGAATAATAAAGAAGACTTTGATCTTAAATCT
AAAGAACTTGGCTAATTCGGGAGATAGCCATATGAAAACTTTAAAACAGAAGTATGGGTAGCTGACTTGAAGTAA
CTCTATGTCAAATAGTCGTAGGTTAAGTATCTTCAAAGAACTTCGATATTATTTCAGAGGATACAAAATAAAAAT
ACAAACTGGAAAATAAAGATTACAGAGAAAAAACCAACACCTTCCTGTGCAGTCCTGTTGGAATTTTCGTCATTG
AATTTTGAGAAGCATTCTGAAAACTTTGCATGGACAGAGAATCGTTATGATGTGAACCGTCGACGACACAACTCT
TCAGATGGCTTTGATTCTGCTATTGGACGTCCTAATGGAGGTAACTTTGGAAGGAAAGAAAAAAATGGATGGCGT
ACACATGGAAGAAATGGTACAGAAAACATAAATCATCGAGGTGGATACCATGGTGGAAGTTCCCGTTCTCGTAGC
AGTATTTTCCATGCAGGAAAAAGCCAAGGACTACATGAAAACAACATACCTGACAATGAAACCGGGAGGAAAGAA
GACAAGAGAGAACGCAAACAGTTTGAAGCTGAGGATTTTCCGTCTTTAAATCCTGAGTATGAGAGAGAACCAAAT
CACAATAAGTCTTTAGCTGCAGGTGTGTGGGAATATCCTCCGAATCCTAAATCTAGAGCTCCAAGGATGCTGGTC
ATTAAGAAAGGTAATACAAAAGACTTACAGCTATCTGGATTCCCAGTAGTAGGAAATCTTCCGTCACAGCCAGTT
AAGAATGGAACTGGTCCAAGTGTTTATAAAGGTTTAGTCCCTAAACCTGCTGCTCCACCTACAAAACCTACACAA
TGGAAAAGCCAAACAAAAGAAAATAAAGTTGGAACTTCTTTCCCTCATGAGTCCACATTTGGCGTTGGCAACTTT
AATGCTTTTAAATCAACTGCCAAGAACTTTAGTCCATCTACAAATTCAGTGAAAGAGTGTAATCGCTCAAATTCC
TCTTCTCCTGTTGACAAACTTAATCAGCAGCCTCGTCTAACCAAACTGACACGAATGCGCACTGATAAGAAGAGT
GAATTTTTGAAAGCATTGAAAAGAGACAGAGTAGAAGAGGAACATGAAGATGAAAGCCGTGCTGGCTCAGAGAAG
GATGACGACTCATTTAATTTACATAACAGCAATAGTACTCACCAAGAAAGGGATATAAACCGAAACTTCGATGAA
AATGAAATTCCTCAAGAGAATGGCAATGCCTCAGTGATTTCCCAGCAGATCATTCGGTCTTCAACCTTCCCACAA
ACTGATGTTCTTTCAAGTTCACTTGAGGCAGAACACAGATTGTTAAAGGAAATGGGCTGGCAGGAAGACAGTGAA
AATGATGAAACATGTGCTCCCTTAACTGAGGATGAAATGAGAGAATTCCAAGTTATTAGTGAACAGTTACAGAAG
AATGGTCTGAGAAAAAATGGTATTTTGAAAAATGGCTTGATCTGTGACTTCAAGTTTGGACCGTGGAAGAACAGC
ACTTTCAAACCCACAACTGAGAATGATGACACAGAGACAAGTAGCAGTGATACATCAGATGACGACGATGTG**TGA**

AGGATTTCCTAACAGCTTTAGAAATCTTAGTGTGATACATCTCTCATACAGTTTGGGGTGAATTGTAAAAATGAA
GAACTATAATTTATGTAGTGAAATACCCCATTAGAAGAGGATTTTTTGGGGGACTTCAATATGAAGAAAACCAAG
AATGTTTTGTTGGGCTGTGTTGAACATTATTTCTTTGTAAATGAATGTTGTAGGAATGAGGACTTGGGTTGGTCC
AACATTGACTTTCTTCATCACTGCAACATTTCTCTGACTAGCAATGTGACGATGTAACAAATGAGATTTTCTCAT
TTAATAATAAAAAATTGTGTAATGTTTTGCAAAGCTTCTGTCTTAAAATGTCCAGGTCTTAAGAAAAAAAGCAGC
TTACACTGTTTTGCTTGCAGAGTCATATCTTTTTCGTACAATGGAAATCCTCAAGTCCACTTTGTGCGGTCTCCC
TCTCCTTCCCCCAAAAAACAACAACAACAAAACAAAAACCAAAAAGGAAAATGTAGCATGTTGGCTAAAACTGGA
GCAAAGTGCACTAAAACAATTTCCTGAACTCACCTGTTGTACTATTCACCTTTTAAACCATAAATTGCTCTTTAG
CCATTTGTAGTGCAGTAAATGTTACAGGAAAAGACTTGGCACATTTTCTTCCAAATTTCAAGAGGTGATTTTCAA
AAGCTTTATTGGGGTATGTTGTCAGACCAGGGTTTTCAGAGTTGATGGAAAAGAGTCTTGTGAGAAAACTTATTT
TGATAAATTATTACACACGCAGAAAAACTGATCACACTGACTGGATCTGTCCACGACATGGAAAATAAACTGGAT
TTTCAAAAAAAAAAAAAAAAAAAG

FIGURE 4435

VKYLQRTSILFQRIQNKNTNWKIKITEKKPTPSCAVLLEFSSLNFEKHSENFAWTENRYDVNRRRHNSSDGFDSA
IGRPNGGNFGRKEKNGWRTHGRNGTENINHRGGYHGGSSRSRSSIFHAGKSQGLHENNIPDNETGRKEDKRERKQ
FEAEDFPSLNPEYEREPNHNKSLAAGVWEYPPNPKSRAPRMLVIKKGNTKDLQLSGFPVVGNLPSQPVKNGTGPS
VYKGLVPKPAAPPTKPTQWKSQTKENKVGTSFPHESTFGVGNFNAFKSTAKNFSPSTNSVKECNRSNSSSPVDKL
NQQPRLTKLTRMRTDKKSEFLKALKRDRVEEEHEDESRAGSEKDDDSFNLHNSNSTHQERDINRNFDENEIPQEN
GNASVISQQIIRSSTFPQTDVLSSSLEAEHRLLKEMGWQEDSENDETCAPLTEDEMREFQVISEQLQKNGLRKNG
ILKNGLICDFKFGPWKNSTFKPTTENDDTETSSSDTSDDDDV

4940/8433

FIGURE 4436A

GTGGACCCAGGGTGGGGAACTACCTCTTCCTCTCCACGCGGTTGAGAAGACCGGTCGGCCTGGGCAACCTGCGCT
GAAGATGCCGGGAAAACTCCGTAGTGACGCTGGTTTGGAATCAGACACCGCAATGAAAAAAGGGGAGACACTGCG
AAAGCAAACCGAGGAGAAAGAGAAAAAAGAGAAGCCAAAATCTGATAAGACTGAAGAGATAGCAGAAGAGGAAGA
AACTGTTTTCCCCAAAGCTAAACAAGTTAAAAAGAAAGCAGAGCCTTCTGAAGTTGACATGAATTCTCCTAAATC
CAAAAAGGCAAAAAAGAAAGAGGAGCCATCTCAAAATGACATTTCTCCTAAAACCAAAAGTTTGAGAAAGAAAAA
GGAGCCCATTGAAAAGAAAGTGGTTTCTTCTAAAACCAAAAAAGTGACAAAAAATGAGGAGCCTTCTGAGGAAGA
AATAGATGCTCCTAAGCCCAAGAAGATGAAGAAAGAAAAGGAAATGAATGGAGAAACTAGAGAGAAAAGCCCCAA
ACTGAAGAATGGATTTCCTCATCCTGAACCGGACTGTAACCCCAGTGAAGCTGCCAGTGAAGAAAGTAACAGTGA
GATAGAGCAGGAAATACCTGTGGAACAAAAAGAAGGCGCTTTCTCTAATTTTCCCATATCTGAAGAAACTATTAA
ACTTCTCAAAGGCCGAGGAGTGACCTTCCTATTTCCTATACAAGCAAAGACATTCCATCATGTTTACAGCGGGAA
GGACTTAATTGCACAGGCACGGACAGGAACTGGGAAGACATTCTCCTTTGCCATCCCTTTGATTGAGAAACTTCA
TGGGGAACTGCAAGACAGGAAGAGAGGCCGTGCCCCTCAGGTACTGGTTCTTGCACCTACAAGAGAGTTGGCAAA
TCAAGTAAGCAAAGACTTCAGTGACATCACAAAAAAGCTGTCAGTGGCTTGTTTTTATGGTGGAACTCCCTATGG
AGGTCAATTTGAACGCATGAGGAATGGGATTGATATCCTGGTTGGAACACCAGGTCGTATCAAAGACCACATACA
GAATGGCAAACTAGATCTCACCAAACTTAAGCATGTTGTCCTGGATGAAGTGGACCAGATGTTGGATATGGGATT
TGCTGATCAAGTGGAAGAGATTTTAAGTGTGGCATACAAGAAAGATTCTGAAGACAATCCCCAAACATTGCTTTT
TTCTGCAACTTGCCCTCATTGGGTATTTAATGTTGCCAAGAAATACATGAAATCTACATATGAACAGGTGGACCT
GATTGGTAAAAAGACTCAGAAAACGGCAATAACTGTGGAGCATCTGGCTATTAAGTGCCACTGGACTCAGAGGGC
AGCAGTTATTGGGGATGTCATCCGAGTATATAGTGGTCATCAAGGACGCACTATCATCTTTTGTGAAACCAAGAA
AGAAGCCCAGGAGCTGTCCCAGAATTCAGCTATAAAGCAGGATGCTCAGTCCTTGCATGGAGACATTCCACAGAA
GCAAAGGGAAATCACCCTGAAAGGTTTTAGAAATGGTAGTTTTGGAGTTTTGGTGGCAACCAATGTTGCTGCACG
TGGGTTAGACATCCCTGAGGTTGATTTGGTTATACAAAGCTCTCCACCAAAGGATGTAGAGTCCTACATTCATCG
ATCCGGGCGGACAGGCAGAGCTGGAAGGACGGGGGTGTGCATCTGCTTTTATCAGCACAAGGAAGAATATCAGTT
AGTACAAGTGGAGCAAAAAGCGGGAATTAAGTTCAAACGAATAGGTGTTCCTTCTGCAACAGAAATAATAAAAGC
TTCCAGCAAAGATGCCATCAGGCTTTTGGATTCCGTGCCTCCCACTGCCATTAGTCACTTCAAACAATCAGCTGA
GAAGCTGATAGAGGAGAAGGGAGCTGTGGAAGCTCTGGCAGCAGCACTGGCCCATATTTCAGGTGCCACGTCCGT
AGACCAGCGCTCCTTGATCAACTCAAATGTGGGTTTTGTGACCATGATCTTGCAGTGCTCAATTGAAATGCCAAA
TATTAGTTATGCTTGGAAAGAACTTAAAGAGCAGCTGGGCGAGGAGATTGATTCCAAAGTGAAGGGAATGGTTTT
TCTCAAAGGAAAGCTGGGTGTTTGCTTTGATGTACCTACCGCATCAGTAACAGAAATACAGGAGAAATGGCATGA
TTCACGACGCTGGCAGCTCTCTGTGGCCACAGAGCAACCAGAACTGGAAGGACCACGGGAAGGATATGGAGGCTT
CAGGGGACAGCGGGAAGGCAGTCGAGGCTTCAGGGGACAGCGGGACGGAAACAGAAGATTCAGAGGACAGCGGGA
AGGCAGTAGAGGCCCGAGAGGACAGCGATCAGGAGGTGGCAACAAAAGTAACAGATCCCAAAACAAAGGCCAGAA
GCGGAGTTTCAGTAAAGCATTTGGTCAATAATTAGAAATAGAAGATTTATATAGCAAAAAGAGAATGATGTTTGG
CAATATAGAACTGAACATTATTTTTCATGCAAAGTTAAAAGCACATTGTGCCTCCTTTTGACCACTTGCCAAGTC
CCTGTCTCTTTCAGACACAGACAAGCTTCATTTAAATTATTTCATCTGATCATTATCATTTATAACTTTATTGTT
ACTTCTTCATCAGTTTTTCCTTTTGAAAGGTGTATGAATTCATTACATTTTTATTCTAATGTATTATCTGTAGAT
TAGAAGATAAAATCAAGCATGTATCTGCCTATACTTTGTGAGTTCACCTGTCTTTATACTCAAAAGTGTCCCTTA
ATAGTGTCCTTCCCTGAAATAAATACCTAAGGGAGTGTAACAGTCTCTGGAGGACCACTTTGAGCCTTTGGAAGT
TAAGGTTTCCTCAGCCACCTGCCGAACAGTTTCTCATGTGGTCCTATTATTTGTCTACTGAGACTTAATACTGAG
CAATGTTTTGAAACAAGATTTCAAACTAATCTGGGTTGTAATACAGTTTATACCAGTGTATGCTCTAGACTTGGA
AGATGTAGTATGTTTGATGTGGATTACCTATACTTATGTTCGTTTTGATACATTTTTAGCTTCTCATTATAAGGT
GATTCATGCTTTAGTGAATTCTTCATAGATAGTATATATAAAAGTACATTTTAATAGAAAGCCAGGGTTTTAAGG
AATTTCACATGTATAAGGTGGCTCCATAGCTTTATTTGTAAGTAGGCTGGATAAATGGTGCTTAAATGGTAATGT
ACTCCACTTCTTCCTATTGGAAGATTAACATTATTTACCAAGAAGGACTTAAGGGAGTAAGGGGCGCAGATTAGC
ATTGCTCAAGAGTATGTAAAAAAAAAAAAAAAAAAAAGAACCAAACCACTGGAAATAATCAAATGCAAAAAGGTA
ACAAATTCATAACTGGAAAGCAAAGAGAAGAACAAGTATGATTTGGATGATAAAGCATTGTTTTAATGGTGAAAA
CTTCACAGATCACTAATGTTTCTAGAGGTTAACTTCAAGTGGGCAAGCTGGGGTTTTTAGGTAGTCAGTGGCCTA
GTTCCTAAAGCCACAGTATAGGATCTGTTAAACTGAATGTCTGTTGAAAGTTTGTTTTAGCTGCTTGGAGGCTTC

FIGURE 4436B

CTTTTAAGACAAACTGTATGTGATTAAGTTGTTTTGAGGGAACTGAAGAACCTGATGTAGCCCCTGGCCAGATAA
CTGCCTGATTTCTCAGATATTATTTCTCTGGGAAACATTCTACATAGCACAGGAGCTTAAGAGTGGCATTATCTT
CTCGCCTTAATTTCCAGAGATTATTTCTGTACTGAGAATCCTGGAACTACTATGCTAGGAAATTTAAAGCTGCAT
GGTCTGTCTTGTTTTCATTTAATTATTGTGAATACCTAGAATCTTTCTTGGTCCTGATTTCTCTTGCTTAATCCA
GTCTTTATCTCTAACTGCCCCTTATTTGATCACCATGTACTAGGAGCTCTGATAGCCAGCTCAGCTCCTAATCCT
TGAGGCAACATTCTTTTTCTATTTGAACTTCAGTTCTGTCCTTGAATCCCGACTAGATATTTCTTGCCCTCTGGT
CTCAGAATTCTCTTGGCTTTTATTCCTTGATCCACTTGCCAGTTTTATCACTTTACCCTTGTTCCTCATGGCTTC
CCATCAAGCCATGGGTATTAGGTGACAGTGTAATTTATTAGATTCTGGTTTTGCCCAAATACTGGGCATGCTTTA
ATAATAACTGAACCATTTCATTATTTGGATAGGCATGGGTACCTTATCAAGCAGATTAAAAGGATATGGTACCCG
TCCTTTAGAAAAGAACAGCTAAAACCTTGTTGTGGATTATGGATTTAGCCTAAAGAAAAATAATCTGGCATAAAT
TAAGAGTAAGAGAGAAGATTAATAGAAATTTCACTTCACATAACTTAAAACATGGCTATTTCAATAAAGGACTAA
AGTTTCTCCTGGATCCCAGAATTCAACCTGTATTTATAAATGTATAATGTATTTAGCTACTTTTTGGTTTAAATG
AACTTGTTGGGTTAGCTTGGTAAATGTTATAATTTTTACTGTTTTCTACAAAGAAAATATTTTCTAATTTAAGTT
GGAGCTATCTGTGCAGCAGTTTCTCTACAGTTGTGCATAAATGTTTTTACTATAAAATGAGCTAATGTATAAAAT
ACTGCTGTATACCATAATAAAGATAGTAATACTTGAAAAAAA

FIGURE 4437

WTQGGELPLPLHAVEKTGRPGQPALKMPGKLRSDAGLESDTAMKKGETLRKQTEEKEKKEKPKSDKTEEIAEEEE
TVFPKAKQVKKKAEPSEVDMNSPKSKKAKKKEEPSQNDISPKTKSLRKKKEPIEKKVVSSKTKKVTKNEEPSEEE
IDAPKPKKMKKEKEMNGETREKSPKLKNGFPHPEPDCNPSEAASEESNSEIEQEIPVEQKEGAFSNFPISEETIK
LLKGRGVTFLFPIQAKTFHHVYSGKDLIAQARTGTGKTFSFAIPLIEKLHGELQDRKRGRAPQVLVLAPTRELAN
QVSKDFSDITKKLSVACFYGGTPYGGQFERMRNGIDILVGTPGRIKDHIQNGKLDLTKLKHVVLDEVDQMLDMGF
ADQVEEILSVAYKKDSEDNPQTLLFSATCPHWVFNVAKKYMKSTYEQVDLIGKKTQKTAITVEHLAIKCHWTQRA
AVIGDVIRVYSGHQGRTIIFCETKKEAQELSQNSAIKQDAQSLHGDIPQKQREITLKGFRNGSFGVLVATNVAAR
GLDIPEVDLVIQSSPPKDVESYIHRSGRTGRAGRTGVCICFYQHKEEYQLVQVEQKAGIKFKRIGVPSATEIIKA
SSKDAIRLLDSVPPTAISHFKQSAEKLIEEKGAVEALAAALAHISGATSVDQRSLINSNVGFVTMILQCSIEMPN
ISYAWKELKEQLGEEIDSKVKGMVFLKGKLGVCFDVPTASVTEIQEKWHDSRRWQLSVATEQPELEGPREGYGGF
RGQREGSRGFRGQRDGNRRFRGQREGSRGPRGQRSGGGNKSNRSQNKGQKRSFSKAFGQ

FIGURE 4438

CCCGGGTCAGCGGCGCGGGTGCTGCGCCTAGCTGCGCACCATGGCCGGGTTGCTGGCGTTGCTGGGTCCGGCAGG
CAGGGTGGGCGCCCGGGTCCGGCCTCGCGCCACCTGGCTCCTGGGCGCCACCGCCCCCTGCGCCCCGCCGCTCCT
GGCCCTGGCCCTGCTCCCGCCCAGGCTAGACGCCCGGCTGCTCCGCACGGCGCGCGGGGACTGCCGCGGCCACCA
GGACCCCAGCCAGGCCACGGGGACAACAGGCAGCAGCGTCAGCTGCACAGAGGAGAAAAAGCAAAGCAAGTCACA
GCAACTGAAAAAGATTTTTCAAGAGTATGGCACTGTTGGCGTGTCATTGCACATTGGAATCTCATTAATTTCCTT
GGGCATATTTTACATGGTTGTGTCAAGTGGTGTGGACATGCCTGCAATCCTGCTGAAACTCGGATTTAAAGAGTC
CCTGGTACAGTCAAAAATGGCAGCAGGCACAAGTACCTTCGTGGTGGCCTATGCAATCCACAAGCTGTTTGCGCC
AGTGAGAATCAGCATTACGCTAGTCTCTGTGCCCTTGATTGTCAGATATTTTCGAAAAGTGGGATTTTTTAAACC
TCCAGCTGCAAAACCTTAATGAACTCTTCAGTCGTACACACTGAAAACCTATTTCTTCTAAATTACATGATTTGG
ATTGGTTTTAGGGTTTTAGGGTTGTAGGGTTTCTTTTGGAGAGGTAGGGGGCTAATTGCTATGTTCTCATGGATA
AACTTTGCCAGCAAAAATCAGGCTTTTGAACAATTTTAATTTTTTGCCTCATAAATTTTGTGAATGCTATTCATT
ATAGGGCTTGTATATATAATCTAAAATGTCAGCAAGGCATCGGAGATGGGTTAACATCTCAAAACAAAATAGCCT
ACAAATGTTCCTTGTGGGAGACTTTGGCGAGGGTCTGTGGGTAAAAGCACCAGGGGGTTAATCTTGGCTCAGTTT
CCTAAAAAGCATTGATTAATTTAACTGGMTTTTAAATATCCCCTTCCGCTGATATTTGTTGTCAGCTGCCTACAG
TTTAATATGCAGCGTTCACAAAACAGCTGCCAGTGCTACAATTAATGAAGCAAAACTTAATATGTAATCACAATC
TAAATTAGCATCAATACTTTGACATTCATTACATTGGTTTGGGGGAAGAAAAGTAGTTCTGGTATGTTTCATTGA
TCCCCAGATACCTTCCAATCTGGACATGATGGGGCTGATTCCAGATGGTTTTTCTGAAATTTCATTAAGGTAGGT
CAGCGTCATTTGTCTCTGTTTAGGTAAAATATAAAAACCCTGCCCAGTAGCAGTGGCATCGCTTGGTTCCTGATG
CCCATGTTCCAGAGGAATTCGGATACCACAAACAGCTAAGACAATCTCAGCTTTTCTTAGACAATCTTCTATCTC
AAACTTCAGACATTCCAGAATTGTCATGATGTTTACACTGTCTGAGTTAAAAATCCTGTTCAAGAAAAAAAAAGA
TTTTGTATCACTTCTTAAAAAGGAATATTCATAGCACTTGTCACAAATAGAAGGCAACCATGAGATAATACAAGC
CAGGGAGAGGCTTGTATTACATGACAGGTGTAATTAGTCTGCTGAGCCAGCTTTACCCAATGAAGGGCATATGTG
TTAGAGAGATTAGCTAAGAGTAGAAATTCGAGCATAGAGGCCAGGTGCGGTGGCTCACGCCTGTAATCCCAGCAC
TTTGGGAGGTTGAGGCAGGCGTGTCACTTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATGATGAAACCCCG
TCTCTACTACAAATACAAAAATTAGCCGGGTGTGGTGGCACACGCCTGTAGTCCCAGCTACTGGGGAGGCTGAGG
CAGCATTGCTTGAACCCAGGAGGTGGAGGTTGCAGTGAGCCAAGATCACACCACTGCACTCCAGCCTGGGCGACA
GAGGGAGACACTGTCTCCAAAAGAAAGAAATCCCAGCGTAGATCCAAACTGAGACACTGAGGCTTCGTCCTTATA
GTAGTCAGGAGCAGGCGATTGAAGTAATTCTGTCCTGCGGGGTTCAGCATCATGCACGTTCCCCCTGGGCCATTC
TCTGATGCAGGGCACTTGCTCCACACTCTGGGAACCCAGATTCACCAGTCTGCCCTGTCACGTAGTTGAAGGAGT
TGCATTTATCTTTCTGGCTCCTAATTCCTTTAAAATTACATTTGTTGCAGAACCTCCACAAGGCTAAATAAAATT
ACATTTGTGACCATCAGAGAACTGAATAAACCATTAACTGGCCATCCTGGTTTTGCAGAGATCAGGTTGTTGACA
GTTCCTGGTTGACCCACAGCTACCCATGTCAGTTATCTCCACTAACATATCCAAGAATCTTTGTAGGACAATTTC
TCCACCTGCAAGGTCTTTCAGGTAGAACTCTTCTTTTAAGGCAATTAGCCCATTGCCAAAAGGTTTTACTGTCTT
AAAGCTGTCTTTCTGAGATCTAATTCCAAGGACTTCTCCACAGCTAAGTGAGATGCCTCACACCATTAGGTGATG
CTTTGGACAGAACAGAGTATTTTCATCTTGTGTTTAAAGCAATTCCTTGGCTTCGGCTCCTCACCACTTTCTATG
CCAGTCTCCCATTTATGTCCCTAGTAATGCCTATGCAAAAAAAAAAAAAAAAAAAAAGAAAAACTGATGGTGAAA
CCTACAGGTTTAAGGGCTTAAATCTCAAACTTTGTTAGGAGTAACAGGAGCGTGCTGAGCGGGCAAGCAATAAAA
CAAATCATACCAAAAAGCCACATTGCTCTCTCCTAAGCCCCAACCCCACTCCACTCCTGTGGCCAGGGGTCCAAA
CAGAAAATAACCGGAGAAGACAAGGAGGTCAAAGGATCAGGGAACTAAGCATTATGTGAATTCACCAGCAAGATG
TACAGAACGCCTGTGTTTACATTGTTTTTATGGAACTAGCAGAATAAAACATCTATTTTAAAAATGAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4439

MAGLLALLGPAGRVGARVRPRATWLLGATAPCAPPLLALALLPPRLDARLLRTARGDCRGHQDPSQATGTTGSSV
SCTEEKKQSKSQQLKKIFQEYGTVGVSLHIGISLISLGIFYMVVSSGVDMPAILLKLGFKESLVQSKMAAGTSTF
VVAYAIHKLFAPVRISITLVSVPLIVRYFRKVGFFKPPAAKP

FIGURE 4440A

GCGCGGGGCTGAGCCGCCCGGGATCAGCGCGAGCACCCAGCCCGCCTCGGCCGGGAGGGCCTGAGAACCCCGGGG
GCGTGCTGAGCGTGGAGCTGCCCGGGCTGCTGGCGCAGCTGGCGCGGAGCTTCGCGCTGCTGCTGCCCGTGTACG
CGCTGGGCTACCTGGGGCTCAGCTTCAGCTGGGTTCTCCTCGCGCTCGCGCTGCTCGCCTGGTGTCGCCGCAGCC
GCGGCCTCAAGGCCCTGCGCCTGTGCCGCGCGCTGGCGCTGCTGGAAGACGAGGAGCGCGTCGTGCGCCTGGGGG
TGCGCGCCTGCGACCTGCCCGCCTGGGTTCATTTTCCAGACACTGAAAGAGCAGAATGGCTAAATAAGACTGTAA
AACACATGTGGCCTTTCATTTGCCAATTTATAGAGAAGTTGTTTCGAGAAACTATAGAACCAGCCGTGCGGGGAG
CAAACACCCACCTTAGCACCTTTAGTTTCACGAAGGTCGACGTGGGCCAGCAGCCCCTCAGGATCAATGGTGTTA
AGGTATACACTGAAAATGTAGACAAAAGGCAAATTATTTTGGACCTTCAGATTAGTTTTGTAGGAAATTGTGAGA
TTGATTTGGAGATCAAACGATATTTTTGTAGAGCTGGTGTGAAAAGTATCCAGATTCATGGTACCATGCGGGTGA
TCCTGGAACCGTTGATTGGAGATATGCCCTTAGTTGGAGCTTTGTCTATCTTCTTCCTTAGGAAACCACTTTTAG
AAATTAACTGGACAGGACTGACGAATCTTCTGGATGTCCCTGGATTGAATGGTTTATCAGATACTATCATTTTGG
ATATAATATCAAACTATCTGGTGCTTCCCAATCGAATCACCGTTCCACTTGTCAGTGAAGTTCAAATAGCTCAGT
TGCGGTTTCCTGTACCAAAGGGTGTTCTAAGGATACATTTTATTGAAGCTCAGGATCTTCAGGGGAAAGACACTT
ACCTTAAGGGACTTGTCAAGGGAAAGTCAGACCCCTATGGAATCATTAGAGTTGGCAACCAAATCTTCCAAAGCA
GAGTCATCAAGGAGAACCTCAGTCCAAAGTGGAATGAAGTCTATGAGGCTTTAGTGTATGAACATCCTGGACAAG
AATTAGAGATTGAGCTCTTTGATGAAGACCCAGACAAGGATGACTTTTTAGGAAGTCTTATGATTGACCTCATTG
AAGTTGAAAAGGAGCGCCTTTTAGATGAATGGTTCACTCTGGACGAGGTTCCCAAGGGGAAGCTACACTTGAGAC
TGGAGTGGCTCACGTTAATGCCAAATGCGTCAAACCTCGACAAGGTGCTAACAGACATCAAAGCTGACAAAGACC
AAGCCAACGATGGTCTTTCCTCTGCATTGCTGATCTTGTACTTGGATTCAGCAAGGAACCTTCCGTCAGGGAAGA
AAATAAGCAGCAACCCAAATCCTGTTGTCCAGATGTCAGTTGGGCACAAGGCCCAGGAGAGCAAGATTCGATACA
AAACCAATGAACCTGTGTGGGAGGAAAACTTCACTTTCTTCATTCACAATCCCAAGCGCCAGGACCTTGAAGTTG
AGGTCAGAGACGAGCAGCACCAGTGTTCCCTGGGGAACCTGAAGGTCCCCCTCAGCCAGCTGCTCACCAGTGAGG
ACATGACTGTGAGCCAGCGCTTCCAGCTCAGTAACTCGGGTCCAAACAGCACCATCAAGATGAAGATTGCCCTGC
GGGTGCTCCATCTCGAAAAGCGAGAAAGGCCTCCAGACCACCAACACTCAGCTCAAGTCAAACGTCCCTCTGTGT
CCAAAGAGGGGAGGAAAACATCCATCAAATCTCATATGTCTGGGTCTCCAGGCCCTGGTGGCAGCAACACAGCTC
CATCCACACCAGTCATTGGGGGCAGTGATAAGCCTGGTATGGAAGAAAAGGCCCAGCCCCCTGAGGCCGGCCCTC
AGGGGCTGCACGACCTGGGCAGAAGCTCCTCCAGCCTCCTGGCCTCCCCAGGCCACATCTCAGTCAAGGAGCCGA
CCCCCAGCATCGCCTCGGACATCTCGCTGCCCATCGCCACCCAGGAGCTGCGGCAAAGGCTGAGGCAGCTGGAAA
ACGGGACGACCCTGGGACAGTCTCCACTGGGGCAGATCCAGCTGACCATCCGGCACAGCTCGCAGAGAAACAAGC
TTATCGTGGTCGTGCATGCCTGCAGAAACCTCATTGCCTTCTCTGAAGACGGCTCTGACCCCTATGTCCGCATGT
ATTTATTACCAGACAAGAGGCGGTCAGGAAGGAGGAAAACACACGTGTCAAAGAAAACATTAAATCCAGTGTTTG
ATCAAAGCTTTGATTTCAGTGTTTCGTTACCAGAAGTCCAGAGGAGAACGCTTGACGTTGCCGTGAAGAACAGTG
GCGGCTTCCTGTCCAAAGACAAAGGGCTCCTTGGCAAAGTATTGGTTGCTCTGGCATCTGAAGAACTTGCCAAAG
GCTGGACCCAGTGGTATGACCTCACGGAAGATGGGACGAGGCCTCAGGCGATGACATAGCCGCAGCAGGCAGGAG
GCGTCCTCTTCAGCGTAGCTCTCCACCTCTACCCGGAACACACCCTCTCACAGACGTACCAATGTTATTTTTATA
ATTTCATGGATTTAGTTATACATACCTTAATAGTTTTATAAAATTGTTGACATTTCAGGCAAATTTGGCCAATAT
TATCATTGAATTTTCTGTGTTGGATTTCCTCTAGGATTTCGCCAGTTCCTACAACGTGCAGTAGGGCGGCGGTAG
CTCTTGTGTCTGTGGACTCTGCTCAGCTGTGTCCGTAGGAGTCGGATGTGTCTGTGCTTTATTATGGCCTTGTTT
ATATATCACTGAGGTATACTATGCCATGTAAATAGACTATTTTTTATAATCTTTACATGCTGGTTTAAATTCAGA
AGGAAATAGATCAAGGAAATATATATATTTTCTTCTAAAACTTATTAAATTCGTGTGACAAATAATCATTTTCAT
CTTGGCAGCAAAAGTTCTCAGTGACCTATTTTGTGGTGTTTCTTTTTGAAAAGAAAAGCTGAAATATTATTAAAT
GCTAGTATGTTTCTGCCCATTATGAAAGATGAAATAAAGTATTCAAAATATTAACATTTTCATAAATATAAGGAT
GTATTATTGAGAAGTAAGTTGAAGGGCTTATAAGGAAAAATGTTTTATAACTGAGTAATATATTAAGAGAATTGT
CATGGTTCATAAATCACATTATGCTAATCTGAAATTTCTTACATAAAAATGAAGTGTCTTATGTTTATTTTAATT
GCTGTTGTAACTTACTCATGAAACAGTATACAGACACCTTGTACTTTTCCTCAACTGTAAGAGCAGACTTTCAAT
GTTAGCAATTAAGCTGTTGTCAAACAATCAGTCATGAGCTTTGTTAATTTTCAATGTTTTCCCAGCCTATAAAAA
AAGGAAGGTACACGTTGTCCTTTTAAAGGTTGTGAGGTAGATTGGAGTGAGTAGACAGGATATTGCATTAAAAAT
TGAAAGCTCGATCTCATTATTGTCAGGAACCCCCAGTGTGACCTCACACATAGGATGTGGGACCTTTGAGCCGAT

FIGURE 4440B

GTGCACTGGCCACCACCAGGGTTGGGGGCGCCACAGCTGCGAGCCCGGCCCCTGCTGTTCTCAGCAGCCACTTCC
CAGGCTGCCTCACTTTATGCCATGACTGACCTTAATATTGGGATATTGTTATGCAATTTTTATCCTGTTTAGACT
GTTAAAAGCAGGTTTCTGTACTTAAGAGTCCCCCAGACCTCCTGTGAGGTGAGGCTCTGTTGCAGTGTCGTAGGC
TGTGTGTGTCTGTAAAGAAAGAATGCACATATGTAGACGATTAAGTGTATATTATAAGCTATATGCTGAAAATGG
CTTCCATAGCCATGAGAACATCTTAAAACTATGTGTAAATATATTAAGGAAAGTATAGCTTTGTAATTTAAATTG
GAGCTTTTAGCTTGTTTCATGGAACTATACAACTTGTGGGTAACTCACATGACCAAACAAACCAAAGTGCCTGTG
ACGGGGCGGGTGGCGTCTACCCACCCTCCCTTCTAGCAGATTCTTATTTTGTTTGAATTTATAAACAAGGCTGGT
GGCTGTCTACCCACCCTCCCTTCTAGCAGATTTTGATTTTGTTTCAATTTATAACTTACACTTTGAACCATGGGT
TTACTTATAATGGAGTCTGTAGCTTCACAGCATATTTCATGTAATCATAAAGACCAGTATATTCCCTCCTGCTGA
ATGACATGCGACTGTAAAGCCTCTTTATAAACCATTTCCAATGTTAGTATATAGGATTATTTGGGAAGCGTATCA
ATACCTTTATAGACAAATACGAACATGTATGCACACAAAACATTTAACTATGGTATTTATGGAAGACAGGTAACA
ACATTAAATCTAGTTGCTTTCCCTTAGTATTAGATTTGTTGAGGGTTTTTTAAAAATCAGGTCTGTTGAAAGTCT
TCTGTCATAATCTATAAAGCAGCAGCACTCATGGAAATTGTAGCATGCCAGTAATTTTTACCAACATCCCATACA
TCTGAGTTCTGCAGTCCAGTGTGTAATCCGCTCCATGTGTATTTTGCTTAATGGAATGCTTTATTTAAGCACTTA
GGCAGAGTAGACACAATTAAAGGTACAAAGCCCAGAGGAAGTGGTAGAGCAGCACCGTGCCTGCCCTGAGGCAGT
GGAGTCAGTAGCGCTGTCCCCAGGGCCTTGAGTGCCTGGAGGTGCTTGGCCTCCAGTAGCTGCCTCCATTCTCTT
TTAAAAAAAGGGGGTGATTCTGAGGCACTGAAGTGCCTCCCAGATGTGGAGGAGTGAAGCCACCATCGAGGCCAC
ACTCAGCACTCCAGGATCCCAGCGATGTCAGACACTCTTGAGTTGTCAAAACGTTAATTTTCAGTTTTAAATAAT
CAGTTTATCTAAGAAAAGGGAATTTTAACTTTTCTACCTTGAGCCAAGCCAATGAAGGGAAAATTAATTAACTTA
GTAAATTTGAAGTGCAGCTCTGTTAGCTCGTACATGTGGGTTCTTATCCTGATCCTGTGCCTTAAAGTAGGAAGG
TGTTTCCAAGTTCAGATTAAAATAGAAGCAGCTGGCCGGGTGCGGTGGCTCACGCCTGTAATCCCAGCACTTTGG
GAGGCCGAGGCGGGCGGATGACCTGAGGTCAGGAGTTCAAGACCAGCCTGGCCAACATGGAGAAACCCCATCTTT
ACTAAAAATACAAAAATTAGCCGGGCGTGGTGGTGGAGCGCACGCCTGTAGTCCCAGCTACTCGGGAGGCTGAGG
CAGGAGAATTGCTTGAACCCAGGAGGCGGAGGTTGCAGTGAGCCAAGATCGCACCACTGCACTCCAGCCTGGGCA
ACAGAGTGAGACTCCGTCTCAAAAAATAAATAAAATAGAAGCAGCCTTGTAACTGTATTTACCATGATAATATAT
TCTGCACGGTAAGAATTCCTTTTACAGACATTCTTTATCAAGAGGTCGGCCCTTCTTTTTCAGGCACATAAGCCA
AATGCAGGCCTGTGTGTAGCTGTGTGTTTTTTCTGTGGTTGCCGCATTTATTCCACCTCCAGCTGGACCCCCCAC
TGCAAATAGAGAACAGCGGTGGGGGATGGGGGTTAAAAAGTAGAGAACCTCCTTTCTGTTCAACTAATTTCACGT
GACAGTGCATGTATTTATTCAATAAAACCTTTATGTTAGCTC

FIGURE 4441

TTATGCTAACATGAAGAAAAGAGAAGGGACTCAGCTTTCTTCCCAACAGTCTGTGATGTCTAAACTTGCATCATT
TTTGGGCTTTTCAAAGCAATCTCCCCAAAAAAAGAATCATTTGGTTTTGGAAAAGAAAACAGAATCAGCAACTTT
TCGGGTGTGTGGTGAAAATGTCACGTGTGTGGAATATGCTATCTCCTGGCTACAAGACCTGATTGAAAAAGAACA
GTGTCCTTACACCAGTGAAGATGAGTGCATCAAAGACTTTGATGAAAAGGAGTATCAGGAGTTGAATGAGCTGCA
GAAGAAGTTAAATATTAACATTTCCCTGGACCATAAGAGACCTTTGATTAAGGTTTTGGGAATTAGCAGAGATGT
GATGCAGGCTAGAGATGAAATTGAGGCGATGATCAAGAGAGTTCGATTGGCCAAAGAACAGGAATCCCGGGCAGA
TTGTATCAGTGAGTTTATAGAATGGCAGTATAATGACAATAACACTTCTCATTGTTTTAACAAAATGACCAATCT
GAAATTAGAGGATGCAAGGAGAGAAAAGAAAAAAACAGTTGATGTCAAAATTAATCATCGGCACTACACAGTGAA
CTTGAACACATACACTGCCACAGACACAAAGGGCCACAGTTTATCTGTTCAGCGCCTCACGAAATCCAAAGTTGA
CATCCCTGCACACTGGAGTGATATGAAGCAGCAGAATTTCTGTGTGGTGGAGCTGCTGCCTAGTGATCCTGAGTA
CAACACGGTGGCAAGCAAGTTTAATCAGACCTGCTCACACTTCAGAATAGAGAAGATTGAGAGGATCCAGAATCC
AGATCTCTGGAATAGCTACCAGGCAAAGAAAAAAACTATGGATGCCAAGAATGGCCAGACAATGAATGAGAAGCA
ACTCTTCCATGGGACAGATGCCGGCTCCGTGCCACACGTCAATCGAAATGGCTTTAACCGCAGCTATGCCGGAAA
GAATGCCGTGGCATATGGAAAGGGAACCTATTTTGCTGTCAATGCCAATTATTCTGCCAATGATACGTACTCCAG
ACCAGATGCAAATGGGAGAAAGCATGTGTATTATGTGCGAGTACTTACTGGAATCTATACACATGGAAATCATTC
ATTAATTGTGCCTCCTTCAAAGAACCCTCAAAATCCTACTGACCTGTATGACACTGTCACAGATAATGTGCACCA
TCCAAGTTTATTTGTGGCATTTTATGACTACCAAGCATACCCAGAGTACCTTATTACGTTTAGAAAATAACACTT
TGGTATCCTTCCCACAAAATTATTCTCCATTTGTACATATCTAGTTGTAAAACAAGTTTTAGCTTTTTTTTTTAA
TTCCTCTTAACAGATTTTTCTAATATCCAAGGATCATTCTTTGTCGCTGAAGTCAGTCTTTCTTCAGCTTCTCTT
TCATAATGGAAATGAACTTATTATCTTGAGAGCAAATAACTTGGAAAATTTAAATGAGATAATGCAGTTGCAACT
GTGTGTCCACAAGTATGGACATCAAATCTGTGGGAAAAGAACAGGTTTGTATTTTCAGGAAGGAGAGAATAACAG
TCTTATAGACAGAGGGCACAGCTAAGCACAGCTGCCACTGCAGGAGACAGGCCCCATGTCAGGATGCCATAGTGC
TGTGGGGAGCACAGTATTACCCAGTGGGTAGGGCTTCTGTCTTCCCTGGGAGCAGGGATGGTATCTTAGTCAATT
TTTTTCCCTTGAGATGAGGTCTGTGCCTGATGTACAACGGATACTCCATAAATGTTTGACAAACCAACGAAGAAT
GAAAAAAAGCCTAGTCAGACTCCCATCCAAAGTAGGAACTATCTCTTTAACATTCTTGACTCACTATCACTTTAC
CTCAAATTGAACAGATTCCATGACGGAACTTCATTCTTCACAAACTAGCCAGTGACATGTGGGACAGCTCTGGCC
AGGGCTCTGGGACTGCAGTGTACTTGCGCTCTGCACGGTCCAGGAGCTGTGATGTGGCTGTGGTCTAGGGGAATC
CTGCCTGCCCCATGGAGTTGCGCAGCACAACCCTGGCTCCAATTGCCAGAAGGCTCTTTTTAATGCTGAACCAAA
ATGCGCCTTTTTTTTTTTTCTGAGATGGAGTTTCACTCTTGTTGCCCAGGCTGGAGTGCAATGGCGCGATCTCAG
CTCACTGCAGCCACTGCCTCCCAGGTTCAAGTGATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGATTACAGGCA
TGCGCTAACACACCCAGCTAATTTTGTATTTTTAGTAGAGACGAGGTTTCTCCATGTTCGACAGGCTGGTCTCGA
ACTCCCACCTCAGCCTCCCAAACTGCTGGGATTACAGGTGTGAGCCACTGTGACCAGCCAATGTGCCTTCTTATA
GTGTCTACTCATTGGTCTTTGTTCTGCCCAGTGATAACAATGGGATAACGCCTGCTACACATCTTCATTGTGAAA
CCCTTCCCCTGTGCTGAGATTAAATGAACTCTGAGATTATTAAATAGTATATTTTCCTTGACAGCCTAGCGTTTG
ATGATTTTAAAGCCTTATGTATAAATAAACCAAAGGAAGTAAGCAGTCATATTGCTAATTTGCTAACTCCTATCT
ATTGAATGGTGAAGTTTTAAAAATTTCCCCAGGTAAGTTTAAGATTCAAACACCATCTATTGAGCACCTACATTG
TGTGCCAGGTAGTAAAATAGGTGCTTTCATACACATTGTCTCAATTCCTGTGAGGTCAGAATTATCTCTGCATTT
GAAACTTGAGGAAACATGCTCAGAGTGCAAGAAGCTTCCTTGCCTGAGATCACCTAGAAAGGAACCCTCAGAGCC
GGCAACTGAATCTTGGTCCCTGTGATGTCAAGCCCATTGCTCTCCCACTGCAGAACATGGCCTCTAGATTAATGC
CACCGATTCAGGAACACCTCCGACAGTCTTGAAATACCCCCATGTTGCCTTGTTTGTTTTTTCCTTCTGGCTTCT
TCTATTACAGTCTCTTCATTGGAAGCTCTGTAGGCCAAGGCCAGAGCTGATACTGACACGGAGCCAATGCAGATA
GCACATCAGATGCTAGGGGTCGCTGGGAGGATTAAGGGACTTAATCTGCTAGGAACACCTGTACTTGAAGTGGAG
GAGGCTAGGGGGCCACAGTTGCTGCTTCATTAACATAGAGGTTTTGGATTTTTTTCTCTTGTGGTTTGTTTTTTA
AGTGGATTGGCAGACTCCTTGTTGCTTAAGAGTGGCTTTCTAGGCAGGCCACTGGCATCTGAATTCATCATTGAC
AATAAATGTAAGAAATTGGAATAAAAAAGAGAGGCCTGCTGTTATTCGCTTTTGTTCTCCAGTGATTTGATTAAC
TCAGGGCAAGGCTGAATATCAGAGTGTATCGCACTGAAGAATAATAATCCATTCAGTAATGTTATAGTTATCCTC
AATCTAAATATGTCAACTGTCATTTTGCTACTTTTCAAATAAAATACTTGAAAACTGTC

FIGURE 4442

MKKREGTQLSSQQSVMSKLASFLGFSKQSPQKKNHLVLEKKTESATFRVCGENVTCVEYAISWLQDLIEKEQCPY
TSEDECIKDFDEKEYQELNELQKKLNINISLDHKRPLIKVLGISRDVMQARDEIEAMIKRVRLAKEQESRADCIS
EFIEWQYNDNNTSHCFNKMTNLKLEDARREKKKTVDVKINHRHYTVNLNTYTATDTKGHSLSVQRLTKSKVDIPA
HWSDMKQQNFCVVELLPSDPEYNTVASKFNQTCSHFRIEKIERIQNPDLWNSYQAKKKTMDAKNGQTMNEKQLFH
GTDAGSVPHVNRNGFNRSYAGKNAVAYGKGTYFAVNANYSANDTYSRPDANGRKHVYYVRVLTGIYTHGNHSLIV
PPSKNPQNPTDLYDTVTDNVHHPSLFVAFYDYQAYPEYLITFRK

FIGURE 4443

GGCACGAGGGCTTGATGGGAAGTATGGGCAGCATGTACTTGACACGTTATCACCCAGTCCCCTTGTAAAATCTGG
AATGGAGCGTTTAAGCTGAGCGTTAGCATCAGGTCAGCAGGCAAAGCAAACCTCCCACAAACTGGGTGCCGTAAG
GTGGGAGGTGACACATGGAGAGCTTCGTCCTGGCCGAGCAGGCACCCAGCCCCATGTCCCCCGCCAGCATTCTGG
ATGTCAGAGGAGGGTGCGTGTGATGGCGTCACATTCATCTGAAGCACACTGATTGATTTTCCACAAGGTGGCAAG
TTTGATCAAATTGACCGCTTTTCATGAGACAACCAGATGCTGTAAAAAAAAAAAAACAGCACTGGGATGTGTTGAG
GAGGGGGCAGTTTGCTGTGCTCTGTTCTGTCTGCTGCTCTCTCTGGGGGCCGCACAATGTCCGCACACATCACGG
AGGGGAGAAAGGCATCAGTACCAAACGGAACAACCTCTTTTTTCTACATTGTCCATACCCGGACATGTGAGGCTC
TATTATCAACAGGTGGTGAGAAAAATTCTGTTTTTATTCGCTTTCTGGTAACTTCTGTAGGCCCTGGCTCAAGGA
CTTAGCATTTCGTCTCATGTACATCTTTTTCTTAAGTGTTCTTTGCCATTTCTGGAATTGTCCTTGGTTTTTCCT
TAGCTCATAGGTCATAGATGCAGAAATATAGTATTTAAGGCATCCGCATCCAGCATCAGATGGCTTTGCATCCAG
AAAAACATTGATAACTCAGTTTGAAGCACCAAGCATGTGTAATATGGCTCTATACAATATAATAAATGCATAATG
TTAAGCTTTTTAAAAAAAAAAA

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FIGURE 4444

ARGLDGKYGQHVLDTLSPSPLVKSGMERLS

FIGURE 4445

AGCGCCGCGTGGTTAGCGTCGGCGGCTTTTGGCATGGCGACTTTTTCTGGCCCGGCTGGGCCAATCCTGTCGCTT
AATCCGCAGGAAGATGTCGAGTTTCAAAAGGAGGTGGCGCAGGTTCGCAAGCGCATAACCCAGCGAAAAAAACAA
GAACAACTTACTCCTGGAGTAGTCTATGTGCGCCACCTACCTAACCTACTTGACGAAACCCAGATCTTTTCATAT
TTCTCCCAGTTTGGCACTGTGACACGGTTCAGGCTGTCCAGAAGTAAAAGGACTGGAAATAGCAAAGGCTATGCA
TTTGTGGAGTTTGAGTCTGAGGATGTTGCCAAAATAGTTGCTGAAACAATGAACAACTACCTGTTTGGTGAAAGA
CTCTTGGAGTGTCATTTTATGCCACCTGAAAAAGTACATAAAGAACTCTTTAAAGACTGGAATATTCCATTTAAG
CAGCCATCATATCCATCAGTGAAACGGTATAATCGGAATCGGACACTAACACAAAAGCTACGGATGGAGGAGCGA
TTTAAAAAGAAAGAAAGATTACTCAGGAAGAAATTAGCTAAAAAAGGAATTGACTATGATTTTCCTTCTTTGATT
TTACAGAAAACGGAAAGTATTTCAAAAACTAATCGTCAGACGTCTACAAAAGGCCAGGTTTTACGTAAGAAGAAG
AAAAAAGTTTCAGGTACTCTTGACACTCCTGAGAAGACTGTGGATAGCCAGGGCCCCACACCAGTTTGTACACCA
ACATTTTTGGAGAGGCGAAAATCTCAAGTGGCTGAACTGAATGATGATGATAAAGATGATGAAATAGTTTTCAAA
CAGCCCATATCCTGTGTAAAAGAAGAAATACAAGAGACTCAAACACCTACACATTCACGGAAAAAAAGACGAAGA
AGCAGCAATCAGTGATTTTCAATGTATTATATTTCTTTTGAAAAATATAATATTTTTATGAGAGTGGACTTTGTA
TTTCACTAGGTACAATGGAATACAACCTTTGACAAGATTTTCAGAGGAAAAATACACTGTTTGGTCAAGTTAAGG
AAAGCAGTGTGTAATTTTGGATTGCCTGCCCTTGGCTGAAATACAGGGGTGCATACCATCTTGCAGTGGCTTGGC
TGACATTGCCTCTCTGTCCTGGCCTCTAGTTTTCTTTTGATATTTCATAGCTCTCCTTAGTTTACTCTGCCTGGA
TAGAAAGTTGACCACTAACTGCAGGTTTAAGTACTAAACTGCAGCCTTTTCTGTCGCCAGCAATTAAAGACCACC
AATCTTGTTTGTCCATCTACATGGTTTGTCGGGGACATTTAACTCATGGAGGTGCTTTAGATTTCAACATCAGAT
GGTTGAAGCTGGAAGTTTAATTATATGTAGAGTGAGAAGGCAGTTCCAGTTTTAGCACAGATTTGTTTATGTGTT
CAGATTTTAATAGAGATTCAAAAATGACTCATTTTTACCAATAATGTTAAATTAGTTTTGGTTGTGCTAGCATGA
ATTAATAACCACCATTTTATACCAGTATCATCAGTGAAGAATTGTATTTCAAGATTCAAACAATAACCAGCAATT
AAACTTTTTTCTACAATGTAAAAAAAAAAAAAAAAAA

FIGURE 4446

MATFSGPAGPILSLNPQEDVEFQKEVAQVRKRITQRKKQEQLTPGVVYVRHLPNLLDETQIFSYFSQFGTVTRFR
LSRSKRTGNSKGYAFVEFESEDVAKIVAETMNNYLFGERLLECHFMPPEKVHKELFKDWNIPFKQPSYPSVKRYN
RNRTLTQKLRMEERFKKKERLLRKKLAKKGIDYDFPSLILQKTESISKTNRQTSTKGQVLRKKKKKVSGTLDTPE
KTVDSQGPTPVCTPTFLERRKSQVAELNDDDKDDEIVFKQPISCVKEEIQETQTPTHSRKKRRRSSNQ

FIGURE 4447

AGCGGGTTTGCGGGAGCGCCGCGTGGTTAGCGTCGGCGGCTTTTGGCATGGCGACTTTTTCTGGCCCGGCTGGGC
CAATCCTGTCGCTTAATCCGCAGGAAGATGTCGAGTTTCAAAAGGAGGTGGCGCAGGTTCGCAAGCGCATAACCC
AGCGAAAAAAACAAGAACAACTTACTCCTGGAGTAGTCTATGTGCGCCACCTACCTAACCTACTTGACGAAACCC
AGATCTTTTCATATTTCTCCCAGTTTGGCACTGTGACACGGTTCAGGCTGTCCAGAAGTAAAAGGACTGGAAATA
GCAAAGGCTATGCATTTGTGGAGTTTGAGTCTGAGGATGTTGCCAAAATAGTTGCTGAAACAATGAACAACTACC
TGTTTGGTGAAAGACTCTTGGAGTGTCATTTTATGCCACCTGAAAAAGTACATAAAGAACTCTTTAAAGACTGGA
ATATTCCATTTAAGCAGCCATCATATCAATCAGTGAAACGGTATAATCGGAATCGGACACTAACACAAAAGCTAC
GGATGGAGGAGCGATTTAAAAAGAAAGAAAGATTACTCAGGAAGAAATTAGCTAAAAAAGGAATTGACTATGATT
TTCCTTCTTTGATTTTACAGAAAACGGAAAGTATTTCAAAAACTAATCGTCAGACGTCTACAAAAGGCCAGGTTT
TACGTAAGAAGAAGAAAAAAGTTTCAGGTACTCTTGACACTCCTGAGAAGACTGTGGATAGCCAGGGCCCCACAC
CAGTTTGTACACCAACATTTTTGGAGAGGCGAAAATCTCAAGTGGCTGAACTGAATGATGATGATAAAGATGATG
AAATAGTTTTCAAACAGCCCATATCCTGTGTAAAAGAAGAAATACAAGAGACTCAAACACCTACACATTCACGGA
AAAAAAGACGAAGAAGCAGCAATCAGTGATTTTCAATGTATTATATTTCTTTTGAAAAATATAATATTTTTATGA
GAGTGGACTTTGTATTTCACTAGGTACAATGGAATACAACCTTTGACAAGATTTTCAGAGGAAAAATACACTGTT
TGGTCAAGTTAAGGAAAGCAGTGTGTAATTTTGGATTGCCTGCCCTTGGCTGAAATACAGGGGTGCATACCATCT
TGCAGTGGCTTGGCTGACATTGCCTCTTTGTCCTGGCCTCTAGTTTTCTTTTGATATTTCATAGCTCTCCTTAGT
TTACTCTGCCTGGATAGAAAGTTGACCACTAACTGCAGGTTTAAGTACTAAACTGCAGCCTTTTCTGTCGCCAGC
AATTAAAGACCACCAATCTTGTTTGTCCATCTACATGGTTTGTCGGGGACATTTAACTCATGGAGGTGCTTTAGA
TTTCAACATCAGATGGTTGAAGCTGGAAGTTTAATTATATGTAGAGTGAGAAGGCAGTTCCAGTTTTAGCACAGA
TTTGTTTATGTGTTCAGATTTTAATAGAGATTCAAAAATGACTCATTTTTACCAATAATGTTAAATTAGTTTTGG
TTGTGCTAGCATGAATTAATAACCACCATTTTATACCAGTATCATCAGTGAAGAATTGTATTTCAAGATTCAAAC
AATAACCAGCAATTAAACTTTTTTCTACAATGTATTTGTTTGCGAGTAGGACTTGGGAGTCATTGGAAAAAAAAA
ATAATAAATTTTCCCCTTCATTAACAAAAAAAAAAAAAAA

FIGURE 4448

MATFSGPAGPILSLNPQEDVEFQKEVAQVRKRITQRKKQEQLTPGVVYVRHLPNLLDETQIFSYFSQFGTVTRFR
LSRSKRTGNSKGYAFVEFESEDVAKIVAETMNNYLFGERLLECHFMPPEKVHKELFKDWNIPFKQPSYQSVKRYN
RNRTLTQKLRMEERFKKKERLLRKKLAKKGIDYDFPSLILQKTESISKTNRQTSTKGQVLRKKKKKVSGTLDTPE
KTVDSQGPTPVCTPTFLERRKSQVAELNDDDKDDEIVFKQPISCVKEEIQETQTPTHSRKKRRRSSNQ

FIGURE 4449

GGCACGAGGGGCGGCGTAGGGGCGGAGGTCGCGCCTGAGTGCGTCCGCACGAGAGGGCGGAACCGTCTCCATGGC
AACCCGCGCGCAGCCGGGGCCACTCAGCCAGGCGGGAAGCGCTGGTGTTGCGGCGCTGGCGACAGTCGGGGTTGC
GAGCGGCCCGGGGCCGGGGCGGCCAGGGCCGCTGCAGGACGAGACCCTGGGTGTGGCGTCCGTGCCCTCGCAGTG
GAGGGCCGTCCAGGGCATCCGCGGGGAGACGAAAAGTTGCCAGACGGCCAGCATTGCCACTGCCAGTGCATCCGC
CCAGGCCAGGAATCATGTGGACGCCCAGGTGCAGACGGAGGCCCCCGTGCCTGTCAGCGTGCAGCCCCCGTCCCA
GTACGACATACCCAGGCTTGCAGCCTTTCTTCGGAGAGTGGAGGCCATGGTCATCCGAGAGCTGAACAAGAATTG
GCAGAGCCACGCGTTTGATGGCTTCGAGGTGAACTGGACCGAGCAGCAGCAGATGGTGTCTTGTCTGTATACCCT
GGGCTACCCGCCAGCCCAAGCGCAGGGTCTGCATGTGACCAGCATCTCCTGGAACTCCACTGGCTCTGTGGTGGC
CTGTGCCTACGGCCGGCTGGACCATGGGGACTGGAGCACGCTTAAGTCCTTCGTGTGTGCCTGGAACCTGGACCG
GCGAGACCTGCGTCCCCAGCAACCGTCGGCCGTGGTGGAGGTCCCCAGCGCTGTCCTGTGTCTGGCCTTCCACCC
CACGCAGCCCTCCCACGTCGCAGGAGGGCTGTACAGTGGTGAGGTGTTGGTGTGGGACCTGAGCCGTCTTGAGGA
CCCGCTGCTGTGGCGCACAGGCCTGACGGATGACACCCACACAGACCCTGTGTCCCAGGTGGTGTGGCTGCCCGA
GCCTGGGCACAGCCACCGCTTCCAGGTGCTGAGTGTGGCCACTGACGGGAAGGTGCTACTCTGGCAGGGCATCGG
GGTAGGCCAGCTGCAGCTCACAGAGGGCTTCGCCCTGGTCATGCAGCAGCTGCCACGGAGCACCAAGCTCAAGAA
GCATCCCCGCGGGGAGACCGAGGTGGGCGCCACGGCAGTGGCCTTCTCCAGCTTTGACCCTAGGCTGTTCATTCT
GGGCACGGAAGGCGGCTTCCCGCTCAAGTGTTCCCTGGCAGCTGGAGAGGCAGCCCTCACGCGGATGCCCAGCTC
CGTGCCCCTGCGGGCCCCAGCACAGTTTACCTTCTCCCCCCACGGCGGTCCCATCTACTCTGTGAGCTGTTCCCC
CTTCCACAGGAATCTCTTCCTGAGCGCTGGGACTGACGGGCATGTCCACCTGTACTCCATGCTGCAGGCCCCTCC
CTTGACTTCGCTGCAGCTCTCCCTCAAGTATCTGTTTGCTGTGCGCTGGTCCCCAGTGCGGCCCTTGGTTTTTGC
AGCTGCCTCTGGGAAAGGTGACGTGCAGCTGTTTGATCTCCAGAAAAGCTCCCAGAAACCCACAGTTTTGATCAA
GCAAACCCAGGATGAAAGCCCTGTCTACTGTCTGGAGTTCAACAGCCAGCAGACTCAGCTCTTGGCTGCGGGCGA
TGCCCAGGGCACAGTGAAGGTGTGGCAGCTGAGCACAGAGTTCACGGAACAAGGGCCCCGGGAAGCTGAGGACCT
GGACTGCCTGGCAGCAGAGGTGGCGGCCTGAGGGGTCCCGGGAGGCGGGTGCAAGCCTTCGCTGTGCCGAGCCTT
GTGTTTCTGACGCAAGCCAAATGAAGAAAAGCAAAGCTTAAAAAAAAAAAAAAAAAA

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FIGURE 4450

MVIRELNKNWQSHAFDGFEVNWTEQQQMVSCLYTLGYPPAQAQGLHVTSISWNSTGSVVACAYGRLDHGDWSTLK
SFVCAWNLDRRDLRPQQPSAVVEVPSAVLCLAFHPTQPSHVAGGLYSGEVLVWDLSRLEDPLLWRTGLTDDTHTD
PVSQVVWLPEPGHSHRFQVLSVATDGKVLLWQGIGVGQLQLTEGFALVMQQLPRSTKLKKHPRGETEVGATAVAF
SSFDPRLFILGTEGGFPLKCSLAAGEAALTRMPSSVPLRAPAQFTFSPHGGPIYSVSCSPFHRNLFLSAGTDGHV
HLYSMLQAPPLTSLQLSLKYLFAVRWSPVRPLVFAAASGKGDVQLFDLQKSSQKPTVLIKQTQDESPVYCLEFNS
QQTQLLAAGDAQGTVKVWQLSTEFTEQGPREAEDLDCLAAEVAA

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FIGURE 4451A

CAGAGTGTGGCGGCGGCGGCGAGATCTGGGCTCGGGTTGAGGAGTTGGTATTGTGTGGAAGGAGGCGGAGGCGCA
GGAGGAAGGGGGAAGCGGAGCGCCGGCCCGGAGGGCGGGAGGAGGCGCGCAGCCGAGGAGCCGAGGCCGCCGCGG
CCGTGGCGGCGGAGCCCTCAGCCATGGCCTCGGGCGACACCCTCTACATCGCCACGGACGGCTCGGAGATGCCGG
CCGAGATCGTGGAGCTGCACGAGATCGAGGTGGAGACCATCCCGGTGGAGACCATCGAGACCACAGTGGTGGGCG
AGGAGGAGGAGGAGGACGACAGACGACGAGTGACGGCGGCGGTGGCGACCACGGCGGCGGGGGGCGGCCACGGGC
ACGCCGGCCCACCACACACCACTCACCTATCACCACCGACTCTAGTCACCCGCCC**ATG**ATCGCTCTGCAGCCGCT
GGTCACCGACGACCCGACCCAGGTGCACCACCACCAGGAGGTGATCCTGGTGCAGACGCGCGAGGAGGTGGTGGG
CGGCGACGACTCGGACGGGCTGCGCGCCGAGGACGGCTTCGAGGATCAGATTCTCATCCCGGTGCCCGCGCCGGC
CGGCGGCGACGACGACTACATTGAACAAACGCTGGTCACCGTGGCGGCGGCCGGCAAGAGCGGCGGCGGCGGCTC
GTCGTCGTCGGGAGGCGGCCGCGTCAAGAAGGGCGGCGGCAAGAAGAGCGGCAAGAAGAGTTACCTCAGCGGCGG
GGCCGGCGCGGCGGGCGGCGGCGGCGCCGACCCGGGCAACAAGAAGTGGGAGCAGAAGCAGGTGCAGATCAAGAC
CCTGGAGGGCGAGTTCTCGGTCACCATGTGGTCCTCAGATGAAAAAAAAGATATTGACCATGAGACAGTGGTTGA
AGAACAGATCATTGGAGAGAACTCACCTCCTGATTATTCAGAATATATGACAGGAAAGAAACTTCCTCCTGGAGG
AATACCTGGCATTGACCTCTCAGATCCCAAACAACTGGCAGAATTTGCTAGAATGAAGCCAAGAAAAATTAAAGA
AGATGATGCTCCAAGAACAATAGCTTGCCCTCATAAAGGCTGCACAAAGATGTTCAGGGATAACTCGGCCATGAG
AAAACATCTGCACACCCACGGTCCCAGAGTCCACGTCTGTGCAGAATGTGGCAAAGCTTTTGTTGAGAGTTCAAA
ACTAAAACGACACCAACTGGTTCATACTGGAGAGAAGCCCTTTCAGTGCACGTTCGAAGGCTGTGGGAAACGCTT
TTCACTGGACTTCAATTTGCGCACACATGTGCGAATCCATACCGGAGACAGGCCCTATGTGTGCCCCTTCGATGG
TTGTAATAAGAAGTTTGCTCAGTCAACTAACCTGAAATCTCACATCTTAACACATGCTAAGGCCAAAAACAACCA
G**TGA**AAAGAAGAGAGAAGACCCTTCTCGACCACGGGAAGCATCTTCCAGAAGTGTGATTGGGAATAAATATGCCT
CTCCTTTGTATATTATTTCTAGGAAGAATTTTAAAAATGAATCCTACACACCTAAGGGACATGTTTTGATAAAGT
AGTAAAAATTAAAAAAAAAAAACTTTACTAAGATGACATTGCTAAGATGCTCTATCTTGCTCTGTAATCTCGTTT
CAAAAACACAGTGTTTTTGTAAAGTGTGGTCCCAACAGGAGGACAATTCATGAACTTCGCATCAAAAGACAATTC
TTTATACAACAGTGCTAAAAATGGGACTTCTTTTCACATTCTTATAAATATGAAGCTCACCTGTTGCTTACAATT
TTTTTAATTTTGTATTTTCCAAGTGTGCATATTGTACACTTTTTTGGGGATATGCTTAGTAATGCTACGTGTGAT
TTTTCTGGAGGTTGATAACTTTGCTTGCAGTAGATTTTCTTTAAAAGAATGGGCAGTTACATGCATACTTCAAAA
GTATTTTCCTGTAAAAAAAAAAAGTTATATAGGTTTTGTTTGCTATCTTAATTTTGGTTGTATTCTTTGATGTTA
ACACATTTTGTATAATTGTATCGTATAGCTGTATTGAATCATGTAGTATCAAATATTAGATGTGATTTAATAGTG
TTAATCAATTTAAACCCATTTTAGTCACTTTTTTTTTCCAAAAAAATACTGCCAGATGCTGATGTTCAGTGTAAT
TTCTTTGCCTGTTCAGTTACAGAAAGTGGTGCTCAGTTGTAGAATGTATTGTACCTTTTAACACCTGATGTGTAC
ATCCCATGTAACAGAAAGGGCAACAATAAAATAGCAATCCTAAAGCAAGAATATGGCAGAACAAGATCTGTAAGC
ACAGTCTTATTTTCTTTTGTTGTCCAGAATACTTATAATTCTTGAGCCTCCCAGAAATTGGAAGCTAAATAAAGC
AACTCAAGTTTCCTTTATTTTGCACTCAATTACAGTGATTATTGATGAAAGCGATGCATGGATATTTTAATACTT
CCTACATGTCCTGACTTCTGAAAGAGAGTAGGTAACAGGCATCCCGAGTTCAGGAACTACCTCAGAACACCCCAG
GCCAGGTTGGTCATAGGCTGTGATTTTAGCCCCCGGCAAGTGTGAGTGAAGCATCTGTACCACCGCGCAGGCTGA
GCGCCTGCGCAGGGTAAGGTGCCACCTGGCAGTGGGGCACACAGAGGGAAGACCAGGCCTGTCCATCAGCCGGCT
GCCTTCAGAGGCAGCTCCAGCAGGACCTTGGCTTGTCTGACAGGAAATGCTTGTGGTCGTTGGTTATTTGGTTTG
AGAGCCCTTGTTCCTCCATCTAGTGGAGTCCTTATTAAATGCTAGCAATGTGGCAATTGAGTGCCAGTAGCTTAA
TTTCATGTTTCTAAATGGACACTGGGTGCAAATCGGCAAGGTGATTAGATTATTAGAAAATTCTGCTCAATGAGT
ACCTCTCACATTGTAACCTCTTAAATGTACGATTATAATGTTGGATCTTAGGTCAAATAACAGACTTGAGAATAC
TTTATAAACTGCCATGATACAGCAAAATCTCATTTATTCAAAGTGCAAACATACTGTGTGTCTTTCTGTTTTGTG
TATGCTTGACTGCAAGATAAATGACAAACTAGCTAATATCCGAGATTTATTTACAAATGGCCAGGGACCCCATCA
GGTGAAACACATAGCCCATTGTCTTAGAGCTTCTCCATCGGTCCTGTACAGGAGGATTGGTGACCTACTAACAGT
GACCCTGTGGCTCTGTGGAATTTTGAAGTGCCTTTTGTGAATCATGAATGAAACATTTAACTTGAGACCCTTTAA
AAAATTCATCCAGAATCTGTTACCCCTTGGGTAGTTTGATGGAACTGAGTTAAGCAGAAGACCCCAGCTGTTTTC
TGGGTAAGCCAGGCTTTGCTGTATCTGGCAGTCAGGAGAGAGGTCAGCCCATGGTGGAGGTCTTCAGTGCCGAGG
GCTCGGATGAGAACGTGTAGTTCTTTGACTTGGACCTGGGCAGCGTCTTCTATGGATGCCTGCCTTGTGAGCACC
CACACCTTCCCTCCCCACTGTCGGGTTGAGTAGCCCCAGCGTGGCTGTGTTAGGAGTCCTTTGCCCAACATTGTG

FIGURE 4451B

CTGCACTGGAGCCTGGCCCTGGCACTGTCCTCAGGACCCTGCCCAAGGGCCCACCGCAGAGCACACCTATGCTAT
GGGGAGCCCTGCTGGCAGCCCCGAGAGCCATGCCATGGCCTGCAGGAGCCAGGCTCCTGTGTGGATGAAGTCCCT
CTTCCTCTGTGCCTTGATCCCTTGGGGGTGCCTTTGGTCATCTCTTCTGTCCTTTCCTGTCTCTGAAATAGTCAT
CACTCCCCTTGACTCTCTCTGTTCACGTCTTCTCAGTCTGCAGAGTTAACTTCTGTAAGGAGTTTAATCTGGGGT
TCCAAGAAAACAAGTTCCTTGTTAACATAGCACTGACTTTGCAACAATAGAAAACTAACAAATGAGCAACAATAT
AAAGAGTAGAGGTAGTTCTCATTGGGTGTAACTTCAACCCATTCTGCTTGTGGTTAGAATTTATAATTTTGCTAA
CGATGTAATTTACTAAGGTTTGAAATGGTATTCTAACAGTGAGTCCATTGTCTTGAGGATTAATCTGATTTATAA
GTAATACTGATAGACATATTTTCGTACATCTGAGCAGAAATAAATGCATGTTTCTAGCATATGTAATATAAAAAC
TCCAGAGGATAAGTTTACACTTAACAAGATGTTGTTTTCTATTTTTGAATTTCTTATTATTTCCCCCTTTTTGGT
AGTGGAGTTGAGAGGGGGAGCATACTATTTGTATAAAGAACTGTCACCCCAGAGTGACATTTATTTTCCAAGATG
ACCCTGAACTCATGCTGTTGGTTTCATATGGTGTTTGTGTGCTTTGCCTAGATTCAAGGCCTGAGGATTTGAGGA
AAATCGGGATTTTTTTTTTCCTATTTGGTTTTCATGTAAAAGTTCTAAATGTCACTTATTTTGCTAAATAAGACC
CTTTCACAGGATAGTGTGCGCAATACCTGTCCGTGTTTCCAAGCAGAGTTCAAGTTCATGTCTTCACAAGTAGAT
GAGAGTCACTTCCAGTCGGGGGAAGCCCGCCTGAGCAGTGTTTTGAGAGTGCGTACATTGGAGGACTGCCCCACG
TCCGTTTGCACTCTGCCTTGCAAAACTTACTGTGGAGACGTGCCCCAGACTGGTCTCAGACCAGAGTTTGTGGCA
CAGGAAAACCTGGCCCCCTAAAAAGAAGTTTTGGAATTGGAAGCCTGATAATTTCGGGAGGCTGAGGCAGGAGAA
C

FIGURE 4452

MIALQPLVTDDPTQVHHHQEVILVQTREEVVGGDDSDGLRAEDGFEDQILIPVPAPAGGDDDYIEQTLVTVAAAG
KSGGGGSSSSGGGRVKKGGGKKSGKKSYLSGGAGAAGGGGADPGNKKWEQKQVQIKTLEGEFSVTMWSSDEKKDI
DHETVVEEQIIGENSPPDYSEYMTGKKLPPGGIPGIDLSDPKQLAEFARMKPRKIKEDDAPRTIACPHKGCTKMF
RDNSAMRKHLHTHGPRVHVCAECGKAFVESSKLKRHQLVHTGEKPFQCTFEGCGKRFSLDFNLRTHVRIHTGDRP
YVCPFDGCNKKFAQSTNLKSHILTHAKAKNNQ

FIGURE 4453

GGCACGAGGCGTTGGGAACGGTTGTAGGACGTGGCTCTTTATTCGTGAGTTTTCCATTTACCTCCGCTGAACCTA
GAGCTTCAGACGCCCT**ATG**GCGTCCGCCTCGACCCAACCGGCGGCCTTGAGCGCTGAGCAAGCAAAGGTGGTCCT
CGCGGAGGTGATCCAGGCGTTCTCCGCCCCGGAGAATGCAGTGCGCATGGACGAGGCTCGGGATAACGCCTGCAA
CGACATGGGTAAGATGCTGCAATTCGTGCTGCCCGTGGCCACGCAGATCCAGCAGGAGGTTATCAAAGCCTATGG
CTTCAGCTGCGACGGGGAAGGTGTCCTTAAGTTTGCTCGCTTGGTCAAGTCCTACGAAGCCCAGGATCCTGAGAT
CGCCAGCCTGTCAGGCAAGCTGAAGGCGCTGTTTCTGCCGCCCATGACCCTGCCACCCCATGGGCCTGCTGCTGG
TGGCAGCGTGGCCGCCTCC**TGA**GAGTTGGCCCTCCCTTGTGCCACTGCCAGGGGAGGAAAGGCCTTGATGTTCCA
GACAATAATAAATGCGCCTGTGACTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4454

MASASTQPAALSAEQAKVVLAEVIQAFSAPENAVRMDEARDNACNDMGKMLQFVLPVATQIQQEVIKAYGFSCDG
EGVLKFARLVKSYEAQDPEIASLSGKLKALFLPPMTLPPHGPAAGGSVAAS

FIGURE 4455

ATTGAANTTAGGTGACCCNATNGAAGNGCTATNACGTNGCATGCACNGCGTACGTAAGCTCGGAATTCGGCTCGA
GAAAAAAAAAAGTGCCAGCGTATGAGGTAATTAGATTGGTTCTCTCCAGAGGTAACCTGCCAAGAAGAGATGCTA
TAGATGTTACTCCTATACTGTAAAACATTGTGAAATCAGATTACTTTAAAATGATGTATTACAAAGTTATGCAAA
AAAGCAGTTGTGACTATGGAAGCCCAAGGCTTATATCCCAGCTCTGTCTTACACTAAATATGGGTACAGTGTTTC
CACTCTGTCCATAAAATGGGAGCTAATATTCTCCAACCTGTGTGCCTGACATGATGGTTAAAGGGATTAAACAAA
ACAATAGTTTGTAATTTATTCTGTCAGAGCAAACTGCTGGTAAATAAAAGGGACTAAGTTGACGAAAAATAAATT
TTAAAAAACCTAATAAAACAAGTTTGTAATTTATAATTGTATACAAATAAAAGATGTTACAAAAATTGCGCACTT
ATATGTATGTACCATGACATAACTAATTCGTTGAACAAGTTGTGAGACAATCCTTTCTGAGAAAAGGTAGACCTG
TTACATCGTCTGTGGGTTAGGGTCATGTCAGCACGTACCAGGTACATTCTAGCTTTTGTAGAGAAAGTAAAATCT
AGTGTTGAGTATGTAGGCACTGAGCCAGGTGGCCTGCTTAACATAAAAGGACTGATTTCAGGGTGGCTGTGGGAG
CCTTTCTAATGCTCTAATTCTCTAGCCCCTTGCCTGATCCAGCTGATTCCAAGAGCCAAGATTTTAGTCTTTCTT
GGTTGGCTTTTTTAAATGCTTTGGGCTTTCCTTTAATGTATCTTCAAAATCATTC

FIGURE 4456

LXLGDPXEXLXRXMHXVRKLGIRLEKKKSASV

FIGURE 4457

GGCGCTCCGCCTGCTGCGCGTCTACGCGGTCCCCGCGGGCCTTCCGGGCCCACTGCGCCGCGCGGACCGCCTCGG
GCTCGGACGGCCGGTGTCCCCGGCGCGCCGCTCGCCCGGATCGGCCGCGGCTTCGGCGCCTGGGGCTCGGGGCTC
CGGGGAGGCCGTCGCCCGCGATGCTGCTCTCCAAGTTCGGCTCCCTGGCGCACCTCTGCGGGCCCGGCGGCGTGG
ACCACCTCCCGGTGAAGATCCTGCAGCCAGCCAAGGCGGACAAGGAGAGCTTCGAGAAGGCGTACCAGGTGGGCG
CCGTGCTGGGTAGCGGCGGCTTCGGCACGGTCTACGCGGGTAGCCGCATCGCCGACGGGCTCCCGGTGGCTGTGA
AGCACGTGGTGAAGGAGCGGGTGACCGAGTGGGGCAGCCTGGGCGGCGCGACCGTGCCCCTGGAGGTGGTGCTGC
TGCGCAAGGTGGGCGCGGCGGGCGGCGCGCGCGGCGTCATCCGCCTGCTGGACTGGTTCGAGCGGCCCGACGGCT
TCCTGCTGGTGCTGGAGCGGCCCGAGCCGGCGCAGGACCTCTTCGACTTTATCACGGAGCGCGGCGCCCTGGACG
AGCCGCTGGCGCGCCGCTTCTTCGCGCAGGTGCTGGCCGCCGTGCGCCACTGCCACAGCTGCGGGGTCGTGCACC
GCGACATTAAGGACGAAAATCTGCTTGTGGACCTGCGCTCCGGAGAGCTCAAGCTCATCGACTTCGGTTCGGGTG
CGCTGCTCAAGGACACGGTCTACACCGACTTCGACGGCACCCGAGTGTACAGCCCCCCGGAGTGGATCCGCTACC
ACCGCTACCACGGGCGCTCGGCCACCGTGTGGTCGCTGGGCGTGCTTCTCTACGATATGGTGTGTGGGGACATCC
CCTTCGAGCAGGACGAGGAGATCCTCCGAGGCCGCCTGCTCTTCCGGAGGAGGGTCTCTCCAGAGTGCCAGCAGC
TGATCCGGTGGTGCCTGTCCCTGCGGCCCTCAGAGCGGCCGTCGCTGGATCAGATTGCGGCCCATCCCTGGATGC
TGGGGGCTGACGGGGGCGCCCCGGAGAGCTGTGACCTGCGGCTGTGCACCCTCGACCCTGATGACGTGGCCAGCA
CCACGTCCAGCAGCGAGAGCTTGTGAGGAGCTGCACCTGACTGGGAGCTAGGGGACCACCTGCCTTGGCCAGACC
TGGGACGCCCCCAGACCCTGACTTTTTCCTGCGTGGGCCGTCTCCTCCTGCGGAAGCAGTGACCTCTGACCCCTG
GTGACCTTCGCTTTGAGTGCCTTTTGAACGCTGGTCCCGCGGGACTTGGTTTTCTCAAGCTCTGTCTGTCCAAAG
ACGCTCCGGTCGAGGTCCCGCCTGCCCTGGGTGGATACTTGAACCCCAGACGCCCCTCTGTGCTGCTGTGTCCGG
AGGCGGCCTTCCCATCTGCCTGCCCACCCGGAGCTCTTTCCGCCGGCGCAGGGTCCCAAGCCCACCTCCCGCCCT
CAGTCCTGCGGTGTGCGTCTGGGCACGTCCTGCACACACAATGCAAGTCCTGGCYTCCGCGCCCGCCCGCCCACG
CGAGCCGTACCCGCCGCCAACTCTGTTATTTATGGTGTGACCCCCTGGAGGTGCCCTCGGCCCACCGGGGCTATT
TATTGTTTAATTTATTTGTTGAGGTTATTTCCTCTGAGCAGTCTGCCTCTCCCAAGCCCCAGGGGACAGTGGGGA
GGCAGGGGAGGGGGTGGCTGTGGTCCAGGGACCCCAGGCCCTGATTCCTGTGCCTGGCGTCTGTCCTGGCCCCGC
CTGTCAGAAGATGAACATGTATAGTGGCTAACTTAAGGGGAGTGGGTGACCCTGACACTTCCAGGCACTGTGCCC
AGGGTTTGGGTTTTAAATTATTGACTTTGTACAGTCTGCTTGTGGGCTCTGAAAGCTGGGGTGGGGCCAGAGCCT
GAGCGTTTAATTTATTCAGTACCTGTGTTTGTGTGAATGCGGTGTGTGCAGGCATCGCAGATGGGGGTTCTTTCA
GTTCAAAAGTGAGATGTCTGGAGATCATATTTTTTTATACAGGTATTTCAATTAAAATGTTTTTGTACATAGAAA
AAAAAAAAAAAAAAAAAAAAGGGCGG

FIGURE 4458

RSACCASTRSPRAFRAHCAARTASGSDGRCPRRAARPDRPRLRRLGLGAPGRPSPAMLLSKFGSLAHLCGPGGVD
HLPVKILQPAKADKESFEKAYQVGAVLGSGGFGTVYAGSRIADGLPVAVKHVVKERVTEWGSLGGATVPLEVVLL
RKVGAAGGARGVIRLLDWFERPDGFLLVLERPEPAQDLFDFITERGALDEPLARRFFAQVLAAVRHCHSCGVVHR
DIKDENLLVDLRSGELKLIDFGSGALLKDTVYTDFDGTRVYSPPEWIRYHRYHGRSATVWSLGVLLYDMVCGDIP
FEQDEEILRGRLLFRRRVSPECQQLIRWCLSLRPSERPSLDQIAAHPWMLGADGGAPESCDLRLCTLDPDDVAST
TSSSESL

FIGURE 4459

GGCACGAGGGGCCAACCCAGGATCTCCCAGGACCCTCCGCTCTGCGCGACAAGGGGCCCGCGCTTGCCAAGGCCG
ACGGGCAGGAGTGAACGTGGCCTCCGTGGGTCTGCAGCCCCGATAGGCCAATTGTACAGAATTTAAACCGTCTCT
CAGATGTGTACAGTAGAACTCAAGAAGACAGACTACCAAGGGTCATCTGAAGTCGTGATTGGGTCACTAATAACA
CCAGGACAAAGTTAAGGGATCACTACTCAAGCATAAGCCCCAGTTTTCATAAGACTGCTGTGAAGATGTTTGATA
TAAAGGCTTGGGCTGAGTATGTTGTGGAATGGGCTGCAAAGGACCCCTATGGCTTCCTTACAACCGTTATTTTGG
CCCTTACTCCACTGTTCCTAGCAAGTGCTGTACTGTCTTGGAAATTGGCCAAGATGATTGAGGCCAGGGAGAAGG
AGCAAAAGAAGAAGCAAAAACGCCAAGAAAACATTGCAAAAGCTAAACGACTAAAAAAGGATTGAAGGACTGAAC
AGGCTTTGCAACCAGAGGAAAATCATTTGGAAAATTACACAGCTTTGGAAGAATCCACTAAAGTTTCTTCTTTGG
ATTTCTTGACAGTATGATTTAGTAAATGAAATTTGACCAAATGGAAGAATCATGTTAGTTCTGACCTCAATACTA
TAGTAACTTTTAGGCGTGGGTGTAGAAGTTTATAGGTTTCTATTGACAGTTATTGTAAATTAGCATTTACTGTGG
TACAAATTCTTTATAACTGACTTAGTCATTTGCCGCTTAGCAGTTTATATACTGAAATGAAAACATCTTGTGGGG
AAAAGTGACTTTAGATTATGAACTCAATTCAAATGAACTCTATTTAAAATGGGGTCCTATTTTGGACAAAGGAAA
TTAAGAATGTAAAAGTCAGAACAGTCTTGAGGTAAAAAGTGTGCTTTGGCTTAAAAGGGATACAGTATATTAATT
ACATCTTTTATTATTGTTTATTTCTTAGAATCATTTCTGGCTTTCTCAAAACAAAATAATATTAATGAGTACTTC
TATTTGCTGCATTTTTCTTATTACAGCCTTTGAGACAGCTGGTAATTATAAGTCATTTTCCATTTTTTAAAACAT
AATTTTATAAAGAATTCTCTTATCTCGACTATGTAGAATACCACCTACTGGACAGAACAATTTTTGTACTCACAA
ACACTGCCATTTTCTTAGAGATGGCTTGAGAGGAGTAACACTATGGTTTAAAGCTTGCAGTAAAAATGCCAAACA
CTGTAGTACCTTGGAACCCAGTTTATTCTTGTGCTAAGCAGAACTGTAAAATAGTTAAAATGTCTTATCAAGTAA
TTCGCCGATTACAAAGACACCATTTGTTTTTTATTTCATTCTTTGTTTTAACTCATGTGGTAGTGATATTTAATA
CTTTCTGATCAAACAGGTTCAAAGTAAAACGTTAAATTTCACATTTCTTTTAAAGAAAAAAAAAAAAAAAAAA

FIGURE 4460

GTRGQPRISQDPPLCATRGPRLPRPTGRSERGLRGSAAPIGQLYRI

FIGURE 4461

GGCACGAGGGCAGCGAGTGGCCTTCCCGGTTGGCGCGCGCCCGGGGCGGCGGCGCTGGAGGAGCTCGAGACGGAG
CCTAGTTATGTCTGGGAGGCGAACGCGGTCCGGAGGAGCCGCTCAGCGCTCCGGGCCAAGGGCCCCATCTCCTAC
TAAGCCTCTGCGGAGGTCCCAGCGGAAATCAGGCTCTGAACTCCCGAGCATCCTCCCTGAAATCTGGCCGAAGAC
ACCCAGTGCGGCTGCAGTCAGAAAGCCCATCGTCTTAAAGAGGATCGTGGCCCATGCTGTAGAGGTCCCAGCTGT
CCAATCACCTCGCAGGAGCCCTAGGATTTCCTTTTTCTTGGAGAAAGAAAACGAGCCCCCTGGCAGGGAGCTTAC
TAAGGAGGACCTTTTCAAGACACACAGCGTCCCTGCCACCCCCACCAGCACTCCTGTGCCGAACCCTGAGGCCGA
GTCCAGCTCCAAGGAAGGAGAGCTGGACGCCAGAGACTTGGAAATGTCTAAGAAAGTCAGGCGTTCCTACAGCCG
GCTGGAGACCCTGGGCTCTGCCTCTACCTCCACCCCAGGCCGCCGGTCCTGCTTTGGCTTCGAGGGGCTGCTGGG
GGCAGAAGACTTGTCCGGAGTCTCGCCAGTGGTGTGCTCCAAACTCACCGAGGTCCCCAGGGTTTGTGCAAAGCC
CTGGGCCCCAGACATGACTCTCCCTGGAATCTCCCCACCACCCGAGAAACAGAAACGTAAGAAGAAGAAAATGCC
AGAGATCTTGAAAACGGAGCTGGATGAGTGGGCTGCGGCCATGAATGCCGAGTTTGAAGCTGCTGAGCAGTTTGA
TCTCCTGGTTGAATGAGATGCAGTGGGGGGTGCACCTGGCCAGACTCTCCCTCCTGTCCTGTACATAGCCACCTC
CCTGTGGAGAGGACACTTAGGGTCCCCTCCCCTGGTCTTGTTACCTGTGTGTGTGCTGGTGCTGCGCATGAGGAC
TGTCTGCCTTTGAGGGCTTGGGCAGCAGCGGCAGCCATCTTGGTTTTAGGAAATGGGGCCGCCTGGCCCAGCCAC
TCACTGGTGTCCTGTCTCTTGTCGTCCTGTCCTTCCTATCTCCCCAAAGTACCATAGCCAGTTTCCAGATGGGCC
ACAGACTGGGGAGGAGAATCAGTGGCCCAGCCAGAAGTTAAAGGGCTGAGGGTTGAGGTGAGAGGCACCTCTGCT
CTTGTTGGGAGGGGTGGCTGCTTGGAAATAGGCCCAGGGGCTCTGCCAGCCTCGGCCTCTCCCTCCTGAGTTGCC
TTCTGTTGGTGGCTTTCTTCTTGAACCCACCTGTGTAAAGAGGTTTTCAGTTCCGTGGGTTTCCCCTTTGATTCT
GTAAATAGTCCCAGAGAGAATTCGTGGGCTGAGGGCAATTCTGTCTTGGAGGAAGAAGCTGGACATTCAGCCTGT
GGAGTCTGAGTTTTGAAGGATGTAGGGAGCCTTAGTTGGGTCTCAGACCATAAGTGTGTACTACACAGAAGCTGT
GTTTTCTAGTTCTGGTCTGCTGTTGAGATGTTTGGTAAATGCCAGGTTGATAGGGCGCTGGCTGCTTGGAGCAAA
GGGTGCATTTCAGGGTGTGGCCACCAGGTGCTGTGAGTTTCTGTGGCTCATGGCCTCTGGGCTGGTCCCTTGCAC
AGGGCCCACGCTGGAGTCTTACCACTCTGCTGCAGGGGTGGAAGGTGGCCCCTCTTGTCACCCATACCCATTTCT
TACAAAATAAGTTACACCGAGTCTACTTGGCCCTAGAAGAGAAAGTTGAAGAGTCCCAGACCTACTAGCATTTTG
CAACTATGCTTGTAAAGTCCTCGGAAAGTTTCCTCGCGTACCAGACAGCGGCGGGGGCTGATAGCAATTTTAGTT
TTTGGCCTCCCTATCCTCTCACATGAGAACACTGCCTGGATGCATCTCATGATCTCTGGAGAATTTCCCCATCTT
TCTCTTCTTTCCATCGTGTGGATTCAATAGTTTGGATTTGAAGGCTGCCCTGCCCCCGACTCTCCTGCCGCACCC
CTGGCCATTGTACCTTTTGATGTTTAGAAGTTCGTGGAAGTAGACGCTGAGGTGTGCAGAGGAGCTGGTGGATAA
CAGAGAATGCCAGGGAAGATGAGTGCTGGGTCAGGGTACTTGGATGAAACGGTGCAGGCCAGGCGGGCCCTAATA
AAACCCTCTGCCAGGTCTGGGAGTCCCAGGCCATCTGCTCAACGCTCTGTGGTTTGTCAGACCTGCAAGCAAGCC
CCCTGCTGGGGAAGCCTAGGTGTCCTTGAGCTGAACCGCACTGAAGAACTCTTGTCCTCACTGGCTGATGCAGCA
GAACTCTTGGGAAATGTCTTAGTCCTGCAGAATCAGGAGTCACCAGATGATGCAGAGTTGAGATCATCATTGCAA
AGTTCTCTGTTCCTGAGGAACTAAATTTAAGGAAAAAATGGGATTTTGTTTTAGAGTTGGAAAAAAAGCCTGATT
AAAGAGTTTCTGCCTGTTAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4462

MSGRRTRSGGAAQRSGPRAPSPTKPLRRSQRKSGSELPSILPEIWPKTPSAAAVRKPIVLKRIVAHAVEVPAVQS
PRRSPRISFFLEKENEPPGRELTKEDLFKTHSVPATPTSTPVPNPEAESSSKEGELDARDLEMSKKVRRSYSRLE
TLGSASTSTPGRRSCFGFEGLLGAEDLSGVSPVVCSKLTEVPRVCAKPWAPDMTLPGISPPPEKQKRKKKKMPEI
LKTELDEWAAAMNAEFEAAEQFDLLVE

FIGURE 4463

GGGGGGGGGTGGGTAATAAATGTATATAACATTAAATAATGTAACGTAGGTGTAGATTCCCAAATGCATTTGGAT
GTACAGATCGACTACAGAGTACTTTTTTCTTATGATGATTGGTGTAGAAATGTGTGATTTGGGTGGGCTTTTACA
TCTTGCCTACCATTGCATGAAACATTGGGGTTTCTTCAAAATGTGTGTGTCATACTTCTTTTGGGAGGGGGGTTG
TTTTCTTCTGTTTATTTTCTGAGACTCCTACAGGAGCCAAATTTGTAATTTAGAGACACTTAATTTTGTTAATCC
TGTCTGGGACACTTAAGTAACATCTAAAGCATTATTGCTTTAGAATGTTCAAATAAAATTTCCTGACCAAATTGT
TTTGTGGAAATAGATGTGTTTGCAATTTGAAGATATCTTTCTGTCCAGAAGGCAAAATTACCGAATGCCATTTTT
AAAAGTATGCTATAAACTATGCTACTCTCATACAGGGGACCCATATTTTAAAATCTCCAGAGTTGCTTACATCTA
GATTATCCAGCACAATCATAAAGTGAATGACAAACCCTTTGAATGAAATTGTGGCACAAAATCTGTTCAGGTTGG
TGTACCGTGTAAAGTGGGGATGGGGTAAAAGTGGTTAACGTACTGTTGGATCAACAAATAAAGGTTACAGTTTTG
TAAGAGAAGTGATTTGAATACATTTTTCTGGAACTATTCATAATATGAAGTTTTCCTAGAACCACTGAGTTTCTA
GTTTAATAGTTTGCTATGCAAATGACCACCTAAAACAATACTTTATATTGTTATTTTTAGAAAGACTCAAAACAC
CTGTATTTAAACCTTAATATGAAAATCATGCAATTAATAGTTACACAAGATGTTTTCATTACAAAATATGTACCT
ATATATTGATGGACTCTACATCCTATATTGTGACATGTAAGTCCTTTAAAAGGTGAAAAGTATGATTTCTTACCA
CTTAAGTATGATTGATATGATCCAACAAATTTGATCAGAAGCTGTAGGTAAATCCTCTTCTGAAGCCAAAATGGT
ATATTAAATATAATTTATTGGTACTTCCATTTTCTCTTCCTTCTTACTTGCCTTTAAGATCTTATAAAAAAGAAA
CTAAAAGTTAATATTTAGTTGCCTATATTATGTAACCTTTTAACTATATATAAAGTACTTTTTTGGTTTCTTTCT
CACCACTTTTATTCAAAAGTACTTTTAACATACCAATACATAGTCTGTCTGATGGGAGTATAAATTGGACAGTAA
GGTTTTGTCTTAATAAAATGAAATTTGTTTCTCATGATATGAATCTTGCAGGTAAGATGTAGGGTTTATTGAAAA
TGTGTGGGTTAAATGCTTTCAGGTACACCAATTCTTTCTACTAAATTGAGCTCTATTTGAAGTTCTTTGGAATCT
GTGGTGAAAAATAATTTTCTGATTTCCAAATACATTAAGAGCATTAAATGAATATTAATCACCTTTAAAGTCTTT
TAGAAAAGGACTTGTATTGGTTTTTGGCTGCATAGAGGGGTTGAATAAGTGTANNNNNNNNNNNNNNNNNNNNN
NNNNNTCTTAAAGAAGATGTAATTCACAAATAGTTTAGCTCCCTAGCGCTCAGTTGTAGAATAGAAAATAGAACA
TTATTCAAGTTAATTGAAAGGTGAGGTTTTTATACCCCCACTAATGCTGTGTATCTGTCTTTCGTTTGTTAACAT
TATTTGCTTAATTTCTTTCAACTCACACTTTGGATAATACTATCAAAAACTAAGGCTAAACATTCCTTGTGTATC
TTTAAGCATGCTTCTCCTGAAATTTAACTACATTAGTAGTTGACATTTGTATACATATATCCTAATACAAGAGTA
GGATAAGGTGGAAATGTAATGGCCTGAGGGATGGTGAAGCATTCTTTTAGTATTTTTCATCATGTTGGGCTCCTA
GATTGTACTGGGGTTGCCCATAAATCAAACCCCATACTCTAAGAATTCATTATATTATGGTGATATCCGAACCTA
GTGAATGGTATGCTTGGGTGTTTTCCATTGAGAGTGGATGGACCTCTTTATAAAGTTGGTTGCTGCAAAATCCAG
TTCTTCCAAAAGCCACTTTATTTAGGGTTTATTCACAAGTCATATCCATTTTGGTACAGTGTTTGTTTCCTAATA
TTTATTAACCACCTTATACCAAATGTCTTGCAAAGAAATGTTATTAAAACCTTGAATTTTTACAAATGTAAAAAA
CAAAAAGTGTATTAATGTATTTGTTCAGGAAAAGCTACATACCGAAGGGCTTTTGTATATGAATTCTGTGGTGGG
GAGACCCATTTGTAATCTATATGGCAGTTCCATCTGGGTTTTAAGTTTAGATTTCACCGTGTCTTAGTGCTTCAT
TCTATTGGTTTATTGGAACATGTAATAAATAGGAGTAGTGATGTATTAAAACACAAGTATTCATTAATGTTTTAT
ATCTTCACTAAAATTCTATAGTTATGAAACTATTTTATCAATCAAGGTGTTATATTTCAGTCAGAAGTGAAAATT
TATGAAGAGTATTTGGAAGTGTGTACAGAAATAAACTAGACTTACAGGTAGGCTAGATCAGAACGTTAACATATG
AACCTGCAGAAATCTGGTAAGACTTAAATTCAGTGTGAGGAATAACTCTAGTTCTCTCCTATGAGCATTTCCTAA
AAGCCATCTGATTTGGCATTCTTACTGGAGCTGCAGACAGAAATCTACAAAGACAAAAGTAAACAAAATTAAGTT
ATTATTCCACTGTTAGGAATGGAAATAAACTTGTGAAGTCTGTTTATTTTGAAGTATTGGTGAACTAGGCTTGCT
AATTGATAACTGCAGCAGTTTGTGTTTACTCCAGTTCATCAGCTTAGGTCATTTGAAAGATATAAGAGCTTAAGG
CAAGAAAGAAATAACATGGAATTCTATTTGAAGGACAACAGAACATTCTTGGAAAAGCAGCTCCAGTTGGTTTTT
CAACTGTCAAACTTGAATGTGTAAGTCCCCACAGAGCATGGACAGTCGGTGCAGAGTTCCAAGGAAACAATTATT
GCCTGATGACCACTTCCATTTTGTATACACTCTTTGGTTCGTATAGGCCATATTCCAACTGGCTTTTTAGTAATA
GAAATCCAGTATATAATGTATCAAATACAATTGAGGTTCTAACCTAGTGTGTTAATTTATCTGAATTTGGATTTT
TAAAAAGTAATAAAAAGTTAAATGTAAAACTAGTTCTAGATCGCG

GGGWVINVYNIK

4971/8433
FIGURE 4464

FIGURE 4465

CCTGAGAGGACGCCTCTGGAGCCGCGACTGCCCGGGGTTGTGCCGGCCGCCGCTGCCGCCCAGGCCGCCTCAGCT
CTCCTCTGCGCCGGCCCGCTCACTCCGCCCGGCCCCAGCCCTAGCGCTGGCCGCGACCCCGGCGCCTTTGAAACT
TCTGCTGGTGTGAGTGCCCTCAGGGGTTCCCCAGGAATATCGATACAACACCAACAGGAGATC**ATG**AATCAGACA
GATAAAAATCAACAAGAAATCCCATCATACCTTAATGATGAACCACCAGAAGGTTCAATGAAAGATCACCCACAG
CAGCAGCCAGGCATGTTGTCCCGTGTGACTGGGGGTATCTTCAGTGTTACAAAGGGAGCTGTTGGTGCCACCATT
GGTGGTGTGGCTTGGATTGGTGGAAAGAGTCTGGAAGTGACCAAAACAGCTGTTACAACTGTGCCTTCCATGGGA
ATAGGGCTGGTGAAAGGGGGTGTCTCTGCTGTGGCTGGAGGTGTTACAGCTGTTGGGTCTGCTGTTGTAAACAAA
GTGCCCTTAACAGGAAAGAAGAAAGACAAATCTGAC**TGA**AATATAGAGATACACTTGCGCTCCACAGCACTGTAA
TGCCAGTGGCATTGAATTGCTAAATTATGGACTACAACCAAGTCAACTGTTTTGGACGTTTATCTTCTAAACTGC
TGTGTTGAAAGTATTGATGACTGGCTTTCATCTAAAAAGAAGAGACCAATACGAGCACAGTATATGAAGGTTTCT
CATACTTAAGTTCCAGGTTTTTATCTGGTAAAATGTTACACTTACTCGGTTGTAACTGAAGATATGGTATGTTTG
AATATTTACTATAAGTCTTTCAGTTTGACTAAAAATGTGAAAGTTGAATTTAGTAGATGATCTTCACAGTTCCAT
ATGTATAATGTGCCAGGTAACTCACCTGCCCCTTAAGAAGGGAACCTTGAATTACATAAGCCGTACCTTTGATGT
GCCTAATAGTTTCAGATGTCTTAGTTTTTTATAACCATAGTTGATTAGGCCAAGAGGCATTCATTTCTTATTTAA
GCTGGCAAAATTAGCAGGAATTAGAGAAGTTTAAAAAGATAAATGGTTTTATGATAATGTTAACCATCTTTTGTT
AGTAAATATGCGTTCTATTATTTTAATCATTGATGCCTTACAAAAGAAAACATCTTTTCTAATACCCTGAATATG
TGCTGTTCTTAGAATCATCTATGGATTCTTTTAAAGGTTGTTTGTGAAATTAGTTTTCCCTTTTTAGAATCTCAG
GAGTAGTGGGGTAAAGACATTTCCTGCTGTCAGTGGATAAGACAGAGCTTGTTAACTGTTTTGGCAGTAGTTAAA
ATCAAATTGTACACTTCTCAGCCTGGGTTCATGCTTCATCATTAATACACCTCACAGTGCCTAAGGAACATTTAC
TTACTGGTCAGAAGGTATTTTGGAAGAGTTTCATATTAAGGAGGAACAAATAATAATTTTAAGTTCTTAAAAATT
ACCTAAAACACCCCAAATATAAAAAGAAGCCTTCACACCTATTCTGTCTTTAGGATGTCTTAAATTATTAGCAGT
ACTCCTTTTTTAAAAACACTGTAAAAGTAACCACAAATATGTGAGGACTTACTATTTTAAATGGAATGGAATGAG
CTCCATAGATTAGTTTTGAATATAAAGTATATAAAAGTGCATCAGTGGTTTATATAGGCTTTAAAAACATGTTAT
CTTACAGTCCTTTAAAGCAGCCATAGAGTTTGTATCATTTTTCAAGCCAATTTCAGTCAGGGATTTGAATTGTTT
GATTATGGATGATAAATGTGTCATATCTTATTAATATGTCTCATGTCTCGTTCCTTCTTAATATGATTTAGCTGG
AATTCATTTTCTTTTCGTTTCATGTTTAATTTCATAAAACGTTTAACAATTGGCATATATACTTGGCATTCCTGT
CCACCAAGGATTGTAATCCAAGCCTGGGAAAATCTTAAATTTCTTTTTACTTAAATCTGGAAATTTGTCTCCATT
CTGCCACCTTTTTTTTTTTTTTTTTATAGTGGAGGGGAGGAAAGGGGGGTGATACCTTGCAGTAAGTAAGTCGAA
ATAGCATGCCTGAAAATTTGAAACAGACCATTCTAACACCCAAGGCTTGTTTATAAAATACTTGAGAATTACATT
AATGTGGAATCAACAGATGCAGAAGAATATAACATAACTTTTAAAAGCTTTCATAAATACCAGCAGCAATTGTAA
GCAAATCTACAAAGGTTCTTGAACCTTTCTATTATATACAAAACTGAAAAGTCATTAAGGAGTTCAACTAATCAG
GAATTAAATGGTCATTTATTTCATGCAGTATGATTTAAGGTATTTCTTGAGATTCTGGTCAAATGTCATAATCAG
CAAACGGGATTAAAAAAAAAACTCCAAAATCACTAAATAATTATCTAAATAATGGTATTGGAGAACTTGTTTCCT
GCTATTTGGAAGAGATTGTTGCTTCATTGCTAGTTTGTATTTCTAACTTCTACAGTTATAGACTCCACTGTGCTT
TGTGTCTGAATTTCTCAGTATAGACATTTTGTTTACTGTATGCTTGCATATTTATTTTCAACTTTGTTTGTCTTT
AAAATTGCTTGAGGAAAAATGGTTGTAATTAATTTCTGCTACAGAAAAGCCACCTGGTACGTTTTGTCTCATCAG
GATTGTTTTAAATTCTAAACTATAAGTTTGTTCAGAGGGGCTTTTGCAATGATAGCAGAAAACTGTACAAATGTA
CAGTTAGTTATAGAGGTTCTTGTTGAAATGAACTTACCATCTGATGATATGTATGTACAGCTGTGTACTTGAGTC
TTTTTTAGTTTACTTAGAAAGACTAGCAGTTTGACCTGTTAAACAGGACTAGTTCAAGTCAAGAAACTAAGGTTG
TTGTATACACCTGGAGGCATCTGTTATTCAGCTTATCCTTTGAGTGGGTATTTGGCACAATGAGGATAAACTTAT
GTGACCCACTTGAATGGCTGATCTAATAATGTTGACATTATGCATTCTGTACTTAGTGAAATGTCAGATGAAAAT
AACTGATGAATAATTTTTTTGTATTAAAGGGATGGGAAAAGAACACATGAATTTGTTAATAAAGCACTATGATCT
GCAAAAAAAAAAAAAAA

FIGURE 4466

MNQTDKNQQEIPSYLNDEPPEGSMKDHPQQQPGMLSRVTGGIFSVTKGAVGATIGGVAWIGGKSLEVTKTAVTTV
PSMGIGLVKGGVSAVAGGVTAVGSAVVNKVPLTGKKKDKSD

FIGURE 4467A

GACCGCGGCTGCAGGAACGGAGGCGGAAGGGGCCCTGCGGCGACGACGTCGTCGACGGGGGTGGCCGTGGGAGCT
GAGCACGGAGAAGACTCCCTCTCTCGGAAGCCGGATCCCGAGCCGGGCAGGATGGATCACCACCAGCCGGGGACT
GGGCGCTACCAGGTGCTTCTTAATGAAGAGGATAACTCAGAATCATCGGCTATAGAGCAGCCACCTACTTCAAAC
CCAGCACCGCAGATTGTGCAGGCTGTGTCTTCAGCACCAGCACTTGAAACTGACTCTTCCCCTCCACCATATAGT
AGTATTACTGTGGAAGTACCTACAACTTCAGATACAGAAGTTTACGGTGAGTTTTATCCCGTGCCACCTCCCTAT
AGCGTTGCTACCTCTCTTCCTACATACGATGAAGCTGAGAAGGCTAAAGCTGCTGCAATGGCAGCTGCAGCAGCA
GAAACATCTCAAAGAATTCAGGAGGAAGAGTGTCCACCAAGAGATGACTTCAGTGATGCAGACCAGCTCAGAGTG
GGGAATGATGGCATTTTCATGCTGGCATTTTTCATGGCATTTATTTTCAACTGGCTTGGATTTTGTTTATCCTTC
TGTATCACCAATACCATAGCTGGAAGGTATGGTGCTATCTGCGGATTTGGCCTTTCCTTGATCAAATGGATCCTT
ATTGTCAGGTTTTCTGATTATTTTACTGGATATTTCAATGGACAGTATTGGCTTTGGTGGATATTTCTTGTACTT
GGCCTGCTCCTTTTCTTCAGAGGATTTGTTAATTATCTAAAAGTCAGAAACATGTCTGAAAGTATGGCAGCTGCT
CATAGAACAAGGTATTTCTTCTTATTG**TAG**AGACTGCATCAACCCGACATTCCTTTCTTATACCAATGTGAAATT
TCCAGATCATCTGTAAACCTACAACTTTAATAGAAGACTACTAATAACAGAAGACAAATTAGTGAAGAAAAGACG
GAGTTTCGAAATTGAATGGCAGGGTGGTTTTTGCTTACAAGCCATTTCTGTTCATTCTTTAAGTATCTATATTTC
ATTTGTTTTGCACATATGCATATGTGCCCATTTAAGATATTTGCATATACTTGATAGAAACCATAAAGTTGTAGC
AGTTAAGTCCAGTCACATTTGGTTAATCAGTGTTTGATATAATTGAAAGAGTTGAGTGGATAAACAGTCTTCCAG
CTTGTAAATGCCATTGACTTCTGACCTGACATTTAGTATAATAAAAATGAAATTCTTAACCATGTCAAATGATTT
AGTTTCTGGCTCTTAGACTCATCTGGCAGTTCTACACATGAAACATCTTTTGTTATATAAGGTGTATTGAAACCT
GCAGTGCTGATTATTAGAAAGGATTTGTCGGATTTTTGAACATGATATTTACATTATTATTTAGGAAAACTCTTC
CTGTAAATAACCATGCATAACTTACTTTCTGCAATGTTTTCTTAGAAATTGTGTCCAGATAGCTTTCACTAATTT
TAAATTAAGTGAACTAAATATATATGTGTATATGTATACACATATATATACACACACACATATATATATTTAGAA
ACGTGAGTGTTAAAGATAGAATTTGTTTTAGGACAAATTTTAAGAAAATGTGGGAATACCAAATGTCCTTTATAA
GAAAAATAAATTTTGTTTTAAGGGACATACCAGTTTTAGGGATTTTCAGATGGGAAGCTGCATTTTTAGGATTGC
CCATCTTAAGAGATCTTGCAGGAAGAGATTGTATTAGATATTATATTTATTTCATTTAAGATAATTTTCAAAGTT
AATTTTCTAAATAAGATAATTCTCATTTGTGTTTGTCTTTTAAAAGGCCAATAAAATATCTTTCAGTATCATTGT
AATAATTTTTTAGAGTTTAATTTGTAAAGCTTAGCAAATAAAATCTTGTACTATGAATAGCTTCTTGCTTTATGA
CTTTAGGATTAACTTGTAAAAAACATATCCTGAACTGAGATATGCAAAATACTCATTTTCAAGTTATGGAAATGT
GTTTGTGGCATATAGGACTGTGGGGTCTGTGTGTGTAGTGAGAGTGTGTAGCCACTATTATAACTGGAATTTAAT
TTACATTCATAAACTACTATATTTCCCATCTTGCAAATCATTTTATGTCTCATCTGTTTTTCCTTTCGGTTATAT
CTTTGGTTTTGAATACCAACATTTAAAATGATGGTATTTTATCTTTTAAACTTAAAAATTATTTAATACAGCTAT
ATGGACCTTATAAAATTGATTTCTTATTTATTATTAGACATTACTACTAAAAGGTACATCTAACTATTCAGGGAC
ATTTTTCCATTTCCAAAAAATAAAATTTATTATGCTTTATAACCTCTTCTGTATTTTCTAATTTTTTCATTGTCT
TTGATAAATAAAACAGTTTTGTTTTGCTAATATAGCCTATTTTTTGTTTTGTCTCATTCAGTTTACTTTCCTGCG
TAGAATTTTTATTGTTATATTAAAATTTTTATTGTTGTATTAAAGTACCTGTGTTACACCCCTTGAAGTAAGACA
GTAGCATGGGGTAAAGAAAAAATATTTAGTTTAGTTGCCTAATTTGGAAGTTAATTAAAATTAAACTGTACTAAT
AACATATTCAAACTCATGCTGGATCTCTTTCATATTAATTTCTTATAGACCTGTACTTTATTCTTTCAATAATTT
TTAAATGAAATTAAGCTTTGCTACATGGTAATTAAATAATTACTAGGAAGCTTAGCTATCAAACATCGACTTACT
AAAATTTCATTTTAGCTTTTATGGTATATGTGCTTGTTTTCTGAATATGGATACATGTTACTTTTGATCCAGCAT
CAAAACTTCACTTTTTGTTTTGACTTTTCCCCCCAAATCTGTAAGGTTCAAGTATACATATTACTGAATCCTCTA
TAATTGGCATAATTCAATGGTAGCCTTAAATCTCATCATGTAAGCAGGGGAATCAGAATGTTATTTTCAAGAACT
TAATGTTCCCTTCAGATATATAAAATCCTGCATACTTCATTTCCTGTGAGCTTGAACAGCTGCTGTTGTGTTTTG
GGGATGCTTGATCATCTTTGCACTCTGCCTTAAAGATTGAAAAATCAAAACTCTTGTTAGGGTATCTAAACATTT
TTGAGTGTGAACTGGGGATTGGAAGTTAATACAAAAAAATTTCAAATTATTTCTATTGTAAATGAATAAGCTAGT
CATGGCTAGGATAATCCATTTTCATGTATTTATGCAATAAACTGAATTTTAAGGCAAAAACAACACTTTTCTATA
TAGTGTATGCAGGACAGATTTTAGAAACTTAGATTAAAATACAAATCCCATTACATTTGGTTAAAATGAATCTCT
GCTTAATGGAAAAAATACTAATCTTTAGCCTATTTTGAGTCTATAAGATATATTTCATTTTAGACATGCCTTCTA
AGTTGTTCACAGATTTTTACCTGCTAAAACAATATTATTTCCAGTAAAACCTCTCCTAACAGGAAAAGTGGAGTT
CAAAATATCCAATTGGAGAAAAATTCAGAGTTCCTTCATTAAATATAATTTTTTTCATCTAGTATGTACTATTTC

FIGURE 4467B

AAGAAGTGCAAAAAGTAATGATAGTGAATGTGATACCATACTTAACTAAGGTAATATATATCCTTAGTTTGCTCA
AAAGAGTCCTGGTTATTCCTGTTTTCTCAGCTTAATAGTGCCTCATCGTACTCTCAAAAGTGTTCTAATTTGGAG
GATAAGTTATATGATCATCCTGTGTATAATTGTAGACTGTACCAAGAAGCAACTACCTTAGCTCCACTGCCCTTT
GAGGGATGGAACTGGGGTAAGGGCAGGAGCCAGTTATTATTGCCACAGTGTTTTCTAATGAACCATTTGGCCTGT
AGAAGAGGAATAGTATTTTTTTTAATAGTTGTATTTGAATGATTCCAGCTTATCGTAAATACTAAACTGAATGGC
TTTTATATTTTTAACTGCTGTTAAATGTTATTTTAGCATTTATTAGTTGTTTATTATTTAATTCTTCAAATAGTC
ATATGAAAACATATATTTGATAAAGGTCAATTGTTAGATGATAATGTGCCATTCATTATCATAGGAATGTCCTTG
CCCATATATAAAACATGCTGGCATGTATTTTACTTGTTAATAAAGTTGTATAGATGTGGAAGTGTGAACCTGTGA
TGCATCCTTTTCAAAATCAGTTTAAGATTCGCATATTATCATGACTGTGACCTCACTAAACTGTTTATGTGACAA
ACCTTTCAAGATTGGAGATGAAAACAACACTTGTGAAATTAGGTTGGGGTTGCAACATCTTTTAACTTCTCAGTT
ATTTGTATGTCAGGAAACAGATTGTGGTTTAATTTTAATAAACAAAATATCATCTTTTTGAAAAT

FIGURE 4468

DRGCRNGGGRGPAATTSSTGVAVGAEHGEDSLSRKPDPEPGRMDHHQPGTGRYQVLLNEEDNSESSAIEQPPTSN
PAPQIVQAVSSAPALETDSSPPPYSSITVEVPTTSDTEVYGEFYPVPPPYSVATSLPTYDEAEKAKAAAMAAAAA
ETSQRIQEEECPPRDDFSDADQLRVGNDGIFMLAFFMAFIFNWLGFCLSFCITNTIAGRYGAICGFGLSLIKWIL
IVRFSDYFTGYFNGQYWLWWIFLVLGLLLFFRGFVNYLKVRNMSESMAAAHRTRYFFLL

FIGURE 4469A

GAGGAGGCCGCAGCAGTCGCCGCGCGAACATGGCGGCCGAAATCCACTCCAGGCCGCAGAGCAGCCGCCCGGTGC
TGCTGAGCAAGATCGAGGGGCACCAGGACGCCGTCACGGCCGCGCTGCTCATCCCCAAGGAGGACGGCGTGATCA
CGGCCAGCGAGGACAGAACCATCCGGGTATGGCTGAAAAGAGACAGTGGTCAATACTGGCCCAGCATTTACCACA
CAATGGCCTCTCCTTGCTCTGCTATGGCTTACCATCATGACAGCAGACGGATATTTGTGGGCCAGGATAATGGAG
CTGTAATGGAATTTCACGTTTCTGAAGATTTTAATAAAATGAACTTTATCAAGACCTACCCAGCTCATCAGAACC
GGGTGTCTGCGATTATCTTCAGCTTGGCCACAGAGTGGGTGATCAGTACCGGCCACGACAAGTGTGTGAGCTGGA
TGTGCACGCGGAGCGGGAACATGCTCGGGAGGCACTTCTTCACGTCCTGGGCTTCGTGTCTGCAATATGACTTTG
ACACTCAGTATGCTTTCGTTGGTGATTATTCTGGGCAGATCACCCTGCTGAAGCTTGAACAGAACACGTGTTCAG
TCATCACAACCCTCAAAGGACATGAAGGTAGTGTCGCCTGCCTCTGGTGGGACCCTATTCAGCGGTTACTCTTCT
CAGGAGCATCTGACAACAGCATCATCATGTGGGACATCGGAGGAAGGAAAGGCCGGACGCTGTTACTTCAGGGCC
ATCATGACAAGGTGCAGTCGCTGTGCTACCTTCAGCTCACCAGGCAGCTCGTCTCCTGTTCCTCGGACGGCGGAA
TTGCAGTGTGGAACATGGATGTTAGCAGAGAAGAGGCTCCTCAGTGGTTGGAAAGTGATTCTTGTCAGAAATGTG
AGCAGCCATTTTTCTGGAACATAAAGCAGATGTGGGACACCAAGACGCTGGGGCTAAGACAACATCACTGCAGGA
AATGCGGGCAGGCTGTCTGCGGGAAGTGCAGCAGCAAGCGCTCAAGTTACCCAGTCATGGGCTTCGAGTTCCAAG
TCCGGGTTTGTGATTCTTGTTACGACTCCATCAAAGATGAAGATCGGACTTCTCTAGCGACCTTTCATGAAGGAA
AACATAACATTTCCCACATGTCCATGGACATTGCCAGGGGACTGATGGTGACCTGTGGGACCGACCGCATTGTAA
AGATCTGGGACATGACACCTGTGGTGGGCTGCAGTCTGGCGACTGGGTTTTCTCCGCACTGATCTGAGAGCTGGG
CGGCGTCCACACCTAAGAACAGCAGCTCCACCAAATGAAGTCCCTCTCACGCAGCTCCACAGCGCTGTCTCGTGA
ATGGACAGTAGCCACTTACAAACAAATCAACATTCTTAAAAAGAAAATGTAAAGGTGTGTTTTGGGGCATTTGTG
GAACTTACCCATGGGGACTAATATGGAAAAGGTCTGTCCATAGTGGTTCCCTGAAGACTGGAATTACTTCAGCAA
AACTTCCCCATGAACAGCTAATGTGTAGTGAAAGAATGAGCTAGCAAATGAGTTTTAGCGGGGACAAAAAATCAA
ACAAAAAAGTGAATGCTTAGAACCTTCTCAAAGCAGTCACAAGTACAGACACTTCACTTAGCCTAGGGGGCCTTC
CAGGGTTCTTGTGGCTGTTGTCAGAGCAGGAGCTGGGGGAGGGAAGACTTGTTCTCTCTTTCTTGAGGGGTGGCA
TTAGGAACTTACGAAACCAGAGACCTTTCCCTATGACTTGGCAGTATGTGAATATCCTCTACACTTAGTTATTGA
TAAACTTCTTAAAGAGATCTGTTATTTTCAGGTAGTGCCATAATCTGCACTTAGCATTGGCTTGCTTCAGTTGTT
TCTCTTCCCAGCCAGTATGCCACAGGTGAACTTTCGAGGTTGTCATTAAGTAAGTTGTGAAATTTCTGTAATAAC
AAAGGCAGTCCGCATTCTTCCCTTTCCCCCAAATTCCTAGGGCAAAACTTTTTTATGGTGCTGTTAACATGGGAG
TCACACAAGCCGCCTGACTTTTTCTCATTGCCATTAGTAATGACTGATGGAAAACCCAGCCACCACTGTGATGCG
AAATGATCAGTCTGTTGCCTGAAACAGCCCAGTCCTCTTAACTGAAACAGCATTCTACTTCTTGTTCCAAGATGA
GCCTCTGCAATATTCTGGCAATTTAATATACCCCCTACAAAAGCACTCCACAGCTTTTACACTATTTTGACTTTG
AGTTATAACTAGTATTATTCATGTTTTCATAAAAAGAAGTTAGTGACCCAGAGCTATAATCATCCATCAAGTCTT
CCACAATAATTCCCAACTCATAAATTGCTTTCCTAACAACTAGCAAAAGCTATTGTTCATAATGGCATTTAAAGC
TTTTGGGCACTGTGTACCAGGATGAGGAAGAGAAGAAATGAGGAGCCTGTCTTTTAATATTCCAGTATTTGTGTG
TTTGATTTTTTTTGACAACAGTACATATATCTATTTCTCTAGGGATATGGAAGTAAGTGGAGAAGGGCCTACCTT
TTTAAAGGACAAATATAAAAATAGCAACAGTATCTTTGCTAATCTTACTAATGGATATTGATTAAAAAAAAAAAA
CCTCAGTACTGCATCACTGTGTTGGGATCGTACCAGGACAATAGGGTCATTCCATATGATAAAACTAAAGGACTA
AATTTGTTTTATAATGATGTCTTAGAGGGACTGAAAAGTTTAAGGAGGCGATCGAACTAAAATGTCTTAATGGCT
GTGTGACACACGTAAGGAAAGGAAAGGGGGTCACGCACATCATGTACTGGAATGATCTGCATTAAACATTGACTT
GTCTTCAGAAATAAGACTGAAGGGTTTTGTTGTTCCTTAGAGTTTTCGTGTTACATCACCTAAAGAGATTTCTTT
TAAAAACTTTCTAGACTCTTTGCAAAATGTATATTACTAACATAGTTTGGAAGAAAAATTGAGTAGTGGTAAGTT
TTGTTCAAGCACAATGTTGAATGTTAAGCTTCCTGTATTAATTTTAGTTCAGTTAATGGTTCAGCCCATACAAAG
GTGCTATCCTAGGGATTTTATGAATTCCTGAAAGGAAAATAGAATATGATCAATTCCTTGCCCTGTGGAAGAGTG
CAGAACTGTGGTTTTGTTTTCCTTTGACTTCTGTAAAATGTGACCGTTTGACATCTGTGGTAGATTGAACGGAAT
ATCACAGCTGCTGAGTTTACTCCATAGCTTTCAAACCTTTTTTATTTTAAGAAATTCTTGAAAAACCCTATGTTC
CATGGGAACATAAAGTTATTATAGTGCCTCCTAAGGGGTTAATATAAATCAAGGAGGAAGTTTATATTTAAGGAA
GAATTGGAGTGACGTATCTTAGAAAAGGAAAGGCTGATGTTTCCATATAGCTTGCTCTCCACCAGGCCTATCATT
TTTCTTTTTAGAGACAAACGTGACAGGCTAGTCTTGTCTCTCTCATATGCTAGGTAGCAAATGGGGTGATATTTT
TATAGAAGTGGGCAAAAATTATTTTCTCAATTTTACTGAGTAGGCACAGAAGAAAAGTACAGATAGGCTGATGGT

FIGURE 4469B

TATTGCCTTATTTTGACTGCATTTCTCTTAAATGGATCATTTAAATTAGTTCTTCAAGTAACAGTTTACTGGTTG
TTCCATTCCTGAATATGCAGGCTAATTTGTACAGATAGGGATTAAGGAATACAGACTATTAGAGAAGATCCTTAT
ATTTACATCTAGTATATATGTGGTAAGGAAATGCCGATTCTTCATTATAAACAAGTTTTAAAATTGTTCTTTCTT
AGTTCAAATGATAGCAATACCCCTATAGCATTAGGTAGAAACAAATTATTCATTACATCGTAAATCTCTTTACTA
TGTCCTAGCTCTGTCCTGCTACCTAAAGGATATAAAGAAATATTATTGCTCTAGAATGTATTACTTTGTTCTCCC
ATGAAAGAATTCAGTTTGTTAGTACCTATATTTTTAAACTGGTGAAACTGACCCAAATATGTAATAAATACCATA
GTAGCTCAGACCCAAGGAGATATTTTTCTAAAATCAGTTTTCGTTAAAGTACTTCTACTTCCGTTATTGGATATG
GTATCTCCTAAAGTGTAAAAAAAATCTGTTACTATATAGTGATAAACCATCTGCTCATCGTAAGTGTAAGGCTTA
ACAAATAAGTAATACATGCTATATTTATTCAAGTGTCTATTGCTTAATTGTTAATTGTGAGCAGATTTATTGAAT
GCCTATTCTATTTTCTGCAGTTTACAATACAATAACTCTTTGAGTAAGTTGAAGTTTAATTGTGCAACAAATTTG
TATTAGAGTACAATTTAAAGTGTTTTTCTCTATAGCCTTTTTTGACTGGGGAAGCAAGGGGTAATGTTAATTAGT
ACACTTTGTTCTTGTACTAGCTATGTTTCTATAAGATATGGTGCCCTGTGTATCCCAGAGATGCTAGAAAACTGT
TCTTTGCTCCTATTTGTGGGTTCTGTTTTTGTGGGTTTTTTTTTTTTTTGAGAAAATGTACACAATAAAACATTC
CTTGCTTGTT

FIGURE 4470

MAAEIHSRPQSSRPVLLSKIEGHQDAVTAALLIPKEDGVITASEDRTIRVWLKRDSGQYWPSIYHTMASPCSAMA
YHHDSRRIFVGQDNGAVMEFHVSEDFNKMNFIKTYPAHQNRVSAIIFSLATEWVISTGHDKCVSWMCTRSGNMLG
RHFFTSWASCLQYDFDTQYAFVGDYSGQITLLKLEQNTCSVITTLKGHEGSVACLWWDPIQRLLFSGASDNSIIM
WDIGGRKGRTLLLQGHHDKVQSLCYLQLTRQLVSCSSDGGIAVWNMDVSREEAPQWLESDSCQKCEQPFFWNIKQ
MWDTKTLGLRQHHCRKCGQAVCGKCSSKRSSYPVMGFEFQVRVCDSCYDSIKDEDRTSLATFHEGKHNISHMSMD
IARGLMVTCGTDRIVKIWDMTPVVGCSLATGFSPH

FIGURE 4471

ACAGGAAGTGAAGAGCTTCCGCCGGGAGACCGCGGCTGCAGGAACGGAGGCGGAAGGGGCCCTGCGGCGACGACG
TCGTCGACGGGGGTGGCCGTGGGAGCTGAGCACGGAGAAGACTCCCTCTCTCGGAAGCCGGATCCCGAGCCGGGC
AGGATGGATCACCACCAGCCGGGGACTGGGCGCTACCAGGTGCTTCTTAATGAAGAGGATAACTCAGAATCATCG
GCTATAGAGCAGCCACCTACTTCAAACCCAGCACCGCAGATTGTGCAGGCTGCGTCTTCAGCACCAGCACTTGAA
ACTGACTCTTCCCCTCCACCATATAGTAGTATTACTGTGGAAGTACCTACAACTTCAGATACAGAAGTTTACGGT
GAGTTTTATCCCGTGCCACCTCCCTATAGCGTTGCTACCTCTCTTCCTACATACGATGAAGCTGAGAAGGCTAAA
GCTGCTGCAATGGCAGCTGCAGCAGCAGAAACATCTCAAAGAATTCAGGAGGAAGAGTGTCCACCAAGAGATGAC
TTCAGTGATGCAGACCAGCTCAGAGTGGGGAATGATGGCATTTTCATGCTGGCATTTTTCATGGCATTTATTTTC
AACTGGCTTGGATTTTGTTTATCCTTCTGTATCACCAATACCATAGCTGGAAGGTATGGTGCTATCTGCGGATTT
GGCCTTTCCTTGATCAAATGGATCCTTATTGTCAGGTTTTCTGATTATTTTACTGGATATTTCAATGGACAGTAT
TGGCTTTGGTGGATATTTCTTGTACTTGGCCTGCTCCTTTTCTTCAGAGGATTTGTTAATTATCTAAAAGTCAGA
AACATGTCTGAAAGTATGGCAGCTGCTCATAGAACAAGGTATTTCTTCTTATTGTAGAGACTGCATCAACCCGAC
ATTCCTTTCTTATACCAATGTGAAATTTCCAGATCATCTGTAAACCTACAACTTTAATAGAAGACTACTAATAAC
AGAAGACAAATTAGTGAAGAAAAGACGGAGTTTCGAAATTGAATGGCAGGGTGGTTTTTGCTTACAAGCCATTTC
TGTTCATTCTTTAAGTATCTATATTTCATTTGTTTTGCACATATGCATATGTGCCCATTTAAGATATTTGCATAT
ACTTGATAGAAACCATAAAGTTGTAGCAGTTAAGTCCAGTCACATTTGGTTAATCAGTGTTTGATATAATTGAAA
GAGTTGAGTGGATAAACAGTCTTCCAGCTTGTAAATGCCATTGACTTCTGACCTGACATTTAGTATAATAAAAAT
GAAATTCTTAACCATGTCAAATGATTTAGTTTCTGGCTCTTAGACTCATCTGGCAGTTCTACACATGAAACATCT
TTTGTTATATAAGGTGTATTGAAACCTGCAGTGCTGATTATTAGAAAGGATTTGTCAGATTTTTGAACATGATAT
TTACATTATTATTTAGGAAAACTCTTCCTGTAAATAACCATGCATAACTTACTTTCTGCAATGTTTTCTTAGAAA
TTGTGTCCAGATAGCTTTCACTAATTTTAAATTAAGTGAACTAAATATATATGTGTATATGTATACTCATATATA
TACACACACACACATATATATATCTAGAAACGTGAGTGTTAAAGATAGAATTTGTTTTAGGACAAATTTTAAGAA
AATGTGGGAATACCAAATGTCCTTTATAAGAAAAATAAATTTTATTTTAAGGGACATACTAGTTTTAGGGATTTT
CAGATGGGAAGCTGCATTTTTAGGATTGCCCATCTTAAGAGATCTTGCAGGAAGAGATTGTATTAGATATTATAT
TTATTTCATTTAAGATAATTTTCAAAGTTAATTTTCTAAATAAGATAATTCTCATTTGTGTTTGTCTTTTAAAAG
GCCAATAAAATATCTTTCAGTATCATTGTAATAATTTTTTAGAGTTTAATTTGTAAAGCTTAGCAAATAAAATCT
TGTACTATGAATAGCTTCTTGCTTTATGACTTTAGGATTAACTTGTAAAAAACATATCCTGAACTGAGATATGCA
AAATACTCATTTTCAAGTTATGGAAATGTGTTTGTGGCATATAGGACTGTGGGGTCTGTGTGTGTAGTGAGAGTG
TGTAGCCACTATTATAACTGGAATTTAATTTACATTCATAAACTACTATATTTCCCATCTTGCAAATCATTTTAT
GTCTCATCTGTTTTTCCTTTCGGTTATATCTTTGGTTTTGAATACCAACATTTAAAATGATGGTATTTTATCTTT
TAAACTTAAAAATTATTTAATACAGCTATATGGACCTTATAAAATTGATTTCTTATTTATTATTAGACATTACTA
CTAAAAGGTACATCTAACTATTCAGGGACATTTTTCCATTTCCAAAAAATAAAATTTATTATGCTTTATAACCTC
TTCTGTATTTTCTAATTTTTTCATTGTCTTTGATAAATAAAACAGTTTTGTTTTGCT

FIGURE 4472

MDHHQPGTGRYQVLLNEEDNSESSAIEQPPTSNPAPQIVQAASSAPALETDSSPPPYSSITVEVPTTSDTEVYGE
FYPVPPPYSVATSLPTYDEAEKAKAAAMAAAAAETSQRIQEEECPPRDDFSDADQLRVGNDGIFMLAFFMAFIFN
WLGFCLSFCITNTIAGRYGAICGFGLSLIKWILIVRFSDYFTGYFNGQYWLWWIFLVLGLLLFFRGFVNYLKVRN
MSESMAAAHRTRYFFLL

FIGURE 4473

GTATGACGAACAAATAGCATTTTGTACCCGCACTACAATGCAGGAGAACGCCAAACACCGCTTTATTGCATTCAA
ACCTTCTAAGGCACGTCAGCCAGCCCTGGCCTTGTCTACAGCCATGATTATCTCCTTAAAGAGTTAACTCTAAAA
AAATATTAAGCTCAAGAAATAACAGCTCAAATACTCCTAACTAATTAAAATCAATAGTGAGAGGCAGAATACGGT
AAAAGATAACATATTAGTATTATTGATCACAGATCAATTTCAGAGTACTTAAAACAGGAATAATCAGCTACCACA
TCTTGAGCTTAATATTTTTTTAGAGTTAACTCTTTAAGGAGATAATCATGGCTGTAGACAAGGCCAGGGCTGGCT
GACGTGCCTTAGAAGGTTTGAATGCAATAAAGCGGTGTTTGGCGTTCTCCTGCATTGTAGTGCGGGTACAAAATG
CTATTTGTTCGTCATACTGTTGTCAGCAGATGAGCCGCCCACTACAGACGGCTACTGCCCAGGGACCTGCCCAGG
CCCCACCCAAGGGCTCCCAAGGGTTGAGATTTCTGCAGACCTATAGCCAGCACACTTAGTCCTGCCCTATATAGA
GTTCCTCTTCGGGTAA

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FIGURE 4474

YDEQIAFCTRTTMQENAKHRFIAFKPSKARQPALALSTAMIISLKS

FIGURE 4475

GGCACGAGGGCCACTTTCCGGCCGGTGACAGAGTCCAGCGGAGTTGTGGGGGCCGGAGGCGCC**ATG**GGAGCCACT
GGCGACGCCGAGCAGCCGCGGGGACCCAGCGGGGCCGAGAGGGGCGGCTTGGAGCTGGGGGATGCGGGCGCAGCG
GGGCAGCTGGTTCTTACGAACCCTTGGAACATAATGATAAAGCACCGGCAGGTGCAGCGGAGGGGCCGCCGCTCA
CAGATGACAACAAGTTTCACAGATCCTGCCATCTCCATGGATCTCCTCCGAGCTGTCCTGCAGCCCAGCATCAAC
GAGGAGATCCAGACTGTCTTCAACAAGTACATGAAGTTCTTCCAGAAGGCAGCACTGAACGTGCGAGACAATGTT
GGGGAGGAGGTGGACGCAGAGCAGCTGATCCAGGAAGCCTGTCGGAGCTGCCTGGAGCAGGCTAAACTGCTCTTT
TCAGATGGAGAAAAAGTAATACCCAGATTGACCCATGAGCTTCCAGGAATAAAGCGTGGCCGTCAGGCAGAAGAA
GAATGTGCCCATCGAGGAAGCCCCCTTCCTAAAAAGAGGAAAGGACGGCCTCCTGGACACATCCTGTCAAGCGAC
CGGGCAGCCGCCGGCATGGTATGGAAACCAAAATCCTGTGAACCAATTCGCCGGGAAGGCCCCAAGTGGGACCCA
GCTCGCCTGAATGAATCTACCACCTTTGTGTTGGGATCTCGAGCCAACAAAGCCCTGGGGATGGGGGGCACCAGA
GGAAGAATCTACATCAAGCACCCACACCTCTTTAAGTATGCAGCTGACCCCCAGGATAAGCACTGGCTGGCTGAG
CAGCATCACATGCGGGCAACAGGGGGCAAGATGGCCTACCTCCTCATCGAGGAGGACATCCGGGACCTTGCGGCC
AGTGATGATTACAGAGGATGCCTGGATCTGAAGCTAGAGGAATTGAAATCCTTTGTCCTACCCTCCTGGATGGTG
GAGAAGATGAGAAAGTATATGGAGACACTACGGACAGAGAATGAGCATCGTGCTGTTGAAGCACCTCCACAGACC
TGAGGCCGGGTCCCCTGGCCACACTTGGCAGCCCTCCTCCAAAGCCCTCTTCCTCACGTGGCTGAGGCCACCGCT
GGGACTGCTCCTAGATGGATCTCAGCGGCATTAAGCTGTGCCTGAGCGAGTTTGTAGTGACTCACTGCACAGCAC
CCCCAGACTAGCATGTGGTTCTATATTTGTAAAGTTATTGGGATAAGAAACAATTAAACAGTTTGTAGTAAACAC
AGAAAAAAAAAAAAAAAAAAA

FIGURE 4476

MGATGDAEQPRGPSGAERGGLELGDAGAAGQLVLTNPWNIMIKHRQVQRRGRRSQMTTSFTDPAISMDLLRAVLQ
PSINEEIQTVFNKYMKFFQKAALNVRDNVGEEVDAEQLIQEACRSCLEQAKLLFSDGEKVIPRLTHELPGIKRGR
QAEEECAHRGSPLPKKRKGRPPGHILSSDRAAAGMVWKPKSCEPIRREGPKWDPARLNESTTFVLGSRANKALGM
GGTRGRIYIKHPHLFKYAADPQDKHWLAEQHHMRATGGKMAYLLIEEDIRDLAASDDYRGCLDLKLEELKSFVLP
SWMVEKMRKYMETLRTENEHRAVEAPPQT

FIGURE 4477A

GAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCCAGTCACCACCAGCCTGA
CCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGCACACCACCATTACATCATCGTGGCAAATTAAA
GAAGGAGGTGGGAAAAGAGGACTTATTGTTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGG
TTGGTGGCTCTGCTGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACA
TCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTA
ATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGATTGCAGTCAGAAGGTTGTAGTTTACGAT
CAAAGCTCCCAAGATGTTGCCTCTCTCTCTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGC
TTCAACTCTGTTCACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAA
TCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCCGAATTCTTCCC
AATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATGCAGCAGAATGGGATTGGTTATGTGTTA
AATGCCAGCAATACCTGTCCAAAGCCTGACTTTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGC
TTTTGTGAGAAAATTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGT
GTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATGAAGAGGATGGAC
ATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAAAAAGACCTACTATATCTCCAAACTTCAATTTTCTGGGC
CAACTCCTGGACTATGAGAAGAAGATTAAGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTG
CACCTGGAGAAGCCAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCA
CCCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTGCCCAGCGTGCCC
AGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTCAGTGGGCTGCACCTGTCCGCAGACAGG
CTGGAAGACAGCAATAAGCTCAAGCGTTCCTTCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCA
GCATCCTTACATGGCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACC
AACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCTGATAAGGAGGAA
GCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAGAGCAAGCGATTGCATTCGGTCAGAACC
AGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCAC
ACCAGCTTCCTTTTCGGCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGG
CACTCGGATATCTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCCACAGAGTCCTCA
CACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCTGCCTACAGCTGCAGCCAGCTGCCCACT
TGCGGAGACCAAGTCTATTCTGTGCGCAGGCGGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCAT
GAAGAGAGCCCCTTTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAG
AACAGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAAATCATTGAGGTC
TCCTGAGAAGAAAGACACTTGTGACTTCTATAGACAATTTTTTTTTCTTGTTCACAAAAAAATTCCCTGTAAATC
TGAAATATATATATGTACATACATATATATTTTTGGAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAAC
CCAGTTGTTACTCTCTTAACATCTGCATTTGAGAGATCAGCTAATACTTCTCTCAACAAAAATGGAAGGGCAGAT
GCTAGGATCCCCCCTAGACGGAGGAAAACCATTTTATTCAGTGAATTACACATCCTCTTGTTCTTAAAAAAGCAA
GTGTCTTTGGTGTTGGAGGACAAAATCCCCTACCATTTTCACGTTGTGCTACTAAGAGATCTCAAATATTAGTCT
TTGTCCGGACCCTTCCATAGTACACCTTAGCGCTGAGACTGAGCCAGCTTGGGGGTCAGGTAGGTAGACCCTGTT
AGGGACAGAGCCTAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCACCTGA
CAGCCGAGGGACACGAGCATCACTCTGCTGGACGGACCATTAGGGGCCTTGCCAAGGTCTACCTTAGAGCAAACC
CAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCATATCTGGTAGCCCATTTTCTAGGCATTGTGAATA
GGTAGGTAGCTAGTCACACTTTTCAGACCAATTCAAACTGTCTATGCACAAAATTCCCGTGGGCCTAGATGGAGA
TAATTTTTTTTCTTCTCAGCTTTATGAAGAGAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACCTGG
CAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTCTTTGTAAATCAAAGAATTGTTTAA
AATGGGATTGTCAATCCTTTAAATAAAGATGAACTTGGTTTCAAGCCAAATGTGAATTTATTTGGGTTGGTAGCA
GAGCAGCAGCACCTTCAAATTCTCAGCCAAAGCAGATGTTTTTGCCCTTTCTGCTTCACTGCATGGATACAGTTG
GTAAAATGTAATAATATGGCAGAATTTTATAGGAAACTTCCTAGGGAGGTAAATTATGGGAAGATTAAGAAAGGT
ACAAATTGCTGAGGAGAAGCAGGAAACCTGTTTCCTTAGTGGCTTTTATCCCCTCGGCATGCGATGGGGCTGATG
TTTCTATAATTGCCTCAGACTTTCACATTTACTAGTAGGGCTGAGAGAGGCTTTAGTGAGGAAGGAATATTCAGA
ATAAAACGGTTGAGAAAGCTGAGAAGACCATTGAGTTTTGATCAGTTGTGAATAGAGTGCAAAGCCATGGCCAAG
CTGTTTTTGGAAACGCTGGCCGGCGTGTCTTCAGTGGAAAAAGCAAATCAAAATGGAGCGAGAGCAAAGGGGCGT

FIGURE 4477B

CCTCAGTCCTCAACCTACAATCACTGTATGGAATCGGTCCTGGCAGCTGAACATAGGAGGTCACTGGAACAAGTG
ATAGTGCAGATTGGCTTTCAAACATCCTCCTGGCTTGAGTTTTATCAGCTACAGTGTGGGTCCTCTTTTGAAGCC
TTAATTCACAACAGCAGCTTTTTGGGGGTGGGGCTGGGCGGGTGTTGTCATTGTTCTTTCCCTTCCTGTAAGTGT
CGCTAGTTGCTGCCTCGTATCTCAGGTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTGACT
TCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGACCGACTTGGTTATGGGGA
TGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGTGCTATGATGGGGTGTAAAGTGAAGGCAGAAGAG
GGTCAGCCGCATTGTTATGATACTGGGAAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAAT
CTTTAATCAGACATTCTCAAGTTTCACACAGTAGTTTTTGATGTTATGTACACACACACCAAATGTGTAACAGTT
CACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGCTCCTTGCTAACGATGTTT
CAGGAGGTTTGGGGGACTTGGTTTTAATGAGCTTCTGTCATTTAGGGCTTCTCTTGGCCATGGTCCCCTTCCTTC
TGGAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATC
GAGACTGCCGTGGCGAAGGGGTGGCCTCGGAGGCAGGCTCTGGAGCTGCTTGGATGTCTTTAGGTGGGGTGGTGG
CTGGCTCTCTTCAGCATGTAATTGGGGAAACCCTCGTTTCTACTAGGGGTGATACAGATGGTGATTTTAAAGAGC
AAAACTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAGTTAGATGGAAAGACTGTAAA
TGTTTAATATGAATATAGTGTTCTTTTGAAGTAAGGCCAGCTGTTGAACGGTTAAACTGTGCATTTCTCATTTTG
ATGTGTCATGTATGTTAATGTATGAAATGATTAAATAAAATCAAAACTGGTACCTGTTTATACAT

FIGURE 4478A

GCTTCCAGTTGGGATGGGGAAGGCCTTTGTGTGTGTATTGGGGGGAGGGGTTAAAAAATAATTATCCCAAACTTT
TTAATGTACTGCCNNNNNNNNNNNNNNNNNNNNNNNNCCACTATACCATTTTAAGTTCTGACCTCAGGCCTCCAT
TTGGGCCGATGGCCTCTTGGAGGCTTAAAGTTTTCTGTACCTTGTGATGAATGTTAATAGGTGTTTTTATTATAC
AAAGCTGAATGTCATTTCTCGTTTGTAGCTTTCTGTCACTCATTCCATCTTCCTTCAGACATCACCACGTTTCTC
TAAAGTCAGAAAACATTCCGTTTTGGTCTTTTTCAAAAAGGTCCCAAATGCTGCACTCTACACATGAAGGCCCTC
TCACACAGACGTGACGTCCTGCCAGAAAGAGAATGAATGACAGAAAAAAAAAAGAGAGACAAACTCTAGGAACAA
TGCCGATTCATTCCACGCAGCAGTATTGGGGGTGGTTCGGGGGAGGGGTGTTTCGGATTTTCTTTTNNNNNNNNN
NNNNNNNNNNNNNNNNGGCAGCAACCATTAATAAATGCCACCACATTCTACCAGCACAAGGAAACATAGGCAGCA
CTGAAAAAAAAAAAAAAAGCTCATATTAATTAGACTGACAATATGGCCTTGGAAGGCTCTCCCTTGTGGAACCAAG
TTGCCATGGGCCTTGGGTGCTCTGCGATAACGGGTGTGGGTTGGTTTTGTTTGCAAAATGGCCAAAAAAAAAAAC
CGGCTTCCCCGAGCAGCTGCCCTGAAAGTAGGGGTGGCGGCGGCGGCGCTGAGTTTATACATTAGTTCAGACCTA
CTTGGTGGCATTAAACTGTTTGAATGCAAATTCGATTTCAGATTGAACTTGTTAAGGGAGTTAACGAGGGCTGAG
TTCAGCAAATGCTAAAGTGTTAATTTCAAATATGCAAATTTGGTACTGCAGTTTGTTATGCAATATTATATCACC
AACCCAGTATCACAAAAACTCATAGAAGATATCATGTAGGCCCTGGGCTTTGGGGGGGTCCCAAACATGGTATGC
AGAAATGTGATGGTTACAGGTCAGTACAACCTCAGTCCTTAGAACCCCTCCACACTTCAGCTCTGCACCCACTTT
CCTGTCATTTATTTATATAGGACTGTAGTTTTTTTTAGTTCGAGAGCCTTTCGAAGCTTAATTTATATTCTTTCT
TTGTACCTTTTTTCTAAAATTACCAAAGATATTACACAAAGGTAAATTATGTTCTCTGTTTTATGCTTTATCTGA
TGAAGCCAAATATCCTCTTATTGTTGATCAAAGGAGGCAAAAGAATTTAGAGGCAAATGACAAGCGATAGGCTAT
TGCAACCTGAGAAAGAGAACTGCTCCTTCATCGTAAATTTAGAAGACCAAGTAGATAATGGAACCAAAGTTGTTA
CTTTTTTCTAGTAGTTATTTTTCCTTTTTCTTTTTGTGTACCTCTACAGAGACCAAAACTCATTCTCTTAAAGAG
ATTTTATGGGGCTACTGCAGATAAAAATAGGACACAATATTAAAGGAGCTACAGAAGGAAGGGAGTCCCATCTCA
AAAAAAAAATGAATGTATGCCACTGCAATTAGAGTATCCAATAAAGGAGACAGTTTAGAGTCAGGACAGAAAAGC
TTCCATAATTGAACTAGATTACATAATAGTATTTCTAGAAAAAGAGATATTTTTAGATTGTATGCCACTTTTGTT
TAAGAACTGTGCTGTGATCACTGTATTAATTTTGGTTTATCTTGGCATATATCCTTCAGTTTGTTTTTATTTTTA
ATTTTTCCTTTTTTTCCGATTAGGCTTTGGTCAGCATTTTTCATTTAAAGAAAAGTAACACTCCCATCCACTCAT
AAGCTTGGTACAAAAACTTCTCTGGCAGTTACTTTTGAAGCTTCACTCTGCTTTCTGTATAAAGGGCAGTCTGTG
GTCACGCAAGACTTTAAAAAAAAAAAAACAAAGAGCCCATAAAAACAGACAAAAAACTTTTCCAGGCAGCTTCAT
GATGTGCAGGCAGTAGCCAGACAGGGTCATGGGAAGGGGGCCCTGTGCTTCTAAACTGAGTGGTTGCTGGTTAGT
TTGGTATTCAAAAGAGGATAAAAATCTGGTAGATTAGTTCATTCTCAGCATGTGTAGCTAGACATGAGTAAAGAT
AACAGCATGAGAAACTGTTAGTACGCATACCTCAGTTCAAACCTTTAGGGAATGATTAAAATTTAAAAAAAAAAC
ATTTCACTCAGTTGCACTTAGTCGTATGTCTTGCATGCTTAGTCTAAAGACTGTAGCAAAAAAAAAAAAAAAAGA
AAAATTAGATTTTACATATCTTTGCAGGTATCACAGCCTTGCAGAAGAACCAACTGAAAAAAAAATTCTCAGGCT
TTACAGCAAGCAAACTTCACTATGATTTTTACAATTCTGATTCTGTATCCCCTGGGGGTTATCCCAGTTGCTTCT
TTAGGATGGGGTTTATTACGTTGTACATATATCCCGATGTGTCTGTGTGAATCTTTGTCTTTTTTGGGGGAGGGC
AGAGGGCGGTTCTTTTTTTAGATATTGTTCCTAAAAAGGAATAAATGCATACACCTGTTTGTCAAAACACCTTTG
CTTTTTGTGCAACTGCTTTATATTAACGATACTAAAAAAAAAATAGCTTTGGAAAAAAAACTACTGTATGTAACGG
AATTGCAGAATATGCTGCACATGTATTTTATTTAGTTATCCTTGCTTTAAGAATATTGGATGACATTTCCTGACA
TGTGGGAGGGAGAAACTCCCTAACTTTTTTTTTCTGCTTTTAAACTGTAACATAGTTGAAGATTTCTTTTTTCTG
TTCTCATTGATTGGAGCATTTTGTACAAGTTTTGTANNNNNNNNNNNNNNNNNNNNNNNNNNNNCGTGTGTGTT
AATCTGTTTTTTGATACATTCCTATCCCTTGTGTTTATCCTACCACTGCCTTCCTGGCTATCTTAAACAAGTTCA
TACATTTGAAAAGAAAAAAAAATGTTGTTTAAAAAATGTTTTCTCCTGCTGCAGTAAATATTTTGCATGATGAAA
TTCCAGGGTCACACTTTTCCAAGTTTATCAGTGAAGTAGTGATTAACAATGGGGAGTGTCAAAACTATTGAACTT
TTGTATAACACAAAAAAAACTTTACAAGGTGCCAAGATGTAAAGAAAATCTGTTACTTTTTTTTTCTCAAAGAAA
AGCATACATTAGGGAGGTAGTCCCGTGTGTCAGACAAATGCACTGTCAGGAATGAGGATCCAACCTACCTGTCCC
TAGAGTCCGTCTTGTAAGATGAGTTAGGCTGCCCCTTGGACCAGCCACAAAATGGAATATCAAGGCTTATGTACA
TACGTGAAGAGTTACCACCAGTCCTGCCACCTTTGGACAGCTCTAACACCATCCCCAGCATCCAGTCAGACCTAG
TAAAGAAAACCTTGGATTCTTAACCCAAGATAGGCTGTAAATCACTAGCTTTTTTTTCCTCATGAAAAAAAATAG
AGTTAAAAAATATTTCCTCTCTTTTCCATATTCCAGCTGAACTCCGTTTCCAAAGGCACAAAGAAGAGTGTGCTT

FIGURE 4478B

ATTCAGATTTTGAATCTTTTTGGTACCTTTTGGTTAATGACATAGCCTCCTGAAATTCTGGATGTCTTCAAAGTC
AGTTTTGCTTCTTTATCCTGAAAATCAGATTTACAATGCTGAAGGCATTTCTTGGGCCCAGTGTAGCTCACGCAA
TCTCTGCTACCCATAAGCCTTGATGAAGATGATACAGTCCGGACTGTGAGCATGGTGCTTCATGTATATGTGCTG
CCAGTAACAAGAATTTTTTTGTTTTGTTTTGTTTTGTTTTGATAAGGCATAAAAGAAACTCATTCCTTGACATCA
ACTGTAATTCCATCATTCCATGTCTGCGGATACAGACAATAAAAAAAATGTTGTGTAGTCAGTACTAATTACTGA
CATTATAAGCATTCTCAAATGCAATAAAAATGCTGGTTGTTCACGCTGGTAGTAAAAGTTGCCACAGCCTAAGTT
TGTTTCCCTTTCTGACCTGCTGATATTGTATGTTAGGCATATGCCTTAGGTTTATCACCAGCTGCTTCCAATGCA
GAATTAAAATCAATCTTAAAGCTTTCATGATCAGGGAAGGCTGAAGCTCTTATCCTCAGGATTTCCAAGTGAAAG
TATCCACTTAGAGAATTGGGAAGTAAAAAAAAAAGAGCAAGAGATGTTATCTTTTCTCTTGAGGAAGCACACTCT
TATTTTTTTCATCAAATTTTATAAAGAAAAACAAAATGTTTAATAACTAGCATTAAGAGCAAACTAAAATTTCAG
AGGAAAGCAACTTTCATGAATAATTCATTGAAAGATTTCACAGTCTGGCAAGATTAGGTCATCCAAATAAAAGTG
CTAATGGTCAAAAACATGCACCGTCTATAATATTCTCATCAAGAAATCTTTTTGCATATAATGATAAATGCTTAG
ATTAGAACAAATGATTTTATAAAAATATTCTATCAAAAGTATGCTAGATAATTGCATTCATTGAAGAAAACAGAA
CTTCAGTACCTAAATATTCCAGAAAAACCATCTTAATTTTGAGATTTTAAAAAAATAATTAGATGCATTTAGGAA
ATGTGCTGTTTCTTTTTAATATTACTCTATAGTATATATTCTAGGGATTAATGAATTTGAGCATCACCTTTCAAT
AAAAAATTAAATTGCCAATATGAAAGCAGTATTTTAAGTGGCCAAACCGTGGTAACATAAAACCATTACATATAT
AATTCAGAGCACATAATTCAGGGCAAAGGATGACTTGAAAATTAACCTCCCAGTCTTTATTCTGCAAAACACCCA
CCGATGCTGAGGATACAAGTGAACATTCTTTCCCAGCATTGTTTTGAAAAGCCCATATTAGCAAAGTNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNAACAAGTAGATTTTGCTATTAAGTTGCAAACTAGTGTCCTCTTTGAATTAACAA
TTATGCCCTATCTAGAAACCCCTTAGTCTCAATAATTAGCAAAACATTTGAACCTTTAATTCTCACCTGGCTACT
GAGACTATAATCTTAGGGTTAATTCAAATTCCTGTAATTACCAGGCTTAAACCTAAATACTGCTTACAGCCTATC
CATTAGTAACCATTTAAAAATGTACAGATACTTCTTTTAATCAACTGGAGGACCTAAACCAAGTATGACGATATG
TTAGTGAAGATTTTGCTGGTTGAGGCATAGTACATTTTAACTTATATTTCAGGAATTGTTCTCAAGCAGGAACAC
TCTTTTACATATTTATTTCAGGCTTGTCACTCTCATAAACGAGGCAGCAAACCCAAAATATTGGCTCTTCTTATA
AATAGGCGCCTTTATATAAAGAACATAAAACTCTTAAGACTAATTTCACACCAACACAGGCAGCTTCATAATAGT
AACCACCTCTCCCTCCCCACTAAAAAAGATAAAAACAAAGTATAATTAGTCTTTCTTATTAGATTTTTGTCTTTG
ATGATATTACGTATTTATGTGTAGGGTAGTAATCACAATTTATCCTTCATCTTCATTGTAGTTGAATCAAATAAA
AGTATTCTTTATTCAAATAATGTGAAGTTGGGTGTCTCAAACCTTCATTTAATGAATTGATGAAAGGTTTAAGAC
AAAATTCACGTTGGAGGGAAATTAAGTTACATACAAAAACACTGGTTTTAACTGTGGGACAATATTTGGATTAGA
AAACCATCTCTAGATATAACCTACTTATATTTATTTTTAAATGGTATTTTATTTTTTAAAATAACAAAACCCAAT
GTTGTCTTATTTCCACTTTGATTGTAAAATGACATTCAATGCTTAATACCAAAATATATATCTATATTCACATTT

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FIGURE 4479

FQLGWGRPLCVYWGEGLKNNYPKLFNVLPXXXXXXXXHYTILSSDLRPPFGPMASWRLKVFCTL

FIGURE 4480A

GCGGCCGCCGAGGCCTCGGCGGTGCTCAAGGTGCGGCCCGAGCGCAGCCGGCGCGAGCGCATCCTCACGCTGGAG
TCCATGAACCCGCAGGTGAAGGCGGTGGAGTACGCCGTGCGGGGACCCATCGTGCTCAAGGCCGGCGAGATCGAG
CTCGAGCTGCAGCGGGTGAGCGCGCGCTGGGCCCCGGGGAGGCTGGGGCCGCCGAGCAAGGGAAAAACCGCAGCA
GCCCCAGCTGGGGTCCTTCCCACGACGTCCACCCCCATGGCCAGCTCCTCAGTCAGCCAAGCCTGGCTAAAACGA
GAGAATGCCCCCTCCCGCCCGTTCACTTACTGGTGCCCAGCACCGGGCACTCAGTGAGGCCTTGCAATACGGTTC
ACTTGTTGAATTGAATTCGTCAATTGTTGAGCGGGCCGTGCTGCCAGGCACCGCACGTTGTGTGTCTGCCCTACT
CTCGTGGAACCAAGGTCCAGTGGAGAGAGGAACATAAGCGAATGAAGAAAGAAGCAATAGAGTCTCAGTGATAAG
TTCTTGGAAAAAAGGTCTTTGCCAATCCTGATTCCCGGAAGAGAGTCGGCAGAATTCCTTCCTTTAGGCCCCTCT
GGAGCCTTGGCCGACCAGCCACTTCTGTGGTCTGGGGACAGTCACCGAGGGTATCAAAAAGCCATTCACAGAGGT
CATCCGAGCCAACATCGGGGACGCCCAGGCTATGGGCAGCAGCCAATCACCTTCCTCCGGCAGGTGATGGCACT
ATGCACCTACCCAAACCTGCTGGACAGCCCCAGCTTCCCAGAAGATGCTAAGAAACGTGCCCGGCGGATCCTGCA
GGCTTGTGGCGGGAACAGCCTGGGGTCCTACAGTGCTAGCCAGGGTGTCAACTGCATCCGTGAAGATGTGGCTGC
CTACATCACCAGGAGGGATGGCGGTGTGCCTGCGGACCCCGACAACATCTACCTGACCACGGGAGCTAGTGACGG
CATTTCTACGATCCTGAAGATCCTCGTCTCCGGGGGCGGCAAGTCACGGACAGGTGTGATGATCCCCATCCCACA
ATATCCCCTCTATTCAGCTGTCATCTCTGAGCTCGACGCCATCCAGGTGAATTACTACCTGGACGAGGAGAACTG
CTGGGCGCTGAATGTGAATGAGCTCCGGCGGGCGGTGCAGGAGGCCAAAGACCACTGTGATCCTAAGGTGCTCTG
CATAATCAACCCTGGGAACCCCACAGGCCAGGTACAAAGCAGAAAGTGCATAGAAGATGTGATCCACTTTGCCTG
GGAAGAGAAGCTCTTTCTCCTGGCTGATGAGGTGTACCAGGACAACGTGTACTCTCCAGATTGCAGATTCCACTC
CTTCAAGAAGGTGCTGTACGAGATGGGGCCCGAGTACTCCAGCAACGTGGAGCTCGCCTCCTTCCACTCCACCTC
CAAGGGCTACATGGGCGAGTGTGGTTACAGAGGAGGCTACATGGAGGTGATCAACCTGCACCCTGAGATCAAGGG
CCAGCTGGTGAAGCTGCTGTCGGTGCGCCTGTGCCCCCCAGTGTCTGGGCAGGCCGCCATGGACATTGTCGTGAA
CCCCCCGGTGGCAGGAGAGGAGTCCTTTGAGCAATTCAGCCGAGAGAAGGAGTCGGTCCTGGGTAATCTGGCCAA
AAAAGCAAAGCTGACGGAAGACCTGTTTAACCAAGTCCCAGGAATTCACTGCAACCCCTTGCAGGGGGCCATGTA
CGCCTTCCCTCGGATCTTCATTCCTGCCAAAGCTGTGGAGGCTGCTCAGGCCCATCAAATGGCTCCAGACATGTT
CTACTGCATGAAGCTCCTGGAGGAGACTGGCATCTGTGTCGTGCCCGGCAGTGGCTTTGGGCAGAGGGAAGGCAC
TTACCACTTCAGGATGACTATCCTCCCTCCAGTGGAGAAGCTGAAAACGGTGCTGCAGAAGGTGAAAGACTTCCA
CATCAACTTCCTGGAGAAGTACGCGTGAGGACGCCTGAGCCCCAGCGGGAGACCTGTCCTTGGCTCTTCCTCCCA
ATGCCCGTCAGGCTGAACTCGCCTCCCCCGTGACTCTGCCTCGGGCCTCGCAGAGGCCGCTGGTCACTTCGTCAT
CATTTTGCCCCTGGAGACGTCTTTCTTTGTGCCTTGATGTTGAGAGCGCCTCTCTTTTGAGCAAACAAGCATTCT
ATATGCAACCAGAGTAGAGGGGACCTGCTCAGCAGGTGTGACCAGGGTTCTCTGAATCTGTTATTGTTTTTGCTT
CTGGAAAGTTCATTTGGGGTTTACAACAACTAGGATGTGTTGGGTGAGATGTTTCAGATCTGGAGAAATGAGCAG
GTGTCGGGAAATGTGTGACTTAACCGTGGTGAGGGCTGGAAATCCAAACTCACCACCATGATCTGTGAAATAAAG
CCCTTAGCGGTGTGAAGCATCCGGTCCTTTGAACAGAAGGGCCTGGAAGGCCCCTGGGGCTGAGAAAGGGTCCGC
CCGGTGGCCTGGAGGCAGGCGCCGGGAGCGCAGTAGCACGTGGACTGGGCAGGATGTTGCACTAGCTTGGGGTAG
ATGCTGGGGGCTGCGGCCACGGTCAGAGGGCCCCACTGTGAGGCGTGGGTGTGAGCCAGGCTGCAGGAGGAACTG
GGCCTCCGCTTCCCAGCAACGCAGCCAGGCCTGAGAATTCTGTGCGCCCGGCGGGCTTTGGGAATGAGGGGTTCC
CTTGAACATGCGTAGGCTGGAACCCCGTCTGAGAGGTCTCCCTGAATTTCAGTGACACATAGTGCAGCCCGGCAG
TGTCCCACTTCCGTGGAGAGAGCCGCTGGAATGGTGTGGACCCATCCCGCGGGTGACCGGTGCCTGTTCTCCCCT
GACCGAGCCTGTGAGCACATCGCCCCCTGCTGGCGACAGCGGGGAAATGAGGGCTGAAAATATCCTCCCCACAAG
GGCAATCCCCGGGACCTGCCGAGCAGCCAAGGCCCTGTCCTTTCTTGAATGGTGGCGAGCTGAATCTGGTCGGTT
TCCTAGCTTTTAGGTGGTAAAAGTGCCTGGCAGCTTGGCTGCCGTGGAGGAGTCAGTCGTGGTTGGAGGTTCATT
GCCGTGCTTTCATGCAGAGTGTTTTGCCTTCATGTTAGCTTCCGGCTCCCCTCCCAGGCTGCAGACTCTGACCTG
TGGCATCAGGCTTCTCCCAGTACAGGAGGGTGCCATCCCCCAGCATGCGGCTTCTCTGCCATTAGCAGCCCTGGG
CGGGCCGACCACACTCGAGGCTGCGGTGCTACGGGCTTAGCCCTCGCCTCCCTCACTGGGAGCTTCCCCATCCTC
CCTGCCTTCCCCAGTGGGAAGTTAGGGAAGCTCAGGAGCCTGGGACCCCGCATGTCCCAAAATGGGATTGGAGAA
GCTGGAGAGAAAGCAGAAGAGGCCGAGGAGTGAGGCAGCAGCCTCTATGCTGTGATTTCCACACCGGGTCCGTGC
AGAGGAAACAGAAACTCCCAACTGTCCTTACCCACCGACATCACAGCCCCTATGAAGAAAGTAGCCACAATCTCA
AATAACAAAAGGGAATGTTCTAAAACTTTTTCTTCCTTAAAAAATGGAGAAAATTGCACTTGTGCTTGCTGTGTG

FIGURE 4480B

GTATATAAACCAGGATTAGTCCCAGGGTCGTGAGGTTTCTGGTGAAAAGGTTAAATCGTAGAAGCTAGTATATTT
TTTATATTTTTGTAACAATTGCTTTTTTCATGGGGGAGGCGGGGTTAGTATTTATAGTCCTAACAAGTCCAGTAA
TTTTTTATAAATCTTCAGATTATAAACAGCCCCTAAAAACTTTACAACGTTTACACAGTTTTTTAAAAAGAGACT
GTATACACTTGATTTGCTTTCAAAATAAATAAGGTCAGCTAGTCTAGGAGGTTAACGTCGGGTAGGAATGCTGAT
CATGATAGGTTTGGTTTTCTACAGATTCTGTTCCGGTGCCTTTCCTATCCAGGCACCACCTGAGAAAGTTGTCAT
TTGAGGTCGCACTTGGAAGTTACATCTGTGAAGTTTCTGTCATTCGTCCAGATCTGTGTGTGTAGCATGTGCTGA
GGAAGCACGTGCTGGGCTGTGCCTCAGACAGTGCATCACCGGGCACCCAGAGGCTTGCCTGGCTATTCCTGTTCT
GGTGTGTGTGGAGTGTTGGGGAGGAACAGATGCAGATCAACCTGTGGCTGTTTTCCCGTCTAGGTTCTCACAGGT
ATCTCCTGACAGAGGTACTTAACAATGGCTCTGCTGGAAATTTCTATAAATAAAATGTCCAAAATGGTGAAAAA

FIGURE 4481

MGQQPITFLRQVMALCTYPNLLDSPSFPEDAKKRARRILQACGGNSLGSYSASQGVNCIREDVAAYITRRDGGVP
ADPDNIYLTTGASDGISTILKILVSGGGKSRTGVMIPIPQYPLYSAVISELDAIQVNYYLDEENCWALNVNELRR
AVQEAKDHCDPKVLCIINPGNPTGQVQSRKCIEDVIHFAWEEKLFLLADEVYQDNVYSPDCRFHSFKKVLYEMGP
EYSSNVELASFHSTSKGYMGECGYRGGYMEVINLHPEIKGQLVKLLSVRLCPPVSGQAAMDIVVNPPVAGEESFE
QFSREKESVLGNLAKKAKLTEDLFNQVPGIHCNPLQGAMYAFPRIFIPAKAVEAAQAHQMAPDMFYCMKLLEETG
ICVVPGSGFGQREGTYHFRMTILPPVEKLKTVLQKVKDFHINFLEKYA

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FIGURE 4482

GCTCGCCGGTCCTCGGCACGCCGCCCGTTCGCCCCTGCGCTGTCCGCCCTTCCCCTAGCGTTACTTCCGGTCCCT
CGCTGAGGGGGTTCGTGCGGCTCCCAGGAGGCGTGAACCGCGGACCATGAGCGTGGGCTTCATCGGGGCCGGCCA
GCTGGCCTATGCTCTGGCGCGGGGCTTCACGGCCGCAGGCATCCTGTCGGCTCACAAGATAATAGCCAGCTCCCC
AGAAATGAACCTGCCCACGGTGTCCGCGCTCAGGAAGATGGGTGTGAACCTGACACGCAGCAACAAGGAGACGGT
GAAGCACAGCGACGTCCTGTTTCTGGCTGTGAAGCCACATATCATCCCCTTCATCCTGGATGAGATTGGGGCCGA
CGTGCAAGCCAGACACATCGTGGTCTCCTGTGCGGCTGGTGTCACCATCAGCTCTGTGGAGAAGAAGCTGATGGC
ATTCCAGCCAGCCCCCAAAGTGATTCGCTGCATGACCAACACACCTGTGGTAGTGCAGGAAGGCGCTACAGTGTA
CGCCACGGGCACCCATGCCCTGGTGGAGGATGGGCAGCTCCTGGAGCAGCTCATGAGCAGCGTGGGCTTCTGCAC
TGAGGTGGAAGAGGACCTCATCGATGCCGTCACGGGGCTCAGTGGCAGCGGGCCTGCCTATGCATTCATGGCTCT
GGACGCATTGGCTGATGGTGGGGTGAAGATGGGTTTGCCACGGCGCCTGGCAATCCAACTCGGGGCCCAGGCTTT
GCTGGGAGCTGCCAAGATGCTGCTGGACTCGGAGCAGCATCCATGCCAGCTTAAGGACAATGTCTGCTCCCCTGG
GGGAGCCACCATCCACGCCCTGCACTTTCTAGAGAGTGGGGGCTTCCGCTCTCTGCTCATCAATGCAGTTGAGGC
CTCCTGTATCCGAACACGAGAGCTACAGTCCATGGCCGACCAAGAAAAGATCTCCCCAGCTGCCCTTAAGAAGAC
CCTCTTAGACAGAGTGAAGCTGGAATCCCCCACAGTCTCCACACTGACCCCCTCCAGCCCAGGGAAGCTCCTCAC
AAGAAGCCTGGCCCTGGGAGGCAAGAAGGACTAAGGCAGCATCTGTCCCCTCTGTGATTCAGAGCCCTTAGTTGA
GAGCCCCTGCCGCCCCTGCCACCCCCCTGCCCCGCTCCCACCATTGCCCCTCCTCAGCTGTGCAAGGAGAAAGCA
TGCTTAGGAAGTTTTCAGGTCCTTGTGATAAAACCTCCTTAAATCTGTTCAGACCAAGCAATGCGAGCTTCCTCT
CCTGTCCCATGTTGGAAGTTGCTCTGAAGGGGTGGTAGATGCTGGAAGCCAGACACAACCCTGCGTACGCTGCTC
AGTTGGTGGAGACTGGGGCTGGGACTGGAGTCAGCCCAGCTGGGAGGAGGGGCTGGGGAGGATCTGCAGCTGAAG
CCCGAGGCAGGGTTGGTGTGATGCCAAGGCAAAGTGGTGAGGAGAAAACAGGAAACGGGCTTTCTCTGAATTGGT
AAATGGGAAAGAAGTGAGCAACTTAAGATTGTCACAATTAATCACAAGTGTACAGGATTAGACTGGGTTTATATT
TAACTCTTGCTTCATAGGTGTACCATTTAAAGAGTGTTATTTAATGCTAAGTTTAACTGCTTTAATAAAGTTTAT
TTTTAAATATCAAAAAAAAAAAAAAA

FIGURE 4483

MSVGFIGAGQLAYALARGFTAAGILSAHKIIASSPEMNLPTVSALRKMGVNLTRSNKETVKHSDVLFLAVKPHII
PFILDEIGADVQARHIVVSCAAGVTISSVEKKLMAFQPAPKVIRCMTNTPVVVQEGATVYATGTHALVEDGQLLE
QLMSSVGFCTEVEEDLIDAVTGLSGSGPAYAFMALDALADGGVKMGLPRRLAIQLGAQALLGAAKMLLDSEQHPC
QLKDNVCSPGGATIHALHFLESGGFRSLLINAVEASCIRTRELQSMADQEKISPAALKKTLLDRVKLESPTVSTL
TPSSPGKLLTRSLALGGKKD

FIGURE 4484

GGCACGAGGCGGGGTCGGTAAGGGGTGCGGCAATGCTGCAACTGCGGGACTCGGTGGACTCGGCCGGTACGAGCC
CCACGGCGGTGCTGGCGGCCGGCGAGGAGGTGGGGGCAGGCGGCGGCCCGGGCGGGGGGCGGCCGGGGGCGGGGA
CGCCGCTGCGCCAGACACTCTGGCCTCTCAGCATCCACGACCCCACGCGCCGCGCCCGCGTCAAGGAGTACTTCG
TGTTCCGGCCCGGCAGCATCGAGCAGGCAGTGGAGGAGATCCGCGTGGTGGTGCGGCCCGTGGAGGACGGCGAGA
TCCAGGGAGTGTGGCTGCTTACCGAGCGAGAAGGTTTTGGGATTCGAATTCAGTGGGACAAGCAAAGTCGTCCTT
CCTTCATAAACAGATGGAATCCCTGGTCTACCAACGTGCCCTATGCCACTTTCACAGAACACCCGATGGCTGGCG
CAGATGAGAAGACAGCATCTCTGTGTCAGTTGGAAAGCTTCAAGGCTCTGTTAATCCAAGCTGTCAAAAAAGCCC
AAAAAGAAAGCCCTTTGCCAGGACAGGCGAATGGCGTGCTGATCCTGGAGCGCCCCCTGCTCATCGAGACCTACG
TGGGACTCATGTCCTTCATTAACAACGAGGCGAAACTGGGCTACTCCATGACCAGGGGCAAAATAGGCTTTTAGC
CGCTGCGTTCTGGGAGCTCCTCCCCCTCCCCAGAAGGCCAAGGGATGTGGGGGCTGGGGGACTGGGAGGCCTGGC
AGTCTTCATGCTGCCCTGCTGCTGCTGGAAGGATGGGGATCTTTCACCTTTAGGGATCTCAGCACAATTAGAATC
GTAAAGTGAATTCTATCTATTTAATTGGATATTGGACTCTGCTCATATAAGCTACAGACAAAAGCCAAAAGACTC
TCGCTGTCCCTGTGCTGCTGGTATTTCATTCTCTGTAACTTCAGTTCTGGTGTTTTCCTTGAGTATCTACTTGGC
TTCTCGTGGTTTTTCCCACCCCAGCTGCCCCAGCACGCGGGACCCATAGCACACCCCTTAGCGCTTGCCTAGGTT
GCTGAAAACAGGGAGGCACCTGGTATCTCGAGTGCCTGCAGTTGCAAGTGTGTTTACACCTGGTGTCCAATTTTG
TATTTTAAAATGTAATCCATTTTTACTTCAGCTCATCCAAAAGCAGCCAGCAGACCGGTTGACTGAGACCGGTCT
GTGGCTGTGGGCCCCTTGGTGACCCGCTGCTCTTTTGGAAATGGGTGACCTGAAGTGACACTTTTTCCACAATTA
ACCCAAGTTGTGTTAATACTTCAGGTCTGTTTCCCAGACCCAGAAAGCTTTACAGAAAATCATTGTAAGACAATT
TATTAATTTGAGAAAGTCACCTTGACAGTTCTTTGCACACAAGTTTTACACCTCTCTGGATTCGAAGTTTGTATT
GTATTCATAGTTAAAGGGAATCGGGTACTTTGCTTGTTGAATAATGCACTTTAAAACAAGGAACCGTATCAGGCC
AGCATGGTGGCTCATGCCTGTAATCCCAGCATTTTGGGAGGCTCAGGCAGACAAATCGCTCTAGCTCAGAAGTTG
CAGAGCAGCCTGGGCAACATGGTGAAACCCGTCTCTACCAGACAAAAAGCAGCCAGGCGTGGTGGCACATCTGTG
GTCCCAGCTACTTGAGAGGCTGAGCCAGGAGGATCGCTTGAGCCCAGGAGGCGGAGGTTGCAGTGAGCTGAGATG
GCACCACTTATTGCACTCCAGCCCGGGCGACAGAGCGAGACTCCATCTACCAGATCCTTATGACGCAGCTGATGC
CTGCCTTGGTTCCTACCACTCTGGTGTAGACAGAGGACTTTGTCCAAGTCTCACACTAAACATGCCCGGGCTTCG
ATGTGCCTGGAGGATTTCCCCACAGGGACCCACGCACCTCCCTGTATCTGCGCAGCTTGCTCGTGTGGCTGGAAG
CGCTGTCGATAAGCTTCACGCACTGGCTTGCCAGTTCTTCAGCTCTAGGACTTGTAGCTTTAAGCAAACGGTGTG
GCATGGGTTGAGTGTGGCCACCTGCAGGATGTGCAGGGCTGCCTCAGAAGCTGGCTGGGGACTCTAGCCTCTGTG
TTCATAAAGACATTAAGAAGTGGATGGATGTTGTTCCTTTTTTGAAGTTGTCATTAAAGTAGGTGCAACAACCAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4485

MLQLRDSVDSAGTSPTAVLAAGEEVGAGGGPGGGRPGAGTPLRQTLWPLSIHDPTRRARVKEYFVFRPGSIEQAV
EEIRVVVRPVEDGEIQGVWLLTEREGFGIRIQWDKQSRPSFINRWNPWSTNVPYATFTEHPMAGADEKTASLCQL
ESFKALLIQAVKKAQKESPLPGQANGVLILERPLLIETYVGLMSFINNEAKLGYSMTRGKIGF

FIGURE 4486

TTTTTTTCATTTTAAAAAGGAAGTTTATTGGTCTTTAAATGGCTCAAATTGCAAATAAACAAATCGGGTAGTGGC
ATCAGCCTAAGACACGTGATGCATCTTTGTCAGTTGGCTTCATAGCACCTCAGTACCCAGGAGAGGAAAGGTCTC
AAAGCAAAGTCACAATGTTAGTGGTTAGGACCCCTGGTTAAATAAGACTGTAATAAGTACACATGGAGATTGCTG
GGCCCGCTGGCCAGTGTTACATTGGTAACTTGAATTCCGCACATGGCATAGCCTATGAGAAATACGAAATGAAAG
ATGTACATCTCAAACCCTTTAAGGACAAATATTTAACATGAGAAGCTGGATGTAAATATCTAAAGAGTGAGTTCC
TAAAAAGCCTATTTTTAACTTTACATACACACCTGTTACCTGGAATGCCTGAACACATCTTTGACCTGTTCAAAT
TAGGACTGAGAAAAAAGAAAAAAATACTTT

FIGURE 4487A

GCTTCCTCCTCCTCCGACTCGGACACCGGCGGAGCCTCCCCGCCCCCGCGGAAGAAACCCCGAGCCTCGGCGGCG
GAGGGAGTAGGAGAGCCCGGGGCTTCGGCAGGCAGAGCAGGCCTCTCCCCTCCGTCCTNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNGTGGTGGTAGTGGTGGGACTTCCCCCGGCTGCTGCCCCTCCCGCCGCCGCTGCTGTC
CCCCACCGAAGTAGCGGCCACAGCCTGGTCAGCGGCAGCATCATGCAGGCCAATNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNGGTGCCAGGGTACAGACCCCGGAGCTCGCCTGCTTGT
CGGCCCAGAACGGGGANNNNNNNNNNNNNNNNNNNNNNNNCGCGGGGGACCTGGCCCACGCCAATGGGCTCCTGC
CTTCCGCCCCCTCCGCCGCCAGCAACAATAGCAACAGCCTGAATGTCAATAACGGGGTTCCCGGCGGGGCGGCCG
CCGCATCCTCAGCCACCGTCGCAGCTGCCTCCGCCACCACCGCCGCCTCCTCTTCCTTGGCCACCCCAGAACTGG
GCAGCAGCCTCAAGAAGAAGAAGCGGCTCTCCCAGTCAGATGAGGATGTCATTAGGCTAATAGGACAGCACTTGA
ATGGCTTAGGGCTCAACCAGACTGTTGATCTCCTCATGCAAGAGTCAGGATGTCGTTTAGAACATCCTTCTGCTA
CCAAATTCCGAAATCATGTCATGGAAGGAGACTGGGATAAGGCAGAAAATGACCTGAATGAACTAAAGCCTTTAG
TGCATTCTCCTCATGCTATTGTGGTAAGAGGCGCACTTGAAATCTCTCAAACGTTGTTGGGAATAATTGTGAGGA
TGAAGTTTTTGCTGCTGCAGCAGAAGTACCTAGAATACCTGGAGGATGGCAAGGTCCTGGAGGCACTTCAAGTTC
TACGCTGTGAATTGACGCCGCTGAAATACAATACAGAGCGCATTCATGTTCTTAGTGGGTATCTGATGTGTAGCC
ATGCAGAAGACCTACGTGCAAAAGCAGAATGGGAAGGCAAAGGGACAGCTTCCCGATCTAAACTATTGGATAAAC
TTCAGACCTATTTACCACCATCAGTGATGCTTCCCCCACGGCGTTTACAGACTCTCCTGCGGCAGGCGGTGGAAC
TACAAAGGGATCGGTGCCTATATCACAATACCAAACTTGATAATAATCTAGATTCTGTGTCTCTGCTTATAGACC
ATGTTTGTAGTAGGAGGCAGTTCCCATGTTATACGCAGCAGATACTTACGGAGCATTGTAATGAAGTGTGGTTCT
GTAAATTCTCTAATGATGGCACTAAACTAGCAACAGGATCAAAAGATACAACAGTTATCATATGGCAAGTTGATC
CGGATACACACCTGCTAAAACTGCTTAAAACATTAGAAGGACATGCTTATGGCGTTTCTTATATTGCATGGAGTC
CAGATGACAACTATCTTGTTGCTTGTGGCCCAGATGACTGCTCTGAGCTTTGGCTTTGGAATGTACAAACAGGAG
AACTAAGGACAAAAATGAGCCAGTCTCATGAAGACAGTTTGACAAGTGTGGCTTGGAATCCAGATGGGAAGCGCT
TTGTGACTGGAGGTCAGCGTGGGCAGTTCTATCAGTGTGACTTAGATGGTAATCTCCTTGACTCCTGGGAAGGGG
TAAGAGTGCAATGCCTTTGGTGCTTGAGTGATGGAAAGACTGTTCTGGCATCAGATACACACCAGCGAATTCGGG
GCTATAACTTCGAGGACCTTACAGATAGGAACATAGTACAAGAAGATCATCCTATTATGTCTTTTACTATTTCAA
AAAATGGCCGATTAGCTTTGTTAAATGTAGCAACTCAGGGAGTTCATTTATGGGACTTGCAAGACAGAGTTTTAG
TAAGAAAGTATCAAGGTGTTACACAAGGGTTTTATACAATTCATTCATGTTTTGGAGGCCATAATGAAGACTTCA
TCGCTAGTGGCAGTGAAGATCACAAGGTTTACATCTGGCACAAACGTAGTGAACTGCCAATTGCGGAGCTGACAG
GGCACACACGTACAGTAAACTGTGTGAGCTGGAACCCACAGATTCCATCCATGATGGCCAGCGCCTCAGATGATG
GCACTGTTAGAATATGGGGACCAGCACCTTTTATAGACCACCAGAATATTGAAGAGGAATGCAGTAGCATGGATA
GTTGATGGTGAATTTGGAGCAGACGACTTCTGTTTAACTTAAAATTAGTCGTATTTTAATGGCTTGGGATTTGGT
GCAAACAAACATGATTGATAGCTGGACAGACATGCTCGTCATGAAAAAAGAACCATTTCTGAAGCCCGATTGGGG
CCAAACATTTACACCTTGCTTCATAGTAACCAGTTGAGATGAAGCACGTCGTTAGAACGTTGTTGGACACCATGT
TGAATTATTCCCCCATCGGTTGTGAAGAACTGTGCTACATTCAGGCTTACCCATTGAACTCAGTATATATATTTT
TTTCCTTCCTGTCTTTTGTCTGGCAGGATACCATTCTTGTTGCTCTTCTGTGTAATGAAGTTTAAATGCTTGTTT
GGAAAACTTTATTTAACAGTTTAGAAGGCTTGATAGAAAGAGTGCATTAGTCTGAAGAGTATACATTGGATAGGA
AAGAATTTCCTTCTTTTGTTTCTCCAAATCTTTCCGCCTTATTTAGCTTGAGATCTTTGCAGCTTGGTTCATGGA
TTCTAGCCTTGCCCGTTGCGCAGTATATACTGATCCAGATGATAAACCAGTGAACTATGTCAAAAGCACTCTCAA
TATTACATTTGACAAAAAGTTTTGTACTTTTCACATAGCTTGTTGCCCCGTAAAAGGGTTAACAGCACAATTTTT
TAAAAATAAATTAAGAAGTATTTATAGGATTAAAGTGACTTCATTTGTATACATTTGGAATCTAAACCAGCTTAA
AAACAGTTTCCTCAATGACTTAGATACACAGTATAACTGATGCTCTTCTGGAATACCACATGAGACATGGTCAGA
AACAGTGCTTGGAAGGACATTACACAAGAAATTCAGAGTAATGCTTTGAAGATTTCCCCCCTTTTGTTTTATTCC
TGAAGGAACATCAGTACCCGATCTTGAAGAAATTCAAGATTCAAAAAGAATTTTAAATACACCAACATGAGACAT
CAGTAGTCAGTTGGTTTTCAGTAAAGCTTGTTCCAAGTTGTTCTCAACTTAGGAAGTAATTTTGGTGTGATCTAG
CAAAAGAGTAGGAATCAGCGATACAACCACTTTGGAAGTTTATAGTATAATTGAAATTATTAGAAGAATTCAGCA
GGTTACAGACATACTTAAACTGGGATTAAAACCTCATAGTCATTTTTCTTAATTGCCCTTAATATTTTGACATAT
AGGGATACATAAATTTAAAGAATATTTTTTCTCAGTTTTTTCAGATATTGCCATACTGAACCTCATTCTAAACTG
GTGCTGTGGATAGTCTTTCCCTCTCCCCTCCTGTTTTAGTTTAAGGAAAGGTTTCCTTCATGGAAAAGCACTTTT

FIGURE 4487B

AATTTTGAGAATTTCACATTTAAAATAAGCCAAAAGCCTGATGTTCACATTGTGCTTTTAAACTCCGTAACAGCT
GAATACAACATAACATAGTCTCCCTTGAAATTCCCTCCCTTTTTCAGTAGAGGATAAATAGGGTGACTCCAGCTG
TTGGAATGAGAATGGGGATACCCCCAAAATAAGATTCTGGTGAAGAAAAAGTCTTGTACTAAGTTCCCCTTTAGG
TGTAGCCAAGTCTATAATATAATTATGATCATGAATAGACTCCAGAATCCACAAAGAGAAGAGGGCTTGGATGTC
AAAAATTCTTCCATTGTGGGGTAGGTGGTCGGGGATGGGAGAAAGGGAAAAGTCAGGGAAAGGGGAGAAGAAAGA
AAAACACATTTGGCCTTAAAATAGCATGCATTCTCCCAGAAGCCCATAGTAAAGAAAATGACAGATCGTGGTCAG
CAGACTCTTATCAAATTGGTATGTAAAAGATTTCTTCAAGCTCCATTTTGCAGAGACCACCACTTAGAGAATCAA
AAAATTCCTGTTTTGATACTTCTAAGTTAAAATATATGTTACAGTTTATCTGGTACTTCATTTTTCTTAACTAAA
ATTACTTTTTACTTTAAGCTTGAATAAAAATCTTCATTGGTAACTGTATGTAATTAAGTGGCAACTTCTCTTTAC
CTCAGTATAGTTAAAAACCATTCATATTTTAAGTGATTCATGTATACCCTGAAGCCGTTAATACACCCCAGTCTC
TATGGTAACATCACTAAATGTGGGCATAGAAACTCCACAGCTGTTTACAAATTTGGTTACAGTGTGCTATGGTGC
ATTTGTAACACTCAGATTTGTGCCCATTCAGGGGCAATTTGGCACTCAGATTCTACTCTACTTCACCTAACCACC
CCTAGATCTGAGTTTTCAGAGTGCTTCTGAAGTACAGTTTAAAAACACTTTTTAAAAAGTGGAGTAAAAGTGAGG
CACATTTTACAAGAACATAACTCCTATTAAAACGGAGTAACAACTATGCAAAGGTTTCTATAGCAGCTAGGTGAG
TTTGTTTTCCGGGTCTGTCTTAACTGGCAGCTTCCTGTACATACTGGTACTTATTTGCTGTAAACGTCTGTTTCA
TACATTTGCCATGCAGTGACTGTGCTCGAAAGGTGAAATCAATGGTAAAGAAGCCTAGGATTTTATGGTATGAGA
AACTGATCGCAGGATTTTCTGATCCATAGCTATTAATTGAAAACTTCTGATAGTGCTGTAGGCTCTATAGTAGGC
TTAAGAGTGAGTCTTATACTATGAAGCCAGCCACAAGATACTAACAAATGTATAAATTGAAAAGTACCAATACTT
TTTGCACATAGATCAAAATAGAGTGGAGAATTTGGGCTCCAAAAATCAGGTTAGTAGGCTCATTTCCATGTGCTT
AAAAATGTTTTTGTTGTTATGCATTGATTAAGGGCTAGAGCAAATATAAAATTAAATGTCTTTTTCCTCCAAATA
ATTGGTTATTAATGGTAAAATGTTGGACTTGGGGATTACTGAGATTAGTATGTGGGTAGTAAAGAATTGGAGTGG
GAGTTAGTGGGGAGGGATGACAAAGCTTCAGCTTTGGTTTTTGTATTTTTTTAGTCTTCATAACAGCTACATTTC
TGTTGCTCTTATTGGCCAGATAAATGTGTTATATTAAACCAGGTAAGTATTTTAAACAGAGAACATTTTATTTGC
ATATATCCCTACAAATTGGCCCATTTTATTGGGTGGGGGGATAAAAAAGGGATTCCCTAACTTTAAATAATCAGA
ATATCCTGCAATTGAAAGGAGAAAAAAATCCAATTTTGTCAGTATTTTCTTAGTCTGAAAAAAACAGCAGTAGTA
ATCTGGTGAATGTTATTATTAGGAGTGTTCTGCCTCTACAGTGGCATATTCCATGACATTAATAGAAAACCCTTC
TTTCCCACCCCTCCCCATCTTGACATTTTCTTTTTTAGGATGTTGGTTCCTGCAAACAAGAACTGACCCTATCAC
CTCTGCCTCACAGTGGGTAAATATATCATACATCTCTTGAAAGGGAAAATATCCATGTCAGTTTCTTTCACAGTA
GAAGAATGGCTGCTTTTGAATGGGGAGGAAAGAAGACATTTTTCTTAATATCCTTTTTGTCCCATCTCTAAAATG
TATAAATATTTTGATTTGGTTTTACTTTAATTTCTCATTCATAATTTCGCAACTGTCCTTTTGGGTTGCCCTCCA
ACACATTACTTCCATTTCAGAAACCATATCTGATTTAATATAAACTGCTAACTTAAGAAGAGGTGAATTTGCATT
TACACTTAGACACTTTCTAAAAACAGGGTGAACTTAATTGAAATTTTTCAGTGTTGTTAAGCTATTGTTATAGTA
GCTGCCCTATAGTTACAAAAATAAAAACTATAAAAACCCATCCCCTATCTACTTAATCCAGATAGCCTGGATTTA
ACAAAACCAATAGTATAAAAATGTGTGTGTGTGTTCTGTGTGTGTGTGAGAGAGAGAGTACTTGATTCATTAAAA
AGTCCTGGAAACAGCTGTTCTAGGATCTTGTCATTTTTACTGAAAGTCTCGTGCACATGTGAAGTGCCCTCTGAG
TTTAAGGTTTGGTTAATACTGGTATATTTTTATAAGATTGAAATTGTGTCCCCATCTTTAACTTAAACATTTTCA
TTATCAGGGTCAATGTGCTAGAACTGAATTGTAACATTTTTAGGCACAGATGGAAAAAAATGTTATTGGCTCCTT
GAAAATGTGTGTGTGTGGCGAGGGGAATAGATCCACAAAAGCATGTATGTACTTACAAACCAAGCTGTAGAGATC
AAGAAAAGAACTTAAGTGTTGATCTCAAGATTTCTAAATTGTCAAGATTTACATGGCATTGTGGTGGAACTAGTT
AACACTTAGAGCTTTTGGTATGTAATAACTATTTGCTATGGACTGATTAAATGTTTCAAAAGATTGTGTTCTTCA
ATTTTGGTGGGTTTTGATTTTTGTTTTTTTAACTGCCTCTCAGATTATATTTACTTAGTTTAAATTTCTTTGCTT
TATTCATTAAAGTATAAAAACTTCAGGTCTCTGATATTTATTTTCACTTGTTTACTAATTATTTACAAAACACCC
TTTGTTGACTTTTATTTTATAAATGTGTAATGTATTAAACGTCTTTAAATTTTTGTTCAACTGAAACTACATTAA
CTTTGATTTGCTTTACTGGGATTTTTTTTTAAAGACACTTTTTCCATGTCAGTGCGCAGCACTTAACCAGTCGTT
TGTATTCCCTTTCTTTCAATCCAATAAACAGAATGAATACCTAAATAAAA

FIGURE 4488

ASSSSDSDTGGASPPPRKKPRASAAEGVGEPGASAGRAGLSPPSXXXXXXXXXXXXVVVVVGLPPAAAPPAAAAV
PHRSSGHSLVSGSIMQANXXXXXXXXXXXXXXXXXXXXVPGYRPRSSPACRPRTGXXXXXXXXRGTWPTPMGSC
LPPPPPPATSNSLNVNNGVPGGAAAASSATVAAASATTAASSSLATPELGSSLKKKKRLSQSDEDVIRLIGQHLN
GLGLNQTVDLLMQESGCRLEHPSATKFRNHVMEGDWDKAENDLNELKPLVHSPHAIVVRGALEISQTLLGIIVRM
KFLLLQQKYLEYLEDGKVLEALQVLRCELTPLKYNTERIHVLSGYLMCSHAEDLRAKAEWEGKGTASRSKLLDKL
QTYLPPSVMLPPRRLQTLLRQAVELQRDRCLYHNTKLDNNLDSVSLLIDHVCSRRQFPCYTQQILTEHCNEVWFC
KFSNDGTKLATGSKDTTVIIWQVDPDTHLLKLLKTLEGHAYGVSYIAWSPDDNYLVACGPDDCSELWLWNVQTGE
LRTKMSQSHEDSLTSVAWNPDGKRFVTGGQRGQFYQCDLDGNLLDSWEGVRVQCLWCLSDGKTVLASDTHQRIRG
YNFEDLTDRNIVQEDHPIMSFTISKNGRLALLNVATQGVHLWDLQDRVLVRKYQGVTQGFYTIHSCFGGHNEDFI
ASGSEDHKVYIWHKRSELPIAELTGHTRTVNCVSWNPQIPSMMASASDDGTVRIWGPAPFIDHQNIEEECSSMDS

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FIGURE 4489

GCGCTTGCGAAGCGGGCTCCGGCTCGGCTCGCGGGGACTGTGCACGAGGTTGGCGACGCCGCCCCGCCGGGCCCC
AGATCAGGCCGCAGAGATCGGGAGCCGCGGGAGCACTAAGGCGCAAGGGCCACAGCAGCAGCCGGGCTCAGAGGG
TCCCAGCTATGCCAAAAAAGTTGCGCTCTGGCTTGCTGGGCTGCTTGGAGCTGGTGGGACTGTGAGCGTCGTCTA
TATCTTTGGAAACAACCCGGTGGACGAAAATGGTGCCAAGATTCCTGATGAGTTCGACAATGATCCAATTCTGGT
ACAGCAGTTGCGCCGGACATACAAATATTTCAAAGATTATAGACAGATGATCATCGAGCCCACCAGCCCTTGCCT
TCTCCCAGACCCTCTGCAGGAACCGTACTACCAGCCACCCTACACGCTCGTTTTGGAGCTCACCGGCGTCCTCTT
GCATCCTGAGTGGTCGCTGGCCACTGGCTGGAGGTTTAAGAAGCGCCCAGGCATCGAGACCTTGTTCCAGCAGCT
TGCCCCTTTATATGAAATTGTCATCTTTACGTCAGAGACTGGCATGACTGCGTTTCCACTCATTGATAGTGTGGA
CCCCCATGGCTTCATCTCCTACCGCCTATTCCGGGACGCCACAAGATACATGGATGGACACCATGTAAAGGATAT
TTCATGTCTGAATCGGGACCCAGCTCGAGTAGTAGTTGTGGACTGCAAGAAGGAAGCCTTCCGCCTGCAGCCCTA
TAACGGCGTTGCCCTGCGGCCCTGGGACGGCAACTCTGATGACCGGGTCTTGTTGGATCTGTCTGCCTTCCTCAA
GACCATTGCACTGAATGGTGTGGAGGACGTGCGAACCGTGCTGGAGCACTATGCCCTGGAGGATGACCCGCTGGC
GGCTTTCAAACAGCGGCAAAGCCGGCTAGAGCAGGAGGAGCAGCAGCGCCTGGCCGAGCTCTCCAAGTCCAACAA
GCAGAACCTCTTCCTTGGCTCCCTCACCAGCCGCTTGTGGCCTCGCTCCAAACAGCCCTGAACTCTGGGCCTCCT
CAAACTCAGTGCCTGGGTCCAGGGCCCCAGTGCTTCCAGACCAAGACTTGGGCCACCACTTGTCCAATAAAGTAC
ATCCCAGACGCCACAAAAAAAAAAAAAAA

FIGURE 4490

GTGGCTGATTGAACTGCTGGTATTGGTGGGAGAGTACGTAGAAACTTGTGGCCATCTCATCTATGCCTGCAGGCA
ACTGAAAAGCAGTGATTTGGACCTTTTTCGAGTTTGGATGGGAGTGTGGACAGGGCGGTTAGGGGGCTGGGCCCA
GGTCATGTTTCAGTTTCTAAGCCAGGGGTTTTACTGTGGAGTAGGACTGTTTACTCGTTTTCTTAAGCTGCTGGG
TGCTTTGCTGCTCCTGGCTCTGGCCCTCTTTTTGGGCTTTCTACAGTTGGGATGGCGGTTTCTGGTGGGACTAGG
TGACCGGTTAGGCTGGAGGGATAAGGCTACCTGGCTCTTCTCTTGGCTGGATTCTCCAGCCTTGCAGCGTTGCTT
GACTCTGCTGAGAGATAGCAGGCCATGGCAGCGGCTGGTAAGAATAGTTCAGTGGGGCTGGCTGGAGTTGCCTTG
GGTCAAGCAGAATATTAATAGGCAGGGGAATGCACCTGTAGCTAGTGGGCGCTACTGCCAGCCTGAAGAGGAAGT
GGCTCGACTCTTGACCATGGCTGGGGTTCCTGAGGATGAGCTAAACCCTTTCCATGTACTGGGGGTTGAGGCCAC
AGCATCAGATGTTGAACTGAAGAAGGCCTATAGACAGCTGGCAGTGATGGTTCATCCTGACAAAAATCATCATCC
CCGGGCTGAGGAGGCCTTCAAGGTTTTGCGAGCAGCTTGGGACATTGTCAGCAATGCTGAAAAGCGAAAGGAGTA
TGAGATGAAACGAATGGCAGAGAATGAGCTGAGCCGGTCAGTAAATGAGTTTCTGTCCAAGCTGCAAGATGACCT
CAAGGAGGCAATGAATACTATGATGTGTAGCCGATGCCAAGGAAAGCATAGGAGGTTTGAAATGGACCGGGAACC
TAAGAGTGCCAGATACTGTGCTGAGTGTAATAGGCTGCATCCTGCTGAGGAAGGAGACTTTTGGGCAGAGTCAAG
CATGTTGGGCCTCAAGATCACCTACTTTGCACTGATGGATGGAAAGGTGTATGACATCACAGAGTGGGCTGGATG
CCAGCGTGTAGGTATCTCCCCAGATACCCACAGAGTCCCCTATCACATCTCATTTGGTTCTCGGATTCCAGGCAC
CAGAGGGCGGCAGAGAGCCACCCCAGATGCCCCTCCTGCTGATCTTCAGGATTTCTTGAGTCGGATCTTTCAAGT
ACCCCCAGGGCAGATGCCCAATGGGAACTTCTTTGCAGCTCCTCAGCCTGCCCCTGGAGCCGCTGCAGCCTCTAA
GCCCAACAGCACAGTACCCAAGGGAGAAGCCAAACCTAAGCGGCGGAAGAAAGTGAGGAGGCCCTTCCAACGTTG
ATGCCCCTTCTCTTTCCTCAAATCAATGTCAGGGAGTCAAAAGGGCTGTAGCACAGGATGGAGTTTGATTTATCC
CTCCTCCCCCAACACCTAGGAACTGAATCTTTTTCTTTTTATTTTTTGAGATGGAGTCTTGCTCTGTTGCCCAGC
TGGAGTGCAGTGGTGTGATCTCAGCTTACTGCAACCTCTGTCTCCCGGGTTCAAGCAATTCTCCCATCTCAGCCT
CCTGAGTAGCTGGGATTACAGGCACACACCACCACACCTGGCCCAGCTAATTCTTTTTTGTATTTTTAGTAGAGA
CGGGGTTTCACCATGTTGCCCAGGCTGGTCTCGAACTCCTGAGCTCAGGTGATCCACCCGTCTTGGCCTCCCAAA
GTGCTGGATTACAGGCATAGGCCACTGTGCCCGGCCTGAATCTTGTCTTTTGACAATACCAAAGAAATAGGGGGT
AGCTAGAGTAAAGAACCTAGGGCCTGGACCTGGGCTGGACAGTGTATCCCTTTAGGTGTGGGAACTGGGTATTTC
CCTGGGGTCTGTATGCCTTTGTCTTGTCATTTGCTTTTAGGGCAGATGACACTTTTTCCCACCCTTTTAAAGCTA
CAAGTCTATCTTCTTTCTTGACCCATTTCAGGAGGGAGCCCTCTCCTTTATCCTGATATAATATTTAAAAGACAG
AACAAGAAAGCATGTAGCCCTAATGATAGGAGATTATCGCATAGAGTTCAGAGACTGGAAACTGAATTTTCCCTC
GACTTTCACTTTGTGGGTAAATCACCCAATTTTAGGCTCTTTTCTGCAAGGATGGCCAAAATTAATCATTTTTAA
AAAGTAGATTCATGCCCACTGCCCTTGGGTGAGGGGGAAGAATACGGGGGTTCCCAGAAGCCCCCATGTGATCCA
AGGGTTTGTATTTTTTTTTTAAGTTTGTTCATATTTGTATGTACATGACTATTTAAAGCCAGGGGATTATCTTTC
TATAAATGTATAACTGGC

FIGURE 4491

MGVWTGRLGGWAQVMFQFLSQGFYCGVGLFTRFLKLLGALLLLALALFLGFLQLGWRFLVGLGDRLGWRDKATWL
FSWLDSPALQRCLTLLRDSRPWQRLVRIVQWGWLELPWVKQNINRQGNAPVASGRYCQPEEEVARLLTMAGVPED
ELNPFHVLGVEATASDVELKKAYRQLAVMVHPDKNHHPRAEEAFKVLRAAWDIVSNAEKRKEYEMKRMAENELSR
SVNEFLSKLQDDLKEAMNIMMCSRCQGKHRRFEMDREPKSARYCAECNRLHPAEEGDFWAESSMLGLKITYFALM
DGKVYDITEWAGCQRVGISPDTHRVPYHISFGSRIPGTRGRQRATPDAPPADLQDFLSRIFQVPPGQMPNGNFFA
APQPAPGAAAASKPNSTVPKGEAKPKRRKKVRRPFQR

FIGURE 4492A

AACCATAGAACATGGGAATAGGTTTTATTTTCATCTCAAGAACATTTAAGTTGGGTGAAGAAATTCAGCTTTTGT
TGTTAGAATCTGACAGGCTTCAAACACTTGTGATGGAGGGGTTGTTGTCATATCAAAGTCCACCTAGTAAAGTTT
TAGGTGACCAGTGACTTTGTCAATTAGGTCTGCTGGTCCTGGCCCAATCCCTAGGACAGTTTGAGAGCCTGGTGC
AATCTGAGTACGTCCAGCATCTTGAATTAAACTTACAGTCAGTCCCAGCATTTTTGCATGGGCCAATAATGCAAT
CAGGGTTTCTTCATCAGGAGCTTTGACCACCACCTTGGGCTGGCCACAGTATTCCCATTGTTTGAGCATTTCAGG
ATTTCTTCTTTGAATCTGCTTGTAGGCTGAAACAGCAGCATGAGAGCACTGGGCAGCCACTTTCCCTTTTCCCAT
CTTTAAGTCATTTCGAACCACAAGAATCATCTTGTACTCCCCGCTGTCTCCCAAGATGCTTGCTTCACTTTCAGT
ATCTGTGTGTGTCTTGCTCGTCTTGCTTTTGGGGAGCATCCCAAAGCATACTCGAAGGCTCCAGCCCCAGGCACA
TGCCACAAGCAACTCCAACAGCCAAGCCGAGTGTACTGGGATGAGCCAAATATTCCATAACCAAGGATTTGGAGG
GCATCTACAGTACCTCCTTTCCTCACTCGCGCCTTCCCTTCTTCTGGGCAGCGAACACGTTTCTATCGCGTGAGC
TACCTCTTCCGGGGTTCCTGGGTGACAAGTTCCGGATCAAGAATCACAAAGCGAGCAGTCATTCTTCCTCTTGCC
ACACCCACAGGGCCCGCACTAAGAGCCTAACTGAAATCCCGCGAGGATCAACCGAGCTCGCCGAAAGGAGGGAGG
AACGTATCCCTTCTGGAGGCTGTCTCAGGGGGCAGAGGGACCGGACCGGAAGTGACGTGAGCGGGTTCCGGTTGT
CTGGAGCCCAGCGGCGGGTGTGAGAGTCCGTAAGGAGCAGCTTCCAGGATCCTGAGATCCGGAGCAGCCGGGGGT
CGGAGCGGCTCCTCAAGAGTTACTGATCTATGAAATGGCAGAGAATGGAAAAAATTGTGACCAGAGACGTGTAGC
AATGAACAAGGAACATCATAATGGAAATTTCACAGACCCCTCTTCAGTGAATGAAAAGAAGAGGAGGGAGCGGGA
AGAAAGGCAGAATATTGTCCTGTGGAGACAGCCGCTCATTACCTTGCAGTATTTTTCTCTGGAAATCCTTGTAAT
CTTGAAGGAATGGACCTCAAAATTATGGCATCGTCAAAGCATTGTGGTGTCTTTTTTACTGCTGCTTGCTGTGCT
TATAGCTACGTATTATGTTGAAGGAGTGCATCAACAGTATGTGCAACGTATAGAGAAACAGTTTCTTTTGTATGC
CTACTGGATAGGCTTAGGAATTTTGTCTTCTGTTGGGCTTGGAACAGGGCTGCACACCTTTCTGCTTTATCTGGG
TCCACATATAGCCTCAGTTACATTAGCTGCTTATGAATGCAATTCAGTTAATTTTCCCGAACCACCCTATCCTGA
TCAGATTATTTGTCCAGATGAAGAGGGCACTGAAGGAACCATTTCTTTGTGGAGTATCATCTCAAAAGTTAGGAT
TGAAGCCTGCATGTGGGGTATCGGTACAGCAATCGGAGAGCTGCCTCCATATTTCATGGCCAGAGCAGCTCGCCT
CTCAGGTGCTGAACCAGATGATGAAGAGTATCAGGAATTTGAAGAGATGCTGGAACATGCAGAGTCTGCACAAGA
CTTTGCCTCCCGGGCCAAACTGGCAGTTCAAAAACTAGTACAGAAAGTTGGATTTTTTGGAATTTTGGCCTGTGC
TTCAATTCCAAATCCTTTATTTGATCTGGCTGGAATAACGTGTGGACACTTTCTGGTACCTTTTTGGACCTTCTT
TGGTGCAACCCTAATTGGAAAAGCAATAATAAAAATGCATATCCAGAAAATTTTTGTTATAATAACATTCAGCAA
GCACATAGTGGAGCAAATGGTGGCTTTCATTGGTGCTGTCCCCGGCATAGGTCCATCTCTGCAGAAGCCATTTCA
GGAGTACCTGGAGGCTCAACGGCAGAAGCTTCACCACAAAAGCGAAATGGGCACACCACAGGGAGAAAACTGGTT
GTCCTGGATGTTTGAAAAGTTGGTCGTTGTCATGGTGTGTTACTTCATCCTATCTATCATTAACTCCATGGCACA
AAGTTATGCCAAACGAATCCAGCAGCGGTTGAACTCAGAGGAGAAAACTAAATAAGTAGAGAAAGTTTTAAACTG
CAGAAATTGGAGTGGATGGGTTCTGCCTTAAATTGGGAGGACTCCAAGCCGGGAAGGAAAATTCCCTTTTCCAAC
CTGTATCAATTTTTACAACTTTTTTCCTGAAAGCAGTTTAGTCCATACTTTGCACTGACATACTTTTTCCTTCTG
TGCTAAGGTAAGGTATCCACCCTCGATGCAATCCACCTTGTGTTTTCTTAGGGTGGAATGTGATGTTCAGCAGCA
AACTTGCAACAGACTGGCCTTCTGTTTGTTACTTTCAAAAGGCCCACATGATACAATTAGAGAATTCCCACCGCA
CAAAAAAAGTTCCTAAGTATGTTAAATATGTCAAGCTTTTTAGGCTTGTCACAAATGATTGCTTTGTTTTCCTAA
GTCATCAAAATGTATATAAATTATCTAGATTGGATAACAGTCTTGCATGTTTATCATGTTACAATTTAATATTCC
ATCCTGCCCAACCCTTCCTCTCCCATCCTCAAAAAAGGGCCATTTTATGATGCATTGCACACCCTCTGGGGAAAT
TGATCTTTAAATTTTGAGACAGTATAAGGAAAATCTGGTTGGTGTCTTACAAGTGAGCTGACACCATTTTTTATT
CTGTGTATTTAGAATGAAGTCTTGAAAAAAACTTTATAAAGACATCTTTAATCATTCCAAAATTGTGTCCGTTTT
CTTGAGCGTTTTGATTTTTTACTTTTAGCTTATACCAGCTGAATGGCAGCCTTGCCTAATCCACCTACAACAAGA
ATTTCTTAAGCTTTCTTTTATTTGCATGAGAGAGCCACTACCAAGGCATGTTTTGTTATGCTGAAACTGGGCTGC
TGCATACTGCTAAATGGCACCTCTGGGATTGGCCTACCTGGGGATTTCTTGGTTTGTGAAAACAGGAGAGGAGAA
ATATCTCATACAAGTGAAAGGATACTGGAGAGAGAAATTACCCATTTCTAAAAAAAAAACCACACTCTGTCGTATC
TGTGTTAATGTTTTCTAGCATGTACTCTGGTTTCAACAGACACAAATTTATATGTTAACCCAGTTTTCTTGCCGT
TCTGTAAGTGTTTTATTCTTAGTGTGATTTTTTTCCATTGGGATGTTTTTGATTGAACTTGTTCATTTTGTTTTG
CTTGGGAGGAAAATAAACAATTTTACTTTTTTCCTTTAGGAGCATTATGAGCATTATGTCAGAATAGAATAGAAT
TGGGGTTCGATCTTAACAGGCCAGAAATGCCTGGGTTTTTTTGGTTTGTTTTTGTTTTTGTTTTTTTATCAAATC

FIGURE 4492B

CTGCCTGACTGTCTGCTTGTTTTGCCTACCATCGTGACATCTCCATGGCTGTACCACCTTGTCGGGTAGCTTATC
AGACTGATGTTGACTGTTGAATCTCATGGCAACACCAGTCGATGGGCTGTCTGACATTTTGGTATCTTTCATCTG
ACCATCCATATCCAATGTTCTCATTTAAACATTACCCAGCATCATTGTTTATAATCAGAAACTCTGGTCCTTCTG
TCTGGTGGCACTTAGAGTCTTTTGTGCCATAATGCAGCAGTATGGAGGGAGGATTTTATGGAGAAATGGGGATAG
TCTTCATGACCACAAATAAATAAAGGAAAACTAAGCTGCATTGTGGGTTTTGAAAAGGTTATTATACTTCTTAAC
AATTCTTTTTTTCAGGGACTTTTCTAGCTGTATGACTGTTACTTGACCTTCTTTGAAAAGCATTCCCAAAATGCT
CTATTTTAGATAGATTAACATTAACCAACATAATTTTTTTTAGATCGAGTCAGCATAAATTTCTAAGTCAGCCTC
TAGTCGTGGTTCATCTCTTTCACCTGCATTTTATTTGGTGTTTGTCTGAAGAAAGGAAAGAGGAAAGCAAATACG
AATTGTACTATTTGTACCAAATCTTTGGGATTCATTGGCAAATAATTTCAGTGTGGTGTATTATTAAATAGAAAA
AAAAAATTTTGTTTCCTAGGTTGAAGGTCTAATTGATACGTTTGACTTATGATGACCATTTATGCACTTTCAAAT
GAATTTGCTTTCAAAATAAATGAAGAGCAGCTGTCCTTCTTTCCTCTTTTAAGTGTTCAGCTGTGGCATGCTCAG
AGGTTCCTGCTGGATTCCAGCTGGAGCGGTGTGATACCCTTCTTTTTCAGCTGTTCGTGCCTTCCTTTCTTGTAT
CCACCAAAGTGGAGACAAATACATGATCTCAAAGATACACAGTACCTACTTAATTCCAGCTGATGGGAGACCAAA
GAATTTGCAAGTGGATGGTTTGGTATCACTGTAAATAAAAAGAGGGCCTGGGAATTCTTGCGATTCCATCTCTAC
TTTGTATAAGTCTCATTTTGTGCCTTACACATCTGCAGTATTTATCATGTTCCAACTTGGTGACTGTCAGGCAGT
GCAATACATCAGCAGTTTATCACCGAAGAGCTGAGGAATACCTCCCTTAAAACAGACAATGTC

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FIGURE 4493

MAENGKNCDQRRVAMNKEHHNGNFTDPSSVNEKKRREREERQNIVLWRQPLITLQYFSLEILVILKEWTSKLWHR
QSIVVSFLLLLAVLIATYYVEGVHQQYVQRIEKQFLLYAYWIGLGILSSVGLGTGLHTFLLYLGPHIASVTLAAY
ECNSVNFPEPPYPDQIICPDEEGTEGTISLWSIISKVRIEACMWGIGTAIGELPPYFMARAARLSGAEPDDEEYQ
EFEEMLEHAESAQDFASRAKLAVQKLVQKVGFFGILACASIPNPLFDLAGITCGHFLVPFWTFFGATLIGKAIIK
MHIQKIFVIITFSKHIVEQMVAFIGAVPGIGPSLQKPFQEYLEAQRQKLHHKSEMGTPQGENWLSWMFEKLVVVM
VCYFILSIINSMAQSYAKRIQQRLNSEEKTK

FIGURE 4494

GCTTTCGCCGCCTGGGAGCCGTCCGGCGCAGCAGTTTCTAGGTCCCCACTGTCCCCGCCGTCCCGCCCCTTCGCG
TCCCGGGAACCGGCTGGCTTCCGAGCCGCACTCGCCGATCCTCCAGGC**ATG**CCCCGCTACGAGCTGGCTTTAATC
CTGAAAGCCATGCAGCGGCCAGAGACTGCTGCTACTTTGAAACGTACGATAGAGGCCCTGATGGACAGAGGAGCA
ATAGTGAGGGACTTGGAAAACCTGGGTGAACGAGCGCTTCCTTATAGGATCTCTGCCCACAGTCAGCAGCACAAC
AGAGGCGGGTATTTCTTGGTGGATTTTTATGCACCCACCGCAGCTGTTGAAAGCATGGTGGAGCACTTGTCTCGA
GATATAGATGTGATTAGAGGGAATATTGTCAAACACCCTCTGACCCAGGAACTAAAAGAATGTGAAGGGATTGTC
CCAGTCCCACTCGCAGAAAAATTATATTCCACAAAGAAGAGGAAGAAG**TGA**GAAGATTCGCCAGATTTTAGCCTT
ATATGTAATTCCTTCACATTTGGGCAGCATGGACGAGAAGGAAGAATTTGCAAGTTTGGCCTTTATATAAGCATG
TGTTGCAGGTGCTGTTTGATTTTTCTAAGGTATTTTTAGCCCTTGATCCCCTTTGCTTGCGAGAGGTGGGGAACT
GCTCACTGACAGCTTCTCTGTAACCTGCAGTACCAGTGGATCATTCTTGATTTTGTTTTCATTAGTGTCATTTCT
TTGTCATTGAGGACTTTTCCCCTTACAACAGTAACACCATTTTTTGAAGAGCAAAACTTATAATACCTCCTGGGA
TTGTGAGCTAGTCATTCAGCCTGTGTAACCATGTGGAAATAAAAATTGACGACCAATGTATTATATGGACAACTT
TTGCTTTGAGTAATAAACTTGATTGTAGGGAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4495

MPRYELALILKAMQRPETAATLKRTIEALMDRGAIVRDLENLGERALPYRISAHSQQHNRGGYFLVDFYAPTAAV
ESMVEHLSRDIDVIRGNIVKHPLTQELKECEGIVPVPLAEKLYSTKKRKK

FIGURE 4496

GGCAAGTGTCCTTGGATATTGTCTTCTGCCCATGATCCTACTTTCCAGCTTTGCAGTGATATTTTCTTTGCAAGG
AATGGTAGGAATCATTCTCACTGCTGGGATTATTGGATGGTGTAGTTTTTCTGCTTCCAAAATATTTATTTCTGC
ATTAGCCATGGAAGGACAGCAACTTTTAGTAGCATATCCTTGCGCTTTGTTATATGGAGTCTTTGCCCTGATTTC
CGTCTTTTGAAAATTTATCTGGGATGTGGACATCAGTGGGCCAGATGTACAAAAAGGACCTTGAACTCTTAAATT
GGACCAGCAAACTGCTGCAGCGCAACTCTCATGCAGATTTACATTTGACTGTTGGAGCAATGAAAGTAAACGTGT
ATCTCTTGTTCATTTTTATAGAACTTTTGCATACTATATTGGATTTACCTGCGGTGTGACTAGCTTTAAATGTTT
GTGTTTATACAGATAAGAAATGCTATTTCTTTCTGGTTCCTGCAGCCATTGAAAAACCTTTTTCCTTGCAAATTA
TAATGTTTTTGATAGATTTTTATCAACTGTGGGAAACCAAACACAAAGCTGATAACCTTTCTTAAAAACGACCCA
GTCACAGTAAAGAAGACACAAGACGGCCGGGCGTGGTAGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCGAG
GCGGGCGGATCACAAGGGCAGGAGATCGAGACCATCCTGGTTAACACGGTGAAACCCCGACTCTACTAAAACTAC
AAAAAAATTAGCTGGGCGTGGTGGCGGGCGCCTGTAGTCCCAGCTACTCAGGAGGCTGAGGCAGGAGAAAAGTGT
GAACCCAGGAGGCGGAGCTTGCAGTGAGCCGAGATCACACCACTGCACTCCATCCAGCCTGGGTGACAGGGTGAG
ACTCTGTCTCAAAAAAAAAAAAAAAAAAGGAGACACAAGACTTACTGCAAAAATATTTTTCCAAGGATTTAGGAAA
GAAAAATTGCCTTGTATTCTCAAGTCAGGTAACTCAAAGCAAAAAAGTGATCCAAATGTAGAGTATGAGTTTGCA
CTCCAGAAATTTGACATTACTGTAAATTATCTCATGGAATTTTTGCTAAAATTCAGAGATACGGGAAGTTCACAA
TCTACCTTATTGTAGACATGAAATGCGAACACTTACTTACATATTAATGTTAACTCAACCTTAGGGACCTGGAAT
GGTTGCATTAATGCTATAATCGTTGGATCGCCACATTTCCCAAAAATAATAAAAAAATCACTAACCTTTTTTAAG
GAAAATATTTAAAGTTTTACAAAATTCAATATTGCAATTATCAATGTAAAGTACATTTGAATGCTTATTAAAACT
TTCCCAATTAATTTTAACTGTGTTATTGAGTTTACTTTTACTAAACTACTGTTCTCTTTGTCTCTTTTTTAACTA
GGCTCTGATTTTGACCCCTAATTTAAGCTTTAAGAATAGAAATCAGCTAATATAGAATCAGACAAAAAGGGGATT
AAATGAGCAGTTTGAGTTACATTATTTTATTGTATTAAATTTATTTGATTTATATTGTCATGTTCTCTTGCCAGA
GAGAATCTGTAGGAAAATACTGTATCTTGTATAGTGATCATTGGCTTTTTCTAGAAAAACTGTCTCTGATTCTGG
ACAAAGCTCAGTTATAGTTACGAGAAAGATATGGTACAGGGAGGGAAATACTGCCTTTTTTTTTTTTTTTAAAG
AGATTTTCAGACTAAATAGAAATGTCAAAATGATGTATCAATGGTTCTTTTTTAGAACAAGTTTTCAAAGCATAA
AAAGAGGTTGAGAGAAATAACATATTTATTGATTCACATAAGTATGTTTTTCTTCATTAATCGTCTGGAGAAACC
CACTTGTCATTAATTTGTTTTGGGCTAGGTTTTCAAACTTACCAAATTGCTTTAAAAAAGCAATTTGGAAGGTAA
TTTGATAGGCTTTCCAACTTAACCAAATTTTTTATTGTAATTCTTGGATAGTATTTTTGTCTTTTTCAATTCATT
TGTCTTTTTCAGTATAGTTTTTGTTAAGGCAAATGTCTTCCCTTAATATCCAAATATTGCTAATAAACGGTAGAA
GATGCTTTGGAAATTAAAATTATCTCGCTGTTGGTTAGACTTAACACTGTTAATCTTCAGCCAAATATCACATAT
GGATCAAATTATTTTCTTTTTTGTTGTTTACCCTATCCTCAACAACATTTTTAGTTTAAATTATTGTAGAGATTT
TTTTTGTGGTGGTTATTTTTTATTTTGCTCCAAAATAATAAGGTGCAAAGCTATTTTATGCTTAACTGTTGCTCT
GTCAAAACAGCTATGCAGTGGAGTTGCATTTGATGTTCTAGAGTTTGATTACATGCAGAGTTGTATATAGCCAAA
ACTTCTCTTATCAAACTCTGTTATGTAGGCATATTTATATATACATTAAAGACTGTTGTACTGTGTCTC

FIGURE 4497

GACGCGGGGCCGGAACGCGAAGAGGGTGGTGGAGTCGGGCTACCCACTGATTTTCCTTCCCTTACTTCCCCTGAG
CCCTTGGGCCCACTTCCCAGCCTACCGCTTCCGTCCCCGCCCGACTCTTGGGCCAGCGCCTGGGCCCACACTTTC
CTATCCCCCGCAG**ATG**CCGGTGGCCGTGGGTCCCTACGGACAGTCCCAGCCAAGCTGCTTCGACCGTGTCAAAAT
GGGCTTCGTGATGGGTTGCGCCGTGGGCATGGCGGCCGGGGCGCTCTTCGGCACCTTTTCCTGTCTCAGGATCGG
AATGCGGGGTCGAGAGCTGATGGGCGGCATTGGGAAAACCATGATGCAGAGTGGCGGCACCTTTGGCACATTCAT
GGCCATTGGGATGGGCATCCGATGC**TAA**CCATGGTTGCCAACTACATCTGTCCCTTCCCATCAATCCCAGCCCAT
GTACTAATAAAAGAAAGTCTTTGAGTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AA

FIGURE 4498

MPVAVGPYGQSQPSCFDRVKMGFVMGCAVGMAAGALFGTFSCLRIGMRGRELMGGIGKTMMQSGGTFGTFMAIGM
GIRC

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FIGURE 4499

GAATTCGGCACGAGAATGAGCCCCACAGAATAAAGGTTTTTCCTCTTGCTGTGGCCTACTGGAAGCCTTCCTAAC
TCTATAGCTGGTAAAGTAGAGCAGAAAGGGCCAGAATGGCTTAAGATGGAGCTAAATCCCTATAGCATTCCATTT
TCTGCTCTTGCCTCTTGAACTTAGAAGGCTTGCCCATATATCCTAACAATCTGTTCTCTGAGCTGTTAGGCCAAT
CCCTGGTCTCAAACTCCTGACCTCAGGTGATCCACCCACTATGGCCTCCCAAGGTGCTGGGATTGCAGATGTGAG
CCACCGTGCCTGGCCAGAAAATCTGGATTCTTATTCCTAGTTCTTCATTTCTGTCACATGCACTTAGTTGACATT
ACATCTACATATATTAGCTTTTTCCTACATGAGCCATCTATTTACTTAGTAACCAGTGTTCTTAATGAAGTATTT
AGTCTTGGGTTTCTTGTAAAATTTCTCTGCATTCCTTAGACAGTGTACTATACATGAAATATTCTTGTTGACCTA
GTAATTTATATTATTCCATTTAATTCTTAAACCTATGGCCTTTTTATTGAGCACACTCTTAAATCATTATTTGGC
TTGTAAACATTCATCTGAATTGTGGCTACAATCCTCTTTAAATAATCTAGGAAAAAAGAAAGATAAAGCTTACAT
TTTCACAGTTTTGGCTCTTAAACACATTCCACAAATGCCATTAAGAATTTATTTTGTTTTAGGCCAGTCATGGTG
GCTCATGCCTGTAATCCCAGCAATTTGGGAGGCTGAGGCAAGAACTGCTTGAGCCCAGGAGTTTGAGACTAGCCT
GGGCAACATAGCAAGACCCTGTCTCTACCAAAAAAAAAAAAAGTTTATTTTGTTTTAGAGTCATTTAATGTGTTTT
TATGCACAATAATAGTGGGAGGTTGTTTTGTTGCATTTGTTTGTTTGTTTTGTTTTGTTTTGCTTTCCAT
GTGGGAAAAGTTAACATTGGAACTGTTTCTAGTAAAAGATTTTTTTCAGGCTGGGCACGGTGGCTCATGCCTGTG
ATCCCAACACTTTGGGAGACCGAGGGAGCTGGATCACCTGAGGTCAGGAGTTCGAGACCAGCCTGGCCAACATGG
AAAAACTCCATCTCCACTAGAAATACAAAAGTAGCCTGGTGTGGTGGCACATGCCTGTAATCCCAGCTACTTGGG
AAGCTGAGGCAGGAGAATCACTTGAACCTGGGAGGTGGAGGTTGCAGTGAGCCAAGATCACGCCATTGCACTCCA
GCCTGGGCAACAAGAGTGAAACTCCGTCTCAAAAAAAAAAAAAAAAAAAGATGTTTTTCATTTTTTTCATGTTATC
TATCCAAGCACTGTTCCATGGTCAGCAAGTCATATTTCATAATGTGGATTTTCCAAAATAATTATTGAATACAGC
TATTCTATGGCTACTTTTAGTGTTTTTGTGGTATGTGGTGTGGGAGTGTTTATGGAATTACCAGTATCTTAAATT
TTCAAAGGAACCTTGGAAGTCTATCACTCTAAATGAAAGTCTGTCACTCTACATGAATTATGTGCTCAAATTTGA
CCAACTCAGTTTAAGACACAAAACAGTAATTTGAAGAAGGAAAAATGAAGAGAGTTTCTAGTTTAATGGGTTAAA
TTTTTGTTGTTGCAATAGTAAGTTTAGTCTTCTTATAATATTTCTAAATGAAAAATCATAGGTATTTGTTACCAT
GTGTGAAGATTACTTTGTTAAAAGCAAAAGTGGTCGTGTGATATGCTAAATGTTAATTACTGATTTTATATGTTT
AAATCACGCCAAACAAATTATGTCTGTGCCATCCAGGGTCTGTTGTTAATCTTTTTCTGAGTACTTGGATTGGGA
TAAAGGGCTTGTACTATGCACTTTTTATTAATGAATAAATAGAAAACGTTAGTAACACTTTGTGTTTTCTGTTTG
GCTTTTGTGGGAAGAGAAGCAAGCATCTTTTGCCTAGTAGATGTTAACATTGTGTATTAAACAGTTTCTTTGTAA
GACCTAACTAAAGACATTCCTAAGAGAGAACTTAAGTTTTAAGAAAAGTTGTGAGAAAAATATTCATAAAATATG
CAGTATGGGGCCAGTATTCAGAAGTAGAGTTTCTCTCTTGGAAATTAGATTGCAGTCACATTTCTTTGGTTATTT
TCTTTCTCTCTCTCTTCCTAGAATACCAGGTAAAATAGACATTTACTTTGAGGGACTAATATCCAATAGTGTTAA
TTATTTAAGCAGATATATCTAGCTCAAAAGGAACCAGACATGTCACTGTACCAAAAACACACAAAAGTGAAAATT
TGCTTCTGTTCTGTGACCTAGAATGTGTCCAGACATTAAAGATCATGAATACTCATATACATGTAAAAATAGTAA
CACTGCTCTGGCATGATTTTGACGTCAGTGTTTATGTAATAACTTCAGTGTTATATTTAAAATAGATAAATTTGT
GAAATAACAATTTCTTGGAGACAGTCAACTTTTTATGATTTAATCTAAAGATTGTCATGTACATGTCAACGGATA
TCTGAATCCTCAGTGAAACTGTTAAGTTTTCATTAAATGACTCTGCTGCAATACTAGTTTTCTTCTCAGAAAATG
GAATTCAAATAAAATAAGTTTTTTGGTCTTGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4500

MHLVDITSTYISFFLHEPSIYLVTSVLNEVFSLGFLVKFLCIP

FIGURE 4501

GAACTCCCTTTAAGGAGCAGCCCCAGCCCTGCTAACAGCACTGCTGGTACCATTGACAGCGACGGCTGGGACGCG
GGTTTCTCAGACATCGCGTCCTCAGTGCCCTTGCCAGTCTCTGACCGCTGCTTTAGCCACCTGCAGCCTACTCTC
TTGCAGCGAGCCAAGCCCAGTAACTTCCTGCTGGACAGAAAGAAAACGGACAAGCTGAAGAAGAAGAAGAAGAGG
AAGCGCAGGGACAGTGATGCGCCTGGGAAAGAGGGGTACAGGGGGGGCTTGCTGAAGCTGGAAGCCGCTGACCCC
TACGTGGAGACCCCCACGAGTCCCACCTTGCAGGATATCCCCCAGGCTCCCAGCGACCCCTGCTCGGGCTGGGAC
TCCGATACTCCCTCGAGTGGATCTTGTGCCACTGTGTCACCTGATCAGGTCAAAGAAATAAAAACTGAAGGCAAA
CGGACTATCGTCCGGCAGGGAAAGCAGGTGGTGTTCCGAGATGAGGACAGCACTGGCAATGATGAGGACATCATG
GTGGACTCAGATGACGATTCCTGGGACCTCGTGACCTGCTTCTGCATGAAGCCATTTGCCGGCCGCCCCATGATC
GAGTGTAATGAGTGCCACACCTGGATTCACCTGTCCTGTGCGAAAATCCGGAAATCCAATGTTCCAGAAGTGTTT
GTCTGCCAAAAGTGCCGGGACTCCAAGTTTGACATCCGCCGTTCCAACCGCTCGCGGACGGGCTCCCGGAAGCTG
TTCCTGGACTGACTGCTGGCTGGCGAGGAGGCTGCGAGCGTGGAATCGGAAGCGACCGCGGGCTTTTTTGCCCTT
CTCTTAGTTGAGCACAGAACCCTCAGCTCTGGTGCGGGCAGATCCCTGCCATTTAGGTGCCTAAGCAAAAGGACA
GGCTGTCCAAGGTAGAAACTGTACATAGCCGGTGACCGAATGCGACCTTTGCCAGCCAGAGCTGCTGCCAGAGCT
GCGTTCCCTGCAGTGGAGGTGGACTGGACACCCACGTGCAGCGGGTTTGGCTCATTTGAAAATGAGGGTCCGTGG
TAGCTGTGCGTTTTGCTATCATTGCTAAGAGATTCCCGCTGATTGGGCTCAGTGCCAGCTGTTATTCTGCTTCCA
CTGTGTTGGGGAGAGGTGTTCGGTTTCCCCAGCCTGTTAATGAACAGCCATACGTGTAAGCTTTTTCTTGAGTGT
TAAGTCTTTTACCAAAAGTGTCTGTACAGCAGCCATCCAAGTTGCCCCTACTTAGTGGCTTGCCCTCTGCCTGCC
TCAGCTGCTGCCTGACCGGCTGGGGGAGGCACTGGCGGGAGGCCTCGGGCTCCCCTGGAAGGGCGCTGGGCTGGC
GGGTCAGCTGGTGGTTCTTAGGTTTCCTTCTGTTTGTTAAAAGGGACAATGTGGCCACTTCTCTGTGGAAAGGGA
GTTGGTTGGGGGGTTGAGATGGCCCGTGTTCATAACTCAGTTTCCTGTTTTGCACGATGTAAAAACCCTGTCTTT
TTGCACGATACAGCCAAAAGTATTGGCTGATTTCTTGCTGAGTGCCCTCTTAGTTGGTGTGTGAGGTCTTGGTGG
GCTCAGGCCAGCTGTTTGCGAGTGTGGGAACTCATAGGTTCTGTCTTTGTCTCTTCCTTTCACCTCATTCTGGTA
GCAGCATAAAGGTTAGGCAATCACTGGGACCCGCATGGTGTTCCTCCAAAGAATAGGGTAAAGGAGAGCTGGGAG
GGAGCCCTCTCCGTTGGGTGACTCTTGTGTGCCCTTTAGACAGGCTGGCCTGCCGGTTCCACAGGGTACAGTTAG
GACTTGAGTCTTTCTTTTTCTGTTTTGAGTTGGTGAGTGAGTGATAGGGTAACATGGGCCTTCAGGATGACCCCT
TGGAACTGTGCCGAGTTCCTTAAATCTCAGCTGGGATCCTGGACCTGGGAGGCCCCTGTGAGGGCCAGCTCTGGA
AAAACCTGGGAGTTGATGCCGGAGGCTGTGGAAGAACTCTGCTCGAGGGCAGGGTGCCCTGGAACACTGGTAGTT
CTGGGGCTGGGAGGGAGAGGGGCTCCGGCTTTCTCTGAAATGAACACTGCTCTTCAGCAGTTCAAGTACTTGTTC
TCAAAACATTTTCTAATTGATTGGTAGGTTTTCATAAGCATTGTTTCTTTAAGGCATGGAAAGGGAAGAATGCTC
AAGCAAGTCATGTTTGTTTTCAGTGGGATGGGCCCGCGTTCTCACTGCTGGGGGCTTCCCCTTCATGTGGCACCT
TTGTGCCAGGCCACCAGGCAGACTCTTCCCACCTTCTCCCACTGAAGCACCAAGGGGCTTGAACCGTAATTTGGC
TAATCAGAGGCATTTTTTTTGTCCTAGTATCTTTCACACTTGTCCAACCGTCTTATTTTTTTAAAAGTTCTGTTG
CTTGTATTAACACGAAACTAGAGAGAAATAGTTTCTGAAGCCAGTTTATTGTGAAGATCCCCAAGGGGGAGGTTC
GGTAGAGAAAAATAGTAAGCTGGTTTAGAAACTGACGAGGGCAAACAGCCAGGACGCATTGGAGAGGAATTTGCC
AAAGATCTACCCTGAGATAACGCCTGTCCAGTGTCTTCACCACGTGAATAACCAGCGCTCCAAAGTGTTTTTCTG
CTTTGAAAAAAAAAAATTCCACAAGCTTTTAAAGGTGCATTTAAGAATCCATGTGACTTTAGAATGGAACTGCCG
GCCCTGGCAACTGTCACGTGTGCTAGAAGGTTCGATGCCTCTGGAATGCATGTGATACTCATCTCCATTTTGTTT
CCTTGATTGCATTTTTGTTCTTTTAGCAGATCTGTCCCTGTGGGTGGTGTCTAAGAAGTCGGACACCTTGGTTTT
TGTGTTAGATTGAGCTGGGCAGCTGCAATCAGCTTCTTTATATGCAAATTAGGCACGACCCATCTGTGGTTCCTG
GTTGGTGGCTAATGAAGTGAGGGGAGGGAGGGATGTCACCCCAAAAGTAGGCCCTCCCATTGGCTTTGGCCAGGC
CAGACACTTCACATCGTTTACATGGTTCTGTGTAATTTTAAAGTTTATGTGTATAAAGCGAAGCTGTTTCTGTGA
AACTGTATATTTTGTAAATAAATATATTGCTACTTTGAGGTTCATGATTCAAGGTTCAGGCGATTGCGTTCTGTG
CTGAAGGA

FIGURE 4502A

CAGCCCGGCCTTCGTCGCCGCCGCCTCCCTGCTGCTCCTCCTCCTTTCCCCAGCCCGCCGCGGCCATGGCGGACA
GCGCCAGCGAGAGCGACACGGACGGGGCGGGGGGCAACAGCAGCAGCTCGGCCGCCATGCAGTCGTCCTGCTCGT
CGACCTCGNNNNNNNNNNNNNNNNNNNNNNNNAGGCGGCGGCGGTGGGAAGTCGGGGGGCATTGTCATCTCGCCGT
TCCGCCTGGAGGAGCTCACCAACCGCCTGGCCTCGCTGCAGCAAGAGAACAAGGTGCTGAAGATAGAGCTGGAGA
CCTACAAACTGAAGTGCAAGGCACTGCAGGAGGAGAACCGCGACCTGCGCAAAGCCAGCGTGACCATCCAAGCCA
GGGCTGAGCAGGAAGAAGAATTCATTAGTAACACTTTATTCAAGAAAATTCAGGCTTTGCAGAAGGAGAAAGAAA
CCCTTGCTGTAAATTATGAGAAAGAAGAAGAATTCCTCACTAATGAGCTCTCCAGAAAATTGATGCAGTTGCAGC
ATGAGAAAGCCGAACTAGAACAGCATCTTGAACAAGAGCAGGAATTTCAGGTCAACAAACTGATGAAGAAAATTA
AAAAACTGGAGAATGACACCATTTCTAAGCAACTTACATTAGAACAGTTGAGACGGGAGAAGATTGACCTTGAAA
ATACATTGGAACAAGAACAAGAAGCACTAGTTAATCGCCTCTGGAAAAGGATGGATAAGCTTGAAGCTGAAAAGC
GAATCCTGCAGGAAAAATTAGACCAGCCCGTCTCTGCTCCACCATCGCCTAGAGATATCTCCATGGAGATTGATT
CTCCAGAAAATATGATGCGTCACATCAGGTTTTTAAAGAATGAAGTGGAACGGCTGAAGAAGCAACTGAGAGCTG
CTCAGTTACAGCATTCAGAGAAAATGGCACAGTATCTGGAGGAGGAACGTCACATGAGAGAAGAGAACTTGAGGC
TCCAGAGGAAGCTGCAGAGGGAGATGGAGAGAAGAGAAGCCCTCTGTCGACAGCTCTCCGAGAGTGAGTCCAGCT
TAGAAATGGACGACGAAAGGTATTTTAATGAGATGTCTGCACAAGGATTAAGACCTCGCACTGTGTCCAGCCCGA
TCCCTTACACACCTTCTCCGAGTTCAAGCAGGCCTATATCACCTGGTCTATCATATGCAAGTCACACGGTTGGTT
TCACGCCACCAACTTCACTGACTAGAGCTGGAATGTCTTATTACAATTCCCCGGGTCTTCACGTGCAGCACATGG
GAACATCCCATGGTATCACAAGGCCTTCACCACGGAGAAGCAACAGTCCTGACAAATTCAAACGGCCCACGCCGC
CTCCATCTCCCAACACACAGACCCCAGTCCAGCCACCTCCACCTCCACCTCCGCCACCCATGCAGCCCACGGTCC
CCTCAGCAGCCACCTCGCAGCCTACTCCTTCGCAACATTCGGCGCACACCTCCTCCCAGCCTTAATGCATGAGCT
TAGTCTGAATTTCAAGTTGGGACTCATCCAATGGAGCCGTCTACTCAACGCCAAAGGCTTCCTTCTCTGGCATAT
TTGGATATGACTTATTTGCACTGAGGTTATCTAGGCTTCACTATCCATTGTGTTGTAAATGTTTGTCAGAAATGC
AGCCAGTGTTGTGGGTCTACAACACTAACCAGACGACTTTTTCCATCAGTGTTTTACTTGAATCTTCATGTACGT
CCATTCCCTGGCTGGAACCTTCGCTGTTTGGTATTTGGTATTTCAGCAGCAGTGTGCAATTTTTGCTTGGCCCAG
AGCTTCATTCTCCTGGCTTTTAGGTTTGTAAAAGAAAAAGGGATATCTTTTTTATATTTTTTTCCATGAATCTGC
AGAAAATTACTGAGCTGTTGTTACCCTCCTCTCATTATAATAGTGTTTACCAAACATACCAATAATTCAGCACTA
CAATTCAGACCTTTGAAAATCTGGCTTTCAGTGTAGAACAGAAAGTTAGATGAATCAGTGCCCAAGACATATTTT
CTGTTTAACAGAACTTTCTACAGATACATTTTTTACAGGTTATTTTCATTGTGTTATTGACATCCATGTCTCTCG
TAAAACAGATGGCCCAAAGTAATGAATCATGTGGCTGTACCTTCTCCACATAAATGGGATGGATAATTATCGTAT
ATTAAGATGTGATTCTCTTTTTTATCCTTAATGTTAATCTACTTAACCTGGCCCCCTCTAACATGAGTCGATAAA
TGTTGTCCTACTCACCGGTGGTTTCAATGGCTAATTAGAATGTGTTATTTGATTTCTGCTGCAGAAGGCAGTGTG
ATTGTAACAAAAACAATGCGGCTTCCCCCTTTCGTACTTCATTTGTGTTCTCTTAAAATAGAGTTTGAACAAATA
TTTTAAAGGTGCAAAATACCATTAGAAAATACTATTTGAAATGGACATTATCGCATTATCTTGGCATAATGGCCA
GAAAATATTGTATTGCTTGGCAGAAAAGAAAATAAGGTCTAAAGGAAAGTAGCACATTAGCATTGATGGCTGTTC
ATTTCACCCAGTATAAGCAAGTGCAGTGTACAAAGAAGTATATTCTGAATACATTATTTCCATTCATTTAGCACA
AATAAATCATTTGGTTTCACTTTGCAGTGGAACACTGAGTCACTCTTTTCTTAACACGTGCAACATCTTAATTTT
TGTTTTTCAGCAGTTGCTGTTTTGTACTTTGGTAGTGAAGTGATTTTTACCACCTGTGTTTGCATATTTATATAT
GCTGTGGATGAAAATAACTTACTAGAGAATGTATATTTTATGACAAGAATGTGTATCTGTTGGATATAATCAGAG
AACTGAAAAGTAATTTATCAGTAATTTTTAAGAGTCCATGTTTTGTGACAACCATCTCTAATAGCCAACTCTTTA
TTAAACACACTCCTAAAAATAAGGAACCATGACATTGTAGATATTTAATATTGTACAGTATAGAAACCTCCATTT
TTGCCTTCGAATGCATATTTAAGAGTTAACAGAATGAAAAAAAAAAAGTCTTGTTGGATAATAGTGTTTGACTAGC
GTTTTAAGAACTTGAGAGTAAAAGCAACAATAAGATTTTTTCACCTCTTCCTGCTTCCACCCCCAAACTGAGAAC
ATCACTCAATTGTTTGGAAGAAACTGTAGGTCTATATAAATTTTATTTATAATGTATGTGTAATATACATAATCA
TAATACAGTTCTCAGATGCAGGGAAGAAGTTTGGCATTTAATCATTGAGGCTTTAGGTTTTTGATGTGATCAGAC
TGGGCCATGTCAAACCCGGAATTTTCACCAACAGTTCACTCACCCTCCTGGTACATTGCCATTCCAAGGAATTCT
GAGAGTAGGCAAACAAATTTTGCCTTCATGGTACAGTTCTCAGTTTTTCTTATAGGAGAAATATGGTATATGTTT
ATAAGAATCTTTTATGAGATTATAGATTTCAATGCTGTGGATAGTGTCTTGCACCCAAACAAGAAAGTCCATAAT
GGAATGATCTTCCCTCAGCTTCCTATCGATTTAGTTACCTCTTGAAAGCACAAAAATTAAAACATTGCCATATGT

FIGURE 4502B

TGAATTTTTAAAAAGCACTTGGAGTGAGCGAACATTTCCTGATAAATGCCTTTTAGAGATAGGTTCTTGATATTC
AGACATCTGCAGAAATGTTCTGGTTCCCAAAGTCATTTCACTTCGAAATAAAACACAGCTCCTTCAAACAGCACT
TTTTCCACATAAATCTAGTTGCCTCTCCCTGTGGACATTCAGAACTGATAGAACAAACACTACTCTTTTGAATTT
GATGGTTCGTGTCCTTTAAAGTGTTTGAGGACCTATGCAGAGCCTGTAACACTTGGGTAGTACCTGCTAGGACAA
TTTCTTGGCAATTGTCTTACTACTAGGGATCAGTAAGATTTAGATTCTGAGCCCATAATGGCAACAGCCCCCTCA
CCTATGGGAAGCTGACTTCCCTCAGTCGGGCACTTCTCATGGGGGCTGAACATGGTTCCTGCCATTCTGTTACCC
ACTCTCCCAGGTGAGCCCTGGATTGGCTCCCAGAAGGCCTTTGTAAAATCAGTAGCCATCCTGCAGGCAGGTGGG
AGCAACAGGGGCTTCAGTAGCTTCATTTTCCTGTCTTGCAGACAGAGACCCTTGGCTACCACTGTGCTGCTAATA
GGATAAGTACTCTGTTGCCAGATTACCATGCCTTTTATACAAAACCAAATTAACTTACCTAATACCTGACACCTC
TTTGGGCTCTGAACTGCTTTCTCTCATCAAGCATGCTAGCACTCTAGACAGAATTCTAGAAATTTGGCAGACAGT
GGAAGCCTTTAATTGAACTTACTCCTTCGTTGACTGAAAGGAGTTTTAAATTCTGAGCTCCTGAGATACTGACTA
GCAACCATGGAATGAATGTGTGACCAGAAAGTGGCTTTGACACCAAGTGCTACTGTCCCTTTGTAATTGGCTTCT
AACAGATTCAACCAGAAATAATTGATAATGTGAATTTTTGTTAATTGTTCACTTGTAGGAAAATAGAACATGTAT
CACCCTTTGTTAGGTAGACATGAACTTTTCCTGCACAAAGCCTTGCTTTTAGAGAATGCCCAATAAGGCAAGAAA
AAGCATAGTAACTTGTGCTTTGAGAGCTCAATATTTGTATCTTATCAGTACAGAAGAAATATTTCTGTGTAACTT
GATCTTCTGTCTAGTACTTGTCTTATAGGTAACCAACACTGAAAACTTTGTAGTGATGACTACCAAAGAAATACA
TAGTAAAACAACCTTTTATTTCCAAATTGTTAAAGAGCCAGCCATTGATGCTGCTACATGAGTTCCATGCTCAAG
AGCCATTGTAAGAGATTAAGGGGTTTCTAGGTTTTTGGTGATTTTTTGTTTGTTCTTTTTCTTTGTTTTTTAGGG
TTTTTTTTTCTTCTTTAATTTTTTGATTAAAACATACACACAGCTGTTAGCATAAAGTCGTGGGGGGCATTTTCT
GGAATGCTCAGCAGTTCTGATTAACTGCCAAGCCCAGGTTGCCTCTCATGAGGCAACTGAAAAAATCCTGTGTCT
TGATAGCATGGGTGCTGTGTGTGTGCATGTGTGTGTCTGCATTCATGCCTTAACTCGGGTTACTGCACAACTTTA
GTTCTTGACTTAGTCTGCACCGTCATCTAGATTGTATTGTACATCTCGGTCTGAACTTCATCCTGGCAAAAACAA
AGTTGCAGGCACAACAGTTTAAGAATGCATTCCTCCAGAAGAGTATCTGGTCAGGTTGACCCTGAGCCTTCTTTG
GACTTGATTTGGAACTTAGCCTGGAAAGCGAAAGTGGACTGTCCAACAGAAAGATGTCAACAAGGAAAAGAGGAG
AGCCAAGCGCTAGCATGCCTTTTGCCTCTGCATATCTGTGCACACTGTATGTTGTTCATGATAGCTTGTCTACAA
CTTGACTAGGTTGGAGTTCTGGTAATAGTGGCAATCTTGACATTCTTGGTCAGAGTTTAGAGAGATGTAAGACTT
TCAATTAATGTCTTATTTACTCCTTTATGTTGATTAGTCTTTGATACATGTGCTGAATCAGAAACCTAAATAAAG
ATAATTTTTTAAAATGTAAAAA

FIGURE 4503

ARPSSPPPPCCSSSFPQPAAAMADSASESDTDGAGGNSSSSAAMQSSCSSTSXXXXXXXXGGGGGKSGGIVISPF
RLEELTNRLASLQQENKVLKIELETYKLKCKALQEENRDLRKASVTIQARAEQEEEFISNTLFKKIQALQKEKET
LAVNYEKEEEFLTNELSRKLMQLQHEKAELEQHLEQEQEFQVNKLMKKIKKLENDTISKQLTLEQLRREKIDLEN
TLEQEQEALVNRLWKRMDKLEAEKRILQEKLDQPVSAPPSPRDISMEIDSPENMMRHIRFLKNEVERLKKQLRAA
QLQHSEKMAQYLEEERHMREENLRLQRKLQREMERREALCRQLSESESSLEMDDERYFNEMSAQGLRPRTVSSPI
PYTPSPSSSRPISPGLSYASHTVGFTPPTSLTRAGMSYYNSPGLHVQHMGTSHGITRPSPRRSNSPDKFKRPTPP
PSPNTQTPVQPPPPPPPPPMQPTVPSAATSQPTPSQHSAHTSSQP

FIGURE 4504

ATAAAATTCTGCTTGTTAAGAACAAGTTTGGCTCTGGTAACTGACCTTCAAAGCTAAAATATAAAACTATTTGGG
AAGTATGAAACGATGTCTCGTGATCTGGTGTACCCTTATCCCTGTGACGTTTGGCCTCTGACAATACTGGTATAA
TTGTAAATAATGTCAAACTCCGTTTTCTAGCAAGTATTAAGGGAGCTGTGTCTGAAATGGCACTGTCTTGTCAGT
CATTTCTGTTTACCTTTTTCTTCTGCCCAGAGTGTATTTGTGAAGAGTCTCTTATATTATGTTTTGTGGAAATCA
GCACACAACCACAATGACATTTAAGCACAGGATCATTATTAGTCTATGTTTTTAATAAACATATCAATTAAGAAA
AAAAAAAAAAAAAAAAAAA

FIGURE 4505

GGCACGAGGGCGGTATGGCGTCGGGCTGCAAGATTGGCCCGTCCATCCTCAACAGCGACCTGGCCAATTTAGGGG
CCGAGTGCCTCCGGATGCTAGACTCTGGGGCCGATTATCTGCACCTGGACGTAATGGACGGGCATTTTGTTCCCA
ACATCACCTTTGGTCACCCTGTGGTAGAAAGCCTTCGAAAGCAGCTAGGCCAGGACCCTTTCTTTGACATGCACA
TGATGGTGTCCAAGCCAGAACAGTGGGTAAAGCCAATGGCTGTAGCAGGAGCCAATCAGTACACCTTTCATCTCG
AGGCTACTGAGAACCCAGGGGCTTTGATTAAAGACATTCGGGAGAATGGGATGAAGGTTGGCCTTGCCATCAAAC
CAGGAACCTCAGTTGAGTATTTGGCACCATGGGCTAATCAGATAGATATGGCCTTGGTTATGACAGTGGAACCGG
GGTTTGGAGGGCAGAAATTCATGGAAGATATGATGCCAAAGGTTCACTGGTTGAGGACCCAGTTCCCATCTTTGG
ATATAGAGGTCGATGGTGGAGTAGGTCCTGACACTGTCCATAAATGTGCAGAGGCAGGAGCTAACATGATTGTGT
CTGGCAGTGCTATTATGAGGAGTGAAGACCCCAGATCTGTGATCAATCTATTAAGAAATGTTTGCTCAGAAGCTG
CTCAGAAACGTTCTCTTGATCGGTGAAACCATAAGGAGCCCAGTGTTCCTGTTCATGAAATCTCCCTTTTACTGG
AAAACAGGAATATTGACTACCAAATCACAATGCAATTGAAGCCGTACTGCTTTTTTGAGCAGTTATTCATTCCAG
TGATTAAAACTGATTGTGCAGAATATTCTAAGAGGTCAGAAATTGGTGTGTATAACTACATTTTTAGTGATGCAA
TTTATTGATTAGTGAGTAAGATACTGTTTTTATTGAGAGATTTGATTTTTATAAAGTAAAAATACGGCTGCATTA
GGGTTACAAACAGAAAAGTGTCTTAATGTCTAAGGAGGGCATATTAGCTACACTACAAAAACAAATTTTGTCTGT
ACTTCTGAAAAGAATTTTGTTGTTTCTCAGCTGTTTTCCAAAAGCAAAGGAAGTCTTTATGGTTTTTTTCTATTT
CATGTTATTGTGATTTGTTTATAAGTTTGGGTGGGGTGCATACCATATTCTTGGTTCTTAAAATCTATCACTTTT
CACCTTACACTTGATGTGTGAAAACTATAAAAACAATGTGTGAAACCCAGGGGTTCTAAAATACAAGCATAGATT
TTATCAGGGTGTTTTGTCAAAGCAGGTTATTCAGTGATTCCTCCCCACCATTCTTAAGAACGTTAAATAATGCTG
TTGTGTTAGCTCTGAGTAGAAAGGAAAAAGTAAAACCTCTGTTTGGAGGTAATATTGGGTTGAATTCTGACTGCC
CCTTTCTAGCTGGACCTTTAACAAATCACCCAATCTTTTTTGTGTTTCTCTAAAGTCATTTATACATTAAATGTA
ATTATAGCAACTGTGGGGTTCTGTTGAGAATTAAGAGCTAACACTATATATGTAAAGTTTCCAGTACTAGTCCCA
GAATTTAGAATATGCTCAACACAAAGTAAACAGCATTATATAAGTTTATATTTTTGTGAGTTATAAAGTACTTTG
ATATATTCTCATTAAATCTGTAAATCACCTCTATAAGTAAGTGGTAATAATAAAGCAGATATTTTTGTCCCCATT
TAAAAAATGAAGAAATTAATGCTTAATAGGGTGGTACCCTGGAAAGGATCTGGGAAGTGGTAGAATTTCTGGTCT
GTACTTTTACAAATGGAGCCCTTGGGAGGTGGGTTAGGTAAAAGAAGCTTTTTACTTAACGTTGTCTTATTTCCA
GTCTAATTTTACGCTGTAGCAGAACCAGATGGCTGAGAAAATTCTGGAACTATGGATCTTGACCCCAAGGATATA
TTATTTTATTCCAAGAAAGATCAGGTAGGCGAAAAGATGACAGGATACAGAGTCAATCCATAAACTAAATATTTA
TAACTGTTCTGAATTATACAGAGTCTAAAAATATGTGTCAGCTACTTCATTCCTGTAAATACTCTTGCTGTGTTA
TAAATATGGCAAGAAATAAACATGACCAATATCAATAGACTTCTTGAGGCTACTATAAGTTTTGAGAAATAAGGT
TCAAAAAATAAGAATGCTAACACTTAAGCACAGACTAGAGCTTGCTTGGGTTTCTTCCTGCATTACAAGGTAAAA
ATTTGTTAATGTTTGTTTTTATTCAGCTTGGGAAAGCTTTGTGCCATGAATACGTCGCATTTAATAACAAGCAAC
ACACGGCATATAGAAATAACTTTAATTAAAAAACTTACATAGAAGATTATAATATCAGACGTGACAAAGATTTGA
GTTTATTTGCCTGGACAACTTGGGTTTGTCTGGCTTTTGTTTTCTTTTTCTTTAAAAATAAATGTACAGTAAAAC
TAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4506

CTCCGTCTCAAAAAAGATGAAAATAAAATAAAATATATATTTACAGGCCTACAACTTTTGCCTCAGACTGTTCCC
CTTTTCTAAGGGTATTCAAGTTTTCACCTTTTAAGCTTCATATCCTCAGTGCTTGTAGAATGATGAGCTTAGAGG
TACCAGGTCATTGCAGTTGTTTGCTTAAAGACTTATTGAAATGGTTACTGGCGTAAATACTTGGCCAACTCAACT
TTATTGCCCCTGATCTTTTCCATTTTTGTTTCCACCTTAACCTATAGCAGCTCCTCCAAATGAGGAATGCTGTAA
GTAAGACTCATCAAACAGATTTTAACCATTTTATTATCCTGTGTGTCCTTACATTGCTTCTGTGAGATGTTTTTT
TCTTATCTGAGATGAACTTTCAGGAGCCTATTTGAACTCCAGACTGGTGTTCTGGGGCAAAGAGCTATTAGCCAA
ACTGATTCTATGCAGGTGAAGGATGCACTAAAGTTCTCACTTTAGTGAGAACTTTTCTAGCTATTCCAATACAGA
GTTCTTTCTTATAGGGCTATTGATATTGACACCAAATGGAGTGGCTTCTCAGCCTCTTAATGTCTTAAGTAAGTG
CTTAATTTGGAATAGAGAAACCAGTATATTTTAAAAAAAGAAAAATATTCTTTGTAGCAACTGTAAATTCTCCCA
TTATAACAGTGAACAGAGCTCCAGGTAATAACGCATAGGCATGTCAGGTTGCATCTGTATATTTGACTACATTAG
TATTAGTGACATCAGGTGGATATAAAAGAAAACCCTTGGAAAGAGAACTGCCTTAGCCATGATTTCGTTAGTAGA
CCTATTTATGATTCAATTGCAATTTTCAGATAGGATGTGAACATGGAATTTCATTGAAAATAGTTTAATTTTTTA
TATAAAAGGTTTTGTATATAATGTGTGTCAGTGACTATTTTCAAAATCATTTTCATCAAGACACCTTTTTTCTAA
AATAGGCATTGCATACACATATGCACACGTATGTGCATGTGCCACACATTTTTTGTATAATGTTGGGTTTGATTA
TAAAAGTGTTGTCAAATGTTTTATTTATCTGCATATAGCAGTGGTTGGCTTTTTTGAATTGAAATTTTTGCGCAT
TGATGCATTGAAATAAGGAAAATTATTTATCTCTGAGCACTAAACTTATTTTTGCATATTTCTGTAATATTGCAG
TCCCCAGATCCAGAACATGGGAAGTTAGGGAAAATGTGTGATTTTGTGTTTTGAATTACTGTCAGAATTACATAC
ACAATTACAACAAACTTTTTTTAAAAGACATTTCATTGTACTGCAAAAATCTGAATATTTATATTTCTTGTTTTT
TTCTTTATATGTTTTGCATTTTAATATGTTGAGCCACTGGAAATTTGTAACAGATTAATTTGTTATAGGAGTTTA
AATGTGTTGTCATTGTCTCCATTGTCTTTGTCCAGAGCCTATTATTATGGAAACAATAAAATTTATTGTGTCAGT
TGCTTTGATTCTT

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FIGURE 4507

MCCHCLHCLCPEPIIMETIKFIVSVALI

FIGURE 4508

CATGCCAATGCCTTCATACTGAGTTCTGGGCCCCTCTGCAAATAAGTCTGAGAAGCCCCTTCTCTCCTTCCTTTA
TCGTGGCCTATGCTGCAGAATCTCACTGCAGCTGGCAAAAGGCATTGGCCAGCTCTCAGAAATCCCTTTACTCAA
CGTTGAAGCTGCATTTTGGTCAATGTGGGTAACTTACTTTAGAAAATGACTTGAGTTTAGGTCTCCCCCACCCAT
ATTTAATTTTTCCCAAGTTGCTGGTAGAAGAGAAATTTAAAAGTGGATCAATCCTCACAGAGAGAGTTCTTTTTG
TTGTTGTTTATTGAAAAAAATGCAATACAAGAAGCAAGACCAAACAGATATCTAAACACTACAACCACTTCTACT
ACGAAAGGGCCCAAAACAGCAGACTTGATTATTGCCTGTATAGTCCTAAAGATTCTGCCAATCTGGATTCTGCTG
XCCG

FIGURE 4509A

GGGGGCTGCCAAGGGAGGAGGAAGATGGCGGCGGGGGCGAGGTGAGGTGTTGGCAGTGGAAAGGGGTTCGGGCTC
GGGGGGCGGGGGGGACGCGGAGCGATGGCCCGCGCCGGCCGCAGGGGCGGATAAAAAGCCGTCGCGCTGCGGGAGT
GGGCGGGAGGGAGAGGGGGTGTCCGAGGGCCACAAGAGTATGACGGGGCTGTACGAGCTGGTGTGGCGGGTGCTG
CACGCGCTGCTCTGTCTGCACCGCACGCTCACCTCCTGGCTCCGCGTTCGGTTCGGCACCTGGAACTGGATCTGG
CGGCGCTGCTGCCGCGCCGCCTCTGCCGCGGTCCTAGCGCCGCTCGGCTTCACGCTCCGCAAGCCCCCGGCAGTC
GGCAGGAACCGCCGTCACCACCGGCACCCGCGCGGGGGGGTCGTGCCTGGCAGCCGCACACCACCGGATGCGCTG
GCGCGCGGACGGTCGTTCCTTGGAGAAGCTGCCTGTGCATATGGGCCTGGTGATCACCGAGGTGGAGCAGGAACC
CAGCTTCTCGGACATCGCGAGCCTCGTGGTGTGGTGTATGGCCGTGGGCATCTCCTACATTAGCGTCTACGACCA
CCAAGGTATTTTCAAAAGAAATAATTCCAGATTGATGGATGAAATTTTAAAACAACAGCAAGAACTTCTGGGCCT
AGATTGTTCAAAATACTCACCAGAATTTGCAAATAGTAATGACAAAGATGATCAAGTTTTAAATTGCCATTTGGC
AGTGAAGGTGCTGTCTCCGGAAGATGGAAAAGCAGATATTGTAAGAGCTGCTCAGGACTTTTGCCAGTTAGTAGC
CCAGAAGCAAAAGAGACCCACAGATTTGGATGTAGATACGTTAGCCAGTTTACTTAGTTCAAATGGTTGTCCTGA
TCCTGATTTAGTATTGAAGTTCGGTCCTGTGGACAGCACATTAGGCTTTCTTCCCTGGCACATCAGATTGACTGA
GATTGTCTCTTTGCCTTCCCACCTAAACATCAGTTATGAGGACTTTTTCTCTGCCCTTCGTCAATATGCAGCCTG
TGAACAGCGTCTGGGAAAGTAGTGGTCATTGGTTGCATAATTTGATTTGAGGCTTGTGGAGGAAAGGAACCAAGT
GACTCTGATGTTTACAAAGCACCTATGAAACCCTGTACACACCTAGTTCATAATCCTCATAATTTATCAACAAAC
ACAAAAAAGTGTCTTACTTGAGAGTGAGTGTGTGTAGTGTGCGTGTGCACGTGCACACATGTGCACGTTTGTATG
TATGGAAATAAACTTATAAATGGGGACGTATTGGAGAAGGAAATACATAGACCTACAACTTTGAGCAAATAGCAG
TGATGTTTTAGGAACTGAAATGTCACACTTAAAGTCTTCAGCCCAGCTACTTCCCTATTTTTGTGGGGAGAAGAG
GGCCTGATTAGAACTGTTCTGGTTGTGTTTGGCGGGAGGGGAATAATTTTTGTTCAGTCCTTCTTAGTGACCAAA
CTTTAATTTTTAAGAATAATATATTGACTTACTGAACTGAAGCATTCTGAGTTGAAAGGAGCTCCAGAGGAGTGG
AGTTCTGTGTTGCTCACATGTTAAAATCTTGCTCACCTTCAGAGCAGAGGGAATACCTATCTTCAGATATCCGTC
CATTTTCATCTCTTAATTGTAGTCAAAAGTATGACTTGAGAGTGTTGCTCTGGTATTCTGGGTTCTGAAGTCTGG
TATTCTGGTATTCTGGGTTCAAAAGTATGACTTGAGAGTGTTGCTCTGGTATTCTGAGAGTTGCTCTGTATTCTG
GGTTCTGAAGATTATTTGAAAAATAACTCCTACTACATTGAAATGCAGACTTAAAAATTTAAACATTGGATTAGG
CAGTCAAAAAAACCAAGCAAGCATAAAAGGTCAATAAGTTGTAATCTTGATAGTAAAGGTGGAAAACTTATTATA
AATGGAAAGAAAGTTTTATTTCCTTTTTTGTTTGATGGGCAGTATGCCATATTATACCCAAAGTTCTTTTAAAAA
ATATTTCCATCAACCATTTTTATTTAAAATAAACATTTGAGGGAAGTTACCAAGGCAGCTTTTTTCCTCAAAAGT
AACCTGTTCCTCTTTGGAATAGCACATTTTAGGGGCATGGTTAATACCTGAGATTTTTACTCAGTAAATCCTGAT
GGTTACTGTGTGTAAAATATCTTTAAGTAGGATTGAAGGCCTCTGTGGGGGAATAAAATATTACCAAAGTCTATA
AAAATAAATTTTACATGTTCTCTTTTATGACAGAGAGCAGCACTGGTTCTGTTATTTTTAAAATGAATAATTGAT
TTCTTGATAGGTGTTTAATATTTCTTCCCTCACTGCTGATTCTTAGATAGAAACCATTCTTTATATTTGATAGAC
TGCTTTCAGAAAACCCTTATCAACAAGTGTACAATACTTATCTAAAACTATACATTTAGAATGGAGCAGTTTAAT
ACTAGATCTCAGAAGTTTTGAAAAATAGCAAAGAAGACTGGATTTGGAAAGCATGGTCTACAATTGGTTGTTAAA
TTCTGAAGCTATGAAGAATAAATGTTTCAACTTTGGATTATGAAACCCCATTTATGATTTTTTAAATACACTTGA
AATAAAAATGATTAAACTAAATTTTGGTCCAGTGACATTACTTTGCACTGCATAATCCATTATACGTTGTACGAC
TTTTTTTTTTGGTTTTAATTTATTACTGAGAGTTTTGTGTGAAGCTACAGCATATCTAACCAGAGAATTTCTGAT
TCCTTATACTGTGATTATATTATATTGAGGCATTTGTAGTGCAGCTGAAGACTGAATTTATGCCTTTTGTAAACA
TGATAGGTATAAATGTCTTATAAACATTCTGGAGTATGTATAGCTTTAATGAATGAAATTTAATGGACCTGATTA
AAATGAAGGGATTTAATCGTTGTTAAAGTTAAGTTAGTCAAATAAATTACCTACTGGAATATAGCCCAAGCCAGT
AAAGGTTTAATATTTGCATTTTCGTGCTTTTATTTTCTCCTTCCATTCATAAGTATATACTTGAAAGTACATCTG
TAGCCTATGATTTGAGTCTCTTGAAGTTCTAGGAAGAGGCAAACTACAAACTACTAGGATTCTGATTTCAGATGT
AGTCATTCCAGAACCTTCTCTTTATGAGTTCACCTGCTAGTACAATCTCCACAACTTGAATGGCATTGGTTGTTC
TGTAATTCCTGCCAAAAGCATCACAAGTTGTACATCATCAAGGCTCCCTTTGCACTCCCAAGAAGAACTGGTAAT
TTTAAACAAAAGTATGTGTCTTTATTTGTATTGGAAAATACTGTCTTTAAATTGTTTCTTGTTGACACTCCCCAC
AATGGAAAAATTACCGAATTAAACCTGTTTTATGGATGGCAGCTTGGAGCATAGCAAGAAGTTGGAGGATTTGAA
TTCCATTCCCAGTTCTCATTGTGTTTTGTTTCTTAAAACTATAATAATCGGTTACTGTTATAAAGTTTAAAAGGT
GGTTTTAATGTGAATAGCAAATTCTGGTATATCGTGACTAACGCTTAAGAATGCCTGTCTTTGAGAGGAAGGTGT

FIGURE 4509B

TATAATATTAATGAACAGTGCCAAATACACTGTGCATATCTGCAATTTAATCTTTGAATGTATGTTACTGGATTA
GCTCCCTCCTCCTGTGTGATGGTACCATGCATAGAGTCAATCAAATCCTTGTGATGTTTTGTATGGACTTTGACA
ATATGTAAATAATGTGTAAAGCCAGTTTTTATGATTAAGGAATCAAATTTATTGAATTTTATTATTGAAAGTTGA
AACTTAACATGTATGAACAAAAACCAATAAAAGAATATACTCTTTTCATTGACTATAGTATTATGTGAATGCTAC
ATTTGTTCTGAACACTTAGGGGCTGCAAAAATGTAATAAGAAATGCATATGACTAGATAGCAATAGTGTTTTTTT
TAGATGGTATGCTCTTGATTGAAATATATTCTCACTTTTACCAGGTTAAACATTTGGAATCTTATAATGTTACTT
GCTTTTTGATAGATAATAGTGAAATAAATTCAGCTTTGCCATTGCTGGAGTTGTCAAAATTCCACAGTAATTAAA
ATTTGAATTTTTACCGAATATGAAATTTCCAAATTAAAAACGTATATGTGTACTCTTTTAAAAAGGAATTTGATA
GTTCTTGTCAAATGAGAAAATTTAAAGGTAAGAGTTATGGTTTGTCTTATGCTGCATAGACTATTCACCTCCTAA
CTTGAAGGTCTAATCATAAGACAATTGTTTTTTTGTGCATAGTTTTCATCTAAAATTAAGTTTACCAAAGGCAAA
TAACTGCTTACTAGGAACTTCCTTTAGCAAAAATTACTATAAAGTTCAGGACAGTTTGAAATAAAACCCAGGAAA
CAAGATTAATGTGAGCAGTTCTCCAAGATCCTAACTGGTGGGACATAAACTATGATGCAATGGATAGGAAAAGGT
AGTGCAAAAAGAATTTCTTAAGGTTTAAAAAATACACTTTTCATTATAGGAAAAAGAAGATTCAGAGAAACAAAG
GAATGTAACCTTATTGATTACATTTTTGGTGATCACCGAGAATTTTTTGTACTATATTTTAAAAAATGTATTCTA
CTGTAACAAGTTAATAAAGAGATTTTTTAAAAAACTATAAACTAGAAATTGAGAGTCTTGCATTCTCTTTTGTAT
TTGATTATTGTGTCTGGATATAAATTACAATAGCACATGAAAATAAAATGTTTTAAAAAAA

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FIGURE 4510

MRWRADGRSLEKLPVHMGLVITEVEQEPSFSDIASLVVWCMAVGISYISVYDHQGIFKRNNSRLMDEILKQQQEL
LGLDCSKYSPEFANSNDKDDQVLNCHLAVKVLSPEDGKADIVRAAQDFCQLVAQKQKRPTDLDVDTLASLLSSNG
CPDPDLVLKFGPVDSTLGFLPWHIRLTEIVSLPSHLNISYEDFFSALRQYAACEQRLGK

FIGURE 4511A

GCCCCAGCACTCGCCGGCGGCAGTGAAAGGACGCGCCGGAGCCGGATAACAGAAAGTAACGTGAAGGAATTCAGG
TGACTCAGACATGGAGGAGAGAAGACCTCATCTGGATGCCAGGCCCAGGAATTCCCATACCAACCACAGAGGCCC
TGTGGATGGAGAGTTACCACCAAGAGCTAGAAATCAGGCCAATAACCCACCAGCCAATGCTCTCCGAGGAGGAGC
CAGCCACCCTGGAAGGCATCCTAGGGCCAACAACCATCCTGCTGCTTACTGGCAGAGGGAAGAGAGATTTAGGGC
CATGGGCAGGAACCCACATCAAGGAAGGAGGAACCAGGAGGGGCATGCCAGCGACGAAGCTAGAGACCAAAGACA
TGACCAGGAGAATGACACCAGGTGGAGAAATGGCAACCAGGACTGTAGGAACCGCAGACCACCATGGTCCAATGA
CAACTTCCAGCAGTGGCGGACTCCCCACCAGAAGCCTACAGAACAGCCACAGCAGGCGAAGAAACTGGGCTACAA
GTTCTTAGAAAGTCTTCTGCAGAAAGACCCTTCTGAGGTGGTCATCACACTTGCCACAAGTTTAGGGCTGAAAGA
GCTCCTTTCTCATTCTTCCATGAAATCTAACTTCCTTGAGCTCATCTGTCAGGTTCTTCGGAAGGCTTGTAGCTC
CAAAATGGATCGCCAGAGTGTTCTCCATGTACTGGGCATATTGAAAAACTCCAAATTTCTCAAAGTCTGCCTGCC
TGCTTATGTGGTAGGGATGATCACTGAACCCATCCCTGACATCCGAAACCAGTATCCAGAGCACATAAGCAACAT
CATCTCCCTCCTCCAGGACCTTGTAAGTGTCTTCCCTGCCAGCTCTGTGCAGGAAACTTCCATGCTGGTTTCCCT
CCTGCCAACCTCTCTTAATGCTCTGAGAGCCTCTGGTGTTGACATAGAAGAGGAAACGGAGAAGAACCTGGAAAA
GGTACAGACTATCATTGAACATCTGCAGGAAAAGAGGCGAGAGGGCACTTTGAGAGTGGATACCTACACTCTAGT
GCAGCCTGAGGCAGAAGACCATGTTGAGAGCTACCGAACCATGCCCATTTACCCTACCTACAATGAAGTGCACTT
GGATGAGAGGCCCTTCCTTCGCCCCAATATCATTTCTGGAAAATACGACAGCACTGCTATCTATCTGGATACCCA
CTTCCGGCTCCTGCGAGAAGATTTCGTCAGACCTTTACGGGAAGGTATTTTGGAACTTCTCCAAAGCTTTGAAGA
CCAGGGCCTGAGGAAGAGAAAGTTTGATGACATCCGAATCTACTTTGACACCAGGATTATCACCCCCATGTGTTC
ATCATCAGGCATAGTCTACAAGGTGCAGTTTGACACAAAACCACTGAAGTTTGTTCGCTGGCAGAATTCCAAACG
ATTGCTCTATGGGTCTTTGGTATGCATGTCCAAGGACAACTTCGAGACATTTCTTTTTGCCACCGTATCTAACAG
GGAGCAGGAAGATCTCTGCCGAGGAATTGTCCAGCTCTGCTTCAATGAGCAAAGCCAACAGCTGCTAGCAGAGGT
CCAGCCCTCTGACTCTTTCCTCATGGTAGAGACAACTGCATACTTTGAGGCCTACAGGCACGTCCTGGAAGGACT
CCAGGAGGTCCAGGAGGAAGATGTTCCCTTCCAGAGGAATATCGTGGAGTGTAACTCTCATGTGAAGGAGCCAAG
GTACTTGCTAATGGGGGGCAGATATGACTTTACCCCCTTAATAGAGAATCCTTCAGCCACTGGGGAATTTCTAAG
AAATGTCGAGGGTTTGAGACATCCCAGAATTAATGTCTTAGATCCTGGCCAGTGGCCCTCAAAAGAAGCCCTGAA
GCTGGATGACTCCCAGATGGAAGCCTTGCAGTTTGCTCTCACAAGGGAACTGGCTATTATTCAAGGACCTCCTGG
AACAGGCAAAACCTATGTGGGTCTAAAAATTGTTCAGGCCCTCCTAACCAACGAGTCTGTTTGGCAAATTAGCCT
CCAGAAGTTCCCCATCTTGGTTGTGTGTTATACTAATCATGCTTTGGACCAGTTTCTGGAAGGCATCTACAATTG
TCAGAAGACCAGCATTGTGCGGGTGGGTGGAAGGAGCAACAGTGAAATCCTGAAGCAGTTCACCCTAAGGGAGCT
GAGGAACAAGCGGGAATTCCGCCGCAACCTCCCCATGCACCTCCGAAGGGCCTACATGAGTATCATGACACAGAT
GAAGGAGTCAGAGCAAGAGCTTCATGAAGGAGCCAAGACCCTGGAGTGCACCATGCGTGGTGTCCTACGGGAACA
GTACCTGCAGAAGTACATCTCACCCCAGCACTGGGAAAGTCTCATGAATGGACCAGTGCAGGATAGTGAATGGAT
TTGCTTCCAGCACTGGAAGCATTCCATGATGCTGGAGTGGCTAGGTCTTGGTGTCGGTTCTTTCACGCAAAGTGT
TTCTCCAGCAGGACCTGAGAATACAGCCCAGGCAGAAGGGGATGAGGAGGAAGAAGGGGAGGAGGAGAGTTCGCT
GATAGAGATCGCAGAGGAAGCTGACCTGATTCAAGCAGACCGGGTGATTGAGGAGGAAGAGGTGGTGAGGCCCCA
GCGGCGGAAGAAGGAAGAGAGTGGAGCAGACCAGGAGTTGGCTAAAATGCTTCTGGCCATGAGGCTAGACCATTG
TGGCACTGGGACAGCAGCTGGACAGGAGCAAGCCACAGGAGAGTGGCAGACCCAGCGCAACCAGAAAAAGAAAAT
GAAAAAAAGAGTGAAGGATGAGCTTCGCAAACTGAACACCATGACTGCAGCCGAGGCCAACGAGATCGAGGATGT
TTGGCACCTGGACCTCAGTTCTCGCTGGCAGCTTTATAGGCTCTGGCTACAGTTGTACCAGGCTGACACCCGCCG
GAAGATCCTCAGCTATGAACGCCAGTACCGCACATCAGCAGAAAGAATGGCCGAGCTGAGACTCCAGGAAGACCT
GCACATTCTTAAAGATGCCCAGGTTGTAGGAATGACAACCACAGGTGCTGCCAAATACCGCCAGATCCTACAGAA
GGTGGAGCCGAGGATTGTCATAGTGGAAGAAGCTGCGGAAGTCCTTGAGGCCCATACCATTGCCACATTGAGCAA
AGCTTGCCAGCACCTCATTTTGATTGGGGACCACCAGCAGCTGCGCCCCAGTGCCAACGTGTATGATCTGGCCAA
GAACTTCAACCTTGAGGTGTCCCTTTTTGAACGGCTAGTGAAAGTAAACATTCCCTTTGTCCGTCTGAATTACCA
GCACCGTATGTGCCCTGAAATTGCCCGCCTTTTGACCCCCCACATTTACCAGGATCTGGAGAATCATCCATCTGT
TCTTAAGTATGAGAAGATTAAGGGGGTGTCTTCCAACCTTTTCTTTGTAGAACACAACTTTCCTGAACAGGAAAT
CCAAGAGGGCAAAAGCCATCAGAACCAGCATGAGGCTCACTTTGTGGTAGAGCTGTGCAAGTACTTCCTGTGCCA
GGAATACCTGCCTTCCCAGATCACCATCCTCACTACCTATACCGGGCAGCTCTTCTGCCTGCGCAAACTGATGCC

FIGURE 4511B

TGCCAAGACATTTGCTGGCGTCAGGGTCCATGTTGTGGACAAATACCAAGGGGAAGAGAATGACATCATCCTCCT
CTCGCTAGTGCGGAGCAACCAAGAAGGCAAGGTGGGTTTTCTGCAGATATCCAACCGCATCTGTGTGGCCTTGTC
CCGAGCCAAGAAGGGAATGTACTGCATCGGAAACATGCAGATGCTGGCCAAGGTGCCCCTGTGGAGCAAGATCAT
TCATACACTTCGAGAGAACAATCAAATAGGCCCCATGCTCCGGCTCTGCTGCCAGAACCACCCTGAAACCCACAC
CTTAGTATCCAAAGCTTCTGACTTCCAAAAAGTACCCGAAGGAGGCTGCAGCCTGCCCTGCGAGTTCCGCCTGGG
CTGTGGGCATGTCTGCACCCGTGCCTGCCACCCTTATGACTCTTCACACAAGGAGTTCCAATGCATGAAGCCATG
CCAGAAGGTCATCTGTCAGGAAGGGCACCGGTGTCCCCTTGTTTGCTTCCAGGAGTGTCAGCCTTGTCAGGTGAA
GGTGCCCAAAATCATTCCTCGGTGCGGCCATGAACAAATGGTCCCTTGTTCCGTGCCTGAGTCAGATTTCTGCTG
CCAGGAGCCTTGCTCCAAGTCTCTGAGATGTGGGCACAGATGCAGCCACCCATGTGGTGAGGACTGTGTGCAGTT
GTGTTCAGAAATGGTCACCATAAAACTCAAGTGTGGGCACAGTCAACCGGTAAAATGTGGTCATGTGGAAGGCCT
CCTGTATGGTGGTCTGCTAGTCAAGTGTACCACAAAGTGTGGCACTATCTTGGACTGCGGGCATCCTTGCCCAGG
CTCCTGCCACAGCTGCTTCGAAGGGCGTTTCCATGAACGCTGTCAGCAGCCCTGCAAGCGCCTGCTTATCTGCTC
ACACAAGTGCCAGGAACCATGCATTGGTGAGTGCCCACCCTGCCAGCGGACCTGTCAGAACCGCTGTGTCCACAG
CCAGTGCAAGAAGAAATGTGGGGAGCTGTGTAGTCCCTGCGTGGAACCCTGTGTCTGGCGCTGCCAGCACTACCA
GTGCACCAAACTCTGCTCTGAGCCCTGCAACCGACCCCCATGCTATGTGCCTTGTACTAAGCTGCTAGTTTGTGG
CCACCCCTGCATTGGTCTCTGTGGGGAGCCATGCCCCAAGAAATGCCGGATCTGCCACATGGATGAGGTCACCCA
AATATTCTTTGGCTTTGAGGATGAGCCTGATGCCCGCTTTGTGCAGCTGGAAGACTGCAGCCACATCTTTGAGGT
GCAAGCCCTAGACCGCTACATGAATGAACAGAAGGATGATGAAGTCGCCATCAGATTGAAAGTCTGCCCTATCTG
CCAGGTGCCCATCCGCAAAAACCTGAGGTATGGAACTAGCATAAAACAGCGGCTAGAAGAGATTGAAATCATCAA
GGAAAAGATCCAGGGCTCAGCAGGGGAAATAGCAACCAGCCAGGAACGGCTTAAGGCCCTGCTGGAGAGGAAGAG
CCTCCTCCACCAGCTGCTTCCTGAAGACTTCCTGATGTTAAAGGAGAAGCTGGCCCAGAAAAATCTGTCAGTGAA
GGACCTGGGTCTGGTTGAGAATTACATCAGCTTCTATGACCACCTGGCCAGCCTGTGGGATTCCCTGAAAAAGAT
GCATGTCTTAGAAGAGAAAAGAGTGAGGACTCGACTAGAACAGGTCCATGAGTGGCTGGCCAAGAAGCGCTTGAG
CTTCACTAGCCAGGAACTAAGTGACCTCCGAAGTGAAATCCAGAGGCTCACATACCTGGTGAACCTTCTGACCCG
CTACAAGATAGCAGAGAAGAAGGTGAAAGATAGCATAGCAGTAGAGGTCTATAGTGTCCAGAATATCCTTGAGAA
AACATGTAAGTTCACCCAAGAGGATGAACAACTTGTGCAGGAAAAGATGGAAGCTCTGAAAGCCACCCTTCCCTG
CTCTGGCCTGGGCATCTCAGAGGAAGAGCGAGTGCAGATTGTCAGTGCCATAGGTTATCCTCGTGGTCACTGGTT
CAAGTGCCGCAATGGCCATATCTATGTGATTGGCGATTGTGGGGGAGCCATGGAGAGGGGCACGTGTCCTGACTG
TAAGGAAGTGATTGGTGGCACAAATCATACTCTGGAAAGAAGCAACCAGCTTGCTTCTGAAATGGATGGAGCCCA
GCATGCTGCCTGGTCTGACACGGCCAACAACCTGATGAACTTTGAGGAGATCCAGGGGATGATG**TAG**GAAGATGG
TACACCACTGCCTTTTGCCCTCGCCACTGAATGACTGGGGCCAGCTCCCTAATGAAGGAACTGAAGTTTGTTTTT
TATTATCATCCTTTTTAGGCTGGGCGCAGTGGCTTACGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGCAGGCG
GATCACGAGGTCAGGAGTTCGAGACCAGCCTGACCAACATGGCGAAACCCCGTCTCTACTAAAAATACAAAAATT
AGCTGGGCGTTATGGCGGGCGCCTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGAAGAATCGCTTAAACCCAGG
AGGCGGAGGTTGCAGTGAGCTGAGATCATGCCATTGCACTCCAGTCTGGGCGACAGGAGCAAGACTCTGTCTCAA
AAAAAAAAAATCATTCTTTTTAGTCTTAGCACCTACTTAAGGATCCACTTTTAGGGCTCACCCACATTTGTTTCT
AGATTTACCCCTGCGCTAGAGTAAGCACTTTATCTCCAGAACTGAGAGCAAAGTTAACAAATCTCACCCCTTCTC
TCCTGCAAATTAGTGGACAGACTCCCTGGAACATGTTTGGGGCTTCCACCTAGGGCCACCTAGTGGTATCTCTGG
GTCTTTACTTGGTCAGATGTTTATTCTACATTGTTCCCCAGGAACAGAGTATGAGCTCATTGATGCAGACCGATT
CTAATTGCCAGGCCCTAATTTGCAGACTAACTCTCATAATAAACAGAGGCCCATAGTTGTTTATGAACTGCTTAT
CCCTTAAAGGAGCACAAGAACCCCTCCCTGCCCTCCTTGGGCACCCTGCCTCCAGGAGATGGAGGCACGTGATAA
GACAAAAGACTGCACCAACTCACCCTGACACAGTTACATAGTCACTGAGAGTGGGGAAGATGGGACAGCCCACAT
GCTGCATAAGATGGGCCTTATGCAGCAGGCCCAGGTCGTCATTAAGGAGTGACCCCTTTCCTGTAACCTGCACTT
TGGGATGGTAGAAGTTTCTTTACCTGCTGACAGGTTTGGTGGCACTGCTGGTTACCCCTGGGCCCTGAATGGAGC
TAAAATCACATTTGGTACCAGCAGCACCTATCCCAAGTGTGATCCTTCATCCCAACACTCCCTCTTGGAGCTGTT
CCCTGGGTAGAGCTAGCATGCCAGCAGCTTCTGCAGGCTCCAAACCCAGGCCAGAAGCCAGACCCAGGCCTGCTG
CCTGCATCTGCATTCCCTCCTTCCAGTGTTCCTTAGAACAGACATTTAGGTATCTCAGGTCCTTTCTAAGTGTCC
CTTTCCTATGTATGCATTTCCTTTTTTTGTCTTTACTATGCACTTTAGCTTATAAAGCCAATTAAAAACGATGAT

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FIGURE 4511C

TGAG

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FIGURE 4512

RNSGDSDMEERRPHLDARPRNSHTNHRGPVDGELPPRARNQANNPPANALRGGASHPGRHPRANNHPAAYWQREE
RFRAMGRNPHQGRRNQEGHASDEARDQRHDQENDTRWRNGNQDCRNRRPPWSNDNFQQWRTPHQKPTEQPQQAKK
LGYKFLESLLQKDPSEVVITLATSLGLKELLSHSSMKSNFLELICQVLRKACSSKMDRQSVLHVLGILKNSKFLK
VCLPAYVVGMITEPIPDIRNQYPEHISNIISLLQDLVSVFPASSVQETSMLVSLLPTSLNALRASGVDIEEETEK
NLEKVQTIIEHLQEKRREGTLRVDTYTLVQPEAEDHVESYRTMPIYPTYNEVHLDERPFLRPNIISGKYDSTAIY
LDTHFRLLREDFVRPLREGILELLQSFEDQGLRKRKFDDIRIYFDTRIITPMCSSSGIVYKVQFDTKPLKFVRWQ
NSKRLLYGSLVCMSKDNFETFLFATVSNREQEDLCRGIVQLCFNEQSQQLLAEVQPSDSFLMVETTAYFEAYRHV
LEGLQEVQEEDVPFQRNIVECNSHVKEPRYLLMGGRYDFTPLIENPSATGEFLRNVEGLRHPRINVLDPGQWPSK
EALKLDDSQMEALQFALTRELAIIQGPPGTGKTYVGLKIVQALLTNESVWQISLQKFPILVVCYTNHALDQFLEG
IYNCQKTSIVRVGGRSNSEILKQFTLRELRNKREFRRNLPMHLRRAYMSIMTQMKESEQELHEGAKTLECTMRGV
LREQYLQKYISPQHWESLMNGPVQDSEWICFQHWKHSMMLEWLGLGVGSFTQSVSPAGPENTAQAEGDEEEEGEE
ESSLIEIAEEADLIQADRVIEEEEVVRPQRRKKEESGADQELAKMLLAMRLDHCGTGTAAGQEQATGEWQTQRNQ
KKKMKKRVKDELRKLNTMTAAEANEIEDVWHLDLSSRWQLYRLWLQLYQADTRRKILSYERQYRTSAERMAELRL
QEDLHILKDAQVVGMTTTGAAKYRQILQKVEPRIVIVEEAAEVLEAHTIATLSKACQHLILIGDHQQLRPSANVY
DLAKNFNLEVSLFERLVKVNIPFVRLNYQHRMCPEIARLLTPHIYQDLENHPSVLKYEKIKGVSSNLFFVEHNFP
EQEIQEGKSHQNQHEAHFVVELCKYFLCQEYLPSQITILTTYTGQLFCLRKLMPAKTFAGVRVHVVDKYQGEEND
IILLSLVRSNQEGKVGFLQISNRICVALSRAKKGMYCIGNMQMLAKVPLWSKIIHTLRENNQIGPMLRLCCQNHP
ETHTLVSKASDFQKVPEGGCSLPCEFRLGCGHVCTRACHPYDSSHKEFQCMKPCQKVICQEGHRCPLVCFQECQP
CQVKVPKIIPRCGHEQMVPCSVPESDFCCQEPCSKSLRCGHRCSHPCGEDCVQLCSEMVTIKLKCGHSQPVKCGH
VEGLLYGGLLVKCTTKCGTILDCGHPCPGSCHSCFEGRFHERCQQPCKRLLICSHKCQEPCIGECPPCQRTCQNR
CVHSQCKKKCGELCSPCVEPCVWRCQHYQCTKLCSEPCNRPPCYVPCTKLLVCGHPCIGLCGEPCPKKCRICHMD
EVTQIFFGFEDEPDARFVQLEDCSHIFEVQALDRYMNEQKDDEVAIRLKVCPICQVPIRKNLRYGTSIKQRLEEI
EIIKEKIQGSAGEIATSQERLKALLERKSLLHQLLPEDFLMLKEKLAQKNLSVKDLGLVENYISFYDHLASLWDS
LKKMHVLEEKRVRTRLEQVHEWLAKKRLSFTSQELSDLRSEIQRLTYLVNLLTRYKIAEKKVKDSIAVEVYSVQN
ILEKTCKFTQEDEQLVQEKMEALKATLPCSGLGISEEERVQIVSAIGYPRGHWFKCRNGHIYVIGDCGGAMERGT
CPDCKEVIGGTNHTLERSNQLASEMDGAQHAAWSDTANNLMNFEEIQGMM

FIGURE 4513

GTTCCTCACCCCCGCTTCGCCCTCACACTTTCGGGATGTCTGCGATTCCTGCTGAGGAGAGCGACCAGCTGCTGA
TCCGACCCCTTGGAGCTGGGCAAGAAGTAGGAAGATCATGTATTATTCTCGAGTTCAAAGGAAGAAAAATAATGC
TCGACTGTGGGATCCACCCTGGCCTAGAAGGAATGGATGCTCTTCCTTATATTGATTTAATTGACCCAGCTGAGA
TTGATCTCCTATTAATTAGTCATTTCCATTTGGATCACTGTGGAGCTCTGCCCTGGTTTCTACAGAAGACAAGTT
TCAAAGGAAGAACATTTATGACTCATGCCACAAAAGCTATTTATAGATGGCTTCTTTCTGATTATGTCAAAGTTA
GTAACATATCAGCAGACGACATGCTGTATACCGAGACAGATTTGGAAGAAAGCATGGACAAAATTGAAACTATCA
ACTTTCATGAAGTTAAGGAAGTTGCGGGAATCAAGTTTTGGTGTTACCATGCAGGTCACGTCCTAGGAGCCGCCA
TGTTCATGATTGAGATCGCAGGCGTGAAGCTTTTGTACACTGGTGATTTCTCAAGACAAGAAGATAGGCACTTAA
TGGCAGCTGAAATTCCTAATATTAAGCCTGATATTCTTATCATTGAATCTACTTATGGGACCCATATCCATGAGA
AACGTGAAGAGCGAGAAGCAAGATTCTGTAACACTGTCCACGATATTGTAAACAGAGGAGGCAGGGGTCTCATTC
CTGTCTTTGCTCTTGGAAGGGCTCAGGAGCTGCTCTTGATTCTAGATGAGTACTGGCAGAATCACCCAGAACTAC
ATGACATTCCAATATACTATGCATCATCTTTGGCCAAGAAGTGTATGGCAGTGTACCAGACATATGTAAATGCCA
TGAATGACAAAATCCGCAAACAGATCAACATCAATAATCCCTTTGTTTTCAAACACATTAGTAACCTCAAGAGCA
TGGATCATTTTGATGACATTGGTCCCAGTGTTGTAATGGCCTCCCCAGGCATGATGCAAAGTGGCTTATCCAGAG
AATTATTTGAAAGCTGGTGTACTGATAAGAGGAATGGTGTCATTATAGCGGGATACTGTGTAGAAGGGACACTTG
CCAAGCACATCATGTCTGAACCTGAAGAAATCACTACTATGTCTGGACAGAAGTTACCACTGAAAATGTCTGTTG
ATTACATTTCTTTCTCAGCTCACACGGATTACCAGCAAACCAGTGAATTTATTCGTGCTTTGAAACCGCCTCATG
TGATTTTAGTCCATGGAGAACAGAATGAAATGGCCAGATTGAAAGCAGCACTGATTCGAGAATATGAAGATAACG
ATGAAGTTCACATAGAGGTTCATAATCCTCGGAATACAGAAGCAGTGACCTTAAACTTCAGAGGAGAAAAACTAG
CCAAGGTTATGGGATTTTTAGCAGACAAAAAACCAGAACAAGGCCAGCGGGTCTCAGGAATACTTGTTAAAAGAA
ACTTTAATTATCACATACTTTCTCCTTGCGACCTGTCCAATTATACTGACCTGGCCATGAGCACGGTGAAGCAGA
CCCAAGCCATTCCATATACTGGTCCCTTTAATTTGCTCTGTTACCAGCTGCAGAAATTGACAGGTGATGTGGAAG
AATTAGAAATTCAAGAAAAACCTGCTCTGAAAGTGTTCAAAAATATTACTGTAATACAAGAACCAGGCATGGTGG
TATTAGAATGGCTGGCAAACCCTTCTAATGATATGTATGCAGATACAGTAACAACTGTGATATTGGAAGTTCAGT
CAAATCCCAAAATAAGAAAAGGTGCAGTACAGAAGGTTTCTAAAAAATTAGAAATGCACGTTTACAGCAAGAGGT
TGGAGATCATGCTCCAGGACATATTTGGAGAAGACTGTGTAAGTGTAAAGGATGACTCTATTCTTAGCGTCACAG
TGGACGGGAAAACTGCCAACCTTAACTTGGAGACACGGACTGTAGAATGTGAAGAGGGAAGTGAAGACGATGAAT
CCCTCCGAGAAATGGTGGAGCTGGCTGCACAGAGACTGTACGAGGCCCTGACGCCAGTTCACTGAGACTGTGCCT
GTATATGAACTTTGAAAAAATACTTGACTCTACTTTTGTTACCTAAAATAAAATGCATTCGTTTCTCTGGGAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4514

MSAIPAEESDQLLIRPLGAGQEVGRSCIILEFKGRKIMLDCGIHPGLEGMDALPYIDLIDPAEIDLLLISHFHLD
HCGALPWFLQKTSFKGRTFMTHATKAIYRWLLSDYVKVSNISADDMLYTETDLEESMDKIETINFHEVKEVAGIK
FWCYHAGHVLGAAMFMIEIAGVKLLYTGDFSRQEDRHLMAAEIPNIKPDILIIESTYGTHIHEKREEREARFCNT
VHDIVNRGGRGLIPVFALGRAQELLLILDEYWQNHPELHDIPIYYASSLAKKCMAVYQTYVNAMNDKIRKQININ
NPFVFKHISNLKSMDHFDDIGPSVVMASPGMMQSGLSRELFESWCTDKRNGVIIAGYCVEGTLAKHIMSEPEEIT
TMSGQKLPLKMSVDYISFSAHTDYQQTSEFIRALKPPHVILVHGEQNEMARLKAALIREYEDNDEVHIEVHNPRN
TEAVTLNFRGEKLAKVMGFLADKKPEQGQRVSGILVKRNFNYHILSPCDLSNYTDLAMSTVKQTQAIPYTGPFNL
LCYQLQKLTGDVEELEIQEKPALKVFKNITVIQEPGMVVLEWLANPSNDMYADTVTTVILEVQSNPKIRKGAVQK
VSKKLEMHVYSKRLEIMLQDIFGEDCVSVKDDSILSVTVDGKTANLNLETRTVECEEGSEDDESLREMVELAAQR
LYEALTPVH

FIGURE 4515

GTGGTAGAGGAGGTTTCCAAGGCAGGGGAGATTATGGTGGAAGAGGGGGTTATGGTGGAAGAGGGGGCTATGGTG
GAAGAGGCTATGGAGATCCCATATGGCAGGCANNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCAGGTGGATAT
AGAAGATACTAAAAACTATAAAAATTAGATAGCAGTGCTTGCTTCTTTATAGATACATTAGAAATAGTGTTCCAA
ATAACATACTTGAATATCATCTTTGAAGTAAACACCATGTTAGACTCCCTGGTGATACCACTCTTGAATTGGTTA
ATATGTAAGAACATTGTTTTTTATTACCAGTTGATCTCTCAAATGAAGTGATGACTTTTTCCATATTCTGTGTAC
CCTTGAGCATGTTGTGTCTTTTTAAAAAACAAAAAAAAGAACAAAAATTATTTTTTAAAATGTAAATATTTATTA
CCATCAGACTTGGAAAATGGAAAGTATTTTATTGTCATGATTGAATTTAGATTGTTACCTGTATTTTGTTCAGGT
TTGAGACATATAAAAGACCCCACCTGTAATAGAAAGGAATATAGACCCTTGCCTCACCTGTATTGCTGTGGATGT
GTTTTGTGGGTTTTTCATTCGATTTTACAAAATAGGGAAAGGCACTTCCAGTTGTATTTAGTAGGCAGTTGTTGT
GAATCATTTTTTTCTCTTATAGGAGGAGATTCCTCTCTAGCCATGTTTCTGTTAAAGTTTCATTAATTGAAGCCC
AAGTTTACTTTTTACTGTACATACTTATTTTCTAATTGGATTTGAAATCAGCATGATTTTGTTTGACAAAGCAAA
GTTTAAGATTGAGGTCAGAAATACTTTAATGGAGCAAAGACACATACCAACTTTACATGACGGTGTGAGAAATAG
TCCTATAAACTGGTCTCTTCATCATTTATGCTCTCACTTTAGATATCCAAATATTAAAAGGCAGGCTGACCTGTA
TCACACAGAATTAAGGCAGTAATTTTCTGCTTCAGTAGATCAAGGGTAGGGCTAAGGCATCCTGTGGTAATTCTG
ATTCACAGCTAGATTTGGGAAACACAAAGTTAGGGAATGGCTATATGTGATTTGCTAGTTGGAGCAGTCAAAGTC
TTAGCTATCAAGAGTTGTGAATTTGAATCATGGCACTAGGTCAGGGGTGCTATGGATTGAAATGACCTTAGTTCT
CAAGGAGTGATTTGTCCTCATTTGTCAAATGAGGAATGAGACACTTACCATCATCTCAGGTTGTTTCTTAAAGAC
CTAAATACAAATACAATTTGTTAAAAACTTACAGAGGGCCTATTTTGAATGCTTTAAGATGTAGGCCAAGTAATG
TATTTTTCTCTTAGTGTAGAAAGTTAAGAGAAAAAGAGCTGGTACCATAAATTTTTTCAATCTTAGTGTAAAATC
TGTATCTCATTGTAGGCTTCTGGTCAATACCTATACATAACAACTTAATGTGATCTAACCAACTCAACTGATAGA
AAGCTGAATTGTTCCCAGTGGACAAGTGGTATTTGATGTTTAGCAGGTTTTTTTGTTGTTATTTTTTTGGTAAAC
TCTGTGGTAAAATCTAAAATAATGTTAAAACCCTAAAAGTAACTATTGAATATTCTGTAATCTTAGACATGTATT
TTTCAAGCTAACCCTTTGAAGAAATGTGTTCAAGGTAGGAAAATATAAAATTTTTTGGTTATTTGTAAATTTATT
TTTTGTGTGTTTATATTTAATGAAAAGATGTAATTTCATTTGTGATAGCTGAAAAAAAGGCTTTCCATAATTAAG
AAAATACCTTTATCAGTAGCTATGAACTCTGAAAAATAATTTTTAAAAACTTTTAAGAAAAAAACTACTTGAGTA
AAATATTTCAAGAGTTGTTTAAAAATCTTCTTTAAAACCTTTACATTTCTGCCTCACTTCTTTT

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FIGURE 4516

MIEFRLLPVFCSGLRHIKDPTCNRKEYRPLPHLYCCGCVLWVFHSILQNRERHFQLYLVGSCCESFFSLIGGDSS
LAMFLLKFH

FIGURE 4517

AAAAAAAAAAAAAAAGGTGTGCCCAGGCCCCTAGCCATTGCCATGTGCCCAGCCAGAGAGCCAAATTAGAGGGCT
GGCTTCCCTATCACACAGAATAAATGCTAGTGCTAGCCAATGATCCCTTTGCTTTTAATGTATAGAAAATACTGT
TGTTCCTTTTGTCATTTCCAGTGACATCTGTTTTCTAAGCAGCTCTTTTCTAGGGAGGAAACCAAAGGGGCTAGG
TTAAGACCCTAATAGAAATGTTTTTTCTAATCTCTGGTGAGTCTGGAAGTGTCACATTCACAGTCCACCCTTGGG
AGTGGCTTGGTGGAGCTGGGGACAAGGTTTTGTTTACTACATAGTGCACATGATAAATGGCCTTAAACTGTGATT
CTTTCTGGTAGGATAAGTTATAATAAACTGACCCTAAAGAATGCAATGGCTTTTAAACTGCAGTTACTGTGTTCT
TAATGAAGCAATACCCAAAGCTCTGTTCTTTTGGAGCACTTGAGGGGAGCTTGAATGAAAGGTGCAGATAAGAGC
AGTACCTTGATCTTATGCTTTCTGAGTGTCCTGCCTTGTTGCCATCTGCATGGATGAGTGAATGCTTCTATGCAC
GAGGAGACTCAAGCCAACTCAGAGTCTGCTTTTTCCAACGCTCTTCCCAGGTTTCTTTTGCAAAGCTTGGTCATT
TGGCCCAGGTCTTCCTGGAAAGTGGAGTACATGTCACTGACTAGGGTGGCGTGGTGTCTTTACCCTTAACATTAA
GTCTTGTTACCTCAGTGATGTGAAGCCAATGGTTGGAATTATAAAAAGCATCCTTGCTGGTTCTTCACAGGACAC
TGGAACCCACCCTGTCAATTCAGCTAGCATGTCCACACAGTCTTGATGATCCCTCTCTGTAACAGGCAGCTAACA
TTAAGAGAAGGGGGAAAGAGAAGAAGAGAGCAATAGCTTATGGGAGAGCTGAGATCTTACTTCGTTGACCCATAT
TTTTCCCCTGACCAAGTTACCTGTAAACTGGAATTTGCAAGGGGATGCTGTGATGATAACCCCTTTCTATTGCTG
TAATGTTCATATAACCTGGGAAACTGAGAGAAGGGGATGTGTAAATAAAAGCTTAAACATTTTAGTAATGTGTTA
AAATGTCACTCTCTCTTACCCTGTTTCCCTTTTTTGCCAGATGATGATTTTTTTATTTTTATTTTGTACTTTACT
GGATGACTGTGAAGCGATGAGTATTGGGTTGGGGTAGGTGTGTTGATTTTGAGAGTGCATGTTAAGAACTGAAGG
GGAACTACTTGAGATGACTTAAGAAGCATCCC**ATG**CAAATATCTTGTTTTGCCCTAATAAAATATTCAGAAAGAT

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FIGURE 4518

MQISCFALIKYSER

FIGURE 4519

CGCGGGCCGCAGGGCATGGACCTTCAGGCCGCCGGGGCCCAGGCGCAGGGGGCCGCGGAGCCGTCTCGGGGCCCG
CCGCTGCCTAGCGCGCGGGGGGCGCCCCCCAGCCCGGAGGCTGGCTTTGCTACAGCTGACCACTCCGGTCAGGAG
AGAGAGACTGAGAAGGCTATGGATCGACTAGCCCGTGGAACACAGAGCATTCCTAATGACAGTCCTGCCCGGGGT
GAGGGCACCCATTCTGAAGAGGAAGGCTTTGCCATGGATGAGGAGGACTCTGATGGAGAACTGAATACCTGGGAG
CTGTCAGAAGGGACAAACTGTCCACCCAAGGAACAGCCTGGCGATCTTTTTAATGAGGACTGGGACTCGGAGTTG
AAAGCAGATCAAGGGAATCCATATGATGCTGACGACATCCAGGAGAGCATTTCTCAAGAGCTTAAACCTTGGGTG
TGCTGTGCCCCACAAGGAGACATGATCTATGACCCCAGCTGGCACCATCCGCCTCCACTGATACCCTATTATTCC
AAGATGGTCTTTGAAACAGGACAGTTTGACGATGCTGAAGATTGAGTGTGGAGCTTTCTGCCTTGTAGGTGGGCG
GGCCTCCACGTCAAGATCTCTTTTCCTGTCTTGGAGGTGAAAAGTCATATCTGAGAAAATGTTTGCAGTGACCCC
TAGTCTGGGGTACACAGACCAGTGTTCCTTATTGACAGTGTTCAATAAGGCCCCGTCATTCTCGCCAGTCTGTTG
TTGTTCTTAATGGGCTCCTCCTTGAAATGTGTGTGTGTTTGTGTCAAGAGGAGTTGTGTTCTTTGTAAATAAAGG
TTAAAAAGAGAAACC

FIGURE 4520

MDLQAAGAQAQGAAEPSRGPPLPSARGAPPSPEAGFATADHSGQERETEKAMDRLARGTQSIPNDSPARGEGTHS
EEEGFAMDEEDSDGELNTWELSEGTNCPPKEQPGDLFNEDWDSELKADQGNPYDADDIQESISQELKPWVCCAPQ
GDMIYDPSWHHPPPLIPYYSKMVFETGQFDDAED

FIGURE 4521

AAAAAAAAAAGTTCCCACAGCTCACCACTACAGAAGCAGGGAAGACAACTATGCAGAAAACAGAGTTAGTGGCGG
TCAGCAGGAATGCAGCTGGTCTTTTGGACCCCTACGGGATGGGGGCAGTGCAGAAGACACTGGTGAAGTCCTTTA
TACTGAAGACCTGTGGTTGGGAGCAGGGGTAGTCCATGGGTCTGCTGATTTTTTTTCCCTATTTAGTACTAATGT
GTGTGTGATCTTTGTTTTACAAACAGTACCTTTTGGGTTTTCTGCATATTTTATAATTTTTGTACAGTTTTGAAT
TCTATAGATTGTCTTGGAAGGATACTGTGTGATGGGTCAGGCACACAGTAATTGGAGACTTTTAATGTATGTAAT
ATTTCATAGATTGCATGCTATTAATCATCTGTGAGGGTAGTATTTTTTGTTTTATTGTAAGTTTCCCTCTTTTTT
TATAAATTAAAAGATGGTTGGTATTAGGAATTTCAAATGAATGCAGAAAATCTTACATGCTGTGTACTATTAATA
TTATAACAGACGATCCAAGTCCAAAATCTGACCAATAAAGCAACCATTTTATCAAGATAGAGGGATTCTAATGGG
AGAGGGGATTCTTCCCTCCTGAAGTTTGTGTGTCCAGTCCCCTTAAAAAAAAATGAATAGTTGTCTTTTCTTGTCA
TATTAATACTCGAAAGTCCATGGTGGTATTAATGAAAGTACACTTTATTGTTGCCTTTGAACTTACGGCCAAGGC
AATAAATCAGAAACAAAAATAGTGCCAATGTGTCAAAATCGACATCTGAGAGATTCAGCCTCCCATTTGGAATAA
ATATGAATCTTCTAAGCTATCTTGTTTAATATTTTCCATCATTTAGCTACTTCCTATCTCCCTCAGAGGCGCCTG
CTGTTCCCATTTTAGAGTTGACAGTGGCCTGCTAATTTTGCTATGTTCCTAAAAGTTACTGGGTGTGAGACATTT
TCATCCCCTCCTTTTTCCTACTGCTGGTGTTTATTATCCAGCTAGACAATATTTTATGCATATTTACCGTGATGT
CTGGACCGTACCTGTGCTCCTTGGCAGTTTATGTTGAAGATAACTAAAGATTTTTCTCTTTGGGAGGCATCAAAA
TGATGGTAGTTTGCTTTTATCTTTTTATGTTCATTTTCTTTTAGTAGGTGACCTTTCTGCATTAAGAACTGTTTT
TATCTTTTACTACCTTTTCTTTTCTCCTTTGTGGAGACAGCATGACATGTCCTGAAGGTCACCTTTGCCTTTGAA
AAAGGTTTGATGGAGGAATTCACAGGTGACTGACAAGTCTTTGAAAAGAATGGGATCTGCTCACTTCTGGTCTTT
TTGGCCGGGAACTCCTGATTGGTGTTAAGGTGGTAATTTCCCCCATATAAGATTTAGAATCACTGAGTTTGAGCT
AGATGAAATTTTTAAAATTTCTGGTTGTCTCATTAGACTGATGAGGTGAGTTTTCTTCTTCATATGAACAGCTAG
TTAATAACAGCAGAGTTCTCACTCAGTGCTCAGTACTTAATTTTCCACTGCACCACAACTGTCTTAACTAAATGT
GCTGTATTTTTCTTTAAAAGTTAAGAGTTCTATTTGGTGTTTTCAGGAATATACGTGAAAAGACATGCCATGTTT
TGGTAAATACCATCAGAGTTGTGTAAAGGCGTGTACTAAGTGCAATCTTAATTTGTGGAAATAATCTTCATTTAC
CCCTCCTAAAACTACACTCAGTATAAACACTTTCCCATAAGGTGTGTGCAGTAAAAATGTTATATTACTCCAACA
CTGGCAGGAGCACAGCACAGCAGCCTTATTGGAGAGAGCCTTATAAAAGTGATTAAATGGAGGCATTGAGCTCAT
TACCTTTAAGTTTACTTTGTGCTGACCTTTGTTCCTGTTTTGAGAATCTCATATAATTATTAAAAAAAAAAAACA
ATTAAAACGAAACGGCGGGGCCTAGCTGTGTATAAATGATCCTTGCTGAATATCTTAAGGTTTTTTGTAAGAAAA
AAGAAAAACCAACAAAAAAAGCTTATTTTCACATTAAAATGAAACCTCTTTTGCAACTTAAGAATTCTATGGAAA
AGCAGTTTTTATCATATTTTGTGTCCATGCACCATTTTTCTTAAAATGGCTTACAAAAAAGAATGTAAACAATTT
GTGATCTGGCCAGTTGTACTTTTAGCTCCCAGAGGGAGAGTTGGTGGTATTATGAGTTGAGTAAAAACCATCCAG
GGGAACTTGAGGGAGCAGTCTGTTGCCAGTAATGTTCCTTGTGTGCCATTAAACCACCTCCAGATGAGTGGAGGA
ACATCACTTTTTAATTTTTTAATTGTATTTGGAATTGTTGCCGTGTACTAAGAACTTGACCTAAATAAAATCCCA
CAAAGTATATTCAGGTGTCTTGTTAACTTATTTATATAAATAACCTCTTTTTCTAAGGTGGTATCTTGAGTTTAC
GTGTTAGGGATAATCTGACTTTTCTGTTGCTCTAAACCAGGGAGCTGCCTTTTATTACTGAAGAAGTCGTCTTTT
TAAATTTTCAAAGATTTAAAATGTTGAGCTTTAAATTTGATCTCAAGTTTCTTCCCTGAAGACAGCTGTTCTAAT
TAAGAACTTTCTAATCCTGTTTTTGCTCCACTCGCACCTGGGGTTTTCTTACCACTTTTCTCCAAATCTAATTCT
GTTAATGTACAGTTTTTTTAATTCAACAGACAAACACTGAAGATGGGTGTTGACTAAAAAATATTGCAGACTGGT
CAGAAGTGAATCTAAAAGACAAACTCGCTACCTTAGGACCG

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FIGURE 4522

KKKVPTAHHYRSREDNYAENRVSGGQQECSWSFGPLRDGGSAEDTGEVLYTEDLWLGAGVVHGSADFFSLFSTNV
CVIFVLQTVPFGFSAYFIIFVQF

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FIGURE 4523

GGGGGTGGGTCCGGCGGGTCCCCGGGCGGGGCGGGGCCGGGGCGAGGGGTGCCGGGTGGTTTCCGCCCGGCAGCC
CGCAGCCCGCTGCGCCCCGGGCCGCGTCTCCCGGCGGTGGGAGGGGGCGGCCCCCACTCGGTTCCTGGCCCCTCG
CGGCCCCGTCAGCCTCCCGCTCGGGGTGCGCCGCCCTTCGTCTGGGTCTCCGCCCCCAGGACCCGCGGCCGAGAG
CTCCGGAGCGCGGCTTCCCCGGCCGGCTGCGCGATGGGCTGCGGGAACTCCACCGCCACCAGCGCGGGCGCGGGC
CAAGGCCCTGCAGGAGCAGCCAAAGATGTAACAGAAGAATCCGTAACAGAAGATGACAAGAGGAGAAACTATGGA
GGAGTATATGTTGGCCTACCATCTGAAGCTGTCAATATGGTGTCCAGTCAAACAAAGACGGTTCGGAAAAATTAG

AAGAAAATAACATCATGACTCAAGAATCAAGAGCTTGCTCATCAGTTTGGAAGGAATTTGGCTCCGTGGGACGTT
GTAATGTGCACAGACATTTCCAAGGAAATTCTAAACAGTCACCCTTCCCTTTTGCATTCCCCCAAATCTTAAGTG
TATACATAAAACCCTGGGTACATATTGTTGTGGTAATAGAAGGGAATTGGTTAAACAGTACACTTGTTTATGGAA
CTTTCTGTGGCCACCTACGAAAGACAAGTTAACAAACTGTCATGGAGGCTGTTGTTGCCCAGCCAGGGCCGCTGC
ATTTTGACAACATTTCCACCCTGGCCACTCAGCACATTTCATGGAGGTCATGTCTTTTCACTGATACTTTTTTGA
TAGTTTTTATATAACAAAATCCTTATTCTATTTATAACTTAAGATGATAAGGCACTATAAATTAATGACCTAAAA
TAATATATTTGTCTGTTATCTTTTGCTATTTCTACTTCACTTTAATTTTTAGCTGTAAAATTGGTAAATGGATTC
TTACAACTATCTCTTTCCATTTCTTACTATTTGGTTTTCAAATTTCATTTAAATGTCAGAATTTCCTTTTTTAGG
AACAATGTGTATTTCATTGCACTATTTAAAAATAAACTCAAATTTGCATGCCATATGCACATTTTGATTACATTT
TTATTTTCTTTCGTGAAAGGCATGTGCAACTACAAATACTTCATAGCTGTTTGGGTTGCTCATTCTACATCACGA
CAATCTCATCATATTATTTCTATAACTTTTCAAGGACTTGCGATGGATGGTTAGTGGGATATCTGGAAATTAATT
TGATAATGACTTGTGTATCTACTTAGTATTGCAATGTAAGTTACTCAATTCACCAATGTATTTCAACAATTAAAA
CATTTTTATCCCTCTTCAAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4524

GGGSGGSPGGAGPGRGVPGGFRPAARSPLRPGPRLPAVGGGGPHSVPGPSRPRQPPARGAPPFVWVSAPRTRGRE
LRSAASPAGCAMGCGNSTATSAGAGQGPAGAAKDVTEESVTEDDKRRNYGGVYVGLPSEAVNMVSSQTKTVRKN

FIGURE 4525

CACGATAAAGGGGACATGCCGGGAGTTGCAGTACCCTCAGGAAGAAGTCATTGTCATGGACATGGACCCTTTTCT
TCACTGTGTGATCCCAAACTTCATCCAAAGCCAAGACTTCTTAGAAGGGCTTCAGAAGGAACTGATGAACTTGGA
CTTCCATGAGAATCTGATGATTTGAAGAAGAGAAGAGAGCCTCACATCTCCACTTTAAGGAAAATTCTGTTTGAA
GATTTCCGGTCCTGGCTTTCTGATATTTCTAAAATTGACCTGGAATCAACCATTGACATGTCCTGTGCTAAATAT
GAATTCACTGATGCCCTGCTGTGCCATGATGATGAGCTGGAAGGGCGCCGGATTGCCTTCATCCTGTACCTGGTT
CCTTCCTGGGACAGGAGCATGGGTGGTACCCTGGACCTGTACAGCATAGATGAACACTTTCAGCCGAAGCAGATT
GTCAAGTCTCTTATCCCTTCGTGGAACAAACTGGTTTTCTTTGAAGTATCTCCTGTGTCCTTTCACCAGGTGTCT
GAAGTGCTGTCTGAAGAAAAGTCACGTTTGTCTATAAGTGGCTGGTTTCATGGTCCATCATTGACTCGGCCTCCC
AACTACTTTGAACCCCCCATACCTCGGAGCCCTCACATCCCACAAGATCATGAGATTTTGTATGATTGGATCAAC
CCTACTTATCTGGACATGGATTACCAAGTTCAAATTCAAGAAGAGTTTGAAGAAAGTTCTGAAATTCTCCTGAAG
GAGTTTCTTAAGCCTGAGAAATTCACGAAAGTCTGTGAGGCCTTGGAGCATGGACATGTGGAATGGAGCAGCCGA
GGTCCCCCTAACAAAAGGTTTTATGAGAAAGCTGAGGAGAGTAAGCTTCCTGAGATATTGAAGGAGTGCATGAAG
TTATTTCGCTCTGAGGCACTATTCTTGCTGCTCTCCAACTTCACAGGCCTGAAGCTTCATTTCTTGGCCCCTTCG
GAAGAAGATGAGATGAATGATAAAAAAGAGGCAGAAACCACTGATATCACTGAAGAAGGGACTAGCCATAGTCCT
CCTGAGCCAGAGAATAATCAGATGGCCATCAGCAACAACAGCCAACAGAGCAATGAGCAGACAGACCCAGAGCCA
GAGGAAAATGAAACAAAGAAAGAATCAAGTGTTCCCATGTGCCAAGGGGAACTGAGGCATTGGAAGACCGGTCAC
TACACTTTAATTCATGACCATAGCAAGGCTGAATTTGCCCTAGACTTAATTCTGTACTGTGGCTGTGAAGGCTGG
GAGCCAGAATATGGCGGTTTTACTTCTTACATTGCCAAAGGTGAAGATGAAGAGCTGCTAACAGTGAATCCAGAA
AGCAATTCTTTGGCATTGGTCTACAGAGACAGAGAGACTCTGAAATTTGTCAAGCATATTAACCACCGAAGCCTG
GAACAAAAGAAAACCTTCCCAAACAGAACAGGTTTCTGGGACTTTTCATTCATCTATTATGAATGACAGCACTGG
GCAAAGCTGAACAAAAATGTGACCCTTCGTAATTACTGGGAAGTCTGAAAGAGCTAAGCATGGAGTCAAGGAGAA
CTACATGGTAGCTTGCCTGACAGTGTTCTTAAAACTGGTTGTCTTTTACTAGGACTCATAATGATTGTCCTCAAC
CGAGACCTTGAGCTTGCAGCTACGTACTTATCTCTTGATTAAAAAAAAAAAAAAGTTGGCTTTTTTTTTTTTTAA
CATTTAGTCCTTTTTCCATATTGGCTTCTTCAGTGAATTTTTAAGTTCAATTTGTTTTTATTGAGGTAAAATATT
TATAACATAAAACTGACCAGCTTACCCATTTTTAAATATGCAATTCAGTGGATTAAGTACATTCTCATTGTTGTC
CAGCCATCACCATCATCCATCTCCAGAAGTTTTCCATCTTCCCAAATTCTGTGCCCATTGAACAATAACTCCCCA
CCTCCCCTTCCCCTAGCAACAGCCATACTTTTTGTCTCTATCATCAACTTCACTACTCATATTTCTCATGTAAGT
GGAATCATACAGTATTTGTCCTTTTGTGACTGGTTTCACTTAGCATAAAGTCTTTAAGATGCATCCATGTTTCCA
GTGTTTCGGTTTTTTTAGAAAAACTCATACGTGATTGCAGCCGGGCATGGTGGCTCACGCCTGTAATCCCAGCAC
TTGGGAGGCCAAGGCAGGCGGATCACCTGAGGTCAGGAGTTAAACACCAGCCTGACAAACATGGAGAAACCCCAT
CTCTACTAAAAATACAAAATTAGCTGGGCGTGGTGGCACATGCCTGTAATCCCAGCTACTCAGGAGGCTGGGGCA
GGAGAATTGGTTGAACCCAGGAGGCGGAGGTTGCAGTGAGCCGAGATTGTGCCACTGCACTCCAGCCTGGGCAAC
AAGAGTGAAACTCTGTCTC

FIGURE 4526

MSCAKYEFTDALLCHDDELEGRRIAFILYLVPSWDRSMGGTLDLYSIDEHFQPKQIVKSLIPSWNKLVFFEVSPV
SFHQVSEVLSEEKSRLSISGWFHGPSLTRPPNYFEPPIPRSPHIPQDHEILYDWINPTYLDMDYQVQIQEEFEES
SEILLKEFLKPEKFTKVCEALEHGHVEWSSRGPPNKRFYEKAEESKLPEILKECMKLFRSEALFLLLSNFTGLKL
HFLAPSEEDEMNDKKEAETTDITEEGTSHSPPEPENNQMAISNNSQQSNEQTDPEPEENETKKESSVPMCQGELR
HWKTGHYTLIHDHSKAEFALDLILYCGCEGWEPEYGGFTSYIAKGEDEELLTVNPESNSLALVYRDRETLKFVKH
INHRSLEQKKTFPNRTGFWDFSFIYYE

FIGURE 4527A

GTATATGTTTCGTGAGTAATTTTTAAAAAATAAAACAGGTTAATAAGAAGATCCATTCCTTTGCATGTGATTGTT
ATAACATTCTTTCCCAGGGAGTTCAATTTCAGCAACCTCAGAAATCCATACTTGATATTAGGAAACTGTAAATGT
AACACCTGAAATTATTATGTTCACTATTCTACATGAACCTTATGGAAATTCATGATTTATGTCTTTGTTTTTCTT
TTTCCAAGTATATGCAGGACTCCCCAACCTTGATTTTATAATGGTGACTGCATTTTGTAGGTGGAATCATTTCTA
CCGAAATCATTTTGAAACACAAGAATATTGATCAGTACTGTTTCACTCTGATTTAGTAAATCAGAAAGCCTCCCC
CTACCCCCAGCCCCCACTTTCACATACCTTCTGGGAGGTGCCTCAGTATAGACTTGGTATCTGTGAAGGACTGAG
TTCATGAATATGCACAGAAGCACTTAAACCATGCCTCTTATTTCTATAATATCTGAAAATGGCTTCATAAAAGTT
AAGTCAGGAGAACACTGTTTACATGACACTTCTTAACTCATTTTTAATGTTTATTTTTAATTTCAAAAACTTGTT
GCCTATTTGGTTTTCAGTACTGCATAACACTGACTTTCTTAAATTAGTCATAGTTGCAATAATTTACTTAAATTT
GGTAATGTCACATTTGGGTTGGGGTTTCAGTGGGAATAGTAACTTGCCGCTAGTGAGAAATGGCATTGAATACTA
AAGACTCAATATGAACAGGCTTTATAGACCCTTAGAGAAACTGTTGCCTTAATGTTTGGTGCAATTTCTAGTAGT
GCATAAGTGAATTTAGTCTTATGATAAGTAACTTTGAGCTGTTTTTAGCTTAGTAAGAATTGTGGAAACCACATG
TTTATTGTGCCCATCATTTTACACAAAGAAAAGAGGATTATATTATTTCTTCTAAGGAAGTAGGAGTTTTCTTCC
TAAAAGTGCTTACATATTGTAGTACTATTACTTAAAAGTTATTTATGAAGTTGGGAGCCTTCTAGTTTGCCTGTG
TTGATGTATTTTGAAAACAAAATTGCAATAAAGGATGAGCTTCCATCGGTGTGTATGGTATACCAGATACAGATG
GTTGCAAGGAAACCTTTTCCCCCACTAGAATAGTCTATTAGTAACTGCTAAGTCCTAGCTTGCATTTTTGAAAAT
GCCTTTCTGCATGTTAGCACCCAGACTTTCCTTTGTCATATTCCTTTATAGCTACAACTTAACTGTAGCTTATCA
GAGAAGCTCTGTAGTCCTACACTGAAGTGTGTTCCCTTGGCTGTTCATATGGGGCTGGGTTTGGTTGAACTTCCA
TTCTGTATAAATGCTAGAACACAGTTACTACAGATTGATTCACAAACTGCATGTGCTGGTGCTTGAGGCAGCCAA
AATGGAATGCTGTGGAAAGCATATCTATATCTTAAAAAACACTCAGACAGGAGTTAAGGACAGCTTTAATAATTT
TTTTGTTTACCACTTAATCTTTATCAACTTTGATTTTAGTTAGGGCTTAGCTCATGGTTGAAGAAAAGTGGAAAA
TAACAAGTGCCCATTTAGGTTTGAAGAATCCAGAATGTTTTACCTTTGACTTTATGAGTTATAGAAGCTTGGCTT
TGCTCTAGGTTTCATGTTCCCAAATGAGCCATCTGTCAGTATATTCACTTAATTCTTACTAATTTCAGTTTCCTG
TAAAGGAAACAACTTACATATTGATGCTTAAATCCAGAAAGTGTAAAAGGTTTTCTTAAACTGTTAAAATATAGT
GTCTGATATAAAGGATGTAAGTTACTCAGCTTTCTGCTCCCTAAGCCAAACAGTGTTTGTCTTCAGTGTGAAATT
TAACTGTAAAAACTACTTGTAATGTCAAGAGATTATAGATCATATTATTAATAAAATGGACCTGGGTCTAATATT
TTTTTTTCTTCAAAGGGAGTGTGAAGCTGTTTATTCTTTTATTTGCATATGAGTTTTTCTTTTAGTTTTAGTTTT
TCATGTTCATATTTCCACTGATTTGAAAACACAAAATTTATTTTTATAATTTTGTTGCTTGTAGCATAATCAAGT
GCAAAATCAAGTGCAACCTACTTGTGACTAAATCTCTTTGGATTTATAGCTGAGGATATTGTTAGCTAGGTTTTG
TCAATCCCTAATCATTTTTTAAAATCAATGCTGTATTCCCAGGAGGCTTTGAGACTCCTATGAACCTGAAGCACT
CCCTTTTGAACCTTGGAAGATCCTCAAAGAGTGAGCACTCTTGTGCTCTTCTAATCATAATTAATTCCTTAACAA
ATCAGAGTAAGGACCACTGACATATAGAACACTCAAGCCAAAGAACCATCACAGAATTTAGTAACTTTAGTTCTG
TGAACATGAAAAGATTTCTTTTTTGGTTTCCAAAGGAGATTATTTATTTTTCCACAAGGAAAAACATCTTGCAGA
GACTCTGAATTCCAAATCTGAGTGAGAAAGAAAAGGAAAAAAATCTGTTTCATGGTGGATTTCTAAGCAACATAT
ATACATGTTTTTAAGACAACCTTTTGTTGGCAGTGTTTTTCCTGAACACCATATGCACCCTAGGAAACGTTTTTC
CTTTAATCTTGTTCACATATCAGAAAAGGACATGAAATGCTCATACTGGCATACAAGTTTCTATAAGTAGTTATT
TTTTGAGCTACTTATACTATATCCCCAAAAGCTCACAGTGCCTTGTTGGGATTTTTTTTTTCCATGAACTAGCCA
TTATTTTAAATGAGTGGGAGAGGGTAAGTCTTTAGACAGAGGTCATTCAGCAGTTCAAGACTATTCCTCTTCAAG
AACATGTCAGGAATTAAGCAGTTATATGTGGAAACACTGGTAATTCTTTCCACAGTGTTGTTTTGGATAATCTGT
TCTAGTATATTTAACTAATTGTATGGTGGACCTGTACTCTGATACACATCGAATCAGTCAATGGGATTTGTATGT
GCTTTTCCTTCCTACATTTTCATTCCTACTGCCCCAACCTAGTAGCCCTAAGTTGTGGCTTGGTGGGTTTGGCAC
TGAGCCTCAAGACACTCACTACATTCTTTCTGGATGTTTGCTCACAGGCTCCCTGAGGAGCAGAACCTGTGGAGC
TGGGGAGTGCGGGTGGTTTCTATTCCTAATATTGTGTGTCAGTCCTTTTTCGTGTGATGGTGCCTTCAGAATAAC
GAATATTTCTGTTCTGGACAATGATTAAATCTTATGAGAAATATATGTAGGTTATATTAATTCTTGTCCATTTTT
GCTAAGCCTGTGAAATACTTTGGCTCTGATACAACTTAACTTGAATAATATCTTATCCTGAGTCTTCCTCCAAGG
CAGTACATATTCCTGCCAGGACTGTAGTAATCCTTTGGGAACTACATGTGAGTAAGCACTTGTATGTAAGCCATT
ATACTGCTGTAACTAATGCATACAAACAATTCTTCTCTTTACATTTATAGTCTAAAAGGGGATATGCAGTGGGAA
GGAAAATTCCTGAGAGATTCCAGCATAGCTTTGTCAATTCCGACTGAGCCATACTGTTTTCCACAAGGGCTCAAC

FIGURE 4527B

ACATAGTCAGTATTCCGTGCTTTCAGTGTGTGTTCAGATTCTCCTCTTACTGGTTTTCTTAGACTGTATTGTTCT
ATAAGCAAATGCCCATGTGTGATTTTTAAGATGTGCTGGGGAAAAATAAATCAATACCACAACGGAAAAATCACA
CATGGGCATTTGCTTATAGAACAATACAGTCTAAGAAAACCAGTAAGAGGAGAATCTGAACACACACTGAAAGCA
CGGAATACTGACTATGTGTTGAGCCCTTGTGGAAAACAGTATGGGCTACTAGGTTGGGGCAGTAGGAATGAAAAT
GTAGGAAGGAAAAGCACATACAAATCCCATTGACTGATTCGATGTGTATCAGAGTACAGGTCCACCATACAATTA
GTTAAATATACTAGAACAGATTATCCAAAACAACACTGTGGAAAGAATTACCAGTGTTTCCACATATAACTGCTT
AATTCCTGACATGTTCTTGAAGAGGAATAGTCTTGAACTGCTGAATGACCTCTGTCTAAAGACTTACCCTCTCCC
ACTCATTTAAAATA**ATG**GCTAGTTCATGG

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FIGURE 4528

MASS

FIGURE 4529A

AGCGGCCGCCAACGCCGCCCGGACTGGAGCCCTGACATTGCTGCGCTCGGGGGGCTCCAGGCAGCCCGTATCGGG
GCCTTTATTTCTCGTCGGCGGCGCCCTGCACCGCGCCTCGCAAAGCCAAACACCAGAGCACCCTAGAAGGTTTAA
CTAAAAGAATGCTCATGTTTGACCCAGTTCCTGTCAAGCAAGAGGCCATGGACCCTGTCTCAGTGTCATACCCAT
CTAATTACATGGAATCCATGAAGCCTAACAAGTATGGGGTCATCTACTCCACACCATTGCCTGAGAAGTTCTTTC
AGACCCCAGAAGGTCTGTCGCACGGAATACAGATGGAGCCAGTGGACCTCACGGTGAACAAGCGGAGTTCACCCC
CTTCGGCTGGGAATTCGCCCTCCTCTCTGAAGTTCCCGTCCTCACACCGGAGAGCCTCGCCTGGGTTGAGCATGC
CTTCTTCCAGCCCACCGATAAAAAAATACTCACCCCCTTCTCCAGGCGTGCAGCCCTTCGGCGTGCCGCTGTCCA
TGCCACCAGTGATGGCAGCTGCCCTCTCGCGGCATGGAATACGGAGCCCGGGGATCCTGCCCGTCATCCAGCCGG
TGGTGGTGCAGCCCGTCCCCTTTATGTACACAAGTCACCTCCAGCAGCCTCTCATGGTCTCCTTATCGGAGGAGA
TGGAAAATTCCAGTAGTAGCATGCAAGTACCTGTAATTGAATCATATGAGAAGCCTATATCACAGAAAAAAATTA
AAATAGAACCTGGGATCGAACCACAGAGGACAGATTATTATCCTGAAGAAATGTCACCCCCCTTAATGAACTCAG
TGTCCCCCCCCGCAAGCATTGTTGCAAGAGAATCACCCTTCGGTCATCGTGCAGCCTGGGAAGAGACCTTTACCTG
TGGAATCCCCGGATACTCAAAGGAAGCGGAGGATACACAGATGTGATTATGATGGATGCAACAAAGTGTACACTA
AAAGCTCCCACTTGAAAGCACACAGAAGAACACACACAGGAGAAAAACCCTACAAATGTACATGGGAAGGGTGCA
CATGGAAGTTTGCTCGGTCTGATGAACTAACAAGACATTTCCGAAAACATACTGGAATCAAACCTTTCCAGTGCC
CGGACTGTGACCGCAGCTTCTCCCGTTCTGACCATCTTGCCCTCCATAGGAAACGCCACATGCTAGTCTGATTGC
CTCTGTGTCCTGCCTCAGCGTGACTCCCCACTCACCTGGCTCTCTCTCTGTCCTGCCTCCCATTATCTAACACAT
TTTTTACATGTACATTTTAATTTGATTCAGCTGGTCTGAATCTCTGAATTTATATCATCCAAAACTTCCATATGG
TCAGTAGTAGATGTTCTCTAATCCTCCCTCTCCTTACCACGGGTCAGACCTAAAGAATGTGAACACTTTTTTTTT
TTTTTCTGGGGATGCTAAGCAAACCCTTCTTACAGATACGTTTAATGTAATAAGAACAAGGGAACATGTAAACTA
ACATAACCAATTGTCAGTTCTCCATGTATTCCTCAAAAGAATGTCAGAGTAAATGTATTAGAAATACAGTATCCA
GACTGCTAGTCCTTGCCAGAGACATTCTTACCTCTGCCCTGTGATAATATTTTATGCTTGACAGTGAAAACAAGT
GTGGCCCCTTGCACCGGTTAGCTAGAAGTACAGCCAGATTTCAAGCTAGTGCAGTCACCTCTTCCGTCATTCTTC
ACAAATCTTGTCAACCTGGATCTTAGACTTCATCTGAATCGAGTTCTTTGCCCTCCTTTGTGCCTGCAGCTCATA
TGGAGGTCTTTGCCACCAATGGGAGATGAGCCCAAACTTTCGATCTAGGTGGGTGATGTGTAGCAGTTCAAGGGA
AGGGTGCTGTGTTTTCATAGCATGGAGTCGGAGGAGAGGGCCATTTAGCAGGGGGAGCAGAAGAGGCAATTCCTC
CTGGGCTAGGGGTTGTCAATGAGGTTTCAACATTTTGTTAGCTGTGTGCAGCATTCCCAGAGCTTCAGTCTCTGT
GCATACTCAGCTTTGTAGAACCATGCTGCAAAGCCATATACCGATGGGGTTATCCATGCAACTATCTCCATTCCT
ACAATGTCCTTAATATGAGATCATCAAACATTGATAGTAGGGACTCCATGGAATATTTGCCCAGTAATGGTAAGA
AATCTTTCGGGTAAGAGTATGGATGGTTCTTCTTTTACCCAATCTGCTTATAGCTTTTTTTGTAAACAGGGAAAT
GTTGAGTGGTACTTGTATTCCCTTATCAAATTAATCACATAGCTTTTATACAGAAACTCTTCCTGTGTGAGCTGT
TAAGGTGCCAAATTGGCTGTCATTTGTATTCATGACACATACCATAAAGCATCTGCTAATGCTTTAATGGATTGA
TTCAATTAAGACCTGAGTGACACTATTTGTAAATATAACTAGTTGTGAAGCACACATACCTTTATTTTGGGAATT
TATGAGAAAATATAGAAAACCACAGATCAGGGATTCATATATGTAGCTCAAAAATTCCCAAAAGTTTACTGTTAG
AGTTGGCAATTTCCTATCACTATTTCAGTGTCAGAACAAACTGAAAATAATGGCTCGTGTTTATGTTGAAGATAA
ATAGCACCATTATTGGGGGAAGTTATTCAAAAGCAGGCTTTTGAGCACCATAGTCTAAATGCCAATAAAAATAAT
TCATACATAGAAATGTCATTGGTCCTGAATTTGAAGAAAGTGAGCAACAGTAGTTAAATGTGGGTGCATATAACC
AAATTCCCCTTCATCAAGAATGGAGGAGAAGAGAGAAGAATGAAATCCTGAAGATTCATCCCAGCCGCAACTCAG
GATCCAACACAACTTTAACTGGGAGGAATACATTGTTTGATCATTTTTAAAACATCTGTGAATGAGTGATTCCGG
AGGCCTGTGAATTGTGTGGGGAGCTTGCTTTGATGGCACTGTGTTAATAAAAGTTGTAGGGACTGTGCACCTAAG
AGGCTAAGAGGTCCCACTCATCCGCCCTGTGAACCAGCTGTAAAGAAATGTAGTTAAGAAATGCAAAGAAATGTG
TTATCTTGGCACTTGGGTTTGATTTTCCTTTTTTTAAAGCACTGCAAAACTTCTTTAGGATACTAAAACATCCTA
ATTGGGCTGTTTTTTTGTTTTGTTTTGTTTTTCAGCTAAAGGCAAAGATAATTTTTTTTTCAGCTGAAGTTTTTC
TTTTTTGCAACTATGACATGAATTGAGTGATAAAATGGCTCTTTGAAAAGTAGATATTGTCTGTATTGTAAATGC
TTAGTCATATTCATGGCAAAGTGTTCATTTCTTGAGATGGTTCTTTCACAACACACAAGAATCAAGATGGAACGC
AAGGAAAATCTTTTTGTTTTGACCGAGGTAACCAGTTTATGTGTGTTCCAATCCATAGAGAAGTGGGGGAAAGGG
CGAGAAAGGATCAGATTGATCTGGGATCAGCTTTGAGCCTGAGTTCAGTGAATAGCCTCATGGGCATCTCATGGA
ATTGATGCATTTGCTGTGGCATATTTAAATTTTGTTCAAAAGATTTGAAGCAAGACCTTGCAAAGACTCTTAACA

FIGURE 4529B

TTACTGTTCAGCTTGCTTAGATTGTGTTAACAGTTCATTTAACAAAGATCCGTTTTAACTCTGAACAAAAGCAAC
CCAGAGCGGCCATTCTCTATTCCCATGCTGGTCAATACGCTTTCATTACCAATTGGCCCTTACCAAACTTTTCTT
ATATATATATTTGTATTTTACTATGATAGTTGAGAAATTTAGCCTCTTAGTCATTTTTAGCTGTTATTGTGGAAG
ACCTCAAATACAAGATTAGATGCCCTTGAACATGTTTTAATGATGTGTGTCATGTTACTATCAATGGTGATTTCA
ATCGCAATATTTTAAATTGATGAGAATGATTTGTAAACATGAAGTTACTATTACGTAAATTCTGTTTGTTATAGA
GTTTCTTCAGTTGTTACCCAAGTGTCATCCTAGAGAAGTCAGAAGAATCAGAATCCATCGTATTTTAGAGTTATG
TGAATCTACATCATAAATGGGCATTAACATTCTAAATTGCTTGGTTTGGAGAATGTGTTAGCAGCATAGCTATAT
TCAACTAGGGAGATGCTAAATACACAGAAGTTTCAAGAGCCTTGGAACAGAATTACAGGGGAACTATATATGTAT
ATGTATATTTTATTAAACACCCATCTGCACTATCAGTATTGCACTAATGTGGAATTTGAAAGACTATTTTGCTGA
TACTGTATATATGCGCATCATTCCTGATTAGATTGTTGTAAAGACAATCTGAAAGATCTAAGGTTTTAAAATAAT
TTGGTTTGAAAATATACAGTTGTCTTGAAGGAATTGCTGTCATACATGAAGTTGCTCCGAGCTGTCTTTATTCTC
TTCTTGGTCAAGGTTAACAATTGCTAAATGATCGCAAATTCACCTAAACAATACATTTACAAAGCCATCTTTACA
TGCATTAAACGAGGGCTACAACAATATTGTTTTACAAATACTAGCACTTTTTTTTCTGTTATGTACTTAGTGTTA
GAGGGTCAAAATAATCTTTCTGCTTAGCATCTCTTAAACCATACCTGCAAATATAGCAGGATTATTACATTTACA
GTACTTTAATACTTGTATAAACTATGCAGAAATTTTTAATAAAGTGTAATATATTTTATAAGCTAATAAGACTGA
ATGGGTAAAGGTTTTTAGCATGCGTTAGTATACTTGCAGATACTGAAACATTTTGGTAATCTTTCTTACTAAAGA
TGTGAATGTTTAATGTACCTTCTCTGTTTCTACTCTGTAGTCCAATGGGAATTCAGTAATGACATTTTGTCATGT
CAAACTGTGAACATAAATTTGTACTGTACAGTCCTCATATACTATATACAGTATGCAATATATATTATATACTTG
TTAATAAAACCATCAGAATATTAAAAAAAATCTATGTCGGGTGCGGAGAAAGAGGTAATGAAATGGCAGGAATTC
GATATCAGC

FIGURE 4530

MLMFDPVPVKQEAMDPVSVSYPSNYMESMKPNKYGVIYSTPLPEKFFQTPEGLSHGIQMEPVDLTVNKRSSPPSA
GNSPSSLKFPSSHRRASPGLSMPSSSPPIKKYSPPSPGVQPFGVPLSMPPVMAAALSRHGIRSPGILPVIQPVVV
QPVPFMYTSHLQQPLMVSLSEEMENSSSSMQVPVIESYEKPISQKKIKIEPGIEPQRTDYYPEEMSPPLMNSVSP
PQALLQENHPSVIVQPGKRPLPVESPDTQRKRRIHRCDYDGCNKVYTKSSHLKAHRRTHTGEKPYKCTWEGCTWK
FARSDELTRHFRKHTGIKPFQCPDCDRSFSRSDHLALHRKRHMLV

FIGURE 4531

TTTCGCAGGCCGATCCCCACTCCAACCGTTCCCTCAGCAACCCCAGGGGTGTCAGACGGGGCACCCTCCCACTGT
CTTCTCCAGCCAGCCTTAAAAACCCCAGAGACGCCAGCCTGGGAACGATCTCAGTATGGAATCTGAAGTCGCCTT
GTCAGCACAGACACCTCTGGGGTCCCCAGAAGACCTGTGGCAAAGTTCTCTAAACCGAACCTGGAGAGGGGAAGG
TTTTCAAGCAGGAACCACATAAATTCACCTAAAACTCACGCCTACACCCCTCTGTGATAAAAGATTTCTGTTTCT
TCTGTTGGAGACTGAATTTTCTCTTCAAGACTACAGTACTGTATCTGTCAATCTGTGGAAA

FIGURE 4532

AAAAAAGAAGAAAAAAATAGAAAATCCAAAAAGAAAAACCAGAAGGCCTGCTGGCGTATAAATCCCTGGGCGGGT
TTCTGATAAATTGCCCTGTGCTGTCAGCCCCTGCACTGCACTGCTGCCTTCCATGGTGGGTGGGAGACCCCAGAG
CGGGGCAGGCGCCACTGAGGGCTTTTCTTGGAGTCGGCCAGCAGGCCACGCAGCATCCGGCACCCTGGGCGGGCT
GGCTAGCTGCCTTCTTAGGACATCTCTACTTTGAAGGATTTTACCGCAGGAAGCAATAGCAGCGCTGGCCATTGG
TGCTGATGACAGCATTGGGTCTGGTTGAGGGGAAGGGGCTGGAAAGCAGCAGACCCCCCCAGTGCTGCGCATGGT
CCCGGAGCTGTCAGCCAGGGGAGTGGGGTCAGCCGTCAGCCAGCCCTCCCATTTCCCGCCCATGGGCCCTGACCA
CACTCCCTTTTCTAGAAGTCAATCCTAAGGTTTCTCTGCTCTGGCTAAGAGGATGTAAATTTGGATTCTTAGAGG
GCATGGCACCCCCAGTCCCTGCCCAGATAAAGTAGCACAGTGGCATGCAGCACCTCTGTCTGTTGCTGACGTTGG
GGGGCTTACACACCCACCTCATCTCCGTGCACAGCC**ATG**ACTGGCCCTGCCGGCAGCTGGGGTGCAGGTAAGGGT
CTCTCTCATAGAGGGGAGCTGCAGCTGAGAACTGGCGAGGCCCCTTCCTCCAAGGCCCTAGCTGGCCCCCGGGTG
AACCTGAGGTGGCAGGTTCAGGTTTTCAAGATGGTGAGGTCTCGCTGTCTGCTGGACAGTACGTTAGGCTCTCAG
AACTCATGGGTGTGGAGCTGGGCCTGTCCCGGGCCAGTGGACCCCTGTGTGTGGGGGATTTGGGGTGCTGTGGGC
CTGGTTATGCACTGGCAGATGGACCTTGCTTTGGTCCAGCTCTTTTCCTTACCCTGGCTC**TGA**CGTGGGAAGGCT
TGGAGGGCCCGTCTCATCACCCCCGTTCGCCCTCAGCTGTCCCTTTCCCTTGTCGCCTGGCCGCTGCCTCGCCCG
CCTGAGGCCTCCTAGCAGGCAGCCTGGGTGTGAGTTGAGCCTCTCTCTTTTCCCTCTGGTGGGAAAGTGGCCTTT
CCCTCAACACCTGCTCCCCGGCCCCAGAGGAACCCACCTGTTTTGGAGCTCAGCTTGGCCCAGCGTTTCCTTGGG
GAAGGGAAAGGAGGGCTGGACAGCACTGATCCGGGCAGGCAGCGTGTGCAGCAGTGGCCAGCCAGAGTGCCAAAG
ATGCACGGGGATGTGGTGTGTGGCTCCGGGCCCTCGACATCTCTGCTTTGGGGGATTTTTACCTTGTCTGCACAC
TTGTCAGGGGAGAGGGGACAGCAAGGTGGGAGGTTGAAGAGCTTTGAGGCTCAGCAGCATGTTTGTGGCATTCGG
TGGACACCATGGCCTTGGGCGGCTGGACAGGTTTTTGTGATGTGAGGGACACGCATGGGGCACATGGTAAGCTTG
GCAAGGGCTCCAGGAACGCTGACGAAGGGTTTTAGGACCCCCACCCCCATGCCTGTACCAGGGCTGGCCTCCAGA
GCGGGTGAGGACAGAGCAGCTGTGGGCTTTTCATTCTGAGGTCTTGGCCCCCCTGGCCACCGCAAGGGACTCTTT
GCTTGTCAGGGCTTGCAAAAACCAACCTTCGAGAAAGAAAAGGGAACTCTTCACGTTGAATGTTGACTTTGTGTG
NTGCGTGTGTGTTGGGTTTGTGTGCCCGCGCGCGTGTGCGTGTTTACTTCATGGAATTTTGTTTTGTGAAATTCC
CCTCCAATCGTGTCAGAATTTACCTCCATGCCCCAGTCACACTGTTGGTTCTGCGCTCTGAACCTGGGTGTAGCT
CATTTGAAGGACTCTCTTCTGCGTTTCCTAACAGTTATTTGGTGGTCTCAAGAGTTGAGGTTGTGGAGGGTTGGG
AGAAACTGAAGTTCTATACATTTCCATAGAGTTTACATCCTGCAGTTAAAAGGCAGGGAGGGCTCAGCCCGGGCC
CCACAGCTCCAGGCCATCCCCTACGGGCTGCCCACAGTGCCCCCTTTTCTCTAGCCGAATCTTTTTCGAACAGCC
CGGGAAAGGAAAACGGATTCACTTGCTGATTTTGTTCACGGCGGAAGCACCATGTTCCGTTCCTTTTTCAGGTTC
AGTTTGTTGTGTAAATGGCGGTTTTTTCTGGTGTGAGCTTTGGTGATGGTGGCAGGGCTCCTTTGAAGAGATGGT
TCCACCTCGTGGTCTGAAGAACAAACCAGAGAAGAGTCTGGTTTGGCCAGAGGCCCCCTCCGGCCCACGTCACCC
TGAGTACACCCCTCTGATTGCTCTGCTGTCAAGAAGCACGTTTCCACCAGCTGTATTCAACACTACAATGCATTT
TTTAAACTATATTTGCATCCAAGACAATAAAGACACCTTATTTTTTTAGAAAAAAAATCTATGTCGGTGCGGAGA
AAGAGGTAATGAAATGGCA

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FIGURE 4533

MTGPAGSWGAGKGLSHRGELQLRTGEAPSSKALAGPRVNLRWQVQVFKMVRSRCLLDSTLGSQNSWVWSWACPGP
VDPCVWGIWGAVGLVMHWQMDLALVQLFSLPWL

FIGURE 4534

CTCTTACAACATTGGCTGCCGGCGTGACTTTGACCGCTTCCCGGTGCGTTACCGGCAGCTGAACCCACCCGGCGC
CACGGGACTTTGACGCGTGCTCTGCGCTTGCCATGAGACTCCTGGGAGCTGCAGCCGTCGCGGCTCTGGGGCGCG
GAAGGGCCCCCGCCTCCCTAGGCTGGCAGAGGAAGCAGGTTAATTGGAAGGCCTGCCGATGGTCTTCATCAGGGG
TGATTCCTAATGAAAAAATACGAAATATTGGAATCTCAGCTCACATTGATTCTGGGAAAACTACATTAACAGAAC
GAGTCCTTTACTACACTGGCAGAATTGCAAAGATGCATGAGGTGAAAGGTAAAGATGGAGTTGGTGCTGTCATGG
ATTCCATGGAACTAGAGAGACAAAGAGGAATCACTATTCAGTCAGCAGCCACTTACACCATGTGGAAAGATGTCA
ATATTAACATTATAGATACTCCTGGGCATGTGGACTTCACAATAGAAGTGGAAAGGGCCCTGAGAGTGTTGGATG
GTGCAGTCCTTGTTCTCTGTGCTGTTGGAGGGGTACAGTGCCAGACCATGACTGTCAATCGTCAGATGAAGCGCT
ACAACGTTCCGTTTCTAACTTTTATTAACAAATTGGACCGAATGGGCTCCAACCCAGCCAGGGCCCTGCAGCAAA
TGAGGTCTAAACTAAATCATAATGCAGCGTTTATGCAGATACCCATGGGTTTGGAGGGTAATTTTAAAGGTATTG
TAGATCTTATTGAGGAACGAGCCATCTATTTTGATGGAGACTTTGGTCAGATTGTTCGATATGGTGAGATTCCAG
CTGAATTAAGGGCGGCGGCCACTGACCACCGGCAGGAGCTAATTGAATGTGTTGCCAATTCAGATGAACAGCTTG
GTGAGATGTTTCTGGAAGAAAAAATCCCCTCGATTTCTGATTTAAAGCTAGCAATTCGAAGAGCTACTCTGAAAA
GATCATTTACTCCTGTATTTTTGGGAAGCGCCTTGAAGAACAAAGGAGTTCAGCCTCTTTTAGATGCTGTTTTAG
AATACCTCCCAAATCCATCTGAAGTCCAGAACTATGCTATTCTCAATAAAGAGGATGACTCAAAAGAGAAAACCA
AAATCCTAATGAACTCCAGTAGAGACAATTCCCACCCATTTGTAGGCCTGGCTTTTAAACTGGAGGTAGGTCGAT
TTGGACAATTAACTTATGTTCGCAGTTATCAGGGAGAGCTAAAGAAGGGTGACACCATCTATAACACAAGGACAA
GAAAGAAAGTACGGTTGCAACGGCTGGCTCGCATGCATGCCGACATGATGGAGGATGTTGAGGAAGTATATGCCG
GAGACATCTGTGCATTGTTTGGCATTGACTGTGCTAGTGGAGACACATTCACAGACAAAGCCAACAGCGGCCTTT
CTATGGAGTCAATTCATGTTCCTGATCCTGTCATTTCAATAGCAATGAAGCCTTCTAACAAGAACGATCTGGAAA
AATTTTCAAAAGGTATTGGCAGGTTTACAAGAGAAGATCCCACATTTAAAGTATACTTTGACACTGAGAACAAAG
AGACAGTTATATCTGGAATGGGAGAATTACACCTGGAAATCTATGCTCAGAGGCTGGAAAGAGAGTATGGCTGTC
CTTGTATCACAGGAAAGCCAAAAGTTGCCTTTCGAGAGACCATTACTGCCCCTGTCCCGTTTGACTTTACACATA
AAAAACAATCAGGTGGTGCAGGCCAGTATGGAAAAGTAATAGGTGTCCTGGAGCCTCTGGACCCAGAGGACTACA
CTAAATTGGAATTTTCAGATGAAACATTCGGATCAAATATTCCAAAGCAGTTTGTGCCTGCTGTAGAAAAGGGGT
TTTTAGATGCCTGCGAGAAGGGCCCTCTTTCTGGTCACAAGCTCTCTGGGCTCCGGTTTGTCCTGCAAGATGGAG
CACACCACATGGTTGATTCTAATGAAATCTCTTTCATCCGAGCAGGAGAAGGTGCTCTTAAACAAGCCTTGGCAA
ATGCAACATTATGTATTCTTGAACCTATTATGGCTGTGGAAGTTGTAGCTCCAAATGAATTTCAGGGACAAGTAA
TTGCAGGAATTAACCGACGCCATGGGGTAATCACTGGGCAAGATGGAGTTGAGGACTATTTTACACTGTATGCAG
ATGTCCCTCTAAATGATATGTTTGGTTATTCCACTGAACTTAGGTCATGCACAGAGGGAAAGGGAGAATACACAA
TGGAGTATAGCAGGTATCAGCCATGTTTACCATCCACACAAGAAGACGTCATTAATAAGTATTTGGAAGCTACAG
GTCAACTTCCTGTTAAAAAAGGAAAAGCCAAGAACTAACTTTGCTTACTGTGAGTTGACTGACTCTAATTGAATC
TGCGTGGTTTTGATACTTTGATGGATTCCAGTGGAATAAATTCAGGCTGCTGAAACAAGAAATTCTGAGCCCAGG
AAGCGGGCTCTTCTTTCTTCAAAAGAAGCCCTTCTTGTTCATATTCAGGAGCTTCTGTTATATTCAAAGGTAATT
CTATGTCTATCTCAACTCTATTGATTGGTTTTATAGTTTATTGAAAATCCTCAAATAAAATATAATTATTACTGA
AATATGTTTAATATTTAAGGGGAAAAGAGACTAATTTCAGTTATACTTTTAAGCTTAGAATGTATGTTCATTTCC
AAATTTTGTATCATAAGAGTTTTCAACATAGAGAAAAGCTGAAAAAATGCAAAGAATAACCACATACTTTCCATC
TACCTTCCTTTGTTAACGGGTTGTTTATCATATAATAATTTGTTTTGTCATATTTGCTTTCACTGTCTATTATCT
GTTTAAGTCTCATAACTCTATTTTTAGTTTGCTGAAGACTTGAAAGTGAATCGCATATATCATGACACTTCTTGG
AGTGTCATTAATGGGCAGGCTTTTCTGTTGAAGAGTGGATTCCGTATGTTCTTCATAGAGAGTGTTTTTCAGATT
CTTCATTGGGATATTAAAATATTAGCCAAATTTCTCTCTGTTTTATATATGTCTGTTTATTTCAGTTTGTGGTTT
CTGCAAATTTGTAACTGCCTCTGTTTTAGGAGTATAAGTATTACTTCCTTGTGGTCTATTGTGAAGTAAAAAGTA
GACCCTTGCATATACTATTCTTGTTTGTGTTCATCTTAATGTTTTTGTACAGCTAAATCAAATGTAATTTATAGA
GTTAGTTTCATCAACCTAATGAATGCTAGTTAAATTTGAATTCCTTGGAATTTATCGTATATTGTATTCACTGAG
ATTATGAAGGGACAAATGTTAATCTTTTGTTTCCAGAAAAAGTTGGGCTTTCCCAAGCAGTTCTATTACCCGGTT
CAGAATTGCTTCATCCAAAAATCATCTGATGGTATAGATGGATCCTAGTCCTTTTCATTACCTGATGGTAGAAAT
AAAATAATTGATT

FIGURE 4535

MRLLGAAAVAALGRGRAPASLGWQRKQVNWKACRWSSSGVIPNEKIRNIGISAHIDSGKTTLTERVLYYTGRIAK
MHEVKGKDGVGAVMDSMELERQRGITIQSAATYTMWKDVNINIIDTPGHVDFTIEVERALRVLDGAVLVLCAVGG
VQCQTMTVNRQMKRYNVPFLTFINKLDRMGSNPARALQQMRSKLNHNAAFMQIPMGLEGNFKGIVDLIEERAIYF
DGDFGQIVRYGEIPAELRAAATDHRQELIECVANSDEQLGEMFLEEKIPSISDLKLAIRRATLKRSFTPVFLGSA
LKNKGVQPLLDAVLEYLPNPSEVQNYAILNKEDDSKEKTKILMNSSRDNSHPFVGLAFKLEVGRFGQLTYVRSYQ
GELKKGDTIYNTRTRKKVRLQRLARMHADMMEDVEEVYAGDICALFGIDCASGDTFTDKANSGLSMESIHVPDPV
ISIAMKPSNKNDLEKFSKGIGRFTREDPTFKVYFDTENKETVISGMGELHLEIYAQRLEREYGCPCITGKPKVAF
RETITAPVPFDFTHKKQSGGAGQYGKVIGVLEPLDPEDYTKLEFSDETFGSNIPKQFVPAVEKGFLDACEKGPLS
GHKLSGLRFVLQDGAHHMVDSNEISFIRAGEGALKQALANATLCILEPIMAVEVVAPNEFQGQVIAGINRRHGVI
TGQDGVEDYFTLYADVPLNDMFGYSTELRSCTEGKGEYTMEYSRYQPCLPSTQEDVINKYLEATGQLPVKKGKAK
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FIGURE 4536

CTCTTACAACATTGGCTGCCGGCGTGACTTTGACCGCTTCCCGGTGCGTTACCGGCAGCTGAACCCACCCGGCGC
CACGGGACTTTGACGCGTGCTCTGCGCTTGCCATGAGACTCCTGGGAGCTGCAGCCGTCGCGGCTCTGGGGCGCG
GAAGGGCCCCCGCCTCCCTAGGCTGGCAGAGGAAGCAGGTTAATTGGAAGGCCTGCCGATGGTCTTCATCAGGGG
TGATTCCTAATGAAAAAATACGAAATATTGGAATCTCAGCTCACATTGATTCTGGGAAAACTACATTAACAGAAC
GAGTCCTTTACTACACTGGCAGAATTGCAAAGATGCATGAGGTGAAAGGTAAAGATGGAGTTGGTGCTGTCATGG
ATTCCATGGAACTAGAGAGACAAAGAGGAATCACTATTCAGTCAGCAGCCACTTACACCATGTGGAAAGATGTCA
ATATTAACATTATAGATACTCCTGGGCATGTGGACTTCACAATAGAAGTGGAAAGGGCCCTGAGAGTGTTGGATG
GTGCAGTCCTTGTTCTCTGTGCTGTTGGAGGGGTACAGTGCCAGACCATGACTGTCAATCGTCAGATGAAGCGCT
ACAACGTTCCGTTTCTAACTTTTATTAACAAATTGGACCGAATGGGCTCCAACCCAGCCAGGGCCCTGCAGCAAA
TGAGGTCTAAACTAAATCATAATGCAGCGTTTATGCAGATACCCATGGGTTTGGAGGGTAATTTTAAAGGTATTG
TAGATCTTATTGAGGAACGAGCCATCTATTTTGATGGAGACTTTGGTCAGATTGTTCGATATGGTGAGATTCCAG
CTGAATTAAGGGCGGCGGCCACTGACCACCGGCAGGAGCTAATTGAATGTGTTGCCAATTCAGATGAACAGCTTG
GTGAGATGTTTCTGGAAGAAAAAATCCCCTCGATTTCTGATTTAAAGCTAGCAATTCGAAGAGCTACTCTGAAAA
GATCATTTACTCCTGTATTTTTGGGAAGCGCCTTGAAGAACAAAGGAGTTCAGCCTCTTTTAGATGCTGTTTTAG
AATACCTCCCAAATCCATCTGAAGTCCAGAACTATGCTATTCTCAATAAAGAGGATGACTCAAAAGAGAAAACCA
AAATCCTAATGAACTCCAGTAGAGACAATTCCCACCCATTTGTAGGCCTGGCTTTTAAACTGGAGGTAGGTCGAT
TTGGACAATTAACTTATGTTCGCAGTTATCAGGGAGAGCTAAAGAAGGGTGACACCATCTATAACACAAGGACAA
GAAAGAAAGTACGGTTGCAACGGCTGGCTCGCATGCATGCCGACATGATGGAGGATGTTGAGGAAGTATATGCCG
GAGACATCTGTGCATTGTTTGGCATTGACTGTGCTAGTGGAGACACATTCACAGACAAAGCCAACAGCGGCCTTT
CTATGGAGTCAATTCATGTTCCTGATCCTGTCATTTCAATAGCAATGAAGCCTTCTAACAAGAACGATCTGGAAA
AATTTTCAAAAGGTATTGGCAGGTTTACAAGAGAAGATCCCACATTTAAAGTATACTTTGACACTGAGAACAAAG
AGACAGTTATATCTGGAATGGGAGAATTACACCTGGAAATCTATGCTCAGAGGCTGGAAAGAGAGTATGGCTGTC
CTTGTATCACAGGAAAGCCAAAAGTTGCCTTTCGAGAGACCATTACTGCCCCTGTCCCGTTTGACTTTACACATA
AAAAACAATCAGGTGGTGCAGGCCAGTATGGAAAAGTAATAGGTGTCCTGGAGCCTCTGGACCCAGAGGACTACA
CTAAATTGGAATTTTCAGATGAAACATTCGGATCAAATATTCCAAAGCAGTTTGTGCCTGCTGTAGAAAAGGGGT
TTTTAGATGCCTGCGAGAAGGGCCCTCTTTCTGGTCACAAGCTCTCTGGGCTCCGGTTTGTCCTGCAAGATGGAG
CACACCACATGGTTGATTCTAATGAAATCTCTTTCATCCGAGCAGGAGAAGGTGCTCTTAAACAAGCCTTGGCAA
ATGCAACATTATGTATTCTTGAACCTATTATGGCTGTGGAAGTTGTAGCTCCAAATGAATTTCAGGGACAAGTAA
TTGCAGGAATTAACCGACGCCATGGGGTAATCACTGGGCAAGATGGAGTTGAGGACTATTTTACACTGTATGCAG
ATGTCCCTCTAAATGATATGTTTGGTTATTCCACTGAACTTAGGTCATGCACAGAGGGAAAGGGAGAATACACAA
TGGAGTATAGCAGGTATCAGCCATGTTTACCATCCACACAAGAAGACGTCATTAATAAGTATTTGGAAGCTACAG
GTCAACTTCCTGTTAAAAAAGGAAAAGCCAAGAACTAACTTTGCTTACTGTGAGTTGACTGACTCTAATTGAATC
TGCGTGGTTTTGATACTTTGATGGATTCCAGTGGAATAAATTCAGGCTGCTGAAACAAGAAATTCTGAGCCCAGG
AAGCGGGCTCTTCTTTCTTCAAAAGAAGCCCTTCTTGTTCATATTCAGGAGCTTCTGTTATATTCAAAGGTAATT
CTATGTCTATCTCAACTCTATTGATTGGTTTTATAGTTTATTGAAAATCCTCAAATAAAATATAATTATTACTGA
AATATGTTTAATATTTAAGGGGAAAAGAGACTAATTTCAGTTATACTTTTAAGCTTAGAATGTATGTTCATTTCC
AAATTTTGTATCATAAGAGTTTTCAACATAGAGAAAAGCTGAAAAAATGCAAAGAATAACCACATACTTTCCATC
TACCTTCCTTTGTTAACGGGTTGTTTATCATATAATAATTTGTTTTGTCATATTTGCTTTCACTGTCTATTATCT
GTTTAAGTCTCATAACTCTATTTTTAGTTTGCTGAAGACTTGAAAGTGAATCGCATATATCATGACACTTCTTGG
AGTGTCATTAATGGGCAGGCTTTTCTGTTGAAGAGTGGATTCCGTATGTTCTTCATAGAGAGTGTTTTTCAGATT
CTTCATTGGGATATTAAAATATTAGCCAAATTTCTCTCTGTTTTATATATGTCTGTTTATTTCAGTTTGTGGTTT
CTGCAAATTTGTAACTGCCTCTGTTTTAGGAGTATAAGTATTACTTCCTTGTGGTCTATTGTGAAGTAAAAAGTA
GACCCTTGCATATACTATTCTTGTTTGTGTTCATCTTAATGTTTTTGTACAGCTAAATCAAATGTAATTTATAGA
GTTAGTTTCATCAACCTAATGAATGCTAGTTAAATTTGAATTCCTTGGAATTTATCGTATATTGTATTCACTGAG
ATTATGAAGGGACAAATGTTAATCTTTTGTTTCCAGAAAAAGTTGGGCTTTCCCAAGCAGTTCTATTACCCGGTT
CAGAATTGCTTCATCCAAAAATCATCTGATGGTATAGATGGATCCTAGTCCTTTTCATTACCTGATGGTAGAAAT
AAAATAATTGATT

FIGURE 4537

MRLLGAAAVAALGRGRAPASLGWQRKQVNWKACRWSSSGVIPNEKIRNIGISAHIDSGKTTLTERVLYYTGRIAK
MHEVKGKDGVGAVMDSMELERQRGITIQSAATYTMWKDVNINIIDTPGHVDFTIEVERALRVLDGAVLVLCAVGG
VQCQTMTVNRQMKRYNVPFLTFINKLDRMGSNPARALQQMRSKLNHNAAFMQIPMGLEGNFKGIVDLIEERAIYF
DGDFGQIVRYGEIPAELRAAATDHRQELIECVANSDEQLGEMFLEEKIPSISDLKLAIRRATLKRSFTPVFLGSA
LKNKGVQPLLDAVLEYLPNPSEVQNYAILNKEDDSKEKTKILMNSSRDNSHPFVGLAFKLEVGRFGQLTYVRSYQ
GELKKGDTIYNTRTRKKVRLQRLARMHADMMEDVEEVYAGDICALFGIDCASGDTFTDKANSGLSMESIHVPDPV
ISIAMKPSNKNDLEKFSKGIGRFTREDPTFKVYFDTENKETVISGMGELHLEIYAQRLEREYGCPCITGKPKVAF
RETITAPVPFDFTHKKQSGGAGQYGKVIGVLEPLDPEDYTKLEFSDETFGSNIPKQFVPAVEKGFLDACEKGPLS
GHKLSGLRFVLQDGAHHMVDSNEISFIRAGEGALKQALANATLCILEPIMAVEVVAPNEFQGQVIAGINRRHGVI
TGQDGVEDYFTLYADVPLNDMFGYSTELRSCTEGKGEYTMEYSRYQPCLPSTQEDVINKYLEATGQLPVKKGKAK
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FIGURE 4538

TCGCAGATATGGCCAGTACACTATGAACCAGGAAAGCACCACCATCAAAGTTATGGAGAAGCCTCCATTTGATCG
ATCAATTTCCCAGGATTCTTTGGATGAACTATCTATGGAAGACTATTGGATAGAACTAGAAAACATCAAGAAATC
TAGTGAAAACAGCCAAGAAGATCAAGAGGTGGTTGTTGTCAAAGAGCCTGATGAGGGAGAATTGGAAGAAGAGTG
GCTTAAAGAGGCCGGTTTATCCAATCTCTTCGGAGAGTCTGCTGGAGATCCACAGGAAAGCATTGTGTTTTTATC
AACATTGACGCGGACCCAGGCAGCAGCAGTTCAGAAGCGAGTAGAGACGGTCTCCCAGACCTTGAGGAAAAAAAA
CAAACAGTACCAGATTCCTGACGTCAGAGACATATTTGCTCAACAGAGAGAATCAAAAGAAACAGCTCCAGGTGG
CACTGAATCGCAGTCACTTAGAACAAATGAAAACAAATACCAAGGAAGAGATGACGAGGCATCTAACCTTGTTGG
TGAAGAGAAGCTGATCCCACCTGAGGAGACGCCTGCCCCTGAAACAGACATCAACCTGGAGGTATCATTTGCCGA
GCAAGCACTCAATCAGAAAGAGAGCTCCAAGGAGAAAATCCAGAAGAGCAAAGGCGATGATGCCACATTACCTAG
TTTCAGATTGCCAAAAGACAAAACGGGTACCACAAGGATTGGTGACCTCGCACCCCAGGACATGAAGAAAGTTTG
CCATTTAGCCCTAATTGAGCTGACTGCCCTCTATGATGTATTGGGTATTGAGCTGAAACAACAAAAAGCTGTGAA
AATCAAAACAAAAGATTCTGGTCTTTTTTGCGTTCCATTGACAGCGCTATTAGAACAAGATCAGAGGAAAGTACC
AGGAATGCGAATACCCTTGATCTTTCAAAAACTGATTTCTCGAATTGAAGAGAGAGGTTTGGAAACAGAAGGCCT
CTTACGGATCCCTGGAGCTGCCATTAGAATCAAGAATCTTTGCCAAGAACTAGAAGCAAAGTTTTATGAAGGGAC
TTTTAATTGGGAAAGTGTCAAACAGCATGATGCCGCCAGCCTGCTGAAGCTCTTCATTCGGGAGTTGCCCCAGCC
ACTGCTCAGTGTGGAGTATCTCAAAGCCTTTCAGGCTGTCCAGAATCTTCCAACCAAGAAGCAGCAACTACAGGC
TTTGAACCTTCTTGTCATCCTCCTACCTGATGCAAACAGGGACACACTGAAGGCCCTTCTTGAATTTCTCCAAAG
AGTAATAGATAATAAAGAAAAAAATAAAATGACAGTCATGAATGTAGCAATGGTCATGGCCCCGAATCTCTTTAT
GTGTCATGCATTGGGATTGAAGTCCAGTGAACAGCGAGAATTTGTAATGGCAGCTGGGACAGCAAATACCATGCA
CTTATTGATTAAGTACCAAAAACTTCTGTGGACAATTCCCAAGTTTATTGTAAACCAAGTGAGGAAGCAAAACAC
GGAAAATCATAAAAAGGATAAAAGAGCCATGAAGAAATTGCTGAAGAAAATGGCTTATGACCGAGAAAAATATGA
AAAGCAAGATAAGAGTACAAATGATGCTGACGTTCCTCAGGGAGTGATTCGAGTGCAAGCTCCCCATCTTTCGAA
AGTTTCCATGGCAATACAGCTAACTGAAGAACTAAAAGCCAGTGATGTACTTGCCAGGTTTCTCAGCCAAGAAAG
TGGGGTTGCCCAGACTCTCAAGAAAGGAGAAGTTTTTTTGTATGAAATTGGAGGAAATATTGGGGAACGCTGCCT
TGATGATGACACTTACATGAAGGATTTATATCAGCTTAACCCAAATGCTGAGTGGGTTATAAAGTCAAAGCCATT
GTAGAAGACTTAACAAGCTGCAGATAACCATGTGGACTTCTGTCATAATTCTTGCTGAGTCAAGAGTGTAAATAA
AAGAAATGGCAGGACTCATATTATTCAGTTGTACCCAAGTATTTAAAAATGACTCTCTTAAGCCTTAAAAAGTCA
TAGATTTGTGCTGCTGCCAGAATTATATTAATTATTATTAATGTTATTATTAGAAAAAAAATTTCTGGAGTGAGA
GTAAAGAGGCTTAATTAGTTTGTGGGCAGTTTTCATATGCTCTGTGAAATGTGTCCAGATGTGACATAGTTTTTT
TTTTTAATATGTGGAAATGTCTTCTCTTCCCATTCTTTTCTCCTAAAATCATATATACTGTAATATATGCTCTCT
CACCTCTATTACCTCCTCACATCTACCCTTTCCCAGTTAGGTTTGCTTTTTGACCAAAAAGATAACAAATACCAG
GTATGGCAAGTTGTGAAGACAGCACATTAAAACATACCTAATTTCACAGTATTCCTGTCACGACAGAATGTTAGT
ATTCATCTCTTTGAATCATTTGCTCAAATAATAACATTCCACCTTTTCCTGCTGTATCACAGGAAGTGATTTGCA
TTTTTTTTCAGTTCATCTGACTTATGTTCACAGAACCGTATCAGCGACCAAGAAAATAGGACTGTCAGAAGCTGC
CAGTTATTACTGAACCATTAAATACTTATATACTAAGAATAAATAAAATATACCCATGTGAAATAATAATTGGAT
TATGGATAACAAGAGAGTGAAAGCCAAAGCACTTTCTGTCTACTGTACTCTTCTAAATGGAATTTTAAAAGTCAT
AGCTGGCTTTACGTGTTGTCATTATTAGCATTATAAATATGCATGATAGTATAATCCAGTAATGGTTGAAGAATG
TATTTTACTTAAAGAGGGATTTTTTTTTTTAAGTCCTGAATAAGTCTACTGGAAGAATTATTCTTCTGGGTGAAA
AAGCTTTTGTTTGTGTTCTTATTTTAAATAATCGGAGTCAATTTATTAAAATGTTCTTGAAAGTACTATTCCCAG
GGATTTTAATGCACAAACCATATTGTGACAAGAGATGAGCCTCTGTACTGTAAATAAGAAATGAAGTAGAGAAAT
GTTAAATATTTTATGAGTTTAGAATATAGTAAATAAAAGGTGATGTAAATGAATGCTGCACAAACGGTGTTCATG
ATACTTTTAGTAGTACTTTAGGAAAAACTACACATTCTCAGAAGCTCTTGATGTCTCTAATGAAGGGGGGGAATG
CTGTTAATGAGAACAGTCATAAATTTTTAGCATATAATTACAAGAACAGCCTGTGGATATGATCACTTAAATGAT
TTTGTGGTGATTCGTGCCATTGCTTTTTTATTTAAAAGAAAATTTTGTAATTAAATGCCTTTTTCTAAATTAAAA
AAAAA

FIGURE 4539

MNQESTTIKVMEKPPFDRSISQDSLDELSMEDYWIELENIKKSSENSQEDQEVVVVKEPDEGELEEEWLKEAGLS
NLFGESAGDPQESIVFLSTLTRTQAAAVQKRVETVSQTLRKKNKQYQIPDVRDIFAQQRESKETAPGGTESQSLR
TNENKYQGRDDEASNLVGEEKLIPPEETPAPETDINLEVSFAEQALNQKESSKEKIQKSKGDDATLPSFRLPKDK
TGTTRIGDLAPQDMKKVCHLALIELTALYDVLGIELKQQKAVKIKTKDSGLFCVPLTALLEQDQRKVPGMRIPLI
FQKLISRIEERGLETEGLLRIPGAAIRIKNLCQELEAKFYEGTFNWESVKQHDAASLLKLFIRELPQPLLSVEYL
KAFQAVQNLPTKKQQLQALNLLVILLPDANRDTLKALLEFLQRVIDNKEKNKMTVMNVAMVMAPNLFMCHALGLK
SSEQREFVMAAGTANTMHLLIKYQKLLWTIPKFIVNQVRKQNTENHKKDKRAMKKLLKKMAYDREKYEKQDKSTN
DADVPQGVIRVQAPHLSKVSMAIQLTEELKASDVLARFLSQESGVAQTLKKGEVFLYEIGGNIGERCLDDDTYMK
DLYQLNPNAEWVIKSKPL

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FIGURE 4540

GGCACGAGGCCTTCGGCCACCCCCGCTGACCATGGCAGTGTTTCATGACGAGGTGGAAATCGAGGACTTCCAATA
TGACGAGGACTCGGAGACGTATTTCTATCCCTGCCCATGTGGAGATAACTTCTCCATCACCAAGGAAGATTTGGA
GAATGGGGAAGACGTGGCAACGTGTCCTAGCTGCTCTCTCATTATAAAAGTGATTTATGACAAAGATCAGTTTGT
GTGTGGAGAAACAGTCCCAGCCCCTTCAGCCAACAAAGAATTAGTTAAATGCTGAAGAAGCCTTCAGGAATCCAA
ATCCTGAACATTTGGAATGAGCCCAGATAGAAATATCGAATGCAAAGCTACTGGCTTCACAGAGACAACCATTTA
TGATTTGCTGTTCTGTAAGAGTGTGGATTCTTTCTATCAACTGCTGATATCATCTTCAGGAAGCAAGTCCATAAC
ATGACATATCTGGATTTTGTGCTTAGAACCTTAAATTGGAAGCATTCTTAATTATGCATCTAAATTTAAAAGAAG
ATAATTTCAAAACAGTAAAAAAAAAAAAAAAAA

FIGURE 4541

MAVFHDEVEIEDFQYDEDSETYFYPCPCGDNFSITKEDLENGEDVATCPSCSLIIKVIYDKDQFVCGETVPAPSA
NKELVKC

FIGURE 4542

TTTAAATTATAATACTGAATTTTTATTGAAATAAAGCACACTAAATCAAACCAATTACAAAGATACATGTGTCAC
ACCAAGAAAACATTTTCAGTTATGCTGACAGCCCCAAATGTTTTCCATTTTTCAAAGACAGTTTGTAATGTCATG
GGAAAATTGCTCACGACGTTAAAATGAAAAAAGCAAGATACAGTATCATATATGCAGTATGATCTCAACTATGAA
ATAACTTTAATATTTATACATTGAAAAAAAGACTAGAAGAAAATGCACCAAACATTGAACTGAAGTTAATCTCTA
TATACTGGGATAACAAGATATTAATTTTTTACTTCTTGAAAACTTTCAAATTTTCCAAGAAATTAATCATAAAAT
CAGTGAGAAAATTGAACTTGAATGAATATCAAAACTGCTTAAACAAGGACTAGGCTGAGTAACCTGGCTTTGAGG
CATGCTACATGGC

FIGURE 4543

GGCACGAGGCCAGATACTACTGGCCATCAAGGGACAGAAGAAAAAGGCGCTCATTGTGGGGCACTGCATGCCTGG
CCCCCGAATGACCCCCAGATTCGACTCCAACAACGTGGTCCTCATTGAGGACAACGGGAACCCTGTGGGGACACG
AATTAAGACACCCATCCCCACCAGCCTGCGCAAGCGGGAAGGCGAGTATTCCAAGGTGCTGGCCATTGCTCAGAA
CTTTGTGTGAGTTGAGCCCAGGCCTCTGGTTGCAGGACTCGTGAATGGAGCAGTTCTGAGAACCACCCTTTTGCT
AAGGGAGCTTGGGAGCCACATGGCTGCTCCCTTCACACTGGGTAACAGTGTAGTATCCTGTGAGAGAATAAATGT
ATTCATTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4544

TCATGGCCGGCTCCTACCCTGAAGGTGCACCTGCAATCCTCGCCGATAAGAGGCAGCAGTTCGGAAGCCGGTTCC
TGAGCGATCCGGCGCGGGTCTTCCACCACAATGCCTGTTGATTATGAGATCAATGCCCACAAATACTGGAATGAC
TTCTACAAAATCCACGAAAATGGGTTTTTCAAGGATAGACATTGGCTTTTTACCGAATTCCCTGAGCTGGCACCT
AGCCAAAATCAAAATCATTTGAAGGATTGGTTCTTGGAGAACAAGAGTGAAGTATGTGAATGTAGAAACAATGAG
GATGGACCTGGTTTAATAATGGAAGAACAGCACAAGTGTTCTTCGAAGAGCCTTGAACATAAAACACAGACACCT
CCTGTGGAGGAGAATGTAACTCAGAAAATTAGTGACCTGGAAATTTGTGCTGATGAGTTTCCTGGATCCTCAGCC
ACCTACCGAATACTGGAGGTTGGCTGTGGTGTGGGAAACACAGTCTTTCCAATTTTACAAACGAACAATGACCCA
GGACTCTTTGTTTATTGCTGTGATTTTTCTTCCACAGCTATAGAACTGGTCCAGACAAATTCAGAATATGATCCT
TCTCGGTGTTTTGCCTTTGTTCACGACCTGTGTGATGAAGAGAAGAGTTACCCAGTGCCCAAGGGCAGTCTTGAT
ATTATCATTCTCATATTTGTTCTTTCAGCAATTGTTCCAGACAAGATGCAGAAGGCTATCAACAGGCTGAGCAGG
CTTCTGAAACCTGGGGGGATGGTACTTCTGCGAGATTACGGCCGCTATGACATGGCTCAGCTTCGGTTTAAAAAA
GGTCAGTGTCTATCTGGAAATTTCTATGTGAGAGGTGATGGAACCAGAGTTTACTTCTTCACACAAGAGGAACTG
GACACGCTTTTCACCACTGCTGGACTGGAAAAAGTTCAGAACCTGGTGGACCGCCGACTGCAGGTGAACCGAGGG
AAGCAACTGACAATGTACCGGGTTTGGATTCAGTGCAAATACTGCAAGCCCCTTCTGTCCAGCACCAGCTAAGAG
GCACCTGCTGCCAACACGATGCAAGCCCGTTGTGTTTCCGAGCTTTTTTTAAAAAAAAATTTGTAGCACCGGGCA
TGGTGCATGCCTGTAATCCCAGCCACTCAGGAGGCTGAGGCAGGGAGGATCCATTGAGCCCAGGAGTCCAGCCTG
GGCAAAATAGCGAGAGACCCTGAATCTGAAAGTAATGATAAAATAAAAAGAATATAAATGAGGTCTCGTTGATGC
TGGACAATTCAAGAATTCAGACTTGAACCTTAAACCTAGGAAAAGTTACTTTGTATCAGGATTCTAACAATTATG
CTTCATATTTGTGAAGTCCTTTAAAACATAATTTTCTCAAGTTCTTTCTTTGAGACCTCAATCTGTCTTAGCATT
TTGTAACTAATAACTGAAATTTTATTCAAAGGAATTGTAAACCTTAAACCACCAATTTATTTCCATGTGAAAAAG
TGTTATATATGACAAGTGTTTTTTGATTGTAATTGCGTTAAATCTTTTGAGAGTGTAAATGCCGGGCTAGGCAAT
TGCAGTTAATACATACAGGGGTTAGTGAAGGGCTTATTAAGTTGTAGGGGAAGCAAGCTGGGAAGAATCAGATCA
GATATTTTCCTGAC

FIGURE 4545

MPVDYEINAHKYWNDFYKIHENGFFKDRHWLFTEFPELAPSQNQNHLKDWFLENKSEVCECRNNEDGPGLIMEEQ
HKCSSKSLEHKTQTPPVEENVTQKISDLEICADEFPGSSATYRILEVGCGVGNTVFPILQTNNDPGLFVYCCDFS
STAIELVQTNSEYDPSRCFAFVHDLCDEEKSYPVPKGSLDIIILIFVLSAIVPDKMQKAINRLSRLLKPGGMVLL
RDYGRYDMAQLRFKKGQCLSGNFYVRGDGTRVYFFTQEELDTLFTTAGLEKVQNLVDRRLQVNRGKQLTMYRVWI
QCKYCKPLLSSTS

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FIGURE 4546

CATGCTGAAAGCAGGGCGGGACCGGGGCGGTCTTCCAGCAGGGAAAATGGCGCTGGCCATGCTGGTCTTGGTGGT
TTCGCCGTGGTCTGCGGCCCGGGGAGTGCTTCGAAACTACTGGGAGCGACTGCTACGGAAGCTTCCGCAGAGCCG
GCCGGGCTTTCCCAGTCCTCCGTGGGGACCAGCATTAGCAGTACAGGGCCCAGCCATGTTTACAGAGCCAGCAAA
TGATACCAGTGGAAGTAAAGAGAATTCCAGCCTTTTGGACAGTATCTTTTGGATGGCAGCTCCCAAAAATAGACG
CACCATTGAAGTTAACCGGTGTAGGAGAAGAAATCCGCAGAAGCTTATTAAAGTTAAGAACAACATAGACGTTTG
TCCTGAATGTGGTCACCTGAAACAGAAACATGTCCTTTGTGCCTACTGCTATGAAAAGGTGTGCAAGGAGACTGC
AGAAATCAGACGACAGATAGGGAAGCAAGAAGGGGGCCCTTTTAAGGCTCCCACCATAGAGACTGTGGTGCTGTA
CACAGGAGAGACACCGTCTGAACAAGATCAGGGCAAGAGGATCATTGAACGAGACAGAAAGCGACCATCCTGGTT
CACCCAGAATTGACACCAAAGATGTTAAAAGGATAACTTCACAGTAAATCATTTCTCCTGAAATAGAGGAAGATT
CTTTACGTTGTTGTGCTTGTTTTTAAATCATCAGTATAGTTTAACACATTCTTTCTAAGCAGTTTTGTGTGGGAT
AATTTGAAGAATATATTATGAGTAAACTCCGAAAATTTTGTTTATCCAAAGGCTCAATGGATTATGTTTCTATTA
TATACAAGGTTTTAAGTAAACATAAAATTTCCAGAACAAAAATAAAAAATTTAAAATTCATAGCAAAAAAAAAAA
AAA

FIGURE 4547

MALAMLVLVVSPWSAARGVLRNYWERLLRKLPQSRPGFPSPPWGPALAVQGPAMFTEPANDTSGSKENSSLLDSI
FWMAAPKNRRTIEVNRCRRRNPQKLIKVKNNIDVCPECGHLKQKHVLCAYCYEKVCKETAEIRRQIGKQEGGPFK
APTIETVVLYTGETPSEQDQGKRIIERDRKRPSWFTQN

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FIGURE 4548A

CTCGGGCAGAGCGCTAGGGCTCCGAGCGAACCAGCGAGCGAGCGAACGAGCGGCGCTCGGCGGGNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNGCGCGGCCGGGCGAGGCGGGCCCGTCCGGGAGCGGGCTCCGGGGAAG
GGGTGCGGGTCTGGGCGCCGGAGCGGGGAGCGGGGCCGCGTCCCTCTCAGCGCCAGCTCTACTTGAGCCCCACGA
GCCGCTGTCCCCCTGGCGCGCTCGGGGCCGCGGGACGGGCGCACGCCGCCTTCTCCTAGTCAAGTATCCGAGCCG
CCCCGAAACTCGGGCGGCGAGTCGGCCACGGGAAGTTTATTCTCCGGCTCCTTTTCTAAAAGGAAGAAACAGAAG
TTTCTCCCAGCGGACAGCTTTTCTTTCCGCCTTTTTGGCCCTGTCTGAAATCGGGGGTCCCCAGGGCTGGCAGGC
CAGGCTCGCTGGGCTCCTAATCTTTTTTTTAATTTCCAATTTTTGATTGGGCCGTGGGTCCCCGCTGAGCTCCGG
CTGCGCGCGGGGGCGGGAGGGCGCGCGCAGGGGAGGGACCGAGAGACGCGCCGACTTTTTAGAGGGAGGGATCGG
GTGGACAACTGGTCCCGCGGCGCTCGCAGAGCCGGAAAGAAGTGCTGTAAGGGACGCTCGGGGGACGCTGTTCCT
GAGGTGTCGCCGCCTCCCTGTCCTCGCCCTCCGCGGTGGGGGAGAAACCCAGGAGCGAAGCCCAGAGCCCGCGGC
GCGGCCGGCGGACGAACGAGCGCGCAGCAGCCGGTGCGCGGCCGCGGCGAGGGCGGGGGAAGAAAAACACCCTGT
TTCCTCTCCGGCCCCCACCGCGGATC**ATG**TACCAGGATTATCCCGGGAACTTTGACACCTCGTCCCGGGGCAGCA
GCGGCTCTCCTGCGCACGCCGAGTCCTACTCCAGCGGCGGCGGCGGCCAGCAGAAATTCCGGGTAGATATGCCTG
GCTCAGGCAGTGCATTCATCCCCACCATCAACGCCATCACGACCAGCCAGGACCTGCAGTGGATGGTGCAGCCCA
CAGTGATCACCTCCATGTCCAACCCATACCCTCGCTCGCACCCCTACAGCCCCCTGCCGGGCCTGGCCTCTGTCC
CTGGACACATGGCCCTCCCAAGACCTGGCGTGATCAAGACCATTGGCACCACCGTGGGCCGCAGGAGGAGAGATG
AGCAGCTGTCTCCTGAAGAGGAGGAGAAGCGTCGCATCCGGCGGGAGAGGAACAAGCTGGCTGCAGCCAAGTGCC
GGAACCGACGCCGGGAGCTGACAGAGAAGCTGCAGGCGGAGACAGAGGAGCTGGAGGAGGAGAAGTCAGGCCTGC
AGAAGGAGATTGCTGAGCTGCAGAAGGAGAAGGAGAAGCTGGAGTTCATGTTGGTGGCTCACGGCCCAGTGTGCA
AGATTAGCCCCGAGGAGCGCCGATCGCCCCCAGCCCCTGGGCTGCAGCCCATGCGCAGTGGGGGTGGCTCGGTGG
GCGCTGTAGTGGTGAAACAGGAGCCCCTGGAAGAGGACAGCCCCTCGTCCTCGTCGGCGGGGCTGGACAAGGCCC
AGCGCTCTGTCATCAAGCCCATCAGCATTGCTGGGGGCTTCTACGGTGAGGAGCCCCTGCACACCCCCATCGTGG
TGACCTCCACACCTGCTGTCACTCCGGGCACCTCGAACCTCGTCTTCACCTATCCTAGCGTCCTGGAGCAGGAGT
CACCCGCATCTCCCTCCGAATCCTGCTCCAAGGCTCACCGCAGAAGCAGTAGCAGCGGGGACCAATCATCAGACT
CCTTGAACTCCCCCACTCTGCTGGCTCTG**TAA**CCCAGTGCACCTCCCTCCCCAGCTCCGGAGGGGGTCCTCCTCG
CTCCTCCTTCCCAGGGACCAGCACCTTCAAGCGCTCCAGGGCCGTGAGGGCAAGAGGGGGACCTGCCACCAGGGA
GCTTCCTGGCTCTGGGGGACCCAGGTGGGACTTAGCAGTGAGTATTGGAAGACTTGGGTTGATCTCTTAGAAGCC
ATGGGACCTCCTCCCTCATTCATCTTGCAAGCAAATCCCATTTCTTGAAAAGCCTTGGAGAACTCGGTTTGGTAG
ACTTGGACATCTCTCTGGCTTCTGAAGAGCCTGAAGCTGGCCTGGACCATTCCTGTCCCTTTGTTACCATACTGT
CTCTGGAGTGATGGTGTCCTTCCCTGCCCCACCACGCATGCTCAGTGCCTTTTGGTTTCACCTTCCCTCGACTTG
ACCCTTCCCTCCCCCAGCGTCAGTTTCACTCCCTCTTGGTTTTTATCAAATTTGCCATGACATTTCATCTGGGTG
GTCTGAATATTAAAGCTCTTCATTTCTGGAGATGGGGCAGCAGGTGGCTCTTCTGCTGGGGCTGACTTGTCCAGA
AGGGGACAAAGTGCAATACAGAGCCTTCCCTACCCTGACGCCTCCCAGTCATCATCTCCAGAACTCCCAGCGGGG
CTCCCTGAGCTCTCAAGGAGATGCTGCCATCACTGGGAGGCTCAGAGGACCCTTCCTGCCCACCTTCGGAGACGG
CTTCTGGAGGAACGGCTTGGCCAGAAGACAGGGTGTGAGTGAGACAGTGGGGCACAGGTTGGGTTTGCCAAACGC
CTAATTACCAGGCCAGGAAGCATGCCAACAAAGCCACACGGGTGTCCTAGCCAGCTTCCCTTCACCTGGTGTCTT
GAGTAGGGCGTCTCCTGTAATTACTGCCTTGCCATTCTGCCCCTGGACCCTTCTCTCCGGACCAGGGAGGCGTCC
CTCCCTAGGAGCCACACATTATACTCCAAGTCCCTGCCGGGCTCCGCCTTTCCCCCACCCTGGCTCTCAGGGTGA
CGCCACCCACAGAGATTTAATGAGCGTGGGCCTGGACCTTCCCCAGATGCTGCCAGGCAGCCCCTCCCCAAGCCT
CAAAGAAGCATTTGCTGAGGATGGAGAGGCAGGGGAGGGAGGCGGGAGGCCGTCACTGGAGTGGCGTCTGCAGCA
GCTGCTGCCCCAGCACCCGCTCAGCCTGTCCTGGCTGCTCACCTCCCCGCAGGGCACCGGGCCTTTCCTGCCCTC
TGTGGTCATCTGCCACCTGCTGGATCAAGTGCTTTCTCTTTTACACTCCCCTGTCCCCACCCCAGTGCACTCTTC
TGGCCCAGGCGGCAAGCAAGCTGTGAACAGCTGGCCTGAGCTGTCGCTGTGGCTTGTGGCTCATGCGCCATTCCT
GGTTGTCTGTTGAATCTTTCTGGCTGCTGGAGTTGGAGATAGGATGTTTTGCTTCCCACTGCAGGAGAGCTGCCC
CCTTTCACGGGGTTGGGGAAGGGTCCCCCTGGCCTCCAGCAGGAGCACAGCTCAGCAGGGTCCCTGCTGCCCACC
CCTCTGAGCCTTTTCTCCCCAGGGTATGGCTCCTGCTGAGTTTCTTGTCCAGCAGGGCCTTGACAGGAATCCAGG
GAGTAGCTCCTGGCCAGAACCAGCCTCTGCGGGGCTTGTGCTCTGCAAAGACTCTGCTGCTGGGGATTCAGCTCT
AGAGGTCACAGTATCCTCGTTTGAAAGATAATTAAGATCCCCCGTGGAGAAAGCAGTGACACATTCACACAGCTG

FIGURE 4548B

TTCCCTCGCATGTTATTTCATGAACATGACCTGTTTTCGTGCACTAGACACACAGAGTGGAACAGCCGTATGCTT
AAAGTACATGGGCCAGTGGGACTGGAAGTGACCTGTACAAGTGATGCAGAAAGGAGGGTTTCAAAGAAAAAGGAT
TTTGTTTAAAATACTTTAAAAATGTTATTTCCTGCATCCCTTGGCTGTGATGCCCCTCTCCCGATTTCCCAGGGG
CTCTGGGAGGGACCCTTCTAAGAAGATTGGGCAGTTGGGTTTCTGGCTTGAGATGAATCCAAGCAGCAGAATGAG
CCAGGAGTAGCAGGAGATGGGCAAAGAAAACTGGGGTGCACTCAGCTCTCACAGGGGTAATCATCTCAAGTGGTA
TTTGTAGCCAAGTGGGAGCTATTTTCTTTTTTGTGCATATAGATATTTCTTAAATGAAGCTGCTTTCTTGTCTTT
TATTTCTAAAAGCCCCCTTATACCCCACTTTGTGCAGCAAAGATCCCCGTGCAGGTCACAGCCTGATTTGTGGCC
AGGCTGGACAAATTCCTGAGGCACAACTTGGCTTCAGTTCAGATTTCAAGCTGTGTTGGTGTTGGGACCAGCAGA
AGGCAAACGTCCAGCCAACACACAGGACTGTAAGAGGACTCTGAGCTACGTGCCCTGTGAAGACCCCCAGGCTTT
GTCATAGGAGGTCGTTCAGCTTCCCCAAAGTCAGAGGTGATTTGATTTGGGGAAGACTGAATATTCACACCTAAG
TCGTGAGCATATCCTGAGTTTTACTTCCTTATGGCTTGCCCTCCAAGTTCTCTCTCTCATACACACACACACCCT
TGCTCCAGAATCACCAGACACCTCCATGGCTCCAGCTATGGGAACAGCTGCATTGGGGCTGCCTTTCTGTTTGGC
TTAGGAACTTCTGTGCTTCTTGTGGCTCCACTCGCGAGGCAGCTCGGAGGTGTGGACTCCGATTGGGCTGCAGGC
AGCTCTGGGACGGCACAGGGCGGGCGCTCTGATCAGCTCGTGTAAAACACACCGTCTTCTTGGCCTCCTGGCCAG
TCTTTCTGCGAATAGTCCTCTCCCTGGCCAGTTGAATGGGGGAAGCTGCTGGCACAGGAAGGAGAGGCGATCCCG
GCTGAGGCTTAGGAAATTGCTGGAGCCGGCTCCAAGCAGATAATTCACTGGGGAGGTTTTCAGAGTCAAACATCA
TTCTGCCTGTGTTGGGGGCCAGGTGTGTCACACAAGCATCTCAAAGTCAAAAGCCATCTGGGGCTGCTGCTTCTC
TTTCTCAGGCTCTGGGGAAAGGAATCTCCCTCTCCTCTCACTTGATTCCAAGTGTGGTTGAATTGTCTGGAGCAC
TGGGACTTTTTTTCTCTTTTCCTTGATGGACCAACAGTGCAAATGCAATCTCGCCATTTAACTTTCAGGTCGATT
TCCTTTCCTGATCAGACATCTTTGTGCCCCCTTTAGGAAGGAAAAGAATACACCTACGATGTGCCAGGCACTGTG
TTAGGCGCTTTTATATAGATCCTCGTTAGGATGAGACTAAGGGATGAGGACATCTCTTTATAAAAGGCCCCTAAG
TAATGGATAAACAGAAACACTTAGAGGTGAGAAGGTCTGTCTTCAAGATCCAAGGTAAGATTGCCTTCAGTCTGA
TGTTTGTTCTCAAGGACTTATCCCCTACAATATTCTCCCACTCCATACTTCTCCTTCTACCCCACCATGTGCTCC
CGTGCACTCCTCAGATGGTCAGAGGGGTAACCCAAGTCCTTAGAGAATTTGGGGACCAATAGAATATGTGATGTG
TGAATTTTCTTTAAAAAACTTAAGGAGTCTTTGCTACCTTCTGCTTGTTGAGTTGTTTTGGCATTCATATTAAAA
GCCAGCATCTCACTATTTATTGACAGGTTGGGCTGTGTGTGTGCGCATGTGTGTATACATTTCCAGGCGTGCCTG
TGTCCTGTAGCTTTTTAAAAGGAAACCCAGTCATCCCACTATGAATCTGGCATCTTCTTATGCTTCTAGTGTTTT
GGCCATACATCAACCAAGGGGTTTAATTTATCCAATGCTTGACGACATGTTCAGGAGGGGCTGGATCAAATTTTG
AGAGGGTTATGGGAAAGGGAGGGGGAGAAGAAATTGACATTTATTTTATTATTTATTTTAAATGTTTACATCTTC
TTTATGTTGTATCAAGCCTGAATAGAAACTGATAGCATTAAAATACTCCGTTCCTCTCTCTCTTCTCGCTTCCTT
TTTTTTTTTTTTTAAATTTAGGATAACACATTTTTGTTTCTAAAGTGATTTGTGATTTGTGCTGTATAAACTGTA
TAAAAGGTTCTGTTTTTAAAGGTGGATTTTCATTCCTCTGGGGACAGTGGTCGCCAAGACATCTACATTGTAAGA
GAACACAGTGGAAGATCCTGTCCTGATTCTCAAAAATTATTTTCTCTGTATGATTAAAAGTTTATTCCATTTATT
TTAGTTTGTGTTTACTTGATTTTGAGGAAGAAAATATTTGACTTTGTGTAAAGAGTAGGGTATCAGGGTGTCTTT
TCTGCGGTGGGAGATGTGTATATATATAGTATTTTGGTGTATAGTAGAAAATAAGCTTTGTGCATCTGTATTTGA
GATATGTTAATGACGTGGAGTAAAGTCAGCTGTAAGACTCTGGAGGCAAACAAGTTGTATATGGTTCATATGGCT
CTATGGGGAATTTAATTACCTTTCTGGGCACTTTTCTTTTTTTTTTTTTCTTAAGTAATGGTGAAATGGTCCCAT
TGGAGAGTCTCCTAAATAGACCTTCCAGGCAGAACCGCAAGCTCAAAATCTTTGTATAGTTTTGAAAATTGAGGA
GTAGCTTTGTTTGGAAGCCTTTCNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNGTTGTTTTACTATATGTAATA
CAAGCCTACAGTATTTGCACTAAAGAAAGCTTGTTAGAAAAAGCTTGCTGCTATGGAAGAAAGAACATATTAAAA
CTTCTTTCCCTTGCGATTTTTTTGGGNGAGGGGGGTTAGCATTTCCACTTTCAG

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FIGURE 4549

MYQDYPGNFDTSSRGSSGSPAHAESYSSGGGGQQKFRVDMPGSGSAFIPTINAITTSQDLQWMVQPTVITSMSNP
YPRSHPYSPLPGLASVPGHMALPRPGVIKTIGTTVGRRRRDEQLSPEEEEKRRIRRERNKLAAAKCRNRRRELTE
KLQAETEELEEEKSGLQKEIAELQKEKEKLEFMLVAHGPVCKISPEERRSPPAPGLQPMRSGGGSVGAVVVKQEP
LEEDSPSSSSAGLDKAQRSVIKPISIAGGFYGEEPLHTPIVVTSTPAVTPGTSNLVFTYPSVLEQESPASPSESC
SKAHRRSSSSGDQSSDSLNSPTLLAL

FIGURE 4550A

AGGAATGAAAGGTCATAAGCCATTAGAAATAGTGGCATTATTATGCAATAACAACACCCTAGCTAACCTGCTTTT
GTCATCTGTAGCACTTACAATAAAGAATGATGACCTTCCAACCCTGGACACTACCTCGATAAAGCAAACCAGAGA
TCCTCTCTACACTTTCTATGGAAGCCATAAAAGTTGCCATCAATATATCCACTTTCATAGTTCTATACTTTTATA
CTTTCTAGACTTTTTTATAGACTTTATGATCAGATCTTTTTGTCTCAGAGGATAGGTTTTGCAAGATTCAAAGGA
AAATCAAACTCCTTGGTTGTTCCAGCTTTGAAGCTTTTGCTTCAGTAAATTTGTTTAAAGAACCAGATCACATAC
CATTTATCAAATTCTTTACTTAAGTCAGAATACTTTGCAGACATACATATTTGGAAAACAAACTGTTTCTTGTTC
ACTAGATAGAATCTGTATTGTAGTAAGAAACTACTTACAAGGTGGCTTTCTTTCTGCTTTGTTACTCTATGTATT
ACTCAATAATATATGTATGGTCACAGGTTCCTGGAGTTGTTTTATTTCTTTATGACAGACACATGAGTATGCACC
TCTCTCTAATCCTCTGATGTCACTGCAGCTTCAGTCTCTCTCACTCTGTTTTTGAGTGCCTTCAAAATGCCAGCA
TCCTGGAACATTCTTTTCCTGATCTAAATCCTACCTCTGACTATTTCATTATCCATGAATATTGGAATTCACCCA
TATTCCAATGGGCTTAACTCTACAAACTAGCTAAAACCTTGGACAAGAATTTGACCGTATTTCTAGTTTTGTTCC
TCCATGTCATTTTTAGGTTATATTTTTAACTTTTATTTATATCTTATTTCTTCACATATTTCGTCTCTCTGTTGA
AAGATTTTATCCTTATTTGACTCTTCACTTTTTTTACTTTCACCAGAAATTTGACGTTCCTTTAAAATTAAAGGT
CATTGAATGTCTTTTGAACACCTTTTTCTCAACTGAAGTCTTCCTGAATGCCTCCCCTTTCTGATGAAAGGATCC
TGAGTGCTGCTGTTGCTCTGCCCTGTTCCCATGTGCCCACTCCCTTCCGTACACATTTTGCAAGACTATACTCTT
TATTTTAGTCAAATTAATTTAAAATTGCTCCCTGGGTTTCTGCTCTCTCATGGCCCTGTCCCTCAAAAACTTCTG
TTTACTTTTTCTAGCTGTTTTCATCTAATTTGTTTAAAATGTATGATGGATCCATAATATATGAAGGATGTAATG
AAAAGGAGGTTGCAGTGTTTTATATAATATGATCGAGCACCTCCGTGATGAAACATTTAGCAATTGGCTAGTCCT
TCACAGCCAGAGTGGAAGTTTGTGCTGTGGACAGGTCTTTTTACTCCCTTCCAGTTCTCCTCCAAAACTGGACGA
AAAAGGAAAAAAAAAAAGAACTCTTTCAAATGAGGAGATTTGATTGCATTTTTTTAGGTGAATGAAAGCTTGGAG
TTGAGCATTTGGGCCTTAGTCAGCATTTTTCCTTTCTGACTTAAAATCTCATGTCCTTTTCCTTAAAGTTAATAG
TACTCAGGTTTTTAAGACTAATAACCACACAAGGTGGGTATCTAAGAAGGCAGCTGTTAATACATTCTCCATCTT
TCCTGTCTGGCAACAGGAAAGATATTATTGGTGAGATAGTGCAAAATTGTGAGAATTGGTTATGTTCGATGATGA
ATAAATTCAAGATTTTTGAAGGCTTCACTGCTATTTGGGATGGGAAGGTGAGTTTACAAAATGAAAAAGGTAGAT
TTTTATGTTACAGAAATCAGTAACGGGTTTCTTGTTGTGTTAATTACCTTTCACTTGATTTGCCATGATGTTTCT
TCCTCATTATTGATCTAGAAGTTTGCCTCTTGGATAGTAACTAGCAACTTAGTATCTACTTTAAAATTTGTGGCT
TTTCTCTTCAGGGTCCCAGGCCATAAAACAACGGAGAGCTGTACTTGCTTGTCACTTGGAGGAACCACATCCTTG
AGACAGCCTGCTGTCTTGTATGTCTTCAGTAGGAAACTTCTGACACACACATTCAAGGGAGTTCCTGCCCCTGAG
AAGTGTTCCCATAGCTTTCCAGTCGCAGGTTACTTTCACACTACGTCAGCTTCTCTGGTGAGATCAGGGATGTTA
CATATTACTTGAAAATGATTTCATAGGAAGTGAGGATGGGGCAAGAAAGGAGGTAGAAGCTGAATTTTGCTTAAC
TTCAGAAGGAAATCTGATACTTGCCTTGGCTAGTTCTGATCAACTAAAGAGCCTGTGTCTGTACTGGATGTGCCA
AAGAGTCAAGTTGTTTCTGGAATATCCAGCTCCTCTGAATGAACACAGCTTCCTCCCTACCTGTCTTTTATGGGT
GAAAAGGGACCGTCTGATGAGCATGATAGACATCCTGTACAGGACTCAAGACTGTTTCATTGCATTTGAAAGTTG
GTGGGAAGTATTTTATTCTGCTAGAGCTCCTAACCCTCCTAGAAATATCTTTTCATGCTCTATTAATTCAATTCA
TTAGTTTAAAAAGAAACAGTGTGACATAATTTTGGTGTTTACTTCTTAAGTTGTCTCCCCAAGGGCATATATGTA
GCCTCTGAAAATGGGATGATTTCTTCTCAATCTTCCATAAATTTGAATATGCATTTTATTCATTTCTTGACATGG
GCTGTGTGACTGTTTTCCATCAGCAGTTCTGGCTTTGTCCACAAGGGAGCAATAAAGTACGTTAGCTTTATTCTC
AACCTTCTAAAGAAAGATCCCACTTTTAAATCTCTTCTGGAATAGCCTCTTAGCTCAAAGCTTATTCATGTATTT
TGATTATTTAAGAAATTTTCCCTTATTACAAAGTCCAGTCGTCGTTCATCCCTCATGATGCCAAGCAATGATTGA
TGTGTGGGTGTGGAGTCCTTGTGGGTCAGGCATCTTAATTAATTAGACTTTTTACATATTGATGATCCCCAGATT
GAAAGCCAGGACCTTCCCATAGGGGCGCCTTTGTGTGCTAAAGGCAGAGCAGGCAGGCTTCTCCACTCCTATCTC
CTCCGCAGGCCACCACCATCACATCTATAGGAGGAACAAGAGCACTGGGGGAACTCTGGAGTATGAGTAAGGAAA
TGCTTCTCACCTTCTCTGCTCCAAAGAGATATCTGTTACATCAGGGAACAAGTCCTCTAGGTCAGGCACTTCCTC
CTGACCAGTGCAACGGGCACTCCAGGTTAGAAACTGTGTGTGCTCCCTCTCTGTCAGTTACTTGTCTAAGGGCTC
CTATCCGTGGTCATCAGCTCTCTGGCCATGAGTTCTGTTTGTGCTTATTGCAGCAGCATCTTCACAACAAACAGG
TCAGTAATCAACCTGGGAAGGGAAAAGACGACAGTAAATATTACCCCCTGTAGAGCCGGGAGGCATTTACACCTG
GAATGGCCTTCTTAACTGATTTCTGCCTGGCCACCTCACCCCCAGCCAAGTCTGAACCTGAGCAATACCAGGCAC
AGAGAGGTGTCTACTTGTAACTCCAACACTTGACAAAAAACAAAACTGAAGCTGTGATTGGTTTAGGCAGCAAGT

FIGURE 4550B

GGCCAGGTGCAACTTGTTTGTTTTTATTTTTGTTTTCCCCAACAGTACTGAGATCACTTGCACTTTTCCTCATTT
CTTAAGAAAATCCAGTTTGCTTGCCATGACTTGTTTAGCGTTAGGTTTACAAAGCTTGTTGTTGAATGTTGAATA
TTTGTCCAAAGGAGTTTGACAAAATAGAAGCTGCTTGGTCCCTGTTCTGCCTGCTAGGTCATAAGGATGAAGGCC
ATGTGGCTGGGGTACTTATGTCAAGTCCAGAATGGGGCAGTGTCCCTCTCCTACCTCTCTGCGGAGACGCAATTG
AAGGTCAAGTAGACTCAGTGTAGGGCAGGCAGCTGTCATGCTGCAAAGAAGTTTAGAGGAGTCTTTGGGTTGGGG
AGGTGACAGGTAGGTAGGACAGGATCTCTTAAGATGGGAAAGATACTGGGGAGAGGAGGGCTGCTTGGCCCCAGG
GAACTGCAGTGAGGTGGAACTGAGCTCCGCTCCTGAATCTCCAAAGGAGCCCATGCTGCCCGGCTTCCCTGAGTC
ATTTTTTCCAGCATCCTGTCAGATCCCTCAATGTACTGATTTCCCCCTTGTGTTAACTATACCGATATTATTTTT
TTAGCAATTGAAATGCACTTTTTTATTTCAACTCAATCATGATTTTAAGTATAAAAAATTTATAGATTGTTAAAA
CTACTTTTTTGTGTATTTTTAACCACTCAATGTAGCATTGTATATTTTATTCTTGTGAGACTCTGGTACAGGTGT
GCCGCCTAATGATTTTTCTGAGATGCTGGGCCTTTGGATGTGTACGGTAACCAACTTAATGCTAATGTTCAAAGT
ACAAAACAAAAAAAAGGGG

FIGURE 4551A

GTTAAAAACCAAGGACCTGATATCTTATAATTCAGTTTAAGCCTAATACAGTTCATGTAAACTCCTTTTTTGGCA
ATTTAACATATACATGGATCAAGTTTAGTAGGTTTAGAGGAAAATGAATGTCTTGTTCTGAAAAAATAGCAGTAC
CAGCTGAGCTTTGGGGAGGTGACAGATTGAGTCACTTCACAGCTTAATTCTGTTATGAACTGGTCCCATGGGCAT
GGATTGTCAATTAGGGAGACTTGAATCTTTTAGATATTAAATCTACAGGCAGACAACAAAGAACACATTATTCTT
TTGTAAAAATAGAGGAACCTGGCTGTCTACTACAGAACTAGAGGAACCTAGCTTAGACAGAAGCTCATCCCACTT
CAGCACCTACAACAGATTTGATACCTTTGAGCAAGATTGGATACTTTTCTCAAAGTAAATACTGGGTTGGTACCC
CAGAGTTATGCACCACTGAACATGGATTTTAACTTAAAATACTTAAGGGCAGATTTTTACTGTTAGTTTTCTTGA
CTAACAGAGCAACCCAGTGCAGTTCCTAAAGACTTCTGATTTTGTGTAGCACCAGCTCCTGTTGCATTTTCTGAA
TGAATTAGTATTAAAAATGGAGCCCCAAGAAGCTGGTTAAATTTTTAGCCTTCTGCATTTAAGCTGTAGCCCAGG
CTGTGAGCTAGTATCGCATCTTATTCATTATCCAACATAGAACCAGGTTTACAACAGGCACTCAAAATGTTTGTG
GGATGAATGAATGAGAAACTGCCAATTCTGGGGATTTCTGTTTCAGAAGAGTTGATGCTAAGCTGTTCTTTCTAA
CAATGGTTCCCAGGTTCAGCTGTTTCAGTCCACACCTTGTTCACAGTAAGATATTCAATTCAATTCAGCAAACAT
TTGTTGTGTGCTTGCTGCTCTGTGCCTGACCAGAAGAAATGAAGCCAAGATACAAATAATAGAACCCTGTCATGA
GCACAGAAAGACCTGGTGAGTTTCTATTGATTGTGGTAAACCAGCCTGCATCCAGTTCCAAGTAACAGCTGCCCA
CTTAGTGAATACTCTCTCATGTTTCAACACTCAGTTCTAGTGTAGCCTCTTCTATAAAGCCTTTCTTTTCCAGAT
GCAGCTCAAAAAGCTGTGTCTGCCCTGAAGGCCAGTGGGGTTCAAGCTCAA**ATG**GCAAAGCAACAGGAACAAGAT
CCTACCAACCTCTACATTTCTAATTTGCCACTCTCCATGGATGAGCAAGAACTAGAAAATATGCTCAAACCATTT
GGACAAGTTATTTCTACAAGGATACTACGTGATTCCAGTGGTACAAGTCGTGGTGTTGGCTTTGCTAGGATGGAA
TCAACAGAAAAATGTGAAGCTGTTATTGGTCATTTTAATGGAAAATTTATTAAGACACCACCAGGAGTTTCTGCC
CCCACAGAACCTTTATTGTGTAAGTTTGCTGATGGAGGACAGAAAAAGAGACAGAACCCAAACAAATACATCCCT
AATGGAAGACCATGGCATAGAGAAGGAGAGGTGAGACTTGCTGGAATGACACTTACTTACGACCCAACTACAGCT
GCTATACAGAACGGATTTTATCCTTCACCATACAGTATTGCTACAAACCGAATGATCACTCAAACTTCTATTACA
CCCTATATTGCATCTCCTGTATCTGCCTACCAGGTGCAAAGTCCTTCGTGGATGCAACCTCAACCATATATTCTA
CAGCACCCTGGTGCCGTGTTAACTCCCTCAATGGAGCACACCATGTCACTACAGCCCGCATCAATGATCAGCCCT
CTGGCCCAGCAGATGAGTCATCTGTCACTAGGCAGCACCGGAACATACATGCCTGCAACGTCAGCTATGCAAGGA
GCCTACTTGCCACAGTATGCACATATGCAGACGACAGCGGTTCCTGTTGAGGAGGCAAGTGGTCAACAGCAGGTG
GCTGTCGAGACGTCTAATGACCATTCTCCATATACCTTTCAACCTAATAAGTAACTGTGAGATGTACAGAAAGGT
GTTCTTACATGAAGAAGGGTGTGAAGCTGTTATTGGTCATTTTAATGGAAAATTTATTAAGACACCACCAGGAGT
TTCTGCCCCCACAGAACCTTTATTGTGTAAGTTTGCTGATGGAGGACAGAAAAAGAGACAGAACCCAAACAAATA
CATCCCTAATGGAAGACCATGGCATAGAGAAGGAGAGGCTGGAATGACACTTACTTACGACCCAACTACAGCTGC
TATACAGAACGGATTTTATCCTTCACCATACAGTATTGCTACAAACCGAATGATCACTCAAACTTCTATTACACC
CTATATTGCATCTCCTGTATCTGCCTACCAGGTGCAAAGTCCTTCGTGGATGCAACCTCAACCATATATTCTACA
GCACCCTGGTGCCGTGTTAACTCCCTCAATGGAGCACACCATGTCACTACAGCCCGCATCAATGATCAGCCCTCT
GGCCCAGCAGATGAGTCATCTGTCACTAGGCAGCACCGGAACATACATGCCTGCAACGTCAGCTATGCAAGGAGC
CTACTTGCCACAGTATGCACATATGCAGACGACAGCGGTTCCTGTTGAGGAGGCAAGTGGTCAACAGCAGGTGGC
TGTCGAGACGTCTAATGACCATTCTCCATATACCTTTCAACCTAATAAG**TAA**CTGTGAGATGTACAGAAAGGTGT
TCTTACATGAAGAAGGGTGTGAAGGCTGAACAATCATGGATTTTTCTGATCAATTGTGCTTTAGGAAATTATTGA
CAGTTTTGCACAGGTTCTTGAAAACGTTATTTATAATGAAATCAACTAAAACTATTTTTGCTATAAGTTCTATAA
GGTGCATAAAACCCTTAAATTCATCTAGTAGCTGTTCCCCCGAACAGGNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNC
TTCAATTTTCTGGGTATGCACAAAGACCATGAAGACTTATCCAAGTGCATGACCGGATTTTTGTGGTTTTGTTCA
TTTTGTGTTTAATTTGTGTTTTTTTTTTTCCAGCTGTATGAAATGGGCTTTCTGAAGTTTAAATAGTCCGACTTC
ACCCATGGTGTTCTGTGCTTGCAGTGCGAGTGTTGCTGTAATTCAGTGTTGCCGTCAGTGTCTCTTTTCTTAGCT
TTCTGTCTTTCTTTCAACGTAGTGTGAAGTGTCTTATCCTTTTCTATGAATTCCAATTTGCCTTAACTCTTTTGA
TGCTGTAGCTGTTTCAGTAAAAGTTAGTTCAAACTAATGATGTAGAATGCTTTGACCAAATGAGCTGGTCTATTA
TGCCTTGTAAAACAGCAGCATAGGGCTTTTAAAAGGTAGTCAATAAAAGTTGCTGAAATTTTGGCTTTTTTAAAT
ATGTAGTAGGTGTTTTTAATGATTTTTCACATAATGTGTAAGGTAGTGAAATGCAAGAAGGGAAAAATGTTTTGT
GTGAAACACATTTTCTGACTGGGGAACTTTTATTAGGGTAAATTGTTTGTAAGGCTGTACGCCAACAGTTTCCTC

FIGURE 4551B

TGATAGTTTGACTGATTTAGGATATCTGCTGTATGATGCAATGTAAAGTCTTTTTTGCCTTTTTTCAGGAAAAAA
AAAAAAGCTAACTTGATGTACTAGATTTAGTGTAGGTAGTGTTGGGGTTGGGGATGGGGGTGGGGGAGGGGAGTC
ACTGAATGTTTTGTCCTTCCTTTATACTAATGATAGTGCTTTAGAATGAGAATTATGCCTGAAATCTGGCAAACC
GAAAAATGTTGCTATTGCAACAAAGTGGCAAAAGCTAAAAGTAAGGATTTATCTTCAAACATAAGCTGAGATAAC
GAATAGAAGCAAAACGATTGGCTACTAGCTCTCTCTCTCTCTCTATTAGGTAAATTTGAAAAATAAAAATGAC
TTGGCACTTTTAAAGGTAACTTCACCAAAGACCGAAGAGCCAGTAACCAGTAGCTCCAACTTGTCTCAGCATCAC
ATCTTCTGTGCTCTTTATTTTTGCCGGACCAGTTTGCGGTTAGGAGAATGTGCCTTTTTTGTACCTTTGCATTTA
GGTTTTATAATTTTAATTGATGTATGGACACACACAAACAAAAAAGCATGAAGGAAGATTTGGATCCAAGCAGTG
CCACACTTTACATCATCACTACAAGTGTTCAAGTGTAAAGAAAACCAATTTTGAAACTATGAAATTCCTGATTCA
TAAATACACAGTTATTTCTACTTTAGTACATATAAGATAATTCACTGTTATTAAAGCTCTTTTATTAAGGCAATT
GCATATGTTTTAAAAGCAATGGTAAATTAAGTTGTCTTCCAAAACTGTGTACTTGTCTGGTCAGCTGTGTATGAT
CAGTTATCTACCTCAGAGTCTATTTTCTTTTGTGCTGGGACAGGTTGCTGGCCCTCCCTGTTTCCACAGACCAAA
TCCTCCTAGCTCAGGAGCTAGGGCTAAGCAGTTATTTCTTTCAAGTATTTTTTAGTTCTTAAATTTTATGCTTGT
ATTTGATGATAGATGTCAGTGACATTTCATAGTTTCAAAAGTCCTTGCTGCTCTGAGAAGTGTAGATTCTAGTGA
AAATTACATAGTCATAAGAGAAATGTGTTTTTGTTTTTGTTTTTGTTTCATTTTTTTAAAGTTGTGGTATTATTG
GTTCTATGCTCCCTGGAATATTACTGCTTTGTGAAAGTCCAGACTGAACGCAGCACCCTCTGTGTACCTAGTACA
GTTATAAACCTGGGTCTCTCACTACTTGATATTTTTGCATTAGTTAAGACAGAAATTTGATAGCTCGGTTAGAGG
GGAGGGGAAATCTGCTGCTAGAAATGTCTGAACTAAGTGCCATACTCGTCTGGGTAAGATTTGGGAAACATAACC
TCTGTACATAAAAAAAAAAAAATCAGTTAAACATCACATAGTAGACAGCCATTAAATTATAAAAAAATTAATTTA
TGAAGAAAGACCTTTTGTACAGATTGAAAAAAAAAGATTTTCATAGAGATATCTATATGATCAAGAGAGTTAATT
TTTTATTTTTGTTTTACTAGTGCCACAGACTTGCCAGTGGTAACTTATTTGTCCGGTTCAAGATAACTCTGTAGT
TTTCTTTCCTAGGACTTGTTGTTAAACGCCAAAAGACATTTTTGAACTGTACATTTGATCAGATTGTTAGCTTTT
CTGTTTTATTTCTTTTGAGAACCTTTGAATAAAAAACATCTGAAATTTTAAAAAAA

FIGURE 4552

MAKQQEQDPTNLYISNLPLSMDEQELENMLKPFGQVISTRILRDSSGTSRGVGFARMESTEKCEAVIGHFNGKFI
KTPPGVSAPTEPLLCKFADGGQKKRQNPNKYIPNGRPWHREGEVRLAGMTLTYDPTTAAIQNGFYPSPYSIATNR
MITQTSITPYIASPVSAYQVQSPSWMQPQPYILQHPGAVLTPSMEHTMSLQPASMISPLAQQMSHLSLGSTGTYM
PATSAMQGAYLPQYAHMQTTAVPVEEASGQQQVAVETSNDHSPYTFQPNKNCEMYRKVFLHEEGCEAVIGHFNGK
FIKTPPGVSAPTEPLLCKFADGGQKKRQNPNKYIPNGRPWHREGEAGMTLTYDPTTAAIQNGFYPSPYSIATNRM
ITQTSITPYIASPVSAYQVQSPSWMQPQPYILQHPGAVLTPSMEHTMSLQPASMISPLAQQMSHLSLGSTGTYMP
ATSAMQGAYLPQYAHMQTTAVPVEEASGQQQVAVETSNDHSPYTFQPNK

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FIGURE 4553A

GCTTTCTGCCTTCTAAAGTGCAACAGTATATATCTTGTAGAACTGTGGGAGGAGAGAAGATAATTTTTCTACCTT
ACTCCATATTCTTACTTCAAACTATTTTGAATAGAGGTTCACTGAGCCATTGCTGATAGACTGTGCATAGCTACT
AGCTGTCACACTATTGTAGGTTTTTTGGAGAGATTCATAGGGAAGTGAATGTAACCAGGAATAAAGGCTCTCACT
TTAGCTCTGGGACTATGCAGTGGATCTTGGGAACAAAATAAGATATCTAATCTATTTTCCCCATTCTGGCTAGAT
TTTGGTTGTTGTGATGCTCCTACTTCCTGTATAGGTTTTTGGGATCATGGTGCAGGCTAGTAATAGGATTCAGAA
TTGCTTCCCTTTTATATCGACCATGTAAGGGATTCTAAAGGAGGGTAAATCTCAAAGTGCTCTGAAATCATCCCT
CTAAAATCTGTCCTGTGGTGTGCTAAGATGTCTGTTGCCTTTTTATGTTAAGCTAAGGAACTTGAATGCCTTACC
TAATAACTCAACTAGTAGTAAGCTCATTTTGTAAATATGAAAATGGCTGTAAGAAGTGGCATTCATGTATATTCA
ATGTTAGTCAATAGACCATAGTGGCCTGGATGCTTTAACAAGCCAAATTCCGCAATTTTTTTCCTTTTTTCCCC
TTCATACTTGTATGATCTCACCTGACCAGTGATTTCTTTTCCTCCTAACCCCATGCTACCACCATTTTCTGGAAA
TCAAAGAGATGTGGTAGTAAATCATACAGTACACACGATCATCTGAGATCAATATGAGCACAAAACTCATCAAGT
AGGTCTGCCTGGAATGTATATAAAAAATGTAAATAAAAATTTGTAAATTAGTGTGAACTGTATCTTGCATATGAG
ACTGTGTATTGTTTTGCATTCTCTTCCCTTTTGTAGAAATTTTTCTGTAAGGAAATGATTCAGCTTGTTGGTTTT
AGAGTAAAAATAGCCAACAGTTGTGGCTACACAGTGAGATCACAGGAACTGGAAATAGGGTTTGTCGGCTTTGGT
TAATGTCAGTACTCATTTATTTAGCCTCTCAGTGCTTAATAAGACTTTTCTTTATTTTTTAGTTAGCCGTTAGGT
TTTGTGAGGTTAGATTCCTGGAAGCAGTGAATTTATACACTGTTATATTAATAGAGCTCCGTTCTTTGAGTCATG
ATTCCAAGCTAAAGGAAATTAAAAATGTAATTTAATAATTTCCTATTTTTAGGGTTGTTAATTTTTTTCTACAAA
AAAACCTTGAAATTTTAGATATCCCAATGTGAATCTAATTTCCATATATACAGAAATTAGACAAATAATAAGTCT
TTAGTTCAACTTAAGCATATCTCAAATGACTTCTCTAAATTTAAAGTTGATCATGATAGGATCATAAAAGACAGA
AAAGACTTAAGTAATCTTGTAATGACAATTATTTCCATTTTTGCTGAACTAAAAATATTTAACTTCATAAATATG
TTACTACAGCTTCCAGATTTAAAGAAAAAAAGTTTCCCCCACTCTCAATTAAAAGTTAGAACCCTCCACTTTTAA
AATTATACAAATATTTCTTTTTTACATTACACAGAAGCCTTCTGTACCATTTTACGAATTTCTGTCTTCATAATA
TAAGTGAAAATACTGTCATTTCAATTTTCTGCTTTAAATTGTTTTTAATAAGCATTCCAAAGTGATACAGACTTA
AGCTTTTAATCAATCAGTCATTCAGTTGATAGACAAAGTTAGCGATGCTTTATGCTAGGAAACTTGTTGACAGTA
ACCTGTGCGACTTTATGCAGAAGACAAATGCTAGTAATTATTATGCACAGAGGAAAAATCATTTTAAGTATGTGG
TAAAGCAGCTTCATCTTTCAAAATTGATTTGCTCTGGTTTTTCTTTAGTCCATTAGATTCCAGAATGTCCTTTTA
CTGGGAATTTAGTTATGTATTAAGATAACCTGTTTTCAGTTCTTTTTGAAAAGAAGACATTATTTATATTGAACC
ACCTTATTTTAAAATTTTTAACTTTTATATACCACTTGTGTGATTCCAGTGTCATGTCTTGGGTTTGATGTCGTT
GGACAGAAAAGTGTATCAATTATTTTAAATGAATTTTTCCCCATGTTTGAGGCTTAGTCTGTAAATGTGTTGCTG
TAACAGAAAATACTTGGGTATGCATTACTTGAATACTTGAAAACTGAAATTAATAAGATGTATTACATAATGAAT
TAGATTTCTCTGAACAGTTTTTACACTGAAAATCTTCATTTCTGGATTGCAGTTTGAAATGGAATGAAGACCTGA
ATTATTTGGGTAGAAAAAATTATGATAGTGCTTATAAGAACTGTAAACTGTTTTAAACTATTTTGTGTTTGACGC
ATCAAACTTCAAGTTTTTTGTAAGTTTCTCTCCTGAAATTTTCTTTCTCTTCTATACTTTATGCACTTACTATAC
TACTGATGTAATAAAAGAGCAGGGTTAAAAATATTGTATCTGTATTCATTGTGAATCCTGTAGCTTTTCTAGTTA
ACAAAAAATCGCTTTCTAAAATACTCTTAATCCCATTGTTTTGGTTAACATCTTACCCATTTGTTGTATTTCAAA
TGCCATTAATCATTTTAGTACAACACCTATGTTTATAAAAATTTGAAAACATTACATATTGTATTTAAAACTAAT
TAGTGAAGAGTAAGAAAAAAACTAGCCAACAGAATTGTAGGTGATGCATTAGTTAAATTTCAAAACTCATAATAA
AGGAACTTTCAGAGATTGGTTGAAACCCAGTGGTATCCCTGTAAATTAGCTCCTGTGACTGGAAAAGACCCCAAA
AAGGCAGTAGAGGAGATTAGTGTTTACTTGCTGTGGTTGTGGTGTGCTGCTACTTAATTATAGGTAGTGACACAC
TGAAATTCTTATTTGTCCAATAATCTGAAGTAGTTTCCTATATTTATCTGTACTAAATTGACTATAAATTGAGTC
TGCAAAGAGGAAACTTTTTGACTGTACTGTATTTAGGAGCCTTTGTACAGCTTGGTCAAATTTCCATGATATGAA
GTATTTGAGTTTTAAAATATACTGTTATTAAAAGGAAAAAGACATGGCCATTATTCCATGTGCTTAAATGATAAT
TTCCTTATTCAGTTTCAGAAGAAAAAGAATGAAATTGGGTAACTGTCATTGCGTTAGCTTTATGTTGAATTGGGA
AATTGTGGCATAAAGCTTAAATTCGTGTTTATCAAATGTGAACCATAGTAGTATAATGCTGCTTTGTATATAATG
TAAGTGCTACAAATAGTCTCAGCACTGAAAATGTATTGATACCTCTTAAATGAATGCAACTTTTGATGTAGGTGT
TTTGCTATGCCTCAGAAAATATCTGTCTGAGAATTTGTTAATCTGTTTGATAATGAAGATACTTCCTGTTTTCTT
GTTTCATATTTTCATGTTCAAAATTTAAGTTTTACATTTTTACTACTGTTAATTTAAATAAAATTTGTTCTGTGG
ATAAAATGAGGTTGGCAGTGAAGAAAATTAAAAACAGCCTCATTCATGTAACTGGTTAAGTAAAAATACATTTTC

FIGURE 4553B

ACTATGTGTTCATAAACTTTTAATGAAGCTGTTTGTCTTTCAGTTCAAATATAAGTGATGTTTAGGCTTTATTTC
TGTTAATAAGGCTTTTTACCATTGATTAAATGAAGGAATGTATCTTTTTGAAGAGATTTATATTCTGTAAATAAA
AATTCGTTGTAACAATAAAGTTGAGTTCTAACTACAGTGTATTCATAAATTTTATTGTTACTTCAACTTATTTTT
GAGGTTTTCCTTGTGAATATCTGCAAACACAAGACTTTCCAAAGTTAGTGTATAAATGTATATGTGGAGTGATTC
TTTGAATTCT

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FIGURE 4554

FLPSKVQQYISCRTVGGEKIIFLPYSIFLLQTILNRGSLSHC

FIGURE 4555

AAGGGTGAAATAGAAGATTATCGTTTGCTGACAGATATTTTGGGAATTGAAGATTACAATGGTGACATGGACTTC
AAAATAGCTGGCACTAATAAAGGAATAACTGCATTACAGGCTGATATTAAATTACCCGGAATACCAATAAAAATT
GTGATGGAGGCTATTCAACAAGCTTCAGTGGCAAAAAAGGAGATATTACAGATCATGAACAAAACTATTTCAAAA
CCTCGAGCATCTAGAAAAGAAAATGGACCTGTTGTAGAAACTGTTCAGGTTCCATTATCAAAACGAGCAAAATTT
GTTGGACCTGGTGGCTATAACTTAAAAAAACTTCAGGCTGAAACAGGTGTAACTATTAGTCAGGTGGATGAAGAA
ACGTTTTCTGTATTTGCACCAACACCCAGTGCTATGCATGAGGCAAGAGACTTCATTACTGAAATCTGCAAGGAT
GATCAGGAGCAGCAATTAGAATTTGGAGCAGTATATACCGCCACAATAACTGAAATCAGAGATACTGGTGTAATG
GTAAAATTATATCCAAATATGACTGCGGTACTGCTTCATAACACACAACTTGATCAACGAAAGATTAAACATCCT
ACTGCCCTAGGATTAGAAGTTGGCCAAGAAATTCAGGTGAAATACTTTGGACGTGACCCAGCCGATGGAAGAATG
AGGCTTTCTCGAAAAGTGCTTCAGTCGCCAGCTACAACCGTGGTCAGAACTTTGAATGACAGAAGTAGTATTGTA
ATGGGAGAACCTATTTCACAGTCATCATCTAATTCTCAGTGATTTTTTTTTTTAAAGAGAATTCTAGAATTCTAT
TTTGTCTAGGGTGATGTGCTGTAGAGCAACATTTTAGTAGTATCTTCCATTGTGTAGATTTCTATATAATATAAA
TACATTTTAATTATTTGTACTAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4556

GGCACGAGGGCGGGGCGCATCTCCCGCTAGGAGTTCCTAGTAAAGTGGCGGGAGCCGCAGCTATGGAGCCGCAGG
AGGAGAGAGAAACGCAGGTTGCTGCGTGGTTAAAAAAAATATTTGGAGATCATCCTATTCCACAGTATGAGGTGA
ACCCACGGACCACAGAGATTTTACATCACCTTTCAGAACGCAACAGGGTCCGGGACAGGGATGTCTACCTGGTAA
TAGAGGACTTGAAGCAGAAAGCAAGTGAATACGAGTCAGAAGCCAAGTATCTTCAAGACCTTCTCATGGAGAGTG
TGAATTTTTCCCCCCGCCAATCTCTCTAGCACTGGTTCCAGGTATCTGAATGCTTTGGTTGACAGTGCGGTGGCCC
TTGAAACAAAGGATACCTCGCTAGCTAGTTTTATCCCTGCAGTGAATGATTTGACCTCTGATCTCTTTCGTACCA
AATCCAAAAGTGAAGAAATCAAGATTGAACTGGAAAAACTTGAAAAAAATTTAACTGCAACTTTAGTATTAGAAA
AATGTCTACAAGAGGATGTCAAGAAAGCAGAGTTGCATCTGTCTACAGAAAGGGCCAAAGTTGATAATCGTCGTC
AGAACATGGACTTTCTAAAAGCAAAGTCAGAGGAATTCAGATTTGGAATCAAGGCTGCAGAGGAGCAACTTTCAG
CCAGAGGCATGGATGCTTCTCTGTCTCATCAGTCCTTAGTAGCACTATCAGAGAAACTGGCAAGATTAAAGCAAC
AGACTATACCTTTGAAGAAAAAATTGGAGTCCTATTTAGACTTAATGCCGAATCCGTCTCTTGCTCAAGTGAAAA
TTGAAGAAGCAAAGCGAGAACTAGATAGCATTGAAGCTGAACTTACAAGAAGAGTAGACATGATGGAACTGTGAC
AAAAGCCAAATAAACATCCTTTTCCCTAACAAAGTAAATTGAATAGGACTTTACAGAGTTCTTTTTCCTCTTGGC
ATTTCCTAATAACAAAACTTTCTGTGTTCTTAGATTACAGAATATCATAATTGATAGAATATGGTTTCTTACTGT
GTGTTGCATTTTTGTGCCCAAATACATAGTTTTCATATTAAAAAGCCTTTTCTCTTAAAAAAAAAAAAAAAAAAA
AA

FIGURE 4557

MEPQEERETQVAAWLKKIFGDHPIPQYEVNPRTTEILHHLSERNRVRDRDVYLVIEDLKQKASEYESEAKYLQDL
LMESVNFSPANLSSTGSRYLNALVDSAVALETKDTSLASFIPAVNDLTSDLFRTKSKSEEIKIELEKLEKNLTAT
LVLEKCLQEDVKKAELHLSTERAKVDNRRQNMDFLKAKSEEFRFGIKAAEEQLSARGMDASLSHQSLVALSEKLA
RLKQQTIPLKKKLESYLDLMPNPSLAQVKIEEAKRELDSIEAELTRRVDMMEL

FIGURE 4558

ATTTGAAACCCAGGAGGCCGACTTAGCCGGTGGCACGACAGTTGCTGCAGGGAATCTTTTAAACGAGAGCGAGAA
GGACTGCGGGCAGGACCGGCGGGCTCCTGGGGTTCAGCCGTGCCTCCTCGTTACGATGACCAGTGTGGTTAAGAC
AGTGTATAGCCTGCAGCCCTCCTCTGCGCTGAGCGGCGGCCAGCCGGCAGACACACAAACTCGGGCCACTTCTAA
GAGTCTCTTACCTGTTAGGTCCAAAGAAGTCGATGTTTCCAAACAGCTTCATTCAGGAGGTCCAGAGAATGATGT
TACAAAAATCACCAAACTGAGACGAGAGAATGGGCAAATGAAAGCTACTGACACTGCCACCAGAAGGAATGTCAG
AAAAGGCTACAAACCACTGAGTAAGCAAAAATCAGAGGAAGAGCTCAAGGACAAGAACCAGCTGTTAGAAGCCGT
CAACAAGCAGTTGCACCAGAAGTTGACTGAAACTCAGGGAGAGCTGAAGGACCTGACCCAGAAGGTAGAGCTGCT
GGAGAAGTTTCGGGACAACTGTTTGGCAATTTTGGAGAGCAAGGGCCTTGATCCAGCTTTAGGCAGTGAGACCCT
GGCATCACGACAAGAATCCACTACTGATCACATGGACTCTATGTTGCTGTTAGAAACTTTGCAAGAGGAGCTGAA
GCTTTTTAACGAAACAGCCAAAAAGCAGATGGAGGAGTTACAGGCCTTAAAGGTAAAGCTGGAGATGAAAGAGGA
AAGAGTCCGATTCCTAGAACAGCAAACCTTATGTAACAATCAAGTAAATGATTTAACAACAGCCCTTAAGGAAAT
GGAGCAGCTATTAGAAATG**TAA**GAAGAAGCAAGTGGCCAGATGGCTCCCTCTTGGGCATAAAATCTCAGAGGAAG
CTACTTAGGACATCATCTTGGCCATGATCTTCTGGGACTCACCATCTCCAGAATGAAAACAATTTCTACAGTAGA
CTTAAGGACAGTTTATGCTGAAATGGCAATTCCTCATTTAAGCAAGTTTTCCCAACCTTCAGGTTGGTCAGCCCT
CCTGAGCCTCACAGGTGGATAATTGAGGCCTACAAGAGAGGGGAGCCTAGGAGCTTGGATTGACCTTCTAGTCAA
CCACCTGACTTCAGCACACCATTACAATCGGGAGACTAAACCAACAACCAGAGGATCTAAAATGTCACATTCAGA
TTTTCAGGAAGAAAATCTTCATTACAGTGGAGCACAAATGTTCCATACAAGACATCATTGAGGAGCCATGCTGTC
CCCTTCTAACCTGAAACACATTCTTTCCCATCCTGGTTGGGCTTCTGTACCTCCTTATTAATTTATGAACCTGAA
GTTGCTTGAAGTGTTTTGGGCTTAATAAATGGGGTGAAAGTATAGGTAGCAGTAACACCTACATGAAACAATACA
CCTTGGATCTTTTAATCTAAATTACTTTTCTTTTTTAAGTCTACTTTTAAAATAAATACTTCTGTAAATATTCTG
ACTGTAACATTGAGGAATGAAAATAGCCTTTTAACCTAGATATGTCAGTTGATCATTATTGAACTAATTTAGTTA
ACAAGTCCAAGATATTCTGACTTAATTTAGAATATTTTTCTGCTACTCTTTAAGAGTCCTGTGGCTAGTCCCTCT
GTCTCCCAAGAGCATTGGCTAGTCTCCTGAGGGTGTTGCCCATTTGTAGCAGTGGTTTCACCAGGTCTGTGGCCA
CTTGCTGCCCATGTTTTCCCTGCAC

FIGURE 4559

FETQEADLAGGTTVAAGNLLNESEKDCGQDRRAPGVQPCLLVTMTSVVKTVYSLQPSSALSGGQPADTQTRATSK
SLLPVRSKEVDVSKQLHSGGPENDVTKITKLRRENGQMKATDTATRRNVRKGYKPLSKQKSEEELKDKNQLLEAV
NKQLHQKLTETQGELKDLTQKVELLEKFRDNCLAILESKGLDPALGSETLASRQESTTDHMDSMLLLETLQEELK
LFNETAKKQMEELQALKVKLEMKEERVRFLEQQTLCNNQVNDLTTALKEMEQLLEM

FIGURE 4560

GAAAGATCAATGAGGATGAGATCCCACCTCCAGTGGCCTTAGGAAAGCGGCCCCTGGCCCCCCAGGAACCAGCCA
ACAGGAGCCCTGAGACAGACCCTCCAGCTCCCCCTGCCTTGGAGTCAGACAACCCCTCCCAACCTGAGACCAGCC
TCCCTGGCATTTCTGCCCAGCCCGTTTCAGACTTAGACCCAGACCCGCGGGCCCTGCTGTCATCCCGACAGAGAG
AGTACAAAGTGGCTGCCCTCAGTGCCAAGCGGGCTGGAGAGCTAGACCGTGCCCGAGAGCTCATGAGGATTGGGA
AGAGATTCGGTGCTGTCCTGGAGGCCCTGGAGAAGGGGCAGCCCGTGGATCTGAGTGCCATGCCCCCGGCACCTG
AGGATCTGAAGCCCCAGCAGGCTTCTCAGGCTCCCACAGCACCCTCAGTCATTCCCCCAGCCGTGGAGCGAGTGC
AGCCAGTGATGGCCCCTGACGTCCCAGCAACCCCAGTGGCCCCTACAGAGTCACAGACAGTGCTGGATGCCCTGC
AGCAGAGGCTGAACAAGTACCGCGAGGCGGGCATCCAGGCCCGGAGTGGTGGGGACGAGCGCAAGGCTCGGATGC
ATGAGCGCATTGCCAAGCAATATCAAGATGCTATTCGAGCACACCGAGCAGGACGGAAAGTCAACTTTGCTGAAT
TGCCTGTTCCTCCAGGATTTCCCCCCATCCCTGGCCTGGAGTCCACTATGGGTGTTGAGGAGGACGCAGTGGCAG
CGACATTGGCAGCTGCAGAGAAACTGGCCTCTGCAGAGGATTCAGCCCCGGCTGATAAAGACGAGGACGAGGGTG
AGCCCCCAGCACAGGCCCCAGTGGCCAAGAAACCTGCACGGCCCACAGTCCCTTCATCCCAGCGCCTGCCTGAGC
CCAGGGCCTCAAGTTCTAAGGAGTCACCGAGTCCATCTGTGCGGGAGCAGCTGGCACTGCTGGAGGCACGGAAAC
TGCAGTATCAGCGGGCAGCCCTGCAGGCCAAGCGCAGCCAGGACCTGGAGCAGGCCAAAGCCTATCTGCGGGTAG
CCAAATGGCTTGAGGCTCAGATCATCCAGGCCCGATCTGGCAGACCTGTTGATCTGTCCAAGGTGCCTTCGCCCT
TGACGGATGAGGAGGGTGACTTCATCCTCATCCACCATGAGGACCTGCGACTCTCCCAGAAGGCGGAGGAGGTGT
ATGCCCAGCTGCAAAAAATGCTTCTGGAGCAACAAGAGAAGTGCCTGCTGTTCTCCAAGCAGTTCATGCACCAGG
GCAACGTGGCTGAGACCACCCGATTTGAGAAGCTTGCTCAGGACCGCAAGAAACAGCTGGAGATCCTGCAGCTGG
CCCAGGCTCAGGGCCTCGACCCTCCCACCCACCACTTTGAGTTGAAGACATTCCAGACTGTGAGGATCTTCTCAG
AACTCAACAGCACAGAAATGCATCTGATCATTGTCCGGGGAATGAACCTCCCAGCCCCTCCAGGGGTGACTCCCG
ATGACCTGGATGCTTTTGTGCGGTTTGAGTTTCACTACCCTAACTCGGACCAGGCTCAAAAAAGCAAAACAGCTG
TGGTGAAGAACACAAACTCTCCAGAATTTGATCAACTCTTCAAACTAAACATCAACCGAAACCACCGGGGCTTCA
AGAGGGTGATCCAGAGCAAAGGCATCAAGTTTGAGATCTTCCACAAAGGGTCCTTCTTCAGAAGCGACAAGCTGG
TTGGCACAGCACACCTGAAACTGGAGCGGCTGGAGAATGAGTGTGAGATCAGAGAAATTGTGGAGGTCCTGGATG
GAAGGAAGCCCACCGGGGGGAAGCTGGAGGTGAAGCCGATGGCCAGCACCAGGAGAGGAGTCAGGCCGCGACTGT
GCAGGAGATGACTTTCCCAGCTTTGCTGGCTTCAGAAGCCTTTGTACATAAGAGATGCTGCTACCCAAGCACCAA
AGACCTGTTAAGCATGTGCACTACTGACCACGACTCTGGTCTTTCCTGTTGTTGGCCCCTCTGGGGCTCTACAGA
AACAGGCTGGGTTCCAGGAGCCCATCTCCCCACTGTCTCCCCCTGCCCCGAGTCTGGAAGAGGGCAAGGACACTT
CCATTCCTCTGTACCATGGAGTCCTGCAGCCCCTTAACCCTGCGTGGCAACTGTGTACAGCTTACCCCTGCCTCC
AGTTGCACCACTTCTAGATGTGCCTTTAAAAGATCTAACTATGGGATGGGAGAACTTGAGGGTGATCGGGAACCT
CCCCTGCTGAGGGTGGTGTCAGGGTTCCGTGACTCCAGTGGGCCAGTGGTAGCCTGTCCCAGACAACTCCGTCAC
CCCAGCTCTGCCTGTGCCTTTATCCCTGACAGCTGCTGCACTAGCCTTCCTGCTTCCCTAAGGACTTAGTGGAGG
GGGAAAGTTGTTTTTGGTACTACTTGGTGGGAAGTAAGGGGAAGGTTGGATCTTGGGTTTGGTCTACCCACCCAA
GAGAAAAGACTGTTAACTGGAAGAAAAAATATATATATAAAATTTAAAAAAAAAAAAAAA

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FIGURE 4561

MRIGKRFGAVLEALEKGQPVDLSAMPPAPEDLKPQQASQAPTAPSVIPPAVERVQPVMAPDVPATPVAPTESQTV
LDALQQRLNKYREAGIQARSGGDERKARMHERIAKQYQDAIRAHRAGRKVNFAELPVPPGFPPIPGLESTMGVEE
DAVAATLAAAEKLASAEDSAPADKDEDEGEPPAQAPVAKKPARPTVPSSQRLPEPRASSSKESPSPSVREQLALL
EARKLQYQRAALQAKRSQDLEQAKAYLRVAKWLEAQIIQARSGRPVDLSKVPSPLTDEEGDFILIHHEDLRLSQK
AEEVYAQLQKMLLEQQEKCLLFSKQFMHQGNVAETTRFEKLAQDRKKQLEILQLAQAQGLDPPTHHFELKTFQTV
RIFSELNSTEMHLIIVRGMNLPAPPGVTPDDLDAFVRFEFHYPNSDQAQKSKTAVVKNTNSPEFDQLFKLNINRN
HRGFKRVIQSKGIKFEIFHKGSFFRSDKLVGTAHLKLERLENECEIREIVEVLDGRKPTGGKLEVKPMASTRRGV
RPRLCRR

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FIGURE 4562A

CTTGTCCTTCCTCCCGCTTTTTCTTCTCTCTCCTTGCGGTCTGAAGATGCCCTCGGCACCAGCCACAGCGGGAGC
GGCAGCAAGTCGTCCGGACCGCCACCGCCGTCGGGTTCCTCCGGGAGTGAGGCGGCCGCGGGAGCCGGGGCCGCC
GCGCCGGCTTCTCAGCACCCCGCAACCGGCACCGGCGCTGTCCAGACCGAGGCCATGAAGCAGATTCTCGGGGTG
ATCGACAAGAAACTTCGGAACCTGGAGAAGAAAAAGGGTAAGCTTGATGATTACCAGGAACGAATGAACAAAGGG
GAAAGGCTTAATCAAGATCAGCTGGATGCCGTTTCTAAGTACCAGGAAGTCACAAATAATTTGGAGTTTGCAAAA
GAATTACAGAGGAGTTTCATGGCACTAAGTCAAGATATTCAGAAAACAATAAAGAAGACAGCACGTCGGGAGCAG
CTTATGAGAGAAGAAGCTGAACAGAAACGTTTAAAAACTGTACTTGAGCTACAGTATGTTTTGGACAAATTGGGA
GATGATGAAGTGCGGACTGACCTGAAACAAGGTTTGAATGGAGTGCCAATATTGTCCGAAGAGGAGTTGTCATTG
TTGGATGAATTCTATAAGCTAGTAGACCCTGAACGGGACATGAGCTTGAGGTTGAATGAACAGTATGAACATGCC
TCCATTCACCTGTGGGACCTGCTGGAAGGGAAGGAAAAACCTGTATGTGGAACCACCTATAAAGTTCTAAAGGAA
ATTGTTGAGCGTGTTTTTCAGTCAAACTACTTTGACAGCACCCACAACCACCAGAATGGGCTGTGTGAGGAAGAA
GAGGCAGCCTCAGCACCTGCAGTTGAAGACCAGGTACCTGAAGCTGAACCTGAGCCAGCAGAAGAGTACACTGAG
CAAAGTGAAGTTGAATCAACAGAGTATGTAAATAGACAGTTCATGGCAGAAACACAGTTCACCAGTGGTGAAAAG
GAGCAGGTAGATGAGTGGACAGTTGAAACGGTTGAGGTGGTAAATTCACTCCAGCAGCAACCTCAGGCTGCATCC
CCTTCAGTACCAGAGCCCCACTCTTTGACTCCAGTGGCTCAGGCAGATCCCCTTGTGAGAAGACAGCGAGTACAA
GACCTTATGGCACAAATGCAGGGTCCCTATAATTTCATACAGGATTCAATGCTGGATTTTGAAAATCAGACACTT
GATCCTGCCATTGTATCTGCACAGCCTATGAATCCAACACAAAACATGGACATGCCCCAGCTGGTTTGCCCTCCA
GTTCATTCTGAATCTAGACTTGCTCAGCCTAATCAAGTTCCTGTACAACCAGAAGCGACACAGGTTCCTTTGGTA
TCATCCACAAGTGAGGGGTACACAGCATCTCAACCCTTGTACCAGCCTTCTCATGCTACAGAGCAACGACCACAG
AAGGAACCAATTGATCAGATTCAGGCAACAATCTCTTTAAATACAGACCAGACTACAGCATCATCATCCCTTCCT
GCTGCGTCTCAGCCTCAAGTATTTCAGGCTGGGACAAGCAAACCTTTACATAGCAGTGGAATCAATGTAAATGCA
GCTCCATTCCAATCCATGCAAACGGTGTTCAATATGAATGCCCCAGTTCCTCCTGTTAATGAACCAGAAACTTTA
AAACAGCAAAATCAGTACCAGGCCAGTTATAACCAGAGCTTTTCTAGTCAGCCTCACCAAGTAGAACAAACAGAG
CTTCAGCAAGAACAGCTTCAAACAGTGGTTGGCACTTACCATGGTTCCCCAGACCAGTCCCATCAAGTGACTGGT
AACCACCAGCAGCCTCCTCAGCAGAACACTGGATTTCCACGTAGCAATCAGCCCTATTACAATAGTCGTGGTGTG
TCTCGTGGAGGCTCCCGTGGTGCTAGAGGCTTGATGAATGGATACCGGGGCCCTGCCAATGGATTCAGAGGAGGA
TATGATGGTTACCGCCCTTCATTCTCTAACACTCCAAACAGTGGTTATACACAGTCTCAGTTCAGTGCTCCCCGG
GATTACTCTGGCTATCAACGGGATGGATATCAGCAGAATTTCAAGCGAGGCTCTGGGCAGAGTGGACCACGGGGA
GCCCCACGAGGTCGTGGAGGGCCCCCAAGACCCAACAGAGGGATGCCGCAAATGAACACTCAGCAAGTGAAT**TAA**

TCTGATTCACAGGATTATGTTTAATCGCCAAAAACACACTGGCCAGTGTACCATAATATGTTACCAGAAGAGTTA
TTATCTATTTGTTCTCCCTTTCAGGAAACTTATTGTAAAGGGACTGTTTTCATCCCATAAAGACAGGACTACAAT
TGTCAGCTTTCTATTACCTGGATATGGAAGGAAACTATTTTTACTCTGCATGTTCTGTCCTAAGCGTCATCTTGA
GCCTTGCACATGATACTCAGATTCCTCACCCTTGCTTAGGAGTAAAACAATATACTTTACAGGGTGATAATAATC
TCCATAGTTATTTGAAGTGGCTTGAAAAAGGCAAGATTGACTTTTATGACATTGGATAAAATCTACAAATCAGCC
CTCGAGTTATTCAATGATAACTGACAAACTAAATTATTTCCCTAGAAAGGAAGATGAAAGGAGTGGAGTGTGGTT
TGGCAGAACAACTGCATTTCACAGCTTTTCCAGTTAAATTGGAGCACTGAACGTTCAGATGCATACCAAATTATG
CATGGGTCCTAATCACACATATAAGGCTGGCTACCAGCTTTGACACAGCACTGTTCATCTGGCCAAACAACTGTG
GTTAAAAACACATGTAAAATGCTTTTTAACAGCTGATACTGTATAAGACAAAGCCAAGATGCAAAATTAGGCTTT
GATTGGCACTTTTTGAAAAATATGCAACAAATATGGGATGTAATCCGGATGGCCGCTTCTGTACTTAATGTGAAA
TATTTAGATACCTTTTTGAACACTTAACAGTTTCTTTGAGACAATGACTTTTGTAAGGATTGGTACTATCTATCA
TTCCTTATGACATGTACATTGTCTGTCACTAATCCTTGGATTTTGCTGTATTGTCACCTAAATTGGTACAGGTAC
TGATGAAAATCTCTAGTGGATAATCATAACACTCTCGGTCACATGTTTTTCCTTCAGCTTGAAAGCTTTTTTTTA
AAAGGAAAAGATACCAAATGCCTGCTGCTACCACCCTTTTCAATTGCTATCTTTTGAAAGGCACCAGTATGTGTT
TTAGATTGATTTCCCTGTTTCAGGGAAATCACGGACAGTAGTTTCAGTTCTGATGGTATAAGCAAAACAAATAAA
ACGTTTATAAAAGTTGTATCTTGAAACACTGGTGTTCAACAGCTAGCAGCTTATGTGATTCACCCCATGCCACGT
TAGTGTCACAAATTTTATGGTTTATCTCCAGCAACATTTCTCTAGTACTTGCACTTATTATCTTTTGTCTAATTT
AACCTTAACTGAATTCTCCGTTTCTCCTGGAGGCATTTATATTCAGTGATAATTCCTTCCCTTAGATGCATAGGG
AGAGTCTCTAAATTTGATGGAAATGGACACTTGAGTAGTGACTTAGCCTTATGTACTCTGTTGGAATTTGTGCTA

FIGURE 4562B

GCAGTTTGAGCACTAGTTCTGTGTGCCTATGAAGTTAATGCTGCTTATTGTCTCATTCTGACTTCATGGAGAATT
AATCCCACCTTTAAGCAAAGGCTACTAAGTTAATGGTATTTTCTGTGCAGAAATTAAATTTTATTTTCAGCATTT
AGCCCAGGAATTCTTCCAGTAGGTGCTCAGCTATTTAAAAACAAAACTATTCTCAAACATTCATCATTAGACAAC
TGGAGTTTTTGCTGGTTTTGTAACCTACCAAAATGGATAGGCTGTTGAACATTCCACATTCAAAAGTTTTGTAGG
GTGGTGGGAAATGGGGGATCTTCAATGTTTATTTTAAAATAAAATAAAATAAGTTCTTGACTTTTCTCATGTGTG
GTTGTGGTACATCATATTGGAAGGGTTAACCTGTTACTTTGGCAAATGAGTATTTTTTTGCTAGCACCTCCCCTT
GCGTGCTTTAAATGACATCTGCCTGGGATGTACCACAACCATATGTTACCTGTATCTTAGGGGAATGGATAAAAT
ATTTGTGGTTTACTGGGTAATCCCTAGATGATGTATGCTTGCAGTCCTATATAAAACTAAATTTGCTATCTGTGT
AGAAAATAATTTCATGACATTTACAATCAGGACTGAAGTAAGTTCTTCACACAGTGACCTCTGAATCAGTTTCAG
AGAAGGGATGGGGGAGAAAATGCCTTCTAGGTTTTGAACTTCTATGCATTAGTGCAGATGTTGTGAATGTGTAAA
GGTGTTCATAGTTTGACTGTTTCTATGTATGTTTTTTCAAAGAATTGTTCCTTTTTTTGAACTATAATTTTTCTT
TTTTTGGTTATTTTACCATCACAGTTTAAATGTATATCTTTTATGTCTCTACTCAGACCATATTTTTAAAGGGGT
GCCTCATTATGGGGCAGAGAACTTTTCAATAAGTCTCATTAAGATCTGAATCTTGGTTCTAAGCATTCTGTATAA
TATGTGATTGCTTGTCCTAGCTGCAGAAGGCCTTTTGTTTGGTCAAATGCATATTTTAGCAGAGTTTCAAGGAAA
TGATTGTCACACATGTCACTGTAGCCTCTTGGTGTAGCAAGCTCACATACAAAATACTTTTGTATATGCATAATA
TAAATCATCTCATGTGGATATGAAACTTCTTTTTTAAAACTTAAAAAGGTAGAATGTTATTGATTACCTTGATTA
GGGCAGTTTTATTTCCAGATCCTAATAATTCCTAAAAAATATGGAAAAGTTTTTTTTCAATCATTGTACCTTGAT
ATTAAAACAAATATCCTTTAAGTATTTCTAATCAGTTAGCTTCTACAGTTCTTTTGTCTCCTTTTATATGCAGCT
CTTACGTGGGAGACTTTTCCACTTAAAGGAGACATAGAATGTGTGCTTATTCTCAGAAGGTTCATTAACTGAGGT
GATGAGTTAACAACTAGTTGAGCAGTCAGCTTCCTAAGTGTTTTAGGACATTTGTTCATTATATTTTCCGTCATA
TAACTAGAGGAAGTGGAATGCAGATAAGTGCCGAATTCAAACCCTTCATTTTATGTTTAAGCTCCTGAATCTGCA
TTCCACTTGGGTTGTTTTTAAGCATTCTAAATTTTAGTTGATTATAAGTTAGATTTCACAGAATCAGTATTGCCC
TTGATCTTGTCCTTTTTATGGAGTTAACGGGGAGGAAGACCCCTCAGGAAAACGAAAGTAAATTGTTAAGGCTCA
TCTTCATACCTTTTTCCATTTTGAATCCTACAAAAATACTGCAAAAGACTAGTGAATGTTTAAAATTACACTAGA
TTAAATAATATGAAAGTCTGGTTTTCTCACTGTCCTTGAACGCAGTCTGCTTAAGTTGTTAAAAACCATCCAGCA
AAAGCTGTAGTTGAAGAAGTGCTACTGGTGTGAAGAGAGGAAAAGGTTATAAAAGCAATCTGATAGCCTCATCTA
ATACACTTCTCAGCTTCTGCTACTAATATC

FIGURE 4563

LVLPPAFSSLSLRSEDALGTSHSGSGSKSSGPPPPSGSSGSEAAAGAGAAAPASQHPATGTGAVQTEAMKQILGV
IDKKLRNLEKKKGKLDDYQERMNKGERLNQDQLDAVSKYQEVTNNLEFAKELQRSFMALSQDIQKTIKKTARREQ
LMREEAEQKRLKTVLELQYVLDKLGDDEVRTDLKQGLNGVPILSEEELSLLDEFYKLVDPERDMSLRLNEQYEHA
SIHLWDLLEGKEKPVCGTTYKVLKEIVERVFQSNYFDSTHNHQNGLCEEEEAASAPAVEDQVPEAEPEPAEEYTE
QSEVESTEYVNRQFMAETQFTSGEKEQVDEWTVETVEVVNSLQQQPQAASPSVPEPHSLTPVAQADPLVRRQRVQ
DLMAQMQGPYNFIQDSMLDFENQTLDPAIVSAQPMNPTQNMDMPQLVCPPVHSESRLAQPNQVPVQPEATQVPLV
SSTSEGYTASQPLYQPSHATEQRPQKEPIDQIQATISLNTDQTTASSSLPAASQPQVFQAGTSKPLHSSGINVNA
APFQSMQTVFNMNAPVPPVNEPETLKQQNQYQASYNQSFSSQPHQVEQTELQQEQLQTVVGTYHGSPDQSHQVTG
NHQQPPQQNTGFPRSNQPYYNSRGVSRGGSRGARGLMNGYRGPANGFRGGYDGYRPSFSNTPNSGYTQSQFSAPR
DYSGYQRDGYQQNFKRGSGQSGPRGAPRGRGGPPRPNRGMPQMNTQQVN

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FIGURE 4564

GTCTGAGGCTCGGCCGCCTGAGCCGCGGACGGTTTGCTGAGCCCGTTAGTGCGCCCGGCCGAGACACGCCGCCGC
CATGTCCCGCTACCTGCGTCCCCCCAACACGTCTCTGTTCGTCAGGAACGTGGCCGACGACACCAGGTCTGAAGA
CTTGCGGCGTGAATTTGGTCGTTATGGTCCTATAGTTGATGTGTATGTTCCACTTGATTTCTACACTCGCCGTCC
AAGAGGATTTGCTTATGTTCAATTTGAGGATGTTCGTGATGCTGAAGACGCTTTACATAATTTGGACAGAAAGTG
GATTTGTGGACGGCAGATTGAAATACAGTTTGCCCAGGGGGATCGAAAGACACCAAATCAGATGAAAGCCAAGGA
AGGGAGGAATGTGTACAGTTCTTCACGCTATGATGATTATGACAGATACAGACGTTCTAGAAGCCGAAGTTATGA
AAGGAGGAGATCAAGAAGTCGGTCTTTTGATTACAACTATAGAAGATCGTATAGTCCTAGAAACAGTAGACCGAC
TGGAAGACCACGGCGTAGCAGAAGCCATTCCGACAATGATAGACCAAACTGCAGCTGGAATACCCAGTACAGTTC
TGCTTACTACACTTCAAGAAAGATCTGAAAGCGGAAAAAGAACCAAAGAAGGGCAGTTCAAGCGACCAAAGGGTG
GGTGGAAGGTGCTGCAGTATGAATACTGTACGAATATTTTGACTCTGGTCTGAAAAGATAAAAGAATGTTATCGA
AAACTACATGGAATAATTGAAGTCCCTTCAAGTTTGAAAGTAAGCATTTTAGGACAAATAAAAGGAAATTCAACT
TTGTACTTGTGGAAACTAATCCCTAAATATGAATAGGTTTATATTGATTCATGGGTAACAGGTCCATAATAAATT
ATTGGAAACTAGGATGTCTGAATATCAAGGAAGACAGCCATAGTCTCTTACAGTGCCTCTGTTGGTCTGTCTCAA
ACTGAATTGGGTGGGAAAAGGTATGGTCCAATATAAAAGTTCCATTTTTGCCATTATTGGCAAATCTTGCCTTTG
TTTATTTTGGTGCCAGTGTTTTCTGCTTAATCATTTGCTTTGTTGGCATCTGTGTTTATTTACTTGTACACCACA
TGCAGTTTACATCTGTCTTAACTACTCCTTCCCAGGTAAATTCCAATTATATTTGACATCCAGCTAAGAGGGCCC
ATCTCTTCTCACCTCTTTCCTAGTCAGTATATTCAGCAAATATTTATTGAGCCCTTACTGTGGGCAAATCATTGT
ACTGGATAATTGAGAAAAATAGATAATTCCCTTATTCAGTAAATGTCTACTGAGCACAATCTAGTGAATCATTAC
AGTATGGCCTCATTGTTTTGTTTGAGGTGTGTTATTCATAACAATATTTTACACCATTCGTATCAATGTAATTAT
AGAACACAATATACGATCAAGGATAAGTAATTGTGTGGTTATCTGCCATTTAAAAGTATCCAGTATTTGATCACA
TTATTATAAATAATGAAAAAATGATTTAATCTGTAATAAACTGGTTTATTGTGCAGTGACTGTAATATACTAGAG
TTATAATAAATTGTTTACTCTGCCTCACCAAACACATGCTAGGATATAACCCCCAAAATAAGTATTTAACTTTGC
ATTAGGTATAAAGGAGACTGGGTGCTATAATTAGATTATTTTGAGGCAGACAGAGAGCTGTTATCCTAACTGATT
TAGTATGTTCTGTAATTGAGAAAATGTTCACCAAATTATACTTTTTAGTGATTTACATGTACATTTTATAGGGGA
CATGTTCTGTGTATAGCGAATAAATAACTTTTATAGTATCACAAAATGTTTTGGATTCCTTAGTTTCTTATTAGG
ATATGATGTTTCTTTACCTATACATTGATTTCATCACATTTGATTTTTGTCATCTTTTTTGCCACATACTTAAAA
TTTTCCATATAAAATTAACTAAAAATCTGGAAGTGGAATTTAAGCTTTTAATTTGTAGCAATTTTGAAAATATAG
CAGAGGTATATTTTCAAGGGAGGTGTGAAATGGAGGTATTATTGTTTGTATTTTATTTTAGAAATTTTGTTTGAA
CTTGCCCAAGATCACACAGCAAGTGTCAGATCCTAGGTTACAGCCCATAATTTTTCACTTGTTTCATCTTTTGTT
ACCATGTTTGTTGTTTAATCCAATGGGGAAGTGTTTTTATAGCTTTATTTTCATGGAGATAGTAACATTGATATA
ATGGGATCTAGAATTTACTTAGAGTCAAAGTGACTAGATTTAATTACAAAAAGTATTTTGTTGTATACCGTTATA
CACTCATTAACATAGGGGTTCTTATGGACAGAGGTTCTATGTATTTTTAAAAGAATATGTAGAGGCTATAGACTT
TTTTGCCCTCTACCTCCCTTCTCCATTTCCTTTTGAAGTTAAGACATTTAAGGGGGAGAATTAAGGTGCATATTG
AGTTGGGGTTTTGTTTAAAAAAAATTAGGTAAATACATATATAACTACAATAACAACAGTTGGTAGTTCTCTAAA
ATATTTAATTATGGTAAATCAGAAAAGGCCCTTTAATTTTTGCATCTGTTGAATGAATTGCTTTAGGATCTCTTC
TGTGGTTGTTTCTCTCTATACTGAATGCTGTCAATATTATTGAGCACTTACTGTGCCGAACCATGTGCTTTTCAA
ATATTTCTATTTAATCCTAAAAACACTCCTGGGAAATGGGTATTATTCCCATTTTACAGATGAGAAAATTGTCCT
TTGTAGAATACCCATCATGTGATAGCTTCTTGCATATTATGCTATTCATTTCTCACAACCTTACAAGGTAAATGG
ATAATGTTCCTGGATGAGAGATTAAACGTACTCGAAGATCTTATGGTTGTGTGGCTCAGAGACTCTAAGCATGGC
TTTCCAAATCTCATTCTCTTGTAGAGATTTTCCATTGTATTGCATTTTGACCATGTTCCTGTTTACAAAACCTAA
GATTATATTCTGAAGTATCTGTGACTTGAGTGATAGCTCAGGAATAATCTGAGGGCATTCTATTAGGAAGGAGGA
CTAGCAAAGCCTATAGTTAGCCTATCCTAGGCATGAACTATTCTCATTTTAGATAGGATGACTTGATAAATAGGA
TGAAGTGAGCAACCTGTTTGTCTTCGGTTATTGCTATCTACAAGACATTCTGCTAGTCACTGTGGAAAAGTTTCC
TTCTCTTGGGTTTTTTCCTCTTCCCCTTCCTCTTAACAGTGTTGGTTATCTTTATTATGTTTCTGTGTATTTGTA
ACAGCTGTTTCACCCTTGTATTGCATAATGGGGATTTTTCTTGGAATAAAAAGTGAGGCATGTAAATTCATTGAG
AACTAACCGTAGTTTGTAAAGAAGTAAAAGGCCTTTGTATCTAGTTTTTTGCAGATCACATTTCTTTGAATGCTG
GAAAGTGAAATAAACTGGTCTAGGAGCCAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4565

MSRYLRPPNTSLFVRNVADDTRSEDLRREFGRYGPIVDVYVPLDFYTRRPRGFAYVQFEDVRDAEDALHNLDRKW
ICGRQIEIQFAQGDRKTPNQMKAKEGRNVYSSSRYDDYDRYRRSRSRSYERRRSRSRSFDYNYRRSYSPRNSRPT
GRPRRSRSHSDNDRPNCSWNTQYSSAYYTSRKI

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FIGURE 4566

AAAAACAAGCTCAGCGATGGCGGCTCCAGAAGGCAGCGGTCTAGGCGAGGACGCCCGGCTGGACCAGGAGACCGC
CCAGTGGCTGCGCTGGGACAAGAATTCCTTAACTTTGGAGGCAGTGAAACGACTAATAGCAGAAGGTAATAAAGA
AGAACTACGAAAATGTTTTGGGGCCCGAATGGAGTTTGGGACAGCTGGCCTCCGAGCTGCTATGGGACCTGGAAT
TTCTCGTATGAATGACTTGACCATCATCCAGACTACACAGGGATTTTGCAGATACCTGGAAAAACAATTCAGTGA
CTTAAAGCAGAAAGGCATCGTGATCAGTTTTGACGCCCGAGCTCATCCATCCAGTGGGGGTAGCAGCAGAAGGTT
TGCCCGACTTGCTGCAACCACATTTATCAGTCAGGGGATTCCTGTGTACCTCTTTTCTGATATAACGCCAACCCC
CTTTGTGCCCTTCACAGTATCACATTTGAAACTTTGTGCTGGAATCATGGTAACTGCATCTCACAATCCAAAGCA
GGATAATGGTTATAAGGTCTATTGGGATAATGGAGCTCAGATCATTTCTCCTCACGATAAAGGGATTTCTCAAGC
TATTGAAGAAAATCTAGAACCGTGGCCTCAAGCTTGGGACGATTCTTTAATTGATAGCAGTCCACTTCTCCACAA
TCCGAGTGCTTCCATCAATAATGACTACTTTGAAGACCTTAAAAAGTACTGTTTCCACAGGAGCGTGAACAGGGA
GACAAAGGTGAAGTTTGTGCACACCTCTGTCCATGGGGTGGGTCATAGCTTTGTGCAGTCAGCTTTCAAGGCTTT
TGACCTTGTTCCTCCTGAGGCTGTTCCTGAACAGAAAGATCCGGATCCTGAGTTTCCAACAGTGAAATACCCGAA
TCCCGAAGAGGGGAAAGGTGTCTTGACTTTGTCTTTTGCTTTGGCTGACAAAACCAAGGCCAGAATTGTTTTAGC
TAACGACCCGGATGCTGATAGACTTGCTGTGGCAGAAAAGCAAGACAGTGGTGAATGGAGGGTGTTTTCAGGCAA
TGAGTTGGGGGCCCTCCTGGGCTGGTGGCTTTTTACATCTTGGAAAGAGAAGAACCAGGATCGCAGTGCTCTCAA
AGACACGTACATGTTGTCCAGCACCGTCTCCTCCAAAATCTTGCGGGCCATTGCCTTAAAGGAAGGTTTTCATTT
TGAGGAAACATTAACTGGCTTTAAGTGGATGGGAAACAGAGCCAAACAGCTAATAGACCAGGGGAAAACTGTTTT
ATTTGCATTTGAAGAAGCTATTGGATACATGTGCTGCCCTTTTGTTCTGGACAAAGATGGAGTCAGTGCCGCTGT
CATAAGTGCAGAGTTGGCTAGCTTCCTAGCAACCAAGAATTTGTCTTTGTCTCAGCAACTAAAGGCCATTTATGT
GGAGTATGGCTACCATATTACTAAAGCTTCCTATTTTATCTGCCATGATCAAGAAACCATTAAGAAATTATTTGA
AAACCTCAGAAACTACGATGGAAAAAATAATTATCCAAAAGCTTGTGGCAAATTTGAAATTTCTGCCATTAGGGA
CCTTACAACTGGCTATGATGATAGCCAACCTGATAAAAAAGCTGTTCTTCCCACTAGTAAAAGCAGCCAAATGAT
CACCTTCACCTTTGCTAATGGAGGCGTGGCCACCATGCGCACCAGTGGGACAGAGCCCAAAATCAAGTACTATGC
AGAGCTGTGTGCCCCACCTGGGAACAGTGATCCTGAGCAGCTGAAGAAGGAACTGAATGAACTGGTCAGTGCTAT
TGAAGAACATTTTTTCCAGCCACAGAAGTACAATCTGCAGCCAAAAGCAGACTTAAAATAGTCCAGCCTTGGGTAT
ACTTGCATTTACCTACAATTAAGCTGGGTTTAACTTGTTAAGCAATATTTTTAAGGGCCAAATGATTCAAAACAT
CACAGGTATTTATGTGTTTTACAAAGACCTACATTCCTCATTGTTTCATGTTTGACCTTTAAGGTGAAAAAAGAA
AATGGCCAAACCCAACAAACTAACATTCCTACTAAAAAGTTGAGCTTGGACATATTTTGAATTTTTGTAAGTGAA
GATTTTTAAACTGACTAACTTAAAAAAATAGATTGTAATTGATGTGCCTTAATTTGCATAAATCATAAATGTATG
TCCTCTCTGTAATTGTTTTAATGTGTGCTTGAAATATCCAGAAAACCTATGGAGTTAGTAAATTCTGGGCTGTCA
TATGTAGGATAGCCACTTTTTAGGTATATGTACATTTATATTTCTATCAATTCCTTAGAAAGTAAAATAAATGAA
TAGATC

FIGURE 4567

MAAPEGSGLGEDARLDQETAQWLRWDKNSLTLEAVKRLIAEGNKEELRKCFGARMEFGTAGLRAAMGPGISRMND
LTIIQTTQGFCRYLEKQFSDLKQKGIVISFDARAHPSSGGSSRRFARLAATTFISQGIPVYLFSDITPTPFVPFT
VSHLKLCAGIMVTASHNPKQDNGYKVYWDNGAQIISPHDKGISQAIEENLEPWPQAWDDSLIDSSPLLHNPSASI
NNDYFEDLKKYCFHRSVNRETKVKFVHTSVHGVGHSFVQSAFKAFDLVPPEAVPEQKDPDPEFPTVKYPNPEEGK
GVLTLSFALADKTKARIVLANDPDADRLAVAEKQDSGEWRVFSGNELGALLGWWLFTSWKEKNQDRSALKDTYML
SSTVSSKILRAIALKEGFHFEETLTGFKWMGNRAKQLIDQGKTVLFAFEEAIGYMCCPFVLDKDGVSAAVISAEL
ASFLATKNLSLSQQLKAIYVEYGYHITKASYFICHDQETIKKLFENLRNYDGKNNYPKACGKFEISAIRDLTTGY
DDSQPDKKAVLPTSKSSQMITFTFANGGVATMRTSGTEPKIKYYAELCAPPGNSDPEQLKKELNELVSAIEEHFF
QPQKYNLQPKAD

FIGURE 4568

ACGAACTGGTACACAGAATGAAAGGAACAGAGGGCCTGAGGCTATGGCAGGAGGAGCAGGAGAGGAAGGTGCAAG
CCCTCTCGGAGATGGCATCTGAACAACTGAAGCGGTTTGATGAATGGAAGGAACTGAAGCAGCATAAAGAATTCC
AGGACTTGCGGGAAGTAATGGAGAAGAGCTCCAGAGAAGCCTTGGGACACCAAGAGAAGCTAAAAGCTGAGCACC
GTCACAGAGCAAAGATTCTCAACCTGAAGCTGCGGGAAGCAGAGCAGCAGCGCGTGAAGCAAGCAGAACAGGAGC
GGCTTCGGAAGGAAGAAGGCCAGATCCGCCTGCGGGCCCTCTATGCTCTGCAGGAGGAGATGCTGCAGCTCAGCC
AGCAGCTGGATGCCTCTGAGCAGCACAAAGCCCTGCTTAAGGTCGACCTGGCTGCCTTCCAGACCCGAGGCAACC
AGCTGTGCAGCCTCATCTCAGGGATCATCCGGGCCTCTTCAGAGAGCAGCTATCCCACAGCAGAGAGTCAAGCTG
AGGCTGAGCGAGCTCTGCGGGAAATGCGGGACCTCCTGATGAACTTGGGGCAGGAGATCACCAGAGCCTGCGAAG
ACAAGAGGAGGCAGGATGAAGAAGAGGCCCAGGTAAAGCTGCAAGAGGCACAGATGCAGCAGGGACCAGAGGCCC
ACAAAGAGCCCCCAGCTCCCAGCCAGGGCCCAGGAGGGAAACAGAATGAAGACCTCCAGGTGAAGGTACAAGACA
TTACAATGCAGTGGTACCAGCAGCTGCAGGATGCTTCCATGCAGTGTGTGTTGACCTTTGAGGGCCTGACCAACA
GCAAGGACAGTCAGGCCAAAAAGATAAAGATGGACCTCCAGAAGGCTGCTACCATCCCAGTGAGCCAAATCTCTA
CCATTGCAGGCTCAAAACTGAAGGAGATCTTTGACAAGATCCACAGCCTGCTCTCTGGAAAACCTGTTCAATCTG
GTGGGCGCTCTGTGTCTGTCACACTTAACCCACAGGGGCTGGACTTTGTTCAATACAAACTGGCAGAGAAATTTG
TGAAACAAGGCGAGGAGGAAGTGGCCTCTCACCATGAAGCAGCATTCCCCATTGCAGTTGTGGCATCCGGGATCT
GGGAGCTCCACCCCAGAGTGGGGGACCTCATTCTTGCTCATCTACATAAGAAGTGTCCTTACTCTGTTCCTTTCT
ATCCCACTTTCAAGGAGGGAATGGCTTTGGAAGACTATCAGAGGATGCTTGGTTACCAAGTAAAGGATTCCAAAG
TGGAGCAGCAAGACAACTTTCTAAAACGCATGTCAGGGATGATCCGTCTCTACGCTGCTATCATCCAGCTCCGGT
GGCCATATGGAAACCGACAGGAGATTCACCCTCATGGCTTAAATCATGGATGGCGCTGGTTGGCACAGATCTTAA
ACATGGAGCCCTTGTCAGATGTGACAGCCACCCTCCTCTTTGACTTCCTGGAGGTGTGTGGGAATGCCCTCATGA
AGCAATACCAGGTTCAGTTCTGGAAGATGCTAATTCTCATCAAAGAGGACTACTTTCCCAGAATTGAAGCTATCA
CAAGCTCAGGACAGATGGGCTCCTTCATACGCCTCAAGCAGTTCTTGGAGAAATGTTTGCAACACAAGGACATTC
CTGTCCCCAAGGGCTTTCTGACTTCCTCCTTCTGGCGCTCCTGATGTCACTCCATCACCCACCATCACCGCTGCT
GCAAAGAGGCAATAATAAAGGAACTGAAGACAGCTGTATTTGGGAGAAGTCATGTCAGATTCAGAAATTTGCCAT
TATGTATTTTTATGTATTTATGCCTTGTGACTAGGAGAGGAGATTTTCATGGGTCACAAAATTCTTGGAGGTCCC
TTAGTAGATTTGGTAGTTCCTTAAGAGATCCACGTGATAAAATAAATGGAGTTGGCCTTTCTTGTTTTTTGCAAA
AGTGATAAAAGGTCTTTAGCACTTGGTCTCCTCCCTTGTCTCTAGTGTCTTTCAGAAAGTTGGCAATACCTTAAC
AAATGCACTCTGAGCTGGAGGGAGCCCACCATTTGCACCCACCTACCCACCCTCACCCCTGTTCAGATGAATTTC
CAGAAAGAGCTAAGGCTCATAAGGTTCCCTTTTAAGTATTATTTAATAGTTGAGGCCAGATACTTACATGCAAGT
CTGGGTTATGGTTGTTTTGCCTTTCTCAGCTTGTGAAGTCATTCTAAAGCTAGAGGAAGTATGTGATATACACAT
GGACTAAGGCTCAGGTGACACTATGGCTAGATTAACATCTGGGATTAGGACTGGAAACACATGTCATTTTGAACT
AAGGGAAACTCTTTGTCATCCTAATTTGGAATTTGGTCCCTGGATGGCTAGGGATCCATGAACCAGGCAGGTACC
TTTTTTGTTTTTGTTTTGTTTTGTTTCTTTTCTGTTTGAATTAAGATGGGCTAAGATGGGGCTTGCAACATTAAA
CATGAGCTGAGCATCCATAAGCATTGAATTGGGATTAAATAAAGATGTTGGGCAGGAACTGAACACTGCTAATAT
GATGATAAATATGCCTGACTAAAGCCACTACAGAAATCCAGAGATTGGCTGTTAAAATTTGTTTTGTGGAAAGAC
TAATTCTCTTTGATACTGCAGAGGCAGTGGCCATGGATCTGTTCCTCTGTGCTAAATGTCTTGTGGCAGGGTGTG
TTTGTGGGGGAGTGTTCACTGGTACTCTTGAGTGGCCTGAAGTGACCCATTCTATGAATTGTTAATTAAGGTGCC
AAAAAAAATTAATAATAAAGCTTGGTTTTTTGAAAAAAAAAAAAAAAAAAAAAGG

FIGURE 4569A

CCGGCCGCGTCCCGCCCGCTCCCCGGCACCAGAAGTTCCTCTGCGCGTCCGACGGCGACATGGGCGTCCCCACGG
CCCTGGAGGCCGGCAGCTGGCGCTGGGGATCCCTGCTCTTCGCTCTCTTCCTGGCTGCGTCCCTAGGTCCGGTGG
CAGCCTTCAAGGTCGCCACGCCGTATTCCCTGTATGTCTGTCCCGAGGGGCAGAACGTCACCCTCACCTGCAGGC
TCTTGGGCCCTGTGGACAAAGGGCACGATGTGACCTTCTACAAGACGTGGTACCGCAGCTCGAGGGGCGAGGTGC
AGACCTGCTCAGAGCGCCGGCCCATCCGCAACCTCACGTTCCAGGACCTTCACCTGCACCATGGAGGCCACCAGG
CTGCCAACACCAGCCACGACCTGGCTCAGCGCCACGGGCTGGAGTCGGCCTCCGACCACCATGGCAACTTCTCCA
TCACCATGCGCAACCTGACCCTGCTGGATAGCGGCCTCTACTGCTGCCTGGTGGTGGAGATCAGGCACCACCACT
CGGAGCACAGGGTCCATGGTGCCATGGAGCTGCAGGTGCAGACAGGCAAAGATGCACCATCCAACTGTGTGGTGT
ACCCATCCTCCTCCCAGGAGAGTGAAAACATCACGGCTGCAGCCCTGGCTACGGGTGCCTGCATCGTAGGAATCC
TCTGCCTCCCCCTCATCCTGCTCCTGGTCTACAAGCAAAGGCAGGCAGCCTCCAACCGCCGTGCCCAGGAGCTGG
TGCGGATGGACAGCAACATTCAAGGGATTGAAAACCCCGGCTTTGAAGCCTCACCACCTGCCCAGGGGATACCCG
AGGCCAAAGTCAGGCACCCCCTGTCCTATGTGGCCCAGCGGCAGCCTTCTGAGTCTGGGCGGCATCTGCTTTCGG
AGCCCAGCACCCCCCTGTCTCCTCCAGGCCCCGGAGACGTCTTCTTCCCATCCCTGGACCCTGTCCCTGACTCTC
CAAACTTTGAGGTCATC**TAG**CCCAGCTGGGGGACAGTGGGCTGTTGTGGCTGGGTCTGGGGCAGGTGCATTTGAG
CCAGGGCTGGCTCTGTGAGTGGCCTCCTTGGCCTCGGCCCTGGTTCCCTCCCTCCTGCTCTGGGCTCAGATACTG
TGACATCCCAGAAGCCCAGCCCCTCAACCCCTCTGGATGCTACATGGGGATGCTGGACGGCTCAGCCCCTGTTCC
AAGGATTTTGGGGTGCTGAGATTCTCCCCTAGAGACCTGAAATTCACCAGCTACAGATGCCAAATGACTTACATC
TTAAGAAGTCTCAGAACGTCCAGCCCTTCAGCAGCTCTCGTTCTGAGACATGAGCCTTGGGATGTGGCAGCATCA
GTGGGACAAGATGGACACTGGGCCACCCTCCCAGGCACCAGACACAGGGCACGGTGGAGAGACTTCTCCCCCGTG
GCCGCCTTGGCTCCCCCGTTTTGCCCGAGGCTGCTCTTCTGTCAGACTTCCTCTTTGTACCACAGTGGCTCTGGG
GCCAGGCCTGCCTGCCCACTGGCCATCGCCACCTTACCCAGCTGCCTCCTACCAGCAGTTTCTCTGAAGATCTGT
CAACAGGTTAAGTCAATCTGGGGCTTCCACTGCCTGCATTCCAGTCCCCAGAGCTTGGTGGTCCCGAAACGGGAA
GTACATATTGGGGCATGGTGGCCTCCGTGAGCAAATGGTGTCTTGGGCAATCTGAGGCCAGGACAGATGTTGCCC
CACCCACTGGAGATGGTGCTGAGGGAGGTGGGTGGGGCCTTCTGGGAAGGTGAGTGGAGAGGGGCACCTGCCCCC
CGCCCTCCCCATCCCCTACTCCCACTGCTCAGCGCGGGCCATTGCAAGGGTGCCACACAATGTCTTGTCCACCCT
GGGACACTTCTGAGTATGAAGCGGGATGCTATTAAAAACTACATGGGGAAACAGGTGCAAACCCTGGAGATGGAT
TGTAAGAGCCAGTTTAAATCTGCACTCTGCTGCTCCTCCCCCACCCCCACCTTCCACTCCATACAATCTGGGCCT
GGTGGAGTCTTCGCTTCAGAGCCATTCGGCCAGGTGCGGGTGATGTTCCCATCTCCTGCTTGTGGGCATGCCCTG
GCTTTGTTTTTATACACATAGGCAAGGTGAGTCCTCTGTGGAATTGTGATTGAAGGATTTTAAAGCAGGGGAGGA
GAGTAGGGGGCATCTCTGTACACTCTGGGGGTAAAACAGGGAAGGCAGTGCCTGAGCATGGGGACAGGTGAGGTG
GGGCTGGGCAGACCCCCTGTAGCGTTTAGCAGGATGGGGGCCCCAGGTACTGTGGAGAGCATAGTCCAGCCTGGG
CATTTGTCTCCTAGCAGCCTACACTGGCTCTGCTGAGCTGGGCCTGGGTGCTGAAAGCCAGGATTTGGGGCTAGG
CGGGAAGATGTTCGCCCAATTGCTTGGGGGGTTGGGGGGATGGAAAAGGGGAGCACCTCTAGGCTGCCTGGCAGC
AGTGAGCCCTGGGCCTGTGGCTACAGCCAGGGAACCCCACCTGGACACATGGCCCTGCTTCTAAGCCCCCCAGTT
AGGCCCAAAGGAATGGTCCACTGAGGGCCTCCTGCTCTGCCTGGGCTGGGCCAGGGGCTTTGAGGAGAGGGTAAA
CATAGGCCCGGAGATGGGGCTGACACCTCGAGTGGCCAGAATATGCCCAAACCCCGGCTTCTCCCTTGTCCCTAG
GCAGAGGGGGGTCCCTTCTTTTGTTCCCTCTGGTCACCACAATGCTTGATGCCAGCTGCCATAGGAAGAGGGTGC
TGGCTGGCCATGGTGGCACACACCTGTCCTCCCAGCACTTTGCAGGGCTGAGGTGGAAGGACCGCTTAAGCCCAG
GTGTTCAAGGCTGCTGTGAGCTGTGTTCGAGCCACTACACTCCAGCCTGGGGACGGAGCAAAACTTTGCCTCAAA
ACAAATTTTAAAAAGAAAGAAAGAAGGAAAGAGGGTATGTTTTTCACAATTCATGGGGGCCTGCATGGCAGGAGT
GGGGACAGGACACCTGCTGTTCCTGGAGTCGAAGGACAAGCCCACAGCCCAGATTCCGGTTCTCCCAACTCAGGA
AGAGCATGCCCTGCCCTCTGGGGAGGCTGGCCTGGCCCCAGCCCTCAGCTGCTGACCTTGAGGCAGAGACAACTT
CTAAGAATTTGGCTGCCAGACCCCAGGCCTGGCTGCTGCTGTGTGGAGAGGGAGGCGGCCCGCGGCAGAACAGCC
ACCGCACTTCCTCCTCAGCTTCCTCTGGTGCGGCCCTGCCCTCTCTTCTCTGGACCCTTTTACAACTGAACGCAT
CTGGGCTTCGTGGTTTCCTGTTTTCAGCGAAATTTACTCTGAGCTCCCAGTTCCATCTTCATCCATGGCCACAGG
CCCTGCCTACAACGCACTAGGGACGTCCCTCCCTGCTGCTGCTGGGGAGGGGCAGGCTGCTGGAGCCGCCCTCTG
AGTTGCCCGGGATGGTAGTGCCTCTGATGCCAGCCCTGGTGGCTGTGGGCTGGGGTGCATGGGAGAGCTGGGTGC
GAGAACATGGCGCCTCCAGGGGGCGGGAGGAGCACTAGGGGCTGGGGCAGGAGGCTCCTGGAGCGCTGGATTCGT

FIGURE 4569B

GGCACAGTCTGAGGCCCTGAGAGGGAAATCCATGCTTTTAAGAACTAATTCATTGTTAGGAGATCAATCAGGAAT
TAGGGGCCATCTTACCTATCTCCTGACATTCACAGTTTAATAGAGACTTCCTGCCTTTATTCCCTCCCAGGGAGA
GGCTGAAGGAATGGAATTGAAAGCACCATTTGGAGGGTTTTGCTGACACAGCGGGGACCGCTCAGCACTCCCTAA
AAACACACCATGGAGGCCACTGGTGACTGCTGGTGGGCAGGCTGGCCCTGCCTGGGGGAGTCCGTGGCGATGGGC
GCTGGGGTGGAGGTGCAGGAGCCCCAGGACCTGCTTTTCAAAAGACTTCTGCCTGACCAGAGCTCCCACTACATG
CAGTGGCCCAGGGCAGAGGGGCTGATACATGGCCTTTTTCAGGGGGTGCTCCTCGCGGGGTGGACTTGGGAGTGT
GCAGTGGGACAGGGGGCTGCAGGGGTCCTGCCACCACCGAGCACCAACTTGGCCCCTGGGGTCCTGCCCCATGAA
TGAGGCCTTCCCCAGGGCTGGCCTGACTGTGCTGGGGGCTGGGTTAACGTTTTCTCAGGGAACCACAATGCACGA
AAGAGGAACTGGGGTTGCTAACCAGGATGCTGGGAACAAAGGCCTCTTGAAGCCCAGCCACAGCCCAGCTGAGCA
TGAGGCCCAGCCCATAGACGGCACAGGCCACCTGGCCCATTCCCTGGGCATTCCCTGCTTTGCATTGCTGCTTCT
CTTCACCCCATGGAGGCTATGTCACCCTAACTATCCTGGAATGTGTTGAGAGGGATTCTGAATGATCAATATAGC
TTGGTGAGACAGTGCCGAGATAGATAGCCATGTCTGCCTTGGGCACGGGAGAGGGAAGTGGCAGCATGCATGCTG
TTTCTTGGCCTTTTCTGTTAGAATACTTGGTGCTTTCCAACACACTTTCACATGTGTTGTAACTTGTTTGATCCA
CCCCCTTCCCTGAAAATCCTGGGAGGTTTTATTGCTGCCATTTAACACAGAGGGCAATAGAGGTTCTGAAAGGTC
TGTGTCTTGTCAAAACAAGTAAACGGTGGAACTACGACT

FIGURE 4570

GRVPPAPRHQKFLCASDGDMGVPTALEAGSWRWGSLLFALFLAASLGPVAAFKVATPYSLYVCPEGQNVTLTCRL
LGPVDKGHDVTFYKTWYRSSRGEVQTCSERRPIRNLTFQDLHLHHGGHQAANTSHDLAQRHGLESASDHHGNFSI
TMRNLTLLDSGLYCCLVVEIRHHHSEHRVHGAMELQVQTGKDAPSNCVVYPSSSQESENITAAALATGACIVGIL
CLPLILLLVYKQRQAASNRRAQELVRMDSNIQGIENPGFEASPPAQGIPEAKVRHPLSYVAQRQPSESGRHLLSE
PSTPLSPPGPGDVFFPSLDPVPDSPNFEVI

FIGURE 4571

GTCCGACGGCGACATGGGCGTCCCCACGGCCCTGGAGGCCGGCAGCTGGCGCTGGGGATCCCTGCTCTTCGCTCT
CTTCCTGGCTGCGTCCCTAGGTCCGGTGGCAGCCTTCAAGGTCGCCACGCCGTATTCCCTGTATGTCTGTCCCGA
GGGGCAGAACGTCACCCTCACCTGCAGGCTCTTGGGCCCTGTGGACAAAGGGCACGATGTGACCTTCTACAAGAC
GTGGTACCGCAGCTCGAGGGGCGAGGTGCAGACCTGCTCAGAGCGCCGGCCCATCCGCAACCTCACGTTCCAGGA
CCTTCACCTGCACCATGGAGGCCACCAGGCTGCCAACACCAGCCACGACCTGGCTCAGCGCCACGGGCTGGAGTC
GGCCTCCGACCACCATGGCAACTTCTCCATCACCATGCGCAACCTGACCCTGCTGGATAGCGGCCTCTACTGCTG
CCTGGTGGTGGAGATCAGGCACCACCACTCGGAGCACAGGGTCCATGGTGCCATGGAGCTGCAGGTGCAGACAGG
CAAAGATGCACCATCCAACTGTGTGGTGTACCCATCCTCCTCCCAGGAGAGTGAAAACATCACGGCTGCAGCCCT
GGCTACGGGTGCCTGCATCGTAGGAATCCTCTGCCTCCCCCTCATCCTGCTCCTGGTCTACAAGCAAAGGCAGGC
AGCCTCCAACCGCCGTGCCCAGGAGCTGGTGCGGATGGACAGCAACATTCAAGGGATTGAAAACCCCGGCTTTGA
AGCCTCACCACCTGCCCAGGGGATACCCGAGGCCAAAGTCAGGCACCCCCTGTCCTATGTGGCCCAGCGGCAGCC
TTCTGAGTCTGGGCGGCATCTGCTTTCGGAGCCCAGCACCCCCCTGTCTCCTCCAGGCCCCGGAGACGTCTTCTT
CCCATCCCTGGACCCTGTCCCTGACTCTCCAAACTTTGAGGTCATCTAGCCCAGCTGGGGGACAGTGGGCTGTTG
TGGCTGGGTCTGGGGCAGGTGCATTTGAGCCAGGGCTGGCTCTGTGAGTGGCCTCCTTGGCCTCGGCCCTGGTTC
CCTCCCTCCTGCTCTGGGCTCAGATACTGTGACATCCCAGAAGCCCAGCCCCTCAACCCCTCTGGATGCTACATG
GGGATGCTGGACGGCTCAGCCCCTGTTCCAAGGATTTTGGGGTGCTGAGATTCTCCCCTAGAGACCTGAAATTCA
CCAGCTACAGATGCCAAATGACTTACATCTTAAGAAGTCTCAGAACGTCCAGCCCTTCAGCAGCTCTCGTTCTGA
GACATGAGCCTTGGGATGTGGCAGCATCAGTGGGACAAGATGGACACTGGGCCACCCTCCCAGGCACCAGACACA
GGGCACGGTGGAGAGACTTCTCCCCCGTGGCCGCCTTGGCTCCCCCGTTTTGCCCGAGGCTGCTCTTCTGTCAGA
CTTCCTCTTTGTACCACAGTGGCTCTGGGGCCAGGCCTGCCTGCCCACTGGCCATCGCCACCTTACCCAGCTGCC
TCCTACCAGCAGTTTCTCTGAAGATCTGTCAACAGGTTAAGTCAATCTGGGGCTTCCACTGCCTGCATTCCAGTC
CCCAGAGCTTGGTGGTCCCGAAACGGGAAGTACATATTGGGGCATGGTGGCCTCCGTGAGCAAATGGTGTCTTGG
GCAATCTGAGGCCAGGACAGATGTTGCCCCACCCACTGGAGATGGTGCTGAGGGAGGTGGGTGGGGCCTTCTGGG
AAGGTGAGTGGAGAGGGGCACCTGCCCCCCGCCCTCCCCATCCCCTACTCCCACTGCTCAGCGCGGGCCATTGCA
AGGGTGCCACACAATGTCTTGTCCACCCTGGGACACTTCTGAGTATGAAGCGGGATGCTATTAAAAACTACATGG
GGAAACAGGTGCAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4572

MGVPTALEAGSWRWGSLLFALFLAASLGPVAAFKVATPYSLYVCPEGQNVTLTCRLLGPVDKGHDVTFYKTWYRS
SRGEVQTCSERRPIRNLTFQDLHLHHGGHQAANTSHDLAQRHGLESASDHHGNFSITMRNLTLLDSGLYCCLVVE
IRHHHSEHRVHGAMELQVQTGKDAPSNCVVYPSSSQESENITAAALATGACIVGILCLPLILLLVYKQRQAASNR
RAQELVRMDSNIQGIENPGFEASPPAQGIPEAKVRHPLSYVAQRQPSESGRHLLSEPSTPLSPPGPGDVFFPSLD
PVPDSPNFEVI

FIGURE 4573A

GGAGGGAGAGGCTGAATGTTGGCTCGGTAATGGAGAGGAGCGGCCGCTCCAGAGCTTCCTCCCGGGGCGCCCCCC
TCAGTCCGTCCGCGCTTCTCAGCCGCCAGTCTCCTGGCCGCGCAGTCCCCGCGGACGGCCGGGCCGCGGAGACCC
TCGCAGAAGAGGCGCTGCCGGCGGCGAGGACTGGCCGGCGGCATCCGAGGCGCGCGCCCCACCGCCACCCCCACC
CGCCTGCCAGCCGGTCCCTCCGGCCGCCGCCATGTCCTCCTCCTCTTCCTCCCCCAGGGAGACGTACGAGGAGGA
CCGGGAGTACGAGAGCCAGGCCAAGCGTCTCAAGACCGAGGAGGGGGAGATCGACTACTCGGCCGAGGAAGGCGA
GAACCGCCGGGAAGCGACGCCCCGGGGCGGGGGCGAATGGCGGCGGCTGGCGGCCGGAGCTTCTCTCAGCCGGAG
GCAGGTGGAAGTCATCATAAAGTTTCTGTTTCACCCGTCGTCCATGTTCGAGGACTCTGTGAATCTGTGGTGGAA
GCAGACCTCGTGGAAGCGCTGGAAAAATTTGGGACAATATGCTATGTGATGATGATGCCATTTAAACGACAGGCT
CTAGTGGAATTTGAAAACATAGATAGTGCCAAAGAATGTGTGACATTTGCTGCAGATGAACCCGTGTACATTGCT
GGTCAACAGGCTTTTTTCAACTATTCTACAAGCAAAAGGATCACTCGGCCAGGAAATACTGATGATCCATCAGGA
GGCAACAAAGTTCTTCTGCTCTCAATTCAGAATCCGCTTTATCCAATTACAGTGGATGTTTTATATACTGTATGC
AACCCTGTTGGCAAAGTGCAACGTATTGTTATATTCAAGAGAAATGGGATACAAGCAATGGTTGAGTTTGAATCA
GTCCTTTGTGCCCAGAAAGCTAAAGCAGCACTCAATGGAGCTGATATATATGCTGGATGTTGCACACTAAAAATT
GAATATGCACGGCCAACTCGTCTAAATGTTATTAGGAATGACAATGACAGTTGGGACTACACTAAACCATATTTG
GGAAGACGAGATAGAGGAAAGGGTCGCCAGAGACAAGCCATTTTGGGAGAACACCCTTCTTCGTTTAGACATGAT
GGCTATGGATCCCATGGTCCATTATTGCCTTTACCAAGTCGTTACAGAATGGGCTCTCGAGATACACCTGAACTT
GTTGCTTATCCATTACCACAGGCTTCTTCCTCTTACATGCATGGAGGAAATCCCTCTGGTTCAGTTGTAATGGTT
AGTGGATTACATCAACTAAAAATGAATTGTTCAAGAGTCTTCAACCTGTTCTGCTTATATGGAAATATTGAGAAG
GTAAAATTTATGAAGACCATTCCTGGTACAGCACTGGTAGAAATGGGTGATGAGTATGCTGTAGAAAGAGCTGTC
ACACACCTTAATAATGTCAAATTATTTGGGAAAAGACTTAATGTTTGCGTGTCTAAACAACATTCAGTTGTTCCA
AGTCAAATATTTGAGCTGGAGGATGGTACCAGCAGCTACAAAGATTTTGCAATGAGCAAAAATAATCGCTTTACA
AGTGCTGGCCAAGCATCTAAGAATATAATCCAGCCACCCTCCTGTGTTTTGCATTATTATAATGTTCCATTGTGT
GTCACAGAAGAGACCTTCACAAAGTTGTGTAATGACCATGAAGTTCTTACATTCATCAAATATAAAGTGTTTGAT
GCAAAACCTTCAGCCAAAACACTTTCTGGGCTATTAGAATGGGAGTGCAAAACTGATGCAGTAGAAGCCCTTACG
GCACTGAATCACTATCAGATAAGAGTGCCGAATGGTTCCAATCCCTATACATTGAAGCTTTGCTTTTCTACATCA
TCCCATTTATAAGAAGAGAAGAGCATGTTAGAATTTATGTTCACCTTTATTACAATTTCAAAGCTACACTTCATT
AAAAAAAAATCTAAAATGGTTGATCTCATGTTGCCTTGCTTACTTTAAGATCCTGTTCTGTAATAAACATATTTT
GCCTTGAGTAAATTTGTTGTAAGCTTAAATATTGAATTGTTTTCATTTTAAGATAGAATATCATAATGTAGACTA
TCTACAGCTTCATTGTAGATTATACAGATATATGATTTCTAACCTTATTACTGGAATTTTTCTTCCACAGTAAAA
ATATATTTGCATTCTTAATGCTAATTATCTGCAAGTATTTTTTCATTGTGTAAGAGATTAATGCAGGTGAAAGTA
TTGCATTTTAATATAGAATTCCTATTATATGTTTAGATGTTTAAGTATGTTGCAGTTACTCATATTAAACATAAC
TTGTATATTTATTATTTTAATGAAGTTTGAGAATAACGTTACATATGTTGAATTTTAAGTACTACAGATTTAACT
GATTTTATATTTCTGAAAGGCTAACAGACATGGATACACGTGTACAGTATGCATTCAAACTTATTTAAATTGGTG
TATTTTTTTTTAAGTCACTGTCCATTTGTATTGACATGCCTCTGTTTCTAGTCCAGTTTGGAGATTTTATAAAGT
TATAACAATGAGTTAATGTGTTCATTTTCATTTGTTGCATGTGACTTAAATACAGCTAGTATTTGGCATTGAGAT
TTTAATAGAGGTTATAATTAACAGTTCCTCTTATAGATAATAATCTGGGATCCATGGGTGGGCTTCAGAGAATCT
GTGTACCCCCTAAAATTGTATGTAGAATTTTGGATATTTACATTTTTATTTTTTAACTCTTGGATCCATCAGTAA
TATGTATTTTTCTATATGGTACAAGATTTAAGGATCTAATTTTATTTTTATTCCAAACAGATAGCTATTTGTCTC
AATACCATTTATTAAACATTCTTTCTCCCACTGGATCTGTTTTTTTTTTCTTTTTAAGATAATAGATTTTATACA
TAGGCAAGTAAGATTTAAGGACCAAACATGGTATTAAGAGACTATAGCACGATTGTTACCAAGTTCACAGCTTTT
TTACAATAGAAAAACTGATGTGGCCATTTTGTTTTCATCTTTAAAAGAAGGGAGAATATGTGTCATCTACCTAGA
ATAACTGATATCAGTAGTTGACAATATCAGTTTTGTAATCCTGACACTTTTAAACAAATTTGTAAATGAAAGTTC
CATTTAGATCTTTTGTAAAGACTTTATTTTAAATTTTAATATAAAAAATCCTTTTAGAAATAAGGCAGGCATTTA
CAATTTTAGAGCTGTTTAATAGGAAGTTTAGATGGAAACTAAACACACATTAACATTTATTTCCCCTCATTTTGA
TGGCAGTGGACCAGCATTTAGCCCTCTAAAGATAAAGAAAAAATTAAATTTAATCTAGAAGTATTTTAGACCCTT
ATCACAGAACCCAGTAAGTTATGCCAAGGGTAACTGTGTGAACTGTGTTCGATACTGGGCTATGTATGTTTCTTA
TTCATTGCCAATTTAATACCTAAGTTTATCTAACTTTACAATAAAGCTTTTTTTCCCCTATAAATACTTTTCTAC
CTCTTTTGAAAAATTGAAATACCTTAATTTTGGTTTATGTAATAGTTGTCTACGTTCCTTCCTCCTCTGAAAATT

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FIGURE 4573B

AATGTGGGTTG

FIGURE 4574

EGEAECWLGNGEERPLQSFLPGRPPQSVRASQPPVSWPAQSPRTAGPRRPSQKRRCRRRGLAGGIRGARPTATPT
RLPAGPSGRRHVLLLFLPQGDVRGGPGVREPGQASQDRGGGDRLLGRGRREPPGSDAPGRGRMAAAGGRSFSQPE
AGGSHHKVSVSPVVHVRGLCESVVEADLVEALEKFGTICYVMMMPFKRQALVEFENIDSAKECVTFAADEPVYIA
GQQAFFNYSTSKRITRPGNTDDPSGGNKVLLLSIQNPLYPITVDVLYTVCNPVGKVQRIVIFKRNGIQAMVEFES
VLCAQKAKAALNGADIYAGCCTLKIEYARPTRLNVIRNDNDSWDYTKPYLGRRDRGKGRQRQAILGEHPSSFRHD
GYGSHGPLLPLPSRYRMGSRDTPELVAYPLPQASSSYMHGGNPSGSVVMVSGLHQLKMNCSRVFNLFCLYGNIEK
VKFMKTIPGTALVEMGDEYAVERAVTHLNNVKLFGKRLNVCVSKQHSVVPSQIFELEDGTSSYKDFAMSKNNRFT
SAGQASKNIIQPPSCVLHYYNVPLCVTEETFTKLCNDHEVLTFIKYKVFDAKPSAKTLSGLLEWECKTDAVEALT
ALNHYQIRVPNGSNPYTLKLCFSTSSHL

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FIGURE 4575

GGAGGGAGAGGCTGAATGTTGGCTCGGTAATTGAGAGGAGCGGCCGCTCCAGAGCTTCCTCCCGGGGCGCCCCCC
TCAGTCCGTCCGCGCTTCTCAGCCGCCAGTCTCCTGGCCGCGCAGTCCCCGCGGACGGCCGGGCCGCGGAGACCC
TCGCAGAAGAGGCGCTGCCGGCGGCGAGGACTGGCCGGCGGCATCCGAGGCGCGCGCCCCACCGCCACCCCCACC
CGCCTGCCAGCCGGTCCCTCCGGCCGCCGCC**ATG**TCCTCCTCCTCTTCCTCCCCCAGGGAGACGTACGAGGAGGA
CCGGGAGTACGAGAGCCAGGCCAAGCGTCTCAAGACCGAGGAGGGGGAGATCGACTACTCGGCCGAGGAAGGCGA
GAACCGCCGGGAAGCGACGCCCCGGGGCGGGGGCGATGGCGGCGGCGGCGGCCGGAGCTTCTCTCAGCCGGAGGC
AGGTGGAAGTCATCATAAAGTTTCTGTTTCACCCGTCGTCCATGTTCGAGGACTCTGTGAATCTGTGGTGGAAGC
AGACCTCGTGGAAGCGCTGGAAAAATTTGGGACAATATGCTATGTGATGATGATGCCATTTAAACGACAGGCTCT
AGTGGAATTTGAAAACATAGATAGTGCCAAAGAATGTGTGACATTTGCTGCAGATGAACCCGTGTACATTGCTGG
TCAACAGGCTTTTTTCAACTATTCTACAAGCAAAAGGATCACTCGGCCAGGAAATACTGATGATCCATCAGGAGG
CAACAAAGTTCTTCTGCTCTCAATTCAGAATCCGCTTTATCCAATTACAGTGGATGTTTTATATACTGTATGCAA
CCCTGTTGGCAAAGTGCAACGTATTGTTATATTCAAGAGAAATGGGATACAAGCAATGGTTGAGTTTGAATCAGT
CCTTTGTGCCCAGAAAGCTAAAGCAGCACTCAATGGAGCTGATATATATGCTGGATGTTGCACACTAAAAATTGA
ATATGCACGGCCAACTCGTCTAAATGTTATTAGGAATGACAATGACAGTTGGGACTACACTAAACCATATTTGGG
AAGACGAGATAGAGGAAAGGGTCGCCAGAGACAAGCCATTTTGGGAGAACACCCTTCTTCGTTTAGACATGATGG
CTATGGATCCCATGGTCCATTATTGCCTTTACCAAGTCGTTACAGAATGGGCTCTCGAGATACACCTGAACTTGT
TGCTTATCCATTACCACAGGCTTCTTCCTCTTACATGCATGGAGGAAATCCCTCTGGTTCAGTTGTAATGGTTAG
TGGATTACATCAACTAAAAATGAATTGTTCAAGAGTCTTCAACCTGTTCTGCTTATATGGAAATATTGAGAAGGT
AAAATTTATGAAGACCATTCCTGGTACAGCACTGGTAGAAATGGGTGATGAGTATGCTGTAGAAAGAGCTGTCAC
ACACCTTAATAATGTCAAATTATTTGGGAAAAGACTTAATGTTTGCGTGTCTAAACAACATTCAGTTGTTCCAAG
TCAAATATTTGAGCTGGAGGATGGTACCAGCAGCTACAAAGATTTTGCAATGAGCAAAAATAATCGCTTTACAAG
TGCTGGCCAAGCATCTAAGAATATAATCCAGCCACCCTCCTGTGTTTTGCATTATTATAATGTTCCATTGTGTGT
CACAGAAGAGACCTTCACAAAGTTGTGTAATGACCATGAAGTTCTTACATTCATCAAATATAAAGTGTTTGATGC
AAAACCTTCAGCCAAAACACTTTCTGGGCTATTAGAATGGGAGTGCAAAACTGATGCAGTAGAAGCCCTTACGGC
ACTGAATCACTATCAGATAAGAGTGCCGAATGGTTCCAATCCCTATACATTGAAGCTTTGCTTTTCTACATCATC
CCATTTA**TAA**GAAGAGAAGAGCATGTTAGAATTTATGTTCACCTTTATTACAATTTCAAAGCTACACTTCATTAA
AAAAAAATCTAAAATGGTTGATCTCATGTTGCCTTGCTTACTTTAAGATCCTGTTCTGTAATAAACATATTTTGC
CTTGAGTAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4576

MSSSSSSPRETYEEDREYESQAKRLKTEEGEIDYSAEEGENRREATPRGGGDGGGGGRSFSQPEAGGSHHKVSVS
PVVHVRGLCESVVEADLVEALEKFGTICYVMMMPFKRQALVEFENIDSAKECVTFAADEPVYIAGQQAFFNYSTS
KRITRPGNTDDPSGGNKVLLLSIQNPLYPITVDVLYTVCNPVGKVQRIVIFKRNGIQAMVEFESVLCAQKAKAAL
NGADIYAGCCTLKIEYARPTRLNVIRNDNDSWDYTKPYLGRRDRGKGRQRQAILGEHPSSFRHDGYGSHGPLLPL
PSRYRMGSRDTPELVAYPLPQASSSYMHGGNPSGSVVMVSGLHQLKMNCSRVFNLFCLYGNIEKVKFMKTIPGTA
LVEMGDEYAVERAVTHLNNVKLFGKRLNVCVSKQHSVVPSQIFELEDGTSSYKDFAMSKNNRFTSAGQASKNIIQ
PPSCVLHYYNVPLCVTEETFTKLCNDHEVLTFIKYKVFDAKPSAKTLSGLLEWECKTDAVEALTALNHYQIRVPN
GSNPYTLKLCFSTSSHL

FIGURE 4577

GGCGGGCGAGCAAGCGAGCGGCGTCTCCACCAGCATCTGCCGCGGCCGCCTTTGCCCGAAGCCCGGGGACGAACC
GACGGACCGACCGCCTGGCGCACGGACGCGGGCGCTCGCTTTGTGTTCGGGGCTAGCGTCGGCGAGGCTTGAGCT
TGCAGCGCGCGGCTTCCCTGCTTTCTCGCGGCCACCCCGGCTCCGGCGGCCTCGGCGCGCGAGGGGCTGGAGGTG
CGGGAGCCGCTCTCCGCCGGTCGGTCCCCGCGCGGCTGAGCCCAGGCCGCCAGCGCCGCGGCCCCGTGCGGTGTC
CCTGAGCTCCTGCTCCCCGCCGGGCTGCTCCGAGCAACGGTGCTTCGGAGCTCCAAACTCGGGCTGCCGGGGCAA
GTGTCTTCATGAACCCAGAGG**ATG**TCCGGGAAGCACTACAAGGGTCCTGAAGTCAGTTGTTGCATCAAATACTTC
ATATTTGGCTTCAATGTCATATTTTGGTTTTTGGGAATAACATTTCTTGGAATTGGACTGTGGGCATGGAATGAA
AAAGGAGTTCTGTCCAACATCTCTTCCATCACCGATCTCGGCGGCTTTGACCCAGTTTGGCTCTTCCTTGTGGTG
GGAGGAGTGATGTTCATTTTGGGATTTGCAGGGTGCATTGGAGCGCTACGGGAAAACACTTTCCTTCTCAAGTTT
TTTTCTGTGTTCCTGGGAATTATTTTCTTCCTGGAGCTCACTGCCGGAGTTCTAGCATTTGTTTTCAAAGACTGG
ATCAAAGACCAGCTGTATTTCTTTATAAACAACAACATCAGAGCATATCGGGATGACATTGATTTGCAAAACCTC
ATAGACTTCACCCAGGAATATTGGCAGTGCTGTGGGGCTTTTGGAGCTGATGATTGGAACCTAAATATTTACTTC
AATTGCACAGATTCCAATGCAAGTCGAGAGCGATGTGGCGTTCCATTCTCCTGCTGCACTAAAGATCCCGCAGAA
GATGTCATCAACACTCAGTGTGGCTATGATGCCAGGCAAAAACCAGAAGTTGACCAGCAGATTGTAATCTACACG
AAAGGCTGTGTGCCCCAGTTTGAGAAGTGGTTGCAGGACAATTTAACCATCGTTGCTGGTATTTTCATAGGCATT
GCATTGCTGCAGATATTTGGGATATGCCTGGCCCAGAATTTGGTTAGCGATATCGAAGCTGTCAGGGCGAGCTGG
TAGACCCCCTGCAACCGCTGCTGCAAGACACTGGACAGACCCAGCTTTCGGGACCCTCCCGCGTGCCGAACTGAT
CTTCGAGCTGCATGGACCTAATCACAGATGCAGCCTGCAGTCTCGCCTAATGGAGCTGCCATTAGGGGAGTGTAA
AACTGGGAAATGCTGCTCACTGACAGAATTAAAAAAAAAAATAACCAGTATGAAAGTCGTTGCGCCGTGAATCTC
TACTGTAGCCATGAATTTATGGACAGTTAGATGCTTACCAAAAAAGAAAAAAAGGGAGGGTAGGGGACCCAGATG
TACTTGAATGTGCAGAAAATACATTCTTGTCCTCATCTTCCGTAATTGGAGGGCTGGGAGAGGCAGCTTTGCTCT
TCACCACACCTTGGACGGACCACCTTCTTTCTGTTCCATGGCCTGAAGGAGTGCATCTCCTCAAAGACTCAGCCC
CTCACCTGGGAGGGCAGTGGTTTGTGGGCATCCCTCCATGTACATTTTAGGAAACACTTGCAACTCTCATCTGAA
GAAGAAAACAACTCATCTTTGGGTTCAGATTTTGTGATGGTATTCAGCAAGTCACTTGGGCGAGCACACTTGGTC
TATCCTGGAAAGTCTCCTTATAAGAGAAGTTGTGTATTTCATGTGCACCGAGCAAGGGCATTGGAAGACGTCATG
AGGCTGTATTTTAGCAGGACTGATCGTTTTTCTAAGTAGACCTGAGCTTTGTTTATCAGTGAAATTCAAGGAGAA
AATGAGGTTAATGAAGAGGTATCAGTTAAATATCCCCTTCTTCTCACCCTGCCAAAATTAGCAGTTGGATTTTTG
GAAACTCTGGAATATTCTGGGTCATTTTGTTTTGTATGTTTGTTGTTTTTCGTCTTCCAAAGGTGAAAGCTATGA
TACAGTTCCACTTAAATTTTAGTGTTTTCTTACTCAGCTCAAGCATTAATTTTTGATTAAGTCTTAATCTGCATG
ACCTGTGAATCTGAATCCATCATCTCCCTTTCCTGCCAGCTTTTCTACAAACATTGAAATATGTTATTTGGTCAG
CACTTATTTCCTAGGTTCACAGCCTTGGGAGGTTGTGGCATGTCCTCCCAGTCTGGCTGGGAAGAGACCAGCTGT
ACCATCCAAATGCTTCCCTGGTCTTGATGATCTCTTCCAGAGTCGATCTGAGTGGCCTTTTCTGCACCCTCCCCT
TCTTTCTCTTTGAATGGAATTAAACCCAATTTGGAAACAACATTGACCCAGTCAAAAGCTTCTAATGGTTTCTTT
TTCTTCCTCCAGTTTTAGTTTGCTTTTATTAAAAAAAGAAAATAGTGCATGGCCATAGCTCCTTCAGTTCTCTTA
TTGCAGACTAACCATCAGGATGGTATCAAAGCACAAATACTTTGGAGGGGAATGCGTTGAACTGGGGCAAGTACT
CTGTAACACAAAGTGGGAAACCACTTCCTGGTGCTGCCGCTCCTGCCCCCACTTTAGGTGGGAGGGACGAGTTTT
GCCCTCTAGATTTTAATCCAGCTGGTGTCCACCGGATGTTGCCCTCCTGGGGAGCAGATATCAGTCTGTGGAACT
CTGGGAAAACCACAGGCACATTTTTCGGTGCGGACAGATTTGCCAGCACATAACTGGGCAGCCAGCTAGAATACT
TTGTGGAAATTAAGCGAGGTTTTCCATTTCAGCCCCATGGTGCATGGTGGTGGCCGATGAATGTGTCAGTCTGCT
CAGAGAAAGGACAAAAAGGAAATTATTTTCAAAACTGTGTTCACTGTTTGGGTGTGTGTATGGCTCTGCATGTGT
GTGTTTTTGTCTCTGTATAGGTAGAGGTATTCACATCTTACTCCGACTGTAAGGTTGTCTTACTTCATCTCTGCC
CCCACCACAGTTGCCATTTTGTAATGTCCTTCCAACATGGAGAAGACACGAGCTCTCTCCAGTTGGCATCATTTG
TCTTTTTTGTTGATTGCCTCATTCTCCAGTGAACTCCATCTGGCCAATTGATTCAGAATCAGGCAAGATCCCTGC
CCTTTGGCACATCCACTGAAAGGCCAAACAGCAAGTCCGAGTGAGTTTTAAATATTAATTAATCACCCTTTATTT
TTTACACTTGAGAGTGATTGTAATAAAGGCTGTCATTAATAAACTTGGTTCTACCTTAAAAA

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FIGURE 4578

MSGKHYKGPEVSCCIKYFIFGFNVIFWFLGITFLGIGLWAWNEKGVLSNISSITDLGGFDPVWLFLVVGGVMFIL
GFAGCIGALRENTFLLKFFSVFLGIIFFLELTAGVLAFVFKDWIKDQLYFFINNNIRAYRDDIDLQNLIDFTQEY
WQCCGAFGADDWNLNIYFNCTDSNASRERCGVPFSCCTKDPAEDVINTQCGYDARQKPEVDQQIVIYTKGCVPQF
EKWLQDNLTIVAGIFIGIALLQIFGICLAQNLVSDIEAVRASW

FIGURE 4579

GGGAACCCACAGGCGCGCGCGCCGCTGCTTCTGGCCGGGCGCGGGTCGTGGTGCACCACGGGAGCGCCGCACCGG
CCGGCATGGAGGAGCGCGGCGATTCCGAGCCGACCCCCGGCTGCAGCGGCCTGGGTCCGGGCGGTGTTCGCGGCT
TTGGCGACGGCGGTGGAGCTCCTTCGTGGGCCCCTGAGGACGCCTGGATGGGCACTCACCCTAAGTATCTAGAAA
TGATGGAATTAGATATAGGAGATGCCACCCAAGTTTATGTAGCGTTCTTGGTTTACCTGGACCTCATGGAAAGCA
AAAGCTGGCATGAAGTAAACTGTGTAGGATTACCAGAACTCCAGCTCATCTGCCTTGTTGGTACTGAGATAGAAG
GGGAGGGGTTACAGACTGTGGTGCCTACCCCCATCACTGCTTCCCTCAGCCATAACAGGATAAGGGAGATCTTGA
AGGCATCTCGAAAGTTGCAAGGTGATCCAGATTTGCCGATGTCTTTTACTTTGGCCATAGTGGAGTCTGATTCTA
CAATAGTCTATTATAAACTTACTGATGGATTTATGCTGCCAGACCCTCAGAATATTTCTCTTAGAAGATGACATC
CATGTTTCCTGATGCTTGTTTTATTCATACAAGATTGGATTTGAGACCCATCAGACTGCTTCATCTTTTATCTCA
GAAATAGGGTTGACGTACATAGTGAGGGTTGACTTCCCCATTCCATAAGGTTTTCATTCTGAAGAGTAAAACTTC
CCCAGGTAGAAGACTTTCTCCTTCTTAAAAAATATAGGGTGATTTCTTTAAAACTTTGTTATCTAGAGACAGTTT
AATTACAGTTATATACAGGTTTATGCCTAGGATGTATTCAGATGGGTGGGACCTGTGTGCTGCTTTTGTCATCCC
ACACTCAAAGTTGTCTCTTTGTTTCTTGCTGCCACTGCCAGCTCATTGTTGAGACTGCCATTTCTTTCTCTTACT
CAGCTCTCCCCAGTGCCTTTTGGCCACTGCAGCTACCGTAGAATGGCATTTTATATGTACCTTGTCACCCACTTC
TGTTTACTTTTTCCTCTCCAGTAAAAAGTAAAAGATTTCTTTCAATTGGTCTTCCCATTGCAGTTACTGTTATTT
CTCTTTTTTGGTTAACTTTAAATCAAAACTCAAAATATGTTCATCCAGAGTGTGTCTTAAGTAACTTACGTGTCT
TAAGTAACAGGGACCAGAGACATGTTACCTACAAGAGTTCTGGGCTATCCTTTTCATTCTTATCACATATCATAG
CTTGAATATTACAACAGTGTGGGAGAGAATCAACCGTAAAAATGTCTTCATTAATTAGACCCAGTTATTCCACTT
TTGTTAATGTCTCTCAAATTGTACAAAGTATAAAAAATTATATGCACAAAGATGTTCCAAGTGACATTACTTTTA
GTAGCCCAAATTATAAACCACTTTAAAGTTTGGGGTAAAGATTGGCAAACTTTTTCTATAAAGGGCCAGAAAGTA
ACTATTTTAGGTTTTTAAACCTACTGTCTCTGTCATAACTTGTCAACACTGCTGTATGAAGCACAAAAGCAGCCA
TAGACAATACATAAACAATACGGGCGTGGCTTTGTTCCAGTAAAACTTTGTTTACAAATGTGGTGCCATAGTTTG
TCATCCCTGGGTCTAGGAAATAGTCAATAAACAGATATATACAAATGATACATAATGTACTTATTAAAAATTAGT
AATGAATATTATTAAAAACATGAAAATATTACCTTAAGTAAAAATTGCAAGACGGAAAAGTGTATAAGTGGGTGT
AATCATGGCTGAAATAACAGACCAAGCATATGATAAAAAGATAACAAAGTAAATCAAATTACTAACTGGTTATAG
TGGGATAGGAGGCAGAAAATGGATGACTTTGTCTTTTCTCAATGTTTTTATTTGTATTTTATAATAAAAATGTTT
TAAAATTAAAA

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FIGURE 4580

AGCGTGGGGTGCGGGTCGTGGTGCACCACGGGAGCGCCGCACCGGCCGGCATGGAGGAGCGCGGCGATTCCGAGC
CGACCCCCGGCTGCAGCGGCCTGGGTCCGGGCGGTGTTCGCGGCTTTGGCGACGGCGGTGGAGCTCCTTCGTGGG
CCCCTGAGGACGCCTGGATGGGCACTCACCCTAAGTATCTAGAAATGATGGAATTAGATATAGGAGATGCCACCC
AAGTTTATGTAGCGTTCTTGGTTTACCTGGACCTCATGGAAAGCAAAAGCTGGCATGAAGTAAACTGTGTAGGAT
TACCAGAACTCCAGCTCATCTGCCTTGTTGGTACTGAGATAGAAGGGGAGGGGTTACAGACTGTGGTGCCTACCC
CCATCACTGCTTCCCTCAGCCATAACAGGATAAGGGAGATCTTGAAGGCATCTCGAAAGTTGCAAGGTGATCCAG
ATTTGCCGATGTCTTTTACTTTGGCCATAGTGGAGTCTGATTCTACAATAGTCTATTATAAACTTACTGATGGAT
TTATGCTGCCAGACCCTCAGAATATTTCTCTTAGAAGATGACATCCATGTTTCCTGATGCTTGTTTTATTCATAC
AAGATTGGATTTGAGACCCATCAGACTGCTTCATCTTTTATCTCAGAAATAGGGTTGACGTACATAGTGAGGGTT
GACTTCCCCATTCCATAAGGTTTTCATTCTGAAGAGTAAAACTTCCCCAGGTAGAAGACTTTCTCCTTCTTAAAA
AATATAGGGTGATTTCTTTAAAACTTTGTTATCTAGAGACAGTTTAATTACAGTTATATACAGGTTTATGCCTAG
GATGTATTCAGATGGGTGGGACCTGTGTGCTGCTTTTGTCATCCCACACTCAAAGTTGTCTCTTTGTTTCTTGCT
GCCACTGCCAGCTCATTGTTGAGACTGCCATTTCTTTCTCTTACTCAGCTCTCCCCAGTGCCTTTTGGCCACTGC
AGCTACCGTAGAATGGCATTTTATATGTACCTTGTCACCCACTTCTGTTTACTTTTTCCTCTCCAGTAAAAAGTA
AAAGATTTCTTTCAATTGGTCTTCCCATTGCAGTTACTGTTATTTCTCTTTTTTGGTTAACTTTAAATCAAAACT
CAAAATATGTTCATCCAGAGTGTGTCTTAAGTAACTTACGTGTCTTAAGTAACAGGGACCAGAGACATGTTACCT
ACAAGAGTTCTGGGCTATCCTTTTCATTCTTATCACATATCATAGCTTGAATATTACAACAGTGTGGGAGAGAAT
CAACCGTAAAAATGTCTTCATTAATTAGACCCAGTTATTCCACTTTTGTTAATGTCTCTCAAATTGTACAAAGTA
TAAAAAATTATATGCACAAAGATGTTCCAAGTGACATTACTTTTAGTAGCCCAAATTATAAACCACTTTAAAGTT
TGGGGTAAAGATTGGCAAACTTTTTCTATAAAGGGCCAGAAAGTAACTATTTTAGGTTTTTAAACCTACTGTCTC
TGTCATAACTTGTCAACACTGCTGTATGAAGCACAAAAGCAGCCATAGACAATACATAAACAATACGGGCGTGGC
TTTGTTCCAGTAAAACTTTGTTTACAAATGTGGTGCCATAGTTTGTCATCCCTGGGTCTAGGAAATAGTCAATAA
ACAGATATATACAAATGATACATAATGTACTTATTAAAAATTAGTAATGAATATTATTAAAAACATGAAAATATT
ACCTTAAGTAAAAATTGCAAGACGGAAAAGTGTATAAGTGGGTGTAATCATGGCTGAAATAACAGACCAAGCATA
TGATAAAAAAGATAACAAAGTAAATCAAATTACTAACTGGTTATAGTGGGATAGGAGGCAGAAAATGGATGACTTT
GTCTTTTCTCAATGTTTTTATTTGTATTTTATAATAAAAATGTTTTAAAATTAAAAAAAAAAAAAAAA

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FIGURE 4581

MEERGDSEPTPGCSGLGPGGVRGFGDGGGAPSWAPEDAWMGTHPKYLEMMELDIGDATQVYVAFLVYLDLMESKS
WHEVNCVGLPELQLICLVGTEIEGEGLQTVVPTPITASLSHNRIREILKASRKLQGDPDLPMSFTLAIVESDSTI
VYYKLTDGFMLPDPQNISLRR

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FIGURE 4582

GCGGCCGCGAATTCGGCACGAGGGGGCCACAAGAGCCCTTCCTGCAGGGAACCTCAGGCTTCAGAGAGCCGAAAA
GTTGGGAGGCGTAACCACTTACAGGCCGGAAGTGTCCGGGGTGGACGCATTCGGGTAGCCGAAGAAGTCCCAGGA
TTGCCGAAGAAGTCCCAGGATTTCCGAAGCGAGCCGAAGCATCGCGACAGTTTTCAGAGACAGCTGATCGGTTGG
AGCTGTTGCGCCGAGCAGTC**ATG**GCGGCGGCCAGAGCTACTACGCCGGCCGATGGCGAGGAGCCCGCCCCGGAGG
CTGAGGCTCTGGCCGCAACCCGGGAACGGAGCAGCCGCTTCTTGAGCGGCCTGGAGCTGGTGAAGCAGGGTGCCG
AGGCGCGCGTGTTCCGTGGCCGCTTCCAGGGCCGCGCGGCGGTGATCAAGCACCGCTTCCCCAAGGGCTACCGGC
ACCCGGCGCTGGAGGCGCGGCTTGGCAGACGGCGGACGGTGCAGGAGGCCCGGGCGCTCCTCCGCTGTCGCCGCG
CTGGAATATCTGCCCCAGTTGTCTTTTTTGTGGACTATGCTTCCAACTGCTTATATATGGAAGAAATTGAAGGCT
CAGTGACTGTTCGAGATTATATTCAGTCCACTATGGAGACTGAAAAAACTCCCCAGGGTCTCTCCAACTTAGCCA
AGACAATTGGGCAGGTTTTGGCTCGAATGCACGATGAAGACCTCATTCATGGTGATCTCACCACCTCCAACATGC
TCCTGAAACCCCCCCTGGAACAGCTGAACATTGTGCTCATAGACTTTGGGCTGAGTTTCATTTCAGCACTTCCAG
AGGATAAGGGAGTAGACCTCTATGTCCTGGAGAAGGCCTTCCTCAGTACCCATCCCAACACTGAAACTGTGTTTG
AAGCCTTTCTGAAGAGCTACTCCACCTCCTCCAAAAAGGCCAGGCCAGTGCTAAAAAAATTAGATGAAGTGCGCC
TGAGAGGAAGAAAGAGGTCCATGGTTGGG**TAG**AAGAATGTGTATGACAACCACACACAGTGAAGCTCTTTTTTCA
AAGTAAATTTGAAGAAATGCTACAAGTATGAGATGAGATCTAAGTAAAGGTGTTAAGATATTTTTAAGTGGTATG
TGATCGTGTCATTATCATCTGCACTTCACTCAAGAGCTTACTATGTGTCTAAGTCATGTTCTAGGCAGAATTGGG
TATTTAAAGTAAATTGAGGACAGGCTTCTCCCAGATTGTGACATGTATATCTCAGATACATGGGTGTGGCATTGA
ACCACATAATGAGAACATTATTCTCTTTTTAGTCCTTGTGAGACAAGGATGAAGTCTCAGTTGCTGATACTCGCT
GAGCTTACTGGCCCTCTAACCCAGTGTTTTTTTTTGTTGTTGTTGTGTACATGTTATATTTATTTTGAAACCAGT
TTAATGGGATACAACCAGCATTTTAAAAAATGAAATAGAATACAGCATGGAAAATATCAGTGTATTGTTTTATGA
AACTTTCACGTGTATATATAGACCAAGGATATGTGCTGAGTTTTGATGTCAAATATATTTCTCTTTCAGGGTCAT
GATCAAAAAATGAAAAGTCTGCTTAACTCCAATTTCTCTTTTAAAAAAGCAGACTTACAGCTTTCAGGCAACTGA
AATTCATGTTAACATGTTTTTATTTTTATTGCTTTGTATTTTTGTGGTTACCTTCTAAGACAAGTGATTGATCTA
AAGTTCCTTTTAAGTTTATACCGCTAAACAAACTGAGTTGATTTCTATCACAGGCAGTAAGTAGGTAGAGCAAAA
ATGGTGAAGTGACTTGTGAAGACTGAAGTTTGATGAAGTCTGGTTTAAGGCACAGGTAAACTGAGTGTGGATGCA
AAAGTACCAGGAGCTAGCTTTTAACCTTGCCCAGCCTCAGTTTCTTTTCTTAGAAGAAGCTATGTTTGGGTGGGA
AGGGAAGAGAGGGATAAGAAAATACCTTTCTTCCTTGTAAACTCCAATCAACAAACATATTTTGAGTGCCTTTTG
TGTTCCTTGGCACCCTGTTGGGTATTGGGTACTTGGCACCCTGTTGGGTATTGGGTACAATGGTGAGCCAGACAG
ACACAGCGCCTGTCCTTTTGTAAGAATATTTATTTTTATAAAAAAGTATAAAGTATAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4583

MAAARATTPADGEEPAPEAEALAATRERSSRFLSGLELVKQGAEARVFRGRFQGRAAVIKHRFPKGYRHPALEAR
LGRRRTVQEARALLRCRRAGISAPVVFFVDYASNCLYMEEIEGSVTVRDYIQSTMETEKTPQGLSNLAKTIGQVL
ARMHDEDLIHGDLTTSNMLLKPPLEQLNIVLIDFGLSFISALPEDKGVDLYVLEKAFLSTHPNTETVFEAFLKSY
STSSKKARPVLKKLDEVRLRGRKRSMVG

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FIGURE 4584A

CGCGCCCCGGGCTCGGCCGACCCGGCGGGGATCTAGGGGTGGGCGACTTCGCGGGACCGTGGCGCATGTTTCCTG
GGAGTTACTGATCATCTTCTTTGAAGAAACATGAAGTTACACTATGTTGCTGTGCTTACTCTAGCCATCCTGATG
TTCCTGACATGGCTTCCAGAATCACTGAGCTGTAACAAAGCACTCTGTGCTAGTGATGTGAGCAAATGCCTCATT
CAGGAGCTCTGCCAGTGCCGGCCGGGAGAAGGCAATTGCTCCTGCTGTAAGGAGTGCATGCTGTGTCTTGGGGCC
CTTTGGGACGAGTGCTGTGACTGTGTTGGTATGTGTAATCCTCGAAATTATAGTGACACACCTCCAACTTCAAAG
AGCACAGTGGAGGAGCTGCATGAACCGATCCCTTCTCTCTTCCGGGCACTCACAGAAGGAGATACTCAGTTGAAT
TGGAACATCGTTTCTTTCCCTGTTGCAGAAGAACTTTCACATCATGAGAATCTGGTTTCATTTTTAGAAACTGTG
AACCAGCCACACCACCAGAATGTGTCTGTCCCCAGCAATAATGTTCACGCGCCTTATTCCAGTGACAAAGAACAC
ATGTGTACTGTGGTTTATTTTGATGACTGCATGTCCATACATCAGTGTAAAATATCCTGTGAGTCCATGGGAGCA
TCCAAATATCGCTGGTTTCATAATGCCTGCTGCGAGTGCATTGGTCCAGAATGTATTGACTATGGTAGTAAAACT
GTCAAATGTATGAACTGCATGTTTTAAAGAAGACAAATGCAAACCAAAGCAACTTAGTAAAATAATAGGTATAAA
AAGTTATTCTGTAAGTCTGTTGGTTGTATCTTGTATCAGAATCCCAGTAAGTTAAGTTGTAAAGACTTTGGAATA
AGTTTCTTTTAAAAATATGACATAGCCAGTGATGTGTTTAATTATATAACTGTTCTTACTGATTTTATTGCCCCC
TAGCAATAAGCCCTTTCCTTTGAATACATGTACAACTTTGGTCATATGAGAAGCAGGTGCGCAGAGAATTCCTTG
AAAGATCTGAGGTTTTTAACATAAAGTCTGATGTGGTTTTCCTCTAGCATTCCAAAAGGTTTTTGCTTTGAAAGT
GTTAGCAGAAGCATGTTGATGTGAATTATGATTTCTTCATGTGCTACTGTTAGCACACTGAGTTTTTATAGTTGC
ACATCATTCCTCATTGTGCCTTGTTTTATCCATTTTATAAATAGAGTAGATATTTGATATACCACTCTGATAACT
CATATAAAAATATCATCATAAAAAGCTTAATTTCATCCCTTTTATGTTGGTTTTAAAAGGTAAATGCTTACCATA
TTTTATAATTGAGAACTCTTACATAGTAGAATCCATTCTATAATACATGTGTTGACAAAGCTTTAGAGAAAGTTT
CCTATTCTCTTCCATTTCCCCTGCCCAAAGTGCTGACATAGGCAGTGATGAAGAATCTTTACCAAGATTTTCAGG
GTGTACCTATGAAATTGCTTTAAATGCACTGCTGGTGTAAATAATTAGCAAGCAAAAGCGTTTCTGTGACTTCAG
GTACCAGCTTAAAGAGCACTAGGGATGGGGAACGAATGCCAAATCAGACTCCACCTAGAGCACCAGGAAACAGCT
TGTACCCTGGTAGGGAAATGGTGTCGCTGAAAGGGGAGGCTGAGCCAGTGCGAGACTGAACTTGTGCAGCCTTAG
CCAAGACAAAGCAGTGTTTTTCAGCAGACGGCTGATGGGACAGGAATTGAAGAAGAGAATTGACTCGTATGAACA
GGACAGGGTGAAAATGCTGGGAATTATAATGGGAAACAAAACTATCTATGTTCATATTTTGTAATATTTCATTTG
TTAAGTTTATATCTGGATATAATGTTCTTTTTAAACAAGTATAATCATATCGTCGGAGGTTAAGATTATGAAATT
TTAAAATCTCTATTCAAGATGATGTTCACTCCAAATACACTACAGAATTTAGTCAACATTTTATATAATGTTTCA
ATAAATGTTTCTTTCAATAAAGATACTATGTGCCCTTCATAGTAATAAAATCTCAATCTTAAAGCATGAATCTAA
AACATAAATATTTATATTACAGACTCAATTTTACAAAATTACTAATTGCTCTAGTGCATATTTGAACTACAAGCA
ACTTTTTAGGAATACCTCTTTATACGTCTACATATTTTAGTATATAAAAATAGATAATGCTCTTGGACACATTTT
GTATTATTCATGATCTGAATAGTAGTTAGTTAAAAGATCATTTGTAATATTATGATCAACTGTTATAAATTAAGG
TCTTAATACCTTTTCTGCTCTTTCAAATAACTCTAATGAATATTCAAGATATTTTAGCCTTTTAAAAAGTTGAGA
TTTAGCTCATGGATATATTTTTTGGTAGGGAAACATTAGGGTCTCCTTTTCTTCCTTTTACCTAGAATGCCTCAT
TTAAAAGTGCCTTGAAAACATTTAGCTCCCCTTCTTCATGAGCATCTGTAGAGCTGAAAGTATTCTGGAACTTTA
GACAGAAAGCTGAAAGGAATCTGCAGTCTCCTGCTGCAGTTCAACTCTGCTGTTTTTCAGTCATTTCCTACTGTG
AGTGGAGTGATGTTTGTGTGTGTGTTGGCAACATGCCTAATGTTTTCTTAATGATGACAACAAATATTTTAAAAC
TGCATTTATCATTTTTTAGGTCTTCATTAAATTTTAAAATGTAATATCTGTTTCCCACCCCCTACATTAGGAGGA
TAATTTCTTAAACCACATTGTTTTAATTGATTTTTCTTATCTTGATTTCTTTCATTAGAAACTATCCCTAAATGT
AAAGATCTTTTGCCTTCAAATTTGGCTTATTTTTTCTGATTTATGAGGGTTTGAAAGAAAGAATTCACCTAAAAG
ATTCCATTTCCAGTTTTATAATGTATTTCAGGTTCTGAATAACAATATTTTTCCAAATTGAAAGTAAATATTCAA
GAAGTTGATAGCCTGGTTAAAAGTTAGATCCTCTATTACCATTCTAAGCACATTCACTTCTATATTGAAGTTTTG
GTAAAAATTCTTTTTTCTTTTTTAATAAAAAATTAGGTTATTACTTTTTTTATAACCAGATTTTTAAAGCACTAG
GTTTTAAATCAGTGGGTATCATAAAAGCCATATATAAAAGATCCTTTCTTATAGTAAGACTTGTGCTTGTTAGCA
GGTTTTTCTGTTAGTTTTTCCCCCATAACATTTAATTATTACTAAAATTGTATTTACAATAGTGGTGCCAAATCA
AATGGTAATTTAAATAAAATCTATTCTGTGTTTATGTAGGGTGGTATAAAAAAGAGGTCTTCATTTAGACATGTG
ATTTCTAAAATTCCAGAAAGCAAAATTGATAAGATGTTAGAAATTTGGACCGTTATTTATAATCAGGGTAGCATT
AAAATGGAGAAAAGAAAGTTTTCTGAAAAAATGCAGTAAATATAAGCCACATTTCTAAAGTTTATTTTTATGAAA
GCTTCTTTTAAGATTTTGAAATCTATTCTGCATTCCCAAGAGTTTATGTTTATTGTATTTTATATGATCTACAAC

FIGURE 4584B

ATATAAAATTGTGTATTTTTCTTTGGTTGTCCCTATTAACAAAAAAGTATTTTAATAAAAAATTGAAATGAAAAA
AAAAAAAAAAAAAAAAAA

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FIGURE 4585

MKLHYVAVLTLAILMFLTWLPESLSCNKALCASDVSKCLIQELCQCRPGEGNCSCCKECMLCLGALWDECCDCVG
MCNPRNYSDTPPTSKSTVEELHEPIPSLFRALTEGDTQLNWNIVSFPVAEELSHHENLVSFLETVNQPHHQNVSV
PSNNVHAPYSSDKEHMCTVVYFDDCMSIHQCKISCESMGASKYRWFHNACCECIGPECIDYGSKTVKCMNCMF

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FIGURE 4586

GTCCGCTTCTCTCTGCTCTTCGACTGCACCGCACTCGCGCGTGACCCTGACTCCCCCTAGTCAGCTCAGCGGTGC
TGCCATGGCGTGGCGGCGGCGCGAAGCCAGCGTCGGGGCTCGCGGCGTGTTGGCTCTGGCGTTGCTCGCCCTGGC
CCTGTGCGTGCCCGGGGCCCGGGGCCGGGCTCTCGAGTGGTTCTCGGCCGTGGTAAACATCGAGTACGTGGACCC
GCAGACCAACCTGACGGTGTGGAGCGTCTCGGAGAGTGGCCGCTTCGGCGACAGCTCGCCCAAGGAGGGCGCGCA
TGGCCTGGTGGGCGTCCCGTGGGCGCCCGGCGGAGACCTCGAGGGCTGCGCGCCCGACACGCGCTTCTTCGTGCC
CGAGCCCGGCGGCCGAGGGGCCGCGCCCTGGGTCGCCCTGGTGGCTCGTGGGGGCTGCACCTTCAAGGACAAGGT
GCTGGTGGCGGCGCGGAGGAACGCCTCGGCCGTCGTCCTCTACAATGAGGAGCGCTACGGGAACATCACCTTGCC
CATGTCTCACGCGGGAACAGGAAATATAGTGGTCATTATGATTAGCTATCCAAAAGGAAGAGAAATTTTGGAGCT
GGTGCAAAAAGGAATTCCAGTAACGATGACCATAGGGGTTGGCACCCGGCATGTACAGGAGTTCATCAGCGGTCA
GTCTGTGGTGTTTGTGGCCATTGCCTTCATCACCATGATGATTATCTCGTTAGCCTGGCTAATATTTTACTATAT
ACAGCGTTTCCTATATACTGGCTCTCAGATTGGAAGTCAGAGCCATAGAAAAGAAACTAAGAAAGTTATTGGCCA
GCTTCTACTTCATACTGTAAAGCATGGAGAAAAGGGAATTGATGTTGATGCTGAAAATTGTGCAGTGTGTATTGA
AAATTTCAAAGTAAAGGATATTATTAGAATTCTGCCATGCAAGCATATTTTTCATAGAATATGCATTGACCCATG
GCTTTTGGATCACCGAACATGTCCAATGTGTAAACTTGATGTCATCAAAGCCCTAGGATATTGGGGAGAGCCTGG
GGATGTACAGGAGATGCCTGCTCCAGAATCTCCTCCTGGAAGGGATCCAGCTGCAAATTTGAGTCTAGCTTTACC
AGATGATGACGGAAGTGATGAGAGCAGTCCACCATCAGCCTCCCCTGCTGAATCTGAGCCACAGTGTGATCCCAG
CTTTAAAGGAGATGCAGGAGAAAATACGGCATTGCTAGAAGCCGGCAGGAGTGACTCTCGGCATGGAGGACCCAT
CTCCTAGCACACGTGCCCACTGAAGTGGCACCAACAGAAGTTTGGCTTGAACTAAAGGACATTTTATTTTTTTTA
CTTTAGCACATAATTTGTATATTTGAAAATAATGTATATTATTTTACCTATTAGATTCTGATTTGATATACAAAG
GACTAAGATATTTTCTTCTTGAAGAGACTTTTCGATTAGTCCTCATATATTTATCTACTAAAATAGAGTGTTTAC
CATGAACAGTGTGTTGCTTCAGACTATTACAAAGACAACTGGGGCAGGTACTCTAATATAAAGGACAGGTGGTGT
TTCTAAATAATTGGCTGCTATGGTTCTGTAAAAACCAGTTAATTCTATTTTTCAAGGTTTTTGGCAAAGCACATC
AATGTTAGACTAGTTGAAGTGGAATTGTATAATTCAATTCGATAATTGATCTCATGGGCTTTCCCTGGAGGAAAG
GTTTTTTTTGTTGTTTTTTTTTTAAGAACTTGAAACTTGTAAACTGAGATGTCTGTAGCTTTTTTGCCCATCTGT
AGTGTATGTGAAGATTTCAAAACCTGAGAGCACTTTTTCTTTGTTTAGAATTATGAGAAAGGCACTAGATGACTT
TAGGATTTGCATTTTTCCCTTTATTGCCTCATTTCTTGTGACGCCTTGTTGGGGAGGGAAATCTGTTTATTTTTT
CCTACAAATAAAAAGCTAAGATTCTATATCGCAAAAAAAAAAAAAAAAAAA

FIGURE 4587A

GGGGGGGTTTTGTGTAGGAAAACCATAATTGTTGATTTTAAATACAGGTACCTGCCACCGGTAATTAGCATGTAA
AGCTTTGTCTATATTCCTTCCTCCAACTTGGGTTCAATCAGAAGATACTTGTTGGAATGAACTGAAGAAACTTCC
CTTTTGATAGATTGAACTGAAACTGCTTATTGTATGTGGTTATATTTGGTAAAAGTTGCGTGTGAGCTTTTTACA
AAAGGGTAAGAATTGTGTTGAATTTTAATTCACTTGTATAAGAAAACAATTTAAAACTCTCATAATAGGTCTTAA
ATATTTTTACTTGCTATTCTCCCTCAGTGATATATACCTCTTCCTTTCCAGCTTTATGAAACATCTATTTAAGAT
TTAAAGTTATCAGTGATCATAGTTTGGAGATAAAATTTGACCCAGGAATGAATATTTATTTTAATTAGGTTTTCA
TACTTATTAAATGTAATTAAAGACTTGGGTCTTGTCTGAGTTCAGTGGAATTGAAACCACAACTTTAATTTCCTT
ACAGAAAAACTTAATTTGTTTCTTTTAGTGCCACACCTTAAAAAGAAACCCCAAACTAGCTCCTCAGGAATATAG
TTTTATTTTGCAAGCATACCATCTAGCTGAAATTGTATACACATGAATATATGTAGACTTTTCCTGTTGGGCTGA
AGTGTGTGCTTATAAATGTGTTTAGTTTTTAAGCTAAACATTCAGTTAACAGTCTGTGCATTGATTAGCATAGGG
CAGGTGGTGAGGACCTGGATTTTTATTAAACAGTTTAGTAATTATAAAAGTTTCTTGTGTTTACTAGTAAAGAAT
TTTAAAAATCTATTCTAATTCAACAAGTTTTTAAAATCAACTTTGTAATTTGAGGGGAAAATTTGGGGGGAAGAG
GTGGGTGGGCCACTAAGTTACCTCTCTTTCATTTGGTGGCCCTTCCAGGCCATTGAAAATAAAGACGTTGGCTCC
AGTTTGCACATTGGGAAGAAAGCATAGAAATTTGACTTGTATATTAAAAATAATAGAAATGTAATATGTATATTA
AGAATGCATAGGTCTGTATTCTGTAAGGGGCTCTGAAGAACAATATGGCACTGCTGTGTTCAGTGTGAATTCACT
GCCTGGGAGAACTGCAGGAATGCTTGTCTTCACCATTGTGTTCTTACAACGAATTCAACTTTCCATGGTTTATCT
TGACAAAATTTACATGTGTTTAGGTTACTTGTATATTGATATATTTTTTTAATCTTCAGTTTTTGTCTTCCTTTT
GCCTTTGTGTTTTCAGAAGTAACACATGAACACTTTTTAAAGTACATTACAGAGAAGAAAACTGTGAGCTATTAT
ATAGTGTTTCTTTTTTAACACAAATCTTTTAACTTTAAAAAAAGGCAAAAATTTTTTTTTCTACTTCCCACCCAG
CTTACCACCTTGATCTCTTTAACTTATGTTCTAAACTTTGGTGTTAATGGTGGTGTCTAGCATGCTAGTAGTTAG
ATTTTATTTAGATGCCATAACTGGTAATACAGCTTTTATTTTGACTATATTAATTTAGTTTTTTGAGGGGAAGTT
TGTTTATTCTGTGACTCTCAAAGCACACAGAGGTTTTAAAATATATATTATTAAGACTGACGAGAAGAGGAAATG
GGAGGGAGTAACATCACAGAAGTGCTGTTGTTCAACTGTTCTTCAATATAGTTGCTAGTAGGTTTGTATTTACTC
AGTAAGGAAGTCAGTGACCTGAACTACCTATAAAAATTCAGCAGTGCTGCAGTGTTGCTTAAGTGAAACCCTTTG
GCTATCTAGTAGTTTTTATGCTACTGAAACTTGGATTACTGTATGATATTCAGCTTGTCTTGGGCCCTCTATGTA
GACAAACATTCATATTCATAGTAGTGTTGTATACTGGCCTGTTTTTATAACTTTATTTTTCAAATATTAACAACC
ACTGCTTTCAGAGTGGTTATTTTGTTATTTTTGAAGCAGGAAATAACCATTTGTATTTGCACCTGCGTATTGCAT
ATGAATTATGGTATACTTGGCAAATGCTTTTCTTTTACCTGTGAAAATTCTGAAAGCTGGTCCAAGCTACATTGC
ATACCAAATTGTGCTCTTATATATTATTTGCATCGTGTCCTTTTTAATCAAATAGCATGTTTTAGTTTTATTATA
GTAGCTTTTGCTGTAAGAATGTCACTTGCTTATCTTTTATTGTACTTGAATTCTTAATCATGCTTTTAACATTGT
ATTTAACAAATCATTTCGTATTAGGTTCCATTAAAATGTCATTCCTTTGAAAAGGCAAGGGATTTCCACTTTCAG
AATTTGAAAATGAAAGTAGCATGTTTATCTAAAGGCAGAAAATAGTTCGGACTTGGTATTATGAAAATAAGTAAT
GGTTTCTGGAGAGGATTTGTTTAGATTTGCACAGATGGCGATGGCACCTTTTACTTAAATTAACATTAATCAACA
GTGCTAAGGAAAATTTACACAAAATTACAAGATAAAACATGGAAATGTGTGCCTTTCAGTATACAAACTCTTGCT
TGGTGGCCATTTGGGTAATCAGACCATTTGAATGCCTGAGAGCATGTTTAATTTCTGTGGAGTGCCACATATGGC
TAAAACAACTCTTTAATGTGCAATTAATTTCTAGAGTAAAATGTCTGTTATGTGAGGGGGATCTTTATGTTGGGC
TTTTCTATTTTTTAAATGTTCACATTTCTTTCTGTTAATTAAAATGCCATCATAATGTCACATTTACACTGTTGC
CTCTTTTAAAAGCAAAGCCACTTTCTTGTTCTAAGATTACATCAAGACTTGAGCAGTGTGTAGTAATTAAAATGT
GTGCTTAATGAGCATAATAGATTCTGGTTTTAGGAAATAACATATAGCTTTTATATGAATATTTTCTTTTGCTAT
AATGAAAGTCACAGATTTTTTTTTCCTGGCTTTTATGGAGGAATGAAAAGAGTTGTCTCCCTCTAAGAGTATAC
TATTTTTGATTCTCATAGCAATAATGTCACCATTCTTATCAGAGGGTAAATACCCCTTGTATAGGAAAACAGACA
TAATTTCCTCTTGGGAGTTCTCTTTATGACTTAGCATTTTCTTCTACTTGAGAAAATTCCTGTTTTTCCGATTAT
TTCATCTTGAACTTTCTTTTTTTTAAGCTTTTGTGCAATGTAATAGTTTGTTGATCCATCTTTGTACATTTTCAT
TTTATTTCATGTCTTTCTCTCACCTACCTGTCAGAATCAGCTATAGCAGATTTTGAATTCTTTAGTTAAAAAATA
GTTGCTTTACTTGTTTCCTCATGAGTTTGTTAAATAGCTTTGCATTTTAGTCCTCTATTATGCTATGAAAATTAT
TACGAAGTTTATATTGTTCCCTTTTTAAGCCTGCCTTACTCTTGTCTTTTGTCATTGTCTATGGTTTAATGAAGA
ACACACCAAACTAACATTTTTGTTTATTTTGAGGAACAAAAAAACTTTTCTCTTTTAAGGGAAGTTACTACACAT
TGAGTTAGTAACTACTCTTTCAGTCAAGGTTCCTTAATCAGTCCAGTCTACATCAGGACTATGACTTGGGGGGCG

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FIGURE 4587B

GGGCTAATCCTTTTTGCTGTTCTGAGCTACTATTGTCAACTGCTGTTGTACATACTGTTATGTGTAATGGCGTAA
ATATATTTATTATGTTTGTAAAATTCATTGCAGATCAAGGTTGCTCTTCTGTGATATATGGGATATTATGTTTTA
AAGACCATCTTGGAATACAATTAGAGAACTTAGTATTTTGATGTACTAAGACCTATTTTAAGTTTAATATTCTAC
TTTGCAAAAACTTTAATTAAAGATGTTATTTAAAAAAAAATGTTGCTTGCTTTGCTTACTAGTATATGGCATTGT
TATAGATAATTGAATAAAATACAATTTAGAAAGGAAAATGCTTTACATTGTTAATGAGAATTCCATTTAACAACA
ACAAAAAGATGCTAAATTCTGTACCTTAAAGATAAGTAGATTGAGATGTCAATTTGAATTAGTAAACTGTGTTAC
AAATGATTAATACTAGCTTTTAAAAAGTTGTATTTTCCAGGCACACAGGAATTTAGGTTGGGCGAATTCACACTA
ACAAATTATAACTAAAAATTGGTATAATTAACATTGTTTTTCAAAATAAAGATTACTCCTTGTGAAATATTAATA
ATTAACATATTGTATTAAATAAGTATTTCTACTCCAAAGTATAGATTACTTAGGATAAAAACATTGTTATTTCTC
TGTTTAGTCAAACCACTTCCTCTTAGTTCAGAGGTTATAAATAATTGCATATTAGGAGAATTGGATTACTGAGGT
TTGTATTGCGTATTGAATATATTTTGTGTTATTTTAGAAGATAATAATTAGCAGGTATTTTAATTTTATAGTTAA
TTCAGCTGAATCATTAAGAAGCTCGCCTTTTTGTATTTTTTTATCCTGTTAACAGACTATCTAGAAAACATGCAA
ATTTTAACTATTAACATAATCATAATAAAGATATCTTATTTATTGCCAGCAAAAAAAAAAANNNNNNNNNNNNN
AAAAAAAAANGGGGGG

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FIGURE 4588

MQILTINIIIIKISYLLPAKKKXXXXXKKKX

FIGURE 4589

GCGCGGACCTTTCAACAAGGGCTTTATTAATTCTCACGCTGCGGCCCTGGAAAGCGATGGAGGTGGCGGCTAATT
GCTCCCTACGGGTGAAGAGACCTCTGTTGGATCCCCGCTTCGAGGGTTACAAGCTCTCTCTTGAGCCGCTGCCTT
GTTACCAGCTGGAGCTTGACGCAGCTGTGGCAGAGGTAAAACTTCGAGATGATCAATATACACTGGAACACATGC
ATGCTTTTGGAATGTATAATTACCTGCACTGTGATTCATGGTATCAAGACAGTGTCTACTATATTGATACCCTTG
GAAGAATTATGAATTTAACAGTAATGCTGGACACTGCCTTAGGAAAACCACGAGAGGTGTTTCGACTTCCTACAG
ATTTGACAGCATGTGACAACCGTCTTTGTGCATCTATCCATTTCTCATCTTCTACCTGGGTTACCTTGTCAGATG
GAACTGGAAGATTGTATGTCATTGGAACAGGTGAACGTGGAAATAGCGCTTCTGAAAAATGGGAGATTATGTTTA
ATGAAGAACTTGGGGATCCTTTTATTATAATTCACAGTATCTCACTGCTAAATGCTGAAGAACATTCTATAGCTA
CCCTACTTCTTCGAATAGAGAAAGAGGAATTGGATATGAAAGGAAGTGGTTTCTATGTTTCTCTGGAGTGGGTCA
CTATCAGTAAGAAAAATCAAGATAATAAAAAATATGAAATTATTAAGCGTGATATTCTCCGTGGAAAGTCAGTGC
CACATTATGCTGCTATTGAGCCTGATGGAAATGGTCTAATGATTGTATCCTACAAGTCTTTCACATTTGTTCAGG
CTGGTCAAGATCTTGAAGAAAATATGGATGAAGACATATCAGAGAAAATCAAAGAACCTCTGTATTACTGGCAAC
AGACTGAAGATGATTTGACAGTAACCATACGGCTTCCAGAAGACAGTACTAAGGAGGACATTCAAATACAGTTTT
TGCCTGATCACATCAACATTGTACTGAAGGATCACCAGTTTTTAGAAGGAAAACTCTATTCATCTATTGATCATG
AAAGCAGTACATGGATAATTAAAGAGAGTAATAGCTTGGAGATTTCCTTGATTAAGAAGAATGAAGGACTGACCT
GGCCAGAGCTAGTAATTGGAGATAAACAAGGGGAACTTATAAGAGATTCAGCCCAGTGTGCTGCAATAGCTGAAC
GTTTGATGCATTTGACCTCTGAAGAACTGAATCCAAATCCAGATAAAGAAAAACCACCTTGCAATGCTCAAGAGT
TAGAAGAATGTGATATTTTCTTTGAAGAGAGCTCCAGTTTATGCAGATTTGATGGCAATACATTAAAAACTACTC
ATGTGGTGAATCTTGGAAGCAACCAGTACCTTTTCTCTGTCATAGTGGATCCTAAAGAAATGCCCTGCTTCTGTT
TGCGCCATGATGTTGATGCCCTACTCTGGCAACCACACTCCAGCAAACAAGATGATATGTGGGAGCACATCGCAA
CTTTCAATGCTTTAGGCTATGTCCAAGCATCAAAGAGAGACAAAAAATTTTTTGCCTGTGCTCCAAATTACTCGT
ATGCAGCCCTTTGTGAGTGCCTTCGTCGAGTATTCATCTATCGTCAGCCTGCTCCCATGTCCACTGTACTTTACA
ACAGAAAGGAAGGCAGGCAAGTAGGACAGGTTGCTAAGCAGCAAGTAGCAAGCCTAGAAACCAATGATCCTATTT
TAGGATTTCAGGCAACAAATGAGAGATTATTTGTTCTTACTACCAAAAACCTCTTTTTAATAAAAGTAAATACAG
AGAATTAATTATTCTAACATATTGGCCTCTTTGTACTGGAAAAGTATTCAGTGGTACCTGGAGGTCTGGACAGTT
ATACTGTAACCTCTTAAGTTTTAATGTGCTAAATATATCTTGTATGATTTTTTATTTTTTAATAACATTGGAAAT
ATATTCAAGAGATTATGATTCTGTAAAGCTGTGGAATGAAGCTGCAGATTTAGAGAACATTGGCTTCTGAAAAAA
AAAAAGAGTGAAGATAGTACTAGCAAGTATACTTATTTTTTAAAACAGGCTAGAATCTCATGTTTTATATGAAAG
ATGTACAATTCAGTGTTTAAAAATAAAAATATTTATTGTGTAAAAAAAAAAAAAAA

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FIGURE 4590

ADLSTRALLILTLRPWKAMEVAANCSLRVKRPLLDPRFEGYKLSLEPLPCYQLELDAAVAEVKLRDDQYTLEHMH
AFGMYNYLHCDSWYQDSVYYIDTLGRIMNLTVMLDTALGKPREVFRLPTDLTACDNRLCASIHFSSSTWVTLSDG
TGRLYVIGTGERGNSASEKWEIMFNEELGDPFIIIHSISLLNAEEHSIATLLLRIEKEELDMKGSGFYVSLEWVT
ISKKNQDNKKYEIIKRDILRGKSVPHYAAIEPDGNGLMIVSYKSFTFVQAGQDLEENMDEDISEKIKEPLYYWQQ
TEDDLTVTIRLPEDSTKEDIQIQFLPDHINIVLKDHQFLEGKLYSSIDHESSTWIIKESNSLEISLIKKNEGLTW
PELVIGDKQGELIRDSAQCAAIAERLMHLTSEELNPNPDKEKPPCNAQELEECDIFFEESSSLCRFDGNTLKTTH
VVNLGSNQYLFSVIVDPKEMPCFCLRHDVDALLWQPHSSKQDDMWEHIATFNALGYVQASKRDKKFFACAPNYSY
AALCECLRRVFIYRQPAPMSTVLYNRKEGRQVGQVAKQQVASLETNDPILGFQATNERLFVLTTKNLFLIKVNTE
N

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FIGURE 4591

GTCCTGGGGAGATTGGAGGGGACGGCAGCGTTCTGCATGACGGAGGCGCTGCCGGGCCCCGGGTCTGTGGGGGCC
GTGCTCTCAGGGCGTGTGCGGGACGCCACCTGTGCACACCTGCTCAGAGCACGGCTCCTCGCAGGGGTGAAGGGG
CAGACCAACGAAACCAGATGAGACCAACGACACCATGCGAGACACGCTTGCAGACACTGTTGTTTTGGAAATGTG
CTTCCCTCCATCTGAAATCTCATCCCTCCACCCGCCCACTCGGGCAGCTGTGCCGTGGGCAGGGCATGCGCTCCC
CTGGCTGAGCACCCCAGAGATTCTCCTGCACCTTCCTCATGCCGCACGCTGCTCATCCGTCTCCATGTGTGTTTA
GATCCATGCCATTCACTGACTCACTAACACCTGCAAAATCTTTAAGGAAAAAAGCTGAAGGGTACGACCATGCAC
ATATGTGACCTGGAAAATGCAAATTTAGATCTTTTATGATTTAATTATTATTGTTTCCCATAGAAGTTCCCTCCC
TTTGAAATTAATATATAATGTATAAATTCTGCACTGAGCCATGGCGGAGCTGGGCAGCCCCTAGGTTAGAGTGGA
GACGGAGGCCCAGGCGCAGGGGTCACACCTCATCTGGTTTCCTTCCCATCTCACAGCTTAGCTTGTGCTTCTCAA
CACCAAGTCTTTAAGAGCAATAAAAACTACACCATGAATGTTTGAATTTTTTTTTTTTGGGGGGGGGAGGGTGGA
TTTTGCTTTTCATCCAGAAGGAAAAGGGGAGGAGAGCTCCTTTACATTTTTTAAATTAAATTCATAAATCCCAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4592

GGCACGAGGCGCGAAAGGAAAGAGGTCGGGAGCGCTCGCGAGATCTCGGACCACCCAACCTGAAAGGTGCTTAGG
AAGTTGAAAGGCCCAGAGGAGGCCTCCGGGCAA**ATG**GCCGGAGCTGGACCGACCATGCTGCTACGAGAAGAGAAT
GGCTGTTGCAGTCGGCGTCAGAGCAGCTCCAGTGCTGGGGATTCGGACGGAGAGCGCGAGGACTCGGCGGCTGAG
CGCGCCCGACAGCAGCTAGAGGCGCTGCTCAACAAGACTATGCGCATTCGCATGACAGATGGACGGACACTGGTC
GGCTGCTTCCTCTGCACTGACCGTGACTGCAATGTCATCCTGGGCTCGGCGCAGGAGTTCCTCAAGCCGTCGGAT
TCCTTCTCTGCCGGGGAGCCCCGTGTGCTGGGCCTGGCCATGGTACCCGGACACCACATCGTTTCCATTGAGGTG
CAGAGGGAGAGTCTGACCGGGCCTCCGTATCTC**TGA**CCACGATGGCGCTTACCTTTCAGACTTCATTAAACTTAT
GACCGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4593

MAGAGPTMLLREENGCCSRRQSSSSAGDSDGEREDSAAERARQQLEALLNKTMRIRMTDGRTLVGCFLCTDRDCN
VILGSAQEFLKPSDSFSAGEPRVLGLAMVPGHHIVSIEVQRESLTGPPYL

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FIGURE 4594

GGGCCCCTCTCTACAGGGGGACACACAGGCTTAGTTTAGTATATGTCTAACCAGATTTTGCATGTCAAGCATTTG
TCCTTTTCCTGGCTTATGTTTTCTTGTAGAAATTATATAAACCCTATCAAATCCACTACTAGGTAAATTTTTAAA
CCATGCAGCTTTATTACTCTCCTCCCCCAAAGAATGTAGTTTGAAATTTTCTCATTTCCATAGTAGAGGCCCTAA
CTGCCATTGTATTACTAATAATGCAACATGAAATTGAAGGTGCCTAACTGCTCAAAAAACAAAATCAGCCATCAT
ACTGTAACTCTGAGAGGAATGAGAGGTGGCACAGGCACGAGTGGGCTCAGCCCGTGTGAGTGAGGAGAACTGAGG
AATCCTAGGGTGCGCATCCTGCATCCTGGCTGCACGTTTGCTGCAGAGTATGTTTTTCTTTCTTGCCTCCCTTCA
GTTTTCTTCAGTTGCGTTCAGTGTATCTTCTGGAACCAATAGTGCCCTGTGTTCTCAAGTCTCTAAAATGCTAAG
ATCTGAGCAAAGTCAAGCAGCTTACACTAGGCTTTTTTTACAGCTGTGCTTGAGAACATTTCCGAGTGGACCAGG
GCCTTGAGGAGCCTGTTTTTCAGCAAATTCAACAGATGTGTGCAGTGATTCCCTCCGTTTTGTATTTGACACCTT
CATTTAAAATGCTAAGATGCAATATCATTCACTTCAAAGTGGGGAAAATGCAGAATTGTGTTTCCTTTTTATCTG
TGTGATTCCTTAAGAAACATGTTTTTAAAATATGTGTTCTAAATGGTTTTTTATTCTGTATTACTGCTTTGGCCA
TGTGGCTCTCATGACTTTCATTGTACCAGATTCTCAGCTCCCTGAAACATGGGGACGAGAAGCTCTGGAATTACA
GCAAGATTTTTGTTCCATGAGCGCAATACTGTATCATTAACATTTTTAATGGTATGGATTTTATAGCATCTGTGT
ATGTTTGCAAATATTAAGTTATTACATGTTTTAAAATGAGCGTTTTTCATCTTAAATTTTATATGTTTGCAAATA
TATTTTTTTAATAAAATTTCAAAACCAAGTTTTAGCACCTACTAGAGAACTTACTGAGAGAGCTCATTTCAAATT
CATCAGAATGCATTGAGCTAAATCCGGAATGAAAGCTTGACAGATCCCAGGAAATTAGACTCTGGGAAAGA

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FIGURE 4595

APLYRGTHRLSLVYV

FIGURE 4596A

GGGTGGCGGGGGGTTGCAAGTGGGAAGCCTGCTGTTCAGCTGCCCGGGCTCTCCGCCTCCCCCCACCCTGTATTG
AGGCTGGGTCTGGGGAACCTGTGCTCAGCATTCCACCCCCTGGAGCTTGGGCTTGGTCTTCCCTGCGGGTCCCTG
CGCTGACATTCAGGCGGGGAGCCAGGAGGCCTGGGCGCCTCCAGAGCCCGCCGGGGGAGCCGGGCGAGGGTTCTG
GGCTCTGACGGCGGGGTCGCAGGGTCGCCCGCCTCCTGGACACGTCTGTAGGCCTAGGGAAGCCTGCCGGCCCGG
GAGGTACAGAGTAGGAGAAGCCAGATCCCAGGGCGGACAACGAGAAGTCGTCAGGCTAAGAAATGGCATTTCAAA
AGGCAGTGAAAGGGACGATTCTTGTTGGAGGAGGTGCTCTTGCAACTGTTTTAGGACTTTCTCAGTTTGCTCATT
ACAGAAGGAAACAAATGAACCTGGCCTATGTTAAAGCAGCAGACTGCATTTCAGAACCAGTTAACAGGGAGCCTC
CTTCCAGAGAAGCTCAGCTACTGACTTTGCAAAACACATCTGAATTTGATATCCTTGTTATTGGAGGAGGAGCAA
CAGGAAGTGGCTGTGCGCTAGATGCTGTCACCAGAGGACTAAAAACAGCCCTTGTAGAAAGAGATGATTTCTCAT
CAGGGACCAGCAGCAGAAGCACTAAATTGATCCATGGTGGTGTGAGATATCTGCAGAAGGCCATCATGAAGTTGG
ATATTGAGCAGTATAGGATGGTAAAAGAAGCCCTTCATGAGCGTGCCAACCTGCTAGAAATTGCTCCCCATTTAT
CAGCTCCATTGCCTATAATGCTTCCAGTTTACAAGTGGTGGCAGTTACCTTACTACTGGGTAGGAATCAAGCTGT
ATGATTTGGTTGCAGGAAGCAATTGCCTAAAAAGCAGTTATGTCCTCAGCAAATCAAGAGCCCTTGAACATTTCC
CAATGCTCCAGAAGGACAAACTGGTAGGAGCAATTGTCTACTATGACGGACAACATAACGATGCACGGATGAACC
TTGCCATTGCTCTGACTGCTGCCAGGTATGGGGCTGCCACAGCCAATTACATGGAGGTAGTGAGCTTGCTCAAGA
AGACAGACCCCCAGACAGGGAAAGTGCATGTGAGCGGCGCACGGTGCAAGGATGTCCTCACAGGGCAGGAATTTG
ACGTGAGAGCCAAATGTGTTATCAATGCCACGGGACCTTTCACGGACTCTGTGCGCAAAATGGATGATAAAGACG
CAGCAGCTATCTGCCAGCCAAGTGCTGGTGTCCATATTGTGATGCCTGGTTATTACAGCCCAGAGAGCATGGGAC
TTCTTGACCCAGCGACCAGTGATGGGCGAGTTATTTTCTTCTTACCCTGGCAAAAGATGACGATCGCTGGCACTA
CTGATACTCCAACTGATGTTACACACCATCCAATTCCTTCAGAAGAAGATATCAACTTCATTTTGAATGAAGTGC
GTAATTACCTGAGTTGTGATGTTGAAGTGAGAAGAGGGGATGTCCTGGCAGCATGGAGTGGAATCCGTCCTCTTG
TTACAGACCCCAAATCTGCAGATACTCAGTCTATCTCCCGAAATCATGTTGTTGATATCAGTGAGAGTGGCCTTA
TTACTATAGCAGGTGGAAAGTGGACAACTTATCGGTCTATGGCAGAAGATACCATAAATGCTGCTGTCAAAACTC
ATAATTTAAAAGCAGGACCAAGTAGAACAGTTGGGCTTTTCCTTCAAGGGGGTAAAGATTGGAGCCCCACACTCT
ACATTAGGCTTGTGCAGGATTATGGACTTGAAAGCGAGGTGGCACAGCATCTTGCCGCCACCTATGGTGATAAGG
CCTTTGAGGTGGCCAAAATGGCAAGTGTGACTGGCAAAAGGTGGCCTATTGTTGGAGTACGTCTTGTGTCAGAAT
TTCCATATATTGAAGCAGAGGTGAAATATGGGATTAAGGAGTATGCCTGCACTGCTGTGGATATGATTTCACGTC
GTACTCGCCTGGCCTTTCTAAATGTCCAGGCAGCAGAGGAAGCCCTACCCAGGATTGTTGAACTGATGGGCAGGG
AACTGAATTGGGATGATTATAAGAAGCAGGAACAACTTGAAACAGCCAGGAAGTTTCTATATTATGAAATGGGCT
ATAAATCTCGATCAGAACAGTTAACAGATCGCTCTGAAATTAGCCTACTGCCTTCAGACATTGACAGGTATAAGA
AGAGATTTCATAAGTTTGATGCAGACCAGAAAGGCTTTATTACCATTGTTGATGTTCAGCGTGTATTAGAGAGTA
TCAATGTCCAAATGGATGAAAATACACTCCATGAAATTCTAAATGAAGTTGATTTGAATAAAAATGGACAGGTTG
AACTCAATGAATTTTTGCAGCTGATGAGTGCTATTCAAAAAGGAAGGGTATCTGGAAGCCGGCTTGCTATACTAA
TGAAAACTGCAGAAGAGAACCTCGACAGAAGAGTTCCAATTCCAGTGGACCGTAGTTGTGGAGGATTGTGAGTCT
GGGCAGTAAATCCACAGCCAACAAACATAGAAACGACAAATCACCATGTAACAACCAGAGATGACTGAAACCACT
CTGAAATAATGAATGTGGATAGCTGCCTTTTTTAACACTAGAAAACATTCCAAAACTTTAAGGTGTTGGTGTATT
TGCCAGCTTTATTTGCTGTACTTTATTTGTATTTGCCATTCAGTCTAGCTTTTAAGTATATTTTTTTCTTTTTCT
CATTTTCAATGCACATTAGTTTTGCATCTGTTTTGTGACCTGTTAGATGTGACACATTCTCTTTTTGTTTATTCC
CTTATTCTAAATGAGTTCTAAAAACATAATATTTTGGCAAAAATTGAAAAAAGCTGGAGACATTTTGTGACATGC
ATACAGATAGCATGTGTTATTAAAAAGAGTTGCCTATTGAAATGATCGTGTTTCTGGAGAAATTAAGCTTATAGA
CAGCATGTGTTATTAAAAAGAGTTACCTATTGAAATGATAGTGTTTCTGGAGATTTCTCAGCCCCATCTTCCTCC
AGCTTGTCTACCTTCCTCATGCAAACAATATTCCACATTTTTATATCTAGAGCATGACTGGCTAACTGGAGAGGG
AAGGAAAAGTTTAGATCTGGTTACTGGAGCAAGTCTCAAAGAGAAACTCTGAAAGCTTCCAGAATCACAGGTATA
AGATAAGGATAGCATTGACATTTGCTGGGAGTTACAGTGATAGTTTCATCTCAGCAGTTCATTTTTTTCTTCAGT
CACTGCTGGTTTTCTTTGACTATTATAGTTGCCAGGAAGATCCTTGCTCTTCTTACTTTAAAACCAGCATTTAAG
TGGCAATTTGGATGTAATAGGATGAGACCAAATTTATCTAATTATTACAGTAGTAATACATTTAAGAGTTAAAAA
TGTGTTTTTATATATCCACATATGATAACAAAAGATTCAATTCCCAAGCCTAAATTTTGAAGCATGTGGTATTGT
CAAATCTAGCTTACCATCTTTTTTGGGGGTACTTGCAACCATAGTAAAGGAAGATGGAATAGACTTTAGTTAACT

FIGURE 4596B

TTAATTATAATTATATGTTAAATAAGGCACATAACCAGTTTCCAAGGTCATCATGGTTGCTTAAAGTCTTTCCCC
TTCTGTACTCCATGGAAATATTCTCAGTAAACCAAAAACAAAAATGGAAAAATAATCACCAACCCCCATCCCGAC
ACACACACACAGTCCAAAGCAAAAGTCAGTGTGTATTGAATTTAACAAGTAATGCAGTTTGGGATGCTTTTGCTA
CATTTTGGTGGCATTTTAACTAGTTATCTGAATATTTATTAATCGTACTTCCTCTTGTAAAGTTAACTACTTACT
TTTTTGTTGTTGTTTTTTTAACATCAGGTTCTGTATCTAATAGGAGATGTAACACTTTATTTCATGGCAGGTTTT
TATTGCAGAGACTTGAAGTCTTAGTTTTTTAAACTGGCACATAAAACACTTTTTGCTGTTATTTTTATTTATGTC
AATACTGCAGAGTATCTTTATGCCTTATTCAAGTGGATTCTGAGCCTGTATGTCACAATGTAAACACTGGAGGTT
CACTCACCTACGCACTCACCCACCACCTCTGAAAGAAACAGAAACTGCAGAGAAAGACAGCATCTTAGCTCATTT
TGTTTTTAAATGAGGTTTTAGACGCTTGCCACTTCCTAAGGGAAATCCTAAAACAGAGCAAGTGATGCTCCCAGG
TATCACTGTGAACTTTTTTCTTTCAAAGTGTGAATTTTTACACTGGCTTTTTCATTTTTTTAAAGTAATTGAAGC
TTGTGGCTTTACAACTTAGTGTTTTTTGCTATCCAGATAACAAGTTTCATTGTTTAGAACCCAGTGACACTTAAT
AGGTAGATAAATTGTCCTTTAAAATATCCCAGATGATATACACAATATGGTACATTTGTGCTCTCTCTCTCTGTT
TTTCTCTCTTTCTCTTTCTAGTTAGATCAAGATAACGATGACTTGTACCCTCCCTGATTCTGTTACAGTAGGGCC
CGGGCAGATCTGTGTTTGTTAAACAGGCCTTGTTTGTGCATGCTTTGCTATGAATGAAGTTCCTTTAAGGACAAA
GAAAAGCACACTTTTCTTCTTTTGAGCATATCTGCTTTTACTTTAAATCTGCTAATTTCTAAAATGTAGAGTCCT
TCACCAATCCCAGAGACTCAATTTGGAAATGAACTGATTTCAAGCCGTTACTGTCAATAAAGCACCCCAGCATTT
TGTATAAGCTCTTAATTAAACCTGTACAGCTTCTTTACCTGATTTAAGAAAGGGAGACAAGCAATAGGGGGGAAT
AAGCTTCTTCAAAATTCATTCCAAGCACAAAAGAAATTTTTTCCCTTTGCATATAAACTTGACATCAGTTGATTC
TGTTGGGGTCGGGGTGGGTATGCAGGGATTGCCTTTTATTATCAAGTGATTTATTTCAAGAGCCTTTGAGGGGAT
TCAGGTGAAGGAACCCCCATCTGTGCTGGAGAGTTGGATACTCCTTTAAATAGCCCCCACCACAGTCATAACAAT
AATGATAATGCTGGATTATTTGTTAAGCCAAGGTTGTCTGCCTCATATCCATCATGCTGTTTGCAATATTCTTGC
TTTCAATCAATTTATACTGAGTGTAACTTTAGGATTTCTGCTATTAAATGCATGCTCTCTATCCTGCTTCAGTTT
CTGGCTTTGCTTTGTCTGTTTCAAAATATGTAGCTTCCTCTTTTGTACAACAAAAAACTCATTCTCACTTTTACT
AAATATACTGTAGGAGTCATCATTGATGTTATTTTTCTCTTATGTATCTGTAAAGATTTTTGGCATATGAATGTA
ATATTAAAGTCAATGATGCTATAACTTGCGATGTTTGCATCATGTCAACCTTTTTGAAGGAGTGAAAAAGCCCTA
CTATGTTTTTAAATAGCAAGTGTAAGCTCAGTGCTAGAGTGGATATACACACCGCATGTTTTCATATGTGGCACT
TTTATGTATCATGTTGGGTTATTGTTCTAGACTGGACTGTTAAATACTATGTTTGAGGCTGGGTTGTCATTTTTA
TAACTGTCTTGGTGTTTTATGGCCATTATTTATTACTTTTGATACACAGAATGAGCTGCATGCATTTATAGAGCA
ATAAGAGGATGTATTTAATGTGCCTTGTTTTTAACTGAATAAGAACTGGAAGCATGAATCAATAAAACTGATTAA
AATGGTCTATTTGCTAGCATTTTGATGTTACTTGCAGTCAGATAACTTTGATTACTGTTGAAGTTTAAAAAAAGT
TTGAAAATATTTTTACAAACTGTGTTTTTGATGACACAAAAGTGAAATATCTACAGAGATAGATGTAATTTTATA
AGACTGCCAGAATTATTTGTATTAATTTGTTGCTGTAGCCTTTAGGGCATGACTTCTGTATTTGTGCAATCCTAT
TCTACAATTACATTCATCCTATTACAACTCAAAGAAAAACAAAAAGTCGACGCGG

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FIGURE 4597

MAFQKAVKGTILVGGGALATVLGLSQFAHYRRKQMNLAYVKAADCISEPVNREPPSREAQLLTLQNTSEFDILVI
GGGATGSGCALDAVTRGLKTALVERDDFSSGTSSRSTKLIHGGVRYLQKAIMKLDIEQYRMVKEALHERANLLEI
APHLSAPLPIMLPVYKWWQLPYYWVGIKLYDLVAGSNCLKSSYVLSKSRALEHFPMLQKDKLVGAIVYYDGQHND
ARMNLAIALTAARYGAATANYMEVVSLLKKTDPQTGKVHVSGARCKDVLTGQEFDVRAKCVINATGPFTDSVRKM
DDKDAAAICQPSAGVHIVMPGYYSPESMGLLDPATSDGRVIFFLPWQKMTIAGTTDTPTDVTHHPIPSEEDINFI
LNEVRNYLSCDVEVRRGDVLAAWSGIRPLVTDPKSADTQSISRNHVVDISESGLITIAGGKWTTYRSMAEDTINA
AVKTHNLKAGPSRTVGLFLQGGKDWSPTLYIRLVQDYGLESEVAQHLAATYGDKAFEVAKMASVTGKRWPIVGVR
LVSEFPYIEAEVKYGIKEYACTAVDMISRRTRLAFLNVQAAEEALPRIVELMGRELNWDDYKKQEQLETARKFLY
YEMGYKSRSEQLTDRSEISLLPSDIDRYKKRFHKFDADQKGFITIVDVQRVLESINVQMDENTLHEILNEVDLNK
NGQVELNEFLQLMSAIQKGRVSGSRLAILMKTAEENLDRRVPIPVDRSCGGL

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FIGURE 4598

GGCACGAGGGAGACGGACTCTTGCTATGTTGCCCAGGCTGGTCTTGAACTCCTGGCCTCAAGCAATCCTCCTGCC
TCAGCCTCCCAAAGCACGGGGATTACAAACCCTGCTGAGGGATGCCCAAGAAGTTCCAGGGTGAGAACACCAAGT
CGGCAGCGGCCCGGGCACGGAGGGCAGAGGCCAAGGCGGCCGCTGATGCCAAGAAGCAGAAGGAGCTGGAGGATG
CCTACTGGAAGGACGACGACAAACACGTCATGAGGAAGGAGCAGCGCAAGGAGGAGAAGGAGAAGCGGCGCCTCG
ACCAGCTGGAACGTAAGAAGGAGACGCAGCGCCTACTGGAGGAGGAGGACTCCAAGCTCAAGGGCGGCAAGGCGC
CGCGGGTGGCCACGTCCAGCAAGGTCACCCGGGCCCAGATCGAGGACACGCTGCGCCGAGACCATCAGCTCAGGG
AGGCCCCGGACACAGCCGAGAAAGCCAAGAGCCATCTGGAGGTGCCGCTGGAGGAGAACGTGAACCGCCGCGTGC
TGGAGGAGGGCAGCGTGGAGGCGCGCACCATCGAGGACGCCATTGCAGTGCTCAGCGTGGCGGAGGAGGCGGCCG
ACCGGCACCCAGAAAGACGCATGCGGGCAGCCTTCACAGCCTTTGAGGAAGCCCAGCTGCCGCGGCTCAAACAAG
AGAACCCCAACATGCGGCTGTCGCAGCTGAAACAGCTGCTCAAGAAGGAGTGGCTCCGCTCTCCTGACAACCCCA
TGAACCAGCGGGCCGTGCCCTTCAATGCCCCCAAGTGAGCCCAGAACTTGGGGAGCCAGTTCACCCACGGGGTGG
TCCAGGTCACGACTCTGCACGCCCTTAGGCCAGGTCAGCTGCGAGGGTCACAGAGCGTTCCGGGGGCCAAGGCGC
CGGGCCCCGGGGCCATGCTCTTATCACCAGCCACCCGTCCTCCCGCCAGAGGGTCCCTGCCCCGAGTGACACCCC
ATCCCCTCCCATCCCCCGGCGCGTGTGTGTAGAGCCTCAGGGCTGAGTGCCCAATAAAGGTGGCGGCAAGGCTAA
AAAAAAAAAAAAAAAAAAA

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FIGURE 4599

MPKKFQGENTKSAAARARRAEAKAAADAKKQKELEDAYWKDDDKHVMRKEQRKEEKEKRRLDQLERKKETQRLLE
EEDSKLKGGKAPRVATSSKVTRAQIEDTLRRDHQLREAPDTAEKAKSHLEVPLEENVNRRVLEEGSVEARTIEDA
IAVLSVAEEAADRHPERRMRAAFTAFEEAQLPRLKQENPNMRLSQLKQLLKKEWLRSPDNPMNQRAVPFNAPK

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FIGURE 4600

GGGAGTCCCTGGTGGGAAAAGTCCACAATTTCCCATTGATAGCTTTTTACTGTTGTGAAAAAGGGAAGCGTCAGC
CACACAAAAGCCTGCATGACCGCTGCTTCGGAGAAGCTCTCGACCCTAACTGCAGTCACTGTTACTTGGATCAGA
TCAAGCGCAGTGACTTTTTGGGATTCAGTGGTTATTCTCCACACTTCGTAGCCACTTCGACCAACTCTGAGCACA
AAATGCAGCCATCCTCTATGCAGCAAGCCCTGCCCAGTCAGTGGCCCTACTGGACAGATCCAAGGCCAGCCCTGG
TTCCCTGCTGCAGCCACCGTCCTGACGTTCATCGGAGCAGGCCGGGGCCTGGCCTTCCCGGCACAAGTGGCTGTT
CTGACAGGCCCCCAGTTTGTCCCATC**TGA**ACTGCTGGGAGGTTTCCGGGTGGCCAGAGGAGCAAAGCTGCCTTCC
AAGTGCCTGTCTGTGCCTGGGAGAACAGAGCAGGAGCGTCGTGCGGTCCACCGCGCAGTGCATGGCGATTCCAAG
CGCTGAACAACTCCCCTGGACCCTTGGGCCTGCATCTGACTCCCAGCTGCAGAGTCAGAAGCTGAGTCCAGGCAA
CTGCTTGGCCACTCCCGATCGCTCCTCCCTGGACACCCGGTTACCAAAGTCAGCAAAGAAGATGCGGTAATCGCC
GCCTGATCTCCACATGGTGAACACAACACTCCCACCAACACCTCCTTGACTGGTCGGTCTTCAGCACCGGGGGTG
GGCAGGCAGGTGTTCTGTGTTGACGAGAATTGCACAGGCTAAACACAAACACGGAACCAGAGTGAGAACACCTCA
CTCACGGCAGCCCAGGCTGCTCCCTACCAGGTGACGGAGCGCGCCGGGGCTGTGGGTGCCAGGGGCTGAGTGCTA
GGGACTCGTCATGAGTGGGGATCCCCACGTTCCTGTCACTGCTGTCAAACAGAAGGTAAACAGTCATATGAATGT
ATTTCCTTAGGAAAACTTGTAAAAACTTTTATTAGGATATCTATTTAATACTGAACTTTGGCCTACTTTGTGATA
GACTATAAACAAATTGAGGAAATCACTATTTCTCACTTCTGTATTTTCTCAAAAATAATTTTGTTACAGAGTTCA
ATATACTGTGTACCATTGATCTTCTATTGTGAAAGCAAAGAATTTCATCAAAATATTTTAAATTATGAGTGAAAA
TTGTGTATGTTAATTTTGCAGCTATAATATTAATCAAATTTTGTGTAATTCTAATCACAAAATGACGTGCCTTAA
GTGCCCCTCCAGCTGTGGGTTGGCAGTGTCCAGACAGGGAGGGCCCATCACCGAAATCCTGAACGATTACTAGAC
CAATTCTATTAAAAACATTTCAAGGCAAAAAAAAAAAAAAAA

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FIGURE 4601

ESLVGKVHNFPLIAFYCCEKGKRQPHKSLHDRCFGEALDPNCSHCYLDQIKRSDFLGFSGYSPHFVATSTNSEHK
MQPSSMQQALPSQWPYWTDPRPALVPCCSHRPDVHRSRPGPGLPGTSGCSDRPPVCPI

FIGURE 4602

GGGAGTCCCTGGTGGGAAAAGTCCACAATTTCCCATTGATAGCTTTTTACTGTTGTGAAAAAGGGAAGCGTCAGC
CACACAAAAGCCTGCATGACCGCTGCTTCGGAGAAGCTCTCGACCCTAACTGCAGTCACTGTTACTTGGATCAGA
TCAAGCGCAGTGACTTTTTGGGATTCAGTGGTTATTCTCCACACTTCGTAGCCACTTCGACCAACTCTGAGCACA
AAATGCAGCCATCCTCTATGCAGCAAGCCCTGCCCAGTCAGTGGCCCTACTGGACAGATCCAAGGCCAGCCCTGG
TTCCCTGCTGCAGCCACCGTCCTGACGTTCATCGGAGCAGGCCGGGGCCTGGCCTTCCCGGCACAAGTGGCTGTT
CTGACAGGCCCCCAGTTTGTCCCATCTGAACTGCTGGGAGGTTTCCGGGTGGCCAGAGGAGCAAAGCTGCCTTCC
AAGTGCCTGTCTGTGCCTGGGAGAACAGAGCAGGAGCGTCGTGCGGTCCACCGCGCAGTGCATGGCGATTCCAAG
CGCTGAACAACTCCCCTGGACCCTTGGGCCTGCATCTGACTCCCAGCTGCAGAGTCAGAAGCTGAGTCCAGGCAA
CTGCTTGGCCACTCCCGATCGCTCCTCCCTGGACACCCGGTTACCAAAGTCAGCAAAGAAGATGCGGTAATCGCC
GCCTGATCTCCACATGGTGAACACAACACTCCCACCAACACCTCCTTGACTGGTCGGTCTTCAGCACCGGGGGTG
GGCAGGCAGGTGTTCTGTGTTGACGAGAATTGCACAGGCTAAACACAAACACGGAACCAGAGTGAGAACACCTCA
CTCACGGCAGCCCAGGCTGCTCCCTACCAGGTGACGGAGCGCGCCGGGGCTGTGGGTGCCAGGGGCTGAGTGCTA
GGGACTCGTCATGAGTGGGGATCCCCACGTTCCTGTCACTGCTGTCAAACAGAAGGTAAACAGTCATATGAATGT
ATTTCCTTAGGAAAACTTGTAAAAACTTTTATTAGGATATCTATTTAATACTGAACTTTGGCCTACTTTGTGATA
GACTATAAACAAATTGAGGAAATCACTATTTCTCACTTCTGTATTTTCTCAAAAATAATTTTGTTACAGAGTTCA
ATATACTGTGTACCATTGATCTTCTATTGTGAAAGCAAAGAATTTCATCAAAATATTTTAAATTATGAGTGAAAA
TTGTGTATGTTAATTTTGCAGCTATAATATTAATCAAATTTTGTGTAATTCTAATCACAAAATGACGTGCCTTAA
GTGCCCCTCCAGCTGTGGGTTGGCAGTGTCCAGACAGGGAGGGCCCATCACCGAAATCCTGAACGATTACTAGAC
CAATTCTATTAAAAACATTTCAAGGCAAAAAAAAAAAAAAAA

FIGURE 4603

TTTTTTTTATCATTGACAATGTTTATTATCAAGAAACTTTAGGTTTTTTAAAAGAATGCTCGTTTTAGAATACAC
CAAGAGGACACTCTGTGACAGGACATATACAAACAAGGATAATTAAAATATTAAATACTATCTAAATTAAAAGAC
CATAATTCAAATTGCTAATTATAATATTTGTGTCGGTAGAAATAACTATAGTTCCCCTTCATGAAATTCACCCCC
ACGTTCTCATGAAGACTATGACGTCTCACCACAATTTCAGTTATTTAATTTACAATAATCAATGCTGAGTTTTCT
GTGCTGAAGCATGCACTGTTACAGAAAGCACAAAATCCTATTTACAGGGATTTTTAGTTTTCTTTAAAATGTATC
TCAAGCATCTTTTAAAGTGCGAGCTACAAATAGGTTGTATCCTTAATGAAAAAGGCTTCTTTCTAAAAGAAGTAT
GAGATAGCTATCCAATACTGCAGGAACAGTTATATAACTAACCGAAGGAACCAGCAGCACTCTGCTAACTCTGTT
TTAGTGTAGCAACCTCCTTCTTGGTGTTCTACTACCAGCCAXACATGTACTCCATTGCTTTGGATACCAGACTTT
CATCTTTTTTTGGCGTTTGTCTGTCAGAAATACCCTGATAATCACTAGTAGAGGC

FIGURE 4604

GCAGCCCCGGCGGCCGAACGCCCGCGGCGCGGGACTCCATCGTCAGAGAAGTCATTCAGAATTCAAAAGAAGTTC
TAAGTTTATTGCAAGAAAAAAACCCTGCCTTCAAGCCGGTTCTTGCAATTATCCAGGCAGGTGACGACAACTTGA
TGCAGGAAATCAACCAGAATTTGGCTGAGGAGGCTGGTCTGAACATCACTCACATTTGCCTCCCTCCAGATAGCA
GTGAAGCCGAGATTATAGATGAAATCTTAAAGATCAATGAAGATACCAGAGTACATGGCCTTGCCCTTCAGATCT
CTGAGAACTTGTTTAGCAACAAAGTCCTCAATGCCTTGAAACCAGAAAAAGATGTGGATGGAGTAACAGACATAA
ACCTGGGGAAGCTGGTGCGAGGGGATGCCCATGAATGTTTTGTTTCACCTGTTGCCAAAGCTGTAATTGAACTTC
TTGAAAAATCAGGTGTCAACCTAGATGGAAAGAAGATTTTGGTAGTGGGGGCCCATGGGTCTTTGGAAGCTGCTC
TACAATGCCTGTTCCAGAGAAAAGGGTCCATGACAATGAGCATCCAGTGGAAAACACGCCAGCTTCAAAGCAAGC
TTCACGAGGCTGACATTGTGGTCCTAGGCTCACCTAAGCCAGAAGAGATTCCCCTTACTTGGATACAACCAGGAA
CTACTGTTCTCAACTGCTCCCATGACTTCCTGTCAGGGAAGGTTGGGTGTGGCTCTCCAAGAATACATTTTGGTG
GACTCATTGAGGAAGATGATGTGATTCTCCTTGCTGCAGCTCTGCGAATTCAGAACATGGTCAGTAGTGGAAGGA
GATGGCTTCGTGAACAGCAGCACAGGCGGTGGAGACTTCACTGCTTGAAACTTCAGCCTCTCTCCCCTGTGCCAA
GTGACATTGAGATTTCAAGAGGACAAACTCCAAAAGCTGTGGATGTCCTTGCCAAGGAGATTGGATTGCTTGCAG
ATGAAATTGAAATCTATGGCAAAAGCAAAGCCAAAGTACGTTTGTCCGTGCTAGAAAGGTTAAAGGATCAAGCAG
ATGGAAAATACGTCTTAGTTGCTGGGATCACACCCACCCCTCTTGGAGAAGGGAAGAGCACAGTCACCATCGGGC
TTGTGCAGGCTCTGACCGCACACCTGAATGTCAACTCCTTTGCCTGCTTGAGGCAGCCTTCCCAAGGACCGACGT
TTGGAGTGAAAGGAGGAGCCGCGGGTGGTGGATATGCCCAGGTCATCCCCATGGAGGAGTTCAACCTTCACTTGA
CTGGAGACATCCACGCCATCACCGCTGCCAATAACTTGCTGGCTGCCGCCATCGACACGAGGATTCTTCATGAAA
ACACGCAAACAGATAAGGCTCTGTATAATCGGCTGGTTCCTTTAGTGAATGGTGTCAGAGAATTTTCAGAAATTC
AGCTTGCTCGGCTAAAAAAACTGGGAATAAATAAGACTGATCCGAGCACACTGACAGAAGAGGAAGTGAGTAAAT
TTGCCCGTCTCGACATCGACCCATCTACCATCACGTGGCAGAGAGTATTGGATACAAATGACCGATTTCTACGAA
AAATAACCATCGGGCAGGGAAACACAGAGAAGGGCCATTACCGGCAGGCGCAGTTTGACATCGCAGTGGCCAGCG
AGATCATGGCGGTGCTGGCCCTGACGGACAGCCTCGCAGACATGAAGGCACGGCTGGGAAGGATGGTGGTGGCCA
GTGACAAAAGCGGGCAGCCTGTGACAGCAGATGATTTGGGGGTGACAGGTGCTTTGACAGTTTTGATGAAAGATG
CAATAAAACCAAACCTGATGCAGACCCTGGAAGGGACACCTGTGTTCGTGCATGCGGGCCCTTTTGCTAACATTG
CTCACGGCAACTCTTCAGTGTTGGCTGATAAAATTGCCCTGAAACTGGTTGGTGAAGAAGGATTTGTAGTGACCG
AAGCTGGCTTTGGTGCTGACATCGGAATGGAGAAATTCTTCAACATCAAGTGCCGAGCTTCCGGCTTGGTGCCCA
ACGTGGTTGTGTTAGTGGCAACGGTGCGAGCTCTGAAGATGCATGGAGGCGGGCCAAGTGTAACGGCTGGTGTTC
CTCTTAAGAAAGAATATACAGAGGAGAACATCCAGCTGGTGGCAGACGGCTGCTGTAACCTCCAGAAGCAAATTC
AGATCACTCAGCTCTTTGGGGTTCCCGTTGTGGTGGCTCTGAATGTCTTCAAGACCGACACCCGCGCTGAGATTG
ACTTGGTGTGTGAGCTTGCAAAGCGGGCTGGTGCCTTTGATGCAGTCCCCTGCTATCACTGGTCCGTTGGTGGAA
AAGGATCGGTGGACTTGGCTCGGGCTGTGAGAGAGGCTGCGAGTAAAAGAAGCCGATTCCAGTTCCTGTATGATG
TTCAGGTTCCAATTGTGGACAAGATAAGGACCATTGCTCAGGCTGTCTATGGAGCCAAAGATATTGAACTCTCTC
CTGAGGCACAAGCCAAAATAGATCGTTACACTCAACAGGGTTTTGGAAATTTGCCCATCTGCATGGCAAAGACCC
ACCTTTCTCTATCTCACCAACCTGACAAAAAAGGTGTGCCAAGGGACTTCATCTTACCTATCAGTGACGTCCGGG
CCAGCATAGGCGCTGGGTTCATTTACCCTTTGGTCGGAACGATGAGCACCATGCCAGGACTGCCCACCCGGCCCT
GCTTTTATGACATAGATCTTGATACCGAAACAGAACAAGTTAAAGGCTTGTTCTAAGTGGACAAGGCTCTCACAG
GACCCGATGCAGACTCCTGAAACAGACTACTCTTTGCCTTTTTGCTGCAGTTGGAGAAGAAACTGAATTTGAAAA
ATGTCTGTTATGCAATGCTGGAGACGTGGTGAAATAGGCCAAAGATTTCTTCTTCGTTCAAGATGAATTCTGTTC
ACAGTGGAGTATGGTGTTCGGCAAAAGGACCTCCACCAAGACTGAAAGAAACTAATTTATTTCTGTTTCTGTGGA
GTTTCCATTATTTCTACTGCTTACACTTTAGAATGTTTATTTTATGGGGACTAAGGGATTAGGAGTGTGAACTAA
AAGGTAACATTTTCCACTCTCAAGTTTTCTACTTTGTCTTTGAACTGAAAATAAACATGGATCTAGAAAACCAAA
AAAAAAAAAAAAA

FIGURE 4605A

GCGGAACGGGCGGAGGCTGCCGGTTTCGTAACCGTCGCTCCTCCTCGCTGACTCGCGGGCTGTGAGGCCTGGGTC
GGCTCGGGCCGCACCGCGCGGGGCCGCTCGGAGTGGAGGCCGCCTGGGGGCAGGCGGGCTAGAGGAGCAGGTACA
TGTGAAGATTTTTTGGCAGCTTAGCGTGGAAACCATTGATCACCCTGCTCTCATTTCTACCTGTTCTGTGTTGGC
AAGGGAGAGTGCCCAAATGAGCAAGATATCGCAGCAAAACAGCACTCCAGGGGTGAACGGAATTAGTGTTATCCA
TACCCAGGCACATGCCAGCGGCTTACAGCAGGTTCCTCAGCTGGTGCCTGCTGGCCCTGGGGGAGGAGGCAAAGC
TGTGGCTCCCAGCAAGCAGAGCAAAAAGAGTTCGCCCATGGATCGAAACAGTGACGAGTATCGGCAACGCCGAGA
GAGGAACAACATGGCTGTGAAAAAGAGCCGGTTGAAAAGCAAGCAGAAAGCACAAGACACACTGCAGAGAGTCAA
TCAGCTCAAAGAAGAGAATGAACGGTTGGAAGCAAAAATCAAATTGCTGACCAAGGAATTAAGTGTACTCAAAGA
TTTGTTTCTTGAGCATGCACACAACCTTGCAGACAACGTACAGTCCATTAGCACTGAAAATACGACAGCAGATGG
CGACAATGCAGGACAGTAGACCTCACCCTTTCCAGACTTTAGAGCTTGTGGCTTGAATGTTAAAGGTGTGACCAC
CGACACCACTCATGTCAATGGCTGAAAGTTGTCCATTTCCATGACTCAAAGACCCATTGGAGGCTATTTTCTGGG
ATCAGCACTGAAGAGTTGATTAGCTAAAAATGTTAGCCTTGTAATTCGAATATCTGGTTTTAAATGATAGAGGTT
TTTGTGGGAATCAAAATCCCCCAAATGTTAAGGTATATGGTAAAAAAAGAAATATCTGGGATCCCGATGTTCTTA
ATAAATCCTGACTTCCCAAGAAATGCTTCTTTTTTAAGTTGACAAAAGGAATGGGGAACTGGCAGGCCGCGCAGA
AGGTTCTTGGTTTTAATGGATAGGCTGAATTGGATTAAGAAAAGTTGAATGCCACCTATGGTAATCTATTTGTGA
TTTTCTTCTAAATTATGTATTATAAATTCGTAGAGCTATAGAAAGCAATGAGTGTGTAATTTGGAGTGATTTTAT
ATATGGCATAAACTTTGTTTTAACATAATTAGTACTGTTTTCCCCCAAAAGTACAAGTTTTTGAGTAGCAATGTC
AGGTTAAGTAAAGAAACTTCATCACATCTTATAGGTAGTGTGTGGCCAATTGACTTAAAAAATACAAATAACATT
TAGGAAGCAAATAGATTAAACACAAAAATAAAACTAAAGCATAGGAATTATGTTTTTGAGATACCTTTGGGCTTA
GATTGGCATTGTTTTATTCTAAAAACCCAACTCAGTGGTGTAGAGAAACTTGTGTACCAAAATTTTAGTTTCTGC
AGATGCTAGTGTTTTTTTGGATACAATTTTGACAACCAAGTTAGTAAACAAAATATCTTAACAGTTTGATGACAC
AAGCTACTGATGAGGGTTTGGAATATTAATTCAGAAGGTAGTTTCTCTTGTGTTCAAAATAGCTGCCATGGGGCT
GTTACTTTTAAAGTCAAAATTTTCTTCTGAAGGCTCATTTTGGTATTTGATCTTAACCAAGTGATTATTAGAGAA
ATGTATCAACTCCATGCCATCTCCCAAAATAATTGTCTAAGAAAACTTGAAAGTGTAAGGTTTTAACCTTTAATT
TATTTCTCTTAAATACATCTTTTGATATTGTTGTTGTGACATTTCTTTTTCTGGTTAGTGGGCTTTCCAGACTTT
GTACCACTGCTTCTGTTTATTCATTTATATGCTTTTGTGTCCCATAAATTATTTCAGAAAATGCTGATAAAACTC
AGGATATTGACATTTTTGTTGAGACTAAAAAATGGCAGTCGCTAAAGTAGGGACTCTAGAGTCTGGCTTACGTCA
GTGTTGGTAGTTTAGATTGTCTTTGTCAACGTTTTTTCTTCTCTCTTTTGCTTTCTTTTCTTTCTCTTTTTTTCT
TAGCACAGTTCTAGCTCAAATTTGTGTATTTTTTGTGTGCCTGGGCTGGAGATGAGAGACTGAGTCATAACTGAT
TTAAAAGTTTGTGTTATCAGGTATCTTATTTGAACATGGTCATTTTTGGCCACATTGCTGTTTCATACTAGGACT
TGGGATGATGTAGCCAGAATAAAACTCAAGTTGCACCCTCCGGTTGGTGGAAGATTGCTGACCGTGCCGTTTCTG
GGCAGGAGAAGACATCATGGTGTCCAGCAACTCAGCAAAGCCATTCTTAAGAGTCGTGAGGTCCTTCTGAATGTA
AAACTGGAGCCCAGGAGAAGCTGTCCCAGGAGGGCTGTTAACTCCCTATAGAGCCAGGAGACAGGATAGGGGTTT
CTAGGGTCCAACACCAGCTTACCTTGGAGTGTGAATCTACCCATGAAGGATGAGAGATGTTTTGAAAAACTAGCC
AGGACACACCCACAGGATCCTACTGGCTCCTTAGCAGCTGATTGGTGTTACATAATTAACTTAATTGGAGATGCA
TTAGGTCACTTGAATGTATAAGCAAGCACCTATGGTAGGCGCTACAGACATTTAAATCTCTTGGGAATTCGATGC
TCCCATGGAATTTATACCAGTTATATGAATTGACTTAAGTATCTTGAAAAAGAAACTTTAGAGAAAGCATCAGGG
GTGTGTACTCAGTATTTCAAATCAGAACACAAGATTGGAACTTTTGGAAAAATGGGTTCAAGCTTTCCTATTAGC
CATGGAAATGCAAAGTTTAGCAGAAGCAAGCAATTAGGCAGAGAACAAAAATGTTAAGCATGGTGTTGTCTATCT
TATTGAAGTGGTTGGAAATGAAAGCTTTTAATTTGATAGATTTATCAGTATAAAATTAGGGAAACCACGTGTGGG
GAATGAATCAATTTAGAGCTTCGGGAATTGTGAGGTGACTTTTGTAACTTTTGTTCTGTGTGTGACCTGTGAACC
ACTAGGATGTGATCTGCCCTTGTGGGCAGGTCCAGCATAGTTAGGAGTTAGGCTTTAGCATAAATTTCTAGCTGC
ATCTGAGTCTCCTGGGATGGGTGCTCTTTGGCTGGTTTTGGCTGCGGATGGTGAGATCAGAGCAGCTCTTCCTGC
TGCTGGCCCCTGCAATCAGTTGTTGGGATGCCAGTGCAGATCACTAAGTAGTAAGATTTTAATCAAACACGACCA
GGTCCGAAATGCAGGTCATGAGTGTGAAATTCTCAAATTTACATAAAAAGTAGAAGTATAGACAGTTTAACATTT
GGTATTAAAGGAGAGGAAATTGTAGCAGCTTTTCACGTTTCCCAGTCCCCATTAGAGGGCTTGAGACCTTGTACC
TGAACAACCCATTTTGCACTCAGTGCTTTCTGATGCCTTAGGAGAATTGTTTTGTTTCACAAAAGCTGGGAAGGA
AGAAGTCCATTCTGCAGCTGTTAGATCTGCCTCTCAGGAAAAAGTACTAACTTGTTCTTTTTGTTCCTGGCTTTC

FIGURE 4605B

ATCAGTTTGTGAGATTTCTCTATTTTTTTTAAATATAATTTTATTTCTTTCAACAAATATAAAATAAAAAACAAC
TTTGGAACAATGAAAAAAAAAAAAAAA

FIGURE 4606

MSKISQQNSTPGVNGISVIHTQAHASGLQQVPQLVPAGPGGGGKAVAPSKQSKKSSPMDRNSDEYRQRRERNNMA
VKKSRLKSKQKAQDTLQRVNQLKEENERLEAKIKLLTKELSVLKDLFLEHAHNLADNVQSISTENTTADGDNAGQ

FIGURE 4607A

CGGGGCCGCTGAATGAGATCCTCATCTGCGGGAAGTGTGGCCTGGGTTACCACCAGCAGTGCCACATCCCCATAG
CGGGCAGTGCTGACCAGCCCCTGCTCACACCTTGGTTCTGCCGACGCTGCATCTTCGCACTGGCTGTGCGGAAAG
GCGGCGCGCTGAAGAAGGGCGCCATCGCCAGGACGCTGCAGGCCGTGAAGATGGTGCTGTCCTACCAGCCCGAGG
AGCTCGAGTGGGACTCGCCCCATCGCACCAACCAGCAGCAATGCTACTGCTACTGCGGCGGGCCCGGAGAATGGT
ACCTGCGGATGCTGCAATGTTACCGGTGCAGGCAGTGGTTCCACGAGGCCTGCACCCAGTGCCTCAATGAGCCCA
TGATGTTTGGAGACCGGTTTTACCTGTTCTTCTGCTCCGTGTGTAACCAGGGCCCAGAGTACATCGAGAGGCTGC
CCCTGCGATGGGTGGATGTGGTTCACCTGGCCCTCTATAATCTGGGGGTACAGAGCAAGAAGAAGTACTTTGACT
TTGAGGAGATTCTGGCCTTTGTCAACCACCACTGGGAGCTCCTGCAGCTTGGCAAGCTCACCAGCACCCCAGTGA
CAGATCGAGGACCACATCTCCTCAACGCTCTGAACAGTTATAAAAGCCGGTTCCTCTGCGGCAAGGAGATCAAGA
AGAAGAAGTGCATCTTCCGCCTGCGCATCCGCGTCCCACCCAACCCGCCAGGGAAGCTGCTGCCTGACAAAGGAC
TGCTGCCAAATGAGAACAGCGCCTCCTCTGAGCTGCGTAAGAGAGGAAAGAGCAAGCCTGGTTTGTTGCCTCACG
AATTCCAGCAGCAGAAAAGGCGAGTTTATAGAAGAAAAAGATCAAAGTTTTTGCTGGAAGATGCTATTCCCAGTA
GTGACTTCACCTCAGCCTGGAGCACCAACCACCACCTGGCTAGCATATTTGACTTCACGCTGGATGAAATTCAAA
GTTTAAAAAAGTGCCAGCTCAGGCCAGACCTTCTTCTCAGATGTCGACTCCACCGACGCTGCCAGCACCTCTGGCT
CTGCCTCCACCAGCCTCTCCTATGACTCCAGATGGACAGTGGGCAGCCGAAAGAGGAAGCTGGCAGCCAAGGCAT
ACATGCCCCTGCGGGCAAAGCGGTGGGCAGCTGAGCTGGATGGACGCTGCCCCTCGGACAGCAGTGCAGAGGGGG
CTTCAGTCCCCGAGCGGCCAGACGAAGGCATTGACAGCCACACATTTGAGAGCATCAGTGAAGATGACTCATCCC
TGTCCCACCTCAAGTCATCTATCACCAACTACTTTGGTGCAGCTGGGCGGTTGGCCTGTGGGGAGAAGTACCAGG
TGTTGGCTCGGAGGGTCACACCTGAGGGCAAGGTTCAGTACCTGGTGGAGTGGGAAGGGACCACCCCTTAC**TGA**C
TAGCCCCCGGGGGGTGCCAGGGGTCCTGAAAACCAAAGGAGGAGCAGCAGAAGCCATAGGCTCCCCAGCTTTCTCC
AGGCTGGGGTGGGAGAAGGAAGCAGGACAGAGCTGCAAGTGCCTGGCAGAATGCCCTGCCTGCCTGCCTGCCTGC
CAGGCCAAGGCCTGCGTCTCTCTGCTGTACCAGCTCTGTTCCAGGGCCTCCTCAGGCTCGTTACCCCTGTGCCTG
TGTCTCTACACACTCCACACCCCCTCAAACTCTGTTTATCTGTTCTCTGACCTTGTGTCCCCTGCGCTGGGACCC
TTCCTCCTGAGGCCCAGGTCTTTGTCCCCAGTTGTGTGCCTTGACCTCTCTCGCCCCTTTCTGGGTGTGTTCGCA
CATCCTGTGTGTGCACAGCTGTCCCTCCACTGGATCCCCTTCACACGTGACCCGTGGGGCAGCCAGTCCTCCCAG
GGACTACATAACAGGCACCTTTGAGAGAGCATGGGAGAAGGTGGATAAGAGGATGCTGCTCAGTGCTTTTCTCTT
CCACTTTCCTGCCACTCCCCACTACCCTCGGAGAGAGGTGGTGGGATGGGAGAGAGCCCCTGTGAAAGCCTGTGA
GGATCTGAAGAGTAAAGGGCTGGGTCTGCCTCAGAAGGCACCAGCACCAGGGCCCAGGTATTAAGGCTGAGAGTG
AAGGCTGCCAATGTCAGCTTTGGAGGTCCCAGAAGTCTTCTGTTCTCTGGCCTCACCCCCTCAGTCGCCATAGAG
CTGGGCCTGGCCTTGCTGGAATGGAGGCATCCTTCCAAACCTGGGGGACGGGGGTGGGGGGTGGTAGTGGTGGGA
GGGAAACCATGTCTTGCTAAACCTGTTTCTGGTGCCTCCCATCCCCAGACCCACCAGACACCACACAGCAGACAA
TACACACCCACTCGCACAAGCTTCCATCCACATGTGTTGTACTTTCAGCTCTAGGCATGCAGACAACCCCACACG
GCCACACCACCACATGCCCAAGTGTACACACACAGAGCCACACCGTCCCTCTGGGCCTGCTGGCTCCTCCCTTGG
CTTTCCCTTGGCCCACTTCCAGGGCCCAGGTGCTGCAACTAAATGTGAAAGCTCAGTGGCCGCTCCTTCTTTCAG
CCCATCAACCAGCATTGGTCCCATAGGGAAGCACAGGGGACTCACCCTCTTTCATATCCCTTGCCCTGCCCTGAA
ATGGACAATCACTTTTTGGGATAGGTTGAAATTTTTAAAGAGCCTGCATCATTCGGTTCCCTCAAAGGGAAGCCC
TTGCTAGTGGGGGTTTGAAAGAGAATTTTTGGAACCAACATTCAAATTCTGCCTCATCTGGAGGGAAACCAAAAT
TGGGAGGGGGAAGAGGACCCCTGATGTTTTGCTGCTTCCAGAGATATTAGAAACTGACTCACTTGATTGGAAAAT
GGACAAAAGTGCCTTGACGTGGAGGGTGGGCACCAGATGGGGACCAGCCTTGCCAACTGCTGCTGTGGCCTCCAG
CTTGGCTGGTTTTGCAGGCCGCCAGCAGGAAGGCGAAGGTGGTAGTACAGCAAGAGGCACTGGCGGGGCAGCAGG
CCTGCAGGAGCTGTTTTTCCATTGCTAGGCCTGACCCCTCTCTACCTGTGAGCGTTCAGGGGGTCCCTGAGATAG
TTTAGATGCCCCCCCCCATCTTAGACCTCAGCTCCCACAGTGCCTTTTAAGGGGGACCTCACCTCCTGTGCACAGC
CCACCCACTTTCCTCTGCTTCCCTGGCACAGCCCAGGCATAGACGAGCTGGCGTTGGACCCAGTTCTTCCCCCTT
TTCAGCCCCACAGCTGCTGCCACAGGGGCCAACTAGGGCCAGGTGGAAGGGGAGCTGAGAAGCCAACCCCTAGCC
CAGGGGTGCTGTGGGAACTGGGATCCAATTTGTAGCTTCCCGCCTGGCTTCAGAGAGCCCAGCAACCTTCTAGGC
CTGCTTTCCAGACTTCTGAGATAGCCTGGGATGAGCAATCCTGTTACAGTACATCTGGACCTTCCCTACCTGGGC
TCTGGGGAGGCTGTGGGCCTGGAGAGGGAAAAGGAGGGAGGGGGTGTCTGCACCACCTGGGAAGATAGCACAAGG
CCTAATGAGGTCACCCTGACTCCCCACCCCAGCATTTCATTCATACCAGATAATAGCTGCATTACTGCCAACTGA

FIGURE 4607B

CCTTATAACCCTCTGCACCTTCAAAAAGATTCATGGTTTTTAATTGCTGCTTTTAATAACATTTGTAAAGTTAAA
AAAAAAA

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FIGURE 4608

GPLNEILICGKCGLGYHQQCHIPIAGSADQPLLTPWFCRRCIFALAVRKGGALKKGAIARTLQAVKMVLSYQPEE
LEWDSPHRTNQQQCYCYCGGPGEWYLRMLQCYRCRQWFHEACTQCLNEPMMFGDRFYLFFCSVCNQGPEYIERLP
LRWVDVVHLALYNLGVQSKKKYFDFEEILAFVNHHWELLQLGKLTSTPVTDRGPHLLNALNSYKSRFLCGKEIKK
KKCIFRLRIRVPPNPPGKLLPDKGLLPNENSASSELRKRGKSKPGLLPHEFQQQKRRVYRRKRSKFLLEDAIPSS
DFTSAWSTNHHLASIFDFTLDEIQSLKSASSGQTFFSDVDSTDAASTSGSASTSLSYDSRWTVGSRKRKLAAKAY
MPLRAKRWAAELDGRCPSDSSAEGASVPERPDEGIDSHTFESISEDDSSLSHLKSSITNYFGAAGRLACGEKYQV
LARRVTPEGKVQYLVEWEGTTPY

FIGURE 4609

CTGTTTATAGATAATGTCTGCAGTTTCTGTTTGAGAGAGATAATTATGACACTTAGCATTGGAAAACTAAGAAGA
ACGTAAGCAGGTCAGCTATCAGAAGTCTTCAGACTGGAGAGATTCCTGGAGGGGGAGTGGCCCTTTAATCCATCA
GCTGAAGCCATCTGGTAGGACGCTCGTTGCAGAAATGGTTAGTTCTGAAATGTTGTAGCTCAGCAACATCACTGA
ATGTCACAGAATTGACAGGCACGGAGCTAAAAGGGCCTCTAGCCACCCCCACAACTCCGCTCTACCTCTGTCTCC
CTAACACATGACTTGGAACAAATACACTCTAGGTACAAAGATGGCTACCTGAAGTTTATGATCCCTACTCATGGA
GCTGCTTGAGGACTTCACATTTTTTAAAAAGCTGCTTTGGGCACCCCCATTCCTGAGGAGTTTTGTAGCTTGGTT
TCTCTTTGCCACATTACGTTTGTAAGACTAACATTTTATAACCATAAGCAGTTAGGCCTTTTTATTTTGAGAAAT
TTATCTGTAGCTTCCTTTTATTTACACTTGGGGACTATTTTTAAGTAACCGATTGAAATATTTTTGTTTCTCCAT
TGCAAGTGAAATCCTTGTTGCTAATCTTTTGCCACATGTAAAATTGTTCACTTGTTATCAAGCAGGTAGTTCAAT
ATCTGTAATTCTTGAGTTCTTTTCAACTAGCATGATGCTAGGTGTCACTCACTGTTTTTTAATTGTGGGAGATTG
ATGCGTCAGTGCATGAAGTGGGGGGTGGTCACCAGCATCTAACTCAAAGTGTGATTATAGCTATCTTACCACATT
TTTTTTTTCTTTCTCACTCTGTCACCCAGGCTGGAGTGCAGTGGTGTAATCTCAGCTCACTGCAGCCTCGACCTC
CTGGGCTCAAGCGATCCTCCTACCTCAGCCTCCCAAATAGCTGGGACCACAGGCGCATGCCACCCCACTAAGCTA
ATTTTTCTATTTTTTGCAGAGACAGGGTTTTGCCGTGTTGCCTAGGTTGTTCTCAAACTCCTGAGCTCAAGCCTG
CCTCAGCCTCCCAAAGTGCTGGGATTACATGTGTGAGCCACCATGCCTGGCCGTCACTAATCTTCAAGGTTAATA
TTTGGAGGACCCATCCAGAGTCCAAAGGTGGTCTTCGAGGGATAGCACGAGGTGGTCTGACAGGACTAACACTTA
CCAGCCTCTATGCACTATATAATAACTGGGAGCACATGAAAGGCTCCTTGCTCCAACAGTCACTCTGAAGATTTT
GCCAACTCATGAATGGAGGACACTTCAGTAGTCATCTAGATCCTTTTATAAGACAGTTTGGAGTTATTCTCTCTC
TTCTACCTACAATTAGTTTGAAAAATTGGAGATTTTGATTTGCTGTGATGAAAATCCTGGATGGCTGACCAAGAC
TGGCACTTGTTCCAGCCATTAGTGAGTTGAAGCCAAAGCCCTTTGGTGACTCACTGAGTACCATGGTTCTGTTCT
CCTCTGGAGATCTTGCACGTATCTGTTTTCCTCCCCCATGAACTAGAAAACCACTTACTCCCAGAATTCAGGTCG
TGCTTGTTAGTACTATATCACCAAGTCCATTCATTTAATGATCCAAAACTGTAATGTTGCACTGTATTCCAAATA
AAGGGTAAAAACAGAACCAAAGGTATAACTCCAAAAAAAAAAAAAA

FIGURE 4610

GTCCTCTCTGCTCTCGCGGCCGACTCGCAAGATGGCGCCGCAGAAAGACAGGAAGCCCAAGAGGTCAACCTGGAG
GTTTAATTTGGACCTTACTCATCCAGTAGAAGATGGAATTTTTGATTCTGGAAATTTTGAGCAATTTCTACGGGA
GAAGGTTAAAGTCAATGGCAAAACTGGAAATCTCGGGAATGTTGTTCACATTGAACGCTTCAAGAATAAAATCAC
AGTTGTTTCTGAGAAACAGTTCTCTAAAAGGTATTTGAAATACCTTACCAAGAAATACCTTAAGAAGAACAATCT
TCGTGATTGGCTTCGAGTGGTTGCATCTGACAAGGAGACCTACGAACTTCGTTACTTCCAGATTAGTCAAGATGA
AGATGAATCAGAGTCGGAGGACTAGGCAAAGGCTCCCCTTACAGGGCTTTGCTTATTAATAAAATAAATGAAGTA
TACATGAGAAATACCAAGAAATTGGCTTTTAGTTTATCAGTGAATAAAAAATATTATACTCTTG

FIGURE 4611

SSLLSRPTRKMAPQKDRKPKRSTWRFNLDLTHPVEDGIFDSGNFEQFLREKVKVNGKTGNLGNVVHIERFKNKIT
VVSEKQFSKRYLKYLTKKYLKKNNLRDWLRVVASDKETYELRYFQISQDEDESESED

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FIGURE 4612A

AGACCCTAAAATCTAGCCACCACCTGCCTCCCCCAGGTTTCCACACACCCAGTTGGAAGGCCTTTCCCTGCCCTT
GTCCCTGTCTCACACCCATGGAGGTTAAGCTACAGAGCTGGGGAAACAGGAGATTTTGAGTTAATGGCAGCCTCA
CAAATAGTGCTTCTGAATTTCTCTGAGGGTCAGCATACCTCATGGGAGTGTGTTGCTCAGTGCAACCTTGGAAAA
GTGGGAATGGCACCAGACGTTTTTCAGGTGCCTCTTGCAATTCAAACTTACATCCTCTATACCGTCCTAAAATTT
GCCTGATCTTATTTGGTAGATTTCAAGTTGCTTTCAGCTGTGACCGTAATAACTGTTTCAGGAACTGGAGAAATA
GTGGAAGTGCTATTGCCGCGCTGCATGTAAAGCACAGGAGCAAAGATTCGATACAATTAGACCCTTTAAGCTACA
ACGTGGTTGCATTTGGGGAGTCTGATACCCACATAGGTATCACATTTTCTCTGCCTGGGGTTAATTTGTTCTTAT
TATTCTAGGTAAGAAATTGATAGCTTGTTATGCTTGGTACTCATTCTGAAATCCCTGTGTGTCCACCAGGCAGAC
TTCAAGCAATCTCTACCTACTATTATATCTGCCAAAACTACCAATTATTTTTCAATGTCAGAAGTTATTAGAGCC
ACTGGCAAAGCTCATGGTTGAATATGACATTTTTCTGCTTTTCCCTCTAAGAAGTTTTTGAGAATGTTAATGTTG
AAGTATGCAGGCTGGACCTACCAGCAAGTTTAACACGTTAATTAGGTTAAAAAGAATATTAAAAGGCAATAATTA
AATATTTCAATTATTTTGTAATTATAATGGTATCAAATAAGATGCAAAAGAAGTTGATGCTTATTGGTGCTTAAG
AGAATTACAATACTGGTTTTATGAGCATCTTTTCTCTGCAACAGTTAAACTGCCTCAGAGTTTGTGAATTGCTGC
AATTCCTGGAATGGAAACAGGAATTAGGGTCACTGGTTGATTGGCACAGGATCTTTCCATCGTTTCTGCTCCTGA
CCTCTCTCTCTTGCCTTTCCTTCCCCCAGACACCCTCTTGGTTTCCATTCCTTTAGTTCCCTCTGCTTTAGAACA
CAGATTACATGTTGGAAAGAAAAATGGATTAATGGTAAAATTTCTAAAAGCTAAATTGTACAGTGGGGTCTCACT
TCCTAGAAGAAACTATTGGTAATATTTCTTTCTAAAGGTAATAGTATTAATTGTATCTGGTTTTCTTCAAAACTT
AACTATAATTTCCTTGTCAGGGTGCTCAGTAGCTCTTGGTTTGACTTTGGGCTAAGGGATGTGAAATTTTAGCTC
CTTCCCACCACCTGTTTCCCCTCACTCCCACCCCCAGCCAATATTCTTCATAAGCAAAAATTATGGTTAAGCTAA
GCTGAATGGGTTATATTCAAAGTAAGTACAGACGGCAAATAGGCAGACAAATACAGGAATGTCTTTACAATTAGC
CCACCATGGACTGTTTTGAGTCTCTGCATGGTTTCCATAATTCATTATGATGTATCTTTATGCTCTTTCACTGCT
CTTCTGTGCGTTGGAGTTTAGCAATTCAGTGAGACTGGGGAGTGTCTCAAGAATGGAACCTTTGCCTTCAAGGTT
GGGTCATCAAAAATCCCTCTAAAGGATCTAACTGTAATGAACTGTTTTTATTTTTGCCATTAGTGCAAGTATCAA
CTGGCAGCCTCAAACAGCTTTAGACTATGTCTCAGGTCTCTCATAGTTATACTTAGAACTGCTCTTTCTTGAAGC
TAAAAGAGGTTTTTGGAGTAAAGATCTGCTTCATGTCTGCTAGCATGGTATCTGCTGTTCAACCTAGTATAGAGC
ATGTGAAATGCAACTGTCCTTTAATGGAATTCAGCCAAACTCCAAAAATACTGAGTTGCTTCTAGTTATCTAAAG
TAGTACAGAATCACTATCCCGATGAAGAAGTGGGGTTTTTCAGAAGATTGTAAACTCATTTCCATGGCACAGATA
CAAATCATCGTCAGGACTTGTTAGCCAGTCCATGTCTCATTGATAGGATGTAGCCTGCCATCTGCATAGATGGTT
TAACATGGTGCTGTTTTTGAAAACTTGCTGTGGAAATAAATTTGACAGAAGAGTAGTTATTTGTAAAGCTGTCCT
AGAAAGAGGTTAATTCTTTTGGTATATGAATATTTCTCCTCCAATCCTTTTAATTAGGTGGTTCAGCTTATCTTG
TATTTTCTGAGTCATAACTATACTCTAGGGCCAAGACCTACTATAAAATCTGGGGTCCTAACCAGAGAGTTGTTT
AGATCAATATGATATGCTTTGCCAACATGATCTAAGAAGGTATTCATTCTTTCTGGGTTTGAGAAGAGTTGACGA
AAGTGTAAGATTATACTCTCATGCTAAAATAAGGTATAGGCTAAGTGAAATACTGTAAATGGGTTGGTTAGAATT
AAAGTTTAGAACTCTAAATCTTATGCTTATTTTTAAAGTAAAAAGTTGCCTCACTGTCATGAAATCCTGTTACTT
TCATTAAAAAAAAAAATCCTGTAAAATGGTCAAATTGGATAATGTAAGAGATAATGATGGCTTTGAGGCATTTCA
TACTTTACCAGTTTACATTTGGCTAGCAGACTGGTAAGGTTTAGGGTTCTCTCCACTAATGGAAAATTAAATGCT
AAACGTCCTAAGAATTATGTTGTTTTCAAGGCTTTGACTCAGATTTGTACTTTGATGTATGAAAGTGAATATCAA
ACTTGTTTATAGAAAAGACTATATAGAAAAATAAGTCTGTGTTGTGTATAGTGATACATGTTTTATGTTTACCCA
ATGCCTGTACTAAATCTTGTGCTTGGCTTTGAATTATATATGTGTTTACCTATGACTTTTTTTTGAAATAAACAG
AACAGTCATCTAAAAACATAAGGTTTTGGAAAGGAGATGCTTTTTCAATTCTTACCATCTGATTAGGTGGAATGT
TTTATAGACTTTTGGTGTTGAAAAAAAAAAGTTTGATAACAATGCATTTTGCTTGGAATATCCCCCAATCCAGAA
AAGTTGGTGACTTCTCTCCATTGTATATATGTACATAGTTTTCATTACTAGATTGTAAGCTCCTCAAGGGCAGGA
ATTGTTTTATCTTTGTTGTTCCTGCAGCACCTAATGTAAAGTGCCTTGCACAGGGTAGGTGCTCATGACGTGTAG
AATGAGTGAGTAACTTCCTGCCTCATCAGGATGAAATGTGGTTCACTTCCCCTGTGTTCAACACTACAAAGCTAC
TCCTGCCAGAAGAGGGCAGAGTTCTTTCTTGGGTTTGAACTGGCTTTTTTGGGTTGAACCAGATCATCCCACATC
CTTAGCACTACTTAACCTTCTTTTCCTGAAGATTACATATCAGTGTCCTGCGTTTTTATCTAATATTAGAGCTGA
GGTTCCTAGGAAAATTTTGAAGTGGGGAAGATTATGGAGAAAATGAAATGGAAATTTGGGGAGGGTGGTTTGTCA
GTATAAGGCCCTGTGGGGTAATCATATTTTAGTTATTACTTGTTAAAAGGGTAACAGAACCTCTGTTTCTTTACC

FIGURE 4612B

AAGTCGCTGGTTGGCCATTTCTCCAATTGATGAACTACCATTGGTTTTAGCTCTTTCTCATTTGGGATTCCCCTC
AATTGCTTACATGATTCTGGTACTTAGAGTCTAATAGAGTTGCTGTGAATATGTAGTGCTGTACATAATGGCAGT
TTTGTAAATGTGAGATAACCTTGAATATGTTGTGGTTTGTATACAGAGCCATTAGTATTGTTATTTTGGCCACTT
TTTTATTCAAAATAAATAACATAATTATTTGTAAAAAAA

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FIGURE 4613

TLKSSHHLPPPGFHTPSWKAFPCPCPCLTPMEVKLQSWGNRRF

FIGURE 4614

GGGCCCTCATAATAAGCATTGTTACTATTGGAAGTTGTTTTCACATTCTTTCCAATATTAAATATGTATTTTTTTAAGTAATGATAATATTTTCCAGTGGCTCATTTGGATGAGAACTACCCTCTATTTTTAATATTAAAACTACATCCAACTCATCATTTAGCCTTTGGTTGTACAGTTGTGTAATGGGCTATGGACTGTTACACACCTTACCACCTCTAGGCCTATGTTTTTTCTTTCCCCATATATTCTGATGGGGATAAATACTGTTTTGCCTCTCCCATAGGAATGGAATACATTTATTCTAAAATGATCTTTCACAGAAGTAAGAGAGAGGGAAACCTAAATATACCTCTAAATTGTTTGAAGTTGGTCCCAGCAGCATAAAATGGGTTGGCCCCAAAGGGTTGGAGGGTGGGCTTGGTTATCAGTATTTGTTTTCAGAATGAGATGGGAGCATCTTTCCTTTGCCACGTGCTTTGTGCTTGATAACATCATGCTTGGTTCAAACGACAACTCAGCACAAAGCCTTGAGTATAAATTGTTGGAATCAAAACATCTCATTCTGATGACGTGGTTTAATTTTTTAATTTTTTTTTTAATAGGGGTGGGAGGGAGGGTACTTTGCCCCAAAAGGGAGGGTGTCTGCACTAAGGATTTAGAAACACTTTGGAAGCTCATAACCTCATCAGAAACTGCCTTTAGCCACACTCCTGACCTTCTAGATGAGTAACAAAAAAATGAAATAAGTTCTTGGAAATTAAGCCATTTATTTTAATTTGCTATTTTTTTCAATGTTCTAGGTATCTTTAAATTTGTTATTGTGGAATCATTTTCCTGCCAGATACCTTTATCAAAATTATTGGCCTCATGAGAGCTGAAGTAAGTCAGCTTTTTGGTGAACTTTAGTGGACTTCTGTGAGATTGTAGTTGTACTTTGTATCTCTAAATCTAAAGATAGTTTTTTAAAACTCCCAAAGAAAATCTGCTCTCCTTTCTGATCTAAAAACTCATCTTTGGGGTAAAGAGTTAAGTGTCCAAAGGTTGTCACAGTTCATGAGGTCAGAGGGAGCTAGCCTGGCACCTGGACTCTGCCCATCCACAGCTGACAGATTCCAACAGAAGTGTATTTAAATTCTCCAGTAGACAATGCTGGGTAAGGGAGGGGGTAGGGCTGGGTTATTAAGATACAGGCTGCTGTATTTTACATTGGTTGTGGGGGAAGGGGAGCCTGGAGAAAACAAAGTCACTATTCCCTTTTTTGAAACAGGAAAAAAAATTATTTTTTGTTCAGTAAAAATGGTAGAGAATTCCAATGTCCCTAGCCACAAGGGACCAGTTCCACTGAGAAGTGAACAGTGGGAACTCAAAATTTCAGAAACATTGGGGGAAGGGAAAATTGGCTTTCTCTTAATTGGCAGATGTTCCAGTGGGGCGGGGGGGCTCTGTTTTTGTTGGGATGTGTTATGTTGTATGTACGCATATATGGACCGGAGTCTGCTGAGTTTATAAGGTTCCAAAAATATGGTAAAATCTTGGTTTTTGTTAATTTATCTCAATAAAAGCCCACTGGAACTCCAAAAAAAGAGAATAAATATAAATAACATTAGATAATAAACCGACAATAAATGGCACAGCTTTTTTTAGAGTGAAAATATAAAATATTGTATTTTTATTGGTGAAAAAATAAATAAACCAGTAATTTCAATGTTAGTATGAACCTGATTCAGTAAGGCCAGAATATTAA

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FIGURE 4615

ALIISIVTIGSCFHILSNIKYVFF

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FIGURE 4616

CTAACTTTGAGTCAACGCTGACTACAGCACCAGGACTGCTCACTTCCAGCTTCTGCTGACACCTGCCCTCGTTTA
GTCTTTCTTGGTGGCTGCAGGTTCAGTAGAAACTCTATGCCAGGCTTTGTCTCCGGGACATAGGAGAGTGCTGGT
GCTCAGTCATGTTTGTTGAATGAGTAATAAATGGTAAAGGTTGTTGCTGCCCCGAGACGCTTCAAGAGGAAGCAG
CCCCCTAACCCCAGCTGGGAGGAGGAGGAAGAATCCTGGGCTGGTCAGTTGGGGAAGGAGCTGAGCAGGCCGGGC
CACCTGGGCTGACACAGCACGAGCACCACGTGGATGGGATGCCTGCAGTCAGCTGCAGGAGGGCCTCGTCGGGAG
GCCACAGGGCCCCTCTTTTGTCTTGAATGGAGACCTCCAAGGCTCCAGGACATAAAGGGCCTTGGCCAAGCTGTT
CCTGGCCACCTGGCCACATCTCCAGCTGCACCAGTTCTCACCTCCATTCCCCACGGCCCCAGCTGTCAGGTTTTA
GGGTGGCAGAGAGCTCCATGCACCCCCTGGCCTTGGCCTCTTCTGGGGCTTAGAGCTCCAGGACTTTTGGGCCTG
TGCACCCTCAGCGTCCCCTCTTACGACTCCGGCGAGGACGGCCAGGTGCCTGGTGGACTCTTGCACGTGCTCAGC
CACGAGACCTCATGTGCGCTGTCCTGAGCCCACCTGTGTCCTCAG**ATG**TTCCAGGTCATCCAGCCAGAGCGTGCG
CTGTACATCCAGGCCAACAACTGCGTGGAGGCCAAGGACTGGATCGACATTCTCACCAAAGTGAGCCAGTGCAAC
CAGAAGCGCCTCACCGTCTACCACCCGTCCGCCTACCTGAGCGGCCACTGGCTGTGCTGTAGGGCGCCATCCGAC
TCGGCTCCGGGCTGCTCGCCCTGCACTGGCGGCCTCCCAGCCAACATCCAGCTGGACATTGATGGGGACCGTGAG
ACGGAGCGTATCTACTCCCTCTTCAACTTGTACATGAGCAAGCTGGAGAAGATGCAGGAGGCCTGTGGGAGCAAA
TCTGTGTATGACGGCCCGGAGCAGGAGGAGTATTCGACGTTCGTCATTGACGACCCCCAGGAGACCTACAAGACG
CTAAAGCAAGTCATCGCTGGGGTTGGGGCTTTGGAGCAGGAGCACGCCCAGTATAAGAGGGACAAGTTCAAGAAG
ACGAAATATGGAAGCCAGGAGCACCCCATCGGAGACAAGAGCTTCCAGAACTACATCCGGCAGCAGTCCGAGACC
TCCACTCATTCCATT**TAA**AGTCTGCGGGACGCGCCCAGTGGCGCCAGCAAGCTGCCCATGCAAAGCCGCAGCCTT
TGGGAGGGAGAAGAGAAGGAAGAGCGCAGAGCCGGCAAAGTGAGATGCACGCCGTCCCGGCCCATAGACAAGTGG
CGCTGGGGTTTCCCTCTCCCAGAACCGCTGCCACCACCGCCACGCCCTCCGCAGAAAGCCCACCTGGCCCTGTGG
AACGTGTCGTCATTTGATTCTGTGCTTTTTGCTCCTTGTTTGTGGGGATCTGGGGATCAGCTGAAGGATCAGGAA
GTGTGGGCTGTGCCCTAGCCACACCACAGCCAGCCTCAGGGAGCCACGGCCCGTCTAGTCGACTGTGACATGCAC
CTCCGGCCGTGTGTGCGTCAGTCTCGTGCACGTCTGTCTTGCGTTGCACGGTGCGTGTGACGCTGGGCTCTGTGG
CTCTGTGCCCGGGAGGCCTGCTGGCCCCGCCTCGGCTTTCGGCTTCATCACATTGGGAGGTTCAGAGCATTACTC
TCCCACTGTGCCTGCCATCCAGGCAGCCATGGGAGGCGGCCTCCCTGTTCCACTTTCGAGGTTCGTTTGATTCCT
GGCTGAGGGGTCAGTTTTATGGCTGGGAGGTGCAGAATTACACAGAAGTCCCAGTCTGAGGATGTCCTTGGTGCT
TGGGGGATACGGGTTCTGTCCACAGAGTCCCTTGGAGGGAAAGGTGTGGGCTCCAGCTTCTCCAGGCGTCTGCGG
AGCCCACAGTTGAAGCCCACATCGTTTTGCTGTTGAATGGGGTTTAAAATCAGAATTAACATTTGCCACCCCCCG
TGGAAGTTTGAAGATTTTAAAAATAGAAATGTACATTTTTCAAGCTGTTTTTCTTTATGTTTTTGAAGGACCATT
TTTAATTAGCTCTTTGATACAAAGTAACTCAGAACGTCAAAACCTATACCCACTAAAGGGAAGGCTGCCGGGAAG
GCAAATGGAACAGGAATGGAGCCTGTCTCAGGAAGGCCAGCTGCAGGTCCTCCAGAAAATCAAAGAAGGGAAGAA
ACTCTGAGTTTGAGGTACAGGGGCTTCGGGGTGCAGACGTCCCTCCAGGGCCCATGGTCAGTATTGCACCTGTGT
TATGAACCCCCAGATGCTGTGCAGGGCAGGGGCGGGGGCTGCTGTTTTATTGGGGAGGGGAGCATCCTAAAAATG
GGGTCCAGGCAGACCCCTCCAGACCTCACACTGCCGAGGAGGCCTTTCCCAAAGGGCGTCCTCCCGGGATGCAGA
CGGCAGGTGTGTGGGAAGCGCCGTTTAAATACACAGCACGACGTATCCTTGTACCGACTTCTCCCGGTTCTTGTT
TGAAAATACTGTAGTTCAGGCTCTTGATCTAGATGGCAGATAGGAACTTTCTTGTCACAAAAATACTGGAGGAAA
ATGTTGTAAAAATAGACTTTTGGACACACAGCTGTTGGGGCTGCACTGAGCTGCAATTTTTAACATGGATTTATA
ACTTAATGTTTCTGTTTATAAAATACTAATGATTTGCAATGTATTTTACTGGCCAATTAAAACAGATGTTTTATT
CTTTCTGAA

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FIGURE 4617

MFQVIQPERALYIQANNCVEAKDWIDILTKVSQCNQKRLTVYHPSAYLSGHWLCCRAPSDSAPGCSPCTGGLPAN
IQLDIDGDRETERIYSLFNLYMSKLEKMQEACGSKSVYDGPEQEEYSTFVIDDPQETYKTLKQVIAGVGALEQEH
AQYKRDKFKKTKYGSQEHPIGDKSFQNYIRQQSETSTHSI

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FIGURE 4618

AGGCCCGTGGATCTCATCGAAGATGGCGGCGCGATCTGTGTCGGGCATTACCAGAAGAGTCTTCATGTGGACAGT
CTCAGGGACACCATGTAGAGAATTTTGGTCTCGATTCAGAAAAGAGAAAGAGCCAGTGGTTGTTGAGACAGTAGA
AGAGAAAAAGGAACCTATCCTAGTGTGTCCACCTTTACGAAGCCGAGCATACACACCACCTGAAGATCTCCAGAG
TCGTTTGGAATCTTACGTTAAAGAAGTTTTTGGTTCATCTCTTCCTAGTAATTGGCAAGACATCTCCCTGGAAGA
TAGTCGTCTAAAGTTCAATCTTCTGGCTCATTTAGCTGATGACTTGGGTCATGTAGTCCCTAACTCCAGACTCCA
CCAGATGTGCAGGGTTAGAGATGTTCTTGATTTCTATAATGTCCCTATTCAAGATAGATCTAAATTTGATGAACT
CAGTGCCAGTAATCTGCCCCCCAATTTGAAAATCACTTGGAGTTACTAAGCAATTCGGAAGAGAAACACATTGAA
ATCACTGTCTTTCCCTGAGCAAGGGGGCTGCTCATTAGATCTTTTGATACTTTACCATGTGAAATACTACCAGAA
CTGTTCTCTAAACCCACTTTTTCTGTAGAGGAATGTATCATCTTTTTTTTTCTCATATTACAAATGGACAAATAA
CGGACTTTCTATTTTCATATTTGCTGAAACCATTTTTTAAATGAAATTAGGTCATTATTTATGAAAAGTTTTGAG
AGGGCACTGTCAACTTGGGTTTAAGACAGGAGGACATTGCAAGTTCACACCTTTCATAAGCATAAAGTAGTTGCA
AGAAAGTATTTTCATCCTGTTAGGATTCATATCTAAGATAGAGTTATGCATTGCACATACACAAATAAACTTTTA
TTAGATAGATACCTATAAAAGAAACATAAAAGTATGTTGTGTATTACTGACAGTTCTAGATTAATTTCTTTTAGA
ATTAAAGCAGATTTGTTAAAGTGAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4619

MAARSVSGITRRVFMWTVSGTPCREFWSRFRKEKEPVVVETVEEKKEPILVCPPLRSRAYTPPEDLQSRLESYVK
EVFGSSLPSNWQDISLEDSRLKFNLLAHLADDLGHVVPNSRLHQMCRVRDVLDFYNVPIQDRSKFDELSASNLPP
NLKITWSY

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FIGURE 4620

AGGCCCGTGGATCTCATCGAAGATGGCGGCGCGATCTGTGTCGGGCATTACCAGAAGAGTCTTCATGTGGACAGT
CTCAGGGACACCATGTAGAGAATTTTGGTCTCGATTCAGAAAAGAGAAAGAGCCAGTGGTTGTTGAGACAGTAGA
AGAGAAAAAGGAACCTATCCTAGTGTGTCCACCTTTACGAAGCCGAGCATACACACCACCTGAAGATCTCCAGAG
TCGTTTGGAATCTTACGTTAAAGAAGTTTTTGGTTCATCTCTTCCTAGTAATTGGCAAGACATCTCCCTGGAAGA
TAGTCGTCTAAAGTTCAATCTTCTGGCTCATTTAGCTGATGACTTGGGTCATGTAGTCCCTAACTCCAGACTCCA
CCAGATGTGCAGGGTTAGAGATGTTCTTGATTTCTATAATGTCCCTATTCAAGATAGATCTAAATTTGATGAACT
CAGTGCCAGTAATCTGCCCCCCAATTTGAAAATCACTTGGAGTTACTAAGCAATTCGGAAGAGAAACACATTGAA
ATCACTGTCTTTCCCTGAGCAAGGGGGCTGCTCATTAGATCTTTTGATACTTTACCATGTGAAATACTACCAGAA
CTGTTCTCTAAACCCACTTTTTCTGTAGAGGAATGTATCATCTTTTTTTTTCTCATATTACAAATGGACAAATAA
CGGACTTTCTATTTTCATATTTGCTGAAACCATTTTTTAAATGAAATTAGGTCATTATTTATGAAAAGTTTTGAG
AGGGCACTGTCAACTTGGGTTTAAGACAGGAGGACATTGCAAGTTCACACCTTTCATAAGCATAAAGTAGTTGCA
AGAAAGTATTTTCATCCTGTTAGGATTCATATCTAAGATAGAGTTATGCATTGCACATACACAAATAAACTTTTA
TTAGATAGATACCTACAAAAGAAGCATAAAAGTATGTTGTGTATTACTGACAGTTCTAGATTAATTTCTTTTAGA
ATTAAAGTAGATTTGTTAAAGTGTATTGTGTGTTGTAAATTTTTTGAGTGAAATTTGCTTGCGCTCTGCCTTGCC
ATTTCTTTCCAGTAAGTATAATTTTGAAAAAATTAGAATATATGCCAAATATTGAGTGCTGTGACTCTTCCTCAT
AAGAGATGTGCCAGATTCTATGTCTAATTGCATATTCTCTTCAGAGGAGATGATGCTTATTTTAAACCTTTTTCT
CTATAACTTTTAAAAAGTGGTGCTGAGTATTCACTAGAGTGGCAAGTCTTTGTGCTTTAATGCACTCAATTTGTG
GAAATTACTTAAATAGCAGGTTATCAGATGGTTCTGAATGACAAAGGTGTTAAATTTGGGATTTTTTTTTCAAGC
TTTAGATATGGCTGGAGAGTAATGAGACAGAAGGAATGTCTTATATTGTTCTGACTGCTGACAATTCCTAAAGAA
AAGTGATAGAAGGGTTTTTAACAAAACTTTTTCCCTGCCGCCGCCGAGTCGCGCGGAGGCGGAGGCTTGGGTGCG
TTCAAGATTCAGCTTCACCCGTAACCCACCGCCATGGCCGAGGAAGGCATTGCTGCTGGAGGTGTAATGGACGTT
AATACTGCTTTACAAGAGGTTCTGAAGACTGCCCTCATCCACGATGGCCTAGCACGTGGAATTCGCGAAGCTGCC
AAAGCCTTAGACAAGCGCCAAGCCCATCTTTGTGTGCTTGCATCCAACTGTGATGAGCCTATGTATGTCAAGTTG
GTGGAGGCCCTTTGTGCTGAACACCAAATCAACCTAATTAAGGTTGATGACAACAAGAAACTAGGAGAATGGGTA
GGCCTTTGTAAAATTGACAGAGAGGGGAAACCCCGTAAAGTGGTTGGTTGCAGTTGTGTAGTAGTTAAGGACTAT
GGCAAGGAGTCTCAGGCCAAGGATGTCATTGAAGAGTATTTCAAATGCAAGAAATGAAGAAATAAATCTTTGGCT
CACAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4621

MAARSVSGITRRVFMWTVSGTPCREFWSRFRKEKEPVVVETVEEKKEPILVCPPLRSRAYTPPEDLQSRLESYVK
EVFGSSLPSNWQDISLEDSRLKFNLLAHLADDLGHVVPNSRLHQMCRVRDVLDFYNVPIQDRSKFDELSASNLPP
NLKITWSY

FIGURE 4622

GTGCAGTTGCGGCTCCAGGGCC**ATG**GCGGAGGAGCAGGGCCGGGAACGGGACTCGGTTCCCAAGCCGTCGGTGCT
GTTCCTCCACCCAGACCTGGGCGTGGGCGGCGCTGAGCGGCTGGTGTTGGACGCGGCGCTGGCGCTGCAGGCGCG
CGGGTGTAGCGTGAAGATCTGGACAGCGCACTACGACCCGGGCCACTGTTTCGCCGAGAGCCGCGAGCTACCGGT
GCGCTGTGCCGGGGACTGGCTGCCGCGAGGCCTGGGCTGGGGCGGCCGCGGCGCCGCCGTCTGCGCCTACGTGCG
CATGGTTTTCCTGGCGCTCTACGTGCTGTTCCTCGCCGACGAGGAGTTCGACGTGGTAGTGTGCGACCAGGTGTC
TGCCTGTATCCCAGTGTTCAGGCTGGCTAGACGGCGGAAGAAGATCCTATTTTACTGTCACTTCCCAGATCTGCT
TCTCACCAAGAGAGATTCTTTTCTTAAACGACTATACAGGGCCCCAATTGACTGGATAGAGGAATACACCACAGG
CATGGCAGACTGCATCTTAGTCAACAGCCAGTTCACAGCTGCTGTTTTTAAGGAAACATTCAAGTCCCTGTCTCA
CATAGACCCTGATGTCCTCTATCCATCTCTAAATGTCACCAGCTTTGACTCAGTTGTTCCTGAAAAGCTGGATGA
CCTAGTCCCCAAGGGGAAAAAATTCCTGCTGCTCTCCATCAACAGATACGAAAGGAAGAAAAATCTGACTTTGGC
ACTGGAAGCCCTAGTACAGCTGCGTGGAAGATTGACATCCCAAGATTGGGAGAGGGTTCATCTGATCGTGGCAGG
TGGTTATGACGAGAGAGTCCTGGAGAATGTGGAACATTATCAGGAATTGAAGAAAATGGTCCAACAGTCCGACCT
TGGCCAGTATGTGACCTTCTTGAGGTCTTTCTCAGACAAACAGAAAATCTCCCTCCTCCACAGCTGCACGTGTGT
GCTTTACACACCAAGCAATGAGCACTTTGGCATTGTCCCTCTGGAAGCCATGTACATGCAGTGCCCAGTCATTGC
TGTTAATTCGGGTGGACCCTTGGAGTCCATTGACCACAGTGTCACAGGGTTTCTGTGTGAGCCTGACCCGGTGCA
CTTCTCAGAAGCAATAGAAAAGTTCATCCGTGAACCTTCCTTAAAAGCCACCATGGGCCTGGCTGGAAGAGCCAG
AGTGAAGGAAAAATTTTCCCCTGAAGCATTTACAGAACAGCTCTACCGATATGTTACCAAACTGCTGGTA**TAA**TC
AGATTGTTTTTAAGATCTCCATTAATGTCATTTTTATGGATTGTAGACCCAGTTTTGAAACCAAAAAAGAAACCT
AGAATCTAATGCAGAAGAGATCTTTTAAAAAATAAACTTGAGTCTTGAATGTGAGCCACTTTCCTATATACCACA
CCTCCCTGTCCACTTTTCAGAAAAACCATGTCTTTTATGCTATAATCATTCCAAATTTTGCCAGTGTTAAGTTAC
AAATGTGGTGTCATTCCATGTTCAGCAGAGTATTTTAATTATATTTTCTCGGGATTATTGCTCTTCTGTCTATAA
ATTTTGAATGATACTGTGCCTTAATTGGTTTTCATAGTTTAAGTGTGTATCATTATCAAAGTTGATTAATTTGGC
TTCATAGTATAATGAGAGCAGGGCTATTGTAGTTCCCAGATTCAATCCACCGAAGTGTTCACTGTCATCTGTTAG
GGAATTTTTGTTTGTCCTGTCTTTGCCTGGATCCATAGCGAGAGTGCTCTGTATTTTTTTTAAGATAATTTGTAT
TTTTGCACACTGAGATATAATAAAAGGTGTTTATC

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FIGURE 4623

MAEEQGRERDSVPKPSVLFLHPDLGVGGAERLVLDAALALQARGCSVKIWTAHYDPGHCFAESRELPVRCAGDWL
PRGLGWGGRGAAVCAYVRMVFLALYVLFLADEEFDVVVCDQVSACIPVFRLARRRKKILFYCHFPDLLLTKRDSF
LKRLYRAPIDWIEEYTTGMADCILVNSQFTAAVFKETFKSLSHIDPDVLYPSLNVTSFDSVVPEKLDDLVPKGKK
FLLLSINRYERKKNLTLALEALVQLRGRLTSQDWERVHLIVAGGYDERVLENVEHYQELKKMVQQSDLGQYVTFL
RSFSDKQKISLLHSCTCVLYTPSNEHFGIVPLEAMYMQCPVIAVNSGGPLESIDHSVTGFLCEPDPVHFSEAIEK
FIREPSLKATMGLAGRARVKEKFSPEAFTEQLYRYVTKLLV

FIGURE 4624

XATGCTTXCAACTATTTATAATGCATCAATTTGAACTTAGARGGTRGGAGATCRGATCATATGTGGGAAAATGTA
AAAGCAGGGATATCAGTGGGCATTAGAATAAAAACTAGGGATACAATAACTTCTTTGCATATGACAATACTTATT
TGTATATAAGAGAAAGAACGAAATAACCTTTATTGAAATAAAGATACTATGCAAGAAAATGTACAGTTGTCGAAG
TGGAGAAAATGAGGATATATTCTTGCAGACGAGCTATAGGTCATACATGAATGTCTAGTGAGACATTCAAAATTC
GTATAGGGTGCAGAGTAATTTCTTATTGTGAGGAACTGTCCAATGTATTGCAAGATGTTCTGCATACTTGGCTCT
CACATACTAAATGCTAGTAGCGCCCCCACCCCCACGCCCAGTCACGGTGACAACCACAAACCCTATCAGATCTAT
TCACCTTTTTCAGAGCAGATATTTTGTAACATTCTCTTTGCTGACCTGAAATGACTCATAGATAATACAATCTAC
TTACACACATGAATTTCTTAAAAAAATCAATTTAATGCCCTAACTCTCTTATTAAGGAGAAATAGAAAAGAAGAA
ATTTATAATGAAAAGAAGATGAATTTCATTATGTAAACGCTCAGGC**ATG**ACTACGCTGTTTGAAACAGACAGATG
TTTACTCTTCCTTGTAATGAGTAGGTTTGGATTTAAGAGCCGATTAGAGGCTACTTCCTGTAAACAAGTACAGGA
AAATGAAACTAGACGGGTGGGGGACACTAGAATGAAAACCAGTGTTAGGGTAAAGACAAAACAGACTATGTACAT
AATCTGTATATGGGAAAAGAAAGAGCGAAATTACCTTACT**TAA**GGATAATAGGACAAGACAAATTACAGATTGTC
TCAGAGAAAACAAATGAGTTACTCTCTCGGACAAGCTGTAGGTCCTACCTAAATGTCCAGCAGGACATTAGACAG
TCGTACAGGGTACAGAATAATTCTTCGTTGTGTGGCACTAACCCACACACTGCAGGACATCGTTCTCCCTGGCTG
CATCCACTCAGTGCTGGGAGTAGTCCCCAGTTATTATGAAACCACCAATAACCCACTGACCACAGTGAGAACCAC
TGATTTTTTCCACTGACCTACTGAATATCTAGCATCCTTAGATTGGCTCAACTGTTACTTTCCTAAGGAGTCCTT
CTACAGAATAGGTCAGATCTTGGCCTCCCAAACCCCTTATTTTTAAAATACTTTGCGCCTTGCTTTGATAATTTG
TATTATGTATCCAAACTGAAATTATCTGCTTTCTGCATTAGAATGTAAGCCCCCTGAGGGTTGAGTCAGTCTGTC
TTGTTTGCTGTGCCACGCCTGATGCCCAGCCCAGCAGCATGCTTTGTACACTGATATATTGGGTAAATTTTGTTG
AATAAATTAAGCTCAACTATTTGTATTTCAATAGTTGAGTTGTATTGCTTCCTGTTCTTCAAGCTTAATTTGAAC
TGTCTAATAAAAAGAAGTAATTAAAAAAAAAAAAAAAAACTCGA

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FIGURE 4625

MTTLFETDRCLLFLVMSRFGFKSRLEATSCKQVQENETRRVGDTRMKTSVRVKTKQTMYIICIWEKKERNYLT

FIGURE 4626

CGGCTCTGTAACACTCCGTCCAGCTCTCGCACTCTCAGATGCAAACTTCCACACAAACTCCTCGGCTCGCCTTGT
CCCGCGGGACTAGCATATCAAGCCTTCCGGGACACACCGTGCGATGATATATACGTATATACCCCTCTTGCCCTT
GAAGGCCGGAAGTCGGTCTTACAGATAAAAGCGAAACAGGAAGTCCCGCCCCTCTATGGAAAGTAAATGGTAGCT
CGGAAGGGTCAAAAGAGTCCGCGGTTTCGCCGCGTGAGTAGCTAAATGCGGCTGGGGAGGTCTACGCTTCTAGAG
CTTGAGCCAGCGGGGCGACCCTGCCAGTGGCAGGACTCGGCACCGCGCCCTCCACCGCCGGCAGGAGGGCTGCGT
GAACAGGTTACTCCCGTCGACATCGAAAGGAAGCCGGACGTGGGCGGGCAGAGAGGTCGGCTTGCTGATGGGTCC
GGGTGGGGCGCGCGTGGACTATGGGCCCGGGAGGTCCCTTACTGTCCCCGAGCCGCGGGTTCCTCTTGTGCAAAA
CGGGGTGGCACTCCAATCGCCTGCTTGGTGATTGTGGCCCCCACACACCTGTTTCTACAGCGCTTAGGTTCGAAC
AGTAACCCTGTAAACTAGGCACTGCTGTCCCCGCTTTACTGGTGGGAAACGGGCTCGGAGAGAATAAATGAGCTG
CCCTAAGCGACTGGGACAGAACCACAGTTCTCAGCCGGGCTTTCTGAGCCCACGCTGCCGCCCCAGCAGGGATCA
AATCACACAGTGTGAGATAAGCCTCAAGAGCGGGTGGCCTTATGCTGCCACTGAGAACTGATTGGGTTCAGTTGC
CTCATCAAAATCCCTAAGCATGGTTTGGTTTGGTTGTTATTTTTTTTTTTAAGTTTTAAAGGGAAGGAAGAGGAG
ATTGACGGTTTTCCTCTTTCCTTATCTTCTCTTCAGATTACAAAGTTCATTGTTAATCTCAAATATTATTTTGGC
CAACAGCTTCATCGCAGTAGGAATGGCAGCCCCATCTATGAAGGAAAGACAGGTCTGCTGGGGGGCCCGGGATGA
GTACTGGAAGTGTTTAGATGAGAACTTAGAGGATGCTTCTCAATGCAAGAAGTTAAGAAGCTCTTTCGAATCAAG
TTGTCCCCAACAGTGGATAAAATATTTTGATAAAAGAAGAGACTACTTAAAATTCAAAGAAAAATTTGAAGCAGG
ACAATTTGAGCCTTCAGAAACAACTGCAAAATCCTAGGCTGTTCATAAAGATTGAAAGTATTCTTTCTGGACATT
GAAAAAGCTCCACTGACTATGGAACAGTAATAGTTTGAATCATAGTGAACATCAATACTTGTTCCCTATATACGA
CACTTGATAATTAAGATGATCAAGAACCAGAAGATCTGTGAAGAAATGAAATAAAATGGTATTTAGTAAGAAATC
TCTA

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FIGURE 4627

RLCNTPSSSRTLRCKLPHKLLGSPCPAGLAYQAFRDTPCDDIYVYTPLALEGRKSVLQIKAKQEVPPLYGK

FIGURE 4628

AGCTATTTCAAGGCGCGCGCCTCGTGGTGGACTCACCGCTAGCCCGCAGCGCTCGGCTTCCTGGTAATTCTTCAC
CTCTTTTCTCAGCTCCCTGCAGCATGGGTGCTGGGCCCTCCTTGCTGCTCGCCGCCCTCCTGCTGCTTCTCTCCG
GCGACGGCGCCGTGCGCTGCGACACACCTGCCAACTGCACCTATCTTGACCTGCTGGGCACCTGGGTCTTCCAGG
TGGGCTCCAGCGGTTCCCAGCGCGATGTCAACTGCTCGGTTATGGGACCACAAGAAAAAAAAGTAGTGGTGTACC
TTCAGAAGCTGGATACAGCATATGATGACCTTGGCAATTCTGGCCATTTCACCATCATTTACAACCAAGGCTTTG
AGATTGTGTTGAATGACTACAAGTGGTTTGCCTTTTTTAAGTATAAAGAAGAGGGCAGCAAGGTGACCACTTACT
GCAACGAGACAATGACTGGGTGGGTGCATGATGTGTTGGGCCGGAACTGGGCTTGTTTCACCGGAAAGAAGGTGG
GAACTGCCTCTGAGAATGTGTATGTCAACACAGCACACCTTAAGAATTCTCAGGAAAAGTATTCTAATAGGCTCT
ACAAGTATGATCACAACTTTGTGAAAGCTATCAATGCCATTCAGAAGTCTTGGACTGCAACTACATACATGGAAT
ATGAGACTCTTACCCTGGGAGATATGATTAGGAGAAGTGGTGGCCACAGTCGAAAAATCCCAAGGCCCAAACCTG
CACCACTGACTGCTGAAATACAGCAAAAGATTTTGCATTTGCCAACATCTTGGGACTGGAGAAATGTTCATGGTA
TCAATTTTGTCAGTCCTGTTCGAAACCAAGCATCCTGTGGCAGCTGCTACTCATTTGCTTCTATGGGTATGCTAG
AAGCGAGAATCCGTATACTAACCAACAATTCTCAGACCCCAATCCTAAGCCCTCAGGAGGTTGTGTCTTGTAGCC
AGTATGCTCAAGGCTGTGAAGGCGGCTTCCCATACCTTATTGCAGGAAAGTACGCCCAAGATTTTGGGCTGGTGG
AAGAAGCTTGCTTCCCCTACACAGGCACTGATTCTCCATGCAAAATGAAGGAAGACTGCTTTCGTTATTACTCCT
CTGAGTACCACTATGTAGGAGGTTTCTATGGAGGCTGCAATGAAGCCCTGATGAAGCTTGAGTTGGTCCATCATG
GGCCCATGGCAGTTGCTTTTGAAGTATATGATGACTTCCTCCACTACAAAAAGGGGATCTACCACCACACTGGTC
TAAGAGACCCTTTCAACCCCTTTGAGCTGACTAATCATGCTGTTCTGCTTGTGGGCTATGGCACTGACTCAGCCT
CTGGGATGGATTACTGGATTGTTAAAAACAGCTGGGGCACCGGCTGGGGTGAGAATGGCTACTTCCGGATCCGCA
GAGGAACTGATGAGTGTGCAATTGAGAGCATAGCAGTGGCAGCCACACCAATTCCTAAATTGTAGGGTATGCCTT
CCAGTATTTCATAATGATCTGCATCAGTTGTAAAGGGGAATTGGTATATTCACAGACTGTAGACTTTCAGCAGCA
ATCTCAGAAGCTTACAAATAGATTTCCATGAAGATATTTGTCTTCAGAATTAAAACTGCCCTTAATTTTAATATA
CCTTTCAATCGGCCACTGGCCATTTTTTTCTAAGTATTCAATTAAGTGGGAATTTTCTGGAAGATGGTCAGCTAT
GAAGTAATAGAGTTTGCTTAATCATTTGTAATTCAAACATGCTATATTTTTTAAAATCAATGTGAAAACATAGAC
TTATTTTTAAATTGTACCAATCACAAGAAAATAATGGCAATAATTATCAAAACTTTTAAAATAGATGCTCATATT
TTTAAAATAAAGTTTTAAAAATAACTGCA

FIGURE 4629

MGAGPSLLLAALLLLLSGDGAVRCDTPANCTYLDLLGTWVFQVGSSGSQRDVNCSVMGPQEKKVVVYLQKLDTAY
DDLGNSGHFTIIYNQGFEIVLNDYKWFAFFKDVTDFISHLFMQLGTVGIYDLPHLRNKLVIK

FIGURE 4630A

CGACTCCTTAGAGCATGGCATGGCTCAGAGGTGCTGGTAAAACTGATGGGGGTTTTTGCTGTCCCTCCCCTCAGC
GCCGACACCATGTGGATCCAGGTTCGGACCATGGACGGGAGGCAGACCCACACGGTGGACTCGCTGTCCAGGCTG
ACCAAGGTGGAGGAGCTGAGGCGGAAGATCCAGGAGCTGTTCCACGTGGAGCCAGGCCTGCAGAGGCTGTTCTAC
AGGGGCAAACAGATGGAGGACGGCCATACCCTCTTCGACTACGAGGTCCGCCTGAATGACACCATCCAGCTCCTG
GTCCGCCAGAGCCTCGTGCTCCCCCACAGCACCAAGGAGCGGGACTCCGAGCTCTCCGACACCGACTCCGGCTGC
TGCCTGGGCCAGAGTGAGTCAGACAAGTCCTCCACCCACGGCGAGGCGGCCGCCGAGACTGACAGCAGGCCAGCC
GATGAGGACATGTGGGATGAGACGGAATTGGGGCTGTACAAGGTCAATGAGTACGTCGATGCTCGGGACACGAAC
ATGGGGGCGTGGTTTGAGGCGCAGGTGGTCAGGGTGACGCGGAAGGCCCCCTCCCGGGACGAGCCCTGCAGCTCC
ACGTCCAGGCCGGCGCTGGAGGAGGACGTCATTTACCACGTGAAATACGACGACTACCCGGAGAACGGCGTGGTC
CAGATGAACTCCAGGGACGTCCGAGCGCGCGCCCGCACCATCATCAAGTGGCAGGACCTGGAGGTGGGCCAGGTG
GTCATGCTCAACTACAACCCCGACAACCCCAAGGAGCGGGGCTTCTGGTACGACGCGGAGATCTCCAGGAAGCGC
GAGACCAGGACGGCGCGGGAACTCTACGCCAACGTGGTGCTGGGGGATGATTCTCTGAACGACTGTCGGATCATC
TTCGTGGACGAAGTCTTCAAGATTGAGCGGCCGGGTGAAGGGAGCCCCATGGTTGACAACCCCATGAGACGGAAG
AGCGGGCCGTCCTGCAAGCACTGCAAGGACGACGTGAACAGACTCTGCCGGGTCTGCGCCTGCCACCTGTGCGGG
GGCCGGCAGGACCCCGACAAGCAGCTCATGTGCGATGAGTGCGACATGGCCTTCCACATCTACTGCCTGGACCCG
CCCCTCAGCAGTGTTCCCAGCGAGGACGAGTGGTACTGCCCTGAGTGCCGGAATGATGCCAGCGAGGTGGTACTG
GCGGGAGAGCGGCTGAGAGAGAGCAAGAAGAAGGCGAAGATGGCCTCGGCCACATCGTCCTCACAGCGGGACTGG
GGCAAGGGCATGGCCTGTGTGGGCCGCACCAAGGAATGTACCATCGTCCCGTCCAACCACTACGGACCCATCCCG
GGGATCCCCGTGGGCACCATGTGGCGGTTCCGAGTCCAGGTCAGCGAGTCGGGTGTCCATCGGCCCCACGTGGCT
GGCATACACGGCCGGAGCAACGACGGAGCGTACTCCCTAGTCCTGGCGGGGGGCTATGAGGATGACGTGGACCAT
GGGAATTTTTTCACATACACGGGTAGTGGTGGTCGAGATCTTTCCGGCAACAAGAGGACCGCGGAACAGTCTTGT
GATCAGAAACTCACCAACACCAACAGGGCGCTGGCTCTCAACTGCTTTGCTCCCATCAATGACCAAGAAGGGGCC
GAGGCCAAGGACTGGCGGTCGGGGAAGCCGGTCAGGGTGGTGCGCAATGTCAAGGGTGGCAAGAATAGCAAGTAC
GCCCCCGCTGAGGGCAACCGCTACGATGGCATCTACAAGGTTGTGAAATACTGGCCCGAGAAGGGGAAGTCCGGG
TTTCTCGTGTGGCGCTACCTTCTGCGGAGGGACGATGATGAGCCTGGCCCTTGGACGAAGGAGGGGAAGGACCGG
ATCAAGAAGCTGGGGCTGACCATGCAGTATCCAGAAGGCTACCTGGAAGCCCTGGCCAACCGAGAGCGAGAGAAG
GAGAACAGCAAGAGGGAGGAGGAGGAGCAGCAGGAGGGGGGCTTCGCGTCCCCCAGGACGGGCAAGGGCAAGTGG
AAGCGGAAGTCGGCAGGAGGTGGCCCGAGCAGGGCCGGGTCCCCGCGCCGGACATCCAAGAAAACCAAGGTGGAG
CCCTACAGTCTCACGGCCCAGCAGAGCAGCCTCATCAGAGAGGACAAGAGCAACGCCAAGCTGTGGAATGAGGTC
CTGGCGTCACTCAAGGACCGGCCGGCGAGCGGCAGCCCGTTCCAGTTGTTCCTGAGTAAAGTGGAGGAGACGTTC
CAGTGTATCTGCTGTCAGGAGCTGGTGTTCCGGCCCATCACGACCGTGTGCCAGCACAACGTGTGCAAGGACTGC
CTGGACAGATCCTTTCGGGCACAGGTGTTCAGCTGCCCTGCCTGCCGCTACGACCTGGGCCGCAGCTATGCCATG
CAGGTGAACCAGCCTCTGCAGACCGTCCTCAACCAGCTCTTCCCCGGCTACGGCAATGGCCGGTGATCTCCAAGC
ACTTCTCGACAGGCGTTTTGCTGAAAACGTGTCGGAGGGCTCGTTCATCGGCACTGATTTTGTTCTTAGTGGGCT
TAACTTAAACAGGTAGTGTTTCCTCCGTTCCCTAAAAAGGTTTGTCTTCCTTTTTTTTTATTTTTATTTTTCAAA
TCTATACATTTTCAGGAATTTATGTATTCTGGCTAAAAGTTGGACTTCTCAGTATTGTGTTTAGTTCTTTGAAAA
CATAAAAGCCTGCAATTTCTCGACAAAACAACACAAGATTTTTTAAAGATGGAATCAGAAACTACGTGGTGTGGA
GGCTGTTGATGTTTCTGGTGTCAAGTTCTCAGAAGTTGCTGCCACCAACTCTTTAAGAAGGCGACAGGATCAGTC
CTTCTCTAGGGTTCTGGCCCCCAAGGTCAGAGCAAGCATCTTCCTGACAGCATTTTGTCATCTAAAGTCCAGTGA
CATGGTTCCCCGTGGTGGCCCGTGGCAGCCCGTGGCATGGCGTGGCTCAGCTGTCTGTTGAAGTTGTTGCAAGGA
AAAGAGGAAACATCTCGGGCCTAGTTCAAACCTTTGCCTCAAAGCCATCCCCCACCAGACTGCTTAGCGTCTGAG
ATCCGCGTGAAAAGTCCTCTGCCCACGAGAGCAGGGAGTTGGGGCCACGCAGAAATGGCCTCAAGGGGACTCTGC
TCCACGTGGGGCCAGGCGTGTGACTGACGCTGTCCGACGAAGGCGGCCACGGACGGACGCCAGCACACGAAGTCA
CGTGCAAGTGCCTTTGATTCGTTCCTTCTTTCTAAAGACGACAGTCTTTGTTGTTAGCACTGAATTATTGAAAAT
GTCAACCAGATTCTAGAAACTGCGGTCATCCAGTTCTTCCTGACACCGGATGGGTGCTTGGGAACCGTTTGAGCC
TTATAGATCATTTACATTCAATTTTTTTAACTCAGCAAGTGAGAACTTACAAGAGGGTTTTTTTTTAATTTTTTT
TTCTCTTAATGAACACATTTTCTAAATGAATTTTTTTTGTAGTTACTGTATATGTACCAAGAAAGATATAACGTT
AGGGTTTGGTTGTTTTTGTTTTTGTATTTTTTTTCTTTTGAAAGGGTTTGTTAATTTTTCTAATTTTACCAAAGT

FIGURE 4630B

TTGCAGCCTATACCTCAATAAAACAGGGATATTTTAAATCACATACCTGCAGACAAACTGGAGCAATGTTATTTT
TAAAGGGTTTTTTTCACCTCCTTATTCTTAGATTATTAATGTATTAGGGAAGAATGAGACAATTTTGTGTAGGCT
TTTTCTAAAGTCCAGTACTTTGTCCAGATTTTAGATTCTCAGAATAAATGTTTTTCACAGATTGAAAAAAAAAAA
AAA

FIGURE 4631

MWIQVRTMDGRQTHTVDSLSRLTKVEELRRKIQELFHVEPGLQRLFYRGKQMEDGHTLFDYEVRLNDTIQLLVRQ
SLVLPHSTKERDSELSDTDSGCCLGQSESDKSSTHGEAAAETDSRPADEDMWDETELGLYKVNEYVDARDTNMGA
WFEAQVVRVTRKAPSRDEPCSSTSRPALEEDVIYHVKYDDYPENGVVQMNSRDVRARARTIIKWQDLEVGQVVML
NYNPDNPKERGFWYDAEISRKRETRTARELYANVVLGDDSLNDCRIIFVDEVFKIERPGEGSPMVDNPMRRKSGP
SCKHCKDDVNRLCRVCACHLCGGRQDPDKQLMCDECDMAFHIYCLDPPLSSVPSEDEWYCPECRNDASEVVLAGE
RLRESKKKAKMASATSSSQRDWGKGMACVGRTKECTIVPSNHYGPIPGIPVGTMWRFRVQVSESGVHRPHVAGIH
GRSNDGAYSLVLAGGYEDDVDHGNFFTYTGSGGRDLSGNKRTAEQSCDQKLTNTNRALALNCFAPINDQEGAEAK
DWRSGKPVRVVRNVKGGKNSKYAPAEGNRYDGIYKVVKYWPEKGKSGFLVWRYLLRRDDDEPGPWTKEGKDRIKK
LGLTMQYPEGYLEALANREREKENSKREEEEQQEGGFASPRTGKGKWKRKSAGGGPSRAGSPRRTSKKTKVEPYS
LTAQQSSLIREDKSNAKLWNEVLASLKDRPASGSPFQLFLSKVEETFQCICCQELVFRPITTVCQHNVCKDCLDR
SFRAQVFSCPACRYDLGRSYAMQVNQPLQTVLNQLFPGYGNGR

FIGURE 4632

ATGAAGGTGAAGATGCTGAGCCGGAATCCGGACAATTATGTCCGCGAAACCAAGTTGGACTTACAGAGAGTTCCA
AGAAACTATGATCCTGCTTTACATCCTTTTGAGGTCCCACGAGAATATGTAAGAGCTTTAAATGCTACCAAACTG
GAACGAGTATTTGCAAAACCATTCCTTGCTTCGCTGGATGGTCACCGTGATGGAGTCAATTGCTTGGCAAAGCAT
CCAGAGAAGCTGGCTACTGTCCTTTCTGGGGCGTGTGATGGAGAGGTTAGAATTTGGAATCTAACTCAGCGGAAT
TGTATCCGTACAATACAAGCACATGAAGGCTTTGTACGAGGAATATGTACTCGCTTTTGTGGGACTTCTTTTTTC
ACTGTTGGTGATGACAAAACTGTGAAGCAGTGGAAAATGGATGGGCCAGGCTATGGAGACGAGGAAGAGCCATTA
CATACAATATTAGGAAAGACAGTGTATACTGGGATTGATCATCACTGGAAAGAAGCTGTTTTTGCCACATGTGGA
CAGCAAGTAGACATTTGGGATGAACAAAGAACTAATCCTATATGTTCAATGACCTGGGGATTTGACAGTATAAGT
AGTGTTAAATTTAACCCAATTGAGACATTTCTCTTGGGAAGTTGTGCATCTGACAGGAATATAGTACTGTACGAT
ATGAGGCAAGCTACTCCTTTGAAAAAGGTTATCTTAGATATGAGAACAAATACAATCTGTTGGAACCCTATGGAA
GCTTTCATTTTTACAGCAGCAAATGAAGATTATAACTTATATACTTTTGATATGCGTGCACTGGACACTCCTGTA
ATGGTCCATATGGATCATGTATCTGCAGTGCTTGATGTGGATTACTCTCCCACTGGGAAGGAGTTTGTGTCTGCT
AGTTTCGATAAATCTATTCGAATCTTTCCTGTAGACAAAAGTCGAAGCAGGGAGGTATATCATACAAAGAGAATG
CAACATGTTATCTGTGTAAAATGGACTTCTGACAGCAAGTATATTATGTGTGGATCTGATGAAATGAACATTCGC
CTGTGGAAAGCTAATGCTTCTGAAAAATTGGGTGTGCTTACATCACGAGAAAAAGCAGCCAAGGATTATAACCAG
AAATTGAAGGAGAAATTTCAGCATTATCCTCATATAAAACGTATAGCTCGTCATCGACATCTACCAAAATCTATC
TATAGCCAGATTCAGGAACAGCGCATCATGAAAGAAGCTCGTCGACGAAAGGAAGTGAATCGTATTAAACACAGC
AAGCCTGGATCTGTGCCACTTGTGTCAGAGAAGAAGAAACACGTAGTGGCAGTTGTAAAATAA

FIGURE 4633

MKVKMLSRNPDNYVRETKLDLQRVPRNYDPALHPFEVPREYVRALNATKLERVFAKPFLASLDGHRDGVNCLAKH
PEKLATVLSGACDGEVRIWNLTQRNCIRTIQAHEGFVRGICTRFCGTSFFTVGDDKTVKQWKMDGPGYGDEEEPL
HTILGKTVYTGIDHHWKEAVFATCGQQVDIWDEQRTNPICSMTWGFDSISSVKFNPIETFLLGSCASDRNIVLYD
MRQATPLKKVILDMRTNTICWNPMEAFIFTAANEDYNLYTFDMRALDTPVMVHMDHVSAVLDVDYSPTGKEFVSA
SFDKSIRIFPVDKSRSREVYHTKRMQHVICVKWTSDSKYIMCGSDEMNIRLWKANASEKLGVLTSREKAAKDYNQ
KLKEKFQHYPHIKRIARHRHLPKSIYSQIQEQRIMKEARRRKEVNRIKHSKPGSVPLVSEKKKHVVAVVK

FIGURE 4634A

AGCGCTTTACGGCGACGGCGGCTGAGTGAGAACCTTGGCGGCTGTGGAGGCTGCCGCGGCTGCGAAGGAGGCGGC
GGCGGGGCGGAGGAAGAGGAGTGGCGGCAGCGGCGGCGGGGACCCGTGCGGGGATGGCGGAGGTACCGCCTGGGC
CTAGCAGCCTCCTCCCACCACCAGCACCTCCGGCCCCGGCGGCGGTCGAGCCCCGCTGTCCCTTCCCGGCGGGGG
CCGCCCTCGCCTGCTGCAGCGAGGACGAGGAGGACGACGAAGAGCACGAAGGCGGCGGCAGCAGGAGCCCGGCGG
GCGGAGAGTCGGCGACGGTGGCGGCCAAGGGGCATCCGTGCCTCCGCTGCCCTCAGCCGCCGAGTGAGCAAGCAA
GCAAGCTCAACGGATTGATTAGCCCCGAACTGCGGCACCTCCGGGCGGCCGCCTCCCTCAAGAGCAAGGTCCTGA
GCGTAGCAGAGGTGGCCGCGACCACAGCCACCCCTGACGGAGGCCCCAGAGCGACTGCAACAAAAGGAGCCGGGG
TACACTCGGGCGAGAGGCCCCCTCACTCCCTCTCTAGTAATGCAAGAACTGCGGTCCCCAGCCCGGTGGAGGCAG
CGGCGGCGAGCGATCCCGCGGCGGCCCGCAATGGACTGGCCGAGGGCACCGAGCAGGAGGAGGGAGGAGGAATGA
CGAGCAGGTGCGGCTGCTGTCTTCGTCCCTGACCGCCGACTGCAGCTTAAGAAGCCCTTCGGGCAGGGAGGTTGA
GCCTGGGGAGGATCGGACGATACGATATGTCCGATATGAATCCGAGCTACAAATGCCCGATATCATGAGACTGAT
CACCAAAGATCTGTCCGAACCCTACTCCATTTATACCTATAGATATTTTATCCACAACTGGCCACAGCTGTGCTT
CTTGGCCATGGTAGGGGAGGAGTGTGTAGGTGCCATCGTTTGCAAGTTGGATATGCACAAAAAGATGTTCCGCAG
AGGTTATATAGCCATGTTAGCCGTGGATTCCAAATACAGGAGAAATGGCATTGGTACTAACTTGGTTAAGAAAGC
TATATATGCCATGGTTGAGGGAGACTGTGATGAGGTTGTTTTGGAAACCGAAATAACAAATAAGTCCGCTTTGAA
ACTTTATGAAAATCTTGGTTTTGTTCGAGATAAGAGGCTGTTCAGATACTATTTAAATGGAGTTGATGCACTGCG
ACTTAAACTGTGGCTGCGTTGAGAAACTGACATCAAGGAACAACTATCATCCACACAGAATCGACCTTTGCATGC
AATGCAATTTGTACAGAATTGCTTTGCAGGTGGATTTAGTAATTTCCATGCAGCTCTTACCTGTCAGTGTCTCAT
TGAGTGTCGCACAATATTTGTTGCACTTTGGCATGGCACATTTGTTCTGAATTAAAAGATTGTTTTAAACTTCAG
GAGTTCTTTTGGTACCAACAAGATGTGCCAGTTGATAGCCAAGATTTATGTGTTCATTTGCAAAGTCTGCTGACA
ATGTTATTTACACAGTGATCATTTTATCACAGAACCAGTAAGTGGAACATAATTTTTGTTCCCTAAAAAAGCCAA
TGTGGATTGTAAAAGTCTTTAAGTATACTAACATTTCACACAAAACCTGCCCTAGTTTTCTGAAGTGGGTGAGGG
AGACGCTTCAGTTTTAGGTTTTATTTTTTCAATATTAAATTTTCCATTCTTGAATATTGGTACCTCAGTGATTAG
TGAATGAAAAAAATGTAGGGTGGGTATGTCTTACAATGAGTAAAGGTAACAATTAAATTTTGTCTGCCAGTGCCT
GTGTAGATAAGTATATTTGTCTTCATCTCCAGTTTTTGAATGCATGCTATCTTTTCCTTTTCTTTAAGGCCTTTG
CAAGCAAACTTTTGTTTTTATTTAAATTCTAAATTTGATAAATTATTTCAGATTTTTATAATTTGGATACTTTTT
TCAGGTGAATGAAAGAATGGTTTACTTTAGAAGTCCCTTTTTCCTTACAGTAACAAGTTGAATCTACTTGGAAAA
TTGAGAAATGGCTCAAAAGAGATAAGAAAAGTTGATGGAGCCGGGAATTGCTGGGGTTTAGATGCACTTTTTCTT
TTGAGAGTAAGGGAAGTTTTGGAAAAGAATAGAAAATTAGTGTAAGTTGATATGATTTTATTTAATCAAAATTAC
TGCTACGCTGCGAAGAACAGCTTTTACAAAGTAGCTGAATTTGTTTTTCCCACTTGATTTGGATTCACATTGCTT
TCATTTCTTAAAATGCTTCACTTCAGGTTCTTGGTCTTGGAAATAAATTTCAAGGTGCATTGTATCCATTTTAAG
CTGCTTTATTTTATTTTCACTTGTATGAGCAAATTCTTGGGGGAGCTTTGCTTTTCTTCTGCCAGAAAAACAAAA
GGGGGAAATGAAAATCTTTTTTGGAATGAGTTCTGTGGGTTTTCTTAACAGCCACCATGTTTATTAGTTACATTG
TGTTTTGGCCAATCAGTGCAATGTAACAAATTTTACAGTTAATTGCTTTCAATTGAGTCAGTAAACCTGTGATAG
ATAATTTATTTAACTGGAAAACCTAGGTACCCATAAGAAAAAAGATTCATTCTCTGTGAAAACTGTAGGAATCTG
TTGTTGTTTTCATTTGAATATGCTCTACTTCTGCTCTAGTATTTGGTTTGGAATATATTTTGTGGCTCTAATTAC
TGTATTTTTAAAAACCCTACCTCCATTAACAGTTGGTAAAGGCCCCTTTTCAGGAAAGTTTGTTGCTTTTTTTTT
TTTTTTAAAGGGAAAGCTGCTCTTTGCTCAGTATAGTGTTTTGAAAGTGAACATAGTAACAAATACTTTAAAAAT
AAAGATACACAATTTATATTTGAAAATAAAAACTTTCTGCTGGTGGGATTATTTATAGTTCTTTATTTTTAAAGA
AAATGTTTTCCTTTTTATATTGCTCTTGAAAGTTTAATGAGCAGAATACAATACTGGTTATAATAAAAATATGGT
AACCACACAGTACTCAGCCTTTCAATATGTTTTTGGTCAAACTTCATTTAGGCACTAGCATTTAGAAGAATACCA
ATCACAGTGATGCTTTTGTTATTTAATATGAAGGAAATGGAACTAAAACATTTATGTCATCAAATTTTATTTCAC
TTCTTTATATTTGACTTGCTGGTTGATACATAATGGTTGATGAACATATATTTGCTTAAATCACTAATAGGGATG
GTTGTAAAGTAGATAGATCATTGGTTCAACCATTTTAGTGTTTTTGCCAGATTGTCAATGAAACCATCATACTGA
CCTTTTCCTCCAAAATTGCCAAATTGACTGAACTGGTTGGGTGTTTGTAAAGATGACGTTAACTGTGTGACTAAA
AAGTCAGATGGTTGCCATATTGTTTGGAATATGTTGAATGTCAGTGTATGCCTTATGTCTTTAATTGGGTATGCA
AAAAAATTTTTACTTAAGTAGATTAAAATTTTAACCTCTAGCATGAAAACCCAGCACCAACACTGAAAGACTCCA
TTCAGGTTGAAGTAGCCTCAAACAGTAATTTACTTTTTGATAATAGGCTGTTGTTTTTCTTAAATAAGCTTAAAA

FIGURE 4634B

CAATTCTATCTGAAATTGGTAGCATGGGTTCACTTGGCTACAACTGAGCAAAATAGATGCAACTTTCTTTTAATG
GGGTGCTGCCTCTTTAGGACTGACTGTACTATCCACTGACACTGGTTTGGCAGTTGGTACTGCTGAACATTTTTA
TACATGCTACCATGAAGCTATATATGTTAGTATTGAAGAAGCTAACGGGTATACTATCATTTTTGATGTGTGGGC
TGATTATAATTTCCTGTATTTCCTGTACATTGGGATGAAACTACTTTAGCAAAGTCCACAGATCAGAAACCAGAC
GGTAGTTTTTGAAGTTGAAACCAGCAAAATAAGAAAAAATAAAAAATCGATTTTAATATTTTCTGCCTCTTTCCC
AAATTACCCTTCCCACTTGCTCGACAAATCTATGTAAAGCAGTTTGTTTTTTCATGTTTTAACTTTACCTTGCCC
TGTGTTATGGTACTGGCTGACATGTCTAAGACTGGATGTGTATATTTATTATGGTGTCTAAAAATCATGAAGTTC
ATCACTTTTCAGGAGTATAGATAAAATCAAATTGGTAGTACATCAGAGTTACTTTTCAGTGCACCATGACATCAC
TAAAATGAGTGCTGTAATGTTACAGGGCTTTCAGGTTTGTAAAAACATAACCATAAATTATATTGACGTCAGATA
TGAGTTGAGTATCTATAAAATATCACGTGTATCTCAAAATATTGGACTGCTGTTTGACTGGATATTGCTGCATAA
TTTTCTTCTATTGTCCCATATCCTTTTGGAGAGAGATTTAATGGGATTTGAAATGTGCAAGCTGTCTAAATAAGA
TGCAGTCAAATAAAGTATGGTTAAGTTGTGTTTGCATTTTTCTTTTAGATACAGCTGTGTGCATTTTATGATTGG
GTTGTTTTGCTTTTACCTACTAAGTAAAACAGCAACAAACAATATATTGTTTCCCGCTTCCTGCCTTTCATCTAA
GAGTTACGGGGAAGAAGTATTACATAATTGTCATCACTGTTGTGTGTTCTGACAAAGTAAATTTGAAAATAACAT
GAACTTGATTTTTCTAAAAGTACTCAGTCAACTCATATGTCAGTTATCGGTACATTTTCCATGTGTTCAGTCAAA
AGTTTATCTTTTTAGTCTGTTTCATAGCAGTTTATTTCTAAGACAGTTTTTATTTTAATTTACTTTTTTGTCTGT
ACACTGCCACTCTGTAATGTTCCC

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FIGURE 4635

MAEVPPGPSSLLPPPAPPAPAAVEPRCPFPAGAALACCSEDEEDDEEHEGGGSRSPAGGESATVAAKGHPCLRCP
QPPSEQASKLNGLISPELRHLRAAASLKSKVLSVAEVAATTATPDGGPRATATKGAGVHSGERPPHSLSSNARTA
VPSPVEAAAASDPAAARNGLAEGTEQEEGGGMTSRCGCCLRP

FIGURE 4636

GGCACGAGGGTGGCGTGGAGTGGCGTGGCGTGGCGGGGTCTCGCGGCGCGGGCGCGCACCCGGAGCTGTGGACGG
AGAGTGCCTCCCTCTGGCCTCAGTTTCCTCATGTTGTAGTAGCGGAGCATGGCCCGGACCGGGCCCCCGAGACCG
CCCCGTGCAACCTCACCGCCAGCCTGGGGGCCTCAGCGACTGGGACGGGACCAAGGGGCTCGGGGATTCTCCCTG
CCCCCGGCCCTGGTGCGTGACTGACCCTCCTGTTCCCAGAGCCCCCAGCGCAGGCCGGG**ATG**TTCGTCCTGGTGG
AAATGGTGGACACCGTCCGGATCCCCCCTTGGCAGTTTGAGAGGAAGCTCAACGACTCCATTGCCGAGGAGCTGA
ACAAGAAGTTGGCCAACAAGGTCGTGTACAACGTGGGACTCTGCATTTGTCTGTTTGATATCACCAAACTGGAGG
ATGCCTATGTATTCCCTGGGGATGGCGCATCACACACCAAAGTCTCTCTAGGCTTCTTCGATGACATTCTCATCC
CCCCAGAGTCACTGCAGCAGCCAGCCAAGTTCGACGAAGCGGAGCAGGTGTGGGTGTGGGAGTACGAGACGGAGG
AAGGAGCACACGACCTCTACATGGACACCGGCGAGGAGATCCGCTTCCGGGTGGTGGACGAGAGCTTTGTTGACA
CGTCCCCCACAGGGCCCAGCTCAGCAGATGCCACCACTTCCAGTGAGGAGCTGCCAAAGAAGGAGGCTCCGTACA
CGCTTGTGGGATCCATCAGTGAGCCAGGCCTGGGCCTTCTCTCCTGGTGGACCAGCAAC**TAG**CCCTGGGGCTGGA
CAGTGGACCCTACCAGCCTGCGGGAAGGTGGTATGGCCGGCTGTGAAGACAACAGCAGCTGAGGCCGATGCTAAG
GAGATAGTGTCTCGAGCTGGACAGTGAGGCAAGGCCAGGAGTGCCCACCAGCTTGCCCCGCTCCTCCACCATCTA
GGCCCTGCTCCTCCTTCACTGCAGTGATGGATCCATCTGTGGCTGTGGCTGTTGGGCCTCCACTGACCTTGACTG
AAAAGACCCTTCCTGGACCCTGGACTTGACAACAAACGGCACAGACACCAATCACTCACAGAACAGTCACTGGTT
TTGGATTCTTGTTTTCCTTGCAAGAACAAAAGGTTCTCTAGAATCCTTCAGCCACCAATGAAATGATCAGGCAGG
AGAAAAACTTTAGATGGGAGTCTTGTCATCAAAAATAAATACAGTTGCATGGAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAA

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FIGURE 4637

MFVLVEMVDTVRIPPWQFERKLNDSIAEELNKKLANKVVYNVGLCICLFDITKLEDAYVFPGDGASHTKVSLGFF
DDILIPPESLQQPAKFDEAEQVWVWEYETEEGAHDLYMDTGEEIRFRVVDESFVDTSPTGPSSADATTSSEELPK
KEAPYTLVGSISEPGLGLLSWWTSN

FIGURE 4638

GGGGACTCCGGGAGGAGGAACATGGCCGTGGCGGACCTCGCTCTCATTCCTGATGTGGACATCGACTCCGACGGC
GTCTTCAAGTATGTGCTGATCCGAGTCCACTCGGCTCCCCGCTCCGGGCTCCGGCTGCAGAGAGCAAGGAGATCG
TGCGCGGCTACAAGTGGGCTGAGTACCATGCGGACATCTACGACAAAGTGTCGGGCGACATGCAGAAGCAAGGCT
GCGACTGTGAGTGTCTGGGCGGCGGGCGCATCTCCCACCAGAGTCAGGACAAGAAGATTCACGTGTACGGCTATT
CCATGGCCTATGGTCCTGCCCAGCACGCCATTTCAACTGAGAAAATCAAAGCCAAGTACCCCGACTACGAGGTCA
CCTGGGCTAACGACGGCTACTGAGCACTCCCAGCCCGGGGCCTGCTGCCTCCAGCAGCCACTTCAGAGCCCCGCC
TTTGCCTGCACTCCTCTTGCAGGGCTGGCCCTGCCTGCTCCTGCGGCAGCCTCTGGTGACGTGCTGTCCACCAGG
CCTTGGAGACAGGCTAGCCTGGCCACAGAATTAAACGTGTTGCCACACCTGCCGGCTTCTTAAAAAAAAAAAAAA
AAAAAAAAAAAAAAA

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FIGURE 4639

MAVADLALIPDVDIDSDGVFKYVLIRVHSAPRSGLRLQRARRSCAATSGLSTMRTSTTKCRATCRSKAATVSVWA
AGASPTRVRTRRFTCTAIPWPMVLPSTPFQLRKSKPSTPTTRSPGLTTATEHSQPGACCLQQPLQSPAFACTPLA
GLALPAPAAASGDVLSTRPWRQASLATELNVLPHLPAS

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FIGURE 4640

AGCGCCGCCGCGGTCTGCGGAATGTCAACTATTCAACATGGAGGCGGAGGTCGATAAGCTGGAACTGATGTTCCA
GAAAGCTGAGTCTGATCTGGATTACATTCAATACAGGCTGGAATATGAAATCAAGACTAATCATCCTGATTCAGC
AAGTGAGAAAAATCCAGTTACACTCTTAAAGGAATTGTCAGTGATAAAGTCTCGATATCAAACTTTGTATGCCCG
CTTTAAACCAGTTGCTGTTGAGCAGAAAGAGAGTAAGAGCCGCATTTGTGCTACTGTGAAAAAGACTATGAATAT
GATACAAAAACTACAGAAGCAAACAGACCTGGAGCTGTCACCACTGACTAAAGAAGAGAAAACTGCGGCAGAGCA
ATTCAAATTTCACATGCCAGATTTATGAAGAAATGGACTTGGAAAGGAAATTCTAACAGAGAAGAGCTTAATTCC
GGAGAAATTTAGGAAGATGTCTTGTTAACCCTTGATGTCTAGAGATTGGGGGCTGGTGAAGGGGGTTTGGCTTCA
ATGACTGGATAATGATATCTTTCATGAGAGAGATTATAAGAAGAAGGGCAGATAATATATGAATAAAGTTCAGCC
AAAAGGATCAAATGAGAATAAAACGATTTAAATATATGTACACACGCATGCACACACACACTTAGTCTTGTAATT
TCAGGCCAGAAATTCTCAACACTATTTTGCATCTGTTTTCTTTTTCTAAGTCATGATAATATAGATGTTCTGGTC
TATCATAAAAGAATGTTTATGTACATTTCAGTCATTCGGTATGTGGCTTTGTAAATTAAAGTATAGGCAAAACAT
TTGTGTTATACATGATATATAATTTCATTTTGTAAATGTTGATTGCACATGTGGTCACATTATTGTTGAGACTGC
TTTTATGTGACCTGTAGTCTCCCACAGAACCTAAAGTAATAAGCTGGCTTTTCTGTGATAGCCACGTTTGCGTAT
TTCTTTCCCTATTTCCCTTGCCTGCTAATGTTGAACAGCATGAACTTGCTTTCTGATGCTGTTTTAGACTGTCCC
TGTTGTATCTCAATAATATCTTTGTTTTCCTACAAAAAAAAAAAAAAAAAGAAAAAAAAAAAA

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FIGURE 4641

MEAEVDKLELMFQKAESDLDYIQYRLEYEIKTNHPDSASEKNPVTLLKELSVIKSRYQTLYARFKPVAVEQKESK
SRICATVKKTMNMIQKLQKQTDLELSPLTKEEKTAAEQFKFHMPDL

FIGURE 4642

GGCACGAGGCGAGTCCGAGCGCCGCCATGGCTCTGCTGTCCGAGGGCCTGGACGAGCTGCCCGCCGCCTGCCTGT
CGCCGTGCGGGCCGCCCAACCCGACCGAGCTGTTCAGCGAGTCACGGCGCCTGGCTCTGGAGGAGCTGGTGGCGG
GCGGCCCCGAAGCCTTCGCGGCCTTCCTGCGACGCGAGCGCCTGGCTCGTTTCCTGAACCCCGATGAGGTGCACG
CCATTCTGCGCGCGGCGGAGAGGCCGGGAGAGGAGGGCGCGGCGGCGGCGGCGGCCGAGGACTCGTTCGGCT
CCTCGCACGACTGCTCTTCGGGCACCTACTTCCCCGAGCAGTCGGACCTGGAGCCACCGCTGTTGGAGCTTGGCT
GGCCCGCCTTCTACCAGGGCGCCTACCGCGGCGCCACGCGTGTCGAGACGCACTTCCAGCCCCGCGGCGCTGGCG
AAGGTGGCCCCTACGGCTGCAAGGACGCTCTGCGCCAGCAGCTCCGCTCGGCGCGAGAGGTGATTGCAGTGGTCA
TGGACGTGTTCACAGACATCGACATCTTCAGAGACCTGCAAGAAATATGCAGGAAACAGGGAGTTGCTGTGTATA
TCCTTCTGGACCAGGCTCTCCTCTCTCAATTTTTGGATATGTGCATGGATCTGAAAGTTCATCCTGAACAGGAAA
AGTTAATGACAGTTCGGACTATCACAGGAAATATCTACTATGCAAGGTCAGGAACTAAGATTATTGGGAAGGTTC
ACGAAAAGTTCACGTTGATTGATGGCATCCGCGTGGCAACAGGCTCCTACAGTTTTACATGGACGGATGGCAAAT
TAAACAGCAGTAACTTGGTAATTCTGTCTGGCCAAGTGGTTGAACACTTTGATCTGGAGTTCCGAATCCTGTATG
CCCAGTCCAAGCCCATCAGCCCCAAACTCCTGTCTCACTTCCAGAGCAGCAACAAGTTTGATCACCTCACCAACC
GAAAACCACAGTCCAAGGAGCTCACCCTGGGCAACCTGCTGCGGATGCGGCTGGCTAGGCTGTCAAGTACTCCCA
GGAAGGCGGACCTGGACCCAGAGATGCCCGCAGAGGGCAAGGCAGAGCGCAAGCCCCATGACTGTGAGTCCTCTA
CTGTTAGTGAGGAAGACTACTTCAGCAGCCACAGGGACGAGCTCCAGAGCAGAAAGGCCATTGACGCTGCCACTC
AAACAGAGCCAGGAGAGGAGATGCCAGGGCTGAGTGTGAGTGAGGTGGGAACACAAACCAGCATCACCACAGCAT
GTGCTGGTACCCAGACTGCAGTCATCACCAGGATAGCAAGCTCTCAAACCACGATTTGGTCCAGATCGACCACTA
CTCAGACTGACATGGATGAGAACATTCTCTTTCCTCGAGGAACTCAATCTACAGAAGGGTCACCAGTCTCAAAAA
TGTCTGTATCGAGATCTTCCAGTTTGAAGTCTTCCTCCTCTGTGTCTTCCCAAGGCTCTGTGGCAAGCTCCACTG
GTTCTCCCGCTTCCATCAGAACCACTGACTTCCACAATCCTGGCTATCCCAAGTACCTGGGCACCCCCCACCTGG
AACTGTACTTGAGTGACTCACTTAGAAACTTGAACAAAGAGCGGCAATTCCACTTCGCTGGTATCAGGTCCCGGC
TCAACCACATGCTGGCTATGCTGTCAAGGAGAACACTCTTTACTGAAAACCACCTTGGCCTTCATTCTGGCAATT
TCAGCAGAGTTAATTTGCTTGCTGTTAGAGATGTAGCACTTTATCCTTCCTATCAG**TAA**CTGCTCCGTGTTCAGA
CTCCTGGTTTCTTCCAGGCTTACAGTGGACATCATCAGCTTCCTGCTTTAAAAAATATCTTATGTCCCTAATTGC
CTTTCTTTTACCTGACTTTGTCACCTTTGTTGTCTTTGAATTCTTTAGGCTGCATATTATTTTACATGCTTTGTT
TTGTCATGTATATACCAGGTATTGGTTTTATGGTTTAAACACTATGGATACAGGGGTTTGTTTTGCACAATTTTA
ATAGTCATGCACTACATAATGATGTTTTGGTCGATGACAGACCACGTATATGTTGGCAGTCTCATAAGATTATAA
TACTGTATTTTTACTATACCTTTTCTATGTTTAGATACAAATACCATTATGTTACAGTTGCCTACAGTATTCAGT
GCAGTAACATGATGTACAGGTTTGTAGCCTGTTTTGCATTTTTCTTAGGTTGTATGCTCTTCTGTTTTAAAGGTT
TGAATCACCAGCATTTTTGTGATCAAAATCCTATTTAGAAAAAATAAAACTACTTTCTGTTTAAAAAAAAAAAAA
AAAAAAAA

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FIGURE 4643

HEASPSAAMALLSEGLDELPAACLSPCGPPNPTELFSESRRLALEELVAGGPEAFAAFLRRERLARFLNPDEVHA
ILRAAERPGEEGAAAAAAAEDSFGSSHDCSSGTYFPEQSDLEPPLLELGWPAFYQGAYRGATRVETHFQPRGAGE
GGPYGCKDALRQQLRSAREVIAVVMDVFTDIDIFRDLQEICRKQGVAVYILLDQALLSQFLDMCMDLKVHPEQEK
LMTVRTITGNIYYARSGTKIIGKVHEKFTLIDGIRVATGSYSFTWTDGKLNSSNLVILSGQVVEHFDLEFRILYA
QSKPISPKLLSHFQSSNKFDHLTNRKPQSKELTLGNLLRMRLARLSSTPRKADLDPEMPAEGKAERKPHDCESST
VSEEDYFSSHRDELQSRKAIDAATQTEPGEEMPGLSVSEVGTQTSITTACAGTQTAVITRIASSQTTIWSRSTTT
QTDMDENILFPRGTQSTEGSPVSKMSVSRSSSLKSSSSVSSQGSVASSTGSPASIRTTDFHNPGYPKYLGTPHLE
LYLSDSLRNLNKERQFHFAGIRSRLNHMLAMLSRRTLFTENHLGLHSGNFSRVNLLAVRDVALYPSYQ

FIGURE 4644A

CGGTTTAATCTAGTGTGTGACTGGGTCTGTGTGAGGGAGAGAGTGTGTGTGGTGTGGAGGTGAAACGGAGGCAAG
AAAGGGGGCTACCTCAGGAGCGAGGGACAAAGGGGGCGTGAGGCACCTAGGCCGCGGCACCCCGGCGACAGGAAG
CCGTCCTGAACCGGGCTACCGGGTAGGGGAAGGGCCCGCGTAGTCCTCGCAGGGCCCCAGAGCTGGAGTCGGCTC
CACAGCCCCGGGCCGTCGGCTTCTCACTTCCTGGACCTCCCCGGCGCCCGGGCCTGAGGACTGGCTCGGCGGAGG
GAGAAGAGGAAACAGACTTGAGCAGCTCCCCGTTGTCTCGCAACTCCACTGCCGAGGAACTCTCATTTCTTCCCT
CGCTCCTTCACCCCCCACCTCATGTAGAAGGGTGCTGAGGCGTCGGGAGGGAGGAGGAGCCTGGGCTACCGTCCC
TGCCCTCCCCACCCCCTTCCCGGGGCGCTTTGGTGGGCGTGGAGTTGGGGTTGGGGGGGTGGGTGGGGGTTGCTT
TTTGGAGTGCTGGGGAACTTTTTTCCCTTCTTCAGGTCAGGGGAAAGGGA**ATG**CCCAATTCAGAGAGACATGGGG
GCAAGAAGGACGGGAGTGGAGGAGCTTCTGGAACTTTGCAGCCGTCATCGGGAGGCGGCAGCTCTAACAGCAGAG
AGCGTCACCGCTTGGTATCGAAGCACAAGCGGCATAAGTCCAAACACTCCAAAGACATGGGGTTGGTGACCCCCG
AAGCAGCATCCCTGGGCACAGTTATCAAACCTTTGGTGGAGTATGATGATATCAGCTCTGATTCCGACACCTTCT
CCGATGACATGGCCTTCAAACTAGACCGAAGGGAGAACGACGAACGTCGTGGATCAGATCGGAGCGACCGCCTGC
ACAAACATCGTCACCACCAGCACAGGCGTTCCCGGGACTTACTAAAAGCTAAACAGACCGAAAAAGAAAAAAGCC
AAGAAGTCTCCAGCAAGTCGGGATCGATGAAGGACCGGATATCGGGAAGTTCAAAGCGTTCGAATGAGGAGACTG
ATGACTATGGGAAGGCGCAGGTAGCCAAAAGCAGCAGCAAGGAATCCAGGTCATCCAAGCTCCACAAGGAGAAGA
CCAGGAAAGAACGGGAGCTGAAGTCTGGGCACAAAGACCGGAGTAAAAGTCATCGAAAAAGGGAAACACCCAAAA
GTTACAAAACAGTGGACAGCCCAAAACGGAGATCCAGGAGCCCCCACAGGAAGTGGTCTGACAGCTCCAAACAAG
ATGATAGCCCCTCGGGAGCTTCTTATGGCCAAGATTATGACCTTAGTCCCTCACGATCTCATACCTCGAGCAATT
ATGACTCCTACAAGAAAAGTCCTGGAAGTACCTCGAGAAGGCAGTCGGTCAGTCCCCCTTACAAGGAGCCTTCGG
CCTACCAGTCCAGCACCCGGTCACCGAGCCCCTACAGTAGGCGACAGAGATCTGTCAGTCCCTATAGCAGGAGAC
GGTCGTCCAGCTACGAAAGAAGTGGCTCTTACAGCGGGCGATCGCCCAGTCCCTATGGTCGAAGGCGGTCCAGCA
GCCCTTTCCTGAGCAAGCGGTCTCTGAGTCGGAGTCCACTCCCCAGTAGGAAATCCATGAAGTCCAGAAGTAGAA
GTCCTGCATATTCAAGACATTCATCTTCTCATAGTAAAAAGAAGAGATCCAGTTCACGCAGTCGTCATTCCAGTA
TCTCACCTGTCAGGCTTCCACTTAATTCCAGTCTGGGAGCTGAACTCAGTAGGAAAAAGAAGGAAAGAGCAGCTG
CTGCTGCTGCAGCAAAGATGGATGGAAAGGAGTCCAAGGGTTCACCTGTATTTTTGCCTAGAAAAGAGAACAGTT
CAGTAGAGGCTAAGGATTCAGGTTTGGAGTCTAAAAAGTTACCCAGAAGTGTAAAATTGGAAAAATCTGCCCCAG
ATACTGAACTGGTGAATGTAACACATCTAAACACAGAGGTAAAAAATTCTTCAGATACAGGGAAAGTAAAGTTGG
ATGAGAACTCCGAGAAGCATCTTGTTAAAGATTTGAAAGCACAGGGAACAAGAGACTCTAAACCCATAGCACTGA
AAGAGGAGATTGTTACTCCAAAGGAGACAGAAACATCAGAAAAGGAGACCCCTCCACCTCTTCCCACAATTGCTT
CTCCCCCACCCCCTCTACCAACTACTACCCCTCCACCTCAGACACCCCCTTTGCCACCTTTGCCTCCAATACCAG
CTCTTCCACAGCAACCACCTCTGCCTCCTTCTCAGCCAGCATTTAGTCAGGTTCCTGCTTCCAGTACTTCAACTT
TGCCCCCTTCTACTCACTCAAAGACATCTGCTGTGTCCTCTCAGGCAAATTCTCAGCCCCCTGTACAGGTTTCTG
TGAAGACTCAAGTATCTGTAACAGCTGCTATTCCACACCTGAAAACTTCAACGTTGCCTCCTTTGCCCCTCCCAC
CCTTATTACCTGGAGATGATGACATGGATAGTCCAAAAGAAACTCTTCCTTCAAAACCTGTGAAGAAAGAGAAGG
AACAGAGGACACGTCACTTACTCACAGACCTTCCTCTCCCTCCAGAGCTCCCTGGTGGAGATCTGTCTCCCCCAG
ACTCTCCAGAACCAAAGGCAATCACACCACCTCAGCAACCATATAAAAAGAGACCAAAAATTTGTTGTCCTCGTT
ATGGAGAAAGAAGACAAACAGAAAGCGACTGGGGGAAACGCTGTGTGGACAAGTTTGACATTATTGGGATTATTG
GAGAAGGAACCTATGGCCAAGTATATAAAGCCAAGGACAAAGACACAGGAGAACTAGTGGCTCTGAAGAAGGTGA
GACTAGACAATGAGAAAGAGGGCTTCCCAATCACAGCCATTCGTGAAATCAAAATCCTTCGTCAGTTAATCCACC
GAAGTGTTGTTAACATGAAGGAAATTGTCACAGATAAACAAGATGCACTGGATTTCAAGAAGGACAAAGGTGCCT
TTTACCTTGTATTTGAGTATATGGACCATGACTTAATGGGACTGCTAGAATCTGGTTTGGTGCACTTTTCTGAGG
ACCATATCAAGTCGTTCATGAAACAGCTAATGGAAGGATTGGAATACTGTCACAAAAAGAATTTCCTGCATCGGG
ATATTAAGTGTTCTAACATTTTGCTGAATAACAGTGGGCAAATCAAACTAGCAGATTTTGGACTTGCTCGGCTCT
ATAACTCTGAAGAGAGTCGCCCTTACACAAACAAAGTCATTACTTTGTGGTACCGACCTCCAGAACTACTGCTAG
GAGAGGAACGTTACACACCAGCCATAGATGTTTGGAGCTGTGGATGTATTCTTGGGGAACTATTCACAAAGAAGC
CTATTTTTCAAGCCAATCTGGAACTGGCTCAGCTAGAACTGATCAGCCGACTTTGTGGTAGCCCTTGTCCAGCTG
TGTGGCCTGATGTTATCAAACTGCCCTACTTCAACACCATGAAACCGAAGAAGCAATATCGAAGGCGTCTACGAG
AAGAATTCTCTTTCATTCCTTCTGCAGCACTTGATTTATTGGACCACATGCTGACACTAGATCCTAGTAAGCGGT

FIGURE 4644B

GCACAGCTGAACAGACCCTACAGAGCGACTTCCTTAAAGATGTCGAACTCAGCAAAATGGCTCCTCCAGACCTCC
CCCACTGGCAGGATTGCCATGAGTTGTGGAGTAAGAAACGGCGACGTCAGCGACAAAGTGGTGTTGTAGTCGAAG
AGCCACCTCCATCCAAAACTTCTCGAAAAGAAACTACCTCAGGGACAAGTACTGAGCCTGTGAAGAACAGCAGCC
CAGCACCACCTCAGCCTGCTCCTGGCAAGGTGGAGTCTGGGGCTGGGGATGCAATAGGCCTTGCTGACATCACAC
AACAGCTGAATCAAAGTGAATTGGCAGTGTTATTAAACCTGCTGCAGAGCCAAACCGACCTGAGCATCCCTCAAA
TGGCACAGCTGCTTAACATCCACTCCAACCCAGAGATGCAGCAGCAGCTGGAAGCCCTGAACCAATCCATCAGTG
CCCTGACGGAAGCTACTTCCCAGCAGCAGGACTCAGAGACCATGGCCCCAGAGGAGTCTTTGAAGGAAGCACCCT
CTGCCCCAGTGATCCTGCCTTCAGCAGAACAGACGACCCTTGAAGCTTCAAGCACACCAGCTGACATGCAGAATA
TATTGGCAGTTCTCTTGAGTCAGCTGATGAAAACCCAAGAGCCAGCAGGCAGTCTGGAGGAAAACAACAGTGACA
AGAACAGTGGGCCACAGGGGCCCCGAAGAACTCCCACAATGCCACAGGAGGAGGCAGCAGCATGTCCTCCTCACA
TTCTTCCACCAGAGAAGAGGCCCCCTGAGCCCCCCGGACCTCCACCGCCGCCACCTCCACCCCCTCTGGTTGAAG
GCGATCTTTCCAGCGCCCCCCAGGAGTTGAACCCAGCCGTGACAGCCGCCTTGCTGCAACTTTTATCCCAGCCTG
AAGCAGAGCCTCCTGGCCACCTGCCACATGAGCACCAGGCCTTGAGACCAATGGAGTACTCCACCCGACCCCGTC
CAAACAGGACTTATGGAAACACTGATGGGCCTGAAACAGGGTTCAGTGCCATTGACACTGATGAACGAAACTCTG
GTCCAGCCTTGACAGAATCCTTGGTCCAGACCCTGGTGAAGAACAGGACCTTCTCAGGCTCTCTGAGCCACCTTG
GGGAGTCCAGCAGTTACCAGGGCACAGGGTCAGTGCAGTTTCCAGGGGACCAGGACCTCCGTTTTGCCAGGGTCC
CCTTAGCGTTACACCCGGTGGTCGGGCAACCATTCCTGAAGGCTGAGGGAAGCAGCAATTCTGTGGTACATGCAG
AGACCAAATTGCAAAACTATGGGGAGCTGGGGCCAGGAACCACTGGGGCCAGCAGCTCAGGAGCAGGCCTTCACT
GGGGGGGCCCAACTCAGTCTTCTGCTTATGGAAAACTCTATCGGGGGCCTACAAGAGTCCCACCAAGAGGGGGAA
GAGGGAGAGGAGTTCCTTAC**TAA**CCCAGAGACTTCAGTGTCCTGAAAGATTCCTTTCCTATCCATCCTTCCATCC
AGTTCTCTGAATCTTTAATGAAATCATTTGCCAGAGCGAGGTAATCATCTGCATTTGGCTACTGCAAAGCTGTCC
GTTGTATTCCTTGCTCACTTGCTACTAGCAGGCGACTTACGAAATAATGATGTTGGCACCAGTTCCCCCTGGATG
GGCTATAGCCAGAACATTTACTTCAACTCTACCTTAGTAGATACAAGTAGAGAATATGGAGAGGATCATTACATT
GAAAAGTAAATGTTTTATTAGTTCATTGCCTGCACTTACTGATCGGAAGAGAGAAAGAACAGTTTCAGTATTGAG
ATGGCTCAGGAGAGGCTCTTTGATTTTTAAAGTTTTGGGGTGGGGGGTTGTGTGTGGTTTCTTTCTTTTGAATTT
TAATTTAGGTGTTTTGGGTTTTTTTCCTTTAAAGAGAATAGTGTTCACAAAATTTGAGCTGCTCTTTGGCTTTTG
CTATAAGGGAAACAGAGTGGCCTGGCTGATTTGAATAAATGTTTCTTTCCTCTCCACCATCTCACATTTTGCTTT
TAAGTGAACACTTTTTCCCCATTGAGCATCTTGAACATACTTTTTTTCCAAATAAATTACTCATCCTTAAAGTTT
ACTCCACTTTGACAAAAGATACGCCCTTCTCCCTGCACATAAAGCAGGTTGTAGAACGTGGCATTCTTGGGCAAG
TAGGTAGACTTTACCCAGTCTCTTTCCTTTTTTGCTGATGTGTGCTCTCTCTCTCTCTTTCTCTCTCTCTCTC
TCTCTCTCTCTCTCTGTCTGTCTCGCTTGCTCGCTCTCGCTGTTTCTCTCTCTTTGAGGCATTTGTTTGGAAAAA
ATCGTTGAGATGCCCAAGAACCTGGGATAATTCTTTACTTTTTTTGAAATAAAGGAAAGGAAATTCAGACTCTTA
CATTGTTCTCTGTAACTCTTCAATTCTAAAATGTTTTGTTTTTTAAACCATGTTCTGATGGGGAAGTTGATTTGT
AAGTGTGGACAGCTTGGACATTGCTGCTGAGCTGTGGTTAGAGATGATGCCTCCATTCCTAGAGGGCTAATAACA
GCATTTAGCATATTGTTTACACATATATTTTTATGTCAAAAAAAAAACAAAAACCTTTCAAACAGAGCATTGTGA
TATTGTCAAAGAGAAAAACAAATCCTGAAGATACATGGAAATGTAACCTAGTTTAGGGTGGGTATTTTTCTGAAG
ATACATCAATACCTGACCTTTTTTAAAAAAATAATTTTAAAACAGCATACTGTGAGGAAGAACAGTATTGACATA
CCCACATCCCAGCATGTGTACCCTGCCAGTTCTTTTAGGGATTTTCCTCCAAAGAGATTTGGATTTGGTTTTGG
TAAAAGGGGTTAAATTGTGCTTCCAGGCAAGAACTTTGCCTTATCATAAACAGGAAATGAAAAAGGGAAGGGCTG
TCAGGATGGGATAATTTGGGAGGCTTCTCATTCTGGCTTCTATTTCTATGTGAGTACCAGCATATAGAGTGTTTT
AAAAACAGATACATGTCATATAATTTATCTGCACAGACTTAGACCTTCAGGAAACATAGGTTAAGCCCCCTTTTA
CAAAGAAAAAGTAAACATACTTCAGCATCTTGGAGGGTAGTTTTCAAAACTCAAGTTTCATGTTTCAATGCCAAG
TTCTTATTTTAAAAAATAAAATCTACTTATAAGAGAAAGGTGCATTACTTAAAAAAAAAAAACTTTAAAGAAATG
AAAGAAGAACCCTCTTCAGATACTTACTTGAAGACTGTTTTCCCCTGTTAATGAGATATAGCTAGATATCGGTGT
GTGTATTTCTTTATTATTCTCTGGTTTTTGATCTGGCCTTGCCTCCAGGGCCAAACACTGATTTAGAAAGAGAGC
CTTCTAGCTATTTTGGCATTGATGGCTTTTTATACCAGTGTGTCCAGTTAGATTTACTAGGCTTACTGACATGCT
ATTGGTAAATCGCATTAAAGTTCATCTGAACCTTCTGTCTGTTGACTTCTTAGTCCTCAGACATGGGCCTTTGTG
TTTTAGAATATTTGAATTTGAGTTATTGGGCCCCACTCCCTGTTTTTTATTAAAGAACGTGAGCCTGGGATACTT

FIGURE 4644C

TCAGAAGTATCTGTTCAATGAAAAAAAGTTGGTTTCCCATCAAATATGAATAAAATTCTCTATATATTTCATTGT
ATTTTGGTTATCAGCAGTCATCAATAATGTTTTTCCCTCCCCTCTCCCACCTCTTATTTTTAATTATGCCAAATA
TCCTAAATAATATACTTAAGCCTCCATTCCCTCATCCCTACTAGGGAAGGGGGTGAGTGTATGTGTGAGTGTATG
TGTATGTATGATCCCATCTCACCCCCACCCCCATTTTGGGAGTCTTTTAAAATGAAAACAAAGTTTGGTAGTTTT
GACTATTTCTAAAAGCAGAGGAGAAAAAAAAACTTATTTAAATATCCTGGAATCTGTATGGAGGAAGAAAAGGTA
TTTGTTAATTTTTCAGTTACGTTATCTATAAACATGATGGAAGTAAAGGTTTGGCAGAATTTCACCTTGACTATT
TGAAAATTACAGACCCAATTAATTCCATTCAAAAGTGGTTTTCGTTTTGTTTTAATTATTGTACAATGAGAGATA
TTGTCTATTAAATACATTATTTTGAACAGATGAGAAATCTGATTCTGTTCATGAGTGGGAGGCAAAACTGGTTTG
ACCGTGATCATTTTTGTGGTTTTGAAAACAAATATACTTGACCCAGTTTCCTTAGTTTTTTCTTCAACTGTCCAT
AGGAACGATAAGTATTTGAAAGCAACATCAAATCTATACGTTTAAAGCAGGGCAGTTAGCACAAATTTGCAAGTA
GAACTTCTATTAGCTTATGCCATAGACATCACCCAACCACTTGTATGTGTGTGTGTATATATAATATGCATATAT
AGTTACCGTGCTAAAATGGTTACCAGCAGGTTTTGAGAGAGAATGCTGCATCAGAAAAGTGTCAGTTGCCACCTC
ATTCTCCCTGATTTAGGTTCCTGACACTGATTCCTTTCTCTCTCGTTTTTGACCCCCATTGGGTGTATCTTGTCT
ATGTACAGATATTTTGTAATATATTAAATTTTTTTCTTTCAGTTTATAAAAATGGAAAGTGGAGATTGGAAAATT
AAATATTTCCTGTTACTATACCACTTTTGCTCCATTGCATTTACTTCTTAATCTGTACCCCCTGAGCATATCTAA
TCATGTATAAAGGACGTTTTTCCTCCACTTTATCTTAGGGGTTCTCTGTCTCAGAATCATTATAGACTCATTAAC
TCCCCCTCCCAGCAAAAGGTTATCAGGATTTGAAGAGGTGCTTGAAAACGCTAGACTAGGAACTAGAGAATAAAA
AAGTTGGGA

FIGURE 4645

MPNSERHGGKKDGSGGASGTLQPSSGGGSSNSRERHRLVSKHKRHKSKHSKDMGLVTPEAASLGTVIKPLVEYDD
ISSDSDTFSDDMAFKLDRRENDERRGSDRSDRLHKHRHHQHRRSRDLLKAKQTEKEKSQEVSSKSGSMKDRISGS
SKRSNEETDDYGKAQVAKSSSKESRSSKLHKEKTRKERELKSGHKDRSKSHRKRETPKSYKTVDSPKRRSRSPHR
KWSDSSKQDDSPSGASYGQDYDLSPSRSHTSSNYDSYKKSPGSTSRRQSVSPPYKEPSAYQSSTRSPSPYSRRQR
SVSPYSRRRSSSYERSGSYSGRSPSPYGRRRSSSPFLSKRSLSRSPLPSRKSMKSRSRSPAYSRHSSSHSKKKRS
SSRSRHSSISPVRLPLNSSLGAELSRKKKERAAAAAAAKMDGKESKGSPVFLPRKENSSVEAKDSGLESKKLPRS
VKLEKSAPDTELVNVTHLNTEVKNSSDTGKVKLDENSEKHLVKDLKAQGTRDSKPIALKEEIVTPKETETSEKET
PPPLPTIASPPPPLPTTTPPPQTPPLPPLPPIPALPQQPPLPPSQPAFSQVPASSTSTLPPSTHSKTSAVSSQAN
SQPPVQVSVKTQVSVTAAIPHLKTSTLPPLPLPPLLPGDDDMDSPKETLPSKPVKKEKEQRTRHLLTDLPLPPEL
PGGDLSPPDSPEPKAITPPQQPYKKRPKICCPRYGERRQTESDWGKRCVDKFDIIGIIGEGTYGQVYKAKDKDTG
ELVALKKVRLDNEKEGFPITAIREIKILRQLIHRSVVNMKEIVTDKQDALDFKKDKGAFYLVFEYMDHDLMGLLE
SGLVHFSEDHIKSFMKQLMEGLEYCHKKNFLHRDIKCSNILLNNSGQIKLADFGLARLYNSEESRPYTNKVITLW
YRPPELLLGEERYTPAIDVWSCGCILGELFTKKPIFQANLELAQLELISRLCGSPCPAVWPDVIKLPYFNTMKPK
KQYRRRLREEFSFIPSAALDLLDHMLTLDPSKRCTAEQTLQSDFLKDVELSKMAPPDLPHWQDCHELWSKKRRRQ
RQSGVVVEEPPPSKTSRKETTSGTSTEPVKNSSPAPPQPAPGKVESGAGDAIGLADITQQLNQSELAVLLNLLQS
QTDLSIPQMAQLLNIHSNPEMQQQLEALNQSISALTEATSQQQDSETMAPEESLKEAPSAPVILPSAEQTTLEAS
STPADMQNILAVLLSQLMKTQEPAGSLEENNSDKNSGPQGPRRTPTMPQEEAAACPPHILPPEKRPPEPPGPPPP
PPPPPLVEGDLSSAPQELNPAVTAALLQLLSQPEAEPPGHLPHEHQALRPMEYSTRPRPNRTYGNTDGPETGFSA
IDTDERNSGPALTESLVQTLVKNRTFSGSLSHLGESSSYQGTGSVQFPGDQDLRFARVPLALHPVVGQPFLKAEG
SSNSVVHAETKLQNYGELGPGTTGASSSGAGLHWGGPTQSSAYGKLYRGPTRVPPRGGRGRGVPY

FIGURE 4646A

GACGCTCCTCCCGGAGAGTAGTGAGACCCCTGGTGCGGGGCGATTGGCGGCGGGAGCGATGAGTGGCAGCCGCAC
GGCCCAACGGGAGCTGTGCGTGGGCCGCGGGGCGGGGCCAGGGCGGGTGCGCGGCGGCGGCGGGGTGGCTGGGCC
GGCGGCGGCGGCGGTACGAGGCGCGCGCTCGGGGTCCCGGTCGCGAGGAGGAGGAGGATGTGGCGCGCGGAGGGG
AAATGGCTGCCGAAAACAAGCCGGAAGAGCGTTTCCCAAAGTGTATTCTGCGGAACTAGCACCTACTGTGTTCTC
AACACCGTGCCACCTATAGAAGATGATCATGGGAACAGCAATAGTAGTCATGTAAAAATCTTTTTACCGAAAAAG
CTGCTTGAATGTCTGCCGAAATGTTCAAGTTTACCAAAAGAGAGGCACCGCTGGAACACTAATGAGGAAATTGCA
GCTTATTTAATAACATTTGAGAAACACGAAGAATGGCTAACCACCTCCCCTAAGACAAGACCACAGAATGGCTCA
ATGATACTCTACAACAGGAAGAAAGTGAAATACAGGAAAGATGGGTATTGCTGGAAAAAGAGGAAAGATGGGAAA
ACGACCAGAGAGGACCACATGAAACTCAAGGTCCAGGGAGTGGAGTGCTTGTACGGCTGCTATGTCCATTCCTCC
ATCATCCCCACCTTCCACCGGAGGTGCTACTGGCTCCTTCAGAACCCCGACATCGTCCTGGTGCACTACCTGAAC
GTGCCGGCCATCGAGGACTGCGGCAAGCCTTGCGGCCCCATCCTCTGCTCCATCAACACCGACAAGAAGGAGTGG
GCGAAATGGACGAAAGAAGAGCTCATCGGGCAGCTGAAACCCATGTTCCATGGCATCAAGTGGACCTGCAGCAAT
GGGAACAGCAGCTCAGGCTTCTCGGTGGAACAGCTGGTGCAGCAGATCCTCGACAGCCACCAGACCAAGCCCCAG
CCGCGGACCCACAACTGCCTCTGCACCGGCAGCCTGGGAGCTGGCGGCAGCGTGCATCACAAGTGTAACAGCGCC
AAACACCGCATCATCTCGCCCAAGGTGGAGCCACGGACAGGGGGGTACGGGAGCCACTCGGAGGTGCAGCACAAT
GACGTGTCGGAGGGCAAGCACGAGCACAGCCACAGCAAGGGCTCCAGCCGTGAGAAGAGGAACGGCAAGGTGGCC
AAGCCCGTGCTCCTGCACCAGAGCAGCACCGAGGTCTCCTCCACCAACCAGGTGGAAGTCCCCGACACCACCCAG
AGCTCCCCTGTGTCCATCAGCAGCGGGCTCAACAGCGACCCGGACATGGTGGACAGCCCGGTGGTCACAGGTGTG
TCCGGTATGGCGGTGGCCTCTGTGATGGGGAGCTTGTCCCAGAGCGCCACGGTGTTCATGTCAGAGGTCACCAAT
GAGGCCGTGTACACCATGTCCCCCACCGCTGGCCCCAACCACCACCTCCTCTCACCTGACGCCTCTCAGGGCCTC
GTCCTGGCCGTGAGCTCTGATGGCCACAAGTTCGCCTTTCCCACCACGGGCAGCTCAGAGAGCCTGTCCATGCTG
CCCACCAACGTGTCCGAAGAGCTGGTCCTCTCCACCACCCTCGACGGTGGCCGGAAGATTCCAGAAACCACCATG
AACTTTGACCCCGACTGTTTCCTTAATAACCCAAAGCAGGGCCAGACGTACGGGGGTGGAGGCCTGAAAGCCGAG
ATGGTCAGCTCCAACATCCGGCACTCGCCACCCGGGGAGCGGAGCTTCAGCTTTACCACCGTCCTCACCAAGGAG
ATCAAGACCGAGGACACCTCCTTCGAGCAGCAGATGGCCAAAGAAGCGTACTCCTCCTCCGCGGCGGCTGTGGCA
GCCAGCTCCCTCACCCTGACCGCCGGCTCCAGCCTCCTGCCGTCGGGCGGCGGCCTGAGTCCCAGCACCACCCTG
GAGCAGATGGACTTCAGCGCCATCGACTCCAACAAGGACTACACGTCCAGCTTCAGCCAGACGGGCCACAGCCCC
CACATCCACCAGACCCCCTCCCCGAGCTTCTTCCTGCAGGACGCCAGCAAACCCCTCCCCGTCGAGCAGAACACC
CACAGCAGCCTGAGTGACTCTGGGGGCACCTTCGTGATGCCCACGGTGAAAACGGAGGCCTCGTCCCAAACCAGC
TCCTGCAGCGGTCACGTGGAGACGCGGATCGAGTCCACTTCCTCCCTCCACCTCATGCAGTTCCAGGCCAACTTC
CAGGCCATGACGGCAGAAGGGGAGGTCACCATGGAGACCTCGCAGGCGGCGGAAGGGAGCGAGGTCCTGCTCAAG
TCTGGGGAGCTGCAGGCTTGCAGCTCTGAGCACTACCTGCAGCCGGAGACCAACGGGGTAATCCGAAGCGCCGGC
GGCGTCCCCATCCTCCCGGGCAACGTGGTGCAGGGACTCTACCCCGTGGCCCAGCCCAGCCTCGGCAACGCCTCC
AACATGGAGCTCAGCCTGGACCACTTTGACATCTCCTTCAGCAACCAGTTCTCCGACCTGATCAACGACTTCATC
TCCGTGGAGGGGGGCAGCAGCACCATCTATGGGCACCAGCTGGTGTCGGGGGACAGCACGGCGCTCTCACAGTCA
GAGGACGGGGCGCGGGCCCCCTTCACCCAGGCAGAGATGTGCCTCCCCTGCTGTAGCCCCCAGCAGGGTAGCCTG
CAGCTGAGCAGCTCGGAGGGCGGGGCCAGCACCATGGCCTACATGCACGTCGCCGAGGTGGTCTCGGCCGCCTCG
GCCCAGGGCACCCTAGGCATGCTGCAGCAGAGCGGACGGGTGTTCATGGTGACCGACTACTCCCCAGAGTGGTCT
TACCCAGAGGGAGGAGTGAAGGTCCTCATCACAGGCCCGTGGCAAGAAGCCAGCAATAACTACAGCTGCCTGTTT
GACCAGATCTCAGTGCCTGCATCCCTGATTCAGCCTGGGGTGCTGCGCTGCTACTGCCCAGCCCATGACACTGGT
CTTGTGACCCTACAAGTTGCCTTCAACAACCAGATCATCTCCAACTCGGTGGTGTTTGAGTACAAAGCCCGGGCT
CTGCCCACGCTCCCTTCCTCCCAGCACGACTGGCTGTCGTTGGACGATAACCAGTTCAGGATGTCCATCCTGGAA
CGACTGGAGCAGATGGAGAGGAGGATGGCCGAGATGACGGGGTCCCAGCAGCACAAACAGGCGAGCGGAGGCGGC
AGCAGTGGAGGCGGCAGCGGGAGCGGGAATGGAGGGAGCCAGGCACAGTGTGCTTCTGGGACTGGGGCCTTGGGG
AGCTGCTTTGAGAGCCGTGTGGTCGTGGTATGCGAGAAGATGATGAGCCGAGCCTGCTGGGCGAAGTCCAAGCAC
TTGATCCACTCAAAGACTTTCCGCGGAATGACCCTACTCCACCTGGCCGCTGCCCAGGGCTATGCCACCCTAATC
CAGACCCTCATCAAATGGCGTACAAAGCACGCGGATAGCATTGACCTGGAACTGGAAGTTGACCCCTTGAATGTG
GACCACTTCTCCTGTACTCCTCTGATGTGGGCGTGTGCCCTAGGGCACTTGGAAGCTGCCGTCGTGCTGTACAAG

FIGURE 4646B

TGGGACCGTCGGGCCATCTCGATTCCCGACTCTCTAGGAAGGCTGCCTTTGGGAATTGCCAGGTCACGGGGTCAT
GTGAAATTAGCAGAGTGTCTGGAGCACCTGCAGAGAGATGAGCAGGCTCAGCTGGGACAGAACCCCAGAATCCAC
TGTCCTGCAAGCGAAGAGCCCAGCACAGAGAGCTGGATGGCCCAGTGGCACAGCGAAGCCATCAGCTCTCCAGAA
ATACCCAAGGGAGTCACTGTTATTGCAAGCACCAACCCAGAGCTGAGAAGACCTCGTTCTGAACCCTCTAATTAC
TACAGCAGTGAGAGCCACAAAGATTATCCGGCTCCCAAAAAGCATAAATTGAACCCTGAGTACTTCCAGACAAGG
CAGGAGAAGCTGCTTCCCACTGCACTGAGTCTGGAAGAGCCAAATATCAGGAAGCAAAGCCCTAGTTCTAAGCAG
TCTGTCCCCGAGACACTCAGCCCCAGTGAAGGAGTGAGGGACTTCAGCCGGGAACTCTCCCCTCCCACTCCAGAG
ACTGCAGCATTTCAAGCCTCTGGATCTCAGCCTGTAGGAAAGTGGAATTCCAAAGATCTTTACATTGGTGTGTCT
ACAGTACAGGTGACTGGAAATCCGAAGGGGACCAGTGTAGGAAAGGAGGCAGCACCTTCACAGGTGCGTCCACGG
GAACCAATGAGTGTCCTGATGATGGCTAACAGAGAGGTGGTGAATACAGAGCTGGGGTCCTACCGTGATAGTGCA
GAAAATGAAGAATGCGGCCAGCCCATGGATGACATACAGGTGAACATGATGACCTTGGCAGAACACATTATTGAA
GCCACACCTGACCGAATCAAGCAGGAGAATTTTGTGCCCATGGAGTCCTCAGGATTGGAAAGAACAGACCCTGCC
ACCATTAGCAGTACAATGAGCTGGCTGGCCAGTTATCTAGCGGATGCTGACTGCCTTCCCAGTGCTGCCCAGATC
CGAAGTGCATATAACGAGCCTCTAACCCCTTCTTCTAATACCAGCTTGAGCCCTGTTGGCTCTCCCGTCAGTGAA
ATCGCTTTCGAGAAACCTAACCTTCCCTCCGCCGCGGATTGGTCAGAATTCCTGAGTGCATCTACCAGTGAGAAG
GTAGAGAATGAGTTTGCTCAGCTCACTCTGTCTGATCATGAACAGAGAGAACTCTATGAGGCTGCCAGGCTTGTC
CAGACAGCTTTCCGGAAATACAAGGGCCGACCCTTGCGGGAACAGCAAGAAGTAGCTGCTGCTGTTATTCAGCGT
TGTTACAGAAAATATAAACAGTACGCACTTTATAAAAAGATGACACAGGCTGCCATCCTTATCCAGAGCAAATTC
CGAAGTTACTATGAACAAAAAAAATTCCAGCAGAGCCGACGGGCTGCTGTGCTCATCCAAAAGTACTACCGAAGT
TATAAGAAATGTGGCAAAAGACGGCAGGCTCGCCGGACGGCTGTGATTGTACAACAGAAACTCAGGAGCAGTTTG
CTAACCAAAAAGCAGGATCAAGCTGCTCGAAAAATAATGAGGTTTCTTCGCCGCTGTCGCCACAGCCCCCTGGTG
GACCATAGGCTGTACAAAAGGAGTGAAAGAATTGAAAAAGGCCAAGGAACT**TGA**AGACATACAGCAGCATCCCTT
AGCAATGTGACATTGCTTTTCAGACTGTTTTCATTTCTGTTTTTAGCAGAGACATGCAACAACAACACACACGCA
CACACGCACACACACACACGTACACACACATACAAAATCCCTCTGCAGTTTTGGGGAGATCAGCTGCAGGATTTT
AACAGGAATGTTTTGGTCATTGCATTTGCACTTTCATGGACAACTTTTAATTTGATCAGCAAGACATCTTGGAAC
TCAATCTTCTGTTGGATCACGGGAAATCAAGACACCCAGGAGGAATTGAAAGAGGCTTCCTCTTCTCAGGAAGAA
GCCATTTCCTTCTCATATAGGGCTGTATTCAAACATCGTGTGGAACTGTACAAATATTTATACCAAAAATATAGA
TAAGAAAAGGTGGGGCTATACTAGCAACAAAAAAAAGAATGCTGTTCCTGCACCTGCCGGTTATTTCCAAGAAGC
TGAATCTTTGGGACTGATTCTCAGTGGAGGGCTTAGATCATACAAAAATCTTTATTGGGTCCGTGTGTTCTCATT
TCCTTCACTGTTTATTTTTGTTTGTTTGTTTGTTTGTTTTAATCTCTACAGCACATTTAATGCAACTTTTGAAAT
CTGCAGGTTTTTAATGTCTTGTGGAAATTTGCAGAGGGGCAGGTGTGTGGTAAACGGGTAATGCATGGGAAATAA
TGAGAAGCAGCTCACAGAGTTTAAACTATTTTCTTGTCCCCACCACCTTCCAAGAACCTGCGAGGGTAGTAATCA
TCTTGTCCCCTTTTTCATGTTCAGCACTTTAATTTTTTTGCCTTACTTTCATGTGCAATGAGAATTACTTAAGAA
TTGGTAACGCATGTAGCCTTTTTTAGTAACCTTGGAAGCTGTAGTAATTCTAAGGAATCATGAACCTTGCCTGGA
CATTTGCCACCTAAACGATCAGTGTGGTGCTGCGTTCTGGCCAGTAAATTCCATGTTTTTGGCTATATCTCATCC
AAACTGAGCAGTTTCTGTGTATATATAGAAGGTAGAAATGAAAAGTGAGAAAATATTTGAAAGGGATTATATTAA
TTGCTAAATATTTTATTCACAAAGGTCAATAACATGGCAAGATAAAATTATTTGTATAGTTTTGTCTGAATGAGC
GAGAAAAATGTGGATGTACTGTTTGTATATATTGTATATATTAAAACAGAGATATGTGCATGAAATCAAGAAAAA
AGAAATGAACAAAAGCAAAGCATTAGTGGCTATGGTCTGTAAAATGAAACAAAAAAACTTTATTTCACTATAAGA
GTACTTTATTTTAAATGTTCTTTAGGAGAACATTTTGCTAAAGCATGACTAAACTGC

FIGURE 4647

RAEGKWLPKTSRKSVSQSVFCGTSTYCVLNTVPPIEDDHGNSNSSHVKIFLPKKLLECLPKCSSLPKERHRWNTN
EEIAAYLITFEKHEEWLTTSPKTRPQNGSMILYNRKKVKYRKDGYCWKKRKDGKTTREDHMKLKVQGVECLYGCY
VHSSIIPTFHRRCYWLLQNPDIVLVHYLNVPAIEDCGKPCGPILCSINTDKKEWAKWTKEELIGQLKPMFHGIKW
TCSNGNSSSGFSVEQLVQQILDSHQTKPQPRTHNCLCTGSLGAGGSVHHKCNSAKHRIISPKVEPRTGGYGSHSE
VQHNDVSEGKHEHSHSKGSSREKRNGKVAKPVLLHQSSTEVSSTNQVEVPDTTQSSPVSISSGLNSDPDMVDSPV
VTGVSGMAVASVMGSLSQSATVFMSEVTNEAVYTMSPTAGPNHHLLSPDASQGLVLAVSSDGHKFAFPTTGSSES
LSMLPTNVSEELVLSTTLDGGRKIPETTMNFDPDCFLNNPKQGQTYGGGGLKAEMVSSNIRHSPPGERSFSFTTV
LTKEIKTEDTSFEQQMAKEAYSSSAAAVAASSLTLTAGSSLLPSGGGLSPSTTLEQMDFSAIDSNKDYTSSFSQT
GHSPHIHQTPSPSFFLQDASKPLPVEQNTHSSLSDSGGTFVMPTVKTEASSQTSSCSGHVETRIESTSSLHLMQF
QANFQAMTAEGEVTMETSQAAEGSEVLLKSGELQACSSEHYLQPETNGVIRSAGGVPILPGNVVQGLYPVAQPSL
GNASNMELSLDHFDISFSNQFSDLINDFISVEGGSSTIYGHQLVSGDSTALSQSEDGARAPFTQAEMCLPCCSPQ
QGSLQLSSSEGGASTMAYMHVAEVVSAASAQGTLGMLQQSGRVFMVTDYSPEWSYPEGGVKVLITGPWQEASNNY
SCLFDQISVPASLIQPGVLRCYCPAHDTGLVTLQVAFNNQIISNSVVFEYKARALPTLPSSQHDWLSLDDNQFRM
SILERLEQMERRMAEMTGSQQHKQASGGGSSGGGSGSGNGGSQAQCASGTGALGSCFESRVVVVCEKMMSRACWA
KSKHLIHSKTFRGMTLLHLAAAQGYATLIQTLIKWRTKHADSIDLELEVDPLNVDHFSCTPLMWACALGHLEAAV
VLYKWDRRAISIPDSLGRLPLGIARSRGHVKLAECLEHLQRDEQAQLGQNPRIHCPASEEPSTESWMAQWHSEAI
SSPEIPKGVTVIASTNPELRRPRSEPSNYYSSESHKDYPAPKKHKLNPEYFQTRQEKLLPTALSLEEPNIRKQSP
SSKQSVPETLSPSEGVRDFSRELSPPTPETAAFQASGSQPVGKWNSKDLYIGVSTVQVTGNPKGTSVGKEAAPSQ
VRPREPMSVLMMANREVVNTELGSYRDSAENEECGQPMDDIQVNMMTLAEHIIEATPDRIKQENFVPMESSGLER
TDPATISSTMSWLASYLADADCLPSAAQIRSAYNEPLTPSSNTSLSPVGSPVSEIAFEKPNLPSAADWSEFLSAS
TSEKVENEFAQLTLSDHEQRELYEAARLVQTAFRKYKGRPLREQQEVAAAVIQRCYRKYKQYALYKKMTQAAILI
QSKFRSYYEQKKFQQSRRAAVLIQKYYRSYKKCGKRRQARRTAVIVQQKLRSSLLTKKQDQAARKIMRFLRRCRH
SPLVDHRLYKRSERIEKGQGT

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FIGURE 4648

TTTTGGTXTCCGGACCCCCCGGGATCCGGTCGCGAGGAGGAGGAGGATGTGGCGCGCGGAGGGGAAATGGCTGCC
GAAAACAAGCCGGAAGAGCGTTTCCCAAAGTGTATTCTGCGGAACTAGCACCTACTGTGTTCTCAACACCGTGCC
ACCTATAGAAGATGATCATGGGAACAGCAATAGTAGTCATGTAAAAATCTTTTTACCGAAAAAGCTGCTTGAATG
TCTGCCGAAATGTTCAAGTTTACCAAAAGAGAGGCACCGCTGGAACACTAATGAGAGATCATGATGCAGCCGTCC
TTTTGGATTTCTTTTTAATAATGTGTGACCCTTCACCTTTGATCCCCTGACCTGCATTACCTTGGTAACCATTTC
ATTTTTTAATTTAATTTCATTTTTTAATTTTGGTGTACAAGCTGTAACATTTCATCTTTCAAAGTGTAACACGCT
GATTTCCTGAAATAGAGATACCCCTTTGAGTGATAAATTTGCAAAATGCTGTCTTCATTTTCTGTATTAAAATTC
ATTTCAGTTTTAAAATAAAAAAAAAAAAAAAAAAAAA

FIGURE 4649

MWRAEGKWLPKTSRKSVSQSVFCGTSTYCVLNTVPPIEDDHGNSNSSHVKIFLPKKLLECLPKCSSLPKERHRWN
TNERS

FIGURE 4650

TGTCGGGTCCCAAAATACGTGGTCTAAAGTCCTTTGGGCTCCTGCCGCTGCCAGCACTGATCATATGCTCTTGAC
CCTGGTCGGGTGGGGGGGATGTCTGGATACCTCCTCTGTGGAAAGAACTGGCCACACATCCGCAGAGGTGACTCGG
GCTGAGAACCCAGGCTCCTCCTCCCTTTGGTGACACGCCCCTCGGTCCCTCACTGGCACTTCTCCCTCCGGCCAC
ACGGCGGCGTCTCGCCATAGCGCAGCGGCCGATGGTACAGCCCGCTCCCCCCTCGCGCTCTCGGACAGTGGGTCC
TTCCACTTGTAGAAAAGCATTGTGGGACGGAAGCCTGTCCTTTCTTCCTTTTGGTGCGAGCTTGCTGTGGTTTTT
GCTCTGGGTCCTCTGGGATGGCGCCTGGCTGTGGCCGCGTGGTCTCTCACGCAGGGGCGCCGGGCGGGGGAACGC
GGCCACCCTGAGTCTGGTGAGTCGACTGCGGCGGCCTGTGTCCGAAGTGTCCGGGGCCGTGAACAAGGGCAGCGG
CCTGGCCTCAGGCCTGCGTTCCCACGTTTGGAAACGGGGAGCTTCGTCGATTTGTGTTTACATCATCGACTATGC
CAGGGAGTTCTCCAGATAAGCCTGGTTTTATTTTCGTCAGTGAAAAGGCCTTACCGTATAACTGACTTTATGCTT
GCCCTGCCCCCGTATAAAATAACTTAAAAGCAGCGTGCCTGGTTACAGCTGTTTCCACGTGCGGTGCTCGTCGGG
AGTGATCACCTACCCTACAGGTGGAAGATGGATGCCTGAAGTGTAGACTGCTGCTAGCTGAATACCATCTGGGAG
CATAAAGGTGACCTGAAGGATGTCCTTGGTGAGGATTTTGAAAATTTGATCTTCACAAGAGTTGCCTGGATCATT
TGAAATTTCTGGGAGTCTGAGGAGTACTGACATAATTACCTGCTGGAGTCTGTAAATACACATTTAAGACAGTGA
GGATGTGAATAAATATATTAATGCAAAAAAAAAAAAAAAAAA

FIGURE 4651

MVQPAPPSRSRTVGPSTCRKALWDGSLSFLPFGASLLWFLLWVLWDGAWLWPRGLSRRGAGRGNAATLSLVSRLR
RPVSEVSGAVNKGSGLASGLRSHVWKRGASSICVYIIDYAREFSR

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FIGURE 4652A

AGGAGGAGGAGGTCATCGACGGCTTCGCCATCGCCAGCTTCAGCACCCTGGAGGCCCTGGAGAAGGATATGGCCC
TGAAGCCACATGAGCGGAAGGAGAAGTGGGAGCGTCGTCTCATCAAGAAGCCCCGGGAGTCGGAAACCTGCCCCC
CTGCGGAGCCCAGTGAGAACAGGCGGCCCCTGGAGGCAGGCAGCCCCGGGCAGGACCTCGAACCCGCCTGCGATG
GGGCGAGAAAGGTCCCACTGCAGCCCTCCAAGCAGATGAAGGTCACCGTGTCCAAAGGGGGCGACCGGGACAGTG
ACGACGACAGCGTCCTCGAAGCCACCAGCTCCCGGGACCCGCTCAGCGATAGCTCTGCGCATGCGGTCTCGGGGA
GAGGCTACTCTTGTGACAGCGAGAGCGGCCCGGACGACAAGGCATCCGTGGGCTCTGAGAAGCTCTTTGCGCCGG
GAACCGATAAAGGCCCAGCGCTTGAGAAGTCGGAGGCCAAGGCCGGGCCGGTGCCCAAGGTGTCAGGCCTGGAGC
GCAGCCGCGAGCTCAGCGCCGAGAGCTTCCTGCCCACTGCCAGCCCCGCGCCCCATGCCGCGCCCTGCCCGGGGC
CCCCGCCCGGCTCCCGCGCCAATCCCTTGGTGAAGAAGGAACCCCCCGCCCCGCACCGCCACACCCCGCAGCCGC
CACCCCCGCAGCCCCGCGGCCTGCTCCCGACACACGTGCCTGCATCCCTGGGCGCCTTCGCGGGCCACAGCCAGG
CGGCAGCCAACGGCCTGCACGGCCTCAGCAGGAGCAGCAGCGCCCCCCTGGGCCTGGGGAAGCACGTGTCGCTGT
CGCCACACGGGCCGGGCCCCCACCTGTCTACCTCACACCTGGCGCTCCGGTCCCAGGCGCAGCACCAGCTCCACG
CGGCCATGTTTGCCGCACCCCCGACACTGCCCCCGCCCCCGGCGCTGCCGGCCAGCAGCCTGGTCCTCCCAGGAC
ACCCGGCCGATCACGAGCTGCTCAGGCAAGAGCTGAACACGCGGTTTCTGGTGCAGAGCGCCGAGCGGCCTGGCG
CCTCCCTGGGCCCGGGGGCTCTGCTGCGGGCGGAGTTCCATCAGCACCAGCACACACACCAGCACACGCACCAAC
ACACACACCAGCACCAACACACATTCGCCCCCTTCCCCGCAGGGCTGCCCCCGACGCCGCCCGCCGCACCCCCGC
CGTTTGACAAGTATGCGCCCAAGCTGGACAGCCCCTACTTCCGACATTCCAGCGTGAGTTTCTTCCCGTCCTTCC
CTCCTGCCATCCCGGGACTGCCCACCCTGCTCCCACACCCCGGCCCCTTCGGGTCCCTGCAGGGCGCTTTTCAGC
CTAAGGTGTCTGACCCGTACCGGGCGGTGGTCAAGGTGAGCACGTGTTGGGAAGGCCCGTGGCAAGGGAGGACTC
TGGTGCCCCCGGGGCGGCCTCGGGGGGCCCGTGACAGCAGGAGTCTGCAGAAAACATGGGTGGGGGTGGCACCAG
CCCCACTGAGCGCTTCCATCCTGTCGCAGAAGCCGGGGAGGTGGTGTGCCGTGCACGTGCAGATCGCCTGGCAGA
TCTACCGTCACCAGCAGAAGATAAAGGAGATGCAGCTGGACCCCCACAAGCTGGAGGTGGGTGCAAAGCTGGACC
TGTTCGGCAGACCCCCTGCCCCGGGCGTGTTTGCAGGCTTCCACTACCCACAGGACCTGGCCCGGCCCCTCTTCC
CCAGCACAGGTGCCGCCCATCCTGCCTCCAACCCATTTGGACCCTCAGCCCATCCTGGCAGCTTCCTGCCCACTG
GCCCCCTGACAGACCCTTTCAGCAGACCGAGCACCTTTGGGGGCCTGGGCAGCCTGAGCAGCCACGCCTTTGGGG
GCCTGGGCAGCCATGCACTGGCTCCCGGTGGCAGCATCTTTGCCCCCAAGGAGGGCTCCTCCGTGCACGGCCTGC
CCAGCCCCCATGAGGCCTGGAACCGACTGCACCGGGCACCGCCCTCCTTCCCGGCTCCGCCCCCGTGGCCCAAGT
CCGTGGACGCGGAGCGGGTGTCAGCCCTGACCAACCATGACCGAGAGCCGGACAATGGCAAGGAGGAGCAGGAAC
GGGACCTCCTGGAGAAGACGCGCCTGCTGAGCCGGGCCTCGCCCGCCACCCCCGCTGGCCACCCCGTCAGCGGCC
TCCTGCTCCGGGCCCAGAGCGAGCTGGGCCGGTCCGGGGCCCCCGCGGAGCGCGAGGCCGAACCTCGGGTCAAGG
AGAGCCGCTCCCCGGCCAAGGAGGAGGTCGCCAAGATGCCCGCGCGCGCATCCCCGCCCCACAGCAAGGCGGCCC
CTGGAGACGTGAAGGTCAAGGAGGAGCGCGGGGAGGACGAGGCCTCCGAGCCCCCGGCGGGCGGCCTGCACCCCG
CGCCCCTGCAGCTCGGCCTGGGCCGCGAGCGCCTGGGCGCGCCGGGCTTCGCGTGGGAGCCTTTCCGCGGCCTGG
AGCTGCCACGTCGCGCCTTCCCCGCTGCCGCCCCCGCCCCGGGCTCCGCCGCCCTCTTGGAGCCCCCGGAGCGCC
CCTACCGCGACCGCGAGCCCCACGGCTACAGCCCCGAGCGCCTGCGCGGGGAGCTGGAGCGCGCGCGGGCCCCGC
ACCTGCCGCCCGCCGCCCCCGCCTTGGACGGCGCGCTGCTGCCCTCGCTGGGAGCCCTGCACTTCCCGCGCCTCT
CGCCCGCCGCGCTGCACAATGGGCTCCTGGCGCGGACCCCGCCCGCCGCCGCCGCCCTCGGCGCACCGCCCCCCC
TGGTGACGGCGGCCGGGCCCCCCACGCCCCCCGGGCCGCCGCGGAGCCGGACTACTCCGCTGGGGGGCCTCGGGC
CGGGCGAGGCGCGCGACTACTCCCCGTCCCGAAATCCCCCGGAGGTGGAGGCGCGG**TAG**CCCCGGGGCCGCAGAC
GCCTCTCCGAGCGGAGCGCACCGCTGTCCGTCTCTCCATCAGTTCCTAGAACTCAAGCACAGCTCCCGCCGATCC
TGGGGCGGCGCCGCCTCTCCACCCGCAGCCTGCGGAGGCGGGGACTTGGGTGTCGGCTTTTCTGAGGGTGATCTT
TTGTTTTCCGAGTTTGGGATTCGGCTGTTGGGAAAAAAAAATCGCGTTTGTACCTTTTCCCCCCACAGATGAGAA
GTGTTTGTAATGGATTTGTATTTTTCTTAATTTTATGCTCTTTAGACGTTTAAAAGAACCAAAAAAGAAACTTTT
GCTTCTTCGTTTTCGGTTGGGATTTGCAGTTTAATGGCCTCAGATCCTTCTCCAGATCCCCAGGGTTTCTTTGTC
TTATTTATGGAGAAAAACCGGTCACTTTGTCCAGCGCACTGTGAGGCCCCCACTCAGGCCAGCCCTGGCCCCCCC
TTGGTACTTGGAACCGAAGTTACAGATTATATTAAAATAATAATGTACAAAACTTTGTTTTTTTGCCTTATTATG
CAGAAGTGTAATTTCTTTTTTGGTTTGTTTTTTTAAAAGCAAACGAAACGTGTAAATAGTCTGTTGATATAAATA
TATGACGTTACTAAATTCTTAATCTAGATAGACTTTATAAAAACCGTTTCCAGAAACCCCTCTGGTTGTTTGTCT

FIGURE 4652B

AACATGGTCACAAAAACCCAGGCGCTGCTGGCTGTAAACATTATCAGAAGTTTAATGGCAGCAACTTTCCTTCAA
CTATGCAAGCGCTTCCCGGCGGCTCTGCTGGTTGGGGGAGGAAGGTTCCGCCAGCGACCTCCCAGCCCCTGGGTC
CGTGGAGGGGTTGGGTCCCCCCAGCAGAGCCCCTGGGCCAGCAGAACAGCACTCCTGGGCGGCTCCTGTGGGCTT
CAGGACTGGCCGGCTCCAGCCGCAAGGGCGATGCTGTGGACGTTTGTGTGGATGGTGCAGTGTTCTTGGAATCTG
TAGACCAGATCGGTGGAGGTATAGAAGTGCAAGAGTCTAAAGGCTGATTACACACACACACACACACACACACAA
AATCACTGCTGTGTGTTTTCTTCCGCCTGAGGCATCAGCGTCACCTCGGTGTGGTCGTCGCCTCCCAGGCCCTTG
GCCTGGCCTCCTCTCAGTTTGGGTTTTGCCCTCACCCACATGAGCCCCCCCATGCCCTGCCCCCCTTGCGGCCTT
TTGTGTTCCCCGATGTCTGGGCTGTGTCCCTGCCGGGATTCCCAGCCTTCGGGGTCAGCCGTCGAGCCACTTGCT
TTGCTCAGTTCTGTGTTTCAGCCACATTTCCACGGTGGACCCTGTTTGTTTTAAATATTCTGTTCCCATGTCAAT
CAGTGACGATAAATACAGCCTTGATTTGGATG

FIGURE 4653

PALEKSEAKAGPVPKVSGLERSRELSAESFLPTASPAPHAAPCPGPPPGSRANPLVKKEPPAPHRHTPQPPPPQP
RGLLPTHVPASLGAFAGHSQAAANGLHGLSRSSSAPLGLGKHVSLSPHGPGPHLSTSHLALRSQAQHQLHAAMFA
APPTLPPPPALPASSLVLPGHPADHELLRQELNTRFLVQSAERPGASLGPGALLRAEFHQHQHTHQHTHQHTHQH
QHTFAPFPAGLPPTPPAAPPPFDKYAPKLDSPYFRHSSVSFFPSFPPAIPGLPTLLPHPGPFGSLQGAFQPKVSD
PYRAVVKVSTCWEGPWQGRTLVPPGRPRGARDSRSLQKTWVGVAPAPLSASILSQKPGRWCAVHVQIAWQIYRHQ
QKIKEMQLDPHKLEVGAKLDLFGRPPAPGVFAGFHYPQDLARPLFPSTGAAHPASNPFGPSAHPGSFLPTGPLTD
PFSRPSTFGGLGSLSSHAFGGLGSHALAPGGSIFAPKEGSSVHGLPSPHEAWNRLHRAPPSFPAPPPWPKSVDAE
RVSALTNHDREPDNGKEEQERDLLEKTRLLSRASPATPAGHPVSGLLLRAQSELGRSGAPAEREAEPRVKESRSP
AKEEVAKMPARASPPHSKAAPGDVKVKEERGEDEASEPPAGGLHPAPLQLGLGRERLGAPGFAWEPFRGLELPRR
AFPAAAPAPGSAALLEPPERPYRDREPHGYSPERLRGELERARAPHLPPAAPALDGALLPSLGALHFPRLSPAAL
HNGLLARTPPAAAALGAPPPLVTAAGPPTPPGPPRSRTTPLGGLGPGEARDYSPSRNPPEVEAR

FIGURE 4654

CGCTGTAATTTTCACAATATTTTAATTCTGTTCTGAGATCTACAAATATCTCTACATAACACCAAAGCCAGTGAT
TTAATAAATAAGAGGAATGTATATATCGCTTTGCAAAAAAATGCCTGATACATTTATCTCTATATAAGATATTTG
TAGAATCAGTTTCCCAAGGCTCACGAAACTAAAGTGCACACACACACACTTTCCAATACCAGTCGGCATTACCCG
CCCTTTGGTTTCTTTTGCTTTGGATTTCAGCCCCCATATCATTTCTGGTAACAGAGCACAGCAATAGAATTTCTG
GGAAGCAGACCTTGTGAATCGTGCCTGTGTCTTAATTCACAAAGGGTAAGTGAATGCCGTTGAAAGGTGTTTCAT
ACACTTACCCCAGAAATGAGAGCCTGTCTCATGCAGGAGTCGGGAGGCAGCGATGTCAGGGAACTGGGACTATGT
CTTTATGACTGTGATGGTGGTAACCAAGTGGGGTGGTCCCCTCTGGGGAGCTGAGTAAGAACGCAAAGGTTTGGG
TCAGTGATTAGGAAGACTATAATATGACTTTGTGCATGCCCGGGAGGGCTGCCTTGTAGAGAGGATGTGAGCAGC
TTAGTCGCTCATCTGGCCCTGTGATTCAGGCTTATGGAGCGTTAAGAATAACAGCTGTCAAATGGCCTAGACATG
GTTAATGCAATTTGTTGCTAGTGGAAATCCTGAATTGCTTCCTTTCTGTGATCACTGCTACTTCTTAAGATGCTT
TTGATGAATGTCATCTGCCTTACAAGTTGACACCTGATAACTTCTCCCTGATGGGTTTCCGAACTGGCTGACTTA
ACCAAAAAGCCAGCTCTTGCCATCTATCTTGCATTAAAAGGAATTCCTGAGGCTCCTAAGGGGTCAGCTGCCCCA
CTCCTGACTTTTTTATTTTTAATGGTCTATACCTTCTGCAACATTTTTGTTTATGGCCATTTGAATAGTTGGACT
TTGACTCCTCACTTGTGAATAATAGGAATATATTTTGCAGAATCTAACATAATACCCTTAAAATTCATACTGGAC
AACCATCAGTGTGATGTATAGTATCTGGTGTAAACAAATTTTATTCAGCATATTAAATTATTCTGTGTTTTGCTT
TTCCTTGATATGTAGGAGGTGCACCAGTACCAGTTTTTCTCTTGTGGTGGCTTAAAACGCTGATTGCCATTTGCA
TTGTCTACTGAAAAGCTGTGGCAGCGAGTGGTATTATTGACCATGTGTTCTCATGTCTTTTTGCAGATTTAAAGG
TTTTATTGTAGTGTCCATTTAATATCTGCATGTGTGTTTAATCTCTGAATACCATGTAATTAAACTGATTAACTT
GTGATGGTGATGGTGATTAGCACACACTAAAAACCCAATGAAGCAATTGTCTCCCTCTTCTTAACTGGAAATCAC
ACTTGTGAGGTATGGTATCCATTATCAACAGTGGATTCATGATTGACTTCATATTTTGTGTATCTGGTTATAAAT
TTTGTATAGCATTTAATTTGGCACTTAATATAAATCCATTTGATTTGAATAGTGTGTGTGTGTACATGGTGTGTG
TGTGTGTGCACTTTAGTTTCGTGAGCCTTGGGAAACTGATTCTACAAATATCTTATATAGAGATAAATGTATCAG
GCATTTTTTTGCAAAGCGATATATACATTCCTCTTATTTATTAAATCACTGGCTTTGGTGTTATGTAGAGATATT
TGTAGATCTCAGAACAGAATTAAAATATTGTGAAAATTACAGCTTAATAA**ATG**TTTATTGTAATTTTGTTGTATG
GACTTTTAAAATATATCTCATCACTTCTAACCAAA

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FIGURE 4655

MFIVILLYGLLKYISSLLT

FIGURE 4656

AGTAACATGACTAAAAAGAAGCGGGAGAATCTGGGCGTCGCTCTAGAGATCGATGGGCTAGAGGAGAAGCTGTCC
CAGTGTCGGAGAGACCTGGAGGCCGTGAACTCCAGACTCCACAGCCGGGAGCTGAGCCCAGAGGCCAGGAGGTCC
CTGGAGAAGGAGAAAAACAGCCTAATGAACAAAGCCTCCAACTACGAGAAGGAACTGAAGTTTCTTCGGCAAGAG
AACCGGAAGAACATGCTGCTCTCTGTGGCCATCTTTATCCTCCTGACGCTCGTCTATGCCTACTGGACCATGTGA
GCCTGGCACTTCCCCACAACCAGCACAGGCTTCCACTTGGCCCCTTGATCAGGATCAAGCAGGCACTTCAAGCCT
CAATAGGACCAAGGTGCTGGGGTGTTCCCCTCCCAACCTAGTGTTCAAGCATGGCTTCCTGGCGGCCCAGGCCTT
GCCTCCCTGGCCTGCTGGGGGGTTCCGGGTCTCCAGAAGGACATGGTGCTGGTCCCTCCCTTAGCCCAAGGGAGA
GGCAATAAAGAACACAAAGCTGAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4657A

AACTTCTATTTTTTCTTGATAATTCTGTAGGCAAAAAAATTGGGGAAGGCAAATTACAATCATTCTTCTTCTGTA
ATACTTTGGGACAATTTTTAAACAACTCAGACCCATGTTTAAAAACGAGTTTTGTGTGATTAACCCTTGTATAGT
ATCCAGTTACTGTCTTCTCTTGAAGTGGTGGTTCTTTGAGAAGTAGAATTATTTTGTAACTTTTCTTCTCCCAGA
AACAGAAGAATCAAATACTATTCTGTTAGGATTCTATCTAGACCTGTGACTCTTAGTATAATAACCCTTTTATTA
TTATNATTATTTNTTTTTTTTCAGTAATCTATAAAGTAGAGTTGCTTAGTTTTGAGCAATTTAGGGCTTTTCTTA
TTGGCCAGTAGGTTATTCATTTTGCTGCTAAATATAATTTTTTGGTTAATTTTAACATTATAGTGCTGGCCGCTG
GGTTCTATGATTACCTAAAAATCTAGTTTTTTTCCTCCATAGGTAGATGTGTGTGTATGCATACCCCCACACACA
CACGTACATATATGTTGTCATAGAGAGGTATTTCAACCCTTATTTCAAATAACAGTAGAAGATACGAACATGAAT
TTATATTTGGTAAAAATGTCATTCATCCACTTGGTTTCCCATTGGAAATAGTTTTATAAGAAGGGTTCCCCCTGT
GCTCTCTCCACTTAACAATTTCATTATATACGTAGAAAAAGCAGCCGACTTAAGGGCTTGATGTTTTTTCAGGCC
TTGTGGATTCAGGTTTCCAGTTTCCCAGTGCCCTTAATGGATGTTATGAATGCATAAGCACATTTTCTTTTAAAG
AAAGAAGTTAGATTTATAGTGTTATTTCTTACTTGCTATATTTCTTTGCACTAAAAAAGAGCTATGTGTTTGTTT
TATAGGACACTTTAGTACCGTATTGCCTACAATAACTCAGTTTGCTCCTTAAATTCCAAACTCTGGGAAGTTGAT
AAATAACTTCCATGATCACTTGTAAAAGTTACATGCACATCTGAAAAAAAAATCACAAATCTCTATGACAGTAGGT
TATGTTTTGAGCTTGTTACCTTGCAGTATTCTTCTCTGTTCCATAGGTGAAAACAAAGGGTGACAGAGGTTATCA
GGCAGGAAATGCCTAAATACATACATCTCTGCATGGTACAATTTCTCATATTCATGTATTCCATAAACAGTGTTT
TTTCTCTGTTTAAGCAGACTGTTGTTTCTTCTGAGTCAGTGATATGTGATCTTCGTTGGTTTCATTTTGTGAAGC
TCAGTCTGTCTCTGTAACATACTTTAGGATTTGCACCTTGTGCTCCCCAGGAATTATGTTAGTGTCCTTTTCTAT
GCTGTCTTCAAGGATGGACAGAGGCCTAAACCACAACAACAACAAAAATTAGAAAAAAAAAATACTTAGATTTCGG
TAATCATCCATAGGAACTCATAGCATCAGTCTCTTTTCTCTGTGAATAATATCTTTGTGTAAGTTGTCATAAAAA
ATCAACGTTAGAAGATGACAATTAGAATTCTTCTTAGGTATTGAGGGTAAGAAGTTGTAAAGAAAGAAAATTCGT
GTTTCAACTAAAAGATTGGATTGCATATACCTTTGAAGTGGTTTTGTAAAAAAAGTTCAGTTACTAAACTGAGTG
TGCCCTGTAATCCTTTTGAGTGCACTGAAGATGCTTTGAAAATACTTTGTTGGTCTTCACATTGTGCATCATGTC
CTGCAACTTGTAAATATGTGCATGTTGTTTATGTTTGTCTGCCTGTCTCTTATTGCACTAAATTCTGCAAGGTGA
ATAATTTTTTTATACCATTTATTTGGAAAAAGTTCCTCCTCCAACTCTTCTTCACTGACCTTTTAATTAGTTGGT
AAACTTAGAAAACCAGGTAGGATTTTTGAAGCCCTGAGTTTAAAAGAAGAATCGTGGCTATTTGACATCATCCTT
ACATTCCCCTGACTTAAAAAGCTAACAAGAAGCACGAGATCTTCCACCTCATTTTAGAAAGCTTTTCTACAGAAC
TATATGCTTGCTTATAGCTACCTATCTACAGTTTGAACAGGGAGAAAGGGAGATATGTATGTCTGGTTACATCTT
CCTTCACTCTTGAATTGGCTGGGACAGCAAGCAACAACAGTTTGAGGTCCAGTGACCTACGTAAAATGAGTGTCG
TTTGTGTCAGGGGACACATGTAACTGTGCAACATGGTATTTTCTACAGGGAGGGCTAGGAAGGGTGGTTTTGGAA
CCTAACCTACTTTGTGTCTTCATTGTCAGAACTAAGGTTGGAAATGCCCTTTAAAGGACTTGGTGAGGCATATGC
TAGGACAATAGAGCTGCTTTAGAAAGAAATTGAGACATGTTTTGTCAGGACAGATAAAAGTTTAATGCAGGCTTT
TGAACAGATGTTTTAAAACAAATTTGACCTTACCAACTATTTTTTTCTTCTAGCCAAATCATTGTACAGGAGTTT
CATATATGATAAAAAGTGTTTTGTTATTGTTTTTGCTTTCTTGGCAGGGGAGAACCCCTACCATTGTGAGCAGTT
ACTGTCACTCTGGCTGAATGGACAAATAGCTGTGTAAATAGCTTCTCATAAAACGCTTCTACTGATAGCTGTTTG
ACTTTTTCTTCCCGTTATGAATGGGAGGAACATTTGTAAACTTCCTTTCTGGGTAGCTACCAAAAAACGTACTGG
CTTATGGTCCCATGTGACCTTGTCTCCGTTAAGCCCAGAATCTGAGTGCCTTTAGCAAGTGTTAGCATTTCACAG
AGAGAAGAGAGACAGAATTATTGCTATTAATCACCATTCATAAATAGGAGCTTGGAATAACAAAGGTCTGTGTGA
ATTCTGTTCTACGTCTTTTTTTTCCCTTTTTTAAATAAATGTCAATTTGATATCAAGTAAAACTATTGTCATTAT
TGATCAGAAACCATACATTCTGAAAATGAATCCAGTTTTCCCAAGCTGGCAGAAGTCAGAGATCATTTTTCACCT
TGATCTGTGTTGCGTTTGTACTTAGTGAATGGCAGTGTGGTTGATTGGAAGAGCTTGACACTGATGTTTGGAAAA
ATTCTTTATTCTAGTGGTCATTTTCAAACTTGTCTTCTGTAGAGAGGGGAAAAATTATGTATTTGCAGCTAAAGC
GAAGAGACTGGCACAATAATTATTAATTGTGTTAGTTCATTTCTATATTAAATGAAGCATCTTCACAAATCAGGT
TTGAAGCCATTAAAAGCAAAATTTTCCCTAGTTTAATTAATTTAAAATTCTAAATTGCCTGACTACTTAGAATCT
TAGAAACGCCCTGCTAGACTGATTTTATTATAGAAATGTTAACATGTTCCTCAACATTTTCTCAAGAAAATTTTC
AGACATATATCAAAGTTGAAAAAACTTTGCAGTATAACCACTGCTAGATTCTGCCATCAACATTTGACTATACTT
GTATTGCCATGTATCTGTTCATATTCTCTATCCCTCTTTTCATCCATCGATCCATCAGATTTTTTTTTTAAAGAA
CATTCCAAAGTAAATTTTAGGCAATACACTGCCCTAAATTCTTAGCATGGGTGTCATTAATTAAGGTTTAGTATT

FIGURE 4657B

CGTTTAAATATCTATTTTGAAAGTGGTGTATGAAGTTGATAATCTGAGCCAATTAACATACTTTTTTTTTTTTCC
TCCTGTGGACTTTTGTCTTCCAGTTTCTCTTTTTGTGTGTACTTAGGGTGAGGGAGGACAATTCCTTTCAAACAC
AAGTTTATTTTAGAATTGGTCATTTTTAAGTGCTTGTCATAAATTTTAAAGTTTCAATATAATTTTTCTTTTCCC
CACTTCTGATAATGTATTTTTGCCAAACTATGCAGCTTCTTCAAAAAACTGTAAATTACTGATTGGGGTTTATGA
AATCAGCGAATACCTCATTTCAATCTGTTGCTGCTTTTCTCCCTCTTGTCACTTCTCCTTTCACTACTTTCAGCT
GCTCTACCAGAAGGTAGAGGGGAGTAAAGGGTCAAACCCCTATATAATTAGCTGTTTTAAACAACTCTAGGAGAG
CAGATTAAGTAGCTTAGTAAGTTGAAACTATTAATTTTTCTAAAGAATTTGATTTGAATTCCTTGAGAATTGTAA
TTATCCACACTTCCTCCAGCTATAATTAGCAGAATTAAAAATGATTGTACTGTACAATGAGTTGTTGAAATTGTA
AGCCTTAGTAACCATCTTTAGCTTTATTGTAGTCATGTTTAGAAAAAATTATTTTTACATATGCCTTTATTTTTA
TGCCCACTTTTTGTGGATAAGATTCTTTAGATAAAATCTAAAGAATTTTAAGTGACTTTCTCCAGGTCATGAAGA
TTCAATGGGTAGAATTGAATCAGAATTGAAATGTTCCAGATTCATATTCTTGTGTGTGTTTGATAAAATTCATGG
CTTCCAAAGTAACTGAACACTTCCTTTGGGCCCTTGGAGGGAAAATCCATATTTTTACTAATTACACTTTTTTTT
TTAGACATCTGGCAGTTCTTTGAACTTAAACATATTCTCATGGCCATAGTTCCAAATTAAGCCCGACGCAGTTGC
TAAAAATCTTGCTGCACTGTTGAATACTAATAATGCAACATTTATTGGATGTTTTTGCATTTTGATGACCTTCAT
GATTCATTTATAAGTCTTTGTAAGTGCTTAAGTGACCCCCTCACTAGTGAAAATAATAAATGTTCTATATCATTT
ATTATTATTTGTGTATTCTCTACATGATATATTTTTTTAAGGAAGAGTAACTCCACATGTCAGAATGAGTGATAT
TATCCTAGGGCAAAGCGCAAATAGGGCAGTTTGTTTCTACTCTGCAAATATGGCATGTATAGGAACAAAACTCTT
TTGGAGTGGCTGGTCATTGTTTTGCCCTCTTTTGGTACCTGAGTACCTTTCTGGGGTTTTGTAAATCGTGTGTCA
TTTGTAAGAATTTCACGTTAACTCTGCGTTACTTGGTGTTCACCTGTGGTATCCTTGACTGACCATAATGATTTA
GTTTGGGTATGATGTGTCTGCTTTGAAATGCCTTACTGGAGTATGTCAGATCCTGCTTTAAAGCATTCCATATAT
CTGCTGGGACAATAAGTTGCTTCTCCTTGGAAATATGCTCTAGATTCAGAAGCAAAACCGATTTTGCTTTCACCA
TTAAGGTTGCATTTTAATGCAGTTATTGTTTTAAATTAGAGAATAAAATGTAAAACCAAGGGAGGCTTTAGAACC
CTTTATTGAATGGCATGGCAAACTTTTAAAACTGCTTTTGCTATTTCACTAGAACTATCTTTGATAAAGGATATA
GCTAAAAAAATGTCAGCCCAAACTGTGTGTAATTAGGGTTGTTTATTAAAATTTTCTCTAAATGTCATACAGAGGC
TTAAGATCTGTGTATGCTGTTGGGTCGGAGTGCCAGTCACTGCTTTGGAAGTCTGTGTTCTGGGGCTGCAGAATG
ACAAACGTGTCATGGGATTAAAACCAATCAACTGTGAATTGTGAAATTGAAACTACTCTTTCGGTTTTATTTTCT
TTAGCATATTGAGTATAGAAATCTGAAACTTATTTAAAATTTATACTGCTTTTGTTGATGGCTCATTTTGGCTGT
GTATCCTCACTTATGTACTGATTTCTGATAAAGGCTTGACATTATTATAACACGCATTTTGTGTTCCAGTTTAAT
AAAACGGTTTCTGAGTCTTGTCTGAAAAAA

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FIGURE 4658

LLFFLDNSVGKKIGEGKLQSFFFCNTLGQFLNNSDPCLKTSFV

FIGURE 4659A

TATCTCTAAAAAAATAAAATCACCCTCCATTATTATATTTTTAATATACATCTTTCAGAATTTGACAGCTGAAGT
CGGGGGGAAGAGATGTTAATGTAAACAATAGCAGAAGGCTTCGTTTAGTGGATATCTTTGTGTATATTAATAAAA
TTATAACATTCCTTTTAAGGAAGTCAGAAAGGTAAGGAAACTGTACTTTCTAATAACCGGATATGGGTTTCAGAA
ATCGTTATGGATGTGCATTGCCCCTTTGTATTTGTGACTGAAAAAAATGGTGGCTTCTCTTGATCTGCCTTGTGC
ATTTTTTATGTATTAATTTTGATTTTTGACCCTATTTTACTCACCTATGAGGGTGAGCCTCAGATTAACCATAGG
CTGCTAAAGGCAGCAGCCTCCCGTCAGTGAATCAGGAGGATTTTGCTTCTATACTTAAAAATTTTAATGTTTC**AT**
GAGATATTGCCACTTTTCTAAATTTTCCAGGAACCCTCTGGATATTGATGCCTCGGGTGTGGTTGGACTGTCATT
TAGTGGACACCGAATCCAGAGTGCCACTGTGCTCCTCAACGAGGACGTCAGTGATGAGAAGACTGCTGAGGCTGC
GATGCAGCGCCTCAAAGCGGCCAACATTCCAGAGCATAACACCATTGGCTTCATGTTTGCATGCGTTGGCAGGGG
CTTTCAGTATTACAGAGCCAAGGGGAATGTTGAGGCTGATGCATTTAGAAAGTTTTTTCCTAGTGTTCCCTTATT
CGGCTTCTTTGGAAATGGAGAAATTGGATGTGATCGGATAGTCACTGGGAACTTTATATTGAGGAAATGTAATGA
GGTAAAAGATGATGATCTGTTTCATAGCTATACAACAATAATGGCACTCATACATCTGGGGTCATCTAAA**TAA**TA
ATTAAAGTGGCTTTCATAATATGTAACTTTTGGGTTCTGCCTTTTTCAGAAAATGGAAACTTGGGCCATGTGTAT
TTCAAACAAAAATAACTTTAGATATATCTTTTTTGTAGCTTTGATTGATGCTCTAAGATCACATGAGGGTAGTAT
TTAATATATTAGATGAAGGACAACTTTGGACATAACACTGACTAGGAGTTGAGAGCTTTTGCATCAGGCAGAAGC
AAACTGATTATAGTTGTGTTGCACCAGATCATGTAGCTGCTGTGTAACATGACCTTAAATAGTCTTCCTGCATAG
GAAGAGCAAAAGGGTATTCATCAATAGGATATAGATTTAAGACATTCCCTGACTACCCCTTGCGTTGTTAGGTGA
TGTCTTTTAGCAGAATCATGAAGACCTTTTTTCTCCCTTAATAAAGGAGAAAAATATACTGATGGCTGGAGAAAT
TTTTCTCTGCCTTTCAGTTTTATGAATTTTTTCAGAAGTAACAATATTATTATTGACTTTTTACTTATTTGATAA
AAATTAAAGAACTATTTTTGTTTTGGTCAGATAAATTGACAAGACTAATCAGTATTTTATTATAAGTAAAAGATT
TTTCTTCTTTCCTTAAAAATATTTTTTTTTCACCTAGGTCTAAATAGCTAACTAACTGGTAGACCAGAGTATTAC
ATCATCTTATTTTGGTTTTATACCAATAAAACATAGCGTGGAACTCATTCAGGTAATGTTTTGCATTTCATTGCT
TTTGGATGAACAAAGGAAGTAAACTAATCCTTTATAAATGAAAACCCAGAATAGTTGGTATGTCAGCTAGTCATT
CCTGTCATATTCCCAGTAGAATGATTTTCAAGTTTGAATTTCTGTACAAATATCTAAATAAGAGATGTGCAGAGA
GCACCAATTTTCCTTCAATATCCATTCTTTACTTTTCACATAATGATAGAACCTTTGATTTTTCAAGTGGGTATG
CCTCCTAGAATAAAGACTACATTTCCCAGTCTCCTGTGCAGGTATGACTGTGTTCTGGACAATGGAATGTGAGGG
GAAACGATTTTTTGTGTCCTTAAAATGGCATGACCATTTATTTGCCCCTTTCTCCATCCTGTTGCTTGGAATGTG
GATCTGGTAGTGAGCCATCTTGGACCCTGAAGAGGAGGCAACACACCATTGTAGAAGAAAAACAACAGAAGGATC
CTGGTCCCTGTACGACCTCATTGAAGAAACACCATAAGTGGCGTGGACTATCTACCTCCAGACTGTTTTACAAGA
GAGAAATTAGCATATTCCATCTAATACAGTATGATGTAACTAATGTTACTTTTGTAACAGTCAGTGGTTTGTTCT
AACAGGACAGTAGAACACTTGCAAGGTAAGTAAAACCAAATGTATTAGCATTATTCCTGCTTTTCCTTTTTTGTC
ACTTTTATCCTTTTTTTAAAACTGAAAATATTTTTCTCTTGCTATTTATATATATATGATAAAAATGCTTGGAAG
AGTCCTTTAATTTATGGTTATTCTAAATCCTAGTTCCTGAGGCAAGTCCAAAGAAAAATGTGTCAAAACTTTTCA
TCTATGAATATTTATATTTAGCTCTTGCTATTTAGCTATTATCAAAATACCTCAAAATTTTAGTCCTTGAATGTG
CTCATATAGCCCATAAGGCAAATATTTTTTAAACTTTATTGTCCCTGATATTAACCAGAATTGGTTGAATAGTAG
AGGAAAAGGGATTTTTAAAACTGAAAATATGAACAAAATGAGCCTTAGAATTGAATGGATTATTTTAAACAAATT
AATACTCATATAAAATGTTTTGCTGCTTCTCAAAGAGTCTGATACAGGGTAATTTCATACAATATTTGATGTTGT
TAAAGCATTCCTTTTTATAGCTGAGCCTTTGGAGCTTGTTATGAACAGTAAAATCATTTAGTCACATGGTTGTAA
CCTTAGTGCAAAGTAAAAAGGGAAAAGTTGACCTAATAGAAACAATAGTAGTATTGATAAGAACAAAAGTCATCC
TCCCTGCCTCTCAGAGGCCCTGAAGTCCTGTGAGGAAGGGAAATAGTAATTTAACCAAAGTTAAATCTGTGTAAC
TCATTTATTACAATTTTGAAAGGCTTGTCTTAGAAGCATTAAAGGAGTATTAGCTAAAAACAAACTAAATTCCTA
GAGATGACAATCATTGTAGTCCTCTGTGAAACTGAAAATGATCACATGAAAAAAATGTGAGCATAAAAAAGAGAA
GTAAAGGTGTACCATTAGCCTACATACTGAGCTGACGATCAGATCATAGAATACTTTATTTAATCAAGACATTTA
AAAATACTTATTTCATCTACATACTTTCAAAGCAAAATAATTTCTGGGGCTAGTTTCCTTTGTATAAGGCTTAAG
CAAGGAATATATTTCCATGCCCTTTGATCCAAGTAAAATCTAAGGAAGAGGGAAAGTAAACCTTGAAATTAAGAC
CTAGAAATAGATCCACCCTTGCAGACTGATAAAAGTGGGCAATCTAGTAGGCCAGTTCACATTACAGTTATCTCA
GTTTTGCTTAAAGCAAACCCTAACCCTCAACCTACGAGGCCAGATAGCAAAAGACGTGCAACTGGTTTATATTGC
AAATTTAACAAAGTGAACATGCAAAGAATTACAATAGAAATAAACTTTTACAAATCTGAGAACTTTCTATGCAAT

FIGURE 4659B

CTGCAGAAATTTTTAAGAATATAAATATGCTTTTGTCATTTTATACCCAGTCTGGCCCAGGTTTGCACTGCCATA
AATTCAGTTTTAATGGGAACAGAAGACTCCAGATCCTCTTGATGGGAAGAAATCATGAAATTTTAGATGATTGAC
TTGGTTTTCATTTGTAGAAACTGGGTATAAGTTGGCTTAATGAAAATCCTAAAATAATAAAATAAGCATTAGTAA
T

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FIGURE 4660

MRYCHFSKFSRNPLDIDASGVVGLSFSGHRIQSATVLLNEDVSDEKTAEAAMQRLKAANIPEHNTIGFMFACVGR
GFQYYRAKGNVEADAFRKFFPSVPLFGFFGNGEIGCDRIVTGNFILRKCNEVKDDDLFHSYTTIMALIHLGSSK

FIGURE 4661

GCGGCTTCCGGCGGCGTGACCTGACCGCAAGAGGCCAATGGAGTGTGGGAGCTGAAAGGGTCTTCGCTGGCGGCC
GGTAACTGGCGGCGGTTGGGAACGGCCGAGTGTGGCTCTTCTGGTGTTTCAGCTTGGGGAGAGAGGGGTGGCCTT
CCTCTTGCAGTTGAGGCCGGCGCCGAGCCGGACTTCAGGCGGATCTCGTGGCGGAGCCCATCTTGCTCCCTCTCC
CAGGCCTTTACCCGCTCCCTAGGATTCCCGGGCCCTGTAGGTGGGAGTTGGGAGACGACAGTACTGCTTTTAAAG
AGACAGTGTTAGGGATCTTGGAAGCACAGCCAAC**ATG**TGTGACATTGAAGAAGCCACTAACCAACTCCTAGATGT
GAACCTTCATGAGAACCAGAAGTCTGTACAAGTGACAGAAAGTGACCTCGGAAGTGAATCTGAGCTTCTAGTCAC
TATTGGAGCCACTGTACCTACTGGCTTTGAGCAAACAGCTGCAGATGAAGTCAGAGAGAAACTTGGGTCATCATG
CAAAATCAGCAGAGACCGTGGCAAGATATATTTTGTCATTTCAGTGGAAAGTCTGGCACAGGTTCATTGTCTGAG
ATCAGTTGATAACTTATTTGTGGTGGTTCAGGAGTTTCAAGATTACCAGTTCAAACAAACAAAGGAAGAAGTTCT
AAAGGATTTTGAAGACTTGGCTGGAAAACTCCCATGGTCAAACCCCTTAAAAGTGTGGAAAATTAATGCCAGTTT
TAAAAAGAAAAAAGCAAAGCGCAAAAAGATAAATCAGAATTCAAGTAAAGAGAAGATTAATAATGGACAAGAAGT
CAAAATCGATCAGAGAAATGTTAAAAAAGAGTTCACTAGCCATGCTTTAGATTCTCATATCTTAGATTATTATGA
AAATCCAGCCATCAAAGAGGATGTATCAACATTAATAGGTGATGATTTGGCATCTTGCAAAGATGAGACTGATGA
AAGCTCAAAAGAAGAAACTGAGCCTCAAGTGCTGAAGTTTAGAGTCACATGCAACAGGGCAGGAGAGAAACATTG
CTTTACCTCAAATGAGGCTGCAAGAGATTTTGGGGGTGCTGTTCAAGATTATTTTAAGTGGAAGGCCGACATGAC
CAACTTTGATGTGGAGGTTCTTTTGAACATCCATGATAATGAAGTCATTGTGGGCATTGCATTGACTGAAGAGAG
TCTCCACCGAAGAAATATAACACATTTTGGACCTACAACTCTTAGATCAACTCTTGCCTATGGGATGCTCAGGCT
CTGTGATCCTCTACCTTATGATATAATAGTCGATCCAATGTGTGGAACTGGGGCAATACCAATAGAGGGGGCCAC
TGAATGGTCTGACTGTTTCCATATTGCTGGTGATAATAATCCACTGGCTGTGAATAGAGCAGCAAATAACATTGC
ATCTTTATTGACCAAGAGCCAAATTAAAGAAGGCAAACCCTCCTGGGGCTTGCCCATAGATGCTGTTCAGTGGGA
TATCTGCAATCTGCCGTTGAGAACTGGCTCTGTGGATATTATTGTAACAGATTTGCCATTTGGAAAAAGGATGGG
ATCCAAGAAGAGAAACTGGAACCTTTATCCAGCTTGCCTACGCGAGATGAGCCGTGTCTGCACACCTACCACAGG
CCGAGCTGTACTACTTACTCAAGACACAAAATGCTTTACCAAGGCGTTATCTGGAATGCAACACGTATGGCGAAA
GGTGGATACAGTCTGGGTGAACGTTGGTGGTCTTCGTGCTGCAGTTTACGTTCTGATACGTACACCTCAAGCTTT
TGTTCATCCTTCAGAACAAGACGGAGAAAGAGGAACTCTTTGGCAATGCAAAGAA**TGA**AGATGACTAATAGTACT
TGTACTTCCCACCACTGGAAATGTTAGCATAAAAGAACTTGGAGAGGAAAAAAGTATTAACAAAACTGCAGTCTG
CACTCTTTAAACCTGTTTAAGGCTCTTCATCCTGGTTAGCAAAAGGTGTGAATGTAATGTGATGGAATTTAAAAG
TTTTATGAGACCAGGCACAGTGGCTCACGACTGTAATTCCAGCAGTTTAGGAAGCCGAAGTGTGCAGATCACCTG
AGGTCCGGAGACCAGCCTGGCCAACATGGTGAAACCCTGTCTCTACTAGAAATACAAAAATTAGCCAGGTGTGGT
GGCGGGCGCCTGTAATCCCAACTACTCAGGAGGCTGAGGCTAGAGAATCACTTGAACCCAGCAGGCGGAGGTTGC
GGTGAGTCGAGATCACGCCATTGCACTCCAGCCTGTGCGACAAGAGCGAAACTCTGTCTCAAAAAGATTTTATAA
GAAAGCAGAGCTTTTCCTTGAAGCTCTTTTGAAGTGGTAGCTTAATTAGTATTTTGTTGAAAATACTTTAAAGAT
GCCTAGTGAAAAGCCTACTAAAGTGCTGTGAGATTGGGGTTTAGAACATTTTATTTTCAGGCTTTATGGCCTATT
TTCCATTGTGTCAAGTGCAAAACTACCCTGGCCCAAAGGAAGGGCAGAGAACATAATTACATCTTAGGCCACATT
TCATTCTTTGCAGCTTTGCTAATCCAGTTGCTCAAGTTCTTTACCTCAACCTGAAGGAATGAAGCATTATTACAT
TTTGTGAATGGTGTTCAGCCTATAAGACGAAGTCTCACAAGACCTATAGGAAAGTTTACCATCTGCCTAAATATT
AAAATATCCATCTGTTATTCACATTAATACACAGAATGAAAATAGAGGTCTAGGAATTATCAAAGGTACTGCAAA
AATACTGTATAGAACTTATTTGTAAATAGCACATACATTGATAGATGGGGTGTGGGACCAACAAACCAAATTAAA
AGAAATTGTTTTTCTTTCAGTACACTAAGGTGTGTGTTTTCAAAACC

FIGURE 4662

MCDIEEATNQLLDVNLHENQKSVQVTESDLGSESELLVTIGATVPTGFEQTAADEVREKLGSSCKISRDRGKIYF
VISVESLAQVHCLRSVDNLFVVVQEFQDYQFKQTKEEVLKDFEDLAGKLPWSNPLKVWKINASFKKKKAKRKKIN
QNSSKEKINNGQEVKIDQRNVKKEFTSHALDSHILDYYENPAIKEDVSTLIGDDLASCKDETDESSKEETEPQVL
KFRVTCNRAGEKHCFTSNEAARDFGGAVQDYFKWKADMTNFDVEVLLNIHDNEVIVGIALTEESLHRRNITHFGP
TTLRSTLAYGMLRLCDPLPYDIIVDPMCGTGAIPIEGATEWSDCFHIAGDNNPLAVNRAANNIASLLTKSQIKEG
KPSWGLPIDAVQWDICNLPLRTGSVDIIVTDLPFGKRMGSKKRNWNLYPACLREMSRVCTPTTGRAVLLTQDTKC
FTKALSGMQHVWRKVDTVWVNVGGLRAAVYVLIRTPQAFVHPSEQDGERGTLWQCKE

FIGURE 4663

AGAGGAAGCCAAGAACGGTGAAAAGGCCAGGCGGAGTTCAGAGGAGGTGGACGGCCAGCACCCGGCCCAAGAGGA
GGTCCCGGAATCGCCCCAGACCTCTGGCCCAGAGGCAGAAAATAGGTGTGGGAGCCCCAGGGAGGAAAAGCCAGC
TGGAGAGGAAGCAGAGATGGAAAAGGCTACAGAGGTGAAGGGGGAGAGGGTGCAAAATGAAGAGGTGGGACCTGA
ACATGACAGCCAAGAAACAAAGAAGCTGGAGGAGGGAGCTGCAGTGAAGGAGACCCCCCACAGTCCCCCTGGAGG
AGTGAAGGGCGGAGATGTCCCCAAGCAGGAAAAAGGCAAGGAAAAACAACAGGAGGGGGCAGTGCTCGAGCCAGG
CTGCAGCCCCCAGACCGGCCCTGCCCAGCTGGAGACCAGCAGTGAGGTCCAGAGCGAGCCAGCAGTCCCCAAGCC
GGAGGATGACACTCCTGTCCAGGACACTAAAATGTGAAGAACAGCTCATTGTGCCCCAGTGATGAAGTTGCTGGA
CACATCTCTTTGCAGGTAGCAGCAACAGTTGTAGCAGCAGCAGACGAAGCCATTGCAGAGGCAGAATATGCTGAG
TGTCTGGAGTCAGCCTGAAGACACAGGGTGGATTATTTCCTGGCCTCCACACCAAACGTTCCCTTGCAGATGGAG
ACTGAATCTGAGGGCAGCAGACTTTTATCAGCTTGAGTTTATGTCATTTGATGGACTTGGTTCAACAACAAGAAC
TTACTTAAAACAATGTACTGTGGTGATGAGTCCCAGGGGCACTGGTCAGCCTGTGGAGCCCTGGATGCTATCCAC
ACCCACCTATCCCTGCAGCTAATTTAGCTGATCTCTAATTTAACTGAGCTCTAATTTAGCTGATCAGATTTTGCT
TGGGTAAAGTTCCTTTTTAATGTTCTAAAGTGTTTACGGTTCTCAAATATCAGTTAAAAACTAATTTTAGGTGGC
CATAAACATAAAATAGAAACCCTGTAAGTTACAGAAGACCCTAAATTGTATCAAAACCCTAGAGACAACTTTTCA
ATTTGATCCAAATTTGAACTGGCCAACCAGTCTTTAAAACACTGGACTAGAAGAGATAATGATTGAAACATTTAA
AAAAAAAAAGTGCTCCATTCGCAGGAGCTTTTCCTGTCCTGTGGTTTTCCAGTTGGTGACCACCATGGGAGGTCG
CTGGCTCGGCTCACTCCCTTCTCCCACCCTTGAGAATGTGGAGAACTCCCATGGAGAGGCAGAATGGCAGGAGGT
TTCATGTCCCGCGTTGCATCTCCTCCTGAAAGAAAAGCAGTGATACCTGAATAATGCTGGCTCTCCGATTGATCC
TGTGAGGATGAATTTGCATTTCCAGAATCCTTGAGCATGGATTAGATGTTTCCTGGGAGGTGCCTTGAGTACCAT
TATGTGCAAGCTACATAATTAAAACATTTTTCTTAGTTTCCCTGGGAAGCTTTTCTTGACTCACAGCCCAGGTTC
TTCTGCCCAACACAAAAGGAGTGAGTTGGGGTCTTTAGTCTCTTCTTATTGGGTAGCTCTTGCTTTAATATTCTG
TTTGGTGAGTGTAAGGGATTCTGCAAGGGACAGGGGGCCTGACTACCCAGTCTTTGACTTGTATCCTCTCCCCTC
TTCATACACTCCTGCTGAAAAATGTTAATCCAAATACACATTTAAACTTAGGGTCGGTCCTTATTCTGATTTGAG
TATTTTAATGTCTCAGTGTGCTGATTTGGTAGTTGGAAGAATTATTCTTCTGGAGGTCTGTTAGACTACATCCTA
CACTGACTTCAGAAAACAGTCTGTCAGACAAAAAGGCCTTATGTCACCACTGGTACCTCAGTTTCCTCATCCCAT
TTACAGTTTTTCTAACTCCAGGGTAGTGTTTAGTGTTAATATTTGGGATATATTTTTTTTCAAAACTGTTTTTAA
GTAGTTTGTAATTTGTAACAAACTTGTAACCTGGTTGGGACTGATATTGTCATAGCTATGATAAACTTTGGATAT
TAGCAGAATTTGGGAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4664

MEKATEVKGERVQNEEVGPEHDSQETKKLEEGAAVKETPHSPPGGVKGGDVPKQEKGKEKQQEGAVLEPGCSPQT
GPAQLETSSEVQSEPAVPKPEDDTPVQDTKM

FIGURE 4665

TCTAATTTTTGGTTAATTTATAGCCACACCCTAAAGTGAAAAAGTGCCAACACAGGCCAATTGGAATCCCACAAT
TTCCACGAGCCCAAAAAAAAAAAACATGTATTTTAGAGTTCATCTTTGGCAAAATCTTTGGTTCAGGGTACTAGT
TGTTTAAAAGTTGATTCATATTCTTACCTTGTGCTGAGAAAGGTTGCATTGCTGCCCCTTATACACATGCTGCAG
CTTGATGTTAAAGAATTTTTATTCTTTCTGAAGAACTAATTAATGTTTAAAGCAACTGTTTAATATGATGGCANN
NNNNNNNNNNNNNNNNNNNNNATGTTCTGAGTCCACTTCTTTTTTCCTAAATAACACTACAGGGATTTTGTCATA
TTAGATTTAATTTATAATTTGAAAAATCATCTAGTGTGTGACCTACAGGCTTAGAAATGGTATAGTCAAAGACAT
TTTATCCACATTTCTAATAGTGGACTTGATTAAGTAGATAAGATCAGCATCTGTTTATGGTAGTAGGAGAAATAG
CCAAAGTTGAGGATTTTATGTATGTTTTCCTGTTTACCTGGAAAATAGCAATTAATTGGATTTTTTGGTAAAGAT
TGCCTTCTGTATAATGTTTGGATTATATAAAATTGCAAAAATGATAACAGCCCGCTTTACTGTACTAAGCCTGTT
ACTTTCATGACGTGTGAGCAGAATGCCTTATTTTGTAATCTTGTTTAACTTGTTGCTACTGGGACTTGATTTACT
GTGGCACTAGTTAAGTAAGTTAAAAAAAAAGTTAAACCCTCTCATTATTAAAGAGGAAAGGCGATGGTGATGTCTG
TAGTACAATATAAACCATAATTGTGATTTACCTTAAGTAGGTATAACTCTTATGGGATATACAGTATAGTTTTTG
TGAATCTTTACATGATAGCATTATCTTTTTATAATTTTTTTTCCTAAGATAAACAAATGCATAGTTTTCTTCTAT
GGGTGATAGAAACAGCTTTTTGAAGTAATGAAAACCTCAAAAGATCATGTTGATTCTTAATTTTTGCCTTTTGCA
TAAGCCTCTTTATAACATGTATCTTTAAAACAATTAAGTCTTTAGGAATGTGTAACCAGAACTATGTTAGTATTG
CTTATAAAACTTTAGTTAGGTTCAATATATACATATATACATCTCTATATAGGTATATAGATTTGCATTTTGTCT
TGTAAAATTTTATTTGAATAAATTCTTCCTGTAGGTAATGGGAAACAAAATTAATAGTTCATATGTCACTCATAG
CATTTCTATATTTGAAAGTAGCCCAATATAAAACTTTTGATTCTAAAATTAAACCAGCAGCCTATTACAAGCACA
TTCTTTGATTGAGTCATTGGTTATAAACTTACTAAATGCAGAGAAAGCAGCCAATTTAGGAAACTTCTGAGTTGG
TGGGACACTGTTGATTAATAATGTACTGTATGAATTAAGTGATGCTTTAACTTTGATTTTACATTTTAAAGTTAA
AATGTGGGCATTATGTCAGCAAACTTAAGGGCATTATGTCAGCAAGCTAAAACATTTTTTTTCCTGTGCTTTTAA
TGTATCTCTTTACATGATCTGAGAGAGGATTCAAGTTGATAGAAATAGCTGAGGGGAAAAGGGGGAACATCTTGG
GATGAAGCTTGTCCTTATGGTGATGGTTTAATTACAGATTAAAAAATTAGAAGGAAATTTCAGTGGATTAAGTGT
ATAGCTTTCATATCTACATTTCAAGAAATTACCATTGTAACTTGATAAGAGATGATTTATTTTATGTAAACATCT
TTGCAAAGCAAGGTGTAGCAGCTCAGCTAGATTTATTACTGTGCACGAAAGTAAATACCTATCTCAATTATTCTT
TTTCTTTTCCAATATAAAGTTTGCTGAATGTACAAGAAGAGTTTATCACTTAGGATATAGAATTTTTTTAGGGGT
TGGGGGGAGGGGATCTGTTAGGAAACTGTTACCTATAAACAAAGATTGACTGGATTCGATCCAAAAGATAAAACTT
GAAGCTATTCTGGAACTAACATGGAAAAATGAAATGGCTATTGTTTAAAAAAATGATAGAAATACATTGTTGATG
GGATATGAGTTAAGTTTATTTTCTACAAACTGTAATTGATGAGGACATGGATAATATCTTCATGTTTCTGAGAAG
TAATCTGT**ATG**TGGGGGGAGGGGATAATAAATATTTCTAACCAAAAA

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FIGURE 4666

MWGEGIINISNQ

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FIGURE 4667

AGCGGGCTTTCTTCCCGAGGGCGGCACGAGGGCTGGGCGGTGGGGTGCGGGTGCCCGGGTGAGGGGCGGAGCTGG
GGGCATGGCGTCCGGAGCGGCTCGCTGGCTAGTATTGGCACCCGTCAGGTCCGGGGCTCTCCGGAGCGGGCCTAG
CTTGAGGAAAGATGGCGATGTCTCCGCCGCATGGAGCGGCTCAGGCCGGAGCCTGGTACCGTCGGGGTCAGTCAT
CGTTACCCGCAGCGGCGCCATTTTGCCCAAACCGGTGAAAATGTCCTTCGGCCTTCTGCGTGTGTTCTCCATTGT
GATCCCCTTTCTCTATGTCGGGACACTCATTAGCAAGAACTTTGCTGCTCTACTTGAGGAACATGACATTTTTGT
TCCAGAGGATGATGATGATGATGACTAACAGGAATTACAGAAAGGAGAAAGCACTAACTGAAGAAATGGTGATGC
TCTCAGTTTCTCTGCCTTCCCTATCAGCAGAAAGGCTCGGGGAAGGCCCTCAGCCTCCCAGTCTGGTGAAGCTTC
CTGTATGGTCCATGACCGTATTCCACCCCAGGCTCTGGGAGGCTCCCTGAGATGTGCTGTCCACTAAGCACTGCA
CAAACAAGCAATCAAATTATGAATAAACATAATAAATATCAGCCGTGCGTGACTGAGTGATGGCTGCAGTTTCTC
AGTATCCCTAGGTTCTAGTTGGTGCAGTTGTCTCTGCTGTCCTTTATTTATGGGAGAAACATAGGCCCAGGCTAT
CCAGGCTGCAGTGGAGCCTGGTGAACTATTCTGGGGGCCCTGGGAACTATTTTCATTGTTTACAAAAGCCCAACA
GAAACTGTGCATTTTCCCTTAAGAAAGCTTCATGGGCTAACTAAAGCCTCATGCCATTCTGTGTTCAGTGCCAGT
CATGACAGCTCTGCTTGTTAGCATACTACTTAAATATAACTAGAATGATTCAAAACTCGGGTTCTGTGATATGAG
GATATAGATAGGTTTTCATCTATTTCCTGGCTTATAACTCCCAAAACCCTTGTTTTAGGCTTTTGTTATAATGTT
GGGCACTTCGGGCCTCAGAAAACAGCAGGCTGTTTCTCAGATCTTCTCCTGACCTCCTTTCACCTGCTGCTTTTT
CTCCCCAAGGCAGGCCATAGAAACTAAAAGTATAATCTTCCTTTGCCCATCTTCCAGTTGGCCATAAAAAGAATC
CTCTGACCTACCTTGTCTGATTTTAGGTCATGAGACCCCCATTTCAGAAGGGATTCTGCCCCATACCTGAGAGGA
AGAAATGTAGACAGGCCTTGTTGGACTTCCCCACTCCATCTGTATTAGATTATGCCTCTTTTGTCCAATCCCATT
TCTCCAGTGTTGTCCATGCTTCAATCATCCCTATCCAATGAGGTCTCCATAAAAGGCCCAAGAAGACAGGTTTAG
AGAGCTTTCGGAGAACAGAACACTTGGCTTTGCAAAGTGGCACGCCTGGAGAGAACTTGGAAGCTCCACGCCCCT
TCTATACCTCACCCTATGCATCTCTTCAGCTGTATCTTTTGTGATATCCTTTATAATAAACCAGTAAACGGAAAA
AAAAAAAAAAA

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FIGURE 4668

MASGAARWLVLAPVRSGALRSGPSLRKDGDVSAAWSGSGRSLVPSGSVIVTRSGAILPKPVKMSFGLLRVFSIVI
PFLYVGTLISKNFAALLEEHDIFVPEDDDDDD

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FIGURE 4669

AGCGGGCTTTCTTCCCGAGGGCGGCACGAGGGCTGGGCGGTGGGGTGCGGGTGCCCGGGTGAGGGGCGGAGCTGG
GGGCATGGCGTCCGGAGCGGCTCGCTGGCTAGTATTGGCACCCGTCAGGTCCGGGGCTCTCCGGAGCGGGCCTAG
CTTGAGGAAAGATGGCGATGTCTCCGCCGCATGGAGCGGCTCAGGCCGGAGCCTGGTACCGTCGGGGTCAGTCAT
CGTTACCCGCAGCGGCGCCATTTTGCCCAAACCGGTGAAAATGTCCTTCGGCCTTCTGCGTGTGTTCTCCATTGT
GATCCCCTTTCTCTATGTCGGGACACTCATTAGCAAGAACTTTGCTGCTCTACTTGAGGAACATGACATTTTTGT
TCCAGAGGATGATGATGATGATGACTAACAGGAATTACAGAAAGGAGAAAGCACTAACTGAAGAAATGGTGATGC
TCTCAGTTTCTCTGCCTTCCCTATCAGCAGAAAGGCTCGGGGAAGGCCCTCAGCCTCCCAGTCTGGTGAAGCTTC
CTGTATGGTCCATGACCGTATTCCACCCCAGGCTCTGGGAGGCTCCCTGAGATGTGCTGTCCACTAAGCACTGCA
CAAACAAGCAATCAAATTATGAATAAACATAATAAATATCAGCCGTGCGTGACTGAGTGATGGCTGCAGTTTCTC
AGTATCCCTAGGTTCTAGTTGGTGCAGTTGTCTCTGCTGTCCTTTATTTATGGGAGAAACATAGGCCCAGGCTAT
CCAGGCTGCAGTGGAGCCTGGTGAACTATTCTGGGGGCCCTGGGAACTATTTTCATTGTTTACAAAAGCCCAACA
GAAACTGTGCATTTTCCCTTAAGAAAGCTTCATGGGCTAACTAAAGCCTCATGCCATTCTGTGTTCAGTGCCAGT
CATGACAGCTCTGCTTGTTAGCATACTACTTAAATATAACTAGAATGATTCAAAACTCGGGTTCTGTGATATGAG
GATATAGATAGGTTTTCATCTATTTCCTGGCTTATAACTCCCAAAACCCTTGTTTTAGGCTTTTGTTATAATGTT
GGGCACTTCGGGCCTCAGAAAACAGCAGGCTGTTTCTCAGATCTTCTCCTGACCTCCTTTCACCTGCTGCTTTTT
CTCCCCAAGGCAGGCCATAGAAACTAAAAGTATAATCTTCCTTTGCCCATCTTCCAGTTGGCCATAAAAAGAATC
CTCTGACCTACCTTGTCTGATTTTAGGTCATGAGACCCCCATTTCAGAAGGGATTCTGCCCCATACCTGAGAGGA
AGAAATGTAGACAGGCCTTGTTGGACTTCCCCACTCCATCTGTATTAGATTATGCCTCTTTTGTCCAATCCCATT
TCTCCAGTGTTGTCCATGCTTCAATCATCCCTATCCAATGAGGTCTCCATAAAAGGCCCAAGAAGACAGGTTTAG
AGAGCTTTCGGAGAACAGAACACTTGGCTTTGCAAAGTGGCACGCCTGGAGAGAACTTGGAAGCTCCACGCCCCT
TCTATACCTCACCCTATGCATCTCTTCAGCTGTATCTTTTGTGATATCCTTTATAATAAACCAGTAAACGGAAAA
AAAAAAAAAAA

FIGURE 4670

MASGAARWLVLAPVRSGALRSGPSLRKDGDVSAAWSGSGRSLVPSGSVIVTRSGAILPKPVKMSFGLLRVFSIVI
PFLYVGTLISKNFAALLEEHDIFVPEDDDDDD

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FIGURE 4671

CACAATAATTTAAACAGCTTTCTTATTTCTTAACTTCTCTGGGTATTTTGTGTGCTACTGTATCTTGTGAATGAA
TCTCAAGAGGAAGGATGAAGCTTTTCCAAAATCACATGCCTTCATCTCATTTTACAGAAAAATTTGTGCCTAATG
TTAACCAAAGGAAATGGGGAGCGGCAGGGCCAGTGGGTTTTCATGGTGAACTGAGGGTTGCATCTTGGACAGGTT
GCATGTGGAAGGGACAGCAGGGTTCCCAAGGAAGCTTTGCACGGTCATGGGTAGAGCCATCCCTTCTTCATCCAT
AGTGAATATGGCTGGAAATAGCGGGTAGTCTTGGATTTGACCTCCCTCCCATGGAAGTGCTGTCTCCAGCTCGCT
CCTGGAAAAACTGCTTTCTCCCCAAAGTGTGTCTGAGCAGCAGATTTAAGCATGAAGTTGGTTTTGTGGGGCTAC
AGTATGGACTTTGGGAAGATGGTGCCATCTGTATTTCTGATTCTACCGTCCCTCTGTCTGTCTTTGGAAGTATCC
TTTCACTTGTTTGGGAGACTGAGAATGATTTTCTGCAAACAGTGAGCCAGACCATGCTGGTCTCAAGCGGCAGAG
CAGTTATTAACAGAATCACAGTCTTTCTGGAGCTGCTGTCAGTCCTGTGCTGTCCTCAGGGCCTTTGCTTGGTCA
GGGGCCCCACTTCTTATCCACCCTTCCCTCTACCTCACCGAGGCTGCTAGGCCCAGGTGTATTGTGATTATTTGA
TGTACCTGGGAGGCCATGTCTCCCGGGGAGGCTCAGGACCTCATTGGGCTGGAATTCCACAGGGATCTCTCATTG
GGTCTCTTTGGGCCTTTGGAGAGGGGAGTGCAGGGCACCACCTGGGCGAACACCTGTGCCATCCTGTAAGTCCTT
GTGTGACTCTTCATCCAAGTCAACAGGGGCATGTAGGGGAAGAGCCTCAGGGCCCATCAGGAGTCAGACCCTGAC
CAGGAAGTCAGAACTGAATCAACTTTTCAATAAACACACAGGCTGGCCCCAAACAAAGCAGCAGGCTTTTGGGAA
CATCTGCCTTTTCAGTCTCTTCTGAATTCTGTTTATGTGGACACCCCATGTCCCGCACCACCATTGCCGCCAGCA
ATGTTTGTTGCTTGCCAATATTTGAATAGATGCTGATAAATTTGATTCTCTGGCTTATTGTGGCATTCATGATAT
GTCTTTCCCTTTTCAGTTTCCATGTACTAGAGCGACTGTCAGTGTGGTTGGCAGTGACCTGTGTTTTTCATGCAT
GTTTTTGTTTCAGAATAACTGGGAGATGAAACAGGAAGCTCTATGACACACTTGATCGAAT**ATG**ACAGACACCGA
AAATCACGACTCAGCCCCCTCCAGCACCTCTACCTGTTGCCCGCCGATCACAGCCGGAATGCAGCTGAAAGATTC
CCTGGGGCCTGGTTCCAACCGCCCACTGTGGACTCTGAGGCCTCTGCATTTGCGGGTGGTCTGCCTG**TGA**TATTT
TGGTCATGGGCTGGTCTGGTCGGTTTCCCATTTGTCTGGCCAGTCTCTATGTGTCTTAATCCCTTGTCCTTCATT
AAAAGCAAAACTAAAGAAAAAAAAAAAAAAA

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FIGURE 4672

MTDTENHDSAPSSTSTCCPPITAGMQLKDSLGPGSNRPLWTLRPLHLRVVCL

FIGURE 4673

AGCACTCCCGGAGCCTGCAACGCTTGAGATCCTCTCCGCGCCCGCCACCCCGCAGGGTGCCCCGCGCCGTTCCCG
CCGCCCCGCCGCCCCCGTCGCGGGCCCCTGCACCCCGAGCATCCGCCCCGGGTGGCACGTCCCCGAGCCCACCAG
GCCGGCCCCGTCTCCCCATCCGTCTAGTCCGCTCGCGGTGCCATGCCATTCCTCGGGCAGGACTGGCGGTCCCCC
GGGCAGAACTGGGTGAAGACGGCCGACGGCTGGAAGCGCTTCCTGGATGAGAAGAGCGGCAGTTTCGTGAGCGAC
CTCAGCAGTTACTGCAACAAGGAGGTATACAATAAGGAGAATCTTTTCAACAGCCTGAACTATGATGTTGCAGCC
AAGAAGAGAAAGAAGGACATGCTGAATAGCAAAACCAAAACTCAGTATTTCCACCAAGAAAAATGGATCTATGTT
CACAAAGGAAGTACTAAAGAGCGCCATGGATATTGCACCCTGGGGGAAGCTTTCAACAGACTGGACTTCTCAACT
GCCATTCTGGATTCCAGAAGATTTAACTACGTGGTCCGGCTGTTGGAGCTGATAGCAAAGTCACAGCTCACATCC
CTGAGTGGCATCGCCCAAAAGAACTTCATGAATATTTTGGAAAAAGTGGTACTGAAAGTCCTTGAAGACCAGCAA
AACATTAGACTAATAAGGGAACTACTCCAGACCCTCTACACATCCTTATGTACACTGGTCCAAAGAGTCGGCAAG
TCTGTGCTGGTCGGGAACATTAACATGTGGGTGTATCGGATGGAGACGATTCTCCACTGGCAGCAGCAGCTGAAC
AACATTCAGATCACCAGGCCTGCCTTCAAAGGCCTCACCTTCACTGACCTGCCTTTGTGCCTACAACTGAACATC
ATGCAGAGGCTGAGCGACGGGCGGGACCTGGTCAGCCTGGGCCAGGCTGCCCCCGACCTGCACGTGCTCAGCGAA
GACCGGCTGCTGTGGAAGAAACTCTGCCAGTACCACTTCTCCGAGCGGCAGATCCGCAAACGATTAATTCTGTCA
GACAAAGGGCAGCTGGATTGGAAGAAGATGTATTTCAAACTTGTCCGATGTTACCCAAGGAAAGAGCAGTATGGA
GATACCCTTCAGCTCTGCAAACACTGTCACATCCTTTCCTGGAAGGGCACTGACCATCCGTGCACTGCCAATAAC
CCAGAGAGCTGCTCCGTTTCACTTTCACCCCAGGACTTTATCAACTTGTTCAAGTTCTGAATCCCAGCACATGAC
AACACTTCAGAAGGGTCCCCCTGCTGACTGGAGAGCTGGGAATATGGCATTTGGACACTTCATTTGTAAATAGTG
TACATTTTAAACATTGGCTCGAAACTTCAGAGATAAGTCATGGAGAGGACATTGGAGGGGAGAAATGCAGTTGCT
GACTGGGAATTTAAGAATGTGAACTTCTCACTAGAATTGGTATGGAAAAGCAAAATACTGTAAATAAACTTTTTT
TCTAACAATTTGCCAAAAAAAAAAAAAAA

FIGURE 4674

MPFLGQDWRSPGQNWVKTADGWKRFLDEKSGSFVSDLSSYCNKEVYNKENLFNSLNYDVAAKKRKKDMLNSKTKT
QYFHQEKWIYVHKGSTKERHGYCTLGEAFNRLDFSTAILDSRRFNYVVRLLELIAKSQLTSLSGIAQKNFMNILE
KVVLKVLEDQQNIRLIRELLQTLYTSLCTLVQRVGKSVLVGNINMWVYRMETILHWQQQLNNIQITRPAFKGLTF
TDLPLCLQLNIMQRLSDGRDLVSLGQAAPDLHVLSEDRLLWKKLCQYHFSERQIRKRLILSDKGQLDWKKMYFKL
VRCYPRKEQYGDTLQLCKHCHILSWKGTDHPCTANNPESCSVSLSPQDFINLFKF

FIGURE 4675A

GACCAATGAAGACTCACCAATTATAGAATATTACCCACCTGATTTTAAAACTGACCTAAATGGGAAACAACAGGA
ATGGGAAGCTGTGGTGTTAATCCCTTTTATTGATGAGCGATTATTGGAAGCCATGGAGACATGTAACCACTCCCT
CAAAAAGGAAGAGAGGAAAAGAAACCAACATAGTGAGTGCCTAATGTGCTGGTATGATAGAGACACAGAGTTTAT
CTATCCTTCTCCATGGCCAGAAAAGTTCCCTGCCATAGAACGATGTTGTACAAGGTATAAAATAATATCCTTAGA
TGCTTGGCGTGTAGACATAAACAAAAACAAAATAACCAGAATTGACCAGAAAGCATTATATTTCTGTGGATTTCC
TACTCTGAAACACATCAGACACAAATTTTTTTTGAAGAAAAGTGGTGTTCAAGTATTCCAGCAAAGCAGTCGTGG
AGAAAACATGATGTTGGAAATCTTAGTGGATGCAGAATCAGATGAACTTACCGTAGAAAATGTAGCTTCATCAGT
GCTTGGAAAATCTGTCTTTGTTAATTGGCCTCACCTTGAGGAAGCTAGAGTCGTGGCTGTATCAGATGGAGAAAC
TAAGTTTTACTTGGAAGAACCTCCAGGAACACAGAAGCTTTATTCAGGAAGAACTGCCCCACCATCTAAAGTGGT
TCATCTTGGAGATAAAGAACAATCTAACTGGGCAAAAGAAGTACAAGGAATTTCAGAACACTACCTGAGAAGAAA
AGGAATAATAATAAATGAAACATCTGCAGTTGTGTATGCTCAGTTACTCACAGGTCGTAAATATCAAATAAATCA
AAATGGTGAAGTTCGTCTAGAGAAACAGTGGTCAAAACAAGTTGTTCCTTTTGTTTATCAAACTATTGTCAAGGA
CATCCGAGCTTTCGACTCCCGTTTCTCCAATATCAAAACATTGGATGATTTGTTTCCTCTGAGAAGTATGGTCTT
TATGCTGGGAACTCCCTATTATGGCTGCACTGGAGAAGTTCAGGATTCAGGTGATGTGATTACAGAAGGTAGGAT
TCGTGTGATTTTCAGCATTCCATGTGAACCCAATCTTGATGCTTTAATACAGAACCAGCATAAATATTCTATAAA
GTACAACCCAGGATATGTGTTGGCCAGTCGCCTTGGAGTGAGTGGATACCTTGTTTCAAGGTTTACAGGAAGTAT
TTTTATTGGAAGAGGATCTAGGAGAAACCCTCATGGAGACCATAAAGCAAATGTGGGTTTAAATCTCAAATTCAA
CAAGAAAAATGAGGAGGTACCTGGATATACTAAGAAAGTTGGAAGTGAATGGATGTATTCATCTGCAGCAGAACA
ACTTCTGGCAGAGTACTTAGAGAGAGCTCCAGAACTATTTAGTTATATAGCCAAAAATAGCCAAGAGGATGTGTT
CTATGAAGATGACATTTGGCCTGGAGAAAATGAGAATGGTGCTGAAAAAGTTCAAGAAATTATTACTTGGCTAAA
AGGACATCCTGTCAGTACTTTATCTCGTTCTTCTTGTGATTTACAAATTCTGGATGCAGCTATTGTTGAGAAAAT
TGAGGAAGAAGTCGAAAAGTGCAAGCAAAGAAAGAATAATAAGAAGGTGCGAGTAACAGTGAAACCCCATTTGCT
ATACAGACCTTTAGAACAGCAACATGGAGTCATTCCTGATCGGGATGCAGAATTTTGTCTTTTTGACCGTGTTGT
AAATGTGAGAGAAAACTTCTCAGTTCCAGTTGGCCTTCGAGGCACCATCATAGGAATAAAAGGAGCTAATAGAGA
AGCCGATGTACTATTTGAAGTATTATTTGATGAAGAATTTCCTGGAGGGTTAACAATAAGATGCTCACCTGGTAG
AGGTTATCGACTGCCAACAAGTGCCTTGGTGAACCTTTCTCATGGGAGTCGCTCTGAAACTGGAAATCAGAAGTT
GACAGCCATCGTAAAACCACAACCAGCTGTACATCAACATAGCTCAAGTTCATCAGTTTCCTCTGGGCATTTGGG
AGCCCTCAACCATTCCCCTCAATCACTTTTTGTTCCTACTCAAGTACCTACTAAAGATGATGATGAATTCTGCAA
CATTTGGCAGTCCTTACAGGGATCTGGAAAGATGCAATACTTTCAGCCAACTATACAAGAGAAGGGTGCAGTTCT
ACCTCAAGAAATAAGCCAAGTAAATCAACATCATAAATCTGGCTTTAATGACAACAGTGTTAAATATCAGCAAAG
AAAACATGACCCTCACAGAAAATTTAAAGAAGAGTGTAAGAGTCCTAAAGCTGAGTGTTGGTCCCAAAAAATGTC
CAATAAGCAGCCTAACTCTGGAATTGAGAACTTTTTAGCATCTTTGAATATCTCCAAAGAAAATGAAGTACAGTC
ATCTCATCATGGGGAGCCTCCAAGTGAAGAGCATTTGTCACCACAGTCATTTGCCATGAAGGGAACACGGATGCT
TAAAGAAATTCTAAAAATTGATGGCTCTAACACTGTGGACCATAAGAATGAAATCAAACAGATTGCTAATGAAAT
CCCTGTTTCCTCTAACAGAAGAGATGAATATGGATTACCCTCTCAGCCTAAACAAAATAAGAAATTAGCATCTTA
TATGAACAAGCCTCACAGTGCTAATGAGTACCATAATGTTCAGTCTATGGACAATATGTGTTGGCCTGCCCCCAG
CCAGATCCCTCCTGTATCCACACCAGTAACTGAACTTTCTCGAATTTGTTCCCTTGTTGGAATGCCACAACCTGA
TTTCTCCTTTCTTAGGATGCCACAGACAATGACCGTTTGCCAAGTAAAATTATCTAATGGCTTACTGGTACATGG
GCCACAGTGCCACTCTGAAAATGAAGCCAAAGAGAAAGCTGCACTTTTTGCTTTACAACAGTTGGGCTCCTTAGG
CATGAATTTCCCTTTGCCTTCACAAGTATTTGCAAATTATCCTTCAGCTGTACCACCTGGAACCATTCCTCCAGC
CTTTCCCCCACCTACTGCTAATATAATGCCTTCGTCGTCTCATCTCTTTGGCTCAATGCCATGGGGACCATCGGT
GCCAGTTCCTGGGAAGCCCTTCCATCATACTTTATATTCTGGGACCATGCCCATGGCTGGGGGAATACCAGGGGG
TGTGCACAATCAGTTTATACCTCTGCAGGTTACTAAAAAAAGGGTTGCAAACAAAAAGAACTTTGAGAATAAGGA
AGCCCAGAGTTCTCAAGCCACTCCAGTTCAGACTAGCCAGCCAGATTCTTCCAACATTGTCAAAGTAAGTCCACG
GGAGAGCTCATCAGCTTCTTTGAAGTCCTCTCCGATTGCTCAACCTGCATCTTCTTTTCAAGTTGAAACTGCCTC
TCAAGGCCATAGTATATCTCACCATAAGTCAACACCAATCTCTTCTTCAAGAAGAAAATCAAGAAAACTGGCTGT
TAATTTTGGTGTTTCTAAACCTTCTGAG**TAA**ATTTGGCTCTTAGAATTAAGTTAATTTCTTCTCTTTCCATCTAC
CTTTTTATAAATACATATCTATGTCTCATAAAAATTAGAATGTACTATTTTAAAATAATATGTGTAAATTGAAAT

FIGURE 4675B

TTTTTTCATTTTTAAGTTATCAGGCACTTTTCATGCTGTTTAAAAGACTGTGTATCAAATTGTGCACTTTAAGTA
TGTGCAGTTTGTTGTATGTCAATTATACCTCAATAAATCTGTAATAAAAAACTAAATTAAACCTTGCATTAAAAT
AATATCACAGTATCAGTGGACTAAACATTAAAATGTACCACTCTAATCATTGGCCTCATGATTGAAGCATCCTGA
ACTATGAATTAGACATCAGTTAGCAATAATAAGCATTTTTTACACTATCATTGAGGAATAATTACATGGAGCATG
AAATTTGGGCCTCCAGTATAACTTACTGAATGTGGATTTTATTTCTCTTTTTAATGATGTAAGAAAATTGTCAGG
AGAATGGCTCTTATTTATGTGTGTTTTAACTTATGCTTTGTTGCCTCTGAGGGTCTTTAGACCTGCTGTGAAAGG
ATCACATTTGTTGTGGTGCTGCCAGTTTTGCTTTATTCTAAATTTTGTACCAAAGCAACTTTAGAATAATCAGAA
TATTTCATCTAACTGCTTAGAACTATAAATAGCATTCTAAATTTGAGTAAATACAATTTTTTAGGTTACTCAAGA
ACCAGCATTAGTAATTTCTAGTAAAATTGTTTCAAAATCTACAGGGTACAATGATTACAAATTAATCTTCTAACA
AAATAAAATATGAAATATTAGTCATGTTAATTAATAAACTGTATTATTTTGTATAGCTTTTTATTTGCTTACCTG
ACATTTTATGAGAGCTTCATAGTTGGTCGGTATGTAGTGCTTCTTGGGACTGAAGAAATTCTAATTGTTGTTTAA
GTTCCAAGGTGTGCTACAATATAGGAGGCACAGTCATCAGTTTGTGACATACATTATTTACTGCCTATTTCATTC
TGATTCTATATTTTTAGCTTTATGCTGAACTGTTCAATGATGCTGGGATTCTCTCTTTGCATGTCATATGTGAAT
GTGTGGTTCAAGCTGTAACTGTTGAAATTATTTTAGAATTTATGACGATTTCTCAGCAGGGCCTATGTTTATATA
TATATATATATTTATTCTTTAGTTTTTGTGATATGCTTATATTTTTAAGGAAGTAAGTTATAGCATACTTTTTTA
AAAGTAGGAACCACAATCTTTATATGGAGCAGCTTGTTATATCTGATTTTCATGTAACTCATTGGAAACTCTGCC
ATGACTCTTAAAGTAGTCTTACTTGTTTTTTAAAATGCTGGTATTAAACTAAATGGACTCCTTTCACTAACTGCT
GATTTCAGAGTTTAAATGTTAGCAGGATATTTGTGTATTAGCAGTGCCTTCAGTATAAGAGAGAAATATTCATTA
TCTGTCATTTATCATAGTCGTATAAGTTTCCATGATTTTATTTTCTGTTATTTTCATAAGTTCAGATGTTTATCA
GTTCCCAACATTGTTTCTTTATCTGTAGTGGGATCTTGAGTAATGAGGCTCAAGTAAATCCTCAATGTGTATAAT
TATTGCCTCATAAACTCTCTCTTTGTTTTTAAAGGAAACATCTATTATGGTAATACAAAGAAAAGTTAAATTGTG
ACAGTAATGTTATATTAACCTCTTCCTACTTTAAAGTGTGAAATGTTTCACCTCAGCTGTACAAACTCCAGCATT
GAGAATTTGCCTCACTCATTACTCCTGTGTGACAGTTATATAAATAGCATGCAGCTCACATCTGTTTTAGAGCAT
AGAAGAAGCGGCACCTGCCATCTTCTGAAAACTCCAAAGGGAAATTTCAGTAGACATAGTGCACTAAACCCATAA
GGATACTTGACCAATATTTGAGCACAGCAAGCTGACAGTTCTATACAGATAGGCAGTGAAAGAGTTTTATTTTCC
AGCCAGGCGCAGTGGCTCAAATCCCAGCACTTCGGGAGGCTAAGGCAGGCGGATCACTTGAGGTCCGGAGTTCCA
GACAAGCCTGGCCAACATGATGAAGCCCTGTCTCTACTAAAAATACAAAAAAAAAAAAGAAAAAAGTTTTATTAT
CCTTACTTTTTTTTTAACATTATTATTCTAAAGGTCAAAACTGAGAAGAGATTAAGATAGGAGAGAGCTCCATAA
TGGCTGGATAGTGGTCAGGCATTCTCTATTCTTTTCCCCCTGTAGACCCATTCTAAATGTGGGCCTGAGGTCAAT
GGGAGATGTGCCCTCCCTATGGAGGATGTAAGAAGCAGAGGCCATTTCTGCCCCATGTTGAGGAAACAATCTGTT
GATAGACCTGGAATTTAGAGTACATCTGAAAAGCAGTTGGACTTCAAGAAATTTAAAATTCTCTCTTTGAGATGG
GGTGGACTAAGACCACCCCCAAAGTTTAAAAATATGCTCATTCAACTTGAATCTTCTGAGGACTTTTTGTGAAAA
TGGTGGACTGTTTAGGGCATAGGACAGATTCCCCAAATTGCTTTATGCTTCCACATAACTAGAGCACTTCAATCT
ATTTAAGCCTTTGTCTCCTAACTGAAACATTATTTCTAAATATTTCTATTCAATAAGTTTTTTCTTTTTTGAGCA
ACTTAAGTGAATTTTGAAGATTGCTCCTTCCAGTCTCGTTCCTTTTCACATTTTCCTGCATTACCTAATAATTAC
CTCAGCGTTAGAATTTGAATGTATTAATTGATTTAAACATCATGTAGACTAAAGTCTTAAACATCTAAGACTCAG
TTGTAGTTGCAGAAAAAAATTAAAGTCACCTCTACTGAACCTTGGTTTCAATTTAAGATTTTTCTTGCTTTTCAA
AGGGGTAACTAATAAAGATTGAAGGGTTTTTTTCCCGATTGGTGGAGGAATGAAGAACTATTGATGCAAGTTTTT
TTATTGTTTCTTTCTATGATCAGGTACCTGCTTTCATTTTAGACTGCTACTTCCAAACTAAGCTAGATTCTTGGT
TTTAATGAGAGGAGGCAGAGAGAGGGAGGCAGATGGAAGAAGAAAAACAGTTAAATAAGACATACCCAGTCACTG
CATTTTTGGACTATACCGTATCTTTCTAGCACAAGGAAATAGATAAACTGTAAGGTCTTTTTTACTCACTTTTTA
TTTATGTGTTCTATTTGTGTTAGTCATAACTGTTTATAGTGGTTGTCTAATTTTTACTTTTATTATATGAGATAG
AGCTGTGCAGATCTTCACTCAAGTTCTGTCACGCTTCTTCCCATTATTTAGAGCACAGTTTTTTAAAGCAACTGT
ACAATTTCTCAGCCTTATGAGCTTGCTGTATTTCTTGGTATCATGTTGCTTCCAAATTTTGTTTTTACTGTAGAA
GACAATTAATTTATTGTAGAGAAGTGGCTGTGAAAGTCGTTCTCTGTCTTTAAAAATCAATTGCAGAAGTTCATT
TGTCATTTTTCTAGAGATAAATTATAGTACTCAAACTGGCAGTGCTCAGTATATACATTTTGTAAGCTTTGTCAG
TGAAACCATCAGTTTTGCAGGAGCTTCCTTTCCTAGTCAAGATAAAGCTTAAAATTCCAGAAATTAATGTCGTTC
GGACTGACTTTATTCATATTTCCATCAAACTTCTCCAATACAGTAAGAGATAGTGTTGAACCAGCATCAAGTCTC

FIGURE 4675C

CAGAAACATGGCAGAGCAGACAGGCCGTTAAGTTTCACAGACATCATAGATCCTTTTCTTAAAGAAGAAAAACAT
GTATAAAATAGTTTTAGTAGTCCAAAATGTCAACTATCTGTAGCTGCTTTTGTGTGTGTGTCAGTGAACAAATAA
TAATGCCTTGCTCAATCAATGCATTCAGCCATCTCAAGTGCAATTTGTGAAGGAGACTATGGTTTCCAAAAGATA
CATTTTTTTACAAAGTTAAACCTGTAAAAAGTCTTTTTTTTTTTCCCTCCAGCCGTACACCAACTGCACTTGGTT
GTTTCAGCAGTTGGTATACTATTAAATTGTCCAGGCCAAATAGGTTTCTGTAGCTGTTTTAGTAATTTGAAGCCA
AATTCTCATGCTGTTTCTCATTAAAAAGAATGAGAATTTGGTCCATAGTTAGCTTTAAGTTCTCTCTTCCTTTCT
TTCCCTTACAGTTAAGGGTTTGGTGGGGGATGGGGAGGTTGTTTTCGTTTTTTGGATTTTTTTGTCTTTTGGCTT
TAAGTATCATATTTTCTTTTGCCTGTATCCAACTGCTTCTTTGAGTATTTTCATCTAGTTTAATGTGAGTAATAG
ATGCTGTGCTGTCATTGAAGTGTTCAACATTTTGTTCATTTAAACAAAAGTGTAATTCATACATATATAGATACA
TATCTTAATTGATTTCTCAACTATTTTATAAGTAACTGGAATTTTTCATTAGATCTTATACAGAGAAGTATTTTA
TTAAAAATTCAAAAGGGAAGACTTTTATGTGCTCATTTTGTAATTTTTGATTTTAAATATCTTTACATTGTCTGC
CAATTAAAGTGTTTTAAACTTGCATTGGAATGGACTCCGAATGTATTTTTGTGGTGTTACGTTATCCGTAGATTT
CTAGCATGAAGTTAGCCTCACGATGCTGTGCAAAGGATTTTAAAATATGAGAGTCACTGAAAGAGTTTAAACATC
TGTTCATGTTAAATGCTCTATGGATTTTAATTAAAGACTTGAGAATGATTTTAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAG

FIGURE 4676

TNEDSPIIEYYPPDFKTDLNGKQQEWEAVVLIPFIDERLLEAMETCNHSLKKEERKRNQHSECLMCWYDRDTEFI
YPSPWPEKFPAIERCCTRYKIISLDAWRVDINKNKITRIDQKALYFCGFPTLKHIRHKFFLKKSGVQVFQQSSRG
ENMMLEILVDAESDELTVENVASSVLGKSVFVNWPHLEEARVVAVSDGETKFYLEEPPGTQKLYSGRTAPPSKVV
HLGDKEQSNWAKEVQGISEHYLRRKGIIINETSAVVYAQLLTGRKYQINQNGEVRLEKQWSKQVVPFVYQTIVKD
IRAFDSRFSNIKTLDDLFPLRSMVFMLGTPYYGCTGEVQDSGDVITEGRIRVIFSIPCEPNLDALIQNQHKYSIK
YNPGYVLASRLGVSGYLVSRFTGSIFIGRGSRRNPHGDHKANVGLNLKFNKKNEEVPGYTKKVGSEWMYSSAAEQ
LLAEYLERAPELFSYIAKNSQEDVFYEDDIWPGENENGAEKVQEIITWLKGHPVSTLSRSSCDLQILDAAIVEKI
EEEVEKCKQRKNNKKVRVTVKPHLLYRPLEQQHGVIPDRDAEFCLFDRVVNVRENFSVPVGLRGTIIGIKGANRE
ADVLFEVLFDEEFPGGLTIRCSPGRGYRLPTSALVNLSHGSRSETGNQKLTAIVKPQPAVHQHSSSSSVSSGHLG
ALNHSPQSLFVPTQVPTKDDDEFCNIWQSLQGSGKMQYFQPTIQEKGAVLPQEISQVNQHHKSGFNDNSVKYQQR
KHDPHRKFKEECKSPKAECWSQKMSNKQPNSGIENFLASLNISKENEVQSSHHGEPPSEEHLSPQSFAMKGTRML
KEILKIDGSNTVDHKNEIKQIANEIPVSSNRRDEYGLPSQPKQNKKLASYMNKPHSANEYHNVQSMDNMCWPAPS
QIPPVSTPVTELSRICSLVGMPQPDFSFLRMPQTMTVCQVKLSNGLLVHGPQCHSENEAKEKAALFALQQLGSLG
MNFPLPSQVFANYPSAVPPGTIPPAFPPPTANIMPSSSHLFGSMPWGPSVPVPGKPFHHTLYSGTMPMAGGIPGG
VHNQFIPLQVTKKRVANKKNFENKEAQSSQATPVQTSQPDSSNIVKVSPRESSSASLKSSPIAQPASSFQVETAS
QGHSISHHKSTPISSSRRKSRKLAVNFGVSKPSE

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FIGURE 4677

GGCTGGCAATTCAAACTGATACCGGGTTGGAGAGGCAGGAAAAGCGGAAGAGGGAGCGAAAACCAACGTGTTCGG
TGACAGACCCCAGCGCCGACTGAGCCTCTAAAGCGACTTCAGCTCTGCCCCACCAACACCACCGCGCGCCCGGGA
ACAGCCGCTCCGGGAAGAAACCTGAGGGGACTGCGGGGGGCACGAGGGACAGCTGAGGGAAGGGAGGACGCGAGA
GAAACAGCGCAAGCACGCTGAGGGCCGGGGGTTGCCAGGAGAGGGGCCCGCGGACCCGCAGAGCGGAGGAAGGTC
CGGGAGAAAAGGGGCGGGACGGAGGAGAATCCGGGATCGCCTGGCAGAAAAAGAGAAGGGAGTTTCTGAATCCTG
GGAAGAGGAGGCGTGGGTAGGGATGCTTAGCCCGAGATCCGACAGCAGGGAACCGGAGCGCTCCGGGGGAGGGGC
TTAATGCTGGGGAAGGGATGTCTTAAAAGAGGAGAAGCTTTAAATTAGACGATCGGAGAAGGCTGAGGGAATTGC
TATGAAGGGGCGGGAGCTGAAGTGTAGAGGACTCCTTTAGACAGCAGAAAGGGAAAGCCGTTGAGAAGTTCCCTT
CAAACTCCACCTGCCTCCTCTCCAATTCAAACTCCACTCCCTTCTCCAAAAGTTAAAAGGAAAGCCAAGTTTGCC
ACGCTCCCCTGTTCCTACTCAATAAATACTTCTTCTACTCCGCCACCGGGAAAACAGAAAAAAAAAACTAATTTC
CTTCCCAATATTAGGACTTAGAAAAGCTCTAGGTCCCGCAATTTGAATTTTAGCCTAGGGGAATCAAAATAGTAG
GAGCATTACTCTTGTTTCCTTTTTCAAAATCCCACACCTCATCCTTCCTGCGACGCCATGTCTACCAACATTTGT
AGTTTCAAGGACAGGTGCGTGTCCATCCTGTGTTGCAAATTCTGTAAACAAGTGCTCAGCTCTAGGGGA**ATG**AAG
GCTGTTTTGCTGGCTGATACTGAAATAGACCTTTTCTCTACAGACATCCCTCCTACCAACGCAGTGGACTTCACT
GGAAGATGCTATTTCACCAAAATCTGCAAATGTAAACTGAAGGACATCGCATGTTTAAAATGTGGGAACATTGTA
GGTTATCATGTGATTGTTCCATGTAGTTCCTGTCTTCCTTCCTGCAACAACGGACACTTCTGGATGTTTCACAGC
CAGGCAGTTTATGATATTAACAGACTAGACTCCACAGGTGTAAACATCCTACTTTGGGGCAACTTGCCAGAGATA
GAAGAGAGTACAGATGAAGATGTGTTAAATATCTCAGCAGAGGAGTGTATTAGA**TAA**ATGGAATTATGATATATA
TGATATACAAACTTTTTTCTATTTAAAAATATATTAATGGATCAACTTTAAAATTGTTAGTTGCCAGTGATCTTT
TTTGGAAAACAAAAATGGGGCATTGTTGATTTATTTATTTTCCGTCTCTAATTAGTTACCTCAGTTTGATTGAAG
CCAGTGGAGTTGTGCTTTTCCTCTACTTCTACTTCCTCTCCCCCACCTTTTTCTGCCCAGTGTAGGTGTATTCTT
AAATTCAGACGGGAAGATTCTTTCACATATCACTCAGTTACCTCCCAATCTGGGGGAGTTTTTCTTACAACTTGA
TACCAGATACCATTAATTTTACATTCCTGAATAAAGGCCTAGTACCCACGCATATTTCAACCATGCATATATCAA
GTTCAACCGAGTTTTAATAGGGGATTAAAAAAACAAGCTGTTAGGTTTCCATGGGCACTGGTTCTCATAGGTTCT
ATTGGTGATAACTGCTTTAACATGGAGCAAGAGTTTGTGAATCAGGAAATAGAATAAATTAAAATTTAAAATATA
TAGAGGAATCCTCTTGATTGCTCAGCATGATGTTAGATAAATGAGTTTGTCAGAAAATATCAGTATACGCTGTTT
ACCAATGTTATTTATTTACATTCTTCTAAAGCCATTATGGATATTGTATTATGAGAGCTAAACCTAAATAAGTTA
TCCTGTTCCCTAGGACCTTCTCTGTAAATAGTGAATTTTAGACGAGTAGTCTGTCCTAAATCTTAAATAGAAAAA
AAACTAAAGCGATTTGCTTAAGCCATTGTACATTATAAAGAGCTGTTTTGTTTTGCTTTGCTTTGCTTTGTTTTG
TTTTTTTAAAGCTGCATTCAGAGCCACAAAGGAATAGGAAAGTAGGGTAGTGTTGGATTCTGGTTTTATGTAACT
CTAAAATAAATGTATCTCTTTAATATCTCAGTTGTAGGGATTTTGTCAATACCAAAGCAGACTGAGTTGTGGTTT
TGTAAATAAAGTTTTTTCTAAAAATGACCATTCTTCCTTTAATTTTTTGTTATGCCCACATATTGTATGTAAAAA
TATAAATAAATAGTACTTAAAGTATAG

FIGURE 4678

MKAVLLADTEIDLFSTDIPPTNAVDFTGRCYFTKICKCKLKDIACLKCGNIVGYHVIVPCSSCLPSCNNGHFWMF
HSQAVYDINRLDSTGVNILLWGNLPEIEESTDEDVLNISAEECIR

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FIGURE 4679

GGGAGTTGCAGGGGGAGAGATGGAAAGGCTAGCAGCTGAAAAAAAATAGGTAAATAACCAGTGTATTCCATGTAG
CTGTTAATCTAGTTTGTTGCTTCCATCAGCTGCAGGAGTATTCCATAGTATGCATCCACCATAGTAAATTTATCC
ATTCACCTGGTTGCCTCAAATTCTTGGCTACCTGGAGAAATTAAAACCCTTGAAGCTAGGGTTCTGAGTACAAGA
TCAGTTCCACCAATTAGATTTCTTCATTTGAGATTTGGGAGGTAAAGGCTGTCTTTCTGCTGTTTGGGTTGTTGC
TGCTGGAAAGCAAGTTTATGTACATATGGGGCTTTCTGCAACAGCTTTCCAGCTTTGAAAACCTGCNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCATTCAACAGGT
AAAATAAATCTACTCTGTAATAGTATAAGTTTGACTACAATAAACTGTGGTTAAGAAGAAAAATTGGCCGGGCAT
GGTGGCTCATGCCTGCCTGTAANNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NCCAGAGTAATGGTTTCTTGACTTTCTGTAGCCCTTGTTCCTTAGTCTGCTGTGATATTTATGTTGACCTTTATC
ATTTTCTATTCTGAACCCCTCTTAGCATTTAATGTGAAATCTAAGAAATTAGAAGTAGAATGGCTTTTATTGTTT
TGACACCTTTGAAATTATTATTAATAATTTTTCCAGAGCAAAAAAGCAAACACGCTCAATAAGACTAAACAAAAC
AAAATATAAATGTACATCATTTAATGTCCCAGTGGCTCTATTCTACCTGTAAGAAAATGATACAAAACCACCTAA
GATATTTTGAAGCCTGACAAATCAGCTTCATGGAAAAAGGTAAAAAATGCATTTTTCAACCGAAAGGGCAGATCC
AATAGAAGACCCGCTCCTTAAATAAACATAAAATGTAAAAAGTTGGAAAATTAAGAGTAATGTTCCATCTGGAAA
CTGAACTTTTGTCCTTGAACTTGTGTTGGCACCAAGCCTCATACACAGTGAGCTCAATAACTGTTGGGACAAAGG
AAGGAAGGACAAAATGTGTAACTTCCCAGCATCTGGGAGATGCTGTCTCTTGCCTCACTGAGTGTTCCTTTTCTT
TGCTCTCATGTCATTCCCTGAGAACAATGAATTCTGGGACAGGCTAAACATCATGATGAAGTTTCTTAAACAGAC
TTTCTTAGTGGAAATCCATTTAGATCTGGGTGTGCTCTATGGGGAGTGCTGACGTCAAAGAGCAAATGTCTATAA
GGGGCCCTTTTAAAATGAACATTTTCCTCATTGAGCAAGCTGGGATTCTCTAATGTAGAAATCAAGCCATCTTTA
TAATTTCACTTCAGATGTTTATGTTTTTGTTTTTTTTTGTCTCCAATGATGGTAAAAATAAAAACTACGCATTAC
TTAAAGGAGTTTCCCTCACATGTAAACACTGTTAGGAAGTCTGGATTAAGTTGAAAGTCCTGTTTTAACTTTTTT
TCTCTCATATACCAAACACTCTGTATTTCTCTTAAAGAAGCCCTTTAAGAGAAAGCCCTAATTTTATATCTGACA
GTAAAGTTTGCTGCAAGTGTATGAGTTCAAACACATCCCTTGTTTTCTGTCCCTAGGGGAAAAGTCATGTAGTTT
TAGCTTGGCTCCAGTGTTAATATTATATTCAGTAGCAGCCTTAGAAGAGTGGTCTAAGACTTGAACCTGGAGCAA
TTTTATAGCACAGAATCCTACGAAGATAGGACTGTGAACATTTGTTTTCTTTTTCGTGTGTGTCAAACTAACTGG
TTTTTGCTTTACCAATAAAATGTCCTCGGCAGAGTAAATTTTAAACGTGAAAATTATAGATCTTGATATTGAATC
CATCAGTGATTCAAGAGATACACCTATTTGCCTAAAACAACCTAAGATGTATTGGTTATGGAATCATGTGTTGGA
TAGGTTCTTAAGACCTGTTTCCTCAAATCTTGACACAGTTTTCAAGGGTGGCTTATTGACTTGCACGGTTGGGCA
GATAATCCAGATTTACCTAAGATTGGGTAAAAAAGTCATCTGTGACTTTGCTGGCAGGGCATTTGCTAAGTGGAG
TACAGGATCTAAAAGGGTTTTCTTAGAAAGGGCAATATTGTCCAATGAAGTAAGCAGAAGGACTCTGGGTTAGAA
GCATCTGCACAAAAACTGGTGAGACCTACTCTCCACTGCTCTGCAGCTGGATGGCTGATGGCAGGCTGAGCAGTG
GGGAAGCAGGTTTTAACAACAGGGAGTCCTTCCAGGTCACTGTATATTGAGAAGAAACATAAAACTATTGTCTGT
TACATTCCGAGGTCAGCCTTCTTCTTAACGTTTTATAATATGCAAATGCCAGCTTCTGGAAAGCAAGTATCATCA
TGTACCAAATGCTTTATACACCATCACATTCATGAATTTTTTAGCATGGTCAGAACTTGTGTAAATATGTCTCTT
AGATGATTTTGGGGAGATGTGATTTATTTTTCATATTTTCAAAATGCATTTCATTTCAAATAAAGTTATCTATTG
AGACAACCGAAAAAAAAAAAAAAAGCGG

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FIGURE 4680

MILGRCDLFFIFSKCISFQIKLSIETTEKKKKS

FIGURE 4681

CTGGTGGGCGTCAGGGGCAGGCAACAGAGTGGCGGCCGCTACGGCCCTGGAACGGGGCCATGGAGAAGCTGCGGC
GAGTCCTGAGCGGCCAGGACGACGAGGAGCAGGGCCTGACTGCGCAGGTCCTGGATGCCTCATCCCTTAGTTTCA
ACACCAGATTGAAATGGTTTGCCATCTGCTTCGTATGTGGCGTTTTCTTTTCTATTCTTGGAACTGGATTGCTGT
GGCTTCCGGGCGGCATAAAGCTTTTTGCAGTGTTTTATACCCTCGGCAATCTTGCTGCGTTAGCCAGTACATGCT
TTTTAATGGGACCTGTGAAGCAACTGAAGAAAATGTGTGAAGCAACAAGATTGCTTGCAACAATTGTTATGCTTT
TGTGTTTCATATTTACCCTGTGTGCTGCTCTTTGGTGGCATAAGAAAGGACTGGCTGTGTTATTCTGCATATTGC
AGTTCTTGTCAATGACCTGGTATAGCCTGTCGTACATCCCATATGCAAGGGATGCAGTTATTAAATGCTGTTCTT
CTCTCCTAAGTTGAAAATCAGAAACTTGTGGAAAAGAGCACTTGAATGTTGGTACTCTATGTTTGGTGAAGTTTG
CTTTTCCCCATAAAACACTCCAGGAACAACTGACGTGACAGTTGAAGACCGTXTTGTACTAAGTCTCATTTTGTA
TACTGGTAAAAACTACATGCTTGATTAAACCATTAAATGCTTGTAACTTTAAATTCATTATGTGTCATTAATATA
CTTTTCCAAAGATAAGATTTTTAATCACTGCCAGTTGTAAATTATTTTTAGCCAATTTTTAAATCTTTTCAAAGC
AGCTTTGAAATGTGAATATTTAAAGGTAGACCTGTGCTGCAAGATAATTAAACTTTTTTGCTTTTAAAAAATGTC
TGCATXTXTAAGATTTXTTTTACTTTAAATGTGAAACTTATTTXAAGCTAAAAATTGCTTATTATATGTAATAAA
AATAATATATAAATCTTTACAATTTTGAAATAAACCCATCCTTGGAAAAATAAAT

FIGURE 4682

GCACGAGGGCTACGGCCCTGGAACGGGGCCATGGAGAAGCTGCGGCGAGTCCTGAGCGGCCAGGACGACGAGGAG
CAGGGCCTGACTGCGCAGGTCCTGGATGCCTCATCCCTTAGTTTCAACACCAGATTGAAATGGTTTGCCATCTGC
TTCGTATGTGGCGTTTTCTTTTCTATTCTTGGAACTGGATTGCTGTGGCTTCCGGGCGGCATAAAGCTTTTTGCA
GTGTTTTATACCCTCGGCAATCTTGCTGCGTTAGCCAGTACATGCTTTTTAATGGGACCTGTGAAGCAACTGAAG
AAAATGTTTGAAGCAACAAGATTGCTTGCAACAATTGTTATGCTTTTGTGTTTCATATTTACCCTGTGTGCTGCT
CTTTGGTGGCATAAGAAGGGACTGGCTGTGTTATTCTGCATATTGCAGTTCTTGTCAATGACCTGGTATAGCCTG
TCATACATCCCATATGCAAGGGATGCAGTTATTAAATGCTGTTCTTCTCTCCTAAGTTGAAAATCAGAAACTTGT
GGAAAAGAGCACTTGAATGTTGGTACTCTATGTTTGGTGAAGTTTGCTTTTCCCCATAAAACACTCCAGGAACAA
CTGACGTGACAGTTGAAGACCGTTTTGTACTAAGTCTCATTTTGTATACTGGTAAAAACTACATGCTTGATTAAA
CCATTAAATGCTTGTAACTTTAAAAAAAAAAAAAAAAAAAA

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FIGURE 4683

MEKLRRVLSGQDDEEQGLTAQVLDASSLSFNTRLKWFAICFVCGVFFSILGTGLLWLPGGIKLFAVFYTLGNLAA
LASTCFLMGPVKQLKKMFEATRLLATIVMLLCFIFTLCAALWWHKKGLAVLFCILQFLSMTWYSLSYIPYARDAV
IKCCSSLLS

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FIGURE 4684

TTCCGGCCTTGTAATCGCCGAGGGCACGTGCATGCCCCCTGGTTAAGAGTTGCAGGTAGCGGTAGCGATGGACAC
TCTGGATCGAGTAGTAAAGCCCAAAACGAAAAGAGCCAAGAGATTCCTTGAGAAGAGAGAACCGAAACTCAATGA
AAATATTAAAAATGCCATGCTGATTAAAGGGGGAAATGCAAATGCAACAGTGACAAAAGTACTTAAAGATGTGTA
TGCACTGAAAAAACCATACGGTGTACTATATAAAAAGAAAAATATTACAAGACCTTTTGAGGATCAGACATCACT
GGAATTCTTTTCAAAGAAGTCAGATTGTTCTTTATTCATGTTTGGCTCCCATAATAAGAAGCGGCCAAATAATCT
AGTAATAGGTCGTATGTATGACTACCATGTGCTGGATATGATTGAATTAGGTATTGAGAATTTTGTCTCTCTAAA
AGACATTAAGAACAGTAAATGTCCTGAGGGAACAAAACCCATGCTGATATTTGCTGGCGATGATTTCGATGTAAC
AGAAGATTATAGAAGACTAAAAAGTCTTCTTATTGATTTCTTCAGAGGCCCCACAGTATCAAATATCCGCCTGGC
TGGATTAGAGTATGTTCTGCACTTCACTGCACTGAATGGGAAGATTTACTTTCGAAGCTATAAGTTGCTGTTGAA
GAAATCTGGTTGCAGAACACCACGGATTGAATTGGAAGAGATGGGACCCTCATTGGATCTGGTTCTGAGGAGGAC
ACACCTGGCATCGGATGACCTTTATAAATTATCTATGAAAATGCCAAAAGCTCTCAAGCCAAAAAAAAAAAAAAA
A

FIGURE 4685

MDTLDRVVKPKTKRAKRFLEKREPKLNENIKNAMLIKGGNANATVTKVLKDVYALKKPYGVLYKKKNITRPFEDQ
TSLEFFSKKSDCSLFMFGSHNKKRPNNLVIGRMYDYHVLDMIELGIENFVSLKDIKNSKCPEGTKPMLIFAGDDF
DVTEDYRRLKSLLIDFFRGPTVSNIRLAGLEYVLHFTALNGKIYFRSYKLLLKKSGCRTPRIELEEMGPSLDLVL
RRTHLASDDLYKLSMKMPKALKPKKKKK

FIGURE 4686A

GTGGCCACACGTACAAGCCCGCCTATAAAGGTGGCAGTGCCTTCACCCTCACCCTGAAGGTGACAGTTCCTTGGA
ACCTTCCCTGATCCTTGTGATCCCAGGCTCCAAGAGTCCACCCTTCCCAGCTCAGCTCAGTACCTCAGCAGCCAC
CTCCAAGATCCCTACACTGATCATGCTTTTCCCAATCTCCATGTCGGCCACGGAGTTTCTTCTGGCCTCTGTCAT
CTTCTGTCTGGTATTCTGGGTAATCAGGGCCTCAAGACCTCAGGTCCCCAAAGGCCTGAAGAATCCACCAGGGCC
ATGGGGCTGGCCTCTGATTGGGCACATGCTGACCCTGGGAAAGAACCCGCACCTGGCACTGTCAAGGATGAGCCA
GCAGTATGGGGACGTGCTGCAGATCCGAATTGGCTCCACACCCGTGGTGGTGCTGAGCGGCCTGGACACCATCCG
GCAGGCCCTGGTGCGGCAGGGCGATGATTTCAAGGGCCGGCCCGACCTCTACACCTTCACCCTCATCAGTAATGG
TCAGAGCATGTCCTTCAGCCCAGACTCTGGACCAGTGTGGGCTGCCCGCCGGCGCCTGGCCCAGAATGGCCTGAA
AAGTTTCTCCATTGCCTCTGACCCAGCCTCCTCAACCTCCTGCTACCTGGAAGAGCATGTGAGCAAGGAGGCTGA
GGTCCTGATAAGCACGTTGCAGGAGCTGATGGCAGGGCCTGGGCACTTTAACCCCTACAGGTATGTGGTGGTATC
AGTGACCAATGTCATCTGTGCCATTTGCTTTGGCCGGCGCTATGACCACAACCACCAAGAACTGCTTAGCCTAGT
CAACCTGAATAATAATTTCGGGGAGGTGGTTGGCTCTGGAAACCCAGCTGACTTCATCCCTATTCTTCGCTACCT
ACCCAACCCTTCCCTGAATGCCTTCAAGGACCTGAATGAGAAGTTCTACAGCTTCATGCAGAAGATGGTCAAGGA
GCACTACAAAACCTTTGAGAAGGGCCACATCCGGGACATCACAGACAGCCTGATTGAGCACTGTCAGGAGAAGCA
GCTGGATGAGAACGCCAATGTCCAGCTGTCAGATGAGAAGATCATTAACATCGTCTTGGACCTCTTTGGAGCTGG
GTTTGACACAGTCACAACTGCTATCTCCTGGAGCCTCATGTATTTGGTGATGAACCCCAGGGTACAGAGAAAGAT
CCAAGAGGAGCTAGACACAGTGATTGGCAGGTCACGGCGGCCCCGGCTCTCTGACAGATCCCATCTGCCCTATAT
GGAGGCCTTCATCCTGGAGACCTTCCGACACTCTTCCTTCGTCCCCTTCACCATCCCCCACAGCACAACAAGAGA
CACAAGTTTGAAAGGCTTTTACATCCCCAAGGGGCGTTGTGTCTTTGTAAACCAGTGGCAGATCAACCATGACCA
GAAGCTATGGGTCAACCCATCTGAGTTCCTACCTGAACGGTTTCTCACCCCTGATGGTGCTATCGACAAGGTGTT
AAGTGAGAAGGTGATTATCTTTGGCATGGGCAAGCGGAAGTGTATCGGTGAGACCGTTGCCCGCTGGGAGGTCTT
TCTCTTCCTGGCTATCCTGCTGCAACGGGTGGAATTCAGCGTGCCACTGGGCGTGAAGGTGGACATGACCCCCAT
CTATGGGCTAACCATGAAGCATGCCTGCTGTGAGCACTTCCAAATGCAGCTGCGCTCTTAGGTGCTTGAGAGCCC
TGAGGCCTAGACTCTGTCTACCTGGTCTGGTTGGGCAGCCAGACCAGCAGGCTGGCCTATGTGGTCTAAGGTTCA
GCCTGAAACTCATAGACACTGATCTGGCTGCAGTTTTGCTATCTGGGCTGTGGGCAAGCCTAAGGGATCCTGCCT
GCCCCTACCCTGGACTTGCCTCTGCACACCCTCCAGAGACAACAGGTAAAACAGGGCCACATAGATGCTGATGGA
GCCTTCCCAAGTTGTGCTTGAGCCAGGAGGCCTGCTAGGGTTAGGAGGTCCTTAGGCCTCTGAGAAGCTCTGAAG
AACTCTCTGGAAGCCCCTGGGCCCAGTACCTAGCTGGCTCTGTGAGGGTGCTGACTGGCTTCAGCAAGTTAGAAC
TAGCCAAACCAGGACCCTGTCCAATCTTTGACAATTGGGAGCTGCCAAGAGTGAAGGGAAGAGACAGCCCAGGAT
ACTGGCACAGAGGTAGTCTCACTGCTTGAACTAGGCTGAGCAATCTGACCCTATGGGTCTAGGACACAGTTCCTG
GGAACATCACATTCCTCTGCCCTTCCTGCAGGCAGGAACAAACAGGGCTGCCTTCTGGCCTTGTAAGACCCTTAT
TGCTGTCCTGGAGGGGCTGGGGACTTGTGTCTGCGGGGATCAGAGCGCACAGGGAGTGCACATATCCAGGCACCA
GGACTAGGGCTGGAGTGAGGGGGGGGTATTTCAATTACCTTCTATTGGTCTCCCTTCTCTACACTCTTGTAATAA
AATGTCTATTTTTAATGTTTGTACACAACAATCCTTCTATTCTAGCCTGCATTGAGCTTGCATGCTTGCATAAGA
GCTTAAGAACCATTGATTTAATGTAATAGGGAAAATTCTAACCCAGGTATCCAAAAATGTGTAAGAACAACTACC
TGAGCTAAATAAAGATATTGTTCACTCGAGCCGGAAAAATCACATTTATTAGTTAAGACGACCACAGGCTGGACA
CAACACACATGCTAAAAAGTGGACTGTCTTTTAAAACTTCCAAGGTAAATAGGTAAATGTTTTCCACAGCCCAAC
AATCATTTCAGTGTTTACAAATTAAAAGGCCCACGGTTAAGACATTAAACAGTAAAATATGTAATAAATGCTCCA
ACCTACCCTCTCCCCCGAAAGCTGCTTCTAAGTTTAAAACCATGAATTTGACTAACCATGCCATTGAAAACCATC
CAGGTTACTACAGGCTGAATTAGTTTTCAATGTCTAAGTCCTAGAAATATCACTCCCTATCCCAGCCCTAGCAAA
TTCTAACTTTACATTTGACATAAGGCATTAACATCAATTAAAGCCTCAGTTTAATAATCAGAATTTAAATGAAGT
CTCCTGAAGACCTCTCTTCTGGCAAAAAAAAAACACGTATCAGACTCTGGGAAAACATTCAGACCCACTTCTAGC
TATTACTGAAATAAATGATTAGAAAGTTACGTTGGTGAGCCGAAGTTAAACCTAAAGCTATCCCCTGGATCTTTC
TAGCAATAAACCCATGTTGAACCTACCATGAAAACTTTCATTCACTGTGCTTTTGGTTACGTTGCCTCCTGATTA
GTCATTAATTTTAATGAGGTTTTTTCCTTGTGTTGAGTATGAATAGACCTTACAGTTTGAGGATCTCTAGAATTC
CCTGAATTATTGGAAAGACATTCATGACTCCCAGTGTGACTAGTTAAGAGCCCCAGGGAGCCTGTGAAGACTAGA
ATCTACAAGTAACCTGCACTAAGAACGAAATTCAGTAAAGGAGACTCAAGCTTAGCTCCTGGCCATCTTAAAGGG
CTAATGTATGTCTTTCACAGGTTTGTTCAACATTTCAGTAATTCACAGTATAGCCAAGAGCATGAGTATAAGTCT

FIGURE 4686B

CTTGAAAAAGCCAGTTATTTGGAGCTTTTTAAATTATAAACTTTGAAAAAGTCACCCACGTTCTCACACTATATA
GATGACTTTGTATCTATTTTACTATTTTCTCATTTAACC

FIGURE 4687

GHTYKPAYKGGSAFTLTLKVTVPWNLPLILVIPGSKSPPFPAQLSTSAATSKIPTLIMLFPISMSATEFLLASVI
FCLVFWVIRASRPQVPKGLKNPPGPWGWPLIGHMLTLGKNPHLALSRMSQQYGDVLQIRIGSTPVVVLSGLDTIR
QALVRQGDDFKGRPDLYTFTLISNGQSMSFSPDSGPVWAARRRLAQNGLKSFSIASDPASSTSCYLEEHVSKEAE
VLISTLQELMAGPGHFNPYRYVVVSVTNVICAICFGRRYDHNHQELLSLVNLNNNFGEVVGSGNPADFIPILRYL
PNPSLNAFKDLNEKFYSFMQKMVKEHYKTFEKGHIRDITDSLIEHCQEKQLDENANVQLSDEKIINIVLDLFGAG
FDTVTTAISWSLMYLVMNPRVQRKIQEELDTVIGRSRRPRLSDRSHLPYMEAFILETFRHSSFVPFTIPHSTTRD
TSLKGFYIPKGRCVFVNQWQINHDQKLWVNPSEFLPERFLTPDGAIDKVLSEKVIIFGMGKRKCIGETVARWEVF
LFLAILLQRVEFSVPLGVKVDMTPIYGLTMKHACCEHFQMQLRS

FIGURE 4688A

GTTTCTGCCCCTTGCTGAGAGAATGGTCGAAAAAATGGTGAAAGAGGACAAGATAGAAGCTGAGGCTGAAGTTGA
ACTTTATTATATGATCCTGGAACGTTTGGGAAAGTACCAGGAGGCCTTGGATGTCATCAGAGGGAAATTAGGAGA
GAAGTTGACAAGTGAGATTCAGAGTCGGGAAAATAAATGCATGGCTATGTACAAGAAGCTGAGCAGGTGGCCAGA
GTGCAATGCCCTTTCCCGGCGCCTCTTACTAAAAAAAGGCCTGGAGTCCTCCTGCTGAAGGTGAACACTCTTTAG
AAGGAGAAGTACATTATTCTGCAGAAAAAGCTGTGAAGTTTATAGAAGATCGGATAACGGAAGAATCTAAAAGTT
CTCGCCATCTCCGAGGACCACATCTAGCTAAATTGGAGCTGATTAGGCGTTTACGAAGTCAAGGTTGTAACGATG
AGTACAAACTGGGTGATCCAGAAGAATTAATGTTCCAGTATTTTAAAAAGTTTGGCGATAAACCTTGTTGTTTTA
CAGACCTTAAGGTGTTTGTTGACCTCTTACCTGCTACACAGTGTACAAAATTTATTAATCAGTTACTTGGAGTTG
TTCCTTGTCGACACCAACAGAGGATAAGCTGGCACTGCCTGCTGACATCAGAGCTCTGCAGCAACATTGTGTGTG
GTGCAGCTGACGAGGTTACTTGGCTTGTACCACACCATGGATAAAAATCAGAAATTGAGTGTGGTCAGAGAATTG
ATGTTAAGGTACCAGCATGGACTGGAATTTGGGAAAACCTGTTTGAAAACAGAATTGCAATTTTCTGACTATTAC
TGTCTCCTTGCTGTCCATGCGCTTATTGATGTATGGAGGGAAACAGGTGATGAGACCACTGTGTGGCAGGCCCTG
ACTTTGCTGGAAGAGGGATTAACCCATAGCCCTTCCAATGCTCAGTTCAAATTGCTGCTTGTTCGAATCTACTGT
ATGCTGGGTGCATTTGAACCAGTGGTGGATCTTTACTCCAGCCTCGATGCTAAGCATATCCAGCATGATACCATT
GGTTATCTTTTGACCCGATATGCTGAATCTCTAGGTCAGTATGCTGCTGCGTCCCAATCCTGTAACTTCGCACTC
AGGTTTTTTCACTCCAACCAGAAAGATACCTCAGAATATATTATTCAAGCTTACAAATATGGTGCATTTGAGAAG
ATCCCAGAGTTTATCGCTTTTAGGAACAGGCTGAATAATTCTCTTCATTTTGCACAAGTCCGTACTGAACGGATG
CTGTTAGACCTTCTACTTGAAGCAAATATATCAACCAGTTTAGCAGAAAGTATAAAGTCAATGAACCTTAGGCCA
GAAGAAGATGACATTCCATGGGAAGATTTGCGAGACAACAGAGACTTAAATGTTTTTTTCAGCTGGGATCCAAAA
GACAGGGACGTTTCTGAAGAACATAAGAAACTTTCCTTAGAGGAGGAGACCTTGTGGTTAAGAATCCGATCCTTA
ACATTGAGGCTGATAAGTGGACTTCCAAGTCTCAACCACCCTGTGGAGCCAAAGAACTCGGAGAAGACTGCCGAG
AATGGGGTATCCTCCCGGATTGATATTCTTCGTTTGCTCCTTCAACAGCTGGAGGCAACCCTGGAGACAGGAAAG
CGATTTATTGAGAAGGATATTCAGTATCCTTTCCTTGGTCCTGTACCTACCAGAATGGGTGGATTCTTTAATTCT
GGCTGTTCTCAGTGCCAGATAAGCTCTTTTTATCTTGTCAATGATATTTATGAGCTGGATACCAGTGGTTTAGAG
GATACAATGGAGATTCAGGAACGAATAGAAAATAGTTTTAAGTCTTTACTAGACCAGTTAAAAGATGTCTTCAGT
AAATGTAAAGGTGACCTCTTAGAAGTTAAAGATGGTAACTTGAAAACACATCCTACTCTTTTAGAAAATCTAGTT
TTCTTTGTTGAGACTATTTCTGTTATCCTTTGGGTATCCAGTTACTGTGAGAGTGTCCTACGACCATACAAACTA
AATTTACAGAAAAAGAAAAAGAAGAAAAAAGAAACCAGCATCATCATGCCACCTGTCTTTACCAGTTTCCAAGAC
TATGTTACTGGGCTTCAGACTTTAATTTCCAATGTTGTGGATCATATTAAAGGGCTTGAAACACATCTAATTGCA
CTTAAACTTGAAGAACTTATTTTAGAAGACACTTCTCTCTCACCGGAAGAGAGAAAATTTTCAAAGACTGTGCAA
GGGAAGGTGCAGAGCAGTTATCTGCACTCACTTCTGGAAATGGGGGAGCTGCTGAAAAAAAGACTTGAGACCACA
AAGAAACTAAAAATT**TAA**GGAAGTATCTATCATGGGCACTGATGACTCTGCAACAGAATATGACACCATCTTCCC
AGGCAAAAGCAACATCTGGTTGACCATGATTTTAATCCAGAACTTCCTCATAAAATGCATGAAGGACTTTGATCG
TGAATTTTTTTAGGTGTTAAATATATACAACTGATTAAATTATTGTATATAAACCAGAAGCGGGACCCTCATCTG
GGTTTGACCACTTTTTATACATGTTCATATGCATATGGCAGCAACAAGAGAACCCTACTTTTCTTCTTCCCATCA
CCAGAAACATCTTTTCAGGGGAGCGGGGGGTCTATAAAAACAGCAATAGAAATTAAGCATAAAGCATCAACCTCA
TAGCAACTGAATAGCCCTTCCATTATAAATAACATTGAGAGTTTTTGGTCTGGTCCTTGAGCCACAAGAAGTGGA
GGGGAGACCATGCCTGGGAACAGACCCCCTTTTCACAGCAGTAAGTTTGTTTTGAGGCTTTCTCAGCTACTTGGC
TCCCACAGAACCCAAGGCAGGTACACAAAGGACCTTAGATGAGATCTGGCATATGCACCCGCAATAGAAGGGCAC
CACTTGGATGACCACAGGCACTTAGTTTTTGGCTAGTTTTTGTCTGATAGTTAAGACATCCCCATCCTAGCTTCT
GTGAGAGTTAAAAATCTCAGGTAAGAAGGCAAGGAAGGCTCTGTTAATTTATAGCTGTTTAGAGGGGAAAGCAGT
GCAGACCACTTATTAAGCCCGCTGAGGACTAGCTTTCTGTCTTTCATACATTTGGGAAAGATAGGAATGACTGTT
TCAAAGAAGAGAGGTGCACATAATTTATGCAGGCAAGTATGATACTTATTTCATTGGTTTTGTGAGTCNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNGACTTGAAAATTAAGATTTAATACTTTAATGTTTTAAGTGTGGGGG
GTTTGGGAAGGAAGGAATGTAATATTATGGATTTAGCCTTAGGCTTTAAGTTTTAGGCTGGCAAAAGAAATGTTA
TTCAGTGGGTTTGAGGTTTGGACTACTTTCTTCAAACTTAGAGAATTATAACAGGATGGTGTTTACTTTGTTCAC
CTGGATGTCCCCAAGACTCTAGCTTCTTCTATCAGTGGTTGGTCTGATAGAAGAGGTAAAAATTGCTCTTGAAAA
TGTCCTACAATTTATGCAGTTTCTTTGATAATATTTTTCTGTTTAAATCCCTGCTTCTGTTTTTGGTCTGTTACC

FIGURE 4688B

TAAATATAGTTCAAGTTTAATTCTGTAAGAGCAAAGAAATGAATTTGATGAGGAAATTAAGCATCCAATGGAGGA
TTGGTCTTGAAGACCTTAAAGGTGCTTTCCAACCTGCACTGCTCCAGTGAAATGTGGTACTTTTTTCTTTTAAAA
GCAACCAAGAGAGCTGGGAATATCTGTGTACGCAAAGTAATTGCATTTTGTCCCTTCATTTTGACTTTCTTAGAT
TCATAATTTGATACAGTGCTTAAACTTCCAAGGAAATTTTAAACAATTACTACATTACCTGTTCAAAATAAGGCT
TGTTGGAAATCCTAGTCCATCAACTAATTTCAAAAATTTATTTTTGATATGAGTAGCAACAGCTGGTCATATACC
CTATCCCAAAAGGAAGAACTGTCTTGAACAAGATGAATGGAAAATTGTGGTTAATTCTGAATTTCATGTAATGAC
AACATATTCTTTCATAAAACTATGGCCTGTTTAAGATGGAACTTTGTGTGTGTCTGCTGGGGAGGGTGGGGTACA
TGTGTATGGCGTGTGTTCTTGAAATGATGTCTCTCTGAATATCCAAAAAAGTACTGTACTGTAGAAATGCTCTTT
GAAAAAGTCTATCGACTGACCATGATCAATCTAGCATATGTATGTTCAGTGGGCTAGCCTTGGTCCTCAGGGACA
GTGTGTGACTCTAGTGGTCTTCCTAACCAGTCTCTTGCCTAAAGATATCTGGGACCTCTACTGGCTTTAATGACA
AATAATGTTATGTTGAGGTTATGCTTCCTTTGTTATTTGCTGATTTTCCTACTAAATGTAGCATTTCAATTAGAT
CCAGCTTTCACATTTTGAGATAATTGTAAAAAGAATGAAATTATGCAGAAATGGCCAATATCTCTTATCAATCTG
TTCTTTTGGAAACCCTCATGTACTATAAATTGTGTACAGTTAAAAAAATATATATATATATATATTCTTACATGA
GTAAAAAGCACCCTCTCCCAGCAATCGTATGCCATTGGTATTTGAAGAGAATTCCCAAATAACCCATTGCTGCTG
CTGCTGTTTTTGATTTGTATGGGTTTTTTTGTTTTGTTTGTTTTTGTGTGGTAAACTGATATTTAAAAAAGGAAA
GGAGAAAAATCACGACTACTGTTTACAGACTGAAAAATTATTGCTTTTTATACTACTGAGATCCTAAGTTAAGAC
TCTCCAAAGCAAACATTTGGTTTAAATCATTTATCTGATGTAGATAAAAGGTAGAGAAACTTGTAGTGTTCTCCA
CATAATGGAAAATGTACAAATGCCTAGTTGTGTTGCCCATCAATTTTGTATATTTTCATAATTTTAATTGTTGAA
AATTGCATTATATTTTGCAATCACTATGTTCAATCTGGATTTGTCTTTCATTTTAACTTTTAATATAAAAAGGGG
TTTCAATGTATCTACAGGCTTGTTATTGAAACTTCCTACTTATTTGATGTGATTTATTAATATAGGAAGTATATA
TTCTTCCTTAAGTAAGTGAAGCATAGCAAATCTACTTTAAACTGGATGGGTTAATTTATATAAACATTTTCATTT
TAAGTTGGCATTTCTGGCTGGTTCCTTTTTGTTCAGATTCTTAGAAGCAACAACTTCTGAATGGTGTAATTCATC
TC

FIGURE 4689

FLPLAERMVEKMVKEDKIEAEAEVELYYMILERLGKYQEALDVIRGKLGEKLTSEIQSRENKCMAMYKKLSRWPE
CNALSRRLLLKKGLESSCEGEHSLEGEVHYSAEKAVKFIEDRITEESKSSRHLRGPHLAKLELIRRLRSQGCNDE
YKLGDPEELMFQYFKKFGDKPCCFTDLKVFVDLLPATQCTKFINQLLGVVPCRHQQRISWHCLLTHQSSAATLCV
VQLTRLLGLYHTMDKNQKLSVVRELMLRYQHGLEFGKTCLKTELQFSDYYCLLAVHALIDVWRETGDETTVWQAL
TLLEEGLTHSPSNAQFKLLLVRIYCMLGAFEPVVDLYSSLDAKHIQHDTIGYLLTRYAESLGQYAAASQSCNFAL
RFFHSNQKDTSEYIIQAYKYGAFEKIPEFIAFRNRLNNSLHFAQVRTERMLLDLLLEANISTSLAESIKSMNLRP
EEDDIPWEDLRDNRDLNVFFSWDPKDRDVSEEHKKLSLEEETLWLRIRSLTLRLISGLPSLNHPVEPKNSEKTAE
NGVSSRIDILRLLLQQLEATLETGKRFIEKDIQYPFLGPVPTRMGGFFNSGCSQCQISSFYLVNDIYELDTSGLE
DTMEIQERIENSFKSLLDQLKDVFSKCKGDLLEVKDGNLKTHPTLLENLVFFVETISVILWVSSYCESVLRPYKL
NLQKKKKKKKETSIIMPPVFTSFQDYVTGLQTLISNVVDHIKGLETHLIALKLEELILEDTSLSPEERKFSKTVQ
GKVQSSYLHSLLEMGELLKKRLETTKKLKI

FIGURE 4690

GTGCGTACGTGCGTCGTCTCTATGGTGGCGGCGGATTTGGAGGGACCCTACGAACCAGGAGTCAGGCGAGCCGAT
CTGGGGCTGCAGGATGTTCCGCTGGGAGCGCTCCATTCCCCTGCGAGGCTCGGCCGCCGCCCTGTGCAACAACCT
CAGTGTGCTGCAGCTGCCGGCTCGCAACCTCACGTATTTTGGCGTGGTTCATGGACCAAGCGCCCAGCTTCTCAG
CGCTGCTCCTGAGGGTGTGCCCTTGGCCCAGCGCCAGCTCCACGCTAAGGAGGGTGCTGGAGTGAGTCCCCCACT
TATCACTCAGGTCCACTGGTGTGTCCTCCCCTTCCGAGTGCTGCTGGTACTCACCTCACATCGAGGAATACAGAT
GTACGAGTCCAATGGCTACACCATGGTCTACTGGCATGCACTGGACTCTGGAGATGCCTCCCCAGTACAGGCTGT
GTTTGCCCGGGGAATTGCTGCCAGTGGCCACTTCATCTGTGTGGGAACGTGGTCAGGCCGGGTGCTGGTGTTTGA
CATCCCAGCAAAGGGTCCCAACATTGTACTGAGCGAGGAGCTGGCTGGGCACCAGATGCCAATCACAGACATTGC
CACCGAGCCTGCCCAGGGACAGGATTGTGTGGCTGACATGGTGACGGCAGATGACTCAGGCTTGCTGTGTGTCTG
GCGGTCAGGGCCAGAATTCACATTATTGACCCGCATTCCAGGATTTGGAGTTCCGTGCCCCTCTGTGCAGCTGTG
GCAGGGGATCATAGCAGCAGGCTATGGGAACGGACAAGTGCATCTATATGAGGCCACTACAGGAAATCTACATGT
CCAGATCAATGCCCATGCCCGGGCCATCTGCGCCCTGGACCTGGCTTCTGAGGTGGGCAAGCTACTCTCTGCAGG
TGAGGACACCTTTGTGCATATCTGGAAGCTGAGCAGAAACCCAGAGAGTGGCTACATTGAGGTGGAACACTGTCA
TGGTGAGTGTGTCGCCGACACCCAGCTGTGTGGTGCTCGATTTTGTGATTCCTCAGGCAACTCCTTTGCTGTGAC
TGGCTATGACCTTGCGGAGATCCGGAGATTCAGCAGTGTGTGAGAAGAGCAGCCTTCCTTTGTCCCTGTGGTATT
CATAAAGTACCCGCTCCACCC

FIGURE 4691

MFRWERSIPLRGSAAALCNNLSVLQLPARNLTYFGVVHGPSAQLLSAAPEGVPLAQRQLHAKEGAGVSPPLITQV
HWCVLPFRVLLVLTSHRGIQMYESNGYTMVYWHALDSGDASPVQAVFARGIAASGHFICVGTWSGRVLVFDIPAK
GPNIVLSEELAGHQMPITDIATEPAQGQDCVADMVTADDSGLLCVWRSGPEFTLLTRIPGFGVPCPSVQLWQGII
AAGYGNGQVHLYEATTGNLHVQINAHARAICALDLASEVGKLLSAGEDTFVHIWKLSRNPESGYIEVEHCHGECV
ADTQLCGARFCDSSGNSFAVTGYDLAEIRRFSSV

FIGURE 4692A

ATGGCGGCGGCGGCGGGGAATCGCGCCTCGTCGTCGGGATTCCCGGGCGCCAGGGCTACGAGCCCTGAGGCAGGC
GGCGGCGGAGGAGCCCTCAAGGCGAGCAGCGCGCGCGCGGCTGCCGCGGGACTGCTGCGGGAGGCGGGCAGCGGG
GGCCGCGAGCGGGCGGACTGGCGGCGGCGGCAGCTGCGCAAAGTGCGGAGTGTGGAGCTGGACCAGCTGCCTGAG
CAGCCGCTCTTCCTTGCCGCCTCACCGCCGGCCTCCTCGACTTCCCCGTCGCCGGAGCCCGCGGACGCAGCGGGG
AGTGGGACCGGCTTCCAGCCTGTGGCGGTGCCGCCGCCCCACGGAGCCGCCAGCCGGCGCGGCGCCCACCTTACC
GAGTCGGTGGCGGCGCCGGACAGCGGCGCCTCGAGTCCCGCAGCGGCCGAGCCCGGGGAGAAGCGGGCGCCCGCC
GCCGAGCCGTCTCCTGCAGCGGCCCCCGCCGGTCGTGAGATGGAGAATAAAGAAACTCTCAAAGGGTTGCACAAG
ATGGATGATCGTCCAGAGGAACGAATGATCAGGGAGAAACTGAAGGCAACCTGTATGCCAGCCTGGAAGCACGAA
TGGTTGGAAAGGAGAAATAGGCGAGGGCCTGTGGTGGTAAAACCAATCCCAGTTAAAGGAGATGGATCTGAAATG
AATCACTTAGCAGCTGAGTCTCCAGGAGAGGTCCAGGCAAGTGCGGCTTCACCAGCTTCCAAAGGCCGACGCAGT
CCTTCTCCTGGCAACTCCCCATCAGGTCGCACAGTGAAATCAGAATCTCCAGGAGTAAGGAGAAAAAGAGTTTCC
CCAGTGCCTTTTCAGAGTGGCAGAATCACACCACCCCGAAGAGCCCCTTCACCAGATGGCTTCTCACCATATAGC
CCTGAGGAAACAAACCGCCGTGTTAACAAAGTGATGCGGGCCAGACTGTACTTACTGCAGCAGATAGGGCCTAAC
TCTTTCCTGATTGGAGGAGACAGCCCAGACAATAAATACCGGGTGTTTATTGGGCCTCAGAACTGCAGCTGTGCA
CGTGGAACATTCTGTATTCATCTGCTATTTGTGATGCTCCGGGTGTTTCAACTAGAACCTTCAGACCCAATGTTA
TGGAGAAAAACTTTAAAGAATTTTGAGGTTGAGAGTTTGTTCCAGAAATATCACAGTAAGCGTAGCTCAAGGATC
AAAGCTCCATCTCGTAACACCATCCAGAAGTTTGTTTCACGCATGTCAAATTCTCATACATTGTCATCATCTAGT
ACTTCTACATCTAGTTCAGAAAACAGCATAAAGGATGAAGAGGAACAGATGTGTCCTATTTGCTTGTTGGGCATG
CTTGATGAAGAAAGTCTTACAGTGTGTGAAGACGGCTGCAGGAACAAGCTGCACCACCACTGCATGTCAATTTGG
GCAGAAGAGTGTAGAAGAAATAGAGAACCTTTAATATGTCCCCTTTGTAGATCTAAGTGGAGATCTCATGATTTC
TACAGCCACGAGTTGTCAAGTCCTGTGGATTCCCCTTCTTCCCTCAGAGCTGCACAGCAGCAAACCGTACAGCAG
CAGCCTTTGGCTGGATCACGAAGGAATCAAGAGAGCAATTTTAACCTTACTCATTATGGAACTCAGCAAATCCCT
CCTGCTTACAAAGATTTAGCTGAGCCATGGATTCAGGTGTTTGGAATGGAACTCGTTGGCTGCTTATTTTCTAGA
AACTGGAATGTGAGAGAGATGGCCCTCAGGCGTCTTTCCCATGATGTCAGTGGGGCCCTGCTGTTGGCAAATGGG
GAGAGCACTGGAAATTCTGGGGGCAGCAGTGGAAGCAGCCCGAGTGGGGGAGCCACCAGTGGGTCTTCCCAGACC
AGTATCTCAGGAGATGTGGTGGAGGCATGCTGCAGCGTTCTGTCAATGGTCTGTGCTGACCCTGTCTACAAAGTG
TACGTTGCTGCTTTAAAAACATTGAGAGCCATGCTGGTATATACTCCTTGCCACAGTTTAGCGGAAAGAATCAAA
CTTCAGAGACTTCTCCAGCCAGTTGTAGACACCATCCTAGTCAAATGTGCAGATGCCAATAGCCGCACAAGTCAG
CTGTCCATATCAACACTGTTGGAACTGTGCAAAGGCCAAGCAGGAGAGTTGGCAGTTGGCAGAGAAATACTAAAA
GCTGGATCCATTGGTATTGGTGGTGTTGATTATGTCTTAAATTGTATTCTTGGAAACCAAACTGAATCAAACAAT
TGGCAAGAACTTCTTGGCCGCCTTTGTCTTATAGATAGACTGTTGTTGGAATTTCCTGCTGAATTTTATCCTCAT
ATTGTCAGTACTGATGTTTCACAAGCTGAGCCTGTTGAAATCAGGTATAAGAAGCTGCTGTCCCTCTTAACCTTT
GCTTTGCAGTCCATTAATAATTCCCACTCAATGGTTGGCAAACTTTCCAGAAGGATCTACTTGAGTTCTGCAAGA
ATGGTTACTACAGTACCCCATGTGTTTTCAAAACTGTTAGAAATGCTGAGTGTTTCCAGTTCCACTCACTTCACC
AGGATGCGTCGCCGTTTGATGGCTATTGCAGATGAGGTGGAAATTGCCGAAGCCATCCAGTTGGGCGTAGAAGAC
ACTTTGGATGGTCAACAGGACAGCTTCTTGCAGGCATCTGTTCCCAACAACTATCTGGAAACCACAGAGAACAGT
TCCCCTGAGTGCACAATCCATTTAGAGAAAACTGGAAAAGGATTATGTGCTACAAAATTGAGTGCCAGTTCAGAG
GACATTTCTGAGAGACTGGCCAGCATTTCAGTAGGACCTTCTAGTTCAACTACTAACTACTACTACAACAACAGA
GCAACCAAAGCCAATGGTTCAAACAAAAGGCAGACCCCACAGTCAGTGTTTGAACTCCTCTCCTTTATCTCATCA
TTCCCAATTAATGTTTCCAGCCTTGTCAACCCCTTCTTCTTCTACCCCATCTGTACCAGCTGGCACTGCAACAGA
TGTCTCTAAGCATAGACTTCAGGGATTCATTCCCTGCAGAATACCTTCTGCATCTCCTCAAACACAGCGCAAGTT
TTCTCTACAATTCCACAGAAACTGTCCTGAAAACAAAGACTCAGATAAACTTTCCCCAGTCTTTACTCAGTCAAG
ACCCTTGCCCTCCAGTAACATACACAGGCCAAAGCCATCTCGACCTACCCCAGGTAATACAAGTAAACAGGGAGA
TCCCTCAAAAAATAGCATGACACTTGATCTGAACAGTAGTTCCAAATGTGATGACAGCTTTGGCTGTAGCAGCAA
TAGTAGTAATGCTGTTATACCCAGTGACGAGACAGTGTTCACCCCAGTAGAGGAGAAATGCAGATTAGATGTCAA
TACAGAGCTCAACTCCAGTATTGAGGACCTTCTTGAAGCATCTATGCCTTCAAGTGATACAACAGTAACTTTTAA
GTCAGAAGTTGCTGTCCTGTCTCCTGAAAAGGCTGAAAATGATGATACCTACAAAGATGATGTGAATCATAATCA
AAAGTGCAAAGAGAAGATGGAAGCTGAAGAAGAAGAAGCTTTAGCAATTGCCATGGCAATGTCAGCGTCTCAGGA

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FIGURE 4692B

TGCCCTCCCCATAGTTCCTCAGCTGCAGGTTGAAAATGGAGAAGATATCATCATTATTCAACAGGATACACCAGA
GACTCTACCAGGACATACCAAAGCAAAACAACCGTATAGAGAAGACACTGAATGGCTGAAAGGTCAACAGATAGG
CCTTGGAGCATTTTCTTCTTGTTATCAGGCTCAAGATGTGGGAACTGGAACTTTAATGGCTGTTAAACAGGTGAC
TTATGTCAGAAACACATCTTCTGAGCAAGAAGAAGTAGTAGAAGCACTAAGAGAAGAGATAAGAATGATGAGCCA
TCTGAATCATCCAAACATCATTAGGATGTTGGGAGCCACGTGTGAGAAGAGCAATTACAATCTCTTCATTGAATG
GATGGCAGGGGGATCGGTGGCTCATTTGCTGAGTAAATATGGAGCCTTCAAAGAATCAGTAGTTATTAACTACAC
TGAACAGTTACTCCGTGGCCTTTCGTATCTCCATGAAAACCAAATCATTCACAGAGATGTCAAAGGTGCCAATTT
GCTAATTGACAGCACTGGTCAGAGACTAAGAATTGCAGATTTTGGAGCTGCAGCCAGGTTGGCATCAAAAGGAAC
TGGTGCAGGAGAGTTTCAGGGACAATTACTGGGGACAATTGCATTTATGGCACCTGAGGTACTAAGAGGTCAACA
GTATGGAAGGAGCTGTGATGTATGGAGTGTTGGCTGTGCTATTATAGAAATGGCTTGTGCAAAACCACCATGGAA
TGCAGAAAAACACTCCAATCATCTTGCTTTGATATTTAAGATTGCTAGTGCAACTACTGCTCCATCGATCCCTTC
ACATTTGTCTCCTGGTTTACGAGATGTGGCTCTTCGTTGTTTAGAACTTCAACCTCAGGACAGACCTCCATCAAG
AGAGCTACTGAAGCATCCAGTCTTTCGTACTACATGG**TAG**CCAATTATGCAGATCAACTACAGTAGAAACAGGAT
GCTCAACAAGAGAAAAAAAACTTGTGGGGAACCACATTGATATTCTACTGGCCATGATGCCACTGAACAGCTATG
AACGAGGCCAGTGGGGAACCCTTACCTAAGTATGTGATTGACAAATCATGATCTGTACCTAAGCTCAGTATGCAA
AAGCCCAAACTAGTGCAGAAACTGTAAACTGTGCCTTTCAAAGAACTGGCCCTAGGTGAACAGGAAAACAATGAA
GTTTGCATGACTAAATTGCAGAAGCATAATTTTATTTTTTTGGAGCACTTTTTCAGCAATATTAGCGGCTGAGGG
GCTCAGGATCTATTTTAATATTTCAATTATTCTTCCATTTCATATAGTGATCACAAGCAGGGGGTTCTGCAATTC
CGTTCAAATTTTTTGTCACTGGCTATAAAATCAGTATCTGCCTCTTTTAGGTCAGAGTATGCTATGAGTAGCAAT
ACATACATATATTTTTAAAAGTTGATACTTCTTTATGACCCACAGTTGACCTTTATTTTCTTAAATACCAGGGCA
GTTGTGGCTCATTGTGCATTTTACTGTTGGCCCATTCATTTCGTTTTTGGAAATTATGGTTTTGTATTTTCATGT
TTATTTACATTCATTTTTGTTTATTCAGGGAAAGCTGATCTTTTTTTCAAACCAGAAAAAAAAAAATGAACTAGAT
ATGAAGTAGAGTTCATTAAATATCTTGCTATTGTCAGAGTTTTTAAAATATAGACTTAATTTTGTTTTTTTAAAT
TGGAATACAATAAAGTACTACCTACATTTGAGTCAGTCACCACTCTTATTGTGCAGGTTAAGTACAAGTTAACTA
AAAATAAACTGTCCTCTCTGGTGCAACTCACAACCAAGATCAAGATTACCTTAAAATTTATTTGAATTTTTTAGA
TGTTTTGGTTGTCAAACTGTAGGAAACTTCACAACATTTAAGTCTTACTCTGTATGTAACAATCCATCATTCACC
TTCACTACTGGTAATAACATAGAGCTGCCATTTTCCTTTTACCATGCATCATCTCTTTACAGTAGGCCTGGCAGA
TCATTTTTTAAAAAGATTATTCAACTACCAATCAGTAATGTTTTTAAACAGTACATTTGCTTTGAACTTGGAAAA
TGTGTTCAGAAAGAAAAATGGAATTGAATTTCATTTATACACTAATTCCTTGGATTTTGCACAGTTACCTAACGG
TTTTAGTCTGGAGTTAAATTCAGATGCATGGAATCCTGAAGGAAAATGGTAGCTTTTTAATCTTTTTGTGTGTGT
GTGAGTCTTTTAAATCAAGTACTGATTAACTATTAAGTACAACTTTGAGATTTTAGTTTTAACTCTTCAGAAGCC
AGTGTGAAATAGAATTGGTTATTCTCAAAGACTCAGGATAAACTAAATAAGCTATATATAGAGTACATTTAAAAT
GTACAACACAAATTGGAAGTAAAATAAGTTACAAGATAAGTTTACAGGGATATATTGCTTACAATTTTTAAAAGG
CAGTTTGTTTTTTATGTGAATATGTTTCTTAGTGAAATTTTACATTCCTTTGTTTTGGAAGATTGGCGATATTTG
AAGAGTTAAAAATAGTACAGAAATGTGAAGTTTGGTATCTCTAAATGTGTTGTACTTGACTTTCTTTTTTATTTT
TTTTTATTTTTTTTGACTACTTAGAATTTTCACAATTCTAATAAGATTGTTTCCAAGTCTCTCATGTGCAAGCTT
TAAAGGATGCACTCTTGCCATTTTATGTACTGGAAGATCATTGGTCAGATGAATACTGTGTCTGACAAAAATGTA
AACTGTATAAACTGAGGAACCTCAGCTAATCAGTATTACTTTGTAGATCACCATGCCCACCACATTTCAAACTCA
AACTATCTGTAGATTTCAAAATCCATTGTGTTTGAGTTTGTTTGCAGTTCCCTCAGCTTGCTGGTAATTGTGGTG
TTTTGTTTTTTGTTTTGTTTTCAATGCAAATGTGATGTAATATTCTTATTTTCTTTGGATCAAAGCTGGACTGGA
AATTGTATCGTGTAATTATTTTTGTGTTCTTAATGTTATTTGGTACTCAAGTTGTAAATAACGTCTACTACTGTT
TATTCCAGTTTCTACTACCTCAGGTGTCCTATAGATTTTTCTTCTACCAAAGTTCACTTTCACAATGAAATTATA
TTTGCTGTGTGACTATGATTCCTAAGATTTCCAGGGCTTAAGGGCTAACTTCTATTAGCACCTTACTGTGTAAGC
AAATGTTACAAAAAAAGACAAGAAAAAAATCTCTGGGTTAAGAAAATTTGGCTTAAATGTATCCTTTGTTATTTT
AAATATATTGAGATATTTTAATTAAAATTTTTACCCCATTGAACCGATTTTATAGTATTTGTACCTATTTTGGTG
TTTTTGTCTTTATAGTAAATAAAAGTTTTTGAACAAAAAAAAAAGTCGACGCGG

FIGURE 4693

MAAAAGNRASSSGFPGARATSPEAGGGGGALKASSARAAAAGLLREAGSGGRERADWRRRQLRKVRSVELDQLPE
QPLFLAASPPASSTSPSPEPADAAGSGTGFQPVAVPPPHGAASRRGAHLTESVAAPDSGASSPAAAEPGEKRAPA
AEPSPAAAPAGREMENKETLKGLHKMDDRPEERMIREKLKATCMPAWKHEWLERRNRRGPVVVKPIPVKGDGSEM
NHLAAESPGEVQASAASPASKGRRSPSPGNSPSGRTVKSESPGVRRKRVSPVPFQSGRITPPRRAPSPDGFSPYS
PEETNRRVNKVMRARLYLLQQIGPNSFLIGGDSPDNKYRVFIGPQNCSCARGTFCIHLLFVMLRVFQLEPSDPML
WRKTLKNFEVESLFQKYHSKRSSRIKAPSRNTIQKFVSRMSNSHTLSSSSTSTSSSENSIKDEEEQMCPICLLGM
LDEESLTVCEDGCRNKLHHHCMSIWAEECRRNREPLICPLCRSKWRSHDFYSHELSSPVDSPSSLRAAQQQTVQQ
QPLAGSRRNQESNFNLTHYGTQQIPPAYKDLAEPWIQVFGMELVGCLFSRNWNVREMALRRLSHDVSGALLLANG
ESTGNSGGSSGSSPSGGATSGSSQTSISGDVVEACCSVLSMVCADPVYKVYVAALKTLRAMLVYTPCHSLAERIK
LQRLLQPVVDTILVKCADANSRTSQLSISTLLELCKGQAGELAVGREILKAGSIGIGGVDYVLNCILGNQTESNN
WQELLGRLCLIDRLLLEFPAEFYPHIVSTDVSQAEPVEIRYKKLLSLLTFALQSINNSHSMVGKLSRRIYLSSAR
MVTTVPHVFSKLLEMLSVSSSTHFTRMRRRLMAIADEVEIAEAIQLGVEDTLDGQQDSFLQASVPNNYLETTENS
SPECTIHLEKTGKGLCATKLSASSEDISERLASISVGPSSSTTNYYYNNRATKANGSNKRQTPQSVFELLSFISS
FPINVSSLVNPFFFYPICTSWHCNRCLKHRLQGFIPCRIPSASPQTQRKFSLQFHRNCPENKDSDKLSPVFTQSR
PLPSSNIHRPKPSRPTPGNTSKQGDPSKNSMTLDLNSSSKCDDSFGCSSNSSNAVIPSDETVFTPVEEKCRLDVN
TELNSSIEDLLEASMPSSDTTVTFKSEVAVLSPEKAENDDTYKDDVNHNQKCKEKMEAEEEEALAIAMAMSASQD
ALPIVPQLQVENGEDIIIIQQDTPETLPGHTKAKQPYREDTEWLKGQQIGLGAFSSCYQAQDVGTGTLMAVKQVT
YVRNTSSEQEEVVEALREEIRMMSHLNHPNIIRMLGATCEKSNYNLFIEWMAGGSVAHLLSKYGAFKESVVINYT
EQLLRGLSYLHENQIIHRDVKGANLLIDSTGQRLRIADFGAAARLASKGTGAGEFQGQLLGTIAFMAPEVLRGQQ
YGRSCDVWSVGCAIIEMACAKPPWNAEKHSNHLALIFKIASATTAPSIPSHLSPGLRDVALRCLELQPQDRPPSR
ELLKHPVFRTTW

FIGURE 4694A

GAATCTTTCCATGCCGCTGGAGCTCATCTGCTCCGATGAGCACATGCAAGGCAGCGGGAGCCTGGCCCAGGCTGT
CATCAGGGAAGTCAGAGCCCAGTGGAGTCGGATTTTCTCCACCGCACTCTTCGTGGAGCACGTGCTCCTAGGAAC
CGAGAGCCGCGTCCCCGAGTTACAGGGGCTGGTGACCGAGCACGTCTTCTTACTAGACAAGTGTCTTCGAGAGAA
CTCTGACGTGAAGACGCACGGGCCTTTTGAGGCCGTGATGCGCACTCTCTGTGAATGCAAGGAGACAGCCAGCAA
GACCCTCAGCAGGTTTGGGATTCAGCCGTGCTCCATCTGCCTGGGAGATGCAAAGGACCCCGTCTGTCTGCCCTG
CGACCACGTGCACTGCCTGCGCTGCCTCAGGGCCTGGTTTGCCTCAGAGCAGATGATATGCCCCTACTGTTTAAC
TGCCTTGCCAGACGAATTCTCTCCAGCTGTTTCCCAAGCGCACAGGGAAGCCATTGAAAAGCATGCCCGCTTCCG
GCAGATGTGCAACAGTTTCTTCGTAGACCTGGTGTCCACCATTTGCTTCAAGGACAACGCTCCGCCTGAGAAGGA
AGTGATTGAGAGCCTGCTCTCTCTCCTCTTCGTCCAAAAGGGGCGCTTAAGAGATGCTGCCCAGAGACACTGTGA
ACACACAAAATCTCTCTCTCCATTCAATGATGTTGTGGATAAGACTCCTGTCATCCGCTCAGTGATACTGAAACT
GCTTTTGAAGTACAGCTTTCATGATGTAAAAGATTATATTCAGGAATATTTGACCCTGTTAAAAAAGAAAGCATT
CATAACTGAAGATAAAACTGAACTGTACATGCTCTTCATCAACTGCCTGGAGGATTCAATACTTGAGAAGACCAG
TGCTTACTCCAGAAATGATGAACTGAACCACCTAGAAGAGGAAGGTCGTTTCCTTAAGGCATATTCTCCAGCAAG
CCGGGGCCGAGAGCCTGCCAACGAGGCCTCGGTTGAATACCTGCAAGAGGTGGCCCGGATCCGCCTCTGCCTCGA
CAGAGCTGCAGATTTCCTCTCGGAGCCTGAGGGAGGCCCAGAGATGGCCAAGGAGAAGCAGTGCTACCTGCAGCA
AGTCAAGCAGTTCTGTATCCGGGTGGAGAACGACTGGCACCGGGTGTACCTGGTGCGGAAGCTCAGCAGCCAGCG
GGGGATGGAGTTCGTGCAGGGCCTCTCCAAGCCCGGCCGCCCGCACCAGTGGGTGTTTCCCAAGGACGTTGTCAA
GCAGCAGGGGCTGCGGCAGGACCACCCAGGCCAGATGGATAGGTACCTGGTGTACGGCGATGAATACAAGGCTCT
CCGTGATGCTGTGGCCAAAGCTGTCCTCGAGTGCAAGCCACTGGGCATTAAGACTGCTCTGAAGGCCTGCAAGAC
CCCCCAAAGCCAGCAGTCAGCCTACTTCCTGTTAACACTGTTTAGAGAGGTGGCTATTTTGTACAGATCCCACAA
TGCAAGCCTCCACCCCACGCCAGAGCAATGTGAAGCTGTGAGCAAATTCATTGGCGAATGCAAGATCCTTTCACC
TCCTGATATCAGCCGTTTTGCAACATCGCTCGTGGACAATTCTGTGCCATTGTTGAGGGCGGGGCCTAGTGACAG
CAACCTTGATGGAACGGTGACAGAAATGGCCATTCATGCTGCAGCCGTCCTTCTGTGTGGACAGAATGAACTCTT
GGAGCCCCTAAAGAATCTGGCCTTCTCCCCAGCCACCATGGCGCATGCTTTTCTTCCAACCATGCCTGAAGACTT
GCTGGCTCAAGCTCGGAGGTGGAAGGGTCTGGAGCGAGTCCACTGGTACACTTGTCCCAACGGCCATCCTTGCTC
CGTGGGAGAGTGTGGCAGGCCGATGGAACAGAGCATCTGCATTGACTGCCATGCGCCGATTGGAGGCATTGACCA
CAAACCTCGGGACGGCTTTCATCTGGTCAAAGACAAGGCAGACAGAACGCAGACCGGCCATGTGCTGGGCAACCC
GCAGCGGAGAGACGTGGTGACATGTGACCGAGGGCTGCCCCCAGTGGTCTTCCTCCTTATCCGGCTACTCACTCA
CTTGGCTCTGCTTCTGGGAGCGTCCCAGAGTTCCCAGGCTCTGATAAACATCATTAAGCCTCCAGTGAGGGATCC
AAAAGGCTTTCTGCAGCAGCACATCCTGAAGGACCTGGAGCAGTTGGCCAAGATGCTGGGACACAGTGCCGACGA
GACCATCGGCGTGGTCCACCTCGTCCTGCGCAGGCTTCTCCAAGAGCAGCACCAGCTCTCTAGCAGAAGGCTTTT
AAATTTTGACACAGAATTGTCAACTAAAGAAATGAGGAACAACTGGGAAAAGGAAATCGCAGCTGTGATTTCTCC
TGAACTGGAGCATCTAGATAAAACCCTTCCCACCATGAATAATCTCATCAGCCAAGATAAGCGTATCAGCTCTAA
CCCTGTGGCCAAAATAATATATGGTGACCCAGTGACCTTCCTGCCCCACCTGCCCCGGAAAAGTGTGGTCCATTG
CTCTAAGATTTGGAGCTGCAGGAAAAGAATTACAGTTGAGTACCTCCAGCACATTGTGGAACAGAAAAATGGCAA
AGAAAGAGTGCCCATCCTCTGGCATTTCCTGCAGAAGGAAGCAGAGCTGAGGCTGGTAAAGTTCCTGCCTGAGAT
TTTGGCCTTGCAAAGGGATCTAGTGAAGCAGTTCCAGAACGTCCAGCAAGTTGAATACAGCTCCATCAGAGGCTT
CCTCAGCAAGCACAGCTCAGATGGGTTGAGGCAGCTGCTTCACAACAGGATCACAGTCTTTCTGTCCACATGGAA
CAAACTGAGGAGATCGCTTGAGACGAACGGTGAGATCAACCTACCCAAAGACTACTGCAGCACTGACTTGGATCT
GGACACTGAGTTTGAGATCCTCTTGCCACGCCGACGGGGCCTGGGCCTCTGTGCTACCGCTCTCGTCAGCTACTT
GATTCGCCTACACAATGAAATTGTCTACGCCGTGGAAAAACTCTCCAAGGAAAACAACAGCTATTCCGTGGATGC
CGCCGAGGTCACTGAACTGCATGTCATCAGTTATGAAGTGGAGCGGGACCTGACTCCACTGATTCTCTCCAACTG
CCAGTACCAGGTGGAGGAGGGCAGAGAGACCGTGCAGGAGTTCGATCTGGAGAAGATTCAGCGGCAGATCGTCAG
CCGCTTCCTCCAGGGCAAGCCCCGGCTGAGCCTCAAGGGAATACCCACTCTGGTGTACAGACACGACTGGAACTA
TGAACATCTCTTTATGGACATCAAGAACAAAATGGCACAGGACTCCCTCCCCAGCTCGGTCATTAGTGCCATCAG
TGGACAGCTGCAGTCCTACAGCGATGCCTGTGAAGTGCTGTCTGTCGTAGAAGTCACTCTGGGGGTTTCTGAGCAC
AGCTGGTGGGGATCCAAACATGCAGCTGAATGTGTATACTCAAGACATCCTGCAAATGGGTGATCAGACGATTCA
CGTGTTAAAGGCCTTAAACAGATGCCAGTTAAAACACACCATTGCCCTCTGGCAGTTCCTGTCTGCTCATAAGTC

FIGURE 4694B

TGAACAGCTGCTGCGGCTGCACAAAGAGCCATTTGGGGAAATCAGTTCAAGGTACAAAGCGGATCTGAGCCCGGA
AAATGCTAAGCTCCTCAGCACATTCCTAAATCAGACTGGCCTAGACGCCTTCCTGCTAGAGCTGCACGAAATGAT
AATCTTGAAACTAAAGAACCCCCAAACCCAAACCGAGGAGCGCTTCCGCCCTCAGTGGAGCCTGAGAGACACTCT
CGTAAGTTACATGCAAACTAAAGAAAGTGAAATTCTTCCTGAAATGGCATCTCAGTTCCCAGAAGAGATACTGCT
CGCCAGCTGTGTCTCAGTGTGGAAAACAGCTGCTGTGCTGAAATGGAATCGAGAAATGAGATAGAATTATTTCCT
CAGCTATCTTTGGATGACTTTGGAGAGAAGACTCCTCTCTCCTCGTCTGCGGCGTGGACTTGATCATGGACTGGT
GCCTTTGCATTCAGAAGGAGAGCTGTCAGCGTAGCACCGAATTCAAGACCAAGGCGTGCTACCTGAGCTGACAGC
TTTTTGAAAGCCGAGCTGTTTCTGAACCATGTACATACATGTTCTGAAACTTTCTCATCATTTTATGAGTACTGT
TCATTGAGAGATGACAATGAAGATTAGATGAAATTGGAAATAAACCAACATTGTTTACATTCCAGGAGACTTGTA
GCTCAGCCACACACGCAGTAATGACCTGTGCCCGTTCGCCTCTGGCACTGCCCACCCCTCTTTTTTTTTTTCTTC
TAATTCTGTACTCACAAAAGAGAATCTCATTTTCTTCTTTCTTCCATTCCCTTAAATTCTGAGTACTGTACATAT
ATTTCTGGGTTCCCACGATGATGTGAAAAACTACCAGACTGTTTTTTGTCTTCTCACAAAGACAAGAAAAATCAG
GGCATTTTGTGAGTGCCTTAAGATCAAACTAACAAGATCTGACCCTCTCCCCTCACAGTGAGCCACTGCCCCACT
TCAGAGGGTAAGAGCCAAAAGCCTCATTGTGAAAGGCACTGGACTTGGACCAGGGACACCATCAGGGCCTTGGTT
TTCTCACGCATAAAATGGAGAGTGGATTAATCGCCAAAGATTCTTCTGATCTGACATTTTGAAATTGTGAGAGAA
ACTAGATGACTGTAAACTTGGTCACAGGCCTGGTTCTGGCAGTTCTTTGCGGACTTTTTTCTAGCATTATGCCAA
ATAAACATGCAGTCTCAGTGTGCTCTCGCATGTATGAATATCTAGTCCTTTCTGTGGTTCTCAGCCAAGACATAA
AAACTAGGACTCAGAGCACATACAAAACCAGTTATGTTTCGGAAAGAGGGAAAAGAGTCCCCGAGCCCGGATCTT
GTGCTGCTTTTCTCACTGACGTGTTGCCTTTTTTCTTTACAAAATCTGCTTTGATACTTAGGACCTCTCTGGACT
AATTTCTCTTCCTAGACAGCTCAGCACAGCTATTGATATGTTAGAGGCAGTATCCTTAATATTCATTCTAAATGA
GTTAACGACTTAACTTGAAATTGGGCCTAAGGAGTGAGAACTACAAAAATACAAAATGCTTGTCCAGGACTCAGC
CATGCACACCTTGAGCAGCGCCGGCAGGAGGCACGGAAGGAACTGTGCTCCGTTCTCCTCACTGTCATGGTGCCA
CCAGTGTCTGATGAAGGGCAGAGTGACCCAGACTGCAGGCAGTAACTGACTTCACACAGTCCCTGGCATTTAGTC
ATCTGTGATTGTTTTATCACTCTGGACTGTGCAGAGCCACCTGCCACCGAGATCTGCATTCCGACTGCCTATGAA
CGGGTGTGGGGGCCGGGGGCTGGCTTGCTGAAGTCTTCAACTTGCACTCGGAGCTCCTTTGATACCTCAGAGCTG
GCTGTCAGGTGGCAGCTCACACCCAGACTCACTGGCCACACCTCAGCAGGGGGGGAGTCGAGTGTCAGTCTCTTT
CTGTGAAGGCTTTTTTTTCCTTTGGCCTGGGAATTTTTCCCATTTTTATGAAGGGGTTTTAAATTGTTTCATTT
TGTGTGCTGTGCTTCAAAGCCTTAACTGTCAAATCTTGCATTATCTTGTTTGTACAGAAATATACTGGCCTAGCA
GAGGC

FIGURE 4695

NLSMPLELICSDEHMQGSGSLAQAVIREVRAQWSRIFSTALFVEHVLLGTESRVPELQGLVTEHVFLLDKCLREN
SDVKTHGPFEAVMRTLCECKETASKTLSRFGIQPCSICLGDAKDPVCLPCDHVHCLRCLRAWFASEQMICPYCLT
ALPDEFSPAVSQAHREAIEKHARFRQMCNSFFVDLVSTICFKDNAPPEKEVIESLLSLLFVQKGRLRDAAQRHCE
HTKSLSPFNDVVDKTPVIRSVILKLLLKYSFHDVKDYIQEYLTLLKKKAFITEDKTELYMLFINCLEDSILEKTS
AYSRNDELNHLEEEGRFLKAYSPASRGREPANEASVEYLQEVARIRLCLDRAADFLSEPEGGPEMAKEKQCYLQQ
VKQFCIRVENDWHRVYLVRKLSSQRGMEFVQGLSKPGRPHQWVFPKDVVKQQGLRQDHPGQMDRYLVYGDEYKAL
RDAVAKAVLECKPLGIKTALKACKTPQSQQSAYFLLTLFREVAILYRSHNASLHPTPEQCEAVSKFIGECKILSP
PDISRFATSLVDNSVPLLRAGPSDSNLDGTVTEMAIHAAAVLLCGQNELLEPLKNLAFSPATMAHAFLPTMPEDL
LAQARRWKGLERVHWYTCPNGHPCSVGECGRPMEQSICIDCHAPIGGIDHKPRDGFHLVKDKADRTQTGHVLGNP
QRRDVVTCDRGLPPVVFLLIRLLTHLALLLGASQSSQALINIIKPPVRDPKGFLQQHILKDLEQLAKMLGHSADE
TIGVVHLVLRRLLQEQHQLSSRRLLNFDTELSTKEMRNNWEKEIAAVISPELEHLDKTLPTMNNLISQDKRISSN
PVAKIIYGDPVTFLPHLPRKSVVHCSKIWSCRKRITVEYLQHIVEQKNGKERVPILWHFLQKEAELRLVKFLPEI
LALQRDLVKQFQNVQQVEYSSIRGFLSKHSSDGLRQLLHNRITVFLSTWNKLRRSLETNGEINLPKDYCSTDLDL
DTEFEILLPRRRGLGLCATALVSYLIRLHNEIVYAVEKLSKENNSYSVDAAEVTELHVISYEVERDLTPLILSNC
QYQVEEGRETVQEFDLEKIQRQIVSRFLQGKPRLSLKGIPTLVYRHDWNYEHLFMDIKNKMAQDSLPSSVISAIS
GQLQSYSDACEVLSVVEVTLGFLSTAGGDPNMQLNVYTQDILQMGDQTIHVLKALNRCQLKHTIALWQFLSAHKS
EQLLRLHKEPFGEISSRYKADLSPENAKLLSTFLNQTGLDAFLLELHEMIILKLKNPQTQTEERFRPQWSLRDTL
VSYMQTKESEILPEMASQFPEEILLASCVSVWKTAAVLKWNREMR

FIGURE 4696A

GAATCTTTCCATGCCGCTGGAGCTCATCTGCTCCGATGAGCACATGCAAGGCAGCGGGAGCCTGGCCCAGGCTGT
CATCAGGGAAGTCAGAGCCCAGTGGAGTCGGATTTTCTCCACCGCACTCTTCGTGGAGCACGTGCTCCTAGGAAC
CGAGAGCCGCGTCCCCGAGTTACAGGGGCTGGTGACCGAGCACGTCTTCTTACTAGACAAGTGTCTTCGAGAGAA
CTCTGACGTGAAGACGCACGGGCCTTTTGAGGCCGTGATGCGCACTCTCTGTGAATGCAAGGAGACAGCCAGCAA
GACCCTCAGCAGGTTTGGGATTCAGCCGTGCTCCATCTGCCTGGGAGATGCAAAGGACCCCGTCTGTCTGCCCTG
CGACCACGTGCACTGCCTGCGCTGCCTCAGGGCCTGGTTTGCCTCAGAGCAGATGATATGCCCCTACTGTTTAAC
TGCCTTGCCAGACGAATTCTCTCCAGCTGTTTCCCAAGCGCACAGGGAAGCCATTGAAAAGCATGCCCGCTTCCG
GCAGATGTGCAACAGTTTCTTCGTAGACCTGGTGTCCACCATTTGCTTCAAGGACAACGCTCCGCCTGAGAAGGA
AGTGATTGAGAGCCTGCTCTCTCTCCTCTTCGTCCAAAAGGGGCGCTTAAGAGATGCTGCCCAGAGACACTGTGA
ACACACAAAATCTCTCTCTCCATTCAATGATGTTGTGGATAAGACTCCTGTCATCCGCTCAGTGATACTGAAACT
GCTTTTGAAGTACAGCTTTCATGATGTAAAAGATTATATTCAGGAATATTTGACCCTGTTAAAAAAGAAAGCATT
CATAACTGAAGATAAAACTGAACTGTACATGCTCTTCATCAACTGCCTGGAGGATTCAATACTTGAGAAGACCAG
TGCTTACTCCAGAAATGATGAACTGAACCACCTAGAAGAGGAAGGTCGTTTCCTTAAGGCATATTCTCCAGCAAG
CCGGGGCCGAGAGCCTGCCAACGAGGCCTCGGTTGAATACCTGCAAGAGGTGGCCCGGATCCGCCTCTGCCTCGA
CAGAGCTGCAGATTTCCTCTCGGAGCCTGAGGGAGGCCCAGAGATGGCCAAGGAGAAGCAGTGCTACCTGCAGCA
AGTCAAGCAGTTCTGTATCCGGGTGGAGAACGACTGGCACCGGGTGTACCTGGTGCGGAAGCTCAGCAGCCAGCG
GGGGATGGAGTTCGTGCAGGGCCTCTCCAAGCCCGGCCGCCCGCACCAGTGGGTGTTTCCCAAGGACGTTGTCAA
GCAGCAGGGGCTGCGGCAGGACCACCCAGGCCAGATGGATAGGTACCTGGTGTACGGCGATGAATACAAGGCTCT
CCGTGATGCTGTGGCCAAAGCTGTCCTCGAGTGCAAGCCACTGGGCATTAAGACTGCTCTGAAGGCCTGCAAGAC
CCCCCAAAGCCAGCAGTCAGCCTACTTCCTGTTAACACTGTTTAGAGAGGTGGCTATTTTGTACAGATCCCACAA
TGCAAGCCTCCACCCCACGCCAGAGCAATGTGAAGCTGTGAGCAAATTCATTGGCGAATGCAAGATCCTTTCACC
TCCTGATATCAGCCGTTTTGCAACATCGCTCGTGGACAATTCTGTGCCATTGTTGAGGGCGGGGCCTAGTGACAG
CAACCTTGATGGAACGGTGACAGAAATGGCCATTCATGCTGCAGCCGTCCTTCTGTGTGGACAGAATGAACTCTT
GGAGCCCCTAAAGAATCTGGCCTTCTCCCCAGCCACCATGGCGCATGCTTTTCTTCCAACCATGCCTGAAGACTT
GCTGGCTCAAGCTCGGAGGTGGAAGGGTCTGGAGCGAGTCCACTGGTACACTTGTCCCAACGGCCATCCTTGCTC
CGTGGGAGAGTGTGGCAGGCCGATGGAACAGAGCATCTGCATTGACTGCCATGCGCCGATTGGAGGCATTGACCA
CAAACCTCGGGACGGCTTTCATCTGGTCAAAGACAAGGCAGACAGAACGCAGACCGGCCATGTGCTGGGCAACCC
GCAGCGGAGAGACGTGGTGACATGTGACCGAGGGCTGCCCCCAGTGGTCTTCCTCCTTATCCGGCTACTCACTCA
CTTGGCTCTGCTTCTGGGAGCGTCCCAGAGTTCCCAGGCTCTGATAAACATCATTAAGCCTCCAGTGAGGGATCC
AAAAGGCTTTCTGCAGCAGCACATCCTGAAGGACCTGGAGCAGTTGGCCAAGATGCTGGGACACAGTGCCGACGA
GACCATCGGCGTGGTCCACCTCGTCCTGCGCAGGCTTCTCCAAGAGCAGCACCAGCTCTCTAGCAGAAGGCTTTT
AAATTTTGACACAGAATTGTCAACTAAAGAAATGAGGAACAACTGGGAAAAGGAAATCGCAGCTGTGATTTCTCC
TGAACTGGAGCATCTAGATAAAACCCTTCCCACCATGAATAATCTCATCAGCCAAGATAAGCGTATCAGCTCTAA
CCCTGTGGCCAAAATAATATATGGTGACCCAGTGACCTTCCTGCCCCACCTGCCCCGGAAAAGTGTGGTCCATTG
CTCTAAGATTTGGAGCTGCAGGAAAAGAATTACAGTTGAGTACCTCCAGCACATTGTGGAACAGAAAAATGGCAA
AGAAAGAGTGCCCATCCTCTGGCATTTCCTGCAGAAGGAAGCAGAGCTGAGGCTGGTAAAGTTCCTGCCTGAGAT
TTTGGCCTTGCAAAGGGATCTAGTGAAGCAGTTCCAGAACGTCCAGCAAGTTGAATACAGCTCCATCAGAGGCTT
CCTCAGCAAGCACAGCTCAGATGGGTTGAGGCAGCTGCTTCACAACAGGATCACAGTCTTTCTGTCCACATGGAA
CAAACTGAGGAGATCGCTTGAGACGAACGGTGAGATCAACCTACCCAAAGACTACTGCAGCACTGACTTGGATCT
GGACACTGAGTTTGAGATCCTCTTGCCACGCCGACGGGGCCTGGGCCTCTGTGCTACCGCTCTCGTCAGCTACTT
GATTCGCCTACACAATGAAATTGTCTACGCCGTGGAAAAACTCTCCAAGGAAAACAACAGCTATTCCGTGGATGC
CGCCGAGGTCACTGAACTGCATGTCATCAGTTATGAAGTGGAGCGGGACCTGACTCCACTGATTCTCTCCAACTG
CCAGTACCAGGTGGAGGAGGGCAGAGAGACCGTGCAGGAGTTCGATCTGGAGAAGATTCAGCGGCAGATCGTCAG
CCGCTTCCTCCAGGGCAAGCCCCGGCTGAGCCTCAAGGGAATACCCACTCTGGTGTACAGACACGACTGGAACTA
TGAACATCTCTTTATGGACATCAAGAACAAAATGGCACAGGACTCCCTCCCCAGCTCGGTCATTAGTGCCATCAG
TGGACAGCTGCAGTCCTACAGCGATGCCTGTGAAGTGCTGTCTGTCGTAGAAGTCACTCTGGGGTTTCTGAGCAC
AGCTGGTGGGGATCCAAACATGCAGCTGAATGTGTATACTCAAGACATCCTGCAAATGGGTGATCAGACGATTCA
CGTGTTAAAGGCCTTAAACAGATGCCAGTTAAAACACACCATTGCCCTCTGGCAGTTCCTGTCTGCTCATAAGTC

FIGURE 4696B

TGAACAGCTGCTGCGGCTGCACAAAGAGCCATTTGGGGAAATCAGTTCAAGGTACAAAGCGGATCTGAGCCCGGA
AAATGCTAAGCTCCTCAGCACATTCCTAAATCAGACTGGCCTAGACGCCTTCCTGCTAGAGCTGCACGAAATGAT
AATCTTGAAACTAAAGAACCCCCAAACCCAAACCGAGGAGCGCTTCCGCCCTCAGTGGAGCCTGAGAGACACTCT
CGTAAGTTACATGCAAACTAAAGAAAGTGAAATTCTTCCTGAAATGGCATCTCAGTTCCCAGAAGAGATACTGCT
CGCCAGCTGTGTCTCAGTGTGGAAAACAGCTGCTGTGCTGAAATGGAATCGAGAAATGAGATAGAATTATTTCCT
CAGCTATCTTTGGATGACTTTGGAGAGAAGACTCCTCTCTCCTCGTCTGCGGCGTGGACTTGATCATGGACTGGT
GCCTTTGCATTCAGAAGGAGAGCTGTCAGCGTAGCACCGAATTCAAGACCAAGGCGTGCTACCTGAGCTGACAGC
TTTTTGAAAGCCGAGCTGTTTCTGAACCATGTACATACATGTTCTGAAACTTTCTCATCATTTTATGAGTACTGT
TCATTGAGAGATGACAATGAAGATTAGATGAAATTGGAAATAAACCAACATTGTTTACATTCCAGGAGACTTGTA
GCTCAGCCACACACGCAGTAATGACCTGTGCCCGTTCGCCTCTGGCACTGCCCACCCCTCTTTTTTTTTTTCTTC
TAATTCTGTACTCACAAAAGAGAATCTCATTTTCTTCTTTCTTCCATTCCCTTAAATTCTGAGTACTGTACATAT
ATTTCTGGGTTCCCACGATGATGTGAAAAACTACCAGACTGTTTTTTGTCTTCTCACAAAGACAAGAAAAATCAG
GGCATTTTGTGAGTGCCTTAAGATCAAACTAACAAGATCTGACCCTCTCCCCTCACAGTGAGCCACTGCCCCACT
TCAGAGGGTAAGAGCCAAAAGCCTCATTGTGAAAGGCACTGGACTTGGACCAGGGACACCATCAGGGCCTTGGTT
TTCTCACGCATAAAATGGAGAGTGGATTAATCGCCAAAGATTCTTCTGATCTGACATTTTGAAATTGTGAGAGAA
ACTAGATGACTGTAAACTTGGTCACAGGCCTGGTTCTGGCAGTTCTTTGCGGACTTTTTTCTAGCATTATGCCAA
ATAAACATGCAGTCTCAGTGTGCTCTCGCATGTATGAATATCTAGTCCTTTCTGTGGTTCTCAGCCAAGACATAA
AAACTAGGACTCAGAGCACATACAAAACCAGTTATGTTTCGGAAAGAGGGAAAAGAGTCCCCGAGCCCGGATCTT
GTGCTGCTTTTCTCACTGACGTGTTGCCTTTTTTCTTTACAAAATCTGCTTTGATACTTAGGACCTCTCTGGACT
AATTTCTCTTCCTAGACAGCTCAGCACAGCTATTGATATGTTAGAGGCAGTATCCTTAATATTCATTCTAAATGA
GTTAACGACTTAACTTGAAATTGGGCCTAAGGAGTGAGAACTACAAAAATACAAAATGCTTGTCCAGGACTCAGC
CATGCACACCTTGAGCAGCGCCGGCAGGAGGCACGGAAGGAACTGTGCTCCGTTCTCCTCACTGTCATGGTGCCA
CCAGTGTCTGATGAAGGGCAGAGTGACCCAGACTGCAGGCAGTAACTGACTTCACACAGTCCCTGGCATTTAGTC
ATCTGTGATTGTTTTATCACTCTGGACTGTGCAGAGCCACCTGCCACCGAGATCTGCATTCCGACTGCCTATGAA
CGGGTGTGGGGGCCGGGGGCTGGCTTGCTGAAGTCTTCAACTTGCACTCGGAGCTCCTTTGATACCTCAGAGCTG
GCTGTCAGGTGGCAGCTCACACCCAGACTCACTGGCCACACCTCAGCAGGGGGGGAGTCGAGTGTCAGTCTCTTT
CTGTGAAGGCTTTTTTTTTCCTTTGGCCTGGGAATTTTTCCCATTTTTATGAAGGGGTTTTAAATTGTTTCATTT
TGTGTGCTGTGCTTCAAAGCCTTAACTGTCAAATCTTGCATTATCTTGTTTGTACAGAAATATACTGGCCTAGCA
GAGGC

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FIGURE 4697A

GAGGGAGTTATAATTTTAAAGGTATGCTCTGGCTGTTCCACCTCCGTGTGCTTGTTAATTAACTTGTAGGACTTT
GACTGTAAGATGTGAAACCACGTTTCTTGCATGATGTTTTAGAGATTATTTCATTTACAGTCTTTTAACCTGCAG
CTGCAGCACTTAGTTCACGTTTTCACAAATTTCAAGAGTCACTACACTAAAGACAATGCCTTTTCATGAATAAGA
AGTTTTCAGAAGGCTCTAGGGGGCTGGGAGGCAGGCTGTTCGTTTGTCTTTTGTTGGGGGTATCATTTCTGAACT
TGAAATCCAGTTCAGGGAGAAGAGAATTCAAAATTAGAGGAGCTTAAGGGGACACGGGTCAACATCTAGCTCGAT
TCAGGTGCATTGAGAAGAGTGAGTTCACATCGGTGACCCTTAGGACAGTGAGTGGCAGAGCCCTGACGACTGTGG
TGTCCTCTCCACAAAACCCTCAAGGGACTTTTGTCATCATGTGTGATGAATCTTTAAATATCGTCTAATTTTCAT
AAGAATGAAAAGAAGTTAACAGGAAATAGTAGGCTAGGGTTTAGTTTTAAAGGCATGACTGTTATTTACAAAGGT
GTTAAATCTGAGGAAATTGACAAATACAGATTTGTCCATTCTAGTGGCCAAACAGTAACAGTCTAAAATGCAGTC
ATTTTGACCCTCCCAAGCAATTTAGTCATATGTGTTGTTTTCTCTTTTCTGTTTTTACTTCTTAGATTTTTAACT
AGGTTACTGTTGGTTCCCATTCTGTCTTTTTTGCCAGACTTACATCTGGTGCCAGATACAATCAGTTGGTTAAAT
TTTGCTTGCAGTTCTGTGTATTTTTTTTCCTCTATTANNNNNNNNNNNNNNNNNNNNNNGAGATCCTAACCTTAG
ATCTTTGATGTGAAGCTAGCACTGTCTGTAATACTTCTAAGAGCTGCCACTAAAATAATACAGCAATCCGTGGCC
AGGGGAGCACCCCCTCCTGGTTGGGCCCCTCAGTTGGAGTCTAAGGGTTAATCTCTCATCTTGCTAAGCAGTATT
CAAGTGCCTTGAACAGTGTCCCCTCGGCATGGCTCCCCTTCAGCAGGCTGGCATTCCAAGCAGTGGCCCCCGCAG
GCAGCCGACCCCCTTCCTCTTCACGCTCTATGAGTTTAAAAAGCTGATTTGTACCTCTCCCCTGGGGGAAACGGT
TCCATATAAAACACTAACACTTAATTACAAGCTCCATTATGCCATTTTAAATGGCTTCTTTTTGTTAATTGGAGG
CATTGTTCATAACTTAAGGCTTTTGCCATTAACTTAGCTGGCTAAGCAGAGGCTTGGGGTAAAATCAGTGTTTGC
ATTTAGCCTCTTGACCCGGAGTTCCGGCCCAAGCTCCCTTGTGATAGCCGAGATGGCAGGTGTGTGAGTTCTGTC
CTAGACCTGTGCCCAACTCACTTCCACCCCAGAGGAGTCTTCTGTCCTCCTCCCCAACCCCCGAGCTCCCTGGTA
ACCTCCTCTTGAACTTCTGTATCAGTGAAGACATCTGTGGTTTCTGCTCACCAGACCTCTCTTTAGAAAGGGTTA
TCAGAGCCATGGAGCTTAGCTCAATTGGATTCTTCTAGACGATCTTAGGAGGCATCTTGGCATGAGGCAGCTTCT
AAGCGTCTCCTGGGACAGGATTGGGGTGACAGCCCAGGGATGCATGCGTGGGAGAACTCTCTGAGAAATGCCAGG
ATCGTGGCTCACAGGGACCCACCATCAAAACCTGCTACTTTGTGCAAGTAATTGAGGCAAAAGATACCAGTCGAC
AGCCTCCCTGGGGTAGATCCCTTGTACCTCCAAAGTACAAATACCTCCCTGCTCAGTTTCCTTCCTGTCGCCATC
TTTGTTTTCTTCCCATTGAAAAACCATCCTGTCTGATGTGGACGTTCAGGTCTGCTGGTTGGCGGTCCGGGCCCA
GAGTGCAGCAGAGCTCTGGGTTAAATATTCCTTTCTGGCCACCGCCCAAGCCCAGGTGGCCAGCTCTCATACCCC
ATCTCCCTCCTTGGCCAGGGCCAGCATCAGGCGTGCAGCTCATGACCAGTTTACACAGGCTGCAAAGAGATCGCT
GTGGGCCTCGGCTGACTACTTTAAGATTATGCCACAGCCAGGCCCTAAAAAGAGAGGGGAACAGGAGTCCCCAGG
TGAGCTCTCTGACGGGCAGGTGCCTTCCCGACTAAGGTTGGACTGGATGACTTTGTTCCTCCTGCATGCATGTCC
TTTGATGCAAGGGTGATCAATGAACTCTGTTGACATTCTATGCAATGTTTTTCATTCCTCTGATTTTAGCAAAGC
AAATCTTACTGAAAAATAGCAGAGCCAGGGGAACAGACGCATGTCCTTCTGGGAGTCACACAAAGCAGAGAGATT
TTGAACTGAGGGGCGACAGCCTTTGCCTTAAATGCAGTATGACAGGCGCTTCTTGGCAGACCAGTAAAAACAAAA
GCCCATAGACCTTACTCATCCCAAGGCCGACAAGCCAGCTGTACAGGGCGAGATGTAGCAACACGGGGCATGAGC
GGTGGGCGTGCTGGGCTATTTGCTGTGGTACTTTAGGCTGGAGGTTTGGCTCCTGTGCTGCCGGTGGGGGGCCCT
GTCCCTCCCCAGATGTCCTCCCTCTTCTTCACACTCCTCATTGTCCCTTCTACCTCACTAACCTGTCTTCTCCAT
CTGATGTCACCCAGAACCACACCCCACAGAACTGTGAGGCACGTGGGCTGGAGAGAGCAGAAAAGCTGCCAGCGC
AGCAGACACGAACATCCCTCTGCCTGGTGGGCCGGCTTTGTGTGTCTCTCCTTTTGTGAGCGCAACACGGACAAA
CAGCTGTGCTCTGCAAGGCACACGGATGTTTCCCTTCCACCTGTTCCCAAAGCTCCAGCAGCTGTTTCTTTTGCA
GGCAGGGCGTGGTCTCGGGGCTCCGAGGGTCTTGTCTTTGGTCCGCCTTCCTTTCTGTCCAGTCCTGCTCAGCTG
TTAAGATCCATCATGGCCATTATCCTTGTCCCGGACTGCCCCAAAGTTCCCAGCTGGCTTTGGGGAACACTGTAG
CTCTTGGGTGTCTCTTGTCTCTGGCATGGTTTTAGCGTCACTGCGAACACTCCTTTGCAAACATCAAACATCTCA
AAGACGGAAAAGGATAGATGGCTTCCTCCAGCCTACACGCCCCGTCCACAGTGGCATCACCCTCTTATCCCAAAA
GAATATGCCAGTTCCCATCCAGCACCGAAGAAAATCAGCTCCTGGGGCTGGTGGTTGGAGGTGGGTCTGTCCACT
GTGGGGGCCAAAGTGTTCCCCTGCTGGAGACAGTTTGCAAGTAAGAACCTAAGGATGGGGACAGCATCCTGTGCT
TGGGCATTGACCAGCCAAAGCTCACATTTAGAAATCCCTCAGTGCTTCTGTGGTTTCACCTGGGCATCGACGACA
TTAGGGAAGCCTTTGTGACCACAAGGGCAGGGCTTGTGCCCTGAGTGGCGAGGTGGTGACCTGAGGCCAGTGTGA
TGTGGTTGGATCTCAGCGTGTACTGAATGCCAGTCTGGCCGGCACACTCGAACGCTAAGAGAATGGTCCAATTTG

FIGURE 4697B

ATGATCTTATTTCTATTTCGATCAGGTTTTGACTTTTTGTAGATGAAAACTACCAGGGAAAAGGGGAAGCAGGTA
CCCAATAAAGTTTAGAAAGATCCAGTCTGTGAAACCCTTAGAGATGGGCTGAAAGTTAAGTCCACCAACCCTTGG
GCTTAATCAGGACGGAAGAGGAGGGGGTGTGGGGGGCAGAGCGTAAAACAAGCCCCAGCCCTACTCCCGGCCCCC
CAGCCCAGTCTTCCCAATCCCAGAGGCCCCGGCGGCCTGTGCTCCTCACCACCCTGGTCAGGGGAATAGAAGGAA
ATGCAATTTCCGCCTGTCTGCCCGACTTCCAAAAACTGCCTCCTCCTGCCCAGGCCTCTCCCACCACCACCTTCC
CTCCAAAGATAACCGTGTCCATGCCATCCGTGGCATCATCTCGAGTTTTCATTTTTGGATGAAGTGACATTTAGC
TTTAACAAGACATTTCCAAAGCGCCTAGTCTCCTCCAAAATGCTAACTTTAAAAGTTGGGCATTGTAGGCGAAAA
ATCCCNNNNNNNNNNNNNNNNNNNNNNNNNNGGGCTGGCGAGAGAAAGACATTTGGCTATGCATAAATGTGCACT
TCCCCCATGCCCCCGTTCTTAAACTCTTAAGATGCCTTTGAGTTGCTTTTCATGAATCCTTTTAGTTTACCCGAT
AATGTTAAGAAAGCATTAGTCTACGTTACTGTAATTTCTGTAGTGTTTACGCTTTAATTTCTACCACAAAATATG
CTATATGCTATGTATCAAGCTTTCTGTAATCAGAAAGAAAAGGTGCCTTATATCCCAATGTCACGGCTACATCCC
TATGGAAATTAATCAGAAGCACAGTGTGTACGGAAGCATTGGGACTTCTGCTGGTGAAACAAGAGACCATTCAGC
AAGACACATTGAAGTGGCACGGAGCTGCTTTTGTTTTATAATTCTTTTTTCCCCCCTTTTCCTTCTTCTTTTTTA
TTATTTTATTATTTTTTTTGTACTTTGCTTTAAACGGAAAGCACTTAAATAGATGACTATGTGTAAAAGCTCTGT
GCAATTGAAATCATTTTTCTTCATTTTAAAAAAATAACGTATTGCACACCAAATGAACTCAAAGTAAGCTTTAGA
CCAGGACGATTCAGGTTATGAATGAGTTTGTTCACTGTAGTTCCGTTTGTTCATGAACCGAAGGGAAAACAGGCC
TCCCCGACTCCCTCCAGTCTCCCAGCCTGCCTCTTGGTGACCACTGTGCTGGGCGTGCAGGGCCCGCGGGCTCTG
GCCGGAGCCGCTGGCCTGACGAGGCAGGATAGGGAGTATCCGTGATTCAGAAGCTGAGACCCTTCCCCAGTGTCT
GAGGCCACAGCCATCCCTTCCAGCACTTAATCTTGTCTTGTTGAAATGGACTGACTGCTACTGACCTGCCGGCGT
GCGTGAGGGTGATTATAAAAGGATGTTTCCTTGAGAAAAAAAAAATTATTTCTATCCTCTTCTATTTATTATTAG
GTTAATCATTTAAGTACTTATCAGGAGTGTATTGTTATTTTGTGTTTTGTTGTCATAAATGCTTTTTGCTGTCAC
TCTAGTGGTTACTATCCTCTGCCTTCCTCTCCTCCCCTACTCCCCCAGAGAACCAAGGCGTCTGGGGGATTGACT
GGGGGGCAGAGGGGGTTTCCCCAGCAAAATCAAACACCTGTCTCCAGAGTAGCCACTCAAAAACTGGTGGTCTCT
ATGTGTCTAACTTTTTAAATGAGAGTGTTTATGAACAAAAAAATTTACCAACGTGTGAGGGAGTTGCTGAGTTGA
AGAATGCTCGCTCGAGGAGCTTCAGAGGAATCTTAGCAAAGCCAAGTTCAGTTCCCCAAAGCCTCCTAGAGCCTC
TGGTAAGACTTCTGGGTTCATGAAGTTTCGGCGAGCCGTGGTCAGAGAGGGCGCGGTGGCCTGGCCAAGACTTTA
CCTCCAAGCGAGAGAGTGATTTCTTCCAAGGCCCGCACGGGTTGATACGTTTTGGTTGGTTTTTTGTTGTTGTTT
TTCTTGCGTACAAAGTTGGTCAAAACCATCTTTCAAAGCAACAGTGTTTTGTAGTACCAGGCTGTGGCTTGAGGG
CTCACCTAGGAGATCATAGGCAGAGGGCCCCTTTCCCCTATAGGTGGTTCAACGTGGAGGAAGGTTGGGTGTGGA
GATTGCTTGCTGTGGCCCCAAGCTCAGCCAGCAGGACACCCAGTTGTTGCCAATCAGGTGTGAAGGTGAGGCGCC
CTGCCTTGATCCCATGGGCCCAGCAGAAGGAAACTTACCCCAGGCCAAGGCAAGGGCCCTGCTCACCCCAAGGTA
GGCTGGGAAGAGCATCTCTTTCCATATCATCACCTCCCCTTCTCCAAGATTGCCGGGGGCCCTGATTTTGTTCTC
TCTTTGAAAGAAACCCTCCACCGAAACAATGGTCCCCATCTCCCCAGAAGCCTTTTTTTTTTTCATTTTTCTCTA
ATTAGTCTATGCATTTCTCTCTCTCAAACCATCTTCTGCCTCTTCCCTTGAGAAAACGGGCATCTCACGTACCCC
CATCTGAGACCTCTTGGAAAAAAAAAATCCCGTGTATTCTGGAGATGTGAGAATTCACCCAAAATTCTTAAAACA
TTGGAGAATAGCTTGTTATAAAATAAAAGTGGGGGTAAAAAGAAGGTGGTTTTCCCCACATCCCTTTGCATTGAA
TAAGAGACCTAGTTCTTTGCGTTTGTGCAATAACTCTTTGCTGCTTGCCTTGAGAGCGGGTAGCACCACGCTCCT
GTCCAGACTACTAACAGCACAAGACGCACTCACAGGGTGGCGGAATCTTCCGGAAAACTCTCTATAAGCTCAGCT
CCCCCCACCCCACCCCCACTCTAGCGTTTTGTCACGTCTTACATTTTAGCAGTATTTTATATTTTCTGTAACGCA
CCAAGTCTTAGATCTTTCTAGAGCTTGTTTGTTCATCCTCACAATCACAGATTTTTTTCTCCAATCCTCACAGAG
ACCCAATTGACCNAAAAAGCAAAAAGGANAAANNAAAAGTCGTCTTTTNTNTTTTTTTTTTGTACAAATCGCTTT
GAGATGCCTCTGGTGTGTTGCTGTGTGACATCTCTCTGGTAACATTTTATTTCTTGCTATTTGTTTTTCTACATT
AAGAGTCAAAGTTGACCTGGCTGGCGTGGGGGTGGGGGAGGCACCCGTCGGCCCCTTGGTGTTGTCCCTCTGTCT
TTGGTTAGCCATACGATGTTTGTTCTCAGCACTGTACAACGGTCCCTATATAATACGGAGAAGCAATATCACTGT
ATGAGACTCACACCATGTATTATTATTCACTAGCACCCTAGGTGTGATAATTGAAGTAAATATCTTTTATACAAA
CACAAA

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FIGURE 4698

EGVIILKVCSGCSTSVCLLINL

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FIGURE 4699

TACAAAAAAAAACTTATAAAATGTTTAAAAAAATGTTCAAAGCTTGGGAGAAAAGCTTTCTTCATTAGTCAAGGT
GTTTTGATATGGTATTAAAATGTCTAATAAAAGATGGCACTGCGTGATTTTATTTTAATGAAGTGTTATACAATC
AAGAAATGGGGGCAAGGGCCTGCCCCCCACTCCCTCACCTACCTCCTTAGCATTCCTTCAGGCTGCTACTCGGGG
CTCCAGGTGTGTGAATTGGTCCTCAGATAGTCAGGCCTGGGTGGAGGGAGTGGCAAGTCAGGCGTGCCTCCTACA
AGCTTCCTAACCTCTTAAGCATCATGGAACCAGTCAGCCCTCTGTGGAGTCATTGTGCTGGACCTCTGAAAAGAT
CTGCAGGGGCCAAGATGTTGCAGCCACCGGAGGCTGCAAGGATGTGGGTTCTTCCAGGTGTGGGCCCAGCCCCCC
TCCTTCCAGCCTTTGCTCCCCATCCCACGTTCCACTCGCCCTGCCTGTTGTTCAGTTTGCGTCTCAGTGCTGACT
CACGGGCATGCTTCATTGAGGCCCAGGAAGAGGCCCTGGTTTGGGGCTGTGCCAGCTCAGAGCCCTTGAACCAGA
ACCAACTGCTCAGGCTCACAAAAGTTGGCAAAATGCGGGCTGGGCAGGCAGCTCGGGGCAGGGAGCAGCAGTGCA
GGCCTGGCCTGTGTCCCCGTGCCCAGCGGGCTCCCGGAGCAGCATTCCAGAGCCTCCTGCAGAGCCAGCGAAGGA
AAGCTCTAGAGGGAGACGACTCCACCGCCTCTCTGCTCTGACCCTTCTCAGGCCCGCCTGATGTGCTGGACCATC
CCCCTGCTGCCACGGCCCCTGGCTCCGCAGTCACCCTCCATCAGATGCTTCCAGAAGCACCTACTCTGTGCAAGG
GCATTCACAACAGGCCAGTGGGCAAACGTGAGCCAGGGCCAGCGGAGAAACACTAAAGAAGACTCGGTGGTTCAG
AGCCTGGGTCTCAGCGCGGGACCCGTCTGGGGTGAAGACCTTGGGGCTGTTGTGAGTCGGTGGCAGGAACGTGGG
CTCTAGACTGTGCATTCAGGCTCTCCTACTTGGCAGAATGATCTTGGGGAAACGACTTCATCTGAACTTCAGATA
TTTCACATGTGAAGCGGGGACAAAACCATGCAGCTCAGAGGTCCCTGTGGGGGCTGGGGGAGCTGCCCTGCAGGT
CTTGGCACATGCACAGCAGGCTCCCCATAGCTTTGTCACCACAAAGGGCACTGTTCTATTCACAGCACCTCCTGC
TTCTGCCTTTCTGGGATGGGAGAGAAGGTGAGGGAGCCGGCGAGCAGGTTCTACCCTCTCTGCTAAGGGCCTAGC
ACACTTTGATGAGGTTCCTGGACGTGAGACCCTCACAAAGACCAACCATTCCTCTAATAGCCATTTAACGGTACT
GCAGTTCATGGGAAAATGTCCTCATTCTTAGGAGATAGATGCTGGATTATATAGGTGAATGCCTTCAAGAAATGT
GTAATTTAATTCCAAATAGTTCCCCCCAAAATACACAAAGCAAATAAGGCCAAAATGTTCATTGTTGAATCTGCA
GTGGCTGGTATTTCAGTGAACAGTGTACTTGTTCTTTCAACTTTTCTGTATGTTTGGAATTTTTCTTAATAAAAG
ATTGTGGGAAATGGTC

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FIGURE 4700

MEPVSPLWSHCAGPLKRSAGAKMLQPPEAARMWVLPGVGPAPLLPAFAPHPTFHSPCLLFSLRLSADSRACFIEA
QEEALVWGCASSEPLNQNQLLRLTKVGKMRAGQAARGREQQCRPGLCPRAQRAPGAAFQSLLQSQRRKALEGDDS
TASLL

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FIGURE 4701A

CCTGCGGCTCCCCCGGCTTTCGGAGCCCGGGGGCGGCCTGTGGCGCGCGGAGCCCGCGCCGGACTGCGCCTCTTT
GGACCTTGAGGGGAAACATGCGTTTGCSKWGGATCRWTTGAAATTCTGAGKYTRGGATMCSMGSCCGCCYGCCTG
MYTCKKCCGMSSCGCGGGYTTTTTCSTATTTTTCCTTTTGCTTTTTTTCCTTTTCTCCCTCCGGGTCTCCTTTTT
GACTCCCTCCCCCTTTATGCTCGCCCAGCCCTCCCCCTGCTGCTGAGAAGTGGGGGGAGGGTCTCGGCCTCCAGGT
TCCCGCCCCACCGGGGCCCGGGCGAGCATGGGGGGCAAGCAGAGCACGGCGGCCCGCTCCCGGGGCCCCTTCCCG
GGGGTCTCCACCGATGACAGCGCCGTGCCGCCGCCGGGAGGGGCGCCCCATTTCGGGCACTACCGGACGGGCGGC
GGGGCCATGGGGCTGCGCAGCCGCTCGGTCAGCTCGGTGGCAGGCATGGGCATGGACCCCAGCACGGCCGGGGGG
GTGCCCTTTGGCCTCTACACCCCCGCCTCCCGGGGCACCGGCGACTCCGAGAGGGCGCCCGGCGGCGGAGGGTCT
GCGTCCGACTCCACCTATGCCCATGGCAATGGTTACCAGGAGACGGGCGGCGGTCACCATAGAGACGGGATGCTG
TACCTGGGCTCCCGAGCCTCGCTGGCGGATGCTCTACCTCTGCACATCGCACCCAGGTGGTTCAGCTCGCATAGT
GGTTTCAAGTGCCCCATTTGCTCCAAGTCTGTGGCTTCTGACGAGATGGAAATGCACTTTATAATGTGTTTGAGC
AAACCTCGCCTCTCCTACAACGATGATGTGCTGACTAAAGACGCGGGTGAGTGTGTGATCTGCCTGGAGGAGCTG
CTGCAGGGGGACACGATAGCCAGGCTGCCCTGCCTGTGCATCTATCACAAAAGCTGCATAGACTCGTGGTTTGAA
GTGAACAGATCTTGTCCGGAACACCCTGCGGACTGACCTGCGGGCTTGCTTGCTGACTCCTCTCAAAGGGACAGA
GCGCCCCTGCTCCAGGGAGGAGGCTCACCGGACCCTGGGGCAGAGCTGAGCTTGGGACACCAGCGGGAACAGGGC
ACCCCTTCTGCACTGACTTCCAGATCATGGTTCTCCCTTCCTCCCTGAGGACACCAAATTGGATGAGAGCAAGTT
TGAGAGAAGAATGAATCAACTGCTATCCTTCCCCTCACCCCTCAGCCCAGGAGGGAAAGGGCATTTTCTTTTTCA
TCTTTGAAAGGCATTGTGGGTCTGTCTTTAAAGTGTTTACAAAAAAAAATTATATAAAAAAAAAGTCTAGTGTCG
ACTGGTGTTTTCCCTCGTGATGTTTACAGCTTGCTGTTTGCTGCCCAGCCATAACCCACTCAGTGACAGACGAAC
ACAGCTAAGGCCTCGCTGCCAGCCTTCTGACGGCGGGCGAGCACACGGTCTCTTCCCCTGCCCCAACTGGCCCTC
TCCACCACCAACTTCTCTACTTTGGGTTTGTTTGGTTTTTTCCCTCTATTTTTCTGGCTGGTTTTTTGCTCTTTT
CTCCCCTTGAGACCCTAATATCTTGACTTCATTGCCAAAAAACAACCCATTGAGAACTTTCTTCCTACTGATCCC
ATCTCTTTTCCCTTCTTTCCTCCTGGTTCCGGTCAGTTCAGAGGATTTAACAATCACAAGTGTCCTGCAAAAATG
CCTGAACATTATTCTTAGGCCCTCGTGGATTTTTTTTTTTCAGAAAACTTAAACAAAAAAAGACTTACTAAGAAA
TATGTACAGCTACCCCTGTTTTCAGGCACTATGTTTGAGAACATTTTAGCCATTGATGTTCACACGTGGCATCAG
CCCATGCAAGATAGGTTTCTGTATTTATATATTAAAATACAAAAAAAAACTTATAAAATGTTTAAAAAAATGTTC
AAAGCTTGGGAGAAAAGCTTTCTTCATTAGTCAAGGTGTTTTGATATGGTATTAAAATGTCTAATAAAAGATGGC
ACTGCGTGATTTTATTTTAATGRAAGTGTTATACAATCAAGAAATGGGGGCAAGGGSCTGCCCCCCACTCCCTCA
CCTACCTCCTTAGCATTCCTTCAGGCTGCTACTCGGGGCTCCAGGTGTGTGAATTGGTCCTCAGATAGTCAGGCC
TGGGTGGAGGGAGTGGCAAGTCARGCGTGCCTCCTACAAGCTTCCTAACCTCTTAAGCATCATGGAACCAGTCAG
CCCTCTGTGGAGTCATTGTGCCGGACCTCTGAAAAGATCTGCAGGGGCCAARATGTTGCARCCACCSGAGGCTGC
ARGGWTYGTGGGTTCTTCCAGGTGTGGGCCCAGCCCCCCTCCTTYCAGCCTTTGCTCCCCATCCCACGTTCCACT
CKCCCTGCCTGGTGKTTGCGTCTCAGTGCTTGAMTCACGGGCATGCTTCATTGAGGCCCAGGAAGAGGCCCTGGT
TTGGGGCTGTGCCAGCTTCAGAGCCCTTGAACCAGAACCAACTGCTCAGGCTCACAAAAGTTGGCAAAATGCGGG
CTGGGCAGGCAGCTCGGGGCAGGGAGCAGCAGTGCAGGCCTGGCCTGTGXTCCCCGTGCCCAGCGGGYCSCGGAG
CAGCATTCCAGAGCCTCCTGCAGAGCCAGCGAAGGAAAGCTCTAGAGGGAGACGACTCCACCGCCTCTCTGCTCT
GACCCTTCTCAGGCCCGCCTGATGTGCTGGACCATCCCCCTGCTGCCACGGCCCCTGGCTCCGCAGTCACCCTCC
ATCAGATGCTTCCAGAAGCACCTACTCTGTGCAAGGGCATTCACAACAGGCCAGTGGGCAAACGTGAGCCAGGGC
CAGCGGAGAAACACTAAAGAAGACTTCGGTGGTTCAGAGCCTGGGTCTCAGCGCGGGACCCGTCTGGGGTTGAAG
ACCTTKGGGGCTKTTGTGAGTYGGTGGCAGGAACGTGGGCTYTAGAMTGTGCATTCAGGCTCTCCTACTTGGCAG
AATGATCTTGGGGAAACGACTTCATCTGAACTTCAGATATTTCACATGTGAAGCGGGGACAAAACCATGCAGCTC
AGAGGTCCCTGTGGGGGCTGGGGGAGCTGCCCTGCAGGTCTTGGCACATGCACAGCAGGCTCCCCATAGCTTTGT
CACCACAAAGGGCACTGTTCTATTCACAGCACCTCCTGCTTCTGCCTGGCAACTGTGTCTCCCTGTGCTATATTT
AATTCCACCAGCAAAGCTGKCGGAGGCAGGGCCCAGCCTGAAAGGAGATCTCCTTGCCTGACCCCTGGGACCTGG
GAAATGGAGGCTTCATGTGCCCGCCTTGSSKYTTAAAGCCTGCTGGCTTTGGCAGTGCCATGGGTGAGCCGAGCA
GCTGTGAGGTGGGTGGGGCAGGGCTGTAGCCACGCCGGGTGCTATTCCAGGCTCTAGGGGCTGGTGCTCATCCCC
ACCCCCAGCGACTTCCGTCCTACCTGGCATGCTGCAGCCCTCTGCCGGCTGTGGTGTCCTGAATTTGGACCCAGG
TTGCCTGCTCTTGTTGTGGGGGTGGGATTGGGGCTGTCTGTGTTTCCCAGGTGGAGCTCATGTTTGTGATCCTCT

FIGURE 4701B

ATCTGGACAGCTCTCCAGAATCCTGTGTTGCCCCTGTTCTGCCTTTCTGGGATGGGAGAGAAGGTGAGGGAGCCG
GCGAGCCAGGTTCTACCCTCTCTGCTAAGGGCCTAGCACGCTTTGATGAGGTTCCTGGACGTGAGACCCTCACAA
AGACCAACCATTCCTCTAATAGCCATTTAACGGTACTGCAGTTCATGGGAAAATGTCCTCATTCTTAGGAGATAG
ATGCTGGATTATATAGGTGAATGCCTTCAAGAAATGTGTAATTTAATTCCAAATAGTTCCCCCCAAAATACACAA
AGCAAATAAGGCCAAAATGTTCATTGTTGAATCTGCAGTGGCTGGTATTTCAGTGAACAGTGTACTTGTTCTTTC
AACTTTTCTGTATGTTTGGAATTTTTCTTAATAAAAGATTGTGGGAAATGGTCATTTGCTGAGCGCCTCCTAGTT
GCCAGGCACTGGAGGGCGCATCAAAGAAGAGTCCTACCCAGGAGGGAGAGCGCAGCTGCTGCAGGATTCTCGCCT
GGAAGAGTGGGTGGCTGGCTGGCTGGCTGGAAGGGGAGGGGCGAGAGGGCTGTCTCGGTGATGAGCACACGCGTG
CTGGGGTGGTTTGGGGAGAGGGCTGAGATTTGTCACCAGTGAGCCCTTGGCACGGTCTCTGCTCCCCACCAGGGC
AGCACGGGACAGAAACGTCACGGAGGAGTAGCCTC

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FIGURE 4702

MGGKQSTAARSRGPFPGVSTDDSAVPPPGGAPHFGHYRTGGGAMGLRSRSVSSVAGMGMDPSTAGGVPFGLYTPA
SRGTGDSERAPGGGGSASDSTYAHGNGYQETGGGHHRDGMLYLGSRASLADALPLHIAPRWFSSHSGFKCPICSK
SVASDEMEMHFIMCLSKPRLSYNDDVLTKDAGECVICLEELLQGDTIARLPCLCIYHKSCIDSWFEVNRSCPEHP
AD

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FIGURE 4703

AACCTACCTCAGTTTCAGAGAATGAAGGCATTTCAACCATACCAAGCCCTGTGACCTCACCAGTTTTGTCCCGCC
GACACTATGGAGAATCTATAACAAATATAGGCAAAGCAAGCATATTAGGGGCTGCTAGCATTGGAAAGGGACTTG
GAGGAATGTTGTTCTCAAGATTTGGACGTTCATCTACAACACAGTCATCTGAAACATCAAAAGACTCAATGGAAG
ATGAGAAGAAGCCAGTTGCCTCACCTTCTGCTACCACCGTAGGGACACAGACCCTTCCACATAGCAGTTCTGGCT
TCCTCGATTCTGCATATTTCAGACTTCAAGAATCGTTCTTTAATCTCCCACAACTTCTTTTTCCGGAAAATGTAA
TGCAGAATAAAGATAATGCCCTCGTGGAGTTGGATCACAGGATTGATTTTGAACTCAGAGAAGGCCTTGTGGAGA
GCCGCTATTGGTCAGCTGTCACGTCGCATACTGCCTATTGGTCATCCTTGGATGTTGCCCTTTTTCTTTTAACCT
TCATGTATAAACATGAGCACGATGATGATGCAAAACCCAATTTAGATCCAATCTGAACTCTTGAAGGACATGAAT
GGCCTAAAACTGATTTTTTTTTTTTCCGTTAAAATGTGTGTGTCAAGATACGGAGATTTCAGGGTTAAAGTATAT
TTCAGTTTTCTTTAGGGCAACATATATTTGAATTTAAAAGCACTTTATTTAAAAAAAAAAGAAGTTTTCAGTTCT
GAAGAAGTCATTTACAGTTTGCATCATTTTAATTATGAGTCTGACAAAACCTTCTCCAGAGAATCAAGCAAGACC
TGGATGTGAAGAAGGTTTGGGTAAACTGCATGTAAAGGCTACAAATCACAATCTGATTCCTCCCAAATATAAAGG
CATATGGAACATAATGTATTAACCAAAGTATGTTATAAATCAAAAATGGTCAAGGTTCAGCATATTCTATATGAA
GATCACAAGGTGGTATCGTTTTAGATTTCTATGAAGGCTTTCATTTGTACATCCCTTTGAAAAAATATAACAGAT
TTAAAATGTTTTGAATTTAACTTGTTTAGAAAAACTAATGCTTAAAACAATATTTGAACTACTGTATTTATAATT
TATTACCTCTAATTGCTTTATTTCAGTGTATGAGACATTACTGTTTTAATGTTTGCTTTGAACATAATTTAAGAA
CCAGATTTATTTTCTATAGTGATAAACCCTTTTTTCTCAGAACTCCATCTTTGTACTCTTCAGATGAATATATAG
ACACTGTGGCATACATTTTTTTTCATTAAAAACTTATGGCTTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4704A

GGGGGTAGCTGGCGGACCAGAGCCGGTAGCGAGGTTGGGAGAGACGGAGCGGACCTCAGCGCTGAAGCAGAAGTC
CCCGGAGCTGCGGTCTCCCCGCCGCGGCTGAGCCATGCGGCTCCCTGACCTGAGACCCTGGACCTCCCTGCTGCT
GGTGGACGCGGCTTTACTGTGGCTGCTTCAGGGCCCTCTGGGGACTTTGCTTCCTCAAGGGCTGCCAGGACTATG
GCTGGAGGGGACCCTGCGGCTGGGAGGGCTGTGGGGGCTGCTAAAGCTAAGAGGGCTGCTGGGATTTGTGGGGAC
ACTGCTGCTCCCGCTCTGTCTGGCCACCCCCCTGACTGTCTCCCTGAGAGCCCTGGTCGCGGGGGCCTCACGTGC
TCCCCCAGCCAGAGTCGCTTCAGCCCCTTGGAGCTGGCTGCTGGTGGGGTACGGGGCTGCGGGGCTCAGCTGGTC
ACTGTGGGCTGTTCTGAGCCCTCCTGGAGCCCAGGAGAAGGAGCAGGACCAGGTGAACAACAAAGTCTTGATGTG
GAGGCTGCTGAAGCTCTCCAGGCCGGACCTGCCTCTCCTCGTTGCCGCCTTCTTCTTCCTTGTCCTTGCTGTTTT
GGGTGAGACATTAATCCCTCACTATTCTGGTCGTGTGATTGACATCCTGGGAGGTGATTTTGACCCCCATGCCTT
TGCCAGTGCCATCTTCTTCATGTGCCTCTTCTCCTTTGGCAGCTCACTGTCTGCAGGCTGCCGAGGAGGCTGCTT
CACCTACACCATGTCTCGAATCAACTTGCGGATCCGGGAGCAGCTTTTCTCCTCCCTGCTGCGCCAGGACCTCGG
TTTCTTCCAGGAGACTAAGACAGGGGAGCTGAACTCACGGCTGAGCTCGGATACCACCCTGATGAGTAACTGGCT
TCCTTTAAATGCCAATGTGCTCTTGCGAAGCCTGGTGAAAGTGGTGGGGCTGTATGGCTTCATGCTCAGCATATC
GCCTCGACTCACCCTCCTTTCTCTGCTGCACATGCCCTTCACAATAGCAGCGGAGAAGGTGTACAACACCCGCCA
TCAGGAAGTGCTTCGGGAGATCCAGGATGCAGTGGCCAGGGCGGGGCAGGTGGTGCGGGAAGCCGTTGGAGGGCT
GCAGACCGTTCGCAGTTTTGGGGCCGAGGAGCATGAAGTCTGTCGCTATAAAGAGGCCCTTGAACAATGTCGGCA
GCTGTATTGGCGGAGAGACCTGGAACGCGCCTTGTACCTGCTCGTAAGGAGGGTGCTGCACTTGGGGGTGCAGAT
GCTGATGCTGAGCTGTGGGCTGCAGCAGATGCAGGATGGGGAGCTCACCCAGGGCAGCCTGCTTTCCTTTATGAT
CTACCAGGAGAGCGTGGGGAGCTATGTGCAGACCCTGGTATACATATATGGGGATATGCTCAGCAACGTGGGAGC
TGCAGAGAAGGTTTTCTCCTACATGGACCGACAGCCAAATCTGCCTTCACCTGGCACGCTTGCCCCCACCACTCT
GCAGGGGGTTGTGAAATTCCAAGACGTCTCCTTTGCATATCCCAATCGCCCTGACAGGCCTGTGCTCAAGGGGCT
GACGTTTACCCTACGTCCTGGTGAGGTGACGGCGCTGGTGGGACCCAATGGGTCTGGGAAGAGCACAGTGGCTGC
CCTGCTGCAGAATCTGTACCAGCCCACAGGGGGACAGGTGCTGCTGGATGAAAAGCCCATCTCACAGTATGAACA
CTGCTACCTGCACAGCCAGGTGGTTTCAGTTGGGCAGGAGCCTGTGCTGTTCTCCGGTTCTGTGAGGAACAACAT
TGCTTATGGGCTGCAGAGCTGCGAAGATGATAAGGTGATGGCGGCTGCCCAGGCTGCCCACGCAGATGACTTCAT
CCAGGAAATGGAGCATGGAATATACACAGATGTAGGGGAGAAGGGAAGCCAGCTGGCTGCGGGACAGAAACAACG
TCTGGCCATTGCCCGGGCCCTTGTACGAGACCCGCGGGTCCTCATCCTGGATGAGGCTACTAGTGCCCTAGATGT
GCAGTGCGAGCAGGCCCTGCAGGACTGGAATTCCCGTGGGGATCGCACAGTGCTGGTGATTGCTCACAGGCTGCA
GACAGTTCAGCGCGCCCACCAGATCCTGGTGCTCCAGGAGGGCAAGCTGCAGAAGCTTGCCCAGCTCTAGGAGGG
ACAGGACCTCTATTCCCGCCTGGTGCAGCAGCGGCTGATGGACTGAGGCCCCAGGGATACTGGGCCCTCTTCTCA
GGGGCGTCTCCAGGACCCAGAGCTGTTCCTGCTTTGAGTTTCCCTAGAGCTGTGCGGCCAGATAGCTGTTCCTGA
GTTGCAGGCACGATGGAGATTTGGACACTGTGTGCTTTTGGTGGGGTAGAGAGGTGGGGTGGGGTGGGGTGGGGG
CTGTCTGTGTCCAGGAAACTTAATTCCCTGGTGACTAGAGCTTTGCCTGGTGATGAGGAGTATTTTGTGGCATAA
TACATATATTTTAAAATATTTTCCTTCTTACATGAACTGTATACATTCATATAGAAAATTTAGACAATATAAAAA
AGTACAAAGAAGAAAAGTAAAAGTACCCATTGTTTCACTTCCTGGAGATAACCATAGTTGCTATTTTGCTGCCTG
TCCCATCAGTCGTTTATCTGTTGTTTGAGATAGAAATTAACCAAAAATGACATAAATATTCATGAGATTGCCTTC
CTATATCCTTCCTTGTTCCTACCAGTGTCTGCTATTTTGAAGAAGCTAGGGTCTGGAGGGACAGAGAACAGTTCC
CTGATTAACAGTATTAATAGCGACATTGGTAACAGCTACCATTTATAGAGTTTTAATGGGAGTAGGAGCTATGCT
AAGTGTTTTTCATGTATTATCGTTTTTAATCATTATCCCCAACCTATGANNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNGGTGGAGTTGGAGTTTGAACACA
GGCCTGACCCTAGAGTCCACACCCTGACCCAATCAATTATATTGCATCTTGGGTCCATAAACCCTAATCCATAAT
CCCATCAAGAAAAGCTCTGCTGCTCTTAGCTCTAAATAATTCAGAATCTATTCTCTTCTCTCCAGTCCCGTTGTT
ATAGTCTTCACTCATAGACTTAAGATGATCCCATCACCAGAGAGGTTTCTCTACCATTAGCTTCCCTCTTCCGGC
CATTCTTCACAAAGTCATTTTTCTAAATTCTGTGTCACATACGATGATGGCATTTCTGGAAATTCCTTCAGGTGC
TCTCAAGCCCTGCTGCAGAGATCCTTTTCAGAGCACACACTGTTCCAGCCCATCTGTCTCACCCTCTCCTGTTGT
ATCCAGCTCCACGACAAACTTCTGCCTTCCCCAACACCTTTGTGCCTTTGCATATGGTGTTTTCTTGCCCATTTT
CTGCTCGACTCGCCCCTGATTTTCAAGTTCAAGACTTAACTCAGGGTTCAGGTCTTCCAGGAGGCCTTACTTATG
TCGTCAGTCTGGGGAACTCTCCATGTGCTTCTATCACTGTGCGGTTACCTCTTTCACAGCCCTTTTAAAGTTCTA

FIGURE 4704B

TCTTCCCTTTCCCACCTTTTTTGACCTTCCACTAGACCATGAGCACCTGGGCGGAAAGCCATATATCTTATTAAG
CTTTATATCTGCTACCTGGCCGAGGGCCTAATTCATAGTGGAGAATAAATAGTCAATTGAATAAATGAATAAATA
TCTCCACCATCGTACTAATCTTAATCCTCCCTGCCCACTCCCACCACTGAAAATGCAACATTGTACACATCACTG
GTTGTTGGGAGGGACTTACCTTGGAAAGTTGCTATTCTAGGAAAGAGAAACCTTCATATTCCTGGAAACAGCAGG
TAGTTTCCAGTGCTGGCAATGAATTCCCCAGAACTGCTGTTTTGGATTTTTTCTTGCCTGGCAGCTGTTGGGAGC
AGGGTGCAGTGAGGATGGGGTGAGAGTGGGCAGTTTCTTGTGCAGATTTGCCTTTCTTTCATCCTGGGGCTGACT
TGCAGCTCCACACCCATCCATCTCTCAAATTTCACAGAGGGTAAAATAGGCATTTGGAGAGAAAGAACTCTGGCC
TGATTCCTTTCTCTCCCACAAATGTCCTTTATTCATAAAACAGGAATAATAATTCCTGTATCTCCCAACTACATG
GAAGCTGCAGCCCTCACAGAAGAAGATGATCTGAGAAATTCTTTGATTTCCTCAGTACAGTTATACCCATGCATC
ATAATACTTTAAGCCTGGAAGGCATCTTAAAAATAATGCAACAGTCAAACCTAATTTTACAGAGAAACTGACATG
AAATCACGCAGCTAATCATGATAAAGCTGGGTGGAAAACTTATCTTGATGGGCAGTACAGGAAGATGCAGTAGAC
CTTAAGATGTCCTGAAAGTTTCTTATCTCAGGGGAAACTCCCAGGTAGGCTTTATGTCAGGGACACAGAAAAATG
CTCCCTGAAAGTCAAAATATTCGGGCTAGACAGACAAATTCCTGTAAGTGTGGTTTGTCTGGGAACCACAGATGT
CACTAATCCTGGTTTGCTCCAGAGTTCTTTTTGTTCACTCCTACCCCCCATCACCATTTGATTGATCTCCTTACC
CTGTAATTTCCCCTTCTTGTCGCTTACCTGCAGTATCTTTCCCACCCAGGCATGCCTTATTCTTTCTAAAGGAAA
GTATGAATGGAGAGGGGAAAGCTTGGGAAACTGATAGATTTCCTTGGATGCCAAAACACCTCCATAGCCTGTCTG
CCCGGCCCTATGTGGAAACAGCATTGAGTTTCAAGTCCTTTATGCCTCCACCCAGGGATAGCCACTTGGAATCCA
CATGGCAATTGTGAAACAAGCAGGAAATGCGTAATTGTCAGAATTTTGTGGGGAAAGGACTAGGGAATAAGGAAA
ACAAAGATCTTCCTTGTGTTTTAGAGCTGTCAGCTAGAGGAGCACCTGCTTGAGTCTGATGCCATCTAATGGTCC
CAGAAGAAACTGGGTTTTGAACCTAGAGTTCCATGGACTCTTAGGAATTAGACTACTACTACTACTAAGCATTCA
CTGGTGCTTACTATGTGCTATTGCTGTGCCAAGTATCTGAAACCTGTCTTCTTACCTTATTTTTCAAGATAATTC
TATGTGGCAGGTATTACTATCTCAATTCTAAGAGTGAGAAAATGGAGTTTTAGAAACATTTACTAACTTGCCTGG
GTCACATAGCTAAGGAAGAGGTGGACTTGCCCAGCTTTGCATAAAACTCCTCAAAAGAGTTGCCTATACTCCCTG
ACTCCACTTATCTTCCTACTATCCTCTTTTTAAAATATATTATTTATTTATTTAAATAAGCAATATATGAATGTG
GTTTGAAATTCAAAAGACACAAAGAAGTATACAGAGGAAAGCCTCACTCTCAATCCTTCTCAAGGTTTGCTAATT
CCTCTTGCATAGGCAATCCGTTCTTCCAGCTTTGTGTTTATCTTTCCAGAGAAGTTTACTGTGTATTAAGCAAAT
ATGTATATCTTTATTCTTGCTCAGTATTTTCGCAAACAGCAGCTGTCTAAGTTCACTGTTCTGAACTTTATTTTT
TAAATTAAAAATATATGGCTATGTAGTATTCTATTTTATGGAAGTTCCATATTTCATTTATCCTGTTTCCTTCTA
CTGATGGCTAGTTAGGTTATTGGAAGTCTTTTGCTGTTGCTAGTTAGTCTTGTATAGACATTGTAATGCACATGT
GCAAAAATACAAGTATGATACAATCTTAAAA

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FIGURE 4705

MRLPDLRPWTSLLLVDAALLWLLQGPLGTLLPQGLPGLWLEGTLRLGGLWGLLKLRGLLGFVGTLLLPLCLATPL
TVSLRALVAGASRAPPARVASAPWSWLLVGYGAAGLSWSLWAVLSPPGAQEKEQDQVNNKVLMWRLLKLSRPDLP
LLVAAFFFLVLAVLGETLIPHYSGRVIDILGGDFDPHAFASAIFFMCLFSFGSSLSAGCRGGCFTYTMSRINLRI
REQLFSSLLRQDLGFFQETKTGELNSRLSSDTTLMSNWLPLNANVLLRSLVKVVGLYGFMLSISPRLTLLSLLHM
PFTIAAEKVYNTRHQEVLREIQDAVARAGQVVREAVGGLQTVRSFGAEEHEVCRYKEALEQCRQLYWRRDLERAL
YLLVRRVLHLGVQMLMLSCGLQQMQDGELTQGSLLSFMIYQESVGSYVQTLVYIYGDMLSNVGAAEKVFSYMDRQ
PNLPSPGTLAPTTLQGVVKFQDVSFAYPNRPDRPVLKGLTFTLRPGEVTALVGPNGSGKSTVAALLQNLYQPTGG
QVLLDEKPISQYEHCYLHSQVVSVGQEPVLFSGSVRNNIAYGLQSCEDDKVMAAAQAAHADDFIQEMEHGIYTDV
GEKGSQLAAGQKQRLAIARALVRDPRVLILDEATSALDVQCEQALQDWNSRGDRTVLVIAHRLQTVQRAHQILVL
QEGKLQKLAQL

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FIGURE 4706A

CTGGCTTCAAAGCTCAGCGACCACACTGCTAATTAAGAATGCTTATGAAGAATGTTTAATGATATGAGGAAGACT
TACAAACTGTTTTTACAAAGTTATCAATGTGTGGATTTTATTTACATGAAAGAAAAAATAGTCACAAATGTTACC
TTTCAATGGTAGTATAATAGAATATTAAAATTTACTTTTATTTCATTCTAAATTTTCTACATTCTGCATGTATTC
TCTTTATAATCATTTTGTAAACTCAGAATACTGTTGTAAAGATGTCAGCTCCTTCCCGAGGAAATACCACTAGTT
AGACTTAATACACACATTTTTTTATGTTGAATTGAAATTTTACTTGGTAATGAATCATTCCCTTTAATCTACTCT
TCTAGATTACTGATCTCTCATTACCCAACTATCTGATGGCATCTTCGGTTGGACTGCTTCCTACCCAGCTTCTGA
ATTCTTACTTGGGTACCACCCTGCGGACAATGGAAGATGTCATTGCAGAACAGAGTGTTAGTGGATATTTTGTTT
TTTGTTTACAGATTATTATAAGTATAGGCCTCATGTTTTATGTAGTTCATCGAGCTCAAGTGGAATTGAATGCAG
CTATTGTAGCTTGTGAAATGGAACTGAAATCTTCTCTGGTTAAAGGCAATCAACCAAATACCAGTGGCTCTTCAT
TCTACAACAAGAGGACCCTAACATTTTCTGGAGGTGGAATCAATGTTGTATGATTCTAATGAGATACGTGATTGT
CAAGAGCCTAGTGTGCTATCTAAGGTCTAGCAGTCACTTCACTAGTGGGCAGAGACAAGTTCTAATTGTATTACA
GCACAAACAAAACTGACTAGTTTTTAAATTGCACCATTGTTTTTTTTTTTAAAGCAAGAATCATTTTCTGGGTAT
GTAAGTGTAAATGTAGATGCAAATTTGGCTGCACCTCTTTATCATGCCTGTATTGGCCTATAGGTCTGCACTTTA
GTGTTTTTTAATTGTTTTATTTCTGTGTATTTACGAACAGAGAAATAACCCAAATATTATTTCTGCTTAGTGTCT
TTATTTATAAAGCCCATGAGTAGTTTGTATGCATCTTTCCTACTTGTAAAGATGAGTAAAAGTATGCAGTTTTAA
ATTTATAATATTATTGGATGTTCTTTGCTTTGGTAGTCTTTCCAGAAAGGATAAACAGTGGTTTTTGTTTTGTTT
TGTTTTATTGTTTAAGTGGGACCACTTAGCTTCCCGTTTCCTTACTAGTTAAAGAACAGACATTAATTTTCAGTT
GAATGTATTTTTGCAGGCATCATATTGTTACAGGGCCATTTACACCTATTCACAAAGCTTAAATCCTACCTTGTG
GGACTGAAGTGCTCTTAATATAACTGTTTATTTTCACTGTGTAATATGCAAAGCAAAAGGGAAATTATTTGGTGG
ATGGTAGCTCAAAATTGGAACTCTTGTTCTAATTCAGTTACATTGGCTTTACCCTCCTTAGATTTTTCATCAAAG
GGCTGTCCCATTGCAATCTTACTAAAACATTTTGTTAAAATAAACTCTTTTCCTTTTTATATTAATAATTAGGCT
TTTAAATAAAGATGTTATTCCTTTAAAATGGTGGGCTTACCATCATTGAAGATGTCACTCAGGTGGCCTTGTTTG
ATCAAAACGCCTTTTTTAAAAACCAAGCTTTAAAAACATGTTTATAATTTCATGAAGTACATATATATTGTTCCC
ATAGTCTTCAGCTTTAAAACTATAAATATGCCCAAATTTTGTTATTTGCCCTACTTTAAGTAGGTTTATTGTGTT
TGTTTTTTCAGTACTTGTTTTTCTCTGATAAGACTCAGGAATTCTGAAATGTGAAATTGTCTCAATTCTTTCTCT
TGTAGCATGAATCAAATGTATTTATTAATAGCACTTATGACTATAGAATATAATTTGGCATATGATTCATATTAC
ATATGTATTCATTTTATTTTTAAAATAGTTTATAAACTTAATGATTTTTTTTTACAAATGAGGTTATAGATATTA
ATGCAAATTTTCTGGTAGGTATCTCTTTTTTTGCTATGATGATTCCAACTTATCAGAGACCTCCCATTTGCCTTT
TCATTACGGTGAAAGCTTTGCCCTCATCTACTAAAGTACAAAGGAATTCTTTGGAAGCAGATTATTCTAGTCTTA
TGCTAGAGATGAATTTGATCATTTTAATGTGTGATCTTTTTGCTCTATCAGGTATAATTGTTTTCCTTTCCTTTA
TAATGGGTAAGTTTTCTCACCTTTGAGTAACAGTAAAGTTCATTTATATGTCCATACCTAGAAGACCAGTGCAAA
TACTTTGAGAGCACCTGGGTCTACAGGACATAATTGGCATCTAAATCCTCATTTCTTGCTATTAGTAGGAAAACA
GATATAGTATTGTAATACCCTTATTCTTTTTGAATCCTAATTACTCATTTCGGTTTTTTTTCTCTCTTTTGAATC
TAGTTGCTGGTTTTCGTTTAATGATTTTAGTTTAACAATCCCAACCAACAATACATTTGATTTATTTTTTTCTGT
CTAACCTGACAACCTTTTTCTTGTGCTTCTTGTTTGTTGGTTAGTTTTTGTGAAAGGAATCATTGTTTAAGATCA
CTGTTTTCATACTTGTTTTACACTTCACGTATTTTGAAGTACATTTATTTACTAAGCATTTGTGACTTGAATAAT
TTCACCAAATGAATACATTTTGGTAGTTTGTAATGAGTTCTTCTAATTGTTACACTTTGCTTGGTACTTAACAAT
AAATATGTAAAGGTAAAAGAAATAATTTTCTGTATTCTGCCAATCTTAATTTTATATAATAAATCATCCATTTTT
TTCTTAAAATAGTATGGATTGACTGTTTCTAAAATACCAATCTGTGGCTGTGGTTTTTCTTTTCTTCAGCATTTC
CAGCATCCAAGTAAACAATAGTCCCTTATAGTCCTGCTACTTGATGGGTAAATTTGGTTGCTGGGTTTTTAAGTT
GCACTCACAATAAATCGTGCAAAGCATTGTCATGCCTTATTTACTCCATTTTTAATCCTGCATCCCAGATTTATG
GCAGCAACACATATCTACAGGATACTTTTATGTTGTCCAAATATTGCTGTCAGTCATATGTACTTATAAAATGTC
TCCAGTCATGTATATTTATAGAAATGAAATGTCAAATTTCTCAGACTGTTAAAGTGCAGTATAAAGTTGCTTAAT
GCACACTTAAAAATGATATATAATTTCTGAATCCTATGAAATATGTGTTCTTTTTTAATTCTTTGGGAGTTTTCT
TAAGTTTTACATGTTTTTTGGTTTATTGTTAATGATTTTGTTTACTCTTTGCCAAATTTTGTCATGTAGGTTATT
TTACAATAGCACCTTTAAAAAAAATGTATATGCTAATTTACTAAGCATATTCATGTCCATTTTTATTTGATCATC
TGATTTGTGAAATAACTTGAAATTTGTACTGTTTGGTTTGTGAAAATAATATTACCAAATCTCTGTCATTAGAAT
GTGTACTTTATGTTCAGAAGTGACTGTGGGTTTATTCAGAGCCAGCCATTCTCTCCCTTGATGCACTTTGTAACC

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FIGURE 4706B

AGCTACACATGCTTTTAGGTGGCTTTTCCCTGATAGGGTCAAGTATATGACTATAAAACATTTTTCTTGTGAAGC
TATTAAGTTCATTAGTTACTCTTATTTCCCCTTGTTGTAACTAAGTGGTGCAGGTATAAGCATATCCCCAGCATT
CCTGTGTGTGTGAATGTGCACTGCTGATTTGGACTGTTCTTGAGAAAGGTGCTGTGACATATGTCAATATTTGTT
AGCTCTGGGGATATCTTTAGAATGCTTGAGAAAGTTGCTAGGTGTGTGCCACATTGGTGCAGGTAAATCCATGCT
GTTCACAGCCAAGCAGCATTTGCAGAGAAAAGGAGAGTTTTACATAGACCCCAGGAAAAACAGTACTAACCTGGT
TGATGGCCTTGGTGGTGGAATTTTGTTTCAGCCAGAGGCTACTCATTATATCAGAATGATGTTCAGTATAACACT
ATCTGATTTTTAGATTGGTCGATTTCTGTTGTAATCAAGTATTTAGGATGTAATCTTTTTAAAGTCATTGCTTTA
ATCTGAAAAGCCATTAGAAGGGAGAGGAATCACTGTTCCACAGGATATTTAAAACTCAGGAGTTCAAATAACCTC
ACATATTGAACATAAACTGTTAACTTATTCCACAACTAAATTCTAACCTGATACTTATGAATTGCAAAGTGATTG
CTGCAAACTTTTTCTAAGGTGGCTGAAGATTTAAAATAGATCATTCTAAAGGGAAATCAGTAAAATGTCTTGATA
ATTGGTATCCAAATCACTTGTGTGCCTGAGAAAATAAAAGGTAATATTTTACTTTCAAAAAA

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FIGURE 4707

MASSVGLLPTQLLNSYLGTTLRTMEDVIAEQSVSGYFVFCLQIIISIGLMFYVVHRAQVELNAAIVACEMELKSS
LVKGNQPNTSGSSFYNKRTLTFSGGGINVV

FIGURE 4708A

GAATTAGGGGAACTCAGAAATCCATCCCCCACCCCACGGCCCTACCTAGAAGACTTAGGAATGTGGGTCCCCAGC
GCCGCCATCTGAGACTCCAGAGTCGAGGCTCCTAGCATCCCCTACGTAGAACACTGAGAAATTCCGACTGCGGGA
CCCCAGTCTCCGAGAGACCCCAGATTCTATTCCTGGAGCCTGAGAGCCCGAAGTTCACGCCCCTGAGTCTGGGCT
CCGCACCTCCCTGGGGACCGCGTCGGGGTCGCGCAGGAGCCGGGCTGCCTCGAGCCGGGGCTGGAGGCTCCCCGG
GAGGACTCTGCTGGGCCGCTCAGCCATGCCTGAGGGAGCCCAAGGACTGAGCCTCTCCAAACCTAGCCCAAGCCT
CGGGTGTGGCCGAAGAGGTGAAGTGTGTGACTGTGGCACCGTGTGTGAGACTCGGACAGCTCCTGCAGCCCCCAC
CATGGCCTCCCCCCGAGGTTCTGGGAGCTCCACATCCCTGAGCACAGTGGGCTCTGAGGGGGATCCAGCCCCTGG
GCCCACTCCAGCCTGCTCAGCCTCCAGGCCAGAGCCCCTTCCAGGGCCTCCCATCCGCCTACATCTCTCTCCGGT
GGGGATCCCAGGTTCAGCCAGACCCTCAAGGCTGGAGCGTGTGGCCCGGGAGATCGTGGAGACAGAACGGGCCTA
TGTCAGGGACCTCCGCAGCATCGTGGAGGACTACCTGGGCCCTCTGCTGGACGGCGGGGTCCTGGGGCTGAGCGT
GGAGCAGGTGGGCACGCTGTTTGCCAACATTGAGGACATCTACGAGTTCAGCAGCGAGCTCCTGGAGGACTTGGA
GAACAGCAGCAGCGCCGGGGGTATTGCCGAGTGCTTCGTGCAGAGGAGCGAGGATTTTGACATCTACACATTGTA
CTGCATGAACTACCCGAGCTCCCTGGCCCTGCTCCGGGAGCTGTCGTTGTCTCCGCCAGCAGCCCTGTGGCTGCA
GGAGCGCCAGGCCCAGCTTCGCCACTCGCTGCCCCTGCAGAGCTTCCTGCTGAAACCTGTCCAGCGCATTCTCAA
GTACCATCTGCTGCTGCAGGAACTAGGGAAGCACTGGGCGGAGGGCCCAGGCACTGGGGGTCGCGAGATGGTGGA
GGAAGCTATTGTGTCCATGACAGCGGTTGCCTGGTACATCAACGACATGAAGCGCAAGCAGGAGCATGCAGCGCG
CCTCCAGGAAGTGCAGCGGCGGCTGGGTGGCTGGACCGGACCAGAGCTCAGTGCTTTTGGGGAACTGGTGTTGGA
GGGCGCGTTCCGAGGAGGCGGAGGGGGTGGCCCCCGGCTACGAGGGGGTGAGCGGCTGCTCTTCCTGTTCTCTCG
GATGCTGCTGGTGGCCAAGCGCAGGGGGCTGGAGTACACCTACAAAGGCCACATCTTCTGCTGCAACCTGAGCGT
GAGCGAGAGTCCCCGAGACCCTCTAGGGTTCAAGGTGTCTGATCTGACCATTCCCAAGCACAGACACCTGCTCCA
GGCCAAGAACCAAGAAGAGAAGAGGCTGTGGATTCACTGTCTCCAGCGCCTCTTCTTTGAGAACCACCCTGCCTC
CATCCCTGCCAAGGCAAAGCAAGTTCTCCTTGAAAACAGCCTGCATTGTGCCCCCAAAAGTAAGCCTGTCCTAGA
GCCCCTGACACCCCCACTTGGGTCTCCTCGACCTCGAGATGCTAGAAGTTTTACCCCTGGGCGAAGGAACACAGC
TCCATCTCCTGGGCCCTCTGTGATTCGCCGAGGCCGCAGGCAGTCTGAGCCGGTGAAGGACCCTTATGTCATGTT
CCCACAGAACGCTAAGCCTGGATTCAAGCACGCTGGCAGCGAAGGGGAACTCTACCCTCCAGAATCTCAGCCACC
AGTTTCAGGCTCTGCACCCCCTGAGGACCTGGAGGATGCTGGACCCCCAACACTGGACCCCTCTGGGACCTCAAT
CACTGAAGAAATCCTGGAACTGCTGAATCAGCGAGGCCTTCGAGATCCAGGGCCGTCCACCCATGACATTCCCAA
GTTCCCCGGAGACTCCCAGGTGCCTGGCGACAGCGAAACCCTCACATTCCAAGCCCTGCCCAGCCGGGACTCTTC
AGAAGAGGAGGAGGAGGAAGAGGAAGGGCTGGAGATGGATGAACGGGGGCCTTCCCCACTCCACGTCCTGGAAGG
GCTCGAAAGTTCCATTGCAGCTGAAATGCCCAGCATTCCCTGCCTTACCAAAATTCCTGACGTGCCCAACCTTCC
TGAAATTCCCAGCCGCTGTGAAATTCCCGAAGGTTCTCGCCTTCCTAGTCTCTCTGACATTTCCGATGTTTTTGA
GATGCCCTGCCTTCCAGCCATACCTAGTGTCCCCAACACCCCCAGTCTGTCTAGCACTCCCACCCTCTCCTGTGA
CTCCTGGCTCCAAGGGCCTCTGCAGGAACCAGCTGAGGCTCCAGCCACCAGGAGAGAACTGTTTTCTGGGAGCAA
TCCTGGGAAACTGGGAGAGCCGCCTTCAGGAGGCAAGGCAGGGCCAGAGGAGGATGAAGAAGGGGTATCATTCAC
AGACTTCCAGCCCCAGGATGTCACCCAACATCAGGGATTCCCAGATGAGCTGGCATTCCGCTCTTGCTCAGAAAT
CCGGAGCGCCTGGCAGGCATTGGAACAGGGACAGCTGGCCCGGCCAGGCTTCCCAGAGCCACTGCTGATCCTGGA
GGATTCGGATCTGGGTGGAGACAGCGGGAGCGGGAAGGCAGGAGCCCCGAGTTCAGAAAGGACGGCGTCCCGAGT
GCGAGAGCTGGCCCGGCTTTACAGCGAGCGGATCCAGCAGATGCAGCGGGCGGAGACTCGGGCATCAGCCAATGC
CCCGCGCCGCCGGCCTCGGGTTCTGGCCCAACCCCAGCCATCCCCCTGTCTGCCCCAGGAGCAGGCAGAGCCAGG
GCTCCTGCCTGCCTTTGGACACGTGCTGGTATGTGAGCTGGCCTTCCCACTGACATGTGCCCAGGAGTCTGTCCC
CCTGGGTCCTGCTGTCTGGGTTCAAGCTGCCATACCTTTGTCAAAGCAGGGAGGCAGCCCGGATGGCCAGGGTCT
ACATGTTTCCAATTTGCCTAAGCAAGACCTTCCGGGCATCCACGTTTCAGCTGCTACCCTTTTGCCTGAGCAAGG
AGGTTCCCGGCATGTCCAGGCTCCAGCCGCCACACCTTTGCCCAAGCAAGAAGGCCCCCTGCACCTCCAGGTGCC
GGCTCTTACAACTTTCTCTGATCAAGGCCACCCAGAAATCCAAGTTCCAGCCACCACTCCTTTGCCTGAGCATAA
AAGTCACATGGTTATACCAGCTCCATCCACCGCCTTTTGTCCTGAGCAGGGACACTGTGCGGACATCCACGTTCC
CACCACTCCAGCTTTGCCCAAGGAGATTTGTTCTGATTTCACAGTTTCAGTCACCACCCCTGTGCCCAAGCAAGA
AGGTCACCTAGACAGCGAGAGCCCAACCAATATCCCACTGACAAAGCAAGGAGGTTCCAGGGATGTTCAGGGCCC
AGACCCTGTCTGCAGTCAACCCATCCAGCCTTTGTCTTGGCATGGAAGCAGCCTGGATCCCCAGGGCCCAGGCGA

FIGURE 4708B

CACCCTACCACCCTTGCCATGTCACCTCCCAGACCTTCAGATTCCAGGTACCTCACCTTTGCCTGCACATGGAAG
CCACCTGGACCATCGGATCCCAGCCAACGCCCCACTGTCTTTGTCCCAGGAGCTCCCAGACACTCAGGTTCCAGC
TACCACACCTTTGCCCCTGCCACAAGTCCTCACAGACATCTGGGTCCAAGCCCTCCCAACTTCACCCAAGCAGGG
AAGCCTCCCAGACATCCAGGGTCCAGCGGCTGCACCTCCACTTCCGGAGCCAAGCCTTACAGATACACAGGTCCA
AAAACTCACACCTTCGTTGGAGCAGAAGAGCCTCATAGATGCCCATGTTCCAGCTGCCACACCTTTACCTGAGAG
AGGAGGCTCTCTAGACATTCAGGGCCTCTCACCCACCCCAGTTCAGACCACCATGGTTTTGTCCAAACCAGGAGG
CTCCTTAGCCTCTCACGTTGCCAGGTTGGAGTCTTCAGACTTGACGCCACCTCATAGTCCCCCACCTTCCAGCCG
TCAGCTCCTGGGCCCCAATGCAGCTGCCCTCTCCAGATACCTGGCAGCCTCATATATCAGCCAAAGCCTGGCTCG
GCGGCAGGGGCCTGGGGGAGGGGCCCCCGCAGCCTCCCGGGGCTCCTGGTCCTCTGCTCCCACGTCACGGGCATC
TTCGCCGCCCCCCCAGCCCCAGCCACCACCTCCCGCAGCCAGGCGGCTCAGCTATGCCACGACGGTTAACATCCA
CGTGGGCGGGGGTGGGCGGCTGCGGCCAGCCAAGGCCCAGGTCCGGTTGAACCACCCTGCTCTCTTGGCCTCCAC
ACAGGAATCTATGGGCCTTCACAGGGCCCAGGGGGCTCCTGATGCCCCCTTCCACATGTGAGCCAGGACATGAGG
CTTCCCTGAAGCAAGGATTTCAGCCAGATGCCATAGACCCTCAGAACTTGACCTGGAAGTCCAGACACTGAACGC
AGGCCTCAAAACTGCTGCGGCCTTCCAACTCCTGGTATCTGCATCGGCGAATGGCCCTTCTTGCCTTGATCCACA
GGGATGGGGAAGGGAATGTCATTAATGTTTTGTTAATACTGATTCTTTCATGC

FIGURE 4709

EPEVHAPESGLRTSLGTASGSRRSRAASSRGWRLPGRTLLGRSAMPEGAQGLSLSKPSPSLGCGRRGEVCDCGTV
CETRTAPAAPTMASPRGSGSSTSLSTVGSEGDPAPGPTPACSASRPEPLPGPPIRLHLSPVGIPGSARPSRLERV
AREIVETERAYVRDLRSIVEDYLGPLLDGGVLGLSVEQVGTLFANIEDIYEFSSELLEDLENSSSAGGIAECFVQ
RSEDFDIYTLYCMNYPSSLALLRELSLSPPAALWLQERQAQLRHSLPLQSFLLKPVQRILKYHLLLQELGKHWAE
GPGTGGREMVEEAIVSMTAVAWYINDMKRKQEHAARLQEVQRRLGGWTGPELSAFGELVLEGAFRGGGGGGPRLR
GGERLLFLFSRMLLVAKRRGLEYTYKGHIFCCNLSVSESPRDPLGFKVSDLTIPKHRHLLQAKNQEEKRLWIHCL
QRLFFENHPASIPAKAKQVLLENSLHCAPKSKPVLEPLTPPLGSPRPRDARSFTPGRRNTAPSPGPSVIRRGRRQ
SEPVKDPYVMFPQNAKPGFKHAGSEGELYPPESQPPVSGSAPPEDLEDAGPPTLDPSGTSITEEILELLNQRGLR
DPGPSTHDIPKFPGDSQVPGDSETLTFQALPSRDSSEEEEEEEEGLEMDERGPSPLHVLEGLESSIAAEMPSIPC
LTKIPDVPNLPEIPSRCEIPEGSRLPSLSDISDVFEMPCLPAIPSVPNTPSLSSTPTLSCDSWLQGPLQEPAEAP
ATRRELFSGSNPGKLGEPPSGGKAGPEEDEEGVSFTDFQPQDVTQHQGFPDELAFRSCSEIRSAWQALEQGQLAR
PGFPEPLLILEDSDLGGDSGSGKAGAPSSERTASRVRELARLYSERIQQMQRAETRASANAPRRRPRVLAQPQPS
PCLPQEQAEPGLLPAFGHVLVCELAFPLTCAQESVPLGPAVWVQAAIPLSKQGGSPDGQGLHVSNLPKQDLPGIH
VSAATLLPEQGGSRHVQAPAATPLPKQEGPLHLQVPALTTFSDQGHPEIQVPATTPLPEHKSHMVIPAPSTAFCP
EQGHCADIHVPTTPALPKEICSDFTVSVTTPVPKQEGHLDSESPTNIPLTKQGGSRDVQGPDPVCSQPIQPLSWH
GSSLDPQGPGDTLPPLPCHLPDLQIPGTSPLPAHGSHLDHRIPANAPLSLSQELPDTQVPATTPLPLPQVLTDIW
VQALPTSPKQGSLPDIQGPAAAPPLPEPSLTDTQVQKLTPSLEQKSLIDAHVPAATPLPERGGSLDIQGLSPTPV
QTTMVLSKPGGSLASHVARLESSDLTPPHSPPPSSRQLLGPNAAALSRYLAASYISQSLARRQGPGGGAPAASRG
SWSSAPTSRASSPPPQPQPPPPAARRLSYATTVNIHVGGGGRLRPAKAQVRLNHPALLASTQESMGLHRAQGAPD
APFHM

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FIGURE 4710

AAAACTATTTGAGACATAAACAGTTGTGTGATGTAATTTTAGTCGCTGGTGATCGCAGAATTCCAGCTCACAGAT
TGGTGCTCTCCTCTGTCTCAGACTATTTTGCTGCCATGTTTACTAATGATGTCAGAGAGGCAAGACAAGAAGAAA
TAAAAATGGAAGGTGTAGAACCAAATTCGTTGTGGTCCTTGATCCAGTATGCTTATACAGGCCGCCTTGAATTAA
AAGAAGATAATATTGAGTGCCTGTTATCTACAGCTTGCCTTCTTCAGCTTTCACAGGTTGTAGAAGCATGCTGTA
AGTTTTTAATGAAACAGCTTCATCCATCCAACTGTCTTGGAATTCGTTCTTTTGCTGATGCCCAAGGTTGTACAG
ATTTGCATAAAGTGGCTCACAATTATACTATGGAGCATTTCATGGAAGTAATCAGAAACCAGGAATTTGTATTAT
TACCAGCCAGCGAAATTGCAAAGCTCTTGGCTAGTGATGACATGAACATTCCTAATGAGGAGACAATATTGAATG
CACTTCTTACTTGGGTCCGTCATGATTTGGAACAGAGACGGAAAGATCTAAGTAAACTTTTGGCTTATATTAGGC
TACCTCTTCTTGCACCACAGTTCCTGGCAGACATGGAAAATAATGTACTTTTTCGGGATGATATAGAATGTCAGA
AACTCATTATGGAAGCAATGAAGTACCATTTATTACCAGAGAGACGACCCATGTTACAAAGTCCTCGGACAAAAC
CTAGGAAGTCAACTGTTGGTACATTATTTGCAGTTGGGGGAATGGATTCAACAAAAGGAGCAACAAGCATTGAAA
AGTATGATCTCCGTACAAATATGTGGACTCCAGTAGCAAATATGAATGGGAGGAGGCTACAGTTCGGTGTTGCAG
TGCTAGATGACAAACTGTATGTGGTTGGAGGAAGAGATGGACTGAAGACTTTGAATACTGTAGAGTGCTACAACC
CCAAAACAAAAACTTGGAGTGTGATGCCACCTATGTCCACACATAGACATGGCCTTGGTGTGGCTGTACTGGAAG
GTCCCATGTATGCCGTAGGAGGACATGATGGCTGGAGCTATCTGAACACAGTGGAAAGATGGGACCCTCAGGCTC
GCCAGTGGAATTTTGTTGCCACTATGTCTACCCCTAGGAGTACAGTAGGTGTGGCAGTACTAAGTGGAAAGCTTT
ATGCAGTTGGTGGTCGTGATGGAAGTTCTTGTCTCAAATCAGTAGAATGTTTTGATCCTCATACTAATAAGTGGA
CACTGTGTGCACAGATGTCAAAAAGGAGAGGTGGCGTAGGAGTGACGACCTGGAATGGACTGCTGTATGCTATAG
GGGGGCACGATGCTCCCGCATCCAACTTGACTTCCAGACTCTCAGACTGTGTGGAAAGATATGATCCCAAAACAG
ACATGTGGACTGCAGTAGCATCCATGGGCATCAGCAGAGATGCAGTGGGGGTCTGTTTACTTGGTGATAAGTTAT
ATGCTGTTGGGGGGTATGATGGACAGGCATACCTTAATACTGTGGAGGCTTATGATCCCCAGACAAATGAGTGGA
CCCAGGTTGCTCCACTGTGCCTAGGAAGAGCTGGAGCTTGTGTTGTGACTGTAAAATTATAATTTAGTGCCCCGT
TTTCTACATGAAGACACCGTCTTCCTTTATTAATTTAGTATAATTATTCTATCAATGGATACATTTTTAGTAAAT
GTGCATTGTCACAATCCTGGGCACAAAGTGCCTGATGTCAAAATGAAGATAGTAAAACAAGGGAGGAAGCAGTGG
ATGGACCAGGATTAATTCCTTTCATTTCTTAGTAAATTAAAACCTGCAGCTGGTGGATTGTGATCACACATTCCC
GAAGTAATAAGTGAGGACGAATGCACTGCTCTGGAACATAACCCAGTGCTAACTGGGGGTTTCATTTATTCAGTC
AAGCACATCTTACTCACATCCAGATTTATTTTCCTACAGTGCAAACACACCAGATGAAACTTTAAAATGTTACTT
TTTGTAAGCTTATCATAAATGAGTTGCAGTAATTTGTTTGCTTGTTTGTTTAACCACAACCACTATTTTAATGAT
ATACTAAAGATAACACTATTTAGTTTTTTCAGAAACATCTGCATTATATGTGTGTTGGTTGTGGATTTTGTTTCT
AAAATTGGCTTAGTCCAATAAATAAAGAAAAGCATTAAGGACTTAAAGCAACAATAACCAAATAAAAACTTGATA
GGATCTTTGAAGTCTATTTAAATATTCATTCCATTACATCTAGACTCACCAAGAACTACATGTTATGATGTTAAG
TTGAAGTTGAAACATGATGTTTTGCATTAAATTTAAGATATGCAAATTTATGTAGAGAAAATAAATGTTATATAC
CCTATAATCTTTCACCTAATTAGTATTTAATTATATGGATTTGTTTTATATTATAAAAGATGTTTTGATTTTGTC
TTTTGATATTGACAAAATTGTTTGGATATCCTTATGTTCTCAAGTCTGTATCTGCCTCCCCTGCCTTATTTCTTA
TGTTTTGCCACAGTTAACCCATTGTGCTTCTTTGTAATCAAACAGTTTGTGGGAGAATGGGCTTATTGAATGTCT
AAAAAATAAGTTTAAAGTGTTTGTTACCCTAAGTTTTTTACATTTTTAAACTCTAATTACATATGTGAATGTTAT
TACTCTCAGTGAATTGTTATTGTTTGCAAAAATGCACTGGGCAGTAACATTTTGTGATAAATCCTATAAGATATA
AGTC

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FIGURE 4711

MFTNDVREARQEEIKMEGVEPNSLWSLIQYAYTGRLELKEDNIECLLSTACLLQLSQVVEACCKFLMKQLHPSNC
LGIRSFADAQGCTDLHKVAHNYTMEHFMEVIRNQEFVLLPASEIAKLLASDDMNIPNEETILNALLTWVRHDLEQ
RRKDLSKLLAYIRLPLLAPQFLADMENNVLFRDDIECQKLIMEAMKYHLLPERRPMLQSPRTKPRKSTVGTLFAV
GGMDSTKGATSIEKYDLRTNMWTPVANMNGRRLQFGVAVLDDKLYVVGGRDGLKTLNTVECYNPKTKTWSVMPPM
STHRHGLGVAVLEGPMYAVGGHDGWSYLNTVERWDPQARQWNFVATMSTPRSTVGVAVLSGKLYAVGGRDGSSCL
KSVECFDPHTNKWTLCAQMSKRRGGVGVTTWNGLLYAIGGHDAPASNLTSRLSDCVERYDPKTDMWTAVASMGIS
RDAVGVCLLGDKLYAVGGYDGQAYLNTVEAYDPQTNEWTQVAPLCLGRAGACVVTVKL

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FIGURE 4712

GCCTGGCTAATACAAAAAATTCTTTTAAGAGATGGGATCCCTCCCTTTTAAAATCAGAACTTGTTCACATGGTGG
TTGCTTGTGGCAAAACGGAGTTCAAATTTTGCTCTCCTATTGCTATAATTCTGCTAGCAATCTGTTGAGGTGAAA
CTTGGGATCTGACTCTTCAGCAAGCAGCAAATGACCTAGTAACTCAGGGACAACTATTTTTGAACTTTAAGTGCC
ACTTTAATGCAGTTAGTTTGATAAAACCATGTGGGTTTTTTTTTTAGGGCTAGCTCTACGGGAGTGGAAGTGAGA
GCCAGGCATGAGTGCGTCTCCACATGCTTTTCCACCTGCCCTGAGTGTGTTACATACTGAAACAGGCCTACATAG
ATGTTACAACTTCCCTTCCTCTGTCGGAGATGTCATCTGTGCCTTTCTCAGTGTTCATCTGATAATGTAAATTTA
AATGCCTCTACATTTGATACGAAACCCACATTCAGGTGACACTGAACGAGGTGGCTTTTGTCCCACCAGTGCCTC
ATCAGTGTGAGGCGATTCCTCTCTGCTTTAGGAAAATGATTTTTCCCCCTAAACTTGTGCCAACCATCAACAACA
TCTCCATAGATCTTATGGATTGTAGAACTGTTGGCTGTTTCCTAAATTTATTCCAAGTTCTCGTAGAGGCATATA
GATTTCAGTCTGTGCTTGTATGGGATAGATGATCTGAGTGGCTTTCTGGCCTCTTTTTTGAGTTTAAAATCCATA
TGAGGTTGACTTGTCATACTAAGGTAACATGTTTGTGAGGTTATTCCACTAGTACTGTGATCACGTGGGTGTCAG
TATCTTTAACGGCCTTCATTCTTGGTTGTGAGATTTTATTTGATATGCCCACTCACCCTCGACGAATCTGCCCGC
TTTGGGCTGTGGTGCCTGTGTATCTTTGCCCGTCTGGTCTCCAGTTGGTGGAATTACCTTTTTTGTACTGCCACT
TCTCAGCATCTTTGAAATTTGACATAATGTTGCTTCATTTCAGTTTTTTTAGTTCTGTAATTTGTTGATTGTATT
TAACTATGTGAGTTCTGTTGTGATGTTTACTGTATTGTAAAGCACCTCATTCATGTGATGAGTGCTCTATAAATC
AATAAATGATGACTTAGAGGCTGTATCACGAGCTATTTTGGTTTTAGGATGCAGGTCTCAAAAGCAAGTTGTGGG
ACTCTTTCTGTATAAACAGCACATGATACCAAAGGAACCACAGGGAAACCTTGTATTTTACAGACTTTAAAGAAG
GAACCAGAGAAGTTAACTTGCCTTCCAACCTGATAATGATGCTCTTTAGATTTCCAGTACGTGGCCATGCACCGT
TTTAACTCAGAGTTTGTGTGCACTGTGATTTATAACCTTCGAGTGAGCACTTATTAGAACATTATTGGGGATTTT
GTCTTTGGCCTAAACTGGCTCTACCATAAAGGTAAGCTGAAAGGTGAGGAACCCAGACTCAAATGTGAACTGGAA
G

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FIGURE 4713

LANTKNSFKRWDPSLLKSELVHMVVACGKTEFKFCSPIAIILLAIC

FIGURE 4714

ACTGCGCGCGCCTCCAGGCACCGGCGTTAGCGGGTCGCCGACCCGCAATCCCCGCCGCGGCTGCTTGCCTACCGG
AGTGTGCGCCGGCACCTGCCGCCGGAGACATGTTGCAAAAACCGAGGAACCGGGGCCGCTCTGGCGGCCAGGCCG
AGAGGGACAGAGACTGGAGCCATAGCGGAAACCCCGGGGCTTCGCGGGCCGGGGAAGACGCCCGGGTTCTCAGAG
ACGGCTTTGCCGAGGAGGCCCCGAGCACGTCCCGCGGGCCGGGCGGCTCGCAGGGGTCGCAGGGCCCCTCGCCTC
AGGGCGCCCGCCGGGCCCAGGCCGCCCCCGCCGTGGGGCCCAGGAGCCAGAAGCAGCTGGAGCTGAAAGTGTCCG
AGCTGGTGCAGTTCTTGCTGATTAAAGACCAGAAGAAGATTCCGATCAAGCGGGCCGACATACTGAAGCACGTCA
TCGGGGACTACAAGGACATCTTCCCCGACCTCTTCAAACGGGCCGCCGAGCGCCTCCAGTACGTCTTCGGGTATA
AGCTGGTGGAACTTGAACCCAAGAGCAACACTTACATCCTCATCAACACCCTGGAGCCTGTGGAGGAGGATGCCG
AGATGAGGGGTGACCAAGGCACGCCCACTACGGGCCTCCTGATGATCGTCTTAGGGCTCATCTTTATGAAGGGCA
ACACCATCAAGGAAACTGAAGCCTGGGACTTTCTGCGGCGCTTAGGGGTCTACCCCACCAAGAAGCATTTAATTT
TCGGAGATCCAAAGAAACTCATTACTGAGGACTTTGTGCGACAGCGTTACCTGGAATACCGGCGGATACCCCACA
CCGACCCCGTCGACTACGAATTCCAGTGGGGCCCGCGAACCAACCTGGAAACCAGCAAGATGAAAGTTCTTAAGT
TTGTGGCCAAGGTCCATAATCAAGACCCCAAGGACTGGCCAGCGCAGTACTGTGAGGCTTTGGCAGATGAGGAGA
ACAGGGCCAGACCTCAGCCTAGTGGCCCAGCTCCATCCTCTTGAAAGGTGGATTCAGAGGGACCCCCGGGACAAG
GGTCTGAGACCCAAAGGCACAGTTTAGAGGATTGGGGGAAGGGAGAACGAACCCAGGGAGCATATTGCTGTAAAC
GCTTCAATGTGTGTAGCTTTAGGATGTGTTTGCAAAGTTTTGTTTTTTTAATGTTGTGTTATTTTGCTCCAGATT
TTCATCTATAAACAAAGGAGCATTTGTTTTGATTTTACTCTTTTTGGTATAAAAAATTTTGCTAGCTTAGTAAAA
CGAATTGGAAAACTTGACTATGATCTGGAACAGATAATGCAAGAAGGAACACATAAGTAAGTTGCTTTGGTGCCA
AGAAAATAAAAAAGCTATTATCAGGTCTCCTAACTACCCCAGTTTGTAAGGAAAAATAAAAGTTTTTATAAAATT

FIGURE 4715

MLQKPRNRGRSGGQAERDRDWSHSGNPGASRAGEDARVLRDGFAEEAPSTSRGPGGSQGSQGPSPQGARRAQAAP
AVGPRSQKQLELKVSELVQFLLIKDQKKIPIKRADILKHVIGDYKDIFPDLFKRAAERLQYVFGYKLVELEPKSN
TYILINTLEPVEEDAEMRGDQGTPTTGLLMIVLGLIFMKGNTIKETEAWDFLRRLGVYPTKKHLIFGDPKKLITE
DFVRQRYLEYRRIPHTDPVDYEFQWGPRTNLETSKMKVLKFVAKVHNQDPKDWPAQYCEALADEENRARPQPSGP
APSS

FIGURE 4716A

TGGGAATATAAATGTCAAGTTACATCTGACTTGAGCTCAGCAGAATAAACAAAACTGTGAATCATTAAGAGGATG
CTTGTGAAGACATGCTTACTTTTATCTTTGCTTGGGTGAGTTTGAAAGGCAAAGGAAGATAACCAAACCAGTTCC
CTGTTGGTTGGGGGCCATTCTTAACGTGTACTGAACTGAACAAGCAGCAAAATAGGTGGAAGGTGATTTGAATCA
CTCCAAAGTCAGGCTTGGAGTCCCAAGTCTGACCTGGAAAATGGACTCTAGCTCTGCCTCTTATCCCACACATGT
GTGTGTCTGTGTGAACATGTGTGTGTGTTGGTGGTTTGTTTTGTTTTGTTTTCCTCTTATGTACTTGGGAAGCAG
TTGCTGAGGGTCTTGCGGAGCTCTGTTTCCTCCAGTGTAGCATAGCAGCAGGTGCAGGGGTCCAAAGCTATGGTG
GCAAAATGAAGAATGAAAGGAATAAATTGCACACTATCATTTCAACATGTAACCCAGTGAATCAAACTGAAGGTA
GGATGTCTATATACCCTTCATTTCAGGGGCCCCTAGAGAATATACCTTAGCTTTCCCTCTTCCGGCATCCTGGAA
AGTGGATACCTGTGGCCTTCCTTTCACTTTGAAAGCTTACACCCTCATTTTGACTACAACTAATACTAAAAGCTT
GGCATCTTGCTTGAGATTAGTGTTTGCTATGCCAAACACCTTCTCCTCTTTCTATTGAAAGCAAAACATAGGAAA
ATAATTTGAAATACTTTTAAGGCATCTTAAAAACATGACTTTTTCATCTTATGGAAAAGCAGACCAATTTTGCTT
TTTTTTCCCAACTTGTTCTCCAGACTGTGCCAATAAAATGTGTTCATAGCAGGAAAATTTGGAAAATACAGAAAA
GCACTATGAAGAAAACAAAATGTACCCAAAATCCCATCACTCAGATAACATCACTGTTAATGTTTTGATATGTAT
TTCCAGTCTTTTCTATTGTGTTAATTTTTCATTTTGTTTTTGAATAAATAACTTTCAGGAAAGAAATTGAGCCTT
TTCTGCCACCTCTGAAGCCTGATTACTGTGTGAAGCAGGCCATGAAGGCCATCCTCACTGACCAGCCCATGATCT
GCACTCCCCGCCTCATGTACATCGTGACCTTCATGAAGAGCATCCTACCATTTGAAGCAGTTGTGTGCATGTATC
GGTTCCTAGGAGCGGACAAGTGTATGTACCCCTTTATTGCTCAAAGAAAGCAAGCCACAAACAATAATGAAGCAA
AAAATGGAATCTAAGAATCTTTTTGTATGGAATATTACTTCTATCAGAAGATGATCAAGATGTTTCAGTCCAGTG
CACATCAGCATTGCTGACATTTTATGGATTCTAAACTTGTGTTGTTTCTTTTTTAAATCAACTTTTTAAAAAAAT
AAAGTGTAAATTAACCGACTAGAGTACTTGGAAAATGTGATCAGTACAAGTGAACTTAGGTTGTTGCCAACAGGG
TCCTTTTAGGCAGAACCCAGAAACCAGTCAAATCTGTAGAGAAGCAGTGTGACATCTTCAGGTTACCATTATTTT
TTAATGAGCAGGAAGTCTAGAAATGATAACTAGACTGTATGTTTCATGTGTGTGATTTTTCAGAATTCCCAGAGT
TTACTCATTCTTGTTATTAAACTCTAGCCAGTTGACATCTTCGCAATTTCAAGGACTGATAGTGCTGTATTTTCT
CACGTTTTCTAAGTTTCCGTTTTGCAAGGCCTAGGTGACTTTTTCATGGTGTTTGTATGTTTAGCTCTTTTGAAA
AGGAATTTTGAAATCTCCATCAACTGAAGTAAATGATGTCTGAGTGTTACAGTAAAGGTGACCAAGTCTCTTTCT
TAAAGTCACAATGACTAAAGTATTAGTTGAANNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNTTGAATTTTTAATTTTATCTCTGATATA
CTTCATTAGGTCTCCAGACACTTAATGAAGTATATCAGAGATAAAATTATCCTAAAAGATCATACATTTTCTACC
TATGAATTTTGCTGCATACAGAAAGTGCCCTTTCCTCAGGAAGTTGCTGTGTTTCATTTCTTTGGATGGACTCTT
ATCTAGAATACATAGCAGCTCTGCAAAGAAACAGTTTTTAAAAATGGGAACTTCTACATTGAAAAGTCCCCATTT
TTGTGCCAACTATGATTAGTGAGAGGAAGAAATCTTATTCTATGGCATATGTATGGAAGGGTGTAAAGATTCTTT
TGAAAGGTTTATTCACATTGTAGAACAGCAAATGACATTTTTACAGTATTTTTTTGTAAAGCAAACTATTTTGTG
CCTTGAATTTGGTATATGTGTATTAGTGAAACATTGTAAAGGTGAACTTCTACCTCTGTATCTAAATGTATACCA
TCCACTTGTAAATGACTATAAACTATTATGTGATTGCTTTTTTTTTTAGAATGTCTTGTTTAAATAGTGGCCAAT
GTTTAAGGCTGTTAAAATAAGCCAACTTTTACTAATTGGGGAGTTTTATAAATGACTGATTAAATTTAAAGAATT
AACTTACATGCAATTGTGTGATTATTAGTTATCAGCAGTGTTGTAAGGAAAATTATTGTGTTTTTTTTTATGATC
ATTATCCCACTTTAGGTAAAGAAAAATATTGGAATGGAATAGTGTTGGGAAACAGACATTAACAACCTAGGGTGC
CTGCACTCAAATAGCCGATGTTACTGTCCCTAGATTAGAGACTTGATTAAGGGCTTGTTTGTACCAAAAGTGGGG
AAACAATGCCATGACCTGTGTTTTAGTTTGGCTGCACCACAGATCAAATCTGCACTGTGTCTACATATAGGAAAG
GTCCTGGTGTGTGCTAATGTTCCCAATGCAGGACTTGAGGAAGAGCTCTGTTATATGTTTCCATTTCTCTTTATC
AAAGATAACCAAACCTTATGGCCCTTATAACAATGGAGGCACTGGCTGCCTCTTAATTTTCAATCATGGACCTAA
AGAAGTACTCTGAAGGGTCTCAACAATGCCAGGTGGGGACAGATATACTCAGAGATTATCCAGGTCTGCCTCCCA
GCGAGCCTGGAGTACACCAGACCCTCCTAGAGAAATCTGTTATAATTTAACAACCCACTTATCCACCTTAAAACT
GAGGAAAGTCGTCTTTACATCTAATTTTATTCTTGTGTGTTATAACTTAAACCTATTTCTATTTTTGTTTGTTAT
TGCCCTTATAAGGGTGTCCATCTCCAAGTTCAATAAACTAATTCATTTAACTTTTTTGTAGAAGTCTTTCATTCC
CATGTCCCAGCCCAGTTCAATCACTTCTGTGGCTCTTCCTTGAATGTTGTCCATATTCTCCCTCCCATCTTTAGC
TGTGGAGTTTGGAAAGGGATACAGTTAATGCAGGTTTAGAACTATGGAATTCCTACAAGTTGCATTTCTTCATCC

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FIGURE 4716B

CAATGTCACGTTCTTATTAATGCTACATTGCTGATTGTGTGCATTATTGTTTCTAAACATGAAATCTCTTCTAGA
C

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FIGURE 4717

MKSLL

FIGURE 4718

CTATTTTGTTTGTAGTATTGTGGAACAGTCTTGTTATGGAGTGCCAGCTTAGAGGTTGTTGCAAACTTGTCTAGA
AGTGAGAGCATGGTTTTTTTTAGCCCTTTGAGAGTCTACATCTAATGAACATTCTTGCTCACCCATAAATAACGT
CAAGCCTCAATGTCACCGTCACGTTGGGATACTCTTTCTCATCTGGCATCCTAGACAGGACAAGGTTGGTTACCT
TTCCTTCCATGAACCATGAACCTGTGACGGCATCATTCATCCTGACTTCACCAAGCTCCGCCTGTGGGTGAGGCC
AGAGCTCCCACTGGCAATTTTTAGAAGAGCCAGAGGCTCCCTGCTTCCTCTAGAAATAACAGTTCAGGGTGAAGC
ATGGAGGGTTTCAGTTCCCAGACAACGGAACCATTTAGAGACAACACAGTTGGACATTTCCACTTTTTCCTTGAT
TCCTGGAAGTCCAGTGGGTTCTGCAGCTGAAAAAGCCCTGGGTCCCAGCAGCAGAGAGACAGGACAGAGGGGATG
CTTGGGCGGGGAGGGACGGTAACCTGCAGAACAGATTCCATTTTTATAGAACGAGTACACGTTTGCTAAAACAGT
CCTGCTTTCCCAGACTGGATTCCCACCACAGGGACAGTCGGAACTCAGGACTAGCTCCAGCGACATCTTTCCTCC
GAATTCAAGCCTTCTATCACAATGTCAAAACAGCTATTTATAAAGCCATTTTCATTGTACTTGATAACAGCACGA
GTCCCAAAACTTTTAGAAATAAAATAGGACATTGGCTTGATTGAAAAGAGGGACTTTTTAAAAATTGTTCTTTCG
TCAGAAGCCTTTTGGATGACTTACAATAGCTCTGATGAAGATACCACCCCAGCGTCAGTCCAATAGGTCAGTGAG
TTTCAACAGGCATCCATCCCTCCCATGAAGGGATTCTGGTGATGGGAAGTTTCTGTAATGACAGGAAAGCATTGA
CCCTCATTGATTGTCAACTTTGGTATTAGCCATGAAAGACAGGATGCTCATTGGGTGTTCTGTAGAGTGAGGAAT
GCTGCCTATTCCCTCCCAGAACGTCTGACCCAGGGGTGTGTGTTGAGGAGCCCTGGGGGAAATGGACCAAGTTTT
CCCACAGAGCAGTATTAGGCTGAAGAGCAGGTGACTGGTAGGCCCCAGCTCCCATCATTCCCTCCCAAAGCCATT
TTGTTCAGTTGCTCATCCACGCTGGATTCCAGAGAGTTTTCCAATTTGGGAAGCCATGAGAAAGGTTTTTAAATC
TTGGGAAGATGGAGAGAGGGACATAGGATAGTTGACTCCAACATGACAGGAAGAGGCTGGAGATTGGGAATTGGC
CATCAACCAAGCCTGTAGTAGTAAAGCCATGGTCCCGCATTGGAATTACTTGGGGAACTTATACAGTTCTGATAC
CCAGGCTCTCCTAGACCAGTTCAACCAATTCTAGGTGGGGGACTCAGGCATCAGTGTGTTTCGTAGCTCCCCGGG
TGTTTTCCCTGTGCAGCCGAGCTTGGGAAACTGCCATGCTTTTTGGATGTCAAGGCGCTGTTGGAGGCTGGGTGT
GACAGCACAGAGCCAGGTTGTCTTGTGGAAACCACAGCCACGGGTTTGCCACTGGCTCAGCATGGCCTCACTGCC
AGTCCCAGGCTGGCTGAGGGACAAGATGGTTTCTCTTGGGAGTTCCTGAGTGGAGCACCCTTCCAGGCTTTTTGA
AAGCCAGCTGATCTGTGGAGCCTTGTTAAGGGACTCAATACGGTGTTTGGATATTGATGTTTTTCCTTGAGACTG
TCTTGTCCATCAATAAAGATGGAGGATGTCTCCTCTTTGAACCCCGCTTCCCCACCAGTACTCTCTCTCCCTTAG
AGTTTATGAGTTATTCAAGGAGGAGACTTCTTAAAGACAGCAACGCAATTCTTGTAACTTGTGTAAATAGCCCCA
TCTTTCAGAGTGATACCATTTCTACATTTGATAATGCCTGTATTCCTGTAGGATGTATATAGTTTAGGGGATTTT
TTTTTTGTTTGGTTTTGTTTTTTAGAAGTCAATATGTCTGGTTTTATTTATTGCTTGAAAAAGATCATTTGAAAA
AAATAAATACATTTTCAATTCCAGAAAGGATCT**ATG**TCGGGTGCGGAGAAAGAGGTAATGAAATG

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FIGURE 4719

MSGAEKEVM

FIGURE 4720

GGCACGAGGCTGGAACCAAACAGTTTGGCATGTGTGTCAGTGATACACAAAATAGTTTTGCAGATTATGGTTGTA
TGTTACAAATTAGAAACGTGCATTTCTTACCGGACGGAAGGTCTGTGGTTGATACAGTTGGAGGAAAGCGGTTTA
GGGTTTTAAAAAGAGGAATGAAAGATGGATATTGCACTGCCGACATTGAATATCTGGAAGATGTTAAGGTTGAGA
ATGAAGATGAGATTAAGAATCTCAGAGAGCTTCATGATTTGGTTTACTCTCAAGCCTGCAGCTGGTTTCAGAATT
TAAGAGACAGATTTCGAAGCCAAATTCTTCAGCATTTCGGATCAATGCCCGAGAGGGAGGAAAACCTTCAGGCAG
CCCCTAATGGACCTGCATGGTGTTGGTGGCTTCTTGCAGTTCTCCCTGTAGACCCACGATACCAGCTGTCGGTTT
TGTCAATGAAGTCTTTGAAAGAACGGTTGACCAAGATACAGCATATACTGACCTATTTTTCTAGAGACCAATCTA
AGTAACTAACTCTTTGGATCTCCCTTTAAAGTGACCCTAATCTGGCTGCATTGATGGCCAGATTGTCTGCTGCCT
TTGCACATCTAGTGCTGGTTTCAGAAATTTAATGAAACTTTTCTTTTTCCTTCGACCTCCTGAATCATGTGGTTC
TGCAAATGAATACCTTCAACTAGGATTTAGACCACTAAGAACTTGCACAGAAAAACACGCATTGAATGTGTGTCG
AACCTCTACATTGTGAAGTTGCACTATGTACCATACTCTAAAATGAAATAAGAACTCTTTATGTCTGTGAGAGAG
TGTGTGTGTGTGTGTGCGTGCGTGTGTGCTTGTGGGGGGTTGGGTAGTGTGTGTGTATTTTCTCTGGCTTTAAAAT
CTTAAAACAAACAAACAAAAAAGCCATAGAGAGCAGAACTTGCCGAGGGTCATTTATTGCCCAAGTTTACAAGAG
TAGCGATACAAGTTTTTGCAAATTGAATTTGCCTCAGATATATCTGTCCTAATGCTTATATTTGCACAAGTATGT
AAAATATCGTGTTGAGGATCATTCTTTGTTGGAAATACTGCTCTTGCTGAACTGTCTTGACCATTGACTATGACA
CAGTTTCTTATTTATGTAAATACTTGCATCACAGTGGCCGACAGGCATTGGATGCAGAACCTAGAGCCAGTTTTC
AGGAACAATTGTAAACCTGACATGGTACTGTGCATCTATTCATAAAACACTCAAAACTGTGAAAATATGGTTTAC
ATTTAATTGTACATAAAGGTAAAGGGAGAACTCAATTCAGTACCAGTTAGTTTGTACATTTTAGGGGGCTTTTCA
CATTAACTGCCCATTTGTGTAATTTATAGTTTGACATGATGTGTTTGTTTTAAAAAAAAATGCATAGTATAAACC
CATTAAGGATCTGGGAAAAGAGAAGAAGTTTAATATAGAACTAAGCTTTTAAAGTTTGTTTTTGTTTTTAATTCT
GGTCTCGGTGCAAATGTTAGTTATGCCTTATTCATATCACAGTTAGATCACCATGCTGCAACATGGTTTATATTC
ATGCTGCCCTAGAAACTTTTGTAATTATTTGTTGCAAATTTGTGACTGTCCTTATTAACTTTCTTTTATGTAAGT
AATTTGTAAAAGTTTCTTAAAATTTTTGCTTTTGCTTATTTAATTTTGAATAAAAGCTAAATTCCTAAAAAAAAA
AAAAAAAAA

FIGURE 4721

GCAGAAGTCAAAAGTTTTGCAAGGAAACCGATGAGGTTGCTGACCTGAGCTGGGCAGGGTTGAACAGGCGAGTGC
CAAGATCAAGGTCTCTGATTGTCTCTCCTTGAAAGGTAAGCAGAGAACTAGGGCTATCCCATAAATTAAGTGGGA
GATTGGAAAGGGGTGCGGACTTCTGTATTGGGGAGAAGGTCTTGGATGAACTGGGGCAGAGAACTGCCAGAGAGA
GTACCTAGGAATACGTTGTTAGCAGGAGAAAGACCAAGTTCAGATGCAGACTTGGGAAAGTAGGTAACTTGACCA
AAGGTAGCAAAATTAGACTACCCAACTGGATTGTGAATGCAGTTTATGAAATGGATCAGGACAGGAACAAAAATA
GATTTTCTAGAAACTGCAGACTCCTGTGATTGGAGCAGTATACAAAGTACAGCAACATCAGACTAGATCTCACCT
GAGGTGCTGGGTGAGAAATCTTAGGGACCAGATGGAAGAGGGCCTGTGTATAAAGACATTAGGAAGGAGGTTTGG
GAAGGTTTGGGAGGGCAGCCTGACTTGTCTCCAGAGAAAGTTAGAACTGGTTGACTTAGCAACCAAGGGACACTG
GGTCAAAGACGAGGAATCAGGACGTCGGTGCCTAGTGACTGAGCGCCAGCCCAGCCCATTTCTCTACATTGCCAT
GGGCTAAACCCAGTGTGCTGTAAACTCTTCAGTTCCTTTGGTTATGGATTTTGTATCTTTTCTGTGTTTCTTAAT
AAAGTTCTTTTGAAAAATGGGAACCTTTCTCAGATGGGAATTTTGTATCTTTCCTCTGTTTCTTAATAAAGTTCT
TTTGAAAAATTGGAAAAAAAAAAAAAAAA

FIGURE 4722

GGGATTTTCTGCTCCGGTTGGTGAGCGCGCCTGCGCGTTGACGGCGATTTTGCGTTCTGAGGCTGCAGCGTCGGC
ATCTTGAGCTGCCGGTTCGCGAGTTCGAGGCCAGGTTCCGCCTGTCGTGGGTTCGCACCCCGGACGCGATGCTAT
TCGACAAGGTGAAAGCGTTCTCGGTGCAGTTGGACGGCGCGACCGCGGGCGTCGAGCCCGTGTTTAGCGGCGGCC
AGGCCGTGGCGGGCCGGGTGCTGCTGGAGCTGTCAAGCGCCGCGCGTGTGGGTGCCCTGAGGCTGCGCGCGCGGG
GCCGCGCCCACGTGCACTGGACCGAGTCGCGCAGCGCGGGCTCGAGCACGGCTTACACGCAGAGCTACAGTGAAC
GCGTGGAGGTCGTGAGCCACCGCGCCACGCTCCTGGCGCCAGATACCGGGGAGACCACGACGCTGCCTCCTGGGC
GCCATGAGTTCCTGTTCAGCTTCCAGCTGCCCCCGACCCTGGTGACATCCTTCGAGGGCAAACACGGTAGTGTCC
GCTACTGTATCAAGGCCACCCTGCACCGGCCCTGGGTCCCAGCACGCCGGGCAAGGAAGGTGTTCACTGTCATCG
AGCCTGTGGACATCAACACGCCAGCCCTGCTGGCACCTCAAGCGGGGGCTCGGGAAAAGGTTGCCCGATCCTGGT
ACTGTAACCGTGGCCTAGTCTCCCTTTCGGCCAAGATCGACCGCAAGGGCTACACCCCAGGAGAGGTCATCCCTG
TCTTTGCCGAGATCGACAACGGCTCCACACGTCCTGTGCTGCCTCGGGCAGCCGTGGTGCAGACACAGACGTTCA
TGGCCCGAGGCGCCCGAAAGCAGAAACGGGCAGTGGTGGCCAGCCTCGCGGGCGAGCCGGTGGGCCCCGGGCAGC
GGGCGCTGTGGCAGGGCCGGGCACTGCGGATCCCCCCAGTGGGTCCTTCCATCCTGCACTGCCGCGTTCTACACG
TGGACTACGCACTCAAGGTCTGTGTGGATATCCCAGGAACGTCCAAGCTGCTGCTGGAGCTGCCACTGGTGATCG
GCACCATTCCCTTGCACCCTTTTGGCAGCCGTTCCTCCAGCGTGGGCAGCCACGCCAGCTTCCTGCTGGACTGGA
GGCTGGGGGCCTTGCCGGAGCGGCCTGAGGCTCCTCCTGAGTACTCGGAGGTGGTAGCCGACACTGAGGAGGCAG
CCTTGGGGCAGAGCCCCTTCCCGCTTCCGCAGGACCCCGACATGAGCCTTGAAGGCCCGTTCTTCGCCTACATCC
AAGAGTTCCGCTACCGCCCGCCACCCCTGTACTCTGAGGAGGATCCAAACCCACTCTTGGGGGACATGAGGCCGC
GCTGCATGACTTGCTGAACGGCACAGGGACCCCTCGAGGAACAAGGTTGCACACCAGCTTTCAGCCACCATGACT
GTGGGGAGTGGCTGGACCAAGGGCTGACCTCCCCGACTGCATCAAAGTTGGGGAACCAAGTCTCAGAGTGAGGCG
GGGGCCTTTCGGATATCACATGGGACAGAGGAAGAGCCCGGCTGGAATCTGACTTACCTGGACCGCTGTCCTTGT
GAGGCATTGAATGCCCAGTGCAGTATCCGAGAGACTGTTTAATAACCTGTCTTCCCAGCCAATTGGTGGTGCTGG
AATCCCCTAGGAGCCTTCAGTCTGGGAGAAACAGAGCCAGACATAGACAGTTCCAGCATCACAGAACCAGAAGAA
GAGACCTGCAACTGTGAGAGTCCAGACAGGAAGCAGAGAAGGCGTCCTTGCGGAAAGGGCATTTTAGCTGAGGCT
TTGGAGTACGAATAGGAGCTCAGCAGGCAGACGAATGAGGAATAAAGGTCAGAGAAGGTCAGAGCTGAGTGACGT
TTGGAATCCACCCCGTTTATTGTAGAACTGGGGGTTCAGAGGGCAGGTGCCTCAGAGTTGAGGCCACACAGTGAG
GTCTGGTGGGTGAAAGGACCCAGGAACGAGGCGTTCAGGAAAGCAGGTTGTCAGAGCTATGTGGAGTCTGTGGGT
GGCAGGGGCAGCCGCTCCAGCCTTTGAAGACTTTGAAAGCCAGAGATTCCTGGCGCAGGCTTGGACTTCCTGGGA
GCTCCTCCAAGTACCCAGGGGCATCAGAGCTGCCTGGGTGTTACATGGCCCAGGGAACCCAGGTTCAGGGTAGGA
CAGGCAAGACCAGATACCCAATGTGCAAAGTGAAAACACTGGGCTCCCTGTTAAACGATGAAGAATTCAAGACAG
TGACAGCATTACGTCACCCCTGGGGACAGAGGTCAGCCTAAGGTGACACACGGGGACTACTGTGCTTCCGGAGGC
TCCCTGTGTCCTGGAGGAGAAAAGCATTAGAGGGGGCAGCTGGACAAGCTCCCAACTGCAGAGTCCCAGCCCTGG
CTGGGGCAGGGCCCCGGCCTGGGACTCAGCATTTCTGATATGCCTTAAGAATTCATTCTGTTTTGTACAATTATT
TTTTAAAAGTAAACGTGTGGAGAAAGAAAAAAAAAAAAAAAA

FIGURE 4723

MLFDKVKAFSVQLDGATAGVEPVFSGGQAVAGRVLLELSSAARVGALRLRARGRAHVHWTESRSAGSSTAYTQSY
SERVEVVSHRATLLAPDTGETTTLPPGRHEFLFSFQLPPTLVTSFEGKHGSVRYCIKATLHRPWVPARRARKVFT
VIEPVDINTPALLAPQAGAREKVARSWYCNRGLVSLSAKIDRKGYTPGEVIPVFAEIDNGSTRPVLPRAAVVQTQ
TFMARGARKQKRAVVASLAGEPVGPGQRALWQGRALRIPPVGPSILHCRVLHVDYALKVCVDIPGTSKLLLELPL
VIGTIPLHPFGSRSSSVGSHASFLLDWRLGALPERPEAPPEYSEVVADTEEAALGQSPFPLPQDPDMSLEGPFFA
YIQEFRYRPPPLYSEEDPNPLLGDMRPRCMTC

FIGURE 4724

AAAAAACAACTTAAAGAGGTAATTTAGCCATCATTCTTATGCCAGCAGATATAAATAAACTTGGACCCATCTGGT
CTTCAGCTAAACCTGAGACATTTTAAAGTGCATGGACAGCCATGGACAGCAGGCCCTCCTCTAACAGGGGATGCA
AGGCATGGAGAAAGACAATCAGTACCCAAGCTCAGCCACAGAAGACAGGAGTCACTCATATAACTTGTGTTTAGA
AGTTTTTGGTAGCCACGCACACTTTCTGAAATCACACTATCTGGTGGTTTAATCATATTTTTAAAGACAGAATCC
CTGAGTGCTGAGCAGATTCTCAAAACACATTTAGAATCCCTGAAATTAGAAAGATCAATGACAAAATATCTGTCA
GCCAGGCCACAAACAGGTGTAAAATTATGAAAGGAGTGGTTGGATGTGCCAAGTTTGGTAAAGTGGTGACTGCAT
CTGAGAAAGAGGCTGTGAGGCTGAACTCTTGGTGGCTTCCTTCTGTAACTTCCAGAGGGAGTCTTCAACACAGGC
CCCGTGCTCGTAGGAATACGGTAGCACCTATGTAGGAAGTGCGTGGAGTTTTCTGTCTTCTTTCTGTGTGATTTT
TGGCCTTTTTATCAGCACTTCTCCCCTCCCAGGAGCCTGGGGATGCCAAACATCCAGAATGTGATGGGACAAGAT
GGGGGCAGGGGCCTCACCTCCCTGCAGAGGTCCGGCCAGGTCTCCTTGTCCCTGGACAATCTCCTGAGCCTCTCT
GCTTGGTGGAGCAGGCACCTGTGTGCAGAATTCCCACTGTGGCCAGCACGAGGAAGTCTTTTCTAGTGAAAATGT
GTCTTGTGGTCAGGAATAATTATCCTTTCCCCTGTAGCCACCAAGGAGGGCAAATAGAGAAAGGTAACCTAATTG
AAGGATTGGTCATGTGAAAAGGGCTACATTTGGGAAGCTGGGAAAGGCCTCCAGGCTTCTAGAGCAGCTAGCTTG
GGCTGGATTCTCACACCCAGGCTGCCCCTTGGATTGTTCTACCCAAGCTTTTCCCTGGGGTCTGGGCTCACTCCA
TAAGGTAAGGTGCCTTTTACCTTATGGTCCTTCTTTAGCAGGTAACAAAGGAGCATCAGGGGCAGGCTGCCCTGG
TGGCATCACACTGGCTAGTGAGGCCGTGAATATCTTGTCCCCCAGCAGGGCCGACAGTTTCTATCACAGAAAACA
GTGTGTTCAGTGGTGAAAATCGTTGCATGC**ATG**TTTTCATCTGAGCGTGTCCTTCTCCCATACTCCCTATCAGCC
AGCCCTGCCTGTAGCTGCTGTATGGTGATTGCACTTGGACATCAGTCCAATGACTGCAAGTCGGCCTGGATTTTC
ACTTGCAGAGGCTACAGCTGCATTGTCAGGTCTCCCAGCCCTGCAGAGAGCTCCCTCCACTGGTTAGCAGTGTGT
TGTGTTTTCCATTCATTTCAGAAGAGCTACATTGTGTCACTGGACATTTTTAAAAACTGTGATTTT**TAA**TAAAAA
TTTAAAATTT

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FIGURE 4725

MFSSERVLLPYSLSASPACSCCMVIALGHQSNDCKSAWIFTCRGYSCIVRSPSPAESSLHWLAVCCVFHSFQKSY
IVSLDIFKNCDF

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FIGURE 4726

AGACTCCCTGTCTTTGCGGTTTGGGAGATGATGAGAAACCACAGAATTGCTAGTAGTTTATGTGGAGATCAGGTC
TTCTCCAAGAAAAAAAAAAAGAAAAAAAAAAACAACATGGCTGCAAAGGAGAAACTGGAGGCAGTGTTAAATGTG
GCCCTGAGGGTGCCAAGCATCATGCTGTTGGATGTCCTGTACAGATGGGATGTCAGCTCCTTTTTCCAGCAGATC
CAAAGAAGTAGCCTTAGTAATAACCCTCTTTTCCAGTATAAGTATTTGGCTCTTAATATGCATTATGTAGGTTAT
ATCTTAAGTGTGGTGCTGCTAACATTGCCCAGGCAGCATCTGGTTCAGCTTTATCTATATTTTTTGACTGCTCTG
CTCCTCTATGCTGGACATCAAATTTCCAGGGACTATGTTCGGAGTGAACTGGAGTTTGCCTATGAGGGACCAATG
TATTTAGAACCTCTCTCTATGAATCGGTTTACCACAGCCTTAATAGGTCAGTTGGTGGTGTGTACTTTATGCTCC
TGTGTCATGAAAACAAAGCAGATTTGGCTGTTTTCAGCTCACATGCTTCCTCTGCTAGCACGACTCTGCCTTGTT
CCTTTGGAGACAATTGTTATCATCAATAAATTTGCTATGATTTTTACTGGATTGGAAGTTCTCTATTTTCTTGGG
TCTAATCTTTTGGTACCTTATAACCTTGCTAAATCTGCATACAGAGAATTGGTTCAGGTAGTGGAGGTATATGGC
CTTCTCGCCTTGGGAATGTCCCTGTGGAATCAACTGGTAGTCCCTGTTCTTTTCATGGTTTTCTGGCTCGTCTTA
TTTGCTCTTCAGATTTACTCCTATTTCAGTACTCGAGATCAGCCTGCATCACGTGAGAGGCTTCTTTTCCTTTTT
CTGACAAGTATTGCGGAATGCTGCAGCACTCCTTACTCTCTTTTGGGTTTGGTCTTCACGGTTTCTTTTGTTGCC
TTGGGTGTTCTCACACTCTGCAAGTTTTACTTGCAGGGTTATCGAGCTTTCATGAATGATCCTGCCATGAATCGG
GGCATGACAGAAGGAGTAACGCTGTTAATCCTGGCAGTGCAGACTGGGCTGATAGAACTGCAGGTTGTTCATCGG
GCATTCTTGCTCAGTATTATCCTTTTCATTGTCGTAGCTTCTATCCTACAGTCTATGTTAGAAATTGCAGATCCT
ATTGTTTTGGCACTGGGAGCATCTAGAGACAAGAGCTTGTGGAAACACTTCCGTGCTGTAAGCCTTTGTTTATTT
TTATTGGTATTCCCTGCTTATATGGCTTATATGATTTGCCAGTTTTTCCACATGGATTTTTGGCTTCTTATCATT
ATTTCCAGCAGCATTCTTACCTCTCTTCAGGTTCTGGGAACACTTTTTATTTATGTCTTATTTATGGTTGAGGAA
TTCAGAAAAGAGCCAGTGGAAAACATGGATGATGTCATCTACTATGTGAATGGCACTTACCGCCTGCTGGAGTTT
CTTGTGGCCCTCTGTGTGGTGGCCTATGGCGTCTCAGAGACCATCTTTGGAGAATGGACAGTGATGGGCTCAATG
ATCATCTTCATTCATTCCTACTATAACGTGTGGCTTCGGGCCCAGCTGGGGTGGAAGAGCTTTCTTCTCCGCAGG
GATGCTGTGAATAAGATTAAATCGTTACCCATTGCTACGAAAGAGCAGCTTGAGAAACACAATGATATTTGTGCC
ATCTGTTATCAGGACATGAAATCTGCTGTGATCACGCCTTGCAGTCATTTTTTCCATGCAGGCTGTCTTAAGAAA
TGGCTGTATGTCCAGGAGACCTGCCCTCTGTGCCACTGCCATCTGAAAAACTCCTCCCAGCTTCCAGGATTAGGA
ACTGAGCCAGTTCTACAGCCTCATGCTGGAGCTGAGCAAAACGTCATGTTTCAGGAAGGTACTGAACCCCCAGGC
CAGGAGCATACTCCAGGGACCAGGATACAGGAAGGTTCCAGGGACAATAATGAGTACATTGCCAGACGACCAGAT
AACCAGGAAGGGGCTTTTGACCCCAAAGAATATCCTCACAGTGCGAAAGATGAAGCACATCCTGTTGAATCAGCC
TAGAGGAGAAGCAGCAGGAATGATGCTTTGATACTCTGGAGGAGAAGTTAACTCAAGATGGAATTCATGTTCTGA
TTTGAGGAATGAAAATGAGATGATCAGGCAGGAAACTGACATTCCAAGGATCTAATCCAGGAAGTACTCTCAGTG
GGGACCACCTGCTTTCATCCCCTGACATTGTGGGAGAAATTTTGCAATGTATGCTAATCAAAATGTATTTATATG
TTCTCTGCTGATGTTTTATAGAGGTTTGTGAAGAAAATTCAACCTCAGCAACTTCAGAAACTGCCCCTGATACGT
GTGAGAGAGAAATAAAATCAGATTTTGAGTGTTGAAGGGACTGAGGAAGTGAGGATAAAGAGCATGAGGACAGCA
TGGAAAGAAGGAGGCAGAAGTGGAACTGAACTTTCACTCTCCATGGGACAGATCAATCTCATTATCAAGTCTGAA
TAGCAACCAGCCCTCTCCTCCACCCCGTTTCTCCTCAGTTAATTGGAGCTCAGTCAGGTGATTATTGAGTCTTGT
ACAGCACTGAAATGAAATCAAAGATGAAGAAGCATTGATTGTATTCGAAGATTGAAGCACGCTCATACTTTGTAT
GTGCTTTAGGGAAGGGGTGGGTGGGCACTTGGGCCTTGCGGGTGCATTCATGTAATCTGAGACTCTTGAACTTTA
TGACGGAGTCTTCAATATTTTGATGTATATGAAACTTTTGTTAAATATGTTGTATACTTCGCTGGCTGTGTGAAG
TAAACTAAAACTCTGATGAACACTTTGGAGTCTGCTTTAGTGAAGGAGACCAAAGTGGGAAGGGCTTTAGGGCAC
TGATAGAGGCCCTGGGTGTACTTTTCAATCCTGTGTAATGTTTAATTCTTGCAACTGAATCAAAACAGTGTTAAA
TTATGGCAATATTTGCACTTTGGGAATGAGTACATAACTGTATGATCACACTCTGCAAATGCCACTTTTAAAGCT
GTTAATAGACTTTGCACCTTTTCTTTGACAAGGATGTGTCATATTTAAATTTTTACATTCATCATGGCTACAGGT
AGAACTGGGGAGGGGGGAATGTAATTTTTTATGGGAATTTTGATATGAAAAGAAACTAGTCATTTATTTATACAA
TAGGCTTGGCTCAAAAAGTGTTTTTCAGACCTCGGTATTCCTAATGTGGGATGTGACTTTATTTTATTTTTAGTA
GCAAATTTGGATGTAGACTGACAGACATAGCTGAATGTCTTAATAAATTTAAATTTGAAGAT

FIGURE 4727

MMRNHRIASSLCGDQVFSKKKKKKKKNNMAAKEKLEAVLNVALRVPSIMLLDVLYRWDVSSFFQQIQRSSLSNNP
LFQYKYLALNMHYVGYILSVVLLTLPRQHLVQLYLYFLTALLLYAGHQISRDYVRSELEFAYEGPMYLEPLSMNR
FTTALIGQLVVCTLCSCVMKTKQIWLFSAHMLPLLARLCLVPLETIVIINKFAMIFTGLEVLYFLGSNLLVPYNL
AKSAYRELVQVVEVYGLLALGMSLWNQLVVPVLFMVFWLVLFALQIYSYFSTRDQPASRERLLFLFLTSIAECCS
TPYSLLGLVFTVSFVALGVLTLCKFYLQGYRAFMNDPAMNRGMTEGVTLLILAVQTGLIELQVVHRAFLLSIILF
IVVASILQSMLEIADPIVLALGASRDKSLWKHFRAVSLCLFLLVFPAYMAYMICQFFHMDFWLLIIISSSILTSL
QVLGTLFIYVLFMVEEFRKEPVENMDDVIYYVNGTYRLLEFLVALCVVAYGVSETIFGEWTVMGSMIIFIHSYYN
VWLRAQLGWKSFLLRRDAVNKIKSLPIATKEQLEKHNDICAICYQDMKSAVITPCSHFFHAGCLKKWLYVQETCP
LCHCHLKNSSQLPGLGTEPVLQPHAGAEQNVMFQEGTEPPGQEHTPGTRIQEGSRDNNEYIARRPDNQEGAFDPK
EYPHSAKDEAHPVESA

FIGURE 4728A

CCCGGGCAGGTCGCCGCCGCAGCGCGAACATGGGACGCCGTCAACGCCTTCAACCAGGAGCTCTTTTCGCTTATG
GATATGAAACCTCCCATCTCTAGAGCCAAGATGATTCTCATCACTAAAGCTGCTATTAAAGCTATTAAGCTTTAT
AAGCATGTAGTTCAAATAGTAGAAAAGTTCATCAAAAAGTGTAAACCAGAATACAAGGTTCCGGGATTATATGTA
ATTGACTCAATTGTGCGACAGTCTCGTCATCAGTTTGGAACTGATAAAGATGTTTTTGGGCCAAGATTCTCTAAA
AACATAACTGCCACATTCCAATATTTATATCTTTGTCCATCTGAAGATAAGAGTAAAATAGTTCGTGTGCTGAAC
CTTTGGCAAAAAAATGGAGTGTTCAAAATTGAAATTATTCAACCTCTTTTGGACATGGCAGCGGGAACCAGTAAT
GCAGCCCCAGTAGCAGAAAATGTTACCAATAATGAAGGCTCACCTCCACCTCCAGTAAAAGTTTCTTCTGAACCT
CCCACACAAGCCACTCCAAACTCCGTCCCAGCTGTACCACAGTTGCCCAGCTCTGATGCTTTTGCTGCTGTGGCT
CAGCTGTTTCAGACAACTCAAGGCCAACAGCTTCAGCAGATCCTTCAGACTTTTCAACAGCCTCCAAAACCACAG
TCTCCTGCCCTTGACAATGCTGTGATGGCTCAGGTTCAGGCTATCACAGCTCAGTTAAAGACAACTCCTACACAA
CCATCTGAACAAAAAGCTGCTTTCCCCCCACCTGAACAGAAAACTGCATTTGACAAGAAGTTGCTTGATAGATTT
GACTATGATGATGAGCCAGAAGCTGTGGAAGAATCAAAGAAAGAGGATACCATTGCCGTCGCCACGACAGCACCT
GCTGCCGCAGTACCCCCTGCACCCGCCGCCACCGTGCCTGCTGCTGCTGCACCCGCTGCTGCCTCTCCTCCTCCT
CCACAGGCACCATTTGGCTTTCCTGGAGATGGCATGCAGCAGCCAGCATACACACAGCATCAAAATATGGATCAG
TTTCAGCCACGAATGATGGGAATACAACAGGATCCAATGCACCATCAGGTTCCACTTCCTCCTAATGGACAAATG
CCAGGATTTGGACTTCTTCCTACACCTCCATTTCCTCCCATGGCTCAGCCTGTGATTCCTCCAACTCCACCAGTG
CAGCAGCCTTTCCAAGCTTCTTTTCAGGCACAAAATGAACCACTTACACAGAAGCCGCATCAGCAGGAAATGGAA
GTAGAACAACCTTGTATTCAAGAGGTTAAGCGACATATGTCTGATAACAGAAAGTCAAGATCTAGGTCAGCATCC
AGGTCACCAAAAAGGAGGCGATCTAGATCTGGTTCTAGATCTCGAAGGTCTCGGCATCGACGTTCTCGATCTCGG
TCCAGGGATAGACGCCGACATTCTCCCCGATCTCGATCTCAAGAAAGACGGGATCGAGAAAAAGAGAGAGAACGT
CGACAAAAAGGCCTCCCTCAAGTGAAACCGGAAACTGCAAGTGTTTGCAGTACTACCCTCTGGGTGGGGCAGCTG
GACAAAAGAACTACTCAGCAGGATGTTGCCAGTCTCTTGGAAGAGTTTGGTCCAATTGAATCAATTAATATGATT
CCTCCCAGGGGTTGTGCCTATATTGTTATGGTTTATAGGCAAGATGCATATCGTGCCGTGCAGAAACTGAGCCGA
GGAAACTATAAAGTGAACCAGAAATCCATAAAGATTGCGTGGGCCTTAAACAAAGGAATAAAGGCAGATTATAAG
CAGTATTGGGATGTTGAACTTTGTGTTATTTATATTCCATGTGACAATGTTAAGCCTGAGGAAATGGAGAGTTTT
TATGAAGGAGGAATGTTGGACAGTGACACACTTAACCCAGATTGGAAAGGAATTCCTAAGAAGCCTGAAAATGAA
GTTGCTCAAAATGGAGGTGCTGAAACCTCACACACAGAACCAGTATCACCCATACCTAAACCATTACCTGTGCCT
GTCCCTCCTATTCCTGTTCCTGCACCTATAACAGTGCCACCTCCACAGGTCCCACCACATCAACCGGGTCCACCT
GTAGTTGGTGCTCTCCAGCCGCCTGCTTTCACGCCTCCTCTGGGAATACCGCCTCCAGGCTTTGGTCCTGGTGTT
CCTCCTCCCCCTCCTCCTCCACCATTTTTGCGCCCAGGATTCAACCCAATGCATTTACCACCAGGTTTTCTGCCT
CCTGGACCCCCACCTCCTATAACTCCACCAGTATCCATTCCTCCTCCTCACACTCCACCAATAAGCATCCCAAAC
TCTACTATCGCTGGTATAAATGAAGACACTACAAAAGACTTATCTATTGGAAATCCCATTCCAACAGTGGTGTCT
GGGGCTAGAGGAAACGCCGAGTCTGGTGACAGCGTGAAAATGTATGGCTCCACCTGCTGCACCCACGAGTCTGCC
CACCCCTCCTGTAACCCAGCCTGTTTGCCGTGCTCACTTCTTGGCACTCAAGGAGTTGCCCCTGGTCCTGTAATT
GGACTTCAGGAACCATCTACTGGTCTTCTTGGCGCCCGGCCCGGTCTCATCCCACTCCAGCGCCCTCCAGGAATG
CCCCCACCTCACTTACAGCGGTTCCCTTTGATGCCGCCCCGTCCCATGCCACCGCACATGATGCACAGAGGCCCA
CCGCCAGGACCAGGGGGCTTTGCGATGCCTCCACCTCATGGAATGAAAGGTCCCTTCCCACCGCATGGCCCCTTT
GTTAGGCCTGGTGGAATGCCAGGGCTCGGGGGCCCAGGGCCAGGCCCAGGGGGTCCTGAAGACAGAGACGGAAGG
CAACAGCCGCCGCAGCAGCCACAGCAGCAGCCACAGCCGCAGGCGCCCCAGCAACCACAGCAGCAGCAGCAGCAG
CAGCCACCACCATCACAACAGCCTCCACCAACACAGCAGCAGCCACAGCAGTTTAGAAATGATAACAGGCAGCAG
TTCAATTCAGGTAGAGACCAAGAAAGGTTTGGAAGAAGATCTTTTGGAAATAGGGTGGAAAATGACCGGGAACGG
TATGGGAACCGTAATGATGATAGAGATAATAGTAACCGTGACAGGAGAGAGTGGGGAAGGAGGAGCCCTGACCGG
GACAGGCACAGAGACTTGGAAGAGAGAAATAGACGCTCTAGTGGGCATCGAGACAGAGAGAGAGATTCTAGAGAT
AGAGAGTCTCGTAGAGAGAAGGAAGAAGCCCGAGGAAAGGAAAAGCCTGAGGTGACAGACAGGGCAGGTGGTAAC
AAAACCGTTGAACCTCCCATTAGCCAAGTGGGAAATGTAGACACTGCTTCAGAACTTGAGAAGGGGGTGTCTGAG
GCTGCAGTCCTAAAGCCTTCTGAAGAGTTACCTGCTGAGGCTACCTCATCCGTTGAACCCGAAAAGGATTTAGGT
TCAGCAGCAGAGGCTCCTCGTTAGXXXAATTTGTGAAAATGTGACAGTGACAATTCCTGGAGTGTAGAGCTAGAG
GTGTACAGATGCTATATTATATCCGCTCCCGGTGTACTGCAGCCCCGCGCCAGCTGGTGGGGAACTGTAAGCAAT

FIGURE 4728B

TTGATTGCTTCCCTTGTATTTAAAAATAGCCACAAAATAACAAAAAATACTGXAAATATGXATAAATATTACCCT
TTTTGCTGTAACTTTTTAAAAGTTTTGACTTTAAAAAGTTTACAAATTGTAATTAGAAGTGCTCTCTATTTTTTT
TTTTTTTTTTAATTTAAGACAAGGTAACGGTGAAAGCTCCTCAAAACAATAGGGATGTTTTTAATAAACTCTATT
TTCGTAACAAACTTTAATGTGTGCTATTCTTCCTACACTGCATT

FIGURE 4729

PGQVAAAARTWDAVNAFNQELFSLMDMKPPISRAKMILITKAAIKAIKLYKHVVQIVEKFIKKCKPEYKVPGLYV
IDSIVRQSRHQFGTDKDVFGPRFSKNITATFQYLYLCPSEDKSKIVRVLNLWQKNGVFKIEIIQPLLDMAAGTSN
AAPVAENVTNNEGSPPPPVKVSSEPPTQATPNSVPAVPQLPSSDAFAAVAQLFQTTQGQQLQQILQTFQQPPKPQ
SPALDNAVMAQVQAITAQLKTTPTQPSEQKAAFPPPEQKTAFDKKLLDRFDYDDEPEAVEESKKEDTIAVATTAP
AAAVPPAPAATVPAAAAPAAASPPPPQAPFGFPGDGMQQPAYTQHQNMDQFQPRMMGIQQDPMHHQVPLPPNGQM
PGFGLLPTPPFPPMAQPVIPPTPPVQQPFQASFQAQNEPLTQKPHQQEMEVEQPCIQEVKRHMSDNRKSRSRSAS
RSPKRRRSRSGSRSRRSRHRRSRSRSRDRRRHSPRSRSQERRDREKERERRQKGLPQVKPETASVCSTTLWVGQL
DKRTTQQDVASLLEEFGPIESINMIPPRGCAYIVMVYRQDAYRAVQKLSRGNYKVNQKSIKIAWALNKGIKADYK
QYWDVELCVIYIPCDNVKPEEMESFYEGGMLDSDTLNPDWKGIPKKPENEVAQNGGAETSHTEPVSPIPKPLPVP
VPPIPVPAPITVPPPQVPPHQPGPPVVGALQPPAFTPPLGIPPPGFGPGVPPPPPPPPFLRPGFNPMHLPPGFLP
PGPPPPITPPVSIPPPHTPPISIPNSTIAGINEDTTKDLSIGNPIPTVVSGARGNAESGDSVKMYGSTCCTHESA
HPSCNPACLPCSLLGTQGVAPGPVIGLQEPSTGLLGARPGLIPLQRPPGMPPPHLQRFPLMPPRPMPPHMMHRGP
PPGPGGFAMPPPHGMKGPFPPHGPFVRPGGMPGLGGPGPGPGGPEDRDGRQQPPQQPQQQPQPQAPQQPQQQQQQ
QPPPSQQPPPTQQQPQQFRNDNRQQFNSGRDQERFGRRSFGNRVENDRERYGNRNDDRDNSNRDRREWGRRSPDR
DRHRDLEERNRRSSGHRDRERDSRDRESRREKEEARGKEKPEVTDRAGGNKTVEPPISQVGNVDTASELEKGVSE
AAVLKPSEELPAEATSSVEPEKDLGSAAEAPR

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FIGURE 4730

GGCACGAGGCCGGGCCGAGGCG**ATG**GCGCCCTGGGCGCTCCTCAGCCCTGGGGTCCTGGTGCGGACCGGGCACAC
CGTGCTGACCTGGGGAATCACGCTGGTGCTCTTCCTGCACGATACCGAGCTGCGGCAATGGGAGGAGCAGGGGGA
GCTGCTCCTGCCCCTCACCTTCCTGCTCCTGGTGCTGGGCTCCCTGCTGCTCTACCTCGCTGTGTCACTCATGGA
CCCTGGCTACGTGAATGTGCAGCCCCAGCCTCAGGAGGAGCTCAAAGAGGAGCAGACAGCCATGGTTCCTCCAGC
CATCCCTCTTCGGCGCTGCAGATACTGCCTGGTGCTGCAGCCCCTGAGGGCTCGGCACTGCCGTGAGTGCCGCCG
TTGCGTCCGCCGCTACGACCACCACTGCCCCTGGATGGAGAACTGTGTGGGAGAGCGCAACCACCCACTCTTTGT
GGTCTACCTGGCGCTGCAGCTGGTGGTGCTTCTGTGGGGCCTGTACCTGGCATGGTCAGGCCTCCGGTTCTTCCA
GCCCTGGGGTCTGTGGTTGCGGTCCAGCGGGCTCCTGTTCGCCACCTTCCTGCTGCTGTCCCTCTTCTCGTTGGT
GGCCAGCCTGCTCCTCGTCTCGCACCTCTACCTGGTGGCCAGCAACACCACCACCTGGGAATTCATCTCCTCACA
CCGCATCGCCTATCTCCGCCAGCGCCCCAGCAACCCCTTCGACCGAGGCCTGACCCGCAACCTGGCCCACTTCTT
CTGTGGATGGCCCTCAGGGTCCTGGGAGACCCTCTGGGCTGAGGAGGAGGAAGAGGGCAGCAGCCCAGCTGTT**TA**
GGGTTGCTGGAGGCCGGGCTACCGTCTTGTGCCTGAAAACCACGGGGCCTGTCCCCAGCTGGGGTGAGCGCTCAG
AGGGCCTGGGGCCCTCACTCCTGCCCACGCCTCCCAGACCCCAGAACGGAGCTTCAAGTCAGACAGATCCCTGCC
TTGGTGGGCAGTTCTGCCTTCCAAGGAAGAAGGGGAAGAAAAGGACCTGTGGGTGGCTCAGGCCCAAGCAGACCC
CGGGCTCCACCCCAGCCCCGCCCAGGCTGCTGCCAGTGCACACTTTTACAAATTTAATATAAAGCAAGTCCAGTC
TTAAAAAGACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4731

MAPWALLSPGVLVRTGHTVLTWGITLVLFLHDTELRQWEEQGELLLPLTFLLLVLGSLLLYLAVSLMDPGYVNVQ
PQPQEELKEEQTAMVPPAIPLRRCRYCLVLQPLRARHCRECRRCVRRYDHHCPWMENCVGERNHPLFVVYLALQL
VVLLWGLYLAWSGLRFFQPWGLWLRSSGLLFATFLLLSLFSLVASLLLVSHLYLVASNTTTWEFISSHRIAYLRQ
RPSNPFDRGLTRNLAHFFCGWPSGSWETLWAEEEEEGSSPAV

FIGURE 4732

GAAAAGGCAAATCTACCCTTCACAGTTCCTGTTAAGGGTAGATTTGCTGAAATGGAGAAACAAAGACAAGAGGAA
CAAAGGAAGAGAACGGAGGAGGAACGAAAACGCAGAATTGAGCAGGATATGTTAGAAAAGAGGAAAATACAGCGT
GAATTAGCAAAAAGGGCTGAACAGATTGAGGACATAAACAATACGGGAACTGAATCAGCATCAGAGGAAGGAGAT
GATTCACTACTTATAACTGTGGTACCTGTCAAATCATATAAAACATCTGGAAAAATGAAAAAGAATTTTGAGGAT
CTAGAAAAAGAACGTGAAGAGAAAGAAAGGATCAAGTACGAGGAAGATTAAAGAATAAGATATGAAGAACAACGA
CCATCTCTCAAGGAAGCAAAGTGTCTTTCATTAGTTATGGATGATGAAATAGAAAGTGAAGCAAAAAAAGAATCA
CTTTCTCCCAGAAAATTGAAACTAACTTTTGAAGAACTGGAGCGACAAAGACAAGAAAACCGAAAGAAGCAAGCT
GAAGAGGAAGCAAGAAAACGTTTAGAAGAAGAGAAGCGTGCTTTTGAAGAAGCAAGGCGGCAAATGGTAAATGAA
GATGAGGAAAACCAAGACACAGCAAAAATTTTTAAAGGGTACCGCCCTGGTAAACTCAAACTCAGTTTTGAAGAA
ATGGAAAGGCAAAGAAGAGAAGATGAAAAAAGGAAAGCAGAAGAAGAAGCCAGAAGGAGAATAGAGGAAGAAAAG
AAGGCGTTTGCTGAAGCAAGGAGAAATATGGTAGTAGATGATGACTCCCCAGAGATGTATAAGACAATCTCTCAA
GAATTTCTTACACCGGGAAAACTGGAAATTAATTTTGAAGAATTATTAAAACAAAAAATGGAAGAAGAAAAACGA
CGAACAGAGGAGGAACGGAAGCATAAGCTAGAAATGGAGAAACAAGAATTTGAACAACTGAGACAGGAAATGGGA
GAGGAAGAGGAAGAAAATGAAACCTTTGGATTGAGCAAAGAATATGAAGAACTGATCAAATTAAAAAGGAGTGGC
TCTATTCAAGCTAAAAACCTAAAAAGCAAGTTTGAAAAAATTGGACAGTTGTCTGAAAAAGAAATACAGAAAAAA
ATAGAAGAAGAGCGAGCAAGAAGGAGAGCAATTGACCTTGAAATTAAAGAGCGAGAAGCTGAAAATTTTCATGAG
GAAGATGATGTTGATGTTAGGCCTGCAAGAAAAAGCGAGGCTCCATTTACTCACAAAGTGAATATGAAAGCTAGA
TTTGAACAAATGGCTAAGGCAAGAGAAGAAGAAGAACAAAGAAGAATTGAAGAACAAAAGTTACTACGCATGCAG
TTTGAACAAAGGGAAATTGATGCAGCACTACAAAAGAAAAGAGAAGAGGAGGAGGAGGAAGAAGGTAGCATCATG
AATGGCTCCACTGCTGAAGATGAAGAGCAAACCAGATCAGGAGCTCCATGGTTCAAGAAGCCTCTTAAAAACACA
TCAGTTGTAGACAGTGAGCCAGTCAGATTTACGGTTAAAGTAACAGGAGAACCCAAACCAGAAATTACATGGTGG
TTTGAAGGAGAAATACTGCAGGATGGAGAAGACTATCAATATATTGAAAGGGGAGAAACTTACTGCCTTTACTTA
CCAGAAACTTTCCCAGAAGATGGAGGAGAGTATATGTGTAAAGCAGTCAACAATAAAGGATCTGCAGCTAGTACC
TGTATTCTTACCATTGAAACTGATGACTACTAGCTCCCCTCCCCTCTCCCTGGAACTTTCTCTTTCACTCCAACT
TTCTTACTACATCCATCTTTTCTGTGGCGGGGCCAAAAAAGGAAACCAGGAGTGCCACTATGCTGACTTCTTATT
CCTTTTCATAACAGTCTTCAAAGCACAGCTCATCTAAAGAATGCCTACTTCTTTTCCAAATAAGCATCAGATTTA
TCGCCTATTATGCAGTAACAGTCAATAAAATGTACTTATGGGGGGGAATTACTCAATTATTCTATCAGAACCTAT
TATAAAGACTGTATTTCCCATAGACGTTTACAGCAACTATGTTTAAAAAACAAAAACAAAAAAAAAACACACAAA
CCTAAGTAGAATACATTATTTTGCATGAAGGAATGTCATTTCTGAGCTTTTTACACCTAAAATTAGGCTGAAATA
GCTGAGATAATTAATTTGGAACCTATCAATTTGAGTGGACTTTTTCTTTAGTAGTACACCATTTTGGTTGTTGTA
GTTTCAAAGTCTTTCTGAAGCAGATATATTGGGATTGGAGCGGGGTGGGGAAAACTGTCACTCCTTTCAGAGGAA
AAGGGGAGGAGCATGGAGAAAAACAAAAATTAAAGGACTTAAAGAATGGCTATACAGTGTTGAGTGTTGAGGATA
TTAAACATGTTATTTTTCAAACGTATGTAATATATATTAAATTTATAAAGCAAATTTATGTTGTGATCTTGCCTG
AACAAATTATATTTTAATGAAAAAACTTTCTATTAATAGTTCACGCAAGAGAAAACACTTTCAACATAGTCGAAG
GCTTCAAGATCTAAGTGTATCAGACTTAGGGAAAAAGTGGCACAACCTTCGATTTAAAATTCTAGTCTTTAAAAT
GAGTTTGTAAATAATTAGCTATTACGTTCTATTAAGTTGTTTTATATTTTAATTTTCTGGAAGACAATTTTATTT
TACAACGTGAACCCAAATAAAGTAACTTCTGTATTT

FIGURE 4733

MDDEIESEAKKESLSPRKLKLTFEELERQRQENRKKQAEEEARKRLEEEKRAFEEARRQMVNEDEENQDTAKIFK
GYRPGKLKLSFEEMERQRREDEKRKAEEEARRRIEEEKKAFAEARRNMVVDDDSPEMYKTISQEFLTPGKLEINF
EELLKQKMEEEKRRTEEERKHKLEMEKQEFEQLRQEMGEEEEENETFGLSKEYEELIKLKRSGSIQAKNLKSKFE
KIGQLSEKEIQKKIEEERARRRAIDLEIKEREAENFHEEDDVDVRPARKSEAPFTHKVNMKARFEQMAKAREEEE
QRRIEEQKLLRMQFEQREIDAALQKKREEEEEEEGSIMNGSTAEDEEQTRSGAPWFKKPLKNTSVVDSEPVRFTV
KVTGEPKPEITWWFEGEILQDGEDYQYIERGETYCLYLPETFPEDGGEYMCKAVNNKGSAASTCILTIETDDY

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FIGURE 4734A

AGGAACCCGAGCCGCACGGAACGGCGGTGGTGGCCCGCGGAGCCGGACGGGGCACTATGAACGAAGAGGAGCAGT
TTGTAAACATTGATTTGAATGATGACAACATTTGCAGTGTTTGTAAACTGGAAACAGACAAAGAAACACTCTCCT
TCTGCCACATTTGTTTTGAGCTAAATATTGAGGGGGTACCAAAGTCTGATCTCTTGCACACCAAATCATTAAGGG
GCCATAAAGACTGCTTTGAAAAATACCATTTAATTGCAAACCAGGGTTGTCCTCGATCTAAGCTTTCAAAAAGTA
CTTATGAAGAAGTTAAAACCATTTTGAGTAAGAAGATAAACTGGATTGTGCAGTATGCACAAAATAAGGATCTGG
ATTCAGATTCTGAATGTTCTAAAAACCCCCAGCATCATCTGTTTAATTTCAGGCATAAGCCAGAAGAAAAATTAC
TCCCACAGTTTGAGTCCCAAGTACCAAAATATTCTGCAAAATGGATAGATGGAAGTGCAGGTGGCATCTCTAACT
GTACACAAAGAATTTTGGAGTAGAGGGAAAATACAGACTTTGGACTTTCTATGTTACAAGATTCAGGTGCCACTT
TATGTCGTAACAGTGTATTGTGGCCTCATAGTCACAACCAGGCACAGAAAAAAGAAGAGACAATCTCTAGTCCAG
AGGCTAATGTCCAGACCCAGTATCCACATTACAGCAGAGAGGAATTGAATTCGATGACTCTTGGTGAGGTAGAGC
AACTGAATGCAAAGCTCCTACAGCAAATCCAGGAAGTTTTTGAAGAGTTACCTCACCAAGTGCAAGAAAAAGATT
CTTTGGCCTCACAGCTCCATGTCCGCCACGTTGCCATCGAACAGCTTCTGAAGAACTGTTCTAAGTTACCATGTC
TGCAAGTAGGGCGAACAGGAATGAAGTCGCACCTACCCATAAACAACTGACCTAAACAGACTTACTTCGTATGCC
CTGCCCTTTATTGGTCTCCCAGACATGCAAACTTTGAAGAAGTTTGAAGAAAGTTGTGGTCCGTTTTTTTATGGT
CATTAAATTTGCCAAACATAAGGCAGTATTTAACATCTTTGTCAAATAAAGCAGATCATTATACTCTAGTCTTCT
AGGGCTAATCATTTTGGCTCATTTGGGGACTCTTTTTTCCCAGAATTACTAAACAAATTTTATCACATGTGACTA
CTTAAATATACTGTTACAGTGTCATTTTATTAAACATTTTAATTCACCTGTCAAAACAACAGATTAACTCCTTAG
TGTAAACTACTAGAGATAATTTTTAAGAGGGAAATGGAATTCATATCACCTCTTATTTATTATGAGCAATATTTT
AATATAAAAATTTTATATGTGAAAATGCTATTTTAGGTACTTTGCCATTCTATTTATAAATGTGTATTTGAGTGG
TTCTGTATATTTATTTACATTATCATGTGTGAATATGTTCACCCATATTTCAGGTCACTGCATTTTATTCTCTTA
ATACAATGTTTTCACAACGGTTACCTTGCTTTCCAAAGATAAATATATTTTGGATTAGAAATCTGAGTTGTTTTA
ATTTCTAATACCTCTTATAAAAGAAGAATTAATAACTTTTTAAAGCAGTATTCAGGTAAATACAATACATTATTT
TGTTTTCTAACAAAAGCAGTTCTTAGTTCAGGAAGAAAAGACTAATCTGGCTTCTATGTCAATTTGTCTCCATAG
AAATGAAAGCCTCCTCTTGCTTCTTTCATTATTAGCTTCACACCAGTGACTGTGATGCATTAGAATTTGGACAGA
GTAAGTCAAGCCTCACTTCCAATTCAAATATAATGTCTATCTTCAAATTGAGTGTGCTGTGAAATTGTTCTGTCT
TTGAAAAAAAAAAAGTAAGATTATTTTGTGTGCCACTTTGGGTAAAGTTTCAAGAATACTTAAACTGTCCAAATTG
TATTATCACCATCATTGAACTTAGTGCTCAAAGAAAGCATTGTGAGGTATTTTTCTAAACTTTAGACTCTATAGA
GAAATATAGGATTGTTCTACAGAAGAAAAGCAAAACTCCTAATTAAAAAAAAATAAACCTATGTATTAAGAGAAT
GTTCTCGTAAGTTGCCTATGATGCTTCCAAAGAGTTTTTATCTAACAGATTGTGCCAAACAGCTAGATAAATTTT
AATAATGTATTACAGTAAAGGCTATAACCAATGCAGAATTAAAATGGGCTCTAAATTCTGTTTTTAACTCATGTT
TAGAATGTACTTATGAGGTAGATCCTTGCTTGAAAGTATCTGCTGAAAAGCCCAGTAACGTGGCAGCTTCATGCA
TAAAGATATAAATGACATTTGCCTTAAATTTGGCAGCCTACCCTGGCTTGGGTCAGATTTTGTTGTTGAACACAA
GAAAGTATTTAAGCAAAGAAACACTTCAGTTTAATTGAAAACAACTTTTTGTAATGCTGACGTGTTAAATTGGCC
TGAGGGTATTAATTGATATCTGTTGATTTTGTTTTTCTTTGAAGTATAACATTACTTTTTGGAGGGAATTTTTGA
AAGATGCTTTCGATTTCTCTCAATTCTTTAAGTCATGCAAAATGAATTTAAAATCCAGGGAGTATGGATGCATTG
CCTTAGTTTTGATGAGCTTTAAATTAAATGTGTGCAATATCAAAATATTCAAACTTACAAGCTGGGTAATACATT
TCCTGATTAATATCTTAGTGCTTAATTGTTCCCACGTTTTCAAATTTGACTTTACTCTTTTTTGGCGTAATTCAG
TAAGATTGTTACCAGCCAGTGTGTTTGCACACATTTGGGTTTGTGTTTAGATGAGTTAGGGACAGTCATAAAAGT
TGGGGATATGTTGCATTTGATATCAATGGTAGCATATTTCCAGAATATGAGCCATAAGTTGCAGTCCTGAATACA
ACAGTGTTATCCAAAGAAAGGAGTTTTCTGACAAATATACATAGCTTTGCTAATGAGTACGGAACAAGTGGATGA
ACGTGTGCGTGTGCTAAGGTCTTAAGTGGGACTCTGATTTATTCCATTTAGATATTTCTACTTAAGCTCTAAAAA
GGAGAGGTGCTCTTAAAAAAAAAAACTTTGTGGTGCTGGTACTCACACTACTTTATTTGGATGAGTTCCTAGTAA
AAAAAACTTTTTGTTGAAGTATTTTGCACAGCAGTTTATCCAAATGTTTGGTAAACTTATAATTTAGTCCTATGT
TAGTTTTCTTAATCAAATATGCAGTTACTGTGTATGCAAATATAAGTATCAGGTACAGAGTTCTAACAAGAGAAC
ATGAAATATCACAAATATTGTTTTCCACACTTGGCTATTCTCTACAGTTGTTAGTAATTTTTGAGAATGTTTTGA
AGCATATCTCATGTACTACTGTTTAAAAAGTGGCAAAACAGACTGCCAGTCATCCATTACTAAATTTTCAGAGCT
TATATGATTAAGGGGAGTGAGATAAGACAAATCTTTTTCACGTTCAGTTTTATAATTTGACACGTTAAATTGAGT
TTTAAAAATTAGAAAAGTGTTTTTGACCACACAGGTTGTTCTCTTTAAAGTTCAGCCTTATATTGAAGCTAAAAA

FIGURE 4734B

TCAATTATGTTTTACTTTGAGATTATCATCTTATCCTTTGATCCTCATATTAATATCTAAATTAGTCTTTTTTAA
AAGGCATGCACTTGAGACTCCAGTAATAGATGATTCAGGCAGCAGAATAGTGTTTTGTTGTGTCGTTGACTATGC
ACAATGGTGGAGCAAAGACACATTCTTAGTTTTTCAAAACACATGTTCATTTTACCACAAAGTGCCCATTTTTAT
ATACATTTAAGGATTATTTTTTCAATGTCAAGTTCATGTTAGTGATTTCAGAAATATAGTCAAAATATATAGTCA
AATATATCTTGACAGGCATCTTGAGATTTGGTTTTTCATTTTACTATATTTATGACTGAAAATGGTTTTGTGTTT
TCTTTATGTTGTTTATATATTTTTTACCTTAGTGTTTACACTGGTAAGGCTTGTTAGTCCATTTTTGTAGTTTTT
TTAAAGTAAGGTTTTAGATCTATTCGTGTTTTAATGTTTCCCAGTTTGGGTTTTGTTTTGTTTTGGAAGAATCTG
CTTTCATTATTAAATTATAAAATGTAAATGCTCTAAAGTAGGAATTTTTAAAGAGTAAATTATTTGTGTAGCTTA
TTAGGAGGTTCAGGTTAGTGACCATAAAGTGGGTTACTTGTACATGAAAATTTGAAATGGTACCATGTAAAATTC
TTCTATTGTCAACTTTTTCTGATGTATGCCAGTTCATTTACTGACAAATGTTGTTACTAAGTGCTTATTAAGAAG
TGTAATACGCTATAAAAAAGTTAATACTTTTTGTTCAGATGTAAGGCAAAGATAATTGATGCCGTTTCAGTGTAT
GATTGTATTGTTAACTTTTACGTTGGTGGGAGTAACTATTTGAGGAAATTTGTGGTGAGAATTAGTAAGAGATAA
AACCCCCAACAGTTTATTCTTACCAAGTAAAGTTTTGTGGTCATGGGGCAGGGAAGAGTTTATTTACCAGAATAC
TAGAGCCCTCACACAAAATAAAGGTAACTTGGAAGAGGGCTATAATGCTTGCATCTCAGTATTTTCATTTCACTT
CATCCTTTCATAATTGCCTTGATTATGGTGCAGTCTAACCTATTAAGCAACTTCTGGCTATGGTAACATTGATAT
GAACCATATTATATCAAGTCTCCAAAACATCTAGTTTGTTAACATACACTTTCCCTGTTCTTTTTAGTTTGAGTC
CACATTACTAATACATTTTAATAATATTTAATTATTTCACAATTTTAAGTTTACCAAAGTAAACAAAAATTCATG
AAGATGAGTATTGCCCTCTCCCAAAAAAGGTTTAAAGATTAGTTGAACTTCCCTCAACTACACCTAAAGCAAAGG
GGAATTTTAGTAAGTGTGTGTACCTTGTTTCTTTCAGACACATCTAGAATGTTTTTCTTTCACCGTACCTCCAAA
AGAGGCAATTTAGAAAGTATTAAGTAGTGACTTTTGTTCAGTCCCATTTTGTGTGTGTGTGTGTGTGTGTGTG
TGTGTTAACCTTGCTTTAAAACAGTAGCATATACTATGGTCATTGAACTTAATCTCTCTGGCGTTAGAAATTTAC
TTTACAAAATTGTGTTAAGACTTTTGGAAAAAGAAAATGAAACTGCTGTGGTAAAAACCAAGTTTGTTTCAAAAA
AGTAGGCAATTATTTGGCTGTTACATTTTCTTTGAAAACTGCAATAATTTATATATTTGTATTGCTCTGCTTGGG
AACTGTATATATGCTTGTCTACTATTTTTAATTTTACAACAATAAAATAAGTATTTTGTT

FIGURE 4735

MNEEEQFVNIDLNDDNICSVCKLETDKETLSFCHICFELNIEGVPKSDLLHTKSLRGHKDCFEKYHLIANQGCPR
SKLSKSTYEEVKTILSKKINWIVQYAQNKDLDSDSECSKNPQHHLFNFRHKPEEKLLPQFESQVPKYSAKWIDGS
AGGISNCTQRILE

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FIGURE 4736

GCGCGAGAGGACGTGCTCTGCCAGCCAGTGGGAAGGCAGGCCGCGCGCGCGGGAGCGCGGGAGGATCGGCGGCTC
GCGGTCACTGGTCCCTGGCTCGGTTCCCCGCACCCCGGGGCTCACACTTACCCGCGCGGAGGAGCAGCGGCCGGG
TGTCCACCCCCATCCTGCGCCCAGTCTCCTCGATTCCCCTCGCTCTGAGCCGGGAGAGCCGAACAGCTGAAGAGA
GTTCACTGACTCCCCAGCCCCAGGTGGGCCTTGTGCACATCATGACCAGTTTTGAAGATGCTGACACAGAAGAGA
CAGTAACTTGTCTCCAGATGACGGTTTACCATCCTGGCCAGTTGCAGTGTGGAATATTTCAGTCAATAAGTTTTA
ACAGAGAGAAACTCCCTTCCAGCGAAGTGGTGAAATTTGGCCGAAATTCCAACATCTGTCATTATACTTTTCAGG
ACAAACAGGTTTCCCGAGTTCAGTTTTCTCTGCAGCTGTTTAAAAAAATTCAACAGCTCAGTTCTCTCCTTTGAA
ATAAAAAATATGAGTAAAAAGACCAATCTGATCGTGGACAGCAGAGAGCTGGGCTACCTAAATAAAATGGACCTG
CCATACAGGTGCATGGTCAGATTCGGAGAGTATCAGTTTCTGATGGAGAAGGAAGATGGCGAGTCATTGGAATTT
TTTGAGACTCAATTTATTTTATCTCCAAGATCACTCTTGCAAGAAAACAACTGGCCACCACACAGGCCCATACCG
GAGTATGGCACTTATTCGCTCTGCTCCTCCCAAAGCAGTTCTCCGACAGAAATGGATGAAAATGAGTCATGAACA
CAGAAAGTCTAAGAGGAGAAATATGATGGATGAAGAGCTCTGTAGATGCTGTATAGACACTAAATAAGAGTTGAT
TAGGGTAGTATATTATAGTCATCTGTTATGCTGTGAAATTTGGAATTCAGTATTATCATTTTGAAGTCTGTAAAT
TGTGTTAGTCATTAACTTAGTCACCTGTTGTATTCTGGATCTACACAAAATTATTTTAACTGCTCTTATTAATCT
GTGAGGATTAATATACAAAAAGTATCCTTTGAGATGAAGTCGTGTTCTCAAAATAAGGTTATATTATTTTCTTTT
TCTGCTTGATTTTCATCTTGTGTTTTGCTTTGTTTTTGTAAGGAACCATCTCTTGGTTTGGTCACATCAGTTCAC
AACAGCCATTTGTTTTCAAGGTCAAGGCTCCAGGCAGGTTGTTACTGGTGTTTGCAGCCTGTCAGTACTTGCAGT
ACTGGAATAGGTTCTAGGCTAGTGTCTGCGCGTCACTGTGGTTTTAGCATGGGAGGACTTATTTGAGAAATACTA
CCTTACTTTTCTATGATTTCTTTTTACAGAGTTATAGTGTGTTTACTCCTAAGATGACAGTTCTCTTTGTCTATA
TTCAGCATCTAAGACAAATATTTAAACATTTTAAAGAACCACTGTGTTAAGTTTAGGATTATTTACTTACCAAAT
TAGAAGTTTGACTTTTATGTGTTATACACAATCTTAAAATTTCACGAATTCACCTTTTTAATAGTATCCATGTAC
ATAATAAAATCAAAGTTTAATTAGCCATTTTCTTTGAATTTTTTTCTAAATAAGGGAAATAACTGTTCTTGGGCC
ACTTTACAGAGATAAATGTATGTGAATGTTTATGATAAACGCTTAAATATTTCTAAAATATTAACTTCAAAAAAG
TCTTTTTCAGTTCTTAAATAAAAATTTATTTATTTAAGATACTTATTCGACTTATCTTAACTAAGGTAGCTATGA
ATGTTAAGTAGATGAGGTAACCATTCAGTTAAGTTAAATTGTAGCATTGCCAGGTAGTGAGGCTCACTGTACAAT
TTTCCAGGTAAATGAAATTTCCTGTAGTAAGAGGTCCGTATTTTTGTAACAGCCTTTTAAAAATGCTTTTGGGAA
CCCTCCAGCCTCTTACCAAAAGAGGCTTTAAACCTCATCTTGATTCAGACTGTCAGTCTATTCCTGGGCAGTAGT
ATGTGATGTCCAGCACCCTAACCCCGACTCCCCAGCCCTGGGACTATTCCAGTAGAGTGAAATATTTGTCCCTGT
ACAAAGTGGCCTGAATGACTGTTGGAGTTCCTGTGTCTGGTTTTCCTGTTTATTCCCTGTGATGCCCAGAGTAAT
GGCCCATCCAAAGATGTCCAGATGTCCATGTGCTAGTCTCCAGAACTTGTAACTGTGTTGTTATGTGGCAAAGGG
GAATGAAGGCTGCAGATGGAAGTAAAATAGATTATGCTGGATTATCTGGGTGTGCCCAATTGATCACCGGATCCG
TAAAAGTGGAAGAGAGGCAGATCAGGATGTCAGCGTGATGAGGTGTGAGACAGACTTGACTTGCTGTTGCTGGGA
GGAAGGGGAGGTCATGAGCCAAGGAATGTGGACAGTCTCTTGAAGCTGGAAAGTGTGCATTGGACATCTGGAAGC
CAGAAAAGACAAAGAAATATCCAGAAAGGAACAAAGTCTTGTGGACACCTTGATTTTGGTCCAGTGAGAATATGT
TTGACTTGTTAACCTACAAAACTTTATGATGATAAATTTGTGTTGGTCGTAAGCCACTAAATCACAGTAATTTGT
TATAGCAGCAGATAGAAAACTAATATACTCCCTTTAATATAAAAAAAAAAAAAAAAAAAAA

FIGURE 4737

GCGGCCGCTGCCTCCTGCTCGCCCCGGCGCCCGCAGCCCCGGTCCCGCCGCGGCGGGGCTCCTCGGCCTGGCTCC
TGGAGGAGCTGCTGCGGCCCGACTGCCCCGAGCCCGCGGGCTTGGACGCGACACGGGAGGGGCCCGATCGGAACT
TCCGACTGAGCGAGCACCGCCAGGCCCTGGCCGCCGCCAAGCACCGAGGCCCCGCGGCGACCCCGGGGAGCCCCG
ATCCCGGCCCCGGTCCGTGGGGCGAAGAGCACTTGGCGGAGAGGGGCCCCAGGGGCTGGGAGAGGGGCGGCGATC
GCTGCGACGCGCCCGGTGGGGACGCGGCGCGGAGGCCCGACCCAGAGGCCGAGGCACCCCCCGCCGGGAGCATCG
AGGCCGCCCCGAGTAGTGCGGCGGAGCCGGTGATCGTCTCCAGGTCGGATCCCAGAGACGAGAAGCTGGCCCTAT
ACCTGGCCGAGGTGGAGAAGCAGGACAAGTATCTGCGGCAGAGGAATAAGTACCGATTCCACATCATTCCAGACG
GCAACTGCCTCTACCGAGCTGTCAGCAAGACGGTGTATGGGGACCAGAGCCTGCACCGGGAGTTGAGGGAGCAGA
CGGTGCACTACATCGCCGACCATCTCGACCACTTCAGCCCCCTGATTGAGGGCGACGTGGGGGAGTTTATCATCG
CTGCTGCCCAAGACGGGGCATGGGCCGGGTACCCGGAGTTGCTGGCCATGGGGCAGATGCTGAATGTGAATATCC
ATTTAACTACTGGAGGGAGGCTGGAGAGTCCCACGGTGTCTACCATGATTCATTATTTGGGCCCAGAGGATTCCC
TGAGGCCTAGTATTTGGCTCAGTTGGCTCAGTAACGGACACTATGATGCTGTATTTGATCACTCCTATCCTAACC
CAGAGTACGACAACTGGTGCAAACAAACTCAAGTGCAAAGGAAACGCGACGAAGAACTTGCCAAATCTATGGCCA
TATCCTTGTCTAAAATGTATATTGAACAAAATGCATGCTCTTGAAATGTCTCAAAACCTTACACCCTGGGAATAA
TTGCATATATAACTTGTGTTTGGAGAATCACATGAACTTTAATCAGGGTAATAGCACTTTCAAACTTGCTAGTAG
ATTTTACTGTAGGTGTAATGCCTTAATCATCTTTTTGAATGTTTTCTCAGAGCTGGAGGTTGCTGGGCACCTAAA
TGATGTTTCATGATAGCTTTGGGTGATTTTACTGCTATTTATAATTTGCTGTATAAAGTGAGCATTACTTAATTT
GCAAGCTGATTTCTCACAGTGTAAATTTGTTCATTCCTGGTAGTCTATTTTCTATAAAAATGTATTTTTGCACAA
CATTTTTAAAAACTGGTGTACCTTCATCTATGACGTGTTCCATTTTGACAAACAGCTTTCAGGCGTAAATCCAGA
GAAGTGCTTTATATGAAATGTATTATTTTGAACAGAGTTTGTGATTTGGTAGTTATTTTATGTTGTTGAAATTTG
AATTTCACAATTCTTAGATAATTATTTCAAATGGATATTGATGCATTCTTGTTACCAGATGTTTGGCCCATTCCA
TTTTGATGAAACAGAGCTGTTGTTTTGGAAGTCATTATTTTTCTAGAAATGGCGAATCTTTTAAAGAAAATTACT
TAATGGAAGGTTGTGGGAAGGTGTTTTTTTGTGTTTTTTTTTGGGTTTTGGTTTTGTTTTTCCTCTTTTAAGGGA
TAGTAGCAGGTCTTACTTGAATGAAAGTCTGATATTTGCTGATGGCAGAATGATTATTCTGTACCCTGGTTGATG
TGTAGAGTAGATTGTCTGGTGCTCTCAGTTGTTTTTATTTACATTTGTCACGTTGTTGTAAGAGAATGTTAACAT
GGTATAAAACTCTGTGACAAGATAAGCCTCCTGCTTTATATAACTTCTTGAATCCAGCTAAGAGATTTATAAACT
AATGGCATAAATGTCTGGAGCCAACCTTGGCAGTTATAGCAGGAGAACACTGTCTTAATATTTCTTTACATTCTT
TCAAAAGGCAAAATAGGATTGCCCTGTATTGATGTAGAAATGTCTGTAAACAGAGCTTGTATGGTTTGCTGGGTC
AAACAATGTTTCCAACTTAAAATCAATCTCATTGCCACTTTAACTACTTTTAGTCATATTTATTAAGTAATGCAG
TTTGTACTTTTTTTATTTTGTAACATTTTGTGATTTTTTTGTACAAAACTGTATTTGTACAATAGAGCAATTCCC
AGCTGATGGAATGAATGAATAAAATGCAAAATTATACTTTTACAATGCCTTTTTGGATAGAGTGGTTTTTAAATT
GTGATGTTTGTAGGAAACTTTCTTGCATGTATGCATGTACACAATTTTTTTTTTCCATAAAGATGCCCCAGCAAT
AGAGAGGTTTCCTAAATTATCACATGAAGAGGATAGGCTAATCATGAGTAATTTCAAAGGATAAGTCTGAATAAA
ATATAATTTAAAAGTGGAGT

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FIGURE 4738

GRCLLLAPAPAAPVPPRRGSSAWLLEELLRPDCPEPAGLDATREGPDRNFRLSEHRQALAAAKHRGPAATPGSPD
PGPGPWGEEHLAERGPRGWERGGDRCDAPGGDAARRPDPEAEAPPAGSIEAAPSSAAEPVIVSRSDPRDEKLALY
LAEVEKQDKYLRQRNKYRFHIIPDGNCLYRAVSKTVYGDQSLHRELREQTVHYIADHLDHFSPLIEGDVGEFIIA
AAQDGAWAGYPELLAMGQMLNVNIHLTTGGRLESPTVSTMIHYLGPEDSLRPSIWLSWLSNGHYDAVFDHSYPNP
EYDNWCKQTQVQRKRDEELAKSMAISLSKMYIEQNACS

FIGURE 4739

AGAAAAATGATTAGAAATTGAGAACTATTTTACGTGTTTCTAAGTTGTTGGCTACATCAAAGAGATCATCTGTAT
TCTGCATATGGGCTGGCTTTGGTGAAGCTGATGACTGGACTTCTAAGAACCGTTTTCCCAAATGGGTTCCCATAT
TCATGCACCCAAAGCAATGGTCCCCAAGCACTGATGAAAACTAATATGCATTTCCCAAAGACCCACACTATGTAT
CAGGAGCCTGCACCATGCCATTTGAATGACCCTCAGCAATGTGCCTCCCTGCCCTCAAATTCCCAGTTGATAACA
GTGTTTGATTAAATTTCCACTCAAGCCAAACATGGTTACTAAGAAGAGAAAAACCTGATGTTTGCATAATATTTT
TTTTCCCCTCGAGATTCCATCTCAAAAAAAAAAGGTGGGTAAAGGGCCATGAGCCCAAACCACTAGGTTGTTCAC
CTTTTCATCTGAAAATGCTTTACTCTGACTATGTGCTATTGGGTTTTATTTCCAGAAAATATAGTTCTCCTTTTT
TCTGCATGAAGGATACATCGTGGTGCCACATGCTTTAAGCAATTTAAACAAGAGAGATAAGAGGAAAATGCAACC
ACCACATCTGACTTGCCCAATGTAGACTTTCCTCTATTAGATTGAAGTACACAACCTAATATGATATATTATTTT
GTAGTATCTCAGACTTTGTAAATAAATACCATTATTTTTATATGGAAATTTTATAGAAGAGCTATTTCTGTATAC
GTAATTACTCCTGATTTTCTGAAATTGCTTCTGGTAGATAACAGACAAGTCCTAAGCAGTGTTCCACTAAGGGTG
GTTCCAGGCCTGCCTGCCGTGGAGTTGACTGGGGGAATTTTACAGTTTTGCGATCCTAGGATGCGTCCCAGACGC
TCAGTCAGAAGTGCTGGAGGTGGGGCCTGGGAAGCTGTATTTGTAATGAACTCTGGTGTTTTTTGTCCATTAAAG
TGTATCTTTGTCCATCCTATAAGATTAAAGGAAAGAAAAAGCATCTCAAATGAGTGTAAGTTGTTCTTGAGAAAA
AAATGTATCAGACTTTTATGATTTGAATGAAATGTATTATAGAAAAAAATAAACACTTTAAAATAATGTTAGTCT
CATTAAA

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FIGURE 4740

MTGLLRTVFPNGFPYSCTQSNGPQALMKTNMHFPKTHTMYQEPAPCHLNDPQQCASLPSNSQLITVFD

FIGURE 4741

GTCTGATTGGGTGGTGTGGCGCAATGCGCGCGACCCTCAAGATACCAAACTGTACGCATCTCTGACCCTTTCCTC
TCCTTGCTCCTGCTGGTAAACCGAAGCCCAGGAGACTTCCAGGTTTGGGCATCTGCAGAGGGCGAGGAACTGGTC
ACGGCGCCGGGTGGGCTTGCAGCTGTGACGCTTATGTGGACACCTCAGTGTCGCTGGTGGTTCACCTCGGCTTCC
CAGTTTATTTATTGACGTCAACAAATAAATGTTGAATAAGGAAGAAGAGTTAGAATTGCTTGAAGCCCTCTGGAG
TTTTAGCACTAGTCCCGCCCACTCCCTTCTACTTCCAGGTCGGGGGGGGGCGGGTCCAATAGAAAGGCGGAAGCC
AGTGTCCCAGGCGTTCTCACGCCCGCAACAATTCCTGAGTAGGGCCTTGCTTGAGTTCTTCGGAAAGTCTCATCC
ACCCCCACATCGCCTCTTTAGGAAGTCACTTAATGTTGGGCTTCATTATTCCCACATCCCTTTCCTTACTACTTG
CCTGCACTTCTTGAGAAAAAGACTGCAGAAAGGAGAGGTGGGGCTTTCAGTAGAAACAAGCAAACCGCAGGTCCC
TGTGGGGGGACTCTCCAGGAAGAAGGTTCCGCAAGAACCGTGGGCGACAGTTATGGAGAAGCGTCTGCAGGAGGC
TCAGCTGTACAAGGAGGAAGGGAACCAGCGCTACCGGGAAGGGAAGTACCGAGATGCTGTGAGTAGGTACCATCG
AGCTCTGCTTCAGCTGCGGGGTCTGGATCCGAGTCTGCCCTCTCCGTTACCTAATCTCGGACCTCAGGGCCCGGC
CCTCACGCCTGAACAAGAAAACATATTGCATACCACCCAGACAGACTGCTATAACAATCTAGCTGTTGTGAAATA
GGGAGTGTTTCCCTTCTTAATCATAAAAAGGCAGAACATTGACCTGAATTGCCTGAATTGACTCCTCTGCAGCTT
GTCTCCTTCAGATGGAGCCCGTGAACTACGAACGAGTGAGAGAATATAGTCAGAAAGTCCTGGAACGACAGCCTG
ATAATGCCAAGGCCTTGTATCGGGCCGGAGTGGCCTTTTTCCATCTGCAGGACTATGACCAGGCCCGCCACTACC
TCCTGGCTGCCGTGAATAGGCAGCCTAAAGGTAAGCAAGAAGGGCTTTGAAATGGTAAAGACAAAATTGTCTTGC
TGGGGTGGATCTGTGGAAAGGGGGTTTTATTTTACTTTGCCAATGTATTATTTTCAATAAGTAATACATTCACAT
GGTTGAGAATTCGAACTGAAAAAGTATACGATGAACAGACCTTTTTCCACTCTTGTGTTCTTGTCTCCACAGAAA
AGCAGTATTATTAGTTTCATGTGTAGGGGGTTGATGCTTAATCAGACATACACAATATATATGTTGGTATGTCTG
TTTCATATATGTATGTATGCCTATTCTAATATATAAATATATGTATATCAACGTGCTTTTATTTATAAATATACA
GTGTATATATTTATACATATACATGAATATATATATAAAATAGGCAGGCCAGGTGGGGTGGCTCACATCTGTTAT
CTCAGCACTTTGGGAGACCAAAGTGGGTGGATCACCTGAGGTCAGGAGTTTGAGACCAGCCTGACCAACATGGAG
AAACCCCATCTCTACTAAAAATACAAAATTAGCCAGGCATGGTGGCGCATGCCTGTAAACCCAGCTACTCGGGAG
GCTGAGGCAGGAGAATTGCTTGAACCCAGGAGGCGGAGGTTGCGGTGAGCCGAGATCCTGGGCAACAAGAACGAG
ATTCTGTCTCCAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4742

MLNKEEELELLEALWSFSTSPAHSLLLPGRGGAGPIERRKPVSQAFSRPQQFLSRALLEFFGKSHPPPHRLFRKS
LNVGLHYSHIPFLTTCLHFLRKRLQKGEVGLSVETSKPQVPVGGLSRKKVPQEPWATVMEKRLQEAQLYKEEGNQ
RYREGKYRDAVSRYHRALLQLRGLDPSLPSPLPNLGPQGPALTPEQENILHTTQTDCYNNLAVVK

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FIGURE 4743A

TGGAGCTCAGTATTCAGGAAGCTTAATACTGTTTTGATCTACAAGATCCAAATAATTATCCCTATCTTCAGAATT
AACTTAGTCTGTAATGTGGCTTCAAAAAAAGAAAGCCTTTGACAGCTACATGACTTACACCATACAGAACAGTAC
TGGACAAAAGGGGTGATATTTTAAATTTACTATCCCAGAAACAGGGCAACGTTTTTAGAAACATCTTTAGCCCAA
AGTAACTAGTAAAAATAAATGGAGTGGTATCCTATCTTCTTTTTTTAAGGAATCAATGAATAATAAATGTAGATA
GACAATTTTCTTCTGGTGAGCTGTCTAACCCTTTGTACACATTGACATTTTTAATATCGTAACTGATTTCTTGAT
GCTAGTTTAGCTATATTAGGAAACTGCTTCTACCTAGATTGAAAGAAATTTGACTCATAAACTTCCAAGTTAGAA
CAAATATTTCTTCATTATTGTTGCTTTTATGTGAGTAGCATTTCCCTATCTTGCAGTTCTGTTAACATGAAAATG
GCATTTTTCCATAATAGCTTTAAAATAATTTTTTAGTAATTATTACAAAATTAAGGAAAATCTCTATTACCGTTA
TCTTTTAGCATTTTTTTTTTCCTCAGTGATCTCAAGATTGTCTTAGTCTCAATGAGATGTAGCTACAAAAATGGC
ACCTCTTAGCAGTGATGAGGCTCAGGATATCGGATATCATAACACCAATGTCAGGATAAATATCTCTTCTAAAGA
CGATATTTACCTTTTACAAGGTTAGAAAAGTCTCATACTACCTCATCTTTATTGTGGCGCTTTTGTAGATCACTG
AGAAGCTTATCTTATTAACCAATATACCACTTCCTAAATATCCATCTTTGGTGAAAGAAAATAGTGTGGTAAGAG
TACCCATGATTATAGTTTTTTATCAGAATTTGATAAGATTTTCTGTTTCTGTGAAACAATTATTTTAAATATTTT
TCTTTTAAAAATAACTTTTTATCAGTACAGAAAAACCTAAGGGATGACTAGCTTACAAATATTCTGTTAAGGGGT
AGTTTTATAAAGAAAAATGATATATAGTTATGTTGTCTTTTATAGTGTTAAAATTAGTATTTATATGAAAGTCAA
GATCTAAGTACCTTTTCATATAATTCAAACTGATTGCTTGTGATATGTTTTCTCTGGCTTTTTTATTTTTTCAAC
TTCAAGGTATTAACAGCTGTTAACACTTAAAAAGTACTGCCACATATGTAGCCTTGAAGTAGTTGATCTAATAAA
TGAGAGCAGGGAGGAGATTCATTGACTCTGAAATGATTTTTATTTTTCCTTTGGTATTTGCTACAGTGAAAAGAA
GTTTGGAAAGTAGATACATAAAGACTTGAGAAGGGAATTGTTTAAGGGAAAAGAAAAGAGTAATAATTTTTTTTA
AAACATTAAGGAATTGGAATTCAGAAAGGTTACCCCCTTCCTCTGTGTCTTTGTAAGGATACATTTGGAAGAACA
TACAGTATTCAGAAACTAACCTATATAAAATGTAAACAATATATTGATTGCACTATATAAATGAGTAAATTTTGA
GAGGAACAATGTGGGAATGTATAAATTTGTCTAAAATTTTATAACTGTTGAACAAAGGGAAGATTTGAACAGTGT
AAATTCCAGAGTTGAGAAAGCATTTAGCATGGTGGAAATGTGGAGAGCTTATTGGTGAGAGAGGATGGAGCTAAG
AGAAATAAGATCAAATATTAAAATTAGGAATTTAGGCATTACCTCAGGGAAAAGCCTTGACAGTGAAAAGAAACT
ACTTAATCGCTAATAGCTAGTCTGGACCAGACACTTAACTGCGCTTTGGGAATCATCCTGGGCTAATCAGGAAAT
AAACTTGACTTTTCTATTTTTCTCTGAAGCTTTACAGGACATACTCCCACTCCCATTTTTTTCTAAGCCTACAGC
ATCTTGATTCATAGTATAATTCCTGAAGTATGCTGAATGGACTTTTTAAGGTTCCTTTAGCATTTTTGTATAGAG
TTATATGTGATCTTTCTATAACCATGCCATTCACTTAAATAATTCATGAAGGGAATGGTTTAATTTAAAGGAAGA
CCTAATAGGAAGAAGATTAAAGGAAGCTTTTAGTCAGCCTGTGGCTAGATTTATTGATTTGGTGATCAAACCTGT
GCTATTTCCTGAATTTCAGCTAATGGCCAACTGTGGTCAAAGAATGGCTTTCAGTTAAAGTTTTGACTTCTTATT
ATAAATAATATAAAGAATGTCTCAGTAATTAGAAATCCCTTAATAAGTAGAACAAATGTGGCAAGTAGGACTCCT
ATCGGTATACAAATTCCATTTCTTTTTATAAGAAAAACACATAAACCATTATCATTTATTCATGAGCCAAAGCCA
TTAAGAAGATAAATCCAGTTATCAGCTTCCTGTCTCTGAAGTTTGGATCATTTTATAGATCCACGCAATAGAGAG
CTTCCTTCCTATGAAACAAAAACCTTGAGANNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNGATCTAACTCACGCTTACTTTTCATTAAAATATTTCTTGTCGCTTTTAGCT
ATTGTCAGAATCCAATAAACAGCTTACGCATTCATTTTGGTAAAGCAAATTTCACAGGAAAATAGACAAAATTAT
AAGAGATTCCTGGAGACAACACAAGGAAAACAATGTTTAAAAGCAAAATAGCCTGTGTAATGTTAGGTAATGTAA
TGCCCAAGTGAATAAAAGATTTTTCGTCAAGCAAACTACTGTTTCTACTTTGGGGGAAAAAAGTCAGTTTTACAT
TTGTAATTTAAGGAAAGAACAGAAAGCACAAAGGTTTTTCTTTTCTTTATTAATGGCCTACTAGAAATGAGCAGT
GCAAGAGTCTACCTGTACTATTCTAATACAGTAAGATATTGGACACAAAATGGAGGTAACTTTTTAAAATAGATT
GGCTTGGAAGTTGAAATGTAGATTAATGGATATAACCCAATAGAAAGGGATTTTCAAATAAAACCAAAGTCTATT
TTTTTATTTACTTTCTAATTTTGAACAGATGACTCAGTCCTAAATCTTTGCCTTTATTTCCTATAAAATGTAGGT
GATACTTGTAACTCGACTTCCTGGAGTTAATTCTTCAGCAAGAGGTGACCCTGGGAGCGTACTTTAAAATAATTG
CTGTACAGCCATTGAGTACTAACATGATGATAGGTTTTCAAAATATCTTTGTAGTGGATGCTGCATAATTACATT
CACTTCTCTTAGACTGTAAAAGACTTTCTTGACTTGTTTTAACAGTAGAGATAGCAGTACAATTTGAATTTATGG

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FIGURE 4743B

TTTAGGCTCTGCAATTAGAGGAACAATTGCAGTTTCCTCCTACCCTTCATATGGTCTGTGTAAAACTGATGTTTG
CTTAACTTATTTTAAAAGTTGATTACGTTTTCAGAAAATAAAGATAATCACTTTTGCCATGGTTATAATCAAATC
TAAGCTTTCAGACTTGAGAGCCATGGTGTAAAACTCAAGGAGGTTTATTTAAATTATGCTGACTTTGCTAGAATT
GGATAAATTCTGTATAAGCCAAGTATGAGTTCACATGTACTCGAATATACAGTTTTCACAAAGCTATTACTCTCA
TCAGTCAGGCTTGTATGATCTATTCCTTACCACAAAAGAAGTAGACAATTGCCACTTTTATTTCTAATCCTTAAG
TTGAATGTTTCTTCTTGGATGTAAGTTCAAATAAATTGATCTGGATAAATTTTCATTTCTACTTAATTAAAACTT
CCTATGTAAAATCCAAAAAA

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FIGURE 4744

WSSVFRKLNTVLIYKIQIIIPIFRINLVCNVASKKESL

FIGURE 4745A

CAACATTAAATTTAATGAAACATTAATGAAGTTTCGTCAAGACTGGGGACCCATTACTTCAATTTCATTTCGCAC
AGATGGTCATCCAGTAATGGCAGCTGGAAGCCCATGTGGCCATATTGGACTCTGGGATCTAGAAGACAAAAAATT
AATCAACCAAATGAGAA**ATG**CACACTCCTACAGCAATTGCCGGACTGACATTTCTCCATAGAGAGCCACTTCTTG
TCACAAATGGCGCTGACAATGCTCTTAGGATATGGATATTTGATGGTCCTACAGGTGAAGGCCGACTTTTGAGAT
TCAGAATGGGTCATAGTGCTCCTCTTACCAATATCAGATATTATGGACAGAATGGACAGCAGATTCTAAGTGCAA
GTCAAGATGGAACTCTTCAGTCATTTTCCACGGTACATGAAAAATTCAATAAGAGCTTGGGACATGGATTAATAA
ATAAAAAGAGAGTTAAACGTAAAGGACTTCAGAATACCATGTCAGTGAGACTTCCACCCATCACAAAGTTTGCAG
CAGAGGAAGCTCGTGAAAGTGACTGGGATGGTATCATTGCTTGCCATCAAGGTAAGCTATCTTGCTCAACCTGGA
ATTATCAGAAATCTACAATAGGCGCTTACTTTCTCAAGCCAAAAGAGTTGAAGAAAGATGACATAACTGCAACAG
CAGTGGATATAACTTCTTGTGGAAACTTTGCTGTAATTGGCCTCTCATCAGGAACTGTAGATGTATATAACATGC
AGTCTGGCATACATCGAGGAAGTTTTGGCAAGGATCAAGCTCACAAGGGATCTGTTAGAGGTGTCGCAGTGGATG
GATTAAACCAGTTGACAGTTACAACTGGTAGTGAAGGATTACTCAAATTCTGGAACTTTAAAAACAAAATTTTAA
TCCATTCTGTGAGCCTCAGTTCATCTCCAAATATCATGTTGCTACATAGGGACAGTGGCATTCTGGGACTCGCCT
TGGATGACTTCTCCATTAGTGTTCTGGACATAGAAACTAGGAAGATTGTCAGAGAGTTTTCTGGACACCAAGGCC
AAATAAATGACATGGCTTTTAGTCCTGATGGTCGTTGGTTAATAAGTGCTGCGATGGATTGCTCTATTAGGACTT
GGGACCTTCCCTTCTGGGTGCCTTATAGACTGCTTTTTGTTGGACTCGGCTCCTCTCAATGTTTCTATGTCTCCT
ACTGGAGACTTTCTGGCAACTTCCCATGTGGACCACCTTGGAATTTATCTATGGTCCAATATTTCCCTGTATTCA
GTTGTTTCATTACGGCCACTTCCTGCAGATTATGTCCCTTCAATAGTCATGCTTCCTGGTACTTGTCAAACCCAA
GATGTAGAAGTTTCAGAAGAAACAGTAGAACCAAG**TGA**TGAATTGATAGAATATGATTCGCCAGAACAGTTGAAT
GAGCAATTGGTGACTCTTTCACTTCTTCCTGAATCACGATGGAAAAACCTTCTTAACCTTGATGTTATTAAGAAA
AAGAATAAACCAAAGGAACCACCCAAAGTACCCAAATCAGCACCATTTTTCATTCCAACAATTCCTGGCCTTGTA
CCCAGATATGCTGCACCTGAACAAAATAATGATCCCCAGCAGTCTAAAGTGGTAAATCTTGGAGTTTTGGCTCAA
AAATCAGATTTCTGCTTGAAACTTGAAGAAGGACTGGTAAATAATAAGTATGACACTGCTCTCAACCTTCTGAAA
GAATCAGGCCCATCAGGAATTGAAACAGAGCTGCGAAGCTTGTCTCCTGATTGTGGTGGGTCCATAGAAGTTATG
CAGAGCTTCTTGAAAATGATTGGGATGATGCTGGACAGAAAGCGTGATTTTGAGTTAGCCCAGGCATACCTTGCA
TTGTTTCTAAAGTTACACCTTAAAATGCTTCCTTCAGAGCCAGTACTCCTAGAAGAAATAACAAATTTGTCATCC
CAGGTGGAAGAAAACTGGACCCATTTGCAATCACTCTTCAATCAAAGCATGTGTATTTTAAATTATCTCAAAAGT
GCTTTGTTGTAAAAATAAATTTGTGACTAAACAAAGACTTTCATATTAAATGGGTTCAATTGAACTCATTTCTTA
TTTTCCAAGTGTCAATGTGAAAAGAAAATAAATGCTAGCACTACTGACTAGTCAGTATATCTCCACTTTAAATGC
TAAATACTTTCTTGAAATAAAATCGCACCTCCCNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNCACCTGCCTTTTGTTTTGAAGACTTAAAGAATCTGCTCAAATGATTT
ATTTTCTGAGTCTCTTCACATTAACTTTTATATGATTTTTAAAAAATTATTACCTGCTTATATTTTTTGAGTATC
TGTTTCATATAAAGAGATGCTGCATGTTCACTGTGAAGTATTGCTGAATTAAATTGAAAATGTCAGATAAAACTG
ATACATGATGTAGTTATAAAAATGCTGTTATGAAGAAAAAAGGAATGCTTTTTTCCTCGGTGGCCTTTGATAAAA
ATATGAATGATTGACTCTCAGAGTTGGAGGATAAACTAATCATCTTCTAGCACAGCCCTGTTGTGTTGCAGGAGA
GGAATCAGGCTAAAGTCTGCTGGTATTTCAGTGACAGATTAAAACTTTCTAACAGTGGCCTAGTGCTTTCTCCAT
TGTAATGTACTGAAAGGAAGTTGTTCATGGATCAGAAATGTGGGAGGCCCTTCCTTGCCCAAGGCAAGTCGCTGT
AGATGGTTAAACTGATACCAAGGATAGGTAAGGGAAATTCCAAATTCCATTGGAAGATGGCCTTTTACTGACACT
GCAGACATGTAGATAACAATAGTTTAATGTCCTCTGAAAAGGTAAAAATTCCATAAATCCTTGCAAACAATTTTT
AGCAATATTGTTTATTGCTACCACAGCCAAGAATGGGTATTTCAAAGCCAGGGTTTTTTTTATTTTGTTTCGNNN
NNNNNNNNNNNNNNNNNNNGGGCTACACTTTTTTGGGGGGGGACCTTTTAATTTGGGAAGAAAATGCTGAGTATA
CTTTTCTTTCACAACCATTGCAAACCCAGGTAGCCCTGGAGTTTTCTTTTTTTCTCATCATCATTGTTTTGTTTT
TTTTATGGTTCAAGACTTTTGCAATACATGAATTAAAAATAAGCAGTTCTTTAAAGCATAGCGCTCTAAAAACTA
TTCTTAGTTTATACCCTCAAAAGTTGGGTCTTTCATGAAACACAGTGGTTTGAATATGAACACCAGTAGCATTCT
CGTTCGTTGTTAGGGTAAGAGAGTTTTGTAGAATGATCTCCAAAAGAAGCAGTCCTCAAAAGGCATTTACCAGTG
ATATCTTTTAATATTCATGTTTTTATTTAATGATGTAAGATAGAATTAATAAACTACTAAGGAAATAAGCCAATG
TGGTTATTGTACTCAATTTCGTTTTTCTTTTAGAAATGTGTATTGACTTATTAAAGCCACTGACAGAAATGTTAA

FIGURE 4745B

TCATGACTTAAGTTCTAATTTAAAAAACTATTTTCCTCTTTCCTAAATACTATATTCTAAATTGGAATATGGCAA
AATCCCAATATATAATTCTATACCTAGTAAAGATTGTAAATAACTAAAACAAAATGATAAGAGCTGTGAACTGAA
ATTGTATTGCTTACAGAAATCATGAACTGAATTTTCTTCTCTTTTTAAAGTGAGCATAAAGACTTAAGTGTATTG
TTACCAGAGATATATTTAGATAGTATACATCATTTTGGCAGGTAATCTTCTAGAACCTTTCATGTACTGTTTCCA
TCAAGGGAGGGAAAGAAATAGAAAATATAATTTTATCTATATTTTCCTTAAAATATATCAATCTGTGCACACTCT
TTCAGTTTTTTAATTACTCATGTAATATATGACTACATTTTGCTTGTGTGCTTTTTGAAAACCATCTTCAGTCCC
AATATCCTCTGTAGAAGTAATAGTTTTAACTCTCCTAGATCTTCTTTTAGAGTGTTTTTATGAGTGTTTAATGTA
GGAATGTGTATATATTATCTACAGCCACAGGAAATGTATAGTTACGATTTTTACATACGTGTATGTATATTATTG
TACAACTTGCTATTTCTACTTGGGAGTTTTTTATTTTGGTACATTCACATTTACCTAATCTCTTGTGCACTGTCC
AACAGTACTTTGCCTATAATAGACACTTAAGGAAGTTTTCCTTCTTTTTATTCCTTTATAATTACAAACAATGCT
GAAAGGAACATCATCCTACATGAGCCCTTTTTGTACATATAAGGCTCTCTCTGTGGTATATGCTTAGGATTTGAA
TTTCAGGCCAGAGTATAACCATTTTTAATTTGAAGAGATACTTCCATTTGGGTTCCAGAATGGCTGTATCAAGTT
ACAGTTCCCCTGAGCAAGATATGAGCATCTGCTTCCCCATGTAATTAATGACACTTGCTATTGGATTTTTGTAAT
TTAATTACTCTGAAAAAATTATTTTGGTTTTAAATCAGAAATTTCTCACTAGTGAAGATGGACATATTTTTGTAT
GTTTATTTTAGAACATATAAACATTTGTTAATTTTCTTTTTCCTCTCATTTTTCTATTGAATGATTTGTCCTTTT
ATCTCATGGATTTGTTAGGAGTTCTCTTGTATTTTCTGTATTTTATGTCTGTTGCCAATGTTTTCTCCTACTTAG
CCATTTGGCTTTAATTTTACATGGTGTCTGTTTAAATAAATGTTTTATATTTGTATACAATCAAATTGATTAATT
TTCATGACTTATTTCAGGATATAAAGCAAATTATTTTCTAAGACATTTACAGTGTATGTTTTCCTATGTTTACAT
GTGCTCATTTCACGTCATGTATTTTCCTCTACGACATGTTTCTGTGTGAGTAGTTAACATGTAGATCTTTAGAAT
TGATTTTTCTGAAGAGTGAAACAGCGCTGCTTCCAATATCTGTTCAAAATTCATTTATTGAAAAGTCCACTCATA
TGTCTGATTTGAAATGCTGTTTCATTATGTGTTAAATTCTTTCACTGAGCTCTTCCATATTCCTAGTAAATGATG
CATTACTTTGGTATGTTCTCAGATTTGGGTAAAGCCTTCCTCATGTTCTATAAAAATTGGTTAACTGCTGGTGAG
CACATCTCTTGAAGTTTTGATATGGGTTGCACAACATTTATAGGACTGATTTGGAGAGACCGACAATACCGAGTG
CAGTCCTCCCTTGGTATCTAGTTCCAGGACCCCTGTGGATACCAAAATCCAAGCAATGCCCTGCAGATCATGGGA
CCTATGCATATGAAAAGTCGGTCCTTGTATTTGANGGTTTTGCATCCCTCAAATACCATATGTTTTATTTGTGTT
TGGTTGAAAAAAGTTTGCATATAAGTGAAACTTAGCATTTCAAACCTGTGTTGTTCAAAGATCATTTGTATTTCT
CTTCAAGAACAATGAATGTCTTCATTAAATCATCTTTTGTGGGAGAGCTTTTGGTTTCATAGATTTTCATATATA
TATATGATATAATAAACACTTTTTGACATTCTGGGAGTTTTACTTTTGTTACTATAAGGAAATATCCTTTTCTAA
TGCATGTTATAATTGGTTGTTTCTGTTTGTGGTAAAATGACTTAATTTTGATATTCCAATCCGTCATGACACTGC
AGAACCCTTTGTCAATACAGTCTTACTAGAAAATCCAAGAGAATTCTATCTTCTGCAATTGATGAGACTGTAT

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FIGURE 4746

MHTPTAIAGLTFLHREPLLVTNGADNALRIWIFDGPTGEGRLLRFRMGHSAPLTNIRYYGQNGQQILSASQDGTL
QSFSTVHEKFNKSLGHGLINKKRVKRKGLQNTMSVRLPPITKFAAEEARESDWDGIIACHQGKLSCSTWNYQKST
IGAYFLKPKELKKDDITATAVDITSCGNFAVIGLSSGTVDVYNMQSGIHRGSFGKDQAHKGSVRGVAVDGLNQLT
VTTGSEGLLKFWNFKNKILIHSVSLSSSPNIMLLHRDSGILGLALDDFSISVLDIETRKIVREFSGHQGQINDMA
FSPDGRWLISAAMDCSIRTWDLPFWVPYRLLFVGLGSSQCFYVSYWRLSGNFPCGPPWNLSMVQYFPVFSCFITA
TSCRLCPFNSHASWYLSNPRCRSFRRNSRTK

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FIGURE 4747

GTGGGGTTTGCAGAGGAGACAGGGGAGCTTTGTGTACCCGGAGCAATGAACAAGCGGCGACTTCTCTACCCCTCA
GGGTGGCTCCACGGTCCCAGCGACATGCAGGGGCTCCTCTTCTCCACTCTTCTGCTTGCTGGCCTGGCACAGTTC
TGCTGCAGGGTACAGGGCACTGGACCATTAGATACAACACCTGAAGGAAGGCCTGGAGAAGTGTCAGATGCACCT
CAGCGTAAACAGTTTTGTCACTGGCCCTGCAAATGCCCTCAGCAGAAGCCCCGTTGCCCTCCTGGAGTGAGCCTG
GTGAGAGATGGCTGTGGATGCTGTAAAATCTGTGCCAAGCAACCAGGGGAAATCTGCAATGAAGCTGACCTCTGT
GACCCACACAAAGGGCTGTATTGTGACTACTCAGTAGACAGGCCTAGGTACGAGACTGGAGTGTGTGCATACCTT
GTAGCTGTTGGGTGCGAGTTCAACCAGGTACATTATCATAATGGCCAAGTGTTTCAGCCCAACCCCTTGTTCAGC
TGCCTCTGTGTGAGTGGGGCCATTGGATGCACACCTCTGTTCATACCAAAGCTGGCTGGCAGTCACTGCTCTGGA
GCTAAAGGTGGAAAGAAGTCTGATCAGTCAAACTGTAGCCTGGAACCATTACTACAGCAGCTTTCAACAAGCTAC
AAAACAATGCCAGCTTATAGAGATCTCCCACTTATTTGGAAAAAAAAATGTCTTGTGCAAGCAACAAAATGGACT
CCCTGCTCCAGAACATGTGGGATGGGAATATCTAACAGGGTGACCAATGAAAACAGCAACTGTGAAATGAGAAAA
GAGAAAAGACTGTGTTACATTCAGCCTTGCGACAGCAATATATTAAAGACAATAAAGATTCCCAAAGGAAAAACA
TGCCAACCTACTTTCCAACTCTCCAAAGCTGAAAAATTTGTCTTTTCTGGATGCTCAAGTACTCAGAGTTACAAA
CCCACTTTTTGTGGAATATGCTTGGATAAGAGATGCTGTATCCCTAATAAGTCTAAAATGATTACTATTCAATTT
GATTGCCCAAATGAGGGGTCATTTAAATGGAAGATGCTGTGGATTACATCTTGTGTGTGTCAGAGAAACTGCAGA
GAACCTGGAGATATATTTTCTGAGCTCAAGATTCTGTAAAACCAAGCAAATGGGGGAAAAGTTAGTCAATCCTGT
CATATAATAAAAAAATTAGTGAGTATAAAATGGTGGCAAATCTACTTTGTTTAAAACAGTATGAATGCCTATTCT
CAGATCACTACATTTAAGGCATTAGAAACTTTTAAAAAGTTATCTTAAAAATATACATAAAATTTGAACAACTTA
AAAATTGAACTAATTTCTAAAATATATCCTATAATTATATAATACACAGACATTTGTTACCATCTAAGCATTTTG
TATATGAAAAAATTATGCAATTTACAAGAAAATATTTTACAAAATAATCTGGAATACTTGCTAAAGCTGTATAAA
AAGTATACTAAATTTTAGGCTGGGCGCAGTGGTTCATGTCTGTAATCCCAGCACTTCGGGAGGCCAAGGTGGGCA
GATCATTTGAGGTCAGGAGTTTGAGACCAGCCTGGCCAACATGGTGAAACCCTGTCTGTAATTAAAAAAATACAA
AAATTAGCCAAGTGTGGTGGCATGCGCCTGTAATCCCAGCTACTCGGGAGGCTGAGTCAGAAGAATTGCTTGAAC
CCAGGTGGTGGAGGTTGCAGTGGGTCAAGATTGCACCACTGCACTGGCACGGAGAAGCGAGACTCCTTTGGGGGA
GAAAAAAACATACTCAATTTAAAAAATTTAATCTATATTTGACAATGTAGCCTAAGGTGCCCATTAGTTGATACA
TCATTATAGGGCAAGTGAAATTCTAGATTAATTCTTGAACAGAAATAAGATTAAGCTGTAAATATATTTAGACTT
TTCACTGCCTGATCTTGAATATCAGTTTCTTTTGGAAAGGAGAAAATGCAACTTTTCTGGCCACTGTTAACAACT
GCAATCTAAAATTTTTTACATCAAATATTGTAAAAAGTTAAATTTCCAAGACAAAGACCAAGAACAGTATCATTA
CTTTGCAAAGGAAAGAAATATAAAGAATACAACTTAAAATTAACCTGTGGATCTGAAATATAAAATGTTATTAAA
AATAAATTAATGTTAAGGCTAGAACTGAAGATTATAGTAACCGGAACAATTATAGCCATTTATTGCAAAGTTTGG
AAGATATCAAGCTTAGTAACATTCTGTTCATTTGCATAAATGTCATGCAGAACAATAACAAGTAGCACTGTTGAA
AAATATAGACATTTATTATAAAATCAATTGGTTTGATAAGAAAGCAATTATTTAAAAAGTTTAATACAAATACAT
GTTAAGTGTACAAATTAGGATTCTTTTGGGCAAACAAGTTGTTATCTAAAGAAGAAGCAAAACCTCCTTAACAGT
TGTAATAAAACCTATGCCTGAAAAGTTGGTGGCTATTAAAAAA

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FIGURE 4748

MNKRRLLYPSGWLHGPSDMQGLLFSTLLLAGLAQFCCRVQGTGPLDTTPEGRPGEVSDAPQRKQFCHWPCKCPQQ
KPRCPPGVSLVRDGCGCCKICAKQPGEICNEADLCDPHKGLYCDYSVDRPRYETGVCAYLVAVGCEFNQVHYHNG
QVFQPNPLFSCLCVSGAIGCTPLFIPKLAGSHCSGAKGGKKSDQSNCSLEPLLQQLSTSYKTMPAYRDLPLIWKK
KCLVQATKWTPCSRTCGMGISNRVTNENSNCEMRKEKRLCYIQPCDSNILKTIKIPKGKTCQPTFQLSKAEKFVF
SGCSSTQSYKPTFCGICLDKRCCIPNKSKMITIQFDCPNEGSFKWKMLWITSCVCQRNCREPGDIFSELKIL

FIGURE 4749

TTTATTCCTACTTTATTGCAGCAGTATTGAAAGTTTTTAAAGAATATAACCGTGTGTGTTGGTAACAGACAGAAG
AATGGAAGCATTCCAGGAACTTCGTAAACCATCAGCACGTTTGGAGTGTGACCATTGCAGTTTCAGAGGCACAGA
CTATGAAAATGTACAAATCCATATGGGTACCATCCATCCAGAATTTTGTGATGAAATGGATGCTGGTGGGCTAGG
CAAAATGATATTTTACCAGAAAAGTGCAAAGTTATTTCACTGCCATAAATGCTTCTTCACCAGCAAGATGTACTC
TAATGTATACTATCACATCACATCCAAACATGCATCCCCAGACAAATGGAATGATAAACCAAAAAATCAGTTGAA
CAAAGAAACAGATCCTGTGAAAAGCCCTCCTCTTCCTGAACACCAGAAAATACCCTGCAATTCAGCAGAACCAAA
ATCCATACCTGCCCTTTCAATGGAAACACAGAAACTTGGTTCAGTTTTGTCTCCAGAATCGCCAAAACCTACTCC
TCTTACTCCCCTGGAGCCTCAGAAACCTGGCTCTGTTGTTTCTCCTGAGCTACAGACACCTCTTCCTTCTCCTGA
GCCTTCAAAACCTGCCTCTGTTTCTTCTCCTGAACCTCCAAAATCAGTCCCTGTTTGTGAGTCTCAGAAACTTGC
CCCTGTTCCTTCTCCAGAACCACAGAAACCTGCCCCTGTATCTCCTGAGTCAGTAAAGGCTACTCTTAGTAATCC
CAAACCCCAGAAGCAGTCTCATTTCCCGGAAACATTGGGGCCACCTTCAGCCTCATCTCCAGAGTCACCAGTTCT
AGCTGCTTCCCCAGAACCTTGGGGACCATCCCCAGCTGCATCTCCAGAATCTCGGAAGTCAGCCCGGACTACCTC
CCCTGAGCCAAGGAAGCCATCCCCTTCAGAGTCTCCTGAACCTTGGAAGCCGTTCCCTGCTGTCTCCCCAGAGCC
TAGGAGACCAGCCCCCGCTGTGTCACCAGGCTCTTGGAAACCAGGGCCACCTGGGTCCCCTAGGCCTTGGAAATC
CAATCCTTCAGCATCATCAGGACCTTGGAAGCCAGCTAAACCTGCTCCATCTGTGTCTCCTGGACCTTGGAAACC
AATTCCTTCTGTATCTCCTGGACCTTGGAAACCAACTCCATCTGTGTCTTCTGCATCCTGGAAATCTTCATCAGT
CTCACCCAGCTCCTGGAAGTCTCCCCCTGCATCTCCTGAGTCATGGAAGTCTGGCCCACCAGAACTCCGAAAGAC
AGCTCCCACGTTGTCTCCTGAACATTGGAAGGCAGTTCCCCCAGTGTCTCCAGAGCTTCGCAAACCCGGCCCACC
ACTATCCCCAGAGATCCGTAGTCCAGCAGGATCTCCAGAGCTCAGAAAACCCTCAGGGTCACCAGATCTTTGGAA
GCTTTCTCCTGATCAGCGGAAAACTTCTCCTGCTTCACTTGATTTCCCTGAGTCCCAGAAAAGTTCCCGTGGTGG
TTCTCCTGATCTCTGGAAGTCTTCCTTTTTTATTGAGCCTCAGAAACCTGTCTTCCCTGAGACCCGAAAACCAGG
TCCTTCTGGGCCATCTGAGTCCCCCAAAGCAGCCTCAGATATCTGGAAGCCTGTTCTCTCTATCGATACTGAGCC
TAGAAAACCTGCCCTGTTTCCCGAGCCTGCCAAAACAGCCCCTCCTGCTTCTCCAGAAGCACGCAAACGTGCCCT
TTTTCCAGAGCCCCGGAAGCATGCCCTTTTCCCTGAACTCCCCAAATCTGCTCTATTCTCAGAATCACAGAAGGC
TGTTGAGCTTGGTGATGAACTACAAATAGATGCCATAGATGATCAAAAATGTGATATTTTGGTTCAGGAAGAACT
TCTAGCTTCACCTAAGAAACTCTTAGAAGATACTTTATTTCCTTCCTCAAAGAAGCTCAAGAAAGACAACCAAGA
GAGCTCAGACGCTGAGCTTAGTAGTAGTGAGTACATAAAAACAGATTTGGATGCGATGGATATTAAGGGCCAGGA
ATCAAGCAGTGATCAAGAGCAGGTTGATGTGGAATCCATTGATTTTAGCAAAGAGAACAAAATGGACATGACTAG
TCCAGAGCAGTCTAGAAATGTGCTACAGTTTACTGAAGAAAAAGAAGCTTTTATCTCTGAAGAGGAGATTGCAAA
ATACATGAAGCGTGGAAAAGGAAAGTATTATTGCAAAATTTGTTGCTGTCGTGCTATGAAAAAAGGTGCTGTTTT
GCATCATTTGGTTAATAAGCATAATGTTCATAGCCCTTACAAATGCACAATCTGTGGAAAGGCTTTTCTTTTGGA
ATCTCTCCTTAAAAATCATGTAGCAGCCCATGGGCAAAGTTTACTTAAATGTCCACGTTGTAATTTTGAATCAAA
TTTCCCAAGAGGTTTTAAGAAACATTTAACTCATTGTCAAAGCCGGCATAATGAAGAGGCAAATAAAAAGCTAAT
GGAAGCTCTTGAACCGCCACTGGAGGAGCAGCAAATT**TGA**TAACACAGTGTGAATATTTGTTCTACAAAGGTGTT
TGTTGGAACCATTCTTTGTAAGTATAGCTTATCAGATAGCATAGTTGGATCAGTAGATGACATGTATGGTGTACC
GTGTTTCACTGTCTCAGTTGTGTTACTAAGAATGAGCATTTGATCATTTTTTTCTGGTCTCTGTCTATGTGACTA
TCTTGTAAGTCAATAAATTTCTGTATAGTCCAGATGGATTAAACTTCTCATTTCTTTTAAATATGTATGAATAAT
AATACAAGGAAGTAGGCATTCCATTTAATAATCAAGAGCAAGTTGTACTCAAAGCATTCAGTTAAAGTGTATCTG
TGTGTGGAACTAATTTCAGACAATAGAAAATATTAGTTGAAATGTTTAAGAATTAGGCATGAAAAATAAATTTGA
GAAATTTTGTTTCCTTACATGTATTTTTAAATCATAAGAGTTATTTTCTATCTGATGTAAAATTAGTTTATAAAT
CTTAATCAGCTTCTAGATGTTTATTAGCTTTTATGTCATGAAATGTTGGAGTCTCAGGGTTGCTGATTTTCTGCT
AATGGGAAAAATTGACTAAGTCTTTAAAATAGTTTGCAGCCTTCTCCCACAGGAGACAAGTGAAAGATAAGTGTG
ATTTTAGATCTTTCTTGTCCATAGTTGTTTTCAGTGGAGTCTTCCATTCTGTATCTTACCCTAAGATCTGGTTCT
TCCCTCCCCATCCCCACCCCCCACCCACCGCCTGCCAGCTCACACTAATAGATGATTCTTAATTGCCAAATGTGT
TAGAGTTTGTATATCCTACTCCTGGGCCTTACATGTCGCCTGTTGGGGCTTAAGACCAGGTTGATAAGTAGGAAC
TGAAAGTCTTCCAGATTCACAGTAGAAAATTTTATAGACATTTCTGTTAAAGAAATATATCGATTTTATGTTTTT
CAATTATGTTACTGTAAATACCTTGTACCTGTTCATGGATTATTTTATTCTAAAATATTTTGTCAAATGTGTATC
AACCAAATTAAAAAGAAAGGTTTTCATGTC

FIGURE 4750

PCVLVTDRRMEAFQELRKPSARLECDHCSFRGTDYENVQIHMGTIHPEFCDEMDAGGLGKMIFYQKSAKLFHCHK
CFFTSKMYSNVYYHITSKHASPDKWNDKPKNQLNKETDPVKSPPLPEHQKIPCNSAEPKSIPALSMETQKLGSVL
SPESPKPTPLTPLEPQKPGSVVSPELQTPLPSPEPSKPASVSSPEPPKSVPVCESQKLAPVPSPEPQKPAPVSPE
SVKATLSNPKPQKQSHFPETLGPPSASSPESPVLAASPEPWGPSPAASPESRKSARTTSPEPRKPSPSESPEPWK
PFPAVSPEPRRPAPAVSPGSWKPGPPGSPRPWKSNPSASSGPWKPAKPAPSVSPGPWKPIPSVSPGPWKPTPSVS
SASWKSSSVSPSSWKSPPASPESWKSGPPELRKTAPTLSPEHWKAVPPVSPELRKPGPPLSPEIRSPAGSPELRK
PSGSPDLWKLSPDQRKTSPASLDFPESQKSSRGGSPDLWKSSFFIEPQKPVFPETRKPGPSGPSESPKAASDIWK
PVLSIDTEPRKPALFPEPAKTAPPASPEARKRALFPEPRKHALFPELPKSALFSESQKAVELGDELQIDAIDDQK
CDILVQEELLASPKKLLEDTLFPSSKKLKKDNQESSDAELSSSEYIKTDLDAMDIKGQESSSDQEQVDVESIDFS
KENKMDMTSPEQSRNVLQFTEEKEAFISEEEIAKYMKRGKGKYYCKICCCRAMKKGAVLHHLVNKHNVHSPYKCT
ICGKAFLLESLLKNHVAAHGQSLLKCPRCNFESNFPRGFKKHLTHCQSRHNEEANKKLMEALEPPLEEQQI

FIGURE 4751A

CAGGGCTGGCTTTTTTTTTTTTAATAAGATAGCTGGTGCCCAAGATTGTTTTCCACCTTAAGGATAAAACCTGTT
AAGAAAGCCTGAACAATTACAAAAAAGGAAGAAAAGGAGACTTGGCCAACTGGTGTCAGGAGTCTTAACAAGGTC
ATAGTTTGCCAGCCCCTGCCCTAAACAAATAATTCTTGAATGCCTACTGTGGTGTGTAAGATATGAGTAAATACC
AGGGATACACAGAGAACAAAAGAGAAAAACTGCTATTCTTGTGAAACTTGGAAGTTGGAGGAGACTTGGAAGATG
CAGAACTGGATGACTACTCATTCTCATGCTATAGCCAGTTGGAAGTGAATGGATCGCAGCACTCACTGACCTGTG
CTTTTGAGGACCCAGATGTCAACACCACCAATCTGGAATTTGAAATATGTGGGGCCCTCGTGGAGGTAAAGTGCC
TGAATTTCAGGAAACTACAAGAGATATATTTCATCGAGACAAAGAAATTCTTACTGATTGGAAAGAGCAATATAT
GTGTGAAGGTTGGAGAAAAGAGTCTAACCTGCAAAAAAATAGACCTAACCACTATAGTTAAACCTGAGGCTCCTT
TTGACCTGAGTGTCATCTATCGGGAAGGAGCCAATGACTTTGTGGTGACATTTAATACATCACACTTGCAAAAGA
AGTATGTAAAAGTTTTA**ATG**CACGATGTAGCTTACCGCCAGGAAAAGGATGAAAACAAATGGACGCATGTGAATT
TATCCAGCACAAAGCTGACACTCCTGCAGAGAAAGCTCCAACCGGCAGCAATGTATGAGATTAAAGTTCGATCCA
TCCCTGATCACTATTTTAAAGGCTTCTGGAGTGAATGGAGTCCAAGTTATTACTTCAGAACTCCAGAGATCAATA
ATAGCTCAGGGGAGATGGATCCTATCTTACTAACCATCAGCATTTTGAGTTTTTTCTCTGTCGCTCTGTTGGTCA
TCTTGGCCTGTGTGTTATGGAAAAAAAGGATTAAGCCTATCGTATGGCCCAGTCTCCCCGATCATAAGAAGACTC
TGGAACATCTTTGTAAGAAACCAAGAAAAAATTTAAATGTGAGTTTCAATCCTGAAAGTTTCCTGGACTGCCAGA
TTCATAGGGTGGATGACATTCAAGCTAGAGATGAAGTGGAAGGTTTTCTGCAAGATACGTTTCCTCAGCAACTAG
AAGAATCTGAGAAGCAGAGGCTTGGAGGGGATGTGCAGAGCCCCAACTGCCCATCTGAGGATGTAGTCATCACTC
CAGAAAGCTTTGGAAGAGATTCATCCCTCACATGCCTGGCTGGGAATGTCAGTGCATGTGACGCCCCTATTCTCT
CCTCTTCCAGGTCCCTAGACTGCAGGGAGAGTGGCAAGAATGGGCCTCATGTGTACCAGGACCTCCTGCTTAGCC
TTGGGACTACAAACAGCACGCTGCCCCCTCCATTTTCTCTCCAATCTGGAATCCTGACATTGAACCCAGTTGCTC
AGGGTCAGCCCATTCTTACTTCCCTGGGATCAAATCAAGAAGAAGCATATGTCACCATGTCCAGCTTCTACCAAA
ACCAG**TGA**AGTGTAAGAAACCCAGACTGAACTTACCGTGAGCGACAAAGATGATTTAAAAGGGAAGTCTAGAGTT
CCTAGTCTCCCTCACAGCACAGAGAAGACAAAATTAGCAAAACCCCACTACACAGTCTGCAAGATTCTGAAACAT
TGCTTTGACCACTCTTCCTGAGTTCAGTGGCACTCAACATGAGTCAAGAGCATCCTGCTTCTACCATGTGGATTT
GGTCACAAGGTTTAAGGTGACCCAATGATTCAGCTATTTAAAAAAAAAAGAGGAAAGAATGAAAGAGTAAAGGAA
ATGATTGAGGAGTGAGGAAGGCAGGAAGAGAGCATGAGAGGAAAGACAGACAGGAAAATAAAAAATGATAGTTGC
CATTATTAGGATTTAATATATATCCAGTGCTTTGCAAGTGCTCTGCGCACCTTGTCTCACTCCATCCTGACAATA
ATCCTGGGAGGTGTGTGCAATTACTACGACTACTCTCTTTTTTATAGATCATTAAATTCAGAACTAAGGAGTTAA
GTAACTTGTCCAAGTTGTTCACACAGTGAAGGGAGGGGCCAAGATATGATGGCTGGGAGTCTAATTGCAGTTCCC
TGAGCCATGTGCCTTTCTCTTCACTGAGGACTGCCCCATTCTTGAGTGCCAAACGTCACTAGTAACAGGGTGTGC
CTAGATAATTTATGATCCAAACTGAGTCAGTTTGGAAAGTGAAAGGGAAACTTACATATAATCCCTCCGGGACAA
TGAGCAAAAACTAGGACTGTCCCCAGACAAATGTGAACATACATATCATCACTTAAATTAAAATGGCTATGAGAA
AGAAAGAGGGGGAGAAACAGTCTTGCGGGTGTGAAGTCCCATGACCAGCCATGTCAAAAGAAGGTAAAGAAGTCA
AGAAAAAGCCATGAAGCCCATTTGATTTCATTTTTCTGAAAATAGGCTCAAGAGGGAATAAATTAGAAACTCACA
ATTTCTCTTGTTTGTTACCAAGACAGTGATTCTCTTGCTGCTACCACCCAACTGCATCCGTCCATGATCTCAGAG
GAAACTGTCGCTGACCCTGGACATGGGTACGTTTGACGAGTGAGAGGAGGCATGACCCCTCCCATGTGTATAGAC
ACTACCCCAACCTAAATTCATCCCTAAATTGTCCCAAGTTCTCCAGCAATAGAGGCTGCCACAAACTTCAGGGAG
AAAGAGTTACAAGTACATGCAATGAGTGAACTGACTGTGGCTACATTCTTGAAGATATACGGAAGAGACGTATTA
TTAATGCTTGACATATATCATCTTGCCTTTCTTGGTCTAGACTGACTTCTAATGACTAACTCAAAGTCAAGGCAA
CTGAGTAATGTCAGCTCAGCAAAGTGCAGCAAACCCATCTCCCACAGGCCTCCAAACCCTGGCTGTTCACAGAAC
CACAAAGGGCAGATGCTGCACAGAAAACTAGAGAAGGGGTCATAGGTTCATGGTTTTGTTTGAGATTTGTTGCTA
CTGTTTTTCTGTTTTGAATTTTCTTCTTTGTTCTGTTTTTACTTTATTTAGGGGGACTAGGTGTTTCTGATATTT
TAGTTTTCTTGTTTGTTTTGTTTTGTGTTGTCTGTGAATGGGGTTTTAACTGTGGATGAATGGACCTTATCTGTT
GGCTTAAAGGACTGGTAAAATCAGACCATCTTATTCTTCAGGTGAATGTTTTACTTTCCAAAGTGCTCTCCTCTG
CACCAGCAGTAATAAATACAATGCCATAATCCCTTAGGTTTGCCTAGTGCTTTTGCAATTTTCAAAGCACTTCCA
TAAGCATTCCTTCCACCTCCTTGATAGGCATTTATGGAAAGCCTGCTACATGTCAATCATACTGTTAGGCACAGG
GGACCTAAAGACACATAAAAGGATGGCATTCTGCCTCATAAATTGCAAAACCTAATGAAAGTGACTGCTTGGTAA
ACAAATTATTATTATATTATAAAATGCTATAAAAGAGCCATATTGAAAGTGCCCTGTTGGAGACAGGGCAAATGC

FIGURE 4751B

CACAAAAATGATGTAAATTTACATGGAGGAAAAGTAGAATCTGCCTGGTTTGTAGGCAGCAGAAGACATTTTTCA
TCAGTGGGCAGGTGTTCTTTACCTTTTGTAGAAATGGGAGTCAAGTCTCAAATAGGAGGCTCCACAAAATCTCAT
GCCAGGTCTCTGATACCTTATTCACAGAAGTTCTTTGAAGTATTTATTGTTATTTTCTTTGACTTATGGGAAAAC
TGGGACACAGGAAGACAGGTAAATTACCCAACCTCACACGTTAAGTCAGAACTGGGAGCCATAATTTTGTATCCC
TGGTATAAATAGACAATCTCTTGAAGAAATGAAGAGATGACCATAGAAAAACATCGAGATATCTCCAGCTCTAAA
ATCCTTTGTTTCAATGTTGTTTGGCATATGTTATCTTTGGAATTTAGTGTCTGAGCCTCTGTCTGTTACTGTAGT
ATTTAAAATGCATGTATTATAATCATATAATCATAACTGCTGTTAATTCTTGATTATATACCTAGGGACAATGTG
TAATGTAAGATTACTAATTGGTTCTGCCCAATCTCCTTTCAGATTTTATTAGGAAAAAAAAATAAACCTCCTGAT
CGGAGACAATGTATTAATCAGAAGTGTAAACTGCCAGTTCTATATAGCATGAAATGAAAAGACAGCTAATTTGGT
CCAACAAACATGACTGGGTCTAGGGCACCCAGGCTGATTCAGCTGATTTCCTACCAGCCTTTGCCTCTTCCTTCA
ATGTGGTTTCCATGGGAATTTGCTTCAGAAAAGCCAAGTATGGGCTGTTCAGAGGTGCACACCTGCATTTTCTTA
GCTCTTCTAGAGGGGCTAAGAGACTTGGTACGGGCCAGGAAGAATATGTGGCAGAGCTCCTGGAAATGATGCAGA
TTAGGTGGCATTTTTGTCAGCTCTGTGGTTTATTGTTGGGACTATTCTTTAAAATATCCATTGTTCACTACAGTG
AAGATCTCTGATTTAACCGTGTACTATCCACATGCATTACAAACATTTCGCAGAGCTGCTTAGTATATAAGCGTA
CAATGTATGTAATAACCATCTCATATTTAATTAAATGGTATAGAAGAAC

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FIGURE 4752

MHDVAYRQEKDENKWTHVNLSSTKLTLLQRKLQPAAMYEIKVRSIPDHYFKGFWSEWSPSYYFRTPEINNSSGEM
DPILLTISILSFFSVALLVILACVLWKKRIKPIVWPSLPDHKKTLEHLCKKPRKNLNVSFNPESFLDCQIHRVDD
IQARDEVEGFLQDTFPQQLEESEKQRLGGDVQSPNCPSEDVVITPESFGRDSSLTCLAGNVSACDAPILSSSRSL
DCRESGKNGPHVYQDLLLSLGTTNSTLPPPFSLQSGILTLNPVAQGQPILTSLGSNQEEAYVTMSSFYQNQ

FIGURE 4753

TTCTCTTCTAGTGATGTGGCACGGTGTCCGTGAGCTTGTGACTGCAGCGATACGCTGCXTTGTGGCGTGTCGGCC
AGGTGGCGACTACAGCAGGGACTGGCTGCCAACCCCTCCGGCTACGGGCCCCTTACCGAGCTCCCAGACTGGTCA
TATGCGGGGGTATGATCCTGCTTAATTGGATAATTGGTGACTGAGGAAGATGGTGAAGATTTTTTCTACTTGTTA
TTTACTATGGCCGCCCTGCTCCCCCAATGAAAGGCCAGCTTCGAAGAAAAGCTGAAAGGGAGACGTTTGCAGTGA
GTGAGACGAGTTGTACTGCTGTCACAGGAAATGGACGCTGGATTACAAGCATGGCAGCTCAGGCAGCAGAAGTTG
CAGGAAGAACAAAGGAAGCAGGAAAATGCTCTTAAACCCAAAGGGGCTTCACTGAAGAGCCCACTTCCAAGTCAA
TAAAAAGCAACTCCTGCCTCCCTTCCTC

FIGURE 4754A

GGTCTCTTAAAAAAAAGGGAGTAGGGGAGGAGGTGGAGGATCCCTAAAGAATTCTTAATGAGGTGATATAATCAT
TGTAGTCCATGACAAAATGGACCAGCCAGGTTTGCATAGCAGTAGACATATTCCTACTGTACATTTATCCTTCCC
AAATATGTCACATTCTAAAATAGTTGACAAATTATTTTGTGGAAAGAGGAAGAAGCTGGATTGGAGTGGGAGATC
TAATCTGGAGGAGCAAAGAGGTAGTTGTTTATTGCTATGTTCCTGGCCCATCAAATGGCCACTTTCCAAACTGAC
CCACATTTTAGGAAATAAACCAATCTGGACCTGTTTCAAAAGGATAGAGATGCTTTTAGATTGTCAATTCTCACT
TTTAAGTTAAACAATCACAAATATCTTTAGAAATAGGGAAAGACATTTGCTTCAAAATCAAAGAATGAGTGTGGA
TCTTTTTAATTTTTTTTTGTTTCAAGTCCTACAGTCATCTTACATTTAGACCTTCATGGTAGGGTGATATGAGTG
CTAAAAAAATTTCTTTCTAGTAGCCAGGAAACAGATAGATAAGATAAAAGCAAATGTTCCAGATTTAAGACTTCT
TAGGATGAGTACAAGGAAGAGAGAAATAGTATGGAAAGGACATTTTTTAGCAATTTATAATTTTAAAATGGAATT
TGCCAAACAAGGGAGAGGAAAAAAAGTCAAAGGGGAATTTTTATCTCAAGATATTTAGATATGGTTTATAAAAAA
ATAATATTTTCTACCACTAAAAACACTGGTATTATCTCAGCATCATGGGCAATTTTTCTTTATTACATGCCAATA
TTTGTACAAAAAGGGCCCCCAAATGTGTGAAATATAATCCTAAAAAAGAAAATAATTGGAACACATGGATCTGTT
ACAATTCTACACAGGGGGAAACAAGCTAAGCAAAGAAAAAAAATCTGAAATGAAAATCTCTGTATCAAAATGGTT
TCCTGTATCTTTTAATTGAGAGGTAAACTTTAGCTCCTAATAACAGTTTTATAGACCGTTCTCTTCCCAAATTCC
TAATGCTTTGAATCTATTTGTGCCATGATTAAGTGTGCTGGATAATTTCCTGCTCATATTCTAGCCTCAGTTCAT
TCCCAGTCATCTTAGAGATCATAGTAGCTCTTGGCCTTAGAAAGACTTGGGTTTGCTGTGTTTAAAAGTCATAAG
GGTTTTATTTTGTATCATCAAAATATTCTATAAGGTCCCAAATACTCTTTTTCAACCCATGAACAGTAAGAATTT
GTGAATTCTGATAATGAAAAAAGTTTTCCTCCAGGTATGTTTGTTTCACATTCAGTCCTAAAGCCTTGAGCTATG
TGTACTTCCCTCACACAGGAACACCAGCTGTCCTGTCTGTGCTCTGCCTGCGCCCAAAACTCAATATTTTCTCTC
AGCACAGAAGTCAAAAATGAGATATGCCCCTTATAAAACCCCTTCGATTCCTGAGAAAACATAATAAAGCCATAT
GTTGCTTCCTTGTTGGGGCTCCTCCACAATGCTCCCAACACCTGTGACCCCTAGGAAGACAGGGAGCAAGGTGGA
TCTGGCCAGGAGTCACAGGATATACACCCATTCTGGAGCTTTCCTCTGTTGTTCTAGAAGATGTTATTTGATTAG
TTGGGGCTGGGAGCAGGGGATATATGATTTTGTGGAAAAGGTATCAGATAATCAAATCAGGTCTGCCTCTGCTAT
AGCCAGTGTGCTGCTGCATTAAAAGGGAACAAAAGGAAGGTGCAACGTAAGAGCAGACACAACCTGAGATGCCCT
TGAGATTTAGGAGAACAGGAGGGCGCCCTTTCTGTTGTGACCTGACTCTTAAAAGAAATCTTCTAAAAGAATTCT
TTAATTTGGTAATGAGTTGAAGTCCAGGGTAATGGAAGCTCTAGGGCAGAGAACAAAAGAATTGCAAAATGTATT
CAGCACCAAACAATGCTAAACCAAGAAACATCCAATCACAAAACTAGGAAGTTTGGCAAGAAGTGGTTAGAGAAA
TCTCTGGGCTTTTCCATGGGCAGGGTCGACAGACTCTCTTTTCAGTGATTTCTGGCTCTGAGAAACCTCTTTACT
CACTAGAAAAGAACTTTATTTAAATGGCCAATTTTGTTCCTCAGAAAAAGAAATTAAAAAAAAAGAAAAATAGGA
TACTGAAGACAGAACCATGTGACTTGGTGACAAACAAAAGGAGGGGTGCACTAGAATTTCAATAGGCTCCCTAAT
TCCATAGAAAAAGCAAAGCAACCCAATGCCTCCTGAGCCTGCAGTGCATGAAGAGAGTGCTTGAGCTGACCCAGC
CACCAGGCCTTCTGGGGCTAGACATAACTTCCCACTGGAACAGCAGCAGCCTCTTTCCCCTCTTTGTGTTTTCAT
GAAGAAAACGGCTGTTCTCTTAGGTAGCCAGGAAATAGATTACATGGGGCAAACTTTCAAAAGCAATCTCTACCC
TGGTGCTCAGGCTACATACAGAGGCAGAAAAGGGGCACGGAAGAGCCCTTGCTCTTGAGAGAGAGTATTTTCATA
TTCCCAAGGGCTTTCCGTGTAGAGTTGCTATTTCTGATATCACTTAAACCTTTACAAGAAAAAAGGCTGTGGTGA
CTCAGTGTTCCTATAAATTCAGAATGTGGAAACTACTAATCCAAAGCATCATTTCTAGCACTGAGTATCAAGACG
ATCAGCCTGACCAAAATATTGCAAAGAGTTTTCTAAGTCTCTGAAGATTTTTTTCTCCTTGAACACTGAGTCTAT
AGCAGTCAGCAATGTACCTTAGCCGATCCCTGGGAATGGTTATGGAACAGTAGGGCTTGTTTCCATCCTTTTTAG
AGTGAAGAGATAGAAAATTAGGGCTACCTAGTGTGGGTTCTTTTTCAGAACTATGTATTTTCTCCTCACTGCATG
ATGGGTAAAAATGCCCTGGGTTGAAACAAGAAACATTATCTTTCCACACCACTGACTAAAACACCTGCCAGTGGT
TTCTTTAGGCTCCACCTTTTGCTCCGTAAACTGTAGACTTTCAGACTGAAATCTAATCTTAAGTGACCTCAATTA
AGGTATTTTCACAAAAGGCTACTTATAGTGTAGCATTATTGCCTTAAATCAGAAAGCCCTGGGAAGAGGATAAAA
GATATAGAAATGAGAAGGCTCTGAAGTTATAGGCATTTCTTGCTGTTTAATAGTTACATTATCACAAAAACAAGC
CCTATTCATGATTGAGGACTATGGAAATAGTGACTTCTTGAGGAGGCACCAAACTTTCCTAGAACTGGGTACTCT
CAGATAGTGGCTGCTATTTCCTATTCTATTTCAGTGACGTAGGTTGGGGCTGAATGTAAAATAGACATCATATTA
CTAAATAGAATCCTATAAAATGCAATCACAGGTGCCCGGGAGTACTAGTTTTAAACATTTCCTTAACAAGGAGAA
CAATCCAGCAAAAAGCTTTCTTTCTCTATACAGTGTATATCTCTAAACTTTTTTTCCTCAGTTTTAGAGAACATC
TGTTTTATCTGGTGGTTCTTTGTTTGAATGCAAACTCATAACTTTCAAGTCTCCGGTGCAAGAGCATAATCTACA

FIGURE 4754B

GATCATGGGCAAAATCTAGCCACAGTCCTGAGAGTCCAGGCTTCTGGGATGCCCAGCTGGGTATAAAAGTCCCTA
CTAACCCTGTTTCAAATTCAGAGGTTTCTTTGGTTTAGAATGCCTCAATGAGATTTTGATACATCCAAGAGAG

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FIGURE 4755

SLKKKGVGEEVEDP

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FIGURE 4756

CGGCTCGAGAATAAAACTGCTCAACAGTTAATCAGCAGTGAATCATCTTGCAGCTATGCAATTTAAAAAAAATAC
AGATTACCAGTTTCAAGTGCTGCCAGCTAAAATAACTGTTTTAACGGGTATCTTTTGTTTGTTCTTTTCACTTAA
TTATTTTATTGTGCTTTGCATCTCCAGGCAGTTCTCTCACATTTGGGTAAAATGTTTAGCAGGCTGTAAACTTAA
GAAAAGGGTAAAATAAAATTTTCTGGAGAGGAACTTGGAATTTGAGGGAGATTTTATATACCTTTAAAAACTGTA
ATTTAATTGGGATGCCAGGTTTATAGCAATTTGCAACTTTAATTTTCCAGATAATCTGGAGGTTAGCATTTGATA
AATGACTTTTTAAAGTAGATATGAAGATTTTGTTAATTTATAATTTATTCATGTGTTATTACTGTAATTGAAAAT
GTTATAGACACTTTTAAATTCAGTTTGTGTAGAAAGAAATGTGTTAAACAAAATTATGTTAATAAATATTCCCAC
ATAATACATCTGAATGGTTAAAAATACTGGAAGAGTTGTCAGGGCTACAATAGTGAATGTCCTTTTTTTTAATAT
CAAAAATATCGATAAGTAGGTTTTGTGTTTTCAACGTAGGGAAAATGTTATCAGTGAATAGGTGGTGTACTTTAC
TTGGTATAATTTAAAGTTGCACAGTAAGTACTGTTTCCTTATTTTAATCTTTCTTTACTCATAATGTATTTAAGA
ATTTGCTGTTTTATTTAACGCTGCTACTCTTAATCTTCTCTAAATTTTTCCCCCTACTTTCTTGCTTCTGTTTCA
CATTTTTTAAAAGGGCAAGTACAGGAGCAACTGCTGCTACCCAGAAAAATGTGTGTATTATAAATAATTAAAGAG
TTTTTAATTGCTTTCTGTATGATTCCAGCTCAGATAACATTTTCCCTGAAGTTATGCTGTGAAATGCCTTTTGTT
ATGCTGCAATTGCTAAAGGAATCCAAAACCTCCATTGTGACAGCTGAAGGCACAGTTTAATAGGTGCTTTTTTAC
TAGTTATGAAAAATATTCGTCCCTTAAGGAAACGATTCTTTTTCTGTTTTTTTCTGTTACCATGAAGTCTTAATT
TGATTTCATTTTATTTCACATTTTTGATTTTGTAAGCTTTCATACCCTCCTGCTCAACCCCCTCAAGTAAAACCT
CTTAGAATGTGAATAATTGGTTCATTTTCTATTGCTGGTATACTCTTGTGATGAGAATTATTTTGTTGTCTTCCA
TTCTTAAAGGAAGAGATTTATTACAGCTGTGGGGATTAACTGTATTCTCCTGGAAGTTGATTTTCTGATAGGTTA
ATGCAAAAGTCATTGCAAAAACTGCTATTACTTTTGCGCCAATTTAATAGTTCACTTGTTTACTTTTTAACCTAT
ATTGGCTTAAATTCACTTTTTAGCCCCTCTTTGTCATAAGGTTCTGTGCTGCATTTGCTACAATAGAAGCTCCTA
TGGTTTTAAAGAAAGTTCAGTGTTTTGTCAGTGTCAAGTGCTACTTGATGATTATATTTGTCTGGAACAGTATTC
ACTTAAGTCTGTTTATAGCAATCCCTTTTTTGACAAAATTTACAAAGTTGGCATTTTTACTTTAAATTCCATCTC
TATCAGTGACTTCCTAAAAAGAGCAACTTAGAAATTGGGGGAAAAATGTTTTTAAAGCCCAAATGCTCCAGTTTT
TATTCAAAGTCAAAGTCGTTATTCTGGAAAATACAAGTAATGTTCTATATAATGTCACTTAAAATATTCGTAAAT
CTATTTTGCAAACACTGAATAGTATAAGTAAGATATAAAATCACAATAGATATTTAAATACTAAGCTGAAACTTC
TGACAACTAATTATTATGGGGGACACAATAAAGATTGAAAGCCTAGGTTACCAAGTTGGTTTTAGCTTTCTAGAA
TCTTTGTAAATACTCACGTTCAAATAAGATCACACGTGCATATATAGAAAGCAATATGTTCTGAAATTTCACTTT
AGTGCCACTGTTTGTCCATAATGGATTTATTGCCAATTTTGAATCCTCATCTTACTTTGATCTGGCTTTTTTTCC
CCCCCTTGCCAGAATGTTTAGGAGAAAGTAAAATTATTCCGTTTTACTTTGGCTTTTTGCCAGAGATACAAACTA
AGAATAGTCTGAATATGTGTTTTTCAGATCTGGTTACAAGACGGATTATAGATTGTGTTTTAGAGCAATGTTGTG
ATTGAAATATAAATAATGGTATAACTTTTTTGTGTTAGCAAAAACAACATTAAAAAGGTTATGTTACATAATATG
TAGGTTTTGGTTTCTTAGTGCAAGACTTATATTTCTCTTAA**ATG**TTGTATAATTATTTCAGTTTTCACTCACTAG
CTACTTTACTAAAATGTAGCCCCAAAATGACGGGCCAGCCTCAGCGTATCTGCATATGT

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FIGURE 4757

MLYNYFSFHSLATLLKCSPKMTGQPQRICI

FIGURE 4758A

TAGCCCAACTGCCAATACTACTGGTACTGCTACTACTTCCTCAACCACTGTGGGTGCAGTTAAGCAAGAACCTCT
CCACTCTACTTCATATGCAGTAAATATTCTGGAAAATATAAGCTCTTCAGAATCCTCAAAGCCCATTGAACTTGA
TGGTCTTCCTTCAGACCAGTTTGCAAAAGGACAGGACACTGTTGCCATAGAAGGTTTTACAGATGAGGAGGACAC
AGAAAGCGGAGGAGAAGGCCAATACAGAGAGCGTGATGAATTTGTGGTAAAGATAGAAGACATAGAGACTTTTAA
GGAGGCTTTAAAAACAGGAAAAGAACCTCCAGCTATTTGGAAAGTACAAAAAGCTTTATTACAGAAATTTGTTCC
TGAAATTCGAGATGGTCAAAGAGAATTTGCTGCTACAAATAGTTATCTTGGATATTTTGGAGATGCAAAGAGTAA
ATACAAAAGAATATATGTGAAGTTCATTGAAAATGCAAACAAGAAGGAATATGTCAGAGTGTGTTCTAAAAAGCC
AAGAAATAAACCTTCACAAACTATCAGAACTGTTCAAGCTAAGCCAAGTAGTAGCAGTAAAACTTCTGATCCTCT
AGCATCAAAAACTACAACTACAAAAGCCCCTTCCGTGAAACCCAAAGTTAAACAGCCAAAAGTAAAGGCTGAGCC
ACCACCAAAGAAACGGAAAAAATGGAAAGAAGAATTTTCATCATCCCAATCTGACTCATCTCCTGAGATCCATAC
TAGTAGTAGTGACGATGAGGAATTTGAACCTCCCGCTCCCTTTGTCACTCGCTTTTTGAACACAAGAGCAATGAA
GGAAACCTTTAAGAGCTACATGGAATTGCTTGTTAGCATTGCCTTGGACCCTGACACAATGCAAGCCTTAGAGAA
GAGCAATGATGAGCTACTTTTACCTCATATGAAAAAAATAGATGGCATGCTAAATGATAACCGAAAGAGACTTCT
TTTGAATCTTCATTTGGATCAATCATTCAAGAATGCTTTGGAAAGTTTTCCTGAACTAACAATAATTACTCGAGA
TTCTAAAGCAAAGAGTGGAGGAACTGCTATTTCTAAAATCAAAATGAATGGCAAAGCCTATAATAAGAAAACTCT
AAGGACTTCTAAAACAACCACCAAATCTGCACAAGAGTTTGCTGTCGATCCAGAGAAAATACAGTTGTATTCTTT
GTATCATTCACTCCATCATTATAAGTACCATGTTTATCTGATATGTAAGGATGAGATTTCTTCGGTGCAGAAAAA
AAATGAAGATTTAGGACAGGAGGAAATTGTTCAACTTTGTATGAAAAATGTAAAATGGGTGGAGGACCTCTTTGA
AAAATTTGGAGAACTTCTAAATCATGTACAGCAGAAATGTTCCTGACTTTTCCACAAAAATCCCATCTTTTTATA
GCACTAATGAAATGGCAGATATGGGGTGGTCAAAGATAATCAGATGTCAAGTAGTGGCCTTCTGCAGGCCGGCCG
CTTCCATCATGGAACTGTCATTACCACCTCTGCTGAAGGACAGTGGTGCGGCCTTTAGGAACGAAGTTAGTCCTC
TGGAAATGGACCTAAATCCCACCACATTTTTACCCTAATGAATGATTTTTCTATTTTGTAAACCATTGGGTAACT
TGAGTCATATTTTCAGAAACATTTTTTGACAAATGATGAAGCATGCACTAAGTATAATTTTTTTTTATTGCTAGA
GAAGTAACACTTAAAGTAACGATTTTTTTTTTCTGACTCCGGCTAAACACCAGAATGACAGAGAAGTGGCAGAAA
CCATATGTTTGTACTCACATCTGGCCACAAAACCAGAAATACTGTACATTATGTAAAGAGGTCTGGTGTGGTGTG
ACATCCTGTATAAGAATATCATCAATTTAAAATATAAAATTTGGAAACTATTCTGCTTTACAGACTCCTTTTACT
CTTAACATGTTCAGGAAACTGGATGTGGAATTGGTGCAATTCTCTGACTGCTTTTTGTGTCAAATTATATTGTGA
TAAAAAAACAATGACATACTATTTTCCCTATCGCAAAGAAAAGTATTTTCGTTTATACTGTTTTTTCCTTTGGAA
AATTTTCAATTGTACATTTTATTTCACTGATAGTTGTATTTTTCACAAGGAAAATGTTGTGGTTATAATTACGTT
TGATATATCTCTACAACACCTTTTGTTATTTTCAGTAAATCTTAGTTATATGTTGAATTTCTAATGTGAATTCTA
TCTTGAGGTAACCATTTTTTTCATACAGATTTGCTTCAGTGTTATCCAGAATATGCATTCAGTACTAGAATTAGT
TTAGCTTTATAAATAGGGCTGTGTTAGACACTGCAGTAATTTTCTAATTCATAAAATAAACTTCTTACTAAACTA
GCACTTGATTAACTTGTTGAGGTAAAAATCTAACTACATTTACATTTTGAAGAATAAAACTGATAATTAGACTAT
TTGCAGTGTTAAACACAGCTTCCTTAACTCTTAGAACTGGAAGTTGTAGAGCTCTCCTTTTGGTGCCTTTCCAGC
CTTTATACACACTATTGTAGCTTTCTTAGGTTTGATAGGTAGCGTTTCAAGTAGTTTAGCTGAGACAGTGAATGT
ATTAGGTTCAACATGACCTTGTGTTTTATTTGTGTTTGCCAACAGGATGCCTTATTTGTTTGAGAAAAAGATGTA
CTAGTGTCATTCTAAACTATCTCCTTTTTTAGGATTCTAAAGAAGTTAATCATCATCCTTTTGTTTATTTTACCA
CCATTTAGTGCCTTAAATCCTATCAAGAAAGCAGTGTTACTGCTCAATGCCCAAATAAGACACGCGGATATTGCT
ATTGTCTTGCTTTTGAGTTAACAGGCCAACTTTTTATACTTAAAACCTCAGTAAACTGGCAAAGAATTGAAGGTA
ATGTGATTTGATTTGAGAATAAAACATTGTAGCATTGGGTGAAAAATGAGTATTTGAGTTAAGCTTACATATTTA
TTTCTGATGGTTATCTTATTAAAAGCAATAATCCTTAATACTGTACTTGCCATTAGACTAGGTACTCAGTAATGG
AAGTTTCTCTCAAGGGTTAAATGTTCCATTTTTGAAAGTTTTAAAAAACCTGTTTGGGTGGTTTATTTTGAAAAC
AAAAGTAACCTATTAGATTCATTTTGCCTAACTCATATGAGAGATGCAGAGTATCAACAGTGGGAGCATCATAAA
ATGAATTTTCCAAGTGGAGAGGAGTAGGAAGCAGCCATATGATAGTATTGACTCTGGACAGAATTGATGTCTTTC
GTTTCCAAAGTGCAGAGTAGGGAACTACATTTCCTAATGTGGCATTGTAAATATACATCTTTATATTACTCTTCC
AGCCTACGTTCCTAAATCATTGATAATTTAAATATTTTTTAAAGCCACCTTAATTTAGGTAGCTCTTGGAATCGA
TGTTTGAATTCACTAGCCACATTTTCTTCATGATATGCCTCGTGGCAAACAAAGATGTTTCCTTAAGATGAATCT
TACATTTCCCATAGAAAATAACCCATTTCCTTTGGCACTGCAGTTGCCCTCAAACTGCTTGCAGTTGTATTCATT

FIGURE 4758B

TTAGTACAACAAAGGTTTTCATAATATGGGAGGCCAAGTCTATGATACTGCCTCAAAGAGACCCTATTGTGTAGA
TGCATCATCTTCTCTCATTTGATCCATAGAGCATAGGCAAAGATGTCAACCTCAGGCCTTAGAGAAAAGTGGAAA
TGTTATTATGACAGCCGTCCATGAGTTATCGCTTTGTATGAAGTTAAATANNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNAAAGTTGTAATGCGGCGCATGACTATAAATACCTAGCTGGTTAGCATT
TACATTCCTTGCCAGGGAGTTTGAAATTTATACTATAGAAATAACTTTAGGTTTTAGGTAGAGTTAAAGAGGTAA
AGCACATGTTGCCACAACCCAGGAAAGTATTTTTAAGAAAGATTGGATTTTCCTACCTTTAGAGATCTAAAAAAA
ATTTAATATAAAAAATCATTTTGTGTTGGTGTTTATTACTAGTTCAGATGAGTGGCTGCTGAAGGGGCCCCCTTG
TCATTTTCATTATAACCCAATTTCCACTTATTTGAACTCTTAAGTCATAAATGTATAATGACTTATGAATTAGCA
CAGTTAAGTTGACACTAGAAACTGCCCATTTCTGTATTACACTATCAAATAGGAAACATTGGAAAGATGGGGAAA
AAAATCTTATTTTAAAATGGCTTAGAAAGTTTTCAGATTACTTTGAAAATTCTAAACTTCTTTCTGTTTCCAAAA
CTTGAAAATATGTAGATGGACTCATGCATTAAGACTGTTTTCAAAGCTTTCCTCACATTTTTAAAGTGTGATTTT
CCTTTTAATATACATATTTATTTTCTTTAAAGCAGCTATATCCCAACCCATGACTTTGGAGATATACCTATAAAA
CCAATATAACAGCAGGGTTATTGAAGCAGCTTTCTCAAATGTTGCTTCAGATGTGCAAGTTGCAAATTTTATTGT
ATTTGTAGAATACAATTTTTGTTTTAAACTGTATTTCAATCTATTTCTCCAAGATGCTTTTCATATAGAGTGAAA
TATCCCAGGATAACTGCTTCTGTGTCAGTCGCATTTGACGCATAACTGCACAAATGAACAGTGTATACTCTTGGT
TGTGCATTAACTTACATGTATAATTTTTGGCATCTGTGTTCACAAATGCATGTGTTAGCAAATCACCTTTATTTA
TAAGTGACAATAATTGAAGTTAAGGATATAAAGAAACCTGCATTTGTAGTCCAGCGTTTTCATTTGGTCCATAAC
ACAATGTATGGAAATGTGAAAGACAATTTTGTACATTTGTTTGTTACTAACTCAGATCATTAAAATGAAAACAAT
TTTTTTAAACAAG

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FIGURE 4759

SPTANTTGTATTSSTTVGAVKQEPLHSTSYAVNILENISSSESSKPIELDGLPSDQFAKGQDTVAIEGFTDEEDT
ESGGEGQYRERDEFVVKIEDIETFKEALKTGKEPPAIWKVQKALLQKFVPEIRDGQREFAATNSYLGYFGDAKSK
YKRIYVKFIENANKKEYVRVCSKKPRNKPSQTIRTVQAKPSSSSKTSDPLASKTTTTKAPSVKPKVKQPKVKAEP
PPKKRKKWKEEFSSSQSDSSPEIHTSSSDDEEFEPPAPFVTRFLNTRAMKETFKSYMELLVSIALDPDTMQALEK
SNDELLLPHMKKIDGMLNDNRKRLLLNLHLDQSFKNALESFPELTIITRDSKAKSGGTAISKIKMNGKAYNKKTL
RTSKTTTKSAQEFAVDPEKIQLYSLYHSLHHYKYHVYLICKDEISSVQKKNEDLGQEEIVQLCMKNVKWVEDLFE
KFGELLNHVQQKCS

FIGURE 4760A

GTGAGGTGCCGGCGGATGGCGGGCGCGGAGTCTTCGGCGAGACCTACCGGGCCCTGTCTGTGCCGGCCGTGAGCT
GCGGCAGGACGGCTGGAGATTACTTCTCTAACAGGATCACCAGTTTGCTCCACAAAGCACAATGTCTCGATCACG
ACAACCCCCCCTTGTGACCGGCATCTCTCCAAATGAAGGGATACCATGGACGAAGGTCACAATCAGGGGAGAAAA
TCTGGGGACTGGCCCCACCGACCTCATAGGCTTGACCATTTGTGGACATAATTGCCTCCTGACGGCAGAATGGAT
GTCTGCAAGTAAAATAGTATGTCGAGTGGGACAAGCCAAAAATGACAAAGGAGACATTATTGTCACCACTAAGTC
AGGTGGCAGAGGAACCTCAACAGTCTCTTTCAAGCTACTCAAACCTGAGAAAATAGGCATTTTGGATCAGTCTGC
TGTGTGGGTTGATGAAATGAATTATTATGATATGCGCACTGACAGGAACAAAGGAATTCCGCCCTTGTCCTTACG
TCCTGCTAACCCGCTTGGCATTGAGATTGAAAAAAGTAAATTTTCGCAGAAGGACTTAGAAATGCTATTCCATGG
AATGAGTGCTGATTTTACAAGTGAGAATTTCTCAGCAGCCTGGTATCTTATAGAGAATCACTCAAACACCAGTTT
TGAGCAGCTCAAAGTGGCAGTCACCAACCTAAAGAGACAGGCTAACAAGAAGAGTGAGGGCAGCCTGGCCTATGT
GAAAGGCGGTCTCAGTACATTCTTCGAAGCACAGGATGCCCTCTCAGCCATCCATCAAAAACTAGAAGCAGATGG
AACGGAAAAAGTAGAAGGATCCATGACGCAGAAACTGGAGAATGTTCTGAACAGAGCAAGTAATACTGCAGACAC
ATTGTTTCAAGAAGTATTAGGTCGGAAAGACAAGGCAGATTCCACTAGAAATGCACTCAATGTGCTTCAGCGATT
TAAGTTTCTTTTCAACCTTCCTCTAAATATTGAAAGGAATATTCAAAAGGGTGATTATGATGTGGTTATTAATGA
TTATGAAAAGGCCAAGTCACTTTTTGGGAAAACGGAGGTGCAAGTTTTCAAGAAATATTATGCTGAAGTAGAAAC
AAGGATTGAAGCTTTAAGAGAATTACTTCTGGATAAATTGCTTGAGACACCATCAACTTTACATGACCAAAAACG
TTACATAAGGTACCTGTCTGACCTTCATGCGTCTGGTGACCCTGCTTGGCAATGCATTGGAGCCCAACACAAGTG
GATCCTTCAGCTCATGCACAGTTGCAAAGAGGGCTACGTGAAAGATCTGAAAGGTAACCCAGGCCTGCACAGTCC
CATGTTGGATCTTGATAATGATACACGTCCCTCAGTGTTGGGCCATCTCAGTCAGACAGCGTCCCTGAAGAGGGG
CAGCAGCTTTCAGTCTGGTCGAGACGACACGTGGAGATACAAAACTCCCCACAGGGTGGCCTTTGTTGAAAAATT
GACAAAACTCGTCTTGAGCCAGCTGCCTAACTTCTGGAAACTCTGGATCTCCTACGTTAATGGAAGCCTCTTCAG
TGAGACTGCTGAGAAGTCAGGCCAGATTGAAAGATCAAAGAATGTAAGGCAAAGACAAAATGATTTTAAGAAAAT
GATTCAGGAAGTAATGCACTCCCTGGTGAAGCTTACCCGCGGAGCCCTGCTTCCCCTCAGCATCCGGGATGGGGA
AGCCAAGCAGTACGGAGGCTGGGAGGTGAAGTGCGAGCTCTCCGGACAGTGGCTCGCTCACGCCATCCAGACTGT
AAGACTTACTCATGAATCGTTGACTGCCCTTGAAATTCCTAATGACCTGTTACAGACTATCCAGGATCTCATCTT
GGATCTCCGAGTACGTTGCGTAATGGCCACGTTGCAGCACACGGCGGAAGAAATAAAGAGATTAGCTGAAAAAGA
AGACTGGATTGTTGACAATGAAGGACTGACTTCTCTACCATGTCAGTTTGAACAGTGCATCGTGTGTTCTCTGCA
GTCACTGAAGGGGGTTCTGGAGTGCAAGCCGGGAGAGGCCAGTGTCTTCCAACAACCTAAAACACAGGAGGAGGT
TTGCCAGCTAAGCATCAATATAATGCAGGTTTTTATATACTGTCTGGAACAGTTGAGCACCAAGCCTGATGCAGA
TATAGATACTACACATCTCTCTGTTGATGTTTCTTCCCCTGACTTGTTTGGAAGTATCCATGAAGACTTCAGCTT
GACCTCAGAACAGCGCCTTTTGATAGTCCTAAGTAATTGCTGCTATCTAGAACGTCACACCTTCCTAAATATCGC
AGAACATTTTGAAAAGCACAACTTCCAGGGAATAGAAAAAATCACACAGGTTAGCATGGCCTCATTGAAAGAACT
AGATCAAAGACTCTTTGAAAATTACATCGAGTTGAAAGCAGATCCCATCGTTGGCTCCTTAGAACCTGGAATTTA
TGCAGGATATTTTGATTGGAAGGACTGCCTGCCTCCAACAGGTGTCAGAAACTATTTAAAAGAAGCACTGGTGAA
TATAATTGCCGTGCATGCAGAGGTGTTCACCATTTCCAAAGAACTGGTCCCTCGGGTACTATCCAAGGTGATAGA
AGCAGTTTCTGAAGAGCTCAGTCGACTGATGCAGTGTGTTTCATCCTTCAGCAAAAATGGAGCTTTACAGGCGAG
ACTTGAAATCTGTGCTTTGAGGGACACTGTGGCTGTTTACCTGACACCCGAAAGCAAGTCAAGTTTTAAGCAGGC
TTTGGAAGCCCTGCCCCAGCTTTCCAGTGGAGCAGATAAAAAGTTACTGGAAGAGCTCCTGAACAAGTTCAAGAG
TAGCATGCACTTGCAGCTCACCTGTTTCCAAGCAGCTTCTTCAACCATGATGAAAACATAAATATCTGCCACATA
AAAGAAGTCCAGGAAAATAACACGTAATAAGACTGTTCACTCTCTAAGTACCCTAAAGGTATTTGGTGTATTAAA
CATTGGGTTTGCCATTTTTCTCTTTTTTCTTCCTCTGACTTCGAAAATTGTTGGTATACATTTCAACCAAAATGA
CCTCATTTGAAATGCCCAGGAAGTATTTGTTTTGCCATTCTTACTAGATCAGATCCTGTATGACTTTAAAATACA
TTTTAAAATATATTTTGCATCTCAGCAGAAGGTTGAGTGCTGCAGGAAGAGCTGCTTCTGCAGGGAGTTTTCTGG
AATGGCGTGGCACATATTGAAGCATTTCTCAGTGTCCCGTTCACGGAAGCGCAGGCAGCTCCCACGACACACGGA
GAGACTGACTGATACGAGATTTGGAAAGCTATGTAGACATCTTTGGAGCTCTTACTGTCCTAAACTGTACAGCTG
TGCTTAAAACCCTCATTTCATATAAATGGCCTTAAGTTTTCTAATTCAAGCGGGTTTTTGGAAAAATTTATGGTC
TCCATTAAAATACATATTACAACTGGGGTAGATTATTTGTGGTCCAGGTGTCTGTGATTTAACTTTGCGTTTTGC
TATCTGATTTTTATTTTTCACAGGGCTAAGCATGAGCTTTCATTCTCACTCACTCTTAATTTGTCGTGCGTCACT

FIGURE 4760B

ACACATGCACGTGTTGCAGTCCCTGAGGCCCTGTGTGTTATCTGTGATGGAGTGTGAATGTGTAACGGGCACTGT
GTTACACTCTCAGGTGTTGGCGGGGCGGTCGCAGACTTCAGGGTCCCCTAACGGAAAGGCCAGGCTCCGCGTGGA
CGGCCAACTCCCTGCCCGCTCCTTCAGCAGGTGACTGTCTCTGCCACTTCTTACCTGCTGAAGGATCTTGCTCAG
TAGCTGGAACAATGCTGCTGTCACACAGTCTCTTCTCTGAAACTTCAGGATGCTCCTTGGTCACCAGGCAATGGG
AGCTGTAGACCAGCCGCATGCACTTGCCCCACATTCACTGCTGACTGGCTTCACTGGAATAGGTTCAGGTCACCG
GGACTTCTCTCAGAGTCAGCAGCCCACCCAACTCCCTCATACCGTCGCATCTGAAAATTTTCAGAGAGGAATTCT
CTTTGTAGTCGGCTTGTCAGGGTTTTCAAGTTTTTCTATGGTTATTTTTAAATCTCTTTTTTTAAATGCTAAAAT
TAATGTCCTCATTAATGCAAGTAATTTTAGAGCACAGTGTAGCCATGTACAGTTTCCATTATTTAAAATAAATAA
ATGTGTTGGTTCATTTGGTGTATGGGGGGACATCATGGTAACTGGAAATGAAAGTTTAATCTTTCACAAATGTGC
TTGATAAAGCTGTTAAGAATTGTCTTTCCTAAGTATGTTAACTGTTGTATCTAACTCAACTGTGAGCTAAGTTTA
AAAACTGCAATCATGAATGTTTGTGATATTTTAAATATCTACTACAGCACATTCAGCCAATAAAGAATCTGCCTT
TAATGTAAGTTGTAATTTACTTGACATTTTTCCCTAAGTGTCTTTATTTCAACATTTTCATATTTCTACTGTTAA
CACTCAAAATACTTACATTCTGGTTAACCCTGTATTGGTAAACACATTGTCAGAAACCATCTGTCAGGTCCTGCT
AATTCTGTTTGCTGGGGACTTACCATGTGCGAGGCACACCATGAAGTGCCTCGTTGAATCCTCACAACAGCCTTA
TGATACATGTGGGCTAGCTTTAACGCACGTCCATTTAGCAGAGGAAGGAA

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FIGURE 4761

MSRSRQPPLVTGISPNEGIPWTKVTIRGENLGTGPTDLIGLTICGHNCLLTAEWMSASKIVCRVGQAKNDKGDII
VTTKSGGRGTSTVSFKLLKPEKIGILDQSAVWVDEMNYYDMRTDRNKGIPPLSLRPANPLGIEIEKSKFSQKDLE
MLFHGMSADFTSENFSAAWYLIENHSNTSFEQLKVAVTNLKRQANKKSEGSLAYVKGGLSTFFEAQDALSAIHQK
LEADGTEKVEGSMTQKLENVLNRASNTADTLFQEVLGRKDKADSTRNALNVLQRFKFLFNLPLNIERNIQKGDYD
VVINDYEKAKSLFGKTEVQVFKKYYAEVETRIEALRELLLDKLLETPSTLHDQKRYIRYLSDLHASGDPAWQCIG
AQHKWILQLMHSCKEGYVKDLKGNPGLHSPMLDLDNDTRPSVLGHLSQTASLKRGSSFQSGRDDTWRYKTPHRVA
FVEKLTKLVLSQLPNFWKLWISYVNGSLFSETAEKSGQIERSKNVRQRQNDFKKMIQEVMHSLVKLTRGALLPLS
IRDGEAKQYGGWEVKCELSGQWLAHAIQTVRLTHESLTALEIPNDLLQTIQDLILDLRVRCVMATLQHTAEEIKR
LAEKEDWIVDNEGLTSLPCQFEQCIVCSLQSLKGVLECKPGEASVFQQPKTQEEVCQLSINIMQVFIYCLEQLST
KPDADIDTTHLSVDVSSPDLFGSIHEDFSLTSEQRLLIVLSNCCYLERHTFLNIAEHFEKHNFQGIEKITQVSMA
SLKELDQRLFENYIELKADPIVGSLEPGIYAGYFDWKDCLPPTGVRNYLKEALVNIIAVHAEVFTISKELVPRVL
SKVIEAVSEELSRLMQCVSSFSKNGALQARLEICALRDTVAVYLTPESKSSFKQALEALPQLSSGADKKLLEELL
NKFKSSMHLQLTCFQAASSTMMKT

FIGURE 4762

TGCAAACATGAGAACTAATGAACCAAGGCGGCTGCCACCAGGAAGGAACAGAACGCAGGCATTCAACCATGACGT
CTGCACAGTGTTAGTAACATGTCATTGTGGTTTCGTTCTCACTGTGGTAAAATTTATTTCTGAGCACTTAAACTG
TGTTGCATACCCCTAATTTTTTTTTTTTCTGTATCTTCCTTGCCCTCAAATACCCTGAGGTGATAAACTGTTCCA
GTTGTAGCCAACTACCACTGCGCCCGGCCTTAAATAAAATATTGTAGTCATTAATGGTGTGTTTGAATTGAAGAG
ATACCAGGAGATAGAGGTGAAGTGCAGTACTTTTATTCTTTAAGAATATAGTCTTTANNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNGTTTCCCATTCATATTAACTCCATCTTTTAAAAATGTCATGA
TTACAAAGTGAAAAGATTTGGCTTTCTTAGAGGCTCAATCACAGAGGTGAAAGTGACCTTGGAAATCATATACTC
TATCCCCATGTTACACAGATTAGAAAAACTGAGGTTATGGCACTGACTTAGGCACCCCCAGCAAGGCAACCCAGG
GACTACAACTGGCAATCCCAACTCCTGGGCTAGGGCTTTTTCTACCTTTTTTTGCATTGGCCTCTTAAAGAGGCA
ATGAATACTAATTCCTGGCATCAGAAAAAAAAAAAAGGCATGAGGTGGGAGGATTCTTTTTTCCCTGATGGGAAAC
AGTGAATAAGAAAAATCTCATCATTCGATGGAAGAGGTGACTTAATAATTTTATTAATGAATTTGATGTCCCATG
TTTTGTAGTTTTGTTATCATTGAACCATGGGGGCTGGAATCTGCCTAAATAATTTTATCTTGGTAGCCAGCAATT
ATGTTGGTATTTTATGTGGGCCTTCCCAGATTTTCATATTAATGAAATGACTAATAGTCGTACTTAAGAGGTAAC
TCTACTAAAGCAGAATGAGATCTAATATGTTGTGGAAATAAAAGAGTTTGCAGTGGAATGATACTCTCACTCCGT
GCTTGTAAAATTGAGTTCTATTCAAGACGGAACTGCTATGACTGGCCTATTCAAGGCTTCATATTTTTATACAGA
CTATTTCACAGACCATAGATTTATTTTAAAAGGGAAAATCTCACACATAATTAAGCAGTGGAAAATGTGCTCAAT
GCTATGGTGCGTCAGGCCCTCTGTCTACCAGGTTTCTCCCCTTTCTGCAGAGCTGTGGACCCTGTACGTACCAAA
CAGGTGAACTTGGTCCATCTTTCCTTCTTCCTTTTTTTGCACATTTGCATTTATATCTTCCTGTACTAAAAGAAA
CAAATTATTTATAATTGGGGTGACAATATAAAGGAACAAAAGATGGGGCAATAGTTGCTTCCTAGCTGGAGCTGT
AAGTCCATGTTACAGAAACTCACTATTTAAAAAGTTTTAAAAGATTTATGAACCTTGTCCTACAATTCGCTGAAT
ACTTATTTGTCTTTTAAACTCCCCTCGGTGTATGGATCATCTTCGTCAGAATGCCGTTGTTTCATTGTGAATCAG
GGGAAAATGTTAATCATTTGGAGACTGTTTTCTTATTACCAAATGTACAATCCATAAGACAACTGAAAGCAACAA
CTGCTGGGTTCACTGACAAAGATTATAAAAATCATCACGTTCAAAGTAGAGTTTTTAGCCAAGGTCAAGAACTAA
CCTGGGGCTGAGTCAGCGTCTCTACCCACTTAAATAACAGCGTAAAGATCTTTCACTAAATTCGTTATGTGGTCT
GTCTGGATGTAAACCTATATATTTCCTTTTGAAACAGAATCATATCCTGCAGACTCTTGGCACTCCTGCATAGCT
TTGACCGAATGTTCACTCTCATCGTAATGGAAGATTTCTATCTATGCAGATAATACATGTTTTTAAATACTGTTT
TCTGTTTAGTCCTCAATCTTCCTAACTCAAATTGGGGACTGAGGAGAGAGAAAGGTGGTTACCCCTGTTACCGTG
CCATATTCTTCTTGCTGCTTTTCAACCCCACGTGATTGTTGATTGACGGTTCTGCTATAATGTGCGTGCCCTTCA
AGTTTCAGAAAACTTTCCCAATCATTTCACTTCAATCTTAATTGAACCCAAGAGTCAAAGTTATTATTTTCTCCG
AACGTGTTTGTGATCTTCTGTTATATTTTGGGGCATGTTACCTTTATGGTATATAAGCTGTAGTGCATACTCTTT
GTATTGCAAAAAACTGGTCAGTAATTTATGTACATGTATTCCACATTTTAGTGTGCTTGAAGTGACAATCCATAG
TTTGTAGTAGTTTGTTATTTGTCAACTTTACCCTGTGTTTTAAGGACATCTAAACATTCCTTGTCCTATCAAGAT
GACAAAAGCAGAATGTAATTTTTTTTTGGAAGCTTCGTGATTACCTGTAACAAGTTCTGTTTTTAAAACGAATAC
AAATAAAGTTAGTAACTATTTTTAAATCAGAAAAAA

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FIGURE 4763

ANMRTNEPRRLPPGRNRTQAFNHDVCTVLVTCHCGFVLTVVKFISEHLNCVAYP

FIGURE 4764

CGGGCGAGAAGGGCAGACGGGACATGCAGCCTCTTCCGCCTGAGCCCCGGAAGTGATGTGGCTGCGGCATCGCGG
CCTCGCTATGTCTGCCATTTTCAATTTTCAGAGTCTATTGACTGTAATCTTGCTGCTTATATGTACCTGTGCTTA
TATTCGATCCTTGGCACCCAGCCTCCTGGACAGAAATAAAACTGGATTGTTGGGTATATTTTGGAAGTGTGCCAG
AATTGGTGAACGGAAGAGTCCTTATGTTGCAGTATGCTGTATAGTAATGGCCTTCAGCATCCTCTTCATACAGTA
GCTGGGGAAAATGCCAGAATGTAGTTGCCATCAGATTTGATTGTGAACAAGGACTGACTGCAGAAAATAATGGAA
AGGATGTTTAACTCTTTTATCTCCGAACATTGAATGAGATAAATTTCCAGATGCTGTTCTCTATTTTAATGTTAT
TGGACCAATGTTCTGTATAAACAATTAAGATGTAACCATTTAATAGTCTGTAACAATCAACCTCAGTACTGTCAC
TACAATATTACATTCTGCAAATGTTATTCTGTTGTATCAGATACAAAATTTTAGTGAGGTATCTCTAAGGCACAT
AGTAGAAAACAAAATTGGTTAATTACTCAAGTTCCTTTCACTGTGATTTGGAAATGATTTAATCTTTATAGAATG
AGAACCTTTTTTGGACTAGCTTTTTTATTAAAATGGCTCAATTTGTGTTGATAAGGATTGCATTAATATTTAATA
GTGCTTGCTTTTCCTCTGGGCACACCATTTTGATCATTAACCAGAGTACCTCTACTCTTAGCAAACTCTAGTTTA
TGACAAGTATTTAAAATATTTAAAACAAGCTTATGCAGTTCTTAAGGACGAAGGTAAATGAGATGTAACTTAAAA
ATAGTATTGGGAAAATGTTGATAGTTAACATTAGTGGATTTAGACTAGCCAAATGACATAGTAGGCTCTGAAACA
TCTTGTCAAGTATATGTATTTTGTGCATGAATTTTTGCTGGAAAGCTGTCTTTCTCTGAAAAACACAACGTTCTT
AGAATGAAAAGAACAATTATAAAATAAAAAAAAAATTTAAAAAAAACTGGGCGGGGG

FIGURE 4765

MSAIFNFQSLLTVILLLICTCAYIRSLAPSLLDRNKTGLLGIFWKCARIGERKSPYVAVCCIVMAFSILFIQ

FIGURE 4766

AATATCAAGAATGGTTAAAGAAAAAAAATGCTGAAGAATGTGAGAGGAAGAAGAAAGAAAAGGAAAAAGAAAAAC
AACAGCAAGCTGAAATACAGGAGAAAAAGGAAATAGCAGAAAAAAAGTTTCAAGAATGGTTGGAAAATGCGAAAC
ATAAACCTCGTCCAGCTGCAAAGAGCTATGGTTATGCCAATGGAAAACTTACAGGTTTTTACAGTGGAAATTCCT
ATCCAGAACCAGCCTTTTATAATCCAATTCCGTGGAAACCAATTCATATGCCACCTCCCAAAGAAGCTAAGGATC
TATCAGGAAGGAAGAGTAAAAGACCTGTGATAAGTCAGCCACACAAGTCATCATCTCTGGTAATTCATAAAGCCA
GGAGCAATCTTTGCCTTGGAACTCTGTGCAGAATACAAAGATAGCGTATGTGGAAAATAACATGCTTTTATCTGG
AGCTATTTAATTTAAAAATCAGAAATTGTTTTTTACTGCTCAGTCAATAACTCAACACTTAATGTGATTATTGAC
AAATAGCAATTTTTGCATTTGTATATGGAGTCCTTAGAGTTGAGGAAGATATTTTCTGGATTTTGGTTTTTATAA
ACTTTTCAAGGTTGATCTTGGCATGTTGTTTTGCAGAATAAGTGGCTGAATATGTAAGAATTGTGTTTGTATTTA
GCTTGTATTAAAAGTACACTGTAATACCAATAAAACTAACAATTTTTCTT

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FIGURE 4767

GGCACGAGGCAGACACTACTGCTGACGCTACTATCCGTAAAGATGGAGAACAATCTTGCTGAGTTTGAAAGAAGG
GCAGAAAAGAATTTATTAATAATGTGTAAGGAGAAGGAGAAGCTACAGAAAAAGGCCCACGAGCTGAAGCGCAGG
CTTCTCCTCTCTCAGAGGAAGCGGGAGCTGGCAGATGTCCTGGATGCCCAGATCGAGATGCTCAGCCCCTTCGAG
GCAGTGGCCACACGCTTCAAGGAGCAATACAGGACATTCGCCACGGCCCTGGACACTACCAGGCACGAGCTGCCC
GTGAGGTCCATCCACCTGGAGGGAGATGGGCAGCAGCTCTTAGACGCCCTGCAGCATGAACTGGTGACCACTCAG
CGCCTCCTGGGAGAACTTGATGTTGGTGATTCGGAAGAAAATGTGCAGGTGCTGGACTTACTGAGCGAACTCAAG
GACGTGACAGCGAAAAAGGACCTTGAGCTCCGAAGGAGCTTTGCCCAGGTGCTGGAACTCTCCGCAGAGGCAAGC
AAAGAGGCAGCCTTGGCAAACCAGGAAGTCTGGGAAGAGACCCAGGGCATGGCGCCCCCCAGCCGGTGGTATTTC
AATCAAGACAGTGCCTGCAGAGAATCTGGGGGAGCACCCAAGAACACGCCCCTGTCTGAGGACGACAACCCGGGT
GCCTCGTCAGCCCCCGCTCAGGCCACGTTCATCAGCCCAAGCGAAGATTTTTCTTCAAGCAGCCAGGCAGAAGTC
CCGCCCTCTCTCTCTCGTTCAGGGAGGGACTTGTCATGACTCATGGTTACATTCAGGATACTTGAGCACTTTATA
TACTACCGTAGCACTGTAGCTATTTTTTATGTGATAATCTTGTTTGATAAAAAAGTAAACCTGTTTTGCAAAAAA
AAAAAAAAAAAA

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FIGURE 4768

MENNLAEFERRAEKNLLIMCKEKEKLQKKAHELKRRLLLSQRKRELADVLDAQIEMLSPFEAVATRFKEQYRTFA
TALDTTRHELPVRSIHLEGDGQQLLDALQHELVTTQRLLGELDVGDSEENVQVLDLLSELKDVTAKKDLELRRSF
AQVLELSAEASKEAALANQEVWEETQGMAPPSRWYFNQDSACRESGGAPKNTPLSEDDNPGASSAPAQATFISPS
EDFSSSSQAEVPPSLSRSGRDLS

FIGURE 4769

GGAATTCGGCACGAGCCCGATTCCGCGCCCGCCATGGCCGACAAAATGGACATGTCTCTGGACGACATCATTAAA
CTGAACCGGAGCCAGCGAGGCGGCCGGGGCGGGGGCCGCGGCCGGGCCGGCTCCAGGGCCGGCCGCCGCGGTGGG
GCGCAGGCCGCCGCGCGAGTGAATCGAGGCGGCGGGCCCATCCGGAACCGGCCGGCCATCGCCCGCGGCGCGGCC
GGCGGAGGCGGCAGGAACCGACCGGCGCCCTACAGCAGGCCAAAACAACTTCCCGACAAGTGGCAGCACGATCTT
TTCGACAGTGGCTTCGGCGGTGGTGCCGGCGTGGAGACAGGTGGGAAACTGCTGGTGTCCAATCTGGATTTTGGA
GTCTCAGACGCCGATATTCAGGAACTCTTTGCTGAATTTGGAACGCTGAAGAAGGCGGCTGTGCACTATGATCGC
TCTGGTCGCAGCTTAGGAACAGCAAACGTGCACTTTGAGCGGAAGGCAGATGCCCTGAAGGCCATGAAGCAGTAC
AACGGCTTCCCTCTGGATGGCCGCCCCATGAACATTCAGCTTGTCACGTCACAGATTGACGCACAGCGGAGGCCT
GCACAGAGCGTAAACAGAGGTGGCATGACTAGAAACCGTGGCGCTGGAGGTTTTGGTGGTGGTGGAGGCACCCGG
AGAGGCACCCGCGGAGGCGCCCGTGGAAGAGGCAGAGGTGCCGGCAGGAATTCAAAGCAGCAGCTTTCGGCAGAG
GAGCTGGATGCCCAGCTGGACGCCTATAATGCGAGAATGGACACCAGTTAAACAGACCAGCAAATCCGCGTGCGG
AACAGGACCCAGGCGTCTCCTCTTGCTCCCTGGTTGGGGGGCGGTGGCTGGGGCTGTGCGCCCAATGATGGATTT
GTTTCTTTTATGTTTTAAAATAGGATTTAAAAACTCATGTAAAGGTTTTTTTTTTTTCTTTTTTTTTTTTTTAAT
TCTGAAACAGACCTGTTTTGTACCGAGTTATTTTTGGGATAAATTTTACTGGTTGCTGTTGTGGAGAAGGTGGCG
TTTCCACCTTTTCCATAATAAAATAGAAATGTGTGTAA

FIGURE 4770

MADKMDMSLDDIIKLNRSQRGGRGGGRGRAGSRAGRRGGAQAAARVNRGGGPIRNRPAIARGAAGGGGRNRPAPY
SRPKQLPDKWQHDLFDSGFGGGAGVETGGKLLVSNLDFGVSDADIQELFAEFGTLKKAAVHYDRSGRSLGTANVH
FERKADALKAMKQYNGFPLDGRPMNIQLVTSQIDAQRRPAQSVNRGGMTRNRGAGGFGGGGGTRRGTRGGARGRG
RGAGRNSKQQLSAEELDAQLDAYNARMDTS

FIGURE 4771

GGAATTCGGCACGAGCCCGATTCCGCGCCCGCCATGGCCGACAAAATGGACATGTCTCTGGACGACATCATTAAA
CTGAACCGGAGCCAGCGAGGCGGCCGGGGCGGGGGCCGCGGCCGGGCCGGCTCCAGGGCCGGCCGCCGCGGTGGG
GCGCAGGCCGCCGCGCGAGTGAATCGAGGCGGCGGGCCCATCCGGAACCGGCCGGCCATCGCCCGCGGCGCGGCC
GGCGGAGGCGGCAGGAACCGACCGGCGCCCTACAGCAGGCCAAAACAACTTCCCGACAAGTGGCAGCACGATCTT
TTCGACAGTGGCTTCGGCGGTGGTGCCGGCGTGGAGACAGGTGGGAAACTGCTGGTGTCCAATCTGGATTTTGGA
GTCTCAGACGCCGATATTCAGGAACTCTTTGCTGAATTTGGAACGCTGAAGAAGGCGGCTGTGCACTATGATCGC
TCTGGTCGCAGCTTAGGAACAGCAAACGTGCACTTTGAGCGGAAGGCAGATGCCCTGAAGGCCATGAAGCAGTAC
AACGGCTTCCCTCTGGATGGCCGCCCCATGAACATTCAGCTTGTCACGTCACAGATTGACGCACAGCGGAGGCCT
GCACAGAGCGTAAACAGAGGTGGCATGACTAGAAACCGTGGCGCTGGAGGTTTTGGTGGTGGTGGAGGCACCCGG
AGAGGCACCCGCGGAGGCGCCCGTGGAAGAGGCAGAGGTGCCGGCAGGAATTCAAAGCAGCAGCTTTCGGCAGAG
GAGCTGGATGCCCAGCTGGACGCCTATAATGCGAGAATGGACACCAGTTAAACAGACCAGCAAATCCGCGTGCGG
AACAGGACCCAGGCGTCTCCTCTTGCTCCCTGGTTGGGGGGCGGTGGCTGGGGCTGTGCGCCCAATGATGGATTT
GTTTCTTTTATGTTTTAAAATAGGATTTAAAAACTCATGTAAAGGTTTTTTTTTTTTCTTTTTTTTTTTTTTAAT
TCTGAAACAGACCTGTTTTGTACCGAGTTATTTTTGGGATAAATTTTACTGGTTGCTGTTGTGGAGAAGGTGGCG
TTTCCACCTTTTCCATAATAAAATAGAAATGTGTGTAA

FIGURE 4772

MADKMDMSLDDIIKLNRSQRGGRGGGRGRAGSRAGRRGGAQAAARVNRGGGPIRNRPAIARGAAGGGGRNRPAPY
SRPKQLPDKWQHDLFDSGFGGGAGVETGGKLLVSNLDFGVSDADIQELFAEFGTLKKAAVHYDRSGRSLGTANVH
FERKADALKAMKQYNGFPLDGRPMNIQLVTSQIDAQRRPAQSVNRGGMTRNRGAGGFGGGGGTRRGTRGGARGRG
RGAGRNSKQQLSAEELDAQLDAYNARMDTS

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FIGURE 4773

AGTGATTTATAATTCCTACAACAGAGGCCAAGAAATAGATTAAAATATTTTCAAGACCCCAAAATAATGTATTAT
GGTTGGGAAGTCAGTAGAACACTGGAATAGGTGAAGACCTGACAGTAATTTTTGTCTTAAGAATGCTTTCTTTAG
GACAGACCCTTTAACCTCACCTCTGTGCATCTGTTTTTAAAATGATTATATTTGCCTCTGATATTTGAAAGCACT
TTTGTAGTTTTGATGATGAAAAATATATTAAACGTGCATATTACCATTATTTAGGAAATAATTCCTTATATACTG
TGATAAATCATTGCTGTTACATACAGTAACATGCCTTAATTACATTTAATGCCTTACTGCTTTATGTAAGTAAAT
CCAAGTTTCAGAATTAAAAATAAGCATTATTTCATATGGTCCAATCAGATTCGTTACATAGGCTATATAAATTTG
TCTCCATTTTCACCATCAAGCACAAATAATTGGGTCAAAACTGCCTTTGAGGTCTGTTGAAGAAAATGGTTCATT
AAGCAAAAAAGAGTAGAGGTATTTTATATTAGCAGTAACAGACAAATTATTTAGTAATCCCTTAACCTCTGTTTT
TCAAAGAGAAAATATCCAATTTAGACTTTTTTCCTGATCTCTATATATAGCATCAAGTTGGGAAACAAAGGCCAA
AGGTGTATAGATTGCTTGAAAGGGGGTGGTAGTGCCTCTTTTTAAGATCTGTTGAGTCGGCTACAGTCTGGCTAA
GTAAGAAGCATTTGCATACTGATTCCATCATTTAATCTTTAAAAGTATGTGTTTTAAAAATGTAACCAGAATGAT
TCTTCAATAGAAATGAGATTTGGTGGAGTCTGGATTGCCTGTTTTGTATATAATATATACTTAAGATATATAATA
CCACCTCATTTTCTGGGCATTATTTCCTAATTGTTGATGTTTCAGGCTTTTGATAAGTCATTTTATATATTTCAA
ATTTAACTCAGAATAAGTAAATATTTATGGCAAATGCAGTTTTATGTACTTTCAGGAGAAGACCATCAGGAAAAG
ACAGGACAAAGAAGTCAAACATTAAAGCCCTTGCAAATATTAGAGGACCTTAGACAATTACCAAAAAGTGTTTAA
TAGGGAAGTTGCAAATGATTCTCTTAGTAAATTAAACATTTAAAAAGTAGTTTTAATGTGCCTTGGGCATCTTGA
AAAGAAGAGTGTGATATAATTTATGCTTAGTGTTAACTGGTCATTTTACATTGTATTTATTAAGTCTGCTGAAAA
ATGAGGTTTTAAGGAAGAAAATGCAGATTATTTTAGGGTAAACAGGCCAGGTGTCCTTTGAAGAACTTTGTTTAC
ATCAAATTGATGAAATTACAGTCAGTGATTCCTTACTTTTTTTGCTAGTTGTACTTTGAAATTGTTATGGGTTCG
TTTTCCAAAATATGTAACTTATTTTTTAAAGGAATAAGGTGTGCTGTGTATTTGTTGATTAAAAATCATTTGTCT
TGCAGAGTATCCTTTTTTGAAGGAAATATACATCCTTATAACACATCAGGTAGTTTTCTTTTTTCTGTATTTAAA
TTATATATTTGAATTAATTGAATATAATTTGAGTTACATATAATTCTATATAAAGGTTACATATTGAATTATGGT
TCTAATCTGTTTAGGAAAGAAATGAATTTTCTAAGCATTTAATACATTTGGAATAATTTTAGTTTCTAAAAAGTA
CTAATGTAAGTTAAGTTTATATCAAATGCAAATTACCTTGTATAACTAACAAGCACAGTTATTGTTTAACATTAT
GGATTTTAATTGTGTTGACACCCTTCTTTGAATTTGTTGCTTTACATGTGTGTCTGTGTGTGTGTCTGCATGTGT
GCACGCATGTACTTGTATGCAATGTAAAAGTAACAGCAGAATCATTGCATTTGGTTTACTTAAAATTTTGGAGTT
AGCAAGTAAACAAAAAGCTGATAGTTTTATGAAGTCTCGGTTAAAATAAAATTTCTTTGCTATCTCACTCCTAGG
AAGTTATGGAGTTCATATTTTCAAAAGATATGTTAAAAATGGTTACACACTCTGCTGGCCACATTAAAAATTAGA
AGACTCATGTTAAATTATCTCCTCCAAAGGACTTTTTATTTACAGCTTTTCTTTTCCTGGACTCTACCTGCTTGG
TTCAGTGTCCTGAAGAGTTATTTAAATGAACCACTACTTAGTAATTAGTTCTTTTTTAAAGTATCTACTTCTAAA
ATTACCTAGTTGAAAATATGAAGGATATGCTTAGTTTTAGAAATATCATGAAGCAAGGATCTAGTCAGTGTTACA
GGGTAAAGGTGGAGTTTTTTAAAGTCTGTATTTAAATGGTGCACTGATGGATTCATTTTTAATTTGCATTACAAA
AATGTTGCTCAGGTAATCAGTATTTTCTTCCACGTATGTGCATATTGCACTGTTAGATCATAGAAATATCTGAAT
GCTTTAATTTTTATGTATGCAAAATCTATAAATCTTTTGTATAATGTATTTTATACAAATGTAACTGTAGAACAT
TGTTAGCATGTGTATCTGTAAAACCAGTTTTTAAAATTTTTTGCCCCTTATTTTTCATATTTTGAAAGATCTCCA
ACATGTAATAAAGTTTCTCTTATTCAATCTAAAATGGAAGCCAGTGAATTTAATTGAATAAAGCAAAGCTTTTCT
CCACTTTCAAACTATCTAATATAGAGATATTATGTAAGATAGAGCAGATTGCCAAAGGTTTACCAATTCAGATTT
CTTATT

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FIGURE 4774

VIYNSYNRGQEID

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FIGURE 4775

CCCGCTCAACTTCATCCTGGGTTGAGGCGGAGGAGAACTTCCAGAATTATGGCGAAGTCCGGGCTGAGGCAGGAC
CCGCAGAGCACAGCTGCAGCCACTGTGCTAAAGCGGGCAGTAGAACTAGATTCGGAGTCGCGGTATCCGCAGGCT
CTGGTGTGTTACCAAGAGGGGATTGATCTGCTCCTGCAGGTTCTGAAAGGTACCAAAGATAATACTAAGAGATGT
AATCTCAGAGAAAAAATTTCCAAATACATGGACAGAGCGGAAAACATAAAGAAGTACTTGGACCAAGAAAAAGAA
GATGGAAAATATCACAAGCAAATTAAAATAGAAGAGAATGCAACAGGTTTCAGTTATGAGTCACTTTTTCGCGAA
TACCTTAATGAGACAGTTACAGAAGTTTGGATAGAAGATCCTTATATTAGACATACTCATCAGCTGTATAACTTT
CTTCGATTTTGTGAGATGCTTATTAAGAGACCATGTAAAGTAAAAACTATTCACCTTCTCACCTCTCTGGATGAA
GGCATTGAGCAAGTGCAGCAAAGTAGAGGCCTGCAAGAAATAGAAGAGTCACTCAGGAGTCACGGAGTGCTGTTG
GAAGTTCAATACTCTTCTTCAATACATGACCGAGAAATTAGGTTCAACAATGGATGGATGATTAAGATTGGAAGG
GGACTTGATTATTTTAAGAAACCACAGAGTCGTTTTTCCCTTGGATATTGTGATTTTGATTTAAGACCATGTCAT
GAAACAACAGTAGACATTTTTCATAAGAAGCATACAAAAAATATATGATGGGTGGTAGCCTAATTTGTATTATGT
CTACTTTAAGTGAATATTGGATTTTTTTTAAAAGATCACTTTTATAATGTATGAATTTAACAATAAACTTTTATA
TTTCTACTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4776

MAKSGLRQDPQSTAAATVLKRAVELDSESRYPQALVCYQEGIDLLLQVLKGTKDNTKRCNLREKISKYMDRAENI
KKYLDQEKEDGKYHKQIKIEENATGFSYESLFREYLNETVTEVWIEDPYIRHTHQLYNFLRFCEMLIKRPCKVKT
IHLLTSLDEGIEQVQQSRGLQEIEESLRSHGVLLEVQYSSSIHDREIRFNNGWMIKIGRGLDYFKKPQSRFSLGY
CDFDLRPCHETTVDIFHKKHTKNI

FIGURE 4777A

AAGTGGGAAGACCGATGGGAATGGTTAAGACTGATTCTGGAGGTCCATCAGTTCTCAAGAGACGCCAGTGTGGCC
GAGGCCTGGCTGCTTGGACAGGAGCCGTACCTATCCAGCCGAGAGATAGGCCAGAGCGTGGACGAGGTGGAGAAG
CTCATCAAGCGCCACGAGGCATTTGAAAAGTCTGCAGCAACCTGGGATGAGAGGTTCTCTGCCCTGGAAAGGCTG
ACTACATTGGAGTTACTGGAAGTGCGCAGACAGCAAGAGGAAGAGGAGAGGAAGAGGCGGCCACCTTCTCCCGAG
CCGAGCACGAAGGTTTCAGAGGAAGCCGAGTCCCAGCAGCAGTGGGATACTTCAAAAGGAGAACAAGTTTCCCAA
AACGGTTTGCCAGCTGAACAGGGATCTCCACGGGTTAGTTACCGCTCTCAAACCTACCAAAACTACAAAAACTTT
AATAGCAGACGGACAGCCAGTGACCAGCCATGGTCTGGACTGTGAAGTTCACTACCATTTGTCAAGAATCACCCT
TTCCAAATCCTCTGGGTTTTGACTTTTTGGCTTCCACTTCACCCAAAATGTTAAAATTTTTACTTAATTCATAGC
CTTCCTTGGTTTCATATTTGTTTGCATTTAATTCATGTTTGAGTCTCTTAACTGATGGATGCCCACTTGCCTTAA
AGCAGCATACTTATTTTTTGTTTATTTATTGTGAGCTTTTTACTTTATTAAGATTTTACAGCGAAACCCTTACAT
GAGTAATTGAAATGAAATTAAATGAGATTACAGCATAATGAAGAAGAAAACTAGAATCTAACAGGTATGACACAT
TCAGTTATTCTAACAGGGCACAGTACTGTGCTATATGTAGCCGCCTTTACAGATGTTATTAACCTATAGTAGTTT
ACTATTAACTAGGAAGACTGGTGTATGAGGAGGGAGACATTCTGTAATAAGATTAAAACCTAAAGTCAGCTGTGT
AACATTCCATGAAAGATGCATTCATTTATTGAAGATGACAAAAAAGGGAGTCAGATATATTCTGGAAGCTATTTT
AATTTTAGGCACACAATCTCATACATTTTGAGACCCTTGGGTCATTTATTACTTTTTACAAACTAGTTCCTCTCT
TTTTTTCTGCCAAGTCCTGAATTGAAAACTGTAGGCTTCCTTGCACAGATGTTGCAGCCAGCCTCAGGAGTAAAG
TGCCCGCTGACTGCTGCCGCCACCTCTGTCTCGCTCCCTGTCAGTGCTGCTGGCACGTGGGACGCGGCAGGTGAC
AGCCGTTCTCAGCATGTTTTAGAAGCTTGCCTCACAGACTTCCATGCCTCTCCATTCAGCCGATGACTTCAGGGT
GTCAAACTGTTTTAATTTTTCAAACAAATGGAACAGAAGCCATTGTGGTTCATCCTGATTACTTGAACGTTGCAC
TTGGTGGACCGTGCCTGGGAGCGCTCGCATGCCCCCTGGCTTCAGAAGTCATGTCAGTGTCTCTGTAGACAAACT
CCACTGTACATCTTGGATTAATCTTCTGATTCATTGTTCATTTTCTCAAGACTTTTTGTGGAATTCTCTGATAAA
GGAAGCTTTTAGGATGGTATCTATCAGGCCACCAGCAGGAATTGAAAATGTTTTCACAAAAATCCTTTTCCTTAG
AAATAAAAGCTGGTGACAGAGATGGTTTCCTTGTACCGATAAAAACAAAACCAAATCCATATTATACATCAAAAC
CTTGTGAGACATTCACTTGCTCTTTTGCCATATTTAGATGTGTTAGTGGAATCAGAAACCTGTTTTGATATGTGT
TCTCCATGAGTTAAGTCTGATTTGTCTTTTTATTTCATGATGCATGTCTTTTTTTTCTTTTGTCAGGATAACGTC
ATATAGCATCTTGTTTGTTTTTCCTTATCTCTATGTACATATCTATCTACTTCTGACTGTAGATGGGTATATAGA
TAGATGCCAAGCTTCTTATGTTCTGGGGGTAGTATGCATCATTATTGGGTCTCTGCCTTAAAACACATCAAAATT
CATTTTAGACAAAAAAACTTCTGCTTTGTCTTTGGTCATTAGGGAGCTCTAATGTGTGTTTGTGGCTCCAAGTTA
CATTTTGTGTTTCATTGATCTATATGTATATATGTGATGTTTTCATATATATATGTGTGTGTGTTTAAATTTTGT
ATCATCAGGACTGACACCCAATTTGACACTTTTTGTATCTAGAAGACCCTCCAAAAAAGGAACCACATAAGCACA
CAAGAAAAGAGTGCTATGATGTTCTTAGCATTTGCTATCATGCCTATTTTTATCTAGATTTTTAAATGTAGCTTG
TCATAACAAAATTTTAATTACAATTGGCTTGTATGAGAAGAAAAAGTATTTTTATTGTTTTGAGTGATGACGCAG
AGACTCAATGAACTTGAAAATAGCATTGCTTCGTGCACTTTGAATACCAATCAGGTGTTTTCTGTGCTACTAGTT
GTCACGTTGCATTCATGTTCACCTCCTGATTTAAGTATCTCGGGTGTGCCCAGCCACTAAAGCACTCTGGACTAA
TCGCTAAAGAGAAGCAACGTGGGGGGTGGGGTTGCGAGGGATGTGTTCACATGTACCCATCATTTGATCATAGCA
CTGTGATTGCTTTTGATGTGTGTCTCTAGTGGTGTGTTGTCTGTTGGCATGCTTAAAGCACATGTCCATTAAAAT
TCATTTTGTTCCTTTTATTTTCCTTGTTTTCTTGGTTAGTGATTCATTTGCATAAACATTAATGATCTCTGCATA
CTGGTTTGGGGTTTTCTCTTTCCTTCTAACTCTAAAGAAAAAATTTTTGCTGCAGAATTATCCTCAGAAGAGGCT
TCCCTGGCCTTCATCTACCTTGCAGTCTGACCAAGTATGATAAATTTTAGCCGTTTTCAAGGAAACATCTCTCTA
CCCAGGTCATTGCTGTCACTAGCAGCTTTCAAGTCAAACCTGCAGCACTAAATTTTTTTTTATCCTGGTTTCTCT
ACATACTAACCCCATGTCTCTCTGGACTCACACCTGGCTCAGGCCTTCCAGACCAAACTCATACTTCCTCCTCAC
CAGAAGTTTCCGAATCTCACACTAGAGAAGATTTGTCACCTTTAAAGTCCACTCACATTATTTTGACTCAGGGTT
TTGTTTTTTGTCTATTTCCCCTCCTGCAACTCTCCTTTAAAAGTGAAAAGAGAGAGAATGGTTTAAGTAGTCTGT
TGCTCATAAGCACGTGTCTGCAGTCTGTCACTTGCAAGGCCTTGGTGATCACCATGCAGCACTTGTGCGCACACA
CACCCCCACAAGTCTTTTTTCCTAATAATCCATTTTCCACATTGCCATGAGGGTAAAGGGTTCCAATCAAAACCA
CCATTAAACTGCATAGTTTCTAGTCTTCCCTCAGCCCTGATGCTAATTATGATAGTTTGCATAGACATAACTTAA
ACTTGTGATTCTCCCTCCTTCCAGAGCTTTTTGTAGCCCTTTTTCCCCCCAAAATTAGTTTTGTTCAAAATCAAG
CATTGGGCCCAGCCATTAAGATAAGACCTAATAAGTGAGAGATACAGTTCCCAAGAGTTTACAGATCCAGGTGTT

FIGURE 4777B

CACATGGTGGTGGCCAGTCTACCGTTTATCTTGTCAAGGTTGTTACTGCTAATTTGGTGTCACTTTGGTCTTGGG
CAGCAGTGGTGGGCGACGTATCTAATGAGCGTGCCATTGACTTCTCCATGTTTGTCTGTGTACGAGGGGTGCAGG
TTGTCTGTAATCCACTAAAGTGTCAGCCACACCCAGCTTTAGTAACTCGCTAATCGCACACCCTGGGTGTATCAG
CCAGGGGCTGCTACAGTTAATGGTACACAGTTGATGGTACACAGGCTGAAAATGATAATGAATCAAGACCCTACT
ACATTTCCAAAGCCGAAAAGCCATGAGGGTTACAATTTAAATGAGCTTGGGAAGGAACGCTCCCGAAGACGTCTC
CAGCCTGAAGGGTCAGAGCCGCTGGAAGCCTGGCTGTCTCTGGGCTTTCTCGTCTCAGTGCAGCAAGGCACCGTG
ATCAACCAACCCGTGATGGGGAAGGCCCTGGTTCTGTCTTTGTTTGGGGGTAAATAGCTGTGTGGTGTTGAGTGA
CTGTGATTGGCTTTTCCAGCTCCTTTAACACAAACTACAACCCACTCACGATACAACTTCGGCAGATGTGGTCAA
ATTGATGTTTGTTGACTTGCCTCATTTCCTTCCAGCTCTTAAGTTCCAAAGTCTAACTGGGATGGTAGATGTGAA
ATGCATGATTGTCGTCCTAATTTCTGCATGTGTTTATGACAATGTGTTGAGGGGAGGGGGAGGAGAGCCAGAGAG
CATTTTCAGGAACCGAGGTCTTTCCTTGTCTTACTCTGGGGGAATGCCATGTAGCTCTGATAGAGTTGTCTATCG
GTCTGTTTGTGAATGCCCTTTCGCTTAAACTTCCAGCCCTTCTGGTGGCATCCTTGGTTGTAAGGTGGCTGCTGT
ATAACGTCCACTCTCTTTCATATTTAATATGTGTGATTGTTACTGTTGTCTTTTTGTTTTAAAGTAACCATAAGA
GGAGATGATCTGAGTTATATTTATTGATCAGAGGAATAGAGTGCAGTAAAACTCATACTGGCATTTCGCTTTTCT
CATTTCCCTGTAAATGGGCGGGTATTAATCCATTCCCACCTTCTAATGTCCTTGATGTCCAGCTGGCTTTGTGGG
TGTGCAATGGTTTTACTGTACTGCCTCGATCTGTGCCAGGCATTTATACACAGCCACATGTGCGAGTCAGGTAGA
GCGTATGTGGTCACCCCCATGGCTCACGGAGTTAGCTGAATGGCCTCTCCGCTGTCCCTAG**ATG**GCAGAAACGGT
GGACACAAGCGAAATGGTCAACGGCGCTACAGAACAAAGGACGAGCTCTAAAGAGTCCAGCCCCATCCCCTCCCC
GACCTCTGATCGTAAAGCCAAGACTGCCCTCCCAGCCCAGAGTGCCGCCACCTTACCAGCCAGAACCCAGGAGAC
ACCTTCGGCCCAGATGGAAGGCTTCCTCAATCGGAAACACGAGTGGGAGGCCCACAATAAGAAAGCCTCAAGCAG
GTCCTGGCACAATGTTTATTGTGTCATAAATAACCAAGAAATGGGTTTCTACAAAGATGCAAAGACTGCTGCTTC
TGGAATTCCCTACCACAGCGAGGTCCCTGTGAGTTTGAAAGAAGCTGTCTGCGAAGTGGCCCTTGATTACAAAAA
GAAGAAACACGTATTCAAGCTAAGACTAAATGATGGCAATGAGTACCTCTTCCAAGCCAAAGACGATGAGGAAAT
GAACACATGGATCCAGGCTATCTCTTCCGCCATCTCCTCTGATAAACACGAGGTGTCTGCCAGCACCCAGAGCAC
GCCAGCATCCAGCCGCGCGCAGACCCTCCCCACCAGCGTCGTCACCATCACCAGCGAGTCCAGTCCCGGCAAGCG
GGAAAAGGACAAAGAGAAAGACAAAGAGAAGCGGTTTAGCCTTTTTGGCAAAAAGAAA**TGA**ACTCCTTTCCTTCA
CCTCCTGCCCTTCTCTTACCTTTTCAGTGAAATTCCAGCATGCAAGCTCAGAACCAACACATTACTCTCTGTGCC
TAATGTTCCTCAATGTGGTTGATTTTGAGCTTGCATGCTGGAATTTCACTGAAAAGGTAAGAGAAGGGCAGGAGG
TGAAGGAAAGGAGTTCATTTCTTTTTGCCAAAAAGGCTGAACCGCTTCTCTTTGTCTTTCTCTTTGTCCTTTTCC
CGCTTGCCGGGACTGGACTCGCTGGTGATGGTGACGACGCTGGTGGGGAGGGTCTGCGCGCGGCTGGATGCTGGC
GTGCTCTGGGTGCTGGCAGACACCTCGTGTTTATCAGAGGAGATGGCGGAAGAGATAGCCTGGATCCATGTGTTC
ATTTCCTCATCGTCTTTGGCTTGGAAGAGGTACTCATTGCCATCATTTAGTCTTAGCTTGAATACGTGTTTCTTC
TTTTTGTAATCAAGGGCCACTTCGCAGACAGCTTCTTTCAAACTCACAGGGACCTCGCTGTGGTAGGGAATTCCA
GAAGCAGCAGTCTTTGCATCTTTGTAGAAACCCATTTCTTGGTTATTTATGACACAATAAACATTGTGCCAGGAC
CTGCTTGAGGCTTTCTTATTGTGGGCCTCCCACTCGTGTTTCCGATTGAGGAAGCCTTCCATCTGGGCCGAAGGT
GTCTCCTGGGTTCTGGCTGGTAAGGTGGCGGCACTCTGGGCTGGGACTCGGCTTCCTCTGAAACCTTCGTGCTCG
GCTCGGGAGAAGGTGGCCGCCTCTTCCTCTCCTCTTCCTCTTGCTGTCTGCGCACTTCCAGTAACTCCAATGTAG
TCAGCCTTTCCAGGGCAGAGAACCTCTCATCCCAGGTTGCTGCAGACTTTTCAAATGCCTCGTGGCGCTTGATGA
GCTTCTCCACCTCGTCCACGCTCTGGCCTATCTCTCGGCTGGATAGGTACGGCTCCTGTCCAAGCAGCCAGGCCT
CGGCCACACTGGCGTCTCTTGAGAACTGATGGACCTCCAGAATCAGTCTTAACCATTCCCATCGACTTCC

FIGURE 4778

MAETVDTSEMVNGATEQRTSSKESSPIPSPTSDRKAKTALPAQSAATLPARTQETPSAQMEGFLNRKHEWEAHNK
KASSRSWHNVYCVINNQEMGFYKDAKTAASGIPYHSEVPVSLKEAVCEVALDYKKKKHVFKLRLNDGNEYLFQAK
DDEEMNTWIQAISSAISSDKHEVSASTQSTPASSRAQTLPTSVVTITSESSPGKREKDKEKDKEKRFSLFGKKK

FIGURE 4779

AAAAGTGCAAATTTTTATAGGTCCTAATTATTTTGTTTGCCTAATGAAGTGTTCCCTCTATTTTATTGTTTTTAT
ATGCTACAAAGTCCCATCTTCTGCAGTTATGGAAACAGTGTGGCTGTATGTTTTAGTAATTATTTCATAATCTGT
AGCACTTTTCACTTTAAGTGCAATGAATAGTCCAGCTTCATTCACTGTATTACTAATACGCATCCCNNNNNNNNN
NNNNNNNNNNNNNGCTTAGTCAGATTTGGGGATGCAGCCAAACCCTTCTGTTGCTGTGGTTTGAACATACAGTCT
AATGAGCAGGGAGACCATTAGCTCTTTCTGGGGCAGTGGGACAGGAAAGAATACCTTGGACCTTAGGGCTACTCT
AGTTGTAATGTATTAGTGAGTTATCACTAGAGAAGTTCCACAGTTTAATATTATCTATACCTATATCTATATATC
TACCTATATAGATAGATATATGTTAGATGCTTCAACAACTAGGGTCTACACTTAATATACTGACATCTAAGGATG

CGGCCAAGAAAAGCTGTAATTAGGCTGAATTTTATTGCCAAAGTTGTTCTTTTTTCATTTAGTCCTTTAATAAAA
GATGATCTTCATAAATTACAGAAAGTTTGCTTACCCTGTTTGACCTTTTGCAGAAAAGAACAAGAGGGAAGACAG
ACCTTCAGNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNTTC
CTGGTTTTAGGCCCTTTTCCACAATTTCTGATGGAAATACAGAAACCTTGCCATCATTCTTACTGCTGGTTTGCA
TCTCATTTATGGTGTATCTGGGATTTCTTCTCATGAACAGAAAGATTCAGTGGCTGTTATATGCCTTGTCAATTT
AATGTATTGCCCTATCCTCTTTTTGATCAAAGATAGAGACTAAGACTGGGAATTATGACAGAAAAAGTCATATTT
TTCTTTAAATGATTTTGAAATGTTAAAATAGGCCAATATGAGTCAAAGTGCAAATTTTTTGGTGAGTAGGTTGAC
AAAAAAAAAAAAAAATCCAGGAAAAAAAGTGCAAATTTTTATAGGTCCTAATTCTTTTGTTTGCCTAATGAAGTG
TTCCCTCTATTTTATTGTTTTTATATGCTACAAAGTCCCATCTTCTGCAGTTATGGAAACAGTGTGGCTGTATGT
TTTAGTAATTATTTCATAATCTGTAGCACTTTTCACTTTAAGTGCAATGAATAGTCCAGCCTGGGTGACGAGCGA
AACTCCATCCCNNNNNNNNNNNNNNNNNNNNNGCTTAGTCAGATTTGGGGATGCAGCCAAACCCTTCTGTTGCTG
TGG

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FIGURE 4780

MRPRKAVIRLNFIAKVVLFSFSPLIKDDLHKLQKVCLPCLTFCRKEQEGRQTFXXXXXXXXXXXXXXXXXXXXX
FLVLGPFPQFLMEIQKPCHHSYCWFASHLWCIWDFFS

FIGURE 4781

AATCTGTTAAAATTTGATATAGTAGGCACTGACAAAAGAGGTCAAATGCAGGACTGATTTCTAAGCTTGCAATCT
ATCTAAATGCAGATGCTAATTTAGAGTGCATAATTATTACACAAGTACAGACCTAGGTTAGGGCTTAAATTTCAT
TATGTGCAATAAAAAGGTTAAGTGATGGTTAAGCAAGGTGTAGATTATCCTTACCTCTCCTAATGACATGGGCTC
ACATTGGCATTCCTTTCATACTTTTACGTATAAAGTGGGCAGTTGTTTCTGAATGACTGTTGCTGGAGCCTCAGG
CCTGCTTTGTGCTTGGTGCTTTCCAGACTTTCTCCTTTATTCCTATCACCATATACGTACTCACAAAAGAGCAGT
GTAAACCAGGTATTACATTTCCACAAGGGAAAGTAGAACCAGGAATAGCCAC**ATG**ATACTTACCGAAAGCTTCAC
TTTCCCTATAGAGAAAGCAAGCAACATGAATCTTCTGATTTGGGGCCCAGCCTGCTGCTGTATACAGAGGTTGGC
ATTATTGGTGATAGAAATGTCTGATAGGAGTCTTTTAATTATACTCTGGAGTGTGGAGGTGGAGTGCAAGGCTGC
TTCCTTTATTACTGCAAGTGTTATTTTCTATTATCTCAGGTTTCGTTTTGTG**TAA**TAAACTGCTTCTTGTTAAAC
AATGTCTTCTGCTTCATTATTTTTTTGGGGGTGG

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FIGURE 4782

MILTESFTFPIEKASNMNLLIWGPACCCIQRLALLVIEMSDRSLLIILWSVEVECKAASFITASVIFYYLRFRFV

FIGURE 4783

GCGGCTGTCCAGTCGTAGCCCGGCCGCCCGCGCCTGTCCGGTCCGGTCCGGCCACGGAGGCAGCGCAGCGGCGGG
ACTCCGAGCCTACCCCGCCGAGTGAGCTGCGCCGCACCGTGCCGTCCCACCCGGCACCCACCAGTCCGATGGGGC
CGCAGCGGCGGCTGTCCCCTGCCGGGGCCGCCCTACTCTGGGGCTTCCTGCTCCAGCTGACAGCCGCTCAGGAAG
CAATCTTGCATGCGTCTGGAAATGGCACAACCAAGGACTACTGCATGCTTTATAACCCTTATTGGACAGCTCTTC
CAAGTACCCTAGAAAATGCAACTTCCATTAGTTTGATGAATCTGACTTCCACACCACTATGCAACCTTTCTGATA
TTCCTCCTGTTGGCATAAAGAGCAAAGCAGTTGTGGTTCCATGGGGAAGCTGCCATTTTCTTGAAAAAGCCAGAA
TTGCACAGAAAGGAGGTGCTGAAGCAATGTTAGTTGTCAATAACAGTGTCCTATTTCCTCCCTCAGGTAACAGAT
CTGAATTTCCTGATGTGAAAATACTGATTGCATTTATAAGCTACAAAGACTTTAGAGATATGAACCAGACTCTAG
GAGATAACATTACTGTGAAAATGTATTCTCCATCGTGGCCTAACTTTGATTATACTATGGTGGTTATTTTTGTAA
TTGCGGTGTTCACTGTGGCATTAGGTGGATACTGGAGTGGACTAGTTGAATTGGAAAACTTGAAAGCAGTGACAA
CTGAAGATAGAGAAATGAGGAAAAAGAAGGAAGAATATTTAACTTTTAGTCCTCTTACAGTTGTAATATTTGTGG
TCATCTGCTGTGTTATGATGGTCTTACTTTATTTCTTCTACAAATGGTTGGTTTATGTTATGATAGCAATTTTCT
GCATAGCATCAGCAATGAGTCTGTACAACTGTCTTGCTGCACTAATTCATAAGATACCATATGGACAATGCACGA
TTGCATGTCGTGGCAAAAACATGGAAGTGAGACTTATTTTTCTCTCTGGACTGTGCATAGCAGTAGCTGTTGTTT
GGGCTGTGTTTCGAAATGAAGACAGGTGGGCTTGGATTTTACAGGATATCTTGGGGATTGCTTTCTGTCTGAATT
TAATTAAAACACTGAAGTTGCCCAACTTCAAGTCATGTGTGATACTTCTAGGCCTTCTCCTCCTCTATGATGTAT
TTTTTGTTTTCATAACACCATTCATCACAAAGAATGGTGAGAGTATCATGGTTGAACTCGCAGCTGGACCTTTTG
GAAATAATGAAAAGTTGCCAGTAGTCATCAGAGTACCAAAACTGATCTATTTCTCAGTAATGAGTGTGTGCCTCA
TGCCTGTTTCAATATTGGGTTTTGGAGACATTATTGTACCAGGCCTGTTGATTGCATACTGTAGAAGATTTGATG
TTCAGACTGGTTCTTCTTACATATACTATGTTTCGTCTACAGTTGCCTATGCTATTGGCATGATACTTACATTTG
TTGTTCTGGTGCTGATGAAAAAGGGGCAACCTGCTCTCCTCTATTTAGTACCTTGCACACTTATTACTGCCTCAG
TTGTTGCCTGGAGACGTAAGGAAATGAAAAAGTTCTGGAAAGGTAACAGCTATCAGATGATGGACCATTTGGATT
GTGCAACAAATGAAGAAAACCCTGTGATATCTGGTGAACAGATTGTCCAGCAATAATATTATGTGGAACTGCTAT
AATGTGTCATTGATTTTCTACAAATAGACTTCGACTTTTTAAATTGACTTTTGAATTGACAATCTGAAAGAGTCT
TCAATGATATGCTTGCAAAAATATATTTTTATGAGCTGGTACTGACAGTTACATCATAAATAACTAAAACGCTTT
GCTTTTAATGTTAAAGTTGTGCCTTCACATTAAATAAAACATATGGTCTGTGTAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4784

MGPQRRLSPAGAALLWGFLLQLTAAQEAILHASGNGTTKDYCMLYNPYWTALPSTLENATSISLMNLTSTPLCNL
SDIPPVGIKSKAVVVPWGSCHFLEKARIAQKGGAEAMLVVNNSVLFPPSGNRSEFPDVKILIAFISYKDFRDMNQ
TLGDNITVKMYSPSWPNFDYTMVVIFVIAVFTVALGGYWSGLVELENLKAVTTEDREMRKKKEEYLTFSPLTVVI
FVVICCVMMVLLYFFYKWLVYVMIAIFCIASAMSLYNCLAALIHKIPYGQCTIACRGKNMEVRLIFLSGLCIAVA
VVWAVFRNEDRWAWILQDILGIAFCLNLIKTLKLPNFKSCVILLGLLLLYDVFFVFITPFITKNGESIMVELAAG
PFGNNEKLPVVIRVPKLIYFSVMSVCLMPVSILGFGDIIVPGLLIAYCRRFDVQTGSSYIYYVSSTVAYAIGMIL
TFVVLVLMKKGQPALLYLVPCTLITASVVAWRRKEMKKFWKGNSYQMMDHLDCATNEENPVISGEQIVQQ

FIGURE 4785

AGGAAAAAAAGGAAGAGAGACAGAAAGGAAAACAAGGCAGAGACAAGAAAAGGGAGAGGAAGAAGGGCTCGATGC
GATCGGCGCTCGGGTAATCAGGCGTCGACTGCTAGGGTTCTGACGCGGTCCCCACCCCCGTCCCGCCCCCTGTCC
TTCCCTCCGCCCCGCGCCGCGGCTGGCAGGGTGTGCGTGAGTTTGGTGGCGGCCGGCTGTGCAGAGACGCCATGT
ACCGGCTCCTGTCAGCAGTGACTGCCCGGGCTGCCGCCCCCGGGGGCTTGGCCTCAAGCTGCGGACGACGCGGGG
TCCATCAGCGCGCCGGGCTGCCGCCTCTCGGCCACGGCTGGGTCGGGGGCCTCGGGCTGGGGCTGGGGCTGGCGC
TCGGGGTGAAGCTGGCAGGTGGGCTGAGGGGCGCGGCCCGGCGCAGTCCCCCGCGGCCCCCGACCCTGAGGCGTC
GCCTCTGGCCGAGCCGCCACAGGAGCAGTCCCTCGCCCCGTGGTCTCCGCAGACCCCGGCGCCGCCCTGCTCCAG
GTGCTTCGCCAGAGCCATCGAGAGCAGCCGCGACCTGCTGCACAGGATCAAGGATGAGGTGGGCGCACCGGGCAT
AGTGGTTGGAGTTTCTGTAGATGGAAAAGAAGTCTGGTCAGAAGGTTTAGGTTATGCTGATGTTGAGAACCGTGT
ACCATGTAAACCAGAGACAGTTATGCGAATTGCTAGCATCAGCAAAAGTCTCACCATGGTTGCTCTTGCCAAATT
GTGGGAAGCAGGGAAACTGGATCTTGATATTCCAGTACAACATTATGTTCCCGAATTCCCAGAAAAAGAATATGA
AGGTGAAAAGGTTTCTGTCACAACAAGATTACTGATTTCCCATTTAAGTGGAATTCGTCATTATGAAAAGGACAT
AAAAAAGGTGAAAGAAGAGAAAGCTTATAAAGCCTTGAAGATGATGAAAGAGAATGTTGCATTTGAGCAAGAAAA
AGAAGGCAAAAGTAATGAAAAGAATGATTTTACTAAATTTAAAACAGAGCAGGAGAATGAAGCCAAATGCCGGAA
TTCAAAACCTGGCAAGAAAAAGAATGATTTTGAACAAGGCGAATTATATTTGAGAGAAAAGTTTGAAAATTCAAT
TGAATCCCTAAGATTATTTAAAAATGATCCTTTGTTCTTCAAACCTGGTAGTCAGTTTTTGTATTCAACTTTTGG
CTATACCCTACTGGCAGCCATAGTAGAGAGAGCTTCAGGATGTAAATATTTGGACTATATGCAGAAAATATTCCA
TGACTTGGATATGCTGACGACTGTGCAGGAAGAAAACGAGCCAGTGATTTACAATAGAGCAAGATTTTATGTTTA
CAATAAAAAGAAACGTCTTGTCAACACACCTTACGTGGATAACTCCTATAAATGGGCTGGTGGTGGATTTCTGTC
TACAGTGGGTGACCTTCTGAAATTTGGGAATGCAATGCTTTATGGTTACCAAGTTGGGCTGTTTAAGAACTCAAA
TGAAAATCTTTTACCTGGATACCTCAAACCAGAAACAATGGTTATGATGTGGACCCCAGTCCCTAACACAGAGAT
GTCTTGGGATAAAGAGGGTAAATATGCAATGGCGTGGGGTGTTGTGGAAAAGAAACAAACGTATGGTTCGTGTAG
AAAGCAACGGCATTATGCTTCACATACTGGAGGGGCAGTGGGTGCCAGTAGTGTCCTGCTGGTCCTTCCTGAAGA
ACTGGATACAGAGACTATAAATAACAAGGTTCCCCCAAGAGGAATCATTGTTTCTATCATATGTAACATGCAATC
TGTTGGCCTCAATAGCACCGCTTTGAAGATTGCCCTTGAATTTGATAAAGACAGATCAGAC**TGA**TAACCTTAACA
CCATAGGTGCAAAATGAGTTGTTCTGAGGTTTTTTTGAAACATTAAAGTTCCAAAACATGACATTTTTAAGAATA
AATTTGAAATAGAGTATAATTGAATGCAGAGAATTATGTACCTCTAATTGCTTAATTTTGTAATGGTCTTTTATT
GTAGAATTGGTTCTTTATACTCAGGGAAGTAATTATATTGTTTTTACTTTTTGAAAAAAGTGTTAACTCTTGAAA
TAAAATATTCTGATAAAATATGTAA

FIGURE 4786

RKKRKRDRKENKAETRKGRGRRARCDRRSGNQASTARVLTRSPPPSRPLSFPPPRAAAGRVCVVWWRPAVQRRHV
PAPVSSDCPGCRPRGLGLKLRTTRGPSARRAAASRPRLGRGPRAGAGAGARGEAGRWAEGRGPAQSPAAPDPEAS
PLAEPPQEQSLAPWSPQTPAPPCSRCFARAIESSRDLLHRIKDEVGAPGIVVGVSVDGKEVWSEGLGYADVENRV
PCKPETVMRIASISKSLTMVALAKLWEAGKLDLDIPVQHYVPEFPEKEYEGEKVSVTTRLLISHLSGIRHYEKDI
KKVKEEKAYKALKMMKENVAFEQEKEGKSNEKNDFTKFKTEQENEAKCRNSKPGKKKNDFEQGELYLREKFENSI
ESLRLFKNDPLFFKPGSQFLYSTFGYTLLAAIVERASGCKYLDYMQKIFHDLDMLTTVQEENEPVIYNRARFYVY
NKKKRLVNTPYVDNSYKWAGGGFLSTVGDLLKFGNAMLYGYQVGLFKNSNENLLPGYLKPETMVMMWTPVPNTEM
SWDKEGKYAMAWGVVEKKQTYGSCRKQRHYASHTGGAVGASSVLLVLPEELDTETINNKVPPRGIIVSIICNMQS
VGLNSTALKIALEFDKDRSD

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FIGURE 4787A

GCTCATTTGGGGGCATGAATGTTCTCCTTACTAACCTCTCATGGAGTCATGTGATAACAGCCATGTCATGTGTAT
GGATGCCACCATTCTTGAATTTCTGCTAGAAATAAGTAGGTTGCTATGCACTTAGAGTCATCTTTGCAAGGGACT
CATTCCAAACCAATTCCAATCGACCTGAAAGTCCCTTGCACTAAAGAAATGTGATTTTTTTTTAACCCAAGGAGA
AAGTTGGTTGTAACAATTTTTCACCAGAATTAGCAATCTGATAGAATAGGCTTTTTTAACAGGAATTTTAAACTG
GCGGTGCCAGTTGCAGTGAAGGTGAAGTGGCTATTGCTTTATNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNCCTGAAGATAGAGCGTTGAACAAACCCAATGGTCTTGGCCCTCAAAAAGCTTTATGTGACATAGAGCA
TCCAGCTCGACAATTAGCAAACCCCTGATATTATTCATGGACTTGACATGAGGTTTGGACTATTCATGAGCAACA
GCAGAAGGTCCATGACCCCTACAAATTTACATTTTTCTATGGCCCATATTTGAAAACCTCACATTCGGAGCAGGC
CACTTTATATTCGTGAGTGATCCCAAGCTCACTGACCAACAGAAAAGATGCTAAAAAAAATGTGTCCTATCATGTG
CCTGCTCCAACTGATGGGTAATGTCTGCCTTTAAGCCCCAGAATGGATTCTCCAGGCACAGTGTGGAAGAGTGCT
GTGGTTGATTAGCAATGTCTGCCTTGGGTGAGGAAAGGGGAACACTCCTCAAGTGCCTCCTACTGTCATCTCCAT
TCAGCCTAGCACCACATCCCCATGTAGAAGTGTTGTCTTCTACTGCTTGCCACGTACAAGTGTGAAATGCCAAGG
TGAGACTCGTACACTTGGGGATTTGCAATGGTTTTTACCCCTCATGAAGGTCAGAGGTGGACTATTTGTACACAT
ACACACATGCACACCCTCTCACGTCCTCCAGAGGCTGAAAGACCATCAGCATCTTGGTAACTGCCATGCATGAGC
AGCAAGGACAGCCTTCCATAATCCATGCCCCATTTCCTCTGGAAGCCTGGAAACTTTTCATTTCCTGTTCCTTGC
TAATTAACATCTAAACATGCTTCTCATTTCCAGCCATTGCTGATGCTTCTCAGTTGAAGTTTGAGCCACATCCCT
CTTACAGCTAGTGAATGAGTTGGTAGCAGATACTGTATNNNNNNNNNNNNNNNNNNNNNNNNNNAGGGGAGGGTG
GGATGGGGTGTGGGTAAGTTTTGCCTTTTGTTTTGTTTTTGATGCCGTATATAGTGAAGGGGTGAGGATATTCTA
AACAAACAAAAATTGAATAATTTATTCACAGAAACTATTAAGATTGTATTGTAAAGCTCACAGCAAGCTCAGTGG
GCAGCAGCTGCAACATCTCACCGGGGAAATTATTTTATTTAACGTGAGTGAGATGTGGGCCGGAGAAGGTAGCTG
AAGCTATTTATAAAACGTTGTGTACCTTCTTCCGAGCTCTCTCCCCTTTGTGAAGGGCGCAGCAACTATACCCTT
GATGGATGGAGATTTATGCAATGTGTTTTACTGGGTAGAGTGACAGACCTTGGCTGTCCCTGGAATTGAGAATCT
GGACCTTATTTCCAGGCAGAGAACACTGTCCTCAGAAATGGGACTTCTGATAATGAAACAGGTTGTCCAACATTT
TCTAATACGCATTCTACAGAACACAGGTTCCAGGAGGCATCAGGTTGGTGTGATGCAGACTAAGGGTTTTGTGGT
CAAATATCCTTAAGAAACAAAGTTAAGTCAGTTTCCTTTCTGCAAGGACTTTTCAGCCTTCAATGTGTGCTGTGC
ATGGTGAATCCCCAAAAATAATCCTTGAGTCTGTAGCATTTCCTGAACTTACATGACCAGGATACTCTATTTTGC
AGATCACCCCACAGAGCTAGGGTTCCACCGAGTATACTTTGCTTAGGTTGACTTAGCATATCTGAGGTCTTCAAG
GATAAAAACTGCCACCCCAACACCCTTCCATTAAAAAAAAAAATACAAAATAGCACCACAGTCTCCATCTGGTTT
ATAGCAACAGAGGTACTTTATTTAATGAAGCAATGGTTCTAATCCTGGATACTGCCACGGACTACAATTCTATCC
CTCCCAGAGGGAGTGGAGGAAGTCTTGGGTGGTGTGGACAGAAGGAAGAGAGGAGAGGGTGAGTGGGGTATAGGG
CCCAGGGTGGCTCCCTACTCCTCAGGCTCAAAAGGATGCTCAGTGGGAACAGATGATCTCTTGATGAGTGCTTCT
TCAGTTTCATAGTTTGGAATCGTTCACTGTGTGCTTTTTGGGGGGTTTTCAATGGAAATTCACGTTGCTTTGCAT
TTCTGTGTCCGTCTTTGGTCAGTTGTGCAAGCCTGCTCACTGTCATGTGAAGATGGCCTTTCATCTGGCTTCTCT
CTCTTAAGTGAGAAAGATTGTCCTTCAGGGGACATGACATCAATAGGTTTCTGGAATGAGGGACTCTTTCTCCCC
GTGTTTTGCTTTGTGTTCACATTTTCTTTTCTAATGGCATTGAAACTTTAAAAAAAATGGATTCAACTGTTTTTG
CAGAATGTAGAAAGTATTCTGTGTCCTTGGTTAAAGAAATCCACTTGTGAAGTGTGCCTGGAAAATGAAAGTTTG
TGTTTTTTAAAGAGGAATATTTGAAACTGCTTTCTATGC**ATG**CTTAGCTGGAGAAAAGTACAGGCAGGCGTCCCA
TCTCCCAGCCACTTCTCAAAGGTGCTGCTGTGTTTTAAAGACCAGGTACAGCCAGGGCAGTATTTGCAAGGACAT
TCCTGCTTACTTTATCCCTTTGGTTGGAAAGCTCTAGATGATTCCCGCAGCTCCTCCAGACCCCGCCTCCCTGCC
CTCCCCAGCTGGTCTGGGAAGAGGTGGTCTGCTGACCTGTGGTATCTCAGAGGGGACGTTCCTCCTCCTCCCTGT
GCACCAGGTGGGCTGCACCCTCCTGCCTATTCAGGATGTGGATGCCACAGGAGAGCAGCAGGCAGTGGAAACTTC
AGTTGCACTGGTTCTCCTGGTGGCAAAGGCATGAAGCACAGGGGTCGATTAATCCAGGCTACTAGAAAGCTCCAG
AGCAAAGTGTGCGGGTCCCACAAATGCTTGGCTGGTGGGGTCTGGATCAGTGCTGAGATAGAGTTGGCAGAAGAA
GCAGAGGCACTCTGCTTGCTTTCC**TAG**CCAGTCCTCCCCTAACAACACAACACAACAACACACACAATCTCAGCT
GCGCCATTCTGTGCAATCCCAGTGACCAAATCCCTTCCTTGCCCACCTCTATGTCAGCAGGACTGACCACATCAC
TCCCCCGAGTTCCCACCACCAGCATTTCCTCCAACCTTTTTCCATCACAACCAGTTAGAACCCTACAGGCAACAA
GGCCTTCTAGAATCCGCTTAACCCTTGGCTGATAACAGGCAAATTTCAGTCTGCTACACTTTGTTAGGTCCAGAA
GGAGCTGCCCATACTACTTTCTTATGAGCATGCTCAGTATGGCATATGGACATGTAATGTCACATCTTTGTGGAG

FIGURE 4787B

TGTGATTTTCTTTTTTTACATATTTGTATGCAGTAGAGAGCCTGTTGTAGAAAACGCTCCCTGTATCTTGCTGTA
CTGTTAAAGAAAGCTGAATTCCACATTGCCAACAAAAGCGTGAAAATGTTCATGAACCTTCCTCCAGGAAAAGCC
ATTCAAGCCTGATTATTTTTCTAAGTAACTTCAATTAAATTGAAGAAAAAAGAG

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FIGURE 4788

MLSWRKVQAGVPSPSHFSKVLLCFKDQVQPGQYLQGHSCLLYPFGWKALDDSRSSSRPRLPALPSWSGKRWSADL
WYLRGDVPPPPCAPGGLHPPAYSGCGCHRRAAGSGNFSCTGSPGGKGMKHRGRLIQATRKLQSKVCGSHKCLAGG
VWISAEIELAEEAEALCLLS

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FIGURE 4789

CTTCTGAAGAAGCTGCACAGCTGCCAGATGTCCATCCAGCTACTACAGACAACCAGGATTGGAGTTGCTGTTAAT
GGGGTCCGCAAGCACTGCTCAGACAAGGAGGTGGTGTCCTTGGCCAAAGTCCTTATCAAAAACTGGAAGCGGCTG
CTAGACTCCCCTGGACCCCCAAAAGGAGAAAAAGGAGAGGAAAGAGAAAAGGCAAAGAAGAAGGAAAAAGGGCTT
GAGTGTTCAGACTGGAAGCCAGAAGCAGGCCTTTCTCCACCAAGGAAAAAACGAGAAGACCCCAAAACCAGGAGA
GACTCTGTGGACTCCAAGTCTTCTGCCTCCTCCTCTCCAAAAAGACCATCGGTGGAAAGATCAAACAGCAGCAAA
TCAAAAGCGGAGAGCCCCAAAACACCTAGCAGCCCCTTGACCCCCACGTTTGCCTCTTCCATGTGTCTCCTGGCC
CCCTGCTATCTCACAGGGGACTCTGTCCGGGACAAGTGTGTGGAGATGCTGTCAGCAGCCCTGAAGGCGGACGAT
GATTACAAGGACTATGGAGTCAACTGTGACAAGATGGCATCAGAAATCGAAGATCATATCTACCAAGAGCTCAAG
AGCACGGACATGAAGTACCGGAACCGCGTGCGCAGCCGCATAAGCAACCTCAAGGACCCCAGGAACCCCGGCCTG
CGGCGGAACGTGCTCAGTGGGGCCATCTCCGCAGGGCTTATAGCCAAGATGACGGCAGAGGAAATGGCCAGTGAT
GAACTGAGGGAGTTGAGGAATGCCATGACCCAGGAGGCCATCCGTGAGCACCAGATGGCCAAGACTGGCGGCACC
ACCACTGACCTCTTCCAGTGCAGCAAATGCAAGAAGAAGAACTGCACCTATAACCAGGTGCAGACACGCAGTGCT
GATGAGCCCATGACTACCTTTGTCTTATGCAATGAATGTGGCAATCGCTGGAAGTTCTGC**TGA**TGGAACAGCCAG
CCATGAACAAGGTGAGGAAGAAGAAAGAGGAAGCGCTGAATTATCTGAACTGGAGAAGCAATAAAAATTAAAGTG
AAGGAAAATAC

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FIGURE 4790

LLKKLHSCQMSIQLLQTTRIGVAVNGVRKHCSDKEVVSLAKVLIKNWKRLLDSPGPPKGEKGEEREKAKKKEKGL
ECSDWKPEAGLSPPRKKREDPKTRRDSVDSKSSASSSPKRPSVERSNSSKSKAESPKTPSSPLTPTFASSMCLLA
PCYLTGDSVRDKCVEMLSAALKADDDYKDYGVNCDKMASEIEDHIYQELKSTDMKYRNRVRSRISNLKDPRNPGL
RRNVLSGAISAGLIAKMTAEEMASDELRELRNAMTQEAIREHQMAKTGGTTTDLFQCSKCKKKNCTYNQVQTRSA
DEPMTTFVLCNECGNRWKFC

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FIGURE 4791

CTGGCTCAGTCATTCCCCACTTAGCCTCCCAAGTGTTGGGATTATAAGCGTGAGCACCATGCCTGGCCCCAATTT
AAAATGTGGAATTCAGTTGGTGTCCAAGACTTATCTTGAGACTCTTAAAAGCATCAGTCTGTAACTAGAACAAAT
ACAGTCTTAGATTTACCCAAGTGCCTAGATATCATTTTATAATGATTAGAATTGAGTATTGTGGGTCCCCTAATT
CTGTGGGTGCCTTAAGTGAGAATTTCTAAATGATTTTCACATTCTAAATGACTTTGGGTTTTGAACTCTCCATCT
AGTTTACTTCTAAAATGGGAACTTGAGGCAATTCAGGTATCCAGGCAAATCTTTGTATATATTTTTTTGTGTACA
TGCACACATCTCGAAATCCATTTCCGTGTTTAATGTTAGTTGTTTATGTGTTAGTATTCCTGTGTCTACTGTTTT
GTTGTTGTTAATATGGGTAAAGTGAGCCCTGAAATACATGCTAAACAAGACATGAAATGCAGAAAGGTACATAGT
GTTTCAAGTGCATGGTAGTTTGATCTGTGTTTTACTTTATTGTGTTTTCTTGAGTGTAAAGAAAGAATAAATCAA
AGTTCTTCATACCCATTTTGACAAAGTGGAACAGTGGAGCTGTTTTTTGCTTTTGTTTTTATTTATTTTTTGCCA
CTGGTGATGATAGATTTCAAAAAACAAAAGGTGGCAGCAGCACAATGTTCATGGTGAATTATCTCATAGTATCTA
GATTGATCAAGATCTGACAGAAGGAATGCACAAAGGATTCTATATTCTTAATGATTTATTAATTACCAGGATCCT
TTTCTAAATTGAATGTACTTTTGAATTACTAGGTTTCTTCTTTTTTTTTGTTCTGCAATAGTGAAAGAAAACTCA
GTAGTTTAGTTTCAGTTTCTCATGGAAATTGGTAAATGTTAGTTTTGACTTCATCTATTTTTTATTTGTTTTTAT
TAGCGTAGAGTAGGAAGTCTCATATTCTACTGTTCTATCTAGGATGGTGAAATTCCAAAGGTGCCTAACTTGAGT
AAGGGATTTGTGACAAGATAGTACACATTACTATAAGGGCTATTATTTCCTGAACTGGATGTCCCTAAAAGCAAA
TAAACTGCCCACTATCTCTACTCTAGTGCTCTCTTTGTCCTTATCAACATATACCTCCAATAAGTAATTACATAA
TTCACCGTTAAACATGGACCCACTCTAGGTAAAATTACCCTCATGGAAACATTTTCACTGTGAGAATGATGAATT
TAAAAATTATGTTTGAATCACCTAAAATGTATGTGCAGCTTCTAGATGGCCCCTTAGATCTGCTGGGCTCTAGCT
GTGTACTTTAAAAAAACAAAAACAGCTTTATTGATATATAATTTACATATTATGTAATTTACCCACTTTTAAGTA
TCTAATTCAGTGNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNCCTTTTGTCTTTTTTTGCAGACTCATACCTAACACAAATCTAAAGTTTATCACTGTTGCCA
GGATAATTACAGCAGGTTATGTTTGGTTTCATTTTTAAGAGTGGAGGTGTTCATGATTCTAAGCTCAGGAATCTT
GTGATCATGTATTAAATATGTTATCTCATACTATAATGATAAAAAAGCTTAATGATGTGGGTTGGGATGGATATT
AACATAAATAATTGAGTCCGCTGCTTCTATAGCAATGCTGTAGGATAGAACAATAATGTAAGTGATATATGTAAT
TAAAAAATTCTAGAAGCCACATTAAAAAATAAAATAAACAGCTGAAGTTAATTTTAATATTTTATTTAACTCCAC
TACATCCAAAATGTTATCATTTTAACATGTAATTGATGTAAAGATTTATTCTGATAGTTTGTACTATTTCTTGTA
CTAATTTTTTGAAATCTGGTATGCATTTTACAAATTTGGGCAAGCCACATTTTAAGTGCTCATTAGCCACATGAG
GCCAGTGGATACTGTATTGAATAGCACAGTCCTATAGCATATTTATTAATTTGTCTTGTAGTAAGATGAAATAGA
CAATAATACGGAATAATATCTTAAATGGAAATCTTTGTTAGTCTCTAGAGCCTTCATTGCTTGATAAATAGGACA
TCTAAACTTTAGATATAAATCAGTTGTCAATGAGATAAAATTATTGCCAGCAAATATTTTCCTTCAAAGATAAGT
AACTTTTGATATGGCAGTTGGTGAAATGAAAGAATATAATCTGCCTTCTTGTTAAATGGTTGACTATTCTGTAGC
TTGTAGGTAGTACGTATTAGAAACTTGTGTATGTGGGAAATATTTGGCATAATACTGTTTTCAGTATATAGTAGC
TATTTTTTAAGGAAATTAGTTTCATACAAGAAAAAGATTATTATAAAAGTGATACTTTTGCATGAAATATTAGTT
TGTGTTGATAACTCTTAGTTAACCCTTAAAGTTTAAAACAGTACTCAAAAAAAAATAATGAGAATCTAGTATTCT
GTAGTTAACTAATCTATAAGATAAATTGCTAAAGTACTAGGGAGCTTGTAAATCTTAAAAATCTTTTTATTTCAG
TGTTCATTCAGGTTGGATATATTTGAAATTGTAGATTTCTATCTGTACAACATCTCCTAGTTAATAGAATTTTTT
TCCTTCCCCTCCCTTCTCTCTCCTCCTCCTTTTCTAACCAAAGGGCATTTTATCAACAATCATGCTGAATTCAAT
TAATATCTCAAGCTAAAAAACTATGTAATTGAGGTTGTATCTGGAGAAGATGGGAAAACATTGTATAATTTAAGC
CCTTAATTGTCTGTTGAGCTTTTAGGGCTGAGTAATTGCCTTTCATACAAATAAAAGCTTTAACTCTTTTCTCAA
GAGTGTACCACCGTCCTTAGAATCAGGTGTTTTAAATCCAGTTTCTTTTAATTAAATGGGACTGTAGTGATCCCT
ACCCTGTAGAGAAATCAACAGAACTAGAGAAGCTAAGGGCTTGATCAGGTTTCCCCTAGAACCTGTGTTGCCTGC
CTGCTGTATCTTCCATGTCTTTCTTATTCAACTTCTAGAAGTAGAGAAGGTTGGGACTTGAGTGTAGAAGAAACA
TCAGAATAATTTCAAAAAACAGGAAGTTGGAACTATAATTTTTAAATTATTGTATTGTTTTTACGGATTTTACAT
GTATAGTTAAATATTAAAATTCATCTCTTGCAGTTCAATAAAAGCTATAGTATAGATTTTATTTTTAAGAAGTTT
ATATAATTCTTTTGTGAACCAATATGTAAAACTAGAATATTTATTAAACTAATAATATGTATTAGTATCAATAAA
ATATGTATTTATTTTTAAATTGGTATGAAACAAAATAAAAATTTGTAGACACTCTTAAAATTGGTCATTGATATT
ATCTTTGTAATTTAACATTAAGTACTATTTAGTGTCATATGCCTGAATTTAAAGGATGGAATTTAACCTCCCGGA
ATCTTACCAAAGGGGAATTTTAACCCGGGA

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FIGURE 4792

WLSHSPLSLPSVGIISVSTMPGPNLKCGIQLVSKTYLETLKSISL

FIGURE 4793

GGCACGAGATCATTTTCTGTCCCCTCCTATCTTAGGCTGACCGGTTCCCTGATGTGTTACCTGCTTCTGCTACTG
ATCCAAACTGCAGAACTTCTCATTCATCCCCAAGGCCTCCAGGCAGTATCCAATGGGGAATCAGCTCTAAAAGGA
ACCAGACCAACGTTTTCCAGCCCCTTCATTCTGGTGACTGAGGGGAGGAAAGAATGGGAGGGGGTATTCTTGTCT
AGTGGATGGAAAGGAAACACACTGTCAAATTACTATATCTCCTTGGTTTTCTATTACAGTAGAATTCTCCAGCCA
TATTTTTATTGTCTATGGGGGAAGTTGGAGATGGTGACCTTGATTAGAAGTGTCTGGAGGGGGATAAATGGAGGG
GATAAGATTTCAGTTGGTTTTGGAAAATGTTAAAGTCTTAAAATAATGCGTCCCATCTGAAGAATTTTTTCTAAA
ACCAGAGTTTATAAAAATATCACTGATACAGCCTGCCCCCTCATTTCCCTGCCACAGGAGATGTCTTGGACTAGA
GACACTTGTTTAATAATAGCTTGTCTCTGATATTCCCAGTAGCTTCCCTCTGTGTGAGGAAAGGATAGAAATGTT
CAGGACATCATCATACAGGCTCCTCATCTACAAAGTTCCAGTAGCAGTGACGCCTACACGGAAGACTTGGAACTG
CAAACAGGCTGGGGTCACCTCAGTGACATCTGACGCTGTCCAACCAGAAGTTCGATTTTTGTTCTGGGGGTGAAG
GAGGAAACAGACTGTACTAAAGGACTAAAATAATTTGTCTATACTAAAAAAAAAAAAAAAAAA

FIGURE 4794

GTRSFSVPSYLRLTGSLMCYLLLLLIQTAELLIHPQGLQAVSNGESALKGTRPTFSSPFILVTEGRKEWEGVFLS
SGWKGNTLSNYYISLVFYYSRILQPYFYCLWGKLEMVTLIRSVWRGINGGDKISVGFGKC

FIGURE 4795

GTTTACATCCGCCGGGTGCGCGGTTCGCCGCCCGAGGTCGTTCGGCTCGGGTACCATCCTCCGCGCCATGGACAC
CAGCGACCTGTTCGCCAGCTGCAGGAAGGGGGATGTGGGCCGAGTGCGACCATGAACCCGTCCTGACCCAGGCTC
TGACCTCCTTCCTGCCCAGGTACCTGCTGGAGCAGCGAGACGTGGAGGTACTATGCCTGCTTGTGTGGGCACGAG
GAGCTGGTACTCTACCTTCTGGCCAATGGAGCCCGCTGCGAGGCCAACACCTTCGATGGTGAGCGCTGCCTCTAT
GGGGCACTGAGTGACCCCATCCGCCGGGCTCTACGCGATTACAAGCAGGTCACGGCTTCCTGCAGGAGGCGGGAT
TACTATGACGACTTCTTGCAGCGGCTTCTAGAGCAGGGCATCCACAGTGACGTGGTCTTTGTAGTACACGGGAAG
CCATTCCGGGTGCATCGCTGCGTCCTGGGTGCACGTAGTGCCTACTTTGCCAAC**ATG**CTGGACACCAAATGGAAG
GGCAAGAGTGTCGTGGTTCTCAGGCACCCACTGATCAACCCCGTGGCCTTTGGGGCCCTGCTGCAGTACCTGTAC
ACAGGCCGCCTGGACATTGGCGTAGAGCATGTGAGTGACTGTGAGCGCCTGGCCAAGCAATGCCAGCTGTGGGAC
CTGCTCAGCGACCTGGAGGCCAAGTGCGAGAAGGTGTCTGAGTTTGTGGCGTCTAAGCCAGGCACGTGTGTGAAG
GTGCTGACCATCGAGCCCCCACCTGCAGACCCCCGCCTCCGGGAGGACATGGCGCTGCTGGCCGATTGTGCCCTG
CCCCCCGAGCTCCGAGGTGATCTTTGGGAGCTGCCCTTCCCTTGTCCTGACGGCTTCAACAGCTGCCCTGACATC
TGCTTCCGAGTGGCTGGCTGCAGCTTCCTCTGCCACAAGGCCTTTTTCTGTGGCCGCAGTGACTACTTCCGAGCC
CTGCTGGATGACCACTTCCGAGAGAGCGAGGAGCCAGCGACCTCAGGGGGCCCCCCAGCCGTCACCCTGCATGGC
ATCTCACCCGACGTCTTCACTCACGTGCTCTACTACATGTACAGCGACCACACTGAGCTGTCCCCCGAGGCAGCC
TATGATGTGCTGAGCGTCGCCGACATGTACCTGCTGCCAGGCCTGAAGAGGCTGTGCGGCCGCAGCCTGGCTCAG
ATGCTAGACGAGGACACTGTGGTGGGTGTGTGGCGCGTGGCCAAGCTCTTCCGCCTGGCGCGGCTTGAGGACCAG
TGCACTGAGTACATGGCCAAGGTCATTGAGAAGCTGGTGGAGCGGGAGGACTTCGTGGAGGCGGTGAAGGAGGAG
GCAGCGGCTGTGGCAGCCCGGCAGGAGACGGACTCTATCCCGCTGGTGGACGACATCCGCTTCCACGTGGCCAGC
ACGGTGCAGACCTACAGCGCCATAGAGGAGGCGCAGCAGCGTCTGCGGGCACTCGAGGACCTGCTCGTGTCCATC
GGTCTGGACTGT**TGA**GCCCCTGGCTGGGCAGCCCCAGGGGCCAGGAGCTCTCTTGGAGACAAGCATGTGTATGCG
TTTGTGTGCAGCTCTTCTTCCTGCTCCCTGCACATTGAGGGCTTCATGGGGGGTGCGAGGGGCTCAGTGGGGCTT
CTCTTCCCTCCATGAGCCTGGAGACCCCAGGGGAGGATCCATTTGGGATGAGCCCCCTCCCCCCAATGCACAAGC
CAGCCCCCAAGACCCTGGGGGTGGACACCACTCAGGGAAACCTGGGGTGGGGGTGGGCTTTGGTCTTAGCACTTT
CCTTCTCCAGATCCCCCCTACCCACCCCAGTCCCAAATCCAGTCCTCTGGCCCTTGCCTAGCCCTGAATTGCTTC
TCTAAGCTGGTGTTCCCATGCACAGGGCCATTCAGGAAGGGCTGGGGGAGTGTGTGTGGCAATAAAGCTTGAAGG
CACCGTGGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4796

MLDTKWKGKSVVVLRHPLINPVAFGALLQYLYTGRLDIGVEHVSDCERLAKQCQLWDLLSDLEAKCEKVSEFVAS
KPGTCVKVLTIEPPPADPRLREDMALLADCALPPELRGDLWELPFPCPDGFNSCPDICFRVAGCSFLCHKAFFCG
RSDYFRALLDDHFRESEEPATSGGPPAVTLHGISPDVFTHVLYYMYSDHTELSPEAAYDVLSVADMYLLPGLKRL
CGRSLAQMLDEDTVVGVWRVAKLFRLARLEDQCTEYMAKVIEKLVEREDFVEAVKEEAAAVAARQETDSIPLVDD
IRFHVASTVQTYSAIEEAQQRLRALEDLLVSIGLDC

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FIGURE 4797

CACGGCTTTGTTCCGGAAAGCCCTTAGGTGGAGAGCGATGTGGGGCGCGGCAGGGGGATCGCGTAGAGGAACCTT
CGCGCACCGCCTCTCCGGGTCTGGGAATCTGCTGAACTCCTTGCCTCTCTTGGGGTCCCTCGAACGCCCCAGCTA
AGAAGGGCGGGGGCCTTGCCAGGGCGCGAGCAACATGACGTTCAAGGTCTTCCTGTGGCTTCTGTAAAGAAATGT
TCACGTGGGAGCCTGTCCACATGGGCTGTACTAAGGATCTGGCACGAGGAAGAAATATCACTGCAGAACCTGAAG
CCCTCCGTTGGAAGGGTCGTTCACTCGAGTACCTATTCTAAGTAACAGTGACACAAAACACATGTTAGAAAAAAA
CAAAAAGTATGGTAGGTTATACTGTTTTTTAAAAGAAACTTTTATTTATGCCTTTTGCTGTTAAGTCCTCTAATT
TTACATTGGAACTGAGTCATTCTTGGAGCAAAACTAGAATAGGTTTGTATTTGTTTTCTTTTTGGATGTGTATCT
AAATTGTACATAATTAAGAAAAAGCAAGTAATGGAAAAGCTGGAGATGTAGAACTTAGTTCCTTCTAACTTAGTA
TGCAATTGAAAGCCTCAAGTCAAGACTCCTGTGTATTGTTTTGTATTAGGACTCTATTGTACAAATATTTGAGTA
CCTTAATATGAGTCAGTTACTTTTTCTAGATCTTGGATCCATGCCAGACAACGCACATTCTGCAGACACTGGTTA
CTCCAGTGGCTCCTTACTGGAAACATAATATCAGTGATAAGTGCTGTGAAGAAAATAAAACAATGATGTGCTGGT
ATGGATTTTTAACTTTTTTATGTGATGAACCACAGAATGATGGTTTTAAATGTATGAAATACATAGAATTGCAAC
AGAAACCAGTTATGAAATAATGAAGATATTAAATATGACATCTATATTTTAGTAAAGCATTAGTGAGGACTGTAA
ATGATCTTTAAAGAATTTGGCTTAAATTTAATCTAAAATTGCTATCAGGTATTTCACATCGCTGTAATTTTTGCC
TGCATTCGTAACTGAAGAGATAAGTAAATGTCAGAGGTTAAGATAAATCTTTTTCTTTTTTTACCTGTCCATATT
TACAAACATTCTGCGTTCCGTACATAGACGCCTGGATAAGAACCCCTGTGCAAGAATGACTTTGGTGCTACTTTA
AAAAAAGTGGTTGGGGAAGACCTCATAGGAAATGACATCAATAATAGATTGCATGATAACCTATACTAGTTCTTA
CTGTTACCAATTTAAATTCTAACTGCTTAAAAGCTAACACGGTCCTTCCCTTTTTTTGAGCACCTGATTTGAAGT
ACTTTGAGTAGGCCTCAAGTGTCGTATGCAAGTACTAATCTAGGGGGTGTGCCTTTTTCAAAAGTGATTTTTGGA
GAAGATAGGATGTAGTATTATAGCAAGGAAAATTCAGCATCTGGGATGATCATTTCCTTCTGATTAGAGAAATTT
ACCTTGTTAATATTCTGTTCACCCAACCCTTCTACCCTCAGTGTTGACCAATACTGGAAAAAATTTAGGGCTTTG
GAGTGAAATTTTAAAAGTTCAAAACCTTGATCTATTAATTAGTTTGCTTACCTTGAGGAAGTTGCTTATCTTAAT
CTTCTATTTGAACTTCAAGTACAAAAACCCTACTCACGGACTTAACTGTGACCATTAAATGAGATAACCAAAAGG
CTGAAGATGATAGTGAGTTGATTTTACCTTTTTTCTACATACAGATGTTTCAGTTCTTTCATTAGTGGTTGAAGG
TCTGCGTTCTTTTTCTCCCTCCACTCCCTCCTTGACTACCCCCAGAATGAGCTTTGATGGTCTCTACTGGGCCTT
TGGGGGGGATACATTATCCTGTTGTTTTTGTTCTGTTACTTATATATAATACTCATGGATTTATTTCTACTTCTC
TTCCATTTTCTAATTTATAATAACATGTGCATCTTGTTTTCCCTGCCAAACTAAATTTCGTGAGGGGGTACATAC
TGCACAGTTTTTTTTGTCACATACTGCTTATGACACATGAATATGCAGAGCTTGTCAAGCTCTTTAATTAAGTTT
AAAATGCTAATTGAGTGAATCAAAACTTAACCATTATGGTTAGGCTAAAAATGTCAGCTTGTGTTTATATAGTGC
TTACCTCAGTATTGGAAATGCCATGAGTTTAGTATCAGAAGGACATTATTACTAGTGCATTTTAAAGTGATACCA
GTCATAGTTGCAAAAGAAAGTACACAATGGGAAATGGAAGAGAAATGTAGGGAATCAAAACAACTAGTTTTTTCC
TTTATAACGGAAGTTTTATAATTCATCTTTTATGTAAGTGTAATTCTCATTAAAAATACCCTAAAGCTTAAAGTT
TGCAAGGCTGCCCAGCCTAACCCACAACAGTTTGATGCTGCCCCCTAGCGTTTGATTCCCTTCACCTTTTGCTAA
AATAAGGTAATGTTTAAATTACAATTAGATTTACTTACTGCTGTAAATCTGGTCTATTTTAGTTTCCTCTGGGTA
GTTAGTGTTGCTAATAAGATGGACGTAAGTGTTTTTGAACTGGTGAATTCTGATTGCTTTTAGCCCCCAGTTTTC
CAAATAGGGGTGAATTTTGGGTAGAGATAGAACAATCACCAAGTTACCTTGCTCCAAAAAAGAAATTTACGTATG
GGATTGTTTTCAAAGCGGGAAGTTAGCTGTGTAAATAACAACAATTTTATATATTTAATCTGGGCTTCTCCTTAT
CTTGAATGATATAAAAATCTACTTTCTAGATTAATTTAGTTCCATATAACTTTGTATTGCTTTGACTGTACTGAT
AATAAAGTTTGAAAGTGTTAAAAAAAAATCTATGTCGGGTGCGGAGAAAGAGGTAATGAAATGGCAGGAATTCGA
TATCAAGCTT

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FIGURE 4798

TALFRKALRWRAMWGAAGGSRRGTFAHRLSGSGNLLNSLPLLGSLERPS

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FIGURE 4799

GGCAGGCGCGTGGCCGGGCCGCGGCGCGATGAGTGGGGCCCGGGCGGCGCCCGGGGCCGCGGGCAACGGCGCGGT
CCGGGGGCTGCGGGTGGACGGGCTGCCCCCGCTGCCAAAGAGCTTGAGCGGGCTGCTGCACTCGGCGTCGGGCGG
CGGCGCGTCTGGGGGCTGGCGGCACCTGGAGCGGCTGTACGCGCAGAAGTCGCGCATCCAGGACGAGCTGAGCCG
CGGGGGCCCGGGCGGCGGCGGGGCCCGGGCGGCAGCGCTGCCCGCCAAGCCTCCCAACCTGGACGCCGCTCTGGC
GCTGCTCCGCAAAGAGATGGTTGGTCTCCGCCAGCTGGACATGTCCTTGCTCTGCCAACTGTACAGCCTCTACGA
GTCGATTCAGGAGTACAAGGGGGCATGCCAGGCAGCCTCCAGCCCAGACTGCACTTACGCTCTGGAGAACGGCTT
CTTCGATGAAGAGGAGGAATATTTCCAGGAGCAGAACTCCCTGCACGACAGGAGGGACCGAGGCCCTCCTCGGGA
CTTGTCACTGCCTGTCTCCTCCCTCTCCAGCAGCGACTGGATTCTGGAGTCCATCTAGAGGGTCTTGGGAGGGAT
GTGACTGTTGGGAAGCCCTTCCTACTGGACACGCTGTCATCATTTGCTGCTTCTCTTGCAAGAAAGCACCTCCGT
TGTGGACGGTCCTCGGGCACAGGGGATGAGCGCTACCAGTTTCATTTGTAGGCAGGGAGTTCTCCGCGGATGCAT
GGTGGCAGTCTGCTTTGATGGCAGCAGTTATCTGCTTAGGTGACCTAGAGGTCCTCAGCAGTATCCTCCACACCT
ATTTATTGAGGTGCACCTGCTGGGGATTCATAATGAGAATATAACAAGAGGATCTCGGTGAAAGGCCTTAGTGGG
TGTTTTGTGTGAGGTGGCTTGTAGCTAGCTACTTCCTTACAGATGGTAGAGTATTCCAATCCTCTTTGTGTTAGG
GTTCTTGCTTCCAGTTTGGGATGTATTAAAACCACCATTTCACTGCTTCCCTTCCTCAATATGCTCTGCAGCTTT
TCTTGCTGTTTAAACCTCTCGCCTCAGCTTTATTTATTTGTAAGCTGCATTACTAACTGCCCAGTGATTCGGTGA
AAGCTTTTTACTGAAAAAGTTAACATTTCTAGTCATCCCAATCAACTGGCTTTTTTCAACCAAAATTTTATATCA
TTCTTTGTCTATCAGATACGAGAGGAAGGAAGATAATACGAAGACATGTTGAATAGTGAAAAAAAAAAAAAAAAA
A

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FIGURE 4800

MSGARAAPGAAGNGAVRGLRVDGLPPLPKSLSGLLHSASGGGASGGWRHLERLYAQKSRIQDELSRGGPGGGGAR
AAALPAKPPNLDAALALLRKEMVGLRQLDMSLLCQLYSLYESIQEYKGACQAASSPDCTYALENGFFDEEEEYFQ
EQNSLHDRRDRGPPRDLSLPVSSLSSSDWILESI

FIGURE 4801

GGCACGAGGGAATGGCGGCGGCTGCGGACTCGTTCTCAGGCGGCCCCGCGGGGGTGCGGCTTCCGAGGTCGCCGC
CACTCAAGGTGCTGGCGGAGCAGCTGCGGCGCGACGCGGAGGGCGGCCCGGGCGCGTGGCGGCTGTCACGGGCGG
CGGCGGGCCGCGGGCCGCTGGACCTGGCGGCCGTGTGGATGCAGGGCAGGGTAGTGATGGCGGACCGCGGCGAGG
CTCGGCTGAGGGACCCGAGCGGGGACTTCTCGGTCCGCGGCCTGGAGCGGGTGCCGCGCGGGCGGCCCTGTCTAG
TCCCAGGAAAGTATGTGATGGTGATGGGAGTGGTTCAGGCCTGCAGCCCTGAGCCCTGCCTGCAGGCTGTGAAGA
TGACAGACCTTTCTGATAATCCCATCCATGAAAGTATGTGGGAACTGGAGGTAGAAGATTTACACAGGAATATTC
CTTAGAGTATGTTGGAACTGTCGTTAAAAACAACCAAAATCCCGAAACTATTTAGAAGCTTATAATGATGTGGGT
TTCATGGACACTTTTCAATGCGTATTTTTCAAATGCTTCTCAGAGAGCCTTGCTTTGGTTGACCAAGGAGTCCGG
ATGTAGGAATGTTTAAATCCTCGGATACTTCAGTGACACAGCCTCTGCTGCCCCTTGCTTTGCCTGTGTTTGCTG
ATGAAAAGCAGATGCTTGTGTTTCATTTTCCTTCCTGGTTTGTGTGTGTTAATTCTCTCTCTCTCTCTCAGACAC
AGAAGTCTCATGTTGCATTTTCCAAATTTTATGAGTGATGATACTTTTTCCATTACTGCTGCGTCCCTGTTTTAC
AATGCAAAATTTAAGTACGGTCATTGCCCATGGTGATTAAAGTGTGGTTATGGGCAGGAAGACAGACTGTGTAAA
AAAGGAATGACATCCTGGCTCCTCATCTTCTTCATCAGCAACTACCATAACCAGTTTGCGAGTCAAATGGCATTT
CCTAACGGCAGGCATGGCGGCCCCTGAAAGACAACAGCTCCCTTTCTGCTTCGGACACCACTCAAACATTTAGAC
GCAGCTCTATCCCTTTTCCTAGCTAGAGAAGGTGATGCCTTCTTCCATTACTCAGAGATGTTGAGACGTTTTCAG
AATTTCTTGTTGAAATGAAAAACATCAAGATAAAGGACGCCTTTCAGGCATTAGCTAAACTTCCACTTCATAACT
TTCGGCGAGACGTGGTGAGCCTCCTGGTGTAGAGTTCTTTTGTCTTTGTATGGAATGACTTTTTGCTGTGATGGT
TTTGAATGTTGGGTTTCTGCTGTCTGCTTAGTACCCATGCCTGAATTTTTTGAGATTGTAAATATCAAAGGAGTT
AGATTGTGTCCTGACATGGTTGTAGACTTTCACCTGGATTATTGATATTCTACCTCTAATAAATTTTTAATAGGC
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAA

FIGURE 4802A

GGCGGAGCCGCCTCGGACGATAAGGAAATTGAGATTTGGAGAAGTTAAATAACCAAGACTTCACAGACAAAGTCT
CACTCCTTTTGCCCAGGCCGGTGTGCATTGGGGTAATCTCGGCTGACTGCAACCTCCGTCCCCTCCGAGTTCAAG
TGATTCTCCTGCCTCAACCTCCCGAGTAGCTGGGATTACAGGCAAAGCCATGACTACAGTAGTGGTACATGTGGA
CTCCAAAGCTGAGCTCACTACCCTGCTGGAGCAGTGGGAAAAGGAACATGGCAGTGGGCAGGACATGGTACCTAT
CCTTACCAGGATGTCTCAATTGATTGAAAAAGAAACTGAAGAGTATCGTAAAGGGGATCCAGACCCATTTGATGA
TCGACATCCTGGTCGAGCTGATCCAGAGTGTATGCTGGGCCACTTGCTGAGAATACTCTTCAAGAATGATGATTT
CATGAATGCACTGGTGAATGCATATGTGATGACAAGCCGAGAGCCCCCTTTAAACACTGCAGCTTGCAGACTCCT
ATTAGACATCATGCCAGGGCTGGAAACTGCTGTCGTCTTTCAAGAAAAGGAGGGAATTGTCGAGAATCTTTTCAA
ATGGGCCCGAGAGGCCGATCAACCATTGAGGACATATTCTACTGGACTGTTAGGAGGTGCTATGGAAAATCAAGA
CATTGCTGCCAACTATAGAGATGAAAATTCACAGCTGGTGGCAATAGTGCTTCGAAGACTGAGGGAGCTACAGCT
ACAGGAAGTGGCTTTGCGGCAGGAAAACAAGCGTCCCAGTCCACGGAAGCTCTCTTCTGAACCCCTTTTGCCTCT
GGATGAGGAGGCTGTGGATATGGACTATGGTGACATGGCTGTAGATGATGCTGAAATTCAGAAGTCAGCACTTCA
GATTATCATCAATTGTGTGTGTGGCCCAGATAACCGAATATCCAGTATTGGTAAATTTATCTCTGGTACTCCTCG
GAGAAAGCTGCCTCAGAACCCTAAAAGCAGTGAGCACACCCTGGCCAAGATGTGGAATGTGGTTCAGTCCAACAA
CGGCATCAAGGTGCTCCTGTCCTTACTGTCCATTAAGATGCCCATCACAGATGCAGACCAAATCCGGGCCCTGGC
CTGCAAAGCCCTAGTGGGCCTGTCTCGCAGTAGCACTGTCCGGCAGATCATCAGTAAACTGCCCCTTTTCAGCAG
CTGCCAGATCCAGCAGCTGATGAAGGAGCCTGTGCTGCAGGACAAGCGCAGTGACCATGTCAAGTTCTGCAAGTA
TGCTGCTGAACTCATTGAACGGGTGTCAGGAAAACCACTTCTCATTGGCACTGATGTTTCCCTAGCACGACTGCA
GAAAGCAGATGTTGTTGCCCAGTCAAGGATCTCCTTCCCTGAGAAAGAGCTGCTTTTGTTGATACGAAACCATCT
TATTTCTAAAGGGCTTGGAGAAACAGCAACCGTGCTGACAAAAGAGGCTGACCTGCCCATGACTGCTGCCTCCCA
TTCTTCTGCCTTTACCCCAGTCACTGCTGCTGCTTCTCCTGTCTCTCTACCCCGAACCCCTCGTATCGCTAATGG
CATTGCAACTCGTCTGGGCAGCCATGCTGCTGTGGGTGCCTCTGCGCCTTCTGCCCCTACTGCTCATCCTCAGCC
ACGGCCCCCCCCAGGGTCCGCTAGCTCTGCCCGGCCCATCTTATGCAGGCAACTCCCCTTTGATTGGTAGAATCAG
TTTTATCAGAGAGAGGCCATCACCCTGCAATGGCAGGAAAATCAGAGTGTTGCGGCAGAAGTCGGACCATGGTGC
CTACAGCCAAAGCCCAGCCATAAAAAAACAGCTGGACAGACATCTTCCTTCCCCACCTACGCTGGACAGTATAAT
CACAGAGTATCTTAGAGAACAACATGCTCGCTGCAAGAATCCAGTTGCCACCTGCCCACCTTTCTCCCTCTTTAC
TCCTCACCAATGTCCTGAGCCAAAACAGAGGCGGCAAGCGCCAATAAACTTTACGTCAAGGCTAAACCGCAGGGC
ATCATTTCCAAAGTATGGAGGGGTGGATGGCGGATGCTTTGATAGGCACCTTATCTTTAGCAGATTCCGTCCTAT
TTCAGTGTTCCGGGAAGCCAATGAAGATGAGAGTGGCTTCACCTGCTGTGCATTCTCAGCACGGGAGCGGTTCCT
GATGCTTGGCACCTGCACAGGGCAGCTGAAGCTCTATAATGTGTTTAGTGGACAGGAGGAGGCCAGCTATAACTG
TCACAACTCAGCCATCACACATCTTGAACCTTCCAGGGATGGGTCCTTGCTGCTGACATCTGCTACTTGGAGCCA
GCCTTTGTCTGCACTTTGGGGAATGAAGTCAGTATTTGATATGAAGCATTCCTTCACAGAAGATCACTATGTTGA
GTTCAGTAAGCACTCCCAGGATCGGGTCATCGGCACAAAAGGAGACATTGCCCACATTTATGATATTCAGACTGG
CAACAAGCTGTTGACTCTGTTTAACCCAGATCTTGCCAACAACTACAAGAGGAACTGTGCCACCTTTAATCCTAC
AGATGATCTTGTCTTAAATGATGGCGTCCTCTGGGATGTCCGCTCTGCACAGGCCATCCACAAGTTTGACAAGTT
CAATATGAACATCAGTGGTGTTTTCCATCCAAATGGACTGGAGGTGATCATTAATACTGAGATTTGGGACCTTCG
AACTTTTCATCTTTTGCATACTGTTCCCGCTCTGGATCAGTGTCGCGTGGTGTTCAATCACACGGGAACAGTGAT
GTATGGAGCTATGTTGCAGGCAGATGATGAAGATGACTTAATGGAAGAGAGGATGAAAAGCCCCTTTGGGTCATC
CTTCCGAACATTTAATGCAACTGACTACAAACCTATAGCAACCATTGATGTGAAACGGAACATCTTTGACCTGTG
TACAGACACCAAAGACTGCTATCTTGCTGTCATTGAGAATCAAGGCAGCATGGATGCCCTGAACATGGACACAGT
ATGCAGGCTGTATGAAGTGGGCAGGCAGCGTCTGGCAGAGGATGAGGATGAAGAGGAGGACCAGGAAGAGGAAGA
ACAGGAGGAAGAAGATGATGATGAAGATGATGATGACACCGATGATTTAGATGAGCTTGACACTGACCAGTTGCT
GGAGGCGGAGTTGGAGGAGGACGACAATAATGAGAACGCAGGGGAAGATGGGGACAATGACTTCTCTCCCTCTGA
TGAGGAGCTAGCAAACCTTCTAGAGGAGGGAGAGGACGGGGAGGATGAAGACTCTGATGCAGATGAGGAGGTGGA
ACTGATCCTGGGGGGACACTGACAGCTCTGACAACTCTGATTTGGAAGATGACATCATCTTATCTCTGAATGAGTG
AGGAGCCATCACTGCTTGGAAGAGATTCTTGGCAGGCGAGAAACTGAGTCAAATGAATTCAGAACATATTCCCTT
CTCTTTCTCCCAGGGCTGTCTGTCTTTTAAGGAGCTGCATGCCCTGCATTCAGAAGATTATGGCTTAGAGAGCCT
CATTGGCACCCGAGGGTCCTTCCAGAATCAATAACCACCACAAAAATGACAACAGGGACTAGGCCCTACTCTGCA

FIGURE 4802B

CCCCCCACATCCACCCCCCACCATTTCCTAGGATGGACATATCTTTCAAGGGGAAAAAAAAACCATGTCTCTGGG
GTATTTCACAATATATTTTCTTTGTATAGTGTTCTTTACTTAAAGAACAAGAAATAGTTTTTTATAAAACTTTAA
AAAGGAAAAAAAAAACAGGCATTTATAACTGAGGGTATGAACTTATATCCACCAGGTCTCTTGTCCCTGCACTTCA
TTTTCTTTGGAAGAAAATGATGTCTAAAGAACAATATAGAGGCATTTTTACATACGTATTTAAATGAAAAGGAAA
ATCGTGGTTTCTTAAATTGATAAGGATTAAGAATATTTTATTATAAATATAATATATGATTTTTTAACCTGTTTT
GTTGCCTCATATGCTGTCAGGTTAATTTGTTTTCCTTCGTGCCAGAGGTGGGGAGGAAGGCACTCTGTCTGCTGG
GTAAATGCCTAAATTCACTCACCTTCATGGTTTGGGGGCAGCATGGTCATTGTGGATATTGGTTTTGTGGAGTTG
AGGGAACTTAGGATATAAGTTCACTCCCTCTATTTTTCTTTGTGATTCAGTTTTTCAAAAATCTTTTTTTCTTCC
CTTTCTCCCCATTGTGGAAATTACAAATCAAAGGCCTTTTTCTTTAATGTAAAGTGTATTTATTTAAAAAAAATA
CAAAATAAACTACAAGTCTGTCTTTGTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAA

FIGURE 4803

MTTVVVHVDSKAELTTLLEQWEKEHGSGQDMVPILTRMSQLIEKETEEYRKGDPDPFDDRHPGRADPECMLGHLL
RILFKNDDFMNALVNAYVMTSREPPLNTAACRLLLDIMPGLETAVVFQEKEGIVENLFKWAREADQPLRTYSTGL
LGGAMENQDIAANYRDENSQLVAIVLRRLRELQLQEVALRQENKRPSPRKLSSEPLLPLDEEAVDMDYGDMAVDD
AEIQKSALQIIINCVCGPDNRISSIGKFISGTPRRKLPQNPKSSEHTLAKMWNVVQSNNGIKVLLSLLSIKMPIT
DADQIRALACKALVGLSRSSTVRQIISKLPLFSSCQIQQLMKEPVLQDKRSDHVKFCKYAAELIERVSGKPLLIG
TDVSLARLQKADVVAQSRISFPEKELLLLIRNHLISKGLGETATVLTKEADLPMTAASHSSAFTPVTAAASPVSL
PRTPRIANGIATRLGSHAAVGASAPSAPTAHPQPRPPQGPLALPGPSYAGNSPLIGRISFIRERPSPCNGRKIRV
LRQKSDHGAYSQSPAIKKQLDRHLPSPPTLDSIITEYLREQHARCKNPVATCPPFSLFTPHQCPEPKQRRQAPIN
FTSRLNRRASFPKYGGVDGGCFDRHLIFSRFRPISVFREANEDESGFTCCAFSARERFLMLGTCTGQLKLYNVFS
GQEEASYNCHNSAITHLEPSRDGSLLLTSATWSQPLSALWGMKSVFDMKHSFTEDHYVEFSKHSQDRVIGTKGDI
AHIYDIQTGNKLLTLFNPDLANNYKRNCATFNPTDDLVLNDGVLWDVRSAQAIHKFDKFNMNISGVFHPNGLEVI
INTEIWDLRTFHLLHTVPALDQCRVVFNHTGTVMYGAMLQADDEDDLMEERMKSPFGSSFRTFNATDYKPIATID
VKRNIFDLCTDTKDCYLAVIENQGSMDALNMDTVCRLYEVGRQRLAEDEDEEEDQEEEEQEEEDDDEDDDDTDDL
DELDTDQLLEAELEEDDNNENAGEDGDNDFSPSDEELANLLEEGEDGEDEDSDADEEVELILGDTDSSDNSDLED
DIILSLNE

FIGURE 4804

GGCACGAGGGGCGTTTCCTCCAAGGCTGCCCACCAGAAGGACCTGCCCGAGAGGGTAGAGGGCATAGGGTCAAGA
TCAAGATAAGGCAGCTCCAGCCCCTGGAAGGCCAGAGACTTGCCAGTGTCCCACTAGCGGGCTCTTCGCAAGAAT
CCCCCCGGGCCCGCCGCAGCCAGGCGGCGGCCGGCAGAGGGCGCTGCTCGGGCATGGCGGAGGAGCGGCCGGGGG
CCTGGTTCGGCTTCGGTTTCTGCGGCTTCGGGCAGGAGCTGGGCTCCGGACGCGGGCGCCAGGTGCACAGCCCCA
GTCCGCTGCGGGCGGGCGTCGACATCTGCCGCGTGAGCGCGAGCTGGAGCTACACCGCTTTCGTGACCCGTGAGC
ACTCCCCGCCCCGTCCCCACTTATTCCAGCCGCGCTCCCCAGTCGCCTCCCCGCACCGCTGTGGCCAGTCCAGTT
TGTCTCCCCCGTTCAGGCCGCCAGCCCCACATTCTGGGTTGGTCCCCAATTCGACCCCTTCCCAGGAACACCCCG
CTCCCCCCATCCCCGCCGCCTCCATTCTGGCCACCCTGCTCCAATCCGCCCCGCAGGTGGAGGCCGCTTGGAGCT
GTCGGGCTCAGCCAGCGGCGCGGCGGGCCGCTGCAAGGACGCGTGGGCCTCGGAGGGGCTCCTCGCGGTGCTGCG
CGCCGGGCCGGGGGCCGGAGGCGTTACTGCAGGTCTGGGCGGCCGAATCGGCGCTGCGTGGGGAGCCATTGTGGGC
CCAGAATGTGGTGCCCGAGGCCGAAGGGGAAGACGATCCGGCCGGTGAGGCCCAGGCTGGGAGGCTACCCCTGCT
GCCCTGCGCCCGTGCCTACGTGAGCCCGCGGGCGCCCTTCTACCGGCCTCTGGCTCCGGAGCTGCGGGCACGCCA
GCTGGAGCTGGGCGCCGAGCACGCGTTGCTGCTGGACGCTGCTGGCCAGGTGTTCTCCTGGGGCGGGGGCAGGCA
TGGACAGCTGGGCCATGGGACCCTGGAGGCAGAGCTGGAGCCACGGCTGTTGGAGGCGTTGCAGGGCCTAGTCATG
GCTGAGGTGGCCGCGGGGGGCTGGCATTCTGTGTGTGTGAGTGAGACTGGGGATATTTATATCTGGGGCTGGAA
TGAATCAGGGCAGCTGGCCCTGCCCACCAGGAACCTGGCAGAGGATGGAGAGACTGTCGCAAGGGAAGCCACAGA
ACTGAATGAAGATGGTTCTCAGGTGAAGAGAACGGGTGGGGCTGAGGATGGAGCCCCTGCCCCCTTCATAGCTGT
CCAGCCCTTCCCGGCATTACTGGATCTCCCCATGGGCTCAGATGCAGTCAAGGCCAGCTGTGGATCCCGGCACAC
AGCTGTGGTGACACGAACAGGGGAGCTCTACACCTGGGGCTGGGGTAAATATGGACAGCTGGGCCACGAGGACAC
CACCAGCTTGGATCGGCCTCGCCGTGTGGAATACTTTGTAGATAAGCAACTCCAAGTAAAGGCTGTCACCTGTGG
GCCGTGGAACACCTACGTGTATGCTGTGGAGAAAGGGAAGAGCTGACATGTGTACGTATATGTATATGCAACACC
TGTGAGACCCCCATTCAGGTCAAGGAAAACCATTGCCTGCACCCCAAGGGCCCCATATTTGCCCCTCCCCATCAC
AGTCCTGCCCTTCACCCTCAAGCACGGTCCTAAACTTGTCTGCACTTTAGAAACACCTGGAGAGCATTGAAAACT
CTGCTGCCTAAGGTCAGCATCAATCAAAACAATGAAATCAATGAAACAATGAAACCAGAGCTTCTAGGTGTGTGG
CCTGGATAGTGGTAGATTCAAAGCTCCACCCACCTCATCCCAGGTACATTTGATGTGCAGCTGAGATTGGGGCAC
ATTCCAGGTCATCGTCTTCTGTCAGTCATTTCCCTGCTTTCGTTTGAATTTTACCATTCTTGTATGCAGCCTTAT
ACGACATAGTTGTGTTTGCTTTTGAGTGTTAGATAAATGGAATCCTGTGTATGTGCTTTTGTGTCGTTTTTGTCA
CTCAGCATTGTATAATCCATCCTTGTTGGGTCCTGGAGTTCATTTTTAATGCTATATGGTGTTCTGTTGTATGAA
TAATACCTCAAGTGATACAAAAAAAAAAAAAAAAA

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FIGURE 4805

MAEVAAGGWHSVCVSETGDIYIWGWNESGQLALPTRNLAEDGETVAREATELNEDGSQVKRTGGAEDGAPAPFIA
VQPFPALLDLPMGSDAVKASCGSRHTAVVTRTGELYTWGWGKYGQLGHEDTTSLDRPRRVEYFVDKQLQVKAVTC
GPWNTYVYAVEKGKS

FIGURE 4806A

ACCATGATTAAAACAGATTTTCTACCAAAAGCAAAGCAAAGAGAAGGGACTTTTTCAAAATCTGATTCTGAAAAA
ATAGTGAAGGGAACTAAGAGATCAAGCCGGAGAGCTGGTAAAGCTGAACAAACAGGGAATAAAAGGTCTAAGCCC
TTAATGAGATCTGAGCCGGAGAAAAATACTGAGGAATCTGTTGAAGGCATTGTAGTCTTAGAAAATAACCCACCT
GGTTTGCTTAATCAAACAGAATGTGTGTCAGATAATCAGGTTCATCTTTCTGAATCTACAATGGAGCATGACAAT
ACAAAGCTTAAAGCAGCAACAATGGAAAATGCTGTATTATTGGAAACTAATACTGTAGAGGAGAAAAATGTAGAA
ATTAATTTGGAATCCAAAGAGAATACACCCCCAGTAGTAATATCAGCAGATCAAATGGTAAATGAGGATAGTCAG
GTTCAGATAACTCCAAATCAGAAAACCCTTAGACGGTCTTCAAGGCGACGTTCAGAAGTAGTAGAGTCTACCACT
GAAAGCCAAGATAAGGAAAATAGTCATCAAAAAAAGGAACGACGTAAGGAAGAAGAAAAACCTCTTCAGAAGAGT
CCATTGCATATAAAAGATGATGTGTTACCTAAACAAAAACTGATTGCTGAACAAACTCTACAGGAGAATTTAATT
GAGAAAGGAAGTAATTTACATGAGAAGACTCTTGGGGAAACTAGTGCTAATGCAGAAACTGAACAAAATAAAAAA
AAGGCAGACCCTGAGAACATTAAGTCTGAGGGGGATGGTACCCAGGACATTGTAGATAAGTCCTCTGAGAAACTA
GTCAGAGGCCGAACACGGTATCAAACTAGAAGAGCATCTCAGGGTTTGCTTTCCAGCATTGAAAACTCAGAATCT
GATAGTTCGGAGGCAAAAGAAGAAGGTTCTAGGAAGAAGAGATCTGGAAAATGGAAAAACAAAAGCAATGAAAGT
GTTGACATTCAAGATCAAGAAGAGAAAGTGGTGAAACAGGAATGTATAAAAGCTGAAAATCAGTCACATGATTAT
AAAGCAACTTCTGAAGAAGATGTAAGCATAAAATCTCCGATTTGCGAAAAACAAGATGAAAGTAATACTGTAATA
TGTCAGGATTCTACAGTAACTTCAGATTTGTTGCAAGTTCCTGATGATTTACCAAATGTGTGTGAGGAAAAAAAT
GAAACTAGCAAATATGCAGAATATTCCTTTACAAGTCTACCTGTGCCAGAATCAAATCTAAGGACTAGAAATGCC
ATTAAGAGATTACATAAGCGAGACTCTTTTGATAATTGTAGTTTGGGAGAATCCTCAAAAATAGGGATATCAGAT
ATTTCTTCGCTTTCAGAAAAAACTTTTCAAACACTTGAATGCCAACACAAGAGAAGTAGGAGGGTGAGGAGATCT
AAAGGTTGTGATTGCTGTGGGGAAAAATCACAACCTCAGGAAAAGTCACTCATTGGGTTAAAGAATACAGAAAAT
AATGACGTAGAGATTAGTGAAACAAAAAAGGCAGATGTGCAAGCACCTGTAAGCCCATCAGAAACTTCTCAAGCT
AATCCATATTCTGAAGGACAATTTTTAGATGAACATCATAGTGTGAATTTTCATTTGGGTCTCAAAGAGGATAAT
GATACTATTAATGATTCATTAATTGTTTCTGAAACCAAATCAAAAGAAAACACTATGCAAGAATCTCTTCCTTCT
GGAATAGTAAACTTTAGAGAGGAAATTTGTGATATGGATTCTAGTGAAGCAATGTCTCTTGAAAGCCAGGAGTCA
CCTAATGAAAATTTTAAAACTGTTGGCCCGTGTTTAGGAGACTCGAAAAATGTTTCACAGGAATCTTTGGAGACA
AAAGAAGAAAAACCAGAAGAAACCCCAAAAATGGAACTGAGTCTAGAGAATGTTACTGTTGAAGGAAATGCATGT
AAAGTAACAGAATCCAATCTAGAGAAAGCAAAAACTATGGAATTGAATGTAGGAAATGAAGCTAGCTTTCATGGA
CAAGAGAGAACCAAAACTGGTATTTCTGAAGAAGCAGCAATAGAAGAAAATAAAAGAAATGATGACTCTGAAGCA
GACACAGCTAAACTGAATGCCAAAGAAGTAGCAACTGAGGAATTTAATTCAGATATTAGTCTTTCTGATAATACT
ACACCTGTAAAATTGAATGCTCAAACTGAGATTTCTGAACAAACAGCAGCTGGGGAACTAGATGGAGGAAATGAT
GTATCTGATCTACACTCATCTGAAGAAACGAATACCAAAATGAAAAATAATGAAGAAATGATGATCGGCGAGGCA
ATGGCTGAAACTGGCCATGATGGTGAAACAGAGAATGAGGGCATAACTACCAAAACCTCAAAGCCTGATGAAGCT
GAAACAAACATGTTGACTGCAGAAATGGACAACTTTGTTTGTGACACAGTTGAAATGAGCACTGAAGAAGGAATC
ATTGACGCTAATAAAACTGAAACAAATACTGAGTATAGTAAATCTGAAGAAAAATTAGATAACAATCAAATGGTA
ATGGAAAGTGATATTTTACAGGAAGATCACCATACTTCACAGAAAGTGGAGGAACCATCACAGTGTCTGGCATCT
GGAACAGCTATCTCTGAGCTAATAATAGAAGACAATAATGCATCTCCTCAAAAACTAAGGGAACTTGATCCTTCA
CTTGTGTCAGCAAATGACAGTCCTAGTGGCATGCAGACACGCTGTGTCTGGTCTCCTTTGGCTTCTCCGTCTACG
AGCATTTTAAAGAGAGGACTAAAAAGATCCCAAGAAGATGAAATCTCATCACCTGTTAATAAGGTTCGCCGTGTC
TCCTTTGCAGATCCAATATACCAAGCAGGATTGGCAGATGACATTGATAGACGGTGCTCTATTGTTAGGTCCCAT
TCTTCCAATAGTTCTCCCATAGGAAAAAGTGTTAAAACTTCTCCTACTACACAATCTAAGCATAATACCACTTCA
GCCAAAGGATTTCTGTCCCCAGGATCACGTAGCCCTAAATTTAAGAGCTCAAAGAAGTGTTTAATTTCAGAAATG
GCCAAAGAATCCATACCATGCCCAACAGAAAGTGTTTACCCACCATTGGTGAACTGTGTGGCACCAGTTGACATC
ATTTTACCTCAGATTACATCAAACATGTGGGCAAGAGGCCTGGGACAACTCATTAGAGCTAAGAATATAAAAACT
ATTGGTGATTTGAGTACTCTTACAGCATCTGAAATAAAAACTCTTCCTATCCGTTCTCCAAAAGTGTCCAATGTA
AAAAAGGCTCTCAGAATATATCATGAGCAGCAGGTGAAGACTCGTGGACTAGAAGAGATTCCAGTTTTTGATATT
TCTGAAAAAACAGTAAATGGAATAGAAAATAAATCTTTGTCACCTGATGAAGAAAGACTTGTCTCAGATATAATT
GATCCTGTTGCTTTAGAAATTCCATTATCCAAAAACCTTCTGGCACAGATTAGTGCTCTTGCTCTTCAGCTGGAT
TCAGAAGATCTTCATAATTATTCAGGAAGCCAACTATTTGAAATGCACGAGAAACTAAGTTGTATGGCAAACTCT

FIGURE 4806B

GTAATAAAAAATCTACAGTCACGTTGGAGATCACCATCCCATGAAAATTCTATTTAGTATTTTCAGAGAAAATTG
AAGGTTTTTTTAAACATCACTGGATTTCTTGATTGAGGAAACAAGTTCTGAAATAATAGCACAATTTCAAAGAAG
AGACTCTTTGCAAAGTTGATAACATTTCAAACCCTGAAGGACAGTGACTTATTATGTAAGTTCAATTTTGTAAGT
TCATTATGTAAGATCCTTTTTTTTTTCATAATATGTATTCTTGGCTGCTATGCGTGGTTTTTCAGGAAATTTAAT
TATCTTACTGAGATGTGAAAGCAAAACTAGTAACAGAACTTACATTTTATTTCATGCTTTCTTAAACCCGTGCAT
ATTCTGGTGAAACATGTAAAATACTTTAAGTAAAATTGAACATTTTTATTTGAATTTTTGCTGAACTGATAAAGG
TGTTTATATTTTTGTTTGTTGGTTTGTTTAATTCATGTTTGTTGGGACTGAGGTTTAGGAAGTTTGTTACTGGTT
AAAAACCTCAAATGAAATGCGAAAGAATTTGAATTTTTCCTGCATATGTCAACTTTGGACAGCTTTCAAGAAAAA
TGAGAAAAGTTTCAACTTCTGGCGGTTAAAATATTAATGCAGAATTTACTAAGATTTTATTCATTTGCATTAGCA
AATATTCATGCAGCAGCAGTTGACTGAAAATTTATTCTTATGAGACGTATAGTATTCATTTTTAAATGCATGATT
GTACATTATGTATAGACGACAATGTTTTTAATTTATAAATTTCATTCTTTGTTAATTGCATGGGTTTTTCTGCAG
CTTATTGTGAATACCTTGGTTCTGTTCAATAGAAACATTTTGTATATATTAAATACTGAAATATCAGTATCGACG
GTGGAAGTGCTTCATGGGCTTGCTGCACATATTTGTAGGATACTGTATCTGCAAATGCAACAACAAATAGTTTTG
TACTTGGTTAACAGTCTTAGTTAAAACATGAGTTTATTTTCTAAAAGTATCCAGAATAAGTAAAATTATAGAAAT
AAGAAAATGTTACACAACTTTGCTGTTCATACCCTTACCTTCTTACTACTTTTGGTTTGGAGGAGGGTATCACCA
CTAGAAAGTGTGCCTCCTTAAGATTTCTTAAAGGAAAGTTAGTTTCAGTATTTCACAGCAAGTTGGACTACAAAA
TCTAGAGTTGATCTGCTTTTTAAACCTTCATTTAAAAGCAAACTTGGAAGAAATTTGAAACTGATGTTTTTAATA
TATGTCTGTGTTGCCTAGGTTTTCTTTTTTTAAAGAGGTATGTAATTAAAACCTTTGTAAAATTTGCCAACTAAT
ATTAGTGCCTGACTTCCCATATTTGTTTCATCTTTTTAACTGACAGTATATCTCACTTCTTCTTTGAATAGAATG
AGTGAGTGATCTCAGTTTTCACATTTTATTCAGAAGCTAATCCCTACTTAGCAAGGCACACATTCTACAGCAAGT
CATAGAAAGTTTAATCCTTGTGCCTCCTTAGCTCTCGTATATTCAGGGATCTCTATAAAAGTTGGTGTCTTTTTT
CATCATCATAAATTCATCATAATCACAGATATTTTTGGGTCTAAGATATTCATATACCAAGGATGGTTTTGTAAA
GAATTCTGGGATCATTGAATTAAGGATTGTGGCTTGAAGTAACTAAAGAAAAATACTAATTTCCTTAAAAGGAAT
TATAATTATGATTTACATTTTACATCATTAATTTCCCAAATTATATTTAACCGTAAGGAGGTGCACATGAGTTTT
TAGCAAACAGGTATGAATAAGCAGCTATGTATATGTGTTTGGGGCAGAGGGGAGCAGATTACTTTAACACACTTC
AGAATTAAAATCAGTTCGTTTCATGACTCTGTGCCTTAACGTTTGTGTGAACTAAACTTGCTGATTGAATGAAAT
TCTTGGGAAGCCGAACAGTAATAGCAGAAAATGTGACCAAATGAGTATCATGTACTTAAATCACTGAATTTTATA
TAAGCACAAGTATTAATTTTAAAAACATTATAGTTTAATAAAGCTGCATTTAAAAATATTTGGGAGCAAAGACAA
GCATGCTAAATCTTCATTTTGCTATGGCTATAAGCATATATTTTTGGCAACTTATTTGCAATATTCTTGCCTTAA
AGTTTCCTGCAAATTTCCCCCTTAGTAATTCCCGAATAGCAAAACATTAATATTCCATGATTAGCTCTACTGTGT
TGTCTCACTATTAAAATGGAATTCGTTTTTTCAAATCTTTTCTAATGGTTAATAAAACAAATGTCAGATCATAAT
AACACTCAAATGTGTCTTAATTGTCTTGTGCATATTTAAGAAGAAAAAACTAGTGGCATACAGGAT

FIGURE 4807

TMIKTDFLPKAKQREGTFSKSDSEKIVKGTKRSSRRAGKAEQTGNKRSKPLMRSEPEKNTEESVEGIVVLENNPP
GLLNQTECVSDNQVHLSESTMEHDNTKLKAATMENAVLLETNTVEEKNVEINLESKENTPPVVISADQMVNEDSQ
VQITPNQKTLRRSSRRRSEVVESTTESQDKENSHQKKERRKEEEKPLQKSPLHIKDDVLPKQKLIAEQTLQENLI
EKGSNLHEKTLGETSANAETEQNKKKADPENIKSEGDGTQDIVDKSSEKLVRGRTRYQTRRASQGLLSSIENSES
DSSEAKEEGSRKKRSGKWKNKSNESVDIQDQEEKVVKQECIKAENQSHDYKATSEEDVSIKSPICEKQDESNTVI
CQDSTVTSDLLQVPDDLPNVCEEKNETSKYAEYSFTSLPVPESNLRTRNAIKRLHKRDSFDNCSLGESSKIGISD
ISSLSEKTFQTLECQHKRSRRVRRSKGCDCCGEKSQPQEKSLIGLKNTENNDVEISETKKADVQAPVSPSETSQA
NPYSEGQFLDEHHSVNFHLGLKEDNDTINDSLIVSETKSKENTMQESLPSGIVNFREEICDMDSSEAMSLESQES
PNENFKTVGPCLGDSKNVSQESLETKEEKPEETPKMELSLENVTVEGNACKVTESNLEKAKTMELNVGNEASFHG
QERTKTGISEEAAIEENKRNDDSEADTAKLNAKEVATEEFNSDISLSDNTTPVKLNAQTEISEQTAAGELDGGND
VSDLHSSEETNTKMKNNEEMMIGEAMAETGHDGETENEGITTKTSKPDEAETNMLTAEMDNFVCDTVEMSTEEGI
IDANKTETNTEYSKSEEKLDNNQMVMESDILQEDHHTSQKVEEPSQCLASGTAISELIIEDNNASPQKLRELDPS
LVSANDSPSGMQTRCVWSPLASPSTSILKRGLKRSQEDEISSPVNKVRRVSFADPIYQAGLADDIDRRCSIVRSH
SSNSSPIGKSVKTSPTTQSKHNTTSAKGFLSPGSRSPKFKSSKKCLISEMAKESIPCPTESVYPPLVNCVAPVDI
ILPQITSNMWARGLGQLIRAKNIKTIGDLSTLTASEIKTLPIRSPKVSNVKKALRIYHEQQVKTRGLEEIPVFDI
SEKTVNGIENKSLSPDEERLVSDIIDPVALEIPLSKNLLAQISALALQLDSEDLHNYSGSQLFEMHEKLSCMANS
VIKNLQSRWRSPSHENSI

FIGURE 4808

GAACACCATCGCGCTCAGCTGGTGGCCTGTCTTTTGCCCATCCTCATTTCCTTCCTTTTGGATGAAAATTCTCTG
GGATCAGCAACTTCCATAATGAGAAATTTACATGACTTTGCTCTACAAAATCTCATGCAAATTGGACCTCAGTAT
TCATCTGTTTTTAAAAGTTTAGTGGCTTCTTCTCCAGCCCTAAAAGCCCGCCTTGAGGCTGCTATAAAGGGCAAT
CAGGAAAGTGTCAAAGTCAAGATACCAACATCTAAATATACTAAGAGTCCTGGAAAAAACTCAAGCATCCAATTA
AAGACCAGTTTCCTCTGATTTTTTTTTTGGAATAGTAAGCACCTTAATATAATAAATACTTGATCATTGCCTTTG
GTGACAAAAGGGACATTGTAGACACAAGTGCCCTTAGAGGTCTAGTTGATTGTTTTACCTTAAATAGCTGTGACT
CTTCAAAGTAACAGCATACTTAACATTTTTGTGTGTGTGCGTGGGGTTTGTGTTTTGTTTTGTTTTGTTTTTCTA
TTTAAAAAGACAATGGAGCTAACTTGCCAGGAATTTTAAGAAAGTGCTAAAGAACTAAACTTACTAAACAATCCA
CTGCTTTAAAAATGAAATGAATTTCTTCTAACAGTCCATACATATGTGGTATACTTAATACTGTGACAGATATAA
ATATGACTCTAGTGTAAATTATCTGCACTAATATTGTATCCCAATTGCTGATTTAAAATTCTGCTTTGGCCCGGC
ACAGTGGCTCATCCCTGTAATTCCAGCACTTTGGAAGGCCAAGGCGGGCGGATCACGAGGTCGGGAGTTTGAGAC
CAGCCTGACCAACATGGTGAAACCCCGTCTCTACTAAAAATACAAAAATTAGCCGGGTGTGGTGGCACACACCTG
TAATCCCAGCTACTCAGGAGGCCGAGGCAGGAAAATCGCTTGAACCTGGCAGGCAGAGGTTGCAGTGAGCCAAGA
TTGTGCCACTGCACTCCAGCCTGGGCGACAGAGTGAGACTCCATCTAAAAAAAAAAAAAAAAAAAATTCTGCCTTA
TTCAGTAATTGTATTAAACTTTCTCTGATTTCTCCAAGAAGATAAAATGATTGGAGAGCTATTTAGGAAACCTGG
TCTAGGATTATCCAGTATACAATAGTACAAATTACTTACAGCCTTACAGTGCAACATAAGATTTGGTGTCTATAT
CATGGTTTTCCACCATCTTTTGGTTTAGTTTATATTGGGTTCAGAAATTGAGTCTTACTCATTTTAAATAGAATA
AGCCATTTCCACTATTTTTCAAATGGATTTTTCTGTTTACCTCTGTTCTTACCAATTTTGTTCATTTTCATTTGT
GGCAAACATTTGTATCAATGAGTTTTAACCTAGGTTCATATCTACATTGTATTTAGATCAACTATGGGTTTATAT
AAATGCCAAATTTAGTACAACAAATTTAGGTCATCAGGTGAATACAAGTATTTTTTTTAACAGGAAACATTTTAT
TATAGAAAAAAGATTAATGATAAAGTCATATTGGTTGAAAAATATTTTTTAACTGTGTTCATGATTGTTGATTCT
CCTTCTACTTCAGTGTTATACTGTGTGAATCAAGCACTGTGTCAAAACAGAGCATTTCCCTCTTAAAAATTACAA
ACCGAAGTGATAGAAGCATGTCAGAATTGAGAAGACATTTTGAAGCAAGAACAATGTGATGTACCTATTTTATTA
TGTTTGTATATAAATACTATTGTAAATTGTTCAGAGTGAAAACATTTGACAAACTCTAACACTACAATCATTTTT
TCTAAATTACATAAATAAAGCTATTTTTCATTATAAAAAAAAAA

FIGURE 4809

TTCCAGCTCACTTGCGGTGGCAGCACAACTTAGGGAAATAATACCATCCAGTGCTTTGCCTAATGGCACAGTTCA
GCATATCCTCATGCCAGATGATGAAGGTGAAGGTGAATTGTGTTGGAAAAAAGTAGACTTAGGGGACATGAAGAA
TGTGGATGTCTTATCTTTCAGTCATGCTCCTTCATTCAATTTTCTTTCTAATTCATGTTGGTCTAAACCAAAGGA
AGATAAAGCAGTAGATACATCAGATTTGGAAGTTGCAGAAGATCCTATGGGCCTCCAAGGAATAGATCTGATCAC
AGCAGCATTGCTTTTTTGTCTAGGAGATTCTCCAGGAGGGAGGGGTATATCTGATAGCCGCATGGCTGATATTTA
TCACATTGACGTTGGGACTCAGACTTTTTCACTTCCATCTGCAATATTAGCTACAAGTACAATGGTTGGGGAGAT
AGCTTCAGCTTCAGCTTGTGATCATGCCAATCCACAGCTTTCAAATCCAAGTCCGTTTCAGACACTTGGGCTGGA
TTTAGTATTGGAATGTGTCGCTAGGTACCAACCCAAGCAGCGTTCAATGTTTACCTTTGTGTGTGGACAGTTATT
TAGAAGGAAAGAATTTTCTTCCCACTTTAAGAATGTGCATGGTGACATTCATGCTGGACTCAATGGCTGGATGGA
ACAGAGGTGCCCTTTAGCTTACTATGGTTGTACCTATTCTCAGCGTAGATTTTGTCCATCAATACAAGGAGCAAA
GATTATACATGACCGCCATTTGAGGTCATTTGGAGTTCAGCCATGTGTATCTACAGTATTAGTGGAGCCTGCTAG
AAACTGTGTGTTGGGATTACATAATGACCATCTAAGTAGTCTTCCTTTTGAGGTCCTGCAGCATATTGCAGGCTT
TCTCGATGGCTTCAGCTTATGTCAGCTCTCATGTGTATCCAAGTTAATGAGGGATGTGTGTGGCAGCCTGCTTCA
GTCTCGTGGCATGGTCATACTGCAGTGGGGGAAAAGGAAGTATCCAGAAGGAAATTCATCATGGCAGATAAAAGA
AAAGGTATGGCGATTTAGTACTGCATTTTGTTCTGTTAATGAATGGAAATTTGCTGACATCCTAAGCATGGCAGA
CCACTTGAAGAAATGCAGTTACAATGTTGTCGAGAAACGGGAGGAAGCAATCCCTTTGCCATGTATGTGTGTGAC
ACGAGAACTCACTAAAGAAGGACGTTCACTACGCTCAGTTTTAAAACCTGTACTTTAAAAGTTGTAATATTACTA
GCACATATATGCAAGCACCTAGTATAATTTCTTTGTAATATGTGAAACTTTATTAATGTATTAAATATTACAACT
AGCTAAATTTATTGTCACTGTGTATATAATGTTTTGAAGTGACATCTATTTTTATAAAGTACTGTTTAGTTGGAA
AAAGTTGCCTTAATGTTTGAAATGTGTGAAATTTTTGGAACTTGCTGGACAGGGTGATTTAATTTTTAGCTACAT
AATTTTAAGAATTAGTATTTTCAGTGGTGTGCATATTTTGGTTCTTAAATTTTTGCTTCTTAAACTAAAAAAATC
CTGACCAATTTATTTGTTGTTTTCTGTGGGTTGCGACCCATGCAATCAAAAAGCAAAATTTTGATTGAGATTTTT
TACAGCATAGGTTTTTCATATAAAAATATTCTGAATTTGTTAAGCACTGCCATAATATCATTATAATGTTTTTGT
CTTTTAGTGCTTCCCTATACAATTGTTAATGCACAAATGATCTCTAATATATACTTACATACGTAAAATCATAAA
GTTTGGTAATGCAGTTTATCGTTTTAAAAATAATCCACAAAGATGTTTTTATCTCACATACTTACAACTCAACAC
ACAGAGTGACCATGTGCAGCTTTCTTTTTTGTTAGATGCCACATCCGAAGACTCATCGCAGTGTGTTATATGACA
GGACAAAGCAAAAACAAACAAAAAGCAAGCCTGTGAATATAATTTAATTTGAAACTGCTCCTGGTATTATATATT
TGCTAGTTATCTAATGTTTTAAAAGAAAATATACCTCATTTAGGTTTGAATTGGGCGTATTGTGTAAATTTCAAA
TATTCAGAATGCAAAGGGCTTGACTATTAAATGTTTGCCTTTGATGTTTATAAACATTACAACTATGTTGTTTTA
AGACATTTAAAAACGTGAAATTTGTTATCTTTGTAAAATGACAATCATGTAGAAACCTGTCTTGGTTGACAATCT
CTTTGAAACATTTCCGAGTTAATTTCCCATAGGCTTCACCACCAAGAAAGTAAGAATTGCATCTTTACATAATGA
TCAAGGTATAATGGAAAAATATACCTATTCTTGAAGTAGTTTATTATAGTTTTCAAATTGATTTATACCATTATT
AACCTGATGTGGTCTGCTTAAAAAATGAATATATCAGTATTTAGAAATAAATTGCAAAGGTGGGAATATATACTT
AAATAATTTGTCTTAAGTAAATTAGCATTTGGTAGTCTGAAATGGTGACAGATTACTTGTTAAAATTGTGAAAAC
TCTGTTGTGTCCTCTCTTCCTACATTTGTCCCTGAGAGTACTCCACGATTACTAGGTTCTTGATTCCCTTATATG
GCAATCAGGCAGAGGCGTTCCTTAAGCATTAGAGAGTTCTGAAGCTTAAGATTTGTTTTGGTTGGATGAAGTCCT
TAGTACAGTTGAAAAACAGAGCATTAAAGACTAATCAATTGTTTTGCCTCACCAGTCATTTTAAATAGTAGAATA
CTTATTTCTCAGTGCTTAAAATTTCTTTTTCAACTGTGAGATTGAATAAACAGTCTCTATTTCTGTGGAAAAAAC
AACAGAAAAGAGATATTAAATACCATAAAATGTAACTCTGCCTTTTAAAGTTTTGCTGAAGAATGTGTCTGTGGT
TAGGATAGCACAAGCATTAACTTTTGTTTTATAGTTATGCTTTTTAAAATTCATTGTTTTTAAATTTAGACTTCT
TATTTCCACACTGGATTATGAGATACTTAACAATTTTTCCACCTTATATTTCTTTTACACATTTTGCTGTTCTCT
TTTTTGTTATTGTTATGCCACCATACCATTTTGTTAAAATGTTTTCTTTGTGAAACATTTGTTCAAGTTCTAATA
AAATTAATGTTTTCCCTTAACATGGCTCAATAACTTAAAAACGTTCATTTAAATAAAATTTTAATACTTGTTTGA
CAAAAAAAAAAAAAAA

FIGURE 4810

MPDDEGEGELCWKKVDLGDMKNVDVLSFSHAPSFNFLSNSCWSKPKEDKAVDTSDLEVAEDPMGLQGIDLITAAL
LFCLGDSPGGRGISDSRMADIYHIDVGTQTFSLPSAILATSTMVGEIASASACDHANPQLSNPSPFQTLGLDLVL
ECVARYQPKQRSMFTFVCGQLFRRKEFSSHFKNVHGDIHAGLNGWMEQRCPLAYYGCTYSQRRFCPSIQGAKIIH
DRHLRSFGVQPCVSTVLVEPARNCVLGLHNDHLSSLPFEVLQHIAGFLDGFSLCQLSCVSKLMRDVCGSLLQSRG
MVILQWGKRKYPEGNSSWQIKEKVWRFSTAFCSVNEWKFADILSMADHLKKCSYNVVEKREEAIPLPCMCVTREL
TKEGRSLRSVLKPVL

FIGURE 4811

GGGAGGAGTTACGCAGGCAGGGTTGTGGTTGCTGGCTGTTACCAGGACAACCGGAGGCGATTGACCGTTATCTGC
GGTTTGGAGCCGTTAGCGGGAGAGGCAGAGATATTCAGAGGTCTTTTAGGATGCGCTAAAGGGTCGTGAGGGCTC
TCTTAAAATTTTCTTCACAAGCGGTTATCCAGTCGTGCCCCGCGGCCCTGCTGCTGGCCCCGGGGATCTGAGTCG
TACCCTCTTGTTTTTCTCTGAGTCAGTCTTAAGGTGAAATGAAGTGTGGCCCAGTGGCTCCTCACTGTCGCTTCT
CTAGTTTTCTGCCTCCTTTTAGAAAATTGAATTGAAAAGACAGGATGAAGTGGACACAGCATGTGAAGACAATTC
TTTCAAGAAGTTTGGCTGTCAAGGAAAACAGAGAATGTGCTAAAGAACATACAGACACAGAGCAGACAGGCCACC
TTTGCAACCACATGGAGGTTTGTCTGATATTGAAGCTAAAGAAGCTAAGCTGGAAGACAGAGAGACCAAGTCCTG
ATGACATTGTTTGAACCCAGAGATCCAGACATGCCTGAAAACTAGTTTTACCACTGGACTTATCCGTTGAATGAG
CCAATAAACTCTCTTTTATACTTAACCTTGGGTTTTACCTGGATTTTTGTCATTGACAGCTCAAAATATTCTAAT
ATAGAAGTATACATCATTAAATCAACATTTCTTTTTTTCTCTGTCTTATTTTAAATGTAACTCTATAAGGTACTC
TAAAAGTATTCTACAGTCTCACTAAGTTAATCTGCAAATTTGGTAAAATTCCAATATTAATCCCAAAAGTATTTT
AAGAGCTTGTTTTTGTTGTTTGCTTGTTTGGGACTAAACAGAATTACTCCAAAATTCATTGAGAGAAAAAAAAAA
CATGAAAAAAAAAACAAGAAAATAGAATTCATAAAAGGAAATTGTATTATATAACAAAGCATAAAACAAGAATAA
TAA

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FIGURE 4812

GRSYAGRVVVAGCYQDNRRRLTVICGLEPLAGEAEIFRGLLGCAKGS

FIGURE 4813

CACACACACACACACGCCAGGAGCAAGGGAGCTTTCGGGCCACACTCCCAGACGCCTCCCTGAGCCCTGGAACCC
GGACTCGTTGCTCCTGGCCTTCCATACAACATACGAGCACATCCTGCGGTCCCACCCCAGATCCCCTCCTCCTCG
CCATCCCATTCTGCCCCCTCCCCACCCTGGGTACAGAAAGGGACTGAAGTGTTGGGCAGAGAGGGGGCTTAAGGC
CCCTGGGCACAGGCTGGGATCAGGGCAGTGAGCGAAGGGCAGCTGTGTCCTGCCCTCCCTTCTGGAGGCTGGAGG
GGAGAGGCCAAGCCCTTGGAAAATGTAGCAAATGTCTGGATGTCGCATAAGTGCGTGTATGTGCGGGACAGGCCC
CGAGAAGCTAGTGACTCCTGCACACCCCCATTGCACAAATGAAATCACAGCCCAGGAGGGAGGGTAGCTTGGCAC
TGGCTGAGAAATAGAGCTCTCTCCCCGCCCCTCCCCCTAACCACAAGGGATTGTCCTGACAACTTGTGGGGATAG
AAGGGCTCACAGGGCAGGGGTCTCAGCTGCCCCCATCCTTAGGGCAGGGGAGTTAGTGTGGAGCCGAGAGCAGGT
CCCAGCTCCCCCTGCCAGCCGCACTGTCCCAGGCCCAGGGACCTCTGCCGGGTCCTCCCAGCCCTTGCCACACAG
CCTAGACGTAGTAGCCTGGGCTTCCAGCAGGTGGCGAGCTGGTTCGTGCTGGAAATTTCTCCTGGGTTTCTTGGG
GTCAAACATGCCAACCTCCAAGACCCCATCCTCACGTCTCCCACTTTTCTGGCGCTGGAGTGTGCAGGGCGTAGG
ACCTGCATGTGTGGGTGTGAGAATGGGGGCGGTGGACACCAAGGGGCGAGTGTGTGACTAGGTGTGTGTGCACAT
GTGTAGGGTGCAGACGCATGGGTGCCATCCTTTGCGTTCAGTGACTGTGCGTCCAGACCCCTCACCAGCGGCCCC
CCCACCACACCCTGGTCCTCCCAGGCAGCTGTCCCAGGGCGCCCAGGCCTGCCTTGCACCACAGCCCTCAGGAAA
TCCGGCAAGGAGGCCCCTGCAGGTTGGTTCAGGCCCCCAGGTAGCAAAACAGAGACAACAGCAGCCCCGCCTGAC
CCCCTGCCCCTCTCTGTGGAGGCCCGGGACCCCCGCAATAAGCACCACATGGGTGAGGCTGTCCCTGTCAGGGTC
CCCTGCCAGGGTCCCTCCTGGGGTTCTGGGCCATTTGAGGGGCTCTTTGATGGGCCAGGCCGGCCAGAGTGAACT
CCGAGCACTTTCTGGCTGGTGCCCCAACCTCTCCACTCCCCACTCATTCCCACCTTGAAAAAGGGCTATAGGTCC
CCTGCCCTGCCCGGGTCCAGTTTACAAACAGTGTGGGGTGGCCCCAGGGCCTGGCCCCACTCTCCCTGCTGTGCC
CACTCCTCTCCAGACTCCACCTCCCCAGTGGGTATGGGCCCTCCACATGCCAGGTAAGTAGCAAACCCCCACTCC
CTCCAAGGACCAGGTCTCAGAGAAGGCCCTGGTCACTGCCCCCGGCCCACCTGGAGCCCATCGGGGCTGCCTCTC
CCAGCCGCGACTTCTCCTTTTGCCTTAGGCCTCGCGACATCCTGATCTCTCCTGCAATAACTAGGAATCGAGATT
CCACAGTAGACGTCCCTTGCCGTGNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNCTCTCTTTCTCTCTCTCCCTCTCTCTGTTAAGATCCTGTTCGGGAGTTTCCCCAGCCGTTG
TAGTATCTAGTATGTTAGAGTTGGGAGGGGACCATAGTTATGTAGCCCAGCCCCCTCATTCCCAGAGGCACCCAG
AGGGCCAGCCTCCAGCCTGACCCCAGAGCAGAACCGGAACACCAGGTTGGGGCCCTGGTGCTGCCACCTCCTCTG
CTGGTCGGGCTGGGACCCTTTGCCCCTTAGGAGAGGTGTTGGTCACAGATGTTTACCTCAGTTTATGTCACTGTC
GAAGAAACAAAAAATAATAGCAAAAAATAACACTGTAGACATGAAGACTTAGAAGACAAAAAAAAAAAAATTCAC
ACAAAAAATCTCCCTTGTTGCGATTCTTCTGTGAAGGTACAGTGTGTATGTGTGTTGTGTGTATGTGTGTGCGTG
TCTCTGTCCCAGACCCTGTGTCCCCCACACTGCCCCCTGTCCTTCGGTGCTTCCCAGAGACCCCTCTGAGCTGGC
CTGTGGGGCACGGGAAGCCCCCTGGATGGGAGGCGGGGCCACAGGTCGGCTAGAGGGTCTCCACCAGGCCCACTG
AACAGAACCCCACGGCTGCCAGAATGTTCCCTGAGCCCACACTGTGGCCAGTGGGACAGTCCTGGTGGCTGACAT
CAGCGTCCATGCTTGGCTCAGGGCCTGGGGCGGGGTCCTGGGTAGAGTCCTAGCCCCAGAGCCCCAGCCCCTCAT
GTCTTGCCGCCCTTCCTCCATGTGTTTGTAAATACTCTGGCATCCTTTGGCCCTGAGAAGGTTTTTAAATGTGTT
ATTTACTTCTCTAAACATGACGATTGCTATAAAAATAAACAAAAGTTTAGAAAAATGTAAAAAA

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FIGURE 4814

THTHTPGARELSGHTPRRLPEPWNPDSLLLAFHTTYEHILRSHPRSPPPRHPILPPPHPGYRKGLKCWAERGLKA
PGHRLGSGQ

FIGURE 4815A

CGAAGATCCAAGTTTCTTTCCATCTGCCTGAAGAACTTTCTTTAGCACTTCTGGTATAGCAGACCTACTGATGAT
AATTTTTCTTTTAGTATATGGTGATTAGTTTACTTTTTATTCAACTGTGTCTTTTTTTGAAGTCTTCTTCATTGA
AATATATTGTTACTAAATATAGAATTAATGGCTTTCTTTAAGCACTTCAAAGATAATCCACTGTTTTCTGGACTC
CGTTGATACTTAAGTCTTTATTTTTGTGTAATTCTTTTTCTTTAAATGTGCCATTTTTCATTTTTCTCTGACTCC
TACCTACTAAGATATTTTTACCTAAGTATTGAGTCAGTTTTGGTTATGATGTGACTCAGTGTGTTTTTATTTATA
TTGTTTGGTTGTTTGAACTTCTTGAATCTGTAAATGTTGTGCTTTATGTTAAATTTGGGGGGGATTTCAGCCATTT
AAAATATAACTTTTCAGTCTCTTCCCCCTGGGACTCCAATTTTTACATATGTATTAGACCTATTAATATTTTTCT
ATGGATACCTGACATTCTTTTTAAATCTTATTTTTGGTGTTTTTCACTTTGAACAACCTAATAATTTGTTTCCAT
CCATGTTTACTCACTGTTTATTCTATTTTTTCCCAATCTGCTCTTAAGCCTATCCTGTGAATTTTCTTTTTAATT
TATTTTATTTTTTAGTTCCAGATATTTTCTGCNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNTCG
TTGTGTTGCCCAGCTGTCTTGACTCCCAGACTCAGCGTCTTCCTGCCTCGCCTCATGCCCGCGCCAACCAGTTCT
TTATTTTTAATATTATGTTGTATTTGATGTGCTATCCTATTCATTTAGTATAAGCACATTTTTCTTTATGTCTTC
AGCATAATTATATGCTTTTTCAGAATTTTAACATCAGGACTGCTTCCAGGGTAGCTTTATTGCCCTTTGTCTTAA
GTATGGATTATAGTTTTCATTCTTTGTATGTCAAGTAATTTTGGATTGTAACTTGAACTTTGAATATACTGTAGA
AACTCTGAATTCTATTTTATTCTTCTAAAACAATATTTCTCAGCTTCAGCACTACTGACATTTTGAACTGGGTCA
TTTTGTTTGTGTTGTTGTGTGTATTTTGGGAGGGTACTGTTCTATATGCATTGTGGGGTACTGAGTATTATCCTT
TGTCTCCACTCACTACTTACCAGTAGCATAACTCTCTCTCCTCCCCACATCCCCTGCCAAAAAATGCCTTCAGTC
CTTTCTAAGCGCTCTTTTTT**ATG**GTGTTGGGGCCAAAATCATGCATCTTTACTCACTCTTTCTCATTGAGAGCTA
TGGCTATAAAGGGTAGTGATACTTTTACTTATTTATTTTTAAGGCAAGCAGTTAACTTAGCTGGATTCAAACTCC
AGGCTGCCTCGTGTGCTGTGGGAAGCAGCCTACGCTCTATTCAGTTCTTTTCTTTTCATATTGGTTGGGTTACTT
TGAGTCTGGCCTACATGATGGGCAGTTTAGAGGTCAACCAAAGGATTTCAGCAGAACTTATACACAGAATTTCAT
TCAGGCTTCCCGTGTCTGATTGGCTACAGTGTGGGAATTTCCTCCCACTTTTCAGCCACTAC**TGA**GGATGCCTTT
CGGCAAAATTCCTTGAAATTGGAAACTTACAGGGAAATTCCTTTCCTCCAAGAGTGCGCTCTCCTCCAGTGTTGG
CTTGCTTTTGGTTGTTCTCCGTGGTTTTAGATAGCTGTCTTTATATTAATTCTGGAGTTTACAGTTGATATCTGT
TGGGGGCTTAGTTTGATAACATGTATTCTTCTATTACTAGTAGCCAGACCTGTATGTCTTACTTGACCTGATGGA
GAAAAGTTTCAACTTATGAGACAATACTGTGCTAGCTAGTTTTACTGATTTGTACTCTAAAGTACCCAAGCCTAA
AATAGTAGAGCTGTCTATCCCACATGAAACTTCTCTGATTTTCACTGTTTTTTATAAAAAGTATACATGTTCACA
TTTCTGTAGGTTTTTTTAAGCATCACAATTTTTATAAACTTTCTATATTTCCAAGGTCTACCTGCTTTGTATTTT
GCCTAGTGAGAGTTTTGTATTCATGTAGGAATAATCTCTTGGTGTGAGTATCTATTTTCCACTCATCCAAAACAG
ATAGAGCATTGATTTCACTAAGCGTTATGTTCTAGTTTGCTTTGGTATTATTATTAGAAATACCTGGTGATTAAT
TTGAGCTAAGTATTCTTCTCTACCCTCATTCCCAGCATTATCACCCGCTTTTACCACTTCCAAGGGGTGGAAGCA
TTCTCCACAATGCATTTTTTCATGCCAGAGAAAAATCTAGAAAAAAATGAATAAAACGAAGAAATTCTTTCCCCT
TGGTATCTGTAGCTAACTTGCCTAAGTGTTCTTTCCCACAGTTTAAGTCTTCAGTCCATAGTTCATAAGCAAAGG
GGTGTAGCGAGCTCTGATCTTGCCAGAAGAGAGAATAAGTGAGCTACCCCACGGTGGACATTCTGGCCATCTGAA
ATGAGTCGATGCATGTGGCTTTTGTCTAAAGGCTACAAATAAAATGTAACCACTTTCTTCTTTGAGTAGTTGATA
TAGCAAATAGTTGAAACAGAAGTTTTGATTGGCAAATCAGGATGTGGTAGATACTTTAACAAAGAGTAGAACTAT
TACCAGTTTTATGTGTTGCTGTTTGTATCTCTTTCACAGTTTTGATAATATCACATCCTGGAAAGTGAAACAGAA
AATTATTATTCCATTTTAAATGACTAAATTTGCTTTCATGGTATTTACAGTGAAAGAGTAAATTAGAAAGTGAAT
GGATGACTGTTCATGAGAAAAAGCAGGGTAAAAAGATTTTATTTAATTAATTGAAAATATTAGGGTCAAAACATA
GGCTTATGTTATGTTTTGTGAATTGTGCTGTGTTGTAGACATTTGATGAGTCCTAACATAGAATTGATCTAGCTC
TTGAAATACCATTTTTGATTGAGTATAAATGGGATATAGGCACCTTACAACTTCAGAATTCGAGGAAGATGATGT
GAATCTTCCAATTTTATCTATTTGATTCAAATGGTATGTTTTTTCACATTTCTCATAATTTCCACGTCAACTCCC
ATGATGATCATGCAGGAAAGCAGCATGATTGCACTTCTTGTAGTGCATACCATCACTAAAACATAGTTACTGTCT
TTCTGTGGTCTTAAGAAAAATTCAGAAACAGCATACCAATGTACATATAAGATAAATAAGCTTATGTGGTACAGT
AAGTGTTCTGTTCTGAGAAATACCTTGATTCGTATCCTAATGTCTGATGTTATTGGTAGTTCTCAAACTTCCCCA
ATTCTGCTTTCATCTAAATTCATCTTATCTATCTATTGTTAAATAATCTATCAGTCCATTTTTATCTATCATCTA

FIGURE 4815B

TATATCTGTCTTTATCAATCATTCGTCTGTAATCTATCTGTGCCGTTTGGCATAAGAGACAGAAGGGCATAGCAG
TGGAAACTCAAAGGAGTTACCTCCATGTGAATGGACAGTGGTGATGGTGATCTGTGAGGTGGTGATGTATAGAAA
GAAAAACTAGAAGAGAGCATGCCCTAACTCAGGGACCTTGTCCAGCAGGCACTCTGGCCTTGTTATACTGTGCTT
GAATATGAAAAAAAAAAAAAATCAAAATAGTGCTGACATTCTTTGTCTTCTGGGTCTGAGAAAACTTAGAGTAGAT
ATGATGACTCTGCCATTTCAGTCTTTTGTATTTCCACATTTAGAGCTCAGTTTTAATTATGTAGAATTATTTCTC
CAGCCTGTGTTAAACTAGACCATGGATTGGCAAACTTTTTTTGTAAATTGCCAAATACACATTTTCAGTTCTGAA
AGCCTTGTGGTCTTTGTTGCAGCTAATCTACTCTGCTGTTGTGTTATGAAAGCAGCCATAGGTAATTTATAATTG
AATGAGTGCGCTGTGCCTTTCTTCCAATAAAACTTTACAAAAGCATCCTGTGGGCTGGAGTTTACCCTTTGGGAA
ACCAGAGCATTGGCTAAACTGGAACCTGAAAAAATAATCACATCAACTCAGCCACATGGTAATAATATTTAGAGT
ATTATTTCAACATTTTCATTTTCATAAAAATTTTTTTAGCTCTTTTGCCAAATTCCATCTGTGAGTGATACAAAT
GACTACCACGTGCCATTAACATCACCTAAACAGTGCAAAACAAGCATAGTAGAAGTAATTGGAATGATATAAACC
CCTTGCTGTAATAGTTATAGTTGATAAATTATGTTTCAAAATTGAACCTATTTCTTCCAAATTTCATCTATAAAG
TTCCAAGGAGTTCCAAAATCTTGCCTGCCTTCTTTTCCCAGTTAGCAGTATTGTCTCTGAGCAGCCATGGTGGTA
TCCATCCTCCTTGGACAATGAATTTAGCCTATTTTGACTTCATTTGAGCAGTTGTAATTGTTTCACCACATCAGA
GTAAGATTACTACATGCCAGAGCTATTCTTTAACTCAGCTTGTAAAAACATGATAGCATCAACAATATACATAGC
AAATGAATGCCATCTTTAATCCAATTAAATGGTTTTTACAAATTTGCTCTTGTTTGTTGATGCTATCTGCATTGC
AGTAATTAAAGGTGAGGTAAAAAGAATGAATAAACTGCCAAGTTAAAATTAAATTTGGGCAATTTCTCTTTTGCA
GTAATGTATGTATATTTACTCAAAACATATGCCAAATTTAGTGTTGAAAGGCTCATTCAAATCAATTGGGAAAGC
ACGTAAATGAACAATTCATAAAAGAAAAGCATTGCAAATGGCCAAGAGCATAGAAAATGTGCTCAATCTTACCAG
TCATTATAAGGAAATAATGAAATTTGTGTATATATGAAATACTTAAAATATATATAAAATAAAACAATTATTTGC
CTTTTTTCACCTATCAGATTAACAGATTATATGTGTTAACAAGGTGGGGAGAATTTACAACTCCTGATATGTTAA
AATCTTTCAGGAAGGTAGTAGAAAATATATGTAAGATGGAAATTAGCACTTTTGACCAACAATTTTAGTTTTAGA
TATTTACCTATAAGGATATAATAGGAGGTGTTCAAAGATGCATGTAACTCAATGTAGTATTAATTATAATTGTAA
AATAGTAAATAACATTTTTGTCAAATCATAATGTTAGGAAAATTAGTGATGGCACATTTAACCAATTGAATTATA
TTCAGTTCTGAATACCGTGATGCATGTTCAAATTAATTGATACAAAAATCCAACAACTTTAGCAGTTTGTTTACC
AGTTATTGAGTACCAACTGTGTTCAACATTGTTATTTCACTCATATGAAATGATAAATGTATGTGCTTGTTATGA
TACGGTCAATAAAACCACTTTTATAGGAAGAATACGCCCAAAAAATCTATGTCGGGTGCGGAGAAAGAGGTAATG
AAAT

FIGURE 4816

MVLGPKSCIFTHSFSLRAMAIKGSDTFTYLFLRQAVNLAGFKLQAASCAVGSSLRSIQFFSFHIGWVTLSLAYMM
GSLEVNQRISAELIHRISFRLPVSDWLQCGNFLPLFSHY

FIGURE 4817

CTCTAGGTGATGTTTGCAGACAGAAAAAGTAAACTGTCAAGGAATTCAGAGCATTGGGTACTTGTTATTTGGACC
AGTTTGAAGCATCTTTGATTTATTGGACCAACTGGCAACAGAAAATGAAAAGTAGTGTGGCACAGATAAAACCTT
CTTCTGGTCATGACAGAAGGGAAAACCTTAATTCATATCAGAGGAACTCCTCTCCAGAAGACAGATATGAAGAAC
AAGAACGATCCCCCCGGGATAGAGATTACTTTGATTACAGCAGATCAGACTATGAGCATTCAAGAAGAGGACGTT
CTTATGATAGTAGCATGGAGTCACGAAACAGGGACCGAGAAAAACGCAGAGAAAGAGAAAGAGATACGGATCGGA
AAAGGTCTCGGAAATCCCCATCTCCTGGGAGGAGAAACCCAGAAACATCAGTAACTCAGAGTTCCTCTGCTCAGG
ATGAACCTGCTACAAAGAAAAAGAAAGATGAGCTGGATCCTCTTCTTACTCGCACTGGTGGAGCATATATTCCCC
CTGCAAAGCTCAGGATGATGCAGGAACAGATTACAGATAAAAACAGCTTAGCATACCAGAGGATGAGTTGGGAGG
CCCTGAAGAAGTCAATTAATGGCCTTATCAACAAAGTCAACATTTCCAACATAAGTATTATTATTCAAGAGCTTC
TTCAAGAAAATATAGTTAGAGGAAGAGGACTGCTGTCCAGGTCTGTTTTGCAAGCACAGAGTGCTTCTCCAATCT
TCACCCATGTTTATGCAGCATTAGTGGCAATTATCAACTCAAAATTTCCACAAATTGGAGAATTAATCCTCAAAA
GGTTAATTCTTAATTTTCGAAAAGGCTATCGAAGAAATGACAAGCAACTTTGCCTGACTGCTTCAAAATTTGTGG
CGCATCTTATTAACCAAAATGTGGCACACGAAGTATTATGCTTAGAGATGCTCACTTTGCTCCTGGAAAGACCAA
CAGATGATAGCGTTGAAGTAGCTATTGGTTTTCTTAAGGAATGTGGCCTCAAATTAACACAAGTGTCACCAAGAG
GAATCAATGCTATATTTGAACGCCTTCGAAACATTCTGCATGAGTCTGAAATTGACAAAAGAGTTCAATATATGA
TTGAAGTGATGTTTGCTGTACGGAAAGATGGATTCAAGGACCACCCCATTATCCTAGAAGGTCTTGATTTGGTGG
AAGAAGATGATCAATTCACTCATATGCTCCCTCTGGAGGATGACTATAATCCAGAAGATGTTCTTAATGTTTTCA
AGATGGATCCTAATTTTATGGAGAATGAAGAGAAGTACAAAGCTATTAAGAAAGAAATTCTTGATGAGGGAGATA
CTGACTCGAACACAGACCAGGATGCTGGGAGTAGTGAAGAGGACGAGGAAGAAGAAGAGGAAGAGGGAGAAGAAG
ATGAAGAAGGACAAAAAGTAACTATTCATGACAAAACAGAAATTAACCTGGTCTCATTTCGTCGTACAATTTATC
TTGCTATTCAGTCAAGTTTAGATTTTGAAGAATGTGCTCACAAATTGCTGAAAATGGAGTTTCCTGAAAGCCAAA
CAAAAGAACTCTGCAACATGATACTTGATTGCTGTGCCCAACAGAGGACATACGAAAAATTTTTTGGCTTATTAG
CTGGGCGATTTTGCATGCTAAAGAAAGAGTACATGGAATCCTTTGAAGGTATATTCAAAGAACAGTATGATACCA
TCCATCGCTTGGAAACAAACAAGTTGCGAAATGTTGCTAAGATGTTTGCTCACCTTTTATACACTGATTCACTTC
CATGGAGTGTTCTTGAATGTATAAAACTGAGTGAAGAAACCACTACATCATCCAGTAGAATTTTTGTCAAAATAT
TTTTCCAGGAACTGTGTGAATACATGGGTCTTCCTAAACTTAATGCAAGATTAAAGGATGAAACTCTGCAGCCAT
TCTTTGAAGGATTATTACCCCGAGATAATCCAAGAAACACTCGGTTTGCCATCAACTTCTTTACTTCTATAGGTC
TTGGAGGTTTAACGGATGAACTGCGGGAGCATCTCAAAAATACACCAAAGGTCATTGTGGCGCAGAAACCAGATG
TTGAGCAAAATAAATCCTCCCCATCCTCTTCCTCTTCAGCGTCCTCCTCTTCAGAGTCTGACTCATCCGACTCTG
ATTCTGACAGCAGTGATAGCAGTTCAGAGTCTTCCAGTGAAGAGAGCGACTCTTCATCCATCAGTAGTCATAGCT
CTGCCTCAGCTAATGATGTAAGAAAGAAGGGACATGGGAAGACCAGAAGTAAAGAGGTAGATAAATTGATCAGAA
ACCAGCAAACAAATGATAGGAAACAAAAAGAAAGAAGACAAGAACACGGGCACCAGGAAACAAGGACTGAGAGAG
AAAGAAGGTCAGAAAAACACAGAGATCAAAATTCAAGTGGTTCAAATTGGAGAGATCCTATAACAAAGTACACAT
CAGACAAAGATGTTCCTTCTGAACGAAATAACTACAGTAGAGTTGCGAATGACAGAGACCAAGAAATGCATATAG
ATTTGGAAAATAAGCATGGTGATCCCAAAAAGAAGAGAGGAGAGAGAAGAAATTCTTTTTCTGAAAATGAGAAGC
ATACACACCGAATTAAAGACAGTGAAAATTTCAGAAGAAAAGATAGATCAAAGTCAAAGGAAATGAATAGAAAGC
ACTCAGGCTCAAGAAGTGATGAAGATAGATATCAAAATGGTGCCGAGAGACGATGGGAAAAATCTAGCAGATACT
CTGAACAATCCAGAGAATCAAAGAAAAATCAGGACCGGCGAAGAGAAAAGTCTCCAGCAAAACAAAAA**TAA**TTCT
ACAAAATGACATAAACTGGACATGCCTTATATTCAGTTGAAACAAATTATTTTTTACTTTGACGAACTTTATAGA
GAATTCTTGTATAAAGTATTGGTTTGTATTTGTAAATTTAAAAAATGTTTTCATTTTAACATGTTTTATAATTGA
TACATCTCAAGGCCCTACCCATAAAATTATTTGAAAACTTTCACCAGAAAGGGATGTAAGTCTCGCTTATATTTT
GTGAATAAAATGATCAAAAGCTC

FIGURE 4818

TVKEFRALGTCYLDQFEASLIYWTNWQQKMKSSVAQIKPSSGHDRRENLNSYQRNSSPEDRYEEQERSPRDRDYF
DYSRSDYEHSRRGRSYDSSMESRNRDREKRRERERDTDRKRSRKSPSPGRRNPETSVTQSSSAQDEPATKKKKDE
LDPLLTRTGGAYIPPAKLRMMQEQITDKNSLAYQRMSWEALKKSINGLINKVNISNISIIIQELLQENIVRGRGL
LSRSVLQAQSASPIFTHVYAALVAIINSKFPQIGELILKRLILNFRKGYRRNDKQLCLTASKFVAHLINQNVAHE
VLCLEMLTLLLERPTDDSVEVAIGFLKECGLKLTQVSPRGINAIFERLRNILHESEIDKRVQYMIEVMFAVRKDG
FKDHPIILEGLDLVEEDDQFTHMLPLEDDYNPEDVLNVFKMDPNFMENEEKYKAIKKEILDEGDTDSNTDQDAGS
SEEDEEEEEEEGEEDEEGQKVTIHDKTEINLVSFRRTIYLAIQSSLDFEECAHKLLKMEFPESQTKELCNMILDC
CAQQRTYEKFFGLLAGRFCMLKKEYMESFEGIFKEQYDTIHRLETNKLRNVAKMFAHLLYTDSLPWSVLECIKLS
EETTTSSSRIFVKIFFQELCEYMGLPKLNARLKDETLQPFFEGLLPRDNPRNTRFAINFFTSIGLGGLTDELREH
LKNTPKVIVAQKPDVEQNKSSPSSSSSASSSSESDSSDSDSDSSDSSSESSSEESDSSSISSHSSASANDVRKKG
HGKTRSKEVDKLIRNQQTNDRKQKERRQEHGHQETRTERERRSEKHRDQNSSGSNWRDPITKYTSDKDVPSERNN
YSRVANDRDQEMHIDLENKHGDPKKKRGERRNSFSENEKHTHRIKDSENFRRKDRSKSKEMNRKHSGSRSDEDRY
QNGAERRWEKSSRYSEQSRESKKNQDRRREKSPAKQK

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FIGURE 4819A

GATCACACCCCGACGGCAGTCCATGACGGTGAAGAAGGGAGAGCACCGGCAGCTGCTGAAGGACAGCTTCATGGT
GGAGCTGGTGGAGGGGGCCCGCAAGCTGCGCCACGTCTTCCTGTTCACCGACCTGCTTCTCTGCACCAAGCTCAA
GAAGCAGAGCGGAGGCAAAACGCAGCAGTATGACTGCAAATGGTACATTCCGCTCACGGATCTCAGCTTCCAGAT
GGTGGATGAACTGGAGGCAGTGCCCAACATCCCCCTGGTGCCCGATGAGGAGCTGGACGCTTTGAAGATCAAGAT
CTCCCAGATCAAGAGTGACATCCAGAGAGAGAAGAGGGCGAACAAGGGCAGCAAGGCTACGGAGAGGCTGAAGAA
GAAGCTGTCGGAGCAGGAGTCACTGCTGCTGCTTATGTCTCCCAGCATGGCCTTCAAGGTGCACAGCCGCAACGG
CAAGAGTTACACGTTCCTGATCTCCTCTGACTATGAGCGTGCAGAGTGGAGGGAGAACATCCGGGAGCAGCAGAA
GAAGTGTTTCAGAAGCTTCTCCCTGACATCCGTGGAGCTGCAGATGCTGACCAACTCGTGTGTGAAACTCCAGAC
TGTCCACAGCATTCCGCTGACCATCAACAAGGAAGATGATGAGTCTCCGGGGCTCTATGGGTTTCTGAATGTCAT
CGTCCACTCAGCCACTGGATTTAAGCAGAGTTCAAATCTGTACTGCACCCTGGAGGTGGATTCCTTTGGGTATTT
TGTGAATAAAGCAAAGACGCGCGTCTACAGGGACACAGCTGAGCCAAACTGGAACGAGGAATTTGAGATAGAGCT
GGAGGGCTCCCAGACCCTGAGGATACTGTGCTATGAAAAGTGTTACAACAAGACGAAGATCCCCAAGGAGGACGG
CGAGAGCACGGACAGACTCATGGGGAAGGGCCAGGTCCAGCTGGACCCGCAGGCCCTGCAGGACAGAGACTGGCA
GCGCACCGTCATCGCCATGAATGGGATCGAAGTAAAGCTCTCGGTCAAGTTCAACAGCAGGGAGTTCAGCTTGAA
GAGGATGCCGTCCCGAAAACAGACAGGGGTCTTCGGAGTCAAGATTGCTGTGGTCACCAAGAGAGAGAGGTCCAA
GGTGCCCTACATCGTGCGCCAGTGCGTGGAGGAGATCGAGCGCCGAGGCATGGAGGAGGTGGGCATCTACCGCGT
GTCCGGTGTGGCCACGGACATCCAGGCACTGAAGGCAGCCTTCGACGTCAATAACAAGGATGTGTCGGTGATGAT
GAGCGAGATGGACGTGAACGCCATCGCAGGCACGCTGAAGCTGTACTTCCGTGAGCTGCCCGAGCCCCTCTTCAC
TGACGAGTTCTACCCCAACTTCGCAGAGGGCATCGCTCTTTCAGACCCGGTTGCAAAGGAGAGCTGCATGCTCAA
CCTGCTGCTGTCCCTGCCGGAGGCCAACCTGCTCACCTTCCTTTTCCTTCTGGACCACCTGAAAAGGGTGGCAGA
GAAGGAGGCAGTCAATAAGATGTCCCTGCACAACCTCGCCACGGTCTTTGGCCCCACGCTGCTCCGGCCCTCCGA
GAAGGAGAGCAAGCTCCCTGCCAACCCCAGCCAGCCTATCACCATGACTGACAGCTGGTCCTTGGAGGTCATGTC
CCAGGTCCAGGTGCTGCTGTACTTCCTGCAGCTGGAGGCCATCCCTGCCCCGGACAGCAAGAGACAGAGCATCCT
GTTCTCCACCGAAGTC**TAA**AGGTCCCAGTCCATCTCCTGGAGGCAGACAGATGGCCTGGAAACCTCTGGCTAATC
GGGCCATCCGTAGAGCGGGAACCTTCCTGAGGTGTCCTTGGGCCACCCCCAAGTGTTGGGCCATCTGCCAAGAGA
CAGCGACCCAAAGCCGAAGGACAGGTGGCCTGGGCAGATCTCGCCCAGGTCTGGGAGCCCCAGGCTGGCCTCAGA
CTGTGGTTTTTTATGTGGCCACCCGAGGGCGCCCCAAGCCAGTTCATCTCAGAGTCCAGGCCTGACCCTGGGAGA
CAGGGTGAAGGGAGTGATTTTTATGAACTTAACTTAGAGTCTAAAAGATTTCTACTGGATCACTTGTCAAGATGC
GCCCTCTCTGGGGAGAAGGGAACGTGACCGGATTCCCTCACTGTTGTATCTTGAATAAACGCTGCTGCTTCATCC
TGTGGGGGCCGTGGCTGTCCCTGTGTGGGTGGGGCCTCTTCCATTTCCCTGACTTAGAAACCACACTCCACTTAG
AACAGGGTTTGAGAGGCTTGGTCAGCACTGGGTAGCGTTTTGACTCCATTCTTGGCTTTCTTCTTTTTCTTTCCA
GAAGGATTTTTGTGCAGAAATGGGTCTTTTGTTGCCGTGTTAGTCCTCCTTGGAAGGCAGCTCAGAAGGCCCGTG
AAACGTCGGGGGACAGGACCCCCAGGTAGGGAATCCCAGGCTACGCACTTTAGGGTTCGTTCTCCAGGGAGAGCG
ACCTCGTCCCCCGATCCTGACCGCCCTTCCGGCCCACGCTCTCCTGTTTGGCTTCCACAGGCCTGGACTTCTCTG
GCTTCTCTGCCCACACACTCCCTGCCCCCAGTGTCCCTGCCCCTGCCCCAGCACAGGTGACTTCATTTCTGTCCT
CTCAGCTCAGTGGACTCGCTCAACTTTTGTATAAGTCTCCACTTGGTGGTAGCAGCTTGCTGATGACTTGTTTTA
AAACTTTCATCCTAAATAACCTTTTGATACTTGAATATTTGTAAGTTTTATACATAGTTTCTAATTTTTTTCCGA
ACAGATCCAGATACCTAATAAGATGCTGGAATGTAATCCCTGGACAATCCGTGTCCTGGCAGCATTTGGTCTTCC
TCTAAGCGCCTGGCTCCGCTGTTCTCAGGAGTGGGTTCTGAAGTCTCTGGAGAACAGGATACGTGGAGGGTTAGG
AAGGGGCCAGGCCTAGAGACGGGAGACTCCCTCCCGGAGCAGGTGGAGGCACAGGACCGTTCGCTACCCCATCTG
CCGGCACCTGCGGGGGAGCCCAGGCATTCTTTGTAAGCCCTCCTGACTACCTGACTCAAAGAAAACAGAAGCATG
GAGGCCGCCAAGTATTTTCAAGAAATAACCCCATGAATATTCCATCACTTTTTTAGAAAGAGGGGCTTGGGGCAG
GCAGAGGAGAGAAGGGAGAGCAAACTGAGAGCCAAGTTTCCAGACAGTCCTGCAGGAGGAGAGGATGCAGCTGCC
CAGAGGGAAGCAGGATCACATTTAAGGAAGTGTGTGGGGTCCCTGGATGACACCAGCACCCAGTGCGGCTCTGTC
TGGCACCCGCTCCCAAGGTGGGAGGAGTGGGTGTCCCCTGTGTGTCAGTGGGCAGCTCCTGCTGAACCCGCAGCT
CACTAGGGAGCCTGACAGTGGGGCCATGTGCCTGACACTCCTCTCTGCTTGTGGACCTGGCAAGGCAGGGAGCAG
AAAACAGAGCCACTTGAAGGCTTTCTGTCTGCGTCTGTGTGCAGTGTGGATTTAGTTGTGCTTTTTTCTTGCTGG
GAGAGCACAGCCACCATTTACAAGCAGTGTCACCGTCGTGGGTGGCGAGGACAGAACAGGAGCCTCTGCTCTCTG

FIGURE 4819B

TACCTATCTGGGCCCGGTGGGCTCCCTTGTCCTGGCTTCCATCTCTGTCTCAGCGACCATTCAGCCCTGCGCAGG
AACACATGTTGCTTAGAAAAGCCAAATCCAGCCTTGTCTCTGCCTCCTCTGGTCTCATGATGTGCATCTGTTACC
TTGAAACTGGAAACCAGTCTATCAATGTCTGTGCCAATTTTTTATTCCCTCCCCAACCTCCTTCCCCATAGGACT
TTTTATTTATGTAGGATGTGTGCTGTCTAATGATGGGATGACCACACTTTTCCATGTTCTAAAAGTGCTCCTCTC
CTGCAGGGTCCCAGGGCTGGTGGTTGCTTTGGGTCTACAGCTACGTCTTACCCGCCTCCTGCCTCAACAGCCTGT
GTGGTGGCAAAGCCGGTGTGGGGCTGGGGAACGCAGCGTTCTCCAGGAGGGGGACCTGGCTCTCCTTCTGCAATG
CAGGCGAAGGCCTAGATGCCAGTGTGACCTCCCACAAGGCGTGGCTTCCAGACTCCCCGGCCGGAAGTGATGCTT
TTTTGCCTTGGGCCCTGGGTTTGAAGCAGCCTGGCTTTCTCTTGGTAAGTGGCTGGTGTCTTAGCAGCTGCAATC
TGAGCTCAGCCACCTACACACCACCGTGGCCGACACTTTCATTAAAAAGTTTCCTGAGACGAAAAA

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FIGURE 4820

ITPRRQSMTVKKGEHRQLLKDSFMVELVEGARKLRHVFLFTDLLLCTKLKKQSGGKTQQYDCKWYIPLTDLSFQM
VDELEAVPNIPLVPDEELDALKIKISQIKSDIQREKRANKGSKATERLKKKLSEQESLLLLMSPSMAFKVHSRNG
KSYTFLISSDYERAEWRENIREQQKKCFRSFSLTSVELQMLTNSCVKLQTVHSIPLTINKEDDESPGLYGFLNVI
VHSATGFKQSSNLYCTLEVDSFGYFVNKAKTRVYRDTAEPNWNEEFEIELEGSQTLRILCYEKCYNKTKIPKEDG
ESTDRLMGKGQVQLDPQALQDRDWQRTVIAMNGIEVKLSVKFNSREFSLKRMPSRKQTGVFGVKIAVVTKRERSK
VPYIVRQCVEEIERRGMEEVGIYRVSGVATDIQALKAAFDVNNKDVSVMMSEMDVNAIAGTLKLYFRELPEPLFT
DEFYPNFAEGIALSDPVAKESCMLNLLLSLPEANLLTFLFLLDHLKRVAEKEAVNKMSLHNLATVFGPTLLRPSE
KESKLPANPSQPITMTDSWSLEVMSQVQVLLYFLQLEAIPAPDSKRQSILFSTEV

FIGURE 4821

AAAAAAAGAATGCCAGGGGGGAATTATCATGCTAAATTATTTTACTGCTGAAGATAGCTTCATTGCAAATTATTC
TTTTTCCAGAATTTCCCCCAAACAACTTAGAATTCCATAAGTAGAACAAGATAGATTCTACCCCCAAAATATTCA
TAAGCAAATCCCACTGCCCTTAAAATAAGGAAGTTATGCCTGGTTGTCTGTGAATGGAACCTCAGTAGGTAATCC
TGATGAAGCTTAAAACCTTAGGGCAGTGTCTACATGGGAAACAAGTATGTGGAAATTGACAATCATTTTTACCAA
ATCGTTGAGTAATAATATGACTTACCTGATAGATATACACATTCAATAAGGAACATTTTTTTTTTTCAATAAGGA
ACATTTTAACTAAAACATTACTTTAGGGCTGAGATTTCCAGGCTATCTACATTGATCTACTGAAAAATTTCTAGA
TTTCCATATACAAACGAAGAAGACATGAGTTTAGAGAATTTTTTTCCTTTAATTTTTTTTTTAACAGAAGGGTATC
AGAGTGGAGGACCTAGATTACGCTACCTGTGTTTGAAAATATTGCGCTTTGCCTAACCTTCGGTGGAATGTATTG
TTTCAGCATATTCTATGTATAAAAAAGTTTAAAGATGTCTTCAAAGAAGACTAGAGTCTTTAAGTCACTTATAGC
TATATTTTACTACAAAATTTGTGTATAAAGATATATTTAAGTGTTTTAGATAAATTTAAGTTACTCCATATGAAA
TGTTTAATTTCAGCTACTGTGAATTCTTTCGATCAGTCCTTTGCTTTTTTAAAAAATCTTTTCCATCGTGTTAAA
AAGAAAATTAGCTATTAGGAGATATTAAAAGATTGATGTCTTAGAAGGACAGGGTTAAAACCTTCTGTAATATAT
TTAAATATATATTTTTAAGAGAGATGCTACATTGCCAATGATTTTATAAATAATTTAAAATTAATTTACAAATTT
ATAGATGCAAACCAAAAGATCTTTTTAAAAGAGAGAGAGAGGAAAAAAATCACCTTTTATTTGTTTGGGTCTCAT
TGTCAGAATTATTATTCAGATCAAGAAATCTGTGTCGATAAAACCTAATCTCATATTGGAGAGTGAATGTCGTTA
AGTATTTCTGAAATGTTTCTAAAAAATGAACATGAAAAAAATAAGGTATTTTCTCCCTAGCTTCTCATTACAGTA
TTTCTAATTGCTTCACACTTTACAGTTTTAATACAAAGTACAAGCTCTACTTTTATAACGTGTACTACAAGTTTC
TTTAAAAGTATTGTTGTATTTCAGCTGAACTCTTGTATCTGCAGTCTTTTGTTATTTCTGCAGGCTACACCCTTA
ATTTGCAGAGGCCATTTTGTTGTTTGTTTGATGCTGAAGCTGTTGTTAAAATGCCCCAAACTCCAAGGCAGATTG
TCTGTATAATACGCTATAGCTTTTCACCATGTGGTGTTTACCAGCTGTTACTCTGTATTTTAAAAAGCCAGAGAT
TTCTTCTGTCTAAACTGTTTCTATAGCATTTTCTAAACAAAAAAAATGGTTTTTTTCTTTGCCTTGTAATAAGAT
TGTAAATCCATTTCCTGCTTGTGTTCTTAGTGGGCATGATTGTGAGTGTGTGTGGGGTGCTCACACGCGTGCCAG
TCTTTTTGTACTGTAACTACCTCATGGTTTGAATGATGATTGTACTGCTGGTTGTGTTAACAGAGCACATTTTGT
TGGGTGAGTCCTATGTGATTTTTTTCATGTTTGTTTTATCTGGGGGTTGTTCATGAAACTGACAGATGTTTTTCT
AAAAAGGACTATTATCAGTTTCCAAATACAATACTTCTCTCTTCTGGTTTTTCCTGAATGAGCCTGATTTTGTTG
CTGGTTTTCATCATCTATGAGGGTAAAACGAGTACCCTTAAAATCCCTGTGGCCAGTTTGAACACCCCTGTTGTA
TTCTTTTCTCTGTTCAGTGTGTCAGCTATTTTGTGAAGATGCTTAGATGTATAGTTTTGATAACCACAGTTTTAA
ATCTTTTATCTGTGCATAATAAAAAGATATATATCAGTTATTAA

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FIGURE 4822

KKECQGGIIMLNYFTAEDSFIANYSFSRISPKQLRIP

FIGURE 4823

TGGGCCCGGAAACCCCAAGGCCCAGACGGCTCTCAGATCCGGGGACTGCGGATAAATGGCCTTAGGCCGCGGGCA
GCGAGATGTTGCGTTCCGGTGTGGGTGTGGGTGTGCCTCCGACGGCGTCTCGGTGCCAGTGTCGAGGTTCTTTCT
GCTTAGCTACCCGGAGCCGACTACGGAGGAGGACACCTGAGTTTACGTCTCTTCCATCTGCTGCTCGCCTCAGCT
GCCTGGGTCCCCGACGAGAGCCAGGTGACACTTAACTCCGCCATCTGCGTTTTGAGCACTGTTCTCATAATGGAG
TTTCCTGATTTGGGGAAGCATTGTTCAGAAAAGACTTGCAAGCAGCTAGATTTTCTTCCAGTAAAATGTGATGCA
TGTAAACAAGATTTCTGTAAAGATCATTTTCCATACGCTGCACATAAGTGTCCGTTTGCATTCCAGAAGGATGTG
CACGTCCCAGTATGCCCACTCTGTAATACCCCCATCCCAGTAAAAAAGGGCCAGATACCAGACGTGGTGGTTGGT
GATCACATTGACAGAGACTGTGACTCTCACCCTGGGAAGAAGAAAGAGAAGATTTTTACATACCGTTGCTCAAAA
GAGGGCTGCAAGAAGAAAGAGATGCTGCAGATGGTATGTGCCCAATGTCACGGCAACTTCTGTATCCAGCACAGA
CACCCTTTGGACCACAGCTGCAGACACGGGAGTCGCCCCACCATCAAAGCTGGGTGAGAAGAGACTCCGCTGCGA
TGGCTCGGAGCACGCAGTAGCATGCGTGGAAGCAGCTTACACTCTAGTGGGAAGTGGAGCCCCATTGAGCACCAT
CCCACACTGGCTGCTGATCTTGTTTGTTGAGGGAGATGGTACTATAATAAAATTGAATGCTGAAGTTGAAAAAAA
AATCTATGTCGGGTGCGGAGAAAGAGGTAATGAAATG

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FIGURE 4824

MEFPDLGKHCSEKTCKQLDFLPVKCDACKQDFCKDHFPYAAHKCPFAFQKDVHVPVCPLCNTPIPVKKGQIPDVV
VGDHIDRDCDSHPGKKKEKIFTYRCSKEGCKKKEMLQMVCAQCHGNFCIQHRHPLDHSCRHGSRPTIKAG

FIGURE 4825

AAGAAAAGTGTTCAGAAATCTTTATATGGGGAAAGAGACATTGCTTCTAAGAAGCCCCTCCTCAGTCCTATTCCC
GAGCTGCCTGAAGTCCCTGAGATGACACCTTCCATTCCGAGCATCCGAAGACTGGGTTCAGGTTATTTCAGTTCA
AATGGCAAACTGGAAGAAGTGAAGACTCCTAAAAATCCAGTGAAAAGAAAGGATCTTTTGCGTCATGACCCAGAT
TTGCATATGCATCAAGGCTATGATAAATATGATGTCTCTGAATTCTGCTCTTATATAAAAAGTTCCTCATCGCTT
GGCAATGCTACTTCTGATGAAGATCCAAATACAAATATAATGAACATTAATGAAAATAAAAATATTCCAAAAGCA
AAAAATAAGTCAGAAAGTGAAAATGAACCAAAAGCTGGAACTGACAGTCCTGTTTCTTGTGCTTCTATAACTGAA
GAACGTGTGGCATCAGATAGTCCCAAACCTGCTCTGACCCTGCAGCAGGGTCAAGAATTTTCTGCTGGTGGTCAA
AATGCAGAAAACCTTTGTCAGTTCTTTAAAATTTCACCAGATTTAAACATAAAGTGTGAAAGAAAGGATGACTTC
TTAGGAGCTGCAGAAGGAAAACTGCAATGCAATCGTTTAATGCCTAATTCACAAAAAGACTGTCATTGTTTAGGA
GATGTCTTAATTGAAAATACGAAAGAATCTAAAAGCCAGAGTGAGGATTTGGGAAGAAAACCCATGGAAAGTAGC
AGTGTTGTGAGTTGCAGAGACAGGAAAGATAGAAGACGTTCCATGTGTTATTCTGATGGTCGAAGTTTACATTTG
GAAAAAAATGGAAATCACACACCATCCTCCAGTGTGGGCAGCTCTGTAGAAATTAGTTTAGAAAATTCTGAACTG
TTTAAAGATTTGTCTGATGCCATTGAGCAAACCTTTCAGAGGAGAAATAGTGAAACCAAAGTGCGACGTAGCACG
AGGCTACAGAAGGATTTAGAAAACGAAGGTCTTGTATGGATTTCACTTCCACTTCCTTCCACTTCCCAAAAAGCC
AAAAGAAGAACAATATGTACATTTGACAGCAGTGGATTTGAAAGTATGTCTCCCATAAAAGAAACTGTGTCCTCC
AGACAAAAACCGCAGATGGCACCTCCCGTCTCAGATCCAGAAAACAGCCAGGGCCCTGCTGCTGGTTCTTCCGAT
GAACCTGGTAAGAGGAGGAAGAGCTTTTGTATATCTACACTTGCAAATACTAAAGCCACTTCCCAGTTCAAAGGC
TACCGGAGAAGATCCTCTCTTAATGGGAAGGGAGAGAGCTCTCTGACTGCCTTGGAAAGGATTGAACATAATGGA
GAAAGAAAGCAGTAATTGACATTTCCTGCAGAGTCTGTAGCAAGAGGGAAAGTAACCATCTATGCTGAAATGATC
TGTCTAGTTCCCATTCTCTGTTCAACCTCAGTGTTTCAAAAGTTCCTAATAAATAAACTCATTTGAGTTGAACCT
ACTTTTATGTAGAAATAAATAAGTTTCTTCATCATT

FIGURE 4826

KKSVQKSLYGERDIASKKPLLSPIPELPEVPEMTPSIPSIRRLGSGYFSSNGKLEEVKTPKNPVKRKDLLRHDPD
LHMHQGYDKYDVSEFCSYIKSSSSLGNATSDEDPNTNIMNINENKNIPKAKNKSESENEPKAGTDSPVSCASITE
ERVASDSPKPALTLQQGQEFSAGGQNAENLCQFFKISPDLNIKCERKDDFLGAAEGKLQCNRLMPNSQKDCHCLG
DVLIENTKESKSQSEDLGRKPMESSSVVSCRDRKDRRRSMCYSDGRSLHLEKNGNHTPSSSVGSSVEISLENSEL
FKDLSDAIEQTFQRRNSETKVRRSTRLQKDLENEGLVWISLPLPSTSQKAKRRTICTFDSSGFESMSPIKETVSS
RQKPQMAPPVSDPENSQGPAAGSSDEPGKRRKSFCISTLANTKATSQFKGYRRRSSLNGKGESSLTALERIEHNG
ERKQ

FIGURE 4827A

CCCGGGCGAGCCCGCCGTGCGCACAGCTCTGCCCGCCGCCCCTGGAGCGGATCCCCAGCCGTCCCTGGGCGTTCT
CCCGGGTTCTAGCAAAGCCCCCCGGGGTGCCCATCAGTTTCCTTGGGTGACTACAGCGTGTGTTTTTTCTTTCCT
CTTTCCCCTGCCTGTGTGCCCTTCTCCAGGATGGCAGAGGCGGAATTGCACAAGGAAAGGCTGCAAGCCATAGCA
GAAAAAAGAAAGAGGCAGACTGAAATAGAAGGCAAGCGACAACAGCTTGACGAGCAGATACTTCTGCTGCAGCAT
TCCAAGTCCAAAGTGCTTCGGGAGAAATGGCTGCTGCAGGGCATACCCGCTGGAACTGCCGAAGAGGAGGAAGCC
AGGAGGCGGCAGTCTGAAGAGGATGAGTTCAGAGTCAAGCAACTTGAAGATAACATTCAGAGGCTGGAGCAAGAA
ATACAAACGCTAGAAAGTGAAGAGTCCCAGATATCTGCCAAAGAGCAAATCATCCTAGAGAAACTGAAGGAAACA
GAAAAATCCTTCAAGGACTTTCAGAAGGGTTTCTCCAGTACGGATGGAGATGCAGTAAATTACATTTCCTCCCAG
CTTCCCGACCTGCCAATCCTCTGTTCACGAACAGCAGAACCATCACCTGGGCAGGACGGGACCAGCAGAGCGGCT
GGAGTCGGGTGGGAGAATGTGCTGCTAAAGGAAGGTGAGTCAGCCTCGAACGCCACAGAAACATCCGGCCCAGAC
ATGACTATCAAGAAGCCTCCCCAGCTTTCTGAGGATGATATCTGGCTAAAAAGCGAGGGAGACAACTATAGTGCC
ACCCTCCTGGAGCCTGCTGCCAGCTCTCTTTCCCCAGATCACAAAAACATGGAAATTGAGGTGTCTGTTGCAGAA
TGTAAAAGTGTTCCTGGAATCACCTCTACCCCACATCCCATGGACCATCCCTCCGCTTTCTATTCACCCCCGCAT
AATGGCCTCCTTACTGATCACCACGAATCCCTGGATAATGATGTTGCCAGAGAGATCCGCTATCTAGATGAGGTG
CTAGAGGCCAACTGCTGTGATTCTGCTGTGGATGGAACGTACAATGGAACATCCTCCCCAGAGCCTGGTGCAGTG
GTTCTGGTGGGCGGCCTAAGCCCCCCTGTCCACGAGGCGACCCAGCCAGAACCCACTGAAAGAACAGCTAGCCGG
CAGGCACCTCCTCACATCGAGCTCAGTAATAGCAGCCCTGACCCCATGGCAGAGGCAGAAAGAACAAATGGCCAT
TCCCCCAGCCAGCCTAGAGATGCGCTGGGGGACAGCCTGCAGGTGCCTGTCAGCCCCAGCTCCACAACCAGCTCA
CGGTGTTCTTCCCGAGATGGAGAGTTCACTCTCACCACACTGAAAAAGGAGGCCAAGTTTGAGCTGCGTGCCTTC
CATGAGGACAAGAAGCCCTCCAAGCTCTTTGAGGATGACGAGCATGAGAAAGAACAATACTGCATTAGAAAAGTG
AGGCCTTCAGAGGAGATGCTGGAGCTGGAAAAGGAGAGGAGAGAGCTCATCCGCAGCCAGGCCGTCAAGAAGAAT
CCTGGCATTGCAGCAAAATGGTGGAATCCCCCGCAGGAAAAAACCATCGAGGAGCAGCTGGACGAGGAACATCTG
GAGTCGCACAAAAAGTACAAGGAGCGCAAAGAGAGAAGGGCACAGCAGGAACAGTTGCTGCTGCAGAAGCAGTTA
CAGCAGCAGCAGCAGCAGCCCCCATCGCAGCTCTGCACAGCCCCTGCCTCTTCTCATGAACGCGCAAGCATGATT
GACAAAGCAAAGGAGGACATTGTCACAGAGCAGATAGATTTCTCTGCTGCTCGCAAACAATTTCAGCTGATGGAG
AATTCCAGGCAAGCGGTGGCCAAGGGCCAGAGTACACCCAGGCTGTTCTCCATCAAGCCTTTCTACAGGCCTCTG
GGGTCAGTCAACTCAGACAAGCCACTGACTAATCCGAGACCACCTTCTGTCGGGGGACCTCCAGAAGACAGTGGT
GCCTCAGCCGCCAAGGGACAGAAATCCCCCGGTGCCCTGGAGACCCCATCGGCAGCAGGAAGCCAGGGCAACACA
GCCTCTCAGGGGAAGGAAGGGCCCTACAGCGAGCCTTCTAAACGTGGGCCCTTATCTAAACTGTGGGCTGAGGAT
GGAGAATTTACGAGCGCCCGGGCTGTCCTCACTGTGGTCAAGGATGATGACCATGGGATTTTGGATCAGTTCTCA
AGATCTGTCAATGTCTCCTTGACCCAAGAGGAGCTTGACTCTGGTCTGGACGAATTGTCGGTGAGGTCTCAGGAT
ACCACAGTCCTGGAGACCCTATCCAATGATTTCAGCATGGACAACATCAGTGACAGCGGGGCATCCAATGAGACA
ACCAATGCCCTCCAGGAAAATTCACTGGCTGATTTTTCTCTGCCCCAGACACCACAAACTGACAACCCCTCAGAG
GGCCGAGGAGAAGGCGTCTCCAAGTCATTTAGTGATCATGGTTTCTATTCCCCTTCCTCCACGCTGGGGGACTCT
CCGTTGGTTGATGACCCCTTGGAGTATCAGGCTGGCCTCCTGGTGCAGAATGCCATTCAACAAGCCATAGCCGAG
CAGGTGGATAAAGCTGTGTCCAAAACCAGCAGGGATGGAGCAGAGCAACAGGGACCTGAAGCGACTGTAGAGGAA
GCTGAAGCTGCGGCTTTCGGCTCAGAAAAGCCTCAGAGCATGTTTGAGCCACCTCAGGTGTCTTCTCCTGTTCAA
GAGAAAAGGGATGTATTACCAAAGATTCTGCCTGCTGAAGACAGGGCGCTCAGGGAAAGGGGGCCCCCCCAGCCA
CTGCCAGCTGTGCAGCCCAGTGGCCCGATTAACATGGAGGAGACCAGGCCCGAAGGAAGCTATTTCAGCAAGTAC
TCGGAGGCAGCTGAGCTGAGAAGCACAGCCTCCCTCCTGGCCACTCAAGAATCTGACGTGATGGTTGGGCCTTTC
AAGCTGAGGTCCAGGAAACAGCGGACTTTGTCCATGATTGAGGAAGAGATCCGAGCAGCTCAGGAAAGGGAAGAG
GAGCTGAAGAGGCAGAGACAAGTCTTGCAGAGTACGCAGAGCCCCAGGACAAAGAATGCCCCATCACTGCCCTCC
AGAACATGCTACAAAACTGCTCCAGGGAAAATAGAGAAAGTCAAACCTCCTCCATCCCCCACCACTGAAGGCCCC
AGCCTGCAGCCTGACTTAGCCCCTGAAGAGGCTGCCGGAACCCAGCGGCCCAAGAATCTGATGCAGACCCTCATG
GAAGACTATGAGACACACAAATCTAAAAGGCGCGAGAGAATGGATGATAGTAGTTACACTTCTAAGTTACTGTCT
TGCAAGGTGACTTCCGAGGTCCTCGAGGCCACACGGGTTAATCGAAGAAAGAGCGCACTGGCTTTGCGCTGGGAA
GCAGGGATCTATGCCAACCAGGAGGAAGAAGACAACGAATAAACTTCCTTCAACCCAGGAAGCGTCTTTGGTGCT
TGGGAGACCAAGAAACCAAGAAATTAACAACTGAAAGCATTTTAATGGACTATTTATTAAAGTGCAAACAAACTC

FIGURE 4827B

AGCAATCCTTATGTAGACCAGAAGCTGCAATATACAATGATGAAAATGAAACGAAAAGGAAGTCCCCCCATCAGA
CTCTGGACACCCAGGAATCAAAAGAGAAAGGACTTTTTTGGTGACTCAATCCCAGTGTCTGGTTTGGGGCCAATC
TACAATGGATCCAAAAGGACAAAACATGTTACAAGCAAATCAACATAGTTGCTGCAGGCGGAACTGAGACCAGCC
TCTCTGGGCGATGAAGGACAATGGTGGTAGGGCCACTTAGAGAGCAGTAGGGCCCAGGCTGGTGCAGCCTACATG
GCACAGGATATTTCCCTGCACCAGTTTCCCACCTGTCACTTGCAGCATCAGAGGGTGTTGCATTAACTCCATTTT
CTCCAGCAGCCATAAAATGAATGGCGTTTCTCTCCATATTTGCCCAGAAGAGGCAGTTATGATTCCACTTCTCCT
ACATTTAATTATTTTTAATTGAGAACAACTCATGATCACAATTCATAAAATCCATATTTTAAGACAATAGTTCTT
CATGTCACAAACACAATCTATTCTACATGAGGAGGCTGAGAAAGGGGAAGAGAAAAACAAACCAAATGGATGATG
TTAGCTTTAGGATCGTGTCTGCTTATAATATTCACTGATCTGCAGTTTATGAGAACACATTTTCACAGTTATGTT
TCTTCATAGGAAAACTATATTTAGTGGGCAACAACTATTTTTATGATGGGATGGGGGAGTATATACACGTATAGA
ATCTGTACGCGTTGAACAACTTGGTTCAAGATGGTGGGGGCATTTTTAGAGCGGCAATAATTGAAAAAAAAGGCG
AACTCTGCCTTGGAGAGGTAGATGATAAGAAATAAAAAGGTGTTTATAACTATTTTGTATTATAAAGTGGGCCTT
AGAGATAGGAAGAAGAATGATGGATTCCTTTTGGATCAATCAGAAAGGAAACACGAAAGAAAAGTCAGGAAGGTA
GAGAGAGAAAAAGGGAGGGAAGGAGAAAGAATGGGAATAAAATAAGGAGGTAAGAGATACTATTTTTGCTGAGCA
ACCAGTGTGTTTCAGGATGATACAAAGAAAAATATAGAATAGAAATAAGTGCAGGCTTGGAATCAGCTACAAATC
CTAAAGATGGGGTGTGTGTGGATGTGTGTGTGTGTGTGTGTACACCATTGTGTGTTTGTAAAATGTGTATGTTCA
TGAGTAAGGGTGTGTGTGTGTGTGTATTAAAATTCCAGAGTGACCGTGGCACTTGGGTGTACAGGTAATTCCTCC
AGAGCTGTTTGCTGGCTTCAGGAGTGGAGTGAGAATTTCTTTTTTATGAAAAGGGATATAAAGGCACCGAGCTGA
TGCAGTATTTGTAATATTAAGTTGACCTAACAAGGTATTTGCATGAGTCACAATTACAAAGTTTTGAGCGGTTTT
GTAATTTGACATTTAGGAAAGTCTCCTATTTATTCTCATACTTTACATTCATGCTTAGTATACTATAGAGGATGC
CAGCTTTAATCTTTCTGTCATTTAAAGCCATATGATAAGGGTATTCAATAATTGGGTGCCCTAAATTTCTGGATG
AGAAAATTTTCAATTCTGGCCATGAGAAAGAAAAAAAAATAAACAGCCTTCTTTTTTTTTCCTTTGTTTTAAAAC
TGTGGTTTTTTAAAAAAGCAATAATTAACTCAGACCTCACTAAAAATCATTTTTGTTTTTATATTGTTATGTCAT
AAGCTCTATTATGTTATTCTAACAAGTAGCAATTTCACAAAATTTGTATGTAGATGTTAACGCACATTTCCTTTG
CTTCTTTTATTAGACTAGTGTTGACTTTGGGGGGGGACATTTATTCACAAATGAGAAGTAGGCACAAAGTAAAAA
ATGGAACCATCTACTAACAAGGATCCTTTAAAACTGCCAAGGGAGCTCTAACTTGAAGCCACATCCTACAGATGG
CAGCCCAAATAGCACATGGGCAATTGGCACCATCTTTATATGGTTGAGTCTCCTGAATATTTTGAATGAATTCTC
AACAAAATGTGCTAGCCACTGGGGACGCAAAACAAGTAAGATCCCTGTTGCAAGAAATTCATTTTATAGTGAGGG
AGGTTGGCATGGAGACTAAAATTCTCAGGAAAATGAGATCCGTGTTAGATTAGAAGTCCTGATGTGAAATGGGAG
GACTCAGGAAGGAGGATCGTCTTTACCTGAGGATTTCTAGCCAGAGGTCCCAGATGCCTGGGCTGAGAACCCAGC
GATAAGGGGGCGTTCCCAAAGCAGACACAGGGATAAGAACAGAGGAGGCAGCAGCATTGCACAGCCCCAGGCACA
GTGGCAGTTAGGATGGCTGGAGAGTAGGATAGTTCTATGGGTTGCCCAAAAAATGTGATGCGCTTCATGTTTTCT
CTGACTCATGGATCTGGTAGAGACCATAGACATGATATAGACTAACTTCCCCATTTTTCACAATGAAGGTAAACC
ATCCTTATGACTTACCTTAAAGTTTTTTGTTCTGTTTTGAAGGAAACCATGTGCTTCATGAAACCTACAGTTGAC
AAGAGAATGTACAGCTAAGAGAAAAGCTTAAGAGGCCACACTATTCGCGGAATGGCTTTAGAGGCAGATGAAGTG
GTCTTTGACCACAGTTGATTGAACCAGAGCACTTATTGCTTAAAGAATAACAGAGTTCTAGAGCTGGGGGTTCTT
GGGCCATGCTCCGTGTGTGGATAAGGAAAGAAATACTGTTTCTGGGACTCTCCCACAGTCACAAAGCTGTTTTCA
CTGTGGCCCCTACATCTCTTAACTTTTGCTATTACTCCTATGCTGCCTTCCGGATTACTGCTGTCTATCTTCTTG
CTCCACTCACTGAAGATCCTATTATAATCCCATGAAAATGTAAATTACAGTTTACTTGGGAGAGCCAGATTTTCT
CTGTGCTCTTGAGTTTTTTATTCATTCAAGAAACCTTGGGCCACCGCTTTGTACATAGCACCGTGCTAGGCTCTG
GGATCCCAAATGGACCCTTTTAACTTTCTGAAGATGGGACCGTCCCCTGGAGGAAAGTCATTCCTGCCTAATCCA
TCGAGAGAAAGAGGCTTACGAAAAACTTTGCCTCTGATGCTCAGCCCCACCCCCAAATAGCACACAAGCTTGTTA
ACCCCACCTCTTACAAAATGTTTAGATTCTGTAGGTGTTAAAAGCCTTTCTGGAAGTATTGCATTCTGCCGTGTT
TATAGGTGTTCACTTTCCTCCAGAGCTGATTAACTACTGACATGACTTGGCTTTCTCATCCAGAAATTATGGAAA
CAGGGTCTGTCAGTGGCAGGAGGCCGTGCTGTGTTTTACTTGGATGACACAATGCAGTTTACTTGCCTCTTCATA
CCCATGCATGCTGCTCACCCTAGACAATGACATATAAGCCGTATATAGATCAATGTCCACATATATATACACACA
CACATATATATATATAAAGTGTAACAAGGAACACTAAAACAGTGTTGATTCTTGTCTCTGAAGACAAATAATTAA
ACCTTTTTTTTCCCAACTAAAGAATGGATTTAATTAAACTATGTATTGAAAAAAAAGTAGCCTAAGTGTTAGAGA

FIGURE 4827C

TGGTGAATATATTCCATTTTAGTTAAAGAACAAATTTCCTGAATTTTAAGCATTCAGTGAGCTGCCAATTTTGAT
TTTGTGTTGCTCTTTACCCAAATTATTTTTTCTTTGTTTTTCTTTTTTTGGGGGAGGAGGGGAAAAAAGCAGCAA
TACTGTGTTTGGAAATTATACTCTGTATCTGGTTTTCCTGTGTATGTTAACCACTTAAATGTTATTATCCTGCTT
TGGTTTTAGAGTGATTGTGAGGCATTCAATGCAAGTATACAGTTATTTTCTCATTAAAATCCAATGTGTGTTGAG
TTTTTATAAAAAAAAAAAAAAAAA

FIGURE 4828

MAEAELHKERLQAIAEKRKRQTEIEGKRQQLDEQILLLQHSKSKVLREKWLLQGIPAGTAEEEEARRRQSEEDEF
RVKQLEDNIQRLEQEIQTLESEESQISAKEQIILEKLKETEKSFKDFQKGFSSTDGDAVNYISSQLPDLPILCSR
TAEPSPGQDGTSRAAGVGWENVLLKEGESASNATETSGPDMTIKKPPQLSEDDIWLKSEGDNYSATLLEPAASSL
SPDHKNMEIEVSVAECKSVPGITSTPHPMDHPSAFYSPPHNGLLTDHHESLDNDVAREIRYLDEVLEANCCDSAV
DGTYNGTSSPEPGAVVLVGGLSPPVHEATQPEPTERTASRQAPPHIELSNSSPDPMAEAERTNGHSPSQPRDALG
DSLQVPVSPSSTTSSRCSSRDGEFTLTTLKKEAKFELRAFHEDKKPSKLFEDDEHEKEQYCIRKVRPSEEMLELE
KERRELIRSQAVKKNPGIAAKWWNPPQEKTIEEQLDEEHLESHKKYKERKERRAQQEQLLLQKQLQQQQQQPPSQ
LCTAPASSHERASMIDKAKEDIVTEQIDFSAARKQFQLMENSRQAVAKGQSTPRLFSIKPFYRPLGSVNSDKPLT
NPRPPSVGGPPEDSGASAAKGQKSPGALETPSAAGSQGNTASQGKEGPYSEPSKRGPLSKLWAEDGEFTSARAVL
TVVKDDDHGILDQFSRSVNVSLTQEELDSGLDELSVRSQDTTVLETLSNDFSMDNISDSGASNETTNALQENSLA
DFSLPQTPQTDNPSEGRGEGVSKSFSDHGFYSPSSTLGDSPLVDDPLEYQAGLLVQNAIQQAIAEQVDKAVSKTS
RDGAEQQGPEATVEEAEAAAFGSEKPQSMFEPPQVSSPVQEKRDVLPKILPAEDRALRERGPPQPLPAVQPSGPI
NMEETRPEGSYFSKYSEAAELRSTASLLATQESDVMVGPFKLRSRKQRTLSMIEEEIRAAQEREEELKRQRQVLQ
STQSPRTKNAPSLPSRTCYKTAPGKIEKVKPPPSPTTEGPSLQPDLAPEEAAGTQRPKNLMQTLMEDYETHKSKR
RERMDDSSYTSKLLSCKVTSEVLEATRVNRRKSALALRWEAGIYANQEEEDNE

FIGURE 4829

GAGAAGACCAGGGAAGAAGCAGAACTTGAGGCCAACAGTGTGTTTCGTCAAAAGGTAGAAATGTCCTACCAGCGG
ATGGAGAATCCTGGCTGCCATGTGGTTGATGCCAGCCCCTCCAGAGAAAAGGTCCTGCAGACGGTATTAAGCCTA
ATCCAGAATAGTTTTAGTGAACCGTAGTTACTCTGGCCAGGTGCCACGTCTAACTAGATTAGATGTTGTTTGAAA
CATCTACATCCACCATTTGTTATGCAGTGTTCCCAAATTTCTGTTCTACAAGCATGTTGTGTGGCAGAAAACTGG
AGACCAGGCATCTTAATTTTACTTCAGCCATCGTACCCTCTTCTGACTGATGGACCCGTCATCACAAAGGTCCCT
CTCATCATGTTCCAGTGAGAGGCCAGCGATTGCTTTCTTCCTGGCATAGTAAACATTTTCTTGGAACATATGTTT
CACTTAATCACTACCAAATATCTGGAAGACCTGTCTTACTCAGACAGCACCAGGTGTACAGAAGCAGCAGACAAG
ATCTTCCAGATCAGCAGGGAGACCCCGGAGCCTCTGCTTCTCCTACACTGGCATGCTGATGAGATCGTGACATGC
CCACATTGGCTTCTTCCACATCTGGTTGCACTCGTCATGATGGGCTCGCTGCATCTCCCTCAGTCCCAAATTCTA
GAGCCAAGTGTTCCTGCAGAGGCTGTCTATGTGTCCTGGCTGCCCAAGGACACTCCTGCAGAGCCATTTTTGGGT
AAGGAACACTTACAAAGAAGGCATTGATCTTGTGTCTGAGGCTCAGAGCCCTTTTGATAGGCTTCTGAGTCATAT
ATAAAGACATTCAAGCCAAGATGCTCCAACTGCAAATATACCAACCTTCTCTGAATTATATTTTGCTTATTTATA
TTTCTTTTCTTTTTTTCTAAAGTATGGCTCTGAATAGAATGCACATTTTCCATTGAACTGGATGCATTTCATTTA
GCCAATCCAGTAATTTATTTATATTAATCTATACATAATATGTTTCCTCAGCATAGGAGCTATGATTCATTAATT
AAAAGTGGAGTCAAAACGCTAAATGCAATGTTTGTTGTGTATTTTCATTACACAAACTTAATTTGTCTTGTTAAA
TAAGTACAGTGGATCTTGGAGTGGGATTTCTTGGTAAATTATCTTGCACTTGAATGTCTCATGATTACATATGAA
ATCGCTTTGACATATCTTTAGACAGAAAAAAGTAGCTGAGTGAGGGGGAAATTATAGAGCTGTGTGACTTTAGGG
AGTAGGTTGAACCAGGTGATTACCTAAAATTCCTTCCAGTTCAAAGGCAGATAAATCTGTAAATTATTTTATCCT
ATCTACCATTTCTTAAGAAGACATTACTCCAAAATAATTAAATTTAAGGCTTTATCAGGTCTGCATATAGAATCT
TAAATTCTAATAAAGTTTCATGTTAATGTCATAGGATTTTTAAAAGAGCTATAGGTAATTTCTGTATAATATGTG
TATATTAAAATGTAATTGATTTCAGTTGAAAGTATTTTAAAGCTGATAAATAGCATTAGGGTTCTTTGCAATGTG
GTATCTAGCTGTATTATTGGTTTTATTTACTTTAAACATTTTGAAAAGCTTATACTGGCAGCCTAGAAAAACAAA
CAATTAATGTATCTTTATGTCCCTGGCACATGAATAAACTTTGCTGTGGTTTACTAAAAAAAAAAAAAAA

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FIGURE 4830

AAAGAATTTAAAAGTTTTATATAAAGGCATAGCTACTATCTCATCTGCCCAGTGTAGTCATGAATAGATGTCACA
TAAAGAAAAGAAAACCAGAATTCTTGTTAATATGGCCAGTTTGAAGGGTGGTGGCGGAGGTATTGAGCAGGCAGC
TCAGGGAAATGCCAGGGAGACCCTTGAGCACAGAAACTCCTGATTGTCCCCAGGGACTCTCCGTGGACACAGGAG
GGATTTTCCAGGATTTCACATGAATTCAATGAAGGGGGCTGTGTCTTATTCCTGGATGCTTTGCCTCCTTCATGG
AATTCAGTGGATTTAATGGAAGTTCCTAGGCAACAATAAAGAGTAGAAACCAGGTTAACAGCGAGGGCCTCATCT
CACACCAGATCATATCAGGCTACACAAAAGTAGATGGAAGACACCACCCAGGCCTCCAGCTATACACTGGAGAAG
AAGCCAAACTAGTCTACTTCATCTAAGAAAGTTGTCAAAGAGAGCCCTTCTATACTATCTTAAGGTAAAAAGAAA
GACTCTACCCAGCTGCCCTGATTAAGCATTAGAAAGATAAGTGTTCTGATCATTAGGCGAAAGACAATGGGGAAA
AATGTAGAAAAGAAATATGACATGAGCCAGATGAAGAACCCATCCTGAAAGGATATATAACTCAGGGGACAAAAG
ACAACTCACCNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNGCCTCCCCATAGATGTCTCCTGCCATAGAAGAATTTAAGAAGTTCATAAATTCAATAAAACAAGAG
TTGAAGGCCTGTCCCACTGTACCCAATTTCTCCCTCTCTGAACTGCAGCCTAGAAACTCTCTACAGGCAGTAAGC
TGGGGCAGTCACAGAGGTGACCTCATCTGTTTCCCACATCCTGCATTAGGACAGTGATCAGGGATCAGTATCCTT
CATTGACTGATTTCCAATATCTCGAGACCTGTTGTTTCATATATTTTGCCTTATTTTGCAATTGTTTCATATATT
TTGTCTTATTTTGCAATTGTTTCAGGAGGGAGGATAAATATGGTCCCTGTTCCTCTATCTTGACCAGAAGCATCT
AAGAAGGCAGTGAAGCAACATGTGTACAGTTCTTAGGGAAATAAATTTTGACCTAAAAATATTAAACCTAGTCAA
AATATTATTCTAGTACAAAGGCAGCACATGGGTATTTTTGAACATAAAAGAGTTCTAGAAATACAGGACCCATGA
ATCATTCTTGAAGAAAAGTTACTCAGTAAGGAAATCTAGCTAAGCAAGCAACATGTACAAATAAAAGATTATTAT
AATTGGACCAAAGTTAAGTTTAAATCCATTCACATGTATATAATTAAGATATATAGGAATTATAATTACAGAAAA
GAATGTTACAAACCTTCACAAAGTAAAAATATTTTTATATCAGATAGATTCTTCTGTTTCAATCCATAAAACCAG
GGTTTGGATCATTTTAAAAAAACAAACAAAAATAATTTATTGGAATCATTAGGGAGGACCTGATAGAATAAAATG
ACAAGCTGACCAAATAGGCCTTAGAAGGGAGAGGTGCCTGGGCAGTTACAAGGACCTAGGTAGCAGGGGTGACTT
GGCCACAGTCATTTTCTTTACTTGATTTAAGGAGGTTAAATTACAGTGAGAGAGTTGCACTTATTTAGTTTGCAT
ACCGTACTCAACTCTTAGCTAGCATAGGGCAGGTTCCTTAGTTGAAAAATTTCCACAAAACATGATGTAAAGTGG
AAAGATCAGTTCCCCCAAAGAATATCAGTTACCAAAGTAGGATGAAAGGATGTTGGGTAGATCAAAACAACAAAT
GTCCATTACAGCAATTAACAAAAGTTAGGGAGTGGGGAAGTCTGAGTGCTAATATGGATTTCAAAACAACTTTAA
AAATGGCTTCAAACATTTTATGCTTTTTGTAATTTAGTCATTTTAATATTAGATAAATCTTCCTGTAACTGAAAG
TTCTTGAGTTAAAGAAAAATATTCGGTAGTTCAGCTCTTCCTTCAATTTTATTAGTTGCTTTTTCTTTTGTTCAA
GTGAAATAAACATAAAAATAATTTTAAAATATTATGTATCATATCCTTCGATTTAACATAATTCTATCTAGCTGT
TCTTATATTTTCTCTGATATATTTTTAAAAGCTTTCTGGAATATTATTAACCTTGAATATTTCTAGTTGATGAGT
TTATGAGTGATTTATTGCTTCCTTTTCTCTTTCAGTATTGCTAGAATTAATTTTATTGACTTTGCCCCTTTGCAT
AAAGACCTTGAAGGTCACATGCTGAAATCGCCCTCTACTAAAACAAACTCATAGAAATAATGGGGAAGATATTTC
AAAACATTGCCATATGCATAGCCATCCTCACAACCAAGAAAAGCGCCTCTCCATGAACTAAAACCTATGA

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FIGURE 4831

KNLKVLYKGIATISSAQCSHE

FIGURE 4832A

CACCTGTCCGTCCCGCCCCCTCCTTTGATGCCGATGTCTCAGCCACAGTTCCGGCCTCACGTACAGACCGCTCAG
CCTCAGGCCAGCAGCAGCCGGATGCAGTGCCCCCAGCGCCAGGGGCTCCGGCATAATACAACTTCTCAGAATGTA
AGCAAGCGGCCCATGCAGCAAATGCAGCCCACTGCGCCAAGGAACAGCAATTTGCGTGAATTACCCATAGCGCCG
TCACACGTGATAGAAATGAGCAGCAGCCGCTGCTCTGCCACGCCCTCAGCACAAGTGAAACCTATCGTCAGCGCG
TCACCACCCTCGCGGGCCGTGGCGGGTTCCAGAAGCTCACAGGGAAAGACGGAAGTGAAAGTCAAGCCAGCTAGC
CCTGTGGCTCAACCTAAAGAAGAGGCAAAAACAGAAACAGAGTTTCCTGATGAAGATGAGGAAACAAGGTTATAT
CGCTTAAAGATAGAAGAACAGAAACGCCTAAGAGAAGAAATCCTGAAACAGAAGGAGTTACGGCGGCAGCAGCAG
GCTGGTGCCAGGAAGAAGGAGCTGCTGGAGAGACTCGCGCAGCAACAGCAGCAGCTGTACGCTCCCCCACCCCCA
GCAGAGCAGGAAGAGCAGGCACTGTCACCATCACCCACCAACGGTAACCCACTGTTGCCCTTTCCAGGTGCACAG
GTCAGACAAAATGTGAAGAACAGACTTCTTGTTAAAAACCAGGATGTCAGTATTTCAAACGTTCAGCCCAAAACA
TCCAATTTTGTACCATCCAGTGCCAACATGCAGTATCAAGGACAACAGATGAAAGCACTGAAACATTTGAGACAG
ACCAGAACAGTTCCTCAAAGTCAGACTCAGCCGCTGCATAAAGTGCTCCCGATCAAACCTGCAGATGTGGAGGAG
CCAGCTGTCCCCCAGACTCCTCGAGTGGCGTCCATCCAGGGCCGGCCCCAGGACACAAAGCCTGGCGTGAAAAGG
ACTGTCACGCACAGGACAAACAGTGGTGGTGGAGACGGGCCCCACATCAGCTCCAAGGTCAGGGTGATTAAGCTG
TCAGGTGGGGGAGGAGAGAGCGATGGCTTTTTTCACCCAGAAGGCCAGCCCCAGCGGCTTCCCCAGCCTCCGGAA
GTGGGACCACAGCCTGCCCGCAAGGTGACGCTGACCAGGGGGGGCCTCCAGCAGCCCCCACATCTGCCAGCGGGG
CCCCACGCACACTCGCCTGTCCCTCCAGGGATCAAAAGCATCCAAGGAATTCACCCGGCGAAGAAGGCCATCATG
CACGGACGAGGCAGAGGAGTGGCCGGTCCCATGGGCCGGGGGCGCCTGATGCCAAACAAGCAGAACCTGCGGGTG
GTGGAGTGCAAGCCCCAGCCCTGCGTGGTGTCTGTGGAGGGGCTGTCCTCGTCCACCACGGATGCCCAGCTGAAG
AGCCTGCTGATGTCAGTGGGACCCATTCAGAGTTTACAGATGCTTCCTCAGCAACGGAAAGCCATAGCTAAGTTC
AAGGAGCCAGCCCACGCATTAGCATTTCAGCAGAAATTCCACAGGCATATGATAGATTTGTCCCACATAAATGTG
GCCCTGATCGTGGAG**TGA**GTCCTAACAAGAGAGCCTGACCTTAGGCTGTACACACACTGTGGAATTTCTTCAAGG
GAGCTGCCGGCCGGCGCAGAACCCCCAGGAGCACAGGTCTCTCCGGGCCGCTGTCCTGCGTAACTGTTCTCCAGA
GCGCCAGCCAGCCACGGGCCTGATTCCAGAGGAGCCGAACTGACAGGACACAGCAGGCTGGAGTTGGTGTTAGAT
TGCTTCACATTCTCTTGTCACCACCAAGAACTCCAAGTTTTTCGTTTTGTTTTGTTTTCAAAGTGCTTACAATGC
ATGTAGACATTGTTCTTTGTGGTCTGACTCTATGATCGATCACAGTGACTTAGATTCAGGAAAGAACATTAACGT
CACAAGTTCTAAGTAGTTTTCACAGCAAAGAATATTTGATAATGGTTGCACTTATCTTCAGTGCAGGTTAGAAGA
GTCTTCTCAACCAAGCTTAACTCGAGTTGTCTTCTCAGCCCTCAAAAGGCTCTTGTACAAAATGTAGATTAAAAT
TTGGGTGATTGTTGATTGACCTTTGCATACCCTGGAAAGCCAGGGTGTGAGTGGGGTGGTTGGGAGTGGTGCCAG
TTGAACAGCAGATTCTGCTTCTTGTCACTGTTTCAAAAGCGTCAACTCTGTGTTCCTAGTTTCGATGAACTCCCC
ATTCATTTTTAACACACTTCCCAGATAAGGCAATGTGCTGGACAGGCACACGGCATGGCCCTCGGCTAGAGCAGG
GTCTGTGATGGCCTCACCTGGCAGCCCTCTGGCCTAGTTCCCACCACACATGAGGTGGTGGAATGGCCTGAAGGT
GGAACAGACCTGTTTTTTTCCTTTTTAAATGCAGTAAGGTGGCCTGTTTATCACTGGCTCTGTGATACATGACAT
TCTTTGGGAATTTGGTGGCCACTGCTTCAGTCACCTCTGTTTTTCTGAAGGCTGTTCCAGCAGGGCTGCCCTGTT
CATCAGCGGATGTTCACTCTGGCCTGCCGTTCCCCGTGGCATGCGGGGTGAGGGTGGCTTTCTTCCAGCCCCAAA
TGAGACGAGTCTGTGTCATCATTGAAACTGCTTTTCGTAATTGCGGGTAGGTTCCTGTAGGTGAGACATATTCTC
CATAAAGCTACTGTAGTAGAATTCATTCTGGGCAAACACTGAAAAAAGTGCCTTACAGTATTTCTGCTCATGAAA
GAGTTTCACTATTTTGGATATATTCTAAAGTGGACCTGAGCTATTTGAGCAAATAATGATAGGGCATACTCAGAC
ATTTTAGCTACCTTTTATACCTACGATTTCATGTCACATTTACTAATAGAATTAAGGGAAATAGAAGCCCGTTCT
TTCTTACTGCCCCTGGAGGGAGCATGGCGCTAGGGCTCTCAGCCTCCTAGAAGGAAGGGACTAAGGAGACGGGCA
CAGACTTGCGTCATCTCGTTTCCACAGTTGACGTTTTATATTACTTTCTCAAATTAAGTTACCAAAACAAACTGA
AGAGCTGAAGCAGGTCTTCCAGACCCTGCGATCCTTTCTGTAGCAGTGATTCTAAAGTGGCGTTTGCTGTGTGCT
TGAGAGTAACACTGCACGCTGCAGGGGCTGTTGCAGCAGTCAGTCCCAGGAAGCCACAGCGCTTGTAGGATCTGC
TAGGACCCTGCAGCTGTGCTGCCGCCACCTCTGCTCCAGAGTGTCCCAGCCAACCCTCGGAAGATGGGATTGCCA
GTCAGCCCTGCCTCACCATGCCTGCAGGAGGCTGTCCAGGGAGCAGGTCTGTGTGCCCATCAGCAGGTTCCCATG
GCTGTCACTGCCCACTCATTTCCACAGTTAGATACGGATGTGTTGATGTATTTCGTCTAGTTTATTTGGCTCAGT
CCACAGCTGCGTTGGAGTGGTGACTTTGGTAGCCCTTGAGCTCTAATTAAGAGAGATCCAAACCACTCAGTACCC
ACTGGGCAGTGGGAAGGCCTACCGACTTACTTTATCATTGAGGGCTTACTGATACAATGAAATGAGTTTCATGAC

FIGURE 4832B

TTTTTTTTTTTTTAAACACTTTTTGAAATAGAGTGTGCTGTGTTTAAAACCAAAAATATGCATGTTGTCTCTGAA
AAGTAGGCATTGAAACAGACTTTTTTGTAGTCAGTGTTAATAAAACGGATCCTGTTTGGGCCTTCATTGTTAAGG
TGGACTTCATGGCCACTGGAAGGTCTGTTTTGGTGTTACCTGAGTGTGACACAGGCCCTGGGGTGTGCGTGTTTC
TCTAACTGTCTACACATGCACATAGGCAGACTTTCTCATAGAATGTTCTTGAAAGGTGATTGGCAAAGTCATGCA
GGCCCGCCTTAAAGCGCTGATTAGAACAGTCCAACACAGTCCGACCTCACTCAATACCCACAACCATCGAAAATG
GATTCTTAGTACCAGACAATCCCAGTAATGAAGGTTTAGTTTCCTTGAAGGAAACTACAGAAAAGGAAAGAAGCA
GAATGAGAAAGGAATGGTACTTAGGTGTTTGGTATGCTGCTCACGTGAAGTCAGCCCACACCAGCCAAACCCTCG
TGGAAGATCTGCTGCAACCATTATCTTTGTTCTTGAGTTCATCATGCATTTAAAATGAGATGCAAGAGCATTTAG
CATACCATGTAAATATGGACCTTTTAAAATTAAAATACTATTGGAAGTGCTTTCAACTCAGCCACATCTTAGCTA
TTAGTTCTTTGTGTTGTCTTATCAAAGTTTAATGGATACAGTTCCACAGTTGTTGATGTGTTTGTGTGTATATTC
GATTTTTATAAAGATGGTAGTAAGTCAATACATTTATCCTGATCTGTGTATTATTTGTTCACAAATTCAAGAAGC
TTAAAGGTCGTAAATATCAGTATCTCATAAGGTAAACCAATAGCTGATTATGTGGAGCCAAGTTACTTCTTTTCT
TTTTGCATTATCTTGTTTTGGTTTTGTGCTGTAATAGAAGTTCACTTAGCTACTTTAGATAACCTTGCATTACCA
CTGGTCTGGCCACGTTTGTTAAATCCTTATACTGATATTCTTCTAAAGAGTAAATCTCATCATTTTTCCAGACAA
ATTTTGAGGGGTTTCTCTGTTTTGTGGACAGGCAGCAGCCTCCGTAGGCACCCGCACCCTGCCTTGCTGGAGGAG
ATGGGATGGGGCGGGAGGTGGCTTCACCATAACTATTTTTAATATGGGTCATTCTTAGCATGATTTGTAAAGGTC
TCAGGCAAACAGTTGTTGAAGCTTGCTTCTGTGGCATTTCTGAATTGTGGCAGAGCTTAGATCCTGCACCCAGGG
GTCTTTTTTTCAAACAGCATCTTGCTCAGTTCTGTGAACAGAAGGCTTTGTTACTGAAGGAGGTGGAAGAGGAGT
TTAGGGTGAAAAGGAGGAAGGGATGGACAGACCCAGGTGAGGAGAGGCCTGGGGATTGGGGAAGCTGTCATCTCA
GTGTTAATAATCAACTTGCTTCTAACACACTGGCTTATCAGGGGAGGTCATCCAGTCCGGTCGGTGGAGTTGAGA
GCCCTTGGGCCAGGGTGTTTGGCGGCACAGGGGCATCCGCTGGATGGCCTGGAGGAGTGGGGGGAGGGGAACGTCT
TCACTGGGTGGTGATCAGCTGGGACAGTTCAGGTAGGGCAGGTGAGGGACCCCCGAGGCCCTGGAGCCTTGTCCT
GGGATGGGTTTGAAGAACTCATCACTCATCACTTGTTTTCTTTTGGCTTTTGTTGTTTTTTGTTTGTCTGTTTGT
TTTGTTTTGTATTTCTTTGTTATTTTATTGGGAAGGTAAGCGGAATGTGCTCATAGACCATCAGACGCTTGTCGA
AGGCAGGTCCTAGTCATGTAATTGCACAGGACAAGGAGGTCAGCGTGTGTGATGGCAGCATGCTGTGCCGGCACA
TCGTGGAGTCCTAGAAACTCTCTAGTCCCTGCGGCTGTTCCCCTCCTCTGCTCTCTCCCTGGAGAGGACTGCCAG
CTCTTAAGAAACATTCCTGGTGCGGTGTCTGCAGTGCCCTTTGTGGGTGACTTCAGGCTTCCCGCTTTCGTGGTG
CTCTTCCTGGGATTCGTTTTTTTATTACCCTCCCTCCCTACTTGTAGGCCTCAGCTATGGCTTGACGTAATCGCT
TTTAGACCCAGGTTGGCTTCCCTTCATTAAGCTATGATCCTCCACCCATTTTTTTTTTTAATTTGGAGTGGGAGG
GAGGGGGGTGGGCGAGAGAAAGCTCGAAAGGTATTATTGGTTTTTCAAAAAATTAGAGGTGACGATTCTACCAGG
GAGTTGACTGATAGGAGTGTGTGCAGGGCAGGAAAGGTTCGGAGGCACCCGACTACCACCACTCGGAAAGCCGCT
AGTCCAGATCGACTAGGGAGAGGCTTAGATACTTTAGTGTATTTAAAGAGCATTTCAGTTAACTTTTTCAGCTAT
TTTTAAAGTTTGTGAATGGAGTGTTATTTTGGACATTCTTAAATATGAATTCTCCAAAGGCATTTAGCCTTGACT
TAATATTAAATCCTAAGGATTTTATGTAAGGTTTTTTTGCAACCTATTTAATTTTTTTTAAATGCCTAACTTCTG
AGGTGCATAAGCCCGTGGTTTGTGTACTGGAACTAAAGCGGAACTCACTGATTCATATTGGATCCCCAGGTATAC
CTTCTGCTGGTAGCATATGGCTGGAAAAGGCCGTTTGCCTCACACATTGTAACCTGCCTTGGCTAGAAAATGCTT
TTAATGTCTCAACTCTCTCTTTTCTGTGTCATGTTTTGGTAGGAAATCTTTAAGATTGGCGGACGGAACAGGTAT
TTTAGTGAGACACTTCTGAGTACTTGCTTTTTCCTTTGACTTCTAACCAACTAAAAGAGAAGGAGGTCTTCATGT
TGATATTTTGCTTGGTTTTATTTTACTGATTTTAAAAGGTATATAGAAAAATGTAGGCCTTTAAAAAGAAACAGC
ATGTAGTTTTTTATTTTAATATGTTCCATAGAGTGGATAGGCAGACAGGTACTATTGTAATGTATTCTGTATTTA
ATAATTTAATATACTCTAGAAAGTAGACCTCATGCATTCTTTTAGCATGATTTTCTTTTAAACTGCTTTTCATTT
TAAGGGCACCCGTGGCGGAAGCTGGTTTTGCAAGGACTGTGTAAGCTGTATGCGTTCTAGCTGTATGCGTTCTGT
AGTTTTTTCTTAGGTGGGTAACATTTTCAATAACGCGCGCACAGCACACAGGGGTGCCCTGAGCCGAAGGAGCAA
AAAAAGCCACCGCTCGTTTCTATAATCCAGCTTTGCTTTTCACAGGCGTGGGATCCAGGATGGTGTCCTCTGTGA
GGACTTGAACTCTGGGGCTTTAATTCCACTGTTTAATTTTCAGGTACCACAGCAGCAAAGCACAGAGTGTGACCT
TTTTCATGTCTGAGCTGATTCTGTTTGCTCCACGTGCCTGCTTCTTGCTACTGTTCATTTAGTAATGGGATCACC
TCACCATGCCATGCTCTGGGCTCTCCCTCTCTGTCCATTTCTGTTTTGCTTTCCTGGCTAAACCCATCTACCATT
CTTAACACTGGTAGCTCCTGTCCCATTCCAAGACTCACTCTCTCAGACCTTCCCATCTCCCTGGCTTTCCATGCT

FIGURE 4832C

CCTCTCCCTCCACCTCCTGGCTTCAACTGGGTGAGGGCCGTATTCCTGCCACTCTGCTCCGCCTCAGCCTTGAGA
ACTCCACGTGGGCTGGGTGGGAAGGTGCTGACGATTTTCACACTGTGTTTACCACTCCATCACCTCTCCATCACC
TCTCAACCTTTGCTTCGACAGGTCTTCACTCACGATTTATTCCTCCAGGTCTTTGATTGGAGAGAGTAACTTTTT
AATTCTGTTGTTTTGCAGTTTGGCTCTGTAGGAGTGAGTGGCGATTCAAAGATGCCGGCGTCCCGCAGTGTGCGG
TTCGTGCCCTTAACCACCCGCTTCTTTGTTTCCCGCCCCTCTGCTTTCGCAGGAGCTCTTGTGCTTGAGTTCAGT
GTTAGTGGTAGCGTGGCTCACTCCACTTGGAGGTGGCGGCCGTCTGACCGTGTGTTACTGCTTTGCCGACGGGGC
CTCCCGGCCCTGATGCGTGTACACTCTGCGGGCTGCACCGGGTGGCTCTGGTTGGGGGCGAAGCTGTGTTGACTG
GGAGAGCGTTGGAAATTGAGACATGGAGAGATGACGGGAGTGCGTTTCTCTGGGTTTGATCTCCATCCTGTTTTC
TCCCAGACACACCACACCTACCTTGGGGGAATGCCGTTGCCTGTTCCACCCCTTTGTTCACTTCGCGTTAACTGC
TGTGGTAACTTTTTCAGGATCTGTGTGAAGAATGGTAATGACGTAGTTGAAAGGAAAATGTACTGTTGTGTGTTT
CATTTGTGTGATTTCGTACCAAAAAAATGTGTTTGAACTATATTGTATGTAATTTGGAAGTCGTGTTAATAAAAC
CCTGCAGTTTCCAAAAAAATCTATGTCGGGTGCGGAGAAAGAGGTAATGAAATGGCAGGGATTCGATATCAGCTT
ATCATACCT

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FIGURE 4833

HLSVPPPPLMPMSQPQFRPHVQTAQPQASSSRMQCPQRQGLRHNTTSQNVSKRPMQQMQPTAPRNSNLRELPIAP
SHVIEMSSSRCSATPSAQVKPIVSASPPSRAVAGSRSSQGKTEVKVKPASPVAQPKEEAKTETEFPDEDEETRLY
RLKIEEQKRLREEILKQKELRRQQQAGARKKELLERLAQQQQQLYAPPPPAEQEEQALSPSPTNGNPLLPFPGAQ
VRQNVKNRLLVKNQDVSISNVQPKTSNFVPSSANMQYQGQQMKALKHLRQTRTVPQSQTQPLHKVLPIKPADVEE
PAVPQTPRVASIQGRPQDTKPGVKRTVTHRTNSGGGDGPHISSKVRVIKLSGGGGESDGFFHPEGQPQRLPQPPE
VGPQPARKVTLTRGGLQQPPHLPAGPHAHSPVPPGIKSIQGIHPAKKAIMHGRGRGVAGPMGRGRLMPNKQNLRV
VECKPQPCVVSVEGLSSSTTDAQLKSLLMSVGPIQSLQMLPQQRKAIAKFKEPAHALAFQQKFHRHMIDLSHINV
ALIVE

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FIGURE 4834

CGGACGCGTGGGCAAGTAATTAGAAGTAATCCTTCATTTAACATCCCCACTGGGTGCCTCGAGGTATTTCCTGAA
GCCGAATGGTCCCAGGGTGTTCAGGGAACCTTACGAATTAAGAAATACTTGACTGTGGAGCAAATAATGACCTGT
GTGGCAGACACGTGCAGGCGCTTCTTTGATAGGGGCTATTCTCCAAAGGATGTTGCTGTGCTTGTCAGCACCGCA
AAAGAAGTGGAGCACTATAAGTATGAGCTCTTGAAAGCAATGAGGAAGAAAAGGGTGGTGCAGCTCAGTGATGCA
TGTGATATGTTGGGTGATCACATTGTGTTGGACAGTGTTCGGCGATTCTCAGGCCTGGAAAGGAGCATAGTGTTT
GGGATCCATCCAAGGACAGCTGACCCAGCTATCTTACCCAATGTTCTGATCTGTCTGGCTTCCAGGGCAAAACAA
CACCTGTATATTTTTCCGTGGGGTGGCCATTAGGAAGAACTCCAAATCAAAATGCTATGTAAATGTCTATGGGTG
ACAGTCTGCTGATGGTAGAAACCTTTCTTTTTAGTTCACAAGTCAGAGATTTGGACGGAGCTGACACAAAGAGTT
TGGAGCTCCCCCATTTCTGGCTCTCCTTTCAGGGGTTCCTTCCCCAACCCTTTTCAGCAGCGGTGGCTGCCCCCC
ATTCTGACCCCTGACTCTTCCAGCCAGAAAGATGGTGGTTTTCTAAAGGAACTTTAGCTGTCCTGCACAATGCCG
ATCTGTGTCTTGCATTTTGGGTAAAAGCCATAAAAATAAGAAACTCAGCCTGTGGCCTTTCTTTCTTCCAAGGCT
GGGCTTCTTTTTTTAAGTGACTTCATGCAGTTTGTTGCTTTTAAAAATTTGTCCAGAATCGTTTTCTGCAGAAGC
ATGGTCTGTTAGGAGCTTACTGGCCGTAGCAGAAGCAATTGTTTCCTGAATTCTTGACATTTATCTTTGCTGTAT
TCATTTAGGGCTTGGGAGAGTCCGAAGATAATTCAGTCACTGTCAGATTAATAATTTTGTCAGGACAAAGAATAC
CGTTATGATTATTTAATCCTTTAAAATTGTGGTCTCCAGAGCTTGTTCTCAGAATGGCCCAGACCAAGCCTTAAT
TGTGATAGTGAATATTAATGGTCACTTTAAGGAGAAATTATAGGCCAAGATGAAATGAACATAAACCTGTTTGCC
CTGGCTTTCAGTGGAAGATGATATTAGAGACCAAAATCTGGTTCTGAAGGTGTGTATCAGCCCTAAGGTGAACCA
GACTTGGGAAAGATTGTCTTTAAAAATCAATGAGTTTATGTTTTAACTTCTCAGCTTAGTTCTATGCATTGCTCT
ATAACACACCTAGTTAAGTTTTATGTTATTCTTGAACTGTGATTTTTTTTCTATTTACTTTCATGGTTTGGTGGG
CCATTGTTATGGACTGAATGTTTGTGTCCCACCCTTCACCCCCAAATTCCCGTGTTGAAGCCCCAACCTGCACTG
TGGAGCTGGGGCTGCTAAGGAAGTAATTAAGGTTACATGAAGTCATGGTGGGGCTCTGATCTGCTAAGGTTGGTG
TCCTTATAGGGAGAGACCCCAGAGAGCTTGTTCCCTCCCTCCCTGTGCATGCAAACAAGAGGGCATGGGAGCACA
CAGAGAGATGGCAGCCACCTACAAGCCAAGAGGAGAAGCCTCACAATCAAACTCTCGCTGCTGGCGAGAGTCTTG
GACTCTGTCTTGGACTTCCAGCCTCCAGACTGTGAGAAACAAATTTCTGTTGTTTCAGCTTCTCAGTCTCTGGTG
TTTTGTTATTGCAGCCTGAGAACACAGCTGTACGATTATTTGTCAAACAGAAAACACTGATACTTAACAATGCTA
ATGCAATTATTTATTTGCTTTTCAGTCTCTACAAAACGTTCTAAAACACTAATCTAAATATTAACAGTAAAATAT
TTGCATAACTAATGGAAACTAAGAAATCATATGACCAATATTTCACTTATTGGTAATCTTACTCTACTGATTTCC
CCCCAGACTGTGATTTTTGAACTTCCTTGCCTTTCTCCTGTCTTTCTGTGTTTATTCATGGAATTCCAGTTATCT
GGGCTTGAAATTGCAGGCTCTCCTAACTTAAGCAAAATCTGACAGATCAGCAAAATGAGATAAATGTTTCTTTTT
TCTTTCTGACTGCATTAAATCAGATACAACTCAGCATTAAAAAGCTATCTTTGTAAATGTTGTTACTAATAAATT
AGTCTTATAAAAAAAAAAAAAAAA

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FIGURE 4835

RTRGQVIRSNPSFNIPTGCLEVFPEAEWSQGVQGTLRIKKYLTVEQIMTCVADTCRRFFDRGYSPKDVAVLVSTA
KEVEHYKYELLKAMRKKRVVQLSDACDMLGDHIVLDSVRRFSGLERSIVFGIHPRTADPAILPNVLICLASRAKQ
HLYIFPWGGH

FIGURE 4836

ACACACATATAATTTGAAAGAGGTGAGTATGTACTCTGACTTCAGCTCTCAGGTTTTAAAAATTATATTAGTGGG
ACCAGTTATGACAAGAATAATCATTATAGTACTTTTCAGATTTTATAACCTGGAGCAGATTATTTTAAGTTGATT
AGTAGGTTCTGTTACAGTTTTTCTTTTGTTCGTGCACTTATAGTCTTCATTTAATTCCTCATAGAATCCCAGTCA
CCTTTATATATCATATTATTGGAAGAGATTCATCTTCATAATCTCCAGTTTTTTCACAGTGCCTCACAGAGTTAA
TCATGCCTTTTGGAGCTAGAAGGACTTTAGAACTTATCTAGTTATGCTCCTTTATATTATAAGTAAGGGAATAGA
ATCAATAAGACAGTTTCTGCCCAAAGTCATGTTACCAGTTGGTGACAGAGCTGGAAATACGTAGAGATCTATACC
CTTAAATCTCTCCACTCACATGCTGATATACTTTCTACTACAATATGCTATAGCTTTATGGAACTCAGGGTGATG
ATCAGACGTGTCATTAGAACATGAGTCCTCTGCTTCTGATTCAGGCATACTTTTGGGATTCTTCCATCTTTAAAG
GAAAAAGGAAGCCATTCATCTATATTTAGTAACCCAGTAATATCTCACTTAGTTTAGGGTTAGATCTTTAGTTAA
TTCAACCTTATAGATCATACTTATGAAGGTGATAACTGACACGTGTTCCCTGAATTTTAATTTGATAGGCAATAC
ATCTACCCACTCCATTATTTTTTAAAACTTCATTTAATAGTTTAAACAAGATTGGTTTTGTTTTCAATTTTTATT
CACTCTTCATAGAATCACAATTACCTTTATATATCATATGTTATTGGAAGAGATTCCTCAGTAATCTCCAATCTC
TCATAGTGCCTCACAGGGTTGGTCAATGGCTTTTGGAACTGGAAGGACCTTAGAACTTATCTGTTATGCTCCTGA
TAGCCAATAGCAGATAGAAGCTTGCAATCAAGAGGGTAGGACATGTGTTCTTCAATGGATATCAAAGGAAGAGGT
TGCAAACCAAAGCCATTTGGCAAGCCCTGTAGCCTGGGCCATTTAAGACAGGGGCGGTCTCAGCCAAATTGCACC
CATTTAACTATCCCAAAGAGCCACAGTGCCTACAACCCAGGCCCTAAGTTGATGAAGAAAAAGTCAAGGAAGGAG
GTGATACAATTGGAAATATTCCCATCAAATGGTTAATCTTATTTAGAAAATGGGCATATTAGAAAAAGTCCTTCC
AAGATGATTTTGGATAATAAAAGTTGTATTTGTGGAAATTGGTATTATCTCTGTTTTATGCACTTACATTTATCC
CTTACATTTTGTTTTTAGTGACCCTACATGACATTAAATTTAAAGTAAAACATTGTTTAATGTTACCTTTTGGCT
TGAGAATGTCTTTCAGCTCCAGAATTATTGTTACTCATATTTTAATCAGTAAGTCATTTAAGCTATGACAGAGTA
GGAATTGAGAAATTATTTCATATGCTACAGTATTGAAATGTGGATGCTGCCTTGTTTTATAAGAAGATGATCAAG
GTTTGTGTGCCCATTACCTTTCCTCTGCCTGAAAGACGTGTCTCAAGAAAAATAAATTCTATTTTAGATGCAGGT
ACTGCATTTTATTCTAAGAATTGATATCAATTCAAAACATAGAAAACTGTAAAAGATAAATCAGGAGATGGCTGA
TTCATAATGGGTAATAAAATAAATAGCACTTTCGAGCTG

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FIGURE 4837

HTYNLKEVSMYSDFSSQVLKIILVGPVMTRIIIIVLFRFYNLEQIILS

FIGURE 4838

AGCGGGCTGGGCGCGGCGCCGGGGCGCGCGGCTGCAGCGGAGCAGGCTGGGAAGCGTAGTTCCCGGCTGAGCCTC
GCCGCGGCCCCGCAGTCCCCCAGCCCCGCCCTTCCCCGACAGGTGTCCTCTCCCGGAATCGGGGTCTGAACCCCG
CCACAGCTCTGCAGGGGAGGAAGCACCTGGGTCGGGGAGAAGCCTGGGCAGGCTCTTTGGAGACGCTCGGGGCTC
CGGAGAGCGTGGATGGCAAAGGCTTTCAAGCCTGTGATGAGCATTCCTGTGAGCGAGCATCCTGACACGGAAGCC
GCGTTGAGAGCGGTCTCAG**ATG**GAACAGATTAAAAGGGCCAATAAACTGTTTACCAATGATTGTATATTTCTGAA
GAAAACTTTGAACATCCCAGTTATATCAGAGAAGCCTTTGTTGTTTAATGGACTTAACTCCATTGATTCTCCAGA
AAATGAAACTGCTGATAACAGTTTTTCTCAGGAAGAGGAGCCAGTGGTGGCCGGGGAAGACCTCCCTCCTCCCAG
TCCTCAAGAATCTGATGTTCAGCCTGTGCAGCCTGAGGAAGTGTCAGCCAGAGATTTCCTGCAGAGACTTGACTT
GCAGATTAAGTTATCAACACAGGCAGCCAAGAAGCTAAAAGAAGAGAGCAGAGATGAAGAAAGTCCCTATGCAAC
TTCCCTCTATCACAGT**TAG**GTGATTTGGGGGCATAACTCTAACCAAAATTAAGATATGTTTGGACCATAAAGAAT
CCAACAACTGAAGATTCAAAAACATCCCTTCTGGATTCCTATAGTGTCCATCTTAAAATCATAACTAGGTAGTTC
TACCTGCTGCACTGAAGTGATTAGTTCCCTCTGGCTTTCTATAATTTTAAGTCTTTATTATGGCATGATGGCAAG
GTTGTAGCCTAAAGCTCATCACTTTTGTAGGTGGTGTTAGTTTTTAGACTAGCTTTTATAAATACTAATTGACAT
AAAGCATCAAAGATTATTTATATATTTAGGCTAAAAATAATGTTTATCTCCTTATGCAATCCTGATTATGTGAAA
ATATGGTTGCTGTTTAAGTGATGCTGAATTTGCTGTGTGTTTATAACTTAAGTGCTATATATATATTTCGATGTC
TTACATATTCTCTATTAATATAAAGAACCAAATTTTGTCTGCTATTTTGTAAAAATAAACTACAAAAGCCTGAAT
GAGAAAATAAACTATGTTTTCAAAAAAAAAAAAAAAA

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FIGURE 4839

MEQIKRANKLFTNDCIFLKKTLNIPVISEKPLLFNGLNSIDSPENETADNSFSQEEEPVVAGEDLPPPSPQESDV
QPVQPEEVSARDFLQRLDLQIKLSTQAAKKLKEESRDEESPYATSLYHS

FIGURE 4840

GCTCTCGGGCCGCCCCTCTTCGCCGTCTCCACGCCTCCGCGGGCAGTTACCAGCTTTGGCTGCTCGCGCCTCCCC
AACTCGGGTAAAGCTCCTCGGCCTCGGCGTGCTGCGCCTCCGCGGCTGCCCTGCGCCAGAATTCGGTTCCCTCAA
AATTATAAAAGCAGGAAAGCTCAAGACAAAGAAATCCAACAAGGCTAGTGATTTCAGTGATATGGAGAATTGGCC
AACACCAAGTGAATTAGTGAACACTGGATTTCAGAGCGTCCTCAGCCAAGGAAATAAAAAGCCACAAAATAGAAA
AGAAAAAGAAGAGAAGGTTGAAAAGAGAAGTAACAGTGACAGCAAAGAAAACCGGGAAACAAAATTAAATGGTCC
TGGTGAAAACGTCAGTGAGGATGAGGCTCAGTCAAGTAATCAACGTAAGAGAGCTAATAAGCACAAGTGGGTACC
ACTCCACTTAGATGTTGTAAGATCAGAGAGTCAAGAAAGACCTGGATCCCGGAACAGCTCAAGATGTCAACCTGA
AGCAAATAAACCAACACATAACAATAGGAGAAATGATACACGAAGTTGGAAGCGAGATAGAGAAAAAAGAGATGA
TCAAGATGACGTTTCCAGTGTGAGAAGTGAGGGTGGTAATATCCGAGGTTCCTTTAGAGGTCGAGGAAGAGGCCG
AGGACGGGGAAGAGGACGAGGCAGAGGAAATCCTCGATTGAACTTTGATTATTCATATGGTTATCAAGAACATGG
TGAAAGGACTGATCAACCATTTCAAACAGAACTTAATACCAGTATGATGTATTACTATGATGATGGTACAGGTGT
ACAGGTGTATCCTGTGGAAGAAGCGTTGCTTAAAGAGTATATTAAGCGTCAAATTGAATATTACTTCAGTGTAGA
AAATTTGGAACGAGACTTCTTTCTTCGGGGAAAGATGGATGAACAAGGTTTCTTGCCTATTTCCCTGATTGCTGG
TTTTCAGCGTGTTCAGGCTCTCACTACAAACCTTAATCTCATCTTAGAGGCACTGAAGGATAGCACAGAAGTAGA
AATTGTGGATGAGAAAATGAGAAAAAAGATAGAACCAGAAAAATGGCCAATTCCAGGCCCTCCTCCACGCAGTGT
GCCACCAACAGACTTCTCTCAACTGATTGATTGTCCAGAGTTTGTACCAGGCCAAGCCTTTTGCTCACATACAGT
CAGGGTGATGATCTTC**TGA**AGCTCTTGGATGTCATTTGATCGGAATATGCAGTGGAATAGGTGACTCACTGAAAT
GCCTTTATAAATACTGGAACAAATCCTGCTGCAAAAATGAAAGCGATCAGACTGTCTTCTGTTCAAGAATGTCTA
TTCCCACCTCTTGGTGGAGGAAGTTGGGCCAACACTGCAGTGGAGATAACCACCTTTGCGATAATGAGAGACAGA
CCAGAGGACTGCTACTCTTTTTATAGGAGCTGCCTATTTCTGTGTAATTGGCCTGGGCTGCATGGGCTGCTTTTA
TTCATGGTGGGAAAGTTAATTATTATTATTCTGGAAATACCGCAAGATTATGTTTTCTGTTTCCAGGGTTATGTA
CTTGTGTCCAGATGAATAAAGCAGAAAAAGAGGGGATTGAGTAGCATTTCCCAGATTCTTAAGTACTTTGCTATT
CGATTTGCCTTTCAGTGTAGTGTACATTGTAAAACTCAGATATTGTCATGATGTTTCACTTGGACATAAGACTTA
TTAATGTGGTCACTTAAGGGGTAAGGAATTTAAGAACTGGATGAGGTTATTTCTTCCTTTACTCTTCAAAATGTA
TTTTTGATACATCAGTATGAGAGGACGTCCCATCAACAAAGCATCGATGATGGACAGTCTCACACTATTTTTATC
ATATGTTTCTTTGTCAGCCTTCTGCTTCTAATCCCAGTAAGCAACTTGGACAGGCATTTTAAAAGCTGAAGAAAA
GTGACATTATTTTAGCTAGTGGTTTTTAATTTATTTTTTGTTAAGATATAATGGGTGATTATATAAGTTAGATTT
ATTTATGATATCAACTTGGGTCCAAGATGATAGTTTTAGCTAGCTTATGAACATTGGGTTCACAAGGCATTGGGT
AAGTTAGATAAAATAGCATATACTTTCTCTGCAGGGTAGGTAAGATAGGTCAGTCAAGTTGGTAATGCCTGTCCA
TTAACCATTTATGCATACTAATAAAATTATAAGAATAAAATCATAATGTTGT

FIGURE 4841

LSGRPSSPSPRLRGQLPALAARASPTRVKLLGLGVLRLRGCPAPEFGSLKIIKAGKLKTKKSNKASDFSDMENWP
TPSELVNTGFQSVLSQGNKKPQNRKEKEEKVEKRSNSDSKENRETKLNGPGENVSEDEAQSSNQRKRANKHKWVP
LHLDVVRSESQERPGSRNSSRCQPEANKPTHNNRRNDTRSWKRDREKRDDQDDVSSVRSEGGNIRGSFRGRGRGR
GRGRGRGRGNPRLNFDYSYGYQEHGERTDQPFQTELNTSMMYYYDDGTGVQVYPVEEALLKEYIKRQIEYYFSVE
NLERDFFLRGKMDEQGFLPISLIAGFQRVQALTTNLNLILEALKDSTEVEIVDEKMRKKIEPEKWPIPGPPPRSV
PPTDFSQLIDCPEFVPGQAFCSHTVRVMIF

FIGURE 4842

AAAATTCACGGTATGCTTGGAACGATTGAGATTTTCTAGGTAGAAATAGCCTAGACATCAAAGTTGGTGTGAACC
AAAATAGAGTCAGCTGACCCAGCATCAGCCACACTCTGGGTTGGAAAATGTTTGCCTGTTGGAATTAATTTAAGC
TTAAGTATATATCAACATTATTTTATTGTGCAATTAAAACAATACAAATTCATGGTTTTTTAAAGTTAAAAATTC
TAACCACTGTAACAACAGTTTTTGTGTTATTTTCTGTATTAAACATCTTGTTGCACGCATTTGAGGTCATCAGGG
TGCAAAATTTGTATTCCTGAAA**ATG**TCATATATTTTCATTAATAAATA

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FIGURE 4843

MSYIFINK

FIGURE 4844

AAAGGATTGACATCTTTGACAATAATTAGACTGGCATAAGACTACCACATGTTATAAAGTGCTAAACTGCATATC
ATAGAATAAATGATCCGAGAGTTTAGATGAGGCAAATAACAGAGTAATCAAAAATGGCTTCAGGTAGTCGGTAAA
ATTTGAACAGGTAGAATCAGCTAGGAAAAAGATATTCCATATAGAGTGAATATCCTAGGCAAATGCAGAGAATGA
GCAGGGAGTTTGTAAAGGACAGAGTGATTTGTAGGCCTCTTATCTCACACTCTTGAAACTGATTTTGGGGGTCTA
CCCTCAGTGCAGTGTTCAGAAATAAGCATTTTTTAAAAGTTACCTGTCTTATCTGCACAATGAATTTTCAGAATT
ATCCTGCTAGGTGATGGAAGGTTTAGACATTTTCCTGTGTCAAATCTGCCCAACTGTCATTGTTGTTGCTGAACT
CCTAAATGTCTTTATTGGTGATGGGTATGGGAAGGATGGGCGTGAAGTCCCCTAATCTGAGATTGTGTTATTTTA
GTCCCTGATGCTTCCTGCGTTTATGAAGTTGTATAGGAATTTTTCCACCATACATGATACATGATCATATCTAAG
ATGTCAGC**ATG**TTCATAAAGAGGATTATTTTTGTAAAACTATTAAAAGTTTTGCTTTTCTCGAAAAA

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FIGURE 4845

MFIKRIIFVKLLKVLLFSK

FIGURE 4846A

AAAACAGCGGCAGAACAAAGTTCAAAAGAACGAGTATCGATCGCCTAATGAATACCCTGGTGCTCTGGATTTTTG
GATTCCTGGTTTGCATGGGGGTGATCCTGGCCATTGGCAATGCCATCTGGGAGCACGAGGTGGGGATGCGTTTCC
AGGTCTACCTGCCGTGGGATGAGGCAGTGGACAGTGCCTTCTTCTCTGGCTTCCTCTCCTTCTGGTCCTACATCA
TCATCCTCAACACCGTTGTGCCCATTTCACTCTATGTCAGTGTGGAGGTCATCCGTCTGGGCCACAGCTACTTCA
TCAACTGGGATAAGAAGATGTTCTGCATGAAGAAGCGGACGCCTGCAGAAGCCCGCACCACCACCCTAAACGAGG
AGCTGGGCCAGGTGGAGTACATCTTCTCCGACAAGACGGGCACCCTCACCCAGAACATCATGGTTTTCAACAAGT
GCTCCATCAATGGCCACAGCTATGGTGATGTGTTTGACGTCCTGGGACACAAAGCTGAATTGGGAGAGAGGCCTG
AACCTGTTGACTTCTCCTTCAATCCTCTGGCTGACAAGAAGTTCTTATTTTGGGACCCCAGCCTGCTGGAGGCTG
TCAAGATCGGGGACCCCCACACGCATGAGTTCTTCCGCCTCCTTTCCCTGTGTCATACTGTCATGTCAGAAGAAA
AGAACGAAGGAGAGCTGTACTACAAAGCTCAGTCCCCAGATGAGGGGGCCCTGGTCACCGCAGCCAGGAACTTTG
GTTTTGTTTTCCGCTCTCGCACCCCCAAAACAATCACCGTCCATGAGATGGGCACAGCCATCACCTACCAGCTGC
TGGCCATCCTGGACTTCAACAACATCCGCAAGCGGATGTCGGTCATAGTGCGGAATCCAGAGGGGAAGATCCGAC
TCTACTGCAAAGGGGCTGACACTATCCTACTGGACAGACTGCACCACTCCACTCAAGAGCTGCTCAACACCACCA
TGGACCACCTTAATGAGTACGCAGGGGAAGGGCTGAGGACCCTGGTGCTGGCCTACAAGGATCTGGATGAAGAGT
ACTACGAGGAGTGGGCTGAGCGACGCCTCCAGGCCAGCCTGGCCCAGGACAGCCGGGAGGACAGGCTGGCTAGCA
TCTATGAGGAGGTTGAGAACAACATGATGCTGCTGGGTGCAACGGCCATTGAGGACAAACTTCAGCAAGGGGTTC
CAGAGACCATTGCCCTCCTGACACTGGCCAACATCAAGATTTGGGTGCTAACCGGAGACAAGCAAGAGACGGCTG
TGAACATCGGCTATTCCTGCAAGATGCTGACGGATGACATGACTGAGGTTTTCATAGTCACTGGCCATACTGTCC
TGGAGGTGCGGGAGGAGCTCAGGAAAGCCCGGGAGAAGATGATGGACTCATCCCGCTCTGTAGGCAACGGCTTCA
CCTATCAGGACAAGCTTTCTTCTTCCAAGCTAACTTCTGTCCTGGAGGCCGTTGCTGGGGAGTACGCCCTGGTCA
TAAATGGTCACAGCCTGGCCCACGCACTGGAGGCAGACATGGAGCTGGAGTTTCTGGAGACAGCGTGTGCCTGCA
AAGCTGTCATCTGCTGCCGGGTGACCCCCTTGCAGAAGGCACAGGTGGTAGAACTGGTCAAGAAGTACAAGAAGG
CTGTGACGCTTGCCATTGGAGACGAAGCCAATGATGTCAGCATGATCAAAACGGCTCACATTGGTGTGGGGATCA
GTGGGCAGGAAGGGATCCAGGCTGTCTTGGCCTCCGATTACTCCTTCTCCCAGTTCAAGTTCCTGCAGCGCCTCC
TGCTGGTGCATGGGCGCTGGTCCTACCTGCGAATGTGCAAGTTTCTTTGCTATTTCTTCTACAAAAACTTTGCTT
TCACCATGGTCCACTTCTGGTTTGGCTTCTTCTGTGGCTTCTCAGCCCAGACCGTCTATGACCAGTATTTCATCA
CCCTGTATAACATCGTGTACACCTCCCTGCCAGTCCTGGCTATGGGGGTCTTTGATCAGGATGTCCCCGAGCAGC
GGAGCATGGAGTACCCTAAGCTGTATGAGCCGGGCCAGCTGAACCTTCTCTTCAACAAGCGGGAGTTCTTCATCT
GCATCGCCCAGGGCATCTACACCTCCGTGCTCATGTTCTTCATTCCCTATGGGGTGTTTGCTGATGCCACCCGGG
ATGATGGCACTCAGCTGGCTGACTACCAGTCCTTTGCAGTCACTGTGGCCACATCCTTGGTCATTGTGGTTAGCG
TGCAGATTGGGCTCGACACAGGCTACTGGACGGCCATCAACCACTTCTTCATCTGGGGAAGCCTTGCTGTTTACT
TTGCCATCCTCTTTGCCATGCACAGCAATGGGCTCTTCGACATGTTTCCCAACCAGTTCCGGTTTGTGGGGAATG
CCCAGAACACCTTGGCCCAGCCCACGGTGTGGCTGACCATTGTGCTCACCACAGTCGTCTGCATCATGCCCGTGG
TTGCCTTCCGATTCCTCAGGCTCAACCTGAAGCCGGATCTCTCCGACACGGTCCGCTACACACAGCTCGTGAGGA
AGAAGCAGAAGGCCCAGCACCGCTGCATGCGGCGGGTTGGCCGCACTGGCTCCCGGCGCTCCGGCTATGCCTTCT
CCCATCAGGAGGGCTTCGGGGAGCTCATCATGTCTGGCAAGAACATGCGGCTGAGCTCTCTCGCGCTCTCCAGCT
TCACCACCCGCTCCAGCTCCAGCTGGATTGAGAGCCTGCGCAGGAAGAAGAGTGACAGTGCCAGTAGCCCCAGTG
GCGGTGCCGACAAGCCCCTCAAGGGCTGAAGGCCGAGGATGGATGCCCTGTGCCAGTGACCAGAGCACCCAGGGC
TGGCCAGTCACTGAGGGAACAGCGTCTCGGAACTGCTGGTCCTCATTCCTTGCTTCCCGTCCCCCCGGTAGACTC
TGTCCTGCTGGTCCCACCACACATGGCTGGGACATCTGTTCCCAGCTGTAGGCCCTTCCACCAGCTGGGGAGCTA
GAGGGAGCAGGCCCAAGGGCAGAGCAGAGGCTGAGGCACGGGGAGCCAGCCCCACTCGGGGACCAGAAGTGGAAC
CAAAAACAAGAAAAAACTGTGAGAGATTGTGTCTGCCCCTGCCCTGCCTGGGACCCACAGGGAGACTATAATCTC
CTTATTTTTTTACTCCTACTCCCCAGAGGGGCCCTAGTGCCTCTGTTCCTGAATTACATAAGAATGTACCATGCC
GGGAAGCCAGAGACCTGCAGGGGCCTCGGCCCCTCACATCGTGTATGTCTCTCCTTGATTTGTGTTGTGTCCAGT
TTGGTTTTGTCTTTTTTTATTTGGCAAGTGGAGGAGGCTTTTATGTGACTTTTATGTTGTGGTTGGTGTCTTAAC
TCTCCTGGGAAAAGGAGGCTGGCACACACTGGGATGCCGCAGCCTGGCCGGCTGTGGGGTGGTTTGGGAGGATCC
ATGTCGGCTCTGCCTGCAGTGACCAGTGCTCTGTGGGGCAGAGGAGCTGACCAGGGAGGGAGGTACCCATGAGCA
GAGGGTAGTGGGAGAGTGTAAAGGAGGGTTTGGTCCTGTCTGCTTCCTCACCTTGAGAGTAAAGTGCTGCCCTCT

FIGURE 4846B

GCCCCCAACACACACACATATCAATTCCTGGATTCCTTAGTCCTGCTGGCCTTGGGCTGGAGCCTAGGAAAGTGG
CCCCCAAATCCTTAGTGAGCTAAAGCTGGGTCTGAAATTTGGTCAGTGGGGAGGGGTAGTTTTCTTTTCTTTTTT
CTTTTTCTTTTTTTCTTTTTTTTTTTTGAGATGGAGTCTCACTCTTGTCACCTAGGCAAGAGTGCAATGGCACAAT
CTCAGCTCACTGCAACCTCCACCTCCTGGGTTCAAGCGATTCTCCTGCCTCAGCCTCCTGAGTAGCTGGGATTAC
AGGCACACACCACCACGCTTGGTTAATTTTTGTATTTTTAGTAGAGATGTTTCACCATGTTGGCCAGGCTAGTCT
TGAATTCCTGACCTCCTGACCTGCCCACCTCAACCTCCCAAAGTGCTGAGATTACAGGCGTGAGCCACCACACCC
AGCTCAGGGAGGCGTAGTTTTCTTTAATTTTAAATTTAAACCCAAGTTTATTGGCAGACTCCCTTTTGACCTCCC
TTTGCCTCCCCATCTGGTGCTTTCTTGCATCTACACCCCAGGGCCCTGTGGTGGGGCTGCAGGGGGAAGCTGTGC
ACCTGAGATGAGGCTGGAACGGGAATTGGCCTCTCTGCTCCCTTCTTCAGTAAGCAAGGAGCCCCGCCCCTCAGG
CCCAGCCTCTGGCAAGAGGTGGTGGAATCCTTGTGCCGGGTAGTAGAGGAGGATAAGGGCAAAACCAGGCCCAGG
CCAGTGCCTGGCTTGGTCTGGATGGGACACTGTCAGAGTTTGGCCACAGCCTGTCCTTTACTTCATCCACACCTA
TGAAGCTATTCCCTAAATAAGGCATTTCCCAAGTTAGTCGCTACCTAATCAGCCTTGAGAAGAATCCTTTCCTCT
TCTTTGATAGTGGGTCGGGGGATTCTTCAGGAATGGTTTGGAGCTGGGAGTGGGTAGGGGGATTTTAAATGTTCC
ATATGGGAGCCCCAAAGGAACTGGATGGGCTGCAGTGAGGTGGGGGCGGGTGGGCAGGGAATGGGAGAGGGGAAG
TCTTGGCAGGGAAATCCCTTTTGGCCACACAGTTTACAAACCCAGTATCATGTCTGTCTGTGTGTCTCTCAAGGT
GAGAGTCTGATTTTTATACCAAAGAGGAAATGATTTTTTTCATATTTTGTTTGTCTATATTATATAAATATATAT
ATACAGTTATATATATATATATATTATTTTTTGGTTCTCTCTCGTTTTTTAGGGAGGGAAGAAAGTACCAAGTTGCA
TTGAGCTGTAATTAAGGAACATTATAATTTATGACACATTTCTATACTTGCAAAAATTATATCATTTTATGGATA
TAAGAGAAAAATGCCTTTTTATAAAATTTCAATTTCTGAG

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FIGURE 4847

GTCATGTCTTTAGAAGGTGAACAAGCCAACTTGTGATGGCCTGCCTTTTGCTTTTGGCAGTTGGGATGAGAACAA
TTGACTCTCCCATTGGTTGTTAGATAGTTGAAATGGTGCGTTGGTGGTCATACTTAGTGTTCTAGGCTGTGAAAT
CATGGAGTTCTTCCACTTCCAAGAATGACTCATTTGCTGTTGGATTCTAGTACAGAATTT

FIGURE 4848A

CATGAGCCACCATGTCTGGCTGATTAATTTTTTTTTTAACTGTAAGAGTTTGATCTTTTCAAATGTGTTCAGAAA
CTAATTTGGATTCTTTGATTCTAGTATCTCAACGTGTTTATTTTTAGATTCTGATAAGTGAAATGGATGTCCTTG
TGGAGCTCTGGCCTCCCCAGCTTATCTATCAGTCCTGCTGTCCTCACCTCCTTGCCTCTTTCCATGCTTACCCTT
AAGCCACCATCTTTCTCAGCTAGCGTGTGTGTTTCTAGTGTNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN

FIGURE 4848B

TCCTTCTGCATTCTAGTTATCCAACACACCCAGCAGATTGTGTTCAGGGACAGAATGTGTTTTTAGAAATCCCTT
ATTATTGAAATGAATAATAATATAGCTATAAATATGAATGTCTGGAGGTATCCAGATGTGCCTTAACAAATGTAA
ATGGTTTTCATTCAGAAGTTTACATTTTTATTACATTATAAAATCTCATCATTGGGAACTTTCTAAACCATGAAT
ATCAGTTCTTTTAATGAAATTTAGGTGGTGCTTTATCATTTTGGAGAAGTTGCTGTTTGGGACAATAGCATCAGT
TTATCAAGAAGTGTACTCACCATGATATTCAACAATGTGTTACATTTGACAAAACGTGTTTAGAGTAAGAAAGAC
TAACTATACTGTCTGTTATATTTATTTATGCTTTTTGTAGTTTAGCTACATACTATAATTTTCATTTTAAACGTT
CCTTAGTTACTACAAATAATATTTATGTTTTGCTTCTTCTTAGATGTAGGCGGATGCAGAAATAGAATTATGTTA
GAGAAATTATTAAAAGTTTAATTCCAGTAGGCAGTTGGAGAAATCTGAAACTAATTTGAAAAACTTTTATGCTGT
AGTCTCATTAGAATCATTTTAAAAGCACTGTTCTTGCATTTTTCCTAGACTACAGAGAGTGTTCTTTGTCATTTT
TTTTCCTATTCTGTTGTGAAGTTTATTGTTTCAGTTATTTGAGGGAAATAACCTCTTAATATGTTTATTTTCCTG
AACTAAAGTTTTCATGTAGAGAATACAATTAAATGTTTTGTGTTATGACCCAAACTGGCTGGAAGTAGAGTTCAG
AGAGGGAGAAGGGACAAGAATCAGTGTGGGCATCTCAGGAAAGTGGCGCCAGTGCTGGGCTCCAGCCTTCTCCAC
TGGCATGATGGGTCCTCAGATTCTCCTCTGGATAATGAGGGTGTTGGGCACTGTGAGCTCTGACTTCTGGGGAGG
ATAGGCCATCATGGACTCCATACACAATTTTGATGGGTATCAGTTCTCATAAAATACCTGCTACAATTTATTTAT
TTTGTAGTTGTTTAGAAAACTGTGAGCAGTTGGGCATTAGTAAATTGTAGTTATATCTTAACGATCTTGGGAATC
ATTGAAATATGAGTTTTTTTCCCTCACTCCTATTTATTTAATTAAAAAATTAGGGAAGTTGTTCATTCACAGCTG
TATATTAATATAAAATCTCTTTATAAAATGATTCAGAGAAAAGGCAGTAGTGGTCACTTACTGTGCTAAAATACC
TTTTTCTCTAAAAATATTTAAGCTTTAGGGTTTGTCATAGTTTTACTTTTTAAATTATACTTTGTGTAACAATTT
ACGTTAACTAGAAAAATTAGATATATAATAAGTTTTGGTACTAAGAAACATTTACATTCTACACTCATTAGTCAA
ATGAACTTTTCTTTCCCAGTGCTAACAGATTTTGTTTCATGTGAAGAAAAATAAAATACAAATGAAATAAAAGTC
TAGAAACAGCAACAGGAAACTCACCACAGAAATAAAGACATAACCCTTGATAAGTTTGTGTAAGTGCCAGAATTA
TTGGAAGCAGGTGACGAATGATTAAGAAAAGCTTTATTGTGGGGACATGCTTTAAGAATCAGCTCTGTATTTGTG
CCAAGGAGATCAGGTATTGGTGTGCAAACAGATCCCATTAATACTCTGATTTGAACCATGAATTCCACCTACTCT
GCGTTGAAGCCCTCCAGTAGACTGATAGATGTAATCAAATGATCAGCTACCAAGTTTAATTCCTTTGCCTGTGTG
TAGCAACAGTTGGTAGTTTTACAAGTTAAGTTGATGGTCTGGCTGCAGATAAGAGAAAGACTCAGTGATAGGTGG
TTTGTGAGTGAAGTAACTTCCACACTGTCAAGAGTTGACAGCATATTAATTGTGTGGCATTATAATTGTGAGAAA
CAAATGAGAGCAAAATGTTAGGTCCTTTGACAAGCATTTTCCTCCTGTTTTTAAAAAGGGCTTTAAGTTGTTTCC
TATGTAAGGTAATCTTTCTTTTTTAGTATTATCTAAGAAGGATGGTAGATTATGTCATTTTGGAAACTATTGTGT
CCCTTGTATTTTAAATATTTCAGGAAAATGCCTACGATTGTTACAAAGATGTGTGTTTTACTTATAACATAAGCT
CTGATTCTCCAGTGGCCACTGGGCCTTCTCTGTGCTCTGTATTCAACTGCAGTATGAATTACAGAATGCTGTGCA
TGTTCGTTAGTACCAATACCATGTGTATGTGGTAGAAGTTGTAACCAGTTTCTGGATCTGTATGGTACTATAAAA
TACTTATTTTATAATTCTGTAACCGTATGGCAGTGTTATGCCAAAAATGTATAAAGAGCAATAGTTTTTGTTGCT
TACTGCTGTATTTTAAAATATTGTTTCTAAAATAATAGAGTTAGAGTTCCTTTTGAGTAATTATTTTTAAGAACT
ATTGCCAAATATACATCCTGTAAAACTAATAAAAGCCACTCCATCTTAGATAACATTTTAGCATTGTGCTAGAGT
ACATTATGGTGATTTTGCACGATTAAAATATTTTTAAAGAACTAGAAAAAATGACTTGCTGTTTTCCTGTCATTA
AGCATGTATTTTTTATGATTAACACATAAGACTAACATTATTTTCTTTTATCCTCAAAAATAAATATTGTGAAGG
GTGAATCAT

FIGURE 4849

MSLWSSGLPSLSISPAVLTSLPLSMLTLKPPSFSASVCVSSVXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXHIRMIY
IEIYMEQSGTSNCMTSRFCFV

FIGURE 4850

GGCACCCGGAAGTTCAAGAAGAAAGCATATCAGGCAATTGAGGAAAGGCAGAGTTTGGTTCCAGGCACTGCAGCA
ACTGGAGACACCACTTACCAAGAGCAGGGGCAGAGTCCAGCTTAAATCTCTCCCCGAAAATGGTTTCTCTCATCT
CCAGTGTGGTCATTGCTGACCACTCTGTTTTCCTAAGCATTGAAATGGCAAGTGCAACCAAAAGTAGGTATATTC
GTGACTTCTTGTTTAGGTCTCTGGGCCAGGAAATTCATACTGTTACATGGATAAGGTTGGGATTGGGGAGAGGGA
ACAGTTGGGACTAGAAGCAAAAGTGATTCTGGGACTAAAATAGGAAGCAGATGTCCTTTCCCAATGTGTGTTGCT
GTCTTCACCTGAATGCATTTGTGTAAAAATAGCGGAGGGACAATGTGAACATTTGTATTTGGAAGCTATGAATTT
ACTCTGAAGTTTGCAGTTGTTTCCAATTTGTGAGCTCTAAGAGTTTCTGCCTGTAAGAACTACTCTCCTTTTATT
TTGATTTTTAAAAAACTGTCTGAATTTCACACTCTTAGAGCCTGGAAGAGCCCTGAAAAGACACAAGTCTTGCCT
GGCTACTGCTTTTTAACTTTGAGGGCTCTATGTTGACAGACTGTTATCTCCTCTGGGTGACCTCAAACATCTGAA
AAGAAAGATGTTGCCTGTGCCAATTCCACTTTTTCCAGCTGCCCCTTGATGAACACTCCCTTATACCAGACCACT
CTTGGACTTCTGACTGGTGTCATCAAGTCCTCAGAAAATATTTTAAGTTATTTTAAGTTATTAAGGAAGGGATGA
TTTGGAGACAAGGAGTAATGAAAGATGGGTAAAAACTGGAAAAGATTCTGGTGCTAAGTACTACCCCTTCATCTT
CCATGGATGGTCATTACCTTTCCTGTCCTCCTGTTCTATGANNNNNNNNNNNNNNNNNNNNNNNCACATTTCAA
TAAGTCTTCATTGTTCTGGGTCCTTACCTTTCCTGTCCTCCTGTTATATGAACACACACACANNNNNNNNNNNNN
NNNNNNNNNNNNNNNCACATTTCAATGTCTGCATGGTTCTGGGGGTAACAAAGGCAAGAAGTTAAAGTAAGACCA
CATTTGAGTATTACTTACTCTGTAGAATCAAAACAGAGTAGTTAACACCAATTATGCAAACTACTTTTTTTTCCA
GCAGAAAGGGAGCTGACATGATCAAATCCATGTTTTCAAATGAACTGAAAAAGGCATCCAGCACCACTTATAACA
CATTTATTTCAGTTCCAGGCTGACAGCCCTGGGGCATCTAGCAGGATGCATAATTGTCATCTGGTGAGAGTTGGG
ACTTTGCTCAATTTTAATACCAATCTCTCCTGATTGTAATTACCTCCACTACTTTCATGATCCCCCTACAATATT
TTTTTAAATGATATATTTATTCACTGAATCAAATGTCATTAATGAGTTATCTTCTGTGGAGGATGACTGTTCTCT
TTGTTAATGTTCACAATCAAGATCTTGGGCTGAGAAGAGGCCCTTCACCCAAGGAGTTTGAAGTATCACAGCGTG
TGGGAAGGTGGGAACCAGGATACCCATTCATTTCCAACCGAGACACAGAGAAGTGAGTCACAGAATTTGAGCCCG
CTCTCTTGACTGCCCAGCCAGAGACACTGATTTCTGTAACCTCTTCACTTGATCCTGCCTCTTAAGCATTAAAAC
ATTCTCCTAAACCTCTGAGTGTTTTGTGGGTTCTGGGTGTTTTGTACATTTTAGCCAAGCTAACCACTTGTCTGC
AAGTACTGACTTTCCTATGAATTCT

FIGURE 4851

APGSSRRKHIRQLRKGRVWFQALQQLETPLTKSRGRVQLKSLPENGFSHLQCGHC

FIGURE 4852A

GCGAGGGCTGGGTCCTTGCCTCGCCGTCAGCCCCAGCTCGCGGCCGCCGGGGCTCGGGCCGCGCGCCCGCCGAGT
GGCTTTTGCAAGGCGGGGGCCTGTTTGCAGAGAGCCGGGCATTTGCATGAAGCGACTCGACCCCACAGAGCAGCC
GGCAGCAGCAGCGGACCCCGGCGGACGGCAGGCGGGAGCGCGGTCCCAGCCAGGCGGCCCCGGTGTCCCGGCCCC
GGTGGATGCACGGCTGGGGAGGAGCCCATGGGCCGGAGCTGAGGCTGCCCGGGGCGGCGGGGCGCGGGGCAGGGG
GCGCGGTCGAGGCCCGGAGGCGGCGGCGCAGGAGGAAGCGGAGGAGGTCGGGCGCTCGGGGCCCGGGAGGCGGGC
CGCGCAGCGCCGCAGCCCCGGGCTCGCCATGCTCCTGGCCTCGGCCGTGGTGGTCTGGGAATGGCTGAACGAGCA
CGGCCGCTGGCGTCCCTACAGCCCAGCGGTGAGCCACCACATCGAGGCGGTGGTCCGCGCCGGCCCCCGCGCGGG
GGGCAGCGTGGTGCTGGGCCAGGTGGACAGCCGTCTCGCGCCCTACATCATCGACCTGCAGTCCATGAACCAGTT
CCGCCAAGACACGGGAACTCTCCGCCCAGTTCGCCGCAACTACTACGACCCCTCCTCGGCCCCTGGGAAGGGCGT
GGTGTGGGAGTGGGAGAACGACAATGGCTCCTGGACGCCCTACGACATGGAAGTGGGCATCACCATCCAGCATGC
CTATGAGAAGCAGCACCCCTGGATCGACCTCACTTCCATTGGCTTTAGCTACGTAATTGACTTCAACACCATGGG
CCAGATCAACCGTCAGACCCAGCGCCAACGCCGCGTCCGCCGGCGCCTCGACCTCATCTACCCCATGGTCACAGG
GACCTTGCCTAAGGCTCAGTCCTGGCCAGTCAGCCCTGGGCCAGCCACCTCGCCCCCCATGTCCCCCTGCTCCTG
TCCCCAGTGTGTCTTGGTGATGAGTGTTAAGGCAGCCGTGGTCAATGGCAGCACTGGGCCCCTACAGCTGCCAGT
GACCCGCAAGAACATGCCGCCTCCTGGAGTGGTCAAGCTACCCCCACTGCCAGGCTCTGGGGCCAAGCCACTGGA
CAGCACAGGCACCATTCGAGGCCCACTGAAGACCGCCCCATCGCAGGTGATCCGGAGACAAGCCTCCAGCATGCC
CACTGGGACAACCATGGGCTCTCCTGCCAGTCCCCCAGGACCCAACAGCAAGACCGGAAGGGTGGCCCTGGCCAC
CTTGAATCGTACCAACCTGCAGCGACTGGCCATTGCCCAGTCCCGGGTGCTGATCGCCTCTGGGGTCCCCACAGT
CCCAGTGAAGAACCTAAATGGGTCCAGTCCTGTCAACCCTGCCTTGGCAGGAATCACTGGGATCCTCATGAGTGC
AGCGGGGCTGCCTGTGTGTCTCACCAGGCCACCAAAGCTGGTCCTACACCCACCCCCCGTCAGCAAGAGTGAAAT
AAAATCCATCCCAGGGGTTTCCAACACAAGCCGCAAGACCACCAAAAAACAAGCCAAGAAAGGTAAAACCCCAGA
GGAAGTGCTAAAAAAATATCTACAGAAAGTCCGGCACCCACCAGATGAGGACTGCACCATCTGTATGGAACGCCT
CACGGCCCCCTCAGGCTACAAGGGCCCGCAGCCTACGGTAAAACCTGACCTGGTAGGGAAGCTGTCCAGATGCGG
CCACGTCTACCACATCTACTGCTTGGTTGCCATGTACAACAATGGGAACAAGGATGGAAGTTTGCAGTGTCCAAC
CTGCAAGACCATTTATGGGGTGAAGACAGGCACCCAACCTCCAGGGAAGATGGAGTACCACCTCATCCCCCACTC
CTTGCCTGGCCACCCAGACTGCAAAACCATCCGGATCATCTACAGCATCCCCCCCGGCATTCAGGGACCGGAACA
CCCGAATCCTGGGAAGAGTTTCAGCGCCCGAGGCTTCCCACGACACTGTTACCTTCCGGACAGCGAGAAAGGGAG
AAAAGTTCTGAAGCTGCTGCTCGTGGCCTGGGATCGCCGCCTCATTTTTGCCATTGGCACCTCCAGCACCACAGG
CGAGTCAGACACCGTCATCTGGAATGAGGTCCACCACAAGACAGAGTTTGGCTCTAATCTCACTGGCCATGGCTA
CCCAGATGCCAATTACCTGGATAATGTGCTGGCTGAACTGGCTGCCCAGGGCATCTCTGAGGACAGCACTGCCCA
GGAGAAGGACTGAGGCCAGAAAAGCTTTGAGGTGGGAGGGGCCATGGAGACTGCAGGACAGGAAGTGAGGAGAGT
GAGTCAATGTAGAAGAAGTTGGTGTCCTGCCCTCCCAACTTTCTATCCTCCCCTCCTGCCCTGTGTCCATCCCTC
ATCCCTCCCAACCACAGTGGGAGCCAGACTGAATATAGCGACATCATTCATAAATCTCATCCAACACAAAGGGAG
ATGGGATGAGGGCCATCCTGGGTCTGTTCCCATGGAGTTTTTGGTGCTGGGTAGGCAGGAATCCCCTCCCTACCC
CACCTCCCAAGTAGGGGCATGGTCAGCACACCTAGGGTATGGGCAGTGCTTAGGCACTCCATATCCTGGCTTTGG
GAAGCCGGGGTTTCTTGCCTCAGCCGGCTTCTTGCTACTTCCACTCTGCTTTGAGACTGGAGTTTCTGCTATTCT
CCCTCTGCTGGAGGCAGGGAGCTCTCACTGTGCAAGGTTGGGGGGTGGGCAAAGGGGTGAATCACTAAACTGCTG
TGACATCAGAAACTGATGCCTTGGTGTAGAGCAAGGAAGCACTTCTTCCCAAGAGGGTCGGAGAAGGAAAAGCCT
CTGGGAGCACATTCTGCTGTCATCACAGTCCTTGGCTTCTCTGGGCCCTCCTCTCCTCCTACACAGCTCTCACCT
GTCCAAAGAGGCATCTAGGTTCTCTCATGTGGATGGATGGACTCTGGGGTTCCTCTTTGGAGTGGCATCCCATGA
TGCTGTTTCTAGACCCTCTCTGATCAAACCAGAGCCTGCATCCCACTGAGCATCTGAACTGTCCTCAGGGAGAGG
AGCCCACAGCCTTCTTCCCAACTCATTCTAGACCAGCTCAAAGATTCCATGAGTTTCATCGAGTCACTGTGAGTG
GAGCCCATGCTGGGCTCTGTGCCCTCTGTGTCTGTGCATGCGCGTGGTGTGTGTGGGCGTGTGTGCATTGCTGGG
CCAGCTTGAAGGGAAGGCCCGTCATGTCCCTGCACTCTGTTTTGCAAGATGCCAAACCCCAGTTCTGATGGGGCT
CCAACAGCCAGGCTGTGGTCCTTTGACGTTCCTCACCTGTTGCCAACCTATCCCGTAGTGAACTGAAACCCCAAT
GAAGACAGAACTGTGCCTGGGGAGATGCAATGAGGTGAGGGCTGAACTCATCCTTTTATATTTCTTTTCAAGATT
GGATCAGAGCTCATCTCCATCCAGTCTTGTTTCTATGAAGGCTTCAATCTGTTTCCATGCAAATTTGCTAATCAG
AGCCCAGAGCTGCTGGGTCCCTCATCTCCCTCATCTATTATAGATTGACTTACAGCAGGGAGAGAATCTCTTTAG

FIGURE 4852B

CTCATTCCTAATGGGGTTGGGATCACAATATGGTCTGGTCCAATCTGCATCTTGTTGTGTCCCAAGACCCTATCT
CCTCCCCAACATTCTTATTGCCTTTGGCTCCCAGTAAGGAACGAATTGGGGGCCAGGGAGGAGAACAGCGGGGAT
CAAGAAGGGAAACCCAATTCCCCCTTTGAAAGTGGGTTCTTTGAACTATGTGTTTGGGGGAAGTTCCTCTGGATA
CTAATTTGAATTTATATACCTCATGTTTTGGGGGTTTGACGNNNNNNNNNNNNNNNNNNNNNNNNNTTCATAA
TATTTGGAAGGTTTTTGATGCTAGAAAAATGGAAACAAGAGAACCTTCAAAAATGGTACTTAGATGGGAACTGGA
GGCCAATCTTTCATAAAGCCAGCCCCATAGCTGCTTGCTGTTAGGCCTCCAGCCATTTTGACATTGGGGTGGATA
GTCGATTCACCTGCCTGTCAGTCGATTCACCTGCCTGTCACCCAGTTCTGTGGATGTGCTGGTGCTGAGCCTTTG
CTCTCTTTCCAAATGGTTACAGGGATGTTGATCAGCTCCACCAGAGGGAGCTCTGATGGGAGGAATTGCTCTGCC
ATCCTTGTCCCTGTGTCTCCTGTCGGCAGGCAGCCATTGTATCTCACCAGCAGACCAGGAGACTGGTCCCAAGGT
TACTGCACCACAGGGCAATTTCCTGCCATAGTTAGGAAGGAAACACCTGAACTAAATGGAAGAGACATCCCTGCG
GTGTTTAATATCACACCCATGCCCTTTGTCAGGTTACCATGTACAGAGATTACTTGGAGAGCCTCATGCCGTCTC
TACCTTCGCACACTGGTCAAGTATCTGCTGAGCTTCTTGGCCGCAAGGATGCAGAAATAGGCTGAGGGTCCATGG
GAAGAAAGACACAATGAGGCAGTAGGAGGTGGGGAAGAAAAGAAGACAGACTTTCAAAATGGAATTAGGCACTGG
GGAGAGATCAGTTTCCCCACATCAGGGAGAAGAAGGTATAGGTGGGGAAGGGGGTGGCCAGGAGCAGAAGGAAGA
AGACTCAAGATGGAAAGGGAGCCGCTGTGCCTGTGGCAATACCACTTGGAGAGGTCGACTTCATACCTTCAAGCC
TTTTCCCCTGGGCTTTTGATTGTGTCTGTGCCCCCTTTCTTGTCCTCTCTGCAGATGCCCAGTAGGGGCTACCTC
ATCCTCGTGCTGTTCTTGTGTGGCTTTCTGGGCAGTAGGGATCTTGAATTTCCTTTCTAACACTGTGCCCGGCAA
GGCGGGGAGCATTCCTCTGCCCTTTGTCTTGTGCCAACCTGGAAAGGTGCAGTCTAGATTTCAGTGAGAACCCTG
CCAGCTGAGCCCTGTGCATCTACTACCTTGACACAGAGTGTTTTCCCACTAGAAGCTCTGCTCTGCTCTCCTGGC
CCAAGTAGGGGATTCCATGCCTTCCCTTTCATGGTCTTAGCACCAGCAGCCTAGTTTCTCCCTTCCAGAGTCTCC
AGGGATGACAAATTGGATTGGAGACAAACCTCGTCAGATGCTCATCCCCTAAAAGGTTAATTGTGTATTTGTGGC
TGCGTGTGCCTTTGTGTTTTCATTCTCTTCCCATTTTTGTACATTTTGGTCTTCTCTGTGGTTTTATACTTGGTC
AAAAGTACTCGTCTTGGTATTGCACTGTTGTGTGCATGAGAAAACTGGGGGAAGGCTCACTGGTACAAGAAAGGA
CCCCTGACCCCTTTCCTTCTCTGTGGTCCCCGGCATTAGATTGGGGGTTCTGGGAGAGGCAGGTGAATGTCCTAA
GTGAATTGTTCTGTTTGTAACTGGAATGTTTTTGAAGTCTTTGGTGTTGCTCCGTGAAAGGACATCGCCACCTGG
TGCTCATGAGGTGTCTTTGCAGAACAATAAATGGCAAATGAACAACCACAAAATTGTTACTCTTGTTGGCCTTCT
GCTGTTTGTAGATTAGTGCACCTATCTGTGAGGGATTTGGGTTACCTCCCTGAGTCTGTAAGCAACCACAAGCCC
TGCCACTGGGTGGGGGAAGTCCCTCCCCAACCACTTAAAAACAAATTTTCCACATATTACCCACCCACACATTTG
ACCTGGCTAGACTCTTTGTTTGCCTAAAGGAACAGACCACATTGCTGGGAAAATGAGTAAGTGAACGTGTGGGAG
AAAAACACTTTTAGAATCACGAATATTCACTTTTAAAGGTCTCTTTGCCTGGCTGCAATATAGTGTGTGTTTAAA
TTATTTACAGGCTGTTGTTTCTCAAATAAATGTTTAATATTAATCATTCCCAAACTGACAAGAACACAAAAATAA
AATGCAAATACAGAGCCAGCTTTGTCACCCAAATCTGTGTCTATTTCTGATAGTCCATGGAATGTGGTTTTCTTG
GAAGCCAGGGTTGGTCTCCCCACAGACCCCAGGCTAAGGTCACCAGTTAGGAACCCAGGACTTGGAAGGCAGAGC
CTGTGAGCTCTTCCATCAGGGATCTGACTCCGCAAAACGACTTGATGAATGCAATTGGCAAACTCCCATGTTCGG
ACTTCATATGCATGAGCCGTTGGACAGAGGGTTTCTTAGTATATACTTTAATGCATGTTTATGTGCAATCTTGTT
AGTGGGTATACAAGTTTGTGAAGAACTTCTCATTTCAATAGGCAGTTAATGTAATGCATTAAAAGCCTGGGAATT
TGGGGCTATATTTTTCCTTTCTGACTCAATAATCTTCAAAGAATTCATAGGAAAGTCAGTACTTGCAGACAAGTG
GTTAGCTTGGCTAAAATGTACAAAACACCCAGAACCCACAAAACACTCAGAGGTTTAGGAGAATGTTTTAATGCT
TAAGAGGCAGGATCAAGTGAAGAGGTTACAGAAATCAGTGTCTCTGGCTGGGCAGTCAAGAGAGCGGGCTCAAAT
TCTGTGACTCACTTCTCTGTGTCTCGGTTGGAAATGAATGGGTATCCTGGTTCCCACCTTCCCACACGCTGTGAT
ACTTCAAACTCCTTGGGTGAAGGGCCTCTTCTCAGCCCAAGATCTTGAGGTTTTCAAAGAGTCTCAGTGGAAAGT
AGCCGGCTGGGCATGACTGTGCATTTGTCATGGGGTTTATGCTCTTGCTGCTGAAGAGGCCCCCAAAAAGCAGTC
CTGAGTTTTCAGGTACTTGGCTGCTGGCCACACACCAAAAAGCCCTAAATTCAGCTTTTGCCACCTGGAACACAT
CTTCACACACGGTCTTGCAGAAGACGAGGAGAGTGCACTTTCGATGACACTCCAGGTGGTTGTAACCCTCCTCGT
GGATCTGGGATAACAGGTGCACCGGGGAGTAGCCAGAGGGGCAGGAGAAATCACCAGTGAGTGGATTCTTCTGCT
CCAACTTTTGGCAGAGGAGGACATCCCTATTCCCTGAGAGCTGAGTGCATTCCTGATAAACCCCACCGAAAGAGA
AGTTGGTCATTTTCCCCTCGCAGGAGCCATCATCCGTGTTGGCCTGAAAATTGAAGTTGGGAGAATTGAGATCTG
TGCAGCCAGGGTAGGTGTTGAATGTATAATAGCGCTTCACAGCAGTTTCCACTGTCTTTGACACCTTCTTCACCA

FIGURE 4852C

GGGGGCCTGGCAAGTCAGGTAGCATGTTGGGGTTGATGAAGAAATGCAGCGGCAGGCCAGAGCGGTCGATGGCCA
CCAGGTGGTTGGTGATACCCTGCTGCCAGGCCTGGAGGGTGATGCCTGGGTAAAAAGGAACCCCTCCAATGCTCT
GCACCCTGGAGTTGGTTCGGTTTGAGAGGTAGCTCTTGGTGAGGACATTCTGCGAGGTATAGTTTTCCTCAAATT
TGAAGTTCACGGTGTTTTGAAAGGCAAGTCCAGCAGAGGCGGTCACGGCACTACGACTGCTCTGGCTGTCTTGGA
GGAAGGAGGCCCTGAGGTGGTCCTCCTGAATAAGAGCAGCCCCAGCGTCGACACTGGTGGTGACGTGGGTGCCAT
AGTTGAGCACCAGGAGTTCTGCCAGGTAGGTGGCCATCCTCGTCTGGTTGTTCTCTAGACGGTCAGAGATGTCAA
GGAGTTCCTTCCTAAAACCTGAGCTTAGCTCTAAAGTTGGGTTGATTTTGACTGTGTAGACGAGGTTTCTTACCT
GAACTCGGGTAGTTATAGCTTGGTCCTTCACTTGGAGGGTCTTCATCCTCTGGAACTCAGTGGAAAACTTGCCAT
TGACTTTGGAAAAAAGAGAGAGTTCTGTGTTGATGGAGTAGGAGGTGCTACTCTGGTAATTTGCCCAGGATTCCA
GGATTTCTGAGTTCATCTCCAGGTTGCTCTGTTTCTGGGGAATGGTGAAGATTTCATCAGGGATGATATACTGTC
CATCCTCTGTTGTCCTGCAGTTGGAGTAAGTCAATTCCATAACTCGTCCCATGTCCACATTCCGCAGATTGTCCC
AGCCCCCTCCAGGTAGGACTTCCAGGACAGGTAGTTTCAAGGCATTCTTGCATTTTTGAACTCCAACTTCGTCCA
TCTCTCCCGAAGGCTTGCCTGATTTAGCCCATGCTGCCGCTGCCCAGAAGAGGATGGTGGCCCTGAAGTTGTTCA
TGGCTCAGACAGCC

FIGURE 4853

RGLGPCLAVSPSSRPPGLGPRARRVAFARRGPVCREPGICMKRLDPTEQPAAAADPGGRQAGARSQPGGPGVPAP
VDARLGRSPWAGAEAARGGGARGRGRGRGPEAAAQEEAEEVGRSGPGRRAAQRRSPGLAMLLASAVVVWEWLNEH
GRWRPYSPAVSHHIEAVVRAGPRAGGSVVLGQVDSRLAPYIIDLQSMNQFRQDTGTLRPVRRNYYDPSSAPGKGV
VWEWENDNGSWTPYDMEVGITIQHAYEKQHPWIDLTSIGFSYVIDFNTMGQINRQTQRQRRVRRRLDLIYPMVTG
TLPKAQSWPVSPGPATSPPMSPCSCPQCVLVMSVKAAVVNGSTGPLQLPVTRKNMPPPGVVKLPPLPGSGAKPLD
STGTIRGPLKTAPSQVIRRQASSMPTGTTMGSPASPPGPNSKTGRVALATLNRTNLQRLAIAQSRVLIASGVPTV
PVKNLNGSSPVNPALAGITGILMSAAGLPVCLTRPPKLVLHPPPVSKSEIKSIPGVSNTSRKTTKKQAKKGKTPE
EVLKKYLQKVRHPPDEDCTICMERLTAPSGYKGPQPTVKPDLVGKLSRCGHVYHIYCLVAMYNNGNKDGSLQCPT
CKTIYGVKTGTQPPGKMEYHLIPHSLPGHPDCKTIRIIYSIPPGIQGPEHPNPGKSFSARGFPRHCYLPDSEKGR
KVLKLLLVAWDRRLIFAIGTSSTTGESDTVIWNEVHHKTEFGSNLTGHGYPDANYLDNVLAELAAQGISEDSTAQ
EKD

5430/8433

FIGURE 4854

GGCACGAGGAGAATGTGAAGACCAACTATGTTGTTTGGGGGACTGGAAAGGAAGGCCAACCCAGAGAGTACTACA
CATTGGATTCCATTTTATTTCTACTTAATAACGTGCACCTTTCTCATCCTGTTTATGTCCGACGTGCAGCTACTG
AAAATATTCCTGTGGTTAGAAGACCTGATCGAAAAGATCTACTTGGATATCTCAATGGTGAAGCGTCAACATCGG
CAAGTATAGACAGAAGCGCTCCCTTAGAAATAGGTCTTCAGCGATCTACTCAAGTCAAACGAGCTGCAGATGAAG
TTTTAGCAGAAGCAAAGAAACCACGAATTGAGGATGAAGAGTGTGTGCGCCTTGATAAAGAGAGATTGGCTGCCC
GTTTGGAGGGTCACAAAGAAGGGATTGTACAGACTGAACAGATTAGGTCTTTGTCTGAAGCTATGTCAGTGGAAA
AAATTGCTGCAATCAAAGCCAAAATTATGGCTAAGAAAAGATCTACTATCAAGACTGATCTAGATGATGACATAA
CTGCCCTTAAACAGAGGAGTTTTGTGGATGCTGAGGTAGATGTGACCCGAGATATTGTCAGCAGAGAGAGAGTAT
GGAGGACACGAACAACTATCTTACAAAGCACAGGAAAGAATTTTTCCAAGAACATTTTTGCAATTCTTCAATCTG
TAAAAGCCAGAGAAGAAGGGCGTGCACCTGAACAGCGACCTGCCCCAAATGCAGCACCTGTGGATCCCACTTTGC
GCACCAAACAGCCTATCCCAGCTGCCTATAACAGATACGATCAGGAAAGATTCAAAGGAAAAGAAGAAACGGAAG
GCTTCAAAATTGACACTATGGGAACCTACCATGGTATGACACTGAAATCTGTAACGGAGGGTGCATCTGCCCGGA
AGACTCAGACTCCTGCAGCCCAGCCAGTACCAAGACCAGTTTCTCAAGCAAGACCTCCCCCAAATCAGAAGAAAG
GATCTCGAACACCCATTATCATAATTCCTGCAGCTACCACCTCTTTAATAACCATGCTTAATGCAAAAGACCTTC
TACAGGACCTGAAATTTGTCCCATCAGATGAAAAGAAGAAACAAGGTTGTCAACGAGAAAATGAAACTCTAATAC
AAAGAAGAAAAGACCAGATGCAACCAGGGGGCACTGCAATTAGTGTTACAGTACCTTATAGAGTAGTAGACCAGC
CCCTTAAACTTATGCCTCAAGACTGGGACCGCGTTGTAGCCGTTTTTGTGCAGGGTCCTGCATGGCAGTTCAAAG
GTTGGCCATGGCTTTTGCCTGATGGATCACCAGTTGATATATTTGCTAAAATTAAAGCCTTCCATCTGAAGTATG
ATGAAGTTCGTCTGGATCCAAATGTTCAGAAATGGGATGTAACAGTATTAGAACTCAGCTATCACAAACGTCATT
TGGATAGACCAGTGTTCTTACGGTTTTGGGAAACATTGGACAGGTACATGGTAAAGCATAAATCGCACTTGAGAT
TCTGAATTATTTGGCTCCTCCATTTCTGGAAATTGAGACTCAAGCTTTATGAATTTATCAAGAACTTAAAAATGA
AGAAGGTCACAGATTGATCTTTTATAAGACCTTATTTGATGCTTTGTGCTTCAAGGAGATGATACCTGTCATCCA
TATAAGCAAACTTTTTGGCTTACAACTATTTTTTTAATATTAGCCTTCTAGTCTGTAATGGAAATTGTATATTTT
GATAGAAGTTTTTTCTCCATTGGTTAAATTAGCATTACTTAAAATTTGTTTCTTTAGAAAATAAATGCAGGTTAT
AAATGTGTGTATATTTAGAGATTATAAGGCTCTCTGAGCCATCTTCTGATTTTTCATTGCTCTATAATTCTTTTT
ACTGAAAATACTATGTTATGAATGGTATTAAATTTTAGTCTCTGGAACATCCAAAACCAAGCAAAGGGATGTGAC
TATTTTGAATGAATCAGAATGTCAACTTGTATGTACACTATATCTACACTTACTCATTATTTAAAAAGAATAATG
AAAAATTTAGATCAATTCTTCAATTTGATTGAACTGTTCAGCCTTTTCAAGATTTCTTTATTTACAAATGATTAC
ATTTAAATGAATGTACATTTTTCTCACTGACTTTGGTGATTTTGAAACCTAGAATGATGTGTTTCTATCTGTAAT
ATCTTTCCATTTGAAAAAAATCTCAAAACCCAGATTAAAACCAAAAAAAAAAAAAAAAAACTCGAGACTAGTTCTC
TCCCTCGTGCCGAATTCGGCACGAGGCCTCGTGCCGTCTCTCTGGGTTTCTTGTTCACTAAGGAGTAACACAGAG
GTCAGGCAGAGAATGGGGGTCTCGCAGGCTAGGGACCTCAGGGAGAGGCCTCTGTTGCCCTTTTCAGCAAGGCTG
GAAATGGGATATGGGCAGGGGACGTCTTCTCTGACTTCACCCTAGACCTTCTGGCTCCAAATGGGGCCCATGGCC
TTGAGCACCTGGGACCAGCTCTTTCCACCACAGGGCATTGGGCACTGGGCACTTTCTTATCGAGATAGTCACTCC
CACGTCTGGTTCGTGATGGGCTTGGCCCTCCAGCTCAGCACAACTGCAAGAATGGATTTTGTATTCTCTAGACGG
ACACTGTCCAAGATGGTAGCCATTGGCCACATGCGACACATTTTTAATGAATTAAAATTAATCAAGACTGGAAAT
GTCGGCCAGGCCTGGTGGCTCATGCCTGTAATCCCAGCACTTTGGGAGGCCATAGAGGGCGGATGACTTGAGGTC
AGGAGTTTAAGACCAGCCTGGCCAACATGGTGAAACCCATTTCTACTAAAAACACAAAAATTAGCTGGGCATGGT
GGTGTGTTCCTGTAATCCCAGCTGCTTGGGAGGCTGAGGCAGGAGAATCGCTTGAACCCAGGAGGCAGAGATTGG
AGTGAGCTGAGATCATGCCACTGCCCTCCAGTGGCCACCACATCCGGCAAGGCAGATGGGACCATTTCCTTCATC
CAGAACGTTCTGTGGACATCACTGCTCTAGGTTCCTCCCTTATGGAGTCTCACAAGACTGTCTAGCCAGCAAGAT
CTCTTTTCCAACCAGGCCAGGAGCACCTCTCCACCCACTGCTGCTGGTCTGACCGCCTTCCTGGAAGTCCCTCTT
GAGGCAGGCCCTGGAGTTAGAAGCTGGGCAGAGGCACCCACAGCCTTATCCTTTGCCAATCTCTGACTCAATGCC
ACGGCCACTGTAGTGAGCTGAACCACCTCCAGCAGTCCCCTGGCAGAAGCACCTGGAAAACATGCAATGGGAACC
TTCACCCTGAGGCCAGGCCCTTCCCATGCTACCCAACAGTAGACAGGACACCCTGTGTTGTTGGCTGCACCGGGG
TGCTGGGATCTGTGGATCCCTGGGGCCTGGAAGCCACTCTCAGCACATACAGCCACTGTGTTCCGAGGTCCAGTC
AGCTGGCCGGGAAGGAATTCAACACAGCCAAGGACAGAGGTCCATATGATGACGGGTGGATGCTCGTGTGACTTT
GCTGACCTTTTATGTTTTCTATGGGCAATAAAGGCCAAGAGAGCTCCCAAAAAAAAAAAAAAAAAA

FIGURE 4855

MSVEKIAAIKAKIMAKKRSTIKTDLDDDITALKQRSFVDAEVDVTRDIVSRERVWRTRTTILQSTGKNFSKNIFA
ILQSVKAREEGRAPEQRPAPNAAPVDPTLRTKQPIPAAYNRYDQERFKGKEETEGFKIDTMGTYHGMTLKSVTEG
ASARKTQTPAAQPVPRPVSQARPPPNQKKGSRTPIIIIPAATTSLITMLNAKDLLQDLKFVPSDEKKKQGCQREN
ETLIQRRKDQMQPGGTAISVTVPYRVVDQPLKLMPQDWDRVVAVFVQGPAWQFKGWPWLLPDGSPVDIFAKIKAF
HLKYDEVRLDPNVQKWDVTVLELSYHKRHLDRPVFLRFWETLDRYMVKHKSHLRF

FIGURE 4856A

CCAGGGAGAGGACTGCGGCCAAGAGTGCCCGGTGGGGACGTTTTGGCGTGAACTGCTCGAGCTCACTGCTCCTGT
GGGGGGGCCACCTGCCACGGGGTCACGGGGCAGTGCCGGTGTCCGCCGGGGAGGACTGGGGAAGACTGTGAGGCA
GGTGAGTGTCAGCCGCAGCCCCAGTTCCGCCTCCCCAGGCTGCACGGCTCCAAGCTGGTGGGGCCCTGAACTGTG
GGGGCCCCAGCCCTGCGGATCCCAGGCCCGTCTATAGCAGGTGTGAGAGCTCACAGTGCACTCCCCTGGGGTAGG
GAGGGGGGGTCTGTGGCTGCCCCACCAAGTTCCTGGGGCCTCCAGGCTGCCCTCTCGGGCTGCTCCCTCTCTGCA
TGAGGCTCCATCTCTAACGGGCTCGGCTCCTTGTGTTGCCAGCTGAACGGTGCCGGGGGCTGGGGGTCCTCTACT
GTGGGTGCGCACCCCGCAGCCTGCAGCCCCAGGAGGTGCCCGGGTCCTCTCCCCTCCCCGGGGCAGGCTGAGATG
GTAACAGTGGTTCCACCTCCTCGGCTGTGGCTCCAGGGGCATCGTGCCATGTTATGTTGATGTGTTGAGCAAGGG
CAGCTTGGGCACTGACTGGCCATGGGGGTGGGCACTAGATTGTCCCGAGGGCCGCTGGGGGCTGGGCTGCCAGGA
GATCTGCCCAGCATGCCAGCACGCTGCCCGCTGCGACCCTGAGACCGGAGCCTGCCTGTGCCTCCCTGGCTTCGT
CGGCAGCCGCTGCCAGGACGTGTGCCCAGCAGGCTGGTATGGTCCCAGCTGCCAGACAAGGTGCTCTTGTGCCAA
TGATGGGCACTGCCACCCAGCCACCGGACACTGCAGCTGTGCCCCCGGGTGGACCGGCTTTAGCTGCCAGAGAGC
CTGTGATACTGGGCACTGGGGACCTGACTGCAGCCACCCCTGCAACTGCAGCGCTGGCCACGGGAGCTGTGATGC
CATCAGCGGCCTGTGTCTGTGTGAGGCTGGCTACGTGGGCCCGCGGTGCGAGCAGCAGTGTCCCCAGGGCCACTT
TGGGCCCGGCTGTGAGCAGCGGTGCCAGTGTCAGCATGGAGCAGCCTGTGACCACGTCAGCGGGGCCTGCACCTG
CCCGGCCGGCTGGAGGGGCACCTTCTGCGAGCATGCCTGCCCGGCCGGCTTCTTTGGATTGGACTGTCGCAGTGC
CTGCAACTGCACCGCCGGAGCTGCCTGTGATGCCGTGAATGGCTCCTGCCTCTGCCCCGCTGGCCGCCGGGGCCC
CCGCTGTGCCGAGACCTGCCCAGCCCACACCTACGGGCACAATTGCAGCCAGGCCTGTGCCTGCTTTAACGGGGC
CTCCTGTGACCCTGTCCACGGGCAGTGCCACTGTGCCCCTGGCTGGATGGGGCCCTCCTGCCTGCAGGGTAAGCC
ACATCTAGGAGTCCAGGGACCGGGGTCCAGGCCTGAGCGAGGGTGCTGGCCTCTTGCAGGGCCCACAGGACACTT
GGTGCCTGGGGGAGGGAGGAAGGGGCTGTTAGGACTGAGGACCGTGCCTTTCACCTGTGCCCCTCTCCAGGCAGG
GATGGGGAGTGAGGCTGGGCTGGCAGGTCATCCTAGGGGCAGCCCCCTGCAAGGTGCCTGACCCCAAAGTCCAAC
ATGGGGCTGGAAAGCCAGACAGACCCTGTGGGGCCAGCTGGCTGGGGGATGCAGGTTGCTCCCTCTTCCCTGGCC
CCAGCCTGCCCTGCCGGCCTGTACGGCGACAACTGTCGGCATTCCTGCCTCTGCCAGAACGGAGGGACCTGTGAC
CCTGTCTCAGGCCACTGTGCGTGCCCAGAGGGCTGGGCCGGCCTGGCCTGTGAGAAGGAGTGCCTCCCCCGGGAC
GTCAGAGCTGGCTGCCGGCACAGCGGCGGTTGCCTCAACGGGGGCCTGTGTGACCCGCACACGGGCCGCTGCCTC
TGCCCAGCCGGCTGGACTGGGGACAAGTGTCAGAGCCCACCTGCCCCCGGCCTGTCCTGGCCCACAGATCCCCAC
GGGCCCCTCCTAGAAGCCTCCGCAGCCCTCATCTTTCTGCAGCCTGCCTGCGGGGCTGGTTTGGAGAGGCCTGTG
CCCAGCGCTGCAGCTGCCCGCCTGGCGCTGCCTGCCACCACGTCACTGGGGCCTGCCGCTGTCCCCCTGGCTTCA
CTGGCTCCGGCTGCGAGCAGGCCTGCCCACCCGGCAGCTTTGGGGAGGACTGTGCGCAGATGTGCCAGTGTCCCG
GTGAGAACCCGGCCTGCCACCCTGCCACCGGGACCTGCTCATGTGCTGCTGGCTACCACGGCCCCAGCTGCCAGC
AACGATGTCCGCCCGGGCGGTATGGGCCAGGCTGTGAACAGCTGTGTGGGTGTCTCAACGGGGGCTGCTGTGATG
CGGCCACGGGGGCCTGCCGCTGCCCCACTGGGTTCCTCGGGACGGACTGCAACCTCACCTGTCCGCAGGGCCGCT
TCGGCCCCAACTGCACCCACGTGTGTGGGTGTGGGCAGGGGGCGGCCTGCGACCCTG**TGA**CCGGCACCTGCCTCT
GCCCCCCGGGGAGAGCCGGCGTCCGCTGTGAGCGAGGCTGCCCCCAGAACCGGTTTGGCGTGGGCTGCGAGCACA
CCTGCTCCTGCAGAAATGGGGGCCTGTGCCACGCCAGCAAGCGGCAGCTGCTCCTGTGGCCTGGGCTGGACGGGG
CGGCACTGCGAGCTGGCCTGTCCCCCTGGGCGCTACGGAGCCGCCTGCCATCTGGAGTGCTCCTGCCACAACAAC
AGCACGTGTGAGCCTGCCACGGGCACCTGCCGCTGCGGCCCCGGCTTCTATGGCCAGGCCTGCGAGCACCCCTGT
CCCCCTGGCTTCCACGGGGCTGGCTGCCAGGGGTTGTGCTGGTGTCAACATGGAGCCCCCTGCGACCCCATCAGT
GGCCGATGCCTCTGCCCTGCCGGCTTCCACGGCCACTTCTGTGAGAGGGGGTGTGAGCCAGGTTCATTTGGAGAG
GGCTGCCACCAGCGCTGTGACTGTGACGGGGGGGCACCCTGTGACCCTGTCACCGGTCTCTGCCTTTGCCCACCA
GGGCGCTCAGGAGCCACCTGTAACCTGGATTGCAGAAGGGGCCAGTTTGGGCCCAGCTGCACCCTGCACTGTGAC
TGCGGGGGTGGGGCTGACTGCGACCCTGTCAGTGGGCAGTGTCACTGTGTGGATGGCTACATGGGGCCCACGTGC
CGGGAAGGTGGGCCCCTCCGGCTCCCCGAGAACCCGTCCTTAGCCCAGGGCTCAGCGGGCACACTGCCCGCCTCC
AGCAGACCCACATCCCGGAGCGGTGGACCAGCGAGGCACTAGTAGAGGCAGTCCCGTGGAGCCCGCCTCTCCAGT
CCCAGCCAGAGGGGACCCTGGCCTTTGGTGACCACTGAGAAGGACACTTCACGGGCCCAGAGCTCCTGGTACTGC
CCTTCCTTTGAGGGCCGTGGAGGGCTGTGGACAGCCCAGCAACCTGTCGCTCTTGGAGGCTGGTGTGGCCTTGAG
GAGGGAAGCCTCGCATGGCCGCTGGAAGAGAGGCGCCTCCTGGCCTGGCTCTGCAGAACCCAGGGGCACGCTCTG

FIGURE 4856B

GGCCTGGGCTGAGGAAGTCCCGCTCTCCCCGCGGCTCTGAGTTGGACTGAGGACAGGTGTGGGCGCCAGTGTGGG
TGCAGGCGCAGGTGCAGGCACAGGGCCACTGTCCTCCAGGCAGGCTTTTTGGTGCTAGGCCCTGGGACTGGAAGT
CGCCCAGCCCGTATTTATGTAAAGGTATTTATGGGCCACTGCACATGCCCGCTGCAGCCCTGGGATCAGCTGGAA
GCTGCCTGTCATCTCCTGCCCAATCCCCAGAAACCCTGATTCAGGTCTGCAGGCTCCTGCGGGCTCACCAGGCTG
CTGGCTCCGGTACCATGTAAACCTAGGAAGGTAAAGGAGCAGGCAACCTCCTCGTGGCCTGTGTGTTTGCTGTGT
TACGTGGACTCTGTGTGGGCTCCTCCCTGGGGCCCGGCCAGCATAACGGTGCACCCAGGGACCTCCCAGTGCACC
CGGGGCCCTTTGCAGGGGTGGGGGTGCCACACAAGTGAAGAAGTTGGGACTCATCTCAGTTCCCAGTGCTATTGA
GGAGAACGCTGGGGCTGCATTCATTACCGCTGAGACCCAGAGACTGGCTGTTCCCAGAGAATGGCCCAGGGGGAG
GAGGGCTGGTGTGGAGGGGCAACCTGGACTGAGGCCGAACTCCCTTGGGCTCACCCCACCCACCCCTACCTGAGC
ATCAGCAGTGGGGGGAGGGCAGCATCGCAGGGGCAGGGACTCCCTGGGTGAGGACAGACCAGCCCTCCCGAGCAC
CTGGCACTCATGGGCTGAGGCTGACTTCTCCTGGAAGAAGGGCCCAGAGTGGAAGGAAGAGGCAGAGGGTAGAGG
TGGTGGCTGGGGGCTCCTCTGCAGAGTGGGGTGGCCAATGGAGAGGGCTGCACTCACACCGCAACATAGGACTCT
CTCTCCCTTAAGAAGGCCCCCTTAGGGTCTGGGCTGCCGCCCCCATCACCCTAAAACCAGCCAAGGTAGCTGAGG
CCCCAGGGCAGACAATTTCACCAGCAGGAGGAGGAGGAGTCCAGTGAGCTTGGTTGCTCACAGACAGCAAGGGAG
CTGTCACAGAGGAAGCTGATGAATGGACCGCTGTGGGGAGACTTTAAAGTAGAACAGTGATAAGGGAGGGCAGGA
TGGTGGGGATGCAGAAGCAGCAGCCAGAGAGAGACGGACTGGGGTGCAGACGGAGTGTGGAAAACGCATACCTTG
AAATGAAGCATCCAGCAGATGGGGTGAGTGGATACAGCTCAGGAGATTCTCCCAGGAATAGCAGGGAGGCGTAAA
GAGAGACAACGTACAGAGATAGATGAATGGAAATGGGTAAGGGAGGTGTTCATTCACATCCATCTAACTGCAAAA
TACAAAAGTAAGAAGTCATTGACATGAAGCAACGACGACCAAGACGTTCTCAGATCTAAAGGTGAATGATCTCAG
TCAGCCTGGAAATGCACAAGGTGGAAAAATAACATAAAAAAGCCATAAGACCTTGAAGAACATCAATGTCAAAGA
TAAATTCTAAAGTCCCAGAGAAAAAAGAATGGGAATCAAATTGACCTCAGACTATACGTGAGAAACACGGAGAGC
CAGAAAACTGTGATGTTCCATCCTCAGAGTTTGAAGGAAATATTTGAAGGCTGAATTTTACATCCAGCTAAACTA
TCAAAGGCATGCAAAGTCCATGTTATTCTTAGGCCTTCAAGGCCTCGGCCATTTTTCTACAGAAAAGCCTGATTT
TAAAATGCTCTTAGAGACGTTCTCCAGCCAGAAGAGAAAGAAGCCAGGAGGGTGCTCTGAGATATTCAGTCACCA
CAGTTCCCAAATGGCCTAGGAATTCAGAGAGTCAGAATATCACCATTACTCCCCAATGGGAACCCCCGACAGTCT
CAGCATGGTGTGAGGGTGTGGACGGGGGGCCTGGCAGGTACCAATCACTCATCCCGCTCAGTGAAGACACAGTGT
TCAGCTACGGAAGCCATAAGGCAGGCCGAGCTTCTGCCCATCCGGAGGAAATCTCAGCTATCCAACGGCGGTCAG
GAGCAGAGGAAAATAAAGCAGAATAACTAGAAAACACGCTCACAGATCCTAATGTTAACGGTTACAAATGACGAC
GGAAAAACAAACTCCTGACCATATATTATATAGTTTCAAGCAGCAAGAAGGAGGATATTGAACATTCTCAACACA
CATAATAAACGCTTGAGATGATGATATGCTCATTACCCTGATTTGATCACTAGACATCCCATGTATCAAAACATC
ACTGTGTATCCGATGAATATCTACAATTATTGTCAATTAAAAACATCATTAAAAACAA

FIGURE 4857

MGLESQTDPVGPAGWGMQVAPSSLAPACPAGLYGDNCRHSCLCQNGGTCDPVSGHCACPEGWAGLACEKECLPRD
VRAGCRHSGGCLNGGLCDPHTGRCLCPAGWTGDKCQSPPAPGLSWPTDPHGPLLEASAALIFLQPACGAGLERPV
PSAAAARLALPATTSLGPAAVPLASLAPAASRPAHPAALGRTVRRCASVPVRTRPATLPPGPAHVLLATTAPAAS
NDVRPGGMGQAVNSCVGVSTGAAVMRPRGPAAAPLGSSGRTATSPVRRAASAPTAPTCVGVGRGRPATL

FIGURE 4858

AGCTTGGTGCGCTATGGCGACACCCAGCCTGCGGGGTCGTCTGGCGCGGTTTGGGAACCCGCGGAAGCCTGTGCT
GAAGCCCAATAAACCTCTCATTCTAGCTAACCGCGTCGGGGAGCGGCGCCGGGAGAAGGGCGAGGCGACTTGCAT
CACGGAGATGTCGGTGATGATGGCTTGCTGGAAGCAGAATGAATTCCGCGACGATGCGTGCAGAAAAGAGATCCA
GGGCTTCCTCGATTGTGCCGCGAGGGCTCAGGAAGCCCGAAAGATGAGATCAATACAGGAAACCCTGGGAGAGTC
TGGGAGTTTACTTCCAAATAAATTGAATAAGTTGTTACAGAGGTTTCCTAACAAACCTTACCTCAGCTGAAAATG
GACAAGTATTTTCAATGACTGAAATATAGCTTCTGACAACTATGCAGAGGCATTTTAGAGACATTGGCATTGCCA
TGCCCTCTTTGGAGGGTAGAAGAGGCAAAACACTTTTTTCACCCTTTGGAATCATAGTATGGGTAGAAGTTATGA
TTTATCTTGAAATAAAATCCTCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 4859

MATPSLRGRLARFGNPRKPVLKPNKPLILANRVGERRREKGEATCITEMSVMMACWKQNEFRDDACRKEIQGFLD
CAARAQEARKMRSIQETLGESGSLLPNKLNKLLQRFPNKPYLS

FIGURE 4860

CTCGGGGTAATGCTCTTCTCCAAACTGTTTTTCGGAAGCAGCGGTGAACGGGATCGTGCACGATGTGGACGTGCT
GGGCGCGGGCATCCGGCTGGTGACCCTGCTGGTGGATCGGGACGGGCTGTACAAGATGAACCGCCTGTACCTCAC
CCCCGACGGCTTCTTCTTCCGAGTCCACATGTTAGCCCTGGACTCCTCCAGCTGCAATAAGCCGTGTCCAGAGTT
TAAACCTGGTATTGAAACTGACCTGAATGACGCTGCATATGTACTTTATACCACCGTTTGTAACGTGGGTGCCAC
AGCCCGGGCTGTAGGTCGCCCAGCCTTTTTTTGGGAGCGATGGGGAACAATGACATGAATGGGATTTAGACGACA
GGCAGCAGGTATATTGTGATGGGCCACATCTACCATAAGAGACGGCAGCTCCCTACAGCTCTGCTCCAGGTCCTG
AGAGGCCGCCTCCGTCCAGGGATGGACTGCTAAGGAGCAGCAGCAGCTATGTGAAAAGGTTTAATCGAAAAAGGG
AAGGGCAGATTCAAGGTGCAGTTCATACCCAATGCATTTGAAACAACCATCCTGGCATTTCTGGACCGCAAGAGA
CTTGGACGTCGGCAACAAGACATGAAAGGTCTACCTTCATGTAATGGGTCCTCCTTCAGAAGAGAGCCCTCAGCT
ACTCTGTGAATGACTTGCATAGCTGCAACTGTAATCTCGAAGGTGTCACTTTGTTATTTACAAGATGCTTCTTAA
ATGGGCTGCTCCTGAGCCTCAGTGTCAAGGTGATTCAACTGTTGTGCCAGACAGTGATTTACACAGCTCAGATAA
CTGACCTGTCTAGTTAACAGATCACTGCTTCATGTTTTCAAATATTTTAATTTAATACATTCTTTAGTAGAAATA
GTCCACAAAAACATTTTCTTGAATTTAAATATACAACTTTTATATCATGTATCAAACCAGATTTTATATTCAAAC
GATCACATTTTAAATTCTGTACATAACAGTAAGCGCACTAGTCAAAAGACATTTATGTTTGAAATGTCATTTAGA
TCAAACACAAGGGTCAAAGCCCAGGACAAGTATTAAAGTTTTATACTTAAAGAGTACTAAAGGGCCAGTGTGCAG
ATGGGTGGATTAAAAAAATAAATAAAATAAAAAATAGTACTAAAGGGCTTACTTCAGGCAAAAGTGTTCCTGACG
TACCAAAAAGTAAGATATAGTTTATTTTCATGCCTCCCTGCTCCTAGTAATGTATGTTTTGTGCTGAACTGGCAG
CTATCCCAATGTGAAATGTATTTTGGATGTATCTGGTGTCATTTTTCTATTAAGACCAAGTATAATGTTTGTTTG
TAAAGCAATAAATCTTGACTTGAAATCAGATCTTGGATGCACCTGTTTGTTTTTGTTTTAGCCTTACTGAGCCCT
AAAGGTTTGAGAAAAAGGCTTTCTCAAATTCATTCCCCAAACCTTGGAACCAATATTCACCAATGACGGCTCACA
AGCAAGCGAATTTTAAACATTTTTCAGTTGGTTTTAAAAAGGTTTAATTGGCCGGG

FIGURE 4861

LGVMLFSKLFFGSSGERDRARCGRAGRGHPAGDPAGGSGRAVQDEPPVPHPRRLLLPSPHVSPGLLQLQ

FIGURE 4862

GGCACGAGGGGATTACAGGTGCCCACCACCACGCCCAGCTAATTTTTGTATTTTTAGTAGAGACGGGGTTTCACC
ATGTTGGCCAGGCTGGTCTCGAACACCTGACCTTGTGATCCACCCGCCTCGGCCTCCCAATAATTTGTAAGTTAT
GTTAGCGGGATCCTCAAGGCCTTGCTTTGCCCCGTGGAGACGCTTGCTCGGATGAGCTCAGGAAACAGTACCGGC
TGCGTGGCAGGTCTGGGTGTTGTGTGCGAGGACGTGGCCTTTGAACACCGCTGTGTTCTCAGAGGTCCTTAGGAG
ATATTTTTTTTTGTCTTAGGGGGACTGTGTTAAGTTCAGACAAATCATGCTGGGTGTGTAGAGAGTGTGAAATAC
GTCAGTGAAGTAAGTAGCAGTGAGCGATTGTGAATGTGTAATGTAAATGGAAAACCGGGTTTTACCGTGTTAAGT
TATTCACTAGGGAGCCAGTCGTAGTTCTTTGTAATCCTCTTTCTTCCAAACCTGCTTTGCTGAAAGTTGCAGAAA
AGGAAGTGTGTGGAGAGAAACAGAACCCTTCAGGGTGGGTCAGAGGACGCCATCCACAGTGGATTCGTGTTCGTT
TGCAGGTGGAAGCAGTGATTTTTAGGACCCACTGATTAAAAACAAACATTCCCAAGTGTCTCTGAGAGATGCTGT
TTATTTGTTAATTAAAAAGCTTTTTTCTCTGTCTTTTAAATTATGGCTTTCATGTAATAAGGATATTTTTAGTGA
AAAATTGTTTTCCTTTCAAATTACAGACCTTTTAAAAAAACTTAATTTGAGCGAGTACCTTTTCATTTGACACTT
TTCCTGTTTCTAACCTTAGGAAACCAGAATAGCGTTTGGCAGACACGACGTTTTCAGTTTACCTTTGACACCTGC
CCCACTCCATTTTGCTTTGTGATGTCTTCATTTAACAATAAATTATCTGAAAAAACAAAAAAAAAAAAAAAAAA

5440/8433

FIGURE 4863

GCTGGAAGCAACAGATGGGGACTGCAGAGGAGGTGGTGGTATTGGGATAGTGCTGCAGCCAAGAACTTAACGACT
GAAAGTAACTGGGATATCTTCATAATTATCTGAAGGTCACAGTGGGAGAACAAAATTAAAAGAACTGAGAAGACT
TACAAGAGAACCTCCTAAGAGTCACCCAAACAATCGGCTGAGAATGAGAAGAGGTTCAAGTGATTCTTGTGCCTC
AGGCTCCCAAGTAGCTGGGACTACAGTAGCTGGGCCAGCACACCCAGAAAGCCTCACATTGTGCAGTGGAGAAGC
TGAGAGAAGAGGAAAAGAGGAGTGGCCAGACTCCCACCACTACCCAGGACCAACTCCTGCTCCTGAATCTTCTGA
TGGGCCCCACAAGGTGACAGTGCTGGCTACA**ATG**CTATCCAGCCGGTGGTGGCCAAGTTCCTGGGGGATCCTAGG
GCTGGGCCCCCGAAGCCCTCCTCGGGGATCCCAGCTCTGTGCCCTCTATGCCTTTACTTATACTGGGGCAGATGG
CCAGCAGGTGTCTCTGGCTGAAGGGGATAGGTTCCTACTGCTTCGAAAGACCAACTCCGACTGGTGGTTGGCAAG
ACGCCTAGAAGCTCCCTCCACCTCTCGACCCATCTTCGTCCCAGCAGCCTATATGATAGAGGAATCCATCCCTTC
CCAGAGTCCAACTACCGTCATCCCCGGCCAATTGCTCTGGACTCCTGGGCCGAAGTTGTTTCATGGTTCCCTGGA
GGAGTTGTCTCAGGCCCTCCCAAGCAGGGCTCAGGCTAGCTCGGAGCAGCCTCCTCCACTTCCCCGCAAAATGTG
TAGGAGCGTCAGCACTGACAATCTGAGCCCCAGCTTTCTGAAGCCTTTCCAGGAAGGACCAAGCGGAAGATCCCT
CTCCCAGGAAGACTTGCCGTCAGAAGCCAGTGCCAGCACAGCAGGCCCCCAGCCCCTCATGTCAGAGCCCCCTGT
GTACTGTAACCTGGTGGACCTTCGCCGCTGTCCTCGGTCCCCACCCCCAGGCCCTGCATGCCCCCTGCTGCAGAG
GCTGGATGCCTGGGAGCAGCACCTGGACCCCAACTCTGGACGCTGCTTCTACATAAATTCACTGACTGGCTGCAA
GTCCTGGAAGCCCCCGCGCCGCAGTCGCAGCGAGACGAACCCTGGCTCCATGGAGGGGACACAGACCCTGAAGAG
GAACAATGATGTCCTGCAACCTCAGGCAAAGGGCTTCAGATCTGACACAGGGACCCCAGAACCGCTTGACCCACA
GGGTTCACTCAGCCTCAGCCAACGCACCTCGCAGCTTGACCCTCCAGCCTTGCAGGCCCCTCGACCTCTGCCGCA
GCTCCTGGACGACCCCCATGAGGTGGAAAAGTCGGGTCTGCTCAACATGACCAAGATTGCCCAAGGGGGGCGCAA
GCTCAGGAAGAACTGGGGCCCGTCTTGGGTGGTGTTAACGGGTAACAGCCTGGTGTTCTACCGAGAGCCACCGCC
GACAGCGCCCTCCTCAGGCTGGGGACCAGCGGGTAGCCGGCCCGAAAGTAGCGTGGACCTGCGCGGGGCGGCCCT
GGCGCACGGCCGCCACCTGTCCAGCCGCCGCAACGTCCTGCACATCCGCACGATCCCTGGCCACGAGTTCCTGCT
GCAGTCGGACCACGAGACAGAGCTGCGAGCCTGGCACCGCGCGCTGCGGACTGTCATCGAGCGGCTGGTTAGATG
GGTGGAGGCCCGGAGGGAGGCTCCGACCGGCCGGGACCAAGGGAGTGGGGATCGGGAGAACCCCCTGGAGCTGCG
TCTGTCGGGCTCTGGACCCGCGGAGCTGAGCGCCGGGGAGGACGAAGAAGAGGAGTCGGAGCTGGTGTCCAAGCC
GCTGCTGCGCCTCAGCAGCCGCCGGAGCTCCATTCGGGGGCCCGAAGGCACCGAGCAGAACCGCGTGCGCAACAA
ACTAAAGCGGCTCATCGCGAAGAGACCGCCCTTACAAAGCCTGCAGGAGCGGGGTCTGCTCCGAGACCAGGTGTT
CGGCTGCCAGTTGGAATCACTCTGCCAGCGGGAAGGAGACACGGTGCCCAGCTTTTTGCGGCTCTGCATTGCTGC
TGTGGATAAAAGAGGTCTAGATGTGGATGGCATTTATCGGGTGAGCGGGAACTTGGCAGTGGTCCAGAAGCTTCG
CTTTCTGGTGGACAGAGAGCGTGCGGTCACCTCCGATGGGAGGTATGTGTTCCCAGAACAGCCAGGACAAGAAGG
TCGGTTAGATTTGGACAGTACTGAGTGGGATGACATTCATGTGGTCACCGGAGCCCTGAAGCTTTTTCTCCGGGA
GCTGCCCCAGCCTCTGGTGCCACCACTGCTGCTGCCCCATTTCCGTGCTGCCCTTGCACTCTCCGAATCAGAGCA
GTGCCTCTCTCAGATACAAGAATTAATAGGCTCAATGCCAAAGCCCAACCATGACACTCTACGGTACCTCCTGGA
GCATTTATGCAGGGTGATAGCACACTCAGATAAGAATCGCATGACACCCCACAACCTGGGAATTGTGTTTGGACC
AACCCTGTTTCGGCCAGAGCAGGAGACATCTGACCCAGCAGCCCATGCTCTCTACCCAGGGCAGCTGGTCCAGCT
GATGCTCACCAACTTCACCAGCCTCTTCCCC**TGA**TGCAGGGAAGGAAGAAGAGAAAACATATTTCCGGTCATCTC
TGGTGGTGAGAGGCTGGTGTTCTGTTTTGAGGATATCCCTTTAAATCTCCCAAATGACTGTCTCTATCTTCATGA
GTGTGACTTGAGGTGTTGGGATGGGTGAGGGAGCTTCTCTAAAGAGGAAAGTGAGTGGATTAACCCCTGCTTCTC
TTCTTGTTCCCTGTTATCATTCCTCCCCAACATAATAATACATAAAGTGGCATGGTATTTTTAAAAAAAAAAAAA
AAAAAAAAAAA

FIGURE 4864

MLSSRWWPSSWGILGLGPRSPPRGSQLCALYAFTYTGADGQQVSLAEGDRFLLLRKTNSDWWLARRLEAPSTSRP
IFVPAAYMIEESIPSQSPTTVIPGQLLWTPGPKLFHGSLEELSQALPSRAQASSEQPPPLPRKMCRSVSTDNLSP
SFLKPFQEGPSGRSLSQEDLPSEASASTAGPQPLMSEPPVYCNLVDLRRCPRSPPPGPACPLLQRLDAWEQHLDP
NSGRCFYINSLTGCKSWKPPRRSRSETNPGSMEGTQTLKRNNDVLQPQAKGFRSDTGTPEPLDPQGSLSLSQRTS
QLDPPALQAPRPLPQLLDDPHEVEKSGLLNMTKIAQGGRKLRKNWGPSWVVLTGNSLVFYREPPPTAPSSGWGPA
GSRPESSVDLRGAALAHGRHLSSRRNVLHIRTIPGHEFLLQSDHETELRAWHRALRTVIERLVRWVEARREAPTG
RDQGSGDRENPLELRLSGSGPAELSAGEDEEEESELVSKPLLRLSSRRSSIRGPEGTEQNRVRNKLKRLIAKRPP
LQSLQERGLLRDQVFGCQLESLCQREGDTVPSFLRLCIAAVDKRGLDVDGIYRVSGNLAVVQKLRFLVDRERAVT
SDGRYVFPEQPGQEGRLDLDSTEWDDIHVVTGALKLFLRELPQPLVPPLLLPHFRAALALSESEQCLSQIQELIG
SMPKPNHDTLRYLLEHLCRVIAHSDKNRMTPHNLGIVFGPTLFRPEQETSDPAAHALYPGQLVQLMLTNFTSLFP

FIGURE 4865

GCCCCCGAGCAGGAGCCGGTGCGAGCGGAGCAGAGCCGAGGTCGGGCCGCGAGCGGAGCCGGCTGAGCGGGCGCC
GAGCTCCCGCC**ATG**GCCCGGAACACGCTGTCCTCGCGCTTCCGCCGGGTGGACATCGACGAATTTGACGAGAACA
AATTTGTGGACGAGCAGGAGGAGGCGGCGGCGGCGGCGGCGGAGCCAGGCCCGGACCCGAGCGAGGTGGACGGGC
TCCTGCGGCAAGGGGACATGCTTCGGGCATTCCATGCAGCCTTGCGGAACTCTCCCGTCAACACCAAGAATCAAG
CTGTGAAGGAGCGAGCCCAGGGCGTGGTGCTGAAAGTGCTCACAAACTTCAAGAGCAGTGAGATTGAGCAGGCTG
TGCAGTCACTGGACAGAAACGGCGTTGACTTGTTAATGAAGTACATTTATAAAGGCTTTGAGAAGCCCACAGAAA
ATAGCAGCGCAGTGTTACTCCAGTGGCACGAAAAGGCCTTAGCAGTAGGAGGACTAGGCTCCATTATAAGAGTTC
TTACAGCAAGAAAGACTGTT**TAA**AAAAAATAAAAAGACTCATGTTACCTTGAGAAGAATTCTGGATGCCCAGGCT
GGTGAAGAAGGGATTGACAATGGACCATCTTCCTAGGAACTCCCAAGTAAACTATTTCAGGACATGTATCTGCTG
AAATGTATTTTATTTTCAAGGTGGAGGGGAAAATCGTCTGTTTCCTAAATCCTGTTTAGGATCTGATAGTCTATG
CCTTTGTCTCCGAGTACTGCAGAACTGACATTTTGACGGTCTACCAGCGTGGCGGCTGGTGTTGGTCAGATGCAC
CTGTGTGCACTGGGGGAGGGATGGTTTGGGCAGGTGCAGATCCAAGGGCTGTGGTAAACGGGAGAGCTTGTGTTT
TTGAAGTGGAAAAAAACCCAAGAGTTTGTACAGACATCCTGTCTTCCCAGAGAAGGTGGACACTCTTGGGCTCAT
TGTAAAGTGCCTGCTGCATCAATAAAGCTCTTGGCTTATTAGTCTATACAAAAAAAAAAAAAAAAA

FIGURE 4866

MARNTLSSRFRRVDIDEFDENKFVDEQEEAAAAAAEPGPDPSEVDGLLRQGDMLRAFHAALRNSPVNTKNQAVKE
RAQGVVLKVLTNFKSSEIEQAVQSLDRNGVDLLMKYIYKGFEKPTENSSAVLLQWHEKALAVGGLGSIIRVLTAR
KTV

FIGURE 4867A

TAAATTAGAGGGGAAAAAAAAAATCTCCAGTCCCTTCACGTCGTGACGCTTGCTTCCGGGAAGCGGGCCGGAAGC
CACTCCTCGAGTCTGCGTCAAACCCGACTTCAGGGGCCGTCGTAAAAGTGTCGTCCCTGTCTCTCCGACCGGCCA
CAGGTTTCCGCTTGCCTCTGGCCGGGGGTCGGCAACTGCAGGCGTCAGTTTCCCTCAAGATGGCGGACGAGGAGG
CTGGAGGTACTGAGAGGATGGAAATCAGCGCGGAGTTACCCCAGACCCCTCAGCGTCTGGCATCTTGGTGGGATC
AGCAAGTTGATTTTTATACTGCTTTCTTGCATCATTTGGCACAATTGGTGCCAGAAATTTACTTTGCTGAAATGG
ACCCAGACTTGGAAAAGCAGGAGGAAAGTGTACAAATGTCAATATTCACTCCACTGGAATGGTACTTATTTGGAG
AAGATCCAGATATTTGCTTAGAGAAATTGAAGCACAGTGGAGCATTTCAGCTTTGTGGGAGGGTTTTCAAAAGTG
GAGAGACAACCTATTCTTGCAGGGATTGTGCAATTGATCCAACATGTGTACTCTGTATGGACTGCTTCCAGGACA
GTGTTCATAAAAATCATCGTTACAAGATGCATACTTCTACTGGAGGAGGGTTCTGTGACTGTGGAGACACAGAGG
CATGGAAAACTGGCCCTTTTTGTGTAAATCATGAACCTGGAAGAGCAGGTACTATAAAAGAGAATTCACGCTGTC
CGTTGAATGAAGAGGTAATTGTCCAAGCCAGGAAAATATTTCCTTCAGTGATAAAATATGTCGTAGAAATGACTA
TATGGGAAGAGGAAAAAGAACTGCCTCCTGAACTCCAGATAAGGGAGAAAAATGAAAGATACTATTGTGTCCTTT
TCAATGATGAACACCATTCATATGACCACGTCATATACAGCCTACAAAGAGCTCTTGACTGTGAGCTCGCAGAGG
CCCAGTTGCATACCACTGCCATTGACAAAGAGGGTCGTCGGGCTGTTAAAGCGGGAGCTTATGCTGCTTGCCAGG
AAGCAAAGGAAGATATAAAGAGTCATTCAGAAAATGTCTCTCAACATCCACTTCATGTAGAAGTATTACACTCAG
AGATTATGGCTCATCAGAAATTTGCTTTGCGTCTTGGTTCCTGGATGAACAAAATTATGAGCTATTCAAGTGACT
TTAGGCAGATCTTTTGCCAAGCATGCCTTAGAGAAGAACCTGACTCGGAGAATCCCTGTCTCATAAGCAGGTTAA
TGCTTGGGATGCAAAGCTTTATAAAGGTGCCCGTAAGATCCTTCATGAATGATCTTCAGCAGTTTTTTTATGGAG
ATGGAATACAAAAAACTCTTGCTATGGAATTGTGAAGTATTATAAACAACTGCAGAAAGAATATATCAGTGATGA
TCATGACAGAAGTATCTCTATAACTGCACTTTCAGTTCAGATGTTTACTGTTCCTACTCTGGCTCGACATCTTAT
TGAAGAGCAGAATGTTATCTCTGTCATTACTGAAACTCTGCTAGAAGTTTTACCTGAGTACTTGGACAGGAACAA
TAAATTCAACTTCCAGGGTTATAGCCAGGACAAATTGGGAAGAGTATATGCAGTAATATGTGACCTAAAGTATAT
CCTGATCAGCAAACCCACAATATGGACAGAAAGATTAAGAATGCAGTTCCTTGAAGGTTTTCGATCTTTTTTGAA
GATTCTTACCTGTATGCAGGGAATGGAAGAAATCCGAAGACAGGTTGGGCAACACATTGAAGTGGATCCTGATTG
GGAGGCTGCCATTGCTATACAGATGCAATTGAAGAATATTTTACTCATGTTCCAAGAGTGGTGTGCTTGTGATGA
AGAACTCTTACTTGTGGCTTATAAAGAATGTCACAAAGCTGTGATGAGGTGCAGTACCAGTTTCATATCTAGTAG
CAAGACAGTAGTACAATCGTGTGGACATAGTTTGGAAACAAAGTCCTACAGAGTATCTGAGGATCTTGTAAGCAT
ACATCTGCCACTCTCTAGGACCCTTGCTGGTCTTCATGTACGTTTAAGCAGGCTGGGTGCTGTTTCAAGACTGCA
TGAATTTGTGTCTTTTGAGGACTTTCAAGTAGAGGTACTAGTGGAATATCCTTTACGTTGTCTGGTGTTGGTTGC
CCAGGTTGTTGCTGAGATGTGGCGAAGAAATGGACTGTCTCTTATTAGCCAGGTGTTTTATTACCAAGATGTTAA
GTGCAGAGAAGAAATGTATGATAAAGATATCATCATGCTTCAGATTGGTGCATCTTTAATGGATCCCAATAAGTT
CTTGTTACTGGTACTTCAGAGGTATGAACTTGCCGAGGCTTTTAACAAGACCATATCTACAAAAGACCAGGATTT
GATTAAACAATATAATACACTAATAGAAGAAATGCTTCAGGTCCTCATCTATATTGTGGGTGAGCGTTATGTACC
TGGAGTGGGAAATGTGACCAAAGAAGAGGTCACAATGAGAGAAATCATTCACTTGCTTTGCATTGAACCCATGCC
ACACAGTGCCATTGCCAAAAATTTACCTGAGAATGAAAATAATGAAACTGGCTTAGAGAATGTCATAAACAAAGT
GGCCACATTTAAGAAACCAGGTGTATCAGGCCATGGAGTTTATGAACTAAAAGATGAATCACTGAAAGACTTCAA
TATGTACTTTTATCATTACTCCAAAACCCAGCATAGCAAGGCTGAACATATGCAGAAGAAAAGGAGAAAACAAGA
AAACAAAGATGAAGCATTGCCGCCACCACCACCTCCTGAATTCTGCCCTGCTTTCAGCAAAGTGATTAACCTTCT
CAACTGTGATATCATGATGTACATTCTCAGGACCGTATTTGAGCGGGCAATAGACACAGATTCTAACTTGTGGAC
CGAAGGGATGCTCCAAATGGCTTTTCATATTCTGGCATTGGGTTTACTAGAAGAGAAGCAACAGCTTCAAAAAGC
TCCTGAAGAAGAAGTAACATTTGACTTTTATCATAAGGCTTCAAGATTGGGAAGTTCAGCCATGAATATACAAAT
GCTTTTGGAAAAACTCAAAGGAATTCCCCAGTTAGAAGGCCAGAAGGACATGATAACGTGGATACTTCAGATGTT
TGACACAGTGAAGCGATTAAGAGAAAAATCTTGTTTAATTGTAGCAACCACATCAGGATCGGAATCTATTAAGAA
TGATGAGATTACTCATGATAAAGAAAAAGCAGAACGAAAAAGAAAAGCTGAAGCTGCTAGGCTACATCGCCAGAA
GATCATGGCTCAGATGTCTGCCTTACAGAAAAACTTCATTGAAACTCATAAACTCATGTATGACAATACATCAGA
AATGCCTGGGAAAGAAGATTCCATTATGGAGGAAGAGAGCACCCCAGCAGTCAGTGACTACTCTAGAATTGCTTT
GGGTCCTAAACGGGGTCCATCTGTTACTGAAAAGGAGGTGCTGACGTGCATCCTTTGCCAAGAAGAACAGGAGGT
GAAAATAGAAAATAATGCCATGGTATTATCGGCCTGTGTCCAGAAATCTACTGCCTTAACCCAGCACAGGGGAAA

FIGURE 4867B

ACCCATAGAACTCTCAGGAGAAGCCCTAGACCCACTTTTCATGGATCCAGACTTGGCATATGGAACTTATACAGG
AAGCTGTGGTCATGTAATGCACGCAGTGTGCTGGCAGAAGTATTTTGAAGCTGTACAGCTGAGCTCTCAGCAGCG
CATTCATGTTGACCTTTTTGACTTGGAAAGTGGAGAATATCTTTGCCCTCTTTGCAAATCTCTGTGCAATACTGT
GATCCCCATTATTCCTTTGCAACCTCAAAAGATAAACAGTGAGAATGCAGATGCTCTTGCTCAACTTTTGACCCT
GGCACGGTGGATACAGACTGTTCTGGCCAGAATATCAGGTTATAATATAAGACATGCTAAAGGAGAAAACCCAAT
TCCTATTTTCTTTAATCAAGGAATGGGAGATTCTACTTTGGAGTTCCATTCCATCCTGAGTTTTGGCGTTGAGTC
TTCGATTAAATATTCAAATAGCATCAAGGAAATGGTTATTCTCTTTGCCACAACAATTTATAGAATTGGATTGAA
AGTGCCACCTGATGAAAGGGATCCTCGAGTCCCCATGCTGACCTGGAGCACCTGCGCTTTCACTATCCAGGCAAT
TGAAAATCTATTGGGAGATGAAGGAAAACCTCTGTTTGGAGCACTTCAAAATAGGCAGCATAATGGTCTGAAAGC
ATTAATGCAGTTTGCAGTTGCACAGAGGATTACCTGTCCTCAGGTCCTGATACAGAAACATCTGGTTCGTCTTCT
ATCAGTTGTTCTTCCTAACATAAAATCAGAAGATACACCATGCCTTCTGTCTATAGATCTGTTTCATGTTTTGGT
GGGTGCTGTGTTAGCATTCCCATCCTTGTATTGGGATGACCCTGTTGATCTGCAGCCTTCTTCAGTTAGTTCTTC
CTATAACCACCTTTATCTCTTCCATTTGATCACCATGGCACACATGCTTCAGATACTACTTACAGTAGACACAGG
CCTACCCCTTGCTCAGGTTCAAGAAGACAGTGAAGAGGCTCATTCCGCATCTTCTTTCTTTGCAGAAATTTCTCA
ATATACAAGTGGCTCCATTGGGTGTGATATTCCTGGCTGGTATTTGTGGGTCTCACTGAAGAATGGCATCACCCC
TTATCTTCGCTGTGCTGCATTGTTTTTCCACTATTTACTTGGGGTAACTCCGCCTGAGGAACTGCATACCAATTC
TGCAGAAGGAGAGTACAGTGCACTCTGTAGCTATCTATCTTTACCTACAAATTTGTTCCTGCTCTTCCAGGAATA
TTGGGATACTGTAAGGCCCTTGCTCCAGAGGTGGTGTGCAGATCCTGCCTTACTAAACTGTTTGAAGCAAAAAAA
CACCGTGGTCAGGTACCCTAGAAAAAGAAATAGTTTGATAGAGCTTCCTGATGACTATAGCTGCCTCCTGAATCA
AGCTTCTCATTTCAGGTGCCCACGGTCTGCAGATGATGAGCGAAAGCATCCTGTCCTCTGCCTTTTCTGTGGGGC
TATACTATGTTCTCAGAACATTTGCTGCCAGGAAATTGTGAACGGGGAAGAGGTTGGAGCTTGCATTTTTCACGC
ACTTCACTGTGGAGCCGGAGTCTGCATTTTCCTAAAAATCAGAGAATGCCGAGTGGTCCTGGTTGAAGGTAAAGC
CAGAGGCTGTGCCTATCCAGCTCCTTACTTGGATGAATATGGAGAAACAGACCCTGGCCTGAAGAGGGGCAACCC
CCTTCATTTATCTCGTGAGCGGTATCGGAAGCTCCATTTGGTCTGGCAACAACACTGCATTATAGAAGAGATTGC
TAGGAGCCAAGAGACTAATCAGATGTTATTTGGATTCAACTGGCAGTTACTG**TGA**GCTCCAACTCTGCCTCAAGA
CAATCACAAATGACGACAGTAGTAAAGGCTGATTCAAAATTATGGAAAACTTTCTGAGGGCTGGGAAAGTATTGG
AGGGTCTTTTGCTCCATGTCCAGGTTCACTTACATCAATAAAATATTTCTTAATGGAGTATTGCTTTCAATTAGC
AAACATATGCTTCACAGGAAAAAAGGACATAGATCAATCTGTTTTATGTGCTAGTATTTCCAGGAATTTATTCCC
CTTCATAATTTGTCTCATTTCATTTTATTTCATCCACTTGGTAGATGAAGTCACGTCAAACAGTTGTAGACATTT
TATGTGTTGGTTAACTCTTCTGCAATTTTGTATTTGGTGTTTTCCCCCCAAGTTTAGTTCAACTGACATTGGATC
ACTGACAAAATTCTAATAATCTGTGATAGTCTTCCTTGCAGTTAAAGAAGAATTGCAGAAACCATGCAATATACT
TGGGAAAGATTCCAAAAATAAATTTTTTATTATTTCTCTTTTAAGGAAATACCCCTAATGTGCCACCTGCTGCTA
TCACCACAAATTAAACTCAATCTCTATGTGGACAGAGGATGATTTCTGCCAATATGGAAAAGCTTTTTTCTCACT
GTAGGCCTCAAGAAAAGTTAGGGTAATGTATTTGTTATTCATTCCTGACGGTACAAAGAGCTTGCAGTTCTCACC
TCTGACTACCAGTAGCTTTGTTGAGTTTTGAAATAATACTTGACATTTTCCAAAGGCAAATCTCATTCTGCAAGG
AGATTGTGGCACCATCCTGTTTGACTCTCAGAAACCTCTTGTAATTCTGATGTAAAAACTGTAGAATGAAGATGA
GAAAATTCTCGCAATGAGTGGATCATGACAACTGTAAATTAGAACAATCAGATTTAAACCAATTCCGCAATCTTC
TATATCTTTGTAAAAGACAAATCCTTGATGTTGTCTGTGTGCAACCTTTTCATAAACTCTGGTTTTATGACTAGT
ACAAACCACCAAAAAAGCCATGTGATCAATAGTCTGTGTCCTGTTATAACATGCTGTGGTTGAGCCATCTTGTTT
ATAAATAATAGAGCTCTCCTGAATTTGTGCATAGACTTCTTGGTTCCTGGCTTTTGTTTTTTGTATCAAGAGATT
GTGATATAAAACAGCAGAAGATAAATGGAAACCTTCCATTTTAACTTACGTTGTTTCTGGGGTAATGTTAGAACC
TTGAAAGATGCATTCAAAGACTGTATCTTATTTTGCCCTTGGCTATTAGTGTCTCACATATGTGTGTAAATGTTT
TCCTACCTTCTTTTTGCTCAGCAAAGGCAAGCAAGTAAAATATATTTGCTAAGTGATTAGTGATGCACATTTGGG
GCTAGATTTTTTTGGTACTTTTATGTAAAGAAAAGTGGATTTTGCAGTAAGGGATTGGCATGAGCAGGCGTCAGA
ATCACAATCATGATTTTCTACTTGAATAATTACAATTCAGAAGGTATCTGGATAAATAGATACATGTCTAGTGAA
CAATTTGTAACAATAACAGGTAAGGATCAGGAAATTCAGTATTCAGTTTGTCAGATTTGCCAGAATGATGAAAGT
ATTTGAACATGTGTGTTTGTTTCTTATATAATTGTATTGAGTGGATTGTTTGACTGGGAAATCTGGGCTAGAATA
GGAAACAGAAGATACTGACTTCTACCCTAATAGATGGGCCCCAATTTAGCAAAGATAAACTGACTTTATTTTTAG

FIGURE 4867C

TCCTTTTTATATTAACTTAATAAATTCTGGAGTTAGGCTCTCAAGAGGACAGAGGGACTGTCTGGCAATGGCCAG
CCAGACCTTTACTGCCAAAGAACCCATTTCATATTGCGTTCCACTGATTGAGATTGATTCAGATTTTTGCACTGT
AGATGAGCGTATGTCTCAGTGCTGCCCCAAGCCCCAGGGATTTCTCATTATGTTCAAATGTCCTAGTGATTTACC
TTAATCATTGCAAACAATTATGCTTATGAAGTTTACTTACAAACAAGCAACTGAGTCACTTTATTTTCTTTAGTG
TAGTATGTGAAGGCACTGGTTCAACAGGATGGCTCCAGAACTGTGTTTTTCTAATGTTTGGTAAGGGGCTAGTGA
GAATTTTAATGATATGGTGAAGAAAAATATATCTGTATAATTAATTTATTATATTGGTGTATGGGCTGTGAGTTC
ACCTTTTAGTGGTCATTTGTCATTTCATAACAACTATGCATTTTGGTTCACTGTGATGATGATCTATATTTAGTG
ACTGCAACATGTTTATACCACTGATTCAAATTCCATCCATGATGAAGTTATACAAATAATGCATATATTGATAAC
TTTTATTGCAAAAATGTAAATTTAAAACTTGTATAATGTTCTTGTGCTTTTTAAAATAAAATATATGTGTATATT
TAAAAAGA

FIGURE 4868

MADEEAGGTERMEISAELPQTPQRLASWWDQQVDFYTAFLHHLAQLVPEIYFAEMDPDLEKQEESVQMSIFTPLE
WYLFGEDPDICLEKLKHSGAFQLCGRVFKSGETTYSCRDCAIDPTCVLCMDCFQDSVHKNHRYKMHTSTGGGFCD
CGDTEAWKTGPFCVNHEPGRAGTIKENSRCPLNEEVIVQARKIFPSVIKYVVEMTIWEEEKELPPELQIREKNER
YYCVLFNDEHHSYDHVIYSLQRALDCELAEAQLHTTAIDKEGRRAVKAGAYAACQEAKEDIKSHSENVSQHPLHV
EVLHSEIMAHQKFALRLGSWMNKIMSYSSDFRQIFCQACLREEPDSENPCLISRLMLGMQSFIKVPVRSFMNDSS
AVFLWRWNTKNSCYGIVKYYKQLQKEYISDDHDRSISITALSVQMFTVPTLARHLIEEQNVISVITETLLEVLPE
YLDRNNKFNFQGYSQDKLGRVYAVICDLKYILISKPTIWTERLRMQFLEGFRSFLKILTCMQGMEEIRRQVGQHI
EVDPDWEAAIAIQMQLKNILLMFQEWCACDEELLLVAYKECHKAVMRCSTSFISSSKTVVQSCGHSLETKSYRVS
EDLVSIHLPLSRTLAGLHVRLSRLGAVSRLHEFVSFEDFQVEVLVEYPLRCLVLVAQVVAEMWRRNGLSLISQVF
YYQDVKCREEMYDKDIIMLQIGASLMDPNKFLLLVLQRYELAEAFNKTISTKDQDLIKQYNTLIEEMLQVLIYIV
GERYVPGVGNVTKEEVTMREIIHLLCIEPMPHSAIAKNLPENENNETGLENVINKVATFKKPGVSGHGVYELKDE
SLKDFNMYFYHYSKTQHSKAEHMQKKRRKQENKDEALPPPPPPEFCPAFSKVINLLNCDIMMYILRTVFERAIDT
DSNLWTEGMLQMAFHILALGLLEEKQQLQKAPEEEVTFDFYHKASRLGSSAMNIQMLLEKLKGIPQLEGQKDMIT
WILQMFDTVKRLREKSCLIVATTSGSESIKNDEITHDKEKAERKRKAEAARLHRQKIMAQMSALQKNFIETHKLM
YDNTSEMPGKEDSIMEEESTPAVSDYSRIALGPKRGPSVTEKEVLTCILCQEEQEVKIENNAMVLSACVQKSTAL
TQHRGKPIELSGEALDPLFMDPDLAYGTYTGSCGHVMHAVCWQKYFEAVQLSSQQRIHVDLFDLESGEYLCPLCK
SLCNTVIPIIPLQPQKINSENADALAQLLTLARWIQTVLARISGYNIRHAKGENPIPIFFNQGMGDSTLEFHSIL
SFGVESSIKYSNSIKEMVILFATTIYRIGLKVPPDERDPRVPMLTWSTCAFTIQAIENLLGDEGKPLFGALQNRQ
HNGLKALMQFAVAQRITCPQVLIQKHLVRLLSVVLPNIKSEDTPCLLSIDLFHVLVGAVLAFPSLYWDDPVDLQP
SSVSSSYNHLYLFHLITMAHMLQILLTVDTGLPLAQVQEDSEEAHSASSFFAEISQYTSGSIGCDIPGWYLWVSL
KNGITPYLRCAALFFHYLLGVTPPEELHTNSAEGEYSALCSYLSLPTNLFLLFQEYWDTVRPLLQRWCADPALLN
CLKQKNTVVRYPRKRNSLIELPDDYSCLLNQASHFRCPRSADDERKHPVLCLFCGAILCSQNICCQEIVNGEEVG
ACIFHALHCGAGVCIFLKIRECRVVLVEGKARGCAYPAPYLDEYGETDPGLKRGNPLHLSRERYRKLHLVWQQHC
IIEEIARSQETNQMLFGFNWQLL

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FIGURE 4869

CCCACGCGTCCGCCGGGCGCGTTCCGTTGGCGGCGGATTCGAACGTTCGGACTGAGGTTTTTCTGCCTGAAGAAG
CGTCATACGGACCGGATTGTTTTCGCTGGCCCAGTGTCCCCGGAGCTTGTGTGCGATACAGAGAGCACCTCGGAA
GCTGAGGCAGCTGGTACTTGACAGAGAGG**ATG**GCGCTGTCGACCATAGTCTCCCAGAGGAAGCAGATAAAGCGGA
AGGCTCCCCGTGGCTTTCTAAAGCGAGTCTTCAAGCGAAAGAAGCCTCAACTTCGTCTGGAGAAAAGTGGTGACT
TATTGGTCCATCTGAACTGTTTACTGTTTGTTCATCGATTAGCAGAAGAGTCCAGGACAAACGCTTGTGCGAGTA
AATGTAGAGTCATTAACAAGGAGCATGTACTGGCCGCAGCAAAGGTAATTCTAAAGAAGAGCAGAGGT**TAG**AAGT
CAAAGAACATATTCTTGAAAGTTATGATGCATTCTTTTGGGTGGTAACAGATCATAAAGACATTTTTTACACATC
AGTTAATATGGGATTATTAAATATTGGCTATAAGTGAAAAAAA

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FIGURE 4870

MALSTIVSQRKQIKRKAPRGFLKRVFKRKKPQLRLEKSGDLLVHLNCLLFVHRLAEESRTNACASKCRVINKEHV
LAAAKVILKKSRG

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FIGURE 4871

GGGCGATARGGTGCTGTCCTTGGGGTGCTGTGTATATGGGATGATGACGCTTATCAGCATTATCTAGTCCTTTCC
ACCCCGAAATTCGCCCCGATTAAAGACTGTGTTGCATTATCAGCCTGCCGACCATGCCCGCGGGCGTGCCCATGT
CCACCTACCTGAAAATGTTCGCAGCCAGTCTCCTGGCCATGTGCGCAXGGGCAGAAGTGGTGCACAGGTACTACC
GACCGGACCTGATGAGAAACAGGTTGAGAAGAGTGAAGTTGATTTCTCAAAGTCACATAGCTTTAGTGAGACGAT
TTGAGGATCTGAAGCCCAAGCTTTCTGTTTGCMAAACTGGGATCACAAGTCTTTCGGTCGGAGAACTGGAAGTCT
GGGCAGAGTCGAGCAGAGGAGACCTGATGACTGCCTAGACTTGTGCTCAGTGCTGTGTTGGGGAGAACTGCTACG
ACATACCTGAAATTCCACCAAAGCGTGGAGAACTCAAAACGGAGCTTTTGGGACTGAAAGAAAGAAAACACAAAC
CTCAAGTTTCTCAACAGGAGGAACTTAAATAACTATGCCAAGAATTCTGTGAATAATATAAGTCTTAAATATGTA
TTTCTTAATTTATTGCATCAAACTACTTGTCCTTAAGCACTTAGTCTAATGCTAACTGCAAGAGGAGGTGCTCAG
TGGATGTTTAGCCGATACGTTGAAATTTAATTACGGTTTGATTGATATTTCTTGAAAACCGCCAAAGCACATATC
ATCAAACCATTTCATGAATATGGTTTGGAAGATGTTTAGTCTTGAATATAATGCGAAATAGAATATTTGTAAGTC
TACTATATGGGTTGTCTTTATTTCATATAAATTAAGAAATTATTTAAAAAAAAAAAA

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FIGURE 4872

MSTYLKMFAASLLAMCAXAEVVHRYYRPDLMRNRLRRVKLISQSHIALVRRFEDLKPKLSVCXTGITSLSVGELE
VWAESSRGDLMTA

FIGURE 4873

GAGCCAGCCTCTGGGACCGAGGAAATACCAGAAATAGCCCACCACCCTACGGGTTTCATCTCTCACCAGAAGAAA
TGAGGAGACAGCGGCTTCACAGATTCGATAGCCAGTGAGGTGGCATCTTGGGAAGACATGGCCTATTCGTGTAAT
TATTGCCCATTTGGCTCATTCCCCAAGCCCCTAATTCATTTTAATTCATTTTAAACAAAAGCAGAGTACACCGGT
ATTGCTCCAGATCGCTCACATCACCTGGGACAGTCCCATGGCCCCTATGAGTCAACTCACAGCTTGCGGGGAGTG
GGCCTTCTCCTGGCCTTGTTCTTGCTCATAAACAGGTCACTTCCTCCATGAAGAGACCAGTTTCCACGCTCCCAT
CTCTCACTGCTGACTCAGCGATGCCTCTGCCTCGGTCTGCTTTTGAAGACTGTGACCTTCACCAGGAGGTTTTAC
TTACACCAGTCGGGAAGATTAGTCCCTCATTCTGCCTGGAGTGCCCCGTGTTTGACTTGGCAGCGGGTGTGGAGC
CATCCCCGCGTCCTCCTGGCGCATTGCCACTGTGGCTGTCCAGGAACAGGATGTGGCTGCCTTGGCCGAATGTTG
TCCTACTCTCCCCAACCCCGGCGCCTCAGCTCCTCAGCTCCTCGGGCCCCTGCGTCTGGCTGGTGTTTGCAGGGC
TTTCGCTCTGCTCTGGTATTGCTCTGCCTTTATAGAAAGTCTTATTGAAGAAGTGTAAGAAAGACCTAAGGTGGG
GAAGACTCCTACACACACCATTAGTATCAGTGACACCAGCAATGTAGGTTCCCAGCCCCTTCCCAGTGGCAGCTT
GTGTGTCCAGGAGATAGGACATCATTTAACGCATCAGCAAAGTAGCAGCAGATGCCACATACAGAGTAGAGCGAA
GGCATTTGGTGGATCGGTCACTAGAGATCTATCTTGCAGAAAGTATGTTTTTCCTCATAAAAGTGCCTCTTAATT
GGCCATTGTACCAGCCACTTGTCCTAGCCAAATGTCCAAAACACGCCCTTGGGCCCCGCCACGTTACAATCCACA
GATTGTCTGTCTGAGTCGTTTAAGGCATTTCCTGGTGCTTGTGTTCCATGAATAAAAGGACAAAGTCAGAAGATC
ACTGATGTCTTACTGTCAACAGAGATATTTTAAAAGAGAGAAGCAGGAAAAGATCTTCCTTTTTTGATCTACAAC
TTATATAGTTTTCTGATTATGCACATAATAGATATGCCTTCCAGATGCATAAGGCAAACATCTGGAAAGAAATAT
ACCCAAATCTTAGCAGGGGTTATCTTTGGGAGTGGAGTACATGGGATTTTGCTTTCTTCATTTTTATAATTTTAT
ATTACTGTCTTGGAAGATGTGTTTATGTGTGTGTGTTACTTTTACAATCAGGAAAACATATTTAATAACATATAG
TCAAGAAAACAGACTTAAAAATAAATACTATGTGTCCATTGAGAAAATTCACAATATAAACAGAAATACAAATAA
ATACATACACAATTTTAAAGTCACCTGTAGCCCTACCCTTAGAGGTACCCAGGGTTAACATTTTGGTGGTATTGT
CTTATCAATTTTTCCGTTGATACATTCAGCAAATTTGGAGCACATTGACCATGGAGTTTTGTGTCCAAATCCAAT
CTGAATTTACCTGGAAGAGGCCTTGACACCTGCATGGAAATGAGCTAAGAAAACCACTGGAGCCTTGGGAGCTCT
TTGGCCTCCTGGCTGGCCCAGTAATATCTGAGCTCCTTTGGTTAATTTATAACTGATATAAAACTACATCTTCTT
TATAATATAAATTGTACCTGTGAGTCTAGAAGCTTTAAATGTGTTTAAATTAAAATATTCAAGCTAAATGTTACT
GCTCTCTCCCAAATTCTGTAAGTTTGACTCCCGTTACCCCAATTAGAAGTAACTTCTTTGTTTCATGCCACTTTT
ATAGCATTTGGTAATTCTGCTATAACACATCTTGCCCCTATTATTAACTGTGCACAGCTACACAAAGGTGTGCCT
TCTACGTGGGAACATGGATTGTGAATGACTCTGTAATGAGGCCTGAGTCTTAGTTATCTTTCCACTCACTCCCCG
TCTCCCCTTTCCAACCCCAAAGGCTCACGATAGGGGCTCACTAAATGTCAGTGTTTCACCAAAGTATTTTTTCCA
TTGTATTAAGAGTCCAGTCACTGTATATGGAAGTATTTTATTTTTTATTTTTTTATATCACTTGAGTCCACTAGT
AGTACTTCCTTGCTCTGTTTGACTTGTCAGATACAAAGACACGGGATTAGATTTTGGGTGGTAAAATTGTGATAC
GCATGGCTGTTGATGGAGTGGAACATCTTAGTGATGTGAGAAAGGTCATTTTAGTTATAAATGTAAACCAATTAC
TTTAGCACAACAATAAAGATGTTCTGGAAATTATTATAAAAAAAAAAAAAAAAA

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FIGURE 4874

MKRPVSTLPSLTADSAMPLPRSAFEDCDLHQEVLLTPVGKISPSFCLECPVFDLAAGVEPSPRPPGALPLWLSRN
RMWLPWPNVVLLSPTPAPQLLSSSGPCVWLVFAGLSLCSGIALPL

FIGURE 4875

TAGGAGTAACCAACCCTTTTTTTGCTAAGACACTCCAGCACTGGCCACACATTATTCGAATAGGAGACCTTAAAC
CTACAGGTGAAATTCCTAAGCAGGTTAAAGTGAAAAAACTGAAGAATCTAAAGACTCTGGATTCCAAACCTGGAG
TTTATACTTCATATAAGCCATATTTAAATAGAGATGAAGAGATCATAAAACAATTACAGAAGGGTGTACAACAGA
AACGTCCTTCTGAGGCTCAAAGTGTTATTCTTCGACGCTATTTTTTGGAACTGACACAAAGTTTCATCATTCCAT
TAGAAAGATATGTGGCAAGCTTGATGCCTTTGCAGAAAAGTATTTCCCCATGGAAGAGTCCACCTCAATTAAGAC
AGTTTCTTCCAGAAGAATTTATGAAAACACTTGAGAAAACAGGACCTCAGCTAACCTCTAGAATAAAAGGCGATT
GGATTGGACTTTACCGGCATTTCCTAAAGTCTCCAAATTTTGATGGCTGGTTTAAGACCCGGAGGAAGGAAATGA
CCCAAAAATTGGAGGCACTCCATCTAGAAGCTCTTTGTGAAGAGGACTTACTTCTCTGGATCCAGAAACACACAG
AAGTAGAAACAGTAGACCTTGTCTTGAAGCTGAAAAATAAGCTGTTGCAGGCTGATCGAGAGCACTTACCTGTGA
AACCTGACACTATGGAAAAGTTACGGACACACATAGATGCCATTATCTTAGCATTGCCAGAGGACTTGCAAGGCA
TACTGCTCAAAACGGGCATGACATGATATTTGCCAAGATTTTCCAGCCAAAAAGGATTATGCATCATGAAGCATA
CTGACATTTCAACCAGACGCACAAAGGAGATCTCTCAGTGGCAGCGGAGTGGAAAATTGCCATGAATGCTAGTTA
CAGGGTAGAAAGACTGTATTGTATAAACAGACCTTTTTAGTGCATTACTTTTTAAAGTGGATATCTGTGGTGGTT
CCACTTTAATACTGAAACACCGAAAGGCATTTCTATATTTTTAATCATGTTCTAAAGTGCTCTTATGAGAGACTT
GTGGGCCATCAGTATTAGTGATTTCATACTGCAGTGCTGGCATTGCAGATATTTTTTTAAATTGGTGCTGCTTTG
CCCAATCATGTTAAAACTCAGGGGGATATAAAAATAACATTCACACTGGCTATCTTCTTAAGAACAGAAAGACTG
AACTGTCCTATGGTTAGAAGGAATTGATGCTTATGTAGTGCCTTCTGTTGTCCTACATGTTTCACAGTTCAGCTG
CTAGTCTTGAAGCTTTTCCTTAGCTTCATTATGATACGTAATTTTATAAGGTATTCTGTTGAGTGATCATTGTTT
AAAAAAAAAGTTTCTTGCTACCCATTGTGTTTATTAATAGACATGATGGGTTTTTTTCAGTTGTCATATAGATTT
TCATTATTTTCCCTTCCATTTTCAAAATTTAATGTTACCAGTTTCTCCAAAGACAAGAAGGCATCTAGTATTAAT
GATGGAAGAGTTTATTTTCTCTTACCCTTTACTAATTTAAACATTAGGCTGGGTGTGAGCCACCGCACCTGGCCA
GAAGCCACTAACTAAAATAGGCACACATGACACAGCATGTGGTTAATAGCTGTGTCTTGAATTATCCTCTAAATA
ACCAAATTTAGTTGTATGTATTTGTAAAGGATATGGCTTCAGAAGCTATCTTTTGTTCTCTGTCGATATAACTCT
TAAGGGCATTCCTGACCCAAGAAAGACTCCTTGCGTTTGTAACTGTGGTCTAATACCCAAATGTGCCCTGTTCTT
ATGGATACAGTCTCTTGAAGCATACCTCAAAGTCATAGAGAGAATATGGCATTTGAAAGAAATCGTTTGCCTTGG
ATCATATGAGTTATTTTGTGAAACAACAGCTGACTTTTCAGAAAAGGAGCAACTACTTTTATATGCTAAAAGTAT
TTCATAACTTTCTGGGAAACCTTATTTAGGTATAAATGGTCATCTTATTATTTTTCAAAAAGGTATATTTTAATA
ATTGTACAATTTATATACAGTTTGTGACCAGAATTTGTAAGTTGTTGGTGTCATATCAAGGATCTTTTAAATTAT
GCCACTACAGGATGTATCATTTCAAGTCTATTTTGCACAGCTAAACAGTAGCAAAAGATGCCAATTAGCATGATA
ATGGTGTCTTCATTTTTACTGTATTTAACTGAAACCTAACACATGTTGAAAACCATATCATACCTAGTTTATCTC
TTAATTTCAAACTATGTACTTGTAAAAATGATGTAAATTTGCACTGGGAACCTGGGAAAGAGTGACTGATAATTT
TTGGTGCGTGATTTTTAGATTTGTCTTTTTTTTTTTAAGAAGAATTTGTTACTATGTAAACCCTGACATTAAATG
TTTTATCTCTACCAGCATCAGGAGGAATCACTGCTTTAAGGGTATTATGTAATGCCTAGTGCCTTCTATTTACAG
TGAAAAAGAGGTTTTGTGAAGGCATTTATGGTCATTACCAAAAACTAAATTAAAGGCCTTGGATTTTAAAGCGAA
AAAAAATCTATGTCGGGTGCGGAGAAAGAGGTAATGAAATGGCAGGAATCCGATATGCAGCTATCGATAC

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FIGURE 4876

GVTNPFFAKTLQHWPHIIRIGDLKPTGEIPKQVKVKKLKNLKTLDSKPGVYTSYKPYLNRDEEIIKQLQKGVQQK
RPSEAQSVILRRYFLELTQSFIIPLERYVASLMPLQKSISPWKSPPQLRQFLPEEFMKTLEKTGPQLTSRIKGDW
IGLYRHFLKSPNFDGWFKTRRKEMTQKLEALHLEALCEEDLLLWIQKHTEVETVDLVLKLKNKLLQADREHLPVK
PDTMEKLRTHIDAIILALPEDLQGILLKTGMT

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FIGURE 4877

GCAGCCCGATCGCGGGAGCTCGAACCCGAGCCGGGGCCGCCCGGGTGGCGCGGTGGCGGCGGCTGCGGCTGCAGC
AGCTGCGACGGCTGCGGGGGCTGCTCCGGGTACTGCGGGGGCGGCCGGGAGCCGGCAGCCGGCGGCGGGGCCGGA
TGGCTCTGTGCGGGCAGGCGGCGGGCGCTGCTGTCTCTGCCCAGCGAGCTGATCGTGCACATCTTCTCTTTTCTG
CCGGCGCCCGACCGGCTGCGGGCCTCGGCCTCCTGCTCGCACTGGCGTGAGTGCCTCTTCTATCCGGCCCTGTGG
CCCCAGCTCCGCATCTGCCTCCGCGTCTCGCCCGCGGAGCAGCCTCGGCTGGAATTCCTCATGCGCAAGTGCGGC
TGGTTCGTGCGAGAGCTGCGTGTTGAATTCGCCGCCGAGAACTATCTGAGCGGCGGTGGCCCCAGGGGACGGAGG
TGGCGCGGACACCGGGACTGGAGGGGAGGAAGTCGAGGCCCTGCAGCTCTCAGCTCGTTGGCTGGAAGTGCTGCG
CACCTACTTGGAGCTGGTGCTTTGCGTGCTGGTCAGCATCCGGAACAACAGGAACCTTCAGAAGTTTAGTCTTTT
TGGAGACATAAGTGTTCTACAACAGCAAGGAAGTTTGTCAAATACATACCTCAGCAAGGTGGACCCTTGATGGCA
AAAAAATTAAACAAATTCAGCAACTGTTTGAAGAAATCCTGAGTAATAGTAGGCAACTGAAATGGCTGTCCTGTG
GGTTT**ATG**CTGGAAATAGTAACCCCAACATCACTGTCATCTCTCTCTAATGCTGTTGCCAACACCATGGAGCACC
TCAGTTTACTGGACAATAATATTCCTGGTAACAGCACTCTTATTACTGCAGTTGAACTGGAGCGATTTGTGAATC
TGCACTCACTTGCCTTGGATTTTTGTGACTTTACAGCTGAGATGGCAAGAGTCTTAACTGATAGCAACCATGTGC
CTTTGCAACGACTGTCTCTTCTGGTTCACAATGTTTCTGTAATGCACAAGTCTCTGGACAACATGCCAAATGATG
AGCATTGGAAAGCCCTGTCACGAAAGAGCACCAGCTTTCGGGTCTATATAATGGCTTTTGATATCAAGAGTGAAG
ATATGTTAAAGATTCTGAAACCCAGTATACCACTAGAGAGGATTCATTTTGATAGCTATATCACTTGTGTTTCAG
GGGCTATTGTTGATCTTATATCCAGGCAATATGACAAGTTCCTCACTCATTTTATTTTAATGAATGATGTGATTG
ACACATCTGGTTTTCCAGATCTTAGTGACAACCGAAATGAAGATCCGTTGGTTTTATTAGCATGGAGGTGCACAA
AGCTCTCTCTTCTGGCAATTCATGGTTACACGGTGTGGGCACACAACCTCATTGCCATTGCTCGTCTTCGGGGCT
CTGATCTGAAAGTGCTTGAAGTCACCGAAGAAAGCATTGATTTTGACCAAGGTGAACTGGCCGACCAGGATGTAG
ATCCAGTGCATAACCTTATTGAGCAGGTATCCCTGGGCCTGGGTCAACCTTGGCATGCAGTCATGGACATCGAAT
CACTCAGTGTCTTCACTGAACCAAATCGTCATTTTTACAGAGAGATGCAAAGCTTCAGTGAAGACATT**TAG**CTTT
TTTTTAATGTAGAATTCCTGTGGTTACATATGCAAGTAGGGTCCTATTATGTTTTTTTTTCAGTAGTGTGAATTA
ATCCTTTTGTGCTGTGTTTAATCAGTATTAGCTTTATAGAATTATATATGTATATTCTACTTCTTGATCAAAGAA
CGTAGTCGGGTATTGGTTTAGAAGTTCAAAGTGACAATGTATAGGGCTTTCACGGTTAATGGACTTGTTACCAAA
CCTTAAGGATATACAGCCGAAGATTGTCTGAGGTTGCTGGCTAACTTTATTTTTCACTGAGTTACTCTGCCTTTT
TGACGTTTTTATTCTTTGTGTGTCAGAGTTCAGAGCTCAGGAGCCAAAATATTTTTATACATATATAGATATATA
TCCATAGCCTGGTAGATTTATATGCAATGCACTGCATCCATGCATTCTGATAGCATTTCATTAATTTTGATTTCA
AATGGAAGATAAATAATATCCCAAATGAATTATCTGTAACAGAAAAGCCAAGACTTTAACTTTCATTACATATCT
AATAGTTGATATCACCAGTTACCATTTTGAATTTTGTATAGTACTAGGTTAGAACATTGCTTAATCCTTTTAAAA
AAAATGCATTTACGTAAACACGAATACTGAAATTGTTGGATTTTTTAACTATATCTGACATAATTTTATTCATCA
ATTACATTACACATTCATTTAGCCCAGATTTCAAATAGTGGGGGAAGAAAGAAACTGTATTTCAGAGTAAAATCT
CCTAAAGGAAATAAAAACACAGAGTTGTAAATACACATGCTTGCAAAAACATTAGTCGTGAAATCCCTAGCAACA
AGTCACTGGATTTTTCTCTGTCAGCACGCGTGTCAGCTGCCAAAGAATAGACTTAATGAAGAAGTGCCCACATGC
TGGCAGGGGCCGGCCCACTCTGGCCAGCCAGATACTGCTAGATTGTAATATTTAAGGTCGAATTTCGACCTGTGG
TACACAGCTGTGCTGTGGCTCAGTCAGCAACCTCAGAACTCTGAAAAAACAAAACAAAAGAAAAAAAAAAGAAAA
AAAAAACATGCACCTGTTTCACTGTGAATAGTGAATGTAAAGGAAAGAAAGGAAAAACTGAAAGCTTGTTCTATC
ACAGGTATGAGCTGCTATGATACATGAAGAACATTCCATGAAGTATGTTTTAAAACCTTGTTATATCTGAGAGGC
TTTAAAAGCCTATTAACTGTTTCAGGGCAACCGCGGTACAGACGTGGTCTCTGTGAGACTTCCACCTGACCCCAG
TTTTAAGTGGTACGAATGTTGTGCATTTAATGTTAAAGGACAGTCTGCAATAATAAAGTAAGTAGCCAACCTGGG
TGCCCAGCAGTGCTGAGACCTGGCTGCTCTATTGTAAGCTTTGGAAACACAATTTATGCAACAGATGTCCAGATA
TGATTCTATTTATGGAAAAAAGTTTATATGTGTTTTACAAATGGTTTTACCATCTTATATTAAAATGACCTTTTG
ACAGGTGTGCACTGTTTTGTCTCCAGTGAGCACATACCATGCGGATTTTATATGTACATCAGTAGTGTGAATCCA
CTGGCACAGTGTGTGTAAATGCCAGATGTGGTGAGATTTTATCTTATAAATGTGATCAGATAAAATAACTCCTGA
CAGAAACTGTAAGGAAACCAGCTGAATGTTTGACCTGATGACTGATGTTGTATGGTTTATGTTAAATGTATATTC
TTTTAATCAATGAATAAAGCATTAAAAATGATCATTGTAATATATTTTATTGTATATGAAGCATGACTACTTTTA
GTGTTAAATAAACTGCAATAATCCTTATATTGTGTATAATAATGTGTTAGTATTCTGGTTGTATTCTGGTGCAGC
AAAGCTTAAATTTGAGATACATTATAAA

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FIGURE 4878

MLEIVTPTSLSSLSNAVANTMEHLSLLDNNIPGNSTLITAVELERFVNLHSLALDFCDFTAEMARVLTDSNHVPL
QRLSLLVHNVSVMHKSLDNMPNDEHWKALSRKSTSFRVYIMAFDIKSEDMLKILKPSIPLERIHFDSYITCVSGA
IVDLISRQYDKFLTHFILMNDVIDTSGFPDLSDNRNEDPLVLLAWRCTKLSLLAIHGYTVWAHNLIAIARLRGSD
LKVLEVTEESIDFDQGELADQDVDPVHNLIEQVSLGLGQPWHAVMDIESLSVFTEPNRHFYREMQSFSEDI

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FIGURE 4879

TTTTAACTTTGCAACAGGTTTTTATTTTTGCTTTATATCTATTACAGTGTTTGAAACCTAAAGAAATACATTTTC
TCTTCAAATTTGGATGTGTATATAAATAACATTTGTCTGGACTCAGCACACTCAATGCCATGTTTTCTTCGCCTA
TGTCTGCTCTGAAATCAAGCTGTGTCTGTCTACCCAGGGGCCCTGAGAACATGGAAAATAGAGTTTATTGTTATT
AGAAAAATAAAAGCAAATGAATTTGCAAAGAAAAACCAGTGAGAAGGATTAGATTCATCTTCCAAGGGTCCATAG
CTGGTAACCCAAGCCATTCTCGGGGGATATCCAGTCTCTTGAGTGGCTGGGACTCCATTACCCACTTTCCTTCTT
TAATAGGTCAAAGGCAATTCCCACAAAAGCTGGCTAAAAAAGCCGACACCCAACTCCAGAGTCTGAGGGTTCATG
AAGATGTGGACTTTTTTTTTTGAGACAAGAG

FIGURE 4880

CGCTGGCGCGGCTGCGGCCGCTGCTGCCTACGCGCCATGGAGCATCGCATCGTGGGGCCCGGGCCGTACCGAGCT
ACCAGGCTGTGGAATGAGACCGTGGAGCTTTTTCGTGCTAAGATGCCGTTACGGAAACATCGCTGTCGTTTCAAG
AGCTATGAGCATTGTTTCACAGCGGCCGAAGCTGTGGATTGGCTGCATGAGCTGCTGAGGTGCAGTCAAAACTTC
GGCCCTGAAGTGACCCGCAAACAAACGGTCCAGCTGCTAAAAAAAATTCCTGAAGAATCACGTTATTGAAGACATC
AAGGGAAAATGGGGTGAGGAAGATTTTGAAGACAATCGTCACTTATACAGATTTCCTCCTTCTTCACCCCTGAAA
CCATATCCAAAGAAGCCCCCAAACCAAAAGGATGTTATTAAATTTCCAGAATGGAATGATCTCCCACCAGGCACT
TCACAAGAGAACATCCCAGTGAGGCCAGTTGTGATGAATTCTGAGATGTGGTACAAGCGTCACAGTATTGCAATT
GGAGAGGTGCCAGCTTGCCGTCTTGTCCACCGCAGACAGCTGACAGAGGCCAATGTAGAAGAGATATGGAAGTCT
ATGACATTATCATACTTACAGAAAATTCTTGGCCTGGATTCCTTAGAAGAAGTTTTAGACGTCAAACTTGTCAAT
TCGAAGTTCATCATCCATAATGTATATAGTGTTAGCAAGCAGGGAGTTGTTATTCTTGATGACAAGTCAAAAGAA
CTTCCTCATTGGGTGCTGTCAGCTATGAAGTGTTTGGCAAATTGGCCCAACTGTTCTGATTTGAAGCAGCCTATG
TACTTGGGATTTGAAAAAGATGTCTTTAAAACCATAGCTGATTACTATGGTCACTTGAAAGAGCCTCTACTTACA
TTTCATCTTTTTGATGCTTTTGTCAGTGTACTGGGTTTGTTACAGAAGGAGAAAGTGGCAGTTGAAGCATTTCAG
ATTTGCTGCCTTCTCCTACCTCCTGAAAATAGGAGAAAGTTACAGCTATTGATGATGATGATGGCAAGGATTTGC
TTAAACAAAGAGATGCCACCCCTGTGTGATGGCTTTGGTACCCGAACACTGATGGTTCAGACATTTTCCCGTTGC
ATCTTGTGTTCCAAGGATGAAGTGGACTTGGATGAGTTATTAGCTGCTAGATTGGTAACGTTTCTGATGGACAAT
TACCAGGAAATTCTGAAACTCCCTTTGGCCTTGCAGACCTCTATAGAGGAGCGTGTGGCTCATCTACGAAGAGTC
CAGATAAAATACCCAGGAGCTGATATGGATATCACTTTATCTGCTCCATCATTTTGCCGTCAAATTAGTCCAGAG
GAATTTGAATATCAAAGATCATATGGCTCTCAGGAACCTCTGGCAGCCTTGTTGGAGGAAGTCATAACAGATGCC
AAACTCTCCAACAAAGAGAAAAAGAAGAAACTGAAGCAGTTTCAGAAATCCTATCCTGAAGTCTATCAAGAACGA
TTTCCTACACCAGAAAGTGCAGCACTTCTGTTTCCTGAAAAACCCAAACCGAAACCACAGCTGCTAATGTGGGCA
CTAAAGAAGCCTTTCCAACCATTTCAAAGAACTAGAAGTTTTCGAATGTAATAATACTTCCACAGCAACAGGTGC
TAGAGACCACTGTTGTTGTTTTGAGTGAATGGTGGTTAGGAGAAAGACTTTGGTGGTGGAAGAAAGAAAAGCATA
AAACAAAGACTACTGAAATATAGATAAAGATTGCCTTAGTTTTTAAAAATGTTTGGCCATTAGTATTTTTATAAA
ACTCAATGCTAGTTTTAAAGTGTATAAATTGGTTAAAATTTATGAGTCAAATATATAGTGATAATGTTAACATGT
TTGTAATTGCTACAGAATTTAAGGGTATTTTTATCTCTGTGCTTTCTTTTTCATGGTGTTTATTAAATAATTGTG
TATATACATCCTAGCTACTGATATCTTTATTATAGCCTTAAGACTTAATTTTAAGTCTTAAAAATAGTGTGTATA
CTTGAATAAGAAAGACACTGGGTACTGTTACTGTGATGCTATTGACTTAGTAGCCAATTATCATTTCTCCTGTAT
AAATTCCAGTTTTTATTGCTGCACATAAATTTTTTAATGTCTTATATTGTGATAGCTATGTCTTTTATTGCAGAT
TTATTGGATGTTATGACAGATTTTACTAAAGCTAGTGTTTTTATAACATATATATTAGTTGATGTTTACCTATAA
GTGGAGTAGATTTTCATCTGCCTGCAATGGTATAATTTCAGTCTTAGCTAAAAATGGAAAGTTGAACTGGATAAA
TTCTTTGGGTACCCTTAGACCTCTGATTCTAAGTCAAATGCAAATGGGTTAAATAAAATGAGACTACTTCCTTTA
TAAATATATTTTCATCCTTTTGAAAGTAAGTGAAATGTAAATAAACTTATTTTTTTTAAAAATGCCAAAAAAAAA
AAAAAAAAA

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FIGURE 4881

MEHRIVGPGPYRATRLWNETVELFRAKMPLRKHRCRFKSYEHCFTAAEAVDWLHELLRCSQNFGPEVTRKQTVQL
LKKFLKNHVIEDIKGKWGEEDFEDNRHLYRFPPSSPLKPYPKKPPNQKDVIKFPEWNDLPPGTSQENIPVRPVVM
NSEMWYKRHSIAIGEVPACRLVHRRQLTEANVEEIWKSMTLSYLQKILGLDSLEEVLDVKLVNSKFIIHNVYSVS
KQGVVILDDKSKELPHWVLSAMKCLANWPNCSDLKQPMYLGFEKDVFKTIADYYGHLKEPLLTFHLFDAFVSVLG
LLQKEKVAVEAFQICCLLLPPENRRKLQLLMMMMARICLNKEMPPLCDGFGTRTLMVQTFSRCILCSKDEVDLDE
LLAARLVTFLMDNYQEILKLPLALQTSIEERVAHLRRVQIKYPGADMDITLSAPSFCRQISPEEFEYQRSYGSQE
PLAALLEEVITDAKLSNKEKKKKLKQFQKSYPEVYQERFPTPESAALLFPEKPKPKPQLLMWALKKPFQPFQRTR
SFRM

FIGURE 4882A

CGGCGGCAGCGTTAAGTGAGAAAGGAAAAAAGACAACGAGGAAAAAGGAGGTGTCCGGGTAGGGCAACGCGGCGA
CACCCGAGGCCTGGTGGTGGCGGCGGATCGAGATATTCAAGGCTGAAGCAGCTACGGAACGGCAGCGGCGGCGGT
CGGACAAACTGACTGACCGAGCCGGGTGGTGGCGGGAGCAGCGGGAGCAGCCGGAACG**ATG**CCGGCCGTGAGCCT
CCCGCCCAAGGAGAATGCGCTCTTCAAGCGGATCTTGAGGTGTTATGAACATAAACAGTATAGAAATGGATTGAA
ATTCTGTAAACAAATACTTTCTAATCCCAAATTTGCAGAGCATGGAGAAACCTTGGCTATGAAAGGATTAACATT
GAACTGTTTGGGGAAAAAGGAAGAAGCTTATGAATTGGTTCGTAGAGGTTTGAGAAATGACTTGAAGAGTCATGT
GTGTTGGCACGTTTATGGCCTTCTTCAGAGGTCAGACAAGAAGTATGATGAAGCCATTAAGTGTTACAGAAATGC
ACTAAAATGGGATAAAGACAATCTTCAAATCTTAAGGGACCTTTCCTTACTACAGATTCAAATGCGAGATCTTGA
GGGTTACAGGGAAACGAGGTATCAGTTACTTCAGCTTCGACCTGCGCAGAGAGCATCATGGATTGGTTATGCTAT
TGCTTACCATTTATTAGAAGATTATGAAATGGCAGCAAAGATTTTAGAAGAATTTAGGAAAACACAACAGACATC
CCCTGACAAGGTGGATTATGAATATAGTGAACTACTCTTATATCAGAATCAAGTTCTTCGGGAAGCAGGTCTCTA
TAGAGAAGCTTTGGAACATCTTTGTACCTATGAAAAGCAGATTTGTGATAAACTTGCTGTAGAAGAAACCAAAGG
GGAACTTCTGTTGCAACTATGTCGTTTGGAAGATGCTGCAGATGTTTATAGAGGATTGCAAGAGAGAAATCCTGA
AAACTGGGCCTATTACAAAGGCTTGGAAAAAGCACTCAAGCCAGCTAATATGTTAGAACGGCTAAAAATTTATGA
GGAAGCCTGGACTAAATATCCCAGGGGACTGGTGCCAAGAAGGCTGCCGTTAAACTTTTTATCTGGTGAGAAGTT
TAAAGAATGTTTGGATAAGTTCCTAAGGATGAATTTCAGCAAGGGTTGCCCACCAGTCTTCAATACTTTAAGATC
ATTATACAAAGACAAAGAAAAGGTGGCAATCATAGAAGAGTTAGTAGTAGGTTATGAAACCTCTCTAAAAAGCTG
CCGGTTATTTAACCCCAATGATGATGGAAAGGAGGAACCACCAACCACATTACTTTGGGTCCAGTACTACTTGGC
ACAACATTATGACAAAATTGGTCAGCCATCTATTGCTTTGGAGTACATAAATACTGCTATTGAAAGTACACCTAC
ATTAATAGAACTCTTTCTCGTGAAAGCTAAAATCTATAAGCATGCTGGAAATATTAAAGAAGCTGCAAGGTGGAT
GGATGAGGCCCAGGCCTTGGACACAGCAGACAGATTTATCAACTCCAAATGTGCAAAATACATGCTAAAAGCCAA
CCTGATTAAAGAAGCTGAAGAAATGTGCTCAAAGTTTACAAGGGAAGGAACATCAGCGGTAGAGAATTTGAATGA
AATGCAGTGCATGTGGTTCCAAACAGAATGTGCCCAGGCTTATAAAGCAATGAATAAATTTGGTGAAGCACTTAA
GAAATGTCATGAGATTGAGAGACATTTTATAGAAATCACTGATGACCAGTTTGACTTTCATACATACTGTATGAG
GAAGATTACCCTTAGATCATATGTGGACTTATTAAAACTAGAAGATGTACTTCGACAGCATCCATTTTACTTCAA
GGCAGCAAGAATTGCTATAGAGATCTATTTGAAGCTTCATGACAACCCCCTTACAGATGAGAATAAAGAACACGA
AGCTGATACAGCAAACATGTCTGACAAAGAGCTAAAGAAGCTACGTAATAAACAAAGAAGAGCTCAAAAGAAAGC
CCAGATAGAAGAAGAGAAAAAAAATGCAGAAAAAGAAAAGCAGCAGAGAAATCAGAAAAAGAAGAAGGATGATGA
TGATGAGGAGATAGGAGGTCCAAAAGAAGAACTTATTCCAGAGAAACTGGCCAAGGTTGAAACTCCATTGGAAGA
AGCTATTAAATTTTTAACACCGTTGAAGAACTTGGTGAAGAACAAGATAGAGACTCATCTTTTTGCCTTTGAGAT
TTACTTTAGGAAAGAAAAGTTTCTTTTGATGCTACAATCAGTAAAGAGGGCATTTGCTATTGATTCTAGTCATCC
CTGGCTTCATGAGTGTATGATTCGTCTCTTTAATACTGCAGTGTGTGAAAGTAAAGATTTATCTGATACAGTTAG
AACAGTATTAAAACAAGAAATGAATCGTCTTTTTGGAGCAACGAATCCAAAGAATTTTAATGAAACTTTTCTGAA
AAGGAATTCTGATTCATTGCCACACAGATTATCAGCTGCCAAAATGGTATATTACTTAGATCCTTCTAGTCAGAA
GCGAGCTATAGAGTTGGCAACAACACTTGATGAATCTCTCACTAACAGAAACCTCCAGACATGTATGGAGGTATT
GGAAGCCTTGTATGATGGTAGCCTAGGAGACTGTAAAGAAGCTGCTGAAATTTATAGAGCAAATTGTCATAAGCT
TTTCCCTTATGCTTTGGCTTTCATGCCTCCTGGATATGAAGAGGATATGAAGATCACAGTTAATGGAGATAGTTC
TGCAGAAGCTGAAGAACTGGCCAATGAAATT**TGA**ACATCACTAAACAAGCAAATGGAATGACTTTGGACCATATC
TAGTATATAATATTTTTGTCACGCACCTGCTGCATTGCTCTAACTTACACAGAATGAGAGGAGTAAATGTTCTTG
CCTTCAAATAGTGTTTTACGTTTTTTATCCTGCTGAAAAAGTATATATAAAATATCTAACATTACAGGATAGAGG
TTCAGTTTCTTAAAAAATTAAAGCTGCTAAAATTGAGTGGTTAAAAAAGATACCTTATCCTATTCCTCCCCACCC
ACCCATGTTTTTAAACTAATTTATATAAAATCTGGAGGCTGTTACAGCTAACAAAGCAGGTGTGTGGCAGAAATA
TTACTTTAAATTTGTCTTGTGAGATTTTACTATATCTCAGACAGCATAAATGCTGTTTTAGCACTGGATTCTTTC
ACTGAGCACAAAGAGTTGTTGGGGCTTTAGCATCTGACTGATTTTGTTACGGGGTTGATTCTGACCATAGGAAGT
ATGCAATGTGAATCACTATTTACAGAGAAACCTACAACAGATGCTTGATGTTGTAGAAACTGGGACATATAGATA
CCAAGCAAAATTATAAGAAACCTATAAGGTGTTCAATACGCTTGTGTTTCCAAAATTCACTGTACATGATCAGTT
TGGTGTTCTTGTACCACAGTTTTTAACTGAAGGAACCAGTTGTAACAGTCTCAATTTTAACTAAAACTTGAAGAA
CTAAAACAACAATGCAAACCTTTCAGCATTGTTTGGCCAAACTTGTTAAAACTGTAATGCAAGAACCAAATGCAC

FIGURE 4882B

TGTGATGTGGCACCAACTAATTAGCAAGCATGAATTTTTCACCCAAGAGTGAAAAAAGGAAAATCTACCATGGCT
TGAAGTTAAAGAGCAGAACTCCTGACTACCATTCTATGACTGATCAAAAGACTAATAGTTAAAAACCTCAGCAGG
CCTTGTTCACGATATGCAGAAAAAAAAGTGCTGCAGTTTAGATACCTCTGGAATTTTTCCACAGTGTCACAGGTT
TGTAATACTTGAAGCCCTACATTTCTAAGAATATATTTCTTGCTCAGTTGTTTCAGGCAAGCCCAAGACTTTGTA
ATTTTTAAAGGGCCCAAGATTTTTTTTTTTTTTTTTTTTCAAATAACAGACCAGCTTCTTTTTCTTGCAGTTAC
AGATGTAATTTCCTTTTTGTTGTCAAACATAAGGTACCAAATATGATGCAATAAATTGTTTTGAAAAACAGTTGT
GTGAATATTTCAACTAATCTGTGTTGGGCTTCTGTGAAATACACAGGTGGAAACAGAGGTGCAAGCCAGAGGCAA
TGTAATATGCTGTAAGGCTAGTGCAGATGGGAGCTTTTTAGAAGGGGCTAAGTGCTGGTGTCAGGGAAATTCCAT
AATGAAGTAGAATGCTGCTCCTGCATTAAGATTTCATTGAGGGCAAGGCTGGTGGCAGGTACTATGAATGTAATT
CATAATTTAAAAGGAAAACTAAAAACTATTTTGATTTGGGAAAATGAGCCTTAATTTGTTAAACCTATACACTGA
GAACTAGCCTCAGGCTTAATATTCTCATTGCATTTGCAAGATCTGAGCAAATAAGATTAAGTAAAACAAATCAAT
TGTATATATAATTGACCTTTTTGTGGAACATGTAGTTTATAGAAAGTATACTCTAAAGGGAATTTGCCGAAGACC
TTTTACTGATTGAACAGTTGTGCTACAATCAACTTTTCATAGTACATGACCTGCATTCCACATCTCAGTCTAACA
GTTTAGTAGTGATGTAAAGAGAAGTACAAACCGAACTCCAGTGCTTTGTTATGTTTTATTAACTGGCCCTGTCTC
AGGAACATCTTAACAGATGGCAAAAAAACAAAAACTTTTTTTCAACTCCTATGAGTGGCAACTGAAGTTCTTATT
GTTGGGAAAGAACACTAGTCCTACCTCTGCCACTAATGAGGTGTTTGGAGGAGGTACCAGCCATATAATAGGGGG
TGTATGTGTGAATTTTGTTTAAACTCTACTGTATATTGAAATGAAATTCATTTATTTGTCTTGACAATGTTCAAA
TGATGTAGATTGTCTTAGAATGAATATTCATAAGTACTCAGAACTCTTAAGATGCAGATGCCACCCGTGAGGAGC
TAAATTCCTAATGTGTATTGTATTCCAACCCAATTTTACTGGAACTATTGAATAAATCTTTTATTTTCTTTCAGG
TTTACTTGATAGTGGATACATTGGTGTCAGAGGACCTTGACTGGGTTCATTTTATGTCCAGACATCACCCCTGAA
ACACTGTACTGTACTATCTTGCTCTGAGTAGTATCAACTGGATCGTCTCATATTTGCCTCATTCATCCTATTAAT
TTCAAATGATACTGTGGGGGAAAAACAGGGTTAGAAAAACAAGTGGAAAAAATGGAGTGATGTTGTAATCTAAAC
AAGTGCCTTATGTTTATTGCTAAGAACTGGTGTTACCAACCCTTTTGAGAAGAAAGGGTCTCTTGACCTGTATTA
ACATAGGAAAGTAAAGTTCTTTTTGTTTTTCTTTATAAGCTACTCTTGTCATTTCTCGTTGAAAAACTAAAATCT
GACTAGGTTAGTTTACTCAGCTTTAATTAGATAGTTGAGTCATATATTTTCAACATTTTTCTGTATCGTATTTAT
TATGCACAAAAATAAAGTGTGATCTCTAAT

FIGURE 4883

MPAVSLPPKENALFKRILRCYEHKQYRNGLKFCKQILSNPKFAEHGETLAMKGLTLNCLGKKEEAYELVRRGLRN
DLKSHVCWHVYGLLQRSDKKYDEAIKCYRNALKWDKDNLQILRDLSLLQIQMRDLEGYRETRYQLLQLRPAQRAS
WIGYAIAYHLLEDYEMAAKILEEFRKTQQTSPDKVDYEYSELLLYQNQVLREAGLYREALEHLCTYEKQICDKLA
VEETKGELLLQLCRLEDAADVYRGLQERNPENWAYYKGLEKALKPANMLERLKIYEEAWTKYPRGLVPRRLPLNF
LSGEKFKECLDKFLRMNFSKGCPPVFNTLRSLYKDKEKVAIIEELVVGYETSLKSCRLFNPNDDGKEEPPTTLLW
VQYYLAQHYDKIGQPSIALEYINTAIESTPTLIELFLVKAKIYKHAGNIKEAARWMDEAQALDTADRFINSKCAK
YMLKANLIKEAEEMCSKFTREGTSAVENLNEMQCMWFQTECAQAYKAMNKFGEALKKCHEIERHFIEITDDQFDF
HTYCMRKITLRSYVDLLKLEDVLRQHPFYFKAARIAIEIYLKLHDNPLTDENKEHEADTANMSDKELKKLRNKQR
RAQKKAQIEEEKKNAEKEKQQRNQKKKKDDDDEEIGGPKEELIPEKLAKVETPLEEAIKFLTPLKNLVKNKIETH
LFAFEIYFRKEKFLLMLQSVKRAFAIDSSHPWLHECMIRLFNTAVCESKDLSDTVRTVLKQEMNRLFGATNPKNF
NETFLKRNSDSLPHRLSAAKMVYYLDPSSQKRAIELATTLDESLTNRNLQTCMEVLEALYDGSLGDCKEAAEIYR
ANCHKLFPYALAFMPPGYEEDMKITVNGDSSAEAEELANEI

FIGURE 4884

CACAGAAACATGATGTGGAAGTGCTGGAACGGAACTTCCAGACCATCCTGTGTGAGTTTGAGACCCTCTACAAAG
CTTTCTCAAACTGCAGCCTCCCGCAAGGATGGAAAATGAACAGCACCCCCAGCGGGGAGTGGTTCACCTTTTACT
TGGTCAATCAGGGGGTTTGTGTTCCCAGGAACTGTAGGAAGTGCCCACGGACGTACCGCTTGCTCGGAAGCCTTC
GGACCTGTATTGGGAACAATGTTTTTGGGAACGCGTGCATCTCTGTGCTGAGCCCTGGGACTGTGATAACGGAGC
ACTATGGACCCACCAACATCCGCATCCGATGCCATTTAGGTCTGAAAACTCCAAATGGCTGTGAGCTGGTGGTGG
GGGGAGAGCCCCAGTGCTGGGCAGAAGGGCGCTGCCTTCTCTTTGATGACTCTTTCCTGCATGCTGCGTTCCATG
AAGGTTCAGCAGAGGATGGCCCACGGGTGGTTTTCATGGTGGATTTGTGGCATCCAAACGTCGCAGCGGCCGAAC
GGCAGGCTCTTGATTTCATCTTTGCTCCGGGACGATGAGAGTATTTCCCATGCTGGAGTCGGCGAGAAGGGCCGA
GGCGGGGCCTGGGCAGACTGTGGTCCGGTCCAGTCCCTACCGGTGTTGTTTCCATGCTCAGAAACCTGCCTCAGC
GGAAAGCTCTTATTTGGGATTTTATATCATGTCGGGTCCCTCTTTCCCTTGGTTATTGTAAATGGAAACTTTTCG
GCTTGTATTTCCTTAGATTTTTTTTTTTCCTTCCAATCATTTGCTTCAGAGACTCCTTTCTGGCCTAACAGCGC
ATTCCTTTGATTGGTCCTTGAGTGACCAGAGACTTAGTGCCCTTGTAAGTCTGTCTTCTGTTGCTACTTGTTTTT
TTCAGTGCTCTGAAATAGAGTAACTAAATGGTTATTTGTCTGAATATAATAATGTAAAACTTCTTGTGGTCATCT
TAAAAAAAAAAAAAAAAAAAAAACTAAAAACTGCAAACCAGAGAGCTAGAGAACTTGGCCTCTGATGCTGGCACA
CTGGGGACCCTTCAGCCACCTGACGGCAGGGGGACAGTCTGCAGCCCCCACACCTGACTGGCTTCAGTAGCCAGG
TGGAGGGGCTGCCAGACACAGTCAGGGTGGCACACAGTGTCCAGGCCCAGGGATACTGTCACCATCGCTCACCTC
ATTCTAAACCTTGTCAGGTCCCTGATGGCAAAAGCATTGGGCCAGTAGGACTGGAGGCTACTCTTTAAACATGGC
TTTCCTGCAAAGCTGAAGCTGGTGTCCCCCAGCACCAAGCTGCGGCTCACACAGATCAGCCACGGAACGTGTGAT
CCGCTTACCTCACTGCCTACAGAAGCCCTACTGCCAAACTGGGCCTGGAAAATTCCCAGTTTTAGGTGTTTTGAG
TCCACAGTGATGAACGTTAAGGCCACCAGGTTGGCTGATAGGAGCTGTAGGGGGATAGGACCGCGCTCACCCAGC
GACATTTGGGGAAAGCCTTTCTCTGGCAAAACTGGAATAATAGATCTGACCAAAGTTTCTGTTTTGCTTTGGAGT
TCTGTTGCCTATGTTTTTTTTTTTTCATTTATTTGTCTGTACATAAATGTTCAAACACTAGACTTGGAGATAGT
GGAAGAGTTGGCCCTGTGTCTTTGTCATGGCACAAAGGTGTGCACTGCGTGACAATGACCCAAGCCAGTGTGTGC
TAGTGAGGAGACAGAGAAGACCTACATGCCCAGAGGACCCGTGGCCGTTGTGCTGGTTTTCTGGTCTCCTGTGAA
GAACATGTGGATCTCTTCCCGAAGGAAAAGGTCCCAGGAGACCAGTTTGAGGCACTCACTCTAGAAATAGCCTGT
GTTAGCTGATGTGTGAAAGCGTAGCCGGCCAGCCACACTAGAGATGCCTTTTCTGAATAATGTATTATGAGCAGT
GTCAGATTTATAAAGCCGAGGAGTGGTTTGGAATATACAGCTGGTCGCAGGTGCAGGTCCAGTGTTTAGATCCAA
ATGGAAAACAGCAGCTTCTAAGAGGTACAACTGTTGGAAGAAAACACAGTTGAAATGCACCAGGCAGGTACTAGC
AAGTGTGCAAAGAGCACGTCTACATTTGAGTAAAATGTCTACACAGATATTTGTCAGTGATGAGAATGCAGGAAA
AGGCAGACATTTCAAACATACCTGAAGTCTTTTTACTCATTATCTTGTTAAAGAATCACTGAGGTGCATGATTTC
TACACATCGTGACTGCTCTGCTCTGCGTTTACAAAACCAACAGCCCGCGCAGGTACCTAGCTACCTGCATTCATG
TGACATGTCTGGGGAACAGAAGATAAATAAAGGATCTTGCTGAAAACCAGAAAAAAAAAAAAAAAAAAAAGAAAA
AAAAAAAAAAAAAAAG

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FIGURE 4885A

GTGGGCCGCGGCGGTGGCGGAGACTGTGGCTTTAAGAGCGTGCCGGGAGCCCGAGCCCCAGCCGGGCCGCGCTTC
GCCGCTGCGCACCCCAGCGGAGCCAAGCCCCACGCTGGCCGGACAGGGCCGCCTGTCGCCGGGCTGCTGAGAACT
AGCCCTAGACCTCTGCGTGAGGGTTCTTCTGCCGAAGACATCACCAGTGTGTGGAGCCTGCCACACCCACCCGCT
GCCAAACCACGGCCTTTACCTGTGTCTTCCGGTGTTTCCCGTGCGACCCATCCTGTGGGAGTGCCTCGTGGGCTG
CCCCAGAGTTCACCCCACACTCAGCAGCACCAATGGTGAAGATGACAAGATCGAAGACTTTCCAGGCATATCTGC
CCTCCTGCCACCGGACCTACAGCTGCATTCACTGCAGAGCTCACTTGGCCAATCATGATGAACTAATTTCCAAGT
CATTCCAAGGAAGTCAAGGACGAGCATACCTCTTTAACTCAGTAGTTAATGTGGGCTGTGGGCCTGCAGAAGAGC
GAGTGTTGCTAACAGGACTGCATGCAGTCGCAGACATTTACTGTGAAAACTGCAAAACCACTCTGGGCTGGAAAT
ACGAACATGCTTTTGAAAGCAGCCAGAAATATAAAGAAGGCAAATACATCATTGAACTAGCACACATGATCAAGG
ACAATGGCTGGGACTGATTGGACAGCATCTACCCAACCCAGTGTCCACGTGAACGCCATTCAACCGAACATTCTT
CCCAAGCGTGAGAGAGTGACTGACACTTGGTTCCATCCATTTAGGGGCCTTGCCATCCGGGGCATCCTCCCACCC
TGACGCCATCTTTCTGGTGACCGGCCTCTAAATCGCTGTCTCTCTGTCTCTTTGCTTTGTATCTGTTTGTGAGTT
GATCCTGGCTTCTCTCTCTGTTCTAGTTTTGGCTGAAAACAAAACAACAAAAGGAACAGATCCTTGACCGCATGG
CGGCAGCCCACCTTGGTAAGGGCCCCAGGGCCCATGCGAGAGCTGCCTGATGGCCTCTTGTCAGGAGAGCAGTGG
CACGGGGGCGTGAGGAAGAGGGAAAGGGGAAACTCTAAGGGTCCTGGCGCGGGGAAGGGGTGGAAGGGTGGAGGT
AGGAACAAAATTGCGCCGCTCCTGGAGACCTGATAACTTAGGCTTGAAATAATTGACTTGTCTAAAAGGACAAAG
AGAAAAAAAAAATACCTCATGACTGCATTCTCTCTGACTAGAAGCTTCTGTTCCTGACACCAAATGTGCCAGGTT
AGCAAATGAGCACAAGATGTGGCCCTGATTCTAGTTGGTGGGGCAAGGGCCTGGTTCTCCTGGGCTGAGTGGGGG
AGTGTCCTGGCAGCAGCGAGTGACCTGGGCAGTGGCCAGGTGGGTGCGATGACTCTGATGCCTCACTCAGTCTCT
GGGCAATCATCATCTTTGCCTCTAGCCACCGTAGATAAGGTGTGAAGGGACTGCTGTTTGCAATGGGCTTACCAT
CCAAATATCCCAAAGGCTTTGACCAGCAACCAAGTAAAATCAGTAATTGAGGAGAGCAGGGCACAAAGGGGCTGC
AGTTTGGGAGCTCCTGAAGAAATGGCTCAGATATTGAGTCAGAGAAATAAAAAGTAGGATCAGTTAGCAATTCTA
ACTGCCCTTCCTTCTGACCCCTCATAAGAGGAGTGTGGTGAGGGAGGGGACTGGGTAGGGGTCATCCCAGGAGGA
GGGGTTTACATTGGAACCAGTTCAGGTTCGGTGCATCTTTCCTCTTCGGTTTTACAGTGGCTTCCGTGGGATCGT
CAATTTCTTGTTCTTAGAGTTTCGGGTGTTTTTCTCCAGTCTTGTTACTGTAGACTGTAGAAAGCACGGGCCCCA
GGCTCTGAGCTTAGTAATAACCTGGCTGGTAGATTCCTCATGCCCCTAATTGTCCCACTTAGGCCTGAATGTCTT
GCATGGAGAGAAATCTCCTGTCAGTGTGGTCCAGCAGCAGGGAGGAGTTCTGCCCAAATTCCGATATCACCCCTT
CCCCCATCCAAACATCCTTCGATTAGGGAAGTGGAGAGCACATCCCTGTAAGGCCCATAAGAGAAAGAGGAGTTT
GTTACATTTAATCAACACTGTGAAGTCTGTTCTACAGCAATTCAGCCATTACACAGTATATGACTGAAACTCATT
TAACTGGGTTAATTTCATTTCTTAGACTGAATATATTATTGTTAAGATACGTGTGCGTGTTAGGTAATTCTCAGC
ATCTCCTCCAAGTAGGCCGACCTTCTCGGAAAATTCACCCTAAAAGTCTCACAAAAGAATGAGTTCATGGGGAGA
TTCTGTAAAGTGATGAACTGAGATGAAAGCAGCCAACAGCCCAGGAGCTTTTCAGAATAGCGTCTGCAGCAGAAC
CAGTTTCCATTCAGAGCGCGTCCTTGGTGGAAATGCTTTTTTGTGTGTCTCCACGCGCTGATGGTGGAATGGGAG
CCCCAAGACGTGTGGGCTTAGAAATCAACTTTTGTTCCCCAAGGCTTCTTGTCCAGATCTTTCCAGTGCTTTCAT
AGCCCTGGGAGATCAAGTTGTTCTCCCCACTTTACTGCAAGGTAGACTGAAGTTCAGAAGAAATACTGAATTTCT
GCTCCCAGAAGAATAGTTTCTCTGGCTCACAGGCCCAAGTTCTCAATGAAATCGTTTTTTAACTTTCACATTCCT
AAGCTGGCTTCCCGTGCACAGAAGCCATGGATTTCCCCTCTCTCCCTTCCCCCTCCTCAAGGAAATAGTCTTCCT
TTATGGATTTTCATTGGACTCTTTCCTCAGCGATTGTCCTGGCTGTTTATTGATAGTCCTTCCCATAAGAAAATG
GGGTTAAACATGGGGTAGGTATTTTGTCTTTCAAACTACAAATGGAATGTGGTGACATAAACTAGACATGGGGTG
CCCTCAAGTTTCCAAGGGGACCAATGTGCCACTGTTCTTCCTTGGGGATGAGGCCTTTGACTGTTGGATGGATCA
GAGCAGGCTCCAGTCAGACCCTGGTTCTGAATGTTTTTTTTTTCGGTGACTATCCAGTGAGCCTTCAGTGGGTGC
AAGGCGCCATACTTGCTGTGAGAGAGCTGAGTAGAGTGTTGGTTTTTCCATAACTACAGGGGGAAAAAAAGTCAT
TAGGCTTTCCCTTTGTGTCAGTGAAACCAAAAGTGCTTCTTACAACGTTCGCTCTGTTCATGGGTTGTCTATCTA
ACATTGAGCAGCATTGGAGAGGCCACAGCTGAGCTATGGAGATGCTAAATTAACTCATGGCCTCAGTCAGTTCAT
TCTTTAATTTCCTCACCAAATTATTGACTTAGAGCATAACCAAAGACCTCATTCATTCACCCCAGGTGGGTTGGG
GGAATTGGAGTTTGTTGGTGAAGTTTGGGGGCGGGGTGTGGGGAGTAGAGACAGGGTAAGGGGACGTGAGAAAGG
AAAAGGCATGAAGTTCTATACCTCAGCCAGCAGCTGCCTTCGTTTGGAACTGAAGTCCAGCCAGCAGACTCTCTA
GCTCCATCTCCCCTGTGCCACCCTAGGTCATATGACCTTGGCCACCTTGGAGTAGACCCAGACCCCTCGGGACCC

FIGURE 4885B

GGGACATTAGTCTCAGGCTGCTGATGGATTGATTTGACATGAACCAAACACAGCCAAACTCGATACCCACAAGCT
GTCAGCTGAACCTGACTGAGTGTTCTTCCTGAGTTCACGAGGATAGGCTAGAGTGCATTTTTACTGGTGGATCAG
TGTGTGCGAAAGAGATGACCCTTTATAAAGAGATTTTCAAGTGGATATATATAAAAGAAACAGTTGCTTGTAAAA
TATACTTTTGTAAATAATATTTAATTTTTTAAATAATATATTTGGTGCTGTTTTCTCAGATCCCCTGAGAGCACT
TTTTATTTTCCTTTTAAATTCTATGGTTTCCTTTGCATTTCTTGAAGTATATTTTAAGGGAAACAGTGATCACCA
ATACATGTTTTCAGTTTTTTTTTTTTAAGGTCTCTATCACTTTAATCTGGATCAAGGCTTTGAAGCAATGCCTCT
CTGCATTTTTTCCCCAGTGGAACAGACTCTGCAGTACATTAATCAGGTTGAGAATTGAAATATTTTCTTGCATCA
GTATTGGCTAGAAAAGAAAATAAATAAAACCAAGTTAATTTAGTAGTAACAACTTACAGTGATTCTTCCTGTTGG
AAGAATTTGCAACAAATCAGAATCACGTTTTTAGTTGTGCGTGTGCGCGCACACGTGTGTAAAAAGCACTTTCGA
TTGTGCCTCCTGTTTTCTCGAGTGGGGACACTTTAACTACAGTTTACACCTCGGGCGCATAAAGTTTTTCTTCTC
TTTCTCTCTGGTTGTTTCTGTTTCTGAGTGGACCAACAGCAGAACCCACGAGGATTTGTTTTGAGTATGGAGCTG
TTGCGGGTTTGCTCCTTTTTCTTGCTTTGCGTGCTCAGTTTTTACAGACTGTAAAGGAGATGTGTTGTTTGTGAA
GATGGAGCAGAGTCAAATCTGTGCTTCTAACTGAGATGAGAGTGTATTAATCACGTATCGCAGGGCTCCAGCTGT
TTTAGAAGCCACATCATGTTAAACATTAACTGGTTTGGATTAAAAGAACATTAATATTATAATACACATATCTTA
GTGGTAAACAGCTTTTTTTTTTTAAGGTCAGATTGCCTCAGGTTTAGAAAGAGGCTGAGAAATCAAATCTTGAAC
ACAATCAACTTACATATTTTAAAGGAATCTGCCTCAAATGAGAAAATATGCTAGTTATCTAGATAGAGGAAAGAG
ATATTTACTTTTTTAAAAATTAAAATAGTTATGAAATCTGGCAGAAAAGGTAAAGCCTAGAAGAAACTATGAAAG
CTATTCTCATGTTACCAAATTCTATCTGCGCATATGTTTTTGTATAACATTTCGGTGACAGTGGGAGTCGGTTCC
CTTTCCCAACCTGCAGAGACTATCTTCCAATACAGAATCTGTCTATTTATGCTTGTGTTTACAAACTGTATTTGT
TGGGTTTGGGTTTTTGTTTTCTTTGGTGGCATTTTTCAGGTCACTTTGCTTCTATAACAAAGGTAATTGTTTTCA
AATAATTTGTCTTCACCTTTTCCTGTATTTGTACATAGTGATTCAGTATTAGAGAAAAGTGCATTGTTTCTGTCA
TATTTCCAATCTGTGTTGGTGCTCATTTGAGAAAATAAAAGTTTTCAAATATTACAAAAAAATCTATGTCGGGTG
CGGAGAAAGAGGTAATGAAATGGCAGG

FIGURE 4886

VGRGGGGDCGFKSVPGARAPAGPRFAAAHPSGAKPHAGRTGPPVAGLLRTSPRPLREGSSAEDITSVWSLPHPPA
AKPRPLPVSSGVSRATHPVGVPRGLPQSSPHTQQHQW

FIGURE 4887A

AAAAGAGACATTGTAATGAGGCACACCACTAAAGTGAGCATGCCCAATTAAAACCAGTGTAATATAGGATAAGAA
AATCTGATTTTTCAAAAAAGATACTCTACATAAAGAATCCTTCATATAAAAAGTTCTTTCTTGTAGTACATTTAA
AGTTTTAATTCACTCATGTATAACTGAGAGTTCCTTTGAGCCCTTTTTAGGCAGGGAGGCATGTCTGTCATCTAG
CGTGTGGCCCAGTAAGTGATTATTACATTGGAATCAGTTTTTCAGTCTTTTAAAATAAATTCTATGCCATAAGAA
TAAAAGATAAAGAGCAAAATTAATGTTAACTATTTTTAGCTTATTATAACTATGTCAACAAGTGTTTATTAATAC
CTATTATGGGAAAGTCACTGTGGTTGGCATTGAAAATTACATCATCTTTAAAGCAGTATTTGTCCCCAGATGGAC
TCATCACTAGCAAAGACTAGGTTCATTGGAAGGCATAGGGTGAGAGAATGGGAAGATGGAGTGRAGGCGGGTTGT
TAAAGTGCTGTCAGTGAGTGATTTTGTCTACTTGAATAATGGTCCATGTTTGGGGGCATATTGTGTTTCATAAGA
AGTGAAAGGTATTTGCAAAGTAAGCTACAAATGACCCATAAATCTGTTAACAACAGTCCTTAATATGCAAAGATG
AAAACCAAGCATTACTGCTACCCAAAGGGAACTGGTGCTTGGTGATGTGCAGATGGGGCTGTTGGTTAAGAGAGC
TATTACAGGTTTTCTCTCTTAGGTTTCATAGGAGGTAGTTACTGAGATGAGATTGTTTTATCTTTTTGAATACAG
ATCTCTTGTCTTGAGTTAGTTCTGAGGATGGGAGTAATAAAGGAGTTTTTTGTTTTTTTGTTTGTTTGTTTGTTT
TGGCTCCTTAGTAATACTCCTCTGACATTTATTTCTATTATTCTTCAAAGAAAGGAAACCAACTGAAATGTTTGC
TTTAACAAACATTTTAATAAGTTCTCTGGGTTTTTTTTTCCCCTTTTAAAAAAATTAGCATATACCATAGCAATA
AAAGAACTAATGTTAACTATTGTATGCTACAACTTAAGTGATTTTTCTAAAGAAGCACAATGTCATTGAAAGTAT
TATTGAAAAGGATCATAGTCACATTGAATTTGTGAAGGCCAAAGAAATTGAAGGGAGTGATATTTTCATTTTATG
ATATTCACATTAGTAAATTTTGTGTACAAGAATACCAGGCAGAGTGTTTTACCCATGGAAACAGGTTTCAGATTA
CTTTGTTTTTACTGTTAGAGTCTCAAGTTTAGAAATGCTAACACTTAAATCAGTTTTTTTCTCACTATACTTGAA
GATTGTTAATATTTTGATATCTTCCTAGCTTGATGAATTTAAACATATCTTCAGATCTGTGACAGTGACAGCCAA
TAGGACTGATAATATTAGCTTCAAACCAATAATATCCAGGGTTAAAATAAAAATCATAGTGAAAGTACGATTGTA
AAATTATGCTATATTAACTTTTAAGTCTGTAATAACTTGACATCAAAATGTTATGTAATTACCATAAATAATGGC
TAGCGAGAACATCTTTGGAAATTCTCAAATTACCTTTCTTACTACACTGTTTGCAGAATGAATGTAGAAATGATC
CTGTTAGCTTTCTGAATGTTCTGTGGGTTGAATGTGTTTTTGCTTAAATAAAGCTTTTGGTATTTGTTTAAATTA
CACTTCTTGAGAAGTGGAAATTTTAGGATCATCTTTGCTTTGTTTCAGTTTTGTGATTTTTGAAATGAATGTTTA
GTTTACTGAGCCAGTTGGTCATTTCTTCCTCATGTCGTTAAGTCCAGTGAGTAAGCCTGAACTGTGAATAAATTA
CCAAAAACTTGCTTAGAATTTCATTTTGAAGCAATTTGCTAATATTTGAAGTGTATACACATTTGTAGTTATGTT
AAAAATTGTATTGTACTAAGAATGTAATCAATGTCTACTTTAGTTGTAAACATTTCTGATGTCAAAACTTTATTC
ATTACTGTTGATTTTAAGAATAAGAAATCACTGCCTAAATATTACCAAAAGCCACTGTCTCTACCCGAACTTCCC
AGTTTGGGAAAGAATCGTTAGATAAAACAAAGGCTCTGCCCTTTCTGATACCAAACTCCACAGATACTTTCTCAC
ATCTTTTAAAACATTTTGCAATAACATATTGTTTATAGGAAGTTTACAGGGTATGCAATGATTAAAACTTTTAAG
TGAATTGATAGTTGCAAAAGAAAGGATAATATTTAAGGTCAGTGAGTAGCAAGACAATCTAAAGTTTCTGTAATA
TCTGGCTCTCTGTTAATTATAGAGCAAAGTTTCCCTTACAGAATCCTTTTATGAACAGCAAGCTAGAGTCTATCC
CTAGTGGTTATAGCACCTGCTGCGTTTTTCAGGAGACAGTTAGGCCAGGGTGATTTGAATGGATAGATGTGCTGT
TTTGCCTGCTTGTAGAATTCAGCCCAGTCTTTGGTCTCTCTCTCTCTCTCCCTCCTCCACCTCTCCCTCTCTCTT
CTTCTGCACCAGAGCCTAAGGCTGCGCCACCAAGATGCGTCATTTTTTCCAGAGGCTTCTTTTTTTTTTTTTTTG
AGATGGAGTTTTGCTCTGTTGCCCAGGCTGGCATGCAGTGCTGCAATCTTGGCTGACTGCAACTTCCACCTCCCG
TGTTCACACGAGTCTTTTGCCTCAGCCTCTGGATTAGCTGGGATTACAGGCACGTGCCACCATGCCTAGCTAATT
TTTGTGTTTTTAGTAGAGACGGGGTTTCACCATGTTGGCCAGGCTAGTCTCAAACTCCTGACCTTAAGTGATCTG
CCCGCCTTGGCCTCCCAAAGTGCTGGGATTACAGGCATGAGTCACCGTGTCCTGCCCAGACATATCAAATTTGAC
AGGTATTGTATACCCTTTGGATCTTTAGGAATTAATTTTTGCCTCTGTCACTCAGCTTTGTATATTTTGAAATGG
AGATAAGTATAGGGAGGTCTTGGAAGGAAAATTGCCAGAATTCCCAAACCATGTAACACTCATTGAGAATTCCAG
ATCCATTATATCTAAAGGGCAAGTGAAGGAAACAGTATTGTGAACTGGGTATAACTCCTTGGTTCTTAACTAGTA
CATTCTTAATCTGTGAGACCCAAAGGTTGATAAACAATAATTTAAGATTGTACAGTACTCTAAACGTCTGCAAAG
GTCTAGATGTTATCAGTATCACTAGTTTTTATTTCTGCCAGTAGCTCCCTTTTAGGTTACATTGTTGTCCTCTTT
CCAGTGTGGCATCTGTCATTGGTTTTTCACTATGGCAAGTTCATTAAAAAGCTTGCTCCATTGTTATCTTCAAGT
AATGCCCATAAGGAGATGGAAGATATCTGAGACAATTAAGGCTTTAGCTTCTAGGCAAGAGAAATAACGTTGCAT
TAAATTTCAAGTTTCTTTCTGCTAGACTTGAATGTGTCTAGCCACTCTAATTTATGGGGGCTTTTGGTTTTTTCC
TATTGTACTTTGTATGTAGAATTGTTTTGAAATATCAAGCATATTTACTTTGAATTTGAACTCTTTCTTAATTTT

FIGURE 4887B

GTATTTATCCTTTGAATAAAATGTAAATCCAAAAAAAAAAAAAAAAAA

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FIGURE 4888

MCLATLIYGGFWFFPIVLCM

FIGURE 4889

GCCGCGCAACGCACGTTACACGCATCGCGGAGGGAGCGGAGGTGGTTGGGTTTCTGAGTTTGAGTCTGTCGCTCC
TGGCTCTCCCGACACAACAGCGGCGCCCACCTGCCCGCAACGGACTCCCAGGAGCCTCGAGCTCCTCATTTCCAA
AGCTGAACTGCCCCGTGTCTGATTCCGATTTCTCTTGAGCGCGTTTCGGAGCCGGCCCAGAACAGAGGGAAGCCA
GACACACCATACCCGGCCCAACAGTGGCAGGGCGGCTGCGGGTGCTGGTCAAGCTGGGTCACCCGGCACTGAGTG
ACGATCAGCAAATACTCAGTGGACGAAATATTTGCAGTGCAGTGAGGTGAGGGGCATAACCGCGGAGCGTATTCG
AAGAGATGAGAGAGACTGGGGATTAGGCCAGGCTTGAAGGGAAGAATGGTTTGAGCACCGAGGACAAGAATTAAT
TCCCCAGGCCTGGGTTCCAGCCTTGTGCGGCTATCACGTGCTTGAAACCTGGCTAGTCCGGAGTGAGATGCGCTT
TACGTGTAAAATACAGGATTCCAAAGACGTCGTATAAAATAATTTGTATATTGTTTGCATGTTAGGTAACATTTT
TAATGTATTGGATTAAATAAAATGCATTAAACTAAATATTACAGTTA**ATG**ACCGCGTTTACACGTGTGACTGAGA
CACCCTGCGTACCCACTAATCGCTTGAGACTATCCCTTGGCAGCG

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FIGURE 4890

MTAFTRVTETPCVPTNRLRLSLGS

FIGURE 4891

GCTCTCCCTACGTTGCACCAGCTGGCCAAGGGGGCTCCCTAGAGGTCATCTCGTCCAAGCCCTGTCTGTCTGGTG
GGCCTTCAGGGAGCCTCTGCGTACCTCTCTCGTGACCAACTAGCTTAGTCTGTAGGGGCACCTGTTTTAGAGCCC
AGGCCCAGCTCTGCAATGAATGCAGAAAAGAGACAAAGCAAGATGGGAGGTACTGTGGGGGCTTAGCAAGGGGGA
CTTACATAGCCTGGAAAGAGGGCGGGGCACTGGACCTAGGGGCTGAGGACTTAGATTCCAGGCAGAGGATGCAGA
GGTTGAGCAAAGGCTGAGAGGTGACAGGGAAATGATGAATTGGGAAGTCAGAGCCCAGATGATAAGGCCTTGACC
GCCAGCTCCCCT**ATG**CCCTTGTCCCTGGCAGGGTATCCTCAGGTCCGAGCCCCTGGACAGCAGCCCCAGGCCCAG
CTGGCCATGGCCCTGTGCCTGAAGCAGGTGTTCGCCAAGGACAAGACGTTCCGGCCGCGGAAGCGCTTTGAGCCG
GGCACACAGCGCTTTGAGCTGTACAAGAAGGCACAGGCCTCTCTCAAGTCGGGCCTGGACCTGCGCAGTGTGGTG
AGGCTACCACCCGGGGAGAACATCGACGACTGGATCGCCGTGCACGTGGTGGACTTCTTCAACCGCATCAACCTC
ATCTACGGCACTATGGCGGAGCGCTGCAGTGAGACCAGCTGCCCGGTCATGGCCGGCGGGCCCCGCTACGAGTAC
CGCTGGCAGGACGAGCGCCAGTACCGGCGGCCCGCCAAGCTCTCTGCGCCGCGCTATATGGCGTTGCTCATGGAC
TGGATCGAAGGCCTCATCAACGACGAAGAGGTCTTTCCCACGCGTGTTGGAGTTCCCTTCCCTAAGAACTTCCAG
CAGGTCTGCACCAAGATCCTGACCCGCCTCTTCCGAGTCTTTGTCCATGTCTACATCCACCACTTCGATAGCATC
CTCAGCATGGGGGCAGAGGCGCACGTCAACACCTGCTACAAGCACTTCTACTACTTCATCCGCGAGTTCAGTCTG
GTGGACCAGCGGGAGCTGGAGCCACTGAGGGAGATGACAGAGCGGATCTGCCAC**TGA**GCCCAGGTCTGGACTTTT
TTGGCCATCAGATGGACGATCTGAACATAGGGTGGCTGGCAGAGGGGACCCCCAGGAGCCTGAAGGAATCTGAAG
GCACTGGAATCACTCCACACACCCAAAGCCTCTGGACTTCTGGTTCTCAGGAGTCTGCCTACCTGTCGCCCTGAC
CGCTTGTGGATGGAGAAGGGGAGAGCATCTAGGCAGGCAAACAGAAGGGAAGTGGAGTTAAACCTCTGGCATGAA
GTCTGGGAGTAGGGTAGGCTAGGGGGTTTCTTCTATGACACTTGACCCTTCCATGCTGGTTCCCAAGCCTATTGG
AGGAATGTGGGTGTGGCCGAGGTGATGGCAAGAAAGGTGCAAGAAAGTGAGCAGTCTGCCTGTGAGTGAGCACAG
ATGCCGGGGTGTGTGTGTGTGTGTGTGATTTTCACTGTGGGGTGTGTCTGTGAGAGCTAGCTGCCTTACCCCTCC
TTGGCACATAGTAGGCCTTCCATAAATGTTGGATGGATGGATAAATAGATTGGGACCATCAGACCATGACCACTG
TAGGAGTGATGACAGCTCAGCGTCCCCACTCAGTGTATCTGACCATGTGTGTAAGTGCACAAAAATGTGGTTGTA
GATGTTGCTCTACATTCAAACCTTCCAGGCTACACTCTTCCATCAGCATGAGTCCTGGAGAGCTGGGGGAAGGTA
GGAAGAGGAGCCTTGCCTTGAGTTCCTAAACCGACCCACTGCAGACACAGGCTCTGATTCTCTTACCCAGAGATG
CCCATGAGCTGACATTTTACTCATCCCTCTGCCTCCAAGAAGGCCTGTATTATACGTGTCCTCCTGGGGGTTGGA
GATGATCCCTCAAGTACACAAAGGTCCCCTGGCCCTTCATCTGGGAATCATATACTCCACTCTAGCTCCCAGAAT
CTACAGACCTGGCTCCTCGGATCTGAAGCCCAGCACAAAATAATCTCCCCGTCCAAGGAGCTTGTGGAACTTGAA
TTGGGAACTTTGGAGTCTTGTCTCCCATCCCAGCACATTGAGGATGTAGTTGGTGAATGGACTCTTCCAGGCATG
GAGATCCTCCATCCTAAAAGTACCTGCCTCCTTCCCAGCCATCCCTGACACATTCCAGCCAGTTGGATCTCACAG
CACAGCTATCCACAGGGAGACTGGGATGTTCACGCAGCACTCCATTACTCAGTACCTCCATACCCAGCCCTATAC
GCAGACCCACAGGTGGGGAAACTGAGGCAGGAACAGGGTTCTGCCCTCCCAGAGCCTCCACTCTGGGATGCCAGA
ATGGAAAGCCAGAGGGAACCTGAGAATCATCCAGTCTTACTGTCTCAATGTACATACGGGGAAACTGAAGCCAGG
AGAAGAAGAGGGAGAAACTGTCCAGGGCCTCACAGGGAGGCATTCATGGAGCTGGAGAAACCAGGGATCCTGACC
GCAGGGCCCATCAATTGCTACATAGAGATACACATGGAAAGAGGGTTTAACAGACCCTCTCTAGGACACAACTGT
TTCTGCTTTGAGCAATAATTTCTAACCTGAGGCCAACATGTCCCACTGCCCCTTGGGTTGGCTGGGGTTGTTTCC
TGAGCCAAGCATCCAATATCATGCCCCACTCAATGGCCTAGAAGCTGCCTGTACTTTGGGGAAACAGATGGAGCT
CTTGGGCCCAGCCAGCTGGGCCTGGGACTTCTGCCTCTGCCGCCTCCAGAGTGGCCTGGCAGCTTTGCCAGAGGC
TGTGGAGCGAGGGTAGTAGGAGCTTTTCCCAGAGTGCTGTGACTTGCATGATGGATTCTAGGCTGTGGCAAGGGC
TGATTTCTGGGATAGGGGGAGGGTTGGAAAATTTATTTTTATGAAACAGAGGGAAGACTTTATTGTTGTTATTTT
TGGTAAAATAAAAGGCAAACTAAAGCAGCCACTGGTGGGAAGCGGTGATCTGGGTGCAACATGGCTCTTGGCAGA
CCATGGAAGGAACTGAGCCAGA

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FIGURE 4892

MPLSLAGYPQVRAPGQQPQAQLAMALCLKQVFAKDKTFRPRKRFEPGTQRFELYKKAQASLKSGLDLRSVVRLPP
GENIDDWIAVHVVDFFNRINLIYGTMAERCSETSCPVMAGGPRYEYRWQDERQYRRPAKLSAPRYMALLMDWIEG
LINDEEVFPTRVGVPFPKNFQQVCTKILTRLFRVFVHVYIHHFDSILSMGAEAHVNTCYKHFYYFIREFSLVDQR
ELEPLREMTERICH

FIGURE 4893

TCAAGGGCCTACTTTATGGCAGACATTGTGCTAGTGCTTTTATTCTAACTTTTATTTTTATCAGTTACACATGAT
CATAATTTAAAAAGTCAAGGCTTATAACAAAAAAGCCCCAGCCCATTCCTCCCATTCAAGATTCCCACTCCCCAG
AGGTGACCACTTTCAACTCTTGAGTTTTTCAGGTATATACCTCCATGTTTCTAAGTAATATGCTTATATTGTTCA
CTTCTTTTTTTTTTATTTTTTAAAGAAATCTATTTCATACCATGGAGGAAGGCTCTGTTCCACATATATTTCCAC
TTCTTCATTCTCTCGGTATAGTTTTGTCACAATTATAGATTAGATCAAAAGTCTACATAACTAATACTCACAGCT
GAGCTATGTAGTATGCTATGATTAAATTTACTTATGTAACTTTTATTGTCTTTGGCATTAACAGTGTTTCAAAAA
ATTTTCTGTGTATACCCATCAGTGATTCATTCCCAAATCTTCTAGAAGCATAAGTGTCTCAATATATTAAAACAT
ATTGAATAATCCTTGTTAGAGTTATCCTTGCAGGAGTCCTTAGTGCTCCTTTATCCAATTTGTACTTGATGCCCT
CTAGGCAGGGTGTACAGCTAGCTGTTGCTCTGGTATTTCCTATAACCTTCTTGGGGATTTCTTTTACCTCCTGTG
TTAGACTCCTGTTTTCTGGATTCCCCCTTTTCCCTCTTTCTTGGTCTACTTTTTGTAGAACACAAGACTCTACTA
GCTTCCTGAGAANNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNGAGACTCGAAGCCACTGTT
TCATTGTCACTATTGAGAATCTAAATGGCCATTCGGATTCTTTCATCATCTTTATAATTTTACCTTCCTATTTCT
TTCCTGTCCTTTTAATGGAGTTTTGGGAGAGAGCAGAGGTAAACATGATTTGAAAAAGCCATGTCTGACCAGAAA
TTCTGTGCTGGCAAGATATGTATTTCACCTTTAGGG

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FIGURE 4894

MPSRQGVQLAVALVFPITFLGISFTSCVRLLFSGFPLFPLSWSTFCRTQDSTSFLRXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXETRSHCFIVTIENLNGHSDSFIIFIILPSYFFPVLLMEFWERAEVNMI

FIGURE 4895

AATCCCAATTTATTTTCTAACTCTTTTATTGGATGTATTTAGAACACAGTATACCTATAGTATACCTATGTGTTT
ATTATGTTTGTAAATGGTAACTGACATTTAATTATTAGAAGTACTTACCCCTGCCTTCCTCCATTTTTATTCATG
GCTACTTGAGAAAGCAAAAGGAAAAAATAATAGTTATCAGTAGTGTCACTGGAAAGAAGAGAGGAGGGACAAAAC
TGAGCAGCAGAATTCGTATAGACATTTACGTTTAAATTCTAAAAGCCCAATTGAGATGTTCAGGGAGGGTTTGTT
TTGCCCTTTGGCCTCATGAATGGGTTTCATGAATGGGCTTCAGTGGCTTATAAACTCTGTAAAATTCTATTCTAA
ATTTTGTACATTTATTTTGTTCCGGTTAATTCCAGAAGACATTTCAAACATTTTTCTTACACCATATAATAAAAA
TACTTAACTAAATTGACAGTTATAAAAATAAATCAGTGAAATGTACCTTATACTTTAATAAAAAATGTTTTCAGA
AATAGATAAGTGAAAGCTGAGTGTTTCTTTGATAGGTTCCCCTGTACTATAGGAGTGATAATTGCAGCTATTGCA
ATAGTAGTAATTGTTAAATGGATACTAATGAATAGCATAGCATAGTGGGTAAGAGTTTATATAGCACAGGCTCTA
GAATCAGATTAAGTAGGTTCAAATACCAGTTCTGCCAGTAACTGGTTTTAGAACCTTGGGGCAAGTTAAAGAATG
TCTCCCAGCCTCAAGTTTCCCTATTTGTCAACAATGGAAATATGGTAGCTACCTCAAACCTCATTACGAATTCAA
TGAGTTAAACTTGAAAAGACTTATTACAGTAGCTGGCACATAAAGACTTGATAGTAGTTTATATGGATGCTATCT
CATATTAGCATATATGGAATTAATAGTGTATCACTATACTTTTTTTTTCTTTTTTTTTTTTGAATAGAGATCAGTC
TATCACCCAGGCGTGGAGTGTGCAGGGGTGACATTCATAGCTTCACGTTGTAACTTCCTCCCATTACTCTACCAA
TCCTTCCGTGCCTCAGCAATCCAGACGGGCGTGTGATGTGCAGGGTGTGCACCACCACACCCAGCTACATTTTTT
TGTGGGATAAAGAGCGGGGGTCTCACTAGTGTTGGCCCAGTTCGTGGTTCTCGAGCTCCGCGGCCTCAAGCAATC
CTCCCACTGGCCTCACAAGTGTGGGGATTACGGGTATAAGCCACGGCACACGGCCTTACTATGCTATCAATTCCA
TATATGGAAAGGTGTTTTCCCTTTCAGAGCTCTTTAAAGCTCTGCAGAAGATTTACATGTGTTTATAGAGCTAAG
AGAAATCAGGGCATGGAAATTGAGTGTGTAATAAAAATTAAACTCTTCATGTTATATAATCATGCATAACTTCTA
TCTTCATTCTCTGAAGTTGCCTAGAGCACCATCACAGCTAGGAAGCTTCCATCATGAATTACCTTATTTCCAAAA
GCAAGTACTCAAATAATTGTCTCAAGAGAGGAAGGACAAAACTGTTACAAGCTGAAATATTTGGGGATTTGTTTG
ACTTGACTAGGGAACCACAAGTTTTCATATAATGCCTGATTTAGCCCTGTGCCTAACAGTTTAAATCTTAATGCT
AATGTTAATTGCTTCCCAGTTGGTTGACCTTATAAGAAAACACTGTGTGGTATTTTAATGTGGTAAACATGTGAA
TGAAGGCCTGTGGCTCAGTTAATCACTCCCACAACTTTGAGCTGTGAGTTTTACTGGTGGAAGGAACTTTAACAG
GTCTTCGCTCTTGTCATTAGATATCAAAGAACTGAAATTAGTTGGAATTGTAAGCAGTGAATAGATGTGTTGTTA
GAATGATTCCATCACTTATACATTGTTTAAAATGCTAATAAAGTAACTTGCTTTGTAAGAAAGAAAAAAGAAGAA
AAAATT

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FIGURE 4896

IPIYFLTLLLDVFRTQYTYSIPMCLLCL

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FIGURE 4897

AGCTGCTGGCTGGGCTGCCTGTTGAGTCAGCCTTCTTCCCTCACGGCTCTTCTCCCGGTCCCTGAAACTCGGCTG
CCAGGGGAGCTGGAGCCACCTGCGAAGGTGTCCTCCCATACTGGACCCCTACAGGAAGCTCCGTGTGCCCAGCTG
GGGCACAGCCCCAGCTG**ATG**CCCCAGAGGGGCCACCCATCGCAAGAGGGGCTTTGGGCTCTGCCCTCCCTCCCCA
TGGCGCATGGGCCAAAGCCTGAGACTGAAGGACTGTTGGACCTCAGCTTCCTGACAGAGGAGGAGCAGGAGGCCA
TTGCTGGCGTCCTCCAACGAGATGCCCGCCTGCGCCAGCTGGAGGAGGGGCGGGTCAGCAAGCTCCGGGCCTCAG
TGGCAGACCCTGGGCAGCTGAAGATCCTGACAGGGGACTGGTTCCAGGAAGCACGCTCCCAGCGGCACCACAATG
CCCACTTCGGCTCTGACCTTGTCCGAGCGTCTATGCGCAGGAAGAAGAGCACCAGGGGAGACCAGGCTCCAGGCC
ACGACAGGGAGGCTGAGGCTGCTGTGAAAGAGAAGGAAGAGGGGCCAGAGCCCAGGCTCACCATTGATGAGGCCC
CTCAGGAGAGGCTCAGGGAGACTGAGGCTTCAGATCCTGAGGAGGCGTCCCAGGCCCAGGAAGATCCTGGCCAAG
GAGACCAACAGGTCTGTGCCGAGGAGGCTGACCCGGAGCTGGAGCCCGCGTCGGGGGGGAGAGCAGGAGCCGCGGC
CCCAGCAAGCCCAGACCAAGGCCGCGTCCCAGATCCTGGAGAATGGGGAGGAGGCCCCGGGGCCCGACCCCTCTC
TCGACCGCATGCTCAGCAGCAGCTCCTCGGTGTCCAGCCTTAACTCCTCCACGCTGAGCGGCAGCCAGATGAGCC
TGTCAGGCGACGCGGAGGCGGTGCAGGTCCGCGGCTCCGTGCACTTCGCGCTGCACTACGAGCCGGGCGCCGCCG
AGCTGCGCGTGCACGTGATCCAGTGCCAGGGCCTGGCCGCCGCCCGGCGCCGCCGCTCGGACCCCTACGTCAAAA
GCTACCTCCTCCCGGATAAGCAGAGCAAGCGCAAGACGGCGGTGAAGAAACGGAATCTGAATCCGGTTTTCAACG
AGACTCTCCGGTACTCCGTCCCGCAGGCCGAGCTTCAGGGCCGCGTGCTGAGCCTGTCTGTGTGGCACCGCGAAA
GCCTGGGTCGCAACATCTTTCTGGGCGAAGTTGAAGTGCCCCTGGACACGTGGGACTGGGGCTCTGAGCCCACCT
GGCTCCCCCTGCAGCCCCGGGTCCCACCCTCTCCCGACGACCTTCCGAGCCGCGGGTTACTCGCCCTGTCCCTCA
AGTACGTCCCCGCCGGCTCCGAGGGCGCAGGACTGCCCCCGAGCGGGGAGCTGCACTTCTGGGTGAAGGAGGCTC
GGGACCTCCTGCCGCTGCGGGCAGGATCCCTGGACACTTACGTACAATGCTTCGTGCTGCCTGATGACAGCCAGG
CCAGCCGCCAGCGTACAAGGGTTGTGCGACGCAGCCTCAGCCCTGTGTTCAATCACACCATGGTGTACGATGGCT
TTGGGCCTGCTGACCTGCGCCAGGCTTGTGCCGAGCTCTCCCTCTGGGACCATGGGGCCCTGGCCAACCGCCAGC
TGGGGGGCACACGCCTCAGCCTGGGCACCGGCAGCAGCTATGGGCTGCAGGTGCCCTGGATGGATTCCACACCTG
AGGAGAAGCAGCTGTGGCAAGCCCTCCTGGAGCAGCCGTGCGAATGGGTGGATGGCCTTCTACCCCTCAGAACCA
ACCTGGCCCCCAGGACG**TAG**CCCCACCAAGCCTCTCTCTCTGGACCCCCATCTCAGGGCCTGCCCTTGGCTAAAG
TCAATAAAGTCTATTCTAAGAGC

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FIGURE 4898

MPQRGHPSQEGLWALPSLPMAHGPKPETEGLLDLSFLTEEEQEAIAGVLQRDARLRQLEEGRVSKLRASVADPGQ
LKILTGDWFQEARSQRHHNAHFGSDLVRASMRRKKSTRGDQAPGHDREAEAAVKEKEEGPEPRLTIDEAPQERLR
ETEASDPEEASQAQEDPGQGDQQVCAEEADPELEPASGGEQEPRPQQAQTKAASQILENGEEAPGPDPSLDRMLS
SSSSVSSLNSSTLSGSQMSLSGDAEAVQVRGSVHFALHYEPGAAELRVHVIQCQGLAAARRRRSDPYVKSYLLPD
KQSKRKTAVKKRNLNPVFNETLRYSVPQAELQGRVLSLSVWHRESLGRNIFLGEVEVPLDTWDWGSEPTWLPLQP
RVPPSPDDLPSRGLLALSLKYVPAGSEGAGLPPSGELHFWVKEARDLLPLRAGSLDTYVQCFVLPDDSQASRQRT
RVVRRSLSPVFNHTMVYDGFGPADLRQACAELSLWDHGALANRQLGGTRLSLGTGSSYGLQVPWMDSTPEEKQLW
QALLEQPCEWVDGLLPLRTNLAPRT

FIGURE 4899

TCAGTCTTTGAATTAAATGCGTTTTTTTCTTCCCTTACAGATGATTTTTTAAAAAATGAAATTCTTGAAGAGCTG
CACCTTAAAAAATAAGACAAAGTGAAAGTATTGTATTATGTTACAAACAATGCAGGCTCCTTCCTCATTTAACTT
TACAACCTTGCGAAGTGGGTCCAGGAGATTTGGAGTTTGTGGTAAAGCCAGTAATGGGCATTGTCCTGCATTCCC
TTCCCTTCATGGTTTGCCTCGATCCTCTCTAAGCTTCTATCCTGGCCTGAATAACTCAAAGATAATTGGTCTCAG
AGATCAAGCCATATCCTCAGGCCTTATTTCCATCTTCTCATGATTCTGCCATCATACCTTTGCTTCTCCGCTAAT
GAAATGAGCTGGCAAGACCTCTGTTCATTGGGAAGTGCTTCTGAAAGAGCCTAAGAAAA

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FIGURE 4900

SVFELNAFFSSLTDDFLKNEILEELHLKK

FIGURE 4901A

GACGGGGCGGGGCGCAGCCTTGCGAAGCCCTAACGCAGCGCTGGGGAGGGGGGCGGCCGAAAGGGGGGCGGTGGT
CGGGCCGCGCAAGCGGAGATGGAATGGGGCCCGGGCTCAGACTGGTCACGGGGGGAGGCTGCCGGCGTGGACCGC
GGGAAGGCGGGGCTGGGGCTCGGCGGGAGGCCACCCCCACAGCCGCCCCGGGAGGAGCGCGCCCAGCAGCTGCTG
GACGCGGTGGAGCAGCGGCAGCGGCAGCTCCTGGACACCATCGCAGCCTGCGAGGAGATGTTACGGCAGCTGGGC
CGCCGGCGCCCGGAGCCGGCTGGTGGCGGGAACGTCTCAGCCAAACCTGGAGCGCCCCCCCAGCCGGCTGTCTCC
GCCAGAGGCGGCTTTCCAAAGGATGCTGGCGATGGAGCTGCGGAGCCCTGACCATCCCCGAGCAGAATACCCTGA
CTTCTCTCCCTCCCCAGGGCCGGTGGCTGGACTCTGAACAACTCCCTTCAGTAAAGGGGCCAGTCTTCACTGGCA
GTGGCTGGTACTTGGCTCTCAGCCTGGAGTGGCAGCTCTGCTAGCAGCTGGGTTCACTCCCACTTCATCCTGGCT
GAAAGCAGTGCTGTGCTTTGAAATGCAGCCAATGAATACCCAGTCTGATTACCCAGATTTGGGCAGACCAGCAGT
GCTCGCCAGAGTGGTCTGGCCTGCTATGGGGGATCCAGGTGGTGTTACATGTCCATTTCATGTTTTGGGGGCTTT
TAGCCCCACAAAACACCTTCAGTAGAGCCTTGATTAAAAGGAAACCTGCAGACTCTCCTGGTGACCGACGTTTCC
TTTCTGTCCCCTCTCCAAGACTGATGGCTGGGAAGGGGGGAGTGGTGGAAAAATGTCAACTATGGGCAGGGTTGG
TAAGAAATGCCACAGATACTACCAGATTTAAATAAGCATTTAATTAGGATTTCATTAGTATTTAATATTGCTTTT
TCAATTCCAAAAAGTTAAATTTTCACTTTTTAGCAGATATTTTAAAGTACAATATTAAGTTTATACAAAATGAGC
AATTAAGCAAACACCATTATTTCACATTCTTCAAAAATACAAATTCATATTTATTCTTTTTTGGGTTTGGAGGTT
TCTTCCTTTGGAAGTACTGAACCTGTAACGTTTTCACATCGCTCAGTGGAAGTCCGTTGTTCCCATGTTTCACAC
TTACTTTTACATAATCCAAATAAAACTATTTGGGATTTTAAAAGTTGTCACCAAGACCCCGGCCAATGATTAGTG
TATGTCAAAAAAAAGGGCTCTTGGGGGCTCTTGCCTTTCCTGGCTAGAAGATCTGAGCCAGAAATTCAGCAAAAA
TCTGTTTCCAGCCACCCTCCCCAAATAGGGACTAGAAAGAGTTCACAGGAAAAGGGAACAGACACCTTGAACTCT
GACCCCCACCCCCACATTCTCCAAAACACAACGAAGGATGTAGACTGTTGAGTCAAACAGCCCTTGGGAGGCCTG
AGAACACAGCAGGAAAAGGGCAAGAGAAAGCCTCTGACTTGGCACACTACGAGGATAACAAGGATATTGCAAAAA
ACACCCCTGGGTTTTGGTGCAAAAAGGTTTTATGAAAAATTTTCCCATAAGAAAAAGTAGAAACTGCATTGAGCT
GAGAAAGTGACACTACATTATCACCCAATTTTTGGCCCAACAGGCACACCACCAAAAGGGCAGTGTGTGGTTTTA
AACCTCAATTCCAGTAAAAAAGCTTGTACTATGTACACATTGACATAAAGATCCAGTTTAATTTGCATTTTTCAG
TGCAGACTGAGAAGCCCTCTCTTGAACAGGAGTAACAGTGAGAAATGCCCAGTGGTCGTCGGCTTCCCCAAAGGG
CATCAGAAGAAATACAGGACTGTTTCCCTCTCTCCCTAAAAAACATGCAAGAGGAAACAGGCCAAAATGGCTAAC
CAATCAGAAATATGCTTCAGTTTTGTTGCCTCCACCCCCAAATATTAAGGAACAGACAATTTCTGATCTATGTCA
CAGCAGAACTATTTGCATATTGGATCTATGAAAATCTTTCTGCTTTGGCTGAAGTATATTCTAAAACTTGTCTAT
TCTATAGCCTGAGAATTGAAGATAAAATGGGGGAGGTGGAGTAAAGGAAGAAAGTTGATAATGATTCATGGGATG
TAATGTTTGTTTATAGGATTTAATGAAGGCTGGAGGCCTTTTTGCTTAAGGAACCAACACAGGTAGTATGGGGAG
CAGTATGGAAATGGCTCATGTTGCCCCCTGCCACCCATGCCTCCCCAAACATATTTCTGATTGGTGGTGTAAGAC
AATTGTAAACTCTTGAGAAATATTGTTGCAGTTCCACAAATCAATGGTTTCAATCACTCTGGAAAAGTCTTTAAG
GACAATGGATGTGATTACAAATATAAAAGTCTAGAAGGTGCCAGGTTTCTACCTAGGAACAATCTGTTCCTTCCT
TTCAGGCATCATTTTGTAATGGTGAAGAGGGAAAAGATGGCGAGAGACCAAGAAGTGATGAAAAAGGGCCTCAAC
AGTCAGCAGAAAACAGGACCCACAGCAGTTCTTCAGAGAGCCTGAGGGGGCGCCCTGGGGCACACAGGGAAGGCT
TGCATAGATTGAGCGGTTGCTGAGAATGCATAATAGTGTTTCCCTATGGACAGTCTCACAGCACAGGGCTGATTG
AGCGGAAAAACGCTGCCAGGCCAGGGCCACATGGGACAACGACCATCAAGCTACACATATTGCACCAAGGTAAGT
GCTTTTCTTTTCACACCTCAATTTAACTTTTTATTCTGAGCAAAAAATAAAACTTTGTGGAAAGTATATATATGT
ATATATACACACAAAAGAAATTGCAGCAATCGGGTTAAAGATAAAATAACCTAAAGTGCTTTTTTATTTTATTAT
TTCTTTAATATACCAATATGAGGTTCTGCAAACTTGTCCCTCTGGACACATTCAGCATTATACAAAGTCTCTCAG
GAAAACCCACCCACCCTCCAATATCCCCATCAGTCCACAGCCTTGACCCTGAAAATAAAACTCTCCGATCTACCA
ACTATCCCAGAGGTGAAGAAGAGAAGCCCCTTGCCTTTTACTCAGAGAGATCTTCACATCTTAAGGCCCCTCCTG
GGCTTTGTACCATGATCTCCTTCTAAACGGAGGTGGAATTCAATAAATGACACCACTTCTGTCACCAAACTGGTG
GTGCCCCCATGAGACTGGCCAGACCCTGCCAGCAAAGACTGGGCCACCTTCCCTCAATGCCCAACCTACCTGCCT
GGGAAGGGCCAAGTTCACTAAGGCAGTTTGGTGGTGCCAGCCAGTTTCCTTACCACCTCCTAAGTCCATGAACCC
CAATCCCTGGTGCTAAGCACCCTTTGAAGCGGTTGTCTAATTGGAGATGTTAGTAGGAGCTAGAAGATAACGTAC
AGGGTGAAAATGGTTAAGTTTACTATGGGAGGGGAAAAAGGCTTGATTTTTACCTGCTAGAATTCTACAAATCCT
CCCTAACCTCACCCTAGGTTCATTTCCCAAGTTTGGGAAACCACACTCACCATGAAGGTTCTTTCTGGCTCCAGC

FIGURE 4901B

TTAGCTAGGGGCCCTCTCTTCTCCAAGGTCCTCGGCACTAGAGACCAGGCTTATGGAAGGACAGGTAGGAAAAGA
GAACTGGAAAAGGAGGGAAAGAAAGACTGCCTATCCTGGGAAATAAACCTGATCTTCACAACCACTCACTGGCAT
TTTAAGCACATTCCTGATTTTTCAAAAGCTGATTGGATCTGATAGTCTCTCTTGTAATCTAGAGTCACCCTCAAA
AGGCAGATACTTCAGCTTCTTCAACTGGAAAAATCTGTCAGCCTAAACACTGTTTAAGATGCTGCTTCGTCACCC
CCGATCTTTGAGAGTGAAAAGGCCACTGACCTGGGTAGGGCCCAACATGAGCACAGCCCTGGCTAACCAAGAAGA
GTCGCTATTTAAACTGTGGGTGCTTCAGATGTCCTTCCCTGGGCTCCTATTTCCCACTTCCGCCCCAGGGAACCC
AAATCCCAGGTGACCACAGGATGGGGATATGGGAAGGTCATTACTGCCCTCTGATACAAGCTTACTTTGGGGTCC
CATCACTACTCTCTCAGAAGTTGTAAACAGCAAGGGCCCTACCTCAAAACTTCCCATGGGTGCGAGGCCCAGAGA
CAGCCAAGGACAACTCATGCTCAGCAGTTGGTTTTCCAGGAGGACTGGAAACCTCCTGCCTTATCAACTTCTGCT
GAGGTCAATGGTCAACAGAAGCCACAATCCTTTTGGGGAAGGGAGTGCAGAAGGTCAAAAAGAAGTCAATTCCCT
A

FIGURE 4902

RGGAQPCEALTQRWGGGRPKGGRWSGRASGDGMGPGLRLVTGGGCRRGPREGGAGARREATPTAAPGGARPAAAG
RGGAAAAAAPGHHRSLRGDVTAAGPPAPGAGWWRERLSQTWSAPPAGCLRQRRLSKGCWRWSCGALTIPEQNTLT
SLPPQGRWLDSEQLPSVKGPVFTGSGWYLALSLEWQLC

FIGURE 4903

CTCTCTCTCCCTCTCCCTTTCTTTTCTACATTGAAATCTGTTCTTACATAATAGAGAACAGGGCTATTGAATAAA
GACCCAATCCTACCAGATCTTTAGTTCTAAAGGGCAACTTGACTGTGAGTAGGAGGGCCCCCAAGAAAGGGAGGA
AAGTCCACACCCAGCTAACCACACAACAGGGCTTCATTATGGAAATATTTTAACAAAAGTACATGTTATTACCAA
CCAAAGAGATGCATGTGCAATAGAAGCCTTCCTTAAAAACAGGCTAAATAACCTCATTTTATGCAGCAGTTTAAT
CTGAGAACAGAGGGAAAGGTGTGCAGTGGTTCCAGAGGGGCCTTATATTCTATTTTTAGTCTAGATATTTTTTGT
TTATAAATTCCCAAGGAATTGTTAACACTTTGGTGACACCTAATGGATTCTTTTTGAAATTCCAAGGTGCTTCAG
TTCTTTGCCCAAGTGAACTGTGCCTTTTATTGCATTTCTGTTCGTCTCTTGGTGGCTCTTCTGACTTTTTGGAGA
ATACCCATCTTGTTGGAGGCAGACTTAAGTTGTTATGCTGTGCCACACAATTTACTGAGACAATCATATCTTCCT
AAGCATTTAAGGAAAGTTGAAAAAAATAGAATTAGCTATAAAATATGTATGGCACATCTTGTTTAATTTTGCATG
TAACTTCTCTTTTGTACATTGATGAGGTTTTAGTGACATTGTCATCCAACACTTTACCTTTATTGTTCAGGGAAT
GCCTTCGTGATTTTTTGTACTGGTTTTATTATTCAGACTATGGCCTGGATTTGAGTATATTGTTATTACCACCTG
GTTTTTTAATTATTCATCCCAGTAAACTTATATTTTGTGAAGCATTTGTTTCTCAGATTAAGACACTGTTAGAAC
CTAAAGTAGTAGCTGATGGGTATCTGTGAATNTNNNNTTTTTTTTNTTTTNNACNTGAAGTAGATTGTCTGAATA
GGCATCCTCATCTATATTTACCCAAAACCTCGCTTACTGTCATGTGCACTACAAATTGCAATTTGGAAACCTACT
GTATTGAAATTCTGTCAGTTTATGGTTCTTGAAGACTGATGTCCTTTCCCAAACACTGGTTACTGCAGCAGCATT
TTTAATGTGTAAGTGAAGAAAAAAGGCCACTAAGGCCAAAGATTTTTTAAGAATCATTGTACAAATCATTATGTT
AAACTATCTAAGCTTTGCTGTAATACTGTTTTCTCTTCAATATGTGATGGTACAGGAAGGATGTTAAATGAAGGG
GTGGTATTGCAGGAGAGCATTTTAAATGGCAGAAGTAAAAAGTTATAATATTTATAATTTTGATGGGTTTAAGTT
TATTTTTGTAGGGAAGATTTTTCTCCCCTAAAATAGTTTCTAGAATGGCAAAAGTGTTTCCATTATTAAAAATTG
AAGTTATTAGTTG

FIGURE 4904

MYGTSCLILHVTSLLYIDEVLVTLSSNTLPLLFRECLRDFLYWFYYSDYGLDLSILLLPPGFLIIHPSKLIFCEA
FVSQIKTLLEPKVVADGYL

FIGURE 4905

GAAGCGCCAAGTGCGCATGGGGACGCTATAGCAATTCGTTTGCTGTCCTTCCTCTCCTTCGAAGATGACAAGGCC
TACCATCGTTTCTTCCTGCCTTTGGGCCGTCAGGCAGTTGGTTGGGACCCGCTCCAACCCTCGGTTCTTCCTGCA
ATACAGTGGATACAATTTGTCATGGCTACTCTGAGTGTTATAGGTTCAAGTTCACTTATTGCCTATGCTGTATTC
CATAATATACAGAAATCTCCAGAGATAAGACCACTTTTTTATCTGAGCTTCTGTGACCTGCTCCTGGGACTTTGC
TGGCTCACGGAGACACTTCTCTATGGAGCTTCAGTAGCAAATAAGGACATCATCTGCTATAACCTACAAGCAGTT
GGACAGGTGATAGATTATACTTGTCGAGTTGGTCAAATGGCCTTTGTTTTCTCAAGCCTGATACCTCTGCTATTG
ATGACACCTGTATTCTGTCTGGGAAATACTAGTGAATGTTTCCAAAACTTCAGTCAGAGCCACAAGTGTATCTTG
ATGCACTCACCACCATCAGCCATGGCTGAACTTCCACCTTCTGCCAACACATCTGTCTGTAGCACACTTTATTTT
TATGGTATCGCCATTTTCCTGGGCAGCTTTGTACTCAGCCTCCTTACCATTATGGTCTTACTTATCCGAGCCCAG
ACATTGTATAAGAAGTTTGTGAAGTCAACTGGCTTTCTGGGGAGTGAACAGTGGGCAGTGATTCACATTGTGGAC
CAACGGGTGCGCTTCTACCCAGTGGCCTTCTTTTGCTGCTGGGGCCCAGCTGTCATTCTAATGATCATAAAGCTG
ACTAAGCCACAGGACACCAAGCTTCACATGGCCCTTTATGTTCTCCAGGCTCTAACGGCAACATCTCAGGGTCTA
CTCAACTGTGGAGTATATGGCTGGACGCAGCACAAATTCCACCAACTAAAGCAGGAGGCTCGGCGTGATGCAGAT
ACCCAGACACCATTATTATGCTCACAGAAGAGATTCTATAGCAGGGGCTTAAATTCACTGGAATCCACCCTGACT
TTTCCTGCCAGTACTTCTACCATTTTTTGAAACTACAATACTGGAACATCCAGGAACTGGAGTTATTCTACGCTA
ATGGATTGGAAAGAATGTTGGGAAAGGACATCTTAAATCTTTTCTAACTATGCCCTAAACTGCAGAACTCAAAGG
AAATATAGTGCCATTGTTAGTAGTCATTCTAGATGAATTGGGAGTATCTCTCCAGTTATTCCCAGATTCACTAGT
GATCCTTAAAGTCTCTATTCAGGGAGAGGAAGACACTTTCCATCTCAGAGATAGACTCGTGTTACCTTGATGGAT
ATTGGATTTGTCTAAGTCTCTTCTAGAAAAAATAAATTCTAGATTATTATTTAAAAAAAAAAAAAAAAAAA

FIGURE 4906

GGAAAGAGATGGCCAAATAATTAGTAATGTCTTTTAACATTACGAACAAATATATCTTAGTACTAGAATTCCAAT
GTATTTGTTCGTAATGTTAAAAGACATTACTAATTATTTGGAAAGAGATGGCCAAAATAATCAACTCTACAGGCT
TCAAGCTGGTGGGGGGAATGCTGTTACTCATTAATGCTTTTTTACTGAATGGTCGGAATCACATATGCACCACACA
TACTGATCTTAAGTAACATTATTTTATAGAACTGTTTAAATGGGTTTAAATGGTGTTCTTTAGATGAAATGTGTT
CTGTTTTGTTCATTGTCTTAAACTGAATAGGGCTGAATAGGCTTTATGTAATTCTTCATTTCATGGTAGAGTTTG
ATGCTGTGTTTAAGTGGGTTCTTGTTTATAGGATTTTCAACTACAGTTTGAATGCCATGGAGGAATTTGAATAAT
ATATTAATGAAGGACATATTCTTGTAATCACAAATTTGCATTTGCTCAGGTTTCATTGCTGTGTGATAGGATTTT
TCCTCTAACTTGAAATTTAAAAACTTTTATTTCCTATTCCTTTTGTCGGTAAAGCAGTCTGAATTTGGAACATTT
TATCATGGAGTCAACAGTGAAGACTACCAGATAATTTTGTATTGGAGAAGAGGAAATAACAGCTAAATTGTGGAT
TTCAGTGCTTTACATGGTGCCTTTCGAGTCAGCTTTTACATTATAGGGGCTTGTTATAGTTTAGCTAAGATGACC
ACTTAACAGTTTATACAGAACTCATATGTATAAATCAACATTCTTAGGATATTATTTATATCCTTTGAATAAATC
CCTGTGAAGTTTTTCCTCCCCACTAAAATGGTGCATAATAAAACATGAAATATGTAGTATGCAGATATCATTTAT
TAGATAGTTTGTAGTGTATACATTTAGAACATACTTCTTTTGACAAAGGGTGATCTGATTGCTAATTTACCATTT
TATTCTGTCAGGTACAGGTGAAACAAATTCTCATCTTGAATGATCAGATGCAAAATCATTTCTGAACCCTAGAGC
AGAAGTTAGAAATAACAAAATGGCCGTTTCAACCTTGACTGGCCAAAAATAACTAATAAACTTTTTTGTTTTAAG
TCAGGCAAGTGATTTTCTACATTTAGCAGTTTGAAAGTCCAGTGTTAATGCAATATTTCTAGTGAGAAATGCTTG
TTATTAAAAGCATGGGAGTGATAGTGTGAAATGGTGGTGAGTGCTTCTATCATATTACTGTAGGTACTTGGACTG
GTGCAAACTTGATTCCTTTTCATCCCCCTGTTTAGGAGCTATTAAAATATTACTGTTAAAAATCCAAACCATTCT
TTGTTCCATGTAATAAGAAAATAGCCAAAATCACTTTAGAGCTTCTCAACTATTTATGAAGAGCTATCCTGCTTT
TATTGAAAGTCACTAGAGTTGAATGTGGTAAGAAACCACTTAGCCTATGTATTGGACGAGAAAATCAGTATCATG
ATAAAATTTTGAATTAAGAGAACCCTTGTAGAGTTTTTAAAAAATGATTTATTTTCAATTAGGTTTAAGAAATCT
ATGTTATGCAGGGAGGCATATCAGATGAATGTTGTAGCAGACAAAAGTTTTAAATCGTGTTAGACTTGAATTCAT
CAATTGTTTGAATGAGGGTGGGTGGGTAGAAGGATAACAAAATTACTGTTAGTGTTTCTTTCCTTACGGAAAAAG
ATGTGAATCCCAGCCTTATTTCAGGGAAGCCTTTGAAGCTATGATGGACATAAGTCTAAATTAAATGTATGTATG
TTTCATTATATTGCTCTTAAGACTACTGAGGTGGCAGTTTAATTCTTAAAAACAATAAAATGGAAGCATAAATAC
TAAAAAA

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FIGURE 4907

ERDGQIISNVF

FIGURE 4908

CTTTCACTAATTTTTGGCAGAGTTCACAATCCCATCCTATGTCAGAAACTTGAACCTAACTTAAGAAATTTTGAG
TCATTTTTTTGGAGGACTGAGGCTTTGTTCTACCTACTCTTGAAGAATCCTGATGAAATATTCAAACACATAAAG
GGATGGCCCTGGAGGTCTATCCTGCATACCTGGAGAGCTTCTCTGGTCCTGCCCACCTTGAAAGTTGCAGACTTT
GTTGTAACATCTATGTGATGAGCTTCCCTGTGAAGCCCCATTTGACAGGTGGGCCAGCAGTGTTTTATCAGCACT
CTGATGGCCCACATTTCCCAGGAAAACTTCTTGAAACTTACCGTTGTGGGCAGTGGTCAGAGCGTGTAGTTCTTA
TGACTGTCTTGTTTCATCTGTGGAGCACGTGTGGAGCACGTTGGTACAGCAGTTTCTGTGGGGTTTGGCATGGGT
GATTTTGGTTAGTAACCATCCTCCAATTGTTGCTTGTGAAAGTCATTCATAACTTGTTCCTTTTACTTAGTTTTG
TTGTTACTGCTGTTGTTGTATGGTTAAGGNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNTGAGCC
ACCATGCCTGGCCTGTTTAGTTTTGTTTCAAGTTGAAATACCTTTCTTGTGTTTTCTAATTAGAAAAGTAATATC
TACTCATTGTAAAAACTCAAACAGTGCAGAAATGTAGAAAGTAGAAAGTGTAAGTCCCTGGTTGTCCCTTCTGCC
TGAGACAACCACTGCTCACAGTTTGATGTATATCCTTCCAGAGACTCTCAAATTTAAGCAAATAATTTTTATTAC
CATGTCTTTTTATTTGAAGACGTACATTTGCCTCCAAAGTTCAACACAAGTTCAACTGACCATATCCTTCCATGA
CCTGAATAGATGCTATCCTTTATCACGATGTTCAATTGCCTTTGAAAGAGAGTAGTCCAGGTATATTCCTGATCA
AAATTTGGCATTTTTGATGATACTACTCTACACAGATCAGACTCATGTGCAGAATCGTGCCTGGAGAGAGAGGTT
TGGTTAAGACAGAGATTTCTGGAAACATTCAAATTGCAAATGGAAACTTGAAACCCACAATCTAATGAGGAATGT
ACTGGAAAAATAATCTGAAGAGTTGACAAATTGTGTACTAGATTGAACACATGGAATGCAATGCAATGAGACTTT
CTGCACTAAAACTTATCCTCATATGTACAACAATGATGTGTGTATTATATAACAGTGATGTGTACATTTCTGACA
CCCCATACATAATATACACAGTTTGTATAAATGCATACATTTAAAAATATATATGTACAATACAGCTAACATAAA
ACTGTAGTACGCCTGAAGGATATTACTAGTGCCTAATATTGAGTATGAGTCACTGCGTGTTCGCATCAACTTGGA
AGTGCAGTAATTGTTATAAAATTAATCAGTGCAGCCAACATTATTTATGAATCACATCTTTGAAACTGTGCAGTA
GCATATACATATATATTTTTAAATAACATTTTTCACAGTTTTCCAGAGTTACTGTTGAAATCTGCATCACCAAAA
AAAAAAAAAGCAAGATTTTTTTAACAATGTAGACACTCTTCAGACCCAGTAATCTGCGTGTGATTTCCTATTTGT
AGATTCCCAAGAGACTTTAGCAGTCACCAGCCTTAATGCATGTACAGGATATTATTGTGACTTAATTTATCTGCA
GTTTTTAATCCATGTGAAATTGGAATTTATAAACGGACTTGGATTAAACATGTCTGCCTTTCTAAGGTTGCAAAT
GTTACATTAAATGATTTATGTTGTAAATGAGAGAAGTTGAGTTGTACGTAAAAGACATCCACCAATTTCTGTGAA
TATTTTTACACGGAAACTTGAGAATCAAAATACGTTCAAGTCAGTTGTTCTGGCTCCCAGTTTATAATCTCGAAA
AGCAATCTTTTTGTTTCATAAATGGCTTAAATGTAGCTCCCACAGATTATCAGTATGAAGTCTGACATTTTTCAT
GGAAAAGAAGTATGTTTTTCTTCATTATAACTATAGTTTACTATTTGTCTTTGCTATTTCCTGATACATACACAT
ACGGCACACACGGCGGCGGCACATGGCATGCACGTTATGGCACATGCACGGCT

FIGURE 4909

MVKXXX

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FIGURE 4910

ACTCGGCCGGGCAGCCGCGGGCCGAGCGCAGCCGCCTCCGCCACCGATGCGCCTGGTGGCCAGACTCCAAGTGGG
ACCGGCGGACACGCAGCCTCGCGTGTCAGGGGAAGCTGATGGAGAATCGAGCTCTGGATCCAGGGACTCGGGACT
CCTATGGTGCCACCAGCCACCTCCCCAACAAGGGGGCCCTGGCGAAGGTCAAGAACAACTTCAAAGACTTGATGT
CCAAACTGACGGAGGGCCAGTATGTGCTGTGCCGGTGGACAGATGGCCTGTACTACCTCGGGAAGATCAAGAGGG
TCAGCAGCTCTAAGCAAAGCTGCCTCGTGACTTTCGAAGATAATTCCAAATACTGGGTCCTATGGAAGGACATAC
AGCATGCCGGTGTTCCAGGAGAGGAGCCCAAGTGCAACATCTGCCTAGGGAAGACATCAGGGCCGCTGAATGAGA
TCCTCATCTGCGGGAAGTGTGGCCTGGGTTACCACCAGCAGTGCCACATCCCCATAGCGGGCAGTGCTGACCAGC
CCCTGCTCACACCTTGGTTCTGCCGACGCTGCATCTTCGCACTGGCTGTGCGGGTGAGCCTTCCATCCTCCCCAG
TCCCTGCCTCTCCTGCCTCCTCCAGTGGGGCAGACCAGAGACTCCCATCACAGAGTCTGAGCTCCAAGCAGAAGG
GCCACACCTGGGCTTTGGAGACAGATAGCGCCTCTGCCACTGTCCTTGGCCAGGATTTGTAGACTCCCTGAGCCT
CAGTTTCCTCAACTGTAAAGTGGAGATGGGTTTGGTGTCGGGAATAACGGGACCAATAAATGATGCTTTACTATT
AAAAAAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4911

MENRALDPGTRDSYGATSHLPNKGALAKVKNNFKDLMSKLTEGQYVLCRWTDGLYYLGKIKRVSSSKQSCLVTFE
DNSKYWVLWKDIQHAGVPGEEPKCNICLGKTSGPLNEILICGKCGLGYHQQCHIPIAGSADQPLLTPWFCRRCIF
ALAVRVSLPSSPVPASPASSSGADQRLPSQSLSSKQKGHTWALETDSASATVLGQDL

FIGURE 4912A

CGGGGCCGCTGAATGAGATCCTCATCTGCGGGAAGTGTGGCCTGGGTTACCACCAGCAGTGCCACATCCCCATAG
CGGGCAGTGCTGACCAGCCCCTGCTCACACCTTGGTTCTGCCGACGCTGCATCTTCGCACTGGCTGTGCGGAAAG
GCGGCGCGCTGAAGAAGGGCGCCATCGCCAGGACGCTGCAGGCCGTGAAGATGGTGCTGTCCTACCAGCCCGAGG
AGCTCGAGTGGGACTCGCCCCATCGCACCAACCAGCAGCAATGCTACTGCTACTGCGGCGGGCCCGGAGAATGGT
ACCTGCGGATGCTGCAATGTTACCGGTGCAGGCAGTGGTTCCACGAGGCCTGCACCCAGTGCCTCAATGAGCCCA
TGATGTTTGGAGACCGGTTTTACCTGTTCTTCTGCTCCGTGTGTAACCAGGGCCCAGAGTACATCGAGAGGCTGC
CCCTGCGATGGGTGGATGTGGTTCACCTGGCCCTCTATAATCTGGGGGTACAGAGCAAGAAGAAGTACTTTGACT
TTGAGGAGATTCTGGCCTTTGTCAACCACCACTGGGAGCTCCTGCAGCTTGGCAAGCTCACCAGCACCCCAGTGA
CAGATCGAGGACCACATCTCCTCAACGCTCTGAACAGTTATAAAAGCCGGTTCCTCTGCGGCAAGGAGATCAAGA
AGAAGAAGTGCATCTTCCGCCTGCGCATCCGCGTCCCACCCAACCCGCCAGGGAAGCTGCTGCCTGACAAAGGAC
TGCTGCCAAATGAGAACAGCGCCTCCTCTGAGCTGCGTAAGAGAGGAAAGAGCAAGCCTGGTTTGTTGCCTCACG
AATTCCAGCAGCAGAAAAGGCGAGTTTATAGAAGAAAAAGATCAAAGTTTTTGCTGGAAGATGCTATTCCCAGTA
GTGACTTCACCTCAGCCTGGAGCACCAACCACCACCTGGCTAGCATATTTGACTTCACGCTGGATGAAATTCAAA
GTTTAAAAAGTGCCAGCTCAGGCCAGACCTTCTTCTCAGATGTCGACTCCACCGACGCTGCCAGCACCTCTGGCT
CTGCCTCCACCAGCCTCTCCTATGACTCCAGATGGACAGTGGGCAGCCGAAAGAGGAAGCTGGCAGCCAAGGCAT
ACATGCCCCTGCGGGCAAAGCGGTGGGCAGCTGAGCTGGATGGACGCTGCCCCTCGGACAGCAGTGCAGAGGGGG
CTTCAGTCCCCGAGCGGCCAGACGAAGGCATTGACAGCCACACATTTGAGAGCATCAGTGAAGATGACTCATCCC
TGTCCCACCTCAAGTCATCTATCACCAACTACTTTGGTGCAGCTGGGCGGTTGGCCTGTGGGGAGAAGTACCAGG
TGTTGGCTCGGAGGGTCACACCTGAGGGCAAGGTTCAGTACCTGGTGGAGTGGGAAGGGACCACCCCTTACTGAC
TAGCCCCCGGGGGTGCCAGGGGTCCTGAAAACCAAAGGAGGAGCAGCAGAAGCCATAGGCTCCCCAGCTTTCTCC
AGGCTGGGGTGGGAGAAGGAAGCAGGACAGAGCTGCAAGTGCCTGGCAGAATGCCCTGCCTGCCTGCCTGCCTGC
CAGGCCAAGGCCTGCGTCTCTCTGCTGTACCAGCTCTGTTCCAGGGCCTCCTCAGGCTCGTTACCCCTGTGCCTG
TGTCTCTACACACTCCACACCCCCTCAAACTCTGTTTATCTGTTCTCTGACCTTGTGTCCCCTGCGCTGGGACCC
TTCCTCCTGAGGCCCAGGTCTTTGTCCCCAGTTGTGTGCCTTGACCTCTCTCGCCCCTTTCTGGGTGTGTTCGCA
CATCCTGTGTGTGCACAGCTGTCCCTCCACTGGATCCCCTTCACACGTGACCCGTGGGGCAGCCAGTCCTCCCAG
GGACTACATAACAGGCACCTTTGAGAGAGCATGGGAGAAGGTGGATAAGAGGATGCTGCTCAGTGCTTTTCTCTT
CCACTTTCCTGCCACTCCCCACTACCCTCGGAGAGAGGTGGTGGGATGGGAGAGAGCCCCTGTGAAAGCCTGTGA
GGATCTGAAGAGTAAAGGGCTGGGTCTGCCTCAGAAGGCACCAGCACCAGGGCCCAGGTATTAAGGCTGAGAGTG
AAGGCTGCCAATGTCAGCTTTGGAGGTCCCAGAAGTCTTCTGTTCTCTGGCCTCACCCCCTCAGTCGCCATAGAG
CTGGGCCTGGCCTTGCTGGAATGGAGGCATCCTTCCAAACCTGGGGGACGGGGGTGGGGGGTGGTAGTGGTGGGA
GGGAAACCATGTCTTGCTAAACCTGTTTCTGGTGCCTCCCATCCCCAGACCCACCAGACACCACACAGCAGACAA
TACACACCCACTCGCACAAGCTTCCATCCACATGTGTTGTACTTTCAGCTCTAGGCATGCAGACAACCCCACACG
GCCACACCACCACATGCCCAAGTGTACACACACAGAGCCACACCGTCCCTCTGGGCCTGCTGGCTCCTCCCTTGG
CTTTCCCTTGGCCCACTTCCAGGGCCCAGGTGCTGCAACTAAATGTGAAAGCTCAGTGGCCGCTCCTTCTTTCAG
CCCATCAACCAGCATTGGTCCCATAGGGAAGCACAGGGGACTCACCCTCTTTCATATCCCTTGCCCTGCCCTGAA
ATGGACAATCACTTTTTGGGATAGGTTGAAATTTTTAAAGAGCCTGCATCATTCGGTTCCCTCAAAGGGAAGCCC
TTGCTAGTGGGGGTTTGAAAGAGAATTTTTGGAACCAACATTCAAATTCTGCCTCATCTGGAGGGAAACCAAAAT
TGGGAGGGGGAAGAGGACCCCTGATGTTTTGCTGCTTCCAGAGATATTAGAAACTGACTCACTTGATTGGAAAAT
GGACAAAAGTGCCTTGACGTGGAGGGTGGGCACCAGATGGGGACCAGCCTTGCCAACTGCTGCTGTGGCCTCCAG
CTTGGCTGGTTTTGCAGGCCGCCAGCAGGAAGGCGAAGGTGGTAGTACAGCAAGAGGCACTGGCGGGGCAGCAGG
CCTGCAGGAGCTGTTTTTCCATTGCTAGGCCTGACCCCTCTCTACCTGTGAGCGTTCAGGGGGTCCCTGAGATAG
TTTAGATGCCCCCCCCATCTTAGACCTCAGCTCCCACAGTGCCTTTTAAGGGGGACCTCACCTCCTGTGCACAGC
CCACCCACTTTCCTCTGCTTCCCTGGCACAGCCCAGGCATAGACGAGCTGGCGTTGGACCCAGTTCTTCCCCCTT
TTCAGCCCCACAGCTGCTGCCACAGGGGCCAACTAGGGCCAGGTGGAAGGGGAGCTGAGAAGCCAACCCCTAGCC
CAGGGGTGCTGTGGGAACTGGGATCCAATTTGTAGCTTCCCGCCTGGCTTCAGAGAGCCCAGCAACCTTCTAGGC
CTGCTTTCCAGACTTCTGAGATAGCCTGGGATGAGCAATCCTGTTACAGTACATCTGGACCTTCCCTACCTGGGC
TCTGGGGAGGCTGTGGGCCTGGAGAGGGAAAAGGAGGGAGGGGGTGTCTGCACCACCTGGGAAGATAGCACAAGG
CCTAATGAGGTCACCCTGACTCCCCACCCCAGCATTTCATTCATACCAGATAATAGCTGCATTACTGCCAACTGA

FIGURE 4912B

CCTTATAACCCTCTGCACCTTCAAAAAGATTCATGGTTTTTAATTGCTGCTTTTAATAACATTTGTAAAGTTAAA
AAAAAAA

FIGURE 4913

GGGGGACTGGGGATCCCGCCGCCGGGCCGCAGC**ATG**GGGCGCTTCCGCGGGGGCCTGCGGTGCATCAAGTACCTG
CTGCTTGGCTTCAACCTGCTCTTCTGGCTGGCTGGATCGGCCGTCATTGCTTTTGGACTATGGTTTCGGTTCGGA
GGTGCCATAAAGGAGTTATCATCAGAGGACAAGTCCCCAGAGTATTTCTATGTGGGGCTGTATGTTCTGGTTGGA
GCCGGGGCCCTGATGATGGCCGTGGGGTTCTTCGGATGCTGCGGAGCCATGCGGGAGTCGCAATGTGTGCTTGGA
TCATTTTTTACCTGCCTCCTGGTGATATTTGCTGCTGAAGTAACCACTGGAGTATTTGCTTTTATAGGCAAGGGG
GTAGCTATCCGACATGTTCAGACCATGTATGAAGAGGCTTACAATGATTACCTTAAAGACAGGGGAAAAGGCAAT
GGGACACTCATCACCTTCCACTCAACATTTCAGTGCTGTGGAAAAGAAAGCTCCGAACAGGTCCAACCTACATGC
CCAAAGGAGCTTCTAGGACACAAGAATTGCATCGATGAAATTGAGACCATAATCAGTGTTAAGCTCCAGCTCATT
GGAATTGTCGGTATTGGAATTGCAGGTCTGACGATCTTTGGCATGATATTCAGCATGGTCCTCTGCTGTGCGATA
CGAAACTCACGAGATGTGATA**TGA**AGCTACTTCTACATGAAAATTGCAGTCTAAAGCTTTCATACCAAATGTCAC
AGGAGCTGTCTCCCAGCTCATTTTTAACACTGAAATGACATTAGGATCTAAAATAATTTGCTGTCAATTGTACAT
TTGCATGAGTACGTATGTTTGGCTCATTACTGGTTTACCCCTTGAGTGAATGCCTGTTTATGATGACTGAGAGCA
TATTCATGTGTGATCTGCGTGTTTCTGGAATATGCTTTATACGTAATGAAATCTGTTTGCTGGGAATTCCTGATT
CTTGTTATATAAGAAGAACAACCTATTTCGCTCCCAGAAAAAAAAAGATCAAAGAGCTTTCAGAAACTTTGAGAA
CTTGGCTATTTAGAAAAAGTGATAATGGGTCAGTTTCTCAGACTGTAGCCATTGAAAATTAGATGCAGAGAATTC
AGAGATTTCTTCTTAATGGAAGTAATAAGCTGTAAGAATTGAGAGATCACAATGGAGTGTTAAAACTGACTGTGT
CTAAGTTGGGTGTAAGGGTTTCCTGGGTTTTTTTATATACATGCTCTCCCCAGAATACAGTAAACCACAGTTTTA
GAACTAAACACATCTGTAAAACTAAATATAGCATGGAAAATCCAATTTGAATAAGTCATGCTTTCCTAGAATTTA
AAAATAAAAAAGTCTTCCTCTGGAAAGAGAAGTCACACAGACAATCATGTGCCCTATAAAAGTGAGTGTTTATAG
GACTAAAAAACTTTTAACAACTTTTTAAGGAAATATTTTTGTTCTTATACAAAAACATGTAAATATTGCTTTATT
ACTTTCATTTTCTGACCCTGCTGTAAACTACTGCAACCCTCACATCCTCAAAGGGACTTTTATGTCAAACTCTTC
TGTTTCTCCAAATATAAGGAAAAAAGACTAAAGCAAGAGATCTGGCAGTTGAAAATTGTGGGAAAGAGAATTTGT
ATGGGCACTGTATCTATGAAATACCTCATAACTTACGTTTACATGTTTTCCTAACTTTTTGTATTTTTCTTGTAT
AGCCACCTAGAGAATTCTTCATAGATTAAGAACTACAGTTTTCACCACTTAACATAAGTAAAACAAAGTCCTTCA
TAATTTAACCATTAGCATCTTTGGCCAAACCAAAATAAAGAAAAGCATCTTCTCCTAGTTGTGTGTGGGCAACAG
AAACAAGTTAAGGAAACAAAAATACTTATATATACACAGAACAAAAATAATGTTCTTTTTATGCAAATCCCCTGT
GAAAATAAAATTTTCAATGTTTTAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4914

MGRFRGGLRCIKYLLLGFNLLFWLAGSAVIAFGLWFRFGGAIKELSSEDKSPEYFYVGLYVLVGAGALMMAVGFF
GCCGAMRESQCVLGSFFTCLLVIFAAEVTTGVFAFIGKGVAIRHVQTMYEEAYNDYLKDRGKGNGTLITFHSTFQ
CCGKESSEQVQPTCPKELLGHKNCIDEIETIISVKLQLIGIVGIGIAGLTIFGMIFSMVLCCAIRNSRDVI

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FIGURE 4915

AAACTTTATGAGGCAGCTGTGAAGAAAGTTCCCAATAGTGAGGAGTATCACTCTCACCTCTTCATGGCCTATGCC
AGAGTGGGTGAATACAAGAAAATGCAACAGGCTGGCATGGCTCTATATAAGATTGTCCCCAAAAATCCCTACTAC
TTTTGGTCTGTGATGAGCTTAATTATGCAATCTATATCGGCACAGGATGAAAACCTCTCAAAAACAATGTTTCTG
CCCCTTGCTGAGAGAATGGTCGAAAAAATGGTGAAAGAGGACAAGATAGAAGCTGAGGCTGAAGTTGAACTTTAT
TATATGACCCTGGAACGTTTGGGAAAGTACCAGGAGGCCTTGGATGTCATCAGAGGGAAATTAGGAGAGAAGTTG
ACAAGTGAGATTCAGAGTCGGGAAAATAAATGCATGGCTATGTACAAGAAGCTGAGCAGGTGGCCAGAGTGCAAT
GCCCTTTCCCGGCGCCTCTTACTAAAAAACTCAGATGACTGGCAGTTCTATCTGACTTATTTCGATTCTGTCTTT
CGACTGATTGAAGAGGCCTGGAGTCCTCCTGCTGAAGGTGAACACTCTTTAGAAGGAGAAGTACATTATTCTGCA
GAAAAAGCTGTGAAGTTTATAGAAGATCGGATAACGGAAGAATCTAAAAGTTCTCGCCATCTCCGAGGACCACAT
CTAGCTAAATTGGAGCTGATTAGGCGTTTACGAAGTCAAGGTTGTAACGATGAGTACAAACTGGGTGATCCAGAA
GAATTAATGTTCCAGTATTTTAAAAAGTTTGGCGATAAACCTTGTTGTTTTACAGACCTTAAGGTGTTTGTTGAC
CTCTTACCTGCTACACAGTGTACAAAATTTATTAATCAGTTACTTGGAGTTGTTCCTTTGTCGACACCAACAGAG
GATAAGCTGGCACTGCCTGCTGACATCAGAGCTCTGCAGCAACATTTGTGTGTGGTGCAGCTGACGAGGTTACTT
GGCTTGTACCACACCATGGATAAAAATCAGAAATTGAGTGTGGTCAGAGAATTGATGTTAAGGTACCAGCATGGA
CTGGAATTTGGGAAAACCTGTTTGAAAACAGAATTGCAATTTTCTGACTCTTACTGTCTCCTTGCTGTCCATGCG
CTTATTGATGTATGGAGGGAAACAGGTGATGAGACCACTGTGTGGCAGGCCCTGACTTTGCTGGAAGAGGGATTA
ACCCATAGCCCTTCCAATGCTCAGTTCAAATTGCTGCTTGTTCGAATCTACTGTATGCTGGGTGCATTTGAACCA
GTGGTGGATCTTTACTCCAGCCTCGATGCTAAGCATATCCAGCATGATACCATTGGTTATCTTTTGACCCGATAT
GCTGAATCTCTAGGTCAGTATGCTGCTGCGTCCCAATCCTGTAACTTCGCACTCAGGTTTTTTCACTCCAACCAG
AAAGATACCTCAGAATATATTATTCAAGCTTACAAATATGGTGCATTTGAGAAGATCCCAGAGTTTATCGCTTTT
AGGAACAGGCTGAATAATTCTCTTCATTTTGCACAAGTCCGTACTGAACGGATGCTGTTAGACCTTCTACTTGAA
GCAAATATATCAACCAGTTTAGCAGAAAGTATAAAGTCAATGAACCTTAGGCCAGAAGAAGATGACATTCCATGG
GAAGATTTGCGAGACAACAGAGACTTAAATGTTTTTTTCAGCTGGGATCCAAAAGACAGGGACGTTACTGAAGAA
CATAAGAAACTTTCCTTAGAGGAGGAGACCTTGTGGTTAAGAATCCGATCCTTAACATTGAGGCTGATAAGTGGA
CTTCCAAGTCTCAACCACCCTGTGGAGCCAAAGAACTCGGAGAAGACTGCCGAGAATGGGGTATCCTCCCGGATT
GATATTCTTCGTTTGCTCCTTCAACAGCTGGAGGCAACCCTGGAGACAGGAAAGCGATTTATTGAGAAGGATATT
CAGTATCCTTTCCTTGGTCCTGTACCTACCAGAATGGGTGGATTCTTTAATTCTGGCTGTTCTCAGTGCCAGATA
AGCTCTTTTTATCTTGTCAATGATATTTATGAGCTGGATACCAGTGGTTTAGAGGATACAATGGAGATTCAGGAA
CGAATAGAAAATAGTTTTAAGTCTTTACTAGACCAGCTAAAAGATGTCTTCAGTAAATGTAAAGGTGACCTCTTA
GAAGTTAAAGATGGTAACTTGAAAACACATCCTACTCTTTTAGAAAATCTAGTTTTCTTTGTTGAGACTATTTCT
GTTATCCTTTGGGTATCCAGTTACTGTGAGAGTGTCCTACGACCATACAAACTAAATTTACAGAAAAAGAAAAAG
AAGAAAAAAGAAACCAGCATCATCATGCCACCTGTCTTTACCAGTTTCCAAGACTATGTTACTGGGCTTCAGACT
TTAATTTCCAATGTTGTGGATCATATTAAAGGGCTTGAAACACATCTAATTGCACTTAAACTTGAAGAACTTATT
TTAGAAGACACTTCTCTCTCACCGGAAGAGAGAAAATTTTCAAAGACTGTGCAAGGGAAGGTGCAGAGCAGTTAT
CTGCACTCACTTCTGGAAATGGGGGAGCTGCTGAAAAAAAGACTTGAGACCACAAAGAAACTAAAAATTTAAGGA
AGTATCTATCATGGGCACTGATGACTCTGCAACAGAATATGACACCATCTTCCCAGGCAAAAGCAACATCTGGTT
GACCATGATTTTAATCCAGAACTTCCTCATAAAATGCATGAAGG

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FIGURE 4916

MAYARVGEYKKMQQAGMALYKIVPKNPYYFWSVMSLIMQSISAQDENLSKTMFLPLAERMVEKMVKEDKIEAEAE
VELYYMTLERLGKYQEALDVIRGKLGEKLTSEIQSRENKCMAMYKKLSRWPECNALSRRLLLKNSDDWQFYLTYF
DSVFRLIEEAWSPPAEGEHSLEGEVHYSAEKAVKFIEDRITEESKSSRHLRGPHLAKLELIRRLRSQGCNDEYKL
GDPEELMFQYFKKFGDKPCCFTDLKVFVDLLPATQCTKFINQLLGVVPLSTPTEDKLALPADIRALQQHLCVVQL
TRLLGLYHTMDKNQKLSVVRELMLRYQHGLEFGKTCLKTELQFSDSYCLLAVHALIDVWRETGDETTVWQALTLL
EEGLTHSPSNAQFKLLLVRIYCMLGAFEPVVDLYSSLDAKHIQHDTIGYLLTRYAESLGQYAAASQSCNFALRFF
HSNQKDTSEYIIQAYKYGAFEKIPEFIAFRNRLNNSLHFAQVRTERMLLDLLLEANISTSLAESIKSMNLRPEED
DIPWEDLRDNRDLNVFFSWDPKDRDVTEEHKKLSLEEETLWLRIRSLTLRLISGLPSLNHPVEPKNSEKTAENGV
SSRIDILRLLLQQLEATLETGKRFIEKDIQYPFLGPVPTRMGGFFNSGCSQCQISSFYLVNDIYELDTSGLEDTM
EIQERIENSFKSLLDQLKDVFSKCKGDLLEVKDGNLKTHPTLLENLVFFVETISVILWVSSYCESVLRPYKLNLQ
KKKKKKKETSIIMPPVFTSFQDYVTGLQTLISNVVDHIKGLETHLIALKLEELILEDTSLSPEERKFSKTVQGKV
QSSYLHSLLEMGELLKKRLETTKKLKI

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FIGURE 4917

CCGGGACAGCTCGCGGCCCCCGAGAGCTCTAGCCGTCGAGGAGCTGCCTGGGGACGTTTGCCTTGGGGCCCCAGC
CTGGCCCGGGTCACCCTGGCATGAGGAGATGGGCCTGTTGCTCCTGGTCCCGTTGCTCCTGCTGCCCGGCTCCTA
CGGACTGCCCTTCTACAACGGCTTCTACTACTCCAACAGCGCCAACGACCAGAACCTAGGCAACGGTCATGGCAA
AGACCTCCTTAATGGAGTGAAGCTGGTGGTGGAGACACCCGAGGAGACCCTGTTCACCTACCAAGGGGCCAGTGT
GATCCTGCCCTGCCGCTACCGCTACGAGCCGGCCCTGGTCTCCCCGCGGCGTGTGCGTGTCAAATGGTGGAAGCT
GTCGGAGAACGGGGCCCCAGAGAAGGACGTGCTGGTGGCCATCGGGCTGAGGCACCGCTCCTTTGGGGACTACCA
AGGCCGCGTGCACCTGCGGCAGGACAAAGAGCATGACGTCTCGCTGGAGATCCAGGATCTGCGGCTGGAGGACTA
TGGGCGTTACCGCTGTGAGGTCATTGACGGGCTGGAGGATGAAAGCGGTCTGGTGGAGCTGGAGCTGCGGGGTGT
GGTCTTTCCTTACCAGTCCCCCAACGGGCGCTACCAGTTCAACTTCCACGAGGGCCAGCAGGTCTGTGCAGAGCA
GGCTGCGGTGGTGGCCTCCTTTGAGCAGCTCTTCCGGGCCTGGGAGGAGGGCCTGGACTGGTGCAACGCGGGCTG
GCTGCAGGATGCCACGGTGCAGTACCCCATCATGTTGCCCCGGCAGCCCTGCGGTGGCCCGGGCCTGGCACCTGG
CGTGCGAAGCTACGGCCCCCGCCACCGCCGCCTGCACCGCTATGATGTATTCTGCTTCGCTACTGCCCTCAAGGG
GCGGGTGTACTACCTGGAGCACCCTGAGAAGCTGACGCTGACAGAGGCAAGGGAGGCCTGCCAGGAAGATGATGC
CACGATCGCCAAGGTGGGACAGCTCTTTGCCGCCTGGAAGTTCCATGGCCTGGACCGCTGCGACGCTGGCTGGCT
GGCAGATGGTAGCGTCCGCTACCCTGTGGTTCACCCGCATCCTAACTGTGGGCCCCCAGAGCCTGGGGTCCGAAG
CTTTGGCTTCCCCGACCCGCAGAGCCGCTTGTACGGTGTTTACTGCTACCGCCAGCACTAGGACCTGGGGCCCTC
CCCTGCCGCATTCCCTCACTGGCTGTGTATTTATTGAGTGGTTCGTTTTCCCTTGTGGGTTGGAGCCATTTTAAC
TGTTTTTATACTTCTCAATTTAAATTTTCTTTAAACATTTTTTTACTATTTTTTGTAAAGCAAACAGAACCCAAT
GCCTCCCTTTGCTCCTGGATGCCCCACTCCAGGAATCATGCTTGCTCCCCTGGGCCATTTGCGGTTTTGTGGGCT
TCTGGAGGGTTCCCCGCCATCCAGGCTGGTCTCCCTCCCTTAAGGAGGTTGGTGCCCAGAGTGGGCGGTGGCCTG
TCTAGAATGCCGCCGGGAGTCCGGGCATGGTGGGCACAGTTCTCCCTGCCCCTCAGCCTGGGGGAAGAAGAGGGC
CTCGGGGGCCTCCGGAGCTGGGCTTTGGGCCTCTCCTGCCCACCTCTACTTCTCTGTGAAGCCGCTGACTGTAAC
CCAGTTCTAGGCTTCCAGGCGAAAGCTGAGGGAAGGAAGAAACTCCCCTCCCCGTTCCCCTTCCCCTCTCGGTTC
CAAAGAATCTGTTTTGTTGTCATTTGTTTCTCCTGTTTCCCTGTGTGGGGAGGGGCCCTCAGGTGTGTGTACTTT
GGACAATAAATGGTGCTATGACTGCCTTCCGCCAAAAAAAAAAA

FIGURE 4918

MGLLLLVPLLLLPGSYGLPFYNGFYYSNSANDQNLGNGHGKDLLNGVKLVVETPEETLFTYQGASVILPCRYRYE
PALVSPRRVRVKWWKLSENGAPEKDVLVAIGLRHRSFGDYQGRVHLRQDKEHDVSLEIQDLRLEDYGRYRCEVID
GLEDESGLVELELRGVVFPYQSPNGRYQFNFHEGQQVCAEQAAVVASFEQLFRAWEEGLDWCNAGWLQDATVQYP
IMLPRQPCGGPGLAPGVRSYGPRHRRLHRYDVFCFATALKGRVYYLEHPEKLTLTEAREACQEDDATIAKVGQLF
AAWKFHGLDRCDAGWLADGSVRYPVVHPHPNCGPPEPGVRSFGFPDPQSRLYGVYCYRQH

FIGURE 4919A

TTAGAGGTCCTTTCTGCTTTATAACATTAGGTTCTTCTTGTGAGGCCTTAAGCATTTGCTAAACAGGTTCAAGTA
AGTTTAGTAAAGTTTCATTACTGCCATTGATTCAATTATCAAACTGCTTTTGTACATATAAAGAATTCTTCAGAT
GCATGGTTTCTATTAACAAGATCCAATGCCTTCCTTTTATTTCCCCTTCAGTTCAACATCTAATATATAAAGATT
GCTCTGACTACTACGCAATAGGCAAAAGAAGCAGTGAGACCTACAGAGTTACACCTGATCCCAAAAATAGTAGCT
TTGAAGTTTACTGTGACATGGAGACCATGGGGGGAGGCTGGACAGTGCTGCAGGCACGTCTCGATGGGAGCACCA
ACTTCACCAGAACATGGCAAGACTACAAAGCAGGCTTTGGAAACCTCAGAAGGGAATTTTGGCTGGGGAACGATA
AAATTCATCTTCTGACCAAGAGTAAGGAAATGATTCTGAGAATAGATCTTGAAGACTTTAATGGTGTCGAACTAT
ATGCCTTGTATGATCAGTTTTATGTGGCTAATGAGTTTCTCAAATATCGTTTACACGTTGGTAACTATAATGGCA
CAGCTGGAGATGCATTACGTTTCAACAAACATTACAACCACGATCTGAAGTTTTTCACCACTCCAGATAAAGACA
ATGATCGATATCCTTCTGGGAACTGTGGGCTGTACTACAGTTCAGGCTGGTGGTTTGATGCATGTCTTTCTGCAA
ACTTAAATGGCAAATATTATCACCAAAAATACAGAGGTGTCCGTAATGGGATTTTCTGGGGTACCTGGCCTGGTG
TAAGTGAGGCACACCCTGGTGGCTACAAGTCCTCCTTCAAAGAGGCTAAGATGATGATCAGACCCAAGCACTTTA
AGCCATAAATCACTCTGTTCATTCCTCCAGGTATTCGTTATCTAATAGGGCAATTAATTCCTTCAGCACTTTAGA
ATATGCCTTGTTTCATATTTTTCATAGCTAAAAAATGATGTCTGACGGCTAGGTTCTTATGCTACACAGCATTTG
AAATAAAGCTGAAAAACAATGCATTTTAAAGGAGTCCTTTGTTGTTATGCTGTTATCCAATGAACACTTGCAAGC
AATTAGCAATATTGAGAATTATACATTAGATTTACAATTCTTTTAATTTCTATTGAAACTTTTTCTATTGCTTGT
ATTACTTGCTGTATTTAAAAAATAATTGTTGGCTGGGTGTGGTAGCTCACGCCTGTAATCCCAGCACTTTGGAAT
GTCAAGGCAGGCAGATCACTTGAGGTCAGGAGTTTGAGACCAGCCTGGCCAAACATGTGAAACGCTGTCTCTATT
AAAAATACAAAAATTAGCCGGGCATGGTGGTACATGCCTGTAATCCTAGCTACTTGGGAGGCTGAGGCAGGAGAA
TCGCTTGAACCTGAGAGGAAGAGGTTGCAGTGAGCCAAGACTGAGCCACTGCACTCCAGCATGGGTGACAGAGAA
AACTCTGTCTCAAACAAAAAAATAATAAAATTTATTCAGTAGGCTGGATTCTACACAAAGTAATCTGTATTTGGG
CCATGATTTAAGCACATCTGAAGGTATATCACTCTTTTCAGGCTATAATTATTTGGGTAATCTTCATTCTGAGAC
AAACTTAATCTATATCATTTACTTTGCAACAGAACAACCCTACAGCATTTTGGTTCCCAGACTAAGGGAACTAAT
ATCTATATAATTAAACTTGTTCATTTATCATTCATGAAATATAAAATACTTGTCATTTAAACCGTTTAAAAATGT
GGTAGCATAATGTCACCCCAAAAAGCATTCAGAAAGCAATGTAACTGTGAAGACCAGGGTTTAAAGGTAATTCAT
TTATAGTTTATAACTCCTTAGATGTTTGATGTTGAAAACTGCTTTAACATGAAAATTATCTTCCTCTGCTCTGTG
TGAACAATAGCTTTTAATTTAAGATTGCTCACTACTGTACTAGACTACTGGTAGGTTTTTTTGGGGGGGGGTGGGT
AGGGATATGTGGGTAATGAAGCATTTACTTACAGGCTATCATACTCTGAGGCCAATTTTATCTCCAAAGCAATAA
TATCATTAAGTGATTCACTTCATAGAAGGCTAAGTTTCTCTAGGACAGATAGAAAACATGAATTTTGAAATATAT
AGAACAGTAGTTAAAATACTATATATTTCAACCCTGGCTGGTAGATTGCTTATTTTACTATCAGAAACTAAAAGA
TAGATTTTTACCCAAACAGAAGTATCTGTAATTTTTATAATTCATCAATTCTGGAATGCTATATATAATATTTAA
AAGACTTTTTAAATGTGTTTAATTTCATCATCGTAAAAAGGGATCATCTCAGAGAGAACAGCAGTATTCTGCGTA
TTTTTAAAAATGCTCTAGAGTAACATTTGAAGTAATTCACTGTAGTGTATGCCAGTCCTAGAAATAATTTTTTTA
ATTTCTGGTGTCTGTTTCTAATACACTAACCAAGTTTTCAAAATATATTTACAAAGATGCATCTTTACCCATTAT
TTTAAAATGATTAAGGAGGATAGTTGCTTCAGGTAACAAGCTAATTTTTCAAATATTAGGCCCTTACAGAACTAT
TTAGTCAAAAAGTAAGATATTCCTTTAAAATATATAACCCAAAGCTTTCAGTTAAACATGATATATCACAAATAC
TATTAAAATGTTAAAGAGAAATGCAAATAGCATTAAATGATGACCAAAATGTAAAATATTGTAGATTTCAAAAGC
TGTGTCTCTATTAGGTGGGATACCAAATGTAAATGATGTAACTGACGTTGTTTTTTACTTTTTACTTTTTAAAAA
AGACTAAAAACGTTTTGATATTATACAATGTATTTGTTTCAGATAAGGTCATTGTCATTTAGTATATATAATTAA
TATATGTACAAGTTTAAGTAAATTCCTGTGAGTAAAAATGGACTTATCACAAAACATAGTTCTAAAGAAAGGTAT
ATGCTCATATACACGGTGTCCATTAATTTAATGGGAACTAGGTATAACTTCAGGAGAATTTGGCAAATAATTCAT
TAATCCATGTAAATATTCAAAAGCTTGTTCTATCCACATTATTTCAAGGGATCACTTTATTTTTCATTATACTTT
CACAGCACTTTTCTAGTAAATTCTGTAACACAGAAATTCCATTTTGGAATCATTTCATGTTACCAATAATTCTAG
ACTTTTATAACATTTAACATGTTGATGGAAATAGATTACATCTGCTAGAACCTTTTGCCTTAACTATTCACCAAT
ATATGCTAATATTCATAAATATGGATTGACTGTTTACAAACATTAGAATCTTGTCTTGGTTCCATTTTGATGGCT
AATATTTGTTATCTTAATTAAGACTATTTCTGAGGTCATGATTACTTGAAAATATTGACTAAAACTGGGTCCTTA
GAAATTCCAGGTGGAGCTGATTTACCTATGACTGAGGGGAAAAAAAAAATCAAATTTTACTGATAATAGTAATGCT
CCAAATGAATTAATGACACATCTGTTCAATAAATAAAGAGCTTAAATATACAAAACATAAGAAATCTGGGCAACA

FIGURE 4919B

AAACTTGTGGTCTTTACTTTTGAATAGCTACCCAAGAAAAGGTTTTAAAGGTAAAAGTTATGAGTAATGTCATCA
CAATAAGCTCTTGTTTAAAATTCTTTTCTTTTATGTATAATTAGGTTTATGTTTCATGTCTTTTTAAAACCTTAT
AAAAGATTTAATTATCACATCTATTCTTCAATGTGGAAATATTAAATATTGTTGGTTGTAAAATAATATTTATGT
ACTTACTTGTGTCTGAAAAGTTGTAAAATGCTTACCTCAGCTATACAATATCTGTGACTCTGAAGACTTTAATGA
GTACTATTTCATTAACAAGAAGTCAGAGGCAAATAGAGGAACACCATTATCTTACTTCCCTCTAGAATACTGTTG
AAACATTTGAAATACAAAAGTTTCAGTTTCATTTTGTGGCATTCAACTTCCTCTCCTCTTTTTCCGTTATTAGTG
TTGCTGCTCTGGTTAGCC

FIGURE 4920A

CATTCACTATCCAAGCTGCACCATCTTCGGGGTCATTGTGTGCCAGGCATATCAACTCTTTTCAATAAAAATGGA
TGGAAAGGCAGATGTAAAGTCCCTCATGGCGAAATATAACACGGGGGGCAACCCGACAGAGGATGTCTCAGTCAA
TAGCCGACCCTTCAGAGTCACAGGGCCAAACTCATCTTCAGGAATACAAGCAAGAAAGAACTTATTCAACAACCA
AGGAAATGCCAGCCCTCCTGCAGGACCCAGCAATGTACCTAAGTTTGGGTCCCCAAAGCCACCTGTGGCAGTCAA
ACCTTCTTCTGAGGAAAAGCCTGACAAGGAACCCAAGCCCCCGTTTCTAAAGCCCACTGGAGCAGGCCAAAGATT
CGGAACACCAGCCAGCTTGACCACCAGAGACCCCGAGGCGAAAGTGGGATTTCTGAAACCTGTAGGCCCCAAGCC
CATCAACTTGCCCAAAGAAGATTCCAAACCTACATTTCCCTGGCCTCCTGGAAACAAGCCATCTCTTCACAGTGT
AAACCAAGACCATGACTTAAAGCCACTAGGCCCGAAATCTGGGCCTACTCCTCCAACCTCAGAAAATGAACAGAA
GCAAGCGTTTCCCAAATTGACTGGGGTTAAAGGGAAATTTATGTCAGCATCACAAGATCTTGAACCCAAGCCCCT
CTTCCCCAAACCCGCCTTTGGCCAGAAGCCGCCCCTAAGTACCGAGAACTCCCATGAAGACGAAAGCCCCATGAA
GAATGTGTCTTCATCAAAAGGGTCCCCAGCTCCCCTGGGAGTCAGGTCCAAAAGCGGCCCTTTAAAACCAGCAAG
GGAAGACTCAGAAAATAAAGACCATGCAGGGGAGATTTCAAGTTTGCCCTTTCCTGGAGTGGTTTTGAAACCTGC
TGCGAGCAGGGGAGGCCCAGGTCTCTCCAAAAATGGTGAAGAAAAAAAGGAAGATAGGAAGATAGATGCTGCTAA
GAACACCTTCCAGAGCAAAATAAATCAGGAAGAGTTGGCCTCAGGGACTCCTCCTGCCAGGTTCCCTAAGGCCCC
TTCTAAGCTGACAGTGGGGGGGCCATGGGGCCAAAGTCAGGAAAAGGAAAAGGGAGACAAGAATTCAGCCACCCC
GAAACAGAAGCCATTGCCTCCCTTGTTTACCTTGGGTCCACCTCCACCAAAACCCAACAGACCACCAAATGTTGA
CCTGACGAAATTCCACAAAACCTCTTCTGGAAACAGTACTAGCAAAGGCCAGACGTCTTACTCAACAACTTCCCT
GCCACCACCTCCACCATCCCATCCGGCCAGCCAACCACCATTGCCAGCATCTCACCCATCACAACCACCAGTCCC
AAGCCTACCTCCCAGAAACATTAAACCTCCGTTTGACCTAAAAAGCCCTATCAATGAAGACAATCAAGATGGTGT
CACGCACTCTGATGGTGCTGGAAATCTAGATGAGGAACAAGACAGTGAAGGAGAAACATATGAAGACATAGNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNAGGCCCTATTCAAGTCATCCATCTTGCAAA
AGCTTGTTGTGATGTCAAAGGAGGAAAGAATGAACTGAGCTTCAAGCAAGGAGAGCAAATTGAAATCATCCGCAT
CACAGACAACCCAGAAGGAAAATGGTTGGGCAGAACAGCAAGGGGTTCATATGGCTATATTAAAACAACTGCTGT
AGAGATTGACTATGATTCTTTGAAACTGAAAAAAGACTCTCTTGGTGCCCCTTCAAGACCTATTGAAGATGACCA
AGAAGTATATGATGATGTTGCAGAGCAGGATGATATTAGCAGCCACAGTCAGAGTGGAAGTGGAGGGATATTCCC
TCCACCACCAGATGATGACATTTATGATGGGATTGAAGAGGAAGATGCTGATGATGGCTCCACACTACAGGTTCA
AGAGAAGAGTAATACGTGGTCCTGGGGGATTTTGAAGATGTTAAAGGGAAAAGATGACAGAAAGAAAAGTATACG
AGAGAAACCTAAAGTCTCTGACTCAGACAATAATGAAGGTTCATCGTAAGAGTCAACCAACCAAATCCAGTTTTC
CCTGCTCCTCCTAAACAATTGGACATGGGAGATGAAGTTTACGATGATGTGGATACCTCTGATTTCCCTGTTTCA
TCAGCAGAGATGAGTCAAGGAACTAATTTTGGAAAAGCTAAGACAGAAGAAAAGGACCTTAAGAAGCTAAAAAAG
CAGGAAAAAGAAGAAAAAGACTTCAGGAAAAAATTTAAATATGATGGTGAAATTAGAGTCCTATATTCAACTAAA
GTTACAACTTCCATAACTTCTAAAAAGTGGGGAACCAGAGATCTACAGGTAAAACCTGGTGAATCTCTAGAAGTT
ATACAAACCACAGATGACACAAAAGTTCTCTGCAGAAATGAAGAAGGGAAATATGGTTATGTCCTTCGGAGTTAC
CTAGCGGACAATGATGGAGAGATCTATGATGATATTGCTGATGGCTGCATCTATGACAATGACTAGCACTCAACT
TTGGTCATTCTGCTGTGTTCATTAGGTGCCAATGTGAAGTCTGGATTTTAATTGGCATGTTATTGGGTATCAAGA
AAATTAATGCACAAAACCACTTATTATCATTTGTTATGAAATCCCAATTATCTTTACAAAGTGTTTAAAGTTTGA
ACATAGAAAATAATCTCTCTGCTTAATTGTTATCTCAGAAGACTACATTAGTGAGATGTAAGAATTATTAAATAT
TCCATTTCCGCTTTGGCTACAATTATGAAGAAGTTGAAGGTACTTCTTTTAGACCACCAGTAAATAATCCTCCTT
CAAAAAATAAAAATAAAAGAAAAAGGAAAATCATTCAGGAAGAAATGACCTGTCTAAAAAAACCTAAGGAAGAAT
AATAATATAAGAAAGGAAATTTAAAAACATTCCACAAGAAGAAAAATTATTGTTTATACTTCTACTTATGGTTAT
ATCTTATATTCTCTATTCAAGTGACCTGTCTTTTAAAAAGGCAGTGCTGTCTTACCTCTTGCTAGTGGGTTAAAT
GTTTTCAAAAATTATAGCAGTAGTAGAAGTTTTGTATAAAATTTGTCCTTATTTGTTAATTGTATATAAATGTTA
ATTATTTGATACGAATGTTATGCATTTAGTATGCACATTGAAGTCTAAACTGTAGAAGAGTCTAAAACAAGTTCT
CTTTTTGCAGATTCACATACTAATGGTTTAATTCTGTGCTCTGTTTAAAGTACTATTATAACTAGAGTAGATCTG
AATGAGGATAACCCTAAAATCATGAGGAATGGAAGAATGGACCTTGAAACTACCTAGGCTTTTATGCATGGCACC
TCTTTATAATGAAGACACTTTTTAAAGTTTTTGTTTTTGTTTCAATTACCGCTAGATTTTTTTTTCTCTTTTTTT
AAAATCCATTTTACTGGAAAGTTGGCCAGCAGAGGGAGTAGAAATTATTAAAATTCTAGTGTTTGGATTGGGCCC

FIGURE 4920B

TTCTCTAACAGTACATACTCATTCCCAAAGCAATCCAAAAACAAAATGTGAACCATTTGGGTTTCAAATGTTAAG
AACACTAAATAGCATGATTTAAAAAATGAAAAATGCTAACACCCAAGAAAAGAAGATATTAAGTGCTTTTTAACA
ACTCCTAGAGTACAAAATGAGTACATCATAATGCTGGCTCTTCTACTAATGAACCATCGAGTGATATTGAATAAA
TTATTTATCTTCTCAGTTTCCTTATCTGTAAATTACAATATTAGACTAAGTAAGTTTTTCCAACTCTTCACTACC
AATTACCTTAGGCTTTTATAATGCTCCGCCTACTTCAGTCCCATGTTTCAGAAGCTTTTGTCTATTTTTTAAACT
CATTGATTAAATAATGATTAATGCATTCTCCACATTTTAATATTGCAAAGGCCCATTGGAGTTTCTGAAGTGGCT
CCACAGAATTGAAATAATTTCAAATAACTGTAAAGGAACTGAAAATCTTCACAGAGATGAAGTGGGGTTTCCATT
AGGTGCTTTGAAATTTGATAACAAATCATCAACTTCCACTGGTCAATATATAGATTTTGGGTGTCTGAGGCCCCA
AGATTAGATGCCACTAATCTCCAAAGATTCCCTCCAATTATGAAATATTTTAATGTCTACTTTTAGAGAGCACTA
GCCAGTATATGACCATGTGATTAATTTCTTTTCACACTAGATAAAATTACCTGGTTCAAAAGTGGTTTTTGTTTA
TTAAATTTGGTAATAAATATATATAATACACAGACAGGATAGTTTTTATGCTGAAGTTTTTGGCCAGCTTTAGTT
TGAGGACTCCTTGATAAGCTTGCTAAACTTTCAGAGTGCCCTGAGACACTTCCAGCCATCCCTCCTCCTGCCTTC
ATTGGGGCAGACTTGCATTGCAGTCTGACAGTAATTTTTTTTCTGATTGAGAATTATGTAAATTCAATACAATGT
CAGTTTTTAAAAGTCAAAGTTAGATCAAGAGAATATTTCAGAGTTTTGGTTTACACATCAAGAAACAGACACACA
TACCTAGGAAAGATTTACACAATAGATAATCATCTTAATGTGAAAGATATTTGAAGTATTAATTTTAATATATTA
AATATGATTTCTGTTATAGTCTTCTGTATGGAATTTTGTCACTTAAGATGAGCTGCAAATAAATAATACCTTCAA
TGGAAA

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FIGURE 4921

IHYPSCTIFGVIVCQAYQLFSIKMDGKADVKSLMAKYNTGGNPTEDVSVNSRPFRVTGPNSSSGIQARKNLFNNQ
GNASPPAGPSNVPKFGSPKPPVAVKPSSEEKPDKEPKPPFLKPTGAGQRFGTPASLTTRDPEAKVGFLKPVGPKP
INLPKEDSKPTFPWPPGNKPSLHSVNQDHDLKPLGPKSGPTPPTSENEQKQAFPKLTGVKGKFMSASQDLEPKPL
FPKPAFGQKPPLSTENSHEDESPMKNVSSSKGSPAPLGVRSKSGPLKPAREDSENKDHAGEISSLPFPGVVLKPA
ASRGGPGLSKNGEEKKEDRKIDAAKNTFQSKINQEELASGTPPARFPKAPSKLTVGGPWGQSQEKEKGDKNSATP
KQKPLPPLFTLGPPPPKPNRPPNVDLTKFHKTSSGNSTSKGQTSYSTTSLPPPPPSHPASQPPLPASHPSQPPVP
SLPPRNIKPPFDLKSPINEDNQDGVTHSDGAGNLDEEQDSEGETYEDIXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXGPIQVIHLAKACCDVKGGKNELSFKQGEQIEIIRITDNPEGKWLGRTARGSYGYIKTTAV
EIDYDSLKLKKDSLGAPSRPIEDDQEVYDDVAEQDDISSHSQSGSGGIFPPPPDDDIYDGIEEEDADDGSTLQVQ
EKSNTWSWGILKMLKGKDDRKKSIREKPKVSDSDNNEGSS

FIGURE 4922

GGAAATTTTTTAACAGAGAGAAACAAATAGAAACATCTTCAAATCTTCCTAAGTGAATATTTAAAATGCAGAATT
GCTTATCTTCTGTTTTTCTGTATTCAGACACTTATATCTGTTGTATATATTAGTTTAGACACTCTCACTAATATA
CACAGTATTTAAGACTCTAAATGAGATTTCTTAAGTATTTTATTTTATTCTCTGTAAATGGTTTTGTATAATCTT
TAAACATCTACACTTTGCCTTTGTAGATATTTAAGGGAAACCATTTGGGGTTGTCTTGCATGTATATTTTTGTTG
TAGATAAGTGTTGCTTAGTTATTTCTGCAAATTTTGGTTGAAATGCTTACAGACTTTAATACAGTATATATTTTC
AAAATATAAACTTTTATATTTCTGTGATAAGTTAGGATATGCGTTTTAGGCAATATTTTTCATTAATATCACTTG
TTCTTTTGAAAAATAGCATACTGGTTTGGTGCCAATTTTTTCATTAGAATATAATGCTCTTATATTGTTGGAGAG
CAGGTTAATCTTTTTTCGAAGTAATTGCGTTTGAAGTATAATTTCAAAATGTATTGAATTTGTGAATAAGCCTTA
CCATTAGGATCAGTAAATTTTTCAACTTTGCAACTACATAAGTAGTTTAAGATCTCCCCGTAAATTCTCACTGTG
TGGCAGTTGATGGAGTTTGTGAACAGAGCCTTAAGCTTGTTGCAAAAAAATTTAAAAAGGGTAATACGGGTTGTT
TCCTCCATGCAACGTAAGCCATGCTGATGGACTGAATGCAGTCTGTAATTCATGGCTAATCCGAAGAGTTTGATT
GAGTTGATGGCGGCAGGGACCAGATAGACACCTTGGTGATTGTCTTTGGCCATAAGAATAGACCAAGGATAGGTT
TTCCAGAGACACCTTCATACTGTAAACATGGTTTAGACACGGTCATAGGGAAGGCTGCTGGTCCATCATTTGTTC
TGAACAAATGGCATTTCCTGCTCCTGACCCTGGCAGTTGGCCCCAGATTCCTTGTCGATGACTTGGAAACGTCCA
TTCTGGGTAAGGTCAGCACTCCCTGAGAGATGTTAACAAAGTTTACCTATGAGTCTTACTGTGTAGACAATCTGA
AGTCAATTTTAGTTACACAATCAGCATTCCCATGTGTCCTCAGTGTCTTATCAATGAACTATGTGTATCAAGCCA
TACTAAACTGGAGTTTAGCAGGACAAAGGCAAACTAAATGTAGAACATAACATATCAGCTGAATATGTCTATCCA
GGACTGTTTTTCTAGAACATAAATCATGGAGCTCCTTGACAGTGTATCCACTGTTTTTGGGGTTTAATAAAACCA
ACTAGAATTTAGACTTAAAAAGAAATTATTATTCCTTTTGGTTGTCCACATAAAGTAGTCCAGGGCTATCATATG
GCTAAAATCAAGTTATTTGGTTCATCTCTGGTATGTATTTATAAAGTCAACTTATCAGCCATTAAGATGGAGATT
TGCTTTAAATTTTTGCAGTGTGTGTGGCAGTCAGAAAAACCCATATCTAGTTTTCAACTTCACCTCTGGTGTTTT
TATGGCTTAACCTTATATCATTGATCCAACATCTAGCCTGATGCTGGAGCTCTTATTTCTAGCCTGATGCTGGAG
CTCTTATATCTAGCCTGATGCTGGAGCTCTTGAAGCTGACTCTTGGAAGTTTGGAGGGTGTAGAGTTTCCCATCT
AGTATTTAATTTGTCCCTGTGCCATTAGTCCCAGCTTGAAGTCATTTGCCAGTGTCGATGTTGACAGGATTGTGA
CAATATTGCCTTTCATAAAACCGAGAACCAAAGAATTCCATTATTCTAACAAAGCCTGAGTTTCATAGATTGTGG
GCACATCTAGACAGATATGTGCATGCTTGATGGTGCAGAGAAACTGCTGACTTCCACCAACCTCATGCTCCCCCT
GGCTGGCCATACAGAGGGATTCGTTGTCATATTGAAAAGGCTCTGAAAGATGAGTTTCTAATTGAAGCTCACTAT
CTCAGGTTGGTGTTTCTACTGTGTAGTCCCAAGCCTGTATCCATATCATAAAAGTGGAGGCCTGGTACTCCTCCA
GGTTATCTGGCCAGTGTAGACTCCTCCATCTGAATATGAACCTCCAGGGTAAGAATTTTTCAGACATGTCTATAC
TGAACAGTAGGATCCTGCACTTTCCAAATGTCTGCCTCCTTTTGTTCTTCATTGACCCATTCTAATTCCTGTTAG
GTGTGAGAAGAATTGTCTTCAGTTCTCTCTCCATTCTCATTCATGATGGAATCATTGATCCATTGACCAGTTGAG
AAATGATTGATGCTGAAGAAGTGGTATTCTATTGGTAAGGCTTATTACCAAACTTCCGATAATGAAGCAGGCTAC
CAAAAACTTATCCAGCCCACCCTAGGAGTGTTTGGATTTGATCATGGATGTAGCATACACCAAAATCCACCGAGA
CCTTTGCAAAATTAGGCTACTTGTTTTATTTTGCCAGATTATCATGGGAGAGTCTTTAACTAGTTCTGAATATTT
GTAAGTCTGAGTACTTCATAGAATTATAAAGAAGGTACAGCTGACCCCTTCTCACCATGTTGTAAATATTTACTG
AGACTGGGTGCAGTACTGAGGGATAATAATCTTCTGATTTATCAAATCCTGACTGTCTAGAGCAAATTGTACACT
CTCTTTGTGAATGGTCCTGTAACGTGTATGAACACATTTCTGGGTGCCTTAGAAGTTGTATTTTTCATGTGTGCT
AATATGCAGTATTTATACATTGTGAGAAGCTGCTTTGAATAAAAAGGTTGAAACTTAAAAAACAAAAAAAGG

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FIGURE 4923

KFFNREKQIETSSNLPK

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FIGURE 4924

GGCACGAGGGGGCGGCGGGTCACGTCGGCCGGGCATGGCTGCATGGAGCCCGGCCGCGGCAGCGCCTCTCCTCCG
CGGGATCCGCGGGCTTCCACTTCACCATCGGATGTTTGCCACTCAGACTGAGGGGGAGCTCAGAGTGACCCAAAT
TCTCAAAGAAAAGTTTCCACGAGCTACAGCTATAAAAGTCACTGACATTTCAGGCACTAAAAGAAGAAATCAAAG
AGATGCATGGATTGCGGATATTTACCTCTGTCCCCAAACGCTGACCACGCCCTGGCTGCATAGATGCTGCTGCTT
AAGACCTTGGATGAACTTCACTGACATCATTCTTCCCTAAGCAGTCACCAAAAAATTTATATATTTTGCTCATAT
ACATTTCCATATTATAATTATAGAAGATGTATAATCTATTTAGATGTTAATTAAAGGAAACAAACAACTGAAGCT
TTTGAAGGGCC

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FIGURE 4925

ARGGGGSRRPGMAAWSPAAAAPLLRGIRGLPLHHRMFATQTEGELRVTQILKEKFPRATAIKVTDISGTKRRNQR
DAWIADIYLCPQTLTTPWLHRCCCLRPWMNFTDIILP

FIGURE 4926

ACGCCAAGGCGGCCACGTCCTGCTCCCCCTGGTGAAGAAGCTGCCCTGGGCTTGTCGTCCTAGGGTCTCCAGACA
TGTCTGAGGTGAAGAGCCGGAAGAAGTCGGGGCCCAAGGGAGCCCCTGCTGCGGAGCCCGGGAAGCGGAGCGAGG
GCGGGAAGACCCCCGTGGCCCGGAGCAGCGGAGGCGGGGGCTGGGCAGACCCCCGAACGTGCCTGAGCCTGCTGT
CGCTGGGGACGTGCCTGGGCCTGGCCTGGTTTGTATTTCAGCAGTCAGAAAAATTTGCAAAGGTGGAAAACCAAT
ACCAGTTACTGAAACTAGAAACCAATGAATTCCAACAACTTCAAAGTAAAATCAGTTTAATTTCAGAAAAGTGGC
AGAAATCTGAAGCTATCATGGAACAATTGAAGTCTTTTCAAATAATTGCTCATCTAAAGCGTCTACAGGAAGAAA
TTAATGAGGTAAAAACTTGGTCCAATAGGATAACTGAAAAACAGGATATACTGAACAACAGTCTGACGACGCTTT
CTCAAGACATTACAAAAGTAGACCAAAGTACAACTTCCATGGCAAAAGATGTTGGTCTCAAGATTACAAGTGTAA
AAACAGATATACGACGGATTTCAGGTTTAGTAACTGATGTAATATCATTGACAGATTCTGTGCAAGAACTAGAAA
ATAAAATAGAGAAAGTAGAAAAAAATACAGTAAAAAATATAGGTGATCTTCTTTCAAGCAGTATTGATCGAACAG
CAACGCTCCGAAAGACAGCATCTGAAAATTCACAAAGAATTAACTCTGTTAAGAAGACGCTAACCGAACTAAAGA
GTGACTTCGACAAACATACAGATAGATTTCTAAGCTTAGAAGGTGACAGAGCCAAAGTTCTGAAGACAGTGACTT
TTGCAAATGATCTAAAACCAAAGGTGTATAATCTAAAGAAGGACTTTTCCCGTTTAGAACCATTAGTAAATGATT
TAACACTACGCATTGGGAGATTGGTTACCGACTTACTACAAAGAGAGAAAGAAATTGCTTTCTTAAGTGAAAAAA
TATCTAATTTAACAATAGTCCAAGCTGAGATTAAGGATATTAAAGATGAAATAGCACACATTTCAGATATGAATT
AGTTTGACATTATTGAGATTAGACTAAGGTAATTTTTTTAATGGGACCTCTCATGAGAAGACTGGTAAATCAAAA
ATAATGATATTTTGGAGCAAAAGTCATTTTATATTTAATCCTATTTTGTACAGTAAAAATAAAACTTTAAAGCAG
GTTGATTTTCCAAAATAAATATGCTAAAACCTAAAAA

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FIGURE 4927

MSEVKSRKKSGPKGAPAAEPGKRSEGGKTPVARSSGGGGWADPRTCLSLLSLGTCLGLAWFVFQQSEKFAKVENQ
YQLLKLETNEFQQLQSKISLISEKWQKSEAIMEQLKSFQIIAHLKRLQEEINEVKTWSNRITEKQDILNNSLTTL
SQDITKVDQSTTSMAKDVGLKITSVKTDIRRISGLVTDVISLTDSVQELENKIEKVEKNTVKNIGDLLSSSIDRT
ATLRKTASENSQRINSVKKTLTELKSDFDKHTDRFLSLEGDRAKVLKTVTFANDLKPKVYNLKKDFSRLEPLVND
LTLRIGRLVTDLLQREKEIAFLSEKISNLTIVQAEIKDIKDEIAHISDMN

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FIGURE 4928

CCGCCGTCTCCCCAGAAGCCCCCTCCTCCTTCCCCCATGGGTCATATGTTGAAAGTCTATTTTAAAAACTATGTT
CCTTGCCGTAGATTGCAGAGCTAATTTATCACGTTTCTCTCCTGTGAGACCCCCCTTTTATATGATATATCCAGA
GGAAGTTTTGTAATATAAAACAGGACGCCCACACTGATGGTTTTGCACTGGTTTTTGTGAATGTTTCTTACAAAA
AGAAAAAGGAACAAAGAATAAATAGTGACCGTGAAAAAAGGTGGTCTTGATTTGGGGTTGGGGATAGACTGGGGC
GAGGCANAAGCTTGACAAGAGGCTGCTGATGGCTGGAGGGAGCTGGGAGAAGAGGCGTTCCAGGTCACCCCAAAC
GGAGCGTAGAGCGGGCCCACACCGAGCTTTCCTCGCTGGACTTAAGGGCCCACTACAATTAGCTCTAACCAAGCC
ACCCAGTATTTTGTGAGCACAGCTGTGTGCCAGAGCCTGGACAGCCTCATGGGGTAAGGCCACGCCACCCTCCCA
TCCCACAGATGAGTGTGGAAGACTGGATGTCT

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FIGURE 4929

PPSPQKPPPPSPMGHMLKVYFKNYVPCRRLQS

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FIGURE 4930

GCGGCCGCGGAGCCCCACCCGCTCCTACTCCAGTCCTCTCACGCCCACTGACTTACCCTGCGCACGCGCGCTGAG
GCTCCGTGGGGCCGCCGCGGGCCCCGCCCCGAGGTGGGAGGGCCTGACGCATCCACAGCTGGCCAATCGGCGGAT
GGCCTCGCGCGCCCGCCCCCTCCCCCTGCCCCCGGCGCCGGGCTCCACGTGCCAGTGTTTGTGTACGTGCGGCCG
TGGCGGGGCTGGACAGGGTCCGGGTCGTTGAGGATTAGGCTGCTCGGGCGTAACCGGAGCTGGGGCGCGGCTGCC
AAGGGCCGGCCCGGAAGTCCCAGCGGTCTTTAAATTCTCCCGTGCTAGGGCCAGCCTGCGCATTCTTACCTGTCG
GGGTGCGGCGAGTGTCTCACCTCTCTGCACTTCCAAGGACTCTTGTCATCTGCCTTAGGCGGGAA**ATG**CTGTTGC
TGGATTGCAACCCCGAGGTGGATGGTCTGAAGCATTTGCTGGAGACAGGGGCCTCGGTCAACGCACCCCCGGATC
CCTGCAAGCAGTCGCCTGTCCACTTAGCCGCAGGAAGCGGCCTTGCTTGCTTTCTTCTCTGGCAGCTGCAAACGG
GCGCTGACCTCAACCAGCAGGATGTTTTAGGAGAAGCTCCACTACACAAGGCAGCAAAAGTTGGAAGCCTGGAGT
GCCTAAGCCTGCTTGTAGCCAGTGATGCCCAAATTGATTTATGTAATAAGAACGGGCAAACAGCTGAAGATCTCG
CTTGGTCATGTGGATTTCCAGACTGTGCCAAGTTTCTTACAACAATTAAATGTATGCAGACAATAAAAGCAAGTG
AACACCCTGACAGGAATGATTGTGTTGCCGTGCTCAGACAGAAACGGAGTCTCGGAAGTGTAGAAAATACCAGTG
GGAAAAGGAAGTGC**TGA**TGTCACGTGGGTTATGAAGAAGTCTGAAGAACGCCTTCATTTCATGCAAATCTATAAG
CTCCTGCTTTTGGCTTTACCATATGTTGTGTCTAATCTCCTTCTGAGAAGGACGAAAAACTTTCTTCCAAGTGAA
GATCCATTTAAGAACACATGTATTTACATGCCTATAATATGCTGGTTGTGTATGCTTTGTCTTTTAAGTGGATCT
TCACTTGGAAGAAAGTTTTTCGTCC

FIGURE 4931

MLLLDCNPEVDGLKHLLETGASVNAPPDPCKQSPVHLAAGSGLACFLLWQLQTGADLNQQDVLGEAPLHKAAKVG
SLECLSLLVASDAQIDLCNKNGQTAEDLAWSCGFPDCAKFLTTIKCMQTIKASEHPDRNDCVAVLRQKRSLGSVE
NTSGKRKC

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FIGURE 4932

GCGAGAACCTTTGCACGCGCACAAACTACGGGGACGATTTCTGATTGATTTTTGGCGCTTTCGATCCACCCTCCT
CCCTTCTCATGGGACTTTGGGGACAAAGCGTCCCGACCGCCTCGAGCGCTCGAGCAGGGCGCTATCCAGGAGCCA
GGACAGCGTCGGGAACCAGACCATGGCTCCTGGACCCCAAGATCCTTAAGTTCGTCGTCTTCATCGTCGCGGTTC
TGCTGCCGGTCCGGGTTGACTCTGCCACCATCCCCCGGCAGGACGAAGTTCCCCAGCAGACAGTGGCCCCACAGC
AACAGAGGCGCAGCCTCAAGGAGGAGGAGTGTCCAGCAGGATCTCATAGATCAGAATATACTGGAGCCTGTAACC
CGTGCACAGAGGGTGTGGATTACACCATTGCTTCCAACAATTTGCCTTCTTGCCTGCTATGTACAGTTTGTAAAT
CAGGTCAAACAAATAAAAGTTCCTGTACCACGACCAGAGACACCGTGTGTCAGTGTGAAAAAGGAAGCTTCCAGG
ATAAAAACTCCCCTGAGATGTGCCGGACGTGTAGAACAGGGTGTCCCAGAGGGATGGTCAAGGTCAGTAATTGTA
CGCCCCGGAGTGACATCAAGTGCAAAAATGAATCAGCTGCCAGTTCCACTGGGAAAACCCCAGCAGCGGAGGAGA
CAGTGACCACCATCCTGGGGATGCTTGCCTCTCCCTATCACTACCTTATCATCATAGTGGTTTTAGTCATCATTT
TAGCTGTGGTTGTGGTTGGCTTTTCATGTCGGAAGAAATTCATTTCTTACCTCAAAGGCATCTGCTCAGGTGGTG
GAGGAGGTCCCGAACGTGTGCACAGAGTCCTTTTCCGGCGGCGTTCATGTCCTTCACGAGTTCCTGGGGCGGAGG
ACAATGCCCGCAACGAGACCCTGAGTAACAGATACTTGCAGCCCACCCAGGTCTCTGAGCAGGAAATCCAAGGTC
AGGAGCTGGCAGAGCTAACAGGTGTGACTGTAGAGTTGCCAGAGGAGCCACAGCGTCTGCTGGAACAGGCAGAAG
CTGAAGGGTGTCAGAGGAGGAGGCTGCTGGTTCCAGTGAATGACGCTGACTCCGCTGACATCAGCACCTTGCTGG
ATGCCTCGGCAACACTGGAAGAAGGACATGCANAGGAAACAATTCAGGACCAACTGGTGGGCTCCGAAAAGCTCT
TTTATGAAGAAGATGAGGCAGGCTCTGCTACGTCCTGCCTGTGAAAGAATCTCTTCAGGAAACCAGAGCTTCCCT
CATTTACCTTTTCTCCTACAAAGGGAAGCAGCCTGGAAGAAACAGTCCAGTACTTGACCCATGCCCCAACAAACT
CTACTATCCAATATGGGGCAGCTTACCAATGGTCCTAGAACTTTGTTAACGCACTTGGAGTAATTTTTATGAAAT
ACTGCGTGTGATAAGCAAACGGGAGAAATTTATATCAGATTCTTGGCTGCATAGTTATACGATTGTGTATTAAGG
GTCGTTTTAGGCCACATGCGGTGGCTCATGCCTGTAATCCCAGCACTTTGATAGGCTGAGGCAGGTGGATTGCTT
GAGCTCGGGAGTTTGAGACCAGCCTCATCAACACAGTGAAACTCCATCTCAATTTAAAAAGAAAAAAAGTGGTTT
TAGGATGTCATTCTTTGCAGTTCTTCATCATGAGACAAGTCTTTTTTTCTGCTTCTTATATTGCAAGCTCCATCT
CTACTGGTGTGTGCATTTAATGACATCTAACTACAGATGCCGCACAGCCACAATGCTTTGCCTTATAGTTTTTTA
ACTTTAGAACGGGATTATCTGTTATTACCTGTATTTTCAGTTTCGGATATTTTTGACTTAATGATGAGATTATCA
AGACGTAGCCCTATGCTAAGTCATGAGCATATGGACTTACGAGGGTTCGACTTAGAGTTTTGAGCTTTAAGATAG
GATTATTGGGGCTTACCCCCACCTTAATTAGAGAAACATTTATATTGCTTACTACTGTAGGCTGTACATCTCTTT
TCCGATTTTTGTATAATGATGTAAACATGGAAAACTTTAGGAAATGCACTTATTAGGCTGTTTACATGGGTTGCC
TGGATACAAATCAGCAGTCAAAAATGACTAAAAATATAACTAGTGACGGAGGGAGAAATCCTCCCTCTGTGGGAG
GCACTTACTGCATTCCAGTTCTCCCTCCTGCGCCCTGAGACTGGACCAGGGTTTGATGGCTGGCAGCTTCTCAAG
GGGCAGCTTGTCTTACTTGTTAATTTTAGAGGTATATAGCCATATTTATTTATAAATAAATATTTATTTATTTAT
TTATAAGTAGATGTTTACATATGCCCAGGATTTTGAAGAGCCTGGTATCTTTGGGAAGCCATGTGTCTGGTTTGT
CGTGCTGGGACAGTCATGGGACTGCATCTTCCGACTTGTCCACAGCAGATGAGGACAGTGAGAATTAAGTTAGAT
CCGAGACTGCGAAGAGCTTCTCTTTCAAGCGCCATTACAGTTGAACGTTAGTGAATCTTGAGCCTCATTTGGGCT
CAGGGCAGAGCAGGTGTTTATCTGCCCCGGCATCTGCCATGGCATCAAGAGGGAAGAGTGGACGGTGCTTGGGAA
TGGTGTGAAATGGTTGCCGACTCAGGCATGGATGGGCCCCTCTCGCTTCTGGTGGTCTGTGAACTGAGTCCCTGG
GATGCCTTTTAGGGCAGAGATTCCTGAGCTGCGTTTTAGGGTACAGATTCCCTGTTTGAGGAGCTTGGCCCCTCT
GTAAGCATCTGACTCATCTCAGAGATATCAATTCTTAAACACTGTGACAACGGGATCTAAAATGGCTGACACATT
TGTCCTTGTGTCACGTTCCATTATTTTATTTAAAAACCTCAGTAATCGTTTTAGCTTCTTTCCAGCAAACTCTTC
TCCACAGTAGCCCAGTCGTGGTAGGATAAATTACGGATATAGTCATTCTAGGGGTTTCAGTCTTTTCCATCTCAA
GGCATTGTGTGTTTTGTTCCGGGACTGGTTTGGCTGGGACAAAGTTAGAACTGCCTGAAGTTCGCACATTCAGAT
TGTTGTGTCCATGGAGTTTTAGGAGGGGATGGCCTTTCCGGTCTTCGCACTTCCATCCTCTCCCACTTCCATCTG
GCGTCCCACACCTTGTCCCCTGCACTTCTGGATGACACAGGGTGCTGCTGCCTCCTAGTCTTTGCCTTTGCTGGG
CCTTCTGTGCAGGAGACTTGGTCTCAAAGCTCAGAGAGAGCCAGTCCGGTCCCAGCTCCTTTGTCCCTTCCTCAG
AGGCCTTCCTTGAAGATGCATCTAGACTACCAGCCTTATCAGTGTTTAAGCTTATTCCTTTAACATAAGCTTCCT
GACAACATGAAATTGTTGGGGTTTTTTGGCGTTGGTTGATTTGTTTAGGTTTTGCTTTATACCCGGGCCAAATAG
CACATAACACCTGGTTATATATGAAATACTCATATGTTTATGACCAAAATAAATATGAAACCTCATGTTAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4933

MGLWGQSVPTASSARAGRYPGARTASGTRPWLLDPKILKFVVFIVAVLLPVRVDSATIPRQDEVPQQTVAPQQQR
RSLKEEECPAGSHRSEYTGACNPCTEGVDYTIASNNLPSCLLCTVCKSGQTNKSSCTTTRDTVCQCEKGSFQDKN
SPEMCRTCRTGCPRGMVKVSNCTPRSDIKCKNESAASSTGKTPAAEETVTTILGMLASPYHYLIIIVVLVIILAV
VVVGFSCRKKFISYLKGICSGGGGGPERVHRVLFRRRSCPSRVPGAEDNARNETLSNRYLQPTQVSEQEIQGQEL
AELTGVTVELPEEPQRLLEQAEAEGCQRRRLLVPVNDADSADISTLLDASATLEEGHAXETIQDQLVGSEKLFYE
EDEAGSATSCL

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FIGURE 4934A

GGTGAGAAGCACTAGAAATATCCATTCAGTTATTAGTGGGGATTAGGTTCAGGTCTGTTGTTTAAGGAGCCCTTA
AACTTTAAATTTCAACACAGGAATGGAGGTCCCTGTGTAAGGATTGGGAATGGGACCTAATAACTGCTCCCTCAA
GGTGAGTTGCGAGTCAGCTGGCCATCTCCATCTCCCATGCATTACCTTGATGTACCTTCCAGTCCACCATCTGCT
TGTGCACCAGGCTGCACCTACTGTTCCATGATGGAAGGGAAGGTAGAAGTTGGGCTGGAAGGAGATGTTGGTCCA
GATCTGGGTACATTTACCCCTTGTGGTACCTCTTGGGAGCAAGAAAGTCCAGGCCCTGGAGCCTTCCACTGACAA
CTCTTGAAGGCCCACCTCAACTGAAGCCTCACTGATAGCACTTTCATGAGATGCTGGTCAGGGAAGAGCTTCTGA
TTTGGCCTAGGCTAGTGGCAGTGCCACCAGGCAATTGCTTAAAATCTTCTTTCTGCCAAATTCTGTGATGTATTA
AAGTATGCGATACATGAAAATTGAGAGTGGCTTTGGTTTTGTTGTAGGTCTGGATCTATTTACCTTTATTAAGCT
CTGGAGACTGACATATGATATTTTTAGATGTATGAGTGCAGATTTATGGAGATATTGGTTCTGGATTTAGTATGA
GATGCTAAACCTGGTCCCCATTGTTCTCAAGGCCACTGCACCTGGCCGATAACAGATGTTTTAATAGTAAGATAA
AAAGTAAAATTTCCAGTGTGTCGAAGGAAGAAAATTACAGCCTAGAATTTTATCTTCATGTACATTATTTAAGTG
TGAGGGAATAGTTTCAGTGACATTATGTCATTGAAGACCTTAGAAGATTTCCCTCGCTAAAGGAGATAAAGCGAC
TGGCACAACATGTATTTCTCTGAGTAAGTAGAAGTGTTCTTTTCTGGCTGTACTGAAGGGACTTTCATGATTTCT
TCGTTTTTGTACTCTTAGTTTTATAATATTGCATAGTAGCTAAGGCCTGGCTGTAGCAGTTATAAACTGTTCTGC
AAGTGCGGGAAGTAATAGTTATTCCTATCTCAAGGATGTGGGGTTTAAATGGGTTAGTGCACAAAAGGACATTTA
TTAAATTTAGTCATAATCATCTCAAGGACATGGTAAGTGAAAGAGTGTACATAAAGTACTTAATGTAATGTTGCT
ACTTAATGTTCAATAACTCAAAGAGACCACCACCACTACTACATTTTACTTTTATTAGTAATTAATAATAATTAA
TAATTAGTAATTCAGTGGTAATTAGTATACTACCAAAGAAAGTACTTGAGCAGAAGAGCCAAAATTCAAACCATA
GAATCATTTTACTGTGCTTTTATTCTACCTCAAACACTAATCTCCAGGCCTTGGATAAAGGGATTATTTCTCTGA
AGGGGAAAGTTATCCTCTTTTTGCCCAAGTCACACTTGTGTCATTTCTTATACTGTAAACATGTGGTTCCAATTC
TGAGGTATTTTCCCGGCTTGTAGGACCCAAAAAGAAGTTAGGCTTGAGAAATTTTAAGTGAAGAGAACAATTCTA
GTTCAGAGTGATTGGCTCTTCCTAAAAGCTGACATTTGACTGAAAATTTTGAGGGGAGGGAAAGAAACAATACCT
TTTACGGCATGTAATAGGAAGAAGACCTGGATTTTAGTTGCTGCTCTGATGTCCCAACTTGGGTAAGGCAACATA
ACATAAATGTCAGTTTCTTCAGATTTGTGATGAAGCTGATAATCCATGCTCAGCTTCCTTTATGGGTCTCTTGCC
TATCAAATAAGGTACAGTATGTGAAGATACATTGCAGATTATCTTATGCATTGCTTCAGGGGATGATTAAACCAT
CCTTTATTATAGCCAGAGTCTAGTCTAAGGGAAGAAGGTCATTCTCTATACCAGTGAAGGCTCCATCCAAACCAG
TGTTTGGGGGCATAGTCATAATTGAAAAATGATTGTTTTCCTTATCTGTAAAACAGGTAAATGGTATTAATCCTC
AGGTGGTTGTGAGGATTAAGTGATACATGTAAAAAAAAGAAAGCTTTGGATAGTACCTATTATAAGAAACTCAGT
GTTGCTGCAATGTATGTATTATAATGGATTTGAAATTTGCCCTAACCAAGAGTCACAGACAGAAAAAAGGAAGTT
AATGTATCTCTTGATCACTATCAAGATGTGGTATTGAACCTTCAAGATCCTTTTCAGGGAATATGTGAGATCAAA
ATTTTTATACTGGCACTATGATGTTATTTGCCTTTTCCTCATATTCACAAGTGAACAGTGGAGTTTTACAGAAGC
TATATAATGTCATGACATCACTGATGGGTAATAGAATGTGTGCTTGTATATTCCGAAACTTTCAGTTCCAATTTC
TTCGATCAATGTAATCCTCATAAGTAAAAGTTATTTGAGGACCTCAGACATTTTTAAAAATGTAAAGGGGGTGGN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN

FIGURE 4934B

TCTTTGTGGCCTAGTACATAGTTAATTTAGTGAATGCTTCCAGTTGTACTTGAAAAGAATGTATATTTTCTGATT
ATTGAGGGTAAATTTCTCTATATATGTTTTCCTGTTTAATAAATATGTAGCTATGTGCTTATGAAA

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FIGURE 4935

VRSTRNIHSVISGD

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FIGURE 4936

CCGCAGAACTTGGGGAGCCGCCGCCGCCATCCGCCGCCGCAGCCAGCTTCCGCCGCCGCAGGACCGGCCCCTGCC
CCAGCCTCCGCAGCCGCGGCGCGTCCACGCCCGCCCGCGCCCAGGGCGAGTCGGGGTCGCCGCCTGCACGCTTCT
CAGTGTTCCCCGCGCCCCGCATGTAACCCGGCCAGGCCCCCGCAACGGTGTCCCCTGCAGCTCCAGCCCCGGGCT
GCACCCCCCCGCCCCGACACCAGCTCTCCAGCCTGCTCGTCCAGGATGGCCGCGGCCAAGGCCGAGATGCAGCTG
ATGTCCCCGCTGCAGATCTCTGACCCGTTCGGATCCTTTCCTCACTCGCCCACCATGGACAACTACCCTAAGCTG
GAGGAGATGATGCTGCTGAGCAACGGGGCTCCCCAGTTCCTCGGCGCCGCCGGGGCCCCAGAGGGCAGCGGCAGC
AACAGCAGCAGCAGCAGCAGCGGGGGCGGTGGAGGCGGCGGGGGCGGCAGCAACAGCAGCAGCAGCAGCACC
TTCAACCCTCAGGCGGACACGGGCGAGCAGCCCTACGAGCACCTGACCGCAGAGTCTTTTCCTGACATCTCTCTG
AACAACGAGAAGGTGCTGGTGGAGACCAGTTACCCCAGCCAAACCACTCGACTGCCCCCCATCACCTATACTGGC
CGCTTTTCCCTGGAGCCTGCACCCAACAGTGGCAACACCTTGTGGCCCGAGCCCCTCTTCAGCTTGGTCAGTGGC
CTAGTGAGCATGACCAACCCACCGGCCTCCTCGTCCTCAGCACCATCTCCAGCGGCCTCCTCCGCCTCCGCCTCC
CAGAGCCCACCCCTGAGCTGCGCAGTGCCATCCAACGACAGCAGTCCCATTTACTCAGCGGCACCCACCTTCCCC
ACGCCGAACACTGACATTTTCCCTGAGCCACAAAGCCAGGCCTTCCCGGGCTCGGCAGGGACAGCGCTCCAGTAC
CCGCCTCCTGCCTACCCTGCCGCCAAGGGTGGCTTCCAGGTTCCCATGATCCCCGACTACCTGTTTCCACAGCAG
CAGGGGGATCTGGGCCTGGGCACCCCAGACCAGAAGCCCTTCCAGGGCCTGGAGAGCCGCACCCAGCAGCCTTCG
CTAACCCCTCTGTCTACTATTAAGGCCTTTGCCACTCAGTCGGGCTCCCAGGACCTGAAGGCCCTCAATACCAGC
TACCAGTCCCAGCTCATCAAACCCAGCCGCATGCGCAAGTATCCCAACCGGCCCAGCAAGACGCCCCCCCACGAA
CGCCCTTACGCTTGCCCAGTGGAGTCCTGTGATCGCCGCTTCTCCCGCTCCGACGAGCTCACCCGCCACATCCGC
ATCCACACAGGCCAGAAGCCCTTCCAGTGCCGCATCTGCATGCGCAACTTCAGCCGCAGCGACCACCTCACCACC
CACATCCGCACCCACACAGGCGAAAAGCCCTTCGCCTGCGACATCTGTGGAAGAAAGTTTGCCAGGAGCGATGAA
CGCAAGAGGCATACCAAGATCCACTTGCGGCAGAAGGACAAGAAAGCAGACAAAAGTGTTGTGGCCTCTTCGGCC
ACCTCCTCTCTCTCTTCCTACCCGTCCCCGGTTGCTACCTCTTACCCGTCCCCGGTTACTACCTCTTATCCATCC
CCGGCCACCACCTCATACCCATCCCCTGTGCCCACCTCCTTCTCCTCTCCCGGCTCCTCGACCTACCCATCCCCT
GTGCACAGTGGCTTCCCCTCCCCGTCGGTGGCCACCACGTACTCCTCTGTTCCCCCTGCTTTCCCGGCCCAGGTC
AGCAGCTTCCCTTCCTCAGCTGTCACCAACTCCTTCAGCGCCTCCACAGGGCTTTCGGACATGACAGCAACCTTT
TCTCCCAGGACAATTGAAATTTGCTAAAGGGAAAGGGGAAAGAAAGGGAAAAGGGAGAAAAAGAAACACAAGAGA
CTTAAAGGACAGGAGGAGGAGATGGCCATAGGAGAGGAGGGTTCCTCTTAGGTCAGATGGAGGTTCTCAGAGCCA
AGTCCTCCCTCTCTACTGGAGTGGAAGGTCTATTGGCCAACAATCCTTTCTGCCCACTTCCCCTTCCCCAATTAC
TATTCCCTTTGACTTCAGCTGCCTGAAACAGCCATGTCCAAGTTCTTCACCTCTATCCAAAGAACTTGATTTGCA
TGGATTTTGGATAAATCATTTCAGTATCATCTCCATCATATGCCTGACCCCTTGCTCCCTTCAATGCTAGAAAAT
CGAGTTGGCAAAATGGGGTTTGGGCCCCTCAGAGCCCTGCCCTGCACCCTTGTACAGTGTCTGTGCCATGGATTT
CGTTTTTCTTGGGGTACTCTTGATGTGAAGATAATTTGCATATTCTATTGTATTATTTGGAGTTAGGTCCTCACT
TGGGGGAAAAAAAAAAAAAAAAGCCAAGCAAACCAATGGTGATCCTCTATTTTGTGATGATGCTGTGACAATAAG
TTTGAACCTTTTTTTTTGAAACAGCAGTCCCAGTATTCTCAGAGCATGTGTCAGAGTGTTGTTCCGTTAACCTTT
TTGTAAATACTGCTTGACCGTACTCTCACATGTGGCAAAATATGGTTTGGTTTTTCTTTTTTTTTTTTGAAAGTG
TTTTTTCTTCGTCCTTTTGGTTTAAAAAGTTTCACGTCTTGGTGCCTTTTGTGTGATGCCCCTTGCTGATGGCTT
GACATGTGCAATTGTGAGGGACATGCTCACCTCTAGCCTTAAGGGGGGCAGGGAGTGATGATTTGGGGGAGGCTT
TGGGAGCAAAATAAGGAAGAGGGCTGAGCTGAGCTTCGGTTCTCCAGAATGTAAGAAAACAAAATCTAAAACAAA
ATCTGAACTCTCAAAAGTCTATTTTTTTAACTGAAAATGTAAATTTATAAATATATTCAGGAGTTGGAATGTTGT
AGTTACCTACTGAGTAGGCGGCGATTTTTGTATGTTATGAACATGCAGTTCATTATTTTGTGGTTCTATTTTACT
TTGTACTTGTGTTTGCTTAAACAAAGTGACTGTTTGGCTTATAAACACATTGAATGCGCTTTATTGCCCATGGGA
TATGTGGTGTATATCCTTCCAAAAAATTAAAACGAAAATAAAGTAGCTGCGATTGGG

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FIGURE 4937

MAAAKAEMQLMSPLQISDPFGSFPHSPTMDNYPKLEEMMLLSNGAPQFLGAAGAPEGSGSNSSSSSSGGGGGGGG
GSNSSSSSSTFNPQADTGEQPYEHLTAESFPDISLNNEKVLVETSYPSQTTRLPPITYTGRFSLEPAPNSGNTLW
PEPLFSLVSGLVSMTNPPASSSSAPSPAASSASASQSPPLSCAVPSNDSSPIYSAAPTFPTPNTDIFPEPQSQAF
PGSAGTALQYPPPAYPAAKGGFQVPMIPDYLFPQQQGDLGLGTPDQKPFQGLESRTQQPSLTPLSTIKAFATQSG
SQDLKALNTSYQSQLIKPSRMRKYPNRPSKTPPHERPYACPVESCDRRFSRSDELTRHIRIHTGQKPFQCRICMR
NFSRSDHLTTHIRTHTGEKPFACDICGRKFARSDERKRHTKIHLRQKDKKADKSVVASSATSSLSSYPSPVATSY
PSPVTTSYPSPATTSYPSPVPTSFSSPGSSTYPSPVHSGFPSPSVATTYSSVPPAFPAQVSSFPSSAVTNSFSAS
TGLSDMTATFSPRTIEIC

FIGURE 4938A

GGCGACCGTGGGGAGGTGCCGCCGGGGTCGCAGGTGAGCGGTTCTATGCTGGAGGAGGCGGCCAGGGAAGCGGCG
GCTCCGTGACCAGTGGGTGCCCTCGCAGTGGGTAGGGTCCCGGAGGGGTCAGCGGCAATTGGCGCAACGCTTGCT
GCCGGGTTTGGTCCAAGGGCTGCGACGTAGCGGGACTGCACGCTCGGGAGAAGTGCCACGCGCGTCTGTCGCCTG
ACCGGGGAGGCTGGGGAGGGCCCAGGCCACGGAAACAAGACTGCAGAAGTTTCTGGGCACTCAGTCGGGACTCTC
ATTTAATACCCAGAGAGAGGAGATCTTCCAGGTTGCCCCGACTCCCACCGGGACTCCTACCAGCAGCAACCTCAT
CATTGTGGCCGAGGCAGGTGCGCGCCCCTGCTCCCCTGGGTGGCCTTCCGGGAGCCCAGTCTAACTCGATTCTTC
CCAGGGGCTCTTTTTGGACGGTCCCAAAGGAGGCAGCGGGAGGGAGGTGAAAGATACTTTGATAACCGTCGACCC
ATAAGTATACTTGTTATGCACCTACCACGAGTTTTAGAGAAGAACATACTTTTTGGCAGGGAAGTGAATCCCCTA
TAAGAATATAGGGGAGGGGAAAGCCACACTTTAAAGAGAATTTGGGTAGGGTTTGATATTGTAGATTTGTGATGC
TTTTCTTCTTGAACTGCTTAACTAATTTACCCTCAAATTTTTTTGATCCGGAACTTGCCGTCTGGTTTTTCTCAG
ACTTCTTAATTCTGACTTATCATGAAGTATCTAGGAACTTCATTCTCAAGTTTCAGTGCTTGTAAAAAGTTGCCT
GGTTATATTATGCCATTGGCAGTACATCATCTTCACAAGGATTACGTAAGTGAACTACATCTCATTCCTGTTTCC
AACTAGTGAAGAACGATTGTGAAATGGGATTTTAGAAAATGGCTGTTCTCTGTGACTGGGCATAGAAGGTTTGTA
AGTTTTAGAGACTGCAGCTGTTGAATCCTTTCTGCTAAGAGAGCGATGACAGGCAATAGAAAAGGGATAGTGTTT
GACATCTAAAATGACATATTTTCACATTTTATGAGGTGTTATATCCCCAGCACCAAAAATAGTGCCTTTCACACA
GTAGGAGCTCAGTAAGTATTTTTTGAGGAAATTATTGGGGAATGAATGGATGGTAGAAAACCCAAGCTTCTGTTA
CTTGGATACCGGCATATAAAGGAGAGGACAGGAAGACAAACATTTCTGGAAATGGCTTTTATCCAGGAATTATCC
AGACTGCCTTGCCACTAGATGAATGGAAGACAATGATTTGAACTAAGGGCCAGCAAAGAATTATCCCTGGTTTTT
GTGCTTTGCAGCATTCCTCAAATTGTTTTCACATCTCTTACCATAAAAACTGCATTGAAATTGAAAATGAAGCAG
TTGAAAAGAAAAAGGAAAAGCAATTTTAGTGTTCAAGAAACTCAGACCCTTTTGAAAGAAATTACGAAAAGGAAA
GAAGTCATTTTTTCCAAGCAGCTCAATACAACAATTAATGTGATGAAGCGAATGGCTTGGGAAGAGATTGCACAG
TGTGTGAATGCTGTAGGAGAAGGAGAACAGAGGACAGGGACGGAGGTGAAAAGAAGGTACCTTGACTGGCGAGCA
CTTATGAAGAGAAAGAGGATGAAGGCCAACATTAAGCTGGTTGGTTCAGGATTTCCCCTTCCCTCCTCTGATTTG
GATGACTCTCTCACTGAAGAGATAGATGAAAAGATTGGATTCCGAAATGATGCAAATTTTGACTGGCAAAATGTG
GCAGATTTCAGGGATGCAGGTGGATCCTTAACTGAGGTCAAGGTGGAAGAGGAAGAAAGGGATCCGCAGAGTCCT
GAATTTGAAATTGAGGAGGAGGAAGAAATGTTGTCATCCGTCATACCAGATTCCAGGAGAGAAAATGAACTTCCC
GATTTCCCCCACATTGATGAGTTTTTTACCCTTAACTCAACACCATCTAGATCTGCATATGATGAGCCTCATTTG
CTCGTAAATATTGAGAAACAGAAACTAGAGTTGGAAAAACGACGACTGGATATCGAGGCCGAAAGGCTGCAGGTA
GAAAAGGAACGCCTACAAATCGAGAAAGAGAGGCTGCGGCATTTAGACATGGAACATGAGCGGCTTCAGCTAGAG
AAGGAGCGGCTGCAGATTGAAAGAGAAAAGTTGAGGTTACAGATAGTCAATTCAGAGAAACCGTCCTTGGAAAAT
GAACTTGGTCAAGGAGAAAAATCCATGCTTCAACCACAGGACATAGAAACAGAGAAGTTAAAACTTGAGCGAGAA
CGCTTGCAACTGGAAAAGGATAGGCTGCAGTTTTTGAAGTTTGAATCTGAGAAGCTGCAGATTGAAAAGGAACGC
TTACAGGTAGAGAAAGACAGACTTCGAATTCAGAAAGAAGGACACTTGCAGTGATTTTTCCAGGCTTCCATTTAG
CAAATGTTTGAAAACTCTAGATTTTTCTCATATCAGGTGATATAATGATGGTTGCTGGATTAGCTGTGGTTTCTT
GTCTAATGTCAGTGTTCAGTAGGAAAAAGTTATATGTGGATAACTGTATGCCTAAGTAGTATATAAAAGCTGTGC
CCTAGCGTAAACAGTATAGCAGAAACTTACTGTGCTGGACTCTTTACCTTATAATATTACATAGAGTCTTGTATT
GTCTGTGTACCCAGAGTTTACAATTATGTCCATATAAAATTCTAGCCCAGAAGTTCTCATCTGGGGTAGATTTTG
GCCTTCAGAAGACCAATTTGGTGATGTCTGGAGACATGTTGGGTTGTCAAAACTGGGGTGGGGAAAAGGTTGCTA
CTGTGCAATGCATACCTCCTCAACACCCCCCCACACTCAGTAAAGAATTTTCCAACCCAAAATATCATTAGTCCT
GAGGTTGAGAAACCCTGTCCTAGCCTAACTGTGTACCTCTATAGCTATGTTTTATAGTTTTAGAATATTAAAACC
TCAGATATTTATGTGGGTAGGTACTTAAATGGCCAAAAACTTTAACTATGAAATGTTACTGTGTAGTATATTGAA
TATAGGAAGTGATGAAGATTATAGGTATTTTATTCCCATGTTTCCATCTATAAATAGCCTTCTCAGATTCAGAAA
ACAATACAGAGAACATCAGAAATTTTCTAAAATGGGTCACTTTGAAAAGAATTCTTTTTCTCACTATTAATGCTT
TAGAAGCAAGACGCAATTTTAAAGCTTTAGTTCCTTTTCTTTCAGTCATTGTCTTAGTTTGGGTACAAAAATGTC
ATTTCAGTAATGTACTGAAATCTTATAAGTGAATAGTTGAAGCTAGTAAAAATGATACCAGTATAAAAATGGTAC
TTGTAGTCCATGAGCTTGAACCCAATGACTGATTGTTTGACTTTTAAAATAAGTAATAGCAGCCATTTGGGAGTA
GGGGGTAGGTGGGGAAGATGTACTCCGTATCAAATAATAATGATGTTGAAATAATGATAGTAGGTATGTATTATG
GATTGGAGAAGCACTTATTACACTATCTAACCTAATATGTAGAACAATTCTTGAGAGTTGTATCTGTCGTTATTT

FIGURE 4938B

CTGAATGTGAAGCTCAGAGAAGTGACACAGAGTAAATGGCTGATCTTCTATATTGTAGTATATTTTGTCCTTCCC
TCTTCCCTGAGGAACAAAGCACGTATCTTTAGTCTCTTTGATATTTATTCTGAGACCAAGGGCTTGCTTGACCTG
ATGATTTTCCTTCAGCTCTCTGAAGGTGCTTTTTCCACAATCCAAGTGATTCTGATACACACTAAAGTTGAGAAT
CACTGCACTAGATCACTTTGTGTTTTCTGATTTTCAAGGTTGATACGTAGCTTTAATACAGCTCTTCTGTTGACA
GTTATTACTTTAATTTTGCATTTGTTCCTTGTAAGAATGGCTGGAAACTGTGTGTTGACATTTGAGGATGGGTAT
GCAAGGAAAAAATATACTTCTGTTTACTTACTCTGACTTTGAAATAGTGTTATTTTTCTATATCTGAAATAAATG
CTTCTACCATAGAAAT

FIGURE 4939

ACTTATCTTGCATGGGCAAGGGGATTTCCAAAAAATCCTTGACACCTATTCACAGCACCATACTTCGGTGTGTGA
AGTATTTGAAAGTGATTGTGGAAACAACAAAAATGAACAGAAAGATGCAAAAACAGGAGTCTGCATCACTGCTCT
AAAAACAGAAATAAAAAACATAGATACTGTGAGTACTACTCAAGAAAAGCCACATTGTCAAAGAGACACAGGAAT
ATCTTCCTCCCTAATGGGTAAGAATGTTCAGAGGGAACTCAGAAGGGGAGGAAGGAGAAACTGGACCCATTCTGA
TGCATTTCGAGTCTCCTTGGATCAAGATGTGGAGACTGAGACTGAGCCATCGGACTACAGCAATGATGAGGGAGC
TGTTTTCAACAAGTCTCTGAGTGGCAGCCAGACTTCCAGTGCTTGGAGCAACTTATCAGGGTTTAGTTCCTCTGC
AAGCTGGGAGGAAGTGAATTATCACGTTGACGACAGGTCAGCCAGAAAAGAGCCTGGCAAAGAACATCTGGTGGA
CACTCAGTGTTCCACTGCCTTGTCTGAGGAGCTAGAGAATGACAGGGAAGGCAGAGCTATGCATTCATTGCGTTC
ACAGCTTCATGATCTCTCTCTTCAGGAACCCAACAATGACAATTTGGAGCCTTCTCAAAATCAGCCACAGCAACA
GATGCCCTTGACACCCTTCTCGCCTCATAATACCCCAGGCATTTTCTTGGCCCCTGGTGCAGGGCTTCTAGAAGG
AGCTCCAGAAGGTATCCAGGAAGTCAGAAATATGGGACCCAGAAATACTTCTGCTCACTCCAGACCCTCATATCG
TTCTGCTTCTTGGTCTTCTGATTCTGGTAGGCCCAAGAATATAGGCACACATCCTTCAGTCCAAAAAGAAGAAGC
CTTTGAAATAATTGTTGAGTTTCCAGAAACCAACTGCGATGTCAAAGACAGGCAGGGGAAAGAGCAGGGAGAAGA
AATTAGTGAAAGAGGCGCAGGCCCTACATTTAAAGCTAGTCCCTCTTGGGTTGACCCAGAAGGAGAAACAGCAGA
AAGCACTGAAGATGCACCCTTAGACTTTCACAGGGTCCTGCACAATTCTCTGGGAAACATTTCCATGCTGCCATG
TAGCTCCTTCACCCCTAATTGGCCTGTTCAAAATCCTGACTCCAGAAAAAGTGGTGGCCCAGTCGCAGAGCAGGG
CATCGACCCTGATGCCTCCACAGTGGATGAGGAGGGGCAACTGCTCGACAGCACGGATGTTCCCTGCACAAATGG
GCACGGCTCTCATAGACTGTGCATTCTGAGACAGCCGCCTGGTCAGAGGGCGGAGACCCCCAATTCCTCTGTAAG
CGGTAACATCCTCTTCCCTGTCCTCAGCGAGGACTGCACTACCACAGAGGAAGGAAATCAGCCTGGAAACATGCT
AAACTGCAGCCAGAACTCCAGCTCATCCTCAGTGTGGTGGCTGAAATCACCTGCATTTTCCAGTGGTTCTTCTGA
GGGGGACAGCCCTTGGTCCTATCTGAATTCCAGTGGGAGTTCTTGGGTTTCATTGCCGGGAAAGATGAGGAAAGA
GATCCTTGAGGCTCGCACCTTGCAACCTGATGACTTTGAAAAGCTGTTGGCAGGAGTGAGGCATGATTGGCTGTT
TCAGAGACTAGAGAATACGGGGGTTTTTAAGCCCAGTCAACTCCACCGAGCACATAGTGCTCTTTTGTTAAAATA
TTCAAAAAAATCTGAACTGTGGACGGCCCAGGAAACTATTGTCTATTTGGGGGACTACTTGACTGTGAAGAAAAA
AGGCAGACAAAGAAATGCTTTTTGGGTTCATCATCTTCATCAAGAAGAAATTCTGGGGAGGTATGTTGGGAAAGA
CTATAAGGAGCAGAAGGGGCTCTGGCACCACTTCACTGATGTGGAGCGGCAGATGACCGCACAGCACTATGTGAC
AGAATTTAACAAGAGACTCTATGAACAAAACATTCCCACCCAGATATTCTACATCCCATCCACAATACTACTGAT
TTTAGAGGACAAGACAATAAAGGGATGTATCAGTGTGGAGCCTTACATACTGGGAGAATTTGTAAAATTGTCAAA
TAACACGAAAGTGGTGAAAACAGAATACAAAGCCACAGAATATGGCTTGGCCTATGGCCATTTTTCTTATGAGTT
TTCTAATCATAGAGATGTTGTGGTCGATTTACAAGGTTGGGTAACCGGTAATGGAAAAGGACTCATCTACCTCAC
AGATCCCCAGATTCACTCCGTTGATCAGAAAGTTTTCACTACCAATTTTGGAAAGAGAGGAATTTTTTACTTCTT
TAATAACCAGCATGTGGAATGTAATGAAATCTGCCATCGTCTTTCTTTGACTAGACCTTCAATGGAGAAACCATG
CACATAGAATACGGCACAGTCTGGTCCTTTGGGGCTTGGGCAGGGCCGTGACACAGGTTCTGGCCAATGATTTGC
AAGAGGAATTGATCAGTATCACTTTAAGCCCTGCATTTAATTGGCAGCACAAGATCCTGCAGAGCCTCTTTCCCT
CTGCCACAGTTATCAAGAATGGGTCAGGAGACCGCTGCTTCTGGGCATAAGTCCTGCAAGGAAAGCAACATGGAA
AACAGCCCCAACTCACCCATGAGGGATGAAAAGCACTGTTGAGAAAGGCATGTGTTGTTTAAGCCATTGAGATTT
TAGAGCTTTTTGTCACTATCTGTCAAGACTGATACTACTGGGGCTTTTCCTATTGATTTGGGAGTTCTTTACATA
TTAAAAAAATGTGAGCCTT

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FIGURE 4940

GCAGTGATATAAATATATTTTTTTCTTAGACTAAATATGAGCTGACTATCTCTTTTGATGTGTGTACATAGGTGT
GAGTGTGTGTGTATGCGTGCCTGTCTGTGTGCGGGTGTGTGTATGTGCATAGCCTCATGCTTAGGACTACCCATG
AATGTTGTGGAATGCTACACCTGGAGAGTTCTGGTTTTCCACCAGTTTCAAGATGAAGAACTACATGATACAGTG
GACCTGGAGACCATCCCCTTGGAAAGACAACCCAGAGATGTTCAGCATCCTGTATCTACACGCATCCTGTATCTA
CACGTGTATTTTGTAGCTGTCACACTAACCTTAATAAGAATTCTACAGCTTTGGACAGAGGCATTTTCACCTTAA

TGGTGAAGTAATTTAAAATATAAATCCATTCAGGTGACAACCCATCATCAAAATTACAAATTTTCTGATTGAACT
CATCTGAATCATCAGTTCCTTGATGGAGAGAGAGAAGGAGATGGAATGTGTCTGGTAACCCCAAATGGAGTACAA
GTAGCCTTTGTTTTCCTGCATAAATGGACTTGTTGAATGCGAACGAATATATGCAATTCATATACTTTTGGAGAT
GAACGTAGATATGTGTGTCAGCTTTGAGATGGTGTGTCCTGGATTAATACTTTGTCTCCCAATATCACAGAAAAA
TACATGCCAGTGACTCTTGAGGTTAAGGTAGTTGGGATGAAATGGCCTCAGGCAATTTCACATTCCCTAATTACC
TGGAAAGTTCTACAGTAATTAATATGCAGCTAACTCCTGTTGCCCTCACAAGAGCATCAGCCTTCTAGAATCGGA
GCTCCGGAGTGTGAAGATTCAGTATTGATATGATATGTATACCAAACTCCAGCCAACTTACTGCCATTTTTCATA
ATCTGAGTGGCTGCCTTGCTTATCCTAAGCTGTGGTTGCAGAAACCGTGGCCATTTATATAAGCTATAACATCAA
ATCAGGGAAAAATGAGGAAAAAAAATAGATTCTGAACCATTTATTGTTGAATAAGTAGAGAAAATCATCAATAAA
TATTTATTACATTCTGACAGGGTGTGTGGCATTGTGTTCTATGCCAGAGTGACAAAGTTGATTCACCCCTTTTTG
GGGACCTTAATATATTTTTTAAGGGATGTGCCTATGCATTGATGCCTGAAAAATATGTATAAAGAAATGAGGTTG
ACTCTTCTGAGCAGTTCATCTTTTCCAGAGGTAAGGGTAGGAGGCCAACTTCAGGATCTGGGTCTAAGCCCGTGG
GCAAGCCCTGGCCGAGTGAGCTCCAATGCTAACTCATGTGCCGATCTCTAGAGCAGTGGGAAACTACCCCGCTGC
ACCAAATCAAGTAGCTTCACCTTGTGTATGCAGGCCCCAAGTTATTTTTTAGCAATCTTACGAGTGAAATGTTCT
GGTGGGTTGAAAAACGTTCTTATTTTAAAGAAAGGTTGTGCTCGCTACACTGCTGGTGTGTGCGTTCTGAGACCT
CTTGTATTCAATCTGTGAAGGATATGTGTATTAATCCGTACACCCGTATAGCCTCAATATTTGTCTGAAGACACT
TAAATTCTGACCCATAAAGGAAAGTTCTAGAAGCAATATTTTCACTTATTTAACATTCTCCAAACAACATCAAGC
ATTGATACACACTGAAGAGTGCGTTTATTTTTTGTATCACTCTAAGTATGTTGGAATATGCAAGGACTGTGGTTC
AAATTAGAATGTATAAGGCATATTATAATTTAGTTCATACTGAAAAAGAAATTAACAGAACATTGTTCGGTTCAC
ACGTTCCAAAATTTGAGTGATTTCTGGAGTTAGACATAGATTTTCTATTTTGTTTTAATTTGTCAAGGTATTTTT
CTTCCCTTCATGAACTTTAGGTACACATAACTTATGTCATTTATTTATGGTCTTTTATACCTAGTTTGTAAAATT
GTAAAATAGCAAACTAAATGCAAAGAGTTTGCATTTGAAAATAATAAAGTAGTTACCGTATACAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4941

MCVHRCECVCMRACLCAGVCMCIASCLGLPMNVVECYTWRVLVFHQFQDEELHDTVDLETIPLERQPRDVQHPVS
TRILYLHVYFVAVTLTLIRILQLWTEAFSP

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FIGURE 4942

AACACAAAGTCCAGGGTTGGAGCAGGAGCAGGGGAGGGACAATGGAAGCTGCCCCGTCCAGGTTCATGTTCCTCT
TATTTCTCCTCACGTGTGAGCTGGCTGCAGAAGTTGCTGCAGAAGTTGAGAAATCCTCAGATGGTCCTGGTGCTG
CCCAGGAACCCACGTGGCTCACAGATGTCCCAGCTGCCATGGAATTCATTGCTGCCACTGAGGTGGCTGTCATAG
GCTTCTTCCAGGATTTAGAAATACCAGCGGTGCCCATACTCCATAGCATGGTGCAAAAATTCCCAGGCGTGTCAT
TTGGGATCAGCACTGATTCTGAGGTTCTGACACACTACAACATCACTGGGAACACCATCTGCCTCTTTCGCCTGG
TAGACAATGAACAACTGAATTTAGAGGACGAAGACATTGAAAGCATTGATGCCACCAAATTGAGCCGTTTCATTG
AGATCAACAGCCTCCACATGGTGACAGAGTACAACCCTGTGACTGTGATTGGGTTATTCAACAGCGTAATTCAGA
TTCATCTCCTCCTGATAATGAACAAGGCCTCCCCAGAGTATGAAGAGAACATGCACAGATACCAGAAGGCAGCCA
AGCTCTTCCAGGGGAAGATTCTCTTTATTCTGGTGGACAGTGGTATGAAAGAAAATGGGAAGGTGATATCATTTT
TCAAACTAAAGGAGTCTCAACTGCCAGCTTTGGCAATTTACCAGACTCTAGATGACGAGTGGGATACACTGCCCA
CAGCAGAAGTTTCCGTAGAGCATGTGCAAAACTTTTGTGATGGATTCCTAAGTGGAAAATTGTTGAAAGAAAATC
GTGAATCAGAAGGAAAGACTCCAAAGGTGGAACTCTGACTTCTCCTTGGAACTACATATGGCCAAGTATCTACTT
TATGCAAAGTAAAAAGGCACAACTCAAATCTCAGAGACACTAAACAACAGGATCACTAGGCCTGCCAACCACACA
CACACGCACGTGCACACACGCACGCACGCGTGCACACACACACGCGCACACACACACGCACACACACAGAGCTTC
ATTTCCTGTCTTAAAATCTCGTTTTCTCTTCTTCCTTCTTTTAAATTTCATATCCTCACTCCCTATCCAATTTCC
TTCTTATCGTGCATTCATACTCTGTAAGCCCATCTGTAACACACCTAGATCAAGGCTTTAAGAGACTCACTGTGA
TGCCTCTATGAAAGAGAGGCATTCCTAGAGAAAGATTGTTCCAATTTGTCATTTAATATCAAGTTTGTATACTGC
ACATGACTTACACACAACATAGTTCCTGCTCTTTTAAGGTTACCTAAGGGTTGAAACTCTACCTTCTTTCATAAG
CACATGTCCGTCTCTGATTCAGGATCAAAAACCAAAGGATGGTTTTAAACACCTTTGTGAAATTGTCTTTTTGCC
AGAAGTTAAAGGCTGTCTCCAAGTCCCTGAACTCAGCAGAAATAGACCATGTGAAAACTCCATGCTTGGTTAGCA
TCTCCAACTCCCTATGTAAATCAACAACCTGCATAATAAATAAAAGGCAATCATGTTATAGG

FIGURE 4943

MEAAPSRFMFLLFLLTCELAAEVAAEVEKSSDGPGAAQEPTWLTDVPAAMEFIAATEVAVIGFFQDLEIPAVPIL
HSMVQKFPGVSFGISTDSEVLTHYNITGNTICLFRLVDNEQLNLEDEDIESIDATKLSRFIEINSLHMVTEYNPV
TVIGLFNSVIQIHLLLIMNKASPEYEENMHRYQKAAKLFQGKILFILVDSGMKENGKVISFFKLKESQLPALAIY
QTLDDEWDTLPTAEVSVEHVQNFCDGFLSGKLLKENRESEGKTPKVEL

FIGURE 4944A

CTCGAGGCTCCGCACCAGCCGCGCTTCTGTCCGCCTGCAGGGCATTCCAGAAAGATGAGGATATTTGCTGTCTTT
ATATTCATGACCTACTGGCATTTGCTGAACGCATTTACTGTCACGGTTCCCAAGGACCTATATGTGGTAGAGTAT
GGTAGCAATATGACAATTGAATGCAAATTCCCAGTAGAAAAACAATTAGACCTGGCTGCACTAATTGTCTATTGG
GAAATGGAGGATAAGAACATTATTCAATTTGTGCATGGAGAGGAAGACCTGAAGGTTCAGCATAGTAGCTACAGA
CAGAGGGCCCGGCTGTTGAAGGACCAGCTCTCCCTGGGAAATGCTGCACTTCAGATCACAGATGTGAAATTGCAG
GATGCAGGGGTGTACCGCTGCATGATCAGCTATGGTGGTGCCGACTACAAGCGAATTACTGTGAAAGTCAATGCC
CCATACAACAAAATCAACCAAAGAATTTTGGTTGTGGATCCAGTCACCTCTGAACATGAACTGACATGTCAGGCT
GAGGGCTACCCCAAGGCCGAAGTCATCTGGACAAGCAGTGACCATCAAGTCCTGAGTGGTAAGACCACCACCACC
AATTCCAAGAGAGAGGAGAAGCTTTTCAATGTGACCAGCACACTGAGAATCAACACAACAACTAATGAGATTTTC
TACTGCACTTTTAGGAGATTAGATCCTGAGGAAAACCATACAGCTGAATTGGTCATCCCAGAACTACCTCTGGCA
CATCCTCCAAATGAAAGGACTCACTTGGTAATTCTGGGAGCCATCTTATTATGCCTTGGTGTAGCACTGACATTC
ATCTTCCGTTTAAGAAAAGGGAGAATGATGGATGTGAAAAAATGTGGCATCCAAGATACAAACTCAAAGAAGCAA
AGTGATACACATTTGGAGGAGACG**TAA**TCCAGCATTGGAACTTCTGATCTTCAAGCAGGGATTCTCAACCTGTGG
TTTAGGGGTTCATCGGGGCTGAGCGTGACAAGAGGAAGGAATGGACCCGTGGGATGCAGGCAATGTGGGACTTAA
AAGGCCCAAGCACTGAAAATGGAACCTGGCGAAAGCAGAGGAGGAGAATGAAGAAAGATGGAGTCAAACAGGGAG
CCTGGAGGGAGACCTTGATACTTTCAAATGCCTGAGGGGCTCATCGACGCCTGTGACAGGGAGAAAGGATACTTC
TGAACAAGGAGCCTCCAAGCAAATCATCCATTGCTCATCCTAGGAAGACGGGTTGAGAATCCCTAATTTGAGGGT
CAGTTCCTGCAGAAGTGCCCTTTGCCTCCACTCAATGCCTCAATTTCTTTTCTGCATGACTGAGAGTCTCAGTGT
TGGAACGGGACAGTATTTATGTATGAGTTTTTCCTATTTATTTTGAGTCTGTGAGGTCTTCTTGTCATGTGAGTG
TGGTTGTGAATGATTTCTTTTGAAGATATATTGTAGTAGATGTTACAATTTTGTCGCCAAACTAAACTTGCTGCT
TAATGATTTGCTCACATCTAGTAAAACATGGAGTATTTGTAAGGTGCTTGGTCTCCTCTATAACTACAAGTATAC
ATTGGAAGCATAAAGATCAAACCGTTGGTTGCATAGGATGTCACCTTTATTTAACCCATTAATACTCTGGTTGAC
CTAATCTTATTCTCAGACCTCAAGTGTCTGTGCAGTATCTGTTCCATTTAAATATCAGCTTTACAATTATGTGGT
AGCCTACACACATAATCTCATTTCATCGCTGTAACCACCCTGTTGTGATAACCACTATTATTTTACCCATCGTAC
AGCTGAGGAAGCAAACAGATTAAGTAACTTGCCCAAACCAGTAAATAGCAGACCTCAGACTGCCACCCACTGTCC
TTTTATAATACAATTTACAGCTATATTTTACTTTAAGCAATTCTTTTATTCAAAAACCATTTATTAAGTGCCCTT
GCAATATCAATCGCTGTGCCAGGGCATTGAATCTACAGATGTGAGGCAAGACAAAGTACCTGTCCTCAAGGAGCT
CATAGTATAATGAGGAGATTAACAAGAAAATGTATTATTACAATTTAGTCCAGTGTCATAGCATAAGGATGATGC
GAGGGGAAAACCCGAGCAGTGTTGCCAAGAGGAGGAAATAGGCCAATGTGGTCTGGGACGGTTGGATATACTTAA
ACATCTTAATAATCAGAGTAATTTTCATTTACAAAGAGAGGTCGGTACTTAAAATAACCCTGAAAAATAACACTG
GAATTCCTTTTCTAGCATTATATTTATTCCTGATTTGCCTTTGCCATATAATCTAATGCTTGTTTATATAGTGTC
TGGTATTGTTTAACAGTTCTGTCTTTTCTATTTAAATGCCACTAAATTTTAAATTCATACCTTTCCATGATTCAA
AATTCAAAAGATCCCATGGGAGATGGTTGGAAAATCTCCACTTCATCCTCCAAGCCATTCAAGTTTCCTTTCCAG
AAGCAACTGCTACTGCCTTTCATTCATATGTTCTTCTAAAGATAGTCTACATTTGGAAATGTATGTTAAAAGCAC
GTATTTTTAAAATTTTTTTCCTAAATAGTAACACATTGTATGTCTGCTGTGTACTTTGCTATTTTTATTTATTTT
AGTGTTTCTTATATAGCAGATGGAATGAATTTGAAGTTCCCAGGGCTGAGGATCCATGCCTTCTTTGTTTCTAAG
TTATCTTTCCCATAGCTTTTCATTATCTTTCATATGATCCAGTATATGTTAAATATGTCCTACATATACATTTAG
ACAACCACCATTTGTTAAGTATTTGCTCTAGGACAGAGTTTGGATTTGTTTATGTTTGCTCAAAAGGAGACCCAT
GGGCTCTCCAGGGTGCACTGAGTCAATCTAGTCCTAAAAAGCAATCTTATTATTAACTCTGTATGACAGAATCAT
GTCTGGAACTTTTGTTTTCTGCTTTCTGTCAAGTATAAACTTCACTTTGATGCTGTACTTGCAAAATCACATTTT
CTTTCTGGAAATTCCGGCAGTGTACCTTGACTGCTAGCTACCCTGTGCCAGAAAAGCCTCATTCGTTGTGCTTGA
ACCCTTGAATGCCACCAGCTGTCATCACTACACAGCCCTCCTAAGAGGCTTCCTGGAGGTTTCGAGATTCAGATG
CCCTGGGAGATCCCAGAGTTTCCTTTCCCTCTTGGCCATATTCTGGTGTCAATGACAAGGAGTACCTTGGCTTTG
CCACATGTCAAGGCTGAAGAAACAGTGTCTCCAACAGAGCTCCTTGTGTTATCTGTTTGTACATGTGCATTTGTA
CAGTAATTGGTGTGACAGTGTTCTTTGTGTGAATTACAGGCAAGAATTGTGGCTGAGCAAGGCACATAGTCTACT
CAGTCTATTCCTAAGTCCTAACTCCTCCTTGTGGTGTTGGATTTGTAAGGCACTTTATCCCTTTTGTCTCATGTT
TCATCGTAAATGGCATAGGCAGAGATGATACCTAATTCTGCATTTGATTGTCACTTTTTGTACCTGCATTAATTT
AATAAAATATTCTTATTTATTTTGTTACTTGGTACACCAGCATGTCCATTTTCTTGTTTATTTTGTGTTTAATAA

FIGURE 4944B

AATGTTCAGTTTAACATCCCAGTGGAGAAAGTTAAAAAA

FIGURE 4945

LEAPHQPRFCPPAGHSRKMRIFAVFIFMTYWHLLNAFTVTVPKDLYVVEYGSNMTIECKFPVEKQLDLAALIVYW
EMEDKNIIQFVHGEEDLKVQHSSYRQRARLLKDQLSLGNAALQITDVKLQDAGVYRCMISYGGADYKRITVKVNA
PYNKINQRILVVDPVTSEHELTCQAEGYPKAEVIWTSSDHQVLSGKTTTTNSKREEKLFNVTSTLRINTTTNEIF
YCTFRRLDPEENHTAELVIPELPLAHPPNERTHLVILGAILLCLGVALTFIFRLRKGRMMDVKKCGIQDTNSKKQ
SDTHLEET

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FIGURE 4946A

AGTGGAGCCTGCACCGCCCGCTCCCGGCACCCCCGGACACCGCCCCGGTCTCACGCATGCGCAGAGGGCCGATCC
AGTTCTTTTCGGCTGGAATGGGGAATTTGTGAGGTCAAGGATGCATTCCAGGAAAGTTCTATAAAAATATACCAT
CAACTCCAACCTGATATTTGACCTAGCCATGGAAAACCTCATTGGCTCCTCACTGGATCAGACCATAAAAATGAT
CCAGGAATGAAAATCTAAGATAAATTCCCACCACTTCAAGATGTTCTTATACAAGTCAACAGTCTAGCAGATCAG
CCAGTCTCTTTCATCATCAAGCAGACATACTCAAGAAAGAGGAATAGTGAAGTGAAATATACAGAAGCATGTTCA
AGTTCATCTGTTGAATCTGGAATTGTGAATAGTGACAATATTGAGAAAAATACTGACTCCAATCTGCAAACTTCA
ACTTCATTTGAGCCACATTTCAAAAAGAAAAAAGTAAGTGCAAGACGTTATAATGAAGATTACTTAAAATATGGC
TTTATCAAATGTGAAAAACCCTTTGAAAATGACAGACCTCAGTGTGTTATTTGTAATAATATTCTTGCGAATGAA
AGCTTAAAACCTTCGAAATTAAAAAGGCACTTAGAAACTCAGCATGCTGAACTTATTGATAAGCCTCTTGAATAT
TTTCAAAGAAAGAAAAAAGACATAAAGTTATCAACACAATTTCTTAGTTGTTCTACTGCTGTTAGTGAGAAAGCC
TTATTATCATCATATTTAGTTGCATATCGTGTGGCAAAAGAGAAAATAGCTAACACAGCTGCTGAAAAAATTATT
CTTCCAGCATGTTTGGATATGGTGCGTACAATATTTGATGATAAATCAGCTGATAAATTAAAAACTATACCTAAT
GATAACACAGTATCTCTTCGAATTTGTACTATTGCAGAACATTTAGAAACAATGCTTATTACTCGTTTACAGTCT
GGTATAGATTTTGCAATCCAGCTTGATGAAAGCACTGATATTGGAAGCTGCACAACACTTTTAGTTTATGTCAGA
TATGCGTGGCAAGATGATTTTTTGGAGGATTTTTTGTGTTTTTTAAATTTAACCTCACACCTAAGTGGATTAGAT
ATTTTTACAGAATTAGAAAGGCGCATAGTTGGCCAATATAAATTAAACTGGAAAAACTGTAAAGGAATTACAAGT
GATGGCACAGCAACCATGACTGGAAAACATAGCAGAGTAATTAAAAAATTACTAGAAGTTACTAATAATGGTGCT
GTGTGGAATCATTGTTTTATACATCGTGAAGGTTTAGCATCCAGAGAAATTCCACAGAATCTCATGGAAGTATTG
AAAAATGCAGTGAAAGTTGTTAATTTTATTAAAGGAAGCTCATTGAATAGCCGGCTTCTTGAAACATTTTGTTCA
GAGATTGGAACTAATCATACCCACTTACTATATCATACCAAAATTCGTTGGTTGTCTCAAGGGAAAATACTAAGC
AGGGTTTATGAGCTCAGGAATGAGATTCACTTTTTTCTCATTGAAAAAAAATCTCATTTGGCAAGTATTTTTGAA
GATGATACTTGGGTAACAAAATTGGCATATTTAACTGATATTTTTAGCATTCTTAATGAACTGAGTTTAAAACTA
CAGGGGAAAAACAGTGATGTATTCCAACATGTTGAACGTATCCAGGGATTTCGAAAGACATTATTGTTATGGCAA
GTAAGACTTAAAAGTAATCGTCCTAGCTATTACATGTTTCCAAGATTTTTGCAGCATATTGAAGAGAATATTATT
AATGAAAACATTTTGAAAGAAATAAAATTAGAGATATTGTTGCATCTCACTTCTCTGTCTCAAACTTTTAACCAT
TTCTTTCCAGAAGAAAAATTTGAAACATTAAGGGAAAACAGTTGGGTAAAAGATCCATTTGCTTTTCGAAACCCT
GAATCAATAATTGAGCTAAACTTGGTGCCTGAAGAAGAGAATGAATTATTGCAGCTTAGTTCTTCATATACATTG
AAGAATGATTATGAAACCTTAAGTTTATCAGCATTTTGGATGAAGGTAAAGGAAGACTTTCCATTGTTAAGTAGA
AAGAGTGTCCTGCTATTGCTACCATTCACAACAACTAGTTTGTGTGAACTAGGGTTTTCCATCTTAACGCAGTTA
AAAACAAAGGAAAGAAATGGGCTGAATTGTGCAGCAGTTATGCGGGTAGCATTATCTTCCTGTGTTCCAGACTGG
AATGAACTTATGAACAGGCAAGCACACCCATCATAGTAAATAAAAATCTTACCTAGCTTTTGTCTTTGTATTTCT
TATTTTGTAGTATTTTTCTATGTTATATTTAAATGGTACTATAATACTGTGATACTTTTGTTATGTTTTAATTTT
TGTTATATTTAATAAAATTATTTTATGTTCATTGAACAAAAATTTAATGAATTTCTGTTAGAGGCCAGGAACTAT
TCTAGAGACATTTGGGATACAAAAGTGAACAAAACAGGTAATTCCCTAGTAGAGTTTATATCCTGGCAAGGAGAA
ATTGACAATAAACCTAATAAATAAGGTTTATAATATTTAGAAGCTATTAAGTGCTATGGAAAGAGTAGTAAGAAG
GAAGGTCAGGGAAGTACTGGGGAACCAAACCATGAAGGGTTCTGTAGACCATTATTGGGCCTCTGGCTTTTGTCA
GTGGACTAGAGAACAGTTGAAGGGTTTAAGCGAAGGAGAGAAATGATCTGAGCTAGGTTTTAAAAGACACTCTGG
TCACTATTTTAAATTCTTAGGGTAAGTCTGAATTAAATGTTACTTTCCCCTCANNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
AACCACCCTAGGGTAAATCCTCCATTATTCCTTTATTTCTTTGTTTTCCTTGTAGTATATAATTTGTAATAATTT
TGATTACTGATTGTCATTCTGCCACCCTGGAGTATATAATTTTTAATTATCTGATTACTGTTATTCTTCCATAGT
AGGGGAGGTGATATCCATTTGCCTGATACATAGTATGTGTTCAATACACATTTGCTAAAGAATAAATGAATCAAT
AATACCTAACATCTCTAATTTGCAGTCATTCCCAAGAGTAATTATTAAATATGTGGCAAATTTCTTTGCCTTTTT
ACTTTTAAAAATCTAATTTTGACATAACTGCTGTAACCATCCAGAAACGGCATTGATGTTGCTTCACGTTGCTGA
TGCTTAAGCAATGTATATTGTGTAATATACAATGTAGTCTTCAAACTAATTTCAACTTCTGCCTTTCTGTGTACT

FIGURE 4946B

CCCTTATCCCACTGGGTGATATTATTTGGCATGGTCATTGTCATTAAAATCATACAGGATAGTAATTCCTTTCCA
TCTGCTACCATGCCTAGCCTTATTTAATTTTTCAGATTTTCTGTTCTATTGAAGGTAATTGATTTTTTCTTTTTT
TTTAATGCTTGAAATAAAGTGTTG

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FIGURE 4947

MVRTIFDDKSADKLKTIPNDNTVSLRICTIAEHLETMLITRLQSGIDFAIQLDESTDIGSCTTLLVYVRYAWQDD
FLEDFLCFLNLTSHLSGLDIFTELERRIVGQYKLNWKNCKGITSDGTATMTGKHSRVIKKLLEVTNNGAVWNHCF
IHREGLASREIPQNLMEVLKNAVKVVNFIKGSSLNSRLLETFCSEIGTNHTHLLYHTKIRWLSQGKILSRVYELR
NEIHFFLIEKKSHLASIFEDDTWVTKLAYLTDIFSILNELSLKLQGKNSDVFQHVERIQGFRKTLLLWQVRLKSN
RPSYYMFPRFLQHIEENIINENILKEIKLEILLHLTSLSQTFNHFFPEEKFETLRENSWVKDPFAFRNPESIIEL
NLVPEEENELLQLSSSYTLKNDYETLSLSAFWMKVKEDFPLLSRKSVLLLLPFTTTSLCELGFSILTQLKTKERN
GLNCAAVMRVALSSCVPDWNELMNRQAHPS

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FIGURE 4948

GCGGGCGCGAGGCGGCGGCGGAGGCCCGAGCCCGGCCCAGCCTCGTCCCGCCCGGAGCCCGCCTGGCTGCTACCC
CGACCCCGGCTCCGGTCCCGTCCTGTCCCGGCGCGCCGCGGCCTCGCCCCGGCCCCCGCTCGGCGCCTCCCGAGG
GAGCGGCGCTGCCGGCCGAGAGCGCAGGCCCGGCC**ATG**ACCGACTTCAAATTGGGTATCGTGCGGCTCGGCCGGG
TGGCCGGGAAGACCAAATACACGCTGATCGATGAGCAGGACATCCCGCTGGTGGAGAGCTACTCCTTTGAGGCCC
GAATGGAAGTGGATGCAGATGGAAATGGTGCTAAGATATTTGCCTATGCCTTTGACAAGAACCGAGGAAGGGGCT
CTGGGAGACTCCTTCATGAGCTGCTGTGGGAGCGGCACCGGGGGGGGCGTGGCCCCGGGCTTCCAGGTGGTGCACC
TCAACGCTGTGACCGTGGACAATCGCCTGGACAACCTGCAACTGGTGCCGTGGGGCTGGCGGCCCAAGGCTGAAG
AGACCTCCAGCAAGCAGAGGGAGCAAAGCTTGTATTGGCTTGCAATTCAGCAGCTGCCTACAGACCCTATAGAAG
AACAGTTTCCTGTCCTAAATGTGACCCGGTATTATAATGCCAACGGGGATGTAGTGGAAGAGGAGGAGAACTCTT
GCACCTACTATGAGTGCCACTACCCTCCCTGCACAGTGATTGAGAAGCAGCTCCGGGAGTTCAACATCTGTGGGC
GCTGCCAGGTGGCCCGGTACTGCGGCTCCCAGTGCCAGCAGAAGGACTGGCCTGCCCACAAGAAGCACTGTCGGG
AGAGGAAGCGTCCCTTCCAGCATGAGCTTGAGCCAGAGCGA**TGA**CGGGCAGGGGAGCCACACATACTCACAGCCC
CCGGGCTCTACCCTGGGCACAGCAGAGACAGACTGGTGGTTGAACCTGGAGGTGCCAAAAAAGCCAGCTGCGGGC
CCAGGACAGCTGCCGTGAGACTCCCGATGTCACAGGCAGTCTGTGTGGTTACAGCGCCCCTCAGTGTTCATCTCC
AGCAGAGACAACGGAGGAGGCTCCCACCAGGACGGTTCTCATTATTTATATGTTAATATGTTTGTAAACTCATGT
ACAGTTTTTTTTGGGGGGGAGGCAATGGGAAGGGTAGAAATTACAAATAGAATCATTTGCAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 4949

MTDFKLGIVRLGRVAGKTKYTLIDEQDIPLVESYSFEARMEVDADGNGAKIFAYAFDKNRGRGSGRLLHELLWER
HRGGVAPGFQVVHLNAVTVDNRLDNLQLVPWGWRPKAEETSSKQREQSLYWLAIQQLPTDPIEEQFPVLNVTRYY
NANGDVVEEEENSCTYYECHYPPCTVIEKQLREFNICGRCQVARYCGSQCQQKDWPAHKKHCRERKRPFQHELEP
ER

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FIGURE 4950

AAGCAATTAACAAAGAAGGAACATTTACAGTTCAGTTTTATGATGGAGTAATTCAGTTGTTTAAAAAGAATGCAC
ATTAAAGCCATGCCCGAGGATGCTAAGGGGCAGGTGAAATCCCAGCATCCACTAAGCTGGTGTTGTCCTATCGAC
CCAGCTGGATCGTGTAACCAGTCTATGGGAAGTGAGGATTGGATAGCTTTAGTCAAAGCAGCTGCTGCAGCTGCA
GCCAAGAACAAAACAGGGAGTAAACCTCGAACCAGCGCTAACAGCAATAAAGATAAGGATAAAGATGAGAGAAAG
TGGTTTAAAGTACCTTCAAAGAAGGAGGAAACTTCAACTTGTATAGCCACACCAGACGTAGAGAAGAAGGAAGAT
CTGCCTACATCTAGTGAAACATTTGGACTTCATGTAGAGAACGTTCCAAAGATGGTCTTTCCACAGCCAGAGAGC
ACATTATCAAACAAGAGGAAAAATAATCAAGGCAACTCGTTTCAGGCAAAGAGAGCTCGACTTAACAAGATTACT
GGTTTGTTGGCATCCAAAGCTGTTGGGGTTGATGGTGCTGAAAAAAAGGAAGACTACAATGAAACAGCTCCAATG
CTGGAGCAGGCGATTTCACCTAAACCTCAAAGTCAGAAAAAAAAATGAAGCTGACATTAGCAGTTCTGCCAACACT
CAGAAACCTGCACTGTTATCCTCAACTTTGTCTTCAGGGAAGGCTCGCAGCAAGAAATGCAAACATGAATCTGGA
GATTCTTCTGGGTGTATAAAACCCCCTAAATCACCACTTTCCCCAGAATTAATACAAGTCGAGGATTTGACGCTT
GTATCTCAGCTTTCTTCTTCAGTGATAAATAAAACTAGTCCTCCACAGCCTGTGAATCCCCCTAGACCTTTCAAG
CATAGTGAGCGGAGAAGAAGATCTCAGCGTTTAGCCACCTTACCCATGCCTGATGATTCTGTAGAAAAGGTTTCT
TCTCCCTCTCCAGCCACTGATGGGAAAGTATTCTCCATCAGTTCTCAAAATCAGCAAGAATCTTCAGTACCAGAG
GTGCCTGATGTTGCACATTTGCCACTTGAGAAGCTGGGACCCTGTCTCCCTCTTGACTTAAGTCGTGGTTCAGAA
GTTACAGCACCGGTAGCCTCAGATTCCTCTTACCGTAATGAATGTCCCAGGGCAGAAAAAGAGGATACACAGATG
CTTCCAAATCCTTCTTCCAAAGCAATAGCTGATGGAAGAGGAGCTCCAGCAGCAGCAGGAATATCGAAAACAGAA
AAAAAAGTGAAATTGGAAGACAAAAGCTCAACAGCATTTGGTATCAGGAGTTGGGATTTCTCAGCACTGCTAATG
AAGATCCCCTCTTATAGTCCAATAAGCTTATCAGGACTTCCAGAGTCATGACATGAACAGTTTAATTGAACCCAT
CCACTCTGGGCAGGTGACTGGAATAGCTGATTAAAACATAAATGCTGCTTTTAGGTTAACCACAAAGGAACAACT
CAGGATCAGTCGTGATTGCTAAAGTATTCACTTTTATCTTTTAGGTAAGAGAAAAGAAAAAGATAAGGAAAGAAG
AGAGAAGAGAGACAAAGATCACTACAGACCAAAACAGAAGAAGAAGAGGCACCTCTGGTACTGAAGATTCCTGCT
GATTTTGAGAACTGGATGGAGAATACTTTCCCATCAGGGGCTGGAGAGGGAGAAGAAACCTTTTTCTACAGAATC
ATCAGGCATGGGTAAGGTGGCTAACGCTGAGATCTCTT

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FIGURE 4951

MHIKAMPEDAKGQVKSQHPLSWCCPIDPAGSCNQSMGSEDWIALVKAAAAAAAAKNKTGSKPRTSANSNKDKDKDE
RKWFKVPSKKEETSTCIATPDVEKKEDLPTSSETFGLHVENVPKMVFPQPESTLSNKRKNNQGNSFQAKRARLNK
ITGLLASKAVGVDGAEKKEDYNETAPMLEQAISPKPQSQKKNEADISSSANTQKPALLSSTLSSGKARSKKCKHE
SGDSSGCIKPPKSPLSPELIQVEDLTLVSQLSSSVINKTSPPQPVNPPRPFKHSERRRRSQRLATLPMPDDSVEK
VSSPSPATDGKVFSISSQNQQESSVPEVPDVAHLPLEKLGPCLPLDLSRGSEVTAPVASDSSYRNECPRAEKEDT
QMLPNPSSKAIADGRGAPAAAGISKTEKKVKLEDKSSTAFGIRSWDFSALLMKIPSYSPISLSGLPES

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FIGURE 4952

AGATTAGGAATTCATGTTGTGTTTACCATTTAGAAGCTGGGATTGCTTTTAAAGGTTTTTCTTTTTAAAATTGGC
ATGTTTTTGATTTATCATGTCTTTCTATTCAGATTATTGGGTATCAAAGATTAATGAGGACACCAGAATCTTGGT
TAAATAGACAAGTGGTATCATTACTGTTTGAGTCTTTTAATATTCTCCATACCTGCCACCAGTGAAAAAACTTGC
CNNNNNNNNNNNNNNNNNNNNNNNNNNNTATTATCAAACAATTTATTTTGGCTTTATTGAAAAAAGAGTATTTG
GTCTAAATGTGCCACCATAGGTGTTAAATTCTCCTATCTGCAATTGTCTTTATCCTATATTGTGTTCATTTCTTT
TCTTAATAATTTACTTTGTTGTGTGTTTCTACACTTTCATCCCTGTTTTTTATCTTGTATATCATCAGGAAATTG
TGATTTAATCATTAACATTGGTTTTTTTGTGTGTGTGGTAAAAATCAACACTAGGCTCATGGTACATATTTTTAT
TCTGTACATTTGCTTGTAACTATCAATTTGTAACTCTGTTTATCTACTACATGTGTATATATACTTAGAGCATTT
TCTCTAACACATTTTAATGTTAGTATTTTTTAAAAGGTCTGACCAGTCTAGCAAATTGTCAGTCCAACGTCATTA
CTTTAAATTAAGAAGCAGTCTTCTTCTGGTAAACCTTGTTGGTATTTGTAAAATAATTTTGAAGGTCTTAATTTC
TTCCTTTGTAAAAGGAAAAGGTTTTTTTTAAAGTTTTTAGGTTGGCATGGAGGCAGAAGTTGGTGATTACTTGAT
TTACAACAGATTTTTTCCAGATCATACAAAAGGCCATACAGTAAGTATAGAAGTAGGTATGGGGAGGGCTTACTA
ATATCAAATAGGCAAGGCCTTAGTGAGTGGGCAGGATACCACCTGAGAGTGGCCAGATCTGGGGAGGTTACTCTG
CTCTGGGTGCTCTCATTCATGAATCGACAAGGATACATTAGATTATTTTGAAACATTTTTTTAAGAAGCAGAATT
CTTTAATAATTCCTTCCTAGACATTGAATATACTTATAAAATTAAAGACTTGGGGAAGGAGACACTGAGAGACTT
GCCAGTTTGGTTCCTCATGAACAAAAGAGGACAGTTTGATAACTACCAGAATAGAATATCCCTAGTTTTAAAATA
GTGAGAATCTCTGAAGTTCATCAACATCTTAAGATGCACTTACTTGAAAGTTTGAGATTCTGTTTATCATTTGAA
AACACATTTTGCTTTAATTCTTTCTTTGACATGTTGTTTTTTCATATCAAGAAATATATGAACAAAATAATAACC
TTTTGACCCTGACCTTGCTGGGTGAATTAGCTCTGAAACACTCTCTACAACCAGTAATGCATTTGTCCCACATTT
CATTCTGATAGAAAATGAACACCATAGCACCAAACAAAAATCCGAGGCGTTAGATAATGTCTGGATTAAATAATT
TAAGACTCTCTAGGATTTTGGTTGTCATTTTTTATTTATAACAGACTTTAAGTCACTTTCTGTTGCCTCATAGGT
CACATTTTAGACAGGTTTGTGTCTGTTCCTTGCATCTGAATTCCTGATTGTAAAGACACCTATGAGGTCTCTTAG
TTTTTGTCATTCATTTTCTTGGTTTATCACCCCTCCCTTCTTTTTGTTGTTTTTCCCTGACTGTTAAGCAGTTTC
ATCTTTGCTTTTGTTAAATATTTGACAGCAGTTAGTTTGTGTTAAGCTCTTGAAACTTGTGATTGTACTTTCTGT
GTAGATATACATGTAATTATTTTTTATTTTTCAATCATAGATTCAAGCTTCCTTCTTTTTTACCACAAATCATTA
AAGTTATTTGTGTTTCCATATACCTGTGTCTTGTATAAAATTGGCTTATTCTGTGCTGTTGAATGAGGCTCAACA
TGACTTGGTGAGGAAGTCTATTAACTAACAAAAGCTTATCTTTTTTAACATAATGCTTTTTAATTAATTTTGAAT
AAAAATATTTCTAAAGTGTACTAGATACTTTATTACCTTAGATTATTCCGAATACAGTATAACTTTGATAGTTTG
GAATAGTCATTAAGAAACAATTACACACTGATTGCTTTGTGTCTCTAAAAGTGAGAGGCTGGTAGCTTTTCCACA
TTCTCATGGCTATTTTCTAGTTCTACTTGAATTTATAACTGTTTCCCTTTTTCCTTGACAGCTGCCACTTTGTAG
CTATTTTTCTGTCTCTGCTAATACTTTACCATATCTATCTCAATTGTTTTTTCTTTTGACTTGCTGAAAAATAGA
AACCAGATGGGAAGTATATTAGCATTATGATTGAAATAAGGGTAAATGAGCAATGTGTGAAGGTTTTCACTGACT
TCACCTAAAAGATAGTTTAGCTACTTGAATTTTAGTAAATAGAATTTTTCCTTTATTTCATCGGTCCCCCCACCT
TTTCTTTTTTTTTGCACCTGCCTTGTAAATTTAATAGTTAAGTGACCTCTGCCTAGAGGATGATATTTGGGGAGG
TTTGATGTTTCCTGTGGGAATAAGACGATTCACAGGTGAGAGTGGGGCCACATTAGCTGTTATTGTTTCCATGGG
TCAGTGTGGAAAATGGATTAATCATATTCTAAACGTTCATGGACCTCATTACAGTCACAATTGTCTATTCTGTTT
CCTACCCTGAACACATTAAAATGGTAGGAACTAATGCTTATTTAATTACTAAAAGCCACCATTTTCTTTGATAGA
TTGAGCTACAGATTGTAAACTTCATGTATTTCTTTATAAGTCAACCCTTTTCAAAGATATGCACATCCAGCTGAA
TGAATAAATAAATATTGAGAAGTT

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FIGURE 4953

IRNSCCVYHLEAGIAFKGFSF

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FIGURE 4954

GGCGCGCTCCGGCTCGGCCATGGAGCTGCCAGCTGTTGGCGAGCACGTCTTCGCGGTGGAGAGCATCGAGAAGAA
GCGGATCCGCAAGGGCAGAGTGGAGTATCTGGTGAAATGGAGAGGCTGGTCGCCCAAATATAACACGTGGGAACC
GGAGGAGAACATCCTGGACCCCAGGCTGCTGATCGCCTTCCAGAACAGGGAACGGCAGGAGCAGCTGATGGGATA
TCGGAAGAGAGGGCCGAAGCCCAAACCGCTAGTGGTGCAGGTGCCTACCTTTGCCCGTCGTTCCAATGTCCTGAC
CGGCCTCCAGGACTCCTCCACTGACAACCGTGCCAAGCTGGATTTGGGCGCGCAGGGGAAGGGCCAGGGGCATCA
GTACGAGCTCAACAGCAAGAAGCACCACCACCACGCCGTCGGCCTGAATCTCTCCCACGTGCGCAAGCGCTGCCT
CTCCGAGACCCACGGCGAGCGCGAGCCCTGCAAGAAGCGGCTGACTGCGCGCAGCATCAGCACCCCCACCTGCCT
GGGGGGCAGCCCAGCCGCTGAGCGCCCGGCCGACCTGCCACCAGCCGCCGCCCTCCCGCAGCCCGAGGTCATCCT
GCTAGACTCAGACCTGGATGAACCCATAGACTTGCGCTGCGTCAAGACGCGCAGCGAGGCCGGGGAGCCGCCCAG
CTCCCTCCAGGTGAAGCCCGAGACACCGGCGTCGGCGGCGGTGGCGGTGGCGGCGGCAGCGGCACCCACCACGAC
GGCGGAGAAGCCTCCAGCCGAGGCCCAGGACGAACCTGCAGAGTCGCTGAGCGAGTTCAAGCCCTTCTTTGGGAA
TATAATTATCACCGACGTCACCGCGAACTGCCTCACCGTTACTTTCAAGGAGTACGTGACGGTGTAGCCGGAGGG
CGTCGGAAGGGGAAGCGCCATTCCCGCGGGGGGGCGGGGAGCTGAGCACCTGGGGCCTCGGGGCGGGCTCCCCTC
TCGCCAACCCGCCAACCGCGAGAGACCCAGGCTGGCCCCCAGGGTGAGGACGCCCGGAGCGGAGGTAACCATGTT
CCCCCTGCGGCGGCTGTCAGACCTGGGCGGAGGCCCCTTCCACGCGGTGCCGGCGGGGCTCGCCCTCTCCTGCCC
TTCCCCGCTGGAGATGGACCCCCGGAACGGACAGGGCAGCTCTGCGCCCGGCCTCAGAGTTCTAGTATTATATTT
TAACCGTGCTAACTTGTCAAGTGCTGACTCTACTCCCGTTTGTACGTGGTGTTATTATTGAAATGTATTGTTTGA
GCTCAAAAGGCCCGACCACCCCCCTTCGGGCTGCTATATATATATTTATTTGTAGGTATTTATATATTGAAATAT
AAAAACCTAGATTTATGGAGTTTCCTCTAGATCATGTTATATTCTATATCAGACAAACTATTTTCTTTTGACCTT
TCTTCCCCTCCATCCAGTATTTCGGTTGATTTCATTTTCTCCCCTCTCTTCCCCTTCCACGAACTGCAATACCAG
TAACCTTGGTATATATTTTTTGATACTGTACACATGGATGTCTTGTTTCTATGTGCAAAAAAAAAAAAAAAAAAA
AAA

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FIGURE 4955

MELPAVGEHVFAVESIEKKRIRKGRVEYLVKWRGWSPKYNTWEPEENILDPRLLIAFQNRERQEQLMGYRKRGPK
PKPLVVQVPTFARRSNVLTGLQDSSTDNRAKLDLGAQGKGQGHQYELNSKKHHHHAVGLNLSHVRKRCLSETHGE
REPCKKRLTARSISTPTCLGGSPAAERPADLPPAAALPQPEVILLDSDLDEPIDLRCVKTRSEAGEPPSSLQVKP
ETPASAAVAVAAAAAPTTTAEKPPAEAQDEPAESLSEFKPFFGNIIITDVTANCLTVTFKEYVTV

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FIGURE 4956A

GTAGCGGAGGAGACGGTTTCAGGCCTCCGGTGCGGCTGCAATGCTGAGCTCCCGGGCCGAGGCGGCGATGACCGC
GGCCGACAGGGCCATCCAGCGCTTCCTGCGGACCGGGGCGGCCGTCAGATATAAAGTCATGAAGAACTGGGGAGT
TATAGGTGGAATTGCTGCTGCTCTTGCAGCAGGAATATATGTTATTTGGGGTCCCATTACAGAAAGAAAGAAGCG
TAGAAAAGGGCTTGTGCCTGGCCTTGTTAATTTAGGGAACACCTGCTTCATGAACTCCCTGCTACAAGGCCTGTC
TGCCTGTCCTGCTTTCATCAGGTGGCTGGAAGAGTTCACCTCCCAGTACTCCAGGGATCAGAAGGAGCCCCCCTC
ACACCAGTATTTATCCTTAACACTCTTGCACCTTCTGAAAGCCTTGTCCTGCCAAGAAGTTACTGATGATGAGGT
CTTAGATGCAAGCTGCTTGTTGGATGTCTTAAGAATGTACAGATGGCAGATCTCATCATTTGAAGAACAGGATGC
TCACGAATTATTCCATGTCATTACCTCGTCATTGGAAGATGAGCGAGACCGCCAGCCTCGGGTCACACATTTGTT
TGATGTGCATTCCCTGGAGCAGCAGTCAGAAATAACTCCCAAACAAATTACCTGCCGCACAAGAGGGTCACCTCA
CCCCACATCCAATCACTGGAAGTCTCAACATCCTTTTCATGGAAGACTCACTAGTAATATGGTCTGCAAACACTG
TGAACACCAGAGTCCTGTTCGATTTGATACCTTTGATAGCCTTTCACTAAGTATTCCAGCCGCCACATGGGGTCA
CCCATTGACCCTGGACCACTGCCTTCACCACTTCATCTCATCAGAATCAGTGCGGGATGTTGTGTGTGACAACTG
TACAAAGATTGAAGCCAAGGGAACGTTGAACGGGGAAAAGGTGGAACACCAGAGGACCACTTTTGTTAAACAGTT
AAAACTAGGGAAGCTCCCTCAGTGTCTCTGCATCCACCTACAGCGGCTGAGCTGGTCCAGCCACGGCACGCCTCT
GAAGCGGCATGAGCACGTGCAGTTCAATGAGTTCCTGATGATGGACATTTACAAGTACCACCTCCTTGGACATAA
ACCTAGTCAACACAACCCTAAACTGAACAAGAACCCAGGGCCTACACTGGAGCTGCAGGATGGGCCGGGAGCCCC
CACACCAGTTCTGAATCAGCCAGGGGCCCCCAAAACACAGATTTTTATGAATGGCGCCTGCTCCCCATCTTTATT
GCCAACGCTGTCAGCGCCGATGCCCTTCCCTCTCCCAGTTGTTCCCGACTACAGCTCCTCCACATACCTCTTCCG
GCTGATGGCAGTTGTCGTCCACCATGGAGACATGCACTCTGGACACTTTGTCACTTACCGACGGTCCCCACCTTC
TGCCAGGAACCCTCTCTCAACTAGCAATCAGTGGCTGTGGGTCTCCGATGACACTGTCCGCAAGGCCAGCCTGCA
GGAGGTCCTGTCCTCCAGCGCCTACCTGCTGTTCTACGAGCGCGTCCTTTCCAGGATGCAGCACCAGAGCCAGGA
GTGCAAGTCTGAAGAA**TGA**CTGTGCCCTCCTGCAAGGCTAGAGCTGATGGCACTGTCTGCACTGTCCAGGAAAAA
AGTAAAACTGTACTGTTGCGTGTGCAAGCGGCCCCACTAGAGCCTTCCAGCCTTCTGGTGTGTTCTAAGAGCAGG
CTCCACCTGGGAGCCAGCCCCAGTTCACACCAAACCAGGCTCCCTGAACAGTCCTGTTCATGTGTGTAGGTGGTT
CTGTTGTGTTAAGAAAGCATTCATTATGTCCGGAGTGTCTTTTTACTCATCTGATACAGGTAATTAAAAGAACTC
AGATTCTTGAAGCCACCGTTTTCATATTGTAATGTTAGGTGTTCTCAGAGGGGAGGTACCTTTGTCTAATCAACG
TTTCCACTTAGATCTTTTATTTTTAATAAGCAGGCCCATAAAAATTGTTGACAAGAATTAATGAAATTATTAAAG
GCAACAATTTAGAAGAAAAAGTGCCTTTCACTTTCGATTGCTTTTGTAGCACGTCCATTGTGAAATATTCCTTCC
AGGCTACTCAAAGGATAGCAAGAGAACAGGTAAATGATGCCTAAAGAACACCTTCCTTTTTCTATGCCTTTTCTA
ATCTTTCAATTCTTTCTATGGAGTAAAGGCTCATCTGCCAAATCTGCCCCCTGGGGAAACTCTTTCACTACTTTG
TCAGTTATAAGTGAAGAGCTTACTTGTTGCTTTTATCTTTTGTATATTGGACTGAGATGTAATTACACTGTATTA
TAAAACTCTGTGAATAGCCAGAACTGAGCTGGATCTTTGCAACACCTGATTCCTCTGCTCTGTGGAAAACTTTTT
CTTACACAAGGATCCACTGTGGACGGTTACTTTCATCTGTTTATTTATTGCCCATGCAGAGCTCTTAAGGTTTAC
AGGTGGGAGCTTGGGGCTGTATAAAAAAATAATCCCTGCCCTGAGTTGACACCTGGCTTAGGAAGGAAGGGCTGA
CTATGGGGCTGCANNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNGGTTAGATTTGATGACCACCAAA
GTTCAGCCCTTTTCACGAAAAGGAGAAAGCAGCTTTTGACTTTTTAAAAAACATATAACTACAGCTGGCATCTAG
TATTGTCATGTTGCTCTAGGTCCATATTCTGAATTTATTCATTTCCAATAGCCTAATACAAAAAGTATATATTGA
GCACTTTCTTCCCTTTTCAGGTAAGTCTCTGAATGCAGCCCAGGGCCAAAGGAATTTTGATGACACAGTAGTACC
TATGTTTTAAGCTATATTTTTAATTTAGAAAAATGGATACCAAATTCAAACCGACTCATCAGAGGTAAGATTTGG
AATCAGACCTTTCCAAAAGGTCATCTGAGGTAAGGCTAAGACCGCACTTCCTCTGCTGGGGGTGAGCTGGCAGAC
ACACCAAACAGTGCCTTGGCAGCAGCTCACAGTGCAGGAAGCCCAGGTGATCACTCTTCTGCTGGGCCCAGGCTG
CACCCTGAGGACTCAGTAACTCACTCTCAACAGAATATTCTGTGCAGGCTCTCCAGGCTCTGGGCGTCAGGGTGC
AAGGGGCAGCTTGAACTGTACGGTCCGTCCTGCACTCACCCGATGCAGACCTTGACTTTGATGTTGAAATGAACA
CACTTGTTTTACCCAAGTCTGGTGGAACAAATGCCCAATCATGTGACCTTAAAGTGTACTGCAAAGCTGTAGCTT
TAAGTAATTGCTGTTCTGCCACTGCTTACTCTGAAATCTACCATCAAAGAAAGATAGAGAAAAGGGGCTGAGCCT
TGGAATATATGGTTATAAGCAGATCTTTCTTTGGTCAGAGACCAGGGTTTGAGCCAAGGCTGTAAATGTGAACAA
TAGCTGTGCAAAGCCTTTTAACCTGACTTCTTCATTTTGTAAATTATTATGCATTAAGTAGCAGCCCAATAATCT
GATTTCTAGTTTTATTTTCAAAGTAAGTAGCTTCTTTTGGGAAAAACCTAAGTTAAACTAGTAGTTTTGCCATAA

FIGURE 4956B

TAACTGCTGATTTATGTATTTGCTAAAGGTACTTTTGTATCTGCTGTGTATTATAGCAATAAAATAATCATTTTG
TTAGAAAAAAAATC

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FIGURE 4957

VARRRFQASGAAAMLSSRAEAAMTAADRAIQRFLRTGAAVRYKVMKNWGVIGGIAAALAAGIYVIWGPITERKKR
RKGLVPGLVNLGNTCFMNSLLQGLSACPAFIRWLEEFTSQYSRDQKEPPSHQYLSLTLLHLLKALSCQEVTDDEV
LDASCLLDVLRMYRWQISSFEEQDAHELFHVITSSLEDERDRQPRVTHLFDVHSLEQQSEITPKQITCRTRGSPH
PTSNHWKSQHPFHGRLTSNMVCKHCEHQSPVRFDTFDSLSLSIPAATWGHPLTLDHCLHHFISSESVRDVVCDNC
TKIEAKGTLNGEKVEHQRTTFVKQLKLGKLPQCLCIHLQRLSWSSHGTPLKRHEHVQFNEFLMMDIYKYHLLGHK
PSQHNPKLNKNPGPTLELQDGPGAPTPVLNQPGAPKTQIFMNGACSPSLLPTLSAPMPFPLPVVPDYSSSTYLFR
LMAVVVHHGDMHSGHFVTYRRSPPSARNPLSTSNQWLWVSDDTVRKASLQEVLSSSAYLLFYERVLSRMQHQSQE
CKSEE

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FIGURE 4958

CTCGGAAGTCGAGAGACCAGGGCCTGGCCAGATTCTCCCTGCAGAACCTCTAGACGATTCCAAGAATGCCACAGG
GAACTCAGCCTCAGGCCTGGGGGCTGGCAGGACCGCAGAAGATACCGTGGAAGATGCCTGCCCAGCCGAGGGCAG
CAGGGAGGCCAGACCCAACACGCACCCCGGCCCGGCCCCCACCCCGGCCGAGCTGCCCTGGACCAATATTGACCT
CAAGGAGGCCAAGAAAGTGCCCAGCCACTCGGCCGCTGGCTTCCCCGAGACCACCAGCCTCTCCTCTCTGGGGCT
CCTCCCACTGGGCTTGGAGGAGCCGTATGGGGTGGATGACCACCCGCTGTGGGCCTGGGTGTCGGGAGGCGGCTG
CGTGGTGGAGGCATGTGCCATGCCCAGATGGTTCACTGTCCAGGCGGGTAAGGGCTCCTGCAGGGCCTGGGGGCA
TCCACATGGCCAGGTGCCCTGGGGGTGTGGGGTGTGGGAGGAGGCCGGGGTCAGGGGGCTCGGGCAGGCCTGCTG
TCCTCCCTGGACGCCTCACTGTGCTCAGCAGCTCTGAGCCAGGCATTGCGCTCCTCTGTGGCCTCCAGAGACCAG
CCCGAGGCTGTCAGGACCTGGAAGCACGGTGGCCAGTGCCCCTTCCCCTGTCTGCAGCCCCTCCCCTGTGCTAGC
GGTGGTGGCTGCTTTCCAGGCTGAATTACTGGGGGAGAGCAACTCATCCATCAGGGCAAAGGGTGGAAGGAGGCT
TAACAGAGAGCGTAGCTTTTGAGCTAGAAAGGGCTGATTTGGTGGAGGGGAGCGCCGTGGCTTCCTGCCCAGCTG
CGGGCAGGACAGTGCCCCGGCCCTGAGGCTCTCTCTGCCCCACAGGCCTGTCCTCCTCGGTACACATGCTGTCCC
TGTCCATCACGCCGGCCCAGACCGCTGCCTGGAGGAAGCAGATCTTCCAGCAGCTCACGGAAAGGACCAAGCGGG
AGCTGGAGAACTTCAGACACTACGAGCAGGCCGTGGAGCAGTCGGTGTGGGTGAAGACCGGGGCGCTGCAGTGGT
GGTGCGACTGGAAGCCCCACAAGTGGGTGGACGTGCGCTTGGCCCTGGAGCAGTTCACGGGGCACGACGGCGTCC
GGGACAGCATCCTCTTCATCTACTATGTGGTCCACGAGGAGAAGAAGTACATCCACATATTCCTGAATGAGGTGG
TGGCGCTGGTCCCAGTGCTGAACGAGACCAAGCACTCCTTTGCCCTGTACACCCCTGAGCGGACACGGCAGAGGT
GGCCGGTGCGTCTGGCTGCTGCCACCGAGCAGGACATGAATGACTGGCTCGCCCTGCTCAGCCTGTCTTGCTGCG
AGAGCCGGAAGGTGCAGGGCCGCCCGTCCCCGCAGGCCATCTGGTCCATCACCTGCAAGGGGGACATCTTCGTGA
GCGAGCCCACCCAGACCTGGAGGCCCACGAGCACCCCCTGCCCTGCGACCAG**ATG**TTTTGGCGGCAGATGGGAGG
CCACCTGCGGATGGTGGAGGCCAACAGCCGGGGCGTGGTGTGGGGCATCGGCTATGACCACACGGCCTGGGTATA
CACAGGCGGCTATGGAGGCGGCTGCTTCCAAGGCCTGGCCAGCAGCACCAGTAACATCTACACGCAGTCAGACGT
GAAGTGTGTTCACATCTATGAGAACCAGCGCTGGAACCCCGTCACAGGCTACACCAGCAGGGGTCTGCCCACGGA
CCGGTACATGTGGAGCGATGCCTCGGGGCTGCAGGAGTGCACGAAGGCTGGCACGAAGCCCCCGTCCCTGCAGTG
GGCCTGGGTTTCCGACTGGTTCGTGGATTTCAGCGTTCCGGGGGGCACGGACCAGGAGGGGTGGCAGTATGCCAG
CGACTTCCCTGCCTCATACCATGGGTCCAAAACGATGAAGGATTTTGTGAGGAGGAGGTGCTGGGCCAGAAAATG
CAAGCTGGTGACCAGTGGGCCCTGGCTGGAGGTGCCCCCCATCGCCCTCAGGGACGTGTCCATCATCCCGGAGAG
CCCGGGTGCCGAGGGGAGTGGGCACAGCATCGCCCTCTGGGCCGTCAGCGACAAGGGGGATGTGCTGTGCCGCCT
GGGCGTGTCGGAGCTCAACCCTGCGGGCTCCTCCTGGCTGCACGTTGGCACCGACCAGCTCTTCGCCTCCATCTC
CATCGGGGCCTGCTACCAGGTGTGGGCCGTGGCAAGGGACGGCTCCGCCTTCTACCGGGGATCCGTGTACCCCTC
GCAGCCAGCCGGTGACTGCTGGTACCACATCCCGTCCCCACCGAGACAGAGGCTGAAGCAGGTGTCCGCGGGGCA
GACGTCGGTGTATGCCCTGGATGAGAATGGAAACCTGTGGTATCGCCAAGGGATCACGCCCAGCTACCCGCAGGG
CTCCAGCTGGGAGCACGTGTCCAACAACGTGTGCCGAGTGTCCGTGGGGCCCCTGGACCAGGTCTGGGTGATCGC
CAACAAAGTGCAGGGCAGCCACAGCCTGAGCCGGGGGACAGTGTGTCATCGCACCGGCGTGCAGCCTCACGAGCC
CAAGGGCCACGGCTGGGACTACGGCATCGGGGGAGGCTGGGACCATATCTCTGTCCGGGCCAATGCCACCAGGGC
CCCCCGGAGCTCGTCCCAGGAGCAGGAGCCGAGTGCCCCACCAGAGGCCCATGGCCCCGTCTGCTGC**TGA**GGCCC
CCCCACACACCTACATGCAGGGACGGTGCCCAGTTTGGGGGATCAAGGCTGAGCCATTCTTGTGCTGGAGTGTGC
ACCGTGGGAGCAATGTGGCCCAGGTGGACTCAGGAGGGAACCTGGCCCCAAGGCTGCGGCCACTTCAGAGGCACT
GGCTGAGACGGCCCTGAAATGTGAAGCTCCGCGGACACTCCCACACGTGTCCCCGTCTGCGAGGAGTCCCGGGGT
GTGGGGCATGGGGTGGGGCTGCACCTCCCAGAGGCCCCTCCCACCCTTCCCTTCCCCTCTCCCTTCTGCCTTTCC
AGGACTAGAACCGGGAACCTGGAGCCCTCCGGGAACGCCGGCCCTGGGGCAGCAGAGCCAGGATGGAGCCCTCCT
GAGCTGGCATCTCAGACAGCACCCGGGCCCGCCACCCCTCACCAAGAGAGATGGCCATGGGGCTCAGGGCCTCTT
TACCATGTGCAGTGACCATTTCTCAGAGCAGGACTTGCAAAGAGGCTTTAATTTCAAAAGTGAAGGAAGGAGGCC
AGGCGCCGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCTGAGGTTTTCTCTGGGCATTACGATTTGTTCC
CCTACAACAGTGACCTGTGCATTCTGCTGTGGCCTGCTGTGTCTGCAGGTGGCTCTCAGCGAGGTACGGGGAGGG
CGTCACCCTGCAGAACGGCAGAGTGACGCGTCCTCTCGCTGCTGAGCACCAGCTGTTTACCTGCCCTGCATCACT
TCCTCGGATACTTTACTCAATAAAGCATTTTCCCCTGGAAAAAAAAAA

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FIGURE 4959

MFWRQMGGHLRMVEANSRGVVWGIGYDHTAWVYTGGYGGGCFQGLASSTSNIYTQSDVKCVHIYENQRWNPVTGY
TSRGLPTDRYMWSDASGLQECTKAGTKPPSLQWAWVSDWFVDFSVPGGTDQEGWQYASDFPASYHGSKTMKDFVR
RRCWARKCKLVTSGPWLEVPPIALRDVSIIPESPGAEGSGHSIALWAVSDKGDVLCRLGVSELNPAGSSWLHVGT
DQLFASISIGACYQVWAVARDGSAFYRGSVYPSQPAGDCWYHIPSPPRQRLKQVSAGQTSVYALDENGNLWYRQG
ITPSYPQGSSWEHVSNNVCRVSVGPLDQVWVIANKVQGSHSLSRGTVCHRTGVQPHEPKGHGWDYGIGGGWDHIS
VRANATRAPRSSSQEQEPSAPPEAHGPVCC

FIGURE 4960

TTTATAAGCTGTCCAGTTAATGGAATTTTGTTATTGTAGCCCAAATATACTAAGACAACAACCAATATAGTTAAA
ATTACTATGCATGTTCTACTTTATATTAAGTTCTAGTGTACGTTGTATAATGCTTACATCAAATAAAAGGTAAGG
TTAATTTACATAAAACATGTTTAGGTAGGATAATTGTAAAAATTATTTATTAGAGAAATTGGTAAAATTGTGGCT
TTGCATAGAGGCAGGAGAAAGAAAAGAGCAAGGCACTAGTGAGAAAAATTGCTATGGAGAATATTGAGAATAGAT
ACAAGGAGACCTACAGGTTTACAACATTAATATTGGCCAATACTTGATTGGACAGTTTAAATTTTTCAACCTGAA
AGGCCTTTGTGCCCCAAAGTTTGGTAAGGAGATTTTGTAAAAACAAACAACAATAGCAATAAAAAATCAGGGAAG
ATTAAGAGATTTCATAAGGAGCAAGAATTTATAGGTAATACTTAAAAGGTATAGGTATGATTACTATTTTGGTGA
ATAATAGGCACATGGTAGACTGAAATTCGGCAACAGCTACTGTGCAAATAAGCATATCTGTGATTATGGCTTATA
TCTGGTTGGGGACCCCTGTTGTAAGCCATTCTTTTTAGTACAGGTTAAGCTCCATTTCTCAATCACAGTTCTGTT
ATTTTCATCTGTGGGAAATAATGAATTCTGTTTCAGATTTTGATTGTCTTTTGTGTTCTTTGTCATCCAACAGAA
TTGCACATTTCACTTTGTAAAATTTTTATAACTAGTGTTTGACACTTGAAACTGGCTTTTGAGTCTTCTATAATA
GTTTGTGCAGAAGTCTGAGGTTTAATGTTATGATGGCCTTATTCATACTGTAGAAATATATACTGCAGCAATATG
CACCCAAATGGTCAAATGGTCAGTAAGCTTTTTAAATGAACTAGCTAGATTTTTAGTTTTGATTTTAATTCTTGG
TTTGAATTGCTAAAAGCTATCTTGACCTTAGGAAAATGAAAGCTTACATGAGGTTTAGCCACTTAAAACAAAGTA
TTTCTTGTGTCTCCAGTTCATGTGAAACCTGACTTTTATTTACAATATTTATGTTAGGAGCACTTTTATTAGGAT
CTTTTGAAGCCTTTCAAGAGTTTTCTTTCAGTTATTATTAATAGTACTAATAAAGAAGGTGAGCAGGATTTAAAG
CTGAAAGGAGCATCAGAGATAATTGAACTTTGTTTATGCCATTCATTGTTACCCTATGCAATGTCTTTTGTTTGT
TTTTAATTAATTGCCAATATTTAAGAAGAGGGTCATAGAACAGTCATTATTCCAGATTCTCTTGAAAAACTGGAA
GATCTGGCAACTACAGGTTTATGTTCTTGCATGTTAACAATATACAGGGGCTGGAATTAACCTGCTCTGAGTCCC
TTTAGATGTGCATACTCTCTCCGATTTGCCACAGTTCCCACCAATTCTTATTTCTCCTCTCTTTACTTGGCCCAC
ATCATTGGGCCTATCTCATTAATTTCTATTAAATATTTTATTACTGAGGCCATTAGTTTATGACCCCTGAGGCCA
AGACAGCTGTTAAGAACTTGCATTACTGGTGGCAAAATTATACCTTTACGATTACTTACTAGGTTTTAGAAATCT
CACTTTTCTAACAAGAGGTATTATGGTAATCATAAGTTCAAAAGAATTAAAGTTCATTTGAGATAATTAAATCAA
AACCTCTAGTCTGGGTTGGAGGGTGATAAAGTTATCTGGCGAAATATATGAACTTCTGTTACCTTCCTCTTCTGC
TAA**ATG**AATGGTAAAATGAATCCTGATTTGTTTAGGCAGTTTACTTATGAAGTTGGGAGAATTTNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN

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FIGURE 4961

MNGKMNPDLFRQFTYEVGRIXXX

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FIGURE 4962A

GAAGTATAAGTGGGATTTTCACCAAAACCCTATCCTTCCCCAGACTCCAGTGACAGTTTAACGGTCAGCTGCATC
AAGGCTTGTGTACTGTGCAGTCTTAAAAGGCACCACTCCTGTCCATCTCGGTGAAATTGATGGTGGAGCAAAAGG
GAGTTTAGGTGGTTCCGGTCTGGGGAGAAGACGTGCAGGGTTTCAGATGCGAAAGTCGCACCCAACCGCTTCACT
CGGGCTCTAGGCCATCCGCAGGGGCCCTGCTTCCTTCCACCTGCGAGCTTTTTCTGCAGAATGCGGGAAGCCGCC
GCCGCCGCCACAGAGGAGGGGGCGGAGGCAGAGGCGGAGGCGGCACCCAGGGGCCGGGGCAGGGGAGGCCGGGAC
CATCGCAGTGACAATTTATTTTCCTGCAGCAGCGGCAGCAGGGACGGTTGCTGCAGGTTCGGGGTCGGCCGGCCT
GCGCGTGGGCTTGCGAGGACGCTGTTCGTCCCCTGCGCTGGGGTGTCCGACAGCGAGGAGGAGAACGACGCACGG
AGCCCGCGCGACTGGAACCAGCAAAGCTCCATCTGTCGGCAGAGGAGAAGGGGGAGGAGGCACGGCCGAGGCAAA
CGAGCGGACGCCTCGTCGCCGGGTGCCGGTATCACCCCGCTGCAACGCCTTCCAGCAAAAGCCACCGCGGCCCGG
GTTGCAGCAGCCGGACGGATGCCAAGGCCACACGGCAGCCACGGGGGCAGCCGTCGCAGTCGCCGTCCCACACGG
GCTGCGGACACCAAGGGTTGCTAATGAAGTGATTGAGAAGAAACAGTGAACATCCTCATTTCACAGATAAGACAA
CATGGATCAGCCTTTTACTGTGAATTCTCTGAAAAAGTTAGCTGCTATGCCTGACCATACAGATGTTTCCCTAAG
CCCAGAAGAGCGAGTCCGTGCCCTAAGCAAGCTTGGTTGTAATATCACCATCAGTGAAGACATCACTCCACGACG
TTACTTTAGGTCTGGAGTAGAGATGGAGAGGATGGCGTCTGTGTATTTGGAAGAAGGAAATTTGGAAAATGCCTT
TGTTCTTTATAATAAATTTATAACCTTATTTGTAGAAAAGCTTCCTAACCATCGAGATTACCAGCAATGTGCAGT
ACCTGAAAAGCAGGATATTATGAAGAAACTGAAGGAGATTGCATTCCCAAGGACAGATGAATTGAAAAACGACCT
TTTAAAGAAATATAACGTAGAATACCAAGAATATTTGCAAAGCAAAAACAAATATAAAGCTGAAATTCTCAAAAA
ATTGGAGCATCAGAGATTGATAGAGGCAGAAAGGAAGCGGATTGCTCAGATGCGCCAGCAGCAGCTAGAATCGGA
GCAGTTTCTGTTTTTCGAAGATCAACTCAAGAAGCAAGAGTTAGCCCGAGGTCAAATGCGAAGTCAGCAAACCTC
AGGGCTGTCAGAGCAGATTGATGGGAGCGCTTTGTCCTGCTTTTCCACACACCAGAACAATTCCTTGCTGAATGT
ATTTGCAGATCAACCTAATAAAAGTGATGCAACCAATTATGCTAGCCACTCTCCTCCTGTAAACAGGGCCTTAAC
GCCAGCTGCTACTCTAAGTGCTGTTCAGAATTTAGTGGTTGAAGGACTGCGATGTGTAGTTTTGCCAGAAGATCT
TTGCCACAAATTTCTGCAACTGGCAGAATCTAATACAGTGAGAGGAATAGAAACCTGTGGAATACTCTGTGGAAA
ACTGACACATAATGAATTTACTATTACCCATGTAATTGTGCCAAAGCAGTCTGCGGGACCAGACTATTGTGACAT
GGAGAATGTAGAGGAATTATTCAATGTTCAGGATCAACATGATCTCCTCACTCTAGGATGGATCCATACACATCC
CACTCAAACTGCATTTTTATCCAGCGTTGATCTTCACACTCACTGTTCCTATCAACTCATGTTGCCAGAGGCCAT
TGCCATTGTTTGCTCACCAAAGCATAAAGACACTGGCATCTTCAGGCTCACCAATGCTGGCATGCTTGAGGTTTC
TGCTTGTAAAAAAAAAGGGCTTTCATCCACACACCAAGGAGCCCAGGCTGTTCAGTATTCAGAAATTCCTTTCTGG
GATAATTTCTGGCACTGCTTTGGAGATGGAGCCCCTGAAAATTGGCTATGGACCAAATGGATTCCCACTCTTGGG
GATCTCTAGGTCATCATCACCATCTGAACAGCTCTGAGAGAGACAAGAAGTGGAATGGAGAAGGTGATTAGGTAA
TCCAAGAATTGCCAGGCGAACAATTGTGAAAATCTTTCATAGAGTTCCCGATGAAAACAACTCTTTCTTGTTAGC
CATTATCTCTGCCTTTCCTTTCTAAAGAAAAACACGTCATTTCATCTTGATTATCAGTTTCTCAAGTACTCATGG
ATGTGAGGCCAGGTACCCTGTCACCTTGGCTCTGTTTGGGATGCAATGTTGTGTTTGTCACCACTTCCCATTCCC
CAAAAGCATCTTTAACATAGACCATTCATTCTTCAGATTCAAAATGCTTAAGCTGAACTAACCTCAAAGGGCCCT
CATTAATTTACAGACATTTGAATAACACCCATATTCATTTCTGCTACTGAACCAAAGCCTTTTCCAAAAAAATCA
TCTAGCAAACTGTTTTTGCCAGGCCAAATATTAACAGGTATATATATTTGCATACATAAATATTTACCTCTATGT
CTTGTGTGTTTTTGTTATGAGACAGAGTCTCACTCTGTCGCCCAGGCTGGAGTGCAGTGGCACAGTCTCAGCTCA
CTGCAACCTCCACCTCCCAGGTTCAAGCGATTCTCATGCCTCAGCCTCCCGAGTAGCGAGGACTACAGGCGTGCA
CCACCACGCCCAGCTAATTTTTGTATTTTTAGTAGAGATGGGGTTTTACCCTGTTGGCCAGGGTGGTCTCGAATT
CCTGACCTCTGATGATCTGCCCGCCTGGACCTCTCAAAGTGCTGGGATTACAGACATGAGCCACTGTGCCCTGCC
TCTGTTTTGTGTATTTACATAAATACATGTCTCCAGAGCTTTAAATTCTTCTTAAATTTTAAAACTAGAACTAAA
CCAGACATTGAGAGGACCCAGAAATATACCCTGACTAACGTGGGTGGAATTTCATTTGGCTTGACTCTTTGGTGA
AAAAAAAAAAAATCAGGCTCTCAAGGACTCAATTTGGTGAACCAATGCCAAATAGAAAAATGTTCTTGACATTTT
CCCCAAAATAGATGTCTAAAGATTTTGCACTTCAAATTGGTACTTTATGTATTAAAAGTGATATTGAAACTAAAT
TCCTACCCAATTAGTTGAAAAATATGAAAAAAGCAATTGCTAGAGAATGCAATTTATTAAATGTTGGTGGTCTTT
TAAAAAATGAATTCCTCTTGTAGCCAGTGAGATCAGTTATTTATTTATTTATTTTAATAGTAACAAGGTCTCACT
ATATTGTCCAGGCTGATCTTGAACTCCTGGCCTCAAGCTGTCCTCCCATCTCAGCTTCCCAAAGTGCTGAGATTA
TAGGCATGAGCCACCATGCCTGGCTAGTTAATGGTTATTAAGTAATACAAACATTTCTGTGAATTCCACCAGATC

FIGURE 4962B

ATTGACTTTGGCATAGTTCACTTAAGACTTTGTTTGATAAAATAAATCTCTTTCACTCTAATTAGGAAGCATTTT
TGGGATCCTGATTAATGCTCTAATATTGTGGGGCCAAAAAATATGTGGAACGTGGCCCTGCAGTTAGATGAGCTG
AGATCACTATAGTACTATATAGCGCTCTAAATCCTAAATGCTAGATCACTGTAATACTGTACAGATCAGCCACTT
GCTGGCTTGTGACTCTGGGCCATTTACTTCACCTCTCAAAAGGCATATTTAAAGTGAGGAAAATAATAAGTTTAT
TTTGGAAATTCAGTTAGATGATGCAAATTGTTTACTGTAATTTCTAGCATGTAGTTCGTGCTCCATGCATTTAAC
TGTTATTACAGGTTGTATTAGTATCACATTAAATTACCCACTGAAGTGAAAGTGAAACCAGAATGCTGTCAACGA
TT

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FIGURE 4963

GCAGCGGCAGCAGGGACGGTTGCTGCAGGTTCGGGGTCGGCCGGCCTGCGCGTGGGCTTGCGAGGACGCTGTTCG
TCCCCTGCGCTGGGGTGTCCGACAGCGAGGAGGAGAACGACGCACGGAGCCCGCGCGACTGGAACCAGCAAAGCT
CCATCTGTCGGCAGAGGAGAAGGGGGAGGAGGCACGGCCGAGGCAAACGAGCGGACGCCTCGTCGCCGGGTGCCG
GTATCACCCCGCTGCAACGCCTTCCAGCAAAAGCCACCGCGGCCCGGGTTGCAGCAGCCGGACGGATGCCAAGGC
CACACGGCAGCCACGGGGGCAGCCGTCGCAGTCGCCGTCCCACACGGGCTGCGGACACCAAGGGTTGCTAATGAA
GTGATTGAGAAGAAACAGTGAACATCCTCATTTCACAGATAAGACAACATGGATCAGCCTTTTACTGTGAATTCT
CTGAAAAAGTTAGCTGCTATGCCTGACCATACAGATGTTTCCCTAAGCCCAGAAGAGCGAGTCCGTGCCCTAAGC
AAGCTTGGTTGTAATATCACCATCAGTGAAGACATCACTCCACGACGTTACTTTAGGTCTGGAGTAGAGATGGAG
AGGATGGCGTCTGTGTATTTGGAAGAAGGAAATTTGGAAAATGCCTTTGTTCTTTATAATAAATTTATAACCTTA
TTTGTAGAAAAGCTTCCTAACCATCGAGATTACCAGCAATGTGCAGTACCTGAAAAGCAGGATATTATGAAGAAA
CTGAAGGAGATTGCATTCCCAAGGACAGATGAATTGAAAAACGACCTTTTAAAGAAATATAACGTAGAATACCAA
GAATATTTGCAAAGCAAAAACAAATATAAAGCTGAAATTCTCAAAAAATTGGAGCATCAGAGATTGATAGAGGCA
GAAAGGAAGCGGATTGCTCAGATGCGCCAGCAGCAGCTAGAATCGGAGCAGTTTCTGTTTTTCGAAGATCAACTC
AAGAAGCAAGAGTTAGCCCGAGGTCAAATGCGAAGTCAGCAAACCTCAGGGCTGTCAGAGCAGATTGATGGGAGC
GCTTTGTCCTGCTTTTCCACACACCAGAACAATTCCTTGCTGAATGTATTTGCAGATCAACCTAATAAAAGTGAT
GCAACCAATTATGCTAGCCACTCTCCTCCTGTAAACAGGGCCTTAACACCAGCTGCTACTCTAAGTGCTGTTCAG
AATTTAGTGGTTGAAGGACTGCGATGTGTAGTTTTGCCAGAAGATCTTTGCCACAAATTTCTGCAACTGGCAGAA
TCTAATACAGTGAGAGGAATAGAAACCTGTGGAATACTCTGTGGAAAACTGACACATAATGAATTTACTATTACC
CATGTAATTGTGCCAAAGCAGTCTGCGGGACCAGACTATTGTGACATGGAGAATGTAGAGGAATTATTCAATGTT
CAGGATCAACATGATCTCCTCACTCTAGGATGGATCCATACACATCCCACTCAAACTGCATTTTTATCCAGCGTT
GATCTTCACACTCACTGTTCCTATCAACTCATGTTGCCAGAGGCCATTGCCATTGTTTGCTCACCAAAGCATAAA
GACACTGGCATCTTCAGGCTCACCAATGCTGGCATGCTTGAGGTTTCTGCTTGTAAAAAAAAGGGCTTTCATCCA
CACACCAAGGAGCCCAGGCTGTTCAGTATATGCAAACATGTGTTGGTAAAAGACATAAAAATAATTGTGTTGGAT
CTGAGGTGATATGTTCTGAATGTAAGCACCGTCAACATCAGACACCTACTCATGGACATGTGGTTGCCGGATTTT
CTTAAGATGTTTCCAGAAATGACTGATATTTTATATTTATACATTTTAGATGACAAAGCTTGATATTTATTGCTG
TTGCACATTTTAAAGTTTTCTTTTTGGGTTGCTCTGTGTCAAGAGAGGTTACATGGTGTTAAATCGGTACCTGAT
AATGTACCCAAATACTATGGCCAGATAATAAATTGTGCTGCAAACAAAAAAAAAAAAAAA

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FIGURE 4964

MPDHTDVSLSPEERVRALSKLGCNITISEDITPRRYFRSGVEMERMASVYLEEGNLENAFVLYNKFITLFVEKLP
NHRDYQQCAVPEKQDIMKKLKEIAFPRTDELKNDLLKKYNVEYQEYLQSKNKYKAEILKKLEHQRLIEAERKRIA
QMRQQQLESEQFLFFEDQLKKQELARGQMRSQQTSGLSEQIDGSALSCFSTHQNNSLLNVFADQPNKSDATNYAS
HSPPVNRALTPAATLSAVQNLVVEGLRCVVLPEDLCHKFLQLAESNTVRGIETCGILCGKLTHNEFTITHVIVPK
QSAGPDYCDMENVEELFNVQDQHDLLTLGWIHTHPTQTAFLSSVDLHTHCSYQLMLPEAIAIVCSPKHKDTGIFR
LTNAGMLEVSACKKKGFHPHTKEPRLFSICKHVLVKDIKIIVLDLR

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FIGURE 4965

CGCTAAGCGTCCCAGCCGCATCCCTCCCGCAGCGACGGCGGCCCGGGACCCGCGGGCTGTGAACCATGAACACCC
GCAATAGAGTGGTGAACTCCGGGCTCGGCGCCTCCCCTGCCTCCCGCCCGACCCGGGATCCCCAGGACCCTTCTG
GGCGGCAAGGGGAGCTGAGCCCCGTGGAAGACCAGAGAGAGGGTTTGGAGGCAGCCCCTAAGGGCCCTTCGCGGG
AGAGCGTCGTGCACGCGGGCCAGAGGCGCACAAGTGCATACACCTTGATAGCACCAAATATAAACCGGAGAAATG
AGATACAAAGAATTGCGGAGCAGGAGCTGGCCAACCTGGAGAAGTGGAAGGAGCAGAACAGAGCTAAACCGGTTC
ACCTGGTGCCCAGACGGCTAGGTGGAAGCCAGTCAGAAACTGAAGTCAGACAGAAACAACAACTCCAGCTGATGC
AATCTAAATACAAGCAAAAGCTAAAAAGAGAAGAATCTGTAAGAATCAAGAAGGAAGCTGAAGAAGCTGAACTCC
AAAAAATGAAGGCAATTCAGAGAGAGAAGAGCAATAAACTGGAGGAGAAAAAAAGACTTCAAGAAAACCTTAGAA
GAGAAGCATTTAGAGAGCATCAGCAATACAAAACCGCTGAGTTCTTGAGCAAACTGAACACAGAATCGCCAGACA
GAAGTGCCTGTCAAAGTGCTGTTTGTGGCCCACAATCCTCAACATGGGCCAGAAGCTGGGCTTACAGAGATTCTC
TAAAGGCAGAAGAAAACAGAAAATTGCAAAAGATGAAGGATGAACAACATCAAAAGAGTGAATTACTGGAACTGA
AACGGCAGCAGCAAGAGCAAGAAAGAGCCAAAATCCACCAGACTGAACACAGGAGGGTAAATAATGCTTTTCTGG
ACCGACTCCAAGGCAAAAGTCAACCAGGTGGCCTCGAGCAATCTGGAGGCTGTTGGAATATGAATAGCGGTAACA
GCTGGGGTATATGAGAAAATATTGACTCCTATCTGGCCTTCATCAACTGACCTCGAAAAGCCTCATGAGATGCTT
TTTCTTAATGTGATTTTGTTCAGCCTCACTGTTTTTACCTTAATTTCAACTGCCCACACACTTGACCGTGCAGTC
AGGAGTGACTGGCTTCTCCTTGTCCTCATTTATGCATGTTTGGAGGAGCTGATTCCTGAACTCATATTTAAACTC
TACTGCCAGGGAAATGCTACATTATTTTTCTAATTGGAAGTATAATTAGAGTGATGTTGGTAGGGTAGAAAAAGA
GGGAGTCACTTGATGCTTTCAGGTTAATCAGAGCTATGGGTGCTACAGGCTTGTCTTTCTAAGTGACATATTCTT
ATCTAATTCTCAGATCAGGTTTTGAAAGCTTTGGGGGTCTTTTTAGATTTTAATCCCTACTTTCTTTATGGTACA
AATATGTACAAAAGAAAAAGGTCTTATATTCTTTTACACAAATTTATAAATAAATTTTGAACTCCTTCTGTAAAA
AAAAAAAA

FIGURE 4966

MNTRNRVVNSGLGASPASRPTRDPQDPSGRQGELSPVEDQREGLEAAPKGPSRESVVHAGQRRTSAYTLIAPNIN
RRNEIQRIAEQELANLEKWKEQNRAKPVHLVPRRLGGSQSETEVRQKQQLQLMQSKYKQKLKREESVRIKKEAEE
AELQKMKAIQREKSNKLEEKKRLQENLRREAFREHQQYKTAEFLSKLNTESPDRSACQSAVCGPQSSTWARSWAY
RDSLKAEENRKLQKMKDEQHQKSELLELKRQQQEQERAKIHQTEHRRVNNAFLDRLQGKSQPGGLEQSGGCWNMN
SGNSWGI

FIGURE 4967

AGGACATGAGCAACATTGACCTGGTGGAGGGCGACGAGGGCAGGATGTGCATCAACACAGAGTGGGGGGCCTTCG
GGGACGACGGGGCCCTGGAGGACATTCGCACTGAGTTCGACAGGGAGCTGGACCTCGGCTCTCTCAACCCAGGAA
AGCAACTGTTCGAGAAGATGATCAGTGGCCTGTACCTGGGGGAGCTTGTCAGGCTTATCTTGCTGAAGATGGCCA
AGGCTGGCCTCCTGTTTGGTGGTGAGAAATCTTCTGCTCTCCACACTAAGGGCAAGATCGAAACACGGCACGTGG
CTGCCATGGAGAAGTATAAAGAAGGCCTTGCTAATACAAGAGAGATCCTGGTGGACCTGGGTCTGGAACCGTCTG
AGGCTGACTGCATTGCCGTCCAGCATGTCTGTACCATCGTCTCCTTCCGCTCGGCCAATCTCTGTGCAGCAGCTC
TGGCGGCCATCCTGACACGCCTCCGGGAGAACAAGAAGGTGGAACGGCTCCGGACCACAGTGGGCATGGACGGCA
CCCTCTACAAGATACACCCTCAGTACCCAAAACGCCTGCACAAGGTGGTGAGGAAACTGGTCCCAAGCTGTGATG
TCCGCTTCCTCCTGTCAGAGAGTGGCAGCACCAAGGGGGCCGCCATGGTGACCGCGGTGGCCTCCCGCGTGCAGG
CCCAGCGGAAGCAGATCGACAGGGTGCTGGCTTTGTTCCAGCTGACCCGAGAGCAGCTCGTGGACGTGCAGGCCA
AGATGCGGGCTGAGCTGGAGTATGGGCTGAAGAAGAAGAGCCACGGGCTGGCCACGGTCAGGATGCTGCCCACCT
ACGTCTGCGGGCTGCCGGACGGCACAGAGAAAGGAAAGTTTCTCGCCCTGGATCTTGGGGGAACCAACTTCCGGG
TCCTCCTGGTGAAGATCAGAAGTGGACGGAGGTCAGTGCGAATGTACAACAAGATCTTCGCCATCCCCCTGGAGA
TCATGCAGGGCACTGGTGAGGAGCTCTTTGATCACATTGTGCAGTGCATCGCCGACTTCCTGGACTACATGGGCC
TCAAGGGAGCCTCCCTACCTTTGGGCTTCACATTCTCATTTCCCTGCAGGCAGATGAGCATTGACAAGGGAACAC
TCATAGGGTGGACCAAAGGTTTCAAGGCCACTGACTGTGAAGGGGAGGACGTGGTGGACATGCTCAGGGAAGCCA
TCAAGAGGAGAAACGAGTTTGACCTGGACATTGTTGCAGTCGTGAATGATACAGTGGGGACCATGATGACCTGTG
GCTATGAAGATCCTAATTGTGAGATTGGCCTGATTGCAGGAACAGGCAGCAACATGTGCTACATGGAGGACATGA
GGAACATCGAGATGGTGGAGGGGGGTGAAGGGAAGATGTGCATCAATACAGAGTGGGGAGGATTTGGAGACAATG
GCTGCATAGATGACATCCGGACCCGATACGACACGGAGGTGGATGAGGGGTCCTTGAATCCTGGCAAGCAGAGAT
ACGAGAAAATGACCAGTGGGATGTACTTGGGGGAGATTGTGCGGCAGATCCTGATCGACCTGACCAAGCAGGGTC
TCCTCTTCCGAGGGCAGATTTCAGAGCGTCTCCGGACCAGGGGCATCTTCGAAACCAAGTTCCTGTCCCAGATCG
AAAGCGATCGGCTGGCCCTTCTCCAGGTCAGGAGGATTCTGCAGCAGCTGGGCCTGGACAGCACGTGTGAGGACA
GCATCGTGGTGAAGGAGGTGTGCGGAGCCGTGTCCCGGCGGGCGGCCCAGCTCTGCGGTGCTGGCCTGGCCGCTA
TAGTGGAAAAAAGGAGAGAAGACCAGGGGCTAGAGCACCTGAGGATCACTGTGGGTGTGGACGGCACCCTGTACA
AGCTGCACCCTCACTTTTCTAGAATATTGCAGGAAACTGTGAAGGAACTAGCCCCTCGATGTGATGTGACATTCA
TGCTGTCAGAAGATGGCAGTGGAAAAGGGGCAGCACTGATCACTGCTGTGGCCAAGAGGTTACAGCAGGCACAGA
AGGAGAACTAGGAACCCCTGGGATTGGACCTGATGCATCTTGGATACTGAACAGCTTTTCCTCTGGCAGATCAGT
TGGTCAGAGACCAATGGGCACCCTCCTGGCTGACCTCACCTTCTGGATGGCCGAAAGAGAACCCCAGGTTCTCGG
GTACTCTTAGTATCTTGTACTGGATTTGCAGTGACATTACATGACATCTCTATTTGGTATATTTGGGCCAAAATG
GGCCAACTTATGAAATCAAAGTGTCTGTCCTGAGAGATCCCCTTTCAACACATTGTTCAGGTGAGGCTTGAGCTG
TCAATTCTCTATGGCTTTCAGTCTTGTGGCTGCGGGACTTGGAAATATATAGAATCTGCCCATGTGGCTGGCAGG
CTGTTTCCCCATTGGGATGCTTAAGCCATCTCTTATAGGGGATTGGACCCTGTACTTGTGGATGAACATTGGAGA
GCAAGAGGAACTCACGTTATGAACTAGGGGGATCTCATCTAACTTGTCCTTAACTTGCCATGTTGACTTCAAACC
TGTTAAGAGAACAAAGACTTTGAAGTATCCAGCCCCAGGGTGCAGAGAGGTTGATTGCCAGGGAGCACTGCAGGA
ATCATTGCATGCTTAAAGCGAGTTATGTCAGCACCCTGTAGGATTTTGTTCCTTATTAAGTGTGTGCCATGTGGT
GGGGTGCTGTCTGGGGCATCTGTTTTTCATTTTGCCTGTGGTTTGTGTTGCAGGTGTTGATAGTTGTTTTAAGGA
TTGTTAGGTATAGGAAATCCAGTAAATTAATAAAAAAATTTTGATTTTCCAATAAACTTTGCAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAA

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FIGURE 4968

TTTTTTTTTTTTTTTGAAAAAGGGGGGAAGGGTTTCTTTTATCCTTTTTTTTTTGGGTGACTTCTATCAAAACAC
AGAAATACAGCACACGCACAAACCAGCACAAAAGCGCAGCGCTCTATTTACAGCTCCGGCTGGCACCTGCCCACC
TGGCCAGCCGCCTGCAGGGAGGGGTGGGAGAGGGGTCAGCCACATCAGCAGGGAAAGGATACGAAGCAGGTAAAG
ACAGAAGGAAAATGGGCGGGTGCGGAGAAACCAAGAGGGAGGTGGAGCTCCAGCAATGCGGACACGAGGAGACAG
GAGCAAAAGGGGCGTGGGGGAGACCTGACCTGTCCTTCCTCTCTCCCCCCAGATTCCCATCCAGGACTCCAAAAG
CATAGCT

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FIGURE 4969A

CTGCTGACTGTTTCTTCGGATGCATTTTTTGGTGTGCTCTTGAGGGATTAAATGCAAAGAGATCACACCATGGAC
TACAAGGAAAGCTGCCCAAGTGTAAGCATTCCCAGCTCCGATGAACACAGAGAGAAAAAGAAGAGGTTTACTGTT
TATAAAGTTCTGGTTTCAGTGGGAAGAAGTGAATGGTTTGTCTTCAGGAGATATGCAGAGGTTGATAAACTTTAT
AACACTTTAAAAAAACAGTTTCCTGCTATGGCCCTGAAGATTCCTGCCAAGAGAATATTTGGTGATAATTTTGAT
CCAGATTTTATTAAACAAAGACGAGCAGGACTAAACGAATTCATTCAGAACCTAGTTAGGTATCCAGAACTTTAT
AACCATCCAGATGTCAGAGCATTCCTTCAAATGGACAGTCCAAAACACCAGTCAGGTCCATCTGAAGATGAGGAT
GAAAGAAGTTCTCAGAAGCTACACTCTACCTCACAGAACATCAACCTGGGACCGTCTGGAAATCCTCATGCCAAA
CCAACTGACTTTGATTTCTTAAAAGTTATTGGAAAAGGCAGCTTTGGCAAGGTTCTTCTTGCAAAACGGAAACTG
GATGGAAAAGTTTATGCTGTCAAAGTGTTACAGAAAAAAATAGTTCTCAACAGAAAAGAGCAAAAACATATTATG
GCTGAACGTAATGTGCTCTTGAAAAATGTGAAACATCCGTTTTTGGTTGGATTGCATTATTCCTTCCAAACAACT
GAAAAGCTTTATTTTGTTCTGGATTTTGTTAATGGAGGGGAGCTTTTTTTCCACTTACAAAGAGAACGGTCCTTT
CCTGAGCACAGAGCTAGGTTTTACGCTGCTGAAATTGCTAGTGCATTGGGTTACTTACATTCCATCAAAATAGTA
TACAGAGACTTGAAACCAGAAAATATTCTTGTGGATTCAGTAGGACATGTTGTCTTAACAGATTTTGGGCTTTGT
AAAGAAGGAATTGCTATTTCTGACACCACTACCACATTTTGTGGGACACCAGAGTATCTTGCACCTGAAGTAATT
AGAAAACAGCCCTATGACAATACCGTAGATTGGTGGTGCCTTGGGGCTGTTCTGTATGAAATGCTGTATGGATTG
CCTCCTTTTTATTGCCGAGATGTTGCTGAAATGTATGACAATATCCTTCACAAACCCCTAAGTTTGAGGCCAGGA
GTGAGTCTTAGAGCCTGGTCCATTCTGGAAGAACTCCTAGAAAAAGACAGGCAAAATCGACTTGGTGCCAAGGAA
GACTTTCTTGAAATTCAGAATCATCCTTTTTTTGAATCACTCAGCTGGGCTGACCTTGTACAAAAGAAGATTCCA
CCACCATTTAATCCTAATGTGGCTGGACCAGATGATATCAGAAACTTTGACACAGCATTTACAGAAGAAACAGTT
CCATATTCTGTGTGTGTATCTTCTGACTATTCTATAGTGAATGCCAGTGTATTGGAGGCAGATGATGCATTCGTT
GGTTTCTCTTATGCACCTCCTTCAGAAGACTTATTTTTGTGAGCAGTTGCCATACAGAAACCATTGAGCAAAATA
AGTCTATAGATGGGACTGAAACTTCTATTTGTGTGAATATATTCAAATATGTATAACTAGTGCCTCATTTTTATA
TGTAATGATGAAAACTATGAAAAAATGTATTTTCTTCTATGTGCAAGAAAAATAGGGCATTTCAAAGAGCTGTTT
TGATTAAAATTTATATTCTTGTTTAATAAGCTTATTTTTAAACAATTTAAAAGCTATTATTCTTAGCATTAACCT
ATTTTTAAAGAAACCTTTTTGCTATTGACTGTTTTTTCCCTCTAAGTTTACACTAACATCTACCCAAGATAGACT
GTTTTTTAACAGTCAATTTCAGTTCAGCTAACATATATTAATACCTTTGTAACTCTTTGCTATGGCTTTTGTTAT
CACACCAAAACTATGCAATTGGTACATGGTTGTTTAAGAAGAAACCGTATTTTTCCATGATAAATCACTGTTTGA
AATATTTGGTCATGGTATGATCGAAATGTAAAAGCATAATTAACACATTGGCTGCTAGTTAACAATTGGAATAAC
TTTATTCTGCAGATCATTTAAGAAGTAACAGGCCGGGCGCGGGTTGTCACGCCTGTAATCCCAGCACTTTGGGAG
GCTGAGGCGGGCAGATCACCTGAGGTCAGGAGTTGGAGACCAGCCTGACCAACATGGACAAACCCCGTCTCTACT
AAAAATACAAAATTGGCAGGGTGTGGTGCACATGCCTATAATCCCAGCTACTTGGGAGGCTAAGGCAGGAGAATC
GCTTGAACCCGGGAGGCGGAGGTTGCAGTGAGCCGAGATCGCACCATTGCACTCCTGCCTGGGCAACAAGAGTGA
AACTCCATCTCCAAAAAAAAAAAGGAAAAAGTAACAAAAGGAAATTATTTGTTTTTGAAATACCAGTTCAACTTT
GTGGATTATTTTTCCTCTGAAGGAAAAGAAAAGGCTTAATGGTTAGGATTTTTAAGTATTCCCAAAGATCTGAAG
GGTAATAAAATGTACTGGATTTTTTAAGGTGGTACCAAAAATGAATGTCTGTCATATATTTATATTACAAATACA
TTATATTTATGTTCTATTCATCTTTTGAATGTTTAGTATGCTATTAAGTCATTCTGAATCTTTGTATTTGCTTTT
GCAAATAGGTATTTCAAAGCTCTTTTCCTAACTGGTTAAGTAAAATAAAAAATTGAGCTTTCTAGAATATTTGCC
TAATTGGGAATTAAAAAGTAAAATAATAGGCCAGGCATGGTGGCTCATGCCTATAAGCACCCTGGGAGGCCGAGG
CAGGCAGATTATTTGAGCTCAGGAGTTTGAGACCATCCTGGGCAACATGGCGAAACCCTATCTCTACAAAAAATA
CAAAAATTAGCCAGACATGGTGGCACATGCCTTTAGTCCCAGCTACTCAGGAGGCTGAAGTTGGAGGATGGCTTG
AGCCCACGAGATGGAAGTTGCAGTGAACTGAAATTGTGCCACTGCACTTTTCAGCCTGGGTGCCACAGCGAGACC
CTAGTTAAGAGAAAAAAAAAGTAAAAACAAATTGTGGGTCAAAGTAAATGTATACAGTTTTATTACAATGTAACA
AAAGTTGAAAATCGGGCCCGGAATTTATCCAATTTCAGATATATCTTAGAAAAAGCACAGGAAACAGACCTTAAA
ATTGTAACCTACCAACTAACTTACATGCTTATAAAAGTAAAGGAGAATAACTGGCCGGGCACGGTGGCTCATGCC
TATAAAATTCCAGCACTTTGGGAGGCCAAGGCAGGAGGATCACTTGAGCCTATGAGTTCAAGACCAGCCTAGGCA
ATGTAGTGACACCTCATTTCTATTTATTTTAAAAAAAAGAGAGAGTAACTACAGAAGAACTTTAAAAAATAAAAA
ATAAGCTTACCTTGGATTCTTGGCTTAGAGTAGAGGTTTTTTTTAAGTTATGGAGGAAACATTTTTGTAAAAGTT
TAATGACCCACTTTAGATGCTCCAAGAACAAGCATCCCTTCCATGTATGTCTTGAGAAAGAAATCACAGAAGCAT

FIGURE 4969B

TTCTCACCAATACTCTTTGGCTTAAAATGTTCAGCAGAATTGGGCAGTGGGGGTGACTTTTCTTATATTAATAAT
ATTTACATCCAATACACTGAATCTTCCTTTAGAGGTAAGACTTTAATATCTATACTGTAAATATTTGGTTTATTT
GGCACTACTGTAAGTTTTGTTTTTCACAAAGCTCTTATTATGAAGCAAAATAAAAATTCTAGTTTCTTGTATGAT
TTTTTGTACTCATTCATTCCTGTTAAGCTGCCAAAAATTAAAGTGCAATATTGTATATTTTTAAGAACAAATTTA
AAATAGAATTTTGATGTTTCTCAGATCACAAGAAATACAAATCTATATAGTATAATAAAATCAGCAAAAGATCAA
AAAAAAAAA

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FIGURE 4970

MQRDHTMDYKESCPSVSIPSSDEHREKKKRFTVYKVLVSVGRSEWFVFRRYAEVDKLYNTLKKQFPAMALKIPAK
RIFGDNFDPDFIKQRRAGLNEFIQNLVRYPELYNHPDVRAFLQMDSPKHQSGPSEDEDERSSQKLHSTSQNINLG
PSGNPHAKPTDFDFLKVIGKGSFGKVLLAKRKLDGKVYAVKVLQKKIVLNRKEQKHIMAERNVLLKNVKHPFLVG
LHYSFQTTEKLYFVLDFVNGGELFFHLQRERSFPEHRARFYAAEIASALGYLHSIKIVYRDLKPENILVDSVGHV
VLTDFGLCKEGIAISDTTTTFCGTPEYLAPEVIRKQPYDNTVDWWCLGAVLYEMLYGLPPFYCRDVAEMYDNILH
KPLSLRPGVSLRAWSILEELLEKDRQNRLGAKEDFLEIQNHPFFESLSWADLVQKKIPPPFNPNVAGPDDIRNFD
TAFTEETVPYSVCVSSDYSIVNASVLEADDAFVGFSYAPPSEDLFL

FIGURE 4971A

CATTTGGATTCTCAGGAAGATTTCTGAAACTGGAAAGCCATAGCATAACTGAATCAAAATCGTTGATTCCAGTAG
CTTGGACATCCCTGACACAGATGCTTTTGGAAGCACCTGGTATTTTCTTATTGGGTCAAAGAAAAAGATTCTCAA
CCATGCCAGAAACAGAAACACATGAGAGAGAGACTGAATTGTTTTCACCACCTTCTGATGTCCGAGGCATGACAA
AACTTGATAGAACAGCTTTTAAAAAGACAGTCAACATTCCAGTGCTTAAAGTGAGGAAAGAAATAGTCAGTAAAT
TGATGCGATCCCTAAAAAGGGCAGCATTGCAGCGCCCAGGCATAAGACGTGTGATTGAAGATCCGGAAGATAAAG
AAAGTAGACTAATCATGTTGGATCCCTATAAAATATTTACTCATGATTCCTTTGAGAAAGCAGAACTCAGTGTTT
TAGAGCAGCTTAATGTCAGTCCACAGATCTCTAAATACAATTTGGAACTAACATATGAACACTTTAAGTCAGAAG
AAATCTTGAGAGCTGTGCTTCCTGAAGGTCAAGATGTAACTTCAGGGTTTAGCAGGATTGGACATATTGCACACC
TAAACCTTCGAGATCATCAGCTGCCTTTCAAACATTTAATTGGCCAGGTTATGATTGACAAAAATCCAGGAATCA
CCTCAGCAGTAAATAAAATAAATAATATTGACAATATGTACCGAAATTTCCAAATGGAAGTGCTATCTGGAGAGC
AGAACATGATGACAAAGGTTCGAGAAAACAACTACACCTATGAATTTGATTTTTCAAAAGTCTATTGGAATCCTC
GTCTGTCTACAGAACACAGCCGTATCACAGAACTTCTCAAACCTGGGGATGTCCTATTTGATGTTTTTGCTGGGG
TTGGGCCCTTTGCCATTCCAGTAGCAAAGAAAAACTGCACTGTATTTGCCAATGATCTCAATCCTGAATCTCATA
AATGGCTGTTGTACAACTGTAAATTAAATAAAGTGGACCAAAAGGTGAAAGTCTTCAACTTGGATGGGAAAGACT
TCCTCCAAGGACCAGTCAAAGAAGAGTTAATGCAGCTGCTGGGTCTGTCAAAAGAAAGAAAACCCTCTGTGCACG
TTGTCATGAACTTGCCAGCAAAAGCTATAAAGTTTCTTAGTGCTTTCAAGTGGCTTTTAGATGGGCAGCCATGCA
GCAGTGAGTTCCTTCCCATAGTGCATTGTTATAGCTTTTCCAAAGATGCTAACCCTGCTGAGGATGTTCGGCAAA
GGGCTGGAGCTGTGTTAGGCATTTCTCTGGAGGCATGCAGTTCAGTTCACCTGGTAAGAAATGTGGCCCCAAACA
AGGAAATGCTGTGCATCACGTTTCAGATTCCTGCCTCTGTCCTCTACAAGAACCAGACCAGAAATCCAGAGAATC
ATGAAGATCCACCTCTTAAAAGGCAGAGGACGGCTGAAGCCTTTTCAGACGAAAAAACACAAATTGTTTCAAACA
CT**TAA**TTGGAAATGTTTTCTCCATCTCCCTACCAGACTTACATGTAGTGAAATAGAATTTGTATTATTTAATAAA
ATTTTAGGGTTTGGTTTTTACTATTGAACCCTTGTACTTTGCCTTATTTTACAAATTGAGGATTACCAATTAAAC
TTTAACTGAACTAAGGCTACCAAATACATTCCCTGTTATCTAAATTATAACATACAATTATTTTATAACAAAATA
TATCTAATTTTTATTGGATAAATATGAATAAATATTTTCTCTCAGGGAAAATAATTTTTGAAAGTAGGGTGATTG
AGTACTAACTAGGAAGGTATTAACACCACTTTGTAGTTGTCCTTTACGTAACTACTCCTTTACTGCCAATTAACT
ATCACCATAAAAGTAATAAAAAATGAAATTATTTAGAACGGGGCAGGCAAACTACATCCTGCAGGCCAAATCTGT
CCCACCACCTGTTTTCATATGGCCTGTGGCCTAATAATGTTCTTACGTTTTCCATTGGTTGAAAAATAATCAAAA
GAACATTTTGTGACGTGAAAATTTTATGACATCTATTATGTATCAGTTTTAAAAATTAGAATTGTATGAAATTAA
GAGTTTCAGAGTTCATAAAGTTTGATTGGAACATACCATGCTCGTTTGTTTACATATCATCTGCAGCTGTTTTTT
GTTTTTAATATGGAACGCTTCACGAATTTGCATGTCATCCTTGCGCAGGGACCATTCTGATCTTCTCTGTACCAT
TCCAGTTTTTTAGTATATGTGCTGCTGAAGTGAGGACTGCAGCTGCTTTCTTGAACAATAGCAGAGTTGAGTGGT
TGCAACACACACTGAATGTGACTGTCATCACTTCACACTGCTGTTTGACACATCACAAATCACTGATGTGGTTGT
AACGACAGCATTTTGAGTGCCATGTATATCACATGAACCCACATTTTATTTTTTATTACCAGAGCATATCTATTA
TAGCAAAACAAGAAAAGTGGACTTTGTTGTTATTTTTAAAGTACAGTAGGGTGTGAATTATTTTGATGTTGAATT
AGACGACAAAGCATCTATATAGCTAAGCTAAAAGAATAACCATTGACATTACCAGACAAACCACTCATCACAGTA
TTCCCAACTCACAGGCAAGCAACTGTTAGAAAAATTAGAAAATTTAAAATGGAAATAACAAAGCAGAATTTCTTC
GCAAAATGAAAATGAGGCTGCAACAACAGTAAGTCTCTAAGTCAATCATTTGTTAGCCAAGCAAAGCCATTTATT
GATGGTGTGAATTAATTATGTTTGGATGCAGCAGCTGAATATATCCAGAGAAAATAAACTTAAGATTACTGGCCT
TTGGCAAGAACAGTTGCTTAAAGAGTTAAGGACATTGAAAGCGACATAAATAGTCACTTTAAAAAGGAAATGATT
CTGGATGGTTCTTTGACTCTATTTTTATTTTTACTTAGAGACAGGGTCTTGCTCTGTTGCCCAGGCTGGAGTGTA
GAGACACAGTTACACCTCAATGTAACCTTGAACTCCTAGGCTTGAGATCTTCCCATCTCGGCTTCCCAATGTGTG
AAGGTTACAGGTGTGAGCCCTTATATGTGGCCCTCGTGAATGGTTTAGCACTATCCCCTTGGTGGTGTCCTTACG
ATAATGAGTTATGAGATCTTGTTGTTTCAAAGTATGTGGCACTCGCCCCCCACACTCTCTTGCTCCTGCCTTCGC
CATGTGAAGTGCCTTCTCCTATTTTGCCTTCTACCATGAGTAAAAGCTTCCTGAGGCTTCCCCAGAAGCAGATGC
CAGTGCTATGCTTCCTATAGCCTGGAGAACTGTGAGCCAATTATACCTCTTTTCTTATAAATTACCCAGTATCAA
GTATTTCTTTATAGCAATGCAAGAATGGCCTAAAACACAAGGCAAAACAACTTTGATATGGTACAGTCATTTTGA
CAATCGATATTTGAATCACAATATTTGATGACAATATCCTTACACATTTGTCATACTATCAAAGAGAAAGAAACA
AGATTTCCATTCCCACAAATTTTAGTGAGTATATTTTCTGAGTTCAGCATTTTTAGGGACCTAGGTGCAAGTGCA

FIGURE 4971B

AAGGAAATTTCCCTGTTTCAAAATCTATTTAACTGCAATTGAGGTGATTCAACCTAATTTTCAGTAAGAAGTGAT
TAAAATAATGACATGCTAAAAGGCAAATTTCAAGGGAAGAAATGTAAAAGAATTTTACAAATGCTTTCCAAGTGA
TGAATATGCTCAGTTAATTTCATATGCTCCTGGATTGATAGCAGTATTTGGCAATACCTATCTGTATGAGAAGAC
ATTTTTAAAGATGAAATGTGTAAAATCTTATTACCATTAGTATTAATGGTTAATGATGGTTAATGATAACCATTA
ATAGGCAATCATTTACAACTGATTTTGATCACAGGGAACACTTACTTAGAACCCTGATTAGAGGCAATGTTATTC
TCACCAAAAAAGGCATTACAAAAAATTGGGCTATATTTTGAATTTTGTCAATTAAAAAAGCGTGGGAGCAGTGTG
AAGGAGAAGAGGCAAGAACGACCCCTGGACCGACCAAAGCCCGCGCGCTGCTGCGTCCCACACCCGGTGCCCACA
TCCCGCCGCCGCCGCCGCCGCCGCCATGCCCAAGAGAAAGACTGAAGGGGATGCTAAAGGAGATAAAGCCAAGGT
GAAGGATGAATCACAGAGAAGATCTGCGAGGTTGTCTGCTAAACCTGCTCCTCCAAAGCCAGAGCCCAAGCCTAA
AAAGGCCCCTGCAAAGAAGGGAGAGAAGGTACCCAAAGGGAAAAAGAGAAAAGCTGATGCTGGCAAGGAGCGGGA
AGGTGCTGGAGATCCCAAGTGAAGTGTGTGCATTTTTTATAACTGTACTTCTGGTGACTGTACAGTTTGAAATAT
TCTTTATCAAGTTTTATAAAAATGCAGAATTTTGTTTTACTTTTTTTAAGCTATGTTGTTAGCACACAGAACACT
TCATTGTTGTGTTTGGGGGAAGGGGTATGTGTCACTAATAGAATATCTCTGAAGCTGGATTGATACGGGGAAAAC
ATCTTTCCCTTCTAGTTTTGAGAGACTTCCTCTTGGCTCCCAGGAGGAGGGATTTCCTGACTTTGACACACATGG
CCACCTTGGCACAAAAGCCTTGTGGTATGGAAAAACAAATTCGTTTTTATGTCTTCTTTTCCCTTTCCATCTTTC
AGCATAGACTTAACCCTTAAGCCCAGACATCTGTTGGGACCTGACCCCCGGTCATTGGTTACCAGTGTGTCTGGC
AATCTGGACTTTCCAGTGATGCCACTGAGATGGCACCTGTCAAAAGAGCAGTGGTTCCATTTCTAGATTATGGAT
CTTCGGATAAATTCTGCCATTTTCATTTCACTTCCTGAAAGTCAGGGTTGGCTTGTGAAAAGTTGTTAAACAACA
TGCTAAATGTGAAATGTTAACCCTCTAAACTTTCCCTGTTCAGAGCATCAGATGAGGACTTCATTGGGTTTTATA
GTGGCTGATTTTTGGTAGTCCATTGAAGAAGAGAGTTTGAAAGTTGTATACTGTTAATGACTGTCTGCCCATGTC
CTGCCTGAAATACCATGATTGTTTATGGAAAGTATCTTTAATAAAGCTGGATACAGTTTGAAAG

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FIGURE 4972

FGFSGRFLKLESHSITESKSLIPVAWTSLTQMLLEAPGIFLLGQRKRFSTMPETETHERETELFSPPSDVRGMTK
LDRTAFKKTVNIPVLKVRKEIVSKLMRSLKRAALQRPGIRRVIEDPEDKESRLIMLDPYKIFTHDSFEKAELSVL
EQLNVSPQISKYNLELTYEHFKSEEILRAVLPEGQDVTSGFSRIGHIAHLNLRDHQLPFKHLIGQVMIDKNPGIT
SAVNKINNIDNMYRNFQMEVLSGEQNMMTKVRENNYTYEFDFSKVYWNPRLSTEHSRITELLKPGDVLFDVFAGV
GPFAIPVAKKNCTVFANDLNPESHKWLLYNCKLNKVDQKVKVFNLDGKDFLQGPVKEELMQLLGLSKERKPSVHV
VMNLPAKAIKFLSAFKWLLDGQPCSSEFLPIVHCYSFSKDANPAEDVRQRAGAVLGISLEACSSVHLVRNVAPNK
EMLCITFQIPASVLYKNQTRNPENHEDPPLKRQRTAEAFSDEKTQIVSNT

FIGURE 4973

ATGAACTAATTTATTTAGGCTTAATCTCTAAAATTTCAGCCTGATCTTAACCAATGAAATTTCAAAAACAAAAAC
TGTACTTCAGTCTACAATTGAATGGAATTCAGTGTAGACCAGTACAATGGAATGTACTGGCTGAGATGGGAGGGT
CCCTTGAGCCCAGGAGTTGGAGGCTGTAGTGAGCTGTGATGGTGTCTGTGAATAGTGACGGCACTCAAGCCTAGG
TGACATAGCAAGATGCCATCTCAAAGAAATATAGATATATAACATAAAATAAATAACTTTATACATTTCCTGGAG
GAAAAGTACTCTGTAAATTCAAGAGATCTGAATCAAATTACTCAACCTTTTGGAATTTGATCCTCTACTGTAATA
CTCATATGCTAGATTACTGAATTTTCAGAGTGAAAAAAAATTGACAGGGTAATATATAGGCCATATTATAGTGAA
GATCATAAGTATAAATGTCCTCGTTTAATCTTTCCATATTGAGGACAGCCTCTGCATATAAAAATGTTCATTGGG
AGAAAAATTATTTTTAAAACTAAATTTTTATAGTAGTCCTCCATTACTGGCAATTAAGGAGCAACCCACAAAATG
TCATTATGTGGTTCTTTGATTAGGCATAAAAAGTATTGCAAACAGCTTTTCTATTCCTTTGGAATATGAATCTTT
TTAATGTCTAAAGTTAACCTGCAACATTTTCTAGTAGGACAAGTCAATGTAAATTAGGTAATTTTTGCCTGTTTT
ATACCTTCTGTTGCATTTTGTTCAAATGAAAACATTTTTTAAAACATGATTGAATTTTTACTTCTCAGATAATTG
GTTTGAGTGTGGAATTTCTTTTTTAACACTTTGATATGTAAGTTAGTGTAAATTAATACTTTTATAACACTACTA
GGCTTTATATTTTTATGGAATGTTTTAAAATTTGAAATTTTTGAAGTGTTAATTTAGCAGTACTTTATCATTATG
TGCCAATACTGACAAGAAAAACAATTTTTTATGTATTTAATATACT**ATG**GTATTCAATAAATTCTATTTTAAAAT

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FIGURE 4974

MVFNKFYFK

FIGURE 4975

AAACGTGGCCGGGTCTGCAAGCTAGGTGCCAGCGGGGAAAGTTTCCCTGCTTCTTATCGTCTGCTTTAACGCCTT
AAATAGCCCGCTGAAGGCTGCAGCAGGTGCTAGGTAGCAGCCTCCCGGCCCTCGGGAAAGGCGGGGTGGGGAGGC
GAGAGCAGCTTAGCCTCCTCGACCTCCCTTCCTGGTGACGGACGAACAGTTCCCGTAGAATTTCGCTTCACCGAG
TGACCTTGAGCCCAGGGCGACGGTCAGCTTGTTAATTCCTGGCTGCAGGAACTTTGTGAGAATTTTAATGCATGG
AAAAGCTGTCCATGTTCCAACTGCTGTACATCCAAAAGTCTCAGTGTAATAGCAGGACCAAAATATTCTGTCAAT
CAGCTGACCATATACTTAATGACTCCTAAAATCTCGTGGACTTCTAAGAAAGCGCC**ATG**GCCTGTGCTGCTGTTA
TGATTCCTGGGTTGTTGCGGTGCTCTGTTGGAGCCATCCGTATTGAGGCTGCGTCACTGAGATTGACACTCAGCA
CTTTGCGCCACCTTACTCTAACCAGCATAATGAAATCCAAAAGGAAAACTGATCACATGGAGAGAACTGCAAGTG
TCCTTCGACGGGAGATTGTGTCAGCAGCTAAGGTGTGTGGAGCTGCCAGTGAGTCACCGTCAGTGAAGAGCCTCC
GCTTGCTTGTTGCTGATCAAGACTTTTCCTTTAAAGCTGGCCAGTGGGTTGATTTCTTTATTCCAGGAGTCTCTG
TGGTTGGTGGGTTTTCAATATGCTCCAGTCCCAGACTGCTAGAACAAGAGAGAGTGATAGAATTGGCAGTGAAAT
ATACGAACCACCCTCCTGCCCTCTGGGTTCACAATACGTGTACACTTGACTGTGAAGTGGCTGTGAGAGTGGGTG
GAGAGTTCTTCTTTGACCCTCAGCCTGCGGATGCCTCTAGAAACCTCGTGTTGATTGCAGGAGGAGTCGGAATTA
ACCCTCTGCTTTCCATCCTGCGGCACGCAGCAGATCTCCTCAGAGAGCAGGCAAACAAAAGAAATGGATATGAGA
TAGGAACAATAAAACTATTCTACAGTGCAAAAAATACCAGCGAACTCCTGTTTAAGAAAAATATCCTTGATTTAG
TAAATGAATTTCCTGAGAAGATTGCATGCAGTTTGCATGTTACAAAACAGACTACACAAATCAATGCGGAACTCA
AGCCATACATCACGGAAGGAAGAATAACGGAGAAGGAGATAAGAGATCATATTTCAAAAGAGACTTTGTTCTATA
TTTGTGGCCCACCTCCAATGACAGACTTTTTCTCCAAGCAACTGGAAAACAACCATGTACCCAAAGAACACATTT
GCTTTGAGAAGTGGTGG**TAG**GAGGCAGACAAAGGCAGAAAAAATAAAGAGGTGAGATCTAAAAAAAAAAAAAAAA
AAA

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FIGURE 4976

MACAAVMIPGLLRCSVGAIRIEAASLRLTLSTLRHLTLTSIMKSKRKTDHMERTASVLRREIVSAAKVCGAASES
PSVKSLRLLVADQDFSFKAGQWVDFFIPGVSVVGGFSICSSPRLLEQERVIELAVKYTNHPPALWVHNTCTLDCE
VAVRVGGEFFFDPQPADASRNLVLIAGGVGINPLLSILRHAADLLREQANKRNGYEIGTIKLFYSAKNTSELLFK
KNILDLVNEFPEKIACSLHVTKQTTQINAELKPYITEGRITEKEIRDHISKETLFYICGPPPMTDFFSKQLENNH
VPKEHICFEKWW

FIGURE 4977

GTCTGTAATGAAGTGTTATCGTTTTCCCTCATCTGAGTCTGAATTAGATAAAATGCCTTCCCATCAGCCAGTGCT
CTGAGGTGATCAAGTACTAGATTGAACTAGAGATTTTTGTCCTTAGTTTCTTTGCTATCTAATGTTTACACAAGT
AAATAGTCTAAGATTTGCTGGATGACAGAAAAAACAGGTAAGGCCTTTAATAGATGGCCAATAGATGCCCTGATA
ATG

FIGURE 4978

GGATCTTGGAAACAATTGGTTGGTTGCCCACTTTCCGTAGGATCAAGAGCAGAACCTTTCACATGGCACAGAAGA
ACCCAGGTTGCGCTTCATACCTGCATATTCCAGCCTTAGCCTGCCATTTCTCTCCTTGGCACTTTGTGCTCCAGC
AACACTGGTCTCAGTTGGTCATCCTCAAACTTGGGTTCCATATCCAGCCTCAGGACCTCTGTTCCTGTTACTATG
GTTCCTTGCATGTCGCCTGCTCTTACTAAAGAGCTCGTGTGTTTTCCAGCACACTTCGGTTTATCTCTTGATGAT
GATGCTAGTCTCTCCCTCCGCAAGGGCGGAAAGGCTGCCTGTTGGTTTGTACCAGTGTTTCCTAACGTGTAGCTG
CAGTCAGTATTTGGCTAAGCTGTTCCCAGGGGCTCAACAGATGCTTTCGGATGAGCCTTAACTGACCCAATCCTT
TGTGATGCGGGAGAGATTGCTAGGCCTCGCTCACCTGGCCAGAACCAGGGAAAGAGGCCGCGGTTGCAGCGCGAT
TCCAGGCCCTGGGCGTCAGGCGCGGGGTGGGCAGCTCTCCCCGGGCGGTGGGGCCCTTGTGACCGCGAGGCGGGG
CGCACCAGGAAGGGAGTGGGACAGCGCGGGCGCCCAGGGATGTGGCCTGGTTACCTGCCTTCTCTGATACGTCAA
GACACCTTCAACAATGGCTTGCAGCTGTACCCTGTTGGCTGCACCCAGGACGCCCTTTTCACTGCTAAGCAGTCC
TACCTGAGGCCCAGGGGCTGCCAGATTGACCCATAAATAATCTCCGGCGCCTCAGATCCAGAAGCTGCTGAGCCT
GATCTTAGTGCCTTCTCCTTTCTCTGTGTGGCCCCCCAGCCCCTTTCCCCACTGCCTTGTGTCCAAGGCCCTTTC
CTTCATGTATCCATGGAGGAGAGACAAAAATACACATCAATAAAATAAGATAGGGAATCCATAAATAGACATTCA
GAAGTATGGCCAACGGATTTATCTTAAAACCAATGGAGGAAGAAGAGTTTCAATAAATGTTGTGGACTTCCATTT
GTCAAAGACCAAAACAAAGGAACCCCAACCTTACATGTAATACAAACTTAACTCAAAATGGATCATATATCTAAA
TGTAAAATGGAAAGCTATAAAACTGAAAACAGACTATCTTTACAACCTAGGCGTAGGTATAGTTTTTAGACATTA
CACCAAAAGCACATGCCGTAAAAGAAAAAATAGATAAATTGGTGGATTTCATTAAAATTAAAAAACTTTTTCTCT
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNTGAGGTAAGAGAGA
GACCTTCTCATATTGTTGTTTTATATTGTTTTATACTCAGTACCTGTTTTAAGAAAAAAACAAGGAAGTGAAATC
AAAGACAGGCAGCCCGGCACCAGGCCTGAAACCAGCCCTGGGCCTGCCTGGCCTAAACCTAGTAGTTAAAAATCA
ACTTACGACTTAGAACCTGATGTTATCCGTAGATTCCAAGCATTGTATAAAAAAATTGTGAAACTCCCTGTTGTG
TTCTGTACCAGTGCATGAAACCCCTGTCACATATCCCCTAGATTGCTCAATCAATCACGACCCTTTCATGTGAAA
TCTTTAGTGTTGTGAGCCCTTAAAAGGGACAGAAATTGTGCACTTGAGGAGCTCA

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FIGURE 4979

ILETIGWLPTFRRIKSRTFHMAQKNPGCASYLHIPALACHFSPWHFVLQQHWSQLVILKLGFHIQPQDLCSCYYG
SLHVACSY

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FIGURE 4980

GGCACAGGGCTGTGACTAGCGGGCCGGCCCGGGCCAGGACAGCGGGCGGCGGGCGGCGCGGGCCTGGCCCCGGGATGGCTATGTTCCGCAGCCTGGTGGCCTCGGCTCAGCAGCGGCAGCCGCCGGCCGGGCCGGCGGGCGGCGACAGCG
GCCTGGAGGCGCAGTACACCTGCCCCATCTGCCTGGAGGTCTATCACCGGCCCGTGGCCATCGGCAGCTGCGGCC
ACACGTTCTGCGGGGAGTGTCTCCAGCCCTGCCTGCAGGTGCCATCCCCGCTGTGCCCACTGTGCCGCCTGCCCT
TCGACCCCAAGAAGGTGGACAAGGCCACCCACGTGGAGAAGCAGCTCTCATCCTACAAAGCGCCCTGTCGAGGCT
GCAACAAAAAGGTGACCCTGGCAAAGATGAGAGTGCACATTTCGTCCTGCCTGAAGGTCCAGGAGCAGATGGCCA
ACTGCCCCAAGTTCGTCCCCGTGGTGCCCACATCACAGCCTATCCCCAGCAACATCCCCAACAGGTCCACCTTCG
CCTGCCCGTACTGTGGTGCCCGCAACCTGGACCAGCAGGAGCTGGTGAAGCACTGTGTGGAAAGCCACCGCAGCG
ACCCCAACCGCGTGGTGTGCCCCATCTGCTCGGCAATGCCCTGGGGGGACCCCAGCTACAAGAGCGCCAACTTCC
TGCAGCACCTGCTTCACCGACACAAGTTCTCCTACGACACCTTTGTGGACTACAGTATTGACGAGGAGGCCGCCT
TCCAGGCTGCTCTGGCCCTGTCTCTCTCTGAGAACTGAAGGGAAGCGCAGCCACCCGCCTGCGTCTGGGGTCAGG
GATGTCCCCGCTCCTGTGTCGCACCTGGCACCTGCTCGGGAGCGCACCTCACCGGACTGAGCTCACAGGAGGAGC
CTGCACCCGCGCAGAAGGGGAGCCGGGGCCGAGCCTCCGGGCCTGAATACGGGCCAGCCGCCGAGGCCGCCAGAG
CAGGGCCGCCTGGTCCCACCGGCGTCGCTGGGTTCTTCGGTGCTTCTGGCCGAGCAGGCGGCCTACTTGGGCAGG
GCTGGACGCTGGGACCTGGAGCTGCCGCCGTCTCTTCAAAGCCATGATACCCCCTCGTGGGAAGAAGGGACCGAC
GCGCGAGTCGCGCTCCGCAGTCGAGCCGGGAGGAACCCAGGCTGCTGCCCTGCCCAGCCCGACCCTGCCCCGGCC
CCGCTTCCACCTTGCGCATTTGGTACTGGCTTTTGTGATACTTAGGAACCCTGGCATCTTTTCTATATTATCCAG
TGTGATAATCTTTTCACGTTTTATAGAGCAAAGACAGAGCAGTTACTCTTCATATTGCAATATCTGTGTTTGACT
AGGAATAATAGTATTTTTATGGAACATTTACAAAATTATATTTTTTAAGAAAACAATCAAAACAAGCATTGGGGG
ATTGGGGCAAGGATGGAAGGAGCAGTGGGGCAGCTGCCAGAGCTCAGGCGAGCCATGGGGTCTGCTGTGGGGTCT
GCCCTGGCCACCCACTGTGTGTCTGGGTCCTTGAGGTTTGTACGTTTCTCTTTGATGACCAGGAAGAAATCCCAG
CACCCCAGCCACAGGCTGTGGCTGCTCCCAGCAGAGGTGGGGCCGGCAGAGAAGGGGCCTCCTCCACCCAGAGTC
CTGGCCTTGGCCCGCTGTCACCTTCAAAGCTGACTGTGCCCCGCTGCGGGAGGGGACGGCACCCCAGTGGTGGCA
GAGCTTGGGGGCCTGGGCAGGGGCCCGCTTGGCGGGCCGGGCAACACGTCAACATTCTTTTCTGTTCTTGGCATT
AATTATTGCTGTCTTTTTTTAAAAAAAAAAAGTTTAAATAAAATGTCTCAGAGCAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAA

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FIGURE 4981

MAMFRSLVASAQQRQPPAGPAGGDSGLEAQYTCPICLEVYHRPVAIGSCGHTFCGECLQPCLQVPSPLCPLCRLP
FDPKKVDKATHVEKQLSSYKAPCRGCNKKVTLAKMRVHISSCLKVQEQMANCPKFVPVVPTSQPIPSNIPNRSTF
ACPYCGARNLDQQELVKHCVESHRSDPNRVVCPICSAMPWGDPSYKSANFLQHLLHRHKFSYDTFVDYSIDEEAA
FQAALALSLSEN

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FIGURE 4982A

ACTTGAACCCAGGAGGTGGAGGTTGCAGTGAGCGGAGATTGTGCCACTGCACTTGGACCTGGCTGACACAGCAAG
ACTATGTTTAAAAAAAAAGAGAGAGAAAAAAAAACAAGAAGGAAGAGCAATGGCGACACTGGATCGCAAAGTGCC
CAGTCCGGAGGCGTTTCTGGGCAAACCCTGGTCCTCCTGGATCGACGCCGCCAAATTACACTGCTCCGACAATGT
AGATTTAGAAGAGGCTGGAAAAGAGGGTGGAAAAAGCAGGGAGGTTATGAGGCTTAATAAAGAAGATATGCACTT
ATTTGGCCATTACCCAGCACATGACGACTTCTATCTCGTAGTGTGCAGTGCCTGTAACCAGGTCGTCAAGCCACA
GGTTTTCCAGTCGCACTGCGAGAGAAGACACGGTTCAATGTGTAGACCTTCTCCCTCTCCAGTGTCTCCAGCCTC
CAATCCCAGGACATCACTAGTACAGGTGAAAACAAAAGCCTGTCTCAGCGGCCATCACTCTGCCAGCAGCACCTC
AAAGCCATTCAAAACGCCCAAAGACAATCTACTTACCTCCAGCAGCAAACAGCACACAGTCTTTCCTGCGAAAGG
ATCAAGGGATAAACCATGTGTTCCAGTTCCTGTAGTCAGTTTAGAGAAAATTCCTAACCTAGTGAAGGCAGATGG
TGCCAATGTCAAAATGAACTCCACAACCACTACTGCAGTTTCTGCCTCCTCCACCTCGTCCTCTGCCGTCTCCAC
CCCTCCTTTAATTAAGCCTGTCCTGATGTCCAAGTCAGTGCCACCTTCACCAGAGAAGATCTTAAATGGCAAAGG
AATTCTGCCAACCACCATAGACAAGAAACACCAAAATGGCACCAAAAACAGCAACAAGCCTTACAGGAGACTTTC
AGAGAGAGAATTTGACCCAAATAAACACTGTGGAGTATTGGATCCCGAGACAAAGAAACCTTGCACAAGATCCCT
CACCTGCAAGACACATTCGCTAAGCCATCGGAGGGCAGTCCCAGGCCGGAAAAAGCAATTTGACCTCCTCCTGGC
AGAACACAAAGCAAAGTCCCGGGAAAAAGAAGTTAAAGATAAAGAGCATCTCCTGACTTCCACGAGGGAAATACT
TCCAAGCCAATCCGGGCCGGCACAGGATTCTCTGCTAGGGTCTTCAGGGAGCTCTGGGCCAGAACCAAAAGTTGC
ATCCCCTGCAAAATCCAGACCACCCAACTCTGTACTTCCTAGACCATCATCTGCAAATAGCATAAGCAGCAGCAC
ATCTTCAAATCATAGCGGCCACACTCCAGAGCCCCCACTCCCACCGGTTGGAGGTGACCTCGCCAGCCGACTGTC
CAGTGATGAAGGGGAGATGGACGGAGCCGACGAATCCGAGAAGCTAGACTGTCAGTTCTCCACGCACCACCCCAG
ACCTCTGGCGTTTTGCTCATTTGGGAGTCGCCTCATGGGACGAGGGTACTATGTGTTTGATAGAAGATGGGATCG
TTTTCGATTCGCACTAAACTCCATGGTAGAAAAACACCTGAATTCACAGATGTGGAAGAAGATCCCTCCTGCGGC
AGATAGCCCCCTGCCCTCGCCAGCAGCCCACATCACCACCCCCGTTCCAGCATCCGTTTTGCAGCCTTTCAGCAA
CCCCAGTGCTGTGTATCTTCCTTCAGCTCCCATCAGCTCGAGGCTCACCTCTTCTTACATAATGACATCAGCCAT
GCTCTCAAACGCAGCTTTCGTGACATCGCCGGACCCGAGCGCCCTCATGTCCCACACCACAGCTTTCCCTCATGT
GGCCGCAACCCTCAGCATCATGGACTCAACCTTCAAGGCCCCATCCGCCGTGTCCCCGATACCAGCCGTCATCCC
TTCCCCATCCCACAAGCCATCCAAAACCAAAACCAGCAAATCCTCAAAAGTCAAAGACCTGTCCACCCGTAGCGA
CGAGTCTCCAAGTAACAAAAAAAGGAAGCCACAGTCTTCGACTTCCTCCTCCTCCTCCTCCTCCTCTTCCTT
GCAGACATCCCTCTCGTCTCCACTGTCAGGGCCTCACAAAAAGAACTGTGTTTTGAATGCCAGTTCTGCTTTGAA
CTCCTATCAGGCGGCCCCTCCCTATAACAGCCTGTCTGTGCACAACTCAAACAATGGGGTGAGCCCACTCAGTGC
CAAACTGGAGCCCTCAGGACGGACCTCGCTGCCCGGCGGCCCCGCGGACATAGTGAGACAGGTGGGCGCGGTGGG
AGGCAGCAGTGACTCCTGTCCCCTCTCTGTGCCCTCCCTTGCGCTCCACGCAGGGGACCTCTCTCTGGCCTCACA
CAATGCTGTGTCTTCTCTGCCCCTCTCTTTTGACAAATCAGAAGGAAAAAAGCGTAAGAACTCGAGTTCTAGTAG
CAAAGCCTGTAAAATCACTAAAATGCCTGGTATGAATAGCGTTCACAAAAAGAACCCGCCCAGCCTTCTCGCACC
GGTGCCCGATCCCGTTAACAGCACCTCCTCTCGGCAGGTTGGGAAAAATAGCAGCCTAGCTTTGTCACAATCCAG
TCCTTCAAGTATATCCAGCCCAGGACACAGCCGACAGAACACAAACAGAACGGGCAGGATAAGGACTCTTCCA**TA**
ACAAGACTATGAAGCCACTTCCACATCAATTCCAGGCCACCTAATCCCATCCGAGGAGGCCATGGGGAGGAGGAG
GGAGGGGAGTGGGCTGGGGGGAGAGTCTGTTTTCTGTGCACTCCCTGTGACTCTGGCCTTTCTTCTTCTTTTTTT
AATTGACCAATTTTTAGTTAAAAAGGCAAAAGAAGGTGAATTTGAGATTTACAGAAAACAGTTCCAGTGTTTGGT
TTCCGCTGTCTTTCCTTTCATTTGCCATGTTTTTACATTCTTCCAAATTTGGGGTCACTCCCCTAGCTCCTGATG
CTGCTACTGTACCATCCTTTTGCTCCAGCCATGAGAGCAGACATTGCAGAATGTTGGTTCCAGGTTGGCATGCTC
TGAAGCTCTTGAACTGTAGCACAGGCAGAGCCCTTTTTCTTCCTGTCATCTCCACCCGATTCCTTCCATCCCTAC
GTCTACCACTCTCTGGGTCCTCACTGGTCTTCAAAGGACCTGGCTCTCATAGGATCCCCTCAGGATTGTGTGCAG
GGAGAGGGGGCTTTGCTGGGGAGGAGCTGGGAGTGGAGAGTTGGAGGGTGGGTGGGGTTCCCTCATCCAGTTTCC
ACAGCCCACCATGGCTGGAGCCAAATGCTAGAAGCGAGATTGAGAACAGTGGCCGTTTAGTGATGTGGTTTACCT
AATACCACTGTCCAGCTGTGCAGCTCAGAAAGGATAAACCAGTCAGGGACAGGGGCCAGAACAGGTTTGGGAAGG
TGGCAGCAAGCAGAGCATGGTGGGTAGGAGATGATCCCTAAAAAAACTGGAGACTGTGGTGGTCTGAGCTGGTCA
GGAATCTGCAGAATCCCTTCCAGGAATCAGTGTGCCAGTGCCCACAGCAGGGTGAGCTAGGAGGGAGAAATCCCA
GGAAAAAGGTCGTGAGAACCCAGAAAGCCACTCCATGAGGAGGCACGGTGACCACAGCTGCTAAAGGTTCTTAGG

FIGURE 4982B

CTGCCTTCCTGGGCTAGGAAGAGCCCCCCAGGGAGAGCTTCCACAAAAGGGTATGTGTCAAACCTTTTGTCAGAA
TAAATAATAGCATTTCCCACCCACCCCCATGCCCTGGGCCACAGGGACTTGGTGGGATCAGCACACCCATGGATC
AGCTTTTGCTGTCTTAGAGACAGCCATCCCCATGAAGGAATGGTAAGGACAGCCACTGCTCAGTGAAGAACAGCC
ATTTGGAAGAGCCACGCTGGAGCCCTGCAGCCATAGAACTATTCACACTGGAGTTTTAAAAGAAACAGCAATACC
ATAAGCTCTAGTAGGGAATCATAATCAGGAAAGGAATTCACAACATAAAATAGGTGTTCTGTGCTATTAATCATG
TAACTTTGTATATGATGTATAGCAAAGATACTGGGAGGTTTTGTTTCATCCTTAAATCAGAAATGAATGCTAGTT
TCATAGCTGGGCAGAACCCTCATCCCCACCCCAAAGTTTTCCTTTTCTTTCCCATTCCCCCAACCCAAAGATCAG
ACTACTGTTAAGTTTCACCACACAATTGGAATTGCAAAGACGGGAGGCAAATGGAGTGATTTTCATCAATGGAAT
TGCACTGACAGTGAGTGTTTCTTATAGGATTACTAAATTTTTTAATATAAAATGATTTGTTTAAAAATCAGGAGT
TGATATTAAGTACCAGGACATTAGTTCGGATGATTTCATTTTTATTTCTACAGTGTTAAAAGTGCACTTATATGC
TGGTTTATTTACGTCTTGGGAAAAGAGACTGCAAATTGAAGGGATGATTGTTACTTTTTCTTTTTTTAAAAAAAA
AAGGTTAAGGAGATTTTAAGACTTATAAATGTTTAAGAAATTATAAACAAGGTTAGACCCTTTGAAAAAAAGTTT
AGAAGATATTCTTAAAGTAAATTTTTATAGTGTTAATTTTGTAATAATTTATGTTTTACTATATTACAGAGCTAA
CTGACCAGAATAGTTTCAGAAACAATATGAAACTTAGGAAAGTTTAAGCAATGTTTATATTTTTAAAATGTTCTT
TGAATTATGTTTTTATTGTACATTTCTTCAGACTGAAAAGTATGTACATATCTTTGTTATTTTTGCACAATTTTG
TCTTGTTCGGTTTCAGAGGTCTGTTGTTTTTTATAATTTATTTTGAGTTGTAAAACTTGCAGGAGTAAAAACAAA
AAACAAAATCTCCACAACAAAATAACCCTCTGATTTATAAACTCTTATAGTCAAAGAGGGAAAACAAAGGTTGAG
AGATTAAGTGGCTGCTTCTGAGAAATAATGTCTCAAGGACTAAAGGAGCAATTCAATAGGTTTAGACATTGTAGC
TCTCTACATCTTGAATTGGAAGCTGGAATAAAGAGCCCCCACCCCCCCCCCACCCTCATCGAATGCTGCTTACTT
TGTCAAAAGACTGGCTATGACCAAGGTGAGGATATTTCTGGAAAACTGGGCAAAAAGGGAAAGCCCACAGTATTC
TTCCTTGGCAGTCAACCACAGGTTTACTTTACAATGATGTATTAAAAACTTGCAGCTTGAAAAATGGAATGCAAA
TAAAAGGTTCTCTTTGGGTTTGTCTTAATGGAGTTAAACTGGAGCAGCCTATAAAACATTTTTAGGGTGATGTCC
TCTGGGTCCTTCTGTTCTGCACACCCACTCAGTCTTCTCTCCCAGCCCCTTGACTGCACACACCCCTCTTTGCCT
GAAGATCTCCTGACTTGTCGCCAGCCATAGAGGCTCGAAAGCTCTGGTTGTGAAGCATAACGCAATGCATAGACC
TGTCAGCCAT

FIGURE 4983

AEIVPLHLDLADTARLCLKKKREKKKQEGRAMATLDRKVPSPEAFLGKPWSSWIDAAKLHCSDNVDLEEAGKEGG
KSREVMRLNKEDMHLFGHYPAHDDFYLVVCSACNQVVKPQVFQSHCERRHGSMCRPSPSPVSPASNPRTSLVQVK
TKACLSGHHSASSTSKPFKTPKDNLLTSSSKQHTVFPAKGSRDKPCVPVPVVSLEKIPNLVKADGANVKMNSTTT
TAVSASSTSSSAVSTPPLIKPVLMSKSVPPSPEKILNGKGILPTTIDKKHQNGTKNSNKPYRRLSEREFDPNKHC
GVLDPETKKPCTRSLTCKTHSLSHRRAVPGRKKQFDLLLAEHKAKSREKEVKDKEHLLTSTREILPSQSGPAQDS
LLGSSGSSGPEPKVASPAKSRPPNSVLPRPSSANSISSSTSSNHSGHTPEPPLPPVGGDLASRLSSDEGEMDGAD
ESEKLDCQFSTHHPRPLAFCSFGSRLMGRGYYVFDRRWDRFRFALNSMVEKHLNSQMWKKIPPAADSPLPSPAAH
ITTPVPASVLQPFSNPSAVYLPSAPISSRLTSSYIMTSAMLSNAAFVTSPDPSALMSHTTAFPHVAATLSIMDST
FKAPSAVSPIPAVIPSPSHKPSKTKTSKSSKVKDLSTRSDESPSNKKRKPQSSTSSSSSSSSSLQTSLSSPLSG
PHKKNCVLNASSALNSYQAAPPYNSLSVHNSNNGVSPLSAKLEPSGRTSLPGGPADIVRQVGAVGGSSDSCPLSV
PSLALHAGDLSLASHNAVSSLPLSFDKSEGKKRKNSSSSSKACKITKMPGMNSVHKKNPPSLLAPVPDPVNSTSS
RQVGKNSSLALSQSSPSSISSPGHSRQNTNRTGRIRTLP

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FIGURE 4984A

GGGGGGGTGTCTGGGACGTAGGCGGGGGGCTGAGGTGAGCGTAGGTGGGGGGGTCTGGGAGGCGTCAGGCGGGTG
TCTGGTCTATGTGGGGCAGCAAGCAGTGGTGTTTTGTGGCCAGCGGCAGGTGATGGGAGTTGCCGAGTCCACAGC
GCTGTAGACTGCGCCGCATTAGAATGCCTGGCCTCCTGATGCTGTGCTCTTCATCTAGACCCAAGCCCCAGGTCG
TGGTGACGATTTCTCCCGTTTTTGACTCCCTGGAACTGTATTGCCTGCTTTACCTGCGTACATGTTGATTCTTTC
TCATGGCAACCCCGCAGGAAACCATCAAGATCTCATTTTACAGCTGGGATTCTCTGGTTCACAGAGGTAACGGAG
CTTGCCCGAGGCCAGTTAAACGAGAAGATTCATCACCGCTTTG**ATG**GCTGCCTCACAAACTTCACAAACTGTTGC
ATCTCACGTTCCTTTTGCAGATTTGTGTTCAACTTTAGAACGAATACAGAAAAGTAAAGGACGTGCAGAAAAAAT
CAGACACTTCAGGGAATTTTTAGATTCTTGGAGAAAATTTCATGATGCTCTTCATAAGAACCACAAAGATGTCAC
AGACTCTTTTTATCCAGCAATGAGACTAATTCTTCCTCAGCTAGAAAGAGAGAGAATGGCCTATGGAATTAAAGA
AACTATGCTTGCTAAGCTTTATATTGAGTTGCTTAATTTACCTAGAGATGGAAAAGATGCCCTCAAACTTTTAAA
CTACAGAACACCCACTGGAACTCATGGAGATGCTGGAGACTTTGCAATGATTGCATATTTTGTGTTGAAGCCAAG
ATGTTTACAGAAAGGAAGTTTAACCATACAGCAAGTAAACGACCTTTTAGACTCAATTGCCAGCAATAATTCTGC
TAAAAGAAAAGACCTAATAAAAAAGAGCCTTCTTCAACTTATAACTCAGAGTTCAGCACTTGAGCAAAAGTGGCT
TATACGGATGATCATAAAGGATTTAAAGCTTGGTGTTAGTCAGCAAACTATCTTTTCTGTTTTTCATAATGATGC
TGCTGAGTTGCATAATGTCACTACAGATCTGGAAAAAGTCTGTAGGCAACTGCATGATCCTTCTGTAGGACTCAG
TGATATTTCTATCACTTTATTTTCTGCATTTAAACCAATGCTAGCTGCTATTGCAGATATTGAGCACATTGAGAA
GGATATGAAACATCAGAGTTTCTACATAGAAACCAAGCTAGATGGTGAACGTATGCAAATGCACAAAGATGGAGA
TGTATATAAATACTTCTCTCGAAATGGATATAACTACACTGATCAGTTTGGTGCTTCTCCTACTGAAGGTTCTCT
TACCCCATTCATTCATAATGCATTCAAAGCAGATATACAAATCTGTATTCTTGATGGTGAGATGATGGCCTATAA
TCCTAATACACAAACTTTCATGCAAAAGGGAACTAAGTTTGATATTAAAAGAATGGTAGAGGATTCTGATCTGCA
AACTTGTTATTGTGTTTTTGATGTATTGATGGTTAATAATAAAAAGCTAGGGCATGAGACTCTGAGAAAGAGGTA
TGAGATTCTTAGTAGTATTTTTACACCAATTCCAGGTAGAATAGAAATAGTGCAGAAAACACAAGCTCATACTAA
GAATGAAGTAATTGATGCATTGAATGAAGCAATAGATAAAAGAGAAGAGGGAATTATGGTAAAACAACCTCTATC
CATCTACAAGCCAGACAAAAGAGGTGAAGGGTGGTTAAAAATTAAACCAGAGTATGTCAGTGGACTAATGGATGA
ATTGGACATTTTAATTGTTGGAGGATATTGGGGTAAAGGATCACGGGGTGGAATGATGTCTCATTTTCTGTGTGC
AGTAGCAGAGAAGCCCCCTCCTGGTGAGAAGCCATCTGTGTTTCATACTCTCTCTCGTGTTGGGTCTGGCTGCAC
CATGAAAGAACTGTATGATCTGGGTTTGAAATTGGCCAAGTATTGGAAGCCTTTTCATAGAAAAGCTCCACCAAG
CAGCATTTTATGTGGAACAGAGAAGCCAGAAGTATACATTGAACCTTGTAATTCTGTCATTGTTCAGATTAAAGC
AGCAGAGATCGTACCCAGTGATATGTATAAAACTGGCTGCACCTTGCGTTTTCCACGAATTGAAAAGATAAGAGA
TGACAAGGAGTGGCATGAGTGCATGACCCTGGACGACCTAGAACAACTTAGGGGGAAGGCATCTGGTAAGCTCGC
ATCTAAACACCTTTATATAGGTGGTGATGATGAACCACAAGAAAAAAAGCGGAAAGCTGCCCCAAAGATGAAGAA
AGTTATTGGAATTATTGAGCACTTAAAAGCACCTAACCTTACTAACGTTAACAAAATTTCTAATATATTTGAAGA
TGTAGAGTTTTGTGTTATGAGTGGAACAGATAGCCAGCCAAAGCCTGACCTGGAGAACAGAATTGCAGAATTTGG
TGGTTATATAGTACAAAATCCAGGCCCAGACACGTACTGTGTAATTGCAGGGTCTGAGAACATCAGAGTGAAAAA
CATAATTTTGTCAAATAAACATGATGTTGTCAAGCCTGCATGGCTTTTAGAATGTTTTAAGACCAAAAGCTTTGT
ACCATGGCAGCCTCGCTTTATGATTCATATGTGCCCATCAACCAAAGAACATTTTGCCCGTGAATATGATTGCTA
TGGTGATAGTTATTTCATTGATACAGACTTGAACCAACTGAAGGAAGTATTCTCAGGAATTAAAAATTCTAACGA
GCAGACTCCTGAAGAAATGGCTTCTCTGATTGCTGATTTAGAATATCGGTATTCCTGGGATTGCTCTCCTCTCAG
TATGTTTCGACGCCACACCGTTTATTTGGACTCGTATGCTGTTATTAATGACCTGAGTACCAAAAATGAGGGGAC
AAGGTTAGCTATTAAAGCCTTGGAGCTTCGGTTTCATGGAGCAAAAGTAGTTTCTTGTTTAGCTGAGGGAGTGTC
TCATGTAATAATTGGGGAAGATCATAGTCGTGTTGCAGATTTTAAAGCTTTTAGAAGAACTTTTAAGAGAAAGTT
TAAAATCCTAAAAGAAAGTTGGGTAACTGATTCAATAGACAAGTGTGAATTACAAGAAGAAAACCAGTATTTGAT
T**TAA**AGCTAGGTTTCCTAGTGAGGAAAGCCTCTGATCTGGCAGACTCATTGCAGCAGGTGGTAATGATAAAATAC
TAAACTACATTTTATTTTTGTATCTTAAAAATCTATGCCTAAAAAGTATCATTACATATAGGAAAACAATAATTT
TAACTTTTAAGGTTGAAAAGACAATAGCCCAAAGCCAAGAAAGAAAAATTATCTTGAATGTAGTATTCAATGATT
TTTTATGATCAAGGTGAAATAAACAGTCTAAAGAAGAGGTGTTTTTATAATATCCATATAGAAATCTAGAATTTT
TACTTAGATACTAATAAAATACATTTAGAAACTTTTAAAGTCATGAAAAAGCATTAACCTTCTAAACAGTATATT
CTAAAAAGTCAAAACGTTAACAATAGTTTTTATCTAATAAAAGCACTGCAAGAAAATAGGGTAGAATTGTTACAG

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FIGURE 4984B

CTGGACTTGTAAAAATATGTCTTTTTACTCAGGGTTTAAAATGTCCCATTTAAATATGAAATGTAAACAAATTTG
TTTTTTAAGGTTAAGGCCAAATGTAACAATAAAACCCTGTCGATGGTTTTAGCTAAATTAGAGGAAGTTGTATGA
GACTTAATGATCTAAAAACTTAAAATTGAATTGGTTTGATTAAAAATAAAGCTTGCAATTTTAAAAGTAGCTCAC
ATTTAATTTCTTGTGTGAAATAGAACATGCTTTAAAGGAAGTATTTTTATGTGAATTTGCATTCCAGTATAAATA
GTATTCACAAAAAAGATTTTCCTAGATTTTATCTATTGAATAGGTGTCAATATGGCATGCATATTGTAACTTTCA
TTAGAAATAAGTTGCTTTGACTTTTAAAAATGACATAGTTAGATTATTTAAAGTCAATGTATATAGTATATATTA
TGTATGGATTTATATACCAAATTTTGGAATACAGCCTATCTCATGACCATATTGAAATGTACGGAATTTGATCCA
TGCGATACTATGTGTGCATTATTTGAAAGTTATTGGAAATTTTATTCAAACCGTGGAACAAATGTATGTGATTTT
GTTATACTTCTTAATTTAAATAAAATATTTAATGCACTATTAAAAT

FIGURE 4985

MAASQTSQTVASHVPFADLCSTLERIQKSKGRAEKIRHFREFLDSWRKFHDALHKNHKDVTDSFYPAMRLILPQL
ERERMAYGIKETMLAKLYIELLNLPRDGKDALKLLNYRTPTGTHGDAGDFAMIAYFVLKPRCLQKGSLTIQQVND
LLDSIASNNSAKRKDLIKKSLLQLITQSSALEQKWLIRMIIKDLKLGVSQQTIFSVFHNDAAELHNVTTDLEKVC
RQLHDPSVGLSDISITLFSAFKPMLAAIADIEHIEKDMKHQSFYIETKLDGERMQMHKDGDVYKYFSRNGYNYTD
QFGASPTEGSLTPFIHNAFKADIQICILDGEMMAYNPNTQTFMQKGTKFDIKRMVEDSDLQTCYCVFDVLMVNNK
KLGHETLRKRYEILSSIFTPIPGRIEIVQKTQAHTKNEVIDALNEAIDKREEGIMVKQPLSIYKPDKRGEGWLKI
KPEYVSGLMDELDILIVGGYWGKGSRGGMMSHFLCAVAEKPPPGEKPSVFHTLSRVGSGCTMKELYDLGLKLAKY
WKPFHRKAPPSSILCGTEKPEVYIEPCNSVIVQIKAAEIVPSDMYKTGCTLRFPRIEKIRDDKEWHECMTLDDLE
QLRGKASGKLASKHLYIGGDDEPQEKKRKAAPKMKKVIGIIEHLKAPNLTNVNKISNIFEDVEFCVMSGTDSQPK
PDLENRIAEFGGYIVQNPGPDTYCVIAGSENIRVKNIILSNKHDVVKPAWLLECFKTKSFVPWQPRFMIHMCPST
KEHFAREYDCYGDSYFIDTDLNQLKEVFSGIKNSNEQTPEEMASLIADLEYRYSWDCSPLSMFRRHTVYLDSYAV
INDLSTKNEGTRLAIKALELRFHGAKVVSCLAEGVSHVIIGEDHSRVADFKAFRRTFKRKFKILKESWVTDSIDK
CELQEENQYLI

FIGURE 4986

TCCCAAAGTGCAGGGATTACAGGTGTGAGTGAGCCACCGCGGCCGGCCTCTATCATTTTCTGACTCAGCAGCTCC
ACCAAAATTGACATCCTAGCAAACACTGTGAAGGAATTAACCTAAGTGCTTCCAGAGCATCTCATGTAACCTCTA
TGGAGTAAGTCACTTTTTCTGTAACATGTGGCTTTTGACCTTGATGAAGACTTTGACTTCTCATCCCTGTCTACA
TGGAGGAAGATGATTCAGTGGTGGGGAAAATGAACCTCGGTAACATTTCCAATGTCCTTCAAGAGGGAAACAAGT
TCAGTGTTATCATCGTGGCATTCGTTAGTTTTTTTTTTTTAAATCACTTTTTTAGATACAACTTTATTTTTTTA
TACCTACATAGCACATGACTGGGGGGGATAAAGCATGTATAAGTTGGGAGAGGGTAAAGAATGTGTGACTATGTAT
ACAGAAAATAGACTAAAATGTGCAGCAAAATGATATATACTGTAATCTGGTTTTTGAAGTATCTACTATTCTGGA
ATATTGTTAAACAACTTTTTGCTTTTGAAAAAAAAAGGTGCCTTGATTCAGTTGCGTGACTTAGAACATTCATCC
TATTTTATTGTGATTTTTAATGTCTTCTGACCCCAAACTGTGTTTTTGGTTGCAGTCTGGCGGCTGCAGGCATAG
CGTCGGTTTTGTTCCAATAACAGAGACCAAAGAGTTAATCAGATATGGTTCAGCTGCTACAATTGT**ATG**ATTCAA
AGGCAATTTAATCACCCCAAATTTCCATGGCCCCCACAGTCAAGACCTGCCATTCGTTTTCTCTTGCAGGTTGGA
GTAAATTTGCACTTTGAATCATGTGGGTCATTTGGGGACCTTGTTCTTTTCTATTTTGCTTTATTAATAAAGGAA
CTTGTAGAAACCTC

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FIGURE 4987

MIQRQFNHPKFPWPPQSRPAIRFLLQVGVNLHFESCGSFGDLVLFYFALLIKELVE

FIGURE 4988

TCGACCCACGCGTCCGCCCACGCGTCCGCTTAATATCTGTATTCCCAGTTGCCTACGGGATAAAAGCCCAAACTC
CTTAGCAGAGAATATAAGGCCCTAGCTCCCACATTATTTCAGCAGTCATCACCCACTATGTTCCTCAAGACTGCA
GCCATTAACTTTTTAGAGTTCCCTAAACATGCTGTTTACTTTCATGCCTCTATCCCGTTGTCTGTGGAATGACTT
CCCTCCTTGCCCTTTTCAGTGCTACAAACCCCTATTCTTTAAGACATAGTACAAATGGCATCTCCTGGTTGGCAT
CTTTCCTGCAGGCCTACAGGCCTAGTAAGTATCTTCCTCCTCTGTGCTCCTGCATACCTCCATTCCTTTGTTATG
ACATCTATAACTTTAATAAGTACTAAAATCTGTAGTCCTACAAAACTCAGGCATAGAACTCATTTCCTTTATGGY
TCTATAATGGAACTTTACCCAACTCTCACGTTCCCCATGACCACAGATGTGGAAAATTTGAATCTTGACAGTTCA
AGGTGAACTCAGTCATTTTCAGAGTTTTCATAGTCCCTTCAAGATTGAAACTCAGTTCCTGCAATGTTTGCCCCT
TTTCTCCTCTTTTGTCTATGCTGGGAGAGGCATTGTGGGGAGGGTTGTCTGGCTTATGGCTCCCATTGTCCTCTG
CTTGATAAACCACCTGAGCTTTGGTCATTAGCAGTCTCCTGTGCCTTTCACACTCAGGTAGTGTCTGCACAGGCC
ACTCTATGTCTTTTCCATGCTGAAGAAATTCCTTTCCAGGCCATGTCTGTGTTCCTCCTGCCACACAGGAAATTT
TTGAGCATGTTCATCCTCCAAGCTGAATGCAGGGTCTTGGGTAGTGGTCCTCACCTGCTCCAGAGACTTCTCCAG
CCATTGCCACTCTCCACTCAGGTGATGAAGCTGGATGAGGGACTGCACCCACCAGAGTCAGGCCAGGGTCCTGTC
TGCTCTGTGAGTCCCTCCAATTGTTCTTATTCCGAGATTTCCATTGTTCTGCCCCCTCTTGACTCCCAGGGCTCT
CAAGGGAGTGGGGGTAGTGAAGGGAGCCCTTTCCCAAGCTCCCCCAAGAGCTCTAGTCACATCACTTCTGATACT
TCTTTTCCCACCAGCTGGAAGAAAGAACTTTCATTTGTCTTGAAATGAGAAAAATGTTCTTAGAATATTTTGTAT
TACTCTCTGCTCTGTCATTTATGGTAAACAAAATAAAATAATAAAAAAAAAAAAAAAAAAAAAAAAAAGGGCGGC
C

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FIGURE 4989

MASPGWHLSCRPTGLVSIFLLCAPAYLHSFVMTSITLISTKICSPTKLRHRTHFLYGSIMELYPTLTFPMTTDVE
NLNLDSSR

FIGURE 4990A

GGCTCTACTTTGAACCTGCTGGGCAAGGAAGAGATTTTCAAGGAAACCATCTACCGTGTGCAAGCTCCTGCCGGC
CAACCCCAGACCCCAGCACGGAGCCAGGCGCCTGTGCCCGCCGACCCTCAGCATCCTCCTCAGAAAGGCTGGTGG
CATCAGGAAGCCCCTGGCCAGCCTCCACCTGAGCCCAGTGAGCTCAGCTTTAAGGATGGAGTCAGGCAGGGGGTC
CTCAACCCCTCCAGGACCCATTGCTGCCCTAGGGATGCCAGACACTGGGCCTGGCAGTTCCTCCCTAGGGAAGCT
TCAGGCGCTCCCTGTTGGGCCCAGAGCCCACTGTGGGGACCCTGTCAGCCTGGCTGCAGCAGGGGACGGCTCTCC
AGACATAGGCCCCACGGGAGAGCTGAGTGGTAGCTTAAAGATCCCCAACCGGGACAGCGGGATCGACAGTCCCTC
CTCCAGTGTGGCTGGAGAGAACTTTCCCTGCGAGGAGGGCTTGGAGGCTGGCCCAAGCCCCACTGTACTGGGGGC
GCACGCAGAGATGGCCCTGGACAGCCAGGTCCCGAAGGTCACCCCCCAGGAGGAGGCGGACAGCGACGTGGGTGA
GGAACCTGACTCTGAGAACACCCCCCAGAAGGCTGACAAGGATGCCGGCCTGGCCCAGCACTCTGGCCCCCAGAA
GCTTCTCCACATTGCCCAGGAGCTCCTGCACACCGAGGAGACCTATGTGAAGCGGCTGCACCTGCTGGACCAGGT
TTTCTGCACCAGGCTGACGGATGCGGGGATCCCTCCAGAAGTCATCATGGGCATATTCTCTAACATCTCCTCCAT
CCACCGCTTCCACGGGCAGTTCCTGCTGCCGGAGCTGAAGACGCGGATCACGGAGGAGTGGGACACAAACCCACG
GCTCGGGGACATCCTGCAGAAGCTGGCCCCATTCCTGAAGATGTACGGCGAGTATGTCAAGAACTTTGACCGAGC
CGTAGGGCTGGTGAGCACGTGGACCCAGCGCTCCCCACTGTTTAAAGACGTCATCCACAGCATCCAGAAGCAGGA
GGTATGCGGGAACCTGACGCTGCAGCACCACATGCTGGAGCCCGTGCAGAGGGTCCCCCGGTACGAGCTGCTGCT
CAAGGACTATCTGAAGAGGCTCCCGCAGGACGCCCCAGACCGGAAGGATGCGGAGAGGTCCTTGGAGCTCATCTC
CACAGCCGCCAACCACTCCAATGCTGCCATTCGGAAAGTGGAGAAAATGCACAAGCTCTTGGAGGTGTACGAGCA
GCTGGGTGGGGAAGAAGACATTGTCAACCCGGCCAATGAACTGATCAAGGAGGGCCAAATCCAGAAACTGTCAGC
CAAGAACGGCACCCCCCAGGACCGCCACCTCTTCCTGTTCAACAGCATGATCCTTTACTGTGTGCCCAAGCTGCG
GCTCATGGGCCAGAAGTTCAGCGTCCGGGAGAAGATGGACATCTCAGGCCTCCAGGTGCAGGATATCGTCAAGCC
AAACACAGCACATACATTCATCATAACGGGAAGAAAAAGGTCCCTGGAGCTGCAGACGCGGACAGAGGAAGAGAA
GAAAGAATGGATTCAGATCATCCAGGCCACCATCGAGAAGCACAAACAGAACAGCGAAACCTTCAAGGCTTTTGG
TGGCGCCTTTAGCCAGGATGAGGACCCCAGCCTCTCTCCAGACATGCCTATCACGAGCACCAGCCCTGTGGAGCC
TGTGGTGACCACCGAAGGCAGTTCGGGTGCAGCAGGGCTCGAGCCCAGAAAACTATCCTCTAAGACCAGACGTGA
CAAGGAGAAGCAGAGCTGTAAGAGCTGTGGTGAGACCTTCAACTCCATCACCAAGAGGAGGCATCACTGCAAGCT
GTGTGGGGCGGTCATCTGTGGGAAGTGCTCCGAGTTCAAGGCCGAGAACAGCCGGCAGAGCCGTGTCTGCAGAGA
TTGTTTCCTGACACAGCCAGTGGCCCCTGAGAGCACAGAGGTGGGTGCTCCCAGCTCCTGCTCCCCTCCTGGTGG
CGCGGCAGAGCCTCCAGACACCTGCTCCTGTGCCCCAGCAGCTCTAGCTGCCTCTGCTTTCGGAGTGTCCCTGGG
ACCAGGATAGATGTGGGTGTGTCTCAGTGGGGCCCCCAGGCTGGGAACACACTCGGAAGATCCCGTGTGTGCACG
CTGGCTTCTCGGGACCAGCCAGGGCCAAGGCTTGGGAACCATTTGCATCCAGGAGTTAGATGGGAACAAGTGTCA
CTCCTGGTCACCTGGTTGGAGGGCATGGATTGAAGCTGCCCTCAAGTCCAGGCCTTGAGGCCCACCTGAGGGGAG
ATACTGCCCTTCTCTCTGCCTGCCTCACCTCCAGCTGTCAGAGGGTGAGCAGGGCCCTGGAGGCAGGCACCCCCT
CCTCCTCCTCCCCGTCCCCTTCTCCTCCTCCTCCCCGTCCCCTTCTCCTCTTCCTCTCCCTCCTTCCTCTCCCTC
CGCCTCGCTGTCTTTCTCCTTCTCCTCTCCCTCCTCCTCCTGCTCCTTCTCCTCCCCGTACCCTTTTTCTACTCT
TCCCTCTCCTTCTCCTCCTCCTTTCTCTCCCTCCTCCTCCCCCTCCCCTTCTCCTCCTCTCTTTCTCTTCCTCTT
TTCCTCCTCCACTCCTCTTTCTGAGAGTAGCTGCTGCTTTCCCTGCCTTCCTTCCTCAAGAATACAGTCTATTCT
GGGGGGTTGCAGGACAGCTGAAAAAGAAAACGTGAGTTTCCAGAAAAGCACATCGCCCTTTCTCTCCACTCGACA
CAGCCTGCGGTTTGCAGTGCCAGCTGCACGTTGGAGTCTCCTGGGAAGCTTCTAGTGTTGATCTCCCTCCTAGAG
GCTCAGTGAGGTGATCGGGGGGTCAGTGTGTTTTCAGAGTCCCAGCTGCTCTGACTTACAGCTGTGGTTGGAGCC
CTGACCTAGGTCCTTGGTCTAAGAAGTCAAGGATGTAAGTCTATTAGGACTGAGTGTTGAATGGTCTTGATGGTG
AAGAAGGACCTTGCACTGCCTACCGAGCTCCCTCATGCCTGCAATTTAAATACCGAGGTGTGTTCTGAGAGCCCC
AGGTCCTTGGGGCACGGGCCTCCAGGGCCCTGTAAGGTGGACTCTGGCCTCGAAGGGGGGCCCAGGTCTGAGGGG
TCCAGCTCTGGCAGGGGGTGTCTAAGCCACGTCCAAATGGTGGACAGTAGCTCCAACAGTGACATGACAGAGGGA
GGGCCTGTGTGTGTGGTGTGTGTGTGTGCTGTGTGTGCACGCACGTGCATGTATATGGTGTGTGTAGAACTGA
CACGCTTGAAGTCCCTGTCCCGTGACCCACCCTCAGGTACTTGCTGTTGGGTTTTCCTATGATTTTGATGTGTCC
TGACCCAGCATATGGATGCCCTCCCCTTGGAGGGCCCAGCCTGCAAACCCCATCTGATACCACACATGCCTATGT
CCTGCAGGCTTCTAGTGACCCTTGCAAGCCGGGTGAGGCTGGTCCCAGTCTCTGTGCAGATCTTGGCCATGTCTC
CACAGCCAGCTCCCCCCAAGCAGTGGCCCTGGCCCTACCCCAGCCTCCTCAGAACAGGGGTGACCACTGCAGGGG

FIGURE 4990B

AGACTGCCCCTAACCTGTGTCTTTGTGTCCCCAGAAGACACCCACTGCAGACCCCCAGCCCAGCCTGCTCTGCGG
CCCCCTGCGGCTGTCAGAGAGCGGTGAGACCTGGAGCGAGGTGTGGGCCGCCATCCCCATGTCAGATCCCCAGGT
GCTGCACCTGCAGGGAGGCAGCCAGGACGGCCGGCTGCCCCGCACCATCCCTCTCCCCAGCTGCAAACTGAGTGT
GCCGGACCCTGAGGAGAGGCTGGACTCGGGGCATGTGTGGAAGCTGCAGTGGGCCAAGCAGTCCTGGTACCTGAG
CGCCTCCTCCGCAGAGCTGCAGCAGCAGTGGCTGGAAACCCTAAGCACTGCTGCCCATGGGGACACGGCCCAGGA
CAGCCCGGGGGCCCTGCAGCTTCAGGTCCCTATGGGCGCAGCTGCTCCGTGAGCTGAGTCTCCCACTGCCCTGCA
CACCACCACATTGGACCTGTGCTGTCCTGGGAGGTGGTGTTGGAGGCCCCATGAAGAGCGCCCTGGACTGCTGAG
GGTGGGCCAACAGCCCAGAGCTCAGGACATTTGGCTTTGGGGGGAAGGAAACTGAGGCCCAGAGAGGGGCAACCA
CTGGCCAAGGGTCACCCAGCAAGTTTTGGCTAAGAGCCTGGCCTCCAGCCCCAGCAGTGTGGCCCAGAGCAGGGG
CCGACTGCCAAAGTAACCATCATCCATATGGGCCGTGTGGTGATGCTGGCCCGGAAGGCAGAAAGAGGCAGCATG
GGCACTGCCAGGGACAGCCACATCCTGCTGGTCTGCAGCGTGGTCCACCCCGCCTCTGCCCAGCCTGTCTACACC
GTGTGAGCTGAATCGTGACTTGCTTCCCACCTCCTTTCTCTGTCCTCTCCTGAGGTTCTGCCTGCAGCCCCCAGG
AGGTGGGCCTGCCCCATCCTAGCTGGACTCATGGTTCCTAAATAACCACGCTCAGAAGCTCTGCTAGGACTTACC
CCAGCCACTGAGTGGCAGGCGCATGAGATTTGTGGCTGTTCCTGATGCTAGTGGCACACAGTGCTTATCTGCATA
AATAAACACTGGCCACCAGC

FIGURE 4991

GAGCTAGTGACAGGAGGGGCCGGGCTGGTACTTCAGGCGCCCAGGCCGGCGGGGCGCGCTCCGGCGGCTCCTGTC
AGCGGCGGGTGCGGCGGATCCCAGGGCAGCCTTCGGGCGGCGGCGCTGCCTGGTGCGTCGCGGCGTGGTCCTCCG
GCGGCTGTCCGGGGCGGTAGGAGTTGGCTGCGGGATGTGCTCAGCCGGGGAGCTGCTGCGGGGCGGCGACGGCGG
GGAACGCGACGAGGACGGGGACGCGCTGGCGGAGCGGGAGGCGGCAGGGACCGAGTGGGATCCCGGGGCGAGCCA
GCGGCGGCGCGGACAGCGGCAGAAGGAGAGCGAGCAGGATGTTGAAGACTCACAGAACCACACTGGTGAGCCGGT
TGGAGATGACTACAAGAAAATGGGAACACTTTTTGGTGAACTGAACAAAAACCTTATCAACATGGGCTTCACAAG
GATGTATTTTGGAGAACGAATAGTGGAACCAGTAATAGTCATTTTCTTTTGGGTTATGCTGTGGTTCCTTGGCCT
GCAAGCCCTTGGACTAGTTGCTGTTCTTTGCCTTGTTATTATTTATGTGCAACAGTAAAACATGGCCGAATTGAA
TTGTTTGACATTTGGTAGCCATATATGTAATTGAAGAAGTTATATATTTCACTTTTTGACAACCGAAAAAGTTTG
CCTTGTTTCAAATCATGTGCTGGCTGTTTTGTAAGTAAATTTATACATGGATGTCACTTAAAACTAAACTCTTGA
TCATAACAGGGTTGAATATATATTTTGAATATACATTAGCTTATTCAAAACTCTTGTTTCACTACTGTGATCTCT
GTCTCCTTTATACACCTCTATCCCCATGCCAAATCTTAAGTAACACCACCAGAAAGTGAACAGGGAAAATAACAG
GACATGGAATTCAAATCAAGCAATATAGTTCTTATAAAGAGTTCCAATAAAACATTTCAGAAGAAAAAGTATGAA
ACAAGCTAAAAGTAAGTTTCACTTAGAAAACTTCTCCCCACTCACACTCCCCACCAAATAATCTCATATTATTTG
GGAAATATTTGGATTTCAATTGTCCCTACCCAGCCTAAACTAAGGTAAATGATAATTAGCATACACTACCTTAAT
ATTGTGATGAAAATCAGTAAAGATAGAACGTTTTCTAAAGGTCAAAAATAATATATTTATTATTACTGGGGAAAG
CTCCCAGGTTAAATATAACTTTTTTAAAATGTAACATTTGGACCTAGACCTACTTTAATATATCATTTGAAGTTT
CAGACAATTTTGGTGCTAATTACTTTTTGTGAGTTTTTAAAGTCTCATAGCCTAGTTGACTGCACCCTATGGTAA
TGCCATATTTTCTTGTATCTAACAAGTTGCATATTTTTTCCTAGAGAGACATTTTCAGTGTATTTTTTTTTAGAA
ATTTATAATTTTATAGTTCTTTCATAACACTTATTCTGAGTTTTGAAACAATGTATTTCCTATCTTGACATGGAT
TTTTTCACAAAAAATTTGTATTTTACTGTTGTTTTCAGGAAAAAAATCAGATCATTTTTCTTTGATATCTATATC
AGAAAGGTACAATATTAACAGTATAAAACCAAATGCTTAAATTTGGAACTTAGCCAATTTTGATAATCTTTTTCT
AAGGCTAAAGTCACATCAGTAATTGGCTAGCCATGTTATTAAGGTGTCTTAATTCAGCATTTTCAGGTTTTATAT
TGAAATACGCATTTCTTTAAATATTCTTTGAAAATGGAGAATGGCTTTAGTGATATTTTGGGTTTTGTTAGAGAA
CCTAAAATCTTTACACTTTCATCTCAAAGATTATAAAGGAAAGGGGGGTAGTTAAGATTTAGAATTCAAGTTAAA
TTTCAGAAATTGGGGCAGTCAGGCATTTGTATCTTTGGTAGGGCAACAAGTAAAACATGTAGAGTGCTTGCTATC
CCACTTCATAAAGCTTTTACCCAATCTTATTTCTAAACCTCTGTGCATTCTTAGTGTCTTCTCATTCTGAAACAG
AAAATAAGGAAAAACATTTAACTTAGTTTTCTAAAATCAGATAATCCTAAACAAAAATGTTAGTCAGGGTCACTA
AAAAGTATTGCACATTTATATAAATACAGTCCTTTTAAAATTTGACTTTTAAAAAACAAAAGACTTTGTACGATA
TTGTGTTTTTATTGCTTTTGCAATATTTTTATAGTAGCCTTTATGAACTCAGTATAAGTGCAAGTTGTTTGAAAA
GGTGTTTTTATTAGTGCACAATAGAATTGTGAGGTTTTCAATAGATGTCATGAGATTTTGTATATCTACATAAAA
TATCAGTACATTTTTTTCTAATGCTACTGGAAATTTTACTTTTCCTTTGCAACACATAAATGATATGATGTACAA
AATAACAGCTCTGGTTCCACCAGTACCTAATGTTGAAAACATTTTTAAAGTAATTTTTAATACTAACTATTTAGT
ATACTGTCAGTACTGTACATCTGCACACTGGTGTTAATAGGGTATATATTAAATTATATAAAGAAATAAAAAAAA
GAAAAAAAAAAAAAA

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FIGURE 4992

MCSAGELLRGGDGGERDEDGDALAEREAAGTEWDPGASQRRRGQRQKESEQDVEDSQNHTGEPVGDDYKKMGTLF
GELNKNLINMGFTRMYFGERIVEPVIVIFFWVMLWFLGLQALGLVAVLCLVIIYVQQ

FIGURE 4993

ACCTTTCAGGATCCTGCTCACATATCACCTCTTCTGGGAGGTCTTACCAGGTTGCAGTTTGATGTCCAGGCTATC
CCCTTAGCTTTGTGACTTCAGGTAACTTGCTGCATTGTTCTGATCTTCAGTGTCATTGTCTCTGAAATGCTACTG
ATGCTGCCCTGCCTGCCTTGCAGGACTGTTGGCAGGCCTGATTCCAGAAGCTCTCTAGAACTGTACTGTGCTGGA
CAGATAGGCAGGGGGCTTGGCAGGGTAATTTCTTGGTTCTAGGGTGTGTGTTTGGGGAGTATGTTTGGTGGTCCT
GAGAGCTGCAGCATTTCAGGTTGTTTTTCTCACTGCAGGTCATTTC**ATG**GGCAACAACACAGTGCTGGATGTTTT
GCGGCGTGAAGGCTATGAGGTAGAACACGCCCCTGCTGGACGACCCATCCACAAAGGGAAGAGTAAAAAGACCTC
CACACGGCCCACTCTGTCCACCATCTTTGCTCCAAAAGTCCCTACCCTGGAAGTACCGGCACCAGAAGCCGTATC
CTCAGGGCACTCAACGCTGCCTCCCCTTGTGTCCCGGCCTGGAAGTGCCGACACGCCCAGTGAGGCCGAACAGAG
GTTCCGGAAGAAGCGGAGGCGGTCACAGCGGAGGCCGCGACTCCGGCAATTCAGCGATCTGTGGGTCCGCCTGGA
GGAGAGTGACATAGTCCCGCAACTCCAGGTCCCTGTCCTGGACAGGCACATCTCCACTGAACTGCGGCTCCCTCG
CCGTGGGCATTCCCACCACAGCCAGATGGTGGCCAGCAGTGCCTGCCTGTCTCTCTGGACTCCTGTGTTCTGGGT
GCTGGTGCTGGCTTTCCAAACAGAGACACCCCTCCTG**TAA**CGACTGGAAGCACCAGGCTAAGAACCTGACCCCTC
GGACTTGAAGAATGGCCATTCCTGTACTCCACATTCTGGTCTAGCCTTGTTGGGCCCAATCCAGAAGAGACTGCT
CTTGAAAAAGCGGCCCAGTGTTGATTCTTCTCTTTCCAAGGAATGTGACTTTGGGTTATCCAACTTTGGGGGCAG
GTGTACAGTTTTGTAACATAGTGAGTTGTGTGAAAATAAATTATAAATGAGTTGTATGAAAATAAATAC

FIGURE 4994

MGNNTVLDVLRREGYEVEHAPAGRPIHKGKSKKTSTRPTLSTIFAPKVPTLEVPAPEAVSSGHSTLPPLVSRPGS
ADTPSEAEQRFRKKRRRSQRRPRLRQFSDLWVRLEESDIVPQLQVPVLDRHISTELRLPRRGHSHHSQMVASSAC
LSLWTPVFWVLVLAFQTETPLL

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FIGURE 4995

ATTGATTAAAAAGAGATTGCCCTGCAAGGTAAATCAGTTAAAACCAACCTCTCCTGCCCTGAGTGGATAGGTAGG
GTTAGGGTTGCCAGATGTCACGAAGTTACAGGATGCTCAGTTTTAAGGTATATCCCTTATACTATAAGGGTTATA
GTAAAAAATATTCATTATGTGAAATTCAAATATAACTGGGTATCAGGTATTCTATGTGGCAACCCTAGGTAGGGG
AGCACAGGTTAGGCAAGCGATTAGAAGATTTGCAGCCTCCAAAGTTTCTGCACCTCGATGGGACACTAGAACAGG
AAGGCTCCTGGGCCTTTCTGGCTCTGGGAATGAAGCGTGGAAAACCCTCCTTAGGCGGGCGCAGTGCTTCAAGTA
GCCAAGCTCTGACTTCCGAGGGAAGAAAGGAGGCCATGGGCCTCTGCCAGAGCCATGCTCTGCACTCTGGGGTCA
GCAGAGTTCAAAACGACCTGCAACGTCTGGCGCTTAGCTCCTAAAGAGGTCTCCAGTCCAGCGCCGACGGCCAGC
GGCTAGAGGCCGTCCGCCCGACTCCAAGATGGCGCCCGCCACAGCTGCCAGGTGTTAAGATGGCGGCGCGGGGCC
GCGCCCGCGCTCCCAGGCTCTCCTCCCCCAGCCTTCCTCCGGCTGGCAGCACGACTCGCGTAGCCGTGCGCCGAT
TGCCTCTCGGCCTGGGCA**ATG**GTCCCGGCTGCCGGTCGACGACCGCCCCGCGTCATGCGGCTCCTCGGCTGGTGG
CAAGTATTGCTGTGGGTGCTGGGACTTCCCGTCCGCGGCGTGGAGGTTGCAGAGGAAAGTGGTCGCTTATGGTCG
GAGGAGCAGCCTGCTCACCCTCTCCAGGTGGGGGCTGTGTACCTGGGTGAGGAGGAGCTCCTGCATGACCCGATG
GGCCAGGACAGGGCAGCAGAAGAGGCCAATGCGGTGCTGGGGCTGGGCACCCAAGGCGATCACATGGTGATGCTG
TCTGTGATTCCTGGGGAAGCTGAGGACAAAGTGAGTTCAGAGCCTAGCGGCGTCACCTGTGGTGCTGGAGGAGCG
GAGGACTCAAGGTGCAACGTCCGAGAGAGCCTTTTCTCTCTGGATGGCGCTGGAGCACACTTCCCTGACAGAGAA
GAGGAGTATTACACAGAGCCAGAAGTGGCGGAATCTGACGCAGCCCCGACAGAGGACTCCAATAACACTGAAAGT
CTGAAATCCCCAAAGGTGAACTGTGAGGAGAGAAACATTACAGGATTAGAAAATTTCACTCTGAAAATTTTAAAT
ATGTCACAGGACCTTATGGATTTTCTGAACCCAAACGGTAGTGACTGTACTCTAGTCCTGTTTTACACCCCGTGG
TGCCGCTTTTCTGCCAGTTTGGCCCCTCACTTTAACTCTCTGCCCCGGGCATTTCCAGCTCTTCACTTTTTGGCA
CTGGATGCATCTCAGCACAGCAGCCTTTCTACCAGGTTTGGCACCGTAGCTGTTCCTAATATTTTATTATTTCAA
GGAGCTAAACCAATGGCCAGATTTAATCATACAGATCGAACACTGGAAACACTGAAAATCTTCATTTTTAATCAG
ACAGGTATAGAAGCCAAGAAGAATGTGGTGGTAACTCAAGCCGACCAAATAGGCCCTCTTCCCAGCACTTTGATA
AAAAGTGTGGACTGGTTGCTTGTATTTTCCTTATTCTTTTTAATTAGTTTTATTATGTATGCTACCATTCGAACT
GAGAGTATTCGGTGGCTAATTCCAGGACAAGAGCAGGAACATGTGGAG**TAG**TGATGGTCTGAAAGAAGTTGGAAA
GAGGAACTTCAATCCTTCGTTTCAGAAATTAGTGCTACAGTTTCATACATTTTCTCCAGTGACGTGTTGACTTGA
AACTTCAGGCAGATTAAAAGAATCATTTGTTGAACAACTGAATGTATAAAAAAAATTATAAACTGGTGTTTTAAC
TAGTATTGCAATAAGCAAATGCAAAAATATTCAATAGATGCACTATTCTTGTTTTTACTGCATGAACGTAATCCA
GTATTTGGAAAGTAATCCAGTTTGAAATGTGAAGATGTATTCCGGCAGAATAGTGAGTAGAATGACATGCTTACT
ATACAGAAGGCAAAAATAGGACTCTCAGGTAATAGTTTAAGGAAACCCTTGATTCCTTATATATGTTTAAGAAGG
TTAGCTTTCTGTTTCTTTGCAGTTTTTCTTCTAGAGTCCATAGCAGGAAAGTATGTAACCAGAATTGGTTAGTGT
GACCCCCTCAAGTAGCAAGTGATGGAAAATAAGAGTCAAATACCTTGATGTTTGTGATCTCTAACTCAAAAAATT
TGAAGTGTTTTAAGTTGTTTCTGGGTAAGGGAGATGTTAGGAGAAAGGAAATGCTGTAACTAAAGCTCAATTATT
ATCAGTTCTATGCTAACGTATACATTTTAATCATAGTTACCTAAGCAGCATGCATTAATTGAACCTTAAAATGTT
CCCAGCAGGCTGGTCTCAAACTGCTGACTTCAGGTGATCCACCCGCCTCGGCCTCCCAAGGTGTTGGGATTGCAG
GTGTGAGCCACTGCGCCTGGCCTAAACAAACTTTTTGAAAAGCTGTTTCTAAAAGATTCCTTAAATTCAGATATG
ACAGCTAATTACCTCATCATAAATTACTTTTATACTAATTGTTTCCAGGGTTTTAGAGTAGTTGAATGTTTATTT
CACAAGGCACCCTAAATTCTATAGAAATAAAACCTCAGATGAGTCTC

FIGURE 4996

MVPAAGRRPPRVMRLLGWWQVLLWVLGLPVRGVEVAEESGRLWSEEQPAHPLQVGAVYLGEEELLHDPMGQDRAA
EEANAVLGLGTQGDHMVMLSVIPGEAEDKVSSEPSGVTCGAGGAEDSRCNVRESLFSLDGAGAHFPDREEEYYTE
PEVAESDAAPTEDSNNTESLKSPKVNCEERNITGLENFTLKILNMSQDLMDFLNPNGSDCTLVLFYTPWCRFSAS
LAPHFNSLPRAFPALHFLALDASQHSSLSTRFGTVAVPNILLFQGAKPMARFNHTDRTLETLKIFIFNQTGIEAK
KNVVVTQADQIGPLPSTLIKSVDWLLVFSLFFLISFIMYATIRTESIRWLIPGQEQEHVE

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FIGURE 4997

TTCGGCAGAGCCCTTGCGCGCTCTTGAATACCTGCKTTCTGTAGCGCTAGTTCTCTTCAAGATTTGCTTAGTGTC
ATTTCATTTCGGTTTCTTTTCTCGCCATGTTTTTCTGTCGGAATTACGGTTCGTTTTGGTTCTATGTACTCTCTA
AAATGTTATCGTTTTTCATTTGTCTACTAATTTTCGTGCATTTGTTACTACTGAGTTTCTTAATATCTGACTGGC
CTCCGCCCACGGGCTCTGCAGAXCATAAAATACTCAGGCTGATGGTAGTGCAGAGACTCTCCCTCCTTGATCAGC
GCAAACGTTGGTCTGAGGCTTGAGGGATGGAGCAACATTTTCTTGGCTGTGTGAAGCGGGCTTGGGATTCCGCAG
AGGTGGCGCCAGAGCCCCAGCCTCCACCTATTGTGAGTTCAGAAGATCGTGGGCCGTGGCCTCTTCCTTTGTATC
CAGTACTAGGAGAGTACTCACTGGACAGCTGTGATTTGGGACTGCTTTCCAGCCCTTGCTGGCGGCTGCCCGGAG
TCTACTGGCAAAACGGACTCTCTCCTGGAGTCCAGAGCACCTTGGAACCAAGTACAGCGAAGCCCACTGAGTTCA
GTTGGCCGGGGACACAGAAGCAGCAAGARGCACCCGTAGAAKARGTGGGGCAGGCAGARGAACCCGACAGACTCA
GGCTCCRGCAGCTTCCCTGGAGCAGTCCTCTCCATCCYTGGGACAGACAGCAGGACACCGAGGTCTGTGACAGCG
GGTGCCTTTTGGAACGCCGCCATCCTCCTGCCCTCCAGCCGTGGCGCCACCTCCCGGGTTTCTCAGACTGCCTGG
AGTGGATTCTTCGCGTTGGTTTTGCCGCGTTCTCTGTACTCTGGGCGTGCTGTTCACGGATCTGTGGAGCTAAGC
AGCCTTAGATAGCAGCAGAAGGCTTTTTGGATTCTCCTCCTTGAAAAGATTCTCAGTTACCAAACGTCTCCACCT
AGAAAATAAAAATACATTAAGATGTTGAXAAAAAAAAAXAAAAAA

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FIGURE 4998

MLSFFICLLIFVHLLLLSFLISDWPPPTGSAXHKILRLMVVQRLSLLDQRKRWSEA

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FIGURE 4999

AGGTTACTATAGTGTCTGCTCCTACCCCTGGGACAAGATCCCCTAATGAGCTGGCAGGTGGGCGTGGGGGGCACA
GGTACAGCTTGGCTTCTCAGCTTTGCTCCCCTATCCTCTGCTTTGCCATGAATCTCTCATCCAGCCCCGCAGGGA
TCTGCCTGGCCAGCAGTGAGCCTGAGCCCCTTTCATCCTGGGACCTGCCGACCACGGCTCACATCCTCCTGGGTG
AAGAATGTCACCTTGCTTCCTATCTGCCTCTTTCGTGGTTGGCTGGGGAGGGGGACCGGGGGGTGGGGTGAGGTT
AACCTCATTGTTGTCTTATATGGTCATTTAAATCTCCCAGGGCTTCCTCCAAGGGCCAAAAATAATCCGGAGACA
CAGCAGCTGTGTCCAGCACACAGAGGACCCGGCCATCTGCTTTGGTTCAGAGCCCTGTGTCTGTCAGTCAGTCTC
TCCCTGGCTCTCCCTCCATCCTCATTCCTGCCTGAAGCC**ATG**ACCCGCTTCTCCTATGCAGAGTACTTTTCCCTC
TTTCACTCCTGCTCTGCACCCTCCAGGTCCACTGCACCTCCTGAGAGTTCGCCGGCCCGGGCCCCAATGGGCTTG
TTCCAAGGGGTCATGCAGAAATACAGCAGCAGCTTGTTCAAGACCTCCCAGCTGGCGCCTGCGGACCCCTTGATA
AAGGCCATCAAGGATGGCGATGAAGAGGCCTTGAAGACCATGATCAAGGAAGGGAAGAATCTCGCAGAGCCCAAC
AAGGAGGGCTGGCTGCCGCTGCACGAGGCCGCATACTATGGCCAGGTGGGCTGCCTGAAAGTCCTGCAGCGAGCG
TACCCAGGGACCATCGACCAGCGCACCCTGCAGGAGGAAACAGCCGTTTACTTGGCAACGTGCAGGGGCCACCTG
GACTGTCTCCTGTCACTGCTCCAAGCAGGGGCAGAGCCGGACATCTCCAACAAATCCCGAGAGACACCGCTCTAC
AAAGCCTGCGAGCGCAAGAACGCGGAGGCCGTGAAGATTCTGGTGCAGCACAACGCAGACACCAACCACCGCTGC
AACCGCGGCTGGACCGCTCTGCACGAGTCTGTGTCTCGCAATGACCTGGAGGTCATGCAGATCCTGGTGAGCGGA
GGAGCCAAGGTGGAATCCAAGAACGCCTACGGCATCACCCCCTTGTTCGTGGCCGCCCAGAGTGGACAGTTGGAG
GCCTTGAGGTTCTTAGCCAAGTACGGTGCTGACATCAACACGCAGGCCAGCGACAACGCGTCTGCCCTCTACGAG
GCCTGCAAGAATGAGCATGAGGAGGTGGTGGAGTTTCTGCTGTCACAGGGTGCCGACGCCAACAAGACCAACAAG
GACGGCTTGCTCCCGCTGCACATCGCCTCCAAGAAGGGCAACTACAGGATCGTGCAGATGCTGCTGCCGGTGACC
AGCCGCACGCGCATACGCCGTAGCGGCGTCAGTCCGCTGCACCTGGCGGCCGAGCGCAACCACGACGAGGTGCTG
GAGGCGCTGCTGAGCGCGCGCTTCGACGTGAACACGCCGCTGGCGCCCGAGCGCGCGCGCCTCTACGAAGACCGG
CGCAGCTCCGCGCTGTACTTCGCGGTGGTCAACAACAACGTGTACGCCACCGAGCTGCTGCTGCAACACGGCGCC
GACCCCAACCGCGACGTCATCAGCCCCTTGCTCGTGGCCATCCGCCACGGCTGCCTGCGCACAATGCAGCTGCTG
CTGGACCACGGCGCGAACATCGACGCCTATATCGCCACGCACCCCACCGCCTTCCCCGCCACCATCATGTTCGCC
ATGAAGTGCCTGTCGCTGCTCAAGTTCCTCATGGACCTGGGCTGCGACGGCGAGCCCTGCTTCTCATGCCTCTAC
GGCAACGGCCCGCACCCGCCGGCCCCGCAGCCCTCCAGCAGGTTCAACGACGCGCCCGCGGCCGACAAGGAGCCC
AGCGTGGTGCAGTTCTGTGAGTTCGTATCTGCCCCAGAGGTGAGCCGCTGGGCGGGGCCCATCATCGATGTCCTC
CTGGACTACGTGGGCAACGTGCAGCTCTGCTCGCGGCTGAAGGAACACATCGACAGCTTTGAGGACTGGGCCGTC
ATCAAGGAGAAGGCAGAACCTCCAAGACCTCTGGCTCACCTTTGCCGACTGCGGGTTCGAAAGGCCATTGGGAAA
TACCGTATAAAACTCCTAGACACCTTGCCGCTCCCAGGCAGGCTGATTAGATACCTGAAATACGAGAACACCCAG
TAACTGGGGCCACGGGGAGAGAGGAGTAGCCCCTCAGACTCTTCTTACTAAGTCTCAGGACGTCGGTGTTCCCAA
CTCCAAGGGGACCTGGTGACAGACGAGGCTGCAGGCTGCCTCCCTCTCAGCCTGGACAGCTACCAGGATCTCACT
GGGTCTCAGGGCCCAGAGCTTTGGCCAGAGCAGAGAACAGAATGTGTCAAGGAGAAGAATCATTTGTTTACAAAC
TGATGAGCAGATCCCAGACCTTCTCTACCTTCAGGAATGGCAGAAACCTCTATTCCTGGGGCCAGGGCAGAGCTT
GAGGTGTTCTGGGGAAGGTGGTGCTCAGAGCCTTCCCTGTGCCCCTCCACTTGTTCTGGAAAACTCACCACTTGA
CTTCAGAGCTTTCTCTCCAAAGACTAAGATGAAGACGTGGCCCAAGGTAGGGGGTAGGGGGAGCCTGGGTCTTGG
AGGGCTTTGTTAAGTATTAATATAATAAATGTTACACATGTG

FIGURE 5000

MTRFSYAEYFSLFHSCSAPSRSTAPPESSPARAPMGLFQGVMQKYSSSLFKTSQLAPADPLIKAIKDGDEEALKT
MIKEGKNLAEPNKEGWLPLHEAAYYGQVGCLKVLQRAYPGTIDQRTLQEETAVYLATCRGHLDCLLSLLQAGAEP
DISNKSRETPLYKACERKNAEAVKILVQHNADTNHRCNRGWTALHESVSRNDLEVMQILVSGGAKVESKNAYGIT
PLFVAAQSGQLEALRFLAKYGADINTQASDNASALYEACKNEHEEVVEFLLSQGADANKTNKDGLLPLHIASKKG
NYRIVQMLLPVTSRTRIRRSGVSPLHLAAERNHDEVLEALLSARFDVNTPLAPERARLYEDRRSSALYFAVVNNN
VYATELLLQHGADPNRDVISPLLVAIRHGCLRTMQLLLDHGANIDAYIATHPTAFPATIMFAMKCLSLLKFLMDL
GCDGEPCFSCLYGNGPHPPAPQPSSRFNDAPAADKEPSVVQFCEFVSAPEVSRWAGPIIDVLLDYVGNVQLCSRL
KEHIDSFEDWAVIKEKAEPPRPLAHLCRLRVRKAIGKYRIKLLDTLPLPGRLIRYLKYENTQ

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FIGURE 5001

GAATCTCTCGCGGGCAGCAGGGCGCGCGCTGCACGCACAGTACTAGGTCAGGTGGTGCTCCCGGGTGAGGAGCTG
CTCCTGCCGGAACAGGAGGACGCGGAAGGCCCTGGGGGTGCAGTGGAGCGACCGTTGAGCCTGAATGCTAGAGCG
TGCTCGCGGGTGCGCGTTTGTATGCGGTCCGGGCCTTCGACGCTGTGGGGACCGCCTGCTGGTCACCAAGTGCGG
CCGCCTCCGTCACAAGGAGCCCGGCAGTGGAGGCGGCGGCGGTGTTTACTGGGTGGACTCTCAGCAGAAGCGGTA
TGTTCCAGTAAAAGGAGACCATGTGATTGGCATAGTGACAGCTAAATCTGGAGATATATTCAAAGTTGATGTTGG
AGGGAGTGAGCCAGCTTCTTTGTCTTACTTGTCATTTGAAGGTGCAACTAAAAGAAACAGACCAAATGTGCAGGT
TGGAGATCTCATCTATGGCCAGTTTGTGGTTGCTAATAAAGACATGGAACCAGAGATGGTCTGTATTGACAGCTG
TGGACGAGCCAATGGAATGGGTGTCATTGGACAGGATGGTCTGCTTTTTAAAGTGACTCTGGGCTTAATTAGAAA
GCTATTAGCTCCAGATTGTGAAATCATACAGGAAGTGGGAAAACTCTATCCACTGGAGATAGTATTTGGAATGAA
TGGAAGAATATGGGTTAAGGCAAAAACCATCCAGCAGACTTTAATTTTGGCAAACATTTTAGAAGCTTGTGAACA
CATGACGTCAGATCAAAGAAAACAGATCTTCTCCAGATTGGCAGAAAGTTGATATAGGTGGACTTTTTTACAGGT
CAGTTGAGGCAAAAAACTATGGGTTTTTTCAGGTGAACCTCCCCCATTTAAATACTCAGAAGATAAGGTGTGAAT
GTATGTATTATTAGAGTCCGAAAGTATTTTTATAAGTTACTGGTTTTCACCCACGCTTTTGTGGGAGAGAAAATC
ATTGCAAAATCATTTTTTTTGTTCGGTACAATAAAGTTTACTAAAAAACAAA

FIGURE 5002

MLERARGCAFVCGPGLRRCGDRLLVTKCGRLRHKEPGSGGGGGVYWVDSQQKRYVPVKGDHVIGIVTAKSGDIFK
VDVGGSEPASLSYLSFEGATKRNRPNVQVGDLIYGQFVVANKDMEPEMVCIDSCGRANGMGVIGQDGLLFKVTLG
LIRKLLAPDCEIIQEVGKLYPLEIVFGMNGRIWVKAKTIQQTLILANILEACEHMTSDQRKQIFSRLAES

FIGURE 5003A

GAATGATCTAATCTCCACCCTCCTTTGTCTTCAAGTCAGXAATAAGTAATCAGAACAACTTTGCACTCATGTTTA
AAATATTTCXCTCGCCTTGGCCTCCCAAAGTGTTTGXATTACAGGCGTGAGCCGCCACGTCCGGGTGGATCCCAA
GGTCAGGAGTTCXAGACCAGCCTGGCCGAGATGGTGTXCCCCXGTCTCCGCTAAGAATXCAAGAATTAGCCAGGC
ATGGTGGCAGGTGCCTGTAATCCCAGATTCTCGGCAGGCTGAGGCAGAAAATTACTTGXACXTGAAAGGCACAGG
TTGCAATGAGCCAAGATCATATGACTGCACTCCAGCCTGGGTGACAGAGCAAGGTTTCCAAAAAATTTAATAATT
AATXATTGXAXXTAGAATTTTTTCCACTCATAAAATTAATTGATTCAATAAATGTTTCATTCAAGTACGTACXCA
TTAGTACATGGTTTCAATGATCCTTGATTTAAACACCTTGAAATAGCTTTAATTCTATATTGCATTTACATCGAC
ATCCACTCAGGTATGAATATTCTGTAGAAAAGTTTTGGTTTTTCCCTTTCCATTCTTTTGTGAAAATGTTTGTCT
TCCTTGTCTGCTAACACTTTTTAATATGACAATTATCATTAATTATTCACAAAGTAGAGTTAATATTTGCTACAT
ATTTAATGTCTAATTTGTTTCACTATTTTAAACGTACTGTACCTGGCTTCTGAAAAGAATGCAAAGCCCTCAGAA
TCAAGTGCATAATATAATATCCTTATGGTTTTGCAGCCTACTATTCGTTCGGTACTCAATAACTAGCAATGAACA
GCAAATGTAATTATATATATGTATATATATAGAGAGAACATTTATGTATATATAGAACATATATATGTATATATA
TAGAACACACACACACACACATATATATATATATATATATGAAACATAAGAATTTATGTATAGCTAAGCTGAACATT
TGGCTATCAGATAAAACTGTAGCTTTACAAATACTTAAGAACAGAAAAACTGAGATTGCTCCTAGATCTGGGGTG
GCCAAAAGAAATGGAATCAGATGTTTTTGTTAATAGGTAATGCCCCAAATCTTATCAGTCATAAGCACTGGGCCA
GACAGACCTGTGCTTAGATATTCTAATATGGTATACCTTTACTAGTACCTTGGTTAGAAAAAAAGATATCCCCTC
TAGGTGGACAAATCAGAAAAACAGACCAGCTGTTAACAGGTCAAGCTTAAGAGCACATGGCTTGGTGATGGTGGC
AGAGAAGGAATTTTAGACTCTCCGGCTCCCTCCACAAGGCACTATTGTGCAGCACACACATTGCACAACCTCACG
GAGTAGTCTTGGCCTTAGCTGAGGGGATGAAAAGAACTGTTTAGTTAAGAAGTGAGATTTAGCAGCTTACATAAA
TCCTTAAGGTGTTTTACGCACTTTTTGTACATCAGTGCCTTACATTAATTAATCCATTTAATTCTACCTGCCATG
AGTCTACCACACCCATTTTACTCATGTGGAAACCAAGGCACAGGGAGGTTAAATGGCTTGTCCAAGGTCACACAG
CCTTTGAGTGGTAGATTCCGGATTCAAATACATGCAGCCTGATACTGAAACTTTGTTCGTGAACACTTTACTGCC
TTTAAACTGATGAAATTAGAATAAATGGAAATTCCTGGGACTAACTATTAAAAAAGTGTAATAAGCTGTAAGAAG
GAGGCATTATTAAGTAAAGGAACTCACTTTGGGAAATACCAGCTTAGAACTTAATAGGCTTATGATAGTATTTAT
AAACAATCAAAGGATCAAGTTGATAAGCCATTCTGTGACTTGTTGATAAATATCTTATCAGTTTTTGTACCCGGC
TGAAATCCTTCCTCAAGAGATTAAATCACCAAAGGGGTTAACTCTTTGTTTTGTGTGCAATTTTTCCACTGCCAA
TAATTTTGTTCTCTGAGCAGTGAAACAAGTAATTCCCAAATTAAGAGCATGTTAGGACTATAGGTCCTCATTTTC
CTAACTGCAAAGAAAATTATTTTAAAAGTAATTTTCCCCTCAGAAGCAATTCCAAGACTGAAGATTAAATATACA
GAGAAGCAATGATTCAGGCTTTTAAAAAAATCGCTTTTTAAAGGAGTATAAGTGAAAACAGTTAAGTAAATATAT
TTAATTACCAAGATTTTATTGGATCTTTTACTCACATAAAAAGACTAAAATAAAACGTTTCTGGTTTTCACAGTA
ACTGATCTGATAATGTCAACTTTTGAAAACAGATAGTTATGACTCAAGGCTTTGAGAATGTAAAGAGACGCCCTT
CACATGTTGAGAAATGGTACGATTTCACGTTATCAGTGCAGTTCGGTTCTCAGGGGGAAAGGTAAGCCCATAGCT
AACTCCAGCTCCAAGCTGCTATTTCATGATAACAGCTCACGGAGCTGTGGGCCTGCTAAGCCTTTCCCACCTCGT
TCTGGAATTCCTCTATAGCCCATCCGTACTACCAGGAGACTGGATCCGCAAAGTAGACACTTGGTCTCATGAAGC
CACTGCTGGGCTCCAGAGAGAAGGAAAAACTAAGCGGTTTTAAAACCCCCACCCTCCTTGGTTTACCTCCATCAT
TAAAAAACAACAATGACAACGACAACAAAAAACAAAACTAAAACGACTTATTGTTTATTAATTATGTTGTGGCAG
ACAATATGCTGAACATTAGGCATAATTAAATTCTTTTTAAAAATTGATAATTTATCTCTGTTTTATAGAAGTGTG
AAACTGTCAGGAAGACAGATGAAATGATTTGCCTGAGGCCGTATCATCAAACAAGAAATTCATATTCACCTTTCT
GGAATTCTTAGGATAATGATTACATGTGTTCAATTGTTAAAAATTGGCAGATAAAATTTTATGTATTTACCACGT
ACAACATGAAATTTTGAAACATGTATACATTCTGGAATGACTAAATCCAGCTAATTAACATAGGTATTGTCTCAC
ATATTTACTTTTGTGGTGAGAACAGTTAATATCCACTCTCAACATTTTCCAAGAATACAATATATTACTAACTAT
AGTCACCATGTTGTAAAACGGATCTCTTCAAGTATTCCTCCTATATAATTGAAATTTTGTATCCTTGGACCAACG
TCTCCTCACCCTACTCACTCCTCAAATATCCCTACCCTTGGAAACCACTGTTCTCCTCTCTCTACTTCTAGGATA
TCAGCTTTCAAGAGTGAGATCTTGTGGCATTTGTCTCTCTGTTCCTAGCTTATTTCACTTAACATAACGTCCTCT
AGGTTCATCCATGTGCAACCCCCTAGGTTCATGTCCTTTTTTAAGGTTTAATAGTTTTCTGTTGTGTACATATGC
CACAATTTATTTACCCATCCACTTCTTGATGGATGCTTCAATTGTTTCTGTACTTGAGCTATTGAGGACGATGCT
CCAGTGAACATTGGAGCACCGATATTTTTACAGGGTGGTGATTTATTTTTCTCTGGATATATATACCCAGAAGAG
AAAGTGCTGGGTCATACGATAGTTCTTTTCTTTTCGATTTTTTCCTTTCTTTTCTTTTTTTTTTTTTCAGAAACC

FIGURE 5003B

TCCATACTGTTTTCCGCAGTGGCTGCACCAATCTATATTCCCAAATTAAACTTCAATGTGCAGATGAATTACCTA
AAATTCTTTATAAATTGCAAATGCTGGTTTAGAAGGTGTGCTGATTTTGATGCATTTTTAAGACCCCCCTCCCAT
CCCGTGTGATGTTCCTACTCCACTCACTGATTTCCCATGTATTATCTAGGGTCTTAACCACATTGCTTGTTTTTC
TATTAGAGTTTGGAACTGGGTCACCCATGCTCTGAGGCTCTATGAAACCCTGAAGGGAGAGGTAAACATATAAGC
TCTGCAATCCAACTGCTTGGTTTTGTATTTTGGATTTGAAACTTAGTAGCCATTTTCACCCAGAGGAAATTCCTT
AAGCTCTGTAAGCCTCAGTTTCTTTATCTGTAAAGTGGGAGTTACAGTAGTATTATCTCTCACTGTATTTTTAAA
GACCAAATGAGAAACTTGATGTAAATAGGAACCTAATGCCTGGTACATAGTGAAAGTTCAATATATACATTCATG
AGTATTTTTAAGTAAAACATGTTCATTGGAACATTATTCACAGGGGCCAAGATATGAAATCAACCTAAATGTCTG
CCAACAGATGACTGGATAAAGAAAAGATTATATATATACATATATATGTGTGTGTATATATATATATATATATAC
ACACACACACACCCACACACAAACATATATATGTATATATCTGTGTATATGTGTATATATACACACATACATGCA
CAGATATATATGTATATATGTATATATGTATGACAGGCGTGAGCCATCTCGTCTGGCCAATTATCATTATTATTT
TAGAAATTTATCAGTGATGCTTTTCTGCCCAGCTTTAATGAGGTGTAATGACAAAAAAATTGAATATATTTATGT
ATGCTGTACACTGTGATGTTTTGATATATGTATATATTATGAAATGATTACCACAATCAAGCTAGTTAACATATA
CATCACCTCTCGTAATTATCTCTTTGTGTAGTGAGAACATTTAAGACCCCCTCTCTAAGCTGATTTCAATTATAC
AATATAGTATTACTAACTATAGTCACCATGCTCTACGTTAGGTCCCCAGAAATTACTTTTTCTGCATAATTGAAA
ATTTCTATCCCTTGACCAACATCTCTCCATTTCCCCAACCCCAGTTTACACACACACACACACATACATATACAT
ATATAGTGTATATATATACACATATACATATATACATATGTGTATATATATATGTGTACATATATATGTGTATATAT
ACACTATATATGTATATGTGTAAAATTAGATGGGTGTGGTGGTGCCTGCCTGCAATCCCAGCTACTCAGGAGGCT
GAGGCAGGAGAATCACTTGAACCCGGGAGGCAGAGGTTGCAGTGTGCCGAGATCATGCCACTGCGCTCCAGCCTG
GGCGACAGAGCAAGACTCCATCTCAAAAATAATAATAATAATATCAAAAATAAAATAAAAATTGCTTAGAAATTT
CAAAATACAATACCTTCCACTGAACTTCCTTAATCCACATAGCACTGTATTTTTCTGTCTATTGCATTGCCACAA
ATTTAGCCACTTAACACAGATTTATTATTGCACAATTTCTGTTGGTCGGGAGCCTGCCACATTTTGGCCAAGTCC
TCTTCTCAGGGTCTCATAAGGCTGTCAGGGTGCTGGCCAACTGCATCGTCATCTGGAGGCCTGACTACAAAAAGA
TCGGCTCAAAGGCCCCTCAGAGTGTTGGCAGCATTTGTTTCCTTGTGGTTGTAAGATTGAGGTCCCTCTTGCCTC
ACTATCTGTCAGCTGGGAGTGACCTCACCTCCTCCAGGCTGCTATCAGGTTATGCCACAGGCCCCTTCCGTTTCT
GTAATAAAGAACTGCCCTCATATTGAATCCATATCACACCTCAGATTTATCTGATTTCCCTTCTGCTTTCAACTA
GACAAACTCTCTGCTTATAGAAAGGCTCATGTGATTAAATTGTGCTCTATTTTAAGGTCAAGTGTGCTATGTAAC
ATGACCAAATAATGAGAGTAAAATCTATTATAGTGACATGCCCTGGAATTATGTAGAAGCGAAACTATTGCTGGA
GGGGTAATCTTTGGGGCCAACTTAGACTATTGATTATTCCATGTTCAAGGAGAGCTGGCATATAATTGGAGAGCT
AAGAACCGTCAATATCTCAACATCTAAAAAAATAAAAATTGTAATTGTATTTAAAATGTTAGGAAACATAGTTAG
AAATTTAGGGTTTTAAGCAGATATAAAGATCTTTTAATCATGCTACCACCTAATTACAATATTAGATAAAGAAGA
ACAATTAAGCCTAGTCTATATGTTAGAGAAATATAGTAATTTTTTCTGGAATGATTTATTATGTGCAGACTTTGG
GTTATTGGAATAGAXCATTGACCATATATGTTTTAAAGXACTTAAAAAATATTTTATAAATAAAAGTTATTTTTA
TTACAGAAACAGAAAATAGGTTGGATATTGGAATCAXGAAAAATACTGTXTTAAGCATAAAGGCATTATGTTTTA
AAGGAAATAATATTTCCCTTAACCAATTAXGGGAAGAAAACCCCAGGGCCAACCXCTTGATTGTAAAAAAAXGAX
TTTACCAGGACATTGAAGCTGCATXGCCCCTTGGGTTTATGGGACTAAGAAATTTTTATGCCCTTXTTAAAAACA
XXAAAA

FIGURE 5004

GAATTCGGCACGAGCAAATGTTGAACCAATTATGTTTTGGTGGTGGTGTTCTTAGCTGTTGAATCCTGAATGGTT
TATAAAGTGAACTAGCTGGCTTAATGCAGCCAGCGTTCTGGGCAGCAGAACATATTCATTCTTACTGTAAATTCT
ATTTGCTGCTTCCAAAGGTGATGATTTTCAAGCAGACATGTTCTATATGGTCTGTGTTTTAGGATCTGGTGCCCA
GCCTCTATCAGAGCTTGCCTACCTGGCAAAGCTGCCTACCCTTCAAGTGGGAAAATATAATCCACTGTTTAACAA
GGCTCACCCTCTCCACCCTGTCCTAACGACCTTTTGTGAATGTGCTGTGATATTTTCTTGCTCAATAGCAAGGTG
GTAGCTCTGCTTTCATTTTAAGAAAGTGGAGGCTGAGGGCATTGTATCAATACTGTTGCAACTCCAAGAAGTTTT
CCTTGTAAAATTAAAGGAAAGATCTTGTTATTGATTAACCATTTTCTTATGCCTTGCTATTGACATATTCATGCT
CTTTCTACGTCTAGTGGCTGAAAATGTTTGCATTTGTTCATTTGACTAATGGTGTGATTTTTGKYYCWATATTAT
TAGACCTGTAATGTTTTAAAATGTATTTTATTAAATTTGGACTGGATGTATGKCCTCTAGCAATACGAGGTACTT
TCTAAACTATTAAGGGAGGGGTTGTAYCCTCATGTTGAGATAAGATGATGGTCGTTTAAATTTTGCAATTTTTTT
TGGCCTGCAGGGATATTTTGTGTTTATGTGTCCAAAAAAGGAATAAATTGGCATTCTTGTGCCAAAAGTTGTTTT
TCCTGTCAATTGTCTAATAAGTATGCAGTACACTGTAATGGCAACATACATGGTTGCTTTATAAAAACAGTTTCC
TCAGTATGAGAAATTTTACAAAGAACAGTGGAAAAACTTTGTGTTTTTAACTCTTGGGTCTCCCTATTTTTAAAA
ATTGCTATTTGGTATACAATTATTATGTGTCAATTAAAACTAAAATAAAACTTTTAAAAAARAAAAAAAAAAAAA
AAAAAAAAAACTCGTA

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FIGURE 5005

MFYMVCVLGSGAQPLSELAYLAKLPTLQVGKYNPLFNKAHPLHPVLTTFCECAVIFSCSIARW

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FIGURE 5006

ACGTCAGGATTGCGTCTTATGTTAATGCGAAATATGCATAGCTGTCATCCGAAGTATACCACCATTCCCTTCAGC
ACTCTACGTCAGAGGAGGCACGTCAGGGGAGACAAAATTCCTCTTCGGACAGTCCCTCAAAAGACAGGAATGTGG
ACATATATTCCACATTTCTCTTTGTCTCCTGAGGAAGAAGCATAGAGTTGGGAGTTTCTCCTGGATTGCACCATG
CTGTATTGGGAGGAGGTCAGGCTGCGCTGGGCATATCTAATAAGCTTTTTCTTCTCTTCTACATGTTTTTGGCAT
TGTGCTCAACTGAAGTAGTACAAATTCTTAACTATGTTCAGGAATTCTCACAAAGGCAATGTGATCAGCGTGGTG
TTAAGTTCATATATCTATGAAGAAACGAGGACCAGTGGTGTTTGTTTTTACGCTTTTCATTTTAAATTTATATTT
TATTTATTATTTTAATTTTGTGAGTACGTAGTACCTATATGTATCTATGGATTATATCAGNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCCGACCAGAGA
AAAACCCTGTAGACATTAGTCACTCCTCATTCTGTCTCAAACCCTCTCCCTGACCCTCAGCCCTAGGTAGCAACT
ACCTAGTGCGATCAATCCCATATGCATAGATTACCATATTGTGGACATTTCCTATAAGCGGAATTGCACAATAGG
GGAGCTGTTATGACTGACATAACACGTAGCACAATATTTTCAAGATTTCGTCCACATTGTAGGCTTACCCACAGG
GGGAAACCATTTTATTGGGGGCTTTTAGTAACACCGGTGTTTTCTCCTTCCTTANNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNCCTTCCTGAGACNTTCTTTCCTTCCCTCCTTCCTCCTATTTCTCTCTTACTCCTTCTG
CCCTCTCTCTTTCCTATGCCTTAGGTGCATCCCACATTCTGCATTTTTTTGGGGGAAATCCTCGACAGGTGCAGGA
AAATTGTGTTATTGTAACTATTTACCGTTATCTCTCTTTCACGGCTCTCCATCAGTTGTGAACATCTATTGGTTT
ATCCCAAGTCACTAAGCATATTTTCATTAGGTAAACCTGTTTTTCCTTATACAGCTGTTTCTGGAGTATAGGGTC
GCATACTCATAAACCCAGTGTAACTCAGAAACGCATCTAATATTCCAGTAAACCCATCATAACGTTGAAAAATCG
TAAATCAAACCATCATAAGTCACGGTTTGTCCGTGGATATGGGCGTCATCAATTCCATTGTATTCAGTAATGCTG
TACACCATTAACAATGGCAGACTGATTGGGAGTGGATATTGATAGCATTATAAAAGTCAGTTATTAGAGGGATAC
TTCTTTAACCTGACTGAAGAACTGATCTAATGGCTTTAGTACAGTGCATGATTATGTGCGATGTTTTGAGACAGA
GTAGTACATTTGTGAATGAAATTTTATGGCTTTTTTTTTCACTTAGTAGGAACCATTGTGTGTGGAAAAGTGAGA
AAATGGCTTTCTGCTGTAGGGTCTGGCATTCATTGTAGATGTAAGCTGATTTTTCTGTGAGCAAATCTTATTCAA
TAAAATACTACTCTTTATACTAAAAAAAATCTATGTCGGTGCGGAGAAAGAGGTAATGAAA

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FIGURE 5007

TSGLRLMLMRNMHSCHPKYTTIPFSTLRQRRHVRGDKIPLRTVPQKTGMWTYIPHFSLSPEEEA

FIGURE 5008A

ATTTGGTAATGCTGCACAGAAATTTTCAATTGGAGATTCCACAGTAAGCGTTTTTTTTCTTTGAAGATTTATGAT
GCACTTATTCAATAGCTGTCAGCCGTTCCACCCTTTTGACCGTACACATTCTATTACAATGAATTTTGCAGTTTT
GCACATTTTTTAAATGTCATTAACTGTTAGGGAATTTTACTTGAATACTGAATACATATAATGTTTATATTAAAA
AGGACATTTGTGTTAAAAAGGAAATTAGAGTTGCAGTAAACTTTCAATGCTGCACACAAAAAAAAGACATTTGAT
TTTTCAGTAGAAATTGTCCTACATGTGCTTTATTGATTTGCTATTGAAAGAATAGGGTTTTTTGNNNNNNNNNNN
NNNNNNNNNNNNNTAAATGTGCAGTGTTGAATCATTTCTTCATAGTGCTCCCCCGAGTTGGGACTAGGGCTTCAA
TTTCACTTCTTAAAAAAAATCATCATATATTTGATATGCCCAGACTGCATACGATTTTAAGCGGAGTACAACTAC
TATTGTAAAGCTAATGTGAAGATATTATTAAAAAGGTTTTTTTTTCCAGAAATTTGGTGTCTTCAAATTATACCT
TCACCTTGACATTTGAATATCCAGCCATTTTGTTTCTTAATGGTATAAAATTCCATTTTCAATAACTTATTGGTG
CTGAAATTGTTCACTAGCTGTGGTCTGACCTAGTTAATTTACAAATACAGATTGAATAGGACCTACTAGAGCAGC
ATTTATAGAGTTTGATGGCAAATAGATTAGGCAGAACTTCATCTAAAATATTCTTAGTAAATAATGTTGACACGT
TTTCCATACCTTGTCAGTTTCATTCAACAATTTTTAAATTTTTAACAAAGCTCTTAGGATTTACACATTTATATT
TAAACATTGATATATAGAGTATTGATTGATTGCTCATAAGTTAAATTGGTAAAGTTAGAGACAACTATTCTAACA
CCTCACCATTGAAATTTATATGCCACCTTGTCTTTCATAAAAGCTGAAAATTGTTACCTAAAATGAAAATCAACT
TCATGTTTTGAAGATAGTTATAAATATTGTTCTTTGTTACAATTTCGGGCACCGCATATTAAAACGTAACTTTAT
TGTTCCAATATGTAACATGGAGGGCCAGGTCATAAATAATGACATTATAATGGGCTTTTGCACTGTTATTATTTT
TCCTTTGGAATGTGAAGGTCTGAATGAGGGTTTTGATTTTGAATGTTTCAATGTTTTTGAGAAGCCTTGCTTACA
TTTTATGGTGTAGTCATTGGAAATGGAAAAATGGCATTATATATATTATATATATAAATATATATTATACATACT
CTCCTTACTTTATTTCAGTTACCATCCCCATAGAATTTGACAAGAATTGCTATGACTGAAAGGTTTTCGAGTCCT
AATTAAAACTTTATTTATGGCAGTATTCATAATTAGCCTGAAATGCATTCTGTAGGTAATCTCTGAGTTTCTGGA
ATATTTTCTTAGACTTTTTGGATGTGCAGCAGCTTACATGTCTGAAGTTACTTGAAGGCATCACTTTTAAGAAAG
CTTACAGTTGGGCCCTGTACCATCCCAAGTCCTTTGTAGCTCCTCTTGAACATGTTTGCCATACTTTTAAAAGGG
TAGTTGAATAAATAGCATCACCATTCTTTGCTGTGGCACAGGTTATAAACTTAAGTGGAGTTTACCGGCAGCATC
AAATGTTTCAGCTTTAAAAAATAAAAGTAGGGTACAAGTTTAATGTTTAGTTCTAGAAATTTTGTGCAATATGTT
CATAACGATGGCTGTGGTTGCCACAAAGTGCCTCGTTTACCTTTAAATACTGTTAATGTGTCATGCATGCAGATG
GAAGGGGTGGAACTGTGCACTAAAGTGGGGGCTTTAACTGTAGTATTTGGCAGAGTTGCCTTCTACCTGCCAGTT
CAAAAGTTCAACCTGTTTTCATATAGAATATATATACTAAAAAATTTCAGTCTGTTAAACAGCCTTACTCTGATT
CAGCCTCTTCAGATACTCTTGTGCTGTGCAGCAGTGGCTCTGTGTGTAAATGCTATGCACTGAGGATACACAAAA
ATACCAATATGATGTGTACAGGATAATGCCTCATCCCAATCAGATGTCCATTTGTTATTGTGTTTGTTAACAACC
CTTTATCTCTTAGTGTTATAAACTCCACTTAAAACTGATTAAAGTCTCATTCTTGTCATTGTGTGGGTGTTTTAT
TAAATGAGAGTTTATAATTCAAATTGCTTAAGTCCATTGAAGTTTTAATTAATGGGCAGCCAAATGTGAATACAA
AGTTTTCAGTTTTTTTTTTTCCTGCTGTCCTTCAAAGCCTACTGTTTNNNNNNNNNNNNNNNNNNNNNTGGCCT
GAGAGTAGAGTATCTGTCTACTCATGTTTAATTAAGGAAAAACACTTATTTTTAGGGCTTTAGTCATCACTTCAT
AAATTGTATAAGCACATTAAATAGCGTTCTAGTCCTGAAAAAGTCCAAGATTCTTAGAAAATTGTGCATATTTTT
ATTATGACAGATGTTTGAAGATAATTCCCCAGAATGGATTTGATACTTTAGATTTCAATTTTGTGGCTTTTGTCT
ATTATTCTGTACTCTGCCATCAGCATATGGAAAGCTTCATTTACTCATCATGACTTGTGCCATATAAAAATTGAT
ATTTCGGAATAGTCTAAAGGACTTTTTGTACTTGAATTTAATCATGTTGTTTCTAATATTCTTAAAAGCTTGAAG
ACTAAAGCATATCCTTTCAACAAAGCATAGTAAGGTAATAAGAAAGTGTAGTTTGTACAAGTGTTAAAAAAATAA
AGTAGACAATGTTACAGTGGGACTTATTATTTCAAGTTTACATTTTCTCCATGTAATTTTTTAAAAAGTAAATGA
AAAAATGTGCAATAATGTAAAATATGAAGTGTATGTGTACACACATTTTATTTTTCGGTATCTTGGGTATACGTA
TGGTTGAAAACTATACTGGAGTCTAAAAGTATTCTAATTTATAAGAAGACATTTTGGTGATGTTTGAAAAATAGA
AATGTGCTAGTTTTGTTTTTATATCATGTCCTTTGTACGTTGTAATATGAGCTGGCTTGGTTCAGTAAATGCCAT
CACCATTTCCATTGAGAATTTAAAACTCACCAGTGTTTAATATGCAGGCTTCCAAAGGCTTATGAAAAAAATCAA
GACCCTTAAATCTAGTTAATTTGCTGCTAACATGAAACTCTTTGGTTCTTTTATTTTTGCCAGATAATTAGACAC
ACATCTAAAGCTTAGTCTTAAATGGCTTAAGTGTAGCTATTGATTAGTGCTGTTGCTAGTTCAGAAAGAAATGTT
TGTGAATGGAAACAAGAATATTCAGTCCAAACTGTTGTAAGGACAGTACCTGAAAACCAGGAAACAGGATAATGG
AAAAAGTCTTTTAAAGATGAAATGTTGGAGCCAACTTTCTTATAGAATTAATTGTATGTGGCTATAGAAAGCCTA
ATGATTGTTGCTTATTTTTGAGAGCATATTATTCTTTTATGACCATAATCTTGCTGTTTTTCCATCTTCCAAAAG

FIGURE 5008B

ATCTTCCTTCTAATATGTATATCAGAATGTGGGTAGCCAGTCAGACAAATTCATATTGGTTGGTAGCTTTAAAAA
GTTTGTAATGTGAAGACAGGAAAGGACAAAATAGTTTGCTTTGGTGGTAGTACTCTGGTTGTTAAGCTAGGTATT
TTGAGACTACTTCCCCATCACAACAACAATAAAATAATCACTCATAATCCTATCACCTGGAGACATAGCCATCGT
TAATATGTTAGTGACTATACAATCATGTTTTCTTCTGTATATCCATGTATATTCTTTAAAAATGAAATTTATACT
GTACCTGATCTCAAAGCTTTTTAGCTTAGTATATCTGTCATGAATTTGTAGGATGTTCCATTGCATCAGAAAACG
GACAGTGATTTGATTACTTTCTAATGCCACAGATGCAGATTACATGTAGTTATTGAGAATCCTTTCGAATTCAGT
GGCTTAATCATGAATGTCTAAATATTGTTGACATTAGGATGATACATGTAAATTAAAGTTACATTTGTTTAGCAT
AGACAAGCTTAACATTGTAGATGTTTCTCTTCAAAAATCATCTTAAACATTTGCATTTGGAATTGTGTTAAATAG
AATGTGTGAAACACTGTATTAGTAAACTTCATCACCTTTCTACTTCCTTATAGTTTGAACTTTTCAGTTTTTGTA
GTTCCCAAACAGTTGCTCAATTTAGAGCAAATTAATTTAACACCTGCCAAAAAAAGGCTGCTGTTGGCTTATCAG
TTGTCTTTAAATTCAAATGCTCATGTGACTTTTATCACATCAAAAAATATTTCATTAATGATTCACCTTTAGCTC
TGAAAATTACCGCGTTTAGTAATTATAGTGGGCTTATAAAAACATGCAACTCTTTTTGATAGTTATTTGAGAATT
TTGGTGAAAAATATTTAGCTGAGGGCAGTATAGAACTTATAAACCAATATATTGATATTTTTAAAACATTTTTAC
ATATAAGTAAACTGCCATCTTTGAGCATAACTACATTTAAAAATAAAGCTGCATATTTTTAAATCAAGTGTTTAA
CAAGAATTTATATTTTTTATTTTTTAAAATTAAAAATAATTTATATTTCCTCTGTTGCATGAGGATTCTCATCTG
TGCTTATAATGGTTAGAGATTTTATTTGTGTGGAATGAAGTGAGGCTTGTAGTCATGGTTCTAGTGTTTCAGTTT
GCCAAGTCTGTTTACTGCAGTGAAATTCATCAAATGTTTCAGTGTGGTTTTCTGTAGCCTATCATTTACTGGCTA
TTTTTTTATGTACACCTTTAGGATTTTCTGCCTACTCTATCCAGTTGTCCAAATGATATCCTACATTTTACAAAT
GCCCTTTCAGTTTCTATTTTCTTTTTCCATTAAATTGCCCTCATGTCCTAATGTGCAGTNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNATTTTCAAGAGTGCTAGACTTCCAATTTGAGAGATTAAATAATTTAATTCA
GGCAAACATTTTTCATTGGAATTTCACAGTTCATTGTAATGAAAATGTTAATCCTGGATGACCTTTGACATACAG
TAATGAATCTTGGATATTAATGAATTTGTTAGTAGCATCTTGATGTGTGTTTTA**ATG**AGTTATTTTCAAAGTTGT
GCATTAAACCAAAGTTGGCATACTGGAAGTGTTTATATCAAGTTCCATTTGGCTACTGATGGACAAAAAATAGAA
ATGCCTTCCTATGGAGAGTATTTTTCCTTTAAAAAATTAAAAAGGTTAATTATTTTGACT

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FIGURE 5009

MSYFQSCALNQSWHTGSVYIKFHLATDGQKIEMPSYGEYFSFKKLKRLIIL

FIGURE 5010

GGGGGCAGAGCTGGCGCTCTAGCCCACGGAGTTGGTTAACTCCTCTCACCGGCCCCTGGAAAGGGTTCCAAGTCC
TTTAGTACCCGACGCTGTCTGGGAATTCCGGGCGTTTCGGCTCCTTGGTCGCAGAGGCAGGAGGCACCCGACCGC
ATGTCTGTCATGGACCTCGCCAATACTTGCTCCAGCTTTCAGTCGGACCTGGATTTCTGTTCAGATTGCGGCTCG
GTCCTGCCTCTGCCCGGGGCTCAGGATACGGTCACCTGTATTCGCTGTGGCTTCAACATCAACGTTCGGGACTTT
GAGGGGAAGGTTGTGAAGACTTCGGTTGTGTTCCACCAACTGGGGACAGCCATGCCTATGTCGGTGGAGGAAGGG
CCTGAGTGCCAGGGACCTGTGGTTGACAGGCGCTGCCCTCGATGTGGTCATGAAGGAATGGCATACCACACCAGA
CAGATGCGTTCAGCCGATGAAGGGCAAACTGTCTTCTACACCTGTACCAACTGCAAGTTCCAGGAGAAGGAAGAC
TCT**TGA**CCTTTTTTCCTGGGCAACTCTACAGTCCCTCCCTCCTTTCGGAAGGTGAAGGATACTGGGTTTTTAGAT
GCCTTGTCCATCCTGTCTGGTTGCAATGTTTTGCTCCCAGAAGAGAATCAGATCATCATGTGGGGATTACCATTG
TTCCTGGAGTACTCCTACCCTTAGTTGAATTTCCTTATTAAAGTTATATTTTTCTATAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAA

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FIGURE 5011

MSVMDLANTCSSFQSDLDFCSDCGSVLPLPGAQDTVTCIRCGFNINVRDFEGKVVKTSVVFHQLGTAMPMSVEEG
PECQGPVVDRRCPRCGHEGMAYHTRQMRSADEGQTVFYTCTNCKFQEKEDS

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FIGURE 5012

AGCGGAAGGGGCCTTTCGGAACGATTTGGAACGAAAGGAAGTGGAAGAAACGCGGAACCATGGCCGCTGTGGTTG
CTGTTTGCGGTGGTCTAGGGAGGAAGAAGTTGACACACTTGGTAACGGCTGCTGTCAGCCTTACACATCCCGGGA
CTCACACGGTGCTTTGGAGAAGAGGTTGTTCACAACAGGTATCCAGCAATGAGGACCTGCCCATTTCAATGGAAA
ATCCTTATAAAGAACCTCTTAAGAAATGTATCTTGTGTGGAAAGCATGTAGATTATAAGAATGTACAGCTTTTGT
CCCAGTTTGTTTCTCCATTTACTGGATGCATTTATGGAAGGCACATTACAGGTCTTTGTGGGAAGAAACAGAAAG
AAATCACAAAAGCAATTAAGAGAGCTCAAATAATGGGGTTTATGCCAGTTACATACAAGGATCCTGCATATCTCA
AGGACCCTAAAGTTTGTAACATCAGATATCGGGAATAAATTCTATCACGTTACCACTAATAAACTTATTTTACAG
TAAGTGGTTGTATGATGCCAATACTGACTCAAACCAACCTTTGGATAGAAAAGTGTTTGAGGAGTGAGGTAAAGA
ATGACACTTCCCCTTCATACCAATGTCCATTAAGCAGATTGCTTATTTAAAATGTTAACACTCATCACATTTTAT
CTATGTTGAATAAAAGTGGTTCTGTGTGATTGTCATTTATATCTGATCCCCAAATAGCTCATACAATAATCCATT
CAATAGAATGGAATTAAAACTGTTCAGAATGATTTTCCAACTAGCAAATATAAGTATGCCTGGTTAAGATATCTT
CCCTTTGTAGAAATGTTACATTGGGATGGATAGTGGTGCTGTCACAGAAGGACAAAATATTCCTAGACGAGTCTA
TCCTCAAACCAGTAGTGTCTTTTACATGAAGAGATGATTTACACCTAATAGACATTGAATATGATAGACATACAT
GTATATATGTATCAGTTCTGAGTTCCACTGGCCTATCCC

FIGURE 5013

MAAVVAVCGGLGRKKLTHLVTAAVSLTHPGTHTVLWRRGCSQQVSSNEDLPISMENPYKEPLKKCILCGKHVDYK
NVQLLSQFVSPFTGCIYGRHITGLCGKKQKEITKAIKRAQIMGFMPVTYKDPAYLKDPKVCNIRYRE

FIGURE 5014A

GCGGCGCTGGGTCGGTGGCGGAGGCTGAGGAGAAGGAGGAGCGGGCCGTGGAGGCTTCGCCGCCTAGGTACTGCT
ATAACCAGAATTTGGTAGAAAAAGGATTTACTTGTTGGGGCCCTCTTGATAAAAAGAGATGTGGGGGGATTCTCG
ACCTGCTAACAGAACTGGACCTTTTCGTGGGAGCCAAGAAGAAAGGTTTGCTCCCGGGTGGAACAGGGATTATCC
TCCTCCTCCCCTTAAGAGTCATGCTCAAGAGAGACACTCTGGCAACTTTCCTGGCAGAGATTCACTTCCCTTTGA
TTTCCAGGGGCATTCGGGGCCTCCTTTTGCAAATGTAGAGGAGCATTCTTTCAGCTATGGAGCTAGAGACGGACC
GCATGGTGACTATCGAGGAGGGGAGGGACCTGGACATGATTTCAGGGGGGGAGATTTTTCGTCTTCTGATTTCCA
GAGCAGAGATTCATCACAGTTGGACTTCAGGGGTAGGGACATACATTCTGGGGATTTTCGGGATAGAGAAGGACC
ACCTATGGACTATAGGGGTGGAGATGGTACTTCTATGGATTATAGAGGTAGGGAGGCACCTCATATGAACTACAG
AGACAGGGATGCTCACGCTGTTGACTTCAGAGGTAGGGATGCTCCTCCATCTGACTTCAGGGGCCGGGGCACTTA
TGATTTAGATTTTAGAGGCCGGGATGGATCCCATGCAGATTTTAGGGGAAGGGATTTATCAGATTTGGATTTTAG
GGCCAGAGAACAGTCCCGTTCTGATTTTAGGAATAGAGATGTATCTGATTTGGACTTTAGAGACAAAGACGGAAC
ACAAGTAGACTTTAGAGGCCGAGGTTCAGGTACTACTGATCTAGACTTTAGGGACAGGGATACGCCACATTCAGA
TTTCAGAGGTAGACACCGATCTAGGACTGATCAGGATTTTAGGGGCAGAGAGATGGGATCTTGTATGGAATTTAA
AGATAGGGAGATGCCCCCTGTGGATCCAAATATTTTGGATTACATTCAGCCCTCTACACAAGATAGAGAACATTC
TGGTATGAATGTGAACAGGAGAGAAGAATCCACACATGACCATACGATAGAAAGGCCTGCTTTTGGCATTCAGAA
GGGAGAATTTGAGCATTCAGAAACAAGAGAAGGAGAAACACAAGGTGTAGCCTTTGAACATGAGTCTCCAGCAGA
CTTTCAGAACAGCCAAAGTCCAGTTCAAGACCAAGATAAGTCACAGCTTTCTGGACGTGAAGAGCAGAGTTCAGA
TGCTGGTCTGTTTAAAGAAGAAGGCGGTCTGGACTTTCTTGGGCGGCAAGACACCGATTACAGAAGCATGGAGTA
CCGTGATGTGGATCATAGGCTGCCAGGAAGCCAGATGTTTGGCTATGGCCAGAGCAAGTCTTTTCCAGAGGGCAA
AACTGCCCGAGATGCCCAACGGGACCTTCAGGATCAAGATTATAGGACCGGCCCAAGTGAGGAGAAACCCAGCAG
GCTTATTCGATTAAGTGGGGTACCTGAAGATGCCACAAAAGAAGAGATTCTTAATGCTTTTCGGACTCCTGATGG
CATGCCTGTAAAGAACTTGCAGTTGAAGGAGTATAACACAGGTTACGACTATGGCTATGTCTGCGTGGAGTTTTC
ACTCTTGGAAGATGCCATCGGATGCATGGAGGCCAACCAGGGAACTCTAATGATCCAGGACAAAGAAGTTACCCT
GGAGTATGTATCAAGCCTGGATTTTTGGTACTGCAAACGATGTAAGGCAAACATTGGTGGGCACCGATCTTCCTG
TTCATTCTGCAAGAACCCAAGAGAAGTGACAGAGGCCAAGCAAGAATTAATAACCTACCCTCAGCCTCAGAAAAC
ATCCATACCAGCACCATTGGAAAAACAGCCCAACCAGCCCCTAAGACCAGCTGATAAGGAACCTGAACCCAGGAA
GAGGGAAGAAGGCCAAGAGTCACGCTTAGGACATCAAAAGAGAGAAGCAGAAAGGTATCTGCCTCCTTCTCGAAG
GGAAGGGCCAACTTTCCGAAGAGACCGAGAGAGGGAGTCATGGTCTGGAGAGACACGCCAGGATGGAGAGAGCAA
AACTATCATGCTAAAGCGTATCTATCGTTCCACACCACCTGAGGTGATAGTGGAAGTGCTGGAGCCCTATGTCCG
CCTTACTACTGCCAACGTCCGTATCATCAAGAACAGAACAGGCCCTATGGGGCATACCTATGGCTTTATTGACCT
CGACTCCCATGCGGAAGCTCTTCGTGTGGTGAAGATCTTACAGAACCTTGATCCGCCATTTAGCATTGATGGGAA
GATGGTAGCTGTAAACCTGGCCACTGGAAAACGAAGAAATGATTCTGGGGACCATTCTGACCACATGCATTACTA
TCAGGGTAAAAAATATTTCCGAGATAGGAGGGGAGGTGGCAGAAATTCAGACTGGTCTTCAGATACAAATCGACA
AGGACAACAGTCATCATCTGACTGCTACATATATGATTCTGCTACTGGCTACTATTATGACCCCTTGGCAGGAAC
TTATTATGACCCCAATACCCAGCAAGAAGTCTATGTGCCCCAGGATCCTGGATTACCTGAGGAAGAAGAGATCAA
GGAAAAAAAACCCACCAGTCAAGGAAAGTCAAGTAGCAAGAAGGAAATGTCTAAAAGAGATGGCAAGGAGAAAAA
AGACAGAGGAGTGACGAGGTTTCAGGAAAATGCCAGTGAAGGGAAGGCCCCTGCAGAAGACGTCTTTAAGAAGCC
CCTGCCTCCTACTGTGAAGAAGGAAGAGAGTCCCCCTCCACCTAAAGTGGTAAACCCACTGATCGGCCTCTTGGG
TGAATATGGAGGAGACAGTGACTATGAGGAGGAAGAAGAGGAGGAACAGACCCCTCCCCCACAGCCCCGCACAGC
ACAGCCCCAGAAGCGAGAGGAGCAAACCAAGAAGGAGAATGAAGAAGACAAACTCACTGACTGGAATAAACTGGC
TTGTCTGCTTTGCAGAAGGCAGTTTCCCAATAAAGAAGTTCTGATCAAACACCAGCAGCTGTCAGACCTGCACAA
GCAAAACCTGGAAATCCACCGGAAGATAAAACAGTCTGAGCAGGAGCTAGCCTATCTGGAAAGGAGAGAACGAGA
GGGAAAGTTTAAAGGAAGAGGAAATGATCGCAGGGAAAAGCTCCAGTCTTTTGACTCTCCAGAAAGGAAACGGAT
TAAGTACTCCAGGGAAACTGACAGTGATCGTAAACTTGTTGATAAAGAAGATATCGACACTAGCAGCAAAGGAGG
CTGTGTCCAACAGGCTACTGGCTGGAGGAAAGGGACAGGCCTGGGATATGGCCATCCTGGATTGGCTTCATCAGA
GGAGGCTGAAGGCCGGATGAGGGGCCCCAGTGTTGGAGCCTCAGGAAGAACCAGCAAAAGACAGTCCAACGAGAC
TTATCGAGATGCTGTTCGAAGAGTCATGTTTGCTCGATATAAAGAACTCGATTAAGAAAGGAGACAAGTTCCATG
GGATACAACCTCCCTCTTGTTTTGTTTGTCTCTCCTTTTCTTTTGTTACTGTTCTTGCTGCTAGAACTTTTTTAA

FIGURE 5014B

ATAAACTTTTTTTCAATGTGAAAAAAAAAAAAAAAAAA

FIGURE 5015

MWGDSRPANRTGPFRGSQEERFAPGWNRDYPPPPLKSHAQERHSGNFPGRDSLPFDFQGHSGPPFANVEEHSFSY
GARDGPHGDYRGGEGPGHDFRGGDFSSSDFQSRDSSQLDFRGRDIHSGDFRDREGPPMDYRGGDGTSMDYRGREA
PHMNYRDRDAHAVDFRGRDAPPSDFRGRGTYDLDFRGRDGSHADFRGRDLSDLDFRAREQSRSDFRNRDVSDLDF
RDKDGTQVDFRGRGSGTTDLDFRDRDTPHSDFRGRHRSRTDQDFRGREMGSCMEFKDREMPPVDPNILDYIQPST
QDREHSGMNVNRREESTHDHTIERPAFGIQKGEFEHSETREGETQGVAFEHESPADFQNSQSPVQDQDKSQLSGR
EEQSSDAGLFKEEGGLDFLGRQDTDYRSMEYRDVDHRLPGSQMFGYGQSKSFPEGKTARDAQRDLQDQDYRTGPS
EEKPSRLIRLSGVPEDATKEEILNAFRTPDGMPVKNLQLKEYNTGYDYGYVCVEFSLLEDAIGCMEANQGTLMIQ
DKEVTLEYVSSLDFWYCKRCKANIGGHRSSCSFCKNPREVTEAKQELITYPQPQKTSIPAPLEKQPNQPLRPADK
EPEPRKREEGQESRLGHQKREAERYLPPSRREGPTFRRDRERESWSGETRQDGESKTIMLKRIYRSTPPEVIVEV
LEPYVRLTTANVRIIKNRTGPMGHTYGFIDLDSHAEALRVVKILQNLDPPFSIDGKMVAVNLATGKRRNDSGDHS
DHMHYYQGKKYFRDRRGGGRNSDWSSDTNRQGQQSSSDCYIYDSATGYYYDPLAGTYYDPNTQQEVYVPQDPGLP
EEEEIKEKKPTSQGKSSSKKEMSKRDGKEKKDRGVTRFQENASEGKAPAEDVFKKPLPPTVKKEESPPPPKVVNP
LIGLLGEYGGDSDYEEEEEEEQTPPPQPRTAQPQKREEQTKKENEEDKLTDWNKLACLLCRRQFPNKEVLIKHQQ
LSDLHKQNLEIHRKIKQSEQELAYLERREREGKFKGRGNDRREKLQSFDSPERKRIKYSRETDSDRKLVDKEDID
TSSKGGCVQQATGWRKGTGLGYGHPGLASSEEAEGRMRGPSVGASGRTSKRQSNETYRDAVRRVMFARYKELD

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FIGURE 5016

CGGCTCGAGCCGAGTTCCGGGCGCGAGGCGGCCACCGTGGAGAGCAGAGCGCGGCGGCTGGAAGCTGCTAAGTCA
GAGCCGCGATGTTCCGGATTGAGGGCCTCGCGCCGAAGCTGGACCCGGAGGAGATGAAACGGAAGATGCGCGAGG
ATGTGATCTCCTCCATACGGAACTTTCTCATCTACGTGGCCCTCCTGCGAGTCACTCCATTTATCTTAAAGAAAT
TGGACAGCATATGAAGACAGGACATCACATATGAATGCACGATATGAAGAGCCTGGTTACAGTTTCGACTCCTCT
CTGCAAGTGAATAGGCCCAGAAAGGTGTAAGAGACTCTTTGAATGGACATAAAATTCTGCTTGTTAAGAACAAGT
TTGGCTCTGGTAACTGACCTTCAAAGCTAAAATATAAAACTATTTGGGAAGTATGAAACGATGTCTCGTGATCTG
GTGTACCCTTATCCCTGTGACGTTTGGCCTCTGACAATACTGGTATAATTGTAAATAATGTCAAACTCCGTTTTC
TAGCAAGTATTAAGGGAGCTGTGTCTGAAATGGCACTGTCTTGTCAGTCATTTCTGTTTACCTTTTTCTTCTGCC
CAGAGTGTATTTGTGAAGAGTCTCTTATATTATGTTTTGTGGAAATCAGCACACAACCACAATGACATTTAAGCA
CAGGATCATTATTAGTCTATGTTTTTAATAAACATATCAATTAAGATCCTGTGCTTAAATGTCATTGTGGTTGTG
TGCTGATTTCCACAAAACATAATATAAGAGACTCTTCACAAATACACTCTGGGCAGAAGAAAAAGGTAAACAGAA
ATGACTGACAAGACAGTGCCATTTCAGACACAGCTCCCTTAATACTTGCTAGAAAACGGAGTTTGACATTATTTA
CAATTATACCAGTATTGTCAGAGGCCAAACGTCACAGGGATAAGGGTACACCAGATCACGAGACATCGTTTCATA
CTTCCCAAATAGTTTTATATTTTAGCTTTGAAGGTCAGTTACCAGAGCCAAACTTGTTCTTAACAAGCAGAATTT
TATGTCCATTCAAAGAGTCTCTTACACCTTTCTGGGCCTATTCACTTGCAGAGAGGAGTCGAAACTGTAACCAGG
CTCTTCATATCGTGCATTCATATGTG**ATG**TCCTGTCTTCATATGCTGTCCAATTTCTTTAAGATAAATGGAGTGA
CTCGCAAGAGGGCCACGTAGATGAGAAAGTTCCGTATGGAGGAGATCACATCCTCGCGCATCTTCCGTTTCATCT
CCTCCGGGTCCAGCTTCGGCGCGAGGCCCTCAATCCGGAACATCGCGGCTCTGACTTAGCAGCTTCCAGCCGCCG
CGCTCTGCTCTCCACGGTGGCCGC

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FIGURE 5017

MSCLHMLSNFFKDKWSDSQEGHVDEKVPYGGDHILAHLPFHLLRVQLRREALNPEHRGSDLAASSRRALLSTVA

FIGURE 5018

AAGATCTCTCTGGACCAGCTCGGGTGCAGGGCCTCTGCGGGAGCCCTCCTAGACCTCTGCGGCTTCTCCTCTAAC
ATGGCCGACTCGGAAAACCAGGGGCCTGCGGAGCCTAGCCAGGCGGCGGCAGCGGCGGAGGCAGCGGCGGAGGAG
GTAATGGCGGAAGGCGGTGCGCAGGGTGGAGACTGTGACAGCGCGGCTGGTGACCCTGACAGCGCGGCTGGTCAG
ATGGCTGAGGAGCCCCAGACCCCTGCAGAGAATGCCCCAAAGCCGAAAAATGACTTTATCGAGAGCCTGCCTAAT
TCGGTGAAATGCCGAGTCCTGGCCCTCAAAAAGCTGCAGAAGCGATGCGATAAGATAGAAGCCAAATTTGATAAG
GAATTTCAGGCTCTGGAAAAAAAGTATAATGACATCTATAAGCCCCTACTCGCCAAGATCCAAGAGCTCACCGGC
GAGATGGAGGGGTGTGCATGGACCTTGGAGGGGGAGGAGGAGGAGGAAGAGGAGTACGAGGATGACGAGGAGGAG
GGGGAAGACGAGGAGGAGGAGGAGGCTGCGGCAGAGGCTGCCGCGGGGGCCAAACATGACGATGCCCACGCCGAG
ATGCCTGATGACGCCAAGAAGTAAGGGGGGGCAGAGATGGATGAAGAGAAAGCCCACGAAGAAAAAAGCCTGGTTT
TGTTTTTCCCAGAATATCGATGGACTTAAAAAGGCTCAGGTTTTTGACCAAAATACAATGTGAATTTATTCTGAC
ATTCCTAAAATAGATTAAATTAAAGCAATTAGATCCTGGCCAGCTCGATTCAAATTTGACTTTCATTTTGAACAT
AATAAATATATCAAAAGGTGTTAAAGAAAACTGAATTAAACCCAAAATTATGTTTTCATGGTCTCTTCTCTGAGG
ATTGAGGTTTACAAAGGGTGTTAGCAGATGCGAAGTAAAGAACGTCACTTTGAAACCCATTCATCACACAGCATA
CGCTACACATGGAACACCCAAGCCATGACTGAACACGTTCTCAGTGCTTAATTCTTAAATTTCTTTACTCATGAC
ATTTCGCAGTGCAGAGAAGGCAGAACCCAAGAAAAACGTCATCTTTGAGACTTTGCTTTTGTAACGCAGACATCA
GCTTTACACTTCACAGGAGATTGATGGCATTGAGGAAGATTGCAATGGAGATCATGACACTACTGTTAATAAGGC
CAGGAAAACTGCCATTTCAAGTTCTGAAAAATGTTTTGAGTATTTGAATTTAGAGAAACAACATGGTTCCAAGAA
GGAGGGTGTAAAACCTGTAAAATACTGTCAACATGTATTCATTAGTTACAATCTCATGTTTGTGTTTTCTTAGTA
CTGTCTATTTACAAACACGTAAAAAATACCCCAAATATGTTTAAGTATTAAATCACTTTACCTAGCGTTTTAGAA
ATATTAATTTACTTGAAGAGATGTAGAATGTAGCAAATTATGTAAAGCATGTGTATCCAGCGTTATGTACTTTGC
GCCTTGTGACGTCTTTCTGTCATGTAGCTTTTAGGGTGTAGCTGTGAAAATCATCAGAACTCTTCACTGAAGCTA
ATGTTTGGAAAAAATATATACTTGAAGAACCAATCCAAGTGTGTGCCCCTACCCCCAGCTCAGAAGTAGAAAGGG
TTTAAGTTTGCTTGTATTAGCTGTGCCTTCATTATTTTGCTATGTAAATGTGACATATTAATTATAAAATGGTGC
ATAATCAAATTTTACTGCTTGAGGACAGATGCATACAGTAAGGATTTTTAGGAAGAATATATTTAATGTAAAGAC
TCTTAGCTTCTGTGTGGGTTTTGAATTATGTGTGAGCCAGTGATCTATAAAGAAACATAAGCTTAAAGTTGTTTA
TCACTGTAGTGTTAATAAAACAGTATTTTCAAAAAAT

FIGURE 5019

MADSENQGPAEPSQAAAAAEAAAEEVMAEGGAQGGDCDSAAGDPDSAAGQMAEEPQTPAENAPKPKNDFIESLPN
SVKCRVLALKKLQKRCDKIEAKFDKEFQALEKKYNDIYKPLLAKIQELTGEMEGCAWTLEGEEEEEEEYEDDEEE
GEDEEEEEAAAEAAAGAKHDDAHAEMPDDAKK

FIGURE 5020

CCCCTTATCTCTGTGGGGAGCAGTCAAGTGCCGCGAAACAGGAGGCGGGGCCGCGGCCAACGTCATTCCCGCGGC
CGCACGTCACCGCCACTTGCCGCATCCGCAAGATCTCTCTGGACCAGCTCGGGTGCAGGGCCTCTGCGGGAGCCC
TCCTAGACCTCTGCGGCTTCTCCTCTAACATGGCCGACTCGGAAAACCAGGGGCCTGCGGAGCCTAGCCAGGCGG
CGGCAGCGGCGGAGGCAGCGGCGGAGGAGGTAATGGCGGAAGGCGGTGCGCAGGGTGGAGACTGTGACAGCGCGG
CTGGTGACCCTGACAGCGCGGCTGGTCAGATGGCTGAGGAGCCCCAGACCCCTGCAGAGAATGCCCCAAAGCCGA
AAAATGACTTTATCGAGAGCCTGCCTAATTCGGTGAAATGCCGAGTCCTGGCCCTCAAAAAGCTGCAGAAGCGAT
GCGATAAGATAGAAGCCAAATTTGATAAGGAATTTCAGGCTCTGGAAAAAAAGTATAATGACATCTATAAGCCCC
TACTCGCCAAGATCCAAGAGCTCACCGGCGAGATGGAGGGGTGTGCATGGACCTTGGAGGGGGAGGAGAGTAGAA
GAGAGTACGAGGATGACGAGGAGGAGGGGGAAGACGAGGCCGAGGAGGAAGCTGCGGCAGAGGCTGCCGCGGGGG
CCAAACATGACGATGCCCACGCCGAGATGCCTGATGACGCCAAGAAGTAAGGGGGGGCAGAGATGGATGAAGAGAA
AGCCCACGAAGAAAAAAGCCTGGTTTTGTTTTTCCCAGAATATCGATGGACTTAAAAAGGCTCAGGTTTTTGACC
AAAATACAATGTGAATTTATTCTGACATTCCTAAAATAGATTAAATTAAAGCAATTAGATCCTGGCCAGCTCGAT
TCAAATTTGACTTTCATTTTGAACATAATAAATATATCAAAAGGTGTTAAAGAAAACTGAATTAAACCCAAAATT
ATGTTTTCATGGTCTCTTCTCTGAGGATTGAGGTTTACAAAGGGTGTTAGCAGATGCGAAGTAAAGAACGTCACT
TTGAAACCCATTCATCACACAGCATACGCTACACATGGAACACCCAAGCCATGACTGAACACGTTCTCAGTGCTT
AATTCTTAAATTTCTTTACTCATGACATTTCGCAGTGCAGAGAAGGCAGAACCCAAGAAAAACGTCATCTTTGAG
ACTTTGCTTTTGTAACGCAGACATCAGCTTTACACTTCACAGGAGATTGATGGCATTGAGGAAGATTGCAATGGA
GATCATGACACTACTGTTAATAAGGCCAGGAAAACTGCCATTTCAAGTTCTGAAAAATGTTTTGAGTATTTGAAT
TTAGAGAAACAACATGGTTCCAAGAAGGAGGGTGTAAAACCTGTAAAATACTGTCAACATATGTATTCATTAGTT
ACAATCTCATGTTTGTGTTTTCTTAGTACTGTCTATTTACAAACACGTAAAAAATACCCCAAATATGTTTAAGTA
TTAAATCACTTTACCTAGCGTTTTAGAAATATTAATTTACTTGAAGAGATGTAGAATGTAGCAAATTATGTAAAG
CATGTGTATCCAGCGTTATGTACTTTGCGCCTTGTGACGTCTTTCTGTCATGTAGCTTTTAGGGTGTAGCTGTGA
AAATCATCAGAACTCTTCACTGAAGCTAATGTTTGGAAAAAATATATACTTGAAGAACCAATCCAAGTGTGTGCC
CCTACCCCCAGCTCAGAAGTAGAAAGGGTTTAAGTTTGCTTGTATTAGCTGTGCCTTCATTATTTTGCTATGTAA
ATGTGACATATTAATTATAAAATGGTGCATAATCAAATTTTACTGCTTGAGGACAGATGCATACAGTAAGGATTT
TTAGGAAGAATATATTTAATGTAAAGACTCTTAGCTTCTGTGTGGGTTTTGAATTATGTGTGAGCCAGTGATCTA
TAAAGAAACATAAGCTTAAAGTTGTTTATCACTGTGGTGTTAATAAAACAGTATTTTCAAAAAATA

FIGURE 5021

PYLCGEQSSAAKQEAGPRPTSFPRPHVTATCRIRKISLDQLGCRASAGALLDLCGFSSNMADSENQGPAEPSQAA
AAAEAAAEEVMAEGGAQGGDCDSAAGDPDSAAGQMAEEPQTPAENAPKPKNDFIESLPNSVKCRVLALKKLQKRC
DKIEAKFDKEFQALEKKYNDIYKPLLAKIQELTGEMEGCAWTLEGEESRREYEDDEEEGEDEAEEEAAAEAAAGA
KHDDAHAEMPDDAKK

FIGURE 5022

GCTGCCACCTCTCTAGAGGCACCTGGCGGGGAGCCTCTCAACATAAGACAGTGACCAGTCTGGTGACTCACAGCC
GGCACAGCCATGAACTACCCGCTAACGCTGGAAATGGACCTCGAGAACCTGGAGGACCTGTTCTGGGAACTGGAC
AGATTGGACAACTATAACGACACCTCCCTGGTGGAAAATCATCTCTGCCCTGCCACAGAGGGGCCCCTCATGGCC
TCCTTCAAGGCCGTGTTCGTGCCCGTGGCCTACAGCCTCATCTTCCTCCTGGGCGTGATCGGCAACGTCCTGGTG
CTGGTGATCCTGGAGCGGCACCGGCAGACACGCAGTTCCACGGAGACCTTCCTGTTCCACCTGGCCGTGGCCGAC
CTCCTGCTGGTCTTCATCTTGCCCTTTGCCGTGGCCGAGGGCTCTGTGGGCTGGGTCCTGGGGACCTTCCTCTGC
AAAACTGTGATTGCCCTGCACAAAGTCAACTTCTACTGCAGCAGCCTGCTCCTGGCCTGCATCGCCGTGGACCGC
TACCTGGCCATTGTCCACGCCGTCCATGCCTACCGCCACCGCCGCCTCCTCTCCATCCACATCACCTGTGGGACC
ATCTGGCTGGTGGGCTTCCTCCTTGCCTTGCCAGAGATTCTCTTCGCCAAAGTCAGCCAAGGCCATCACAACAAC
TCCCTGCCACGTTGCACCTTCTCCCAAGAGAACCAAGCAGAAACGCATGCCTGGTTCACCTCCCGATTCCTCTAC
CATGTGGCGGGATTCCTGCTGCCCATGCTGGTGATGGGCTGGTGCTACGTGGGGGTAGTGCACAGGTTGCGCCAG
GCCCAGCGGCGCCCTCAGCGGCAGAAGGCAGTCAGGGTGGCCATCCTGGTGACAAGCATCTTCTTCCTCTGCTGG
TCACCCTACCACATCGTCATCTTCCTGGACACCCTGGCGAGGCTGAAGGCCGTGGACAATACCTGCAAGCTGAAT
GGCTCTCTCCCCGTGGCCATCACCATGTGTGAGTTCCTGGGCCTGGCCCACTGCTGCCTCAACCCCATGCTCTAC
ACTTTCGCCGGCGTGAAGTTCCGCAGTGACCTGTCGCGGCTCCTGACGAAGCTGGGCTGTACCGGCCCTGCCTCC
CTGTGCCAGCTCTTCCCTAGCTGGCGCAGGAGCAGTCTCTCTGAGTCAGAGAATGCCACCTCTCTCACCACGTTC
TAGGTCCCAGTGTCCCCTTTTATTGCTGCTTTTCCTTGGGGCAGGCAGTGATGCTGGATGCTCCTTCCAACAGGA
GCTGGGATCCTAAGGGCTCACCGTGGCTAAGAGTGTCCTAGGAGTATCCTCATTTGGGGTAGCTAGAGGAACCAA
CCCCCATTTCTAGAACATCCCTGCCAGCTCTTCTGCCGGCCCTGGGGCTAGGCTGGAGCCCAGGGAGCGGAAAGC
AGCTCAAAGGCACAGTGAAGGCTGTCCTTACCCATCTGCACCCCCCTGGGCTGAGAGAACCTCACGCACCTCCCA
TCCTAATCATCCAATGCTCAAGAAACAACTTCTACTTCTGCCCTTGCCAACGGAGAGCGCCTGCCCCTCCCAGAA
CACACTCCATCAGCTTAGGGGCTGCTGACCTCCACAGCTTCCCCTCTCTCCTCCTGCCCACCTGTCAAACAAAGC
CAGAAGCTGAGCACCAGGGGATGAGTGGAGGTTAAGGCTGAGGAAAGGCCAGCTGGCAGCAGAGTGTGGCCTTCG
GACAACTCAGTCCCTAAAAACACAGACATTCTGCCAGGCCCCCAAGCCTGCAGTCATCTTGACCAAGCAGGAAGC
TCAGACTGGTTGAGTTCAGGTAGCTGCCCCTGGCTCTGACCGAAACAGCGCTGGGTCCACCCCATGTCACCGGAT
CCTGGGTGGTCTGCAGGCAGGGCTGACTCTAGGTGCCCTTGGAGGCCAGCCAGTGACCTGAGGAAGCGTGAAGGC
CGAGAAGCAAGAAAGAAACCCGACAGAGGGAAGAAAAGAGCTTTCTTCCCGAACCCCAAGGAGGGAGATGGATCA
ATCAAACCCGGCGGTCCCCTCCGCCAGGCGAGATGGGGTGGGGTGGAGAACTCCTAGGGTGGCTGGGTCCAGGGG
ATGGGAGGTTGTGGGCATTGATGGGGAAGGAGGCTGGCTTGTCCCCTCCTCACTCCCTTCCCATAAGCTATAGAC
CCGAGGAAACTCAGAGTCGGAACGGAGAAAGGTGGACTGGAAGGGGCCCGTGGGAGTCATCTCAACCATCCCCTC
CGTGGCATCACCTTAGGCAGGGAAGTGTAAGAAACACACTGAGGCAGGGAAGTCCCCAGGCCCCAGGAAGCCGTG
CCCTGCCCCCGTGAGGATGTCACTCAGATGGAACCGCAGGAAGCTGCTCCGTGCTTGTTTGCTCACCTGGGGTGT
GGGAGGCCCGTCCGGCAGTTCTGGGTGCTCCCTACCACCTCCCCAGCCTTTGATCAGGTGGGGAGTCAGGGACCC
CTGCCCTTGTCCCACTCAAGCCAAGCAGCCAAGCTCCTTGGGAGGCCCCACTGGGGAAATAACAGCTGTGGCTCA
CGTGAGAGTGTCTTCACGGCAGGACAACGAGGAAGCCCTAAGACGTCCCTTTTTTCTCTGAGTATCTCCTCGCAA
GCTGGGTAATCGATGGGGGAGTCTGAAGCAGATGCAAAGAGGCAAGAGGCTGGATTTTGAATTTTCTTTTTAATA
AAAAGGCACCTATAAAACAGGTCAATACAGTACAGGCAGCACAGAGACCCCCGGAACAAGCCTAAAAATTGTTTC
AAAATAAAAACCAAGAAGATGTCTTCAAAAAAAAAAAAAAAAAAAAAA

FIGURE 5023

MNYPLTLEMDLENLEDLFWELDRLDNYNDTSLVENHLCPATEGPLMASFKAVFVPVAYSLIFLLGVIGNVLVLVI
LERHRQTRSSTETFLFHLAVADLLLVFILPFAVAEGSVGWVLGTFLCKTVIALHKVNFYCSSLLLACIAVDRYLA
IVHAVHAYRHRRLLSIHITCGTIWLVGFLLALPEILFAKVSQGHHNNSLPRCTFSQENQAETHAWFTSRFLYHVA
GFLLPMLVMGWCYVGVVHRLRQAQRRPQRQKAVRVAILVTSIFFLCWSPYHIVIFLDTLARLKAVDNTCKLNGSL
PVAITMCEFLGLAHCCLNPMLYTFAGVKFRSDLSRLLTKLGCTGPASLCQLFPSWRRSSLSESENATSLTTF

FIGURE 5024

CGGGCCCGGGGTCCTTCCCGCCTCCGCGGCCGCCGGCCGCTTTGTTTCCCCTGCCTCTGCGCTTCGGGCGACTCG
AGAGGGTCTCCCGCCGGGGTTGCGAAGGGGACGCGGCGGCAGAAGGGCGGCCGACCCCGCCGGGACTCACAGGGA
CCCAGGAGTCCGGCCGCCGGGAGGGCCGCGTGAGGAGAGCGAAGAGGGAGCCCGAGCTCTGCGGCCCCGGGTGGC
GGGCCGGGGGCGCCCGTGAGCAGAGACCTCCCCGTCGACGGGGGGCGATGTTCCCCTCACCCGTGGGCTCTTCGG
GCAGCCAGGGCATCCCGCCGCTGGGACCTGGACCCGCTCAGTGGGCACCCCTCAGGCTGCTCC**ATG**GAGACCCTG
TGCCCTGCGCCCCGCCTGGCAGTGCCGGCGTCCCCGCGAGGGTCGCCCTGCTCCCCCACGCCCCGGAAGCCGTGT
CGGGGGACCCAGGAATTCTCTCCGCTGTGCCTGCGTGCCCTCGCCTTCTGCGCCCTTGCCAAGCCCCGGGCGTCC
TCTCTGGGCCCGGGGCCTGGGGAGCTGGCGGCGCGGTCCCCAGTGCTGCGGGGCCCTCAGGCCCCCCTGCGCCCT
GGCGGCTGGGCCCCGGATGGCCTGAAGCACCTCTGGGCACCGACCGGGCGGCCCGGCGTTCCTAACACCGCCGCC
GGCGAGGATGCGGACGTCGCAGCGTGCCCCCGCCGCGGAGAGGAGGAAGAGGGCGGAGGCGGTTTCCCGCACTTC
GGCGTTCGCTCCTGTGCACCTCCGGGCCGCTGCCCTGCGCCCCCGCACCCTCGGGAATCTACGACCAGCTTCGCC
TCGGCCCCGCCTCGCCCGGCCCCGGGTCTCGAGCCTCAGCGTGGCCCAGCCGCCAGCCCGCCTCAGGAACCCAGT
TCCCGGCCTCCGTCGCCACCTGCGGGCCTCTCCACCGAGCCCGCGGGTCCCGGGACGGCGCCGCGGCCGTTCCTG
CCCGGCCAGCCTGCCGAAGTCGATGGAAACCCCCCGCCGGCCGCCCCCGAGGCTCCAGCGGCCAGCCCCTCGACG
GCCAGCCCGGCTCCGGCCGCACCCGGAGATCTCCGCCAGGAACATTTCGATCGTCTGATCCGCCGGTCGAAACTT
TGGTGTTACGCGAAGGGCTTCGCCTTGGACACTCCGAGTTTGCGCCGGGGGCCAGAGCGGCCGCCTGCGAAAGGG
CCGGCTCGGGGAGCCGCCAAGAAACGCCGGCTGCCGGCGCCCCCTCCGCGCACCGCGCAGCCCCGCCGCCCTGCA
CCGACGCTCCCCACCACGAGCACCTTCAGCCTCCTCAACTGCTTCCCCTGCCCCCCGGCCCTGGTGGTGGGGGAA
GACGGAGACCTAAAGCCGGCATCCTCGCTTCGCCTCCAGGGAGACTCTAAGCCCCCGCCCGCCCACCCGCTGTGG
AGGTGGCAGATGGGGGGTCCCGCTGTCCCTGAGCCCCCTGGCCTCAAATTCTGGGGGATCAACATGGATGAAAGC
TGACCGTGGGACTTCTGCCAAAGGGGAAAAGTTGGGACCATGGCCAAACCGCGGGCTTGAGGAGGGAGCCCCGTT
TCTCACATTTGTCCCCTTCCTTTACATTTTAGGAGCTGTGGGCAGAGGGACCTAAATAACAGTGATCTTCATTCA
AGCACCTAAGTTTTCGGGGTGACAGTCCCTCCCCCTCATCCTTTGCAGAGGAACCCAGGGCTGGAGTCGGGAGAA
GGCTGATGACATAGATTCCAATCCCTGCCTCCTTCCATCTCGGACCGTTGGAGGCAGGGCCTGCACCCCAGTGGG
AGCAAAGGAGGCCACCGCTCAAAGACAGCCCCTCACCCAAAAAAAAAGGGGAGAAGAGAGAGACCTCGGTGATGGA
CAAACCGGTTGTTACTGTGTCTGTGGGCGAGCCTGGGGTGCGGGGCTGTGGTGGGGGTGGGGAGATGATTGGCAG
CTCCCTGGGGGCATCCCCCACCCCCACTGTCCAGGCCTTTAACCCTTTGCTCCCCTCAGGCCTTCCCTAACGCTC
CAAGCACCGCTGGAGCCTTTAATGGGTGAGGGAACTTGGGTAAGAGGAAGATCACCCCCTTCCTGTCCCCTTTCT
AGGCCCCCTCAAGTGCAGGTGACCCTTAATTGGTGAGATCTTCAGCCTCAGCCGCCGACCTTTCCCTTTTGTCCA
GTTTTGGAGTTCCCGTTTTTTCCTTGTTTGCTTTCCGAGTGTAAGGTCTGGCCGGTGAGAAAGATTTCCCCCAAC
CTTGATTAATCAGCCCCCTCCCCCAACTTACTTCCCTTAGGACGGGTAGGGCTGAGGGACCTCCTCTCCTGGAAA
GTGCTTACTTTGCCTGGGGAAGGGGCTAGACACTGTCCCAGGGAAAGTAATAGAAGGTGGAAGAAATCAATAAAA
TCAGACCAAACAAGTCGCCTTTCGAGGGCCTCCACCGATTTATGGATGAGAGGGGGTGGAGGTGGAAGGCAGGCC
CAAGTCCATTCTTTGGACACCCAAACTCAGCCCCCTTAAAGAGTGGAAACAAAACAAGCTGCACTTTGCAGAGGT
GGTAAATGAAAGGACTCTTGGCCTAACTTCAAGAGTCCCCTGGGGTTTGAAGGGGCAAAGTTTGAGTCTGGATGG
AACCTGGGCTGAGGTACCTTAAGCTTCCCCCCGCAACACCCCAGCCTCAGGGATTGCGGGAGTTGTCAGAGATCT
GATGGATCCGAAAGGGGCAGGGCCAGGGGATTAGGTTTGGGGTCAGAGGTTCTGTTTTCCAGGGGAGGGGTGAGA
TAGGCCTGGATCATGCCCTCTGCCATGCCCTCCAGCTAGGAGGATCTTGAGTCAGAGAGGATTGGAAGTGCTTTC
TCCTCCACCCAGGTGAGGTCAGGGGAGCTTAGGTCTTAGGGAGATGGCAAGTTGAGGTATGAAGGGAAGCTGGGG
CTTTTGGAGCTGCCGAACAACTGAGGGACCCAGTGCGCCTTCCATCCCGCACTAGTGAATAGCGCCCCCTCTTCC
CCCGAAAACGAGGTGCGAGAGGAACAATTCCCACGCTGGGGAAGGACTTGTCTCCTTTTCTGTGAAAATGCTTTG
TAAAAAGTTGTTATTGTTTGCATAGAGCAGATTCTTGAGAAAAACTGTTTTGGACCATAAAAGTTTTGTTTGTTT
T

FIGURE 5025

METLCPAPRLAVPASPRGSPCSPTPRKPCRGTQEFSPLCLRALAFCALAKPRASSLGPGPGELAARSPVLRGPQA
PLRPGGWAPDGLKHLWAPTGRPGVPNTAAGEDADVAACPRRGEEEEGGGGFPHFGVRSCAPPGRCPAPPHPREST
TSFASAPPRPAPGLEPQRGPAASPPQEPSSRPPSPPAGLSTEPAGPGTAPRPFLPGQPAEVDGNPPPAAPEAPAA
SPSTASPAPAAPGDLRQEHFDRLIRRSKLWCYAKGFALDTPSLRRGPERPPAKGPARGAAKKRRLPAPPPRTAQP
RRPAPTLPTTSTFSLLNCFPCPPALVVGEDGDLKPASSLRLQGDSKPPPAHPLWRWQMGGPAVPEPPGLKFWGIN
MDES

FIGURE 5026

GGCACGAGGTGATGAAGAAGCCAGTTATCTCAGATTTCGAAATAGTATATGGAAAAATGAAGAAGAGAAAGTGGA
AATTTTTCATCCTTTGCGACTAGTTCGGGATCCACTGTCACCTGCTGTAAGACAGAAAGAAACTGTGAAAAATGA
CCTGCCTGTAAATGAAGCTGCAATTAGAAAAATAGCTGCCCTTGAAAATGAGCTGACTTTTCTTCGCTCTCAGAT
TGCAGCAATTGTGGAAATGCAGGAACTGAAAAATAGTACAAATTCTAGTTCCTTTGGCTTGAGTGACGAGCGCAT
TAGTTTGGGTCAGCTGTCATCATCGCGGGCTGCCCATCTGAGTGTGGACCCAGATCAGCTTCCAGGTTCAGTGCT
TTCTCCTCCTCCTCCTCCACCACTTCCTCCTCAGTTTTCATCTCTCCAGCCACCGTGTTTTCCTCCCGTACAACC
AGGATCTAATAATATTTGTGACTCAGATAATCCAGCAACTGAAATGAGCAAACAGAACCCGGCTGCTAATAAGAC
CAATTATAGTCATCATTCAAAAAGCCAGAGAAATAAAGATATTCCAAACATGTTGGACGTTCTAAAGGATATGAA
TAAGGTTAAGCTTCGTGCAATTGAGCGGTCACCTGGCGGTAGACCCATTCATAAGAGGAAAAGACAGAATTCACA
TTGGGATCCAGTTTCTTTAATATCTCATGCACTTAAACAGAAATTTGCATTTCAAGAAGATGATTCTTTTGAGAA
AGAGAATAGATCTTGGGAATCTTCCCCATTTTCTAGTCCAGAAACTTCAAGGTTTGGACATCACATTTCACAGTC
AGAAGGACAGCGAACTAAAGAAGAAATGGTCAACACAAAAGCTGTTGACCAAGGTATCAGCAACACAAGCCTTCT
AAACTCAAGGATTTAAACTCAACTTAAGGTTGAGCTTTAAACTTCCAAAACTTCTTCCTGGATGATAAATTATTC
TTAGAAACTGATTTGGACTGTTAAAGGCTAAAAGTAGATGTATTTAAAGACTCTTCTTGACACATTTTGCCTACA
CTTGCTATGTAAATATGTATGCCTGTCATTTTTGTTTCCTTTGTTCCTTTTTACGTTTATACTCTGTTCTTCTGT
ACATAGAGCTTAAAATAAACATTCTTTTTGAACTTGAAAAAAAAAAAAAAAAAA

FIGURE 5027

MQELKNSTNSSSFGLSDERISLGQLSSSRAAHLSVDPDQLPGSVLSPPPPPPLPPQFSSLQPPCFPPVQPGSNNI
CDSDNPATEMSKQNPAANKTNYSHHSKSQRNKDIPNMLDVLKDMNKVKLRAIERSPGGRPIHKRKRQNSHWDPVS
LISHALKQKFAFQEDDSFEKENRSWESSPFSSPETSRFGHHISQSEGQRTKEEMVNTKAVDQGISNTSLLNSRI

FIGURE 5028

CATCATATTTTAATTTTTGTAATTTAATTTCTTTCTCCTTTTCTTCCTCTGATTTATGCTTATCCTCTTCTACTA
GTTTAATTTCTTCATTTAATTGGTCAGTGTAGATTTTCCTCAAAACCTCTTCCCGTTGTTTCAGCCTTTCCTCTG
TGTCCTTGTATATGTCATCAGAAAAGTAAGCCCCTTCGTTGCACTGCACCATTTTCTCTATCAGCTCCACCAACT
CCTGCACTTGACTTTCCTTCTCTGCCTTACTGGTTTTCTTGCTGTTGCTAAAGGCACAGCAACGGTTCCCGCAAT
TCCTTTACCAATGCTTTTTAGGCCCACATCCGCATCTGCTATGAAGTCATGGAAGCTCTGGCCCTCCAACTCTTC
TTTGCGAGTGAACAAGATGACCATGTGCTTCATGGCTGACTTCCCAAAGACAGCCTTGATCAATGCAACGGTTTT
CTGCTCCTCCTCTGTGTAGCGGCCCAGCAGCAGAACTAGGACAATAGCATGGGGCCCTGGGCAGGAGGAGATGAT
GCAGCAGCTGATTTCCTTGCAGGTGGTGTCCAGGCTCTCCTTGGTGTCAAAGAGCCCTGXAGTGTCCACAACAAG
AAGGTCTCTCCCCTGCCATTCCCGGGATGCTTTTTGACAGTTCTTGGTAACAGCTXGGGCAGCAATTCTAGAATC
AAAGATTTCCTCTCCAAAGATGGTGTTCGCTGXTGCACTTTTTCCCACTCCGATTTTGCTAACCAGACGATCCTC
ATGGAGCGG

FIGURE 5029

CGCGGTTCGGTCGGCTGCAGCGCTACTTTTGGTCCGGGGTCGGCAGGGAGGCCGCGGCTACCGCATCACAGCTGA
CGTGAGGACTACGTGGGGCCGCTGCCGGCTCCGGGTTGCTGGGCGGCGGCGCCGCTGCTGAGCGGCGGTCGGGCT
CGCCGTCTCCACCTCCTCGCGTCCGTAATCAGTGACGAGGTCCGCTACGTAAATCCCTTTGCGGCGGACAA**ATG**A
CCATGGAAACAGTTGAATCCCAGCATGATGGAAGTATAACAGCTTCTTTGACAGAGAGCAAGTCTGCTCATGTGC
AGACTCAGACTGGCCAAAATTCAATCCCTGCTTTAGCTCAGGTAGCAGCAATTGCAGAGACAGATGAATCTGCAG
AATCAGAAGGTGTAATTGATTCTCATAAACGTAGAGAAATCCTTTCACGAAGACCCTCTTATAGGAAAATACTGA
ATGAACTGTCCTCTGATGTGCCTGGTGTTCCCAAGATTGAAGAAGAGAGATCAGAGGAAGAAGGAACACCACCTA
GTATTGCTACCATGGCAGTACCAACTAGCATATATCAGACTAGCACGGGGCAATACAGTATGTATGCTGCAATTC
GATATGATACAGTGCTAGCTTTAAGTCTTCTC**TAG**TTATATTGAAGCAACTCAGGTTTTGGCATTAAATTGTTCC
ATTTTAAAATGCATCATTAATACCTAAACTGTATCATAGAATGAAAGTATATGTTAAAAAGTGAGATCTTTGTAT
TGACAGCTGTCATATAATTTTGAAAAGTAAAAATTTTGACTGCCGAATATAGAAGAAAATTTTGGGGTAAAAAGG
AGAATTTTTCCTATTTACATGTTTATATTAATCTCTAGTAAAACATTGTTTTTGTTGTCTTTATGATGCATGCGA
ACATAAATGTCTGTATTTCATTCTTGTTGGCTTTTGTTACCCACAATTACATACTATTCTTACTAATCTGAGAGT
TTTCTAAAGTATGTTTTCAATGTTTCACTACTCTCTACTCTGTTAATTTGTGCTACAGTTTTTCCTAAAAGAGAA
TGGAAAAATGATTTAATTTTTTAAACTGTAGCAATTGGATAGATAATTTTATTTGAAATTTTACACACTGAAAGC
TCTAAATAAACAGATACATTCACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
A

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FIGURE 5030

MTMETVESQHDGSITASLTESKSAHVQTQTGQNSIPALAQVAAIAETDESAESEGVIDSHKRREILSRRPSYRKI
LNELSSDVPGVPKIEEERSEEEGTPPSIATMAVPTSIYQTSTGQYSMYAAIRYDTVLALSLL

FIGURE 5031

CACAGTGACCAGCGCCGTGATGATGCAGTATAGCCGTGACTTGAAGGGCCACTTGGCATCTCTGTTTCTGAATGA
AAACATTAACCTTGGCAAGAAATATGTCTTTGATATTAAAAGAACATCAAAGGAGGTGTATGACCATGCCAGGAG
GGCTCTGTACAATGCTGGCGTTGTGGACCTCGTTTCAAGAAGCAACCAGAGCCCTTCACACTCGCCTCTGAAGTC
CTCAGAAAGCAGCATGAACTGCAGCAGCTGCGAGGGCCTCAGCTGCCAGCAGACCCGGGTGCTGCAGGAGAAGCT
ACGCAAGCTGAAGGAAGCCATGCTGTGCATGGTGTGCTGCGAGGAGGAGATCAACTCCACCTTCTGTCCCTGTGG
CCACACTGTGTGCTGTGAGAGCTGCGCCGCCCAGCTACAGGTAGGGGAGTCAGCTGCCCACTTTTGCCTGCAGCC
TCACCTATCCCTCCTCTTAACGGGGAGTAGGAGCCAGGTACTGGCTCGC**TAA**TGCACAGACGGGGAATGCCCATC
TTCACCCGGAAAGGGTCTTTGTATTTGGTGACCTAAAAGGCATTGCCCTTTAGAAACATTTTAGATTAGCATACT
ATTTTCAACAACATAATTACTCCAAATTATGCAGTGTTTTCAAGTTCTGAAAATGAGGCTGAGATTCCTGGGTAA
CATATCTAGTTAGCGGCTTACCTGAGGACAAGAATCCAGGCCTCCTGAGGCCTGGCCCAGGGCTGCTTCCTCTAT
TTCAAGTTGCCTCCCTTTTTCTGACACTTAGGAGGATGGTCTTTATTACTTAAGATATTTGGGAAAGAATACTTC
TCAATTATCCATGGATGGGTTGTTGACTCTGTGATATTGGTGATTAATTTCCTTTTATGATTGCAAATGCCTCAA
GGGCATATGGGTTGGCTGTTATTTATTAGCAAGTCAAACTAATTTTAATATTAACACGAAAAAGAGAACTCACAT
ATAGTTTTCTTCCTTTCTTGCATGAAGAAGAATTTTAAATTTCCTCTTACAAGTTTTTTCAATTTGTTTTTATTT
CTCAGATGTGTTTGCCAAATGTCACTGTGGTTTTATGTAAAACTGGTTCTAGATAATACTTAGTCCTTCAGAAGC
TGCTAATTTCAGAGCTAATAAGACCAAATGACCCCTGTGTCCTTTCCCCAGAAGCAGTCATAGGCTTGTCTTTTT
CTGCCCACCTATTCTGACTCTCATCCCTAAGTCTCTCCTGAGGGCTGATGATGGGCACGGGCTTTCTGAGAAGTC
AGCCAGGAATGTGGAGCTGCCACCTACGGCTAGAAGCAGAGCCACCCTCCCTGGCCATGTGGGCATCAGCCCAGA
AATGTTGGCCTGAGTCAGTCAGCTGAGCTAAGGACACACAATTTCAAGAAGGGTCTCCTGCATTGCTGCCTGAAG
TGTTATAGTCTACTCATGTAGAGACCACATTCTGCACAGAAAGACGTCTTCAGTAATTGCTTTATTCAATGTACC
TTCTTTAGCGTTTCACTAAAAATGTAATTAATTTCCTTCAGTTTATACTATGTCATAGTATTTATTTTTAAGCCC
TTGTAAAGTATAAACTTTCAACCTGTGAGACGGCAAAGATCTCTACCAATTGAAAGCTAGAAATCACTGTGATCA
CAATTGATTTAGAAAATTAAATGCACTAGAGACCAGGGGTGTGCACAGAGACACAGGCCCCCCACCGAGGCTTGC
ATGCTAACAGAGACTGTTGGCTTTTCTTTCCCAGTCATGTCCCGTCTGCAGGTCGCGTGTGGAGCATGTCCAGCA
CGTCTATCTGCCAACGCACACCAGTCTTCTCAATCTGACTGTAATCTAATCTGTTGTGCTTTTGTTGGACTTGGC
ATGTTTCCATGAACTGCACTATTATAAACTATTAAAATGATAGATTGTGGAGAAAGTAATTATTCCAACACCCAT
CTGCCATGCGATGTTAAA

FIGURE 5032

TVTSAVMMQYSRDLKGHLASLFLNENINLGKKYVFDIKRTSKEVYDHARRALYNAGVVDLVSRSNQSPSHSPLKS
SESSMNCSSCEGLSCQQTRVLQEKLRKLKEAMLCMVCCEEEEINSTFCPCGHTVCCESCAAQLQVGESAAHFCLQP
HLSLLLTGSRSQVLAR

FIGURE 5033

GGGGGTGGCGGGGACGCGAGTGGCGGCCGCGGGGCCCCGGACAAGGGTCCGCAGAGCTGCAGCCTTCGAGGGCCA
GCCCTCTCCGAGTCCGGGGCTGGGTCCCACCAGTGACAAGGCGGCAGCCCCGCGCACACCAAAGAGAAAGCGGCT
GTGGCGGCAGCGGCAGCCCCAGCCATGCTGTGTTATGTGACGAGGCCGGACGCGGTGCTGATGGAGGTGGAGGTG
GAGGCGAAAGCCAACGGCGAGGACTGCCTCAACCAGGTGTGCAGGCGACTGGGAATCATAGAAGTTGACTATTTT
GGACTGCAATTTACGGGTAGCAAAGGTGAAAGTTTATGGCTAAACCTGAGAAACCGGATCTCCCAGCAGATGGAT
GGGCTAGCCCCTTACAGGCTTAAACTTAGAGTCAAGTTCTTCGTGGAGCCTCATCTCATCTTACAGGAGCAGACT
AGGCATATCTTTTTCTTGCACATCAAGGAGGCCCTCTTGGCAGGCCACCTCTTGTGTTCCCCAGAGCAGGCAGTG
GAACTCAGTGCCCTCCTGGCCCAGACCAAGTTTGGAGACTACAACCAGAACACTGCCAAGTATAACTATGAGGAG
CTCTGTGCCAAGGAGCTCTCCTCTGCCACCTTGAACAGCATTGTTGCAAAACATAAGGAGTTGGAGGGGACCAGC
CAGGCTTCAGCTGAATACCAAGTTTTGCAGATTGTGTCGGCAATGGAAAACTATGGCATAGAATGGCATTCTGTG
CGGGATAGCGAAGGGCAGAGACTGCTCATTGGGGTTGGACCTGAAGGAATCTCAATTTGTAAAGATGACTTTAGC
CCAATTAATAGGATAGCTTATCCTGTGGTGCAGATGGCCACCCAGTCAGGAAAGAATGTATATTTGACGGTCACC
AAGGAATCTGGGAACAGCATCGTGCTCTTGTTTAAAATGATCAGCACCAGGGCGGCCAGCGGGCTCTACCGAGCG
ATAACAGAGACGCACGCATTCTACAGGTGTGACACAGTGACCAGCGCCGTGATGATGCAGTATAGCCGTGACTTG
AAGGGCCACTTGGCATCTCTGTTTCTGAATGAAAACATTAACCTTGGCAAGAAATATGTCTTTGATATTAAAAGA
ACATCAAAGGAGGTGTATGACCATGCCAGGAGGGCTCTGTACAATGCTGGCGTTGTGGACCTCGTTTCAAGAAGC
AACCAGAGCCCTTCACACTCGCCTCTGAAGTCCTCAGAAAGCAGCATGAACTGCAGCAGCTGCGAGGGCCTCAGC
TGCCAGCAGACCCGGGTGCTGCAGGAGAAGCTACGCAAGCTGAAGGAAGCCATGCTGTGCATGGTGTGCTGCGAG
GAGGAGATCAACTCCACCTTCTGTCCCTGTGGCCACACTGTGTGCTGTGAGAGCTGCGCCGCCCAGCTACAGTCA
TGTCCCGTCTGCAGGTCGCGTGTGGAGCATGTCCAGCACGTCTATCTGCCAACGCACACCAGTCTTCTCAATCTG
ACTGTAATCTAATCTGTTGTGCTTTTGTTGGACTTGGCATGTTTCCATGAACTGCACTATTATAAACTATTAAAA
TGATAGATGTTGGAGAAAGTAATTATTCCAACACCCATCTGCCCATGCGATGTTAAAAAA

FIGURE 5034

MLCYVTRPDAVLMEVEVEAKANGEDCLNQVCRRLGIIEVDYFGLQFTGSKGESLWLNLRNRISQQMDGLAPYRLK
LRVKFFVEPHLILQEQTRHIFFLHIKEALLAGHLLCSPEQAVELSALLAQTKFGDYNQNTAKYNYEELCAKELSS
ATLNSIVAKHKELEGTSQASAEYQVLQIVSAMENYGIEWHSVRDSEGQRLLIGVGPEGISICKDDFSPINRIAYP
VVQMATQSGKNVYLTVTKESGNSIVLLFKMISTRAASGLYRAITETHAFYRCDTVTSAVMMQYSRDLKGHLASLF
LNENINLGKKYVFDIKRTSKEVYDHARRALYNAGVVDLVSRSNQSPSHSPLKSSESSMNCSSCEGLSCQQTRVLQ
EKLRKLKEAMLCMVCCEEEINSTFCPCGHTVCCESCAAQLQSCPVCRSRVEHVQHVYLPTHTSLLNLTVI

FIGURE 5035A

ATGCAGAAGAGCGTGCGCTACAACGAGGGGCACGCCCTGTACCTGGCCTTTCTGGCGCGCAAGGAGGGCACCAAG
CGCGGCTTCCTGAGTAAGAAGACGGCCGAGGCGAGCCGCTGGCACGAGAAGTGGTTCGCCCTCTACCAGAATGTG
CTCTTCTACTTCGAGGGCGAGCAGAGCTGCCGCCCGGCGGGCATGTACCTCCTGGAGGGCTGCAGCTGCGAACGA
ACGCCCGCGCCACCCAGGGCCGGCGCCGGGCAGGGAGGCGTCCGAGACGCGCTGGACAAGCAGTATTACTTTACT
GTTCTTTTTGGCCATGAAGGTCAGAAGCCACTGGAGCTGCGCTGTGAGGAGGAGCAGGATGGTAAAGAGTGGATG
GAGGCCATTCACCAAGCCAGTTATGCAGACATTTTGATTGAGAGGGAAGTATTAATGCAGAAGTACATTCATCTA
GTTCAGATCGTAGAGACAGAAAAAATTGCAGCTAACCAACTCCGACATCAACTTGAAGATCAAGACACAGAAATC
GAAAGGCTTAAATCAGAGATTATTGCTCTTAATAAAACCAAAGAACGAATGCGACCTTACCAAAGCAACCAAGAA
GACGAAGATCCAGACATCAAGAAGATTAAAAAGGTTCAGAGCTTCATGCGAGGATGGTTGTGCAGAAGGAAATGG
AAGACCATCGTGCAGGATTACATTTGTTCTCCTCATGCTGAAAGTATGAGGAAGAGAAACCAGATTGTGTTCACC
ATGGTGGAGGCAGAGTCAGAGTACGTTCACCAGCTCTACATCCTGGTCAATGGCTTTCTCCGGCCCCTGCGTATG
GCCGCCAGCTCCAAGAAGCCCCCCATCAGCCACGACGACGTCAGCAGTATTTTTCTTAACAGTGAAACAATCATG
TTTCTTCATGAAATATTTCATCAAGGACTAAAGGCAAGGATAGCAAACTGGCCCACTTTAATTTTAGCTGATCTG
TTTGATATTTTGCTCCCCATGCTGAACATTTATCAAGAATTTGTGCGTAATCACCAGTACAGCCTGCAAGTTCTC
GCCAATTGTAAGCAAAACAGAGATTTTGACAAACTCTTAAAACAGTATGAAGCCAATCCAGCCTGTGAGGGGAGG
ATGCTGGAGACATTCTTGACCTATCCCATGTTTCAGATCCCCAGATATATCATCACACTCCATGAGCTCCTTGCT
CACACACCCCATGAGCATGTGGAAAGGAAAAGCCTGGAGTTTGCCAAATCAAAGCTAGAGGAACTATCCAGAGTA
ATGCACGATGAAGTCAGCGACACTGAAAACATAAGGAAAAACCTTGCCATCGAAAGAATGATCGTGGAGGGCTGT
GACATCTTGCTGGACACCAGCCAAACGTTCATCCGCCAAGGTTCTCTTATTCAAGTACCTTCCGTTGAGAGGGGG
AAACTTAGTAAAGTTCGCCTGGGTTCGTTGTCTTTGAAAAAGGAAGGAGAGAGACAATGCTTCTTATTTACAAAA
CACTTTTTAATATGTACAAGAAGTTCAGGAGGGAAGCTTCATCTGCTCAAGACAGGTGGGGTTCTGTCTCTAATA
GACTGCACATTGATTGAGGAGCCAGATGCAAGCGATGATGACTCTAAAGGTTCTGGGCAAGTGTTTGGGCACCTG
GATTTTAAAATAGTGGTGGAGCCTCCTGACGCTGCCGCCTTCACTGTTGTCTTGTTAGCACCCTCACGCCAGGAG
AAAGCTGCCTGGATGAGTGACATCAGTCAGTGTGTGGACAATATACGATGTAATGGTTTAATGACTATAGTGTTT
GAAGAGAATTCCAAAGTCACTGTGCCACATATGATTAAGTCTGATGCCCGTCTTCATAAAGACGACACTGACATT
TGCTTCAGTAAAACACTCAACTCCTGCAAAGTGCCCCAGATCCGTTATGCCAGCGTGGAGCGCCTCTTGGAACGA
CTGACAGACTTGCGGTTTCTGTAGTATTGATTTCCTCAACACCTTTCTGCACACCTATCGTATTTTCACTACTGC
CGCTGTGGTGCTGGGGAAACTCTCCGACATATACAAGAGGCCTTTCACCTCCATCCCTGTCAGGTCATTGGAATT
GTTTTTTGCTACCAGCCAGAACAACAGAGGTGAACATTTGGTGGATGGCAAATCCCCACGTCTGTGTCGCAAATT
CTCTTCCCCCGCCACCACTGGCTGTGTCCAGAACATCTTCCCCAGTGAGGGCCAGAAAGCTGTCTTTGACTTCTCC
CTTGAACTCAAAGATAGGAGCATTGGACCTGACAACTTCCAGCAGTCCCACCACCACCACCCAGAGTCCCGCTGC
GTCTCCACCACCACACACTGGTCAGATACCACTGGATCTCAGCAGAGGCCTCTCTTCTCCAGAGCAAAGCCCGGG
AACGGTAGAAGAGAATGTCGATAACCCACGCGTGGATCTGTGTAACAAGCTAAAACGAAGTATTCAAAAAGCAGT
CCTAGAGTCTGCACCAGCGGACCGAGCAGGAGTGGAAAGCTCCCCTGCAGCGGACACCACAGAACTTTCACCTTG
CAGATCCCCCTCAACTCCTCGGCACCTCCGCTATCGACAGCCTGGAGGACAGACGGCGGACAATGCCCACTGCTC
TGTTTCACCGGCTTCTGCTTTTGCAATAGCCACAGCTGCAGCAGGACATGGGAGTCCACCAGGCTTTAACAACAC
CGAGAGAACATGTGATAAAGAGTTTATTATACGGAGAACGGCTACCAATCGAGTTCTGAACGTCCTCCGTCACTG
GGTCTCAAAGCACGCACAGGATTTCGAACTCAACAATGAACTAAAGATGAATGTCCTAAATTTGCTAGAAGAAGT
TTTGCGAGACCCAGACCTTCTTCCCCAAGAAAGGAAAGCCGCCGCGAATATCCTCAGGGCCCTTTCACAAGATGA
CCAAGATGACATCCACCTAAAATTAGAGGATATAATTCAAATGACTGACTGCATGAAGGCCGAATGCTTTGAGTC
CTTGTCGGCCATGGAGCTGGCAGAACAGATCACCCTCCTGGACCATGTCATTTTCAGAAGCATTCCCTATCGAGG
AGTTTCTTGGGCAGGGGTGGATGAAGCTGGATAAAAACGAAAGAACTCCTTACATTATGAAAACCAGCCAACACT
TCAATGACATGAGTAACCTGGTGGCCTCCCAGATAATGAACTATGCTGATGTCAGCTCCCGTGCCAACGCCATCG
AGAAATGGGTGGCAGTGGCGGACATCTGCCGATGCCTGCACAACTACAACGGCGTGCTGGAGATCACCTCGGCCT
TAAACAGAAGTGCCATCTACAGGCTGAAGAAAACCTGGGCCAAGGTCTCTAAGCAGACAAAAGCTCTAATGGACA
AACTTCAAAAGACTGTTTCCTCTGAAGGAAGATTTAAAAATCTTAGAGAAACCCTTAAAAATTGTAACCCTCCTG
CAGTTCCTTATCTTGGGATGTACTTGACAGACCTGGCATTTATTGAAGAAGGAACACCAAACTTTACTGAGGAAG
GCCTTGTCAATTTCTCCAAAATGAGAATGATATCACACATCATCAGAGAGATACGCCAGTTCCAGCAGACTTCCT

FIGURE 5035B

ACAGAATAGATCATCAGCCAAAGGTCGCACAGTACTTGCTTGACAAAGACCTTATCATAGATGAAGATACGCTAT
ATGAGCTGTCACTAAAAATTGAACCTCGACTCCCTGCTTGAAGATCTGGCCTTGCCCCTGAGTCCACGGGATGTT
CATGGAAAGCAGGACAGACAGAATTGTGTATGCCTTGCCTATCACGGTACAGCACGAAGCCAGGCTCCTTTCTCC
ACCAAAGAAGATGGAACCAGACTGGAATTCTGTCTCCAGAGAGAAACCCAGCTGTTTGGGTCAAAGACAGATGCT
TCAGACTTGGGTGGGAAGGTGAAAGATGGCTATTTAGAAAGCTGGTGGCACGTTTTACATAAGGGAATGTCAGAT
GGGAGATGCTAGTTGCCATTTTAACAAAGCAGGTAAATCGGTAAATTTTAAACTCTGTCCATGTTCTGATAGAAC
TCAGGGACAAGGATCCATGAAAAAGACCTGTGATGTTTCTCTGGCGCTTTACTGGCCTGGGCACACCTACCAATC
TTCTAGGATTTGACTGGTTCCATTACATTTCCTTTTGGTATAAGCTTCACAGAAAAGCTGACACTTCCTCTACAG
AGATGGACCAAAACATAAGCAATTTCAGTCTACAGCATGTGCATGGTTGTCAGTGCATTCTAAATATTTCTATGT
GAGGAATGGTACCTTCTGAAACTGCCTTTCCAGTCTTTAGGCAATGGGATAGGAAAGAAAGAATGAAACACAAAT
GGATTTGTATGTAACATTTCCTTAATTAAATGCAGTAGGCTGTGCCCCAGAGGATTCCAGACAGTGGCTGGCTGA
GGTGGGTGGGGAGCTTTTCCTTGAGACTGTTGGTCCTAAGAAGCCAGCCCTTTTGGAGAGGCAGCTGCAAAAAGG
TGCACGCCCATCTCACCGACAAAACTGTGGAACAGAAGGCCACCAAGTGCTGTGGGGAATCATGGGTTTCAGTGC
TGAGTGAAAATCTATACCTAAAAATCATCTCTGCACCTTGCTTTGTTTGTTTTCTTTCCCCACTCATAGTACTGC
AGGAATCTATTCTCATTTACACAGACCTTTTTTTAGGCTTACTATGAACATTGGCTGTATTTTTTTTAAACAGTT
TAGTGAAATTTTCTTTTCAAAACCCACACTTCCATATGCTGTTCGTAGATCTCTTTCTTTAAAAACTGATGTTGA
GAGATCTCTGAGAATATTATAAGTGCATGGGAAATGGGCCCAACCACCGAACAGCTCTTACATTACAAAACCAAA
TGCAAGGGTTAGTCCTGCTACCTGAGGCTGGGGAAGTGACCTTCCTTTTCCCAAGATTGTCAGTTGTTGAAGAAA
TAGGGCTATCTCATTGTTTACCTCCCTCTTCTCTTCTCAGGGAGACTGCTGCTTTAAAAGAAGGAAGAGAAAAAA
TATAGTTCTATTTCCCTGAACCTGTTGCACCTGACATTTTCTCTTAGCAGCATGAAACTTATTGATGCTGACAAT
GAAAAATGGATCTGTCTGGCTGCTTTCCCTCTTTCCTTGCACTTTAATTATGTTGCTAGAGCTAACAGACTAATA
AATTCCACCTGCTGGCTCTTAAGACTCAGTGAAAGAGCTAGCATTGGTAATGCACCATAGAGGTAGAGAATGTAC
ACTTTCTGCACGGTAAGTGCCATCTCTGTATGTAACTATATAGTGAAATATCAACTAAGTAAAAGAAAATATAAT
ATTTGAAGACCATTCCCAAAATATTTTCAATAGTTCATATTAGCCAACAGTGTAGCACTCAACCCAAGGAGGGTT
CCTTATGGATGCTTTCTTTTTCTTTTTTAAAGTTGCTTGATGGTTCTCTTTAGTTTCAAATAAGAGGTTGACGCA
TCTTGATGCATGATGAGAAGCATGGGCTGTTTGGATCCTAACAACGCATAACTTGTGATTTATTTCTCAGTGCTC
CAGAAACTGAGGGTTTGAAATAATATGTATCAGTTGCACCAAACACCTCAAGGTCTTGCAGAAGAAAAGTAAAGG
TTAGCTTTCATGGCTCAAAAGCATAGTCCTGAAGGGTGAACTAAAACCGGGACAAATCTGTGAGAGGACCACACA
CATACTAGTTTCGGGCCAAACAACACGTGGAAAGGTGCATGCATTCTACTCTGCCTTGGAGTTGCCAGAGTCCTT
CAGAGGGAAAGGGATGGTTCTGTGTGCACTTTTTCTGGAAGTTCGGACTCATTTCTTTGACCCAAATGTTCCAGA
GACACTGCAGCCATTCTTATTAACAAAAAATAAGACAGGAGTTTCCAAATGCTCCTTCCCTTTTGGATCGCAGCT
TTTCTTCAACTAGTGACAAAGCTTTTGCGCCTATTTCCTGCAGGATGTTGGAACTGCCCCGCACTGGTCATATTA
GGCACTGTCAATTGCTATGCTGACTTTTAGGGGNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNCACTAGCCTTTCGCATTTTTGTTTGAGAATTACACCACTTTCTGGAGTCTGCAGCCTTCCTGGAGCTGCA
AGAGGGCAAGAGAGAGAGCTCCACCTCTGAGGGAGTGTCTGTTGATGACCTGCACTATTCGTGTGCCAGCTGGGA
GAGGAATGCACATTTTAAAATCCCTTCAATTTGGTCAAATTAAAAATCCCCAAGAGCAATTTGCAGTGTTTTTTC
TGGTCGTTAAAGTACCCATCCTCTTCTGCCTACACACAAAGCATGCATTCCCAGCTGCATCTGCCTCTAGTCCAT
TATGGAGACCCATTTCTAAGAGGAGATGGGAGGTCAACCTCTAACAGCCAAGTAGCGAACATGTATACTGTAAAA
TTAACCTAGAAAATCAGAAGAAAAATCCAATTTCATGCTTTCGAATGAATGCCCACATTTTGTACTGTCAACGAA
ATTATCTTGGAGCTTTTAGGGGATGCCTTTTCGTTATTAACTGAGACATCTAGTTTTGCTACAGGGACAAATCTC
TTACCTAATCCAATATATTATTTGACAGATTCAGGCATGAAGTAAAACGTCGTCACTTTTCCTTAGTGCTTTTCT
GAAGGAATTTAAAGACGGAATTTTAAACGGCCATTGCAATATTTTCAAGTGGCTCTCATACCAAGTCCCATTACT
GTTTGTTAAATTTCAGTACGTCTTAAAGTACTACTTATAAACAAATGAAACTCAGAGAAACTGAATCACCTGGAA
GAGAAAAATCCATTATGGTCCCATGTGGAGTGAATAATGATGGATCAGCACCCTTTCTCTCATGTTATTGTATAA
GACGAGACTTTTGGGCCAGCAGCGATTGGGCAGCTTTTAAATTCTTAACTGAAAAGAGTAATGCAATACAGGGAT
TATTCCCAATAAAATTAACTTTTATTTAAAAGCAAGAGATTTTACTTAGCTTTTTTTTTTCAAAGTTTGATTTTA
TCCCCTTGAAAAAAAATCTCTTCACTTTAAAGTATAAAGGTTTTTAAAAATCCAATTGCAAAATGTATTATTTTT

FIGURE 5035C

ACAACTATCGAAAAGGCATAAAAGAGAACATACTATTTATGGCTGAAGGGTATAGCCAGGCTAATGTGCACAGAG
GGAATCAATAAATAAAACTCTTTTTCATTTCAGTAAGAAATCAGATTGTAAGTTTAATGGCTCCATTATAGATAC
CACCGTGTAATAGAAGACTTAAGTCAATGAAATCTAATCAGTGTGTCATTTCTCAGCGGCCATTGGTGACTTAAA
ATTAAGATGAGGCAGAGCCAAAATGGAAAACAGTCATTTTGTTGTAGGTATAAACACATGAACGATTCAGAAAAT
TATTCATCTCAGCTGCCATGCAGCATGACATTAACATTAGGATTGATAGCACTAGTCTGATCTGCTCAAGGAAAA
TAATAGTTCTATTATACTTAATGATGTTGGTTTTTACACAGCTCATTTCATTTTTCACTAGAAAGCCAGTTATGA
AAGAGAGCTGGCCTAGGCATCCCGGCCCTGAGTCCTAGGCCCAGTCTCCAACTGGAAAACCTTAGGCTGGTGTTT
ACACATCCCTGAGCCTCAGTTTCCTCATCTGCAAAACGGTGTGAATAGTAATCCCTGTGCTGCTTATCTCACAGG
GCTATTGTGAGGACCAAATGGATTAGACTGTAAACTGCAAAGTGCTGTCCGCACATGAGGTCATCTGATTACTGT
CCTCAGATCTCTTTTGTAGAGGATTTCAATGTATTTCTTTATCATTTGAGTGTGTGTGTGATGGACGAATATGTG
TGTGAGTTTGAGAAGCATATCGTTCGTGTCCAGTTACTTTGCAAATTTGTGGACATTTGTGATTGGACAGAGGGG
TTTGTGCTGTGGCCTAACACTTGCCAAGTGAGGTGTAGGTTATGCCTATATGCAAATTAAACTTCACCTTTCTTG
AATATTC

FIGURE 5036

MQKSVRYNEGHALYLAFLARKEGTKRGFLSKKTAEASRWHEKWFALYQNVLFYFEGEQSCRPAGMYLLEGCSCER
TPAPPRAGAGQGGVRDALDKQYYFTVLFGHEGQKPLELRCEEEQDGKEWMEAIHQASYADILIEREVLMQKYIHL
VQIVETEKIAANQLRHQLEDQDTEIERLKSEIIALNKTKERMRPYQSNQEDEDPDIKKIKKVQSFMRGWLCRRKW
KTIVQDYICSPHAESMRKRNQIVFTMVEAESEYVHQLYILVNGFLRPLRMAASSKKPPISHDDVSSIFLNSETIM
FLHEIFHQGLKARIANWPTLILADLFDILLPMLNIYQEFVRNHQYSLQVLANCKQNRDFDKLLKQYEANPACEGR
MLETFLTYPMFQIPRYIITLHELLAHTPHEHVERKSLEFAKSKLEELSRVMHDEVSDTENIRKNLAIERMIVEGC
DILLDTSQTFIRQGSLIQVPSVERGKLSKVRLGSLSLKKEGERQCFLFTKHFLICTRSSGGKLHLLKTGGVLSLI
DCTLIEEPDASDDDSKGSGQVFGHLDFKIVVEPPDAAAFTVVLLAPSRQEKAAWMSDISQCVDNIRCNGLMTIVF
EENSKVTVPHMIKSDARLHKDDTDICFSKTLNSCKVPQIRYASVERLLERLTDLRFLSIDFLNTFLHTYRIFTTA
AVVLGKLSDIYKRPFTSIPVRSLELFFATSQNNRGEHLVDGKSPRLCRKFSSPPPLAVSRTSSPVRARKLSLTSP
LNSKIGALDLTTSSSPTTTTQSPAASPPPHTGQIPLDLSRGLSSPEQSPGTVEENVDNPRVDLCNKLKRSIQKAV
LESAPADRAGVESSPAADTTELSPCRSPSTPRHLRYRQPGGQTADNAHCSVSPASAFAIATAAAGHGSPPGFNNT
ERTCDKEFIIRRTATNRVLNVLRHWVSKHAQDFELNNELKMNVLNLLEEVLRDPDLLPQERKAAANILRALSQDD
QDDIHLKLEDIIQMTDCMKAECFESLSAMELAEQITLLDHVIFRSIPYRGVSWAGVDEAG

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FIGURE 5037

ACATGACGGGCACGCCAGGCGCCGTTGCCACCCGGGATGGCGAGGCCCCCGAGCGCTCCCCGCCCTGCAGTCCGA
GCTACGACCTCACGGGCAAGGTGATGCTTCTGGGAGACACAGGCGTCGGCAAAACATGTTTCCTGATCCAATTCA
AAGACGGGGCCTTCCTGTCCGGAACCTTCATAGCCACCGTCGGCATAGACTTCAGGAACAAGGTGGTGACTGTGG
ATGGCGTGAGAGTGAAGCTGCAGATCTGGGACACCGCTGGGCAGGAACGGTTCCGAAGCGTCACCCATGCTTATT
ACAGAGATGCTCAGGCCTTGCTTCTGCTGTATGACATCACCAACAAATCTTCTTTCGACAACATCAGGGCCTGGC
TCACTGAGATTCATGAGTATGCCCAGAGGGACGTGGTGATCATGCTGCTAGGCAACAAGGCGGATATGAGCAGCG
AAAGAGTGATCCGTTCCGAAGACGGAGAGACCTTGGCCAGGGAGTACGGTGTTCCCTTCCTGGAGACCAGCGCCA
AGACTGGCATGAATGTGGAGTTAGCCTTTCTGGCCATCGCCAAGGAACTGAAATACCGGGCCGGGCATCAGGCGG
ATGAGCCCAGCTTCCAGATCCGAGACTATGTAGAGTCCCAGAAGAAGCGCTCCAGCTGCTGCTCCTTCATGTGAA
TCCCAGGGGGCAGAGAGGAGGCTCTGGAGGCACACAGGATGCAGCCTTCCCCCTCCCAGGCCTGGCTTATTCCAA
GAGGCTGGTCTTGAATTCCTGAGCTCAAGCAACCTGCCGGCCTCGGCCTCCCAAAGTACTGGGATTACACGCAGA
AGGCACCATGCCCAGGCTAGATGTGTCTTATCCCAATCCTTTGGCAGGCATGCAGCTCCACAGGCGATTTCTTCA
AGCAGCTGAAGTGTTTAGCCCTCCTGGGTTAAGAGCCAGATAAGGAGAAATCCCTTTCCTAGGTTTGGAATGTGT
TGTGAAAAAAAAGAGAAATCCCTGGCTCCTGGAGCTGGTGGGAGACAAGATTAAGCAAACCTCCCCTGACATGTA
TCCCTTTGACCCCAAGCTCTGCCTCCTCCCTGACCACCCATGCCCTTTCCTTTAACTTCTCAAACAGATACCAGG
GCCTAAACTGCTTTACCTCCCCTCCTACTGAGTCAGGTTAGGTGGTGGGAGGTCACCCATTTCCGAGTTAAACCA
ATGCAATATGAGTAAAACAAAGTCATGTGGGTATGTCTGGGGTAGAGAGAGGGGTAGCAAGTTCATGTGTCCTCC
TTGGTCACATATCTCCCAAAGCTCCGATCCCTGCCATGGGAAGTGGACAGGAAACATGAGGTCATGACCTGCAGG
CATCTTTACTGCAGCTCTGCCGGCCTGGAGGGGGAGAGGGGGAGGAAGAAGTATGCGCTGCACATTTCTGAGGCT
ACTGCATTTGCTTTCAAGGCAGAAATCTTGCTCTGAGCAGTCAGCGGCTCCAGTTTGGGCCCGATAAGGAAGTTC
TCCGTGGCCTCCCTCAGGCAGAGCAGGGAGGAGGCTGACATTGCCAGTCTCTTCTGGGGCCCAAGGCAGGTTGCA
GGAGATCCAATCCCATAGACAGCTCTGGGCCTCTTGCATTTGAGTTTTTCAGAATTAAACTGCAGTATTTTGGAA
AGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 5038

MTGTPGAVATRDGEAPERSPPCSPSYDLTGKVMLLGDTGVGKTCFLIQFKDGAFLSGTFIATVGIDFRNKVVTVD
GVRVKLQIWDTAGQERFRSVTHAYYRDAQALLLLYDITNKSSFDNIRAWLTEIHEYAQRDVVIMLLGNKADMSSE
RVIRSEDGETLAREYGVPFLETSAKTGMNVELAFLAIAKELKYRAGHQADEPSFQIRDYVESQKKRSSCCSFM

FIGURE 5039

ATAAACAAAAGTATAATTTATTTTTGCCTGATATTAATCACTTCTTAAGGCCCAAATTTCTGTTTTTAAGCAAAA
GGATAGCTCTAAGTGTGGGTTGCAGTTACTGGGACATTAAATTTTCATAAAATGAGATTCCTTTGGTTATGGCTG
TTCATAGAATTTTAATTCTATGTCAGTGTTCTTGTTCACTAAGATATTTCGAAGTGAGAGAAAGCATTTTACCAA
TACATTCTTATTTTTTCTCCTTTAAAATAATATTGAATTTTTCCTGGTACGAAGACAGATATTTATTAACTTGAT
TGGAAAACACAGAAATTAAGATCATGTTGAACACTGAGTTATCTAGATGATCCCTGAGATTTGAATGTTCATGTC
AACCGTGTTGAGCGCTCACCAGCCACCAGGCTTTAGGCACTGGCAGTGCAAGGTGTCTGAGGCCCATTCTCAGGC
TGGGCAGAGGTCACACAGTGAGTAAATGGGTCTTTTCAGTGCAATGTGGTTATGATAGAGGCATGCCAGGTGCCA
CTAACCCAGCAGGTGTGGCAGGAGGGGCTTCACAGAGGAAAGGGACTTTGAGCTCAGTGTTAAAGGATGAGGAGT
GAGTCATAAGGGGGAAAAATGGAAATGACTTTCCAGGCTTCAGAAACAGCATAAACAAACAAAGGCCTGAGAGCT
GGAGTCAGTGTGGTGTGTCCAGGGATCACAAGTGGGCTGGAGCTGCCGGAGAACAGCCAAGTGGCTCAGCTGCCA
TCCCAGAATTGAGCTCGTCACTATCAGATGCTGCTGCTCCCTGGCCTCAGAGGAAAGCAGCACACAGCTCACCAC
GAGGGGTTTCCCCAGAGGCTCCTCCTGCAGCCAATGCTACTATTAGTTTATATTATAATAGTATCAGTTTCTTTT
TCTTTGGAAATCCCTAGAACTGTTAACTGAAGGTGACTCAGGGTAACTAATTCTGGATCTTTGGGTGCACAGCCT
CTCACTGGAGTCTGAGAGGAGGAGGTGGAGACTATCAGTGCACGGCCCGCAACCAGGAAGGACTCCCAGACTAAC
GCCAAAGGTGTGTTGGGCTCAGCTGCTCCACTGTGGAAAAGGAAAGCCCTGGCCCTGTGGCAGGAGAGGATTGTT
CTAGTCAAGTGTGGCGTTGCACGGACAGGCGGTGCCGAGTGTTTGGGTGCAGACACAGGCAGCTGCTGCCCTCCA
CTTCCTGCTCTTGCAAGTCACAGATGATTCCAGTACAATGTGGGAGGTCCTCCTTACAGGGGCACTTGCAACAGG
AAGGCAGAGAGTTTCGTCAATTCAGGTACAGGTCTGTCTGGGAGACCTGGCCCCTGTGGAGGCAGGAACACCGTG
CAGGGGCATGGCAGCGCCTGTCTTTGCTATCACATCATTTGCCTTTTCCTTGTAGGACCCAAAGATCTATGTCCA
AAACTTAGTCCAGAAACATCTGCATTCCTGTTTAAACTTCAGCTCAGTTTCTTAACCAAGAACCACGTCAACCCT
CCAGGGTTGTGGTTTGTATTTTTGCCTTTAAGCATTATCTCCTTTCCACCAAGAAGCCTACTTAGGTTTAACACA
TGAAAGCAGTGTCTAAAAATTAGATCGGTCCTAAATTGGAATGGGATGTCTTCCTTGCATGTCCCATACCAGGGA
ATTTTTTTAACACACAGTGTAGAGCCTTTGCCAGAGATGTTGAAAGGGAGATTAAAGGCTTGAGGGATGAATTTG
ATCATCATTCTTAAAGTCCCTTCCAATCCTGTGATTCTCTGATTCCCTGAGTCTCGTTTATTATTGGACATGCCT
AGCCCATCACCAGTGACCTGCCCGCATATTGCTGGCTTCCCTTGGATAACGGAGAGCCTATCACCACATGCCTTT
GTTGTCTTCCATCATATCAAGTGAGTTGCTTTCTGGACTTTTTCCATCTAGAGCCTGCTAGGTTTGGTTTTGAGA
AAAGATGGTGAAGTTTCTTTTCATGAGTTTGTAGGGCAAAAAAAATTCTTTTTAAAGATGGTAAGGGTGGAAATT
AATCATGGTACCATCTCATTAAAAATAGATACCTCAAAATGTTTACCTTTACAAGTCAAGAAGAGTATCTGACTT
TCTTGGAAGTGTCAAGAATTGCAGGTTGGCTGAAAAGTTAGATTGAGAATCTGACCTTGTTACTTATGATTCTTT
TTTCCCTTGGTTCTCGGGGATGCATGAGAAGGTGAGCTGTCACTCACAAAAAAAAGGGAAAATGATTTGAAAAAT
GTTTCACATATACACTTTTTATCATTTTAGTGGATGGCAGCCTTACGTCAGTAGTATATGCCACTATGAAGTATG
GCCAAAACCCTAGCGTCACTTGTAACCATTGTACTCTTATGGATTTGTGTCTTACACCATTTGCCTTGCTTTTTA
AATGACTTTGTTTTTCAAGGTGCTGTCATTTTGCAAAAGGAAATCTTTATATGAAATGTACAAAAACCGTTACTA
ACTGGACAACAGGGAAGGTGCTGGCCCCACATTAGTGCCTGCCCACCGCTCTACTTCTAACCAGGGACACGGATC
TTCCATTCTCTACATCCACCGGACTGCAGCCCAAGTCTGGACCTGGCTGCAGTGGGCATATTACCGTATGGATAT
CTTTTTCTTTCTTTTTTTAAAGTGAGGAGATTCTTCAGGGGGTCAGGCTGAGAATGTAATAAGCCTGACATTGGA
ACAGATTTCTCCCGTGTGGTCTAGCTGGACCCCTCCGGCATTTGCCACACTCCCTGCCAGTCCTGACATTGACTT
CCTGAATGTGATTAGGTGGTAATGAGCAAGAATTTCCTAGGATGTTGAAACATCTGTATCCAGGCCCCCAATCAA
ATGCTGCTGAATATTGTGAATGTTTTTACTCCGCTCACTTTCCCACTGTGCTTTCCTCTAACCAAAATATACGTG
TAGCCATTACCAATGTACAACTCTCAATGCGGAGTTGCCGCCACGGTTTAAAATAAATCTCTGTGAAAACCTTTC
TGCAA

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FIGURE 5040

KQKYNLFLPDINHFLRPKFLFLSKRIALSVGCSYWDIKFS

FIGURE 5041

TTTTTATTACTATTTCCTGAAGAATGGTTTTTGTTAACTTGTTACTGTATCATTAAAAAGACCTTCTAATGGTTC
AGTACAATAATCTAGAACTTGATTTATGTGGCTTTTTATAGTTATCTGAATGCATTCCTTTTGCCACATAGACCA
TATGGCTAGTTCTCCAACTTTTTTGCTTATTTTTAATAAACCTTGCTGTTCAACAATCAGAGAAACCTTTAGATT
TTGGATGATTCTTCCAGTTGAGGTAGAAACATCTTAGATAATAGGAAAGGCAAATACAAAGTCCTAACATTTTCA
TAGTAGAGTTTACAAGTAAAATAACTTATCCATATAGGTTATCTTCGTTGTGTAGCACCAGTATAAATAGTGATT
TCATTAATCATTGAATCAGATGAAGCAGTTATAAATCACTTTTTACTTTGTGCTAAGAATTATTGTAATTTCAGG
ACACTTTATTATTTCCTCTGAGCAGTTTCCATTGGAAGGTTGAGTTTCCCTTTTTTAAGTTCTAATCATCACTAA
AGGTTAAGATAATCAAATAGGAGTTAAAATAAGTTATGTTTGATCTTTTTCCCTTGAAAATAATGCTGAACTTAT
TGTCTACATTCTGATTATTAGGCAGAAATGCACTTGTTTAAATCATAGAAGTAATTCATTTGGAGGATATAATTA
CTCGATTTTCTAGTGGTGTGAAATACTTTTTAACAATTGTGCTTGTCTGTAACTGAAATGTTATAGAATTTTAAC
ACTATAGGGATTATAGAGTTATATTAGCTCTCCTCAAGAGACTGAAGCACAATATTTTTCATGTAACAATTCTTA
TCCAAGTGCTGCTAATCTGTCGTGCAAATAATGAAGCTATTTGGTTGCCTATTTAGCTATTCACAAATCACTGTA
ATCTTTGAAACAATCTTGTCGTTCATTTGTATTAATATTTGGATATTGTGAGTTAATACTTTAGAAAAAAATCCA
TCAACTCAGCCCCGTTAGCAAAACTGTTTGGATTCATAGTTTTTATATGTGTTAACAGTAGAATAAATTTTGAAG
GGGCTATTTACTACCAATGACTAAGGGGAAAATTATACTGTCACTATCATTTGACTTGAACATTTGTGGTATTGT
AAAAGTCTTGTCAGTTGTGTTCTAAATTGCTTAAGCCATACGTTCTCTTAAACAGGATGTTTTTTTCTTCCTTTC
CAGCAGCCTTTTTCTTCTTTGTCTGTTATGGTTAATACTCCATAGATTTTAGAAATTGAGAAGTTCTTGAAACAT
TTTATTTTCTTGAGTTCATCACTTTTGACTCTTGTATGAGATGTGATTTGTCATAAAAGATAGCCTTCCACTACT
TCACTAAATGAATTTCAGAGTAAACACTGTGATTCTGCAGAGCGGATTCAGTAGGCTTTCCAATGTTTTCTCCTG
CTATACAGTGCCTACCACCTTGAGGGCACTTCAGTACTAGAGGATGAAAACTGAAACGTTGTTTTGATGTTTATT
GAATAACGAGATTAGAGAATATTTGATTTTTGTTGTCAGTGTATTAAAGAAATTTTCACATTGATAAATGTTCTC
TAGGAATGTGTCTACATTCATCAGGTGTGAACTCTTGTACATGAATTTTGTACCTTGAATCCACATATATATTAA
GTGTATCATCAATATAAAAATAAACATTATTTGCTTAAA

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FIGURE 5042

FLLLFPEEWFLLTCYCIIKKTF

FIGURE 5043

CCCATCTTTGTCCTTTGAGGAGTTTTCAGTGGTGATAATGGGAATGATTGTGCTGTAGTAAACCTCTTTCCTGGC
TATTTTAGCTGTAATTGAGGTGAGTCTGAGACAACAACAGTATTCTGTGGGTAATTCCCATTGGCCTTGGGACCC
CAATCTCAAACCTTTTCAATCCAAACAAACTTTATCATGTGTAGGAAAAGAGGAAGGGTGAAGAGTCCTAAACTT
AAGCCATCCCCCATTCACAGATACACATGGTGGTTAAATCTGTTTTGCCATAGGTATGGTCCACCTGCTAACAGT
CAAATTCACGAAAGTCTCAGTGGCCTAATAAATAGATCTCTTTTTTGTTGCACAGCCTCACTGCACTCCTGGTCC
CCAGATTTAGGGCCTTCCTAGTAGCATTTATAGAGGAATAGGAGAGGTGTTGAGTAAAACTAAGCCTTCTCCTAG
ATAGTTATTTAATAAGTAATTTGCTGAAAGTAATGGATCTTCAGTACCTTTAAAGATTTAGTTATTTGAAGAGAG
GTTCTCATTTCCTAGAAAAGATATGAGAAACCCAAATAGAAAATTATTAGAGATCTTTGAGACACTCTATTTACA
TTCCGGACCTAATCTTTTTGAATTGTCTTATATGAGTGAGTACTTTGTGGCAGAAGATCTAGACATTTTAATAAA
ACATTTTAATACAAATATCTAGATATTTTAGATACATATTTAAGTATCTNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCAGACCACCGTCTGAAATTGCTGTTCATG
ATTGGAAATCGAACTGGAAACCCGAAGGCAGGAGATGTATGCTCCCTTGGGATGTATGGGGAAATCACACAGAGC
TGTTAGTACTTCAGTCATGGGATTTGCTCTCATGCTATGCATATGGGCCTCACAACTTGTAAATGCCACTGGAAG
ATGGCTTATCTAAGGTTCCTTATTTTGTGGTCTTTCCCCCTTAGTTCTGCAGTGAGTGGGGCAAAGCGTGTCACT
GACCTTTTGAATGGAAAACACTGGAAGCCTTAGCGTTCTTAATTCCTGAAATGTTCATTTTTTCTTCTAAGCAAC
TGGGCTTCAGAGGAGATTAGGGCAGGCAATAACAGTGTTGACACCAGGGCAACTGTTTTCTCCTGTTTATGGGTA
TTTATTCAACATCTGCTTTCTGCTAAGCTCCATGGAAGGCACAGAGGAAACACAGCAGAGTCCATGCCTTAGAGA
CTTTGTACCTGATGAATTGAGTGGTATCAGGACAATGCTATTTAATGTTTGATCCATCCCTTCTCTAAGCACATC
TCAGATTTCTGTGCTACCTGATTTAACCCTTTCAGTTCATAGAACCCAGAAGGATAAGGTGAAAAGATAGACCGG
GAAAAGTAATGCAAGTGGCCAAGAGTAGCTTCCACTTCAAAGTTCCTCATGTGTGTGTGCTAACATTGTGACTTC
TGTTCAGTCATTGTCAGTATAAACTGTACATTGGAATCATTTGTAGCTTTTTAAAAAATGCCTATGCCTCACCCT
AGACCTACCACATCAAAATCTCATGGATAGAGTCTCAAGCTAAAAAGCCTCTATTTGAGCCAGGCTTATTGGCAC
CTGCCTGTAGTCCCGTACTCAGAAGGCTGAAGTGAG

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FIGURE 5044

PSLSFEEFSVVIMGMIVL

FIGURE 5045

CTATCTTAATTCATTTTATTCTACAAAATGCTACTCAACTGAAAGTGGAAATGCTAACCCCCCTCCCCCAAAAAA
ATCGCAAGGGAAAGAAGTTTTAATATGTTCTTTCTTCCATAGCAGCAAGCTTTTTCTAACAAGCTTTCTTTAGTG
CAAATACTGTAGGCTTGTATTACATATAGTAAAACAACAAAACAACAACAACAACAAAAACCACCACCAGAAAGG
CTTCCAAACAAAGCTACTCCTCAATTTTCAAAACTATACAAAGATTTTGAGCTTGCGGTTCTGCCTGGAAGGTCT
ATTTAGGAGACTCTCCAATGGGACCATTTCACCATTACTTAAAAAAAAAAAAAAAAAAAAAGTGCCCAGAAAGGTA
ATTAAATTCCCCATAGGGCCATATGAACCATATACAACTTGTTTGCCTCCAGAGTCTTACAGCTGACTTTACTCC
ACGTCATTAACATATCTCAAATACAGATGCACAAAGCTTATTTTCTACTATACACCAAAX

FIGURE 5046

TGTAGTTATGTTTTCACTATTGCTGCTTCTATAGAGGGCATTGTGATAGAGAGTTACAGATGAAACATTAAATGC
CACAGTGAGTAGAAATAATTACTACAAAAAGTAATAAATATGATTACTTGGTAATATCATTCTCCATCTAAAATA
CTAGTTTCACCTGTGAGCAGATTTCAGCTCAGTTTATAGTTAAAAACAATGAGGGTAAAATGGGATTCATGCTCA
GGGAATGAATCAGCCATAGTTAGAGTGGGAAATTATTATTTTCTTCATTTAAAGGTAGATTTTATGTTTATTTCC
CTAAATTGCATAAGATAAAATTGTCTGTTTAATAAAAAGACATTTATTACCATTATTAACAGTCATTTTAGAGCC
AAATTTAAGAAAAGGATATTGAAAGGGTCTTTATTGGCCTTGTTTGGGTAACTCTATGCTGTTAGATAGAAGAGA
CTTAGGTAAATAACTTTTTATGTCTGAGGTGAGTACACAATATTGGTTCTTGGAAAAATAGCTGTTTCTTCATAA
GATACCCAAGTGATAATTTTTTTTCCCCTAGACTGTCAGGCCTATGAGTAAATACTAAATCTATTAGCTGTCCCC
ACTCATAAACCAAACCAAACCAATACAAACAGATGAGGAGAGGAAATGTAGTAAAAATACTGGCTGGGTCTTATG
ATTGGGATGAGTGATTTTATAAGATAATATGGTGATAATTTTATTCTAGGATTTTATTTTTGGCCTAATATAGGA
ATGTTTAAAAAAGGCTTTTCTATGAAAATTAGAAATTTATACTTGAAATTAAAAGTCTAGAAGGGGGAGGACCTT
AAAGCTAAGCTACCAGTAAGACAATGAATAATTCAGAAGAGAACACTATTCTTTTACTGACTGAGTGCCCAAGAT
GCCAATTTCCATGAAGTCTTGATTTATATATATGTACACATGTTATGCACATACATGTTTGTTTTCTAACAGTTA
TTTTTTAAGCCNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNATA
ATACTAACTAAAGTAGAAAGTTTAAAAAGTAGAGATTTTAGTCTTTTCACTAATGTCCTTTTACTGTTCCAAGAC
CCAGCCTTGCATTTAGCTATCATGCCTACGTCCTGTCTTCCAGTCTGTGACAGTGTATCATAACAGGGGATACCT
GATGTTGTA**ATG**TNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNGTAATTATTGAATATTTGCTGGAGATACCCGGAGNCTANGCAAATGTCCCGTTT
CTGCTTAAACTNTTGCTCATTTTACTACCCATTGGCAGATCTTGCTTGTGGCAGTTACTACTGTGGTGTTCTAAT
GGTGATTTTCTATTTCTCTCAATCCTTCTACATTTATTATTGGAATTCTTCTGTAAGGAAGAGTTGTCAGTTCTG
GATTTATATTTT**TAA**CTATAATAAGATATTCAGGATAAGTATAGATTTAGAACTTAAAGATGTTAAATCATGTTA
AAATTATTCCAAATACCAATATCAAAGAAAACTAAGTTGGTAATCTATCTCAGAAAATATATGAACTTAAGAAGG
AAAATAGTATTTATGATTTGTAGAATTGGTTCAACTTTTGACTTAATACTGACTTTGGACTGAATTCAAAGTTTT
CTTGAAATTTCACATCTGGACTTTTTAAAGTGTCTACATTTATATTACTTTGGGGATCATTTTGTCAAAGTCTTG
AATAAAGTTACCCAGTCCTGGCATGATAAACCCAAAAAAA

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FIGURE 5047

MXXXXXXXXXXXXXXXXXXXXXXXXXXXXXVIIEYLLEIPGXXANVPFLLKLLLILLPIGRSCLWQLLLWCSNGDF
LFLSILLHLLLEFFCKEELSVLDLYF

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FIGURE 5048

GCAGGAATTCTGTGTCCATGTCCTGGATGTATTTCTGTATGTTCCTATAACTCTGGACAAATCATTAAACCTCTC
TGGGCAGCATTTTCCTCATCCATGAAATGAATGTGTTCAATTTGATCTCAAAGATCTTTCCAAAATATTAAATGC
CATTAATCATGGAATAGACCAAATTATTATATCACAGGAACTTGAATCCAGCCAGAGAAAAATTCCCTGGACAAT
TGGATAAACAAATGTGATTGCTACCTTATGGATACAACGGACTTTTACATTTCTTTTTAGCCTTTTTAGTCAGTT
GAGGGTAACTCAAGCAGAGTATGTCCAATCATTAGCTTCCTTTGATATTTACATTACAGGTAAAAACGGCCAAAA
ATATATTTTAAGGTCTCTCCCCAAATAATTGTTTTTATTTTTAAACTATCAATGTTGTTTAAAATAATCATGTAC
TTGTTGAGTTCCTGAGGTTTGGAACAAATTACACATAAAATTTAGAATACTTTATTTCTGAAAAGCATATACATA
TATGTTATGTTTATTTTTCCTTGTTGATTAGAAAGGTGATGGAATATGTGACAATGCAAAATGAATTGATAATTT
TTCTGTATTTTGAGTGAAAGTTGTCTGTAATATGTCAAGCAAGAATGTTATAATTCNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNTTCATTGTGCTACAATGTAACAATGGCTGTGGCATCACTAGGTGATAGGAATTTTTCAGTTCCATTATAATCT
TATAGGATCTCTGTCATATGTGGTCAATTGTTGATCGAAACATGACTGTATGTCGTATTTTCAGAAAATGGAATA
GGTAATCATCACTTGTGTGAATTTTAATCAAATGACTTAGGAAAGAAACTGGATGTTTCAAAAGCTGTTGCATTT
ATTACAAATGTCACAAATACAGCTCTTGCCTTTTGAGAATGTTGGAGAGATGTCTTTAAAAAATATGTTTGTGTG
TAAAAATGTGTCTGTATGCAATAGCTAGAAAAATGCCTGTGTCTTAAGTCATTACTCATGTTCTAATTTTTGTTC
TTTGTACTATTTATCTGTATGCTTGTTCTTCAGTATTTCAGACTCAAAATAAATTTATTTTTTTATGTTAAAAAA
A

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FIGURE 5049

MSSKNVIIXXX

FIGURE 5050A

CGCTAACTCGGCTACGGTGTATCTGCGTCTTTGGTCAGGTTGTTCCTTGGCTAAGAGGGCAGTCGTCGCGGACCC
ACGCGGTTAGCAAGGCTTAGTGCTCGGGCCGGCCGCCTTCACTTCCCTCCCGGCTTTTCCTCCCGACTTATCCAC
TTTAGGGGCGTCTCGGAGTGCCGGAGGCCCCCGGGGAAGAGCGGGGTGCCGGTGTCCGCTCCGGGCTCGGATGGG
AAGTGGTGGGAGGAGCGACCCGGGATGTTCAGTCTGATGGCCATTTGCTGCGGCTGGTTCAAGCGGCGGCGGGAG
CCTGTCAGAAAGGTGACTCTTTTGATGGTGGGACTTGATAATGCTGGTAAAACCGCAACAGCAAAGGGAATCCAA
GGAGAATACCCTGAAGATGTAGCTCCTACTGTTGGATTTTCAAAAATTAACCTTAGACAAGGAAAGTTTGAAGTC
ACCATCTTTGACTTGGGAGGTGGAATAAGAATTCGGGGAATCTGGAAGAATTACTATGCTGAATCCTATGGGGTA
ATATTTGTTGTGGATTCCAGTGATGAAGAGAGAATGGAAGAGACAAAAGAGGCTATGTCAGAAATGCTAAGACAT
CCTAGGATATCGGGAAAGCCTATATTGGTGTTGGCAAATAAACAAGATAAAGAAGGAGCTTTAGGAGAAGCTGAT
GTCATTGAATGTCTATCTCTGGAAAAATTGGTCAATGAGCACAAGTGCCTGTGTCAGATAGAACCATGTTCAGCA
ATCTCGGGGTATGGAAAGAAAATTGACAAGTCCATTAAAAAAGGCCTTTATTGGCTGCTACATGTTATTGCAAGA
GACTTTGATGCCTTAAATGAACGCATCCAAAAAGAGACAACAGAGCAGCGTGCTCTTGAGGAACAAGAGAAACAA
GAAAGAGCTGAACGAGTGCGAAAATTACGAGAAGAAAGAAAACAAAATGAACAGGAGCAGGCTGAACTCGATGGA
ACCAGTGGTCTGGCTGAGTTGGACCCAGAACCAACGAATCCTTTCCAGCCAATAGCATCTGTAATCATTGAGAAT
GAAGGAAAACTTGAAAGAGAGAAAAAAAACCAAAAAATGGAGAAAGACAGTGATGGCTGCCACCTGAAACATAAA
ATGGAGCATGAGCAAATAGAGACACAAGGCCAGGTTAATCACAATGGCCAAAAAAATAATGAATTTGGACTAGTA
GAAAATTATAAGGAGGCATTAACACAGCAGTTAAAGAATGAAGATGAGACAGACCGGCCATCATTGGAATCAGCT
AATGGTAAAAAGAAAACTAAGAAACTAAGAATGAAAAGGAACCACCGGGTAGAACCACTTAATATAGATGACTGT
GCTCCTGAGAGTCCAACGCCACCCCCACCCCCTCCTCCTGTTGGCTGGGGAACCCCTAAAGTCACTAGACTTCCA
AAACTTGAGCCTCTTGGTGAAACACATCATAATGATTTCTATAGGAAGCCACTGCCTCCCCTGGCTGTGCCACAG
CGACCTAACAGTGATGCTCATGATGTGATCTCATAAACAAGACGTATGGAGGAGTTCTCTTAATATCAGCAAGGT
GAACTGGGACATTCTTCTTTCTCAGAAGAAGAAACATCTTGTAAATTGATGACTGGGGCAAGATAACCATAATAA
TTTTAGTGAGAAGATTAATACTCAAGGACCTGACTTGATAATTACTTATTTGTGTTTTTCATGGTTAAAACAAAA
AAAGAAGCACAATGACCAGTACATGAAATCAGCATTTGGACCAAATTAGCAAGATTTACTGTTGACTCTGGTTTA
TACATCCCCACTCATGAGCATACTTCTGAAGGAAAACTTTACAAAAAGAGCCAATGGACTCAGCACTTTCTTTAC
TATTTGTTCAATAGCCTATATTTCTAGATATTAAATATTTTTTGTAAGATATATGCACATAGAAGGGGGACTTCT
AGGAATTTATAACCAAAATTTTAAAACTATTTTTATATTTTTTTAAATCTTTAAAAATTTTAATTACTGTGATAT
TGATTATACACCTTTTTTATAGATGATTTGTTTAAATTATATCTGGAAAATAGAGTTGATTTACTTTCAGACATG
AACTATACAAACAGGATATATTTATATGGCTTGAGGTATGTTTTGTAATAGCGTTGTTCTTTAAGTGTACATCGT
AATTTGACCTAATTTAAAAATAATATATTTTCGAAGTAGTAGATTCTCAGATCTTTATTCTAACAATTACATGAT
TTGAAAACAGTACTCAATGAGACTGGAAATACCTTTTGTACCTAAATGTTTTTTAAATTAATCAAAATACATTCT
GTGAGATACTATTAAAAGTCTCAGTAAAGTCCTATTTTAAAGGTTAGACACTTTCAGAGATCAAGGTGCTCCCTA
TACTCCCTTGTTCCATCAGAAGCTGCAGTGACTCTTTTAGGTGATTCTAATTCTTTCATGCCTTGAAATTAAACT
ATGAAATTAAAGGCAGAAAAACTGGAAAACCTACTGCAGGTCCAGAGACTTCTGTTTTACAACTGGGAAACAGCT
TGTGTACTAAAGTAATGAGAATAAAAATGTTGGCCCAAAATTACTTTTATAAATAAATAATTCCAAAATAATTTC
TTAATTTAAAATGATAGCACTTCTCTTGCACTTAAGAATGGCATCCATAAGATTCTGTATTTGGCATTTAGACTA
ACTTCTAGATGTATATTTTTAATAATAGATTCATAATGTTACATTTAATTGAAAACAAACCTTTATATCCAATGA
AAATAGTATAAACAGAATGATTTTTATACCACCTTGTTAAGATTGGTGCTTTTGGTAACTTGTACTGACACAACA
GACATGTGCTAGTATCTGATAACATTAAGTACATTTTATGTCGTTTAATATAATTATTTACTTTAAAAATTGTAC
TTCAGAACATCAGATTTTATTCACATTTTTTAACTCACTGAACTTTAATAATCAGGTCACCTGTACTCTAGTCAG
CACTGTATATATTCTTGGAGTTTGTACATGGGACTTAGCAACCACACTGAGTGAGGTAAAAGCATTTGATTTCAG
ATCTAAAATTCGTAACAACCTAAATTTGAGAGGTGGCTGAAATGTGATGAAAAGCAATACGAAAAGACAATGTAA
ACTTTGAAAAGGATTTTAGAGGGAAAATTGCATAGCTTTTTGTAACATTTACTTAATTTTAAAACTAAACTCATA
CTTTTGCTATCTTTTTAATATTTATCTCGTTTGGGAGTATACGTGTTTTTAAAATTTGTGTTTTCTATCTGTTTA
CTATAGTGTAGCTACTGGCTTCATTTAATAAAAATAAATGATTTTGAAATTAAATATAATATAGAATTCACATTT
TATATAGCTCTCTCAAAAATTAATTTTTATTCCTTAAGCATTTTAAAAACATTTTAAAAAATGTTTTGTAAATCC
AGGTGTATTTTAACAATTAAATGCCTATTTTGTTATATGTTATACTTTTATTCTTAATTCTGAATTTTGACATTT
TCACACAATAAAAATAATTTATATCAATATTCTGTTTCTCTTTTCAATTGGTAGATTTAAATGATTTCCTTTGGG

FIGURE 5050B

TAATAAAATAGGTAAAGATTTTAAAATATGATTATTGAAAAACAGTTTAAATCAGTAGATTAAAATAATGCATTT
TTTTGATACTTTACACACAAAACTTTTTTCTCTCTGCAAGTTTTTATGTATGTGGGAAAGAATTTGTGATTTTAA
ATGCAGCTACAAATAGCATTTCACCATATGATGTTAGAGGATTTGATGTCTGTCTTGCGTTAAAGCTGTTGGTCA
ACAGATATGTTTTTATGTATTTAAAAGAGGCTCTTGTGTGCCTTTATGTGTAAAATGCATATTACGTAGTATACA
TGATATTGTATGTAACTGACTTCAAATATAAAACTATGCATAG

FIGURE 5051

ANSATVYLRLWSGCSLAKEGSRRGPTRLARLSARAGRLHFPPGFSSRLIHFRGVSECRRPPGKSGVPVSAPGSDG
KWWEERPGMFSLMAICCGWFKRRREPVRKVTLLMVGLDNAGKTATAKGIQGEYPEDVAPTVGFSKINLRQGKFEV
TIFDLGGGIRIRGIWKNYYAESYGVIFVVDSSDEERMEETKEAMSEMLRHPRISGKPILVLANKQDKEGALGEAD
VIECLSLEKLVNEHKCLCQIEPCSAISGYGKKIDKSIKKGLYWLLHVIARDFDALNERIQKETTEQRALEEQEKQ
ERAERVRKLREERKQNEQEQAELDGTSGLAELDPEPTNPFQPIASVIIENEGKLEREKKNQKMEKDSDGCHLKHK
MEHEQIETQGQVNHNGQKNNEFGLVENYKEALTQQLKNEDETDRPSLESANGKKKTKKLRMKRNHRVEPLNIDDC
APESPTPPPPPPPVGWGTPKVTRLPKLEPLGETHHNDFYRKPLPPLAVPQRPNSDAHDVIS

FIGURE 5052A

TGCTCACTTCTGACAGCCAGACAAGGGCTGTGCTCAGGGGCAGCTCGGCTGGGCACACAGTAGGTGCTTTAGCGG
ACAGCACTGAGGCCCCCAGCAAGAAGCCCATGAGCTCCTCCCCCTCCCGCAGTGCCGCCGACATCTACATCCGGG
AGTATTTCCACAGCCACGTCAGCGGCGGCCACCCCGAGGCCACTCCTCTCCGTGTGATGTACACGGACCGGCCGC
TGAGCCAGACGGACCCAGTCACGCTGCAGTACTGTTGCCTGACCGACGACCGCCAGGCTTTCCGCCCGCCCACAC
GGGCAGAGCTGGCGCGGCACCGCGTGGTGGTCACCACCACCTCCCAGGCCCGTGAGCTCAGGGTGCCGGTCGGCT
TCTTCTCCCACATTCTCATCGATGAGGCGGCCCAGATGCTGGAGTGCGAGGCCCTCACCCCGCTGGCCTACGCCT
CGCACGGCACCCGCCTCGTGCTGGCGGGCGACCACATGCAGGTCACACCCCGGCTGTTCAGTGTGGCCAGGGCCC
GGGCGGCCGAGCACACGCTGCTGCACCGCCTCTTCCTGTGCTACCAGCAGGAGACTCACGAGGTGGCGCGGCAGA
GCCGCCTGGTCTTCCACGAGAACTACCGCTGCACGGACGCCATTGTCAGCTTCATCTCGCGGCACTTCTACGTGG
CCAAGGGCAACCCCATCCACGCCAGGGGCAAGGTTCCGCCCCACCCCCGGCACTACCCGCTCATGTTCTGCCACG
TGGCGGGCAACCCAGACCGGGACATGTCCATGGCGTCCTGGCTGAATCTGGCTGAGATTGCGCAGGTCGTCGAGA
AGGTGCAGGAGGCCTACAACACCTGGCCCAGCTGCTGGGGCGGCCGTGAGCAGAGGTGCATCTGTGTCGTTTCCC
ACGGTGCCCAGGTCAGTGCACTGAGGCAGGAGCTGAGGAGGCGGGACCTAGGCCAGGTGTCTGTCGGCAGTTTTG
AGATCCTGCCAGGGCGGCAGTTCCGGGTCGTGGTGCTCAGCACTGTGCACACCTGCCAGAGCCTGCTCAGCCCTG
GGGCACTGGCCCCTGAGTTCTTCACCGACGCCCGCGTGCTCAACACCGTCCTGACCCGCGCCCAGTCCCAGCTGG
TGGTAGTGGGGGACGCCGTGGCCCTCTGCTCCTTCGGGGCCTGCGGCAAGCTCTGGGAGAGCTTCATCCGTGAGT
GCGTGGAGCGGCACAGTGTCTGCCCCGAGGGCCTGTCCATGGAGCAGGTCGAGCAGGGTGTGGCGCAGAGACGGC
GCTGGCCTCCCCGAGGCACACAGGCTGGGGCAGCGGGGAACTGGGAGGCTGCCCCAGAGCCAGTAGGGGACCTGG
CCGAGGAGCAGGCGGCTGTGGTGACGGCCATGGTGAAGGCAGAGCCGGGAGATGAGGCTCTGAGCCCAGCATCCC
GTGACATCACGGCAACCACAGCGCAGACGGAGGCTGCGGCAGCACCAGCAGGAGACGCAGTGAAGGAAGACGTGG
TGCCCGGGGCCTGTGCGGCAGGAGCGGCTGCTGCAGCGGGCGTGGAGTCCACGGAGGCTGAGGATGCAGAGGCTG
ACTTCTGGCCGTGGGACGGGGAGCTCAACGCTGACGACGCCATCCTACGGGAGCTTCTGGACGAGAGCCAGAAGG
TGATGGTGACCGTCGGGGAGGACGGGCTGCTGGACACCGTCGCCAGGCCCGAGTCCCTGCAGCAGGCCCGGCTGT
ACGAGAACCTGCCCCCGGCTGCGCTACGGAAGCTGCTGCGCGCGGAGCCCGAGCGGTACCGCCACTGCTCTTTCG
TGCCAGAGACCTTCGAGCGGGCGTCAGCCATCCCGCTGGACGATGCCTCCTCGGGCCCCATCCAGGTCAGGGGCC
GCCTGGACTGTGGGATGGCCTTCGCCGGGGATGAGGTGCTGGTGCAGCTCCTTTCGGGAGACAAGGCGCCCGAGG
GGCGGCTTCGGGGCCGCGTGCTGGGCGTGCTGAAGAGGAAGAGGCACGAGCTGGCGTTTGTGTGCCGCATGGACA
CGTGGGACCCGCGCATCATGGTCCCCATCAATGGCTCCGTGACCAAGATCTTCGTGGCCGAGCTGAAGGACCCAT
CGCAGGTCCCCATCTACAGCCTCCGGAAGGGCCGGCTGCAGCGTGTGGGGCTTGAGAGGCTCACCGCCGAGGCCC
GGCACAGCCGGCTCTTCTGGGTCCAAATTGTCCTGTGGCGGCAAGGCTTCTACTACCCGCTGGGCATCGTCCGGG
AGGTGCTGCCTGAGGCCAGCACCTGGGAGCAGGGCCTCCGCATCCTCGGCCTGGAGTACAGCTTGAGGGTGCCCC
CGTCGGACCAGGCCACCATCACCAAGGTGCTGCAGAAATACCACACGGAGCTTGGCCGGGTTGCCGGCCGCCGAG
AGGACTGCCGCGCCTTCTTGACCTTCACTGTGGACCCCCAGGGCGCCTGCAACCTCGATGATGCCCTCAGTGTCC
GAGACCTGGGTCCCAGGTGCGAGGTGGCTGTGCACATCACTGATGTGGCCAGCTTCGTGCCCAGGGACGGGGTGC
TGGACGTGGAGGCGCGAAGGCAGGGCGCTGCGTTCTATGCCCCCGGCAGGGAGCCAGTGCCCATGCTGCCGGCCA
GCCTCTGCCAGGACGTCCTCAGCCTCCTGCCTGGCCGGGACCGCCTGGCCATCTCCCTGTTCCTCACCATGGAGA
AGGCCAGTGGCCAGCTGAAGAGCCTGCGCTTTGCACCCTCCGTGGTCCAGTCTGACCGCCAGCTGTCCTACGAGG
AGGCGGAGGAGGTGATCAGGCAGCACCCGGGTGCCGGCCGTGAGCTGCCGGCCCGCCTGGACTCCGTGGACGCCT
GCGTCGTGGCCGCGTGCTACTTCTCTCGGCTGCTGCGCCGGCACCGCCTGCGGTCCGACTGCTTCTATGAGCAGC
CGGACGAGGACGGCACCCTGGGCTTCCGCGCGGCCCACATCATGGTGAAGGAGTACATGATTCAGTTTAATAGGC
TCGTGGCTGAGTTCCTGGTGGGCAGCGAGTGCACGCGGACGGTCACGCCTCTGCGGTGGCAGCCAGCACCCCGCA
GCCAGCAGCTCAAGGCCCTGTGTGAGAAGCATGGGGACCGGGTGCCCCTGTCACTGCACCTCGGCCACCACCTGC
ACGGCGGCGGGGGCAGTCCCCCCGACACGCGGCTGCACCTCCTGGCCTCCCTCTGGAAGCAGGTCCAGTTTGCTG
CCCGCACCCAGGACTACGAACAGATGGTGGACTTGGTCACCACGGACGACATGCACCCATTCCTGGCTCCTGCAG
GCCGCGACCTCCGCAAGGCCCTGGAGCGCTCGGCGTTCGGCCGCTGCGCCCGGGGCCACCAGCAGCAGGGCGGCC
ACTACTCGCTGCAGGTGGACTGGTACACGTGGGCCACCTCGCCCATCCGCAGGTACCTGGACGTGGTGTTGCAGC
GGCAGATCCTGCTGGCGCTGGGCCATGGGGGCTCTGCCTACTCTGCCAGGGACATCGATGGGCTCTGCCAGGCCT
TCAGCCTCCAGCACGCACTTGCCCAGAGCTATCAGCGGCGGGCGCGCAGCCTGCACCTGGCCGTGCAGCTCAAGG

FIGURE 5052B

CCCAGCCTCTGGACAAGCTGGGCTTCGTGGTGGACGTGGAGGCGGGCTCCCGCTGCTTCCGGCTGCTCTTCCCCA
GCAACCGGGAGACGCTGCCTGACCCCTGCCCCGTCCCCTACGGCTCCCTGCAGCTGGCCGAGCACCCCCACGCCC
TGGCAGGCCGGCCGGGCCTGCGGCTCCTGTGGCGGCGCCGTGTCTACTCAGCGCAGGGATCCAGCCCGCCCCTGC
CACTGCCTGGCACTGTGCCGGACCCACACACCCTGGCCGTGGAGACGGCCCTGTGGAAGCAGCTGCTGGAGCTGG
TGGAGCTGCAGCGCTGGCCGGAGGCGGCTGCTCTCATCCAGGAGAAGGGCGAGGCGTCCCAGCGGCGGGAGCTGG
TGCAGGTGCAGCGGAGCCACTGTGGCCATTTCCTGGAGGTGGCCCGGGAGCTGGGCAGTGGGGACACCCTGCAGG
TGCAGCTCGGCACCAGCCTGCAGCACGGCTTCCTGGTACCGAGCCCTCAGCTCTGGACGGTGGCACCGGGCTTCA
GCCTCTGCCTGGAGCACGTGGAGCGGCCCGGAGACTGCTTCTCAGGCCGTGTGTACCGGGCCCCGAGGGACCGGT
ACCGCGACGTGGATGAGTACGCCTGCGTGTGGGAACCATTCTGCGCCCTGGAGTCGGCCACCGGCGCGGTTGCCG
AGAATGACTCCGTCACACTTCAGCACCTGAGTGTCTCCTGGGAGGCGTCACGGACGCCGCAGGGGCAGCTGCAGG
GCGCCTTCCGCCTGGAGGCCGCCTTCCTCGAGGAGAACTGTGCCGACATCAACTTCAGCTGCTGCTACCTCTGCA
TCCGGCTCGAGGGGCTGCTGGCTCCCACGGCCAGCCCACGCCCCGGGCCCAGCAGCCTCGGCCCTGGCCTGAATG
TTGACCCCGGCACGTATACCTGGGTGGCCCACGGGCAGACGGAGGACTGGGACCAGGAGCGCCGGGCAGACCGGC
AGGAGGCTCCCAGACGGGTGCACCTCTTCGTCCACCACATGGGCATGGAGAAGGTTCCGGAAGAGGTGCTGAGGC
CGGGCACCCTGTTCACCGTTGAGCTGCTGCCCAAGCAGCTTCCTGATCTCCGCAAGGAGGAAGCCGTGCGTGGAC
TAGAGGAGGCGTCCCCGCTGGTCACCAGCATCGCACTGGGCCGGCCTGTCCCGCAGCCCCTCTGCAGAGTGATCC
CCAGCAGGTTCCTGGAGCGGCAGACCTACAACATCCCCGGAGGCCGCCACAAGCTGAACCCCAGCCAGAACGTGG
CGGTCAGGGAGGCTCTGGAGAAGCCTTTCACGGTCATTCAGGGCCCACCAGGTACAGGGAAGACGATCGTGGGCC
TCCACATCGTATTCTGGTTTCATAAATCAAACCAGGAGCAGGTGCAGCCCGGAGGCCCCCCCCGTGGGGAGAAGC
GGCTGGGGGGTCCCTGCATCTTGTACTGCGGCCCCTCCAACAAGTCGGTGGATGTCCTGGCAGGACTGCTCCTGA
GAAGGATGGAGCTGAAGCCCCTCCGTGTGTACAGTGAGCAGGCTGAGGCCAGCGAGTTCCCAGTGCCGCGTGTGG
GCAGCAGGAAGCTGCTCAGGAAGAGCCCCCGGGAGGGGAGGCCGAACCAGAGCCTCAGGAGCATCACCCTGCACC
ACCGGATCCGGCAGGCCCCCAACCCTTACTCGTCGGAAATCAAGGCCTTTGACACCCGGCTGCAGAGAGGGGAGC
TCTTCTCCAGGGAGGACCTGGTCTGGTACAAGAAGGTCTTGTGGGAGGCTCGGAAGTTCGAGCTGGACCGGCATG
AGGTCATCCTCTGCACCTGCTCCTGTGCAGCCTCTGCCAGCCTCAAAATCCTGGACGTGAGGCAGATCCTTGTTG
ACGAGGCAGGCATGGCCACGGAACCTGAAACCCTCATCCCCCTGGTGCAGTTCCCACAGGCCGAGAAGGTGGTTC
TTCTCGGAGACCACAAGCAGCTGCGGCCTGTGGTCAAGAATGAGCGGCTGCAAAACCTGGGTCTGGACCGGTCTC
TGTTCGAGCGGTACCACGAGGACGCACATATGCTGGACACTCAGTACCGCATGCATGAGGGCATCTGTGCCTTCC
CCTCTGTGGCGTTCTACAAGAGCAAGCTGAAGACGTGGCAGGGCCTGAGGAGGCCGCCCAGTGTCCTGGGCCACG
CTGGCAAGGAGAGCTGTCCTGTCATCTTTGGCCACGTGCAGGGCCACGAGCGGAGCCTGCTGGTGTCCACGGACG
AAGGGAATGAGAACTCCAAGGCCAACCTGGAGGAGGTGGCTGAGGTGGTCCGTATCACCAAGCAGCTGACCCTGG
GGAGGACCGTAGAGCCCCAGGACATCGCCGTCCTCACGCCCTACAACGCGCAGGCCTCTGAGATCAGCAAGGCCC
TTCGGCGAGAGGGCATCGCCGGGGTGGCCGTGTCCTCCATCACCAAGAGCCAGGGGAGCGAGTGGCGCTATGTGC
TGGTGAGCACCGTCCGCACCTGTGCCAAGAGCGACCTGGACCAGCGGCCCACCAAGAGCTGGCTCAAGAAGTTTC
TGGGCTTCGTTGTGGACCCCAACCAAGTGAACGTGGCTGTCACGCGGGCCCAGGAGGGGCTCTGCCTGATCGGAG
ACCACCTCCTTCTGCGCTGCTGCCCCCTCTGGCGTAGCCTCCTGGACTTCTGCGAGGCTCAGCAGACCCTCGTGC
CTGCCGGCCAGGTGCGCGTCTGCAGGAGGCCAACTATGCCTTCCTGAAGAGCCCTCTCCACCTGCAAGGTGCCAG
GACTGGGAGGGAAAGTCCAGGGCCCCCCCACCCTCCCCACCACCCTCCGCCATCAGCCTGCCTGGGCCAGCCTGC
CTCCTGGCCTCAGGATCTCCCTGGGGCAGGAAGTGGGTGGACTTGGAGGAGGAACGGCAAGGGCCGGTCCCCACA
CTCTTGCTTCTCCTGGGCATCTGGGGACAGGAACACCTCTCAGGGTGGCCAAGAGGGGCTTCCTTGGGACCAGTG
TAAGGAAGTTCTGCTGTCCCTGGGAAGTCTCAGAACCAGGAAGGAAACCCTGTGGAGGCTGCCCTTTGACCTTTG
GACGCCACCTGTAATCACTCTGGATGGTGTCTGTGGAGTTCAGGTTTATTTTCTATTTAAATGAACTAAAAGCCA
GCATCCTGCCGGGCGTGGTGGCTCACGCCCATAATCCAGCACTTTGGGAAGCCGAGGCGGGCAGATCACCTGAGG
TCAGGAGTTCGAGACCATCCTGGCCAACATGGTGAAACCCCGTCTCCACTAAAAATACAAAATTAGCTGGGCGTG
GTGGCGGGCGCCTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCGCTTGACTCCAGGAGGCGCAGGCT
GCAGTGAGCTCTGATGGTACCACTGCACTCCAGCCTGGGTGACAGAGCGAGACCCTGTCTTAAAAAAAAAAAAAC
AAAACAAAACCAGCATCTGTTACTGGAACAGAGACCTCAGCCCAAGCTCAGGACAAGGAGGCCTCCCTGGGAGAG
GGGGCCTTTCTCCCACCATCACCGCCTGTGTCCTTCAGGGGCTGCTGGAGGGCAGCCCAAAGCCAGGGGCCCACC

FIGURE 5052C

CCGCCCCACCCCACCCCACCCCACCCTCTGAAATGTGAAAAGCCTGCACTCTTCCTGTGGGCTGCGCAGTGGGCT
CGGGGGTTGGGGGGTGCCGGGGCGATGCTTCCACCCTGGACTGAGTGTTCGGGGCAGCCTGCTCGGCTGTATGTT
TCTCGCACGCTCACCCGCTTCAGTGCGGCTCTGTCCCTGCTGCCGCCTCCAGTCCTGAGGGAGGGGCTTGCCCCA
CCTTCTACATTCCAATTTTTATATCTTTGAATTATGTGATTAGATATTAATTTAATGAT

FIGURE 5053

AATATTTTGGTTATAATCATAAGAAGAATCCTTACAATTTAAAATATTTTCACTTTTATTTTGAAAAAGAGCCAA
CTTTCTCAAAGGAAGCTGTCATTAACTTCTGTTGTTTGGTTAGCTAATAAATTCTGTTAGTATGCAAGTTAAACC
TGTGTAAAGGAGGTTATAATGTGGTAAGGTATAATTTTCCAATATGAGACAATGGCTTAAATTTGCCTTTGGAGA
TGGAGAATATTTTCAACATACATAATTTTAACAAATAGTTTTGTTGCTTTTTGTTAAGCTTAAAAAAAAATTTGG
ATCAGAAATTATAGGATTGAGCTGGTACCAAAAGAATCCTAAAGTACAGAATGGTTTTCCAAAAGAGCAGACATT
TCAATGAAAATAAAACCCCAAAACATTTTTTTTATATATCATGATTGCATGCTTTTAAAATAAGGAGGCTTATCA
TTGAATTTTAGTTCCATAAAAATGAAAATACATGTTTATTATTTAGAAATGGTTAGTGACTGGTATTGAAGTATT
ATTCACACTTATGTTTGTAATAATTTATTTAAAGAATGCCAACAGTTTAGCACACTTTTGTAATCTCTAGAACAG
TTCTATACATTAAAAATAAACATTAAAAATAAAGCAGTTCCTTTAAACAACTTACTATGAAACTATAATTGTTAA
TGAAATAAGATATTCCTATGTATACATTAGTATGATTTAAGGGTATGAAAAACAGTGCTAAAATGTGGAGTTAAT
TGGAATGTGTGCAGCTGCATACTCACTTTCTGTGTTTTTATATTTCCTTACCTAGTTTTAAAAATCATCACTTTT
CGGCACTTCAGCTAGACTTATTTCAATATTATAATTATGATTAATGAAGGAGCAGTCAGAAGTAGAGGTGTGGTA
TTCCGTGGGCAGAAGTCAAATGAAAAAAGCTATATTGTTTACTTGTTTACTATATCAATGTTAATATTATGCCTT
ATTTTGATAAATCAAATAGTATATCTTAATCATTGTTGATAAATATACAGGCAAAGTTTGAGCATCATATGTATT
TTTATGAAGCTGCTTAATTCCAAATTGCCTCCCACCCCACTATCTAGCATAGTTTAAGCAACACATAATTTTGAA
AGAAAAGTTTGTAATCCCTCCTTTCTTTTTTTTGCCCATTTCTAAATCCTGTATGCCCGCAGTAAAGATAGTTTG
GGGATTTTAAAAGTTTTCTCTATTACCCATTTCTAAATCCTGTATGTCAAAGATAGTTTGGAGATTATAAAAATT
TTCATGTATTGGTGTAGGTTGAGTATCCCTAATGAGAAAATTCAAAATCTGAAATGCTTCAAAATCTGAAATTTT
TCGAGCACAGACATGATGCTCAAAGGAAATACTCACAGAGCATTTTACATTTGTAGGTTAGCGATACTCAACAAG
TAAATATAATGCACATGTTCTAAAATATCCCCCCAAACCCCAGCAATCCAAAACACTTCTGGTCCTAAGCATTTT
GAGTAGGGGATACTCACTCAACCTGTATATTTGTGCTAATACATGACTCATTAGAATGATTCTTTGTAAACTTAA
TATTTTAAAAGTACAGCACTTCTGTAGTATGGAAGGTTTCAGTAATAATTATATTCATTCAGTAGTCTCTTACCA
TTATCTCCCAGATGGAAAAAGAGGACTAATGTGGAAACCCCAGAGGGTGTCCAGTTGGACCAGGGAGATATTAGA
CACTTAACAGTATTTTCAGTCTGTCCATCTCTTTATTCCAATGTGAGAAATGGAAGTGTTTTTTTTTTTACGTTT
ATTGGCTCTTCATATTTCTCTACATTATTTTTAATGTGCAGTTTCTTCAATTGGTTAGTATTTCCATACTATTTG
CAACTTTATGGCCTTTAAATATAGGACATATTATATAGCAGAAATTTTGACTTTAAATCCTCTTGAGTAGTATAT
TTTGAGAAGAAAAGCTATACTGCTCTTCTGGATGGTTTCCATCCTTTATTTAGGTCTTTTCTTTTTGAATTCAAG
TGTTTTGTATGCTTAGAAAGTAGACATGTATAATATTGAGATCGGTTATTTCTGAGCTGGAAATTGGAAACTTTG
GAAACTCAGGAAATTGCTCTGACAATGTTTTAACTGCTCTCAATTTAAGAAAATGACGAAATGTATAAAAAAGAC
AAAAATAACGTGTGCTGTTTTTTCCAAGTGCTTTTTCTAAGTGCTTTTCCATTGTGCAATGAGGTGAAGTTTGGT
AATTTTTCGGTGTAGTAGTTAAATATTGCTCAATTTTTATTTACATGTAAAGAAAACAGATTTAAATGTTTATGT
GGCCAAAAGGTGTCATTTAAAAGGTAAAATAAGTTTATGTAGAATGTATGTTCATGGTGCTTATTTTTAAAATGT
AATTCAAGTTTACAGTATTACTTAATGCTTCTTTACAGAATTTAATAGAGAAACAAGGCTAGAACACATCTACAT
CCTGAAGAGCCGTTTATAACTTCATATTATATGATGACAAAGTTCATTATTTTCCTTAAAGTTGAGCAATTGACT
TTTATGGTCCAATGATGAACTTATTATTAATAAATGATTGAGTTAACTGTGAGGCTTCTCATTAAAATACAATAT
TGCAGCTATCAGTTGGAGAATATATTATAAAATTTTCAGACAGTATATCAGAAAAATGTTTTTATTTGTACTGTA
TAGAAAATGTAATTTTGCTGTTAACTCTGTACTTTTTAAATTGAAAATGTTTTATAAATTTGCTTTTAAATTTTC
TTATGAAGCCATTTGCAAATTACATACTTAATTTAATAAAATACTTTAGCCACAAAAAAATTACATTTTCTATAC
AGTACAAATAAAAACATTTTTCTGATATACTGCCTGAAAATTTTATAATATATTCTCCAACTGATAGCTGCAATA
TTGTATTTTAATGAGAAGCCTCACAGTTAACTCAATCATTTATTAATAATAAGTTCATCATTGGACCATAAAAGT
CAATTGCTCAACTTTAAGGAAAATAATGAACTTTGTCATCATATAATATGAAGTTATAAACGGCTCTTCAGGATG
TAGATGTGTTCTAGCCTTGTTTCTCTATTAAATTCTGTGTCGACG

FIGURE 5054

YFGYNHKKNPYNLKYFHFYFEKEPTFSKEAVINFCCLVS

FIGURE 5055

AGCCGCCGCCTCGCCGCTTCCCCTCGTCGGAGCGGCCGCTCGTCCGCCCGGCTTGAGGCCCGCGGGGAGCGCGGC
GCAATTCGTCGGCCCGCGGGGGGGCGGCCTCCCGGCATCTTCGCGGCGACCAAGGACTACCAGGAAGGGGAGCGG
CTGGGATGGCGCGTCCGCGGCCCCGCGAGTACAAAGCGGGCGACCTGGTCTTCGCCAAGATGAAGGGCTACCCGC
ACTGGCCGGCCCGGATTGATGAACTCCCAGAGGGCGCTGTGAAGCCTCCAGCAAACAAGTATCCTATCTTCTTTT
TTGGCACCCATGAAACTGCATTTCTAGGTCCCAAAGACCTTTTTCCATATAAGGAGTACAAAGACAAGTTTGGAA
AGTCAAACAAACGGAAAGGATTTAACGAAGGATTGTGGGAAATAGAAAATAACCCAGGAGTAAAGTTTACTGGCT
ACCAGGCAATTCAGCAACAGAGCTCTTCAGAAACTGAGGGAGAAGGTGGAAATACTGCAGATGCAAGCAGTGAGG
AAGAAGGTGATAGAGTAGAAGAAGATGGAAAAGGCAAAAGAAAGAATGAAAAAGCAGGCTCAAAACGGAAAAAGT
CATATACTTCAAAGAAATCCTCTAAACAGTCCCGGAAATCTCCAGGAGATGAAGATGACAAAGACTGCAAAGAAG
AGGAAAACAAAAGCAGCTCTGAGGGTGGAGATGCGGGCAACGACACAAGAAACACAACTTCAGACTTGCAGAAAA
CCAGTGAAGGGACCTAACTACCATAATGAATGCTGCATATTAAGAGAAACCACAAGAAGGTTATATGTTTGGTTG
TCTAATATTCTTGGATTTGATATGAACCAACACATAGTCCTTGTTGTCATTGACAGAACCCCAGTTTGTATGTAC
ATTATTCATATTCCTCTCTGTTGTGTTTCGGGGGGAAAAGACATTTTAGCCTTTTTTAAAAGTTACTGATTTAAT
TTCATGTTATTTGGTTGCATGAAGTTGCCCTTAACCACTAAGGATTATCAAGATTTTTGCGCAGACTTATACATG
TCTAGGATCCTTTTATCAAGGCAGTTATGATCATCGTTTTCCTGCCTTGACCCCACCATCATCAAACACTCAGTT
AAATATAAATTAACATTTTTTAGATGACCACTCAACATAATGCTTAAGAATGGAATTTCCTCTCTGTGACAGAAC
CCAGGAATTAATTCCTAAATACATAACGTTGGTATATTGAAGACGAAATTAAAATTGTCCTTCAGTTTTGAGGCC
ATGTGTAAAGTTTAACCATATTGTAAAATATCTATTCCGTATTAGAAATAGCTAGTTGACAGCTTATACTTCTCA
AAATTCATATTGTTATGTACACAAACTAAGTTTCTATATGTGAAGTTAGTGAGTCTTTTTGTGTTACTCCAAAAT
AAAGGCAATGATTTATTTTTTTCCCAGTGCCAATACAATTTTGAGCTAAGCACTCAAGGTGGATACTTTACATTT
TAAAGCTGGAATCAGCAACAGCCCTATGGGAAACCAGACAAAGCATTGACTTTTAAATGTAGACTTTTAAAATAA
ACTGTTTTCTTTTGGAACTACAATTAGAATAGTTAATATTCATCCTTAAACCATTATTATGTGTACATTATTGTT
GCTATTGTGATAATAGAGAATTTTATTTATTTTTATGCCAGCTTATATTGTGAGAACACATTTAGTCAGTTTGGG
TTTTATCAATCCTGTTAATGCTTGTCCTTGGAACATCTTTCGCGTATTCACGGTTTGTAGTTGAAAAGTTTACTG
TAAAAAAATCAAAAACAAAAAAATGTATTGTTTTTACAGAATAAATTTATTGGGATGTGTACTGGGAGTAAGATT
TGAGGTTGTAAGCAAACTAAGTTAGTGTAATTTGGCTTCATATATGTAACGTGAGGTATTAATGTAATTCATATA
TTAAAGCAAAAATTGTTCGCAGC

FIGURE 5056

MARPRPREYKAGDLVFAKMKGYPHWPARIDELPEGAVKPPANKYPIFFFGTHETAFLGPKDLFPYKEYKDKFGKS
NKRKGFNEGLWEIENNPGVKFTGYQAIQQQSSSETEGEGGNTADASSEEEGDRVEEDGKGKRKNEKAGSKRKKSY
TSKKSSKQSRKSPGDEDDKDCKEEENKSSSEGGDAGNDTRNTTSDLQKTSEGT

FIGURE 5057

CTTTATGGCGTGGGAGAGGCCACAGCCCGGACTCCATCGACTCCCCCGGCTCTTAGACTAAAATCATGCCCAAGT
TCAAACAACGAAGACGAAAGCTAAAAGCCAAAGCCGAAAGATTATTCAAAAAAAAAGAAGCCTCTCACTTTCAGT
CCAAGCTAATTACACCTCCTCCTCCACCACCCTCACCAGAAAGAGTCGGTATTTCTTCAATAGATATATCTCAAA
GCAGAAGCTGGCTAACATCATCCTGGAACTTCAATTTTCCTAACATCAGAGATGCAATAAAACTTTGGACAAATA
GAGTATGGTCTATATACAGCTGGTGCCAGAACTGCATAACCCAGAGTTTAGAAGTATTGAAAGACACCATCTTTC
CATCTCGTATCTGCCACCGAGAACTTTACAGTGTAAAACAACAGTTTTGCATTTTGGAAAGTAAATTATGCAAGC
TTCAGGAAGCACTGAAGACCATCTCAGAAAGTTCTTCCTGTCCAAGCTGTGGTCAAACATGTCACATGAGTGGTA
AACTTACAAATGTGCCTGCCTGCGTTCTGATCACCCCTGGAGACTCCAAAGCTGTGCTTCCTCCCACACTGCCAC
AGCCAGCCAGCCATTTTCCTCCTCCTCCTCCACCTCCACCTCTGCCACCTCCTCCACCACCACTAGCACCTGTGT
TGCTCAGAAAACCCAGTCTCGCTAAAGCACTTCAGGCTGGACCATTAAAAAAAGATGGACCCATGCAGATAACAG
TTAAAGATCTGCTGACTGTAAAATTAAAGAAGACACAGAGTTTAGATGAAAAGAGGAAGCTTATACCATCGCCGA
AAGCACGGAATCCACTAGTTACCGTCTCTGACTTGCAGCATGTTACCCTGAAACCTAACTCCAAAGTGTTATCGA
CTCGAGTTACAAACGTCTTAATCACTCCTGGAAAAAGTCAGATGGATCTGCGGAAACTGCTTAGAAAAGTCGATG
TAGAGAGGAGGCCAGGTGGAACCCCTCTTACCAATAAGGAAAATATGGAAACAGGAACAGGACTGACTCCAGTGA
TGACGCAGGCCTTAAGGAGAAAGTTTCAGCTGGCTCACCCTAGAAGCCCAACTCCAACTCTGCCACTTTCTACAA
GCAGCTTTGATGAACAAAACTGATGCCAACTCTGCCTCACTCCATGAGATGATCCATAACAAATACAGATAAAAA
CACCCAGCTGGGTGCAGTGGCTCGCACCTGTAATCCCAGCACTTTGGGAGGCTGAGGCAGGTGGATCACCTGAGG
TCGGGAGTTTGAGACCAGCCTGGCCAACATGGTGAAATCCCATCTCTACTGAAAATACAGAATTGGCCGGGTGTG
GTGTCACGCGCCTGTGGTCCCAGTTACTTGAACCTGGGAGGCGGAGGTTGCAGTGAGCCGAGATTGCAACACTGC
CACTCCAGCCTGGGTGACAGAGCAAGAGACCCTGTCTCAAAAAAAAAAAAAAAAAAAATTAAATGGGTAGTGACGT
TAAGAGATATATATCAGCTTCTAGTAAAAGTTTTTTTTTTTAAACCTGCTAGCTACATTTACATTATGTAAAAAT
AAATGGAATAATCACTGAGAATAAAGCAGTTGAGTATTTATAACAATAATATTTTATGGGGCGCTTATAATGTTT
ATAATATTGTAAACCACTGTGTACTCTATTCATTTAATGCTAAATGACTTGACCATTCTTGTGGGATAAGAGATC
ATTAAAAAAAATGCTAGGGCCGGGCACCATGGCTCACGCCTGTAATCCCAGGACTTTAGGAGGCCAAGGCAGGTGG
ATGACTTGAGCTCAGGAGTTTGAGACCAGCCTGGGCAACATGATGAAAACTCCGTCTCTACCAAAAATCAAAAAA
ATTAGCCAGGTGTGATGTTGTGCGCCTGTAGTCCCAGCTACTTGTGAGGCTGAGGTGGGAGGATGGTTTGGGCCC
CGGAGGTAGAGGTTGCAGTGAGCTGAGATTGTGCCACTGTATTCCATCCTGGGCAACAGAGCCAGACCCTGCCTC
AAAAAAAAAAAAAAAAAAAAAAAAGGCCTGGCTTTGCTACATAATGAGGCCAGGCNAAAAAAAAAAAAGTCCTGTGG
AAATCATATAGACAAACATTTGCAAAGCTGCTACTGCCATTGTACCAGTGTTAAANTGTGTTCTACCTTGCATCT
TTTACTGATTTTTATGACAGATTTTATATTGTAACCATTNGAGAACTCTGTAAGTGCTATGGCTTCCTTAAACTA
CGATTTATCATATGCTCCCNGTGTTTACTTTGAGACTGAATGGCAACCAGAGAATGTAAACAACCAAGGTGCATC
TGGTTATGTTTGCACAGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCTGAGGCGGGCAAAACACTTGAGG
TCAGACGTTTGAGACCAGCCTGGCCAACATGGTGAAACCCCGTCTCTACCAAAAATAAAAATAAAAATTATCCAG
GCGTGGTGGCATGTGCCTATAGCCCCAGCTACTCAGGAAGCTAGAGCACGAGAATTATGTGCATCCTGGAGGTGA
AGGTTGCAGTGAGCCAAGATCACACCACTCCACTCCAGTCTGGACAACAGAGTGAGACCCTGTGTC

FIGURE 5058

MPKFKQRRRKLKAKAERLFKKKEASHFQSKLITPPPPPPSPERVGISSIDISQSRSWLTSSWNFNFPNIRDAIKL
WTNRVWSIYSWCQNCITQSLEVLKDTIFPSRICHRELYSVKQQFCILESKLCKLQEALKTISESSSCPSCGQTCH
MSGKLTNVPACVLITPGDSKAVLPPTLPQPASHFPPPPPPPPLPPPPPPLAPVLLRKPSLAKALQAGPLKKDGPM
QITVKDLLTVKLKKTQSLDEKRKLIPSPKARNPLVTVSDLQHVTLKPNSKVLSTRVTNVLITPGKSQMDLRKLLR
KVDVERRPGGTPLTNKENMETGTGLTPVMTQALRRKFQLAHPRSPTPTLPLSTSSFDEQN

FIGURE 5059

GGACGTGACTGGGAGGAGCCTGCCCGCCCCGGCTCGCTGCGCCGCGCGCACAGGGCCCGCGCCAGCGACCATGGC
GGAGCCCACAGTGTGCTCCTTCCTCACCAAGGTGCTGTGCGCCCACGGCGGCCGCATGTTCCTGAAGGACCTGCG
CGGCCACGTGGAGCTGTCGGAGGCCAGGCTCCGGGACGTGCTGCAGCGCGCCGGGCCCGAGCGTTTCCTGCTGCA
GGAGGTGGAGACGCAGGAGGGCCTCGGGGACGCGGAGGCCGAGGCGGCGGCCGGCGCGGTGGGCGGTGGCGGCAC
CTCCGCCTGGAGGGTGGTGGCCGTGTCCGGGACTATAGGTGCATGCCACCATACTCAGCTAATCTTTTTAGGTTT
TTAGTAGAGACAAGGTCTCACTATGTTGCCCAGGCTGGTCTTGAACTCCTAAGCTCAAGCAGTCCTCCCGCCTTG
GCCTCTGAATGTGCTGGGATTACAGGCATGAGCCACTATGCCTAACCATATTTTTTCCAATATTAAAAAATCTTT
TTTTCCCCCTAAGGAATGTGTTATATAAGGTCAACATGTTTTTAGTGCTTCAGTTTGACTTGTCTACATCTAAAG
TTAACTCTTTAAGGCTTACATTTATGATTATAATTCTTTCCATCGAGGGATTTAGTCTCCATTATTGTCATGTTT
CTTGATTTTTTTCATTATACTTGGTTCTTCTTTTTGTCTAGGTTTTATATATACCTTAATTAATTCTTTCTTGGC
TGTTTTATATCTATGTTGCTGTCAGCATGGGAATCTCTATTATTAGAAAGCTATTAACTTTTAAAATATGTATCT
TTTGGTGATTTTCTTTGTTCTAACAGTTTTAGATGGCCTGTTTGCTCTTTCTAAATATAAAATCATAGGTATTTC
TATTTTGTTTTTGTGTTTCATAAAATTGTAATAAGTTTTTTTGATATTTTTTCATTACATATGAAGTTAATTGTT
GGTTTTAAACAAATGTTCTTTGTTAGGATAACAGAAATAACATCTTCTATTCTTGTTTGTTGGAAGCTAAAAGCT
TGATAAAAGGAATTGGTGTCTTTTGATACAATCAAATTTTTATCACTTAAATTGCCTAATATGATTATAATAAGG
GTTTTTGTAATATTAAAACATCCTTAAATTCCTGAGATAAAACTCTACCTGGTTATAGTATATGTTCTTTTAATG
TATTATCTTTCCTATTTGCTGTACATCTATACATTCATAAATAAAATTCATTTATATTTTAGAAAAAAAAAAAAA
AAAAAAAAAAAAAAAA

FIGURE 5060

MAEPTVCSFLTKVLCAHGGRMFLKDLRGHVELSEARLRDVLQRAGPERFLLQEVETQEGLGDAEAEAAAGAVGGG
GTSAWRVVAVSGTIGACHHTQLIFLGF

FIGURE 5061

GCTGAGTGCAGTTCACAGCAGTCATCATGAAATTGGAGTTAATGACTCTAATTTATTCTCTTTGGAAATGCGAGA
GCCCCTTGAGTCAAGTAATACAAAATCCTTCCACAGTGCAGTGGAAATTAAAAATAGGTCCCAGCATGAGCTACC
ATGTTTTCAGCATCATGGTATAGATACCCCAACTAGCCTTCAGAAGAGATCTGCATGTGTCCACCTTCGTTACTC
AGACTTGAAGAGACAGCCAGCAGTTCCCAGGATGGTGACCCTCAAATTGGGATGATCTGCCATTCTCTGAAAGCC
TGAACAAGTTTCTGGCAGTTCTTGAAAGTGAGATTGCTGTAACCCAGGCAGATGTCAGTAGTAGGAAACATCATG
TAGATAATGACATTGATAAATTTCATGCAGACCACAGCAGGTTATCTGTGACTCCCCAGAGAACTACTGGAGCCC
TGCATACACCACCTATAGCTTTAAGATCATCACAAGTAATAGTCAAAGCAAACTGTAGCAAAGATGACTTCCTTT
TCAACTGTAAAGGAAATCTAAGTCCTAGTGTTGAAAAGGAGTCACAACCAGATAACAAAGTAGAGGCTGTCTCTG
TAAATCATAATGGAAGAGATATGTCAGAATATTTTTTACCGAATCCTTACCTGTCAGCTCTGTCTTCATCTTCAA
AAGATTTAGAAACAATAGTTACTCTTAAGAAGACTATCAGAATCTCACCACACAGGGAGAGTGACCATTCTAGTC
TAAATAACAAATATTTGAATGGATGTGGAGAAATATCAGTTTCAGAAATGAATGAAAAGTTGACAACTCTGTGTT
ATAGGAAGTATAATGATGTCTCTGATCTTTGCAAATTAGAAAATAAACAATATTGTAGGTGGTCCAAGAACCAAG
ATGACAGTTTTACAATTTGCAGGAAACTTACATATCCTTTAGAAACTCTTTGCAATAGTCCAAATAGAAGTACAA
ATACATTGAAAGAAATGCCTTGGGGACATATCAATAACAACGTAACACAGAGCTATTCTATTGGTTATGAAGGTA
GCTATGATGCCTCTGCTGATCTCTTTGATGATATTGCTAAAGAAATGGACATTGCAACTGAGATTACCAAAAAAT
CACAGGATATTTTGTTAAAATGGGGAACATCTTTGGCAGAAAGTCACCCTTCAGAGTCTGATTTTTCACTGAGAT
CACTTTCTGAAGACTTCATCCAGCCTTCACAAAAATTATCCTTGCAAAGCCTATCTGACTCTAGGCATTCAAGAA
CATGCTCTCCAACACCTCATTTTCAATCAGATTCAGAATATAATTTTGAAAATAGTCAAGACTTTGTTCCATGTT
CACAGTCAACTCCAATTTCAGGGTTCCACCAAACAAGAATTCATGGGATAAACAGAGCTTTCAAAAAACCTGTAT
TTTATTCAGATCTTGATGGTAACTATGAAAAAATAAGGATTTTCCCTGAAAATGACAAACAGCAAGCCAGCCCAA
GCTGTCCAAAAAATATAAAAACACCTAGCCAGAAAATCAGAAGCCCTATTGTATCTGGTGTTTCACAACCAGACG
TTTTCAATCACTACCCTTTTGCTGAGTGCCATGAAACTGATAGTGATGAATGGGTCCCTCCTACCACACAAAAAA
TATTTCCTTCAGATATGCTTGGATTCCAAGGCATAGGTCTAGGGAAATGCCTTGCTGCCTATCATTTCCCTGATC
AACAAGAGTTACCAAGAAAGAAACTGAAACATATTAGACAAGGAACCAATAAAGGTTTAATTAAGAAGAAATTAA
AGAATATGCTTGCAGCAGTTGTTACGAAAAAGAAAACTCATAAATATAACTGTAAAAGTTCAGGCTGGATTTCCA
AATGTCCAGACATTCAAGTCTTAGCAGCACCTCAGCTGCACCCTATTCTTGGACCTGATTCTTGTTCAGAAGTCA
AATGTTGCCTTCCATTTTCAGAAAAAGGCCCACCTTCAGTGTGTGAAACTCGAAGTGCTTGGTCACCTGAATTGT
TTTCA**TAA**AAAGTCACCTGAACCCAATTCCTGAACTTTTAAATCTGTTTGGAAATGTTTGCCTTCAGGGGTACGG
AAAGCATTCTTTACATTTTGAACACTTGGAGAGAAGCAAATTGAAAACAGGACTCTGCTGGGAGCTACTGTGCCT
TTTAAAATATAAAGCCATTGTTTTCCCCAGGGTTTTATCTAGAATACTATGATTAGGTAGTTGAGCACTTTATCT
TATACTGTTTATTGTACTTTAATAATATTGTTAAGATTGTTTTTGAAAGTATTAATGTTTGTTAAAATCACATAT
ACATCCAGAAATAAAGACTTTGCAAACCAAAAAAAANAAAAATGGAAAANGAAAAAAANANNNGAAA

FIGURE 5062

LSAVHSSHHEIGVNDSNLFSLEMREPLESSNTKSFHSAVEIKNRSQHELPCFQHHGIDTPTSLQKRSACVHLRYS
DLKRQPAVPRMVPSNWDDLPFSESLNKFLAVLESEIAVTQADVSSRKHHVDNDIDKFHADHSRLSVTPQRTTGAL
HTPPIALRSSQVIVKANCSKDDFLFNCKGNLSPSVEKESQPDNKVEAVSVNHNGRDMSEYFLPNPYLSALSSSSK
DLETIVTLKKTIRISPHRESDHSSLNNKYLNGCGEISVSEMNEKLTTLCYRKYNDVSDLCKLENKQYCRWSKNQD
DSFTICRKLTYPLETLCNSPNRSTNTLKEMPWGHINNNVTQSYSIGYEGSYDASADLFDDIAKEMDIATEITKKS
QDILLKWGTSLAESHPSESDFSLRSLSEDFIQPSQKISLQSLSDSRHSRTCSPTPHFQSDSEYNFENSQDFVPCS
QSTPISGFHQTRIHGINRAFKKPVFYSDLDGNYEKIRIFPENDKQQASPSCPKNIKTPSQKIRSPIVSGVSQPDV
FNHYPFAECHETDSDEWVPPTTQKIFPSDMLGFQGIGLGKCLAAYHFPDQQELPRKKLKHIRQGTNKGLIKKKLK
NMLAAVVTKKKTHKYNCKSSGWISKCPDIQVLAAPQLHPILGPDSCSEVKCCLPFSEKGPPSVCETRSAWSPELF
S

FIGURE 5063A

GTCCCATACTGTTTTCATTGACTACCAAGAAAAGGAAAGAACAGACAGACCTAACTTTGAACTATCCCAAAGGAA
AAGCCTAGGAACACCAACAGTGATATGTACTCCTACTGAGGAGAGTGTTTTCTTTCCAGGAAATGGTGAAAGTGA
CCGTCTAGTAGCAAATGACAGCCAGCTAACCCCTCTGGAGGAATGGTCTAATAATAGGGGCCCTGTAGAGGTAGC
TGATAACATGGAATTGTCTAAATCAGCCACTTGCAAAAACATCAAAGATGTACAAAGTCCTGGATTTCTGAATGA
ACCTCTATCAAGCAAAAGTCAGAGAAGAAAAAGCCTTAAGCTAAAAAATGACAAGACCATTGTATTTTCAGAGAA
TCATAAAAATGATATGGATATTACCCAGAGTTGTATGGTGGAAATAGATAACGAAAGTGCCCTGGAGGATAAAGA
GGACTTCCATTTGGCAGGGGCTTCTAAAACTATTTTGTATTCATGTGGGCAGGATGACATGGAGATCACTAGGAG
TCACACAACTGCCTTAGAATGTAAAACTCTCCTGCCAAACGAAATAGCTATTAGGCCCATGGACAAAACCGTATT
GTTCACAGATAATTACAGTGATCTGGAAGTCACCGATTCCCATACTGTTTTCATTGACTGTCAAGCCACAGAGAA
AATACTTGAAGAAAACCCTAAATTTGGAATAGGAAAAGGAAAAAACTTGGGTGTTTCCTTTCCTAAGGATAATAG
CTGTGTTCAAGAAATCGCTGAAAAACAAGCACTGGCTGTAGGAAACAAAATAGTTCTTCACACCGAGCAAAAGCA
ACAACTCTTTGCTGCTACTAATAGAACTACTAATGAAATCATCAAATTTCATAGTGCTGCTATGGATGAAAAGGT
CATAGGGAAAGTTGTAGACCAGGCCTGTACATTGGAAAAAGCGCAAGTTGAAAGCTGTCAGTTAAATAATAGAGA
TAGAAGAAATGTGGACTTTACAAGTAGTCATGCAACTGCTGTTTGTGGATCCAGTGATAATTATTCCTGTTTACC
AAATGTTATTTCCTGTACTGATAATTTGGAGGGTAGTGCCATGCTCTTATGTGATAAAGATGAGGAAAAAGCCAA
TTATTGCCCAGTGCAAAATGATCTTGCTTATGCAAATGATTTTGCCAGTGAATATTACTTGGAATCTGAGGGACA
GCCTCTCTCTGCTCCTTGTCCTTTGTTAGAGAAGGAAGAAGTTATTCAAACCAGTACCAAAGGACAGTTAGACTG
TGTTATAACACTGCACAAAGATCAAGATCTGATTAAGGATCCACGAAATCTATTGGCTAATCAAACTTTAGTATA
TAGTCAAGATCTGGGGGAGATGACTAAACTTAATTCAAAGCGAGTATCTTTTAAGCTTCCAAAGGATCAAATGAA
AGTCTATGTTGATGACATTTATGTTATTCCTCAGCCTCATTTCTCAACCGACCAACCTCCATTACCTAAAAAAGG
ACAGAGTAGTATCAATAAAGAAGAAGTAATACTGTCTAAAGCTGGAAATAAGAGTTTAAATATTATAGAAAATTC
CTCTGCACCCATATGTGAAAACAAGCCCAAAATACTCAATAGTGAGGAATGGTTTGCTGCAGCCTGTAAAAAAGA
ACTGAAGGAAAATATTCAAACAACTAACTATAATACAGCTCTAGATTTCCACAGTAACTCAGACGTAACTAAGCA
AGTCATTCAAACTCATGTCAATGCTGGAGAAGCACCAGATCCTGTAATTACATCTAATGTTCCATGTTTTCATAG
TATCAAACCAAATCTGAATAATTTGAATGGAAAAACTGGAGAGTTTTTAGCCTTTCAAACTGTTCATCTACCACC
CCTTCCAGAGCAATTACTTGAATTAGGAAATAAGGCACACAATGATATGCATATAGTGCAAGCTACAGAAATACA
TAATATTAACATAATCTCCAGCAATGCTAAAGATAGTAGAGATGAGGAAAATAAAAAGTCTCATAATGGAGCTGA
AACCACCTCTCTACCGCCAAAGACAGTTTTTAAAGATAAAGTAAGGAGATGTTCTTTGGGAATCTTTTTGCCTAG
ATTGCCCAACAAGAGAAATTGTAGTGTCACTGGTATTGATGACCTGGAACAGATTCCAGCAGACACAACTGATAT
AAATCACTTAGAAACTCAGCCGGTCTCTAGCAAAGATTCAGGCATTGGATCTGTTGCAGGTAAACTGAACCTAAG
TCCTTCTCAATATATAAATGAGGAAAATCTTCCTGTATATCCTGATGAGATCAATTCTTCAGACTCTATTAACAT
AGAAACTGAGGAAAAGGCCTTGATTGAGACATACCAAAAAGAGATTTCACCATATGAAAATAAAATGGGAAAAAC
TTGCAATAGCCAAAAAAGAACGTGGGTACAAGAAGAAGAAGATATTCATAAGGAGAAAAAAATCAGAAAAAATGA
GATTAAGTTTAGTGATACGACACAAGATCGGGAGATTTTTGATCACCATACTGAAGAGGATATAGATAAAAGTGC
TAACAGTGTATTGATAAAAAACCTGAGCAGGACCCCATCTAGTTGCAGCAGCTCTCTGGATTCAATCAAGGCTGA
TGGGACCTCTCTGGACTTCAGCACTTACCGCAGTAGTCAAATGGAATCACAGTTTCTCAGAGATACTATTTGTGA
AGAGAGCTTGAGGGAGAAACTCCAAGATGGGAGAATAACAATAAGGGAGTTCTTTATACTTCTCCAGGTCCACAT
CTTGATACAGAAACCCCGACAGAGCAATCTCCCAGGCAATTTTACTGTAAACACACCACCTACTCCAGAAGACCT
GATGTTAAGTCAATATGTTTACCGACCCAAGATACAGATTTATAGAGAAGATTGTGAGGCTCGTCGCCAAAAGAT
TGAAGAATTAAAGCTTTCTGCATCGAACCAAGATAAGCTGTTGGTTGATATAAATAAGAACCTGTGGGAAAAAAT
GAGACACTGCTCTGACAAAGAGCTGAAGGCCTTTGGAATTTATCTTAACAAAATAAAGTCATGTTTTACCAAGAT
GACTAAAGTCTTCACTCACCAAGGAAAAGTGGCTCTGTATGGCAAGCTGGTGCAGTCAGCTCAGAATGAGAGGGA
GAAACTTCAAATAAAGATAGATGAGATGGATAAAATACTTAAGAAGATCGATAACTGCCTCACTGAGATGGAAAC
AGAAACTAAGAATTTGGAGGATGAAGAGAAAAACAATCCTGTGGAAGAATGGGATTCTGAAATGAGAGCTGCAGA
AAAAGAATTGGAACAGCTGAAAACTGAAGAAGAGGAGCTTCAAAGAAATCTCTTAGAACTGGAGGTACAAAAAGA
GCAGACCCTTGCTCAAATAGACTTTATGCAAAAACAAAGAAATAGAACTGAAGAGCTACTGGATCAGTTGAGCTT
GTCTGAGTGGGATGTCGTTGAGTGGAGTGATGATCAAGCTGTATTCACCTTTGTTTATGACACGATACAACTCAC
CATCACCTTTGAAGAGTCAGTTGTTGGTTTCCCTTTCCTGGACAAGCGTTATAGGAAGATTGTTGATGTCAATTT

FIGURE 5063B

TCAATCTCTGTTAGATGAGGATCAAGCTCCTCCTTCCTCCCTTTTAGTTCATAAGCTTATTTTCCAGTACGTTGA
AGAAAAGGAATCCTGGAAGAAGACATGTACAACCCAGCATCAGTTACCCAAGATGCTTGAAGAATTCTCACTGGT
AGTGCACCATTGCAGACTCCTTGGAGAGGAGATTGAGTATTTAAAGAGATGGGGACCAAATTATAACCTAATGAA
CATAGATATTAATAATAATGAATTGAGACTTTTATTCTCTAGCTCCGCAGCATTTGCAAAGTTTGAAATAACTTT
GTTTCTCTCAGCCTATTATCCATCTGTACCATTACCTTCCACCATTCAGAATCACGTTGGGAACACTAGCCAAGA
TGATATTGCTACCATTCTATCTAAAGTGCCACTGGAGAACAACTACCTGAAGAATGTAGTCAAGCAAATTTACCA
AGATCTGTTTCAGGACTGCCATTTCTACCACTAGACCCTTGGACCACCATTGGAACAACCAAGCAGAATGTACTT
GATATTATTTCAGGGTCCCATTGCTGTTCAGCCTTTGTTTTTACGTCATTACAAGCTGAGTAAAATTCCTTCTGA
TGATGTTATAGTTAATCTGTATGTTTTTTATATCTCTGCAGAATGATGGTGATGAAGTCTGGATGGTAGGCCTCA
TAGCCTACTATCAACTTACTCATCTTTGTACCAAAGGTTTAAGTAATAGGACACTTAGGAAAAATGTCTCCTAAC
TAAACTAGTGCTTTCTGCTTTAGTACAAGCCCTAAGGATTAACTTAAGTATAAGAAGTGTTATCACTGACAAGAA
CATTAGCCATTTTCCCATAACTAGATAGAGCTATGATTTTTTAGGTTGCCTGGCTTCTGCCTAGCAGATATTTCT
GGAGTAGAAATGTATCTGTCTACAAACTATTATCCTTTTTCTCCGTTACTAAAATGCTATTAAGAGAAAGTAGGG
CTGGGTGTGAGCCACCACACCCAGCAATGTTTTCTTAATAAGTATAGTTTTTCTAGGGAAAGTTAATTCATTTTT
GTCTAGTACATATATGTAAATATATTAATGTTGTTTTTGTGTTTGTGATGTAGTAAGGAGATGTACATAGAAATT
CATTGAGGTATATAGATACTCATCTGTCTAGGCAGTTCCCAATTTTCTGAAGAATGTTTTACAGCAAAATTTTCT
ATTTTCTTTTATTAAATAGTGACACGTCAAACAATGTCACATCCAAAACACTAGTTTCATCAATTTCTAGCAGTA
ATAATAGACTTGCTGTAAGTATTGTTTTCTGATGCCATACCCTTGTCATACATATTATTAAATGACCAATATTAT
GTATGAAGTAGACAAAAAAATTTACTCAAACTTCATTCAAATCCTAATTGTGATAATTTTTGTTTTATATTTAAT
TATAAACCAAAATACATTTGCATTTTTAAGCTAATTTGTCTCAAAATTTTGCTTTATATTTTTGGATCAGGTTAA
AGTCCTGTGGATCCCCTGAATGTTATTGTCCCTCTTGATTGGTTTTTACTTCTGAGCTATACGTCAAAAGACACA
TAAGCTTCAAAAGTCAAGACAAACCTCATTTGCCATAAAAATCAAGATATAGATGTTCTGTTCCGTAAACTCCTT
GAAAAACATTTTAAAGTCATCAATATGATCTGTTTCCCATGAAACTTAAGTTAGCTTTCTTATTGGAGTTATTTC
TTTTCTGTAAGTCTGAAAAGTAGAGATTTTGTTTTACGCATTTTAGTAACCTGCAACAACCAACTCTAAAAAAGA
TTTGGCTTGTAATGACGGTCTCTGCTTTTTTGGGTTTGGAGTACACAATTGTAATATTTACTTAGTTATTTGTGT
TTTTCTTTGTTCAAGGTATTGACTAGTTTCATAAATTTTTTGCAAGTTTTTCTTTCATTGGTTGGAAAGCAGATT
ACATTTTGCACTATTAAAATAAGTTTATTACTTT

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FIGURE 5064

GGAAGTGCTTTTGAATGAGGTACTGAGGGCCAAGGTGTTGGAAGTTCCTAATTCTTTCCTCGGTTAACTGTGAAA
CTCTGCGTATTGGGAAGGCCTGGCCTCAGTCATCAGGCCAGGAGAGGTACTGGACGCCGCGCACGCACTCGTCTG
CCAGCGAGGCCCAAAGGGGAAGCCTAGCGGAGCTCAGTGTGGCAGCTGCTGGCCTCTGGGCCGCTACTTGTCAAT
ACCATGCTTTCCTGTAATATTTGTGGTGAAACAGTAACCTCAGAACCAGACATGAAAGCTCACCTAATTGTTCAC
ATGGAAAGTGAAATTATATGTCCATTTTGCAAGTTGTCAGGTGTGAATTATGATGAAATGTGTTTTCATATCGAA
ACAGCTCATTTTGAGCAGAATACACTTGAAAGAAACTTTGAGAGGATAAATACAGTACAATATGGAACTTCAGAT
AACAAGAAAGACAACACCCTACAGTGTGGAATGGAAGTTAATTCAAGTATTCTTTCAGGTTGTGCATCTAATCAT
CCAAAAAATTCAGCTCAAAACCTGACTAAAGATAGTACTTTAAAACATGAAGGCTTCTATTCAGAGAACTTAACT
GAATCTAGAAAATTCCTGAAAAGTAGGGAAAAACAGTCCAGCCTGACCGAAATAAAAGGATCTGTTTATGAAACA
ACATACAGTCCTCCTGAATGTCCATTCTGTGGAAAAATAGAGGAGCACAGTGAAGATATGGAAACTCATGTGAAA
ACAAAGCATGCCAATCTTTTAGACATTCCATTGGAAGACTGTGATCAACCACTCTATGATTGTCCTATGTGTGGG
CTCATATGTACAAATTACCATATTCTTCAGGAACATGTTGACTTGCATTTGGAAGAAAACAGCTTTCAGCAAGGC
ATGGATAGAGTCCAGTGTTCTGGTGATCTACAATTGGCTCACCAGCTTCAGCAAGAAGAAGACAGAAAGAGGAGA
TCTGAAGAATCAAGACAAGAAATAGAAGAATTTCAGAAGCTGCAGAGACAATATGGTTTAGATAATTCTGGAGGA
TACAAACAACAACAACTACGAAATATGGAGATAGAAGTAAATAGGGGAAGAATGCCTCCATCTGAATTTCATAGG
AGAAAAGCTGATATGATGGAATCATTAGCTCTTGGTTTTGACGATGGAAAAACAAAAACTTCCGGAATTATTGAA
GCACTTCATAGGTATTATCAGAATGCTGCCACAGATGTGAGACGGGTGTGGCTTTCTTCAGTGGTGGATCACTTT
CATTCATCTTTAGGCGACAAAGGTTGGGGTTGTGGTTACAGAAATTTCCAAATGCTACTTTCATCATTATTACAA
AATGATGCTTACAACGATTGCTTAAAAGGTATGTTGATTCCTTGCATTCCAAAAATTCAATCTATGATTGAAGAT
GCATGGAAGGAAGGTTTTGATCCTCAGGGGGCCTCTCAACTTAATAACAGGTTACAGGGAACAAAGGCCTGGATT
GGAGCATGTGAAGTATATATACTCCTGACCTCCCTAAGGGTAAAGTGTCATATTGTTGATTTTCACAAATCAACT
GGTCCTTTGGGTACACACCCTCGCTTATTTGAATGGATATTGAACTATTATTCTTCAGAGGGAGAAGGGAGTCCA
AAGGTAGTGTGTACATCTAAACCTCCTATCTATCTTCAGCATCAAGGTCACAGTCGAACTGTTATTGGAATTGAA
GAGAAAAAAAACCGAACATTATGCTTACTAATACTTGATCCTGGATGTCCTTCTCGAGAAATGCAGAAATTATTA
AAGCAAGACATAGAGGCTAGCAGTCTCAAGCAACTTCGGAAATCTATGGGAAATTTAAAACATAAGCAATACCAG
ATATTGGCAGTAGAGGGTGCTCTTTCTCTAGAGGAGAAACTTGCCAGGAGACAAGCTTCTCAAGTCTTTACAGCC
GAGAAGATTCCTTGAAGAATCAAGCATTTAAGCATTTCAGTGATTGAGAACAATACTTTGTTTTCTAAATGTAGA
TATTGAACTCCTTAATACAATTATGAATCTGTGAATTCTCTTAAGTCTTAACATATAATTTAATTTCTAAAATGC
CTGTGTTAATTGAATTATACCTATCATACTTCATTGTTTGGTAAATTATTTCAATAAAATGTCTTGTTTTTGCAT
TGTGAAAAAAAAAAAAAA

FIGURE 5065

MLSCNICGETVTSEPDMKAHLIVHMESEIICPFCKLSGVNYDEMCFHIETAHFEQNTLERNFERINTVQYGTSDN
KKDNTLQCGMEVNSSILSGCASNHPKNSAQNLTKDSTLKHEGFYSENLTESRKFLKSREKQSSLTEIKGSVYETT
YSPPECPFCGKIEEHSEDMETHVKTKHANLLDIPLEDCDQPLYDCPMCGLICTNYHILQEHVDLHLEENSFQQGM
DRVQCSGDLQLAHQLQQEEDRKRRSEESRQEIEEFQKLQRQYGLDNSGGYKQQQLRNMEIEVNRGRMPPSEFHRR
KADMMESLALGFDDGKTKTSGIIEALHRYYQNAATDVRRVWLSSVVDHFHSSLGDKGWGCGYRNFQMLLSSLLQN
DAYNDCLKGMLIPCIPKIQSMIEDAWKEGFDPQGASQLNNRLQGTKAWIGACEVYILLTSLRVKCHIVDFHKSTG
PLGTHPRLFEWILNYYSSEGEGSPKVVCTSKPPIYLQHQGHSRTVIGIEEKKNRTLCLLILDPGCPSREMQKLLK
QDIEASSLKQLRKSMGNLKHKQYQILAVEGALSLEEKLARRQASQVFTAEKIP

FIGURE 5066

ACATTTTCTATGTAGTAAACATGTATGTGTATGTGTGTGGGTGTGTGTCTAATTACTTTGTTGGACAGATTCCTG
TGGTTTGGAACTGCTGGGGCCAAGTTTATACAAAAATCTACATTTTTGAGTAAACTCCCCATGACTCTAGTAAGT
TTCCACAGTATTTGAGTATTCTTTATTTCCTAAAGCTGTACAAACATCAGATAATCAATATTTGTAAGGATCGAT
AATATAATTTATAATGAAATTGCTTTATCAGCTATTAATGTTAACTACATCATCTTCATATAGCCTTATAACTCA
TTTGTGCTATTCCATTTTCCTCTGTTCCTTTTATTTTCACTTCCCTTGTAATGTTAGTCTCTTTGTACTGATTTC
TGAAGAGTTCATTTATGATTAAACATGTTAACATTTTGTCTAGAATTGCAAATATGTTTTTTCTCATTCATTTTA
CTATGGTGTTTTATTTTTTGGTTATACAGAAGTTGTATATTGAAATATAATCTTGTTCTGTTTTATGACTTTGGA
GTTTTGTGGTTTTTTAAAACATGTTTACATTGGTATCATTTATTTGTATTGCCTTCTATTTCAGCAGTTAGTTTG
TCATTTCTTTTTCCATTAATCATCATTCTGGTGTTAATGAATGCATTAAATATTTAAAGTAAAAAAAAAAAAAAA
AAA

FIGURE 5067

MCMCVGVCLITLLDRFLWFGTAGAKFIQKSTFLSKLPMTLVSFHSI

FIGURE 5068

CTGAAAAGCGTCCGCGGGGCCGTCTGACAGGTCCGGGAAGAGGCCCCTGAGGGGCGGACGGGCGCGTCTCCACCG
TTTTCGCAGAGGGATACTGGTGAAGCGGGAGTGGTGTGCGGCCTCAGGTCCGGGCGGCACTGGGGTTAGGGACTG
CGGAGGGAAGTGGTGCGTGTTTTTTGTCCTGAGGGCCAGTAAATGACCTGCGACATAACTATTTGCAAAACAAAT
GGGGAAGACCAAGATAAAGATAAGTTATATCACAGGAAAGCAATTGAAAATGCAAAAATGAAGCATCTGAATGAA
GGACTAATAACACTGAATTCAGCTTTTGTGAATCTTATCTGCAGATATGTACAGACCACATCCTAAGATTGACTT
CTGCCTCAACAGAAATACATGAGCCAGTGCCTTATTGGAAATGATTTGCGTGTTTTAAGAACTGGTGTATATAGG
TACATCTTGAATGTTCTGCTTTCCTTGCCTTATGCCTGTACTTCACCTCAGCCTTCAATTCCATTGTGTTTCCTT
GCTACTTGGTATCTTGAAATCTGGTACGAAACTATTGCATGATCCCTGCACCTTTGCTTCTGCATATATCATAGC
TCTCTTATAGTGAGTGTGCACAATCTATTTCATTTGATGTAATCAAAGTTTAATATATTGGATAGTTAAAAATAA
AATACAACTTTAAATCCTAAAAGACTTGAGCAAGCTTAT

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FIGURE 5069

EKRPRGRLTGPGRGP

FIGURE 5070

CCCAAGAGAGATGGGCTGGTGGGTCACTGACATAAAGCAGTCCACAAGATCTATTTTAGAAAAGTATCAATGACA
TTTCCTTAGTTGGTTTGATTCTCTTGAGAATACATGAGTTTAAAAGAACTGAGGTCAAATTGCTTTATGTGGAAA
GCAATAAAAACAAGTATTTTTGACTTGCAAATTAGAGGTAACTGTAAGCAATTTTTGCTATTGAAGCCTATGGCC
CAAATTATTCCACCTGCAAAATAACTTTCACCCTTGCAAGGCTGATAGACGGCTCTTCATTGGTCTTTTTTTATG
GTTTTGTTTTGTTTTTTTAAGTCATTGGTCTTAAATCTGTATGGTGACAAATCTATTTGAGTTTGATTGAGACTT
TCTTGGACTCCTTTGGACAAGAGGTCAGAGCACAAAGGCTAGTCACCACTTCTTTGACTTCTTGAGGTATGAGCC
AAAATTTTACTTTTCCATTGATTTAAAGCAGAATTTTTGGAGATGCTGTGTTCTAGTTCCTGACGGAATCGGTGG
TGGTTGCTGACTTTGACACTTTGGAGAGTGATGTGGGGAGTTATATAGAAGGGGAAACACTAGTTTAGGTGTGAG
GAGTTCTAGTATGCCACAAATTAGCTGAGGCTTTAGACGAAGCACAATATTTGAGCATCAATCTTCTCATCTATG
AGATAGACCTGTCAGGATTATTGTGAAAATTAGATGAGATAAGTTGAAAGTACAGTGCTTGGTAAACAGTTAGCA
CTCAAATATTAGTTCTTTTTCACTTTAATTAAGAGCAGACTTTGAATGGTCTGATGCCAAGTGTAGATCCTTAAG
AGACAAAACAAAGAAACTTTCCTGGCTTCAAAGAAAAGAACTCCATTTCTGAAAGGGTGCCTTAAAAGGAATTCA
TTTGTCTGATCCATCCTTTTGCCTTTGGGCATTACTACTGTCACCCTCCATTTCTTTACAAACTTCAGGCAAGGT
GGTCTCTCTCTCTCTCCCAATAGGCAATTCCAGGGTTGTAAACTCATTATCAGGAAGCTTAATCTTAGAACTGAA
ATACCTCACAGAGCAATTTAAACCTCTTTCTTCTTGTTCCTATTCTTCATGGGAAGAAAACTGGGTTGATCCCTA
TCTTCTTTTTAAGGAGCCACATTTGCCATTTATTATTGCTCTTTTGCCTATTTAAAAAAAATAACAGTCAGAAAA
AATAATGATTATTAAAATGATAGTCATTATTTACTTAGTGAATGTCAGGATAGGTATTTATTACTCTTAGCTTCT
TATTGGTATCAGATGTAGATCACGGTCTTACTGTTGATTAACTCTTCAGTTATATATACATACTTTGATTCTTTA
GTTACATAATTGATAACAAAGTGTGCTTCTGAAGAATTATTCTGGCTGTATGGCTCTTGTTTCCTCCCCTTGGTA
AAAATGGAGGCATGAATCTCAGTTTTGTGATCTGCTTTTAATTTCATATATGACATTATTTGATATACATAATTA
CCAACATCCAAAAGCGTTTCTTCCCCTTTCTACGTGTGCACTAAATTCTAAAACAAAAATTGGAATACAAAATGC
CTAATAAAGAAAAAATTCATGTACAGAAAAGCAAAAGATAATCTACTTTGTTAAGATAATTTGTCACTAGCTGGT
TGAATAATGCACAGTTTTTGTTTAAGGTTACACATTTATGCCTGGATTAAATAACAATAGTAAAACTTGACAAGT
CTTTTGAAAAACAGCTGCTAAACATATTGCTTTCTGGAATGTAATCATTAGCAACAAATATTCTCTTATTCTATA
CAATTGCAGAATGCTAGTGGAACTTTCTTGTAGGTTATTTGACAATGAATGTTAATTGATTTATTTTTTAAAAAT
GTAAAATCCTCTTATCCCTTTAAGGCCGGTTTAGGCTTTCATGTCCCTGTGGTAGAAAATTTCAAATGCTGGCTT
CTAATTTCTACTCACTGAAGTGTCTTCCAGACATACCAGATGGTTGGAGCTCCTTTGATAGTATATAAGGGAGCT
ACATAAATGTATTTGAACTAACTCGTGAGCAAAATTTCTGTTTCCCGCAAAAAAAATCTATGTCGGGTGCGGAGA
AAGAGGTAATGAAATG

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FIGURE 5071

PREMGWWVTDIKQSTRSILEKYQ

FIGURE 5072A

GGTCGACGAACACTTACATGAAGATAATGGTGAAGTTGAAGTGCGTCGAAGTTGTAGGATTAGAAGTCGTTATAG
TGGTGTAAACCAGTCCATGCTGTTTGACAAACTTATAACTAACACTGCTGAAGCTGTACTTCAAAAAATGGATGA
CATGAAGAAGATGCGTAGGCAGCGAATGAGAGAACTTGAAGACTTGGGAGTGTTTAATGAAACAGAAGAAAGCAA
TCTTAATATGTACACAAGAGGAAAACAGAAAGATATTCAAAGAACTGATGAAGAAACAACTGATAATCAAGAAGG
CAGTGTGGAGTCATCTGAAGAGGGTGAAGACCAAGAACATGAAGATGATGGTGAAGATNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNGAAGAAGATGGAGAAGAAGAGAA
TCAGAAGCGATATTATCTTAGACAGAGAAAAGCTACTGTTTACTATCAGGCTCCATTGGAAAAACCTCGTCACCA
GAGAAAGCCCAACATATTTTATAGTGGCCCAGCTTCTCCTGCAAGACCAAGATACCGATTATCTTCCGCAGGACC
AAGAAGTCCTTACTGTAAACGAATGAACAGGCGAAGGCATGCAATCCACAGTAGTGACTCGACTTCATCTTCCTC
CTCTGAAGATGAACAGCACTTTGAGAGGCGGAGGAAAAGGAGTCGTAATAGGGCTATCAATAGGTGCCTCCCACT
AAATTTTCGGAAAGATGAATTAAAAGGCATTTATAAAGATCGAATGAAAATTGGAGCAAGCCTTGCCGATGTTGA
TCCAATGCAACTAGATTCTTCAGTACGATTTGATAGTGTTGGTGGCCTGTCTAATCATATAGCAGCTCTAAAAGA
GATGGTGGTGTTTCCATTACTTTATCCAGAAGTCTTTGAAAAATTTAAAATTCAACCCCCAAGAGGTTGTTTGTT
TTATGGGCCACCTGGAACTGGAAAGACTCTGGTTGCCAGAGCACTTGCCAATGAGTGCAGTCAAGGGGATAAAAG
AGTAGCATTTTTCATGAGGAAAGGTGCTGATTGTCTAAGTAAATGGGTAGGAGAATCTGAAAGACAGCTACGATT
GCTGTTTGATCAGGCCTATCAGATGCGCCCATCAATTATTTTTTTTGACGAAATTGATGGTCTGGCTCCAGTACG
GTCAAGCAGGCAAGATCAGATTCACAGTTCTATTGTTTCCACCCTGCTAGCTCTTATGGATGGATTGGACAGCAG
AGGGGAAATTGTGGTCATTGGTGCTACGAACAGGCTAGATTCTATAGATCCTGCTTTACGAAGGCCTGGTCGCTT
TGATAGAGAATTCCTCTTTAGCCTGCCTGATAAAGAGGCTCGAAAAGAGATTCTAAAGATTCACACCAGGGATTG
GAATCCCAAACCACTGGACACATTTTTAGAAGAGCTAGCAGAAAACTGTGTTGGATACTGTGGAGCAGATATTAA
ATCAATATGTGCTGAAGCTGCTTTATGTGCTTTACGACGACGCTACCCACAGATCTATACCACTAGTGAGAAACT
GCAGTTGGATCTCTCTTCAATTAATATCTCAGCTAAGGATTTCGAGGTAGCTATGCAAAAGATGATACCAGCCTC
CCAAAGAGCTGTGACATCACCTGGGCAGGCACTGTCCACCGTTGTGAAACCACTCCTGCAAAACACTGTTGACAA
GATTTTAGAAGCCCTGCAGAGAGTATTTCCACATGCAGAATTCAGAACAAATAAAACATTAGACTCAGATATTTC
TTGTCCTCTGCTAGAAAGTGACTTGGCTTACAGTGATGATGATGTTCCATCAGTTTATGAAAATGGACTTTCTCA
GAAATCTTCTCATAAGGCAAAAGACAATTTTAATTTTCTTCATTTGAATAGAAATGCTTGTTACCAACCTATGTC
TTTTCGACCAAGAATATTGATAGTAGGAGAACCAGGATTTGGGCAAGGTTCTCACTTGGCACCAGCTGTCATTCA
TGCTTTGGAAAAGTTTACTGTATATACATTAGACATTCCTGTTCTTTTTGGAGTTAGTACTACATCCCCTGAAGA
AACATGTGCCCAGGTGATTCGTGAAGCTAAGAGAACAGCACCAAGTATAGTGTATGTTCCTCATATCCACGTGTG
GTGGGAAATAGTTGGACCGACACTTAAAGCCACATTTACCACATTATTACAGAATATTCCTTCATTTGCTCCAGT
TTTACTACTTGCAACTTCTGACAAACCCCATTCCGCTTTGCCAGAAGAGGTGCAAGAATTGTTTATCCGTGATTA
TGGAGAGATTTTTAATGTCCAGTTACCGGATAAAGAAGAACGGACAAAATTTTTTGAAGATTTAATTCTAAAACA
AGCTGCTAAGCCTCCTATATCAAAAAAGAAAGCAGTTTTGCAGGCTTTGGAGGTACTCCCAGTAGCACCACCACC
TGAGCCAAGATCACTGACAGCAGAAGAAGTGAAACGACTAGAAGAACAAGAAGAAGATACATTTAGAGAACTGAG
GATTTTCTTAAGAAATGTTACACATAGGCTTGCTATTGACAAGCGATTCCGAGTGTTTACTAAGCCTGTTGACCC
TGATGAGGTTCCTGATTATGTCACTGTAATAAAGCAACCAATGGACCTTTCATCTGTAATCAGTAAAATTGATCT
ACACAAGTATCTGACTGTGAAAGACTATTTGAGAGATATTGATCTAATCTGTAGTAATGCCTTAGAATACAATCC
AGATAGAGATCCTGGAGATCGTCTTATTAGGCATAGAGCCTGTGCTTTAAGAGATACTGCCTATGCCATAATTAA
AGAAGAACTTGATGAAGACTTTGAGCAGCTCTGTGAAGAAATTCAGGAATCTAGAAAGAAAAGAGGTTGTAGCTC
CTCCAAATATGCCCCGTCTTACTACCATGTGATGCCAAAGCAAAATTCCACTCTTGTTGGTGATAAAAGATCAGA
CCCAGAGCAGAATGAAAAGCTAAAGACACCGAGTACTCCTGTGGCTTGCAGCACTCCTGCTCAGTTGAAGAGGAA
AATTCGCAAAAAGTCAAACTGGTACTTAGGCACCATAAAAAAGCGAAGGAAGATTTCACAGGCAAAGGATGATAG
CCAGAATGCCATAGATCACAAAATTGAGAGTGATACAGAGGAAACTCAAGACACAAGTGTAGATCATAATGAGAC
CGGAAACACAGGAGAGTCTTCGGTGGAAGAAAATGAAAAACAGCAAAATGCCTCTGAAAGCAAACTGGAATTGAG
AAATAATTCAAATACTTGTAATATAGAGAATGAGCTTGAAGACTCTAGGAAGACTACAGCATGTACAGAATTGAG
AGACAAGATTGCTTGTAATGGAGATGCTTCTAGCTCTCAGATAATACATATTTCTGATGAAAATGAAGGAAAAGA
AATGTGTGTTCTGCGAATGACTCGAGCTAGACGTTCCCAGGTAGAACAGCAGCAGCTCATCACTGTTGAAAAGGC
TTTGGCAATTCTTTCTCAGCCTACACCCTCACTTGTTGTGGATCATGAGCGATTAAAAAATCTTTTGAAGACTGT

FIGURE 5072B

TGTTAAAAAAAGTCAAAACTACAACATATTTCAGTTGGAAAATTTGTATGCAGTAATCAGCCAATGTATTTATCG
GCATCGCAAGGACCATGATAAAACATCACTTATTCAGAAAATGGAGCAAGAGGTAGAAAACTTCAGTTGTTCCAG
ATGATGATGTCATGGTATCGAGTATTCTTTATATTCAGTTCCTATTTAAGTCATTTTTGTCATGTCCGCCTAATT
GATGTAGTATGAAACCCTGCATCTTTAAGGAAAAGATTAAAATAGTAAAATAAAAGTATTTAAACTTTCCTGATA
TTTATGTACATATTAAGATAAATGTCATGTGTAAGATAACTGATAAATATTGGAACTTTGCTAGAACAAGACCCT
GTAGTAATAGTAATAATAGTTGAAGTTTGGCCAACTCTTAATAAAGTTATTTTGGTAACTAATGTTTTATGGCAC
TTAAGAATAATTAGCAGCGTTAAATTTTGTTTGTATTAAGCACTTTTAATTTTATCCTTCCTAAAAATAGTTTAT
TGTATCTGACAAGAAACTTACTTAACCATTGTGTCCTTCCCATCTTTTTTGTCATCTTTGTTTTCTTCAAATGCC
CTCCTCCCATCTGCCTTGAGATTCCCTTGTCTTCACTTAAAAGCCAGAGTGCAAGTCATGATTTGCGGGAGGGCT
CTTGAACCACTTCTGGCTGCACCACAATTCTGTACTTGAGTATCACAGTCATTGTTTTTGAGACAAACATTTTTA
TAATTCTAATTTGGGTTAATAAAGATTTTAAATATTTCTTGGTTTACTTTTGTAATTATATACACAACAAATGTA
TTAATAACTACCTTGTTAAACACCTTTTAATAGCACAAGGTTTTTATATTTGCAAGCTGTTGATATCTTTCTAAA
ACTGTTTAGGTTATAGTCTATTGATACTTTTTATATACAATTTTATAAATATAAATATTATAATTTTATATTAAT
GGTACCAAAAATACATTTCTTAAGGTTAAAAGCATGCACTTCCATGCATACTTGCTTTTGGGGAGAGTGGGGAGA
AGACATTCTAATAATCAGTTTGTGAAATAGCTTCTGTTGGAAACCTTTTGAGGGGAATAAGGAATGGTCATCTAA
AATGAGAGATTCTGGATTTTAATGCAGTTCAAAGTTGAGCTGTATTTTTGTTGTTGATTTATCTGGATTTTTTTT
AAAGCCTTCTAAAACCCAGTGAATTCAATACCTTAATTAGTACATACTATCTTATGTAATGCATAAAGCAATGCC
AGTCACTGAGAACATTTAAATATATTTATATTCCTGGAGATACACATTCTCATTTTTGTTGGTTTATTATAAATT
ATTCTTCTAGATGCATCTTTTATAACTAGGATTTCATTTTGTGTGTATAGCTTATGTAATAAATTTTAAAGGTGA
AAACTCTCTT

5680/8433

FIGURE 5073

VDEHLHEDNGEVEVRRSCRIRSRYSGVNQSMLFDKLITNTAEAVLQKMDDMKKMRRQRMRELEDLGVFNETEESN
LNMYTRGKQKDIQRTDEETTDNQEGSVESSEEGEDQEHEDDGEDXXXXXXXXXXXXXXXXXXXXXXEEDGEEEN
QKRYYLRQRKATVYYQAPLEKPRHQRKPNIFYSGPASPARPRYRLSSAGPRSPYCKRMNRRRHAIHSSDSTSSSS
SEDEQHFERRRKRSRNRAINRCLPLNFRKDELKGIYKDRMKIGASLADVDPMQLDSSVRFDSVGGLSNHIAALKE
MVVFPLLYPEVFEKFKIQPPRGCLFYGPPGTGKTLVARALANECSQGDKRVAFFMRKGADCLSKWVGESERQLRL
LFDQAYQMRPSIIFFDEIDGLAPVRSSRQDQIHSSIVSTLLALMDGLDSRGEIVVIGATNRLDSIDPALRRPGRF
DREFLFSLPDKEARKEILKIHTRDWNPKPLDTFLEELAENCVGYCGADIKSICAEAALCALRRRYPQIYTTSEKL
QLDLSSINISAKDFEVAMQKMIPASQRAVTSPGQALSTVVKPLLQNTVDKILEALQRVFPHAEFRTNKTLDSDIS
CPLLESDLAYSDDDVPSVYENGLSQKSSHKAKDNFNFLHLNRNACYQPMSFRPRILIVGEPGFGQGSHLAPAVIH
ALEKFTVYTLDIPVLFGVSTTSPEETCAQVIREAKRTAPSIVYVPHIHVWWEIVGPTLKATFTTLLQNIPSFAPV
LLLATSDKPHSALPEEVQELFIRDYGEIFNVQLPDKEERTKFFEDLILKQAAKPPISKKKAVLQALEVLPVAPPP
EPRSLTAEEVKRLEEQEEDTFRELRIFLRNVTHRLAIDKRFRVFTKPVDPDEVPDYVTVIKQPMDLSSVISKIDL
HKYLTVKDYLRDIDLICSNALEYNPDRDPGDRLIRHRACALRDTAYAIIKEELDEDFEQLCEEIQESRKKRGCSS
SKYAPSYYHVMPKQNSTLVGDKRSDPEQNEKLKTPSTPVACSTPAQLKRKIRKKSNWYLGTIKKRRKISQAKDDS
QNAIDHKIESDTEETQDTSVDHNETGNTGESSVEENEKQQNASESKLELRNNSNTCNIENELEDSRKTTACTELR
DKIACNGDASSSQIIHISDENEGKEMCVLRMTRARRSQVEQQQLITVEKALAILSQPTPSLVVDHERLKNLLKTV
VKKSQNYNIFQLENLYAVISQCIYRHRKDHDKTSLIQKMEQEVENFSCSR

FIGURE 5074

GCTCAGCTGGTAGTTTGACCTCCGTTGGTGCAATGCCAGAGATGGGATTGTCAGCCACCACACTGCCACCACCCT
GCACACAGTCTGGGTCCCTCCGAGAGAAGCACGCCAACCTTAACATCCCCTACAGCATCTTGGTGCTTCACACAC
CATTTAGGAGGCCACCCTAACGAGGCAAGAGGACATGGGGGTGTGCAGAAGTTCTGTTCTTAGTGAGAATGGCTG
GCCTGAGAATCCAGCTCACCTCCTCTGCCCACAGTCTGGACTGCTTGTGGGAAGGCCATCTCCTCCTGTCTGGTG
GTACCTCCACTCTGGGCAGGGAGGGCCTGTCTGTGACTCGCTCTGGACCCCACTTCCCGCTCTGGCCAAGGGCTG
TCTTCTGTGCACATAGCTCAGGAGCCTGCAGCAGTTCCCTGTATGGGTGGATGTCCTCAGGGGCCAAGAAGAGAA
GAATGGGGACAACAGAAACCTGCTTTGTAGGGGATTATGTAGACTAAAAGCCTAGAAGTTCTGCCCACATCCTTA
TGACGCAGCCAATCTGGAGCTTCATGTTTCCTTCTAAAAGTAGTAACCGGGTAGAAGTGGGTGACCCATCGAGGA
CACATGATGTGAGGTATTTCTGCCGGATTCTAGGTTAGCAAAGACTCAAATGGGTGACTCATGAATGAAGGGAGA
ACAGGCACAGGACTTAATGAAAAGAGTTTCTTGAACTTAGTTTTCTGAATGGGGGTGGGGAGTTGGGGCACGTGT
GTGTAAGGGGAGGCTGCCTCACTTTGAAGGAATGGTGTTGGCTAACAGGATCCATGAAATTCCTAGGTCAGTTGA
ATAATAACTGAACTACTGGTTTGACTGTGGATTATTTCCTGGGTATTAGTGGGACCCAACAGCACATTGCTATTA
ATAGTATGGAAATAATGGTCCCTCTGTTTCATTGAATTGCTGAAGTAATGATAATGCCATGAACCAGGAGAAGAT
GGTTGTGGGGGTTTCTAGGAAGCAGCTGCTGTGACAGGCCAATCCCAGGCTTGCCCCCGAGCCCTCCTGTCCTTC
TGGGTTTGTGTTTGCCTTGCCTGGTGCTTCCTCCCTCATTGTGTTGTTGAATAGACCTAGGCAGCCTTGTATCCA
TAGAAAGCCTCCACTGCTGGGCCGGGGAGGGGGTTGTGGTAAGGGCCCTCTGGAAATCAAGCAGAGAATGCCTTT
GCAGTGGTCTCCCGGGCATTGGGCAGGGCCTAGCCTTTTGCAGCCCCCAGAGGACCTTGCCTGCATAAAGCACTC
AGAAGGGTTAGCCACCTGGTGATTTTGTCTCTAGTGAAACTGTGTTTGCCGATAATCATCCACATAGCCACCTCT
GTCCTCGCAGTTTGGATGCCTTTTTTTGACACCTGCGCTAGGTTCTTGTATGCTGGCTTTTCTTAAAGGAACAGC
AGAGTAGAAAAGAGGTTGAGAATGTTTTCTAGCAGGCAGAATGTGCATACATGTTTTCATGAGTGTCCTTTGGGT
GCTGTTTCTTTTAAATCCTCTGTGCACAGGGCTCTGGCCTTTAGTAAACTGTTTTTCTGTCTTACGTCATGCTGA
CTGGGTGCTAGGGGCTGATTACAAAGGGGAAGAGTTGAACAGACATCAGGGGCCGATGAAACCAAAGGACTAGGA
GTCAGGAGAACAAGTCAGGGATTAGGAGACAGCGGTTTGGTTTATTGTTATCCAGCTGGAGGACTCCTAGGGGCA
GCAGCAGGAGGAATACCAGGGCCACGGAGGGGCCAGGAGTCTCACAGTGGAGGGCAGACTCTAACAGATGCCAGC
TGAACGCTCGCTGGCCCTGGATGTCATACGAGTTGGGGACCAGAAATCTGGGCTCAGAGAACCCGTCCAGGGAGA
TTTGAAGCCATGGGTTATCTTCTAGAGTTGATACTGATAATATATTTTAATTTTTATTGATGTTTAATACCTTCT
GAAACAGGAGGGTAAGATCAGATGGGAAGCCCCTCTGTTGAAGGATCTTGGGAACCTTGGTGGTTTTTTTTTTTT
TTTGGTTTTTTTTTTTTGATCGAGCTGTGGACATCCTTCTTAATTCGATTCTGAGGATTTGTTTAACTAAAAAGT
TCCCAAACACAGAAAGGGCCTCCCCACCTGCTTTGGGGAGCTGTCTGTGCTGGGAGTGCCAGGCATCCCATGGGA
CCCATCACTGCCAGTGTCTGTGCCTCCCAGAGGTCAGCCGTGTCTGCCCTGGCTCTGTCTCCTCTGTGACAGGGC
AGAGCATTTCTGGTCAGTTTCTCCATGGTGCCTCCCACCCCTTTGTAAAGTGGATGGACATGATGGAATTCAGTT
GTCTCACCCTGATAGCCTGGGTGTTGATATTCACTTTACCCGCACTCAGACACAGGCGACCTTGAAGCAGTTCTC
GGTGTGTAGAGTCCACGTGACAGTCCCCACAGCCTCCCCAGATAGCTGTGTGCCTGTGCGCTACTGCTGTGCCAT
TTTCCCAACTTGGCGTTTCACTAAATGCAGCTGATCTCTCTCTCTGTGCACTCGTGATCCATGTTGAACAATACA
TGTAGGTTCTTTTTCCACGCAATGTAAGAACATGATATACTGTACGTTGGAAAGCATTTACCTTATTTATATACC
TGAATGTTCCTACTACACAAATAAACATATATTAAATTCT

FIGURE 5075

AGTTGGCGGGAATGGCTGCTCGCGGAGGGGCAGTGTACGCGGGGCCGCTGTAGGCTGTCCAGCGATGGATCCCAC
CGCGGGAAGCAAGAAGGAGCCTGGAGGAGGCGCGGCGACTGAGGAGGGCGTGAATAGGATCGCAGTGCCAAAGCC
GCCCTCCATTGAGGAATTCAGCATAGTGAAGCCCATTAGCCGGGGCGCCTTCGGGAAAGTGTATCTGGGGCAGAA
AGGCGGCAAATTGTATGCAGTAAAGGTTGTTAAAAAAGCAGACATGATCAACAAAAATATGACTCATCAGGTCCA
AGCTGAGAGAGATGCACTGGCACTAAGCAAAAGCCCATTCATTGTCCATTTGTATTATTCACTGCAGTCTGCAAA
CAATGTCTACTTGGTAATGGAATATCTTATTGGGGGAGATGTCAAGTCTCTCCTACATATATATGGTTATTTTGA
TGAAGAGATGGCTGTGAAATATATTTCTGAAGTAGCACTGGCTCTAGACTACCTTCACAGACATGGAATCATCCA
CAGGGACTTGAAACCGGACAATATGCTTATTTCTAATGAGGGTCATATTAAACTGACGGATTTTGGCCTTTCAAA
AGTTACTTTGAATAGAGATATTAATATGATGGATATCCTTACAACACCATCAATGGCAAAACCTAGACAAGATTA
TTCAAGAACCCCAGGACAAGTGTTATCGCTTATCAGCTCGTTGGGATTTAACACACCAATTGCAGAAAAAAATCA
AGACCCTGCAAACATCCTTTCAGCCTGTCTGTCTGAAACATCACAGCTTTCTCAAGGACTCGTATGCCCTATGTC
TGTAGATCAAAAGGACACTACGCCTTATTCTAGCAAATTACTAAAATCATGTCTTGAAACAGTTGCCTCCAACCC
AGGAATGCCTGTGAAGTGTCTAACTTCTAATTTACTCCAGTCTAGGAAAAGGCTGGCCACATCCAGTGCCAGTAG
TCAATCCCACACCTTCATATCCAGTGTGGAATCAGAATGCCACAGCAGTCCCAAATGGGAAAAAGATTGCCAGGA
AAGTGATGAAGCATTGGGCCCAACAATGATGAGTTGGAATGCAGTTGAAAAGTTATGCGCAAAATCTGCAAATGC
CATTGAGACGAAAGGTTTCAATAAAAAGGATCTGGAGTTAGCTCTTTCTCCCATTCATAACAGCAGTGCCCTTCC
CACCACTGGACGCTCTTGTGTAAACCTTGCTAAAAAATGCTTCTCTGGGGAAGTTTCTTGGGAAGCAGTAGAACT
GGATGTAAATAATATAAATATGGACACTGACACAAGTCAGTTAGGTTTCCATCAGTCAAATCAGTGGGCTGTGGA
TTCTGGTGGGATATCTGAAGAGCACCTTGGGAAAAGAAGTTTAAAAAGAAATTTTGAGTTGGTTGACTCCAGTCC
TTGTAAAAAAATTATACAGAATAAAAAAACTTGTGTAGAGTATAAGCATAACGAAATGACAAATTGTTATACAAA
TCAAAATACAGGCTTAACAGTTGAAGTGCAGGACCTTAAGCTATCAGTGCACAAAAGTCAACAAAATGACTGTGC
TAATAAGGAGAACATTGTCAATTCTTTTACTGATAAACAACAAACACCAGAAAAATTACCTATACCAATGATAGC
AAAAAACCTTATGTGTGAACTCGATGAAGACTGTGAAAAGAATAGTAAGAGGGACTACTTAAGTTCTAGTTTTCT
ATGTTCTGATGATGATAGAGCTTCTAAAAATATTTCTATGAACTCTGATTCATCTTTTCCTGGAATTTCTATAAT
GGAAAGTCCATTAGAAAGTCAGCCCTTAGATTCAGATAGAAGCATTAAAGAATCCTCTTTTGAAGAATCAAATAT
TGAAGATCCACTTATTGTAACACCAGATTGCCAAGAAAAGACCTCACCAAAAGGTGTCGAGAACCCTGCTGTACA
AGAGAGTAACCAAAAAATGTTAGGTCCTCCTTTGGAGGTGCTGAAAACGTTAGCCTCTAAAAGAAATGCTGTTGC
TTTTCGAAGTTTTAACAGTCATATTAATGCATCCAATAACTCAGAACCATCCAGAATGAACATGACTTCTTTAGA
TGCAATGGATATTTCGCGTGCCTACAGTGGTTCATATCCCATGGCTATAACCCCTACTCAAAAAAGAAGATCCTG
TATGCCACATCAGACCCCAAATCAGATCAAGTCGGGAACTCCATACCGAACTCCGAAGAGTGTGAGAAGAGGGGT
GGCCCCCGTTGATGATGGGCGAATTCTAGGAACCCCAGACTACCTTGCACCTGAGCTGTTACTAGGCAGGGCCCA
TGGTCCTGCGGTAGACTGGTGGGCACTTGGAGTTTGCTTGTTTGAATTTCTAACAGGAATTCCCCCTTTCAATGA
TGAAACACCACAACAAGTATTCCAGAATATTCTGAAAAGAGATATCCCTTGGCCAGAAGGTGAAGAAAAGTTATC
TGATAATGCTCAAAGTGCAGTAGAAATACTTTTAACCATTGATGATACAAAGAGAGCTGGAATGAAAGAGCTAAA
ACGTCATCCTCTCTTCAGTGATGTGGACTGGGAAAATCTGCAGCATCAGACTATGCCTTTCATCCCCCAGCCAGA
TGATGAAACAGATACCTCCTATTTTGAAACCAGGAATACTGCTCAGCACCTGACCGTATCTGGATTTAGTCTGTA
GCACAAAAATTTTCCTTTTAGTCTAGCCTCGTGTTATAGAATGAACTTGCATAATTATATACTCCTTAATACTAG
ATTGATCTAAGGGGGAAAGATCATTATTTAACCTAGTTCAATGTGCTTTTAATGTACGTTACAGCTTTCACAGAG
TTAAAAGGCTGAAAGGAATATAGTCAGTAATTTATCTTAACCTCAAAACTGTATATAAATCTTCAAAGCTTTTTT
CATCTATTTATTTTGTTTATTGCACTTTATGAAAACTGAAGCATCAATAAAATTAGAGGACACTATTGAGAGTGA
GCCACTAGCTTGATTTTCTTTCTCCTCTGATTTCAGTTCACTGTTCAGTTTAGCATTAAAATAATAAAATAATCA
TACAGTTCC

FIGURE 5076

MDPTAGSKKEPGGGAATEEGVNRIAVPKPPSIEEFSIVKPISRGAFGKVYLGQKGGKLYAVKVVKKADMINKNMT
HQVQAERDALALSKSPFIVHLYYSLQSANNVYLVMEYLIGGDVKSLLHIYGYFDEEMAVKYISEVALALDYLHRH
GIIHRDLKPDNMLISNEGHIKLTDFGLSKVTLNRDINMMDILTTPSMAKPRQDYSRTPGQVLSLISSLGFNTPIA
EKNQDPANILSACLSETSQLSQGLVCPMSVDQKDTTPYSSKLLKSCLETVASNPGMPVKCLTSNLLQSRKRLATS
SASSQSHTFISSVESECHSSPKWEKDCQESDEALGPTMMSWNAVEKLCAKSANAIETKGFNKKDLELALSPIHNS
SALPTTGRSCVNLAKKCFSGEVSWEAVELDVNNINMDTDTSQLGFHQSNQWAVDSGGISEEHLGKRSLKRNFELV
DSSPCKKIIQNKKTCVEYKHNEMTNCYTNQNTGLTVEVQDLKLSVHKSQQNDCANKENIVNSFTDKQQTPEKLPI
PMIAKNLMCELDEDCEKNSKRDYLSSSFLCSDDDRASKNISMNSDSSFPGISIMESPLESQPLDSDRSIKESSFE
ESNIEDPLIVTPDCQEKTSPKGVENPAVQESNQKMLGPPLEVLKTLASKRNAVAFRSFNSHINASNNSEPSRMNM
TSLDAMDISRAYSGSYPMAITPTQKRRSCMPHQTPNQIKSGTPYRTPKSVRRGVAPVDDGRILGTPDYLAPELLL
GRAHGPAVDWWALGVCLFEFLTGIPPFNDETPQQVFQNILKRDIPWPEGEEKLSDNAQSAVEILLTIDDTKRAGM
KELKRHPLFSDVDWENLQHQTMPFIPQPDDETDTSYFETRNTAQHLTVSGFSL

FIGURE 5077A

CTCGCAGGAGCAACACGTGATGTGTCTACTTATCAGGGTGAGAGGGGGAGAGCGAGACTCCGAGCGTGCGGGCGA
GGAAGCTGGGCGGGGGGCCGAGACGGGGGCCGGGACGACGGCTGGGGCGCCGGGGTCGCCAGCTCCTCGCCCACC
TCCCTCCCTGTGGGAGAAGAGGAGGAGGGGAAGTGACTGCGGAGTTGATGAACTTTGCACATCCAGAAACGCCAT
TTTGATTCCTTTTCCGGAACAAGTTTGCATCTCTCCTCGGTCTCTCCCTGAAGCCCACCGGTCCCCAACGCATCA
TGCCAGGGAGCCAAGCGTCCTGCCCGGCCGTAAGTTGCTCCGACTGTGTGTTCCAGGAGTGGTGGCTCTGAGGTG
TGACCCTGCCCACGTTTGGGCCCAGCCAGGTTCAGCCCCCCAATAAGGAGGGCAGCTTGATAACACAAAGAAAAC
AGTGTCAACGAGTACTACCAAGAGAAGAAGACAAGAGGTCAACACAGACTCATTTTCTACTCCGTGTGAATGATA
GCTACAGCAGGGGAAAGTTTCATAGTCTATCAGTGGGTCAGAAAATGGAGTTTTATAGCAGAGGCTTCTTAGAAG
CTTAAACCCCTGTCCCAATGACGTCAAGTTCGCCCGCTGGCTTGGAAGGTTCAGACCTATCTTCCATCAACACCA
TGATGTCGGCGGTCATGAGTGTAGGGAAGGTCACAGAGAATGGCGGGAGCCCCCAGGGGATCAAGTCCCCCTCGA
AGCCTCCAGGACCAAATCGGATTGGCAGAAGGAACCAGGAAACGAAAGAGGAGAAGTCTTCCTATAACTGCCCCC
TGTGTGAGAAGATTTGCACTACCCAGCACCAGCTGACCATGCACATTCGCCAGCACAACACAGACACTGGAGGAG
CCGACCACTCATGCAGCATCTGCGGAAAGTCACTGAGCTCGGCCAGCTCCCTCGATCGCCACATGCTGGTGCACT
CTGGCGAGAGGCCTTACAAGTGCACTGTGTGTGGCCAGTCATTTACCACCAATGGGAACATGCACAGACATATGA
AGATCCATGAGAAGGACCCTAACAGTGCCACAGCCACAGCCCCTCCATCTCCTCTGAAACGTAGGCGATTGTCCT
CCAAGAGGAAACTGAGTCACGATGCCGAGTCAGAGAGAGAAGACCCAGCACCAGCTAAAAAGATGGTAGAAGACG
GGCAGTCAGGTGACTTGGAGAAGAAAGCTGATGAAGTCTTTCACTGCCCAGTATGTTTCAAGGAGTTTGTTTGCA
AGTATGGACTGGAGACCCACATGGAGACCCATTCAGATAACCCACTAAGATGTGACATTTGTTGTGTCACCTTTC
GAACACATCGAGGACTGCTGCGTCACAACGCGCTTGTCCACAAACAACTTCCCAGGGATGCAATGGGCAGACCTT
TCATGACAGAACAACCCTTCAATTCCTGCTGGCTTCCACGACTTAGGATTCACGGACTTCTCCTGTAGGAAGTTT
CCTCGCATTTCTCAGGCCTGGTGCGAAACAACCTGCGGAGGTGCATCAGCGAGCAACACCGTTTTGTCTGCGACA
CCTGTGACAAGGCGTTCCCCATGCTCTGCTCACTGGCTCTGCACAAGCAGACCCATGTGGCGGCAGACCAGGGTC
AAGAAAAGCCGCAGGCCACGCCCCTGCCTGGTGACGCCCTGGACCAGAAGGGCTTCCTGGCCTTGCTTGGCCTGC
AGCACACCAAAGACGTCAGGCCTGCCCCCGCCGAGGAGCCCCTGCCGGATGACAACCAGGCAATTCAGCTCCAGA
CACTCAAGTGTCAGCTACCTCAGGACCCCGGCTGCACCAACCTGCTGAGCCTGTCACCTTTCGAAGCTGCTTCCC
TAGGCGGTTCTCTCACAGTTCTCCCCGCGACCAAGGACAGCATAAAGCACCTGTCCCTGCAGCCCTTCCAGAAGG
GCTTCATCATCCAGCCTGACAGCAGCATTGTGGTCAAGCCCATCTCTGGCGAGTCGGCCATCGAGCTGGCAGACA
TCCAGCAAATTCTGAAGATGGCAGCCTCGGCTCCCCCTCAGATCAGTCTTCCGCCCTTCTCCAAGGCCCCTGCCG
CCCCACTGCAGGCGATCTTCAAGCACATGCCCCCTCTGAAGCCAAAGCCCCTGGTCACACCACGGACGGTGGTGG
CCACCTCCACGCCCCCGCCTCTCATCAACGCCCAGCAGGCTTCCCCGGGCTGTATCAGCCCCAGCCTGCCGCCAC
CGCCCCTGAAGCTCCTCAAAGGCTCAGTGGAGGCGGCCTCCAACGCCCACCTGCTGCAGTCCAAGTCCGGGACCC
AGCCCCACGCGGCCACGCGGCTCTCCCTGCAGCAGCCGCGGGCGGAGCTGCCGGGCCAGCCTGAGATGAAGACGC
AGCTGGAGCAGGACAGCATCATCGAGGCCCTGCTGCCGCTGAGCATGGAGGCCAAGATCAAGCAGGAGATCACAG
AGGGGGAACTCAAGGCCTTCATGACAGCGCCCGGCGGCAAGAAGACGCCCGCCATGCGCAAGGTGCTCTACCCCT
GCCGCTTCTGCAACCAGGTGTTTGCCTTCTCGGGGGTCTTGCGTGCCCACGTGCGCTCCCACCTGGGCATCTCGC
CATACCAGTGCAACATCTGCGACTACATCGCCGCCGACAAGGCCGCGCTCATCCGCCACCTGCGCACGCACAGTG
GGGAGCGGCCCTACATTTGCAAGATCTGCCACTACCCCTTCACTGTCAAAGCCAACTGCGAGCGGCACCTGCGCA
AGAAGCACCTCAAGGCCACCCGCAAGGATATCGAGAAGAACATCGAGTATGTGAGTAGCAGCGCGGCCGAGCTGG
TGGACGCCTTCTGCGCCCCGGACACCGTGTGCCGGCTGTGCGGCGAGGACCTCAAGCACTATCGTGCCCTGCGCA
TCCACATGCGCACGCACTGCGGCCGCGGCCTGGGCGGGGGCCACAAGGGCCGCAAGCCCTTCGAGTGCAAGGAGT
GCAGCGCCGCGTTCGCGGCCAAGCGCAACTGCATCCACCACATCCTCAAGCAGCACCTGCACGTGCCCGAGCAGG
ACATCGAGAGCTACGTGCTGGCCGCCGACGGCCTGGGCCCCGCAGAGGCGCCGGCCGCTGAGGCGTCGGGGCGCG
GGGAGGACAGTGGCTGCGCTGCCCTTGGTGACTGCAAGCCCCTCACTGCCTTCCTGGAACCCCAGAACGGCTTTC
TTCACAGGGGCCCCACCCAGCCTCCACCTCCCCATGTCTCGATCAAGTTGGAGCCCGCCAGTAGCTTTGCGGTGG
ACTTCAATGAGCCCCTGGACTTCTCGCAGAAGGGCCTGGCCCTGGTCCAAGTGAAGCAGGAAAACATCTCCTTTC
TGAGCCCTTCTTCCCTGGTCCCCTATGACTGCTCCATGGAGCCCATCGACCTGTCCATCCCCAAGAACTTCAGGA
AAGGGGACAAGGATTTGGCCACTCCCAGCGAAGCCAAGAAGCCTGAGGAGGAGGCGGGGAGCAGCGAGCAGCCCT
CTCCCTGCCCAGCACCCGGCCCTTCTCTTCCTGTAACTTTGGGGCCCAGCGGAATCCTGGAAAGCCCCATGGCCC

FIGURE 5077B

CTGCTCCGGCGGCCACCCCGGAACCCCCAGCACAGCCCCTGCAGGGCCCTGTTCAGCTGGCGGTCCCAATCTACT
CCTCAGCCCTGGTCAGCAGCCCTCCACTCGTGGGCAGCTCAGCCCTCCTGAGTGGCACAGCCTTGCTGCGTCCAC
TGCGGCCCAAGCCCCCGCTGCTTTTGCCAAAGCCCCCCGTGACAGAAGAGCTGCCCCCGCTGGCCTCCATTGCCC
AGATCATCTCATCTGTATCCTCGGCCCCCACCCTGCTGAAAACCAAGGTGGCGGACCCAGGGCCCGCAAGCACTG
GCAGTAACACCACGGCTTCAGACAGCTTAGGAGGTTCTGTCCCCAAAGCCGCCACCACCGCCACCCCCGCTGCCA
CCAACAGCCCAAAAGAGTCTAGTGAGCCTCCCGCTCCAGCCAGCAGCCCAGAGGCTGCCTCTCCCACCGAGCAGG
GCCCAGCGCGGACGTCGAAGAAGAGGGGCCGGAAAAGGGGGATGAGGAGCCGACCCCGCGCCAACAGCGGCGGGG
TGGACCTGGACTCCAGCGGGGAGTTTGCCAGCATCGAGAAGATGCTGGCCACCACAGACACCAACAAGTTCAGTC
CGTTTCTGCAGACAGCGGAGGACAACACTCAGGATGAGGTGGCCGGAGCCCCTGCCGACCACCATGGGCCCAGTG
ATGAAGAGCAGGGCAGTCCCCCAGAAGACAAGCTGCTGAGGGCCAAGCGGAACTCGTACACCAACTGCCTGCAGA
AGATCACCTGTCCCCACTGTCCCCGGGTTTTCCCTTGGGCCAGCTCCCTACAGAGGCACATGCTCACACACACTG
ACAGTCAGTCGGATGCGGAGACTGCAGCCGCCGCGGGCGAAGTGCTAGACCTCACCTCACGGGACAGAGAGCAGC
CGTCGGAGGGCGCCACTGAGCTCCGCCAGGTCGCAGGGGATGCGCCTGTGGAGCAGGCCACGGCGGAAACGGCCT
CGCGCGTGCACCGGGAAGAGCACGGGCGTGGGGAGAGCCATGAGCCGGAGGAGGAGCATGGCACTGAGGAGAGCA
CTGGGGACGCCGACGGCGGAAGAGGACGCGTCGAGCAACCAGAGCCTGGACCTGGACTTCGCCACCAAGCTCATG
GACTTCAAGCTGGCGGAGGGCGACGGCGAGGCAGGCGCCGGGGGCGCGGCCTCGCAGGAGCAGAAGCTCGCCTGC
GACACCTGTGGGAAGAGCTTCAAGTTCCTGGGCACCCTGAGCCGCCACCGGAAGGCGCACGGCCGCCAGGAGCCC
AAGGACGAGAAGGGAGATGGCGCCAGCACTGCAGAGGAGGGGCCCCAGCCCGCCCC**TGA**ACAGGAGGAGAAGCCC
CCCGAGACCCCGGCAGAGGTGGTGGAGTCGGCCCCGGGTGCCGGGGAGGCCCCGGCGGAAAAGCTCGCGGAGGAG
ACGGAGGGCCCCTCCGACGGGGAGAGCGCGGCCGAGAAAAGGTCCTCAGAGAAGAGCGACGATGACAAGAAACCA
AAGACAGACTCCCCCAAAAGCGTGGCCAGCAAGGCAGACAAGAGGAAGAAGGTCTGCAGCGTGTGCAACAAGCGG
TTCTGGTCGCTGCAGGACCTGACCCGGCACATGCGCTCCCACACAGGGGAAAGGCCATACAAATGTCAGACCTGC
GAGCGAACCTTCACCTTGAAGCACAGCCTGGTTCGCCACCAGCGGATCCACCAGAAAGCCAGGCATGCCAAACAC
CACGGGAAGGACAGCGACAAGGAAGAGCGGGGTGAGGAGGACAGCGAGAATGAGTCCACCCACAGCGGCAACAAC
GCCGTCTCAGAGAACGAGGCTGAGCTGGCTCCCAATGCCAGCAACCACATGGCTGTCACCCGGAGCCGGAAGGAG
GGCTTGGCCAGTGCCACCAAGGACTGCAGCCACAGGGAGGAGAAGGTCACGGCAGGGTGGCCGTCTGAGCCTGGC
CAGGGTGACCTTAACCCAGAGAGCCCGGCGGCCCTGGGGCAGGACCTGCTGGAGCCGCGCAGCAAGAGGCCTGCC
CACCCAATCCTGGCCACAGCTGATGGCGCCTCCCAGCTCGTGGGGATGGAGTGACAGCCTCAGTCCCCCTCAGCA
CAGACAAAAGCCAGCAGAGCAAAGCGTCTATACTTCATGGGGTTTCCTCAGTGCCCTTTGGCTGTTGAGGAGTGA
GAGANANANANANANAGAGANAGAGAGAGACAAGCAGGAGCGTGGCTGCTCGCTCAGTGCCATAGCCTTACCGCA
GCCTGCGCGGGAGGCCACAGCCCGTGCCGATTCCAGTGCCTTAACTACTTACCGGATCCCTCCATATTATCATGG
GTGTTGTATTTTTCCAAAATGACTTCTTAAACAAAACAAATATTATAATGATATTGTCTGGAGAGGACCTCTTCA
TTTGAGCATTAGCGTTATTTTGTATTGGTGTGTGTGAGCTTGTTCTTGTGAATCTGTGATAGCACCGTTTGTTCT
GTGAGCTGGAAACAGAAGGAAAAAACATACCCTTGGGTACCCATAGCCAATAACTGGAAGAAAATGATGTGAATT
TCATGTAAATGACCAGAGGAAAGATGGATAAGATGATAATTTCTTAAATAGACATTTTCCCTTTTTCTTTGTGCT
TCATGGTGGAGCTGTCATCTGGTCCTTGGTATTACAGGATGTGGTTGATGAAGGTTTCCAATATGGTTTCAGGCC
AAAACCAGGGAAGATTCTAGCTTCAGCCTCATGTCCATTTCCAGTCTGTCAGCATTAGACATGGTCACTGTTCAA
GTTTCAAGACATCCATTCTTAACTATAGAGAAGAGTACTCCCCTGGCGTCTTAACCTATGGAAAACATGCACGGA
TAGGATATATTTGATTGCCTCCTCTTCCCTTTCAGTATATGTATTATTAATATTATTATTATTATTATTATTATT
AGTTCATCAGTTTGCTGTTCTCTGCAGTGAGCAGAATCAAATGGGCAATATTTGTCCTGGGAGACCTGTGCCGCA
CCCAGGTCCCCGTGTTAACGTGTGCCTGCGGTTGTGGTTGGCACCCTCGGGTGGTAGCTCTTCTACTGTAATGAG
ACAAGCCTTTCTTCTGTCACTGCAGAATTTAGAAGGGGCCGTGAGCAGTCTTCCCAAGCATGGTCCAGGAGCAGC
TCAGAGAGGGTGGAGTGAGGATGCATGCATCCAGGGAACAGGCATCAAGAAGCCAGGGCCGTGCCTGGAGCACTG
CAGAGATGACTTTGGAGAAAGCAAAGCAGTGACCCAGTGACCAGGCACATTACTCGTGAGCGAGGTATTCCCAGT
CTTCCTGCTAAGCCTAATCCAAGCCTTACCCAGCTGTGCTACTGTCATTTGCAAAGCAAGGAAATACTACTACTG
GTAATAAAACTACACATGCAAGATGTCAGATAAGAAATAGGTTTATATTTACCTTCCTGCGATGTGGGGTTGGTG
CTTGAAGATAAATGTGCTGTTTCTAGTTTCTTAAATAGCCCACACCCCTGGATGCAAAAAGGCAGGGTTATTTTT
ACCCATGAGCATCCTGTGCAGGCAATAGACTTCCCTCACTGTCTCCGCCTGCAGGGAGGAGAATGTACCCCACTG

FIGURE 5077C

CACCTGAGCTCCTGGTCCCTCAGCCAAGACCTCAGGGGTCCCCAGCCAGCCTGCTGCTGGGGACCCCTGTGCTTG
CTGCAGTGTATGGAGCCTCTTGCCTTCCCCTGGGGAGGCACCCCTGTACCCCAGCTTCCTTCCCCTGGCCTTTTC
TGGCCCCAGTGCTCCTCCTTTACATAGACTTGTTCACACAGAAACGTGCACGCCCCCTTTTCTCCGCCACTTCAC
CAGTTTCTGAAATCCAACCTCCCAGACTTCACAGGAAGATAGATATTCTTGAGATAATGAAAAGTGATATCTTCG
CATACGAAAGGAAAAAAGGTTGAGGTATATATGATTTTTAACTGTATTAGGGGTGTATGAACCAGTTTAAAAACG
AGGTTTTATTTACTGTAGAGATGAATGCAAATCAGAACCAATGATCCCTTGGCCTACTTAGTTAAAACCAGTTCA
TACATCCCTTAGGGTTTTTATTATTATTATTATTATTATTACAGTTGTTATTGTTGTTTTTGTTGTTATTATTAT
TTGGGGTTTCTTGTGTTTTTTCTTTGCGACTCTCCACACTAAACTTGCAATATTGTGGGGAGAAGCTGTGACTAA
ACTCTACGCTGCGGTGAGATGTAGCAGTAATCAGCTCCCAGCGACGTGTGTAGCTGGGGCTGCCGCTCGCAATAA
TCACTATTGATTTAAAGCTTTACTTAGCCTTGATCTGTACCCTCGTAGTCAATAAGGTCTTGCCACATTTTATTA
GTGAGGTGGAGAAACGTATTATTTGTTTGTTGTTTTTGCCCTTCCCCCACCCCCCAATATTAAACTGTGAAATTT
GTGATTTGTTTAAACTCTGGGTGAATCATAGCTTAGTTTGCATGTCCAGCTAATTTGTTTCTATACATTTTGTTT
GATTCTCTTTCTCCTTCTCTCAGGGCTTTTACAAAAAAATATATATATATGGATCTTCTGAAAAGTTTTTTGAGG
TGCAAGTTTTTTCTCTTGTTTTTTTTTCTTTTTTTTTTCTCATTGATTAATGGACATGATGCTGAGATTCAATCA
CTACATGAAACACCTGGCTGTGAAAACAAAACAACCCAGAGGGCTGTGTTCCAAGCAGCGCTGGGGAAGCTACGT
AACAGTCGGATGCCAGTTTTGGAAGATTCACCATGCGTTCTGACCCTCTGTTCGTCTCTTTCCTCTCCTCTTTCT
TCAAGAAGGAAATTGATCCTAGTGATTTCAGCCCATGCATTAAACAGGAAACAATAATAAATTTGTAGAATTCAT
ATTTTTCTAAAGGGAACTTAAAAACTGCTGCTACATGTTATGTACAAAACTGGTTTATGCCACATGAACAGAGAA
TCACAAGTTTGGTTTTGGTACTTTTTGTTCCTCTTTGTATTCAGTTGTATAGAACTTCCAAATTCAGAATGAGAA
GAAAGCTGTTCTGTATCAAACCATTTAAGCAATAAATGTTATATTTTAAAAGCTGCAGATTGCCGGTCACGTGGC
CGTCCTGTGATTTTTTGTGATCCCATCCCCAAACCCACAGCCCACTTGGGGCAGGTCCCAGGTGTGCAGTACCAT
TGGGGGGAGTCACAGGTGCCCAGGAAAGCTCTTGTCACCCAGGCAGCATTTTTATTTGCGCTGGAGGCTGTGG

FIGURE 5078

MSAVMSVGKVTENGGSPQGIKSPSKPPGPNRIGRRNQETKEEKSSYNCPLCEKICTTQHQLTMHIRQHNTDTGGA
DHSCSICGKSLSSASSLDRHMLVHSGERPYKCTVCGQSFTTNGNMHRHMKIHEKDPNSATATAPPSPLKRRRLSS
KRKLSHDAESEREDPAPAKKMVEDGQSGDLEKKADEVFHCPVCFKEFVCKYGLETHMETHSDNPLRCDICCVTFR
THRGLLRHNALVHKQLPRDAMGRPFMTEQPFNSCWLPRLRIHGLLLXEVSSHFSGLVRNNLRRCISEQHRFVCDT
CDKAFPMLCSLALHKQTHVAADQGQEKPQATPLPGDALDQKGFLALLGLQHTKDVRPAPAEEPLPDDNQAIQLQT
LKCQLPQDPGCTNLLSLSPFEAASLGGSLTVLPATKDSIKHLSLQPFQKGFIIQPDSSIVVKPISGESAIELADI
QQILKMAASAPPQISLPPFSKAPAAPLQAIFKHMPPLKPKPLVTPRTVVATSTPPPLINAQQASPGCISPSLPPP
PLKLLKGSVEAASNAHLLQSKSGTQPHAATRLSLQQPRAELPGQPEMKTQLEQDSIIEALLPLSMEAKIKQEITE
GELKAFMTAPGGKKTPAMRKVLYPCRFCNQVFAFSGVLRAHVRSHLGISPYQCNICDYIAADKAALIRHLRTHSG
ERPYICKICHYPFTVKANCERHLRKKHLKATRKDIEKNIEYVSSSAAELVDAFCAPDTVCRLCGEDLKHYRALRI
HMRTHCGRGLGGGHKGRKPFECKECSAAFAAKRNCIHHILKQHLHVPEQDIESYVLAADGLGPAEAPAAEASGRG
EDSGCAALGDCKPLTAFLEPQNGFLHRGPTQPPPPHVSIKLEPASSFAVDFNEPLDFSQKGLALVQVKQENISFL
SPSSLVPYDCSMEPIDLSIPKNFRKGDKDLATPSEAKKPEEEAGSSEQPSPCPAPGPSLPVTLGPSGILESPMAP
APAATPEPPAQPLQGPVQLAVPIYSSALVSSPPLVGSSALLSGTALLRPLRPKPPLLLPKPPVTEELPPLASIAQ
IISSVSSAPTLLKTKVADPGPASTGSNTTASDSLGGSVPKAATTATPAATNSPKESSEPPAPASSPEAASPTEQG
PARTSKKRGRKRGMRSRPRANSGGVDLDSSGEFASIEKMLATTDTNKFSPFLQTAEDNTQDEVAGAPADHHGPSD
EEQGSPPEDKLLRAKRNSYTNCLQKITCPHCPRVFPWASSLQRHMLTHTDSQSDAETAAAAGEVLDLTSRDREQP
SEGATELRQVAGDAPVEQATAETASRVHREEHGRGESHEPEEEHGTEESTGDADGGRGRVEQPEPGPGLRHQAHG
LQAGGGRRRGRRRGRGLAGAEARLRHLWEELQVPGHPEPPPEGARPPGAQGREGRWRQHCRGGAPARP

FIGURE 5079

CTCATCCCGGCCCCGGGATGGCGTCCCCACGGGAATTGACACAGAACCCCCTGAAGAAGATCTGGATGCCATACA
GCAATGGGCGGCCCCGCTCTGCACGCTTGCCAGCGCGGTGTGTGCATGACCAACTGCCCAACTCTCATTGTCATGG
TGGGCCTGCCCGCCAGGGGCAAGACCTACATCTCCAAGAAGCTGACTCGATACCTGAACTGGATTGGTGTGCCCA
CTCGGGAGTTCAATGTTGGCCAGTATCGCCGGGACGTGGTCAAGACCTACAAATCTTTTGAATTTTTCTCCCCG
ACAATGAAGAGGGCCTGAAAATCAGGAAGCAGTGTGCCCTGGCAGCCCTCCGTGACGTCCGGCGGTTCCTTAGTG
AGGAGGGGGGACATGTGGCGGTTTTTGATGCCACAAACACCACCCGAGAACGGAGAGCGACCATCTTTAATTTTG
GAGAACAGAATGGCTACAAGACCTTTTTTGTCGAGTCCATCTGTGTGGATCCTGAGGTCATAGCTGCCAACATCG
TGCAAGTGAAACTGGGCAGCCCTGACTATGTCAACCGCGACAGTGATGAGGCTACGGAGGACTTCATGAGGCGCA
TTGAGTGCTATGAGAACTCCTACGAGTCGCTAGATGAGGACCTGGATAGGGACCTGTCCTATATCAAGATCATGG
ATGTGGGCCAGAGCTACGTGGTGAACCGTGTGGCTGACCACATCCAGAGCCGCATCGTATATTACCTCATGAACA
TCCACGTGACCCCCCGCTCCATCTACCTCTGCCGGCACGGGGAGAGCGAGCTCAACCTCAAGGGCCGGATTGGCG
GGGACCCAGGACTGTCCCCTCGGGGCAGGGAGTTTGCCAAGAGTCTAGCCCAGTTCATCAGTGACCAAAATATCA
AGGATCTGAAGGTCTGGACAAGCCAGATGAAGAGGACAATCCAGACGGCTGAGGCACTGGGTGTGCCCTATGAAC
AGTGGAAGGTCCTCAACGAGATCGATGCGGGCGTCTGTGAGGAAATGACCTACGAGGAAATTCAGGATAATTATC
CACTGGAGTTCGCCCTGCGGGACCAGGACAAGTACCGGTACCGGTACCCTAAAGGGGAGTCCTACGAGGACCTGG
TCCAGAGACTGGAGCCTGTCATCATGGAGCTGGAGAGGCAAGAGAATGTGCTGGTCATCTGCCACCAGGCTGTGA
TGCGCTGCCTGCTGGCCTACTTCCTCGACAAGGCAGCAGAACAGCTGCCCTACCTCAAGTGTCCGCTGCACACAG
TCCTGAAGCTGACTCCTGTGGCATATGGTTGTAAAGTGGAGTCCATATTCCTGAACGTGGCTGCTGTGAACACGC
ACCGGGACAGGCCTCAGAACGTGGACATCTCAAGACCTCCAGAGGAAGCCCTTGTCACGGTGCCTGCTCACCAGT
GACCATGTTCATCCACTGTGACCACTAGGCAGGCACTGCTCTCTGCAGAGGGGGTCATTCCAGGCCCTCCAGTGT
GTGTGATAGTCACCATGCCATGCAGGGATATTCTTGAAGCCACACATGGCTGGCGGAACCCAGAGCCCCCACCCC
AGCCCACCTGGCTCTTTGTTGACAGTCGGCGACAAGGTTGTGCGTGGCTCCTGACCTGCTGCTAAGAGTCACTTG
ACCAGACTGCATCTGCATGGGCTGCGCGGAGGTTGCCCAGCCCCAGTTTCTTCCGGCGCAGCTCTTAGGTGTTCA
CTCTCGCCAGCTCAGTTGGCTTTGTGAAGTGTGAAACCCTACAATGTGAAAGGAAAGTGCTTGCTGTGATGTTCC
TACTGTGGCCCAGCTGCCCAGCATGGACCTGGTGACTCTCCACAGGGCCTCTACCATCCTCTCTGTGGCCACTTC
CTGAGCCAGAGGCCAGGTCTTCATGGGGCCCTGAGCTTCTGCTGCCTCTGGTGAGAGGGAGAGCCCTTCCCATCC
TTACCCACCAGGAACTAGAGCCCCAACCACAGCAGATGCTTCCTGGGCAGCCACTGGCCAGGCCGTTGTATCCAT
GTCACCCTTAGTTGTGGGCATTCATGAAAGCAATGCGCTTGCTTCAGCACATTGGGATGCACAGAAACGTGAGGG
CAGGGGGGCAGTTGTGGTCGCCCCTCCCCAGTTGTGCATGTACCCGGCTACTTAGGTATGCTTAGGGGAGCTGGT
GGCCAGGGGTGCCCCTTCAGGCCTGCTCTCACAGTGAAACCACTTCAAGACAGGGCAGGAAGTTACCTTCCTGGT
GCACACACCGAAGTGCTCGAGGGAGAGGCTGCCGCCCCCTCTCCCCTTCCCTGGCTGTGGACACTGGCAGCCAAT
GGGGAGGCGGCCTCTCCCCTGTTGCTGCCCGTGTCCACACAGGAATGTACACTGGTGGCAGAAACATGCATTTGC
CATAAATAATTCAGAAACACTTGTATGGTCCTGTAAAACTTCTCTGGTGTTTGTTGACTTCTGCCTGTGGGTCTG
AGGAAGGGAGAAGGCAGAACCCATAGGCAGTCCCTGGGCAAGGGAGGATTTTCCCGGCCGCAGCACAGCCTTCCA
TTCATGTGCACGTGAGTCTGGTGAAAATGGCCTTGTGAAGTCCAGTGTCTGTCATGCCCCTGAGTTCTTTTGGTC
CCAGAGAGGCAGCCTGGGCAGTCTGTTTACAGCTGGCAAACAGACTGGCTGGCAAGTTGTGGGGCTGGGTCAGAA
AGTGTCTGGACTTGTAATCGGGTGCCCTGCTGTCCACAGGTGGACTCTGGGGAAGCCAGGCCCCTGGATCCCAAG
TCCTTTGTGTCCGGAGCCTTTCCTGGCCTGTGCCTGGAGGGTAGCACATCTTTCCAGCCTCCCAGGGCTTTGCAG
CCTGCAGATGCCACCTGTCCCTGAGAGAAGTTAGCGTCCCTGGCCCTGGCCGGTGGTCTCTCATCCTTGTGTGCT
GCTCTGCTAAGAGATGTCCAAGGCGGAGCCGGGGCAAGATCCTTCCAGACTCATCTGTCAGAGCCCCAAGCCCTT
TAGACCCAGAGCCCAAGGACCATGCCTTTGGGACATTAGGACTGCAGCCTTTGCTTCTGTGTATTTTGGAGTTTT
GGTGACTTTTGTCACCTGGACACACTCATTTGTTAGCCATAGTGGGTTCCCTTGGTCAGCAACAGTGCATGTACC
TCTGGATGTCATCTGAGGTGAGACCACCGAGGCCTTTTCTCTCTGTGTACAGAGGGGAGTTAGGAGTTGCTGGAC
TGGATGCATTACGAGGACTGGGGACAGGGTAGAGGGACATCCAGGGATCAGGGCATGAGTGGGGGCAACCCCCCG
GCCTCTGCCCTGGCATGGTCTCCGCATGGGCTGAGGTGTAGCTGATTGGCTGCCACATTTCGGCCATGCTGGCTG
GCGTGCCCATGTTGCAGATATTTTCCCGAGTTCCCCAGAATGGATGGTATTGAATCTCAGCCACATGCAACACTG
TGTCCAGCATTCTTTGCAATAAATACTTTTTAAAAAATAAAAAAAAAAAAAAA

FIGURE 5080

MASPRELTQNPLKKIWMPYSNGRPALHACQRGVCMTNCPTLIVMVGLPARGKTYISKKLTRYLNWIGVPTREFNV
GQYRRDVVKTYKSFEFFLPDNEEGLKIRKQCALAALRDVRRFLSEEGGHVAVFDATNTTRERRATIFNFGEQNGY
KTFFVESICVDPEVIAANIVQVKLGSPDYVNRDSDEATEDFMRRIECYENSYESLDEDLDRDLSYIKIMDVGQSY
VVNRVADHIQSRIVYYLMNIHVTPRSIYLCRHGESELNLKGRIGGDPGLSPRGREFAKSLAQFISDQNIKDLKVW
TSQMKRTIQTAEALGVPYEQWKVLNEIDAGVCEEMTYEEIQDNYPLEFALRDQDKYRYRYPKGESYEDLVQRLEP
VIMELERQENVLVICHQAVMRCLLAYFLDKAAEQLPYLKCPLHTVLKLTPVAYGCKVESIFLNVAAVNTHRDRPQ
NVDISRPPEEALVTVPAHQ

FIGURE 5081

TTAATATACAATTTTTATTTGTCAATTAGAAAGTAACAATAAAGAGTGAGCTTATAAGTTATGGAGTTAAAATTT
TATGCAGAAGCAAGGGAAAATCTTCCTCCAGTGAAAAAATTCTAATGAGATTTTGAAGACAGAAACAAATCACAT
TTTTTTTGTTTTTGTTTTCTAAATGTTTTACAAGAGAAAATTTCAAAAGCATAATCAGTAAGAGGGAGAAAAGTG
TGCTGAATTCCATGTATCCAGCTTGCAGCCATTGTTAACTCAGGACTAATCTTGTTTCGGTTCTACTTCCCTTTC
ACCACCCCCACACCCCAAACACAAAATTACTGATTCTAGATCATGTCATTTATTTACAAATACTTTAGTATGTAT
C

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FIGURE 5082

GTCAGTCTTAGACGACTGCGTCGTGCTATGACCGGACTTTTTCTTGAAAGGGGATGACAGCATGGGAGGCAATGG
CTCCACATGTAAACCCGACACTGAAAGACAAGGCACTCTCTCCACAGCAGCCCCAACAACTAGCCCTGCACCCTG
TCTCTCTAACCACCACAACAAAAAACATTTAATCCTTGCCTTTTGTGCTGGGGTTCTACTGACACTGCTGCTGAT
AGCCTTTATCTTCCTCATCATAAAGAGCTACAGAAAATATCGAAGGGAGAGGCTTCCCATTTCCCCAGGCCCATT
GCTGAGATGGGTCCCTCTTCTTTCTGGCACCATGGCAGATCACTCCAAGCCCCAGGCCCCAGATCCTCACTCAGA
TCCTCCAGCCAAGCTTTCATCCATCCCAGGGGAATCACTTACCTATGCCAGCACAACTTTCAAACTCTCAGAAGA
AAAGAGCAATCACTTGGCTGAGAACCATTCTGCAGACTTTGACCCCATTGTCTATGCTCAAATTAAAGTAACAAA
CTAACTCAGCTTTTCCAATGAGGCTTGAATCCATTTCCTCTCATCTCAGCCCTATCTTCACACATCACTTTCACT
TTTTTACAAATTTTGGACCACCACCTGTGTGAAACTGCAGTCGGAGTTGTTTAGATGTGATCTGGCAATGCTATC
CAGCATCTTTGGAGACCAATGGTCAGTCTTTTCCTGGCCAGAGGAAAGATTGATGGCCCTCCCACTTGAACTGAC
AGCCTGTGAGCCCCTTGGGGGCATAGACTGCCTTCCTTGGACCCTTCCAAAGTGTGTGGTACGGAGCTCAGTGCA
CAGAGTATTCACCCAGCATCATGAATCAACTTGGGAGGAGTCAACCAAATGAACAATCTACCAAAAATTTCAAAT
AAAGTCAAACCCCCCAC

FIGURE 5083

MGGNGSTCKPDTERQGTLSTAAPTTSPAPCLSNHHNKKHLILAFCAGVLLTLLLIAFIFLIIKSYRKYRRERLPI
SPGPLLRWVPLLSGTMADHSKPQAPDPHSDPPAKLSSIPGESLTYASTTFKLSEEKSNHLAENHSADFDPIVYAQ
IKVTN

FIGURE 5084

CTTTCCAGCCACCCTCCTGGAACACGCAGTCACGTGACCCTGATGCCAGGCTCTCCAGGGAATCAGGAGGAAAAG
CCCAGGTGCTCTTGACAATAATGTGGTGCCTGCTGCCCTGTGGGCTCCCTAATCCCCAGAGGGGCCTGTTCAGCA
AAAGGAGCACAAGCAGGACTTAAACAGGCACAATCAAAACCATCTCAGTCAGAAGTCAGAGCGTGGTACCTGGGA
GAGAACCCCGAGGGGCATCTGGAGTGTTGGGGCCATGTTGGTGATATGGACGTACTTCACTTGTGAAAATTCTCA
CCAAAATGTTCACAAGTTCTTTTGAAGGAGAGGGGATGTGGGGAGGGAGAAGAGGTTATATGAGATTGTCTTTAA
TGTTTTGTACTTTTTGCATTTTTAAGCTTTTTGACAACATGTATTTTATAATCAGAGAAAAATGCTGACTTTTAT
AAAGTGCCATTATTATGATTATGAGCTGCCTCGTGTGTGTGGGCATGGGTTTGCCATGAAAACTATGAAGAACTT
TGAGATGGGCAAGACAATTCCTGGGTGTCTTCTGGACAAGATCTAGGGAGTTACCTAGCAGACCTTCCGGACTGA
CGTGATGCTACAGGGGTCCCATCTTTCCTTGTCATTGAGCTATTTTACAGTTCTGTGAATTGTAAAGAACTGAGG
GTAATGCGAATGACTCTTGTTCATAGAGGCAAATGAATTTTGTCCCATGGAGATTTAATTGATATTACTCTGTGG
ATGTTGACAAGTTTTGTGTCTGTTAGCAAATTAATTTCAGTGTTCTTATTTGTCTTTGAATTGTTTCTTTTTAAA
ATTTTACTGGTTCCTTTATAAATTTACCTTTTTGAAAAAGTATTGTCCTTTAACAGGACCCTGGTGGCAGACATG
GTTGCTGGGCCCTCCCTCACTGCCTGGGAACCTCTTCCCCAAGGCCCCAGGGCACCCTCTCCCCTCTCCCCTGCA
GCCCCAGAGCTGCCCACTCCCAGGATTCCTCCTACCTCACCCCCTCCATCCCTCTGCTTCTCAGTGTAGGATATA
GACTCAGGGGTGGGAGATCAGGGGTGAAAGCCACTATGAATACTGAGTCGGCTAAACAGAGTTGCTAAATTGGCC
TGGGAATCTGCTGAGGGTCCATCCTCTTGATTCTATGGGAAAATGCAGTTTAAAGATCTAAAGAGCTGGGAGGTC
CTTACAAGAGGCTTCCTTCTGTGGGCACGCATTGGGGTGGGGTGGTGAGGTTACCCCGCGGGTGTCTCCCTGCCC
CAGTGG

FIGURE 5085

FQPPSWNTQSRDPDARLSRESGGKAQVLLTIMWCLLPCGLPNPQRGLFSKRSTSRT

FIGURE 5086

GCAATTGGTGGCTTTGAAGGCGCGGCGAGCGGGAACAGCTCTTGAGGAGTGAGACTGCAGGAGATGTGGGCCGTG
CCAAAGAGATGGATGAGACTGTTGCTGAGTTCATCAAGAGGACCATCTTGAAAATCCCCATGAATGAACTGACAA
CAATCCTGAAGGCCTGGGATTTTTTGTCTGAAAATCAACTGCAGACTGTAAATTTCCGACAGAGAAAGGAATCTG
TAGTTCAGCACTTGATCCATCTGTGTGAGGAAAAGCGTGCAAGTATCAGTGATGCTGCCCTGTTAGACATCATTT
ATATGCAATTTCATCAGCACCAGAAAGTTTGGGATGTTTTTCAGATGAGTAAAGGACCAGGTGAAGATGTTGACC
TTTTTGATATGAAACAATTTAAAAATTCGTTCAAGAAAATTCTTCAGAGAGCATTAAAAAATGTGACAGTCAGCT
TCAGAGAAACTGAGGAGAATGCAGTCTGGATTCGAATTGCCTGGGGAACACAGTACACAAAGCCAAACCAGTACA
AACCTACCTACGTGGTGTACTACTCCCAGACTCCGTACGCCTTCACGTCCTCCTCCATGCTGAGGCGCAATACAC
CGCTTCTGGGTCAGGCGCTGACAATTGCTAGCAAACACCATCAGATTGTGAAAATGGACCTGAGAAGTCGGTATC
TGGACTCTCTTAAGGCTATTGTTTTTAAACAGTATAATCAGACCTTTGAAACTCACAACTCTACGACACCTCTAC
AGGAAAGAAGCCTTGGACTAGATATAAATATGGATTCAAGGATCATTCATGAAAACATAGTAGAAAAAGAGAGAG
TCCAACGAATAACTCAAGAAACATTTGGAGATTATCCTCAACCACAACTAGAATTTGCACAATATAAGCTTGAAA
CGAAATTCAAAAGTGGTTTAAATGGGAGCATCTTGGCTGAGAGGAAAGAACCCCTCCGATGCCTAATAAAGTTCT
CTAGCCCACATCTTCTGGAAGCATTGAAATCCTTAGCACCAGCGGGTATTGCAGATGCTCCACTTTCTCCACTGC
TCACTTGCATACCCAACAAGAGAATGAATTATTTTAAAATTAGAGATAAATAAGACGTGCGTGGTTTCTTAAGCA
CAGCTCCTCCTTCTTGATATTGCACATGCACTTCAGTTCATGGGCTAGCTGTATAGCTTNCGTCTGTAAACTTGT
AATTTCAAGAATCCTTGGTATTGAATTTTAGAAATGCTCACATAATTGTTGGGACTGATTCATTCCTCCACGGAT
ATGCCTCCTCTCTCTGATATCCTGCTAACTGTAGCCGTTGTGGCATTTGAGATGACAGGACATATATATATATGG
CCCCACACTTGACCTTGAGTGCCTGAATGCTCTGAAATCAAGCATATGGCACAGCGCTCAAGACTTTTGGGTTTG
TGTCCTTTTTTCTATGGCTGTCTCTTCTCAATTCTGGAGAGGTCTGGTTCCAGTGGCTGGTTTCCAGGGATTGAT
TCTTAAGCTCTGGATCACAGAGAGAAGCAACAAGGAACTATACTCAACTCAAAACTTTTTAGGAGAATCATGAAA
TTGGTCTATTCAAAGGATGGAGTTGAGTCCATTCTGTTATTGTTGCAAGAGGTTGCATATTTGGTGAGTCAGTTA
TATAAAATAGTGTTCTTATTGTAAATATGATACTTCTCATAATCTATTTTATCATGTGTATAACATTCAAACTGA
CAAATATATTGACTTATGAATAAAGGTGTCAAAAAACTGGCACATCAGTTAATTTTGATCAAAGTACTTCAGTGA
TCATCACTAAATACCCTATCTTTTTAAAAANNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNAATGACATCACTTTGGTTCAGAGCTCTAAAATGGAGGGAGGAAGCCATTCTAAAAAGGACTCCCTACATGACC
TGCAACTTGAAAAAAAATTAAAAGCTCCAAAAAAAAAACAATACAGGAGCTTACCTTGAACCTTTGAATTGGGCC
AAATTGCGATGACCACTGCATCCTGGAAAATTTTATTTCACCAGCACTACAACTCCTCAACAGCACCAACCAATA
AACTATGGATTTTTGTACTAAGCCAGTTGCCTCTTTCAAAACAACTTGTCAACTTGTCTAATCACCCTCAGCTTT
TTTTAAAAACCCCTCCTCTACCCTCTCTCTTCAGAACACAAGTGGCTTCTAGCTGAATCTGTCTCCCAAATTGCA
ATTCCTAAGACCTCAATAAAAACACCTTGTCTTGCTGAAAA

FIGURE 5087

AIGGFERGEREQLLRSETAGDVGRAKEMDETVAEFIKRTILKIPMNELTTILKAWDFLSENQLQTVNFRQRKESV
VQHLIHLCEEKRASISDAALLDIIYMQFHQHQKVWDVFQMSKGPGEDVDLFDMKQFKNSFKKILQRALKNVTVSF
RETEENAVWIRIAWGTQYTKPNQYKPTYVVYYSQTPYAFTSSSMLRRNTPLLGQALTIASKHHQIVKMDLRSRYL
DSLKAIVFKQYNQTFETHNSTTPLQERSLGLDINMDSRIIHENIVEKERVQRITQETFGDYPQPQLEFAQYKLET
KFKSGLNGSILAERKEPLRCLIKFSSPHLLEALKSLAPAGIADAPLSPLLTCIPNKRMNYFKIRDK

FIGURE 5088A

GCCAGGCCCTGGTCGGACGGAAACGCTCCGCCGGCTTTATTGTCGCTTCGTTATGTGGCGGAGCCGAGCAGTTTA
GCGTGCCTCTCACCCTCAGCGCCTGCGAAGCCGGCGGCGGCGTCGGGACTCCTCGGCGCGCGGAGGAAGGATATC
TGTGTGGAGGATCGGTGTGTGCGCGCGGCTTTAAAGAGGGGGCAGCGGAGGGTCTCCCCGCACTCCGCTGCTC
AACTTCGAAGGGCCTCGCTCGCTGCAGGCTCGCTCCTCAACCTCTCCGCCGCCCGGCCCCCCTTCTCCGCGCGGG
ACGCTGCCCGGAGCGCGGCGGGGCCGGGGGGTGGAGGACGAGAGAAGCGGTCGGAGGCGTCGGCCCGGCAGCGGC
AGCGGCAGCGGACGCGTGCAGCAGACCCGGGAGCGAGCGCGAGCCGGGCTGCCGGGCGAGAGGGCGAGGCCGAGC
CCCGCGAGACCGGAACGCCGGGGGCGGGGGCGAGACAGAGGGGGAGCCGCGGGGAGCGCGCGGGACGCGGCCCGA
GGCCGTGCGCGAGCCGGGGCACCGGACGGCGGACGGCGGACGGCGCGCAGCCATGTCGTTCAGTGAAATGAACCG
CAGGACGCTGGCGTTCCGAGGAGGCGGGTTGGTCACCGCTAGCGGCGGCGGCTCCACGAACAATAACGCTGGCGG
GGAGGCCTCAGCTTGGCCTCCGCAGCCCCAGCCGAGACAGCCCCCGCCGCCAGCGCCGCCCGCGCTTCAGCCGCC
TAATGGGCGGGGGGCCGACGAGGAAGTGGAATTGGAGGGCCTGGAGCCCCAAGACCTGGAGGCCTCCGCCGGGCC
GGCCGCCGGCGCCGCCGAGGAAGCCAAGGAGTTGCTGCTCCCCCAAGACGCGGGCGGCCCCACCTCGCTTGGCGG
TGGCGCGGGGGGCCCCCTGCTAGCGGAAAGGAACCGTCGGACTCTGGCCTTCCGAGGCGGCGGCGGCGGGGGTCT
CGGCAACAATGGCAGTAGCCGCGGCCGCCCCGAGACCTCGGTGTGGCCCTTGAGGCATTTCAATGGGCGAGGGCC
GGCGACTGTGGATCTGGAGCTGGACGCGCTGGAGGGGAAGGAGTTGATGCAGGACGGCGCGTCCCTGAGCGACAG
CACCGAGGACGAGGAGGAGGGGGCGAGCCTGGGCGACGGCAGCGGGGCGGAAGGCGGCAGCTCAAGCAGCAGCAG
GCGGTCGGGCGGCGATGGCGGGGACGAAGTGGAGGGCAGCGGTGTGGGAGCTGGCGAAGGAGAGACTGTCCAGCA
CTTCCCGCTCGCGCGGCCCAAGTCTCTAATGCAGAAGCTCCAATGCTCCTTCCAGACCTCCTGGCTCAAGGACTT
TCCCTGGCTGCGCTATTCCAAGGATACTGGTCTTATGTCTTGCGGCTGGTGCCAAAAGACCCCTGCAGATGGGGG
AAGCGTGGACCTTCCCCCAGTGGGGCATGATGAGCTTTCGCGAGGGACCCGCAACTACAAGAAAACCCTCCTCCT
GAGGCACCACGTCTCTACCGAGCACAAACTCCACGAAGCCAACGCCCAGGAGTCAGAAATACCATCAGAGGAGGG
GTACTGTGACTTTAATAGTAGGCCAAATGAGAACTCTTATTGCTATCAACTTCTGCGACAACTAAATGAACAGAG
AAAGAAAGGTATTCTTTGTGATGTCAGCATTGTGGTAAGCGGAAAAATCTTCAAAGCTCATAAGAACATCCTGGT
TGCAGGCAGCCGTTTCTTTAAGACTTTATATTGCTTTTCAAACAAAGAAAGCCCTAACCAAAACAATACTACCCA
CTTAGATATTGCTGCAGTTCAAGGTTTTTCAGTCATCTTGGACTTCTTGTATTCTGGTAACCTGGTGCTCACAAG
CCAAAATGCCATTGAAGTTATGACCGTGGCCAGCTATCTTCAAATGAGTGAAGTTGTTCAAACTTGCCGAAATTT
CATTAAAGATGCCTTAAATATAAGCATTAAATCAGAAGCTCCAGAGTCTGTAGTTGTGGACTATAATAATAGAAA
ACCAGTTAATAGAGATGGTCTGTCTTCATCACGGGATCAAAAAATTGCCAGTTTTTGGGCAACACGGAATCTTAC
CAATTTGGCAAGTAATGTAAAGATTGAAAATGATGGTTGTAATGTCGACGAGGGCCAAATAGAAAACTACCAAAT
GAATGACAGTAGTTGGGTCCAGGATGGATCTCCTGAAATGGCTGAAAATGAATCTGAAGGTCAAACAAAAGTGTT
TATTTGGAATAATATGGGCTCCCAGGGAATTCAAGAGACTGGCAAAACAAGGAGGAAAAACCAAACTACAAAAAG
ATTTATTTATAATATTCCACCTAATAATGAAACGAATTTAGAAGATTGCTCAGTAATGCAGCCACCTGTTGCCTA
TCCAGAAGAAAATACACTACTCATCAAGGAAGAACCAGATTTAGATGGTGCTCTACTCTCGGGGCCAGATGGTGA
TAGGAATGTGAATGCAAATTTATTGGCTGAAGCTGGCACTAGTCAAGATGGAGGTGATGCTGGTACTTCACATGA
TTTCAAGTATGGTTTGATGCCTGGTCCTTCAAATGATTTCAAGTATGGATTATTGCCAGAATCTTGGCCAAAACA
AGAAACCTGGGAAAATGGTGAATCATCTCTAATCATGAACAAGTTAAAATGCCCTCATTGTAGCTATGTAGCCAA
ATACAGACGAACACTAAAAAGGCACTTGCTCATTCACACAGGAGTGAGATCATTTAGCTGTGATATTTGTGGAAA
ACTGTTTACTCGAAGAGAACATGTAAAAAGACATTCCCTGGTGCATAAAAAGGATAAAAAATACAAATGTATGGT
GTGTAAGAAGATCTTCATGTTAGCAGCCAGTGTTGGAATAAGACATGGATCTCGACGTTATGGTGTTTGTGTAGA
CTGTGCAGATAAATCACAGCCAGGAGGGCAAGAAGGTGTAGATCAGGGACAGGATACAGAATTCCCTCGGGATGA
AGAATACGAGGAGAATGAAGTAGGAGAAGCTGATGAAGAGCTAGTTGATGATGGAGAAGATCAGAATGATCCCTC
TCGATGGGATGAATCAGGAGAAGTTTGTATGTCTCTAGATGATTAACTGACCTACTATACTCCTCAAGGATGCTG
CATTTGGACCTAATATGAATCGACAATTTGGATTGTTGAACTTGAAGGCTTGCAAAATATGGTACATGCTGGATA
GTAGTTATGTTGCTGTGAAAACTGTAGGGTCAAAGCCTTATAGCAAAAAAAATTTTTTTTTATATTTGCACAGGA
CTATACAGCAAACAACCATGTGGTTGGATTACATGGAGTCCCCACATACTCAGTCAGTTATCAAAGTAAAATATT
TTTTATTTATAGGATATACAGTAACTATTTGGGTCCTATGAAAATAGTCCTTAAAGAGCTTACATTCATGTGCTA
CTTTAACATGAATGGAGAAAATCCGTTTATGGAAGTACAGTGACAATTGACCCAATCACTCTGTCCATCAAACCA
CTCAGGCTAGTTTGTACTAGTAGAGTTTTGTTTCTATTTTTATTTTTATTAATTTTATTTTTTTTAATACAGATT

FIGURE 5088B

TTCAGTGAGGGGCTTTTTCAATCCCATTGGTTCTATTTTCTTGTATTTTTCCATTTAATTTGCTTCATAACTTAA
ACCAAGTCTCTTCTAGTCTTAGGTATTATTTCTCGATTTTGTGCTGATGGGCATGTTTATAAGAACTGGAGAGGT
AATTTATTGGAATGAACTAACTGACTTCCTCCATTCCCCTCTTCCTTTTTGACATGAATTTTACTACTTCACAAA
TGAAGAATGATGTTATGAAGTTACCGTGGCGAAGTTGACAAATACCACTAAGAATGATTATGATTTAGAAGTAAC
TTTCTTCTGCTGCTCTAATCTGATAAATGGTTACTATATGATATTTTCTGACATGGTATTTGGTTTTGGGTATCT
GTTACTTTGGCACTATTCTTGTTTGCCTCTTTATTTTTGCCAGTGTACTATACCTCAGTCCTATTTGAAAGACCT
AATTGAAAGAAAAATCATAGAAATAAGTAAAATGATTTGTTTTATAATTTATCCACCATGTCCAGTTTGGTTAGC
TTGTTATGCAATATAAGTGAAATATCAGGTTTTTACCCGTGTCCCTTTTATCATGAAAATTAACACAAAATGTGC
ATTCTCTTTTGTTTCATACTTAGCGGGATATTGATTGTTTTGAAATTATGATCAATACTTAATTTATTTTTTTCT
GTCCTTGAAGTCACTACACCTTGATACAGTCTTTCTAGTAGTCACCATGATTCAACAGTCTCAAAAATCTTACAA
ATAAAATTCTGAGAAGCTTTATTATTCTATAAATTCTTCAGGGTACAAAGGGTGACATATTGAGGTGAAATTGTC
AGATTTACTTAGCCTGGTGACATGAATTAGCTGATTGTGGAACTCTCAGCAGCATTTCACGTATTGTTAACATGT
ATGGCATTTATTAGCATATTGTATATTATATAAGATTGAGGGATGTCATATTTTCAGCTTTCTTTTAAATAAAAA
TTGAGTATATTTTCCTATTTTATATCAGGTAACTAAATTATGCTAGTTATGTGGAAAAAATTGCAAAGATGCTTT
GACAGATATAATCCCTTTGGTGCTCCATCTGATCAAAGTTGAAAAGTTGATGTTTTTTAAGAGACAAGCTTTATC
ATTGTCTCTGATTTCAGTAGAATAATGGTTTATTGTTAGACAATGATGTTTCTGCTTGGATAAATCAAAGATAAA
TTACAGTTACATGGTTAGATGCATCTTTTGTCATCTATATTGTAGTTTCTACATAACTGTAAACCTGACAGATAA
GAATAGTTTCGGTTTGATTTTTGTTTAAAACAGATGAGTACTTCTTAATGTTCTAGACAAATGAGTAAAATGTAT
TTCTGGTAGAAATTAGTTGGGCAAAGATACTATGAATGAAAAAGTATTTTAAACGTAAAATGTTCTTTGTGAATA
TGTAAGTATAGTATAAAGATTTCTTTCATCCCATTTATCCCCTTCCTTTAAATAAACTAGTTTACAATTGGTAGN
NNNNNNNNNNNNNNNNNNNNNNTAAAGAACAAAGATATATATCTAAAAATCACCTAAATCTGCTTTATTAGACT
ACAGTTCACTTATTGCATAGAAACTGGACTTGGCTTTACATTCTTAATGTACTTTTACTTTTCCTCAAGATATGA
ACTTACTCTCTTGAAGCTGAATTTTCTTTTACTACTTAAATCATTTATGTATATCTGGTAAATTATGACCAAATT
TTTGTTAGATTGCATACAGTAAATTGAAATACACACTTGGTACACTACGGGATTGTTGTGCTTTTGTTTGGTTTT
AGTTGGAAATAAGGTTTGATGTAGATGGCTTGTTACTGTTAATTTAAAATATTCTATAATTGTCCATTACTTTAT
GTTGTGTTGTGACAGATTTGGCTATATTTTTAGTCAATTGAAATATGATACTTTAAAAGTTTGTTTTTAGGTAAT
CCAAAGGAAAAGTGTTTATACTCTTGAATATATTAGCCTCAGCCTATATAAAAATTTCTTTGAAGTAAACATTTT
ACCGGAAACAGAATTGACAGATTTTTCTACTTGCTGACTGCCTAACTTATTTTGTTTCATGATCTCGAGGGACTG
CCTTTTCCCATCTAGATCTTTTAAAAAAATAGTTTTAGTACTAAGGTATACTACTGGACATTTCTATTTTTTTAA
GTGTATTCTTTTTCTGACTTACAGTAAAATTTCAGGAAGTTGATAGATACTAAGAACTTATGATTGGTCTCAGAG
GTAACAATGAAATACTCATAATTTTGTCTGTGGAACTCTGGCAGAATTATGTTACACATTTGGCGAAGTTGTCTC
TTGTAATTTATATTTTAAATGAAAAAGTATTTTAGAGCTTTTAATGAAGGGGAAGAGTATAAACTTTCTTTCATA
TTCACTCTGTAGTTACAGACCGTCTCATAAATCAAGATTGTGCATTATTAGAGTTCTCAGAGACAGATACTTCCA
TATGGACCCCTGTTCATTTTTCTTATTTACTAGATATTTTGCTAAATTTAGCACACTAGCAATTAAGAGTTTAAA
AAAGAAGAAACGTTATAGGAAAGGGAAACTGAACAGTAATGAGTAGCTTTGAAATTGGGGAAAACACACTAGCTG
GGTTAGGTACAGCTATCCTAATGGAGAAGAGTGAGCTAAATGCGTTAATTCATGTAAAGTGCTTAGAACACTGGT
ACATAATAGGTGCATAACACATCTTAAAGTTGTTTAATAATAGATAAGAACCAAGAGGAAAAAGAAATAAGAAAA
GATGGGGGAAAGGAAGGAGAAAATAGGAAATGAAAGGATTAGGACTTGGGCATTTATATTAATACAAAATGGTGT
AAACGGCCTGAATATCACTGTAGTAGTATCATACGGGGGAAAGTGTGATGGAAAATAGGTTTAAAAATCTTAATT
TTTAAAACTTTAGTAAGCTTTATTTATATTTTTTAGGATTTTCTGAACATAGCATGAAGGGTTTAGATTCATTTT
TCTGAAAAACGATTAAAAAAACTACCAATTTTTTTTTTGAGTGCCCACACTTGCCGTTGTGCTGTATACATGATT
TTACCTTAATCCTCTATAAGGTAGGTGCTAATTGTCTCCATTTTATAGATGAGGAAAGGCTCAGAGAAATTCAGA
AACTTGGCTAATTTAACACAGCTGTGACAGAGCTCGAATTTGACCACGTCTGATTCTGAAGCCCATACTCTTTCA
GGGAGGCTCTATTGCTGCCTCATTAAACAACTCTTGTAGAATTTCAGCTCTTAATGGAGTCTATGGATTATATTT
TTCCTATAAGACAGCTGTGTTTAGAATTTTGAGTGTCTTTCCTCCCCCCAATAAATTTCCTTACTACTCTTTCTT
CATAAAGCAGTTGTTTTGTCACTTTGACTATATTAAGACACATCAGTGTAGCACATGCTCTTAACTGGCTGTGGC
ATTTTAATTTTATAAAAGAATGGTTTTTATCTGAAGAACTAGATAGAAACCCCAGTTTTTGTGCCGTTCAGTCAC
CCAGATCCTTAAACTTAACTATGGTACATAATATCCACACTTAGAACTAACAGGTGTTTAGTCACTTTAGGACTT

FIGURE 5088C

AAAATGGAAAGTTTTTTTTTTTTCCTGCTGTATCTCTGCTTTCAACTGAAGTTAAAGAATTCTAGATAGTTTAAA
ATGTGTTAGGGATAAGCACACTTCAAAAGATGTTTTCTAGCCCTAAATTTTATGACATTGGGTACTTAAATTTGG
AGTACACTAGCTATTGAGAACAATATTTTGGGTTGAGGAGAGATGGTTGAGGCCATTATTTAGTGGGAGCATTGG
CATTTTGAACACTGTAAACAAAAGAACACTTCCGCCTGCTGTTTGTAAAAGCTCTTTGGGAAGATCTTTTACGAA
GACCAACTTTTTAAAATGTAAATTACCTACCTAATATAAGTGTCCTAAGACATGTATGTAAACTTCCGGAACTGT
TTTGTCTGTGTATTTAGAAAATACACAAGAATCTTTATTCAAACCTAAAAATATAAACTTGTGAGCACTAAAAGA
GAATCTATGTCGGGTGCGGAGAAAGAGGTCAATGAAATG

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FIGURE 5089

ARPWSDGNAPPALLSLRYVAEPSSLACLSPSAPAKPAAASGLLGARRKDIVWRIGVCARGFKEGAAEGLPALRCS
TSKGLARCRLAPQPLRRPAPLLRAGRCPERGGAGGWRTREAVGGVGPAAAAAADACSRPGSEREPGCRARGRGRA
PRDRNAGGGGETEGEPRGARGTRPEAVREPGHRTADGGRRAAMSFSEMNRRTLAFRGGGLVTASGGGSTNNNAGG
EASAWPPQPQPRQPPPPAPPALQPPNGRGADEEVELEGLEPQDLEASAGPAAGAAEEAKELLLPQDAGGPTSLGG
GAGGPLLAERNRRTLAFRGGGGGGLGNNGSSRGRPETSVWPLRHFNGRGPATVDLELDALEGKELMQDGASLSDS
TEDEEEGASLGDGSGAEGGSSSSSRRSGGDGGDEVEGSGVGAGEGETVQHFPLARPKSLMQKLQCSFQTSWLKDF
PWLRYSKDTGLMSCGWCQKTPADGGSVDLPPVGHDELSRGTRNYKKTLLLRHHVSTEHKLHEANAQESEIPSEEG
YCDFNSRPNENSYCYQLLRQLNEQRKKGILCDVSIVVSGKIFKAHKNILVAGSRFFKTLYCFSNKESPNQNNTTH
LDIAAVQGFSVILDFLYSGNLVLTSQNAIEVMTVASYLQMSEVVQTCRNFIKDALNISIKSEAPESVVVDYNNRK
PVNRDGLSSSRDQKIASFWATRNLTNLASNVKIENDGCNVDEGQIENYQMNDSSWVQDGSPEMAENESEGQTKVF
IWNNMGSQGIQETGKTRRKNQTTKRFIYNIPPNNETNLEDCSVMQPPVAYPEENTLLIKEEPDLDGALLSGPDGD
RNVNANLLAEAGTSQDGGDAGTSHDFKYGLMPGPSNDFKYGLLPESWPKQETWENGESSLIMNKLKCPHCSYVAK
YRRTLKRHLLIHTGVRSFSCDICGKLFTRREHVKRHSLVHKKDKKYKCMVCKKIFMLAASVGIRHGSRRYGVCVD
CADKSQPGGQEGVDQGQDTEFPRDEEYEENEVGEADEELVDDGEDQNDPSRWDESGEVCMSLDD

FIGURE 5090

GGGGCGCGGGCGATTTGTAGGTAATGGCAGGCGTTCGGTCACTGAGGTGTAGCAGAGGATGCGCTGGCGGCTGTG
AGTGCGGCGACAAGGGCAAATGCAGCGACTCCTCGCTGTTGGGCAAGAGACTCTCCGAAGACTCGAGCCGCCACC
AGCTGTTGCAGAAGTGGGCGAGCATGTGGAGCTCCATGAGCGAAGACGCGTCGGTGGCCGACATGGAGAGGGCGC
AGCTGGAGGAGGAGGCGGCGGCTGCGGAGGAGAGGCCGCTGGTGTTCCTGTGCTCCGGCTGCCGGCGGCCGCTGG
GCGACTCGCTGAGCTGGGTGGCCAGCCAGGAGGACACCAACTGCATCCTGCTTCGCTGTGTTTCCTGTAATGTTT
CTGTGGATAAGGAACAGAAGCTATCCAAACGTGAAAAGGAAAATGGTTGCGTCCTTGAGACTTTGTGCTGCGCGG
GGTGCTCACTCAATCTTGGCTACGTGTACAGATGCACGCCCAAGAATCTTGATTACAAGAGAGACTTGTTTTGCC
TCAGTGTTGAAGCCATTGAAAGTTATGTTTTAGGGTCCTCTGAAAAGCAAATTGTGTCAGAAGATAAAGAGCTTT
TTAATCTTGAAAGCAGAGTTGAAATAGAAAAGTCTCTAACACAGATGGAAGATGTCTTGAAAGCATTACAAATGA
AGCTGTGGGAGGCCGAATCCAAATTGTCCTTTGCCACTTGTAAAAGCTGAACTCTAGTCTGTGTCCTCCATTCTG
CCCCCGCCCTTCCTCCCCTTATTTGTTAAATGAAGCAACATAGTGAGACGTCGTCTCTACAAAAAAAAAAAAGAAA
AAAAAAATTAGCCAGGCATGCGAAACGCTGAGGTGGGAGGATCAGATGAGCTTGGGAGGTTGAGGCTGCAGTGAG
CCTTGGTCATGCCACTACTGTGTTCTAGTCTGGGCAACAGAGTGAGACCTTCTCTCAAAAAAAAAAACCCAAAAT
TGTAGAATTACTTCTATAGCTATATTTTATGATAAAGAAGTGATTGTTTCTCAAAATCGCATTTTAAAGACGTTT
TATGGTACTTGTTGGAATTGGGACTTAGGAGTTTTGATTTTGATAAGAAACTGGGATAATTTTCTGAACTTTTTT
TCCTCTGTATCACATTTATTTACTATTTTTAAAAACTTTGACATTTAACACTTGGGACAACATTTATTATAAATG
ATAAGAAAAATCTTAGAGGTTTGTCTACCCACAGTGTCATGGAATCTTCTCTGAAAACTAATCCATAAAGTTCCC
TGGAGAAATTGGTCAGAATGATCTGTCAGAACCATTTGAAAACTTGCTCAAGAGCAGTTGCTTATATATAGTAGG
ATTTTACTTTTTCCTGCTTATGTACTACTATATGCTTAAAAAACCTGGAGGAATACTTACCAAAGAGGAGTAACC
ATCTCTGAGGGTGGGATTCTGGGGGAATTTTTGTTTTTTTTCTGTTTTCTATAATGTGAAACTTTTGTAGTATGTA
TTTTTCTAATTGAAGAGAATAAAGATTAAAACAAAGTGCTTTAAA

FIGURE 5091

MAGVRSLRCSRGCAGGCECGDKGKCSDSSLLGKRLSEDSSRHQLLQKWASMWSSMSEDASVADMERAQLEEEAAA
AEERPLVFLCSGCRRPLGDSLSWVASQEDTNCILLRCVSCNVSVDKEQKLSKREKENGCVLETLCCAGCSLNLGY
VYRCTPKNLDYKRDLFCLSVEAIESYVLGSSEKQIVSEDKELFNLESRVEIEKSLTQMEDVLKALQMKLWEAESK
LSFATCKS

FIGURE 5092A

GCCGGGGCGTCGGCACCGGCGGCCATCTTGTGCTTCCCGGGGAAAGGCGGCGTGAGGGGAAGAAGTTGTAGGGTG
GGGGCAGGAGTGAGGAGGAGGGAAGAGAGAGGGGGAGGAGGCCGCGGCGGGGCAGGGCGGGGACTGCCTGCCTGC
CTGGGTTGCGGAAGTGATAGCCGCCGACCGAGCCTGCTGCTTTCTTGCTACTGCTTCGGCTTCCCGGCTACCCCC
CGGACGGTGAAGGCGGCCCAGCTGTGGATGGTCAGATAGCCCTTGTCTCCCGCCGCCAATCTCTGGCCCCTAGCA
GCACGGAGCAGACGGCGGCACAGCAGCAGCAGGCGAGGAGGAAGATGGCGGGACGGCTGCCGGCCTGTGTGGTGG
ACTGTGGCACGGGGTATACAAAACTAGGATATGCTGGAAATACAGAACCACAGTTTATCATCCCTTCCTGTATTG
CTATTAAGGAGTCAGCAAAAGTGGGTGATCAAGCTCAAAGGAGGGTGATGAAAGGTGTTGATGACCTAGACTTCT
TCATTGGTGATGAAGCAATAGAAAAACCTACATATGCAACAAAGTGGCCAATCCGCCATGGTATAGTTGAAGATT
GGGACTTAATGGAAAGGTTTATGGAGCAAGTGATCTTTAAATATTTAAGGGCAGAACCTGAAGACCATTATTTTC
TTTTGACTGAACCTCCATTGAATACTCCAGAAAACAGGGAATATACTGCTGAAATAATGTTTGAGTCCTTCAATG
TTCCAGGCTTGTACATTGCTGTGCAGGCTGTTCTTGCCTTAGCTGCATCTTGGACCTCAAGACAAGTAGGAGAAC
GGACGTTGACCGGTACGGTAATAGACAGTGGAGATGGTGTCACTCATGTCATTCCTGTGGCTGAAGGGTATGTGA
TTGGCAGCTGTATTAAACACATTCCAATCGCAGGACGAGATATAACATATTTTATTCAGCAACTGCTGAGAGACC
GAGAAGTAGGAATCCCTCCAGAACAATCCTTGGAAACTGCTAAGGCAGTAAAGGAGCGCTATAGTTATGTCTGCC
CAGATTTAGTAAAAGAATTTAACAAGTATGATACAGATGGGTCAAAATGGATTAAACAGTATACTGGAATCAATG
CTATCTCAAAGAAAGAGTTTTCTATCGATGTTGGTTATGAGAGATTTTTGGGACCTGAAATCTTTTTTCATCCAG
AGTTTGCTAATCCAGACTTTACACAACCTATCTCAGAAGTTGTAGATGAAGTAATTCAGAATTGTCCTATTGATG
TCAGACGTCCTCTCTACAAGAATATTGTCCTCTCTGGAGGTTCAACCATGTTCAGGGACTTTGGACGTCGCTTGC
AAAGAGATTTGAAAAGAACTGTAGATGCCCGGCTGAAATTAAGTGAGGAATTGAGTGGTGGTAGATTGAAGCCAA
AACCTATTGATGTACAAGTCATTACACACCACATGCAGCGATATGCAGTTTGGTTTGGAGGATCAATGCTGGCTT
CCACGCCTGAGTTCTACCAAGTATGCCACACCAAAAAGGATTATGAAGAAATTGGACCTAGCATTTGTCGTCACA
ATCCAGTGTTTGGAGTCATGTCG**TAA**AATTGGCTTCATAGTTATTGGGGTTAGGGAGGTGGGGAAGAGATAATCT
TTCTGATTACCTGTTTTGTCTGGATGGCTGGTTTTGAGGTTTTAAACCTGACTTGAAATAGTAACACCAAACATG
ATTATACAGGAATATTTTAATAAGTGTATCACCATGCAGATGTAGAAGAGAGCGAAAGTGATTGTGTTTTTCTTT
AGATTGAATATTTGAATCTTATGTGTAACAAAAAGAAGTGGGTTTTAGTTCTTTCTGTGCCCTGATATTTTGTAT
ATTAATGAATTATCCAAGATTCGATGGGATTTATCAGTGTGTAGATAGCTCTATAATGCTTGAATTGTACACTTC
TAAGTGTGCAGTGCAAGAGCTTGTTTATATTTCATACTTTTTATACTTTGAGGAAAAAAAGTCAAAAGAAAAATT
GTATTTGAGGGAAAAAACCATGACCAAGTAAAGGATAAATTCAAAAAATAGCCTCATGAGACTTGGCATACACAC
TCATGGGATTCCAGTTATTATGGAGTGCTTCCATCCCTCTCCACCCCTTCCCCCCAAAAGGTTTTCTTTGCAAGT
GCTTTTGGAACTAAGAGCTAGTATCTTGGATTAACTGATGCCTGCTAGTGCTTTCTGATTACTCGCATTCTGTTT
CTTGCTTTAAAAGAAGAGTAAAGACAAGAGTGTTGGACCAGTATTGCAGTTCTGTAGTGTCATTTCTTATAAAAA
ACAAAACAACAACAATAATTTATCAAAATTGGCATATTTAAAGCCTAACATTCTAATAAAGGCACAAATTTCTTT
TTAATACTTGTTTCAGCCTCTTTAATCTCTTTATAAGTTAACTAATAAATCTATTTTCTTCAGACTTCTGCAATA
GTTCTTTAAAATCACAACAGTTAGCAAGCTGACTTTTGTAATGTGCTCAATACAAATACTTGTGAACTTTTAATA
TGTTGAGTGCTTTCATTTTGATAACTGGATCTCCATTTGATATTTTCATTTGTATAACTCATTTGCAGTCTGAAA
ATTTTTTTTAGTGCCAGTCCCTGAACATATCATTGAAAGTTAATTTTCTTTGCATTTTAAAATATCTGGATTATG
AAGAAAAAGTGATGAAAATAAATTAAAACTGAATTACCTTTTCTAATGTTTTTTTTTTTTAAGTAATGTAATTCT
ATTTTGTTTTTATGTATGTGATATCTGTTTCTGTTGAGATTTGGGAGTTATTGAAATCTCTGTAATGTGTATGGT
AGAAAATTTCTTGTGACCTTAAAATTTTACCAGTTATTTATAGAAAGAGAAAATGGGAAATGTTTTATAGGCTTT
TTACTAGCAGTATCAGTGAACACTTGAACTCCATTATTCATGAAAATAACACGTTAGGATTGGAATACGTCTATT
CAAAAGTGAAAGAATATAAAGTGTTTAGTTTTTTGTTTTTACTCTAAAGATAGAATTGGGGAGTAAACTTCAGTT
TTTGTTTAGAGTGGATCTGAATATTTAAAATCCTATAATAATTTTTGTGAATCTTCATTCTTTGAGTATGGGATT
GTAAAAGACAAACTATATCCTACAGTAGTATCATCATCAGTATCAAAGGTCTCCTTTTTTTACTTGGAAAAGTAA
TTCACAAACATTATAAAAATACTATTCAAACAGTACCAAAGAGTAGATTAGCAAAAGTAAGTTTTTTTCCCTAGC
CTGTCTCATTTTTCCATCATTACACAGACTACTTGGAATGTCTTAGATGTCCTTGTATTGTAATTTTCTGTGTAG
GTAGAAATAAATGTAGCTTTCTTATTTTACACAAATAGGAACTTACTGTATATACTGTTCTGCACTTTGCTTTTA
TTAAAGATCTTTTGATAAAGAACTATATTGATAAGCAGTAAAGATGTCATGCTCCTGGCCCAATAAAATATTGTT
AGCATTGTCATAAATATGTCTTTTCCACCGGCGATGGTTGGGTAGTTAAGTGAATAAGCTAGAAAGACATGTTTA

FIGURE 5092B

TAAAGCTATTTGATGACAATCTCAGGCATATTTATACAGAGATGTTCTTAACTGTTTGCTACAAAAACATGAAGA
TCAAAAACTTTCTTGAAGCTTACGCTTAACTTATTTGGGGAAACAAAACTCCAGCCCTTCTTGTGTATGTTCTGA
TATCCCTTTGCTCTACTTTTAGAGGAGTGAACCCTAATAGGATGGTAGCAGCATTCTTGTTTCTTTATATCTCTC
CTCTGTGATTGTATACCGTTTTTTCAACTTAAAGCAACTTCAGCTGGAAATATGTAGAGGTTGGCCAAGGTGAAC
TAAATAGTCTGTAACATTGATTAGATATCAAGCAACGTGAGCATGGTAGCAAAAGCACTAACTGAAGCCAGTGAT
TTAATTTTTAATTCTGATTCTGATAATTGATGATATAGCTCCTCGAACTTTGTTTTTTGTTAAAACTTGGAAAAT
ATATTTGTATTATTTTGGACAAATTATTTGAACTCTCTGGACCTTGATTCAATTTATATATAAGGTAAAGGCATT
ATACTGGATTATCCTGCAATTTCTTTGAGTTGTTAGAATATAATGTAGCTTATTAATAGCAATATTAGCAGTGTA
GTAGATTCTGACTGCAAAACCTAGCCTTTTCTATTGATTCATTAGTGGTAGTAAAGGTATTATCTGATTTATCCT
TTTTAATAGGCAGTGCTTTGATCAAGTGGGAAATAGTAATGGACAAATAAAATCAATGATCATTATCTAACTTGA
TGCCTGCTTTTCAAAAAGTGAGCAAATTTCACATCTTCACCCTTAGACATTAATTCATGGCACCTACTATAAGTA
CTCATCCTCTTCTTACCTATCTTCTTTTCTATAGGAGATAAAGTGGTTATTCAGACCCCCCAATACAATTTTTTG
GTTTGTTTTCACAGCTACTTAAAAGATTAAAATAACTATTCTTGCAGATATTTCTAGGAATATTTTTAGAAATAA
TATGAAATACAGGGATAATAGGCCAATTATGATCTTTATTTTTAATTTCTACAGAAAAGTACTAGAGAATATATC
TATAGAAACTTCTTTCAGATAACCCTAAAGATGATACTAGAATGTTTATAAAATTATTGAGAAGATTATTTGTGT
TATAAAGCTTATTTGTACCATAGTAAAGGATGTTTTTGTTCCTCTTCATTCTGGGCTAATCTGTCAATACTGAAG
TCCAGTCTTTTCCCCCTTTTCTTACCAGCTCAACCTTGATTCCTGTGACCCATTCTTTCTGATCTTTCGTAGTTC
ATAGTCACCAGGCATGAGTACCTTGGATAGCCCTCTGAAGTCTGTTACCACCCAGATTTCCAACTCGGGTTAATT
GGTACTAATTCTATTAGCTGGTATAAATAATCCAAAATCTGTGCAGACTCTGGGAGCAAAATGTTCTACTCAGTT
TGGAATACTGTGCCTTAAAATATATTTCATTGTAACAGCACCTTGTATATATAGTTGGCCAAGGACAGAGTTGTT
ACAAGTTACGTGGAACTTTCATAGCAAATCTTGACAGTAAATACCTTGTTCTTGTATTAGGTCTATATCCTGAAT
TGACCTTTAGCAAGAATCTTTAGATCTGCTGGAGGGCTGGGATGGCTTTTGGACTTCAGTGAAAAAGAATTTCTG
CTACTCATTGTTGATAACGCTTCAGTACTGTATAAATGTTTATCCTTTTCCACGTAATTTGTTTTCTATGATATG
AGAACTTTTATTATAATTTGCCTCAGTCTTGATAGAATCTTAACAAAAATAAAATCTGTGGTCGTCTGAGGTATT
CTCCATGCTATAACCCAGTTTAGCTGATGCATTTGGAGCTTGGGTGCTGAAATTAAATATAACCTATTTGAGTTA
AGGATTTATTACTAGTGCTCCAGTGGTCACAGGAACAATAAAAAAGGAACAACGATAGAAATACGTGATCTAGGA
AAGAAGGCAACTGAAAAACCTGAAAGAAAAAAAATGAAAGATTAAAAGTATACGATATTCTATTTTGATTTAGCA
ATTACTTGTTTTCTAGTGTTCTGTCAATTTTTGGTGACTTTTATAATTACATTAAAACTAAGATGCTGAATTAAA
ATAAAGTTTCTCTTTTATTCAAGCACCACATTNACTTATATTCCCTATATATTGCATCAAGTTTTGAGCCTTCAA
TCCCAGAAGCATTGATTGACTGTCTACTATGGTTCAAGTACTGTGCATAAAGATGAATAAATATTCTGTCCTTGG
CTTAGTCTAATAGTAAAGGCACTCTTAGAGGAGGGACAAATATTTTGCCTAGATAAGATTTGAGAGATAGTAAGT
GCGGAATTTCTCTTCATAAAAATGGTAGTGTTAGTTGTTTAGAGGGAGAAGTCCAGCTATGTAAGGTGAAAGTGG
GGCTTATAAAAGTGGATCTGTTGTTTAAAAATTAGTACTTTGCTCCTAAAATTTTTACCTAAGTGTTACATCCAA
CAACAGATGAAAGTAATTCGACAGTAGCATCTGCTTTATTCATTTCATATTTCCAGTGCCTGACATATTGCTTGG
CATATAGTAGTTTAGTGGATGTGTTTGATGAATGAATGAGTAAAAATTATTTTTCATGTTAAAATAAAACTTTGA
ATTACATGAGTAAAA

FIGURE 5093

AGASAPAAILCFPGKGGVRGRSCRVGAGVRRREERGGGGRGGAGRGLPACLGCGSDPPTEPAAFLLLLRLPGYPP
DGEGGPAVDGQIALVSRRQSLAPSSTEQTAAQQQQARRKMAGRLPACVVDCGTGYTKLGYAGNTEPQFIIPSCIA
IKESAKVGDQAQRRVMKGVDDLDFFIGDEAIEKPTYATKWPIRHGIVEDWDLMERFMEQVIFKYLRAEPEDHYFL
LTEPPLNTPENREYTAEIMFESFNVPGLYIAVQAVLALAASWTSRQVGERTLTGTVIDSGDGVTHVIPVAEGYVI
GSCIKHIPIAGRDITYFIQQLLRDREVGIPPEQSLETAKAVKERYSYVCPDLVKEFNKYDTDGSKWIKQYTGINA
ISKKEFSIDVGYERFLGPEIFFHPEFANPDFTQPISEVVDEVIQNCPIDVRRPLYKNIVLSGGSTMFRDFGRRLQ
RDLKRTVDARLKLSEELSGGRLKPKPIDVQVITHHMQRYAVWFGGSMLASTPEFYQVCHTKKDYEEIGPSICRHN
PVFGVMS

FIGURE 5094

TGAGGATCAAAAAACTACCTATCTGGTACTATGCTTTTTATCTGGATGATGAAATAATCTGTACAACAAACCCTG
GTGACATGCAATTTACCTATATAGCAAGCCTACACATGTGCCCCTGAACCTAAAAAAAAAAGTTAAAAGAAAAACG
TTTGGATTATTTTCCCTCTTTCGAACAAAGACATTGGTTTGCCCAAGGACTACAAATAAACCAACGGGAAAAAAG
AAAGGTTCCAGTTTTGTCTGAAAATTCTGATTAAGCCTCTGGGCCCTACAGCCTGGAGAACCTGGAGAATCCTAC
ACCCACAGAACCCGGCTTTGTCCCCAAAGAATAAAAACACCTCTCTG

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FIGURE 5095

RIKKLPIWYYAFYLDDEIICTTNPGDMQFTYIASLHMCP

FIGURE 5096

GGAGGAGGTGGCGGCGCTGGAGCTCCTCCCGGGGACCAGCGACCCGGGGAGCGAGCACGTCGCTCCGCACCGCTC
TTCCTCCAGCCGCTGAGCCGTCCCTTCTCGCC**ATG**TCCCAGAGCAGGCACCGCGCCGAGGCCCCGCCGCTGGAGC
GCGAGGACAGTGGGACCTTCAGTTTGGGGAAGATGATAACAGCTAAGCCAGGGAAAACACCGATTCAGGTATTAC
ACGAATACGGCATGAAGACCAAGAACATCCCAGTTTATGAATGTGAAAGATCTGATGTGCAAATACACGTGCCCA
CTTTCACCTTCAGAGTAACCGTTGGTGACATAACCTGCACAGGTGAAGGTACAAGTAAGAAGCTGGCGAAACATA
GAGCTGCAGAGGCTGCCATAAACATTTTGAAAGCCAATGCAAGTATTTGCTTTGCAGTTCCTGACCCCTTAATGC
CTGACCCTTCCAAGCAACCAAAGAACCAGCTTAATCCTATTGGTTCATTACAGGAATTGGCTATTCATCATGGCT
GGAGACTTCCTGAATATACCCTTTCCCAGGAGGGAGGACCTGCTCATAAGAGAGAATATACTACAATTTGCAGGC
TAGAGTCATTTATGGAAACTGGAAAGGGGGCATCAAAAAAGCAAGCCAAAAGGAATGCTGCTGAGAAATTTCTTG
CCAAATTTAGTAATATTTCTCCAGAGAACCACATTTCTTTAACAAATGTAGTAGGACATTCTTTAGGATGTACTT
GGCATTCCTTGAGGAATTCTCCTGGTGAAAAGATCAACTTACTGAAAAGAAGCCTCCTTAGTATTCCAAATACAG
ATTACATCCAGCTGCTTAGTGAAATTGCCAAGGAACAAGGTTTTAATATAACATATTTGGATATAGATGAACTGA
GCGCCAATGGACAATATCAATGTCTTGCTGAACTGTCCACCAGCCCCATCACAGTCTGTCATGGCTCCGGTATCT
CCTGTGGCAATGCACAAAGTGATGCAGCTCACAATGCTTTGCAGTATTTAAAGATAATAGCAGAAAGAAAG**TAA**A
TCTGGAGCAACTTAAAAAATCTTTCAGTAGCACATAAAAAGTTCCCCTCTGGCCCCTTCCCAAGTAAAACTTTTA
CCGTAGTGTTTATGTCTTGTTTCTAAATCTCTTCATAGATTCCATCAACACTCCAGATTTAATTATCTCCTCATA
GTTGTTATTAAGCTCTTTTTAATGGCTTCAACTTTGTATCAGTATACTGTATTTATAAACTTTGTACCACAAGAG
AGAGTGTAGCACCCATTTTACAGTGCCATGCACATCAGAGAAAGAAACTGCATGTTTGTTGTTGATGATGAAATA
AAAATGCTAGCGACAGTCTTTCTTACTGGTGCTTAAGCTCTTCTTTGCACAAAGCTTTATAAAGGGAATTCAAAG
GAAGCCCTTTAGAATTAGAGTCTTGAGGGACAGCACTAACAGGCCTTTATTAAGTATGATTGATTGTTAAATTTC
AGGGAACATGATTGGTCTGCTGTGTATTTGAATTCATGTAACAAAGAACTGTTACGATGGGATTCTGCTCATTTT
ATTAAAAAGCTACTGACTTGACTGTCATCCTGTTCTTGTTAGCCATTGTGAATAAGATTTTAATGTTGATAATTC
TGTTATTTACATATCTCTAATTTACTTTGAAATTCAAAGGTGAAAATAAAAAATGATGGCCTAAGTAAAATTTAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACCCCCGGG

FIGURE 5097

MSQSRHRAEAPPLEREDSGTFSLGKMITAKPGKTPIQVLHEYGMKTKNIPVYECERSDVQIHVPTFTFRVTVGDI
TCTGEGTSKKLAKHRAAEAAINILKANASICFAVPDPLMPDPSKQPKNQLNPIGSLQELAIHHGWRLPEYTLSQE
GGPAHKREYTTICRLESFMETGKGASKKQAKRNAAEKFLAKFSNISPENHISLTNVVGHSLGCTWHSLRNSPGEK
INLLKRSLLSIPNTDYIQLLSEIAKEQGFNITYLDIDELSANGQYQCLAELSTSPITVCHGSGISCGNAQSDAAH
NALQYLKIIAERK

FIGURE 5098A

CTGGTTCTCAACTTCTTTTGAAATAATGTTCATAGAGAAGGAGGGCTGTCTGAGATTCGAGGGAAACAAGCTCTC
AGGACTTCCGGTCGCCATGATGGCTGTGGGCGGTAAACGCGGTTAGTGCAAGCATCTGGGCCATCTTCAATGGTA
AAAAAGATACAGTAAAGACATAAATACCACATTTGACAAATGGAAAAAAAGGAGTGTCCAGAAAAGAGTAGCAGC
AGTGAGGAAGAGCTGCCGAGACGGGTATACAGGGAGCTACCCTGTGTTTCTGAGACCCTTTGTGACATCTCACAT
TTTTTCCAAGAAGATGATGAGACAGAGGCAGAGCCATTATTGTTCCGTGCTGTTCCTGAGTGTCAACTATCTGGG
GGGGACATTCCCAGGAGACATTTGCTCAGAAGAGAATCAAATAGTTTCCTCTTATGCTTCTAAAGTCTGTTTTGA
GATCGAAGAAGATTATAAAAATCGTCAGTTTCTGGGGCCTGAAGGAAATGTGGATGTTGAGTTGATTGATAAGAG
CACAAACAGATACAGCGTTTGGTTCCCCACTGCTGGCTGGTATCTGTGGTCAGCCACAGGCCTCGGCTTCCTGGT
AAGGGATGAGGTCACAGTGACGATTGCGTTTGGTTCCTGGAGTCAGCACCTGGCCCTGGACCTGCAGCACCATGA
ACAGTGGCTGGTGGGCGGCCCCTTGTTTGATGTCACTGCAGAGCCAGAGGAGGCTGTCGCCGAAATCCACCTCCC
CCACTTCATCTCCCTCCAAGGTGAGGTGGACGTCTCCTGGTTTCTCGTTGCCCATTTTAAGAATGAAGGGATGGT
CCTGGAGCATCCAGCCCGGGTGGAGCCTTTCTATGCTGTCCTGGAAAGCCCCAGCTTCTCTCTGATGGGCATCCT
GCTGCGGATCGCCAGTGGGACTCGCCTCTCCATCCCCATCACTTCCAACACATTGATCTATTATCACCCCCACCC
CGAAGATATTAAGTTCCACTTGTACCTTGTCCCCAGCGACGCCTTGCTAACAAAGGCGATAGATGATGAGGAAGA
TCGCTTCCATGGTGTGCGCCTGCAGACTTCGCCCCCAATGGAACCCCTGAACTTTGGTTCCAGTTATATTGTGTC
TAATTCTGCTAACCTGAAAGTAATGCCCAAGGAGTTGAAATTGTCCTACAGGAGCCCTGGAGAAATTCAGCACTT
CTCAAAATTCTATGCTGGGCAGATGAAGGAACCCATTCAACTTGAGATTACTGAAAAAAGACATGGGACTTTGGT
GTGGGATACTGAGGTGAAGCCAGTGGATCTCCAGCTTGTAGCTGCATCAGCCCCTCCTCCTTTCTCAGGTGCAGC
CTTTGTGAAGGAGAACCACCGGCAACTCCAAGCCAGGATGGGGGACCTGAAAGGGGTGCTCGATGATCTCCAGGA
CAATGAGGTTCTTACTGAGAATGAGAAGGAGCTGGTGGAGCAGGAAAAGACACGGCAGAGCAAGAATGAGGCCTT
GCTGAGCATGGTGGAGAAGAAAGGGGACCTGGCCCTGGACGTGCTCTTCAGAAGCATTAGTGAAAGGGACCCTTA
CCTCGTGTCCTATCTTAGACAGCAGAATTTGTAAAATGAGTCAGTTAGGTAGTCTGGAAGAGAGAATCCAGCGTT
CTCATTGGAAATGGATAAACAGAAATGTGATCATTGATTTCAGTGTTCAAGACAGAAGAAGACTGGGTAACATCT
ATCACACAGGCTTTCAGGACAGACTTGTAACCTGGCATGTACCTATTGACTGTATCCTCATGCATTTTCCTCAAG
AATGTCTGAAGAAGGTAGTAATATTCCTTTTAAATTTTTTCCAACCATTGCTTGATATATCACTATTTTATCCAT
TGACATGATTCTTGAAGACCCAGGATAAAGGACATCCGGATAGGTGTGTTTATGAAGGATGGGGCCTGGAAAGGC
AACTTTTCCTGATTAATGTGAAAAATAATTCCTATGGACACTCCGTTTGAAGTATCACCTTCTCATAACTAAAAG
CAGAAAAGCTAACAAAAGCTTCTCAGCTGAGGACACTCAAGGCATACATGATGACAGTCTTTTTTTTTTTGTAT
GTTAGGACTTTAACACTTTATCTATGGCTACTGTTATTAGAACAATGTAAATGTATTTGCTGAAAGAGAGCACAA
AAATGGGAGAAAATGCAAACATGAGCAGAAAATATTTTCCCACTGGTGTGTAGCCTGCTACAAGGAGTTGTTGGG
TTAAATGTTCATGGTCAACTCCAAGGAATACTGAGATGAAATGTGGTAAATCAACTCCACAGAACCACCAAAAAG
AAAATGAGGGTAATTCAGCTTATTCTGAGACAGACATTCCTGGCAATGTACCATACAAAAAATAAGCCAACTCTG
ACATTTGGATTCTACCATAGACTCTGTCATTTTGTAGCCATTTCAGCTGTCTTTTGATTAATGTTTTCGTGGCAC
ACATATTTCCATCCTTTTATGTTTAATCTGTTTAAAACAAGTTCCTAGTAGACACCATCTGGTTGAGTCAGTTTT
TTTTATGGTGTATTTTGAACCCATTCTGATAGTCTCTTTTAACTGGAAGATTTCAATTACTTACGTTAATGTAAT
TATTAATATGTTAGGATTTATCCTCAGTCAGCCAGTTTGTTATGTCTTTTCTATTCTACTGTTATCACATTTGTA
CCACTTAAAGTGGAATCTAGGCACTTTATCACCATTTAGATCCTATTACCTTTTCTCATCTAGGATATAGTTATC
TTCTACATAATCTTTCTGTATCTTAAAACCCATCAATAAATTATTATATATTTTCTACTTTTAATCACTCAGAAG
ATTTAAAAAACTCATGAGAAGAGTAATCTGTTATGTTTTTCCAGATATTTACCATTTCTGTTGCTCTTCCTTCAT
TATTTTCCAAATTTCGTTCTGCAAATTTCCACTTCTTCTGATAGACGTTTTTTAGTTCTTTTAGAGTGGTTCTGA
TAGGTACAGATTCTCTTATTTTTTGCTTCCTCTGAGGACATCTTTTTCTCACCTTCATTCTCAGTGATGTTTTTT
GCTTGTAGTATTTTTAGTTGACATTGTTTTCTGTTCAGCAGTTTCCTTTTAGCTTCCGTATTTCCTGATGAGAAA
TCTGCAGTCATTCAAATTGTTGTTTCCCTGTATGTAGTGTGTCATTTTTCTGTCAGATTTCAAGGTATTTATCTT
TAGTTTTTAGCCATTTCATTATGTTGGGGATGAGTTTCCTTGTTTTATTCCCTTTGGAATTTGCTCCAATTCATA
AATTTGCAGTTTTATGTCTTTTACCAAACTTAGAGGTTTTCAGCCTAATTTCTAAAAATACTTTTTATTAGCCTG
ATTTTCATCTTTATAGGAAATAGTTTAAGTGATGACAAGTTCCAATAGCTTATATGCCCAGAAGGCCTTCAAAAT
AAGAATTTTGAAAGAATACAGAAAACAAACTTTTATATCCTTCTCATGTCTTCTACTGTAAAATTCATATGCTTT
GCTACTCTAAACCTAGTTTGAAATCAACAGTCTTGAGAATAGATGAAAATTTTGATGAATAGTGGAATTCTTTTA

FIGURE 5098B

AATGGAAACCTCTTACATGTGATTTTCCTTGCCATCTAGAAATAAACCATAGTATTTATGTTGAATCAATCAATA
TTATATTTTGTTTTTTTCCTCCTCTTCTGAGACTCTTATTGTGGAAATGTTAGACTTTTATGTTTTCCTAAATGT
CCCTGATATTCTACTTATTTAGAACATCTTTTCATTTTTTCCATTATTCTGATTGGGTAATTTTAATTTGTCTAT
TTTCAAATTTGCTGGAGTGTTCACCTGTTGTTGTCTGTGTCGTCCCACTGAGTGCATTCACCACCTTTTAAATTT
TGGTCACTGTATGTATCAGTTCTAAAATTTCCATTTTGTTCTCTATATTTTAAATTTCTTGGCTTATATTCTATT
TTCCTGCAAATGTGTCAGCATTTGCTTGTTTGAGCTTTTTTTTTTTCAAGACAGGGTCTCAACTCTGTTACCCAG
GCTGGAGTGCAGTGGTGCGATCTCAGCTCACTGCAACCTCTGCCTCCTGGTTCAAGCGATTATTGTGCCTCAGCC
TCCTGAGTAGCTGGGATTACAGGCATGCACCACCACAGCCCAGCTAATTTTTTGTATTTTTAGTAGAGACAGAGT
TTTGCTATGTTGGCCAGGCTGGTTTTGAACTCCTGGCCTCAAGTGATCCACCCACCTCAGCCTCCCAAAGTGCTG
GGATTACAGGCCACTACACCTGGCACATTTGAGTATTTTTTTTTTTTTTTTTTTTGAGATGGAGTCTCGCTCT
GTCATCTAGGCTGGAGTGCAGTGGTGTGATCTCAGCTCACTGCAGCCTCTGTCTCCCGGGCTCAAGCGATTCTCT
TGCCTCAGCCTCCTGAGTAGCTAGGACTACAGGTGCATGCCAACACGCCCGGCTAATTTTTTTAAAAAATATTTT
TAGTAGAGACAGGGTTTCACCATTTTGGCCAGGATGGTCTCGATCTCCTGACCTCATGATCCACCCGCCTCGGCC
TTCCAAAGTGCTGGGATTACAGGCATGAGCCACCGTGCCTGGCCTCATTTGAGTATTTTTATAATGTCTCTTTTA
AAGTCTTTGTCAGATAATTCCACTGTACATGTTATTCAGTGTTTGGTGTCCACTGAGTTGTCATTTGCCAGACAA
GTGGAGATTTTTGCAGCTCATCCTTGTATTCTCAGTAGTTCCGATATGTACCCTCGACATGTGAATGTTATCTTA
TGAGACTCTGTTTTATTTGTATCCAACAGAAGATGTTTATTATTTATTTGGCTTTCTGTGAACTGAGGTCTTAAT
ATCAGCTCATTTTAAAAGTCTTTGCAGTGGTATTCGGATCTATCCTGTGTGTGCCTATGAGATTGGGTGCAGTGT
ATCCTGTTAGCTCCATTCTCAGGGCGTTTGAATGTGAATTAGGACCAGCGCAATGAATGCTCAAGTTGGGGTTGG
GCGTTAGAATTCATAAAAGTCTTTATATGCTCAG

FIGURE 5099

MMRQRQSHYCSVLFLSVNYLGGTFPGDICSEENQIVSSYASKVCFEIEEDYKNRQFLGPEGNVDVELIDKSTNRY
SVWFPTAGWYLWSATGLGFLVRDEVTVTIAFGSWSQHLALDLQHHEQWLVGGPLFDVTAEPEEAVAEIHLPHFIS
LQGEVDVSWFLVAHFKNEGMVLEHPARVEPFYAVLESPSFSLMGILLRIASGTRLSIPITSNTLIYYHPHPEDIK
FHLYLVPSDALLTKAIDDEEDRFHGVRLQTSPPMEPLNFGSSYIVSNSANLKVMPKELKLSYRSPGEIQHFSKFY
AGQMKEPIQLEITEKRHGTLVWDTEVKPVDLQLVAASAPPPFSGAAFVKENHRQLQARMGDLKGVLDDLQDNEVL
TENEKELVEQEKTRQSKNEALLSMVEKKGDLALDVLFRSISERDPYLVSYLRQQNL

FIGURE 5100

GGAGGACCACGTCTCTATGGTGTGCCGGGGGCCGCGCGGGCCGGGAGTTGGGTGGGCTGGGGGACAGGCGCGCCC
GCGCCGCCCGCTCCAGCTGGGCTAGTGCTGCACATTCCGGCCAGCCCCTCCTCAAGACCCCATTCCCAAGCCCCT
TCTCAGCTCCCTCGGGCCGGCAGAGCGGCTCTGATCAGTAAAATGCTGTTGAAGGCCCACGGGCATGACTGCACC
CCTCACTAATTGGTCATTGGTTTGGGGAGGACACCACTGTCCCAGTGGAACCTTGAGCACACCTTGGAGCCCTCC
TCTTCCTCTCCGGACCTGTGCCAAACTGTGAGTGGCACAGAGCAAGGACTGTATGTGTTCTCTTCTTTGTTGCAT
ACTCAGTTCCTTGACCACAGTGCCAAGCACACAGCGAGCACTCCCTGTGTATCTGCTGAGTAAATAAACGAATGA
ACAAACCCAACACATTTCAGCCAAGTCCTGCTGATGTTTCTCCTCCGATCTAGCTCCTCCTTTCCAGCCTTACTT
CTGCCACTCCAGATTTCACCCCCATCAGCTTCAGACTGGATAAAAGGAAACCATTTCTCTAAAGGATCACTTGCT
CTCTCATTTCAGGCCATCCTGCAGCCACCAGAACCTTCCACATGAAATGAAAGGCTCACCACTTCATAGGCTTTA
AGGAAATTCTTGGCCATGGTGTGGTGCCTCACTCATGTAATCCCAGTGCTTTAAGAGCC

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FIGURE 5101

GGPRLYGVPGAARAGSWVGWGTGAPAPPAPAGLVLHIPASPSSRPHSQAPSQLPRAGRAALISKMLLKAHGHDCT
PH

FIGURE 5102

GCCTCCAGTCTTGAGTGACTCCTGGGCTTTGGCTCAGCAGTAACTCCTCCATAAAAACAAGTGTGTGCATCTGGC
TGTTAGAAGAATTCATGCTCATCCGGGAAAAATGAGGAAGCTGTGAGTACCAGTGGAAGGAACGAGCCAGGAAGA
GGGACTGGAACCATCTCAGAAGCCATGCCCCTCAGGCTGGAACTTGCCCTGTCTCCTCGCAGATGAGCTACCTCT
TGTGTTTAAGAATTGAGGGAAGATGAGCTAGGAATCAAGAAATACGCAGAACTGATTCCTGTCACTGGCGCCACC
CTGCCACTTGCCCAGAGCTGTGGTATAAATTTTTTTAATAGGCTGAAATAAAAATATGAATAGCATTTTGGTGTT
AAGCATTAAATTGATAAAGGCTATGAGATACACCTGCTCTCAACCATGTTAATTTTTTATTATTGGTATTAATAA
ATTATTACTTACTAACATATTAACAAGAATTGCATTGAGAAACAAAGCATCCACAGGCCAAATCTTCTGAATTTC
AAATGTTTATATTAATGCGTTGTATTCTAGAAAAGTAGAATTGTCTTAAGTAGCTTTGTAATATAAAGTCATCTA
TCAGCCCATTACACCTATTAGAATGTTTTAACCTTTATTTCCCACTTTTTTGTTTCTAGACTGAGTGTACTTGGT
CTGGTATTTGTGGCATAACTTACGGAACACATAAGAATGATACAGATACTATTTAATGATGACCTAATACAAGCT
TAGATAGCTAAGGTGAAAGCTTCTATGGCCTTAACATTTTCCTCTTGAAGAATGTATTTTCTGTAATAAAATACA
GTGGCTACTTGAAATCTATAAACTTATGTGAGGTCTGGATAAATCTGAGCAACTTTCTTCTTTGTGCTCCAGGAA
CCTACGCACTATATATATAAATAAAGCTTAAGTAAACATCAAAAA

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FIGURE 5103

PPVLSDSWALAQQ

FIGURE 5104

CCAAGTCTCAGTTTCTAAATTTATAAAAATCAGGAGTGCAAACCAGAGCAAGATTTGTCAAAGTCTCCAGACACC
CAGACATTTGTTACTTTCAGCTATTGCAGCTTCATCCTTCTGAGTACATGAGTTAGTGGGCAAGCCCAACATTTA
AATTTCTTTAAATGGAAGAAAGAAAGTGGATAAGATAGAAAAATCAGGGTGTTGCACTTTATTAAGTGTAGGTAT
TGTTTTGAGAAGCTTTTATTTCACACCCAATAAAAGTGTGCAGGATTCCTCTTGTTCCAGCCTTACCTTCCCGAT
GATCCTAGCACATACTTGTGTGTATATACAGACATGTTACAGTGCCAAGTGTACTTCCTACTGTGGTGTGATTTA
AAAAATTGAAATACCCTAAACTGGAAGAACTCCTCAAGGTCTAAACTGCCGAATCGAACTTCCTATTGTAATGGA
AATGTTCTATAGCTGTACTATCTAGTACCGTAGCCACTAGCCACATGTAGCTGTTGAGCACTTGAAATGTGTCTA
GTGTGACGAAGAATTAAGAATTTTGGCTGGGCGTGAGCCCNCCCACGTTTAGCCTGAGTATAATTTTAAATAGCC
CTATGTGACAAGTGGCTACTTTATTGGACAGTGTAGATCTAAGATTAATTCCTCAACTGTTTTGCACTCAACAAA
GACATACCTCTGAGTTGGCAACCAGCAGGGTGGATAACGGGCCAGTGGTGATAAAATCAAAGAATAGGTAATGAA
ACAATCATCCAGTTAACAATCAGCAAGGTTCTTCAGAGCCTAATTAATGTTTAATTCTAAATAAATTGCAACAAT
TAAGAAAAGTAGTGTTTTTGTAGTTCTTTATTGCATTTGCAGAAGAGTACTGTATTTTGTGAGAATTGGGAAATG
TGTTTTAAAGAGATGTGTGAGGAGGAAAATCTTTCTTCCTCACCTTTACAGCCGTTAGGCCGATCTGA

FIGURE 5105

QVSVSKFIKIRSANQSKICQSLQTPRHLLLSAIAASSF

FIGURE 5106

CAAGGAAGTGGAGTCTAGTTTTAGGGTGGGCAAGTCAGCAATTACAAAAGTGCAATTAGGTTTGAGCAGAGGAAG
CATGAGAGCACCTAGGAAAGGAGTCTTTAGCATTGTCTTAAATTTCAGTTATATTAATTATACAGTACCCATCTC
TTTTCCACTCCTGAATAACATCTAACATCTAGAAACTTTATGAAAATCATTATTGATTTGAGCATTTTTAACATT
AACTTGTTGCCTTAGACACCAACTCTACAACATTACCTGTCATATACTGAAGAATCTCTTCTTCCAGTTATGCAG
CACCTGGCTAAGAATGTAGTCATGGTAAATCAAGGACTTACAAAGCACATGGTGAGTCAATATAGTGGCATTGTA
AGATGCTGAAAAGTGTAATAATTCAAACTTAATGCCTGCAAATGCCTGGTTTATTTTTAATGAGTTAATGTTTTA
AATGAATACCTGTATCATTGCATCTTGTGATTTTTTTTCTTTTGCCTCTTTAATTGCTATCTTTTTGTCTTCCAG
ACTGTCAAGAACAAGTATGCCACATCGAAGCATGCTAAGATCAGCACTCTACCACAGCTGAATTCTGCACTAGTT
CAAGATTTAGCCAAGGCTGTGGCAAAGGTGTAACTTGTAAACTTGAGTTGGAGTACTATATTTACAAATAAAATT
GGCACCATGTGCCATCTGTACATATTACTGTTGCATTTACTTTTAATAAAGCTTGTGGCCCCTTTTACTTTTTTA
TAGCTTAACTAATTTGAATGTGGTTACTTCCTACTGTAGGGTAGCGGAAAAGTTGTCTTAAAAGGTATGGTGGGG
ATATTTTTAAAAACTCCTTTTGGTTTACCTGGGGATCCAATTGATGTATATGTTTATATACTGGGTTCTTGTTTT
ATATACCTGGCTTTTACTTTATTAATATGAGTTACTGAAGGTGATGGAGGTATTTGAAAATTTTACTTCCATAGG
ACATACTGCATGTAAGCCAAGTCATGGAGAATCTGCTGCATAGCTCTATTTTAAAGTAAAAGTCTACCACCGAAT
CCCTAGTCCCCCTGTTTTCTGTTTCTTCTTGTGATTGCTGCCATAATTCTAAGTTATTTACTTTTACCACTATTT
AAGTTATCAACTTTAGCTAGTATCTTCAAACTTTCACTTTGAAAAATGAGAATTTTATATTCTAAGCCAGTTTTC
ATTTTGGTTTTGTGTTTTGGTTAATAAAACAATACTCAAATAC

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FIGURE 5107

KEVESSFRVGKSAITKVQLGLSRGSMRAPRKGVFSIVLNFSYINYTVPISFPLLNNI

FIGURE 5108

GCGGCCGCGCGGCGATTCTCGGACGGGCTGGCCTGCCACCTAGCGGTGGGCTGAGATCGAGTTCGCGGCCATGGG
CGGTGGGCTCGCCGTTCCACCTCCCGGGCGGCGGTACCCTGACCAGATGCTAGGACTGACAGAAGGAGGGCACCC
TCCAATGGGGATGGCATACAACCTCCAAAGTTTTGGCAAGAGGGATGAAAATCAGAAAGGCCTCGCTGCTTGCCC
ATCACTCAGCGATGAGCATCTATTTGCACTAAGAAAAACCACAAATAACCCGCTTCGAACACACCATCTTCCTGT
CCCTGTGGCCCCTCTTAGGGGAAGTCGGTAGTGGAAGGATGCCACCTAGGAGCTCAGGGGCTTTGGGACGTACAA
CTCTGTTTTGCAGTTGAGGAAACAGGCCCGACGAGGAGGCTTGTTAGTGGTGAGTTAGTGACTTAACCAGGACCA
GATTTTAAGCTTCTGAATTTCATGTCAGTGACTGAAAGCCAAAGGCGGGTTTATCTCAGCTCCTTAGAAGTATTT
ATGAGAAAGGAGCGGCTGCCAGAACCATGAGTTTAACCTCTTAGGTCACCTTTGTTGCCAGTGTTCATTGGAAAC
CGCTCCCCAGCAGTCTTGGAGGATTTTTTTTAAAGAAAATATGGCCTAAGATTTTCGGTAATGACACGAAAAGCC
CAGATGGTGCTGAAGGGTGTGGGTCTCGGAGCTCGGGGGTTTGCGTGTTAAGAGGGGGGTTAAGGCCTGCACCAA
AGACTTGCAGGGCGAGCCTCGATTCTGAAATCGCTCTCTTCCCCTTCCTAACATCCTCTGCATAGTAGCCTGGCG
AGAAACCGGGTGTGTGTGTGTGAGGGGGTGGGGGTCATGTGGATAGGCCAGAATTTGTGCCACAACAGTTCCTCC
GTAAAGTTTTCTTTCTCCGAGCTCGTGACTTAAGATGGCAAACGCGCGTCCGCATGCTGGCGGCCCCTAGCGGCA
GCAGGCGCGCTCTGCAGGGGGAGACAGCGCCGTCGCCCCCGCCCGGGTCGGCGGGGATCGAGTTCGGCCTCTCCC
ACTGCGGGAGCCGTCGGAGGCCGCGTCGGAGAAACGCGCCTCTGTTCGGACTGGAAACGAATCTGGGAACGAGTT
TGAAGCGCGGTCAAGTTTGACTCATCGCTTTCCAAGGACAGTTAGTGCCTTCCATCTTCATTAACGTGAATAAGG
ACCTTGGCTGACTTCTTTCCAGATCGGATTTTTAAAGGCATTGTTTGCTTGAGGAGATCATGCTTCTCCCCTCCC
CCGCCAGCCTTTTTGCAAAGGCTGAGCCCAGTCCAGCCAGGACGGCCGAGGGATCTCTGCTCCGGGACGCGATTT
GCTGGCATTGTCTTCGGGCCCTTCTGGAAGGCTGTCTCGCGCTGAGCGTATGGGGAACGTCCCTTCTGCAACTCC
TCTTCAGATCTTGATGATAAAACACATCCCTCTGTTTTATTGCATTTCCTAGAAGCTTGCAGGCTTGCAAGAGCA
CTGTTGGCAGGAAACGTGATAGAAATGAAAGTCAGGACACAATGTCCCCGAACACCTCGGTTATCCAAAGCGGCT
GTCGAGGCCATCGCGTTATCAAATTCGCTTTTATTTACTGTCGTCTCCTGCACCCTCCCGTTCCCCAGCCAAGAG
GGCGAAGAGTGTTTTCCCCCAAGAATAAAAACAGCTCCGCGATTTGACCTCACCCCCTGCCGCCGGACCACGGTG
GTGTCTGCAGCCGTGCAGCTAGTTGGCTGAAACACTGCTGAGACCGGGAGCCCCACGGCAGGGCCCCTGATGCGG
GGTTCACTACGGCAGTTGCAGCCTTATTAAAATTCCTTGTCCTTGTCCCTAAACAGTGCTTTACACTTTCAGATT
TCCCTTTGGATTTTTCAGCGGGTTATTGGAGTTATTAGATTACCAATAATCCAACAGCCTCTGTAGCCTCTCTGG
CTGGAGAGGAGGGGGGAAGGGCGGAAGGCATTCTCCAAATCGGGAGGCTCTGGCCAAACTAGGTCAATGGGAAGG
AGGGGAGGGGCGAGAAAGGGGTTGACGGTTTCAAACCTTGATGGAGGGCTCTCTCTAGCGTTAGGCAGCGGTAAA
AACACCATTCGGTTTGAGCTCCCGGAACCACGGGACTCCTAATTTCCAATAAATGCACTTACTTCATTTTAACTT
CCCAGATTCTCATCCCTACCCCTTATTAAATCCCAACCGTCTCTTTCACCTTTATCCCACCGGGCGAAGGGGTGA
GAAAGCCTCAATGTAGGATTTGGAGGCCAAAGGCTCGTTCTTTGCAGACCGACTCTGACCCTTCCGCTTGCCGCA
GAAGGGATGAGCGGCGCAGTGTGACGCCACTGGCTAGTTTTAGGACCAGACTGCGGCCTTTGTGGCTGAGTCTTT
CGCTGTCCCCTAGCCCCCGAAAGCGCACCCCGGAGCCTGCTACCGAGACCAATTAGGACATGGCACCCGGGGGTT
ATAATTCCCGGGAGGGCCACAGGAAGGCGAGGCAACTTTGGAGAGTGCCAGTGCGCGCGCAGGGGTCGGGGCCCC
GGCCTTTGCCGAGTCCAAGCTGTGTCTCTACGGTTTCGGGGAAATCGGATTCGGAAATCCTTACGGCTTGGCAGC
TCCTGTTCTAAAGACTTTGGGCGGAAACCAAGTGGAGCTGGGTTCCCGTTCTTGCCAACGTAGGCGGAAGGGGCT
TTCTGTTTAGTTTTTCTCCAACCTTGCCTGGGGCGCCTATGATGGAGACCCTCAGCCCCTAGGGACTCCATCTTT
TGACCTTGAAGTCTCGCTCAAACATTCCCCTAAAAGAACGGGGGTGAGGGAGAATGGAAGGCAAAAAGAGGGAAA
AAAGCAAATAAACTTCGGAATCGGACAACTTAAAGTCTCGATATGAGCCTCGGATTGTATTCGAACTCCTGGGTT
CTAGACCCAGCTCTGCTACTAACTTGTCTGACCTTCCCCATTTATAAACTGTTGTGGGTGAGAGGTGGGACTAGG
TGAACTCTGAGAGCCCTGCACTCGGCGCGGACGAGGGATTTAGGGGAAAGTGTGCTGTATTCCCCGCGAGCCTTC
CCCAGCGGCCCCGCCTCCCCGGGTGAATCCCCGGCGGCCAGCGCAGCGCAGGCAGCGATCCTGGCGGCTGCCGGG
GCCGGCAGCTTCCTGGAAAGTTACTTCTTGTTGGAGCCGGCAATAGGCAAAGTGTGTTCTGTGAAATCCGCAGAG
CCGAGATTGACTACGTTCCGGGAATGAGAGGGCTGTGTCATTCCCCTCATTGCCTGCTGCATTGACGGCGTAACA
GG

FIGURE 5109

GRAAILGRAGLPPSGGLRSSSRPWAVGSPFHLPGGGTLTRC

FIGURE 5110

AAAAAAAAGAAAAAGGAAAAAAACAAACAAACAACAACTTTGAAACCTAGGAACAATTTTGGACCTGTTGGAGCA
GAAATGTGTAGTTGTCATTGAAGGTGTGAACATACCCTACCTCTACTCTACATGTGGAAGACCTGACCCACAGAG
GACATGAACCCATGAAGAAGAGTGATGTGACATGTTTTGCATTTTATTAGTACCATGATCTAACCAACTGAGCTA
ACTGGCCACACCATTTTATCCTTTATAATGATCACTATGAGGGCTGAGTGCAGAATGGAGTGTATGTGGTCAAGA
GTGGAAGCTGTGAGGCTATTGCAGTAATCCAGAAAGAAAGGTGACAATGGCTTAGACTTCAGTGGTAGTGTTGGA
AATGGACATAAATAGACATATTCAGGAAATATATTGATCTTAGATCTAATAAGACACGTAATAGATTAGAAGTAG
GGAAATTAATGAAAAAGCAGAATTAAGGATGACTTCTCACTGGCTTGAAATGCTAAATGGATGACGGTGCTGTTT
AGTGAGTTGGGGAAGACTGGGCGTGGTGATGGGTGTAGAAATTGAGAAAGGAAAATCAAGAATTTCCAGAACTTT
CAGAGCAATGTTAAATACTTTCCTTGATAGTGGGTCAGTCATCATTTATAAGTGCATTTCTAAAAATATTGCTTA
ATTTTGTTTTTGAGCTTTGTATAAGTGGAATTTTGTGTGTACTGATTATTTTGCTCAATACTATGTCTTTAAGAT
TCTCTGTATTGTTGCATGTGGCTGAGTTTATTTTTGATGCTGTGTAGTGTTTTACTAATTAATAAATCATAATTC
AGTTTTTACTGTTCTATTGATGGACATCTGGGT

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FIGURE 5111

KKKKKEKNKQTTTLKPRNNFGPVGAEMCSCH

FIGURE 5112

GGGGTTCTGTCTGCGCTGTTACGTATTACCTACACTTCTGGGTTTTTTTGTTCTTGTTCTCAGCCTCTCTTTAAG
AGTTCTTGGGCCTTCCTTTTCCCTCTTTCTATTTTAACAGTTTTAATTTTAGAACCATTTACATTCCAGTAGGTA
ATTCACTATGCGCTTTATATGCCTTAGGGCATCCAAATAAAAAACAATAGGGTAAACATCCCCAAAACCCACCTT
TAAAAAAAAAAAAAAAACCCATACAGATTTCCATATGTAATAAAACCCCGTGTTCTTGGATAGATATTAATAAGGT
TGTAATTCCAACTGGTGACATAACTCCTGTGAGGGATAAGAATGTGTCTGCTTATAGTAATAACATCAGAACCTC
TTTGTGAAATTGCGGCCTTTAATGTACATTTTAATGAAAGGGTGCATTAGTATTGTACAGGGGTCTTGTAAAGTC
ATCAAAACTTGCTATGAACTCTAATTGCCATTTGAAGCTACTGATTGGCAGTGGCTCTACTCTAAAACTGCTTTT
TAGCAATTGTATTTTTTTCCTGATTATATTTTTTAATGTACTTTGATGTTTATGCTGATGAGTTTTTTATGTACT
TTTGGTGATGTTTCAGTCTTATGTACTCTTCTGACGTCAGAAAAGTACCACTGGTTGTTTGCAGTCTTATTGTGT
AATCAGCCTACCGCAGGCTTCCATGTATAATAAAGTAATTAATATTGTGCAAGTGTAAAACACTTCTGTTATAAA
AGCAGTGTTTGGAAAATAAGAAATATTAAAAATGGTTACAAAGTATTAGTTAATTTCCTTTTCCCACTTTCCTCC
CTTTAGCTTTAGCAGCTAAAGGGTCACCAACTTGTCATTGCAAGATTCTTAGATAATGTACTTAATCTTAAATAC
GCTGAGTACTAAAAAGTGTTTATTTCTTATTTCAGTAAGTGCGGTAAGTTCTATTGAGTACAGAGTACAAGCTGT
AATCAAAGGATGGAGAGGACCTTTACCACTGTATCTCTTAAGCTGTATGATTTTTCTCCAGTTTGTTTTATACAG
GTTTTGAATTTCTTTAACTTTTATTGTGTGTACTGAATACTGCATATGTATTATTCTGATTGTTTGCTCTAGTTT
ACTACCAATAAAAGTCCTGTTAATCGCAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 5113

CCCCTGGGCCCTGCTCCCTGCCCTCCTGGGCAGCCAGGGCAGCCAGGACGGCACCAAGGGAGCTGCCCCATGGAC
AGGGCCCCACAGAGACAGCACCGAGCCTCACGGGAGCTGCTGGCTGCAAAGAAGACCCACACCTCACAAATTGAA
GTGATCCCTTGCAAAATCTGTGGGGACAAGTCGTCTGGGATCCACTACGGGGTTATCACCTGTGAGGGGTGCAAG
GGCTTCTTCCGCCGGAGCCAGCGCTGTAACGCGGCCTACTCCTGCACCCGTCAGCAGAACTGCCCCATCGACCGC
ACCAGCCGAAACCGATGCCAGCACTGCCGCCTGCAGAAATGCCTGGCGCTGGGCATGTCCCGAGATGCTGTCAAG
TTCGGCCGCATGTCCAAGAAGCAGAGGGACAGCCTGCATGCAGAAGTGCAGAAACAGCTGCAGCAGCGGCAACAG
CAGCAACAGGAACCAGTGGTCAAGACCCCTCCAGCAGGGGCCCAAGGAGCAGATACCCTCACCTACACCTTGGGG
CTCCCAGACGGGCAGCTGCCCCTGGGCTCCTCGCCTGACCTGCCTGAGGCTTCTGCCTGTCCCCCTGGCCTCCTG
AAAGCCTCAGGCTCTGGGCCCTCATATTCCAACAACTTGGCCAAGGCAGGGCTCAATGGGGCCTCATGCCACCTT
GAATACAGCCCTGAGCGGGGCAAGGCTGAGGGCAGAGAGAGCTTCTATAGCACAGGCAGCCAGCTGACCCCTGAC
CGATGTGGACTTCGTTTTGAGGAACACAGGCATCCTGGGCTTGGGGAACTGGGACAGGGCCCAGACAGCTACGGC
AGCCCCAGTTTCCGCAGCACACCGGAGGCACCCTATGCCTCCCTGACAGAGATAGAGCACCTGGTGCAGAGCGTC
TGCAAGTCCTACAGGGAGACATGCCAGCTGCGGCTGGAGGACCTGCTGCGGCAGCGCTCCAACATCTTCTCCCGG
GAGGAAGTGACTGGCTACCAGAGGAAGTCCATGTGGGAGATGTGGGAACGGTGTGCCCACCACCTCACCGAGGCC
ATTCAGTACGTGGTGGAGTTCGCCAAGAGGCTCTCAGGCTTTATGGAGCTCTGCCAGAATGACCAGATTGTGCTT
CTCAAAGCAGGAGCAATGGAAGTGGTGCTGGTTAGGATGTGCCGGGCCTACAATGCTGACAACCGCACGGTCTTT
TTTGAAGGCAAATACGGTGGCATGGAGCTGTTCCGAGCCTTGGGCTGCAGCGAGCTCATCAGCTCCATCTTTGAC
TTCTCCCACTCCCTAAGTGCCTTGCACTTTTCCGAGGATGAGATTGCCCTCTACACAGCCCTTGTTCTCATCAAT
GCCCATCGGCCAGGGCTCCAAGAGAAAAGGAAAGTAGAACAGCTGCAGTACAATCTGGAGCTGGCCTTTCATCAT
CATCTCTGCAAGACTCATCGCCAAAGCATCCTGGCAAAGCTGCCACCCAAGGGGAAGCTTCGGAGCCTGTGTAGC
CAGCATGTGGAAAGGCTGCAGATCTTCCAGCACCTCCACCCCATCGTGGTCCAAGCCGCTTTCCCTCCACTCTAC
AAGGAGCTCTTCAGCACTGAAACCGAGTCACCTGTGGGGCTGTCCAAG**TGA**CCTGGAAGAGGGACTCCTTGCCTC
TCCCTATGGCCTGCTGGCCCACCTCCCTGGACCCCGTTCCACCCTCACCCTTTTCCTTTCCCATGAACCCTGGAG
GGTGGTCCCCACCAGCTCTTTGGAAGTGAGCAGATGCTGCGGCTGGCTTTCTGTCAGCAGGCCGGCCTGGCAGTG
GGACAATCGCCAGAGGGTGGGGCTGGCAGAACACCATCTCCAGCCTCAGCTTTGACCTGTCTCATTTCCCATATT
CCTTCACACCCAGCTTCTGGAAGGCATGGGGTGGCTGGGATTTAAGGACTTCTGGGGGACCAAGACATCCTCAAG
AAAACAGGGGCATCCAGGGCTCCCTGGATGAATAGAATGCAATTCATTCAGAAGCTCAGAAGCTAAGAATAAGCC
TTTGAAATACCTCATTGCATTTCCCTTTGGGCTTCGGCTTGGGGAGATGGATCAAGCTCAGAGACTGGCAGTGAG
AGCCCAGAAGGACCTGTATAAAATGAATCTGGAGCTTTACATTTTCTGCCTCTGCCTTCCTCCCAGCTCAGCAAG
GAAGTATTTGGGCACCCTACCCTTTACCTGGGGTCTAACCAAAAATGGATGGGATGAGGATGAGAGGCTGGAGAT
AATTGTTTTATGGGATTTGGGTGTGGGACTAGGGTACAATGAAGGGCCAAGAGCATCTCAGACATAGAGTTAAAA
CTCAAACCTCTTATGTGCACTTTAAAGATAGACTTTAGGGGCTGGCACAAATCTGATCAGAGACACATATCCATA
CACAGGTGAAACACATACAGACTCAACAGCAATCATGCAGTTCCAGAGACACATGAACCTGACACAATCTCTCTT
ATCCTTGAGGCCACAGCTTGGAGGAGCCTAGAGGCCTCAGGGGAAAGTCCCAATCCTGAGGGACCCTCCCAAACA
TTTCCATGGTGCTCCAGTCCACTGATCTTGGGTCTGGGGTGATCCAAATACCACCCCAGCTCCAGCTGTCTTCTA
CCACTAGAAGACCCAAGAGAAGCAGAAGTCGCTCGCACTGGTCAGTCGGAGGGCAAGATCAGATCCTGGAGGACT
TTCCTGGCCTGCCCGCCAGCCCTGCTCTTGTTGTGGAGAAGGAAGCAGATGTGATCACATCACCCCGTCATTGGG
CACCGCTGACTCCAGCATGGAGGACACCAGGGAGCAGGGCCTGGGCCTGTTTCCCCAGCTGTGATCTTGCCCAGA
ACCTCTCTTGGCTTCATAAACAGCTGTGAACCCTCCCCTGAAGGATTAACAGCAATGATGGGCAGTCGTGGAGTT
GGGGGGGTTGGGGGTGGGATTGTGTCCTCTAAGGGGACGGGTTCATCTGAGTAAACATAAACCCCAACTTGTGCC
ATTCTTTATAAAATGATTTTAAAGGCAAAAAAA

FIGURE 5114

PLGPAPCPPGQPGQPGRHQGSCPMDRAPQRQHRASRELLAAKKTHTSQIEVIPCKICGDKSSGIHYGVITCEGCK
GFFRRSQRCNAAYSCTRQQNCPIDRTSRNRCQHCRLQKCLALGMSRDAVKFGRMSKKQRDSLHAEVQKQLQQRQQ
QQQEPVVKTPPAGAQGADTLTYTLGLPDGQLPLGSSPDLPEASACPPGLLKASGSGPSYSNNLAKAGLNGASCHL
EYSPERGKAEGRESFYSTGSQLTPDRCGLRFEEHRHPGLGELGQGPDSYGSPSFRSTPEAPYASLTEIEHLVQSV
CKSYRETCQLRLEDLLRQRSNIFSREEVTGYQRKSMWEMWERCAHHLTEAIQYVVEFAKRLSGFMELCQNDQIVL
LKAGAMEVVLVRMCRAYNADNRTVFFEGKYGGMELFRALGCSELISSIFDFSHSLSALHFSEDEIALYTALVLIN
AHRPGLQEKRKVEQLQYNLELAFHHHLCKTHRQSILAKLPPKGKLRSLCSQHVERLQIFQHLHPIVVQAAFPPLY
KELFSTETESPVGLSK

FIGURE 5115

GGGGAGTTGAAACCTAATTTTGTGGCGTAGCAGCTATGCAGCTTGAAATCCAAGTAGCACTAAATTTTATTATTT
CGTATTTGTACAATAAGCTTCCCAGGAGACGTGTCAACATTTTTGGTGAAGAACTTGAAAGACTTCTTAAGAAGA
AATATGAAGGGCACTGGTATCCTGAAAAGCCATACAAAGGATCGGGGTTTAGATGTATACACATAGGGGAGAAAG
TGGACCCAGTGATTGAACAAGCATCCAAAGAGAGTGGTTTGGACATTGATGATGTTCGTGGCAATCTGCCACAGG
ATCTTAGTGTTTGGATCGACCCATTTGAGGTTTCTTACCAAATTGGTGAAAAGGGACCAGTGAAGGTGCTTTACG
TGGATGATAATAATGAAAATGGATGTGAGTTGGATAAGGAGATCAAAAACAGCTTTAACCCAGAGGCCCAGGTTT
TTATGCCCATAAGTGACCCAGCCTCATCAGTGTCCAGCTCTCCATCGCCTCCTTTTGGTCACTCTGCTGCTGTAA
GCCCTACCTTCATGCCCCGGTCCACTCAGCCTTTAACCTTTACCACTGCCACTTTTGCTGCCACCAAGTTCGGCT
CTACCAAAATGAAGAATAGTGGCCGTAGCAACAAGGTTGCACGTACTTCTCCCATCAACCTCGGCTTGAATGTGA
ATGACCTCTTGAAGCAGAAAGCCATCTCTTCCTCAATGCACTCTCTGTATGGGCTTGGCTTGGGTAGCCAGCAGC
AGCCACAGCAACAGCAGCAGCCAGCCCAGCCGCCACCGCCACCACCACCACCACAGCAGCAACAACAGCAGAAAA
CCTCTGCTCTTTCTCCTAATGCCAAGGAATTTATTTTTCCTAATATGCAGGGTCAAGGTAGTAGTACCAATGGAA
TGTTCCCAGGTGACAGCCCCCTTAACCTCAGTCCTCTCCAGTACAGTAATGCCTTTGATGTGTTTGCAGCCTATG
GAGGCCTCAATGAGAAGTCTTTTGTAGATGGCTTGAATTTTAGCTTAAATAACATGCAGTATTCTAACCAGCAAT
TCCAGCCTGTTATGGCTAACTAAAAAAAAGAAAATGTATCGTACAAGTTAAAATGCACGGGCCCAAGGGGGATTT
TTTTTTTCACCTCCTTGAGAATTTTTTTTTTTAAGCTTATAGTAAGGATACATTCAAGCTTGGTTAAAAAAATAA
TAATAAAACATGCATCATTTTTCATTTGCCAACCAAGCACAAAGTTATTTTATACTGACTGTATATTTTAAAGTA
TACTCTCAGATATGGCCTCTTACAGTATTTAAGATATAGCAAGGACATGGCTGATTTTTTTTTATAAAAATTGGC
ACTAATAAGTGGGTTTATTGGTCTTTTCTAATTGTATAATTTAATTTAGTACAAAGTTTGTAAAATATCAGAGGA
TATATATATATTGTTTCTACGACATGGTATTGCATTTATATCTTTTTACTACAGTGATCTGTGACAGCAGCAGCT
TCATGTTGTATTTTTTTTACTGAAATTGTAAAATATCCATCTTAAAGACATCAACTATTCTAAAAATTGTGTACA
GGATATTCCTTTAGTGGTGGAATTAAAATGTACGAATACTTGCTTTTTCAAAAAAATGTATTTTCTGTTAAAAGT
TTAAAGATTTTTGCTATATATTATGGAAGAAAAATGTAATCGTAAATATTAATTTTGTACCTATATTGTGCAATA
CTTGAAAAAAACGGTATAAAAGTATTTTGAGTCAGTGTCTTACATGTTAAGAGGGACTGAAATAGTTTATATTAA
GTTTGTATTAAAATTCTTTAAAATTAAAAA

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FIGURE 5116

MQLEIQVALNFIISYLYNKLPRRRVNIFGEELERLLKKKYEGHWYPEKPYKGSGFRCIHIGEKVDPVIEQASKES
GLDIDDVRGNLPQDLSVWIDPFEVSYQIGEKGPVKVLYVDDNNENGCELDKEIKNSFNPEAQVFMPISDPASSVS
SSPSPPFGHSAAVSPTFMPRSTQPLTFTTATFAATKFGSTKMKNSGRSNKVARTSPINLGLNVNDLLKQKAISSS
MHSLYGLGLGSQQQPQQQQQPAQPPPPPPPPQQQQQQKTSALSPNAKEFIFPNMQGQGSSTNGMFPGDSPLNLSP
LQYSNAFDVFAAYGGLNEKSFVDGLNFSLNNMQYSNQQFQPVMAN

FIGURE 5117

GGTTTTAAGTGATATTAAGAGTATTGGCTTATATTTAAGAAGTCAAAAGATACCACTTTATGAGGAATGCCAGCT
TTTGGTGAGAAAAGGATTTGATTTTCAGAGAAAACAGTATGGCAAACTAAAGAAGTTTACTACTGTAAATCCTGA
GTTTTATAATGAACCAAAAACCAAACTTTATCTTAAGCTAAGTCGGAAGGAAAGATCTTCAGCTTATAGCAAAAA
TGATCTTTGGGTGGTTTCAAAAACCCTAGACTTTGAGCTGGATACTTTTATCGCATGTAGTGCTTTCTTTGGACC
ATCATCTATCAATGAGATAGAAATACTGCCTTTGAAAGGCTATTTCCCTTCTAATTGGCCCACTAACATGGTTGT
CCATGCGTTATTGGTTTGTAATGCTAGCACAGAACTGACTACTTTGAAAAACATTCAGGACTACTTTAATCCAGC
TACTCTACCTCTAACACAGTACCTGTTAACAACGTCTTCGCCAACTATAGTTAGTAACAAAAGAGTCAGTAAGAG
AAAATTTATCCCACCAGCCTTCACAAATGTCAGTACAAAATTTGAACTACTCAGCCTAGGAGCAACATTGAAGTT
AGCTAGTGAGTTGATTCAGGTACACAAGTTAAACAAGGATCAAGCTACAGCTCTAATTCAAATAGCTCAAATGAT
GGCATCACATGAAAGCATTGAAGAAGTGAAGGAACTGCAAACTCATACCTTCCCTATCACAATCATACATGGTGT
GTTTGGAGCAGGAAAGAGTTACTTGCTGGCAGTGGTGATTTTGTTCTTTGTACAGCTGTTTGAAAAGAGTGAAGC
TCCCACCATTGGAAATGCAAGGCCGTGGAAACTTCTGATTTCTTCTTCTACTAATGTGGCTGTTGACAGAGTACT
TCTTGGGCTTCTCAGTCTTGGATTTGAAAACTTTATCAGAGTTGGGAGTGTTAGGAAGATTGCCAAACCAATTTT
ACCTTATAGCTTGCATGCTGGCTCAGAAAATGAAAGTGAACAGTTAAAAGAACTACATGCACTAATGAAAGAAGA
CCTGACTCCTACGGAAAGAGTCTATGTGAGAAAAAGCATTGAGCAGCATAAACTGGGGACCAATAGAACCCTGCT
GAAGCAGGTTTGAGTGTGAAAAGCTGATTCTTGTTGGGGATCCCAAACAGCTACCTCCTACTATTCAGGGTTCTG
ATGCAGCTCATGAAAATGGATTGGAACAAACTCTTTTTGATCGACTTTGCTTA**ATG**GGTCACAAGCCAATTCTAT
TGAGAACTCAATACCGTTGTCATCCTGCAATCAGTGCTATTGCTAATGATCTGTTTTACAAAGGAGCCCTCATGA
ATGGTGTAACAGAAATAGAGCGGAGCCCTTTATTGGAATGGCTACCAACCCTGTGTTTTTATAATGTTAAAGGAC
TAGAACAGATAGAAAGAGATAACAGCTTTCATAATGTGGCAGAAGCTACGTTTACACTCAAGCTGATTCAATCAC
TGATTGCAAGTGGAATAGCAGGCTCTATGATTGGTGTGATAACATTATACAAATCCCAGATGTACAAGCTTTGTC
ATTTACTCAGTGCTGTGGACTTTCACCATCCTGATATTAAAACTGTGCAGGTGTCCACAGTAGATGCTTTTCAGG
GAGCTGAAAAGGAGATCATTATTCTGTCCTGTGTAAGGACAAGACAAGTAGGATTCATTGATTCAGAAAAAAGAA
TGAATGTTGCATTGACTAGAGGAAAGAGGCATTTGTTGATTGTGGGAAATTTAGCCTGTTTGAGGAAAAATCAAC
TTTGGGGACGAGTGATCCAACACTGCGAAGGAAGGGAAGATGGATTGCAACATGCAAACCAGTATGAACCACAGC
TGAACCATCTCCTTAAAGATTATTTTGAAAAACAAGTGGAAGAAAAACAGAAGAAAAAGAGTGAAAAAGAGAAAT
CTAAAGATAAATCTCATTCA**TAA**AAAGACATGGTGTAAATATTTTGTATTTATGTAAATTCAGACTCATTTTACA
TGATATATTTTTTATATTTTTATTACTCTAAACCCTCTTATTAAAAATATGATATTTAAATAACATAGTAAACAC
ATGTAAAAATTTTGTTCTTCAAAAAAGTGTACAAAAGGTAGTATAAAATCCTACTAATAAAAATAAGCTTTTTTC
TAAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 5118

MGHKPILLRTQYRCHPAISAIANDLFYKGALMNGVTEIERSPLLEWLPTLCFYNVKGLEQIERDNSFHNVAEATF
TLKLIQSLIASGIAGSMIGVITLYKSQMYKLCHLLSAVDFHHPDIKTVQVSTVDAFQGAEKEIIILSCVRTRQVG
FIDSEKRMNVALTRGKRHLLIVGNLACLRKNQLWGRVIQHCEGREDGLQHANQYEPQLNHLLKDYFEKQVEEKQK
KKSEKEKSKDKSHS

FIGURE 5119

CGGGCGATCAGAAGCAGGTCACACAGCCTGTTTCCTGTTTTCAAACGGGGAACTTAGAAAGTGGCAGCCCCTCGG
CTTGTTGCCGGAGCTGAGAACCAAGAGCTCGAAGGGGCCATATGACACTCCTCCCGGACCCCTGGACACACACAG
CCCTGGAGACTGGAGCCTTGGAGCATGGCAAGTCCAGAGCACCCTGGGAGCCCTGGCTGCATGGGACCCATAACC
CAGTGCACGGCAAGGACCCAGCAGGAAGCACCAGCCACTGGCCCCGACCTCCCGCACCCAGGACCTGACGGGCAC
TTAGACACACACAGTGGCCTGAGCTCCAACTCCAGC**ATG**ACCACGCGGGAGCTTCAGCAGTACTGGCAGAACCAG
AAATGCCGCTGGAAGCACGTCAAACTGCTCTTTGAGATCGCTTCAGCTCGCATCGAGGAGAGAAAAGTCTCTAAG
TTTGTGGTGTACCAAATCATCGTCATCCAGACTGGGAGCTTTGACAACAACAAGGCCGTCCTGGAACGGCGCTAT
TCCGACTTCGCGAAGCTCCAGAAAGCGCTGCTGAAGACGTTCAGGGAGGAGATCGAAGACGTGGAGTTTCCCAGG
AAGCACCTGACTGGGAACTTCGCTGAGGAGATGATCTGTGAGCGTCGGCGCGCCCTGCAGGAGTACCTGGGCCTG
CTCTACGCCATCCGCTGCGTGCGCCGCTCCCGGGAGTTCCTGGACTTCCTCACGCGGCCGGAGCTGCGCGAGGCT
TTCGGCTGCCTGCGGGCCGGCCAGTACCCGCGCGCCCTGGAGCTGCTGCTGCGCGTGCTGCCGCTGCAGGAGAAG
CTCACCGCCCACTGCCCTGCGGCCGCCGTCCCGGCCCTGTGCGCCGTGCTGCTGTGCCACCGCGACCTCGACCGC
CCCGCCGAGGCCTTCGCGGCCGGAGAGAGGGCCCTGCAGCGCCTGCAGGCCCGGGAGGGCCATCGCTACTATGCG
CCTCTGCTGGACGCCATGGTCCGCCTGGCCTACGCGCTGGGCAAGGACTTCGTGACTCTGCAGGAGAGGCTGGAG
GAGAGCCAGCTCCGGAGGCCCACGCCCCGAGGCATCACCCTGAAGGAGCTCACTGTGCGAGAATACCTGCAC**TGA**

GCCGGCCTGGGACCCCGCAGGGACGCTGGAGATTTGGGGTCACCATGGCTCACAGTGGGCTGTTTGGGGTTCTTT
TTTTTATATTTATTCCTTATACTATTATTCAGTTATTCTGGAGGACAGTCTTGCATCTGTCACACCATGACTGAA
GTGCAGGTGGCGTCACATTATGTNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNCACACAGTGTGAGCCACCACCCCTGGCCTGGGGTTCATTTTTAATGGGAAAAGCCACTGGGGGCTCTA
ACTCGCTGGGTGACTTTGGACAAGCCCCTCCTCTGGTCCTCAATTTCTCCATCTGTATTGGACAGAGGTGCTCCT
GGGACCCCTTGGAAGCCTCTGCTTGTGTCCCACGTCCTCTTGATGCCAGGGCCACTTCATCTCCAAAACACAAAA
CCAACTGCCAAAACCGTCCAGAGCAGTGTCCACCCCACCAGTGTCTTTGTGGGAAGCTGGAGAAGAAGTTTACCT
CACACATTCTAGACAAAACTTAGTCCATTTCCTTGAAGACAGTTCTCTCCAGCTGCTCCAAGGCTTTTCTCTCTG
TTCCTTCCACCTTGGAATTGCTTTAAAATATTTCCATCCATTATCCTAATACTATCTTAGTATTCTAGCCCTTCC
CCCTTACCATGTAGACCTGACAAAGCAAAACAAAAGCTCACCTATTGCCCTCAAGAACAGCCTCTNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCACGGTGGGAGTTGTATGCCATCCTTTTGAAGGGTGGG
AGGACCCTGGACCAGAAAGCAATAATGGCATAAGATTCTGTGATACCAGGCATTTTTGGCAAGGGAAGTTGCCAA
CAATTTTTCTGGCTGGGATGGCATAGCACATTGTCTAGGGGTGGATTTTCATTCATAAGGCAGCTGTTCCCTGAA
TGGCTTCCCTGGGTTATGTAGAAACAGCCTGGGGAGGAGGTGATACAACATACTTAATGGGGCCTCTGGGCAGAA
AACAGACTGAATCCTCAACACTGCCCCTTTTGAGGGTCTGTGATCCTGGAACTTCTCTGATGGACTGGGATGCCC
TTAACTGAGGTCTGCTGTCTGGAAAGGACACCACAGGCCCAGAATGAAGGGGCATCTGGACCAATGACCTAGATT
CAACACAGGGCTTGGAGCTGGTGGTACAGGCTGGTTTTGGCCCAATGTGTGTTGGAGGCTGGAAGCCCCTGAAGA
CCTAAACTGCCTGGATGAGCTTATTAGGGTGAATTAATGAGTCTGTAATTTGGGAACCTTAATGTGAGACACCAC
TTAAGGAGAGGAACTTGGCCCAGCAAGTGATCACTCTAGAAGTGGACAGCTATGCACTAGACTGCACCAGAATCT
GTTCAACAGCGACACCTTGTGGTAAAAACTGTAGACGCCCCATCAGGCTGGATGGGAAACTAGAAACAGACTGTC
TCATCTTTGGACAGATATCCCTCAAATCTCCCAATCTACTCCAGGGAAAAGACACTTCAAGTGAGAGATATTGGA
CTTCTTGAAAATCTAGGCCTATGGAAAATTAAAGTGTTAAATGGAAAAATTAAAGAGCTATGAGTCTATTTGTAA
TGATGAAACAGAA

FIGURE 5120

MTTRELQQYWQNQKCRWKHVKLLFEIASARIEERKVSKFVVYQIIVIQTGSFDNNKAVLERRYSDFAKLQKALLK
TFREEIEDVEFPRKHLTGNFAEEMICERRRALQEYLGLLYAIRCVRRSREFLDFLTRPELREAFGCLRAGQYPRA
LELLLRVLPLQEKLTAHCPAAAVPALCAVLLCHRDLDRPAEAFAAGERALQRLQAREGHRYYAPLLDAMVRLAYA
LGKDFVTLQERLEESQLRRPTPRGITLKELTVREYLH

FIGURE 5121

GGCTGCAGAGCAGGAAAGGCCCATCCGTTCCACCAAGGATTCAAAGACCACATTGTTCTTTCAGGAAAGCTGTAG
CAAGGACACCCTGTAGCCACCAGGAAGGAGTCCCTGACACCGACCTCAACCCCACAAGACCCTGCTGCCACTGAC
CACAGCCACCCCCGGAGAAGGCCTGGTCCCCCACAACTGTGAACTGTCTTGCCCAAGCCTGCTCTGAACACAGCC
ATTGGGCCACCACCTGATGGGCAGAGGCGGGACAGTGGAGAAGCCTGGAACCCAAGTGGGCCTGTGACAGGAACT
AAGACTTAAAAAATTAGGTGCTTACCTGGGACAGTAAGTTCTGTCTGGCACAAGCAGGTAACCAGGATGGCTAAC
AGGCTTTGATAGCTGCTCGTGAACTAAAACAGCAGGGTGTGTGCAGGTTCCTCCTCTACGGTCAGGCAGCAGGCT
CTGAAGGCTGATCCTACACCGTCCCAGTGACTCCCCTTGACAGAGTGCCCCCACCCCCTAATAGCCAACAGGGTT
AGCATGGCCAGCACAGATCGCTGCTTCTCCTCCCTGCAGACTTAGCCAAGGAACTCCAAGATGCATGACTGGGAC
AAGAAAAGGTGAGACTCCACATGGAAATGCCTTGCCCTAAACCTTGAATGACTGTGAGATGCGATCTGGGAGTGC
ATCTGTCAAGTCTTTGTGTTTTCTTCACTAACCTCAGAATACTGGGCTCTATTTTATCAAGCGCTGCAGTTTATG
CCTCTGTCCCGTCAATGCTCAGCTTCTGCAACAGGACACCAAACTTGATGCAGAAAGCCAAATAGGTCAATTATG
CAAATCTCCTGGTGCCATATTAAATTTCTTGACAATGG

FIGURE 5122

LQSRKGPSVPPRIQRPHCSFRKAVARTPCSHQEGVPDTDLNPTRPCCH

FIGURE 5123

GTTAACTTGCTGTATACCTCAGTGTAATGTCCGTTCAAGGAGTATTAA**ATG**AGGATTTCCCTGCGAGGACATTTA
CTGTATTGCTACTTAAATTATGGAAGACAATATATCTTCAACTTTAATAAAACCTATTCAGAAAATTACCAATTC
AGAATTCGGAGTTCTTATCCAGGTGCTCTAACTAACTTCAGGGAAATTGGAACAATAAGTTATGTTACATGCACA
CTCAAATTCTTTATTTTCTCCACTTTAAGCAGGAAAGGG**TAA**AAACTGTTTTGGTACTCAAGCCCAGCCTTACAT
ACTGTGTTTCTCTCTCTGTCTGCATGCATATTAAAGTGGAAAAATTGTATTTATATCTTAGTTATTACCATAGTA
CCTATGAACCTTATCAAAATTGCTTATTTGACTGGTGTTACAGCTGCTATTAATCTAAGTCTATTGTTTTTCTAT
TTTAGTAGATAATTTAGTTTTAAAATACGTAGGGTTTGAGAGCAGATATATTTATTTAATCTGTTTTCTCTAGTA
ACTATTGCTGAAGGGTTAGGCATTCAGTATTCCTATTTGTCCTAATTTTGAAGTTAAAAATTTTGGTTACAGATA
GATAGAGGGAGAAAAGTTCAAAATGAGTGAGAGAGAACTTTATGCAGGTTGAGATAATGCCTAAAATAATGAGCT
GGCCAGACTGTGGAGGTACTCTTTGTATTTTGTAACATTGACTTTGGGTAAATGCTTTTTCACTGTTAATAAATA
TATATCCTGTATACAAAAAT

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FIGURE 5124

MRISLRGHLLYCYLNYGRQYIFNFNKTYSENYQFRIRSSYPGALTNFREIGTISYVTCTLKFFIFSTLSRKG

FIGURE 5125

GCATGAGCCGCCGTGCCTGGCTGATGCTGGAGCTTTTATGTGACATGGTGACTCTTAAAACTGGGGAGGGACGTA
GAGATGAGAGTTTCACACACCAGCCCATAGGTGGGATGTCAAGACCCATCGGAAGTGTCGCTGGCCTAAGAGAAG
AGCACTTATTTCTCACCATGGCTGATCTAGAATTGTTCCCTGATTCTGAAAGAAGTTTACACTACACTGGTAAGC
AGTACTATTAGACTACTGACTGTGGCCTTCTGTGCATATGGAATAATGATTTCTCAGATTTGTAGGCTTGAATGT
GAATGTTATTTTATCAGTAATCAGAATAAATTGCTTATATTCAGGAGTTATTTTAAATATTTAAATGAAATTTAT
TTTAGGCACCAAGCACCACATAAACTCATAATAACTATTTGCAATGCATTAGCATCACTCACGGGGTAATGAAAA
CATACCTTAGCTGCTGTAAAAGCAAAGTCTTCCGTGTCCGGGTGGGCTGAAAGTTTTTAATAAAATTTTAGCTAA
ACATTTGTTTAAGTGAATACTAAGGATGGAGCAATAGTGTTATTTTCCTCAGGAACTGAAGTCTCATGCTGAAGT
ATTTTCTCCTTAAAATTAAATTTTTAAAATCAGGGAAGGGGAAGGGACTGATGCAAAGCAGTCCGTTCATTTCTC
AGACTGCGAGCATCCCTACTAACCTCATCACCCTCACTCTGGTGATATTACTCCTGGGTCTCCACAGAACAAAAG
GAACGCACCTCGTTTACAAAGAAAGTCCTGATTGATATAGAACAGAAATCTTCCTACTTCAGTT

FIGURE 5126

MSRRAWLMLELLCDMVTLKTGEGRRDESFTHQPIGGMSRPIGSVAGLREEHLFLTMADLELFPDSERSLHYTGKQ
YY

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FIGURE 5127

GAGGCTTTTCAGCCTCATTTGAGGTACAGTTACATATCTTTTGCCTTTTGCCCCCGTGCATAGCTATCTACAGCC
AATCACAGATCACAGAGTCACTGGACTATAGAGCTGGAAGGAAGCTCAGAGACAATGCCAAGGGGGCAGAAAATT
TATCAGAAGCCAGTCCCAGTGCGTTTCCTCCATTTCCTTCTGCAGGAAGACTATTTTGGGCTGCCTGAACATTGT
ATCAAACCTGCTACCTATACTATGGTCTACCTTTCCTCCAGTGGAATTACAAAGGCACTAACTGAAATGCCTTCT
AGAAACAGAGAAAACGAAACTGTACTTATTTACTCTTGATACACAGATTATTTATAAAACAGATTGAAGTAACCT
GTTAACTGGCAAAAAGAGAATGAGATCGGATTTAAATGTATGGCAGTAAGTCCTATTGATCCCTCCAGTTATCTC
AGTATGACTGCAGTATATTCATTCACTAAAACCACTCACTAGATACCAACTACACATCTGGCACTGCAGATGTAA
AGGTCAGTCACACATGTTCTGACTTTACAGAGTTCACAGTAGCAGTGGAGGATGATATATGTGGAAACAAAAAAG
GCATTGATTCTATTCAGAGCACTGTTAGGGCTCAAAGGAGAGAGGGGTCTTTCCACCTAAGAAATGAGGAATAGG
GTCATCATAGAAGTGACCTTAAGTCTTAAAAATTAAGAAGGGGATTCCAAGCTGCTTCAGACAGAGACACATCGA
GCTAAAACACAGAGGTATGAAAGAGCACAGGGACTTTAGGAATTGCACAGTTCATTCTAACAGGAACAAAAGGCT
CAAGGGGGGCAAGAAATGAGGCTGTATGGAAAGAGATTCAATGTAAGCACTTTATAAAATAGATTAATTTCTGAT
TCAATGAAGCATTTCTTGATCATTGTGTACAAGGCACTACATGCATCATGGAAAATTCATTAGGATGCATTGCCA
GCACTTGCAGAACTGATATTATTCAGCCTCAAGCTTTCCAGTGGCCAAAGGGAAATGCTGACTGCTTTTCATATA
TTTGAGTCAAAGATTTTTTATATGGTCAATGAAGACTAATATAAGGGCAGTGGGATTTTCACAGATGCATGCCAT
GTTGTCGAGAGCCTCTTAGATTTTCTCAACTGTGAGAAAGAAAAACGAAAATGTTGAAGACGTTGAGTCTGGAGA
GGGGATACTAATCACTGTCCAGTTGGGCACTGGTGGGAATGGGGAAATGGCACAGGAATGCAAGCCTCTCCACCC
TACCCCCCGAACTCCAGCCATACACTCATCGTTTCACAAAATATAAATGAGTTAGCATTAAATGTTTCAGAGTAA
ATAATTCCTTTTCCCGAAATGCATGAAGATAGAGTAACAGACTTCTCACACTGTATTTTTAGGGTATGGAGAATT
TAGAAGGTTAAAGAATTACTGCTTCAATTTTTCAGTTAAAAAAAAATCAGGAAGCTCTGTTCATTCAGGCTATGC
ACCATGTGCACAGTCAAGAATTAGCAGAAACCCTCTGCATTTACAAACACTTTGTGCTATAAAAAAGTAATTTTT
AAAAAGCCACGTGTGTGTGTGTCGTATATCNNNNNNNNNNNNNNNNNNTCTAACACGCCAAGGTTTTTGATACTT
TTTTACAAAAACTACAAGAGAAAACAAATATACCTGTCCAAACCATATACTTTTAAAAGAGCATTTTTTTTTCCA
TACAAGCTGTTGTTAATTTGGGGGTAAAGTGCTGATTTGCAAACTTCATCAAATTGTTCCCAAGTGGATTCTCCT
TGTTTGTCTCCCCCTACCAACCCCAAAGTTACCATATTTGATGTAAGAATCAGGCATGTTAGAATGTTGTGTCAC
ACTAACTGATTCTGCTCTTTTTGTCTTGTCATTCAAGTTCCGTTAGCTTCTGTACGCGGTGCCCTTTGCAGTCTG
GTGTCTCTTCCAGAGGCGAGGGGGCTGAGGATGGGGTGCTGCATCTCACTAGCTATACTGGCATCATCTTGGTAA
ACATTCATTCCCATGCCATTGGGGTTGCTTTTGCCAAGGTCATCCAGGACCTCCTCGATTATAAATCTGGTAAAC
ATTTTCAGTCTTGCTCTTCCTTGACCTGAAAGCTTTACAAAAAGTACCAATGCCCAGGTCCAGCGCTGGAGATNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCA
GAGAATTACTGCTCGGTAAGTGGGATGACTGGGGAGTGGGAGATCAAATACTCTAACGTCTCCCAGCACCTATTC
TAGAGATCAGTGGGGCAGAAAGGTAGAAATAAAAGGTGGAAAGGGATGAAATGGGTAAGTGTGGGTGAATTAGTT
CCAGGAAAACGGCAATCTCCACTGTGGATTCAGGGAAGGCGTCACTGAGGAGGGCTTTCTTAACAGTTCAGGTCA
GTGGAAGCCAACTTGAGGCACACATCGTGCGCGGCATCCTCCGGGGAGGTCGGGTCATTTCACCCCATTTTACTG
CCGAGATGACCTAGGTCCAGAGACGGTAAAGAGCGGTGTACGACTCACACAAGTCGGGGGTCCTGTGAACCGAGG
TTGAGCCTGGCGGGCCTTCGGCCCGAGGTCTTTAAGCGAAGTCACCAGACCCGGGGTTCAAAGCCCAGAGGTAGG
CAGGCGGCTGGCTCTCCGCCTCAGGCCTGGAGAGAACCCAGGGGTATGAACCTCAACCTCGCTCCCGCGTCCAGC
TGGAGGGGCGGAGCTGGCTGGCCCCGCCTCCGGGTTAAACAAAGTTCTTTACAGACTAGGCGTGAGGGGATGTTG
CAGTCTTGTTGCCACTTCCGGGCGAAGAG

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FIGURE 5128

GFSASFEVQLHIFCLLPPCIAIYSQSQITESLDYRAGRKLRDNAKGAENLSEASPSAFPPFPSAGRLFWAA

FIGURE 5129

GCATAAGCTATTTTTATCCTCATCTATACTGATTGATTTAAATTTTCCGGGCCTGCAGATGAATTTGGAAAAGGG
CATAATCAACTGATGTTGCTGTAGCAAATTTGGACTTAAGAAACTACAGACAGNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
CACTAAAATTTTCAGAAATTATGTATGTCATTTGTAAAATATAAGTTTTGTAATCCTAGATAATTGCTTCACATT
GAAATTTTTTAGCTATTCTGTGTAAAGAATAGCTATTCTTTTGGCCTAATTTCTGAGAAATTAGACCGAAAAATC
TCCTCAAGTATTGTAACAGTTGAAAATACTTATATTCAACTACCAAGTTTTGTTTCATTTTGATTTTTTGTTATA
AAACATTTTTAAGTTATTTGAGAAGTAATTATTAGTAAAATTGTATCTTGATAAATCATTTCCTCATCCTGCCAT
TCCCTTTTATAAAACACTGAGTTTTTTTATTCCTTAAGTCACATATCCCAGAAATGTTTTGGTTGTGAATCATTT
GCCAGCGAGCCAAGGGAGAGGCAGGGATTCCCTTGAAATGTACTCTTACACTTTTTTATTTTATTTTTAATGTAC
ATTTGTGTGCACCAGAATGGAATGTGCTCTTTTTAAAGAGCTGGACAGTGGTTGCTTCAGACTTCTGAATACCAG
AAAGACTTGCCTTTTAATTTTTAAATATTACTTTTTACATCATAAAATGTGTTATCTTATCCATGTATTTGAATA
ACATCATATATAAAGGTAGTTTTTTGCTTGTGCTTAGTGAAGCCTCCTTTTTTAACATACATTTGATATGCTTTA
TGTTCTTTTTCTTGATTTTTAGTACTGAGAATTTATAAGCCAAGAAGTAACTGACAATATGTTTAGCAGGA

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FIGURE 5130

HKLFLSSSILIDLNFPGLQMNLEKGIIN

FIGURE 5131A

GTGCTGCCGTGACACTCGGCCCTCCAGTGTTGCGGAGAGGCAAGAGCAGCGACCGCGGCACCTGTCCGCCCGGAG
CTGGGACGCGGGCGCCCGGGCGGCCGGACGAAGCGAGGAGGGACCGCCGAGGTGCGCGTCTGTGCGGCTCAGCCT
GGCGGGGGACGCGGGGAGAATGTGGACTGGGTAGAGATGAACGAGACTTTTCTCAGATGTTGGATATTTGCTTGG
AAAAACGTGTGGGTACGACCTTGGCTGCCCCCAAGTGTAACTCCAGCACTGTGAGGTTTCAGGGATTGGCAGAGG
GGACCAAGGGGACCATGAAAATGGACATGGAGGATGCGGATATGACTCTGTGGACAGAGGCTGAGTTTGAAGAGA
AGTGTACATACATTGTGAACGACCACCCCTGGGATTCTGGTGCTGATGGCGGTACTTCGGTTCAGGCGGAGGCAT
CCTTACCAAGGAATCTGCTTTTCAAGTATGCCACCAACAGTGAAGAGGTTATTGGAGTGATGAGTAAAGAATACA
TACCAAAGGGCACACGTTTTGGACCCCTAATAGGTGAAATCTACACCAATGACACAGTTCCTAAGAACGCCAACA
GGAAATATTTTTGGAGGATCTATTCCAGAGGGGAGCTTCACCACTTCATTGACGGCTTTAATGAAGAGAAAAGCA
ACTGGATGCGCTATGTGAATCCAGCACACTCTCCCCGGGAGCAAAACCTGGCTGCGTGTCAGAACGGGATGAACA
TCTACTTCTACACCATTAAGCCCATCCCTGCCAACCAGGAACTTCTTGTGTGGTATTGTCGGGACTTTGCAGAAA
GGCTTCACTACCCTTATCCCGGAGAGCTGACAATGATGAATCTCACACAAACACAGAGCAGTCTAAAGCAACCGA
GCACTGAGAAAAATGAACTCTGCCCAAAGAATGTCCCAAAGAGAGAGTACAGCGTGAAAGAAATCCTAAAATTGG
ACTCCACCCCTCCAAGGAAAGGACCTCTACCGTTCTAACATTTCACCCCTCACATCAGAAAAGGACCTCGATGAC
TTTAGAAGACGTGGGAGCCCCGAAATGCCCTTCTACCCTCGGGTCGTTTACCCCATCCGGGCCCCTCTGCCAGAA
GACTTTTTGAAAGCTTCCCTGGCCTACGGGATCGAGAGACCCACGTACATCACTCGCTCCCCCATTCCATCCTCC
ACCACTCCAAGCCCCTCTGCAAGAAGCAGCCCCGACCAAAGCCTCAAGAGCTCCAGCCCTCACAGCAGCCCTGGG
AATACGGTGTCCCCTGTGGGCCCCGGCTCTCAAGAGCACCGGGACTCCTACGCTTACTTGAACGCGTCCTACGGC
ACGGAAGGTTTGGGCTCCTACCCTGGCTACGCACCCCTGCCCCACCTCCCGCCAGCTTTCATCCCCTCGTACAAC
GCTCACTACCCCAAGTTCCTCTTGCCCCCCTACGGCATGAATTGTAATGGCCTGAGCGCTGTGAGCAGCATGAAT
GGCATCAACAACTTTGGCCTCTTCCCGAGGCTGTGCCCTGTCTACAGCAATCTCCTCGGTGGGGGCAGCCTGCCC
CACCCCATGCTCAACCCCACTTCTCTCCCGAGCTCGCTGCCCTCAGATGGAGCCCGGAGGTTGCTCCAGCCGGAG
CATCCCAGGGAGGTGCTTGTCCCGGCGCCCCACAGTGCCTTCTCCTTTACCGGGGCCGCCGCCAGCATGAAGGAC
AAGGCCTGTAGCCCCACAAGCGGGTCTCCCACGGCGGGAACAGCCGCCACGGCAGAACATGTGGTGCAGCCCAAA
GCTACCTCAGCAGCGATGGCAGCCCCCAGCAGCGACGAAGCCATGAATCTCATTAAAAACAAAAGAAACATGACC
GGCTACAAGACCCTTCCCTACCCGCTGAAGAAGCAGAACGGCAAGATCAAGTACGAATGCAACGTTTGCGCCAAG
ACTTTCGGCCAGCTCTCCAATCTGAAGGTCCACCTGAGAGTGCACAGTGGAGAACGGCCTTTCAAATGTCAGACT
TGCAACAAGGGCTTTACTCAGCTCGCCCACCTGCAGAAACACTACCTGGTACACACGGGAGAAAAGCCACATGAA
TGCCAGGTCTGCCACAAGAGATTTAGCAGCACCAGCAATCTCAAGACCCACCTGCGACTCCATTCTGGAGAGAAA
CCATACCAATGCAAGGTGTGCCCTGCCAAGTTCACCCAGTTTGTGCACCTGAAACTGCACAAGCGTCTGCACACC
CGGGAGCGGCCCCACAAGTGCTCCCAGTGCCACAAGAACTACATCCATCTCTGTAGCCTCAAGGTTCACCTGAAA
GGGAACTGCGCTGCGGCCCCGGCGCCTGGGCTGCCCTTGGAAGATCTGACCCGAATCAATGAAGAAATCGAGAAG
TTTGACATCAGTGACAATGCTGACCGGCTCGAGGACGTGGAGGATGACATCAGTGTGATCTCTGTAGTGGAGAAG
GAAATTCTGGCCGTGGTCAGAAAAGAGAAAGAAGAAACTGGCCTGAAAGTGTCTTTGCAAAGAAACATGGGGAAT
GGACTCCTCTCCTCAGGGTGCAGCCTTTATGAGTCATCAGATCTACCCCTCATGAAGTTGCCTCCCAGCAACCCA
CTACCTCTGGTACCTGTAAAGGTCAAACAAGAAACAGTTGAACCAATGGATCCTTAAGATTTTCAGAAAACACTT
ATTTTGTTTCTTAAGTTATGACTTGGTGAGTCAGGGTGCCTGTAGGAAGTGGCTTGTACATAATCCCAGCTCTGC
AAAGCTCTCTCGACAGCAAATGGTTTCCCCTCACCTCTGGAATTAAAGAAGGAACTCCAAAGTTACTGAAATCTC
AGGGCATGAACAAGGCAAAGGCCATATATATATATATATATATATATATATATCTGTATACATATTATATATACT
TATTTACACCTGTGTCTATATATTTGCCCCTGTGTATTTTGAATATTTGTGTGGACATGTTTGCATAGCCTTCCC
ATTACTAAGACTATTACCTAGTCATAATTATTTTTTCAATGATAATCCTTCATAATTTATTATACAATTTATCAT
TCAGAAAGCAATAATTAAAAAAGTTTACAATGACTGGAAAGATTCCTTGTAATTTGAGTATAAATGTATTTTTGT
CTTGTGGCCATTCTTTGTAGATAATTTCTGCACATCTGTATAAGTACCTAAGATTTAGTTAAACAAATATATGAC
TTCAGTCAACCTCTCTCTCTAATAATGGTTTGAAAATGAGGTTTGGGTAATTGCCAATGTTGGACAGTTGATGTG
TTCATTCCTGGGATCCTATCATTTGAACAGCATTGTACATAACTTGGGGGTATGTGTGCAGGATTACCCAAGAAT
AACTTAAGTAGAAGAAACAAGAAAGGGAATCTTGTATATTTTTGTTGATAGTTCATGTTTTTCCCCCAGCCACAA
TTTTACCGGAAGGGTGACAGGAAGGCTTTACCAACCTGTCTCTCCCTCCAAAAGAGCAGAATCCTCCCACCGCCC
TGCCCTCCCCACCGAGTCCTGTGGCCATTCAGAGCGGCCACATGACTTTTGCATCCATTGTATTATCAGAAAATG

FIGURE 5131B

TGAAGAAGAAAAAAATGCCATGTTTTAAAACCACTGCGAAAATTTCCCCAAAGCATAGGTGGCTTTGTGTGTGTG
CGATTTGGGGGCTTGAGTCTGGGTGGTGTTTTGTTGNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNAAT
GTCAAAATTGCACAAACATGGTGCTCTACCAGGAAGGATTCGAGGTAGATAGGCTCAGGCCACACTTTAAAAACA
AACACACAAACAACAAAAAACGGGTATTCTAGTCATCTTGGGGTAAAAGCGGGTAATGAACATTCCTATCCCCAA
CACATCAATTGTATTTTTTCTGTAAAACTCAGATTTTCCTCAGTATTTGTGTTTTTACATTTTATGGTTAATTTA
ATGGAAGATGAAAGGGCATTGCAAAGTTGTTCAACAACAGTTACCTCATTGAGTGTGTCCAGTAGTGCAGGAAAT
GATGTCTTATCTAATGATTTGCTTCTCTAGAGGAGAAACCGAGTAAATGTGCTCCAGCAAGATAGACTTTGTGTT
ATTCTATCTTTTATTCTGCTAAGCCCAAAGATTACATGTTGGTGTTCAAAGTGTAGCAAAAAATGATGTATATTT
ATAAATCTATTTATACCACTATATCATATGTATATATATTTATAACCACTTAAATTGTGAGCCAAGCCATGTAAA
AGATCTACTTTTTCTAAGGGCNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCTCCTTTCTGAGACTTTGCTTAAT
ACTTGGTGACCTCACAATCACGTCGGTATGATTGGGCACCCTTGCCTACTGTAAGAGACCCTAAAACCTTGGTGC
AGTGGTGGGGACCACAAAACAACCAGGGAGGAAGAGATACATCATTTTTTAGTATTAAGGACCATCTAAGACAGC
TCTATTTTTTTTTTGCCACTTTATGATTATGTGGTCACACCCAAGTCACAGAAATAAAAAACTGACTTTACCGCT
GCAATTTTTCTGTTTTCCTCCTTACTAAATACTGATACATTACTCCAATCTATTTTATAATTATATTTGACATTT
TGTTCACATCAACTAATGTTCACCTGTAGAAGAGAACAAATTTCGAATAATCCAGGGAAACCCAAGAGCCTTACT
GGTCTTCTGTAACTTCCAAGACTGACAGCTTTTTATGTATCAGTGTTTGATAAACACAGTCCTTAACTGAAGGTA
AACCAAAGCATCACGTTGACATTAGACCAAATACTTTTGATTCCCAACTACTCGTTTGTTCTTTTTCTCCTTTTG
TGCTTTCCCATAGTGAGAATTTTTATAAAGACTTCTTGCTTCTCTCACCATCCATCCTTCTCTTTTCTGCCTCTT
ACATGTGAATGTTGAGCCCACAATCAACAGTGGTTTTATTTTTCCTCTACTCAAAGTTAAAACTGACCAAAGTT
ACTGGCTTTTTACTTTGCTAGAACAACAAACTATCTTATGTTTACATACTGGTTTACAATGTTATTTATGTGCAA
ATTGTCAAAATGTAAATTAAATATAAATGTTCATGCTTTACC

FIGURE 5132

AAVTLGPPVLRRGKSSDRGTCPPGAGTRAPGRPDEARRDRRGARLCGSAWRGTRGECGLGRDERDFSQMLDICLE
KRVGTTLAAPKCNSSTVRFQGLAEGTKGTMKMDMEDADMTLWTEAEFEEKCTYIVNDHPWDSGADGGTSVQAEAS
LPRNLLFKYATNSEEVIGVMSKEYIPKGTRFGPLIGEIYTNDTVPKNANRKYFWRIYSRGELHHFIDGFNEEKSN
WMRYVNPAHSPREQNLAACQNGMNIYFYTIKPIPANQELLVWYCRDFAERLHYPYPGELTMMNLTQTQSSLKQPS
TEKNELCPKNVPKREYSVKEILKNWTPPLQGKDLYRSNISPLTSEKDLDDFRRRGSPEMPFYPRVVYPIRAPLPE
DFLKASLAYGIERPTYITRSPIPSSTTPSPSARSSPDQSLKSSSPHSSPGNTVSPVGPGSQEHRDSYAYLNASYG
TEGLGSYPGYAPLPHLPPAFIPSYNAHYPKFLLPPYGMNCNGLSAVSSMNGINNFGLFPRLCPVYSNLLGGGSLP
HPMLNPTSLPSSLPSDGARRLLQPEHPREVLVPAPHSAFSFTGAAASMKDKACSPTSGSPTAGTAATAEHVVQPK
ATSAAMAAPSSDEAMNLIKNKRNMTGYKTLPYPLKKQNGKIKYECNVCAKTFGQLSNLKVHLRVHSGERPFKCQT
CNKGFTQLAHLQKHYLVHTGEKPHECQVCHKRFSSTSNLKTHLRLHSGEKPYQCKVCPAKFTQFVHLKLHKRLHT
RERPHKCSQCHKNYIHLCSLKVHLKGNCAAAPAPGLPLEDLTRINEEIEKFDISDNADRLEDVEDDISVISVVEK
EILAVVRKEKEETGLKVSLQRNMGNGLLSSGCSLYESSDLPLMKLPPSNPLPLVPVKVKQETVEPMDP

FIGURE 5133

AAATCGCCACTCAGCACCTTTTCCAGAAGTCTTCCCTTAGCAAACCGTTTGTTTTTCATTGCATGTGTGGTATAT
TAGTTTGACTGATTTTGTTCTCAAAAAGATTTTGTTTTCACTAAGTGAGAATAATAACTCTTAGGTTGGGTTTTT
TTCTGTTCTAAGAATAATTAATTTGACATAGTATGTAATCTCTTGAGTTCCATAGTTATGGTCTTGATTTATTTT
ACTATTTTGAAAAGGAATGTTACATGAAAAAAATGGCTGTTTTACCTTTTCTGTTTTCTTTTTCTTTAGATGAAA
GGTTGTATCAAAGTTCTTAAGGACCAACCTCCTAATAGTGTGGAAGGTCTTCTAAATGCTCTCAGGTACACAACA
AAACATTTGAATGATGAGACTACCTCCAAGCAAATTAAATCCATGCTGCAATAACAATTCTGGAATAAGCACCTG
CTGTAGACAGAAGACAGTATTCTGCAATGACTGAGAATGCAGTTTTTTAGTGATTGCAATTACTATCTCATTTAT
TCTTGCTTTTATTTCTTTCCTCTGTTCCTCTTCCCTCTTTTTTAATCATGTTCTTAAGACTTCTTTTCTGTGCCA
AAATCAGTAAAGTTACACTCTGAAGGGATATCATCCTTTCAAACGGGCCATCTAAGGCAGCTAATTATGCATTGC
ATTGGGGTCTCTACTGAGAAAAATTCTGTGACTTGAACTAAATATTTTTAAATGTGGATTTTTTTTGAAACTAAT
ATTTAATATTGCTTCTCCTGCATGGCAAAACTGCCTATTCTGCTATTTAAAAACCCTCAATGACTTTATTTTCTA
CTGCCGCCTTTTTCATGTGCAACCAAAATGAAAATGTTTAAATTAACTGTGTTGTACAAATGGTACCCAACACAA
ACTTTTTTTAAATTAGTAATACTTTTGTTTAAAGTTTTAAGTTTGCATTTTGACTTTTTTTTGTAAGGATGTATGT
TGTGTGTTTAACCTTTATTAACTAACGTTAAAAGCTGTGATGTGTGCGTAGAATATTACGTATGCATGTTCATGT
CTAAAGAATGGCTGTTGATGATAAAATAAAAATCAGCTTTCATTTTTCTAAGTGTGGCTTGGTTTACTGATGTTT
TGTTTTTAGGCTTCTGAAGTTTTCCCCATGTATGTTTTTATGGAATGCATATATACATTACATGATTTTTTCTTC
TTTTAGGGGAGAGCCGGGTCTTTTCATTAGAATTTTGATCATTGTCTATGTATATACTTTTAATTGCCTTTAAAA
TTTTGCTAAGTATATTAAGACCAGTGATCTTTTCATTAACTGGACTTTTATTCTTGATTTACTCTTGTATGGATG
TAGTAATGGAAGGAAAACCACATCCTTGCTTGATTCTCCATTTCCAGGGGAGCGGGTAGCAACATGAAGGCAGAG
TAGCCCTTTAATCATGGGAAGAGAGTGATTATAAGAGGGACTTCCCAGGAGAAAAGCAGAGGCCATGATCTCACT
AGTGGTAGAAAACTAACAGGTTTCAGTTTAAGATCATAAAACCTAAATCATGAAATCTAAATCTCATGGTTGGAA
CAAACTACTTAAAGGTTGTCTAGTTCAACCATGCCAGTGTTTTAAATATTTAGGAATATCCGAGGTATAATACAA
TTAAAATGTTTAACCATGGAAGAGAATCACAGAGGCTTCCATCAGACCCTTCTGGATTAATAGGGCCAGATCATG
GCACACACAGCTTCTCAAGATCACATCCCTGCTGATCTCTCTGGCCCTCCTGATCACTGCTCCCCCACTTCACAC
CCTGTCCTGCAGCCAGGCCCTACTGCTTGCTGTTCACAAATTGTTCCATGTGATGTCACTTCCTTAGCTCTGGTC
TGGCTGGTCCCTGAACCTGACATTCCCTTCCTCCCCTTGTGACCCTCTAATGAACGCCAACTTTCATCTTTGAAG
GGTTAGCTTCTATTACCTCCTTCATGAAGCCTTCTGGATAACATTGGCCATATCCTTCTAGGCATCTTCTAAGAA
TAGTGTAATAGGCTGAATAGTGGCCCCCAGGAGATACATTCACTGGGAATCTCCACNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNAATTCA**ATG**ACT
AGCTCTTACAAAACAACGGGAAATAGACACACAGAGCTGAAGGCCATGGGAACATGGACGCAGAGATTAGAGCAA
TGCATCTATGAGCCAAAGAACCCTGAGAATTGGAGGAAGTCACTAGAAGCTAGGGAAAACAGGCATGTCACAGAT
TCTCCCTCAGAGTCTCGAGAAGGNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNTGTATCTCG**TAA**ACACCTCTGATACTTACCTGCGCTTGTGGCTGTGTTTTCTGATACTATGAGAGCCGTAG
TATCTGGATACCGGAGAGTCTGCGAACTTGAGAGAAGGGCCGTGTCTGATTTTCCTTCAGTGTCCCAAGGAAGGA
TCTTGCACAGTACCCAGATTTGGAGAGGTGCCAAGTGAATGCTTCGGTGGACTGAATGAATACAAATCAAAAATA
ATGATGCAGCGGGAATGGATGCAGTAAGATTGCTGTGGCCTATGCAGTTCACACAGTTCACACTCTGCATGTTGA
GGAGTAAGTGGACAGATCTCTTAAGCCCAGGGGCTAGCAAACCGGTCTGTGGGCCAATTTACTCACCGTCTGTTT
TTGTACAGCTTGTGAGCTAAAAATGGTTTTTAAAAAGGTTGAATACAATCAAAAGAATAATATTTTGTGGCATGA
GAAAAGCATATGAAATTCAAATTTTAGTGTTCATAAATAAAATTTTATTGGAACCTAAAAAA

FIGURE 5134

MTSSYKTTGNRHTELKAMGTWTQRLEQCIYEPKNPENWRKSLEARENRHVTDSPSESREGXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXCIS

FIGURE 5135

GCCGCATTCCCGGTGTCGACTTACTAGCTGCAAGCCTCTGCCTGCCTTCCTGCGCGCCGTTCCCCGCTAGTCGCT
GCTGCTGGCGCGCACTCGCCGGGTTTTTCCTCCCACGGCCTCGAGATGGTGGTGAATGTGGCACGGAGGAGCCGG
GCCTTCCAACCCGGTGGGCCCGAGCTCCGAAAGGCCCCCTCGGCAGTGAGAGGGGCGGGAGCCCGCGGGGGCCGC
GCCCTTCTCTCGCTTCGGACTGCGCAACGCTGCGCTCTGGGCTGACAGGCGGA**TAA**AACGGTCCCATCAAGACTG
AGAAAAAGCACACCAGCTATTGGCACAGCGTGGGCAGTGGGGCCTACAGGATGACTGACTTAGTCTACAGAGATC
CCGGCGTACTTAAGCAGGTAGTAATGATGGACAGATGAAGACTCTTAAGATGACAGAAGGTGATTTTTCTGGTGA
TCGAGGACTTCCGGGGTAATGACAGTGATGAAATGCAGGGGACCTGGTTGCCCCCAAGTTTCCTGGCAGTGTGTG
ATACTGAGGAGGTGAGCTTGTTTCTGGAGCTGTGCTTTAAGGTAAAGTTGATCAGCTTAATCCTCCTGATCCCTT
TCCCATCGGATCTGAACACTGGTCTTGGTGGTCGTAAAAGGAGGAAAAGTAATAGTGAAGCTGGCCTAAATGTTG
TAATCTGGTATATGGCATGTGGGCTAGTTTCAGACAGGTTTCAGAGATGGTTGGATCTCTGAAATTGTAAAATGA
AGTATAATCTTAGGCTAAGGGAAGGATGCGTGTGAAGCTCTGGAGATTCATGTTACATGTAAAGCTGTCCTCATT
TGTGACTATGGACCTATGGAGTTGGGACAATCTCTATGGGAAGCAGAAGGCAAGGACCCCGGTCATTTTAGGTAG
AAACAACAGCATGCTAATGCAAAAAATTATGCAGTGTGCTACTGAACTTCAGAGGTGATCAATAAAAGAAGAATA
AAAAGACT

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FIGURE 5136

RIPGVDLLAASLCLPSCAPFPASRCCWRALAGFFLPRPRDGGECGTEEPGLPTRWARAPKGPLGSERGGSPRGPR
PSLASDCATLRSGLTGG

FIGURE 5137

AATCAAAGGCAGAGCTCTCAGAGCTGGGAAGGAGGCTCTAGATGGCGGCTGTGCCTTAGAGAGAGCGCGCTCTGC
TCCCTGCCTTTGCCTCACTTTACGCAACTTTCCCTAACTTTCGGGCAGCCTCAGGGGGCCCCCGTAGCCCCCTGC
CTTTCC**TAG**GGACTTACTGGGGTCGATTCGAACCTTTTTTTGGGAGAAAAGCAGCTTTTAGGAGCTTTCTTTTCG
TGCCTTGTTGGAAAGAAGCAGCCGTACTGAGAGCCCAGGTCGTTGTTTTTTCCAGCTTAGAAGCCATGGCGCACC
TCCATTTTTGTGCGCTCTCCTAATGAGGTTTTTTTTCTTTCGGACCTGTTTTAGTATTAATTATTGCTTTATTTT
TTTGACCAGTTAACATATTTGAGGGTTATTTTATTTATTTTTCGTTTTTTAACGGAGGATTTTGCCTTTATTTTT
AATTATTTGGGATCTGATATTTTTCTACTAGTAGATAGGACTCTTGGTTTGGACATACTACATGGATCAGTAAAT
ACCTGGGCACAGGACTTCAAAGCAAACACAGATTCCCCCTCCCCCTTAATATTTAAGAATTAAAAGATGATGAGA
AATAAGGACAAAAGCCAAGAGGAGGACAGTTCGCTACACAGCAATGCATCGAGGTATGAGCTATCAACTTTCTTC
CTTTTTGTCTTTTTTTTTGGGGGAGAAACCTCAGCTTACAATTGTTTACCTTGACAGACATGGATTGCTGTCTGT
TTTATTGTGTTTTTCTAATTTGGATTCGTTTTTTAAAGCATGACCTTGAGATTGCTAATATGCCACACCCTAATT
TTTTGGTAGCAATTTATGAAAGTTGAGTTGTGACTTAAGGCCTCTTACAGCAGTCAAAAGGTAAGGTACCTTTAT
TCAAAGGGGCCTTTACTGTAATGTACAGTTTTTCTGTCAGTAAATTTCAGTTTTTAGGTTTTTGTACTGCAGAAA
AATGACCTTGTCGGTTTAGCCATTGCTGCATTGCACCATTTTACATACAAGGCAAATTTTTTCTTTGAAGAATCC
AGGATATCTAAACTTGTAACTGAGGGCCATAGAGAAGCCTTGTAGTAGTAAATTATAGTAAATAGACATATCAGA
AAGTTATATGAATGAAAAAATGTACATTTAAAAACAAAATCACTTAAAGGACCCTTTGACTGATGCCTCTCAGTT
TATATTTTTATGTGACTTTATATTTCTTTTGATACACTTGACATTTTAGGAAATTTTGATGTGATTTATCAAAAC
CTTTACTTGATGGTTAGAGTTCCTGCATTTATGAAATCAAATCTGTAATAACAGAAATCCTGGAATACTCTTAAT
ATATACTTCTATTTTGTGTTTGTTACTGTGATTAATATTTGCAGTTGTATATTTTACATTTAAATTATTTTAAGG
TTTGCATTTGTATGCTTAAGACATTGATTTCCTGTTGGTAGATGTATTTTATCCTCACAATTTAGATGTAGCTGC
TTTAAATTTATTGATGTATTTCGACAGAGTCGTCTGGAATGCTTTATCTTCTGAAGCTTAAAAATGTACTGTTTG
TGCAAATCATGATCTGTTTCACATTCCTTGGAGTACCTTGTTAGTGATGAAGTAATAAAGCCTCTAAGATGTTTT
TGTTGTATGACCTCTGTATATTAATTTTTAAAAGTACATATGAATGCATTTTTTGATGTGTTCTTTATGCATTTT
CATATTATAAATTTTAAATCATGCAGTTTAACAAGGATGTGATTCATTATGTGGTTTTCCTTCCCAATTTTTACT
TTTCTAATTTTTATAAATAATACACTTTTCTATTAGGCTAGTGAATTTGAAAGTTTTGAACATGATGTGTTACTA
ATATGCTGAATTCTATTTATTTTATTTGACTGAAAGCATATTGAGCCTTGCTTTAGAAAATAAGTTACCAAATTT
TTTTGCATTGAGTTGTCACCCAGTTTGTAGTGCTGTCTTAATTGAATTGCCCATGTAAATTACTAGATTAAATTG
AGGACAGAAAAGTTTTTTACTCATCCTAAGCTGTTTTTTTCTGGAAAGTAATGACAATTTGAAGAAATGAGAACC
TCCAGATATATTTGGCAAATTATTAAAGATTCAGCACT

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FIGURE 5138

NQRQSSQSWEGGSRWRLCLRESALCSLPLPHFTQLSLTFGQPQGAPVAPCLS

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FIGURE 5139

GAGACCATATGGACTGCAAAGCCTAAAATCTATCTGGACCCTTACAGTAAAACAATGACCCTGGGTTTTCATGGC
ACCCCAATGCCTTTTTGGTGACTTGCAGGAATACAGATTCCTATATTCCCGTTTGTTTTTTTTTTTTCTCCTTA
GCTTAAGGTTCGTATTCCCATTTGCTTCTGAGAAAGTTAGGAAAATTTTGTTTTATGTTGCAGATGCTCTCACAA
CATAATTGTGCTGGAGATAGATACACTTAGTGAAATTTTCCTACAGAACTAAAAACGCAAATTGCATCACTCCTA
AAAAAAAGAAATTTAGAGTATGAATTGAGTTGGTTGAGAGTAGAATTAAAAAGATTTCTAGCACTTTGAGCATGT
TTTAAGAAATTTGATCCTTACATTTAAAATTATGTAAATGACATCTTTCACTGGCATTTGCTCACATTTAAGTCA
ATCTACAGCTGTTACTTACTAAGCTAAGAAATAAGAAGATCCCTATGGTTCTGAATCTCTCATAATATTCTGAAG
TAATTTATATCAATTGAATTTTCATTAATCATTTTAGGAAATATTATGTTTTATTTTGTGGCATTATATGACAAT
GACTTTCTCAACAATAGCTCAGGGAATACGCAAACAGCCAGCTCTTTTATGTAAGAAAGCCATTTTCTAATCCCC
ACGCTTTCCTGAGTGTTACGTATTTTATTTCTTTGAAAAGAGAGGGCCTTGAGTAAATGCTTTCGTTTGCTTTCC
TTACATATTTAGAAATCCAAGAAGGGCCCTTGTCTTAGTCTATTTCTGTCACAGAGAAATTGTTCATTCCAAAAT
ATCCACCTTAAGGGAAGCTAGTGACCGAGATATGGAGAAAAACATAGGCATTCATGACCTTTGTGTTTCCGTTTG
ACTTTCAACATCTGTAACCAAAAGGTCACAAATGAAATATTTAGTAGAAAGTGCAATATCAATTTATTAGGAGTA
CCTAAAATTATAACTCTAAATAATATACAGCAATATTATTGCTCTATTATTACAGCAATCAATAATATAATATAG
CCACTAGGATACACTCGCTGTAGAACTCAGAACAAAAGATATCAATCTTCTGCCAGTCCGCATCATTATGTGTAG
CAGAGACTTTACTGGAATGAGTGAGGGGAAAGATAACAAAATGTAGATTAGGATTCCACATTCTCCCCTGCCCAT
CTTCTTGATTGCTCAGTTTGAAGACGATCATTGATGGACAAATACTTTAGAAATGAATGAAGTCAATAGCTAATG
TTTCTCCCAGAAACTAAACAACATAGTTTAGGGGATATTAGGCCTACATTCTAATCACATTGTAAGGAAGTGATT
TTCTAATTTTGAAGCTTCCCAGGAGCAGCCCCCTCCAGGAACAATTTTCCCTGTGAACTTTCACTGAGAAACTAT
TATATGCCATGGAGGAGTCAAAGATGAATTAAGTCCAATGCTATCCTCCAGGAGTGAGCTTTGTAGTTGGAGAGA
AAAGCCAACCTTATAGATACAACCTGTACATATATAACCTATGCTGCATTTAGGCAGATGATAAGCCCTAGGAAT
GGAAAGAGGGAAAAGCTCCCTTTCGCCAGGAATGATGAAGGAAAGCTTTATGGAAACACAGGCTGTATGTGAAAG
ATGGGTGAATCTTTGCAGGTAGGGAAGAAGTAGGGGGCATGTCTGGCTGAGAACCGGCCTGATCATAGAGTGGAA
AAATGAAAGGCAGAGGTGAAGGAAGAATACTAAATGTGAAAGGCTGAAATACACAGGGAAGTGTTGCCAGTGTGC
AACAGAATCTCATCTCGTGCAAAATTGAATTAGACTTCCTTACTCCTTCCTTACTCTGGGTAGGTCCATGTGCAG
CCTTTCCTCAGAGCATCTAGCCTGACATACTTGGCTCATCTGCTGTGCTTCTAAGCCAAATAAAAATCATCAAAC
ACATCGAAGATATTTTTGGGAGTCACCAGGTTAAAGCAAAGCCTCAGTCACTGAAAGCAAAAACTGAATTGGCCA
GGTCTCCACTGACAAAACAGAGTAAATGATAGTATGACAGATAATTTCAAGTTTTCCAAGACTCCAATTTCTGAA
AAATGTCTCATGACTCCAAAAAATCACGTACTTCCTAAAATGTTGCCAGTGGAGGACCGAATCAAGGTTATTGCT
GACCTCATTTTTTCAACCTTTTCAGTTATTTGACCTGAATAGGCAATCCCCCAGGATTTCTGATTGAATTCTACC
TGAAAGTTTAGATTTTAAAAGACAACCTGTAGGAAGCTAAGTCTCAGGCAACAAAATTTAAAACCATCAGAACTT
GTTTCTCCAAACATCAACCTGCTCCTGTCAAGTCCTTTTTCATCTCTCCCTTTTGTCCCTTTACATACTGTTTTG
TAAGTTCCTTTTGATATCATTTATTGCAGGCAGTATTTTTACATCCATCTTCAAGAAACTTGGGAGACATTTAGA
CATTTAGTATGTGTACTTTTAGTTGTCTTGCCTCTTTATTTCAGATAATGCCTGTGATTAGTGAATGGCGGCATT
ATTCCTGAAGACAAATGAAGGAAGATAGGGAGCAAGATTGACTGTCATTTGAATGATGGAAGAGAAGTAGAATTA
CTGTGAGGTTACAAAAATCGTAAGTTAGCAGACATTGAGAAAGGAAAACTTCCTACTTGGGCTTTTCAGGCTTAT
GTGACATTATCTGGATGTGTTTTCTAGTCTTTCCTAAAGGAGAAATTTTTATTCCTGGGTTGCTGAAAGCTTTCT
GGACTAAAAGGATATAAGCAGCTCAATAGCAGCATAGAGGATTAGATTAATGGAACAGCACTGCATACAGGAAAG
CTACATCTCCAATAGTTTAGGCTGCAAGTCAGTAGCCAAACACAAGAGCATGTAAGATTTGGAGGACAAAGTATA
AATATTTTAAGTTTACACAACCAAGATTATAGGCTACCTTCCCAACTTCTAATTTGAAGAGCACTGAAAATGGAG
CTGTGAACACTTCATTTTTAAAACCTGACAATATGGTGCTATTGACTACTTAATACAAAGATATATTACAATATT
TTTAGGTAAATGTATTAAGTCTGGCCTGGGCATAAATGTACATACAGAAAATGTTTGTAGAGAATTCATCAAAAT
CATGCCCATTTGCTGTTGTAGAGCTACAGTATTCTTCAATGGTGGTGACTGACCAGTGAGTTTCTACTTCTTACA
GATGGGACACAACAGTCATGGGCTGTCTCAGCTGCCCAAAGCCTGAGGCAGACCACATGAGAGCTGTGGCTTCTT
CTTGGATTCAGGTTGGATAACCCAATTCAGTAATTAAATATGTAAATTTTGGGGGGGGGTTGGGGGGTGTTTTCTA
GGAACTTGAAGAGTACGTGACATTATAAAAAATGGGTGTTGGAAGACTAATTGTAGAAATTTGACCTGAGGGCCA
ATGTTACTTGGTGTAAGTTCACTCAGACAGACATGTCAGAACATGCCCAAAGAAGCCTATATCTTGCTGCTGGGA
AATGTAAAGCAGTTGGCATGTAGAATACGATAATAAATCATTTAAGAAACCACC

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FIGURE 5140

ETIWTAKPKIYLDPYSKTMTLGFHGTPMPFW

FIGURE 5141

GGCTCCTCCTTGAGGGAGAGAGCTGAGGAGGTGGCATTCTTGCTTCCCTGACTCACCCAAAGGAAGATTTCACAG
CCCCTTGGCTGGGTGGGGAGTTATGCTGGGAAGTCTTCCAGGCCCCCTGGGGGTGGGAAGATGCTCAATGTTCAA
AGGAGATGGAACGAGGAAAACAGTTAAGCAACGATGGACTCCAGGGGGAAAACCGGAGAAGAAGAAACTGTAATT
CCAGTCCGTCCACATGGCCCAGCAGTGAACGACAATTGCATGGTCAGAGAGAGCAAAAGCACCACGCCGACTGAA
AGCAGCTCGAATGTGGTGGGGCAGTGGGAGATAATGCCCTCATCTACCAAAACAAGATCTGCCACCTTCGCAGAC
CACTAAACCTCATTCCTCCAGCCAGCTCCCCACCCCCATGAAGGCCAACTGACCAGAGAGCAGGGCTCCCGAGGG
TCGGGTCGGGTCGGGTCGGGTTGGGTCGGGTGGGTGCCTCTTACCCTGAGGCTCTGCCCTGGACTCGGAGTCCAC
TTGCTGTCAAAGC**ATG**CGACTCTTCTTTCTGATACTTGACATATTTCTTTTCCCGTTCAATTCATGGTTTCTGCC
CAAACGGAGCCACGTGAGGACGTCTTTGGGGATGTGTCTCCAAGAAAAGTGTGGGCTGCCTTCCTCACCCTGGAT
GCCTGTGGGCTGCCTTCCTCACCCTGGATGCCTGTGGGCTGCCTTCCTCACCCTGGATGCCTGTGGGCAGCCTTC
CTCACCCTGGATGCCTGTGGGCTGCCTTCCTCACCCTGGATGCCTGTGGGCAGCCTTCCTCACCCTGGATGCCTG
TGGGCAGCCTTCCTCACCCTGGATGCCTGTGACTTGGTTTCCATGGGGGCTTCCTAAGCTCAGGGACCCCAAGCC
TCCATCAAATCTAATGACCCGCCTTGTCTCTGAACACACCTGTGTTGTCCCCGAGCCCCTCACCAACCCCCTCTG
CAACCCGGCCCACGCATTTCCCATCCTGAAGGGTCCAGCTCATAGGCCGGCCCATGTGTTCCCTTTACCCCTGCT
TTGTCCCTACCTGGTGGGGAGCTGTCCCTTCTGGGCCCTAGTGTGGCACTTCACACACAAATGTGTCCTGTGGGT
GGTATCTGGGCCTCCCCCTGCAGTGAGGGGA**TGA**CCAATGTGCAGAGCTCACTGGGCCTGGATATGGGCTCGGGT
GGCACAGAACAGAGAGAAAGTGCTCCGTAAAAGTGAGCTGCGATGCGGAGGTGGGCAAGCTCTTCCCTGGAGGGG
GAAGAGCTCTCAACCCAGAGGGATCTGACCAGGAAGGTTCACCCCCCCTCCACCCAGGAAGCCCCTGCAGACAGT
ATGTGTTTTAGGCTTTGCTGGCCAAATGGTCTCTGCCGTGACTACTCAGCTCTGCCATTGTGGCTGCAGAGTGAC
CATAGACCTTCTGAAAGTGAATGAGTATGACTGTGTTCCAATAAAACTTTATTGACAG

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FIGURE 5142

MRLFFLILDIFLFPFNSWFLPKRSHVRTSLGMCLQEKCGLPSSPWMPVGCLPHPGCLWAAFLTLDACGQPSSPWM
PVGCLPHPGCLWAAFLTLDACGQPSSPWMPVTWFPWGLPKLRDPKPPSNLMTRLVSEHTCVVPEPLTNPLCNPAH
AFPILKGPAHRPAHVFPLPLLCPYLVGSCPFWALVWHFTHKCVLWVVSGPPPAVRG

FIGURE 5143

CATCACCAGTGTGTGGAGCCTGCCACACCCACCCGCTGCCAAACCACGGCCTTTACCTGTGTCTTCCGGTGTTTC
CCGTGCGACCCATCCTGTGGGAGTGCCTCGTGGGCTGCCCCAGAGTTCACCCCACACTCAGCAGCACCAATGGTG
AAGATGACAAGATCGAAGACTTTCCAGGCATATCTGCCCTCCTGCCACCGGACCTACAGCTGCATTCACTGCAGA
GCTCACTTGGCCAATCATGATGAACTAATTTCCAAGTCATTCCAAGGAAGTCAAGGACGAGCTTACCTCTTTAAC
TCAGTAGTTAATGTGGGCTGTGGGCCTGCAGAAGAGCGAGTGTTGCTAACAGGACTGCATGCAGTCGCAGACATT
TACTGTGAAAACTGCAAAACCACTCTGGGCTGGAAATACGAACATGCTTTTGAAAGCAGCCAGAAATATAAAGAA
GGCAAATACATCATTGAACTAGCACACATGATCAAGGACAATGGCTGGGACTGATTGGACAGCATCTACCCAACC
CAGTGTCCACGTGAACGCCATTCAACCGAACATTCTTCCCAAGCGTGAGAGAGTGACTGACACTTGGTTCCATCC
ATTTAGGGGCCTTGCCATCCGGGGCATCCTCCCACCCTGACGCCATCTTTCTGGTGACCGGCCTCTAAATCGCTG
TCTCTCTGTCTCTTTGCTTTGTATCTGTTTGTGAGTTGATCCTGGCTTCTCTCTCTGTTCTAGTTTTTGGCTGAA
AACAA

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FIGURE 5144

MVKMTRSKTFQAYLPSCHRTYSCIHCRAHLANHDELISKSFQGSQGRAYLFNSVVNVGCGPAEERVLLTGLHAVA
DIYCENCKTTLGWKYEHAFESSQKYKEGKYIIELAHMIKDNGWD

FIGURE 5145

GGGCATGGTTCTCAAGTATTTGTTCAATTAGCTTGGGGAAGAAATGCCAAATCCACTTTGAGGATGAGTCTTACG
ACACAGATCCACCCACATGTGCTCTTATCTGGAATTTGGGACAAAGCAATGCACAGGCCCTCATTCCTGATGTGG
CGCCCTCCAGACATGGCTGCCCAGGAAGGACGGCCACTTTAGAAGTGGGACGTATCACCAGTAAGCTTGAATGAT
TAGGATCGCAGGTGGCTACTGCATTCTGCCGTTCGTGACCGTGTTCTAGCCTGTAGACCACCCGGCTACCTTCAT
TCACCAGTTTTTATCCTTCACCTTTTCCAGTATCGTGTTAGCCACTAGTTCTTGAGTTTTTTGGCTATGATGTGT
ACGTTTATGTATGTCATTCATGGACTTTCAACTAGAAAAGGTAATGATAAGGTTTTCTGAAGACCATTTGTAAAT
TGTCCATTTAACCATTTTTCAGCTTGCTTTGAAACAAAAGTCACACCTACTATTTTTCTATGAATTAGGGAATGA
GGGGGAGATCATTCAGTTTTACTTTTCTTTTTGTTGAAATTTTGTACCCGGATTGCAGTTGGCACTTTTCCTAAA
ACAGAATTGTTTCCCACTTAGGTGTCAGAATGTACCTTTGAACTTCCCTAAGAAGCAGCAGGATCTTTTTAACTC
TCTCTGGTCTGTTTAGACTTTGAAGTCCCTTCTGTAGAAAAGTCTCATAACTGAGAAGGCTCTGTTTTGGGCCGG
GTGGGTCTGCTGGCCTCCACTCACTGTGCTGTTTCCTTTGAGTGGCACACTTGGGAAGCTCCGGGGCATGTGAAG
GAGCTGCAAACATGAGAACTAATGAACCAAGGCGGCTGCCACCAGGAAGGAACAGAACGCAGGCATTCAACCATG
ACGTCTGCACAGTGTTAGTAACATGTCATTGTGGTTTCGTTCTCACTGTGGTAAAATTTATTTCTGAGCACTTAA
ACTGTGTTGCATACCCCTAATTTTTTTTTTTTCTGTATCTTCCTTGCCCTCAAATACCCTGAGGTGATAAACTG
TTCCAGTTGTAGCCAACTACCACTGCTAGGCCTCAATGTAAATTCAGTTGAAATTTGCAATTCTATCAGCAATTT
AATGTATTGAATTCAGATCATCATTTGTCATTTTAACCGACAACCACCCAATAAATTTACTCTGCAGTTCTGAAC
TCAGCATTGTGCCCATTTTTTACTGCAAGATGGACCCTGTATGCCAGGAGACATGTTATTATCAACAATTGGGAA
TTTTTTGAATTTCCTTTTAGGTAATATTGATTCACTGTAATTTTCTAAGTGATCAAAACCCATGAGATTTTGTTA
TTTGGCTTGGCTTTCATTCTCTGCCTGCCCATTAAAGAATATTCTATTCCTAACACATAAAACATTTTACAGTCA
AGCAGTGCAAATTACAGTGCTTTTCTATTTTTTTTTTGAGAGCCTTGAATAAATTGAAGAAAACTTTAAACCAAA
ATTAGAGACGAGTCATTTAAGCTTTTCTGAATGGAAAGTATTAATATTTTCATTTTTCTAGTATAATATAATAAA
ATGAATTTTTTTAAAAAAGCTACTAAGTACCCATCAACTTTTTCATATTGTGAAATGAACCAGGATCTTAACAGA
TACTATCATCGCTGTCCTTTTTTGGCTGTTTAATATCTAGTTCATGTAACAAATTTACAAGAGATAAGTCTCATG
GTTTTTTTTTTCTTTTAATAGGCTTTTCTGCAATTTTTTGGAAATTGAGTTATTACTTGGATTTAACCCTGATA

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FIGURE 5146

AWFSSICSISLGKKCQIHFEDESYDTDPPTCALIWNLGQSNAQALIPDVAPSRHGCPGRTATLEVGRITSKLE

FIGURE 5147

GACTTAGGCTGTGACCCACAGAAGGACGCCAGAAAGTACTCAAGACATTCACGGTGCCCCGGTCAGCACTCGCCA
TGACGAAGACTTCTACATGCATATACCACTTCCTTGTTCTGAGCTGGTATACTTTCCTCAATTATTACATCTCAC
AGGAAGGAAAAGACGAGGTGAAACCCAAAATCTTGGCAAATGGTGCAAGGTGGAAATATATGACGCTGCTTAATC
TGCTCTTGCAGACCATTTTCTACGGGGTCACCTGCCTGGATGATGTGCTGAAAAGAACCAAAGGGGGAAAAGACA
TTAAGTTCCTAACTGCCTTCAGAGACCTGCTTTTCACCACTCTGGCTTTTCCTGTATCCACGTTTGTATTTTTGG
CATTCTGGATCCTCTTTCTCTACAATCGAGATCTCATTTACCCCAAGGTCCTAGATACTGTCATCCCCGTGTGGC
TGAATCATGCAATGCACACTTTCATATTCCCCATCACATTGGCTGAAGTCGTCCTCAGGCCTCACTCCTATCCAT
CAAAGAAGACAGGACTCACCTTGCTGGCTGCTGCCAGCATTGCTTACATCAGCCGCATCCTATGGCTCTACTTTG
AGACGGGTACCTGGGTGTATCCTGTGTTTGCCAAACTCAGCCTCTTGGGTCTAGCAGCTTTCTTCTCTCTCAGCT
ACGTCTTCATCGCCAGCATCTACCTACTTGGAGAGAAGCTCAACCACTGGAAATGGGGTGACATGAGGCAGCCAC
GGAAGAAGAGGAAGTAATTGCACACCATTTTCCAAGAACCAAGAAAGAAGAAAACACAAGAGATTTTTCTCATCT
TTTTTTTTTTTTTTTCTGGTGGAGGGAGGTGGTGGAGGAACATAGCAAAGTAGGAGGGACAGAGAGTGATACTTA
AATTTAATAAGAGGTTCGTGAAGGTAGCTTAACTTGAGAACTCTTGGTTTTTTGAAAGGTTGACTGCACATGCCA
AAAACAACTCCTGCTATCTCAGAATTAATTATCTTTGACCTTCGTGGAGGATGGTCTCTGGTTAAAATCTGACCA
AAGAAACTCACATAAACTTGGTGTTAGAGAACATCTAGAGAGAGAGAGAGGAACTTAGAGTCATTTAAACTCTTC
AGTTTACAGAGAAGGATGCTGAGGACCTAGATGAGAAGTTACCTGCAAAAGGCAAAAGGGTTACTTAGTGTCAGA
ACCAAGGCAATGACTTCTCTCTCCCAGATCTCCTAGCTACTGGTCCTGGGCCATTTTTTTTTTTTTAAATAATCC
CAACTTTTCTTTAAAAGACAAGCATTTCAGTAAGCTAGTTATTTTCATGGGTTGCTCATCCATTTTTTTCAGTGA
TCTAAAAATGTAGGGAGATGGCTACTACTGAAGTTGTCTGTCTACTTGGGATAATAGCAAATTAATTGAAGACAA
TGGGAAAGTAAGTTATAAAAAATACTGGGAAATCTGTTTCTCTTCTGAGCAAGCATTCAGGGCAGGTATAAACAT
CAAACATAGTGACATTGTCAAAACCTCTTCCATTTGAACATTGATTAATTCATCAAATAAATGGTATAGTAACAA
AAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 5148

MTKTSTCIYHFLVLSWYTFLNYYISQEGKDEVKPKILANGARWKYMTLLNLLLQTIFYGVTCLDDVLKRTKGGKD
IKFLTAFRDLLFTTLAFPVSTFVFLAFWILFLYNRDLIYPKVLDTVIPVWLNHAMHTFIFPITLAEVVLRPHSYP
SKKTGLTLLAAASIAYISRILWLYFETGTWVYPVFAKLSLLGLAAFFSLSYVFIASIYLLGEKLNHWKWGDMRQP
RKKRK

FIGURE 5149

ATGGGTGTATGTTTTCACATCTCTCTTAAAAACAATTAGTCTGACAAATCAAATCAAATCATTTATGTTTATTTA
CGTAGAACCTCTTGCAATCCTGTTTGGAGAGTGCAACTTACGATCTTAGTTTAATTGATCAATTAGGAGACCTCT
GAATAAAGACTAACTCCCCAATACATCCATAAGAATTTTTCTATGAGCCTGTCATTTAGATGTGATAAGCAATCA
ATTTCATGAAGACTGTTTCAGTCTTGTAGAAATTGAGTTGCCATCACATAGAGGATTTCTTGTCCTCTGCATTGT
TTAAAGGACAACTACAAATCATGCTGGATAAGAGTACTCATTCAATCTTTTAGGATTCAATGAAGTAGCATTTTA
AATATGTAAGTTATTTTATATATTGTCTGTCTTTTAAAATTGGACTTTGCTTCTTGAAAAAAGTTTGTCAAATCA
CCAAACCATATGACTGTCCATTCATTGTAGCCTATGTTTTCTATTATTAAGAAATAATTCATACTGAGAGTAAAA
GAAAAAGAATGTATTTTGTGTGCAAAGGATGAATGTATTAAAAACTTTTTATTTGTAACAATTTTTTAAAAAAAC
TAAATGGAAATTGCTTTCCCATGTACTTGTATATAAATAAACATTTCCTGTTGCCCACATTTGGAAAAACAAATA
AAAGG

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FIGURE 5150

WVYVFTSLLKTISLTNQIKSFMFIYVEPLAILFGECNLRS

FIGURE 5151

TTTGTCTCCTGGTATTCCTCAGTTCTTTATTTGGTGGTTAAATTATACATATTGCTTTAGAGAGCAGGTAGGTGG
CCATGTGTTCAGCAGTGTGTCCTTAAGAAAATACCATCTTTCTAAGCCACTGGAATTTTTACTTTACTATTTTTA
ACATTAATGGATGTCAGGTCATCAACCTCAAGTCTTTACATATCCATGTATATTCCATATATATTGTTTATATAG
GCCCAAGTTTCTCCTTAATTGGGATCTATATACTACCAGCACAACATCAAAAACATGTAATTGAATACATCAGAG
CTATATATGTAAGGAAATGACTGGTGACCCCATTATCATCATTGTTGAATTCATGTTAAGTAGACCCTCTAGGGG
ACCATAAGGCAATTGAGCACATAACGAAAAATGATGCAATAAGAATGTATGCACTCTCTTTGCCAAATGCATGTG
CTTTTGTGTAACGTGGATGTAAACAGAATTGCAGTGCTGCCGAAATTCTTGATCTTGGCTAAGAGAGTATTTTTC
CCCTTGTAATTATGACTCTGAGATAAAATTGCCATTTTGAAATTTCCAAAGTAACAACTTTTTTTATTTTATGAA
TAAACTTGGGATTGCAATTTCTCTGATCTGACAATCAATAACTTTAACAAAGATCTAAATAAGTGTTTCAAGGAA
AGTTTTCCTAAGCAAATGTAATATTACCTCATTTGGGCATCATTACTCTGTTAATTCTATATCAAAGGAAATAAA
CTTGCTACTTGCACTAAATGAAAA

FIGURE 5152

LSPGIPQFFIWWLNYTYCFREQVGGHVFSSVSLRKYHLSKPLEFLLYYF

FIGURE 5153

ATTCCAAATTXTTTAATTTAACAAGTCAACACCTTATCATTAAGCACTTGAGATCTTGATACATATTCAAGTTAC
ACATCTAAAAGGTTTCCACTTTGCAAGCAAACATGGXAATGCAGAGACCTCCTATTTATGAAATCATGTAAAATG
GTTCTTCAGACACCTCTATGTCCCACTGATGCTCAAGGAXTCAACATTTTTCAAGGGGGTXTTCAAGGCAAATGA
CAACCATCTTATACATGCAGTTAAACATTTTTGCTTTTCCAATGATTTGCAGGGTAAATATGTGTGTGAGGGCTG
ATGGGGTTCTGGGGCGGGGXTCCCAAGGG

FIGURE 5154

AATCAGAGCACAAGAAGTACCAGTCCACCAACTCACATTTTCTATATTAATAATTCTTAACTAAAAGAAGTTCCA
TATTCGACAGCATTTTAGTTTTTTAATAGTACTTATTAGCATCAACCATCTTGATAATCACCAAGGGAAAAATTA
AAAATACCTAGACTGCAATAAACCTTTAAATTGGATTTTCAGTGAGAATTTAGAAGCAATCACTACCTTTCTCGT
TTCATTTGTGTAACCATGCAGCATAGGCACTGTGTTACATCATCTTTACGCTTTGGTATTTGAACTTATTACAGA
ATTTTTTCTCTAAATTGGATGTTTCTTTATATGACCTTGGAAACTGAAGTGATCTTAGCATTAAACAAAAATGCT
TTTTGAAGCAA

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FIGURE 5155

MTLETEVILALNKNAF

FIGURE 5156

GCTCAGCACGGGGGTCATCCGGTGAAGGGACACAGAGAACAGGCAGGAGGAAAGGCAGGAGCCAGTCCGTGCAGG
CACACTCAGCGCTAAGCCAAAGGCCGCCCATGCTGAGCTCATCTGGCCCCATCTTAGAGAGCCGCCAAACATTCC
TCCAGACGTCCACCTCAGTGCACGAGCTGGCCCAGAGGCTCTCGGGCAGCCGGCTCTCCTTGCACGCCTCGGCCA
CGTCCCTGCACTCTCAGCCCCCGCCCGTCACCACCACCGGCCACCTGAGTGTCCGTGAGCGGGCCGAGGCGCTCA
TCAGGTCCAGCCTGGGCTCCTCCACCAGCTCCACCCTGAGCTTCCTCTTCGGCAAGAGGAGCTTTTCCAGCGCGC
TCGTCATTTCCGGACTCTCTGCTGCGGAGGGGGGCAATACCAGTGACACCCAGTCATCCAGCAGCGTCAACATCG
TGATGGGCCCCTCAGCCAGGGCTGCCAGCCAGGCCACTCGGCACCTCTCCGAGCCATGTGAGCCCCCTGATGCCA
CCGAGCAGGGGCAGCTTCATGACCGATGTCTGGCTGAGGCTGTGGCGGACACTCTCGGGGTTGTCTGCAGGAGAG
CAAGCCAGGAGGACATGGGCCTGGACGACACGGCCTCGCAGCAAAGTGTGTCAGACGAGCAG**TGA**CGGGCGTGCG
GCCGGGCGGGGAGGCTGGCTCCCCCACACCTCCCACCTGCATTGCTCTCCCTCGTGCTCCCCAAATCACCACAAC
CAACCAATACCGCGATCCATGAGGGACTCCTCCTGTGGAAAAGGAGAGCTGTTCCAGAACACAGAACTGATCTCA
GGNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNTCACATGATGGGGAAAC
AAAAAAAAGCAACAAAGAAGCCACACCACACCTCCCTGGCCAGGCACAGCGCTGCCCAGAGCGGCACACCGCGGA
CAGCACCACACATGTTCCAGAATCTGAAATCTCAAAAGCCATTCACTAACTTAAAACAACTCAACAGAGCCATGA
AACAAATGCCCTGATGAAAATAAGACAACTGCATGTTACATCATCGGCACTTTATACATTACTGTTACCATGAAA
AAGAAATGAACAGCAGCACGTCTGATACCATCAGCTGGGCAGATGCATTAAGGTTAAATCTAAGTGTCAAGAAAA
CCCTATTTCTTTATAATATTTATGCAGCTGTTAAGCGTAACATGGTGGCAGCTTCACAACAAGAACCGTGATCAT
GCATGCAGTCATGTCTCCAGTATTCTGTGAAAAGCCAGGATACGTTAGGATGTGAGTTTAGAAACTGAGTCCATT
CGGTGCATGGAAATCCACCGCGGAGTCACACAATGCTCCTCACTGTAGTCCAGGCGATTGGTGGGCCGCCAGCAC
CCTGCGGGCTTCACAGGGACGCGTGCTTGTTCTCCAAGCCCCGCAACCCTTACTGTGCACACAACATCGCACACA
CCTTTGTTTTTGAAATTAAAATGTTTATAGTTATTGCTGCGTCCAGTGTTTTGAGTTATACTGAAGCTTCTCATT
TCTACAAGTATATCTTTTATGGTGAGAACGACATTTGGGTAAATTCTGAGACAACTTTTCCCATCTTCAAGACCC
CAGGAACCTGTATCCTTGCTGGGGTAGAGGTCCCAAAATGCAGTCCATAGAGTATCACTGGCCTGGTGAACCATC
CCTTTTCAAAAGACAATAGTTAGAAGGAAATACTCAATTTTAAACAGTCACACAAATTTCTTCAAAGTATTTAGG
ATTTGGAAATTTGAGGAGAGGGTTGGGGGAAGGGTATTGTAGAGAATCTCTTGCCCCTTGGAAAGTAAATGGTAA
TGCTTTTCTAATTTTTTTTTTTGTAAACTAAGAATCAGCAATTAATAAAAGCAAGTGTACTCTATAATCACAGAC
AGAAGGTTCTTATTTTCAGGTCAGCACTCCCTAGAGGTGCAAACTTTATTTAATTTAAATGCAGTTGTTTGTCTA
ATGGGAAGCTGATAGGGCCTTGCTGCAGTTCTCTAAGGTGGCCAAATTAAACTTGGCTGGCAGCTCCTGTAATCC
TCTTGGGCAACTTTACAGCCAAGCCCCAAGGGCTAAATGGCAGGCCTGGAGCTGTGAGTGTGGCCTCCCCACGGA
GGGTGACTCCTTGAGTTCAGTGAGGAAAACCACGGTGCCTGGCAGTGGTCAGCCAGGAGTATGACTGGCCACTCC
TTAGGCATCCAGAAGTAGGAAACACAGAAAGCATTCCACAAAACGGGGAATCTCCCCAAAGAGCTAGAAACCCAG
GCTGGAAGGAAATGGCAGCGCAGGCAAGAGAGCAAGAGCACCCTGGGTGCTCCTCCATCCCGTTTCTCTGGGGAG
GTTCATGAGGTGCTTCTTCAACAGTTATTCTGTTCATTGCTTATCACAGTTCACGAGTTCTCGTGGCATCTTTTG
TGGGGAGGAGGGAGGATGAAAGTGACACAGTGTATCTACAACACTAAGGTCACATTAATCAGATAGGAATGCAGT
GACGCTCTGCACCGTCTATGAGAGCGGGCATCTCGAGTGTGCATACCGAGGCACAGATGTGCACACACATCCGCA
GGCAACTGCACCCACAGAGAAAAGGTGGCAGTATTGGAGTCACCCCAGGATTCTTGGGGGCTGTTTGACCAGCCA
TCAACAGTGCAGCCATACTTCTTTTTCTTTTTTATCGTGGTACACAACTTTTATATTTACAACTCATGAACTTGT
TAATCTGGTCCTTCATCTAGTCAGCTATGTATCAGAAAGGACTTCCTGCAAAATGTTATATTCTAAGCCCCCATT
TAGAGGAGGCATCCCTAAACTGACATTTCTTGCTAGAGTTGTTCAAATATTCTGCCAGTATATAGCTAAAGAGTT
ATTTTCCAGTTCAAGAGTTATTTGGGGGCTCCTCACCCGCCACATGCCCGACTTGTCCACAGTTAGAGAGAAGGC
ACACTGCTGCTTATACCAGTGGGTTTGTAGCCAAT

FIGURE 5157

SARGSSGEGTQRTGRRKGRSQSVQAHSALSQRPPMLSSSGPILESRQTFLQTSTSVHELAQRLSGSRLSLHASAT
SLHSQPPPVTTTGHLSVRERAEALIRSSLGSSTSSTLSFLFGKRSFSSALVISGLSAAEGGNTSDTQSSSSVNIV
MGPSARAASQATRHLSEPCEPPDATEQGQLHDRCLAEAVADTLGVVCRRASQEDMGLDDTASQQSVSDEQ

FIGURE 5158

GGCACGAGGCGCCGTCCAGGGCTAGAGCAAGCGCGGCCCCGCGGCCCGGAGCCATGCTGAGGAGCTGCGCCGCGC
GCCTCCGCACGCTGGGGGCTCTGTGCCGGCCGCCAGTAGGCCGGCGCCTGCCGGGAAGCGAGCCGCGACCCGAGC
TGAGGTCATTTTCTTCTGAGGAAGTCATTCTTAAGGACTGTTCTGTCCCCAACCCCAGCTGGAACAAGGACCTAA
GACTGCTCTTTGACCAGTTTATGAAGAAATGTGAAGATGGCTCCTGGAAACGTTTGCCTTCATATAAACGTACAC
CTACTGAATGGATTCAAGACTTCAAAACCCATTTTCTTGCCTGGTTAATGGCCGGGCGCTGTGGCTCACGCCTAT
AATCCCAGCACTTTGGGAGGCCAAGGCAGGCGGATCCCTGAGTTCGGGAGTTCAAGACCAGCCTGACCAACACGG
AGAAACCCCGTCTCTACTAAAAATACAGAATTAGTCAGGCGTGGTGGTGGGCGCCTGTAATCCCAGCTACTCAGG
AGGCTGAGGCAGGAGAATCGCTTGAACCCGGGAGGCGGAGGTTGCGACCCAAAGCTTATGAAAGAAGAACAAATG
TCACAGGCCCAGCTCTTCACCAGAAGCTTTGATGATGGCCTGGGCTTTGAATACGTGATGTTCTACAATGACATT
GAGAAAAGGATGGTTTGCTTATTTCAAGGAGGCCCTTACCTGGAAGGACCACCTGGATTCATTCATGGAGGTGCC
ATTGCAACCATGATTGATGCTACTGTTGGTATGTGTGCAATGATGGCTGGGGGAATCGTCATGACTGCCAATCTC
AACATCAATTATAAAAGACCTATCCCTCTTTGTTCTGTTGTTATGATAAATAGCCAACTTGATAAAGTTGAAGGA
AGGAAATTTTTTGTTTCCTGTAATGTTCAGAGTGTTGATGAGAAGACCCTATACTCAGAGGCGACAAGCTTATTT
ATAAAGCTGAATCCTGCTAAAAGTCTGACATAAAGAGCTGCTGGTGAACTCCATCTCATTCTCGCCCCTCCAGAA
GAAGCAGTTGTCCCCCAAATACTCTGCTCCCTCACTGCTGAATCCCTGTAGGGAGAAGCCTGCCAACAGTGACCT
TCCGAAACAGCCTTCTGAATACAAAGAGGATTCAGTTTCCATCTTCTCAACTTTTTAACACAGAAACACTTCCTG
CGAGCATATCGACAACTCTCGGGCCAGGCGCTGTGGCTCACACCTATAATCCCAGCACTTTAGGAGGCCGAGGCA
GGCGGATTGCCTGAGCTCAGGAGTTCAAGATCAGTCTGGGCAACACGATGAAACTCCGTCTCTACTAAAATACAA
AAAATTATCCAGGCATGGTGGCGTACGCCTGTAGTCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATTGCTTGAA
CCCAGGAGGAAGAGGTTGCAGTGAGCCAAGATCATGCCACATCACTCCAACCTGGGCAACAGAACAAGAACCCAT
CTCAAACAAACAAACAAACAAACAAAAAAAAAACTCTTGTCTCCTTAGGATATGTTACCTGCTCCACTGCAGACTA
GAGAAATAAATGTGTATTGAACCTTTTACTGCAAACTTGAAAATGCTAGAAAACCAAGCATGAAGAATAAATACA
TGGCGGGAAACACACAGGCATGTGCATATGCATATACATTGTAAGTTAGTAAGTTAGAAAGCTAGCTTTGTTGTA
TCTGAACACATGAATCTTTTTTGGTCAGTGTAGGAAGCACAGCCAGATCCTATAGGAATGAATACCTCAAATCTG
TTGTCTGAGATTCTAGAGATTAAACCACTGTGCCATTTTTAAAAAAAAAAAAAAAAAA

FIGURE 5159

MLRSCAARLRTLGALCRPPVGRRLPGSEPRPELRSFSSEEVILKDCSVPNPSWNKDLRLLFDQFMKKCEDGSWKR
LPSYKRTPTEWIQDFKTHFLAWLMAGRCGSRL

FIGURE 5160

CAACACTCTCCTGAAATCTAGCAATATNAGCAGGATACCTAGCTAAATATTACGTATTGTTTCCTTGGCCTCTCT
TAATAGTGCCATTTATATTTTTAATTTACCAGAGTTAGGCTCATTAAGATAGTGTTNGCTTTGAAATCAATGTTT
CTGTGGAAACTAATTTTAACTTTTACAGATATTGATTACGGGCTTGTGAAAAGGCAAGTAAAGGAGGAATGCTGN
GCTATCTGGGCATTAAAACA

FIGURE 5161

TGGGGGGGGXAATGGGTGTCTGGCTCAXGGATTGCCXAATCTGGAAATTCTCCATAACTTGCTAGCTTGTTTTTT
TTTTTTTTTTTACACCCCCCCGCCCCACCCCCGGACTTGCACAATGTTCAATGATCTCAGCAGAGTTCTTCATG
TGAAACGTTGATCACCTTTGAAGCCTGCATCATTCACATATTTTTTCTTCTTCTTCCCCTTCAGTTCATGAACTG
GTGTTCATTTTCTGTGTGTGTGTGTGTTTTATTTTGTTTGGATTTTTTTTTTTTAATTTTACTTTTAGAGCTTGCT
GTGTTGCCCACCTTTTTTCCAACCTCCACCCTCACTCCTTCTCAACCCATCTCTTCCGAGATGAAAGAAAAAAAA
AAGCAAAGTTTTTTTTTCTTCTCCTGAGTTCTTCATGTGAGATTGAGCTTGCAAAGGAAAAAAAAATGTGAAATG
TTATAGACTTGCAGCGTGCCGAGTTCCATCGGGTTTTTTTTTTAGCATTGTTATGCTAAAATAGAGAAAAAAATG
CTCATGAACCTTCCACAATCAAGCCTGCATCAACCTTCTGGGTGTGACTTGTGAGTTTTGGCCTTGTGATGCCAA
ATCTGAGAGTTTAGTCTGCCATTAAAAAAACTCATTCTCATCTCATGCATTATTATGCTTGCTACTTTGTCTTAG
CAACAATGAACTATAACTGTTTCAAAGACTTTATGGAAAAGAGACATTATATTAATAAAAAAAAAAAGCCTGCAT
GCTGGACATGTATGGTATAATTATTTTTTCCTTTTTTTTTCCTTTTGGCTTGGAAATGGACGTTCGAAGACTTAT
AGCATGGCATTCATACTTTTGTTTTATTGCCTCATGACTTTTTTGAGTTTAGAACAAAACAGTGCAACCGTAGAG
CCTTCTTCCCATGAAATTTTGCATCTGCTCCAAAACTGCTTTGAGTTACTCAGAACTTCAACCTCCCAATGCACT
GAAGGCATTCCTTGTGCAAAGATACCAGAATGGGTTACACATTTAACCTGGCAAACATTGAAGAACTCTTRATGT
TTTCTTTTTAATAAGAATGACGCCCCACTTTGGGGACTAAAATTGTGCTATTGCCGAGAAGCAGTCTAAAATTTA
TTTTTTAAAAAGAGAAACTGCCCCATTATTTTTGGTTTGTTTTATTTTTATTTTATATTTTTTGGCTTTTGGTCA
TTGTCAAATGTGGAATGCTCTGGGTTTCTAGTATATAATTTAATTCTAGTTTTTATAATCTGTTAGCCCAGTTAA
AATGTATGCTACAGATAAAGGAATGTTATAGATAAATTTGAAAGAGTTAGGTCTGTTTAGCTGTAGATTTTTTAA
ACGATTGATGCACTAAATTGTTTACTATTGTGATGTTAAGGGGGGTAGAGTTTGCAAGGGGACTGTTTAAAAAAA
GTAGCTTATACAGCATGTGCTTGCAACTTAAATATAAGTTGGGTATGTGTAGTCTTTGCTATACCACTGACTGTA
TTGAAAACCAAAGTATTAAGAGGGGAAACGCCCCTGTTTATATCTGTAGGGGTATTTTACATTCAAAAATGTATG
TTTTTTTTTCTTTTCAAAATTAAAGTATTTGGGACTGAATTGCACTAAGATATAACCTGCAAGCATATAATACAA
AAAAAAATTGCAAAACTGTTTAGAACGCTAATAAAATTTATGCAGTTATAAAAATGGCATTACTGCACAGTTTTA
AGATGATGCAGATTTTTTTACAGTTGTATTGTGGTGCAGAACTGGATTTTCTGTAACTTAAAAAAAAATCCACAG
TTTTAAAGGCAATAATCAGTAAATGTTATTTTCAGGGACTGACATCCTGTCTTTAAAAAGAAATGAAAAGTAAAT
CTTACCACAATAAATATAAAAAAATCTTGTCAGTTACTTTTCTTTTACATATTTTGCTGTGCAAAATTGTTTTAT
ATCTTGAGTTACTAACTAACCACGCGTGTTGTTCCTATGTGCTTTTCTTTCATTTTCAATTCTGGTTATATCAAG
AAAAGAATAATCTACAATAATAAACGGCATTTTTTTTTGAAAAAAAAAAAAAAAAAA

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FIGURE 5162

MAFILLFYCLMTFLSLEQNSATVEPSSHEILHLLQNCFELLRTSTSQCTEGIPCAKIPEWVTHLTWQTLKNS

FIGURE 5163

GAAAACATTTTGCTGAAAATATAAGCAAACATCGGCCTTGTCCTCCTTGTGTTCATACACTGTGGAAGCTTTTCT
CTGCCTCCTCCGTGAGAGTGCGTGGCCGGGAGACCAGAAACGTGGTCCTTTCTCTTGCCTGTGAGCTGGTGCAGA
GATGGAGGAAGAAGAATATGAACAAATTCCCCAGGAGAATCCCCCAGAAGAGCTGTCCCAGGATCCTGTGCTGGA
GCTGTCAGGAGGTCTCGCCAGAGGTGGCAGACGCTATCTGCCAAGCCATCGTCTTATCCGCCCCAGGGCCCCACG
CCGTGCTCCTGGTGACACAACTGGGCCGGTTCACGGATGAGGATCAGCAGGTGGTCAGGCGCCTGCAGGAGGTCT
TTGGAGTGGGGGTTCTGGGTCACACCATCCTGGTGTTCACCCGGAAGGAAGACCTGGCTGGCAGCTCCCTGGAAG
ACTATGTGCGAGAGACCAACAACCAGGCCCTTGCCTGGCTGGATGTGACCCTTGCACGGCGCCATTGCGGCTTCA
ACAACAGGGCACAGGGGGAGGAGCAGGAGGCCCAACTGCGAGAGCTCATGGAGAAAGTTGAAGCCATTATGTGGG
AAAACGAAGGAGATTATTACAGCAACAAGGCTTACCAATATACCCAGCAAAACTTTCGGCTGAAAGAACTACAGG
AAAGGCAAGTAAGCCAGGGCCAAGGCTCTGAGGACGTGCCTGGTGAGGAGTCTTGGCTGGAAGGACTGTCCCAGA
TCCAGAAGGAATCTGAGGAAGCCCACAGATGCCTGCTGGGGAAGGCTGACCTTTGAGCCTGTGCTGGACTTGAGC
CAAGGACACCATCAGCCTTTGCACCCCCCTGTGTCCAGCCCTCTGTTTCTCTTTCCATCCCATGGAGTGCTTCCC
AGTCTCCAGGTCATGACGTCTGGTGTAGGAAGAGGGGCATGGGGCTTGAGGACAGGGTCCAGCATGCCCAGATCA
CATTCCAGTTCCTTCATTCCTTCTTCCAGAACATCTGGGTCCTCCCTCCTCTGTGCCCCAACAGCACGCTGTCTT
CCTATTGGACCTTCTATCTCATTGGCATTGCCTTTCATGAGTTACTTGTCTATACTCTGATAGAACCAAAGTTTC
TTGAGGGCAGGCCTGTATCTTTTACTTCTGTGTAACTTCCACAGCTTTTGACTGCATTGGAGTCATGCAGTCACG
TTTGGTGCGGCAACTCCATGCAAGCTGTTGACCAGATGACTTCTCATCTCTCCCCACACCATGATGGTTTAAGGT
GCCTGTTGTGTCTGGTGGAGACAGTGCTGGGAGATGATCAGAAATCTCAGGGCACAGCCTCAGGTCTACCTGGAC
ACTCATCCACTGTTGGAGATGCTCAACAGCTAGACACAGATGCTCACAGCCGACCTGTGGCCTCTTGCTCTGAAG
CCATCCCCCATCTTCCCTAGACACAGCAGACATCTGAGAAAGCTTCAGCATTTCTCTTGCTAACAGATTCAGAAA
AGTGTCTCAAAGCAGAGCACAGAGTTATTTGGTGTTTGCTGAAGACAGCCTTTGTGCCACAATCACTTATTAAAT
AAGCGATCAATTTCCCATTGAACTGAACATGCAACATTTATCATACATTCAGCTCTCATTCACACTCCTTAAGAT
TTGGTCAGAATTTTTATTTCTGTTCATGTCTTCTACTTTTCTACTCCTGTATGAATAAAATATTGATTTGATTAC
AGTGGCTTTGACTATAATGTGGGAGCCAATTTTTGCCTCAGTCTTCATTTTTATATTTACCTTGTTATTCTCAGG
CATTTTTTTCTTCTATGTGAGAGTTAAAATCATTCTGTAATTTCCCCCCAAAATCATATTGGTATTCTAGTTGGC
AATGTCTTACATTTATGTTAAGTTTGAGGGAATTGGTAGTTCAAGTATAAGTTAATTAAGGCCATTTTATTTCTA
AGTGAACAGACTTGAAACTCCAGAGCTACTGAAGTAAAAGTTAGAATCATTTGCATTTTCATTCAGATAGGAGAT
AATTTTGTAAATTTTGATGCTATTATTTTAACTCTATTAGCTTAAGTAATGTCATAATAGAAAACACAAGCATTT
GACCAAATGAGATCCATTCAGCGACTAACTGGCAAGGCACTCAAAACATGTCATTCATTAAATGTTGTTTTTATT
TACCTCAAAAAAAAAAAAAAAAAAAAAA

FIGURE 5164

MNKFPRRIPQKSCPRILCWSCQEVSPEVADAICQAIVLSAPGPHAVLLVTQLGRFTDEDQQVVRRLQEVFGVGVL
GHTILVFTRKEDLAGSSLEDYVRETNNQALAWLDVTLARRHCGFNNRAQGEEQEAQLRELMEKVEAIMWENEGDY
YSNKAYQYTQQNFRLKELQERQVSQGQGSEDVPGEESWLEGLSQIQKESEEAHRCLLGKADL

FIGURE 5165

GCCTAGGAACATTTTTTAAGGACTCAGCTGTGGCTTTTAGGGCTTGGTTCATACCATGGGGGAAAAAAAAGTCCT
AGGAGAAAGCGACGTGGCTCATTAGTGTTGCCTCTTCAGTGCTCAAGCCGCCTGGTGGATTCCTATGACACAGGG
GGCCTGGAAAGAAAGGGAAAGTGGATTTAAAATATATATATACGTAACCCAAGCCCCATAACCCCTAACTGGACA
AATGAGGTCTGTTTCTTTGGGCCTGAGGCTGTGCATATAAAGTCTTATTTTGGGACTTTACAAACTTGTCCTAAC
TATCTTGTGGATAGTGGGCTGTGACAATCTGGAATAGAGAACGTTCACACTTCGCTCCTTTAAAGAAGCGACCCC
AGATCTGCAAGGGAGTAGATTCTGCTATCTTGGCCTCACAGCCCTTCCTGTTGATTACAAAGCCCGTGGAAGAAA
ACAGAACACACCCTCCTCAGTTCCGTCTAAATGTGTTTCTTCTGCTTCAATTACACCAGTTCTGGGGCAAAGACA
CTGATGAAACAACACCCATACCTGAAAAGAATAAATGTGTGACTTTCAAATCCCCTTTCGCAGTGAAAGAAACAG
CAAACACTTAAGATTCAGCATCTGTTCTCCAGTTGCACTGAGGAATGCACTGTCTCGCAGCACCAGCTCTGCAGA
GCCCTTGCCCCAGACTCTTTGCGGTTTTATTTATATGTATTTCCATATTTCATTCCTGTGTGTCACTGCTGCATT
GGTGTGGCAGCAAGTGACCAAATGCTACAGGTCTTACTATGGACACCAGGTCAGGTGCAACCACACAAAACAAAG
CCAGTTCCATGAGCTGCCTATGATATGCATTGCGGAAGTAACATTTTACCCAGGGTGTGCCATTGCAGTGATATA
AATATATTTTTTTCTTAGACTAAATATGAGCTGACTATCTCTTTTGATGTGTGTACATAGGTGTGAGTGTGTSTG
TATGCGTGCCTGTCTGTGTGCGGGTGTGTGTATGTGCRTAGCCTCATGCTTAGGACTACCCATGAATGTTGTGGA
ATGCTACACCTGGAGAGTTCTGGTTTTCCACCAGTTTCAAGATGAAGAACTACATGATACAGTGGACCTGGAGAC
CATCCCCTTGGAAAGACAACCCAGAGATGTTCAGCATCCTGTATCTACACGCATCCTGTATCTACACGTGTATTT
TGTAGCTGTCACACTAACCTTAATAAGAATTCTACAGCTTTGGACAGAGGCATTTTCACCTTAATGGYGAAGTAA
TTTAAAATATAAATCCATTCAGGTGACAACCCATCATCAAAATTACAAATTTTCTGATTGAACTCATCTGAATCA
TCAGTTCCTTGATGGAGAGAGAGAAGGAGATGGAATGTGTCTGGTAACCCCAAATGGAGTACAAGTAGCCTTTGT
TTTCCTGCATAAATGGACTTGTTGAATGCGAACGAATATATGCAATTCATATACTTTTGGAGATGAACGTAGATA
TGTGTGTCAGCTTTGAGATGGTGTGYCCYGGATTAATACTTTGTCTCCCCAATATCACAGAAAAATACATGCCCA
GTGACTCTTGAGGTTAAGGTAGTTGGGATGAAATGGCCTCAGGCAATTTCACATTCCCTAATTACCTGGAAAGTT
CTACAGTAATTAATATGCAGCTAACTCCTGTTGCCCTCACAAGAGCATCAGCCTTCTAGAATCGGAGCTCCGGAG
TGTGAAGATTCAGTATTGATATGATATGTATACCAAACTCCAGCCAACTTACTGCCATTTTTCATAATCTGAGTG
GCTGCCTTGCTTATCCTAAGCTGTGGTTGCAGAAACCGTGGCCATTTATATAAGCTATAACATCAAATCAGGGAA
AAATGAGGAAAAAAAATAGATTCTGAACCATTTATTGTTGAATAAGTAGAGAAAATCATCAATAAATATTTATTA
CATTCTGACAGGGTGTGTGGCATTGTGTTCTATGCCAGAGTGACAAAGTTGATTCACCCCTTTTTGGGGACCTTA
ATATATTTTTTAAGGGATGTGCCTATGCATTGATGCCTGAAAAATATGTATAAAGAAATGAGGTTGACTCTTCTG
AGCAGTTCATCTTTTCCAGAGGTAAGGGTAGGAGGCCAACTTCAGGATCTGGGTCTRAGCCCGTGGGSAAGCCCT
GGCCGAGTGAGCTCCAATGCTAACTCATGTGCCGATCTCTAGAGCAGTGGGAAACTACCCCGCTGCACCAAATCA
AGTAGCTTCACCTTGTGTATGCAGGCCCCAAGTTATTTTTTAGCAATCTTACGAGTGAAATGTTCTGGTGGGTTG
AAAAACGTTCTTATTTTAAAGAAAGGTTGTGCTCGCTACACTGCTGGTGTGTGCRTTCTGAGACCTCTTGTATTC
CAATCTGTGAAGGGATATGTGTATTAATCCGTACACCCGTATAGCCTCAATATTTGTCTGAAGACACTTAAATTC
TGACCCATAAGGAAAGTTCCTAGAXGCCAATATTTTCACTTATTTAACATTCTCCAAACAACATCAAGCATTGAT
ACACACTGAAGAGTGCGTTTATTTTTTGTATCACTCTAAGTATGTTGGAATATGCAAGGACTGTGGTTCAAATTA
GAATGTATAAGGCATATTATAATTTAGTTCATACTGAAAAAGAAATTAACAGAACATTGTTCGGTTCACACGTTC
CAAAATTTGAGTGATTTCTGGAGTTAGACATAGATTTTCTATTTTGTTTTAATTTGTCAAGGTATTTTTCTTCCC
TTCATGAACTTTAGGTACACATAACTTATGTCATTTATTTATGGTCTTTTATACCTAGTTTGTAAAATTGTAAAA
TAGCAAACTAAATGCAAAGAGTTTGCATTTGAAAATAATAAAGTAGTTACCGTATACAACCCTGCAAAAAAAAAA
AAAAAAAACTCGAG

FIGURE 5166

TTCGAATTTAATACGACTNCTATAGGGAATTTGGCCCTCGGGCCAAGAATTCGGCACGAGGAAGGAGATCAGGCA
GAGGAGAGAAGAGTCAGTGTGAACTAGGCTGGTGGCTCTGTCCGGTAGGGAGACGGAAAGGGTGCCGCCCATCAT
AGAAGTACCAGAACTTGAGCTGGACTTTGCTGATTTAGCTTATGGAAGAGGAACCAGAAATTTGTCCTTGAATAA
TGTTTCCCGTGTTGGGCTGGATCTTGATAGCAGTTGTTATCATCATTCTTCTGATTTTTACATCTGTCACCCGAT
GCCTATCTCCAGTTAGTTTTCTGCAGCTGAAATTCTGGAAAATCTATTTGGAACAGGAGCAGCAGATCCTTAAAA
GTAAAGCCACAGAGCATGCAACTGAATTGGCAAAAGAGAATATTAAATGTTTCTTTGAGGGCTCGCATCCAAAAG
AATATAACACTCCAAGCATGAAAGAGTGGCAGCAAATTTCATCACTGTATACTTTCAATCCGAAGGGCCAGTACT
ACAGCATGTTGCACAAATATGTCAACAGAAAAGAGAAGACTCACAGTATCAGGTCTACTGAAGGAGATACGGTGA
TTCCTGTTCTTGGCTTTGTAGATTCATCTGGTATAAACAGCACTCCTGAGTTATGACCTTTTGAATGAGTAGAAA
AAAAAATTGTTTTGAATTATTGCTTTATTAAAAAATAAACATTGGTATTTTTTTGAGTAAAAAAAAAAAAAAAAA
AA

FIGURE 5167A

CCGGAGGACAAGACTTTTGCCTTTCTTGCATCTCTCTATCTTTAGCACACAATACACTGTCTCATAACATCCCAA
GTGCCCAATTATTATTATTATTTTAAAGGCAGAGTCTCCATCACCCAGGNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCCCAATTATTATTTG
TTGCATTAATATAGAATAAGCTTCAAACATCATTATGGCCAAGAGAACCACTGATTTTCTGCCCTGATGCATTTC
CCATTTCAGCAAGAGACCACTAAGTTATGCAGGCTCCATACCTTGGAGTCATCCTTGATTCCTCTCTTTTCTTTA
TAGCCCACATTCAATTGGTCCATTTGTCAGCTCTACTTCCAAAATATATCCTAAGTATGACTACTTTTCATCATT
TCCATTGCTACAGTCCTACCCGAGCTACCAAACTCCCACCTGTGGACCAATATAGAAGTTTAACTTGTCTCCATC
CATGCAGACACCAGAGTGATATGTCTAAGACAAAATGAAAATTTCATCATTCCATTTAAATAAAACTCTAAAATG
ACTTCTTATTGCAAACAGAATAAAATCCAAATTCTTTGCTATGGCCAAAATTGCTTATTTACATGTTTACTGTTC
CTCTTTTTCCATTAGAAACATCNTGAATAGTAACCAGTATATAATAANNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNGTTGGCTATTT
GGCGATGAGAGGTGGTGAACAGTGACCATACTGGTATACAACACTATGGGACCTGGCATTTTTGCTGCATGTCCA
GCCCACCCCCACTAATAATGTAGGAAGCTGTCTGGTCCATTGGAAACACTAATCTGATCTCAGAAGTGGCTGATC
GTGGCAGGATGTGTCGACGATGATGATGGCAAGAAAGCAAGATGTCCGAATTCCCACCTACAACATCAGTGTGGT
GGGATTATCTGGGACCGAGAAGGAAAAGGGCCAGTGTGGGATTGGAAAGTCTTGTTTGTGCAACCGCTTCGTGCG
CCCGAGTGCTGACGAGTTTCACTTGGACCATACCTCCGTCCTCAGCACCAGTGACTTTGGAGGGCGAGTGGTCAA
TAATGACCACTTTCTCTACTGGGGAGAAGTTAGCCGCTCCCTGGAGGATTGTGTGGAATGTAAGATGCACATTGT
GGAGCAGACTGAATTTATTGATGATCAGACTTTTCAACCTCATCGAAGCACGGCCCTGCAGCCCTATATCAAGAG
AGCTGCTGCGACCAAGCTTGCATCAGCTGAAAAACTCATGTACTTTTGCACTGACCAGCTGGGGCTGGAGCAGGA
CTTTGAGCAGAAACAAATGCCAGACGGAAAGCTGCTGGTTGATGGTTTTCTTCTTGGTATTGATGTTAGCAGGGG
CATGAATAGGAACTTTG**ATG**ACCAGCTCAAGTTTGTCTCCAATCTCTACAATCAGCTTGCAAAAACAAAAAAAGC
CCATAGTGGTGGTCCTGACTAAGTGTGACGAAGGTGTTGAGCGGTACATTAGAGATGCACATACTTTTGCCTTAA
GCAAAAAGAACCTCCAGGTTGTGGAGACCTCAGCGAGATCCAATGTAAACGTGGACTTGGCTTTCAGCACCTTAG
TGCAACTCATTGATAAAAGTCGGGGAAAGACAAAAATCATTCCTTATTTTGAAGCTCTCAAGCAGCAGAGTCAGC
AGATAGCTACAGCAAAAGACAAGTATGAGTGGCTGGTGAGTCGCATTGTGAAAAACCACAATGAGAACTGGCTGA
GTGTCAGCCGAAAGATGCAGGCCTCTCCAGAATACCAGGACTATGTCTACCTGGAAGGGACTCAGAAAGCCAAGA
AGCTGTTTCTACAGCACATCCACCGCCTCAAGCATGAGCATATCGAGCGTAGGAGAAAGCTGTACCTGGCAGCCC
TGCCATTAGCTTTTGAAGCTCTTATACCTAATCTAGATGAAATAGACCACCTAAGCTGCATAAAAGCCAAAAAGC
TCTTAGAAACCAAGCCAGAATTCTTGAAGTGGTTTGTTGTGCTTGAAGAGACCCCATGGGATGCCACCAGTCACA
TTGACAACATGGAAAACGAACGGATTCCCTTTGATTTAATGGATACCGTCCCTGCAGAGGCACTATACGAGGCCC
ACTTAGAGAAGCTGAGGAACGAAAGGAAAAGAGTTGAGATGCGAAGGGCGTTTAAAGAAAACCTGGAGACTTCTC
CTTTCATAACTCCCGGAAAGCCTTGGGAAGAGGCCCGTAGTTTTATTATGAATGAGGATTTCTACCAGTGGCTGG
AGGAATCTGTATACACGGATATTTATGGCAAACACCAAAAGCAAATTATAGATAAAGCAAAGGAAGAATTTCAGG
AGTTGCTTTTGGAATATTCAGAATTGTTTTATGAACTGGAGCTGGATGCTAAGCCCAGCAAGGAGAAGATGGGTG
TTATTCAGGATGTTCTGGGAGAGGAACAGCGATTTAAAGCATTACAAAAGCTCCAAGCAGAGCGTGATGCCCTTA
TTCTGAAACACATTCATTTTGTGTACCACCCAACAAAGGAGACATGCCCCAGCTGCCCAGCTTGTGTGGACGCTA
AGATTGAGCACTTGATTAGTTCTCGGTTTATCCGGCCGTCTGACCGGAATCAGAAAAATTCACTCTCTGACCCTA
ACATTGATAGAATCAACTTGGTTATATTGGGCAAAGACGGCCTTGCCCGAGAGTTGGCCAATGAGATTCGAGCTC
TTTGTACAAATGATGACAAGTATGTGATAGATGGTAAAATGTATGAGCTTTCCCTGAGGCCAATAGAGGGGAATG
TCAGGCTTCCTGTGAACTCTTTCCAGACGCCAACATTTCAGCCCCACGGCTGTCTCTGCCTTTACAATTCAAAGG
AATCGCTATCCTATGTAGTGGAAAGTATAGAGAAGAGTAGAGAGTCCACGCTGGGCCGGCGGGATAATCATTTAG
TCCATCTCCCCCTTACATTAATTTTGGTTAACAAGAGAGGAGACACCAGTGGAGAGACTCTGCATAGCTTAATAC
AGCAAGGTCAACAAATTGCTAGCAAACTTCAGTGTGTCTTTCTCGACCCTGCTTCTGCTGGCATTGGTTACGGAC
GCAACATTAATGAAAAGCAAATCAGTCAAGTTTTGAAGGGACTCCTGGACTCTAAGCGTAACTTAAACCTGGTCA
GTTCTACTGCTAGCATCAAAGATTTGGCTGATGTTGATCTGCGAATTGTTATGTGTCTGATGTGTGGAGATCCTT
TTAGTGCAGATGACATACTTTTTCCTGTCCTTCAGTCCCAAACCTGTAAATCTTCCCATTGTGGAAGCAACAACT
CTGTTTTACTTGAACTACCAATCGGACTGCACAAGAAGCGGATTGAACTGTCTGTTCTTTCATACCATTCCTCCT

FIGURE 5167B

TTAGCATCAGAAAGAGCCGGTTGGTTCATGGGTACATTGTTTTTTATTCAGCCAAACGTAAGGCCTCTTTGGCTA
TGTTACGTGCCTTTCTTTGTGAAGTGCAGGATATTATCCCTATTCAGCTTGTAGCACTCACTGATGGCGCTGTAG
ATGTCCTGGACAATGACTTAAGTAGGGAACAGCTAACTGAGGGGGAGGAGATTGCTCAAGAAATTGACGGAAGGT
TCACAAGCATCCCCTGTAGCCAACCCCAGCATAAACTTGAGATCTTTCACCCATTTTTTAAAGATGTGGTGGAAA
AAAAGAACATAATCGAGGCTACTCATATGTACGATAATGCTGCCGAGGCCTGTAGCACCACCGAAGAGGTGTTTA
ACTCCCCCCGGGCAGGATCACCGCTCTGCAACTCAAACCTGCAGGATTCAGAAGAAGATATCGAGCCATCTTACA
GCCTGTTTCGAGAAGACACATCACTGCCTTCTCTGTCCAAAGACCATTCTAAGCTCTCTATGGAACTGGAGGGAA
ATGATGGGCTGTCTTTCATTATGAGCAATTTTGAGAGTAAACTGAACAACAAAGTACCTCCGCCAGTCAAACCAA
AGCCTCCTGTCCATTTTGAAATTACAAAGGGGGATCTATCTTATTTAGACCAAGGCCATAGGGATGGACAGAGGA
AGTCTGTGTCTTCTAGCCCCTGGCTGCCTCAGGATGGGTTTGATCCTTCTGACTATGCTGAACCCATGGATGCTG
TGGTGAAGCCAAGGAATGAAGAAGAAAACATATACTCCGTGCCCCATGACAGCACCCAAGGCAAAATCATCACCA
TTCGGAATATCAACAAAGCCCAGTCCAACGGCAGCGGGAATGGTTCTGACAGTGAAATGGACACCAGCTCTCTAG
AGCGAGGGCGCAAGGTTTCCATCGTGAGCAAGCCAGTGCTGTACAGGACGAGATGCACCCGGCTGGGGCGGTTTG
CTAGTTACCGGACCAGCTTCAGCGTGGGGAGTGATGATGAGCTGGGGCCCATCCGGAAGAAAGAGGAGGATCAGG
CATCCCAGGGTTATAAAGGGGACAATGCTGTCATTCCATACGAAACAGACGAAGACCCGCGGAGGAGGAATATTC
TTCGCAGCCTAAGGAGGAACACTAAGAAACCAAAGCCCAAACCCCGGCCATCCATCACAAAGGCAACCTGGGAGA
GTAACTATTTTGGGGTGCCCTTAACAACTGTCGTGACTCCAGAGAAGCCGATCCCCATTTTTATTGAAAGATGTA
TTGAGTACATTGAAGCCACAGGACTGAGCACGGAAGGCATCTACCGGGTCAGCGGGAACAAGTCTGAGATGGAGA
GTCTGCAGAGACAGTTTGATCAAGACCACAACCTGGACCTGGCAGAGAAAGACTTTACGGTGAATACCGTGGCTG
GTGCCATGAAGAGCTTTTTCTCAGAACTGCCTGACCCCCTGGTCCCGTATAACATGCAGATCGACTTGGTGGAAG
CACACAAAATCAACGACCGGGAGCAGAAGTTGCATGCCCTTAAGGAGGTATTAAAGAAATTTCCAAAGGAAAACC
ACGAAGTCTTCAAGTATGTCATCTCTCACCTAAACAAGGTCAGCCACAACAACAAGGTGAATCTCATGACCAGCG
AGAACCTCTCCATCTGCTTCTGGCCCACCTTGATGAGACCTGATTTCAGCACTATGGACGCCCTCACAGCCACGC
GCACCTACCAGACAATCATTGAACTCTTTATCCAGCAGTGCCCCTTCTTCTTCTACAATCGGCCCATCACCGAGC
CCCCCGGCGCCAGGCCCAGCTCCCCCTCTGCCGTGGCTTCCACCGTCCCCTTCCTCACTTCCACGCCTGTCACAA
GTCAGCCGTCGCCCCCACAGTCGCCTCCACCCACCCCCCAGTCCCCAATGCAGCCACTGCTTCCCTCCCAGCTTC
AAGCCGAACACACGCTGTGAGCCACCAAGACCTGGGGCGACAGGAGAACCGGTCCTCTCTCTGACGGGGTGGCAT
TTGGCCTTGAACAAAACCAAGTCCACTGGGGACAGAGGCAGGGGCAAGTGGCTCTCCCCATTACCTTCTCAAGAC
CTCAGTGGGAGCACCAGCCAATGGTACCATCGGCTGGGCTGCCAGGTACCCTGGGCCTGGCGCTGCAGACCTGAG
CTGGCTTGGACCCATTTGAGGACTGAACTAGGCAGGCAATGGCTCCAGTGCCCTCCCTCTGTTCCCTGGACCACC
ACCCCACGTAGCTGCTCACACCAGCCTCCGGGTGCCTCCCTCTGCTTGTACAGAGCCCATGGTCGGGACAGTGCC
CTGGCCTTTGCCGGGGAGGAGGATGCTCTGAGATTCAGGGTGGGGCTGGCAACCCCTGAAGAGAACACTTCCTGT
TGGTCTGTCTCTTCCCACCTTCCATCTGCACACACCCCCAAGGTAAGGGTACAGCCCGGCTGGCGGCCTCCTTGG
GAACGTGTAGGCCACGGCTCTGCCACCACTAGGTACCTGCTGAGGGCGCTGGCTCTGCAGATCAGAACAACGGAG
GATAGCTTTGTGCCTGGACCCAGAGAGTGTGGGACTCCCCGCTTCATCCCCACCGTCCCACTCCACAGCCTTCCC
GAAACATTCCCTGGCAAACAAAGGAACACTAGGAGAAAAAATGGAAAAACCCTTCCAGTAATTAAAAAGGAAGAA
ACCACAGAAAGAAAACTACAGACCTCAAGATTCCACTCTGTGCCCGCCTCTGCCGGGAGGGAGGGAGGCACACAG
GTGGAGCTGACCCTCGTCTTTGTGGCAGCAAAACCAGGATGCCTGGAGCTGTGGCCTGAGGGCCTGCTGGGGTCC
CACTCACCCACT**TAG**GTCTAGTCGCTAGATCCCCCGTTTTCCCAAGAAGAGGGTTCGAGCCCTTGGTGGGGACAG
CTGGGGAGATGGCAGTGCAGGCTGGAACCTGGGCTGCCCCAGAACACAGTCCATTACGATAGAAACACTAATTGA
GCATGTGCGTGGGGTGGGGGTGTGTGTGCACATGTGAGTGTGAGTGTGTGTGGGCGCTTGGTGGGGGGTTGGGGA
CAGCTGGAAGGTGCCAGGTGCACTTGGGGTTGGGGTTGGTGTGTTGGGTGTTGAAGTGGAATCGTTTCATCCCAG
CCATGGAGGCCACCAGCAGGAGTGTTCATGGGGATGTGGGCGAGGTGGGGCACTTTGAAGGAATGGCGGTCTGCT
GGTGCCCTCGAAGGGGCATCCTTCCTGGTCTTCGCTGACCCAGAGGCGCTGTGCCTGCATATCATCCACCACCAC
CCTAGCCCAGCCTTCCCACTGCCCCAGGAAAAGCTCTTCTCCTGGCCACCTCTGCCCCCCAGCACCTCAAACTTG
CATGGCTGGGCTGTGGCCTCTGCGGCCAGGAAGCCTGACACTAGGCACCCCCCAGGCGAGAGCTAGTGGGGTGCA
GAGGGCCCCATGCCAGACAGCCCTTGGGGCTCGTTGCACTTTAAGAAATAGGATCTGTGGTGTATTCCAGGGGGC
CTGATGGACACCTTTCCCGGGCGTCTGCAGCTGCCCTGCCCGTGCCCGCCTGCAGTGGTTGGAGACGGGAGTGGC

FIGURE 5167C

CCTTCGGCTCCCGAGCTCCCTCTGGGGACGGCTGGCTCACTGTCTCCAGTTCTCAATGGCCAACGAAGGTGCTTG
GAAACACCTAACCTTGCAAGTTTTACCGCCTTTTGAGGAACACAAATCGGAGAACAAACCCAGGGTTCAGGCGTG
TTTTCTGTGAATGTTGGATGATGAATTTTTGTCTCTTCTGGTGGAGCTGTGCCTGGCCCTGTAGGCCCAGGGTTG
GCTGGAAGGTGACATCTGTGTTTCGTTTTAGCTGAGGTTGGCAGAAACGTTCCCAAACTCCCCCAGCCCTGGACC
CCAGCAGATGAGGAAACGGCCCCATTTACTGACCCCGCCCCCTTTTCGAGGTTATGCTCACCTGGTCAGCTCCTC
ACGTAATTGGGGGTGAGGGAAAGCATGGTGGTGCCCTGGGCCGTCCCTGTGTGAACGCAGGCAAAAGCAGCCCAG
TCCCCCTCACTGCTTGAGCTAACACTGCCACCTCTTTTGTGTGAGCACAAAAGCCACGTCCCAAGCCACCTGGCC
CGATTCCACAGATGTATGTGCGGCCAGTGACTTCCCCAGGAGTGTGGAGGGGGTGGTGAGGAGGAGCACCTGGGC
TCTCTACCCCTCTCCTCACAGAAGTACCTGAAACTAGGTCTGGGGCACTCCCAATGCAGCGCCTTGTCAGCCAAG
GTGGGCAGGCAGGGACTGTGGCAGCTTATGTCCAAAGGGAGCCCCCATGCACAGGAAGCCACAGGGTTCCTCTTG
TTTCCCCCGCTAACTTCAGCCTCTCATCTGCTGCTCCGGGCTGAGGGACTAGAGGACATCTCGGTCGTTTGAGGG
GCATGGCCAGTCGTGGCAGGCCGGCCTTCAGCGTCCGGTCAGGGAAGCGTGCAGCCCAAATGGGCACTTGCATGG
GAGCCACAGAGGAGCGTCCCTGGGGATTGTTGGGACCATGCTGCCCCCACTCCCGCTTTTGTTGGGGCTCTAAGT
TCTGGAAGGTGTGTGCACAGAGGGTGCTCATGGGACTCGCATGCAGCTCTCAGCACTGGGTGGGAGGGCGTTGGC
TTGTCCAGAATGGGGACGTGGGGCAGCCACCCCTGCCCAGCGAGAGCGCAGACACCGTGTGAGGGGACAGCAGCC
CTTGGTGCAAAGCCAGAGACTGATCCTGGCTCTGACGGCTGAAGAGGGAAGACCCAAGGCTGGGTGGCGTGGCTC
GTGAATCCACTTAGAATTCTTGGCTTGTGTCGCATACTGGGTGTCACGGCACACATTTACTCTGCATTGTCCCCG
TCTTTCCCATCGCCTAGCGTTTGGGGAGGAACAGGGAGAGAGCTTCGGGGCGTCTGTCTCCGTGCTCTCCTGCCT
CCACCGCCTTGGTTTTGCTTCCTGCTGGAGGCAGGGCACCTGCTGCGACCCAGATTCTTCTGCAGGATGTGTCTG
TCTTTGTCACGGTGGACAGAGGGTGACATCATAGGAGCAGCTCGCTGGCCAGAAGGGGATGGGGGCATCCCTGTG
CCTCACTCAGCTCCTGCTGCTCTTAGGGAAAGGAGGCCTGGGTCAAGCCAGCATCCCCTTGGTAAAGACCCCCGC
AGGCCACCAGGCATTCTGGNNNNNNNNNNNNNNNNNNNNNACACACACACACAAAACTTCACAGCAGGCCAGCTG
CAGTGACTTGTCATCAAGAGTCACCTCAGCTGCGCCCCCCTCCCATCCTTTCCTATGAGAAGCCACTGCTTTGGG
GGCGCCGGCTAGAAAAAGTAGGGTGCGGTGGCCAGGAGGGCCCCTGCCGCGCGGGGGGCTGGGTCTGGTTGAGTC
GCTGCTTTCCCGAGGGCAGCGCAGGGATCCGGGGAAGCTGCGGCAGGGAGCGGGCGCCGGCTTCGTGGCTCTGAG
GTGTAACGGGGGTGGGCTCCCTCCCTCGGAGGACATCGTCTGTGTCCAGGTCAGAAAGTGGCCCAGGAAGGGGGC
AGTTTCTGTCGCGGGTCCGGTGGGGGCGCGGCCGCGGTGCGGTCGGTGCAGCGTGGCCAATGCGCGGCGCGCGCG
GGGGACAGAGCAGGAGGCGGTCTGTCACCTCGGCCACTGCTGACCTGGGCTGGCCTCCCCCAGCCCTCCCGTGGC
GGAGCCGGCAGCGATGCTACAGGCCTAAGTTATTGTTTGCATAAAAAGAATCATGTTCCCTGTGTACATTTAAGA
AAAAAACAAAAAAACGGAAATGTCAGAATTGTATGGAAATAAAACTTGTTTGAAAATTTGGAATAGTGCTGCTGC
CAGCTTATTTTTCTGGTACTTGTATTTTCACATGTTAAATGATCTTTATATATGTTGAATTAACAAATATTTTGA
GTTTCTGAGAAAAAACAAAACATATTAATGGTATTGAAATGTGTTAGTAGTCTGGCTGTGTGCCCAAAATTCTGT
TTCGCAGCAAAAGTGAAGACCTGTATGTAAAGAAAGTATAACAATTATTTCTTTGTATTTTAGGGGCTTTAACCG
GAACATCGTCTAGCTGGTGTTAGGAATGTTTGCTTAATTTCCAGACTTTTTTTTAAAAACACATCGTGGGTTTTT
TGAGGCTCCAACCTGATTAGTGCATGGTCAGCCCTCAATGAAGGCTGAGGCATCTCTGACTGAGGTGTTTTTGTT
TGGTTTTGTTTTTTAAAATCATGTATTTGCTACAAAGTATTGTACTTGTCTCAATGGGAATGGTGTAAAAAACAA
AAGGCCTTATGTGATCTGTATCATAGTTAATAAATGAATCTTGTAAAAAACCAAAAAAATCTATGTCGGTGCGGG
GAAGAGGTATGAAATGCAGGATTCGATATCAGCTTATC

FIGURE 5168

MTSSSLSPISTISLQKQKKPIVVVLTKCDEGVERYIRDAHTFALSKKNLQVVETSARSNVNVDLAFSTLVQLIDK
SRGKTKIIPYFEALKQQSQQIATAKDKYEWLVSRIVKNHNENWLSVSRKMQASPEYQDYVYLEGTQKAKKLFLQH
IHRLKHEHIERRRKLYLAALPLAFEALIPNLDEIDHLSCIKAKKLLETKPEFLKWFVVLEETPWDATSHIDNMEN
ERIPFDLMDTVPAEALYEAHLEKLRNERKRVEMRRAFKENLETSPFITPGKPWEEARSFIMNEDFYQWLEESVYT
DIYGKHQKQIIDKAKEEFQELLLEYSELFYELELDAKPSKEKMGVIQDVLGEEQRFKALQKLQAERDALILKHIH
FVYHPTKETCPSCPACVDAKIEHLISSRFIRPSDRNQKNSLSDPNIDRINLVILGKDGLARELANEIRALCTNDD
KYVIDGKMYELSLRPIEGNVRLPVNSFQTPTFQPHGCLCLYNSKESLSYVVESIEKSRESTLGRRDNHLVHLPLT
LILVNKRGDTSGETLHSLIQQGQQIASKLQCVFLDPASAGIGYGRNINEKQISQVLKGLLDSKRNLNLVSSTASI
KDLADVDLRIVMCLMCGDPFSADDILFPVLQSQTCKSSHCGSNNSVLLELPIGLHKKRIELSVLSYHSSFSIRKS
RLVHGYIVFYSAKRKASLAMLRAFLCEVQDIIPIQLVALTDGAVDVLDNDLSREQLTEGEEIAQEIDGRFTSIPC
SQPQHKLEIFHPFFKDVVEKKNIIEATHMYDNAAEACSTTEEVFNSPRAGSPLCNSNLQDSEEDIEPSYSLFRED
TSLPSLSKDHSKLSMELEGNDGLSFIMSNFESKLNNKVPPPVKPKPPVHFEITKGDLSYLDQGHRDGQRKSVSSS
PWLPQDGFDPSDYAEPMDAVVKPRNEEENIYSVPHDSTQGKIITIRNINKAQSNGSGNGSDSEMDTSSLERGRKV
SIVSKPVLYRTRCTRLGRFASYRTSFSVGSDDELGPIRKKEEDQASQGYKGDNAVIPYETDEDPRRRNILRSLRR
NTKKPKPKPRPSITKATWESNYFGVPLTTVVTPEKPIPIFIERCIEYIEATGLSTEGIYRVSGNKSEMESLQRQF
DQDHNLDLAEKDFTVNTVAGAMKSFFSELPDPLVPYNMQIDLVEAHKINDREQKLHALKEVLKKFPKENHEVFKY
VISHLNKVSHNNKVNLMTSENLSICFWPTLMRDLISALWTPSQPRAPTRQSLNSLSSSAPSSSTIGPSPSPPAPG
PAPPLPWLPPSPSSLPRLSQVSRRPHSRLHPPPSPQCSHCFPPSFKPNTRCEPPRPGATGEPVLSLTGWHLALNK
TKSTGDRGRGKWLSPLPSQDLSGSTSQWYHRLGCQVPWAWRCRPELAWTHLRTELGRQWLQCPPSVPWTTTPRSC
SHQPPGASLCLYRAHGRDSALAFAGEEDALRFRVGLATPEENTSCWSVSSHLPSAHTPKVRVQPGWRPPWERVGH
GSATTRYLLRALALQIRTTEDSFVPGPRECGTPRFIPTVPLHSLPETFPGKQRNTRRKNGKTLPVIKKEETTERK
LQTSRFHSVPASAGREGGTQVELTLVFVAAKPGCLELWPEGLLGSHSPT

FIGURE 5169

AAGCTTTCCTCTTTGCATTTTGGCATTTGAAAACTCCGAAGAGCGGTTTTTGTTTTTTATTTAAAGAAGATGATA
CATATGTGTACCCGATTCAAAACTAGAGAATAGAATTTAAAACATAATTTTCAAAGTCTTCAAATATGCCTAAAG
GTAACAATGTCATCTTTTAATTGCCAATTTCTCTACCACTTTCAAAAAATTACTTCCAAGGATTTAATGAGCTCC
TTCCTTTCAACAGAAAATGGACTATTTTCCTTTCAGATTTACTATATGCTGTCACTCCAGCTTTATAACCGCATG
TGCATACACAAACATTTCTTTCTCTCTTGCAGGTGGCACAAACCAGGAAGGGGAAATCTGTGGTTTAAATTCTTT
ATGCCTCATCCTCTGAGTGCTGAAGGCTTGCTGTAGGCTGTATGCTGTTAATGCTAATCGTGATAGGGGTTTTTG
CCTCCAACTGACTCCTACATATTAGCATTAACAGTGTATGATGCCTGTTACTAGCATTCACATGGAACAAATTGC
TGCCGTGGGAGGATGACAAAGAAGCATGAGTCACCCTGCTGGATAAACTTAGACTTCAGGCTTTATCATTTTTCA
ATCTGTTAATCATAATCTGGTCACTGGGATGTTCAACCTTAAACTAAGTTTTGAAAGTAAGGTTATTTAAAAGAT
TTATCAGTAGTATCCTAAATGCAAACATTTTCATTTAAATGTCAAGCCCATGTTTGTTTTTATCATTAACAGAAA
ATATATTCATGTCATTCTTAATTGCAGGTTTTGGCTTGTTCATTATAATGTTCATAAACACCTTTGATTCAACTG
TTAGAAATGTGGGCTAAACACAAATTTCTATAATATTTTTGTAGTTAAAAATTAGAAGGACTACTAACCTCCAGT
TATATCATGGATTGTCTGGCAACGTTTTTTAAAAGATTTAGAAACTGGTACTTTCCCCCAGGTAACGATTTTCTG
TTCAGGCAACTTCAGTTTAAAATTAATACTTTTATTTGACTCTTAAAGGGAAACTGAAAGGCTATGAAGCTGAAT
TTTTTTAATGAAATATTTTTAACAGTTAGCAGGGTAAATAACATCTGACAGCTAATGAGATATTTTTTCCATACA
AGATAAAAAGATTTAATCAAAAAATTTCATATTTGAAATGAAGTCCCAAATCTAGGTTCAAGTTCAATAGCTTAG
CCACATAATACGGTTGTGCGAGCAGAGAATCTACCTTTCCACTTCTAAGCCTGTTTCTTCCTCCATATGGGGATA
ATACTTTACAAGGTTGTTGTGAGGCTTAGATGAGATAGAGAATTATTCCATAAGATAATCAAGTGCTACATTAAT
GTTATAGTTAGATTAATCCAAGAACTAGTCACCCTACTTTATTAGAGAAGAGAAAAGCTAATGATTTGATTTGCA
GAATATTTAAGGTTTGGATTTCTATGCAGTTTTTCTAAATAACCATCACTTACAAATATGTAACCAAACGTAATT
GTTAGTATATTTAATGTAAACTTGTTTTAACAACTCTTCTCAACATTTTGTCCAGGTTATTCACTGTAACCAAAT
AAATCTCATGAGTCTTTAGTTGATTTAAAAAA

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FIGURE 5170

MSSFLSTENGLFSFQIYYMLSLQLYNRMCIHKHFFLSCRWHKPGRGNLWFKFFMPHPLSAEGLL

FIGURE 5171

GCCCGTGAGTTTTTTACCATGCTGCTCTGACCAGTTTGAGTGGCAATTACCAATAGATTTGTTTTCTTTATTCTA
TGGAGATGTTTTTTACCACTGACACTGTTTTCTGATTATAGTCTGCTTCATAGAAAATAGCCTGCATAATCAAACA
AGGAGTTACTTTGAAATTAAAGTATGCCTGGCTATTAAAAATGCAGATTTTAGGTGGGTAAACATCAGGTAGGTC
TGGGTGGGTCATGTTCTAGGCCTAGAAAAATACACTATTAGACAAGTTCTAAAGAAGGCAAGGAGATAAAGGCAT
CAGGTGGTAACTTCTAATTGAATATTATATGTTGATCATACATAATATATACTATGCCTGGAAATTATGACTGAA
AAGCACCTATTCGGTTAGTGCTCCTATTCATGAGAACATATCTCCAATACTAAATGAGATAAGCCTGTTCTAAAA
TCTTATAGCCAGTATTTTAAGAAACTTGATTATACTTACCAAAGGAACATTGTTTGTTTTCTCTTGTTTTAAATA
TGGAGAGGTTTAATCCTTTACATAACAAAGGAATTAATTTTAGCAAAATGATTCATTCCAACCTTCTTATAAGAA
ATATCTAGGAGAGTCAAGTAAGAAAAATAACGAATCTAAGTGATAAACATTCAAGAAATTCTCTAAATAAGAGAT
TTATTTATAATTTTAATATCTCAGGGTTCTTTTTAGGTTTCCAGGGGAAAAGAGCAGGATAACAGTGTGGAGACT
GCTAAGTTGAGAATTTAAAACAAATGAGAACATAAGATTTTTAAAATTGCATTGTGAATGTAAAATTTTTATCAA
TCCTTTGCTCTCTTTTAGACATATTGAGAAAATGTTAAATAGAAAAAATTAAGTATTTTAATAAGATGTTTCAGA
TCTTTGAGTATGAAAAACATAACAAAAAAGCCTAATTTCAAAAAACTATTTGAGATCAAGGGACAATGGTGTGAC
CAATATGAAGGGTCAAGACTGAAATGTATTGTCTTTACTATCAAGAACTCTACTTTCAGTTGTTTCTCAGACAGT
TAATTTCAGCTTCATAGAGATTTCTGAGCAAATTAAGAAACACTGTTTTCCTGGGTTTGTTTTGGGTATATGTCA
TTATAGTTATGTTATTTCTTGTTGAAATTTATAATTGTAGGTTTTTTGTATTGTTTTAGTATTTAATGGTGTATA
ATGTGTTATTACATTATATGTAGTTATACCAAAATATTGCCTGAAGATAAATCATGACAAGGTCCCCTGTTTATT
CCTGTGTTACAGACGCATGGAATTGCTCCTGTAGATTTGAATTTTTGTTTCATTTTTTTCTGTCCCACCCTTCAC
TCTCTCTGTTTCAGAACATTTTTGGTAGAAGTGCTATCCAGAAGTGAACTTGTCAAAAGGCAAGTAGCATGAAAG
AAGACAGAAGAAGCAAAAGGCTAATACAGTGGATAATTTCTGAGCACTTGAAGTTTCTTCAAATGTGCAAGACTG
TGTGTCTTCCTATTAGATGTATAAATTGGATATTTCATGCCTAATTAAATGTTGCGTTGGATTGCAGTGCCTATC
ATACAGCGATTGGAGTAAATTGAGGCCTAATCCTGAACACATATAGAGCATATTGTTAGATATTTTTCCTGTGAC
ATTTGAAGTTATTATTCTCCCATTTCCTTTTTCTTTTTTTGTTTATAATCATATGTCCCTAAGATTGTTTTCCTT
TTTTGGACCAAAAAAAAGAAAAAAAAAATCTTAGCTTTTCATCCTCCCAGTGTATTCTGCATTGTCCTTACCCTA
GATCAGCCCCTTCTGTGTAACAGTTTTTCTCACAATGTAGCAACTTTTATCCACCCTTCAGGACCTTCACTGGGG
ACTAGTTCATTCATTTTCAAATAGCTATTTCAACCTTTAACATCTACTGGTCTTAGTCTTTTACACAGAAGCCAG
AGTGACTGGGTCTGGGCAAGACTCTGGTGGTGGTATCACCACTCGTAACCTTACTGGATTGGTTTCAGCAAATT

FIGURE 5172

PVSFLPCCSDQFEWQLPIDLFSLFYGDVFTTDTVF

FIGURE 5173

GGTGAAATGGGGATGGAAAAGGGTTATATAAAAACAAATAATGGTAACAATAATGATGAAGATTGGAGTACTCCA
TCTCNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCATGTTCATTATAGTTCATTACAGTTACATA
GTCCGAAGGTCTTACAACTAATCACTGGTAGCAATAAATGCTTCAGGCCCACATGATGCTGATTAGTTCTCAGTT
TTCATTCAGTTCACAATATAACCACCATTCCTGCCCTCCCTGCCAAGGGTCATAAATGGTGACTGCCTAACAACA
AAATTTGCAGTCTCATCTCATTTTCATCCAGACTTCTGGAACTCAAAGATTAACTTTTGACTAACCCTGGAATAT
CTCTTATCTCACTTATAGCTTCAGGCATGTATTTATATGTATTCTTGATAGCAATACCATAATCAATGTGTATTC
CTGATAGTAATGCTACAATAAATCCAAACATTTCAACTCTGTTAGAATAGAGGTAATTGTGTGGTTTGTGTATGG
GACTATAACAGTAATATTAATTCCCAAAATTTCTCCTACTAGGAACAGTGGGTA

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FIGURE 5174

GEMGMEKGYIKTNNGNNNDEDWSTPSXXXXXXXXXXXXXXMFIIVHYSYIVRRSYN

FIGURE 5175

CTAGGAGTGAAATTGCTGGATAATATGTTTAACTATTTGAGGACTGATAGACTACTTTGTAAAGTGGCCAACATG
AGTAAGTTTTCATCACATTTATAAAATGTTAGTGTACTTACATTAGCTTGCAAAGCATTTAATAAGCAGCAAGAG
TTAAACCACGTTGGTCCAAGTGAACTGAAAGCAGACTTCTGTGTTACATGTGTATGAGTTACTGAACATGTTCCA
TAATACAGGAGTGTGAGCACACTAACAGGTAAGTGCAGGAAAACAAGAAGAAATATTTTCAGAGTATAGTCAAAA
GTACACTGAGCATGGGAGAATTGTTTTGACATTTTGCTCAAAACTATTTCTGAAGAAAATTCAACATTTCTTTCA
CGGAAAGTTTTAGGAACAGGTAAATACAATTATATAAAGTACTGGTAGAATATGTTCGTTCAGATGACCTTGAAG
TGTTTTTTCAGACTTATCTGAACTTGAGATCTGAACTGAATTTTTATTAGAAACTGTTAAAGCCTCTGGCATTGA
AGGTTAGTTCATAATTGGTGAGTTCTGAATCACTTCATTTCCTGCAGTGGTTCCTGAGAGAATCTTAGTTCAAAG
GACTGCCCCCGCCAACCCCTGCCCCGCCAAAAAAA

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FIGURE 5176

LGVKLLDNMFNYLRTDRLLCKVANMSKFSSHL

FIGURE 5177

GGCCTCCGCCGCCGCCTCGGGAGGTGAGGACGAGGAGGAAGCGAGCAGCCCAGACAGCGGCCACCTCAAGGATGG
AATCCGACGTGGTAGGCCCAGAGCAGATACTGTCCGCGATTTAATAAATGAAGGAGAGCATTCATCCAGCAGAAT
CCGTTGTAACATCTGTAATAGGGTGTTTCCACGGGAGAAATCGCTCCAGGCTCACAAAAGGACTCATACAGGTGA
GAGGCCCTATCTGTGTGACTATCCAGACTGTGGAAAAGCCTTTGTTCAAAGTGGACAGCTCAAAACACATCAGCG
TCTTCACACCGGAGAGAAACCTTTGTTTGTTCAGAAAATGGCTGCCTGAGCAGATTCACCCATGCAAACCGCCAC
TGTCCGAAGCACCCCTACGCCAGGCTGAAGAGAGAGGAGCCCACGGACACACTCAGCAAACATCAGGCTGCCGAC
AACAAGGCCGCGGCCGAGTGGCTGGCGAGGTATTGGGAAATGAGAGAGCAGCGCACCCCCACTTTGAAAGGCAAG
CTGGTTCAGAAGGCTGATCAGGAGCAGCAGGACCCTCTGGAATACCTTCAGTCTGATGAAGAGGACGACGAGAAG
AGAGGGGCCCAGCGCCGGCTGCAGGAGCAGCGGGAGCGCCTGCATGGAGCCCTCGCGCTCATAGAGCTTGCCAAC
CTGACTGGGGCGCCACTCCGACAGTAGCTTGGACACTGACTCTTCCACTGTACAAAAGTACTGCCCAGCATACTT
AAAAAGTAGATCCTTGGGCATAAGCTAAGCACCTTATTTGCTTATCATAGGCTGCTATTCTGTAGAAATTTATGA
AGAATGTTATTGCCCCAGAATATGGGGTGAGAGAGAACTGCACTTTTTTAATATGGAAATGAATTCATCGTAAAG
TTTAAAATATTTTGTAAATATGGACTGCACAGTACAGGGTAGAAAACTACATATTGTGGGAAGCTAGATTTTGCA
AGTTTAATGCATTCATTGGAAGCAGTTCTCACAGGAAGCACTTTCTGAATAAGACACTTGTTTGAAAAACAGAAT
GGTACAAATAGCCAAAGAAGATTAAAACAGATTATTTATAAGATCATTTTTAACAATATATATTAGTATGTTTAA
CAATACTGTAAACACTGAAGCAAGCAAGAAAGTATAAAATATGTAAGATAGATAATTTTAATTGCAAAATACTGT
GCCCACTAAGGCTAGAGAAATGGGAGGCTATTTTGGAAGATGTTCTAAGTAATGGACTTAGAAGAAAATAGATAT
TTGAGGCTCTTGGTAAGATGCACAATAGTTCAGAATTTTTGAAATTGGAGCAAAATCAGTCTTATTCTATCTGGG
GCTTTACAACTCAGTATAATGTTTAAGTTTGAAAAGCACTTGTCATCCCTAGCATGTTAACTTGGGAACTTTTGC
ACATTTCATATTTCTCATTTGCTGAAATTGAGTGATTAATCTTGCAAAGTCTAGGTAACATAGTAATTGGTAATT
TTAAAAATACATATTAAGGGCCCTGTAATGAGATTTGGCACTTGGATTTTTACTAAAGGGACACCTGCAGGGTTG
TTTTGTAGTGAAATGTTTTAGATCTTTTGTTAGCAAACACTACATTTTAATTGTACTGCTTGTTTAGAATTATTA
GCAAATGGAAGCCTCCATATTTATATTTTCAGTGCATAAAGCCACCTTCTTGCTTTACTTCAGAGTAACATGCCA
AGCTATTTTGTGTTCACTAAATTTAGCTATCAGTTAAACACTGCAGAAAATATTAGCTACTCAAATAAGTAGGCT
TCTGAAATAGTTTTAACTGCAAGTGTGTTAACTTGTGTGGTGGTTTGAAGCCATTTTTCCAAATAAAGTTATTAA
ACACCACTTTATGTACTGAAGCATGAACAGAAAAATCAAGAGCTGAGCAGACCACCTCCTTTATGTAGGCAAAAC
TTCCATCATTTTGGCTTTTGTTCTAAACAGAACTAAATGACATGCATAGCATGGTAACTTACAGATCGCTTAATT
GGAGTAAAACTCAGAGTAATAGAGGGAAATATGGGCTCTTCAGTGCCTTTTTAGCTTTTTTGAGTTGAAGACGTT
CCTACAGATGTAGTTTAAACATTACAAAGTAGGCTTCTTTATCCAAAAATCCCAATGTGTCATAGTACACAGATA
GTTTAAAATATGTAGCCACGGGGAAGGGGAGGCATGTAAATGTCTTGAAGAGGAGAAAAAGTATGAAAGAAGATA
CGATAGTTACGAATAATGTGTATGATGAGGACATACTTTAAAAATGTAATTCCTCTGTACAGTAAATTACAAATC
TTTAGGGATTTTTTTGTAATAAGAGAATTTATATTTGTAATGGTCTAAGAATTTTTTTGTAATGTGGTATATAGA
ATTTTAATTTGGAGCACTTATAAGCTGGTAAGAGAGACTATAGCATCTGAATTATCTTGGTTTATGTTTCAGCAT
TTCCTCTAGAATTTTTGCTCTCAAATATGTGATTTAATGAACTAAAAACAACACTCATCAGTCTTGGGAAATTTG
AACTTTGATCAACTTAACTAAAGAAGGAAGGGTAGTAAGAATTTTTCAAATACAAATATTTGCCAATTCACAGAT
GATAACATTTAAGGCCTTCAAAAGTAAGGGTTTTTCCTTGTTTCTCCAGTCAGCTTTTGTCAACTCTAATAGTTT
TTTCATAAACATTTTTTATTTGTATAATTGCAACAGTTTAAGAAATTATCACAACTATTTAGAAACATTTAAAAT
GTTCTTTTTGATATAAGCTATATACTTGGAAAAATACATTGGTATCTAAAATTTGAGGTGTGTTAAGACTGCTTT
TTGTTTTAAAAAATGGTTTACATTCAAATTTTTGAAGTGTTTTATGCTTCATATGGCTAAGTTGTAGTTTGGCAG
AGTTAACAGCATAAGAATAAACATGCTGTAATTTTAAAAGATGCTTTGAATAAAAATTTATTTTAATTT

FIGURE 5178

MKESIHPAESVVTSVIGCFHGRNRSRLTKGLIQVRGPICVTIQTVEKPLFKVDSSKHISVFTPERNLCLFRKWLP
EQIHPCKPPLSEAPLRQAEERGAHGHTQQTSGCRQQGRGRVAGEVLGNERAAHPHFERQAGSEG

FIGURE 5179

AGGCGCGCGGCGGGCAGGCCTGGGAGGGGGCGGGTCCGCGCGGGCTTCGGAGGAGCCCGCCCTGCCAGAGGAGAG
GGAGGTCACGGCGTAAAGGTGCAGCTGCCGCCACCGCCGCTTCTGCAAGGTCTCAGGGACGGGCTGCAGCCATGT
CCTATTGCCGGCAGGAAGGCTTTGCCCAGGATGGTTCCTTCTGGAATGTCTATTCCCCTCCTTCCCTCCCTGAAG
CTCTTTGTCAGGGACAAAGGTAGGATCCCTCCCCTTCCGTCTTCTCCACTGG**ATG**CCTGTGTCGTATTCATCTGT
GACCACCAGGTACTACCACAGAGCTGGAGCTGAGGAAGGGAAGGATCGAATCATATTTGTAACCAAAGAAGATCA
TGAAACTCCAAGCAGTGCAGAATTGGTGGCTGATGACCCCAACGATCCATACGAGGAGCATGGATTGATACTGCC
AAATGGAAACATTAACTGGAACTGCCCATGCCTTGGGGGAATGGCCAGCGGTCCCTGTGGAGAACAGTTTAAGTC
AGCCTTTTCCTGCTTCCACTATAGCACGGAGGAGATCAAGGGGTCAGACTGTGTAGACCAGTTCCGGGCCATGCA
GGAATGCATGCAGAAATACCCAGACCTCTATCCCCAAGAGGATGAGGATGAGGAAGAGGAAAGAGAGAAGAAGCC
AGCAGAACAAGCAGAAGAAACAGCTCCCATTGAGGCCACTGCAACCAAAGAAGAGGAGGGATCAAGT**TAA**TGAAG
GCCACAAGGCACTGGGCACCAGTCCTTTTGGAGTGGACCTTTTGCAAAAGGCCTTGTCATCACCTTCCAAGAAAG
TTTCCTTCTGTTGTCCTGTGCATTATAATATACAAAATAACTTATTTTGATGATCAGAGGTCTTGAGGTCTTGAC
ATCTTGACATATACACTGAAAAAAATGGGGGTTGTATGTATGTGTGTCCTACCCAAACCTGTGGCCGCCACTTTT
GAATTCTCAGATTGCCCTGAATTTTGCCACTTTTAAATAATGTGCTGAATAAGCTCAGCAACTAAAAACCATTAC
CCAAGAACGTTTCTTGTGAGTGAGCTGATTTATTCTGATTCATTATATTCCTTTTGGTAGATTTTATACCCCTTG
GGGAAATAATACAACAAAAACATCTCTTAAAAATGCTGGGATGGGGCCATATCTACTAGCAGAGGCCAGATGGTC
AGATATGATTTCTGCAAACCCATCTTGACCTTGAGTATGTGAAGGGGTACTGTACTTTATTCCTGATACATTTTG
GTTTCCATGTAGGTGTTGAGCTCCTGGTTTTCTGTGTTTGGATGATGAAGATTTGGACCCTTCCATTCATAATCC
CTTTCTAAGTGAAGGGAGAGGCTGGCTTGGCTGTTCCTTGTTATTCCGAAAGCCCTGGTTTGGGGCCCATGTTCA
CACTGGCTCTCAGTCTAGTCAGGTGCAATGTTCTTGAGAGGTGGGGACCTAATTATTACCAGAGTAGCAGCAAGA
GAGGAAACGTTGTGAATTAAGTATTCAATTAAAAGGAAACATGATTTCT

FIGURE 5180

MPVSYSSVTTRYYHRAGAEEGKDRIIFVTKEDHETPSSAELVADDPNDPYEEHGLILPNGNINWNCPCLGGMASG
PCGEQFKSAFSCFHYSTEEIKGSDCVDQFRAMQECMQKYPDLYPQEDEDEEEEREKKPAEQAEETAPIEATATKE
EEGSS

FIGURE 5181

TGTGTTGGTACCCGGGAATTCGGCCATTATGGCCGGGGGTCACTGAAGAGTCATGGTGGGGGCCCGGGCCTACCG
CTGCTGCCGCTGTCGAAGAGCGGCAGAGAAAGCTTCAGGAGTACCTTGCAGCCAAGGGAAAACTGAAGAGCCAAA
ACACCAAGCCTTATCTAAAATCCAAGAATAATTGCCAGAATCAACCACCTTCTAAATCTACTATTAGACCCAAAA
ATGATGTTACCAACCATGTTGTTTTGCCTGTCAAACCTAAAAGGTCCATCAGCATTAAACTCCAGCCCAGACCAC
CTAATACTGCAGGGTCCCAGAAGCCGAAGTTGGAGCCACCAAAACTTCTGGGCAAAAGGCTGACTTCAGAATGTG
TTTCTTCTAACCCATACTCTAAGCCTTCTAGCAAGAGTTTTCAACAGTGTGAAGCTGGATCGTCCACAACAGGAG
AACTGTCAAGAAAACCTGTGGGGTCACTTAATATAGAGCAATTGAAAACTACAAAGCAGCAGTTAACAGATCAAG
GAAATGGTAAATGTATAGACTTTATGAATAATATCCATGTTGAAAACGAATCTTTGGATAACTTTCTAAAAGAAA
CAAACAAAGAGAACTTGCTCGATATCTTAACAGAACCTGAGAGGAAGCCAGATCCTAAATTATATACCAGAAGTA
AGCCAAAGACTGACTCTTATAATCAAACCAAGAACAGTTTAGTTCCTAAACAAGCCTTGGGCAAAAGTTCAGTTA
ATAGTGCTGTTCTGAAAGATAGGGTTAATAAACAATTTGTTGGAGAAACACAAAGCAGGACTTTCCCAGTAAAAT
CACAGCAACTCTCTAGAGGAGCAGATCTTGCAAGACCAGGAGTAAAACCCTCAAGGACGGTTCCCTCTCACTTTA
TTCGGACCCTTAGTAAAGTTCAGTCATCAAAGAAACCAGTAGTCAAGAACATCAAAGATATAAAGGTTAATAGGA
GTCAATATGAAAGACCAAATGAAACTAAGATACGGTCATACCCTGTTACTGAACAGAGAGTGAAGCACACCAAAC
CCAGAACATACCCCAGTTTGCTTCAGGGTGAATATAACAACAGACATCCAAACATCAAGCAAGATCAGAAGTCCA
GCCAAGTTTGTATACCTCAGACATCATGTGTACTGCAAAAGTCAAAAGCCGTAAGCCAGAGGCCTAATTTGACAG
TTGGCAGATTTAATTCAGCCATTCCAAGCACCCCTAGCATAAGACCAAATGGAACCAGTGGTAATAAACATAACA
ATAATGGCTTTCAGCAAAAAGCACAGACTTTGGACTCCAAGTTGAAAAAGGCTGTTCCCCAGAACCATTTTCTGA
ACAAGACAGCTCCCAAAACTCAAGCTGATGTCACAACCGTAAATGGGACCCAAACAAACCCAAATATTAAAAAGA
AGGCAACAGCAGAGGATCGAAGGAAACAACTAGAAGAATGGCAGAAATCTAAGGGAAAAACCTATAAACGGCCTC
CTATGGAACTTAAAACAAAAAGAAAAGTAATAAAGGAAATGAATATTTCATTCTGGAAGAGCATTGAAAAAGAAG
AGGAAGAAAAGAAAGCACAACTCGAACTGTCCAGTAAAATTAACAACACTCTGACAGAATGTCTGAACCTCATCG
AAGGGGGTGTACCTTCTAATGAAATACTTAACATATTGTCCAGCATTCCTGAAGCTGAAAAATTTGCTAAATTCT
GGATCTGCAAAGCAAAGTTGTTGGCAAGTAAAGGCACCTTTGATGTTATTGGGCTATATGAAGAGGCCATTAAAA
ATGGGGCAACACCAATACAAGAGTTGCGGAAAGTTGTTCTTAATATCTTGCAAGACTCAAACAGAACCACAGAAG
GGATTACTTCTGACTCTTCAGTTGCTGAAACTAGTATAACATCAGTGGAAGAGCTGGCCAAGAAGATGGAATCTG
TGAAGTCTTGTCTTTCTCCAAAAGAGAGGGAACAAGTCACGGCGACACCCCGAATAGCCAAGGCAGAACAGCATA
ATTATCCTGGTATCAAATTACAGATTGGTCCAATCCCTAGAATAAATGGGATGCCGGAAGTGCAAGACATGAAAT
TTATCACTCCTGTACGGCGTTCGTCGAGGATTGAGCGAGCAGTGTCCCGCTACCCAGAAATGCTGCAGGAACACG
ATTTAGTAGTGGCTTCTCTTGATGAACTGTTAGAAGTGGAAGAAACAAAATGTTTTATATTCCGTAGAAATGAGG
CGCTGCCCTGTAACATTGGGGTTTCAAACCCC**TGA**ATCATAATTTCTTGATGCTTTTTTTAAAAAAGGTGTTTCA
GAACCAACATAAGACAAGAAATATTCTTGTCCAAGTGACCTGGAAAAAAAGAGAGGCATCATGGATGCAGATTAT
GGACGCTCAGGACTTAAGTAATTCACTGGGCTTACTCTCAAATTTTCTCTCCCCATGGGAAAATCTTTGCTTTAT
GTGTTTAAGACCAGTTTGCCAGTTTTACAGTATACATAAATTTCAAACTTTTGAATATTTACCCTACAACTATGA
TAAATATTTATACTTTATTGATCTACTTTAATCCCAACATAGTTTTTTATATCAGAAGGTTGGTCCCACAATATA
ATGGGACTTTTCTTTCTGCATCCACCTTAGCAGAGGGCAAGTTCTTTCATCGTGGAAGATCTGAACTTTGACGCT
AGCTTGACAGGCTGAATGGACCTTGACAGATGGCCAAGTCAAAACCCCTCATTTTACAGATGAGTTTATGCTAGC
TGTGCCTTTGCTCAGAGATCATAAATTTATGTGTGATCTTTGACTTTCATCACAGTATCCTTGTAAATGAGAGAG
AATTCTTGTTTTTTCTATGCCAGGTCTCCTCAGATGAAACACAATCCTGAATTGGCGTGGTCGTCTAGCTTTTAT
ATTCAAACCTAGTTTTGCATTTGTTACTCAGAAACACTTCAAGTAACAAAAGGGGGGCAGGGGAGAGGGGTGGGG
AGTGGACACTTGCTTCTTCAGTTCTTTGCTCAGCTAGGGTATAGCTGGCCTGAGAAGGCAGTGCAAGCCCCAGAG
ACTGTTGTAGGTTGCTTTTTCTTCCTCCTGGGCAACTATTTGTGGAAAGGTTTTACCTTAGTCATTATGTAAATA
TAATTGTGTAGAAAAACCTAGTCAACACATTTTAAATTTTAGCTTTCTTAATATTTAAGTATTATCTTAAAACAA
CATTAAATTTCTATTAGTTCCTGCTTGTTTATCTTATTTATTATAGAAAACCATGATAATGGCTTTGCATAGAGA
ATTAGGAGTTTGTCTAAG

FIGURE 5182

CWYPGIRPLWPGVTEESWWGPGPTAAAAVEERQRKLQEYLAAKGKLKSQNTKPYLKSKNNCQNQPPSKSTIRPKN
DVTNHVVLPVKPKRSISIKLQPRPPNTAGSQKPKLEPPKLLGKRLTSECVSSNPYSKPSSKSFQQCEAGSSTTGE
LSRKPVGSLNIEQLKTTKQQLTDQGNGKCIDFMNNIHVENESLDNFLKETNKENLLDILTEPERKPDPKLYTRSK
PKTDSYNQTKNSLVPKQALGKSSVNSAVLKDRVNKQFVGETQSRTFPVKSQQLSRGADLARPGVKPSRTVPSHFI
RTLSKVQSSKKPVVKNIKDIKVNRSQYERPNETKIRSYPVTEQRVKHTKPRTYPSLLQGEYNNRHPNIKQDQKSS
QVCIPQTSCVLQKSKAVSQRPNLTVGRFNSAIPSTPSIRPNGTSGNKHNNNGFQQKAQTLDSKLKKAVPQNHFLN
KTAPKTQADVTTVNGTQTNPNIKKKATAEDRRKQLEEWQKSKGKTYKRPPMELKTKRKVIKEMNISFWKSIEKEE
EEKKAQLELSSKINNTLTECLNLIEGGVPSNEILNILSSIPEAEKFAKFWICKAKLLASKGTFDVIGLYEEAIKN
GATPIQELRKVVLNILQDSNRTTEGITSDSSVAETSITSVEELAKKMESVKSCLSPKEREQVTATPRIAKAEQHN
YPGIKLQIGPIPRINGMPEVQDMKFITPVRRSSRIERAVSRYPEMLQEHDLVVASLDELLEVEETKCFIFRRNEA
LPCNIGVSNP

FIGURE 5183

ATGGCTTTAGAGATCCACATGTCAGACCCCATGTGCCTCATCGAGAACTTTAATGAGCAGCTGAAGGTTAATCAG
GAAGCTTTGGAGATCCTGTCTGCCATTACGCAACCTGTAGTTGTGGTAGCGATTGTGGGCCTCTATCGCACTGGC
AAATCCTACCTGATGAACAAGCTGGCTGGGAAGAACAAGGGCTTCTCTGTTGCATCTACGGTGCAGTCTCACACC
AAGGGAATTTGGATATGGTGTGTGCCTCATCCCAACTGGCCAAATCACACATTAGTTCTGCTTGACACCGAGGGC
CTGGGAGATGTAGAGAAGGCTGACAACAAGAATGATATCCAGATCTTTGCACTGGCACTCTTACTGAGCAGCACC
TTTGTGTACAATACTGTGAACAAAATTGATCAGGGTGCTATCGACCTACTGCACAATGTGACAGAACTGACAGAT
CTGCTCAAGGCAAGAAACTCACCCGACCTTGACAGGGTTGAAGATCCTGCTGACTCTGCGAGCTTCTTCCCAGAC
TTAGTGTGGACTCTGAGAGATTTCTGCTTAGGCCTGGAAATAGATGGGCAACTTGTCACACCAGATGAATACCTG
GAGAATTCCCTAAGGCCAAAGCAAGGTAGTGATCAAAGAGTTCAAAATTTCAATTTGCCTCGTCTGTGTATACAG
AAGTTCTTTCCAAAAAAGAAATGCTTTATCTTTGACTTACCTGCTCACCAAAAAAAGCTTGCCCAACTTGAAACA
CTGCCTGATGATGAGCTAGAGCCTGAATTTGTGCAACAAGTGACAGAATTCTGTTCCTACATCTTTAGCCATTCT
ATGACCAAGACTCTTCCAGGTGGCATCATGGTCAATGGATCTCGTCTAAAGAACCTGGTGCTGACCTATGTCAAT
GCCATCAGCAGTGGGGATCTGCCTTGCATAGAGAATGCAGTCCTGGCCTTGGCTCAGAGAGAGAACTCAGCTGCA
GTGCAAAAGGCCATTGCCCACTATGACCAGCAAATGGGCCAGAAAGTGCAGCTGCCCATGGAAACCCTCCAGGAG
CTGCTGGACCTGCACAGGACCAGTGAGAGGGAGGCCATTGAAGTCTTCATGAAAAACTCTTTCAAGGATGTAGAC
CAAAGTTTCCAGAAAGAATTGGAGACTCTACTAGATGCAAAACAGAATGACATTTGTAAACGGAACCTGGAAGCA
TCCTCGGATTATTGCTCGGCTTTACTTAAGGATATTTTTGGTCCTCTAGAAGAAGCAGTGAAGCAGGGAATTTAT
TCTAAGCCAGGAGGCCATAATCTCTTCATTCAGAAAACAGAAGAACTGAAGGCAAAGTACTATCGGGAGCCTCGG
AAAGGAATACAGGCTGAAGAAGTTCTGCAGAAATATTTAAAGTCCAAGGAGTCTGTGAGTCATGCAATATTACAG
ACTGACCAGGCTCTCACAGAGACGGAAAAAAAGAAGAAAGAGGCACAAGTGAAAGCAGAAGCTGAAAAGGCTGAA
GCGCAAAGGTTGGCGGCGATTCAAAGGCAGAACGAGCAAATGATGCAGGAGAGGGAGAGACTCCATCAGGAACAA
GTGAGACAAATGGAGATAGCCAAACAAAATTGGCTGGCAGAGCAACAGAAAATGCAGGAACAACAGATGCAGGAA
CAGGCTGCACAGCTCAGCACAACATTCCAAGCTCAAAATAGAAGCCTTCTCAGTGAGCTCCAGCACGCCCAGAGG
ACTGTTAATAACGATGATCCATGTGTTTTACTCTAA

FIGURE 5184

MALEIHMSDPMCLIENFNEQLKVNQEALEILSAITQPVVVVAIVGLYRTGKSYLMNKLAGKNKGFSVASTVQSHT
KGIWIWCVPHPNWPNHTLVLLDTEGLGDVEKADNKNDIQIFALALLLSSTFVYNTVNKIDQGAIDLLHNVTELTD
LLKARNSPDLDRVEDPADSASFFPDLVWTLRDFCLGLEIDGQLVTPDEYLENSLRPKQGSDQRVQNFNLPRLCIQ
KFFPKKKCFIFDLPAHQKKLAQLETLPDDELEPEFVQQVTEFCSYIFSHSMTKTLPGGIMVNGSRLKNLVLTYVN
AISSGDLPCIENAVLALAQRENSAAVQKAIAHYDQQMGQKVQLPMETLQELLDLHRTSEREAIEVFMKNSFKDVD
QSFQKELETLLDAKQNDICKRNLEASSDYCSALLKDIFGPLEEAVKQGIYSKPGGHNLFIQKTEELKAKYYREPR
KGIQAEEVLQKYLKSKESVSHAILQTDQALTETEKKKKEAQVKAEAEKAEAQRLAAIQRQNEQMMQERERLHQEQ
VRQMEIAKQNWLAEQQKMQEQQMQEQAAQLSTTFQAQNRSLLSELQHAQRTVNNDDPCVLL

FIGURE 5185A

CGGGCAGCGCAGCCCGCAGAGGCGCTGCGGCCCGTGCAGCCCCGGAGGCCCCTCGCGGAGAAGGCGGCGGCGGAG
GAGAGGCCGAGTTACCGCCCGCCGCCCGCGCCCCCCCAACCCCGCCGCCGCCGCCGCCGCCGCCACTGCCCCCCC
TCCCCGCGGCGCCGCATCTTGAATGGAAAC**ATG**GCGGTGCCGGCTCGGACCTGCGGCGCCTCTCGGCCCGGCCCA
GCGCGGACTGCGCGCCCCTGGCCCGGCTGCGGCCCCCACCCTGGCCCCGGCACCCGGCGCCCGACGTCCGGGCCC
CCGCGCCCGCTGTGGCTGCTGCTGCCGCTTCTACCGCTGCTCGCCGCCCCCGGCGCCTCTGCCTACAGCTTCCCC
CAGCAGCACACGATGCAGCACTGGGCCCGGCGTCTGGAGCAGGAGGTCGACGGCGTGATGCGGATTTTTGGAGGC
GTCCAGCAGCTCCGTGAGATTTACAAGGACAACCGGAACCTGTTCGAGGTACAGGAGAATGAGCCTCAGAAGTTG
GTGGAGAAGGTGGCAGGGGACATTGAGAGCCTTCTGGACAGGAAGGTGCAGGCCCTGAAGAGACTGGCTGATGCT
GCAGAGAACTTCCAGAAAGCACACCGCTGGCAGGACAACATCAAGGAGGAAGACATCGTGTACTATGACGCCAAG
GCTGACGCTGAGCTGGACGACCCTGAGAGTGAGGATGTGGAAAGGGGGTCTAAGGCCAGCACCCTAAGGCTGGAC
TTCATCGAGGACCCAAACTTCAAGAACAAGGTCAACTATTCATACGCGGCTGTACAGATCCCTACGGACATCTAC
AAAGGCTCCACTGTCATCCTCAATGAGCTCAACTGGACAGAGGCCCTGGAGAATGTGTTCATGGAAAACCGCAGA
CAAGACCCCACACTGCTGTGGCAGGTCTTCGGCAGCGCCACAGGAGTCACTCGCTACTACCCGGCCACCCCGTGG
CGAGCCCCCAAGAAGATCGACCTGTACGATGTCCGAAGGAGACCCTGGTATATCCAGGGGGCCTCGTCACCCAAA
GACATGGTCATCATCGTGGATGTGAGTGGCAGTGTGAGCGGCCTGACCCTGAAGCTGATGAAGACATCTGTCTGC
GAGATGCTGGACACGCTGTCTGATGATGACTATGTGAATGTGGCCTCGTTCAACGAGAAGGCACAGCCTGTGTCA
TGCTTCACACACCTGGTGCAGGCCAATGTGCGCAACAAGAAGGTGTTCAAGGAAGCTGTGCAGGGCATGGTGGCC
AAGGGCACCACAGGCTACAAGGCCGGCTTTGAGTATGCCTTTGACCAGCTGCAGAACTCCAACATCACTCGGGCC
AACTGCAACAAGATGATCATGATGTTCACGGATGGTGGTGAGGACCGCGTGCAGGACGTCTTTGAGAAGTACAAT
TGGCCAAACCGGACGGTGCGCGTGTTTACTTTCTCCGTGGGGCAGCATAACTATGACGTCACACCGCTGCAGTGG
ATGGCCTGTGCCAACAAAGGCTACTATTTTGAGATCCCTTCCATCGGAGCCATCCGCATCAACACACAGGAATAT
CTAGATGTGTTGGGCAGGCCCATGGTGCTGGCAGGCAAGGAGGCCAAGCAGGTTCAGTGGACCAACGTGTATGAG
GATGCACTGGGACTGGGGTTGGTGGTAACAGGGACCCTCCCTGTTTTCAACCTGACACAGGATGGCCCTGGGGAA
AAGAAGAACCAGCTGATCCTGGGCGTGATGGGCATTGACGTGGCTCTGAATGACATCAAGAGGCTGACCCCCAAC
TACACGCTTGGAGCCAACGGCTATGTGTTTGCCATTGACCTGAACGGCTACGTGTTGCTGCACCCCAATCTCAAG
CCCCAGACCACCAACTTCCGGGAGCCTGTGACTCTGGACTTCCTGGATGCGGAGCTAGAGGATGAGAACAAGGAA
GAGATCCGTCGGAGCATGATTGATGGCAACAAGGGCCACAAGCAGATCAGAACGTTGGTCAAGTCCCTGGATGAG
AGGTACATAGATGAGGTGACACGGAACTACACCTGGGTGCCTATAAGGAGCACTAACTACAGCCTGGGGCTGGTG
CTCCCACCCTACAGCACCTTCTACCTCCAAGCCAATCTCAGTGACCAGATCCTGCAGGTCAAGTATTTTGAGTTC
CTGCTCCCCAGCAGCTTTGAGTCTGAAGGACACGTTTTCATTGCTCCCAGAGAGTACTGCAAGGACCTGAATGCC
TCAGACAACAACACCGAGTTCCTGAAAAACTTTATTGAGCTCATGGAGAAAGTGACTCCAGACTCCAAGCAGTGC
AACAACTTCCTTCTGCACAACCTGATCTTGGACACGGGCATCACGCAGCAGCTGGTAGAGCGTGTGTGGAGGGAC
CAGGATCTCAACACGTACAGCCTACTGGCCGTGTTCGCTGCCACAGACGGTGGCATCACCCGAGTCTTCCCCAAC
AAGGCAGCTGAGGACTGGACAGAGAACCCTGAGCCCTTCAATGCCAGCTTCTACCGCCGCAGCCTGGATAACCAC
GGTTATGTCTTCAAGCCCCCACACCAGGATGCCCTGTTAAGGCCGCTGGAGCTGGAGAATGACACTGTGGGCATC
CTCGTCAGCACAGCTGTGGAGCTCAGCCTAGGCAGGCGCACACTGAGGCCAGCAGTGGTGGGCGTCAAGCTGGAC
CTAGAGGCTTGGGCTGAGAAGTTCAAGGTGCTAGCCAGCAACCGTACCCACCAAGACCAGCCTCAGAAGTGCGGC
CCCAACAGCCACTGTGAGATGGACTGCGAGGTTAACAATGAGGACTTACTCTGTGTCCTCATTGATGATGGAGGA
TTCCTGGTGCTGTCAAACCAGAACCATCAGTGGGACCAGGTGGGCAGGTTCTTCAGTGAGGTGGATGCCAACCTG
ATGCTGGCACTCTACAATAACTCCTTCTACACCCGCAAGGAGTCCTATGACTATCAGGCAGCCTGTGCCCCTCAG
CCCCCTGGCAACCTGGGTGCTGCACCCCGGGGTGTCTTTGTGCCCACCGTTGCAGATTTCCTTAACCTGGCCTGG
TGGACCTCTGCTGCCGCCTGGTCCCTGTTCCAGCAGCTTCTCTACGGCCTCATCTACCACAGCTGGTTCCAAGCA
GACCCCGCGGAGGCCGAGGGGAGCCCCGAGACGCGCGAGAGCAGCTGCGTCATGAAACAGACCCAGTACTACTTC
GGCTCGGTAAACGCCTCCTACAACGCCATCATCGACTGCGGAAACTGCTCCAGGCTGTTCCACGCGCAGAGACTG
ACCAACACCAATCTTCTCTTTGTGGTGGCCGAGAAGCCGCTGTGCAGCCAGTGCGAGGCTGGCCGGCTGCTGCAG
AAGGAGACGCACTGCCCAGCGGACGGCCCGGAGCAGTGTGAGCTAGTGCAGAGACCGCGATACCGGAGAGGCCCG
CACATCTGCTTCGACTACAACGCGACAGAAGATACCTCAGACTGTGGCCGCGGGGCCTCCTTCCCGCCGTCGCTG
GGCGTCCTGGTCTCCCTGCAACTGCTGCTCCTCCTGGGCCTGCCGCCCCGGCCGCAGCCTCAAGTCCTCGTCCAC

FIGURE 5185B

GCCTCTCGCCGCCTCTGAGCACCCTGCCCCACCCCACCTCCACTCCCACCTCACCCGGCCTCTTCGCCTTTCCCA
CCCTCCTGCCCCACACTCCCCGCCTTAGAGCCTCGTCCCTCCCTCACTGAAGGACCTGAGCTGGCCAGGCCCTGA
GAGTCTGGTCTGCGCCTTGGGATGGGGAGTCCCAAAGCGGGACGCCGCAGGTGTTTGGCACCCAAATCACATCTC
ACCTCCGAACTGTTCAAGTGTCCCCAGACCCTTCTTGCCTGCTGGGCTCCCCCCAGTGGGATGGGACAGGGAGGC
CACACGCACTGGTGCCAAAACCAGGCCTCTGCTGCCGCCCTTCCTGGAGGCTGCCTATGTTGGGGGGGACCCTGC
CTCAGCTGACCCGGCCTCTCTGCCCCACCCAAGCCCAAACTTGGTTTCTGTGAGAATAGTGGAGGAAGGTGAGAT
GGCCAGTTTGAAGCCTGTGCCTCCCAGCTTAAATCCTAGCAGGAGAGAGGCTCTGGGGCAGCCCCCATGGGCTCC
TGCCCCTTTCAGGCCTACAGCCACATCCCCAAGCCCACCAGGTGTCAGGATAGTCACAGTGATACCAGTTCAGAC
ACTACCCCATATACACCTGGAACATTGAGGATGGAAACTGGACTCACATTCGACATACCCCACTGGGCACACGCA
CAAACACACACACTATGGGGTGGGGTGGGTGTAGGGGCTTACAAAGCCTTACACAGGGCGAGGGGTTGGTGGGAG
GGTTGGCACCTGCACACTCCATCTCCTGCTCACCACCTGCCTCTAATCTGAGCTGCAGCCTGGCTGGTCCTCCCA
TTTCTAAAGCTGAATGTCAAACAGTGCCAAATGCTGGGGCAGGGGGTGAAGAACCCTCTGTCCCACCCCTAGCCA
CCAGTGTCCTCCAAGTGCCCCCTCACCTCTCCAGGTGCTCATTGTAACCATTTCTCACTAGTGTCAGGCCCCCAG
TGGGACCACATGCCACTGCCTGCACCTTTCGGCAGAGGAACCCCCACCAGACATCACCCTTTGCCTTAGCAGGGG
TGACTTTGTCTCTCCTGGCTGGGCCATCCTTCCGCCAATCTGGCCCTTACACACTCAGGCCTGTGCCCACTCCCT
ATCTCCTTCCCACCCCTACACACACACTCCCTGCTTGCAGGAGGCCAAACTGTCCCTCCCTTGCTGAACACACAC
ACACACACACACACACAGGTGGGGACTGGGCACAGCTCTTCACACCATTCATTCTGGTCATTTCCCCCAAAGGCA
TCCCAGCCTGGGGGCCAGTGGGGAACTGAGGGCAAGGGGATATAGTGATGGGGCTCAGATGGACTGGGAGGAGGG
GGAGGGTGATGCATTAATTAATGGCTTCGTTAATTAATGTCATGTTGCTTGTCGCTTTCTCAGTGTGTGTGTGTG
GTCCATGCCCACTGCTGGTGCCAGGGTGGGTGTCCATGTGCACCCGGCCTGGATGCCAGCTGTGTCCTTCGGGGG
CGTGCGTGTAACTGTAGTGTAGTCAGGTGCTCAATGGAGAATATAAACATATACAGAAAAATATATATTTTAAGT
TTAAAAAACAGAAAAACAGACAAAACAATCCCCATCAGGTAGCTGTCTAACCCCCAGCTGGGTCTAATCCTTCTC
ATTACCCACCCGACCTGGCTGCCCCTCACCTTGGGCTGGGGGACTGGGGGGCCATTTCCTTTTCTCTGCCCTTTT
TTTGTTGTTCTATTTTGTACAGACAAGTTGGAAAAACAACAGCGACAAAAAAGTCAAGAAACTTTGTAAAATATC
GTGTGTGTGATTCCTTGTAAAATATTTTCAAATGGTTTATTACAGAAGATCAGTTATTAAATAATGTTCATATTT
TCACTTC

FIGURE 5186

MAVPARTCGASRPGPARTARPWPGCGPHPGPGTRRPTSGPPRPLWLLLPLLPLLAAPGASAYSFPQQHTMQHWAR
RLEQEVDGVMRIFGGVQQLREIYKDNRNLFEVQENEPQKLVEKVAGDIESLLDRKVQALKRLADAAENFQKAHRW
QDNIKEEDIVYYDAKADAELDDPESEDVERGSKASTLRLDFIEDPNFKNKVNYSYAAVQIPTDIYKGSTVILNEL
NWTEALENVFMENRRQDPTLLWQVFGSATGVTRYYPATPWRAPKKIDLYDVRRRPWYIQGASSPKDMVIIVDVSG
SVSGLTLKLMKTSVCEMLDTLSDDDYVNVASFNEKAQPVSCFTHLVQANVRNKKVFKEAVQGMVAKGTTGYKAGF
EYAFDQLQNSNITRANCNKMIMMFTDGGEDRVQDVFEKYNWPNRTVRVFTFSVGQHNYDVTPLQWMACANKGYYF
EIPSIGAIRINTQEYLDVLGRPMVLAGKEAKQVQWTNVYEDALGLGLVVIGTLPVFNLTQDGPGEKKNQLILGVM
GIDVALNDIKRLTPNYTLGANGYVFAIDLNGYVLLHPNLKPQTTNFREPVTLDFLDAELEDENKEEIRRSMIDGN
KGHKQIRTLVKSLDERYIDEVTRNYTWVPIRSTNYSLGLVLPPYSTFYLQANLSDQILQVKYFEFLLPSSFESEG
HVFIAPREYCKDLNASDNNTEFLKNFIELMEKVTPDSKQCNNFLLHNLILDTGITQQLVERVWRDQDLNTYSLLA
VFAATDGGITRVFPNKAAEDWTENPEPFNASFYRRSLDNHGYVFKPPHQDALLRPLELENDTVGILVSTAVELSL
GRRTLRPAVVGVKLDLEAWAEKFKVLASNRTHQDQPQKCGPNSHCEMDCEVNNEDLLCVLIDDGGFLVLSNQNHQ
WDQVGRFFSEVDANLMLALYNNSFYTRKESYDYQAACAPQPPGNLGAAPRGVFVPTVADFLNLAWWTSAAAWSLF
QQLLYGLIYHSWFQADPAEAEGSPETRESSCVMKQTQYYFGSVNASYNAIIDCGNCSRLFHAQRLTNTNLLFVVA
EKPLCSQCEAGRLLQKETHCPADGPEQCELVQRPRYRRGPHICFDYNATEDTSDCGRGASFPPSLGVLVSLQLLL
LLGLPPRPQPQVLVHASRRL

FIGURE 5187A

CGCCTTTGCAAGGTTGCTGGACAGATGGAACTGGAAGGGCAGCCGTCTGCCGCCCACGAACACCTTCTCAAGCAC
TTTGAGTGACCACGGCTTGCAAGCTGGTGGCTGGCCCCCCGAGTCCCGGGCTCTGAGGCACGGCCGTCGACTTAA
GCGTTGCATCCTGTTACCTGGAGACCCTCTGAGCTCTCACCTGCTACTTCTGCCGCTGCTTCTGCACAGGGATCT
TTCTCTTTGACTGCTTTGCTGAGCACATGGCTGGAAACAGGATGAGCAGAATCCACCAGATCACAATTAAAGTAT
CCTAAGAGCCCGGGCGAGGACCCCTCCAGGATGCAGGTCCCGAACAGCACCGGCCCGGACAACGCGACGCTGCAG
ATGCTGCGGAACCCGGCGATCGCGGTGGCCCTGCCCGTGGTGTACTCGCTGGTGGCGGCGGTCAGCATCCCGGGC
AACCTCTTCTCTCTGTGGGTGCTGTGCCGGCGCATGGGGCCCAGATCCCCGTCGGTCATCTTC**ATG**ATCAACCTG
AGCGTCACGGACCTGATGCTGGCCAGCGTGTTGCCTTTCCAAATCTACTACCATTGCAACCGCCACCACTGGGTA
TTCGGGGTGCTGCTTTGCAACGTGGTGACCGTGGCCTTTTACGCAAACATGTATTCCAGCATCCTCACCATGACC
TGTATCAGCGTGGAGCGCTTCCCTGGGGGTCCTGTACCCGCTCAGCTCCAAGCGCTGGCGCCGCCGTCGTTACGC
GGTGGCCGCGTGTGCAGGGACCTGGCTGCTGCTCCTGACCGCCCTGTCCCCGCTGGCGCGCACCGATCTCACCTA
CCCGGTGCACGCCCTGGGCATCATCACCTGCTTCGACGTCCTCAAGTGGACGATGCTCCCCAGCGTGGCCATGTG
GGCCGTGTTCCTCTTCACCATCTTCATCCTGCTGTTCCTCATCCCGTTCGTGATCACCGTGGCTTGTTACACGGC
CACCATCCTCAAGCTGTTGCGCACGGAGGAGGCGCACGGCCGGGAGCAGCGGAGGCGCGCGGTGGGCCTGGCCGC
GGTGGTCTTGCTGGCCTTTGTCACCTGCTTCGCCCCCAACAACTTCGTGCTCCTGGCGCACATCGTGAGCCGCCT
GTTCTACGGCAAGAGCTACTACCACGTGTACAAGCTCACGCTGTGTCTCAGCTGCCTCAACAACTGTCTGGACCC
GTTGTTTATTACTTTGCGTCCCGGGAATTCCAGCTGCGCCTGCGGGAATATTTGGGCTGCGCCGGGTGCCCAGAG
ACACCCTGGACACGCGCCGCGAGAGCCTCTTCTCCGCCAGGACCACGTCCGTGCGCTCCGAGGCCGGTGCGCACC
CTGAAGGGATGGAGGGAGCCACCAGGCCCGGCCTCCAGAGGCAGGAGAGTGTGTTCTGAGTCCCGGGGGCGCAGC
TTGGAGAGCCGGGGGCGCAGCTTGGAGATCCAGGGGCGCATGGAGAGGCCACGGTGCCAGAGGTTCAGGGAGAAC
AGCTGCGTTGCTCCCAGGCACTGCAGAGGCCCGGTGGGGAAGGGTCTCCAGGCTTTATTCCTCCCAGGCACTGCA
GAGGCACCGGTGAGGAAGGGTCTCCAGGCTTCACTCAGGGTAGAGAAACAAGCAAAGCCCAGCAGCGCACAGGGT
GCTTGTTATCCTGCAGAGGGTGCCTCTGCCTCTCTGTGTCAGGGGACAGCTTGTGTCACCACGCCCGGC**TAA**TTT
TTGTATACTTAAATAGTAGAGCTGGGCTGTCACCCCCGAGCTCCTTAGACACTCCTCACACCTGTCCATACCCGA
GGGTGGATATTCAACCAGCCCCACCGCCTACCCGACTCGGTTTCTGGATATCCTCCGTGGGCGAACTGCGAGCCC
CATTCCCAGCTCTTCTCCCTGCTGACATCGTCCCTTAGTTGTGGTTCTGGCCTTCTCCATTCTCCTCCAGGGGTT
CTGGTCTCCGTAGCCCGGTGCACGCCGAAATTTCTGTTTATTTCACTCAGGGGCACTGTGGTTGCTGTGGTTGGA
ATTCTTCTTTCAGAGGAGCGCCTGGGGCTCCTGCAAGTCAGCTACTCTCCGTGCCCACTTCCCCCCACACACACA
CACCCCACCCTGTTGCTGACCAAGGTGATTTTTGGCACATTTGTTCTGGCCTGGCTTGGTGGGACCCCACCCCTA
TTCTGCTTCTGTGAGTCCCTGATAGAGAAGGAGGTCCCATCAGGCCCCTGGAACACACTCAGGCTTCCGTGACTC
AGGACAAGGACCACGGGAGGCCCAGGTGCGGAAAGGAGGCTCCGTGAGATGGGGTCCAGCCCATCCCAACACAAG
GGTGCAGCTTGATTCGGGAGTTCCCCACCTCCTGCCCATTCTCCGCGTCCTTTTACCCCATGGAGAGCCTCAGCC
ATGGCAAGTCCATCTGGAGTCCAGGAAGCAGGCAACTGGCCTGACCCATGAGACCGTTTGGAGACCAAGCAGCAG
ATGCAGGTGTGGACCCCAGGAACCTACAGGGGTGTCAGCCGCTGAGCCCCCTCCCTGCTGTGTGGGTGGTGAGCA
GGCTGGGTCTTTGTCTGTCTTCTTCTACACGGCATGTGCCTGCACCAGCCCCAACACCTGAGCTGGTTTAGCGCA
AAGAAGAGCTCTGACTCTCCAGGGGTGCTGGGACATCACGTGGAATTGGATCCCAGGCTCTCTTGGGCGAGAAAG
ACCATTCTGGAGGTGGGAGTGGGAGAGCTGCCTGTCTGCCCACGGGCTCTGCGTCTCCGCAGTGGGTGGCCTTGG
ATGCCCGGCCCCTCCCTTTCTGTGCACTGGGGACGCTGATGGAGGCTGAAGCTGCTGTTCGGAGGCCCTCTATTG
GTGCCTCTCTCCTGCCGTCATCACTATGGCAGGAAAACAGAGATGGTTTAGTAATGAATTATCATTCCCAAACCC
GTGTCCACCTGGAACATCAGGATGGGACCATGTTTGAAAATCGGGTCTTTCCAAATGTAATTAAGTAAGGCGAGG
CCATACTGCATTTACAATGGGCCCAATCCAGTGTCCCTATGAGAGACGGAAGAGGAGACACAGACACAAAGCAGG
AGGCCACATAAAGACAGAGGCAGAGACTGAAGTGATGCTGCCCCAAGCCCAGGGATGCCTGGAGTCCCCAGGAGC
TGGGAGAGGCAGGAAGGAGCCTCCCCTAGAGTCTCTGGAGGGAACTGGATACAATTGCAGAGTGCACTAAACAGT
TGCCCCAGAAAGACATGTCTTGTTTTAAAGCCCAGAACCTGAAATTATTATAGATTTTATTCGGTAATAAGGAAC
TTTGCATGTGTAATTACTTAAGGATATGAAGATGAGATTGTGCTGGATTATTAAGCACCCTAAATGCCATGACAG
GTGTCCTTCCAAGAGACAGAAGAGGAGACACAGACACAGAGCAGGAGGACACGTGGAGACAGAGGCAGACTGGAG
TGATGCGGCCACAAGCCCAGGGACACCTGGAGCCCCCAGGAGCTGGGAGAGGCAGGAAGGATCCTCCCCTAGAGC
CTCCAGGGGGAACTGGAGGATGCGTAAGAGACCCAGAACTTCCACAGAAGGAGGAAAATTAACCTCCTGCTTCTC

FIGURE 5187B

TAGACTGTTCCAAAGCTGAACCCTAGAAAGCAAAGCTGATACAGAAGCATCCAGGCTGCAGGAGTACAGGTCGCA
AGTGCTGAGCGTGGGCCTTGGGTGTGTCTCATGGGGGAAAAAAAACTGTGAAAAACCTCAGAGTAGCATCTTCAC
AGTAACGCACGGACGATCCCTAAACTGCCTTGTAAACAAAAATGAGAGCTTGAGTCAGAGGAAGCCGAGACAATA
TCCTTCCTCGACAACGTGCGAGAACCCTGACGTCCCCCAGCAAAGGAAGACGTTGCAAGCAGGCAAAATGCGTCG
ATTTTTTTTTTTGTCAGTATGATGATTTTTGCAGCCACTTGGCTATGGAGAGCAGCCGACACCCCCTCTTACAGC
CGTGGATGTTTCCTGGAAGCTGACTCAGTCTGTTCACTGGTTGAGCTTTGAGTGAAAAGATAACACAGGTCTATT
GACTCACACACATGTTTTAAGATGGAAAACTTTACTTCTGTTCTTGGCAGGACATGGAGAGAGGGAGGGATTCCA
AAAAGTCTCAGCCTCCATCAAGGCGTGGCAGCTCATGCCGGTAATCTCAGCGACTTGGGGAGGCATCAGAGCGGG
AGGACTGATT

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FIGURE 5188

MINLSVTDLMLASVLPFQIYYHCNRHHWVFGVLLCNVVTVAFYANMYSSILTMTCISVERFPGGPVPAQLQALAP
PSLRGGRVCRDLAAAPDRPVPAGAHRSHLPGARPGHHHLLRRPQVDDAPQRGHVGRVPLHHLHPAVPHPVRDHRG
LLHGHHPQAVAHGGGARPGAAEARGGPGRGGLAGLCHLLRPQQLRAPGAHREPPVLRQELLPRVQAHAVSQLPQQ
LSGPVVYYFASREFQLRLREYLGCAGCPETPWTRAARASSPPGPRPCAPRPVRTLKGWREPPGPASRGRRVCSES
RGRSLESRGRSLEIQGRMERPRCQRFRENSCVAPRHCRGPVGKGLQALFLPGTAEAPVRKGLQASLRVEKQAKPS
SAQGACYPAEGASASLCQGTACVTTPG

FIGURE 5189

AGATGATGCAAGTATGAATGGGTACGGGGGGAGCTTAAAACCTGCCAACACTGAGACTTGATGCCAGGGGCCATG
CACCCGCTCTGCCACCTGCTAGGTCTGTGCAATGGTCAGAGCAGAGGTGTGTGATGAGTTCAGCTCCCAAGCACA
TCCACACTTAGGAAGTGTTCTGTGTGTTTTTAAATAATCCTTACCATGTAAAGATTGTATTACATTTGTATACAA
ATTTTTTTGCATTTTACTTTTGTAATATTTGGGGTTTTATAGATTTTTATTTTATGGCCAAGTATACTTTTGTAA
GGAAATGTTGAAGTCTTGAGTATTTTTATTCTTTTAAAAAACTATAGTTAGTGTCAACTGTGAGCACTGATAAAT
ATTATTCATGTGTGGTTTTCCTTCTTTTTAATCCAGACTTTTTAAGAAACTGTTTTGGCATAGAGCTTTACTTAA
AATGCTGCTTCATTTTACACATTGTGAATACTGAAGATTCTAAAAAATAAAGATGCATTTAAAATCTCTGTGCTG
TTCCATTGTAGAAATGGTAATGTGCATTGCTTTGCCAAAGTGGTAATTAAATGTTTAATGGTTTAGAACTCCTAG
TTCACAACAGGGCTTCTCGTCATCACTTGCAGCGTGTGAGCTTCCAAATAAGCCGCCATTTCTTTGGAAAACGCA
CGCACTTAGGCATGGCGATCTCCTGTTCCGTTAGGAAATACGGTT**ATG**TTGACATTATGGTTACTGTGCTTGTGG
TTTTGCAATAAACCATGTATTGAAAGCAAA

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FIGURE 5190

MLTLWLLCLWFCNKPCIES

FIGURE 5191A

GCTGGCTGCGGAAGGGGAGGGGGGGGGAGAAGGCGATTGGATGCGGCGGCGGCGGCGGATCCCGGAGAGCCCCGG
AGTGAGCGGAGTAGCGAGTCGGCAACCCGGAGGGGTAGAAATATTTCTGTCATGGCTCATTCAAAGACTAGGACC
AATGATGGAAAAATTACATATCCGCCTGGGGTCAAGGAAATATCAGATAAAATATCTAAAGAGGAGATGGTGAGA
CGATTAAAGATGGTTGTGAAAACTTTTATGGATATGGACCAGGACTCTGAAGAAGAAAAGGAGCTTTATTTAAAC
CTAGCTTTACATCTTGCTTCAGATTTTTTTCTCAAGCATCCTGATAAAGATGTTCGCTTACTGGTAGCCTGCTGC
CTTGCTGATATTTTCAGGATTTATGCTCCTGAAGCTCCTTACACATCCCCTGATAAACTAAAGGATATATTTATG
TTTATAACAAGACAGTTGAAGGGGCTAGAGGATACAAAGAGCCCACAATTCAATAGGTATTTTTATTTACTTGAG
AACATTGCTTGGGTCAAGTCATATAACATATGCTTTGAGTTAGAAGATAGCAATGAAATTTTCACCCAGCTATAC
AGAACCTTATTTTCAGTTATAAACAATGGCCACAATCAGAAAGTCCATATGCACATGGTAGACCTTATGAGCTCT
ATTATTTGTGAAGGTGATACAGTGTCTCAGGAGCTTTTGGATACGGTTTTAGTAAATCTGGTACCTGCTCATAAG
AATTTAAACAAGCAAGCATATGATTTGGCAAAGGCTTTACTGAAGAGGACAGCTCAAGCTATTGAGCCATATATT
ACCAATTTTTTTAATCAGGTTCTGATGCTTGGGAAAACATCTATCAGCGATTTGTCAGAGCATGTCTTTGACTTA
ATTTTGGAGCTCTACAATATTGATAGTCATTTGCTGCTCTCTGTTTTACCCCAGCTTGAATTTAAATTAAAGAGC
AATGATAATGAGGAGCGCCTACAAGTTGTTAAACTACTGGCAAAAATGTTTGGGGCAAAGGATTCAGAATTGGCT
TCTCAAAACAAGCCACTTTGGCAGTGCTACTTGGGCAGGTTTAATGATATCCATGTACCAATCCGCCTGGAATGT
GTGAAATTTGCTAGCCATTGTCTCATGAACCATCCTGATTTAGCAAAAGACTTAACAGAGTATCTTAAAGTGAGG
TCACATGACCCTGAGGAAGCTATTAGACATGATGTTATTGTGTCAATAGTTACAGCTGCTAAAAAGGATATTCTT
CTGGTCAATGATCACTTACTTAATTTTGTGAGAGAGAGAACATTAGACAAACGATGGAGAGTACGCAAAGAAGCC
ATGATGGGACTTGCCCAAATTTATAAGAAATATGCTTTACAGTCAGCAGCTGGAAAAGATGCTGCAAAACAGATA
GCATGGATCAAAGACAAATTGCTACATATATATTATCAAAATAGTATTGATGATCGACTACTTGTTGAACGGATC
TTTGCTCAATACATGGTTCCTCACAATTTAGAAACTACAGAACGGATGAAATGCTTATATTACTTGTATGCCACA
CTGGATTTAAATGCTGTGAAAGCATTGAATGAAATGTGGAAATGTCAAAATCTGCTCCGACATCAAGTAAAGGAT
TTGCTTGACTTGATTAAGCAACCCAAAACAGATGCCAGTGTCAAGGCCATATTTTCAAAAGTGATGGTTATTACA
AGAAATTTACCTGATCCTGGTAAGGCTCAGGATTTCATGAAGAAATTCACACAGGTGTTAGAAGATGATGAGAAA
ATAAGAAAGCAGTTAGAAGTACTTGTTAGTCCAACATGCTCCTGCAAGCAGGCTGAAGGTTGTGTGCGTGAAATA
ACTAAGAAGTTGGGCAACCCCAAACAGCCTACAAATCCTTTCCTGGAAATGATCAAGTTTCTCTTGGAGAGGATA
GCACCTGTGCACATAGATACCGAATCTATCAGTGCTCTTATTAAACAAGTGAACAAATCAATAGATGGAACAGCA
GATGATGAAGATGAGGGTGTTCCAACTGATCAAGCCATCAGAGCAGGTCTTGAACTGCTTAAGGTACTCTCATTT
ACACATCCCATCTCATTTCATTCTGCTGAAACATTTGAATCATTACTGGCTTGTCTGAAAATGGATGATGAAAAA
GTAGCAGAAGCTGCACTACAAATTTTCAAAAACACAGGAAGCAAAATTGAAGAGGATTTTCCACACATCAGATCA
GCCTTGCTTCCTGTTTTACATCACAAATCTAAAAAAGGACCCCCCCGTCAAGCCAAATATGCCATTCATTGTATC
CATGCGATATTTTCTAGTAAAGAGACCCAGTTTGCACAGATATTTGAGCCTCTGCATAAGAGCCTAGATCCAAGC
AACCTGGAACATCTCATAACACCATTGGTTACTATTGGTCATATTGCTCTCCTTGCACCTGATCAATTTGCTGCT
CCTTTGAAATCTTTGGTAGCTACTTTCATTGTGAAAGATCTTCTCATGAATGATCGGCTTCCAGGGAAAAAGACA
ACTAAACTTTGGGTTCCAGATGAAGAAGTATCTCCTGAGACAATGGTCAAAATTCAGGCTATTAAAATGATGGTT
CGATGGCTACTTGGAATGAAAAATAATCACAGTAAATCAGGAACTTCTACCTTAAGATTGCTAACAACAATATTG
CATAGTGATGGAGACTTGACAGAACAGGGGAAAATTAGTAAACCAGATATGTCACGTCTGAGACTTGCTGCTGGG
AGTGCTATTGTGAAGCTGGCACAAGAACCCTGTTACCATGAAATCATCACATTAGAACAATATCAGCTATGTGCA
TTAGCTATCAACGATGAATGCTATCAAGTAAGACAAGTGTTTGCCCAGAAACTTCACAAAGGCCTTTCCCGTTTA
CGGCTTCCACTTGAGTATATGGCAATCTGTGCCCTTTGTGCAAAAGATCCTGTAAAGGAGAGAAGAGCTCATGCT
AGGCAATGTTTGGTGAAAAATATAAATGTAAGGCGGGAGTATCTGAAGCAGCATGCAGCTGTTAGTGAAAAATTA
TTGTCTCTTCTACCAGAGTATGTTGTTCCATATACAATTCACCTTTTGGCACATGACCCAGATTATGTCAAAGTA
CAGGATATTGAACAACTTAAAGATGTTAAAGAATGTCTTTGGTTTGTTCTGGAAATATTAATGGCTAAAAATGAA
AATAACAGTCACGCTTTTATCAGAAAGATGGTAGAAAATATTAAACAAACAAAAGATGCCCAAGGACCAGATGAT
GCAAAAATGAATGAAAAACTGTACACTGTGTGTGATGTTGCCATGAATATCATCATGTCAAAGAGTACTACATAC
AGTTTGGAATCTCCTAAAGACCCGGTACTACCAGCTCGTTTCTTCACTCAACCTGACAAGAATTTCAGTAACACC
AAAAATTATCTGCCTCCTGAAATGAAATCATTTTTCACTCCTGGAAAACCTAAAACAACCAATGTTCTAGGAGCT
GTTAACAAGCCACTTTCATCAGCAGGCAAGCAATCTCAGACCAAATCATCACGAATGGAAACTGTAAGCAATGCA

FIGURE 5191B

AGCAGCAGCTCAAATCCAAGCTCTCCTGGAAGAATAAAGGGGAGGCTTGATAGTTCTGAAATGGATCACAGTGAA
AATGAAGATTACACAATGTCTTCACCTTTGCCGGGGAAAAAAAGTGACAAGAGAGACGACTCTGATCTTGTAAGG
TCTGAATTGGAGAAGCCTAGAGGCAGGAAAAAAACGCCCGTCACAGAACAGGAGGAGAAATTAGGTATGGATGAC
TTGACTAAGTTGGTACAGGAACAGAAACCTAAAGGCAGTCAGCGAAGTCGGAAAAGAGGCCATACGGCTTCAGAA
TCTGATGAACAGCAGTGGCCTGAGGAAAAGAGGCTCAAAGAAGATATATTAGAAAATGAAGATGAACAGAATAGT
CCGCCAAAAAAGGGTAAAAGAGGCCGACCACCAAAACCTCTTGGTGGAGGTACACCAAAAGAAGAGCCAACAATG
AAAACTTCTAAAAAAGGAAGCAAAAAAAAATCTGGACCTCCAGCACCAGAGGAGGAGGAAGAAGAAGAAAGACAA
AGTGGAAATACGGAACAGAAGTCCAAAAGCAAACAGCACCGAGTGTCAAGGAGAGCACAGCAGAGAGCAGAATCT
CCTGAATCTAGTGCAATTGAATCCACACAGTCCACACCACAGAAAGGACGAGGAAGACCATCAAAAACGCCATCA
CCATCACAACCAAAAAAAAAATGTCCGTGTAGGACGCTCCAAACAAGCAGCTACTAAGGAAAATGATTCAAGTGAA
GAAGTAGATGTGTTTCAGGGTAGCTCTCCTGTCGATGATATTCCACAGGAAGAAACAGAGGAGGAGGAAGTTTCT
ACAGTAAATGTACGGCGGCGAAGTGCTAAAAGGGAACGGCGATGAACAAATGTAATTAATAACTTTCTCTGTGAA
AGCTTTGGAAAAATCTTTTTTTTTTTTTTTTTTTTTTGGTCAAGCTTGAGGCTGAATAAAGCCTTTGATGCACAA
AATGGGACTGCTGAAGAGTGGACAGTTGGACCTTACTTTGGTGACCCCATACATTTGTGGTCACATGCTTTAGCC
ATACACATGGTAACATTGACTATGGAGTCTTGTGAAAGTGTAATGTGCGATGGCTATGTAGACATAAAGAAGAAA
CTTGTAAATATCTTTTTTCTTTTTTTTAATGTTTCTGATTTCTGAAGTGCTTGTATAGCTTTTATCTGCGGCTTT
AAACTGACAGTACCCGACTGTTTATTGGATCTATTGATTTGAAAAGAATTTGTTAGGATAGATCTTAAGCAGTAA
TCTGTCAGTGTTTGTATTTGTATTCTCTGCAATTTTACTGTGAAAAAAAATTTGTTTTCAACAATTGGTGTCATT
TTCTTGATGTCACTATTTGTTGGAGAGTTAAATGGTCTCTTCCCTTTGTGTATCTTACCTAGTGTTTACTCCTGG
GCACCCTTAATCTTCAGAGGTGCTAAATTGTCTGCCATTACACCAGAAGGATGCCTCTGATAGGAGGACAACCAT
GCAAATTGTGAAATAGTCCTGAAGTTCTTGGATTACTTTACACCTCAGTATTGATTTGTCCCAGAATTTTCTGGC
CTTTCATGGCAATGAAAATTTTAAGAAGAAAGATTTAAAGTATTTTAATTTTAAAGAGTGTGTTATAAAATAATG
TACTGAATTCTTTATCCCATTTTATCATCCTTTCAGTTTTTATTAATCTACTGTATCAATAAAATTCTGTAATTT
GAATGAGTTTTTAATAGTCTAGAATGTTATTGTGTATAGATATTTCCTCTTGAACGTTATGTTCAGAAAATGCAA
ATTACACTATAATATAAAACCTGATATATACACATTAGAAATATTCCAGTTCTCCGTAACAGTGTAAAGTTAATC
AGAAAGAAAAAATTTTATTGATGCAGTGTGTCTTTATAAAGCTGTTCTTGAAAGCCAAGTGTTTTGTATTTTATA
GTGAGTTGCATGTTTTTGAAAAAAAGTGCTGAAAATGGGATGTGCTGTTTTCTGTAAATTCATATTTAGCCATAG
TATATGATAGATTGCCCCATAACATAGTTTTTCATCAAGAGTTTATTATTGTACTTTATTTTGGAGCCAAAAAAT
TGATTCTGGGGGGTGGGGGCAGCGTAGAAGTGGTATATCCAAGTATATCAGCTACTGTAGTTGTCACAGTCTTGT
GAACTTTGAATGAAATTCCACTTTGTCCAGATTGGGAGAAGTGGAAATTTATTTGGATTTAGAGCAGGTCTTTTT
TTTTCTTCATTGTAATCTGCAAAATGTAGAAATAAATTACTTAAGGCAGTATCCTTTATACAGTTGTATAAACTG
TATTTTGAACCAAAACATATAGGTTACTACTTAATGCTTACCTAATTTCATTTTAGTATTTTAGGTGCTGTTATG
TTTTTTCATGGTTAACACCAGAGGGGAAAAAATCATATTCTAACTTATTAAATTTATCACATTGAATAGTGGAAC
ATTTTCATATGATACACCATTATGTTTAAGATATATTTCCAAGATTGGTTATAATAGATGGGGCATATAATAAAG
AAGCTACTATTTTGGAAAATGACATTTTACTATTTGCCAATGTATATTGCAATTGATGTGATTATTTTTCTTTTA
AAGATTTGTTTGTGTTTATGAAACAGCCATTTATTTTTTAAAAAGTGTTTTGAATTGTGTCTTAATCTCTCCATA
TTCAACTATTCTTCATTTACAACAATAGTGACACCAGTAATTATGAGAGGCTGTCATATATCAAAGCAGCTCAGG
TGGGATCAACATACATTGGTTTTGAAATGTTTCCTTAGCTCGGTTCTCCCAAACACATAATTTCTGTTTCAGCAG
TACAAAGGCATGTTTTAAAATCTATAACATAAAGAATAAGGAATAGCTTTGTATTTTTGTCATTGATTAAATTGC
ACCAGAAATGTTTATGGAAATATTAAGAACATTTTATAAAACATACGAAAAAGTGATTGTGAAGGATTTTTATTT
GCATGATTATAGTTAAGCAAATTTCATTTCACATTTTTGTAATGCTGTACAGCAGTTCACAAAAAAATGTTCATT
GTAGATTTTGTTATGTTCAATGCCAATGAGTCTGTAATTTTACGACCTGTCTGTTCTTTTTTTGGGTGGATTACG
ATGTAAATTTTTCTTTTCTTTCTTTCTTTTTTTTTTTTTTTGTGTAGAAAAATAGGTGCAATAATGATCAAAGTT
TTGATGTCTTGAGTCTCCATCTTAGGGGATTATCTTACGTTTAAGCTTAACATTTCATGTAGTAAGATTTGGAGA
GCCACATACTTTACAGTAAAATTAAGTGTGTATAAAACATTAATTGCTAACAATTGTTAGCAAACTATTTCAGTG
ATAATGTTCATTTTGAAAATATGTACTGTATAACATTAAGAAAATATTTAACTCCCTGTAACAAGTTCCATTATG
AAAATCTTATTCCTCAGTGAGGTTATCTTGCTGCACTCTGTAGCAAATTTGTTTAATCTACATTATAATAAAATT
TCTTGCTGCAGTGCAACAGGAGGCTTTTTCAGTGATCTTCACTGTATATGTAAATTACAAATGTGGCTGTAAAAC

FIGURE 5191C

TTATTCCAGGTATTAAAGGTTAAATTGCTTTCTATATCTTCTTATAACTTGTAAGTCTGATTTTTAAGATTTCCT
TTTGTCCACTTGTAAGAATGTCAGGAATTTAAGAATTTGTTTAAATTAGGCATATCTCTGCCATCACATAGTATT
ATGTCACCATAATGAACAATTGCTATTTAAATAGATAACCAATTTTCAGACACATTTTTGGATTTCTGTGAAGTT
GAATAAACATAAAAGCTAA

FIGURE 5192

MAHSKTRTNDGKITYPPGVKEISDKISKEEMVRRLKMVVKTFMDMDQDSEEEKELYLNLALHLASDFFLKHPDKD
VRLLVACCLADIFRIYAPEAPYTSPDKLKDIFMFITRQLKGLEDTKSPQFNRYFYLLENIAWVKSYNICFELEDS
NEIFTQLYRTLFSVINNGHNQKVHMHMVDLMSSIICEGDTVSQELLDTVLVNLVPAHKNLNKQAYDLAKALLKRT
AQAIEPYITNFFNQVLMLGKTSISDLSEHVFDLILELYNIDSHLLLSVLPQLEFKLKSNDNEERLQVVKLLAKMF
GAKDSELASQNKPLWQCYLGRFNDIHVPIRLECVKFASHCLMNHPDLAKDLTEYLKVRSHDPEEAIRHDVIVSIV
TAAKKDILLVNDHLLNFVRERTLDKRWRVRKEAMMGLAQIYKKYALQSAAGKDAAKQIAWIKDKLLHIYYQNSID
DRLLVERIFAQYMVPHNLETTERMKCLYYLYATLDLNAVKALNEMWKCQNLLRHQVKDLLDLIKQPKTDASVKAI
FSKVMVITRNLPDPGKAQDFMKKFTQVLEDDEKIRKQLEVLVSPTCSCKQAEGCVREITKKLGNPKQPTNPFLEM
IKFLLERIAPVHIDTESISALIKQVNKSIDGTADDEDEGVPTDQAIRAGLELLKVLSFTHPISFHSAETFESLLA
CLKMDDEKVAEAALQIFKNTGSKIEEDFPHIRSALLPVLHHKSKKGPPRQAKYAIHCIHAIFSSKETQFAQIFEP
LHKSLDPSNLEHLITPLVTIGHIALLAPDQFAAPLKSLVATFIVKDLLMNDRLPGKKTTKLWVPDEEVSPETMVK
IQAIKMMVRWLLGMKNNHSKSGTSTLRLLTTILHSDGDLTEQGKISKPDMSRLRLAAGSAIVKLAQEPCYHEIIT
LEQYQLCALAINDECYQVRQVFAQKLHKGLSRLRLPLEYMAICALCAKDPVKERRAHARQCLVKNINVRREYLKQ
HAAVSEKLLSLLPEYVVPYTIHLLAHDPDYVKVQDIEQLKDVKECLWFVLEILMAKNENNSHAFIRKMVENIKQT
KDAQGPDDAKMNEKLYTVCDVAMNIIMSKSTTYSLESPKDPVLPARFFTQPDKNFSNTKNYLPPEMKSFFTPGKP
KTTNVLGAVNKPLSSAGKQSQTKSSRMETVSNASSSSNPSSPGRIKGRLDSSEMDHSENEDYTMSSPLPGKKSDK
RDDSDLVRSELEKPRGRKKTPVTEQEEKLGMDDLTKLVQEQKPKGSQRSRKRGHTASESDEQQWPEEKRLKEDIL
ENEDEQNSPPKKGKRGRPPKPLGGGTPKEEPTMKTSKKGSKKKSGPPAPEEEEEEERQSGNTEQKSKSKQHRVSR
RAQQRAESPESSAIESTQSTPQKGRGRPSKTPSPSQPKKNVRVGRSKQAATKENDSSEEVDVFQGSSPVDDIPQE
ETEEEEVSTVNVRRRSAKRERR

FIGURE 5193

CAAGGCTGCTCTGCTCCCAGAACTGCCAATGCCCAGCGAAACGGGAGGACTCAAAGTCAACTGCCAAGCTACCTT
CTTCACTCCAGAGCCAGGATCCAGGGAACACTGAAGATTTATCTCAGCTGACCAACAACGGAGCAGTAACTAACA
CCTCTTAAAATGTATATAGCACTTTAAGTTTAAAAAGTCCTCCCACACACATTTAATGTTCACNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNAAAGCAAAACT
AGTGAATGGTAGAGCTTGGATGTGGAGCCATAAATTGACTCCAAGGTCAGAGCTCTTTAACATAGCCATTATTAG
CAAACTATTTTTAATCTGACCACTGGAAATTAAGAGTCAGAAGGATCTTTAATAAATCCTATAATCACATGGCCG
GAGAGTCACAAAAACAACAGCTTTGGCCAAGACCGTGACTTCAGTAAAGGGAACCCGGGGCTCTCGCAGCCAGCC
CTCCTGCCCATGGAGGACAGTTTCCTTCAATCTTTTGGGAGGCTGAGCCTCNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNCCCGGCCGCCCCCGCGGGGGACACCTCCTCGCCGCCACAGCTTTAGGAAACACCTCTACCTCCTG
CGAGGCCTCCCGGGCTCCGGGAAAACTACACTGGCCAGGGACGACTGGAGTGAGCACTGGCCTGGGAGTCTGAAG
ATTGTGCCTTCAGACCTACTTCGTCACTTACTAGCTGGCGACTTTGGTCAGTCATCTAGTTTTTCCGGGCCTTAT
GTTCCTTACATGTGACTACTAAAAGGCTACTAGATTATAGGATTTATTAAAGATCCTTCTGACTCTTAATTTCCA
GTGGTCAGATTAAAAATAGTTTGCTAATAATGGCTATGTTAAAGAGCTCTGACCTTGGAGTCAATTTATGGCTCC
ACATCCAAGCTCTACCATTCACTAGTTTTGCTTTTCACCCAACCCCTCTGTGCCTCGGTTTCCTTTTCTGTTAAA
TGGGGATATCTGTTCTGTTTGCCTCTGAGGGTTTTGTGAACATTAAATGTGTGTGGGAGGACTTTTTAAACTTAA
AGTGCTATATACATTTTAAGAGGTGTTAGTTACTGCTCCGTTGTTGGTCAGCTGAGATAAATCTTCAGTGTTCCC
TGGATCCTGGCTCTGGAGTGAAGAAGGTAGCTTGGCAGTTGACTTTGAGTCCTCCCGTTTCGCTGGGCATTGGCA
GTTCTGGGAGCAGAGCAGCCTTGGCATGCCATGGGGTGGATTGTGTGTTTATAGAAAAGTCTGGGACGTAAGCGA
GGAAATGGGCCACAGCTCAGCGGAAGGGAGGCCGGTGGTGAGGATGGAATGGTGGAGAGGCAGGCTCAGGTGTGG
CCCACCAGGAGCTGCCTTCCCCACTTTTTTGGGAGGTAGGGTGGGGAAGAAGAAAAGAGCAAATTGTTTAAAAAT
ACACATGTATATAGAAAATAGTAAAACTGTAAGGTTATCTGTGTGTTGTTGGATTCTGGGAAATTCACATTTTCT
CTATTCTCTGTATTTTCCAAATTTTCTATAACGAATATGTATTTCTTAGAATAAAAATTTTTTTCTTCAAAATTT
GGAGGAAATCGCTTTTTACAAATGTGGGTTCATCTTTTTCTGCTTAACCTTTTTTCTCATTTGATTAAAGAACTA
ATAAAAATGTTTTTGAAATTAAGATATGTCTTGTCTCCCAAATCAATGTTAGATTTCTGTGCTTTTTACATGTTT
TCATAGTTTGAAGTGGATGGA**ATG**TGGAAAAACATCTATTTAAATTCTTTGAATTTATTTTTTAAAAGTTGGA

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FIGURE 5194

MWKNIYLNSLNLFFKS

FIGURE 5195A

ATTATGGGCTGTGGGTGCCGCTGAGCAAGATGGAGCTGTCTGCAGTGGGCGAGCGGGTCTTCGCGGCCGAATCCA
TCATCAAACGGCGGATCCGAAAGGGACGCATCGAGTACCTGGTGAAATGGAAGGGGTGGGCGATCAAGTACAGCA
CTTGGGAGCCCGAGGAGAACATCCTGGACTCGCGGCTCATTGCAGCCTTCGAACAAAAGGAGAGGGAGCGTGAGC
TGTATGGGCCCAAGAAGAGGGGACCCAAACCCAAAACTTTCCTCCTGAAGGCGCGGGCCCAGGCCGAGGCCCTCC
GCATCAGTGATGTGCATTTCTCTGTCAAGCCGAGCGCCAGTGCCTCCTCGCCCAAGCTGCACTCCAGCGCAGCCG
TGCACCGGCTCAAGAAGGACATCCGCCGCTGCCACCGTATGTCCCGCCGTCCCCTGCCCCGCCCGGACCCGCAGG
GGGGCAGCCCCGGACTGCGCCCGCCCATTTCGCCCTTCTCGGAGACGGTGCGCATCATCAACCGCAAGGTGAAGC
CGCGGGAGCCCAAGCGGAACCGCATCATCCTGAACCTGAAGGTGATCGACAAGGGCGCTGGCGGCGGGGGCGCCG
GGCAGGGGGCCGGGGCGCTGGCCCGCCCCAAAGTCCCCTCGCGGAACCGCGTTATAGGCAAGAGCAAGAAGTTCA
GCGAGAGCGTCCTGCGTACACAGATCCGCCACATGAAGTTCGGCGCCTTTGCGCTGTACAAGCCTCCGCCCGCCC
CCCTGGTAGCCCCGTCCCCCGGCAAGGCTGAGGCCTCAGCCCCGGGCCCTGGGCTACTTCTGGCCGCCCCCGCCG
CCCCCTACGACGCCCGCAGCTCTGGCTCCTCCGGCTGCCCCTCGCCTACACCACAGTCCTCTGACCCCGACGACA
CGCCCCCCAAGCTCCTCCCCGAGACCGTGAGCCCATCCGCCCCCAGCTGGCGCGAGCCGGAGGTGCTCGACCTGT
CCCTCCCTCCCGAGTCGGCAGCCACCAGCAAGCGGGCACCGCCTGAGGTCACAGCTGCTGCCGGCCCGGCACCTC
CCACGGCCCCTGAGCCCGCCGGTGCCTCCTCCGAGCCCGAGGCTGGGGACTGGCGCCCCGAGATGTCACCCTGCT
CCAATGTGGTCGTCACCGATGTCACCAGCAACCTCCTGACGGTCACAATCAAGGAATTCTGCAACCCTGAGGATT
TCGAGAAGGTGGCTGCTGGGGTAGCAGGCGCCGCTGGGGGCGGTGGCAGCATTGGGGCGAGCAAGTGAGGGGGCT
CCACCAAGGAGGGGGGCTTGGGGGGGCCCTCCTGCCCGAAGTCATACTCTTGCTCCCACCCCACCCTTGCCCCCA
GCCCTCTCTCCCTGTGCTTTGCTTGTCTCAAATGGCTCGGTGTTGACCCAGGGATGGGGCTGGGTAGTTGGGGTC
CCAGAAAGCCGGGGGGTAGGGGCCACCCTGGAATGGGGCAGGGGAAGGGCACACCCCCTGCCCATGCATGGTAGCC
CACTGGGTGGTTTCTGGAAAGCCCTAGAAACTAGGGTTCCTCTGCCCCTTCCACATCCCACCTGTCTCTCTAGCT
TGCTTCCTGCTCTCCTGTGCGGCGTCTGATTTCTCGGTGCTAACCTGGCAGCTGTGGGGCCCTTAGGAGCCCCCC
ACCGAGGGTGGACACAGTCCCTTTCCTTCCTGCAGATGCCTAGGCAGGAGGAGGGCTTCCTGCCTGTTTGGCAAA
GTCCCAGGCAGAGGCCAAGGATGAGGCCTGACTCGGCTCCTCCCTCCACATCAGCCAGGGCATCAGAAGTTGGGC
CAGGGCGGGGTCTTCCCTGCTCGATTTTGGACGAGGCCTAAGTAGACCCCCTATGCCCTGCCCCAGCCCTGGCTC
TTTCCTAACCCCCTCAACGGTGGGAGGAACTGGCAGAGGGTGCGCCTGGCCACAGCCTCCCCGCATCTAAAGGCC
CCTTCAGTTCTTGACCAAAGGTGCTACGAGAACCTGCCGTGGAAACTTCCAGTTGTGCGTCTGCCCCACTCGCTG
TGTTTGTCCGTGGGTTCATACATGCATTGGGTGCTAGGCCCCAGGCTGCCGGGTGGCACCCTTTACAGTTCCTTT
GAACAGGGGCATTGAAGGCCTGGACTGCCTCTCGCCTCAGTAGGCCTGGGGACCAGGCTTGGGTCTGGAGGTTTG
CTGTGGAAGTCACCAGGCCTCCCCTCCTGGCCCAGGTGTGCTGGGGGCACCGTGCCCCCCACCCCCCTGCCCTCC
TCAGGGTGGTCAGCCCAACCTGTCGGACCTTCACTTCACATCATGGTGGGGACCGAGATAGAGAGGGAGACCCCA
TTCCAAGCTCCCTCTTCCTCCGGGTGTTTGGGGAGGATGCTGAAGAATCCATTCCCGAGGGCCTCCCGGCTTGTC
CCAGCCCCTCTTTTGCTTCTGACCACGGAGGCTTTCTCACAGCCCAGCCTGCCTGAAGCAAAGGAGGCTCCCGTG
TCCTGGGCAGCTTCTGTTTCCCTCTGCTGCCTGGGAGCTGAGGCACCCGTGCCAGTGGCAGAGGCCACAGCCCCA
GCCTTAGGCCAGGCCCTGGGAGGGCAGGCAGGCAAAGGGGAGACCAGAGGGTCTGTGTTCTCCAGGAGAATGAGG
GTGTTGGTCCCAGAATTGGGACCGGGGCCCCGCTGGCCAGCCCTGGGCCACTTCCCGGGTCTCCATTGTGCGTGG
GTGGCGTGTTCCAGGCGTGGCTGGAGCTGGCTTCCTGGCTGTGCTGCCATGGGCCCCTCCCTCAGAAGCACGTTG
GCAGGAGGCCGATCAGAACCCTAGCGCCTTTGGTCCTAAGAATGGGAGGCTGCCTTCCTTCCCAATCTCCCTGCC
AGGGCCCACAGCGTGGCCCTAGCCCTCCCCTCCCCGGGATGTAGAACGGGGACCCTCGCAGGGTTGGGGCGGGGG
CTGATACTCCTCGGCCCCTCCCTACCCTGCCCTGTGTGTTGGCTTTGTGGCCGTCCAAGTGCCAATTGGCTTTTC
GCCCAAATAAGGGCTGGTATTTCTCCTCTGTCCTTGGAGGTGATTTCCCCCTGACCCCCTCCCCCAGGTGAGTGA
CCACCTGGGTGCCAGTTACAGGTGTTTCCAGAGACCATAGAAATGTGTTTTCCTGAGAGTTCGTGTCATTCGTGA
CTTTTTTGTAAAGAAGTTGTGTTTTCAGAGGTGATTTTATGACAGGAAAGTGAAAGAATTAGTTTTGCAAAAAAA
CAAAAACAAAAAAAGAGGAAAAAAAAAAGAAATAGAAAAAAATATTGTGGGATTCCTATGGGGGGGTGGCGGGGG
AGAAAGAGCTATTTAAGAAAAAATAGTAACGCAGTGATTGCACAGGTGAGGTGGCAATGTCAGGATGGGGCGGAG
GCCTGGGCCCAGCTGGCAGGTCCCCTGGCATCGCAGGCACTGTGGAGAGGGCCTGGACCCAGATCTCCACACCCG
TGCTTGCTCAAAGGGAAGGACAACAGCGGGCCCCCGGGAGCTAACCCAAGCTGCAGGTCCCGGCAAGCTGAGGTT
TGGGAGGGTGGGGGTTGTCACTGGTGATTTTCTCCAGGGGGCTGGTGAGTGGGCAGTTTGGTTTCTTGCCCCCTT

FIGURE 5195B

CTGTTCCTTTCCCAGTTGTTGGGCCATCTGGTCCCCACCACCGCCACCCTATGGGGGAGACCTCCCTCCCCACGG
GTCACCCTAAAGCCCACAACCTCTCTGAGCCTCCCTGGCCTGAAAGGGGATGCAGGCTTCAGGAGGCAAGAAGCT
GGGCCCCTGGGGGTGGCTGGGGAGAGGGAATGCATTTCCCTTGCCACAGGTGGTCTGCTTCTGCTGGCCTGAGCT
CCAAGTGGAGCAGCCCGGGCCAGCCTTGGTGCATGAAGAGGCACCAGGCACACCGCCTTGAGGTGGGCAGTGCCC
ATGGGGGCCCGAGTGGATGGGACCGAGGGTGAGTGGAGCCTCCTTCCTCCCCTCTCTAGTACCCCCGCCTCCCAC
ACACTTGCACGGATCGGCCTCCCTTGGGAGATCAGCCTCCATGGGCCCCTCGTCCACCCTTGCTGCTTTCCATTT
GCCTAATTACCAAGCAGAAGTTGCAATCTGGTTTGCTTTATTTTTGTATGTGAAATAACCCCCAAAGCCCAATCT
CCTCCTACGTTCAATATTGGTTGGGGCATCCGTCATCTCCCCTTAAGTGCGCCCCCTCCCCACCCAAGTATCATA
GGAAACCGGTGAGGTCTGGTGTCTCTGGTTTGAGACGGTAAGTTGGGACCCATCCCTGTCTGGGTGCCCACTCTG
ACCTTTAGTTTGCCCTTCTGTGAAATGGGTGTATTGGGTAGCAAGCCCTCTTCAGAAAGCGCTGCTGGTGTCAGA
GCAGCTGCCCAGTACCAGGTGGGGGGTCAAGGTTGCTGGTACTGGGGCCCCCAGCTGCCCACAACCCCTCTTTGT
TCTCACCCTGCAAAGGGGTCAAGGTCAAAATGAGCCTCATCCTTCCTATGATCTGGGAAGAGGTGATGATCAAGT
CCCCAACTTCAGTGTGAGGTGGACAGAGTTGGGGGGATGGCCCCTTTTTGAAGAGGTGAAAATGGTTTTGGAGAA
GCGCAGCTGCTTCACTGGGGGAATGCGGCAGGGACTGGGGCCCAGGATGCTTTGGCCTATGGGGAAAAGCCCTTT
AAAAGGCAGGGCCCAGGCCCTGGAGCCAGCACAAGACTGGCCTCGAGCCCCTGAGCCAGGAGGTCCTGGAGGAGA
GCCAGGCCGGTGGGCCCGCCCAAGGCTGGAGGGTCAGCCCCAACAGGGAGCTGGGTTGGCCAGGGGGCTGGACTG
CTACCAGCCTCTCTGGCCTATGGGGACCCAAGAGGACACATCCCCCTTTTGCCCACTCTTCTGTGTCATTTTGTT
GTTTTGGTTTGTGGTGGTTTTTCTTTTTTCTTTTGTTTTTCTTTTTTCTTTCTTTCTTTTTTTTTTTTTTTTTT
TTTTTTTTGCACTTCGCCCACACAGGACAGTGGAGCCCCACCTGGTCAGTTCCACTTCCGGGCTCCCATGCACTT
GCCCAAGGCGGCCTCTTTGGGACGGGGATGGTTTGAGGAAACACTTTTAAAGAAAAAAGGAAGACATTGAAAGGT
TTTAGTTTCTTCCCTATCTGCATGTCCTCTCATATAGAAAGCCCAGAATTAGGGGCTAGAACTCCAGGAGAGGGT
CTCCCCGACTCATCTCTTGCTGACGGTCACCAGGATGCAGAAATAGGGAGATGGTTAGTGGGGGCCAAAGATGCC
CCCTCCCAGGCCTTCGTGGTTCCCTCCTCCGCCCCCTGCAATCTTTGGAGGAGTCAGTGCCTCACTCCAGCAGTG
AGTGCCTACTGTATGCAGGTAGTCAGCCAGGCAAAGAGAGACTAACGGTCTCATGGGGGAACCCTCTTGCGGGAG
GCCGGGTAGCTGGAGCGAAGCGTTCCGGCTGCCCTTGCTGCTGGGTGGAGTGGAGAGGGAGACTTCTTTTTGTTG
GTTTTAATTTAAAAACACAAAGGCCTAAAGAAATACGTATCTTATAATTTTTTTAATTTTTGAGACGTTCATTTA
ATGAATTGTGCACGAATGAATTCTATATATATAAAATATACATATATAGCTCTATATTTGGGGAGGGGCACTGTC
TCTTTTTTCTCTCATTTTTAAAATGAAGTGTTGTTGCCTTTGTATGTGGTTCAACCATCCAGCTCCCAGCTGGCT
AAACTTTGCCTCCAGTGGTCAAAGATGGGAAAAGAGTGGGGTTGGCAGGAGATGGAAAACGGAGGTGCCGCCCCA
GCATGGGGGGCAGGTCCCCCAGTCCACCCTGCCCCTCCCCCTGTGGAGAAGACGCTTAGTTGGGGGTGTGGGTTT
GGGCTCCATTCTGGATTCGGCGGTTCCGGGGGAGGGGTGGGTCTGTGCCGATTACTCTGTCTTGTACGTTTGTTC
TGCTGCTCTTCAATATTGTATCAACGCCAGGAAAGGGGGGTGAAAAGCCTCTTTTACCCCCCAAATAAATTGTCA
CATTCCGAAGCTGA

FIGURE 5196

MELSAVGERVFAAESIIKRRIRKGRIEYLVKWKGWAIKYSTWEPEENILDSRLIAAFEQKERERELYGPKKRGPK
PKTFLLKARAQAEALRISDVHFSVKPSASASSPKLHSSAAVHRLKKDIRRCHRMSRRPLPRPDPQGGSPGLRPPI
SPFSETVRIINRKVKPREPKRNRIILNLKVIDKGAGGGGAGQGAGALARPKVPSRNRVIGKSKKFSESVLRTQIR
HMKFGAFALYKPPPAPLVAPSPGKAEASAPGPGLLLAAPAAPYDARSSGSSGCPSPTPQSSDPDDTPPKLLPETV
SPSAPSWREPEVLDLSLPPESAATSKRAPPEVTAAAGPAPPTAPEPAGASSEPEAGDWRPEMSPCSNVVVTDVTS
NLLTVTIKEFCNPEDFEKVAAGVAGAAGGGGSIGASK

FIGURE 5197

CAAACAAACAAAAACTTATGGCGATGCAGGTTTTCATGCTCAGACGCTTGCATTCAGGTATGCTTTCTTTTTTGA
GAGAGACAAATGGGTCACAGCTGGCACCCTGGGAATAGCACATAATCCAGGGTGTGTCTGTGGTGGTGGACGTGC
AGGGGAACACCATCTGTCCTGTGTCATGATGGGAAAACAATCATGAACCACTGGTCTAAATTAGGCCTGGCCATG
CTTTCTCAGCCCCTCCCTCATTTAAATTTGTCTTCCCAAAGCTGAGCTAAAACTAAACCATTTCTCCTCTGCTGG
AATGATGGATTGGTCATTCAGAGGAACAATACCAGGGGTGGGAGGTTTGCAGGCTGAGTTCCCCAGGCATGGGGG
TGCAGGGTGTCCCTGAGGTTTACCCAAAGCACAGCTCGCTGGCCTGTGACCTCTGCCCTTCCTCCCACAGTGTAA
GACCCCCCAGGAAGCAGCTGGGGCCTGAACCTCTCACCTAGGAGGTAGGTTTATTTTATTTTTTGTTAGCATCAG
GCTCTGAAGGAGTTGGTATACATTTTGTTTTGAAAACATCTTCTGGACTTACACCAGAGCTTAGTGTCGTCTTTA
CTATGGAAAGAGAGGAGAATGGACAGAAATGGTTTAACTGTGTGGAGTTTTGTTTGTTTTGTTTTAAATGGAAGA
AAGACCAAAACTTTCCTGGTGGATCAGCTAGGGCCTTTGACCCTGCATTACCACGGCATTTTATCCAGGTGAAGT
CCAGGGAAAGAACTCAGCCAAATGGACTAAGGAACACACGAGTTTGGAATGCGAGACTCTGACATTTTTGTGTTC
TTGGAAATCCAATTACCTTCCCATGCCCAGATTTCCTTCCTGCCTCTTGGACCAGGCTCTGGCACTGAGGTTCTC
ACTGTTCCCAACACAGACAAAGCTTCCTGAGGGCTGGAGGGGCAGCAAGGGGAGAGGAGAATGGGGAAGAAGCGC
TTGATGTAGTTGTGTGGAATAAACAGTATTTTTTCTTTTGTAAAAAAA

FIGURE 5198

KQTKTYGDAGFHAQTLAFRYAFFFERDKWVTAGTLGIAHNPGCVCGGGRAGEHHLSCVMMGKQS

FIGURE 5199

AATAAATAAATTTTTAAAAACCAACCTGATGTGAAGTTGAAACACAAGACGCGGAAATAAAAACTCAGAGTATAA
ATATCTATATTGTTACCATTATCTGGGATAATTGATGATTTATAAGAAGCTGAGGTTTCGTCTTCCTAGAAATGG
ACTTTTATTAGGCCAGCAAGAATGACCACTTAGCCATTTAAATGATTTGTCAGCATCTTTTGCTGCTCTCTTCTA
AGACCATTGGTTTTCACTAAAGGATAAATACCTGCTAAGCAAATTATAAAATACTATAAGACATTTAATCTCCTG
GAAGAGGACTTGCTGATAATTGGATCAAAGTTCCAGCATTATTGCTCTTTTCGAATCATATGGACTTAGTGTTCT
CATGACCGAGGAGTCACATTTTTAGCTTGCTAAAATATTCACTGGAGAACATGGTGAAATCCACGAGTGGAAACG
TTCCATGGTATTTTCAAACGCCACGTGTCAGGAATTTGGCATGCCTTCCTCTGGGAGAGGCACTGGAGTGTGGCC
AGATGGAACCCAGCAGGGTACAGAGGGCATTTGTGGGAGCAGTTAGGAAACCAGGACGTCCAGCTTCTGCCTGCC
AGGGAGCTCGCTCATGTTGTCTCTGAAATTTGCATAAGAGCAATTACCTCATATTCTAATTTTAAAGATACAATT
TTTAAAGACATGGAAGGCTCTGAGGCCTCCTGAAGGCTATTCCTATGTGAGGTATTGTTTACGGGTGGCCTTTCA
CTATTTCCAAATCAGCGATGAAAAGAAGACTGAGTCTAAAATAAATGAAGCAACAGACTTCAGCAGCCTGAGAGA
ATTTTGTTCAATTCCAGTCTCCTTAAAAAAAAATCGGTTTTTGCTTTCAATTTAGGAAAATTGTTTTGGGTTGCA
TTGTTGAAAGTAATGATTTCTAGCAGCTACTTATGTATAATCTCTTAACCAATTAAATTCTGAATCTCTTAAATC
ACTTGATTATTCATGCTGGTTTTAGTTATCCACTGCTGTA

FIGURE 5200

MVKSTSGNVPWYFQTPRVRNLACLPLGEALECGQMEPSRVQRAFVGAVRKPGRPASACQGARSCCL

FIGURE 5201

ACGCGCGCCCTGCGGAGCCCGCCCAACTCCGGCGAGCCGGGCCTGCGCCTACTCCTCCTCCTCCTCTCCCGGCGG
CGGCTGCGGCGGAGGCGCCGACTCGGCCTTGCGCCCGCCCTCAGGCCCGCGCGGGCGGCGCAGCGAGGCCCCGGG
CGGCGGGTGGTGGCTGCCAGGCGGCTCGGCCGCGGGCGCTGCCCGGCCCCGGCGAGCGGAGGGCGGAGCGCGGCG
CCGGAGCCGAGGGCGCGCCGCGGAGGGGGTGCTGGGCCGCGCTGTGCCCGGCCGGGCGGCGGCTGCAAGAGGAGG
CCGGAGGCGAGCGCGGGGCCGGCGGTGGGCGCGCAGGGCGGCTCGCAGCTCGCAGCCGGGGCCGGGCCAGGCGTT
CAGGCAGGTGATCGGTGTGGCGGCGGCGGCGGCGGCGGCCCCAGACTCCCTCCGGAGTTCTTCTTGGGGCTGATG
TCCGCAAATATGCAGAATTACCGGCCGGGTCGCTCCTGAAGCCAGCGCGGGGAGCGAGCGCGGCGGCGGCCAGCA
CCGGGAACGCACCGAGGAAGAAGCCCAGCCCCCGCCCTCCGCCCCTTCCGTCCCCACCCCCTACCCGGCGGCCCA
GGAGGCTCCCCGGCTGCGGCGCGCACTCCCTGTTTCTCCTCCTCCTGGCTGGCGCTGCCTGCCTCTCCGCACTCA
CTGCTCGCCGGGCGCCGTCCGCCAGCTCCGTGCTCCCCGCGCCACCCTCCTCCGGGCCGCGCTCCCTAAGGGATG
GTACTGAATTTCGCCGCCACAGGAGACCGGCTGGAGCGCCCGCCCCGCGCCTCGCCTCTCCTCCGAGCAGCCAGC
GCCTCGGGACGCG**ATG**AGGACCTTGGCTTGCCTGCTGCTCCTCGGCTGCGGATACCTCGCCCATGTTCTGGCCGA
GGAAGCCGAGATCCCCCGCGAGGTGATCGAGAGGCTGGCCCGCAGTCAGATCCACAGCATCCGGGACCTCCAGCG
ACTCCTGGAGATAGACTCCGTAGGGAGTGAGGATTCTTTGGACACCAGCCTGAGAGCTCACGGGGTCCACGCCAC
TAAGCATGTGCCCGAGAAGCGGCCCCTGCCCATTCGGAGGAAGAGAAGCATCGAGGAAGCTGTCCCCGCTGTCTG
CAAGACCAGGACGGTCATTTACGAGATTCCTCGGAGTCAGGTCGACCCCACGTCCGCCAACTTCCTGATCTGGCC
CCCGTGCGTGGAGGTGAAACGCTGCACCGGCTGCTGCAACACGAGCAGTGTCAAGTGCCAGCCCTCCCGCGTCCA
CCACCGCAGCGTCAAGGTGGCCAAGGTGGAATACGTCAGGAAGAAGCCAAAATTAAAAGAAGTCCAGGTGAGGTT
AGAGGAGCATTTGGAGTGCGCCTGCGCGACCACAAGCCTGAATCCGGATTATCGGGAAGAGGACACGGGAAGGCC
TAGGGAGTCAGGTAAAAAACGGAAAAGAAAAAGGTTAAAACCCACC**TAA**GATGTGAGGTGAGGATGAGCCGCAGC
CCTTTCCTGGGACATGGATGTACATGGCGTGTTACATTCCTGAACCTACTATGTACGGTGCTTTATTGCCAGTGT
GCGGTCTTTGTTCTCCTCCGTGAAAAACTGTGTCCGAGAACACTCGGGAGAACAAAGAGACAGTGCACATTTGTT
TAATGTGACATCAAAGCAAGTATTGTAGCACTCGGTGAAGCAGTAAGAAGCTTCCTTGTCAAAAAGAGAGAGAGA
GAGAGAGAGAGAGAAAACAAAACCACAAATGCTAAAAACAAAACGGACTCACAAAAATATCTAAACTCGATGAGA
TGGAGGGTCGCCCCGTGGGATGGAAGTGCAGAGGTCTCAGCAGACTGGATTTCTGTCCGGGTGGTCACAGGTGCT
TTTTTGCCGAGGATGCAGAGCCTGCTTTGGGAACGACTCCAGAGGGGTGCTGGTGGGCTCTGCAGGGCCCGCAGG
AAGCAGGAATGTCTTGGAAACCGCCACGCGAACTTTAGAAACCACACCTCCTCGCTGTAGTATTTAAGCCCATAC
AGAAACCTTCCTGAGAGCCTTAAGTGGTTTTTTTTTTTGTTTTTGTTTTGTTTTTTTTTTTTTTGTTTTTTTTTT
TTTTTTTTTTTTTTACACCATAAAGTGATTATTAAGCTTCCTTTTACTCTTTGGCTAGCTTTTTTTTTTTTTTTT
TTTTTTTTTTTTTTTAATTATCTCTTGGATGACATTTACACCGATAACACACAGGCTGCTGTAACTGTCAGGACA
GTGCGACGGTATTTTTCCTAGCAAGATGCAAACTAATGAGATGTATTAAAATAAACATGGTATACCTACCTATGC
ATCATTTCCTAAATGTTTCTGGCTTTGTGTTTCTCCCTTACCCTGCTTTATTTGTTAATTTAAGCCATTTTGAAA
GAACTATGCGTCAACCAATCGTACGCCGTCCCTGCGGCACCTGCCCCAGAGCCCGTTTGTGGCTGAGTGACAACT
TGTTCCCCGCAGTGCACACCTAGAATGCTGTGTTCCCACGCGGCACGTGAGATGCATTGCCGCTTCTGTCTGTGT
TGTTGGTGTGCCCTGGTGCCGTGGTGGCGGTCACTCCCTCTGCTGCCAGTGTTTGGACAGAACCCAAATTCTTTA
TTTTTGGTAAGATATTGTGCTTTACCTGTATTAACAGAAATGTGTGTGTGTGGTTTGTTTTTTTGTAAAGGTGAA
GTTTGTATGTTTACCTAATATTACCTGTTTTGTATACCTGAGAGCCTGCTATGTTCTTCTTTTGTTGATCCAAAA
TTAAAAAAAAAATACCACCAAC

FIGURE 5202

MRTLACLLLLGCGYLAHVLAEEAEIPREVIERLARSQIHSIRDLQRLLEIDSVGSEDSLDTSLRAHGVHATKHVP
EKRPLPIRRKRSIEEAVPAVCKTRTVIYEIPRSQVDPTSANFLIWPPCVEVKRCTGCCNTSSVKCQPSRVHHRSV
KVAKVEYVRKKPKLKEVQVRLEEHLECACATTSLNPDYREEDTGRPRESGKKRKRKRLKPT

FIGURE 5203

AGATCCCTAAAATTGACCTTTTAGAAAAAGGGAGAAATAGAAATATAGTGGCCACTGATCCATAGCAATTTGAAA
GTACCACTTGGCAAAAATAATTAAATCTCTCTGCTATAGTTCATGAATATATTCCTTGGTTTGCCTATCAGGCAA
CCCCTGATTCACCTTTCTGAGAGGAATTCCTTTACCTAATGTCCTCAGGGGGCCTTGGTTTTACTTTCTTGGAGG
TTTTTATTGTACATTAATTTTCAGACACAATCTGAATGGGCATTGGAAAGTATACCCTTCTTGGAGGCTGGGCAG
CCTTAGCAGTTTACTTCCTATAATTGTGAGTCTGGGGGCAGGCTTGGGAATTAGAGTATAGATCCGTAACAGCTA
CAGTCTATTGCAGGCCAGGTTTGGGTTTTTGTTGTTGTTTTGTTCTGTTTCTTGGCCAAGTGGATTCCTAAAACT
TTAGTAAGTTTCTGGTCTGTTGTCTTCAGTCATTTACATGGACAGTATTAACCAAGGTAAAATACATTGTTTTTA
ACAAAGAACCTCATCATTTACTTGCTGGCCTCTGTGTGCTCTCCATCCCCTTTGTTCTTACAGGAATGGTACCTC
CTTGAGATCCTTTGAGACTGTAGGCTTGCATGGAATGGCAACAGTCTTAATCTGATCTCTTCCCCTAGGATGGCT
CCTATTATTTGGCAGAAAATTCTTAAGGGAAGGTTCTTAAAAAAGGTTGAGAAAGTTTTAGTAGCTCCCTCAGAG
CCTTTACTTATAAATGTTTCAGTTTGGAGTACAGTTTTCAATTCTTCAGGGCTCCAGATTTGGGACTTGGTCAAT
TTATATGGTAGACAAAGAGCAATTCTCTCAGCAAAGCTATTTTTCCCTTGCGTCACTGCAGACTTGTTAATCTTA
GTCCAAGTCACATATCTCTTGTAGGGCTTTGCTGAAAAGAGGCAAGAAGCAGCCAACACATGCTAGCACTCTGAA
GTTCTACCACCTTCGTCTCTGTGGCAGGAAGTCTCAACCTCACCTTGACTTCTGTTGGCAAGAAGTCTCACTGCC
CAAAGCCCTACCTCCTCAACTAAGCCAACCCCAGATTTAGGGCCTTCGACTTGCTGTGCTTTACTTCTAGCTGCC
AAATTCTGTATAGGTCAAGATTCTTGGCTGTAAGCAATGAAATCTTCTTTAGCTTAAACAGAAGGGAATTGATGA
ATGAGTATATATAGGTCACAGAATCAATGGGAGGGTTGAAGAAACAGATCTAGGCTGAGCTTCTAGGAATTATGT
CACAAGAGTAGGCTGCTGAAAGAGCTGCTGCTTTTAGAACAATCAAGAAGCTGCCTGCTGGATTAGGAAGCTGCC
TGCTGAACAGTTGCCAGTTCCAGAGCCACACCACCTCTGCCATGCTTTATGCCAGCAAAAATAGATACATCTCTT
CCTGCCTCTGTCCCCACGTTACTTGGCTCTGAGTAAAAGTCTCAAGTGAGTGAATCTGATGGACTGGACCAATCA
TATCTGAAACCCTAGCTGCAAAGGAGCCATGAAGTACAATCAAGAAATTGAAAAACAGTCAGAGTTAGATGATGA
GCTTCATCGTTTGTC**ATG**CAGGATTTTTATCCCCTGAAGAACCTGCTAGAGAAGTCCACCTTCACCCTTAACCAC
TGGTGCCTCAACTTAATACTTTTAAAATTCATTTGTTTCTGTTGGAATTGGGATACTAAGGTCCAGAGGTGTCCT
TCTAAAGCTGGTAGAGGTTTCACGAGTCATCAGGGACCCAGAACCCTTCTCTTTTGCTGTCCCTTTGTCCTAGTG
CATGGTTTCCACACTGTGGTGCAAGATGTCTCCTCAAGCTCTAGGCATTACATCTGCTATCCTGCTGTCAGAAAG
AAGGAAGGGGAAAAGAAGATCATTTCCTTCTCTTTAAGGACATTTCCCAGAAGTCACACAGAACATTTCCATTTA
TATTACTTTGGCCAGAACTTGGTCATATGGCCACATTTAGTTCCAGAA**TGA**TTAGGAAATGCAGTCTTTTATTGA
TCCCTGTGCCCAGGAAAATATTGGAGGCCTTTTTCAAGGAAAAAGGGGAAAACAGATATTGGTTGACAAATAGCA
GTCTCTGCCATACTGTCCCTGGATACATGTCTTTGAGTGAATGTCCCTTATTTACCATTCTGATTACTTGTTGGA
TATTTTCAATATGTGTTACAATATGGTTCCAAAATTGTATGTGATATTCCAACAGCAAGTTGGATGCAATGTGTC
ATAAAAATGACCTCAGTGTCAACCAGCATTTGAATACCGTGTCTCAATGCTGTGCACCAATAAAGAACACAGAAA
GTCAGAGTTTTCCATAAAT

FIGURE 5204

MQDFYPLKNLLEKSTFTLNHWCLNLILLKFICFCWNWDTKVQRCPSKAGRGFTSHQGPRTLLFCCPFVLVHGFHT
VVQDVSSSSRHYICYPAVRKKEGEKKIISFSLRTFPRSHTEHFHLYYFGQNLVIWPHLVPE

FIGURE 5205

GGCACGAGGGAAAGCTGAAAGCGTGCGAGGGGGGTGGGGTGGAAATAGCGGCTGCTTCTTTTCCAAGGATTTATT
TAATGGGGATGTGTTCAAGGCAAGACCGAATTCAGAAGGATATCGACGTCGTGATCCAGAAGTCCAGAGCTGAGG
ACTGCCTGTTTGCAGGGCCCGCCTGGCAGGACGACTGAGCAAGTTCTTGGAAAACCAGAGATATTAGAGCGGTGA
ATCGCGCTGGTCACGTTGGACACCTGCGCGTTAGGAGATTCTGGAGCCAGAGGGAGAGACCCCAGAAACGCCCCG
GTCGGCGACCCAGCCCGAGACGCCTGGGGTCCCAAGGGAAGCTGAACGCCCGGTGGGCTCCCGGGATGGTTCTTC
CGGTTCTTTGTGCCGCCTTCACCCAGTGAAGGAGCCTGTATCCACCCTGCCCAGTCGCTGTTGGGCTGCTGCGGA
GCTTCCGCTGCCATCTTCGGATCCTGTGTTCCGCCCGGGGCTCCACCAGGGCAGGGATGGTGGTGAGGGTCGCTC
GTGGGTCCCCTGGCAGGGAGCAGGGTCTGGCACTCACAAGGGCGCACGACTAGGACTTGTCGAATGAATCCCTTG
TCGCCTTTAGCTTTTAGTCCTTTGAAGAGAGGTGAGAGTGGAAATCAAGAGATTTTTTTCCACGGGGAAGTTCTT
TTTACAAAGCGTTGATTTCTTGGCACCCCGCGGGGCGGGCAACTGACACGGCCTCCGGTGCACCTTCTGCGCTGT
GGAGCCTCTGGGGCTCAGCTGGGCGGTGGTCGGGTCGTGGGGCGGTAGGGCGGGAGCGGGGGAAGGGAAAGCAAA
AGCTGGAAAAGAAGCAGGGGAGTTGTGAACCAGACATCCAGACCTCCTGAAGGGCTCGTGCAGACGTACAGGCGG
GATCTTCTGGAAGTGAGAATTGTTTTTGTTTGTTTATCTATTGTAGCAGAATGGGGAAATGGAGAGAGAACCTGA
AAGAGCCCCAAACTCGAGGACCTATTGCTCCCCAAGAATAACATCTTCCAGAACTAGACAGAAAACTAGGCGTCT
GGGAACCCTGAAATCCTTGGAGGAGTAGATCATCATGACCCTCTGTGTTCCTTTTGGCAAATGACTTGCTTCCAT
TGTTTGTTTGTTCAATTGTCTGTTTGTTAAATAAATAAAACCCTTTTTATGTATCTTTAAAAAAAAAAAAAAAAA
A

FIGURE 5206A

GCAGGTGGATGAATATCCATATGAACAGAAAAACAATAAAGAATATCAACACCTTTGAGAACAGAATGTTAATGC
TTGATGGGATGCCGGCAGTCAGAGTCAAAACAGAGCTTTTGGAATCTGAACAAGGGTCTCCAAACGTCCACAACT
ATCCCGATATGGAAGCCGTTCCCCTGTTGCTAAATAATGTGAAAGGGGAGCCCCCGGAGGACTCGTTATCTGTAG
ATCACTTCCAAACACAAACTGAGCCAGTGGACTTGTCAATAAACAAAGCCAGGACGTCCCCTACTGCCGTTTCAT
CCTCCCCAGTTTCCATGACAGCATCTGCCTCCTCACCTTCYTCAACTTCAACCTCTTCATCGTCTTCTAGTCGTC
TAGCCTCATCCCCAACTGTTATCACATCAGTATCTTCAGCGTCATCTTCGTCAACAGTATTAACTCCAGGGCCCC
TTGTGGCCTCTGCATCTGGTGTTGGAGGCCAGCAGTTTTTGCACATTATCCATCCCGTACCGCCTTCAAGTCCCA
TGAATTTACAGTCTAACAAACTGAGTCATGTTCACCGCATCCCCGTGGTGGTACAGTCGGTGCCTGTTGTCTACA
CAGCTGTAAGGTCACCTGGAAATGTGAACAACACTATTGTCGTGCCGCTTTTGGAGGATGGGAGAGGCCATGGCA
AAGCACAAATGGACCCCCGAGGCCTATCTCCCAGACAAAGTAAAAGTGACAGTGATGATGATGACCTGCCAAATG
TGACCTTAGATAGCGTTAATGAAACTGGATCTACGGCCCTTTCCATAGCCAGAGCAGTACAAGAGGTACATCCGT
CCCCAGTATCAAGGGTCCGGGGCAATCGAATGAATAATCAAAAGTTTCCTTGTTCAATTTCACCATTTAGTATTG
AGAGCACAAGACGCCAGAGACGGTCTGAATCCCCAGACTCCAGAAAACGGCGTATCCACAGATGTGATTTTGAGG
GATGCAACAAAGTGTACACAAAAAGTTCTCACCTGAAGGCTCACCGGAGGACACATACAGGAGAGAAACCTTACA
AGTGTACCTGGGAAGGCTGCACCTGGAAGTTCGCTCGTTCAGATGAACTGACGAGGCATTACCGCAAACATACGG
GAGTGAAGCCATTCAAGTGCGCGGACTGTGATCGCAGCTTTTCCCGGTCAGATCATTTGGCCCTGCACCGCCGGA
GGCATATGTTGGTGTGAGGAATGCTACCTGTCCAGCTGAGCGTAAGAGCTGGATCTCTTAGCGGCACCCAATTCA
GCAGGGCTGAATCCCCTTCACAGTGTTAACACAAAAGGGCATCACCATCCCACGATGTCTGAAACCAGAGCAGGA
AAAAGAAGGCACACTTCTTTTGGTCTGAAGGTAACCCCCATCATGACTAGACGAGAACCGTCTTTACGCGGCCTG
GGAGCTCAGTGACATAAATGCTGAAGAGACAGGCATTGTTTTCCGTGCTGTGTCTCTGCCATTTAAAGATGTTTG
TAGCTTGTACATTTTCTGAGCTGTCAGACATTTTGTTATTGATACCTTAAAGGTCACCTACCACAAATTGATGGC
TAGAGCAAGACCTTTTAAATTTGGATGAATCTCCCATCATCCCATCCCTTAACCCCTTTTTACCAGAAATTTTAG
TTACAATCTGAGTAAGCTAGAACACACATCCAATCTGTTACCAGCAAGCAGCATGAAAGTAGAAACGAAGAAGCA
GATGGAGAGTCCCATTACCCGCAAAGAAAGGGCACTCAGGCAGCCCTTTGCAATCGCGATGGCAGCCATTAGATA
TCACTCTCAACTTGTCATTCTGCCATGCCCTGAAGAAAACCAACATTGAATCTTTCATTTGTTTGTCGTTGATTG
TTTTTGTTTTGTTTCGATTCTGTTTTGTTCATCTGTTCGAGCAGAGGGGCAGTTGAAGTCTCGTCCTGGTCTCTG
CCCTGGCATGGACTGGCACAGAGGTGTTCTGTAGTTGAATAGGAAGAGCCTGTCTAAAAAACTACTGCCCCACTT
CAAATTGCAGTGTTCTGTCACCTAGGCATCATCTCTTCCTGCCCCTAGTATTTGATTACAAGGAACCAGGGGAAA
AAAACTTTCTTAGACACACTGGCACCAAGGTAAGAGGTGGGGCTGCCCAGGCAAAGTCAGTGAACATGAAAACTC
AGACAAAGCAGAGATGGAAATAATGCGCCTCTTGAGGAGAAAAGCAATAATGAATAAAAGGACTTTCCTACAATA
ACTTCACTGAGGACTCACGTTACCAATTTTCATACTTACTAAAGGGATTGTAAAAAACACCCCAGCATTTTAGGT
GTCTGGTTCCATTTACAGCACTGAGGTAATCTTTCTGCTGTTTGTTGTCCTGCTTGGTTGAGTACCACAATTAAA
GATTATGCTCCCCTTTTCTTGTTTGAAAACAGTTATTTGGTGACTAGAAAGGCAAGGGAGGCATAGCCGGGAATT
AACTCTTCGGTTAATGGGTCAGTTCTCCTTGGAACTGAATCAGTGGAAAGAGAATGCTTCCCATAGAAAGCCCGA
CATGGTGCTAGTTTCCTCTCTTGGAGAGCCAAGGATAAGTGACTCTCCAATAGGTTCTTCTATACCGATTTCATT
TTCTAAACTGTATCAGGACCCAGGTGTCCTGCATTGGCATCTGCAGGGATATTGAACCCACTCATCCTGTGCAGA
GGATGAGAGGAAGGTGTTAGTTCCATCAGCCCCATAAAATTATGAACCTTTTTGCAACTAGGAACATATACAGTA
AACAAGCAATACATCACCAACGAGCATTCTTTCAGAAAAATTACCATATTTTTGTCCCCACCACAAGCTGGGTTT
TTTTCCAGCTTTCTGTGGCTGAGGGGCTGGTGAGATTTTTTGTTGTTATTGTTGTTGTTGCTAGAATTTTTTATA
GCTTAGATATAAAAGGTCTCCAACAAAGACCTTTGCAATATATTTTAATTACCAACCACTTGATTTGGGAATTGC
ACATATTACCCTCACAATATTACTAGCCTCATTTTTAAATGTCTGGXCATTCTGAAATAATTTCCGGGTTACAGA
ATTACCCTTTTTAGGATCATCTTCTAATTCAGATAATCTTATTCTGATGAAGCGAGAACTATGAACGTTGAAACA
AGGACAATTTGTGTTGGATGGTATTCAAAAGGAATTTTTTAAAACATTAAGCAACAGTGTAATGATTTTCAGGTC
AAATTATGGCTTCACAAATATGTGCTCTATATTGTCTGCCAGGTCTCAAAAATTCATCAAGCAATTTCCCTCCAA
CAAGGGCTGCAGTTCTAGTGATAAATAGCATCTTTAGCTGCACAGTCTACTACTCATCAACCAGTGGGTTTTTTT
TAGCACCTGGAAAGTTTTTTTGTACTATATGCAACTCCTACTTCACATTGCCTGTGACCATTCAGAATAGAAAAA
GGTCTGTTGATGCATGCCAGTGCTGGTTACTAGTCAGTGACAGAGAACACAGAGAGGGACAAACACAGCCATGAA
CCCCCTGGCACTAGTACCAGCACCTAGTTGGCAAGTAGTGGGTGCATCTCTCAAGTGAAGTGTAGATTTGTATTT

FIGURE 5206B

AGTCCTGCTTGCTCTCATAAAAAGAGCCAGTTCYTTTCTCTGCTGAAAGATGTCTTGAGAGTATTACAGGTAGAC
TTGGTTTTTAGAATTCATAAAACTGACAGGCAGGGGAATCTTCCTGAGTGACAGCTTGGTTTAAATTTAGCACAG
AACTAGATGAGTTGCACTTTTCTAATAACATAGGATGGATTTGGGGAAGGGAACATTTTCCCTCATCCTCTGAAA
GTGGAAACCAGACTGAGATGGTAAGTTAACTGATAAAACCTGTCAGCATTCCATCATTTTCCCCTTTTGACGTAT
CAGTACTTCTAAGAAGGGATCTAAGCACAATTAAGTGAATTGAGTCCCTGGTCTAGCCTCAGGAACTGAAACTTC
TTTGGGGCTTGTCTTGAGACGTGGCAAATTCTCCTTGGTGAGTTTTCTAAAAGTATTTCCCCATGGAAAGGAGAA
AGTGGTTTGGGACAGAAAGAAATGGAATGTCTTCAGTCATGGAAGAGCCTCCATTTCATCTCATGTCCATTTCTA
GCCTCTTTCAAAAAGCACAGTGCATCATGAGCAACAGAAAAGCAGTAGAATCCTAAAGGACATAACAGTTGTTCC
GTAACTAGAAGCATTCTTTGATTTTAAATTTGAAGCTGTTCAGTTTGCAGCTGGGGATATGTGCATGGTTGGGAA
CTTATACACATAGAGCCATTAACTACTTAAGCAGCTGCAGTAGACCTGATTTTCTGTTTGCAGTATAGAGATTGA
TTTCAAGGGAGTTACATTATTTGAAAAGTTATGACTTTCAGCCTTTGAGGTTTTAAGAATCCCTTTTCATGGTCT
GATCTTAAGTTGTTTGAAAAAAGATTCACGCTTCTGCATCCACCTCTGCCCTCATTCTGTCAATTGTGTGTGGAC
TCTGAGAAGCCTGCTTGATAACTTGTCTTAAGTTCTATTAAGGCAGTTAGACTGAGATTTCTAATGACTTCACCA
TAAAGATTATACTTCTGCCTGGCGTCGTTTCTATAAAACACTATAGGACATTTGTTTTCAAAAGCAGTTGAGTAA
CAGCAACATAAACCACATTTTTTAAAAAAAATGAGCACTTTTCATTCACTTGAAAGCTTAAGTGGGAAAAAGGAAG
ATGATTGTCAGGGGAAAAACTTACAAAATGCTACAGTGTTTACAAATGCCAGTTCCAGGTGATTAGAAAGGCCGT
TTTCATTATGGTTCAAATTTGGAATAGCTTATGCAAAGATTGTGTTCATTTTTATACAATTCTTTTTAACTTTAA
ATTGCCATCTGTGTTTTAAACATAATTCTGCACTTTGGAATCAGTTCATTAGAATGATAACATTTATATGGATAA
AGATGCAGTATTCCTTATTCTGTACTTGATTTATTATACTTACCAAAGCTGCAACTGAATAAATCTGGTGAGGTG
AGGCCTTCAAAATGTATTAATACGCCTTTGTTATGTTGTTATGACTGCTTAGAAATGTAGCCATGATGTTGTTCT
AAAGATGTCTTAACATTTATAGTGAGGATTGACAGAAATTAAGCAGTGTTAAGAATACCAGCATCCATGTTACAG
TCTGCGTATAAGGGACTGAATGTGAGGTAACTCTTATGAATCATAATAGGCCCAGAAAGCCTTAATATTCATAGT
TCATAATCCAGTCTCAGATTTTGCTCTTCAATGTTGCCTGTAAACTTAGCAGGTAAATGTATTCTAGTATAAAAC
ATCATTGACCAAATCTCTTCCTTTAGTTTTTCTGAGGTAGTGCATCCCATTAAAAAAGTCTCTTCAATTAGATTT
GGCTTTAGTTTAGAAAGGGGTTTGGTAAGTCATGTCTTCCATATGACATTTCTACTCATCCCCACACTGCCTTCC
ACTTAACCTGTACAGACAGCCCCAACACATGCACATGTGTGTACACAACTGTATATGCAGCAGCCAGTGGGCTAA
CAAATATCAGCAAAGAACTTTTTTAAAAAGAATTTGTAATAATCCGTGCTGTCTAGAAATGTGAGTTACTTACCT
TATTAGGAAACCGGCTTATAATACTATATATGACTCTGCCTGCATTTTATAGTTAAGAAATGTACATAAAAATTG
CTATATTTTCACAGTTTCATTATAATGTCTGTTTAGTAACCCATGTCCACTGATACTTTAAATATGCTAATTACT
GAGCAATTGCAATAGAAATCCAGATTTTCATAAGAAAATGAAATAGAAGGATACTGCATCTTTAAAAAATAGAGT
GAAGATATTTTACTGTATTCGTAACATATGTGATAGTGGAAAAAGTATTTTCAAACTCACAAATTTTACAGAGGT
TGTAAATAGTTTGATGAAGTATGTTGGGAAAGAGAGCTTCTAGTTTTCATCACAATAAAAAGAAAAAACTTGTTC
AGATATGCCTTGTATATCTTACACACAATGAGTGAAATTGCCATGGGAACTCTGTCCAACTTTGTCAGAGCATGC
TCTTCGTGTTCTGTTCAAAATAGAGTGGCCACTTGTCATGGTTTAGCCAGGATGGTTTAAAATATAATGAAGTCA
TTTTAAGTTGCAGACAACTGATTCCAAACTAGTAATGTCTTTTCCTGAAAAGGGCAAAACAGCTGCACAGGATTT
TGCTTGTACTAAAGAGGAGCATCTTACAATTGTTCTCTTTTCTCAGTTATCTCCCTCCTCAACAGAGTGTGAACA
ACCATACAGGTGTTTATTCTTGTTTTATTCCAGGAGACTGCTTTTAGGTATAACTACATGTTGAAAGATTAAGTG
CTGTGCATATGGCCACGTGTTAAAGGAATCTATACTCGCAATAGGAATAAGCTAATGCCCATTTTCAGAAATAAA
TTAAATGCTGAAAGTGCCTGTCAGTAAACCTTATGACCAATGAGATATTCCTATACTTTTACACAGCAATAATTC
TTAATAAGACTGGGTTTTTTCCTGCACATGTGAACACACACACACATACACACAGAGAGAGTAAATACATACACA
TAGTAAATCAAATCTGTTCACATGCCCACAAAAAACGCTTTTATAGCTTTCAAATATACCTAATCTTGTTTACAT
TAACATTTCTTAATTTGATCTTTCTAACTTGCAGAACGTTAAGAACACAAATCTGAACATTAAGTTTATCTTCAG
TGAACACTATTGCATATGGTAATTATAATTTCCAGATAAAAAGTTGACTGTCATTTGCCCCAAACTTATGAAACA
GTATGTATGATTCAAAAAGTTTTGCTCAGTTAAAAACACCAATTTATTTGGCGCAAAAGACTGAAGGATATTTGT
TTGCTTGTTCATTTTATCCACTCATATCAAACGCACAAATTCATCTTTACATTTCTTCATTCCCCTTTCCCCTAA
TATTTCCTATTATCATCTTAAGAATCATTTTGGAATGAATATTGACAGAATCATTTCTCCCCAAAAAGTCTGTTG
AAGTACCACTGACACTTAGTAAGCCTAGCCTTTAACCATCTTTGCAGTTAGTCCTAAAAATTACCAGATGCACAT
TCAGAAGCTCACAGGTTTTTTCCTGTAATTACTGTACTGCTAAAAGTGGAGTCATGGATAGAAATATACAATGAG

FIGURE 5206C

ACTATATGAATAGACATGAACCCTGGAAATTCTCCAACCCTGCCATCTCAGAGCACAAATTCACCCAAACAAGCT
ACTGAGGCTATCAGTAAAATTATACTCATGGAGAGTCACACATCGGGTAAGGGCAATTTTAAAAGTAGGACTGTG
ATTAAACATTCAGGCTTTAGACTTCCATGATGGACTCAGACCACAGGCCTCAAAAAAACATCCACTGTTTTCTCC
TCCCAATGTTAGAAAGAAGAAAAGGGAGAAGGAAATGTACCAGGATAAGGGGGTAAAATAACCAATTAAGTGTCA
AAGGAAAGCTGCTGGGTTCCTTAATCTCACTGAAGTCAAGTCTTCTGACTGGGCTTCTTTCCATGTGTTGTCTGA
AAAAACTAAAGTACCTTGAAAGGTTACACATTCAGCAAACCATGAAGATAATAGCTATTCTTTATTAAACACTGT
GTGCCAAGCAATAGACTAGGCAATTTTTAGATACGTTACCTGCAACCTGTACAACATTTCTACACTTTATGGATG
GGAAACGGAGACATGGGAAGTGTGGCTGAGTTGTTCATGGATGTAGAAATAGTAAACGGCAAAGTAGGAAAGTGA
AACCGCCTATCTCTGACCTGGAGGTCTGCCTGTATCTTTCCCACTCCACCACACTGCACGTGGGTGTCCCGAAAC
CACCTTCCCAGATTCCTGACTCTCAGTAATTTTATTATGGACAACATGCATGAGTAGTCATCATATTTTTCAAGT
GAAATATCGGGACATGATATAACACATGACTTAACAATGGTACTGAATATTTGAAATCAGGCCTTTCCCGGAAAA
TCATGCATGAAGGATCATTATAAACAAACAATAGCAACCAGTTGTCTCCCCGAACTTGTCACTTTTCTCATAAAT
GTCTGGCCTGGAGCTCCAAAATCATCCAAATACTTAGTAGCATTTTAGCCTGAGTACACTTTCTCAGTTCCTCAA
CTCTTTGTATACCTTTCCACCAATATAGACATTCTAGAATCTGCTTCAGATGCATTTGAAATTTTCACCCCCATG
GAACTAGTGATTAATATCAGAGCCCACTCTTGCAGTTGGTAATGGGGTGGCAATCAAACGTTCAGATGATGATAA
AGGAGAGATAATGGATAATTCTTTTTCAGAGTTCTCACTTAACAGCTCTGTTGTGGAATGTTTTAAATAGTCTTA
TAAATAATTTGTTTATAGTATTGTTGTTAGTTTAATTGAATTTTATGTAAGAAGCTGTCCAACATCAGAGAAATG
AAATTCCTCCCACTTTCTGTGTAGAACAAGGTCTCTGACAGTATTGATTCATGGAAGTACTAATGGACTTAGAAA
ACATTAAGAGAATGTCATTTCTCATAGTGTTTCTGTTTCTGAAAATGAATCTCCTGAATTATTATCTTTCTCCCT
GTTACTTGGCTGGGGAAAGAGATAGAAGCTGTATAAACAAATTCTCTTCCATGCTCAAAGCAAGTGTTCCATGTG
CACAACCTGCTGCAGACTGGGGCCCTTCTCAGTTAATTGGGTTTCACAAGCAATAATTTCTCCACAACAAAAACC
ACAACTTGAAGTGAGTTGAAAAGAGATCAATAGTGGAAACAGTCGCCTCAGTACTTTTTCTTTCTGGATTTCATC
TCTAGAAATTTGAAGTGTTTGAGACAGAGTCCACCCTTTGTGCAAGGCGAGAACCAATGAATGGACTCCTTGTGT
GAATTATTGCATCTTCTTCCAAAGCAGGTTCATCAAGACTTTCACAGAGATTCATTTTTGTTGAGAAGTAAGGGT
TAATAGGAGGATAGAATTTGGATCCAAATCTAGTGATAAAAGTGTCCAAGCAATCAAAAAGTAAGATATTTTAGG
GACATACCAACATCTTCCCTTTCTGCTAATTTCATGCTCCAAAGATATGGCAAAAAAAAAAAATCATAAAAAGTGC
TTTTGCCCTACTTGTGTTCTAGTTTTCCCATGGCAGAATTTTGTAATTACATCCAGAATATAGTGTATATTTTGT
TCCTCAAACTTTATTACATTGGATGGATATTGTTGAACTGGGGCACTGGTGCCTATATTCAAGGCTCTTTCCTAT
CAACGTGTCTGTCCACGATTTGTTGTGTTTAAAGCTTCATTTTGAAAAATCACTGTCCCCCTGTGGGGTAGTGAC
TGTATTGTTTTGTTCATGTCTATGTGGGACACATTGCATCACATGGCAAACCAACTCTCTGTGGATGTGAGATAA
GTACTTATAAAACCAGCTTGAAAACATCGTCTTATGTATTATGTCATCCTGCATCATAATGCAATTATGTGTATC
ATAACATGCTCATTTAAAAAAAGAGAAACCAGCAAATTCATGTTTGTCCATAGAAGAATGTACTCAGAACTTTGT
GTTGTGAAACGATGAGAACAGACCACCTTTAAGATACCCACCTGCCACTTAAAATGACTTAGTTATAATTAGTAG
TAGTCTAGACGTTGTTCTTGGTGTGTGGGGGTCAATTCTAACGTCATGTTCTTTTGAATAAATCTCTCAGTCATA
TTTGAAAAAAAAAATACATGGGAATAAAGAAAAATATCATCTTTGGCCAAATCAAGCAGGCATCTTTTTTCTTTT
CCTTGACGTTTAGCTCATTATACGTGGTGATTGGATCACGAGATCTGTCCGTGTGAAAATACAGAAACATCCTTT
AGTTTACAAAACAGTTATTCTAGGCTTGAAGCCTXTGAACAGCAAATTGAATAGATGGGCTGCATCTGATTTGCT
TTATGGATGTAATTTTACAAAACACTCTTGGGTCTCTGACCCCAGGGAGTTAAGAGTGCCCAGAGGAGGTCCTAC
ACATTAAAGGATAAAGCCCCCCAGTGATGCTGGCAAGCAAATGTGTTGAGTTCTTAAATCTTCATTTGGTTTTCT
GTTCAGGATTTTAATTGCAAATGAATTTATTTCTCCAGTTTATCTAAAGACCTAATTTCCCAATAGTTTCCTCTG
CATTTATATACTCTGTAGTGTTTAGGCAACCCTGTTATAAGTTTATTAATATTATGTAAGTGTTGTTCTTGTATT
TATGTATAGTGTATGTATTGTAAATATACTCAGAGCTTTTTTCCTTTTACTGTAAAATGGTGATTTTTTTGCCCT
ATGATAATGTAAAGGGAGACCCTCCTAATGAGATTCTCTCAGAGGATGATTATTCCAGTCTATTCTCAGAGATTT
AAATGAACAAGTGTTATTGTTTTTAATGGTGTCTCAGACATATTCTGTTGGTGCATTGCTTTTCTGTATTCAACT
TTCCTATGAATTGAGCTGTGAACTGAAATAGAGTTTAAACCTTTAACTGTATGCATTTGTATAATTATCTGAATG
AAGGCATGAAGGTTAAATAAAGCATTTTGTATGGAAAAAAA

FIGURE 5207

MNIHMNRKTIKNINTFENRMLMLDGMPAVRVKTELLESEQGSPNVHNYPDMEAVPLLLNNVKGEPPEDSLSVDHF
QTQTEPVDLSINKARTSPTAVSSSPVSMTASASSPSSTSTSSSSSSRLASSPTVITSVSSASSSSTVLTPGPLVA
SASGVGGQQFLHIIHPVPPSSPMNLQSNKLSHVHRIPVVVQSVPVVYTAVRSPGNVNNTIVVPLLEDGRGHGKAQ
MDPRGLSPRQSKSDSDDDDLPNVTLDSVNETGSTALSIARAVQEVHPSPVSRVRGNRMNNQKFPCSISPFSIEST
RRQRRSESPDSRKRRIHRCDFEGCNKVYTKSSHLKAHRRTHTGEKPYKCTWEGCTWKFARSDELTRHYRKHTGVK
PFKCADCDRSFSRSDHLALHRRRHMLV

FIGURE 5208

GAGAGGCGCCCAGGCGGCGGCGGCGGCGGCCCAGCTTCTTCTTTCCTCGCACAGCCAGGCGGCCCCTGCTCGAGT
CCCGCGTCGCCATGGCCGCGGTTCCCGAGTTGCTGCAGCAGCAGGAGGAGGACCGCAGCAAGCTGAGATCTGTAT
CTGTGGACCTGAATGTTGATCCCTCGCTTCAGATTGACATACCTGATGCGCTCAGTGAGAGAGACAAAGTCAAAT
TTACAGTGCACACAAAGACCACACTGCCCACGTTTCAGAGCCCAGAGTTTTCTGTTACAAGGCAACATGAAGACT
TTGTGTGGCTACATGACACTCTTATTGAAACAACAGACTATGCTGGGCTTATTATTCCACCTGCTCCTACGAAGC
CCGACTTTGATGGTCCTCGAGAGAAGATGCAGAAACTGGGAGAAGGTGAAGGGTCTATGACCAAAGAAGAATTTG
CCAAGATGAAACAAGAACTGGAAGCTGAGTATCTCGCTGTGTTTAAGAAGACTGTGTCCTCCCATGAAGTCTTTC
TTCAGCGGCTTTCTTCTCACCCTGTTCTCAGTAAAGATCGCAACTTTCATGTTTTCCTGGAATATGATCAGGATC
TAAGTGTTAGGCGGAAAAATACTAAAGAGATGTTTGGTGGCTTCTTCAAAAGTGTGGTGAAAAGTGCTGATGAAG
TCCTTTTTACTGGAGTTAAGGAGGTAGATGACTTCTTTGAGCAAGAGAAGAACTTCCTTATTAACTATTACAATA
GGATCAAAGATTCTTGTGTGAAAGCTGACAAAATGACCAGATCTCATAAAAATGTTGCCGATGACTATATCCACA
CCGCAGCCTGCTTACATAGCCTGGCTTTAGAAGAGCCCACAGTCATCAAAAAGTACCTATTGAAGGTTGCTGAGC
TATTTGAAAAACTAAGGAAAGTAGAGGGTCGAGTTTCATCAGATGAAGATTTGAAGCTAACAGAGCTCCTCCGAT
ACTACATGCTCAACATTGAAGCTGCTAAGGATCTCTTATACAGACGCACCAAAGCCCTCATTGACTATGAGAACT
CAAACAAAGCTCTGGATAAGGCCCGGTTAAAGAGCAAAGACGTCAAGTTGGCTGAGGCACACCAGCAGGAGTGCT
GCCAGAAATTTGAACAACTTTCCGAATCTGCAAAAGAAGAACTGATAAATTTCAAACGGAAGAGAGTGGCAGCAT
TTAGAAAGAATCTAATTGAAATGTCTGAACTGGAAATAAAACATGCCAGGAACAATGTCTCCCTTTTGCAGAGCT
GTATTGACTTGTTCAAGAATAACTGATATGCCTTCACTCAGAAGAAAAGAAATGAATGTGAAAGAAAGCCAAGCA
TCACTTGCACTTAAATCATTACCACGGAAGATATATTAGCTTCAACTTTAGTTTAAAATTATGTGAATAAATATT
TTGATTTCTACAAATCTTAACATTTAACCATGTTGGTTTAAAAATATTATTGCTTGCTACTTGGACATAACTAAT
TTTTCCTTGTGCATTTAATACCTCTGGGCAGAATCCAAATACTGGGTTCTCCCGTAGTTCGTCTTTAGTTACTAA
GAAAGGGTGTAGGACACATTAGCCTTCTGGAAACAAGTAGAAGCCATCACCTGGCCCATGTCCCTACAAACCCAT
GATTGTCAGGGAGGTGCCAGTTACAGCAGGTGATTCAGCTACTTGAGGTCGGTAACAGACCTTCCATTCCTCACT
GAAGGTGGGGTTTGTGTTTTTGTTTTGCCCTGTTACTCCACTGGTAGTCATCTGGTGTTTGTACTATAACAACAG
CAAGAAAATCTCATTTATCTTTATATACTCTTTGCACCTCCTTTTTTTAGTCGAGATATAAATATTTGAGGGGAG
AGAAATATCTACAGGTATATATGGAAACAAATAATGTGGTCTGCTTTATAAGATGGCCAGATCTACATTAGGAAA
AGTATAAGCCCCCTCCCTAATGGCCGCTGGGGGGTGAGGGCGGTGTGTTGTATGTCTTTGGGTGTTTGTTTTTTT
ATAAAGCATATAATAAAATAATCGTGCTACT

FIGURE 5209

MAAVPELLQQQEEDRSKLRSVSVDLNVDPSLQIDIPDALSERDKVKFTVHTKTTLPTFQSPEFSVTRQHEDFVWL
HDTLIETTDYAGLIIPPAPTKPDFDGPREKMQKLGEGEGSMTKEEFAKMKQELEAEYLAVFKKTVSSHEVFLQRL
SSHPVLSKDRNFHVFLEYDQDLSVRRKNTKEMFGGFFKSVVKSADEVLFTGVKEVDDFFEQEKNFLINYYNRIKD
SCVKADKMTRSHKNVADDYIHTAACLHSLALEEPTVIKKYLLKVAELFEKLRKVEGRVSSDEDLKLTELLRYYML
NIEAAKDLLYRRTKALIDYENSNKALDKARLKSKDVKLAEAHQQECCQKFEQLSESAKEELINFKRKRVAAFRKN
LIEMSELEIKHARNNVSLLQSCIDLFKNN

FIGURE 5210

TGATATATGAAAAAGTCCAAATGAATATAAGGAAGTCAGTTTGGAAGCTCTTCTAGTATTCTTGGTATTAGATCA
TGAAGTGCCACAGGCTAGTGTGATAGATGGAGGGATGGAAAAAGTGCTGAATACAAGAAAGGAAGGTTGAATTTT
ATATATTTGTCTATAAAGTGTCACTCTGGGAATAAAGCTTAAATTGTCTCACTTATTTAAAAAACAGTTCCAGTT
TGCCCACGTGCAACATTAGTGAGTACCTACCCTGTTCCCATGGGTTCTCCACCCACCCGAAACAAGCACACACTG
GGACAATCTGAGGGTGCTCACGTCTGCCGGTGATAAGGAGGTGTTCATTTGCATGATGGCATTTGTGCATAAAAT
GGTACTGCTCCAGAAGTGGTTCTAGTGACCCTGTCTTCACCCTAGTGTGGCAGGCCGATGGAACAGAGCATCTGC
ATTGACTGCCATGCGCCGATTGGAGGCATTGACCACAAACCTCGGGACGGCTTTCATCTGGTCAAGTATGTGGGT
CAGGATTCTATTTCCTAAGTACTCAAACTTTGGGGTGTTGGGCTGTTTTTATTCCAGCTGATAAAGTGATACTCA
AGATAGTACTAATTACTCCAGTACATGTGGGCCTGTGTCATATTGAATAGCAATGCCAAAGTCCCAGCAGTCACA
CAGCAGGGAGGCATCTGATCTGTTGTTGGATCCCTGGGCCCTGAAATGCAAAGCAGGCTACCCTTTAACAGCTGT
TAATATGAATACAGGTGTCTTCCTTTTGGGCCTTGGGTGCACCTTCTGTAGAAATATGCATGACATAAACAGATG
ATCTAATTCACGAGGACATCTATGTCTGCAGGACCAAAACCTGGGCATCCGTCTGTCTCAGCAGATGCCATCTCA
CTTGCCAGCAATCTTAGCTTTCTCCATTTTTTATTTTTTGAGAAAAATGAAGGAGACAGACATAGTCTTATGAAA
TACCAGACTTCAGAATCCAGGTACAAATCCGATCCCACAATCCCATGCTGAGATGAATGTGGTTCTAAATGCTCC
TTTCAGAGAGTGAGTGGGACCTGCGTGGGGGCCTCACATTCTGACTGTTCCCTGCAGTCACAGCTTAAAATACTT
TCATGTTATCTCCAGAAACTGTCACAGTGTCCTCCATCCTCTAATAGTTTTGCCACTGAGAGCATCGGCCACACT
GCATCTCCTCTCTGCCGGACTTTAGATCCCGGTTTTTCCTTTGGGGAGATGAGAACAATATGGACACCCATGGGA
TGCCGACTGTCCTCCCAAACTCTAGCTGTTCTTAGCCCAACCGCTCCTCTCCTGACAAAGACTTCAGTGGAAAAG
ACGGGTCCAGGCCTGCGTCTTAACACCCTGCCCGGGGATCAGCATCAATACCACACAGCGCAGCCACCTGACGCT
GAGAATGCGGTCGGGTCTGGTCCACCGGAAAGGCGAGTCTATCATGAGAGAGACTCTTAGGAACATGGTCCAGGC
TTTGTGGAACAGCAAGTACTCTTCACATAACTCTCTTCTCAGCCGTAAGCCTCACTCCAAGTGCTGAGAAAGTGC
AGCGTGCCAAAGCGGCCAGCCTCAGCCTCTGTCTTGTGTTCTCTCGTTCTTTCCAGAGACAAGGCAGACAGAACG
CAGACCGGCCATGTGCTGGGCAACCCGCAGCGGAGAGACGTGGTGACATGTGACCGAGGGCTGCCCCCAGTGGTC
TTCCTCCTTATCCGGCTACTCACTCACTTGGCTCTGCTTCTGGGAGCGTCCCAGAGTTCCCAGGCTCTGATAAAC
ATCATTAAGCCTCCAGTGAGGGATCCAAAAGGCTTTCTGCAGCAGCACATCCTGAAGGACCTGGAGCAGTTGGCC
AAGATGCTGGGACACAGTGCCGACGAGACCATCGGCGTGGTCCACCTCGTCCTGCGCAGGCTTCTCCAAGAGCAG
CACCAGCTCTCTAGCAGAAGTGAGGAAAGGGGCAAGGGCTGGGCGGGGATCACACAGCACAACGGCAGCGCAAGC
AGGCTCGCTGTCTTGTGGGCCACCCCACACACAGCCAGTCTGAGCTCTGTCTGTGCTGTTGCTGGAAAGA**ATG**AG
AGAACACACAGAGAGAAAACCGTGTCTAGGGAAGGCGATGCCTGGGGCTGGAAAAAGGAAGCACTCTGCTTGCCC
AGAGGCTGGAAGGAGCTGCTCTGTTCCCTCCATTCACCCCTGCCTGGCTAAGACCTGCGGTATTCGGGAGCGTCT
GCACGCAAGTGTTCAGTGTGCATATATGGGGAGTCTTCAGTTCCGAAGTCAGCCCCGTAGGTCATTCCCCTACCA
TGCTGGGAGCACGTGTCGTCCACACAGAGCGTGCGTGTCAAAGGATCAATCACCATCACAGTTGTGTGCTGATTT
ATTAAATGTTTATATGTCCACAGTTATGTTAAAAAAAAAAAGCTATAAAATATTGTATTCACTGAGC**TAA**CTTTC
TATTTTAAAAATTTAAATCCATACAGAAAGAAAAGGTCTGTAAGACAACTTAGTAAAATGGTTATATGGTTATCT
GTGAAAAAAAT

FIGURE 5211

MREHTERKPCLGKAMPGAGKRKHSACPEAGRSCSVPSIHPCLAKTCGIRERLHASVQCAYMGSLQFRSQPRRSFP
YHAGSTCRPHRACVSKDQSPSQLCADLLNVYMSTVMLKKKSYKILYSLS

FIGURE 5212A

GCCGCGAACATCAAGCGGCCCGCGGCCCGCCGCAGCAGCTGCTGACCCTGCAGAACCAGGTGGCGCGGCTGGAGG
AGGAGAACCGAGACTTTCTGGCTGCGCTGGAGGACGCCATGGAGCAGTACAAACTGCAGAGCGACCGGCTGCGTG
AGCAGCAGGAGGAGATGGTGGAACTGCGGCTGCGGTTAGAGCTGGTGCGGCCAGGCTGGGGGGGCCCGCGGCTCC
TGAATGGCCTGCCTCCCGGGTCCTTTGTGCCTCGACCTCATACAGCCCCCCTGGGGGGTGCCCACGCCCATGTGC
TGGGCATGGTGCCGCCTGCCTGCCTCCCTGGAGATGAAGTTGGCTCTGAGCAGAGGGGAGAGGTGACAAATGGCA
GGGAGGCTGGAGCTGAGTTGCTGACTGAGGTGAACAGGCTGGGAAGTGGCTCTTCAGCTGCTTCANNNNNNNNNN
NNNNNNNNNNNNNNCCGCCCAGGCGGACCTTACACCTGCGCAGAAATAGGATCAGCAACTGCAGTCAGAGGGCGG
GGGCACGCCCAGGGAGTCTGCCAGAGAGGAAGGGCCCAGAGCTTGCCTTGAGGAGTTGGATGCAGCCATTCCAGG
GTCCAGAGCAGTTGGTGGGAGCAAGGCCCGAGTTCAGGCCCGCCAGGTCCCCCCTGCCACAGCCTCAGAGTGGCG
GCTGGCCCAGGCCCAGCAGAAGATCCGGGAGCTGGCTATCAACATCCGCATGAAGGAGGAGCTTATTGGCGAGCT
GGTCCGCACAGGAAAGGCAGCTCAGGCCCTGAACCGCCAGCACAGCCAGCGTATCCGGGAGCTGGAGCAGGAGGC
AGAGCAGGTGCGGGCCGAGCTGAGTGAAGGCCAGAGGCAGCTGCGGGAGCTCGAGGGCAAGGAGCTCCAGGATGC
TGGCGAGCGGTCTCGGCTCCAGGAGTTCCGCAGGAGGGTCGCTGCGGCCCAGAGCCAGGTGCAGGTGCTGAAGGA
GAAGAAGCAGGCTACGGAGCGGCTGGTGTCACTGTCGGCCCAGAGTGAGAAGCGACTGCAGGAGCTCGAGCGGAA
CGTGCAGCTCATGCGGCAGCAGCAGGGACAGCTGCAGAGGCGGCTTCGCGAGGAGACGGAGCAGAAGCGGCGCCT
GGAGGCAGAAATGAGCAAGCGGCAGCACCGCGTCAAGCCCTGCCCACTGAGCTCCTCACCCAGGAGCTGGAGCTG
AAGCATGAGCAACAGCAGAAGATCCTGAAGATTAAGACGGAAGAGATCGCGGCCTTCCAGAGGAAGAGGCGCAGT
GGCAGCAACGGCTCTGTGGTCAGCCTGGAACAGCAGCAGAAGATTGAGGAGCAGAAGAAGTGGCTGGACCAGGAG
ATGGAGAAGGTGCTACAGCAGCGGCGGGCGCTGGAGGAGCTGGGGGAGGAGCTCCACAAGCGGGAGGCCATCCTG
GCCAAGAAGGAGGCCCTGATGCAGGAGAAGACGGGGCTGGAGATCAAGCGCCTGAGATCCAGCCAGGCCCTCAAC
GAGGACATCGTGCGAGTGTCCAGCCGGCTGGAGCACCTGGAGAAGGAGCTGTCCGAGAAGAGCGGGCAGCTGCGG
CAGGGCAGCGCCCAGAGCCAGCAGCAGATCCGCAGGGAGATCGACAGCCTGCGCCAGGAGAAGGACTCACTGCTC
AAGCAGCGCCTGGAGATCGACGGCAAGCTGANNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNGGCCCTGGATGCTGCCATTGAGTATAAGAATGAGGCCATCACATGCCGCCAGCGG
GTGCTTCGGGCCTCAGCCTCGTTGCTGTCCCAGTGCGAGATGAACCTCATGGCCAAGCTCAGCTACCTCTCATCC
TCAGAGACCAGAGCCCTCCTCTGCAAGTATTTTGACAAGGTGGTGACGCTCCGAGAGGAGCAGCACCAGCAGCAG
ATTGCCTTCTCGGAACTGGAGATGCAGCTGGAGGAGCAGCAGAGGCTGGTGTACTGGCTGGAGGTGGCCCTGGAG
CGGCAGCGCCTGGAGATGGACCGCCAGCTGACCCTGCAGCAGAAGGAGCACGAGCAGAACATGCAGCTGCTCCTG
CAGCAGAGTCGAGACCACCTCGGTGAAGGGTTAGCAGACAGCAGGAGGCAGTATGAGGCCCGGATTCAAGCTCTG
GAGAAGGAACTGGGCCGTTACATGTGGATAAACCAGGAACTGAAACAGAAGCTCGGCGGTGTGAACGCTGTAGGC
CACAGCAGGGGTGGGGAGAAGAGGAGCCTGTGCTCGGAGGGCAGACAGGCTCCTGGAAATGAAGATGAGCTCCAC
CTGGCACCCGAGCTTCTCTGGCTGTCCCCCCTCACTGAGGGGGCCCCCCGCACCCGGGAGGAGACGCGGGACTTG
GTCCACGCTCCGTTACCCTTGACCTGGAAACGCTCGAGCCTGTGTGGTGAGGAGCAGGGGTCCCCCGAGGAACTG
AGGCAGCGGGAGGCGGCTGAGCCCCTGGTGGGGCGGGTGCTTCCTGTGGGTGAGGCAGGCCTGCCCTGGAACTTT
GGGCCTTTGTCCAAGCCCCGGCGGGAACTGCGACGAGCCAGCCCGGGGATGATTGATGTCCGGAAAAACCCCCTG
TAAGCCCTCGGGGCAGACCCTGCCTTGGAGGGAGACTCCGAGCCTGCTGAAAGGGGCAGCTGCCTGTTTTGCTTC
TGTGAAGGGCAGTCCTTACCGCACACCCTAAATCCAGGCCCTCATCTGTACCCTCACTGGGATCAACAAATTTGG
GCCATGGCCCAAAAGAACTGGACCCTCATTTAACAAAATAATATGCAAATTCCCACCACTTACTTCCATGAAGCT
GTGGTACCCAATTGCCGCCTTGTGTCTTGCTCGAATCTCAGGACAATTCTGGTTTCAGGCGTAAATGGATGTGCT
TGTAGTTCAGGGGTTTGGCCAAGAATCATCACGAAAGGGTCGGTGGTAACCAGGTTGTGGTTTAAATGGTCTTAT
GTATATAGGGGAAACTGGGAGACTTTAGGATCTTAAAAAACCATTTAATAAAAAAAAATCTTTGAAGGGACAAAT
GGGAAGTTTTCACTTAGAGTTTGATTTACAAGACAATAGGAGGAATCAGATTTGGGAACACAACAGGCTTGAACA
CTTTCTGGAGACTGAGAGACAGTTCAGAGTCAGCCCTCACCGTTAGCCAGACCCCTGGCCAGGACCCGCAGCAGG
CTGGTCCAGCGGGTCTGTGGGGCACTCCTGTGGGGCACTCTTGGTGGAAACGATGAGCCAGGTGATGGTCTCCCC
AGGAGTGGGCAATGGGTGAGGCCTGAGCCCTGAACTGGCTGGCTTTTGGACAGTCCTTGAAAATGTGGCTGCTCC
AGAAGCCACTCAAGCTGGACCATGGTCACAGTTAACCTCAGGCCCAACATTAAACAAAAATGTACTGAGTGCTCA
GTCACTAGAGATGATTTTACTGTTACACAGGGAAGGCAAAAAATAGCTTCCACTGCCCAATGCACTCTTCAGTTT
CACGTATATGGCTTCACAGTTTACAAAGCGCTGCCTGTGTCGCAGCAGCCCAGCCTTACAGCAGCTCAAGGGACC

FIGURE 5212B

CCAGGGAGGGCGCCTTTCTCCATTTGCATAAATGAGGCAGAGTGGCCCCCTGACTTGCCAAGGTCATGGTTGGGG
TGAGGCTGGAATGGGATTCCTTGTCTGGGTTCCTGACTCCCAGGCTGCCTGAGTTATAGCACCAATCACATTGCC
ATCCACCTCTCCTCCTGCAACTTCCCCAACAAGGGGCAGGGCCAGGAGATGGATTGGATCCATAAGGGGAATTAG
AAAACCCTAAGGCATTCTAATGGCAATCTGAACACTGACCATGGCAAAAGAGGCTTGGGACCAGGCATCCGACTT
CTTTATGTCCACAGGGTCCTGGCTGACTCCTTGATCTTTTGGGCTCAGTAATGTTTGTGGCTATAAGTCCTCCAG
CCAGGTTCCCATGAGCTTCTTCCGTGTATAAGTTCTGCTGATGGGGCGCCTCCTGGAGAAAGCGCGACTGAAAGG
AGAGTCTTCTACAGTGGAGGGAAGAACATCCACATCCTCATCTCTGGGGTCTTTGCTCTGAGAGGAAGGTGTTTT
CCCCTGGAACAGCAGCGGAGACTGGGTCAGAGCCTGGAGGGCACTGGCAGAGAGGCAGCTCCGCACGGCACAGCT
GGGAGGTGGGGTGGAGCCGGAAACAAACACCTCTTCGTCTCCCGTGGAGGGTAGCTGCCATGCACTCCAACTTGG
AGACCCCTCTTTACTCTTACTAACTTCTGAATCTTCTCTCAGGTCACAGATCCTTTTGGCTCCACGGTCAGCTTC
TTCCTTGGCTAACAGGACTCTCTTCCTGGAACTCAACCCAAACTGTCCCCAGGAAGAGGCTTCCTCGGCCTTAGG
CATGCTGTTCCTGGGAGGCGACTGGTCTGGGAGCTGGCACACTCCCTCGAGCTCAAAATCCTCCAAGATGGGCGT
CCTGTGGATGCTGAGTTCAAGGCCGTGGTCCTTGCCCTCTGACTCAAGCAGTGACAGGCTCCCAGGAAGGTCTGC
ACCGACCTCGCCCCTCCCGGAAGAGGAGCCGGCGCCACAGCCCACCGCCCTCTTCCTCCTGGGCCAGTCTTTAAT
TATGTCTGGAGTTGTCTTCCCACTGTGCTTGGGGGATGGTGTCCAAGGAACCCCATCTGTTTGAAATGGAGAGGG
GGTACTAGAAGGGCCGTGGGTGGGGGTACAGGCCTGGCAGATGTAGGTTTGCCCCCTGCTCTTGCCAGGTGTGCT
GTGGGAGAGGCGGGGGCAGGGGGGTGACACATAGGTGGGTTCAGGTTTGCTTAAGGACCTGCTGGCCCTGGGCAT
GCTGAGAGCAGGGAGGAAGCTCTCTTCTCCCAGAGAGCTCTCCTCCTTGCTGAGGGGCTCAGCCTCTAATGAAGA
GCTGGGGTCTATCTTCTTAATTCGAAGTTTGGGAAGGCCAGAAGCTTGCATCTCCAGCTCAACCTCATAGGTCTG
TGGGCTGGCAGAGTCTGTGGAATGCCAAGCTGATGCTGGCAGGTTGTCTAGTTGTGCCGAAGCCTGGCACTGTCT
CCCATCTGTGGTACAGTGCACGTCACAGGAAGGCATCAGAGGAGAGCCAGGCCCACAGGAAGGAGGAGATGGGGG
AATCCCAGGGTGAGACAGAGAAGACTTCTCAGCATCTGCTGTCCTTAGCCCCTCACCCTCTTCCACTGATAAGAC
GTTACTTTTCAAGTCACCAATGCCATGGTGTTCGGCTTCACTGAGGAGAGTGACATGCTCTGTGTCACTTGTAAT
GAGCAGAGGAGAGGATGCATGCCAATCACTCCTGAGACCAGGGCCTGGGTAGCCCCGTCTTTCAGGAGGAGACTG
AGGAGAGAGGCTCAGTCCCTTCTGGTCATCTCTAGAGTCTGTGGGGGCAGCTGGGCTGTCAGCTGTGCCAACCCC
AGGAGTAGCGGAGGCATCAGGCTGACACTCCACGATGCTCCTTCTGGGATCAGAGGTCTTTCTACACCGTTTCCC
AACTTTAGAAGGGGGTGGAGGAGGGACGGTGTCCAATGTAGCTCTCTGTGAGAGTTCAGGGGGAGTTGAGGGAAC
AGGGCAGGAGAGAGATGCAGCTACGCTGGGTGACATCTGGGGCTCTTTCTGATCCAGTTCTCCTGGGGAAGGACA
CTCTATTTTAGATTTCCTAAATGGACTCTTCTTGGAGACATCACATAAAGGAGAGGTAAACAGTTTCTTTGGCGT
AACAGGTGGGGAAGAAGTCACAGTTGAATTCCCTGGTCTTTTTGGAGTTTTGATAGCTTTATCCTTTAGTTTCTG
GGCTGGTTCCTCTGCCCGAGCAGCTCTGAGGACATGGGGCTGTTGGTGTGTTTGATTCTGAGGCGTGCCCATGAA
GGCTGCTGCTCTCGGAGGTGTTCTGAGAGGGTCTCTGATGGGAGTGAGACACTCTCTCCTGGGCTGGGCAGTCGA
TGAAGTTGGAGGGGCTGGACAGGAGGGGCTTTCTGGACTGGAATTCACTGAATGTGGCCAAGTACAGTTTGGCAA
AAACCCAGGCGGCTGAGTACCTTGCCTCTTAGGAGTTCTTGGTGTCTTCGTTTCAAGAGAGGTACCTTCTCCTGC
CTGGGTATGTCGTTTTTGAGGAGTGATTTTTGAATCCAATGGTGAGTCATGGCCGGGTGAGGAGGAGTCTTTTAA
GGACTCCTTAAAAGCTGCCTGCTTTGTAGGGGTCATTTTTGCAGGGGACTTCTGCAGCCTTTCTGGAGTATACAA
CGGAGTTTGTGGTGTATGAGAGATCCTTCTTGGTGTAGTTTTAGAAAAGCTCAGAGATTTCTGGTGACTCTTCTT
GGGAGTCTGGTAAGCTGCAGGTACCTCCGAATCCAAAGTGTTTCTTGAACGCTTTTTCATTCGAGCTGAACCCTT
TTCTGAGGGGCTGATCATCTCAGACATTGCCCCAAAAAGAAGACTCTTGGGAGACCGAATACTTTGGACTGGAGA
ATTTTCTCTTTGGTCTGACTTATCTTGCTGGAAAGAGTGGACTCTTTGCACACTTCGAGACTTCGGCTGAGACAC
AGAATAGAAGGAGGCAGAATGTGTCCTGCTAAATGACAACTGCTTGATTCGAGGACTTCGTCTCAGACTTATTTC
ATCTCCTTTTTCAGGGGACTCTTCAACAACACCAATATCAGGACCAGGATCAGAGGACCTCGAGGAACCACATGC
ACAAGGATTATTCCATACCACTTGTAATTAACACTTATTAAGGAGACAGGCAGCTTCTCACTTAACAAGATCACA
AAGATCACAGGGTCTGATAACACCAGTGCTGGTAAAGGGCTCTCATACGTGATTATTGTCAAGAGGGA

FIGURE 5213

MEKVLQQRRALEELGEELHKREAILAKKEALMQEKTGLEIKRLRSSQALNEDIVRVSSRLEHLEKELSEKSGQLR
QGSAQSQQQIRREIDSLRQEKDSLLKQRLEIDGKLXXXXXXXXXXXXXXXXXXXXXALDAAIEYKNEAITCRQR
VLRASASLLSQCEMNLMAKLSYLSSSETRALLCKYFDKVVTLREEQHQQQIAFSELEMQLEEQQRLVYWLEVALE
RQRLEMDRQLTLQQKEHEQNMQLLLQQSRDHLGEGLADSRRQYEARIQALEKELGRYMWINQELKQKLGGVNAVG
HSRGGEKRSLCSEGRQAPGNEDELHLAPELLWLSPLTEGAPRTREETRDLVHAPLPLTWKRSSLCGEEQGSPEEL
RQREAAEPLVGRVLPVGEAGLPWNFGPLSKPRRELRRASPGMIDVRKNPL

FIGURE 5214

ACTCACAGGACAACCACCACAGGCACCACCACACTCCTTGTACCCCTTGCCCTTCTCCCAGCTCATTGCTCCAGG
AGAGAGAAGAGTTCAAAAAATAAAGTAATCATAAACTTGAACTCTCTCCATTCTCTTGTTCCCATTTACAGGTGA

ATCTCTTCCTTTAAGCCATTTTTGTCTCCTGTGAATACAGCCTTATCTCCACCTGTTTCTTAGATCCCATCTCCC
CTGGCTTATTTTTTCCATTCATTACCCTCTTTGTTCCCTTTACTTCTCAACCTGTGCTATATACATGCTGTTCTC
TCTGTTGAGATTGCCTTATTTCCATCTAACATTCTCTCTCCTGCTATTCTGATTTGTCATTCACAACTGATTTCA
AGAGTCACCTTCACCAGGAAGTCTTCCTTGACCACCATCATTCCTGCCTGATTAGAGGGCTTCCTCATGGTAATA
TGTGTTCTCAAGTTTTCAGTGTCAAGGAATGCCATCCCAGAAGCTCATTCTCAGATGCACAACAGCCAGAACAGT
CTCAAGCAGCATTCTAGAGCTTGGAATTTAAGAACTACGCATTGCCTATAAAGTGAAACATAGGCTAATATAGAT
TAAATTGAATATTGAATAAAAAATATATTTATTTATCC

FIGURE 5215

THRTTTTGTTTLLVPLALLPAHCSRREKSSKNKVIINLNSLHSLVPIYR

FIGURE 5216

TGGGACCGCTGACCGCGCGGCTGCTCCGCTCTCCCCGCTCCAAGCGCCGATCTGGGCACCCGCCACCAGCATGGA
CGCTCGCCGCGTGCCGCAGAAAGATCTCAGAGTAAAGAAGAACTTAAAGAAATTCAGATATGTGAAGTTGATTTC
CATGGAAACCTCGTCATCCTCTGATGACAGTTGTGACAGCTTTGCTTCTGATAATTTTGCAAACACGAGGCTGCA
GTCAGTTCGGGAAGGCTGTAGGACCCGCAGCCAGTGCAGGCACTCTGGACCTCTCAGGGTGGCGATGAAGTTTCC
AGCGCGGAGTACCAGGGGAGCAACCAACAAAAAAGCAGAGTCCCGCCAGCCCTCAGAGAATTCTGTGACTGATTC
CAACTCCGATTCAGAAGATGAAAGTGGAATGAATTTTTTGGAGAAAAGGGCTTTAAATATAAAGCAAAACAAAGC
AATGCTTGCAAAACTCATGTCTGAATTAGAAAGCTTCCCTGGCTCGTTCCGTGGAAGACATCCCCTCCCAGGCTC
CGACTCAGTAAGTACCAGTTCTTGTTTATATACAGTAGTGTTTTGGGCACACCTAAGGTCGATCTGTGTTGTATT
TAAAAATCTAATTTCTTTATTTGTGTGGCCTTCTAGACAAACGAAGGGGACCCAGAGGAAACCCCCTGACAGATC
TCTGGATGATCCTCCTTGAATCCTGGGCAGTTTGGTCTCTCCTTGCTGTGCTCCTGTGGCACTAAACTCCTTTTG
ATTGGTTCTTTCTTTCCTTCCCAGCTAGACTAAGCCCCTCATGGGCAGGTAATGAAGATTGAAAACTTTTTTCTG
TTCTCCAGTGTGAGCACATTCCTCCTACATGGTAGATGTGCAATAGATGTTTTTAAAATTGGAGAATGAAAATAA
AAGAAGAAAATCACAATTTCTTATCAAGTTGTAGCTTGGTATCATACACAATTGCATTCTGAGGAATTAAGGTGG
TACAACTTAGGGAGATTTGGTGTGTCTGCTGTGATAGAAAAGATTTCTTTTTCCTAGCTTTCCCTGAGGAAAGGA
AAGATGGAAAGAGGGAAGCCATACAGATATCCCTCTGTTTTGCAGTGTAGAAACTGAATGTGTTTCTACAGGGTC
AAGAGACATCAGAGAAATTTTTTTTTTTTTAGAACAGAAGATCATTTCTTACATCTTCATTAAGTAAAAGAATAA
ATAGCTCATCTCTCAAGTTGAAAGAAACTGGGCTTGGTATTATTACAAAAGCAAAATTAAAATGGCCATATAGGT
TTTAGGCTCATTTTGCCATGCATTATGCAAAGGACAAAGAAAAAGAAAAAATAGAGCTCTCTTTACTTAAAACAT
CCTTAAGGAGAAGCTATGAATTCCCCAAAGTACTACTTCTCTTTATTATGGAATAAATGGATTCCCTTATACGTG
CTTTGTTTAGCAATCAAGGAGACCGCGAAGGCGTACATTCCCGGGTGTTGCTTCCAGGAGAAACCCTGAACGGAG
AGCTCGTCCTCTTACCAGGTCAAGGTCCCGGATCCTCGGGTCCCTTGACGCTCTACCCATNNNNNNNNNNNNNNN
NNNNNNNNNNTACATGTTGGTGAGAAAGAGGAAGACCGTGGATGGCTACATGAATGAAGATGACCTGCCCAGAAG
CCGTCGCTCCAGATCATCCGTGACCCTTCCGCATATAATTCGCCCAGTGGAAGAAATTACAGAGGAGGAGTTGGA
GAACGTCTGCAGCAATTCTCGAGAGAAGATATATAACCGTTCACTGGGCTCTACTTGTCATCAATGCCGTCAGAA
GACTATTGATACCAAAACAAACTGCAGAAACCCAGACTGCTGGGGCGTTCGAGGCCAGTTCTGTGGCCCCTGCCT
TCGAAACCGTTATGGTGAAGAGGTCAGGGATGCTCTGCTGGATCCGAACTGGCATTGCCCGCCTTGTCGAGGAAT
CTGCAACTGCAGTTTCTGCCGGCAGCGAGATGGACGGTGTGCGACTGGGGTCCTTGTGTATTTAGCCAAATATCA
TGGCTTTGGGAATGTGCATGCCTACTTGAAAAGCCTGAAACAGGAATTTGAAATGCAAGCATAATATCTGGAAAA
TTTGCTGCCTGCCTTCTACTTCTCAAATCTTTCTTGTAAAAGTTTCCAATTTTTTCACTGAAACCTGAGTTAAAA
ATCTTGATGATCAGCCTGTTTCATAAGAAACTCCAATCAAGTTAATCTTAGCAGACATGTGTTTCTGGAGCATCA
CAGAAGGTATATTGCTAGTTACACTTTGCCCTCCTGCAGTTTCTTCTCTGCTCCCAACCCCCATCTCATAGCATC
CCCCTCTATTTCCAATGCTCCTCTCCAACCGCTTAGTTTCTGAATTTCTTTTAAATTACAGTTTTATGAAAGCAT
ATTTTATTTACTTGGTGTTGAAATAGCCCTCATAAAACCTAAGCACTTGGAAACACAATAATAGTATTAACTAAC
TAGATCTATTGAATTTCAGAGAAGAGCCTTCTAACTTGTTTACACAAAAACGAGTATGATTTAGCATTCATACTA
GTTGAAATTTTTAATAGAATCAAGGCACAAAAGTCTTAAAACCATGTGGAAAAATTAGGTAATTATTGCAGATTG
ATGTCTCTCAATCCCATGTATTGCGCTTATGTTACAAGTTGTTGTCACAGTTGAGACTTAATTTCTCCTAATTTC
TTCTGCCCGAAGGGTAAGTGGTGCCGTCCAGCTTACACAATCATAATTCAAAGGTTGGTGGGCAATGTAATACTT
AATTAAAATAATGATGGAAGAGCTATCTGGAGATTATGAGTAAGCTGATTTGAATTTTCAGTATAAAACTTTAGT
ATAATTGTAGTTTGCAAAGTTTATTTCAGTTCACATGTAAGGTATTGCAAATAAATTCTTGGACAATTTTGTATG
GAAACTTGATATTAAAAACTAGTCTGTGGTTCTTTGCAGTTTCTTGTAAATTTATAAACCAGGCACAAGGTTCAA
GTTTAGATTTTAAGCACTTTTATAACAATGATAAGTGCCTTTTTGGAGATGTAACTTTTAGCAGTTTGTTAACCT
GACATCTCTGCCAGTCTAGTTTCTGGGCAGGTTTCCTGTGTCAGTATTCCCCCTCCTCTTTGCATTAATCAAGGT
ATTTGGTAGAGGTGGAATCTAAGTGTTTGTATGTCCAATTTACTTGCATATGTAAACCATTGCTGTGCCATTCAA
TGTTTGATGCATAATTGGACCTTGAATCGATAAGTGTAAATACAGCTTTTGATCTGTAATGCTTTTATACAAAAG
TTTATTTTAATAATAAAATGTTTGTTCTAACTTGTCTGCTTTTTTTAAAAATAATCTTACTGTACTTAATTCTAA
TTTTTTCCTCATATTTAAATAAAAGGCCATTTCCACC

FIGURE 5217

GTADRAAAPLSPLQAPIWAPATSMDARRVPQKDLRVKKNLKKFRYVKLISMETSSSSDDSCDSFASDNFANTRLQ
SVREGCRTRSQCRHSGPLRVAMKFPARSTRGATNKKAESRQPSENSVTDSNSDSEDESGMNFLEKRALNIKQNKA
MLAKLMSELESFPGSFRGRHPLPGSDSVSTSSCLYTVVFWAHLRSICVVFKNLISLFVWPSRQTKGTQRKPPDRS
LDDPP

FIGURE 5218

GCAAACATATGGGTAAGTTATTTTTTATAATCCCATGTATTATAATCCATCTCTATAAAATAGTTATGGATTTAC
ACTGTAAATTAAACCATGATTGTATTATTTTGAAGTAAATTGTAACATCCTTTGTTGTCTGCCACTGAAAGAAAA
TCCTCAGACTCTAGAACATATAAATAAATTATCAAGCCATCCATGAGGTCAAAAGTATTTGTCCCACATGTCCCG
GGTCTAAGAGAAGTAAATTAATGAATGAATATGCCTTGTCTTTCGTGATCGATCTTTGTTGTTGTGGGTTTTCTG
TCCTTGTAGAAGTCTACTTTCACAAGCATGCTTTAGTATAGTTATTACAGCCAAACATGTATAATTATAATCGGA
AGTAAGGATTAAGTGGCGATAATGAAAACATCTGTTTTTCCCATACCTTATTTGAAACTGGATCACCAAATCTTC
AGGAGAATATTAGAGGTGTGTTTATTCCGTCTGTACCAGTGTTAGCTACACTATTGCCACATTAAAAATAGGAAA
CATTTATATGTTCCCTTTGAGTCTTTCTGAAAGGGAAAGAAAAATTACAGTACTCACTGGTTCATAATACAAATG
CTGGATAATGCTAAAAGTCAACTAAGTATCAAAAACTTACCAAGCCTCTTTTTTTAAAAC

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FIGURE 5219

KHMGKLFFIIPCIIIHLYKIVMDLHCKLNHDCIILK

FIGURE 5220

CCTGTCTCAAAAAAAAAAAAAATATCACCCTTAAATCAACAAAAAGACCTCATGCTCATGCAGTGGACATTTCTT
GGCCTGTTTTCCTGTGGGTTTTCTTCAGCATGATATGAAGCAACTGTTGGCATAGCCAGTGGGATAAATAAGAAA
TGGAATCATTTGGCTGCCTCGTCACTTGTGCTAATGGTCAGTTGTACACACATGACATGTGGAAGTGACCTGTAG
CAGCGGTCACTCATTTTAACAATTGAACTCTGCTGGGTTGGGTATTTACCTTTGTCTAGAAAAGAAATATGATAT
ATTTTCTCTAAATAAATTTATTTTCATCATTCCAAAA

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FIGURE 5221

PVSKKKKISPLNQQKDLMLMQWTFLGLFSCGFSSA

FIGURE 5222

CAAAGAGCTTCAAATCCCAGCTCTTTCTACTAGAGATAATGAAAATCAATGTGACTATAGGACCCAGAATGTGTT
GGGTTTGCAAAAGCAGATCACCAATATGTACCCCGTTCAGCAAAACGAATCAAAAGTTAATAAGAAGCTTAGGCA
GAAAGTAAATCGGAAGACAGAAATAATTTCTGAAGTGAATCATTTAGATAATGACAAAAGTATAGAATACACAGT
TAAAAGTCACTCACTCTTTTTAACGCAAAAAGATAAGGAAATCATCCCCGGAAACCTAGAAGACCCAAGTGAGTT
TGAAACACCTGCTCTTTCTACCAAAGATAGTGGAAACCTGTATGATTCTGAGATTCAAAATGTTTTGGGGGTGAA
ACATGGCCATGATATGCAACCTGCTTGTCAAAATGATTCAAAAATAGGTAAGAAGCCTAGACTAAATGTATGTCA
AAAGTCAGAAATAATTCCTGAAACCAACCAAATATATGAGAATGATAACAAAGGTGTACATGACCTAGAAAAAGA
TAACTTCTTCTCTCTAACCCCAAAGGATAAAGAAACAATTTCTGAAAATCTACAAGTCACAAATGAATTTCAAAC
AGTTGATCTTCTCATCAAAGATAATGGAAATTTATGTGATTATGACACCCAGAATATATTGGAGTTGAAAAAGTA
TGTTACTGATAGGAAATCTGCTGAGCAAAATGAATCAAAAATAAATAAGCTCAGGAATAAAGTGAATTGGAAGAC
AGAAATAATTTCTGAAATGAACCAGATATATGAGGATAATGATAAAGATGCACATGTCCAAGAAAGCTATACAAA
AGATCTTGATTTTAAAGTAAATAAATCTAAACAAAAACTTGAATGCCAAGACATTATCAATAAACACTATATGGA
AGTCAACAGTAATGAAAAGGAAAGTTGTGATCAAATTTTAGATTCCTACAAAGTAGTTAAAAAACGTAAGAAAGA
ATCATCATGCAAGGCAAAGAACATTTTGACAAAAGCTAAGAACAAACTTGCTTCACAGTTAACAGAATCTTCACA
GACATCTATCTCCTTAGAATCTGATTTAAAACATATTACTAGTGAAGCAGATTCTGATCCAGGAAACCCAGTTGA
ACTATGTAAGACTCAGAAGCAAAGCACTACCACTTTGAATAAAAAAGATCTCCCTTTTGTGGAAGAAATAAAAGA
AGGAGAGTGTCAGGTTAAAAAGGTAAATAAAATGACATCTAAGTCAAAGAAAAGGAAGACCTCCATAGATCCTTC
TCCAGAGAGCCATGAAGTAATGGAAAGAATACTTGACAGCGTTCAGGGAAAGTCTACTGTATCTGAACAAGCTGA
TAAGGAAAACAATTTGGAGAATGAGAAAATGGTCAAAAATAAGCCAGACTTTTACACAAAGGCATTTAGATCTTT
GTCTGAGATACATTCACCTAACATACAAGATTCTTCCTTTGACAGTGTTCGTGAAGGTTTAGTACCTTTGAGCGT
TTCTTCTGGTAAAAATGTGATAATAAAAGAAAATTTTGCCTTGGAGTGCTCCCCAGCCTTTCAAGTAAGTGATGA
TGAGCATGAGAAGATGAACAAGATGAAATTTAAAGTCAACCGGAGAACCCAAAAATCAGGAATAGGTGATAGACC
ATTACAGGACTTGTCAAATACCAGTTTTGTTTCAAATAACACTGCTGAATCTGAAAATAAGTCAGAAGATCTATC
TTCAGAACGGGCAAGCAGAAGAAGAAGGTGTACTCCTTTCTATTTTAAAGAGCCAAGCCTCAGAGACAAGATGAG
AAGATGAAGTGAATTTATGGATTCTGGTTTTTCTGAATTTTCAAAGCATAAGGAATCAAAACAGAAATATAGTAT
CAAGAAGATGAAATGCTTAATGAAAAGGTTTTTTTTTGTTTCTTTGGCCTTTCATGGAGTGTTGATTTGTCCATT
CTTAATGTTTATTAATAGGTATATGTGCATAAAATAGCTATTTTGTAACATTAAACTTTTTGAGTCATTTTGGTC
ATCATATAACTTACCTTCCTGTTTATTTAAGCTTCTTTTTACCTAGTAGCCTTTAACCAAACAATAGCCTTTTAA
CCAAATAAAATGTGTTAAT

FIGURE 5223

MYPVQQNESKVNKKLRQKVNRKTEIISEVNHLDNDKSIEYTVKSHSLFLTQKDKEIIPGNLEDPSEFETPALSTK
DSGNLYDSEIQNVLGVKHGHDMQPACQNDSKIGKKPRLNVCQKSEIIPETNQIYENDNKGVHDLEKDNFFSLTPK
DKETISENLQVTNEFQTVDLLIKDNGNLCDYDTQNILELKKYVTDRKSAEQNESKINKLRNKVNWKTEIISEMNQ
IYEDNDKDAHVQESYTKDLDFKVNKSKQKLECQDIINKHYMEVNSNEKESCDQILDSYKVVKKRKKESSCKAKNI
LTKAKNKLASQLTESSQTSISLESDLKHITSEADSDPGNPVELCKTQKQSTTTLNKKDLPFVEEIKEGECQVKKV
NKMTSKSKKRKTSIDPSPESHEVMERILDSVQGKSTVSEQADKENNLENEKMVKNKPDFYTKAFRSLSEIHSPNI
QDSSFDSVREGLVPLSVSSGKNVIIKENFALECSPAFQVSDDEHEKMNKMKFKVNRRTQKSGIGDRPLQDLSNTS
FVSNNTAESENKSEDLSSERASRRRRCTPFYFKEPSLRDKMRR

FIGURE 5224

GTCACCCCCAGCGGGCGCGGGCCGGAGCACGGGCACCCAGCATGGGGGTACTGCTCACACAGAGGACGCTGCTCA
GTCTGGTCCTTGCACTCCTGTTTCCAAGCATGGCGAGCATGGCGGCTATAGGCAGCTGCTCGAAAGAGTACCGCG
TGCTCCTTGGCCAGCTCCAGAAGCAGACAGATCTCATGCAGGACACCAGCAGACTCCTGGACCCCTATATACGTA
TCCAAGGCCTGGATGTTCCTAAACTGAGAGAGCACTGCAGGGAGCGCCCCGGGGCCTTCCCCAGTGAGGAGACCC
TGAGGGGGCTGGGCAGGCGGGGCTTCCTGCAGACCCTCAATGCCACACTGGGCTGCGTCCTGCACAGACTGGCCG
ACTTAGAGCAGCGCCTCCCCAAGGCCCAGGATTTGGAGAGGTCTGGGCTGAACATCGAGGACTTGGAGAAGCTGC
AGATGGCGAGGCCGAACATCCTCGGGCTCAGGAACAACATCTACTGCATGGCCCAGCTGCTGGACAACTCAGACA
CGGCTGAGCCCACGAAGGCTGGCCGGGGGGCCTCTCAGCCGCCCACCCCCACCCCTGCCTCGGATGCTTTTCAGC
GCAAGCTGGAGGGCTGCAGGTTCCTGCATGGCTACCATCGCTTCATGCACTCAGTGGGGCGGGTCTTCAGCAAGT
GGGGGGAGAGCCCGAACCGGAGCCGGAGACACAGCCCCCACCAGGCCCTGAGGAAGGGGGTGCGCAGGACCAGAC
CCTCCAGGAAAGGCAAGAGACTCATGACCAGGGGACAGCTGCCCCGGTAGCCTCGAGAGCACCCCTTGCCGGTGA
AGGATGCGGCAGGTGCTCTGTGGATGAGAGGAACCATCGCAGGATGACAGCTCCCGGGTCCCCAAACCTGTTCCC
CTCTGCTACTAGCCACTGAGAAGTGCACTTTAAGAGGTGGGAGCTGGGCAGACCCCTCTACCTCCTCCAGGCTGG
GAGACAGAGTCAGGCTGTTGCGCTCCCACCTCAGCCCCAAGTTCCCCAGGCCCAGTGGGGTGGCCGGGCGGGCCA
CGCGGGACCGACTTTCCATTGATTCAGGGGTCTGATGACACAGGCTGACTCATGGCCGGGCTGACTGCCCCCCTG
CCTTGCTCCCCGAGGCCTGCCGGTCCTTCCCTCTCATGACTTGCAGGGCCGTTGCCCCCAGACTTCCTCCTTTCC
GTGTTTCTGAAGGGGAGGTCACAGCCTGAGCTGGCCTCCTATGCCTCATCATGTCCCAAACCAGACACCTGGATG
TCTGGGTGACCTCACTTTAGGCAGCTGTAACAGCGGCAGGGTGTCCCAGGAGCCCTGATCCGGGGGTCCAGGGAA
TGGAGCTCAGGTCCCAGGCCAGCCCCGAAGTCGCCACGTGGCCTGGGGCAGGTCACTTTACCTCTGTGGACCTGT
TTTCTCTTTGTGAAGCTAGGGAGTTAGAGGCTGTACAAGGCCCCCACTGCCTGTCGGTTGCTTGGATTCCCTGAC
GTAAGGTGGATATTAAAAATCTGTAAATCAGGACAGGTGGTGCAAATGGCGCTGGGAGGTGTACACGGAGGTCTC
TGTAAAAGCAGACCCACCTCCCAGCGCCGGGAAGCCCGTCTTGGGTCCTCGCTGCTGGCTGCTCCCCCTGGTGGT
GGATCCTGGAATTTTCTCACGCAGGAGCCATTGCTCTCCTAGAGGGGGTCTCAGAAACTGCGAGGCCAGTTCCTT
GGAGGGACATGACTAATTTATCGATTTTTATCAATTTTTATCAGTTTTATATTTATAAGCCTTATTTATGATGTA
TATTTAATGTTAATATTGTGCAAACTTATATTTAAAACTTGCCTGGTTTCTAAAAAAAAAAAAAAAAAA

FIGURE 5225

MGVLLTQRTLLSLVLALLFPSMASMAAIGSCSKEYRVLLGQLQKQTDLMQDTSRLLDPYIRIQGLDVPKLREHCR
ERPGAFPSEETLRGLGRRGFLQTLNATLGCVLHRLADLEQRLPKAQDLERSGLNIEDLEKLQMARPNILGLRNNI
YCMAQLLDNSDTAEPTKAGRGASQPPTPTPASDAFQRKLEGCRFLHGYHRFMHSVGRVFSKWGESPNRSRRHSPH
QALRKGVRRTRPSRKGKRLMTRGQLPR

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FIGURE 5226

GTTTTTAAAGTGTAAGACAGGAAAGGGATCTATTTGATGTCTATCTTCAGATATATTGGCAGTTTTCCTTAAGCT
ATTTAGTTCCTCATCTGTTGCTTTTTCATTTTGTATACTGCAAGTTCCCAGGCAACTCGAATTTGCAAACACAGC
CATGGATACACTATTTACCTTACAGTAGTTTCCTGGGAATCTAAGTCTGGTTTTTGTTATTCTTCCCTCCCCTCC
ACTGCATAATCATGTATAACTAGCAACATTTATGGTTATAGGTTGATTTCCTAAGTGTGGCTGATGGTAGCCTCT
AGTTTGAAGTGAGGGAAGAATGAGTAGTCAGGAACTGGTCACTTTGAATGTGGGAGGGAAGATATTCACGACAAG
GTTTTCTACGATAAAGCAGTTTCCTGCTTCTCGTTTGGCACGCATGTTAGATGGCAGAGACCAAGAATTCAAGAT
GGTTGGTGGCCAGATTTTTGTAGACAGAGATGGTGATTTGTTTAGTTTCATCTTAGATTTTTTGAGAACTCACCA
GCTTTTATTACCCACTGAATTTTCAGACTATCTTAGGCTTCAGAGAGAGGCTCTTTTCTATGAACTTCGTTCTCT
AGTTGATCTCTTAAACCCATACCTGCTACAGCCAAGACCTGCTCTTGTGGAGGTACATTTCCTAAGCCGGAACAC
TCAAGCTTTTTTCAGGGTGTTTGGCTCTTGCAGCAAAACAATTGAGATGCTAACAGGGAGGATTACAGTGTTTAC
AGAACAACCTTCGGCGCCGACCTGGAATGGTAACTTTTTCCCTCCTCAGATGACCTTACTTCCACTGCCTCCACA
AAGACCTTCTTACCATGACCTGGTTTTCCAGTGTGGTTCTGACAGCACTACTGATAACCAAACTGGAGTCAGGTA
TTTTGTACTTTGCAGTATTTCTCTTGTATACCAGTTTGTGATGTTTTCTCTAAAAACTTGAAGTTCCTCAGGCCT
GTAACTTCTGGAAAAGATGATTATTCAAAATAATGTTTTGGGGTAACCAGTGGAGTTGGGTAGAATGACCAAATA
ATTATTTTCCAAACTGGGATACTTTTTAGAGTGAAAGGGGCTATTATTAGGTGGGACAAAAGGAATAAATGAAGA
CTGCCCAGAAAAAACTGAGACTATGGACATTCAAATCATGGGAGAAAATAATTTTGTAGATTATGTTCCATTGCT
AATGAATTTGACTTAGAAAAGAATTGCCTTATTTTTAAGAGATTGTTTCAGTGGTTCACATAAAGGCTCGCTCAC
TGGTTTCTCTTGAGTTCCTTACACACTATATAAGTTGTTCTTTCAGTTTTATGATTCAACTACTGTTTTTCCTTC
AGCTGACTTTATTTTTAAACACCCTTAAAGACAGATATATCTCATGGCAAATTTGGTATCCTGTTACAGCCTTGG
CTCTTAAACAACTCAAAATATTGGGATAGGCTGTCAGTATGTTAAGGATAGTTGCTCCTGAGTCAATTCTTCACT
TACTCCCTCTGTTGTTCTTGGCTGGATCCTAACGCTGATTTCCACTCTGCTGTCACAAACATTTTTCCCCCCGTA
AAATGTCTTAATGCTGTCCTACCATTATTTTACCAACTGTGAAAGCTGGCTTTAATTTTTAGGAGGAAAAGAAAA
GCCTGCATGTGTTCTTTATTGGTATCATTTAAAATATACTTTTTTTTTTTTTTTGGTAAAGGTAGGCGTATTTTA
AGATATTTTCTTAACTTGAGCAGTAGCCAACAGGAAGGATACCAGTGTCTCTCTCTCTTAGCGACACACTCCTTG
GTCTTGCTTACCAACTGGAGGACACTAGGTAGAATAACCGAGTATGACAATTCTTAATTGTTTACATTTTATAAC
TTCCTGTCCTTCAAAAGAGTTTGAAATGTCATTTTGGGAAAAGAGAGCCAGTCAAGCTAGTAGGCTGATTGTGAA
GAAAATCTAATACCTTATCTTTATCTCAAACCTCTGTACAACTTTATTTTCATTGATGGGATACTTTAACAAAAA
TGAAATTTTTTTTGGTTTTTAAAATATGAGTGATTATGACCTCTTTGGGGATCATGCTTCAAAAAGTCAGAAACC
TAGAGACAAAACTGTCATTGATTTTTAAGAAGAAACACACTAGGTCAAAAGAAGATGTCCTGGAAATACGAAGTA
CTCTTTAAAAACCATGCATTTGGAGAAAGTAATTGTTTCCTTGAAAAACATGATTAAAAACTAAAACTGGGATGT
TCCTGTGTGTACACAGTGCCAAATGGTTTTCCCTTTTTATGTTGTGTTTTAGAAACAGCACGAAAGTTTTTTCCA
TTTTAAAGTGAGAAAACATTATATTTAGACTTCCATAATTCCAAAATCAGAAGCTATTTTTAAAATTAGCATTTT
CTTGCATCACCAAATGGTATTCAATTGTTTGAAGCTCAAAATTTTTACCATTCCATAAATGTTTGTGAATTTTTA
GACAGTGCCAATTTAAAAGTAGAGATAGCCAATCTGAATACGGTGAAATTATGGGGATCTCTGGTGATTGGGATG
AAAACTCTGGCCTTAAAAGGTCCACTTTTAGTATATAATTGCCTAATTAGCAATCATTTTTATTTTTTGCTCACT
CCCTGGTCTGAATCTATCTGTCTATTCAGATATTTTTTGGTAGGTTTGGAAAATGGAGAAGTGAGCCTAATTGGT
GCCTAATTGTCTGGTGTATCATTCACTTTATTCAGTTTGTTCTATCAATATGATTTACCCCTCAAGGTTAACCTA
GCAGGTTGCTCAGTTATTATCTCTCAAGGTCACAGTACTAGAAATACTTGGCTTGCATCTTTCAGATGCCATTCA
TGTTATCAAGCTCAAATTATAGTTGGTCACAGGATTCTAAAGTCTTTATTTGACTTCTCCTTTTTGAACTGGCTC
AAATGGAAAAGTGTAGTTGCTTTTAAATGTTAAAAATAAGTTTAAACTTTATATTTCCCATTGGTTTCCCCTATT
TTGTCCTTTCTTTGTGTGCTTGAAATATTTTATTTTTCAGTTTGTCCTCATAGGGAATCAAGTATTTTAGCTAGG
TGATGTCTTGCAAGTACGTTCCACTTTGTTACAATCTACTATCTGTATATACTATTTGTATCTTAATTCTTTTAT
GAGATGTTCTGTAACATTTTTCTCACTTTGACAAATGTTTTTAGACTGTACAGTCAAGATCTGGCGCTTGGGGGT
AAGTGGAATGATTTGCTAATATTGAGAATCTGTTGTATCAAACATAATAAACTTTTTTTGAGATGCAAAAAAAAT
CTATGTCGGGTGCGGAGAAAGAGGTAATGAAATGGCA

FIGURE 5227

MSSQELVTLNVGGKIFTTRFSTIKQFPASRLARMLDGRDQEFKMVGGQIFVDRDGDLFSFILDFLRTHQLLLPTE
FSDYLRLQREALFYELRSLVDLLNPYLLQPRPALVEVHFLSRNTQAFFRVFGSCSKTIEMLTGRITVFTEQPSAP
TWNGNFFPPQMTLLPLPPQRPSYHDLVFQCGSDSTTDNQTGVRYFVLCSISLVYQFVMFSLKT

FIGURE 5228A

CCCGGCCCGCCGGGACCGCAGGTAACGGGCCGCGGGGCCCCGCGGGCCAGGAGGGGAACGGGGTCGGGCGGGCGA
GCAGCGGGCAGGGGAGCTCAGGGCTCGGCTCCGGGCTCTGCCGCCGGATTTGGGGGCCGCGAGGAAGAGCTGCGA
GCCGAGGGCCTGGGGCCGGCGCACTCCTCCCGCCCTGTCTGCAGTTGGAAAACTTTTCCCCAAGTTTGGGGCGGC
GGAGTTCCGGGGGAGAAGGGGCCGGGGGAGCCGCGGAGGGAGGCGCCGGGCCCGCGCGTGTAGGGCCCAGGCCGA
GGCCGGGACGCGGGTGGGGCGCAGGCCCGGGTCAGGGCCGCAGCCGGCTGTGCGCCGTGCCCGCCCGGGGCGCTG
CCCCCTCCCTCCCCTGGGAGCTGCGTGGCTCCCCCCTCCCCCCCACCTGCTTCCTGCCTCAGCCTCCTGCCCCGA
TATAACGCCCTCCCCGCGCCGGGCCCGGCCTTCGCGCTCTGCCCGCCACGGCAGCCGCTGCCTCCGCTCCCCGCG
CGGCCGCCGCCCGGGCCCCGACCGAGGGTTGACAGCCCCCGGCCAGGGCGGCGCCAGGGCGGGCACCGCGCTCCC
CTCCTCCGTATCACTTCCCCCAACTGGGGCAACTTCTCCCGAGGCGGGAGGCGCTGGTTCCTCGGCTCCCTTTCT
CCCTACTTGGGTAAAGTTCTCCGCCCTGAATGACTTTTCCTGAAGCGGACATTTTACTTAAATCGGGTAACTGTC
TCCAAAAGGGTCACTGCGCCTGAACAGTTTTCTTCTCGGAAGCCCCAGCACCCAGCCAGGTGCCCTGGGGCGTGC
AGGCCGCCCTGGCCTCCCCTCCACCGGCGGCCGCTCACCTCCTGCTCCTTCTCCTGGTCCGGGCGGGCCGGCCTG
GGCTCCCACTCCAGAGGGCAGCTGGTCCTTCGCCGGTGCCCAGGCCGCAGGGCTGATGCCCCCGCTCAGCTGAGG
GAAGGGGAAGTGGAGGGGAGAAGTGCCGGGCTGGGGCCAGGCGGCCAGGGCGCCGCACGGCTCTCACCCGGCCGG
TGTGTGTCCCCGCAGGAGAGTGTGCTGGGCAGACG**ATG**CTGGACACGATGGAGGCGCCCGGCCACTCCAGGCAGC
TGCTGCTGCAGCTCAACAACCAGCGCACCAAGGGCTTCTTGTGCGACGTGATCATCGTGGTGCAGAACGCCCTCT
TCCGCGCGCACAAGAACGTGCTGGCGGCCAGCAGCGCCTACCTCAAGTCCCTGGTGGTGCATGACAACCTGCTCA
ACCTGGACCATGACATGGTGAGCCCGGCCGTGTTCCGCCTGGTGCTGGACTTCATCTACACCGGCCGCCTGGCTG
ACGGCGCAGAGGCGGCTGCGGCCGCGGCCGTGGCCCCGGGGGCTGAGCCGAGCCTGGGCGCCGTGCTGGCCGCCG
CCAGCTACCTGCAGATCCCCGACCTCGTGGCGCTGTGCAAGAAACGCCTCAAGCGCCACGGCAAGTACTGCCACC
TGCGGGGCGGCGGCGGCGGCGGCGGCGGCTACGCGCCCTATGCTATGGCGACGAGCTGGGCCGGGAGCGCGGCTC
CCCCAGCGAGCGCTGCGAAGAGCGTGGTGGGGACGCGGCCGTCTCGCCCGGGGGGCCCCCGCTCGGCCTGGCGCC
GCCGCCGCGCTACCCTGGCAGCCTGGACGGGCCCGGCGCGGGCGGCGACGGCGACGACTACAAGAGCAGCAGCGA
GGAGACCGGTAGCAGCGAGGACCCCAGCACCGCCTGGCGGCCACCTCGAGGGCTACCCATGCCCGCACCTGGCCT
ATGGCGAGCCCGAGAGCTTCGGTGACAACCTGTACGTGTGCATTCCGTGCGGCAAGGGCTTCCCCAGCTCTGAGC
AGCTGAACGCGCACGTGGAGGCTCACGTGGAGGAGGAGGAAGCGCTGTACGGCAGGGCCGAGGCGGCCGAAGTGG
CCGCTGGGGCCGCCGGCCTAGGGCCCCCTTTTGGAGGCGGCGGGGACAAGGTCGCCGGGGCTCCGGGTGGCCTGG
GAGAGCTGCTGCGGCCCTACCGCTGCGGCTCGTGCGACAAGAGCTACAAGGACCCGGCCACGCTGCGGCAGCACG
AGAAGACGCACTGGCTGACCCGGCCCTACCCATGCACCATCTGCGGGAAGAAGTTCACGCAGCGTGGGACCATGA
CGCGCCACATGCGCAGCCACCTGGGCCTCAAGCCCTTCGCGTGCGACGCGTGCGGCATGCGGTTCACGCGCCAGT
ACCGCCTCACCCGGACGCACATGCGCATCCACCCTCGCGGCGAGAAGCCCTACGAGTGCCAGGTGTGCGGCGGCA
AGTTCGCACAGCAACGCAACCTCATCAGCCACATGAAGATGCACGCCGTGGGGGGCGCGGCGGCGCGGCCGGGGC
GCTGGCGGGCTTGGGGGGGCTCCCCGGCGTCCCCGGCCCCGACGGCAAGGGCAAGCTCGACTTCCCCGAGGGCGT
CTTTGCTGTGGCTCGCTCACGGCCGAGCAGCTGAGCCTGAAGCAGCAGGACAAGGCGGCCGCGACCGAGCTGCTG
GCGCAGACCACGCACTTCCTGCACGACCCCAAGGTGGCGCTGGAGAGCCTCTACCCGCTGGCCAAGTTCACGGCC
GAGCTGGGCCTCAGCCCCGACAAGGCGGCCGAGGTGCTGAGCCAGGGCGCTCACCTGGCGGCCGGGCCCGACGGC
GGACCATCGACCGTTTCTCTCCCACC**TAG**AGCGCCCCTCGCCAGCCCGCTCTGTCGCTGCTGCGCGGCCCTGGCC
CGCACCCCAGGGAGCGGCGGGGGCGGCGCGCAGGGCCCACTGTGCCCGGGACAACCGCAGCGTCGCCACAGTGGC
GGCTCCACCTCTCGGCGGCCTCACCTGGCCTCACTGCTTCGTGCCTTAGCTCGGGGGTCGGGGGAGAACCCCGGG
ACGGGGTGGGATGGGGTAAGGGAAATTTATATTTTTGATATCAGCTTTGACCAAAGGAGACCCCAGGCCCCTCCC
GCCTCTTCCTGTGGTTCGTCGGCCCCCTCCCCCGGCTCCGCGCTGCTCTTAGAGGGGGAGGGGTGTCACTGTCGG
GGCACTCCTAGCCCTACCTCCGGCCCTTGCGACCACACCCATTCTCACTGTGAATCTCCCCGCTGGGTCGGAGCG
TCGGGCAGAGTTGGGGAGTGGGGAGGGGACTGAGCCGGCCGGAGGCCCCCGCACCCCCGCTCCCACCCACCCCGG
GACTGATAATGTGAAGTTCCTCATTTTGCACAAGTGGCACTAGCCCAGGGCCAACCCTTCCTTCCTCAGTCACCA
AGGGCGGGGAGTTCTGGAGTCGGAAGGCGAAGAGCCTACCACCAGGTCTCCCACTCCCGCGGTGCCCTCCCTTCC
CTTCCCTGCGGCCCCGGACCATATTTATTGCATGCGCCCCGGCGGCCCCCCATCCCGAGCCCAGGCTGGGCTGGG
CTGGAACGCGGTCTCTTTAGCTCCCTCCTCTTCGTTTGTATATTTCCTACCTTGTACACAGCTCTTCCAGAGCCG
CTTCCATTTTCTATACTCGAACCAAACAGCAATAAAGCAGTAACCAAGGACCCCGACCCCGCTGCTCTCTTCTGC

FIGURE 5228B

CCCTGCACAAGGACCTGGATGCTGCGCCCGCTGGGTGGAGGAGCCAGAAAGGGCCACCCTCACACAGGTGCAGAG
GCTTGGACCTGCCTCCCTCCCCAGTCCCAGAAACAGATCAGCAAGAGGTCAGGTATGTTTCATAACTAAAAATTT
ATTAAGGAAACAAAACCAGTGCTGCAAACGGGACAGAAAGGAGAGCTGGGTCTCCCTCCCGACCACCCAGTCATC
GGCCTTCCAGCTGGGGAGAGAATCTTAAAGGAGAGGCCGGGGACCCTGTACTCCAAAGAGCCCAGTCTTCTGAGA
CTCTAGGGGACTCCTACCCCCAAACTACTGGCCTTGGCTCCCCTACACGGTACCCCATCGCTTCTGGCATAGTCC
TGGGCCTCAGGGAGGGCAGAGCTGCGCACCCATCCTCCAGGCAGGCTGTGCAGTCAGGCCATGGGCTCTGGGGTA
TCCCCCACTGGTCCCATTAAGATTTGCCCCTGGCTCCACCGAAAACCCCGTCTTCCCCTAAG

FIGURE 5229

MLDTMEAPGHSRQLLLQLNNQRTKGFLCDVIIVVQNALFRAHKNVLAASSAYLKSLVVHDNLLNLDHDMVSPAVF
RLVLDFIYTGRLADGAEAAAAAAVAPGAEPSLGAVLAAASYLQIPDLVALCKKRLKRHGKYCHLRGGGGGGGGYA
PYAMATSWAGSAAPPASAAKSVVGTRPSRPGGPRSAWRRRRATLAAWTGPARAATATTTRAAARRPVAARTPAPP
GGHLEGYPCPHLAYGEPESFGDNLYVCIPCGKGFPSSEQLNAHVEAHVEEEEALYGRAEAAEVAAGAAGLGPPFG
GGGDKVAGAPGGLGELLRPYRCGSCDKSYKDPATLRQHEKTHWLTRPYPCTICGKKFTQRGTMTRHMRSHLGLKP
FACDACGMRFTRQYRLTRTHMRIHPRGEKPYECQVCGGKFAQQRNLISHMKMHAVGGAAARPGRWRAWGGSPASP
APTARASSTSPRASLLWLAHGRAAEPEAAGQGGRDRAAGADHALPARPQGGAGEPLPAGQVHGRAGPQPRQGGRG
AEPGRSPGGRARRRTIDRFSPT

FIGURE 5230

GGTGCACACGGGAGCGCCGCACCGGCCGGCATGGAGGAGCGCGGCGATTCCGAGCCGACCCCCGGCTGCAGCGGC
CTGGGTCCGGGCGGTGTTCGCGGCTTTGGCGACGGCGGTGGAGCTCCTTCGTGGGCCCCTGAGGACGCCTGGATG
GGCACTCACCCTAAGTATCTAGAAATGATGGAATTAGATATAGGAGATGCCACCCAAGTTTATGTAGCGTTCTTG
GTTTACCTGGACCTCATGGAAAGCAAAAGCTGGCATGAAGTAAACTGTGTAGGATTACCAGAACTCCAGCTCATC
TGCCTTGTTGGTACTGAGATAGAAGGGGAGGGGTTACAGACTGTGGTGCCTACCCCCATCACTGCTTCCCTCAGC
CATAACAGAATATTTCTCTTAGAAGATGACATCCATGCTTCC**TGA**TGCTTGTTTTATTCATACAAGATTGGATTT
GAGACCCATCAGACTGCTTCATCTTTTATCTCAGAAATAGGGTTGACGTACATAGTGAGGGTTGACTTCCCCATT
CCATAAGGTTTTCATTCTGAAGAGTAAAACTTCCCCAGGTAGAAGACTTTCTCCTTCTTAAAAAATATAGGGTGA
TTTCTTTAAAACTTTGTTATCTAGAGACAGTTTAATTACAGTTATATACAGGTTTATGCCTAGGATGTATTCAGA
TGGGTGGGACCTGTGTGCTGCTTTTGTCATCCCACACTCAAAGTTGTCTCTTTGTTTCTTGCTGCCACTGCCAGC
TCATTGTTGAGACTGCCATTTCTTTCTCTTACTCAGCTCTCCCCAGTGCCTTTTGGCCACTGCAGCTACCGTAGA
ATGGCATTTTATATGTACCTTGTCACCCACTTCTGTTTACTTTTTCCTCTCCAGTAAAAAGTAAAAGATTTCTTT
CAATTGGTCTTCCCATTGCAGTTACTGTTATTTCTCTTTTTTGGTTAACTTTAAATCAAAACTCAAAATATGTTC
ATCCAGAGTGTGTCTTAAGTAACTTACGTGTCTTAAGTAACAGGGACCAGAGACATGTTACCTACAAGAGTTCTG
GGCTATCCTTTTCATTCTTATCACATATCATAGCTTGAATATTACAACAGTGTGGGAGAGAATCAACCGTAAAAA
TGTCTTCATTAATTAGACCCAGTTATTCCACTTTTGTTAATGTCTCTCAAATTGTACAAAGTATAAAAAATTATA
TGCACAAAGATGTTCCAAGTGACATTACTTTTAGTAGCCCAAATTATAAACCACTTTAAAGTTTGGGGTAAAGAT
TGGCAAACTTTTTCTATAAAGGGCCAGAAAGTAACTATTTTAGGTTTTTAAACCTACTGTCTCTGTCATAACTTG
TCAACACTGCTGTATGAAGCACAAAAGCAGCCATAGACAATACATAAACAATACGGGCGTGGCTTTGTTCCAGTA
AAACTTTGTTTACAAATGTGGTGCCATAGTTTGTCATCCCTGGGTCTAGGAAATAGTCAATAAACAGATATATAC
AAATGATACATAATGTACTTATTAAAAATTAGTAATGAATATTATTAAAAACATGAAAATATTACCTTAAGTAAA
AATTGCAAGACGGAAAAGTGTATAAGTGGGTGTAATCATGGCTGAAATAACAGACCAAGCATATGATAAAAAGAT
AACAAAGTAAATCAAATTACTAACTGGTTATAGTGGGATAGGAGGCAGAAAATGGATGACTTTGTCTTTTCTCAA
TGTTTTTATTTGTATTTTATAATAAAAATGTTTTAAAATTA

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FIGURE 5231

GAHGSAAPAGMEERGDSEPTPGCSGLGPGGVRGFGDGGGAPSWAPEDAWMGTHPKYLEMMELDIGDATQVYVAFL
VYLDLMESKSWHEVNCVGLPELQLICLVGTEIEGEGLQTVVPTPITASLSHNRIFLLEDDIHAS

FIGURE 5232A

GCGAAGGCGACAGCTCTAGGGGTTGGCACCGGCCCCGAGAGGAGGATGCGGGTCCGGATAGGGCTGACGCTGCTG
CTGTGTGCGGTGCTGCTGAGCTTGGCCTCGGCGTCCTCGGATGAAGAAGGCAGCCAGGATGAATCCTTAGATTCC
AAGACTACTTTGACATCAGATGAGTCAGTAAAGGACCATACTACTGCAGGCAGAGTAGTTGCTGGTCAAATATTT
CTTGATTCAGAAGAATCTGAATTAGAATCCTCTATTCAAGAAGAGGAAGACAGCCTCAAGAGCCAAGAGGGGGAA
AGTGTCACAGAAGATATCAGCTTTCTAGAGTCTCCAAATCCAGAAAACAAGGACTATGAAGAGCCAAAGAAAGTA
CGGAAACCAGCTTTGACCGCCATTGAAGGCACAGCACATGGGGAGCCCTGCCACTTCCCTTTTCTTTTCCTAGAT
AAGGAGTATGATGAATGTACATCAGATGGGAGGGAAGATGGCAGACTGTGGTGTGCTACAACCTATGACTACAAA
GCAGATGAAAAGTGGGGCTTTTGTGAAACTGAAGAAGAGGCTGCTAAGAGACGGCAGATGCAGGAAGCAGAAATG
ATGTATCAAACTGGAATGAAAATCCTTAATGGAAGCAATAAGAAAAGCCAAAAAAGAGAAGCATATCGGTATCTC
CAAAAGGCAGCAAGCATGAACCATACCAAAGCCCTGGAGAGAGTGTCATATGCTCTTTTATTTGGTGATTACTTG
CCACAGAATATCCAGGCAGCGAGAGAGATGTTTGAGAAGCTGACTGAGGAAGGCTCTCCCAAGGGACAGACTGCT
CTTGGCTTTCTGTATGCCTCTGGACTTGGTGTTAATTCAAGTCAGGCAAAGGCTCTTGTATATTATACATTTGGA
GCTCTTGGGGGCAATCTAATAGCCCACATGGTTTTGGGTTACAGATACTGGGCTGGCATCGGCGTCCTCCAGAGT
TGTGAATCTGCCCTGACTCACTATCGTCTTGTTGCCAATCATGTTGCTAGTGATATCTCGCTAACAGGAGGCTCA
GTAGTACAGAGAATACGGCTGCCTGATGAAGTGGAAAATCCAGGAATGAACAGTGGAATGCTAGAAGAAGATTTG
ATTCAATATTACCAGTTCCTAGCTGAAAAAGGTGATGTACAAGCACAGGTTGGTCTTGGACAACTGCACCTGCAC
GGAGGGCGTGGAGTAGAACAGAATCATCAGAGAGCATTTGACTACTTCAATTTAGCAGCAAATGCTGGCAATTCA
CATGCCATGGCCTTTTTGGGAAAGATGTATTCGGAAGGAAGTGACATTGTACCTCAGAGTAATGAGACAGCTCTC
CACTACTTTAAGAAAGCTGCTGACATGGGCAACCCAGTTGGACAGAGTGGGCTTGGAATGGCCTACCTCTATGGG
AGAGGAGTTCAAGTTAATTATGATCTAGCCCTTAAGTATTTCCAGAAAGCTGCTGAACAAGGCTGGGTGGATGGG
CAGCTACAGCTTGGTTCCATGTACTATAATGGCATTGGAGTCAAGAGAGATTATAAACAGGCCTTGAAGTATTTT
AATTTAGCTTCTCAGGGAGGCCATATCTTGGCTTTCTATAACCTAGCTCAGATGCATGCCAGTGGCACCGGCGTG
ATGCGATCATGTCACACTGCAGTGGAGTTGTTTAAGAATGTATGTGAACGAGGCCGTTGGTCTGAAAGGCTTATG
ACTGCCTATAACAGCTATAAAGATGGCGATTACAATGCTGCAGTGATCCAGTACCTCCTCCTGGCTGAACAGGGC
TATGAAGTGGCACAAAGCAATGCAGCCTTTATTCTTGATCAGAGAGAAGCAAGCATTGTAGGTGAGAATGAAACT
TATCCCAGAGCTTTGCTACATTGGAACAGGGCCGCCTCTCAAGGCTATACTGTGGCTAGAATTAAGCTCGGAGAC
TACCATTTCTATGGGTTTGGCACCGATGTAGATTATGAAACTGCATTTATTCATTACCGTCTGGCTTCTGAGCAG
CAACACAGTGCACAAGCTATGTTTAATCTGGGATATATGCATGAGAAAGGACTGGGCATTAAACAGGATATTCAC
CTTGCGAAACGTTTTTATGACATGGCAGCTGAAGCCAGCCCAGATGCACAAGTTCCAGTCTTCCTAGCCCTCTGC
AAATTGGGCGTCGTCTATTTCTTGCAGTACATACGGGAAACAAACATTCGAGATATGTTCACCCAACTTGATATG
GACCAGCTTTTGGGACCTGAGTGGGACCTTTACCTCATGACCATCATTGCGCTGCTGTTGGGAACAGTCATAGCT
TACAGGCAAAGGCAGCACCAAGACATGCCTGCACCCAGGCCTCCAGGGCCACGGCCAGCTCCACCCCAGCAGGAG
GGGCCACCAGAGCAGCAGCCACCACAGTAAATAGGCACTGGGTCCAGCCTTGATCAGTGACAGCGAAGGAAGTTAT
CTGCTGGGAACACTTGCATTTGATTTAGGACCTTGGATCAGTGGTCACCTCCCAGAAGAGGCACGGCACAAGGAA
GCATTGAATTCCTAAAGCTGCTTAGAATCTGATGCCTTTATTTTCAGGGATAAGTAACTCTTACCTAAACTGAGC
TGAATGTTTGTTTCAGTGCCATATGGAGTAACAACTTTCAGTGGCTTTTTTTTTCTTTTCTGGAAACATATGTG
AGACACTCAGAGTAATGTCTACTGTATCCAGCTATCTTTCTTTGGATCCTTTTGGTCATTATTTCAGTGTGCATA
AGTTCTTAATGTCAACCATCTTTAAGGTATTGTGCATCGACACTAAAAACTGATCAGTGTTAAAAAGGAAAACCC
AGTTGCAAGTTTAAACGTGTTCGAAAGTCTGAAAATAGAACTTGCCTTTTAAGTTAAAAAAAAAAAAAAAGCTAT
CTTGAAAATGTTTTGGAACTGCGATAACTGAGAAACTTCTTACCAGTCCACATGCAATTAAACATATTCAGCATA
TTTGTTATTTTAAAAGGGAGGGTTGGGAGGTTTCTTATTGGTGATTGTCACACGGTATACCATACTCCTCTCCTT
CAAAGAATGAAAGGCCTTGTTAAGGAGTTTTTTGTGAGCTTTACTTCTTTGGAATGGAATATACTTATGCAAAAC
CTTGTGAACTGACTCCTTGCACTAACGCGAGTTTGCCCCACCTACTCTGTAATTTGCTTGTTTGTTTTGAATATA
ACAGAGCCTTGATCCAGAAGCCAGAGGATGGACTAAGTGGGAGAAATTAGAAAACAAAACGAACTCTGGTTGGGG
TACTACGATCACAGACACAGACATACTTTTCCTAAAGTTGAAGCATTTGTTCCCAGGATTTATTTTACTTTGCAT
TTCTTTTTGCACAAAGAACACATCACCTTCCTGAATTCTTTAAATATGAAATATCATTGCCAGGGTATGGCTTAC
AGTGACTACTATTATCAATACTAAAACTCAGAGAATCAAAGATGGATTAAACTCAGTGGTTGATGAAAGCCAAAA
CCTGTTTGTACTGTTCTATACTATTCAGGTATCTTTTTATTTCTGATAGTTTTATATTATAATAGAAAGCCAGCC

FIGURE 5232B

ACTGCTTAGCTATCATAGTCACCATTTTCTCACTGTTAACATTAGGAAAATCAAGGCTACTATGCTTCAGGATTG
TCTGGTTAAATAGTATGGGAAAAAAACTGAAGAGTTTCAACATAATTACACACGTGAAATAATTACAGCTTAAAC
TGAATTTGTATTTCATTTTATTGTCAGATGGTGGTGTTCACCAGCCTGTATCTTGTCTGAGACTGCATTCGTATC
TGAGCAGGTTTTCTATGCCTACTGATGTCAGTATGTTTATACTAACCTTCATGCTTTTTTCCCAGAATCCCTCAT
CTGCCAGAAAACTTGAAAAGTTTATTGCTTGTAGAGTTGTACTGCTTTGATTTTTGAAGTTGGGGTAGTAGTTAG
AACTAGATTTAACTAGTCTATAATGAACATGAAGGCTTTTATATATGAAGTTGTATACCTTTTTGTGTTTAGAGA
ATTATGGGAAACCTGGTAAGCAAAACTTTCCTCCCAGATAATTGCTTCCAAATTCGAAGAGTTAGTCACCAAGAG
AGCCATATGTATGAAAGCGTATCTGTGAAAGGTAGGAAACTTACCCCCCCCTAAGTGTAATGTTGCTTTAGGCAAC
TCTTGTAAATAGTGAGACTTGTTTGGTCTCTTACATGTAGAGATTTGAGTGCAGTTGGTACAGTACTTTGGTGTC
TCCACCACTGTCCCTTCTCCCCGCTTCAAAATAAGTGTAATCCACGGTAGCAGCCACACTTCCTTCAGAAGGAAC
TGTTATAATTTATTTAAAAGTTGAAAAACCACCCAAGATGACTACCAACTTTCACTTTTTTTCTTCTGCCATCCA
CCCTCATTTTCCCTTTAGCAAGATTTTTATATCTAACTTTCCTTCCCTCCATTGAGTACGTGCTTTGAGAAAACA
TTTCTTAAAACAGTGTGTGCCACCTAAGGCTGGATGGGAAAGTGCAGTCTTGTTGTTCATATAAAAAACACACTT
CTTATTAGTTTACCCACTTGCCTTTTTCTATTGTTAATGTTCTGAATTTCCTTTTCTTGGCTTGTTTCTACTTCA
TTTTAACCCTGGGTCACTTGCTGCCAGCAGTTTGTGAATGGTGTCTTTCAAATAACTTAGTTCTTATGGCTTCAC
TTAAAGACTGTCTCAAAAATACTTTGCTCTCTTCTTCTTTTTTGTTCATGGGACATGGTACCTAAGCAAATAGGA
GTTGGGTTTGGTTTTTCTCCTAAAATAATGCTCAATACTTACCTAATCAAATGGCATCCATTTGAATAAAATGAC
AATAACTAAAGCTAGTTAATGTCAGTGACATTAAACTAACTCCAGGATTCAGGAGTTTTAATGTTAGAATTTAGA
TTTAACAGATAGAGTGTGGCTTCATTTGTCCATGGTAGCCCATCTCTCCTAAGACCTTTTCTAGTCTGTCTTCCT
GCCTTCGAACTTGATGACAGTAAAACCCTGTTTAGTATTCTCTTGTGCATTTGGTTTGTTGGTTAGCCGACTGTC
TTGAAACTATTCATTTTGCTTCTAGTTTTATTTTACAGAGGTAGCATTGGTGGGTTTTTTTTTTTTTTTCTGTCT
CTGTGTTTGAAGTTTCAGTTTCTGTTTTCTAGGTAAGGCTTATTTTTGATTAGCAGTCAATGGCAAAGAAAAAGT
AAATCAAAGATGACTTCTTTTCAAAATGTATGGCCCTTTTATTGCACTTTTAACTCAGATGAATTTATAAATTAT
TAATCTTGATACTAAGGATTTGTTACTTTTTTGCATATTAGGTTAATTTTTACCTTACATGTGAGAGTCTTACCA
CTAAGCCATTCTGTCTCTGTACTGTTGGGAAGTTTTGGAAACCCCTGCCAGTGATCTGGTGATGATCTGATGATT
TATTTAAAGAGCCGTTGATGCCTCCAGGAAACTTAAGTATTTTATTAATATATATATAGGAATTTTTTTTTATTT
TGCTTTGTCTTTCTCTCCCTTCTTTTATCCTCATGTTCATTCTTCAAACCAGTGTTTTGGAAGTATGCATGCAGG
CCTATAAATGAAAAACACAATTCTTTATGTGTATAGCATGTGTATTAATGTCTAACTACATACGCAAAAACTTCC
TTTACAGAGGTTCGGACTAACATTTCACATGCACATTTCAAAACAAGATGTGTCATGAAAACAGCCCCTTTACCT
GCCAAGACAAGCAGGGCTATATTTCAGTGACAGCTGGATATTTTGTTTCTGAAAGTGAATCTCATAATATATATA
TGTATTACACATTATTATGACTAGAAGTATGTAAGAAATGATCAGAACAAAAGAAAATTTCTATTTTCATGCAAA
TATTTTTCATCAGTCATCACTCTCAAATATAAATTAAAATATAACACTCCTGAATGCCTGAGGCACGATCTGGAT
TTTAAATGTGTGGTATTCATTGAAAAGAAGCTCTCCACCCACTTGGTATTTCAAGAAAATTTAAAACGATCCCAA
GGAAAGATGATTTGTATGTTAAAGTGACTGCACAAGTAAAAGTCCAATGTTGTGTGCATGAAAAGGATTCCTTGG
TTATGTGCAGGGAATCATCTCACATGCTGTTTTTCCTATTTGGTTTGAGAAACAGGCTGACACTATTCTCTTTGA
TTAGAAAATAAACTCATAAAACTCATAATGTTGATATAATCAAGATGTTAACCACTATAAATATGTAGAAGAGGA
AGTTTTAAATAGACCTTAAGCTGGCATTGTGAAGGAACACCATGGTAGACTCTTTTTGGTAATGGTATTTTGTAT
TTAATGAAATGCAGTATAAAGGTTGGTGAAGTGTAATAATAATTGTGTAAACAAATCCTGTTTAATAGAAGAGAT
GTACAGAATCGTTTTGGTACTGTATCTTGAAACTTGTGAAATAAAGATTCCACTTTTGGTTATCCTGTATGCTGT
AATATACCACAACCAAGCACCCTTTCCAGACAGACTTTTTTTAAGCTGAATGAATCCAATTTTTTAATGTTTTTT
GGAAATTCAGAAGCTTCTGAAAACATTCACTTGTGGCAATTTGAATTTATCTTTCATTTTAAACTCCTGAAATTC
AGATTTTTACAAGTCCAATATTGCCCTAGGGAGAACATGAATTTGCTAAGAAATGTTATCTTTTAAATCTCTGAT
ATCTTTGTCTTGAAGCAGCCTTGATATGTAGTAAGCGTGATTCACTTTAGCCTGATTATAATATTATTTATCTAA
AGTTTGTTTATGCATTGCCTTGTCCCAGGAATTTTTTAAGAGGACTTGCAGAGACACGTACCACACAGTAACATT
TAGACTAAATATGCTCTGAGTAAAGGAGAAATGAAAAAATATTAAATCAAGAGTGAACATGTACACAAAGTGCAA
TTGGAAGTGGGCTACAAATTTAGCCCCCAGCTTCCCAGCAGGCAACTCAAAGAGGTAACTGAGGTAAAATGTTCC
AGCTCAGAAGCATTGGATCTTGGATAAAAAGCCTACATGATGCAAACTGTGGCAACTGAGATGTCAGATCTCAAG
ATCTCAAATTGTACTTGTGGGAGCACAGTCAGTGACCCCAGATGACCTTGACTGACCTAAAAGTTGTGGGGGAAG

FIGURE 5232C

TCGGATGTCAGAGCCTTAACACCAGCAGGTGACCATCCAACCTGGGGCAATGCCTGCCTGTTCACCACTTAGCCT
CTTTCTGGCAAGTCATTAGAATGTCCTCCATCTTCATTGGCTGCAACTTGATGAGCTACAGCCTCTTTCCTAACT
TCCTTTATGATGCTAGTTTAGGTTGGTTATACCAGCTTGGAAGTATGCTTAGATTAAGTTACAGCAGATACACAA
ATTAGATGCAAGTAAAAAAAATCAGAATTTCTGTAGTAGAAACTACGAAAAATAAAAAGGAAAGTTTTTACTTTT
TGGGTATTTTTTTACGAATAAGAAAAAGTGAGCGTTAATCAGTTCAAAAGGAGGTACTGCTGTGTAATGGGCTTT
GTACGTTCCTTCTCATGTCACTTACGTCACTACTTCGCCATCAAATTGAACAAGCTTTTAATTAGATCCTGAAAA
TTCACTATGCTAGTAGTTTATTGGTAGTATTATATTTTGAGTAGAACTCTGATTTTCCCTAGAGGCCAAATTCTT
TTTATCTGGGTTAATTTCTTTTAAACATAACAATGTTAATGCTGAATTGTATATTAAATCCCATTTCTAAAAACC
ACACAATTTTTTCTCATGTAAGTTGAGTGGAATGTGGTTAGTTAACTGAATTTGGAATGTTCATATAAATAATTT
GTTGCTGCTC

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FIGURE 5233

MRVRIGLTLLLCAVLLSLASASSDEEGSQDESLDSKTTLTSDESVKDHTTAGRVVAGQIFLDSEESELESSIQEE
EDSLKSQEGESVTEDISFLESPNPENKDYEEPKKVRKPALTAIEGTAHGEPCHFPFLFLDKEYDECTSDGREDGR
LWCATTYDYKADEKWGFCETEEEAAKRRQMQEAEMMYQTGMKILNGSNKKSQKREAYRYLQKAASMNHTKALERV
SYALLFGDYLPQNIQAAREMFEKLTEEGSPKGQTALGFLYASGLGVNSSQAKALVYYTFGALGGNLIAHMVLGYR
YWAGIGVLQSCESALTHYRLVANHVASDISLTGGSVVQRIRLPDEVENPGMNSGMLEEDLIQYYQFLAEKGDVQA
QVGLGQLHLHGGRGVEQNHQRAFDYFNLAANAGNSHAMAFLGKMYSEGSDIVPQSNETALHYFKKAADMGNPVGQ
SGLGMAYLYGRGVQVNYDLALKYFQKAAEQGWVDGQLQLGSMYYNGIGVKRDYKQALKYFNLASQGGHILAFYNL
AQMHASGTGVMRSCHTAVELFKNVCERGRWSERLMTAYNSYKDGDYNAAVIQYLLLAEQGYEVAQSNAAFILDQR
EASIVGENETYPRALLHWNRAASQGYTVARIKLGDYHFYGFGTDVDYETAFIHYRLASEQQHSAQAMFNLGYMHE
KGLGIKQDIHLAKRFYDMAAEASPDAQVPVFLALCKLGVVYFLQYIRETNIRDMFTQLDMDQLLGPEWDLYLMTI
IALLLGTVIAYRQRQHQDMPAPRPPGPRPAPPQQEGPPEQQPPQ

FIGURE 5234

GCTGTGGACGAAGAGGCGGCCTCGGTGGTAAGTGGCGGCCGCTGGGACCCAGCCAGGTACCGGTCCGGCTCGGCC
CTGCCCCTTTCCGGCCGCTCTCACTCCTTCCCTCGGCCTCGAGTTCCTCGTGGGCCCGTGGGGGCCGCCGCGGGG
TCGGGGCTGCGAGGCAGCGCCCGCCGTTCCATGGTAAGCGGTGCTACGGGACGTTCGGAAGGAAACCTCGCTAGA
GCAGGGGACGCCTGGGCTCCTGGCTGACCACGGGGCCTTTGCACGGCCAGGGCTTTGCGACCGCAGTGTCTTCCT
TCTGTCCCCGGTCGTGCGCCGTGCCCCTCAGCGCGGCTCACGTTTCGGAACACGTCTGCCTTTCATGCCTCCCGA
AGAGCCTCCCCGCATCCCGTGCCCCCTGCTCGCTGCTGCCGCTGACCCTTGGGCGCTGCGCTGGTCCAGAGCGTG
TTGTCCTCTGACGCCGTCAGAACCTGAGCTCCCTGCGAGCTGGGACTCCGCCGTGTCTTCATTGCCTCCAGTGCA
AAGCAACTGCTTGCAAGAGAACAAAAGTGTGTTCAGGTGCACAGAGTAGAAAATTCAAGGAGCCTGAAAGGGTAT
TTGGTGAAGACTTGATGTGTTTTTCCCAGTCCTAACCTCCAAGGCCCAGTTCTCCCCTGGGGCAGAGGGAAACCC
GTTTCTTACGGGTCTGCAAAGAAAGTCTATGCAGGAACATCTACGTGCGTTTCTGCAAAAGGTCAGTTACTTTAC
TTGGGGCTCTTATACTTAACGTAGCTCGGAGAGCGCCCCATGCATTCAGATACAGGTGGGATTCCTCCGGAAACG
GAGTTTTATAGCACCAGACTTTATCCCCTTTCCTGTAGAAATTTAGGGTTTTTGCTGTCTTTTATAACGAACAAT
GCTAGCTTGACTATTGCTTGTACAAACCGTTTTTTGCCCAAGTCGGACTATTTTCTTAGGTTAAATTCCTTGGTG
CAGAAGTGCGAGGGCTGTATTTAGGCCCCTAAAGGGGTGGTACCAAATCGCCCTCCCCCACCAGCATAAGAGGGG
GCCGGCGACACCCTTGCCCAAGCTGGATTTTGCAGACCTGGTAGGCGTGAGATAGTATTTCACTGTAGCTTGTGT
TTCCTGTAAGTATAGTCGAACGTCGTGATGTTCCTGTTACATCTATGTTACGTTGATCATTGTTACCACTGACAG
TCGTTTCGAGATTGGAAAATATGTTTATTATAAACGTTTGACTATTTAAAAGCCATTTGTATT

FIGURE 5235

AVDEEAASVVSGGRWDPARYRSGSALPLSGRSHSFPRPRVPRGPVGAAAGSGLRGSARRSMVSGATGRSEGNLAR
AGDAWAPG

FIGURE 5236

GGTGATGAGTTTCTAATCCCAAATATATTTGCATTTACCAGGCTTTTGTGAGTTTAAGAAGTTATCTATCATATC
TNNNNNNNNNNNNNNNNNNNNNNNNNTGCTTGTTTCTATCAAGAATGACTCCTTTATAAACTGGGGAGTATCTTTAA
GAGTGGTTTCAACCCTGACTGTATAGTATCATCTGTTGAGGAGCTTAAAAAAAATATGTAGGCCCAGCCCACACT
AGACTGGCATTGGTACCTGGTATCAGTATTTTTTAAAAACTTCCCATAGGATTCTAATGTACAGCCAAGATTGAG
GACCATTTGTCTGTCATCTGGGATTATGCTTAATAAATTAATACTGTTTTTTAAATTAATTAGATTTCACTTCTA
AGTCATTATCAGTAAATTTACTCAGTATCTAACTGACAAGAATTTCTAGCATATATTTCTTGATTAGTGCATGTA
AAATTCTAAAAGAATTTCTATAGTATTTTCCAGGCAATAAGACAACTAGTGCCCCAAATTTACCAAATGCATGAG
TCTAAGCCTGTGCTATATATAAATATACTCAAAGCCAAGTTTACATCTGTGTACACAAGTGTGCATGCATATGTA
CAATTAAAGACTATAGTTGTAACAGTCATGAGCTTGTGTTTTGATTTTACTCCTATTCCTGTATTGTATTAAGTG
TACTATCATGTTCTTGAGGCATATCTCCAGGAGATATGTTTATTTCTTTTCCAGGAAAAGTGGGACATATATAAG
TAGGGTAAACGCTAGAGCTAGATACTCCTTTAATCTCTATTACGTCAGATCTCTGGCTCCCTTTTACAACCAGGC
AATCTTCAATTATAGGTGGCTAATAGGGAAGAAAATCATCGGCAGAGCAACAGCTTCATGTAATTTCAGAGTAGA
AAAATGAATTTTAATCTTCTGAAAGGTAATATTAGAATTAGCTGGATTGCTACACTTAGGAATCATAGGTTCCAA
ATAAATATCAGTACATACGGAAATCAGATAATGGGACAGATTATTTGAAATTAGGGCTGCCTAGAAATCTGGAAT
GTGAGATCACCCTCCTTCTGACCAAATATGCTTGAATAAACTTAATATTCCAAATTATGTGAGGGATTGCCTATT
GTGCAAAAAAAAAAAAAACGAAATCTGAATTTAAAAAAAATTACCACAGTCTAGTATTATTTTAGTCTCTTGGATG
TTATAACGTTATCTGTCCCATCTGTTGTTAATATGAGACACTGTACAAACAAACAACTATTTTGATTTAGAATCA
GTATAGATCACCTAGCTTTTTGTCTCAATTTTCCTACTTTAATGCTCTTGGGGCTTTCGCTTTTGATTTTCAGTT
TTTTCCTTAAAATAATTAATATTGTTGAAATTAGACTTTCTAAATTTAAATTTATCAGAATTTCCTATGTAAAAT
GAGTCTAGGCACCAAATGTTTAATGACTTTAAAAAAAATGTTTATGACTATAAAAGGAAAAACCCTGTATCAATT
TCAAGCTTGTTTTATATCCAAAGTGCTAGTTATTTTGTGATGAGAATATATGCCCCAAGAACATTTTTGAAAGAC
ATATAGTTAGTAACTTTTTTATTTTTCAACTTACATAAAATAAACTTATTACTTGTTTCACAAGTTTGAGTTTTC
AAAATAATATTTACTAAATGGCATATTTATGTACATCCAGCTGAACTTTTTGCTTGAATTGGGTTTCTACATTTT
AAAAAGTCTTTCAGTAATATACGATTTTTTATGAATGTTTTTCATTTAATAATTATGAAATCAAGTAAAGCTAAA
AGGAATCTTAAATTCCCAATATGATATCATTTTTTTCTTCTCAAAAGTAAGTAGTAATGAGGTTTTACTATAAAC
TGTTACAGCATTCTTTAAAACGACAATGACAATAACATTTTCATCATAATACAAATTTTTGCAGATGAGTTGAAT
ATATCAATGAAAGAAAAAAATCTACTTTTTCTTGTTTCCTTTCACAGGCAATGATACCGTCTTTATCCAAGTTAC
TCTGCCCCATGGCCCAAGTTAGTATATTTGGTTTAAGACTCATAATTCTTGCTTTGGCTTTAAAAATCAAACCAA
GTGTAACCTTTCCTGCTAAAACTCTTCTTGGGTCTGGCAGCATTGGTACCTTGCTTGCAACATCCTAGAAGTGAG
GCCTTCACTTGTGCTATCTTTAGATCATAAGTGATTTGCTTAAATTTATATATTTCTCATGCTTTTTATAAAACC
TTGTTTCTCTCTTAAAAGAACATATTAAATAAGTGGCTTCCACATTTAACCATTTCTTTTTTCCAACTATAGAGT
TCTAAGTATATTTTAATGCTCAACTTTGAAAAAAA

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FIGURE 5237

GDEFLIPNIFAFTRLL

FIGURE 5238

GCTGGGAAGGGATGGGTTGGGGAGCGGGGGTGATCCCAGTCTGAGGCTCCCGGGGATGAGATAAGAGTCTGGAGA
CGGGCATGGGTTCTTGGAGAGTGGCATGAGCTGGCTCTGCCCTGGGAGCCCGGTCTGAGGGGGACGTTGTTGGAG
CCCCTAGTGTTGGGGGTGGTTATGGGAGGGGGTGGGGTGAGGGAAACGGGAGAATGAAGGAGAAAACTGAGCCCT
AGTTTCACCGTGTTCATTTGGAAGGACGAGCCGGGTCCTCAGGGGGAGGTTCCAGGACTCTGCCCTTGGCGTTGA
GGGTTGGGGGGCGGGGGGCCTCCTCCCTTCCTCTCAGCCCCCTTCCCCAGGGGCTGTGCTTCCATGCTCCTAGCC
TCCCACCTTCGCTCAGGACATGTTATAACTTAGGCTAAACTGTGAAAATTCCGGTGGGGATGGCCTGGGCCGAGC
TCTCCAGGCAGGCGGCCCTGCCCCCAGCCCTGTCCATCCATTTCAGGGGGGAGCTGGGCCCTTCTCCGGCTGTGT
CTGGCCACCCAGGGCAGTGGCTGGGGCCAGTGGCCTTCCAGCTTTGGCCCCTGCACCTCTTCTCAATGCACTTTA
ATAATGTAACATATTACTAATAAACAAGCTATTTATTTACCTG

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FIGURE 5239

LGRDGLGSGGDPSLRLPGMR

FIGURE 5240

CGCTGTTGCCTCCGCCACCTCCTCCGCCGCCGCGCGCCCCTCGGAGTTCCGCGCCCCACC**ATG**CCCAACATCGTG
CTGTTCAGCGGCAGCTCGCATCAGGACCTATCCCAGCGCGTGGCCGACCGCCTGGGCCTGGAGCTGGGCAAGGTG
GTCACGAAGAAGTTCAGCAACCAGGAGACCAGCGTGGAGATTGGTGAAAGCGTGAGAGGGGAAGATGTCTACATC
ATCCAGAGCGGCTGCGGGGAAATTAACGACAACCTGATGGAACTCCTCATCATGATCAATGCCTGCAAGATTGCG
TCATCATCCAGAGTAACTGCCGTGATCCCGTGTTTCCCATACGCCCGACAAGATAAAAAGGACAAGAGTCGTGCC
CCAATTTCTGCAAAACTTGTGGCCAATATGCTGTCGGTGGCTGGGGCGGATCACATCATCACCATGGACCTGCAT
GCTTCTCAGATACAGGGATTCTTTGATATTCCTGTGGATAATTTGTATGCGGAGCCCGCAGTCCTGCAGTGGATT
CGGGAAAACATTGCCGAGTGGAAGAACTGTATCATTGTTTCACCTGACGCAGGGGGAGCCAAAAGGGTTACATCA
ATTGCAGACAGGTTGAATGTGGAATTTGCTTTGATCCACAAAGAGAGGAAGAAGGCGAATGAAGTGGACCGGATG
GTCCTGGTGGGCGACGTGAAGGACCGTGTGGCCATCCTCGTGGATGACATGGCTGACACTTGCGGCACCATCTGC
CATGCTGCGGACAAGCTGCTGTCAGCTGGAGCCACCAAAGTGTATGCTATCCTTACCCATGGGATCTTCTCTGGA
CCAGCTATTTCCAGAATAAATAATGCCGCCTTTGAGGCTGTTGTCGTCACAAACACAATTCCGCAAGAGGACAAA
ATGAAACACTGCACCAAGATTCAGGTCATTGACATTTCCATGATCTTGGCCGAAGCAATCCGAAGGACACACAAT
GGGGAATCCGTGTCCTACCTGTTCAGCCATGTCCCGCTA**TAA**ATCCAGAATGGGAAGTGTCCAGCAAGCCTACTC
TGACTTCTGACTTGTTTTTGTTTTCTGGATTTTTAGCTGTAGGTATTCAGCAATGATAGGTTAATCACTGGCAAA
AGCATCAGATCTTTGTATATGCTAAGATTTATTGTTTCCCCTTCTAAAGCTCAAGATCATTTCTTTCCAGTTTTT
GGGGAAATGGTGGTGGTTATTTGGTCTTTAAGTGAACTGTCTTAAATGAGAAACGTTTTTGTCATTTTGACTTTT
AACAGGTACAGGTGATCTCTTCCTTTGTTCTTTCAGTACTTTGAGGCGACAACTTTCAAGTATATAATTTCATTG
TGGAAGTCATAGTTTATATATTTCGAGGTTGCCAAAGGTGACTTCACATTAAAGCCTTCTGTGTAAATATATACT
GATAATGCCTATGGACATTTGGGTAAAACCCTGTATAGAATTAATTATCCTTTTACTTTGGAGTGAACCTTGGAA
AATTTATAATTATAATACCATGGATTTTGAATTTTCCTTTTTTTTTTTTTTTTTGGATAACTCAGTTTCAGATA
AACCATCTTGGTTACTGTGCTTAATTTGGACCAAATTTTATTTAGCTTAATATGGACACTGACACATTTTGGGGG
GTATACATTAGACATATCAGAGCAGTGTATTTCTGGATCATTTTTTAAATGACCTCTTCTAAAACATAACTGTCA
CTTACCTGAAATGCTGCATCCTAAAATTCCAAAATTATATTGAGCAATCGCCAAGGCCTAAAGCCAACTGACTTA
AAGGTAATCATTTCAGCTAAGATTAAATTTAAAGCCTAAGAATGTATAGAGCTAGTTTTAAAATAATGATCTCAG
ATTTTTAAAAAGGATATAGGAACCTGCATTGTCATTCTCTGAATTAAGAACTGATGGTTTCTATCATTATTTAGC
CCCACCTTTGTATTTTAAAATCCTTCAGAATACATTTATGAACCAATGCGACTGGACTTAGCCACACACAATGGA
AATTCAGACCTTGACTATTTGGTGTTTCCAGTTCACAAAGGTGATGAAGACTGTCTTGGGAGCAGCTTAATCCCA
AAATTTGTACATTTCTTGCTGCTCCTGGCGTGGAAACTTAAGTGAGACCACCAAATACATTGGTCCTGTCCAATT
CTACTGAATGGGGGTGGACCTGGCATTTATCTGGCCAAAAACAGGAGCCAGAGAAATATGAATATACCAAAGTTG
TTTGTTTAGCCTCCAACTTAAATTACATTAGTCAACTTATAGATACTCATATGATCACTTTTCTTTTTAGATACT
ACATCAACTAGATTCAGGAGTATATCATTTGCAGTGCTTGTATTGGTTTAAAATGTAAGATTTTAAGATCCTCTA
ACACTGTACTAAAACATTTCAATAAAATCATTCTGACTGCGTTCAAAAAAAAAAAAA

FIGURE 5241

MPNIVLFSGSSHQDLSQRVADRLGLELGKVVTKKFSNQETSVEIGESVRGEDVYIIQSGCGEINDNLMELLIMIN
ACKIASSSRVTAVIPCFPYARQDKKDKSRAPISAKLVANMLSVAGADHIITMDLHASQIQGFFDIPVDNLYAEPA
VLQWIRENIAEWKNCIIVSPDAGGAKRVTSIADRLNVEFALIHKERKKANEVDRMVLVGDVKDRVAILVDDMADT
CGTICHAADKLLSAGATKVYAILTHGIFSGPAISRINNAAFEAVVVTNTIPQEDKMKHCTKIQVIDISMILAEAI
RRTHNGESVSYLFSHVPL

FIGURE 5242

CAGGACCTCCAGCACCTCCCCAGAATCGAAGAGAAAGGCCATCATCATTCAGGGATCGTCAGCGTTCACCTATTG
CACTTCCTGTGAAGCAGGAGCCTCCACAAATTGGTAGCTATTTAACTTAGTTTAGTGGACCACAATTGGCATGAC
TTTTTTATCATATAAAAAGGATGTCTTGTTTTCTTAAAATTGTTTGAGTATCTCTGATGTGTTAGGAATTGACAC
TTTATTTTTTATGGTCATAAAGCTTAAAATTACAAAAATGATACTGGTCTGAAATTAAAAGGTTTAAATAATTTT
ATTTAAACCTTCACATTAAATTCCAGATTTTGTGATGAAGTGAAAATTTATGCTAGCCATAGCATGTTGGTATTT
TCTTCAGTGTAGGCATTTCAGTACATTATACAGATATATGAGCCCTTCTCCTTTTAAATCTAATTGTTCAATCTC
TGTCCACTCTTAGTTCATCTGATGCACTGCTGTCAGATTAATTTTCCTCTGGTTATTTCACTTCCCTTAAGTATT
TTGGCAGAAAATTTCAATTTTTTAAATAACATTATAGAGCCAGCCTATTTCAAGTGACAAATACATATTTATGCC
ACTTTATATCTGGAAAGTTCTAAATTGTTCAGTATTTAATGGACAGGAGCATTTGTTAATAAATCTTTACTTTTT
ACATTTTAGGAAGATTCTAACTTTACTCCTTTTTTAACTTACTAGCAAATCACTTATTTTTTTCGAGTCTCAGTT
TCCTCAGCCTGTGGAAAAAAGTGGAGTAATAGTAGTGATCTCTGAGGGCTTTTGTAAGGATTAAATTAGATGATG
GTTTAACATGCTTTCATTGTGTCCTGGCAGATTGTAAGCACTAGAGCAGTGGTCCCTGCTGTTACTAAAAGTGAT
GGCATTGAAGAAAGGC**ATG**ATATTTAATGGGATATTTTTTAAATTTACTCACAAGTTTGTAGAAATATTTTACTT
AACTGACTTGCGTATATTTTTCCCACGTGAAACAGACGCAGTAAAACGCAGGACTCTTCCCGCTTGGATTCGCGA
AGGTCTTGAAAAAATGGAACGTGAAAAGCAGAAGAAATTGGAGAAAGAAAGAATGGAACAACAACGTTCACAATT
GTCC

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FIGURE 5243

MIFNGIFFKFTHKFVEIFYLTDLRIFFPRETDAVKRRTLPAWIREGLEKMEREKQKKLEKERMEQQRSQL

FIGURE 5244

TGGCCTTAGGTGTACACACACCTGGCACTTTGCTTGACACATAATAGGTGGACCACAAATATCTACTAAATGAAT
ATTTGCATATAGTAATATTTTAAGGTACTAAAAGCAGCTCAAAGTAAATATATTAATATATTAATTCCATTGCTA
TCTGGATAACCACTCAACTTTCCTGCTGAAAATGCCCATTTAATTAAAGAAGGTTGGATAGAGCTCTCTATATGC
ATTTTGGACAGGCAGGGGTTTCAGGTCATAAACATTCTGATGAGTTAATATAAAATGAGAGAAACTGTAAATTTC
CACTACTAAAAATCACAAAAATAACAGAAACAAAAGAAGAGATAAGAATTTGGGGAATTGTGCTGAACAATTTAG
TGGTTAAAAAAAACAACTGTGCATGTTTAGACTTAAATAAGCCCCCATCCAAGTGTGAGGGGTCCAGTAATTTTT
CAAAACATATGAAAGTGTTAATACATTTTGACAAAGGACCATTAAAAAAGTCCTGAATTCTGACTTGAGGGAGGA
AAGTAATGACTAATACATTCTCTAGAGACTTGCAGACTTTGGGAATTCATAAAGGAATGGATGATAATTATTAAC
TGTTGCTGGCTGATTGCCCAGACAGTTCTCAACAGCCCTGTACAAGTCTCTGGGTTTGGGATGGATCAATTCTGA
GACTGGAAAATGGCCAAATCTTTGCAAATGAGAAATATTTTTCTTATAAGTTCTTATTGTAGGCAAATAATTACA
TAGATTATTCATCAGAGAATTTTTAAATGCTCATAATCTCAACTCTTTCATTTACAACTTGTATTTCCAATAGTT
TATGGGTCATCTCTGCATAGATGTCAGAAGTCACCTCAAGTTTAGTGTGTCCAAAATCTAACTCACAGGTCTGTT
TCTGACCTCCCAACTTGCTTTCCTTGTGTTTTTCCTATGCTAATGATCCACCATAATCAAAATAATTAACATTTA
TCCAGTGCCTACTATGTACTATTCCCTGTCCTGTTTTACATTTACTCATTTAAAGTCCATAAGAAACATTAAATC
TCATCTGCCTTCTGAAGAAGATACAACCATGCTCTCTTTTACAAAGTAGGAAACTGGGTCACAGAAAGGTGAAGT
CTTTAAGGCTGAATCACAGTAGCTCATCCTAGTAAATAGAAAAGCCAGGATTCAACTCCAGGGGCTGGGTGCAGA
ACTGCTATTCTTCACTGCTTCACCAATCAGCAGCTACCCAAGGCAGAAAACTTTTTCATCCTTGGCTCCTTCATT
CTCCCTGTCACCCCAGATCCCCTCTACATCTAGTCAGAGAATAGGTCCTGTCAATTCCAACTTCTCTATATGGCT
CCTCTCAGGCATGTGCCCTTAATTGGCCTAATTCTCTAATACACCTTCCCTCTACATGCTCACTCCCTCAGATCA
TTGCTTTATCACGTGTTACCTGGGTTGCTATTACATAAAGAGCAATCTTTCTAAAATGAGGATCTTATCACTTCA
CTTCCACACTAAAATGTTTTTCCTGGGGAACCACACTCCTTAGCAATCTGACCCATCAGACCTTCCAGGCTGTCT
CCTGCCTGCTCCCTAAGGCTCCAGCCACACAGAATTATCATGGGCCCACACACCCACCAAATCCTCCCATGCCTT
TGCCCATGTTGTCTGGGATGCCCTTCTCTCCCTTCTGTCTACATCAAGCATCAGACTGAATATCCCTCTTGTGCG
GCCTTCTAAAACCTCCCGTCCAAAGCGAAATATATTGCCCTCTATTTATACTTTTACAGCATTTGGCACACAAGT
ACAGAGTAGTAGCTTTTTATCACATTCTCTGATAATTATATAGATATGGTATTTCTTAGCTCTCTCTCCAACTGG
CTAATAAGTTGCTTTTTGTCTGAGTGCCTAATTTTGTGTTTTGTGTCTGAGTGCCTCAGTTCCTCAAAAAAAGGT
TTTTTGATTAGTTCATTATTCATTTGAACATGGAAATTATGCTCACTAGTGGCAAATGCCACTAACCGTATTCCA
GAAGCTAGGTGTCATGTTTGCAATAAGATATATTATCCCTTCTACAAGTCACCTTTTATTTCAGGCATTTGTAAA
TGCCCATTAATAAAGTATGGTTCATAAATTTTACCTTGTAAGTGCCTAAGAAATGAGACTACAAGCTCCATTTCA
GCAGGACACAATAAATATTATTTTATAATGCAAAAAAATCTATGTCGGTGCGGAGAAAGAGGTA**ATG**AAATGGCA
GGAATTCGATATCAGCTATCATACCT

FIGURE 5245

MKWQEFDISYH

FIGURE 5246

AACAACTTTCTTTTATTAAAAATGTACATAAGTAAAAGGAACGTGGTTTAATTGTGCAAAGAGTAAGAAATACAG
ATGAGCAAATAACACGTATTAAAGCCACCTACGATATACCACCCAGAAGTAACCAGGCTGTTGAATTTTTAGAGA
CTGGGGTGCAAACACATTTTTTCACTCCCTTGTGCATATATCTGGGAGCTCTGCCATATACAGACACAGACGCGG
TGTCCACAGGCGATGCCTCTGCTGGGAATGCTGCAAGCAGGAGTCTATCCTTTCCTGGTACTGGCTCGGGGGCCC
TCCTCAGCGCCCAGGTCACTCTAGCATCCAGGAGTCCAAAGGCCCGGCTGTGCAGGCTGCAGAGGTGATCTTGGT
GTGTTTTCCTCCAATAGGCTACAAACTCTGGCACCCATGGCTGGTGGCTGGCATTCAACTCTCCAGCAGCCAGGG
AGTCCATTTTCTTGTTTCTCTGCTGGCCATCCTCAGGACTTGCGGCGGGGAGTGGGGGGCCCAGGGTGTGCTGCC
ACCTCGCCCGGCGCGGGTTGCGGCCCCAGGGCCCGCGCTCCAGGCTG

FIGURE 5247

CGCTTCGGGGAGAAGGTGGCTGCGGCTGCTGGGGCCGCTGCGCCGGCGGCGGTTCCCGATGTGGAGGTCCGTCTT
GGGTGGGGAGGCACCCAGGTCGCTGGTTCGATGCAGAGGAAGAAACCACACCTAGCACGTAAAGCCCTGAAAAAA
TAGAGGTGTACAGTAGAGTTTTCCAGAGGCTAC**ATG**ACATGCAGTATCACAACGGAAGCAAATATAAGAACCCAC
CTGTCTCCTGTTAAAATGCAAAATGTAAAACAATACCACTTTGCTAACTGTTTTTGTTTGGGGAAATATAGTTCA
TAAAAATATTTATGTTAACATGTAATTTAGGTTAAAATAAATTAATAAATATTTGT

FIGURE 5248

MTCSITTEANIRTHLSPVKMQNVKQYHFANCFCLGKYSS

FIGURE 5249A

AGCCCAGCATTCATGGCGCAGCCATCTCTTGTACTTGCTAGCAAAACACCACCTGTGGAAAGTCAGCTCAAACTT
CCAACCTCATCCCTCACAAAGGGGGAATGGAGGGTTTGGTTTTGGCTTTCACTGGAGTCTGCAACAAGAACTGGC
ATCATGCTGCCCATTTCCCGCCTCTCCCCACCCAGACCCCTGCCTCAGGGACGCCTGTCCTCAGCCCAGCCCTCA
GCTGCAGCCAGGCCTTCAGCCTCCGTAACCCCCCGCTCAGGGTCCCCACCCCCTGCAGCCCTGTCCCTCCAGATGC
ATGGCCTTGTCCTGTGTGGGGGTGGCCGAGAGCACTGCCCCAGCCCTGGGTACCTTGGGCAGGAAGCTGGCAGAG
GCCAGGGCTGCCATTCAAACAGGGGCAGGTGGTTTTGCCAGGAGGAAGTTGACAGTTCAACTTCAAACATGGGTG
ACGCAGGCCCCACACTGCCTGCTCCCCGTCCCACCCCTCCCTGAGACACGCCACCCCGCCCTCTCCCTCTCTGAG
AGCGAGATACCCGGCCAGACACCCTCACCTGCGGTGCCCAGCTGCCCAGGCTGAGGCAAGAGAAGGCCAGAAACC
ATGCCCATGGGGTCTCTGCAACCGCTGGCCACCTTGTACCTGCTGGGGATGCTGGTCGCTTCCTGCCTCGGACGG
CTCAGCTGGTATGACCCAGATTTCCAGGCAAGGCTCACCCGTTCCAACTCGAAGTGCCAGGGCCAGCTGGAGGTC
TACCTCAAGGACGGATGGCACATGGTTTGCAGCCAGAGCTGGGGCCGGAGCTCCAAGCAGTGGGAGGACCCCAGT
CAAGCGTCAAAAGTCTGCCAGCGGCTGAACTGTGGGGTGCCCTTAAGCCTTGGCCCCTTCCTTGTCACCTACACA
CCTCAGAGCTCAATCATCTGCTACGGACAACTGGGCTCCTTCTCCAACTGCAGCCACAGCAGAAATGACATGTGT
CACTCTCTGGGCCTGACCTGCTTAGAACCCCAGAAGACAACACCTCCAACGACAAGGCCCCCGCCCACCACAACT
CCAGAGCCCACAGCTCCTCCCAGGCTGCAGCTGGTGGCACAGTCTGGCGGCCAGCACTGTGCCGGCGTGGTGGAG
TTCTACAGCGGCAGCCTGGGGGGTACCATCAGCTATGAGGCCCAGGACAAGACCCAGGACCTGGAGAACTTCCTC
TGCAACAACCTCCAGTGTGGCTCCTTCTTGAAGCATCTGCCAGAGACTGAGGCAGGCAGAGCCCAAGACCTAGGG
GAGCCACGGGAACACCAGCCCTTGCCAATCCAATGGAAGATCCAGAACTCAAGCTGTACCTCCCTGGAGCATTGC
TTCAGGAAAATCAAGCCCCAGAAAAGTGGCCGAGTTCTTGCCCTCCTTTGCTCAGGTTTCCAGCCCAAGGTGCAG
AGCCGTCTGGTGGGGGGCAGCAGCATCTGTGAAGGCACCGTGGAGGTGCGCCAGGGGGCTCAGTGGGCAGCCCTG
TGTGACAGCTCTTCAGCCAGGAGCTCGCTGCGGTGGGAGGAGGTGTGCCGGGAGCAGCAGTGTGGCAGCGTCAAC
TCCTATCGAGTGCTGGACGCTGGTGACCCAACATCCCGGGGGCTCTTCTGTCCCCATCAGAAGCTGTCCCAGTGC
CACGAACTTTGGGAGAGAAATTCCTACTGCAAGAAGGTGTTTGTCACATGCCAGGATCCAAACCCCGCAGGCCTG
GCCGCAGGCACGGTGGCAAGCATCATCCTGGCCCTGGTGCTCCTGGTGGTGCTGCTGGTCGTGTGCGGCCCCCTT
GCCTACAAGAAGCTAGTGAAGAAATTCCGCCAGAAGAAGCAGCGCCAGTGGATTGGCCCAACGGGAATGAACCAA
AACATGTCTTTCCATCGCAACCACACGGCAACCGTCCGATCCCATGCTGAGAACCCCACAGCCTCCCACGTGGAT
AACGAATACAGCCAACCTCCCAGGAACTCCCGCCTGTCAGCTTATCCAGCTCTGGAAGGGGCTCTGCATCGCTCC
TCCATGCAGCCTGACAACTCCTCCGACAGTGACTATGATCTGCATGGGGCTCAGAGGCTG**TAA**AGAACTGGGATC
CATGAGCAAAAAGCCGAGAGCCAGACCTGTTTGTCCTGAGAAAACTGTCCGCTCTTCACTTGAAATCATGTCCCT
ATTTCTACCCCGGCCAGAACATGGACAGAGGCCAGAAGCCTTCCGGACAGGCGCTGCTGCCCCGAGTGGCAGGCC
AGCTCACACTCTGCTGCACAACAGCTCGGCCGCCCCTCCACTTGTGGAAGCTGTGGTGGGCAGAGCCCCAAAACA
AGCAGCCTTCCAACTAGAGACTCGGGGGTGTCTGAAGGGGGCCCCCTTTCCCTGCCCGCTGGGGAGCGGCGTCTC
AGTGAAATCGGCTTTCTCCTCAGACTCTGTCCCTGGTAAGGAGTGACAAGGAAGCTCACAGCTGGGCGAGTGCAT
TTTGAATAGTTTTTTGTAAGTAGTGCTTTTCCTCCTTCCTGACAAATCGAGCGCTTTGGCCTCTTCTGTGCAGCA
TCCACCCCTGCGGATCCCTCTGGGGAGGACAGGAAGGGGACTCCCGGAGACCTCTGCAGCCGTGGTGGTCAGAGG
CTGCTCACCTGAGCACAAAGACAGCTCTGCACATTCACCGCAGCTGCCAGCCAGGGGTCTGGGTGGGCACCACCC
TGACCCACAGCGTCACCCCACTCCCTCTGTCTTATGACTCCCCTCCCCAACCCCCTCATCTAAAGACACCTTCCT
TTCCACTGGCTGTCAAGCCCACAGGGCACCAGTGCCACCCAGGGCCCTGCACAAAGGGGCGCCTAGTAAACCTTA
ACCAACTTGGTTTTTTGCTTCACCCAGCAATTAAAAGTCCCAAGCTGAGGTAGTTTCAGTCCATCACAGTTCATC
TTCTAACCCAAGAGTCAGAGATGGGGCTGGTCATGTTCCTTTGGTTTGAATAACTCCCTTGACGAAAACAGACTC
CTCTAGTACTTGGAGATCTTGGACGTTACACCTAATCCCATGGGGCCTCGGCTTCCTTAACTGCAAGTGAGAAGA
GGAGGTCTACCCAGGAGCCTCGGGTCTGATCAAGGGAGAGGCCAGGCGCAGCTCACTGCGGCGGCTCCCTAAGAA
GGTGAAGCAACATGGGAACACATCCTAAGACAGGTCCTTTCTCCACGCCATTTGATGCTGTATCTCCTGGGAGCA
CAGGCATCAATGGTCCAAGCCGCATAATAAGTCTGGAAGAGCAAAAGGGAGTTACTAGGATATGGGGTGGGCTGC
TCCCAGAATCTGCTCAGCTTTCTGCCCCCACCAACACCCTCCAACCAGGCCTTGCCTTCTGAGAGCCCCCGTGGC
CAAGCCCAGGTCACAGATCTTCCCCCGACCATGCTGGGAATCCAGAAACAGGGACCCCATTTGTCTTCCCATATC
TGGTGGAGGTGAGGGGGCTCCTCAAAAGGGAACTGAGAGGCTGCTCTTAGGGAGGGCAAAGGTTCGGGGGCAGCC
AGTGTCTCCCATCAGTGCCTTTTTTAATAAAAGCTCTTTCATCTATAGTTTGGCCACCATACAGTGGCCTCAAAG

FIGURE 5249B

CAACCATGGCCTACTTAAAAACCAAACCAAAAATAAAGAGTTTAGTTGAGGAG

FIGURE 5250

SPAFMAQPSLVLASKTPPVESQLKLPTSSLTKGEWRVWFWLSLESATRTGIMLPISRLSPPRPLPQGRLSSAQPS
AAARPSASVTPAQGPHPLQPCPSRCMALSCVGVAESTAPALGTLGRKLAEARAAIQTGAGGFARRKLTVQLQTWV
TQAPHCLLPVPPLPETRHPALSLSESEIPGQTPSPAVPSCPGXGKRRPETMPMGSLQPLATLYLLGMLVASCLGR
LSWYDPDFQARLTRSNSKCQGQLEVYLKDGWHMVCSQSWGRSSKQWEDPSQASKVCQRLNCGVPLSLGPFLVTYT
PQSSIICYGQLGSFSNCSHSRNDMCHSLGLTCLEPQKTTPPTTRPPPTTTPEPTAPPRLQLVAQSGGQHCAGVVE
FYSGSLGGTISYEAQDKTQDLENFLCNNLQCGSFLKHLPETEAGRAQDLGEPREHQPLPIQWKIQNSSCTSLEHC
FRKIKPQKSGRVLALLCSGFQPKVQSRLVGGSSICEGTVEVRQGAQWAALCDSSSARSSLRWEEVCREQQCGSVN
SYRVLDAGDPTSRGLFCPHQKLSQCHELWERNSYCKKVFVTCQDPNPAGLAAGTVASIILALVLLVVLLVVCGPL
AYKKLVKKFRQKKQRQWIGPTGMNQNMSFHRNHTATVRSHAENPTASHVDNEYSQPPRNSRLSAYPALEGALHRS
SMQPDNSSDSDYDLHGAQRL

FIGURE 5251A

GCCCTTTTGAGTACCTCTGTCCAGGACTGAAGACGAACCTTGGCCGCAGTCCTTGCGAACTGTTCGCAAAACAGT
GCGGGCTGCGGTGGGTCAGCGTCACATGCTAATGACAGGATGTTCCTCGTAGCTTTTTATTTTGTGCGTCTTATG
TTTGTATAGTGTGTTGTCATTTTGATTTTTTTTTTTTTTTTAAGTATAAAAGCTGCTTAGAATAGTTCTATCATG
AAGGGCACTTTTCAGATTGTGGGCTGGAAAGGGTTATTTTATCTGTGGGGGAGGGAGGGAGACGTGAAGCCTATT
TAAAATGAGCCTGTGACGATTATGCACATGACCAGAGGCGGCCGGTAATCAGGGCAGAGTCTGGTGTGGACCGCC
GGGCGCAGAGCGGCTCCGCGGCGGGAGCTGAGCGGAAGGCGCGGGCTGCGATCTGCTCTCTGTTCCCCTGGATCC
GCCTATGCACATTACCCTTGTTTCATTACTTTTTCATGTCATTTTTTTATCCCAAAAAATATTTTTTAAAAGTTA
AAAAAAGACATATCAAACATGCAAATACTTGAATCCAGCAGGCCAATAGTGAAATGTGAACACTTTCTAATTCTA
CACTTCCAGGTTGACATCAGTACACAGAAACAGGCTCTAGGAAAAATTTCTAAGTTCATAGCCTACGTGTGTGTA
TGTGTGCGTGTTGAAACAGAAGTGTGTGTGTGTGTGCATGTGTGGCGCGTGCTCCTGCACGGCGTGCAGTTTTCT
GTGTTTGTGTGTTTGAAAGCGTGTGAGGATTTAACTGTGGGTTTTCCCTTGTATTCAGTATACGCTTTTTTTTTG
GCGCATTGGTCAAACGGTTGTTATTATTAGCTTCTAACTTTGCACTGAGTGTCCTCGCCCTTCCTTTAGCTAATC
CTATACATTACAGAGAATTCCTAGGACAGGGCTGGCGACAATTCATGTGTAAATGTTTACTCAAGGACTCTGTGA
CTGCGTTTAAAAAGTACAGTGTATATCTCTGGAGAAATAACATGTATACCTACCTTTAGCAGCTTTTTATTGTGG
ACTAATGCAAGAAAATTATTACCAGAGTATTGCACCATTTTTCCATTTGGAATATAAAGTTAAAGAGAAAAAAAA
AAAAAACTGTTGTTGAACTGTGGCCATAGATACTTGTAAAGAATGGATGGTTCCGTGGAAGGAACAGAAACAAGC
ACTTGGGCGTGGGTTGTGACTGCTTTTGGGGGAGCCTGGGGTTTGGGCTCCCACCTGTTTACAGACCTTTTTTTC
TCCTTCAGACTTTAAAATTTTAAAAATTTAAAAAGGAATTAAAAAAAAAAAAAAGACTTCCGTCGTAAAGAAACCT
ATTTTCAGAATGCAGATGCGTTCCTTCAGAGCTCTGGGACGGGACAGTGTTGTTCCCTCGGCCATCGTCGTGGAC
TCTGTCGATTGCTTTCGCCCCTTCGTCAAGGTGACAGGCGTTGTGGCCACTGTCTTGCACATGCCGGACGCGCTC
TCAGGAAAGCCAGGGCTCCCGAGGGCAGCTCCACACCATTTCATGTATTTTTAAACCCAACTCCTAGCACTGAAG
ATGTTATTTAAAAAAAAAAAAAACAAAACAAAACAAAAAAATGAAAAAAAAGAAAAAGAGGAAAAAAAAACACAA
AGAAGAAAAATACCTAATCTCTAATGTGTAGCAGTTACATATTTACCAAATAATGGACTCAAAAGAAATAGATGT
TTGAAGAGTGCTTTATATATTAAAAATTGCTTTATGTTTTAAAAATGATCAATGTTTTGATTGTTTTGCAAGGAA
GAAAGACAATGGAATAACATACCTTCAAGTATGTTTTAAAAAATATATATATGAACATTGTGCTCCCTGCCTGCT
TGATCAGGAAACTTGTGCATTACATTTTTTTAATTAGCTTTTTAATGGTTTTATCAAAACAAAAAAAATACAAAA
GAAAAAATAAAAAGTCCTGCAAGACTGCAGATCCACAAAAGCTGGTTTTATAGAGGATCATGAACTATGCACAAA
CTGGGTTCAAGACTTTTTTTCTCAAGTTTAGTAGGATATTTAGAAAAACCAACCTTCCTCAGAGTGACTGCATCT
CATTGCCATTACATGCGTTCTATATATTCGATGGACATACACCTGCGTATGTATATCCAATATGTGTGCGTGTGA
GCATGCGTGTGCGTATGTGCGTCCGACATACCACTTCCCGTGCTGCCGGCGAGCATTGAGTTGTAGAAAAACTGT
TGTTTTAAAATTGGGGATGGAAGTCAGGATATTTTGTCTTTTTTGGGTTTGGTGGGTTTGAGGGGTTTTTTGNTT
GTTTGTTTTTTGTTTTTTTTACCTTTTATTTTGAACTTAATATGTCTGTAACTCTGAGATTAAACAACAAGTTCG
TGGCTCTTAATGTTTTCCTCATAGAATGTGACTGTTGAAGAACATGCATCGAAAGTTGCTTTCGAAAGTACAACG
CTTTATTGAATCTTAATAAATTGCAATTTTTTTCTTGGCTGTTCAAAGTAATGTGTTTTTCATTTTTCAAAAGAC
ACTATGGATGTCTACTTTGCACGCTGCGATTGGGAGAGCTGTCCCGCTGCATGCGTTCCCTCTGTAATTTCCTCA
GAGCTCACATACGTACCTCTCTCACGAGTGAACTCAGATTTTCCATTGTTTTGCTTTATTCTATCATTTGCTTTG
TGGTTTTGCTGTAAATATTGAAATCTTAATCATCATCGAGAGGCACAGCCAAGCTTTCCAGCTCTCCACCCCCGT
GGCCCATCCAAGTCTGTTCATCTGGTAACTTCTGTTGTCTGGGACGGCAGCAAGAAGATGCCGGGGCTTGCCTGG
AGTCCTGGCAGAGGAGTGCCACTCACTTTTGCCTAGGGTCCAGTTGGGGCTTAAAAAATATTTGGAGAGAAGAGT
AATGAGGATTTTTTGTGTTTCCTAGACATTTTATGCATCTATTTTTGTAAAATCACCTTCGCTAACTTTCACCAA
GCACTTTGAGCACAGTGGAACTTCAGAAGCACAACCAGCCTAACCCCAGAATCTCAGGTGGCACAGCTAGAAATT
GAGTCCCTTCCTAGGACACTGGCCGTGGCCTTCAGGGTGACCAGTCAGTGCCACCGGGTTGGCATTGGTGTTACA
GACAGGCCTCTGAAGACAAACCGAGCACCCCAGCGGCCCCTCAAACTAAGCAAGGATCTTTTTTCTGTCTGCGCT
CCCTGGGGCAAGGTCAAAGGTGGACCCGCCCACTGTGGGTCAATTCCTTCGAAAAGATGGGACCCGCACCCCCGC
CACAGGCTGGCCCCCCCCCACCCATGGGGAAGGTGGTGTGCTGCTGGCTCTGACCATACTCTTTTGGAAATTGAG
AAGGAAAGCATTGAGTGGGACCTAATCCGGAGAAGAAATTAAAGACCAGAAAAAGAAGGAAGCTGGGAATGAAAC
TCAAAATGCACTTGAACCTGGAAGCGGCAACCCTCAGCTCTGCGCGGCCGAGCCTCAGCAAGAGTTCGTTTTGTG
CCTGAGTTACTACTACAGGGGCAAACTGTACCCGTGCCTGTGCGCTGGGAGAACAAGGTCAGCGCCCAAGGGTGT

FIGURE 5251B

GCAAAGGATGTGGCAGGCTTCATGGAGGAGGTGGCATTTGCCCTGGGCCTGGGAGACCAGGTTGGATTTTGACAG
ACTGGGAACTCGGGGGACAGGAGGGCAGCACAGTGTAAGCTAAAGCCCTGTGTAGGGACCCCACGCAAAGACCTC
GTGGGCCTGGGTGTCCAGGGCACCATTTCCACCCATGGGTGAAAAAGAGGCTTGAGGAAGACAACAGGTTCTTCA
CCTGCATCTGTGGATATATATTTTTTTAAGTTTATTAAATTTTTTTTTAAATGGCAGTTTCAGACCTGCCCTTTG
TGG

FIGURE 5252

PFEYLCPGLKTNLGRSPCELFAKQCGLRWVSVTC

FIGURE 5253

TTTTAACTCCGGGCTGAGAACGGAAGTCAAGTTCAGATTCTCTTCCTTCCTCAAGCAAGCCAAAAAATTAAAGAG
CAAACACAGAGGCCCTAAATGTCTCGAGGCCTCTTCACCTGTGGCGATCGACGCAGCAAGCCTGGGTGTGCTAAG
AATTGAGGCTCTCTCTCCTTCATTCCGGGGGTTACGGGTGGCCTTGGAGCACCGGGAAGAATTAACCGGTGCCTA
AGTTTTCAATCGGATCATTCTTCTCAACTTGGGCGGCNNNNNNNNNNNNNNNNNNNNNNNNNGGCCCGGCACAC
ACGGCGGGGCAGTGCCAGCGCGGGCAGCAGGCTGGGCCCGAGGGCAGCGCTGCCGCAGCCGGGAGCCCCTCAGAG
TGTGGGGCGCGGGCTGCCCCCCGCGCGGACACCGGGCAGGGGCCGCAGATCTGTCCCCGCCGCCAGGCGTGGGGA
CCGCGAAGGGGCAGCCGCGGCGGGGCGGAGGGGCGGGGTGAGCACTTCCTGACTCTCGCATTGTCCACGCACCGC
CCGCGCCACCCAGGGCCCCGCCACCGCGCCGTCCCCGTCGGGGAGGAAGTTGGCGCTCGCCCCGCCAGCCCCGTC
TTACCGTTTTTGGCATCGCCCGCGGCCGC

FIGURE 5254

FNSGLRTEVKFRFSSFLKQAKKLKSKHRGPKCLEASSPVAIDAASLGVLRIEALSPSFRGLRVGLGAPGRINRCL
SFQSDHSSQLGRXXXXXXXXXGPAHTAGQCQRGQQAGPEGSAAAAGSPSECGARAAPRADTGQGPQICPRRQAWG
PRRGSRGGAEGRGEHFLTLALSTHRPRHPGPRHRAVPVGEEVGARPASPVLPFLASPA

FIGURE 5255

CATGGCCGCCCCGCCGCGCCCCGCGCCATCGCCCCCCGCCCCGCGGCGCCTCGACACGAGCGACGTCCTGCAGCA
GATCATGGCCATCACCGACCAGAGCCTGGACGAGGCACAGGCCAGAAAGCATGCTCTGAATTGCCATCGGATGAA
GCCTGCTCTGTTCAGCGTGCTCTGTGAGATCAAGGAAAAGACAGTGGTAAGCATCCGTGGCATTCAAGACGAAGA
TCCCCCTGACGCCCAGCTCCTGAGGCTGGATAACATGCTGCTGGCTGAGGGCGTGTGCAGGCCCGAGAAGAGAGG
AAGAGGAGGAGCGGTGGCCAGGGCCGGCACAGCAACACCAGGTGGCTGTCCAAATGACAATAGCATTGAGCACTC
TGACTACAGGGCCAAGCTGTCCCAGATCCGACAGATTTACCACTCTGAGCTAGAGAAATATGAACAGGCCTGTCG
TGAGTTCACCACGCACGTCACCAACCTCCTCCAGGAGCAGAGCAGGATGAGGCCTGTCTCCCCTAAGGAGATTGA
GCGCATGGTCGGCGCCATTCACGGCAAGTTCAGCGCCATCCAGATGCAGTTGAAGCAGAGCACCTGTGAGGCAGT
GATGACCCTGCGTTCGCGGCTGCTCGATGCCAGGCGCAAGCGGCGGAATTTCAGCAAGCAGGCGACGGAAGTGCT
GAATGAGTATTTTTACTCCCATCTGAACAACCCTTACCCCAGCGAAGAAGCCAAAGAAGAGCTGGCCAGGAAGGG
CGGCCTCACCATCTCCCAGGTCTCTAACTGGTTTGGCAACAAAAGAATCCGGTATAAAAAGAACATGGGGAAGTT
TCAAGAAGAGGCTACCATTTACACGGGTAAAACGGCTGTGGATACCACGGAAGTTGGGGTCCCAGGGAACCACGC
CAGCTGCCTGTCAACACCTAGCTCCGGCTCCTCTGGACCCTTCCCGCTGCCCAGCGCTGGGGACGCCTTCCTCAC
CCTGCGGACTCTGGCCTCTCTCCAGCCTCCTCCTGGGGGAGGCTGCCTGCAGTCCCAGGCCCAGGGTAGCTGGCA
GGGGGCCACCCCCCAACCTGCAACTGCCTCACCTGCTGGAGACCCTGGCAGCATCAACTCCAGTACATCTAATTA
AGTTTGGGGGATAAGCAGGAAAGAGCGCTGCGTGAGCTGCCATGTATCGCCAGCCGTTGCTTTGTTACTGAACGT
GCCGCCGACGACCTCAGAAAACCCAGATGGGTGGTGGTGCCCATGAGCCCCTGCTCCTCAGCCAGGCCCGTGGCG
CCGGCTCATGTGTCTGCTGCGACTCGAGATGGCCTGAAACGCCACTCATTCTCCCACTTCAGTTCGTTTTTTTGA
CAGTAATTTTATGGTAACGCTATGAATTGAATTGTCTGTTCTAGGACTGGGCACAGATTTTCCCATTAAAATTTT
TGACTTATTTTAAAAAAA

FIGURE 5256

MAAPPRPAPSPPAPRRLDTSDVLQQIMAITDQSLDEAQARKHALNCHRMKPALFSVLCEIKEKTVVSIRGIQDED
PPDAQLLRLDNMLLAEGVCRPEKRGRGGAVARAGTATPGGCPNDNSIEHSDYRAKLSQIRQIYHSELEKYEQACR
EFTTHVTNLLQEQSRMRPVSPKEIERMVGAIHGKFSAIQMQLKQSTCEAVMTLRSRLLDARRKRRNFSKQATEVL
NEYFYSHLNNPYPSEEAKEELARKGGLTISQVSNWFGNKRIRYKKNMGKFQEEATIYTGKTAVDTTEVGVPGNHA
SCLSTPSSGSSGPFPLPSAGDAFLTLRTLASLQPPPGGGCLQSQAQGSWQGATPQPATASPAGDPGSINSSTSN

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FIGURE 5257

TTTTGGTGACTGCAAAGGACAGAGAACCTTTCCACTTTGGCCATACTGGGTTGCTAAGCCGGAGCCATTTCAGCT
CCTGGCTCCTCAAGATAACGGCGAGTCCAGTGCCATCTTGGAGAAGCTCCAGGGGCAGGGCTGACTTTTCTCCTA
CAGGAGGAACAATGTGGGGATCTGAGGGATGGGAGGGAGACTTCCCCCTAGAGTGGTGGTCCTGCTGGGGGCTCA
TATCCAGGGACCCAAAAGGGGGGCTGTGTAGGAGGTTCCACATTGGAGGGGCTCTCTCTCTCGCAGCTGTCAGAG
TTGGTCCTGGCTGTGGCGTCCAAACAGCT**TGA**GGGAAAAAGATCCTGTCTAACCACCTCATCTACTACTCAAGTT
CTTTCTGAAGGAGGGATTTCTTCAGTTAACCATGGACAGTGAGGTTTCTCACCACAGTAACTTGAGTCCAGGTTG
AGGGGGAGACAGATCTGTGGTAAATCTCTGACTTGGGCAGCACACTGAGTGTGGAACCCCACAGGACTCCTTAGG
GAAGGAGCTTGTGTGTGAAAGAACCCCTGGGGCTGAGCTGGTGACCTCCATGTGTGGGTGCAGCAGGGTCTTGGA
TGGTGCCAATTGATCTGGACAGCCTGTTGATGCTTTTCTACTTCCACCCTTCGGCCTGGCCCCACTGAGCCCCAT
CAAGGTGCCTGAAGAGGGGTCCAGTGAGATCCCGTGGCCACAGGGACTCCAGAGGCATCTCTGCAGGAAGCACAC
CATGCCTTCCCTCCATGTTCCATCACGGCGCCACAATCTGTGTCCCTTAACTTCTCAGGGTCAAAGACAAAGGCA
AGCGTTGCTGAATTTTCTCTTTAATGGCCATTGGAAGAGTCTGGTTCAGTTTTTCCCAACTCTCTTCCCACTCGT
ATTTGGGGCCTCTGGGTTTTCTGAAGGCACAAGGACTGTGACTTTGTACCACTAACCTGTGGTTCAAACCTGGGT
GTGTTTCTGGCATCTCCCTAACCCAGATCAGCAATGGCCACCCTGCTCCTCTGAGGTCAGCAGAAGACTGGGAAG
CAGAGGTGAGGGATGCAGGCCACACTGGAATGGGAAGTCTTTTCCCCACTGGATGTGCCTGTCTGGTGGGTTTTG
GACCTTCCCAGACTACATCTCTAGGAGAGGCCTGTTTGGAGTAGTACACTGAGAGACCCTGGCCTCTTCTGCTGG
AAGACTGTCCAAGTCTTGGGGTTTCTTGAGCTGGTGATTCCTCTGCCATCCTGCTCTCTCTCTTCATCTCAGGCA
GCATGGGGTCCACTTTTGTCCCCAAACCTAATGTTTTAATCCAAATGCAAATTGGTTCCACATTTTTACTGGAGG
GTAATCAGTTTTTAAAATTCACACACATGTAATCGAAACGCAATACTATAAAGTTCTACTGGTGAGACTCCTGAA
CTCAGTCTGTTTTCTTAGTAAAATCCAGCACCTTCCTTCTCTTCATTCTTTGTATCACTGTGGCTTTAAACTGTC
TTCAAGTTATTCCTCCTCATCACCTCCATTGTTTTATCTTCACCCCCTTAACATCCACAGAAACAGACTGGAGTT
CTTGAATGTTTTAGCTTCAACTTCTACATGTGCCCACTTTGCTTTGTTAATGCTACCACAGCTGTGCTGAATGAA
GCCTGTTTCCCAGGCAGAGATCCTGCCACTCTGGATGGGAAGATAAAATGCAGGGTCCTCTTTCCTGGTTTCCTG
GGAACATCAAGGGACAGGTGACCAGCTTGGAACTCTTTGATGACTTGGAAGGAGGAAGATGGTCTGGCTGATCTG
TGGTGAGAAGGTCCTTTGCACAAGGCCTGGCCTAGAGGACGCAGCCACGACCCCAGCGCTTGGCCATCTCTGTAG
AGGATTCGCGGGTGGACCATGCTTAGTCTAACAGGGTATGGTTATTAACGCCCGTTATGAACGGTTCATAACCAG
CCAACGGTTATGAACTGTGGAGGGCTTCCGCAATCCCACCAC

FIGURE 5258

LVTAKDREPFHFGHTGLLSRSHFSSWLLKITASPVPSWRSSRGRADFSPTGGTMWGSEGWEGDFPLEWWSCWGLI
SRDPKGGLCRRFHIGGALSLAAVRVGPGCGVQTA

FIGURE 5259

CCAAAGTGCTGGATTACAGGTGTGAGCCAGTGCGCCTAGCCCACCATGCCTCACTTTTAGCGCAGTGTGATCCTA
CACAAATTGCCCTGTGTATATTCCAAGGGACGATCTGGGTTTGTAGGGCCAGAAACACGTGCAGTTCTGGGGTAG
CGGGGAGGTGGTCGGTGGCTCTTTTAACAAAAAAATACCAAATGATGAAAACAAAATTAAGTTCAGGGCCTTGGG
CAGGTCCTGCAAGTTAGGGGCCTAGAAGCTGAAATTTCATTAACATCTACTAGTGGTAAATCCGCTTCTCCTACA
TGCCAGTGCCCTCTGGGAAAAAA

FIGURE 5260

KVLDYRCEPVRLAHHASLLAQCDPTQIALCIFQGTIWVCRARNTCSSGVAGRWSVALLTKKYQMMKTKLSSGPWA
GPAS

FIGURE 5261

GGGGCGGAGAGAGGCGAGCACCGGGAAGGGGAGCGTGGGGCCGCTGGAATGGGTGAATTTAAGGTCCATCGAGTA
CGTTTCTTTAATTATGTTCCATCAGGAATCCGCTGTGTGGCTTACAATAACCAGTCAAACAGATTGGCTGTTTCA
CGAACAGATGGCACTGTGGAAATTTATAACTTGTCAGCAAACTACTTTCAGGAGAAATTTTTCCCAGGTCATGAG
TCTCGGGCTACAGAAGCTTTGTGCTGGGCAGAAGGACAGCGACTCTTTAGTGCTGGGCTCAATGGCGAGATTATG
GAGTATGATTTACAGGCGTTAAACATCAAGTATGCTATGGATGCCTTTGGAGGACCTATTTGGAGCATGGCTGCC
AGCCCCAGTGGCTCTCAACTTTTGGTTGGTTGTGAAGATGGATCTGTGAAACTATTTCAAATTACCCCAGACAAA
ATCCAGTTTGAAAGAAATTTTGATCGGCAGAAAAGTCGCATCCTGAGTCTCAGCTGGCATCCCTCTGGTACCCAC
ATTGCAGCTGGTTCCATAGACTACATTAGTGTGTTTGATGTCAAATCAGGCAGCGCTGTTCATAAGATGATTGTG
GACAGGCAGTATATGGGCGTGTCTAAGCGGAAGTGCATCGTGTGGGGTGTCGCCTTCTTGTCCGATGGCACTATC
ATAAGTGTGGACTCTGCTGGGAAGGTGCAGTTCTGGGACTCAGCCACTGGGACGCTTGTGAAGAGCCATCTCATC
GCTAATGCTGACGTGCAGTCCATTGCTGTAGCTGACCAAGAAGACAGTTTCGTGGTGGGCACAGCCGAGGGAACA
GTCTTCCATTTTCAGCTGGTCCCTGTGACATCTAACAGCAGTGAGAAGCAGTGGGTGCGGACAAAACCGTTCCAG
CATCACACTCATGACATGCGCACTGTGGCCCACAGCCCAACAGCGCTGATATCTGGAGGCACTGACACCCACTTA
GTCTTTCGTCCTCTCATGGAGAAGGTGGAAGTAAAGAATTACGATGCCGCTCTCCGAAAAATCACCTTTCCCCAC
CGATGTCTCATCTCCTGTTCTAAAAAGAGGCAGCTTCTCCTCTTCCAGTTTGCTCATCACTTAGAACTTTGGCGA
CTGGGATCCACAGTTGCAACAGGCAAGAATGGGGATACTCTTCCACTCTCTAAAAATGCAGATCATTTACTGCAC
CTAAAGACAAAGGGTCCTGAGAACATTATCTGTAGCTGTATCTCCCCATGTGGAAGTTGGATAGCCTATTCTACA
GTTTCTCGGTTTTTTCTCTATCGGCTGAATTATGAACATGACAACATAAGCCTCAAAAGGGTTTCCAAAATGCCA
GCATTCCTTCGCTCTGCCCTTCAGATTTTGTTTTCTGAAGATTCAACAAAGCTCTTTGTAGCATCAAATCAAGGA
GCTCTGCATATTGTTCAGCTGTCAGGAGGAAGCTTCAAGCACCTGCATGCTTTCCAGCCTCAGTCAGGAACAGTG
GAGGCCATGTGTCTTTTGGCAGTCAGTCCAGATGGGAATTGGCTAGCTGCATCAGGTACCAGTGCTGGAGTCCAT
GTCTACAACGTAAAACAGCTAAAGCTTCACTGCACGGTGCCTGCTTACAATTTCCCAGTGACTGCTATGGCTATT
GCCCCCAATACCAACAACCTTGTCATCGCTCATTCGGACCAGCAGGTATTTGAGTACAGCATCCCAGACAAACAG
TATACAGATTGGAGCCGGACTGTCCAGAAGCAGGGCTTTCACCACCTTTGGCTCCAAAGGGATACTCCTATCACA
CACATCAGTTTTCATCCCAAGAGACCGATGCACATCCTTCTCCATGATGCCTACATGTTCTGCATCATTGACAAG
TCATTGCCCCTTCCAAATGACAAAACCTTACTCTACAATCCATTTCCTCCCACGAATGAATCAGATGTCATCCGG
AGGCGCACAGCTCATGCTTTTAAAATTTCTAAGATATATAAGCCTCTACTCTTCATGGATCTTTTGGATGAAAGA
ACACTCGTGGCAGTAGAACGGCCTCTGGATGACATCATTGCTCAGCTCCCACCACCCATTAAAAAGAAGAAATTT
GGAACCTAAAACAGGGCACTGTCTGTGTCCTTCCTTGAACTGTCTACCCTGTTGCTTTTCACAAATCATGGTAAT
AAAACAAGTTATTCTTG

FIGURE 5262

MGEFKVHRVRFFNYVPSGIRCVAYNNQSNRLAVSRTDGTVEIYNLSANYFQEKFFPGHESRATEALCWAEGQRLF
SAGLNGEIMEYDLQALNIKYAMDAFGGPIWSMAASPSGSQLLVGCEDGSVKLFQITPDKIQFERNFDRQKSRILS
LSWHPSGTHIAAGSIDYISVFDVKSGSAVHKMIVDRQYMGVSKRKCIVWGVAFLSDGTIISVDSAGKVQFWDSAT
GTLVKSHLIANADVQSIAVADQEDSFVVGTAEGTVFHFQLVPVTSNSSEKQWVRTKPFQHHTHDMRTVAHSPTAL
ISGGTDTHLVFRPLMEKVEVKNYDAALRKITFPHRCLISCSKKRQLLLFQFAHHLELWRLGSTVATGKNGDTLPL
SKNADHLLHLKTKGPENIICSCISPCGSWIAYSTVSRFFLYRLNYEHDNISLKRVSKMPAFLRSALQILFSEDST
KLFVASNQGALHIVQLSGGSFKHLHAFQPQSGTVEAMCLLAVSPDGNWLAASGTSAGVHVYNVKQLKLHCTVPAY
NFPVTAMAIAPNTNNLVIAHSDQQVFEYSIPDKQYTDWSRTVQKQGFHHLWLQRDTPITHISFHPKRPMHILLHD
AYMFCIIDKSLPLPNDKTLLYNPFPPTNESDVIRRRTAHAFKISKIYKPLLFMDLLDERTLVAVERPLDDIIAQL
PPPIKKKKFGT

FIGURE 5263

ATTAATTTATATTTTCAGTACGATACATATCATCCCCCCATACTAAACAAATCAACCCAAAAATTTTGATTTCGC
TTAATTTCGCCTAACAAATATCTAACATGTATATAGCACTTTATAGATTAAGTGTGTTACTATTTTCTGTGCAGT
GGGCAGGAATTATAACTTCTACAGATGGAAAATGGTCTCTTATTGAGAAGTTTTTTGTCAAAAGATAACCGTCAA
AAGGATTCATGTCCGGGTTTCATCACTGTGTAGTCCCATACTGTTTATCACTCCATCACAATTTGAAGGCTGTCT
GAAATATCCATGAACTCCACTGGTAATTCATGGAGTTCAACTCTCTTAACCACCCTCCTCCCTGACCCATGATTT
TTACCCTAACAGCCATGAGAGTTTCCAAAAATGTTATGTTTTACTTTTCTAGTGTATGTCAAAAGACATTTTGTA
CTGTTTTAAAATTACTATTCTTGCTATTCAAAGAATAAAAAGTATTGTTTTTCAGATGATGGGTGGATCATGCTA
TAAAATGGTAACAAAGTTTTGGAAATAATAGCTTTAGATTATTCCAAAAAGAAAAAAAAAGAAAGCCTTTCTTGAG
TATAAATTGTTTTTATGAGTTCAAGGTTACATTGGCCTCATCTTAATAATTAGCGATGATTCAGATATTTTGGAA
TAGC

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FIGURE 5264

INLYFQYDTYHPPILNKSTQKF

FIGURE 5265A

GGCGCGGGCGGCCTGGAGCCCCGGGAGCGGCGCGCGGTCCCGGCCCAGCCGGCTCTCCTGGCCTCGCGCTGCA
CATTCTCTCCTGGCGGCGGCGCCACCTGCAGTAGCGTTCGCCCGAACATGGCGACACGGAGCAGCAGGAGGGAGT
CGCGACTCCCGTTCCTATTCACCCTGGTCGCACTGCTGCCGCCCGGAGCTCTCTGCGAAGTCTGGACGCAGAGGC
TGCACGGCGGCAGCGCGCCCTTGCCCCAGGACCGGGGCTTCCTCGTGGTGCAGGGCGACCCGCGCGAGCTGCGGC
TGTGGGCGCGCGGGGATGCCAGGGGGGCGAGCCGCGCGGACGAGAAGCCGCTCCGGAGGAAACGGAGCGCTGCCC
TGCAGCCCGAGCCCATCAAGGTGTACGGACAGGTTAGTCTGAATGATTCCCACAATCAGATGGTGGTGCACTGGG
CTGGAGAGAAAAGCAACGTGATCGTGGCCTTGGCCCGAGATAGCCTGGCATTGGCGAGGCCCAAGAGCAGTGATG
TGTACGTGTCTTACGACTATGGAAAATCATTCAAGAAAATTTCAGACAAGTTAAACTTTGGCTTGGGAAATAGGA
GTGAAGCTGTTATCGCCCAGTTCTACCACAGCCCTGCGGACAACAAGCGGTACATCTTTGCAGACGCTTATGCCC
AGTACCTCTGGATCACGTTTGACTTCTGCAACACTCTTCAAGGCTTTTCCATCCCATTTCGGGCAGCTGATCTCC
TCCTACACAGTAAGGCCTCCAACCTTCTCTTGGGCTTTGACAGGTCCCACCCCAACAAGCAGCTGTGGAAGTCAG
ATGACTTTGGCCAGACCTGGATCATGATTCAGGAACATGTCAAGTCCTTTTCTTGGGGAATTGATCCCTATGACA
AACCAAATACCATCTACATTGAACGACACGAACCCTCTGGCTACTCCACTGTCTTCCGAAGTACAGATTTCTTCC
AGTCCCGGGAAAACCAGGAAGTGATCCTTGAGGAAGTGAGAGATTTTCAGCTTCGGGACAAGTACATGTTTGCTA
CAAAGGTGGTGCATCTCTTGGGCAGTGAACAGCAGTCTTCTGTCCAGCTCTGGGTCTCCTTTGGCCGGAAGCCCA
TGAGAGCAGCCCAGTTTGTCACAAGACATCCTATTAATGAATATTACATCGCAGATGCCTCCGAGGACCAGGTGT
TTGTGTGTGTCAGCCACAGTAACAACCGCACCAATTTATACATCTCAGAGGCAGAGGGGCTGAAGTTCTCCCTGT
CCTTGGAGAACGTGCTCTATTACAGCCCAGGAGGGGCCGGCAGTGACACCTTGGTGAGGTATTTTGCAAATGAAC
CATTTGCTGACTTCCACCGAGTGGAAGGATTGCAAGGAGTCTACATTGCTACTCTGATTAATGGTTCTATGAATG
AGGAGAACATGAGATCGGTCATCACCTTTGACAAAGGGGGAACCTGGGAGTTTCTTCAGGCTCCAGCCTTCACGG
GATATGGAGAGAAAATCAATTGTGAGCTTTCCCAGGGCTGTTCCCTTCATCTGGCTCAGCGCCTCAGTCAGCTCC
TCAACCTCCAGCTCCGGAGAATGCCCATCCTGTCCAAGGAGTCGGCTCCAGGCCTCATCATCGCCACTGGCTCAG
TGGGAAAGAACTTGGCTAGCAAGACAAACGTGTACATCTCTAGCAGTGCTGGAGCCAGGTGGCGAGAGGCACTTC
CTGGACCTCACTACTACACATGGGGAGACCACGGCGGAATCATCACGGCCATTGCCCAGGGCATGGAAACCAACG
AGCTAAAATACAGTACCAATGAAGGGGAGACCTGGAAAACATTCATCTTCTCTGAGAAGCCAGTGTTTGTGTATG
GCCTCCTCACAGAACCTGGGGAGAAGAGCACTGTCTTCACCATCTTTGGCTCGAACAAAGAGAATGTCCACAGCT
GGCTGATCCTCCAGGTCAATGCCACGGATGCCTTGGGAGTTCCCTGCACAGAGAATGACTACAAGCTGTGGTCAC
CATCTGATGAGCGGGGGAATGAGTGTTTGCTGGGACACAAGACTGTTTTCAAACGGCGGACCCCCCATGCCACAT
GCTTCAATGGAGAGGACTTTGACAGGCCGGTGGTCGTGTCCAACTGCTCCTGCACCCGGGAGGACTATGAGTGTG
ACTTCGGTTTCAAGATGAGTGAAGATTTGTCATTAGAGGTTTGTGTTCCAGATCCGGAATTTTCTGGAAAGTCAT
ACTCCCCTCCTGTGCCTTGCCCTGTGGGTTCTACTTACAGGAGAACGAGAGGCTACCGGAAGATTTCTGGGGACA
CTTGTAGCGGAGGAGATGTTGAAGCGCGACTGGAAGGAGAGCTGGTCCCCTGTCCCCTGGCAGAAGAGAACGAGT
TCATTCTGTATGCTGTGAGGAAATCCATCTACCGCTATGACCTGGCCTCGGGAGCCACCGAGCAGTTGCCTCTCA
CCGGGCTACGGGCAGCAGTGGCCCTGGACTTTGACTATGAGCACAACTGTTTGTATTGGTCCGACCTGGCCTTGG
ACGTCATCCAGCGCCTCTGTTTGAATGGAAGCACAGGGCAAGAGGTGATCATCAATTCTGGCCTGGAGACAGTAG
AAGCTTTGGCTTTTGAACCCCTCAGCCAGCTGCTTTACTGGGTAGATGCAGGCTTCAAAAAGATTGAGGTAGCTA
ATCCAGATGGCGACTTCCGACTCACAATCGTCAATTCCTCTGTGCTTGATCGTCCCAGGGCTCTGGTCCTCGTGC
CCCAAGAGGGGGTGATGTTCTGGACAGACTGGGGAGACCTGAAGCCTGGGATTTATCGGAGCAATATGGATGGTT
CTGCTGCCTATCACCTGGTGTCTGAGGATGTGAAGTGGCCCAATGGCATCTCTGTGGACGACCAGTGGATTTACT
GGACGGATGCCTACCTGGAGTGCATAGAGCGGATCACGTTCAGTGGCCAGCAGCGCTCTGTCATTCTGGACAACC
TCCCGCACCCCTATGCCATTGCTGTCTTTAAGAATGAAATCTACTGGGATGACTGGTCACAGCTCAGCATATTCC
GAGCTTCCAAATACAGTGGGTCCCAGATGGAGATTCTGGCAAACCAGCTCACGGGGCTCATGGACATGAAGATTT
TCTACAAGGGGAAGAACACTGGAAGCAATGCCTGTGTGCCCAGGCCATGCAGCCTGCTGTGCCTGCCCAAGGCCA
ACAACAGTAGAAGCTGCAGGTGTCCAGAGGATGTGTCCAGCAGTGTGCTTCCATCAGGGGACCTGATGTGTGACT
GCCCTCAGGGCTATCAGCTCAAGAACAATACCTGTGTCAAAGAAGAGAACACCTGTCTTCGCAACCAGTATCGCT
GCAGCAACGGGAACTGTATCAACAGCATTTGGTGGTGTGACTTTGACAACGACTGTGGAGACATGAGCGATGAGA
GAAACTGCCCTACCACCATCTGTGACCTGGACACCCAGTTTCGTTGCCAGGAGTCTGGGACTTGTATCCCACTGT
CCTATAAATGTGACCTTGAGGATGACTGTGGAGACAACAGTGATGAAAGTCATTGTGAAATGCACCAGTGCCGGA

FIGURE 5265B

GTGACGAGTACAACTGCAGTTCCGGCATGTGCATCCGCTCCTCCTGGGTATGTGACGGGGACAACGACTGCAGGG
ACTGGTCTGATGAAGCCAACTGTACCGCCATCTATCACACCTGTGAGGCCTCCAACTTCCAGTGCCGAAACGGGC
ACTGCATCCCCCAGCGGTGGGCGTGTGACGGGGATACGGACTGCCAGGATGGTTCCGATGAGGATCCAGTCAACT
GTGAGAAGAAGTGCAATGGATTCCGCTGCCCAAACGGCACTTGCATCCCATCCAGCAAACATTGTGATGGTCTGC
GTGATTGCTCTGATGGCTCCGATGAACAGCACTGCGAGCCCCTCTGTACGCACTTCATGGACTTTGTGTGTAAGA
ACCGCCAGCAGTGCCTGTTCCACTCCATGGTCTGTGACGGAATCATCCAGTGCCGCGACGGGTCCGATGAGGATG
CGGCGTTTGCAGGATGCTCCCAAGATCCTGAGTTCCACAAGGTATGTGATGAGTTCGGTTTCCAGTGTCAGAATG
GAGTGTGCATCAGTTTGATTTGGAAGTGCGACGGGATGGATGATTGCGGCGATTATTCTGATGAAGCCAACTGCG
AAAACCCCACAGAAGCCCCAAACTGCTCCCGCTACTTCCAGTTTCGGTGTGAGAATGGCCACTGCATCCCCAACA
GATGGAAATGTGACAGGGAGAACGACTGTGGGGACTGGTCTGATGAGAAGGATTGTGGAGATTCACATATTCTTC
CCTTCTCGACTCCTGGGCCCTCCACGTGTCTGCCCAATTACTACCGCTGCAGCAGTGGGACCTGCGTGATGGACA
CCTGGGTGTGCGACGGGTACCGAGATTGTGCAGATGGCTCTGACGAGGAAGCCTGCCCCTTGCTTGCAAACGTCA
CTGCTGCCTCCACTCCCACCCAACTTGGGCGATGTGACCGATTTGAGTTCGAATGCCACCAACCGAAGACGTGTA
TTCCCAACTGGAAGCGCTGTGACGGCCACCAAGATTGCCAGGATGGCCGGGACGAGGCCAATTGCCCCACACACA
GCACCTTGACTTGCATGAGCAGGGAGTTCCAGTGCGAGGACGGGGAGGCCTGCATTGTGCTCTCGGAGCGCTGCG
ACGGCTTCCTGGACTGCTCGGACGAGAGCGATGAAAAGGCCTGCAGTGATGAGTTGACTGTGTACAAAGTACAGA
ATCTTCAGTGGACAGCTGACTTCTCTGGGGATGTGACTTTGACCTGGATGAGGCCCAAAAAAATGCCCTCTGCTT
CTTGTGTATATAATGTCTACTACAGGGTGGTTGGAGAGAGCATATGGAAGACTCTGGAGACCCACAGCAATAAGA
CAAACACTGTATTAAAAGTCTTGAAACCAGATACCACGTATCAGGTTAAAGTACAGGTTCAGTGTCTCAGCAAGG
CACACAACACCAATGACTTTGTGACCCTGAGGACCCCAGAGGGATTGCCAGATGCCCCTCGAAATCTCCAGCTGT
CACTCCCCAGGGAAGCAGAAGGTGTGATTGTAGGCCACTGGGCTCCTCCCATCCACACCCATGGCCTCATCCGTG
AGTACATTGTAGAATACAGCAGGAGTGGTTCCAAGATGTGGGCCTCCCAGAGGGCTGCTAGTAACTTTACAGAAA
TCAAGAACTTATTGGTCAACACTCTATACACCGTCAGAGTGGCTGCGGTGACTAGTCGTGGAATAGGAAACTGGA
GCGATTCTAAATCCATTACCACCATAAAAGGAAAAGTGATCCCACCACCAGATATCCACATTGACAGCTATGGTG
AAAATTATCTAAGCTTCACCCTGACCATGGAGAGTGATATCAAGGTGAATGGCTATGTGGTGAACCTTTTCTGGG
CATTTGACACCCACAAGCAAGAGAGGAGAACTTTGAACTTCCGAGGAAGCATATTGTCACACAAAGTTGGCAATC
TGACAGCTCATACATCCTATGAGATTTCTGCCTGGGCCAAGACTGACTTGGGGGATAGCCCTCTGGCATTTGAGC
ATGTTATGACCAGAGGGGTTCGCCCACCTGCACCTAGCCTCAAGGCCAAAGCCATCAACCAGACTGCAGTGGAAT
GTACCTGGACCGGCCCCCGGAATGTGGTTTATGGTATTTTCTATGCCACGTCCTTTCTTGACCTCTATCGCAACC
CGAAGAGCTTGACTACTTCACTCCACAACAAGACGGTCATTGTCAGTAAGGATGAGCAGTATTTGTTTCTGGTCC
GTGTAGTGGTACCCTACCAGGGGCCATCCTCTGACTACGTTGTAGTGAAGATGATCCCGGACAGCAGGCTTCCAC
CCCGTCACCTGCATGTGGTTCATACGGGCAAAACCTCCGTGGTCATCAAGTGGGAATCACCGTATGACTCTCCTG
ACCAGGACTTGTTGTATGCAATTGCAGTCAAAGATCTCATAAGAAAGACTGACAGGAGCTACAAAGTAAAATCCC
GTAACAGCACTGTGGAATACACCCTTAACAAGTTGGAGCCTGGCGGGAAATACCACATCATTGTCCAACTGGGGA
ACATGAGCAAAGATTCCAGCATAAAAATTACCACAGTTTCATTATCAGCACCTGATGCCTTAAAAATCATAACAG
AAAATGATCATGTTCTTCTGTTTTGGAAAAGCCTGGCTTTAAAGGAAAAGCATTTTAATGAAAGCAGGGGCTATG
AGATACACATGTTTGATAGTGCCATGAATATCACAGCTTACCTTGGGAATACTACTGACAATTTCTTTAAAATTT
CCAACCTGAAGATGGGTCATAATTACACGTTCACCGTCCAAGCAAGATGCCTTTTTGGCAACCAGATCTGTGGGG
AGCCTGCCATCCTGCTGTACGATGAGCTGGGGTCTGGTGCAGATGCATCTGCAACGCAGGCTGCCAGATCTACGG
ATGTTGCTGCTGTGGTGGTGCCCATCTTATTCCTGATACTGCTGAGCCTGGGGGGTGGGGTTTGCCATCCTGTACA
CGAAGCACCGGAGGCTGCAGAGCAGCTTCACCGCCTTCGCCAACAGCCACTACAGCTCCAGGCTGGGGTCCGCAA
TCTTCTCCTCTGGGGATGACCTGGGGGAAGATGATGAAGATGCCCCTATGATAACTGGATTTTCAGATGACGTCC
CCATGGTGATAGCC**TGA**AAGAGCTTTCCTCACTAGAAACCAAATGGTGTAAATATTTTATTTGATAAAGATAGTT
GATGGTTTATTTTAAAAGATGCACTTTGAGTTGCAATATGTTATTTTTATATGGGCCAAAAACAAAAAACAAAAA
AAAAAA

FIGURE 5266

MATRSSRRESRLPFLFTLVALLPPGALCEVWTQRLHGGSAPLPQDRGFLVVQGDPRELRLWARGDARGASRADEK
PLRRKRSAALQPEPIKVYGQVSLNDSHNQMVVHWAGEKSNVIVALARDSLALARPKSSDVYVSYDYGKSFKKISD
KLNFGLGNRSEAVIAQFYHSPADNKRYIFADAYAQYLWITFDFCNTLQGFSIPFRAADLLLHSKASNLLLGFDRS
HPNKQLWKSDDFGQTWIMIQEHVKSFSWGIDPYDKPNTIYIERHEPSGYSTVFRSTDFFQSRENQEVILEEVRDF
QLRDKYMFATKVVHLLGSEQQSSVQLWVSFGRKPMRAAQFVTRHPINEYYIADASEDQVFVCVSHSNNRTNLYIS
EAEGLKFSLSLENVLYYSPGGAGSDTLVRYFANEPFADFHRVEGLQGVYIATLINGSMNEENMRSVITFDKGGTW
EFLQAPAFTGYGEKINCELSQGCSLHLAQRLSQLLNLQLRRMPILSKESAPGLIIATGSVGKNLASKTNVYISSS
AGARWREALPGPHYYTWGDHGGIITAIAQGMETNELKYSTNEGETWKTFIFSEKPVFVYGLLTEPGEKSTVFTIF
GSNKENVHSWLILQVNATDALGVPCTENDYKLWSPSDERGNECLLGHKTVFKRRTPHATCFNGEDFDRPVVVSNC
SCTREDYECDFGFKMSEDLSLEVCVPDPEFSGKSYSPPVPCPVGSTYRRTRGYRKISGDTCSGGDVEARLEGELV
PCPLAEENEFILYAVRKSIYRYDLASGATEQLPLTGLRAAVALDFDYEHNCLYWSDLALDVIQRLCLNGSTGQEV
IINSGLETVEALAFEPLSQLLYWVDAGFKKIEVANPDGDFRLTIVNSSVLDRPRALVLVPQEGVMFWTDWGDLKP
GIYRSNMDGSAAYHLVSEDVKWPNGISVDDQWIYWTDAYLECIERITFSGQQRSVILDNLPHPYAIAVFKNEIYW
DDWSQLSIFRASKYSGSQMEILANQLTGLMDMKIFYKGKNTGSNACVPRPCSLLCLPKANNSRSCRCPEDVSSSV
LPSGDLMCDCPQGYQLKNNTCVKEENTCLRNQYRCSNGNCINSIWWCDFDNDCGDMSDERNCPTTICDLDTQFRC
QESGTCIPLSYKCDLEDDCGDNSDESHCEMHQCRSDEYNCSSGMCIRSSWVCDGDNDCRDWSDEANCTAIYHTCE
ASNFQCRNGHCIPQRWACDGDTDCQDGSDEDPVNCEKKCNGFRCPNGTCIPSSKHCDGLRDCSDGSDEQHCEPLC
THFMDFVCKNRQQCLFHSMVCDGIIQCRDGSDEDAAFAGCSQDPEFHKVCDEFGFQCQNGVCISLIWKCDGMDDC
GDYSDEANCENPTEAPNCSRYFQFRCENGHCIPNRWKCDRENDCGDWSDEKDCGDSHILPFSTPGPSTCLPNYYR
CSSGTCVMDTWVCDGYRDCADGSDEEACPLLANVTAASTPTQLGRCDRFEFECHQPKTCIPNWKRCDGHQDCQDG
RDEANCPTHSTLTCMSREFQCEDGEACIVLSERCDGFLDCSDESDEKACSDELTVYKVQNLQWTADFSGDVTLTW
MRPKKMPSASCVYNVYYRVVGESIWKTLETHSNKTNTVLKVLKPDTTYQVKVQVQCLSKAHNTNDFVTLRTPEGL
PDAPRNLQLSLPREAEGVIVGHWAPPIHTHGLIREYIVEYSRSGSKMWASQRAASNFTEIKNLLVNTLYTVRVAA
VTSRGIGNWSDSKSITTIKGKVIPPPDIHIDSYGENYLSFTLTMESDIKVNGYVVNLFWAFDTHKQERRTLNFRG
SILSHKVGNLTAHTSYEISAWAKTDLGDSPLAFEHVMTRGVRPPAPSLKAKAINQTAVECTWTGPRNVVYGIFYA
TSFLDLYRNPKSLTTSLHNKTVIVSKDEQYLFLVRVVVPYQGPSSDYVVVKMIPDSRLPPRHLHVVHTGKTSVVI
KWESPYDSPDQDLLYAIAVKDLIRKTDRSYKVKSRNSTVEYTLNKLEPGGKYHIIVQLGNMSKDSSIKITTVSLS
APDALKIITENDHVLLFWKSLALKEKHFNESRGYEIHMFDSAMNITAYLGNTTDNFFKISNLKMGHNYTFTVQAR
CLFGNQICGEPAILLYDELGSGADASATQAARSTDVAAVVVPILFLILLSLGVGFAILYTKHRRLQSSFTAFANS
HYSSRLGSAIFSSGDDLGEDDEDAPMITGFSDDVPMVIA

FIGURE 5267A

GACCTCTTCCCCCCACCTTGTAATTTTGCTTTTTTAATTTCGGTATTTAAATACTTTTTTTTTTTTTTAAGCATC
AATGTAGTAGTACTCTGGGCCGAACAGGGGTCAACGTTTAATCTACAGTTATCACCAACATGTATGTACTTATGT
CGGAATCAAAATGTATCAAACTGCTTATTGTGAAGAGAATTATAGCAGACCTGAAGGGGGCGAAAAACCAGATAG
GGTGGGGGGATGGATGCCGGTGACGTGCTAGCACTTGTGTGGACATCCCAGTCTGCATTATGCTGTTTAACATAA
AGTGCCGACATTTTGTACCAGCAAATACCTGCCCATTCCAACCCTTGGTGGGAGCAGACCTCTACTGTCCTCTGT
AACTTGCTGCTATTGAGGACAAGGGAGTTTTTCTTTCTTTAGCGTCTTCAGTGAAGGATACAATACAACAATGCC
TAATGTATTTGACTTTTTAGCTTGTGTCTGTGTGTATAGGAAAAGCCTAAAACAAGTTATTTGCATTTCAGTGGT
TTTGTGAGACAAAGAATGGGAAATTCTGTAGCCCTTCTGGCTTACCCTGTTGATTATAAACCTAGCCTCAAAAGA
GATTGACAGGCATGACTCAAGTGAGTGTTCACATATACAAGCCTGCATGAGCCCTCTGTGGGTAGGTGGTCACAC
TTGGCATCTGCAGCATTGACGTGGCCCCGCTGGGTGCCTTGAGCATGCCCTCTTCCTGCTCTGCAATTTGAATCA
CCACCGTGCCCCTTCCACCACTGTTCCCCATGCAAAAGCTCTGCTTCCAGCAGCCCCCACTGACCGCTCTCTGTG
TGGAGCAAAGTGCTGTCGTGCGGTGACCACCAGGTGAAGAGCAGCTTGTATTCAGACATCTAGAGAAGGTTAAAT
CTTAGTGTCCCTGGGCCAGGAGCATATCCCAAGGCTCCTGCGAGCCAGTGGCGACCCTGTCCACTGCCGCTCTTG
GTTCACTGCTGTGTCCTGCCCCACCCTCCTCTCCTCCTGCCTGTTGGTTCCTTGACCTGCACTATGGGTTAGTTG
AGTTCCTTACGATACTACGGTGAAAGCCGGGTGCTAGAGCCCCTCTTGTTTACAAGACATAATGAGGGATTTGAA
ATATGTAAAAATAAACATGAGAAGCTAAAATGTTCTTCCATCATAAGCTTAAAGGGAAAAAAACTAAAAACTTTA
AAAAAAAAAGACCAAAAAGTGCGTATATATATACATATAAATATATATTTTAGATGAAGACTAACTCTGGGAGCA
TTTAACAGTGTTTTTTGTTTCTGTTTTTAACATTTGTTTTCCTGCTTTAAAATTTGCAAGCATTCTCAGGAATTC
TAGGGTAGGAAGCCAGTTTTTTGAAGATGGTTTATTTAACCATATCTTATCCTAGAGAGATGGCTGTTTCTTTCC
TGTTAATAAACTTTTACAAGTTCCTGAAACTTCAGAAAGTTTAAACAATTTTTACTTAAAAAAATGTAAAAAGAA
AAGTCTCCAAACATTATTGTCATACTGGGGATCACACATTTTAAAACACATAGAAATATTTTTTAAAAATTATCA
ATTTAGCAGCAACAGGTAAATTCATTATCTTAAAAATATGGGAGAAGGATTAAGCTTTGTAAGAGCTCGATCATG
GATTCTTTTGAAATTGTGTGTAGTTTAATGGGAGAGTGTTTGGTGTATATAGATGAGAATGCCATCACTTTGTTC
CTTTCCATTTGAGACTGAACTGAAATCTCCCCTAGTAATTTTTATTTTTTTTAAAGGAACCCTTCTCCTTGTCCC
CACAACCCCAGCAACAANNNNNNNNNNNNNNNNNNNNNNCAACAGCTTAAAAAAAAAAGTAATCTGTAAAATAGT
ACAGTTGGATTGCTGAGAATCTATGTAAAGAGTTAGGAGATATAGGTTAATAATTTTTGGAACAAATTTTAAATA
TAGGCATTACTAGAGGAAAATTATCTATGGACTGTCCTATTAATGAAGAATGTCTGTCTTACCTCCGTTTGTTTT
GGGAGGAGGAGAAAATATAGAAGAATCTAATAAGGAACAAGTGATTTTACTTTTTTAGCTCCCAGCTACTGTTGT
GCTCGTTTTAATTGCTGTTTTGAAGATCTGCTGCTTAATTATCCCCATCCCTTAGCCGGAGATGTGGAGTGTTTC
CTTTCAGTTTTTGGTGATGTTGAATTCTTTTGTATTCCCTCCTGGGGCCAGGGGTCAGAATTCCCAAGCATGACC
ACAGCTTCTTTTAAACATTAAGCTTCCCAGTGGGAAGGAAACTCCAGCTCGACAGGTAAAGGGAGTGGGTGGGGT
TGCTGCCTGCAATTTCTCTAAAACCGCTTTAGTGCCTTCGTACATACACCCAGACATCCTGAGCAAGGGGGACGC
ACATGTGTGTGTGTGTGGTCCAGTCACTCCACAGATGTAAGATACTCACCCATAAAGGAAATTGGAGTGGTTCTG
GACAGGCCCCAAAGGCAGTGGGCTGAATTTAAAATAAATAAACAAACGTCAAGCAAGTTAATATGCTTATGTCTC
AGTAATGTAGAATGCCAAGTTCCTTCCTGTGTCGTGTGCCCTCCATTACTGTGCATTGATTCCTCCAGGTGTGTA
ATTGTGACAACTGCAGTGATTTGGAAAGTCTCTTTGTCTTGGGCAAATAGAAGGGGTTCCTGTTGTTCTGCTCTT
GTCCTTCGTCTCCTCCCCTTTTCCCCCAGACCTCCCCCTTCTTTTTGTCAACTTGCTGGGAGCTTTGCTTTATTG
GTTGGCAGTGACCTAAGAACAGGATATGGTGAGGATGTCATGGAAGAGAAGAGCTCTTTCCGTGGTATTCTTTGG
CAAGAGCCATGTCTACTAAGAGGTTAGGTGACTTCAGTATACTTATAAAATTCAGTGAGAGTGCCTTCTTCTCTT
CTACCACACTCTGGCATAGATACAGGCTTGCTGGTCACCTCTCATTACATAGATTTATTTTAAAAACATTTTGAT
TATGTTAATTTGAGCTTTCCCTTTTTTTTTTTTAACTACTTTTTAAAACACTTGATTACTAGTGGCTTAGAGGTG
TGTACATCTCCTGAACATCACAAACTTGGTTTCTACCTACCACACGAGTAGCCAAAAGAAAAGAAGCACTAATAG
AGAAAGGGGTGTCTCACACCAGACAGAGGACCTCTGCTGTCAATTAGATCCAGTATCATGACCTAACTTTAAGTG
TGGAAAAGAGTTCAGATCTCTGAGACACTGTGAAGAAATGGATGGCTCATGTAACATCTCTGATCCCTCAGTCCC
CAACCCTGGACGTGTTTCATTTACAACATTCATAGGAGTTAACTTAGCAGTGTTGCAAGTTAAGGTTCCAAACCA
AATTATTTAATCAGTGTCCCCCCAATAAATCACTTATCCATTTATTGCTAGTTAGTTTTATTTATAGCAACTTGA
TTTCCTATGAGTATGGCTCCTGTTGTAAGAATTTTCCCACCTCTTCTGACATGAATGTAGCATAAGTTAGCAATC
GGTTCTTCCAAACTCCTGTGGGTTGAATATGGTATAGAAGGTATGCAAGAGGAAAAAGAAAGGAAAAGATAAAAC

FIGURE 5267B

TCCTGCCTGAGAATTTGGAAGCACCTTTATTAACACATATATCTCGCAGAAACTAGAAGCTCATAGGCTGTTAAC
TTTTTGCAACTATTCACTCATTTTTACCACNNNNNNNNNNNNNNNNNNNNTGATTTTTGTAAGGTTAACAGCCA
GATTCCATTTTGACCTCAGATGCTGTGTACTTTTTAATTTCATTTTTTATATTCTGCCATCTTGACTCTTCTCTA
AAACAGAATGAAAATGTCTGCATGCTGAGCAAAATGCTTACGCCAAGCCTGTTTTTCTCTGTAGAGTAAACAGGA
TGTTTTCAGCAGACTTGGCTCTAATAGCCATCTCTAAGATTAGGGAACAATTGAGTCTTTATGTAGAAAAGATCC
ATTTTTTCCCCATCCTCAGAGTTAAAATTCAACATTTAAAGCTTTATCGGTTATTGTTTTAGATTTGAGATTTTT
GTTTTTAAGTATCTATAAGATCTTTAGAAGTGAGATAAATTTTTCGCTGGTTAAAAAAAATCAAACTTTCCTCTG
CAGTGTTTTTGCCAAGTTTTGTCACACTTCATGTGTATGCATTAACTATACTTCTTAGTGTTACTGCNNNNNNNN
NNNNNNNNNNNNNNNNNAAAAAAGCCTGGTTCTTTAATGGTGTTTTTCCTCCGGGTTGAGTGGGACAACTAAAGC
CGCGTGATGATGCGGATGAAAATATTCTGGGTCTGGGGTGTATACAATGGAATTGGTCAGTCTTCAGACCTCAGG
GTCGTTAAGAAAATAGGGAACTCACAAACCCTGCTGCGCACTACATTTACTTCTTTATCTGGCAAGTACAGGGAG
TCCATACAGTCAAGAAACACACAGATACACATAATGCTATTGAGGACATTGGTCATTCTGTAAGAAAACAGAATA
TTATCTAGATTTCCAGAGTTAGTGCAGACCCTGTGATAACAGTCTGTGGGTTTGTGGCCAGCGCCAAAGGTGTGT
GTATTTTCAGAAATGGTCCCTATTTGTCAGTGATAGTGTTTTTTTTTTCTTAAGTTTGACAAAGGGGGTGGTAAT
ATCACATTCTTTAGATTTGAAATAATTATCAGCTCCAAGAATCTGTGAACATAGTAATAACAATAAAAATTCAAC
ATCGACCCTCCCTAACCTGCTCACCATACCTCCCCACCCCATGCCTCTGAAGAAAGAGGCCATGAACCTACGAGG
TGGTAAAGGGGGACACAGGTCAGGGAGTGGAGAGCTACTCCTCCAGCAGCTCAGCACCCACACTGCCCGCATGCG
TGTGGCCACCGGGACCAGATCCCGAGTGATTGTGGCATACCCCTAATATTTGAGTAGTTTTTAAGCTGTCAGTCT
CTTGTCATAACCTCCTACCGCCACCCAAAAAAAGTAACGAAAGTTGCAGTAACTGCCAGTGTTTGCCTCACCAAA
TTTAAATCGTTCCCTTTTCAGTTAGCTATATACCTGAATTTGTTTTTAACAAGAAACTGTACATGGCCAGGAAAA
ATGGTACTACCTTGGCCAAAGGGTCTTTGCAAAAAGCTCAGTCTTCAGTTCTTCACTGTGACAAATGCTTATCTT
GTTCATGGGAGGGGAAAGATCAGATAAATAGGCAAGAAGTACTCTGTTTTAAATAAAGAATAAATAGTGTCCGTT
TAAAGCACTTTGTGCCTCAACTTTATTTTTAAACTGTAAATCATTGCTTTGGAAATAAATTCCCAATTATAATTG
ACCCATATCTAGCCAATATCAACAAGTTGGGATGGTTAAGTAAAATACTTTATTTCAAAAAGG

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FIGURE 5268

DLFPPPCNFAFLISVFKYFFFFLSINVVVLWAEQGSTFNLQLSPTCMYLCRNQNVSNCLL

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FIGURE 5269

GGATGATACTGATGAGACACTGACTTCACTGCTCAATGAAATTGCCTTTCTTAATCAACAACTAAATGATGACTC
TGTTGGCCTGGCTGAACTACCCAGCTCTATGGATACAGAGTTCCCAGGGGATGCTCGGCGGGCTTTTATTAGTAA
GGTTCCTCCTGGAAGCAGAGCAACTTTCCAGGTTGAGCACTTGGGAACTGGTTTGAAAGAGTTGCCTGATGTTCA
AGGGGAGAGTGACTCTATCAGTCCCCTCCTCTTGCACTTGGAAGACGATGACTTTTCTGAGAATGAAAAACAACT
TGCAGAACCAGCCTCTGAGCCAGATGTCCTTAAGATTGTTATTGACTCTGAAATAAAGGATTCCCTCCTTTCCAA
CAAGAAAGCTATTGATGGAGGGAAGAATACTTCTGGCCTCCCTGCAGAGCCCGAAAGTGTGTCCTCACCCCCCAC
CCTACACATGAAGACTGGCTTGGAGAACAGCAACAGCACAGACACTTTGTGGAGGCCTATGCCAAAGTTGGCCCC
TCTAGGTTTAAAAGTAGCTAATCCTTCCAGTGATGCAGATGGTCAGAGTCTCAAGGTGATGCCTTGTTTGGCACC
TATAGCTGCCAAAGTTGGGTCAGTTGGACACAAAATGAACTTAACAGGGAATGACCAGGAAGGCCGGGAAAGCAA
GGTGATGCCTACATTGGCACCTGTTGTGGCTAAATTGGGCAACTCGGGGGCCTCACCAAGTTCTGCAGGGAAATG
AACTTACTTGTCCTTAAGCAGAAGCCAGGCTGTGAGGGGAAATTGATCTCACCTCCTTTCTCTGCAGGCATCTGT
TTGTTTGTGTCTTAGAACTTGGATCCTTGACTTCAATGATGCAGTGGATAATGATGGGAGAAAGGGGGTAGGGTG
CTGACCCTGGTATAAGAAGTACTCTGAAATTCTGATCATGTTAAAATGTGTTACCTCACTTGTGGTGCTGGGTCC
CCTCATCCTCTCTAAGAAGATGTGATCCATTACTGAACATGAGGTGCCCCTCTTACCCAAGGAATTTATAACATG
ACTCTGGCTCCACAGTGGTTTCTAGTTCTTCCCCCACAAGCGAAAGAGCTGTTTGCAACTTTGGAGTTGCTGTAG
ACTGAACTGTAGCTTGTAGCTGTTGAATTAAGTCCAAAATCTAAGGAATGCGATGGACTTGTGCAAAGGGATCCA
GAAGAGACACTTTTTAGTTGATGTTTCAAGAATAGGGAGAGAGAGGATGGGTACCATGGAATACCAAAGTGAAGG
ACTTTGTGTCATTCAGTAAAATTTTCTTTTTTCATATCCTAAGTAGCTCCCATTCCCTCACCTTTTCAATCAGAA
TTAACAAATTCAAGCCTTCAGTAAAGTAGGGATGCTTTTAACTTTTATTATTAATTATTTTGAGATCTTAAAAAA
ATAGTAGTTCTCCCTTATTATTTTTGTGGGCATTGAAAAGCTCATTTCACAGTACCAGAGATTTTTACTGGGAGT
ATATATTTTGGAGGTAGGCATAGAGGGAGCCCTACCCCTTCCACAAATTACGTTACTCAAGAGACAGCTAAAATA
AAATGCATTATCTCCCCAGACCAGAGACAGTGGCCAAAATAAAAAATCATGGGGCTGGAAATTTCCCAAATCAAA
CCAGCCTCCTGGTGCTTGAAGGTTTCATTCACTATTACCTGCACAGGATGTAAAGAAAAGTCACAGTAGGCACTC
TTTACCAGGGAAATAAGGCAGTATTTGAATCACAAGATATATTTTTTATCTGCAACCATGGATCCAATGATCTGT
AGAGCTTTTTCACTCATTAACTGTCAGGATATGAAGGACTGACAGTCTGTAAAGATATTTATATTTTTGTATAGT
TGTTTTCATAGATTTCTCAAAGGCTGAAGTTTTCAACCTAGAAGATGAGATTTGTATTGAGTATAGAAATGATGT
TTCCTATCTAGTTTGTAAATAATCATGGTGCACTTGAGGGGTCTCTTGGAAACTCCTAGGGGGTCAAGAATCACT
ATTCTGAAACTGTATAGACTGGGATTTAGCTGCTGCATTTTGCCTTTCTTAAATAATTATATTTTGGAATGTAAC
CCCTGTTCTGTCTTCATTGACAGGATTTGCTTGTGTTGTTAAAACACTAACACAAGAGCTTCCAGTGCCTGGGCC
GTGCCTAGGTGATGCTATTTCTTCTATATCTCCTGTCTTCTTTATCCCAAATCCCACTCAGCATATCTTCAGACC
TAGGTTGTAAGACCAACTTTGGATTGGATCTAGCCAGTGAATTATTATTTCCATGGTTGGTTCCCTTTCTGTTAA
CTCTGGTAATCAACAGATTGAAAACGGTGGAAGAACTTCTTCTGAAAATTGCAGTGGGAGCAAATTCTTGTTGGT
TTTGTGCTGCTTGCCTTTCTAGATCTGCTCATCAGCACTTAACCTTCCCTCCTCTAAAGGTTACTAAAGAAGCCT
GAAGTAGGTAAAGAGTGCTCCTCAGCTTCTTATCCTTCCACTCTTTACCCAGCAGATTTCATTCAATGCCTTAGC
CAAGGAGTCCAGCACCTGTCTCCCCTGCTAATAATTGTCCTTAGAGATGCTAGTACTTTAATCCAGGTATAGCAG
TTTCCCGTTATTTTCTTGCTTGTCGTTCCCCTACATTTCCTCCTGATTTCCCAAGACTCTCTTTGTGGCTTTTGA
GGGTCAGCCAAGGAGCAGGCAAGTGAGTGAACAATCCTCAGGAAAAGAAGGACCATTTTAGCTTAACACTTCCTT
TTTTTTTTTTTTTTTTAAGAAGAATATAGGTAAACAGGTAATGATTCTTGATTGGAGATACCATTTGACTCTTGA
TGAGAGTTGTACGAAGATGGAAATGAGGGATGATTCCAGGCGTTTTAGGGGGAAGGCTGCAGATACCATTCTAAC
CCCCAAGATACTGTGTTCTCAAGACCTCTTAGAACTAGGTGTTGTCAGGGATAATTTGAGGAGGGCTTAGTCTTC
AGAACAATCCTGCAGTCTTGACAGAAATCTAAAATCTCCAAAAACTCCTACCCTTTAACCTTACCCTAGGGGGAA
CTGATCTATGAATATTACATGTGTGATTATGAAAGGTGAAGTTGAGTGAGAGGAGTTGAGGAACGTGGAAGACAG
TGAGCTCTCACCCTAACACTATAAGAAGCATGATCTCAATAGACCAATAATTCACCTTTTTATACATCTGTAAAT
AAATGGAATGTTTTTAAGAATATAATTATGTCAGATTTAGCATTTTCTTTTATATATTAAATATATATATCTTTC
CTTTTCTGCTTTCGAAAAGTGACTATTTTTTTAGAAATCTAAGAACAGAAGTTTGGTGATTGAAAGGTAGAATAT
ATAAACCTGAAATAAAGCAGTTAAAACAATTAAAAAAAAAAAAAAAA

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FIGURE 5270

CGGTCCATGCCACTGGCTACCACATTCCAGCCTGGCAAGGGTTTACTGTTTATAGAGGCACCGTTTGGGGGCTTT
TCCATGTAGAATGGCCGTTGTAAAGCTGAAGAGAAAGGAACAGAAGCACAAAAGCACCTTGATTCTTCGCAAACA
CAGGCAGGGGCTGCCGGCTGGACGAGGGCGCTGCATTTTGAGGGCGTGCTGGACCCGCTGGCAGAGCCCGCCCTG
AGGGTTTTCTCTGCAGCTGTGGGCTAAGCTTGCCCAAGCCCCTCCCCTTTTCCAGAAAGCCACCCCCATGGCCAC
TTGCCTTTCAGGTCCAGGTTGAGGACACAGCCACGGGCATATATGTATTTGTTTCACTGGGGTTCATGGTTCTGG
GGACAGTCTTCTAGCCCCCGAGATCTTGGGAAAGGCATGAGCTCAAGCCACATAACCAAAAAGTAGCAAAACTCA
AAATTATTACTTTACTTTCAGCTGTTTTCTCTCAATAGCGCGCCACCATCGTCTGTGTGTCTGCACTGAACAAAC
ATACGAGAGAATCTGGCTGATCACTTTGAGTGCCTTTGGCCTAAACTTTGCACATGACTTTAAACGTGGCCCTGA
TACTGCACACAGTAAGAAATGTTTTTTATTTTATGGTCCCTGAGGTTACGAGATCAGATCTCTGGAAATGTGTAA
GCCACCTGCTGTCACCTCTGACCCATGTGGTCCATTACCATGAGGGCCGGTGAGTGGGGCAGAGATGCTGAGGCC
TGGCTGGTGAGCCCCCGAGCAGTGAGGCAGGACCCTCCCTGGTGACCTGTGTGGGGGCCAGTCCTCTAGTCCCCC
AGACAAATCTCCCTTTAAGGAGGCTTCTGAAGCTCTGAGTGCCGGCGCTCAGAATTAATTTGACTCTTCACTGCT
CACCGCACCTGCCTATGAGCCTCTAGAAAACAGCTTGCCCAATGAGAGTGCTGCAGCTGAGGCAGCAGCAGACAT
GTCCGTTTCTGGGGAAGTTACTCAAACAATCGTGCCTCTTAGGGGGCCCTAATGTGCCCCTTCTGGCAGGTTGAA
ATGCATCTGGCCTTGAAGGGGAAGGTTAGGAAATTATGAAGTACGTGGGTTTAGGGTTGACAACCCCATATCCAT
GGACTCCTGGAGATCCCTGAACGCCGTCTAATCTGAATGGTACCACAATTTGGTTTGTCTGAAAATATAGTAGTA
ACCACGGCAGTGATTTCATTTTTACACGTTTGCATTTTTACATGTCTGTCATTATGCATCTTGGGGTCTCTTTTC
CATGACCTACCAGCTTCCCAAGCTTAATAATCAGTATCTCACTATTATGTCATTGGCCAACTGAAAACAGTAGCA
AAACATCCTATCATCCAAATTGCTAATAAAATAGAACACCACACCCACACGCTGGCTTCCCATTTTTATAGTCTT
ATCCTCCCACCTGGAGGGTGTGAATGGGGATCAGTTTTTCAATAGAACATGTATGTTTGGTAAGTTAATATGTGT
AGCTGACCCCTTTGCCTTTGTTTTTATATATTTATGTTTTTCTATTGTAGACATATTGATGCAATACCTGTTCAT
AGTTGAATCTGTTACAAATTGTTACCTTTTATTTGATGAAGAACTATTTAAAGATTTTCCTTTTTTATTTCTTCT
AAAGCAAAAGTCAATGCAAGTAACTCTAATCAGCGTGCAAAGGCGTGCATATATATCTGCTATGTAATTATATAA
TGTTTTTATAATGCTGTGTGGATAACTTTTCACTGATTTAGTTACTTGACTGTAGGAAACACTGTTGCTTTGCAC
GCTGTGAGAGGTTTGCACTGTTACAGATGAAGGCAACATATTTACATATGTACNNNNNNNNNNNNNNNNNNNNN
NNTCAAAAATAACATCGGCTCTTTGGGGTGTCTGTTTCCTTGGTTGTCTCACGCCACTGGAACATTGAACCCAGA
CAGACCCTAGGATGTGAGGTTCCTGACTGCACCTTACAGACCACAGAGCCACGTGTCTATTTCTGTAGACCTATC
TCCTTAGATTTGTACATGCATTTTTTGCGGACTTGAACTTTGTTTTCTGAAATTAGATGCCATTTATGATGATGT
GATGTCAATCAAATAAAGCATCATTATTTTCAGAAAA

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FIGURE 5271

VHATGYHIPAWQGFTVYRGTVWGLFHVEWPL

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FIGURE 5272

CAACTCTGTGTAAGAGGTGAAAGGCAGCTTGCAGAAACACTGCATTCACAGGTGAAGGAGAAATCCCAGCTCATT
GGCAAGAAAACAGATTGTAGAGACTGAGGCATCTTTAAAAGATGTCAGGGTACAGAAAAAGTCTTTCAACACCCC
CGGCTTTGTAGATGCCTACAAGAAGGTGAATAGCACCAACGAGATGCTGATGGAGAAATTTACCACCCTCGTTCA
AGAACTGAAAGAAGAGACATCCTCCAGACTCTCCAGGCAACAAGAGGAGCTGGTAGAGATGCTAACAACGCTGGA
GGCCCTGGGAGAGGCCATGAGAGCCACCCCGTCACAAGGAGCTTTTCCACACCTGCCATGCAGCTGAGAGCCAAG
CCCTGCTGCTCTCTCCCCCACGAGGGGGCTGGGTCTTAGAGCAGCACTGTTCTTTTCCCCTCCACCCAGGCCTCC
CGAGCTGCCAGGCTCTGTGCTCCCACACTGACTCCATCTGAGGGGTCCTTGAGGCCAGTGGATCTGGAGTACCCC
GCCCCTGGCCTGGAGTTCCTCCTCCTTCTCACGCTGACACTGCAGCCAGCTCCTCAATGGGCGGTGCCTCCAAAT
CTAAAGAATATGGAGGTCCTGGAGCACACCAAGAAATGAGGGACTTTTTCTTTGCAGAAAGTTTGAATTCTGTCT
TAATGAGACAGAATGCCATACTTGAGCACCTCATCTTTTGCTCAAATTGAAATGTCATCGAACTGTATTTCTCAA
GTCAATGGTCTGTAAATATGATTTATGTATTAATCTCCTAAGTGAACAATTTATATTTTATCCTCTACATAATTA
TCGTATTATGCTTTAAATATATATTTAGTTTATCAATAAAGACATTCAGTACTCAATAGC

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FIGURE 5273

QLCVRGERQLAETLHSQVKEKSQLIGKKTDCRD

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FIGURE 5274

GACAGTGGAGGGCAGTGGAGAGGACCGCGCTGTCCTGCTGTCACCAAGAGCTGGAGACACCATCTCCCACCGAGA
GTCATGGCCCCATTGGCCCTGCACCTCCTCGTCCTCGTCCCCATCCTCCTCAGCCTGGTGGCCTCCCAGGACTGG
AAGGCTGAACGCAGCCAAGACCCCTTCGAGAAATGCATGCAGGATCCTGACTATGAGCAGCTGCTCAAGGTGGTG
ACCTGGGGGCTCAATCGGACCCTGAAGCCCCAGAGGGTGATTGTGGTTGGCGCTGGTGTGGCCGGGCTGGTGGCC
GCCAAGGTGCTCAGCGATGCTGGACACAAGGTCACCATCCTGGAGGCAGATAACAGGATCGGGGGCCGCATCTTC
ACCTACCGGGACCAGAACACGGGCTGGATTGGGGAGCTGGGAGCCATGCGCATGCCCAGCTCTCACAGGATCCTC
CACAAGCTCTGCCAGGGCCTGGGGCTCAACCTGACCAAGTTCACCCAGTACGACAAGAACACGTGGACGGAGGTG
CACGAAGTGAAGCTGCGCAACTATGTGGTGGAGAAGGTGCCCGAGAAGCTGGGCTACGCCTTGCGTCCCCAGGAA
AAGGGCCACTCGCCCGAAGACATCTACCAGATGGCTCTCAACCAGGCCCTCAAAGACCTCAAGGCACTGGGCTGC
AGAAAGGCGATGAAGAAGTTTGAAAGGCACACGCTCTTGGAATATCTTCTCGGGGAGGGGAACCTGAGCCGGCCG
GCCGTGCAGCTTCTGGGAGACGTGATGTCCGAGGATGGCTTCTTCTATCTCAGCTTCGCCGAGGCCCTCCGGGCC
CACAGCTGCCTCAGCGACAGACTCCAGTACAGCCGCATCGTGGGTGGCTGGGACCTGCTGCCGCGCGCGCTGCTG
AGCTCGCTGTCCGGGCTTGTGCTGTTGAACGCGCCCGTGGTGGCGATGACCCAGGGACCGCACGATGTGCACGTG
CAGATCGAGACCTCTCCCCCGGCGCGGAATCTGAAGGTGCTGAAGGCCGACGTGGTGCTGCTGACGGCGAGCGGA
CCGGCGGTGAAGCGCATCACCTTCTCGCCGCCGCTGCCCCGCCACATGCAGGAGGCGCTGCGGAGGCTGCACTAC
GTGCCGGCCACCAAGGTGTTCCTAAGCTTCCGCAGGCCCTTCTGGCGCGAGGAGCACATTGAAGGCGGCCACTCA
AACACCGATCGCCCGTCGCGCATGATTTTCTACCCGCCGCCGCGCGAGGGCGCGCTGCTGCTGGCCTCGTACACG
TGGTCGGACGCGGCGGCAGCGTTCGCCGGCTTGAGCCGGGAAGAGGCGTTGCGCTTGGCGCTCGACGACGTGGCG
GCATTGCACGGGCCTGTCGTGCGCCAGCTCTGGGACGGCACCGGCGTCGTCAAGCGTTGGGCGGAGGACCAGCAC
AGCCAGGGTGGCTTTGTGGTACAGCCGCCGGCGCTCTGGCAAACCGAAAAGGATGACTGGACGGTCCCTTATGGC
CGCATCTACTTTGCCGGCGAGCACACCGCCTACCCGCACGGCTGGGTGGAGACGGCGGTCAAGTCGGCGCTGCGC
GCCGCCATCAAGATCAACAGCCGGAAGGGGCCTGCATCGGACACGGCCAGCCCCGAGGGGCACGCATCTGACATG
GAGGGGCAGGGGCATGTGCATGGGGTGGCCAGCAGCCCCTCGCATGACCTGGCAAAGGAAGAAGGCAGCCACCCT
CCAGTCCAAGGCCAGTTATCTCTCCAAAACACGACCCACACGAGGACCTCGCATTAAAGTATTTTCGGAAAAA

FIGURE 5275

MAPLALHLLVLVPILLSLVASQDWKAERSQDPFEKCMQDPDYEQLLKVVTWGLNRTLKPQRVIVVGAGVAGLVAA
KVLSDAGHKVTILEADNRIGGRIFTYRDQNTGWIGELGAMRMPSSHRILHKLCQGLGLNLTKFTQYDKNTWTEVH
EVKLRNYVVEKVPEKLGYALRPQEKGHSPEDIYQMALNQALKDLKALGCRKAMKKFERHTLLEYLLGEGNLSRPA
VQLLGDVMSEDGFFYLSFAEALRAHSCLSDRLQYSRIVGGWDLLPRALLSSLSGLVLLNAPVVAMTQGPHDVHVQ
IETSPPARNLKVLKADVVLLTASGPAVKRITFSPPLPRHMQEALRRLHYVPATKVFLSFRRPFWREEHIEGGHSN
TDRPSRMIFYPPPREGALLLASYTWSDAAAAFAGLSREEALRLALDDVAALHGPVVRQLWDGTGVVKRWAEDQHS
QGGFVVQPPALWQTEKDDWTVPYGRIYFAGEHTAYPHGWVETAVKSALRAAIKINSRKGPASDTASPEGHASDME
GQGHVHGVASSPSHDLAKEEGSHPPVQGQLSLQNTTHTRTSH

FIGURE 5276

GGATTGTTTCGTGTCTATTGCTTTGCAGCCTCATTATTTTCATTTCAGCATATTGAGAACATCCTGCCATTGTCC
CCAAATGCATTTCTTTCATATCCTTTTAACTGGTTGTTTGTTTTCCATAAGACTGATTCATATTCAATCCGATTG
TTGAACATTTTGATTATGTCCAGTTTTTTGCAGTTATAAACAAAACCTCACCTAATGAACATCCTTATGCTTCAA
TCTTTGCCCATGTCCCTAAAAGACATATCCTAAGGGTCAATTCTGGGATTGCTAGGACAAAGGACATACATATTT
CTAGGGCTTTTGATACAGATTGCTGGTTTGCTCACCAGTTGGACCAGTCTACACTCCCATCAACAGTTGTAGTAA
TTCATATTTCTAATGCTTCTGAAATTATAAATAAAAGTTTTTAAAAATATGATTCTTTCAGTTCACCTGAGCTAC
TTGAAGACCCAGAAAAATTGANNCTTACTTGTCTTTGATATCAAGACCCTGTTTCATACCTAAGTACTGGTGAAA
CATGCTCTAGTTTGTGAGCTATTTGAGTAGAACTAATGGAAAGATGAAATAATAGTACATCAATAGTTACAATGA
AGAAACTAATTATCCCAGAGAGTTTTTGAGCATATGGGTAGTGTTTGTGAATTTAAGTTTGTTCCCCACATTGTC
AGTTTATTCTAAAATTATCACCATTTTAGACTTAAAGAATTTTAAAGCCAAAAGATAAGCAAACAGACTTGCTTA
GGTCCTGTAGCAAATTAATTCAGACCTTGAACAACATTTCATTGTGCTGTTTAGGAAGTGTTAAGTATATTGAGA
TTTTCCATATTACTGTGTTACTATCATACTTAAATTTTAGAAGATGATCAAATTATTTTAATGACTAGGACTATG
CTTATGAAGTTAGCATTTCCTGCCCTTATTTATAGAAAGCACTTGATATATTTCACAAAGGTGAGGAGATTAACT
TTTTAGGGAACAAGTCATTTAAATTCTTGAACCAGTTTCCATCTTTTAGGCTATATGAGTATTGAATATAGGAGA
AAAGAGAAAAGTATGCATGTTTCTCAAAGGCTCTTTCTTTAAATGTCACCAGCAGATCTAAACAGTATCCATAGG
CACCTATGGCCAAATTTACTGAAAAAAAAAAAGAGGGTTAAAG

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FIGURE 5277

GLFRVYCFAASLFSFQHIENILPLSPNAFLSYPFNWLFVFHKTDSYSIRLLNILIMSSFLQL

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FIGURE 5278

GCCAAAGCTGTAATTGAACTTCTTGAAAAATCAGGTGTCAACCTAGATGGAAAGAAGATTTTGGTAGTGGGGGCC
CATGGGTCTTTGGAAGCTGCTCTACAATGCCTGTTCCAGAGAAAAGGGTCC**ATG**ACAATGAGCATCCAGTGGAAA
ACACGCCAGCTTCAAAGCAAGCTTCACGAGGCTGACATTGTGGTCCTAGGCTCACCTAAGCCAGAAGAGATTCCC
CTTACTTGGATACAACCAGGAACTACTGTTCTCAACTGCTCCCATGACTTCCTGTCAGGGAAGGTTGGGTGTGGC
TCTCCAAGAATACATTTTGGTGGACTCATTGAGGAAGATGATGTGATTCTCCTTGCTGCAGCTCTGCGAATTCAG
AACATGGTCAGTAGTGGAAGGAGATGGCTTCGTGAACAGCAGCACAGGCGGTGGAGACTTCACTGCTTGAAACTT
CAGCCTCTCTCCCCTGTGCCAAGTGACATTGAGATTTCAAGAGGACAAACTCCAAAAGCTGTGGATGTCCTTGCC
AAGGAGATTGGATTGCTTGCAGATGAAATTGAAATCTATGGCAAAAGCAAAGCCAAAGTACGTTTGTCCGTGCTA
GAAAGGTTAAAGGATCAAGCAGATGGAAAATACGTCTTAGTTGCTGGGATCACACCCACCCCTCTTGGAGAAGGG
AAGAGCACAGTCACCATCGGGCTTGTGCAGGCTCTGACCGCACACCTGAATGTCAACTCCTTTGCCTGCTTGAGG
CAGCCTTCCCAAGGACCGACGTTTGGAGTGAAAGGAGGAGCCGCGGGTGGTGGATATGCCCAGGTCATCCCCATG
GAGGAGTTCAACCTTCACTTGACTGGAGACATCCACGCCATCACCGCTGCCAATAACTTGCTGGCTGCCGCCATC
GACACGAGGATTCTTCATGAAAACACGCAAACAGATAAGGCTCTGTATAATCGGCTGGTTCCTTTAGTGAATGGT
GTCAGAGAATTTTCAGAAATTCAGCTTGCTCGGCTAAAAAAACTGGGAATAAATAAGACTGATCCGAGCACACTG
ACAGAAGAGGAAGTGAGTAAATTTGCCCGTCTCGACATCGACCCATCTACCATCACGTGGCAGAGAGTATTGGAT
ACAAATGACCGATTTCTACGAAAAATAACCATCGGGCAGGGAAACACAGAGAAGGGCCATTACCGGCAGGCGCAG
TTTGACATCGCAGTGGCCAGCGAGATCATGGCGGTGCTGGCCCTGACGGACAGCCTCGCAGACATGAAGGCACGG
CTGGGAAGGATGGTGGTGGCCAGTGACAAAAGCGGGCAGCCTGTGACAGCAGATGATTTGGGGGTGACAGGTGCT
TTGACAGTTTTGATGAAAGATGCAATAAAACCAAACCTGATGCAGACCCTGGAAGGGACACCTGTGTTCGTGCAT
GCGGGCCCTTTTGCTAACATTGCTCACGGCAACTCTTCAGTGTTGGCTGATAAAATTGCCCTGAAACTGGTTGGT
GAAGAAGGATTTGTAGTGACCGAAGCTGGCTTTGGTGCTGACATCGGAATGGAGAAATTCTTCAACATCAAGTGC
CGAGCTTCCGGCTTGGTGCCCAACGTGGTTGTGTTAGTGGCAACGGTGCGAGCTCTGAAGATGCATGGAGGCGGG
CCAAGTGTAACGGCTGGTGTTCCTCTTAAGAAAGAATATACAGAGGAGAACATCCAGCTGGTGGCAGACGGCTGC
TGTAACCTCCAGAAGCAAATTCAGATCACTCAGCTCTTTGGGGTTCCCGTTGTGGTGGCTCTGAATGTCTTCAAG
ACCGACACCCGCGCTGAGATTGACTTGGTGTGTGAGCTTGCAAAGCGGGCTGGTGCCTTTGATGCAGTCCCCTGC
TATCACTGGTCGGTTGGTGGAAAAGGATCGGTGGACTTGGCTCGGGCTGTGAGAGAGGCTGCGAGTAAAAGAAGC
CGATTCCAGTTCCTGTATGATGTTCAGGTTCCAATTGTGGACAAGATAAGGACCATTGCTCAGGCTGTCTATGGA
GCCAAAGATATTGAACTCTCTCCTGAGGCACAAGCCAAAATAGATCGTTACACTCAACAGGGTTTTGGAAATTTG
CCCATCTGCATGGCAAAGACCCACCTTTCTCTATCTCACCAACCTGACAAAAAAGGTGTGCCAAGGGACTTCATC
TTACCTATCAGTGACGTCCGGGCCAGCATAGGCGCTGGGTTCATTTACCCTTTGGTCGGAACGATGAGCACCATG
CCAGGACTGCCCACCCGGCCCTGCTTTTATGACATAGATCTTGATACCGAAACAGAACAAGTTAAAGGCTTGTTC
TAAGTGGACAAGGCTCTCACAGGACCCGATGCAGACTCCTGAAACAGACTACTCTTTGCCTTTTTGCTGCAGTTG
GAGAAGAAACTGAATTTGAAAAATGTCTGTTATGCAATGCTGGAGACGTGGTGAAATAGGCCAAAGATTTCTTCT
TCGTTCAAGATGAATTCTGTTCACAGTGGAGTATGGTGTTCGGCAAAAGGACCTCCACCAAGACTGAAAGAAACT
AATTTATTTCTGTTTCTGTGGAGTTTCCATTATTTCTACTGCTTACACTTTAGAATGTTTATTTTATGGGGACTA
AGGGATTAGGAGTGTGAACTAAAAGGTAACATTTTCCACTCTCAAGTTTTCTACTTTGTCTTTGAACTGAAAATA
AACATGGATCTAGAAACCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 5279

MTMSIQWKTRQLQSKLHEADIVVLGSPKPEEIPLTWIQPGTTVLNCSHDFLSGKVGCGSPRIHFGGLIEEDDVIL
LAAALRIQNMVSSGRRWLREQQHRRWRLHCLKLQPLSPVPSDIEISRGQTPKAVDVLAKEIGLLADEIEIYGKSK
AKVRLSVLERLKDQADGKYVLVAGITPTPLGEGKSTVTIGLVQALTAHLNVNSFACLRQPSQGPTFGVKGGAAGG
GYAQVIPMEEFNLHLTGDIHAITAANNLLAAAIDTRILHENTQTDKALYNRLVPLVNGVREFSEIQLARLKKLGI
NKTDPSTLTEEEVSKFARLDIDPSTITWQRVLDTNDRFLRKITIGQGNTEKGHYRQAQFDIAVASEIMAVLALTD
SLADMKARLGRMVVASDKSGQPVTADDLGVTGALTVLMKDAIKPNLMQTLEGTPVFVHAGPFANIAHGNSSVLAD
KIALKLVGEEGFVVTEAGFGADIGMEKFFNIKCRASGLVPNVVVLVATVRALKMHGGGPSVTAGVPLKKEYTEEN
IQLVADGCCNLQKQIQITQLFGVPVVVALNVFKTDTRAEIDLVCELAKRAGAFDAVPCYHWSVGGKGSVDLARAV
REAASKRSRFQFLYDVQVPIVDKIRTIAQAVYGAKDIELSPEAQAKIDRYTQQGFGNLPICMAKTHLSLSHQPDK
KGVPRDFILPISDVRASIGAGFIYPLVGTMSTMPGLPTRPCFYDIDLDTETEQVKGLF

FIGURE 5280

CTTTTTAAATTGAGTTTTCATTTTGAAATGAAAAATGAGAAAATTCAAAATTTTTAAATGAAAACATTGGTCTTT
GCCCAGTAACGAACATGTGTACACCTTTGCATTCATACAGTCCCCTAGAACCAGTAAGTCCTTTCCCTGCAAAGC
TGTCCTGAACATTCAGGGTCCACACATTGACCACTGAAGGGTAGGAGGAAAGGCAAAGCAAGCTGCACAAAGGGA
AGATGGCCCGTAGCCTTGAAATGCACTCTTGCTAGCCCTCCCCATTTTGGTTATTATCAGCAAAGATCAGTGACA
TGTTAATATATTCGGCTATTTTACTGTGAATATAATGGTAAATTTTAATAGAAATTGAGTTAGATAGCAGTTTCT
GAATCTGAAAGAAAGTGACATTGCTTGCGAAGTGCTCACAGTAGCACTTAACATTGTGAAGTTCAACTCAATTTT
TATTTGCTGTTTCACAGAAAGCAATAATCCCTCATATTTTATAGTACCATCTGGGTTACAAAAATCCCGATGCGT
CTTTGTTGGACAAGCCAGGATCTCAGGAAGGAGTGGAGGGGAGCTTCATCTCAGTGGCTTCTGCCCTGAATTTGA
ATTTTTAACAGGCAGCTTTTAAGCATCCTGTGGCACTCATCCCATCTCAGTGTAGCAGAGACAGTAATGTCTTTC
CCTCTATGGTTGAGAAGGAGCTTTTGAATGCCCTTTTGGAAGCTGTAGAAATCTATGATACTCATCGTCAGCATT
CGACCATGAACTTAAACTCCTATCACACCTCTAGGTGTGATAATATTTCTCCTTCTGTTACAACAGAGTAATGTC
ACACTTGGCACTTTTACTGTCCTCTTGCGAGACTATCCTCCAAGTGCTGTCTGAGAGTGTTAACTGCTATTTGGC
TCATTTTTCTGCACCAAGGAGAACAGAAACACAGCAGGCACCAAGAGGAGGTTTAGTGTGCAGTGGGTTGTTCTG
AAAGGCAGTGAGTAAAATGAGGTATTCCCTGACTTCTGCTTTTGCTACATGAAGTCATGAGGTCCTTGAAGCCAG
ACTTAGGTACCGTTTCTTTCATCCCTTGCTAGTTCCTAATCGTAGACACAAACCTTCCACATCCATCCAGGCGGA
TGGCAGTGCTTCTTGTAGAAAGCAATGTCACTAAGGCAGTGTCACTAAGGAAAACAGGACAAGGCAACAGTTGTG
TTCAGAGTTTTGACTGGCGTCTGATTGGAATTAGAAGGAAGATTATTTTGCCATAACCTAGGTACCGTGACCCAA
GCTCTTTTGGCAGACCTTGACGTCACAAACCGTACGCTTGCTGGAGAAGGGAAAAGGAGAGTTGCAGCCACTAAG
AGAGTCAAGGCTGTGGCCTGCCTGGTGGTGTTTTATAGGAACTGGCTCAGGGAGGCTGCATGTCCTTTGTTTTCT
GAGGCCTTGTTCCACGTGGCCTCCCACTTGAGGCCAGGAATATTGCAGCAATGCCGAAGAGTGGGTGGACAAATA
GCCTTATTATTAACCTAAGTTGGAAACATGGCTTTTTGAGTGTCTTCATTCACAGATGCAGTCACAAAATATTAA
TACTCTTTTTTTGAACATGGCAAAACAAAGTATTCATTTAAACCTCCTTTGTCCACGTCC**ATG**GTAAAAGAGCAC
CTCAGGCAGGGGAGGAAAAA

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FIGURE 5281

MVKEHLRQGR

FIGURE 5282

ATACACATGCAGAAGCTGTGACACGTGCGGAAGCTGTGGTAAGTGCATCCTCCTTCAGTCTCAGTTCTGAAAATA
GATCATCATGGTGGCACCAAAGAGTCACACAGATGACTGGGCTCCTGGGCCTTTCTCCAGTAAGCCACAGAGGAG
TCAGCTGCAAATATTCTCTTCTGTTCTACAGACCTCTCTCCTCTTCCTGCTCATGGGCCCAACTCCTGGGAAACA
TCTCTCCGCTGCATGGCCCGGAACCCCACTGTCCAGCAGATAGAGCCAATCCAGTACCCCAGAGAGGATCTCAGC
CACCTGGGACTGTGGCAGCTACTGTCCTTCTGTGCTCCCGCTTTCTCCAGGGCTTCAGGGATGATGATGCAGGAC
TAAGAGCCTCTGGAAAGGACTCAGCCCCAACAGTGGTGTCAGGGATCCTAGGGGGTTCCGTGACTCTCCCCCTAA
ACATCTCAGTAGACACAGAGATTGAGAACGTCATCTGGATTGGTCCCAAAAATGCTCTTGCTTTCGCACGTCCCA
AAGAAAATGTAACCATTATGGTCAAAAGCTACCTGGGCCGACTAGACATCACCAAGTGGAGTTACTCCCTGTGCA
TCAGCAATCTGACTCTGAATGATGCAGGATCCTACAAAGCCCAGATAAACCAAAGGAATTTTGAAGTCACCACTG
AGGAGGAATTCACCCTGTTCGTCTATGCACCATTTATTGAAAAGTTGTCCGTCCACGTCATCGAGGGTGACCACC
GCACACTCCTGGAGGGCAGCGGCCTGGAGTCCATCATCAGCACCCTGGCTGAGCCACGTGTGAGCGTGCGGGAGG
GCTAGGCCCTCGCCCCCACCTGCCACTGGAGACCGCTCCGCCATCCCCACCTCACCGCCGCGCAANAGAGCTGGA
AGGGTCCTGCCGATGGGACCCTGCCAGGCCCAGTGCCACTGCCCCCCGAGGGCTGCTAGACGTGGGGCGTTAGGC
GTGTCCCACCCACCCGCCGCCTCCCATGGGCACGTCGGGAACACCGGAGCCGCCAACTTGGAGACTTCCTGGTCT
GTGAAGAGCCGCTGACGCCCGCAGGAAACCGGGGCTGGGCCTTGTGTGCCAGTCGGGGTTTTGTGCTTGGTCGTT
TCTCCGCTTGGATTTGCTTATTTATTGCATTGCTGGTAGAGACTCCCAAGCCTGTCCACCCTGCAAAGACTCCTC
GGGCAGCATGCGGGTCCCGCACACTGCACCCATTTCCTGGATGTCCCCTGCAGGCGCGGGAGGCCATCCGGGCCT
GCTGGCTGCGGCCCCCTCTCAGCCAGGCCTGGCTCAGCCCACTGCGTGGGAGGTCACCGGCCACTCCCCGAGGAG
CTGGGATCCCCGGGATGCAGGCCCACAGTGCGGGGCTGCACCCATGATGCGGAGCTGGCCTCCAACCCTGCGGGC
CGCGCCAGGCACCAACTCAGTGTTTGTCAGTGTTTGTTTTTCCAAGAAATGGTTCAAATTGCTGCTCAGATTTTT
AAATTTACTGTAGCTGCCAGTGTACACGTGTGGACCCCATTTTATTTTACACCAATTTGGTGAAAATGCTGCTT
TCCTCAGCCTCCCCACAATTAAACTGCACATGGTCTCTAA

FIGURE 5283

THAEAVTRAEAVVSASSFSLSSENRSSWWHQRVTQMTGLLGLSPVSHRGVSCKYSLLFYRPLSSSCSWAQLLGNI
SPLHGPEPHCPADRANPVPQRGSQPPGTVAATVLLCSRFLQGFRDDDAGLRASGKDSAPTVVSGILGGSVTLPLN
ISVDTEIENVIWIGPKNALAFARPKENVTIMVKSYLGRLDITKWSYSLCISNLTLNDAGSYKAQINQRNFEVTTE
EEFTLFVYAPFIEKLSVHVIEGDHRTLLEGSGLESIISTLAEPRVSVREG

FIGURE 5284

AGATCTAGTGTCTGGTAAGGCAAATTTCTGGCTCATAGATGGTACCTTCTTGCTGTGTCCCCACATGGTAGATGG
GAAGAACTGGTCTCATTGGCCCCTTATAAGGACATTAATTCCACTCAATAGGCTCCACCCTCATGNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNAGGATGTGACTTCAACTTTACATTTCTACAGGCAGAGAA
GTGGGGCTGTGTAAATTCTTCCCATCAGTACTTGAATGTTCATTTAACAAATAACTTATCGAGCATCTAGCATGT
TCCAGACACAATCTGAACACTGAGCACACAACAGTTGGAACAAATATGATTCCTATCCTCATGGAGCTTCTATTC
TCCTGTGAAAAACAGATGTTAAACATGATTGAGGATTAGGTCTCAACATAAGAATTCTAGGAGGACACAGACATT
TAGACCATAGCATCTTCAGGTAAACTTTATCTTCAGTAAATTAAAGAGATCTATTTAGATGACCTTTGAGCATCT
TAATTATTAGATGTCAGTGCTAGTTTAACTTATTTTAAACGTTTCAGATATTTATTTAATTATACTTTAAGTGTC
TCATGTAAAAAAGTTATTTATAAAATAATTTATAGGGTTAGAGTCATTGCCCTTTTA**ATG**CAACAAATAAACAGT
TTTTTAAAAACCTGCATGGGNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNCCTGCATGGAAGCCTAGTATATTTATTAATAACAAATAAATTATACTTTAGTGTA
CTATTAACCTATACCAATTTTAAGTTG**TGA**TTAGGGAATGGGGATGTTTTTAAGCTGAATTGTCTTGCTGCGGAA
TTTTCCTTTTTTAATAAGACCATATTATGACTCTGAATGCTCAAGGGTAAGTCTAAGGCCTCATTGCTGTTACCA
GGAGATTTTTCTAGTTACAGTAATAAAGATGTTAATTCACATGCATGCAGACAACTGAAACTCAAGTGGAGAATT
TGTTTGTGAACAAGTCATACTACTTCTGTTATTTGCATGAATGGAATCTGCAATATCTTTTTCCATGGGAGACCC
TAAAAGAAAACCCTGGATCAGAATGATCTGCAGTTTCAGATAATAAAGGCTTTTAAGAGACATTTTTAGAATTAA
AAATATGCTAATTTTATTAAATGAAAATATTTGTAACTGTTAACTTTCTCACTGACAAAGCAAGTTTCTCAATAA
AATACCTATTTTAACTTGCATTACTGACATCTTTTCTTTGAGTAATCTGAATAATGCAGAAGCCATCATAGAGGT
CTTTTCTATACATTCTCAATGTTTTCTTAAATGGGTTTCCTGAGTTCTGTTCTTCATGACTCTGGGCTCTGCAAA
CAGGGTTTCCCAATTACGCATTCTATAAACACTTTTATGAATGAGTCAATATGACATTGAGTCCTTTTCATACAT
TTCATCATTTCCAATATGTAGAGTGACAGCTAGAAAAATGATAAAATTTTGATTAAAACCTATCTCTTTTTCTTC
AGCATAGTCAATTGTTTTCTTAACTCTCAATGAGTAACTCCATGCCTAGCTTGTGCTTAGCTTTCAATATTTTTA
GACTAAGACAAAGTGTATTTGGCATTTTGAGAACAACAATTAATGGTCAGTAAATTTCTAAAGCAAGAAAAATGT
GAAACTAGTGTTTTATATGTTTGTTACGCAGCAGAATGCGGGCTCTTAGTGTTTGCCCCTTCATATCTCATCATG
TAAAATATTAAATTACTTTAGGCCACTGCACATAGG

FIGURE 5285

MQQINSFLKTCMGXXX

FIGURE 5286A

GCCGGGAAGTGGCTCCAGGGAGAAGAGGCCTCTTCCCTCACCCGCTGTGGGAGCTGCGCCCCGAAAGCCTGCCCC
GGCACGTCGGGCTCTCCTGACCCGCCAAGACCAGAGAGCCGTTGGCGCCCTCCGCCCGGGCCTGCCGGTCCGTTT
ATTTTAAGAAGCTTTGTGCGCCTGCTGTGGGGATTTCTGATCCAGGCTGCGAAGAATTTCGAAGTCTGGAAAATA
GCAACTGTGTTTGTTTCTAAAGGATCTTCTCCTGACCCAGCATCGCTCATCACAATGAAGAACCAAGACAAAAAG
AACGGGGCTGCCAAACAATCCAATCCAAAAAGCAGCCCAGGACAACCGGAAGCAGGACCCGAGGGAGCCCAGGAG
CGGCCCAGCCAGGCGGCTCCTGCAGTAGAAGCAGAAGGTCCCGGCAGCAGCCAGGCTCCTCGGAAGCCGGAGGGG
GCTCAAGCCAGAACGGCTCAGTCTGGGGCCCTTCGTGATGTCTCTGAGGAGCTGAGCCGCCAACTGGAAGACATA
CTGAGCACATACTGTGTGGACAATAACCAGGGGGGCCCCGGCGAGGATGGGGCACAGGGTGAGCCGGCTGAACCC
GAAGATGCAGAGAAGTCCCGGACCTATGTGGCAAGGAATGGGGAGCCTGAACCAACTCCAGTAGTCAATGGAGAG
AAGGAACCCTCCAAGGGGGATCCAAACACAGAAGAGATCCGGCAGAGTGACGAGGTCGGAGACCGAGACCATCGA
AGGCCACAGGAGAAGAAAAAAGCCAAGGGTTTGGGGAAGGAGATCACGTTGCTGATGCAGACATTGAATACTCTG
AGTACCCCAGAGGAGAAGCTGGCTGCTCTGTGCAAGAAGTATGCTGAACTGCTGGAGGAGCACCGGAATTCACAG
AAGCAGATGAAGCTCCTACAGAAAAAGCAGAGCCAGCTGGTGCAAGAGAAGGACCACCTGCGCGGTGAGCACAGC
AAGGCCGTCCTGGCCCGCAGCAAGCTTGAGAGCCTATGCCGTGAGCTGCAGCGGCACAACCGCTCCCTCAAGGAA
GAAGGTGTGCAGCGGGCCCGGGAGGAGGAGGAGAAGCGCAAGGAGGTGACCTCGCACTTCCAGGTGACACTGAAT
GACATTCAGCTGCAGATGGAACAGCACAATGAGCGCAACTCCAAGCTGCGCCAAGAGAACATGGAGCTGGCTGAG
AGGCTCAAGAAGCTGATTGAGCAGTATGAGCTGCGCGAGGAGCATATCGACAAAGTCTTCAAACACAAGGACCTA
CAACAGCAGCTGGTGGATGCCAAGCTCCAGCAGGCCCAGGAGATGCTAAAGGAGGCAGAAGAGCGGCACCAGCGG
GAGAAGGATTTTCTCCTGAAAGAGGCAGTAGAGTCCCAGAGGATGTGTGAGCTGATGAAGCAGCAAGAGACCCAC
CTGAAGCAACAGCTTGCCCTATACACAGAGAAGTTTGAGGAGTTCCAGAACACACTTTCCAAAAGCAGCGAGGTA
TTCACCACATTCAAGCAGGAGATGGAAAAGATGACTAAGAAGATCAAGAAGCTGGAGAAAGAAACCACCATGTAC
CGGTCCCGGTGGGAGAGCAGCAACAAGGCCCTGCTTGAGATGGCTGAGGAGAAAACAGTCCGGGATAAAGAACTG
GAGGGCCTGCAGGTAAAAATCCAACGGCTGGAGAAGCTGTGCCGGGCACTGCAGACAGAGCGCAATGACCTGAAC
AAGAGGGTACAGGACCTGAGTGCTGGTGGCCAGGGCTCCCTCACTGACAGTGGCCCTGAGAGGAGGCCAGAGGGG
CCTGGGGCTCAAGCACCCAGCTCCCCCAGGGTCACAGAAGCGCCTTGCTACCCAGGAGCACCGAGCACAGAAGCA
TCAGGCCAGACTGGGCCTCAAGAGCCCACCTCCGCCAGGGCC**TAG**AGAGCCTGGTGTTGGGTCATGCTGGGAAGG
GAGCGGCAGCCCAGCCAGGCCTGGCCCATAAAAGGCTCCCATGCTGAGCAGCCCATTGCTGAAGCCAGGATGTTC
TGACCTGGCTGGCATCTGGCACTTGCAATTTTGGATTTTGTGGGTCAGTTTTACGTACATAGGGCATTTTGCAAG
GCCTTGCAAATGCATTTATACCTGTAAGTGTACAGTGGGCTTGCATTGGGGATGGGGGTGTGTACAGATGAAGTC
AGTGGCTTGTCTGTGAGCTGAAGAGTCTTGAGAGGGGCTGTCATCTGTAGCTGCCATCACAGTGAGTTGGCAGAA
GTGACTTGAGCATTTCTCTGTCTGATTTGAGGCTCAGACCCCTCCCTGCCCTTCAGAGCTCAAGACAAGTAATAC
ACCCAGGTCTTGACTGCATTTGTCTTGTGAGCAGGGCTTGCTTGGTCAGCTCAGGCCCTCCTAGCTGCTCTGGAG
GCTCCTTTGATTCTCTAGACCTGGAAAAGGTGTCCCTAGGCAGAGCCCTGGCAGGGCGCTCAGAGCTGGGGATTT
CCTGCCTGGAACAAGGGACCTGGAGAATGTTTTTGCGTGGGATGATGTGCTGGTCAGGAGCCCCTTGGGCATCGC
TTCCCCTGCCCTTTGGTAGTGCCAGGACCAGGCCAATGATGCTTCTCAGTAGCCTTATCATTCACAGGTGCCTCT
CTAGCCTGCACAAATGATTGACAAGAGATCACCCAAAGGATTATTTCTGAAGGTGTTTTTTTCNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNTTTTGCACATGACAGTGTTTGTATTGAGGACCTTCCAAGGAAG
AGGGATGCTGTAGCAGTGGTGCCTGGGTGCCTGGCCTCCAGTGTCCCACCTCCTTCACCACCCCACTTGGCTCCT
TTGCCATCTTGATGCTGAGGTTTCCTGTTTGGTGAGATCAGGTTGTTTGTGGTAAAAGAAAGGAAAGGGCTTCTG
ATGGCTTTGCCACAAGCTTACCTGTGGGTTTCAGTCCTGAGAGGCCACCACCAGTTCCCATCAGCACTGTCTCCA
TGCAGCAGTTGCTGGGTCCCATGTCCAGCTGCCTCTTTGGCTTCATGGGTTTTTCTGCTTCCTGCCCCCACCCCC
ACATGTGCAATCCTCAAGATTTGTCCTGATTCTATTTCCTGGCACCTCCCTGCCTGTCCTTGGGGATTCTACTTC
TTCCTGTGTGGGAGCCCATAGCTGTTGTCTAACAGGTAAGAAATGAAATTGAACTATTGACTGGGCCCCAGAAAT
CCATAAAATGGCTGCAGACAGTTGTTTCTGTGTCCTGTTCTACCCCCACTCCAGTACATAACTACTATGTACTGT
GTAGAGCCATTCTATATGCTGAATGTTCTGCTGTTGCAAACTTGCCAGGGTATTAGCCAGTGTTTGTGCCAAGCA
GTTTTCTGGGACAACAGAATGACTCAGACCAAGATGGATAGGATGGTTAGGGCTTTGCTTCTTGCTGTTTTTCTT
TGAAGCTAGTTCATTGTCCTGCAGGTCCCTTCATCTTCCATACCTAGCCCACTCTTTTAGCCCTTACCTTAAATC
TCTCAGATAAGTTGGTTCACAAAGAATGTTAAGTACTGAATCATGTGTGACTGAGACCAGAGATGGCAAATGAAT

FIGURE 5286B

GGCACACCATTTCTCCTTCTCCTGCCCCAGGGCAGGTACCACTGATCTGCATCAGAGTTGCCTGCTATTCTCTGG
TGTATCCTTCACATCTAGGTGCCCTCAAGCAGCTGTGTGAGTGTTGAGATCTCTGCCATCTCTGGCTGAGATACT
GCTGTCCTGTGAAGTGTTTCCCATGACCTTTTTCTTCCCCTTTGAATCCCTCTGTCTGGAGTAGTCCTTGCCTCT
TCCTGCTCCAGTAGGGCCTTTTCCCTACCCCAGCCCCTGTGCCAGGCTAAGCTGGTACAAGAGCTGCCAACCTCA
CAGAGTGTTTGCTAGGCGAGAGAGGTGCAGGGAAGAGGCAGAGGTATGCACCTTCCCCCTTGAAGAGAGGGGAAA
GGCCTACAGTGGCCCACATAATTGCCTGACTCACACTTCAGCTACCTCTTAATGCCTGTGGAGGGACTGGAGCTG
CTGGATCCCAGTGTGGTGGTGTAGGAGGCCACAGTGAGCAGGTGGCCCCAGCTGGGTTTCCCAGGTCAGGAATGT
GGGCCCCAGGCAAGGTGCAGCCTTTGCTCACAGCTCCATCCATGTCTAGACCTTCAGGCCAGTCTGCAGATGAGG
TTCCCTACCTTTTTCTTCTCTTCATTGACCAAATCAACCAATCACTACAGCTGCTCTGCTTCTGCTTTCCAAAGT
AGCCCAGGTCCTGGGCCAGATGCAGGGGAGGTGCCTATCCATGAGTGAAGGCCAGTGTCTTCCTCACCTGGGTGG
GTCCCACACTTGTGACCTCAGTTTTAGGACCAAGATCTGTGTTGGTTTCTTAGATTGCTAGCTTTTCCTCCAGGG
GACCACAGCAGGTGAAGCTCAAGAGCGCATGGCTCTGCTAATAGTAAATTGTTTTCAGGGCCTTGTCCAGCTGAG
AGCTTCATGTCCACCAGATTCTGAGAGGTGTCAGCAGCACTTTTTTTTTTATTTGTTGTTTGTTTTCCATGAGGT
TATCGGACCATGGGCTGAGCTCAGGCACTTTCTGTAGGAGACTGTTATTTCTGTAAAGATGGTTATTTAACCCTC
CTCCACCCCATCACGGTGGCCCTGAGGGCTGACCCGGAGGCCAGTGGAGCTGCCTGGTGTCCACGGGGGAGGGCC
AAGGCCTGCTGAGCTGATTCTCCAGCTGCTGCCCCAGCCTTTCCGCCTTGCACAGCACAGAGGTGGTCACCCCAG
GGACAGCCAGGCACCTGCTCCTCTTGCCCTTCCTGGGGGAAGGGAGCTGCCTTCTGTCCCTGTAACTGCTTTCCT
TATGGCCCAGCCCGGCCACTCAGACTTGTTTGAAGCTGCACTGGCAGCTTTTTTGTCTCCTTTGGGTATTCACAA
CAGCCAGGGACTTGATTTTGATGTATTTTAAACCACATTAAATAAAGAGTCTGTTGCCTTACTTGTTTCTCTCCT
GACCTGTGTATTCCTTTGTTTCTGGATCTGATCCATTNAGCCCCTTCCATCATCACTGACTTGTTCAGGTCTGCT
GCAGAGCGCCCATGGTGGTTCCTGGTATCTTACAAATTCCACANTGTCTTTGAGCAGTCGCCACAGCCTCAGGAT
GCTGGCATATTCACTTGACTGCCTGAGTGGAGCCNTTGGCAAAGTTGGCAAGACCCTTGCCTCAGAGAGGATCAC
ACACACACAAAAAAGTTTTCCCTGACCTGGGGGCTCACAGGCTAGTGAAGGGAAAAGGTACTNTTAGCTATAGAC
AGGTCAATGGTGCTGAGAGCAGAGAGGAGGCCCCTGCCCCCTTCAGCAAGGTGAGGGGGTGATACCTGGAATGGC
CTTCTGAACCACAGGGCAGGTAGAAGATGAACGTCATTTAGTGATTAAATGGTACAGCTGGGAAGCAGGTCCATG
GGACTGGGAGAGGGGGTGAGGCTGGGCCCAGAGTCTGGGTACCAGGTTAAGGAATGTGGGCTAGATCCAGAGGGC
AGGGGGGGCAACTGAAGGTGTTTCAATAGGAAATTGATAGGCTCCAGCAGTAAGGCAAAAGGCATGGAGCCAGGC
ATAGGCCATTTGAGGCCCAGGTTAAGAGGGGTGGACACTCATCACTGCTATTTGGGTCTGAGCTGTGGGTAGGCT
CCTATAGCCCTGGCCTGCCCAAGGGAATTCACAGGGGCCTCTAATTGTATGCATTCCTTAAGGAGAGCACATTCT
CTGTTCAGTTTTTACACCCCCCATTTACCCACCTCAAGCATGGGACTCCTATATGGGAGACATGCTGCTGGTGGC
CTCACCCAGCACCCTGTTCTCTCTGGGTCCTGGGTTGGTCAGGCACAAAGGATGATATGTGCTGAATGCCCAGGA
AATGGCAGAGACAACCCACCTGCCCTTCCCTCCAGGCCTCCACAAATAGATGTGCCCACAATGACTGTGACAGTC
CCAGCAGAGCCTCTGACCCTTCTAGCTGGGTCCTGATACATGTTTTCCATGCTGGCCATGTTATTTCTAGTCGCA
GATCCTCTGGAGGGTGTGGGGGGGGGGTGCCGCCCCAACTCTTGGAGATTCCAAGCAAAGCAGCTCTGAGAATAAT
GAGGTTTCTGACCCCCCAGTGAAGCAGCTGAGGATGGGAACCACAGGGGTGCTCCCTCTGTCAGCAGCATTACCA
CTGTCTACTCTAGCAGCTCCGGTGGGGAAGGAGAGGGATTTCTGTTGTCCCCAGTCTGGGCCCCTGGTTATTGAA
AAAGTTCGGAATTACTCTTTACCCTTGTGGAGTGTTCTGAGTGTTGGAAGTACCCAGGAAGAAGCCCTGAGCAGG
TGCCCTCAGGAGCAGTGCCCATGGCTCCCCACATCAGCCAAGAGGCCCAACCCCAGGAAGCCACTCCTGCCCGGG
GATGGGGAAGGTGGGCTGGGTGGCTGTGTGCACTGCCCTGGGCCAGCTCACTTGAGCCTGCTGAGCCGCCTGGCC
AAACATGAGCCTCTCTCCTGTTGTATCAGATGCTGTTCTGGGACCTGCTCCA

FIGURE 5287

AGKWLQGEEASSLTRCGSCAPKACPGTSGSPDPPRPESRWRPPPGPAGPFILRSFVRLLWGFLIQAAKNFEVWKI
ATVFVSKGSSPDPASLITMKNQDKKNGAAKQSNPKSSPGQPEAGPEGAQERPSQAAPAVEAEGPGSSQAPRKPEG
AQARTAQSGALRDVSEELSRQLEDILSTYCVDNNQGGPGEDGAQGEPAEPEDAEKSRTYVARNGEPEPTPVVNGE
KEPSKGDPNTEEIRQSDEVGDRDHRRPQEKKKAKGLGKEITLLMQTLNTLSTPEEKLAALCKKYAELLEEHRNSQ
KQMKLLQKKQSQLVQEKDHLRGEHSKAVLARSKLESLCRELQRHNRSLKEEGVQRAREEEEKRKEVTSHFQVTLN
DIQLQMEQHNERNSKLRQENMELAERLKKLIEQYELREEHIDKVFKHKDLQQQLVDAKLQQAQEMLKEAEERHQR
EKDFLLKEAVESQRMCELMKQQETHLKQQLALYTEKFEEFQNTLSKSSEVFTTFKQEMEKMTKKIKKLEKETTMY
RSRWESSNKALLEMAEEKTVRDKELEGLQVKIQRLEKLCRALQTERNDLNKRVQDLSAGGQGSLTDSGPERRPEG
PGAQAPSSPRVTEAPCYPGAPSTEASGQTGPQEPTSARA

FIGURE 5288

CCTTGAGCTCCTCCTCGCCCTTCTCCAACCGGCCTCCCCTGCCGCCTACCCCCAGCAGGGCCTTGGATGACAAAC
CCCCTCCACCACCTCCTCCAGTGGGCAACAGGCCCTCCTCCTCCTCAGAACAACAAGCCTCCAGTGCCTTCCACT
CCGCGGCCTTCGGCCTCCTCACAGGCCCCAACTTCGGCGGCCACCTCCCAGCAGGCCCGGGCCGCCTCCTCTGCC
TCCAAGTTCCAGCGGCAATGACGAAACCCCAAGACTCCCACAGCGGAATCTGTCCCTCAGTTCGTCCACGCCCCC
GTTACCTTCGCCAGGACGTTCAGGTCCTCTTCCTCCCCCGCCCAGTGAGAGACCCCCACCTCCAG**TGA**GGGACCC
GCCAGGCCGATCAGGTATGACAAGACGTGGAGTGAGTTGCTTCCAAAACCCAGCCTGCCCAAATGTACCAATAAT
CCTGTCAGTCAAGATAGTCTAACAAAAGCAGGCATAAGTAAACTCAGACTGCTTTGTGCTTTTAAGTGGCACACG
ACACGTGTGATCGTGACCTCGTGTAAACCCCGGGGGGAAAGTGGGACCAATATTTCTGTTGGTGTTTTAGAGATGA
GGACACTGAGTAGCTAATAAAGTTAAATGGTCACGAGCTAGTTAATAAAGAAGAGGCAAGAACTTTCATCTTCCA
TCTCTGAAGTGTACTTGCCAGTCCACTACCCTGCCTCCCTAGAGAGAATTTCGGCGGTCTTAATTGGGAAAATAA
GTCCCCACCTCCCGCAGGAGGGCTCTGTTATTCCAACAAGAGGGGAAGTTCTTCAAGAGCTAATGAACTTCTCCT
GTACTTCTCTCTTCATTCGCCAGGCTTTGAGGCCATTTCCCTATTCATTAAAGACTAATGTTTAAAAAGTCAAAA
AA

FIGURE 5289

LSSSSPFSNRPPLPPTPSRALDDKPPPPPPPVGNRPSSSSEQQASSAFHSAAFGLLTGPNFGGHLPAGPGRLLCL
QVPAAMTKPQDSHSGICPSVRPRPRYLRQDVQVLFLPRPVRDPHLQ

FIGURE 5290

ACAGAAGTGCTAGAAGCCAGTGCTCGTGAACTAAGGAGAAAAAGAACAGACAAGGGAACAGCCTGGACATGGCAT
CAGAGATCCACATGACAGGCCCAATGTGCCTCATTGAGAACACTAATGGGCGACTGATGGCGAATCCAGAAGCTC
TGAAGATCCTTTCTGCCATTACACAGCCTATGGTGGTGGTGGCAATTGTGGGCCTCTACCGCACAGGCAAATCCT
ACCTGATGAACAAGCTGGCTGGAAAGAAAAAGGGCTTCTCTCTGGGCTCCACGGTGCAGTCTCACACTAAAGGAA
TCTGGATGTGGTGTGTGCCCCACCCCAAGAAGCCAGGCCACATCCTAGTTCTGCTGGACACCGAGGGTCTGGGAG
ATGTAGAGAAGGGTGACAACCAGAATGACTCCTGGATCTTCGCCCTGGCCGTCCTCCTGAGCAGCACCTTCGTGT
ACAATAGCATAGGAACCATCAACCAGCAGGCTATGGACCAACTGTACTATGTGACAGAGCTGACACATAGAATCC
GATCAAAATCCTCACCTGATGAGAATGAGAATGAGGTTGAGGATTCAGCTGACTTTGTGAGCTTCTTCCCAGACT
TTGTGTGGACACTGAGAGATTTCTCCCTGGACTTGGAAGCAGATGGACAACCCCTCACACCAGATGAGTACCTGA
CATACTCCCTGAAGCTGAAGAAAGGTACCAGTCAAAAAGATGAAACTTTTAACCTGCCCAGACTCTGTATCCGGA
AATTCTTCCCAAAGAAAAAATGCTTTGTCTTTGATCGGCCCGTTCACCGCAGGAAGCTTGCCCAGCTCGAGAAAC
TACAAGATGAAGAGCTGGACCCCGAATTTGTGCAACAAGTAGCAGACTTCTGTTCCTACATCTTTAGTAATTCCA
AAACTAAAACTCTTTCAGGAGGCATCCAGGTCAACGGGCCTCGTCTAGAGAGCCTGGTGCTGACCTACGTCAATG
CCATCAGCAGTGGGGATCTGCCGTGCATGGAGAACGCAGTCCTGGCCTTGGCCCAGATAGAGAACTCAGCTGCAG
TGCAAAAGGCTATTGCCCACTATGAACAGCAGATGGGCCAGAAGGTGCAGCTGCCCACAGAAAGCCTCCAGGAGC
TGCTGGACCTGCACAGGGACAGTGAGAGAGAGGCCATTGAAGTCTTCATCAGGAGTTCCTTCAAAGATGTGGACC
ATCTATTTCAAAAGGAGTTAGCGGCCCAGCTAGAAAAAAAGCGGGATGACTTTTGTAAACAGAATCAGGAAGCAT
CATCAGATCGTTGCTCAGGTTTACTTCAGGTCATTTTCAGTCCTCTAGAAGAAGAAGTGAAGGCGGGAATTTATT
CGAAACCAGGGGGCTATCGTCTCTTTGTTCAGAAGCTACAAGACCTGAAGAAAAAGTACTATGAGGAACCGAGGA
AGGGGATACAGGCTGAAGAGATTCTGCAGACATACTTGAAATCCAAGGAGTCTATGACTGATGCAATTCTCCAGA
CAGACCAGACTCTCACAGAAAAAGAAAAGGAGATTGAAGTGGAACGTGTGAAAGCTGAGTCTGCACAGGCTTCAG
CAAAAATGTTGCAGGAAATGCAAAGAAAGAATGAGCAGATGATGGAACAGAAGGAGAGGAGTTATCAGGAACACT
TGAAACAACTGACTGAGAAGATGGAGAACGACAGGGTCCAGTTGCTGAAAGAGCAAGAGAGGACCCTCGCTCTTA
AACTTCAGGAACAGGAGCAACTACTAAAAGAGGGATTTCAAAAAGAAAGCAGAATAATGAAAAATGAGATACAGG
ATCTCCAGACGAAAATGAGACGACGAAAGGCATGTACCATAAGCTAAAGACCAGAGCCTTCCTGTCACCCCTAAC
CAAGGCATAATTGAAACAATTTTAGAATTTGGAACAAGCGTCACTACATTTGATAATAATTAGATCTTGCATCAT
AACACCAAAAGTTTATAAAGGCATGTGGTACAATGATCAAAATCATGTTTTTTCTTAAAAAAAAAAAAAAGACTG
TAAATTGTGCAACAAAGATGCATTTACCTCTGTATCAACTCAGGAAATCTCATAAGCTGGTACCACTCAGGAGAA
GTTTATTCTTCCAGATGACCAGCAGTAGACAAATGGATACTGAGCAGAGTCTTAGGTAAAAGTCTTGGGAAATAT
TTGGGCATTGGTCTGGCCAAGTCTACAATGTCCCAATATCAAGGACAACCACCCTAGCTTCTTAGTGAAGACAAT
GTACAGTTATCCATTAGATCAAGACTACACGGTCTATGAGCAATAATGTGATTTCTGGACATTGCCCATGTATAA
TCCTCACTGATGATTTCAAGCTAAAGCAAACCACCTTATACAGAGATCTAGAATCTCTTTATGTTCTCCAGAGGA
AGGTGGAAGAAACCATGGGCAGGAGTAGGAATTGAGTGATAAACAATTGGGCTAATGAAGAAAACTTCTCTTATT
GTTCAGTTCATCCAGATTATAACTTCAATGGGACACTTTAGACCATTAGACAATTGACACTGGATTAAACAAATT
CACATAATGCCAAATACACAATGTATTTATAGCAACGTATAATTTGCAAAGATGGACTTTAAAAGATGCTGTGTA
ACTAAACTGAAATAATTCAATTACTTATTATTTAGAATGTTAAAGCTTATGATAGTCTTTTCTAATTCTTAACAC
TCATACTTGAAATCTTTCCGAGTTTCCCCAGAAGAGAATATGGGATTTTTTTTGACATTTTTGACCCATTTAATA
ATGCTCTTGTGTTTACCTAGTATATGTAGACTTTGTCTTATGTGTCAAAAGTCCTAGGAAAGTGGTTGATGTTTC
TTATAGCAATTAAAAATTATTTTTGAACTGA

FIGURE 5291

MASEIHMTGPMCLIENTNGRLMANPEALKILSAITQPMVVVAIVGLYRTGKSYLMNKLAGKKKGFSLGSTVQSHT
KGIWMWCVPHPKKPGHILVLLDTEGLGDVEKGDNQNDSWIFALAVLLSSTFVYNSIGTINQQAMDQLYYVTELTH
RIRSKSSPDENENEVEDSADFVSFFPDFVWTLRDFSLDLEADGQPLTPDEYLTYSLKLKKGTSQKDETFNLPRLC
IRKFFPKKKCFVFDRPVHRRKLAQLEKLQDEELDPEFVQQVADFCSYIFSNSKTKTLSGGIQVNGPRLESLVLTY
VNAISSGDLPCMENAVLALAQIENSAAVQKAIAHYEQQMGQKVQLPTESLQELLDLHRDSEREAIEVFIRSSFKD
VDHLFQKELAAQLEKKRDDFCKQNQEASSDRCSGLLQVIFSPLEEEVKAGIYSKPGGYRLFVQKLQDLKKKYYEE
PRKGIQAEEILQTYLKSKESMTDAILQTDQTLTEKEKEIEVERVKAESAQASAKMLQEMQRKNEQMMEQKERSYQ
EHLKQLTEKMENDRVQLLKEQERTLALKLQEQEQLLKEGFQKESRIMKNEIQDLQTKMRRRKACTIS

FIGURE 5292

TTTGTTTTTCTCTTTGATAATACTGTTTATTGTCCACGGACCGAGCGATTGCTCAAGAATGATACAAAGCATCAG
AAACATGCGCAGTCTGCTTGTCAACTTTCAACAACTCTTGTGTGTTCCCAGCACCGGAAGTCGTCAGACTTCATA
TTCCAGCATAAACACAGTGCTCCCCTCCCCCAAAAATCCAACTGAAACAAAATCAACAGAGCTTTAAATTACGGC
AGCAAGTCCAATATTTCTTAATACTTATCAAGCAAAGATTTGAAAATAACTACAATGTAAACTTTATTTTAAATA
TTTTGAGTT

FIGURE 5293

GAATAGGGTTGCACCATCCCAGAAGCTGCTGTTAGCTCGCCGGTCCTCGGCACGCCGCCCGTTCGCCCCTGCGCT
GTCCGCCCTTCCCCTAGCGTTACTTCCGGTCCCTCGCTGAGGGGGTTCGTGCGGCTCCCAGGAGGCGTGAACCGC
GGACC**ATG**AGCGTGGGCTTCATCGGGGCCGGCCAGCTGGCCTATGCTCTGGCGCGGGGCTTCACGGCCGCAGGCA
TCCTGTCGGCTCACAAGATAATAGCCAGCTCCCCAGAAATGAACCTGCCCACGGTGTCCGCGCTCAGGAAGATGG
GTGTGAACCTGACACGCAGCAACAAGGAGACGGTGAAGCACAGCGACGTCCTGTTTCTGGCTGTGAAGCCACATA
TCATCCCCTTCATCCTGGATGAGATTGGGGCCGACGTGCAAGCCAGACACATCGTGGTCTCCTGTGCGGCTGGTG
TCACCATCAGCTCTGTGGAGAAGAAGCTGATGGCATTCCAGCCAGCCCCCAAAGTGATTCGCTGCATGACCAACA
CACCTGTGGTAGTGCAGGAAGGCGCTACAGTGTACGCCACGGGCACCCATGCCCTGGTGGAGGATGGGCAGCTCC
TGGAGCAGCTCATGAGCAGCGTGGGCTTCTGCACTGAGGTGGAAGAGGACCTCATCGATGCCGTCACGGGGCTCA
GTGGCAGCGGGCCTGCCTATGCATTCATGGCTCTGGACGCATTGGCTGATGGTGGGGTGAAGATGGGTTTGCCAC
GGCGCCTGGCAATCCAACTCGGGGCCCAGGCTTTGCTGGGAGCTGCCAAGATGCTGCTGGACTCGGAGCAGCATC
CATGCCAGCTTAAGGACAATGTCTGCTCCCCTGGGGGAGCCACCATCCACGCCCTGCACTTTCTAGAGAGTGGGG
GCTTCCGCTCTCTGCTCATCAATGCAGTTGAGGCCTCCTGTATCCGAACACGAGAGCTACAGTCCATGGCCGACC
AAGAAAAGATCTCCCCAGCTGCCCTTAAGAAGACCCTCTTAGACAGAGTGAAGCTGGAATCCCCCACAGTCTCCA
CACTGACCCCCTCCAGCCCAGGGAAGCTCCTCACAAGAAGCCTGGCCCTGGGAGGCAAGAAGGAC**TAA**GGCAGCA
TCTGTCCCCTCTGTGATTCAGAGCCCTTAGTTGAGAGCCCCTGCCGCCCCTGCCACCCCCCTGCCCCGCTCCCAC
CATTGCCCCTCCTCAGCTGTGCAAGGAGAAAGCATGCTTAGGAAGTTTTCAGGTCCTTGTGATAAAACCTCCTTA
AATCTGTTCAGACCAAGCAATGCGAGCTTCCTCTCCTGTCCCATGTTGGAAGTTGCTCTGAAGGGGTGGTAGATG
CTGGAAGCCAGACACAACCCTGCGTACGCTGCTCAGTTGGTGGAGACTGGGGCTGGGACTGGAGTCAGCCCAGCT
GGGAGGAGGGGCTGGGGAGGATCTGCAGCTGAAGCCCGAGGCAGGGTTGGTGTGATGCCAAGGCAAAGTGGTGAG
GAGAAAACAGGAAACGGGCTTTCTCTGAATTGGTAAATGGGAAAGAAGTGAGCAACTTAAGATTGTCACAATTAA
TCACAAGTGTACAGGATTAGACTGGGTTTATATTTAACTCTTGCTTCATAGGTGTACCATTTAAAGAGTGTTATT
TAATGCTAAGTTTAACTGCTTTAATAAAGTTTATTTTTAAATAAAAAAAAAAAAAAAA

FIGURE 5294

MSVGFIGAGQLAYALARGFTAAGILSAHKIIASSPEMNLPTVSALRKMGVNLTRSNKETVKHSDVLFLAVKPHII
PFILDEIGADVQARHIVVSCAAGVTISSVEKKLMAFQPAPKVIRCMTNTPVVVQEGATVYATGTHALVEDGQLLE
QLMSSVGFCTEVEEDLIDAVTGLSGSGPAYAFMALDALADGGVKMGLPRRLAIQLGAQALLGAAKMLLDSEQHPC
QLKDNVCSPGGATIHALHFLESGGFRSLLINAVEASCIRTRELQSMADQEKISPAALKKTLLDRVKLESPTVSTL
TPSSPGKLLTRSLALGGKKD

FIGURE 5295

GCGCGTTCGGGAGCTTCGGCCCTGCGTAGGAGGCGGGTGCAGGTGTGGGTGCTGAGCCGCCCGCCGCCTGGAGGG
GGAGACAGCTTCAGGACACGCAGGCCGCAGCGAGGGCCCGGGCCCGGGGGATCCCAGGCCATGGATGCTCCCCAC
TCCAAAGCAGCCCTGGACAGCATTAACGAGCTGCCCGAGAACATCCTGCTGGAGCTGTTCACGCACGTGCCCGCC
CGCCAGCTGCTGCTGAACTGCCGCCTGGTCTGCAGCCTCTGGCGGGACCTCATCGACCTCATGACCCTCTGGAAA
CGCAAGTGCCTGCGAGAGGGCTTCATCACCAAGGACTGGGACCAGCCCGTGGCCGACTGGAAAATCTTCTACTTC
CTACGGAGCCTGCATAGGAACCTCCTGCGCAACCCGTGTGCTGAAGAGGATATGTTTGCATGGCAAATTGATTTC
AATGGTGGGGACCGCTGGAAGGTGGAGAGCCTCCCTGGAGCCCACGGGACAGATTTTCCTGACCCCAAAGTCAAG
AAGTATTTTGTCACATCCTACGAAATGTGCCTCAAGTCCCAGCTGGTGGACCTTGTAGCCGAGGGCTACTGGGAG
GAGCTACTAGACACATTCCGGCCGGACATCGTGGTTAAGGACTGGTTTGCTGCCAGAGCCGACTGTGGCTGCACC
TACCAACTCAAAGTGCAGCTGGCCTCGGCTGACTACTTCGTGTTGGCCTCCTTCGAGCCCCCACCTGTGACCATC
CAACAGTGGAACAATGCCACATGGACAGAGGTCTCCTACACCTTCTCAGACTACCCCCGGGGTGTCCGCTACATC
CTCTTCCAGCATGGGGGCAGGGACACCCAGTACTGGGCAGGCTGGTATGGGCCCCGAGTCACCAACAGCAGCATT
GTCGTCAGCCCCAAGATGACCAGGAACCAGGCCTCCTCCGAGGCTCAGCCTGGGCAGAAGCATGGACAGGAGGAG
GCTGCCCAATCGCCCTACCGAGCTGTTGTCCAGATTTTCTGACAGCTGTCCATCCTGTGTCTGGGTCAGCCAGAG
GTTCCTCCAGGCAGGAGCTGAGCATGGGGTGGGCAGTGAGGTCCCTGTACCAGCGACTCCTGCCCCGGTTCAACC
CTACCAGCTTGTGGTAACTTACTGTCACATAGCTCTGACGTTTTGTTGTAATAAATGTTTTCAGGCCGGGCACTG
TGGCTCACGCCTGTAATCCCAGCACTTTGGGAGACCGAGGCAGGTGGATCACGAGGTCAGGAGACAGAGACCATC
CTGGCCAACACGGTGAAACCCTGTCTCTACTAAAAATACAAAAAATTAGCCGGGCGTGGTGGCGGGCGCCTGTAG
TCCCAGCTACTCGGGAGGCTGATGCAGAAGAATGGCGTGAACCCGGAAGGCAGAGCTTGCAGTGAGCCGAGATCA
CGCCACTGCACTCCAGCCTGGGTGACAGAGCGAGACTCTGGCTCATAAAATAATAATAATAATAAATAAATAAAA
AATAAATGGTTTTCAGTAAAAAAAAAAAAAAAAA

FIGURE 5296

MDAPHSKAALDSINELPENILLELFTHVPARQLLLNCRLVCSLWRDLIDLMTLWKRKCLREGFITKDWDQPVADW
KIFYFLRSLHRNLLRNPCAEEDMFAWQIDFNGGDRWKVESLPGAHGTDFPDPKVKKYFVTSYEMCLKSQLVDLVA
EGYWEELLDTFRPDIVVKDWFAARADCGCTYQLKVQLASADYFVLASFEPPPVTIQQWNNATWTEVSYTFSDYPR
GVRYILFQHGGRDTQYWAGWYGPRVTNSSIVVSPKMTRNQASSEAQPGQKHGQEEAAQSPYRAVVQIF

FIGURE 5297

GTGGCGGGAAAAGCGACCTTTTCTGAGCGCGTTTGCCTGTTGAGTGGTAGCCTTTCCCCTCAACCAGCAATGGAG
GAGCAGCCCCAGATGCAAGACGCCGACGAGCCCGCGGACTCCGGAGGGGAAGGCCGGGCAGGCGGGCCACCGCAG
GTCGCCGGCGCCCAGGCGGCGTGCAGCGAGGACCGCATGACCCTGCTCCTCAGGCTGAGAGCACAGACAAAACAA
CAACTCTTAGAATATAAATCAATGGTTGATGCAAGTGAAGAAAAAACTCCAGAACAAATTATGCAAGAAAAGCAA
ATCGAAGCTAAAATTGAAGACCTGGAAAATGAAATTGAAGAGGTAAAAGTTGCTTTTGAGATAAAAAAGCTTGCA
TTAGACAGGATGAGACTTTCAACTGCACTTAAAAAAAACCTGGAGAAAATTAGCAGACAGTCTAGTGTGCTCATG
GATAACATGAAACACCTATTAGAGCTAAATAAATTAATAATGAAATCACAGCAGGAATCTTGGGATTTAGAGGAA
AAACTGCTTGATATTAGAAAGAAGAGATTGCAATTAAAACAAGCTTCAGAAAGTAAGCTTTTAGAAATACAGACT
GAAAAGAACAAACAGAAGATTGATTTGGACAGTATGGAAAACTCAGAGAGGATAAAGATCATACGACAAAACCTA
CAGATGGAGATAAAAATTACTACTGTTATTCAACATGTGTTCCAGAACCTTATTTTGGGGAGTAAAGTCAATTGG
GCAGAGGATCCTGCCCTTAAGGAAATTGTTCTGCAGCTTGAGAAGAATGTTGACATGATGTAATAAGAATTCATT
TCTGACATATTTTACATTTCTGGCAATCTCAACTCTTATTTGGAATACTTCTGTGCATTTGTCTGTCCACCGTAA
TTTTAGAAAAGCATATCCATAACGTTTACAGTTGTAGTACAGTTGTGGTTAGTTATTTGTAGTGGGATTGAAAGT
AATTTTTTTCTTTTTATATTTCTATATTTAGTTTGTTTTTTTGTTGTTGTTGTTTTTTGAGATGGAGTCTCGCTT
TGTTGCCCAGACTGGAGGGCAGTGGCGCGATCTCGGCTCACTGCAACCTCTGCCTCCCGGGTTCAAGCAGTTCTG
CCTCAGCCTCCCAAGTAGCTGTGACTAAAGGTGCACGCCGCCATGCCCAGCTAATTTTTTGTATTTTAGTAGAGA
CGGGGTTTCACCGTGTTGCCCAGGCTGCTCTCAGAACTCCTGAGCTCAGGCAGTCCACCGCCTCGGCCTACCGAA
GTGCTAGGATTACAGACGTAAGCCACCGAGCCTGGTCTAGTTTGCATTTTTTTTCTATCAGTTTTATAAGTTAAG
AAATAAAAGGAATTAATGTTAAAAAAAAAAAAAAAAA

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FIGURE 5298

MEEQPQMQDADEPADSGGEGRAGGPPQVAGAQAACSEDRMTLLLRLRAQTKQQLLEYKSMVDASEEKTPEQIMQE
KQIEAKIEDLENEIEEVKVAFEIKKLALDRMRLSTALKKNLEKISRQSSVLMDNMKHLLELNKLIMKSQQESWDL
EEKLLDIRKKRLQLKQASESKLLEIQTEKNKQKIDLDSMENSERIKIIRQNLQMEIKITTVIQHVFQNLILGSKV
NWAEDPALKEIVLQLEKNVDMM

FIGURE 5299

GGCAGGATGGCGCCACCACCAGCTAGAGTACATCTAGGTGCGTTCCTGGCAGTGACTCCGAATCCCGGGAGCGCA
GCGAGTGGGACAGAGGCAGCCGCGGCCACACCCAGCAAAGTGTGGGGCTCTTCCGCGGGGAGGATTGAACCACGA
GGCGGGGGCCGAGGAGCGCTCCCTACCTCCATGGGACAGCACGGACCCAGTGCCCGGGCCCGGGCAGGGCGCGCC
CCAGGACCCAGGCCGGCGCGGGAAGCCAGCCCTCGGCTCCGGGTCCACAAGACCTTCAAGTTTGTCGTCGTCGGG
GTCCTGCTGCAGGTCGTACCTAGCTCAGCTGCAACCATCAAACTTCATGATCAATCAATTGGCACACAGCAATGG
GAACATAGCCCTTTGGGAGAGTTGTGTCCACCAGGATCTCATAGATCAGAACGTCCTGGAGCCTGTAACCGGTGC
ACAGAGGGTGTGGGTTACACCAATGCTTCCAACAATTTGTTTGCTTGCCTCCCATGTACAGCTTGTAAATCAGAT
GAAGAAGAGAGAAGTCCCTGCACCACGACCAGGAACACAGCATGTCAGTGCAAACCAGGAACTTTCCGGAATGAC
AATTCTGCTGAGATGTGCCGGAAGTGCAGCACAGGGTGCCCCAGAGGGATGGTCAAGGTCAAGGATTGTACGCCC
TGGAGTGACATCGAGTGTGTCCACAAAGAATCAGGCAATGGACATAATATATGGGTGATTTTGGTTGTGACTTTG
GTTGTTCCGTTGCTGTTGGTGGCTGTGCTGATTGTCTGTTGTTGCATCGGCTCAGGTTGTGGAGGGGACCCCAAG
TGCATGGACAGGGTGTGTTTCTGGCGCTTGGGTCTCCTACGAGGGCCTGGGGCTGAGGACAATGCTCACAACGAG
ATTCTGAGCAACGCAGACTCGCTGTCCACTTTCGTCTCTGAGCAGCAAATGGAAAGCCAGGAGCCGGCAGATTTG
ACAGGTGTCACTGTACAGTCCCCAGGGGAGGCACAGTGTCTGCTGGGACCGGCAGAAGCTGAAGGGTCTCAGAGG
AGGAGGCTGCTGGTTCCAGCAAATGGTGCTGACCCCACTGAGACTCTGATGCTGTTCTTTGACAAGTTTGCAAAC
ATCGTGCCCTTTGACTCCTGGGACCAGCTCATGAGGCAGCTGGACCTCACGAAAAATGAGATCGATGTGGTCAGA
GCTGGTACAGCAGGCCCAGGGGATGCCTTGTATGCAATGCTGATGAAATGGGTCAACAAAACTGGACGGAACGCC
TCGATCCACACCCTGCTGGATGCCTTGGAGAGGATGGAAGAGAGACATGCAAAAGAGAAGATTCAGGACCTCTTG
GTGGACTCTGGAAAGTTCATCTACTTAGAAGATGGCACAGGCTCTGCCGTGTCCTTGGAGTGAAAGACTCTTTTT
ACCAGAGGTTTCCTCTTAGGTGTTAGGAGTTAATACATATTAGGTTTTTTTTTTTTTTAACATGTATACAAAGT
AAATTCTTAGCCAGGTGTAGTGGCTCATGCCTGTAATCCCAGCACTTTGGGAGGCTGAGGCGGGTGGATCACTTG
AGGTCAGAAGTTCAAGACCAGCCTGACCAACATCGTGAAATGCCGTCTTTACAAAAAAATACAAAAATTAACTGG
ATGTGATGGTGTGTGCATATATTCTCGGCTACTCGGGAGGCTGAGGCAGGAGAATCACTTGAACCCACGAGGCAG
TGAGCTGAGATTGCACCACTGCACTCCAGCCTGGGACACAGAGCAAGACTCTGTCTCAAGATAAAATAAAATAAA
CTTGAAAGAATTATTGCCCGACTGAGGCTCACATGCCAAAGGAAAATCTGGTTCTCCCCTGAGCTGGCCTCCGTG
TGTTTCCTTATCATGGTGGTCAATTGGAGGTGTTAATTTGAATGGATTAAGGAACACCTAGAACACTGGTAAGGC
ATTATTTCTGGGACATTATTTCTGGGCATGTCTTCGAGGGTGTTTCCAGAGGGGATTGGCATGCGATCGGGTGGA
CTGAGTGGAAAAGACCTACCCTTAATTTGGGGGGGCACCGTCCGACAGACTGGGGAGCAAGATAGAAGAAAACAA

FIGURE 5300

MAPPPARVHLGAFLAVTPNPGSAASGTEAAAATPSKVWGSSAGRIEPRGGGRGALPTSMGQHGPSARARAGRAPG
PRPAREASPRLRVHKTFKFVVVGVLLQVVPSSAATIKLHDQSIGTQQWEHSPLGELCPPGSHRSERPGACNRCTE
GVGYTNASNNLFACLPCTACKSDEEERSPCTTTRNTACQCKPGTFRNDNSAEMCRKCSTGCPRGMVKVKDCTPWS
DIECVHKESGNGHNIWVILVVTLVVPLLLVAVLIVCCCIGSGCGGDPKCMDRVCFWRLGLLRGPGAEDNAHNEIL
SNADSLSTFVSEQQMESQEPADLTGVTVQSPGEAQCLLGPAEAEGSQRRRLLVPANGADPTETLMLFFDKFANIV
PFDSWDQLMRQLDLTKNEIDVVRAGTAGPGDALYAMLMKWVNKTGRNASIHTLLDALERMEERHAKEKIQDLLVD
SGKFIYLEDGTGSAVSLE

FIGURE 5301

CCGCCTGTGGCTCAAATTCCACCGCCACCAAACTGAGATGATCATTACGAAACAGGGCAGGCGCATGTTTCCTTT
CTTGAGCTTCAACATAAACGGACTCAATCCCACTGCCCACTACAATGTGTTCGTAGAGGTGGTGCTGGCGGACCC
CAACCACTGGCGCTTCCAGGGGGGCAAATGGGTGACCTGTGGCAAAGCCGACAATAACATGCAGGGCAACAAAAT
GTATGTTCACCCAGAGTCTCCTAATACTGGTTCCCACTGGATGAGACAGGAGATTTCATTCGGGAAATTAAAACT
CACCAATAACAAAGGCGCAAATAACAACAACACCCAGATGATAGTCTTACAATCCTTACACAAATACCAACCCCG
ACTGCATATTGTTGAAGTTACAGAGGATGGCGTGGAGGACTTGAATGAGCCCTCAAAGACCCAGACTTTTACCTT
CTCAGAAACGCAATTCATTGCAGTGACTGCCTACCAAAACACCGATATTACTCAACTAAAGATTGATCATAACCC
CTTTGCAAAAGGCTTCAGAGACAACTATGATTCCATGTACACCGCTTCAGAAAATGACAGGTTAACTCCATCTCC
CACGGATTCTCCTAGATCCCATCAGATTGTCCCTGGAGGTCGGTACGGCGTTCAATCCTTCTTCCCGGAGCCCTT
TGTCAACACTTTACCTCAAGCCCGCTATTATAATGGCGAGAGAACCGTGCCACAGACCAACGGCCTCCTTTCACC
CCAACAGAGCGAAGAGGTGGCCAACCCTCCCCAGCGGTGGCTTGTCACGCCTGTCCAGCAACCTGGGACCAACAA
ACTAGACATCAGTTCCTATGAATCTGAATATACTTCTAGCACATTGCTCCCATATGGCATTAAATCCTTGCCCCT
TCAGACATCCCATGCCCTGGGGTATTACCCAGACCCAACCTTTCCTGCAATGGCAGGGTGGGGAGGTCGAGGTTC
TTACCAGAGGAAGATGGCAGCTGGACTACCATGGACCTCCAGAACAAGCCCCACTGTGTTCTCTGAAGATCAGCT
CTCCAAGGAGAAAGTGAAAGAGGAAATTGGCTCTTCTTGGATAGAGACACCCCCTTCCATCAAATCTCTAGATTC
CAATGATTCAGGAGTATACACCAGTGCTTGTAAGCGAAGGCGGCTGTCTCCTAGCAACTCCAGTAATGAAAATTC
ACCCTCCATAAAGTGTGAGGACATTAATGCTGAAGAGTATAGTAAAGACACCTCAAAAGGCATGGGAGGGTATTA
TGCTTTTTACACAACTCCC**TAA**AGAGTTATTTTAACCTCAAAAATTAGCTAACTTTTTGCAGATGGACTTGGTGG
TGTTTTTTGTTGTCTTCTTTGCCTAGGTTGCCAAAAAGATGTTTGCCTTCCACCTTGATGCATCCTGTTTTGTGC
AATTCTCTAAAAGAAGGTGCCAAAGCTTTTTGATTGCTGCAGGTAACTGAAACAAACCTAGCATTTTTAAAAAAT
AAGATTAATGGAAGACTTTAAGGTATTTTAAAATTCGAAGGGTATCCAAGGTTCTGTATTTATTTATTGGGGAGA
CACTAACAATTCAAAGAAGCAGGCTGTGAACATTGGGTGCCCAGTGCTATCAGATGAGTTAAAACCTTTGATTCT
CATTTCTATTTGTAAATTCTTAAGCAAATAGAAGCCGAGTGTTAAGGTGTTTTGCTTCTGAAAGAGGGCTGTGCC
TTCCGTTTCAGAAGGAGACATTTTGCTGTTACATTCTGCCAGGGGCAAAAGATACTAGGCCCAGGAGTCAAGAAA
AGCTTTTGTGAAAGTGATAGTTTCACCTGACTTTGATTCCTTAACCCCCGGCTTTTGGAACAAGCCATGTTTGCC
CTAGTCCAGGATTGCCTCACTTGAGACTTGCTAGGCCTCTGCTGTGTGCTGGGGTGGCCAGTGGGACTCAGGAGA
GAGCAAGCTAAGGAGTCACCNNNNNNNNNNNNNNNNNNNNNNGGGAGAATTTAAAAGTGTACAGTTGTGTGTTTA
GATACACTATAGAATAATGTGGTATATATTGTACAAATAGTCTACATAGGTGTCTGGGATAATGTAAAACTGGTG
CTTTGGCTTTGTAAAGAATTTGCAAATCACTTAACAGCTGCAGGGGCAAGGGGAGAGTTTCATCATCCCCATGAT
ATTTGGGAATATTCTGTTTACTTCTTAGAGTAGTTAAGAATGTATTCAGCTACTATGTACTAACTTGAACCGTGT
TTAAGGAAAACTCCATATTTCATCCTCTTCTTGCGCCATCCCCTCTCCCTAACTTGGTAATGTGAAGAAACTAAA
ACCTGATACCACAGCTCCTATAGGCATTTTAGAGATCTTGGATTTTTATGTACAGTCTTAGTCATTTTTAATAAA
TGTGGTTCAGTAAGGGAACGGAAAA

FIGURE 5302

RLWLKFHRHQTEMIITKQGRRMFPFLSFNINGLNPTAHYNVFVEVVLADPNHWRFQGGKWVTCGKADNNMQGNKM
YVHPESPNTGSHWMRQEISFGKLKLTNNKGANNNNTQMIVLQSLHKYQPRLHIVEVTEDGVEDLNEPSKTQTFTF
SETQFIAVTAYQNTDITQLKIDHNPFAKGFRDNYDSMYTASENDRLTPSPTDSPRSHQIVPGGRYGVQSFFPEPF
VNTLPQARYYNGERTVPQTNGLLSPQQSEEVANPPQRWLVTPVQQPGTNKLDISSYESEYTSSTLLPYGIKSLPL
QTSHALGYYPDPTFPAMAGWGGRGSYQRKMAAGLPWTSRTSPTVFSEDQLSKEKVKEEIGSSWIETPPSIKSLDS
NDSGVYTSACKRRRLSPSNSSNENSPSIKCEDINAEEYSKDTSKGMGGYYAFYTTP

FIGURE 5303

GAGATGAAGGTGAAGATGCTGAGCCGGAATCCGGACAATTATGTCCGCGAAACCAAGTTGGACTTACAGAGAGTT
CCAAGAAACTATGATCCTGCTTTACATCCTTTTGAGGTCCCACGAGAATATGTAAGAGCTTTAAATGCTACCAAA
CTGGAACGAGTATTTGCAAAACCATTCCTTGCTTCGCTGGATGGTCACCGTGATGGAGTCAATTGCTTGGCAAAG
CATCCAGAGAAGCTGGCTACTGTCCTTTCTGGGGCGTGTGATGGAGAGGTTAGAATTTGGAATCTAACTCAGCGG
AATTGTATCCGTACAATACAAGCACATGAAGGCTTTGTACGAGGAATATGTACTCGCTTTTGTGGGACTTCTTTT
TTCACTGTTGGTGATGACAAAACTGTGAAGCAGTGGAAAATGGATGGGCCAGGCTATGGAGACGAGGAAGAGCCA
TTACATACAATATTAGGAAAGACAGTGTATACTGGGATTGATCATCACTGGAAAGAAGCTGTTTTTGCCACATGT
GGACAGCAAGTAGACATTTGGGATGAACAAAGAACTAATCCTATATGTTCAATGACCTGGGGATTTGACAGTATA
AGTAGTGTTAAATTTAACCCAATTGAGACATTTCTCTTGGGAAGTTGTGCATCTGACAGGAATATAGTACTGTAC
GATATGAGGCAAGCTACTCCTTTGAAAAAGGTTATCTTAGATATGAGAACAAATACAATCTGTTGGAACCCTATG
GAAGCTTTCATTTTTACAGCAGCAAATGAAGATTATAACTTATATACTTTTGATATGCGTGCACTGGACACTCCT
GTAATGGTCCATATGGATCATGTATCTGCAGTGCTTGATGTGGATTACTCTCCCACTGGGAAGGAGTTTGTGTCT
GCTAGTTTCGATAAATCTATTCGAATCTTTCCTGTAGACAAAAGTCGAAGCAGGGAGGTATATCATACAAAGAGA
ATGCAACATGTTATCTGTGTAAAATGGACTTCTGACAGCAAGTATATTATGTGTGGATCTGATGAAATGAACATT
CGCCTGTGGAAAGCTAATGCTTCTGAAAAATTGGGTGTGCTTACATCACGAGAAAAAGCAGCCAAGGATTATAAC
CAGAAATTGAAGGAGAAATTTCAGCATTATCCTCATATAAAACGTATAGCTCGTCATCGACATCTACCAAAATCT
ATCTATAGCCAGATTCAGGAACAGCGCATCATGAAAGAAGCTCGTCGACGAAAGGAAGTGAATCGTATTAAACAC
AGCAAGCCTGGATCTGTGCCACTTGTGTCAGAGAAGAAGAAACACGTAGTGGCAGTTGTAAAATAATTGGTATTC
CTAACAATCCTGATGTATAATTATTTGTTACTTTTGATTTGAGAACTCTACAAATAAAAGTGCTGGGACTAGATT
AATTGCAAACATTTTAGTTATATGTGTAGAGCTTTATTGTTACTCCTTTTAGCTACCCTGAAAAATGATCCTTAA
AGGTGGCCTAGTTGGTAAGACTGTTTTATCCTTAATCTGCATTCTTCTTTCATTGTAGAATACAGTATTTGCAAC
TCATTTTTTCTTGTTTTTATTACAGATATACTTACTTTCTCTTTGATCTATTATTGTAGACACTATACATTCAAA
TTGACATTTAAGACCAAACATCTCTTATGTTATCTTTAATATTACTTTGAATAATGATTGCAATGATGTTTCTTC
CTGTGATTCCACATAACATTTAGAATAATGATGTCAATTTTTTACAACTG

FIGURE 5304

MKVKMLSRNPDNYVRETKLDLQRVPRNYDPALHPFEVPREYVRALNATKLERVFAKPFLASLDGHRDGVNCLAKH
PEKLATVLSGACDGEVRIWNLTQRNCIRTIQAHEGFVRGICTRFCGTSFFTVGDDKTVKQWKMDGPGYGDEEEPL
HTILGKTVYTGIDHHWKEAVFATCGQQVDIWDEQRTNPICSMTWGFDSISSVKFNPIETFLLGSCASDRNIVLYD
MRQATPLKKVILDMRTNTICWNPMEAFIFTAANEDYNLYTFDMRALDTPVMVHMDHVSAVLDVDYSPTGKEFVSA
SFDKSIRIFPVDKSRSREVYHTKRMQHVICVKWTSDSKYIMCGSDEMNIRLWKANASEKLGVLTSREKAAKDYNQ
KLKEKFQHYPHIKRIARHRHLPKSIYSQIQEQRIMKEARRRKEVNRIKHSKPGSVPLVSEKKKHVVAVVK

FIGURE 5305

ATCTGTGACCCAGGCCTTACTGCTTTTGAACCTGAAGCTTTGGGTAATTTAGTGGAAGGGATGGATTTTCACCGA
TTCTACTTTGAAAATGCTTTGTCCAAAAGCAATAAACCAATCCACACTATTATTCTAAACCCTCATGTACATCTG
GTAGGGGATGATGCCGCCTGCATAGCATATATTAGGCTCACACAGTACATGGATGGCAGTGGAATGCCAAAGACA
ATGCAGTCAGAAGAGACTCGTGTGTGGCACCGCCGGGATGGAAAGTGGCAGAATGTTCATTTTCATCGCTCGGGG
TCACCAACAGTACCCATCAAGTAAATATTTCCAGGCTGTCAGCTTCTTTGTTAATACACCCATGCTAAATTTCAA
CAGTGCCACTTCTGCATTCTCTGTTCTCAAGGCACCTGGATGGTGACCCTGGGCCGTCCTCTCCTCCTCTTCATG
CATGTTTCTGAGTGCATGAAGTTGTGAAGGTCCTACATGTAATGCATATGTGATGCATCATCTTATCATATATTC
CTTCCTATACATTGTTTACACTTCAACTACGGGGATGTTCCACACAAACTTAAATTACTGTTGGCAAAACAATAG
GGGGAGATTAGACAAAAAAAAATCCACAATATTCCAAGTACAACTCTTCATCAAGTTTCTCTGTTAATGCCAAGA
TTTAACAGACTTAAGAACTATTGTTCTCTGAATGACAGTTGTAAGAGAAATGTAAATTTTTTAGAACTCTTTGCT
GTTAATCTGTTTTGGNNNNNNNNNNNNNNNNNNNNNNNNNNAAGGGTTAAAAAAAATACACCTTCAGTTTCCTGG
TGTGATCCTGGTTAAAATGGATGATTTTTCATTGAAAGTTTTGCTGATTAACAATTAAAGTGGGATGATATGTGG
GCAAAATCACTTATGAAAGTAGAAGCAAGAATCAGTTGGTTTGCTACCACATAAAGCCATGCTGTTTTTGGTCAA
ACTGTGTAAACTGGAAAAATTCACATCATTTCTGAGTTTAATCACTTTAGGATATATTCACATTGTTTTGGTGAA
TTTGCTGAATTGAATTGTTTTTCTTTCTCAAATCTGTGATCTCTTTTCTTTATCCTGTTTCTTTGTTCCTTTCGT
TTGCTTTCTTATTTTTCTTTTGTTCCATTCTTTTCTTACTTTTTTCCCTTTTCCTTTTTTGGGGAGGCTGGCTAG
TAGTGTGTGAGAAAAGAATAGAAGTGAAATTTGCATAATGAATGTAAAAGGGAAATAAAAGTCTTTTGAAGGTAG
CTATACTAGCACTTTTGATCATCTTCAGGGCCCACAAAAATGTTGTCAAGATTTTAAAGGTTTATAATTCTGCTT
AAGCTCTAGTTTGGACTTAGGTATCCTAACTATGTTGGAGGTATTTGCATTGTTTAAAGTTAGGATAAAAGCAAG
TTCCTCCTGTGACTGCAACGTCTTACTGATTGGGACAGTTGCCAGGAGGATACCAACTTGATAGCAGAGGGGGTT
TTATGCAAACGCACTCACCTCCGCCTTGGGGAATGAAAGGGTCACTTCTGCATCATCACTAGCTAGTTTTCTAGT
GTTAGAGAGGCTTACAAATGTTTGCCATTCTCATAAGTGTTTTGAACTTGATCTTTGTGACTTGTGCTTTTTTAG
CTTCTCTCTTGAATCAGAGTATCATTGTCTTCCTCCAAGGAGTTAGAATTTCCCAGTTTAAAACAAAAAGGGAAA
TGTCCTAGGTTTTCTTTGTGCTTCTCATTTTTCCTTTGTTGATTCAATTCCTGTGATTTTTGTTCTCTTCCCTGA
AGTGCTTTACAGTGCATGGAATCTCCATCATTGTTATTTTAACGATAGTAATTCACAGTCCTCAGAAGCCTATTT
TTAAAGCAGAAGCAAAAAAGAAAAACAAAATAACAAAAACAACCCTTCCTCTTTTCTCTCATCTCACCTCTCTGT
GTTGATTACTAATCATCTTAGATATTATTGCTAGTGGATGTATGGTAGATGGGTTGAAGCTTTTCTGATAATTAT
TACACAATTTAAAACAACATATATATTTAAAATAAATATATACAGTAAATATATTGAGCCATGTTAACCTGCCAA
TGAGATCTGTGAAAAAATAATGGCCTCATTTTTCTCTTTTTAATTTCTTTTACCCTTTTGTGAAGCAGCTATACG
TGGCATACATGTATTTAAAGAAAAAAAAAATAGATGTAGAGTGTTTTTTTTACACTTTTAACTTAGCATGTGGTGT
TGAAGTATTACTGTAGATCAAGTTTGTCTTCCGCACTAAGATGTGAGGAAATTGTGATTTGTTCTCTCCACCACA
AATGAATTACACATTTATTATCTTCTATCATTTTGAAACACTGCAGTTTACCATGGGACACTGTATATATTTCTT
GCCATAATGGTAAAGGACTGATTGATATATTTAAGAGTTAATAAATTTGTGATTTCTGCTGACAGTGCGTCCATC
TTTATTTCTTCAGAAGAGGTACTGTATGTATGCCTGCATAGTGCTGGCCAGTGTCAAGGGCAGTGTGTCCTACTC
TGGTCTCATTTAGTACATAACAATTTGCACTTGGTGAGAATGGCAAGTTAATTGTTCTCTGTGAGCAAAACAATG
GTCTCTTCTGGGAAAATGTTGCTGAGAACAAAATAGTTAACAACTAAGACTCCTAAAAGCTTCTCTAAACTGTAC
CCTCCAATCCAGCCTTCACATGGCTGCTTTTTTTTT

FIGURE 5306

ICDPGLTAFEPEALGNLVEGMDFHRFYFENALSKSNKPIHTIILNPHVHLVGDDAACIAYIRLTQYMDGSGMPKT
MQSEETRVWHRRDGKWQNVHFHRSGSPTVPIK

FIGURE 5307

CTTCTGTGTGTGCACATGTGTAATACATATCTGGGATCAAAGCTATCTATATAAAGTCCTTGATTCTGTGTGGGT
TCAAACACATTTCAAAGCTTCAGGATCCTGAAAGGTTTTGCTCTACTTCCTGAAGACCTGAACACCGCTCCCATA
AAGCCATGGCTTGCCTTGGATTTCAGCGGCACAAGGCTCAGCTGAACCTGGCTACCAGGACCTGGCCCTGCACTC
TCCTGTTTTTTCTTCTCTTCATCCCTGTCTTCTGCAAAGCAATGCACGTGGCCCAGCCTGCTGTGGTACTGGCCA
GCAGCCGAGGCATCGCCAGCTTTGTGTGTGAGTATGCATCTCCAGGCAAAGCCACTGAGGTCCGGGTGACAGTGC
TTCGGCAGGCTGACAGCCAGGTGACTGAAGTCTGTGCGGCAACCTACATGATGGGGAATGAGTTGACCTTCCTAG
ATGATTCCATCTGCACGGGCACCTCCAGTGGAAATCAAGTGAACCTCACTATCCAAGGACTGAGGGCCATGGACA
CGGGACTCTACATCTGCAAGGTGGAGCTCATGTACCCACCGCCATACTACCTGGGCATAGGCAACGGAACCCAGA
TTTATGTAATTGATCCAGAACCGTGCCCAGATTCTGACTTCCTCCTCTGGATCCTTGCAGCAGTTAGTTCGGGGT
TGTTTTTTTATAGCTTTCTCCTCACAGCTGTTTCTTTGAGCAAAATGCTAAAGAAAAGAAGCCCTCTTACAACAG
GGGTCTATGTGAAAATGCCCCCAACAGAGCCAGAATGTGAAAAGCAATTTCAGCCTTATTTTATTCCCATCAATT
GAGAAACCATTATGAAGAAGAGAGTCCATATTTCAATTTCCAAGAGCTGAGGCAATTCTAACTTTTTTGCTATCC
AGCTATTTTTATTTGTTTGTGCATTTGGGGGGAATTCATCTCTCTTTAATATAAAGTTGGATGCGGAACCCAAAT
TACGTGTACTACAATTTAAAGCAAAGGAGTAGAAAGACAGAGCTGGGATGTTTCTGTCACATCAGCTCCACTTTC
AGTGAAAGCATCACTTGGGATTAATATGGGGATGCAGCATTATGATGTGGGTCAAGGAATTAAGTTAGGGAATGG
CACAGCCCAAAGAAGGAAAAGGCAGGGAGCGAGGGAGAAGACTATATTGTACACACCTTATATTTACGTATGAGA
CGTTTATAGCCGAAATGATCTTTTCAAGTTAAATTTTATGCCTTTTATTTCTTAAACAAATGTATGATTACATCA
AGGCTTCAAAAATACTCACATGGCTATGTTTTAGCCAGTGATGCTAAAGGTTGTATTGCATATATACATATATAT
ATATATATATATATATATATATATATATATATATATATATATTTTAATTTGATAGTATTGTGCATAGAGCCACGTAT
GTTTTTGTGTATTTGTTAATGGTTTGAATATAAACACTATATGGCAGTGTCTTTCCACCTTGGGTCCCAGGGAAG
TTTTGTGGAGGAGCTCAGGACACTAATACACCAGGTAGAACACAAGGTCATTTGCTAACTAGCTTGGAAACTGGA
TGAGGTCATAGCAGTGCTTGATTGCGTGGAATTGTGCTGAGTTGGTGTTGACATGTGCTTTGGGGCTTTTACACC
AGTTCCTTTCAATGGTTTGCAAGGAAGCCACAGCTGGTGGTATCTGAGTTGACTTGACAGAACACTGTCTTGAAG
ACAATGGCTTACTCCAGGAGACCCACAGGTATGACCTTCTAGGAAGCTCCAGTTCGATGGGCCCAATTCTTACAA
ACATGTGGTTAATGCCATGGACAGAAGAAGGCAGCAGGTGGCAGAATGGGGTGCATGAAGGTTTCTGAAAATTAA
CACTGCTTGTGTTTTTAACTCAATATTTTCCATGAAAATGCAACAACATGTATAATATTTTTAATTAAATAAAAA
TCTGTGGTGGTCGTTTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 5308

MACLGFQRHKAQLNLATRTWPCTLLFFLLFIPVFCKAMHVAQPAVVLASSRGIASFVCEYASPGKATEVRVTVLR
QADSQVTEVCAATYMMGNELTFLDDSICTGTSSGNQVNLTIQGLRAMDTGLYICKVELMYPPPYYLGIGNGTQIY
VIDPEPCPDSDFLLWILAAVSSGLFFYSFLLTAVSLSKMLKKRSPLTTGVYVKMPPTEPECEKQFQPYFIPIN

FIGURE 5309

AAAAAAAGAAAAAAAAATAAGTGAGCTGAACTCACCTGAAGTGGTTTACTTCTGTGGGTTAAGAAGTTCTAGTCA
GTGTTCATAGTCGTTTCGTTTTGATAATTGTTGAACCAATTTTGTTTTTAAAACCTTTAGACTCTGAAAGTAATA
TTTTGACTAAGAATGTAAATATTTCCAAACTAAATTACTCGGGAAGTAAACGCTTTTTTTAAAAGTATTTTTACT
GGTTTTATACCAATATTATATGCAGAAATCACAGGATGAATTTAGAATTAAATCTCAATTAGTTCACTTTGGCCT
AGATTTATGAAAAATGCATGCCTCGTAAAGAGTCCACTGTATTCACGAGTAAAGTTGCTTTTAGTGTTCACTTGA
TGACTTGGAGAGTAGGAATTTTGCAAAATCTGAATTTAAGGAAATTCTTTAGGATAACCATTTCAAAAAATAAAA
TTGCTATGCAATCTTGAATATTTTCTCTTTTGCCTCGTAAAATGAAAATGCATTCACAGTTTCTGTAAATTATTT
AGCAGCCTTAAAGTTTATCAAAAAATTGTCCAGATTCCACGTGCAGCATGCTTGGCCCTGCATTTAATTTAAGAA
GGATTAATAATAATGCTCTGAATTTTTCGAAAGGGATTCTCCTAAACCCACCCACTTCTCTTGCCCAGGCTGCTT
TTTAAAAATATTTTTTTATTTTTTACTTATTTTTAAATTTTCTCTTTTTATTTATTTTTGGTTTTCTTGTTAGCC
CCCTGTTATATGGGAGAACGAAAATTGTTATATTTTGAAAGTACTTATTACATTATTTTTATTTTAGTATCTTGA
TGCTCCTGTCAAAAGGGAAATGAGGCTTTTAAAAATAAAGTACCTTAATTCTTTATTGACTTTTTGCCCTAAATT
GCTAGGTGTGACCCAGCAATCTTTTAGGAAGAGATTTTACAGTGGTGCTTTATTTATATCAATAATCCAGTATAG
TTAGGCTGTTCATTCCTCATAATAGAGTACATAACAGAAAAGTGGGACTTTCACATTTTCATATTTAGGCACGTT
CCAATTTAATTCCAAAAATACTCTGTAATTCTACATCTAAAAAAACCGATTCCCTAATTCGAATTTATTGGTACC
AAAGCTCTCTTTGGCTATAGACAATTAAGAGTTGACCTTTTAAGTTAATGTATATGCTTAAAAACAGTTTTAGGA
AAATATTTGGTAGACAAAGAGTTTCAACTTTAAATGTTCACTATGTCATTTAGTGTCCAACTTTACGGATAGGTT
GACTATCTAAATAGGCATTTTTAGTCATTAAAAAAAATCTAGTCACCAGGAGGATCCCTATAACTCAAAATAACT
TGTTTGTAAAAGAAAATTTGTTTACTTACCCATTAGTAAGTTCCTGCATATTCATTATAAGATGGCAAATCAAAC
TTTTCTAGGATGAAGACAGCTTATTTTTAAGTTGTATAGTCTTAGTTGGTTTAGGGTCTCAATTTTAATTAATAA
AATACTTGGTTTTTATTTGCTTGTCCTTTTGAATTCCTGTTTTAATAATTTTAAAATGAGCACAAAGAATGTTGA
AGTTCAGATTAATCTCTTCTGAATGATGTTTTTTTCCTCTGTGATGAGTTGTTTCTGACTTTTTTCCTTTTGTAT
TTGTAATGTTGATTAAGATGTAAAATAAAAAGTGTGCCTGATTATTTTTGC

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FIGURE 5310

KKEKKISELNSPEVVYFCGLRSSSQCS

FIGURE 5311A

ATTGAAGGAATTAGGAACAAAGTATAAATACTCACTTTTAACAGATGGTTCTTGGGATATGAGTAAGTTCTTGAA
CATTCAGTGTCAACTCAGCAGGCTCAAATACCCTCCTTTTGCGAAAAAGTGGATCAATATTCGGAAGTCATATGG
AAATTTTTACAAGGTTCCTAGAAGCCAAACCAAACTGACAATAATGCTTGAAAAATTAGGAATGGATTATGATGG
GCGGCCTCACTGTGGTCTTGATGACTCTAAGAATATCGCCCGAATAGCAGTTCGAATGCTTCAGGATGGGTGTGA
ACTCCGAATCAACGAGAAAATGCATGCAGGACAGCTAATGAGTGTGTCCTCTTCCTTACCAATAGAGGGCACTCC
ACCACCACAAATGCCACATTTTAGAAAGTAACAGTTTTGTGTGTGGATCATTCCAATTGAAGTTGCTATGAAGAG
GTAGCAGATGAATCTCATTGAATTAGTCCTGTAGTGCAAACTTTAAGCACCTTAAAACATTTAAAATCTTATTAC
AGGTGATAGAGATAGATACATGTATGTGAACAGATTTTGTAGGAAGGCATACTGAATTCTTTGTCACCAGCACTT
TTGATATGAACAGTATTCGTTACATAGTAACAGTTCCTGCTTACAACTGAATTTTATAATTTAAGGTGTTCAAGA
TATATTCTTTTTGGTTTTAAAATGCAAAATCTTATTGGCTGTTCTGTTGAATGTCATATCTTACTGGTGTTTAAA
TATGTAATGTGTTTCTTTATTAACATCACTAGATGAAACCATATCTTAAAATGCAGAAATGATTGGAAGGTAGAT
CTTATCTAGCCTTTGGATTTCAAGAATATCATAGTCCTTTTGATTTTCAAAGTTTATATGTGAAGTTCACCATGT
ATGTGGTGAATTTCGTAAGGTACTTGGTATACATATCTGCCTATGTTTCTTTTCAACTCATAATTGGAAGAATTA
TGATGGATTATAGGGTTTGGTTAAAAATCCAGTTACTGAAGGAATTAATGAAAACGTAGAAGAAAGTACTAAAAG
GAATATCATAAGGGCTGTAGCTCAAACTTCATAATACATAAATCACTGGGGTCTTTTTGGATTTGGTTGTTTGAT
TCGCCTTCCTTTTTTGACATATGTATGCCTTAATTCTTAAATCTGAGGGACCATGCTTTGAAATAGACTGAAAAT
TAAGGGTCACCACCTAATTTTACTTTGTATTCAGTATCGTAAGTGAGGTTAATAAAGTCAATACTTTCTACCATA
TATTACGTTTTTGTTATTAAAAAACTTCATTGGCCACTAGTGAAGTTAGTCAATAAAAGACTTGTTTTTCTGATT
TTACATAGTAAATGGCTGCTAAGTATTGAGTAATTCTTAACTAATTCTAAAAACTAAAATGTGCATTTCGACTTG
ATAAGGTAAAACTCTTATCTAGAGGCTAAACCCATGTATTTTCAGAATTGAATTTTTCTCCTTGTAGCTTTCAGG
GAACAATTTCATTGACATTGCTTGCTTCCTGCCTTTTACCTTTTAATAAAAATTGTGATGCTACTTTATTCTAAA
GATTTATATTTTATAACCAGATGAATTTCCTCAAAGGTTTCCAAACCTATATCATATAGGGTGAAAAGCAGGAAA
GTAGACATTTTTCTTGGCGTGGGAATTCTCTACATAGGGCAGTAGATTTCTTAAGCCAATGAATTTCTGCTTTTC
AGCAGTAGTCATATAATCAGTATCATAAAGAATAATGTGTAAATAACAGAAGGCATATGAGAGTGTGGTGTTCCT
AGATGAGCTGTTACAGATTATAGTAAAATAAGGAAATCTAAGTGCTTTAAGTTTATACAGTTAACTCTTAGGATA
AGAGGGATGTATGCTGAGATGTTTGTGCATCCCAGATAGCACTGTACGATAACCTGTAAAGTATTACTGAATACT
GAATAGCTGAAACTGCAATTGGAAAATCTGATGATGACGAGGAAATATTACGTTTCCAGTCTTTTTAGCTCTATC
TGCTAATTTCTTTGCCTGTTTTCACTTTCGCCAAGTACCAACAAGCTCATGTTGTATTTCTTTTTAAGAACTTCA
ACATTATAAGCTCTCAGTACCCTATTTTGTTGTTGNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN

FIGURE 5311B

AAACTATGGTTTTTATATTCCCTTTTGTTAATGGCTCAAAATAATATTTTGTATAATATGAAAATTACGAGATTT
TAGTTTCTCTAAATAAAGTTTTGGAAAGAACTACCATTCTCATTTGTTTTCATGTCATCTCTGACCACTTTTGTG
CTACAATGGCAGAGTTGAATAGCTGCATCAGTGGCACCATCTGGCCAGCAAGGCCAAAAATACTACTGTCTGGCC
CTTTATGGAGAAAGTTTGCCTACCCTTACCTCCCTTATGTAATGCAATATATAAGTTCCATCAACAAACAAGAAA
TGCGACTGTGATGAGAGCGTAGAGCTGAATGTTAAGGTACAATAATGATACTTGCATCAGACATTTATGGAGCAC
TGTTAAGTACTTTACTCCATTGTTTAGTAAGAATCTGGTGATGGAGAGAGGCATTCTCCGGCAGTTTACAGATGG
GAAAGT

FIGURE 5312

LKELGTKYKYSLLTDGSWDMSKFLNIQCQLSRLKYPPFAKKWINIRKSYGNFYKVPRSQTKLTIMLEKLGMDYDG
RPHCGLDDSKNIARIAVRMLQDGCELRINEKMHAGQLMSVSSSLPIEGTPPPQMPHFRK

FIGURE 5313

GGGGGGAGTCGAGCGGGTGCTGCTAGCGGAGGCGCCATATTGGAGGGGACAAAACTCCGGCGACAGCGAGTGACA
CAAATAAACCCCTGGACCCCCTTGTTCCCTCAGCTCTAAGGGCCGCGATGTTGTACCTAGAAGACTATCTGGAAA
TGATTGAGCAGCTTCCTATGGATCTGCGGGACCGCTTCACGGAAATGCGCGAGATGGACCTGCAGGTGCAGAATG
CAATGGATCAACTAGAACAAAGAGTCAGTGAATTCTTTATGAATGCAAAGAAAAATAAACCTGAGTGGAGGGAAG
AGCAAATGGCATCCATCAAAAAAGACTACTATAAAGCTTTGGAAGATGCAGATGAGAAGGTTCAGTTGGCAAACC
AGATATATGACTTGCAGCACTTCTAAAAGATTGAAAACACCAAGAAGATAGATAGAATATTCACTATTTCTCATA
TTGATGCAATTGTGGTGCTCTTTTTCATTTGAAACATCTTCTCCTAAAATATACACTTTAAGAAATAGTCATTTC
TGTTTTTGCATTAAAGTAAATTAAAGCAGAAAACACATGCTCACTTTTGGCTAACTTCAGTGTATAGATTTCATA
CTTATGTTGTCTTTCCTGGGTACAGATTTATTACTGAACAAGTACGTGTAAGTAAAATGTCATTGGTGAGCAGGA
CACAAGATAAAAGGTGAACACCACATATGGTGTGAATTGTAAATGCTTATACCACAAACTTGAAAATGTGTCATG
TAGAGCCATGGAAAATGTCTAGTTGTTTTTATGTAGTACACACATTTTAATGGTGCTAACAACCTGGGCTCTTTT
GTTCATAGAGTTATTCTGAAAAAAATTTCATAAAAGACACTGCCTAAAGATAGGTAGAATAGGCTGTAGCTTGAT
TTACTGTGGAATAAAAACCAAAAAAAAAAAAGGTCTTAATTGTTTCAGTCTTTAATTATGTCTATAAACTTAGAAA
AAGGCATTTACATTTGAATCTAGACTAATTTGTTTAGTAACATTCTTCCTCATATTCAATGACTGTATGTATCAG
TCCTTATTTAGAGACTGCCTGCTTTTTAATTCATATAGCTTTTTGGTTCTATTCTTTGTTTTGTTTATTATTTTG
TTGTTTTATTGCTTGTTAGACCTTTACTAAAGATATTTTGTGTATTTAGAAAAAATATAACATAAATATATGCTT
TTTAAATATGAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 5314

MLYLEDYLEMIEQLPMDLRDRFTEMREMDLQVQNAMDQLEQRVSEFFMNAKKNKPEWREEQMASIKKDYYKALED
ADEKVQLANQIYDLQHF

FIGURE 5315A

GGCACGAGGCCTGGCTGGGACGGAAGTTGCACCACAAGTACAATTAGTTTCAGTTTTGTTTCTTTTCCAGGCACC
CAGCAACGGCGGCCTCCAGGCCTCAGGCCCCCTCACCATCCTAGAGGTCAAGATCAGCTCTGGCTAGTTCTCACA
GGTCTGACCCAACAAGTAGCACTGACATTTTTACGTTTGCTGGATGTACACACGGAAGTGGAGGAGGAGGAGGAG
AAGGAGGAGGGCAGCTCCTTAGCTCAAGAGCAAGTGGCCCAAGGCCTCAGAAGACTAGAAGGAAGTTCCTGGCCA
TTCAGCATGGTTTCCCACGGGTCCTCGCCCTCCCTCCTGGAGGCCCTGAGCAGCGACTTCCTGGCCTGTAAAATC
TGCCTGGAGCAGCTGCGGGCACCCAAGACACTGCCCTGCCTGCATACCTACTGCCAAGACTGCCTGGCACAGCTG
GCGGATGGCGGCCGCGTCCGCTGCCCCGAGTGCCGCGAGACAGTGCCTGTGCCGCCCGAGGGTGTGGCCTCCTTC
AAGACCAACTTCTTCGTCAATGGGCTGCTGGACCTGGTGAAGGCCCGGGCCTGTGGAGACCTGCGTGCCGGGAAG
CCAGCCTGTGCCCTGTGTCCCCTGGTGGGTGGCACCAGCACCGGGGGGCCGGCCACGGCCCGGTGCCTGGACTGT
GCCGATGACTTGTGCCAGGCCTGTGCCGACGGGCACCGCTGCACCCGCCAGACCCACACCCACCGCGTGGTGGAC
CTGGTGGGCTACAGGGCCGGGTGGTATGATGAGGAGGCCCGGGAGCGCCAAGCGGCCCAGTGTCCCCAGCACCCC
GGGGAGGCACTGCGCTTCCTGTGCCAGCCCTGCTCACAGTTGCTGTGCAGAGAGTGCCGCCTAGACCCCCACCTG
GACCACCCCTGCCTGCCTCTGGCTGAAGCTGTGCGTGCCCGGAGGCCGGGCCTGGAGGGACTGCTGGCCGGTGTG
GACAATAACCTGGTGGAGCTGGAGGCAGCGCGGAGGGTGGAGAAGGAGGCGCTAGCCCGGCTGCGGGAGCAGGCG
GCCCGGGTGGGGACTCAGGTGGAGGAGGCGGCTGAGGGCGTCCTCCGGGCCCTGCTGGCCCAGAAGCAGGAGGTG
CTGGGGCAGCTACGAGCCCACGTGGAGGCTGCCGAAGAAGCTGCTCGGGAGAGGCTGGCGGAGCTTGAGGGCCGG
GAGCAGGTGGCCAGGGCGGCAGCCGCCTTCGCCCGCCGGGTACTCAGCCTGGGGCGAGAGGCCGAGATCCTCTCC
CTGGAAGGGGCGATCGCACAGCGGCTCAGGCAGCTGCAGGGCTGCCCCTGGGCACCAGGCCCGGCCCCCTGCCTG
CTCCCACAGCTGGAGCTCCATCCTGGGCTCCTGGACAAGAACTGCCACCTTCTTCGGCTGTCCTTTGAGGAGCAG
CAGCCCCAGAAGGATGGTGGGAAAGACGGAGCTGGTACCCAGGGAGGTGAGGAGAGCCAGAGCCGGAGGGAGGAT
GAGCCGAAGACTGAGAGACAGGGTGGAGTCCAGCCCCAGGCCGGAGATGGAGCCCAGACCCCAAAAGAGGAAAAA
GCCCAGACAACCCGAGAAGAGGGAGCCCAGACCTTGGAGGAGGACAGGGCCCAGACACCCCACGAGGATGGAGGA
CCCCAGCCCCACAGGGGTGGCAGACCCAACAAGAAGAAAAAGTTCAAAGGCAGGCTCAAGTCAATTTCCCGGGAG
CCCAGCCCAGCCCTGGGGCCGAATCTGGACGGCTCTGGCCTCCTCCCCAGACCCATCTTTTACTGCAGTTTCCCC
ACGCGGATGCCTGGAGACAAGCGGTCCCCCCGGATCACCGGGCTCTGTCCCTTCGGTCCCCGGGAGATCCTGGTG
GCGGATGAGCAGAACCGGGCACTGAAACGCTTCTCCCTCAACGGCGACTACAAGGGCACCGTGCCGGTCCCTGAG
GGCTGCTCCCCTTGCAGCGTGGCCGCCCTGCAGAGCGCGGTGGCCTTCTCCGCTAGCGCACGGCTCTATCTCATC
AACCCCAATGGCGAAGTGCAGTGGCGCAGGGCCCTGAGCCTCTCCCAGGCCAGCCACGCGGTGGCGGCACTGCCT
AGCGGGGACCGCGTGGCTGTCAGCGTGGCGGGCCACGTGGAGGTGTACAATATGGAAGGCAGCCTGGCCACCCGG
TTCATTCCTGGAGGCAAGGCCAGCCGGGGCCTGCGGGCGCTGGTGTTTCTGACCACCAGCCCCCAGGGGCATTTC
GTGGGGTCGGACTGGCAGCAGAATAGTGTGGTAATCTGTGATGGGCTGGGCCAGGTGGTTGGGGAGTACAAGGGG
CCAGGCCTGCATGGCTGCCAGCCGGGCTCCGTGTCTGTGGATAAGAAGGGCTACATCTTTCTGACCCTTCGAGAA
GTCAACAAGGTGGTGATCCTGGACCCGAAGGGGTCCCTCCTTGGAGACTTCCTGACAGCCTACCACGGCCTGGAA
AAGCCCCGGGTTACCACCATGGTGGATGGCAGGTACCTGGTCGTGTCCCTCAGTAACGGGACCATCCACATCTTT
CGGGTCCGTTCTCCGGACAGTTAAAGGGGCTAGGACTAGGGTGAGAGGGAGTGGGGAGGGAGAGGGCAGGAAGGA
GGCAGAGCTGTCCGTGGGAGGTGGAGGCCGAGGACATTTTCCTGAAGGGCAGGGGTTGGCAACTTTTCAACATGG
AGTGCCAAACTGCTAACCCGTCTTCTAGTGTGTAGAATAGGGACCAAGGTGGTGGCGTGACCTTAACTCTCAGAA
GCAGAGGAGGCAGGTGGGTGGAGGGGGATGCTGGGAATTCACCTGCCTCTTGCTTTTTGTGGGTGGCTGCTGCCA
CCACCGCCGCTGCTATATAGTTTAGGTTTCTGAGGTTTGTGAGCCTGTCCTGCTTTGCATTCTTCAAAACCATTC
CTGATAGAGTAGCCGAGGGAGAGTCTTGGGGCCAAGAAGGGCCCAGGGTGGGTCAGGCGTGTGCACTGTGGAACA
GAGCTGAGACCCCGGCCCCCCTTGGACTGGCACAGGGTCCTACAGAGTCAGAGGAGGCCTGAGATTTCGAATGGG
CAGTGAATGGCCTCTTCTGCCAGCCACAGGCAGGATGCTCCTTGATCACGGCATCCCCCGGCGGTAGTACAGGGT
GAGCTTGCAGGAGGGTCTGCAAGTGCAGACAGCAGCTGGGGCCAAAGAGGTGTTAGGTTCAAAGGCTGCGAAGAG
AATAGGCTACTGGAAAACCAAACCCAACAGAATTCACGTCCAAAAATCCACATTCTCCATCGCTTCTCAGCCTTT
TGGCTAAGATTAAGTATTAAAAAAAAACCAGGCTCTGCCAGGCGCAGTGGCTCATGCCTATAATCCCGGCACTTT
GGGAGTCTGTGGCAGGAGGATTGCTTGAGGCCAGGAGTTTGAGACCAGCCTGGGCAACATAGCGAGACCCCATCT
CTACAAAAGATTAAAAATTAGCTGCGTGTAGTAGCATATGCCTTTCAACGTAGCTACTCAGGAGGCTGAGGTGGG
AGGATCCCTTGAGCCGAGGAGTTTGAGTCTGCAGTGAGCTATGATCGCACCACTGCATTCCAGACCCCATCTCGA

FIGURE 5315B

AAAAAAAAAAAAAAAAAAAA

FIGURE 5316

CAGGCATGGGCCACTGCGCCCGGCCAATAATTTTTGTGTGTGTGTGTGCTAATCATACTACATTTTCTTTAGAAT
AAAAGATCACATACTTGTTTGCCATTCGCAGTCTGGCCCCATTGTGCCATTCTAGACTTACCTCCTGCCACTCCC
CACCAGCTTTGTTTTGTCTTAGCCACACAAAATAATCTAGCGTCTCTAACCAGTCAAACATTTTACCTTGTGCCT
TGGCTCACTCTGTGCCTTTTCTCCAGAATATCTTTCTGTGTACTTTTCTCCCATCCTTTTACCTTTAAACCTGCT
GCTATGGTTTGCATGTTGTTTGGGNACTCCAAAACTCCATGTTGTAGTTCAATTNCCAATNTAATAGTGTTGGGA
GATGGTATNTNAAGAGGTAATTAGGTTGCTAAGATGGATTAACATCTTTCTCTTGACACTGAGACTGGGTTCTCC
TGGGAATGGTTAGTTCCCAAGAGAGTGAGTTGTTATAAAACAATGCTGCCTCTTCTATTTTGCGCTTTTTGTTTG
CACAAACTCGGTCCCCTTCTGTTTCTCTACGATGTTTTGATGCAGCATGAGGCAGTCATGAGAACCCACCAGATA
CAGCTGCCTGATCCTGAATTTCCCAGCCAA

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FIGURE 5317

MRTHQIQLPDPEFPS

FIGURE 5318

AACAGTCTGGAGCTGCTGCTGCCCCTTCTTCCTTTACTTTGGCCGTCATCCTAGAGGGAATGTACTGGAATTAAA
CGTCGAGTCATATTCTTCCCTCTTAGAGCAACAAAATTTGAATGTTTCTCTCACTTTCTGGAATTTTTAAAAAGC
AAACTTTTTAAGTTATTTTTTCAGATTTTATTTCTCATTAGCCTTTTTTCCTTGAACTCCATTTTGGAGTGCACC
CTGTAGTTGTAAGAGCATTGTGCTGAGAGCGTTCCCCAAATGAGGGTCTGCAGCTTGCACTGACCCCTGAGTTCC
TCACCCACCAGCCCCGTGCCGACCCGTCTAACCCGTGTGGGGGTGCTCCACTCAAATAGGCCCTTGGCAGAAAAG
ATTGTCCGTTCTGTCCACACACTGCCTGGATACAGTCTCCAGCTCTAGGAGATGGAATTGGTTTGCTCCATTTAG
AAATAGATCAAAACTGGGCATTCAGTAGATGGTACCAATATCTTCCTGTACTGGGAAATACTAAATTTAGATTGT
GAATATTTACCTAATGATAATTTTTAGAGAAGGAGATATCATAGATGAGTATGATTGGGAAGTTCAGAAAACTAA
AATTTGATTTTTACAGCCATCCAACTATAGAATCATTAGAATTTAGTCATTTATGGATAAATTAAAATGAACACC
TGGACTCTTGTTAAAATCAGAAAGTCCAAACCAAAGATAGGCACTTCCCATTCACCATTCTGTTTTAAAGCAGTA
AAAATTGAGGTGCCCTTGGATATCCACAAGCCTAAATTGAGTACACCCTTGAACCAGAGCCCCTCAGTTAATGGG
GTGACCGACATGGGGTAGCTGATCCCAGGGGGCATTCCCCTCTCGAGCTGGCCCTGCACTGGGTGGCCTGGGGAT
TGTGCTTCCTTGCACAGTGGTGCACATTTCTATGTGTGGATGAGATTTTCTTGTCAACTTTTCCTGCCAAGACAC
TAAATGCTTTTCAGTGCTAATACTGACCTGATAGTAGAGATTTCTTTCCCTGAGTCGGATGGTAGCAGGATTTAC
TTGGTAACCCTTGGTTTAAAATACCNNNNNNNNNNNNNNNNNNNNNNNNNNNNNTTTTTAAGGAAATAAGATCAA
TAGGCGGAGGGAAATTGTTTCTATATGCACTTATTAAATAATTTTTGTTAACAACCCTGCCCTGGGATAAAAGTG
AATGGAAGTACATGACTGAGTAACAGTAATTAATTCTTTGCCCTGATCGTTTATTTGGGGACTGTATATGCTTTC
TTGACTGACAATAGAATGTTGTATTAGTTTTCATTGTGTCTTTATTTGCAGTTCACAGCACTTTTGTTTTCCATA
TGCTACAAACTAAAAGTTTAGCAATTACGTTATATTCCAATTCTGGAGTCCAGATTGTACAAATTAGATGAAATT
CTAATTCGTCATTTTAGGAAGAAATCAATTACCTAAAATTACTGGCTCTTTTCAACATACCCTTTAGTATGTAAA
AAAATAAGCTTCAAATGCGTGGGTTAAAGTTAACTATCAATCCCAGTTTAAGAATGATATTTCTGTAAGAAAACT
GCTTTATTTTCCAAGTTGTAGTATTTAACATAGGCTGAGTCACAAATAAGTTTTTAATTGTATCTTAATGCAGTT
GTCTCTGCCTTTCAAGTCACTTTGATTGAAACATTTTAAGCAGAACAAATATAGCCAATAATTTAAAATAATCAC
CCCAAAACCATTTCTCAAACCTGCTAAAACTTTGAGCATGTGAATAATTTTCTCCTCTTCACATTCTTCTTATGT
GGGAAGGAAGTGAATTTGAAATATTAAAATCTGCCCTTTGGAATAGGCTACTTTGGCCGTTTATAACTTGATTTC
TACTCGGGGAGGAAGGTACATTCCCAATAGCTTTCCAATTGGGATATCCTGTGATATGATTGGCAGGCTGTCCGA
GTAGTTACACTTAATAAAATTTGGGTTCGAAAGCAGATTCCTGGAAGTTCAAAAATAATTAAAACAGCCCCGGAT
AGGTTAGAAAGTGAACTTAAATCATTCTCAGAATTAGAAAATAAGAAGTTATTTTTTATCTTCAAAGATA

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FIGURE 5319

TVWSCCCPFFLYFGRHPRGNVLELNVESYSSLLEQQNLNVSLTFWNF

FIGURE 5320

CGAGGCGGTAGAGCGGAGAAAGCCTATTTTCTTTTCGTTTAGATACATTGCCTTTTGCCTAGGCTGGCGTCGAGA
CTTGAGGCCGTTGCAGACTTTGGCGCGGCTCGCGCCTCCTGCTTCAAGAGCCCAGCGGTGAGAGCTGGCCTGCGG
CACGCGGCCTAATGCCAGTCACAACTGTGGAGAGACTATGAGGCCCTGAACTTTGGCGTTACCAATGAAAAGGGA
ATGGATTCAAGGCCAGGCATGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCGAGACAGTAACAGTTTG
GAGGATCAAGATGTTGACCAACTTGAGGATATTTGCAATGAGTCATCAGACAATACCCAGTGTGTATATTAATAA
TATATGCTGCTATAAAATAAGAGCAAGTTTAAAAAGATTAAAGCCACATGTGCCGCTTGGAAGAAATTGCAGTTC
TCTACCAGGCTTAATAGGAAATGATATCAAATCCCTTCATTCCATCATCAATCCTCCCATAGCTAAAATCCGTAA
TATTGGAATTATGGCTCATATTGATGCAGGCAAAACTACCACCACAGAAAGAATATTGTACTATTCCGGATATAC
AAGATCACTGGGAGATGTTGATGATGGAGACACAGTGACAGATTTCATGGCCCAAGAGCGAGAAAGAGGCATTAC
TATTCAATCAGCTGCTGTTACATTTGATTGGAAAGGTTATAGAGTCAATCTAATTGATACACCAGGTCATGTGGA
CTTTACCTTGGAGGTTGAGCGGTGCCTAAGAGTGTTGGATGGTGCAGTGGCTGTATTTGATGCCTCTGCTGGTGT
AGAGGCCCAGACTCTCACAGTATGGAGGCAAGCTGATAAACACAATATACCTCGAATCTGTTTTTTAAACAAGAT
GGACAAAACTGGAGCAAGCTTTAAGTATGCAGTTGAAAGCATCAGAGAGAAGTTAAAGGCAAAGCCTTTGCTTTT
ACAGTTACCAATTGGTGAAGCCAAAACTTTCAAAGGAGTGGTGGATGTAGTAATGAAAGAAAAACTTCTTTGGAA
TTGCAATTCAAATGATGGAAAAGACTTTGAGAGAAAGCCCCTCTTGGAAATGAATGATCCTGAATTGCTGAAGGA
AACAACTGAAGCAAGGAATGCCTTAATTGAACAAGTTGCAGATTTGGATGATGAATTTGCTGACTTGGTTTTAGA
AGAATTTAGTGAGAATTTTGATTTGTTACCAGCTGAAAAGCTACAGACTGCAATACATAGAGTGACACTAGCTCA
GACAGCAGTGCCTGTGCTTTGTGGAAGTGCCCTGAAAAACAAAGGGATACAGCCCTTGTTAGATGCTGTTACTAT
GTACTTACCTTCACCTGAAGAGCGTAACTATGAATTTCTGCAGTGGTATAAGGATGACTTATGTGCATTGGCATT
TAAAGTTCTCCATGACAAGCAGCGAGGACCACTGGTTTTTATGCGCATTTACTCAGGCACTATAAAACCCCAGTT
GGCCATTCATAATATTAATGGAAACTGCACGGAGAGAATAAGTCGTCTGCTTTTGCCGTTTGCTGACCAACATGT
AGAAATCCCTTCATTGACTGCTGGTAACATTGCTTTGACTGTTGGGCTTAAACATACTGCCACTGGAGACACCAT
TGTCTCATCCAAGTCCAGTGCATTAGCTGCAGCTCGTAGAGCCGAACGGGAGGGAGAAAAGAAGCACAGACAAAA
CAATGAAGCAGAGAGACTTTTATTGGCTGGAGTGGAGATTCCAGAACCTGTTTTCTTCTGTACCATAGAACCCCC
ATCACTGTCTAAGCAGCCAGATTTGGAACATGCGTTGAAATGTCTTCAGCGTGAAGATCCCAGTTTGAAAGTGAG
GCTAGATCCTGACTCTGGACAAACTGTTCTGTGTGGTATGGGGGAGTTACATATAGAGATTATTCATGATCGAAT
CAAGAGGGAATATGGACTGGAGACCTATCTCGGGCCTCTCCAGGTGGCATATCGAGAGACCATCCTAAACTCAGT
TCGTGCCACAGATACCTTAGATAGAACTTTAGGAGACAAAAGGCATCTTGTGACTGTAGAAGTGGAAGCAAGGCC
AATTGAAACATCATCTGTTATGCCTGTGATTGAGTTTGAGTATGCTGAAAGTATCAATGAAGGCCTTTTGAAGGT
CTCCCAAGAGGCCATTGAAAATGGAATTCACAGCGCATGTCTCCAAGGACCATTGCTTGGATCCCCAATTCAGGA
TGTAGCAATTACTTTACATTCCCTGACAATTCATCCTGGCACCTCCACAACTATGATTTCTGCCTGTGTCTCAAG
ATGCGTGCAAAAGGCTCTGAAGAAAGCTGATAAGCAAGTTTTGGAGCCTCTGATGAATCTTGAGGTTACAGTAGC
TAGAGATTATCTCAGCCCTGTCCTGGCAGATCTGGCACAAAGAAGAGGAAACATTCAGGAAATTCAGACTCGCCA
GGACAACAAAGTTGTTATTGGATTTGTTCCCTTAGCAGAAATTATGGGTTATTCAACTGTGCTTCGAACGCTAAC
ATCAGGCTCAGCTACTTTTGCCTTAGAACTATCTACTTATCAAGCCATGAATCCTCAAGATCAAAATACACTGCT
CAACCGGAGAAGTGGTTTGACCTAAATGTTTTAGTTTTTGGAGAGAAATTCAGGAGCACCTAGCTACTTCATTTT
CAGTAAGAACAATTTTTATTGCTTTATTTATTGGACGAATAAAGTACTGTTTCAGTACATTCAGAGAACTAGATA
AAAGATATAACTTAAGCTTTGATAGTGGCACTGGAGCCACCCATTTTAATTTATATAATGAGAAATGTGCTTTGA
TGTTTAAAGCCACTGTACCTGAATCATGCTGTTCATCTATGAAGTTATTACTATAAGTAGCCTTCAGAAGAGTGG
TATCACAAAGTTGTGTTTCTTTTGTGTCCTTAAGCTTGTCTCACAAGAAAGATGCCAGGCCTCTAAATGTAATAA
GATAGAGGGTCAAAGGTTCAATCAATAAAAATATTTTATTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 5321

MLTNLRIFAMSHQTIPSVYINNICCYKIRASLKRLKPHVPLGRNCSSLPGLIGNDIKSLHSIINPPIAKIRNIGI
MAHIDAGKTTTTERILYYSGYTRSLGDVDDGDTVTDFMAQERERGITIQSAAVTFDWKGYRVNLIDTPGHVDFTL
EVERCLRVLDGAVAVFDASAGVEAQTLTVWRQADKHNIPRICFLNKMDKTGASFKYAVESIREKLKAKPLLLQLP
IGEAKTFKGVVDVVMKEKLLWNCNSNDGKDFERKPLLEMNDPELLKETTEARNALIEQVADLDDEFADLVLEEFS
ENFDLLPAEKLQTAIHRVTLAQTAVPVLCGSALKNKGIQPLLDAVTMYLPSPEERNYEFLQWYKDDLCALAFKVL
HDKQRGPLVFMRIYSGTIKPQLAIHNINGNCTERISRLLLPFADQHVEIPSLTAGNIALTVGLKHTATGDTIVSS
KSSALAAARRAEREGEKKHRQNNEAERLLLAGVEIPEPVFFCTIEPPSLSKQPDLEHALKCLQREDPSLKVRLDP
DSGQTVLCGMGELHIEIIHDRIKREYGLETYLGPLQVAYRETILNSVRATDTLDRTLGDKRHLVTVEVEARPIET
SSVMPVIEFEYAESINEGLLKVSQEAIENGIHSACLQGPLLGSPIQDVAITLHSLTIHPGTSTTMISACVSRCVQ
KALKKADKQVLEPLMNLEVTVARDYLSPVLADLAQRRGNIQEIQTRQDNKVVIGFVPLAEIMGYSTVLRTLTSGS
ATFALELSTYQAMNPQDQNTLLNRRSGLT

FIGURE 5322A

AGCCAAGCCCAGCAGAGTGGCCCCACTGGCCAGCCGAGCCAGCCCCCAGGCACAGCCACCACGCCACTGGAGGGT
GACGGCCTCTCCGCGCCCACCGAGGTTGGCGACAGCCCCCTGCAGGCCCAGGCTTTGGGAGAGGCAGGAGTGGCC
ACAGGAAGTGAGGCTCAGAGCAGCCCGCAATTCCAGGACCACACGGAAGGGGAGGACCAGGACGCTTCCATCCCC
TCTGGGGGCAGAGGCCTGTCCCAGGAGGGGACCGGTCCCCCCACCTCTGCTGGTGAAGGCCATTCTAGGACTGAA
GATGCTGCCCAGGAGCTCCTGTTGCCTGAGTCAAAAGGAGGCAGCTCTGAGCCCGGGACAGAACTGCAGACCACC
GAGCAACAGGCAGGGGCCTCAGCCTCTATGGCAGTTGATGCTGTAGCTGAGCCAGCCAATGCAGTTAAAGGGGCC
GGGAAGGAAATGAAAGAGAAGACCCAGAGAATGAAACAGCCACCAGCAACCACTCCTCCTTTCAAAACACACTGC
CAGGAAGCTGAGACCAAGACCAAGGACGAGATGGCTGCTGCTGAAGAAAAAGTCGGTAAGAATGAACAAGGGGAG
CCTGAAGACCTCAAGAAGCCAGAGGGGAAGAACAGAAGTGCAGCTGCTGTGAAAAACGAGAAGGAGCAAAAAAAC
CAGGAAGCAGATGTCCAGGAAGTGAAGGCAAGCACGCTGAGCCCGGGTGGAGGAGTCACCGTGTTCTTCCACGCC
ATCATCTCTCTTCATTTCCCATTCAATCCTGACCTCCATAAAGTCTTCATCAGAGGAGGAGAAGAATTTGGGGAG
TCAAAATGGGACAGCAATATCTGTGAGCTGCACTACACCAGAGACTTGGGTCATGACCGCGTTCTTGTTGAAGGC
ATTGTCTGCATTTCCAAGAAGCACCTAGATAAATACATTCCTTACAAGTACGTCATTTATAATGGGGAATCTTTT
GAGTATGAGTTCATTTACAAGCACCAGCAGAAGAAGGGCGAGTACGTCAACCGCTGTCTGTTCATAAAATCTTCA
CTTCTGGGCTCAGGAGACTGGCATCAGTACTATGACATAGTTTATATGAAGCCTCATGGGAGACTCCAGAAAGTC
ATGAACCACATCACAGACGGGCCGAGGAAGGACCTGGTGAAGGGGAAGCAGATTGCCGCTGCGCTCATGCTGGAC
AGCACCTTCAGCATCCTGCAGACCTGGGACACCATCAACCTGAACAGCTTCTTCACCCAGTTCGAGCAGTTTTGC
TTTGTCCTGCAACAGCCTATGATTTATGAAGGACAGGCACAGCTGTGGACCGATTTGCAGTACAGGGAGAAAGAG
GTGAAGAGATACCTGTGGCAACATCTGAAAAAACACGTGGTACCATTGCCGGACGGAAAAAGCACGGACTTTTTG
CCTGTGGACTGCCCAGTGAGGAGTAAACTGAAAACAGGCCTGATTGTCCTTTTTGTAGTGGAAAAAATTGAGCTT
TTATTAGAAGGCAGCCTGGACTGGTTGTGTCACCTCCTAACCTCAGATGCCAGCTCACCAGATGAGTTTCACCGT
GACCTAAGCCACATCCTTGGGATACCTCAGAGCTGGCGGCTGTACCTGGTGAACCTGTGCCAAAGATGCATGGAC
ACAAGGACGTACACCTGGCTGGGCGCCCTGCCTGTCCTGCACTGCTGTATGGAGCTGGCCCCGCGGCACAAGGAT
GCCTGGAGACAGCCTGAGGACACCTGGGCCGCTCTGGAGGGACTCTCCTTCTCACCGTTCCGGGAACAAATGCTA
GATACGAGTTCCCTACTTCAGTTTATGAGAGAGAAGCAGCATTTGCTGAGCATAGACGAGCCTCTCTTCCGGTCC
TGGTTTAGTCTGCTACCTCTGAGTCACCTGGTTATGTATATGGAAAACTTCATTGAGCACCTGGGTCGTTTTCCT
GCTCATATCCTGGACTGTCTTTCAGGGATTTACTACCGGCTTCCGGGACTTGAGCAAGTCTTGAATACGCAGGAT
GTTCAGGATGTTCAGAACGTTCAGAACATTTTAGAAATGCTGTTGCGACTCCTGGACACTTACCGGGACAAGATT
CCCGAGGAGGCCTTGTCACCATCCTACCTGACTGTGTGTCTGAAACTGCATGAAGCCATCTGCAGCAGCACAAAG
CTACTTAAGTTTTACGAGCTGCCAGCCTTATCTGCCGAGATTGTCTGCAGAATGATTAGACTTCTATCTCTGGTG
GATTCTGCAGGACAGAGAGATGAAACTGGAAATAATTCAGTCCAAACAGTCTTCCAAGGGACCCTTGCTGCTACG
AAAAGGTGGCTCCGAGAAGTTTTTACAAAGAACATGCTCACATCTTCAGGTGCCTCATTCACATACGTCAAGGAA
ATTGAGGTCTGGAGGCGGCTGGTGGAAATCCAATTCCCCGCGGAGCATGGCTGGAAGGAGTCGTTGCTGGGAGAC
ATGGAATGGAGGCTCACAAAGGAGGAACCCCTCTCCCAGATCACTGCCTACTGCAATAGTTGCTGGGACACCAAA
GGCTTAGAGGACAGTGTGGCCAAGACCTTCGAGAAATGCATCATTGAAGCCGTGAGCTCAGCCTGCCAGTCTCAG
ACCAGTATCCTTCAGGGGTTCTCTTACTCTGATTTGCGGAAATTTGGCATCGTCTTGTCTGCTGTGATCACTAAG
TCCTGGCCTAGGACCGCGGACAACTTCGATGACATTTTAAAGCATCTGCTCACGTTGGCAGATGTCAAGCACGTC
TTCAGATTGTGTGGAACCGACGAGAAAATACTAGCAAATGTCACAGAGGATGCCAAGAGGCTGATAGCTGTTGCC
GACTCTGTGTTGACGAAAGTTGTTGGTGACCTCCTAAGTGGCACGATTTTAGTTGGACAACTGGAGCTGATTATA
AAGCACAAGAATCAGTTTCTTGACATCTGGCAACTGAGGGAAAAAAGTCTTTCACCCCAGGATGAAAAATGTGCT
GTGGAGGAAGCACTGGATTGGAGAAGGGAGGAACTGTTACTTCTAAAGAAAGAGAAAAGATGTGTTGATAGTCTC
CTGAAGATGTGTGGGAACGTGAAACATCTGATACAAGTGGACTTTGGAGTGCTTGCAGTAAGACACTCACAAGAC
CTCAGCAGTAAAAGATTAAATGACACCATGACAGTGAGACTGTCCACCTCCTCGAACTCGCAGAGGGCAACGCAT
TACCACCTGAGCTCCCAGGTCCAAGAAATGGCTGGGAAGATAGACTTGCTCAGAGACAGCCACATCTTCCAGCTC
TTCTGGCGGGAAGCCGCAGAGCCGCTGAGTGAGCCTAAGGAGGACCAGGAAGCCGCAGAGTTGCTGAGTGAGCCC
GAAGAAGAATCAGAAAGGCACATCCTTGAGCTTCAAGAGGTGTATGACTATTTGTATCAGCCTTCTTACAGAAAG
TTCATTAAGTTGCACCAGGATCTAAAGTCAGGAGAGGTCACCCTTGCAGAGATTGATGTCATCTTCAAGGACTTT
GTGAATAAATACACGGACCTGGATTCAGAACTTAAGATCATGTGCACCGTGGACCACCAGGGCCAAAGAGATTGG

FIGURE 5322B

ATCAAGGACCGAGTGGAACAGATCAAGGAATACCATCACCTGCACCAGGCTGTCCACGCAGCCAAGGTCATCTTG
CAGGTCAAAGAGAGCCTGGGACTGAACGGTGACTTCAGTGTTCTCAACACTTTACTAAATTTTACTGATAACTTC
GACGACTTTCGCCGTGAAACACTGGACCAGATCAACCAGGAGCTCATCCAGGCCAAAAAGCTGCTCCAGGACATC
AGCGAGGCCCGGTGCAAGGGGCTGCAGGCTCTGTCCCTGAGAAAGGAGTTCATCTGCTGGGTCCGGGAGGCTCTT
GGAGGCATCAATGAGCTGAAGGTGTTTGTGGACCTGGCCTCCATCTCAGCGGGGGAGAATGACATTGATGTGGAC
CGGGTGGCCTGCTTCCATGACGCTGTGCAGGGCTACGCATCCCTGCTATTTAAGCTGGACCCCAGCGTGGACTTC
AGTGCATTCATGAAGCATCTGAAAAAGCTGTGGAAGGCTCTGGATAAGGACCAGTACCTGCCCAGGAAACTGGTG
AGTCTTATTCTGTCTCTAATGCAGATTTTGTTGAATAGAGCATTGCTTAGCAACGTTAGGGCAGTGACTGTGGAA
ATGGTGGCACACCTGTGTGGTAGGTTTGTACACAGCCGTTTTCAATGATATTTAAAAAGCTTTTCTTCATAAATG
GAAATTCACCATCTTGTTACCTAGAAAGCAGGATACAAAATTACATGACACATAGTAATCTCTAAGGTGCAAAAC
ACACGTGGAAAAAAGACAGAAGGGAAATATGCTGAAACGTTGCCAGGAGTTTTCTCTGAATGGTTGTAATTGTCA
TTTTATTCTGTTACTTTTTGTTATTTTCTATAATTGATAGAATTTTTTATCAGAAAAAAGTAAACATTTAAAATT
AGCCAGGCATGGTGGTGTGCGCCTGTAATCCCAGCTACTCTGGAGGCTGAGACAGAATTGCTTGAACCCGGGAGG
CAGAGATAGCAGTGAACTGAGATCACACCACTGTACTCCAGCCTGAGTGACAAAGTGAGACTCTGTCTC

FIGURE 5323

SQAQQSGPTGQPSQPPGTATTPLEGDGLSAPTEVGDSPLQAQALGEAGVATGSEAQSSPQFQDHTEGEDQDASIP
SGGRGLSQEGTGPPTSAGEGHSRTEDAAQELLLPESKGGSSEPGTELQTTEQQAGASASMAVDAVAEPANAVKGA
GKEMKEKTQRMKQPPATTPPFKTHCQEAETKTKDEMAAAEEKVGKNEQGEPEDLKKPEGKNRSAAAVKNEKEQKN
QEADVQEVKASTLSPGGGVTVFFHAIISLHFPFNPDLHKVFIRGGEEFGESKWDSNICELHYTRDLGHDRVLVEG
IVCISKKHLDKYIPYKYVIYNGESFEYEFIYKHQQKKGEYVNRCLFIKSSLLGSGDWHQYYDIVYMKPHGRLQKV
MNHITDGPRKDLVKGKQIAAALMLDSTFSILQTWDTINLNSFFTQFEQFCFVLQQPMIYEGQAQLWTDLQYREKE
VKRYLWQHLKKHVVPLPDGKSTDFLPVDCPVRSKLKTGLIVLFVVEKIELLLEGSLDWLCHLLTSDASSPDEFHR
DLSHILGIPQSWRLYLVNLCQRCMDTRTYTWLGALPVLHCCMELAPRHKDAWRQPEDTWAALEGLSFSPFREQML
DTSSLLQFMREKQHLLSIDEPLFRSWFSLLPLSHLVMYMENFIEHLGRFPAHILDCLSGIYYRLPGLEQVLNTQD
VQDVQNVQNILEMLLRLLDTYRDKIPEEALSPSYLTVCLKLHEAICSSTKLLKFYELPALSAEIVCRMIRLLSLV
DSAGQRDETGNNSVQTVFQGTLAATKRWLREVFTKNMLTSSGASFTYVKEIEVWRRLVEIQFPAEHGWKESLLGD
MEWRLTKEEPLSQITAYCNSCWDTKGLEDSVAKTFEKCIIEAVSSACQSQTSILQGFSYSDLRKFGIVLSAVITK
SWPRTADNFDDILKHLLTLADVKHVFRLCGTDEKILANVTEDAKRLIAVADSVLTKVVGDLLSGTILVGQLELII
KHKNQFLDIWQLREKSLSPQDEKCAVEEALDWRREELLLLKKEKRCVDSLLKMCGNVKHLIQVDFGVLAVRHSQD
LSSKRLNDTMTVRLSTSSNSQRATHYHLSSQVQEMAGKIDLLRDSHIFQLFWREAAEPLSEPKEDQEAAELLSEP
EEESERHILELQEVYDYLYQPSYRKFIKLHQDLKSGEVTLAEIDVIFKDFVNKYTDLDSELKIMCTVDHQGQRDW
IKDRVEQIKEYHHLHQAVHAAKVILQVKESLGLNGDFSVLNTLLNFTDNFDDFRRETLDQINQELIQAKKLLQDI
SEARCKGLQALSLRKEFICWVREALGGINELKVFVDLASISAGENDIDVDRVACFHDAVQGYASLLFKLDPSVDF
SAFMKHLKKLWKALDKDQYLPRKLVSLILSLMQILLNRALLSNVRAVTVEMVAHLCGRFVHSRFQ

FIGURE 5324A

GCCTCCTCCGCCACCTCCACCGATGTGGAATCCAATGATTCCTGCTTTTGACCTCTTCCAAGGAAACCATGGCTT
TGTAGCTCCTGTTGTAACCACAGCTGCACACTGGAGATCTGTCAACTACACATTTCCACCCTCAGTTATTTCTCA
CACTTCCCCAACAAAAGTATGGAGAAATAAAGATGGAACAAGTGCTTATCAAGTACAAGAAACCCCAGTTTCTCA
GGTTGTAAGAAAGAAGACATCTTACGTTGGACTAGTTCTTGTTCTTCTCAGAGGTCTTCCGGGATCTGGAAAATC
TTTTTTGGCAAGGACTTTGCAAGAGGATAATCCAAGTGGAGTCATTCTTAGTACTGATGATTATTTTTATATAAA
TGGACAGTACCAGTTTGATGTAAAGTACTTAGGAGAAGCACATGAATGGAACCAGAATCGTGCAAAAGAAGCATT
TGAGAAGAAGATATCTCCTATAATTATAGATAATACAAACCTACAGGCATGGGAAATGAAACCATATGTTGCTTT
GTCTCAGAAACACAAATATAAAGTCCTTTTTCGGGAACCAGACACATGGTGGAAGTTTAAACCAAAGGAACTTGC
AAGGCGTAACATTCATGGGGTAAGCAAAGAAAAAATAACAAGAATGTTGGAACATTATCAACGTTTTGTTTCAGT
GCCAATAATTATGAGTTCTTCGGTTCCAGAGAAAATTGAACGTATTGAGTTGTGTGCATATTCTTGTGAGGATAG
AAGCACTAGCCCAAGAGACAATGAAGATATTATCTCTGAAAAAGAAGAAAATATTTTATCTTTATCTTTGAAGCA
TCTAGAGTTCACTGAAGAGAAGAATCTTGATGTAACCAAAGAAACAATGTTACCTGAGAATGTTGCATATCTCTC
TAATGCAGATTTAAACAAAAGAAGAAAAGAAATAAGTGATATGAATCCTAGCATTCAAAGTGCTTTAATTCTGGA
AACTCCACACATGTATTTTTCTGACTCTGAAAGCAAACTACAGGCAACAGACAAAAGTGAAAACGAGCAAATAGA
AATGGTGGCTGTAAAAGGGTATAGTAAAACTGACACAGATAGTTCTATGGAGAGAGTATCACCTAGTACTTGCTG
TAGTGAAAATAATCAAGAAGACTGTGATCTTGCAAATAGTGGACCACTTCAAAATGAAAAATCCTCACCTGGTGA
AATAGTGGAAGAAAGAGCAACAGTAACGAAAAAAGCCTTTGGGAAACAAAAAAGCAAATCGACTTTGGAAGAGTT
CCCAAGACATGAGCTATCAAATTTTGTTGGTGACTGGCCAGTTGATAAGACTATTGGTCAGAGGACAAAAAGGAA
CAGAAAAACTGAAAAAACTTCATCCGTACAAAGCGACAAAAAGTATAATTACCCTCAGTCACACAAATTAGTTAA
CAGTGTATCTGTGAATACAGATTGTGTCCAGCAACGAGGATCTCCACATGAAAGTGTAGAGGATGGCAGAAAGTC
ACAGTGTGATGATGCTTCAGAGCCACTCAATAGCTATAAATATGATGCTTATAAAAATATTGACAAAAACTCATT
CAACATTATGGGTGACTGGCCTTCATCTGATTCTTTAGCTCAGAGGGAACACAGATCAAGAATGCCAAAGACTGG
TTTAAGTGAGCCCAACCTAGAAATTGGAACAAATGACAAAATGAATGAAATATCCTTATCTACAGCACATGAGGC
CTGTTGGGGCACAAGCTCTCAAAAACTAAAGACATTGGGTAGCTCCAATCTAGGAAGTTCTGAAATGCTGCTCAG
TGAAATGACCTGTGAGAGTCAGACTTGTCTAAGTAAAAAGAGTCATGGGCAACACACATCGTTGCCTCTTACTTT
TACCAATAGTGCACCAACTGTTTCTGGAGTAGTAGAACCACAAACGTTAGCTGAATGTCAAGAGCAAATGCCTAA
GAGAGACCCTGGAAAAGAAGTAGGCATGTGCACCCAGACTGAACCACAGGATTTTGCTCTTTTATGGAAAATAGA
AAAGAATAAAATTAGCATTTCAGATTCTATCAAAGTATTAACAGGAAGATTAGATGGATTTAAGCCGAAAGTTTT
CAATATTAACACAAAATCAGACGTTCAAGAAGCAATTCCATATAGAGTAATGTATGATAAAAGCACGTTTGTTGA
AGAAAGTGAGCTTACCAGTGCAGATGAATCTGAAAATCTTAACATTCTTTGTAAACTGTTTGGATCCTTTTCATT
AGAAGCCCTGAAAGACTTATATGAGAGGTGCAATAAAGATATTATTTGGGCCACAAGCCTTTTGTTGGATTCTGA
AACTAAGTTATGTGAGGATACAGAGTTTGAGAATTTCCAAAAATCGTGTGATGGATCACAAATTGGGCCTTTTTC
TCTGGGGTTGAATTTGAAAGAAATTATTAGCCAAAGAGGAACTTTAGAGAATTCTAATTCTCCTGTGCCAGAGTT
TAGCCATGGGATTGGTATTAGTAACGCTGACTCACAGTCTACTTGTGATGCAGAAAGAGGAAACTCAGAGCAGGC
GGAAATGAGAGCTGTCACTCCTGAAAACCATGAATCGATGACAAGTATATTTCCCAGTGCTGCTGTGGGTCTAAA
GAATAATAATGACATACTTCCTAACAGCCAGGAAGAACTTTTATATAGCAGTAAGCAGTCCTTTCCAGGTATTCT
AAAAGCTACTACTCCTAAAGATATGAGTGAAACAGAAAAAAACCTAGTAGTCACAGAGACTGGAGACAACATACA
TTCTCCTTCACATTTCTCTGATATTTTTAACTTTGTATCTAGTACTTCAAATCTTGAATTAAATGAAGAAATTTA
TTTTACTGATTCTCTTGAAATAAAGAGAAATGAAAATTTTCCAAAGGATTATGTGAAATTTTCAGATGAAGAAGA
ATTTATGAATGAAGATGAGAAGGAAATGAAGGAAATTCTAATGGCAGGAAGTAGTTTATCAGCTGGAGTTAGGGG
GGAAGATAAAACCGAGATATTGAATCCCACTCCAGCGATGGCCAAATCTCTGACCATAGACTGTCTGGAATTGGC
ATTACCCCCTGAACTGGCTTTTCAACTTAATGAATTATTTGGTCCTGTTGGTATTGATTCAGGGTCTCTAACAGT
TGAAGATTGTGTGGTTCATATAGATCTGAATCTGGCGAAAGTGATTCATGAGAAATGGAAAGAATCTGTAATGGA
GCGACAAAGACAAGAAGAGGTGTCTTGTGGCAAGTTTATGCAAGATCCTTCCTTGGTTGGACATACTGGGCTTGA
TAATCCTGAACAAAAATCATCTCAGAGAACAGGCAAAAAATTACTGAAGACTTTAACAGCATCTGAAATGCTACC
TTTATTGGATCATTGGAATACTCAAACTAAAAAAGTATCACTCAGAGAAATAATGTCAGAAGAAATTGCCTTACA
GGAAAAACATAATTTGAAAAGGGAGACCCTTATGTTTGAAAAAGATTGTGCCACTAAACTAAAGGAGAAGCAGCT
CTTTAAGATATTTCCAGCCATTAACCAAAATTTTCTGGTGGACATTTTCAAGGACCACAACTATTCATTAGAACA

FIGURE 5324B

CACAGTGCAATTTCTTAACTGTGTTCTTGAAGGGGACCCTGTAAAAACAGTTGTAGCCCAAGAGTTTGTTCACCA
AAATGAGAATGTCACATCTCATACTGGCCAGAAGTCTAAAGAGAAAAAGGACTTTGAGTACCCAGACTATGATGA
CTACAGAGCAGAGGCTTTCCTTCACCAACAGAAGAGGATGGAGTGCTACAGCAAGGCCAAAGAAGCTTATCGGAT
AGGGAAAAAAAAATGTCGCCACCTTTTATGCCCAGCAGGGTACTCTTCATGAGCAGAAGATGAAAGAAGCCAATCA
CCTTGCTGCCATAGAGATCTTTGAGAAAGTCAATGCTTCGCTGCTGCCACAGAATGTTTTAGACCTCCATGGGCT
GCATGTGGATGAAGCTCTAGAACATTTGATGAGAGTTTTAGAGAAGAAGACTGAAGAATTTAAGCAGAACGGTGG
GAAGCCCTATTTGTCTGTGATTACGGGGAGAGGAAACCACAGCCAGGGAGGAGTTGCTCGCATCAAACCAGCTGT
CATTAAGTACCTCATAAGCCATAGCTTCAGGTTCTCTGAAATTAAACCAGGGTGCTTGAAAGTCATGCTAAAGTA
AAATAAACATCCTTGAATTAGAAGTATGAAGGTTTGTAGGTTAAAATTACTTTTATTTGCAGTAATTCAGTCAAT
TCTACCCTAAAGATGTGTTTTATTATAAATAATATTCAATTATGAAACAAAAAAATTATGATGTTTTTCAAAATG
CAAGTGAGGTTTGATTTTTTACTGAATCAAATGCAAATGTTACCTGTTAAAGATATTACAGAGAAATTTTATTGA
TTACAAAATATGTAAGAAAATTATCAGCTACAGTTTTAAAGTTTAAAATGCTCTGATTGTTTCTCAGAAAAGGTT
ACCTTTGTATTAATTGTTGTATGACATTTAGTAATGTCCTAAAAGTCTTTTGTGAGAGGTATTTAAAGTGCTTTG
AGACCTGATTCATGCCCCCCAAAGGGTGGTATTAAAAGAGGAAAAAGGACATAGTAGTGGTAGTAAAGAAAAAAA
GGAGATCTAACAAAAACACTTGAATATTTTTTATTTTCAAAACTAAACACATAAAATGCTTTTATTTTGCCATAT
CCTACAGGAAGGAAGACATGCTTTTGCCCTTTCTTCTGCTTTGTATATGACCTTGATCTTTTACCTTTTGTTCTG
TTCTTCTGTGTGCATTTTATGGAAAGAAAGTTGGGTCTGAGATTATATTGTAATTTTATACTTTCTATAGACAGA
AAGGTTTTCAGAGAAAAAGAAATGGTTAAATATCTTCCAGATGTTGCTGCCTTATCGAAATGCTTCTAGAACTGT
CTGTATAAGTCGTATTTCAGACAGTACTAAATACTTATATTTTATTTTTGAGGCATGTAATTTTAAAACTGCAGT
AGGTTAAAATTCTATTAAACAAATATAGAAAATATTTTGTTTATAATTGGCCTGGTGTGGTGGCCCACGCCTGTA
ATCCCAGCACTTTGGGAGGCCGAGGTAGGTGGATCGCCTGAGGTCAGAAGTTCAAGACCAGCCTGGCCAACATGG
TGAATCCCCGTCTCTATTAAAAATACAAAAATTAGCTGGGTGTGGTGGCGTGTGCCTGTAATCCCAGCTACTTGG
GAGGCTGAGGCAGGAGAACCGCTTAAACCTGGGAGGTGGAGGTTGCAGTGACCCGAGATCGAGATCACACCACTG
CACTCAGCCTGGGTGACAGAGCAAGACTCCGTCTCC

FIGURE 5325A

ATTTTTATTGATGTTTAGTAATACAAATTCCTAATCATTTTTAAACCATTCTTTGTCAACATTTTTTGCTCATTT
CTGAACACCTGCTATATGTAGGAAACATTTGTTTGCTTTTCTAAATTTGAGGTAAATTTGACTTCTTTGTGGACT
ATAAGATATTTAGGGGCAATAGTGATTACTTGGTGGTAAAAAGGTGATTTAGGTGCAGTTGCATATCTAAAACCA
CTTCAAAGTCAATAAATACATAATACTAATAAGTTGGCAGAAAGCTTAAAAGCACACAAAAGCCCAGCATAAAAA
CAAAAAGGATACTATATCTTAAGTGTTAGGAGTGGGAAGATTTTTTTTTTTTATTCTTAAGTTTTTTAGTTCCAG
TGGTAAGAAAGTTAATATAATTGTTTTCTTTCCAAGGAAATCATCAGTATTTATATTCTATTCTAGATAGTAATG
GGCTATTTTTAAAGACTATTTGTTTTATTGGTTAGAATGTAGTATAGATGATGGTTGACAGCAATTTGTCTAGTC
CTTGTTACTTAAAATCAAGTAACTTCTGGTTGGTATAAAATCTTTAAAATAGATTGAGTAGGTCAGAACTTATTT
TAGATAAAAAGATATATGTATTATTTAGAGGTTTTTTTCTACTTACCACTTGAGATTAGTTCTTAAAGGAAAAAA
ATACTTAAAAGCTGGACAAAAATGATAACCCATTGGCAAATTATGTAGATATGCATTAAGTTATAGGGTTAGTGC
ATCATGAACTCTTTTATAGTCAGTTCCTTAATGTGGAGCAAAGAACCTTTTGTCTGAATAAACATCCCAGTAATA
TCCATCAAATTAACTTTTAAAACCCTAAGATATTTGTGAGATGTGTCTTATATTTAGCCAACATTATTTTTTATT
TACATTTATTGAATCCCTACTGTGTGGGCATTGGCTAAGAACTTCATATTGAGACTGGTTACATTTGTCTTTGGG
GCTCTTAAGTCATGTTGCTTTTATTTTAAAACTTTTGGTTCTCTGGAACAGAATACCTGATGAAGACTTTTTTCT
TTGATCCAGACATCTTGTTACATTCTCCATTTTAAATGAAGAGTTCTGACCTTACGACATGTTAACTAAGCAACC
CACTTACTACGTAGGAAGCTGTAGGGAAATCATATCTTCAAGATTGTTTGCTAAAGATTTTGTTTAAAAACTGAT
ATTAAAATCATTTCACGAGGATCAACTTGAAAAAAAATTTAGTGTCAATTTTAAAATACATTTTCATTTTTATTT
TATTTTGAAAGAGAAATGTTTTATTCCTCTTTGCACAGAACAGTTTATGAAGGTGGCTCTCTCCTGACTCCATAC
ATCTTTTACACAAGATGCCTCTTCAAAATATGCCCAGTTATCTCCCCCTCTTCAGTGTTAGAGAATTGGCAGTTA
GTGAGTGGGGCAGAATGCTTAAGGCTCATTAAAATACCTTTTTTAAAGCCCTCTTATATCCTTTATGTACACTTG
CTCTGTGTGATTAAATTAACTTTCTTCAAATATTAGAGTCCATCATAATAAGTGACAGCTCTGTTGGCCTTCTCC
TCAGGGTGCCATTGTTTTCCCTTTTTTTGACTTAACATCTTTGCCCTGAGAAAGCTGTGGTTTCTTTGACAAGAA
GCTATTACTCTTTGTATGAGAGAATAAACAAACTTACTCAGACTGAAGAGTATGTTTTCAAAAATTAAAGAAGTA
GCAATTATATGGGAGCTGTTATTTATTAAAGCAATTATCTGAGCCCTTAAAGGGCTGTTTGTTTTTACAATGTTG
TATAATGGCCTTGCAGGAAAATTAGATTTCTTATTCTCTCTTCCAGTGTACATTGTCTTGAGTATTGTCACATTT
AGAGACCATAGGGAGATATGGGACTCCTAGTATTCAGTCGACACTCTGAACAGATTTTCTGTGTGATACATTTTT
TCATTTTAATTGAGTCCCCTCTTCCTCCCCTCCAACTGATAGCTTTTTATAACTGTGTGAAATATCTAGAGAAGA
ATGAAGTAGGCTGAGCTACATTTTCAAGCTTAACATTCTTTAGAAAACTAAGAAAATGCCCAATATTTCAACATT
AAGGTGTCAATAGGGGCTAAATGATCACTTTAAGATGTTTTCAGTTTGGAACTTGAATGTGTGTTTAATTTTTTG
TGAACAGATTGATGACTCTTCCGCGTCTATTTCTCTGGCCCAGCTNNNNNNNNNNNNNNNNNNNNNNNNTCTTG
AAAATATAAGTTTTTTTCTAACATCATATTTTTTTATGTGGAACGGTTTTTTAAGAGGGGTTGGGGGAGGACATA
TTTTGCAAAAGCATTGTACATATTATTACTATCCTGTAAAGAGTAGTTGCTGTTTTGAGAAGATAGGGGAATACT
TTGTCAGCCTCAGCGTATTGGAGTATTGTTCATCTTCAAGACAGAAGAAACACTTGAAGCTACACTTAATTATTT
TTTTTCCCTCATACATTTTGTTTAATTATACATTGGAAACTAACAAGGTTCTGGAGGAATTTCCTGGTTTTGGCT
ATAAATTATGTGGACCTTTTTTAAGCAGCCAAAACAGAAGATTTCCTTTACACGGACGATTGCATGGTTATTTCT
TGAATATTTGACTTGATCCCATGAAGGTCAATATTTTAAATGTGATGCAGTTGTTTCTTTATGCTATAGACTTGT
AGTCTGTCTGCATTAGGAAAAGTTTTGAACAACCTAATTTGTTTGAACACAGACTACATGAATTGTGTAAGTGTG
TAAAGCTGTTTGCAGGAATATACCAATGTGTATGTTTGGCAGAGGGGCAAATTGTTACCTCCTGAATCACTGTAT
ATGCCATGTTTTGCGATAAGATTGCTTGCATTTTCTGCTCAACAATGTGTATCTTCTGTTTGGGAAAGCACTAGT
GATGGATTACTTTTTAAAGCAATACATTTAGCTTGCAAATTGTGCCTTTAAAAAAAAAAATAGGCAGACTTTTGA
GGGCCAAGAAGGAAGCTGTCCAGTTTTCCAAAAATCCTTTTTCCCTGCTATCAGAAATGTGAAACCAAATTTAGC
AACCAAGATTAATGAAAAGATGGGTTTTCCATTAGTGCTGTCCCTATCTTGTTCTTGGCTTTGTTATGTCCTTTC
CCCTAGACTGTATCCCGACAAAATGTCCTAGTAACAAATTGCTTTTTAAGCTCCTGTTCTGGGAAAACTAAGCAT
TAAAATTGATTATTCTAAAACATAAAGTGGACTAAAGCCATCCTATTTTATAATTTTCTAATGCAAAGTGGTTTA
GTATAGAGTTAACACTTAGAAGTTTATAGTTTACTGTTTTTATTCTTATGTACTGTAAGGACCATATTTGAGTTT
TTGGTCTATTCCTACCATTGTTTCTTTGTGGGGAGGAGTTGGGGCGGTTTGGGGGATTGGTTTTTTTTTTGGTTT
TTTTAAACTACAGGTATTTGTAAAACAATGTTTGGGTTCAAACAAATTAGTTGTTAAACATCTGTAATCCAGTTT
TCTGTAAATGTTGCTGTTGTTCTAAGCTCTGTTAATGTTAAGCATTCTTTGTATATAAAATTACAATAAAATGTT

FIGURE 5325B

AAAACTGGTTGCTTGTTTTGTGGATGAATGTAAAGACAAACCCCAATGAATGGCTGATATGAGTGCTAAATGCCT
GAAGATTCAACTTAACTAGAAATCACTCCCTTAGACCCTGCTTACATCTAGACCTTGTATATCATACCTCAAAGA
TGAAATTCATAAAACTTATCTGAAGAGTTTAATTTAAAATTATAATGCTCAATGCACATCTTTTGCACTTGAGTT
GAAACTAACATCACTACCTAAAGAGCCTTCTACTTCTAATATCTGCTGCATAATACGTTCAGTCATTCTACCCCC
ATCCCTACCTCCACATTGTAAGTATAAATTAGTCTTAATGCTCTGACACTTGAATTATTTTTAAAACATCAAGTG
TTTCTATTCTAACTTAATATCAGTCTTTAACTTGTAGAAAAGTAGTATGCAAGTCTTAATGTAAGGTACAAACAG
GGTCTAAGGTTTGAGTGCCCCCAGAATGACTTTCTTCAGCCTTGCAGACACCTAAACATCATGTAATTACCTAAG
GAATTCCCAAGTGCCTCTTCCAGGTTATACGTGTAAATAGCTGTTTTTATGCAAGATTAGTTAGATACTGCTCTT
TACAGGATGAGTGGTGTTGTCTTTGGCTGTGTGGTCTTAAATGTGTTTCTAATGTGTGTGTCAAATAATTACCTG
TTAAACAGACTGCCAATCTGGCTGAAGCCAATGCTTCTGAAGAAGATAAAATTAAAGCAATGATGTCGCAATCTG
GCCATGAATACGACCCAATCAATTACATGAAGAAACCTCTAGGTCCACCACCTCCATCTTACACGTGTTTCCGTT
GTGGTAAACCTGGACATTATATTAAGAATTGCCCAACAAATGGGGATAAAAACTTTGAATCTGGTCCTAGGATTA
AAAAGAGCACTGGAATTCCCAGAAGTTTCATGATGGAAGTGAAAGATCCTAATATGAAAGGTGCAATGCTTACCA
ACACTGGAAAATATGCAATACCAACTATAGATGCTGGGAGACTCCTCTTTCACAAATTGGGAACAATGGGGCATA
AGCAAATTGATACTTATTTCTGGAATCGTGGTGATGTCTATGGAGCAACTGCAACACAAATAACACACCTAAGAG
AAGCATATGCAATTGGGAAGAAAGAGAAACCTCCCTTCTTACCAGAGGAGCCATCTTCTTCCTCAGAAGAAGATG
ATCCTATCCCAGATGAATTGTTGTGTCTCATCTGCAAGGATATTATGACTGATGCTGTTGTGATTCCCTGCTGTG
GAAACAGTTACTGTGATGAATGTATAAGAACAGCACTCCTGGAATCAGATGAGCACACATGTCCGACGTGTCATC
AAAATGATGTTTCTCCTGATGCTTTAATTGCCAATAAATTTTTACGACAGGCTGTAAATAACTTCAAAAATGAAA
CTGGCTATACAAAAAGACTACGAAAACAGTTACCTCCTCCACCACCCCCAATACCACCTCCGAGACCACTGATTC
AGAGGAACCTACAACCTCTGATGAGATCTCCGATATCAAGACAACAAGATCCTCTTATGATTCCAGTGACATCTT
CATCAACTCACCCAGCTCCGTCTATATCTTCATTAACTTCTAATCAGTCTTCCTTGGCCCCTCCTGTGTCTGGAA
ATCCGTCTTCTGCTCCAGCTCCTGTACCTGATATAACTGCAACAGTATCCATATCAGTTCATTCAGAAAAATCAG
ATGGACCTTTTCGGGATTCTGATAATAAAATATTGCCAGCTGCAGCTCTTGCATCAGAGCACTCAAAGGGAACCT
CCTCAATTGCAATTACCGCTCTTATGGAAGAGAAGGGTTACCAGGTGCCTGTTCTTGGAACCCCATCTTTGCTTG
GACAGTCATTATTGCATGGACAGTTGATCCCCACAACTGGTCCAGTAAGAATAAATACTGCTCGTCCAGGTGGTG
GTCGACCAGGCTGGGAACATTCCAACAAACTTGGCTATCTGGTTTCTCCACCACAACAAATTAGAAGAGGGGAGA
GGAGCTGCTACAGAAGTATAAACCGTGGGCGACACCACAGCGAAAGATCACAGAGGACTCAAGGCCCGTCACTAC
CAGCAACTCCAGTCTTTGTACCTGTTCCACCACCTCCTTTGTATCCGCCTCCTCCCCATACACTTCCTCTCCCTC
CGGGTGTTCCTCCTCCACAGTTTTCTCCTCAGTTTCCTCCTGGCCAGCCACCACCCGCTGGGTATAGTGTCCCTC
CTCCAGGGTTTCCTCCAGCTCCTGCCAATTTATCAACACCTTGGGTATCATCAGGAGTGCAGACAGCTCATTCAA
ATACCATCCCAACAACACAAGCACCACCTTTGTCCAGGGAAGAATTCTATAGAGAGCAGCGACGACTAAAAGAAG
AGGAAAAGAAAAAGTCCAAGCTAGATGAGTTTACAAATGATTTTGCTAAGGAATTGATGGAATACAAAAAGATTC
AAAAGGAGCGTAGGCGCTCATTTTCCAGGTCTAAATCTCCCTATAGTGGTTCTTCGTATTCAAGAAGTTCATATA
CTTATTCTAAATCAAGATCTGGTTCAACACGTTCACGCTCTTATTCTCGATCATTCAGCCGCTCACATTCTCGTT
CCTATTCACGGTCACCTCCATACCCCAGAAGAGGCAGAGGCAAGAGCCGCAATTACCGTTCACGGTCTAGATCTC
ATGGATATCATCGATCTAGGTCAAGGTCACCCCCTTACAGACGCTATCATTCACGATCAAGATCTCCTCAAGCGT
TTAGGGGACAGTCTCCTAATAAACGTAATGTACCTCAAGGGGAAACAGAACGTGAATATTTTAATAGATACAGAG
AAGTTCCACCACCATATGACATGAAAGCATATTATGGGAGAAGTGTTGACTTTAGAGACCCATTTGAAAAAGAAC
GCTACCGAGAATGGGAGAGAAAATATAGAGAGTGGTATGAAAAATATTATAAAGGTTATGCTGCTGGAGCACAGC
CTAGACCCTCAGCAAATAGAGAGAACTTTTCTCCAGAGAGATTTTTGCCACTTAACATCAGGAATTCTCCCTTCA
CAAGAGGCCGCAGAGAAGACTATGTTGGTGGGCAAAGTCATAGAAGTCGAAACATAGGTAGCAACTATCCAGAAA
AGCTTTCAGCAAGAGATGGTCACAATCAGAAGGATAATACAAAGTCAAAAGAGAAGGAGAGTGAAAACGCTCCAG
GAGATGGTAAAGGAAATAAGCATAAGAAACACAGAAAAAGAAGAAAAGGGGAGGAAAGTGAGGGTTTTCTGAACC
CAGAGTTATTAGAGACTTCTAGGAAATCAAGAGAACCTACAGGTGTTGAAGAAAATAAAACAGACTCATTGTTTG
TTCTCCCAAGTAGAGATGATGCCACACCTGTTAGAGATGAACCAATGGATGCAGAATCAATCACTTTTAAATCAG
TGTCTGAAAAAGACAAGAGAGAAAGGGATAAACCAAAAGCAAAGGGTGATAAAACCAAACGGAAGAATGATGGAT
CTGCTGTGTCCAAAAAAGAAAATATTGTAAAACCTGCTAAAGGACCCCAAGAAAAAGTAGATGGAGAACGTGAGA

FIGURE 5325C

GATCTCCTCGATCTGAACCTCCAATTAAAAAAGCCAAAGAGGAGACTCCGAAGACTGACAATACTAAATCATCAT
CTTCCTCTCAGAAGGATGAAAAAATCACTGGAACCCCCAGAAAAGCTCACTCTAAATCAGCAAAAGAACACCAAG
AAACAAAACCAGTCAAAGAGGAAAAAGTGAAGAAGGACTATTCCAAAGATGTCAAATCAGAAAAGCTAACAACTA
AGGAAGAAAAGGCCAAGAAGCCTAATGAGAAAAACAAACCACTTGATAATAAGGGAGAAAAAAGAAAAAGAAAAA
CTGAAGAAAAAGGCGTAGATAAAGATTTTGAGTCTTCTTCAATGAAAATCTCGAAACTAGAAGTGACTGAAATAG
TGAAACCATCACCAAAGCGCAAAATGGAACCTGATACTGAAAAAATGGATAGGACCCCTGAAAAGGACAAAATTT
CTTTAAGTGCGCCAGCCAAAAAAATCAAACTCAACAGAGAAACTGGGAAGAAAATTGGAAGTACAGAAAATATAT
CAAACACAAAAGAACCCTCTGAAAAATTGGAGTCAACATCTAGCAAAGTTAAACAAGAAAAAGTCAAAGGAAAGG
TCAGACGAAAAGTGACTGGAACTGAAGGATCCAGCTCAACTCTGGTGGATTACACCAGTACGAGCTCAACTGGAG
GCAGTCCTGTGCGGAAATCTGAAGAAAAAACAGATACAAAGCGAACTGTGATTAAAACGATGGAAGAATATAATA
ATGACAATACCGCGCCAGCTGAAGATGTTATCATTATGATTCAGGTTCCTCAATCCAAATGGGATAAAGATGACT
TTGAATCTGAAGAAGAAGATGTTAAATCCACACAGCCTATATCAAGTGTAGGAAAACCTGCTAGTGTTATAAAAA
ATGTTAGTACAAAGCCATCAAATATAGTCAAGTATCCTGAGAAAGAAAGTGAGCCATCCGAGAAAATTCAGAAAT
TCACCAAGGACGTGAGCCATGAAATCATACAACATGAGGTTAAAAGTTCAAAAAACTCTGCATCTAGTGAAAAAG
GGAAAACCAAAGATCGAGATTATTCAGTGTTGGAAAAGGAGAACCCTGAAAAGAGGAAGAACAGCACTCAGCCAG
AGAAAGAGAGTAATTTGGACCGTCTGAATGAACAAGGAAATTTTAAAAGTCTGTCTCAATCTTCCAAAGAGGCTA
GAACGTCAGATAAACATGATTCCACTCGTGCTTCCTCAAATAAAGACTTGACTCCCAATAGAGACAAAAAAACTG
ACTATGACACCAGAGAGTATTCAAGTTCCAAACGTAGAGATGAAAAGAATGAATTAACAAGACGAAAAGACTCTC
CTTCTCGGAATAAAGATTCTGCATCTGGACAGAAAAATAAACCAAGGGAAGAGAGAGATTTGCCTAAAAAAGGAA
CAGGAGATTCCAAAAAAAGTAATTCTAGTCCCTCAAGAGACAGAAAACCTCATGATCACAAAGCCACTTATGATA
CTAAACGGCCAAATGAAGAGACAAAATCTGTAGATAAAAATCCTTGTAAGGATCGTGAGAAGCATGTATTAGAAG
CAAGGAACAATAAAGAGTCAAGTGGCAATAAACTACTTTATATACTTAACCCACCAGAGACACAGGTTGAAAAAG
AGCAAATTACTGGGCAAATTGACAAGAGTACTGTCAAGCCTAAACCCCAGTTAAGTCATTCCTCTAGACTTTCCT
CTGACTTAACTAGAGAAACTGATGAAGCTGCTTTTGAACCAGACTATAATGAAAGTGACAGTGAAAGTAATGTTT
CTGTAAAAGAAGAGGAATCTTCAGGAAACATTTCTAAGGACCTGAAAGATAAAATAGTGGAGAAAGCAAAAGAGA
GCCTGGACACAGCAGCAGTTGTCCAGGTGGGCATAAGCAGGAATCAGAGCCACAGCAGCCCCAGCGTCAGCCCCA
GCAGAAGCCACAGTCCTTCTGGAAGCCAGACCCGAAGCCACAGTAGCAGTGCCAGCTCAGCAGAAAGTCAGGACA
GCAAGAAGAAGAAGAAAAAGAAGGAAAAGAAAAAACACAAGAAACATAAAAAGCATAAGAAGCATAAGAAACATG
CAGGCACTGAAGTGGAATTGGAAAAAAGCCAAAAACACAAACACAAGAAAAAGAAGTCAAAGAAGAACAAAGATA
AAGAGAAGGAGAAGGAGAAAGATGACCAAAAAGTGAAATCTGTCACTGTG**TAA**AAAGACAGATTTTTTAAATTGA
CTTAATTACTAAGTCATCTGTATTAAATTTTGTTATAATGTAAAGAGATTCAAGCCTTGTAAATAATGACATGGA
AGACCCTGTGCTGCACTTAAAATATTGCTGCTTGATTATTTGATTTTTACATCAGAGCTTTATAACACGAACTTT
TGTACAGAATTGTGAGTTGTGACCATGTAACATGAGAGGTTTTGCTAGGGCCTATTATTTTTAACCACCATTAAT
TAGTTGGGGTGGAGTTTACTGTAATGTGAAATTTTCACATTTGAATTTTTTAATTGCCTGGCAAAAGCTGATATA
AGTTCTAAAATATCAGCAGAATGATTTGCTGAATTCATTACATCCCTGTTATGTCACTTTTTGATTACAATAAAA
GTTTTCAGTAAACTTTTCAAAAAATCTATGTCGGTGCGGAGAAAGAGTAATGAATGGCA

FIGURE 5326

MSQSGHEYDPINYMKKPLGPPPPSYTCFRCGKPGHYIKNCPTNGDKNFESGPRIKKSTGIPRSFMMEVKDPNMKG
AMLTNTGKYAIPTIDAGRLLFHKLGTMGHKQIDTYFWNRGDVYGATATQITHLREAYAIGKKEKPPFLPEEPSSS
SEEDDPIPDELLCLICKDIMTDAVVIPCCGNSYCDECIRTALLESDEHTCPTCHQNDVSPDALIANKFLRQAVNN
FKNETGYTKRLRKQLPPPPPPIPPPRPLIQRNLQPLMRSPISRQQDPLMIPVTSSSTHPAPSISSLTSNQSSLAP
PVSGNPSSAPAPVPDITATVSISVHSEKSDGPFRDSDNKILPAAALASEHSKGTSSIAITALMEEKGYQVPVLGT
PSLLGQSLLHGQLIPTTGPVRINTARPGGGRPGWEHSNKLGYLVSPPQQIRRGERSCYRSINRGRHHSERSQRTQ
GPSLPATPVFVPVPPPPLYPPPPHTLPLPPGVPPPQFSPQFPPGQPPPAGYSVPPPGFPPAPANLSTPWVSSGVQ
TAHSNTIPTTQAPPLSREEFYREQRRLKEEEKKKSKLDEFTNDFAKELMEYKKIQKERRRSFSRSKSPYSGSSYS
RSSYTYSKSRSGSTRSRSYSRSFSRSHSRSYSRSPPYPRRGRGKSRNYRSRSRSHGYHRSRSRSPPYRRYHSRSR
SPQAFRGQSPNKRNVPQGETEREYFNRYREVPPPYDMKAYYGRSVDFRDPFEKERYREWERKYREWYEKYYKGYA
AGAQPRPSANRENFSPERFLPLNIRNSPFTRGRREDYVGGQSHRSRNIGSNYPEKLSARDGHNQKDNTKSKEKES
ENAPGDGKGNKHKKHRKRRKGEESEGFLNPELLETSRKSREPTGVEENKTDSLFVLPSRDDATPVRDEPMDAESI
TFKSVSEKDKRERDKPKAKGDKTKRKNDGSAVSKKENIVKPAKGPQEKVDGERERSPRSEPPIKKAKEETPKTDN
TKSSSSSQKDEKITGTPRKAHSKSAKEHQETKPVKEEKVKKDYSKDVKSEKLTTKEEKAKKPNEKNKPLDNKGEK
RKRKTEEKGVDKDFESSSMKISKLEVTEIVKPSPKRKMEPDTEKMDRTPEKDKISLSAPAKKIKLNRETGKKIGS
TENISNTKEPSEKLESTSSKVKQEKVKGKVRRKVTGTEGSSSTLVDYTSTSSTGGSPVRKSEEKTDTKRTVIKTM
EEYNNDNTAPAEDVIIMIQVPQSKWDKDDFESEEEDVKSTQPISSVGKPASVIKNVSTKPSNIVKYPEKESEPSE
KIQKFTKDVSHEIIQHEVKSSKNSASSEKGKTKDRDYSVLEKENPEKRKNSTQPEKESNLDRLNEQGNFKSLSQS
SKEARTSDKHDSTRASSNKDFTPNRDKKTDYDTREYSSSKRRDEKNELTRRKDSPSRNKDSASGQKNKPREERDL
PKKGTGDSKKSNSSPSRDRKPHDHKATYDTKRPNEETKSVDKNPCKDREKHVLEARNNKESSGNKLLYILNPPET
QVEKEQITGQIDKSTVKPKPQLSHSSRLSSDLTRETDEAAFEPDYNESDSESNVSVKEEESSGNISKDLKDKIVE
KAKESLDTAAVVQVGISRNQSHSSPSVSPSRSHSPSGSQTRSHSSSASSAESQDSKKKKKKKEKKKHKKHKKHKK
HKKHAGTEVELEKSQKHKHKKKKSKKNKDKEKEKEKDDQKVKSVTV

FIGURE 5327

TTCCAGATTAAGTTTTTAACCAGAGTCAAACTTAGCCTTTATAAAAAGTCCTCATTTAATTTCAAAATAGATCTT
CTGTAAGACATGCACATAGGGAAGACCTACCTAGGAATAGCCTGGTGAAATGCAGAATTGGAAAAAGGCAAAAGT
CCTTGCTCATGACTCAGAACTACATCGAGTGAAGTCAGTGTTGAAAACGCCCATTCCCTCCAGGTGAGCCTTCCC
CATTGTGGATTAGTGTTGTGGCTTCATGGCCCTAATAGGGGTGTGTCTGCCAGGAACTGCACTGCATGGGGCCCA
CAGCCCTGCCCCAGAAGCAGCTTTGGTCTCGTTTGCTGAGACCGCTTGCTGTGCCTCATCAATTTCAGGAGGAAA
CAGTGAGATGCCTCTAGATTTTAAATCTGGTTTCGGAGAGCACCTAAGCCCTCTGATGGAATGACTCTCGTAGGA
ACTTGATGGGGGTAATTCTAAGGGGGAAGAGCTTGGGAACCGTGAGGGCTGTTAGGCTGCAAGAAGGGAATGGAT
ATGTGAGACCATGTGGGTTTATTTTTTGAAGGGTGAACTGGAGTAGCTGAGGATTCTGCAGTTGACGCCCCAGGA
TGGCTTTGCTCAGCCCTCCCCCGTAGACTGGAGGAAAGCCTACCGCCAAGGGAGGAGAGGATGCATCTGTCCTAG
GTGCAGCCGGCCTCCCTCTTCCAGGTTCAGCAAGGGTCCCTGGCTGGGCATTTTCCTCGTAACCTTTGGCAGCAT
TGGCTCAAATGCCATTGTTTAGATTCCCAGATATTTCCCCACTGCTTTTTGTGTTAAGGTAGTTTGGTAAAATGC
CTTATTCCAATGGCCTAAGATAATATCAAGCAACTCACTGGTTTACTTTTCTAACCAGCTGTGGTTAAGACACAC
ACGGCAATGTGCTATCTTTCACATGTTGGACGTTAAACCCAGACCAACTCCCCAAATCTAATTTGTTTCAGTAAT
TTCTGAATGCATTGACCAAGATATTCCTTTCATCTCTGGTTGAGTTTCTTCCATTAGAAGGAAGGATTAAACCTT
GGATAAAAGATTTGCAGATGCCCCAGTGGTTAGTAGAGGTGAAAATGGAGGTTTCAGGGAAACTGCTGGGGCCTT
TTGCCTTTGTCCTCATCCAAAGCATTTTGTGCCTCTCTTTCTTCTCCTCTGGCTGAATATCCACTGGAGATTGAA
TTCTCCGAAACTCCCTGTGTGGGTGAAGTGGGAAGCTGTGCCCAGGAAGGGGAGTAACTGTGCAAAGTTTTATGC
AGTCAGTGCCAGAATTGGATTACATCACCTGGGGGAGGCGCCTTCAGGACCAGGAAATGGTACATGGAGCTTTGA
GGTGAAAACTCATCTTAGAAACCCACAAAAAGTCATTCCCCCAGCCTGACATCAGGGACAGACCACACCCATGGG
GCAGAAACCGGGCTTGGTTGTTGCAGTGGGAAGAGAAGGCACGACTCTGGTGCACCGAGCACCTTTCCTCGTGGC
TGTTTCCAGGCACTGGGCTGGATGTCCTCAGAACCCCCTGTCCCCTGCCCACTCCTCAAACCCTTACTGACCCAC
CCCTCTCGCCTGGTGCTGTCCCAGGCCCTGGGGGTGAGGGGGAGGGGACTCCAGCGTGGGCTTGCCCTCCAGTGT
GGTGGGAGGGAACCACGTGGCCACTTGGCTTAGCCGTGCTCATGGTGCAGACGTGGAACGCGGAGGCAGGGAGAG
GCTCCGTGACGTCCCCAGGGCCCCAGAACGAGGAAGGAGCGGAGTTGGGATTCCAGCCCAGTTGGACGCTGAAGT
CCCTGTTTTGTTTACTGCCTCCTGTTCATGGCGTATGAATGTATCTGAGATGCTTTGTAAGGCATAAAGTGCAAT
ACTAGCTTAGTGGCTGTTCGTTCAGTGATTCCTTCTGTTACCAAACAGGTGGCTGAGATGAGAGGGCAACCCAAG
CCTAACGCCCTTCAGTGGCCTTGCATCAGAGTACTCGTGACAGGTACCTCTCCGTGGAGAGGGGCTGTCCTCTGC
CCTTGCCTGCTCCTCCTATTGCAACAGTCCTGTGGACTAGCTCAGGCTCTACAGGGGCTGNNNNNNNNNNNNNNN
NNNNNNGTGTATATGTGTCTACCTACACACAAGCACATGTGCACACATGCACACACATGCAGTGCATAGCACACG
CACACTACACACATGCACACACACTCACATGGACACACACTATACACACACATGCACACACATACATGCACACAC
ATGCACATGGACACACATACATGCACACACATACATGCAGGTGTGCAGACTTGGCTCCAGGCGTGTGTTTGATAG
TATTATTCTATGATATTTCCCTCATCTCCATAGAATACCAGCTTCTGAATCCTCAATCAGCCTTTACTGCAAGAA
GAAAAGAAAAACCTCTCTCATTCCAGGTCTGTGGTGCAGATGGGAAGAGTATAGTCAAAACCCATTAAGGCCTTA
GTCAAATGCCAGCCGAATTAGAACGCAATGAACGTTAGACAAAACAACCCAACTGGCCAGGCGGGGGAGGCGCAG
AGCGTATAAATATAAAGTTAGATACTTATAAAGAATAAAGACTCTAATAAAATATTTTATATAAAACTTTT

FIGURE 5328

MRGQPKPNALQWPCIRVLVTGTSPWRGAVLCPCLLLLLQQSCGLAQALQGLXXXXXXXVYMCLPTHKHMCTHAHT
CSA

FIGURE 5329

CATACGCAAAGATAGTCACCATAAGTCGACCATGTTTTTCACCTTTTAGTCAATGTTAGAAGCAAGGGGTAACTT
AAGTCCTGGTGGGAAGACCATCCATTGAGTTCTTTGAAAGTCAACATTTTTCAGCCCACGATAGTGAAATGAAAG
TAAATATAAATGAATAACAATTCTAACAAAAAGAGTTTTTTGATTCAAATCCATTAGTTTGAACTTTTCGAGCTT
ATTATCCATTTCCTTAAATCCCATAGCTTATCAGAGTTAACATCAGAGGGAGGTAAAATATTTCTGTGATATTCT
TTGTATAAAATCTACACTTTGAAATGGATTAGTAACCTGTGAACAATACATATTTTAGTTAACATATAAATTATG
TGAGCAAAGTGGTTTTCAGTGTTTTTTTCTTATTTTAGTTTTGAACCTGTCTTAAACTCACAGACTTGTAGAAGA
AATCTCTAATTCAGTATTTATTAGGAGTTCACTTTTGCCCTATTACAGCCTTAATTAGTGACATCCCAGTGCTGT
TACAGCATAGCAGTGTCTTAATATGTAATCTAATTGAAATAACACATTTGTAAAATAATTACTAGAAGGTAAACT
TACGTTA**ATG**TCCTGTGTGGTTTCTACAAAGTGTGTCATTGTAGACCTCTTGGCCACTAGATATTTTAAGAT

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FIGURE 5330

MSCVVSTKCVIVDLLATRYFK

FIGURE 5331

GGCAGCAGTGTCGACGGCAGCGGGGCGGCGGGTGGGAAATGGCGGAGTATCTGGCCTCCATCTTCGGCACCGAGA
AAGACAAAGTCAACTGTTCATTTTATTTCAAAATTGGAGCATGTCGTCATGGAGACAGGTGCTCTCGGTTGCACA
ATAAACCGACGTTTAGCCAGACCATCTCTGCTTCAAAACATCTATCGTAATCCCCAAAACAGTGCACAGACGGCT
GACGGCTCACACTGTAAGTCCCACAGTTGGAGAAATTTTTTTAAAACAATGGTGTTAAAGAGCCCACTCTTAATT
GAGACAAATAATGTTGGCTTCTGAGCTGCTGACATAGAGCTGTTGCAAACAGGACAAGGTGCTGGAACTCCTTGG
CGCACACAGCAAGAACTTGATACTTGGCCACGTTCAGGAGGCTTATCCCTTCTAGGGAGGGTCACTGGCCCGGCC
ACCTCCATTGATTGACATTTGTCATGAGAGCAGGTCCGTCCATGTGAAACGGATTTCAACATTTTGAGCCATTCA
TTGGTCTTTACAGTGACTGAACCCCTGGCCTTTATTAAGTTCTTTGTGTAAAATTAAAACTCTTAGGAATATTAA
GGAATCAATAAGGTAAGTTGCCCAGTAAGTGTGGGTTTTATTTCACCATTATAATTTTTCCTCCAGGAAGTGGAG
ATTTCATGATATGTAACAATTGTATTTCTCTAATACAGTAATTTTTTCCATCAGTTTATGTAAGCATTATTCTTT
CCGAGTTCATTAAAAATTTTCTGCCACATCTAAGAACATTTTGGTGCTAGCCTGGCAAACTATTTGTGCTTTTAC
CTGAATTGGAATTTTGAAAAGGAGAGTTTTCACGTTCTGTAAGCAGAAGTACAAGATGGGCATATCATGAGACCT
CCGTTACACCGCAGTGTTAGGGATTCAAGGCAGCCGCCAACTGAGAAAACGCCTCTGCTTCTCCAGAAAATAACT
TGCTCTCTTTTCAGCACTGAATCTCAACTGAAGCACTTGCCAGAGGCAGCCGGTTAAGTGTTTACCTTTAATTTT
CCATAATATAAAGTTGTTGCGTTTTGTATTTCAGACCATTGCCCTCTTGAACATTTACCGTAACCCTCAAAACTC
TTCCCAGTCTGCTGACGGTTTGCGCTGTAAGTTCATACAAGTTCCTTCCCCGGTTCCCTGGGCTTGCGTGTCAGA
GCTCAGTGTCCACTCCATCTGGTCTGCCGTGCTAGTGTCAAGGACCGCGTTTCACTAGAGGTGGCAAGGAGCTTT
CGTCCCACTGACCCCATGGAAACCTCTTTTGGAGATTTGAACTCCCACCGTGTGTTAAAAGGGAAAAAGTAACTG
GAAAGGGTGCCCTTTAAAACAGTCTAGAGCTGGGCCGGGCGCGGTGGCTC

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FIGURE 5332

GSSVDGSGAAGGKWRSIWPPSSAPRKTKSTVHFISKLEHVVMETGALGCTINRRLARPSLLQNIYRNPQNSAQTA
DGSHCKSHSWRNFFKTMVLKSPLLIETNNVGF

FIGURE 5333

CGGACGCGTGGCTTGTCTGTTTCTGCAAAAAAAAAACAACAACAACTGGGGATTTTGGTAGGGATTTCATTGAAT
CTGTAGATCATTGGCCACTTGATTTTAAACAAAATATTGAGATATCTACTTCTTGAAATGATTGCTTGAGACAGT
ACCTGTGTACTCCTTGCTATGAAAAATGAGGAAGTTAACATACTCATCTTCCACCTTTCCTTTTCCTTACTTTTT
TTGTTGAAGTATCATTGTGGACACTTTCCCAGTTGACTTCCACTTGATCCCCTGAATTAACTAACTGGCACTGGC
GTTTCCTTTGTAAAATGTACAATGTCAGCCACCATCTTGCTACTAAAGTGTGGCCTGTGGACCACAACATGGGGG
GAATCTCAGGTCTCACCTCAGACTTGCTGGGTCAGAACCTGAGTTTTGAGAGGCTCTGGGCAACCGGCACCTCTC
AGACCTGCTGTTGGGTTCTCATCGATGGACCCGATGCTTCCTAGCAAATGATACCTGTTGTATGTGTTATTGGTA
ATAACATAGTTTACTTAGCTATTACATTAATTAATAAAACATGAGCGCTGAAAGAGTTGTTTCTGTGAAAATAAG
CTGATTGCTTTAAAAAGATAAGAGACAAATNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCTTTTGGGTGAGACA
GTAGTAAGGAAATACAGTAAAAATCCAGAAGGGCTCTGTGCTCTGATGCTTCAGGAGTGTGTCTAAGTTCTTGCT
CGCTTTAAAGAAGCTGCTACTAGAAATTATAGATCATGATTATCGATGTGGTTCATACA

FIGURE 5334

DAWLVCFCKKKTTTTGDFGRDFIESVDHWPLDFKQNIEISTS

FIGURE 5335

AAACTTCATTGAGCACCTGGGTCGTTTTCCTGCTCATATCCTGGACTGTCTTTCAGGGATTTACTACCGGCTTCC
GGGACTTGAGCAAGTCTTGAATACGCAGGATGTTCAGGATGTTCAGAACGTTCAGAACATTTTAGAAATGCTGTT
GCGACTCCTGGACACTTACCGGGACAAGATTCCCGAGGAGGCCTTGTCACCATCCTACCTGACTGTGTGTCTGAA
ACTGCATGAAGCCATCTGCAGCAGCACAAAGCTACTTAAGTTTTACGAGCTGCCAGCCTTATCTGCCGAGATTGT
CTGCAGAATGATTAGACTTCTATCTCTGGTGGATTCTGCAGGACAGAGAGATGAAACTGGAAATAATTCAGTCCA
AACAGTCTTCCAAGGGACCCTTGCTGCTACGAAAAGGTGGCTCCGAGAAGTTTTTACAAAGAACATGCTCACATC
TTCAGGTGCCTCATTCACATACGTCAAGGAAATTGAGGTCTGGAGGCGGCTGGTGGAAATCCAATTCCCCGCGGA
GCATGGCTGGAAGGAGTCGTTGCTGGGAGACATGGAATGGAGGCTCACAAAGGAGGAACCCCTCTCCCAGATCAC
TGCCTACTGCAATAGTTGCTGGGACACCAAAGGCTTAGAGGACAGTGTGGCCAAGACCTTCGAGAAATGCATCAT
TGAAGCCGTGAGCTCAGCCTGCCAGGTGAACAATCTCTCCTCCTGGGAAACGGATTCGGGCTCACAGCTGTGTTC
TGCCATGACCCAGCTAAGGGCTATGAAGCACCCGCTGGGTCTCAGCTCCTCCGCTAACTCAGAGATTGGGAAGTG
GGCACCCTCCTCCCTCGCCAAGGGCAATGGCGCTGAGATCTAGTTCTCTCCGGATTCCTCAGTGTGCTGCACAGT
CCCTGCTGCTCGCACCATCCTGCATGTGTTCCATATGGAATCACGGCCGTGCGCGTGTGGCACAAGTCACACGGG
CTTGCAGGCCGTTCCTCAGATGGCCCTGTCGTCACTGTGGCTGCTGGTTTGATTGATTGTTAACACTTGCTCAGT
AGGTGTGCGGGAAGAGACTCCAAAGGTTGACAGAACATTTATGGAAGCAAAATATGTGAAATGGAAAATTGTATC
AATTTATTTAGCTCTTTTCGGCAAAGGGGAAGAGATTGTGCCCCCCTGTCTCCCAGGAACAGTCTCGCAGGCAAT
GCCACATGAGGAAGCTCCCTGCTGGCCATGGCTGCCCTGCTCACATTTCCTAATTGGACACTTAACCCCTGTACA
AGCACAGCCTTGCGGCCACAGGGGAAGTCCAGAAACATTGAGGTCATTGAATTCCGGGGACCAAGGGGTTCTAAT
TTTTTAAGTGACTGATACCTTTGATAAGGTTTTCCTTTCCCTTTTTCGTTAACTCTTTGTTGAGATATTGTTCGT
ATGCCATACGGTACATCTGTCAAAAGTTCCAGTTCAGCAGGTTTTGGGGTAGTCACAGATATGTACAGTCATCAC
CACAGTTAATGACAGAGCATTTTCATCACTTCAAAGAGAAACCCGGCCCCTTTAGCCATCATCCTCCTCCCCTCT
AGTCACCCACTCCCCTCTGCAGGCATAAACAATTGCTGAACATAAACAACTGCTTCTGTGGCTTTCTCTGTTCTG
ACTGTCATATGAATGGAATCATATCATATGTGGCCTTTTGGGTATGGCTTATTTCACTGAGCATAATGTTTTTTT
GTTGTTGGTGGTGGTGGTTGTTTGTTGTTTTTGGGACCGAGTTTCACTCTTTTTGCCCAGGCTGGAGTGCAGTGG
TGCGATCCTGGCTTACCGCAACCACTGCCTCCCGGGTTCAAGTGATTCTCCTGCCTCAGCCTCCCAAGTGCTGGA
ATTACAGCTACTTTTTGTTTAAAGAGTCTTTTAATTGTTTAAAGAACAATGTGCCGCCACACTCGGTTCCTTTTG
TATTTTTAGAAGAGACAGGGTTTCTCCATGTTGGTCAGGCTGGTCTCGAACTCCCGACCTCAGGTGATCCACCCA
CCTTGGCCTCCCGAAGTGCCGAGATTGCAGGTGTGAGCCACCGCGCCCGGCCGAGCATAATGTTTTGAAAGACCG
CTCAGGCTGGACACGGTTGCTCACGCCTGTAGTCACGGCACTTTGGGAGCCCAGGAGTTCAAGACAAGCCTGGGT
AACAGAGTAAGACCCTGTCTCTATAAAAACTAAAAAATAAACAAAAAAAATTAGCCAGGCATGGCCGGGCACACC
TGTGGTCCCAGCTACTTGGGAGGCTGAGGTGGGAGGCTCCCTTGGGCCCAGAAGGTCAAGGCAGCGGTGAGCCAT
GATCGCACCACTGCACTTCAACCTGGGGGACAGAGCAAGACCCTGTCTCAAAAAGCAATAACAACAAAAGTCCAT
CCATATTGTAGCTTGTGTCCGTTTACGTTAAGTATTCCTTACCCAAAATGCTTGAGACCAGAAGTGTTTTGGATT
TCAGATGTTTTCAAATTTTGGAATATTTGCATTTACATAATGAGATGTCTTCCAGATGGGACCCAGAGTCTAACC
ACAAAATTCACTTGTTTCATATACATCTTATACACATAGCCTGAAGGTAATTTTATACAATATTTTTAACAATTT
TGTGCATGAGACAAAGTTTGTATTAAGTATTTGTATGTTGAATTTTTCACTTGTGGCATCATTATACTCAAAAAG
TTTGGATTTTGTAGTATTTTGGATTTGGGGATTAGGAATGCTCAACCTATATTTCATTTTTTTCCATGGCCAAAT
ATTCCCCGTTTATCCATGTGTCCATTGACGGCCATCTATGTTGCTTCTTCGGCTATTATAAATCTGCTGATAC

FIGURE 5336

MLLRLLDTYRDKIPEEALSPSYLTVCLKLHEAICSSTKLLKFYELPALSAEIVCRMIRLLSLVDSAGQRDETGNN
SVQTVFQGTLAATKRWLREVFTKNMLTSSGASFTYVKEIEVWRRLVEIQFPAEHGWKESLLGDMEWRLTKEEPLS
QITAYCNSCWDTKGLEDSVAKTFEKCIIEAVSSACQVNNLSSWETDSGSQLCSAMTQLRAMKHPLGLSSSANSEI
GKWAPSSLAKGNGAEI

FIGURE 5337

GGCACGAGGGGAAGTTGCCGGCGGCCGCGCGGCCTCCCGGGCGGGCCTACAGCCATGTCCCGGGACCCGGGGTCG
GGCGGCTGGGAGGAGGCCCCGCGCGCAGCTGCCGCGCTCTGCACCCTGTACCACGAGGCCGGACAGCGGCTGCGC
CGCCTGCAGGACCAGCTCGCTGCCCGCGACGCCCTCATCGCTCGCCTCCGCGCCCGCCTGGCCGCGCTGGAGGGG
GACGCCGCGCCGTCCCTAGTGGACGCGCTGCTGGAGCAGGTTGCGCGCTTCCGGGAGCAGCTGCGAAGGCAGGAG
GGCGGCGCCGCCGAGGCCCAGATGCGCCAGGAAATTGAGAGGCTGACTGAGCGACTAGAAGAAAAAGAGAGGGAG
ATGCAGCAGCTGCTGAGCCAGCCCCAACACGAGCGAGAGAAGGAAGTCGTCCTGCTACGGAGGAGCATGGCAGAA
GGGGAGCGCGCCCGGGCCGCCAGTGACGTCCTGTGCCGCTCCTTGGCCAACGAGACCCATCAGCTGCGGAGGACG
CTGACCGCCACCGCCCACATGTGTCAGCATCTGGCCAAGTGTCTGGATGAACGACAGCATGCACAAAGGAATGTG
GGGGAGAGAAGTCCTGACCAGTCGGAACACACAGATGGGCACACCTCTGTCCAGAGTGTTATTGAGAAGTTGCAG
GAAGAAAATCGACTGTTAAAACAGAAGGTGACTCACGTTGAAGACCTCAATGCCAAGTGGCAGCGCTACAACGCC
AGCAGGGACGAATACGTGAGGGGGCTCCATGCGCAGCTCAGGGGGCTGCAGATCCCCCACGAGCCCGAGCTGATG
AGGAAGGAGATCTCCCGGCTCAACAGACAGTTGGAAGAGAAAATAAATGACTGTGCCGAAGTGAAGCAGGAGCTG
GCGGCCTCCAGGACGGCCCGGGATGCTGCGTTGGAGCGGGTGCAGATGCTGGAACAGCAGATTCTCGCTTACAAG
GATGACTTCATGTCAGAAAGGGCCGATCGGGAACGGGCTCAAAGTAGGATTCAAGAACTGGAGGAAAAGGTCGCC
TCTTTGCTGCACCAGGTGTCCTGGAGACAGGATTCTCGAGAGCCAGACGCCGGCCGGATTCACGCTGGGAGCAAA
ACTGCCAAGTATTTGGCCGCCGACGCATTAGAGCTTATGGTGCCTGGTGGCTGGAGGCCTGGGACTGGGTCCCAG
CAGCCAGAACCCCCTGCAGAGGGCGGGCATCCTGGCGCGGTCCAGAGAGGCCAGGGGGACCTTCAGTGCCCTCAC
TGCCTGCAGTGCTTCAGTGACGAGCAAGGGGAAGAGCTCCTCAGGCATGTGGCCGAGTGCTGCCAGTGACCGAGA
CTCACCCGTGCCCTTGCGGCCTCCTGGCCCGGTGCAGCTGCCCTCAGGGACAGGGTGGGTGCTCTCAGATGCCAT
GGGTTGAGCTCTACTGAGAGCCAAGGCCCCTAGAATAGTTGCGGGGCACTCTGATCGTTCACTTTGGTCCCTTTG
GCTATGGAACAGGCTGGGTCACAGGGAACTGCCAGTGAGGCTGGAGGCTGGAGGTGGAGATGGGGTCAGGAACAT
CTGGCAGAGGGAGGTCCCAGTCTGTGTCTCCATCAGGCTTAAGCCAGAGCTATCTGGTGCTGGTGTGCCAGCCCC
TCCCCCAGCCTGCCTAGAAAGGGGTGGCTGCCTGAGGGAGTCACTTGTATGGTCCCCAGGGTGGGAGCCCCATCC
TGTTCTATGGAATAAAGCGTCGCCTCTCTGCCTCGAACCAGTCAAATGGAGTATTGCGGCTGCACGTCACACTAG
GGTGGCCACCCCCGCCATTGCGAGCCACATGTCTGCACTGAGAAACTGCATTTCAGTAGCATTTGTCATCCAGCC
GGAAGTTAAAGCACACTTACTTTATTCACCTATTTTTATAATAAACGTTCTTGCTGCTGTGACTGCAAAAAAAAA
AAAAAAAAAA

FIGURE 5338

MSSGDPRSGRQDGAPRAAAALCGLYHEAGQQLQRLKDQLAARDALIASLRTRLAALEGHTAPSLVDALLDQVERF
REQLRRQEEGASETQLRQEVERLTERLEEKEREMQQLMSQPQHEQEKEVVLLRRSVAEKEKARAASDVLCRSLAD
ETHQLRRTLAATAHMCQHLAKCLDERQCAQGDAGEKSPAELEQTSSDASGQSVIKKLQEENRLLKQKVTHVEDLN
AKWQRYDASRDEYVKGLHAQLKRRQVPLEPELMKKEISRLNRQLEEKISDCAEANQELTAMRMSRDTALERVQML
EQQILAYKDDFKSERADRERAHSRIQELEEKIMSLMYQVSQRQDSREPGPCRIHTGNKTAKYLEMDALEHVTPGG
WRPESRSQQMEPSAEGGHVCTAQRGQGDLQCPHCLRCFSDEQGEAFLRHLSECCQ

FIGURE 5339A

CCAGCCGTGTGTGATGAGTGGCCACACCTTGCCTCCTCTTCCCGTCCCAGGCACCAACAGCACAGAGCAGGCCAG
TGTACCCAGAGCCATGGCAGCCACGCTGGGAGCCGGCACGCCCCCCAGGCCCCAGGCCAGGAGCATAGCTGGGGT
GTATGTGGAGGCCTCGGGCCAGGCCCAGAGTGTCTACGCCGCCATGGAGCAGGGCCTCCTGCCTGCTGGGCTCGG
GCAGGCTCTGCTAGAGGCCCAGGCAGCCACTGGGGGCCTGGTGGACCTCGCCCGGGGCCAGCTGCTCCCTGTGTC
CAAGGCCCTGCAGCAGGGTCTGGTGGGGCTGGAGCTGAAGGAGAAGCTGCTGGCCGCTGAGCGTGCCACTACGGG
CTATCCTGACCCCTACGGCGGTGAGAAGCTGGCCCTCTTTCAGGCCATCGGGAAGGAGGTTGTGGACAGGGCCCT
GGGGCAGAGCTGGCTGGAGGTCCAACTGGCCACTGGGGGCCTGGTGGACCCCGCCCAGGGAGTGCTCGTGGCCCC
TGAGCCAGCCTGCCACCAGGGCCTCCTGGACCGGGAGACATGGCACAAGCTGTCAGAGCTTGAGCCTGGCACAGG
TGACCTGCGCTTCCTCAACCCCAACACGCTGGAGCGGCTGACATACCACCAGCTGCTGGAAAGGTGTGTGCGTGC
CCCCGGGTCGGGGCTAGCCTTGCTGCCCCTCAAGATCACCTTCCGCTCCATGGGCGGGGCGGTGAGTGCAGCTGA
GCTGCTGGAGGTGGGCATCCTGGACGAGCAGGCTGTGCAGGGTCTGCGGGAGGGCAGGCTGGCCGCAGTGGACGT
GAGTGCACGTGCCGAGGTGCGGCGCTACCTGGAGGGTACCGGCAGCGTGGCCGGGGTTGTCCTGCTGCCCGAAGG
CCACAAGAAGAGCTTTTTCCAGGCTGCCACCGAGCACCTGCTCCCAATGGGCACCGCGCTGCCACTCCTAGAGGC
CCAGGCTGCCACCCACACCCTGGTGGACCCCATCACAGGCCAGCGGCTGTGGGTAGACGAGGCAGTCAGGGCGGG
CCTGGTCAGCCCAGAGCTCCATGAGCAGCTCCTGGTGGCTGAGCAGGCCGTGACAGGGCACCACGACCCCTTCAG
TGGCTCCCAAATCCCCCTTTTCCAGGCCATGAAGAAGGGGCTAGTGGACAGGCCACTAGCACTGCGGCTCTTGGA
TGCCCAGCTGGCCACAGGCGGGCTGGTCTGTCCAGCACGCAGGCTCCGGCTGCCCCTGGAGGCCGCCCTGCGCTG
CGGCTGCCTGGATGAAGACACTCAGCGGCAGCTCTCGCAGGCTGGCAGCTTCTCAGACGGCACGCACGGCGGCCT
GCGCTATGAACAGCTGCTGGCCCTCTGTGTCACCGACCCAGAGACCGGGCTTGCCTTCCTGCCACTCTCAGGGGG
ACCCCGGGGAGGGGAGCCCCAGGGACCCCCATTCATCAAGTACAGCACTCGGCAGGCCCTGAGCACGGCCACAGC
CACCGTCTCTGTGGGGAAGTTCCGGGGCCGGCCCGTGTCCCTCTGGGAGCTGCTCTTCTCTGAGGCCATCTCCTC
AGAGCAGAGGGCGATGCTGGCCCAGCAGTACCAGGAAGGGACCCTCTCCGTGGAGAAGCTGGCCGCTGAGCTGAG
CGCCACCCTTGAGCAGGCTGCAGCCACTGCCAGGGTCACCTTTTCTGGGCTGAGGGACACCGTGACACCAGGAGA
GCTGCTGAAAGCCGAGATCATCGACCAGGACCTGTACGAGCGGTTGGAGCATGGACAGGCCACAGCCAAGGATGT
GGGCAGCCTGGCCTCGGCGCAGAGGTACCTGCAGGGTACGGGCTGCATTGCTGGCCTGCTGCTCCCTGGCTCCCA
GGAACGCCTGAGCATCTATGAGGCCCGATGCAAGGGGCTCCTCCGGCCCGGCACTGCCCTCATCCTTCTGGAGGC
ACAAGCTGCCACAGGCTTCATCATCGACCCAAAAGCAAACAAGGGGCACTCCGTTGAGGAGGCACTGAGGGCTGC
TGTCATTGGGCCTGATGTGTTCGCGAAGCTGCTGTCGGCTGAGCGCGCTGTCACTGGCTACACTGACCCCTACAC
CGGGCAGCAGATCTCCCTCTTCCAGGCCATGCAGAAGGGCCTCATCGTCCGGGAGCACGGCATCCGCCTGCTGGA
GGCCCAGATCGCCACGGGCGGCGTCATCGACCCCGTGCACAGCCACCGCGTGCCCGTGGACGTGGCCTACCGGCG
CGGCTACTTCGATCAGATGCTGAACTTGATCCTGTTGGACCCTTCTGACGACACCAAGGGCTTCTTCGACCCCAA
CACGCACGAGAACCTCACGTACCTGCAGCTTCTGGAGCGCTGTGTGCGTGACCCCGAGACGGGCCTGTACCTCCT
GCCACTCAGCAGCACGCAGTCCCCGCTGGTGGACAGTGCCACCCAGCAGGCCTTCCAGAACCTGCTGCTCTCCGT
GAAGTATGGACGGTTTCAGGGGCAGAGGGTCTCCGCGTGGGAGCTGATCAACTCTGAGTACTTCAGCGAGGGCCG
CAGGAGGCAGCTGCTGCGTCGCTACCGGCAGCGCGAGGTCACGCTGGGGCAGGTGGCAAAGCTGCTGGAGGCGGA
GACGCAGAGACAGGCGGACATCATGCTGCCCGCACTGCGGAGCCGGGTCACCGTCCACCAGCTCCTGGAGGCCGG
TATCATTGACCAGCAGCTGTTGGACCAAGTGCTGGCCGGGACAATCAGCCCGGAGGCCCTCCTACTCATGGACGG
CGTCCGCAGGTACCTGTGCGGCCTGGGAGCTGTGGGCGGTGTGCGGCTGCTGCCCTCTGGCCAGCGGCTCAGCCT
CTACCAGGCCATGAGGCAGAAGCTGCTGGGGCCCAGGGTGGCCCTGGCCCTGCTGGAGGCCCAGGCGGCCACCGG
AACCATCATGGACCCTCACAGCCCAGAGAGCCTCTCGGTGGATGAGGCCGTGCGCAGGGGTGTGGTGGGGCCGGA
GCTGTATGGCAGGCTGAAGCGGGCTGAGGGTGCCATTGCTGGCTTCAGAGACCCCTTCTCTGGGAAGCAGGTGTC
TGTGTTCCAGGCCATGAAGAAAGGTCTCATCCCTTGGGAGCAAGCTGCCCGCCTCCTGGAGGCTCAAGTGGCCAC
AGGAGGGATCATTGACCCCACCAGCCACCACCACCTCCCCATGCCAGTGGCCATTCAGCGTGGCTATGTTGACCA
GGAGATGGAGACAGCCTTGTCCAGCTCCTCCGAGACCTTCCCCACACCGGACGGCCAGGGGCGCACGAGCTATGC
CCAGCTCCTGGAGGAGTGCCCCAGGGATGAGACTTCTGGCCTTCACCTCCTGCCCCTGCCAGAAAGTGCTCCTGC
CCTCCCCACCGAGGAGCAGGTCCAGAGGAGCCTGCAGGCCGTGCCGGGGGCCAAGGATGGCACATCCCTCTGGGA
CCTGCTCAGCTCCTGCCACTTCACCGAGGAGCAACGGAGGGGCCTGCTGGAGGACGTGCAGGAGGGGAGGACCAC
TGTGCCACAGCTGCTAGCCTCTGTGCAGAGGTGGGTACAGGAGACCAAGCTTCTGGCCCAGGCCCGCGTCATGGT

FIGURE 5339B

GCCCGGCCCACGGGGTGAGGTACCCGCTGTCTGGCTGCTGGATGCTGGCATCATCACCCAGGAGACCCTTGAGGC
CCTGGCTCAGGGCACGCAGTCGCCCGCCCAGGTCGCCGAGCAGCCGGCGGTGAAGGCCTGCCTGTGGGGCACAGG
CTGCGTGGCCGGTGTGCTGCTACAGCCCTCTGGGGCCAAGGCCAGCATCGCCCAGGCCGTGAGGGATGGCCTCCT
GCCCACAGGCCTGGGCCAGAGGCTGCTGGAAGCCCAGGTGGCATCTGGCTTCCTTGTTGACCCCCTGAACAACCA
GAGACTGTCAGTGGAGGACGCGGTTAAGGTCGGCCTGGTGGGCAGGGAGCTGAGTGAGCAGCTCGGGCAGGCCGA
GAGGGCGGCGGCCGGGTACCCAGATCCCTACTCTAGGGCCTCCCTCTCTCTGTGGCAGGCCATGGAGAAGGGGCT
CGTGCCACAGAACGAGGGCTTGCCCCTCCTGCAGGTGCAGCTGGCCACAGGGGGTGTGGTGGACCCTGTCCACGG
GGTGCACCTGCCCCAGGCGGCAGCCTGCAGACTCGGCCTTCTGGACACACAGACGAGCCAGGTGCTGACTGCAGT
TGACAAGGACAACAAGTTCTTCTTTGACCCCAGTGCGCGGGACCAGGTGACCTACCAGCAGCTCAGGGAGCGCTG
CGTGTGCGACTCCGAGACCGGATTGTTGCTGTTGCCACTGCCTTCAGACACAGTGCTTGAGGTGGACGACCACAC
CGCGGTGGCTCTGAGGGCCATGAAGGTGCCCGTCAGCACAGGGAGGTTTAAGGGGTGTAGCGTGTCACTCTGGGA
CCTGCTGCTCTCCGAATACGTTGGCGCTGACAAGCGGCGGGAGCTGGTGGCACTCTGTCGGTCTGGGAGGGCTGC
GGCCCTGCGGCAGGTGGTCAGCGCAGTCACCGCCCTGGTCGAGGCTGCAGAGAGGCAGCCCCTGCAGGCCACCTT
CAGAGGGCTCCGGAAGCAGGTGTCAGCCAGGGACCTGTTCAGGGCGCAGCTGATCAGCAGGAAGACGCTGGACGA
GCTGAGCCAGGGGACAACGACTGTGAAGGAGGTGGCGGAGATGGACAGCGTGAAGCGGTCCCTGGAGGGAGGCAA
CTTCATTGCCGGGGTCCTTATCCAGGGCACCCAGGAGAGGATGAGCATCCCAGAGGCCCTGAGGAGGCACATCCT
GCGGCCTGGCACAGCCCTGGTGCTGCTGGAGGCACAGGCAGCTACCGGCTTCATCATCGACCCCGCGGAGAACCG
GAAGCTGACCGTGGAGGAGGCGTTCAAAGCAGGAATGTTCGGGAAAGAAACCTACGTGAAGCTGCTGTCGGCCGA
GCGCGCCGTCACCGGCTACACCGACCCCTATACCGGGCAGCAGATCTCCCTCTTCCAGGCCATGCAGAAGGACCT
CATCGTCCGGGAGCACGGCATCCGCCTGCTGGAGGCCCAGATCGCCACGGGCGGCATCATCGACCCCGTGCACAG
CCACCGCGTGCCCGTGGACGTGGCCTACCGCTGCGGCTACTTCGACGAGGAGATGAACCGCATCCTGGCGGACCC
CAGCGACGACACCAAGGGCTTCTTCGACCCCAACACGCACGAGAACCTCACGTACCTGCAGCTTCTGGAGCGCTG
TGTGGAGGACCCCGAGACGGGCCTGTACCTGCTACAAATCATAAAGAAAGGAGAAAACTACGTGTACATCAATGA
GGCCACGAGACACGTGTTGCAATCCAGAACTGCAAAAATGCGCGTGGGGAGGTTTGCTGACCAGGTGGTCTCTTT
CTGGGACCTGCTGTCCTCTCCATACTTCACAGAGGACAGGAAGCGGGAGCTCATCCAGGAGTATGGAGCCCAGAG
TGGGGGCCTGGAGAAATTGCTGGAAATCATCACCACGACAATTGAAGAAACAGAGACGCAAAACCAAGGCATCAA
AGTGGCGGCCATCAGAGGGGAGGTGACAGCTGCAGACCTGTTCAACTCCAGGGTCATCGATCAGAAGACCCTGCA
CACACTTCGTGTGGGGAGGACTGGGGGACAGGCACTCAGCACGCTGGAGTGTGTGAAGCCCTATCTGGAAGGCAG
CGACTGCATTGCGGGGGTCACGGTGCCCTCCACCAGGGAGGTCATGAGCCTCCATGAGGCCAGCAGGAAGGAGCT
CATCCCTGCAGCATTTGCGACTTGGCTGCTGGAGGCGCAGGCCGCCACCGGGTTCCTCCTGGACCCCTGCACCCG
CCAGAAGCTCTCTGTGGATGAGGCTGTGGATGTGGGCCTGGTGAACGAGGAGCTGCGGGAGAGGCTCCTGAAGGC
TGAAAGAGCTGCCACGGGCTACAGGGATCCGGCCACAGGAGACACGATCCCGCTGTTCCAGGCCATGCAGAAGCA
GCTCATCGAGAAGGCGGAGGCACTGAGGCTGCTGGAGGTGCAGGTGGCCACGGGGGGTGTCATCGACCCACAGCA
CCACCACCGGCTCCCACTGGAAACAGCCTACAGACGGGGCTGTCTGCACAAGGACATCTATGCGCTCATTTCCGA
CCAGAAGCACATGAGGAAACGGTTTGTGGACCCGAACACGCAAGAGAAGGTCTCGTACCGAGAGCTGCAGGAGAG
GTGCCGCCCACAAGAGGACACGGGCTGGGTGCTGTTCCCAGTGAACAAGGCTGCACGGGACTCCGAGCACATCGA
TGACGAGACGAGAAGGGCCCTGGAGGCAGAGCAAGTGGAAATCACAGTGGGAAGGTTCAGAGGCCAGAAACCAAC
ACTGTGGGCACTACTGAATTCCGAATACGTGACAGAGGAGAAGAAGCTCCAGCTGGTGAGGATGTATAGAACACA
CACCAGACGGGCACTGCAGACGGTAGCGCAGCTCATCTTAGAGTTGATCGAGAAGCAGGAAACCAGCAACAAACA
CCTGTGGTTCCAAGGAATTAGACGACAGATCACAGCTTCTGAACTCCTCAGCTCAGCCATAATCACGGAGGAAAT
GCTCCAGGACCTGGAAACGGGACGGAGCACGACGCAAGAGCTCATGGAGGACGACCGCGTCAAGCGCTACCTGGA
GGGCACCAGCTGCATCGCGGGCGTCCTGGTGCCCGCCAAGGACCAGCCCGGCCGCCAGGAGAAGATGAGCATCTA
CCAGGCCATGTGGAAGGGCGTGCTGCGGCCCGGCACGGCCCTGGTGCTGCTGGAGGCGCAGGCGGCCACCGGCTT
CGTCATCGACCCCGTGCGCAACCTGAGGCTGTCGGTGGAGGAGCCCGTGCCCGCGGGCGTGGTGGGCAGCGAGAT
CCAGGAGAAGCTGCTGTCGGCCGAGCGCGCCGTCACCGGCTACACCGACCCCTACACCGGGCAGCAGATCTCCCT
CTTCCAGGCCATGCAGAAGGACCTCATCGTCCGGGAGCACGGCATCCGCCTGCTGGAGGCCCAGATCGCCACGGG
CGGCGTCATCGACCCCGTGCACAGCCACCGCGTGCCCGTGGACGTGGCCTACCGGCGCGGCTACTTCGACGAGGA
GATGAACCGTGTCCTGGCCGACCCCAGCGACGACACCAAGGGTTTCTTCGACCCCAACACGCACGAGAACCTCAC

FIGURE 5339C

GTACGTGCAGCTGCTGCGCCGCTGCGTGCCCGACCCGGACACCGGGCTCTACATGCTGCAGCTGGCAGGCCGGGG
CTCCGCCGTGCACCAGCTGAGCGAGGAGCTGCGCTGTGCCCTGCGCGACGCCCGCGTGACGCCAGGCTCGGGCGC
CCTCCAGGGCCAGAGCGTCTCCGTCTGGGAGCTCCTCTTCTACCGCGAGGTGTCCGAGGACCGGCGCCAGGACCT
GCTGAGCAGATACCGGGCGGGCACGCTGACCGTGGAGGAGCTGGGCGCCACCCTCACCTCGCTGCTGGCCCAGGC
CCAGGCCCAGGCCCGGGCCGAGGCCGAGGCCGGGAGCCCGCGCCCAGACCCCCGGGAGGCCCTGCGTGCGGCCAC
CATGGAGGTCAAGGTGGGCCGCCTCCGGGGGCGCGCGGTGCCCGTGTGGGACGTGCTGGCGTCCGGCTACGTGAG
CAGGGCCGCCCGGGAGGAGCTGCTGGCCGAGTTTGGCTCGGGGACCCTGGACTTGCCCGCGCTGACCCGCCGGCT
GACCGCCATCATCGAGGAGGCCGAGGAAGCCCCCGGGGCCCGGCCGCAGCTCCAGGACGCCAGGCGCGGCCCGCG
GGAGCCAGGGCCAGCCGGGCGAGGGGACGGCGACTCGGGGCGCTCCCAGCGAGAGGGCCAGGGGGAGGGCGAGAC
CCAGGAGGCCGCCGCCGCCGCCGCCGCCGCCCGCCGCCAGGAGCAGACCCTGCGTGATGCCACCATGGAGGTGCA
GCGCGGGCAGTTCCAGGGGCGGCCGGTCTCCGTGTGGGACGTCCTCTTCTCCTCGTACCTGAGCGAGGCCCGCCG
AGACGAGCTCCTGGCCCAGCACGCGGCCGGCGCCCTGGGCCTGCCCGACCTCGTCGCCGTCCTCACCCGGGTCAT
CGAGGAGACGGAGGAGCGGCTCAGCAAGGTGTCCTTCCGCGGCCTGAGGCGCCAGGTGTCCGCCTCCGAGCTGCA
CACGTCCGGGATCCTGGGCCCCGAGACCCTGCGGGACCTGGCCCAGGGCACTAAGACGCTGCAGGAGGTGACGGA
GATGGACTCGGTCAAGCGCTACCTGGAGGGCACCAGCTGCATCGCGGGCGTCCTGGTGCCCGCCAAGGACCAGCC
CGGCCGCCAGGAGAAGATGAGCATCTACCAGGCCATGTGGAAGGGCGTGCTGCGGCCCGGCACGGCCCTGGTGCT
GCTGGAGGCGCAGGCGGCCACCGGCTTCGTCATCGACCCCGTGCGCAACCTGAGGCTGTCGGTGGAGGAGGCCGT
GGCCGCGGGCGTGGTGGGCGGCGAGATCCAGGAGAAGCTGCTGTCGGCCGAGCGCGCCGTCACCGGCTACACCGA
CCCCTACACCGGGCAGCAGATCTCCCTCTTCCAGGCCATGCAGAAGGACCTCATCGTCCGGGAGCACGGCATCCG
CCTGCTGGAGGCCCAGATCGCCACGGGCGGCGTCATCGACCCCGTGCACAGCCACCGCGTGCCCGTGGACGTGGC
CTACCGGCGCGGCTACTTCGACGAGGAGATGAACCGTGTCCTGGCCGACCCCAGCGACGACACCAAGGGTTTCTT
CGACCCCAACACGCACGAGAACCTCACGTACGTGCAGCTGCTGCGCCGCTGCGTGCCCGACCCGGACACCGGGCT
CTACATGCTGCAGCTGGCAGGCCGGGGCTCCGCCGTGCACCAGCTGAGCGAGGAGCTGCGCTGTGCCCTGCGCGA
CGCCCGCGTGACGCCAGGCTCGGGCGCCCTCCAGGGCCAGAGCGTCTCCGTCTGGGAGCTCCTCTTCTACCGCGA
GGTGTCCGAGGACCGGCGCCAGGACCTGCTGAGCAGATACCGGGCGGGCACGCTGACCGTGGAGGAGCTGGGCGC
CACCCTCACCTCGCTGCTGGCCCAGGCCCAGGCCCAGGCCCGGGCCGAGGCCGAGGCCGGGAGCCCGCGCCCAGA
CCCCCGGGAGGCCCTGCGTGCGGCCACCATGGAGGTCAAGGTGGGCCGCCTCCGGGGGCGCGCGGTGCCCGTGTG
GGACGTGCTGGCGTCCGGCTACGTGAGCGGGGCCGCCCGGGAGGAGCTGCTGGCCGAGTTTGGCTCGGGGACCCT
GGACTTGCCCGCGCTGACCCGCCGGCTGACCGCCATCATCGAGGAGGCCGAGGAGGCCCCCGGGGCCCGGCCGCA
GCTCCAGGACGCCTGGCGCGGCCCGCGGGAGCCAGGGCCAGCCGGGCGAGGGGACGGCGACTCGGGGCGCTCCCA
GCGAGAGGGCCAGGGGGAGGGCGAGACCCAGGAGGCCGCCGCCGCCGCCGCCGCCCGCCGCCAGGAGCAGAC
CCTGCGTGATGCCACCATGGAGGTGCAGCGCGGGCAGTTCCAGGGGCGGCCGGTCTCCGTGTGGGACGTCCTCTT
CTCCTCGTACCTGAGCGAGGCCCGCCGAGACGAGCTCCTGGCCCAGCACGCGGCCGGCGCCCTGGGCCTGCCCGA
CCTCGTCGCCGTCCTCACCCGGGTCATCGAGGAGACGGAGGAGCGGCTCAGCAAGGTGTCCTTCCGCGGCCTGAG
GCGCCAGGTGTCCGCCTCCGAGCTGCACACGTCCGGGATCCTGGGCCCCGAGACCCTGCGGGACCTGGCCCAGGG
CACTAAGACGCTGCAGGAGGTGACGGAGATGGACTCGGTCAAGCGCTACCTGGAGGGCACCAGCTGCATCGCGGG
CGTCCTGGTGCCCGCCAAGGACCAGCCCGGCCGCCAGGAGAAGATGAGCATCTACCAGGCCATGTGGAAGGGCGT
GCTGCGGCCCGGCACGGCCCTGGTGCTGCTGGAGGCGCAGGCGGCCACCGGCTTCGTCATCGACCCCGTGCGCAA
CCTGAGGCTGTCGGTGGAGGAGGCCGTGGCCGCGGGCGTGGTGGGCGGCGAGATCCAGGAGAAGCTGCTGTCGGC
CGAGCGCGCCGTCACCGGCTACACCGACCCCTACACCGGGCAGCAGATCTCCCTCTTCCAGGCCATGCAGAAGGA
CCTCATCGTCCGGGAGCACGGCATCCGCCTGCTGGAGGCCCAGATCGCCACGGGCGGCGTCATCGACCCCGTGCA
CAGCCACCGCGTGCCCGTGGACGTGGCCTACCGGCGCGGCTACTTCGACGAGGAGATGAACCGTGTCCTGGCCGA
CCCCAGCGACGACACCAAGGGTTTCTTCGACCCCAACACGCACGAGAACCTCACGTACGTGCAGCTGCTGCGCCG
CTGCGTGCCCGACCCGGACACCGGGCTCTACATGCTGCAGCTGGCAGGCCGGGGCTCCGCCGTGCACCAGCTGAG
CGAGGAGCTGCGCTGTGCCCTGCGCGACGCCCGCGTGACGCCAGGCTCGGGCGCCCTCCAGGGCCAGAGCGTCTC
CGTCTGGGAGCTCCTCTTCTACCGCGAGGTGTCCGAGGACCGGCGCCAGGACCTGCTGAGCAGATACCGGGCGGG
CACGCTGACCGTGGAGGAGCTGGGCGCCACCCTCACCTCGCTGCTGGCCCAGGCCCAGGCCCAGGCCCGGGCCGA
GGCCGAGGCCGGGAGCCCGCGCCCAGACCCCCGGGAGGCCCTGCGTGCGGCCACCATGGAGGTCAAGGTGGGCCG

FIGURE 5339D

CCTCCGGGGGCGCGCGGTGCCCGTGTGGGACGTGCTGGCGTCCGGCTACGTGAGCGGGGCCGCCCGGGAGGAGCT
GCTGGCCGAGTTTGGCTCGGGGACCCTGGACTTGCCCGCGCTGACCCGCCGGCTGACCGCCATCATCGAGGAGGC
CGAGGAGGCCCCCGGGGCCCGGCCGCAGCTCCAGGACGCCTGGCGCGGCCCGCGGGAGCCAGGGCCAGCCGGGCG
AGGGGACGGCGACTCGGGGCGCTCCCAGCGAGAGGGCCAGGGGGAGGGCGAGACCCAGGAGGCCGCCGCCGCCGC
CGCCGCCGCCCGCCGCCAGGAGCAGACCCTGCGTGATGCCACCATGGAGGTGCAGCGCGGGCAGTTCCAGGGGCG
GCCGGTCTCCGTGTGGGACGTCCTCTTCTCCTCGTACCTGAGCGAGGCCCGCCGAGACGAGCTCCTGGCCCAGCA
CGCGGCCGGCGCCCTGGGCCTGCCCGACCTCGTCGCCGTCCTCACCCGGGTCATCGAGGAGACGGAGGAGCGGCT
CAGCAAGGTGTCCTTCCGCGGCCTGAGGCGCCAGGTGTCCGCCTCCGAGCTGCACACGTCCGGGATCCTGGGCCC
CGAGACCCTGCGGGACCTGGCCCAGGGCACTAAGACGCTGCAGGAGGTGACGGAGATGGACTCGGTCAAGCGCTA
CCTGGAGGGCACCAGCTGCATCGCGGGCGTCCTGGTGCCCGCCAAGGACCAGCCCGGCCGCCAGGAGAAGATGAG
CATCTACCAGGCCATGTGGAAGGGCGTGCTGCGGCCCGGCACGGCCCTGGTGCTGCTGGAGGCGCAGGCGGCCAC
CGGCTTCGTCATCGACCCCGTGCGCAACCTGAGGCTGTCGGTGGAGGAGGCCGTGGCCGCGGGCGTGGTGGGCGG
CGAGATCCAGGAGAAGCTGCTGTCGGCCGAGCGCGCCGTCACCGGCTACACCGACCCCTACACCGGGCAGCAGAT
CTCCCTCTTCCAGGCCATGCAGAAGGACCTCATCGTCCGGGAGCACGGCATCCGCCTGCTGGAGGCCCAGATCGC
CACGGGCGGCGTCATCGACCCCGTGCACAGCCACCGCGTGCCCGTGGACGTGGCCTACCGGCGCGGCTACTTCGA
CGAGGAGATGAACCGTGTCCTGGCCGACCCCAGCGACGACACCAAGGGCTTCTTCGACCCCAACACGCACGAGAA
CCTCACGTACGTGCAGCTGCTGCGCCGCTGCGTGCCCGACCCGGACACCGGGCTCTACATGCTGCAGCTGGCAGG
CCGGGGCTCCGCCGTGCACCAGCTGAGCGAGGAGCTGCGCTGTGCCCTGCGCGACGCCCGCGTGACGCCAGGCTC
GGGCGCCCTCCAGGGCCAGAGCGTCTCCGTCTGGGAGCTCCTCTTCTACCGCGAGGTGTCCGAGGACCGGCGCCA
GGACCTGCTGAGCAGATACCGGGCGAGCACGCTGACCGTGGAGGAGCTGGGCGCCACCCTCACCTCGCTGCTGGC
CCAGGCCCAGGCCCAGGCCCGGGCCGAGGCCGAGGCCGGGAGCCCGCGCCCAGACCCCCGGGAGGCCCTGCGTGC
GGCCACCATGGAGGTCAAGGTGGGCCGCCTCCGGGGGCGCGCGGTGCCCGTGTGGGACGTGCTGGCGTCCGGCTA
CGTGAGCAGGGCCGCCCGGGAGGAGCTGCTGGCCGAGTTTGGCTCGGGGACCCTGGACTTGCCCGCGCTGACCCG
CCGGCTGACCGCCATCATCGAGGAGGCCGAGGAGGCCCCCGGGGCCCGGCCGCAGCTCCAGGACGCCTGGCGCGG
CCCGCGGGAGCCAGGGCCAGCCGGGCGAGGGGACGGCGACTCGGGGCGCTCCCAGCGAGAGGGCCAGGGGGAGGG
CGAGACCCAGGAGGCCGCCGCCGCCACCGCCGCCGCCCGCCGCCAGGAGCAGACCCTGCGTGATGCCACCATGGA
GGTGCAGCGCGGGCAGTTCCAGGGGCGGCCGGTCTCCGTGTGGGACGTCCTCTTCTCCTCGTACCTGAGCGAGGC
CCGCCGAGACGAGCTCCTGGCCCAGCACGCGGCCGGCGCCCTGGGCCTGCCCGACCTCGTCGCCGTCCTCACCCG
GGTCATCGAGGAGACGGAGGAGCGGCTCAGCAAGGTGTCCTTCCGCGGCCTGAGGCGCCAGGTGTCCGCCTCCGA
GCTGCACACGTCCGGGATCCTGGGCCCCGAGACCCTGCGGGACCTGGCCCAGGGCACTAAGACGCTGCAGGAGGT
GACGGAGATGGACTCGGTCAAGCGCTACCTGGAGGGCACCAGCTGCATCGCGGGCGTCCTGGTGCCCGCCAAGGA
CCAGCCCGGCCGCCAGGAGAAGATGAGCATCTACCAGGCCATGTGGAAGGGCGTGCTGCGGCCCGGCACGGCCCT
GGTGCTGCTGGAGGCGCAGGCGGCCACCGGCTTCGTCATCGACCCCGTGCGCAACCTGAGGCTGTCGGTGGAGGA
GGCCGTGGCCGCGGGCGTGGTGGGCGGCGAGATCCAGGAGAAGCTGCTGTCGGCCGAGCGCGCCGTCACCGGCTA
CACCGACCCCTACACCGGGCAGCAGATCTCCCTCTTCCAGGCCATGCAGAAGGACCTCATCGTCCGGGAGCACGG
CATCCGCCTGCTGGAGGCCCAGATCGCCACGGGCGGCGTCATCGACCCCGTGCACAGCCACCGCGTGCCCGTGGA
CGTGGCCTACCGGCGCGGCTACTTCGACGAGGAGATGAACCGTGTCCTGGCCGACCCCAGCGACGACACCAAGGG
CTTCTTCGACCCCAACACGCACGAGAACCTCACGTACGTGCAGCTGCTGCGCCGCTGCGTGCCCGACCCGGACAC
CGGGCTCTACATGCTGCAGCTGGCAGGCCGGGGCTCCGCCGTGCACCAGCTGAGCGAGGAGCTGCGCTGTGCCCT
GCGCGACGCCCGCGTGACGCCAGGCTCGGGCGCCCTCCAGGGCCAGAGCGTCTCCGTCTGGGAGCTCCTCTTCTA
CCGCGAGGTGTCCGAGGACCGGCGCCAGGACCTGCTGAGCAGATACCGGGCGGGCACGCTGACCGTGGAGGAGCT
GGGCGCCACCCTCACCTCGCTGCTGGCCCAGGCCCAGGCCCAGGCCCGGGCCGAGGCCGAGGCCGGGAGCCCGCG
CCCAGACCCCCGGGAGGCCCTGCGTGCGGCCACCATGGAGGTCAAGGTGGGCCGCCTCCGGGGGCGCGCGGTGCC
CGTGTGGGACGTGCTGGCGTCCGGCTACGTGAGCGGGGCCGCCCGGGAGGAGCTGCTGGCCGAGTTTGGCTCGGG
GACCCTGGACTTGCCCGCGCTGACCCGCCGGCTGACCGCCATCATCGAGGAGGCCGAGGAGGCCCCCGGGGCCCG
GCCGCAGCTCCAGGACGCCTGGCGCGGCCCGCGGGAGCCAGGGCCAGCCGGGCGAGGGGACGGCGACTCGGGGCG
CTCCCAGCGAGAGGGCCAGGGGGAGGGCGAGACCCAGGAGGCCGCCGCCGCCGCCGCCCGCCGCCAGGA
GCAGACCCTGCGTGATGCCACCATGGAGGTGCAGCGCGGGCAGTTCCAGGGGCGGCCGGTCTCCGTGTGGGACGT

FIGURE 5339E

CCTCTTCTCCTCGTACCTGAGCGAGGCCCGCCGAGACGAGCTCCTGGCCCAGCACGCGGCCGGCGCCCTGGGCCT
GCCCGACCTCGTCGCCGTCCTCACCCGGGTCATCGAGGAGACGGAGGAGCGGCTCAGCAAGGTGTCCTTCCGCGG
CCTGAGGCGCCAGGTGTCCGCCTCCGAGCTGCACACGTCCGGGATCCTGGGCCCCGAGACCCTGCGGGACCTGGC
CCAGGGCACTAAGACGCTGCAGGAGGTGACGGAGATGGACTCGGTCAAGCGCTACCTGGAGGGCACCAGCTGCAT
CGCGGGCGTCCTGGTGCCCGCCAAGGACCAGCCCGGCCGCCAGGAGAAGATGAGCATCTACCAGGCCATGTGGAA
GGGCGTGCTGCGGCCCGGCACGGCCCTGGTGCTGCTGGAGGCGCAGGCGGCCACCGGCTTCGTCATCGACCCCGT
GCGCAACCTGAGGCTGTCGGTGGAGGAGGCCGTGGCCGCGGGCGTGGTGGGCGGCGAGATCCAGGAGAAGCTGCT
GTCGGCCGAGCGCGCCGTCACCGGCTACACCGACCCCTACACCGGGCAGCAGATCTCCCTCTTCCAGGCCATGCA
GAAGGACCTCATCGTCCGGGAGCACGGCATCCGCCTGCTGGAGGCCCAGATCGCCACGGGCGGCGTCATCGACCC
CGTGCACAGCCACCGCGTGCCCGTGGACGTGGCCTACCGGCGCGGCTACTTCGACGAGGAGATGAACCGCGTCCT
GGCCGACCCCAGCGACGACACCAAGGGCTTCTTCGACCCCAACACGCACGAGAACCTCACGTACCTGCAGCTTCT
GCAGAGGGCCACCCTGGACCCTGAGACGGGGCTCCTATTTCTTTCTCTCTCTCTACAGTGACTGGGCTTCCTCCG
TGCAGTTTTCTGCAACTCTGGAGAAGTTGAGGCATACTTGTGTGTCTGGGTTGTTTTTTTTTTTTTTGTCATTC
TTTAATTTTGTTGTTTTACCCATTCGTTATCTGTGGAAAACGTTTTAAGTTGTCATGTGACAGAAACTTTTCCTT
TGTCCATCGAGGTGTTTCATAAGTTTTTTGGTGTGTTTTCTGGGTCGTCTATGTGTCATATGGTTTTACTTTTCT
CCCGGAATT

FIGURE 5340

MAATLGAGTPPRPQARSIAGVYVEASGQAQSVYAAMEQGLLPAGLGQALLEAQAATGGLVDLARGQLLPVSKALQ
QGLVGLELKEKLLAAERATTGYPDPYGGEKLALFQAIGKEVVDRALGQSWLEVQLATGGLVDPAQGVLVAPEPAC
HQGLLDRETWHKLSELEPGTGDLRFLNPNTLERLTYHQLLERCVRAPGSGLALLPLKITFRSMGGAVSAAELLEV
GILDEQAVQGLREGRLAAVDVSARAEVRRYLEGTGSVAGVVLLPEGHKKSFFQAATEHLLPMGTALPLLEAQAAT
HTLVDPITGQRLWVDEAVRAGLVSPELHEQLLVAEQAVTGHHDPFSGSQIPLFQAMKKGLVDRPLALRLLDAQLA
TGGLVCPARRLRLPLEAALRCGCLDEDTQRQLSQAGSFSDGTHGGLRYEQLLALCVTDPETGLAFLPLSGGPRGG
EPQGPPFIKYSTRQALSTATATVSVGKFRGRPVSLWELLFSEAISSEQRAMLAQQYQEGTLSVEKLAAELSATLE
QAAATARVTFSGLRDTVTPGELLKAEIIDQDLYERLEHGQATAKDVGSLASAQRYLQGTGCIAGLLLPGSQERLS
IYEARCKGLLRPGTALILLEAQAATGFIIDPKANKGHSVEEALRAAVIGPDVFAKLLSAERAVTGYTDPYTGQQI
SLFQAMQKGLIVREHGIRLLEAQIATGGVIDPVHSHRVPVDVAYRRGYFDQMLNLILLDPSDDTKGFFDPNTHEN
LTYLQLLERCVRDPETGLYLLPLSSTQSPLVDSATQQAFQNLLLSVKYGRFQGQRVSAWELINSEYFSEGRRRQL
LRRYRQREVTLGQVAKLLEAETQRQADIMLPALRSRVTVHQLLEAGIIDQQLLDQVLAGTISPEALLLMDGVRRY
LCGLGAVGGVRLLPSGQRLSLYQAMRQKLLGPRVALALLEAQAATGTIMDPHSPESLSVDEAVRRGVVGPELYGR
LKRAEGAIAGFRDPFSGKQVSVFQAMKKGLIPWEQAARLLEAQVATGGIIDPTSHHHLPMPVAIQRGYVDQEMET
ALSSSSETFPTPDGQGRTSYAQLLEECPRDETSGLHLLPLPESAPALPTEEQVQRSLQAVPGAKDGTSLWDLLSS
CHFTEEQRRGLLEDVQEGRTTVPQLLASVQRWVQETKLLAQARVMVPGPRGEVPAVWLLDAGIITQETLEALAQG
TQSPAQVAEQPAVKACLWGTGCVAGVLLQPSGAKASIAQAVRDGLLPTGLGQRLLEAQVASGFLVDPLNNQRLSV
EDAVKVGLVGRELSEQLGQAERAAAGYPDPYSRASLSLWQAMEKGLVPQNEGLPLLQVQLATGGVVDPVHGVHLP
QAAACRLGLLDTQTSQVLTAVDKDNKFFFDPSARDQVTYQQLRERCVCDSETGLLLLPLPSDTVLEVDDHTAVAL
RAMKVPVSTGRFKGCSVSLWDLLLSEYVGADKRRELVALCRSGRAAALRQVVSAVTALVEAAERQPLQATFRGLR
KQVSARDLFRAQLISRKTLDELSQGTTTVKEVAEMDSVKRSLEGGNFIAGVLIQGTQERMSIPEALRRHILRPGT
ALVLLEAQAATGFIIDPAENRKLTVEEAFKAGMFGKETYVKLLSAERAVTGYTDPYTGQQISLFQAMQKDLIVRE
HGIRLLEAQIATGGIIDPVHSHRVPVDVAYRCGYFDEEMNRILADPSDDTKGFFDPNTHENLTYLQLLERCVEDP
ETGLYLLQIIKKGENYVYINEATRHVLQSRTAKMRVGRFADQVVSFWDLLSSPYFTEDRKRELIQEYGAQSGGLE
KLLEIITTTIEETETQNQGIKVAAIRGEVTAADLFNSRVIDQKTLHTLRVGRTGGQALSTLECVKPYLEGSDCIA
GVTVPSTREVMSLHEASRKELIPAAFATWLLEAQAATGFLLDPCTRQKLSVDEAVDVGLVNEELRERLLKAERAA
TGYRDPATGDTIPLFQAMQKQLIEKAEALRLLEVQVATGGVIDPQHHHRL

FIGURE 5341

GGAGGCCGAGGAGGCCCCCGGGGCCCGGCCGCAGCTCCAGGACGCCTGGCGCGGCCCGCGGGAGCCAGGGCCAGC
CGGGCGAGGGGACGGCGACTCGGGGCGCTCCCAGCGAGAGGGCCAGGGGGAGGGCGAGACCCAGGAGGCCGCCGC
CGCCGCCCGCCGCCAGGAGCAGACCCTGCGTGATGCCACCATGGAGGTGCAGCGCGGGCAGTTCCAGGGGCGGCC
GGTCTCCGTGTGGGACGTCCTCTTCTCCTCGTACCTGAGCGAGGCCCACCGAGACGAGCTCCTGGCCCAGCACGC
GGCCGGCGCCCTGGGCCTGCCCGACCTCGTCGCCGTCCTCACCCGGGTCATCGAGGAGACGGAGGAGCGGCTCAG
CAAGGTGTCCTTCCGCGGCCTGAGGCGCCAGGTGTCCGCCTCCGAGCTGCACACGTCCGGGATCCTGGGCCCCGA
GACCCTGCGGGACCTGGCCCAGGGCACTAAGACGCTGCAGGAGGTGACGGAGATGGACTCGGTCAAGCGCTACCT
GGAGGGCACCAGCTGCATCGCGGGCGTCCTGGTGCCCGCCAAGGACCAGCCCGGCCGCCAGGAGAAGATGAGCAT
CTACCAGGCCATGTGGAAGGGCGTGCTGCGGCCCGGCACGGCCCTGGTGCTGCTGGAGGCGCAGGCGGCCACCGG
CTTCGTCATCGACCCCGTGCGCAACCTGAGGCTGTCGGTGGAGGAGGCCGTGGCCGCGGGCGTGGTGGGCGGCGA
GATCCAGGAGAAGCTGCTGTCGGCCGAGCGCGCCGTCACCGGCTACACCGACCCCTACACCGGGCAGCAGATCTC
CCTCTTCCAGGCCATGCAGAAGGACCTCATCGTCCGGGAGCACGGCATCCGCCTGCTGGAGGCCCAGATCGCCAC
GGGCGGCGTCATCGACCCCGTGCACAGCCACCGCGTGCCCGTGGACGTGGCCTACCGGCGCGGCTACTTCGACGA
GGAGATGAACCGCGTCCTGGCCGACCCCAGCGACGACACCAAGGGCTTCTTCGACCCCAACACGCACGAGAACCT
CACGTACCTGCAGCTTCTGCAGAGGGCCACCCTGGACCCTGAGACGGGGCTCCTATTTCTTTCTCTCTCTCTACA
GTGACTGGGCTTCCTCCGTGCAGTTTTCTGCAACTCTGGAGAAGTGGAGGCATACTTGTGTGTCTGGGTTGTTTT
TTTTTTTGTTTTTTTTTTTTTTGTTTTGTCATTCTTTAATTTTGTTGTTTTACCCATTCGTTATCTGTGGAAAA
CGTTTTAAGTTGTCATGTGACAGAAACTTTTCCTTTGTCCATCGAGGTGTTTCATAAGTTTTTTGGTGTGTTTTC
TGGGTCGTCTATGTGTCATATGGTTTTACTTTTCTCTCCTTTTTCGTTTTCAGAACATTTTTCTGTCTGTTTTGG
ATTCACTGCTTCCATTTTACAGAATGTCACTCTTTAGACTCTCAGTCCATCATGCCATCGGGTACTCTTGTTGCA
GTGTAATTTTTATTACATGCGGTTATTTCCCTAACGATGTGCTATTCACGTTCATCTTCAAACTCATTTTCCATC
AGCCAGTGTCTACTATTTAGTGCCCTGGCTCTATTTCGGTCCTCCTCCCCGGGCTTTCCCTGGCTGCTGTGCTGG
CCAAAAGCATGGGCTTTATTCTCTCCATTGGCTGCTGCTCCACCTTAGAGGTGTGACCTCACTAGCGTTGACTGA
GCGAGTCTGTTGTGGAGAAGAACTTTTTGTAGTAATTTACTAGGAAAAATTCTGAACAAGTAAAATATGAAGGAA
AAAAAAAAAAAAAAA

FIGURE 5342

GCAATTGCACCCTGCCTGCCAGAGTAGAAATACTGGTAGGCCCCAGGCTCTGCTGCCCCTTCCATGTCCTTGTGT
AAGCATCCATGGACAAAGCTGACTCACGGGGTGTGCACAGCTGCAGGGAGGCCAGGAAACAGGGGTTTTATTCTA
GAGGGCCTTGTGCTCAGTGACAGACCAGAGTCCCATCACTGAGAGAGCAGGGCTGGGGCAGCACAAAGGACTGGA
GAGCATTTGCCATGATGCCATGTGCACAGCCAGTGCAAGTCCTTCATTGTAGCTGTGGTCAGAGGTCATGAGACA
CTGCCTTCAGCAGCCCTGGGAGTCCACCTGGTGTGTGGTTAGAGCTGTGCATCTGCAGATTTCAGAAGGACTTAC
GTTTGGTGAGGTGCTTTGAAGTAACACTTCACAAATACCAAGAAGCAAGAAATACACAAATAAGCAGGTAATGGT
TCTTTGGTGTTTACATTAGCTAGTGGGCAACGGTTCTTTGGTGTTCACATTAGCTATAGTCCCAGAACTCAGTCC
ATGAGGTGGAATCACAAAAATGGAATTCATTTCTGGCTGTCAGTACACAAACTGATTTAAGATATCACCTTGAAT
TTTAAGCTGACAAACAGTGATCTAAACTGAATTTCACTGATTGCCCCACCTGAAAGTCAGACCTGATAGATAATG
CCCTCCCTTAACTCAAGGCCAGCAGCAGATGTGTTAGAGGGGACCCTTGTGCCTCGCAGCCCTCATCTCCTAATG
GCTGTGGGGTCACTGTGTCGAGTTGTAATGCCTAATGAGCTCCTCTAAAAACATCCTGAAACTTGTGTAAAAAAA
ACAGCAGACTCCCAGTGGAACTCGCCTTCAGATGCAGCCCAGAATAAGAGTTCTAGAATGTGTGTGCCATCCTTT
TGTCTCAATCTGCATGATTGCAAGTCTCTTCAACATGATTGGGTGCGTGGAGTGTCTCGGTCATGTGTCTTCCCC
TCTGAGCATGCCTTTTGATTCGCACCTGTGTCACAATTGTGCCAGCCTGTGAGATGTGTCTGCCTGTCACCAGTA
TCGGCACATTTAGTTTTCCCTTTACGTGAGTTTTGGTAAAATAGTGACAAAATGTAATGCAGTGCTCAGTCACAG
AAAAATGTCAGGCCTACAGAAATGGAGCATTTGGCTGGCGGGTAGCGTGATGACCATAGGCTTTATTTGGCTGGT
GTGGTAAACAAGCAGCAGCTTGTGCAGGTGAGAATAAATGGCCATATTGCATTTCATTTTAAGGACTCCCTTAAA
ATGAAAATCTTCGTGTGGGACATGAACACAGGCTTTCACGAAATTGATCATCTACACTATATGTATGACTGTTGA
AAGGCTGTTGTTCCTCAGAAATTCTTAAAATGTTATGTAATGTAC**ATG**AGTCCCTTCAGGAAGTCATCAGCTTTG
TTCAGTTTCCTCAGATTAGATAGTAAAACTGAGATTATGAACTATAAAGATGTGTGTAATTTATCTGTCAGTGAA
CTTGACTTTAATAAAAGCTTTTTGAAAAAGAACTCTGGGTGGGGTGCATTGGGCTCACACAAATTAANNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCTCTCGATGTCACTGGCTTTCCATG**TAA**GCAGAGCACATCATG
TGAGCCCCATTCGTGGATGTCAGTCAGCAGAACAGAATCTTGGACCTGGAGCTTGTTTGTCCTGTGCTAGAGGTT
GGAGGTGTCTCTGTCTTTCTGTTGGTTCCTGTCAGTTCAGGTCACTTAGAGATTCTGTTACATACACCAGCTCTG
ACAGGTTGGGGGAGATGATCAACCTTCCGCCTGCGCCTGTTCCCTTCCCTGACTCATGCCAAAGTATCCCTGAGA
TCTGCAAGGGACCGAGGACAGTACTGGCTGGTGGTCTGGGTACAGGCCACAGAGGCATCTGGACCCCATGTGCAT
CTGGACCAGTTTGGTTGGATCCATTCATGGACACAAAACGGATGTGAACTCACAGAGCTACATTTTCTCCCTGCC
CCTGTTCAGGCACAGTGAGGTGTCGGGGAATGTAGCTGCCAGAGTTGACTGTCCCGTTCTTTGGTGTAATGCCTG
AAGGCCACCTTTACCATTGGTCTGTGGTCCTCACTGAAGAAAGAAACATTCTTCCTAAAAGACTTTTTTTCCTCA
GAGTTGGAGCCCACAGCGTGGTCAGGAAAGAGAAGTAGCCACTGGTGGCTCCTGGCATCCTCCTGCTGGGCAGCC
CCTTCTCAAAGTGTGAGGGGTCCCCTTGTGTACAAGCAGGAAGGCTCTGAGAAAGTCAGGTTTGCTCCTACCACA
GGATAATTCCGATGAACCTGAAAAGCGGGTTTTGGCTTGTGTGCAGGGACTCTGGTGGAAGAAAGGGTGACAGCA
CCTGGCCTGGGCATGACACAAGTTAGGACCCGTACCAAGAGGCCCTGGAATTGAGGGTGGGGGTTGCTGTGGACT
CTTTCTCCCTCTTAGGAAACTCTATTGGGTCTCCATCTGTCACAGAAGCAGTAAATGATGTAGGGGCTGCCAGGT
ATAGGGTCCTGTGGGGATGCTGGAACATGCCGAGGCAGGACGTGCCAGCCACCCTCTGCCCATATGTGCAGCAGG
GCCACAGATGTGCTTGTCGGTAGGAGAGACCAAGCTGTCTGTGTGCCGATGTCTTGACACCTGAGACTTCAGGTT
CACCCATCCTGGTTCTGCCATTCCATTGCAGGGTGGCTTCCCTCCTTTGGGGACTCTTAACGCTTTGGTCTGTT

FIGURE 5343

MSPFRKSSALFSFLRLDSKTEIMNYKDVCNLSVSELDFNKSFLKKNSGWGALGSHKLXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXSRCH
WLSM

FIGURE 5344

ATTTCAGGATACTTGGGCTTTTCCTAGAGTGACAGACAAGGAGGGGGAATTTCACATCTTTCATATTTTCTGTGC
AATTCATCTGCCTCCAATTTTATAACACTGACTTTGTGTTACAAAGAATTTAATATTGTAATGAGCAAATAAGAC
AAAATTAGAAAGAGTTCTTTGACTCCTGGAAGTACCTGTATCTTTAGCTAAGTAGCCCTAGGATGTACATTAATA
TTATACCATCTGAAGCATATCTTTGTAAATTAAATAAACAAGAGACAGAAAAATTGGCATATGATGTGGTTTTAG
GTTGCAGCTTCAGTGTCTGAAGGTAATTGGCTTTTCAGCTTTGTTTTATATCCAGTTTGATTTGTGAAAGAATCC
TTAGGCCTTGACTAGGACTCCTCTGTTACTATTTGGGAGCCAGTTGGTGCAGAAAAGGGACAGTTTCTTTTTGCT
CCTTTGGCGAGAAGGAATATACTAAGCAGGTGGTGGAAGTAAACCTCAGATTGATTGAATCTGAGGAGCTTCTTA
CAGTAGCTCCCCCCGGAGTGCTCTTGACATTTTGGGTATGCCACTTTTTCATTGTTCAGTACTTTCCCACATACT
ACAGGACATTTATAGGTCCTTCACCCACCAAATGCCATTTGAGCCTGCAAATCCTCGTAACAGCCAAAAAATGCA
CAGCATATTTTCAGATGCCCCTTAGACTGCTAATACTACCTCTGGTTGAAAACCACTATCAGGGAAAATATTTCT
AATCCCTGCCTCTGTAATACCATATTCTGTACTTTTCTTCCTATTTTACTCTGCCATGCCCTCATGTTTTCATTG
TTATCTCTTTTTCATCTTTCATCTTTACTAGGCAATAAGAATCTTAGGGATCACAGATTGACTCTTGGCTGGGTG
CGGTAGCTCACACCTATAAT

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FIGURE 5345

FQDTWAFPRVTDKEGEFHIFHIFCAIHLPPIL

FIGURE 5346

TCGAGCCACCATGCTAGGCCAGTCTATCTTCCTTAGTTCTCCATTTTCTTCTATAAGACAGAACTAATCATGTTA
CTTAGAGAATTAAATTCAAACATGGCTCTTCACAGTTTGGCCATAACCTATCTCTTTAATTTTTTCTTTCCTTGA
ATTTTTTGAGATATTCCAGACCCTTGGATGGCTTTTTGTTTGCCCCCGTCCCTAAGCCGCCTTGATCATTTTTAA
TAGCTTAAAAAGTACTTTTAAGTATTTTATTTCATCATGCCTTTAACTGTCTTTTACTATGTGCTGTCATGTTGT
ATGCTAGGATACGTAGATGAGTAAGGCATGATCTCTGCCTTTGATCCTTACTATTAGGAAATAAGGTGTATTTTA
TAGTTATGTTAGTATTGAGAAAATGAATTCTAAGAATATGAGTTATAGCTAATTTAAAAAGTACCGTATTCCCAG
ACATCAGTCCAGAGCTATATAATCCGTGTCCATGCCTCTTTTAAAAAAAACNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
GTAACATGTAATTGTTACTTGCCTTTAAGTGCCTCTCTTTCAGCTCATGTGGACAAGAAAATAATCCCTATCCTG
TTGTTTAAAAGTGGGTATACACACATTTTTGTGATTTTTAGACTTTTTTGCCTGATTTTCACACAGTTTTGACTT
TAATTTTCTTCTTTATTAGAAGATATGGGTAACTTTAGAACCTCTGAGTTCAAGGAAGGATCTAAGCAATGAGGC
CAGAGGAGTGAGATGTCCTATGGTAACCAAGCATACCATTTCTTTGTCAAGTGGGCTTTTGTTTATGGCTGCTTA
GGGGCTTAAAAGCTCCATGGACTGGTGAGGATTATCATTTGAATGGAATTTCCCCAATTCAAGAACCTTACTATT
ATCCTCCAATCAGTTCTACACTGTTGGGGAAAATCCCCTGGACCTTATATAACATACTTTGTAACCATGCAGTTA
GTTACTCTTACACTCTTGTCATTATAAATGCTTGATCAATAGTTGATAGACTAGCTCTTGATCAGAGTACCCTTG
TATGGAGAGAAGGAAAAAATGCCATACATTTCACTTGATTCTGTGAACCATAATGCTTAGGACAGTAGTGGTTTG
GGTTTGATTT

FIGURE 5347

MPLLKKTXXX

FIGURE 5348

ATCTTATAAACGATATCTTTGGGCTACAGTTACAATTCAGAGGCATTGGCGTGCTTATTTAAGAAGAAAACAAGA
TCAACAAAGATATGAAATGCTAAAATCATCAACTCTTATAATCCAATCTATGTTCAGAAAATGGAAGCAACGTAA
AATGCAATCACAAGTAAAAGCTACAGTAATATTGCAAGAGCTTTTAGAGAATGGCATTTAAGAAAACAAGCTAAA
GAAGAAAATTCTGCTATTATCATACAATCATGGTATAGAATGCATAAAGAATTACGGAAGTATATTTATATTAGA
TCTTGTGTTGTTATCATTCAGAAAAGATTTCGGTGCTTTCAAGCCCAAAAGTTATATAAAAGAAGAAAAGAGTCC
ATACTAACCATCCAGAAGTACTACAAAGCATATCTGAAAGGAAAGATTGAGCGCACCAACTATTTGCAGAAACGA
GCTGCAGCCATTCAATTACAAGCTGCTTTTAGGAGACTGAAAGCTCATAATTTATGTAGACAAATTAGAGCTGCT
TGTGTTATTCAGTCATACTGGAGAATGAGACAAGACAGAGTTCGATTTTTAAACCTTAAGAAGACTATTATCAAA
TTTCAGGCACATGTAAGAAAACATCAACAACGACAGAAATATAAGAAGATGAAGAAAGCAGCTGTTATAATTCAG
ACTCATTTCCGAGCTTATATTTTTGCCATGAAAGTTCTAGCATCTTACCAGAAAACACGCTCTGCTGTCATTGTG
CTGCAGTCTGCATATAGAGGGATGCAAGCCAGGAAAATGTATATTCACATCCTCACATCTGTTATAAAGATTCAA
TCATATTATCGTGCTTATGTTTCTAAAAAGGAATTTTTGAGCCTAAAAAATGCTACAATAAAATTGCAGTCAACT
GTTAAGATGAAACAAACACGTAACAATATTGCATTTAAGAGCAGCTGCACTATTTATCCAGCAATGTTACCGTTC
C

FIGURE 5349

SYKRYLWATVTIQRHWRAYLRRKQDQQRYEMLKSSTLIIQSMFRKWKQRKNAITSKSYSNIARAFREWHLRKQAK
EENSAIIIQSWYRMHKELRKYIYIRSCVVIIQKRFRCFQAQKLYKRRKESILTIQKYYKAYLKGKIERTNYLQKR
AAAIQLQAAFRRLKAHNLCRQIRAACVIQSYWRMRQDRVRFLNLKKTIIKFQAHVRKHQQRQKYKKMKKAAVIIQ
THFRAYIFAMKVLASYQKTRSAVIVLQSAYRGMQARKMYIHILTSVIKIQSYYRAYVSKKEFLSLKNATIKLQST
VKMKQTRNNIAFKSSCTIYPAMLP

FIGURE 5350

GAACCTCTACTTTGACTGTTCAAGACCAAGAGGAGTTGTGTAATGGGAAATGCAAGTCAAAACAGCTTTGTAGGT
CTCAGAGTTTGCTTTTAAGAAGTAGTACAAGAAGGAATAGTTATATCAATACACCAGTGGCTGAAATTATCATGA
AACCAAATGTTGGACAAGGCAGCACAAGTGTGCAAACAGCTATGGAAAGTGAACTCGGAGAGTCTAGTGCCACAA
TCAATAAAAGACTCTGCAAAAGTACAATAGAACTTTCAGAAAATTCTTTACTTCCAGCTTCTTCTATGTTGACTG
GCACACAAAGCTTGCTGCAACCTCATTTAGAGAGGGTTGCCATCGATGCTCTACAGTTATGTTGTTTGTTACTTC
CCCCACCAAATCGTAGAAAGCTTCAACTTTTAATGCGTATGATTTCCCGAATGAGTCAAAATGTTGATATGCCCA
AACTTCATGATGCAATGGGTACGAGGTCACTGATGATACATACCTTTTCTCGATGTGTGTTATGCTGTGCTGAAG
AAGTGGATCTTGATGAGCTTCTTGCTGGAAGATTAGTTTCTTTCTTAATGGATCATCATCAGGAAATTCTTCAAG
TACCCTCTTACTTACAGACTGCAGTGGAAAAACATCTTGACTACTTAAAAAAGGGACATATTGAAAATCCTGGAG
ATGGACTATTTGCTCCTTTGCCAACTTACCCATACTGTAAGCAGATTAGTGCTCAGGAGTTTGATGAGCAAAAAG
TTTCTACCTCTCAAGCTGCAATTGCAGAACTTTTAGAAAATATTATTAAAAACAGGAGTTTACCTCTAAAGGAGA
AAAGAAAAAAACTAAAACAGTTTCAGAAGGAATATCCTTTGATATATCAGAAAAGATTTCCAACCACGGAGAGTG
AAGCAGCACTTTTTGGTGACAAACCTACAATCAAGCAACCAATGCTGATTTTAAGAAAACCAAAGTTCCGTAGTC
TAAGATAACTAACTGAATTAAAAATTATGTAATACTTGTGGAACTTTGATAAATGAAGCCATATCTGAGAATGTA
GCTACTCAAAAGGAAGTCTGTCATTAATAAGGTATTTCTAAATAAACACATTATGTAAGGAAGTGCCAAAATAGT
TATCAATGTGAGACTCTTAGGAAACTAACTAGATCTCAATTGAGAGCACATAACAATAGATGATACCAAATACTT
TTTGTTTTTAACACAGCTATCCAGTAAGGCTATCATGATGTGTGCTAAAATTTTATTTACTTGAATTTTGAAAAC
TGAGCTGTGTTAGGGATTAAACTATAATTCTGTTCTTAAAAGAAAATTTATCTGCAAATGTGCAAGTTCTGAGAT
ATTAGCTAATGAATTAGTTGTTTGGGGTTACTTCTTTGTTTCTAAGTATAAGAATGTGAAGAATATTTGAAAACT
CAATGAAATAATTCTCAGCTGCCAAATGTTGCACTCTTTTATATATTCTTTTTCCACTTTTGATCTATTTATATA
TATGTATGTGTTTTTAAAATATGTGTATATTTTATCAGATTTGGTTTTGCCTTAAATATTATCCCCAATTGCTTC
AGTCATTCATTTGTTCAGTATATATATTTTGAATTCTAGTTTTCATAATCTATTAGAAGATGGGGATATAAAAGA
AGTATAAGGCAATCATATATTCATTCAAAAGATATTTATTTAGCAACTGCTATGTGCCTTTCGTTGTTCCAGATA
TGCAGAGACAATGATAAATAAAACATATAATCTCTTCCATAAGGTATTTATTTTTTAATCAAGGGAGATACACCT
ATCAGATGTTTAAAATAACAACACTACCCACTGAAATCAGGGCATATAGAATCATTCAGCTAAAGAGTGACTTCT
ATGATGATGGAACAGGTCTCTAAGCTAGTGGTTTTCAAACTGGTACACATTAGACTCACCCGAGGAATTTTAAAA
CAGCCTATATGCCCAGGGCCTAACTTACACTAATTAAATCTGAATTTTGGGGATGTTGTATAGGGATTAGTATTT
TTTTTAATCTAGGTGATTCCAATATTCAGCCAACTGTGAGAATCAATGGCCTAAATGCTTTTTATAAACATTTTT
ATAAGTGTCAAGATAATGGCACATTGACTTTATTTTTTCATTGGAAGAAAATGCCTGCCAAGTATAAATGACTCT
CATCTTAAAACAAGGTTCTTCAGGTTTCTGCTTGATTGACTTGGTACAAACTTGAAGCAAGTTGCCTTCTAATTT
TTACTCCAAGATTGTTTCATATCTATTCCTTAAGTGTAAAGAAATATATAATGCATGGTTTGTAATAAAATCTTA
ATGTTTAATGACTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 5351

MKPNVGQGSTSVQTAMESELGESSATINKRLCKSTIELSENSLLPASSMLTGTQSLLQPHLERVAIDALQLCCLL
LPPPNRRKLQLLMRMISRMSQNVDMPKLHDAMGTRSLMIHTFSRCVLCCAEEVDLDELLAGRLVSFLMDHHQEIL
QVPSYLQTAVEKHLDYLKKGHIENPGDGLFAPLPTYPYCKQISAQEFDEQKVSTSQAAIAELLENIIKNRSLPLK
EKRKKLKQFQKEYPLIYQKRFPTTESEAALFGDKPTIKQPMLILRKPKFRSLR

FIGURE 5352

GTTTCATAATACAGCATGGTCTGGTAGTTTGCAAAATGGTGTGCTTTTGGGGAGATACACTAGCAATTTTTTTAA
AAAATGGAACAGTGTGATAGGAAGCCTGCTGGATGATTTCTTAAATATTCTAAAATGTAAGTCAAATATGTTTTA
ATAACAAAGACTTAAATGGCTTTTCTCCCTAGAGACTGAAACTAGTATTCATTGTGTTCAGAACTTAATTGGGCT
TGAACTGAGATTTAAATCTAATAAACAAGTTAATAAATGTGTATGTTTTGTTGTGGGTTTGGTAGTGATCTGTGG
TTCTATAGGGTTTAATAGGAATTGCTTTTGATTTGTTTCTGGCTTTAGAATGTGAGGCAAATTTTACATTCTTGG
TTCTATTAAGATTTTCTTAGGCATGCTAACATGCCAACAAAAAGCCATGTAAGTATTGTATAAAAAGATTCACAT
TGTTAATTTAGCCATTTTGAAATTCAGATGAGTGAGCAAGTTGATAATGGCCTCATCTCTGACCTGAGAAAAAAC
AACTTTGACCCTTGTTCTTAAAATGCTTTAACCTTGAAGTTGCTTGAGACTTAAGAGGTCATGTTGCTTTAGGTT
TAATAAATAGCCTTAACTATTTGGAGGGGAAAAAATGGGTCCACTTTTTTTTTTTTTTGGCGTTTGCATGTACAA
CTTTCTATTTTTAGCCTATATTTGGAAAGAAAGCACTTAACATTTTAGGAATTCTTTTTAAAGCTGCTTGCAAAG
TGTTGGTGATTTTACTGAAAACTTTTGAGATCTTCATTTTACAGGCAGACCTGTCTAACTACAAGCCAGACTTGG
GTTTTCTCCTGTAGTTTGAAGACACACTGACTCCTGACAAAATGCAGCCTGCAACTTCCTGGAGAACAACTCAGT
GTCACATTAAAGTTTATTATGTATTTAATGATACACTGTTTAATTGACAGTTTTGCATAGTTTGTCTAACTTTAG
AGAATTAAGAGCCTCTCAACTGAGCAGTAAAGGTAAGGAGAGCTCAATCTGCACAGAGCCAGTTTTTAGTGTTTG
ATGGAAATAAGATCATCATGCCCACTTGAGACTTCAGATTATTCTTTAGCTTAGTGGTTGTATGAGTTACATCTT
ATTAAAGTCGAAATTAATGTAGTTTTCTGCCTTGATAACATTTCATATGTGGTATTAGTTTTAAAGGGTCATTAG
GAAAATGCACATATTCCATGAATTTTAAGACCCATAGAAAAGTTGAAGAATGCTTAATTTTCTTATCCAGTAATG
TAAACACAGAGACAGAACATTGAGATGTGCCTAGTTCTGTATTTACAGTTTGGTCTGGCTGTTTGAGTTCTAGCG
CATTTAATGTTAATAAATAAAATACTGAATTTTAAAGCTGTTAAGAAATTGTCCAGAACGAGAATATTGAAATAA
AAACTTCAAGGTTATTATCGCAGTTTTTATGGCGTTTTTGTTTTGTCACTACAGATGGTCTAAAGGTTACTTATT
AATTAATTGGGGAAGTGGAGACAAGGACCAAAGTTTATCTGGATTTTCTTATTTAATCTTCATTACCTGTGAAAT
ATGTATTTGTATTCTTACTTTACATATGAGATCAGAAGTTCATTTTCAAGCAGANTGGAAAGGTGGTAAATGGAC
TCTGAATTAAAATATGTCAGTATTTTAAAAGGTTATCTTCTGCCTAGTATTTTTATGGAATCTGACAAGTTCTCA
GATCACACTTGTTTCCTTAAATCTTGGTAAGTCTGAAGCATTCTTCATTTTGTTTATATTATACACGTTAGTAAG
GTGGGAGTTCTTTTGTTTTTTGTGTNTTTTGGCCAGTTGATAACATGAAAGTTTAAGAGAGGAGGCC

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FIGURE 5353

FHNTAWSGSLQNGVLLGRYTSNFFKKWNSVIGSLLDDFLNILKCKSNMF

FIGURE 5354

ACATGTTATGGAGAAATGGTCATAAGATCTGAACAACAAAAGTATGTTTACTACTTAGCAAACATGTCTGTTGGA
CAGGTTCTGCTAACATAATGAGAGTGCATTTGTACATTCAGGTAGCTAAGACTTAACAAATCTAAAAATTCCTTA
CTTCAAAAGTTCAGCTATTTAAAGTGTTTGGTTCACAATTAAAGGAGATTGTGTTTTAAACAATACATACTGTAC
TTTTTAAAGGTTGTATTAGCACATGCAAACAGTTCACCTTAAAAAAACAGAATGAGTCATAAGGAGTCAGACATG
CCATTAATCAGCTCTTAATTATCTTCCATAAAAGAGGGAAGGAAAAAAATAGAGATAACACGAATCTGTGTATAA
TCCAAAAGGTTCTCTGTGACTTGGAATGAAGCCAGAAAAAGAATCTCATTTTGTTTCACACACTGGCACCTGGTA
TGGAGATCAACAGTTGCTCAAAGGAATTTTAAATAATTATAATGTGTTAATAGATAATTAATTGGGAATTGATTC
TGCAAGGCAAAGTCAAACATTTGTTTTATAATTGTGCAGTTCTTGCAAGAGATCACCTATACTTTTTTTCCCCCA
TCAGGTATAATGGGTCTCTCCCAAATGGCGATAGAGGAAGGAGGAAAAGTAGGTTTGCTTTGTTTAAAAGACCTA
AGGCAAATGGGGTGAAGCCCAGCACTGTGCATATTGCTTGTACTCCTCAGGCTGCAAAGGT

FIGURE 5355

MKPEKESHFVSHTGTWYGDQQLLKGILNNYNVLIDNNWELILQGKVKHLFYNCAVLARDHLYFFSPIRYNGSLPN
GDRGRRKSRFALFKRPKANGVKPSTVHIACTPQAAK

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FIGURE 5356

CCACTTTGTAATTGTTACGCTGCTTACTGAAGTAAACTGGACCATGCAGTAGGCATACAGCATACAGCCAGGGTG
GTTTTGGCAATGCTGAGCCCACTGTTTTACAAGTGACATAAAATGGATGTCATATGTACAAAGAATCTACTGAGA
GGGAAACTGGATTACAGGAGAGCTCCCTTATAGTCCTTTGTCAGGGGACAGAATACCTGGGTCACACTGGGCTTC
AGATTGAGAGTTGATTCATGTTCTGAGTCCATATGATGAGACACATTACGATGGAATTGTCACTTTTGTTGCCTC
TGGAACTTTAAAATACCCGTTTAGTGACGTGGAATTAATCTTTATTTTTTCCGTCACCCTCAGCCCTCATTTAAG
CTATCAGTTGGTAACCACTTGGGTAATCTAAACCTAAGTTGCATTTATTTGGTCACATTGGTAACCAACATTGCT
TCTTAAAAGTTCCTTGCAACAGAATGACTATAATTGAGATAAAACATTAATTTTGAGGCTTTAATTTTGTAATAT
GGATT

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FIGURE 5357

HFVIVTLLTEVNWTMQ

FIGURE 5358

GATTCGGAACGAGGACACAAATCATCATGAGAGATATAATAACAATAAATTTTAAAATATTGTGAGAATTACCAA
AATGTGACAAAGACACAAAGTTAGCACATGCTGTTGGAAAAATGACTCTGATAGACTCAACATAGGGTTGCCACA
AACCTTCAATTTTAAAAAACTGAAGTATCTGCAAAGTACCATACAACAAAGTGCAATAAAACAACCTATGCCTGT
ACTTATTAACACAACATATCAAAGTACTAATAGTGACCTTAGGGCTGAGCCCTGATTTCATCTGCCTGTTTCCTC
AATGGACCAGTTTTAACATCTGCAACCAATATATACTTCAGTCATTAAAGGAACAATACACCTAGTATATATCAG
TGGTAGATGACCTGGGCTGATGGGGATAAGAGGGAAAATGGCCATTTACACAAACAGGTCATTTCCCTGCTGCAT
TTCTTCAAGTCAAAGCTGTACTCTTCTGTGTACCCTTCTACACATTTTCACATTACATTCATGGTTACATTCATC
AAGCTGCATAAAGATTATTGCAGTGGATGCCAACAGTGTTAGTTACCATAGTTTCTTGGATTGTTACACTGTGCC
CAAATTTGGAGTTCTGATAAGTCAGAGGATCTTGCAGCATTGTCAAAGACAACCCAAAGGAATGTAGTTTCAGAA
CAAAAGCCAGGTTCTTTCTGACAATGACATGAAAATTACTGAATCTGTCATGTGTTTTTAGTTGAAGTGAGAGGC
TCATTTGAAACCAGCCTAGGTGCTGTTGGATAAAGTCAAAGTATTGCTACTCTAATAGCAAAATTACTCAGTACA
CAGAAGAAAAACTATTACTTTATTTCCTTATTTAAAAGGACAAACAGGAGTGATGAATAGAGTTAGAAGATATTA
ATATTCCATTCGCCTGACTTCCATATAGAAACCCCAAGCATTTCCAGGGTGAAAATTTTATTATTGTCTGGAGAT
TTCCTGCTTATTTTGATTCATTAGATCCTTAAAAGGAATGGAAGCTTTGACTCCAGAATAAAAGACATTTATTTC
CTTTGGAGTCTTATTCTTTTAAGTACTTCTTAAAACATAACCATCACCATCACCAGAATTTTTTAAACATGAGAA
TAAGACAGACAGAACTTTTCTTTGGTAGTGTTAACACAAAAGGTGTCTGATCTTCATACAAGCAATCTTTGCTCA
CATACATCAAAATGGAATGACACAAGGAAAGAACCATTTTGCAAAAGGAAACAAGACAAGCTGCCGTCAGCTAGA
TACGTTTCGATTGTTCAGGAAAGTCTGTACAGGAACTTTGATTGGCATCCTGCTTGTCTACCTTCTTTCCTACTT
TAAAGTGGTAGCTCTGATCATTGTTGTCAGTGTTTTCTGACCCCTCAGATCTGGTCTTTGCCTATC**ATG**TCTGAT
GTAGGCACTTGGTTCGATTACCTTGATTTGCAGGTGAATTGGTCCTCAATCC

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FIGURE 5359

MSDVGTWFDYLDLQVNWSS

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FIGURE 5360

CGTGCTGTAGCTGGTTCTTACGTCCAACCTGGGGGCAGTCTGCCCAGATCGCCTGCCTGGCCTCGCCTCTGCCCA
TCAGACACTTGGTGCTGGAATCTCCGAGGCTGGGAGGGACTGGGAGCGCCCCAGTTCTGTGTCCTCCCCACACAG
CCCCTTTTATGTAACTTGACTAAGATCAAGCAGTTAGTAAATGGTAGAAAGAATATTTGAATCTACCTAGTGAGT
CTCTAGTGCATGCTTTTGTCCGGTATCCTGGAAAGCCTCCCACAAAAAGCTAATCTTTGCCCCATTCAAAACATG
CACCCTGAAGAAGCTGTTTGTACAGGATTGGGTTTATTCTGTTATTAAGACAAAGGCATCATGGCCTTTGGGTGA
GAGGCCCGTATGTGTTTGGGATTTGGCAATCAGCATTCCATCTCTGTCATCACCATTATTGAGAAAATAGATGGA
TTGGTTCCCTCTCTGCAGTCCTGTGGAGCAGTTGGACTGCTCTCTCTGCTCTCAGGATGATACTGTGAGAACAAT
TTAAATATGCTAAGCACATGTCAGGAAACAGTTTTGTGGTCTTTGGACACTCGCTGTAGCCATTCCGTTCCATTT
CAGGTGATTTTATTCATTTCATTTGTAGAATAAAATAAATCCATTTNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNTATACACCACTAAAGCCTCCCATTAAACCCATAGAAGACTTAAAGAGCTAAAAGAGGCTATTN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
ACGTGTTTGATCTTCACTTCTTCTTAATATTTGGTGTTTGATCTTCTCACAAGTGGTTTTGCTTGC

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FIGURE 5361

RAVAGSYVQPGGSLPRSPAWPRLCPSDTWCWNLRGWEGLGAPQFCVLPTQPLLCNLTKIKQLVNGRKNI

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FIGURE 5362

TAATGCTGCAGTTGCTGATTATACCAGCATATATAAGAATAAAGTCTGATTTATTTATCCATTGATTTAGAAGGC
AATTGGATGAAAGGGTCTTAGAAGTCTATACTATCCATTAATATTTATCATATTAAATTTATTTTAAATCCTGTT
TTATTGTGCCGCTTTAAAAACGCAGATTACTTGTTTATTCATTCCCCTTTCCCCTTATTCTCTTTCAGATTACCT
TATAAGGAATATAGTTTTTAACATGAAACTCAGTTTCTTGTCTGTACCCCTACACATAAAAATACATACGTGCAT
ACACACATACTTCCAGATGTGGTTAATAATATTCAGATCCCTAGGTTACTCAAACAAAACTAAAGGAGAGAACTA
TTTAGGGGCCATCTGCTTTAAAGTTTAAGGTGTTTTGTTGTTGTTTTAGTGCCTGTACAAATTGACCATAAAACC
CAGATTGATTAGTGAGTGTGGATTTGAGTTGCCTAAGTTGAGGCTATTAAGGTACTTCTTTACTTAAAAGATAAG
TTTAAAAGACTCTATTCATCAGTTCATGATGATCTTGGAAATGCTGTTTCTCTACTCAAAGGATATACCCACAGG
CAGGTCCATGGGGACTTGCTCTGGTGATCTCTGCTATTAAGGCAAATTCCAGCCTGTTTGTGCCAAGAACAGAGT
CAAGTGAGAGAGAATGAAGACTCAGAGATGTGCAGCACTGGCTTGTATGTTGTCAGGCAGAAGCCTTGTTCCTTT
CTCAAGAAAACTTCAGGCCTATCAAGCTTGGAAGGAAATACATTTTTTTATGCTGATTTGCAGCCTACACCAGCT
GATGAATATGCTAGGACTTTGAGAGAACACAAAGCATGGTAAGTTTTGGTCAGGTGGAAAGGAGCCTGACATCTG
AACATAATGCTTCCTCTCTCAACATCTGGGATACTTTTGAAAATTCAGTAAGGCTTAATGTAGGAAAAATTCTTT
ACAGGAAAAGCTAATTGATCTGTTTGTCTAACCTCATAGCCACTCCAAAATATGCCTTTTATAATGGAAAAAAAC
AGTGAACAGAGAGAAGAGATTTGGGGATAAGTTAGAAGGTACCCTCAAAACTACTGCCGTAAACCTACAGGTGGG
CAAGGAGGAATTACTGTAGTGTCTCTGGAGAAAGTTCTTGAACATCCAAATCATCTCTTTTCTAAGCAGTTTTTC
CCCTAATCTCATACCTTACATCTTCCAGCATCATTTGCTACATCAATGTCTTTTCATCCTCTTCATCAGCCCCAT
TGAGCTGACTCCAGCTTATTTTTGCACTGATTTCCACCATTTCCTTCCCACACCCATCCTTTCCCTCTATTTAAA
GCCTCCATCTCACCCTCAGTAATGCTGCTGATTTACTCTCAGATGTCTCAAGTCTAGCTTCCTTTTTGAATCCTT
CTCCTACTCCAGGGGCTGTCAAAGGCAGCCTTAAAGTTCAGTGACTGTTAGGTGGCTCAGGCCATTTTTCATTGG
GTGGTCTTTGGTGTTTGCATACTGAATTTGAATTCAGTTTAAAAGCAAACTGTTGGATATGAGGAAGAAAGGGAT
ATGGCCTTAGCCCTTTTTCCAATATTTGGAATATGAAAGCATATTGTGCTTTGTGTAAAAAATGTTTTCTTCTCC
TATTCTGCTCTTGTCTTTACTGAAGGTAAAAGTATTCCTTAAGTAGCTTTTGCAAATTTCTAGTCTGATTTCCAC
ATTCATTAAGTTGATTTAGCAGACATGTAAGTCAGAAGTTTCACATATCCCTTGTATCAAACATTTTATAGGGAA
ACCTAGTAAATTTATGATGCTTCATTTTGGGCTTTCCAGACTATTTGAGTTATTCAAGATAGCCATAATGTTTTA
GTAGCGACATTCTTTTATTACTTCTAATTGCCTTGTAAAATGCATTGTTATGGCCCGGCACGGTGGGTGGATCAC
AA

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FIGURE 5363

MLQLLIIPAYIRIKSDLFIH

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FIGURE 5364

GGGCCAAGTCCTTCTGTTGCCCTCCTCTGTCACCAAGTAAGCTAGGTCCTTTCTGAGGCTCAGGTTTGCTGTGAT
GATGATCACTTTTAGGCAGAAGGTTAGAGGCCTCATGAGTGCTATATGGACTTTATTAGGCTTTAGATTTGATGG
GGAATAAGGGATGTGATTTGTCTTTTGGGAACTCATCTTTGATTCATCATTGTCTCTTGGTATCTTGGAATTTCC
ATGTCATTACAGTCTACAGAATGAAAGAGTAACCTGTCCCAGAGGAGAGGCAGGTGAAAGACTCCACAGCATGCT
CATTCTCATTCTGTCTTCTCAGTGACACCGAGGNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCAGGGC
TTTCTTTGTATGCATGATCTCAGTGAATCTCACCAAGCCTCATCTGGAAAACGGGGACAAATTAACAACAGGATG
GCAAATTGAAAAACACGTAACCATGTTCTACAGATGGAAAGGGGTGCTTGGTTATTATGAAGGCCCCCTCGCAAG
CGTGTGGGACATGGGTGTGTTCTCTGGGTTGTACTGATCAGATCAAGGACCTCCCCCACCCTTCTCACACTCTGC
CCACTTCCGCCCTTTGCTTATCAGACCCTTAGCCAGTGACTCATTCCAGAACCAGAACCTTGGTGAAATCTCAAC
CGACACCAGAGATCGGTGTCTTCAGTCCTAGACTGATGGAGAAAATCCAGAATATATACTAGAAGCTCCAAATGC
TCTGGGTTTCAGCTCCTCTGTGCTGTGGACACTGACTTTGGCTCAGAACTCCGATTTAGTACAAAAGGCTCATTT
TTATTTCAGGGGCACTCTTCCTAAAGCAAACCTAATAAATGAAATATGGAATTCACAGATACACACACACAATTA
AAAAATTAACCTAGTGTATCTGTGAGGAGTAGGCAGAAATTCACTGTATAAAAGAATGCTTCATTTCATAGAGAA
TTTGTGTTAAGATTCCATTAGATAGTACATTTCTCAAAGATTTTTGAGGTTGTATTTGCTTTACCAAAACTTGGT
TTATGTAAGTGGAAAAAGCATGTTGCAAAATAACTTGGTGTCTATGATTCAGTTTATGTAAAATAATAAATGTAT
GTAGGAATACGTGTGTTGAAAGATGTACATCAATTTGCTAACAATGGTTATCTCTGACGTGGTGGGATTTGAGAT
GTGTTTTTCTTTTTGGTTGTATTTTTCTCTATTGTTTGACTTAACACAGAACATGTTTGGTTACAACAATAAAGT
TATTGAAGACAATATAACACCCAATTGTGATGAGTCCAGACAGTACTCATGCTGTGCATTTATTAGACAGTATGC
CATAGAGGTGGGTCATGGAGGAGTGGAGAGAGAGCCCTGATTTGTTGTCCCATGAAGAAGATAGGCACAGGGTAA
TATGTAGTGTGATTCTTTTTTTTTTTTGCACGAGGAGAAGTGTGTGTGTATCCGTGTAAGTGTATGGATATCCAG
TGGGTAGTGGGTGTTAAGATTGCAAGTGATTTTTTTCCCCTCTCCCTTAATCATGCTTTTCTGCCTAAATAAAAA
AAGAACTCTCTCC

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FIGURE 5365

MLFCLNKKRTL

FIGURE 5366

GGGAACGATAGATTTGAGCTGCTGGTGGGAAATTCTGGTTTAGTGCCCAGCTGGCTGTACAGGCTGGTTGGACTT
TAGGAGGGAGGTTTGAGCTGGAAAATAAAGATGGAGAGTTGTCTTTCAGTTTTAGATCATCAGTGAGGTCATAAG
GGTAGATGGAGTTTACCTGGGAAAATTAAGTAGCTATTCGATTTGGCTTATTATTATGTTAAAATAATACTTCTC
TAGTGAAGTACTTAATATGCCAGATACTGTGCCAAGCATTTTATATACATCCTCTCTTTTACTAAGCCCTCATAG
GGCAGATATTTTGATTCCAATCATACTGATTGGAACTCCTAAGAAGGTATCTTGCTTAAGGTCCCACAACGAACA
GGTGGCAGATCCAGGTAATTCAGGTCTGTCAGAACAGTGATTCTTAATTTTTTCCCTCCTCAGACTCCAGGAGTC
ACATGAAGTTATGCATCCTGTCTGACCGAGGCACAGGCACACCACATTTTTATATTCCGCTTCCAGCGATATCAC
AAACCTGAAGCCCCATCCTCCATGGCCCAGAGAGAAAACCCGGGACAAAACCTTGGAGAAGACTATTTTCATGAA
AGACAAATGGAGAAGGAGCAGTAGAGTAAAAAGAGAGGTAAGGGAAGGCATTGAGATGGTTTACAGGGTTAGATG
TTTTGAGTCAATCCCATTATAATTACCAATGCTATCTACCTATTTAGTTAACGTTTTATTGCCCTGCTGTTTTCT
CCAGGATAATTGGAATAGCATGTATTGGTTGGGTGGAAAAGATAGAACTTGAGCAGGGAGATTGCCAAAGAGTGA
AGATGTGGCTGAGTGATTGATGATGGTCTGAACTGGGTATTCAGGGAAGAGAACTAGAAGCCAACCATGTAGAAT
CTATGCAGGTGCTCTTAAGACATTGGTTTGACTGGAATTATCTTCTTGTTAGGTCTTAGGAATCTCCTTCCAGGT
AACTTTTTCTATGATTAGACAATTGATTTGTTCAGGGTCATAGAGCAAAGTCCACATTTAATTCCACATGGCCAA
TAAAAGTGAGGGGCTACAAGGTGAGATCCAGGGGCCAGAGTTATCAAAGTGATACAGCACTTTTAGGAATAGGAC
AGGGAATGGAGGAATTGGAATTCCAGTATTACTTTCAAAAGCAGAACTGGCCAGAGGAATTGGAATTCCAGTATT
ATTTTCAAAAGCAGAACTGGCCAGAGGTGCTTGTGATTCCTGGGTGGAAACCATGGCAGTGGACAGAAGCAGCAT
GGAGGAAAAGAGCACTGGAATTCAGGCTGAGGAACTGTGAAGCCAAGGGTGTTGTATAGGTTGTCCATTTCAAAT
TAGGGTTGCTTGGTTCTGGGATGATTTGCATGGAAGAGGGGAGAGTGACTTGGAGATGTGTGATTGAGGACAGTG
AGCACAGTGAGTTGATGGTGTTGCTGGGTTATAAGCAGCTTCAAAGAGAAGGCATTTTGAATGAAGGTGGAAACA
TAATGGCCAGGAGAACAAGCAAAGGACTAGGAAACAGTGAACTTCATCTTGGCCTCAAGTTCCTGAGGTGCATAT
GAATAAACAGTCTCTAACCCAGAGGGTTTCAAGAAAAGCAGAGTCCTCAAAATCCAAAGGTAGAGTTTCCCCACA
TTGATATTATACTAATTACACGTATAACAGTACTTTGGAAAAGCACAGGTCTCTGGTCACCTCTAAAAGGCAAGG
TTGGTAAGGAGGTCAGGGTGTCACCTGTTGGTAGTCTTAACTAAATGGTCTCTTCAAGGGATCTAAGGATGGAAA
GGGGATATATAATGGTTGGATTAAAGGCTCATCATTGATTAGCAAATTGTCCCTTTTGTTTCTTAAACCCAATTT
GTACAGGGAAAGTTATGCCACTGTAAGATATTTTTAAATGGGG

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FIGURE 5367

GNDRFELLVGNSGLVPSWLYRLVGL

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FIGURE 5368

GGGAAGGAGACACGGTGCCCAGCTTTTTGCGGCTCTGCATTGCTGCTGTGGATAAAAGAGGTCTAGATGTGGATG
GCATTTATCGGGTGAGCGGGAACTTGGCAGTGGTCCAGAAGCTTCGCTTTCTGGTGGACAGAGAGCGTGCGGTCA
CCTCCGATGGGAGGTATGTGTTCCCAGAACAGCCAGGACAAGCACTCTCCGAATCAGAGCAGTGCCTCTCTCAGA
TACAAGAATTAATAGGCTCAATGCCAAAGCCCAACCATGACACTCTACGGTACCTCCTGGAGCATTTATGCAGGT
GATAGCACACTTCAGATAAGAATCGCATGACACCCCACAACCTGGGAATTGTGTTTGGACCAACCCTGTTTCGGC
CAGAGCAGGAGACATCTGACCCAGCAGCCCATGCTCTCTACCCAGGGCAGCTGGTCCAGCTGATGCTCACCAACT
TCACCAGCCTCTTCCCCTGATGCAGGGAAGGAAGAAGAGAAAACATATTTCCGGTCATCTCTGGTGGTGAGAGGC
TGGTGTTCTGTTTTGAGGATATCCCTTTAAATCTCCCAAATGACTGTCTCTATCTTCATGAGTGTGACTTGAGGT
GTTGGGATGGGTGAGGGAGCTTCTCTAAAGAGGAAAGTGAGTGGATTAACCCCTGCTTCTCTTCTTGTTCCCTGT
TATCATTCCTCCCCAACATAATAATACATAAAGTGGCATGGTATTTT

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FIGURE 5369

ATTTCCCAGACTTTGTTTTCTCATTAGCAAAACAGACCTAATAAAAGGACTCATTTCATAGGTTTTTTATGAGGA
TTAATTGAGATAAACCAGATAATACGCTTAACACCGTGGTACTTGCAATGAAGAAAATGGTGAATGGTACATACA
TGGTAAGTGGTCAATACATTTTAGTCATTCTATTAANNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNCCCTTCTGGGTAGTTGGGAGAAGTCAAGCATTAATACCAGTGAAGCACTTCAA
ATGGTGCTTTGCATACAGCGAGTGCTCAATTAAATGTNAAAATTCTTAAAATCATCACCACGATTCTGACCTTAT
GGACTTTGAAGGGCAGATGTTGTGTCTCATTGCTTTCGTGTCCACAAGACCTGGCACATAGACGATGCTCAATAA
ATATTATTTGAAGGAGTGAATGATGGTGACATGGTTCTTAGGAGTTAAAATGAGAAAACCCAAGGAGCCGAAAGC
ATGTCTCTACGGGGAAAGGTTAGAGAGCACTGACTCAAACCATCGTCTCCAATTATGCAGTTTTAATGAGGAAGC
AAGCCCAACCTTGAACATTATTTAAGCCAGAGTTATCCCAATAAGCATTTTCCTACCATGAGTGGTAGATTAAGT
AGCATTGAGTCATGTAGTGAAAGTAATGTCCCTTCTTCATACCATTTCAATGCCTCTGGTAAGTCAAGAGAAAGT
CTTTGATAATAGCCTATTTTTAACACCTCTCACCCTTGTTTGTCAGAAAGAGCAGACCTCAGATTCAGAGACTTT
AGCAAGCAAAGATATCCAGTAAAGAAATGAAATAATGGCCGGGCACAGTGGCTA

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FIGURE 5370

MMVIWFLGVKMRKPKEPKACLYGERLESTDSNHRLQLCSFNEEASPTLNII

FIGURE 5371

CTCAAAGTAAATCCAGTGCATCTGTATATATGTGTAGATAGCAGCAACAAACAATCCTGAAACATTATTTTTGGC
TGTTAGGTAAGTAAACGTGATGATAATTATAAACAACATTCAAATAACCTTGGACCTTGGTGAAATGACTTGTGG
TGGCCAGAATGGTGCAACAAGATGTTATTTGCAAGTTTTTTTAAGACACAAATATCTCAGATACTAATAATGAGA
ATAAAGACTGTTGAATATGAAATTAAAGCCAAGCAATAATGTGCCAAAAAGAGGCAGTTATACCAGCAAATGCAT
CTATTATGGGCACACCATTATATAATGATGGTTTGCTTTATGAAGACTGACTGTAACCCACAGGATAAAATAAGC
AAAGGCATAGTTTCTGCTTTCTTCCTGGAAAAACTTGTTTAGAAGCTTCATAAAGAGGTACAGCACTAATGAGCA
TTAGTCAGGATACAGTTGGCATCTATGTTTTTATGTGAGCCCAGAGGGAAGAGGAGCCACTCAAAGTCTTGCTGG
CTTAAAACTCAAGACAGCTGCAACCAGAAGTTTTGTTGAAATGGAGACTTTAAACTTATGGTAATTACTCTTTCT
GGACACTAGCATGTAGAAAGCAATTCAGTTAACTCTGCCCAGAGGATTACCAGCTTTAGCTGTGAAAAAATGGGC
TCCCGGATGTAAAATCACTAAAACATGAGATCTTGTATCCAAAGAGGCTTCAAATGATGCCTTACAGAAAACGAT
GCTCCAGATGGGCACTTCTAAATGCTAACTCTTCATCAAGTATCTTTCTGGATTCAAGCTCAAAATTAATTGGCT
GCAAAATAGTAGGAATAAAAATCACATATTTTACACTTTAGAAAAGGATATTGATGATCAACCTGCATGGTGATA
ATTATG**ATG**AGATACCCCAGTGATTTAATGATGTTAGAAAGAATTAAATGGGAGAGAATTGCTAACAGCTTTCTT
GATCTCTTAACTATGGAGATGTCATTCATTTATTTCTGGGGTGAAAATTATAGCTTGCTTTTTGACATTGCTGCT
AGTATTGTTCTTTGTTGCTTTAAAAATTGTCTCTCTTTAGAAAAACTCTTGAGCAGT**TAA**ACAGTTTTTTTTCTG
ATTCATATCATTGCTTTTAATAACATGTAAAGGCTGTGTGTAGAGCAAACTATATAAAATGAGTAGAAAGGGCTT
ACTCATGTTAATTGGCATCCTTGATGATTTTAGTTGAGATTCCTTAACATTTATTTTAGATCACATCTTTACGTA
ACTTATTTTTCCTAATGTTTTCCATCGTGTCTTAAAATGATGCTGGTATATCAGGAGATTGCAGTATTATAGTCA
TACTCCCCAATCCCTAGAGGAGAGGAAAGACTAATTCTTGTTTTAAGGGCCCCTGGAGATACCTTTTATTAAGGT
TGAAAAAGGTCAACACAGCCTGAAAATAAGAAAAATATATACTAGCAATTACTAATTTTCTAAATGTGTGTATCT
CTGCTGTACTAATGTGTGAACAATATGTCGTGCATAATACTGTAGCTGGTCGTGGTATGTCAATACATTCTGTGA
GTGTGTACAGTCTGAGTGATCAGTTTTCTATTTTTATGTGTAAAAAAAATAACTTGTCGTATCCCATTTAAAGGC
CAATTTCTGTATTCAGGCAGGCATATGTACATACATGAATAAAGCCAACAAAAGTGTGCACATGTATTCAGTAAC
AGAATTTGTCCTTTTATTTTTGAAGGTCAGAAAGGGCTGTTTGATTTGTGTTTTTGTTTTATCATCTCCTTGAGT
AGGTAACAT

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FIGURE 5372

MRYPSDLMMLERIKWERIANSFLDLLTMEMSFIYFWGENYSLLFDIAASIVLCCFKNCLSLEKLLSS

FIGURE 5373

TCACACACAGAGAAGGCAGCAGAACTGGTTCCAGAGCCTTTATGCTAGAATAGAAAGTGCCTGTTATTTTGTTCA
TTCTCCTCCTCGTCCAGTGTACAGCTGTAGTGATGGGGAAACAGGAAATCAATTACTAGGTTGCCACTAAGTCTA
CAAACTATTGAAGACCAGAATTTACATAAATCGTATGCAGTCCCACATCTGACAGGCTTGCAAAACCTTCCACAT
TTCCATGAGTAAGCCTATCCAAATAGTACTACTTCTCAATTGCAAATCATAACAACCTCTTGTGTGGCCGTCAGA
GCTGACTAAGCAGAAACTATGATCCTCTGAATTTAGTATTTTTCCTGTTTGCCAAAAATGATGTGTCATTAGTGA
CGAAGTTATTCTTAAAGTTCCTTTAACAAAACTGTGATTTATATCAAATAACAATGGCTTGGAGGGGGTATGGAA
AATTGATTATTCTTCCTAACAAATCTATTAATTTTATTAAACTTGGTCTCCCTCCCTTTTTCTTGGATGTTTATA
AAATTTAAGTCTTTCTAAAAAAAAATNNANAAATNAAAAATNTGTATCCCACTGCCTTCTGGCCTCCATGGATTCT
GAT

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FIGURE 5374

HTQRRQQNWFQSLYARIESACYFVHSPPRPVYSCSDGETGNQLLGCH

FIGURE 5375

TCTTTATCTAGAAGTTTGATGATTTTTTTGTGACCAGAAATATGCCGTAGGAANNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNGATAAC
GTTGAGTGAGTACTTAACTGTATGTTGCAATATTGCATTGTTCTTCTGTTTGACATCCTACATTTGTGTCATACA
TCCTAATATCTGGTAGGTAAAATAGTGAAAGAAACTGTAGGCAATTAATGGTAGTGCCAATGTATGAATTCTTTC
TTCCTGTTCTTTGTCAGATAAACAAAGATATTTAGTATACACAATTTTACGAAAGTAGGGCTTAGGAAAAGCAGA
GTAATGATGCCTGTGGTATAGTAGTGTGGCTTGTAATTACACTGTGTTTAGCCTGACTCTCCATTTCACTCTTTT
GGGTTTAATAATATACTC

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FIGURE 5376

SLSRSLMIFL

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FIGURE 5377

AGTCGCTGTTTGGGACGCTGGGTGTGCGGTGTTCTGTCTCCGCTCCCGTTTCGCTGTCACAGCCCGTTCCTTCCC
GGAGCCCGGGACAGGCTGGGCGCGCGCCCGTGTGAGTGAGCGGGACTCAGGGCAGAAGTGTCCCCTCACTGCGTT
TTTTTTTCCTTTTATCCAAAGAACGGGGCAGTTAGTACGCTTGCCTTCCTGTCGCCCGGTTGGGAGCGGGGTTGG
TGTGCGGAGTGGTTCGCCTTTTTTTCTTTAGAACTTGTGAGCCTTTTTTTTTTTTTTTTTCTTTCCTTTTTTT
AGGCTCAGTGCTGTCCGGGCTGGTTTGCCCGGTCCCTGACTAACGGCTTTCTGCCCCTTCTCTCGCCACCCCTGC
CCAAGGTCGCCCCTCTGCCTTCGCCCCTGTCCCGGGAGGGTGGGAAGCTTTGACCCCGCCCTGCCCACTCGCGTC
TCCGCAGCCGTAGCCGCGCCTGTCCCAATATGAATAGGGTCAACGACCCACTTATTTTTATAAGAGATATTAAGC
CCGGACTGAAAAACTTAAATGTCGTCTTTATTGTCCTGGAGATAGGACGCGTGACCAAAACCAAAGACGGCCATG
AAGTGAGATCGTGCAAAGTAGCAGATAAAACGGGCAGCATCACTATTTCCGTGTGGGATGAGATCGGAGGTCTTA
TACAGCCAGGGGATATTATTCGGTTGACCAGAGGGTATGCATCCATGTGGAAAGGATGTCTGACACTTTATACTG
GAAGGGGTGGTGAACTTCAAAAAATTGGGGATCTAGGTGCGGTGCAGGCAGCCGCAATGCGAGATTCCATACACT
ACTACCCTGGTAATGATCTCCACCCTGACCTGGAGGAGCCATCCTCTCTAGGGGTGTAAGATTTTGTATGGTTTA
TTCAGAAGTGCCAAATTTCAGTGAACCCAACCCAGATTATCGAGGACAGCAGAACAAAGGGGCACAGAGTGAACA
GAAGAATAATTCCATGAATAGTAATATGGGTACAGGTACATTTGGACCAGTGGGAAATGGTGTTCACACTGGCCC
TGAATCAAGGGAACACCAGTTTTCACATGCTGGCAGAAGCAATGGCCGGGGACTTATAAATCCACAACTACAAGG
AACAGCTAGTAATCAAACAGTGATGACCACAATAAGTAATGGCAGGGACCCTCGGAGAGCCTTTAAAAGATGACC
TATGCTAAATACTCATGTGTAGTTTTTATACTACATGCCCTACTTGAACACTTATTGCACTTTTATTTATTGTTA
ACTGTGAAAAGTACGTCCTTTATTGGGTTTCCTTTTATATTCTTGGTTTGTTAAGAAGAATGGTTTGTTTTTATA
GCAAAACTGTTAAGCTGCTCGAGTCTCCTGTTGAAGAATGGGAACACTGAAAAGTAGGGGCATTTATTTTTAGAG
TAAAAAGATTATTGGATAGCCTTTAAAAAACCTGCACCCATTTCATGGGTGAGTTACTTAAGACATCAGCTTTAT
AGCCTCTATGAGTCTATCTTCTGTATAAGTTTTGTAATATTTAACATAAGGCTTAATGGGAGATGTTCTTTTGTC
TTGTATTCAGATATTGCCAACTAAAGCAATAACCATCAAAAAACACAAGAACTTGTCAATGCTAGCAGTAATTTT
TGAGTGTTTGTGGCTCTCGGAATGATTGACTTCGTTCAGTGACTACTATTAAGATTTTCCAAGGACTGACTCATC
CCAAATTTTTGTTGTATTACCAAAAAAACAGATTCCTTATCAGAATTTGGAATAGAATGTGATCTCTATTGCAAC
AAGTAATTTTAAAAGAAAGCTACATTTATTTTAGAGTAGTGCTCCTAACATGTATTATCAACTTTGTGGATTACA
TTGGAGGAAAATTTAAAACTGGGGCCTTGAATATTTATTTTTTGAAACTACCATGTTAAATACTGAAGTATAATT
TGGGGGAGTTATAAAGTTATGATAAACATTCATCTGATTATTTTAAACAATAGTTGTGGTAGATAAACATACTGG
AGGTGAGTAAAATTGAATTCATATAGTAACATGCAGTCTGAAGTCCTAGTTACTTAATAGGTACTCAGCCTGGAG
TGAAAATCCTGGGTACTGACTTTGAGAGGAGTGAGTGTGCATGTTGTCAAAGTTTCTGAACACAGTTCACATAGC
CTTATTAGCAAAAGTTTTAAGAAATGGCTCTATCAAAGAAGCAATTGCAGCTTTATTCAGAAATATAAAAGTGGA
ATTTATGTACATGTCATAAGTGGTACCCACTTCCCCTTTTTACTGTAGGGTGGATAACTCTTAGGATTTAACTCT
TTGAATATTATCTCTTGAATAAAGCATGTGTTAATGTTAACAAACCTACGTAATTTTTGCCCTTTCAATGACTTA
CAGTGGAGAGCCAGTACATCTTAACTACTGTTGTAGTGATGGTATCAACCTCATGGTTACTTAGCTCTGCATTTG
TTGCTTTGTTTTTTTTCCACTTCAAATCACAAAATAAGTAGATTTTGTTTTCTGAAAACTCCATAGCATTTGAAT
ACAAAAAGTTGTGCCAGATTGTTTGCCCTAATTCACTGTGTTTAACAAATATTTCAGTACACACTATGTATTAGG
CACTGTGTGGAAAGTGTTAAGGGGTAGACAAGATACCGAATAATCTCCACAAGTTTATTTGTGGTCTATAGTACT
TTTGTAACTGGGGTTACAAAAATTATAGAAATTTTTTTCCTTTGTTCATATGCATATTCATGATTATAATTTGGC
TTTGTTTGTGATTAATGTTTTCTTAAGATTTTCACATTATAGAATACCTCAAAAGAAGTTGTCTAAGGACTGGGA
TAGAGAGTATGTTTCATAAAATTGTAGATGTTTAGAATTTTTAAAAACCCTACAAATTAGTATATGATTGTTTTA
TATAAGTAAGATAGGAGCAACACTTTAAATTATTTGTGGGAGAATACAGCATTAAAGGTGATTTTAAAAGAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 5378

MNRVNDPLIFIRDIKPGLKNLNVVFIVLEIGRVTKTKDGHEVRSCKVADKTGSITISVWDEIGGLIQPGDIIRLT
RGYASMWKGCLTLYTGRGGELQKIGDLGAVQAAAMRDSIHYYPGNDLHPDLEEPSSLGV

FIGURE 5379

ATGAGTTTCTTTTTTAAAACTGGATTCAGGATCAGTGTAATGTTACTGATCTTCAATAGTAACCACAAACTTAAA
AAATCTTTACATATTGCCGTATGTATTAGATATTCTGATATTTAATAGCTGAGACAGTCATACCTTATAGTATTA
TTATCCCAATTTTACTAGTGAGGAAACAAGCAGTTAATAACTGTTAGAGCTCAGATTCACATTCTGAAAGTTATA
GAAATTAAGAACATAGAGCCTATGTTCTTAATTTCACCAAAATATCTCCTCCCAAATTATACATACCCTTTCAAA
CCTACCTTCCTCTCTTAGTAATTAATGATACCGTCTTTCAATTTACATGAATCAGTATCACTATTAGTAAATGTA
TTTTATGCCATTATATAACAGACTAATTTATTTATTCTGTACTCTACTGTGATATTTTCCTCTATCTTCTGCAAG
ATTTTCATTTTTAAAAATTACTGTCTTGGCTGGGTGCAGTGGCTCATGCCTGTAATCCTC

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FIGURE 5380

MSFFFKTGFRISVMLLIFNSNHKLKKSLHIAVCIRYSDI

FIGURE 5381A

CAATGCTACATATGTACAGCCTAGAAGAAAACAGAGAGATGAGCAGCTTCTGACAAATGTCCTGGAAACACTTCG
AGGTGATGGAAATGTGTTAATAGCAGTGGACACAGCAGGCAGAGTTTTGGAACTTGCTCAACTTCTTGATCAGAT
TTGGAGGACTAAAGATGCAGGATTGGGTGTTTACTCATTGGCACTCCTAAATAATGTCAGTTACAATGTGGTGGA
GTTTTCTAAGTCCCAGGTAGAATGGATGAGTGATAAATTGATGAGATGTTTTGAAGACAAAAGAAATAATCCGTT
TCAGTTTCGCCATCTCTCTTTATGTCATGGTCTTTCTGACTTGGCCCGTGTACCTAGCCCTAAAGTTGTACTTGC
CAGCCAACCTGACCTGGAATGCGGATTTTCAAGGGATCTCTTTATTCAGTGGTGTCAGGACCCTAAAAACTCAAT
CATTCTAACCTACAGAACTACTCCTGGGACTTTAGCACGTTTCCTAATTGATAATCCTTCTGAAAAAATTACAGA
AATAGAGTTGAGGAAACGTGTGAAGCTTGAAGGGAAAGAACTTGAAGAATACTTGGAAAAAGAGAAACTAAAGAA
AGAAGCTGCCAAAAAGCTTGAGCAGTCAAAAGAGGCAGATATAGATTCCAGTGATGAGAGTGATATTGAGGAAGA
TATTGACCAGCCATCAGCTCATAAGACGAAGCATGACTTGATGATGAAAGGTGAAGGCAGTCGTAAAGGAAGTTT
TTTCAAACAGGCAAAAAAGTCCTATCCTATGTTTCCTGCCCCAGAAGAAAGAATTAAATGGGATGAATATGGAGA
GATTATCAAACCAGAGGATTTCTTAGTGCCAGAGCTTCAAGCTACTGAAGAAGAAAAAAGCAAATTAGAATCTGG
TTTGACAAATGGAGATGAACCTATGGATCAGGATTTATCTGATGTTCCTACTAAATGTATTTCTACAACAGAGTC
TATTGAAATAAAAGCCCGGGTTACCTACATAGACTATGAAGGACGCTCTGATGGGGATTCCATTAAAAAAATCAT
TAATCAGATGAAACCACGACAGTTGATCATCGTCCATGGCCCACCAGAGGCCAGTCAAGATCTGGCAGAGTGCTG
TCGCGCCTTTGGTGGGAAAGATATTAAAGTGTACATGCCAAAGCTACATGAAACAGTTGATGCCACTAGTGAAAC
TCACATCTACCAGGTGAGGTTAAAAGACTCACTTGTCAGCTCTCTTCAGTTTTGTAAGGCAAAAGATGCTGAATT
AGCTTGGATAGATGGTGTCTTAGATATGAGAGTTTCCAAAGTGGACACAGGGGTTATTTTAGAAGAAGGAGAACT
AAAGGATGATGGAGAAGACTCAGAGATGCAAGTGGAAGCTCCCTCAGATTCTAGCGTTATAGCACAACAAAAGGC
CATGAAAAGTCTGTTCGGAGATGATGAAAAAGAAACAGGTGAAGAAAGTGAGATCATTCCTACTTTGGAACCCTT
GCCACCTCATGAGGTTCCTGGACATCAGTCAGTTTTTATGAATGAACCAAGGCTGTCAGACTTCAAGCAAGTTCT
CTTACGGGAGGGGATTCAAGCTGAATTTGTAGGAGGTGTACTTGTTTGCAACAATCAAGTAGCAGTCCGCAGAAC
GGAAACTGGACGCATTGGATTAGAAGGCTGCCTTTGTCAAGATTTTTATAGGATAAGAGACCTTTTATATGAACA
ATATGCCATTGTATAAAGGACATGATGTCAAGAAGTATCTGCTTGACCTTTCTAAGAAAAAGGGATTCTTATCTT
ACTCTGAGCTTTTGATGTTTTGTTTTGTAACATACAAAAAGAATCTGCCAGAAAAACTTACATGTATCAGATTTT
TAAAAATATAAATAGAGAACATTTTGCAAATGCTCAAATGAGCATTCTATCTTTTGGCTTTCAGAGTGATAGAGC
TCCTAACAGGTGTACAGGCCCAAGAGTTGAAGGTGATTGGTTTTCTTTACAGACTCCTTGTTCTCTAGAAGGGCT
TTTTACTTGAATAAAACAATGCAACTTAGCAAACCAATTTATGGCCTTAGAGAAACATTTTTGCATGAGTTCTTA
CAAACTGTTTGTTATATTTTCTGGAATGATAAGTGAGAATTATTTAGAAAAGACATGCTCCAAAAAAAAAACAAA
ACTGATAAAACAGTTTTTCGAAACTTACTTTTAAAAGCATACGTGCTATGACTCTCTCCAGTTTGAATATGCAAT
TGTTTTCACAGGCAGGATGTCTGTTTTCTGCCTGTATTTCCCAGTGATTTACTCTAGGGTAAGGTAGTACACATT
TGGTTCAGAAATTAATTTTTATTTCTCCTATATCTTGTTTTATCAAGATTTTGTTGTGGCATTTCAATGTAAATT
ATAACACCATCATTTGAGTATACATAATTCAAAAGAACTACTTGATGCAGTATAGTCTTAAGGGTTCTGCATACA
TTTTAGAAACATCTTAGCCGTAAGTTAGGTCCTGTGTTAAACTGTTTAGTGCTCTGTTTTTAAGAAAACAAATGT
TGAACCTCACACTTTTATGTGGTGACAGTGTAATTTAATTAAAAGGTGTAAATGTTTTCATCTCTTAGGCTTGCT
GTCTCCTAAGGTCACCCAAGCAGTGGTTGGATTTTATACACATTACTACTAAAATAATACTGAAGTTGGATAAGG
TTATCCTTTCTGTATTTGCGTCTTTCTTGTGACTAACCACCCTGATATAGTATTAACCACTGTGTTCAAGAGTAA
AAACAATATATGCAATTTTCATTGAACTTAAAGAGTGAAAACCATGTAAACTATTGAAACTATTGTAATCCATTA
ATGCTTTTTTAGAATGGCAGACCTTGATGTTTATTTCTCAAATGGTTAAGCCCTCTTCTTTACTCTTAATTTTTT
TTTGAGACAGAGTCACCCAGGCTGGAGTGCAGTGGTGAGATTTTGGCTCACTATAACCTCTTCCTCCAGGGTTCA
AGTGATTCTCCCACCTCAGCCTCCCAAGTAGCTGGGACTACGGGCACATGCCACTGCACCTGGCTAATTTTTATA
TTTTTGGTAGAGACAGGGTTTCACCATGTTGGCCAGGCTGGTCTCAAACTCCTGACCTCAAGCGATCCACCCACC
TAGGCCTCCCAAAGTGCTGGGATTACAGGCATGAATCACCACAACTAGCCTACCCTTAGATTTTTGGAAGGATCG
ATCTTATTTAACTATGTGTGGAACAACCCAGTAATATCAGACTCGAATTACTATTTCATTCTATTTCAAATGCTT
ATAAAGCTACTATTGTAGATTATAGTGTTAATGCAAAGTTTACAGACTTTTGATATGGAAAACCAGATAAAACAA
TGTTACAAAAGGCAAATATAAAGAGTATGTTTTCTTTTTAGTGCTTTGGAAAAATTTCACTTAAACTCTTATTAC
TGTATAGATTAAGCCCTATAATGCTATTTATATTCCAGGGGAACGAAAATCTGAATTTGTTTTATGATTTAAAGC
ATCTGGTTTGCATATTGTATTGTAATACTGATACAGTTTGGCTGTGTCCCCACCAAATTGAATTGTGTTAATAGT

FIGURE 5381B

TCCCATAATCCCTACGTGTTGTGGGAGGGACCCAGTGGGCAGTAATTTAATCATGGTGGTGGTTACCCTCATGCT
GTTCTTGTGATGGTGAGTTCTCATGAGATCTGATGGGTGTTTTTTTTTGTTTTGTTTTTTGTTTTTTGAGATGGA
GTTTTGCTCTTGTTGCCCAGACTGGAGTGCAATGGCACACGATCTCGGCTCACCGCAACCTCTGCCTCCTGGGTT
CAAGCGATTCTCCTGCCTCAGCATCTCGAGTAGCTGGGATTACAGGCATGCACCACCACGCCCAGCTAATTTTGT
ATTTTTAGTAGAGACGGGGTTTCTCCATGTTGGTTAGGCTGGCCTCAAACTCCCGACCTCAGGTGATCCGCCCGC
CTGGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACTGCTCCTGGCCCAAGATCTGATGGTTTTGTAAGGG
AATTTTCCCCCTTTGCTTGGCACTTCTTCCTGCTGCCATGTGAAGAAGGATGTGTTTGCTTCCCCTTCCACCATG
ATTGTAAGTTTCATGAGGCCTCCCCAGCCTGTGGGACTGTGAGTCAATTAAACGTGTTTACTTTATAAATT

FIGURE 5382

NATYVQPRRKQRDEQLLTNVLETLRGDGNVLIAVDTAGRVLELAQLLDQIWRTKDAGLGVYSLALLNNVSYNVVE
FSKSQVEWMSDKLMRCFEDKRNNPFQFRHLSLCHGLSDLARVPSPKVVLASQPDLECGFSRDLFIQWCQDPKNSI
ILTYRTTPGTLARFLIDNPSEKITEIELRKRVKLEGKELEEYLEKEKLKKEAAKKLEQSKEADIDSSDESDIEED
IDQPSAHKTKHDLMMKGEGSRKGSFFKQAKKSYPMFPAPEERIKWDEYGEIIKPEDFLVPELQATEEEKSKLESG
LTNGDEPMDQDLSDVPTKCISTTESIEIKARVTYIDYEGRSDGDSIKKIINQMKPRQLIIVHGPPEASQDLAECC
RAFGGKDIKVYMPKLHETVDATSETHIYQVRLKDSLVSSLQFCKAKDAELAWIDGVLDMRVSKVDTGVILEEGEL
KDDGEDSEMQVEAPSDSSVIAQQKAMKSLFGDDEKETGEESEIIPTLEPLPPHEVPGHQSVFMNEPRLSDFKQVL
LREGIQAEFVGGVLVCNNQVAVRRTETGRIGLEGCLCQDFYRIRDLLYEQYAIV

FIGURE 5383A

GAGGAGAGCCGGGCCGCCGCCGTCTCTGCAGCCCGCGGGTAACTGGGCCGTTGCCGCCGTCCGCGCTCGGCCCCC
GCGGAGAGATCGAGCTGAAGGACTGCGCGGCTGGCTCTCCTCTAGTATGGCCAATGAAGAGGATGACCCAGTTGT
ACAGGAGATCGATGTGTACTTGGCCAAGAGTCTGGCGGAAAAGCTGTATCTATTTCAGTACCCTGTGCGTCCAGC
CTCGATGACCTACGATGACATTCCGCACCTCTCAGCCAAGATCAAGCCCAAGCAGCAGAAGGTAGAGCTTGAGAT
GGCCATCGACACCCTGAACCCCAACTATTGCCGCAGCAAAGGGGAGCAGATTGCGCTGAACGTGGACGGGGCCTG
CGCCGACGAGACCAGCACGTATTCCTCGAAGCTGATGGACAAGCAGACCTTCTGCTCTTCCCAGACCACCAGTAA
CACATCCCGTTATGCCGCTGCACTCTACAGGCAAGGTGAGCTCCACCTGACACCTTTACATGGCATCCTGCAGCT
GCGGCCCAGCTTCTCCTACCTGGATAAGGCTGACGCCAAGCACCGGGAGAGGGAGGCGGCCAACGAGGCAGGGGA
CTCTTCACAGGATGAGGCGGAAGACGATGTTAAGCAGATCACGGTGCGGTTCTCCCGGCCGGAGTCAGAGCAGGC
CCGCCAGCGCCGTGTGCAGTCCTATGAGTTCCTGCAGAAGAAGCACGCAGAGGAGCCCTGGGTCCACCTGCATTA
CTATGGCCTGAGGGACAGTCGCTCTGAGCATGAGCGTCAGTACCTGCTGTGCCCCGGCTCAAGCGGGGTGGAGAA
CACGGAGCTCGTCAAGTCACCCAGTGAGTACCTGATGATGCTGATGCCACCCAGCCAGGAGGAGGAGAAAGACAA
GCCTGTGGCCCCCAGCAACGTCCTGTCGATGGCCCAGCTGCGCACGCTGCCCCTGGCCGATCAGATCAAGATCCT
GATGAAGAATGTGAAGGTCATGCCTTTTGCCAACTTGATGAGCCTCCTGGGCCCCTCCATCGATTCCGTGGCTGT
TCTGCGGGGCATCCAGAAGGTGGCGATGTTGGTCCAAGGGAACTGGGTGGTGAAGAGTGACATCCTATACCCCAA
GGACTCGTCCAGCCCTCACAGCGGCGTGCCTGCTGAGGTGCTCTGCAGGGGCCGAGACTTCGTTATGTGGAAGTT
CACGCAGAGCCGCTGGGTGGTTAGGAAAGAGGTGGCAACCGTGACCAAACTCTGCGCCGAGGATGTGAAGGACTT
CCTGGAGCACATGGCCGTGGTGAGGATCAACAAAGGCTGGGAGTTCATTCTGCCTTATGATGGGGAGTTCATCAA
GAAGCACCCGGATGTGGTCCAGCGGCAGCACATGCTGTGGACGGGTATCCAGGCCAAACTGGAAAAAGTCTATAA
TCTTGTAAAGGAAACCATGCCAAAGAAGCCGGATGCACAATCAGGGCCTGCCGGGCTGGTCTGTGGGGACCAGCG
GATCCAAGTAGCCAAAACCAAGGCCCAGCAGAACCACGCGTTGCTGGAGCGGGAGCTGCAGCGGCGGAAGGAGCA
GCTGCGGGTGCCTGCGGTCCCGCCCGGTGTGCGGATCAAGGAGGAGCCCGTGAGCGAGGAGGGCGAGGAGGACGA
GGAGCAGGAGGCGGAGGAGGAGCCCATGGACACTTCCCCCAGCGGCCTCCACAGCAAGCTGGCCAACGGGCTGCC
TCTCGGGCGGGCTGCGGGCACAGACAGCTTCAACGGGCACCCGCCCCAGGGCTGCGCCAGCACCCCTGTGGCTCG
GGAACTGAAGGCCTTCGTGGAGGCCACCTTTCAGAGACAGTTTGTGCTCACGCTGAGCGAACTCAAGCGCCTCTT
CAATCTGCACTTGGCCAGCCTGCCCCCCGGCCACACACTCTTCAGCGGCATCTCGGACCGCATGCTACAGGACAC
GGTGCTGGCCGCCGGTTGCAAGCAGATACTGGTGCCTGTAAGTAGAGCCCTGCCTGCCAGGGGCATGGGGGGTGG
GGGGTGGGGAGAACCAGCTGTTGGGAGGCCACGTGGGGACACGGGAGGCCATGCTTGGTGAGCATCTGCTCTCAC
GTGGGCCTAGGTGTGACATGGGCAAGTCAGCCTCTCTGAGGCTCTATTCTCATGAAATGGGATCATGTTGGGTTT
TATGTCACAGGACTGTGGTAGGGGCTAAATACGGTGTCTGAAGGCCCGGCCTATTGCCTGGCCTGCAGCAGGGCC
TAGTGAAACAGGGCCCCTGCCTGGTTTCTCACCCTGTCCCCCACCAAGAACACCTGTTTCCTACTAGCTTTGCCA
TTGTTTGGAATGATTTAACTTCTAAGATCGTTTGATCTTCTTTGCAATCTGCAGATGAAGAAACTGAGGCTCCAA
GGAATGAAATGTACGTTTAAAGGTCACTACCTAGGAGGTAGTAGAGCTGGAATTTGGACCTCAGTATAGTGGCCT
GGAGTTTTGAATCCTTTCTGCTCAGCTAAGATGAGCTGCTTCCCCACAGCTGCGCCACGCCCCAGCTTGGGCCTG
GGTCCTGGCGGCCTCCCTGTGCATCAGAAGCAAGCTGACCAGCTCAGCGCTGTGCTCTCAGCACTTCCAGTGCCA
GGCCTTGAGTGTGGTATTGCAAGCCTCCTGCCCCTTCCCCCTGGGCTGCTTTTCTGTCACTGGGAGGGGCCCTGA
CGGGGGAGCAGAGTGCTTGCTGGGGACCGTTTCCCTGCGCTGAGGATAGAGAGCGCCAGGTGCTGCCTGAGGCAC
GCCTTTCCCGTGCTCCTTTTCCACAAGGCTCTGCCCAGACCTGGCAGCAAAATGGGGTGAGGTGGGGCTGTGGTG
GTCTCTAAGAAAGCATTGATGTTTTCATTGCCAAGGTCAGGAGCGGGCCTGCAGCCTTGGGTGATGATCTGAGGC
CAAGGCCCATCCCTGTGTATGAGGAATAGAAACTAGGACAGGAGGCCTTGTGGAGCCTAGGCTGTCTCAGGGGAT
CGGCCCTGCTGGCAGGCAGCCCCCTGTGGGAGGTACTGGCAGAGTTCGGAGCTCCTGCCCACCCAGCACATGGGT
CTGGGTCTCCACAAGCTCACCTTTCTTCATGAGCTGGGCCAGGACAGGCAGGACACCTGCCTGACATTAGTTGTT
TTGGGCCGCTGGAGTGGACAGAGGTGAGGGGTGGGACATGGCCACCCTCAGACACCCTCACCCCTCCTTCCGGAC
CCCCTCTGTCCATGTTGCTTTGGGGTGGGGCCAGCGTCTCCAGGAGACACCATGGCCCTAACTGTAATGCTCTCC
TTGCCATCCTGACAAGGAGACTGTATTGTAGTCACATCCAAGACGTAAGAGACCTCCGATCCCAGCCACCTCTGT
GTTGTACATGAGGGAGCTGAGGTCCAGGGCAAGTGAATAGATCGAGAACTTGACTTGAACTCCTGGTTCTGCTGC
TTATTAGCTGTGTGACCATGGACAGTGAGCAAACCTCTCTGAGCTTACTTTTCCCCATGTACTACCTCCCCAGTT
TCTAATGCTCAAATGCAAATGTGTATTGGAGGCCTCACAGGGCTTTTACTGGTAGTAACCATTATTGCTACTTGT

FIGURE 5383B

GTGATGGAACCAGGACTGGAAACTACCATCCCAGATGCCCCCTCCCCTGTCCCCTTCTCTCCAGGACCCAGGCCT
GTGTCACACTTGTCCTGGTCTACCTTTGGACCAAGTGGCCTGGATTGCTTGGGAGTCAGGCAGTGCCTCTAACCC
ACACTGACATGGTACATGTGGGAAGCAGTTGAAAAGAACCCCCAGGGTACCCCAAGAGTTATGGGGAAGGGGGCG
CCCCTCCATCAGGGTTGGCATCTTCAGGAGGGAGGACTCTGGGTGTTAAAGCACAGTTGAGTTGGTGCCAGGCTG
ATGGGAAACAGACGCAGCTTCCCCACTGTACGGAGGATATCTGCAGACTCGAAGCCGGGCATTTCACTGGGCCCA
TCACACTCCCCCTCTCGCTGAAGCCCTGTCAGGCCCTGGGGGGTGTGCTGGCCTCCTCCCCATGGTGAGGTGAGA
GGCACAGGTTTGTGGCTGCCCAAGGCCCTCAGAGATGGTGAGTAGCAGAAGCTGGGATTGGAACCCATGTTCCTG
CATCTGGGCTGGGGCAGACAGGGAGGGATGAGGCAAGCAAATGGATCCATGGGGTAGAGATGGACAAGCAACTCA
CCCCTGGGCCTTGGTCAGTTTCCCCCCCAGACTGCTGCTTCCCCGGATGAGCAGAAGGTGTTTGCCCTCTGGGAG
TCTGGAGACATGAGTGATCAGGTGAGGTGAACTTTGCTGCCATCTTCCCGAAGAGCCAGGGGGGTTTCCTGCAGC
GTTGGAGGCCTTGGGGGACATGTGCACCCAAAGTGCAGCCACACATTTCAGATTTTCTGGCACACTCGGTTTTAA
ATATCCTGCTCCAACTCTGTACGCTAACAAAATAAGCTGTATGTGCCAATAGTTTGAACCTAAACCAGTGGTTCC
CAGATGCCAGTCTGTGAGCCAGCTCCATCAGAATCATCTTTTAAAAAATACAGGCTGGGCGTAGTGGCTCACGCC
TGTAATCCCAGCACTTTGGGAGGCCAAGGTGGGTGGATCACCTGGGGTTGGGAGTTTGACACCAGCCTGGCCAAT
ATGGTGAAACCCCATCTCTACTAAAAATGCCCATAGTCGTGGGAGGCTGAGACAGAATTGCTTGAACCTGGGAGA
GAGAGGTTGCAGTGAGCCGAGATTGCACCACTGCACTCCAGACTGGGCGACAGAGCAAGACTGTGTCTCAGAAAG

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FIGURE 5384

GGAACCTTTCAAACTTCCCCGAAATGCACTTGTGGTCAGCAGCTAGCGGTCTTTTGTTTGGGGAAAAAAGGAGTA
GCGGCTAAGAGCGGAACCCTGACTTCTCAAAAAGCACTGCACAGAGGAGGAGGCAGCAGAACCCCATGGGCTGTT
TTGGGAGAGGGACTGAGTACAGTGCAACACTACTCAAACTGTGGTTCACAAAGCAGCAACATTGGCATCACCCAG
GTAGAAAGGCTCATTCTTGAGCCTACCGAAGGCCTTCTGATTTAGCATTTTTGCAGATAGGACCCAGAAATCTGC
ATTTCAACAAAATCCCAAGTTCAGCTTCTTAGGACTCTGCACTTCCCCAGAAGGAAGAATTAAAA**ATG**AATATGT
TCAAGGAAGCAGTGACCTTCAAGGACGTGGCTGTGGCCTTCACGGAGGAGGAATTGGGGCTGCTGGGCCCTGCCC
AGAGGAAGCTGTACCGAGATGTGATGGTGGAGAACTTTAGGAACCTGCTGTCAGTGGGGCATCCACCCTTCAAAC
AAGATGTATCACCTATAGAAAGAAATGAGCAGCTTTGGATAATGACGACAGCAACCCGAAGACAGGGAAATTTAG
GAGAGAAAAATCAAAGTAAGTTAATTACTGTTCAAGACAGAGAATCAGAAGAAGAGCTTTCTTGTTGGCAAATCT
GGCAACAAATTGCAAATGACTTAACCAGGTGTCAAGACTCCATGATCAATAATTCTCAGTGTCACAAACAAGGTG
ATTTCCCTTACCAGGTAGGGACAGAACTGTCTATTCAAATTTCTGAAGATGAGAACTATATAGTAAATAAAGCAG
ATGGTCCCAATAATACTGGGAATCCAGAGTTTCCTATCTTGAGAACCCAGGATTCTTGGAGGAAAACATTCCTGA
CTGAGTCACAGAGATTGAACAGAGATCAGCAAATTTCCATAAAAAATGAATTATGTCAATGTAAGAAGGGTGTTG
ATCCCATCGGTTGGATTTCACATCATGATGGTCATAGAGTACACAAAAGTGAAAAATCTTATAGACCCAATGATT
ATGAAAAAGACAACATGAAGATTTTGACATTTGATCACAATAGCATGATTCACACAGGACAGAAATCGTACCAGT
GTAATGAGTGTAAAAAACCCTTCAGTGATCTCTCCAGCTTTGATCTTCATCAGCAGTTACAATCAGGAGAGAAGT
CTCTTACATGTGTTGAGCGTGGAAAAGGCTTCTGTTACAGCCCAGTTCTTCCTGTTCATCAGAAAGTACATGTGG
GAGAAAAACTTAAGTGTGATGAGTGTGGTAAGGAATTCAGTCAGGGCGCTCATCTACAGACCCATCAGAAAGTCC
ACGTGATAGAGAAACCATACAAATGTAAGCAATGTGGGAAAGGTTTCAGTCGTAGATCAGCACTTAATGTTCATT
GCAAGGTCCACACGGCAGAGAAACCTTATAATTGTGAGGAGTGTGGGAGGGCCTTCAGTCAGGCCTCTCATCTTC
AGGACCATCAGAGACTCCACACTGGGGAGAAGCCATTCAAATGTGATGCATGTGGTAAGAGCTTCAGTCGGAATT
CACATCTTCAATCCCATCAAAGAGTTCATACAGGAGAGAAACCATACAAATGTGAGGAGTGTGGTAAGGGCTTCA
TTTGTAGCTCAAATCTTTACATTCATCAGAGAGTCCACACAGGAGAAAAACCCTATAAATGTGAGGAATGTGGTA
AAGGCTTTAGTCGGCCTTCAAGTCTTCAGGCCCATCAGGGAGTTCACACTGGAGAGAAGTCATACATATGTACTG
TATGTGGGAAAGGCTTTACTCTGAGTTCAAATCTTCAAGCCCATCAGAGAGTCCACACTGGAGAGAAGCCATACA
AATGCAATGAGTGTGGGAAGAGCTTCAGGAGGAATTCCCATTATCAAGTTCATCTAGTGGTCCACACAGGAGAGA
AACCCTATAAATGTGAGATATGTGGGAAGGGCTTCAGTCAAAGTTCGTATCTTCAAATCCATCAGAAGGCCCACA
GTATAGAGAAACCTTTTAAGTGTGAGGAGTGTGGGCAGGGTTTCAATCAGAGCTCACGACTTCAGATTCACCAGC
TGATCCATACGGGTGAGAAACCATACAAATGTGAAGAGTGTGGCAAGGGATTTAGTCGTAGAGCAGATCTTAAAA
TTCACTGTAGGATCCACACAGGAGAGAAACCATATAATTGTGAGGAGTGTGGGAAGGTCTTCAGGCAGGCCTCAA
ATCTTTTGGCCCATCAGAGAGTCCACAGTGGAGAAAAACCATTCAAATGTGAAGAATGTGGGAAGAGTTTCGGTC
GGAGTGCACATCTTCAAGCCCATCAAAAAGTCCACACTGGAGATAAGCCATACAAATGTGATGAGTGTGGGAAGG
GCTTCAAGTGGAGCTTGAACCTTGACATGCATCAGAGGGTGCACACAGGAGAAAAACCATATAAATGTGGGGAGT
GTGGTAAGTACTTCAGTCAGGCCTCAAGTCTTCAACTTCATCAGAGTGTCCACACAGGAGAGAAACCATACAAAT
GTGATGTGTGTGGTAAAGTCTTCAGTCGGTCTTCACAACTACAGTCTCATCAGCGAGTTCACACTGGGGAGAAAC
CTTATAAATGTGAGATATGTGGTAAGAGCTTCAGTTGGCGATCAAATCTTACAGTTCATCACAGAATCCATGTTG
GTGATAAATCCTATAAAAGTAATAGGGGTGGTAAGAACATCAGAGAATCCACACAGGAAAAAAAATCTATAAAA**T**
GATTCTTTGTG

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FIGURE 5385

MNMFKEAVTFKDVAVAFTEEELGLLGPAQRKLYRDVMVENFRNLLSVGHPPFKQDVSPIERNEQLWIMTTATRRQ
GNLGEKNQSKLITVQDRESEEELSCWQIWQQIANDLTRCQDSMINNSQCHKQGDFPYQVGTELSIQISEDENYIV
NKADGPNNTGNPEFPILRTQDSWRKTFLTESQRLNRDQQISIKNELCQCKKGVDPIGWISHHDGHRVHKSEKSYR
PNDYEKDNMKILTFDHNSMIHTGQKSYQCNECKKPFSDLSSFDLHQQLQSGEKSLTCVERGKGFCYSPVLPVHQK
VHVGEKLKCDECGKEFSQGAHLQTHQKVHVIEKPYKCKQCGKGFSRRSALNVHCKVHTAEKPYNCEECGRAFSQA
SHLQDHQRLHTGEKPFKCDACGKSFSRNSHLQSHQRVHTGEKPYKCEECGKGFICSSNLYIHQRVHTGEKPYKCE
ECGKGFSRPSSLQAHQGVHTGEKSYICTVCGKGFTLSSNLQAHQRVHTGEKPYKCNECGKSFRRNSHYQVHLVVH
TGEKPYKCEICGKGFSQSSYLQIHQKAHSIEKPFKCEECGQGFNQSSRLQIHQLIHTGEKPYKCEECGKGFSRRA
DLKIHCRIHTGEKPYNCEECGKVFRQASNLLAHQRVHSGEKPFKCEECGKSFGRSAHLQAHQKVHTGDKPYKCDE
CGKGFKWSLNLDMHQRVHTGEKPYKCGECGKYFSQASSLQLHQSVHTGEKPYKCDVCGKVFSRSSQLQSHQRVHT
GEKPYKCEICGKSFSWRSNLTVHHRIHVGDKSYKSNRGGKNIRESTQEKKSIK

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FIGURE 5386

GACTCTTACCTACTTCGGGGCCCACTTTGCTGTCATCCGCCGAGCGTCCCTGGAGAAGAACCCGTACCAGGCTGT
GCACCAATGGGCCTTCTCTGCGGGGTTGAGCCTGGTGGGCCTCCTGACTCTGGGAGCCGTGCTGAGCGCTGCAGC
CACCGTGAGGGAGGCCCAGGGCCTCATGGCAGGGGGCTTCCTGTGCTTCTCCCTGGCGTTCTGTGCACAGGTGCA
GGTGGTGTTCTGGAGACTCCACAGCCCCACCCAGGTGGAGGACGCCATGCTGGACACCTACGACCTGGTATATGA
GCAGGCGATGAAAGGTACGTCCCACGTCCGGCGGCAGGAGCTGGCGGCCATCCAGGACGTGTTTCTGTGCTGTGG
GAAGAAGTCTCCTTTCAGCCGTCTGGGGAGCACAGAGGCTGACCTGTGTCAGGGAGAGGAGGCGGCGAGAGAGGA
CTGCCTTCAGGGCATCCGGAGCTTCCTGAGGACACACCAGCAGGTCGCCTCCAGCCTGACCAGCATCGGCCTGGC
CCTCACGGTGTCCGCCTTGCTCTTCAGCTCCTTCCTGTGGTTTGCCATCCGCTGTGGCTGCAGCTTGGACCGCAA
GGGCAAATACACCCTGACCCCACGCTCTCCAGGGCAGAAGTCGCGGTGGGCTCAGTGGGTGCCCTGAGCGGGGTC
TCTCAGACTGACGTCAGGCCTTGGTGGGCTGCACTCTCACCTGGAGGCTCCGGGGAAGCATCTGCCTCCAGGACC
ATTCAGGCTGTTGACAAGTCAACTCCTCATGGCTGTAGGACTGAGGTTCCCAAGTCCTTGTCCCTGGTCCTGTGG
TCCCTCCACCTTCAAACCAGCAATGGTGCATTGAGCAAATTGTGGTCAAATATACATCACATCAAATTTACCATC
TT

FIGURE 5387

GTACTCAATCACTGTCATTTTAGTAACCTTGAATCAGAACCTCAGTTGTTAAAGGCTTAACTGCTTGTGGCAACT
ACTATAGTGCTCTAGTGGGGACAGTGGTTAAATCTGCAGAATCCCTTGCTTTGTCATCTTATCCAGAAGGACTGA
TAGCTTGTTAAACTGTGGTATGATTAGAATGTTGGTGGTTGTGTAGTGCATTTGGGGTGCTACAACGTTAATCAA
ATATAATTGAGCTGTTCTGTTTCCAGTCAGTGTAACCATTTAAAAATACCTTGGCAAAACAAGCTAGGAGCTAGT
TCATGCTAATATTCTTAAGGACAAAAATAGTTTACAGCTTTTTTTTTTTAATCTGAAATCCTGAAGGCTATGCT
TAAAAGTTAGAGATAAACCTGTTGGAAATAAGTGATTCATTTATAGACTGAAGCCTCTATGACTTCAAAAAGATA
CTCAACAGTCTCTGGCATTTGAAGAACAAAATATTTTCTCTGTAAATACACCTCATTTCCATTCTAGTTAGGAGC
AATGGCGCCCAGGACGGCACACAGAATGGAGAAAACTGGATAGCTGGTAACTCATTTAGCTCTTGGCACTCTAAA
AAACCTCAAATACAGCCATCCAAGCCAGTAATTCTATTGCTGCGTTATTTCTGTGTTTAACTGTGAAACTTGCTT
CTTGTCTGTACCCTTGAAATGGAATAAAATTTCATGAGACTCCTTGCTTAGAAAAAAAAAAAAAAAGGG

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FIGURE 5388

VLNHCHFSNLESEPQLLKA

FIGURE 5389

CTAGTTGGCGGCGGGGTCGGGTCCGCGTGAGCCGCGATGGAGCTGCGCATCCTAGAACACCGGGTGCGGGTGCTG
AGCGTCGCCCGTCCCGGTCTCTGGCTCTACACCCACCCGCTCATCAAGCTGCTCTTCCTGCCCCGCCGCAGCCGG
TGCAAGTTCTTCAGCCTGACGGAGACCCCTGAGGATTACACGCTTATGGTGGACGAGGAGGGCTTTAAAGAGCTG
CCCCCATCTGAGTTCCTGCAAGTAGCTGAGGCCACATGGCTGGTGCTGAACGTGTCGTCTCACAGCGGTGCGGCA
GTGCAGGCTGCTGGGGTCACCAAGATCGCCCGTTCGGTCATCGCGCCACTGGCCGAGCACCACGTGTCTGTGCTG
ATGCTGTCCACTTACCAGACGGACTTCATCCTGGTGCGGGAGCAGGACCTGTCCGTGGTGATCCACACGCTGGCC
CAGGAGTTCGACATTTACCGCGAGGTGGGCGGAGAGCCTGTGCCTGTGACGAGGGATGATTCCAGCAATGGCTTT
CCCCGCACTCAGCATGGGCCCAGCCCCACGGTGCATCCCATCCAGAGCCCACAGAACCGCTTCTGTGTCCTCACA
CTGGACCCTGAGACGCTTCCAGCCATCGCCACCACCCTCATAGATGTCCTCTTCTACTCGCACAGCACCCCCAAG
GAGGCAGCCTCTAGCAGTCCTGAACCCAGCTCCATCACGTTCTTTGCCTTCTCCCTCATCGAGGGTTATATCTCC
ATTGTCATGGATGCTGAAACACAGAAAAAGTTCCCCAGTGACCTCCTGCTGACCAGCTCCTCGGGGGAGCTGTGG
AGGATGGTGCGCATCGGTGGACAGCCCCTGGGCTTTGATGAATGTGGCATCGTGGCACAGATTGCAGGTCCCCTG
GCTGCCGCTGACATCTCTGCCTACTACATCAGCACCTTCAACTTCGACCACGCCCTGGTGCCCTAGGACGGTATC
GGCAGCGTCATCGAGGTCCTCCAGCGGCGGCAGGAAGGCCTGGCTTCCTGAGGCCCATGGGCAACAGAGCAGCCT
CCCTGCTCTCCCCTCGACCCAGGCTTCCAAAGACTTCTCTAAGCTATTTCCTTAAGCTCTGGAACGAGCCCCCTG
TTCTGCTGGGGACCCTCGTTCCGCTCTCTGTATGTAAGCTGCGTGCAGGCACCGGCTTTTACGCGGACACCTGTG
TACACTCACAGGTGGAGTGGGCAGGTGCTAGCCTGACTGCGTGTCTGCCCATGCAGGGGAACACGGTGCTCGGGG
CTTAAGCCCCCAACCCATCACTCCCTGCGCAGCCTCGGCGTTTGCACAGTCCCTGCCTGAGGCCTGAGCCATTCC
CCAAAGGCTTCCTGGGCCAGCTGCCCCCCTGACCTCCGTTCTGCCTCTGGTGGGGTTGCCTTCCCTGGCCAGGTG
AGTCCTGACAGTGCCTCTCCCTCCTGGGGCCTCCAAGGAAAGTATTTTGACATCTCTCTCTCTTCTGTTTTTATT
GACTTGTTAATAAAGGACTTTGTAGTG

FIGURE 5390

MELRILEHRVRVLSVARPGLWLYTHPLIKLLFLPRRSRCKFFSLTETPEDYTLMVDEEGFKELPPSEFLQVAEAT
WLVLNVSSHSGAAVQAAGVTKIARSVIAPLAEHHVSVLMLSTYQTDFILVREQDLSVVIHTLAQEFDIYREVGGE
PVPVTRDDSSNGFPRTQHGPSPTVHPIQSPQNRFCVLTLDPETLPAIATTLIDVLFYSHSTPKEAASSSPEPSSI
TFFAFSLIEGYISIVMDAETQKKFPSDLLLTSSSGELWRMVRIGGQPLGFDECGIVAQIAGPLAAADISAYYIST
FNFDHALVP

FIGURE 5391

GCGGCCGCCTCCTCTTCGGGGTCATTAAAGCCAATGAGCCGCGCGCCTCTGCCGAGCGCAGCCAACTAAATCGGC
TTGGATGATTCGCGACCTGAGCAAGATGTACCCGCAGACCAGACACCCGGCACCGCATCAGCCTGCTCAACCCTT
TAAATTTACAATTTCCGAATCCTGTGATCGGATTAAGGAAGAGTTTCAGTTTTTACAGGCTCAATACCACAGTCT
GAAGCTGGAATGTGAGAAACTCGCCAGTGAGAAGACAGAGATGCAGCGGCATTATGTCATGTATTATGAAATGTC
CTATGGGTTGAATATAGAAATGCACAAGCAGGCAGAGATTGTCAAGAGGCTGAATGCTATCTGTGCACAAGTCAT
TCCTTTCCTGTCCCAAGAGCACCAGCAACAAGTGGTGCAGGCTGTGGAACGGGCCAAGCAGGTGACCATGGCAGA
ACTGAACGCCATCATTGGGCAACAACTCCAGGCCCAGCATTTATCACATGGACATGGTCTCCCCGTACCTCTGAC
TCCACACCCTTCAGGGCTCCAGCCCCCTGCCATTCCACCCATCGGTAGCAGTGCCGGGCTTCTGGCCCTCTCCAG
TGCTCTAGGAGGTCAGTCCCATCTTCCAATTAAAGATGAGAAGAAGCACCATGACAATGATCACCAAAGAGACAG
AGACTCCATCAAGAGCTCTTCAGTATCCCCATCAGCCAGTTTCCGAGGTGCTGAGAAGCACAGAAACTCCGCAGA
CTACTCCTCAGAGAGCAAAAAGCAGAAAACTGAAGAAAAGGAAATTGCAGCTCGTTATGACAGCGATGGTGAGAA
AAGTGATGACAACTTGGTGGTTGACGTTTCCAATGAGGATCCATCTTCCCCTCGAGGGAGCCCAGCACATTCCCC
CAGAGAGAATGGCCTAGACAAGACACGCCTGCTCAAGAAAGATGCCCCGATTAGTCCAGCCTCTATTGCATCTTC
CAGCAGTACTCCCTCCTCCAAATCCAAAGAACTTAGCCTTAATGAAAAATCTACTACTCCCGTCTCAAAGTCCAA
TACCCCTACTCCACGAACTGATGCGCCCACCCCAGGCAGTAACTCTACTCCCGGATTGAGGCCTGTACCTGGAAA
ACCACCAGGAGTTGACCCTTTGGCCTCAAGCCTAAGGACCCCAATGGCAGTACCTTGTCCATATCCAACTCCATT
TGGGATTGTGCCCCATGCTGGAATGAACGGAGAGCTGACCAGCCCCGGAGCGGCCTACGCTGGGCTCCACAACAT
CTCCCCTCAGATGAGCGCAGCTGCTGCCGCCGCCGCTGCTGCTGCTGCCTATGGGAGATCACCAGTGGTGGGATT
TGATCCACACCATCACATGCGTGTGCCAGCAATACCTCCAAACCTGACAGGCATTCCAGGAGGAAAACCAGCATA
CTCCTTCCATGTTAGCGCAGATGGTCAGATGCAGCCTGTCCCTTTTCCACCCGACGCCCTCATCGGACCTGGAAT
CCCCCGGCATGCTCGCCAGATCAACACCCTCAACCACGGGGAGGTGGTGTGCGCGGTGACCATCAGCAACCCCAC
GAGACACGTGTACACGGGTGGGAAGGGCTGCGTCAAGGTCTGGGACATCAGCCACCCAGGCAATAAGAGTCCTGT
CTCCCAGCTCGACTGTCTGAACAGGGATAACTACATCCGTTCCTGCAGATTGCTCCCTGATGGTCGCACCCTAAT
TGTTGGAGGGGAAGCCAGTACTTTGTCCATTTGGGACCTGGCGGCTCCAACCCCACGCATCAAGGCAGAGCTGAC
ATCCTCGGCCCCCGCCTGCTATGCCCTGGCCATCAGCCCCGATTCCAAGGTCTGCTTCTCATGCTGCAGCGACGG
CAACATCGCTGTGTGGGATCTGCACAACCAGACCTTGGTGAGGCAATTCCAGGGCCACACAGATGGAGCCAGCTG
TATTGACATTTCTAATGATGGCACCAAGCTCTGGACAGGTGGTTTGGACAACACGGTCAGGTCCTGGGACCTGCG
CGAGGGGCGGCAGCTGCAGCAGCACGACTTCACCTCCCAGATCTTTTCTCTGGGCTACTGCCCAACTGGAGAGTG
GCTTGCAGTGGGGATGGAGAACAGCAATGTGGAAGTTTTGCATGTCACCAAGCCAGACAAATACCAACTACATCT
TCATGAGAGCTGTGTGCTGTCGCTCAAGTTTGCCCATTGTGGCAAATGGTTTGTAAGCACTGGAAAGGACAACCT
TCTGAATGCCTGGAGAACACCTTATGGGGCCAGTATATTCCAGTCCAAAGAATCCTCATCGGTGCTTAGCTGTGA
CATCTCCGTGGACGACAAATACATTGTCACTGGCTCTGGGGATAAGAAGGCCACAGTTTATGAAGTTATTTATTA
AAGACAAATCTTCATGCAGACTGGACTTCTCCTCCTGGTAGCACTTTGCTCTGTCATCCTTTTTGTTCACCCCCA
TCCCCGCATCTAAAACCAAGGATTTCAGATACTCATTGCAGTTGTGGAGTTTAATCCCCTTTCTTAACCTCACTT
CCCACTTGCTATTGAATTGTGAATAGTCATTAAAAACCTGTGATACCAAATCTTCAGCTGTCTACTTGGAAGAAC
ATGGAATAAGCATACTTAACAGTGAAAAGAATCTTTAATTATGTATTATATCTGTAATATATTTATTTTGTTTAA
AGAAGGCTTTCTAACAATGACTGACTAAATAAAGCTGTCTGCTCCTGCATTGAT

FIGURE 5392

ATGGCGGAGCTGATCCAGAAGAAGCTACAGGGAGAAGTGGAGAAATATCAACAGCTACAGAAGGACTTAAGTAAA
TCCATGTCGGGGAGGCAGAAACTTGAAGCACAACTAACAGAAAATAATATCGTGAAAGAGGAACTGGCCCTGCTG
GATGGGTCCAACGTGGTCTTTAAACTTCTGGGTCCGGTGCTAGTCAAACAGGAGCTGGGGGAGGCTCGGGCCACA
GTAGGGAAGAGGCTGGACTATATCACAGCTGAAATTAAGCGATACGAATCCCAGCTTCGGGATCTTGAGCGGCAG
TCAGAGCAACAGAGGGAGACCCTTGCTCAGCTGCAGCAGGAGTTCCAGCGGGCCCAGGCAGCAAAGGCAGGGGCT
CCTGGCAAGGCCTGA

FIGURE 5393

MAELIQKKLQGEVEKYQQLQKDLSKSMSGRQKLEAQLTENNIVKEELALLDGSNVVFKLLGPVLVKQELGEARAT
VGKRLDYITAEIKRYESQLRDLERQSEQQRETLAQLQQEFQRAQAAKAGAPGKA

FIGURE 5394A

GACCAATGAAGACTCACCAATTATAGAATATTACCCACCTGATTTTAAAACTGACCTAAATGGGAAACAACAGGA
ATGGGAAGCTGTGGTGTTAATCCCTTTTATTGATGAGCGATTATTGGAAGCCATGGAGACATGTAACCACTCCCT
CAAAAAGGAAGAGAGGAAAAGAAACCAACATAGTGAGTGCCTAATGTGCTGGTATGATAGAGACACAGAGTTTAT
CTATCCTTCTCCATGGCCAGAAAAGTTCCCTGCCATAGAACGATGTTGTACAAGGTATAAAATAATATCCTTAGA
TGCTTGGCGTGTAGACATAAACAAAAACAAAATAACCAGAATTGACCAGAAAGCATTATATTTCTGTGGATTTCC
TACTCTGAAACACATCAGACACAAATTTTTTTTGAAGAAAAGTGGTGTTCAAGTATTCCAGCAAAGCAGTCGTGG
AGAAAACATGATGTTGGAAATCTTAGTGGATGCAGAATCAGATGAACTTACCGTAGAAAATGTAGCTTCATCAGT
GCTTGGAAAATCTGTCTTTGTTAATTGGCCTCACCTTGAGGAAGCTAGAGTCGTGGCTGTATCAGATGGAGAAAC
TAAGTTTTACTTGGAAGAACCTCCAGGAACACAGAAGCTTTATTCAGGAAGAACTGCCCCACCATCTAAAGTGGT
TCATCTTGGAGATAAAGAACAATCTAACTGGGCAAAAGAAGTACAAGGAATTTCAGAACACTACCTGAGAAGAAA
AGGAATAATAATAAATGAAACATCTGCAGTTGTGTATGCTCAGTTACTCACAGGTCGTAAATATCAAATAAATCA
AAATGGTGAAGTTCGTCTAGAGAAACAGTGGTCAAAACAAGTTGTTCCTTTTGTTTATCAAACTATTGTCAAGGA
CATCCGAGCTTTCGACTCCCGTTTCTCCAATATCAAAACATTGGATGATTTGTTTCCTCTGAGAAGTATGGTCTT
TATGCTGGGAACTCCCTATTATGGCTGCACTGGAGAAGTTCAGGATTCAGGTGATGTGATTACAGAAGGTAGGAT
TCGTGTGATTTTCAGCATTCCATGTGAACCCAATCTTGATGCTTTAATACAGAACCAGCATAAATATTCTATAAA
GTACAACCCAGGATATGTGTTGGCCAGTCGCCTTGGAGTGAGTGGATACCTTGTTTCAAGGTTTACAGGAAGTAT
TTTTATTGGAAGAGGATCTAGGAGAAACCCTCATGGAGACCATAAAGCAAATGTGGGTTTAAATCTCAAATTCAA
CAAGAAAAATGAGGAGGTACCTGGATATACTAAGAAAGTTGGAAGTGAATGGATGTATTCATCTGCAGCAGAACA
ACTTCTGGCAGAGTACTTAGAGAGAGCTCCAGAACTATTTAGTTATATAGCCAAAAATAGCCAAGAGGATGTGTT
CTATGAAGATGACATTTGGCCTGGAGAAAATGAGAATGGTGCTGAAAAAGTTCAAGAAATTATTACTTGGCTAAA
AGGACATCCTGTCAGTACTTTATCTCGTTCTTCTTGTGATTTACAAATTCTGGATGCAGCTATTGTTGAGAAAAT
TGAGGAAGAAGTCGAAAAGTGCAAGCAAAGAAAGAATAATAAGAAGGTGCGAGTAACAGTGAAACCCCATTTGCT
ATACAGACCTTTAGAACAGCAACATGGAGTCATTCCTGATCGGGATGCAGAATTTTGTCTTTTTGACCGTGTTGT
AAATGTGAGAGAAAACTTCTCAGTTCCAGTTGGCCTTCGAGGCACCATCATAGGAATAAAAGGAGCTAATAGAGA
AGCCGATGTACTATTTGAAGTATTATTTGATGAAGAATTTCCTGGAGGGTTAACAATAAGATGCTCACCTGGTAG
AGGTTATCGACTGCCAACAAGTGCCTTGGTGAACCTTTCTCATGGGAGTCGCTCTGAAACTGGAAATCAGAAGTT
GACAGCCATCGTAAAACCACAACCAGCTGTACATCAACATAGCTCAAGTTCATCAGTTTCCTCTGGGCATTTGGG
AGCCCTCAACCATTCCCCTCAATCACTTTTTGTTCCTACTCAAGTACCTACTAAAGATGATGATGAATTCTGCAA
CATTTGGCAGTCCTTACAGGGATCTGGAAAGATGCAATACTTTCAGCCAACTATACAAGAGAAGGGTGCAGTTCT
ACCTCAAGAAATAAGCCAAGTAAATCAACATCATAAATCTGGCTTTAATGACAACAGTGTTAAATATCAGCAAAG
AAAACATGACCCTCACAGAAAATTTAAAGAAGAGTGTAAGAGTCCTAAAGCTGAGTGTTGGTCCCAAAAAATGTC
CAATAAGCAGCCTAACTCTGGAATTGAGAACTTTTTAGCATCTTTGAATATCTCCAAAGAAAATGAAGTACAGTC
ATCTCATCATGGGGAGCCTCCAAGTGAAGAGCATTTGTCACCACAGTCATTTGCCATGAAGGGAACACGGATGCT
TAAAGAAATTCTAAAAATTGATGGCTCTAACACTGTGGACCATAAGAATGAAATCAAACAGATTGCTAATGAAAT
CCCTGTTTCCTCTAACAGAAGAGATGAATATGGATTACCCTCTCAGCCTAAACAAAATAAGAAATTAGCATCTTA
TATGAACAAGCCTCACAGTGCTAATGAGTACCATAATGTTCAGTCTATGGACAATATGTGTTGGCCTGCCCCCAG
CCAGATCCCTCCTGTATCCACACCAGTAACTGAACTTTCTCGAATTTGTTCCCTTGTTGGAATGCCACAACCTGA
TTTCTCCTTTCTTAGGATGCCACAGACAATGACCGTTTGCCAAGTAAAATTATCTAATGGCTTACTGGTACATGG
GCCACAGTGCCACTCTGAAAATGAAGCCAAAGAGAAAGCTGCACTTTTTGCTTTACAACAGTTGGGCTCCTTAGG
CATGAATTTCCCTTTGCCTTCACAAGTATTTGCAAATTATCCTTCAGCTGTACCACCTGGAACCATTCCTCCAGC
CTTTCCCCCACCTACTGCTAATATAATGCCTTCGTCGTCTCATCTCTTTGGCTCAATGCCATGGGGACCATCGGT
GCCAGTTCCTGGGAAGCCCTTCCATCATACTTTATATTCTGGGACCATGCCCATGGCTGGGGGAATACCAGGGGG
TGTGCACAATCAGTTTATACCTCTGCAGGTTACTAAAAAAAGGGTTGCAAACAAAAAGAACTTTGAGAATAAGGA
AGCCCAGAGTTCTCAAGCCACTCCAGTTCAGACTAGCCAGCCAGATTCTTCCAACATTGTCAAAGTAAGTCCACG
GGAGAGCTCATCAGCTTCTTTGAAGTCCTCTCCGATTGCTCAACCTGCATCTTCTTTTCAAGTTGAAACTGCCTC
TCAAGGCCATAGTATATCTCACCATAAGTCAACACCAATCTCTTCTTCAAGAAGAAAATCAAGAAAACTGGCTGT
TAATTTTGGTGTTTCTAAACCTTCTGAGTAAATTTGGCTCTTAGAATTAAGTTAATTTCTTCTCTTTCCATCTAC
CTTTTTATAAATACATATCTATGTCTCATAAAAATTAGAATGTACTATTTTAAAATAATATGTGTAAATTGAAAT

FIGURE 5394B

TTTTTTCATTTTTAAGTTATCAGGCACTTTTCATGCTGTTTAAAAGACTGTGTATCAAATTGTGCACTTTAAGTA
TGTGCAGTTTGTTGTATGTCAATTATACCTCAATAAATCTGTAATAAAAAACTAAATTAAACCTTGCATTAAAAT
AATATCACAGTATCAGTGGACTAAACATTAAAATGTACCACTCTAATCATTGGCCTCATGATTGAAGCATCCTGA
ACTATGAATTAGACATCAGTTAGCAATAATAAGCATTTTTTACACTATCATTGAGGAATAATTACATGGAGCATG
AAATTTGGGCCTCCAGTATAACTTACTGAATGTGGATTTTATTTCTCTTTTTAATGATGTAAGAAAATTGTCAGG
AGAATGGCTCTTATTTATGTGTGTTTTAACTTATGCTTTGTTGCCTCTGAGGGTCTTTAGACCTGCTGTGAAAGG
ATCACATTTGTTGTGGTGCTGCCAGTTTTGCTTTATTCTAAATTTTGTACCAAAGCAACTTTAGAATAATCAGAA
TATTTCATCTAACTGCTTAGAACTATAAATAGCATTCTAAATTTGAGTAAATACAATTTTTTAGGTTACTCAAGA
ACCAGCATTAGTAATTTCTAGTAAAATTGTTTCAAAATCTACAGGGTACAATGATTACAAATTAATCTTCTAACA
AAATAAAATATGAAATATTAGTCATGTTAATTAATAAACTGTATTATTTTGTATAGCTTTTTATTTGCTTACCTG
ACATTTTATGAGAGCTTCATAGTTGGTCGGTATGTAGTGCTTCTTGGGACTGAAGAAATTCTAATTGTTGTTTAA
GTTCCAAGGTGTGCTACAATATAGGAGGCACAGTCATCAGTTTGTGACATACATTATTTACTGCCTATTTCATTC
TGATTCTATATTTTTAGCTTTATGCTGAACTGTTCAATGATGCTGGGATTCTCTCTTTGCATGTCATATGTGAAT
GTGTGGTTCAAGCTGTAACTGTTGAAATTATTTTAGAATTTATGACGATTTCTCAGCAGGGCCTATGTTTATATA
TATATATATATTTATTCTTTAGTTTTTGTGATATGCTTATATTTTTAAGGAAGTAAGTTATAGCATACTTTTTTA
AAAGTAGGAACCACAATCTTTATATGGAGCAGCTTGTTATATCTGATTTTCATGTAACTCATTGGAAACTCTGCC
ATGACTCTTAAAGTAGTCTTACTTGTTTTTTAAAATGCTGGTATTAAACTAAATGGACTCCTTTCACTAACTGCT
GATTTCAGAGTTTAAATGTTAGCAGGATATTTGTGTATTAGCAGTGCCTTCAGTATAAGAGAGAAATATTCATTA
TCTGTCATTTATCATAGTCGTATAAGTTTCCATGATTTTATTTTCTGTTATTTTCATAAGTTCAGATGTTTATCA
GTTCCCAACATTGTTTCTTTATCTGTAGTGGGATCTTGAGTAATGAGGCTCAAGTAAATCCTCAATGTGTATAAT
TATTGCCTCATAAACTCTCTCTTTGTTTTTAAAGGAAACATCTATTATGGTAATACAAAGAAAAGTTAAATTGTG
ACAGTAATGTTATATTAACCTCTTCCTACTTTAAAGTGTGAAATGTTTCACCTCAGCTGTACAAACTCCAGCATT
GAGAATTTGCCTCACTCATTACTCCTGTGTGACAGTTATATAAATAGCATGCAGCTCACATCTGTTTTAGAGCAT
AGAAGAAGCGGCACCTGCCATCTTCTGAAAACTCCAAAGGGAAATTTCAGTAGACATAGTGCACTAAACCCATAA
GGATACTTGACCAATATTTGAGCACAGCAAGCTGACAGTTCTATACAGATAGGCAGTGAAAGAGTTTTATTTTCC
AGCCAGGCGCAGTGGCTCAAATCCCAGCACTTCGGGAGGCTAAGGCAGGCGGATCACTTGAGGTCCGGAGTTCCA
GACAAGCCTGGCCAACATGATGAAGCCCTGTCTCTACTAAAAATACAAAAAAAAAAAAGAAAAAAGTTTTATTAT
CCTTACTTTTTTTTTAACATTATTATTCTAAAGGTCAAAACTGAGAAGAGATTAAGATAGGAGAGAGCTCCATAA
TGGCTGGATAGTGGTCAGGCATTCTCTATTCTTTTCCCCCTGTAGACCCATTCTAAATGTGGGCCTGAGGTCAAT
GGGAGATGTGCCCTCCCTATGGAGGATGTAAGAAGCAGAGGCCATTTCTGCCCCATGTTGAGGAAACAATCTGTT
GATAGACCTGGAATTTAGAGTACATCTGAAAAGCAGTTGGACTTCAAGAAATTTAAAATTCTCTCTTTGAGATGG
GGTGGACTAAGACCACCCCCAAAGTTTAAAAATATGCTCATTCAACTTGAATCTTCTGAGGACTTTTTGTGAAAA
TGGTGGACTGTTTAGGGCATAGGACAGATTCCCCAAATTGCTTTATGCTTCCACATAACTAGAGCACTTCAATCT
ATTTAAGCCTTTGTCTCCTAACTGAAACATTATTTCTAAATATTTCTATTCAATAAGTTTTTTCTTTTTTGAGCA
ACTTAAGTGAATTTTGAAGATTGCTCCTTCCAGTCTCGTTCCTTTTCACATTTTCCTGCATTACCTAATAATTAC
CTCAGCGTTAGAATTTGAATGTATTAATTGATTTAAACATCATGTAGACTAAAGTCTTAAACATCTAAGACTCAG
TTGTAGTTGCAGAAAAAAATTAAAGTCACCTCTACTGAACCTTGGTTTCAATTTAAGATTTTTCTTGCTTTTCAA
AGGGGTAACTAATAAAGATTGAAGGGTTTTTTTCCCGATTGGTGGAGGAATGAAGAACTATTGATGCAAGTTTTT
TTATTGTTTCTTTCTATGATCAGGTACCTGCTTTCATTTTAGACTGCTACTTCCAAACTAAGCTAGATTCTTGGT
TTTAATGAGAGGAGGCAGAGAGAGGGAGGCAGATGGAAGAAGAAAAACAGTTAAATAAGACATACCCAGTCACTG
CATTTTTGGACTATACCGTATCTTTCTAGCACAAGGAAATAGATAAACTGTAAGGTCTTTTTTACTCACTTTTTA
TTTATGTGTTCTATTTGTGTTAGTCATAACTGTTTATAGTGGTTGTCTAATTTTTACTTTTATTATATGAGATAG
AGCTGTGCAGATCTTCACTCAAGTTCTGTCACGCTTCTTCCCATTATTTAGAGCACAGTTTTTTAAAGCAACTGT
ACAATTTCTCAGCCTTATGAGCTTGCTGTATTTCTTGGTATCATGTTGCTTCCAAATTTTGTTTTTACTGTAGAA
GACAATTAATTTATTGTAGAGAAGTGGCTGTGAAAGTCGTTCTCTGTCTTTAAAAATCAATTGCAGAAGTTCATT
TGTCATTTTTCTAGAGATAAATTATAGTACTCAAACTGGCAGTGCTCAGTATATACATTTTGTAAGCTTTGTCAG
TGAAACCATCAGTTTTGCAGGAGCTTCCTTTCCTAGTCAAGATAAAGCTTAAAATTCCAGAAATTAATGTCGTTC
GGACTGACTTTATTCATATTTCCATCAAACTTCTCCAATACAGTAAGAGATAGTGTTGAACCAGCATCAAGTCTC

FIGURE 5394C

CAGAAACATGGCAGAGCAGACAGGCCGTTAAGTTTCACAGACATCATAGATCCTTTTCTTAAAGAAGAAAAACAT
GTATAAAATAGTTTTAGTAGTCCAAAATGTCAACTATCTGTAGCTGCTTTTGTGTGTGTGTCAGTGAACAAATAA
TAATGCCTTGCTCAATCAATGCATTCAGCCATCTCAAGTGCAATTTGTGAAGGAGACTATGGTTTCCAAAAGATA
CATTTTTTTACAAAGTTAAACCTGTAAAAAGTCTTTTTTTTTTTCCCTCCAGCCGTACACCAACTGCACTTGGTT
GTTTCAGCAGTTGGTATACTATTAAATTGTCCAGGCCAAATAGGTTTCTGTAGCTGTTTTAGTAATTTGAAGCCA
AATTCTCATGCTGTTTCTCATTAAAAAGAATGAGAATTTGGTCCATAGTTAGCTTTAAGTTCTCTCTTCCTTTCT
TTCCCTTACAGTTAAGGGTTTGGTGGGGGATGGGGAGGTTGTTTTCGTTTTTTGGATTTTTTTGTCTTTTGGCTT
TAAGTATCATATTTTCTTTTGCCTGTATCCAACTGCTTCTTTGAGTATTTTCATCTAGTTTAATGTGAGTAATAG
ATGCTGTGCTGTCATTGAAGTGTTCAACATTTTGTTCATTTAAACAAAAGTGTAATTCATACATATATAGATACA
TATCTTAATTGATTTCTCAACTATTTTATAAGTAACTGGAATTTTTCATTAGATCTTATACAGAGAAGTATTTTA
TTAAAAATTCAAAAGGGAAGACTTTTATGTGCTCATTTTGTAATTTTTGATTTTAAATATCTTTACATTGTCTGC
CAATTAAAGTGTTTTAAACTTGCATTGGAATGGACTCCGAATGTATTTTTGTGGTGTTACGTTATCCGTAGATTT
CTAGCATGAAGTTAGCCTCACGATGCTGTGCAAAGGATTTTAAAATATGAGAGTCACTGAAAGAGTTTAAACATC
TGTTCATGTTAAATGCTCTATGGATTTTAATTAAAGACTTGAGAATGATTTTAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAG

FIGURE 5395

AGAAGGCCTCGCACAAAACACTGTACAAACCCGAAAGGAAGTCTGAGAGACGAACCGCCTTCCTCCCTGAAGCTT
CTAGAACTGGAGCAGAAAGAAGGTGTGGCCCAGGGCCAGCCCCGCCTCCTCCCCGGGCGGAAGCTGTGTCAGTTG
CCGGAAGTCGGCGTGAGGTGGGGCTTATGCGGCGGCGTGGTGAAATAGATATGGCGACCGAGGGGGATGTGGAGC
TGGAGTTGGAGACTGAGACCAGTGGACCAGAGCGGCCTCCGGAGAAGCCACGGAAACATGACAGCGGTGCGGCGG
ACTTGGAGCGGGTCACCGACTATGCAGAGGAGAAGGAGATCCAGAGTTCCAATCTGGAGACGGCCATGTCTGTGA
TTGGAGACAGAAGGTCCCGGGAGCAGAAAGCCAAACAGGAGCGGGAGAAAGAACTGGCAAAAGTCACTATCAAGA
AGGAAGATCTGGAGCTAATAATGACTGAGATGGAGATATCTCGAGCAGCAGCAGAACGCAGTTTGCGGGAACACA
TGGGCAACGTGGTAGAGGCGCTTATTGCCCTAACCAACTGATGCGTGCTTTCTCAAATATACCTACTGGATTAAT
TTATGGCAATAAAATTTTTTTTTGTCTTTTTCAGTTTTATCATCTTGGGTCAAGTAGAGTGTATACTATATCCTA
TGTTGTGGAGAATTTATATGTTGGAGACTAACTGAATTTAAGTGACCCATTAAAATCTAGCACACCTGTATGAAA
AATCAGTGTAGAAGAATACCTCATGTGCAGATGCTAGGTGGCAGGCCAGTCTCATTCATCTGACTAGCTCTCAAC
AGTATTCAAGGTACATCTGGAGTCTCAGCAGAGTTACTGTACTCAAATGGCATGTGTCTCCAAGACAGCTTATGA
ATATCTAAAAGGCCAGCTACCTGCCTAGGAGCCACTATATATATAGATAGATGTAGGTTATGAACCCAGTTCATA
GGCCACCTTGAGTTAGAATTTTGGTACCTACAACATGCTTGATTTTGAGTGATTAAAAAAAAATAATTTGGCTGG
GTGCTGTGGCTCACGCCTCTAATCCCAGCACTTTGGGAGGTCGAGGCAGGTAGATCACGAGGTCAGGAATTCAAG
ACCAGCCTGGCCAACATGTGAAACCCCGTCTCCACTGAAAATAGAAAAATTAGCTGGGCATGGTGGTGGGCGCCT
ATAATCCCAGCTATTCTGGAGGCTGAGGCAGGAATCGCTTGAAATTGGAAAGCAGAGGTTGCAGTGAGCTGAGAT
CACACTACTGTACTACTGTACTCCAGCCTGGGGGGAAAGAGTGAAACTCCATCTCAAAAAAAAAAAAAAAAAAAA

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FIGURE 5396

MATEGDVELELETETSGPERPPEKPRKHDSGAADLERVTDYAEEKEIQSSNLETAMSVIGDRRSREQKAKQEREK
ELAKVTIKKEDLELIMTEMEISRAAAERSLREHMGNVVEALIALTN

FIGURE 5397

AGGTTACTATAGTGTCTGCTCCTACCCCTGGGACAAGATCCCCTAATGAGCTGGCAGGTGGGCGTGGGGGGCACA
GGTACAGCTTGGCTTCTCAGCTTTGCTCCCCTATCCTCTGCTTTGCCATGAATCTCTCATCCAGCCCCGCAGGGA
TCTGCCTGGCCAGCAGTGAGCCTGAGCCCCTTTCATCCTGGGACCTGCCGACCACGGCTCACATCCTCCTGGGTG
AAGAATGTCACCTTGCTTCCTATCTGCCTCTTTCGTGGTTGGCTGGGGAGGGGGACCGGGGGGTGGGGTGAGGTT
AACCTCATTGTTGTCTTATATGGTCATTTAAATCTCCCAGGGCTTCCTCCAAGGGCCAAAAATAATCCGGAGACA
CAGCAGCTGTGTCCAGCACACAGAGGACCCGGCCATCTGCTTTGGTTCAGAGCCCTGTGTCTGTCAGTCAGTCTC
TCCCTGGCTCTCCCTCCATCCTCATTCCTGCCTGAAGCC**ATG**ACCCGCTTCTCCTATGCAGAGTACTTTTCCCTC
TTTCACTCCTGCTCTGCACCCTCCAGGTCCACTGCACCTCCTGAGAGTTCGCCGGCCCGGGCCCCAATGGGCTTG
TTCCAAGGGGTCATGCAGAAATACAGCAGCAGCTTGTTCAAGACCTCCCAGCTGGCGCCTGCGGACCCCTTGATA
AAGGCCATCAAGGATGGCGATGAAGAGGCCTTGAAGACCATGATCAAGGAAGGGAAGAATCTCGCAGAGCCCAAC
AAGGAGGGCTGGCTGCCGCTGCACGAGGCCGCATACTATGGCCAGGTGGGCTGCCTGAAAGTCCTGCAGCGAGCG
TACCCAGGGACCATCGACCAGCGCACCCTGCAGGAGGAAACAGCCGTTTACTTGGCAACGTGCAGGGGCCACCTG
GACTGTCTCCTGTCACTGCTCCAAGCAGGGGCAGAGCCGGACATCTCCAACAAATCCCGAGAGACACCGCTCTAC
AAAGCCTGCGAGCGCAAGAACGCGGAGGCCGTGAAGATTCTGGTGCAGCACAACGCAGACACCAACCACCGCTGC
AACCGCGGCTGGACCGCTCTGCACGAGTCTGTGTCTCGCAATGACCTGGAGGTCATGCAGATCCTGGTGAGCGGA
GGAGCCAAGGTGGAATCCAAGAACGCCTACGGCATCACCCCCTTGTTCGTGGCCGCCCAGAGTGGACAGTTGGAG
GCCTTGAGGTTCTTAGCCAAGTACGGTGCTGACATCAACACGCAGGCCAGCGACAACGCGTCTGCCCTCTACGAG
GCCTGCAAGAATGAGCATGAGGAGGTGGTGGAGTTTCTGCTGTCACAGGGTGCCGACGCCAACAAGACCAACAAG
GACGGCTTGCTCCCGCTGCACATCGCCTCCAAGAAGGGCAACTACAGGATCGTGCAGATGCTGCTGCCGGTGACC
AGCCGCACGCGCATACGCCGTAGCGGCGTCAGTCCGCTGCACCTGGCGGCCGAGCGCAACCACGACGAGGTGCTG
GAGGCGCTGCTGAGCGCGCGCTTCGACGTGAACACGCCGCTGGCGCCCGAGCGCGCGCGCCTCTACGAAGACCGG
CGCAGCTCCGCGCTGTACTTCGCGGTGGTCAACAACAACGTGTACGCCACCGAGCTGCTGCTGCAACACGGCGCC
GACCCCAACCGCGACGTCATCAGCCCCTTGCTCGTGGCCATCCGCCACGGCTGCCTGCGCACAATGCAGCTGCTG
CTGGACCACGGCGCGAACATCGACGCCTATATCGCCACGCACCCCACCGCCTTCCCCGCCACCATCATGTTCGCC
ATGAAGTGCCTGTCGCTGCTCAAGTTCCTCATGGACCTGGGCTGCGACGGCGAGCCCTGCTTCTCATGCCTCTAC
GGCAACGGCCCGCACCCGCCGGCCCCGCAGCCCTCCAGCAGGTTCAACGACGCGCCCGCGGCCGACAAGGAGCCC
AGCGTGGTGCAGTTCTGTGAGTTCGTATCTGCCCCAGAGGTGAGCCGCTGGGCGGGGCCCATCATCGATGTCCTC
CTGGACTACGTGGGCAACGTGCAGCTCTGCTCGCGGCTGAAGGAACACATCGACAGCTTTGAGGACTGGGCCGTC
ATCAAGGAGAAGGCAGAACCTCCAAGACCTCTGGCTCACCTTTGCCGACTGCGGGTTCGAAAGGCCATTGGGAAA
TACCGTATAAAACTCCTAGACACCTTGCCGCTCCCAGGCAGGCTGATTAGATACCTGAAATACGAGAACACCCAG
TAACTGGGGCCACGGGGAGAGAGGAGTAGCCCCTCAGACTCTTCTTACTAAGTCTCAGGACGTCGGTGTTCCCAA
CTCCAAGGGGACCTGGTGACAGACGAGGCTGCAGGCTGCCTCCCTCTCAGCCTGGACAGCTACCAGGATCTCACT
GGGTCTCAGGGCCCAGAGCTTTGGCCAGAGCAGAGAACAGAATGTGTCAAGGAGAAGAATCATTTGTTTACAAAC
TGATGAGCAGATCCCAGACCTTCTCTACCTTCAGGAATGGCAGAAACCTCTATTCCTGGGGCCAGGGCAGAGCTT
GAGGTGTTCTGGGGAAGGTGGTGCTCAGAGCCTTCCCTGTGCCCCTCCACTTGTTCTGGAAAACTCACCACTTGA
CTTCAGAGCTTTCTCTCCAAAGACTAAGATGAAGACGTGGCCCAAGGTAGGGGGTAGGGGGAGCCTGGGTCTTGG
AGGGCTTTGTTAAGTATTAATATAATAAATGTTACACATGTG

FIGURE 5398

MTRFSYAEYFSLFHSCSAPSRSTAPPESSPARAPMGLFQGVMQKYSSSLFKTSQLAPADPLIKAIKDGDEEALKT
MIKEGKNLAEPNKEGWLPLHEAAYYGQVGCLKVLQRAYPGTIDQRTLQEETAVYLATCRGHLDCLLSLLQAGAEP
DISNKSRETPLYKACERKNAEAVKILVQHNADTNHRCNRGWTALHESVSRNDLEVMQILVSGGAKVESKNAYGIT
PLFVAAQSGQLEALRFLAKYGADINTQASDNASALYEACKNEHEEVVEFLLSQGADANKTNKDGLLPLHIASKKG
NYRIVQMLLPVTSRTRIRRSGVSPLHLAAERNHDEVLEALLSARFDVNTPLAPERARLYEDRRSSALYFAVVNNN
VYATELLLQHGADPNRDVISPLLVAIRHGCLRTMQLLLDHGANIDAYIATHPTAFPATIMFAMKCLSLLKFLMDL
GCDGEPCFSCLYGNGPHPPAPQPSSRFNDAPAADKEPSVVQFCEFVSAPEVSRWAGPIIDVLLDYVGNVQLCSRL
KEHIDSFEDWAVIKEKAEPPRPLAHLCRLRVRKAIGKYRIKLLDTLPLPGRLIRYLKYENTQ

FIGURE 5399

AAGTGCTGGTGCCCTCTGCCGCTGCTCCCGTCTCTTTGGTTACGCTCGTCAGCCGGTCGGCCGCCGCCTCCAGCC
GTGTGCCGCTATGGAGTCCCGGCGTTCTTCCGCTGGCTCAGCCGCAAGTACCCGTCCATCATAGTCAACTGCGT
GGAAGAGAAGCCAAAAGAATGCAATGGTGTAAAGATTCCAGTTGATGCCAGTAAACCTAATCCAAATGATGTGGA
GTTTGATAATCTGTATTTGGATATGAATGGAATCATCCATCCCTGTACTCATCCTGAAGACAAACCAGCACCAAA
AAATGAAGATGAAATGATGGTTGCAATTTTTGAGTACATTGACAGACTTTTCAGTATTGTAAGACCAAGAAGACT
TCTCTACATGGCAATAGATGGAGTGGCACCACGTGCTAAAATGAACCAGCAGCGTTCAAGGAGGTTCAGGGCATC
AAAAGAAGGAATGGAAGCAGCAGTCGAGAAGCAGCGAGTCAGGGAAGAAATATTGGCAAAAGGTGGCTTTCTTCC
TCCAGAAGAAATAAAAGAAAGATTTGACAGCAACTGTATTACACCAGGAACTGAATTCATGGACAATCTTGCTAA
ATGCCTTCGCTATTACATAGCTGATCGTTTAAATAATGACCCTGGGTGGAAAAATTTGACAGTTATTTTATCTGA
TGCTAGTGCTCCTGGTGAAGGAGAACATAAAATCATGGATTACATTAGAAGGCAAAGAGCCCAGCCTAACCATGA
CCCAAATACTCATCATTGTTTATGTGGAGCAGATGCTGATCTCATTATGCTTGGCCTTGCCACACATGAACCGAA
CTTTACCATTATTAGAGAAGAATTCAAACCAAACAAGCCCAAACCATGTGGTCTTTGTAATCAGTTTGGACATGA
GGTCAAAGATTGTGAAGGTTTGCCAAGAGAAAAGAAGGGAAAGCATGATGAACTTGCCGATAGTCTTCCTTGTGC
AGAAGGAGAGTTTATCTTCCTTCGGCTTAATGTTCTTCGTGAGTATTTGGAAAGAGAACTCACAATGGCCAGCCT
ACCATTCACATTTGATGTTGAGAGGAGCATTGATGACTGGGTTTTCATGTGCTTCTTTGTGGGAAATGACTTCCT
CCCTCATTTGCCATCGTTAGAGATTAGGGAAAATGCAATTGACCGTTTGGTTAACATATACAAAAATGTGGTACA
CAAAACTGGGGGTTACCTTACAGAAAGTGGTTATGTCAATCTGCAAAGAGTACAGATGATCATGTTAGCAGTTGG
TGAAGTTGAGGATAGCATTTTTAAAAAGAGAAAGGATGATGAGGACAGTTTTAGAAGACGACAGAAAGAAAAAAG
AAAGAGAATGAAGAGAGATCAACCAGCTTTCACTCCTAGTGGAATATTAACTCCTCATGCCTTGGGTTCAAGAAA
TTCACCAGGTTCTCAAGTAGCCAGTAATCCGAGACAAGCAGCCTATGAAATGAGGATGCAGAATAACTCTAGTCC
TTCGATATCTCCTAATACGAGTTTCACATCTGATGGCTCCCCGTCTCCATTAGGAGGAATTAAGCGAAAAGCAGA
AGACAGTGACAGTGAACCTGAGCCAGAGGATAATGTCAGGTTATGGGAAGCTGGCTGGAAGCAGCGGTACTACAA
GAACAAATTTGATGTGGATGCAGCTGATGAGAAATTCCGTCGGAAAGTTGTGCAGTCGTACGTTGAAGGACTTTG
CTGGGTTCTTAGATATTATTACCAGGGCTGTGCTTCCTGGAAGTGGTATTATCCATTTCATTATGCACCATTTGC
TTCAGACTTTGAAGGCATTGCAGACATGCCATCTGATTTTGAGAAGGGTACGAAACCGTTTAAACCACTAGAACA
ACTTATGGGGGTATTTCCAGCTGCAAGTGGTAATTTTCTACCTCCATCATGGCGGAAGCTCATGAGTGATCCTGA
TTCTAGTATAATTGACTTCTATCCTGAAGATTTTGCTATTGATTTGAATGGGAAGAAATATGCATGGCAAGGTGT
TGCTCTCTTGCCATTCGTGGATGAGCGAAGGCTACGAGCTGCCCTAGAAGAGGTATACCCAGACCTCACTCCAGA
AGAGACCAGAAGAAACAGCCTTGGAGGTGATGTCTTATTTGTGGGGAAACATCACCCACTCCATGACTTCATTTT
AGAGCTGTACCAGACAGGTTCCACAGAGCCAGTGGAGGTACCCCCTGAACTATGTCATGGGATTCAAGGAAAGTT
TTCTTTGGATGAAGAAGCCATTCTTCCAGATCAAATAGTATGTTCTCCTGTTCCTATGTTAAGGGATCTGACACA
GAACACTGTAGTCAGTATTAATTTTAAAGACCCACAGTTTGCTGAAGATTACATTTTTAAAGCTGTAATGCTTCC
AGGAGCAAGAAAGCCAGCAGCAGTACTGAAACCTAGTGACTGGGAAAAATCCAGCAATGGACGGCAGTGGAAGCC
TCAGCTTGGCTTTAACCGTGACCGGAGGCCTGTGCACCTGGATCAGGCAGCCTTCAGGACTTTGGGCCATGTGAT
GCCAAGAGGCTCAGGAACTGGCATTTACAGCAATGCTGCACCACCACCTGTGACTTACCAGGGAAACTTATACAG
GCCGCTTTTGAGAGGACAAGCCCAGATTCCAAAACTTATGTCAAATATGAGGCCCCAGGATTCCTGGCGAGGTCC
TCCTCCCCTTTTCCAGCAGCAAAGGTTTGACAGAGGCGTTGGGGCTGAACCTCTGCTCCCATGGAACCGGATGCT
GCAAACCCAGAATGCAGCCTTCCAGCCAAACCAGTACCAGATGCTAGCTGGGCCTGGTGGGTATCCACCCAGACG
AGATGATCGTGGAGGGAGACAGGGATATCCCAGAGAAGGAAGGAAATACCCTTTGCCACCACCCTCAGGAAGATA
CAATTGGAATTAAGCTTTTGTAAAGCTTTCCCAAATCCTTTCATCATTCTACAGTTTTATGCTATTTGTGGAAAG
ATTTCTTTCTCAAGTAGTAGTTTTTAATAAAACTACAGTACTTTGTGTATTTCTTTTAACTGTGTATATTTCTAC
TGATCTGATCTCACTGTTTATGTTGCTTTCCAAAGATGTATGTTGCATAATACAGTGGATCTGAATTTATTATTG
CTTATAAAACACATTTGATGGAATAGGAGTACTGGTTTTTCATAATGGTTAAAAATGAAACCAGCTGTGGATTTC
AAAACACAGTGTATTCTAGATCATCTAAGATCCATGCTGATTTTTATTGCACAAGAATTAGGTTTGAACTCTTGA
GCTGGAACCTCAGCAAACTAGAGTATATATTGTTCAGTATTTCTTTGGAAACATTTCATTAATGTACTTGTCTTA
CAGAAATTTCTGAACTTTAGTAAAAAAAAATAAAGTTAAACTTTTAAAACTCAAAAAAAAAAAAAAAAAA

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FIGURE 5400

MGVPAFFRWLSRKYPSIIVNCVEEKPKECNGVKIPVDASKPNPNDVEFDNLYLDMNGIIHPCTHPEDKPAPKNED
EMMVAIFEYIDRLFSIVRPRRLLYMAIDGVAPRAKMNQQRSRRFRASKEGMEAAVEKQRVREEILAKGGFLPPEE
IKERFDSNCITPGTEFMDNLAKCLRYYIADRLNNDPGWKNLTVILSDASAPGEGEHKIMDYIRRQRAQPNHDPNT
HHCLCGADADLIMLGLATHEPNFTIIREEFKPNKPKPCGLCNQFGHEVKDCEGLPREKKGKHDELADSLPCAEGE
FIFLRLNVLREYLERELTMASLPFTFDVERSIDDWVFMCFFVGNDFLPHLPSLEIRENAIDRLVNIYKNVVHKTG
GYLTESGYVNLQRVQMIMLAVGEVEDSIFKKRKDDEDSFRRRQKEKRKRMKRDQPAFTPSGILTPHALGSRNSPG
SQVASNPRQAAYEMRMQNNSSPSISPNTSFTSDGSPSPLGGIKRKAEDSDSEPEPEDNVRLWEAGWKQRYYKNKF
DVDAADEKFRRKVVQSYVEGLCWVLRYYYQGCASWKWYYPFHYAPFASDFEGIADMPSDFEKGTKPFKPLEQLMG
VFPAASGNFLPPSWRKLMSDPDSSIIDFYPEDFAIDLNGKKYAWQGVALLPFVDERRLRAALEEVYPDLTPEETR
RNSLGGDVLFVGKHHPLHDFILELYQTGSTEPVEVPPELCHGIQGKFSLDEEAILPDQIVCSPVPMLRDLTQNTV
VSINFKDPQFAEDYIFKAVMLPGARKPAAVLKPSDWEKSSNGRQWKPQLGFNRDRRPVHLDQAAFRTLGHVMPRG
SGTGIYSNAAPPPVTYQGNLYRPLLRGQAQIPKLMSNMRPQDSWRGPPPLFQQQRFDRGVGAEPLLPWNRMLQTQ
NAAFQPNQYQMLAGPGGYPPRRDDRGGRQGYPREGRKYPLPPPSGRYNWN

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FIGURE 5401

CTCAGCTGCAGCGGCGACTTTCAGTTTCATTTCCACGGACCCTCCTGCCTGGGCCGCAGCCGCCGCCGCGATGCC
CAGTAAGTTCAGCTGCCGGCAGCTCCGGGAGGCGGGCCAGTGTTTCGAGAGTTTCCTGGTCGTTCGGGGACTGGA
CATGGAGACAGATCGCGAGCGGCTGCGGACCATTTATAACCGCGACTTCAAGATCAGCTTTGGGACCCCCGCCCC
TGGCTTCTCCTCCATGCTGTATGGAATGAAGATTGCAAATCTGGCCTACGTCACCAAGACTCGGGTCAGGTTCTT
CAGACTCGACCGCTGGGCCGACGTGCGGTTCCCAGAAAAGAGGAGAATGAAGCTGGGGTCAGATATCAGCAAACA
CCACAAGTCACTGCTAGCCAAGATCTTTTATGACAGGGCTGAGTATCTTCATGGGAAACATGGTGTGGATGTGGA
AGTCCAGGGGCCCCATGAAGCCCGAGATGGGCAGCTCCTTATCCGCCTGGATTTGAACCGCAAAGAGGTGCTGAC
CCTGAGGCTTCGGAATGGCGGAACCCAGTCTGTTACCCTCACTCACCTCTTCCCACTCTGCCGGACACCCCAGTT
TGCTTTCTACAATGAAGACCAGGAGTTGCCCTGTCCACTGGGCCCCGGTGAATGCTATGAACTCCATGTCCATTG
TAAGACCAGCTTTGTGGGCTACTTCCCAGCCACAGTGCTCTGGGAGCTGCTGGGACCTGGGGAGTCGGGTTCAGA
AGGAGCCGGCACATTCTACATTGCCCGCTTCTTGGCTGCCGTCGCCCACAGCCCCCTGGCTGCACAGCTGAAGCC
CATGACTCCCTTCAAGCGGACCCGGATCACCGGAAACCCTGTGGTGACCAATCGGATAGAGGAAGGAGAGAGACC
TGACCGCGCTAAGGGCTATGACCTGGAGTTAAGTATGGCGCTGGGGACATACTACCCACCTCCCCGCCTCAGGCA
GCTGCTCCCCATGCTTCTTCAGGGAACAAGTATCTTCACTGCCCCTAAGGAGATCGCAGAGATCAAGGCCCAGCT
GGAGACAGCCCTGAAGTGGAGGAACTATGAGGTGAAGCTGCGGCTGCTGCTGCACCTGGAGGAACTGCAGATGGA
GCATGATATCCGGCACTATGACCTGGAGTCGGTGCCCATGACCTGGGACCCTGTGGACCAGAACCCCAGGCTGCT
CACGCTGGAGGTTCCTGGAGTGACTGAGAGCCGCCCCTCAGTGCTACGGGGCGACCACCTGTTTGCCCTTTTGTC
CTCGGAGACACACCAGGAGGACCCCATCACATATAAGGGCTTTGTGCACAAGGTGGAATTGGACCGTGTCAAGCT
GAGCTTTTCCATGAGCCTCCTGAGCCGCTTTGTGGATGGGCTGACCTTCAAGGTGAACTTTACCTTCAACCGCCA
GCCGCTGCGAGTCCAGCACCGTGCCCTGGAGCTGACAGGGCGCTGGCTGCTGTGGCCCATGCTCTTTCCTGTGGC
ACCTCGGGACGTCCCGCTGCTGCCCTCAGATGTGAAACTCAAGCTGTACGACCGGAGTCTGGAGTCAAACCCAGA
GCAGCTGCAGGCCATGAGGCACATTGTTACGGGCACCACCCGTCCAGCCCCCTACATCATCTTTGGGCCTCCAGG
CACCGGCAAGACTGTCACGTTAGTGGAGGCAATTAAGCAGGTGGTGAAGCACTTGCCCAAAGCCCACATCTTGGC
CTGCGCTCCATCCAACTCAGGGGCTGACCTACTCTGTCAAAGGCTCCGGGTCCACCTTCCTAGCTCCATCTACCG
CCTCCTGGCCCCCAGCAGGGACATCCGCATGGTACCTGAGGACATCAAGCCCTGCTGCAACTGGGACGCAAAGAA
GGGGGAGTATGTATTTCCCGCCAAGAAGAAGCTGCAGGAATACCGGGTCTTAATTACCACCCTCATCACTGCCGG
CAGGTTGGTCTCGGCCCAGTTTCCCATTGATCACTTCACACACATCTTCATCGATGAGGCTGGCCACTGCATGGA
GCCTGAGAGTCTGGTAGCTATAGCAGGGCTGATGGAAGTAAAGGAAACAGGTGATCCAGGAGGGCAGCTGGTGCT
GGCAGGAGACCCTCGGCAGCTGGGGCCTGTGCTGCGTTCCCCACTGACCCAGAAGCATGGACTGGGATACTCACT
GCTGGAGCGGCTGCTCACCTACAACTCCCTGTACAAGAAGGGCCCTGATGGCTATGACCCCCAGTTCATAACCAA
GCTGCTCCGCAACTACAGGTCTCATCCCACCATCCTGGACATTCCTAACCAGCTCTATTATGAAGGGGAGCTGCA
GGCCTGTGCTGATGTCGTGGATCGAGAACGCTTCTGCCGCTGGGCGGGCCTACCTCGACAGGGCTTTCCCATCAT
CTTTCACGGCGTAATGGGCAAAGATGAGCGTGAAGGCAACAGCCCATCCTTCTTCAACCCTGAAGAGGCTGCCAC
AGTGACTTCCTACCTGAAGCTGCTCCTGGCCCCCTCCTCCAAGAAGGGCAAAGCTCGCCTGAGCCCTCGAAGTGT
GGGCGTCATCTCCCCGTACCGGAAACAGGTGGAGAAAATCCGTTACTGCATCACCAAACTTGACAGGGAGCTTCG
AGGACTGGATGACATCAAGGACTTGAAGGTGGGTTCAGTAGAAGAATTCCAAGGCCAAGAACGAAGCGTCATCCT
CATCTCCACCGTGCGAAGCAGCCAGAGCTTTGTGCAGCTGGATCTGGACTTTAATCTGGGTTTCCTTAAGAACCC
CAAGAGGTTCAATGTAGCTGTGACCCGGGCCAAGGCCCTGCTCATCATCGTGGGGAACCCCCTTCTCCTGGGCCA
TGACCCTGACTGGAAAGTATTCCTGGAGTTCTGTAAAGAAAACGGAGGGTATACCGGGTGTCCCTTCCCTGCCAA
ACTGGACCTGCAACAGGGACAGAATTTACTGCAAGGTCTGAGCAAGCTCAGCCCCTCTACCTCAGGGCCCCACAG
CCATGACTACCTCCCCCAGGAGCGGGAGGGTGAAGGGGGCCTGTCTCTGCAAGTGGAGCCAGAGTGGAGGAATGA
GCTCTGAAGACACAGCACCCAGCCTTCTCGCACCAGCCAAGCCTTAACTGCCTGCCTGACCCTGAACCAGAACCC
AGCTGAACTGCCCCTCCAAGGGACAGGAAGGCTGGGGGAGGGAGTTTACAACCCAAGCCATTCCACCCCCTCCCC
TGCTGGGGAGAATGACACATCAAGCTGCTAACAATTGGGGGAAGGGGAAGGAAGAAAACTCTGAAAACAAAATCT
TGTTCTATGCAAAAAAAAAAAAAAAAAA

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FIGURE 5402

MPSKFSCRQLREAGQCFESFLVVRGLDMETDRERLRTIYNRDFKISFGTPAPGFSSMLYGMKIANLAYVTKTRVR
FFRLDRWADVRFPEKRRMKLGSDISKHHKSLLAKIFYDRAEYLHGKHGVDVEVQGPHEARDGQLLIRLDLNRKEV
LTLRLRNGGTQSVTLTHLFPLCRTPQFAFYNEDQELPCPLGPGECYELHVHCKTSFVGYFPATVLWELLGPGESG
SEGAGTFYIARFLAAVAHSPLAAQLKPMTPFKRTRITGNPVVTNRIEEGERPDRAKGYDLELSMALGTYYPPPRL
RQLLPMLLQGTSIFTAPKEIAEIKAQLETALKWRNYEVKLRLLLHLEELQMEHDIRHYDLESVPMTWDPVDQNPR
LLTLEVPGVTESRPSVLRGDHLFALLSSETHQEDPITYKGFVHKVELDRVKLSFSMSLLSRFVDGLTFKVNFTFN
RQPLRVQHRALELTGRWLLWPMLFPVAPRDVPLLPSDVKLKLYDRSLESNPEQLQAMRHIVTGTTRPAPYIIFGP
PGTGKTVTLVEAIKQVVKHLPKAHILACAPSNSGADLLCQRLRVHLPSSIYRLLAPSRDIRMVPEDIKPCCNWDA
KKGEYVFPAKKKLQEYRVLITTLITAGRLVSAQFPIDHFTHIFIDEAGHCMEPESLVAIAGLMEVKETGDPGGQL
VLAGDPRQLGPVLRSPLTQKHGLGYSLLERLLTYNSLYKKGPDGYDPQFITKLLRNYRSHPTILDIPNQLYYEGE
LQACADVVDRERFCRWAGLPRQGFPIIFHGVMGKDEREGNSPSFFNPEEAATVTSYLKLLLAPSSKKGKARLSPR
SVGVISPYRKQVEKIRYCITKLDRELRGLDDIKDLKVGSVEEFQGQERSVILISTVRSSQSFVQLDLDFNLGFLK
NPKRFNVAVTRAKALLIIVGNPLLLGHDPDWKVFLEFCKENGGYTGCPFPAKLDLQQGQNLLQGLSKLSPSTSGP
HSHDYLPQEREGEGGLSLQVEPEWRNEL

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FIGURE 5403

GCAGCTGGGAGGAGGTGGTGACGGTGGCAACGGCAGCGTCGGGGACGATGGCGCGACTCGTGGCAGTGTGCAGGG
ACGGGGAGGAGGAGTTCCCCTTCGAGAGGAGGCAGATTCCCCTCTACATAGACGACACCCTGACGATGGTGATGG
AATTTCCTGATAATGTGTTAAATCTCGATGGACATCAGAATAATGGTGCACAGCTAAAGCAGTTCATTCAGCGAC
ATGGTATGCTTAAGCAACAGGATCTAAGTATTGCCATGGTGGTGACATCACGCGAAGTCCTGAGTGCACTTTCTC
AGCTTGTCCCATGTGTTGGTTGTCGTCGCAGTGTGGAGCGTCTCTTTTCCCAGCTTGTAGAGTCTGGAAATCCTG
CTCTTGAACCCCTAACAGTAGGGCCCAAGGGAGTCCTGTCTGTAACTAGAAGCTGCATGACTGATGCAAAGAAGC
TTTATACATTATTTTATGTACATGGGTCCAAACTAAATGACATGATAGATGCTATTCCAAAAAGTAAGAAGAATA
AGAGATGTCAGTTGCACTCCTTAGATACGCACAAGCCAAAACCTTTGGGAGGTTGTTGGATGGATGTATGGGAAC
TAATGTCGCAGGAATGCAGGGATGAAGTAGTTTTAATTGACTCGAGTTGTCTTTTAGAAACACTAGAAACATATC
TGCGAAAACACAGGTTTTGCACTGATTGCAAAAATAAAGTCCTCCGAGCATACAATATCCTTATTGGTGAACTTG
ACTGCAGCAAAGAAAAGGGCTACTGTGCTGCACTTTATGAAGGCTTGCGGTGCTGTCCACATGAACGACACATAC
ATGTTTGCTGTGAAACAGACTTCATTGCACATCTTTTGGGTCGTGCTGAGCCAGAGTTCGCAGGAGGGCGAAGAG
AAAGGCATGCAAAGACAATAGATATAGCTCAAGAAGAAGTTCTGACCTGCTTGGGAATTCATCTTTATGAAAGAC
TGCATCGAATCTGGCAGAAGCTACGGGCAGAAGAGCAGACATGGCAGATGCTTTTCTATCTTGGTGTTGATGCTT
TACGCAAGAGTTTTGAGATGACCGTGGAAAAAGTACAGGGTATTAGCAGATTGGAACAACTTTGTGAGGAATTTT
CAGAAGAGGAACGAGTAAGAGAACTCAAGCAAGAAAAGAAACGCCAAAAACGGAAGAATAGACGAAAAAATAAGT
GTGTGTGTGATATTCCTACTCCCTTACAAACAGCAGATGAAAAGGAAGTAAGCCAAGAGAAGGAAACAGACTTCA
TAGAAAATAGCAGCTGCAAAGCCTGTGGCAGCACTGAAGATGGTAATACTTGTGTAGAAGTAATTGTTACCAATG
AAAATACATCATGTACCTGTCCTAGCAGTGGCAATCTTTTGGGGTCCCCTAAAATAAAGAAAGGCTTATCTCCAC
ACTGTAATGGTAGTGATTGTGGATATTCATCTAGCATGGAAGGGAGTGAAACAGGTTCTCGGGAGGGTTCGGATG
TTGCCTGCACTGAAGGCATTTGTAATCATGATGAACACGGTGATGACTCTTGTGTTCATCACTGTGAAGACAAAG
AGGATGATGGTGATAGTTGTGTTGAATGTTGGGCAAATTCTGAAGAGAACGACACAAAAGGAAAAAATAAAAAGA
AGAAAAAGAAAAGCAAGATACTGAAATGTGATGAACATATCCAGAAGCTTGGAAGCTGTATTACAGATCCAGGTA
ATCGAGAGACCTCAGGAAATACCATGCACACAGTGTTTCACCGTGACAAGACCAAAGATACACATCCTGAAAGCT
GTTGCAGCTCTGAAAAGGGTGGGCAGCCATTGCCTTGGTTTGAGCATAGGAAAAATGTACCACAGTTTGCAGAAC
CTACAGAAACGTTGTTTGGTCCCGATTCCGGAAAAGGTGCCAAGAGCTTAGTTGAACTCCTTGATGAGTCTGAAT
GTACTTCAGATGAGGAAATCTTTATCTCACAAGATGAAATACAGTCATTTATGGCTAATAACCAGTCTTTCTACA
GCAATAGAGAACAATACCGACAGCATCTGAAGGAGAAATTTAATAAATACTGCCGGTTAAATGATCACAAGAGGC
CCATTTGTAGTGGCTGGTTGACAACGGCTGGAGCAAATTAAATAAATAAAATAGCTCTGTCTTTCAATGAAACAC
TCACGATGACTACTGCGCCTTCTCTTTCGAAAAACTCTTAATTTAGTGACTTATGGCAAAATTTTATCTTAAATC
AATGTGATTCTTTCTTGTTTTGGGAGACGGTGGAGGTATCCTCATTAGTTCTTTCTTCAGGCTTGTGTCTTTAGT
TGCGTGGCTGCGCAGGCCTGCCATATGATTTAAGCCATCTCTTTTCATTAAATGTTTCTCTTCCTGTGAGACTTA
CTAAAGCAACTTAGTGGCAAAAAGTAATGTTGTACTTATAATTCTGTACAGAAATGACAATGAGCTGAATATATG
GTTTTACAAAGTAGACATCCACTTGCAAAATGTTTGGATGTAATGTTAAAGCGCAATGTGCAAAATTTAAAATAA
AGAATATTTATTAATACGCACAGTAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 5404

MARLVAVCRDGEEEFPFERRQIPLYIDDTLTMVMEFPDNVLNLDGHQNNGAQLKQFIQRHGMLKQQDLSIAMVVT
SREVLSALSQLVPCVGCRRSVERLFSQLVESGNPALEPLTVGPKGVLSVTRSCMTDAKKLYTLFYVHGSKLNDMI
DAIPKSKKNKRCQLHSLDTHKPKPLGGCWMDVWELMSQECRDEVVLIDSSCLLETLETYLRKHRFCTDCKNKVLR
AYNILIGELDCSKEKGYCAALYEGLRCCPHERHIHVCCETDFIAHLLGRAEPEFAGGRRERHAKTIDIAQEEVLT
CLGIHLYERLHRIWQKLRAEEQTWQMLFYLGVDALRKSFEMTVEKVQGISRLEQLCEEFSEEERVRELKQEKKRQ
KRKNRRKNKCVCDIPTPLQTADEKEVSQEKETDFIENSSCKACGSTEDGNTCVEVIVTNENTSCTCPSSGNLLGS
PKIKKGLSPHCNGSDCGYSSSMEGSETGSREGSDVACTEGICNHDEHGDDSCVHHCEDKEDDGDSCVECWANSEE
NDTKGKNKKKKKKSKILKCDEHIQKLGSCITDPGNRETSGNTMHTVFHRDKTKDTHPESCCSSEKGGQPLPWFEH
RKNVPQFAEPTETLFGPDSGKGAKSLVELLDESECTSDEEIFISQDEIQSFMANNQSFYSNREQYRQHLKEKFNK
YCRLNDHKRPICSGWLITTAGAN

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FIGURE 5405

AGCAGTGGCCCAAAGAGGAGCAGCAGACAAGAGTGCAGTGGTGGCTGCCGCCGCACCAGCCTCAGTGGCAGATGA
CACACCACCCCCCGAGCGTCGGAACAAGAGCGGTATCATCAGTGAGCCCCTCAACAAGAGCCTGCGCCGCTCCCG
CCCGCTCTCCCACTACTCTTCTTTTGGCAGCAGTGGTGGTAGTGGCGGTGGCAGCATGATGGGCGGAGAGTCTGC
TTGACAAGGCCACTGCGGCTGCAGCCTGGCCTTCCCTGTTGGCCAATGGGATGACCTGGCGGCGGCC**ATG**GCGGT
GGACAAAAGCAACCCTACCTCAAAGCACAAAAGTGGTGCTGTGGCCAGCCTGCTGAGCAAGGCAGAGCGGGCCAC
GGAGCTGGCAGCCGAGGGACAGCTGACGCTGCAGCAGTTTGCGCAGTCCACAGAGATGCTGAAGCGCGTGGTGCA
GGAGCATCTCCCGCTGATGAGCGAGGCGGGTGCTGGCCTGCCTGACATGGAGGCTGTGGCAGGTGCCGAAGCCCT
CAATGGCCAGTCCGACTTCCCCTACCTGGGCGCTTTCCCCATCAACCCAGGCCTCTTCATTATGACCCCGGCAGG
TGTGTTCCTGGCCGAGAGCGCGCTGCACATGGCGGGCCTGGCTGAGTACCCCATGCAGGGAGAGCTGCCTCTGCC
ATCAGCTCCGGCAAGAAGAAGCGGAAACGCTGCGGCATTGTGCGCGCCCTGCCGGCGGCGCATCAACTGCGAGCA
GTGCAGCAGTTGTAGGAATCGAAAGACTGGCCATCAGATTTGCAAATTCAGAAAATGTGAGGAACTCAAAAAGAA
GCCTTCCGCTGCTCTGGAGAAGGTGATGCTTCCGACGGGAGCCGCCTTCCGGTGGTTTCAG**TGA**CGGCGGCGGAA
CCCAAAGCTGCCCTCTCCGTGCAATGTCACTGCTCGTGTGGTCTCCAGCAAGGGATTCGGGCGAAGACAAACGGA
TGCACCCGTCTTTAGAACCAAAAATATTCTCTCACAGATTTCATTCCTGTTTTTATATATATATTTTTTGTTGTC
GTTTTAACATCTCCACGTCCCTAGCATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 5406

MAVDKSNPTSKHKSGAVASLLSKAERATELAAEGQLTLQQFAQSTEMLKRVVQEHLPLMSEAGAGLPDMEAVAGA
EALNGQSDFPYLGAFPINPGLFIMTPAGVFLAESALHMAGLAEYPMQGELPLPSAPARRSGNAAALCAPCRRRIN
CEQCSSCRNRKTGHQICKFRKCEELKKKPSAALEKVMLPTGAAFRWFQ

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FIGURE 5407

GTGAGGCTGGCGGTGGCGACAACCGAGGAGGAGGGGCGGGACGCCGTGGAGCACGGCGACCGGCTGAGCGTC**ATG**

GAGGGCTCAGGGGAGCAGCCGGGCCCACAACCACAGCATCCCGGAGACCACCGCATCCGCGACGGCGACTTCGTG
GTGCTGAAACGTGAAGATGTGTTTAAAGCAGTACAAGTCCAGCGGAGAAAAAAAGTAACTTTCGAAAAACAGTGG
TTCTACCTGGATAACGTCATTGGCCATAGTTATGGAACTGCATTTGAAGTGACCAGTGGAGGAAGTCTACAGCCC
AAGAAGAAGAGGGAAGAGCCTACTGCAGAGACTAAAGAAGCGGGCACTGATAATCGAAATATAGTTGATGATGGG
AAATCTCAGAAACTTACTCAAGATGACATAAAAGCTTTGAAGGACAAGGGCATTAAAGGAGAGGAAATAGTTCAG
CAGTTAATTGAAAATAGTACAACATTCCGAGACAAGACAGAATTTGCCCAAGATAAATATATTAAAAAGAAGAAA
AAAAAATATGAAGCCATCATTACTGTTGTGAAGCCATCCACCCGTATTCTTTCAATTATGTATTATGCAAGAGAA
CCTGGAAAAATTAACCACATGAGATACGATACACTAGCCCAGATGTTGACGTTGGGAAATATCCGTGCTGGCAAC
AAAATGATTGTGATGGAAACGTGTGCAGGCTTGGTGCTGGGTGCAATGATGGAACGAATGGGAGGTTTTGGCTCC
ATTATTCAGCTATACCCTGGAGGAGGACCTGTTCGGGCAGCAACAGCATGTTTTGGATTTCCCAAATCTTTTCTC
AGTGGTCTTTATGAATTCCCTCTCAACAAAGTGGACAGTCTTCTACATGGAACATTTTCTGCCAAGATGTTATCT
TCAGAGCCAAAAGACAGTGCTTTGGTTGAAGAAAGTAATGGCACACTGGAGGAAAAACAGGCTTCTGAACAAGAG
AATGAAGACAGCATGGCAGAGGCCCCAGAGAGCAACCACCCAGAAGACCAGGAAACAATGGAAACAATTTCTCAA
GATCCAGAACATAAGGGGCCTAAAGAGAGAGGAAGCAAAAAAGATTATATTCAGGAAAAACAGAGGAGACAAGAA
GAGCAGAGGAAAAGACATTTAGAGGCTGCCGCTCTGCTGAGTGAAAGAAACGCAGATGGTTTAATTGTAGCTAGT
CGTTTCCACCCCACTCCCCTGCTGCTGTCTTTGCTGGACTTTGTGGCCCCTTCAAGGCCGTTTGTGGTCTACTGT
CAGTACAAAGAGCCTCTGTTGGAATGCTACACAAAACTGCGGGAGAGGGGAGGGGTCATCAACCTCAGGCTGTCT
GAAACCTGGCTCAGAAATTATCAGGTTTTGCCAGATCGAAGTCATCCTAAACTGCTGATGAGTGGAGGTGGGGGT
TATCTTCTCTCCGGCTTCACCGTTGCCATGGACAACCTTAAAGCAGACACCAGCCTCAAATCTAATGCAAGCACT
TTAGAATCACACGAGACTGAGGAGCCTGCAGCTAAAAAACGAAAATGCCCAGAGTCTGACTCT**TAA**CCCTTTTGA
GAATTGCTCTGAATTTTGTTCTCAGGCATTATACAGTTAGTAATTAAACTTTAAATGCCATTACTACTTGTTTTT
TCATATCCCAAGAATAAGAACATGTCTATGTACCCGTTTCTAGGAAGGAGGAGTATATGCCTTTTGTCTATTTCT
GACACAGATGCATTTGGTCTGTCAAAACTGCAACCATGGGGTATGTAGTATGACCAACTGCATTTAACAAAACTC
CTCTAAGTACTTCTAAATATTCTGTGCAAATATCTTGAGAACTTCAACATCCTAAAAATGTGTTTCTACAAGACT
TTATATTTTAAGCTAAGTGGAATAATACAACGTAACTAAAACATGGCGGGTACCGAAAGGAGGGCAATTCATGGA
AGAAATTTCCTCTGTTCATTCCGTTCTCTTCAACCTAAGCAATATGGATGTGTGAGTGTGTGATTTATTATGGTA
CCAAAAATGTCCACCTTCTTTCCTGCAGCGGAATAAGCTTTTTTGAAATGCTGAGGTTTTATTTTAATAGTTGAC
AACCTGGGAAAGTTCTGAGTATTTATTTTACTGCTCTTTTTTGTGCATAGAAAGGTTTAGTAGGGTACTTTTTTG
CATTAATTTGCCAATACTCTTATTCTTTGTTCTAAATAAAGTGACTAGAATTTTTGTGTACTATTCAATTAAAGG
AAAAAAAAAAAAAAAAAAAAA

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FIGURE 5408

MEGSGEQPGPQPQHPGDHRIRDGDFVVLKREDVFKAVQVQRRKKVTFEKQWFYLDNVIGHSYGTAFEVTSGGSLQ
PKKKREEPTAETKEAGTDNRNIVDDGKSQKLTQDDIKALKDKGIKGEEIVQQLIENSTTFRDKTEFAQDKYIKKK
KKKYEAIITVVKPSTRILSIMYYAREPGKINHMRYDTLAQMLTLGNIRAGNKMIVMETCAGLVLGAMMERMGGFG
SIIQLYPGGGPVRAATACFGFPKSFLSGLYEFPLNKVDSLLHGTFSAKMLSSEPKDSALVEESNGTLEEKQASEQ
ENEDSMAEAPESNHPEDQETMETISQDPEHKGPKERGSKKDYIQEKQRRQEEQRKRHLEAAALLSERNADGLIVA
SRFHPTPLLLSLLDFVAPSRPFVVYCQYKEPLLECYTKLRERGGVINLRLSETWLRNYQVLPDRSHPKLLMSGGG
GYLLSGFTVAMDNLKADTSLKSNASTLESHETEEPAAKKRKCPESDS

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FIGURE 5409

AAACGTTCCCAGGATCCCTAAGCCTCCGGCCCCAGACAAACGGGACTCGCAGCTTCTGCGCCTCCTGCTCCGCTC
ACTCTTCTTTGTCTCAGCCTTTCCATCTTTTTCGCCAGGACTCTGCTGGGCCGCTCAGCCATGCCTGAGGGAGCC
CAAGGACTGAGCCTCTCCAAACCTAGCCCAAGCCTCGGGTGTGGCCGAAGAGGTGAAGTGTGTGACTGTGGCACC
GTGTGTGAGACTCGGACAGCTCCTGCAGCCCCCACCATGGCCTCCCCCCGAGGTTCTGGGAGCTCCACATCCCTG
AGCACAGTGGGCTCTGAGGGGGATCCAGCCCCTGGGCCCACTCCAGCCTGCTCAGCCTCCAGGCCAGAGCCCCTT
CCAGGGCCCCCATCCGCCTACATCTCTCTCCGGTGGGGATCCCAGGTTCAGCCAGACCCTCAAGGCTGGAGCGTG
TGGCCCGGGAGATCGTGGAGACAGAACGGGCCTATGTCAGGGACCTCCGCAGCATCGTGGAGGACTACCTGGGCC
CTCTGCTGGACGGCGGGGTCCTGGGGCTGAGCGTGGAGCAGGTGGGCACGCTGTTTGCCAACATTGAGGACATCT
ACGAGTTCAGCAGCGAGCTCCTGGAGGACTTGGAGAACAGCAGCAGCGCCGGGGGTATTGCTGAGTGCTTCGTGC
AGAGGAGCGAGGATTTTGACATCTACACATTGTACTGC**ATG**AACTACCCGAGCTCCCTGGCCCTGCTCCGGGAGC
TGTCGTTGTCTCCGCCAGCAGCCCTGTGGCTGCAGGAGCGCCAGGCCCAGCTTCGCCACTCGCTGCCCCTGCAGA
GCTTCCTGCTGAAACCTGTCCAGCGCATTCTCAAGTACCATCTGCTGCTGCAGGAACTAGGGAAGCACTGGGCGG
AGGGCCCAGGCACTGGGGGTCGCGAGATGGTGGAGGAAGCTATTGTGTCCATGACAGCGGTTGCCTGGTACATCA
ACGACATGAAGCGCAAGCAGGAGCATGCAGCGCGCCTCCAGGAAGTGCAGCGGCGGCTGGGTGGCTGGACTGGAC
CAGAGCTCAGTGCTTTTGGGGAACTGGTGTTGGAGGGCGCGTTCCGAGGAGGCGGAGGGGGTGGCCCCCGGCTAC
GAGGGGGTGAGCGGCTGCTCTTCCTGTTCTCTCGGATGCTGCTGGTGGCCAAGCGCAGGGGGCTGGAGTACACCT
ACAAAGGCCACATCTTCTGCTGCAACCTGAGCGTGAGCGAGAGTCCCCGAGACCCTCTAGGGTTCAAGGTGTCTG
ATCTGACCATTCCCAAGCACAGACACCTGCTCCAGGCCAAGAACCAAGAAGAGAAGAGGCTGTGGATTCACTGTC
TCCAGCGCCTCTTCTTTGAGAACCACCCTGCCTCCATCCCTGCCAAGGCAAAGCAAGTTCTCCTTGAAAACAGCC
TGCATTGTGCCCCCAAAAGTAAGCCTGTCCTAGAGCCCCTGACACCCCCACTTGGGTCTCCTCGACCTCGAGATG
CTAGAAGTTTTACCCCTGGGCGAAGGAACACAGCTCCATCTCCTGGGCCCTCTGTGATTCGCCGAGGCCGCAGGC
AGTCTGAGCCGGTGAAGGACCCTTATGTCATGTTCCCACAGAACGCTAAGCCTGGATTCAAGCACGCTGGCAGCG
AAGGGGAACTCTACCCTCCAGAATCTCAGCCACCAGTTTCAGGCTCTGCACCCCCTGAGGACCTGGAGGATGCTG
GACCCCCAACACTGGACCCCTCTGGGACCTCAATCACTGAAGAAATCCTGGAACTGCTGAATCAGCGAGGCCTTC
GAGATCCAGGGGAATCTATGGGCCTTCACAGGGCCCAGGGGGCTCCTGATGCCCCCTTCCACATG**TGA**GCCAGGA
CATGAGGCTTCCCTGAAGCAAGGATTTCAGCCAGATGCCATAGACCCTCAGAACTTGACCTGGAAGTCCAGACAC
TGAACGCAGGCCTCAAAACTGCTGCGGCCTTCCAACTCCTGGTATCTGCATCGGCGAATGGCCCTTCTTGCCTTG
ATCCACAGGGATGGGGAAGGGAATGTCATTAATGTTTTGTTAATACTGATTCTTTCATGCAAAAAAAAAAAAAAA
AA

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FIGURE 5410

MNYPSSLALLRELSLSPPAALWLQERQAQLRHSLPLQSFLLKPVQRILKYHLLLQELGKHWAEGPGTGGREMVEE
AIVSMTAVAWYINDMKRKQEHAARLQEVQRRLGGWTGPELSAFGELVLEGAFRGGGGGGPRLRGGERLLFLFSRM
LLVAKRRGLEYTYKGHIFCCNLSVSESPRDPLGFKVSDLTIPKHRHLLQAKNQEEKRLWIHCLQRLFFENHPASI
PAKAKQVLLENSLHCAPKSKPVLEPLTPPLGSPRPRDARSFTPGRRNTAPSPGPSVIRRGRRQSEPVKDPYVMFP
QNAKPGFKHAGSEGELYPPESQPPVSGSAPPEDLEDAGPPTLDPSGTSITEEILELLNQRGLRDPGESMGLHRAQ
GAPDAPFHM

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FIGURE 5411

ATGGAGAATCAGGTGTTGACGCCGCATGTCTACTGGGCTCAGCGACACCGCGAGCTATATCTGCGCGTGGAGCTG
AGTGACGTACAGAACCCTGCCATCAGCATCACTGAAAACGTGCTGCATTTCAAAGCTCAAGGACATGGTGCCAAA
GGAGACAATGTCTATGAATTTCACCTGGAGTTCTTAGACCTTGTGAAACCAGAGCCTGTTTACAAACTGACCCAG
AGGCAGGTAAACATTACAGTACAGAAGAAAGTGAGTCAGTGGTGGGAGAGACTCACAAAGCAGGAAAAGCGACCA
CTGTTTTTGGCTCCTGACTTTGATCGTTGGCTGGATGAATCTGATGCGGAAATGGAGCTCAGAGCTAAGGAAGAA
GAGCGCCTAAATAAACTCCGACTGGAAAGCGAAGGCTCTCCTGAAACTCTTACAAACTTAAGGAAAGGATACCTG
TTTATGTATAATCTTGTGCAATTCTTGGGATTCTCCTGGATCTTTGTCAACCTGACTGTGCGATTCTGTATCTTG
GGAAAAGAGTCCTTTTATGACACATTCCATACTGTGGCTGACATGATGTATTTCTGCCAGATGCTGGCAGTTGTG
GAAACTATCAATGCAGCAATTGGAGTCACTACGTCACCGGTGCTGCCTTCTCTGATCCAGCTTCTTGGAAGAAAT
TTTATTTTGTTTATCATCTTTGGCACCATGGAAGAAATGCAGAACAAAGCTGTGGTTTTCTTTGTGTTTTATTTG
TGGAGTGCAATTGAAATTTTCAGGTACTCTTTCTACATGCTGACGTGCATTGACATGGATTGGAAGGTGCTCACA
TGGCTTCGTTACACTCTGTGGATTCCCTTATATCCACTGGGATGTTTGGCGGAAGCTGTCTCAGTGATTCAGTCC
ATTCCAATATTCAATGAGACCGGACGATTCAGTTTCACATTGCCATATCCAGTGAAAATCAAAGTTAGATTTTCC
TTTTTTCTTCAGATTTATCTTATAATGATATTTTTAGGTTTATACATAAATTTTCGTCACCTTTATAAACAGCGC
AGACTGAAAATGAGGGCAGGCGCAGTGGCTCATGCCTGTGATCCCAGCGCTTTGGGAGGCTGA

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FIGURE 5412

MENQVLTPHVYWAQRHRELYLRVELSDVQNPAISITENVLHFKAQGHGAKGDNVYEFHLEFLDLVKPEPVYKLTQ
RQVNITVQKKVSQWWERLTKQEKRPLFLAPDFDRWLDESDAEMELRAKEEERLNKLRLESEGSPETLTNLRKGYL
FMYNLVQFLGFSWIFVNLTVRFCILGKESFYDTFHTVADMMYFCQMLAVVETINAAIGVTTSPVLPSLIQLLGRN
FILFIIFGTMEEMQNKAVVFFVFYLWSAIEIFRYSFYMLTCIDMDWKVLTWLRYTLWIPLYPLGCLAEAVSVIQS
IPIFNETGRFSFTLPYPVKIKVRFSFFLQIYLIMIFLGLYINFRHLYKQRRLKMRAGAVAHACDPSALGG

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FIGURE 5413

ATGATATCCTTGAGAGTTTTACTGGTGATCCTGTGGCTTCAGTTAAGCTGGGTTTGGAGCCAACGGAAGGAGGTG
GAGCAGGATCCTGGACCCTTCAATGTTCCAGAGGGAGCCACTGTCGCTTTCAACTGTACTTACAGCAACAGTGCT
TCTCAGTCTTTCTTCTGGTACAGACAGGATTGCAGGAAAGAACCTAAGTTGCTGATGTCCGTATACTCCAGTGGT
AATGAAGATGGAAGGTTTACAGCACAGCTCAATAGAGCCAGCCAGTATATTTCCCTGCTCATCAGAGACTCCAAG
CTCAGTGATTCAGCCACCTACCTCTGTGTG

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FIGURE 5414

MISLRVLLVILWLQLSWVWSQRKEVEQDPGPFNVPEGATVAFNCTYSNSASQSFFWYRQDCRKEPKLLMSVYSSG
NEDGRFTAQLNRASQYISLLIRDSKLSDSATYLC

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FIGURE 5415

ATGTCCAACAACATGGCCAAGATTGCCGAGGCCCGCAAGACGGTGGAACAGCTGAAGCTGGAGGTGAACATCGAC
CGCATGAAGGTGTCGCAGGCAGCAGCGGAACTCCTGGCTTTCTGCGAGACGCATGCCAAAGATGACCCGCTGGTG
ACGCCAGTACCCGCCGCGGAGAACCCCTTCCGCGACAAGCGCCTCTTTTGTGTTCTGCTC**TGA**

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FIGURE 5416

MSNNMAKIAEARKTVEQLKLEVNIDRMKVSQAAAELLAFCETHAKDDPLVTPVPAAENPFRDKRLFCVLL

FIGURE 5417

CTTCCAGAGAGCAATATGGCTGGTTCCCCAACATGCCTCACCCTCATCTATATCCTTTGGCAGCTCACAGGGTCA
GCAGCCTCTGGACCCGTGAAAGAGCTGGTCGGTTCCGTTGGTGGGGCCGTGACTTTCCCCCTGAAGTCCAAAGTA
AAGCAAGTTGACTCTATTGTCTGGACCTTCAACACAACCCCTCTTGTCACCATACAGCCAGAAGGGGGCACTATC
ATAGTGACCCAAAATCGTAATAGGGAGAGAGTAGACTTCCCAGATGGAGGCTACTCCCTGAAGCTCAGCAAACTG
AAGAAGAATGACTCAGGGATCTACTATGTGGGGATATACAGCTCATCACTCCAGCAGCCCTCCACCCAGGAGTAC
GTGCTGCATGTCTACGAGCACCTGTCAAAGCCTAAAGTCACCATGGGTCTGCAGAGCAATAAGAATGGCACCTGT
GTGACCAATCTGACATGCTGCATGGAACATGGGGAAGAGGATGTGATTTATACCTGGAAGGCCCTGGGGCAAGCA
GCCAATGAGTCCCATAATGGGTCCATCCTCCCCATCTCCTGGAGATGGGGAGAAAGTGATATGACCTTCATCTGC
GTTGCCAGGAACCCTGTCAGCAGAAACTTCTCAAGCCCCATCCTTGCCAGGAAGCTCTGTGAAGGTGCTGCTGAT
GACCCAGATTCCTCCATGGTCCTCCTGTGTCTCCTGTTGGTGCCCCTCCTGCTCAGTCTCTTTGTACTGGGGCTA
TTTCTTTGGTTTCTGAAGAGAGAGAGACAAGAAGAGTACATTGAAGAGAAGAAGAGAGTGGACATTTGTCGGGAA
ACTCCTAACATATGCCCCCATTCTGGAGAGAACACAGAGTACGACACAATCCCTCACACTAATAGAACAATCCTA
AAGGAAGATCCAGCAAATACGGTTTACTCCACTGTGGAAATACCGAAAAAGATGGAAAATCCCCACTCACTGCTC
ACGATGCCAGACACACCAAGGCTATTTGCCTATGAGAATGTTATCTAGACAGCAGTGCACTCCCCTAAGTCTCTG
CTCAAAAAAAAAACAATTCTCGGCCCAAAGAAAACAATCAGAAGAATTCACTGATTTGACTAGAAACATCAAGGA
AGAATGAAGAACGTTGACTTTTTTCCAGGATAAATTATCTCTGATGCTTCTTTAGATTTAAGAGTTCATAATTCC
ATCCACTGCTGAGAAATCTCCTCAAACCCAGAAGGTTTAATCACTTCATCCCAAAAATGGGATTGTGAATGTCAG
CAAACCATAAAAAAAGTGCTTAGAAGTATTCCTATAGAAATGTAAATGCAAGGTCACACATATTAATGACAGCCT
GTTGTATTAATGATGGCTCCAGGTCAGTGTCTGGAGTTTCATTCCATCCCAGGGCTTGGATGTAAGGATTATACC
AAGAGTCTTGCTACCAGGAGGGCAAGAAGACCAAAACAGACAGACAAGTCCAGCAGAAGCAGATGCACCTGACAA
AAATGGATGTATTAATTGGCTCTATAAACTATGTGCCCAGCACTATGCTGAGCTTACACTAATTGGTCAGACGTG
CTGTCTGCCCTCATGAAATTGGCTCCAAATGAATGAACTACTTTCATGAGCAGTTGTAGCAGGCCTGACCACAGA
TTCCCAGAGGGCCAGGTGTGGATCCACAGGACTTGAAGGTCAAAGTTCACAAAGATGAAGAATCAGGGTAGCTGA
CCATGTTTGGCAGATACTATAATGGAGACACAGAAGTGTGCATGGCCCAAGGACAAGGACCTCCAGCCAGGCTTC
ATTTATGCACTTGTGCTGCAAAAGAAAAGTCTAGGTTTTAAGGCTGTGCCAGAACCCATCCCAATAAAGAGACCG
AGTCTGAAGTCACATTGTAAATCTAGTGTAGGAGACTTGGAGTCAGGCAGTGAGACTGGTGGGGCACGGGGGGCA
GTGGGTACTTGTAAACCTTTAAAGATGGTTAATTCATTCAATAGATATTTATTAAGAACCTATGCGGCCCGGCAT
GGTGGCTCACACCTGTAATCCCAGCACTTTGGGAGGCCAAGGTGGGTGGGTCATCTGAGGTCAGGAGTTCAAGAC
CAGCCTGGCCAACATGGTGAAACCCCATCTCTACTAAAGATACAAAAATTTGCTGAGCGTGGTGGTGTGCACCTG
TAATCCCAGCTACTCGAGAGGCCAAGGCATGAGAATCGCTTGAACCTGGGAGGTGGAGGTTGCAGTGAGCTGAGA
TGGCACCACTGCACTCCGGCCTAGGCAACGAGAGCAAAACTCCAATACAAACAAACAAACAAACACCTGTGCTAG
GTCAGTCTGGCACGTAAGATGAACATCCCTACCAACACAGAGCTCACCATCTCTTATACTTAAGTGAAAAACATG
GGGAAGGGGAAAGGGGAATGGCTGCTTTTGATATGTTCCCTGACACATATCTTGAATGGAGACCTCCCTACCAAG
TGATGAAAGTGTTGAAAAACTTAATAACAAATGCTTGTTGGGCAAGAATGGGATTGAGGATTATCTTCTCTCAGA
AAGGCATTGTGAAGGAATTGAGCCAGATCTCTCTCCCTACTGCAAAACCCTATTGTAGTAAAAAAGTCTTCTTTA
CTATCTTAATAAAACAGATATTGTGAGATTCAAAAAAAAAAAAAAAA

FIGURE 5418

MAGSPTCLTLIYILWQLTGSAASGPVKELVGSVGGAVTFPLKSKVKQVDSIVWTFNTTPLVTIQPEGGTIIVTQN
RNRERVDFPDGGYSLKLSKLKKNDSGIYYVGIYSSSLQQPSTQEYVLHVYEHLSKPKVTMGLQSNKNGTCVTNLT
CCMEHGEEDVIYTWKALGQAANESHNGSILPISWRWGESDMTFICVARNPVSRNFSSPILARKLCEGAADDPDSS
MVLLCLLLVPLLLSLFVLGLFLWFLKRERQEEYIEEKKRVDICRETPNICPHSGENTEYDTIPHTNRTILKEDPA
NTVYSTVEIPKKMENPHSLLTMPDTPRLFAYENVI

FIGURE 5419

CTTCTGTGTGTGCACATGTGTAATACATATCTGGGATCAAAGCTATCTATATAAAGTCCTTGATTCTGTGTGGGT
TCAAACACATTTCAAAGCTTCAGGATCCTGAAAGGTTTTGCTCTACTTCCTGAAGACCTGAACACCGCTCCCATA
AAGCCATGGCTTGCCTTGGATTTCAGCGGCACAAGGCTCAGCTGAACCTGGCTACCAGGACCTGGCCCTGCACTC
TCCTGTTTTTTCTTCTCTTCATCCCTGTCTTCTGCAAAGCAATGCACGTGGCCCAGCCTGCTGTGGTACTGGCCA
GCAGCCGAGGCATCGCCAGCTTTGTGTGTGAGTATGCATCTCCAGGCAAAGCCACTGAGGTCCGGGTGACAGTGC
TTCGGCAGGCTGACAGCCAGGTGACTGAAGTCTGTGCGGCAACCTACATGATGGGGAATGAGTTGACCTTCCTAG
ATGATTCCATCTGCACGGGCACCTCCAGTGGAAATCAAGTGAACCTCACTATCCAAGGACTGAGGGCCATGGACA
CGGGACTCTACATCTGCAAGGTGGAGCTCATGTACCCACCGCCATACTACCTGGGCATAGGCAACGGAACCCAGA
TTTATGTAATTGATCCAGAACCGTGCCCAGATTCTGACTTCCTCCTCTGGATCCTTGCAGCAGTTAGTTCGGGGT
TGTTTTTTTATAGCTTTCTCCTCACAGCTGTTTCTTTGAGCAAAATGCTAAAGAAAAGAAGCCCTCTTACAACAG
GGGTCTATGTGAAAATGCCCCCAACAGAGCCAGAATGTGAAAAGCAATTTCAGCCTTATTTTATTCCCATCAATT
GAGAAACCATTATGAAGAAGAGAGTCCATATTTCAATTTCCAAGAGCTGAGGCAATTCTAACTTTTTTGCTATCC
AGCTATTTTTATTTGTTTGTGCATTTGGGGGGAATTCATCTCTCTTTAATATAAAGTTGGATGCGGAACCCAAAT
TACGTGTACTACAATTTAAAGCAAAGGAGTAGAAAGACAGAGCTGGGATGTTTCTGTCACATCAGCTCCACTTTC
AGTGAAAGCATCACTTGGGATTAATATGGGGATGCAGCATTATGATGTGGGTCAAGGAATTAAGTTAGGGAATGG
CACAGCCCAAAGAAGGAAAAGGCAGGGAGCGAGGGAGAAGACTATATTGTACACACCTTATATTTACGTATGAGA
CGTTTATAGCCGAAATGATCTTTTCAAGTTAAATTTTATGCCTTTTATTTCTTAAACAAATGTATGATTACATCA
AGGCTTCAAAAATACTCACATGGCTATGTTTTAGCCAGTGATGCTAAAGGTTGTATTGCATATATACATATATAT
ATATATATATATATATATATATATATATATATATATATATTTTAATTTGATAGTATTGTGCATAGAGCCACGTAT
GTTTTTGTGTATTTGTTAATGGTTTGAATATAAACACTATATGGCAGTGTCTTTCCACCTTGGGTCCCAGGGAAG
TTTTGTGGAGGAGCTCAGGACACTAATACACCAGGTAGAACACAAGGTCATTTGCTAACTAGCTTGGAAACTGGA
TGAGGTCATAGCAGTGCTTGATTGCGTGGAATTGTGCTGAGTTGGTGTTGACATGTGCTTTGGGGCTTTTACACC
AGTTCCTTTCAATGGTTTGCAAGGAAGCCACAGCTGGTGGTATCTGAGTTGACTTGACAGAACACTGTCTTGAAG
ACAATGGCTTACTCCAGGAGACCCACAGGTATGACCTTCTAGGAAGCTCCAGTTCGATGGGCCCAATTCTTACAA
ACATGTGGTTAATGCCATGGACAGAAGAAGGCAGCAGGTGGCAGAATGGGGTGCATGAAGGTTTCTGAAAATTAA
CACTGCTTGTGTTTTTAACTCAATATTTTCCATGAAAATGCAACAACATGTATAATATTTTTAATTAAATAAAAA
TCTGTGGTGGTCGTTTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 5420

MACLGFQRHKAQLNLATRTWPCTLLFFLLFIPVFCKAMHVAQPAVVLASSRGIASFVCEYASPGKATEVRVTVLR
QADSQVTEVCAATYMMGNELTFLDDSICTGTSSGNQVNLTIQGLRAMDTGLYICKVELMYPPPYYLGIGNGTQIY
VIDPEPCPDSDFLLWILAAVSSGLFFYSFLLTAVSLSKMLKKRSPLTTGVYVKMPPTEPECEKQFQPYFIPIN

FIGURE 5421

ATGACAGTGAAGACCCTGCATGGCCCAGCCATGGTCAAGTACTTGCTGCTGTCGATATTGGGGCTTGCCTTTCTG
AGTGAGGCGGCAGCTCGGAAAATCCCCAAAGTAGGACATACTTTTTTCCAAAAGCCTGAGAGTTGCCCGCCTGTG
CCAGGAGGTAGTATGAAGCTTGACATTGGCATCATCAATGAAAACCAGCGCGTTTCCATGTCACGTAACATCGAG
AGCCGCTCCACCTCCCCCTGGAATTACACTGTCACTTGGGACCCCAACCGGTACCCCTCGGAAGTTGTACAGGCC
CAGTGTAGGAACTTGGGCTGCATCAATGCTCAAGGAAAGGAAGACATCTCCATGAATTCCGTTCCCATCCAGCAA
GAGACCCTGGTCGTCCGGAGGAAGCACCAAGGCTGCTCTGTTTCTTTCCAGTTGGAGAAGGTGCTGGTGACTGTT
GGCTGCACCTGCGTCACCCCTGTCATCCACCATGTGCAGTAA

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FIGURE 5422

MTVKTLHGPAMVKYLLLSILGLAFLSEAAARKIPKVGHTFFQKPESCPPVPGGSMKLDIGIINENQRVSMSRNIE
SRSTSPWNYTVTWDPNRYPSEVVQAQCRNLGCINAQGKEDISMNSVPIQQETLVVRRKHQGCSVSFQLEKVLVTV
GCTCVTPVIHHVQ

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FIGURE 5423

AGTGTAAGCAGTGTGCAAACAAGGTGTTACAGCACATGAAGGCCGTGCAGGCAGATCAGGAGCGGGAGAGGCAGC
GGCGGCTGGAAGTAGAACGTGAGGCAGAGAAGAAGCGTGAGGCTAAGCAGCGAGCTAAGGAAGCTCAGGAGCGGG
AACTGCGGAAGCGGGAGAAGGCGGAAGAGAAGGAGCGCCGGAGAAAGGAGTATGATGCCCTCAAAGCAGCCAAGC
GGGAGCAGGAGAAGAAACCTAAGAAGGAAGCAAATCAGGCCCCGAAATCTAAGTCTGGCTCCCGTCCCCGCAAGC
CACCACCCCGGAAGCACACTCGTTCCTGGGCTGTGCTGAAGCTGCTGCTGCTGCTGCTGCTATTTGGTGTGGCGG
GAGGGCTGGTTGCTTGTCGGGTGACAGAGCTGCAGCAGCAGCCCCTCTGCACCAGCGTGAACACCATCTATGACA
ATGCGGTCCAGGGTCTACGCCGCCATGAGATCCTCCAGTGGGTCCTTCAGACCGACTCTCAGCAGTGAGCTTGTT
CCCAGCACCTGCTGCCTCCCAGCCTTGGAGTTTGGATTCCTATGGAATTGGGTTCTGCTGGACACAACCTCTTTT
TAGCATCAGACCTACCTGCCATCATCAAATGGCTGCAGATTGGTACATGAGACCTCCTCTTTGTAGGACTTCTTC
ATTCCTTAGTCAGGGTTCCCTGAAGGAATGAGGAGAAATGGGAGGTGGCGGGGGGGGCGTGGGGGGCAGTTACCTG
CATGCCTAAAGGAGTAGGCTTGGGGGTGGGGAGAGAGAAAACATAGCCTTTTCTAGTTGTTATATAAAGCTGTGT
AAAGGCAAGGCTCGTTTCTACTAAATGGTCAGCTGTCACTACATTTATACTTTTGTATGCCACAAACCCTTTCAT
TCCTCCCTGGGAATCAGGGTAGATCAGGAGGAACTGGGGGGGGACTAGAACACCACGCTCAGTAAATCCAGTCTAA
ACTGGGAGGTAGGGGTATTCCTGTTTTCTTTAGGACCTCAGAGATGTAAGCATTTTAGCAGCCACACAAAATCTC
TGGCTATGAAAGGGACTTCATGACCATCCAGTCCAATATAACACTTGCAGACAGAGAAACTGAGGTCTTCCATGA
CTTGCCTAGTCTCCCAGCTAGTTTGAGGCAAAACTGGATTCCCACTCTGGTATTCTTTCTTCCCTTTACATCATT
TTCCCTCCTTTATAATGTCCTGAGAGACCAGAACTCACACCAGAATCGATTATTCCTCAGGTGAAGCATAGACTC
TTTCATGGTAGACAGATTTCACGACTCAGAGATAGAAATCTCTTGCTATCATCAGGTCACGGGCAGCTCCTGTGG
AGTCCTGCCCAACTTATGTGGCTTCCATAAAATGGCAACAGTCCAGGCTCCTTGCCTAATTTTAGAGCATTAACT
CCCTAATTGCCAGTAAGCAAGGAGGTGGATCTCTGCAAACCTACACTGTCTATGACAGCTCTAGTTGTACTTGGT
GTGACTAAATACCTCAAAGGCAACCTGCTTCTGCAGGTTTTGAAGTGTCAGCTTCATAAGACACTGAGGTTTAGA
ATTGTTTGATTCTAGACCATAACTGAAGGGCATAAATGGAAACAGGATATGAAGGGAAACAAGTAGCATCATGGA
GCTGAAAAGTGGTGCATCACCCAATGGCTAGCACAAACAAGGATCACACTGTCCATTCTCTTGTCTGCTAAATTA
AGCATTTTCTTGCCTCCTTTGCTTCATCTTTTCACAACAGCTGGATAGAGGGATCAGAAATGACTGTGTCATGGT
GCTCATTCACTGCAAACTCCCAGTTGCAAGCTCCTTGGCTCCCCCGGAGGGAGCAAGAATCTCATAGTTCAGAGA
CACAGAGGGCCTTTTAGCCCTAATGACCTTTTGGATGGGACTGCAACTCATGACTATCCTGATATTGGAAGAAAG
GACTTTGTTAATCTTCTCCCCCATAGCTCTGCTGCGTAGGTCTACATCTTACTCAGAATCACTACACATTCCTTT
AGTCTTCCTCCAAGCTCCAGAGCCATTGGTACAAATGCTTTATTGAAACTAAATACATAATACACACAATGAGAT
GAAGACAATATAGAAGTCCGCATAGTCATCATAATCCCGTTCCTTGGCCGGTTGAGGCAGCTCAGTGGCTGAGCC
CAGTCAAGCCAACCCGCAGCTTCACTCACGACTTCAAGATTTGATGCTAATTCTTTTGGATTTCTACAGTTATTA
AATAAGTGTCTGAGTGGACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAA

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FIGURE 5424

MKAVQADQERERQRRLEVEREAEKKREAKQRAKEAQERELRKREKAEEKERRRKEYDALKAAKREQEKKPKKEAN
QAPKSKSGSRPRKPPPRKHTRSWAVLKLLLLLLLFGVAGGLVACRVTELQQQPLCTSVNTIYDNAVQGLRRHEIL
QWVLQTDSQQ

FIGURE 5425

GACAGGTCTGTGAAGCAGGCAGGTTGCTCAGCTGCCCCCGGAGCGGTTCCTCCACCTGAGGCAGACTCCACGTCG
GCTGGC**ATG**AGCCGGCGCCCCTGCAGCTGCGCCCTACGGCCACCCCGCTGCTCCTGCAGCGCCAGCCCCAGCGCA
GTGACAGCCGCCGGGCGCCCTCGACCCTCGGATAGTTGTAAAGAAGAAAGTTCTACCCTTTCTGTCAAAATGAAG
TGTGATTTTAATTGTAACCATGTTCATTCCGGACTTAAACTGGTAAAACCTGATGACATTGGAAGACTAGTTTCC
TACACCCCTGCATATTTGGAAGGTTCCTGTAAAGACTGCATTAAAGACTATGAAAGGCTGTCATGTATTGGGTCA
CCGATTGTGAGCCCTAGGATTGTACAACTTGAAACTGAAAGCAAGCGCTTGCATAACAAGGAAAATCAACATGTG
CAACAGACACTTAATAGTACAAATGAAATAGAAGCACTAGAGACCAGTAGACTTTATGAAGACAGTGGCTATTCC
TCATTTTCTCTACAAAGTGGCCTCAGTGAACATGAAGAAGGTAGCCTCCTGGAGGAGAATTTCGGTGACAGTCTA
CAATCCTGCCTGCTACAAATACAAAGCCCAGACCAATATCCCAACAAAAACTTGCTGCCAGTTCTTCATTTTGAA
AAAGTGGTTTGTTCAACATTAAAAAAGAATGCAAAACGAAATCCTAAAGTAGATCGGGAGATGCTGAAGGAAATT
ATAGCCAGAGGAAATTTTAGACTGCAGAATATAATTGGCAGAAAAATGGGCCTAGAATGTGTAGATATTCTCAGC
GAACTCTTTCGAAGGGGACTCAGACATGTCTTAGCAACTATTTTAGCACAACTCAGTGACATGGACTTAATCAAT
GTGTCTAAAGTGAGCACAACTTGGAAGAAGATCCTAGAAGATGATAAGGGGGCATTCCAGTTGTACAGTAAAGCA
ATACAAAGAGTTACCGAAAACAACAATAAATTTTCACCTCATGCTTCAACCAGAGAATATGTTATGTTCAGAACC
CCACTGGCTTCTGTTCAGAAATCAGCAGCCCAGACTTCTCTCAAAAAAGATGCTCAAACCAAGTTATCCAATCAA
GGTGATCAGAAAGGTTCTACTTATAGTCGACACAATGAATTCTCTGAGGTTGCCAAGACATTGAAAAAGAACGAA
AGCCTCAAAGCCTGTATTCGCTGTAATTCACCTGCAAAATATGATTGCTATTTACAACGGGCAACCTGCAAACGA
GAAGGCTGTGGATTTGATTATTGTACGAAGTGTCTCTGTAATTATCATACTACTAAAGACTGTTCAGATGGCAAG
CTCCTCAAAGCCAGTTGTAAAATAGGTCCCCTGCCTGGTACAAAGAAAAGCAAAAAGAATTTACGAAGATTG**TGA**

TCTCTTATTAAATCAATTGTTACTGATCATGAATGTTAGTTAGAAAATGTTAGGTTTTAACTTAAAAAAAATTGT
ATTGTGATTTTCAATTTTATGTTGAAATCGGTGTAGTATCCTGAGGTTTTTTTCCCCCCAGAAGATAAAGAGGAT
AGACAACCTCTTAAAATATTTTTACAATTTAATGAGAAAAAGTTTAAAATTCTCAATACAAATCAAACAATTTAA
ATATTTTAAGAAAAAAGGAAAAGTAGATAGTGATACTGAGGGTAAAAAAAAAATTGATTCAATTTTATGGTAAAG
GAAACCCATGCAATTTTACCTAGACAGTCTTAAATATGTCTGGTTTTCCATCTGTTAGCATTTCAGACATTTTAT
GTTCCTCTTACTCAATTGATACCAACAGAAATATCAACTTCTGGAGTCTATTAAATGTGTTGTCACCTTTCTAAA
GCTTTTTTTCATTGTGTGTATTTCCCAAGAAAGTATCCTTTGTAAAAACTTGCTTGTTTTCCTTATTTCTGAAAT
CTGTTTTAATATTTTTGTATACATGTAAATATTTCTGTATTTTTTATATGTCAAAGAATATGTCTCTTGTATGTA
CATATAAAAATAAATTTTGCTCAATAAAATTGTAAGCTTAAAAAAAAAAAAAAAAAA

FIGURE 5426

MSRRPCSCALRPPRCSCSASPSAVTAAGRPRPSDSCKEESSTLSVKMKCDFNCNHVHSGLKLVKPDDIGRLVSYT
PAYLEGSCKDCIKDYERLSCIGSPIVSPRIVQLETESKRLHNKENQHVQQTLNSTNEIEALETSRLYEDSGYSSF
SLQSGLSEHEEGSLLEENFGDSLQSCLLQIQSPDQYPNKNLLPVLHFEKVVCSTLKKNAKRNPKVDREMLKEIIA
RGNFRLQNIIGRKMGLECVDILSELFRRGLRHVLATILAQLSDMDLINVSKVSTTWKKILEDDKGAFQLYSKAIQ
RVTENNNKFSPHASTREYVMFRTPLASVQKSAAQTSLKKDAQTKLSNQGDQKGSTYSRHNEFSEVAKTLKKNESL
KACIRCNSPAKYDCYLQRATCKREGCGFDYCTKCLCNYHTTKDCSDGKLLKASCKIGPLPGTKKSKKNLRRL

FIGURE 5427

GCCTGGAATAGCCTGGCTACTACCCCTGCACCTGTTCCCCTGCTGTCCCCAGGCCTCTCTGCCTGAATCTGCCTC
TCTCTGCCTCTTTTCTCCTGTCCCTCCAGGAGTCTCTCTGCCTCAACCACTCTCTCTGCCCCTTCATCTCTCTGA
GCTGGTGTGTCTGGTCCTACCCTCTGTTTGGGGAGCTGTCTGGCTCTGTCCCCCACCTCTTGGCCAGCCTGTGTC
TCCTGTCTATGACTGAGCCCAATTGCCTGTTGCCTTTCTGCAGGTGTTTCCACGAGCCTATCCCTACCCACCTGT
TTGTTTCTGAGTCTGCCTGTGTGTCCCTTTCTCCCTGTCTCTGCCTGTCTTCCAAGCTCCCCTAGCATCCCCTCC
TCCCGCCCATCTGTCTTTCTGTCCCTTCTGTGGTCTGTCTGTTCCTGTGCTGTTTCTCATGCCTGCTTTCTTTGT
AACTTCAGTTCTCCTACTCTCTCTCTGTCTCCTCTCTGCACCTTTTTCTGCCATCCATCCCATCCTGCTGTCCGT
CTGCTCTGTGAGTCATCCCCTCTGTCTGCCTGTCACTCTCTCTAGCTGTGGGTCTACACCCTCAATCTTTCAGGC
CATTTCCCCCACCATCAACACACAAACAAACCGCTGTCTCCCTCCAAGTGGGTCCAGATAGGGGGCGCCCCTTCT
CCACCTCTTCCCCCGCCCAGGGCCAGAAGGAGGGAAACGAAATTAAAATTAACATTTCTTCTCAGGAAAAAAAAA
AAAGTACCGCTCCAGAGCAGGAGCCTAGGCAGCCGAGAGGGTGCCCGAACCTGAGTCTGAGTTGCGGCCACTTCA
GGAGCTGAGAGGAGCAGG**ATG**GAACTGCAGGATCCAAAGATGAATGGAGCCCTCCCTTCGGATGCTGTGGGCTAC
AGGCAAGAACGTGAGGGCTTCCTGCCCAGTCGTGGTCCTGCTCCTGGGAGCAAGCCGGTCCAGTTCATGGATTTC
GAGGGGAAGACATCGTTTGGAATGTCAGTGTTCAACCTCAGCAACGCCATCATGGGCAGCGGCATCCTGGGGCTG
GCCTATGCCATGGCCCACACGGGGGTCATCTTCTTCCTGGCCCTGCTGCTGTGCATTGCGCTTCTGTCGTCCTAC
TCCATCCACCTCCTGCTGACCTGTGCTGGTATTGCAGGCATCCGAGCCTATGAGCAGCTGGGACAGAGGGCATTC
GGGCCTGCGGGGAAGGTAGTGGTGGCCACAGTCATCTGTCTGCACAATGTTGGGGCCATGTCCAGTTACCTGTTC
ATCATCAAATCTGAGCTCCCCCTGGTTATCGGCACCTTCCTGTACATGGACCCCGAGGGGGACTGGTTCTTGAAG
GGAAACCTCCTCATCATCATCGTCAGTGTGTTAATCATCCTGCCCCTCGCCCTCATGAAACACTTGGGCTACCTG
GGGTACACCAGTGGTCTCTCTCTGACCTGCATGCTGTTTTTCCTTGTTTCGGTCATCTACAAGAAGTTCCAACTT
GGCTGTGCTATAGGCCACAATGAAACAGCAATGGAGAGTGAAGCTCTCGTGGGACTCCCCAGCCAAGGACTCAAC
AGCAGCTGTGAGGCCCAGATGTTCACAGTTGACTCACAGATGTCCTACACAGTGCCCATTATGGCTTTTGCTTTT
GTCTGCCACCCTGAGGTGCTGCCCATCTATACGGAGCTCTGCCGGCCCTCCAAGCGCAGGATGCAGGCCGTGGCC
AACGTGTCCATTGGGGCCATGTTCTGCATGTATGGGCTCACAGCAACCTTTGGATACCTCACCTTCTACAGCAGT
GTGAAGGCGGAGATGCTGCACATGTACAGCCAGAAGGACCCGCTCATCCTCTGTGTGCGCCTGGCCGTGCTGCTC
GCGGTGACCCTCACTGTGCCAGTCGTGCTGTTCCCTATCCGCCGGGCCCTGCAGCAGCTGCTTTTCCCAGGCAAG
GCCTTCAGCTGGCCACGACATGTGGCCATAGCTCTGATCCTGCTTGTTTTGGTCAATGTCCTTGTCATCTGTGTG
CCAACCATCCGGGATATCTTTGGAGTTATCGGGTCCACCTCAGCCCCCAGCCTCATCTTCATCCTCCCCAGCATC
TTCTACCTCCGCATTGTACCCTCTGAGGTGGAGCCTTTCTTATCCTGGCCCAAGATCCAGGCCCTGTGCTTTGGA
GTCCTGGGAGTCCTCTTCACGGCCGTCAGTCTAAGCTTTATGTTTGCCAACTGGGCCACAAGCCAGAGCCGCATG
TCTGGACAC**TGA**TAAGGCCTGCTGGCCCAGGTCCCTGTGCGCATGCACATGGAGGGGTCAGGGCCGCTCCCTAGG
GTCCCTCCTGCCCAACATGTGGAGGTGGCTGGTTCCCATGAACGTGGTTGTCAGAGGCGGGGGACAGCAGAGGCT
GCAGACTGGCCCACTTCCCTCCTCCCCAGGGATGCCAAGCTTGGATCATGGCCCTAATCCCAACCCCAACCCCAT
GGGAGGAGGAGGAAGAAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGCCAGGTCCTGGTGGAGCCTTT
GCCCAGCCCAGTCCTCTCTGCCTCCTCCTGGCTGAAGCTGTTTGTCAGGATTACCCTCGGGCTAAAGAGGAAAAA
TAAAGATGTTGAGCTACCAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 5428

MELQDPKMNGALPSDAVGYRQEREGFLPSRGPAPGSKPVQFMDFEGKTSFGMSVFNLSNAIMGSGILGLAYAMAH
TGVIFFLALLLCIALLSSYSIHLLLTCAGIAGIRAYEQLGQRAFGPAGKVVVATVICLHNVGAMSSYLFIIKSEL
PLVIGTFLYMDPEGDWFLKGNLLIIIVSVLIILPLALMKHLGYLGYTSGLSLTCMLFFLVSVIYKKFQLGCAIGH
NETAMESEALVGLPSQGLNSSCEAQMFTVDSQMSYTVPIMAFAFVCHPEVLPIYTELCRPSKRRMQAVANVSIGA
MFCMYGLTATFGYLTFYSSVKAEMLHMYSQKDPLILCVRLAVLLAVTLTVPVVLFPIRRALQQLLFPGKAFSWPR
HVAIALILLVLVNVLVICVPTIRDIFGVIGSTSAPSLIFILPSIFYLRIVPSEVEPFLSWPKIQALCFGVLGVLF
TAVSLSFMFANWATSQSRMSGH

FIGURE 5429

TTTGTAAATCTGAAAACTCAGGATTGAGTAGTCTTTCCTTAGCTGCAGTTGCCTGTCTGGCCACACCTGCCAGCT
GTTGCTTGTACCCCTGTAATTTGCACGGCCTTCCGGGCCTTTCTCACAAGATCACTGCAGGTCACATTCATGAGG
AAAATGCAGGCAGTTCCTGCCATCAGACCCCTCAGGATGTCATGGTTTGGCCTGAAAACAAGATTCCTGCAACTC
TAATTTTCCTTTGCTAGATCAAATGAAGGATTTGATCTAATGTTTGCATTCTAGCAGCAAAATCATTGAATATTT
TATTTCTTAAGAGCCCTGCCTAACCACCGCCCCCCTCCTCCCCCGCGATCACACACACCTGGGTTAGGCCCTGCC
TCTCACGCCTGTGCCTCCTGCCAAGTCCTCAGAGGTCTCTGATCCCATGTGCCTCCAGGCATGGCATAGGGGGAC
TGTGACACAGCCTCTCGGCCCACAGACCCCTGATTGTGGGCTTGCTCACTGCCCCAGTCAGTCCTCTTATTGAGG
ATTCCGTGCCAGTTCCTGCCTCTGCCTTCCTGAGATTACAGGTATGAGCCACTGTGTTAAGCAAAAAAACTTTTT
TAAATGAAAATCATTTTTTAAAAGACAGGCTTTCCAGGGGAGGGTATTATTCCACTTATATGAAGTGTCAACAGA
GCAAAACTCGATCTCNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNGCAGCTCTCTCTCTCGGGAGAGGGAGGGG
ACTTCCGAGAGGAAAAGGCCTGCAAGAGCCTTTGGGTTAACTGAGAAAGCACAGCCCGGCCAACGCTTGGGAAGA
AAGACAGGCAAGCACTGGAAACAGGAGCTATTAGGGTGAGGAGAGAGCCTTGCCTTTCACAGCACAGTGAGGATG
ACATTGCACCAGGGACAGAGATTGTATGTGACAAGGCTGGGGCTCCTTCTTTCCTAGACAATCAAAGTATCAGTG
ATGGGTTTTGGTTGGTGATTTTGAAAAAAAAAAAAAGTATGTTATGTTATACTAGTGTATGCTGTACTGAATTGA
AATAAAACCAAAATCTGCATCTTC

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FIGURE 5430

CKSENSGLSSLSLAAVACLATPASCCLYPCNLHGLPGLSHKITAGHIHEENAGSSCHQTPQDVMVWPENKIPATL
IFLC

FIGURE 5431

ATTTGCCTGGGAAAACTTGTTTAGATATTGAGCTACTTATGCCTTCTAGCCTTTATATTAATTGTATGTAATGTT
ATTAAATATATATATAGTTCATCTTTACATTTGGAAATGCCCAACATTTTTTTCATATAAGTCCTTAAACAAGCG
TTCATTTTATTTTAAATCTATACAGTGAACTGGCCAAGATATTTTAAGAGGGAACTTTAATATCCCATTTATTGT
TTTTATAACCCTGGACTTATAAAAATGGGTTGTTTGAAGGGTTATTTTGAAAGTGGGGGAAAAAAAAACTTAGTT
GCTAATGTATCTAAACTTCAGCAGAGCTTTTTGGTGATCTCCTACCTGCACCCTCAACTCTTGACAAAGAAGCAA
GACTATAGATTCATTTTCTGAAGGGGATCATGTATGGAATTTTTTGATGAGTTTTTACTTTTACCTCTCTACTCT
TGATTTTCTATTATTGAATACTCTTTTAAAACACTGATTTTTAAGGCTTTATATATGTTTTCCAGGCTGATGTTC
ACATCTTTTTTTCATGAACTATCAGAATATAGTGAACACTTTTCAAATATTTAAGGACTTAATGTTTAAAAAGCC
ATAAAATAGAGAGTGGTAATACTACCAAATAATTACTTAAAACTGAAAGCTAAGTTATCAATAGTTTATATAAGA
GATGTTTTCTGAGGAGATGTGCATCCAGTGAGACCAAGGTAGAAAGTTTATATAATTGTTTTTTTTCCAGTAAAT
ATGAAAAAAAAAAGCTGTAGCTTGTTTATTACATGTCCAAAATACAGTGGAGCCTTACTTTAACACAATGTACTGT
AACTTGGAATTTGTTCTGTTATGAGTCTATCTTGAATTCCCATCCATGAAACTGTAGTCACCAAAAGCAACAAGT
ATTTTCACATGATGTAAAAGACCATACTATGATGGCCATTGCTAGAAATTGAATCACAAATAATAGCTAATAATT
TTTCATTTTTCAAAAAAGATCATTTGGATAGCAGCTATGTATAAAATGGAAAATAAAAAATTATTCTATTTTGCA
TGAATAGTTCAGACTTTCCCATACCACAGCCAAGCAGTAACTAAAATTAGGATCTTAATTTTCAATGATAAAAGG
TCTAAGGTTCATTTAATTATGCTCCTTTAACACTGTCTTTCTAGATTTTTCACCCAGTATTTTCAAAATTTGGGA
ATGTAAACAATTGATATATTTATTGTATGTTGGCTAGCAGTTCATCCTTCTGCAAAATATGCATTCAGAGAAATG
TGAAGCTTGTTTTAATGAAGACTTAAACCATTTGTGTCATTTGTGTTTTCATATTCAAATACACCAAATTAAAAT
TCTGAACCTATATTTTTCATCATTAACTTCCTAATATACCAGAACATATACCTTTTTCATGTAAAGTTGGCAATG
GGATATGGCAGTTTTATTTTTGAAAAATATGTAACATGACTTTAATATTTTTATAGTTTTCAGAATTAGAAACAT
AGGAAGGGAAAATGTTTTAATTAGATAAGTCAACTTTTTATGTGTCTGTAGTGGTGTACTATAATAGCAAATTAT
AAAGCATTATTAAATGTTTATAATAATTTTTAATATTACCTACATTATGAATTTAACTAAAATAAAGTGTGAGTT
GTATATTTTTTAATTGGGTTGTTTCAATAGCTGGAAGCATCCTGAAGCATTATATTGATTTTTGAACTATTTGAA
CTCAAACTGAGTATGATTTGAAAATAAATTAATAATTTAAAAACATCCAAATCATAA

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FIGURE 5432

LPGKTCLDIELLMPSSLYINCM

FIGURE 5433A

GTCTAGTTCACGCACTGGGTGAAAAACAAACCAGAGGCTGCAGATAAGTGAACGAGATGTTCTCTGTGTTCAGAT
GCTGGACTTTGTCATGATCTCGGTCATGGGCCATTTTCTCACATGTTTGATGGACGATTTATTCCACTTGCTCGC
CCGGAGGTGAAATGGACGCATGAACAAGGCTCAGTTATGATGTTTGAGCACCTTATTAATTCTAATGGAATTAAG
CCTGTCATGGAACAATATGGTCTCATCCCTGAAGAAGATATTTGCTTTATAAAGGAACAAATTGTAGGACCACTT
GAATCACCTGTCGAAGATTCATTGATTTGGTGCCTATCCTAAAACTTCCAGTGGGTTTTCTTGCCTTCCAGTGGC
CATATAAAGGGCGTCCTGAAAACAAAAGCTTCCTTTATGAGATAGTATCTAATAAAAGAAATGGCATTGATGTGG
ACAA**ATG**GGATTATTTTGCCAGGACTGCCATCATCTTGGAATCCAAAATAATTTTGATTACAAGCGCTTTATTAA
GTTTGCCCGTGTCTGTGAAGTAGACAATGAGTTGCGTATTTGTGCTAGAGATAAGGAAGTTGGAAATCTGTATGA
CATGTTCCACACTCGCAACTCTTTACACCGTAGAGCTTATCAACACAAAGTTGGCAACATTATTGATACAATGAT
TACAGATGCTTTCCTCAAAGCAGATGACTACATAGAGATTACAGGTGCTGGAGGAAAAAAGTATCGCATTTCTAC
AGCAATTGACGACATGGAAGCCTATACTAAGCTGACAGATAACATTTTTCTGGAGATTTTATACTCTACTGATCC
CAAATTGAAAGACGCACGAGAGATTTTAAAACAAATTGAATACCGTAATCTATTCAAGTATGTGGGTGAGACGCA
GCCAACAGGACAAATAAAGATTAAAAGGGAGGACTATGAATCTCTTCCAAAAGAGGTTGCCAGTGCTAAACCCAA
AGTATTGCTAGACGTGAAACTGAAGGCTGAAGATTTTATAGTGGATGTTATCAACATGGATTATGGAATGCAAGA
AAAGAATCCAATTGATCATGTTAGCTTCTATTGTAAGACTGCCCCCAACAGAGCAATCAGGATTACTAAAAACCA
GGTTTCACAACTTCTGCCAGAGAAATTTGCAGAGCAGCTGATTCGAGTATATTGTAAGAAGGTGGACAGAAAGAG
TTTGTATGCCGCAAGACAATATTTTGTTCAGTGGTGTGCAGACAGAAATTTCACCAAGCCGCAGGATGGCGATGT
TATAGCCCCACTCATAACACCTCAAAAAAAGGAATGGAACGACAGTACTTCAGTCCAAAATCCAACTCGCCTCCG
AGAAGCATCCAAAAGCAGAGTCCAGCTTTTTAAAGATGACCCAATG**TGA**ATGTCTGTAGTCAGTTGTTTACAAAC
TCCCTCTCCTGCACAATTCATTTAGAGGCTTCAATCATAGAATTCTGCAAATTAATGACAACTCATGCTTTAATT
TTGTATTTTGAATGTACACGCATGCTGAAGCTAAGTAACTTTTAATCAAAGAAATAAGATGGTATTAGGCAAATC
TTACTATACTATGAAAAGCATTACCTTGCCTATTTTTAATATTATTAAAGCCTTTCTCCTTCAGTAGTCTATTTT
CTTAGAATAACAACTCTTTTATCTATTCTGAACTCTATTTCTTGTTTTCTTTTGTTTGAAGAGACAAGGTGTTTG
GCTGCTGTTCGCCCAAGTCTTGGGATCTCAGAACTTTCACTTGGGCTCAATGCGACCACTCCTCNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCAGATGATTGTT
TTTTGTTTTTAATGTAGAAATGAGACAAGGGTACAAATTGGAACTAGAAATTGACATTGTCATTGACAAACATGG
CTAAAAACAAAACATCAAATCCTGCCCCCGTGAAGAGTTCCCTGTCACCTCAAGTTTGAGGATAGTCCTCTAAGA
GTGACCTAAGCATAAGTGAAAGACACCTCCCCTCACCCTTCTAGCCCCCTACAAGGTGCCAGGTTGGGGTAAAGA
GTTGGAGATGATGGCCAGGAGTGGCCTCCAACACGCTGGTGAGAGGCCTGATTAGGTTTTGGGGAAGATCTGAGA
GCTCTGGCCTCTTCGTGAGTGGAACATAAAGCCGCCTCTTGTTGGGAGATCCTACCCCAGTGACAGAGGAATCCC
CCAAACTAGGCTGTGCCCTGGCTCCGTGGCGGCTCCAGACCCGGGTAGTGCCTTTGTCCCCTGAATACTCACTCC
CCCGGTCCAGAGGGCCTTCCCACTGCCCAGCCTGGAGAAGGCCTCCCCTGACCTGCTCTCTCAGTATCCTGGAGA
GCTGGCCAGAGGCCATCACAGGCATCATCCTCAGAGCTCCTCAGACCTGGGACTTTGTTTTTGCTGGTTCAGTGC
ATTTTGTGTATTTAAGAGNNNNNNNNNNNNNNNNNNN

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FIGURE 5433B

TGTAATCCCAGCACTTTGGAGGCCAGGTGGGCGGATCAC

FIGURE 5434

MGLFCQDCHHLGIQNNFDYKRFIKFARVCEVDNELRICARDKEVGNLYDMFHTRNSLHRRAYQHKVGNIIDTMIT
DAFLKADDYIEITGAGGKKYRISTAIDDMEAYTKLTDNIFLEILYSTDPKLKDAREILKQIEYRNLFKYVGETQP
TGQIKIKREDYESLPKEVASAKPKVLLDVKLKAEDFIVDVINMDYGMQEKNPIDHVSFYCKTAPNRAIRITKNQV
SQLLPEKFAEQLIRVYCKKVDRKSLYAARQYFVQWCADRNFTKPQDGDVIAPLITPQKKEWNDSTSVQNPTRLRE
ASKSRVQLFKDDPM

FIGURE 5435

CAAAGATGGAATACGTCTGAATCTTATTTTGATACGATACACTGGAGACAATTCACCCTATTCCCCAACTATAAT
TTATTTTCATGGGAATGCAGGCAACATAGGTCACAGGTTGCCAAATGCATTACTTATGTTGGTTAACCTCAAAGT
TAACCTTTTGCTGGTTGATTATCGAGGATATGGAAAAAGTGAAGGAGAAGCAAGTGAAGAAGGACTCTACTTAGA
TTCTGAAGCTGTGTTAGACTACGTGATGACTAGACCTGACCTTGATAAAACAAAAATTTTTCTTTTTGGCCGTTC
CTTGGGTGGAGCAGTGGCTATTCATTTGGCTTCTGAAAATTCACATAGGATTTCAGCCATTATGGTGGAGAACAC
ATTTTTAAGCATACCACATATGGCCAGCACTTTATTTTCATTCTTTCCGATGCGTTACCTTCCTTTATGGTGCTA
CAAAAATAAATTTTTGTCCTACAGAAAAATCTCTCAGTGTAGAATGCCTTCACTTTTCATCTCTGGACTCTCAGA
TCAATTAATTCCACCAGTAATGATGAAACAACTTTATGAACTCTCCCCATCTCGGACTAAGAGATTAGCCATTTT
TCCAGATGGGACTCACAATGACACATGGCAGTGCCAAGGCTATTTCACTGCACTTGAACAGTTCATCAAAGAAGT
CGTAAAGAGCCATTCTCCTGAAGAAATGGCAAAAACTTCATCTAATGTAACAATTATATAATGTTTCCCTTTTTG
ATTATTGCATTGTATTTTAATTTGTGCAGAATGATAAAGAATGTTCCTTTTAGAAGTGTGTTATGTCTGTACCTG
TCTGAAGAGTGACATTAAACTTTGAAAGGACTTCACTGCTCCTTTACGATATTCCAAATAGTTTTTTACATTGGA
AAAACTAATTCTTGGGATTCTTTCATACATTTTCATCAAAACTTTCAGTGTGATTATGTATTCATATCTTCAGTT
TAATATGTCAGTATAATAGATATTGTTCAAAAGTTTCTTGTTGCTAAAGTGGTGTAATCTGTTACACAGATGAAT
AGCTAGATGTGGAAAGAGATATGTAAACAAGAAACCTTTGGGTATTGTTTCTTAAGTAAATATTGGGACAATCAT
GGTAAGCAAACTTAGTTCTGTAACTGCATTTTTCACCTTAAAAGTTAAATGAAATGCATGATGGTATTTTATTCC
TTGAATTATGCAATGCAACATTTTACATGTAAATAGCACTGGTCATATACTGATGTATATGGTTATCTGGGTTAT
ATCTATTTTTATGTAAACTCTATTTTGTTTTTGGCAAGAAGTGAAATTGAGACTTATGTGCAGGTTGCCATTGAA
TTTTGCTCTGGTGAATGCTGAGATCCAGCTTTTTCTTACAAATAAATGGGACCCTGTTTTCCAATACAAATGTAC
CGTGTTTTTGTTAGGTACAGTCTGGATCATGGCATGTAGAAATAGAAATTTAGAATTTTACTGCAGCTTTGATGT
GCATATTTGAACTTTTTAACATTTGTAACTTTGGTGGCAAAGAGAATTTTAGCTTCTATCGATTTTGTAAGTCTT
CAGCTGAACCACTAATAGCAGTCATAGTGAAGATTAGCACTACTTAGAATTAAATTAGGAAGTCTTTTATCATTG
CAGGATTGTACATACTACTTTATAAAAATTCTCACCTTTGATTTTAAATCCCAGTACCTAGTTATATCTAACCTA
TCAAAGGCAAGATATCATTTATTGGACTTCTTGAAAATAAAAGTTACAAAATCCAACAACAACAACAACAAAACA
ATGTTCTTGGTTTTAATGTTCCAGTTGCTGTGAAATAGAACTCCTACAATCAAAAGACAGTTTTAGGAAGTCTTA
TTTATTGATTTTAAAAGTTTTACATGTAGGAGTGTGGGAATGAAGGAATTCTGGAGCTTTTTGACACAAAACCTA
TTACCACATTTAGCAGTTAAATGGCTATAGGTGGGAAGTAGGATTTAGATGTATAGAAAAGTAAGAAAATCTTAC
TTAGAAAAAAGCCCCTTGAAACTTGCAGGATTTACTTAATAAAAATACACGCTATGAGTCATAATTGTGCCAAGT
TGTTTCATGCAGTCCTCAAAAATTAGATGTAATTGAGCTTTGTGTAATATTATGTCAGCTTTAACATATAATATT
TTGAATATTTTAGCTATATTTAGTGGCTTTCTGCAAGCAACTAGAACAGAGAAGTAATGGGTCAATAATCTTGAC
CTTAATTTAAAACTTTCAATGGAGATAGGGCTAGAAATACTTTTGCCAAATAGCATTCTTATTCACTTTATGCCG
GTATTTAGAAAAAATAAATTATAGCAAGTATGATTTCTAAGAATGTTTTTCTATAAATTACTAATTGTAAAAAGT
CTTGCTTTTTAAAACAAGTTGGTAATGCATATCATGGAAGGCATATTTTGTATGTATAAATTCACCACAATTAAA
GATTATTCTTGTCAGTC

FIGURE 5436

MLVNLKVNLLLVDYRGYGKSEGEASEEGLYLDSEAVLDYVMTRPDLDKTKIFLFGRSLGGAVAIHLASENSHRIS
AIMVENTFLSIPHMASTLFSFFPMRYLPLWCYKNKFLSYRKISQCRMPSLFISGLSDQLIPPVMMKQLYELSPSR
TKRLAIFPDGTHNDTWQCQGYFTALEQFIKEVVKSHSPEEMAKTSSNVTII

FIGURE 5437

GCAGAAGCTTCACTGAGCGGGCACTGGAGGTCGCGAGCACGTTGCTAGTGGGCGCGGCTGGCGGGGCCGGGGGCG
GCAGGGGGCTAGCGTCCGGCTGAGCCCGGCGGGTTCCTGCACGCGGACCCACGCTTTGTCGGGCTGCTCTGCTGA
GTGACACCGCCGTGGCATCCGAGGAGCTGTGGTCCAGCCTGCGCGGCGGGAAGCGGCGGCGGCGGCTCCAGCGTC
CTAAGAGAGTCTCACTCTGTCTCCCAGGCTGCAACATCCACCTCCCAGGTTCAAGTGATTCTTGTGCCTCAGCCT
CTCCAGTAGCTGGGATTACAGGTGTGTGCCAGCATGCCTGGCCAATTGTTGGATTGTATGAAGCTGAAACCTATC
AACACTCTTCAAA**ATG**CAATGGAATGTACCACGGACTGTATCTCGACTGGCACGCAGGACATGCTTGGAACCACA
TAATGCTGGTCTCTTTGGACACTGTCAAAATGTAAAGGGACCTTTACTTTTATACAATGCTGAATCCAAAGTGGT
TTTGGTACGAGGCCCTCAAAAACAATGGTTGCATTTATCTGCTGCCCAGTGTGTTGCAAAGGAAAGGAGGCCATT
GGATGCTCATCCACCCCAACCAGGAGTCCTTCGCCATAAGCAAGGGAAGCAACATGTTTCATTCAGGAGGGTTTT
TTCATCCAGTGCCACAGCTCAGGGAACTCCGGAAAAAAAGGAAGAGCCTGATCCTTTGCAAGACAAATCTATTAG
TCTTTATCAACGATTCAAGAAGACATTTAGACAGTATGGAAAAGTTCTGATTCCAGTGCATCTAATAACTTCTGG
TGTTTGGTTTGGAACATTTTATTATGCAGCCTTGAAAGGAGTGAATGTCGTTCCTTTTCTAGAACTCATTGGGTT
ACCTGACAGTGTGGTAAGCATCCTGAAAAACTCCCAGAGTGGAAATGCCCTCACAGCATATGCCTTGTTTAAGAT
TGCAACACCTGCTCGGTATACCGTGACTTTGGGAGGAACATCTGTCACTGTGAAGTATCTGCGCAGTCATGGCTA
CATGTCCACGCCGCCACCCGTCAAGGAGTATCTGCAGGACAGGATGGAAGAGACAAAGGAGCTTATCACAGAGAA
AATGGAAGAAACAAAAGATAGACTCACTGAAAAGTTACAAGAAACCAAAGAAAAAGTTTCCTTTAAGAAAAAAGT
GGAA**TAA**GGTGCCTTATATAGCAGTATAGAAAATTCCTGCACTTTAACCCTTTGGAAACTATGGGCAAAGATACA
TGTGTCTGATTATTTTTTTGGTTAGTTGCCGAAATATACTAGTTCTCTGAGGGTTAAAGAAGTAAAATACCTTTT
TAAAGTTAAATATCACTAGAAAAATCAGTGTTATTACAAGGGAAGAAATGAACCCAGTTTAAGAATTTGCCATCA
GTAGCAGTATTAAGCAGTGGTTAATGTCTTAGAAGTCAGACTTCTTTTTCAAGGTCTTCAGAACCACACTTGATT
TCTGTTTTGTTGCAGCTGTAATTGACACACACTAGGCAGCTGACTCCTTGAATATCCAGTGTGACCCATAAAATA
GTCTGTTAATACCGGATCTTAATTTTTATGTTATTCATTAAGATTTTAACTATATTCAGTACGTAATTTGGAGAC
AAACTAGCATCATCAAAACTGCCTGTAAATAAGGTGTTTAGTCTTTCTATAAAAACAGAATAGAGCAGTTACCTA
CCAGTTAAAATATCTTATATGAAGAAAATAGAATAAAGATCCAGTCATATATGTAAATAAGATGTACTGATTGTA
CGTAAATGAAAAATGGACCCTTTAAAAATTATTTTTACCTGAAGCTTGTCATAATTTTTTTAAAGCAAATATATA
TATGGTGATGGTACTTTTCAAAGTGTGTATTAGTGGTGATCACCTCAAACATAAACCTCTGTTGTG

FIGURE 5438

MQWNVPRTVSRLARRTCLEPHNAGLFGHCQNVKGPLLLYNAESKVVLVRGPQKQWLHLSAAQCVAKERRPLDAHP
PQPGVLRHKQGKQHVSFRRVFSSSATAQGTPEKKEEPDPLQDKSISLYQRFKKTFRQYGKVLIPVHLITSGVWFG
TFYYAALKGVNVVPFLELIGLPDSVVSILKNSQSGNALTAYALFKIATPARYTVTLGGTSVTVKYLRSHGYMSTP
PPVKEYLQDRMEETKELITEKMEETKDRLTEKLQETKEKVSFKKKVE

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FIGURE 5439

CCCGAAGTTGTGTGGATTGTCACATTGCACTAAGGCATAACCAAGTGCTGTGAATCCTGGGAATGCCTTCGAATA
ACAATCCACTCGTGTTCAGCACCAGAGAATCCACAGCAGAGAAAGCCCTTATGAATGCAGCAAATGTGGAATCTT
CTTCGACTTACGCCGCTGACCTCACTCAACACCAGAAAGTTCACAATAGAGGAAAACCGTATGAGTGCTGTGAAT
GTGGAAAATTCTTCAGCCAGCACTCCAGCCTTGTTAAACATCGCAGGGTTCACACCGGTGAAAGCCCTCACGTGT
GTGGTGACTGTGGGAAATTCTTCAGCCGAAGCTCCAACCTCATTCAGCATAAGAGGGTTCACACTGGTGAAAAGC
CATATGAGTGCAGCGACTGTGGGAAGTTCTTCAGCCAGCGTTCCAACCTCATTCATCATAAGAGGGTTCATACGG
GCAGAAGTGCCCATGAGTGCAGTGAATGTGGGAAATCTTTCAACTGCAACTCCAGCCTAATTAAACATTGGAGAG
TTCACACTGGAGAAAGACCTTACAAGTGTAACGAATGTGGGAAATTCTTCAGCCACATTGCCAGCCTCATTCAAC
ATCAGATAGTTCACACTGGCGAGCGGCCTCACGGGTGTGGTGAGTGTGGGAAAGCCTTCAGCCGAAGCTCTGACC
TCATGAAACATCAGCGAGTTCACACTGGTGAGCGGCCTTATGAATGCAATGAATGTGGGAAGTTATTTAGCCAGA
GCTCCAGCCTCAATAGCCATCGGAGACTTCACACTGGTGAACGGCCTTACCAGTGCAGTGAATGTGGGAAATTCT
TTAACCAAAGCTCCAGCCTCAATAACCACCGGAGACTTCACACCGGCGAGCGGCCTTATGAGTGCAGCGAATGTG
GGAAAACCTTCAGGCAGAGGTCCAATCTGAGGCAGCACCTGAAAGTTCACAAACCAGATAGGCCTTACGAATGCA
GCGAATGTGGGAAAGCCTTCAACCAAAGGCCTACCCTCATTCGGCATCAGAAGATTCACATCAGAGAAAGGAGCA
TGGAGAATGTGCTCCTTCCCTGTTCACAGCACACACCAGAGATAAGCTCTGAGAACAGACCTTATCAGGGCGCTG
TCAACTACAAGTTGAAACTTGTTCATCCAAGTACCCACCCTGGGGAGGTTCCC**TAG**GAATGCTAGCTGTGTTGGA
AGCTTTCTGGAGACAAGTTACATTCTCTTACTGTAGAGTTTATCAGCGTTTTTTCACTGCTGGGGTTGTGATAGA
AGCCATGTCAGCACCACACACTGCAGCTCTCCAAAGAGTGTGTCCACCACTCCACTGTGCTCAGGGAAGGCAGAC
CTCTCCTCTCTCTTTCCAATCCCTAAAGGGAATTAGGAGTAGTCTGAAGCCTTGGGAAGATGTCATTCCCGCCCT
GTATGGCTGGTTTAGCCATGGACATGACCAGCTTTTGGCTGTGAAGACCTGAGCAGGGTTTTGCCAACAGCTTGT
TCTAGAGAAGGTTTCCCTTTTTCTGGGACATTGTTGGTCTCATGTTATGCCTGTGAAGGATTTGTCCAGCCTTCA
TGTTACTCTACACAACAACTTATCTCCTGTGTATTGCCCTGGTTCATGTGATGATAATGGCCTTATGATAAAGCC
GCCTTTAGTCTTCCATGTTCTGATCACTGTGTGGGGTGGTTCAAGAGCAGAGTTAAGATCTACCAAACTGAAGGG
GTCTCCAGATTATCTTGGAGGGGACAGGAGGATGGCAGAGAAACAACTGTCAATCCAGATTTGACCTCATTTGCA
TTGCCACCAAGGCCTCCTAGGAAAAATTGTAGGAATTTATGGGTATAATATTGTGGTCTGAATGGCGTGAATTTT
TATCCCGAGGAGGGGGCAGTTGTGACAACCTCCAGTGCATGTGGGAACAGCATGAATTGGGTCCCTTATTCCCAG
GGGGTGCCCCATATTCCCCAATACTGTAAAGCAGATGCTGTTTAGCACCTGCCAAGGAGCCATATGCCCTGAAGT
TCAGCATTAGGCAGGTATCTCTTAACTGTAAGACATACCAGGCCCAGCTGGGACCATAATTTGTACAGAAACACT
GGATGTGATTAATAGGGAGTAGGCGAGATTATAGCAAACCAGCAGAAATGGAACTCTGCTAAATGTGCATCCGTG
AATGCTCCCTTGAATGTGGCTGTGCAGGATTCCAGGGTTTGCAGAAATTCTCAGGACCTCAGACCTCTGTCCTAT
GACTAATGTTACTGGCAGAGCAAATAATCCTAAAGGTTTTGGTTTTGTGGATTACCATCCTCCGTGCTGTGCATC
TGAAGGCCCAGTGCTGTGCTGGCAGGAAAATAGGGACTGAGAAAAAGCAGATCCTATACTATAGGGACTGTAGTA
TCTATGACGTAGCCAGCCATTCTTTGCTCCCAAGGCAAGAAGAAAGAGATGACAGAGTCAATATAGGGTTGCCAA
ATCGGATTTTCTAAAATGAGTAGGAAGTTGGATTTTTATGTGCAACAGTTTCTTTTAATGCTTTGTTGATATGTG
ATTGTCATGCAATAATTATTCATATTTGGTAAGTTTTGTACATATATTATGTACACTCAGGGAACCAATACCATA
ATCATGATAATGAACGTATCCATCACCTGCAAAGCTACCTCATGCCCCTTTACATTCCCTCCTTGCCTTCCCTAG
GAAACCGTTGATTTACATTTTTTACTTTAGATTTGTTTGCCTTTTCTAGAATTAACACAATTGGAATCATAAAGT
ATTTATACTCTCTTTTGGTCTGGTTTCTTTCATGCAGCATAATTATCTTGAGAATCATCCATGCTGTGTGTATAT
ATAGTTCATTCCTTTTACTACTGAGTAGTGCTATACTGGGTGAGTGCACCATAGTTTTTTATGGTTCATTTAAAA
ATGTTAAAAAAATCTGA

FIGURE 5440

RSCVDCHIALRHNQVLXILGMPSNNNPLVFSTRESTAEKALMNAANVESSSTYAADLTQHQKVHNRGKPYECCEC
GKFFSQHSSLVKHRRVHTGESPHVCGDCGKFFSRSSNLIQHKRVHTGEKPYECSDCGKFFSQRSNLIHHKRVHTG
RSAHECSECGKSFNCNSSLIKHWRVHTGERPYKCNECGKFFSHIASLIQHQIVHTGERPHGCGECGKAFSRSSDL
MKHQRVHTGERPYECNECGKLFSQSSSLNSHRRLHTGERPYQCSECGKFFNQSSSLNNHRRLHTGERPYECSECG
KTFRQRSNLRQHLKVHKPDRPYECSECGKAFNQRPTLIRHQKIHIRERSMENVLLPCSQHTPEISSENRPYQGAV
NYKLKLVHPSTHPGEVP

FIGURE 5441

CTATCTGAAATGCAGAGATTAAGCCAAATACCTGATGTATTGTGAAAGCCACTGATTTTAAGAATGGAGAGAAAG
GGATTTTTTACTGCATCCCTCTGTATGAATATGAAATCAGAGACCAGGGCATGATGTTGCTAGGATTAGAGCCTC
TCAGTCTGGCCTCTTCACCCAAGTGCAAGAACTCAGTCTCTTACTGTTCAAAGAAAGAATCTTAACAGTTGAATT
ATGGAGGGAAATTCCCTTTTGCCCCAAGCGTTTCTATATTTAAAGCAATATCCCAGGAGAATATGTCAGACTTAG
GATGATACCTTCAGCCACTTGAAGAAGAAATAGAAGGCGCTCATTCCAATATAGTCTTTATTTCCCATTCAGATA
CAGGTTGAGCATCCCTAATCTGAACAGTTAAAACCCCCAAATGCCCCAAAATCCAAACCTTCCTGAACGCTATGA
CACCATGAGTGGAAAATTCCACACCTAACAAACACATTTGCTTTCTTATGGTTCAATGTACACAAACTGTTTTAT
ATAGAAAATGATTTCAAATATCATAAAATTACCTTCAGGCTATGTGCATAAAGTATATATGAGCCATAA**ATG**AAT
TTTGTGTTTAGACTTTGTGTCCATCCCCAAGATCTCTCATTATATATATA

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FIGURE 5442

MNFVFRLCVHPQDLSLY

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FIGURE 5443

GAATTTCCAGCAGGCAAGGCAGTGGCCGCTTTGACTGCTTGCTTCGGAGATCCGAGACGACGGAGAAGGCACTCT
TATTTACCGACCAAGAAAGCTCCTCCCCCGTCCTCCGTTAGCTAATTAAAACATTTTTCAGGGACGTAGCCATCC
AGAGACATTCCATTATTGTTCCATTGACCTTTCCCTCATCACTGAGTCCTTTGGAGCTGAGTTATGTCAACAGCT
GCCTTAATTACTTTGGTCAGAAGTGGTGGGAACCAGGTGAGAAGGAGAGTGCTGCTAAGCTCCCGCCTGCTGCAG
GACGACAGGCGGGTGACACCCACGTGCCACAGCTCCACTTCAGAGCCTAGGTGTTCTCGGTTTGACCCAGATGGT
AGTGGGAGTCCAGCTACCTGGGACAATTTTGGGATCTGGGATAACCGCATTGATGAGCCAATTCTGCTGCCACCC
AGCATTAAGTATGGCAAGCCAATTCCCAAAATCAGCTTGGAAAATGTGGGGTGCGCCTCACAGATTGGCAAACGG
AAAGAGAATGAAGATCGGTTTGACTTCGCTCAGCTGACAGATGAGGTCCTGTACTTTGCAGTGTATGATGGACAC
GGTGGACCTGCAGCAGCTGATTTCTGTCATACCCACATGGAGAAATGTATTATGGATTTGCTTCCTAAGGAGAAG
AACTTGGAAACTCTGTTGACCTTGGCTTTTCTAGAAATAGATAAAGCCTTTTCGAGTCATGCCCGCCTGTCTGCT
GATGCAACTCTTCTGACCTCTGGGACTACTGCAACAGTAGCCCTATTGCGAGATGGTATTGAACTGGTTGTAGCC
AGTGTTGGGGACAGCCGGGCTATTTTGTGTAGAAAAGGAAAACCCATGAAGCTGACCATTGACCATACTCCAGAA
AGAAAAGATGAAAAAGAAAGGATCAAGAAATGTGGTGGTTTTGTAGCTTGGAATAGTTTGGGGCAGCCTCACGTA
AATGGCAGGCTTGCAATGACAAGAAGTGTTGGAGATTTGGACCTTAAGACCAGTGGTGTCATAGCAGAACCTGAA
ACTAAGAGGATTAAGTTACATCATGCTGATGACAGCTTCCTGGTCCTCACCACAGATGGAATTAACTTCATGGTG
AATAGTCAAGAGATTTGTGACTTTGTCAATCAGTGCCATGATCCCAACGAAGCAGCCCATGCGGTGACTGAACAG
GCAATACAGTACGGTACTGAGGATAACAGTACTGCAGTAGTAGTGCCTTTTGGTGCCTGGGGAAAATATAAGAAC
TCTGAAATCAACTTCTCATTCAGCAGAAGCTTTGCCTCCAGTGGACGATGGGCCTGATTACCAGCTGGGACTTAG
AGTTTCTGTGCAACAGTTTTTCACTGAGCATGTCAAGAAACTGATAAGATCAAAAAGGTCTCCTAACTCACTAGA
TCAGCGCACAAGTCAGTGTAAACCACTTAGATAGTAGTTTTTTCATAAATGCTCATCATATTTATGTTCCGCTGT
ACATGTTCAGTATAAATATATGTGTAGTGAAGCTACTGTGAGTCTTTAAATGGAAAGAGCAAATGAGAAGTGGTT
TGGATACACTTGATGAGAGATGAGAGTGTCACATTAATAATTTTTAAGACTCTTAGGCAGCTATGGGTTTCTTTT
GATCATTTTTGTTCTTTATTCATTTGAACACGTTTTTGAAGTTCTTCAAAACTAGTCAGTTTGAATTTTGACAGC
TATTCAATATGTGATCTCCAAGTTTAAAAAAATTTTTTTCCAGACTTCCCTAATCCTAAAATGCGAGTTTTTATT
TTTAATAACTGTACCAAGGAATAAGTATGAAAACAGTTCTCTGTTACCATATTTTGTATTCTGGACCACTTACTG
GTGAAAGCAACCATGCAAAAGAAATTAATTTGGCCAGGCACAGTGGCTCATGCCTGTAATCCCAGCACTTTGGGA
GGCCGAGGTGGGTGGATCATCTGAGGTCGGGAATTCGGGACCGGCCTGGCCAACGTGGTGGGGCCCTGTCTCTAG
TAAAAATCC

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FIGURE 5444

MSTAALITLVRSGGNQVRRRVLLSSRLLQDDRRVTPTCHSSTSEPRCSRFDPDGSGSPATWDNFGIWDNRIDEPI
LLPPSIKYGKPIPKISLENVGCASQIGKRKENEDRFDFAQLTDEVLYFAVYDGHGGPAAADFCHTHMEKCIMDLL
PKEKNLETLLTLAFLEIDKAFSSHARLSADATLLTSGTTATVALLRDGIELVVASVGDSRAILCRKGKPMKLTID
HTPERKDEKERIKKCGGFVAWNSLGQPHVNGRLAMTRSVGDLDLKTSGVIAEPETKRIKLHHADDSFLVLTTDGI
NFMVNSQEICDFVNQCHDPNEAAHAVTEQAIQYGTEDNSTAVVVPFGAWGKYKNSEINFSFSRSFASSGRWA

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FIGURE 5445

GAAAAATGAAACGTCTTTGTGGTCCGGGGCTGAGACCCACGAGGAGACTGGGCGGGATTTCTGGCGTTAGGAGGC
GGGGCCTTTCGGCTTTGGGCGCGAGTGGTTAAAAGACAGTTGGTGTCGGTTCGGCTTCTCGGGTCGGATTCCGCG
GTCCCAACCCTTCCCCATGGCCGACCCTGAGGAGTTGCAGGTTTCTTCGCCGCCCCCGCCGCCTCCCTCTTCTCC
CTCCTCTTCAGACGCCTCTGCAGCATCTTCCCCGGGCGGCCCAGTGAGTTTGGGCTGGCCAGTTCCGAGCAGGAG
CAGCGGCCCAACGGTGGACCAGCTGGAGGAAGTGGAGCTGCAGATCGGAGACGCAGCCTTTTCATTAACCAAACT
TCTTGAAGCCACATCTGCAGTATCAGCTCAAGTGGAAGAACTTGCCTTCAAATGTACAGAAAATGCACGTTTCCT
TAAAACGTGGCGGGACCTCTTGAAAGAAGGCTATGATTCTTTGAAACCTGATGACTGATTTGGCATACTTCGTTG
TTTAATAATGACTGCAATAATTCATACTTCTTATGTCATATTTTGTACATGTACCACACATATAGGATGACCTCT
GTCCAGCAGTTCTGTATATACTCAGAATGAAATTTTTCTTGGTTTTCTTGGTTTTTGTGAAAGCAGAATACCGAT
GCTATTTTTGTTGCGGACCAGTACTTGTTTGTCCTTAAATACTTTATGCCTCTGAACTTTCATAGAATCCTTTAT
GAAAGTTAACTTCATCAATAGACGGTTAATATTAATAGAGCCACAGTGCTACCAGTAGCAAACTAGGTAGACCAT
TATTTGTTTTGCAACAAGATGCTAAGCATGGCAGACTTTGAAGTTGCGTTTCATCTTAAGGACCAAGGGAGGTAA
CTTTAAGGTTGCCAGTGGTGGATCCAGCTCCGTTAGGCTAAGTTGTCTACAGCTAATGATTGTGTCTTTATTCTA
TATCCCCAGCACCTAAAACAGGGTCACACAACATTCACTAAATGTTTGTTGAATAAAAGAGTTAACAAACATAAT
TGAAAGCTTTTTTTCTTCCTATATTTAGCATGAAGACTGTCATTGTTTCTCTAGGAAATGTATGAATCTGAACTT
TTTTGACTTGAAGAAAAACATTCTTTTTTTACAGAGATTTGGACTTTGATGATAGGTTTTAAAAATATATGATAA
ATATTTTTTGTACTTGTTTGATTTTTTTTTTAAAGACTTTACTTCAGAAAGGGAAAGACTGTTTAGAAAGAATGC
ATATTTTTTCCCTATTTATTTCTGTGGTTACTGCTTTTGCAGTTTAACAGTGTTTGTATTTGATATTTGTATATG
TTTGATTGCTATCTTTAAAGTGCCTTATCAGATTTATGGCTCTGTGCTATTACTTTTTGAGCTTTGCAAGTTGTG
TACATAATAATTCTAAAGAAGTTACTTTGTTTGCAATGCATCAAATTTAAATGATGTGATTTTTTTTGTATTATT
TGATCTTAGTGACAGTGTTCTATTTTGCATCCTGTATCTTATGTTGCTTTTGGTGTTTTGTGTTGTGTGTCAACG
ATTAAGCCAACTAATTCTCTACCATATATAACTTCTGGACATTTTTGATACAACATCTTAATTCTTTGTAGATAT
GGAGATAGGTACAGAACTATATTCTAATGCCCCACAATGGGGCTATGAGAGGGGACAGATGGATGGGCAAAGAAT
AGTTTTGTTTAACATATTAGGTCATAGTTCTTGATTAGTTTTTTTAGTTAAAGATAAACACATAGGGTGTGATTT
CTATACCAAAGATATGCTTATTTCAGTATTAGAAAAATATTCTTCTTACATCTCCTGAAAATTGCAATTTTTAAA
ATGTGTAAAAATAAATTATTATTAAAAGCACATTTTATTTCCATTTGTTTGGATTCATTACCTTAAAACTTTATT
GACATATTTCAAAGATATAGGAAAGGTAAATGATTTCAAGAAAATCCGTGTATTTCTACCATGCAGATGTAATAA
ATGTTAGCATTTGGCTATATTTTCTTCAGACACACATATGCATGTAATTGCAAATGTTAGATACATTTGAAGTTT
GCTTTGTTACCTGTTTGATCCTGTCCCGTTCCTCCCTCCCCAGAGTCCCCAGAGGTAACCACTAGAGGGGGCATA
ATATAGCATGTGTTTTTATATTTTTAATACAAATATATTTTTTAAAAGCGCTACAAAATATTGTTTTATATATGT
GGTAGCCAGCTTCCAGATGGCCCCAGTGATCCCTGGCCTCCTGGTGTTCATGCCCCAGTATAGCCTTCTCCTGCA
TTTTACAGTGCTGACTTTTGTAACTACCAGGATATTGAGCAAATGCAGTGTGTGATTTCTGAGGCCATANNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNAAGCACTGGGATTACAGGCA
TTTTTGCTCATTTTTCTATGTTGTTTTTTTTACTTGTCAGTTTTTAGATATTACATATTTTGAATACTAATGATC
TGTTATGTATGTTCCAATTATCTTTTTTAGTCTGGTTTGTCTTCATATTTTGGTTATGAAATCTTGAATTTTTAA
AAACGTAATTTTACCAATCTTTCATAATGATTTGCTTTTTCTGGTTTTTGTATAGGAAATGTCATAAAAATAGTC
CTATTCAGCCTTCCAAAAGTTACAAAATTTTTGGTTTTAACATTTAGATGTTTAGTCCAACTGAAATTGTTTTCT
TTTATGGCATGATTTTGGAATCTTGTTTTAATTATTTTTACATATTTATAGCTGTTCCTCCAAGTATCAATTTTT
CAAGTGCAACATCTGTCATGCAGTTACTATGTAAGGGCCAGATTCTGACCTTTCTGTTCTTTTTATCTGAAGGAA
ATTTGAACATGCCACCCCCAAATATGCCGATTTGGCATACTGATTATTTCGAGCTAAAGGTGCTTGACTAACAGT
AGTTGCAGAAATGGCTATTTTAACTGTCCTTTCCTACCTGTAGCAAGCCATACAAACTTCTTTGATAAAGATGCT
TTCCTGATACCAAGATGAGAAGATGGCTCTAATCAGCTGAGACAGCACCAGAGGAATCTACAAACAAGAAACTAT
TAGTTTCTTAACATATATTTACCTTCCACAGTTTCTGCCTCTGGAAGCCTAAAACTGCTTTCCTTCGTCTTGTCA
CACTTCTCTGAAATGTATTCTTTGTGGAAGATGCTATATAGTCCAGAGTTGTAAGCCACTACTTGTGTTTACCTT
TTCATTGAGTTTTCTCCTGTGTGATGTACGTTGCATATATTAATAAAATTACTTGTTTTTCTCTT

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FIGURE 5446

KMKRLCGPGLRPTRRLGGISGVRRRGLSALGASG

FIGURE 5447

CTAACCGAGGCAGCAGCGGACGTGAGCGATAATGGCGGATATGGAGGATCTCTTCGGGAGCGACGCCGACAGCGA
AGCTGAGCGTAAAGATTCTGATTCTGGATCTGACTCAGATTCTGATCAAGAGAATGCTGCCTCTGGCAGTAATGC
CTCTGGAAGTGAAAGTGATCAGGATGAAAGAGGTGATTCAGGACAACCAAGTAATAAGGAACTGTTTGGAGATGA
CAGTGAGGACGAGGGAGCTTCACATCATAGTGGTAGTGATAATCACTCTGAAAGATCAGACAATAGATCAGAAGC
TTCTGAGCGTTCTGACCATGAGGACAATGACCCCTCAGATGTAGATCAGCACAGTGGATCAGAAGCCCCTAATGA
TGATGAAGACGAAGGTCATAGATCGGATGGAGGGAGCCATCATTCAGAAGCAGAAGGTTCTGAAAAAGCACATTC
AGATGATGAAAAATGGGGCAGAGAAGATAAAAGTGACCAGTCAGATGATGAAAAGATACAAAATTCTGATGATGA
GGAGAGGGCACAAGGATCTGATGAAGATAAGCTGCAGAATTCTGACGATGATGAGAAAATGCAGAACACAGATGA
TGAGGAGAGGCCTCAGCTTTCCGATGATGAGAGACAACAGCTATCTGAGGAGGAAAAGGCTAATTCTGATGATGA
ACGGCCGGTAGCTTCTGATAATGATGATGAGAAACAGAATTCTGATGATGAAGAACAACCACAGCTGTCTGATGA
AGAGAAAATGCAAAATTCTGATGATGAAAGGCCACAGGCCTCAGATGAAGAACACAGGCATTCAGATGATGAAGA
GGAACAGGATCATAAATCAGAATCTGCAAGAGGCAGTGATAGTGAAGATGAAGTTTTACGAATGAAACGCAAGAA
TGCGATTGCATCTGATTCAGAAGCGGATAGTGACACTGAGGTGCCAAAAGATAATAGTGGAACCATGGATTTATT
TGGAGGTGCAGATGATATCTCTTCAGGGAGTGATGGAGAAGACAAACCACCTACTCCAGGACAGCCTGTTGATGA
AAATGGATTGCCTCAGGATCAACAGGAAGAGGAGCCAATTCCTGAGACCAGAATAGAAGTAGAAATACCCAAAGT
AAACACTGATTTAGGAAACGACTTATATTTTGTTAAACTGCCCAACTTTCTCAGTGTAGAGCCCAGCATGTCCCT
GCATTTAGGCAATGAAGTGTTTGATGTGTACAAAGCCCCACTGCAGGGCGACCACAATCATCTTTTTTATAAGAC
AAGGTACTGGTCTACAGGGACAAGCAGTCTTTAAAACGAAACTCACCTTCAGACCTCACTCTACGGACAGTGCCA
CACATAGAAAGATGACTCTGTCACTTGCAGATAGGTGTTCAAAGACACAGAAGATTAGAATCTTGCCAATGGCTG
GTCGTGATCCTGAATGCCAACGCACAGAAATGATTAAGAAAGAAGAAGAACGTTTGAGGGCTTCCATACGTAGGG
AATCTCAGCAGCGCCGAATGAGAGAGAAACAGCACCAGCGGGGGCTGAGCGCCAGTTACCTGGAACCTGATCGAT
ACGATGAGGAGGAGGAAGGCGAGGAGTCCATCAGCTTGGCTGCCATTAAAAACCGATATAAAGGGGGCATTCGAG
AGGAACGAGCCAGAATCTATTCATCAGACAGTGATGAGGGATCAGAAGAAGATAAAGCTCAAAGATTACTCAAAG
CAAAGAAACTTACCAGTGATGAGGAAGGTGAACCTTCCGGAAAGAGAAAAGCAGAAGATGATGATAAAGCAAATA
AAAAGCATAAGAAGTATGTGATCAGCGATGAAGAGGAAGAAGATGATGATTGAAGTATGAAATATGAAAACATTT
TATATATTTTATTGTACAGTTATAAATATGTAAACATGAGTTATTTTGATTGAAATGAATCGATTTGCTTTTGTG
TAATTTTAATTGTAATAAAACAATTTAAAAGC

FIGURE 5448

MADMEDLFGSDADSEAERKDSDSGSDSDSDQENAASGSNASGSESDQDERGDSGQPSNKELFGDDSEDEGASHHS
GSDNHSERSDNRSEASERSDHEDNDPSDVDQHSGSEAPNDDEDEGHRSDGGSHHSEAEGSEKAHSDDEKWGREDK
SDQSDDEKIQNSDDEERAQGSDEDKLQNSDDDEKMQNTDDEERPQLSDDERQQLSEEEKANSDDERPVASDNDDE
KQNSDDEEQPQLSDEEKMQNSDDERPQASDEEHRHSDDEEEQDHKSESARGSDSEDEVLRMKRKNAIASDSEADS
DTEVPKDNSGTMDLFGGADDISSGSDGEDKPPTPGQPVDENGLPQDQQEEEPIPETRIEVEIPKVNTDLGNDLYF
VKLPNFLSVEPSMSLHLGNEVFDVYKAPLQGDHNHLFYKTRYWSTGTSSL

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FIGURE 5449

CCGCCAGCTCCTTCGGCA**ATG**AACTTCTCCACCAGCAGCAGCAGCTTCGCCTACGACCGGGAGTTCCTCCGCACC
CTGCCCGGCTTCCTCATCGTGGCCGAGATCGTTCTGGGGCTGCTGGTATGGACGCTTATTGCTGGAACTGAGTAC
TTCCGGGTCCCCGCATTTGGCTGGGTCATGTTTGTAGCTGTATTTTACTGGGTCCTCACCGTCTTCTTCCTCATT
ATCTACATAACAATGACCTACACCAGGATTCCCCAGGTGCCCTGGACAACAGTGGGCCTGTGCTTTAACGGCAGT
GCCTTCGTCTTGTACCTCTCTGCCGCTGTTGTAGATGCATCTTCCGTCTCCCCTGAGAGGGACAGTCACAACTTC
AACAGCTGGGCGGCCTCATCGTTCTTTGCCTTCCTGGTCAACATCTGCTACGCTGGAAATACATATTTCAGTTTT
ATAGCATGGAGATCCAGGACCATACAG**TGA**TTTACCATTTTGATAATTAAAAGGAAAAAAAAAAGGAAGACTCTCA
CTGTAAAAACAGCTGTAGGTATAATGTATATTCCCAGAGAATTGTATTTAACTAATTAATGTTTTTTATATTCTT
AAATTTGCTCACAAATTGTGGTTTGTTACAATTAAACTGGATACTTATTTGCAAAGTGTTGTAGCTTATAATGAA
CTCTTAAGTATCTTATTAATGTATTAATGTCTTCATAGATCATATTTTCTTAGACAATGTTTAAATAGATAAATT
GCTAATATTGAGAATGTGTCAAGTTTGTAAACCTAACTTTTAAGATGCCAGATTCTTTTTTGATTAAATGTTGCA
AAATCCCAAAAAAAAAAAAAAAAAAAA

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FIGURE 5450

MNFSTSSSSFAYDREFLRTLPGFLIVAEIVLGLLVWTLIAGTEYFRVPAFGWVMFVAVFYWVLTVFFLIIYITMT
YTRIPQVPWTTVGLCFNGSAFVLYLSAAVVDASSVSPERDSHNFNSWAASSFFAFLVNICYAGNTYFSFIAWRSR
TIQ

FIGURE 5451A

CTCCCTCTCCTATCGGAGCACAATGAAAGCCTGTGTATCGCCGTGACTCCGGGCGGGAGCCAGTGTCAGCAAAGC
GGCTAACAACAGACGAGAAAGAGAAAGGAAAATACAAGCTACTTTTTTTTTCCATCTATAAAGCGGAGCAAATAC
AGGAGATAGAACCAGATTGCTTATTGCGAGTCCAGACCCTCAGATCCACTGGCCGGGGATGGAATGTACAAAAGT
GGACAGAAAAGTGGCTGGACATGACTCGGTGCAATTTGCTGGAAGTTTGTAAGTTTGACCATCGTTTGTAAATTA
CTCTCGGAAGAGTTTGTCTCTCTTGATACTGTATTAGAATAGAGCCGGGGGTGAGGAATAGAAACGTAAGCGGGA
AAGAAAAAAATGTGTTGAAGGATCTCTCTCAGTGGCTAGCGACTTAAGATTGCTTTTCATTTAAGGCTAGGAAAC
CTTAGAGGGAGTGAGGATTTTACCGGTGATTGGATTAGCTGAAGAAAAAAGCATGGTCCAAAAGTCCAATTACTG
ACATTGTTAACAGTTGAAAAGCTGTCTCCCTCTTTTGGGAGAAGACAACATCCTACAGTACCCCAAAGAGGAGAA
AACACCGGAGCGAAAGGAAAGGGAGGAAAAATTAAAAGCCAAAAGACAGTCTCCCTTGATTTTTGCACATTTTGA
ACAGTGACTTAAACATCTTCTGAAACAGCACTGTTTTGTTTTGTTTTGGTTTTTTATTTAACCTGAGGAAAAGTC
AAGGCTGCTGGTTACATAGACATGGTAGAAATGTGTTTCTCTGCAGAAACATCCCCATAAAGAATTGTCGGAAAC
AACTAGGTGAGGGGGAGTCCTCTCTATTAATACCTCTCTCAATACCTTTTGCTGTGTGTTTCTGTCTCTTGCTGG
ACAATCCCTGAATTCTTGATCTAACCCCCAGATCGTGTGTTTACAAAGTACCTAGTGGCTCTTGTCAGCTTGGTG
GAGGAAAAAAAATCCACCAACTCTGTCCAACTTCTCCAGAGCTGTCAAATGCAATTAGAGTAAGTTAATCAGGGT
TTGTTTCCAACTTATCCTCCCCCCAGTTGGTTTCTATTCTTTCTCCCCACCCTCTTTTTACTAACTCCCCTCCCC
CACAACTTCTCCACGGCTCCCCCACAACCTCTGAAGACCTCTATTCATGTGGCCCTGAACACTGAGCTCACATTG
TCAAAAACAGACTTGCCTGCAATAGCCAGCAGTAGCCTCTTTCCACCTCACCATCCCAGAGGCAGCAATCATTGT
GTCCGGTAAGATGGGGGACACAGCGCCCCCGCAGGCCCCCGCAGGAGGGCTAGGGGGGGCCTCTGGGGCGGGGCT
CCTTGGAGGGGGCTCAGTCACCCCGAGAGTGCACAGTGCTATCGTGGAGCGCCTCCGGGCTCGGATCGCTGTCTG
CCGCCAACACCACCTGAGCTGTGAAGGACGATATGAACGAGGTAGGGCCGAGAGCTCAGACCGGGAAAGAGAAAG
CACCTTGCAGCTCCTGAGCCTTGTACAGCATGGCCAGGGGGCAAGGAAAGCTGGCAAACACACCAAGGCCACCGC
CACTGCTGCCACCACTACAGCCCCTCCACCGCCCCCTGCTGCCCCTCCTGCGGCCTCCCAAGCAGCAGCAACAGC
AGCCCCACCGCCCCCACCAGACTATCACCATCACCACCAGCAGCACCTGCTGAACAGTAGCAATAATGGTGGCAG
TGGTGGGATAAACGGAGAGCAGCAGCCGCCCGCTTCAACCCCAGGGGACCAGAGGAACTCAGCCCTGATTGCGCT
CCAGGGTTCCTTGAAAAGAAAACAGGTAGTTAACCTATCTCCTGCCAACAGCAAGCGACCCAATGGCTTTGTGGA
CAACTCATTTCTTGATATCAAAAGAATTCGTGTTGGGGAGAATCTCTCTGCAGGACAAGGTGGCCTCCAAATAAA
CAATGGACAAAGTCAGATTATGTCAGGGACCTTGCCTATGAGCCAAGCACCCCTGCGAAAGACTAACACTCTGCC
ATCCCATACACATTCTCCTGGCAATGGCCTGTTTAACATGGGCTTAAAGGAGGTAAAGAAGGAGCCAGGAGAGAC
TCTGTCTTGCAGTAAGCACATGGATGGCCAAATGACCCAAGAGAATATTTTTCCTAATAGGTACGGAGACGACCC
TGGAGAACAACTGATGGATCCTGAGCTGCAGGAACTGTTCAATGAACTGACCAACATATCTGTGCCTCCCATGAG
TGACCTTGAACTGGAGAACATGATCAATGCCACCATAAAGCAGGATGACCCATTTAACATTGACTTGGGTCAGCA
AAGCCAGAGGAGCACACCTAGGCCCTCCTTACCCATGGAGAAAATAGTGATCAAAAGTGAATACTCACCGGGCTT
GACTCAGGGCCCCTCAGGCTCTCCTCAGCTGAGGCCCCCATCAGCTGGCCCCGCATTCTCCATGGCCAACTCTGC
CCTCTCCACTTCGTCTCCAATCCCTTCAGTCCCTCAGAGCCAGGCTCAGCCTCAGACAGGCTCCGGAGCAAGCCG
GGCCTTGCCAAGCTGGCAGGAAGTATCCCATGCCCAGCAGCTCAAACAGATAGCTGCTAATCGTCAGCAGCATGC
CCGGATGCAGCAGCACCAGCAGCAGCACCAGCCTACCAACTGGTCAGCCTTGCCCTCCTCTGCTGGACCATCACC
AGGTCCATTTGGGCAGGAGAAAATCCCCAGCCCTTCTTTTGGTCAGCAGACATTCAGCCCACAGAGCTCCCCCAT
GCCTGGGGTAGCTGGCGGCAGCGGCCAGTCGAAAGTAATGGCTAACTACATGTACAAGGCCGGCCCCTCAGCCCA
GGGTGGGCACCTAGATGTCCTCATGCAGCAAAAGCCTCAGGATCTCAGTCGAAGTTTTATTAACAACCCGCACCC
AGCCATGGAGCCCCGTCAGGGCAACACCAAGCCTTTGTTTCATTTTAACTCAGATCAAGCGAACCAGCAGATGCC
TTCTGTTTTGCCTTCCCAGAACAAGCCTTCTCTCCTACACTACACCCAACAGCAACAGCAGCAACAGCAGCAGCA
GCAGCAGCAGCAGCAGCAACAGCAGCAGCAGCAGCAACAGCAACAGCAACAGCAACAGCAGAGTTCAATTTC
AGCTCAACAACAGCAACAGCAGCAGAGCTCAATTTCAGCCCAACAGCAGCAGCAGCAGCAACAACAGCAGCAGCA
GCAGCAACAACAACAGCAACAACAGCAGCAGCAGCAGCAGCAACAACCATCTTCTCAGCCTGCCCAATCTCTACC
AAGCCAGCCTTTGCTAAGGTCACCTTTGCCACTTCAGCAAAAGCTCCTACTTCAGCAAATGCAGAATCAGCCCAT
TGCAGGAATGGGATACCAAGTCTCCCAACAACAGAGACAGGATCAACACTCTGTGGTAGGCCAGAACACAGGCCC
CAGTCCAAGTCCTAACCCCTGCTCAAATCCAAACACTGGAAGTGGTTACATGAACTCCCAGCAATCACTGTTGAA
TCAGCAATTGATGGGAAAGAAGCAGACTCTACAGAGGCAGATCATGGAGCAGAAACAGCAACTTCTTCTCCAGCA

FIGURE 5451B

GCAGATGCTGGCTGACGCGGAGAAAATTGCTCCACAAGATCAGATAAACCGACATTTGTCAAGGCCACCTCCAGA
TTATAAAGACCAAAGAAGAAATGTGGGCAATATGCAACCAACTGCTCAGTATTCTGGTGGCTCATCCACAATAAG
CTTAAACTCTAACCAGGCTTTGGCAAACCCAGTTTCAACACACACCATTTTAACTCCCAATTCCAGCCTCCTGTC
TACTTCTCACGGGACAAGAATGCCATCATTATCTACAGCAGTTCAGAATATGGGGATGTATGGAAATCTGCCTTG
TAATCAACCTAACACATACAGTGTCACTTCAGGAATGAATCAATTGACCCAACAGAGAAACCCAAAGCAATTGTT
AGCAAATCAAAACAACCCTATGATGCCACGGCCACCTACCTTAGGGCCAAGTAATAATAACAATGTAGCCACTTT
TGGAGCTGGATCTGTTGGTAATTCACAACAATTGAGACCAAATTTAACCCATAGTATGGCAAGCATGCCACCACA
GAGAACATCAAACGTAATGATCACATCCAACACAACTGCACCAAACTGGGCCTCTCAAGAAGGAACAAGCAAACA
GCAAGAAGCCCTGACGTCTGCAGGAGTCCGCTTCCCCACAGGTACACCTGCAGCCTATACCCCAAATCAGTCACT
GCAACAGGCAGTAGGTAGCCAGCAATTTTCCCAGAGGGCAGTGGCTCCTCCTAACCAGTTAACACCAGCAGTGCA
AATGAGACCCATGAACCAAATGAGCCAAACACTAAATGGGCAAACCATGGGTCCCCTCAGGGGTCTGAATCTCAG
ACCCAATCAGCTAAGCACACAGATTTTGCCTAATTTGAATCAGTCAGGAACAGGGTTGAATCAGTCGAGGACGGG
CATCAACCAGCCACCATCCCTGACGCCCAGCAATTTTCCTTCACCCAACCAAAGTTCCAGGGCTTTTCAAGGAAC
TGACCACAGCAGTGACTTAGCTTTTGACTTCCTCAGCCAACAAAATGATAACATGGGCCCTGCCCTAAACAGTGA
TGCTGATTTCATTGATTCTTTATTGAAGACAGAGCCTGGTAATGATGACTGGATGAAAGACATCAATCTTGATGA
AATCTTGGGGAACAATTCCTAAAGAAGAAAGGGAAGACAATTTACAAACTCCAAGCACTAAAAGGCAGTATATTA
CAGAAACTCTGTAGAGGCTGAACTGTTGATGTTCAGGTGGACTACATGAAGATAACATGCTTAAAAATGGAAAGC
AGAAAGTAACTGCAGTGATGAACATTTTGGTCCAAATTCTTGTTTTAAATCTTACACCTGAAAGTAAAATATTGG
GATCACTTTTCCCTGTCTAAACTCCAGGATACAGTATCCAATTTATCCAAACAGAACTGTGGTGTCAATGTGTAA
TTAATTGTGTAAAATAGCCTTCCCAAGTTTCTTTTTCCCTGGAAAATAAAAAAGGTAATAGAACTTGTAGTTTAT
TTAAACCCCATGTCATGAGGAGGTACTAGTTCCAAGCAACAAACTCCTTAATTTGCTCTAATAGATAGGTATGGT
TTAATCTTTCCATTGTGTCTTTTCATTTAATTTTCCTGAAGCTTGCAGGATAGATTGAAATGTTATAGGTTTGTT
TGGAGTAACCAAACAGTATGCAAATTAAGAAAAAGCCAGAGAACCTAGAAAACATCCAGTGGATTACAGAATTTC
TTCCCCATATTCACTCCTCACTTTTACAATTTTCCCACAATCCTCTACTTCAGTGGGATGCTGTGTCTAGTGATT
AAACAAAAATATAGAGCTG

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FIGURE 5452

GTAAAGCATTGCTTGAGGTTGCCCAGGTAGTTTCGCCTTACACTTCTTGTCCCAGTGCAATTATTAGTAGAGCTC
CCTTTCACTGTCAAATTTCCGGTTGGGGATAAATTGCATTGTCGTTTTGGTTTGAGATAGGAAGATGAGGGGAGG
AAGGAGGTGAGGCGGTAAGGGGCGTTCTCTCTCTTGGGTCCCGCGCCCAACTTCCGCTGGCCCAAAGAAACTATA
ATTTTGAACCAACAGACCTCTGCTGGCATCTGCGATTGCATTTTTCCTGTTTTAACAACGGCTGTGCTAGACGAA
GTGGTGAAGCCCAAAGACTTATTTTTGAGCTCGCTGTAAGACTGAGAAATCACGTAGTCCTTCCTGAAACCACTA
AGAGGAAAA**ATG**TCTGTGACACTGCATACAGATGTAGGTGATATTAAAATTGAAGTCTTCTGTGAGAGGACACCC
AAAACATGTGAGATGGAGTCTCGCTGTGTCCCCCAGGCTGGAGTACAATGGCGCGATCTAGGCTCACTGCAACCT
CCGCCTCCTGGGTTCAAGCAAGTCTTCTGCCTCAGCCTCCCGAGAACTGGAAGAGGAGGCAACAGTATTTGGGGC
AAGAAGTTTGAGGATGAATACAGTGAATATCTTAAGCACAATGTTAGAGGTGTTGTATCTATGGCTAATAATGGC
CCGAACACCAATGGATCTCAGTTCTTCATCACCTATGGCAAACAGCCACATTTGGACATGAAATACACCGTATTT
GGAAAGGTAATAGATGGTCTGGAAACTCTAGATGAGTTGGAGAAGTTGCCAGTAAATGAGAAGACATACCGACCT
CTTAATGATGTACACATTAAGGACATAACTATTCATGCCAACCCATTTGCTCAG**TAG**CTATGATAGACCTGGACA
AATAACTTGACAAATTGCTGGAACACACTTATTGTGGTTTACCCGGTTTTAATTATGAGCCAGCTTGACGTGGTT
GTGGCCGTTGGGCGAGATGAAGCTACACTGTGAGGTGGAGGTGATCAGCCGGCACTTGCCCGCCTTGGGGCTTAG
GAACCGGGGCAAGGGCGTCCGAGCCGTGTTGAGCCTCTGTCAGCAGACTTCCAGGAGTCAGCCGCCGGTCCGAGC
CTTCCTGCTCATCTCCACCCTGAAGGACAAGCGCGGGACCCGCTATGAGGATTCCATATGGCTCTCATATCATTC
CATTCCATCTCTGCCAAGATTTGGATACCGCAAAAATTTGTGTTTGTGGAAGATTCTGTCTGAACTCTTTCATTC
AAGGAACTACTACCATGAATCTGCATTCTGTTGCCCACACTGTGGTCTTAGTAGATAATTTGGGTGGTACTGAAG
CACCTATTATCTCTTATTTCTGTTCTCTAGGCTGTTATGTTAATTCCTCTGATATGTTAAAGTAATGGGTGAGAC
CAGAAAAAGAAATTTCAATAACAGATCAGTTTGGGGTGCATGTATGATTTTGCAGCGTCAAATTGGAGTAAGGGA
AGATTTCTGTATACTTGCTGGAGAGGAGGAATGTGTATAGTTACTCATTTAGATGACTCCAAAACTTTTATTAAA
ACCAATTTTAGTTTT

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FIGURE 5453

MSVTLHTDVGDIKIEVFCERTPKTCEMESRCVPQAGVQWRDLGSLQPPPPGFKQVFCLSLPRTGRGGNSIWGKKF
EDEYSEYLKHNVRGVVSMANNGPNTNGSQFFITYGKQPHLDMKYTVFGKVIDGLETLDELEKLPVNEKTYRPLND
VHIKDITIHANPFAQ

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FIGURE 5454

GGGGGCGCGGCCGGTTACTCGCTTACCGGAGGCTTCAGTCCCCGGCGGCGCGGCGACAGCTAGGGTTCACGGCCA
CTGGGGCAGAGGAGCCGCGAGAAGATGTGGGTTTTTGGTTACGGGTCCCTGATCTGGAAGGTGGATTTCCCCTAT
CAGGACAAGCTGGTCGGATACATCACCAACTACAGCAGGCGCTTCTGGCAGGGCAGCACGGACCACCGCGGGGTC
CCCGGCAAGCCTGGAAGAGTTGTGACTCTTGTTGAAGATCCTGCGGGATGTGTATGGGGTGTTGCTTACAGATTG
CCAGTAGGAAAGGAAGAAGAAGTAAAAGCATACCTTGACTTCAGAGAAAAAGGAGGCTACAGAACCACAACAGTC
ATTTTTTATCCAAAAGATCCCACAACAAAACCATTCAGTGTATTGCTATATATTGGAACATGTGATAATCCTGAT
TATCTTGGTCCTGCACCTCTGGAAGACATTGCTGAACAAATTTTTAATGCAGCTGGTCCAAGTGGAAGAAATACA
GAATATCTTTTTGAACTTGCAAATTCTATTAGGAACCTTGTGCCAGAAGAAGCAGATGAGCATCTTTTCGCTTTG
GAAAAATTAGTAAAGGAACGTTTAGAAGGGAAACAGAACCTCAATTGCATATTAATTTAGTCTTCAGAGAATTAAC
TTCAGTGCACAATGACAATATGATTTGGAAATACGTTTACTTAAAGATCTTATTTTTAATGTAGTGAGGATATTA
TTTAAACTTTTATTTTAACTGGAAATGTCCTGAAACACATATTTAAAATATTGGGATACAGTGAAAGAAAAATTC
AAATTTTAATAACATAAAGATTTCCTAACTTTATGTTATTGAACACTTACTCACTAGAAGTGAGTTCTTTAGAAA
AATACAGTGAAGGACTCAGTTCAGTCTTGTTTTTATCAGAGTGATAATCATCCTGTTTCACATCCCAATACTATT
TTGAAATTCTAAACAATTAAACCAAAATTCCAATAAATATAAGGTTATGCCTTCAATATATTCCTATACAATTCT
GTAACCATGGTTTAAAATACACAAGCTTAAAATAACATGCTTAGAAATACACAATAATATGAACAGTATTTCAGC
CTTAATTGTGAATTTCCTTGTTATTCAAGTATTAAATGAAATCTTTTGAGTTTTTAGCCAAAAATTGGCATTTTT
AAAATACGAAAATTTCCTTGGAATTATAATGTACTGTACCTCTTCTTTTTTAAATAAAGGCATTTTACTATATGG
AAAACTAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 5455

MWVFGYGSLIWKVDFPYQDKLVGYITNYSRRFWQGSTDHRGVPGKPGRVVTLVEDPAGCVWGVAYRLPVGKEEEV
KAYLDFREKGGYRTTTVIFYPKDPTTKPFSVLLYIGTCDNPDYLGPAPLEDIAEQIFNAAGPSGRNTEYLFELAN
SIRNLVPEEADEHLFALEKLVKERLEGKQNLNCI

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FIGURE 5456

GGGGGATTCGGCCGGAGCTGCCAGCGGGGAGGCTGCAGCCGCGGGTTGTTACAGCTGCTGGAGCAGCAGCGGCCC
CCGCTCCCGGGAACCGTTCCCGGGCCGTTGATCTTCGGCCCCACACGAACAGCAGAGAGGGGCAGCAGGATGAAT
GTGGGCACAGCGCACAGCGAGGTGAACCCCAACACGCGGGTGATGAACAGCCGTGGCATCTGGCTCTCCTACGTG
CTGGCCATCGGTCTCCTCCACATCGTGCTGCTGAGCATCCCGTTTGTGAGTGTCCCTGTCGTCTGGACCCTCACC
AACCTCATTCACAACATGGGCATGTATATCTTCCTGCACACGGTGAAGGGGACACCCTTTGAGACCCCGGACCAG
GGCAAGGCGAGGCTGCTAACCCACTGGGAGCAGATGGATTATGGGGTCCAGTTCACGGCCTCTCGGAAGTTCTTG
ACCATCACACCCATCGTGCTGTACTTCCTCACCAGCTTCTACACTAAGTACGACCAGATCCATTTTGTGCTCAAC
ACCGTGTCCCTGATGAGCGTGCTTATCCCCAAGCTGCCCCAGCTCCACGGAGTCCGGATTTTTGGAATCAATAAG
TACTGAGAGTGCAGCCCCTTCCCCTGCCCAGGGTGGCAGGGGAGGGGTAGGGTAAAAGGCATGTGCTGCAACACT
GAAGACAGAAAGAAGAAGCCTCTGGACACTGCCAGAGATGGGGGTTGAGCCTCTGGCCTAATTTCCCCCCTCGCT
TCCCCCAGTAGCCAACTTGGAGTAGCTTGTAGTGGGGTTGGGGTAGGCCCCCTGGGCTCTGACCTTTTCTGAATT
TTTTGATCTTTTCCTTTTGCTTTTTGAATAGAGACTCCATGGAGTTGGTCATGGAATGGGCTGGGCTCCTGGGCT
GAACATGGACCACGCAGTTGCGACAGGAGGCCAGGGGAAAAACCCCTGCTCACTTGTTTGCCCTCAGGCAGCCAA
AGCACTTTAACCCCTGCATAGGGAGCAGAGGGCGGTACGGCTTCTGGATTGTTTCACTGTGATTCCTAGGTTTTT
TCGATGCCACGCAGTGTGTGCTTTTGTGTATGGAAGCAAGTGTGGGATGGGTCTTTGCCTTTCTGGGTAGGGAGC
TGTCTAATCCAAGTCCCAGGCTTTTGGCAGCTTCTCTGCAACCCACCGTGGGTCCTGGTTGGGAGTGGGGAGGGT
CAGGTTGGGGAAAGATGGGGTAGAGTGTAGATGGCTTGGTTCCAGAGGTGAGGGGGCCAGGGCTGCTGCCATCCT
GGCCTGGTGGAGGTTGGGGAGCTGTAGGAGAGCTAGTGAGTCGAGACTTAGAAGAATGGGGCCACATAGCAGCAG
AGGACTGGTGTAAGGGAGGGAGGGGTAGGGACAGAAGCTAGACCCAATCTCCTTTGGGATGTGGGCAGGGAGGGA
AGCAGGCTTGGAGGGTTAATTTACCCACAGAATGTGATAGTAATAGGGGAGGGAGGCTGCTGTGGGTTTAACTCC
TGGGTTGGCTGTTGGGTAGACAGGTGGGGAAAAGGCCCGTGAGTCATTGTAAGCACAGGTCCAACTTGGCCCTGA
CTCCTGCGGGGGTATGGGGAAGCTGTGACAGAAACGATGGGTGCTGTGGTCCTCTGCAGGCCCTCACCCCTTAAC
TTCCTCATACAGACTGGCACTGGGCAGGGCCTCTCATGTGGCAGCCACATGTGGCGTTGTGAGGCCACCCCATGT
GGGGTCTGTGGTGAGAGTCCTGTAGGATCCCTGCTCAAGCAGCACAGAGGAAGGGGCAAGACGTGGCCTGTAGGC
ACTGTCTCAGCCTGCAGAGAAGAAAGTGAGGCCGGGAGCCTGAGCCTGGGCTGGAGCCTTCTCCCCTCCCCAGTT
GGACTAGGGGCAGTGTTAATTTTGAAAAGGTGTGGGTCCCTGTGTCCTCTTCCAGGGGTCCAAGGGAACAGGAGA
GGTCACTGGGCCTGTTTTCTCCCTCCTGACCCTGCATCTCCCACCCCGTGTATCATAGGGAACTTTCACCTTAAA
ATCTTTCTAAGCAAAGTGTGAATAGGATTTTTACTCCCTTTGTACAGTATTCTGAGAAACGCAAATAAAAGGGCA
ACATGTTTCTGGTTAACAAAAACAAACAAACAACACCACAAAAAACAACAAAAAAAAAAAACAACAACAAACAAA
AAAAAAAAACAACAGAGGGGGGCGGGCCGCCGAAAAATGAGCGGCGAGCGTCACACCCACGCCGGGATAATTATC
CCGCCGCGCGGAAACCACGGAGAGGGTTTCTTCCCCGCACCAGGCGGCGGCGAAAACTACTGAGGGCGGCGCCCC
ATCAGGTGGAAGCGTAACATACCGGAGACGCGTGACACGCCCTTAAACG

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FIGURE 5457

GGFGRSCQRGGCSRGLLQLLEQQRPPLPGTVPGPLIFGPTRTAERGSRMNVGTAHSEVNPNTRVMNSRGIWLSYV
LAIGLLHIVLLSIPFVSVPVVWTLTNLIHNMGMYIFLHTVKGTPFETPDQGKARLLTHWEQMDYGVQFTASRKFL
TITPIVLYFLTSFYTKYDQIHFVLNTVSLMSVLIPKLPQLHGVRIFGINKY

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FIGURE 5458

CAAGGTGCTCCCCACCTCCCAGACAGGGCGCCGGGCAGAGGCGAATTTTTTCTTAATATCTTAATATTTTATGTC
ATTTTGTGTACAAAATGAAATTCTGGCTTTTAATAATAGTACATTCTTACTTGTTTCATCCTATAGAATACATAC
AACTGTTTCAAAATTATCATACCAAAATTATTATTAGCAATATTAAAATAGCTATGCTAGCTTTCTTTTGGTTAT
TGTTAGCATGTTATGGTATATCTTTTCCCACTCTTTTTCTTTTAATCTTATAATAAGTGTATATTTAAGATGTGT
CTCTTGATAGCAACATATACTTGAGTTTTGCTTTTCATCATCCAGCCTGACAATCTTTTATCTTTTAACTAGAGT
ACTTAATCTTACTTACTGTACTTACTGATATGTTTGGGTTTAAATGTACCATATTAATCTCTGTTTTCTATTTAT
CATATCTATTCTTTGTTCTTTTTTATCTTTTCCTGGTTTCTTTTGCATTATTTCTATTTCATTTTCACCCCTATT
ATGTTGTTAGTTATACATTCTAATTCTTTCATTGCTTACCCTAGAGATTATAACATGCATCCTTGACTTATTGAA
CTGTAATGTAAATTAGTATATTCATCATTCCCCAGACAATGCAAAGACCTTTGAATACTTTAAGCCTTATTTATC
TCTCTTCTGCTTTTTGTGTTGCTTTTAACACACATTTTAATTCTATTTATATTTGAAACCCGATGAAACATTTTT
AATTTGTTTATATTTATTTATATGTACCAACATATTTACCATTTATTTCCAGTGTCCTTCAATTCTTCCTATATT
TCCATGCTTCCATGTGGGATAATTTTTCATCTAGANNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCTTTGAAGGATATTTTTGCTGGGCATAGAAG
TTGGATGGCAATTATTTTCTTTCAGCACTTTGAAGAAATTATTGTCTTCTGATTTTACTGTTTCACCATACTTCC
CTTCTCTCTGCAATCTTAGCTCATCAAATCCTTGATGTCTTCAAATAGACTTTTCTCCCTCTCTAGCTCTTCTAG
TAGTTGTTGGTGAGAGGTTGGTCTGATAAAAGTAATCTACCCTGGCTAGACATCTGCTGCTAATAATAAACCTAC
TAAATAAAGTTTAAGATTTATTTGCAATTTTTTTTACCTTAGAATTTATCCCATGAGAAATGTAGAATCAGGTTA
CTATATTCAAAAATTACTTGACATAATTATTTTTAAAAATTTTAAAAGGTAAGAAACAACCTTTTTAAATTTAAG
AATTAAGAGACTAAGAAATTGAGAATTATTTCAAAACTCAAAAAATGTTGAAGGCTTTAAAAATGAGTAAGATAA
AATGTAAGGTAAATGAAATGAATGTAGGCATTTTGAAGATTAGAAATTTAGCCGTAGGTAAAGAATACAAAGGAA
AAATAATTTTAAAATCATCAACCAGATCAACAAAATATATGCTAATGCCGAGACTTTGAATTAGAGTGCGAATTG
TATCTTAATTAAAAAGAGAAAACCCAATACTGGAAAAAAAATCTATGTCGGTGCGGAGAAAGAGGTAATGAAATG
CAGGTATTCGATATGCAGCTATC

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FIGURE 5459

QGAPHLPDRAPGRGEFFLNILIFYVILCTK

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FIGURE 5460

GTGAAACTCCCTGCCCTGTTCTGTTTCTCTCTGACCACCAGTGCATGCAGCCCCTGTCATGTACCGCCTGTTTGC
TCAAATCAATCATNGACCCTTTCATGTGAAATCTTTAGTGTTGTGAGCCCGTTAAAAGGGACAGAAATTGTGCAT
TCAAGGAGCTTGGATTTTAAGGCAGCAGCTTGCTGATGCCACCAGCTGAAAAAAGCCCTTCCTTCTCCAACTCGG
TGTCTGAGAAGTTTTGTCTGCAGCTCATCCTGCTACAGAATGAACTCCTTGTAATTCTACAAGATATGCCATGGG
CCTTTTCACAGGGGACACAGGCTTCTTAAAACAACCCGGCTTCCTCACCCTATGTCCTTTATTTACAAAGCTGTG
CNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNTGCATTCCTGATTTGGCTCTTGGCTTGAATGTTATTAACGCCACATTTTTTAAATAGACAAAAATATGA
GATTAAAAATGTTGAATTTTACTAACAATAAAAGTTGTTCAAAGGAAAACTATAAGGTTCTTGTTTCAACTCTGT
CATAGGAAGAACAGGACAGTGAGCTGGCACAGAGTTAGGGAAATTGACTGTGTCTCATATTGGCTAGTGAGAGTG
ATCTGTTGGAATTGTATATCAAAATTTTAATGTACATACATTTTGTCTAGCAATTCTACTATTGGGTATTTATAT
AGTACATATAAATATAAATGTATATGTTTAGTAAATATATACTTATAGTTAGTAAATATATTTTATATCTATTTA
GTAAATATACTAAATGTCAGGCCTCTGAGCCCCAAGCTAAGCCATCATATCCCCTGTGACCTGCATGTACATACG
TCCAGATGGCCTGAAGCAAGTGAAGAATCACAAAAGAAGTGAAAATGGCCTGTTCCTGCCTTAACTGATGACATT
ACCTTGTGAAATTCCTTCTCCTGGCTCATCCTGGCTCAAAAGCTCCCCCACTAAGCAACTTGTGACACCCACCTC
TGCCCGCCAGAGAACGATNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNTTTACTGCAGAATATTTCCCAAAGTCTCATAAT
GATGCAGAAATACATGTGTACAAGACTTGTTCTGACACCTGGCACAGAACTGACAGTAGTGGCTCCCCAGGGAGG
CTGGAAGGAGGGTGGAGGACGTGACAGGGAAAGGAGATGCTTTATGGACAAGGGCCTAAGCTGCAGCTTTGCTTG
GAGCGTTACCACAAAACAAATACATACATCATGTGATGTTTAAATATCACAATATATATTTAATAATAATTGGTG
GGGCTGAGCACGG

FIGURE 5461

MTLPCEIPSPGSSWLKSSPTKQLVTPTSARQRTXXX

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FIGURE 5462

ATTGAAGGCCGGACGGTTGTCGCAGGCAGGCCGGGGCGGGGAAAGCGGAGCGCGCGCTCCACGCGGGACCGCCTC
CCGGGCCGTCTGAGCAGAGGGCGGGGTGCAGGCGGAATGGCCCTCGTGCCCTATGAGGAGACCACGGAATTTGGG
TTGCAGAAATTCCACAAGCCTCTTGCAACTTTTTCCTTTGCAAACCACACGATCCAGATCCGGCAGGACTGGAGA
CACCTGGGAGTCGCAGCGGTGGTTTGGGATGCGGCCATCGTTCTTTCCACATACCTGGAGATGGGAGCTGTGGAG
CTCAGGGGCCGCTCTGCCGTGGAGCTGGGTGCTGGCACGGGGCTGGTGGGCATAGTGGCTGCCCTGCTGGGTGCT
CATGTGACTATCACGGATCGAAAAGTAGCATTAGAATTTCTTAAATCAAACGTTCAAGCCAACTTACCTCCTCAT
ATCCAAACTAAAACTGTTGTTAAGGAGCTGACTTGGGGACAAAATTTGGGGAGTTTTTCTCCTGGAGAATTTGAC
CTGATACTTGGTGCTGATATCATATATTTAGAAGAAACATTCACAGATCTTCTTCAAACACTGGAACATCTCTGT
AGCAATCACTCTGTGATTCTTTTAGCATGCCGAATTCGCTATGAACGGGATAACAACTTCTTAGCAATGCTGGAG
AGGCAATTTATTGTGAGAAAGGTTCACTACGATCCTGAAAAAGATGTACATATTTACGAAGCACAGAAGAGAAAC
CAGAAGGAGGACTTATAATTGGCTATAATTTATAAGAATGTTGTCATTGAGTGTGTCACTTAAGGTCTTAGACTG
CAAATCTAACCATATTTAATGAAATGTCTTACTGTACAAAAAGTCTAAGCCAAAGGTTCTCAGGGGAGAAAGCAC
ATGTGCAGTTTTAAAACAAAGCAGTGCTTTGTCCCATTGCTGTGATTTTTAGTCAGACTTTACTCAGTCTGAAAT
GCAATTAACATTAAAGGATTAAGTGTGAGATTTCGATTTATGCTATTTGTGTATCCCATACTCCTCCCTTTTAAT
AAACAGTTTCCACTGATGATAAAAAAAAAAAAAAAAA

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FIGURE 5463

MALVPYEETTEFGLQKFHKPLATFSFANHTIQIRQDWRHLGVAAVVWDAAIVLSTYLEMGAVELRGRSAVELGAG
TGLVGIVAALLGAHVTITDRKVALEFLKSNVQANLPPHIQTKTVVKELTWGQNLGSFSPGEFDLILGADIIYLEE
TFTDLLQTLEHLCSNHSVILLACRIRYERDNNFLAMLERQFIVRKVHYDPEKDVHIYEAQKRNQKEDL

FIGURE 5464

AAATAATTAAATATAAATAAAAATAAAGCAAAATCTGTTGGGAAACGAGAAAAAGGAGAGGAATTTTTCAGGAAT
AATCATAAAAAGAAATGATCATCAGACTGAAAGTCCAGAGCCTGAGAAATGAAAACATATTTTTAAGCATTGGTG
TTGACCATGCAGACAAACTTTTGTTAATTCAGAGCGATACAAAAGGCACTTTGAATCTATAAAACTTGAAAAAGT
TAAAAATTGTATGTCGGATAAAGCTTTAAGTCATCTGTCACTATTAACCTCAGTGCAGCAATTCTGACTCCTGTG
CCTGGATTCCTTTTATGATAATTTTGCCACCTACAGGACAGATTAGGTGCTGGTCGCCTGAATTATTTTGTGTTC
TGAATTATTTTGAGCTCTAAAATGGTAAAGTACAAATACTCATTGTTTTACTGTGCCTTTGGCCTTTTATAAAAA
GGTATTTATAATTCGTTGATAAAAACCAATATTTGAAGCTGTTGATTACCAACAAAAAAGTTTCACTCTCTTTAT
AGTGCTTCAGGATACAACTTTTTCAGGGCCTTATTAGAGAAAAACTGATTCACATGTTATTCTTCTAAAGCTAAA
TTATTAAAATGTAGGTTGAAAGATTGGATTGATTGTGAATCTACACTAAAGATATGGTTCCAGGCAGACCTCCTT
AGAGACCTCCAGGCAGACCTCCTTACTGTCTTCAGTGATGTTTAATTTCATTACTGTTACTGGGTGCCAAGTGTC
TTTCATTTGGAAGTGAACTTACTCCAGTTATTGAATGTTTATCATATCATAATTTGCATTTTTCCAACATTGAAG
GTATTTTAAAAAGTCACTAAGAGATTCATTCTTTTATTATTCAACTACAAAAAAATAGTGTAATGATCAGAATTT
AAAATGTGTGATTCTTTTTCTTCTGTAAGTATGTATTGCTATGATAAATAAAAA**ATG**GCAGGACCATTGTTTTTA
TTAAAAT

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FIGURE 5465

MAGPLFLL

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FIGURE 5466

AGAGAAAAAATCCCTGCTGCATTATCTACCCATAAAAGAAATACAGAACCATCTGGAAGGTGAAGAACAAAGAAA
GGGAATCAAGCCCTGGGAATGCAAGTTTGTTGCTTATTCCTGTGACTGCTGCCACAGGGATAAGGGTGCTAGGCT
TGGGTTTAGGAGACTTGGGTGAAATTCCAGTCTACACATGGCTAGCAAGCTCTCTGAAAAATGGGGAGAGTAAGT
GTGACCTCATGGAGTGGTGAGCGTTCAATTATGTCATGTTTATAAAAGTGCCTAGCACTGTACCTGGTACATAGT
AGGGGTGTAGTAGTAGTGGTTTCCTTTTGTTCAGTTGCAGGGTTGGGGATTACTTTAAGGCTTAGACTCAAAGCG
ATAGGAATGAATTGCTTGGTCAGCAGAAGTGCACACTGCACACCAGCCTCAAGGGACAAGGTCAACCACGACACG
TTTGCAAAGTGTTTGTGCGGGGAAGACCACTCTGATGTTTCTTACTTAAAGGCAGGGTCTTCCAACTTTGTCTGA
TACGGAATGACTTGTTACAATCATTTCACAGGCAAGCCAACACTCAGGCTTTTGACTAACTTGTCTGGCGTGTTT
CTCAACAACTCCATTAAGAATTCACTGTTAGAAATCTGATCTTTTCTCCTCTGTTGAGCTTTACTTGGGCATTTT
ATTGATTTGATATCACTTAGTAGAAACCCATTCAACAAAAGGTATCTCTTCAGGCCACTAGTCAATACAGCATTT
TTTATTTGCTGAGATTTTTACTTCTATTTTGCCCCACATCAGCTGGTAAGTTTTATAAGTAAGCAAAAAGTAGGA
GCTATAGACAATAAGGAAGCAGAATGAACCTCTGCAATTCATATTTATGTATGATTTCACTTGGAGTGGGAGGAG
ATGTTTTTTTTCCCCATCTTTGAATAAGTAGAAAAACATCTCACGTAACCTGGGGTGGTGGTGGTGAATTTTCAG
CTGAAGGGAATCCTTCCTCGTGAAGCTCACTGCTATCCTGTTAATCTAGCATTTTACTTTTGTGGTAAGATTCTG
GGTGGAAAGGGAAAATGAAATGATACAGCATCTCAAACATAGGCATCAAGATTATTTCCGTTGACCTGGTGACCA
AGATTAGGGTTTGCCTAACCCAGAGATGATAATACGTATTAATGATGAAGGGTAACGGCCGGCCCTTGGCCAAGG
AGAACTCTTCTGAAGGGGTGGGCCATTTGCTCACATTTATAAAGTTGGTCTCAGGGCGTTGAGGGGTGGGGGTGC
AAACGAGGTGCTTTTACCTCTGGCTTTTGGGGCAATGACAGCAGTTTTCTTTCTTGGCCCTTCTAAAGGGTTCTC
TGCATTCTGTCCCCCTCCCTGCCCCCATCCATTAAAGGAGAACGAATAAACTGATTTTACTGTTTTCCAAGAAGA
AGGCATAACACATTTTATATTACCAGTGCTTAATATTTTCATGAACTACAGGGAGCGTTCAGCCTGCCGCGAGAA
GGATTTGGTTCCCTGGTGACTGGCCATCCACCCAGCTCAATCTGCAATCTCTCTTGGTATGCTGCTGAGTTGGTG
GGACCTGGGCAATTACAAGGGAGGTCACTGCACCCCCAGGCAGTTCCCAGCAAGTGTTTTTTCCAATTTCACTGA
CATTCTTTCCGGGCTCAACTCAATTTGTTTTCAACTTCTCTATGGCAATTGATGACTGACTGTGTAATTCAGCAG
GATCTCCTGTGAAGTGCTTCTTCCCCAGTTGAATAGGAGCTGGTGTTTGTCTAAGCCTCTGCTTATGCATGAGGT
ATAATGCTTTTTATATGTTATATAATGCTCTTACGCGTTAGCTATCTGAATGATAGATTTAATAAAATATACCTC
ATAATATTATGGGGAAAGGATGACGACTGTTATAGAGAGGAACTTGGGAGTATCACTTCTGTAATCCTTATCTAA
CCTGAATCTGTTAGCAGGAAACTGAAAAGGCCTGTGTATGACAATGAGATAAACAATTTTAATCTCTTAGCAATG
TCAAGTGGAAAATCTAACTACCTGCCAGTAGTTTAAGAAATGGCTAAGAGATTTTGTTGGGCACAAATAATCCTG
AGACCCAGATTGCTGAGCCAAGGGTAGGAAAATTGGTTTTGCTATGTGTTACAGCTGGGAAGTGAGAAGGTCACT
GTTTGACAAACTACTAAAAAAACCTTATGGATTAAACATTCGCCAGTGTAGGGGACATTTTGAATGTGTTATAAT
TGATATTTTAGTCTATATGCGGCCGCTGAACGCTTTTTCTTTTAC

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FIGURE 5467

EKKSLLHYLPIKEIQNHLEGEEQRKGIKPWECKFVAYSCDCCHRDKGARLGFRRLG

FIGURE 5468

ACCACAAGGAAATTGTTTCCCTTTTGTGAAAAGATGGGATTGGAGTAAACAGTCCCTTCAAGGTCTGACAATCTT
TGATCCATGTATCTGGCCCAGTTCCAGGAGGACATGTTAAAAGGGTTGGGACAGCAGGGTGACAGGTTCCGAGGT
GGATGCGGACCACGTTGAACTCAAGCCTTGCACTCAGCTTTCCTAAGGATTCCCCTCGTACTATATTTTTTGTCA
GGCGACTCCGCGGTCACCTTTGCTCCGCGGTGATTGGCCTGCAGCGGGGTCCTCGTGTTTGTCCAATATGGCGGC
GCCCAGTGGCGGTGTGAACTGTGAGGAGTTCGCCGAGTTCCAGGAATTACTCAAGGTGATGAGGACAATTGATGA
CAGAATAGTACATGAATTAAACACTACGGTTCCAACAGCTTCCTTTGCAGGGAAAATTGATGCCAGCCAAACCTG
TAAACAACTTTATGAGTCTTTGATGGCAGCTCATGCCAGTAGAGACAGAGTCATAAAAAACTGTATAGCCCAGAC
TTCAGCAGTAGTAAAAAACCTCCGAGAAGAGAGAGAAAAGAATTTGGACGATTTAACGTTATTAAAACAACTTAG
AAAAGAGCAGACAAAGTTGAAATGGATGCAGTCAGAACTGAATGTTGAAGAAGTGGTAAATGACAGGAGCTGGAA
GGTGTTTAATGAACGCTGCCGAATTCACTTCAAGCCTCCAAAGAATGAATAAAGAGAGATTCTTTTTTTTTTTTT
TTTTTAAAGGACTGGGTCATCTCATAAGAGCTAAGCATGACAGATATCAACAGGGCGGGCTTCCTAGGATGATTT
CTGAGCCAACAGTCCAAGACCTTTTGTTGATTTCAGCCCCACTTAGCCAAGACCTCAAGTATAAATAATTCTGAT
AATTATGGAGAAATCAACTGCTATTTTATACTGATTCTGTTAAAAAAAAAGTTTTGTAACTATTAAAATAATGTT
CTGACTCAGTGTAAAAAAAGAAAAACCAAACCTG

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FIGURE 5469

MRTIDDRIVHELNTTVPTASFAGKIDASQTCKQLYESLMAAHASRDRVIKNCIAQTSAVVKNLREEREKNLDDLT
LLKQLRKEQTKLKWMQSELNVEEVVNDRSWKVFNERCRIHFKPPKNE

FIGURE 5470A

AGGAAGGCTGCCTTTTATTTAACCCAGCTCTCTGTTCTGACCAGTGTTGCCCATGACGCTCATGTCCTGAGGTGG
GCAGTGTCAGCCGCCCTGGGTAGGGCAGGGGGCTCATGGGTGGCCACCAGCCTCTGCCTGTTCTCCCAGACCCTT
CTCCACCCTTTCCCCTCCCCTGCAAACAGCAGAGAGGAGAGCCAGCCCCTTCCCTCATCACATTGCTTGTGTCTG
CCTGAGCTCCTCTGTAGTGTGCTTGGGCCTGCCATATGGTTGGGCTGCAGATGAACACAGGCTTTTCTTTTTTGG
ACTTTCTGCAGGCGAAGCTGGTCCGTTACATTTGTAAGCAGAGGCAGTGCAAGCTGAGCGTGGCTCCCGGTGAGA
GGACCCCAGAGCTCAACAGCTACCCCCGGCTTCAGCGACTGGCTGTACACTTTCAACGTGAGGCCGGAGGTGGTG
CAGGAGATCCCCCGAGACCTCACGCTGGATGCCCTGCTGGAG**ATG**AATGAGGCCAAGGTGAAGGAGACGCTGCGG
CGCTGTGGGGCCAGCGGGGATGAGTGTGGCCGTCTGCAGTATGCCCTCACCTGCCTGCGGAAGGTGACAGGCCTG
GGAGGGGAGCACAAGGAGGACTCCAGTTGGAGTTCATTGGATGCGCGGCGGGAAAGTGGCTCAGGGCCTTCCACG
GACACCCTCTCAGCAGCCAGCCTGCCCTGGCCCCCAGGGAGCTCCCAGCTGGGCAGAGCAGGCAACAGCGCCCAG
GGCCCACGCTCCATCTCCGTGTCAGCTCTGCCCGCCTCAGACTCCCCCACCCCCAGCTTCAGTGAGGGCCTCTCA
GACACCTGTATTCCCCTGCACGCCAGCGGCCGGCTGACCCCCCGTGCCCTGCACAGCTTCATCACCCCGCCCACC
ACACCCCAGCTGCGACGGCACACCAAGCTGAAGCCACCACGGACGCCCCCCCCACCCAGCCGCAAGGTCTTCCAG
CTGCTGCCCAGCTTCCCCACACTCACCCGGAGCAAGTCCCATGAGTCTCAGCTGGGGAACCGCATTGATGACGTC
TCCTCGATGAGGTTTGATCTCTCGCATGGATCCCCACAGATGGTACGGAGGGATATCGGGCTGTCGGTGACGCAC
AGGTTCTCCACCAAGTCCTGGCTGTCGCAGGTCTGCCACGTGTGCCAGAAGAGCATGATATTTGGAGTGAAGTGC
AAGCATTGCAGGTTGAAGTGTCACAACAAATGTACCAAAGAAGCCCCTGCCTGTAGAATATCCTTCCTGCCACTA
ACTCGGCTTCGGAGGACAGAATCTGTCCCCTCGGACATCAACAACCCGGTGGACAGAGCAGCCGAACCCCATTTT
GGAACCCTCCCCAAAGCACTGACAAAGAAGGAGCACCCTCCGGCCATGAATCACCTGGACTCCAGCAGCAACCCT
TCCTCCACCACCTCCTCCACACCCTCCTCACCGGCGCCCTTCCCGACATCATCCAACCCATCCAGCGCCACCACG
CCCCCCAACCCCTCACCTGGCCAGCGGGACAGCAGGTTCAACTTCCCAGCCGCCTACTTCATTCATCATAGACAG
CAGTTTATCTTTCCAGACATTTCAGCCTTTGCACACGCAGCCCCGCTCCCTGAAGCTGCCGACGGTACCCGGCTC
GATGACCAGCCGAAAGCAGATGTGTTGGAAGCTCACGAAGCGGAGGCTGAGGAGCCAGAGGCTGGCAAGTCAGAG
GCAGAAGACGATGAGGACGAGGTGGACGACTTGCCGAGCTCTCGCCGGCCCTGGCGGGGCCCCATCTCTCGCAAG
GCCAGCCAGACCAGCGTGTACCTGCAGGAGTGGGACATCCCCTTCGAGCAGGTAGAGCTGGGCGAGCCCATCGGG
CAGGGCCGCTGGGGCCGGGTGCACCGCGGCCGCTGGCATGGCGAGGTGGCCATTCGCCTGCTGGAGATGGACGGC
CACAACCAGGACCACCTGAAGCTCTTCAAGAAAGAGGTGATGAACTACCGGCAGACGCGGCATGAGAACGTGGTG
CTCTTCATGGGGGCCTGCATGAACCCGCCCCACCTGGCCATTATCACCAGCTTCTGCAAGGGGCGGACGTTGCAC
TCGTTTGTGAGGGACCCCAAGACGTCTCTGGACATCAACAAGACGAGGCAAATCGCTCAGGAGATCATCAAGGGC
ATGGGATATCTTCATGCCAAGGGCATCGTACACAAAGATCTCAAATCTAAGAACGTCTTCTATGACAACGGCAAG
GTGGTCATCACAGACTTCGGGCTGTTTGGGATCTCAGGCGTGGTCCGAGAGGGACGGCGTGAGAACCCAGCTAAA
GCTGTCCCACGACTGGCTGTGCTATCTGGCCCC**TGA**GATTGTACGCGAGATGACCCCCGGGAAGGACGAGGATCA
GCTGCCATTCTCCAAAGCTGCTGATGTCTATGCATTTGGGACTGTTTGGTATGAGCTGCAAGCAAGAGACTGGCC
CTTGAAGAACCAGGCTGCAGAGGCATCCATCTGGCAGATTGGAAGCGGGGAAGGAATGAAGCGTGTCCTGACTTC
TGTCAGCTTGGGGAAGGAAGTCAGTGAGATCCTGTCGGCCTGCTGGGCTTTCGACCTGCAGGAGAGACCCAGCTT
CAGCCTGCTGATGGACATGCTGGAGAAACTTCCCAAGCTGAACCGGCGGCTCTCCCACCCTGGACACTTCTGGAA
GTCAGCTGACATTAACAGCAGCAAAGTTGTACCCCGGTTTGAAAGGTTTGGCTTGGGCGTCCTGGAGTCCAGTAA
TCCAAAGATGTAGCCAGCCATATGGTTTTTCGCTGCTGATCTCTTTCTTTTTAAAATGTGTTTCTGAAACATCCC
AACAACCACCCAGCCGCAAGGTCTTCCAGCTGCTGCCCAGCTTCCCCACACTCACCCGGAGCAAGTCCCATGAGT
CTCAGCTGGGGAACCGCATTGATGACGTCTCCTCGATGAGGTTTGATCTCTCGCATGGATCCCCACAGATGGTAC
GGAGGGATATCGGGCTGTCGGTGACGCACAGGTTCTCCACCAAGTCCTGGCTGTCGCAGGTCTGCCACGTGTGCC
AGAAGAGCATGATATTTGGAGTGAAGTGCAAGCATTGCAGGTTGAAGTGTCACAACAAATGTACCAAAGAAGCCC
CTGCCTGTAGAATATCCTTCCTGCCACTAACTCGGCTTCGGAGGACAGAATCTGTCCCCTCGGACATCAACAACC
CGGTGGACAGAGCAGCCGAACCCCATTTTGGAACCCTCCCCAAAGCACTGACAAAGAAGGAGCACCCTCCGGCCA
TGAATCACCTGGACTCCAGCAGCAACCCTTCCTCCACCACCTCCTCCACACCCTCCTCACCGGCGCCTTCCCGAC
ATCATCAACCATCCAGCGCCACACGCCCCCCAACCTCACTGGCAGCGGGACAGCAGGTTCAACTTCCCAGCTGCC
TACTTCATTCATCATAGACAGCAGTTTATCTTTCCAGACATTTCAGCCTTTGCACACGCAGCCCCGCTCCCTGAA
GCTGCCGACGGTACCCGGCTCGATGACCAGCCGAAAGCAGATGTGTTGGAAGCTCACGAAGCGGAGGCTGAGGAG

FIGURE 5470B

CCAGAGGCTGGCAAGTCAGAGGCAGAAGACGATGAGGACGAGGTGGACGACTTGCCGAGCTCTCGCCGGCCCTGG
CGGGGCCCCATCTCTCGCAAGGCCAGCCAGACCAGCGTGTACCTGCAGGAGTGGGACATCCCCTTCGAGCAGGTA
GAGCTGGGCGAGCCCATCGGGCAGGGCCGCTGGGGCCGGGTGCACCGCGGCCGCTGGCATGGCGAGGTGGCCATT
CGCCTGCTGGAGATGGACGGCCACAACCAGGACCACCTGAAGCTCTTCAAGAAAGAGGTGATGAACTACCGGCAG
ACGCGGCATGAGAACGTGGTGCTCTTCATGGGGGCCTGCATGAACCCGCCCCACCTGGCCATTATCACCAGCTTC
TGCAAGGGGCGGACGTTGCACTCGTTTGTGAGGGACCCCAAGACGTCTCTGGACATCAACAAGACGAGGCAAATC
GCTCAGGAGATCATCAAGGGCATGGGATATCTTCATGCCAAGGGCATCGTACACAAAGATCTCAAATCTAAGAAC
GTCTTCTATGACAACGGCAAGGTGGTCATCACAGACTTCGGGCTGTTTGGGATCTCAGGCGTGGTCCGAGAGGGA
CGGCGTGAGAACCAGCTAAAGCTGTCCCACGACTGGCTGTGCTATCTGGCCCCTGAGATTGTACGCGAGATGACC
CCCGGGAAGGACGAGGATCAGCTGCCATTCTCCAAAGCTGCTGATGTCTATGCATTTGGGACTGTTTGGTATGAG
CTGCAAGCAAGAGACTGGCCCTTGAAGAACCAGGCTGCAGAGGCATCCATCTGGCAGATTGGAAGCGGGGAAGGA
ATGAAGCGTGTCCTGACTTCTGTCAGCTTGGGGAAGGAAGTCAGTGAGATCCTGTCGGCCTGCTGGGCTTTCGAC
CTGCAGGAGAGACCCAGCTTCAGCCTGCTGATGGACATGCTGGAGAAACTTCCCAAGCTGAACCGGCGGCTCTCC
CACCCTGGACACTTCTGGAAGTCAGCTGAGTTGTAGGCCTGGCTGCCTTGCATGCACCAGGGGCTTTCTTCCTCC
TAATCAACAACTCAGCACCGTGACTTCTGCTAAAATGCAAAATGAGATGCGGGCACTAACCCAGGGGATGCCACC
TCTGCTGCTCCAGTCGTCTCTCTCGAGGCTACTTCTTTTGCTTTGTTTTAAAAACTGGCCCTCTGCCCTCTCCAC
GTGGCCTGCATATGCCCAAGTAACTGCTCTCAGAGGATCCCACTAACTGAGCTCCCTCCAAGGCAGTCTGGGCAG
CTTCTAACTACCTTCCTGGACATGACTGATTGCTCCCGTGTTCTTCTGAGGGCTGGTCTTGTTTTTGTTTGGGTG
GCTCTGTCTCACTGCTAACACCTTAGTGAGATGCCTTCCACCCTCCTGAGCACACCAGCCTCCCACTGGGTGTGT
GCCTAGTGCGGGGCGGGCGGAGGTTGGGAGGGTGTTGGCTTGGCTTTTAACCTGTGGGGATTTTGTCCAACAAGG
AGTGGAATGATTTCAGAGCTGCCCTGAGGCTGGCACCCTGGTCACAGGAACCCTCTGCGCTGGCTCCTGTCTCAG
TCCCCTCTGTAGAGTTAGATCAGAAGACACAGAAAGTTCTGTGGCCATGAAAGATACCAGCTTGGAAGGGTTGTG
TCTTCAGTGGCACCCTCAGAAAAATTGTCTTAAAGCAAAGAGGTACCTGGCTCCAGACAATTTTTCTGATGAAAA
CAAAGTCTCTGCCCCGTCCCCACCCTGCCACCCTGGCAAAGTTACTTCCTTTACAGCTGCCCAGTGTACCATAGA
CCAGACCCCAGGTCAGCATTTGTCAAGAGCATGGCTGCTGAGTCCCCTGTGGCAGTCAATGCACTGTTTACCAAA
TGCAGGTTTCTGTTCTCCCTCCCCAGCAAGACCTGCTGAACCCAGATCTCTGGAATGGGGCCCTAGGAATTTGCA
TTTCAACCTGCTTCCCAGGTGGCCCTGATGCACCCCAGTATTAGAGTTTATTGCTAAAAGGAACATGCCCTGTCA
CTCCTGGTATCCTGGGAGTCATGTTTCTCTTCTCTCTCAGTTCTACTTGGAGCAAGAGCTTTCCTGGGCTGCAAA
TGAGAAAACAATTCCTAGGAACCCACAGCAGTACTGAGCATGCTGGGAGCTTGGGACTTGGAGATGAATGAGCCA
CCGTTGCTGCTCCAAGTAGGACTACTTGGAGTGTAGCTGAGGCCTTGGACGCAGTATGACCAGGGGCAGCTCTGC
CAGGGCTGTTGGCCAATCAGTCATTTTCATTTCTTGTTGGAGGCCAGGTCCTCTGCTGAACTCATTTCCTAGCTA
GTGTTACCCTAATTCTGATGAAGATCAATGGGGCTATAATTCTTGTTTTTGTTCCTCTTTGCAGCATTAACAGCA
GCAAAGTTGTACCCCGGTTTGAAAGGTTTGGCTTGGGCGTCCTGGAGTCCAGTAATCCAAAGATGTAGCCAGCCA
TATGGTTTTTCGCTGCTGATCTCTTTCTTTTTAAAATGTGTTTCTGAAACATCCCAACAACCACCACGACAAAAA
AACACTGCCTGCCCAGCGCTGCAAACCAGGAGCACACGTCCTAGATTCAGACTGTTGGCCATAAACCCCACTCGG
GAGATGGAGCTGCACCTGCTATTTCTTAAAATGACACCACCAACAACCAAACCTGTCATGACAGACAGCAAATGT
TTACACGTATATTTCTCCTGAGTGAACCTGATGTTTTACAATAGGTAATAATAAAAACAGTCTGTGCAGATGCAC
TGGCACTGACGGCCAGGATGGCGGAAATGGCCATCCCCTCTGAGGACCTTGTAGGCGGTGAGGGACCCATGCTGG
GCCAGAAGGAAGACAAACATGGTAATTGCAGCTGTTCTTGGGGTAGGGCGGGGAGCCCAGAAGGTCTGATCTGGC
CTCTGCTTTTTGGCCCAAGACTCCATCAGGGAAATCTATCTAGGGCTCTCCCCTTGTCCTTTCAAAGGGATACTG
CCCCTTCCTCGTCTTGCAGAGGAAACCCTGGCTGGGAACTGAGCTAGTTTATGGAGTCTGGAATTCCTGGAGAGC
TTGGGTTCACCTTCTCACCCCTGTAATCCAGGCTGCTCCTGCTGGAAAAGTAGAAACAGAATCCAAAAAAGGTCT
GGACTCACCCGGTGGTTCCCAGCCAGGGTTTCTGCTGCAAGGTGAGGAAACATCCATGGCTTGTACAGATGTGAG
TCTTTGATGAAGCCCCCAGGCAGGCACCAAGGTGATGGGACTCAGGGCCTTGGCTTTTAGATACATCCCAGTCCC
TGACTGACATCTGACCATGAGGGCTGGATGGGTGGGAACAAGGAGGAGTAGATGGCAAAAGTACCTGAGCCCACT
TCCCAGCCACAGGGTGACCCTGGCACTGTAAAAACCCTTTGTCAGTCATGCCAGAAGGTTCTAGAACTGCCCACC
TCTTCCATTTCAGTCCTGCTGAAACCCCTTAGCCTATTTCCGACTCCTCTGTCCATGCTCTGAGTTCAGCTGGGC
AGTGTGTGGGCTATCACCCCTTTCATTTAGACCTACCTAGCTGGCCCCCATCTGCAGAGCCTTCCTTAGCACCAT

FIGURE 5470C

TAGGCCTTCTACTTGTGTCCATTTGAAGCAGGAGGGGCTGGATTTGGAAAAGTCTTTGAAGTGAGAGCACCACGC
TTGTCTTCGTTAGAAACTCTTAACTGCAGAAAAAAGTTCCAGATGGCAAGGGAGCCCTTAAGTGGAGATTAGGTT
GCATTAGACTCCAAAACCAGAAAGGAAAAAGGGTGATGGGAGTGGAGACGTGATTGGATTCAGGCCCAGAACCTG
TGACCATGCTCTGAGCTCAGACTTGGGGAGGGAGGGGTGTGGCTCCCACCCCTTCCAGTTAAGACCTGCCTAGCA
GAGCCCCAGTCTCCAGCCCCTTCCCTAGCACCAGAGTCTGGTCAAAATGCCACAGAAAATGAGCTGCTCTGCCAG
CAAACTGTGGAGCTGCCTCCTCTCCAGGCCTGGCATCCCTTGGTCAGCCCCTCCTGGGAGGGCACAGCCGTATTA
CAGTGCCAGTGTGCCTGGCCATCAGCATCTTCACCCTTCCCAGTCTGTGTGGGGAGGCTGTAAACCCCGTGGATT
CAGCTCCGTGTGGAGTTTCTGTGCTATGGTGGGACTGCTCATTTTGCCCCATCATCCCTTTGGCCTCCCACACAC
CTGCCCCTTCCCAGGGATCACGTGTGTCTCCAGCCTTTCACCTTTCTATTGCAATGGTGGCCTTTGTCCAGGCAA
GAGCAGGCCTGATGGATGTACTGGTGAGCCCCACAGTTGGATGTCAGCTCAGCCGTCCAACTGGGAGGAACAGTA
GGCTCAGTTCCTCCCTGACCCCTGACACCAGGCCGCAGTGGGCATGCACAGGCCCACAGAAAGTCAGTCTGGGTT
TTGCTTTTCTCGTGAGCATCACAGTTAAAGAAGCGCTCATTGAGCAACTACAGTGCACTTGGTCTTCTGCAAGTG
CTGGGCACCTAGAGATAGGAACAGTCATGGTCCCTGCTCTTAAGGAACTGATGACCTGGTGGGGCCCTGTTGTCT
TCAAGGAACCCAGAAGCCACTGGGCCCCAAAGGTGGAACTGAAGGACTGGGGGCAGCTGGCTCTCAGCCTGCCAC
CTCTGCACTGCCTGCCTTTAAAGAACCCCACCCCACCCCATGATGGCCCCCTCTGTTCCCCTTGTATTTCAGTGA
CTGTGAATTGAGGTTAGGAAGGCACACCTGCCCTTCTGTGTGCTCTCTCCACACGAAGGATGACAGATACTGTGA
ATTCAGCCCTCACGGCCAACTGTGAAGGGGATGGAGAAGGCTGGGAGGGCTCGGGGAGAGCTCTTAGGGGCTGCG
GAAGTCCCCACGGGGGTCTGAGAGTGGAGCCCAAGCTTTGGCCCTCCAGGCATCCCCAGTTTCCAGCCTCACCTC
TGAAGCCCTGCTGCCTTTAACCACCAGAGCCGCAGCCCCCTGGGTTTCTGTCTAACTCGAAGTCTTGAATCCTAG
CTAGTTTGGGGGTTGTGAGCAGTGTGTAGCAAAGTTGATCTCTCCATGTCACCAAATCAAAACACCCTCTGTCATC
CTACGGCATTTCCTCTTGAGGTCACAGAGAGGAATGGCAAGCCCTGGAAACCTGTGTTATTCTGTGTTGATTTGG
TGTGGGGGGAGGGTGGAGACGTAAATGTGAAGCCAGTTGGAGTTTGTGCTATGCAGCAGTGTTAGCCAGGATCTC
ATCAGCGTGCAAACCTAGCATCTTCTGTGGCCACAAGCCACACACTTGCTTTTTTTGAATGTGATGTAAAATTTG
TACAGTAAAGTTTTTATATTTTCTATCAACTACATTTGTCTTCCAGACATGCTATTAATTTAAATTAAAATGGTT
AGTATTAACAAACATGCTGTATCGGGTTTTTTTGCCACTGGCAAGAACATGCCCTCTGTGCTAAGCCAGGCCTGG
GTGTCTGGAGTTTGTGAATAAAGTTATACCAAGGTGAAAAA

FIGURE 5471

MNEAKVKETLRRCGASGDECGRLQYALTCLRKVTGLGGEHKEDSSWSSLDARRESGSGPSTDTLSAASLPWPPGS
SQLGRAGNSAQGPRSISVSALPASDSPTPSFSEGLSDTCIPLHASGRLTPRALHSFITPPTTPQLRRHTKLKPPR
TPPPPSRKVFQLLPSFPTLTRSKSHESQLGNRIDDVSSMRFDLSHGSPQMVRRDIGLSVTHRFSTKSWLSQVCHV
CQKSMIFGVKCKHCRLKCHNKCTKEAPACRISFLPLTRLRRTESVPSDINNPVDRAAEPHFGTLPKALTKKEHPP
AMNHLDSSSNPSSTTSSTPSSPAPFPTSSNPSSATTPPNPSPGQRDSRFNFPAAYFIHHRQQFIFPDISAFAHAA
PLPEAADGTRLDDQPKADVLEAHEAEAEEPEAGKSEAEDDEDEVDDLPSSRRPWRGPISRKASQTSVYLQEWDIP
FEQVELGEPIGQGRWGRVHRGRWHGEVAIRLLEMDGHNQDHLKLFKKEVMNYRQTRHENVVLFMGACMNPPHLAI
ITSFCKGRTLHSFVRDPKTSLDINKTRQIAQEIIKGMGYLHAKGIVHKDLKSKNVFYDNGKVVITDFGLFGISGV
VREGRRENPAKAVPRLAVLSGP

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FIGURE 5472

CCTCTAGCTTAGCGAGCGCTGGAGTTTGAAGAGCGGGCAGTGGCTGCACACGCCAAACTTTCCCTATGGCTTCGG
TGACCAGGGCCGTGTTTGGAGAGCTGCCCTCGGGAGGAGGGACAGTGGAGAAGTTCCAGCTGCAGTCAGACCTCT
TGAGAGTGGACATCATCTCCTGGGGCTGCACGATCACAGCCCTAGAGGTCAAAGACAGGCAGGGGAGAGCCTCGG
ACGTGGTGCTTGGCTTCGCCGAGTTGGAAGGATACCTCCAAAAGCAGCCATACTTTGGAGCAGTTATTGGGAGGG
TGGCCAACCGAATCGCCAAAGGAACCTTCAAGGTGGATGGGAAGGAGTATCACCTGGCCATTAACAAGGAACCCA
ACAGTCTGCATGGAGGAGTCAGAGGGTTTGATAAAGTGCTCTGGACCCCTCGGGTGCTGTCAAATGGCGTCCAGT
TCTCGCGCATCAGTCCAGATGGTGAAGAAGGCTACCCCGGAGAGTTAAAAGTCTGGGTGACATACACCCTGGATG
GCGGAGAGCTCATAGTCAACTACAGAGCACAAGCCAGTCAGGCCACACCAGTCAACCTGACCAACCATTCTTACT
TCAACCTGGCAGGCCAGGCTTCCCCAAATATAAATGACCATGAAGTCACCATAGAAGCGGATACTTATTTGCCTG
TGGATGAAACCCTGATTCCTACAGGAGAAGTTGCCCCAGTGCAAGGCACTGCATTCGACCTGAGAAAGCCAGTGG
AGCTTGGAAAACACCTGCAGGACTTCCATCTCAATGGTTTTGACCACAATTTCTGTCTGAAGGGATCTAAAGAAA
AGCATTTTTGTGCAAGGGTGCATCATGCTGCAAGCGGGCGGGTACTAGAAGTATACACCACCCAGCCCGGGGTCC
AGTTTTACACGGGCAACTTCCTGGATGGCACATTAAAGGGCAAGAATGGAGCTGTCTATCCCAAGCACTCCGGTT
TCTGCCTGGAGACTCAGAACTGGCCTGATGCAGTCAATCAGCCCCGCTTCCCTCCTGTGCTGCTGAGGCCTGGTG
AGGAGTATGACCACACCACCTGGTTCAAGTTTTCTGTGGCTTAAGGAAGTGTGAAGATATGATCCAGTCCAGGGC
TAGGCTCAGCCACCTGTCTCCTGTCCAGAAAAAAGGTGAAGATTAAGAAGCTTTCAGAATGATTCTATGGATTAA
AATCATACAAATGGTGGCTGTTCTGAGAATCAGTCTGGGTATTGATTTCCTTTTCCAGTGACTGGCTCCAGGCCA
TGTCTAATGACCAGCTCGATTCCCTGTGCAGTTCAGAGAGCAAGTGAACCCAACCAACAATGTCGTCATCTAAGC
CCTGACCCTAGCCAGGGACTCCCATGCTGCTGTTGGCTCCATCTCTCCACACTGCCTCTTTCTTTTCAACTTTTT
GCCCTTCCTTTCTTTAAAGCTATTCTCACATTGCTTTTATTTCCTCCTCCTTCACCTCCAACCACTGTCAGCAGC
ACTCTGGAGTTTTCAAATGTCACATTAGCCTCACCCTGCATGCTAGGAGATGGACCTGTCTCTATACAGCAGTAG
ATGATTGATAAGTGAGGAAACTGAGGCTTACAGAGGTTGAAGACCAACAAGCTAATAAATAAAAAGTTGAGGCCG
GGCACGGTGGCTCACGCCTGTAATCCCAGCACTTTGGAAGGCCGAGGCAGGCGGATCACGAGGTCAGGAGATCGA
GACCATCCTGGCTAACACGGTGAAACCCCGTCTCTACATAAAAAATTAGCTGGGTGTGGTAGCACGCACCCGTAG
TTCCAGCTACTTGGGAGGCTGAAGCAGGAGAATCGCTTGAACCTGGGAGGTGGAGGTTGCAGTGAGCCGAGATCA
TGCCACTGCACTGGGCAACAGAGCAAAACTCGATCTCAAAAAAAAAAAAAAAAAAAA

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FIGURE 5473

MASVTRAVFGELPSGGGTVEKFQLQSDLLRVDIISWGCTITALEVKDRQGRASDVVLGFAELEGYLQKQPYFGAV
IGRVANRIAKGTFKVDGKEYHLAINKEPNSLHGGVRGFDKVLWTPRVLSNGVQFSRISPDGEEGYPGELKVWVTY
TLDGGELIVNYRAQASQATPVNLTNHSYFNLAGQASPNINDHEVTIEADTYLPVDETLIPTGEVAPVQGTAFDLR
KPVELGKHLQDFHLNGFDHNFCLKGSKEKHFCARVHHAASGRVLEVYTTQPGVQFYTGNFLDGTLKGKNGAVYPK
HSGFCLETQNWPDAVNQPRFPPVLLRPGEEYDHTTWFKFSVA

FIGURE 5474

GATCTCTCTCCGGTCGCGCACGCCGAGGCCAGTAGGGAGAGAAGATGGTGGTTCTCCGCAGCAGCTTGGAGCTGC
ACAACCACTCCGCGGCCTCGGCCACGGGCTCCTTGGACCTGTCCAGTGACTTCCTCAGTCTGGAGCACATCGGCC
GGAGGCGGCTCCGCTCGGCCGGCGCGGCGCAGAAGAAACCCGCGGCGACCACAGCCAAAGCGGGCGATGGGTCAT
CAGTTAAGGAAGTTGAAACCTACCACCGGACACGTGCTTTAAGATCTTTGAGAAAAGATGCACAGAATTCTTCAG
ATTCTAGTTTTGAGAAGAATGTGGAAATAACGGAGCAACTTGCTAATGGCAGGCATTTTACAAGGCAGTTGGCCA
GACAGCAGGCTGATAAAAAAAAAGAAGAGCACAGAGAAGACAAAGTGATTCCAGTTACTCGGTCATTGAGGGCTA
GAAACATCGTTCAAAGTACAGAACACTTACATGAAGATAATGGTGATGTTGAAGTGCGTCGAAGTTGTAGGATTA
GAAGTCGTTATAGTGGTGTAAACCAGTCCATGCTGTTTGACAAACTTATAACTAACACTGCTGAAGCTGTACTTC
AAAAAATGGATGACATGAAGAAGATGCGTAGACAGCGAATGAGAGAACTTGAAGACTTGGGAGTGTTTAATGAAA
CAGAAGAAAGCAATCTTAATATGTACACAAGAGGAAAACAGAAAGATATTCAAAGAACTGATGAAGAAACAACTG
ATAATCAAGAAGGCAGTGTGGAGTCATCTGAAGAGGGTGAAGACCAAGAACATGAAGATGATGGTGAAGATGAAG
ATGATGAAGATGATGATGATGATGACGATGATGATGATGATGATGATGATGAAGATGATGAAGATGAAGAAGATG
GAGAAGAAGAGAATCAGAAGCGATATTATCTTAGACAGAGAAAAGCTACTGTTTACTATCAGGCTCCATTGGAAA
AACCTCGTCACCAGAGAAAGCCCAACATATTTTATAGTGGCCCAGCTTCTCCTGCAAGACCAAGATACCGATTAT
CTTCCGCAGGACCAAGAAGTCCTTACTGTAAACGAATGAACAGGCGAAGGCATGCAATCCACAGTAGTGACTCGA
CTTCATCTTCCTCCTCTGAAGATGAACAGCACTTTGAGAGGCGGAGGAAAAGGAGTCGTAATAGGGCTATCAATA
GGTGCCTCCCACTAAATTTTCGGAAAGATGAATTAAAAGGCATTTATAAAGATCGAATGAAAATTGGAGCAAGCC
TTGCCGATGTTGATCCAATGCAACTAGATTCTTCAGTACGATTTGATAGTGTTGGTGGCCTGTCTAATCATATAG
CAGCTCTAAAAGAGATGGTGGTGTTTCCATTACTTTATCCAGAAGTCTTTGAAAAATTTAAAATTCAACCCCCAA
GAGGTTGTTTGTTTTATGGGCCACCTGGAACTGGAAAGACTCTGGTTGCCAGAGCACTTGCCAATGAGTGCAGTC
AAGGGGATAAAAGAGTAGCATTTTTCATGAGGAAAGGTGCTGATTGTCTAAGTAAATGGGTAGGAGAATCTGAAA
GACAGCTACGATTGCTGTTTGATCAGGCCTATCAGATGCGCCCATCAATTATTTTTTTTGACGAAATTGATGGTC
TGGCTCCAGTACGGTCAAGCAGGCAAGATCAGATTCACAGTTCTATTGTTTCCACCCTGCTAGCTCTTATGGATG
GATTGGACAGCAGAGGGGAAATTGTGGTCATTGGTGCTACGAACAGGCTAGATTCTATAGATCCTGCTTTACGAA
GGCCTGGTCGCTTTGATAGAGAATTCCTCTTTAGCCTGCCTGATAAAGAGGCTCGAAAAGAGATTCTAAAGATTC
ACACCAGGGATTGGAATCCCAAACCACTGGACACATTTTTAGAAGAGCTAGCAGAAAACTGTGTTGGATACTGTG
GAGCAGATATTAAATCAATATGTGCTGAAGCTGCTTTATGTGCTTTACGACGACGCTACCCACAGATCTATACCA
CTAGTGAGAAACTGCAGTTGGATCTCTCTTCAATTAATATCTCAGCTAAGGATTTCGAGGTAGCTATGCAAAAGA
TGATACCAGCCTCCCAAAGAGCTGTGACATCACCTGGGCAGGCACTGTCCACCGTTGTGAAACCACTCCTGCAAA
ACACTGTTGACAAGATTTTAGAAGCCCTGCAGAGAGTATTTCCACATGCAGAATTCAGAACAAATAAAACATTAG
ACTCAGATATTTCTTGTCCTCTGCTAGAAAGTGACTTGGCTTACAGTGATGATGATGTTCCATCAGTTTATGAAA
ATGGACTTTCTCAGAAATCTTCTCATAAGGCAAAAGACAATTTTAATTTTCTTCATTTGAATAGAAATGCTTGTT
ACCAACCTATGTCTTTTCGACCAAGAATATTGATAGTAGGAGAACCAGGATTTGGGCAAGGTTCTCACTTGGCAC
CAGCTGTCATTCATGCTTTGGAAAAGTTTACTGTATATACATTAGACATTCCTGTTCTTTTTGGAGTTAGTACTA
CATCCCCTGAAGAAACATGTGCCCAGGTGATTCGTGAAGCTAAGAGAACAGCACCAAGTATAGTGTATGTTCCTC
ATATCCACGTGTGGTGGGAAATAGTTGGACCGACACTTAAAGCCACATTTACCACATTATTACAGAATATTCCTT
CATTTGCTCCAGTTTTACTACTTGCAACTTCTGACAAACCCCATTCCGCTTTGCCAGAAGAGGTAATTTATGTGG
GGCGGTATCATTATACTTTCAAAAAGAGTTGTTTCTACCACAATAATCATAACTTATTGAAAAAATTCAAATGCT
GTAGAAGTGAATAAAAGGATAAGTTTTCTTATCAAATATACCATTGGTAACTATTTGGTATATGTGCTCATTGGG
CAAGATGGTATATGTATATGTGTATGTATATATTAAGGATACATAAATTTTTTCTCTTGAAAAATGGTATTATAT
GCCGGGTGCAGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGTGGGTGGATCATGAGGTCAGGAGA
TTGAGACCATCCTGGCTAGCAGGGTGAAACCCTGTCCCTACTAAAAATACAAAAAAAAAAAAAAA

FIGURE 5475

MVVLRSSLELHNHSAASATGSLDLSSDFLSLEHIGRRRLRSAGAAQKKPAATTAKAGDGSSVKEVETYHRTRALR
SLRKDAQNSSDSSFEKNVEITEQLANGRHFTRQLARQQADKKKEEHREDKVIPVTRSLRARNIVQSTEHLHEDNG
DVEVRRSCRIRSRYSGVNQSMLFDKLITNTAEAVLQKMDDMKKMRRQRMRELEDLGVFNETEESNLNMYTRGKQK
DIQRTDEETTDNQEGSVESSEEGEDQEHEDDGEDEDDEDDDDDDDDDDDDDDEDDEDEEDGEEENQKRYYLRQRK
ATVYYQAPLEKPRHQRKPNIFYSGPASPARPRYRLSSAGPRSPYCKRMNRRRHAIHSSDSTSSSSSEDEQHFERR
RKRSRNRAINRCLPLNFRKDELKGIYKDRMKIGASLADVDPMQLDSSVRFDSVGGLSNHIAALKEMVVFPLLYPE
VFEKFKIQPPRGCLFYGPPGTGKTLVARALANECSQGDKRVAFFMRKGADCLSKWVGESERQLRLLFDQAYQMRP
SIIFFDEIDGLAPVRSSRQDQIHSSIVSTLLALMDGLDSRGEIVVIGATNRLDSIDPALRRPGRFDREFLFSLPD
KEARKEILKIHTRDWNPKPLDTFLEELAENCVGYCGADIKSICAEAALCALRRRYPQIYTTSEKLQLDLSSINIS
AKDFEVAMQKMIPASQRAVTSPGQALSTVVKPLLQNTVDKILEALQRVFPHAEFRTNKTLDSDISCPLLESDLAY
SDDDVPSVYENGLSQKSSHKAKDNFNFLHLNRNACYQPMSFRPRILIVGEPGFGQGSHLAPAVIHALEKFTVYTL
DIPVLFGVSTTSPEETCAQVIREAKRTAPSIVYVPHIHVWWEIVGPTLKATFTTLLQNIPSFAPVLLLATSDKPH
SALPEEVIYVGRYHYTFKKSCFYHNNHNLLKKFKCCRSE

FIGURE 5476A

GCCTTATAAGTGGTTTAGTGCTCAGTTGGCTCTAGTAACCAGAGGACACAGAAAGTATCTTTTGGAAAGTTTAGC
CACCTGTGCTTTCTGACTCAGAGTGCATGCAACAGTTAGATCATGCAACAGTTAGATTATGTTTAGGGTTAGGAT
TTTCAAAGAATGGAGGTTGCTGCACTCAGAAAATAATTCAGATCATGTTTATGCATTATTAAGTTGTACTGAATT
CTTTGCAGCTTAATGTGATATATGACTATCTTGAACAAGAGAAAAAACTAGGAGATGTTTCTCCTGAAGAGCTTT
TGGGGTTGGGAACTATTCTTTTTTAATTGCTGTACTACTTAACATTGTTCTAATTCAGTAGCTTGAGGAACAGGA
ACATTGTTTTCTAGAGCAAGATAATAAAGGAGATGGGCCATACAAATGTTTTCTACTTTCGTTGTGACAACATTG
ATTAGGTGTTGTCAGTACTATAAATGCTTGAGATATAATGAATCCACAGCATTCAAGGTCAGGTCTACTCAAAGT
CTCACATGGAAAAGTGAGTTCTGCCTTTCCTTTGATCGAGGGTCAAAATACAAAGACATTTTTGCTAGGGCCTAC
AAATTGAATTTAAAAACTCACTGCACTGATTCATCTGAGCTTTTGGTTAGTATTCATGGCTAGAGTGAACATAGC
TTTAGTTTTTGCTGTGTAAAAGTGTTTTCATAAGTTCACTCAAGAAAAATGCAGCTGTTCTGAACTGGAATTTTT
CAGCATTCTTTAGAATTTTAAATGAGTAGAGAGCTCAACTTTTATTCCTAGCATCTGCTTTTGACTCATTTCTAG
GCAGTGCTTATGAAGAAAAATTAAAGCACAAACATTCTGGCATTCAATCGTTGGCAGATTATCTTCTGATGACAC
AGAATGAAAGGGCATCTCAGCCTCTCTGAACTTGTAAAAATCTGTCCCCAGTTCTTCCATCGGTGTAGTTGTTGC
ATTTGAGTGAATACTCTCTTGATTTATGTATTTTATGTCCAGATTCGCCATTTCTGAAATCCAGATCCAACACAA
GCAGTCTTGCCGTTAGGGCATTTTGAAGCAGATAGTAGAGTAAGAACTTAGTGACTACAGCTTATTCTTCTGTAA
CATATGGTTTCAAACATCTTTGCCAAAAGCTAAGCAGTGGTGAAGTGAAAAGGGCATATTGCCCCAAGGTTACAC
TGAAGCAGCTCATAGCAAGTTAAAATATTGTGACAGATTTGAAATCATGTTTGAATTTCATAGTAGGACCAGTAC
AAGAATGTCCCTGCTAGTTTCTGTTTGATGTTTGGTTCTGGCGGCTCAGGCATTTTGGGAACTGTTGCACAGGGT
GGAGTCAAAACAACCTACATATAAAAAGAGAAAAAGAGAAACTTGTCCATTTAGCTTTCATAAGAAATCCCATGG
CAAAGGGTAATAAAAAGGACCTAATCTTAAAAATACAATTTCTAAGCACTTGTAAGAACCCAGTGGGTTGGAGCC
TCCCACTTTGTCCCTCCTTTGAAGTGGATGGGAACTCAAGGTGCAAAGAACCTGTTTTGGAAGAAAGCTTGGGGC
CATTTCAGCCCCCTGTATTCTCATGATTTTCTCTCAGGAAGCACACACTGTGAATGGCAGACTTTTCATTTAGCC
CCAGGTGACTTACTAAAAATAGTTGAAAATTATTCACCTAAGAATAGAATCTCAGCATTGTGTTAAATAAAAATG
AAAGCTTTAGAAGGCATGAGATGTTCCTATCTTAAATAAAGCATGTTTCTTTTCTATAGAGAAATGTATAGTTTG
ACTCTCCAGAATGTACTATCCATCTTGATGAGAAAACTCTTAAATAGTACCAAACATTTTGAACTTTAAATTATG
TATTTAAAGTGAGTGTTTAAGAAACTGTAGCTGCTTCTTTTACAAGTGGTGCCTATTAAAGTCAGTAATGGCCAT
TATTGTTCCATTGTGGAAATTAAATTATGTAAGCTTCCTAATATCATAAACATATTAAAATTCTTCTAAAATATT
GCTTTTCTTTTAAGTGACAATTTGACTATTCTTATGATAAGCACATGAGAGTGTCTTACATTTTCCAAAAGCAGG
CTTTAATTGCATAGTTGAGTCTAGGAAAAAATAATGTTAAAAGTGAATATGCCACCATAATTACTTAATTATGTT
AGTATAGAAACTACAGAATATTTACCCTGGAAAGAAAATATTGGAATGTTATTATAAACTCTTAGATATTTATAT
AATTCAAAAGAATGCATGTTTCACATTGTGACAGATAAAGATGTATGATTTCTAAGGCTTTAAAAATTATTCATA
AAACAGTGGGCAATAGATAAAGGAAATTCTGGAGAAAATGAAGGTATTTAAAGGGTAGTTTCAAAGCTATATATA
TTTTGAAGGATATATTCTTTATGAACAAATATATTGTAAAAATTTATACTAAGGTCATCTGGTAACTGTGGGATT
AATATGGTCGAAAACAAATGTTATGGAGAAGCTGTCCCAAGCAAACTAAATTACCTGTACTTTTTTCCCATTTCA
AGGGAAGAGGCAACCACATGAAGCAATACTTCTTACACATGCCTAAGAACGTTCATTGAAAAAATAAATTTTTAA
AAGGCATGTGTTTCCTATGCCACCAATACTTTTGAAAAATTGTGAACCTTACCCAAAACCATTTATCATGTCCAT
TAAGTATATTTGGGTATATAATTAGGAAGATATTTACATGTTCCATCTCCACAGTGGAAAAACTTATTGAGGCTA
CCAAAGTGTGCCAAGAAATGTAAGTCCTTAGAGTAATTAGAAATGCTGTTTTCCTCAAAAGCATGAGAAACTAGC
ATTTTCATTTCTTATTTACTCCCTTTCTATATCAATGCAATTCACAACCCAATTTTAATACATCCCTATATCTCA
AGCATTTCTATCTTGTACTTTTTCAGAAAATAAACCAAAAATAATCCTTGGTCTCTCTATCTTCTGACCTTGTAA
GCAACAGAAATGTAAAAACAGAAGGGGTCCAATTTTTACACGTTTTTTTCTCAAGTAGCCTTTCTGGGGATTTTT
ATTTTCTTAATGAAGTGCCAATCAGCTTTTCAAAATGTTTTCTATTTCTCAGCATTTCCAGGAAGTGATAACGTT
TAGCTAAATGAGTAGAAGTGGACTTCCTTCAACATATTGTTACCTTGTCTAGCCTTAGGAAGAAAACAAGAGCCA
CCTGAAAATAAATACAGGCTCTTTTCGAGCATCTGCTGAAATACTGTTACAGCAATTTGAAGTTGATGTGGTAGG
AAAGGAAGGTGACTTTTCTTGCAAAAGTCTTTCTAAACATTCACACTGTCCTAAGAGATGAGCTTTCTTGTTTTA
TTCCGGTATATTCCACAAGGTGGCACTTTTAGAGAAAAACAAATCTGATGAAGACTAAAGAGGTACTTCTAAAAG
AGATTTCATTCTAACTTTATTTTTCTGCGCATATTTAACTCTTTCCTAGCACTTGTTTTTTGGGATGATTAATAG
TCTCTATAATGTTCTGTAACTTCAATATTTTACTTGTTACCTAGGTTCTGAACAATTGTCTGCAAATAAATTGTT

FIGURE 5476B

CTTAAGGATGGATAATACACCCATTTTGATCATTTAAGTAAAGAAAGCCTAGTCATTCATTCAGTCAAGAAAAAA
TTTTTGAAGTACCCAGTTACCTTACTTTTCTAGATTAAAACAGGCTTAGTTACTAAAAAGGCAGTCCTCATCTGT
GAACAGGATAGTTTCGTTAGAAGTATAAAACTCCTTTAGTGGCCCCAGTTAAAACACACATACCCTCTCTGCTGC
TTTCAAATTCCCTAGCATGGTGGCCTTTCAACATTGATTAAATTTTAAAATCCTAATTTAAAGATCAGGTGAGCA
AAATGAGTAGCACATCAGTAATTCAGTAGACAAAACTTTTGTCTGAAAAATTGCTGTATTGAAACAGAGCCCTAA
AATACCAAAAGACCAGGTAATTTTAACATTTGTGGAATCACAAATGTAAATTCATAAGAAGCTCTAATTAAAAAA
AAAAAGTCTGAAGTATATGAGCATAACAACTTAGGAGTGTGTCTACATACTTAACTTTTGAAGTTTTTTGGCAAC
TTTATATACTTTTTTTAAATTTACAAGTCTACTTAAAGACTTCTTATACCCCAAATGATTAAGTTAATTTTAGAG
GTCACCTTTCTCACAGCAGTGTCACTTGAAATTTAGTAGGGAAGGATATTGCAGTATTTTTCAGTTTCCTTAGCA
CAGCACCACAGAAAGCAGCTTATTCCTTTTGAGTGGCAGACACTCGACGGTGCCTGCCCAACTTTCCTCCTGAGT
GGCAAGCAGATGAGTCTCAGTAATTCATACTGAACCAAAATGCCACATACACTAGGGGCAGTCAGAAACTGGCTG
AGAAATCCCCCGCCTCATTCGCCCCTCTGCTCCCAGGAACTAGAGTCCAGTTAAAGCCCCTATGCGAAAGGCCGA
ATTCCACCCCAGGGTTTGTTATAACAGTGGCCAGTCTGAACCCCATTTGCTCGTGCTCAAAACTTGATTCCCACT
TGAAAGCCTTCCGGGCGCGCTGCCTCGTTGCCCCGCCCCTTTGGCAGGAGAGAGGCAGTGGGCGAGGCCGGGCTG
GGGCCCCGCCTCCCACTCACCTGCCGGTGCCTGAAATTATGTGCGGCCCCGCGGGCTGCTTTCCGAGGTCAGAGT
GCCCTGCTGCTGTCTCAGAGGCATCTGTTCTGCAAATCTTAGGAAGAAAAATGTCCCTAGTAGCAAACGGGTGTC
TTCTGTGCATAAATAAGTACAACACAATTCTCCGAAAGTTCGGGTAAAAAGAGATGCGGTAGCAGCTGCCCTGTG
TGAAGCTGTCTACCCCGCATCTCTCAGGCGCTAAGCTCAGTTTTTGTTTTTGTTTTTGTTTTTTTAAAGAAAAGA
TGTATAATTGCAGGAATTTTTTTTTATTTTTTTATTTTCCATCATTCTATATATGTGATGGTGAAAGATATGCCT
GGAAAAGTTTTGTTTTGAAAAGTTTATTTTCTGCTTCGTCTTCAGTTGGCAAAAGCTCTCAATTCTTTAGCTTCC
AGTTTCTTTTCTCTCTTTTTCTTTGTTAGGTAATTAAAGGTATGTAAACAAATTATCTCATGTAGCAGGGGATTT
TCATGTTGAGAGGAATCTTCCGTGTGAGTTGTTTGGTCACACAAATAACCCTTTCTCAATTTTAGGAGTTTGGAT
TGTCAAATGTAGGTTTTTCTCAAAGGGGGCATATAACTACATATTGACTGCCAAGAACTATGACTGTAGCACTAA
TCAGCACACATAGAGCCACACAATTATTTAATTTCTAACTCTCTGTGGTCCCTAGAAAAATTCCGTTGATGTGCT
TAGGTTAAAGTTCTGAAGATACCCGTTGTACCCTTACTTGAAAGTTTCTAATCTTAAGTTTTATGAAATGCAATA
ATATGTATCAGCTAGCAATATTTCTGTGATCACCAACAACTCTCAGTTTGATCTTAAAGTCTGAATAATAAAACA
AATCCCAGCAGTAATACATTTCTTAAACCTCACAGTGCATGATATATCTTTTCATTCTGATCCTGTGTTTGCAAA
AATATACACATGTATATCATAGTTCCTCACTTTTTATTCATTTGTTTTCCTATTACCTGTAGTAAATATATTAGT
TAGTACATGGAATTTATAGCATCAGCTACCCCCAGGAACAGCACCTGACAGGCGGGGGATTTTTTTTCAAGTTGT
TCTACATTTGCATAAATTATTTCTATTATTATTCATGTATGTTATTTATTTCTGAATCACACTAGTCCTGTGAAA
GTACAACTGAAGGCAGAAAGTGTTAGGATTTTGCATCTAATGTTCATTATCATGGTATTGATGGACCTAAGAAAA
TAAAAATTAGACTAAGCCCCCAAATAAGCTGCATGCATTTGTAACATGATTAGTAGATTTGAATATATAGATGTA
GTATTTTGGGTATCTAGGTGTTTTATCATTATGTAAAGGAATTAAAGTAAAGGACTTTGTAGTTGTTTTTATTAA
ATATGCATATAGTAGAGTGCAAAAATATAGCAAAAATAAAAACTAAAGGTAGAAAAGCATTTTAGATATGCCTTA
ATTTAGAAACTGTGCCAGGTGGCCCTCGGAATAGATGCCAGGCAGAGACCAGTGCCTGGGTGGTGCCTCCTCTTG
TCTGCCCTCATGAAGAAGCTTCCCTCACGTGATGTAGTGCCCTCGTAGGTGTCATGTGGAGTAGTGGGAACAGGC
AGTACTGTTGAGAGGAGAGCAGTGTGAGAGTTTTTCTGTAGAAGCAGAACTGTCAGCTTGTGCCTTGAGGCTTCC
AGAACGTGTCAGATGGAGAAGTCCAAGTTTCCATGCTTCAGGCAACTTAGCTGTGTACAGAAGCAATCCAGTGTG
GTAATAAAAAGCAAGGATTGCCTGTATAATTTATTATAAAATAAAAGGGATTTTAACAACCAACAATTCCCAACA
CCTCAAAAGCTTGTTGCATTTTTTGGTATTTGAGGTTTTTATCTGAAGGTTAAAGGGCAAGTGTTTGGTATAGAA
GAGCAGTATGTGTTAAGAAAAGAAAAATATTGGTTCGCGTAGAGTGCAAATTAGAACTAGAAAGTTTTATACGAT
TATCATTTTGAGATGTGTTAAAGTAGGTTTTCACTGTAAAATGTATTAGTGTTTCTGCATTGCCATAGGGCCTGG
TTAAAACTTTCTCTTAGGTTTCAGGAAGACTGTCACATACAGTAAGCTTTTTTCCTTCTGACTTATAATAGAAAA
TGTTTTGAAAGTAAAAAAAAAAAAATCTAATTTGGAAATTTGACTTGTTAGTTTCTGTGTTTGAAATCATGGTTC
TAGAAATGTAGAAATTGTGTATATCAGATACTCATCTAGGCTGTGTGAACCAGCCCAAGATGACCAACATCCCCA
CACCTCTACATCTCTGTCCCCTGTATCTCTTCCTTTCTACCACTAAAGTGTTCCCTGCTACCATCCTGGCTTGTC
CACATGGTGCTCTCCATCTTCCTCCACATCATGGACCACAGGTGTGCCTGTCTAGGCCTGGCCACCACTCCCAAC
TTGACCTAGCCACATTCATCTAGAGATGGTTCCTGATGCTGGGCACAGACTGTGCTCATGGCACCCATTAGAAAT

FIGURE 5476C

GCCTCTAGCATCTTTGTATGCATCTTGATTTTTAAACCAAGTCATTGTACAGAGCATTCAGTTTTGGCTGTGGTA
CCAAGAGAAAAACTAATCAAGAATATAAACCACATTCCAGGCTGCTGTTTTCTCTCCATCTACAGGCCACACTTT
TACTGTATTTCTTCATACTTGAAATTCATTCTGCTATTTTCATATCAGGGTACAGACTTATAAGGGTGCATGTTC
CTTAAAGGTGCATAATTATTCTTATTCCGTTTGCTTATATTGCTACAGAATGCTCTGTTTTGGTGCTTTGAGTTC
TGCAGACCCAAGAAGCAGTGTGGAAATTCACTGCCTGGGACACAGTCTTATAAGAATGTTGGCAGGTGACTTTGT
ATCAGATGTTGCTTCTCTTTTCTCTGTACACAGATTGAGAGTTACCACAGTGGCCTGTCGGGTCCACCCTGTGGG
TGCAGCACAGCTCTCTGAAAGCAAGAACCTTCCTACCTATTCTAACGTTTTTGCCCTCTAAGAAAAATGGCCTCA
GGTATGGTATAGACATAGCAAGAGGGGAAGGGCTGTCTCACTCTAGCAACCATCCCTCCATTACACACAGAAAGC
CCTCTTGAAGCAAAAGAAGAAGAAAGAAAGAAAGCTTATCTCTAAGGCTACTGTCTTCAGAATGCTCTGAGCTGA
ATGCTCTTGCTCCTTTCCCAAGAGGCAGATGAAAATATAGCCAGTTTATCTATACCCTTCCTATCTGAGGAGGAG
AATAGAAAAGTAGGGTAAATATGTAACGTAAAATATGTCATTCAAGGACCACCAAAACTTTAAGTACCCTATCAT
TAAAAATCTGGTTTTAAAAGTAGCTCAAGTAAGGGATGCTTTGTGACCCAGGGTTTCTGAAGTCAGATAGCCATT
CTTACCTGCCCCTTACTCTGACTTATTGGGAAAGGGAGAACTGCAGTGGTGTTTCTGTTGCAGTGGCAAAGGTAA
CATGTCAGAAAATTCAGAGGGTTGCATACCAATAATCCTTTGGAAACTGGATGTCTTACTGGGTGCTAGAATGAA
AATGTAGGTATTTATTGTCAGATGATGAAGTTCATTGTTTTTTTCAAAATTGGTGTTGAAATATCACTGTCCAAT
GTGTTCACTTATGTGAAAGCTAAATTGAATGAGGCAAAAAGAGCAAATAGTTTGTATATTTGTAATACCTTTTGT
ATTTCTTACAATAAAAATATTGGTAGCAAATAAAAATAATAAAAACAATAACTTTAAACTGCTTTCTGGAGATGA
ATTACTCTCCTGGCTATTTTCTTTTTTACTTTAATGTAAAATGAGTATAACTGTAGTGAGTAAAATTCATTAAAT
TCCAAGTTTTAGCAGAAAAA

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FIGURE 5477

PYKWFSAQLALVTRGHRKYLLESLATCAF

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FIGURE 5478

CCCAGCTAATTTGTTACCTACACTCTAATTAATAATCAATAATTTCTTATTTTAAAAAGTAGTACTATTTAATAT
AATCAAGATAGGAGATTTAAAATGAGCAAGTGATTCATTTGCTCTTTTAAAGAAGCCCGTTGACTTACGCTTTTA
AAAAAGAAGTTGGTGGGTTACCTCAATTATTGTTCATGCTTAAACATATCCATTTGTACAGGCTTATTTCTACGT
GGGACCCAATCATATATACTATATTTCTCAAATAATTTTTCTAAAACTCTGGCCTATATTCTAAACACTTGACCA
ACACCTTAGTTATTGAATAGGTAACCATTTTTAAAGTACATGTGGTTCATTTTTTAAAATTCAATCTCTCAAGAC
CGTTAGATATTTAATAATTTAAGCTGATAAGGGTATCAAAATGCACATTAACTTTGATCATCATGATTTAAGTTG
TAACTTTGTGTTATTATATAAATATTAGGTTGTTTATAAATATATTGCAGAAAGTATTCTTGTTAAGCTCTTTTA
AATGAGGGGACTGTGGTTTAGAGTTATATATTTTTGCTTATTTTTAAACTTCAATTATTCCATTCTTCTGCCTTA
TAATAAAACTTTTAAGGCAGAGAACTGAACTAATTATAGAATTTCTCCTTTGGAGAGTTATAATGTTACATAGTG
AACATTCTTATAAAAGAAAGAATAAGTTTAAGTTGATGAATATTTAGCTGCAAAGATTTTTTACTTAAAAAAATC
CATGAATATCTTTGATTTTATTATAAAGCATTTGTAAATTATTTGCATTTGAGCTGTAAGATTCATAAACATTTA
CATTTCCCAATGATTTCTATTTTGATTTTTAAAAAATATACAGGGCAAGCTACATTTTTAAAGCATTAATCAACA
ACTTTATTATATTACACATTCCAGTGCACAAACACACAATATCATTTAATACTCACAGTAGTACCTGTGAAATAT
ATCAGATGGNTATTCCTATCTCTATTTTACAGCAGAGGAAACCGAAATTCAGAGAACTTACATTTCTAAGGTTGT
ACAGCTGCAAAATGACCAAATTGTGAAGTCCCTAACATCCAGGTTTTCATAATGCCAGTACTCTTTCTATGACAT
GTTTATGACCCTCCAAATGTACCAAAACTACCTAACTAATTCACTGAGAGGAAGCCAACTGCAAAAATAGGATTT
TTAAAAGTACAATAGAGTATTACTACATTTTATGGATTTCAGACAAAGAAACCTCCGTTTATTATATCCTGATGG
TGAGTATTGCCAGCTCTAAATTATTCATATTTCTAAGACCAAGGAAAATATAGGTAAATGAAAATTTTGAAATAA
AGAACAATGCCTTAATTTGTAAAATCTATCATTGCTACCACCCTGCCCAGGTCTGGCCATTTGCCATAAATGCTG
GTAAATAAATACAATGACTGATAGAGTTCTGTCTCCTTTCTCTTTTGCTACCCAACCTTGGTTAGAGCAACCAAA
TGTCTAAAAGGCATGTAACAGGAGAAAAAAATAAAAACATTAGTCACCAATTCGCCGATTATAAAAGGGATGTAG
ATTCCTTTAAATTATTACTGACCTTTTGAAAGCCTTCACGTAAGTATGCAACAGATAAAATGACTCATTTACCCA
CAACAATAATCTATTATCAGTCTTAAGTAATGTGAATTCACTGTATTTCTTTTTATACAACATAAAAACTTCTGC
TTTCCAAACTTCTTCCTTTTCACTAATTTATCAGCCACTTTATTTATACACAGATAACACTTTTAGAAACATTTT
TCTTTCTTGTCCATTTTTTTCTTTCAAAAATAAAGTTTCTTAGAACCTGATAAAATGGAAACTTATGGTAATATG
TGTTCTGGTAGGTGTCCAAAAATTCCACACCATAGACTATCAATGATATAGCCAAATAAAGGCCATTCAAAAAAA
TCAGTAATTGGGATTCCTTGCCTTATATCTATGGTATAGTGTACCCATTTATAACGGGGTTCTGCCATCTTCGAA
TT

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FIGURE 5479

PANLLPTL

FIGURE 5480A

GGCGCCCCAGCCCCTGGCCAAGCCTCTGCTGTCATTTCTCCTCCCTCCTCTCAGTCTGCAGCTGCGGGACGGGCC
GGGCTCCTCAGTTTCTGCTGTGTTGTGACCCCACGAGGCGCTCAGCACCCAGGGAAGGCGCGTGTGTCCCCGATG
CTGGCTCCTCCCTGAGCCCCGACGGCTCTCGAGGTTCTGAGCCTGTGGCCTGCACAGGGAACTTCCTCTCCGACT
GCATTTATGCCTCTGTGGATGTGAAGGCTATTTCTAGAAATCTCTTCCTTTGCAGAAACACCCGAAACCCTCCTG
CCAGGAAGACCAGGGCCTGGGAAGAGGGTCGCTCTCCGGCCATTCTCCCCTCACCCTCCTCACCTTCCTCACATC
CTGTGCCCTGGGGGACCAGCAGCTGCTTCCACCCAGAACAAGCGGGAGCCTGTGTCAGGAAAGC**ATG**TCAGAGCA
GAGCTGCCAGATGTCCGAACTGCGGCTCCTCCTCCTGGGAAAATGCCGCTCGGGAAAAAGTGCCACAGGAAATGC
CATTCTGGGCAAACATGTGTTCAAGTCCAAGTTCAGTGATCAGACAGTGATCAAAATGTGCCAGAGAGAGAGTTG
GGTCCTGAGAGAAAGGAAGGTTGTGGTAATTGACACCCCTGACCTTTTCTCCTCAATAGCTTGTGCTGAAGACAA
GCAACGCAACATCCAACACTGCTTGGAGCTCTCTGCTCCCAGCCTCCATGCTCTGCTCTTGGTAATTGCCATCGG
CCATTTCACAAGGGAGGATGAGGAAACAGCCAAGGGCATCCAACAAGTGTTTGGAGCTGAAGCCAGGAGGCACAT
CATTATTGTCTTCACTCGGAAGGATGATTTGGGGGATGACTTGCTGCAAGATTTCATTGAAAAAAACAAACCTCT
CAAGCAGTTGGTTCAAGACTATGAGGGCCGATACTGCATTTTCAACAACAAGACCAATAGTAAGGATGAGCAGAT
CACCCAGGTGTTGGAGCTCCTTCGCAAGGTTGAGTCTTTGGTGAATACGAACGGAGGACCCTATCATGTGAACTT
CAAAACTGAAGGCAGCAGGTTTCAAGATTGTGTGAATGAAGCTGCATCTCAAGAGGGAGACAAGCCACAGGGCCC
AAGGGAAAGGCAGCTGCAGTCCACAGGACCCGAGCAGAATCCGGGGACATCAGAACTGACAGTCCTCCTTGTGGG
GAAACGCGGTGCTGGAAAAAGTGCAGCAGGAAACAGCATTCTGGGGAGGCAGGCCTTTCAGACCGGATTTAGTGA
GCAGTCAGTAACCCAGAGCTTCTTGTCTGAGAGCAGAAGCTGGAGAAAAAAGAAAGTTTCGATCATTGATGCTCC
GGACATCTCATCTTTAAAGAACATTGACTCAGAAGTTAGAAAACACATCTGTACAGGCCCCCATGCCTTCCTGCT
GGTGACACCACTGGGCTTTTACACTAAGAATGATGAGGCAGTGCTGAGCACCATCCAAAACAATTTTGGAGAAAA
ATTCTTTGAGTACATGATCATACTTCTTACCAGGAAAGAAGATTTAGGGGATCAGGATCTAGATACGTTCTTAAG
AAACAGCAATAAAGCTCTCTATGGTCTCATCCAGAAGTGTAAAAACAGATATAGTGCCTTCAACTACCGGGCAAC
AGGAGAAGAAGAGCAAAGGCAGGCGGACGAGCTCCTGGAAAAAATTGAGAGCATGGTGCATCAGAATGGGAACAA
GCATTGTGTTTTCAGAGAAAAAGAAACCCTGAACATTGTCCTTGTGGGGAGAAGCGGGACTGGGAAGAGTGCGAC
CGGGAACTCTATCCTGGGGAGCCTCGTCTTCACCTCTCGGCTCCGGGCCCAGCCAGTCACCAAGACCAGCCAGAG
TGGCAGGAGGACATGGGACGGACAGGAGGTGGTGGTTGTGGACACTCCTTCCTTCAACCAGATGCTGGATGTCGA
AAAGGACCCATCCCGGTTAGAAGAGGAGGTCAAGCGCTGTTTGTCCTGCTGTGAAAAAGGGGACACATTTTTTGT
CCTGGTGTTCCAGCTGGGACGATTCACTGAAGAGGACAAAACAGCTGTGGCGAAACTGGAGGCCATCTTTGGAGC
AGACTTTACGAAATACGCGATTATGCTGTTCACCCGGAAGGAAGACCTAGGGGCGGGGAATTTGGAAGACTTCAT
GAAGAACTCAGATAACAAAGCCCTTCGGCGCATTTTTAAAAAGTGTGGGCGGCGAGTTTGTGCTTTTAACAACAA
AGAAACAGGCCAGGCCCAGGAAACCCAGGTGAAAGCTCTTTTAACAAAGGTCAATGATCTGAGAAAAGAAAGTGG
GTGGTCCGGGTATCCCCATACACAGGAGAACGTCAGCAAACTAATTAAAAATGTCCAGGAAATGTCCCAAGCCGA
AAAACTCCTTAAAAATTTAATAGGTATTTTACAA**TAG**GTAGCCGAAGTGCCTGGGGTCTCTTCAATTAGAGACAC
CCTCAGGTTGGGGGGAGGGGCGGGGCATGGTACAACCTGTGGGAAGGGAAGCGGGTTCATGGCTTTGAGGGCCTG
AGAGGCAAATGCATCCCGCCTTGTGATGTATCAGCTATTTGTAGATAAATAAATTGCAGGTGGGGGCGAATAGTA
GGGTATTATAAAGGAGAAAGAAGATACAAGGTGGGGAAATCTGGAAAAAGATTTCAGACATTAGGCTGATAATAA
GTGGTAGAATCAAGTCACAAGAATCACCTCACTTGTGTAGGTAGGTTGGAATCAGGATAGACACTGTGATCAAGG
CTGAGGCCACCTGGGATGAGAATATAGATAGTCGTACAACAACCCAGGGGATCCAGATACATGAGACCAGGGCAG
CGTTCAGCACACTCCTGGGCATGGCGGAAGCAGGAAGCAGACTCCAGAGGGCCTCCCTGTTGTCCAGGGCCGTTG
GCTCCCTGAGCTCTCCTGTCTCCTTTGGGATGCGACTTAGGGCTAGAGTGTTCTTTTCTTCACACGTTAGCCATT
CCTTACGGCTCTTCACGTTCCACGCCTAGATGTGAAGTGGGACATAGTCTTCCATTGCTGGCTGTCCCTGAGGAA
ACAGACATGAGTCTTGGAGGTTCTGAATGATTTTATTGCTAATTATCACAGTGACATAGACTAGAACAGAAATTA
GAAGCATAGTAAGATTGCCAAAATCAGAGAATCTTGCAAAGTTCTGTAATTCTAAGTGTTGTTCTAGATTTCCTC
TAGAGAAGGTTATTAGAATCTCCATTGCGTTTCTCTTTCTCCTTCTCTTTCCCTTGAGGTTAGGAAACAGGTTAA
AACTCAGAGAACTCCAATAATAATGGTTTAAAAACATCAGGGGCTTCCTGTATCTCCTGTCAGGAAGCCGAGGAA
TAAGCAGGCTGGGGCTGGTGGGCGTCAACATCCCAGTTTTGTTCTATCTTTCTGTCCCACCTGCACTGGGATGTG
GCTTCTACACTCGAATTTGCTTCTTGGTTTCAAGACAGTGGTGTTCTTTCCATAGCTGAGCAGATTATTTTGAGA
GGTGGGTGATATGTGAGAGAGAAATCTGGAACCTTCTTCTGGGTAGATACAGGATAAGATAGATACAGGGTAAAA

FIGURE 5480B

TGTTGAGCACTTTGTACATGCTTTGAGAGCATAATCTTTGTCATCTGTTTTTTTCCCCTAGACAATATCAGGTTA
CCGTCAACATTAATCCATTTAAAAGGACATGGACTGTTGCCATTAATACTTTTGGATTCCATATAACCCTTAACA
CAATAACTTCTAGAAAATGTGTGTGCCGTAGACACAAAGAAGGGAACAATAGACACCAGGGTATACTTGAGGGTG
GAGGGTGGCAGGAGGGTGAAGATTGAAAAGCTGCCTATTGCGTGTTATGCTGGTTTCCTGGGTGACAAAATTACC
TGTACACCACACCCCTGTGACACACAAC

FIGURE 5481

MSEQSCQMSELRLLLLGKCRSGKSATGNAILGKHVFKSKFSDQTVIKMCQRESWVLRERKVVVIDTPDLFSSIAC
AEDKQRNIQHCLELSAPSLHALLLVIAIGHFTREDEETAKGIQQVFGAEARRHIIIVFTRKDDLGDDLLQDFIEK
NKPLKQLVQDYEGRYCIFNNKTNSKDEQITQVLELLRKVESLVNTNGGPYHVNFKTEGSRFQDCVNEAASQEGDK
PQGPRERQLQSTGPEQNPGTSELTVLLVGKRGAGKSAAGNSILGRQAFQTGFSEQSVTQSFLSESRSWRKKKVSI
IDAPDISSLKNIDSEVRKHICTGPHAFLLVTPLGFYTKNDEAVLSTIQNNFGEKFFEYMIILLTRKEDLGDQDLD
TFLRNSNKALYGLIQKCKNRYSAFNYRATGEEEQRQADELLEKIESMVHQNGNKHCVFREKETLNIVLVGRSGTG
KSATGNSILGSLVFTSRLRAQPVTKTSQSGRRTWDGQEVVVVDTPSFNQMLDVEKDPSRLEEEVKRCLSCCEKGD
TFFVLVFQLGRFTEEDKTAVAKLEAIFGADFTKYAIMLFTRKEDLGAGNLEDFMKNSDNKALRRIFKKCGRRVCA
FNNKETGQAQETQVKALLTKVNDLRKESGWSGYPHTQENVSKLIKNVQEMSQAEKLLKNLIGILQ

FIGURE 5482A

GGTCCGCGCCCTGTCGGGCTGAGCCGAGTTGGCCCACAGAGCCGGCGCGCTCCCGCCTGCAGGGGGAGAGCAGAC
GGGGCGCGGGGACCGGCCAGGCCGCGGCGGGTGCTGTTTCTGTTTCACTTTCCTTCACTCTGAGGCCGGCGCGCT
GGCGGGCGAGGAGCGGCGGCGGTGGCGGCCGCTGGACATGGGAAAGCGGAACCACCAAAAGGAGTGATGATCAAC
GATCTCATGATAAATCTGGATGCTAGTTCTCATGCCTCAGGACATCCTACTGGGAACGACACACCAGCTCCTGGG
ATCAGACTTTCATCTACTTAGGACCCCTCTTTGCCCAGACTACTAAAGCCAGTCTTCACTAGCCACGAATGGCTA
CCCAAAGGAAACACTTGGTGAAAGATTTTAATCCTTACATTACCTGCTATATCTGTAAAGGGTATCTGATCAAGC
CAACAACAGTGACGGAATGCCTCCATACATTCTGTAAGACTTGTATTGTTCAGCACTTTGAAGATAGCAATGATT
GCCCAAGGTGTGGCAACCAAGTTCATGAGACAAATCCATTAGAAATGTTGAGGTTGGACAATACATTAGAGGAAA
TTATATTTAAGCTGGTCCCTGGACTACGAGAACAAGAACTTGAGCGTGAATCTGAATTTTGGAAGAAAAATAAGC
CTCAAGAAAATGGACAAGATGATACTTCAAAAGCTGACAAACCGAAAGTAGATGAAGAAGGTGATGAAAATGAAG
ATGATAAAGATTATCACAGAAGTGACCCACAAATTGCTATCTGTCTAGATTGTTTACGAAATAATGGGCAATCAG
GGGACAATGTAGTAAAGGGTTTAATGAAGAAATTCATTCGATGTTCTACACGTGTAACTGTGGGAACTATTAAAA
AATTTCTAAGTTTAAAACTAAAACTTCCAAGTTCTTATGAGTTGGATGTGCTGTGCAATGGTGAAATTATGGGGA
AGGATCATACTATGGAATTCATCTACATGACAAGATGGCGACTAAGAGGCGAAAAGTTTCGGTGTCTGAACTGCT
CAGCTTCGCAAGTCTGCTCTCAGGATGGCCCTTTGTATCAGTCATACCCTATGGTACTGCAGTATCGACCAAGAA
TTGATTTCGGTTAGACCAAGGGGCCCAGACCTCACTGAGATGAATCCTGCACTATTTGTTTACTCGTCAACAGAT
TGCACAGTTAACGGTGTGTGGACTAGAGGAACACAACCAGATTTTCAGCATGCAAATAAGGCCATTGTCTATCTC
TAAATTGTCAGTTGCATTCATGTTGTTTCTATTAGGAGCAAACCAAGTGCCATTCTGCTACTGAACCATCTGCAT
AAGGTATTTGTGTTGTCTCAAAGTGTGCAAGTCATGGTAAAAATCAGTTAGCTGTGCCGCCATGATTCACCCTTC
TGAATATTTTGCTTGCCTGTTCCAAGATTGTTCTAATGTTTAATTACACTAGTAAAATGGCTCAATTTTTGTGGT
GTTGCAGTTTTCACATACTTACTCTTTTATTCTTGTTTAAATAGCGTACTCTACAAGAAACTAATAATTATATCT
TGAAATTATTTTGTATGGAAGTATATTTAGAAAAGTGGTTTTTGAGCCACTGTCTTGTTCTTGATAAGCTTTTTG
TGTGAAAAAAAGTTCATTCTTGAGTGTGCAAGTCCTTTTGCCAAGAATTCCAATTATTCTGTAACATTAGAGCAC
AATATAATTGTAGACATTCTAAGCATCTGTCCGTGTAGTCTACCAATTGCACAAGGAAGGCATGTTAGCCCTCCA
GATTGAAAATGTATGTGACCTCTTGAACTGAAGTTAGATTCCCAACCATTCAAAATGTTGGCAGCTGATCACATT
TACTTCTGATAAAAGTAATGTGTAAGTAAGGTTAATCTTCTTTCATAATGCCTTATGACAAGCAGGTGCTGCTTC
ATGAAACGTCATTGTATAGCCCATTTCATGTATCATTACATTGTTGCTGTTATTTAATGAGTGCATTATTTCTCT
TTTTAAGTTGGCCTTAGGTATATGTCATTGTGGCATGCAGAGGGTTATGACGATTTTAAATATTAGGATTTTTAG
AGCACATAACATTAGCTATTTTATGGATTTCAAAAGTCTCAAAACAGTTGTAGATTAAAACTGTTAGTTACCTTT
CACATTTCCAAACTATGTGCATAAAATAGAATAAATGCAGTATAGAACTATGCTAACCAAAATTAATAGGTTAAG
GGTATTTTATTTTAAATCCTGTAGTAATTGGGGAAATGAGAAGATTATTATTTTATACATGAGTTCATTAAGATC
AGAAATACAAAATGTCCTGTATTTTGCAGTTTTGTTAAGTCTTCCATTCGTTTTAGGATTAGTCTGCAAGTCAAA
GAAAGTCTTGTTACCTTAAATTATATGAAAACTGTCATTTTAAATCTTTTAATATTTACAGTTTTCAAAAACCTT
ACTTGGAAATTGCTTTGAAACAAACAAGCTAACCTTTGAAACTTAGGAAAAAATCTTGAAAGTTAGGAAAAATAT
TTGAGAAATATGACGAGCACAATCTGTGTGTTACACACATTTAGTTTTTATACTGCATATGTGGTAAATGTGTCA
CATTTTCCAGTAAAATGTATCAGAAATCAATGCCTTCTGAATTTCAAAATGATTCTTAGAAATAAGATATTGTAC
AACTCTAGCAAACATACAAAGTACAGCTAAATCTTAATATATTTCACTATGTAAAAGGCTGAAACTTCATAATTA
TCTGTTCCTTCTATCTTTTTTTGAGTCAAAAAGTCTATTAAATTTTTCTGTTGTTGTTCCAACTTTGGTGAAAAA
GGTTATGGCAATACTTTAACTTTGTTTTGTTACATTGTTTTTGTTCTTGGAATGGCTCACAAGCAGAATTTAAAA
GGCAGATTTTCATTAACTATAAATGGCTGAAAAAACTGAATTTACTATCTAGCTACAGAAATTATTTTTCTATGG
TGTGAAACTGTTCCCAGACATCCCTAAGAACTTTTACAAATTATTATAAATTTGTCACACCTAGGTCAGCGATTA
AAATAGTGTTTTGCAAATGGAATTTTAATTAACTCAAAATGAATTAAGAGTGCATTTTAAAAATCACAAGTGAGA
CTTTGATGTTTTGGCCCCCCAGCCAAAACTTAATGGTCATAAATGAATTTTATCTACAAAATCTCTTTAAATTTG
GCTGGTTGCCTTGTCATATGTAATTTCACTATTTTCCAAGGAAATATATAGGAAGCAATTATGAAACTGAGAATA
GTTTTATATAGAATTCTTTTATTTACTGATAATGCATTAACATTTTTATTGAAATGCAATGGAATATGTGCCAAA
ACACGTGAAAAGCTTACATAAAGAAAGGCATCAGTTGTCGTTTGGAGAAAGGTACACATTTTTTTGATGGTCCTA
AGTGATATGGTATTACTACTAGAATCACAGATTTCTTCAACTGACTTATTTTGGTATATTCAACTACAGCTTTCT
AAGGATAGGACTACTTTCATGTCTAGTAATACACTGTATTCCCCGTTAATTATCCCTTAAGTCAGATTGTAGAAT

FIGURE 5482B

TTGCAAGAAACTAGGTATAGAAAAAATGTACAGGCAACTTTTGTGGTTAGCTTTATAAATTTAGGGTGCTTATAA
AATGATAAAATGAATTCTTTAAATAACCTATAGGAATCATCTGAATCTGTAACATCAGAGACTAAAACTAAAAGT
TTTCTTTAATCTGTTGTTTCTTAAGCAATAAACTGAAAGACCTTTACTTCCATAAAAGATTTTGTTATCTCTTTT
ATCTGCCTTAGAAATTATAAGTATAAAAGGGTCAAGGGAACTTAGATATAAAGAATGACTGTGGTTTATAAACAT
TACTTTAATTGAAGTAATCACATCAGTTAATAGAGAAATCAAAATATGTATGGCCTTTTCTCTAGATTAGCAAAA
CAGCTTTACAAAGTATGAAAAAATAAACTAAAATGCTCATTGATGAGGTAATACTCAGTCTGGAGTACAGGTAAC
TTGGGTAATGCCTTTTAACTACTCTTAGAGGAGTATATTATTTCTTTATACATTAAACATCTATCCCATAGTAAT
GTGCCACATTTTATAAACGTAATGACTTTGCTCAACTACATTACACACTCAAATGTAATCTAAATTTAAACTGAT
TATTTAAGGAAAAAAAGTGTGTTATATAATATTGTGAACTGTTTAGCTTTACTGAAATATTTAAGAGAAAGTGCC
TCATTACTAAAGTGCATTTCTGTTTTAAATTTACTGCATAAAGTTTGAGTTATCTGTACCTGTCTCTTATGAATG
GTTTCATATCTAAATAGGCTCTTGTAAGTTAATTTTTTTGGAAGATTTTCATAAGAATATAGATATCACCAAAGA
CATTTTACAGTAAATTAATAACCATGTTGGAGAGACGGTTTTAACAGTTTGGAGGTTGGAAATTTTTAGATTGCA
ATTTAATTTTATATAGTTAGGCAATAACCTTGATTAATTGCTAAAATATCACCAAAGAAAGGCTTTAAACTGAAT
TTTCTTGGTGAGATCAGTCAAATGCAGGCTTTTCTTGCAATAATCAGAACACACTTCCTTTCAAATATGTTCATT
GTTTTTCAGCATCATCTAACAGATCTTAGTAAATCTAAATCCTCAAAGATGAGAAAGAGGTAAACACAACAAATA
GCCTTCCTCTGCATGAAAAGTGAGAGAAATACATACTTTGAAAAGAAAGTTCAGATTTTTAATTTGAGAGGGTTT
TTATTTCATGGAGGCAGTGTTAACTAAAATTAAGCTTAGATTTAGCTCCTGTATTATTCATAATATGAGAAATTT
TATTAAAGGCAGACTTTGGTAAAAGTGCCAACACACTTACTTGTATAGAAAAGACTTCATTCTATGGGATTTATA
TAAGTAAGTGCTTTCTCTATATTCAAAATATTTCATAAGGACCTGTGGTTTTTTTCCCCTTAAAAAGCAACTCTA
GGCCGGGCACAGTGGCTCATGAGAGACCAGCTGGTTACATGGTGAAACCCATCTCTACTA

FIGURE 5483

MATQRKHLVKDFNPYITCYICKGYLIKPTTVTECLHTFCKTCIVQHFEDSNDCPRCGNQVHETNPLEMLRLDNTL
EEIIFKLVPGLREQELERESEFWKKNKPQENGQDDTSKADKPKVDEEGDENEDDKDYHRSDPQIAICLDCLRNNG
QSGDNVVKGLMKKFIRCSTRVTVGTIKKFLSLKLKLPSSYELDVLCNGEIMGKDHTMEFIYMTRWRLRGEKFRCL
NCSASQVCSQDGPLYQSYPMVLQYRPRIDFG

FIGURE 5484

GTTCCAAATGATCATGTTTTGTGGCACTGTCTTCGTAAAGTGGCCGCTGGTGTGATGGAAAGCATTGCTAAACTC
AAGTGAGACAACTGCTGTTTTGCTTTGGATTTTCCCTGTGAAAAGAGAAGCCACTGCCTGTTCGTCTTGTTAGAA
AGACAAGACTTTGAATGAAGTTCCAGACTTTGAATGAAGTTCCAGACTTTGAATGAAGCTGGTTGTTGCCCAGAG
TAGAAGATTCAGGCACCTACAGCAACTCACAGCAACTCCTAACTCTTAGGAGGGCTCCCTCCTATTGGCCGTGAA
GCTGCAAACCAGCCTCTCTCTTTTCCCTGGATCTTCCTTGCCCCTAGTTCTGAGCCCCAGCCCAGAGGCAGGCCT
CATGGCTAATAAACCAGCTAGAGGACAGCTGGGGCCTGTGGCTCCTTCTCCATGTTGGCCTTCCCTTGTGTCTCT
TGTCCCTGTAGGAGTGCCTTATAGTACTGTCTCGTGCTTCTAGTCTAGTCTGAACCACTTGAAGCCTGCAGGACC
CTTCAACTAAATCTGGATCCCTTTGCTTCTTCCCTGCTGGCTACTCTTCATATAGATGCTCTTGGAGCCTGTGCA
TTCCATGATGCATGTCAGAACTCTCACCTTGTTCAGCCTGGTGTGCCTTAACCTCAGGAGTAAAGGGAATCATGT
CGGAAACACGTCGTTAAAGTAGAATGGTACAAACATTGGCTTCTTAGTGCCATTAGCACTTTTACCAGGAAATGC
AAAAGATGCAACCACATAATGTTTTCACTTTGTTTTATGCTGTTCTTCAATCGCNNNNNNNNNNNNNNNNNNNN
NNNNNNTCATTAACCAAACTCAGGGGAATGTCATGATGTCACCAAGGCCAATGGGTAGAGAAATAAAAACCAGCC
ATCCATAATTGAATCTGTAAAGTCAGTGAACTTAGCCTTTTCAGGTTCAAAATTACACAAACACAAGGATTTTCT
TATCTTTCACCTTTCAAAGGTTTTCTTTTTATTTTGCCACCTGTTTTCCAAATAAGAAGTGGGAAGCCTCTTAGA
TAAATTGTGATAAAAATGTCTCTTTGTTTGGCGTGAGCTATCAAATTAGCTTTGTGTGTCCACTGAGCCATCAAA
TTAGGCTTTGGCTGCTGGAGGCCTAGGTTCTAGCTTTGGTCACCTATCAGAATCTTACTGTTACNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNAGGCTGAAGTGGGTAGATGCTTGAGCCCAGGAGCCTATGCAATAT
GGTGAGACCCATCTCAAAAAACAAACAAAAAAAGAAGTAGAATCTTACTGTGAATAGCTACTAGCCTACCCTAGA
AGATATATATTTTAAATCTGTTTCTTAGGAATAGTAGCTAAAAGAAGGAATGGCCAAAGGAGGGAAAGTNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNTATATATATATACTTTTTTTTTTAAAGGA
GAGAAAATGCTTAGGTTGCAAATGGAGAGTATTGAACGTGGTGATGTAAAAAACTTCTGCAAAACTTGTTCTGTA
GCTCCTGGGTCAGGTCTATGCCATTTTTTCTTATATCTGCTCACACAGTACAGAAATGACTAAAATTTTGGGTCT
GGGCTGTTATATCACTTTGTGTTAAGTTATTTGTAGTAGCTAATGTGCTAACTTATATATGTGTTCTTTCTGTTT
TTTGGATTTTACCTTTTGTTTTGGCATAACTTATCTATATTTTTGTTTACATTATTTTAAAAATATCAGTAACTG
TAATAATATAAAATTGAAGTTGTATTGTTGACAATACCTCTAGTTTTTAAGGTCATCTGTCACATAATTTAAGTG
CACCAGTTCCTAATGTATAAAGTTCTCTCTCTC

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FIGURE 5485

VPNDHVLWHCLRKVAAGVMESIAKLK

FIGURE 5486

CGCAGAGTCCTTCTGTCGGTTGGTCCTGGAGCGGCGCAGCCGGAGTGGGGCCGTGAGATCTTATTCAGGGCTTCT
CAGCCTGAACCCCCAACCAGATTAATTTCTCCACAGCTGGAATTCCAAGTGCTTGGGGATAATGATACCTCTGAC
CTTTCTTCCTTTTGGGAAGTACTTGAGTGTGCAGCTGCATGAGGCCTCAGCAGGAGAGAGATTTTAGGTCCAAGA
AGCTATACCAGTAGGACAAGGCAGGAAAATACTACACTTTCAGGATCAAGCCCCTCTGACTCTCATTTGGAAACT
GGATGTTTGCTAAGCACCTGCTTCTTAAGGATGCCGAGGGATTTAATGATACTCCCAGAAACCTGGAGAGATTAA
TGGGGCCTATGGAGAAGTGCTCTGAACTCAGTGTTGGGACTTGAATAAAATTAACCATTGTCATGTTTTCAGAAC
AACTAAGCTGTTTTATATTTCATGTGCATGAAAGCCCTAGAACTAAGTTGTGTTATTTCCAGAAATGAAATAGAT
CCCACAGTTAGATGATGTGGCCATTAGGAAGTACCAAATTTATAAAAATCACTGGAGGTCTGTCTGAGCAGTACC
TAATAAAATATAGTATACTGAAAGTGAACAGATACTTTGTCTCTTTCTTTGGCTGCTTGATACTTTATCTGTGTA
CTGCCGTACAGTGCACCCTTAAAGTATTCTACACCAGTGCTTCTCAAACTTGAATGTGCATGTAAGTCACCCAGG
GTCTTGTTGAAATGCTGATTCTGATTTGGTAGATCTAGGATGGGACCTGAATGCATTTCTGATTTGCAGGTGATG
CTGATGTTACTGAACTACACTTTTAGTAGTGAGGTTTCATACACGAAGACAAAGTTTCTCTGTGAAAATAGGAAG
GTGGTGGTTAGCCTTATATTTTTTTATTTTATCTTTATCCAGACACACATCCCTTAAAAGTTTGTACAAGGCCAT
AGTCCCCTTTATTAGTTATACTCAATTAGTTATTCTAGCACATAGCTTTTTAAATATTGGCCAAACT

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FIGURE 5487

RRVLLSVGPGAAQPEWGREILFRASQPEPPTRLISPQLEFQVLGDNDTSDLSSFWEVLECAAA

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FIGURE 5488

TTTTTTTACAACTTTTCAGAATAGATGAACACTGAAGCTTCAGTGTTTAAACCTCTCCTGGTGTTTTGTGCTCAA
GAAGTTGGTATCGGGTTGTTTTAACAGTCGTCATCTTTATCAAGTAATACGGAAAAACTGGGCAGAGCTTTTAAA
GAATGAATGACGATGACACAGGCGTTTTCTGCTTACAGATTTCCTCACATCCTTATTAGGCTATTAGGATCAGCT
CTGTCGTGTGCTCAGTTTTCATGTTTTCTTCTTCATGTGAAGGTTGTAGCTCAAGAAGGATTGCTGTACTCTGAT
ATTCTCATCAGAGTTTCAGAGTCCATCTGATTTCTTTCAGCAGTAAAGATTGTAACTACTCATTGGCTTTTAGCT
AGCATTTCATTTTTAATGGCTCTACCATTTTAAAATTCTCCATTCTTTCATGGAGATCAGTTTATCCCAGGGACG
TGTGTGTACACGTGTGTTTATAAAGAACAGTGGATGAGCTGCTTCACTCAGGTTTTCAACAGCAGCCTGAAACTC
TACTTCATACAATTTTATATCAAGTCAGCTTTTCTCTGTGGCCAGACCCTCCGTCTTAGTGTTTCTTTCACTGGT
GGCTGGGAAGGCATCCCTTCAGTGGGGAAGGCACTGTGCCTCATGTTTAAAATGTTCTGCATTCTCCTACAGAGT
TTCTTGTGTGGGATGATGTATTCTGTGATCCAACTCTGACCAGCTGAAATCATTTTCTAATTTTAGCATAAAGCA
TACTTCCTTTGACTTTTTCAAGAAAGGAGAAACAAAACCAGACACTGCTTTGACGTTGTTGCTAGAAGGGATGTC
TTACATAATTTTATCCATCTATACATTATTTCCTATGAAAAGATGACCTTACAGTGGCTTCATAGCATGACCTGC
ATCTCACACAATTCCCTCCCCC**ATG**CAGGGACTAGAATGTGATCGTTGCAGGAAGTTGATGGCTTCTATTCTTGA
AATTGTGGCATTAGCTGCTGTGTGGCCGTCCCTCTCAGCCTGTGTTTTGGAGGTCGCGCACTTCCTCAGAATGC

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FIGURE 5489

MQGLECDRCRKLMASILEIVALAAVWPSLSACVLEVAHFLR

FIGURE 5490

CAACCAAAGCCATTTCATTTGGCTGGGGGGTTGGGGAGTGGGGAGGAAAACAATCTTTATTTTACCCCATCTATT
GAAGAGTATTATTACATTTGAAATAAAACTTCCATCAGTACAGATAACCACATGTGCAATGTTGGGATGTTATTT
TGGGCTTGGCTTATCGAGTAGTCAATGGAAGGATTCCCGTCCCCTCTCTCGGCAGCTTAGTAACTGCTGTAGCCA
GCTCGGCTCCCTTCCCTGTGTATCTGTGTCCTGCTAACAGCCAAGAGATGTTGCAAGGGAGGAAATGTGAGAGAC
CTTGAACCTGTCAGGTTTATTTGTTTTGTTTTTAAAGGCATGTTGAAGTTTAGTTCTTTACCCTTCTCCTAAAAT
CTTTTTTTAATCAGCCTCAAGGTTAAAATAAGGAGTGACTACAGTATGTAAAATAAGGAAAGGAAGCATTAATGG
TGTGATGTGACCTGCCTGTTTTTTTGTAAACAAGAGAATAGGAAATGTTTTCAAGGTAGTTTCACATGTCTTGCA
CCAAGCTCATGCCTCTTGCTTTTCCTTTTTGACTTTATCTCCCTCAGTTTTTCTTCTGCTGTGGCCAGAAAGACA
GTCACTACAGTTGACTATTGATACAAAGGTGCAACAGAAATATTATCCCTGCATTTTTAAATATAAGAAGTAGAC
ATTAATTTTACCATGGTGCCTCCCTAATGTAAGTGATATTTATTGGTGGTTTTCAACAAAGGTTAACTATTAAAG
AAAGAAATATTTGTCTTTATCTTCCTTTTCCCCTTGCCTCAGTCGTGTTATTCACCCCTATTCTTGATATTTTAA
AGGAGGAGATTCAGTAGCATTTTCCTTTATATTATACACATGTGTCTATCCCATTTCAAGGCTCAAGTCTTACCC
CCACCTCTCGCTCCCAATAGGAAATAAAGACCATTTCTGCCCTTAGTTGTTTTACATGCAAGATAAGTGCTTTCC
TTCTCCCTGGACTGAAAGACTTGTTTGTATTTCTACATCTAGTACTTGGGAAATAGACAATCACTGTACTTTGAG
TGTTTATATCTTTATATCTAGGGACACTGAAAAGTAAATGTTGCTTTACTACAATTTTTTTTTAATTTAGTGTCT
TACCCCAAGGCATACTCAACTGATAATCTCCAGCTAGATGAGTAAAACAGTATGTGTTTAGTTTTCCAGAGAATT
CTAGCAAGTTCATATTTTCTTCCAAGTTAGTATAGAACTAACTATAGGAAGTATGGGGTTGCTTTTTCCTCCAGT
AGAATATTAAAGATGGGGGAGGGTGGGCAATGTA

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FIGURE 5491

NQSHFIWLGGWGVGRKTIFILPHLLKSIITFEIKLPSVQITTCAMLGCYFGLGLSSSQWKDSRPLSRQLSNCCSQ
LGSLPCVSVSC

FIGURE 5492

CGATGGCTGATGGGGCAACCGCCAACGGCTGTGGCGTTTAAACCCAAGCCGCAGCCGCTGCTGCTCGCCGAGCTC
CCGGAGCTGGGTGGGGGTGCCCCACGCTGAAAGAGAGTGATGGAGTGCCCAGTGATGGAAACTGGCTCACTTTTT
ACCTCAGGAATTAAGAGACATTTGAAAGACAAAAGAATTTCAAAGACTACTAAGTTGAATGTTTCTCTTGCTTCA
AAAATAAAAACAAAAATACTAAATAATTCTTCTATTTTCAAAATATCTTTAAAGCACAACAACAGGGCATTAGCT
CAGGCTCTTAGTAGAGAAAAAGAGAATTCTCGAAGAATTACAACTGAAAAGATGCTATTGCAAAAAGAAGTAGAG
AAACTGAATTTTGAGAACACATTTCTTCGCCTAAAGCTAAATAACTTGAATAAGAAGCTTATAGACATAGAAGCT
CTCATGAACAATAACTTGATAACTGCAATTGAAATGAGCAGTCTTTCTGAGTTCCATCAGAGTTCCTTTCTACTG
TCAGCTAGCAAGAAGAAACGAATTAGTAAACAGTGCAAGTTGATGCGTCTTCCATTTGCAAGGGTTCCATTAACT
TCAAATGATGATGAAGATGAAGATAAAGAGAAAATGCAGTGTGACAACAATATTAAATCAAAGACATTACCTGAT
ATTCCCTCTTCAGGATCAACAACACAACCTTTATCAACTCAGGATAATTCGGAAGTGTTATTTCTTAAAGAAAAT
AATCAAAATGTATATGGTTTAGATGATTCAGAACATATTTCTTCTATAGTTGATGTACCTCCCAGAGAAAGCCAT
TCCCACTCAGACCAAAGTTCTAAGACTTCTCTAATGAGTGAGATGAGAAACGCCCAGTCTATTGGCCGCAGATGG
GAGAAACCATCTCCTAGTAATGTGACTGAAAGGAAGAAGCGTGGGTCATCTTGGGAATCAAATAATCTTTCTGCA
GACACTCCCTGTGCAACAGTTTTAGATAAACAACACATTTCAAGTCCAGAATTAAATTGCAATAATGAGATAAAT
GGTCATACTAATGAAACAAATACTGAAATGCAAAGAAATAAACAGGATCTTCCTGGCTTATCTTCTGAGTCTGCC
AGAGAACCTAATGCAGAGTGCATGAATCAAATTGAGGATAATGATGACTTTCAATTGCAGAAAACTGTGTATGAT
GCTGACATGGATTTAACTGCTAGTGAAGTCAGCAAAATTGTCACAGTCTCAACAGGCATTAAAAAGAAAAGTAAT
AAAAAAACAAATGAACATGGAATGAAAACTTTCAGAAAAGTGAAAGATTCCAGCTCTGAAAAAAAGAGAGAAGGT
CAAAGNGACCAGTTTTAAAATAGTTCAGATTGTCGGTTTTTNGGGGAAAGGTTGAAAACAGGGCAGAAAGGTCCT
G

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FIGURE 5493

RWLMGQPPTAVAFKPKPQPLLLAELPELGGGAPRXKRVMECPVMETGSLFTSGIKRHLKDKRISKTTKLNVSLAS
KIKTKILNNSSIFKISLKHNNRALAQALSREKENSRRITTEKMLLQKEVEKLNFENTFLRLKLNNLNKKLIDIEA
LMNNNLITAIEMSSLSEFHQSSFLLSASKKKRISKQCKLMRLPFARVPLTSNDDEDEDKEKMQCDNNIKSKTLPD
IPSSGSTTQPLSTQDNSEVLFLKENNQNVYGLDDSEHISSIVDVPPRESHSHSDQSSKTSLMSEMRNAQSIGRRW
EKPSPSNVTERKKRGSSWESNNLSADTPCATVLDKQHISSPELNCNNEINGHTNETNTEMQRNKQDLPGLSSESA
REPNAECMNQIEDNDDFQLQKTVYDADMDLTASEVSKIVTVSTGIKKKSNKKTNEHGMKTFRKVKDSSSEKKREG
QXDQFXNSSDCRFXGERLKTGQKG

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FIGURE 5494

CATTAGATTTCACTTTTTTAAAAAACCCAGTGGACATTGCTATAAATAAGATTTATTTGGCTACAAATAACCTGG
GATGTTGCTTATTATGATTGATGCCTGCXGGTTTGTXCCCAAGCTGAGTGAAATTGAACCTCGTCCTCCCTACTC
ATTTTGATGACTGAGGCTGGTTTATAAGAAAAGGAAGTTTGGAGAAGAAAACCGAGATTAGAAAATATCATGTTT
TGGTTGGAGATAAGAACCAGGGATGGCAAGTACCAGTGTGTACAAATGTATTTCACGGAGTTTGAAGGAACGCAT
AATCAAGAGGGAAAACAATTTGTCCTTCATTGGACGTATTATTTGGATTTGGGTGAGCAACAAAATGGAATGTGG
TCTGTTAGGAGCATTCTGTTTGTTCTTTTGTCCCTGATGTGATGAATCATTGCCACATGCTAGATGGACTCTTCA
TATCCAGGTTTTGTCCCTCAGGGCTGAGCACTGTATTAAAGAGTTTTTGTTGAGTCATTTAACCTTAGTGTCCAC
ATCCAGATCAGCTGTAAAATGGGGAAGACGTGTGCTGATTTGGAATGAATGCAAAATATCACTATCATTTTCCTA
ATTACAGAGGAGCAAAGGTTATCTTCAGCCCTTTCAGTTCTATGCTCACATATTCAAATATCAAATGTAATTTAG
CTGAAGTTATTTAATAATCAAGTCTTTCAATATCTGTTCAAAGAAAAAGAACACACTTTGAAAATTCTGCAAAGC
TGTCTCCCAGTCTTTAAAATGTCTGGAAGCACTCTCCTTCTTTACAATACCAACATCACTGGCCCAGAATCTTCC
CTGTGCTAGGTTGTAAATATAAATAAATTACTTGTTTTGTAAACTTTTGTAAAGAATATTTTGGTAGAAATACTT
CAAACATATTCTTTGGGTTATATTTATACATATGTGAAATAAATATACTATCAAAAGGTTATATTTTATACAAAA
AGTAAATTGCTACCTTTTGTATGCTAATATGCAAAGTTTTGTATAATATGATGGTTTATTTTTAGCTCTACACTT
AAACCATAGGTGGTTGAGTGGGAACTTTTGAAAACTATCAAGAGGCTTGTTAGACAAATTTATATTCTGAAACCT
CAATAAGAAAGCATTCCAGGTTTCAATCCTTGTTTTTTGTCCTGCTCCCAAATTCTTTTTTAAACCCATAGTTCT
TGTGTCTTATTTGATTCTTCTGCTGTGCACATTGTATTGGTCCTTGTTGCATGTAGTCTACTGTGTGTTTTCCGA
TTTTATAAGGCAGCATTTCTCCATACAAAAARAAAAAAAATGATGTACATATAAACGCTTTTRTTGTATGGCTCC
TCCATGTTACTGTATATATCTGCCAGCACTTCCCAGTTACACTCCTGTGAGTCAGCTTATTTTTACCCTAACATA
AATAGTATGTTTTGTAGTAGTTATCAAATTTAAGAGATAAAGCAATCAGAATGTTTGGATTTTCTTCTATCTTAA
TGTGAATTTCATAATTAATGTCTATTTATTCAGCTATTCATTAAAATACAGGATTCTTTGGGGAAAAA

FIGURE 5495

GCTCAGTGGGGGCGGCTACTGCTCATGTGATTGTGGAGTAGACAGTTGGAAGAAGTACCCAGTCCATTTGGAGAG
TTAAAACTGTGCCTAACAGAGGTGTCCTCTGACTTTTCTTCTGCAAGCTCC**ATG**TTTTCACATCTTCCCTTTGAC
TGTGTCCTGCTGCTGCTGCTGCTACTACTTACAAGGTCCTCAGAAGTGGAATACAGAGCGGAGGTCGGTCAGAAT
GCCTATCTGCCCTGCTTCTACACCCCAGCCGCCCCAGGGAACCTCGTGCCCGTCTGCTGGGGCAAAGGAGCCTGT
CCTGTGTTTGAATGTGGCAACGTGGTGCTCAGGACTGATGAAAGGGATGTGAATTATTGGACATCCAGATACTGG
CTAAATGGGGATTTCCGCAAAGGAGATGTGTCCCTGACCATAGAGAATGTGATTCTAGCAGACAGTGGGATCTAC
TGCTGCCGGATCCAAATCCCAGGCATAATGAATGATGAAAAATTTAACCTGAAGTTGGTCATCAAACCAGCCAAG
GTCACCCCTGCACCGACTCTGCAGAGAGACTTCACTGCAGCCTTTCCAAGGATGCTTACCACCAGGGGACATGGC
CCAGCAGAGACACAGACACTGGGGAGCCTCCCTGATATAAATCTAACACAAATATCCACATTGGCCAATGAGTTA
CGGGACTCTAGATTGGCCAATGACTTACGGGACTCTGGAGCAACCATCAGAATAGGCATCTACATCGGAGCAGGG
ATCTGTGCTGGGCTGGCTCTGGCTCTTATCTTCGGCGCTTTAATTTTCAAATGGTATTCTCATAGCAAAGAGAAG
ATACAGAATTTAAGCCTCATCTCTTTGGCCAACCTCCCTCCCTCAGGATTGGCAAATGCAGTAGCAGAGGGAATT
CGCTCAGAAGAAAACATCTATACCATTGAAGAGAACGTATATGAAGTGGAGGAGCCCAATGAGTATTATTGCTAT
GTCAGCAGCAGGCAGCAACCCTCACAACCTTTGGGTTGTCGCTTTGCAATGCCA**TAG**ATCCAACCACCTTATTTT
TGAGCTTGGTGTTTTGTCTTTTTCAGAAACTATGAGCTGTGTCACCTGACTGGTTTTGGAGGTTCTGTCCACTGC
TATGGAGCAGAGTTTTCCCATTTTCAGAAGATAATGACTCACATGGGAATTGAACTGGGACCTGCACTGAACTTA
AACAGGCATGTCATTGCCTCTGTATTTAAGCCAACAGAGTTACCCAACCCAGAGACTGTTAATCATGGATGTTAG
AGCTCAAACGGGCTTTTATATACACTAGGAATTCTTGACGTGGGGTCTCTGGAGCTCCAGGAAATTCGGGCACAT
CATATGTCCATGAAACTTCAGATAAACTAGGGAAAACTGGGTGCTGAGGTGAAAGCATAACTTTTTTGGCACAGA
AAGTCTAAAGGGGCCACTGATTTTCAAAGAGATCTGTGATCCCTTTTTGTTTTTTGTTTTTGAGATGGAGTCTTG
CTCTGTTGCCCAGGCTGGAGTGCAATGGCACAATCTCGGCTCACTGCAAGCTCCGCCTCCTGGGTTCAAGCGATT
CTCCTGCCTCAGCCTCCTGAGTGGCTGGGATTACAGGCATGCACCACCATGCCCAGCTAATTTGTTGTATTTTTA
GTAGAGACAGGGTTTCACCATGTTGGCCAGTGTGGTCTCAAACTCCTGACCTCATGATTTGCCTGCCTCGGCCTC
CCAAAGCACTGGGATTACAGGCGTGAGCCACCACATCCAGCCAGTGATCCTTAAAAGATTAAGAGATGACTGGAC
TAGGTCTACCTTGATCTTGAAGATTCCCTTGGAATGTTGAGATTTAGGCTTATTTGAGCACTACCTGCCCAACTG
TCAGTGCCAGTGCATAGCCCTTCTTTTGTCTCCCTTATGAAGACTGCCCTGCAGGGCTGAGATGTGGCAGGAGCT
CCCAGGGAAAAAGGAAGTGCATTTGATTGGTGTGTATTGGCCAAGTTTTGCTTGTTGTGTGCTTGAAAGAAAATA
TCTCTGACCAACTTCTGTATTCGTGGACCAAACTGAAGCTATATTTTTCACAGAAGAAGAAGCAGTGACGGGGAC
ACAAATTCTGTTGCCTGGTGGAAAGAAGGCAAAGGCCTTCAGCAATCTATATTACCAGCGCTGGATCCTTTGACA
GAGAGTGGTCCCTAAACTTAAATTTCAAGACGGTATAGGCTTGATCTGTCTTGCTTATTGTTGCCCCCTGCGCCT
AGCACAATTTTGACACACAATTGGAACTTACTAAAAATTTTTTTTTACTGTTAAAAAAAAAAAAAAAAAA

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FIGURE 5496

MFSHLPFDCVLLLLLLLLTRSSEVEYRAEVGQNAYLPCFYTPAAPGNLVPVCWGKGACPVFECGNVVLRTDERDV
NYWTSRYWLNGDFRKGDVSLTIENVILADSGIYCCRIQIPGIMNDEKFNLKLVIKPAKVTPAPTLQRDFTAAFPR
MLTTRGHGPAETQTLGSLPDINLTQISTLANELRDSRLANDLRDSGATIRIGIYIGAGICAGLALALIFGALIFK
WYSHSKEKIQNLSLISLANLPPSGLANAVAEGIRSEENIYTIEENVYEVEEPNEYYCYVSSRQQPSQPLGCRFAM
P

FIGURE 5497

TTTAATTTGAACTGCTAATTGAACATGAAGAGTGAAAATTAXACACCTAGTTCGTCCGGTTTAAATGGTCACTAA
GACTGTATAGGCAATTTCAAAATGGGCACTGTAACTAAAAGAAAGCAAACCTATTTAGAGCTGAACGAGACTCTT
GCACTGGGTTTTGCTTGCTCTAAGTGACAAAGTAAGCTGATGCTCATAGCACATTGGACTACAGCAAGAGAAAGG
GGGAGAAGCAGATGGAGCATCTCCTTCACTGTCATGAGCCCAGTGAGTAAAAGGAGTGAGGAAACCCTCTTTTGT
CCACAGATTTACAAATACAAAAAAATAAATAATATTCTAAGACAGTACAAATGCXAATACTGTTCCCTTGTGTCA
ATTACATACAGCATGCCTACAAAGAGAGAATGGTAATTCTTCTTCATTCACAGACAGGACACATGGCAGTGCAX

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FIGURE 5498

GAAAGAATATCCTAGGCAGAGGGAAGAGCTCTTAGAGACCTATAGTGAGAATAAGCTTGATATATTTGAGGGACT
AAGAGAAGGTAAGTGGCTTAATGCCTGGTGGGGAAAGAGGAATGCCATACAATGAGGGTAGGAAGTAAGCAGAGG
CTTACTTACATTACACAGCAGAGTGTGTTTTCATCAGAATGTTATAAGAAGCTGTTCTGAGGGTTTTAAACAAAG
AGGTGACCTAAATATTTTACATTTTGTAAATCCTTTGGTACAGGAGATAAGTGGGCACAAGTGAGGAATGATGTT
TGTACAGCAGTGATAGTAATGGAGTTGGACTGGCAAGGATGGATTTGAGATACATTTTGAACTTAGATGGTAAGA
CTTGCTTGGTACTTTGAATGCGGACATTGGAGTTAAAGAGCAGAATCAGAGATAGCTTAGATTCTTTGACCTAAG
CAAAATGACAGATAAGTAGTGCCAGTTACTAAGATGGCTGAGGATTTGGAGAGAAAAATGAAGCATTTTGTTGTG
CTAATTTCAGATATGCCTACGAGACATCCCAGGTAGAGCTGTTAATGAGGCACTTATCGTCCTGAGGTCAAAGAG
TAGGACTGAATATAAAGATTTGGGCATCATTGGTTTTAAGTGGAATGTAAAGCATGTGACTGGGAGAGTATGTGG
TAAACAATGGAAGGAAGCCCCAGAAAAGCCAGCCAGAGGAAGAAGAGCCAGCAAAGGAAATGAAGAGGTCTTTGT
GATAGAAGAAAACCAGCAGAGAGGTGTCATGGAAGCTAAGAAGAAAATGATTTTTAGAAGAGAGTGCTCAGCTGT
CCTTTTATGAAAAAGCAACCTATACCCAAAACTTAGTTTTAAAAGCCCAAATTACAAGATTTTGGACTCTGTAAT
ATTCCCTATGTACTTCAAACATGTAGTGAGAAAAGAATGTTGAAAATTAGCTTAGTGCCACAGAGTGGTAGAGGC
CTTTGAGAGAGGGGAGAGTAGATAGTGCTGATAGATAGGAAATGGATAGGAAGCTCTGCTGTTACCATCCTTATA
GGTCTCTTCTTTTTTGCTTTTCATTTTCTTCTCTTGAATATCAGTACACTAGCAGCAGTCTCTCATTTGGTACCA
CCTTTCCAAGTATCTGTGTTTCTAAAAGTTCTGCGTTCTATAACAAAAATAGGAGAGTCAGACTTCAGCAAAACT
CCAGCTCCCTTCAATCCACTCACAGTTTAACTACTTCTACCGGGCATTAGTGGCATTTTCTTCTAAAAATCAGAC
ATCTGTTTTGCTTAACAAAGTAGACTTTTTAACTATACATTGATACTTTGTACTAATTAGTTGATTTTAATTTAA
TAATTTAATAATTAATGACAGCAACTTCAAGTAGTGCTGCCAGTCTGAGCAGTACACAATGCCTGTGTACCTATT
TACTTAAAACTGGCAAATTTAATATCTCTGTTCTGTCTGAAAACTATTTTACAAAAACAATTATGTTTTTATTTG
GTTACTCCATTCCAGTAACTGCAATTACTTTACCTTTAGAAGTTATATAGCATGAAATAATAGTGATTGGTAGCA
TGATTCAATTGAATTTATTTCCTACAGGAAATTTTGTTAGAAGTTATGTTAATATGCTAATGACTTAAGAGTTTC
TCCCTATCTTTTTGAAAATCGACAAGAACTGTTTTAGTCCTCATATGATACTGGTTGTTGAGACTTTTTGAGGAA
TGTTTTGAGTAGTTTTCTTGGTTGTGTGGATTGTTTGGAATTATGTGGTAGCTTAGAAGCATGGTAAAGATGCTT
TTAATTTGCGTATTTTTATATAGTAATGTCTAACATGGAATTATCTTTACAGGAAAAAACAAAAAAGAAAAAGAA
GCATAAGAAACACAGTNNNNNNNNNNNNNNNNNNGCTGCTAGTTCAAGTCCTGACTCACCATAACATTAAGAAAA
ATCAGGATTCCCTTATAAAGAAAGTGCAATGTCTGAGGAAATTTCAACTGTGAAAACTACAACATATTTACTAAA
ATGCATGAATTTTCTTGTTTTTGGAATTATTCCTGGACTATTCAGTAGCCACTCAGATGCCACTGTGTGAAAGGG
CCATAAATGTTGCCTGCTGCT

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FIGURE 5499

KEYPRQREELLETYSENKLDIFEGLREGKWLNAWWGKRNAIQ

FIGURE 5500

AAATAATAATAGGGAAATGCCCTTGGTCCACAGACTCAGCTGTCTTCCAGATGCTAGTCATTGGTGAATGAACAA
CAAGAGAGCCTGCACTGTCTTGTGTGAAGGTCTAGGTATTTTGGGTCTTTGTCTTGATAAAATCAGAATAGACGT
GGCCTCTCACTATCAGCTAGGAAGCAGTTTGAACTTGGAGTATCAGAGGGTTGCTCTTTTTGCCAAGCCTCTGGC
TTCAATCCTTGCCTGGGGATGGCAGTGCTGCTGAGGGAAGGAAGTGGGGAACACTGTGAGTGCAAGGACAGGTGA
GGCAGGCACAGACGGCTGTCCCAAGGGAAAGTGCTCCATCAGCTGTGCCAGGAGAGAAGCAGCTCTTGGGTCCGT
GTTTCTGCCTTAGAAGGCAGGAGTTGGGCATCTAGCTCCAGCACTCATCCCTCTTGAAACTGCTGGTTTGTTTAC
TTTCATTGCAACTATATGCCTGGAAGAGATGAAGAGAAAGCTCAACAGGCTTCACTAGGATTGTTTGGGTGGGGT
GGCAGCAGCTCAGATATTTTCCCTCCTCTGTTTTTCATAGGCTTTTTGTAATCGTGTTATAATACTTTAATGGAA
AAAAATAAATTTATTATTTTAAAGCTATAAAAATTATAAATCAGTCATTATGATGTGTTTTTCTCTACTGAGCCC
TCTGGTGTGTTCCCTGTTTTATTAACGTGG**ATG**GAGGGTGTGTCAGGGAGGTTGGGACAGAGGCAGAGAAGAGGC
CAGCCCGGCCTTCGGGGAGTTCGTGGCCTGTCTGGAAAGAGGGTCTTTTACATACCAGCAGTTTGCAGAGCCAGA
CACAGAACGATAGAGCAGGACCTTTTAAACTCCTTTTCAAAAAAAAAAAAAAAAGGG

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FIGURE 5501

MEGVSGRLGQRQRRGQPGLRGVRGLSGKRVFYIPAVCRARHRTIEQDLLNSFSKKKK

FIGURE 5502

CTTCCTATTCCCTGAATCACTAGCAGTAGGTGCAATATAATTCTGTTACCAGAAGGCAACTGGCTCCGGGTAGAA
ACTTCCGGATAACAGCATTATATTGCACCTACTGCTTCCTATTCCCTGAATCACTAGCGCTCCCGAAGGCTTGGA
GGGAGGAGTCTCTGGGCACCCGGGTGAAAGGAAGGTTCACGTGCAACCGCCGCGTCTTTTTTTCCCTGAAGCGCT
TTCATGGAGGCAGATGTTTGTCAGTCAAGGGAAGTAAGAAAGGCATTGGATGAAAACGAAGCCCTAAGCCTCGTA
GTCGTGGCCGAGTGGTTAAGGCGATGGACTAGAAATCCATTGGGGTCTCCCCGCGCAGGTTCGAATCCTGCCGAC
TACGTCATATTTTTTCTTCAGCATACTGACCATATTTCTCTCCAGGATGGGATGATCCAGTCGGCACCCTCCAA
ACCTCTCATCTAGGAACTCTAGAATCGAGAATTTGATTTAGAGTCTATGATTTTGGTTTGAAATCTATGATTAAC
GTCTTTGGACATTGAAGGAAATCCGAGGAATGGACAAGTGATGCAAGAGCCAGTTGAGTTACCAAATTAGTTCTA
GAAAGATCTGAAAAAGCTCGGTCCGGGTTCCTAGCTCTATATTCTTGTAGATGAATTTCAGGAACCTTTATGGCA
GCTTCGGCGCCGTGGCTTAGTTGGTTAAAGCGCCTGTCTAGTAAACAGGAGATCCTGGGTTCGAATCCCAGCGGT
GCCTTTATTCAATTGAAACAGCGTGATTTTGCGGCTAAATCCACATCCTTTCATGTATTGTTTTTATATCAGAAC
GCGTAAGAGTTTCTGTTCTGCACTCATAGCACCCACATTTCCTGCAGAGTCAAGCTGCCACTCCCATGAGATCGC
CACTCTAAAAGGTGGTTCTCTAACTTAGGGGCAGAAATGTTGCATAGGCCTAAGGGTCCTTTGCTTAACTGATGC
CACACCCCACTGGTGCAGGTGGACTGGGTCAGGCGGCCGCCCCACCCTCGATGGAAGGGGCTG

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FIGURE 5503

MPHPTGAGGLGQAAAPPSMEGA

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FIGURE 5504

ATGGGTGAGAGAACTCTTCACGCTGCAGTGCCCACACCAGGTTATCCAGAATCTGAATCCATCATGATGGCCCCC
ATTTGTCTAGTGGAAAACCAGGAAGAGCAGCTGACAGTGAATTCAAAGGCATTAGAGATTCTTGACAAGATTTCT
CAGCCCGTGGTGGTGGTGGCCATTGTAGGGCTATACCGCACAGGAAAATCCTATCTCATGAATCGTCTTGCAGGA
AAGCGCAATGGCTTCCCTCTGGGCTCCACGGTGCAGTCTGAAACTAAGGGCATCTGGATGTGGTGTGTGCCCCAC
CTCTCTAAGCCAAACCACACCCTGGTCCTTCTGGACACCGAGGGCCTGGGCGATGTAGAAAAGAGTAACCCTAAG
AATGACTCGTGGATCTTTGCCCTGGCTGTGCTTCTAAGCAGCAGCTTTGTCTATAACAGCGTGAGCACCATCAAC
CACCAGGCCCTGGAGCAGCTGCACTATGTGACTGAGCTAGCAGAGCTAATCAGGGCAAAATCCTGCCCCAGACCT
GATGAAGCTGAGGACTCCAGCGAGTTTGCGAGTTTCTTTCCAGACTTTATTTGGACTGTTCGGGATTTTACCCTG
GAGCTAAAGTTAGATGGAAACCCCATCACAGAAGATGAGTACCTGGAGAATGCCTTGAAGCTGATTCCAGGCAAG
AATCCCAAAATTCAAAATTCAAACATGCCTAGAGAGTGTATCAGGCATTTCTTCCGAAAACGGAAGTGCTTTGTC
TTTGACCGGCCTACAAATGACAAGCAATATTTAAATCATATGGACGAAGTGCCAGAAGAAAATCTGGAAAGGCAT
TTCCTTATGCAATCAGACAACTTCTGTTCTTATATCTTCACCCATGCAAAGACCAAGACCCTGAGAGAGGGAATC
ATTGTCACTGGAAAGCGGCTGGGGACTCTGGTGGTGACTTATGTAGATGCCATCAACAGTGGAGCAGTACCTTGT
CTGGAGAATGCAGTGACAGCACTGGCCCAGCTTGAGAACCCAGCGGCTGTGCAGAGGGCAGCCGACCACTATAGC
CAGCAGATGGCCCAGCAACTGAGGCTCCCCACAGACACGCTCCAGGAGCTGCTGGACGTGCATGCAGCCTGTGAG
AGGGAAGCCATTGCAGTCTTCATGGAGCACTCCTTCAAGGATGAAAACCATGAATTCCAGAAGAAGCTTGTGGAC
ACCATAGAGAAAAAGAAGGGAGACTTTGTGCTGCAGAATGAAGAGGCATCTGCCAAATATTGCCAGGCTGAGCTT
AAGCGGCTTTCAGAGCACCTGACAGAAAGCATTTTGAGAGGAATTTTCTCTGTTCCTGGAGGACACAATCTCTAC
TTAGAAGAAAAGAAACAGGTTGAGTGGGACTATAAGCTAGTGCCCAGAAAAGGAGTTAAGGCAAACGAGGTCCTC
CAGAACTTCCTGCAGTCACAGGTGGTTGTAGAGGAATCCATCCTGCAGTCAGACAAAGCCCTCACTGCTGGAGAG
AAGGCCATAGCAGCGGAGCGGGCCATGAAGGAAGCAGCTGAGAAGGAACAGGAGCTGCTAAGAGAAAAACAGAAG
GAGCAGCAGCAAATGATGGAGGCTCAAGAGAGAAGCTTCCAGGAAAACATAGCTCAACTCAAGAAGAAGATGGAG
AGGGAAAGGGAAAACCTTCTCAGAGAGCATGAAAGGCTGCTAAAACACAAGCTGAAGGTACAAGAAGAAATGCTT
AAGGAAGAATTTCAAAAGAAATCTGAGCAGTTAAATAAAGAGATTAATCAACTGAAAGAAAAAATTGAAAGCACT
AAAAATGAACAGTTAAGGCTCTTAAAGATCCTTGACATGGCTAGCAACATAATGATTGTCACTCTACCTGGGGCT
TCCAAGCTACTTGGAGTAGGGACAAAATATCTTGGCTCACGTATTTAA

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FIGURE 5505

MGERTLHAAVPTPGYPESESIMMAPICLVENQEEQLTVNSKALEILDKISQPVVVVAIVGLYRTGKSYLMNRLAG
KRNGFPLGSTVQSETKGIWMWCVPHLSKPNHTLVLLDTEGLGDVEKSNPKNDSWIFALAVLLSSSFVYNSVSTIN
HQALEQLHYVTELAELIRAKSCPRPDEAEDSSEFASFFPDFIWTVRDFTLELKLDGNPITEDEYLENALKLIPGK
NPKIQNSNMPRECIRHFFRKRKCFVFDRPTNDKQYLNHMDEVPEENLERHFLMQSDNFCSYIFTHAKTKTLREGI
IVTGKRLGTLVVTYVDAINSGAVPCLENAVTALAQLENPAAVQRAADHYSQQMAQQLRLPTDTLQELLDVHAACE
REAIAVFMEHSFKDENHEFQKKLVDTIEKKKGDFVLQNEEASAKYCQAELKRLSEHLTESILRGIFSVPGGHNLY
LEEKKQVEWDYKLVPRKGVKANEVLQNFLQSQVVVEESILQSDKALTAGEKAIAAERAMKEAAEKEQELLREKQK
EQQQMMEAQERSFQENIAQLKKKMERERENLLREHERLLKHKLKVQEEMLKEEFQKKSEQLNKEINQLKEKIEST
KNEQLRLLKILDMASNIMIVTLPGASKLLGVGTKYLGSRI

FIGURE 5506

CGTCGACGGAAAATCTCAGCAAACTGTACTGACTCCTAGATGGAGCAAGAGCATAGGCCACTATTGGCGAAGGAC
TCTATGTAGCTCTAAGCTACATAGAGACTCCTTGATAAAAACCACTGGGAACTGCTCTTCAAAGACTGGGACAGT
GATACGAAGTGTACCCTGAAAGTCAGGACAATTTGAGAGGAAATATCAGATGAAAGCAAAACATTCAAGGAATTA
TTGGATGAATTTCCAGTTGTTACTATAATTATAGATAGGCATACAAGAGCTTCTTGTGTCCCAAAGGAAATGTGC
CTGAGAAATTTTTAGAATTAAGACAGAATTAAGGCAACAAGATGGAAGATAACAGAAGAGAGCCAGGCAGGACAG
TGATAAATGGAATCCAAGCTCAGATCAGCTGTTAATCCAATTAGAAAATGCAAGCCAGTTAAGATTATCTAACTC
AGAAAGGTGAGGGCGGCCAAGATTTTTTGGACAATGGTTGCTTTTGGCAGACCAAAACCTACTGACTTATCTCTC
ACAACTGAAGTCCCCATTAGATAAATCTAGAACCAAATGTTAGATAAGCACATGTCCGGCCCAGAAAAGAGAGAA
AGTTAAAAAA

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FIGURE 5507

VDGKSQQTVLTPRWSKSIGHYWRRTLCSSKLHRDSLIKTTGNCSSKTGTVIRSVP

FIGURE 5508

GCGCCGCCGCGGACCACCTAAAATGGCCGACGGAAGAACGGCGCGTCCCGGTCACGTGACGCGAGAGCGCGCCCT
TCGCGCGTCCCCCCACCCCTATCCCCCTAGTNNNNNNNNNNNNNNNNNNNNNNTCGGTCCCGCCCTCTCGCTAC
CCTTTATACCTTCCTCTCACGCTCCGCGTTGCACAGCCTTGGGGGCCTTTAAAAGGAACCGGAAGTGTCGTGAGC
TAAGACAGTCGCGCGGGGACCATCGAGAACAAGGAGTGCTGTTTCGAAGTAGCGGCTAGAGGGGCCCCCTGCCTC
CGCCCCCGCCCTTCCGAGGATTCCTGGAGTCCACTCACCCCTCCCCACCACTCCAGTAGCGGCGGGAGCAGCAGC
GTTAGGCCGGGGTGTGGCTGCACCTCTGCGAAGGCTGTCGTGCCCCGTGCAGCTGCGGCGTTCGGGTGGGGGAGG
GGAGGCTCACACCCTGCGGCGGCTTAAGCCTGGATTTACGCACTGGAGGAGGGAATTAGCCCTGAGATGTCAGCC
CTGTGCCCCTGGCGCTGTCCACCCGGACGCCCGCGGAGCGCCAGGCGCCGCAGCGGACCGCGCGCGCACTGATTG
CCGCAGCTACTCTCCCTGCCGTCGCCGCCCGGGACCGGGTGACATTGAGGTTTTCGTCTATCGCCGCTGGGCCGA
TAGGGCTTCTTTTTAAGATTTGGCTTTCCAAGTAAGATTTTTGTTTGCCTGCTTTTCTCCTGGAATTTTTTTGTT
TTTGGTCGAAGAAGCAGGTAACTTGCATATCTTAAGGAAAACATTGTTTTTGCTTTGCTTTTGTTGTTTAAAGAT
CCTAAAACGTACCGTGATTCCTTTACGTTACTAATAATTGGAAAGTGTGTTAAATCAAGGGTTCGCTTAATGTTC
TTTAGCCTTTGTACATAGAATATATAAATGTCGTGAGTCATCCCTGAAAAAAAATCTATGTCGGGTGCGGAGAAA
GAGGTAATGAAATGT

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FIGURE 5509

RRRGPPKMADGRTARPGHVTRERALRASPHPYPPSXXXXXXXXRSRPLATLYTFLSRSALHSLGGL

FIGURE 5510

CATTCTTGAGTTTGATAAAGTAATTCATACAAAGTATTGTCCTCAAATAAGTCTTCCTTAGCTAAATGCAATTTA
AAATTATTCAAAGATCCTAGGGCACTTCTAGTTTCACGTAAATATTCATATTAGGTGGTTCTCTTCATCCATTTG
TTTTCACACTGATACATAAAAATTAACAGCAGTCTAATCTAGTGACACCTCAGTCATATTTCGCTATAGATTTTA
CCTCAAATCAGTCCAAGACTTTTTCAGAGATCACCATTTGTCTTGAAAGGTTTATTTCGTTATTAAACTGCCTAC
TTATAAGTAATTAAGAGAAATTAAGAAAGTAGTATGCATTTTTAATTGAAATTGTTTTACATTCTTTGTATAATA
AACCTAAAAAACAAACATGTCATAAACAAATTGACGTAAAGATATAAAATGCCAAATGAAGTATTCCAAATTTTCT
ATTCTAATTATTTAGCTTCACCATCATTGTGGAAAAAAATACTAGATCCTGCTTAGTATTATATATTTTTCCTAG
TGGATCAGTGAGTAATAAGTACCAAACACTAGACTAGAAGGTAATTTCTACATTGTTTAGAAAGGGTGAAACAAT
TTATCCCCTCTGGTATTGTTCTAGCATAAGCTTTAGTTATACAATGATTAAGATAGAAAACTTCATATATAAATT
TGATAAGCAAACCCACATTTATAGCTGCAGCTAAAATATGTTTCCTTAGGGCACAGTAATCCTTTCTGTGAATTT
TGACCTTGTTTGTGTTTTTGTGAATGAAGCTATATGTCTAATCAAAAATGATTATAAAAGAGGCTCATCTCTGAC
ATCATTCCAAAAATACATTCATTGATCTCTTTTTAAGAAACATCTGTTATTCACTGGGCATTGGGACTTTTTGTG
AGTAATTTGAATTGAAATTTTATGAGCTATCCAAGAATTCTGTATGGTCTATTATTTTCAAGTCAAAATTTCCAG
TAAGGATTTACTTTACATTTCATTTGGATAAATGAATCATTATATAGGTATGTCTTTGCTTCCATTTTGAGACAT
TTAGATTTTTACAGCCTGTTTCTATAGCATTTGATGTTACAACTCTAAGCGTAGTTCAAAGACATTTAAATTGAC
AAGTTACCAGTTAAAGAATTTAGAATATATTAGATCCCATCTAGTATTATATATTTTTTCTAGTTGATCATTGAG
CAGTAAATACCAAATACTCGATTAGAAGGTAATTTTTACATTGTTTTGAAAGGGTGAAACAATTTATCTCCTCTG
GTATTATTCTTAAACCACAGATAGGGATAGTAGGGTAGTGAAACGAATAAATACCTGGTAGAAGACAAGAGACTT
GGGCTCTACACCTGGCTCTGCCACTGATTTGCTAAGTCATATTGGCAATCACCACACCCTTCAGGGAATTAGTTT
CATCTGTAAAATGCAGCGGTTAGTACTATAAAATCATACAAATTTCTTTGTGCTTTGAGAATCTATAAAGGAATG
TCTGTTGATATTCTGAGTCGATTTTCATTTGCTTTTGTTCCAGAACGGTTAAAATAAAGCATATTATTTCATTTA
AAAAGT

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FIGURE 5511

ILEFDKVIHTKYCPQISLP

FIGURE 5512

GGGAAAATATTTGCTGCTTGTAAGTCCTAAGTAGATAAAAAATGAAGCCAGAAGAGGGATAGGAAATGTTGGGAG
GTGGGATAAAGTTTTCAGTAGGCTGGCCAAACAGTGCCTTGCTGAGAAGGTGACATTTGACAAAAGATCTCAACA
AAGTGAAAGAGTGAGCCCTGCTGGTATCCAGGGACATTCCAGGAAGGGAAAACAAGTGTAGTGGCTGGAAACAGG
GGCAGGTGCTTCCTTCAGGAAGCAACGAGGAGGTCAGGGGACTGGGCCAGATTTAGAGGGAAAAATAAAAGACCT
AATATCAGAGGATTAGCAGGGTACCAGATTGTGTGAGGCCTTGTCAGATGGAAAGCCACAGACAGGGTTGGACAC
AACATTGATATGATGTTTACATTTTAACAGGGTCATTCCGGCTGCTTTTTTGAGAAGTCCCTGAAGAGATCAATA
ACAGCAAGNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCCACATTGAATGTG
GAATGCTGGAAGAGAGATAAAGTGTACCTGTCACATACTTTTTGAGTTTTATTTATTTTCTTAGAAGTAAGTACA
CAAAGAGATGCTACCTAGGAGAAGGGTATTCTTTTCACTATTCTTTCAAATTTTCTGTATGTTCAAACATTTTCA
TAGTAGAAAGTTGGGGGGAAAATCTGTTTCATAAACATTTCCTCAGCAGCAGTCCAGTCTATTGCATTTTAATTG
GTTGTGATATCATTGTTTTATGCAATACGTTCTCAACAAGTATATCCTCCGGCAAACTGAACAAGGACCAAGTCT
GTTCTGCCTACAGCTCTGCTTCCTCATAGCTGCTTTCCAGAACGTGACTCTTGCAAATTATCAAGAAAGGGGAAC
TAATCTAAGGGATCCAGATCAAACAGCCTCATGAAGACTTATTTTATGTTTCTAATATAAAGATAGAAGTTTTCA
GAAAAGCCCTGCTACACAGAGGATCAGAGCAGGGGTGGGCCTGCTGGGCTGCAGCTGGGATTCTGAGCATCCTTT
CCCGGAGGCACGGAAAGTGAGTGAGTGAGCCCAGTGAGGAAGAAGTTGAAGCTTTGATATGAGTAAACAAGTATC
TCTACCTGAAATGATTAAAGACTGGACCAAAGAGCATGTGAAAAAAATGGGTAAATGAAGACCTTAAGATTAATG
AGCAATACGGGCAAATTCTGCTCAGTGAAGAAGTAGCAGGATTAGTCCTGCAGGAATTAACTGAGAAGGACCTTG
TAGAA**ATG**GGGCTACCATGGGGTCCAGCACTTTTGATAAAACGTTCATACAACAAATTGAATAGTAAGTCCCCTG
AAAGTGACAATCATGATCCGGGACAATTAGATAATTCAAAACCGTCCAAAACAGAACACCAAAAAAATCCAAAAC
ACACC

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FIGURE 5513

MGLPWGPALLIKRSYNKLNSKSPESDNHDPGQLDNSKPSKTEHQKNPKH

FIGURE 5514

AAAAAAAGAAATTTAGATTTCTGTGGTAAATATAAATGAGTTTCATTTTAAGTAAACTCATTTTGTGGGATTTGA
GATTTAAAAATGAAATTAATTTTGCACATTCTAGTCATGGTTGGGCTCTAAGGCAATGTTGTAAAGCTGTAATTG
TTTGCCTTATGGGAAGAAGTGAAAAGGAATTAAAATTTATGGTGTGTCTACTATGAACCAGGCATGATGCTGAGA
GTTTAACTGTGTAATTTTTGGCCTAAATAGCCCTGTGAAGTAGATATTATTCCAACTTTACAGGTTAGAAAATTT
GAGGCACAGAGAGGTGAAATATTTGCCTAAAGTGAAACGGCAAATTTGGCAATTTGGACTTGGATTCAAGTGTTT
ATAACTAAAGCCCAGCTCCTTGCATCATACCCTGGTACCTAAAAGACATAAAAACTCACTTCAGGTGCAATGTGA
ATGAAAATGACGTTATGACCCAGGCTTGTTGTCTATGTGCTCCTTGAGAAATAGTTCTGTTGGATAGATGCGGTC
AATACTCAAAAGCCCTTGCTATCTTTGCCATGCATTACTCTAAGCACTTGACATGTATTAATTTAATCCTCACGA
TTCCGTGAGGTATGTGCTATTATCATTCCCATTTTACAGACCAAAAAAAAAAAAGGATTTAAGTAAGTTGTTCAAC
TTACTTACACAGCTAGTATGTGGGGGAGGTGGGACCCATACCCAGGTATTCTGACCACAAGCCTAAGGTCTTAAT
GCTGTTTGATGCTGCCTCTCATGTAACCAGATATGTGTGACAGTTGCCGTAGAAGTATTAAAGTGTGAGTGTATG
GTAGTTCAGGGAAAGCCGTGTCACATCCACATGGGATGATCATTGGCATGGTGCCCTGTGCTTTTCGGGAGGTGA
ACACTTGAAGTAAGCCTGAAGTTGAATAGATTCTCCTAGGCGGAGACACAACAGGCTATTTATGGACGGAGGGCA
TAACAAGGAGCGAGAAGCTCAAAGAGTG

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FIGURE 5515

MDGGHNKEREAQR

FIGURE 5516

CATTTTTAGTAAGTATGTTAGTAAACCAATTTTTTAGGGGGATCCAGGAAAAGAAATAGTGAACTTGACAATGGC
ATTCTTTAGTTTTCAGTTTGGAATTTAATTGGAAACTCATTTAGATTTTAATAAAAAGGGAATAAATATATATCT
TGTATCATGTGGATGCCTTAGGCTGTCAGTAACAGAACACTCCAGTGAAGAAAAGATCTCCCAGAACAAGAAGTC
CAGAGGAAGGGAGAGAAGGAAGACAGGTTCGGGGTTGGTTAATTTAGTGGCTCACTGATCTAATCAAGGACCCCG
ACACTTTGCATCTTTATACTCTGCCATTCTCAGAATCTTCTCTCATGATTGTACTCTGGCTGTATTGAATGCAGA
CTCAACAGTGTCTTATGAAGAAATGGAATATTTCCTCCTGTACATCTCTTTTTGTTAGCAAGACAACAATTTCAT
GGAAACCCTCCAGTTTTTCCCTCAGGTCCTATTGATTAGGATTGGGGTCACTTGCCTTTCTTAAACCATCTGGCA
AGGGGAATGAGACCATTATGATTGGCTTGAACCAATTAGGAGTCACTCTCCTGGGATTGGGGAGGGCCCTGCCTC
TAAGTAGTTAGCTGCCTGATAATTCTGCAAAAGCTGGCTTCTATTAGCAAGGGAGGAGGAGGGGAATGATGTAGA
ATAATGACTATTGTCAGGCCACAGCATGGGGCATTTTACTTACATTTAAACATAAGGTAATACTTAGTTTCTGCT
ACAGAATTTCTAATACATGTACTTAAGAGT

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FIGURE 5517

FLVSMLVNQFFRGIQEKK

FIGURE 5518

AAATTTTTTTTCTACTAGCTACTGAGGCTGCCACATCTGGATGGAACTGAGTGGAGGGGGAAAAGAATGAAAAAC
TCAAAAGAATTCCCATGAGGGTGTCTTGCTTTCTCTCCTGAGTTACAATACTTTAGCAAAATCATGAGGCTTTAG
AGATATGGTGTAGTCTGCAAACTTCTTAATGCCCTTACCCACATTTACCATGTTTCCTGGCCTTCCTCTGTGTCA
ACTCTTAGCTCTTCCTAATCATTATTTAATACATGAGTGAGTTTAGTAGTGATCATATTTCTCAGGTCCTTTAGA
AGCTGGAATTTTAAAAGAATTAGAAGGAGGAGTATGTGAATTCTTTGGAGCTCACTGCCTGACTTGCTTATGACC
AGGAAAATCTATCCCCTGTATCTAATTTTAATTTCATGGTTAAATTTGAGAATTGTGGAAACCAAGTTCCACAAG
GCTATTCTCATATTTCTCCCAATTTCTTTTTCAGCCAACTCCAAGGATATGTATCACCTTTGACTTAATTTGCTT
TCTCTAAGGGAAAGGGGAAAAAATGTTCACATAGCTCCACTGCAATGTTTTTTATAATAGAGGAGAGATATTGTA
AATAGAGACTGCCAGCCAGTTTCCACAAAAAAACGAAGAGTTCATAAATTTGACATGTTTGAACCCATAAAGCAT
TTTCTTTGCTTGGAACCATTATAAAAGTAAGTGAGTTTTCAGGCTCTATATACATTTTAATTCCTCACGTTTTAT
ATTGGAGAGTTCGGTACAGACTGTCCATTACTGCACCAAAAGAATGAGTGAACTGTTACCTATAGGGAAAGAACA
CTTCTTCTTCCTGCTGTTTGGGAACCATCTCAGTGTGGCGTAATGGTTAGGAGTACAGATTCCAGATCCTGTTTC
TTAGATTTAAATCTTGACTCTGCCACATACTAGCTGTCTGACTGAACCTTGGNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNCAGTACTTACCTCATAGAGCTGTTGTGAAAAGTGATGACTGAATATGTAAAAGCAC
CCTAGAAACAGTGCCTGGCACATGCTAAGTGCTTTGTTCATTATTGTTGTTATTATGTAATTTTCTCTCAGACTG
AGAGCACTGTTAGTGACCCAAGTAAATTTATAGTTTTTAAGTACAGAGGAAAAATAAAGCCTATTTTTTGTTAAC
AGTCTTAATAAATAATAAAATGGAATAAAGAAACCAAGACCCCAAAAAAA

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FIGURE 5519

MTRKIYPLYLILISWLNLRIVETKFHKAILIFLPISFSANSKDMYHL

FIGURE 5520

AGCAACCCAGCGCTTCCATTGCTGACCTCTACCGACCTCTACCTGTGGTCCTTCCTCTACTGCAGCAGAGACACT
GTTTTCTTCCTTTGTTCTTCCAACCCCATGGCACAGAAACACTCTCCACTGCGGCCAAGGATTGCAGGAGAGGTG
GCATCAGTGATTCAAGACTTCTTTTCCTACCTCTTCAGTGTTTCTTTCAGTGATCTGAAGTTAAAGCCAGGGGGA
ATATCACAGAAGTGAAGTGCAATTCTCATCATGTCATATCAAGAGCACACACTAACAAACAACATGACTTATTGC
TGAATATTGAACNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNGTAAAGGTGAATAAACTGACACTG
GAACATTCAGGAACTTCTTCATGGTCATGGTCACCCAGCTAGAGTGTGGAAGCCAGGCTGTCTGATTCCAGGATC
TGTGTTCTTAATCCTATACATAAGGAAGCCATAATGAGTCAACCACTATTTTTAAGATTCACAGATGTTCGGGTC
CAATTCACCAGAATGCCAAGTTATACAGGGTTGTGGAATCAAAAACTGCAATTAGTAATAAAATGTGATGCTATC
TAGAAAAA

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FIGURE 5521

SNPALPLLTSTDLYLWSFLYCSRDTVFFLCSSNPMAQKHSPLRPRIAGEVASVIQDFFSYLFSVSFSDLKLKPGG
ISQK

FIGURE 5522

GTCACCGCGCCTCCGCTGCCCCCCTTCGCCCCGCCCCGCCCCCGTCCGGCTTCCTTGGTGGAGGCCGTCCTAGGG
AAACCAAACACTCCCAGGATGCCCGCGGTGTGACCGCCGGGGGCGGCCCGGGGCCGCTCGGCGGCACCTCCACAC
CCGCCCCAACGCGTTCTCTGGAGCTTTGGGCCTCAGGGCGCCTAGAAGGCGAGGACGCAGACCTGAAGGCGGCCG
GTGAGCGGGGCGGGTTCTGCTGGGTCGGGAAGAAAAATAATTCTGCAAGGTATTTTGTTTTTTATTAATTCGCGC
TTGGCCACCTCATCTGTAAAGAGATTCTAAAAGCAAGATCTGGAAAAGTGCTTCGTAGACTCCTTGACGGAGTTT
GCCTCCTTTGTACGCTGCGTGAACATGCCTCACCTTTAAGAGAGTCTTAAAGGTAAAGACACGAAAACACTTCCT
CCAGGGACCTTCCCGAAAACGTTCTGGCTCTCATCTGGTGCGGCATGTGTCCACTTTGCCTTTAAGGAGTTCTTA
AAGGCAAGGGCCTGGAAGTGCTGTTCCTGAGATGGATTCTCTTGACTTACCAGTCCACCACGGCACTTCCCCTTT
AAGGTTATTAAAGGTAAGGGGTGGACAGACTTTCTGCATTCAGATAATGAGCAGTGGCAACCCCTTTTGGCCAGG
GCCAGGGGGGCACCAGCAAGGGGCCACCCTTTCCCTTTTCAATAAATAATTTTTGTACTGCCTCTGTTCAAA

FIGURE 5523

HRASAAPLRPAPPPSGFLGGGRPRETKHSQDARGVTAGGGPGPLGGTSTPAPTRSLELWASGRLEGEDADLKAAG
ERGGFCWVGKKNNSARYFVFY

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FIGURE 5524

CAGTCTGAGGAGATGATGCCGCACTGCCGGGTCGGTTTACTACAAGCCCTCCTCGCCCCCGACGCCCACCACCCC
GGGCTTCCAGGTGCAGCACAGCCCCATGTGGGACGACCCGGGATCTCTCCACAACTTCCACCAGAACTACGTGGC
CACGTACGCACATGATCGAGCAGAGGAAAACGCCAGTCTCCCGCCTCTCCCTCTTCTCCTTTAAGCAATCGCCCC
CTGGCACCCCGGTGTCTAGTTGCCAGATGCGCTTCGACGGGCCCCTGCACGTCCCCATGAACCCGGAGCCCGCCG
GCAGCCACCACGTGGTGGACGGGCAGACCTTCGCTGTGCCCAACCCCATTCGCAAGCCCGCGTCCATGGGCTTCC
CGGGCCTGCAGATCGGCCACGCGTCTCAGCTGCTCGACACGCAGGTGCCCTCACCGCCGTCGCGGGGCTCCCCCC
TCCAACGAGGGGCTGTGCGCTGTGTGTGGGGACAACGCGGCCTGCCAACACTACGGCGTGCGCACCTGTGAGGGC
TGCAAAGGCTTCTTTAAGGTGAGCAATGGCGGGAGCGGAGTAGGCAGGTAGGGAGCCCCTAGTGCCCGGGACCTC
GGAGTGTGCCCTCTGCCTTGGTGCCAGTAGCCCAGCCCCAGCTCTCCCGGGACTGCCCAGCTCTCCGGGGTCCGC
CGAAGCTGCCCTGCAGGAGACCATGGGCTGCGGCGGGGACTTCCGGGTGTCTGAGAAAGGGAAGCAGAAAGACTG
GGAGGCCAGGGTCGCATCCCCCTCGCATTCAGCCGACCCGGCTGGCCCCCGCCCGAAGTTGCTGGAGCCGGAGTT
GGAAGAGGGTCATTTGCATGTGCTAGGAGCTGTCTTCCCTGTTCAGAATGAAATTGGTTAGGACAGAGAACCGTG
TCTGAGCTAACCAAGTGGAACAGAATTCCCTATGGTCAAATTAAGTGATCTCTTTATTTCGCCATCCTGATTGAA
TAATCTTATCATTTTAAATAGAGAAGGTCTCCAAGGAATGTAAATAATATGAATGCCCACGGATTTGTATTTACT
GAGCGTCTCCTTCTCCTTCTCTTGGCATATAAAACACAGCAAGGAGCGGCAAGGTTAGCTCAAATGTTAACGCTA
TCAATTTTCTTCTGTTAAATGCCCTGGGGGGAGGAAAAAAGAAAAGACAGACAGAAAAGGAAGAGAAAAAAATAAA
ATGGAATTGTGTGTATGTGTTTGTTTGTGGGGAGGAATCGTAGACCCCAGTCACATAACAGAAATTTTCTCCGAG
TTGCCTGATTTTCAAAAGAAGAAAAAAAATGTTGGTCTATATTGTCTCCTTTTGCAGCGCACAGTGCAAAAAAAT
GCAAAATACGTGTGTTTAGCAAATAAAAACTGCCCAGTGGACAAGCGTCGCCGGAATCGCTGTCAGTACTGCCGA
TTTCAGAAGTGCCTGGCTGTTGGGATGGTCAAAGAAGGTAGGCTGAGGGGAGCTGCCGACCCTCCAGTTTGCGCC
TTTAGGAAACCACTGCTCATACTCCAGCATCACGTTCCACTTCCCGGTGCTGGGGATCTCCGACTCCCCCTCAGT
ATGGCCTCCAGGACCCTGCAGCTGCCTGCTTGCCCGGCCTTCCCTAGAGAAAGCCGCCAGGCCCTTCTCTCCTTT
AACTATACGACCCATTTGGAGGAAGACATAAAATAACCCCGCATTTTTTAATGCTTCTAGTCAGTGAAGGCTTTA
CAAGCACTGGGGCCCTCAGTCCGCTCAGCCTGGTGCCCCGCGGCTGCGGCCTTCCCCGGGGAGGGACCGAGGCAG
CAGCTGGGCCTGGGCTCGGAAAAGCGGCGCTAACAGGGCTCTTCCTTTGCAGTGGTTCGCACAGACAGTTTAAAA
GGCCGGAGAGGTCGTTTGCCCTCGAAACCGAAGAGCCCACAGGAGCCCTCTCCCCCTTCGCCCCCGGTGAGTCTG
ATCAGTGCCCTCGTCAGGGCCCATGTCGACTCCAACCCGGCTATGACCAGCCTGGACTATTCCAGGTTCCAGGCG
AACCCTGACTATCAAATGAGTGGAGATGACACCCAGCATATCCAGCAATTCTATGATCTCCTGACTGGCTCCATG
GAGATCATCCGGGGCTGGGCAGAGAAGATCCCTGGCTTCGCAGACCTGCCCAAAGCCGACCAAGACCTGCTTTTT
GAATCAGCTTTCTTAGAACTGTTTGTCCTTCGATTAGCATACAGGTAATAAGGGAGGGAGGAGACAATCCAGGGA
GGCTGTNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCCCAGAAGC
CTTGGATGAATGGAATGGAGGTGGGATAGGGGGCGTTCTTGATTGTTATGAAATTAAACCCTTTCAAGGTCCACT
GGTCTACATTTTATTAACTCTTCAGTAATTAGGTGACTCTTAAATCCCTCATTTATTGCTCTTCAAGTAATTAGT
TGTTTAGCTTTTCTCTCTCTCTTTTTCTCCCCTCTCTCTCTTTGGTATTAATTGCAGGTCCAACCCAGTGGAGGG
TAAACTCATCTTTTGCAATGGGGTGGTCTTGCACAGGTTGCAATGCGTTCGTGGCTTTGGGGAATGGATTGATTC
CATTGTTGAATTCTCCTCCAACTTGCAGAATATGAACATCGACATTTCTGCCTTCTCCTGCATTGCTGCCCTGGC
TATGGTCACAGGTCAGTACTGCAGGCGCAGGGCGCTTCCCCTC

FIGURE 5525

QSEEMMPHCRVGLLQALLAPDAHHPGLPGAAQPHVGRPGISPQLPPELRGHVRT

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FIGURE 5526

GCTCCGCCTCCGCGGGACCACAGAGCTGGGATAGCGCGCGAGGCCCTCGGTCGGACGGGACGCTCGGGATTCAGG
GACTGCCTCGGCACACGGGAAGTTGCCCTACAGGCGCGGGAGAAAGCGCAGGCGGCGGCTTAGCAGGGAGAGGCA
GGCTGCAGTGCACATTGGGTCAGGCACACGCGAGGGGCAGCCCCCGAGGGCCGTCCCAGAGTCCCCCGCGCCGCC
GGGGTCCTAACGGGGTGCACCGTCTTCCGCCGCACGTGGATTCAGCGCGATGCCCAAATCCAAGCGCGACAAGAA
AGTCTCCT**TAA**CCAAAACTGCCAAGAAAGGCTTGGAATTGAAACAAAACCTGATAGAAGAGCTTCGGAAATGTGT
GGACACCTACAAGTACCTTTTCATCTTCTCTGTGGCCAACATGAGGAACAGCAAGCTGAAGGACATCCGGAACGC
CTGGAAGCACAGCCGGATGTTCTTTGGCAAAAACAAGGTGATGATGGTGGCCTTGGGTCGGAGCCCATCTGATGA
ATACAAAGACAACCTGCACCAGCTGTCCTCACTCCTGATTTGTAGGTCAGCAAAAGGTTGAGGGGTGAGGTGGGT
CTCCTGTTCACCAACCGCACAAAGGAGGAGGTGAATGAGTGGTTCACGAAATACACAGAAATGGACTACGCCCGA
GCTGGTAACAAAGCAGCTTTCACTGTGAGCCTGGATCCAGGGCCCCTGGAGCAGTTCCCCCACTCCATGGAGCCA
CAGCTCAGGCAGCTGGGCCTGCCCACCGCCCTCAAGAGAGGTGTGGTGACTCTGCTGTCTGACTACGAGGTGTGC
AAGGAGGGCGATGTGCTGACCCCAGAGCAGGCTCGCGTCCTGAAGCTTTTTGGGTATGAGATGGCTGAATTCAAG
GTGACCATCAAATACATGTGGGATTCACAGTCGGGAAGGTTCCAGCAGATGGGAGACGACTTGCCAGAGAGCGCA
TCTGAGTCCACAGAAGAGTCAGACTCAGAAGATGATGACTGAAAGGGACTCGGGACTGAAGGTCTCCTGGAAGCT
TCTGGGTCTCACTGGACCATCAGGACTGCTGCCGCCCCTCTGGAGAGAGCAGCTTTTTATTTGTCTGTAGACAGG
GAACATGATGGGCACTGACCTCCTGTAAAGAATAAAACTGTGGGCCGGGCGCGGTGGCTCACGCCTGGCCTCCCA
GCACTTTGGGAAGCCGAGGTGGGCAGATCATAAGGTCAGGAGATTAAGACCATCCTGGCTAACACGGTGAAACCC
CGTCTCTACTAAAAATAGAAAAAAAAACTAGTTGGGCATAGTGGCATGTGCCTGTAGTCCCAGCTACTCAGGAGG
CTGAGGCAGGAGAATCACTTGAACCCGGGAGGTGGAGGTTGCCGTGAGTTGAGATTGGACCACTGCTCTCCAGCC
TGGGCAACAGAGTAAAACTCTGTCCCAGAAAAATGAAAAAGCATACAACCTTGCAGGATGTCTCTCCTGGAGACA
GCAAGAGGGAGAGGAGGGAGAGGGCTCTTTCTTAGAAAAGAGGCCTTTGGNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNCATTGAATTCTGCGTGGATTGCCTCAGTTTGCCTTGTCAGCCAACTTCCACTGG
CTGCCTTGGCACTGCCATGACAGCACAGCTCCACACCAGAGCTGGGGTTTCTCTTCAGTCCTGGGTACCCCTTGG
CAGAGGGATTTGCTGAGGAAAATTAGGTATCCTTCCTAGCCCTCCACACACTTCCAAACCAGGGCTGCGGATCTG
ATGGATGCCAGGAAGACAGCCTTGGGCTGAGAGTGACATCACTGCAAGAGTTGAGAGCCAGCGTCTAAAGTGTCC
ACGGCATCCTGGGAGGTTTTATCCTTGGTGACTCTAATGGTAGATTTTTGTCCACCTTGTTCTATTTGCTTTTG

FIGURE 5527

SASAGPQSWDSARGPRSDGTLGIQGLPRHTGSCPTGAGESAGGGLAGRGRLQCTLGQAHARGSPRGPSQSPPRRR
GPNGVHRLPPHVDSARCPNPSATRKSP

FIGURE 5528

CACACAGGGAGTGTGGATCTGGGCCAGTGGTATGAGCACGGTGCCAGGTGGCTCCCGCCACTCCCTGGGGATCCA
AGTGCGGGGTGGCTGGGGTGTAACTGGGGGAGAGGAGGAGAGCCTCACTGTCCCTGTCGCTGACACCTGGCAGGC
GGGGAGCTTTAAGGTGGCCACCCAGGAGAGGAACCCCCAGAGAGCCCAGATGAGGCTGCGGAGGCAGAAGAAGGG
TGTGGTCCCCTTCCTGGGGGATTTTCTGACTGAGTTACAGAGGCTGGATTCGGCCATCCCGGACGACCTGGATGG
CAACACCAACAAGAGGAGCAAGGAGGTCCGAGTTCTGCAGGAAATGCAGCTGCTCCAAGTGGCTGCCATGAATTA
CAGGCTTCGGCCTCTTGAGAAATTTGTCACCTATTTCACAAGAATGGAGCAGCTCAGTGACAAAGAGAGCTACAA
GCTGTCCTGCCAGCTGGAGCCCGAAAACCCGTAGGCTGGCAACATCCTGCAGTGGCTGGGAACCCACCGGGATGC
TGGCCAGAACACCGGCTCTGCACCATCCCTCACCCAGACCGTAGACACCAGGGAACCACATCTAGGAGGCTGGCA
GCTCAGCTGCATCTTGCCCTGGATCCTCATCACCAACTGCTCCTGCTGGCCAGGATCAGGCCATGGGACTTTTGT
GAGTCAGGCGGGAGACCATTTTATGTTTATTTTCTTTAGTGTATAAGTAAGGGTTTTTTCTTAACTTTCGTTAAA
ATAAAATTTTAAAAAACCAAAAAAATCTATGTCGGGTGCGGAGAAAGAGGGTAATGAAATG

FIGURE 5529

TQGVWIWASGMSTVPGGSRHSLGIQVRGGWGVTGGEEESLTVPVADTWQAGSFKVATQERNPQRAQMRLRRQKKG
VVPFLGDFLTELQRLDSAIPDDLDGNTNKRSKEVRVLQEMQLLQVAAMNYRLRPLEKFVTYFTRMEQLSDKESYK
LSCQLEPENP

FIGURE 5530

TGAGCCACCGCGCCCTGCCAAGAAGAGTTCTTTTGCATACCCTTTACTCAGGTCCTCTCATGTTAACGTTTTACA
TAACTGTAGAACATTTATCTAAAGTAAGATATTAGCCCAGAACAATACTACTAACTGAAGTATAAAACTTATTTG
AATTTCAACAGTTTTTTTTTCATTTCTTATTTTCCTTTTGTGTGCTCTGTTTATACCATGATCCATGATTTTTTT
AAAATCATGATTGTCTTTTAAAGATCTGTGTGTCTCTGTTTTGAGTTTTTCCTGTTTATTTTGAAAAGTACTGTT
GGTCAAGATAATTGGTCAATAATCCATGTTGGTTTTAACAAAAAGCATTTTAACATTAAAAATATTACAGTATAA
AATAACACTCTGTGCTTTAAATTGAGGTTTTATGTCATTTTAGCAGAATTATAATATTTCTGATATACTCATGTT
TGACAAGTTGAAACAGATTTGTTTCTTAAAGGAAGGTTTAATATACAAAAAAAGGTAATCTTAAACTTACGAAAA
AGTAAATTTTACAATTTGAGCATTACTAGATGTTTAGTTTGCATGAACTCATAGTTAGAAATTCTGCAATAGGAA
TATCTACAACCGGCTGATTTGGAATTTGAAATTATAGTGTTACATGTATACCTATCAAATTAAAATTAAGGAAAT
ACAATAGCAATATATAGAATGAATGTAGTAACAGAAATTAACTCTTTACTGCATCATTGAACTTATTGTTAGTTA
CAGGTTTAAAAGAAGTTCATTTAACATCCAGTGTGTCTAATTCTTCTGGAAGTGGTGTAGTACCATTGTTCTTCT
GGCATTTTTAAATATTAAACCTTTTTGGATAGATGGAAGCCTTATACAAAATCTACTTTATTTTAGCAAGGATTC
TCTGTCCTTTTGTATAGTTGGTACCTTACTAATTTAAACTCTAATANCAATCTAAAGAGAAATTTATTATGCAAT
TTGNNNNNNNNNNNNNNNNNNNNNNNNGGAATGAAGTTCAGAGGTAGATCCTCCTGGAAGAAAGAAAGCAAGCG
AACTTTTTAAAGAAAATTAGACTTGAATATTTAAGAATGTCTTACAGAGAAAAGGCCAACTATAATACTAAGCTA
AAAGTTATGAAAAATTAATAGGTTCTTTTATAGAGCTAAGAATGATGAAACCATCAATACTTCCTTCTTCCTAAA
AATCCAGATCAAAACTTCAGGTTAGGTTTCTAAGTTTAGGACATGAATATTATTTTTTTCTTGAAAAGAAGATGA
GTATATGTGTAATAAGACAAGTAGAACTGAGAGA

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FIGURE 5531

SHRALPRRVLLHTLYSGPLMLTFYITVEHLSKVRY

FIGURE 5532

AAAAAAAAAAAAAATTCCTGACATCGCTATGTATTCCCAACTTTATCATTTGTCTGCCTGTTTAGTTTTGACTTA
TGNNNNNNNNNNNNNNNNNTGTGGACATGTAGTTGACGGAAATCGTGAAGGAACTTTAATATTTTATTTAAATT
TCCCAAAACTAATCATGCCTTATGTGACTAATCTTCAGTGATAATATTTCATCTACTGATATATTTTCTTGAGGT
GTGTAATTTTCAGTATACCTTAATCATTTGGTATAAAAAAGAGAGAGGTTTTTGATATATGAATGCTGTTCTTGT
AAAAATCAATCTTGACACTTTATTTTAAACTTTTTATTGGTAATGACAGTGGGTTTTGTACATCATGATTTTCAA
TTTAGGATATCTGTCTAATTTGTTTTTTCAGAGTAACTATATTGGAATTCAATAAAAATATTCAAAATTTTTCTT
AAAAAAAATGAAAAAAAG

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FIGURE 5533

KKKKIPDIAMYSQLYHLSACLVLTYXXXXXXXWTCS

FIGURE 5534

GAGAACAGGGCTTTGTCAAGTTTCCATTGCCCTCAGTGGTGAATGAATAGACTCCCTCACCTTCTCTGTACCTGG
TCTGGAATTTTGCCTAACAGCATTAACATCTAACTTAATGACAAGGAGGAAGGAGATTCTTAGAGGCAGTAGAAA
ATGGTCAAGTGTTCAGAAGATGGCCTTTCATTATATATCTTTAGTTCTTTCTGGCAGATTTGGTTATACTGTCTT
AATCAGGTTGGGTAAGTAGCCCAGGGTGTCTTCTCCATTCTTTCTGTATGCCTTATCTCAGCATTACCATCTTCC
TAGGCTTCAGGATAGGAACTCGGTCATCTTTGACTTCTTTTCTTCAAAGTCAGTAAGTTATCAAGTCCTCCTGAT
TCTACCTTTCTGTGAATGGTTTCCTGAATTCATCCCCTGCTGCTTCAGTCAGACCCTCATAATCCTCTGCCTTTA
GCCGTCTGTTTGGTTTCTACTTTGTCTCTTCTCACCTTCTCACCTAAAAA

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FIGURE 5535

MTRRKEILRGSRKWSSVQKMAFHYISLVLSGRFGYTVLIRLGK

FIGURE 5536

AAGTTATAAAATGAGAAATTAATAAAAGGATTGCTGGGAGGACATGCACCTTTTAAATTTTGATATTACTGCCAA
AATTGCCCTTCAAGAGTTTGATAGTATTTTTCCATATTTTTCTTTTTAATTTTTGCTAATTTCGTAGACAAAAGA
TAGTCTCTTGTTAAAATTTGTATTTCTTTATTAGTGAGGTTGAATGTCTTTTTATGTTAATTGACCATTTGAATT
TCTTGTATGACTTTTGACTCTTCATATGCTTTCTTCATTGTTTCTTTTCTCTTTGGTTTGTTGAAGTTTTTTTGC
ACATTCCCTTAAGTTTGGCAGTCTAATCTGTATCTTTGGCATAAATATTTTAAAACAAAAAATGCT

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FIGURE 5537

MTFDSSYAFFIVSFLFGLLKFFCTFP

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FIGURE 5538

TAGGAGGCCCTGGTTCACAGAGCCCCTCCCCAGCTTTGTAGCTGCCACCGCTTGGCAACTGCCCTTAGGTGCACA
GCAAGACTGAATAACCACAGTGTCCCTGCAGATGGGGGCAGTCCTGTGCACGGCCTCCATGAAACCCTCACTGTC
CAGCTCCCGTCCTGTGGCTCCACCAGCTTCAGATTGCATCTTTTGTCGTCATGCTGCTGCCTCCACATCCCATTT
GGGCAGCTCGCCCTCCAGGATAGCATCTGCATTCTGGGAAGGAAAGCTGAGAAGGGAAGGTGGAGGAGGAAGCGG
TTAGTGCTTAGAGTAGCAAAGCNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCAGGGCTGCGTGGGGATTA
CATGAAATACTCCAAGTAAAGCCCTAAATGAATACTTGACCCACAGCAAATATAATTAATATTAGGAATTATCAT
TGTTTTAGTAGATGTGAAAGAAAGGCTGTTATCAAACTATAAGTAATGTATACATGCTAGTTACCACTGTGAACA
CAGGACATGAAATAAGTATCCAATTAGTGATAATATACAATGAATTGTGACTGTGCTCCCAGAGAAGCCAGGTGA
AGGCCAGGGGAAATTCAGAGGACCATCTCTGGCTGGGACATCAGGGCAGGCTTCCTGGAGCAGGAGGTCCCTCAA
GACTGGAGAGGACACTTTCAGGAAGTCAACCAAGACTGAGGATGTGACTGACATTCCTGGAAAATATCAAGGTGG
AATTTAGTATCTTCCAGTGTTCTTACATGGAATCATTTGTTCATTTCTCCTGTGGAGATTAAAAAACTACAAACC
TCACATTCTTTACCATAAAAATCTCCCATTTTTAAAATTCTTATATTTAGTCCTAGATTTCTGTGAGTCTTCCTC
ATTTGCCCCTGGCTATCATCATCCTACATAAAATCAGGGATGGTTGGCATCCTAACTGGCAGCTACTAGGAAAAG
GAAACTGAGAGAAGATAGGATTCTAAAGCTGCCACTGCCTGGAAAATCTTGTTAGATAATGATACAAGTTAGGAG
CATTGATAACAACACGTTTTTCACTTACTGAGGTCTAAGTTTTGGGTCATCCAATTGTCATCCTACTCTTTACCT
TGTCACCACAAAAATGTTCTTGCTGGGTGAGTCGGAATGTATTAATTACCTATCAAACAATTGAATATTATATCA
ATAAATTATGTAAATATTAATATTTTAATAAATAGCAATACAAATTA

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FIGURE 5539

MKPSLSSSRPVAPPASDCIFCRHAAASTSHLGSSPSRIASAFWEGKLRREGGGGSG

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FIGURE 5540

GCCATTTTGATTGTCAGCTCCTGATTCTGCAGAAAACACGAAACTGAGCTGTACAAAGATGCTGATGAGGGGCTG
CAGCATGCAATTCACTTCACCAGCAGTCACTAAGGTCTGATCTCTTTTCTAACCATACCTGGAAGATGGAATGCT
GGACCCAGGAAGGCTTTGACATATCAATGCACCAGGGATCTTACCAAACTAAATTTTAAGCACTTATAGCTCAAG
ATTCTCCCTCTGAGATGAAACATACTTCCACCCTGTC**ATG**TGTCAGCTTCAGAAGATATCAATTGCTCAAGAAAG
TGTTGGACAAGCAGAAAAGCACACTGAACATTTCTGGACTTGTGAAAGAGCTCTGAATATGGATCTCTCAGGGAT
ATTCCATCCCCACCAATGCTTTACCAATGCGAGAGCTGGCCAGGCTGAGACATTTAATGATAACATGGAACAATT
TATTCAGGAAGATAGTCAACTACTCATGTGGCTTTATGATTATAAAACCCAC**TGA**AAATTGGGTCCCTTGATTCT
CTTGATTTTTCCTAAGCCTTACTCCCTAAAGTCTCCAATTTGATGAGGTATTTGATACTTGATCTCTCCTTGAAG
TAAAATTTGGAGCAAAATATATTGGACTGGAAGGCCTGAGACCTCGATAAGAAGAAACATGAACCCCAGAGCCAC
AGGTCAGGAGGTTTTCATTATAATACTATTGCCCTCTTAAAACAAATACTCCAATTGCCAAGGTTTCCTCACTTA
ATAATTTATCTCATATGTGTTTTTGAAAGTTACTCTGAATACTTCTTATATGTATAAATAAGTTAGTTAACAGTA
ATTAATGCAGATATTTAAATAAATACAAGCAGGCAGGTGGGATGATGACTA

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FIGURE 5541

MCQLQKISIAQESVGQAEKHTEHFWTCERALNMDLSGIFHPHQCFTNARAGQAETFNDNMEQFIQEDSQLLMWLY
DYKTH

FIGURE 5542A

AAATATTTGATATTTTTATTGGAAATGTTTTTGTTAGTTTGAGGGGAAGGGTATGAAGACAGATCTCAAGGTAAA
GTCAGAGAGGGCTGTCATCAGTATGCTGGGGAGTTTAGGGACAGGAGGCATTGGTAGGGGATTAGATGTAGCAGC
AGTCAGGCTGGGATCAAGATGCCTGGGGGACATCTTGATCTTGGCCTTTCAGGGCAAGTGGGAGGCTAGAAAGGT
GGCTAGGAAAGAACAGCATTCTTCAGGTAAGGGTATAGACTTGGGATGTGAGGCGTTATGCTGAAAGGTTCTGTC
ACGAGGGGATCAGAGGACAGTGGGGAAATTGGGTGGGTTATCTAGCCTGTACTGTCTGCAGGTCCTGAAATTTGA
TGCTGTCATAGTCTTTGCAGTGGGTCGGTTGGAATGATTCTGGGGGCAGAAGCTCAGAGCCCCTTAGTAGGAATG
GAGGCGGCCCTTCTGCTGCCACTGCTCAGCCCCCTCCACTGCATGACGAAGGGTGGAGGAAATTCCCAGCAACAT
ATGGCCCAGGCCTTGCAGCAGTGTGGAGGTCCAACGAAGGAGCTCCCTGAATGGCAGAGACAAGAGGAAATCAGA
TGATTTGGAAAACTTGGGAGGAAGCCATCAAGCTGGGAGATGAGGACTTTCCACAAGCAAGAGCTAACTAGGGGT
AGGTGGGTGCAAGAGGACGAATTATGGGGACTATCCAACTGTAGGGGATGGGGCAGTATGACATGTTGATTTCTG
ACCTGAGTACTTTCTTTGGGCCAAGTCCTTGAAAGTCACAACTCATAGAGTAGAGCCCGTAGAATGTGGCTTTGA
CATTCAGGCTGCCAAAGAGGTCTCGAGGGTTTTGCTTGTACACGTCAAAGGTGAATCGGGCGATGTCCTTGCTGT
GCTTGGGCCTCTCCCGTCCCAGGCCATATGACAGCACTCCACTCTGTAGGACACCCTTGTCAGTGCAGTAGATCC
TCATACCAGACACCCACCACTAATCTCCATCAGCACTGGGTCAGACCCTCCCTCGCTTGGACTTTCTGTCCACTG
TGTGACATCCTTGACAATTCCACAACTCCTCCTGCACCTGGTCCCCAGGATCAGGGTTAAGCTAGAGAGGAAGCC
CGGGAAAGCTCTAAAGGACAGGCATTGGAAGCAGCCCCAGTATAGGCCTCTTACCCTTGTAGGGCTCCAGCTCTG
ACCAGACTGCAACACCATCAGGCACGTGTCATCCTCCAGCAGCTGGAAGAAGTCCTCACTGTCCACTGCAGTTCC
ATCCTCCTCTAGCACCAGGGTTAGCACTCCATTCAGCAGTAGGGTCTCCAATGCCTGCCCAATGGCAAGAAGCAA
GAAGGGCAGGTCTTATCCCATGCCCCTTCCCTCTTTAGCTGCCCAACATCCATCAGTTGGCTCTAGACATTGGTC
GATGTCCCACTTTGACTTTCCGGCACTTTGATACCTCCTAAAGGTTGCAGCTCTCCGTGTTCTTCAGTTTTTGGG
GGATCCTAGCTAGAGGCTGACCTTTTTCCTCTTTGCTCCTACCATGTCATTGGCATCTCCCCTTGCTCCCCTCCA
AGTCACTTCTGGTTTGGAATTGGAAAGCAAGCCAGGTTCTCACGAAGTCCACCCTTCTGTCTTATCTACAATGCT
GCACCTCACTTCCCACACCCTCAAGAGTTCTCCAGAAGTGTTTTCAGTAATAGTGTTTAACCTTTTTGAGTCCTT
ACTCTGTGCCAGGTATGAGGACTTTACCTACATTATCCTCTTACTCCTTTCAACAACCCTAGGAGGTGATGTATT
ATTATTGCCTTTTTATAGTTGAAGAAACTGAGGTTTTGGTAGGTTGAACAACTTCCCAAGGTTTGACAGGCAGGA
AGTGGCAGAATCAGAATTTGAACTTGATTTGTCACACAAATCACCTTTCCATACTAGCTTCTGAATTCCGTCCCT
CGAACTCTCCCTATCTCCTGCTAACCCCTGCTCCCATAGAAAAGCTCACTAGGTGGAAAATGAACAAATTGACCA
GAGCTCATTAGGCCCACTCCGCTGCTTTTAGCCCTCAGAGGGAGGGGCAGCTGTGTGACTTCAGCCCTCTGCTCC
ATCATCACAAGTTGCCACTGTTGTGGAGCCCCTTGGCTACCCCTGCTATAGGAACCGAGGAACTTGGCCTACTTA
CTTTGGCTAGCAGCTCCTGGCGGGTGGCAGCTGTCAGGCCTTTCCGGATGGTCCGCTTGTGATCACAGACACGGA
AAGGTCGCTGGGGTGGTGGAGCTGAGGTCCAGACCCTCCGTCCAAACTCCGAGCTTATATTAGATACTGACCTGG
TAGTTGAGAAGAAAAGTCAAGAAGGGGCGAGGAGGGGCTTGGTGAGTGTAAAGGGCATGATGAGGGTAGAGTGGC
TAGAGGGCTAGGGAGGGAGAGATCTAGGTTTATCGATTAGGGATGAGGGAGAGACCATGGAGTGCAGGTGGGGGC
GGGTGGCTCAGGAGCTTGACAAGCCCACTGTGGAGTGGGGAGCAGGAGAGGAAGGGGTACTGGTTAGTCTCCTAG
GGGCTGAGTGGAGTATTGTTGCCCTGCCTATATCCCCTAAAGGTGGAGGGTAGAGCGGAGGGTTAGCAGTCACCT
GAGTAAGTCACTGGGGTTCAGAGCTGAGAGGTACTCCATGGTGGACCGGAGAGTTCCTTCCCTGGAACTTCTGGG
CTGGGTGGTTCTCTCCTGTGCTGGGGCTTTAGTGGTGTTTTCTGTTACAAACCTGGGATCTCAGCCCAGGACAAG
GTGGGAATGAGTCAAGCCTGGACTCTGGCCCCCCTGCCTGGCCAGTAAGAAGGGCAAAGTCCAAGGGGAGGGATG
AGGGAGGGGCCAGATGGGGTCCTGGAGGAAGAATTGCCTGGCAAAAGCCATTGGAGCTTGTATGTGTGTCTTTGG
TGATGACATGTGTTGTGAGGGTAGATGGGAACCATGTAAAAGGATGAAATGTGACTTCTGGTGTTTTTTTATTTC
TATGGAGGGACTTTCTGGGGACGGTTTCTGGCTCTCAGGCTCTGAGAAGCTGCAGTTTATGAGTGGCTCTGTGTG
TGCTGCCACCTACTGGAGAAGCCATAAGCTGCAGCTTTAGGAAAAGGGAACCCGGGGCAGAGTGTGGGGAAGTGG
GATGGCAGCATGGCAGGGCTTTGGAAAATGAGAGGTGAGAGTGTGTCCAGGAAGGGTGTAAGGAGAGGATGGATC
CTGATACATGGATTCAGGATCATTAGGGTCCTGTCTGGGACACTGGCCTTCCTGCTTACCTGCTCTTTCCTTCCT
CCTTGGTCGGAGGAGGGGCTGGCTCACTGCTCTGGCTTCATTTTCCAGAGCTGCCTGCTGCAGTCACACTTAGGT
CATCTTCTCTCACTTTTCTCCTTTTGCCGATTAGTGGACGTGACAGAGATGTGAATGGGGCAGGGATGTCCTTTG
ATGGCATCAAGACTTTAGCTTCTGGTGCGCTGTGTCCCAGCTCTGATTTCAGTTGCAGCCGTGATGGACAGTTGC
ATGGAAGCTGAGACTCTCACTGACAGTGAAACCCTCAAATGAACACAATCCCTGCTTTCCTGCCAAGGATCCTTG

FIGURE 5542B

TAGGGTCCCCCAGCTTCCCCACTTTTTTTCTGTGTCCTGACAAAGAAACACAGAGTAACTTGATTGCCCTGTGAC
CTGGCCAGTTGCATTTCCCCTGCAGGCTTGAGCCCAAGCCAGAGCCTTGAAAAGGTATTCAGGTTGTTGCCCAAA
ACACTGAAAAAAACTGGCCCTGGCCCTGAACCAAATACCTTGAACCCTCGTAAACTCCATACCCTGACCCCCTTG
TTTTGGATATACCCAGGTAGAACAACTCTCTCTCACTGTCTGTTGTGAGGATACGCTGTAGCCCACTCATTAAGT
ACATTCTCCTAATAAATGCTTTGGACTGATCACCCTGCCAGTCTTTTGTCTTGGGCAATCTATACTTTTCTCAGA
GGTTCCCAAGGCCTACTGAAGGGACTTAACATACTCTTAATGGCTTTCCTCTCTCTTGTTTTACCTTATGCCCTC
ACTTCCTGAGTTAACCTCCCAAATACAGGATCACCTGTACCCAAGCCCTTAGCTCAAGAATACAGGATCACCTGT
ACCCAAGCCCTTAGCTCAAGCTCTGCTTTGGAAGAACCCAAACTAAGACAGTGCTCCTGGTGCCCTCCCCAAGCA
ACCTCAAGTTCTGGCTGTTACTTGAGCAGAGGCCTTTCTTTTCCCTTCCCCCAGCTCTATCCATCTGCCAGGCCC
CCCTCAAATCTCTTCATTTCCAAGTTTTGCTTGACTTTTCCAAGAGGAGAGGGCTGCTTCTTAGTATGTCCCTAC
TCATCCTTTCCTTTCTTGTCTTGTATCCTGGTGCAGCCTGGTAATGGGGCCTCTTCATGGTTGTGTGTCATGACT
CCCTAACCATTATGCCTCCATGCATCCCCTGTTCCTCCTGGAACCTAGCACCATGCCTTACATGGAAAAGCTGTC
ATTGACAGCCCGGTGAGAGCCCTGAGGGTGGAGTGACTGGGGCAGGGCCTGAGGCAAGAGGTGGGAGGAGGTAGG
AGGCCAGGGGCTCAGCCGGACCAGGAGACTGGAAACAGGCAAGGATAAGGCAGGTGGGGGACTGAGTTGTTTGGG
TCACCTCTGCAGGCCAGAGAGACCAGGCAACATACACACTGCAGAAGGTGGGCTGGGAGGATGGGGCCAGAGCTG
GGGGAGGGATGAGAACAGAAGCAGGACCAGGATTCAGCAGAGTCCTCCTATTTCCTTCCACCACCAGGGAATCTT
ACTGCCCCACTTCAGCTTGTGCTGTTTCCTGGCAAGGCAGGCTCTCACATGCCTGGACGCCTGGGTGCGTTGGTG
ATGGGAAGGAGCAGGGTGAGGGAGGGGCCCCAGGAGAGGCCCAGGATGAGCCTCATCTTGTCCCTCCCCATTCTT
GTCTTACCCTCTGCAAATGTGATAGGCACAGGACAGGAGTAGGCACCTCGCCTACTGCTGCTTAACCTTTCAGCT
TCTCCAGGCCCCCAATCCTGCTTGCTCCCAGCTTGGTAAGTAGATCTGTGCACGTCCCTTTACACCCCACCATCC
AGTTTTGCCCAGATGTGCTAGAATGGGGCTGGACAAAGAAGGAGGGGCCAGACTAGAGGAGTGGTGGTAGAGATA
GTGACAGCCTGGGGTGATGACTTTATGCCTGTTTACCACTGAGCTCTGGGAAGGAGGCCAGGAGTGGGGCAGGTC
AACTGACTGGGAGCAGGGGATCTGGGTTCCAAGAAGGAGTTGTGTTTGAGGTGGGGTCTGGGTCCTCGTGGAAGT
CAGGACTCCCAGGCAGAAAAGAGGCAGGCTGCAGGGAAGTAAGGAGGAGGCATGGCACCTTCTCATCGGGCATCA
CAGGTGGGGTTTTGCCCCACCCCTGAACGCCCTCTGTGGCGCCTTCCACCCACCTGTAGGCCCAGAAGGATGTCG
GTCTGCTACCGTCCCCCAGGGAACGAGACACTGCTGAGCTGGAAGACTTCGCGGGCCACAGGCACAGCCTTCCTG
CTGCTGGCGGCGCTGCTGGGGCTGCCTGGCAACGGCTTCGTGGTGTGGAGCTTGGCGGGCTGGCGGCCTGCACGG
GGGCGACCGCTGGCGGCCACGCTTGTGCTGCACCTGGCGCTGGCCGACGGCGCGGTGCTGCTGCTCACGCCGCTC
TTTGTGGCCTTCCTGACCCGGCAGGCCTGGCCGCTGGGCCAGGCGGGCTGCAAGGCGGTGTACTACGTGTGCGCG
CTCAGCATGTACGCCAGCGTGCTGCTCACCGGCCTGCTCAGCCTGCAGCGCTGCCTCGCAGTCACCCGCCCCTTC
CTGGCGCCTCGGCTGCGCAGCCCGGCCCTGGCCCGCCGCCTGCTGCTGGCGGTCTGGCTGGCCGCCCTGTTGCTC
GCCGTCCCGGCCGCCGTCTACCGCCACCTGTGGAGGGACCGCGTATGCCAGCTGTGCCACCCGTCGCCGGTCCAC
GCCGCCGCCCACCTGAGCCTGGAGACTCTGACCGCTTTCGTGCTTCCTTTCGGGCTGATGCTCGGCTGCTACAGC
GTGACGCTGGCACGGCTGCGGGGCGCCCGCTGGGGCTCCGGGCGGCACGGGGCGCGGGTGGGCCGGCTGGTGAGC
GCCATCGTGCTTGCCTTCGGCTTGCTCTGGGCCCCCTACCACGCAGTCAACCTTCTGCAGGCGGTCGCAGCGCTG
GCTCCACCGGAAGGGGCCTTGGCGAAGCTGGGCGGAGCCGGCCAGGCGGCGCGAGCGGGAACTACGGCCTTGGCC
TTCTTCAGTTCTAGCGTCAACCCGGTGCTCTACGTCTTCACCGCTGGAGATCTGCTGCCCCGGGCAGGTCCCCGT
TTCCTCACGCGGCTCTTCGAAGGCTCTGGGGAGGCCCGAGGGGGCGGCCGCTCTAGGGAAGGGACCATGGAGCTC
CGAACTACCCCTCAGCTGAAAGTGGTGGGGCAGGGCCGCGGCAATGGAGACCCGGGGGGTGGGATGGAGAAGGAC
GGTCCGGAATGGGACCTTTGACAGCAGACCCTACAACCTGCTGCCCTTCCCTGTCCCTTTCCACCCCCCACCCAC
CCTCCAGAGGTCAGTGTTCTGGGACATTTGGGGACCCTTCTTTGACTAGAGTTTGGATCTGGCTGGGTAGGATTA
CTATACACTTGGGGCAGGCCCAGGCTCCTCCAAACTGAGGGATTATGAGGGTGGTGATGGTCCCTGTTAAGGACT
ATTGTGTGCTTGCAAGTTGGCATGTACCCATGTGCCAGCATTGCTCACTTGTTGCCAATAGCTGTTATTGTGAAA
TACACTGGGAAGCCATTAGATGATGACTTAAGTGTGCTTCCCCTGGTGGTTCTTCATGCCTGAGTTGTACTGAAG
CCACCTAGTTCCCTGCTGGGTCAAGCCAGGCTGGGCAGTGCCAGCCTTCAGTGGCATCTTGACCTGCCCTCCTCA
GCCCAGGTGCCCTGGTTCCACAGGCCAACCCATAGAACCACTCTGGAAATAAAGGAGAAAATGGAAGGAGAGGTA
TGGGAGCTTGGATGAGGGGTAGGAATGGGATCCATTCTCTGAGGCTTATAAAAGCCTCTGAGGAGGAAATGGCTC
TGAAGGGGAAAACGAATCTGTGGGGTTTGAAAAGGAAGTTTTCCTGGCTGTCTTGTATTTGGTCCAGTGAGTATG

FIGURE 5542C

AGACAGGCACACAAGGAGTGGACAGTGGTGTAGGGGCCCTGGGAGTCTGAGACTTACCTTGCCCCCTGACCATCT
GATCCTCCCTGCAAAGGCCACCTGACGTGAAAAGGAGCCAGGAGCAAGCACTCAGTCAGGGAAGTTTGGAGGTTG
GCCATTGGGGTATGAGGAATGGCAGGAATATTTAGAGGACAGGAATAATTTTTCAGAGAAGTGCCACATATTCTT
TTTCTCTTTGCCAAGTCTGGGCTCCTTCTAAGATGCTGCTAGCTATTCCTAGCCCGTTCCCCAATACTTCTCTGC
CCCCACCTTTTGGAATCCTTATCTAGGTCTAAAAACGGTTCTAGATCCTGACCCCTTTGATTGGGGGATGTAGAA
TGGGATTCTTTTCAGGGGACATCCACAAGTACACATCTGTGGTCACTAAGGTGACCAGCTCATCCCAGTTGGCCT
GGAACTTTCCCAGTTTAAGCACTGAAAACTCCTTGTCCCAGCCCTGCCGGTTTCCCAACGAACTGAGATGGTTGG
CCGCTCAAGTGGCTACCCTGACCATCACCCCAGGCTCTACTTTAGCGACTGCTCACACCTCCCTGCTTCCCAGAC
AGAAGTCAAAACAGCAAAAGAAACCCAGTCCCCAGGGTCATGCTAGGGCTACCAAAACTGGGATGAACTAGCACC
TGTGAACTAGAACAGCAGGGAGTATGCTTAGAGTGCCTGGTCCTGGGTGTGGGGAAGAAAGGCCATCAAGGTAGA
TGCGGGTGGGGAACAGCTTGAGAGAGGAGGCAAGGACAACCCAGTTTCTGTCTGAAGGGGCCTCTGGTTGACCCT
GGAGTTTCTGTCCCCAAACACAGGCCTCACGGGATTCTTTCTGTCCTCATGCACTGGGCAGAGGTTCCTTAACTT
CCTTTGTTGCACATTGCCATTCTCTCACATCCCGTGCGGTCAGGAAGCCCTTCCTGAACTCTGACTTCAGTTCTT
GCTGCGGTTTCTGCCCATTTTTTTCATATCCTCTGACAGCTGCGAGGTCATCTCTGCTCTGGCTTTTCTCCAAGC
AGAACAAGTGGGGGCTCTGGAAAGGTTAAGGGACCTCAGTGGCCACCATTATACTTTGCATCTTTCCTGAGAAGT
GAGAGTTGAAAGGGAAGCAGGAAGGCCCATGGTCAGATTGAAGGAAGGACNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNTA
GCTTTTGCAGGAGACTTCAAGGAAAGGAGACATTCCTCTGTCCAGGAAACGGGTAAGGGGACCATTTCTGCATTG
CTGGTTTCCCCTCTTGGCAGGGTGGGCATGAGGCATCACTGTTCCTGCTCCCTCACTCCTGCTCCTCATGCTCAG
CCTGCCAGCTCGGCCTCAACTTTGTGTGTCTAAAGTGGGAACTGAATAGGTAGGCTGTGAGAAGATAGGAAAGAG
GTAGTGCCAATCTCCTTGCCCAGATCATAAAAAAATTTCCCCCAAAGACTCAAGCAGGGTAACCACATGGGCAAG
CACAAGGTAGGTGCTTGGCGAAAGGGGAAGTAATTGGCATTCTGTGTGATACCAAGGAGACCATTTGGATTTTGG
CTTCTACCAAAGAGAATGGAGAATTGGTTGACCTAAATGGAACCAGTCCCTTTAAGTAAGGGGAGGAAAGGGGGT
GCTGGAAGATGGCCCTCTTCCCACCACCTAGATCATAGCTTGAACTGAAGCCAAGGACAGAGTGCTGCCCCCTTC
GGCATTTACTGATGTGCCCTCTTTAAATCATGATGTTATCTAACCCAAACCCAGACCCAGGACCTAGTCACAGCT
CCAACCTACACTTCCTATTAATCTTAAAACAAAGCAAAACAAAACAAAAAGATATCAGCATTGTAGCCTCCAATC
TGAGCCCATTTCCCTTCTCTGGCTACCATACCTCCTTCTCCTATATGATACCATTCACTACTTTGTTCAATTATC
CAGTCTAGACCTGCATCTGAGGCCACACCCAGCCTTCTCACTCCCCACACCCCTCTTTCCTCTCTCACTGCTCCT
TCCTGGTCTCTTCTCATCTGGCCCCACCTCTAAGGAGTCCTCCTGCCTTCTGGGTTGCCCTGGAAAACAGACTAT
CCCCCCTCCTAGTGAAGGGAGTGGGTAGGGGTTTCAGCCCCACCCTCAGGAAGATGCGTCTTCCCTGTCCTCTGC
TCTGTGGTACTTCCTCTCTGGCTGATTTAGCAAACAGCACCTAGACCTGGGGCCAGGCCTTTGGCAGTGGGACAG
ATCCAGGGATAGGCTACACCACCCTGCCCTGACCCTGGGATTGGCATCAGCTTCCAACCAGTTCCTGCCAAAGCT
TGTAAGTAAGTTTCCTGGGAGCNNNNNNNNNNNNNNNNNNNNNNGACAGTGTGCAGCCATGAAAGAAGGTGCAA
AGGAATCTCCAAAGAAAGCCTGACCAGCGTAAAAAGTTGGGAGGCTTTGTCCTTGTCACTTGTCCACTAAACTCC
TCCCCTCCCTGTTATTCCTGGTTGACCCTGGGCATCTCTGGGGACAGTAGGCAGGTGATTGGGAAAGTTAATGGG
ATTGAGGGGCTGAGGGCCTGGCAGGGGGCAAAAAGACTGGCCTTTCAAGGGGTGCAGCATTGGTAGGAACTCTGT
TTGGTTCTGGGCTTTAGGGTCTCCTAAGGGGAGGAGACTGAAAAGGTCTGGAAATGCTGCTGCTGCTGTGGTCAC
TGTATATTTTGCAATTGGGTCTGTGGACAGGAAGGGGCCGCATGACCCAGTTAGGAAACTAGTCTTTGTACTCAA
CCAGATCCCTTTAAGTTGTCAGTCTGCAGCGATGGGGGCAGTATATTTCAGGGGGACCTCTGATGCTGCTGACCC
TGGAGATAGACTAGAGTTCTCAGCCTAGGTGTGTCCATGGCGTCAGGAAACCCTTGGTCCTCTACTCTCATGCGT
GTGTCCGCCCTCACTCTCCAGGTCCTCCCGACGGCCATGAACACTACATCTTCTGCAGCACCCCCCTCACTAGGT
GTAGAGTTCATCTCTCTGCTGGCTATCATCCTGCTGTCAGTGGCGCTGGCTGTGGGGCTTCCCGGCAACAGCTTT
GTGGTGTGGAGTATCCTGAAAAGGATGCAGAAGCGCTCTGTCACTGCCCTGATGGTGCTGAACCTGGCCCTGGCC
GACCTGGCCGTATTGCTCACTGCTCCCTTTTTCCTTCACTTCCTGGCCCAAGGCACCTGGAGTTTTGGACTGGCT
GGTTGCCGCCTGTGTCACTATGTCTGCGGAGTCAGCATGTACGCCAGCGTCCTGCTTATCACGGCCATGAGTCTA

FIGURE 5542D

GACCGCTCACTGGCGGTGGCCCGCCCCTTTGTGTCCCAGAAGCTACGCACCAAGGCGATGGCCCGGCGGGTGCTG
GCAGGCATCTGGGTGTTGTCCTTTCTGCTGGCCACACCCGTCCTCGCGTACCGCACAGTAGTGCCCTGGAAAACG
AACATGAGCCTGTGCTTCCCGCGGTACCCCAGCGAAGGGCACCGGGCCTTCCATCTAATCTTCGAGGCTGTCACG
GGCTTCCTGCTGCCCTTCCTGGCTGTGGTGGCCAGCTACTCGGACATAGGGCGTCGGCTACAGGCCCGGCGCTTC
CGCCGCAGCCGCCGCACCGGCCGCCTGGTGGTGCTCATCATCCTGACCTTCGCCGCCTTCTGGCTGCCCTACCAC
GTGGTGAACCTGGCTGAGGCGGGCCGCGCGCTGGCCGGCCAGGCCGCCGGGTTAGGGCTCGTGGGGAAGCGGCTG
AGCCTGGCCCGCAACGTGCTCATCGCACTCGCCTTCCTGAGCAGCAGCGTGAACCCCGTGCTGTACGCGTGCGCC
GGCGGCGGCCTGCTGCGCTCGGCGGGCGTGGGCTTCGTCGCCAAGCTGCTGGAGGGCACGGGCTCCGAGGCGTCC
AGCACGCGCCGCGGGGGCAGCCTGGGCCAGACCGCTAGGAGCGGCCCCGCCGCTCTGGAGCCCGGCCCTTCCGAG
AGCCTCACTGCCTCCAGCCCTCTCAAGTTAAACGAACTGAACTAGGCCTGGTGGAAGGAGGCGCACTTTCCTCCT
GGCAGAATGCTAGCTCTGAGCCAGTTCAGTACCTGGAGGAGGAGCAGGGGCGTGGAGGGCGTGGAGGGCGTGGGA
GCGTGGGAGGCGGGAGTGGAGTGGAAGAAGAGGGAGAGGTGGAGCAAAGTGAGGGCCGAGTGAGAGCGTGCTCCA
GCCTGGCTCCCACAGGCAGCTTTAACCATTAAAACTGAAGTCTGAAATTTGGTCAACCTTGTGAGTGGGGTACAT
GTGCTGTGGGTATCGGGGTGCTCGTGGGCGCCCTGGTGGGGCCCCTCTCGGTAGTTGAGAGTCACGTCCTTTAGT
TCCCCATGATTTACAATTTTGGAAGGGACACAAAGAAACATAGACTGCCCCCATCCCAGATGATTCCGAGTACAT
AGTCTGCAGATAATACTTAGCAAAACGCAGTCTACAGACTCCTAAAGCAGCTTGTCTAGGAAGACCACCCATGTG
GGCTTATCACTCCAGGTTCTGTGACCCGGGACCTTCTGAGAAAACAGCACTGCTGTGAAATATCTTCCTTGAAGC
CTGTGATAAGTCTCCTTGTTAGAATGACTCCAACTTCCTGCCAATAATCTTTGTCCTCTCCATAGGAGATGTTCT
AGGGGATGCCTTCCTTCCCTCCATTTCACAAAGAGGCCAGACTTGAGGACTAAGTCATTAGATCTTATCCCTTAG
AATTTTGCATATCAGCATCTGCTAACCTCCACAACACACCCTGGCACAGGGTGGGGCTGAGGGCCCCAGGAAACA
AAGATTCCCAAAAGTGAGAGGGATGAGTCATTATTTCCTAGAGATGACTGTTGTTTTAGAGAACCTTGGTCCAAC
TCTGTTCTGACAAGGTTTTAGGAAGATGGCAACAACAGTGGCAGCAGTGTACTTTTTGGATCTTTCTCATAAAAA
AACAAAAGAGCAAGTAAGAGAGGGAAACCAAATATCCACATGCAACATCCGCAACAAATCTAGTATGTCAAGGTT
TGACATACTCCCATGGACCCCAAAGTATGAGCCAGTGAGAATGAGTCATCAATACCTCAAGACCCATATACCAGC
ATCTGTGCAGAAGGATGCAGAAGGAAGCAAAGGGATGTTGGATGGACCTAAGAAGAGGAGATCCCCAAGCTGTCT
ACAGATCCTTACTGGAAGGTATGGTGCACCAATTTGAGAACAGCAGCTGAAACTGGGAGGGACCTAACGGAGTAT
TTCCCAGTCCTCTCGCCCATTCTGTATGGTGAGCACATAATAGGTACTTATTTAGTGTTTGTCGAATTAATAAAG
TTCAAATGACATTTCCCTGGAGATTCTTCCGGTATTTTTGAGTAGGGGGCAGGAAAGGGCAAATTTTTGTTTTGA
GTCATGTGGCTAAATTCTTTATGCTTCCAAGGTGTACAAAATACTATAATCAAGTTGGCAGAGAGGCTGAGGGAG
TTCTCTTCCTGAGCTTGTGAAAAAAATCACTCCCTTTCAAAATGCTTAGTCTCACATGCATGCATGTGTGCAGGC
ATGTGNNNNNNNNNNNNNNNNNNNNNNNNNCTAAAATTGGCCTGGGAAGAAGAAGAATTCCCACTGAAGGGCAA
TGAGAAGGTGATCCCCAGCTATATCAGCAGCTTCAGACATCAATGGGCTCCAGACACCCCAGAGTCTCTTTATTG
AGGTTCTTAGAAGGCGAGTGCAATCTCAGCCTAGGGTAGCTGAAGGAGGTCCAGTTCGTGTCAAGTCTGTGTTCA
GGAAGTAGGTGCAGAGCTGCCCTTTGCCTTTCACCTTGATGACACCCCGGCTGTAGCAGGTGTAGCCCAGGGACT
GTAGGGCCCATGCTGTCTCCTCAGTCACCTACAATTGGAGGGGGGCGAGGGAATATGGAGGTGGCCCTATTCTTA
GTCCCCCTCCCCCTATGCCTCCAATGTGGTTCCCTCACTTGGATTTTGCCAAGGACTCCTGTACTCTCCATGCGG
CTGGCCACGTTCACTGTGTTGCCCCAAATGTCATATTGCGGCTTCTGGGCCCCAATAACTCCAGCTACTACGGGT
CCATGGTTCAACCCTAATGAGGGATGTGGTAATGACAGACTTGGAGAAGGAAGAGGGGAAGAGGAAGCCACAAGG
AACTGGAAGGAAGGGAGAAGAGCCTGGGGGGCCCTAGAGGAGAGGAGGGGTCTCTAAGGGCTGGAGGAATGTAGC
TTAAGAAAAAGAGTGGGAGAGCCTCGTACCTCCTTGCCCAGCACCTTCACACCCCATCCCAGGGAGTGAGTCAGG
AAAGGGGCTTCAGGATGAACTGGGAGCAGCTAACAAAGGACTTGGAGTGGGGCAAGCTCAGGAAGGTGAGGAGGT
ACCAGACTGCTGCAGCAGGGGAAGTCTCTCACCCACTCGCAGGCGGAAGTTGTTGAATGAATGCTTGTTGATGAC
GTCCAGCTTAGACCCCAGGGCCACGGCAAATTCCACCATAGTGCCAAGGTGGCTGCAGCTCCGTTCAGCATCCTG
GCAATGGGCCCGCCCACCAGGGTGGGCCAGTGAGGGCACAGGAATAAGTCCCACTAATAAGCCCATCAATGAGAG
CCCAGAGGAGGATGGTAGGTAAGGAAGGGTTGCCGTACCTGTTGTGCATCCTGTCCAGAGGTGGCATTTAAGCCT
GTGGCTGCCATGTAGGTGCTGCCGATGGTCTTGATCTTCTCCACCCCACTGAACTTGGGCTTGGAGAGCAGCTGT
ATATAGAGAAGAGTCCTGTCCCCAGTCTCTCTTACTCTCTCCATCACCTCTCCCAGAAGCCCAGCCCCAAGCCTT
TGGAGTTAAAGGATCAGGCTGTGGGAGTGGAGATAGTGTCAGGAAGGAGAGGGTTGGTGGTGGGCAGTGTTGCTG

FIGURE 5542E

GAGTGGGTAGATCTGGGGGATCAGAGGAGGTGAGGGAGTACTGTGGAGGGGAGGATTGACTTCATGGCCAGAAAA
GCAAAGTGGAAGGAGGTACTGGTGGAAAATTCTAGAATCTAGGACATAGGGTCTGGGAGACTCTTGGAATTTTCA
CCTCATCAAAATCAGCAATTATCTCATTGAGCAGCCTCAGACACTCTAGGCCCTCATGATTGATGTTGGATTCAG
AGTAGAACTCCTTGAAGTCTGGGACTGAGGCGAAGAGGACACAAACGCATTCATAGGACTGGTGGTAGAGATCCT
GGGGGGAACAGGAGACTGGAGTGAGGGGTGTGTGTCATGTTCCTCTCCCTTCTAGAGGTCTGCGTGGGGCCCTCCT
CCCCATGTCCACACTCCTGGTCTCCCTGTTTAAGAAGAATTGGGAAGGAGGGAGAGGAGTAGGGCCAGGCTACCC
CAGGGAAGTGACTTAGGAGTCAAAGCTT

FIGURE 5543

MNTTSSAAPPSLGVEFISLLAIILLSVALAVGLPGNSFVVWSILKRMQKRSVTALMVLNLALADLAVLLTAPFFL
HFLAQGTWSFGLAGCRLCHYVCGVSMYASVLLITAMSLDRSLAVARPFVSQKLRTKAMARRVLAGIWVLSFLLAT
PVLAYRTVVPWKTNMSLCFPRYPSEGHRAFHLIFEAVTGFLLPFLAVVASYSDIGRRLQARRFRRSRRTGRLVVL
IILTFAAFWLPYHVVNLAEAGRALAGQAAGLGLVGKRLSLARNVLIALAFLSSSVNPVLYACAGGGLLRSAGVGF
VAKLLEGTGSEASSTRRGGSLGQTARSGPAALEPGPSESLTASSPLKLNELN

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FIGURE 5544

GTTTATCCNACCCGGCTTCAGCCTTCTCCAAAGTGTCTGGGATTATCTAAGTGTCGTAGCCACCGCTACCCCGCC
CTAATCTCAGCCTTTTTATATCTTCTTGGTAGGCCCACTTTTTGGCATCCCCTAACAAGAAGTCCTCAGAGATTT
TTACTACTCAACATGTGTGCGTCCCACTCAGATGTATTGTGTTCTTTCTGTTCACCCTCTACTTCCCATTCCATT
TCTTCCTCTGACTTAGGGTTAGAATGGCCCAATGATCCTACAACTTTTTGATGCTATTTCATTTGATTCCTCTAC
TGTCTAAATCACAAGTTGGCTAACTTTACTTACTGTAAGGGATCAGATAGCAAATAGTTTAGGCCTTGTGGGCCA
TTCAATCTGTCATAACTACCCACTCTGACCATATGTAGTGCAAAAGCAGCCCTTGACAATATATAAATGAATGAA
CGTGAATGTATTTCAATAAAGCTTTACTTGTGGACACTG

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FIGURE 5545

VYPTRLQPSPKCLGLSKCRSHRYPALISAFLYLLGRPTFWHPLTRSPQRFLLLNMCASHSDVLCSFCSPSTSHSI
SSSDLGLEWPNDPTTF

FIGURE 5546

TGCCTCAGGATCAACAGTGGTTAGCCAAAATGGTCCAGTATAATACACCATATATGCTTATGTGATTCCCTTGCT
TTGTTGTTACATTTATTAGGTCTATACTAAATTAGCCTTCAATGATGAAGACAGACTAAAGCTAAGCCACATGAG
ATCAAGGCCATTTCAACATGGTTGCCTGGAATTCTCCAAAAAACCTGTGGGTTGTGGGTTTGGCATGTCAAGCTT
CAGACCACAAGGTCTTAAGTGGTAAATAGATGCGTTGTCCTAATACTGTTCCAAGGTAGAGAATCCTGATGATAA
GGAGTATAGGAAACTCAAATAGTTCATTATTTCTAAAAAATGTATATTTTAAGGCATGATACAAGTCCTACAAAC
CTCATAAGTAGGTGAAAAAAAAAACCCTGTGGAGTGATAAACATTCTATAAAACCTGGAAATTTGTGTGGAGTTC
GCCTAAGCTCACTTTTCCTAAATATAGCTATATAATATTGTAAACAAATTTGTTTTTTAGAAACTTTTAAGAAGA
TTTCTGTGAGCGTAATTGACAATATCTGCATTAGAAACAGAAAGTATTATCCATCATAAATATGAGAAAAGTGTG
TGTCCTCTTTCTGACAATCTTTTTATCTTATTTTTTTCAAACGTTGTGGTTGTTGTTTCAGCACCATTTTAAAGA
ATTTGAATACAAACAATCCCTCAGCTTATCAGGTTGACATTTATGAAGCTGACCTCATCACTCTTTATCTTTTAT
GTCTGCAGTATAAATAGCATAGACATTTGGTGTGAAGGGAGGAGAAAGGAAGTAGTAGTTCTGAGAATATTCATT
TGAACAGCGTGACTATGGAAGAATGAATAGCAAAAAAAGGAGAATTTTTTTAAAAAGATCTCTCACTGGGAAAAG
AAAAAGTTATGCATTTATAAAGTAATTAAACTGGTTTTCCTTGTACTTTATTAATCTGAATCTAATGGCACTTCC
TTACGAGGGTTTTCAGATGTGCTTGTAGTTAATGGCAACATTATCAGAATGACTACACAGACAGTCCTACTCTGA
GGAGATGACTTTGGAAGAAACCCATTTGGAACTACACACCCTGCTATGTCTGTGGAGAAATGGAACTGCAATCCT
CAAGAGTCACACTTCATATTCCTTCCTTTCAAGTGGTTGATAAAAGGTAGTGCTTCAAGCACAGGATTTATGGAA
TAGTTGGCAAATTAAACAACATGCTTTTTATTTTGACTACCATTTAAGTGGAATCTTTGAACTTTTTTTTTGACA
TGTGAATCTCTAATGTGGTGAGAGAGAAAAACATAAAAATATAAAAACATTCAAGCAATCG

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FIGURE 5547

PQDQQWLAKMVQYNTPYMLM

FIGURE 5548

TTTTTTTTTTTTTTTTTTTGGGGGAATTAAAATGTATTTGGTGCCAGTGGTGCTGAACATAAAATAAAAAACAAA
AAAAGGGCCCAAACAGGGACATCCAGGCTGGAGGTTGGAGTGGAGCACAGTCAGATGTATTCACTTTTTTAGCAT
GGGTTTCAAAGTGCGTAAGGGGAGAAAACGCATCATGGATTGTGCTGTGCATCCTGGACACCGTGCGAGGTGCTC
ATAGCTGTGATCTTGTCTCCCACAACTTTTTTGGGTGACAGACGTCCACTGTCCACATTTTATAGACAAGGAGAA
AGGGAAGTCAAATGTCTCGTCCAAGTCTACACAGCTAAAAAGGGGCAGAACTAGGGTGACGCTCAGGCCTCATTT
AAAGATCGGGGGTTGGCGAGAAGTGGGGTGGGCTTCTG

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FIGURE 5549

TGGCAGTGATGTCATTCCTTACTAGGCTTCCAAAGCCACTGCTGTGGCCACAGCTTCCATGGAGACAGGCAAGCT
GAGCCTCTATGTGGCACCAATTCCTGCAGCTGTTTGTGTTGGAGGGAAAAAAATCCAAATGGACATCAACAGCTT
TCATCAACTAAATAACCACAGAAAATATTTATGAAGACTATAAAGCAATGATTACTTTTGAATTGGAAAGGAATC
ACTATTATTTGAAATGTTTCTTCAAAAGTGAGCATCCGGACAGGAACCATCATGGATGCTGAGGCCATGGATGAA
GGCCTACTCGGGAAGATGATATCCTTGCAGTCTCAAAACGGCACCCCACAAAGGTGATATCCTAATTTACAAAGG
GAAAAAGGTACCTTAATCTGAAATCTGGCAAATGCAGCCTCAACAGAAGTGACAGAATTGAACATCGCCAATAAT
GGGACACACAGACATCACATGCCCCCAGTCTGATGCACCACGGAGTCGTCTCTGATGTATTCTTGTCAAAAAATG
TTTGCCTGATTCTAATCATGAAAGAACAATTAGAAAAAATCCAAATTGACAGATATTCTGCAGAATAAATGGCCT
GACCTCATCAAAAACATCAATGTCATGAAAAACACAAAACATTGCAGATAGCGTGAAATTAAAGATTACAGAGAT
ATAACTTAATGCAAGATCTCTGACTGGATCCTAGACTGCAGGAAAAAGTCTGCTATAAAGAACATTTGGATCACT
TGTAGTAGCTGGGAAATAAAACAAAACATTATTTGTAAAAGGGGGGAAATCTGAACATGGGTCTTGCAGTATTTA
TGACAGTTTTTGCGGGGCAGAGATTTCTAGATTGACAGCTGTTTTAGTACTTTCAAGGTGATGCTCTGTCTGCTG
GTTTGCATTGTTTCTGTCTGAGTTAAGAGACTGGCAGAACACAGAGTTGCAGTAGCCAAACACTGGAGAAAGCTG
GGCCCTACAGAAACCTAACGCTGAAGAAACCTCAGGAGCCAAACTGGTGGAGAAAACAAAGAGTCCTCCCTCTCT
CCCTTTTCAAATAATGATCATACATCTTCAAGCTGTCTGAAATGGTTAAGGAGTTCAGTCTGTCGTCAGGCACAC
ACCAGAGCCAGCTAGCCCACACAGACCCCATCAGAGCAAAACAGACAAGAGAATTTAATTCATATCCACATAGAA
AGGACTTCTAGGTAGGAGGTAGACCCTTTAGCTCCCTTCCAATTAAAGGAGTCCCCAATTCTGGCACCTGAGAGT
CCCCTGGGTCTAACAGCTATGATATTTATGTAGTGTGTTGCTTACCTAAATGAATACAATTTCCTTCCAGACACG
TGACACTGATATTAAAGTGCTAATGAGAGGGATCTATTTCTTCTTGTACGCTAAAAGAGAAACAGTAGTTCAGAT
TTCCCATCAGAAGTCCGAGGACTTTGTTCTTGATAACTACTACCAATAAAAATTGAGTATTTGAAAAATTCCTTT
GTATTTTCCATCCATACACATTTTTTTTTAAAGCATTTTAGGAAGTCCTCTAATTATATAGTAAAAATTGTCAGC
AATGGCCTGCTAGTTTTCTATTTGACCTAATCACAACCATCCTCGTTAGGTCCTGAGGTCTGCTCTGCTGCTTGG
CCAAAACCAAATGGTGCCAGGTCACAAAGCACTTGCACATGTGAATCCTGCATCCATTCTACAATGGGTCACTAT
TGACTGAAATACTTTAATAAAAATGATAGAGCACATAAAGCTTGCTGTTGACAGAAACTTCCGTGCTCAAGCAAG
GCAGTGCTATACATGGTGAGACCTTGCACAAAGTCAGTTAACTAACAGATGATCTAGAAGCAGGTGACACAATGA
AATACCCTTTGGAGCTGTTGCCTATGTCTGTGGATAGGCTCTTTGTAGCTAGGTTAGGCTTCTGTGTTAAAGTGT
GTTAGAAGAAAGCATCACATAAGGAAAATAGAACTCTATTCGTATGTTTTTTCAAAACAGAAGTCAAGTCACATT
CAGGCAAACCAAATCTGTAACATTCAAGAAGATGCAGTGACTCTTCCGCATCTTAGAGCCACGGTGTCTGAGGTG
GCTGGCATGGCTCCAACACGCTGGCTTCCCTGTCAGTGGATCATTTACAATATGGTGCATTTCAAATTACTGGTG
AATTCACTGAATACTGGCTGTTTTTTTTTTTTTAGGGGTAATCTTATACATAAAATTTAGGAAAAGAAAGAGAAA
AAAGCAAAAATGACAGAAATAACTCAAAAGTTCCTAAAATTTATGTGTATCTTTTCGTACCTGTGAACTCCTGAA
TAAGTATTTATATCTGACAGGTACAAATACAATAATTATATTTTTAAGTAAAACCTATTTAATAATATGAAGTAT
GGTGTTAAATACATGTATTAAAAGATAAGTAACTTCAGAAGTCTTCTGACTTTTTAATTGTAAAATAAGTGAAAA
CTGTTTTGTGCTTTTTTATTTACTGTATGC

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FIGURE 5550

AVMSFLTRLPKPLLWPQLPWRQAS

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FIGURE 5551

ACAGGATACATTCTGGCGACTTCCAATGATTTAATTGGATGCTGAAGCACCACACTCCTGATAATTCTCTGTGAC
TCTCAGCTGAAGGTCACTTTGGTTGGAGTTACTTATACACTATTGCTAGTGTGTCAGAAAGTTGAAGGATTAGCT
GCCTTATAAGACACAGACCATTATAAACANNNNNNNNNNNNNNNNNNNNNTAATTGAGTGGGGAAAAACACACATA
TTTATGGTCTGCACAAATGGGTATATGCCAGAGTGAACATGAAAGTAAATTACATCTTACCCGAATCTGATTCTA
ATCAGAAAACAGCCAAGAACATAACACCTTTTCCTGCTTTCAGAGCCCACTGCTGGGGCCCCAGCAGTGGGCTCT
GCCATAGCAGGCGCCATAAGCTGGAATTTGTGCCTCCAGGCCTGGAGGGACGCAAGGCGTTTCTGATGAAGCCGA
TACATTCAGAATTGGGGTCCAAATAGGAAATAATGCCCTTTTCAGGCTAGTGAAAATGTTGAACTCTAAGAGATA
AGTTTATTTAGAGACTGGATTGAGCTTTTGTTTAAGATTTCCCACCTGCGTAAAATTCCTTTCAGCCCATAGGAT
TCTTGATTCTGAAGTCCAGACAGAAGCCTGTGTTCTGTAGCTGCTGAACAAAGATGAGAGATCACTGGGGCTGCT
GTTTGTCCGAAGTTTGTGTGGGTATCATGATGAACCCTCTTCTAAGAAGTAAAAGGATCTTTTAAATCAAAATAG
ACAACTGCAGTCAGTCCACCATGCCCAACGACATTTAAAAAAAAAGAAATATCTGCCCCATTGGGTTTCTAGTAA
AGTAAGTTGAACACAGAGAACAGCAGAATAGGAAAGGCTAGTGTCACCTTAGTCCACGTAGCACCAAAGTTGTGG
TCCGTTGAGACAGAAAGGAAGCATTTAGGAACTTGGGATAAATACCCACTTTTATTTAACTCATACATGCACTAG
AAATTTGTTTGGGATGCTCATAAATACAGAGTTCACAGTAGATCAGTGTCCTTTGAGGAAATGATTTGTAGAAGG
CCGACTTGCAAAGCATTTCTTTGAAGATGAAATAGAGAAAGCACTTCCTGGGCGGCCCCCTGCCCTGCCTGGCTC
TTAGAAGTGGCCTGTGTTTCCACCCTGAGCTCTTCCTGTTCTGTATGGGAAGACCTCGTTAGTGATGCTGATGCA
GAATAATTTTGGGGTTATGTGGGTAATGTTTGGTATTT

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FIGURE 5552

MLMQNNFGVMWVMFG

FIGURE 5553

TTTCTCTCACGTGCCTATGGAGGAGAGAACACACATAGTTGGATTGATCCATACATAATTGGGCGTTTGCAGGCA
AGTATGAGGACAAGAAGACAAAAAAAGATGAAAGTATTTGTAGGCATGATTCAAGATTAGAGTCACAGTGTTCAAG
CTGCTCGCTGATGAAAAGGAAGCCAAGAAAGAGCTGTGAGAGTGAGGAGAGGATGGAAGCCTTTAGGTTCTCCAT
TCAATCCAAGAACGGAGCGGGAGAGCTGGGAAGGATAACGGGTTTGCTTAGAGGGTAAGATATGACATTTAATAC
ATTCTTCAGAAGTGAGATGTTTAAAGGAGTGACCAGGTTGACTGTGTGACCATGAGTATGAGTAAATGAAGTAGA
ATGAAAATGGTCAATGTAGTTGAGAAAGTCAAATAATGGTGAGTATTTTAGGATATAGTTGTGATTTACAATTTC
AGGTGTGGGTCAGTCAGAGTTTGCTGTTGCTGACATGGTTGACATGTTTGTTTTACTACTGCCACCAGCAGGAGG
AGATGAGCTGCAGGGTATCAAAAGGGGTATAATCGAGATGGCAGATCTGGTAGCTGTAACTAAATCTGATGGAGA
CTTGATTGTGCCAGCTCGAAGGATACAAGCGGAATATGTGAGTGCACTGAAATTACTCCGCAAACGTTCACAAGT
CTGGAAACCAAAGGTAATTCGTATTTCTGCCCGAAGTGGAGAGGGGATCTCTGAAATGTGGGATAAAATGAAAGA
TTTCCAGGACCTAATGCTTGCCAGTGGGGAGCTGACTGCCAAACGACGGAAGCAACAGAAAGTTTGGATGTGGAA
TCTCATTCAGGAAAGTGTGTTAGAGCATTTCAGGACCCACCCCACAGTCCGGGAACAGATTCCACTTCTGGAACA
AAAGGTTCTCATTGGGGCCCTGTCCCCAGGACTAGCAGCAGACTTCTTGTTAAAAGCTTTTAAAAGCAGAGACTA
ATAAAATTCATCCTGTATAATAATTTTACATATCATTTCATAAAGTATTTTAATAGAAA

FIGURE 5554

MVDMFVLLLPPAGGDELQGIKRGIIEMADLVAVTKSDGDLIVPARRIQAEYVSALKLLRKRSQVWKPKVIRISAR
SGEGISEMWDKMKDFQDLMLASGELTAKRRKQQKVWMWNLIQESVLEHFRTHPTVREQIPLLEQKVLIGALSPGL
AADFLLKAFKSRD

FIGURE 5555

GTACAATTCTGGGAAGACATCATCTCCATTTTGTCCATAAGAAGTTTAAGCTCTGAGGGGTAAAAAAAAACTTGTT
AATGACCACACAGCAAGTATGCTGGGACTCAAAGTAGAAATGACCCAAAACCAGCCTCGNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCCCAACTATTATTTTTTTAAATGATCTTATAAAACACACCA
GTATGATTGATCCTCTGCTTTTTAAAATAATTTTACTCATCTAGAAGGGATCTCCCACATTGCTTTTTAAGACTA
AGCTCTGCTATTGTGATTAAAATAAAATTTTATTTTCTAAGATGGATGTATGCACATTTCCAAAGAACTGGTATT
ACATAAAGCGCATCTGTGTGGTTGCTCAAATCTTAAGTACCTTTACAAAAAGGAGAAGATTCATTATGTAGGAGA
GGTTGTACTGCTGAGTTGCCTATGGTTCTGAGTTAATTGCACCCACAGTCACTGCACTGTGTTGAAAAATCACCA
ATTTAATTAGCAGATTTCCTAGACAGTGACTAGACTGACCTTTTATATGTTAAGCTTTGTAAACACATTTAAGCC
GTGATGGAATCGAAGTGCTAGCTCAGATTTATTGAAATAAATATAGCTCTTGCTGTTGGCAACAGGAATTATGAG
AAGCAGTCTTCATAAGAAGAATTACATTTTTATATGTCTGTTAAGAAATTAAAAAAAATTTTTTTAACCATAAGA
TCTTAGTAAGTGTTCTCGCTTTGGCAGATGGATTAACCTTGTTCTTTTGGAGCCAGATCAATATCTAGTTTATCT
CTAGAGCAGTGGACAGTCTAACTATGTTTTGATTATATT

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FIGURE 5556

VQFWEDIISILSIRSLSSEG

FIGURE 5557

TCTAAAATATTGAAATAAAATCATGTTTGGCTTACTTTTCAAGGAAATAAAACTGCTGTACTTTCATTCACAGCT
GATGAAAGAATTACAGAAGAATATGGGCAACAACAATTGTAGTAGATTTTTAAGTACCTAGTTAAAAAGTGTTCT
GGGCCATCCAGATATATGGAAAGCAATATTCCTTAATCTTCTCTCCTGGAGCTCATTTGCTCACGTAAAAGTTAA
TTATAAAACATTGCTATATGACTTCTACTGGAGGAGAATTCACCATGCTGGGAATGGCAGCAGGTTGCAGTGGAG
AAGGCTCTGAATCGACCATGAGGGGGCTTTGAGTTCAAGGGCAATTACCCAACCACTCTCTGTGCCTGTTCTCCA
ACCAGTCAAACAAATGGGTTGGACATGATGAACTTAAAGGTCCCTTTCATTTTGAAAA**ATG**ACACAAAAAGGACA
GAAAGACACATTCAGATTCACTTTGGTTTCTAAGATAACACCAAACACTTTGAAACTTCCCCCTTCATGTTTTTC
AAGCAGAGGAAGT

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FIGURE 5558

MTQKGQKDTFRFTLVSKITPNTLKLPPSCFSSRG

FIGURE 5559

CTCCATAAGCATAGGGACGCTGTGTGAAAGAGTAGATGTGTGAGATAATGCAAGGGAAGAGTAGTGAGTGAGAGG
CTGGAGAGGAAAGAGTGGGTCTTGGAAGACTCTAATAGAGAACTCAGGCTTCATCCTCTAAGAGATGGAGATCCA
GTTAGGAGATTTTGAACAGGGTTTGTGTTTTAGATAGGTCGTACTGGCTGGATTATGAAGAATTAATTTAAGGCA
GACAGACTGGAGGTGCCTTCCACACCCTCATCTCTTGCTGGCCAGGGTTTTGACCCTGAAGCAGAGATTCAAGGC
AGAGGCCCAGACCCTCGACCTTGGGCCCTGATGAATTATCCAAGGTAAAGGCCCCTTGATGAGCCCCTGACAGCC
CCCCAGCACCTCCTGCCCACCCATTCCCCATGCGCATTTACTGCCTTTCCTCTGTATTACCTTGGGCTGCACTTT
CCTTTAAAACTATAACTCTACTTGTTTTCATTTGGAAGGTCCTAATTCTTTCCCTATGCAAAAGAAATTTATTCT
GGTTACCAAGTTATGTGTGTGTTACTTTTTTTAAATATGGAAAAAATCTGAAGACCAGTATAATCTTATTCCCCT
CAGTGCCATCCCTTGCTCTCTTGCCTGATATATAGCTACTATTAATAGCCTGGCATATATTCTTTCAGATTTTTC
ATGTAAATATCTCTCATTCTTTTTAATACTTGTACGTATTCTATTGGGAGGATGTATGATCATTTATTTCTCTAA
TCCCTTATTTGTTGCAGCAGTGGAATTCTTAGATCAAAGAATATGTACTTCCCTTAGGTTATAGAGACTGTGGGA
AAAATAG

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FIGURE 5560

SISIGTLCERVDV

FIGURE 5561

AAATGATATTGGTTAAAAAAATAGGGGGATAATAAATGGAACTTTAGCTTTCCTGTTCCCAACAGCTTATGAAAA
CCTCAACAAGTATCTTATTGCTACAGCTAGACTCCAAAAAGATGTACTTTGAGTTAGAATCTAGACCCCAGATTC
CAGGACCACTTAAACAGCCTGCTCCTTTTCACCTGCTGGTGGCAGATGTGGCCTTGGTGTTTAGAAATTAGTTGC
GCATCCACTGAAGAGACAAGCAGAAAGTACTACCCTCTGGGAGAGTGTTATAGCCTCTCTGGAAACTGAGATGAA
CATGTGGGGTGGGGGGCAGAAAATGCCCAACCTAGTTCTTTAGATACTTAAAAGCTAAGAATAACAACCCCAAGA
GAGGGTCTGAATTCAGCTGTAGACAGCAACTTTTGGTTGTCCTGTTTCTTAATACACAGGGAAGATCAACACATA
GTTACTGTGGGCCAGGTCCTGCCGTGGGCACAGAGATACAACAGTGAACAAAGCCCCTGCCCATATAGAATGCAC
TTACAAGGTGCCAAGCATTTGGCCAAATGGTAGGTTCAGAAATAAGTGGGATCCGTCCTGTTTTCAGTAGAGGAG
AACACAAGAGAAAGACATATTTGATCCAACCCAGGAGTTTAAAGAAAGCTTCCTGAAGACCTCTGAAGCTGCATC
TTGAGAGTTAAGATTTCAACTAGTTAAGAAAGTGTGGGGAAGGGTATCCTAGGCTGTGGGAACATCATGGAGTTA
TGACCACATGTGGGGTGTGGACACGTATAAACACTTCAGCATTGCCAGTTCACACTGTCCTGGGAGAAGCAGGAG
GAGAGACTAGAGAGGAAGGGGGAACAGGACAGTAGGCCTCCAGTGCTGAGCCAAGAAAGAAGCTTGATTTTTATT
CTGTCGGCAATGAAGAACCATCAAAGTGTTTTTTTAAGGAAAGGAAGAGAGGGAGGGAGGAAAAAAAGTTGTATT
CAGGAAGTTCAACAGAAAATATGTTCTGAAATGTTATGTGATGTCTGCCAGTCATCTAGGTTCTGAGCTTGAGAG
TGCTGTCATCCTTATCCCTGCCCTTTGAAATGCTAATAGGTTGTTAAGCTACTCTTTAGTTACTCTTTATTCTCA
TAAACCTTTATACTTTTAGATGCCCTACTTGAAATTGGGTGTAAAATGAACACTTGTAACATGGGAAGGGGGACT
GGAAAATATTAACCAGACAACAATGCAAGTATCCCAAGGCTGCTAACAAGTTTTCCCACCCCAACCTAGACCATA
TATTCTAACTATAAAGATTAGACTAGACAAGGCCCCATGCAAAACAAAACAAAAACAAAGACAATTCAGGAGAAG
TAACTGCCCAAATCTTATCTCTGTTATAATACATGAGCTAAATTTTAAAATAATCAGTGGGTTGTAGTTACGAAT
GGTAAGTTCAAGTATCTGTTGTTACAAGCAGAGTTAAACAGTCCACACCTGACACCTCAGGAATTTAAGTTATAA
AAGTATTTGATATTTTTAAAGAATAAATACAGAAATAATGCCTATTTAGGTAGAAAAAAAACTTTTGGTGCCATC
TAATATCAATCTGTTCTATTAGTAACTGACATAAACATCTCATGCAAAGAAATAGCTTAGAAAAAGTAGATTTGT
TCCA**ATG**GTGTCCCTGATGCCAAGTCTGATGTTAAAGCTATTTTGTAAAATAAAAGAATATAATTAG

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FIGURE 5562

MVSLMPSLMLKLFCKIKEYN

FIGURE 5563

AGTATTTCGTTATAGCAGTCCAAGCAAACTAATGCACATATCAAAACTACTTTAGTTTTTCCACTTTGTTGCAAA
CAATTGCAAGTTGTCCAGGTTTTCTGTCTTCCCCCAGCCTGCAAGTGCTCAGAGGACACCCAACCCTATGATCTC
AGCCAACTCATGAAGTTTGATTTCACAACTTAGTGATGTCTTCCCAGTGGAATCCTAAATGATAAGGAAAATGGT
ATAGAGCCAAGACTTGAACATTAACAACCCAGGAGCACAGAAACAGCACAGTTAGCTGAGAGGCGTTATGGAGAG
AAGCAACCGAATGCACACTGAGCGCTGTGAGAAGTCCACGACAGTGGGGAACAGCGCCCACCGTCACAAAAAGAA
AGACCCTCGGCAGGTACTTTAGAGTCACGTTCATGCTGTAATATGTGGGGAAGAAAGACTATTCCAAATGGATCT
GGCTTTTTAAAACAAGGGAATTTTCCTTGCTCTTGGGAACCAGCAAAATCCAGCTGCTCATTGAACTGCCTGTCT
GGAATCTCACAAATTTGCACCTTGAAGTTGTTAATAAAGGACTAAGTTGATAATTCGAACAAAAA

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FIGURE 5564

VFRYSSPSKLMHISKLL

FIGURE 5565

CAAGGTTTACATGAACAGGGAACTTGTCTGTTTTGTTTATTACTGTATCCCCTATGCTGGCACATACTATGTAAT
AAGTGTTTGTTGAGTGCATGAGTGAATAACCATTCTAAAAAACTCTGATGTTTAAAGCCCTTTGCTTTATATAAG
AATTTTACTTGGAACCCTGGTATTTTTGTTTGTATTTGTTTGTTAATAAATGTCAAGAGTTCAGTAGTAAGATAG
GTTTCAGAAATGCTAAGTTAAACAGAATAAAGAAAGAATATGTATTACAGGTCCTGGCAGAGCCTTGAATATGCT
AACATTTGACAGTGGGAGTCTTTGAGAATTATCACATGAAGCTGCTGTACATTACAACACATTCTAGGAAATGCT
GTCTTAGACAAAAACCTGTCATATTAGAATTGGGGTAAGGGGCACGATACTGACCGTGAGGCAGCAGATTCCTAT
GGACTACATTAAA

FIGURE 5566

QGLHEQGTCLFCLLLYPLCWHILCNKCLLSA

FIGURE 5567A

CTGGGGAGCCGGCGCTGGAGGTGGTGAGTGGCGTGGGGACTGTGTCGAGTGGGTCCCCAAGGTGCCGGACCCTGC
GGAGGGGCGAAGTTTCGGCACTGGGGAGGGCGTGCGGACGCTTTCCCTACAGGCGACCACTGCTCTGCGGGCGGG
TGGTCTTAGCTCCAGTCCCCCATTCAGTTCCTCAGCATTCCAGGTCGGCGGCGAAGGGGTCCCCGAACGAAGGGC
GCAAGGCAGCGTCTCTGCTGGGACCGGGAAGCCGGACTTCAGGGCCTCTCGGCCCGTGGGCTTCTCCCCGAGTCT
CCCCGAGTCGGTTGGCATTAAGAGTTTAGCAGATACTTTCAGAAATGGATACATAAGAAATGGCTGGAAATCAAA
TGAATGTCCAAAGAAGAGCTTAGGGTCTTAGTAACATTCTTTTTTAAAATAACTGTCTGCCAAA**ATG**TCATTACA
CAGTACTCATAATAGAAATAACAGCGGTGATATTCTTGATATTCCTTCTTCCCAAAATAGTTCATCACTGAATGC
CCTCACCCACAGTAGCCGACTTAAGCTGCATTTGAAGTCGGATATGTCAGAATGTGAAAATGATGATCCATTATT
GAGATCTGCAGGTAAAGTCAGAGACATAAATAGAACTTATGTTATTTCTGCCAGTAGAAAAACAGCAGACATGCC
CCTTACCCCTAATCCTGTAGGTAGATTGGCACTTCAGAGGAGAACTACAAGGAACAAAGAATCATCTTTGCTTGT
TAGTGAGTTGGAAGACACAACTGAAAAAACAGCAGAAACACGTCTTACATTACAACGTCGTGCTAAAACAGATTC
TGCAGAAAAGTGGAAAACAGCTGAAATAGATTCTGTCAAAATGACACTGAATGTGGGAGGTGAAACAGAAAATAA
TGGTGTTTCTAAGGAAAGTAGAACAAATGTAAGGATTGTAAATAATGCTAAAAACTCTTTTGTTGCCTCTTCTGT
ACCTTTAGATGAAGATCCACAGGTCATTGAAATGATGGCTGATAAGAAATACAAAGAAACATTTTCTGCCCCCAG
TAGAGCAAATGAAAATGTTGCACTTAAGTACTCAAGTAATAGACCACCCATTGCTTCCCTGAGTCAGACTGAAGT
TGTTAGATCAGGACACTTGACAACGAAACCTACTCAGAGCAAGTTGGATATCAAAGTGTTGGGAACAGGAAACTT
GTATCATAGAAGTATTGGGAAGGAAATTGCAAAAACTTCAAATAAATTTGGGAGCTTAGAAAAAAGAACACCTAC
AAAATGTACAACAGAACACAAACTGACAACAAAGTGCAGCCTGCCTCAGCTTAAGAGCCCAGCTCCATCAATACT
GAAGAATAGAATGTCTAACCTTCAAGTTAAACAAAGACCAAAAAGTTCCTTTCTTGCAAATAAACAGGAAAGATC
CGCAGAAAATACAATTCTTCCCGAAGAAGAAACTGTAGTTCAGAACACCTCTGCAGGAAAAGACCCCTTAAAAGT
AGAGAATAGTCAAGTGACAGTGGCAGTACGCGTAAGACCTTTCACCAAGAGAGAGAAGATTGAAAAAGCATCCCA
GGTAGTCTTCATGAGTGGGAAAGAAATAACTGTGGAACACCCTGACACGAAACAAGTTTATAATTTTATTTATGA
TGTTTCATTCTGGTCTTTTGATGAATGTCATCCTCACTACGCTAGCCAGACAACTGTCTATGAGAAGCTAGCAGC
ACCACTCCTAGAAAGAGCCTTCGAAGGCTTCAATACCTGTCTTTTTGCTTATGGTCAGACTGGCTCTGGAAAATC
ATATACGATGATGGGATTTAGTGAAGAACCAGGAATAATTCCAAGATTTTGTGAAGATCTTTTTTCTCAAGTAGC
CAGAAAACAAACCCAAGAGGTCAGCTATCACATTGAAATGAGCTTCTTTGAAGTATATAATGAAAAAATTCACGA
CCTTCTGGTTTGTAAAGATGAAAATGGGCAGAGAAAGCAACCACTGAGAGTGAGGGAACATCCTGTTTATGGACC
ATATGTTGAAGCACTGTCAATGAACATTGTCAGTTCTTACGCTGATATCCAGAGTTGGCTAGAATTGGGAAATAA
ACAAAGAGCTACTGCTGCTACTGGTATGAATGATAAAAGTTCCCGATCTCATTCAGTTTTCACCCTGGTGATGAC
CCAGACCAAGACAGAATTTGTGGAAGGGGAAGAACACGATCACAGAATAACAAGTCGAATTAACCTAATAGATCT
GGCAGGCAGTGAGCGCTGCTCTACGGCTCACACTAATGGAGATCGACTAAAGGAAGGTGTGAGTATTAATAAGTC
CTTGCTAACTTTGGGAAAAGTTATATCTGCACTTTCGGAACAAGCAAACCAAAGGAGTGTTTTTATTCCTTATCG
TGAATCTGTTCTTACATGGCTGTTAAAAGAAAGTCTGGGTGGAAATTCAAAAACTGCAATGATTGCTACGATTAG
TCCCGCTGCCAGCAACATAGAAGAAACATTAAGCACACTTAGATATGCTAACCAAGCCCGTTTAATAGTCAACAT
TGCTAAAGTAAATGAAGATATGAACGCTAAGTTAATTAGAGAATTGAAGGCAGAAATTGCAAAGCTAAAAGCTGC
TCAGAGAAACAGTCGGAATATTGACCCTGAACGATACAGGCTCTGTCGGCAAGAAATAACATCCTTAAGAATGAA
ACTGCATCAACAGGAGAGAGACATGGCAGAAATGCAAAGAGTGTGGAAAGAAAAGTTTGAACAAGCTGAAAAAAG
AAAACTTCAAGAAACAAAAGAGTTACAGAAAGCAGGAATTATGTTTCAAATGGACAATCATTTACCAAACCTTGT
TAATCTGAATGAAGATCCACAACTATCTGAGATGCTGCTATATATGATAAAAGAAGGAACAACTACAGTTGGAAA
GTATAAACCAAACTCAAGCCATGATATTCAGTTATCTGGGGTGCTGATTGCTGATGATCATTGTACTATCAAAAA
TTTTGGTGGGACAGTGAGTATTATCCCAGTTGGGGAAGCAAAGACATATGTAAATGGAAAACATATTTTGGAAAT
CACAGTATTACGTCATGGTGATCGAGTGATTCTTGGTGGAGATCATTATTTTAGATTTAATCATCCAGTAGAAGT
CCAGAAAGGAAAAAGGCCATCTGGAAGAGATACTCCTATAAGTGAGGGTCCAAAAGACTTTGAATTTGCAAAAAA
TGAGTTGCTCATGGCACAGAGATCACAACTTGAAGCAGAAATAAAAGAGGCTCAGTTGAAGGCAAAGGAAGAAAT
GATGCAAGGAATCCAGATTGCAAAAGAAATGGCTCAGCAAGAGCTTTCTTCTCAAAAAGCTGCATATGAAAGCAA
AATAAAAGCACTGGAAGCAGAACTGAGAGAAGAGTCTCAAAGGAAAAAAATGCAGGAAATAAATAACCAGAAGGC
TAATCACAAAATTGAGGAATTAGAAAAGGCAAAGCAGCATCTTGAACAGGAAATATATGTCAACAAAAAGCGATT
AGAAATGGAAACATTGGCTACAAAACAGGCTTTAGAAGACCATAGCATCCGCCATGCAAGAATTCTGGAAGCTTT

FIGURE 5567B

AGAAACTGAAAAGCAAAAAATTGCTAAAGAAGTACAAATTCTACAGCAGAATCGGAATAATAGGGATAAAACTTT
TACAGTGCAGACAACTTGGAGCTCTATGAAACTCTCAATGATGATTCAGGAAGCCAATGCTATCAGCAGCAAATT
GAAAACATACTATGTTTTTGGCAGACATGATATATCAGATAAAAGTAGTTCTGACACTTCTATTCGGGTTCGTAA
CCTGAAACTAGGAATCTCAACATTCTGGAGTCTGGAAAAGTTTGAATCTAAACTTGCAGCAATGAAAGAACTTTA
TGAGAGTAATGGTAGTAACAGGGGTGAAGATGCCTTTTGTGATCCTGAAGATGAATGGGAACCCGACATTACAGA
TGCACCAGTTTCTTCACTTTCTAGAAGGAGGAGTAGGAGTTTGATGAAGAACAGAAGAATTTCTGGTTGTTTACA
TGACATACAAGTCCATCCAATTAAGAATTTGCATTCTTCACATTCATCAGGTTTAATGGACAAATCAAGCACTAT
TTACTCAAATTCAGCAGAGTCCTTTCTTCCTGGAATTTGCAAAGAATTGATTGGTTCTTCGTTAGATTTTTTTGG
ACAGAGTTATGATGAAGAAAGAACTATAGCAGACAGCCTAATTAATAGTTTTCTTAAAATTTATAATGGGCTATT
TGCCATTTCCAAGGCTCATGAAGAACAAGATGAAGAAAGTCAAGATAACTTGTTTTCTTCTGATCGAGCAATCCA
GTCACTTACTATTCAGACTGCATGTGCTTTTGAGCAGCTAGTAGTGCTAATGAAACACTGGCTGAGTGATTTACT
GCCTTGTACCAACATAGCAAGACTTGAGGATGAGTTGAGACAAGAAGTTAAAAAACTGGGAGGCTACTTACAGTT
ATTTTTGCAGGGATGCTGTTTGGATATTTCATCAATGATAAAAGAGGCTCAAAAGAATGCAATCCAAATTGTACA
ACAAGCTGTAAAGTATGTGGGGCAGTTAGCAGTTCTGAAAGGGAGCAAGCTACATTTTCTAGAAAACGGTAACAA
TAAAGCTGCCAGTGTCCAGGAGGAATTCATGGATGCTGTTTGTGATGGTGTAGGCTTAGGAATGAAGATTTTATT
AGATTCTGGACTGGAAAAAGCAAAAGAACTTCAGCATGAACTCTTTAGGCAGTGTACAAAAAATGAGGTTACCAA
AGAAATGAAAACTAATGCCATGGGATTGATTAGATCTCTTGAAAACATCTTTGCTGAATCGAAAATTAAAAGTTT
CAGAAGGCAAGTACAAGAAGAAAACTTTGAATACCAAGATTTCAAGAGGATGGTTAATCGTGCTCCAGAATTCTT
AAAGTTAAAACATTGCTTAGAGAAAGCTATTGAAATTATTATTTCTGCACTGAAAGGATGCCATAGTGATATAAA
TCTTCTCCAGACTTGTGTTGAAAGTATTCGCAACTTGGCCAGTGATTTTTACAGTGACTTCAGTGTGCCTTCTAC
TTCTGTTGGCAGCTATGAGAGTAGAGTAACTCACATTGTCCACCAGGAACTAGAATCTCTAGCTAAGTCTCTCCT
CTTTTGTTTTGAATCTGAAGAAAGCCCTGATTTGTTGAAACCCTGGGAAACTTATAATCAAAATACCAAAGAAGA
ACACCAACAATCTAAATCAAGCGGGATTGACGGCAGTAAGAATAAAGGTGTACCAAAGCGTGTCTATGAGCTCCA
TGGCTCATCCGCAGCAGTGAGCTCAGAGGAATGCACACCCAGTAGGATTCAGTGGGTGTGAATACTGATGTGTAG
GCACTTTTATGACCACCCATGAAAGAAAAAGAACACTTGCTCGGTAATTTTCTTTATGCAGGAGAGTTTAAGAGA
AATCAGCACAGATATTTCAAAAAAGTCCATGTCTTTTTATCTTTAAAATATCTATTTATCAAANNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
ATATCTTTTATCTTTAAAGTGTTTAACATTGGTATACTGTCTGTAGTTGGTTCATTAGTCGTTTATAAAGGGTTA
TTTTCTCATGAGTGGAAACCTGAACAATCAGTTACCTTTGTGCCTATGCCTTCTCTCTCCTCAGACAGCTGGGAT
GTTTATGGTGAAATGGCCTGTACAAGTTTAACTAAGACAACTTAACTTGCATTGTTAATCAAAAATTCTTTTCTC
AAAGGGTTAACTGGTTGCCATTTTGAATAGTATGTTCAAGGGTGTAGCTTCCTGTTTCTTTCCAAATTATAAGTA
GCTACCTAAATATAGTATAATTATATATTAATAATATGGCTTGCTGGCACAGTAGTTTACCCTGTTATCTGTGTT
TCATAATGGGGGCTGTATGAATATTATTTAAAACTAATAAAATGTTGCCAGAATTATACTAAACTGTTGGATGAG
ATTAGGAGATCAGAGGCTGGACCTTCTCTTGATAATGCTTGTTTTGTTAAAGGTATAATGAAATAATTTGTATAT
GATTTGATGAAGATTAAAGACCCTTATTTTCCACAGCTTTAAAAAAAAACCTTTATTTATGATCAAGTAATAAAG
ATAATATTCTACTTGTGGGATCTTACATTACGGAAATAGTTTGACGTTTTTGACCTCAAGAGTATGTATAATTTG
AAGAGATACTTTGTAACTATGCTTGGGTGATATTGAGCAGTTCCTAAAGAATAATTCATTTAAAAAAAAAGAAGA
AAAAAAAAGAAGAATTCATTTAAATAACCTGATCCTTTCATTTGCCCTTTTCGAATTTACAGATACTACTTGTAC
ATTTGGCATAACTAGTTGAAATTGGCCATTCGTACCATGAATAAATCTGATAGTTTCCTTGTTAGGAAGAGATTG
TAAGTAAATACAGTCATTGCAGTCAGAACAGTATTAGTGAACCTTGTGTGGTGTTTTCAAGCTCTTTAAAATGGT
ACAATGTAGCACATTTGCTTTCATTTCTTTTTTTATTTTTGGCATTTGACCTTGTATTCTTTCTGAAGCTCTATA
TGTGTTTTTATTAGTCAATAATCTGGCAAGTAGCACTTTGCCTGTGCAGTTTGCTGGAGTGTAGATGTACATATG
AGGATTTCCCGGGAGGTGCACTTCTTTGAAGAACTTCCTAAAGTACCTGTATAGTAGTTTTCATCTTAATATTCA
GTATTTAATCTTCAGTTTGTGCTTTGTAAACTCATGACTTAATTGGTCAGAAACTTTTTAGTGTCTTTATAAAAT
TTTGTATACATATTTATACTAAACACATTGTGATACTGTATTTGAATGAATGGTGAAAAAATATTTGCTATTGGA

FIGURE 5567C

ATTATGTGCACTGACAAGAAATGTTATAAAGAGAATGCCTTTAATAAATCTTTTCAGCATTAGAA

FIGURE 5568

MSLHSTHNRNNSGDILDIPSSQNSSSLNALTHSSRLKLHLKSDMSECENDDPLLRSAGKVRDINRTYVISASRKT
ADMPLTPNPVGRLALQRRTTRNKESSLLVSELEDTTEKTAETRLTLQRRAKTDSAEKWKTAEIDSVKMTLNVGGE
TENNGVSKESRTNVRIVNNAKNSFVASSVPLDEDPQVIEMMADKKYKETFSAPSRANENVALKYSSNRPPIASLS
QTEVVRSGHLTTKPTQSKLDIKVLGTGNLYHRSIGKEIAKTSNKFGSLEKRTPTKCTTEHKLTTKCSLPQLKSPA
PSILKNRMSNLQVKQRPKSSFLANKQERSAENTILPEEETVVQNTSAGKDPLKVENSQVTVAVRVRPFTKREKIE
KASQVVFMSGKEITVEHPDTKQVYNFIYDVSFWSFDECHPHYASQTTVYEKLAAPLLERAFEGFNTCLFAYGQTG
SGKSYTMMGFSEEPGIIPRFCEDLFSQVARKQTQEVSYHIEMSFFEVYNEKIHDLLVCKDENGQRKQPLRVREHP
VYGPYVEALSMNIVSSYADIQSWLELGNKQRATAATGMNDKSSRSHSVFTLVMTQTKTEFVEGEEHDHRITSRIN
LIDLAGSERCSTAHTNGDRLKEGVSINKSLLTLGKVISALSEQANQRSVFIPYRESVLTWLLKESLGGNSKTAMI
ATISPAASNIEETLSTLRYANQARLIVNIAKVNEDMNAKLIRELKAEIAKLKAAQRNSRNIDPERYRLCRQEITS
LRMKLHQQERDMAEMQRVWKEKFEQAEKRKLQETKELQKAGIMFQMDNHLPNLVNLNEDPQLSEMLLYMIKEGTT
TVGKYKPNSSHDIQLSGVLIADDHCTIKNFGGTVSIIPVGEAKTYVNGKHILEITVLRHGDRVILGGDHYFRFNH
PVEVQKGKRPSGRDTPISEGPKDFEFAKNELLMAQRSQLEAEIKEAQLKAKEEMMQGIQIAKEMAQQELSSQKAA
YESKIKALEAELREESQRKKMQEINNQKANHKIEELEKAKQHLEQEIYVNKKRLEMETLATKQALEDHSIRHARI
LEALETEKQKIAKEVQILQQNRNNRDKTFTVQTTWSSMKLSMMIQEANAISSKLKTYYVFGRHDISDKSSSDTSI
RVRNLKLGISTFWSLEKFESKLAAMKELYESNGSNRGEDAFCDPEDEWEPDITDAPVSSLSRRRSRSLMKNRRIS
GCLHDIQVHPIKNLHSSHSSGLMDKSSTIYSNSAESFLPGICKELIGSSLDFFGQSYDEERTIADSLINSFLKIY
NGLFAISKAHEEQDEESQDNLFSSDRAIQSLTIQTACAFEQLVVLMKHWLSDLLPCTNIARLEDELRQEVKKLGG
YLQLFLQGCCLDISSMIKEAQKNAIQIVQQAVKYVGQLAVLKGSKLHFLENGNNKAASVQEEFMDAVCDGVGLGM
KILLDSGLEKAKELQHELFRQCTKNEVTKEMKTNAMGLIRSLENIFAESKIKSFRRQVQEENFEYQDFKRMVNRA
PEFLKLKHCLEKAIEIIISALKGCHSDINLLQTCVESIRNLASDFYSDFSVPSTSVGSYESRVTHIVHQELESLA
KSLLFCFESEESPDLLKPWETYNQNTKEEHQQSKSSGIDGSKNKGVPKRVYELHGSSAAVSSEECTPSRIQWV

FIGURE 5569

AAGGTAAAAATGGGAAATGTTTTCAGTTCAGATAAGGTTGACTGTGCAGCTCACATCTGTATGTGAAGCATAGTA
CGGATATTCATAAGGATTTTTAGTTATCAAAATAGGTTAAATTATATTCTGTATACTTAAGATGCCAGAAATACT
TCTATGGAAAGAGTTAAAATCTCCTATCTAAACTGTTAATATTAGGTGTTTAAAGAACTCACATAGTATGACTAG
TTTCTCTCTTAAGAGTTAATAAATAAGGAATCTGCACTGAGAACCATTGCAAAGGAAGCTGGAGACGGGTGGCTT
TCATAGAGACTGGGAATGTGAGTGCTCTCTTTAAAAAAAAAAAAAATACCCTCCTTAAAATATTATAGGTGTTCCT
GCATACTCATACAGTATTTCAGTATGATTTTGTCCATAGACTCAAAGAGACTGTTTTAAAGTATAGTTCTGATCA
TGTCAGACCTCTTT

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FIGURE 5570

KVKMGNVFSSDKVDCAAHICM

FIGURE 5571

GTGAGGCATAGAACTGACTTTATTGTTTTGACTAGGAAAGAGCAAAGGGTTTGGAATCAAAAGTCCCAACTTCCC
CACCTTCTTAATAGTGTGTGAATCTGAGTGCCTTATTAACCTTCCCTGGTCCCAGTTTCGTATCTGTAAAGTTAG
AATAGCAATCCTGTTTAATTTGCTTCTCTCACCAGGGATCAGAAGGCCAAATGAGATGATGTATGTAAAATTGTA
AAGTCCTCCACAGATGGCACTTGCCACATTACAGAGAACTTGAGACCCCCCCCCCACCAATAACGTTCCAAATCT
TCCACATGCAGATCTGGAGTCCAGGTGTCCTGGCTCCTGGCCCTGAACTTTTTGGCTGGGCCAAGGGGCTTTTCG
GTAAAGTGCTTTGGAATAAAACAGGATGAACATGAATCATAAAA

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FIGURE 5572

VRHRTDFIVLTRKEQRVWNQKSQLPHLLNSV

FIGURE 5573

TGAAGTAGAATTTTATTACAGAATTTCACAAAGAACTTAATATCTAAGTGTAAAGATAGAAAGCATTGAAATTCA
TTAGCATCTATAAATACAAGATGATTTTCTCATACCTACCTCTACCACAACCCTAAATCAAAACAATTTCTTATG
AAGCTTCAGTTTTCCCAGAGGTAAATTCCAGTACAATATTTGGCATGCTATTAAGTGAGTGGGTGCTGAAATCCT
ACTTCGTTTTCCTTTTCTTTCAAAGAAGGAAAATAAGGACTGTGCATATCGAAAATCAGCGTTTCTAGGAAGTTG
AAAGTTTGGGACAGTCTTCTTGGACACTCAATCCTAAATACATGAAAGGCAGCTACTAGCGCAGCCAAGGCTGTA
ACACAGTCGTCCACCTTTGTGAGCCTCTCCCTTTCTAAATATAAAGAAAATTCGCAGACCTCCATGTTGAAAGGG
TTTTTAACTTCCAACACAGGTGTGGACACTTGCACCTGTTCATTCATGATGACAAAAAGGCTGGGATCATCCCCA
AAAACATCTGGGAGGAGTAAACATGTGGCTGTCATCTTCATGTATTTCAACATGTCTTCATCTGTGTAATGTTTC
ATTTTTTCTTGCAATACAATATTGATTGGATTGTCCACCACTGAAAAAGAAGTCAGTATATTTTCTGAATAGGAT
TCCAAAATGTGCCTTGTTTTCTTATAAATATCTGTTCTTGTAAGAAGTTGGAATTCTCTGAACATCTGATAAGGG
CACTTCAAGAAAGGAAACAGTTTAAGAATGTCCTTCAGAGGTGTTCGGCTGCCAATCATCTTTCTTCTTATTTCC
AAAGTTTGGCTCATTCTCTTGTCAATTTCTCTCCAGTCCTTTTCTGTTTTCACGTATTCTTGCTGGAACCACTTA
ATATGTTCATCTAGCTCAGAATCAAAACAAACAGCTTCTTCTTTTATCTGGACAAGTTTAATTTCATCAAATCTT
ATATCAGCAAGAGATTTCCTTGTCTGGCCTCTTCGGTGTCCAAATTTACACTTATTTCTAATCACTTGCTCATCA
TCTTCTATGGGTCTTCGAACATATTTAAAGCGATCTTTGAGGGCTCGTTTCCATAAAAAGAAGCCACAGCCATCC
TCATCCAGGAAAGGGTGGGCCTGCAGCAGGGCATTAACCACGTCATTGTACTGCTGGGTGCTGGGGTACAGTGAG
CCTTCCAGATACTTAGTCATGTCGGCCTGGAGAAACTCAATGATCC

FIGURE 5574

GGGACAGAGTGATCAAGGCAGAGTGATCTAAAGGACACAGTAGTACTTCTTTAGGACCCTGGCAGAATGGAAGAG
AGCATCTGGCTTCTAAGGCACTGCACAAACTTGAATGATCTTCTTCAGAATTGACAAGGAAAGGCCATGTTATGT
TCACCCTGGGTTAAGTTTTAAGTGTATCTTATTTAATTTTTTTCAATATGAGTCATCTCCAGATACTGTGATGAT
TTCCAAATAACCAGAATCTAGATGACTAGAAATTTACTCTAGCTGGCTTTAGACAGGAAGCGTGAGGACAGAATC
CAGCTGCTTCCACTCCAGGGTAGGTCTGAAGCCAACCGTCCTCGGTTTCCTGGCCTGTGGCATCAGTCTGGTTGG
ATTACACACAAAGCCCTGCAGATCTGCTGCTTTTCCTGATTCTCCTGTCCTGAGTGAGTGCAAGGGGCTCCCCTG
TCGCCGATGTGTTCTTTGAAGCAGATGCTGTGCCTGATACCTGCTGGAGAGTCCCACCGCCTTGAGCTTCTGGGT
CGAGAAAGGCCAAGTTGCACACTACTGAGAGACTGCCATGCACCCCCTGGAGGCCTCAGAACATTCGACATGCTC
CAGTCATGGCCACGGCAGTGACTGCTGATTGCCTAACCCCACATGTGTTCTCCCCCTTCCCTGATAATCAAGCCC
CTGATTTTCAGCTGGGCACAAAATAATTCTTCCTAGAACAACTCCACGTGTGTTATCGCCCTTGCAGCTGGGGGT
GGCCACCACTGGGGAGAGGCAGGGTGAAGAGGTCGAAGGAGCCTGAGTTAGCAGGGATGAGCAGTGGCCAGGTAA
CCCCAGACCCATTATCCTCTGGATTTCTTTTATGTGAAACAATAAAATGTCTTGTATTCGAAAAAA

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FIGURE 5575

MSSGQVTPDPLSSGFLLCETIKCLVFEK

FIGURE 5576

GACCCACTTGTGTAATACTTAATTGCCTGTGTTTTTACAACACAAGTCAGAAGTTCTGGCGATAGTGGACTATCA
CCCAAAAAAGATTTTCTGAGACATCTCATCAGAGCTGCTCGAGTACCGCGCATGAAGACGGTGTTAGCTCTGCAG
GGCATGTGCTAACTACCAGACGATGAAAGAACATTTCCTCTAGTTTCTGGATAATGAGCAGGCACACAGGTAAAG
ATGCCTTTCTCAGGGTTGACGCCTTTTGTTTCCTAATGATTCTGATGATTTTGTTGAACTAGACTTTTAAATATT
AATTGTTACCTGCATATGTTTGCTGTTGTGGTTTGCAGAGGGCTCAGAGGAACAAGCATTTTAATTGGTATCCTG
GGACTGTAATAACTTTTTATTAAAAGTCTGGAAAGATAGTAATCAAAAATAGACTCTCATCTCTATCTTCTCTGT
GCCCCTGGCAAATATCCTCTTCATTAATTTTGTTTTTATTATTTGCCGTCAAGATGGTTATCTCTAAATATCAGA
TGCTTCAATCCACAGTGATAACCATGTGTGAATTAATGCTTGATAAGCTTCAGGTTATCAGGTGGAGAAGTGTGG
TTAAGGCATACAGAAAGAAAAAATGCACAGAAGGAAAGGGATAGCAAGGGGATACTGTGCCTTGGTAAGCGTGGT
GCCACCGCAGACTAAAAGCAGATATAAGTCAAGTGCTACTGACTTAAGTTTGGCAAAATCACTCCTCACAGCCCG
CTCTGTTTTAGAAATGTTTATATTTCTGATATCACTTTTGTTAATTTGAAGAACTTTTAAAATACCATCATTGTT
TCAAAACAAAATGTGGAAGGTGTGGATCACCTTCCTGAATTTACAGAAAAGTTTTTGGGTACATTTCTTTGCGGA
AGATTGGCTGAGATGTGGTTCACGGCAGGGTGGTGCCCGTGCCTTGCGGATCACGTTGTCTGTACACTGACTGAC
ATACCAACTTAGAGTCTTTGAAA**ATG**CCCATTGGTAAGTCAACATTGTTTTCCCTGAAAGTCCTGAGACAGAAAA
A

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FIGURE 5577

MPIGKSTLFSLKVLRQK

FIGURE 5578

GTGAAAAGAACCAATGCCTCGCTATTTGGTGCACATGGCTTTGTCCGATTCCTAGAATGCCATGTGTTAATGTTA
CAGAAAATGCCAGAGGGTATCTTCATGCATATTCCTCTAGAGCTTCACAGCCAAACCCTTGAGGCTTATTTTGCC
ATCAGTAACTCCTTCCTGTTCCCCCAGCCATGAGTGAATATGCTGAATGAGGACCTTTTACTGTAAGGAGTTCTT
CTCTCAATGTGTGACCTGCCCTGTCTATCACCAGTGGGTATCTGAGCTTAAGGCCTCTGTAATGAGATGTGAAAA
GAGAGAATTGATGTCCCTGACTAACAGCATCAGACCTTTTGACACCTGCTTGACCAGGATTTGGATAAAAGGAGA
ATTTCTGCAGGAAAATAACTCTTAGAAAAGAAACTTAGGAATACAGAGATTTGACAGAGTGGCTGATGTCAAGGA
GAACAAGGATGCAGAAGAAACTCAAGATGTATGTATTAAAACAAAAGAACAATAACCTGAAGGGACCATGATTCT
GTTATTGTATATAACACAAGGAAATGCCCCAGATTCTCCTTTAAAAGATATAATGTACATATTAAGTATACTAGC
CTTTATAGTTACTGCTATCTACATGTTTATCAAAATAAAAGACTATTTTTTTCT

FIGURE 5579

MRTFYCKEFFSQCVTCPVYHQWVSELKASVMRCEKRELMSLTNSIRPFDTCLTRIWIKGEFLQENNS

FIGURE 5580

TTAAGAGACATCTTTGCAGGGCCAATTCAAAATATGTAAAGAAATATATTTTAGAGTAAAATGCTTTTATTTCTT
TCAGATCCCGCTATCTGTCCTGTGATGCCATACTAGAGTAAAGCTGGAATTTGGTGTCTTATTGTTACAAAAAGC
CTTAAGANNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNTTCCCATCATGGCTGAATTACTTTAGAATGCCCTTAGTTGAGAGGAGGGGTCATTCAGACGGTTT
GGAGCTTAGAATTGTGTTTAGTGTGCATCTCCTGAGTGCTGGTAGACCCTTCAGTGTTCATTAGAACTTTATTGT
TCAGACCCAAGAAGAGCAAACTTTTTGATGAAGTATTACAAGAGAAAAGATAAACAGCCTTCTGAAGAAGCAAGT
TATTTTGTTGTAGCAATGTCTACTAAAGAAACCAACTGGCTTCTTCCTGTTCGCCCACCTTTCCTTTGTTTATTG
ATATTTCCACCAGAGGAAGGACCAGGCAAAAGGGAGAATAAATTCACTTTTTAAGATAATGCTTCTGAGTTTTAG
CACAGCATCCCATTTCCCGGGAAGCTTTATTGCCAAGGCAATAAGGAGACCATGTGAGTAGGAGTTAAATGCACA
GCCATTTGTGAAGTGAGACTGCTTGGGTTCAGATCTTGATTCTGCCCTTTATTCTATGTTGTGGAATATATTACA
TTGTGCTGTGCCTCTTTTACCTTATTTGTAAAATAGAGCAAGCACCCAACTCAAGCAGTTGTTGCAAGAACTGCC
TGCTATGCTGTTTAATACAGTATGTGGCAAATAGCAAGTGGGTAGTAAATGTTAATAATACTGTTTGGATTCTCA
TTTTACATATGAGAAACTGAGGTTTAATGAAGTTAAAAAAAGAAAAAAAACTTGTCTAAAGTCACACTACTAGTT
AGTGGCAATGCAAGGAAAAGGACCAAGGTTTCAAATCTACAACTTTCTCCTTTAAGCTACAGTGCTCCCGTAAAG
AGTATTTTTAAAATTGGTAATAGGAAGGGAATTGAGATGTATATTTGAAAATATAAATAATCCATCCTGTCCCTC
AGCTCAGAGTTCTTTTTACCAGACTTTTACCAGACTGGTTCACTTTTACCAGACTTGCTTGGGTTATGTCATTTT
AGTCAGTATATTTGGCAGAACTATCAGGGTGTGTTGCAGAGTGCTGTAGAATGAAAGTCATGAGAAATGACTTCT
AATGGTAGTTTCCCATTCATTTACTTATATGACCTTGACATTTCTCATTCCAGTGATCTCTACTAGTTTATAAAA
TTACTTAGTTCAAGTAGTTATATGCTGACAATACATATTCTAGAGAAAATACTCATTGAGATTATTATAAACTAA
GTTTTTGACTTTTCAGAAGTTTTCAATGCTTATGTAAACTGCTTAGAAATAAATTTATCATTTTATGAAACTTGG
TGATAGTTTACTATTATCTCAAATTGCTTATAAATTAATGGAAGTGTCTCCCATACATTTTAAAATGACTTTTCT
GTTGACATTTTGGGGTATAGCTTCCCACTTATGTATTAAAATGCAATTAAAGAAAAACCCCTAAACTTTCTGTTT
TAGCTGCTTGTTACTCACATTTTGCCTTGGTATATCACCATCTAACTCCATAAATATTGTCCCCTATTGTCTCTT
GTTATTTTTCACCTGAAAATTATTTTGCT**ATG**ACTCTTTCCATCTTCTACCTTAGTATCCTATT

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FIGURE 5581

MTLSIFYLSIL

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FIGURE 5582

ATTTCTCTAACATTAAAAGGGCAGAGTGGGAGGAGGGGATGTGGCAGCCGACCACTTTGAAGGCCAGTTTTCTCA
GGCAACTTAGACCATTTTTAGTCAAATTTTATCTTAGATTCACAGTACTGGTGGTTTTCGAGTATATTATGTTAC
CTTCTGAAATAGTTCCTGTCGTTTTGAGGGGCTTTTCTTTATAAAATAGTCAACTTTGGCTATAAAATGTTACTT
TAGTGTAATTCCAACTGGACCAGTCTTATCTGTAGCATGCAAGAAGTTCAAGTTTCTCTTTTATTTTTAAAAGTG
GCCCATGATACCTGTAAATCTTGGGAAATGACTGAGTACAAAATAACGGAGATTAAATTGAGCTTGAAATTTATG
GGGGAAATGCAGCTAACTTTGTGCTTTTATTTTGAAGCTAAACAGTTAACAGAAACACAATTTTGTAAACAGATA
ATATCTGTGGTCTGTTGAGTTGCTAGGATTTGTCTTTAGATCAATTGGCTTTGAGAAGTCAGCTTAATTCCATTT
TACGGCCCAATTTTGCCTTTTTCCCCCCCTACAGGCTGGCCACTTGAATACATGTCAAATAATCGAAATATGAAG
AATTCATTTTTATTAGAAAAGGCCTTAAGGGTGGAATTTAAGCTCCTATTAACATTCATTCAGTAGAACTTAGGT
TACTGATCAGCTCTTCACTGTGTAAAGTTGATACTGATTTTGGAAGCAGAATATTGAGTGACACAGAGCCAGAAG
TTGTAAAACTGCACTGCAGGTTTCCTGCCCTTTTGCTCTGTAAGCAGTAACTCCAAATGTCACTTCATAACAGTT
CTTGTCAACCTTAGGCAGGATGTATCAATGCATGTCAGATGGGGGTAGATAACTTTGGGGCAGGTTATCACAACC
TAAGAGTTGGTGGAGAAAACATGGGAATGAATTCTAGAGACCACAAAATGAAAACTTGAAAGTGTTACTCTTTCT
CAGCTTAACGTTTTTAAATCCAAAAAACAATTTTTACATTTCTTGGGATTCGAAGAGTTGAACTTCAGGTTGCCG
TGGTTACAGTGTACAGTATATATTATCAGTCTGTACCAGTAGACCAGTACCCTAACTACTGAAAAGAATATGGCA
GTTTTCCATTTGTCTAGTTTCTGTATGTACAATTTACTATCCAATTAATTACTTAAGTGGATTTCTTGTTCTTTT
TTAAAAACTTATTGCTACATTGATAGGCAGAATAGCTTCTGAAAGTGACCAGTTTTCAATTTCATAGGAAGAGGT
GACTCATTGAAAAATAGCTCAAGCAAAGTCAGCTA

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FIGURE 5583

FSNIKRAEWEEGMWQPTTLKASFLRQLRPFLVKFYLRFTVLVVFEYIMLPSEIVPVVLRGFSL

FIGURE 5584

GTTCTTCCTTTCCTTGTCTCTCAGCAAAATATAATCATCTTAGAAATTTTCCTCTCTTCTATTGTCTATTCTATC
CACATATCTAGCTTATTTCCTGTTACTGGGATTTGCCTATGTTTTTCTATACCTTACTTCTGTAAAATTGGTGAG
TTTTTCTATTTATCCCTCTTTCTCCTTAGTTAATGAGGTACCCTAAAGCACTAGCACTTAGGAATTAGTCTACTT
GTCAGCAAGAGCGATCTATTAACAAAGGGATATGTAAGAAACAGGAGAACTAAAACAATCTTGTGGAAAGGGATT
ATTTTCTAAGCGTGTGTCTACTATATTAGTTTACTTCCGAAAAACATCAGTTACTTCTCATAAATCCATCCTGTG
TTTAAGAACATAAAATATAGTGTGGATAACAAATGCAAAGCATGCAAATTTTCAGGTAATCAGGCGAGCCATTAC
TTACGGCACAGGTGTGCCGCCANNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCTACTCAATAAATAGAGA
GCATAGGTGAAAGAAGGACCTAATACAGAAATTTTTAACTTTTCCTGATACTGTTTCAACTTTCTTTTGAATGTC
TGATTTAGGCTGCCCTAGTCATCCTTGGACGTTATCCTTGGGTGATTCAATTAGTAGCAAATTGAGTTGATTTTC
AACTTCTCCATTAATGTGCAGGACCTGAAATCAAAGCAAAAGTGTGCTGTTGAGGGAA**ATG**TTTTGTCACCTAGG
AGATAAGTCAAGCTGTGNNNNNNNNNNNNNNNNNNN

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FIGURE 5585

MFCHLGDKSSCXXX

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FIGURE 5586

GGGCAAAGAGAATTTGTCTTTGGGGGAGTTCCTTGACTTGTCTCCTTGCTTCCTCCGGTTCTTCCTTCCCCTACG
ATCCCCGCCTCTTCGCATCTCCGTTGGCGTCTAGTAACTTTCTGAATGGAGAGAAGACCATAGGGAAACTTAAGG
GTTTTGCTTTTTGGGGGCCCTCTCAGACCTGGCGGAGTTGATCGAAAAGGGTCGTTTAAAGTCAGACCTCATTCT
TGAGCTTAACGTCTTATGTGGACAGTGTTGTTTTGGATTGTGTGTTGCTCCTGTTGTGACATTTCTTTTGGAGAG
ACATTTAAGATACTGAGGAAAGTAGGGAAGAGCACTGTCAGGATGTCCAGGGCGATATTAGTATCAGGCTTGTGT
TAATTTTTTGAGTTACTCAGATTAAGAGATTACCTAAATCAGTTTCAGGAGTTCTGTTTGTAAACTAGCTTCAAA
CTATAGTGTCACTGAAATTAGGA

FIGURE 5587

AKRICLWGSSLTCLLASSGSSFPYDPRLFASPLASSNFLNGEKTIGKLKGFAFWGPSQTWRS

FIGURE 5588

ATTCGGCACCTGGGTGGGTTCTAACCTTGAAATAGGAGCATGGGGCTTGCTTCCCCTTCGTCATTCCTCCAAGAA
AGAGAAAGGAAAGGAAGAGAAAAGAAAAAGCATCCTGTATTATGTGTAAGTTTGTAAGAATCCTTACTATGAGTT
CTGAGTACAACATCTTTTTAACTCTTTTCTCTCCCTCTCCTGCTTCCTTCTTCAATCTCCAGCTACCATTCATTT
CCTGATTTCATTTATAGGTCTTACCAGGCAAGAAGGCTAAGCAGAAGGAACCTACATCAGGGAAGTGCTGGGCTA
CGGGCCCCACCTGGACTTGGGGTTCTGGGCAGCCTGAACACAGGTTTCTTAGTTTCCTGAAGTAATTGAGCTTGT
TGCCTTAACTTCAGTTAAAACACTGATCGTGCTTTACTTTTAACTGAGCATTGAGACCTCTTATAATATTCCATA
AGGCTGGATATTGTTTTGAGGAAGACGATTTTTCCTCTTAACCTTGCCNNNNNNNNNNNNNNNNNNNNNGTCGG
TGTTTAGACAGTTTTCCATGCATGGACCCTGATTACAGCGGGAGCAGGCAACGTGAGGTGCCCGCAATCAGACAT
CCAGCTCCACATGGTGGCCTCCCTGCCCCCAGCTCATCCTTACGCAGTGCCTTCAAATTGAGTGTCTTCAAAGGT
GCTGCTTAGTCTCACTTTGGTTGTTGTGTCGCTGTCGTATTTTTCTTTTTTCGCAGTATTGAAATGTTCACTCCT
AGGGACCGAACACTGGTTTTAGTGTCCATAGTGGCNNNNNNNNNNNNNNNNNNCAAAACTTGTTTCTATTTGGT
CCTCTGTAACCCAAGTTGTTGCTTAGCTTTCCTGCCTAGTAAGAGCCAGAAACGAGATTAGGACGTGAATGGTAT
TTTCTGAACCCTCAGAGTGTGTACAGTACCATTTTGCTAAAGAAAAGCATCTATATTCAAGGTAGATCTAAATAA
TTCCTAGAAATGCCAAATTGTTCTCCCATTCATTTTTCAAGACAAATATGTTCTAATCCATAGGAGAGTGAGAAT
TTCCAAGTTCATTAATTCGGGTTCCTGCTACCAACTCATGTTTTACAGCCCAC

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FIGURE 5589

FGTWVGSNLEIGAWGLLPLRHSSKKEKGKEEKRKSILYYV

FIGURE 5590A

GGCGGCTCGGGACGGAGGACGCGCTAGTGTGAGTGCGGGCTTCTAGAACTACACCGACCCTCGTGTCCTCCCTTC
ATCCTGCGGGGCTGGCTGGAGCGGCCGCTCCGGTGCTGTCCAGCAGCCATAGGGAGCCGCACGGGGAGCGGGAAA
GCGGTCGCGGCCCCAGGCGGGGCGGCCGGGATGGAGCGGGGCCGCGAGCCTGTGGGGAAGGGGCTGTGGCGGCGC
CTCGAGCGGCTGCAGGTTCTTCTGTGTGGCAGTTCAGA**ATG**ATGGATCAAGCTAGATCAGCATTCTCTAACTTGT
TTGGTGGAGAACCATTGTCATATACCCGGTTCAGCCTGGCTCGGCAAGTAGATGGCGATAACAGTCATGTGGAGA
TGAAACTTGCTGTAGATGAAGAAGAAAATGCTGACAATAACACAAAGGCCAATGTCACAAAACCAAAAAGGTGTA
GTGGAAGTATCTGCTATGGGACTATTGCTGTGATCGTCTTTTTCTTGATTGGATTTATGATTGGCTACTTGGGCT
ATTGTAAAGGGGTAGAACCAAAAACTGAGTGTGAGAGACTGGCAGGAACCGAGTCTCCAGTGAGGGAGGAGCCAG
GAGAGGACTTCCCTGCAGCACGTCGCTTATATTGGGATGACCTGAAGAGAAAGTTGTCGGAGAAACTGGACAGCA
CAGACTTCACCAGCACCATCAAGCTGCTGAATGAAAATTCATATGTCCCTCGTGAGGCTGGATCTCAAAAAGATG
AAAATCTTGCGTTGTATGTTGAAAATCAATTTCGTGAATTTAAACTCAGCAAAGTCTGGCGTGATCAACATTTTG
TTAAGATTCAGGTCAAAGACAGCGCTCAAAACTCGGTGATCATAGTTGATAAGAACGGTAGACTTGTTTACCTGG
TGGAGAATCCTGGGGGTTATGTGGCGTATAGTAAGGCTGCAACAGTTACTGGTAAACTGGTCCATGCTAATTTTG
GTACTAAAAAAGATTTTGAGGATTTATACACTCCTGTGAATGGATCTATAGTGATTGTCAGAGCAGGGAAAATCA
CCTTTGCAGAAAAGGTTGCAAATGCTGAAAGCTTAAATGCAATTGGTGTGTTGATATACATGGACCAGACTAAAT
TTCCCATTGTTAACGCAGAACTTTCATTCTTTGGACATGCTCATCTGGGGACAGGTGACCCTTACACACCTGGAT
TCCCTTCCTTCAATCACACTCAGTTTCCACCATCTCGGTCATCAGGATTGCCTAATATACCTGTCCAGACAATCT
CCAGAGCTGCTGCAGAAAAGCTGTTTGGGAATATGGAAGGAGACTGTCCCTCTGACTGGAAAACAGACTCTACAT
GTAGGATGGTAACCTCAGAAAGCAAGAATGTGAAGCTCACTGTGAGCAATGTGCTGAAAGAGATAAAAATTCTTA
ACATCTTTGGAGTTATTAAAGGCTTTGTAGAACCAGATCACTATGTTGTAGTTGGGGCCCAGAGAGATGCATGGG
GCCCTGGAGCTGCAAAATCCGGTGTAGGCACAGCTCTCCTATTGAAACTTGCCCAGATGTTCTCAGATATGGTCT
TAAAAGATGGGTTTCAGCCCAGCAGAAGCATTATCTTTGCCAGTTGGAGTGCTGGAGACTTTGGATCGGTTGGTG
CCACTGAATGGCTAGAGGGATACCTTTCGTCCCTGCATTTAAAGGCTTTCACTTATATTAATCTGGATAAAGCGG
TTCTTGGTACCAGCAACTTCAAGGTTTCTGCCAGCCCACTGTTGTATACGCTTATTGAGAAAACAATGCAAAATG
TGAAGCATCCGGTTACTGGGCAATTTCTATATCAGGACAGCAACTGGGCCAGCAAAGTTGAGAAACTCACTTTAG
ACAATGCTGCTTTCCCTTTCCTTGCATATTCTGGAATCCCAGCAGTTTCTTTCTGTTTTTGCGAGGACACAGATT
ATCCTTATTTGGGTACCACCATGGACACCTATAAGGAACTGATTGAGAGGATTCCTGAGTTGAACAAAGTGGCAC
GAGCAGCTGCAGAGGTCGCTGGTCAGTTCGTGATTAAACTAACCCATGATGTTGAATTGAACCTGGACTATGAGA
GGTACAACAGCCAACTGCTTTCATTTGTGAGGGATCTGAACCAATACAGAGCAGACATAAAGGAAATGGGCCTGA
GTTTACAGTGGCTGTATTCTGCTCGTGGAGACTTCTTCCGTGCTACTTCCAGACTAACAACAGATTTCGGGAATG
CTGAGAAAACAGACAGATTTGTCATGAAGAAACTCAATGATCGTGTCATGAGAGTGGAGTATCACTTCCTCTCTC
CCTACGTATCTCCAAAAGAGTCTCCTTTCCGACATGTCTTCTGGGGCTCCGGCTCTCACACGCTGCCAGCTTTAC
TGGAGAACTTGAAACTGCGTAAACAAAATAACGGTGCTTTTAATGAAACGCTGTTCAGAAACCAGTTGGCTCTAG
CTACTTGGACTATTCAGGGAGCTGCAAATGCCCTCTCTGGTGACGTTTGGGACATTGACAATGAGTTT**TAA**ATGT
GATACCCATAGCTTCCATGAGAACAGCAGGGTAGTCTGGTTTCTAGACTTGTGCTGATCGTGCTAAATTTTCAGT
AGGGCTACAAAACCTGATGTTAAAATTCCATCCCATCATCTTGGTACTACTAGATGTCTTTAGGCAGCAGCTTTT
AATACAGGGTAGATAACCTGTACTTCAAGTTAAAGTGAATAACCACTTAAAAAATGTCCATGATGGAATATTCCC
CTATCTCTAGAATTTTAAGTGCTTTGTAATGGGAACTGCCTCTTTCCTGTTGTTGTTAATGAAAATGTCAGAAAC
CAGTTATGTGAATGATCTCTCTGAATCCTAAGGGCTGGTCTCTGCTGAAGGTTGTAAGTGGTTCGCTTACTTTGA
GTGATCCTCCAACTTCATTTGATGCTAAATAGGAGATACCAGGTTGAAAGACCTCTCCAAATGAGATCTAAGCCT
TTCCATAAGGAATGTAGCAGGTTTCCTCATTCCTGAAAGAAACAGTTAACTTTCAGAAGAGATGGGCTTGTTTTC
TTGCCAATGAGGTCTGAAATGGAGGTCCTTCTGCTGGATAAAATGAGGTTCAACTGTTGATTGCAGGAATAAGGC
CTTAATATGTTAACCTCAGTGTCATTTATGAAAAGAGGGGACCAGAAGCCAAAGACTTAGTATATTTTCTTTTCC
TCTGTCCCTTCCCCCATAAGCCTCCATTTAGTTCTTTGTTATTTTTGTTTCTTCCAAAGCACATTGAAAGAGAAC
CAGTTTCAGGTGTTTAGTTGCAGACTCAGTTTGTCAGACTTTAAAGAATAATATGCTGCCAAATTTTGGCCAAAG
TGTTAATCTTAGGGGAGAGCTTTCTGTCCTTTTGGCACTGAGATATTTATTGTTTATTTATCAGTGACAGAGTTC
ACTATAAATGGTGTTTTTTTAATAGAATATAATTATCGGAAGCAGTGCCTTCCATAATTATGACAGTTATACTGT
CGGTTTTTTTTAAATAAAAGCAGCATCTGCTAATAAAACCCAACAGATACTGGAAGTTTTGCATTTATGGTCAAC

FIGURE 5590B

ACTTAAGGGTTTTAGAAAACAGCCGTCAGCCAAATGTAATTGAATAAAGTTGAAGCTAAGATTTAGAGATGAATT
AAATTTAATTAGGGGTTGCTAAGAAGCGAGCACTGACCAGATAAGAATGCTGGTTTTCCTAAATGCAGTGAATTG
TGACCAAGTTATAAATCAATGTCACTTAAAGGCTGTGGTAGTACTCCTGCAAAATTTTATAGCTCAGTTTATCCA
AGGTGTAACTCTAATTCCCATTTGCAAAATTTCCAGTACCTTTGTCACAATCCTAACACATTATCGGGAGCAGTG
TCTTCCATAATGTATAAAGAACAAGGTAGTTTTTACCTACCACAGTGTCTGTATCGGAGACAGTGATCTCCATAT
GTTACACTAAGGGTGTAAGTAATTATCGGGAACAGTGTTTCCCATAATTTTCTTCATGCAATGACATCTTCAAAG
CTTGAAGATCGTTAGTATCTAACATGTATCCCAACTCCTATAATTCCCTATCTTTTAGTTTTAGTTGCAGAAACA
TTTTGTGGTCATTAAGCATTGGGTGGGTAAATTCAACCACTGTAAAATGAAATTACTACAAAATTTGAAATTTAG
CTTGGGTTTTTGTTACCTTTATGGTTTCTCCAGGTCCTCTACTTAATGAGATAGCAGCATACATTTATAATGTTT
GCTATTGACAAGTCATTTTAATTTATCACATTATTTGCATGTTACCTCCTATAAACTTAGTGCGGACAAGTTTTA
ATCCAGAATTGACCTTTTGACTTAAAGCAGAGGGACTTTGTATAGAAGGTTTGGGGGCTGTGGGGAAGGAGAGTC
CCCTGAAGGTCTGACACGTCTGCCTACCCATTCGTGGTGATCAATTAAATGTAGGTATGAATAAGTTCGAAGCTC
CGTGAGTGAACCATCATATAAACGTGTAGTACAGCTGTTTGTCATAGGGCAGTTGGAAACGGCCTCCTAGGGAAA
AGTTCATAGGGTCTCTTCAGGTTCTTAGTGTCACTTACCTAGATTTACAGCCTCACTTGAATGTGTCACTACTCA
CAGTCTCTTTAATCTTCAGTTTTATCTTTAATCTCCTCTTTTATCTTGGACTGACATTTAGCGTAGCTAAGTGAA
AAGGTCATAGCTGAGATTCCTGGTTCGGGTGTTACGCACACGTACTTAAATGAAAGCATGTGGCATGTTCATCGT
ATAACACAATATGAATACAGGGCATGCATTTTGCAGCAGTGAGTCTCTTCAGAAAACCCTTTTCTACAGTTAGGG
TTGAGTTACTTCCTATCAAGCCAGTACGTGCTAACAGGCTCAATATTCCTGAATGAAATATCAGACTAGTGACAA
GCTCCTGGTCTTGAGATGTCTTCTCGTTAAGGAGTAGGGCCTTTTGGAGGTAAAGGTATA

FIGURE 5591

MMDQARSAFSNLFGGEPLSYTRFSLARQVDGDNSHVEMKLAVDEEENADNNTKANVTKPKRCSGSICYGTIAVIV
FFLIGFMIGYLGYCKGVEPKTECERLAGTESPVREEPGEDFPAARRLYWDDLKRKLSEKLDSTDFTSTIKLLNEN
SYVPREAGSQKDENLALYVENQFREFKLSKVWRDQHFVKIQVKDSAQNSVIIVDKNGRLVYLVENPGGYVAYSKA
ATVTGKLVHANFGTKKDFEDLYTPVNGSIVIVRAGKITFAEKVANAESLNAIGVLIYMDQTKFPIVNAELSFFGH
AHLGTGDPYTPGFPSFNHTQFPPSRSSGLPNIPVQTISRAAAEKLFGNMEGDCPSDWKTDSTCRMVTSESKNVKL
TVSNVLKEIKILNIFGVIKGFVEPDHYVVVGAQRDAWGPGAAKSGVGTALLLKLAQMFSDMVLKDGFQPSRSIIF
ASWSAGDFGSVGATEWLEGYLSSLHLKAFTYINLDKAVLGTSNFKVSASPLLYTLIEKTMQNVKHPVTGQFLYQD
SNWASKVEKLTLDNAAFPFLAYSGIPAVSFCFCEDTDYPYLGTTMDTYKELIERIPELNKVARAAAEVAGQFVIK
LTHDVELNLDYERYNSQLLSFVRDLNQYRADIKEMGLSLQWLYSARGDFFRATSRLTTDFGNAEKTDRFVMKKLN
DRVMRVEYHFLSPYVSPKESPFRHVFWGSGSHTLPALLENLKLRKQNNGAFNETLFRNQLALATWTIQGAANALS
GDVWDIDNEF

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FIGURE 5592

GATCCAGTGTGCCCGGCAATACTGTTGACTTTTAAAGATGAGTAAAATTCAGATCAGCAAAGATGGGGGTATTTT
ACCTGGCAGGAGTATGTAAAGTGAGGGTATAGGTTTGTCATGTAAGGGAGTAGTTGATGATACTGCTACAAAAAT
AAACTGGGGTTAATTATGAAGTTCTTGAGTGCTGGAGTTTAATTAAAGTCATAATTGCCACCATTTTTAAAGCTT
TTAGTATATTCCTAGCACCGTAAAGGACTCTGAAGTACATTAGTTGCTATCCTTCTCATCTCTGTGAAAGGTATC
GTTGCAATTTATAGATTGTCAACTGATATGTGGAGGTTACCTGAGCCTCAGTGAGATAGATGGTATTCAAATACA
AGTAAATTTTGTTCCTAAGTCTGCCATTTTTATGTTAATCTAGCCTATATCAAGTTGGCAAATTCACATGCTAAG
AGGGGTGGGCAGATAGTACAATTAAGTGAAACTGTCTGAGTACTGAACCGGAGGTGACAAAGAGAGTGTAGCTGT
AAAGAAACTACAGATTTGTGCCCTGCTGTAGGCAACAGTAAGGTGCTAGGGAAGATACTTGAGGGAAGCAGCCTG
ACTACCTTGGTTGTAACTGGTAGGGAGTATTTAGGAAGGATTGAAGCCGGATAGAGATTTAAAGACAGAGAGAAG
AGGTTGCAGTTTCCTAAGTAAGGGTTATGTCATTGGAAAATGAGGGGTTGGATTAGAAAGGAAAAAAATGGGTAG
GACTTGGACAGAAATAACTGAAGCCTGGTCCATTGTCACTTTGGAAAGTTTGTAAAAA

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FIGURE 5593

DPVCPAILLTFKDE

FIGURE 5594

TTTACCTAACCCAATGGTTTGCTGGCATTTAGGTTAGTGTCTTTATAAAGAGCTAGCTCTCATTGGGAGAGTTGA
GCCAGAGCAACCATAGTAAACATAGCTTACTGATAATAGCAATTACGTAGGGATAAGATAACATTCTCTCACTTA
CCTAAATTTTAATGTGTCCTGTTACATAGGTTAATTTGTGCTTGGAAATGAATTTTAGTTAAGTGAGAAATACCT
GTTGTTTGCTTTCTGACATTATAGTAATATGTACAGAGAATAATTTAAAATTATAATTTATGGGTCTTTAAAAGG
TTTTGTTCCTAACAACATTTATAAAAATTTATTGTACTATTGTAAAGTTTTTTATATATGGGTTTTTTTCCAGCC
TCAAATTCTTTTGTGACTTGGAAGAGTATTATGGACAGAAGCTTGGGTACTGCTTAAAATTT**ATG**TTTTTAGAAG
TAGAACTTTTATTT

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FIGURE 5595

MFLEVELL

FIGURE 5596

TAGTGATACATTGGATGATTTTAATAGTTTTATTAGTGAGATATTTGAGGTATTCGAATTACTAACAATTCTTTC
CAATCCTACAAGTTAAAAAATTTTGTTATGGTTGCTGACTTTTAAATGCTGTTTATTCTCTGAAGGCAGTTTTATG
ATGCATTTAGAAAAAAGGTAAGAGAGATGTAGGCATTATACTGGTTCATCTTTTACCTAATGCATGACCAGTATA
CTAGAGGAAGTTGTGATGGACCAGAGTCTTTTTGTTTTGTAATCAAATGAATAGTTCCTTCATAACCAGGACAGC
TAGTGTGTGCTTGAGAATGTCTCCCTCAACTATATGATCTGGGATATTCTGCATTAAAAGGACTCCCTTCCCAGT
ATTGGGAGAAAGAGAGATAAATTGACACATTTTTACTCTGACTCCTTCATTTATCTTCCCACATACAAGATCATT
TTGTCTTTTAAAATGTACAAGGTTACAATAAGTTAAATGTTATTAGTGGCCTTCTACATTTGATCAGTAATGTAG
ATGGCTACTTTTATTTACTTGATGTTGCATTTTGTTTTTTTAACTATAAGTTTCAATACACTAATCTGACTGGCA
CAAGTTGCATATAGTTCCCAGTGGTCCACAGGGTTCATCATTCCAAAAATATTTATTCATAACATTGAATGGCTC
AGATTACATAAAATTCTATCTGTTGTGAACAGGTCACCTGATTGTAACTATTATCTACACAGTTGGCCTTCTTCA
TCTCTGGGTTCCACATCCATGGATTCAGCCCACTGTGAATTGAAAATATAAGGAGAGA

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FIGURE 5597

SDTLDDFNSFISEIFEVFELLTILSNPTS

FIGURE 5598

TTTGTGTGTTTGTCTTCCCACATTGGTATATTAAATATTTTTAAACAGAATCATGTACTTTTTATGTCTATGCCT
CTAGGGACTAACAACATGCTTACTGAAATGAGAATAGACAGGAAACACAAGACCAGAGCAGAGATATGACTTGTC
ATCAGTTTATTTGAAAGTCTACTGGTATGAGAGTAAGGGAGAGAGCCAGGCCCAACCTCAGTTGGCCTTACTCAA
TTCTTTCATTTTCTGGGGACAGTACTAGATTAATTATAAGCAGCATCCCCTTCCCCCATGCCCACTTTTCAAGCT
TCAACTTTTCTTGAGTTCCTAAGCAGGAGACCTGGACCTCCAGTGAAAACCATACTCACTGCTCCTAAGCAGAAA
TCCCTTCCTTCTCACCTGTTCCACCAGCCCAGGCTATACCCTGGGCCTGTCAGCAACACTGCCTCCTCTAGCGCA
GGTCTCACTCTGAATCTCATTGGCAGGTCACTTGGTACATATGACCGTGGTCTCCGGCAACGTGACTCTGAACAT
CTCTGAGAGCCTGCCTGAGAACTACAAACAACTAACCTGGTTTTATACTTTCGACCAGAAGATTGTAGAATGGGA
TTCCAGAAAATCTAAGTACTTTGAATCCAAATTTAAAGGCAGGGTCAGACTTGATCCTCAGAGTGGCGCACTGTA
CATCTCTAAGGTCCAGAAAGAGGACAACAGCACCTACATCATGAGGGTGTTGAAAAAGACTGGGAATGAGCAAGA
ATGGAAGATCAAGCTGCAAGTGCTTGGTGAGTCAGGGGAGCCAAAGAGCAAATCCCCACTCCAGTGGCCCCAGAT
GGACCACTGTAGGGCTTCCTGGGAGGCATGGGGCACTCTCGGGGAGGAGGAGAGAAAAACCTCAGGACAGGTTTG
ATTCATTTTTCCTTGATCCAATTCTATTTGGGAGTGAGCCTAGGTCAACAGATATCCAAATTAACAATCTTAGGA
CATTTAACACCTCTTCTGAAGTTAGTGAGTCTAAGCTTTGAAGAGAAGGAAAACTAGAGATTTTTCCTATTTCCT
TCATTTTGTCCTGTGATCAACCTAAATCAGCTCAGCTCATCTTGATTATATCTCCGAAATTAGGCTTCATTGGAC
TTAAGAAAAAAGAGAATGTATTAATATAAAGAATGGGGCAGGAGTTATCAGGAGAATTTTTCAACTTTCATAATG
GGCAGGACAAAAAAACTTCCACTCATAGCTCCAGTCTAACCAGTGTATATGGAATAAGGACTCAGGCATTATACC
TGGAGCCAGACAGACTTGGGTTCAAAACTGGTCAGTTGCTCACTAGCTGTGCAGCCTTGAAAAAAGATCTTCACA
TCTCTGTGCCCATATTAGGTAAGATTCTTTTGATAGCAAATAACAGAAACTAATTCAATGTACCTTTACCAAAAA
AGGAGAATTTAGTTTAAGAAACTAGGGCTATTTAAAGCAATTCAAAGAGTTTAAAAGAGCTAGGAAGGGCTTAAG
GGGAGAAGATTGAAAACCAGGTTCGGGCCAGAACCCCTAGCTTCAGGAATCTGTGGACTGTGCCTATGGATTTGG
ATTCCTGCCATTTTACACATGTTATCTCTCAAAACTTAGACTTTTGCTCCTCTGAGTTTCAATTCTCAGGGCAAT
TTAAAGAGAGAGAAACTGATAGTCCCAATTTAGTTCAGGTGTGTGTACCTGATCTAAACATTTTTGGTGAAAGGA
TCAGATTATAGGGCAGAAACATGGATATGGGGAGGGGCTCCAGGGGTTGGGGTATGCAATTCTTGTAGAAGAGCG
GGGCTAAATAATCCAAGAGTGGTGTTCCCTTGAGAGCCTTGGGTTCTTCATCATATTATGAGAATAATTCTACTT
ACCTTTCAGGCTGTTATTAGAGTCAAAGTAGATAAGGAAAGTGAAAACATTTTTTAAAATGTCAAAACATGCAAA
TGAAGAGTGTTGTATACATTCAAGTTCCACCAGCCAGACAGTCCCTGATCCAAGCAGTCAGATTCCCCTTCTAAC
TCTTCTTCCATGTCATATGGGCTGAAAATTCAGAAAGTCCTGGGAACAAAAAGATTCAAGGTCTCTTACAGTGGT
GTTCTGGTTAACAAGCTCTACAAGATTT

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FIGURE 5599

MTVVSGNVTLNISESLPENYKQLTWFYTFDQKIVEWDSRKSKYFESKFKGRVRLDPQSGALYISKVQKEDNSTYI
MRVLKKTGNEQEWKIKLQVLGESGEPKSKSPLQWPQMDHCRASWEAWGTLGEEERKTSGQV

FIGURE 5600

AGAGAATAAGTGGTTGAAAGTCAACATGCCTAGACAACCCAGCAAACTAGAAGACACCATAAGAATGCGTAATTA
TTATTCTTTATATGTTTATAACANNNNNNNNNNNNNNNNNTAACAGCTCAAGACGCAGGTAGTATAGTAATTTT
TGCCCCATACTGCTGAATGTTTTGCCTGGCAAATACTGGGAATGGGGCAATTCCTGTGGCAGTTTTGTTTTCCAA
TAATTGTTTTTTCTTATATCGGGGATGACAAATGCTTGTCACAAAGAGTAGCCTTGTTGATTACACTTATAAATC
TTCGGGAGACTTCTTCAATGAGTCAGTGTTAGAGCTTTCAGTTTCCATAAATGCAGATTTCCTTTACTCAGTTTT
CTTTTAAACATGAGCTGATCTTTCTTAGTTTGCACTATAATACCCTCCACTGAAGTCTCACTGCAACTGCTTTTA
AGTATATGTGAAGAGAAACTAGCCCTTTGCTAAAATAGTTGCATGTTTCACGGGCCAGTGAGTCATTTAGTCATA
CACTTAAGAACTTTCCACCTTTCAAGTGTTTATCATCACCTCGGATTTCACGGCCTAATGCCAGTCAATTTCATG
GGGCATAGAAGCCCTGTACGTATTAGTTTGGGCCATTATTGTATCAGTCTTGTTTATTCCCAGAAAAGTCTTATC
AAGAAAAGAGGGAGTGACTATAATCAGA

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FIGURE 5601

MFHGPVSHLVIHLRTFHLSSVYHHLGFHGLMPVNFMGHRSPVRISLGHYCISLVYSQKSLIKKRGSDYN

FIGURE 5602

AATAGTCATAGGTCGAGGCCCGGGTGTAAATCGGGCGAGGGCCGGCCTGTTGCCTGTGGCGACTGCGCGCGGGGT
TAGACGCAGGCGCCGCAAGCCGTGAGCTCTCAGTGCAGGCGCATAGGCTGCGGGGTTGAGGCGCATTGCGTGCGC
GTGCGCGCTGCTCACACGCGGACGGTTCTGTGCGCCGCAATGGCTGCCCGCGAGTATCGGAGAGGCGGAGCTCTC
AGTCTTTTACAGGACCGGGTCTCCTGATGCCGCCGGTGGTTCCTCGAGGCCCCCTTCCACGCATCCGCCGCCGCT
GCTTCATCAGGACTTCATTTCGGTGACGCAGAGCTTTGGCGAGAGCTACGGCAACAGCAAGAACTGCCGGCGGCT
CTTGTGCTGCAGGGTGAGGACCGCGCCGGGCGGACCGAGGCCCGGGGTCGCTGCGCCCGCCGCCCTCCCAGCCTG
CGGCTCCGAGCGGGGCCTGGGCGGGCAGACTCGACTCCCCCCGACGCCGCCCTCTCCACCCTTACCCCGCAAAAA
GGGGCAAATCTGCTTTCCGGGCCGGGGCAGCCGTGGTCGGCACGCCTGCAGCGGTCTCAGCGGCCCAAATTCTGC
GGGGCGGTGGTGGTGGGAGGAAGGGTTGGAGCCCCAGCAGGTTGTCTGGGCTTCGTTTGATTTTCGGCAAGGTCC
TGGCCCAGGCCCCAGTCCCTCTTGGAGCGGAAGCCTCTGGACCTGTTGCTCCTAAGAAAGCAAGCGGCCCCTGAC
GCGTTGCTGTGGCCTGGTTTGACCCTCGTAGCCAGCCCATGTTCTGTGAGGCATGAAGCGCCACGCAGACACCAC
GACAAAGTGAGATGAACTAAGACCTCTTCTTGATTCTAAGCAGGGAACGCACAGCTCACCCTGTCACATGCAGCG
ATCATAAGCTGAGAATTACCCTCTTCCTTCCCACAGCGTCTAATCTTTTTTATGTTTTTGTGGGCAAGGTCTCGC
TTAGTCGCCCAGGCTGAGCGCAGTGGCGATCATGGCCCACTGCGGCTCGACCTCCTGGGCTCCAGCGTGCGTCTA
ATCTAGAACCAAATCCTCCTTCCTTAGATCATCCCCCAAATCACCCAACTACAGGTGAAATCCTGTAATAGTTTC
CTCCGAACACCCTGTTGCTGAGACACCTCAACGTCTCAACCTGGTGTGTTTGTACGTAGAGTAAAAGACCCAACT
TGTTTAACTACAGGCGT

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FIGURE 5603

IVIGRGPGVNRARAGLLPVATARGVRRRRRKP

FIGURE 5604A

TACCCAGCACCTAATACCTTTTAACATAAGTATTGCATTAAGATTTTCTCTTCTCTTTGTAGCTTAGGATTTCCT
GGAAGCTGGCTGTCTATCAGTGTGTGTTAAGTGTGATGCTTCCATAATACATTTGGATGCTGTCAGCTAAGTTCA
CTTCTGAACTAAGGGGTTCCTCCAAATGTTGGCTGAAATTCATCCCAAGGCTGGTCTGCAAAGTCTGCAATTCAT
AATGGAGCTACTGTACTGGCTATTGGAAGGAGGAGATTCTGAAGATAAGGAGGTAATATTATCTCTTTTAAAAGA
ATACTTTCCTCTGTAATCCTGAATCTTTATTACATGTAAGAACTTTGTGCAGTAGACAGCAATTTCTTTGAATTT
GGTATATGGAAACAATTTTATTTTCCTCTGCTAAGTTTTTGAGCCTGCCTCTTCTAGTGCCATGGACTGCATTGG
TAGAGCTGAGAAATATCATTTAGCCATACTCAGCACCCTTAAAATAGCTTCTTTCTGAGAATTAGATCTGTGAAG
GTGTCCTGCACAGTTCTTGTAGATGTCATTTTAGTTTGTGGTTGACGTGCATGCATTTAGCATGTTGCTTAACCG
TCCTCATTCGCCTCCCAGTTCTTTGTTGCCTTCATTTGGGGGGGATGTGTTTTCTGCTGGATGATTTACTGCTAGA
CATGACCAAACTCTGAGTATAAGACTTGGTGTTTGGCAGCTGGTTCCAGTGCTCTGCTGAGAAGTAGTTGGGCCC
AGCCTGGGGCATTGTAGTGTCCTGGAGGCCGGGAGCTCCTGCACAGGGGTTCTTTTCCTGGTTCAGAGCCTTAGG
TGCCTTTCCACTTTTCACGTAATCTTTTCCTAGGTTGGCTTGCTGCTTACTTTGCAGCTGTTGCAGGGATTCACA
TGGAATGGAGGGCTCCCTTTTATTGTGGATTATTTCTTTGATAATTTACCCATGTGCTTTTTCATTTTCAAAAAC
CCAGTGGTGTTTAAGAATGAAAGATTCTTGAAGAACAAAAATTGGGTTAAATTTGTATCTATCAGAAAAGATTCT
ATCCTCTGATGCTATGTAGGCACATTGAATATGCAGGCTAAATTAAAAACAGAGTAAAACCTTTTTATAATATGC
CAATTACTATATCTAAGAATGTTTATACAGGCTGAAATTTTGTAATGGTATTTATATCTGTTTTCCTTTTTAAGG
AAAATAATATACTTTTCTAGGCATCAAAAATATCTGCCCCTTTCACTAATGCTGATGTACCACTTCCCCCAACCC
CAACGCTAAATTTGACTGGCTTAAAAACATCTGCCCCCTGAACTATATCTGGGGAGGAATATTAATAAAACAATG
AAGGACTTCATGGTGTCTAGTTATATAATTAGGAAATTGGTTAGAAACGTGGCTAAAACCAGTTTCTTTCATTAA
AAGAACTAGTGTACATTTAAAAACAAAAACTTCAGGAAAAAGACTCTTTGATCTTTAAGTCAAATAGTATTTTTG
GTTAACACAGCAGGAAGGGGAAATATACCAATTTCAGATTCTTTTATTTATGCCTAAGTAGAGGTTGTAAGCAGC
TAAGGAAGTGATTAAAATGTAGTCTAGTAAAAAATGGTGCTGATTACTTGGAAAGCAGTTTACATTTGCAAAAAA
ATTCAGTATTATGACCTTCACCAACTTTTACACATCATATACTTGGGTTATTACTTATGGTATAGCTTGTGTATG
GAATGCAAGGGTATTTTCAAATTGACTAGGTCTTGCTGGTCATCTTAAAATATGTTACAATATTACAAAATTGAA
ATGTAATATTTTTTAATAGAAGGAAAATATAAATTTAATATCTGGGCAATTGAGACCTTTAAACTTACTTTAAAA
GTATGATCTTGATGTATATGATACTGTTTTGTCTTTGCTATATTAACAGAATTAGAGGGGTGTTCTGCAATTCAA
ATACCTTATATATTCCAAATTTTATTCTCTATAATGGACTTTTAAAATAAAAGGTATATGTGCTTCAAGAGGGCA
AAATTTGAATCATGAGCTAATTTGCTAAGCATCAGATTATAGAAAAGCATCCTTGATTAATTTGGAACTGTGAAA
GGGGGCGGGTAAAACTGTTTTCTGCAGAAATTTACTAGTGCAGCAACCATTTAAATTAAATGTTTGTTAACATAA
TAGTGATGGCATTTTCTCCTCCCCCTCCTTGTGGTTTGTCCAACTAGATGTTACAGTGGCAGTTGCACTGACTGT
TAAGTGTTTAAATGATGACACCATTATGTGAAGTGATTTTGAAATGAGAGATTCCAGCCAAGAATTACATCTGCT
CCCATCTCCTTCAAATCATACTCTCTGGCAGTACAGATTATGATTGATTTGTTTGTGACAGATTGCAGGAAACAG
TCATTGATTTTTCAATATTTTACCTTAAAATTATTTACAGTTGTAACCATGGGGAGGTATTTTCATGGGCTGTCA
GCCCCTGAAAGACTAGGATAATATTCCCTGCTCTCTGACAAGACAAATTACCTGTAATGAGTGCAGTAGCTGAAG
GGTATACTTTTATTTTAAAATATGTCAATAACCCCAGTGACTAAACGAATATTGATTTAGCATAATGAAGCCTGA
GTAACGTGAAAATGAGCTTTTTCAAGGGGCATGGTAAAGTCTTTCTTTTTAGCTGGTTGTAAGAAGCTTTTGATT
CTTTTCAGCCAGCTGGTAGGAATATAGAATTTTATAAGCAAACCATCAGGAATGATAGTGTTGTTTCTGATAAGC
AACATCCAAATATTTTGACCCTGCTTTTAGTGGTTTTTTTCAAATCTTATTTTGAGTCTTACTTTTAGTCATAGA
ATAGCTACTGATTTGATGCGGTCTTTAACTGACTTAATATTTTTACAATTTCAATATATTTTGCATTGGAATCTC
CAGTAATGAATATTAAAATATATGTACAATCATTTGTAGATGATATCAATTATATTAAGACATTTCAGATGGGCT
ATTGTAGTATTTAATGTGCCGTATTTTATGGTAGAATAATTCTCAGTCTCTGGACATCAAGATTGCTTTCAGTGG
GAATGAAGATTAATTTACTTCAGTCCTGATTTTTTAGGCATCAATGCATGTTTTCATTTTTGTCAGACTTTTACC
CTCTTTTAATGTAATTCTCAACTTCTTATGGATTTACTTCCCAATACATAAAATCCTTCAAAACAAGAATGATAA
TAATTTTTATACTTTTTATAAAAATAAATTTATTTTTAGTCCATCAAGGTGTCTGAAGATTTTATGCCTAGGTAT
CTCCATATCTAACTTGATAAGGAAAATAGGATAAACAATGCTGGTAATAGCAGGAAAGTAAGTATTTGAATAAGA
TGTCAAACTGATATTTCATGTGAACCTAACTCATTTTATGGTAACTAATAATTATCTTATTTAAATCAATAGGTA
AAACCTGTTTAGAAATTAAAAATGAGTTACGATTTAAAGAAAATTCAGATGACTCATTGTGAGTGCTAGTTCTCT
TGTAGGATGCCACTGGAAATGTTGAAATGAAAAATGTAAGTATATCTTTTGGTGGAAAAAAGGATAGTCTCTAGG

FIGURE 5604B

ACACAAAATTACTGTTTTATTTTTTTCTCAGGAGTTTGCCTAAGGGTGTGACAGATGATCTCTGTCACTTGTCTT
AGTTGTGTCCTGCAATAAACTGGATGCTTTATAAAATACTAGACCTGTGATTTCGTATGCTGTAATATTTCATTT
CTCCATCACCCCTCCAAATTATTTCTTAGTTTGGAGTAAAATAATAAATGTATTATAGTCAACATCTCTTGACCC
CTCTTTAGTTTCAGCTAAACTAAGCATGTGTGTTTGTGTGTTCATTTTATAGTTCATGTGTAGAACTATGTGAAT
TAAATTTAAGAAACATGTAAAGTAGAGGAAATAGTTTTCTGGAGAAATTTTTCCTTTTTGGATATTATGCCCTTT
TCCATTGCTTTTCTCTGCTTGAAAGCAAAAAAAAGTACCCTACCCCTGTTCTCCTTTAGGGAAAAACTATTCCTA
TAAAGTATTTTTAAATCGTGCAAGTCATTGCCTAGGGTTAGCTAAAACATTTCTTTTTAAAAAGGAGAAAATGCC
CTGGCTTTAACATTTTCTTGTATTTGTATCTATTAAGATAAACAGTTTACTTTGATACAGTACATACCAATCTAC
TTAATTTTTTTTCCAGGATTCCTTTTACTATGTTTGGTCTGACCTTTTATGATAACTTAATATGGGAACAAATTA
GCATATAATTCTATTTTCCATGTGACCTCAACCAGTTGCAGAATTGTACCACTACTTTAGGGGGGGCAATTTGAC
AGTTTATGTAGACTATAGCATTAATTGTTCCCAAATGTTCAGTGCATCCTGGCTAATGTGTTATTGAAGGTGTTT
TCACGTAAGCAGTTAGAGGAAGCACTTCACCCCTATTACTAAGTTATTAAAATGCCTCCTAAAGGTAGCATTTTA
AATTAGTATACATAATTGATTAGTAATTTGTCTTCTCCCAAGCATAAAACAGCATAGCAGAGTTAAGTGTGACCA
GTGAAGTATAAGATATTAGGGATTGATGGTGACAATGATCATAGCAACTAAATGGATTTTTTTTTTCTTTTAGAT
TCAGCCGTTGGTCTTTGAAATTTCCTGTGATGTGTTTCAATCTAGATGCAAAGAACATGGAAAAATCAAAGTGCT
CGAGTGGTTTAAATATGTTTTGGGTATTCCTGTTTATAGACTATAATACTTTTCCAATTAAAATCCTCAGTTGTC
ACGCAGAAGAAGGTTAAGCTGTATTTGATTGCCAGTTTTACTGAAAATGCTTAGTATTTTACAGTATCACCAAAT
ATATTTTGTTTAGCCAAGGTATAGGAAAAATAAAATAAATTGTATAGGTTGACTTTTTTCTAAAATGTCTTTATT
GGATTGAATGAATGTTTATACCTGAAAAAAAAAGGTTC

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FIGURE 5605

TQHLIPFNISIALRFSLLFVA

FIGURE 5606

GAAACATTAAATGCAAATATAAATTCTACCAACTTTGCTCCGGATGAAAATCAGTTAGAGTTTATACTGATGGTG
TTAATCCCATTGATTTTATTGGTCCTCTTACTTTTATCCGTGGTATTCCTTGCAACATACTATAAAAGAAAAAGA
ACTAAACAAGAACCTTCTAGCCAAGGATCTCAGAGTGCTTTACAGACATATGAACTGGGAAGTGAAAACGTGAAA
GTCCCTATTTTTGAGGAAGATACACCCTCTGTTATGGAAATTGAAATGGAAGAGCTTGATAAATGGATGAACAGC
ATGAATAGAAATGCCGACTTTGAATGTTTACCTACCTTGAAGGAAGAGAAGGAATCAAATCACAACCCAAGTGAC
AGTGAATCCTAAACCTGAATGGCGCTCATGTTTTCCAAGAGAAGCAGCCCCTGAGGGAGTCTGCTGAGGCTGCCA
ACAGAGGATGAAGAGGATACAAATTTAATTAATTTCAAATCAACATAGACACAAGAACCTTTTGCTGTTTCTTCC
AACGCCCACTCTTCCTAATGATGGCATCACTTGCACTTGGAAGAATGTGCAATTGAGAAGTACTAGGAAAAGGCC
TGGCTGCCATCCATCGCTGCCTCTGAGGGTGGAGAAGGAGGCGGGTGATGTGCTCACTTCTGATCAACATGTGTT
GCCTCCTCTCAGCCAACTTCTAGCTCACTGCACTCACTCTGGTCATGATAAATGTTCGTCACCTTTCTGCTTCAT
TCCTTAGGGCCTAAATCAGGAAGCTGTTTTATCGATGGTTTCCTTTTGGGTCAGTAACCAGCTTTGGATAATTTC
CTCTGATTATTCAAGTCGTGGGACAGGTAAACTACATTCAGCAGGAACTTTTCTCGAGGAGTGTTATGTCATGGA
AAAGACACCAAACACAGCAAGTATTTTAATGAATACACCATCCCAGGGGGTCAGTAAGCTCTGCCTGCCAAGAAG
ACACAGTGAGAGGGGTCCACAGTCCTGATGAGGTGGCGTTTGGTAACTTGTAGACCCTAGCATGGCCAGGTCTGG
TCACCCTTAAGAACTTCTCAGAGAAACTAGGAATCTTCAGTGAAAGAACTAATGTTCTCCTCAGCTGAAATTCCC
TTGCTTGTCAGCATTTCTGCAAAGCTCACACTTGTTTCACCATACCTCCCTTGGATGTGACATGTAGGTAGGAAG
TATGTGCAGGTGGGAGTCATCTGTCAGCCTTCTATGTTTCAGAGATCCTGAAGGTGGTTTGAAACAAACAGAAGA
GGAGCAGGAAATATCCGTGCCTGTGGCAGATCTCACTCATCATGCTTAGCATTCTCTCCCGCCAAGCTGGGATAA
GCCTCATGTCCTAACACAGCACAACAGGAGGTCTCTGTCAGTCCATCAGAGATGACATTCTATGTGATATTTTTG
ACATCCTTGTGCTAAAAGCAATGGCACAAAATGGAAAAGGGCCTATTGACCACACCTACTCCAGTAAAATTGTTC
TTCATTTATTCCTTAATTTTCTAAATCTGACCCCTTTAAAGCAATCTAGCAAATTGAGAATCCTCAGCTCTCCTT
GGATACCTGATATTTTATTTCAAGAAAGAGACAAAGAAGGAAAATTTTATTTATTTTACTACCCACATATAAACC
GAAGGGAGATGGGACTACCCAAACATTTGCTGCTCAATTTTGTGTCTTGTGCTTGAAAGTCTGCCCTAATGCATA
ACAAAAACTACTTGTCTCCTACCTTTTGGGATCCCTTTAACAAGTATTTGCCTTCTGAACTACGTGGATAATTTC
AAAGGCAGAGTTCCAGACCAGAGAGGTCTTTCCATACAATGAAAGCTATAACTAGCTGGTTGTGTTTAACCACTG
CTATCACGCTATCCTGGGACTGCATAGAACTTTGACAAAAGACAGACTTCATGGTACACAACTTCAACAGATTTT
CTGTCATATTCTCACCAGCACATCTGAATGAGGCTTTGTGTTTTCCTTGCTCTCTTGCATGTTCCTTTTCAACTC
ATGGCCCACAGTGACTCTCAGAGATTTATGCCAAAATTGCATACAATTGTTTTCTGAATCATAACTTGTCTATTT
TTCTGCCTATGTGTGCTACTTTCAGTTTGTTTCTCATCAACATTTTGACTCTCAGAAGAGCCTCCATTTGCCCCT
TTCTCTCTTTAGGTATCTAAGATCTTTGAACACCTGGACCTTTACATTTGATCCAACCCTATCAAATAATGAACT
TCTCAGAGAGGCATCTGGGGTCCTGGAACTTCATGTTGATGAAGTCATATTATATAATATGATAAAAATATTCTC
ATGCAGTATTTTAAATAATTTCAAATTCTAGAAGAAGCAAATTTCAGCGACATGTCATTGAGTTTTTATTTGGTA
AAGCTATAATTGTGCAGTGTACAAAGCACTTTTTAAAAAGATAGTTTATTCTGTCAGGGTATATGAAGTTAGTAT
ACAGCCAGAACAGCCAAGCCTCAATTCTTGTACCTTGTGTCTTTTTATTACTGTTTAATCAATAGATATCATATG
TTTATGACAGTTTCAAGAATTGTTTTTAAACCCAAACTTAATTTTATGTTTCAGACTATTGTTAGAAAAACAAAA
AAAAAAAAAAA

FIGURE 5607

GCCAGGGAGGCCAGGACAGAGGGTGGAGCAGCCCTTGAGGGGCAGAGGGGATGAAGTAGTTGAAACCTGATCAGC
TCATAGTTGTTTTTCCATGTGGGTTAGTGTCCGAATGGTTCCCCAAATCCCACTTCATCACTCATAATTCAGGCT
AGAGCTCCGGAGGCTGCTGGGCTGTGGTTTGGGGTGAGGAGAGTGTGTTGTGCAACAGCGGCCCTGAGATTTGGC
ATTTGCATCTTGTAATTAGTGCTGTGGGAGGGGGATCGGGACTCCAATAGGAGGGGGTGGGCCCTCTCGTGTCTT
TCCATGGAATTCTCCCCACCACCCTATGAAACAGGGTTTAGCATCTCTGTTTTATAGGTAAAGAGACTTGCCTGT
GGTTACAGAGCATTAATGTCACAGCTAGAATTCCAACAGCTCAAGCTTTTAAAATTACCCCATGCCACTTCCAGG
GCACTGCATTGAAAGTCAGCTTTGGTTTAGGCTCTGCCACCAAGTTATGTGACCTTGGACAAATCCCCTCACTCA
CAAGCCCACTTTCCCTAAACTGCAAAATGAGGTCAGGGGTGGTGGACCCTTAGTCCTCAGCAGAGTCCTGCAGTT
CCTGTGTCCCTGGAGCCCGTTGGTCTCCCTCTGTAAGTCTGACCTTGGGCAGCACGGTGTCTTTGCCCAGAGCGG
TTCTCATTCCCTTCTAAGGCAGTGTCTGTCACTC**ATG**CCTTTTGGGAGCTGGGGCTCCTATGTGGACTCTGATTT
AAGGGCTATAAGGCCTGTCTCTTCCTACCCAATAGAGGTTTCCT

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FIGURE 5608

MPFGSWGSYVDSDLRAIRPVSSYPIEV

FIGURE 5609

GCTATTTTGCACTTCAGTTCACATACTATTTATGGGTAAGTGACATTTAATGTTTTGCTGCCATTATTACTCGTG
ACCTTTCTCCTGAAACACTTTAGGCTGTACGCAGATTTGTCTTTTACAAATTATGTAGTTGCGTACAGAGATCTG
TATTACTGTTCATAATCAATTTAATAATGGATAACATTTTAAAATATGTTAGGCATCTCTCAAGTTATGTGTAAA
TATCCTTTTTAAATAAGTCAGAACTCCAAAAGAAGAGCTATCATAAAACAATCTGTTGATATTTTTGTTTCTTTG
TTTTGGGGAGATAGGTAAGAAATAGTTACCCAGGAAAGTTGAAGCATGGTTTGATGGCTAAGAATTTTAAATTGT
TTCTGAAACTAGCATTATTTATTTTGCTGCTGCCAGGCTATTTAAACTTAATGATTTTTTCCCCTGTGTATGAAA
TATGATGCTACTTGGGTTCACTTTAGAGCTTGCATTTATTTATGTATTTATTATTTTAGCTTTAGCTTGTAATTT
TCCAGTGATAGAAATTACCAAAATTTGTGTGTGTCAATATGTTTTTGTATATTTTATTAAGTATATTTTTAGGTA
GCTAGGTGAATGGCAGCATAAATTTTCTCTTTAATAATTATTTTATATTGTTCAAAACTACTTGGCTAATGAGTA
TTTTTGCTCTAGCATGGAATTCTGGAGGAGAAGGTTGCAATGTGATCAGTATAGACAGTGTCTTAATCTTGAGTT
TAAAAGAGAAGAAAGAAAAATACCCATTCAAGTGAAGATGATACCAAGCAGTAGGATGTTGCCAGTGCTGCTGTA
CTTATCAAAAAGTGTTTTTAAAAACTCTTTGTTTATTGTGTGCAGCTGAGGAGAAAA

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FIGURE 5610

YFALQFTYYLWVSDI

FIGURE 5611

AATTAGGTAACTCAATCCAGTGTGGTGCTACACCAATCATATTGTATGAAATGCTGTTAAAAACACGCACAAAGT
TGGCTTCCTTTGTCTTCTTAAAATTTGAACAGACTACCAAGCATATTTGAATACTATTTGATTAAAATAGAAGCA
ATTATGAAAGCCTCTCTTCATATTATCAGGAGTGTAACATTGGGTCTTTGTCTTTTTTTATTTATCTATTTTCCT
TCATAGTACCTTTAAAATATGAGCTATAATTTGAATTACTTAACAGATTTTCTTATGCTGATATGTAGAAGCCTA
CCTTTTAGTATCAAATAATTGAAAAAAAGTTCATCTTAATTTAGTTGTCAATATCTCTTTGATCACAGTAGATAA
ATTCTGAATTGTGAAGGGAAATGAATACCCTTCATAGATAGAGCCAATTTGTGTGCCAGTTGGTGCTCATAATTG
GCCTGATGTTATTT

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FIGURE 5612

LGNSIQCGATPIILYEMLLKTRTKLASFVFLKFEQTTKHI

FIGURE 5613

GGAAACTGAAAACACACCTGCAGCATCTCCGGTGGAAAGGAGCGAAGAACACGGACTGGGAGCACAAAGAGAAGT
GCTGTGCGCGCTGCCAGCAGGTGCTGGGGTTCCTGCTGCACCGGGGCGCCGTGTGCCGGGGCTGCAGCCACCGCG
TGTGTGCCCAGTGCCGAGTGTTCCTGAGGGGGACCCATGCCTGGAAGTGCACGGTGTGCTTCGAGGACAGGAATG
TCAAAATAAAAACTGGAGAATGGTTCT**ATG**AGGAACGAGCCAAGAAATTTCCAACTGGAGAAGGTCAGTGCACCA
GATATTCTGAAACCTCTCAATCAAGAGGATCCCAAATGCTCTACTAACCCTATTTTGAAGCAACAGAATCTCCCA
TCCAGTCCGGCACCCAGTACCATATTCTCTGGAGGTTTTAGACACGGAAGTTTAATTAGCATTGACAGCACCTGT
ACAGAGATGGGCAATTTTGACAATGCTAATGTCACTGGAGAAATAGAATTTGCCATTCATTATTGCTTCAAAACC
CATTCTTTAGAAATATGCATCAAGGCCTGTAAGAACCTTGCCTATGGAGAAGAAAAGAAGAAAAAGTGCAATCCG
TATGTGAAGACCTACCTGTTGCCCGACAGATCCTCCCAGGGAAAGCGCAAGACTGGAGTCCAAAGGAACACCGTG
GACCCGACCTTTCAGGAGACCTTGAAGTATCAGGTGGCCCCTGCCCAGCTGGTGACCCGGCAGCTGCAGGTCTCG
GTGTGGCATCTGGGCACGCTGGCCCGGAGAGTGTTTCTTGGAGAAGTGATCATTCCTCTGGCCACGTGGGACTTT
GAAGACAGCACAACACAGTCCTTCCGCTGGCATCCGCTCCGGGCCAAGGCGGAGAAATACGAAGACAGCGTTCCT
CAGAGTAATGGAGAGCTCACAGTCCGGGCTAAGCTGGTTCTCCCTTCACGGCCCAGAAAACTCCAAGAGGCTCAA
GAAGGGACAGATCAGCCATCACTTCATGGTCAACTTTGTTTGGTAGTGCTAGGAGCCAAGAATTTACCTGTGCGG
CCAGATGGCACCTTGAACTCATTTGTTAAGGGCTGTCTCACTCTGCCAGACCAACAAAAACTGAGACTGAAGTCG
CCAGTCCTGAGGAAGCAGGCTTGCCCCCAGTGGAAACACTCATTTGTCTTCAGTGGCGTAACCCCAGCTCAGCTG
AGGCAGTCGAGCTTGGAGTTAACTGTCTGGGATCAGGCCCTCTTTGGAATGAACGACCGCTTGCTTGGAGGAACC
AGACTTGGTTCAAAGGGAGACACAGCTGTTGGCGGGGATGCATGCTCACAATCGAAGCTCCAGTGGCAGAAAGTC
CTTTCCAGCCCCAATCTATGGACAGACATGACTCTTGTCCTGCAC**TGA**CATGAAGGCCTCAAGGTTCCAGGTTGC
AGCAGGCGTGAGGCACTGTGCGTCTGCAGAGGGGCTACGAACCAGGTGCAGGGTCCCAGCTGGAGACCCCTTTGA
CCTTGAGCAGTCTCCATCTGCGGCCCTGTCCCATGGCTTAACCGCCTATTGGTATCTGTGTATATTTACGTTAAA
CACAATTATGTTACCTAAGCCTCTGGTGGGTTATCTCCTCTTTGAGATGTAGAAAATGGCCAGATTTTAATAAAC
GTTGTTACCCATGTCAAAAAGGAGATAACCCACCAGAGGCTTAGGTAACATAATTGTGTTTAACGTAAATATACA
CAGATACCAATAGGCGGTTAAGCCATGGGACAGGGCCGCAGATGGAGACTGCTCAAGGTCAAAGGGGTCTCCAGC
TGGGACCCTGCACCTGGTTCGTAGCCCCTCTGCAGACGCACAGTGCCTCACGCCTGCTGCAACCTGGAACCTTGA
GGCCTTCATGTCAATGCA

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FIGURE 5614

MRNEPRNFQLEKVSAPDILKPLNQEDPKCSTNPILKQQNLPSSPAPSTIFSGGFRHGSLISIDSTCTEMGNFDNA
NVTGEIEFAIHYCFKTHSLEICIKACKNLAYGEEKKKKCNPYVKTYLLPDRSSQGKRKTGVQRNTVDPTFQETLK
YQVAPAQLVTRQLQVSVWHLGTLARRVFLGEVIIPLATWDFEDSTTQSFRWHPLRAKAEKYEDSVPQSNGELTVR
AKLVLPSRPRKLQEAQEGTDQPSLHGQLCLVVLGAKNLPVRPDGTLNSFVKGCLTLPDQQKLRLKSPVLRKQACP
QWKHSFVFSGVTPAQLRQSSLELTVWDQALFGMNDRLLGGTRLGSKGDTAVGGDACSQSKLQWQKVLSSPNLWTD
MTLVLH

FIGURE 5615

TGGGCTGCACCACTCACAGAGCTCCCTCCCCCAGGCACTTAGTTGGGGCCCAGCACTGACCTTTCCCCTGAGCCC
AGGATGTGGCCAGAGCCCCCTCTGGGACCCCTCTCGCCCCTTCTCTGCCTCCTCAGCTTGAGCTGCCTGCCCGAA
GTTCGGCTGTTCCGGGGCCAGTGTGTCACCTGCCAACTTCCACATCACCCTCCTCCCTCGCTCCCTCCTCTCCTT
CCCCAAGGACCTCCCCCCATTTCTGGCAGCCAAGCCATTAATCTGGAGACAGAAATGGGTTTGCTATCGATTCTC
TGGCCACTTTTTCTTTCATTACAATTTGTACCGTGATTCTTCTCACCCTTCTCTGCGTCCATGCATTTAAAGAGT
TGTCTCTTTAAATGTTGAAGCTTCCGGAAGCCTGATGCTATTCTGTGTCTCCTTTCAAAGGAAGAAGGGGGGGCC
CAGCTATGGGTGAGGACTCAAGTTATTAGTTTGGAAATAGAGCAACTATGTGTACAGCCCACCTTAGAGGTCATG
TTACCCCCTTCCTGTTAAATTTTACAATTAATTTTGGTTCAGGAAATGTAAATAAATTTGTTAATTACCAATTAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAGA

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FIGURE 5616

MWPEPPLGPLSPLLCLLSLSCLPEVRLFRGQCVTCQLPHHPPPSLPPLLPQGPPPISGSQAINLETEMGLLSILW
PLFLSLQFVP

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FIGURE 5617

GGTTTATAGAGACAGAGTCTGCTATGTTGCCCGGGCTGTGGCCCTATTTTTTAAAGTACAGTATTTAAAAAGAAT
TTTATTCCTTTAGTTTTTGGTCCACGATGTGCATGGGGGACTGTGCTGTGTGCCACAAAGGTGATGAGGGTGGAA
AAGATGCGGCTCCCACTATTCGTGTGGTTGGAGATGCACCAGCTAATTTGGAGGCTTTCTTGATTCCATACAAAT
ATGACATTGAAATTAGAGTTAAGCTCACTCAGGAGAGAGGAGATTGCCACTGTTTCTAGGACTTTAAAGTTGCTG
ATTCAACGGAGCTTCAGGTTTAAAGTCTTCAGGTTTGATAGACTATATCAGTTCTATCAAACTAGTTTTTGTGAT
ATTCCAGTATGTTCTTGCATGTTAATATTTTAGAATCCTAAAAAAAAATTTAAGTAGATATAAAACTATGTCAATC
TCTGAATTAGCATAAAATGTGTGTTTGCATATTTATACATGTATATACACTTACATATAGAATACTTTTAAAATA
ATAGCTTTATTGAGATGTAATTATGTACCATAAAATTCAACCTTTTAAAAAGTAAGAC

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FIGURE 5618

MTLKLELSSLRREEIATVSRTLKLLIQRSFRFKVFRFDRLYQFYQTSFCDIPVCSCMLIF

FIGURE 5619

GCCAGGCTGGCCGAGCGGCAAAAAGTTCGCGCTGCTGGTCCCGCGCGGGCGGCCCCTGGGCTTTGTGTCCACCAG
GACAGCGGGCCGGGCTCCCTGCAGGCGCGGGCGGCGCCGAACGGTGCTCAGCAACCACCCGGACAGGGCCAGGCC
GTTTTCTCCCGCTCAGGCATTAGTCGTTGGCTGTGGGCCGCCGCGGGAAGTTGAGGCCTACCACGGAGGAGGCTG
CTGAGGTGGATCTCAGGGGATCCGCAAGGGCTCCCTCACCCTTGCCGGGACCCTGGGAACCCGAAACAAAATCCT
ACGCCACCAGCCCGCCGAATGCGCCCCCTCGGCCGGGGGTCCTGGGTCTTCAGAGAAGAACTCGGCCGAATGCGG
TCAGAAAGCCCGCGAACCGCCTGGACCTGCAGGCCCCGCCGCTTGGAGCTCCCGCCTTTCCCGACCGAGCCCGTG
TCTGCTCGTGTGTCTCACTGATGTCTTAGGTCTCACAAAACCATCAACCCGGAAAAGGTTTTTAGTAGACAGAAG
AGAAATGGGGCCGTGGGTTCGTGGTCCCAGGGGGAAACTGACGTCGCATGAGGTCGTCGTCCCTCAGCTTGAGCT
CAGCGGAACATAAGCTTGCAGAGGTGGAAACCACGGAAGGTTTGGGTGTCTTGGAGCTCTCTGGACACCGAAGCC
CGGACACAGTCCCGGGGTCCGCACCGCCTGTGACCTGTGGCGGGACCGCCGGGGTGGGCGTTTTCTCAGCTGGCG
CGCGCGTAGGTGGAACTTGGGAAACTAACTGGAGCGAAGTGGCAAAAAACCAAGACAGGGCCGGTGACCTCGCGC
AGGCCGTCCTTAACTGTGGAGTATTCCTTCAGCTAACCCCTTTATTTC**ATG**TGTCCAAGTCTGGTTTCTGGGTTT
CTTTGTAGTCCCTCCGGGCCTGTTCGTGCGCCTTCACTTGCAAAAGGTTCGTCGTGGAGGGCCGTGTGCTTGTTT
GCAGCAGTAACGATGCCCTTCCCGAGCGTGCTGGAGTGGCTCCTCGCTGACGCAAGCTCACCTTGCAGCCTCCTC
AGCAACTGCAACTTAAACGCGCCCTCAGGAAGCCCTGGAATCTCGCTCAGAANNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCTCAGGAAGCCGTGG
AAGCTCGACCGCCAGAAACTTCCTTCTCCTGACTCAGGCCACAGTCTTCTGTGTGGTGAGCGGGGTGTCCAGCGG
TCTCCTGGTTCCCAGACTCGGAATTGGGTGGTT**TGA**GCAAACTCTGGGCAGTGGGCTCATTAGAGCAGGGGCCAG
GCAGGCAACACAGCCAAGCGAGCAGGGGCTGCACCCACAGGATCACACTTTCCAGGAACAGAGACCCAGACCGCG
CCTGAATCTCACAACTGTTACGTGTTACAATACATTTACAACTGTGGGACTGAGGGGATGTGCCCAGGTTTGCCT
AGACTGTGTTCCTCAGAACCCCAGAGTCGTTTCTGTGGACATCCTAGAGAGGTTCTGCTAATGTTGGACTTGGGT
CTTATTTCAG

FIGURE 5620

MCPSLVSGFLCSPSGPVRAPSLAKGSSWRAVCLFAAVTMPFPSVLEWLLADASSPCSLLSNCNLNAPSGSPGISL
RXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXLRKPWKLDRQKLPSPDSGHSLLCGERGVQRSPGSQTRNWVV

FIGURE 5621

CTTCTCCTGGGCTTGCTTCAGGGAAGGAGACTGGCTTCCCGGCCTTTTCGGAATCCAGCAGGAGCCCTCAGTTCA
GCCCCAGCCCCTGAAACTTGGCAGTGTCCGTACAGACAAAGTAAGTCCTCAGCTCGCCTTTGCCTTTGACGTTGA
TCAGGCCACGGCATTCACAAGAGTACCCGAGGCCCTGGAGGATGGTGCAGGTCTCCTCGGTAACCTGAAAAGGAA
GAGAGACCTGTTGTCTTCAGAGGCGGGAAGAACACCTGTCATGGTAGGGACAGATAGAGACTGCCCAGGCATGCA
GTCTGCCTTCCCTGGAGAGTGTGATAGCTAGAACCATGGCTGCTGGGTGAGACAGCAGCTCTTAAGTCCAAGTCC
CCTCACCTCTGGGGAAGATCTTTTCCCCTTAGTCAACTGCTTCCCCAATAGGTCTTTACCTGGATTTTCCCAAGT
TCTCCAGTGCTTTCCATTCGGCTGGCCACATTGACAGTGTTTCCCCAGATGTCATACTGAGGTTTTCGGGCCCCA
ATCACTCCAGCAATCACAGGCCCATGGTTTATGCCTGAAGATGATGTTTACAGTTACCCAAGCGTGCAGGCAAAG
CCTCAAGCTTCTGCCCTTAGAGGAGGCCAGAGAATCCATACCCCAGCACAGGATGCGGGGACAAAACAACTAGAG
TGAAGGCTGGGTTGCTTCCCAGAGTCACTGCGTTGCAGTCGGGCTTGGGGTATGAGGAGGGCATTCCCCGGCCAG
CTCTTTTTCAGACTCAGAAGTCTGGGTTTGATGTTAACACTTGTATCTGCTAATCTCTCTTTTAACAAAGAATAC
TTTGTTAAAAGTATTAACAAAGGCCTGGCTTTGAGCGCAGGCCCGCAACTATTTAGGTTTAGTAACTTTGCTTCC
TTCTCTATATTTTAAGGTCACCTGTTTACAGACAATAATTTTGGTTCTCCATTTTCTGTAGTTACGTATTATTAA
AACTCTCAATGGTAACTATATGCTAACTATATGCAAAACATCAGAATAATTGTCCAACTGCTGAGCTTGTCAGAT
CAGAGGGATTTCTAAAACCTTTCATAATAGATGGCGAGGTGCAGCTGTGCCACACAGACTGGGTGGACTGGCCTA
GAGGCAGGGGCTCCCCACCCCGCTCCATCACCCGGGCTCACCGACGCGGAGGCGGAAGGAGTTGAAGGAGTGCCT
GTTGATGCCGTCCAGCTTACTCATCAGGGCGATGCTGAACTCCACCATGACACCAATGTGGGCATGCTGCCGCTC
CAGCTCCTGCGGGACAGGCTGTGGGTCAGATCCTTGCATCTCCAGAGCCCCCAGACCTAGTGGGCCCTGGCGCGC
CACTCTTGTTGAGGATCCCCACCACTAAAATCCTGGCTGAGCCCTACAAGTACCTGTGCCCCTCCCCCAGGACGA
GATAAGGGCACACCCTTTAAGTAAGGTGACAGGTCACCTTTAAGTGAGGACAGTCAGCTGAATTTCACCTCTTGG
GCTTGAGTACCTGGTTCTCGTGCCCTGAGGCGACGCTGAGCCCTGCAGCTGCCATGTACGTGCTGCCGATGGTCT
TGATCTTCTCCACGCCGCTGAACTTGGGCTTCAGTAGGAGCTGCAGGCAAGAAGGAAGCGGTGAAGCAGCCGCCA
CTCCATAGCCGCAGCCAGGCTGCCCCTGCTTCTCAGGAAGGGTGTGGGGTTCCCTCCACCCATCGCCGCCTCTCG
CACACACGTCTCATGGCTGCCCTGCCAGCTGAGCGCATGACTAAGCATGGTGAGGACATGGCCCTTGGCGGCTCC
TGCTCTTCCTGTTGTCTCCGTCCCCACACTGTCTCCCTCTTCCCTTCCATCTGTGTCTGCACAGAGCAAACACAG
CATTATCTACACAGGAATGTAGATTCTTTGTCTCCAGCAAAGAATTCAACCCAAACTGATTTCCTCTGTTTGGCT
TGGTTGATAGCGTGGGCTTAGTTGGAAATGAAGCTAAGGGGCCTGAGTCTAATCTTAGCAAGCTGCCCATCACAG
AGAAGATGCCAACGAATTATTTGCTGCATAAAACAGAATGAAAAAGAAATGTGTACCTTTATATTCTGTGTAATG
TATGTTCCCCCCAGGCGG

FIGURE 5622

FSWACFREGDWLPGLFGIQQEPSVQPQPLKLGSVRTDKVSPQLAFAFDVDQATAFTRVPEALEDGAGLLGNLKRK
RDLLSSEAGRTPVMVGTDRDCPGMQSAFPGECDS

FIGURE 5623

TTGCTTCTCCACCAACGTAACAATTTATAAAGCAAGAGATGAGAAAAAGAGATTATTGGGAAATGTACTGAATAA
TGAGGAGTCTGGGGAATAGAACAAAAGTTGTAAGTCGTAACCTGACCCATCTTACTTCACTGGTAATCAAGTACA
GTCGAAAGGATGAAATAAAGAAGTGAGTAGTTTAAAAACTCTGTTGGACCAGCACCTTGAATCAAATGGATGTTT
TAGGGTTCTGTTTCCCACTGAACCAAGAATTGTATCCCTCCATCTCTCCTTGAGGAGAGGCCCTATGTTAGACCT
TGGCTACTCATCATTAAGATAAAATCTTAATAGATAAAACTGGAATTCCTTGAATCCATGAAAAGACAGTGTTCA
TTAAGGGTTTGTGCAGTGGATGCTCCTTATGTCCCATGGTAGAATAAGATCTCCTTAGCTCCGCCAAGTTAAAGG
CTCTTGCAAGGGCACTTAGAGATGTT

FIGURE 5624

GACCGCTGACCTAGAGGGAGTTATGCACATGGGCTTATAAGGTTAGCCAAGAGAAAGGACAAGAAGACCCAAAGT
CGGCAAGCAAATTTATTAACCTGCTGGGCTGCTCTACAGAAATCTGAGGAGGCAGACACCGGGCTTACAGGCTAA
GGGGTATAAGTAGGTCTGCAGGGGTTTTGTGTGTGTGTGCGGGGGTGTCGGGGGGGCAAGGCCATTTGTGGAGAC
TTTTCCTCCCAGTATGGCCACATCCTGCAGTTTGTCAGTTTTTGCCCCCGCCTGGCTCAGGGTACCAGGATGTGG
TTTAGCTTAGGGGTGGTTATAGTGGCACCTAAGTTCTGGGAACTTGCGGTGGGGGCGACCTTTTGGACGAAAAAT
AAGCTGCAGGGCAGCTAGGGGAGGGGGCTTGTTATATTCCTCTGGGGGCAGGGTGTCCCTAACTGGGCTCAGTCG
GAAGGAACTTGACCAAAGTCTGGGCTCAGTTGGGCATCACTCAGGCTAATGGTCGTGTGCTGGATGCCATCAGAG
GGAAGTACCAATGGTAAAGTGGAAACAATGTGCAGCTTTCAACTGGGTGGAGGCTGCTATTCTGTGGACAGTGAG
ATGTTTCCTTGGCACTGTCAATAGACAATCTGCGTAGAGAAATTCCAAGCTGAAAGCCAATAATGTTATAATAAA
ATAGAGATTCTTCAGAAGATGAAAGGAATTACCAGCATGGAAATTGTGTCATAGGCTTAAGGGCTAAAGAAGAAG
CCTTTTCTTTTCTGTTCACCCTCACCAAGAGCACAACTTAAATAGGGCATTTTATAACCTGAACACAATTTATAT
TGGACTTAATTATTATGTGTAATATGTTTATAATCCTTTAGATCTTATAAATATGTGGTATAAGGAATGCCATAT
AATGTGCCAAAAATCTGAGTGCATTTAATTTAATGCTTGCTTATAGTGCTAAAGTTAAATGATCTTAATTCTTTG
CAATTATATATGAAAAATGACTGATTTTTCTTAAAATATGTAACTTATATAAATATATCTGTTTGTACAGATTTT
AACCATAAAAACATTTTTGGAAAACCATAAA

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FIGURE 5625

TADLEGVMHMGL

FIGURE 5626

AGCTGCAGCCACCCGCGTGCGGCACGCGCCGGCCGCCTGCCCGGATCGCGGCCACCAGTGCCGCGGCCTCTCGAC
TCCCGCCCCGCCGAGCCGCGCGCGCGACTGCCATCCTCCTCAATTGCTTTTTACGATTTTTTTTGTGCATGCATT
CATTTTCTGTTCCGTTTTGTCCTTTTTAAGGCGGTGGCGGCGGCGACAGCGGCGTAAGCTCGCAGCGGGGAGGGG
GCGGCCGGAGGATGCGGCGCGGGGCTGCGCTCGCTACGTCCGCTGCTGCTGCCCGGCTCGGGCCTGAGCGCCGAG
CAGGATCCCAAGTGATGGTGGTTTCCTCGGAGGGCGAGCTGAGTCCTGCGCGACTGGTTAGCACGGTGGAGCTGG
TAGCCACGCCTGCTGGCTGGCGTGCGTGAACAGGTGTGGACCGCAGGATCTCAGCACTCTGACCCAAGGGGAAGC
ATGTCGAAGAAAGGCCGGAGCAAGGGCGAGAAGCCCGAGATGGAGACGGACGCGGTGCAGATGGCCAACGAGGAG
CTGCGGGCCAAGCTGACCAGCATTCAGATCGAGTTCCAGCAGGAAAAAAGCAAGGTGGGCAAACTGCGCGAGCGG
CTGCAGGAGGCGAAGCTGGAGCGCGAGCAGGAGCAGCGACGGCACACGGCCTACATTTCGGAGCTCAAGGCCAAG
CTGCATGAGGAGAAGACCAAGGAGCTGCAGGCGCTGCGCGAGGGGCTCATCCGGCAGCACGAGCAGGAGGCGGCG
CGCACCGCCAAGATCAAGGAGGGCGAGCTGCAGCGGCTGCAGGCCACGCTGAACGTGCTGCGCGACGGCGCGGCC
GACAAGGTCAAGACGGCGCTGCTGACCGAGGCGCGCGAGGAGGCGCGCAGGGCCTTCGATGGAGAGCGCCTGCGG
CTGCAGCAGGAGATCCTGGAGCTCAAGGCAGCGCGCAAGCAGGCAGAGGAGGCGCTCAGTAACTGCATGCAGGCT
GACAAGACCAAGGCAGCCGACCTGCGTGCCGCCTACCAGGCGCACCAAGACGAGGTGCACCGCATCAAGCGCGAG
TGCGAGCGCGACATCCGCAGGCTGATGGATGAGATCAAAGGGAAAGACCGTGTGATTCTGGCCTTGGAGAAGGAA
CTTGGCGTGCAGGCTGGGCAGACCCAGAAGCTGCTTCTGCAGAAAGAGGCTTTGGATGAGCAGCTGGTTCAGGTC
AAGGAGGCCGAGCGGCACCACAGTAGTCCAAAGAGAGAGCTCCCGCCCGGGATCGGGGACATGGTGGAGCTCATG
GGCGTCCAGGATCAACATATGGACGAGCGAGATGTGAGGCGATTTCAACTAAAAATTGCTGAACTGAATTCAGTG
ATACGGAAGCTGGAAGACAGAAATACGCTGTTGGCAGATGAGAGGAATGAACTGCTGAAACGCTCACGAGAGACC
GAGGTTCAGCTGAAGCCCCTGGTGGAGAAGAACAAGCGGATGAACAAGAAGAATGAGGATCTGTTGCAGAGTATC
CAGAGGATGGAGGAGAAAATCAAGAACCTCACGCGGGAAAACGTGGAAATGAAAGAAAAGCTGTCAGCGCAGGCG
TCTCTGAAGCGGCATACCTCCTTGAATGACCTCAGCCTGACGAGGGATGAGCAGGAGATCGAGTTCCTGAGGCTG
CAGGTGCTGGAGCAGCAGCACGTCATTGACGACCTCTCACTGGAGAGAGAACGGCTGTTGCGCTCCAAAAGGCAT
CGAGGGAAAAGTCTGAAACCGCCCAAGAAGCATGTTGTGGAGACATTTTTTGGATTTGATGAGGAGTCTGTGGAC
TCAGAAACGTTGTCCGAAACATCCTACAACACAGACAGGACAGACAGGACCCCAGCCACGCCCGAAGAAGACTTG
GACGATGCCACAGCCCGAGAGGAGGCTGACCTGCGCTTCTGCCAGCTGACCCGGGAGTACCAGGCCCTGCAACGC
GCCTACGCCCTGCTCCAGGAGCAGGTGGGAGGCACGCTGGACGCTGAGAGGGAGGCCCGGACTCGGGAGCAGCTA
CAAGCTGATCTGCTGAGGTGTCAGGCCAAAATCGAAGATTTGGAGAAGTTACTGGTTGAGAAGGGACAGGATTCC
AAGTGGGTTGAAGAGAAGCAGCTGCTCATCAGAACAAACCAAGACTTGCTGGAAAAGATTTACAGACTGGAAATG
GAAGAGAACCAGCTGAAGAATGAAATGCAAGACGCCAAGGATCAGAACGAGCTGTTAGAATTCAGAGTGCTAGAA
CTCGAAGTAAGAGACTCTATCTGTTGTAAACTCTCAAACGGAGCAGACATTCTCTTTGAACCCAAACTGAAATTC
ATG**TAA**AGCTCTCAGATGTTTTCAAGCATGTGTAAAGGGGACATGTTATAGTTTCTTTCTTTCTTTCTTTCTTTT
TTTTTTTAAATCTGTATGTTCAGAATAATTTCACTGCCTTAATGTGTTCTGGAGAGCGTGCTCACCCAAGTCTAT
GGACATGTACCAGAGCTAATATATTTATTGCCTATGGCTTGTTTTGCACTTAATAAAATAATTTGTTTTTGC

FIGURE 5627

MSKKGRSKGEKPEMETDAVQMANEELRAKLTSIQIEFQQEKSKVGKLRERLQEAKLEREQEQRRHTAYISELKAK
LHEEKTKELQALREGLIRQHEQEAARTAKIKEGELQRLQATLNVLRDGAADKVKTALLTEAREEARRAFDGERLR
LQQEILELKAARKQAEEALSNCMQADKTKAADLRAAYQAHQDEVHRIKRECERDIRRLMDEIKGKDRVILALEKE
LGVQAGQTQKLLLQKEALDEQLVQVKEAERHHSSPKRELPPGIGDMVELMGVQDQHMDERDVRRFQLKIAELNSV
IRKLEDRNTLLADERNELLKRSRETEVQLKPLVEKNKRMNKKNEDLLQSIQRMEEKIKNLTRENVEMKEKLSAQA
SLKRHTSLNDLSLTRDEQEIEFLRLQVLEQQHVIDDLSLERERLLRSKRHRGKSLKPPKKHVVETFFGFDEESVD
SETLSETSYNTDRTDRTPATPEEDLDDATAREEADLRFCQLTREYQALQRAYALLQEQVGGTLDAEREARTREQL
QADLLRCQAKIEDLEKLLVEKGQDSKWVEEKQLLIRTNQDLLEKIYRLEMEENQLKNEMQDAKDQNELLEFRVLE
LEVRDSICCKLSNGADILFEPKLKFM

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FIGURE 5628

CTTCAGACTCAAGACTGCAACACCGTGCCTGCCCTCTAGCTATGCTTTAAGGCAGGCCTATCAGCCCAGACTGGA
GTCATGTAATACATGGCTCTGTCAGTAGCTCTCCTTCCCACAAATAAGTTTTGATGATCTTACACTCATCCCTGC
CGTTAGCATTCAGGACCAATCTTCTATAGCCTATACGCCACACTGGTCTAGGACAGCACCTAAATAATACTCATG
CTATAAAAAATTCATCAAGTTATATATTTTTAAAAACATCCCTAAAATTATCTTTTTCCTTTACTGAAAAGAATT
TCAGGATCCCCTCTCTCTCACTGCCTCTCTTCACACACACCTACCTTAGTTGGTCACCTATTTTGTAAACATATC
TTCTTTAAAAAAAGAAAGAAATGGCAGTACATGAAAAACTGCTTCGTAAACAGAAACTATATTATTTATATTTGT
AGCATTTTTTTCCCCTTGAGGTTAATTTCCTTTGCTTCCCATAACTGGAAGCCAATGATTCAGTGCCATTATATA
AGCTTATTTTCCCTCTTGGAAATAGTAAATTATAAGAGGTTTGACCCAAAAATATACATCAAAATTAGGCAGTAT
TCGGTGTTTAGCCTCCATCTGCCTTGTCTTCTTGTCTTTAGTTGTGCAAGTAGATGCTGATGATTTCTGGCAGAG
CTAAAGTAAGTAAATCATGTGAATTTATTTTTTTTCCTCATAAAACAGATGGCATGGTCTAGCTCTGGGCTTGTA
TGTTTCATGAAGTACATGGGTCTGAGTGCGTATTTATTTTGTGAGCCAAGGTTTATGCCTTCTTCTATAATTTTC
TTTCACCGAAAATTACCTGGAGAGCTAGAAACTCCATTTGTGTCAGCGTAAGAAGCTTTAGAATCTATATCCAGA
CCAAGGCCATGGAACAATGTAGATTCACTCAGTAAAAACTCACTAGCGGCCTTCTTTGTACTAGTCTGTCACCTT
TGCTTGGCTTTGGGAAGCTTCAAACTAGGGCAGTTTATGTTTGGGAGTGACCAGTCAAATAGCAAGACAGACATA
GGCAAGGATGTAATTTTTAAAAATTTAAGTGGGGAATGGTGAAGCATGAATCAAAACAGAAGGTAGTCTTACCTT
CTTGGAACTGTAAAATAAATACATTTGAAAAAGGCACCCTCTCAACCTTCTGCGAGTCAGAATTTTTGCTGCCAC
CCCTCATTTTGAATCTCTATTCTGCATTTTTTATTCTTTTTTTTAGGAAGGAGGAAGAAAAATTTCTCCTGAAGA
ATTCATTGGAAATTAAAATTAACTTGCGTATTTTGTATTCTTTGGAATGTGATGAAGACTGATTTGAAAGGGCAG
TGCTGGATTTGGTCAGGCATAGGAAAGGAAGACATGCAGTCGTCCTGCCTAGCTCATCCCCGCCACGATGGAGAA
GTGGGGTTGCTTTCGTTGTACTTTTTTTCATTTGTTTCTTGCCAAGCCCAGTGGCTTCTGTTATAACATGTGGCA
GCTTCTCCCTTGGAGACTGATTCAGTCCAAGTTACCATAATATTTAGGACCAGCTACAGAGACGTTTCTTCCCCT
AAACCCATGCCAAATCTAAATCAAACTATCTTCTTCTCCTTAGCCGTTCAAATAGCTCCAGCTCTTATATAAAAA
TACGAGAAATACACAGGCCTCTTTTCGTTTTATTCCTGTTCAAACAGATAAACAAACAAGGCACATCATGCCTAG
GTTGCTTTGAGCTTGATCACTTCCTCCTAAAGCAGTCTTACGCTGTGTTGATTTTAAGAATTGCAACTTAGGTGT
TCTAGAACATATTCTGAGAGCATAGTCATAGTCTGTGATCTCAGAATATGTTTGCTTCCTTCTAGAACATCTGAG
TTCTAGAAATTGCGTACAATAAACTGCTGTCAGTGCTGCTGGAGGAAGGAAGAGTAACTCTGACATCACTGGCCT
TCAACAGGTGTGGCGCTGAGCTTCTGGGCCTCAGAAGCCCTGACTTCTAGAGGCTGGGGGCCAGCGGGGCAGGGA
GGTGATCTCATCATGGATGGCCACAGATCATCCACCTGCCAAACAGTTAACCCTGAACAAGTCATGTCAATTTAT
TTTGCTTTTAAAAAAGAAAGTCTGCAAAATAGAAAAAAAAAAAAAGATTCTTCATAAATACATTTGTTCTGATCT
GTAAATACCCTGGTCATTTCCCCCTTGGCATTTGATACACATAGTATAGACATATTTTAGTCATCCTTGCTCAAG
TAATTATATTCCATAACCAACTTTATTAGCATAAATTAACTTCCTCATATTTTTAGCAAGAGTTACTTTCCTTCA
TTGCTTAGCTTATTGTTTTGAAATATGAATTACTTCAGCACAGTTCATTTTT

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FIGURE 5629

FRLKTATPCLPSSYALRQAYQPRLESCNTWLCQ

FIGURE 5630

TCCAGAGCTAGTTGGTCGGAGGATAATAAACCACTATCCCTGACTTTTTCTGTGATCCTTGCGAATATCTTGCAG
ATTTGTTTGGAGTACCTCTCTCTTCTGAAGCCTGTAACCTTACCTATTTGTAAAATAGATTTAAGTTCTCCTGCT
CTCTGGTATCTCAACATAGGGGGAGAAAAGACCCAATTTAAGTAACTTTTATAGATCTAAATTTCGAAGGAGGAT
CCTTTCTTATTCAAAACCGAACTAAAACTAAGTGACTTGATTCACAGAAATCTTAATATTGAGATGTCTAAATTG
GGTGGGTTTCAGCACGTAAATGTTGACAACTAATAGACATTTTACCATCGCTGTGGCTTTACCTTGTTGTGGAAG
TTGGGTTCGGACACCAGGATAATAGAATCTTCCTCTCATTTCCCCCAGATCCTTGACAGTATAACTTGATGACTT
CTAATCCTAAGGAATTGCATACCTTGGTTTTCAGGTACAGCCATTTAAACAGGGTGCAGTGTATTGACAGTTCAA
GGAAGTCCAGGAGTCGCGTGGATTTGTGTGCTACAATTTTGTTGTGGAAAATTGTACTGTAATACTTCTCTTGGT
ACTGTAAGAATTTTTAATGTAGAAATTATGCTCTGTAATGTTGTTTTTGGAAATAAAACTGTTTAAACTCTTTGG
GTTGTTTAACCTTTTAAAGTGAAATAGCTGTGACAGTGAAATGTTACTTTTGAGAGTAGTGTCTTAAATCTAACT
TTACAGATAAGCCAAGTGTATGTAGTAGCTCAGATTGTCTAGTTGGGCACTGACTTTCAGCACATTGTCTCATGA
GACACTACCTCTTAATTTATTTTACTTGTATCAACTTTAGAGTAGCATGGCCATTTGTTTATTTTTTAATAAGTG
ATTTGTTTTTAAAAATTAAAGTACTTGTGACCCTCAAAAAAAATCTATGTCGGGTGCGGAGAAAGAGGTAATGGA
AATGGCA

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FIGURE 5631

SRASWSEDNKPLSLTFSVILANILQICLEYLSLLKPVTLPICKIDLSSPALWYLNIGGEKTQFK

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FIGURE 5632

ATTTGCAACAAGTCCTTTGACTTTTGGAGCCACAGATAAAAGTCGGTGCGCTGGTCCTGCCTCATTAATCCAGGG
CTTGCAGTGCTTTGAAGCCCAGTCGTTGTTGGCCTTTGTGATGAAAATACCTGTGAAGATGAGTGGCCGGGGACC
AAAAGGAAGAATTGGAAGCGCGATGGTTGGATGGAACAAAAAGATGTTAGCTCACCCACAGATCTCATAGTGATT
AAAATGAAAGAACGTTCACCCCAAATCCTTATGATGTGGTTTAAAAATAAAGAGTTATAGATAAGACCCTATTTT
CGAAAACAAAGTGTTAAATCCCCCCACCCCCACCCCCGGGCCCCGTGTTACCTTTTGAAAGGTTGAGCGAAAGTG
AGAATGCAAGGTTTTCCTGAACGACGTTGCTTAGAGGTAACGCGGGGCTGTGATGTCTGTTAATGGGCATCCTTG
CAAAAGATGTCGTTTGTTGCTAGTGACGTTTAAGGTTTGAACCTGCTGTTCGTATCTACTGCATTTTATGTAGTA
ACACATTTAAAACAATTAAATTGTGCTTAACTGCAATGTTCCTAAAAGCCTTATTTTTTTGTATTTCCCAGGTCC
CTATGAGAAGTTTAATGAAATATTACTGGCTAATGTGGTTTTCCCACCTCCATTAACCATCATATTCGTGACTAG
TTGCTCAGGCTTTTTAAAAAACAAGGAAACTCAAGAGATCTTTACTGTTTTATTTTTCAGGAATGACTTTGTGCC
TCTGGTTTAAATATTAGAAAACAGAAAAATACCAGTTGGCTTTAAATGTTTGCTATTCAGTTAAAGACTGGATTT
GTTTAAATGTAATACATTGTAATCAAAGGTTAAGTTTTTAAATCTTTGTGTTTTTAAAATTGTGCTTATGTTTTA
AATAATAATACTTGAGTTGTGTCCATTACAAATCAGATACATTCCTCGAGTGCAACACAGGTTCTAACGCTTATA
AGACCTCTAGGAAATTTTTTTCCTTTTATTTATCAAATGAATATAACTGCGTTTAAAAGAGGGCTGTAACTGCAA
GGAACAACGATTGAGTGTTCAAGACTGCCTTTATTAGCTTTACTTACAAGATAATACATTGGTTCACCTTTCTAT
GCACAATAAAAGAAGAATTGGGTCTCAATTTTAGAAGTTAAGCTTTTTTCAGTACCTCTTAATGAAATATTTTTA
GGCTTTTGCATACTTAATTTGAGAGGGACATCTCCCTTATCCGGATAGCTGGGTGGATTCTTATCCCTGTGCAGT
AGCAAGTGCTGACTGGGCAGGAGGTAAAAAGAGATTAGTTTTGTGGACCCAATGAGGGACTCCTTTTAAATGTAA
GTTTTCAATGATTTGTATAAGGTACCTACTGCATTACGTCTAACACAGTTGTATAATTTTACCAGTAAAATCTTT
ATATGTTTGAATAGATTAATGGCGAGGATAAATAGAGGCATTGTTTTTGCTACTTTGCATATCATTGGCCAATCA
ATGATTGATTGATTTGTATATCCTTTTACATTACCGCTTCTTGCTGTGGTAGTTTCTGTACCAAAAA

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FIGURE 5633

FATSPLTFGATDKSRCAGPASLIQGLQCFEAQSLLAFVMKIPVKMSGRGPKGRIGSAMVGWNKKMLAHPQIS

FIGURE 5634A

GGGGGGGCTCGTGCGTTCTGCGCCCGCCGCGGCGGTGCCGAGCCCGCTGGCTCCCGATTGTCCTCTGCGGCGGTG
GCGGTCGCTGCCTCCTTGCCTCCGGGCCCGGGGCTGCAGGGGCCAGAGCGAGTGCGCCTCCTGCCCGCGGACCGC
GGCAGCCCAGAGCAGAAACGGCTTACAAAATATACAGATCTTGGTAGACAACGTGGCTGCAGGCTGTTGAATTGG
AATTCCCTGTGGCTGTCCGAAGGCAGGGTGTCCGGAGAGCGGTGGGCTGACCTGTTCCTACACCTTGCATCATGC
CAGCTTTGTCAACGGGATCTGGGAGTGACACTGGTCTGTATGAGCTGTTGGCTGCTCTGCCAGCCCAGCTGCAGC
CACATGTGGATAGCCAGGAAGACCTGACCTTCCTCTGGGATATGTTTGGTGAAAAAAGCCTGCATTCATTGGTAA
AGATTCATGAAAAACTACACTACTATGAGAAGCAGAGTCCGGTGCCCATTCTCCATGGTGCGGCGGCCTTGGCCG
ATGATCTGGCCGAAGAGCTTCAGAACAAGCCATTAAACAGTGAGATCAGAGAGCTGTTGAAACTACTGTCAAAAC
CCAATGTGAAGGCTTTGCTCTCTGTACATGATACTGTGGCTCAGAAGAATTACGACCCAGTGTTGCCTCCTATGC
CTGAAGATATTGACGATGAGGAAGACTCAGTAAAAATAATCCGTCTGGTCAAAAATAGAGAACCACTGGGAGCTA
CCATTAAGAAGGATGAACAGACCGGGGCGATCATTGTGGCCAGAATCATGAGAGGAGGAGCTGCAGATAGAAGTG
GTCTTATTCATGTTGGTGATGAACTTAGGGAAGTCAACGGGATACCAGTGGAGGATAAAAGGCCTGAGGAAATAA
TACAGATTTTGGCTCAGTCTCAGGGAGCAATTACATTTAAGATTATACCCGGCAGCAAAGAGGAGACACCATCAA
AAGAAGGCAAGATGTTTATCAAAGCCCTCTTTGACTATAATCCTAATGAGGATAAGGCAATTCCATGTAAGGAAG
CTGGGCTTTCTTTCAAAAAGGGAGATATTCTTCAGATTATGAGCCAAGATGATGCAACTTGGTGGCAAGCGAAAC
ACGAAGCTGATGCCAACCCCAGGGCAGGCTTGATCCCCTCAAAGCATTTCCAGGAAAGGAGATTGGCTTTGAGAC
GACCAGAAATATTGGTTCAGCCCCTGAAAGTTTCCAACAGGAAATCATCTGGTTTTAGAAAAAGTTTTCGTCTTA
GTAGAAAAGATAAGAAAACAAATAAATCCATGTATGAATGCAAGAAGAGTGATCAGTACGACACAGCTGACGTAC
CCACATACGAAGAAGTGACACCGTATCGGCGACAAACTAATGAAAAATACAGACTCGTTGTCTTGGTTGGTCCCG
TGGGAGTAGGGCTGAATGAACTGAAACGAAAGCTGCTGATCAGTGACACCCAGCACTATGGCGTGACAGTGCCCC
ATACCACCAGAGCAAGAAGAAGCCAGGAGAGTGATGGTGTTGAATACATTTTCATTTCCAAGCATTTGTTTGAGA
CAGATGTACAAAATAACAAGTTTATTGAATATGGAGAATATAAAAACAACTACTACGGCACAAGTATAGACTCAG
TTCGGTCTGTCCTTGCTAAAAACAAAGTTTGTTTGTTGGATGTTCAGCCTCATACAGTGAAGCATTTAAGGACAC
TAGAATTTAAGCCCTATGTGATATTTATAAAGCCTCCATCAATAGAGCGTTTGAGAGAAACAAGAAAAAATGCAA
AGATTATTTCAAGCAGAGATGACCAAGGTGCTGCAAAACCCTTCACAGAAGAAGATTTTCAAGAAATGATTAAAT
CTGCACAGATAATGGAAAGTCAATATGGTCATCTTTTTGACAAAATTATAATAAATGATGACCTCACTGTGGCAT
TCAATGAGCTCAAAACAACTTTTGACAAATTAGAGACAGAGACCCATTGGGTGCCAGTGAGCTGGTTACATTCATT
AACTAAGAGAAATTTCCATAATTGTCTTTTTCTATAGAGTGCATGATGAAATCAATTACAGTTTTGGTAGTAGGG
TTTTTAAATCTATATCACTGTCATAGATGTACAATCTTGGTTCAAGTTGAATGCTGGTTTTGTTTGTATCTTTTT
ACAGCCTTATTTCAAACGCCATGTGTTAGTATAAGATCCGAAATCAAAATATGCACAGTACTGTATTCTAAGCAA
AACCTCAAACCTTCTCGTTGTCTTCAATACCGCTCTATCTCCAAGATGAGGCTGAAATTTTCAGAGAGACTTAGC
TAGAGGCTTAGTATGTATGGGAGTTCAGCGCTTCTGCTGGTCTCAGGTGTGGCTGCTGCTGTCGAGTTTGAATGT
TAGCTGTTGAAGGTATCAATTCAGCAGCCATGAGCAGCTCCAGACAGACAGGTGAGCTCTGCTGTTTCTGGGTGG
ATCATCACAGATTTAGCCGGGCAGGCAGTAAGGTGTCCTCTTACTATTCAAAAAGTGTAGACTTTCTTACATATT
CGCAATACGTTCACAGTGTGTGCATTTTAAAATAATTCTTAAAGGAGTAACTGAAATTTTACCTTGAGTGAATGG
CCTTCATAATATAGCTTGAGAAGTCCTTTTGAGTACCTGTCAGTGACTCAACAACATTTAATAAGGGAAAGTAGA
CTTTTAACAGTTATTATATATGTAACGAAAAGCCTTTCCTTTGGGATTAATATAAGTAAGAATGGTAGCCTTGTG
GCAAGAAATGATTACAAAGGATATTTTTATTTGTAATTCCTCAGAAGACAATTTATGAAGTCACCCAAAATGTTA
TTTTAGCTGGTTTTGGATTTTTCCAATAAATTAGAAGAAGGATTTCTATTCTAAAACATGTAAAACCTGTTTTAC
ATATTACTGATACAATTAAAGATTATTTTTCATCTATGTGCAATAGATCACCCCTCTTTAAATTGCTCTAAGATT
TATTTTAGAAAACTTTTCATGTGATGTTATTTCTTTGTCATCAAAATGCTTGTTAACACTGTCCAGACACCATCC
TAACCTTGCCATTGTTAAAGAAGTTTAGGAAAGACTCTTATATTGTAAATATTTAGATGGGTTCTCTCACTTTTC
TTTGATACTACTGATTTTCAGCAAGTGAATTATATAATTCAAAATGCTAGAAATGTCTATCCGTTCTATAAGAGA
GCATATCCTGCCGTTCTTGCATGCAGTGAAGCCCTGCCCGTCGAAAATCATTGCATCTGTGACTTTCAAAGTGGA
AAAAAAAATGTTATTTTTTTGTTGATTTGTAAAGAGAGTTTAAATGTCATGTGAAAAAAAATAGAATGTAGTAAA
ATTCTATATATTTATGAAATATTTTAAAGGCATATTTTTTTAAATATCAAACGGGGCTATTCATAAAATAAACTG
ATTGTATGTCAAGATGTCCTAATTTAAAAGAGTAGTTTTATAAATCATGGTCAACATTCCATGTAAATATTTGAG
CTTTACAAAGATAGATCCAAGTGTGCGATCTGTGCACTGCACATTTGATAGCATTATTCACTGGTTTTCCTTCAT

FIGURE 5634B

ACTTGTCAAGTTCATATTAGAAGCAGAGACAAAAACCACTCCAATGGCCTTGACACATAGTCACACCAAAATAGA
TAATCAGACTAAGTATTATATAACAACGTGATCCAGACAGTGAGTTCTAAGTGTATTAATTAAATAGCAAAAAAT
TTTGTTTTTAAAAAATGAAAGAGGGAGGGTTGCCAACCTGAAGTCTTAAGTAGATTGTTTGGGTAGCATATTTCC
TTCTTTGAACATTGTCTGAAATTTTCTATAAATCAAGACTTCTTGTACAAAGAATGATGGGACATATGTAATAAT
TCAGGCAATCACCTGAGTAATTTAGGCAGTCCAAATTCTTTACCCTGAAATACCCACATTTTAAAAAAATTGCAG
ATAATTGCTTCAGTTATTTACTTTGGGGACAGAGATATAGTGTAAAGTGGGAGAAACTGAGTCCTTTTTTGGTGG
TGGTAATAATAAGATGTTATAAAAATATAACATTTTAAAAAAGAAAGGTCCAGACCTTAAGCGCAGAGCTAGAAC
AATATTTTTTAAATAATGGGGGGAAAAGGGGGCACTTTGGTAATTTTAGAAATCAGGTAGTATACNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNGGTAGACGTGGTCTTAAAAACAGTGTTT
ACATGGCCATCTTGATGCTTAGAAAGATAATTGATTAAAATTTAATAAGGCAGGGCCAACTCCGAGAGTTCATTG
ACAACGGCAGCAAAAAGGCCCTGAATTCTGTACTTTCTTCCCCCAGCCTCCTTCTCCAGCAAGGAGAATAGCACT
CCTCCCTCCAGAAGCCAGCTCCCTAAGTTGGAGCCACTATGTAAGAGAAGAGGAACGTTCACTTTTTAAAATTCA
TATATTTAAAAATCAAGACCAAAAAGTAAATTCTGTACTCCTATTATTGACTGTAGTCAATCAAACATAAAAAGG
TGAAAGTAAAATTTAATTTTTTACCCTTATTTTACTGACCAATATGGAAGTTCTTGGTATCTTTAAGGCTGACCT
TCCTGGTATTGTGTAATGATTGAATGTATCTAAACTGTAATAATTTGAAACTGACAAACATAACCTTCTCAGACT
TACAAAACTATGTTCTTTCTAAAGATACAGATTTTTATTATTTTATTTTGACTAGGAAGGATTTATAAATAAATG
TAATGAAAAATCTTTGATCTTAATAAAGTACCTTCAAACAGTGTGTGTACTTACTTGAAAATTGTTTTTGCACTT
GGATATTCTATTTTATTATACTACTATTGTGATCTATTCCATTATACTATTTCCCATGGTAGAACAAATTATATT
TTCTACTGTGATATGAAGTGATGTAATTGAACTTGCCATGTCTAAAATTAAATTTCATATTTTTTTC

FIGURE 5635

MPALSTGSGSDTGLYELLAALPAQLQPHVDSQEDLTFLWDMFGEKSLHSLVKIHEKLHYYEKQSPVPILHGAAAL
ADDLAEELQNKPLNSEIRELLKLLSKPNVKALLSVHDTVAQKNYDPVLPPMPEDIDDEEDSVKIIRLVKNREPLG
ATIKKDEQTGAIIVARIMRGGAADRSGLIHVGDELREVNGIPVEDKRPEEIIQILAQSQGAITFKIIPGSKEETP
SKEGKMFIKALFDYNPNEDKAIPCKEAGLSFKKGDILQIMSQDDATWWQAKHEADANPRAGLIPSKHFQERRLAL
RRPEILVQPLKVSNRKSSGFRKSFRLSRKDKKTNKSMYECKKSDQYDTADVPTYEEVTPYRRQTNEKYRLVVLVG
PVGVGLNELKRKLLISDTQHYGVTVPHTTRARRSQESDGVEYIFISKHLFETDVQNNKFIEYGEYKNNYYGTSID
SVRSVLAKNKVCLLDVQPHTVKHLRTLEFKPYVIFIKPPSIERLRETRKNAKIISSRDDQGAAKPFTEEDFQEMI
KSAQIMESQYGHLFDKIIINDDLTVAFNELKTTFDKLETETHWVPVSWLHS

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FIGURE 5636

GCCCCTTCCCTCCTGCCGCAGCCTGCGATTGGCTGAGAGGCTCTGACGTCCGTGTTTCCATGACGTGTTGGTGCA
GGAGGGAGCGGCGGGGGAGGAGGGGGTGGCCAGGCGCGCGGGGAGGTGACTCCGTCAGTCACAGCTGCTGTTTCG
GCGCGGGGCCGGGCCGCTGCCGCGACGTGTGGAGGCAGGAGAGCGATGATTGCCGCAGGAGAAGTGCGGGCGCCC
TTCACCTGGGGCCCCTCCCGAACCGCCCCCGGGCCCATGCCCCTCCAGGGCCCAGGAGCGAGCCAGCGGGAGGGC
GAGGGCGAGCGCTCCTGGCGAGGACAGATTAAGGCGAACCCCCAGTCAGCGGACATTTGAGCGGCTCCTCGCCGC
GTCTCTGCCCCCACTCCAAACCGGACTCGACGCCTGTCCCGGGCCGTGACGCACGCACCGGAGGAAAAAGTGCTT
CTCGGCTCGCTCCCTCTTTGGGGAAGAGAGCTCACTCCCCATGCGGGCGCGGGACACTCCATCTCTGTTCCTGCC
GGTCGGGTCCGCAAACACCGGGGATCCCAGCTGCGGCGCCCAAAGGGTTAACGCAGGCGTTCGGCCAGTGCAAAC
CGGCCTCGCAGGATCCGCGCTTAAAATCCGGGTGTTTTCATTTTGGGTTTGTTTCTTCTACTATGCCAAGCTGGT
GGCTCTCTTTTAATTCTCTTGTAACATCTCAACCCTGCACCCATCTTTCCTGAGGGGAAAAGGAAACGGGATAAC
TTGCGGTATTTCGATGCTCAAAGGTAACCGGCGGCTCTGCTCCAACCTTCAAGAGATTTTGCAAGTTGAAAAAAA
AAAAAAACCATCCTTCGTAACATCTACTTAAAAAAAAAAAAGCAAGTTTTCCTTCTTGTACACGCATATACACAG
TAAAGATGTGTATCTTACCTAAGATACCGCGCTTCATCTTCATCTAATCTTTATTTGAACTCACCGTCGCCACTG
GCCCAGAGACCTTGTCAGTGTTATTTTCAGTATCAGTTAATCAGAACAAAAAGATAAGTTCTGCAATCTTCTTTC
TCTTAATTCCAGAACTGGAAAATTAATATTTATATAGCCTCCTCAAAAGCATACAGGCAATAGGAAGTATGGTAT
TATGTTCACGATCTGATGATAGCATTTGTTTTAAAATATTTTAAAAGATTAGACACAAAATGTGTAAAAGACGTT
TAAAAGTGAATAAATATAAATCAATGCTGTTGCAAATAATTTTTTTATCAGTTTATGTATCTCACTAGGCTTGAC
ATTACCAGCCTTCTGAGCTGTGCCCTTGATGTGTAAGATAAACGAACATTGAACAGAATGATAGCATTTTTCCTC
TCTTCAGTCACTGATGGAGAATTGGTTAATGTGGTACAATAAATAGCCCTTCCTGACACTATTTCAAATCTTTTT
AACAGAAGAATAACCTAAATTTCACCTAATAAATTTCAATATTATTTCCCCCTAAAATATCTTTCAAAACGACTC
AGAGACATTTAAGAATCACTGGCTTTTTTCCAACTTTTCCTCCAAGGAAGTTACAATACAATGTTGAATTATGTA
TTCTACTTTAATCAAGAATTTGACATTAAAGTAATATGTGAATCATTGCTATAGTACACTAGCAAAATGGGTAAT
AAACTAGAATCTGTTCACTTTGTGGGTTTGTTCCAGTTCCAGATTATAAAATGAATGCTCTTAAAGTGTTGTGGT
CATGAAACAATTATTGAGCATCTTTATTTAAGAACACGATTCAATTAAATTTTCATTTATATCGATAAATCTATA
AATGAAACATACGGANNNNNNNNNNNNNNNNNNNNNNNNNAAATGAAAACGTGTGTGTGTGTGTATCCCGGAACAT
ATTTGTATGCATTTTAATGAAATGTGAGTCATATGCAATGACAAACTTTTACTGTCATAGTCAAGAAAATTGTAC
TGTAGTTTGGTTTTTATATTTTTATTCTTCAAATAGGAAATAAAGGGTGAAAGCAATATAGAAATAACTGTTCAC
ATTACATTAAGAAATTCAATTTTTTTCTCCCACAGGCTTAGTACTAAAGCATCCCTCACACATATTTTTCAATGT
AAAAATCAAGAAAATATTGCATTGCTTACTGTTTCCTTGAAAAAAAATTGAACTATCT

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FIGURE 5637

PFPPAAACDWLRGSDVRVSMTCWCRRERRGRRGWPGARGGDSVSHSCCFGAGPGRCRDVWRQESDDCRRRSAGAL
HLGPLPNRPRAHAPPGPRSEPAGGRGRALLARTD

FIGURE 5638A

GTCGACTTTTTTTTCCTCTCCCAGGTGCGCTTCCCTGCTTGATCTGTGTACCCTGCTCTTTCTCCTTCATTCCG
CAGCCTCCTTTGCCCTGTGACCTGCAGGTACTGGACGGTCCCTAGAGAGGATACCGGGACGCTCCTGAAGCCGCG
AGATGATTTCAAGCAGATGCAGCCTGACCATTAGGGCCAAGGCCAAATTGCAAAAAAAAAAAAGAAGTTTGCCTTT
ATTCTACTCCATCCACATCTAAACTTTGGAGGTCAAGGCTGTGGACAGATCAGAAGACATAGTTCCCTCCTTCTG
GGGCTCCACATCCTTCATTCACTGATCTCTGGGAAGGAGGATGGGTGGCAGGATGGGTCTTCCATGATACTGAAG
GGAGAGCCACATGTTGATGCCCAGGACCAGCTGCCTCCTTGGTCTGAAAGGCCTGATCGAGGCCAGGATTGGCTA
TGAGAGCTGGGAAATGGGACCATCTTTGAAGCCATGGGAGAGGGTGAGAGCCACCATCACTCATGTTCTTGAATG
GGAACTGCCTGGAGACCCTGAAGAAGAAGGAGCCTGAAGGAGGAAGGAGGAGGCTGAGCCATCCCGGGAACATGG
GCTGGATGAGGCCAAGCCAGGAGACGACACCACCAGATAGAAGTCACCATTCAGGATTTGGACTTTTCTGTGGAG
ATCCTGGCCCCGAGATCGAACCCTTCTCCCTGTGGGTGTTCCCGCAGGAGATGGTGCTGGAGATCCACCAGCTGT
TCATGGACCATGAATACCCATGTCACCACATCACTTCTCACTGCACCTGGGTGGCAGCACACTGGACCACGTCTC
AGAGCTGCGCAGCATGGCAGGGCTGCAGGCGGGCTTGCTGCTCCACGTGGTGGAAGAGCCCTGCACAATGCACAA
GGCCCACGGTGATGAGTGCCACATTTGAGACTGCTCAGGAGCCTGGACCCAGCTGATGCAGCTCCTTGTCCTTCC
TGAGCGTCTTCACTGACAGTGGCCTGAGAGACGGCAGGAGCAGAAAGACTTGGAGATGGACCCCACCGACTGCAC
ACCACCCAAGTACATCCTGCTAGGGACCCTGGAACAGCCACTGTGTCCCCTGCAACCCCAGAACGGTGACTAAAA
GCCCCTGAAAGTGCTCACCGTGAGCGGCTGGTACCTGTCCCCTGGGAACTGCAAGATGCACAGGACCTTGTGTAC
CTGTTTGTGATCACAGCCGAGGACCAGCGAGGTAGCATTACCACATCCACACAGGGCTTTTACCATAACCGCCCC
AGTACTGGAACGAGGAGCTGCAGATGATGAGGGACCTACCCAACAAGAACCAACCTGAGCAGCTGCTTCAAGAAA
AAGCCATGTTCAAGGTGCCTGAATCCCCTGGTAAGTGAGTGACAGCCTCACAGCCTCAGGCCCACCTGGCTCCTG
CTGGAAGGTTTTCTTGTGCTCGGGAGAGAAGTGAGGGAAGCCGGCAGTCCCAGCCCTGTCAGGTGCCCTGAAGGC
CCGTCAGGTTTGCCCTGCAAGGCCTTCTAGCATTCTGCTTCCTGGGAGACCATCCCCCACCTTTCTCCGGCCTCT
GAGACTTTGAGTCCTTGGGAGGAGAAGGCCCTCCTTGCTATCTGGGCTGAGTGGCCAGGGCCATCCAGCTTCCCA
CCCTCCACTGACTGCCATGGGGCCCTCCCCTGAGCACATGGTGCCCAACTGTAGCCCTTCTAGGGCAGGGGCTCA
TTGGCAGCACTTGCAGCTTGCTGGCACTTAAAAGTCATTAGTGCGGTTACTGAGAGAAATGAGGAAAAAATAATT
GTTAAAAAAAAAAAAAAATCTCTCCTAAACTTACTGTGTAACATGGAAGAAGTAACAGCCAAAATTTCTTGGGTAC
TAACTTTACCAGGATGATTCCAAGTGCTTTATAAGCATTATTTCCTATAATCTTTTGGACCCCTTGTAAATGTCA
ATACTTTCCATCATCATCGTTGCATAGACAAGAAACTGGGTCTGAAGTTACCTGCCCTGGTTTGCCTGGCACATA
GCTGGTGGATCCCAAACCTGCCGCAGCCCTCATACTCCTTGGTAGCCACTAAACTCTGTGCCTCTTTAAGCATAA
GTGTTTACTTTTTTGTAGAAATGATTTTCTTGCCCTTCTCTAAATATAAGGAAACTGAGGCAAGGGTCTCTGGCT
CCCAAGGCAGGCCTGGTTGCCTCTCCCATCTTGGCGAGCTGGACCAGGTGGATGTAGCCTGAGGCTTTTGTGGGC
ATGGCCTCTCACCCTCCCAGCCTTGGTCCCTCCCAGGTACACAGCAACTTCAGAATGGCAGCCACATGGGGCGCC
ATGGTAGTCAGGGAGGCATCGTCATGGCCATCAGTCCCAGTGAGGAGACCAAGCTGCAGATGTTCATGTGGAGCC
GCATCATCTTCAGCCTGGGCTTTGTCATTAGTGGCCACTACAAGGACTTTGCCAGGGATGTGGCAGCCTCCATAG
CATTCACCAATGACCTGAACGGTGAGCACCCGCACAAGGCAGCGGACATGGAGGGTCTGTACACGCTGGACACAG
CAGAGGTGGATGACCGCAGCTACTGGGTCAGGTTCCAGTCCTCATCCCTGGCATCCTGGAGTGGGACCAGGAGCA
GAGTGTCATCTATGGCTCCACTGACTTTGTAAGATGGTGGTGTGGCCCCCATCGTGTTGCCTGGATCTGCTGGAG
CATGAGTTAACTGCTCAAGACCCTGTGCCACTGCATGCTCAACCAGTGCAACGATGAGGCGGAGCTCTTCTCGGT
TGAGGGCAAGTGTGTCACTGGCAATGACAGATACTACCTGCTGAGCCCCCTCCCCCTGACCTCAGCTTCCTGCCT
GTGCCCCACAAGGAGCTGCCAGAGGAGTGCTCCCATGCCAGCTTCCCCTGCACCCACAGGCACAGGTTCTGTCGC
TTGTGCCAGGAGCTGGTGGATGTCTTTGTGGAGCACAGTTGAGGAGCAGCCCTGTGAGGCTGAGGCTGCAGCCAG
CTGCACTCTGCTGCGGGCACGGGCACCCTGGGTTGTTCTGGGGCTGGATCGTTGAAGAGAGAAGCTCTGGACAGT
GAAGAAGAGCTCGTTTTGGCCACACTCACTAGAGCCCCTTTCCCATCCCCCACCCACCTGCCATCAGGCTCCCAG
ATGCAGAATCTGGAGCTTTGTGTTGGTTGCAAGCCAGCAAGCAGTCAAACCAGTGACCCAGCTGAGCTGTGCTGT
TCTCCTAAGGAGCATTTGGAAGTCACTGGGTGGGTTGTGAAGGTCACAGTCCCTGAGTGTTGGTGCTGCTGGTTT
TTAGTGCTTAGGAGTTGGCCATGTTAAATTTCCCACACCACAAGTAACTCTTTTCCAGAAGCCAGTGGCATTCCT
GTCTCTGTTGGAAGTCCTGGTCTGAATGTGGACCCTCTCTCCCCGACCTCTATACTCTGGCTGTCTTCTTCCTGT
CTGGGGAGATCTGGCAGCCACCACCTTGTTGCCTGGGTCTGTGAGAGCAAAGCTGAGTTCTGGTCCGGCTTGTAG
CAGAAGAAGGAATTTGACACCATCTATAAGGCCCAGGTGGGCTGTGGCAGGGCCGGTGGGTTGAGCTGCGCCTGT

FIGURE 5638B

AGGCTGTGGGCAGCTAATCCTTTCCTGCCTGTGCTCTCTCCCCTGTTTTTTGGTGAGAACCACGAGAAGGAAAGC
TCCGAGATCCTCAAGTGCCCGGCCCAGCAGGCCATGGCCCAGCAGCACACTGTGAATGGGAGATACTGGTCGGCT
GCAGTGCCAGCATCCTGCCCCTCCAGCTATATCCCTGGGTGGAGCTGGGCCCCCACCCGGCCTGGGTAGGATGAG
CCTCACTCACAGCTCATCCCCCCACGGCCCCTCAGTTCACAGCCCCCAGTATGGCCAGCGTCTTGGAGCAGCTCC
AGGTCATCGGTGATGTCCTCTTCATTCTTCTCAGCTGAGGCCCCTCCATGGCTCCCTACTTAGAAGTTGGCCTTT
AGTTTTTTAAGATATGTAATAGGCTGACATGGCTCAAAATTGAAAAGTGTAGCCAGTGATGAGAACTTCCTTGTG
AATCCTTCCAGAAATACTCCATGTGATCTTTATCCCCCTCTTTTTTTTTCTTTGGAATTGTGGCATGCCACGGAT
GAAGGTTATTATTGTTTACTTCATTTAACAACGTATCTTGGTGATCTTCCATTTCAGTTCCTAGGTAGTGGCTTT
ATTCCTTCCTAGGCTGCCTGTGGTTCCAGTGCAAAATGTGCCTTAGGAGCAGGCCCTGAGGACTCCCGCGGTGCT
GTCACAAGCAGTGCTGCCTTTGGGAGCCCCTAACCTCCTGCTTTTTCTCTCCTCAGTGTGGGAAAGGGGTTTGGT
CAGCCAGGGGTGTCAGCAGCCCTGTCCCACACCCATTGTCTACACCTAATCTGGTGGCAGGGAGGCCACAGAGTG
CAGTGATTGGAACTGGGTGAGAGGGTTAGAGGCAACTGGGCCCTAGGCCGAGTCAAGTGCATGGAATCCTGACTG
TCAGCAATTAGGGATCTTTCTGCTTTTGGGAGGGAAGTACTTGTTCCACGCATCTCACTGAATATGGCACGGAAC
CTGATCTGTCCCAAGTGGGAGTTTAACCAAGCTAGCGGGGGCCCAGGGCCCTGGCCCAGTCTGACACCTACCTCC
TCTCCCACCTTCTACTCACCCAGAAGACTAGGAGAATCTGAAAGCAGAGGTGGTGCAGCGTCACTAGCTCCAGGA
ATCCAGAAAAACAGGGATAGGNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
GGACCCCTATGGCCACTGAATCTGAGCCCCTGGGGGCAGAGGAACTGAGCTCCCAGCCCTGTGGCTGCCAAGGAT
CCTTTTTCCTTGAGCTTGCAGGGATTGAGAGAGAGAGAGTCAGCGGCCCTGATGTTAGCGATGCAGACTCCAGGA
GAAGGGGGCATGCTCGCAGTTTAGAGGAAGTGAGCCCCTCTTCCACGTTCCACTCCCACCATCCTCCTGGGACCC
CAGCCTGCATGCCCCCCAAAAGATGCTTTTGCACTGATTCAACAAAGCCTAAAGATGCAAAGGCCTAATTGAAGA
CCTGTGAATGGCATGTACGGTCCTCAGTTCCCAGCTGAGGGGCCACTCGGGCTCCCCATATTCCCCTCAGCCTCT
CCATCTTCCAACAGGGGTGTGGAGTGCATCCATGGCCATGAGTATTGATCTGTCCCAGCCTGTGCATTGCTCCGA
GGCAGTTCTGAGTGGATGATGTACAGATGGGATTCCTCAGCTCATTTGCGTGGTTGACGTTATGGCTGCTGGTTT
TACTGCCACAACTCCCAGGCCCAACCTGGCTTAATGTCTAAGTTTTAAGCCAAAAAAGATGGGGAGCAGAGCTTT
GTGGCAGGGCTGGGGGTTGGGGTCCACTTTAGTTTTGTGGCAGGATGAAGGCTGCAGTGGTTTTATTAATCATGA
TTGGCCTGGCCGTAGCTCCAGGCTGAGAGGGACAGGTTTGTCAGTGGTGGTCCCCCAGATGTCCCTGTGCCCAGC
CCTGGCCTGTCTGCCCTCAGGCCCAGCAGGAGGCGCTACCACAGGCTCTGACTGGCGTCCCTACTCCCTGTACCC
CAGATGGACAGAACCTTCGGGTCTACAGTCGGAATATATCATTCTCCCCATTTTAACCTGAGCTGCCTGACACAC
GGAGGGTGTGCTGGGTAAGGGGCCTAGGGAGCCAGGGTTGAATCATGGATCCTGGGGAAAGGTTGCAGACACAGG
AAGGGTTGTCACCTCTCTGTGGAGCCCTGCTGCTTACCACACAGCACCTTCTGCAGAGACTAGCTCTGAGGGTGG
CAGGGGACCCCACAGGCCATGGCCACTCCCTCTCTGCACCTGTCCGTGCCTGCTGTGGAAGCCTGGACTGGGGGA
GGAGATTGCTACCCTGTGAGCCTGAGGGAGCCACGTCCAGCTGTGACCTCTACCTGGGGCTTTACAGAGAGTTGT
TTATGGGTAACAGACACCTTGTTTCAGAGGGAATGGGCATGAGCTGGCAAGTGAAGCACCCCCACAGCTTATCAG
GAACTTTTTCTCATTTTTAAACCATCATGTCTTCATTTCACATTGGAATAAAGTGAGGTTTTGG

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FIGURE 5639

VDFFFPLPGALPCLICVPCSFSFIPQPPLPCDLQVLDGP

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FIGURE 5640

ATCTTATTCTGGCTCTCCTTTAAATAGCAAAACAGTAGCCTGGGCTCATAATATCTTGTTGCTCTGTTTACCATC
ATATAACAAATGCTTTTCTCTGGGTCATTCTCTATCCATTTAGGGACTATTTTGGCTAATAGTCCCTAAAACCAT
TAGCTCCTCCATATGTGCCATTTGTATAATTCTTTAGTAAATTGTATTAATGGGAGAATCTGTAAGTTATGTCTG
AACTTTCAGGTTGTCTTATAATTGTCTTTTTCCTTATGTCAGATGTTCTATGTCATAAGAATAAAATGGTTCACA
CCAATACAAGTACTTAGTTGTGGAAAGGGAGAGTAGAAGATAAAAATGGAGATTTTCCTGTGCTACAGGCTTAGT
CAAGCTTATGGTCTATTTAATGGTTATCAAAGGCAATTAAATAGTGTTGAGTGTTCTGCTTTTACCTACATTTCA
TTTTTCATGTACTTAGTTACAAATTGAACCCTCTTCTATTTTTTTCCTGCTCCTGTTTCTGTTTCATTTTAGTTT
TCCTTTTCCCTGATTATCATTTAGGCATGTAAGTGACACCCAGTAGCATTGCTTTAATTCTGCTGGTGACAGTGC
CAAAGCTTTACTATACTCTTTTTGTTGTCTGTTGCTTTTCTCTTGCTAATTTGCTTGACTAGATAACTAAGAATT
CAGGTAAGCATTAGCTCTTTGTTCACTGAGAATAATACAACTTGCAAGATAATTAATTTGGATTGTTCTACATGT
ATTTCGTTTATTTCTCTTTACCTTGTTCATTTATTACGACATTTTGAATTATTTACATACCCATATTTCTTCTTT
CTTTTATGGCTCAGCTCACTATGCTTTTTTTTAATACTGGTAGCTTCCTCAAGGTTGGAAAACAAGATCTGAATA
CTATAGAAAATAATAACTATTTTTCTGTGGTCATATTAAAGATATAATGGCTTTGGATTTTGGGGTGATTTTTCT
ACTGTCAGTTTAAAAAAAACTTGTCTATTTGCATTTGTGTGTTATTACTTCTAGTTAAGAGTATTTCCAAGGAAA
GTTTCATGTTACTTATTTTGTTTCC<u>ATG</u>TCTTTTTCCAAAAGAACTTATTTTTTATATTATAATAAATATCAGTG
GAAAAGTAGGTTTCGTTATATAGAAATTAACTTTAGGCTGGGTGCAGTGCTCAAGCCTA

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FIGURE 5641

MSFSKRTYFLYYNKYQWKSRFRYIEINFRLGAVLK

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FIGURE 5642

AGTTGGAGTTGCGGCGGCGGGAACGATTGGGCTGAGCAGAGGACGACATGTTGCTTTTCGTGGAGGTAGCATCTA
AAGGAACTGGTTTAAATCCTAATGCCAAAGTATGGCAAGAAATTGCTCCTGGAAATACTGATGCCACCCCAGTAA
CTCATGGAACTGAAAGCTCTTGGCATGAAATAGCAGCTACATCAGGTGCTCATCCTGAGGGTAATGCAGAGCTCT
CAGAAGATATATGTAAAGAATATGAAGTAATGTATTCTTCATCTTGTGAAACCACAAGAAATACTACAGGCATTG
AAGAATCAACTGATGGGATGATTTTAGGACCAAGTCATAAGCGTTGTATTGTAATTCTTAGAGAGATTCCTGAAA
CAACACCAATAGAGGAAGTGAAAGGTTTGTTCAAAAGTGAAAACTGCCCCAAAGTGATAAGCTGTGAGTTTGCAC
ACAATAGCAACTGGTATATCACTTTCCAGTCAGACACAGATGCACAACAGGCTTTTAAATACTTAAGAGAAGAAG
TTAAAACATTTCAGGGCAAGCCAATTATGGCAAGGATAAAAGCCATCAATACATTTTTTGCTAAGAATGGTTATC
GATTAATGGATTCTAGTATCTATAGTCACCCCATTCAAACTCAAGCACAGTATGCCTCCCCAGTCTTTATGCAGC
CTGTATATAATCCTCACCAACAGTACTCGGTCTATAGTATTGTGCCTCAGTCTTGGTCTCCAAATCCTACACCTT
ACTTTGAAACACCACTGGCTCCCTTTCCCAATGGTAGTTTTGTGAATGGCTTTAATTCGCCAGGATCTTATAAAA
CAAATGCTGCTGCTATGAATATGGGTCGACCATTCCAAAAAAATCGTGTGAAGCCTCAGTTTAGGTCATCTGGTG
GTTCAGAACACTCAACAGAGGGCTCTGTATCCTTGGGGGATGGACAGTTGAACAGATATAGTTCAAGAAACTTTC
CAGCTGAACGGCATAACCCCACAGTAACTGGGCATCAGGAGCAAACTTACCTTCAGAAGGAGACTTCCACTTTGC
AGGTGGAACAGAATGGGGACTATGGTAGGGGCAGGAGAACTCTCTTCAGAGGTCGAAGACGACGAGAAGATGACA
GGATCTCAAGACCTCATCCTTCAACAGCTGAATCAAAGGCTCCAACACCAAAGTTTGACTTATTAGCCTCAAATT
TTCCACCTTTACCTGGAAGTTCATCAAGAATGCCAGGTGAACTCGTTTTGGAGAATAGGATGTCTGATGTTGTTA
AAGGTGTCTACAAAGAAAAGGATAATGAAGAGTTGACAATTAGTTGCCCAGTGCCTGCAGATGAGCAGACAGAAT
GCACTTCTGCCCAGCAACTCAATATGAGTACCAGTTCTCCATGTGCTGCTGAGCTTACTGCATTAAGCACAACTC
AGCAAGAAAAGGATCTAATAGAAGATTCCTCTGTTCAGAAGGATGGTCTCAATCAGACAACTATACCAGTTTCTC
CTCCAAGTACTACAAAGCCATCGAGGGAACCCCGAAAGTTAAGTTATGCTGAAGTGTGCCAGAAGCCCCCTAAAG
AGCCATCTTCAGTTCTTGTGCAGCCACTACGGGAACTTCGCTCCAATGTGGTGTCTCCCACCAAAAATGAAGACA
ATGGAGCTCCTGAGAACTCCGTTGAGAAACCACATGAGAAGCCAGAAGCAAGGGCTAGTAAGGATTATTCTGGCT
TCCGAGGCAATATAATCCCCAGGGGAGCAGCAGGAAAAATCAGGGAACAGAGACGCCAGTTTAGCCATAGGGCTA
TACCTCAGGGAGTGACTCGACGTAATGGCAAAGAGCAATATGTGCCACCCAGATCACCAAAGTAAAAAACAACAA
AACTATTCAAAAACTTCACTCTCTTCCCATTAAACTTGAACTGTGGCTATATTGAACTGTTTTGGAGGGGAGGGG
GTAGCCAGGAAGGAAACAAGAGAAAGTACGTCCATTTCATTATGGATTTTGGAGTTGTGAGTGATAGGATCCCAA
AATTCATCTCTAATGTGGTTTTTAAATGCTGGAGGATTCCAATCAATATAAATATATATATATATACACACAC
ATATATAAAAAGTATAATTTTTCTATTTTTGTTTTTGGTTTTAATTTGCAGAGATTTGCTGCCAGGAATCAATTT
TGAGGGTTCAGATTTAGCTTGGAAGAAAAAAAAGAAACATACATCCTTCAGTATAGGAGATGAGGGAATGAGAGA
AAATATTTTTTGAAGAAGCATTTCTGTAAAATTAGAAATTACTTTTTTTAATCTATTTAAAGTTTGGCTTGAAGA
ATGCCATCTCTGACTATATGGCCTTGTATTGCAAAGCAGATCAGTGGCTGGGGTGCCTGTTGTGGGTGTGAGTGT
GTACAAGAGCGATTGAAGCCAAATCTGTTGTCATGTTAGTAAATGATTTGAAAACTG

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FIGURE 5643

MLLFVEVASKGTGLNPNAKVWQEIAPGNTDATPVTHGTESSWHEIAATSGAHPEGNAELSEDICKEYEVMYSSSC
ETTRNTTGIEESTDGMILGPSHKRCIVILREIPETTPIEEVKGLFKSENCPKVISCEFAHNSNWYITFQSDTDAQ
QAFKYLREEVKTFQGKPIMARIKAINTFFAKNGYRLMDSSIYSHPIQTQAQYASPVFMQPVYNPHQQYSVYSIVP
QSWSPNPTPYFETPLAPFPNGSFVNGFNSPGSYKTNAAAMNMGRPFQKNRVKPQFRSSGGSEHSTEGSVSLGDGQ
LNRYSSRNFPAERHNPTVTGHQEQTYLQKETSTLQVEQNGDYGRGRRTLFRGRRRREDDRISRPHPSTAESKAPT
PKFDLLASNFPPLPGSSSRMPGELVLENRMSDVVKGVYKEKDNEELTISCPVPADEQTECTSAQQLNMSTSSPCA
AELTALSTTQQEKDLIEDSSVQKDGLNQTTIPVSPPSTTKPSREPRKLSYAEVCQKPPKEPSSVLVQPLRELRSN
VVSPTKNEDNGAPENSVEKPHEKPEARASKDYSGFRGNIIPRGAAGKIREQRRQFSHRAIPQGVTRRNGKEQYVP
PRSPK

FIGURE 5644

GGATTTCCCCGACAGGTCCCCCAGACATTCCCTCAGGCTGGCTCTTCTACGACAGCCAGCCTCCCTCTTCTGGAT
CAGAGTTTTAAATCCCAGACAGAGGCTTGGGACTGGATGGGAGAGAAGGTTTGCGAGGTGGGTCCCTGGGGAGTC
CTGTTGGAGGCGTGGGGCCGGGACCGCACAGGGAAGTCCCGAGGCCCCTCTAGCCCCAGAACCAGAGAAGGCCTT
GGAGACTTCCCTGCTGTGGCCCGAGGCTCAGGAAGTTTTGGAGTTTGGGTCTGCTTAGGGCTTCGAGCAGCCTTG
CACTGAGAACTCTGGTAGGGACCTCGAGTAATCCACTCCCTTTTGGGGACTGACGTGAGGCTCCCGGTGGGGAAG
GAGACTGACCTCTCGGTTCACGTGTCTTGCCATAGAGCCACTCTCCTGAGTGGGTTTTTCTCCTGATCGTTTGGG
CCAAGTGACTTCTCTCTGAACCTCATGTTTCTCTTCTGGGATAATAAATGGTCACCCTTTCAAGGGGTTGTTTTG
GAAGATATTGTGAACAATGGTAAATAAGGGCTTAATTAATGAGGGTAAGCCCTCAGTAAATTGTCACTGTGTGTT
CATTTCTTCCTCTGTGTGGATCGTGACCGAGAGCCCTTCCCCCTAGCCTCCTCCTGGTATGGGTACCCAAAACCT
AGGTGAGCAGGGATCTCTCCCAGGGGCAGAGAGCTTGTGTACTCTGGGTGCTAGAGGGCTAAAATATAACCAGTC
AACACCACGTTGCCCATTTCTGGTACTTCCGGTAGCAGCCTGAGTCTCAATTATCTTGCCCAGATGATCTGAACT
CTGACCTCTAGCCTGTTTCAGCATAGGCAGAGAGCTTGAGTAGGTGAGTTTGCATTCCTCATAGCAGCTGGCTGA
GCCTAGTCTGGACTTCTCTTTGACCTGTAACCTACAGGCCCACAGGCCCAAGGCAACCACAGGTTGCTTCCAGGG
TTACCACACAGGTGGTTTCTCATTTCTAATGCTAGGTTTTAGATAATTGTTGTAAGTGAGGGGCCCTGGCAGGCA
GGATGACATCCTGCCAATAGGAGTTTTCTGTCACTTTCCCACAGAGCCCTGGCTACTACATACTCTTGCTCAATT
TCGCCAGTAATTGCGTCAATGTGTTCATATCAAGTTTGGGAAGAACATCTTGGAATTGGTCAGACGTGAACTGTG
GTAATAATGGGGGCTTGTTTTTTTAAGCAGATAATTAAATTCCTTTGCATTTGATGATTATTCTGGGAAGCAGAC
TAGTCCCATAAAATGAAATGGACTCTGCCTTGCTGCTAAGTGTCTGACTTGAGACATGCTATCGAGTTTCTCAAA
ATCTCTTCCTTGTGTAAAATGTGGTTGTCGATGATTACCTTACAGGGGTTTTTTTAAGACTAAATGAGATCGTGT
ACATTAAATGCAGGCACTCAGGCTGGGCATGGTGGCTCACGCCTGTAATCCTAG

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FIGURE 5645

GFPRQVPQTFPQAGSSTTASLPLLDQSFKSQTEAWDWMGEKVCEVGPWGVLLEAWGRDRTGKSRGPSSPRTREGL
GDFPAVARGSGSFGVWVCLGLRAALH

FIGURE 5646

TGCAGGCCTCTGCCCTTAAGGCCTGGGGCGGGAAAAAGGAGAACCTTAAGGCTGCGCAGGAGGAGTATGTCAAAC
GAGCCCTGGCCCACAGCCTTGCCTGTCAAGGAAAGTACCCTCCGAGCGGTCAGGCTGGGGGTGCTGCCAACGAGT
CCCTTTTTGTCTCTAACCACGCCTATTAAACGGAGGTGTTCCCAGGGTGCCCCCAACACTTCAGGCCCTGCCCCC
TCCCCCTTTTTAAAAGGAGGCCGCCTCCTCGGGGGTCCAGGCTGGGTTGGCCGCGCTCTTTTTTCCCTCGTGACA
GTGGTGTGTGGTGTTGTCTGTGAATGCTAAGTCCCTCCCCCCTTCCGGCCCCCTGCCCAATAAACAGCTTTTTTA
GGGGGG

FIGURE 5647

MSNEPWPTALPVKESTLRAVRLGVLPTSPFLSLTTPIKRRCSQGAPNTSGPAPSPFLKGGRLLGGPGWVGRALFS
LVTVVCGVVCEC

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FIGURE 5648

GGGGAGAGTCAAAACGCCATACTTGTTTGGCTCCTCTTTTTAATTTGCGGGTTTATTGGGCTTGTTTTCTGTTTT
CTAGGGAGTAGGTTAGTGGAAAAGAAAAAGGGCCGAATTCACTCCCACGACCTCTACAGCCGCCCCTGAGGGGAA
GCGGTCAGCGTAAGTCCCGGATCCCCGCTCCGGAGCCGCCTCGTGGGAGCGGGGCAAGGAGATCCAGGAGGGGTC
TCGAATCTGCC**ATG**GCGAACCGGCGAGTGGGGCGAGGCTGCTGGGAAGTGAGCCCGACCGAGCGGAGGCCGCCCG
CGGGGCTGCGGGGCCCCGCGGCCGAGGAGGAGGCGTCTTCCCCGCCGGTCCTGTCTCTCAGCCACTTCTGCAGGT
CTCCTTTCCTTTGCTTCGGGGACGTTCTCCTGGGAGCCTCACGGACGCTGTCTCTGGCCCTAGACAACCCTAACG
AGGAGGTGGCAGAAGTGAAGATCTCCCACTTCCCGGCCGCGGACCTGGGCTTCAGTGTGTCGCAGCGCTGTTTCG
TGTTGCAGCCTAAAGAGAAAATTGTTATTTCTGTTAACTGGACACCACTCAAAGAAGGCCGAGTAAGAGAGATTA
TGACATTTCTTGTAAATGATGTTCTGAAACACCAAGCTATATTACTAGGAAATGCAGAAGAGCAGAAAAAGAAAA
AGAGGAGTCTTTGGGATACCATTAAAAAGAAGAAAATTTCAGCCTCTACAAGTCACAACAGAAGGGTTTCAAATA
TTCAGAATGTTAATAAAACATTTAGTGTTTCCCAAAAAGTTGACAGAGTTAGGAGCCCACTACAAGCTTGTGAAA
ACTTGGCTATGAATGAAGGCGGTCCCCCAACAGAAAACAATTCTTTAATACTTGAAGAAAATAAAATACCCATAT
CACTATTAGCCTGCTTTCAA**TGA**TTGCCATGGT

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FIGURE 5649

MANRRVGRGCWEVSPTERRPPAGLRGPAAEEEASSPPVLSLSHFCRSPFLCFGDVLLGASRTLSLALDNPNEEVA
EVKISHFPAADLGFSVSQRCFVLQPKEKIVISVNWTPLKEGRVREIMTFLVNDVLKHQAILLGNAEEQKKKKRSL
WDTIKKKKISASTSHNRRVSNIQNVNKTFSVSQKVDRVRSPLQACENLAMNEGGPPTENNSLILEENKIPISLLA
CFQ

FIGURE 5650

GTGTTTGTAGTTCTGTCCAGCTCACATTTTATCTTCATACTTTGAGTAGCCTCCTTCCATGAATGGATCATCCAG
TGGCCGCACTTAGGTTCTCCTATGAAGATTTTTGTTGTATTGTACCTCAGAACCATCTCCATATTCTCTANNNNN
NNNNNNNNNNNNNNNNNNNATTGAATAGAAGTATTTACTAGATGAGGAGGAAAACCCTAAAACAAAACATGAACAT
AAAATATTTTTAAAAGGAAGACATACAAACAGACACTATAACCAAATAAGATGACAGAATTAAGGCCTTATGCCA
CAGCCAGAGTTGAAAAATGCAGAAAAAAAGTTTAAAAACAAGGAATTAAAGCCAAACCTAACTTTTATCAAAATA
AATGTAAAAGTGATGAAAGAATCTGTTAAGATATCAGATTGTAATATAAAAGATACTAGAAACAAATGCCAATAG
AACACTTAAGTACATTTTATATATTCATCCATTAGAATATATAGCTGTCAGAATGATAGAAGAATTACATATGTG
TGCAAAAGTTTTTGTATCCATGTGGAAAACACAGGAAGCTAATAGTACTGTTTTTCTCTGGAGTGGGTGTAAGGG
TAGAGACTTAACTCTTTACATCCTTATGGCAGCCTTCGAATACCTTTTAACTCCCAGTTCCCTTAACTGGGGGTG
TGTATCCTAGAATCCTCGACCCATTAGAAAGTATATTGTAGACATCATACTCTTTACCCTTTAACACTACACATG
CACTTCATAAGAACAAGCATGCTGTCTTACCCAAGTACAGCTATCAAGTTCAGAAATTTAACATTGCCATAATAC
TTTACAGTCCATATTTCAATTTCATTTGCTGTTTTATTGGTAATTTTTTTCAGCTCCACGATCCAGCCTAGGATC
ATATGTTGTATTGCCATAACCCTCTAATCTGGAGCAGTTCCTCAGCTTTTCTTTGTTTTTTATAATAGTAATATA
TTTGAAAAATACAGGACAGCTAAAGGATAGAGTATCCTTCTATTTGGGTTTTTCTGATGTTTCCTCATGGTTAGA
TTGGGGTAGTGCAGTGAGGGTTGAAATGCTGTAAGTGATATGTATTGCAGGTATACATCCAGATGCACAGAATGT
CCATTTGTCCCTTATTGGTGATGCTAATTTTGATCACTTGGGTAAGATGTCCAGTTTCTCCAGTGTATCGTTATT
GTTTTTCCTTTTGCAATTAGTGGGTAATTTGTGAGGAGAAACTTTGAGACCTTGTTGACAATTCTGTTCCTCATC
AAATCTACCCCTCCTAGGTTTAGCATCCTTTGACGATTCTTGTCTGAATAAATTTTTACTAGGATGTTTCCAAAA
TTGTGATTGTTCTAACTCCATTATTATTTCTGTATTAATTAGTCATCATTCTACTGTAAGGAAGAGGTTTCCCTT
TATCATCAACTTCGAGTAAGTACTTTTTTCTGAGCCATTTGAATATTCCTTACTAGATGTGGTGCCTCTTTACCC
CAATTACTTAAGTTTGTATTTCCAAAGAACAAGGGTGTTTTCCTGCATAGCCATAGCACAATTACCAAAATCAGA
AAATTAA

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FIGURE 5651

MIEELHMCAKVFVSMWKTQEANSTVFLWSGCKGRDLTLYILMAAFEYLLTPSSLNWGCVS

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FIGURE 5652

GCATGAGCCACCATGCCTGGCCGGATGTGAATTATCTTAAAAATTTTCAGGTAATTCTAATGGGCCAAGGTTGAG
AACCCCTGCTCTGGGCCCATCCGAGCACCAGGCTGTCACAAACGCATGCATGCACTCACGCCCGTGGGCTTGGGG
GGCTTCGGAAATGTGCNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCTTCTGGT
TTTCATGATGACCTGGGGCCCAGGCATACTACACTTGTGCTGTTCAGGGGCCAGTCCTGCACCAGGAGCCCATCA
GCCACAGCTCCGCCGAGAAGCACTGATATGCAGAGCTAAGCAGCTTTGTTTCCACGTGGATCCTGCGTAGGTTTT
CTTGGTCCATCCGTAGACACCGCACTCCTGCAGAGGATCTTCTCGGGATGCCCCACTGTCTCTGTTTTCCCTCTT
CACTGAACACTCAGTCGGGGCTCGCCATGATGCCTCTGTGTCTGCTGGCTTCTCCCCCATTGGAACAGCCTTCTT
GGCACGCCACACTGCTAGCTGCTGGGCACTGTGCTTTCTGCCTTTACCGTTCTGCCGTGATGTTGCCAANNNNNN
NNNNNNNNNNNNNNNNNNNNAGGCTGGGCACTGGCTCATGCCTGTATTCCAGCAGTTCGAGATCAGCTGGGCAAC
ATGCCCCAACTGGACCCTAGGCAAAAGTGAGTGGCACTCCTCTGCCAGGACTCCAGGCAAGCCCCGGCATCTTCT
TGCTGCCGTCCCAGACAACAGAAGTTACCAG**ATG**AACAGACTTGGATGGGTAATGGGGGTGGAGAGCATGGGA

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FIGURE 5653

MNRLGWVMGVESM

FIGURE 5654

CAGCGTTCCGCCGCGCGAGGGGCCGGGAGCTGGGGCGGAAAGCGGAACCGAGAGCGCTTTCCGCCGTGCGGCGAT
GAACCTCCGGGAAAGACGCTGGGAGGCCCAGGGATGCCCGGCGCAACTGGACGCTCATCGGGAGTCACGGGGTCG
GCCCTCAGGGGAACGGGGACTATCCGTATCAACTCGGTGTTTGTTCGTTTTCTTCACCTTGCGGTTTGTGCCCTC
TCCACATTTCCTCTCTGTGTCTACCATTCTCCTGGGGGGACGTGGCAAACCGTGAGCCGCTGCGTTTGAGTTTTGG
GAAACCCTGCGGAAACGCCCTGGCGCCGGTGGTTTTGCGCGTCCTACCCTGTGTCACCTCAGGGTTATGATCTGG
CCCCTGGCAAGGCTCCCCAAGTGTGATGCCTCCCCCCGTCCAGATGACTGCATTTTGAGGATGGAGTCAGTCTGG
TGGCATTTTTTGCTTAAGTAAACAATTGTAACCGTTTGTGTAGCATCAGCGTTCAACAGCTGCCTGTGCAAATCG
AAAAAAGCGAAACTTTGGAAACTAGGAAGCATCAGATGAATAATTCTGAAGACTTGATGTCAACGGGAGTATCTT
GTTTTTAAACTTTTGGTTTTCTGTTCTGGAGACAAACAGTTCATATGCACTAAAGAAAAAAGTGTCATTATTTCA
GATGCTCATTGCCAGCAAAGAGAACTGTATTGCAAGTCAGGCTTCACTCCCAGTATTTTCTGAATGTTTCAATAA
AATGAAATATATACGTCAAAAA

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FIGURE 5655

SVPPREGPGAGAESGTESAFRRAAMNLRERRWEAQGCPAQLDAHRESRGRPSGERGLSVSTRCLFVFFTLRFVPS
PHFLSVSTILLGDVANREPLRLSFGKPCGNALAPVVLRVLPCVTSGL

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FIGURE 5656

CCCTGTCTCAAAAAAAAAAAAAATACTTGGGGGAAACAATAAAAATAACCATAGAAAATATAAGTTAATATAATT
ATATAGTATTCACACTTTTAAGTATTATAAATAATATAGAGATGATTTATACGGGAAGATGTGCATAGGTTATAT
GCAAATACTACACCATTTTATATCAGGTACTTGAGCATCCTGGGATTTGAGTATCTATGGGGGTCCTAGAACCAA
TCTCCCTCAGGTACCGAGGGACTATACTATACCTTGTTCTTGAACGAGATGATTTGACATTTTAAATAGATGTTC
CCCTAGATTAATCTGTAAATATAATACATTTCCAACCAGAATGCTAACACATTAATTTTTTTTTTTAACGATCTG
GAAAAAATAAAAATACATAGGAAAATCTGAAA

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FIGURE 5657

PVSKKKKILGGNNKNNHRKYKLI

FIGURE 5658A

GGCAGCAAATCATGCAAGCGAAATCTGTCTCAGATGTATGAGATCATTCTTTTTACTGCTTCTAAGAAGGTGTAT
GCAGACAAGTTACTGAACATACTAGACCCTAAAAAGCAACTGGTCAGGCACCGGCTTTTCCGTGAACATTGTGTT
TGTGTACAAGGAAACTATATAAAGGACTTAAATATTCTTGGAAGAGATCTTTCAAAAACTATAATAATTGACAAC
TCACCACAAGCCTTTGCATATCAGCTTTCTAATGGAATCCCTATAGAAAGTTGGTTTATGGATAAAAATGACAAT
GAACTCCTAAAATTGATTCCATTCCTGGAGAAGCTTGTAGAACTGAATGAAGATGTTCGACCACACATCAGAGAC
AGATTTCGCTTGCATGATTTGCTGCCCCCAGATTAAGTACAAAGACTTGTCAAATCACTGAAGGGGGAGAGAATG
CAGGACCCTTTTGGACTAAGACAAAAACATTGCCATTACTGTTGAAATTTTGCATTTTTGTACCCCGTCTTGCTT
TTCTTATCTTTGGTGCCCAATAATAATTAAGGGTTACAGAAAGAGACTTTATCTATCTCAGATCGAATACATATA
GTAGGTAGGCTAAAACAGAAGAGTCTTTAGAACTAGTGCAACTCCAGTGAAATTTTTTATGTACAGGACATCTGC
AGTTTATAAAGAATTCTGTTTCTGCCACCAGCAGTTTGACCTGTAGTCACACAGGATTTTATGATAATAACAGAG
ATGAAAATGGACTTTTATTTTCTCTCTGTTTGGTGCTCTAAGTGGGTTTGTAGCCACTTTTCTGTTACTTTATGA
TTCTCATTTCAACAGGAATGGCCAGTAAAAGTTGTTTTATTTTTCCTGTTAAGGTTTATAACCTTTTTACATTTT
TGACCTGTATTAGATTAGAATTTCATTATGCATTCCTTTTAGTTGAGGCGCTTCATAGTTTTCTGGAGATAGTCA
ATTTTTAGTTTTTTATTATACATTTGAATGGCCGTTTTCCTGCTTTGTCTGCCTGCACATTGTATATTTGTTTAA
AAATATTCTCTACTTTTAGTCTATGTAAGTTTCATTTAGAAAGACATGCATTTATATTTTGTTTCTGTAATATTC
TACTGTAGGTGAAATCTTTTCAAAAATCAAGAGACTGGGTAGATAAGAATATATGAATGACTAATATACAAAAGA
TTTAAACCATTGTGATGGCGTATATTCTCAAATGGTAATATCTTGCAATGGCACACAGATTTAATGGATAAAGGT
ATACCTCAGACTTCACTGTGCTCACAAATCTTTGAGGAGAAAGTTTGGTCACCTGTTTGGCTTGATTTAGTTACT
GCTGCCTTTGGTTTTCTCCAGGAATGAAGTATTCAGCACAGTGACTCAGTATTTTTAGTTATTTTGCATGGGCTG
GTAGTACCTCTGTTATGCTCTCAGTTACAATCAATTTAAAACTGTATAACAGTCTTGGTACCTAACAGTAGCTAT
GCATAATCCTGTGGCACAGTACACTCCCAAGCCACCAATGCAGTTAATATGCTCTCATAGTGGTTTTTCTATGCT
ATATGAAAATAGTCTTCAAGCCTTGGTTCTCTAATGCAGCTACCACAAGAGGTTGATATTTTTATAGTGGCGTGT
AATCTCCTTTTCGGGAGGCTTTTTATGGAAGGTAGAATTTGTAAAAGTTCGTATGCTTTGCCTCTCAACTGCATT
AACATGCCACAGGCTCAGACTGTTTTTGTGTAAAGGATGTCAAAGAACGGCACTTTTTCTAAAGAGAAGTTTGAT
ATTTTGTATGCTTGTTAAGAAAGTACAGTATTGGAAATTAAAGGTGGACAACTGATAATTGAGGAGTATGTCAAT
TAATTTTTTATGTATATTACCTGTTTACTTGTACAACTTACTGTACAAATTACATGCAGCTTCATTTTCAAATGA
ATCCTTAAAATAAGGAAATCTTTTTAGGAAAACATTTAATTTTTGTATTTTTGATTTTAAAGGCATGAGTTATGT
CAATTTTCAGTGTATTAATGAAGATTTTAACTTTTCATCAGGTTGAGTGTTTTCTTACTATATTATCTGTTGTGT
ATGTAGTTAGCATATTGTGTCACTGAACTGTTTAAAAATCTAGCATGTAGAGCAAGCCTGTTTTGTGGAAAATCC
TTATTCATTAAAAAAATAATCATGGCAGATTTTCTGCAAAAAAAAAACAAAAGCATTTGCAATTCAGAATACTGA
TTTTTTTAATTTTATTTAAAGAAAGGTATTTTGCTTGCAGGAAAAAAATACTACAGATTCATTTTAATGAGAATC
TTTGAAATGTATTTATCTTTAGGGCATCTGGGCATCTTTATGCTGTTTGTCTTCTGTCTTTCTTGAAATAAAATG
TACATACGTTACCTTTACATATGCTCTTGCTCAAAATTGTGAACCTAGTTACATTTTCTCCCTGCTCCCTTCCTT
TTTATGCTCAAACAGCGAAACCCAAAACTTAAAAGATCTGAACTTTCAGCATGCATTCTGATTGCTGAAAGATTT
CCTGATTTAGTGCATTCTCAAAAGGGCTTTCCCATAATCTAAAGGGAAATGTAAGCACCTATACTCTTGTGCCTG
TGGGCACTTCAATAATAAAAACCAACTTTTTAAACTAATCATCTTTTATCAATGATAAAGTTGTTTTCAGTCCCA
CACTAGGAGAGTTCCTTTAAGTCAGCTGATCAAGCATAAGATACTTCCGTAAAGAAATAAACTAAGAAAATTTTT
TATGGCTTGAGAAAATTCCTTGAGGCCAAATTAATATATTTTTCTTTGTTATTTTATTTGAGTCATTTTAAATTT
GTTAATACAAAATTTAAGATAATTTACAGAGACAATTTATCCAGCTTCCTTCTACCTTAATACAATGTTTTGTCT
TCCCATTATCCTCTCTTTTCTTTATCTGTTGGTAGATGTAAAAAACTTCCATTTAGTTAATCGGAGGTGTGTATT
TTTTAAATTGAAATGTGCCCAGCCCCTTCAGCTCACACAGGAAACATGAACTCTTAAAAAACTGACTAGTAAATG
CAGGAGAGGTGGATACCTGATGAGACACAGCGAAAGTGACCTGTATACACATTACAACTCTGGAGTACATATTAA
AGTCGTGCTATTTCCAGTGGTAAATGTCTGACTTTTAAGACATTCTTTTAAATATTTGTATCATTGTTAGGATGT
TTTAATCAGTTGTTTTTTAATTCCATGTAATATATGTAGCCCTCATCAGATTTATATCACCATATTTCTCCTTGT
GTCCTAAGAGAATTGATGACAATTCGTAACCATAAATTGTTTTATATTAGCTAGTATGTATATTTATTTTTACCC
AATGGCTTTATCTGTTTCCCAAAATTTGTTTGGGATTTGTTGAAAGCATTGTGTAACTTCTATAAACGGCTATTT
TCTTGTAACTGTCAGTGAAATGAATGTGTACATTGTTTTCTTGTATTTCTCTGGGTTGTTTTTTGTTTTTTTTTC
CAAGGGTTAACATAGAATGTTTTTTTTTTAAAAATTATCTTTGGCCAATGACTTTTTCATCTAGATCTTACTTTCA

FIGURE 5658B

TTCAACCTTCTAAAGAAGTTCGTTTCTCATTGTTTTGTTCTGTCAACTTGCCTGAAAAACAGAGACTTCATCTCA
TCAATGAAGAAAGCATTTCATTATTCCTACAGATCTTTCCTGCGAGCACAGAATTCTTCATAAGGACCAGATCTC
TTCCATGTCTGTGTCAATCACATAAAGCTAAAATGTAAAGGACATTGAAGCCTTTATTTAATTGTACTAATATGA
TGGTGTTATATACTACATCATTAGCTAGTTAAGGTTTTCTGACCTGACTTCTCTTTGTCTTCCTAGGTATTTATT
TGTTATCTTTTAATCTTGTGTATCTAAATTAACTTAGTTAATAGTTACCCACCGAATAACTATGCCAAGCAACTA
GTAAAGAATGTTTATTTTATTTCCCCTTATAGGGGAAGAGTGGACTGGGAACAAAAATGTATGGGCCAAAAGGCC
TTAGGGTTGTCATTCATTGACTTTCTTATTCCTCTCATGAGCTATAATTGAGTATAGTATTTTTTTAGTGCTGAT
GTCATTACTTCTCATGTCTTCCCCTGAGTTGAAAGCCTACGACAAACATGTATAAAATACATTTAAGAATTTTCA
GAATATGAACCACAAAACTCAGTATCTTATATTTAAATGCTACTTAAGTTATTATTGGAATCCAAGTCTCACTAA
CTAGGGTACATTTTTATAAAATGTTTCTCTGTATCTTGAATTGAAATTACTTGCCCAGAGGCAAGAGTTCTGGGG
ATATAACATGATTTGAGATCTTTTTTAAAAAAGGGTGGGGCGGCGGGGGAGAGAGCGACAAGTTTATACTAGTTT
ATGCTTTTGATATTAGTATTTTAAGATACATCAGTTGATCCCGAAACCTGACCATTAGAATTACTCTGAGGAGCT
TTTAAAATAGATTCCTGGAGCCTACCCCTGGAAAATTGTCTCGCTGGATCTCGAGAGGGGCCTGAGAGTTCTGGC
TTTTTTTTTTGGTTGGGTTGGTTTGGTTTTGTTTTGTTTTGTTTTTTCTTTAAAGCTCTCCTGGTGATTCTAATA
GCCAGTATTGGGTAATCAATGTTTTAGCTAAATGTGACACTGGTTTGAGAGTAGGCAACAAAATTAAAGTTCACC
AGACATCTCTTTGTGGTAGAGTTTTTTTTTTTTTAAACTGGGACCAGATTTCACAGAGCTTATTCAAGATACATG
GAGGAATAATAAAGAAGATTAAGGCTACTGCTCATTATCATTTTTGTCTTTCATATTTTTTAAGGGTTTGCATTT
CTAGGACTTGGAATAGTTGACCATATACATAGCTAAAGGACATGTCCCTGAATGAGACCATTATATATATTATCT
GTAAAATATTTCACTATTTTTTTATTTTATAAATCTTTGTAGAAATAAGCAATGAAATACTACTTTCATCTTTTG
AAATGGGATTTTTCAAGGCAGTGTCCTTTTGGCATTAAGGTAGGGGGGAGTTAATATTCTCTCTGCCTTGTTTCC
ACGTGAATCAATATTAAAGTCATGGACATTTTAAAATCTCAATTTAATTTCTTCTTATTTACTATGCAGTATAGC
CGTGAACAAGTAATGTAGATTTAGTTTTCTCATCTTCAAATGCCCTGATCACCCTACCTCACAGGGTTGTTGTGG
GGATAAATAAAACTTTTATGGAAGCAAAA

FIGURE 5659

GSKSCKRNLSQMYEIILFTASKKVYADKLLNILDPKKQLVRHRLFREHCVCVQGNYIKDLNILGRDLSKTIIIDN
SPQAFAYQLSNGIPIESWFMDKNDNELLKLIPFLEKLVELNEDVRPHIRDRFRLHDLLPPD

FIGURE 5660

CGTCCCTCTTTCTCCACCCCGCCGAGCCTAAACTAGTGACGGGGAGGGAGACGGGATAGTGTTTCTGTTTCCGTG
GTCTTTGAATCCACAACCTCTAGTCTGAACACAGAGAACACAAATTTGTCGATTACTTCAGGAAGCCCAGGGGGA
ACCGCGCCCCGCTGAAGGGCTCGGGGAAGGCGCGCTCCCGCGTCCCGCCCCCTCCTCCCCCAGCACTCACACTGT
GGTAGCGGCGGAGGGCGGAGGGATCCGGAGGCGGCGGAGGGAGACGTCATTGCAGGGTTGTTTGTCAGTCTCGGC
GGCGGCGGCGGCGGCGGCGGCGGCGGCGATCCACAGTGATTCGGCCGCGCCGCCGGGGGTGGGGGGGCTGCG
CGGGACTTTTTTTTTTTCAGACTGACCGCGGGGCAGCTGCGGAGC**ATG**TCGACCCCGGCCCGGAGGAGGCTCAT
GCGGGATTTCAAGCGGTTACAAGAGGACCCACCTGTGGGTGTCAGTGGCGCACCATCTGAAAACAACATCATGCA
GTGGAATGCAGTTATATTTGGACCAGAAGGGACACCTTTTGAAGATGGTACTTTTAAACTAGTAATAGAATTTTC
TGAAGAATATCCAAATAAACCACCAACTGTTAGGTTTTTATCCAAAATGTTTCATCCAAATGTGTATGCTGATGG
TAGCATATGTTTAGATATCCTTCAGAATCGATGGAGTCCAACATATGATGTATCTTCTATCTTAACATCAATTCA
GTCTCTGCTGGATGAACCGAATCCTAACAGTCCAGCCAATAGCCAGGCAGCACAGCTTTATCAGGAAAACAAACG
AGAATATGAGAAAAGAGTTTCGGCCATTGTTGAACAAAGCTGGAATGATTCA**TAA**TAGACAACTGGTCTGTTAAT
CTTTTTCATCATTGTTGTGTATAATTTACCTCTCATTAGAAAGGCTAACAAATTTTAAGTGCCACAGGTTTTAAG
GATTCTGCAGAAAAAAAAGAAAAAAGTCCTTCAGTTTAGAACCTACAAAAGCTTGTGTATCTTGATTAATGTACT
TTTTATTGCATGGTGTGAACTAAGTTATTGCTGCATAAATTTGTAATATATCCTGTTTGTATTTTTTTCCAAGTG
TATAATGTTGGTGTGGAGTTTTCATGACAGAATATACACATTTTGTAAATCTGTACTTTTTTCAAATATTGAATG
CCTTATTTTTGAATTCTTTAGATTTTTAAATTGGAGAAAAGCACTTAAAGTTTTTTATATATGAATATTACATGT
AAAGCTGTTAAAATACATAACTTCAGTGCAAGAGACTTTGTCACTTATTTCCTTATGTGTGTAGGAGGGGTTAAT
AAGTCTCTAGCTCTCCATCTATTGATAGTTTCATTTACAATTTCAAAAGAACATTCTTATATTTTATCAAGGAAG
TCTTCAAATTTGATTCTAAATAGCGATTATAATCTCCAACTTTATTTTGAATGTACCTCTATTAGTTTCAATTGA
GTAATTCTAGACATAACTGGTTTGACTCTGTCCAACTCTGTATTTAGGCCATTTGTTACAGTTTCTTCATGCATT
ACTTACTGTTAAAACTGTACCTTTTGCGATTTCACAGTTGGCACTTCTGCCATGAGCAGAGAACTGATGCGACTT
GTTTTGCTGCTTGGTAGCACTTTAAAAAATTTTTTGATTAATGAAGAAAGTAAAACCATAAACATTGCCAAAAAT
TCATGCCCCAGTATTAGCAATGAATTAGTTGAATTGGTTTGAGAAAGGCACATATTGGAGGGAAATCTTGGTGTA
ACTTAAATATTTGAAAATTACCTTTAATGCAATGCATATCTGTTTATTCTGGGAAATGTTTTAATGCCAGGGCCT
GCTGAGTTGCTTCTTCTTGTGGAGATTTTTTTTTTAATCTCCTGAGTTGTATAAAAGTTGTACTGCATCTTAGTT
TACTGGATAAATTTAAAACACAGTATTGTAGAAAGCTAATACAAAACTATCCTATGCCTTCAAATAGTATAGAAA
ATGGAAAATATACAAGTAAATTCTGTTGAACCACCTGTGTAGTCTCTCTAGTAGTTAAAACAGCTATTTTAGTAA
CCCCAAGAGTTTCTTCTCATATCCATAAAATTGGATTACAGTATGGCAATATCTACAGCTTCTATTCATTATGCA
ACGTTTAACATTGATTGGATAAATGCTTATAGGCTGGGCCAGGTGGCTCCCACCTGTAGTCCCAGCACTTTGGGA
GGCAAAGGCGGGAGGATCACTTGAGGCCAGGACTTTGAGACCAGCCAGGGCAACATAATAAGACTTTTCTCTACT
TTAAATTTTTTAAAAAATTAGTTGGGCATAGTGGCACTTGCCTGTAGTCTCAGCTACTTAGGAGGCTGAGGTGGC
AGAATAGCTTATGCCTAGGAGGTTGAGGCTGCAGTGAGCTGTGATTATGCCATTGCACTCCAGCCTGGGTGACAG
AGCAATACCCTGTCTTTAAAAATAAAAGCTATTACTTGGCAAAAAATTCCGCACTATATAATTCGCACACATTAA
TTAGGGTTTATGTACCATACAAAAAAAAATTAATTAGGGCT

FIGURE 5661

MSTPARRRLMRDFKRLQEDPPVGVSGAPSENNIMQWNAVIFGPEGTPFEDGTFKLVIEFSEEYPNKPPTVRFLSK
MFHPNVYADGSICLDILQNRWSPTYDVSSILTSIQSLLDEPNPNSPANSQAAQLYQENKREYEKRVSAIVEQSWN
DS

FIGURE 5662

GCGGCCGGGAGAGTAGCAGTGCCTTGGACCCCAGGTGAGCTGGCCTCCTGTCGCAGGCCTTGCGCCGGGAGTGGG
CAGATGATCAGGTAGATCAGAGGGTCCGTTGGGCTGGCCTGCGCGCACGCCGCAGGGCTGGAAGGAGGTAGGGAC
GATAGCAGGGCGGGGGCGGTGAGACCAGCGCCCAGATTGGGGCTAGTGTGCTGACCTGCTCCCTTTTACCAGCTC
GGGCTAGCGCTTCCGGCTCGATCGGTCCAACNNNNNNNNNNNNNNNNNNNNNNNNACTGCTTCTCACGGCTGTTT
CCCTTCTCCGCCCAGCTCTCCTCCCCCTTTCTCTCTAAGGATGGCCCAGAAGGAGAACTCCTACCCCTGGCCCTA
CGGCCGACAGACGGTAAGGCCCTTCCCTCCGTCCCTGCGCCCCCATGACCCCGCATGGCGAGTTCCTGCTGGGAA
ACTTGAGATCCTGCAATGAGCAATCCTTTAAGCACTTTCTTCCCCGTTATGCTCCAAAGTACGGGTCCCAAGTTT
GACGACAGAACCCGCTCTGGTCATTTGTAGCCACATCCTGTCAGGTGCTGCCAACGTGAATCTGACCAGCCAGTG
ACTCCCAGCTGGTGAGGACCTCTGCAGGGCTCGTCACATACAAATGATATCTGGGACTGAGCAGGCAGGGCTGGC
CTTCAGCATTGATTCCCAACCCATATCCTGA

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FIGURE 5663

MISGTEQAGLAFSIDSQPIS

FIGURE 5664

CCACTGTGCCTGGTCTTGCTGGTGATATTTTGAAGAAACATATTCTTGTACATTGATGGTGGGACACCATTCTCA
TGGGGGGGCAATTGGCATACCTAACAAAATTAGAAATGGNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNTTGCGGGGGGAAATGTCCTCAGACCCAGTAATTCCACCCCTAGGA
ATCCAGCTTACACACACAAGAAAGAAAAGATAAATGTACAAGGTTAGTCACTGCACAGTGAGACAGCAAAAGATT
AGAAAGAACCCAAGTGATTATTGATCTGGGTTTTATTCCTTTATAGCCCAACCATATGATGGAATACTATAATGT
TGTAAAAATGGGTTAAGAGTTCTTTATGAATTGGTGTGGAAACATCGCCAAGATATGAAAGCCAAATGCAGAAAA
ATATATGTGGTATGCTATTATCTATGTGAAAAAGACATTACTATTCTCTGGAAGGATAAACACAAATTTGAGAAT
GGTGGATATCTGGGGTGAGAGGTATCCTTTTCACTGTTCTTTAAAAGTTTTGATATTTTGGTGTTTGCCTATTCA
AAAAAATGGTTAAAATCAGTTGCCACCAATTAAAAATTAGGAGAATGCATATAAAGAACTGAATTTCCTGTTAAA
AA

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FIGURE 5665

MGGQLAYLTKLEMXXX

FIGURE 5666

CCTGATAGAGTCCTTAGAAGCCTTCACAAAGCAGACGATCTTTGAGCTGTGTCTGGAAGTAAGACTGTGTCTTTC
AGGCTGACAAGAGGGGGAAAGCCGAGGGAGAAAGTGTTTATCTGCACCACTCAGGGCTCATTCGCTTGAGTCTTA
CACGGCTTTTGTGGTCGGAGATGTTCTTGCAGATTGAAATGAAAACTGCTTCATAAGCACAAATAATGTTTTCAA
TGATGTCAGCTGTTCTTCATGCTTTGGGGGTGATTGAGAGAGGCAAGTAGGTTTGAACGAGAAGCTAGGGGTGCA
GATATGCAGGAAAATATATCAGAGAAATATAAACATAAGCGTTAAGGGCATCTGTTTAGACTGTTTCTCAAGTCT
CTTAGTCCTGGAACAGCCAATTCCATGGAGCATGCCACCAGGAGTTGCAACTTATAGCCTAGGTGGCTCTTGGGA
GGTGAACGTCTTTGTGGCTATGTGAGCAGCATGGAATTGTCTACGCCTTTTGATTGGAATGCACTCCCCCTTGGT
GAAAGGGAATCTATGTCTTTTTTCTACATGCAGTTATATAACACTTAGAATCACCATTCTTTCCCATAAGGCTTG
TACATAAGCCCTACCTTTTGTCCCTAAGGAAGGAGTTGGTGAAAGTCGGCCTGTGAGTAACATTGGAATTAGGCA
GTAGAATTTGAAGAAATGGTAGCAACAGACAGCCCTCTGCTCCCTTAAGGCTTTCTTTGCCTGATTATTGATTTT
GTAGTAGATCAAGGGGGATGCCATGCAGAGAAAGACCATCAATCCTGGGTTTTAGGTTCAGGGTCAGTTACCAGC
CTCAGGATCCCGGTCAGTTCCGTGCTCTGTAAAACCGATACCTGCTTTACCTACCTTCCAAGGTTATTTTGAAAA
GGAAGTAAGATTATGCATGTAATAAATATCTTATGAAAGTACCTTGAAGCGTTCAATTATTTCACAAATGCATGG
TGGTGGTGTTATTAGTATTTATTAAACTGATATTGTGAAAAATTGT

FIGURE 5667

LIESLEAFTKQTIFELCLEVRLCLSG

FIGURE 5668

TACGAACCCTGAGGGCCTACTTGGCTAGGTGCTCACGGTCTGGTAGAGGAGACAAAGATACAAAAACAGAGTCAC
AGTGTGTAATGAGTGCCATGGGAGCATAAAACAGCATGCGCAGGGCTTGTGACACTCAACCGCCACCCCGCGCA
GCTTCCAATGGAGGCAAAGTCACAATTGACCCCAATAGACAGGCTTGACAGAGTTAGTTGGATGGGAGGCAGGTG
GGGCAGCCTGTCCAGAGGCGCAGACCTGTGTGTGTGGGGAAGGGGTGATGGGAGATGCAGACTCGGCAGTGCTTG
TTAACAGAGGTGTGAATGCCGCGCCTTGCTTGCCTGAAGATTTCCACCCAGGATCCTGACAAAAGTCAGATGTGC
ACTTCAGAAAGGCCAGGCGGGCTGCAGTGAAGAGAATGACTCGAGGGGGTGCGGGTGTGGGACAGGCCATCGAGG
CAAGGAGGCCAAATGGAAAGCTTTGGTCAGGACACAGGTGGTGATGGATTCGGGGGAGAAATGGGGGAGGGTGAC
GCAGGCAGAGTGGCCAGGTTATCAAGTGGCATCATTCACCACAAAATGCAGCCTTATGGCTGACGAGCTACCTTA
CTGAGCATATTCCTGCCTCTACACCAGAGACTCACTCTGTGGTCCGGTGTCACCTCGATTCTAAATTCCCTGCTT
CCTGGTGAATGATGCTATCACACTTTAGAAACCTGGCCAATAAATGCTTTGAAATTTAAGGATAGCTATCCTGAA
AAAATTTAATATAACCTAAATTGATAGTCTAATGACATCAGTATTCAGAAGAGGCATTCTATTTCAGCAAGTGGT
TTTCAGAAAAAAAAAAAAAATAAGTAACCTGAGTTTTTCTCCTGCCACTCTCCCCTCTTGCTTTTATGCTGCAAAA
AGAGCTTGTGGCTTGCCTGACACACCGTGTTGTTCTCTGCCTTCGAAGATCTAGCTCCCTCAGCCTCCCCACGTT
GTCCACCTCTCCAATACCATTGCTCCACTGGGAAGCTGGCCCGGAGGTGCTCTACCACGTTCATCTCTCGCAGCC
CAGGGCTGTCTTTAACGTTACAGNGACNCAGATNTCAAAGNNTTGCAATTTATTTGGCTTTCATTAATTTGCCGG
AAGCAAGGGAGGGTAGATACAAAGTACTCCTCTACCCTGTTATTTNCCTTGGCTGTTAAAATGTAAAGAAGACTG
ATGTAAGAATCTCTGCCTTCCACCAGTCATAACCATGGTATGCACAGAGCTTATGAATCATCTTCTAAATTCACA
GCTAGTTTTAAAATTTAGCTTCCAGGCTAGATCTGCAGGAAATGATTGGGAGATCGTAAGTGCTATGGAGTGAAT
ATGAAGTTACTTACCAGATCCCATAAAGTTAGCTCAGGGAATCCTGAGGAAGGTGTCACTCAGAAAGCTGCTTTC
AAAGCTGAGTCAGACCTGCATGGTGTTTATTACCTCCATTGTGTTACCATGCCAAACATATAAATAGCTTCAAAG
TGAGTTCAGATTAAAACACAGAAAAATCTTTGGATATATTCACAGGCCAGTGGGGGTCATGTAACAAGTCAGCAA
GGAAAATAAAAGATATTTGAGGTACAGCCTCAACTTTTTAAGATGGATCTTGAATAAAAAGGTCTAATGAAATAT
TTTATGGTATTGCTCTCTGGGATTTAAAAAAACAAAGCCAAACCAAAAACGAGGCACTGGAACAATGTTTAGATA
GATCACGGGTGTTTTCCAGTATGCATTTTTTAGTGCACTTACTTAACTGAGACCCTCTCATATGAAACTGGAATG
TCACCACCATGTGATAAAGCGTAGACTAGCTGTGACCTAATACGTACTGATCATGACTAACGCAGAAGTCCAGGT
CACTGCGGTTGTATTTCCTGTGGCCTCAATGTTCTGGGGTTAGGGTTAACAGGGATAATTCATTTCTGTGTTCAA
GTCTCTAATTCTTCCATCATGTAAACTGTAAGTGGGAGCAGACTGGATTCAGCATTGCTACAAGAGAAAAACAAC
AAATAGGAACACCACCAACACCATGTGTTGGGAGCCNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNACTTTTCATAAATAAATGACTCGTGTTGGAGGTGTTTGTATCCTTGGGGCCACTCAGTTTTATTCAGC
CAGCTTTCCTTGGTTGTGGTTTTAATGTGTTAGGGAAGAATGAATGTATTCCCCACAGCTGGGCATCTTTGTGCT
GGATCACCTGGCCACAGCTCATGAATAGTGCAGATTATCACACCCCACCCCCATGACTCCAGCAAATGTGCTGTG
GGTATAGGAGAGTATATTCAAAAAAGGCAATTAACAAAGCAACTGTCCCAACTACCAAGAAAAACAAATGTGGCA
TAACCCATGATAGAACCCTCTTTTTTCCTTATTAGACATGAACAGAAGCTCATTAATGCCGTCCAGTAAGTTCAA
GCCGCATAACTTACATACACTGTCAGGACCCAGAAAGAAACCTGTTGTCTTGTGATGTTATTGTTGCTTGGTTGA
CCTCATCATGT

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FIGURE 5669

RTLRAYLARCSRSGRGDKDTKTESQCVMSAMGA

FIGURE 5670

CAATTCCTAACCTTTTTTAAAGTTTCCTGGTCTCCACTGGACACAGAGCTTTGGAGACGGAGGATCCCAGAGGGC
AGTCTCAGTTGCAATCAGTGTGTGCCCAGCCTGGGCAGACAGGAAATTCCTCGGATACATTATTTTTTCTTTCTT
TCATAGCTGTGTCTCAGAAAGGACCCATTTGTGGCTCTTTTTCACCTCAAAATAAGATCGATGGTATCTTGTAAA
ATGAGGGTAGTGCCACTTCTTAGTATTTTTGAAAGCTGTTTTAGATTTTTATTTTGTTATTTTGCCTTTTCTAGC
CATCTAAATTGACTCTTCCAATATAGGTCTCAGAAATCCAATATTTGGAGTACAATTTCTTTTAATCCAGATTAC
ACCTGCCTTACAAAGCACCCCCTCCTTGTTCCCCTCTGTTTCCTCTACTCAGTTGGGGGGAGAAACTCACAGCTCC
TCCGGGATACATATGTGCCCTCAGCAGCAGCTCCCAGGTGAAGTTACCAGACCCCTGGGCTTCTCCCCAGCTTTT
TCTGAGTTGAGTCAGACATGTAGAGTTTGGGTCACACAGGCAAGAGGAATTTTCCCTCGGCCTTACTGACAAGGA
CACCAACCTAGGGTGCAAACAGATGGACTATGGTTCAAGGACACTGGAATTGAGGAGCTGATCAAGGCTCTCTTC
AGCCTTGCTCTGTCCCTGCCTCTTATCAGAGCACAGGTAGACACACGGGCATAGCCAGCCCACTCCTACTGTCAC
AGGCGCCCCACCATTCAACCTTCCGGGAGGTCAGGGACCTTCTATATGAGGCGAGTGGGTCTCAGTCTGCTTGAA
TGGTGATGAGATTCTGCTGGATCTCAGCACGCTGCAGGTGTCTTTTGAGAGCATTCAGTAGGACATGGTGATCCC
TATTTCAGCCTCTAAGATGACTGGTATTCTATCTGAAATGCAGAGATTAAGCCAAATACCTGATGTATTGTGAAA
GCCACTGATTTTAAGAATGGAGAGAAAGGGATTTTTTACTGCATCCCTCTGTATGAATATGAAATCAGAGACCAG
GGCATGATGTTGCTAGGATTAGAGCCTCTCAGTCTGGCCTCTTCACCCAAGTGCAAGAACTCAGTCTCTTACTGT
TCAAAGAATCTTAACAGTTGAATTATGGAGGGAAATTCCCTTTTGCCCCAAGCATTTCTATATTTAAAGCAATAT
CCCAGGAGAATATGTTAGACTTAGGATGATACCTTCAGCCACTTGAAGAAGAAATAGAAGGCGCTCATTCCAATA
TAGTCTTTATTTCCCATTCAGATACAGGTTGAGCATCCCTAATCTGAACAGTTAAAACCCCCAAATGCCCCAAAA
TCCAAACCTTCCTGAACGCTATGACACCATGAGTGGAAAATTCCACACCTAACAAACACATTTGCTTTCTTATGG
TTCAATGTACACAAACTGTTTTATATAGAAAATGATTTCAAATATCATAAAATTACCTTCAGGCTATGTGTATAA
AGTATATATGAGCCATAAATGAATTTTGTGTTTAGACTTTGTGTCCATCCCCAAGATCTCTCATTTTATATATA

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FIGURE 5671

QFLTFFKVSWSPLDTELWRRRIPEGSLSCNQCVPSLGRQEIPRIHYFFFLS

FIGURE 5672

ACCCAGTAGAACTGTTAAAATAATAAGTTGAGAATCTAGAAAGTAGAGCAAAAACAAAGATTGAGAAGTAGTTAG
AGGCTGGGATTACAGGCGTCAGCTACCGTGTCCAGCCGAAACATGAAGTTTCAAAATGCCAAGATGTATCACAGA
AGACACTCAGCAGTCAGCCACATTTATCTTGGAGAAGAGTTCCAGGACTTAAATGTTTGAATAGTATAAACTAGT
TTTTTAAAAAGTCTGCCTGAAGCCGAAGATTAAATACTTTAAAAAGTTCACTGGGTGATCTTGGCATGTTGACAT
TATCTTAACAGTCTAAGCTTGTTACCTTACACCAACCTGACAGGTTCATTAGAAGCACATGAATACATATAAAAG
GCATAAAAGACTGGGTCAATGAATATGAGCTCTGAATTCTAAAATTCCTTTGCATTTCTAGGCAGTACTTACCAT
AGTATGTTTACGTACCTGGTGAGTGACAATGCTCAAAAATTTCTGAAGTATTCATCCACATTATGCTAGCGAAAT
GTCAAATTGTCCTTTAATATTCAAATGCATGAACCATCACTCCTTGGCCTTTTGGCCAAGATCAAGTGTAGTATC
AAATGCATGAACCATGAAAGCTATCTTAAAAGGAAAGTAACATTTAAAGGAATTGAATATAAACCTTCGGTTAAT
CTTGCTAGCACGTAGTCAATACATCAGTATTTTTCTGCCCCTTTTATAGTCTTACTGGAAATGACTGTAAAACAG
AAACAAAGCTAAGCCATGGTAAATAGAACATTAAATGCCCAACCTAATTTATTTTGCTAAGAGAAACTGATGAAC
TAAAAGAGAAACAACTATTGTCTACATTTTAGATATGGGGGAAAAAACCCTGAGATTACTAATTATGTATCACCA
TCCTCTTAATGTAGATCCTGAAAATGATGGTATCAATATAATACATACAGTGGATTCACCTTTTAAACTGGATCT
ATTACCTTTGATATTTGTCTTACACTGAAAAATTCTGACATCTTCAGGAAACCAATATGATGGATAAGCTAAATG
TTGACTTAAAATAGTTAAACCCCTTAATAACATCCTTTAGTTTCTATTATTTCACTGCTTAAGTTCAGCATCTGA
ATAACAAAGGTAACATAAGTAGTACTTAAGATCCCAAAGGCCCATTACATTCTATCAATAAAGACAAAACAAAAC
TACATGTTTACTGAAAATAGTCTTTTTTTCTTTGCTTTCCAGTTTTACACTTTTGTTGAACACAAAAAAGTGGAC
AAGATCAAATAACTAGATGGTAAAACACTGATTTTTTAAAAATCACATCTTTAAACCCGTGAGAATCACAATTCA
AAGTATGGCCACTGGGGGCAACCTGTAAACCTACAACCTTTTCTTAACACTGACACTATGTGACTGATTTTTCTT
AAAACACAAATGCCATTAAGAAAGTATTTTTTGTTGACACATTCGGCTAAAAAAAATCTATGTCGGGTGCGGAGA
AAGAGGTAATGAAATG

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FIGURE 5673

PSRTVKIIS

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FIGURE 5674

GGATCTTTTGCCAGAGATGAGGGCATACTGGCCTGACGTAATTCACTCGTTTCCCAATCGCAGCCGCTTCTGGAA
GCATGAGTGGGAAAAGCATGGGACCTGCGCCGCCCAGGTGGATGCGCTCAACTCCCAGAAGAAGTACTTTGGCAG
AAGCCTGGAACTCTACAGGGAGCTGGACCTCAACAGGTTGCAGATTTTAAAGATGCCCTTGCCAGAGTATATGGA
GTGATACCCAAAATCCAGTGCCTTCCACCAAGCCAGGATGAGGAAGTACAGACAATTGGTCAGATAGAACTGTGC
CTCACTAAGCAAGACCAGCAGCTGCAAAACTGCACCGAGCCGGGGGAGCAGCCGTCCCCCAAGCAGGAAGTCTGG
CTGGCAAATGGGGCCGCCGAGAGCTGGGGTCTGAGAGTCTGTGAAGATGGCCCAGTCTTCTATCCCCCACCTAAA
AAGACCAAGCATTGATGCCCAAGTTTTGGAAATATTCTGTTTTAAAAAGCAAGAGAAATTCACAAACTGCAGCTT
TCTAAAAAACAACTCCAAAGTGAAGTCTGTTTATTTTGCTGTTTCCCCTCCATGCCTGTGAATTGGATGTTGTGG
TCCCTGTAGAGTGAGTGCATGTGGCGTACACGGGGAGAAAGGAGCTCTCCCACGCCTGAGTGGCTGTTTTGTGCT
TGGGATAAAGCTCACAGATTGTTTTTTTTTTCTCTATTAAACTCTTCAGTGCCCTGGTAGATCAGGCAGGCATA
CTTGGAATTTAGACAGATGGCACTGATTCAGGGGACTCTCTTGCTCGAGTTTTCCCCTCGGAGCCTGTTGCCTTC
TTGGCGCAGGGACCCTGTCAAGACGAAGAGCTCCACGCATGGCAGGAGCCCACGCTGATGCCTGGTGGGCCTGGG
GGGTGTCTCTAGCTCAGACTGGGTCTGTTCCATGTGACCAGAGCCCCAGGACATCGTTCCTTAGCCAGCTGCTCC
GTTGTTGGAGGCCTGGTNTGGTCACAGGTGTGTCCTAGAACGGTGACTTTGCCCCTCCTGCCCTAGGAGATTTGG
GTGTATTCACAGAGCAGCCATCTCCTGTCTCCGTCAGAGCAGTCTCTTTCCAGGTTACTGGAAGGTCAGTTTCTG
TCAGGCCTCACTTCCTTCTTATTCAGAGGTAGCCAGGTCCCTGCACTGGTATCTATTTAGAAATGTACATGGAGC
CCCCAGCGAAATGTGCCTACATTGTGTGTTCCAGAACCGGAGGTACCCTTACCTTCTAGATATGTGATGACATGG
CTCTCACGTCAGGCAGACTGCTGCACCCACGCTCTCGGCCTGCCGTGCAGGGATTTCACTCGTGGAGTGAGGCAT
CTGGGGGCTGTGCAGTGAGGAGCTTTCCATGTGTTGTTAAGACAACCTGTTAGCATTGTCTTCTCCCGCGTCTCC
TGGCCTCTTCTCTCTTTAAATCCTTTTCTCTGTTTGTCTTAATCACATTAACGTCCTATTTATGTTTTATTCAAT
ATACATTTAAAATAGAACTTACTATGTGCCAGGCATTGTGTTCAACACGTGAAATATTTAATCCTTAGAATAACC
ATATTGTCAGCATAATTTACAAAAAATCTATGTCGGGTGCGGAGAAAGAGGTAATGAAATGGC

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FIGURE 5675

DLLPEMRAYWPDVIHSFPNRSRFWKHEWEKHGTCAAQVDALNSQKKYFGRSLELYRELDLNRLQILKMPLPEYME

FIGURE 5676

CAGCAAGATGCGAACGAGCCGTACAGATCCCGGGCTCTCCGAACGCAACTTCGCCCTGCTTGAGCGAGGAAGAGA
AACTTCAATAAGTTAACACTGAAGAGTAGTAAAGAATGAGATAAAAACCACCAACCTTCTGAATACCACATTGGC
TAGACACTGTCTTGGCTTCTCCCAGCCTATCTTCTGAACCACATAGAAGTATACAGTATCAGTGAAGCAGCTAGC
TGTAAAATGTGGGCTGAGTAGCATAACACTTTTATCTGAAAACCTTCAATTCATAGTATCTGAAAGCATTAATAT
TCTCAGTCATTAATTTTTCCAACTACAAAATGAAGGCACTTTGCAAGCATCACAGACTTATTGTAATAGTTAATT
CTTGTTTTTGATTATTGTCATCTTTTGGGGGATTAAAGTGTTTTGGCATGTTGGGCTCTCTAATCTTTTCGCTAC
TTTCAGAATTTGTGCTTTCAAGTGTCATTGTATATGCACAGGACACAGTTGGGACATGAAGATAAACCTCACCTA
ATAGAGTAGATGTCATTTCTGGGTAAGGTTAACTGTGGGAAACAGAAATGTGTTCACTAAGGAAACCTTAGGTCA
CAACCTCCAGTTTCCTGAAGGAAATGCCAATAAATGCTCCAAAGACAAAAGGCTGGAAACAAACTGGAATGTCTC
TCTCCATCTGTCTGCTAAGGGCGGAAGGAATGATTTCATGTTACATTCACTTCCTAGACTTTCATTACAGAGTCA
AGCATAATGGAAAAGTATGTCCATTTTGTGTTTCTGTGGAAGATAAAATGTTCATATTCTCCGACTTATCTTCAT
AAGCACAGTAGTGATTCATGATATGGGGAAAGATGGGATAAGGTGGCTGGCTTTGGGAGATGGGGAGCTCTTTGG
TGACACTTTTCCCCCTGTGACCACATTATCCAGTGATTAG**ATG**TACTTTCTTCCTGGAAACTCCAGACTGTGCAT
TTCATTCCAAGAAAGCTGGGTAGTCATGGACTGTGGTTTTCCTGGGCACATGTGTGGTAGAGCCCCAGATCAGAC
CAAGAAGCAAAGACATAAGAAGAAGGAATCCTTGGTTGTCTCCCAACATGAATATCTGGTTTTAATTCAGTGTAT
TCTCAGAAGTAAGAATGAGAAAAAAATCTTAGTAATTATATGTTTGTAC**TAA**AAAATACACATATAAGGTCTTTG
ATTTTAACAATTGTAGTGTTTTTCAAGAGGAGTGAAACAGATCCTGGACAATACTTGACATATTCTGTAAAAAGT
TCAATTGACTCAAAATAGTCAGGAAAGTTATGAAGTAACATCATATAATACTTTATCCCCAACAATATTAAATGT
GATTACAATTTTACAGAATATTCAAATCAAAATGTTATATAAGACAAATTATTATTCTTGCTTTTACATCTCCTT
AGAAGGAGAAACATTCAATTGTTTTAAAAATGTTCTATTTATTTTTCAGGAAATGAGGGTGTTGCCTTC

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FIGURE 5677

MYFLPGNSRLCISFQESWVVMDCGFPGHMCGRAPDQTKKQRHKKKESLVVSQHEYLVLIQCILRSKNEKKILVII
CLY

FIGURE 5678

CAAAATCTTCCAAATGTTACCAGGTCATCATTTCTGCAGTAATTTTCAAATAAGTCCCCTAGATAGTAATATAAA
ATAAGTTTATTTACTAGATACCTAAATGTTTGGGGATAACCTATCTAATAAATTTTATATATGGAGATATCACAG
TTNTGCATCACCTAATGGCCCACATATATGATTACAATGCTGTATTTTTACTGTACCTTTTCTATGTTTAGATAC
ACAAATACTCATGGCTGTGTTACAATTGCCTACAGTATTCAGTACAGTAACATGCTATACAGGTTTGTAGCCTAG
GAGCAATAGGCTACACCATATAGCCTAGGTGTGTAGTAGGCTATACCATCTAGGTTTGTGTAAGTACACTATGAT
GTTTGCATGACAAAATCGCCTAATGACACATTTCTCAGAATGTAGTTGGAGGAAAAAAATTGAAAGGAGAGTATT
ACTTCATGACACAGGAAAATCATTTGAAATACAAATTCCAGTGTCCATAAATAAAGTTCACTAGAATGTGGCCAT
GCTCATTCATTTACATGTAATCTGTGGTAGTTTTTGTGCTACTGTGGCAGAATTGAATACTTGCAGTGGAACTTG
AATGGGCTACAAGGTGTATTTAGTACCTGGCCCTTCACAGAAAAAGTTTGCTGACCTGATTGAATGTGCTTGTGT
GTATCACAGGAAGCTCACCAGGACTCTTGGTATGTAGCCTCTAGCTCCCAAAGGCATCTGAGCCCCACTGGCAGG
ACTCAGTTACCTGTCTCTGTCTAAGCATGACTCCACCCATTAGCGTCCAGACAACGAAGAAAACTTCTATTTTAA
AGAGCTTGACTAACCCCCTCCTTATTATCTAAGTTAGAGTAGCTGTGCCACCCCTTAAGTAGCTTTTCCTTCTTC
CTTTCAAATAGGGGTTGGAAGAGTAGCAGGTGAGAACAACCTCTTTCTTCCTCAATTGTAGAGACTCAATAGTCT
AGGCTATAAATTA

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FIGURE 5679

KIFQMLPGHHFCSNFQISPLDSNIK

FIGURE 5680

ATCACACTGAGAGATTTTTAACATATCAGTGGGGAAATGGGGTTCTTGAACCTCTGGAAAACTTGAAGCTGAGAT
TGTTCAGGGGTCCATGAGTCTGATGTTGGTAAACATTCCTCATGTACAAGCCAAAGATTATTTGTATAAATTTTG
GAATGGTGATGTGAACCTTAGGTATGAAAAGGCAGTAACATATAACAAGAAAATAATTTTCTAGATCTGGGGCAA
CAGTGTGCAAATAATGTCCCCAGTAGAGAAGCAAATCCTTTTCATGGACTCTAGGGCTTGCTACTCTGAGATACA
ATGCCTCTAATTTCATGCTATGTGGCTGCTTTGTCTTTGATCAGATTTAGTGTCTTAGGTAATTAAATCAGAAAG
TCTATTTAGCTATTCTAGAAGTGTATGTGTAGGTATTGGGTGGGTGGGGTTCTTTGAGCGAACTTGTCAGAAACT
CCATTCTTAACATCAGAATCAGGGCAGGATTGAAAACATTGTGGCTGGATCTTGAAATTGCTATAACATCTATTG
CAGAAAATGATAGGTCAGATGGATAGCAATAATAATTATATATCAGATCTTAGTAACAAAATTACCAAGCTTTAT
CTAGTGGATATATGTAAAAGAATATTTTTAAATGTCCAGCATTGATGTATTTTCTTTAAGAATTATTACAGTATA
TAAGCATTCTTTGGGAATACAGTATAAAAACATAAATTTTTTCTTATTTTTAATTTTTTTTATTTTTTTGTTCAA
GGATGAATCTTCCCTTTAAATATTAATTTTCTCTTAATTTCGTGTTTCCTTGCACATAATAGCACTGCCCCTAAC
TTCAGAGATGCTGATTGCAGTTAAAAAATCAAAAAGAAATGATGTGAATCAGAAAATACCATGTTGTATTGAAAG
CAAATCAAATAGTGTAAACACCATCACCAGAAAACCTCTGTGCGAACAAGCTCCCAAGAGGAGGGCAGCTTGTAA
CTTACAAAGGCTGTTAGAGAACTCAGAGCATCAGAGCATAAAGCATGTGGGATCCAAAGAGACACATTTGGAATT
CCAGTTTGGGGATGGTAGTTGCAAGCACCTAAACAGTTTGCCAAGGAATGTTTCTCCTGAGTTTGTTCCTTGTGA
AGGTGAAGGAGGCTTTGGTTTGCACAAGAAGAAAGACCTACTCAGTGATAATGGTTCTGAATCACTTCCGCATTC
AGCTGCATACCCCTTTCTTGGAACCTTAGGAAATAAACCCTCACCTAGATGTACCCCTGGTCCTTCTGAATCAGG
ATGCATGCATATAACCTTTCGCGATTCTAATGAAAGACTTGGTTTAAAAGTATATAAATGCAATCCACTAATGGA
AAGTGAAAATGCTGCATCTGAGAAAAGTCAAGGTTTGGATGTTCAGGAACCTCCAGTAAAAGATGGAGGGGACCT
TAGTGACTGCTTGGGCTGGCCTTCCAGCAGTGCAACCTTATCCTTTGACAGTCGTGAAGCATCATTTGTACATGG
TAGGCCACAAGGAACTTTGGAAATACCAAGTGAATCTGTTAAATCCAAACAGTTTTCACCATCCGGTTATCTTTC
AGATACAGAGGAAAGTAATATGATTTGTCAAACAATGAAATGTCAGCGTTATCAAACTCCATACCTGTCAGAAGA
AACCACGTATTTGGAGCCAGGAAAGATCAGTGTGAATTGTGGACACCCATCTCGTCATAAGGCTGATAGATTAAA
GTCAGATTTCAAAAAACTGAGCAGTACATTACCATCTTCAGTGTGTCAGCAGCCTTCAAGAAAATTAATTGTTCC
GCTATCTAGCCAACAAGATAGTGGCTTTGATAGCCCATTTGTTAATCTAGACTAATTATGGTACAGTATTTAAGA
AGAATCATTAATATATTAACAAAAATGGAAGGGAAGACCTCATACTGAAAAAAATTGTGAGCCCTGCCTCTTTTG
AGATGTTTTAATAACATCTGTTATATAAGTAAAGCATTCTTCTAAAATTGCTTGAGATATTTATGTTGCCTTAAT
ATTCCAAAGGCCTGATGGTGTATGTATAATCTGCTTTTGTGTGGTGCTTATTTTTGGTTTCTAAACCATCTATTT
TTATACTTATAAATTGACTCACTCTGCAGTGTTAACTTATTTAAATAAACTTGCATATGGTCTGAAAAAAA

FIGURE 5681

MLIAVKKSKRNDVNQKIPCCIESKSNSVNTITRKPLCEQAPKRRAACNLQRLLENSEHQSIKHVGSKETHLEFQF
GDGSCKHLNSLPRNVSPEFVPCEGEGGFGLHKKKDLLSDNGSESLPHSAAYPFLGTLGNKPSPRCTPGPSESGCM
HITFRDSNERLGLKVYKCNPLMESENAASEKSQGLDVQEPPVKDGGDLSDCLGWPSSSATLSFDSREASFVHGRP
QGTLEIPSESVKSKQFSPSGYLSDTEESNMICQTMKCQRYQTPYLSEETTYLEPGKISVNCGHPSRHKADRLKSD
FKKLSSTLPSSVCQQPSRKLIVPLSSQQDSGFDSPFVNLD

FIGURE 5682

AATTAAAAACAAAAATACTTTAGGGTGATTTGCAATATAATTTTCCAAATGTCTCAGGGATTATAAATACAGACT
TGCACTATTATGATGCCTCTAGTTATGTATGGCTATTGAAGTAAAATTAAAGACTCAGNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCACTATTTAAAGATCTGAGCTGAAATTGTACTGACTCCAGAAT
CTACAATAGGGCATTTTGATGGTATTTAAATAGAAATCTA

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FIGURE 5683

MAIEVKLKTQXXX

FIGURE 5684

ATGAAGGCTTATCTGCATTCATTCCCCGGCCCTCCCTGCCGTCTGCACAGCCTCCTCCAGGCCTCCCCTTCCCAG
TGAAAAGCACCACCATCCAGACCTCAGGAAGCAATCATTTTAGCTTCTTCTCCTTCTCCCTCACCATCCAGGACA
TCACTGAGCCCTGTCAGTTCTGCCCCCAGAATATCTAAGTTCATCCAATGCCCCATTTCCACTGCTGCTTCCTCA
CCCAAATCAGGATGTTTCTGGCCCCGTCTCCCTCCTACCTGGTCTCCCTGCCTGTACCCTCCTCTCCACTGGGCC
CATTCTCCACCGGCAGCCAGCATGATCTCTAAGAAATGTACATCTGTCATCTGTCATATCTGCTGAAAATTGTTC
AGGGCTTCCTGCTGCCTTGAGAATGAGGGTCTGAATCCCAAACAAGGGTTCAAATCTCAACCTCTCAGGCCTACC
CTGACCTTACGTATCTTTCCTCAGGGCCTGTGCACATGCTGTTCCTTCTTCCTGGAATGCTTGTCCCCATAGTTT
TCAGCTGGCGAATGTGAGTCAGGTCTCCCCTTAAATGTCATCTAAGAGAGCCCTTTCTAATTCCTCCCCTTCATC
TTAACTCTATCCCCAATACACTCTCTCACAGAGACTGTTCTTTTCCTTCTGAGACCCTACTCCAGCTTGTAGTTC
TAAATCTGTGATTATGCACTGTCTGTCTTCCTCTTGAGGTCAGGGGCCATTTCTTTTGTTCTCTGCTATGCTCAG
GACCCAGATCAAAGGAGCTCAGTAACTATTTACAGGCGTACATCATATGTGGAGGACACTTATGCTGTGATGGCC
CCACACACAGCTTCCTTTGGGGTCTGTCCCCTGCTCTCCGTTACCCGCGTGGTAGCCACTGAGCACTGGCTCTTC
CTGGCTTCACTCTCTGGCATCAAAACTTATCAGTCCTACATCTCAGTCTTTTGCAAGGTGACACTTATCTGATTA
CCTAATTCACACGAAGGTGTTAATGGTGGTAATGGCATAGTATTTATTACCCCAGGGGACCCAGAACGGTGGTAT
CAAAACATATCATTCCCCAGTGGTTTAAAACTCTGGTAGCTTTCCAGGGAGTCCAAGTGGAGTCCAGTCTCCTTA
GCTGAGTTCACAGGGCCCCGTCTGCACGACTTGGCTTCTGTCGGCTTCCCTAGCCCTGACTTCCCAAGCCTTAGT
CATCACCCTCTCTCCCACCCAGGGCTCAGCACAGTACCTGGAACAGTCAAGCCCTCAATAAATGTTTACTGAGTG
CATTAAAA

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FIGURE 5685

EGLSAFIPRPSLPSAQPPPGLPFPVKSTTIQTSGSNHFSFFSFSLTIQDITEPCQFCPQNI

FIGURE 5686

GCTTTGGGGATTTTTTTTTTTTCATTGTCGGATACAGGCATTTCAAAGGGAAACCGTTGAAATGCATAACCTGCA
AAGTAAGTTGCCTTGAATTTGTGCACTTCTCTGTTCCTTATCTGAGCGGTGCCTTTCTGTAGTTTGTCTTGGAGT
ACGTGTGTGTGCGTGCGCCCCTGTAAGCGCTGCCTGGGGAGGACAGATGGGAGATTAGGGGAGACACTCCCCCTG
TCCTCGAGGGGGACAGTGGCTGGGAAAGATAGGGTTTAGGTTGGAATTTCAGTAAGAAGGTACTAATTACAACGT
GCTTGGTTGGAAGTTGGTGCCAGGCCAGGGCTTGGAGAGACCATGGGAAAATCACCTGTCTCCCTGCCTTCTCCC
TGAGTTAGTTTGCCACAGAAGATCCAACAGCCAGACTGGTTTGCACCGACGGTTCCCAAATGCATGGACTGGCAC
TCTGGGCTGTTACACCCGCCACAGCTGCTCGGAGAACTTGTCTCCTTGCTTCGGGGGAGGGTCGACATTTTAATT
AAACTAAAAAAGAATGTTTTTCTGAATCTTAGGGCATACAGCCACTTTTACCATTTTTATTTGAATTTGAGTTCA
GGTAAACTTAGGCAAATAGAAAAGTGGGAGAGGGTGGGAAAAGACAAGGTGAGCCTGCTTTTCCCAATACTGGGA
AAATGAATTAAACTAGACGGGGGACGTCAGAGAACAGAATGCCTTGCCTTTGGTCTGCTTTTTAATATATTTTAT
GATCCCAAATTTTACAGAAAGTCTCAAGGGTTTCTGTGTTTTTTAAATGGTCAAATATGTGACATACATGTGTAC
ATAGATCACAGAGCCCCACTGTAGTTTTTTAAATGAGCCACATTTACCTTGGGGAAGAGCCCCTCCCCCCCCGCC
ATCATAATATTGTGAATGTAAAGAGAGATTGGTTCACAATGAGAATGTACAGTAGGCTCCTATAAGGGTGACAGG
ATTATATGCAGAATGACTTTGAAGAGCCAAAATTGATTTATTTATGTTAAGTAGTGCTAAGAAGGAATATTTGTC
CCGGAGTGAGGCATTTGAGATAGAGGGGGAAAAGCC

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FIGURE 5687

MDWHSGLLHPPQLLGELVSLLRGRVDILIKLKKNVFLNLRAYSHFYHFYLNLSSGKLRQIEKWERVGKDKVSLLF
PILGK

FIGURE 5688

GTTTTTGGACTCCTGGTATAGACAACTGCCAAATCCACCAACAAACAGTATGAGCTGTATTACACTACAAAGCCA
GGACTGGCTATTTTTGGTGGTCTTTGTTTTCTAGATGAGATGTTTTTCTCTGAGTTCATTTAAAATGATTCTGCA
TAAAGCACATACTCTACTGTACAAAATACTTTTGCCTTCATGGTGATGAAAACTATGGATTGAGGGTCGGGGTGA
TACCATCTTTAAAGGGATGCAGCTAAAAAGTAGGGACTACCTGCATTTCTTATCTAAAGATAACCACAGTTGGCA
TTTAGTGATATACTGGCTTTGTATCATGGCCAAAAGTATCTGTAAAGAAGCTTGTGGGCATACTTTTGAAACCTT
CTGAAAATAAATGTAAAGCATTTACTTCGTGTGTAAAATTAGAAGTGTCTATGGTTGGTTTGAATAATATGAGTC
AAATTATAAGAGCATTAAAGTTTGATACTGCTATCTATTAAAGTCTTAATCTCTTGCAAAAA

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FIGURE 5689

FLDSWYRQLPNPPTNSMSCITLQSQDWLFLVVFVF

FIGURE 5690

AGCAAAAAAAACCTAGAGGCAATATTTTTTTTTAAAGTTTGTCTTTTCTTTTCTACCCAAATTACTAATCTATGC
CATTAAGGAAAGGAATAAGAACCTCCATATGTATTATTATCTCCACAGTCCTGCAGAAGTACAATCTGATCTTTA
ACTTTCATGCTACAAATAATAATTTGAGTAGATTAATTTGAATTTTATCAACAAAATTATTGCCATATGATGTAT
CATTTCTGTGTTTGAACAAAGCATCGTAATGCAGGATAACTTCTACTTTATTCCCTGTAGTTAAAAAAAAAAAAA
ACTATATAGTTCAAGCCAATATTTA

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FIGURE 5691

SKKNLEAIFFFKVCLFFSTQITNLCH

FIGURE 5692

GGGAGAGCAGCGGAGAAAAAGGAGGATGTTACGGAAGAATGGGGATCTGTCTGGATCTGAAGACTGAAACACCAG
CTTCCAGAAAAATAGAAATCTGGTAATTAAAAAATGTAAAAGAAAGGTTGCAAATTCTGGTTAAATCCTAAAGAA
ACTGGGCTTCTGACTTCTTCAGTATTATTACTCCTATAGATAATTGTTTCTTATCTTCATGACTTTAGTTCCGTT
GTTCCAACTTATGAGAACGATGTTGCAATTTAATCTTACCTTGTAAACGTATGGTATCACTTGGAATGCAGTCAG
TGTTTCTGAATTCCATCCTCTGAATTGTTAATGAAATATTGACCTGGACTGGACCTACAGTCAGATCCCTTAGGG
CTCTCAGAGTGCCATGCTGGTGGACAGTGAATTATTCATAATTACTCTGCATTTGGTATTTGAGCCATTGTGAAT
GTGTATCTTTTGAAATTCCGCAGAATCTCTGCTTCTCTTGTTTTGCTTCCAACAATTATGGATAATCATGTCTTA
GCTAAAAGGGCCCCAAGTTATAACATACTGTTTTTCTCTAATATGCTTCTTACAAATAGCCAATCCCTATTAGCT
GTGTGGCATTGAAATTCAATGCTATTACTAATTTTCCTTTGACATCAATAGTAACGTTACCTCATAATTTGATAG
TCATTATAGCTATGAAGGGAACTAATGCCCAAGATTCTCAAAAATGCAAGATTGATGTGTTTCTTTCTTTTCCCC
TCTGTCATAATTTACCTATATAACAGAGTATTTACAGTCATCATTCATTCCTTTCTTTAGGAATCCAAAGTGGTA
ATTGCCCAGGAATATACAGTGTTCTTGATTGGATTAATAATTATCTTCAGTAATTCAGAATAACACATGAGGGAA
TGAATGAATG

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FIGURE 5693

ESSGEKGGCYGRMGICLDLKTETPASRKIEIW

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FIGURE 5694

GGAATTACAGGCGTGAGCACCATGCCTGGCCATCAGAACTTGTAATCAAGACAGTATGTTGAGAAATTCTAACAT
TATAAATTACAAAGCTTTGACTATTAAAGTTTTTGTGATCTAATGATACAGTTTTGATTCTATAGTAATTTGTGG
CTTATTTTATAGTTTATAATGAATACTTATTTCTAGACTCATACACTGGAAGGGGACCCGGAAAGGTAATGTAAC
TCAGTGATTTTAAAACTTGATTTTTTTAACTGAGAACTTTTTTTGCCCCCTGCCTGTAGGTTAAGTCTTACGTGA
AATGCCAAGATAATTGCTGAGCAGCTTTGGTTACCCAGGGCGGGGTCTGGGTCTGTCTGTACTTTGCCTTTACTC
TAGATGGCTCCTGAGACACAGGCAGGACTCCCAAGCACCGGGTTGGGATCTGCCCTGGTCCCGGCATTCCAGTAT
AAGATTGCCTCAGACCTGTGTTTTTCAGACTGGGTTTTTGCTCTTCACATGAAATCAAGTTAGATGACAATGACT
GGTGTTGAAAAAAATGAAAAGGAAAGAATTTGTAAAGAACAGAAAATATATTTGAGTAAGTATTGTTTGGTAAAA
CTTAGTTACATATGCATATATATTTGTTAGGTATATATGTTTATGTGTATTCTGATGTANNNNNNNNNNNNNNNN
NNNNNNTATTACTATAGTACCATGGGTAATGGNTAAAGAAGTTAAAGCNACTGCNTAGAATGAAGAAGGCCCCAG
GCTTACCTGTCCCGNTCTTTAAACTGTCCGAAGGAAATTCAATAGCCTGTTAAGTGAATACCTTCATTCTTACTT
GTATTTGGGGGAATATTATGAAATACTCACCACTTTTGGTATTTTATGAAAATGTTTTCTTTTCAGAAGTTATGG
TAATTTCAATGTGTTTGTTGTTGGGAGGGGAGCTGCCAAATCAGTTACTAATATTACTGTGTGACATCTATCCAA
CTTTTTTCATTATTCTTCATTGCCAAATACTGAAAGACTTGTAAATGGCTTTGGCAATATGTTTGAATTCTAAGA
GGAAATATTTTCCCATAATTGTATATCAGAGAAATATAGTGATATACAATTTCCTTGAAAACCAATTTCTAAATA
ATTTTCTTCTCTGTAATCTAAGTGTAAAAAGGTTTAGTTTTTTAATAGGTTTAGGTGTTTATAAGCAATAGTTCT
CTATTTTCTAGTTGATATAAGTAGAAGAATTGACAAGTGAGATGGAAATGTTAATTTATAAAGGGAAAGAAAAGC
TAGGTGAGGTTGAGTTATAATTAAACTGTTCAGGAAACATCGTAAAGGCTTTAGGCTCCCTTTTTCATTTCTATA
CCAATTAATCTCATGGGTTCTAGAGTGGTTAGTTCTACGGGAATTGTTTTTGTTTTTGTTTTTAAAGATGCTGAA
AACTACTCTCAATCAAATTAGTACCATCATTTAAGCTTTGAATACTTGGCAGTAATTGCCTGGGCTCGTCAATAA
ATGTTAGCAAATTCTTGATGTTC

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FIGURE 5695

NYRREHHAWPSELVIKTVC

FIGURE 5696

TAGCAGCAGCTTTTTGCAGGGAAAGAGGGAGTTGTATTTATTGCTTCTCCATGACATGGTTCTTTTCTCATTAGT
TCATGGGCAAGTCAAGGGAAAGAGACCTAGGTAGCAGCTGAGTGCTGTAGCCTTACAGATGGCCTGGGCTGGCTT
GGCTGCCAGTGCACTGTGCCCTTGTAGTCACTGTCCTACAC**ATG**TCCAGAAATTGTGTTTTTCTTACAGGTGACA
GAGGAAGTTATATATGGAAGGTAGGGTTAGGGGCACCAACCCCCTGTGCAATTGACAATCCATGCATAACTTTGA
CCCTCCCGAACATAGCTA

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FIGURE 5697

MSRNCVFLTGDRGSYIWKVGLGAPTPCAIDNPCITLTLPNIA

FIGURE 5698

GGTACAAGCCACCACACCCAGTAGACTTATTCCTTTAAAATTACAGGCGTGAGCACTGCGCCCGGCTCAAATTAG
TTATTTTAGAGAATATTACTTTTAATCTCAAAACTGTTTCTTTGAATTCTGCCTGCCTATCCGATTGGTTTTACT
GAAGTTTTCCTTGAGGGGCTGTCTGTCATCTTTTAGGGCCCTCTGCAAGTTTTTTTCAAAAATAACAACTGCTTA
GTTGTGTGCAGTGTAGGACTCTTTATAGGTTTTTGACTACTCTTCTTTTCTTGTAGAATTTCACTGTCTTTTAATT
GTTTACAGACTGCAAGCAGGATAAAATTAAAAATTCAACCATTATTAATATTGCTGCTTTGTAGGAGCTGGTAAA
GGAGTAGAAGGTAAAGATCTATTAATTATAGTGTCTAATACACCCTTGAGGAAAATCTGTTAACTCCAAATTATT
AAGTACCTAAAGAAATCTGGAGATCTTAATTTATTTGCCCTATTTCAGGCCTTACC

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FIGURE 5699

MFTDCKQDKIKNSTIINIAAL

FIGURE 5700

GATGAATTGAGGCTGCGTGACCCACTGTGCCTGGCCAGTTTTGAATTTTTTAACTTAAAAAAATTGCAACTTTTA
TAATATTTTATGTTTTATAATGAAAAAATGTAATCCTATTGAATGTTCCTCTGAGCATAGCTTTAGCTATATTAC
TTAAATTTTGATGAGTAATATTTTTATGTTTATATATTTAAAAACCCCTGCAGTTGCAGTTTTTATTTTTTCAAC
AAGTATTTAAGCACCTGCTCCATCTAGACATTCTGCCAAGTGCTGAGGACACAACTATGTACAAGACAAGGTCTC
TTGCCTTCATCCAGTTACAGTCTGTCAATATAGACAAACCAACGAATAAAGAATTTTCAGATTTCGACAAGTGTC
TAGGAAGTAAATAAATAATAGAAGGTGCTAATTGGATGATCTGAGACTGTCTCTCTGAGGATGTCATGTTTAAGT
TGATTGGTGGTACCAAGGTGTGTATGGGAGTTTCTTTAGCTTTCCCAATCTATCGAAACAT

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FIGURE 5701

DELRLRDPLCLASFEFFNLKKLQLL

FIGURE 5702

CTTATTCATGCAGGCTCTGCATTAGCTGCTAATGTATGTAAAAAGATTACTGGACGTCTTACAAGTGCAATAGCA
AAACAGGAAGATGTCTCTGTTCAGCTAGAAGCCTTGGATATTATGGCTGATATGTTGAGCAGGCAAGGAGGACTT
CTTGTTAATTTCCATCCTTCAATTCTGACCTGTCTACTTCCCCAGTTGACCAGCCCTAGACTTGCAGTGAGGAAA
AGAACCATTATCGCTCTTGGCCATCTGGTTATGAGCTGTGGAAATATAGTTTTTGTAGATCTTATTGAACATCTG
TTGTCAGAGTTGTCCAAAAATGATTCTATGTCAACAACAAGAACCTACATACAATGTATTGCTGCTATTAGTAGG
CAAGCGGGTCATAGAATAGGTGAATACCTTGAGAAGATAATTCCTTTGGTGGTAAAATTTTGCAATGTAGATGAT
GATGAATTAAAAGAGTACTGTATTCAAGCCTTTGAATCATTTGTAAGAAGATGTCCTAAGGAAGTATATCCTCAT
GTTTCTACCATTATAAATATTTGTCTTAAATATCTTACCTATGATCCAAATTATAATTACGATGATGAAGATGAA
GATGAAAATGCAATGGATGCTGATGGTGGTGATGATGATGATCAAGGGAGTGATGATGAATACAGTGATGATGAT
GACATGAGTTGGAAAGTGAGACGTGCAGCTGCGAAGTGCTTGGATGCTGTAGTTAGCACAAGGCATGAAATGCTT
CCAGAATTCTACAAGACCGTCTCTCCTGCACTAATATCCAGATTTAAAGAGCGTGAAGAGAATGTAAAGGCAGAT
GTTTTTCACGCATACCTTTCTCTTTTGAAGCAAACTCGTCCTGTACAAAGTTGGCTATGTGACCCTGATGCAATG
GAGCAGGGAGAAACACCTTTAACAATGCTTCAGAGTCAGGTTCCCAACATTGTTAAAGCTCTTCACAAACAGATG
AAAGAAAAAAGTGTGAAGACCCGACAGTGTTGTTTTAACATGTTAACTGAGCTGGTAAATGTATTACCTGGGGCC
CTAACTCAACACATTCCTGTACTTGTACCAGGAATCATTTTCTCACTGAATGATAAATCAAGCTCATCGAATTTG
AAGATCGATGCTTTGTCATGTCTATACGTAATCCTCTGTAACCATTCTCCTCAAGTCTTCCATCCTCACGTTCAG
GCTTTGGTTCCTCCAGTGGTGGCTTGTGTTGGAGACCCATTTTACAAAATTACATCTGAAGCACTTCTTGTTACT
CAACAGCTTGTCAAAGCTCATCATATGCCCGAAGCTCAGTGGTTACGGCTGTGAAATTTACAATTTCTGACCATC
CACAACCTATTGATCCACTGTTAAAGAACTGCATAGGTGATTTCCTAAAAACTTTGGAAGACCCAGATTTGAATG
TGAGAAGAGTAGCCTTGGTCACATTTAATTCAGCAGCACATAACAAGCCATCATTAATAAGGGATCTATTGGATA
CTGTTCTTCCACATCTTTACAATGAAACAAAAGTTAGAAAGGAGCTTATAAGAGAGGTAGAAATGGGTCCATTTA
AACATACGGTTGATGATGGTCTGGATATTAGAAAGGCAGCATTTGAGTGTATGTACACACTTCTAGACAGTTGTC
TTGATAGACTTGATATCTTTGAATTTCTAAATCATGTTGAAGATGGTTTGAAGGACCATTATGATATTAAGGTAA
GATGTTTGTGCCTATTTATACAATGTTTTAGAAGAAGACTTTGCTAGAGCAACTTTCACCCTTGTAATTTACTCA
TGTGTCTGAGAAAAATCAGGTTGTCTGTGAAGATTTTGATAAGCATATTGTAAACTATAAAGTGCAAAAGTAATA
GGCAGTGTAACACCAGTTGACGTGTAAGAAAGATCCAGAGCCCTTTTTATTGGAGGAGGAAGTGGCAGTGGATGC
AAAATGCTGTGTGCCCACTTGCTTAGTGAATAGTCCCTAGATCCTTTCCCTCAAAAAAGTCCCGACAGATTTTGC
TGTTTAAAGTATAAATCTGTAACTTTTTGGCCTGTCTTAACATTGGACCATAGTTGCTACCCATGGAGGGTTTTC
TTAGCATTGTCTTGATTAAGTCTCCTGAGCTACCTTTGGGGCTAGTCTGAATTGTAACTGTATCATTTACCTGAA
TGAGGAATTTTTGTTTTTCAATATAATATACTGTGTTTAATATCAAGAATTTTGTTATAGGACATGGAACTTTTC
AGATATACAAAACAATCTGTAGAAGCTACTTGAGAGAAATCATACTGCGTCTTATGTTTGGATAATGAATTTTGC
ATATAAGTGTTCTTTGTTTTCCTGTGTGTTCGTCTCCATTTAAAATGTGAACAGTAAAAGGGTGATTTGAAAAAT
GAAAAATATATGCATTGTGTCTTTTTCATCTACTCTTCCATTTAGCGCTTTTGGCCAAGCAGGACAAAAGTGGTA
ACTCAGCAGTAATTGAGCCATACTACCCGAACTCCTACTCTTAGGTTTCCATGTGTGGTAGTGACCTGAGCCTCT
CAAAGTTCAATGAAGAGGGCCTCCCCACCAAGAAGTAAAAGGATGTGCTTGTTTAATTCTATGAGTTTATAGTCC
AAGAGAAAAAGGTTTATGGGTTATCAGGTTTTACATGGATTAATCTGAATAACTGGTCAACTCTGTTATGATAGT
GGAAACTTATTATGAAATTGTGTTCCAGTTCAGTAATTTTCTAGTTCTATGATTCTCAATTCTGGTGCACATGAG
CTTTAAAAAAT

FIGURE 5703

MADMLSRQGGLLVNFHPSILTCLLPQLTSPRLAVRKRTIIALGHLVMSCGNIVFVDLIEHLLSELSKNDSMSTTR
TYIQCIAAISRQAGHRIGEYLEKIIPLVVKFCNVDDDELKEYCIQAFESFVRRCPKEVYPHVSTIINICLKYLTY
DPNYNYDDEDEDENAMDADGGDDDDQGSDDEYSDDDDMSWKVRRAAAKCLDAVVSTRHEMLPEFYKTVSPALISR
FKEREENVKADVFHAYLSLLKQTRPVQSWLCDPDAMEQGETPLTMLQSQVPNIVKALHKQMKEKSVKTRQCCFNM
LTELVNVLPGALTQHIPVLVPGIIFSLNDKSSSSNLKIDALSCLYVILCNHSPQVFHPHVQALVPPVVACVGDPF
YKITSEALLVTQQLVKAHHMPEAQWLRL

FIGURE 5704

AAGCTGTATCTTGACTCTTCAAGCTCCTGGTGGCTACCAGCATCTCTGGGCTTGTGGATGCATCACTTTAATATC
TACCTTCACAGTCACTTTGCTTCTTTCTCCTTTNNCTGTCTATCCCTCCTCTGTGTCTCTCTTATAAGGGCGCTT
GTCATGAGATTTAGGACCCACCTAGATAATCCGCGATTATGTANNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNAATCCTTTTGGTCACCATTTAATCTACTATAACATC
TTAACTTATTACAGTCTACCTTTAAGTAATATTACTTCCATTTTACTCTTCTGTGTCCTATTGTTGTCATGTGTC
TCATTTCTATAGAATAAATTTCACAATATATTATTTTTGCTTAAA

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FIGURE 5705

KLYLDSSSSWWLPASLGLWMHHFNIYLHSHFASFSFXCLSLLCVSLIRALVMRFRTHLDNPRLCXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXNPFGHHLIYYNILTYYSLPLSNITSILLFCVLLLSCV
SFL

FIGURE 5706

GGCACGAGGGAGACTTCAGGAGTCGCTGTCTCTGAACTTCCAGCCTCAGAGACCGCCGCCCTTGTCCCCGAGGGC
CATGGGCCGGGTCTCAGGGCTTGTGCCCTCTCGCTTCCTGACGCTCCTGGCGCATCTGGTGGTCGTCATCACCTT
ATTCTGGTCCCGGTGCCCTTCCAGCTGTCACTGAAATGGCTTTATTCGTCACCGTCTTTGGGCTGAAAAAGAAAC
CCTTCTGATTACCTTCATGACGGGAACCTAAGGACGAAGCCTACAGGGGCAAGGGCCGCTTCGTATTCCTGGAAG
AAGGAAGGCATAGGCTTCGGTTTTCCCCTCGGAAACTGCTTCTGCTGGAGGATATGTGTTGGAATAATTACGTCT
TGAGTCTGGGATTATCCGCATTGTATTTAGTGCTTTGTAATAAAATATGTTTTGTAGTAACATTAAGACTTATAT
ACAGTTTTAGGGGACAATTGAGATGGCTGAACTACTGAATAAAAAAAAAACAACGCTGTTTTCTAGTCCTGCAGA
CCGTAAGATACTTGGTATCGCTTCTATTTTGGTTACTACGGTAGGTGCCTGGCGGAAGGGAGTGGGCGGAGATAT
GTAAATAGAAAGTGCGTACAGTTAGAACGTCCGGCACGTAACTGATCGGAGCATTCTGGGAAGAAGTAATTTATT
CCTTTTCGGCAGCCGAATGAAAAAAAAATTTAAAAAAATGTGCGAGCTAATATGGCAAAACAACTGGAAGGACGC
TAAATAATAGGATTGCTCATACCAGCGCGTTATGAACTCACCCTAGCTTGTAACGGAATCTTTTTCACTGAGTGC
AGAATGTCGGCTGTTTGTCTGTATCGTCAGGTGGGATAATCCTTACCTGTTCCTCCTCCGGAGGGCAGATTAGAA
CATGATGATTGGAGATGCATGAAACGTGATTAACGTCTCTGCGTAATCAGGACTTGCAACACCCTGATTGCTCCT
GTCTGATTCTTTCTGACGATCACTTACATTTGTGTTATGCTGATTAGCAGATATCCACAAACATAGCTATGAAGT
TCTGACTGGGATAACCTTGCTGTTTGTCTATTTTGCAGTCTTGCTATTGCTGTTTGTCTATTTTGCAGTCTTGCT
AAATTTGTTTGTTCTTGAAAATTGTGATTTGGTTTTTGTTGCTTTCTGGAATTTAGGCAGTGAAATAATAAAAAA
AAAAAAAAAAAA

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FIGURE 5707

MGRVSGLVPSRFLTLLAHLVVVITLFWSRCPSSCH

FIGURE 5708A

GCCCCAGATCGGAAGTGACGGAGACGTGCTAGCGCGTCGAAGGTAGCTCTATGGTTTTCCTCGCGTTCTTGAGTC
GGGAAATGGCCGCTGTGTGGTTGCAACGGAGATAAATTCCCGGAACCGCGATTCGGCGTGTCAGGAATTCGAATT
TAGAGTTTAATTTCTCAGAGCATTCTCTCCAGGAAGAATTTTTACAGTATCTCAAAGACTTCACTTGACTTCTTG
ATCCTGCATAAAACCAAGGAGAAAAGAA**ATG**GGTCGCTCCAATTCTAGATCACATTCTTCAAGGTCAAAGTCTAG
ATCACAGTCTAGTTCTCGATCAAGATCAAGATCTCATTCTAGAAAGAAGCGATACAGTTCTAGGTCTCGTTCCAG
AACATATTCAAGGTCTCGTAGTAGAGATCGTATGTATTCTAGAGATTATCGTCGCGATTACAGAAATAATAGAGG
AATGAGACGACCTTATGGGTACAGAGGAAGGGGTAGAGGGTATTATCAAGGAGGAGGAGGTAGATATCATCGAGG
TGGTTATAGACCTGTCTGGAATAGAAGGCACTCTAGGAGTCCTAGACGAGGTCGTTCACGTTCCAGGAGTCCAAA
AAGAAGATCCGTTTCTTCTCAAAGATCCAGAAGCAGATCTCGCCGGTCATATAGATCTTCTAGGTCTCCAAGATC
ATCCTCTTCTCGTTCTTCATCCCCATATAGCAAATCTCCTGTTTCTAAAAGACGAGGGTCTCAGGAAAAACAAAC
CAAAAAAGCTGAAGGGGAACCCCAAGAAGAGAGTCCGTTGAAAAGTAAATCACAGGAGGAACCGAAAGATACATT
TGAACATGACCCATCTGAGTCTATCGATGAATTTAATAAGTCATCAGCCACATCCGGTGATATTTGGCCTGGCCT
TTCAGCTTATGATAATAGTCCTAGATCACCCCATAGTCCTTCACCTATTGCTACACCACCTAGTCAGAGTTCATC
TTGCTCTGATGCTCCCATGCTCAGTACAGTTCACTCTGCAAAAAATACTCCTTCTCAGCATTCACATTCCATTCA
GCATAGTCCTGAAAGGTCTGGGTCTGGTTCTGTTGGAAATGGATCTAGTCGATACAGTCCTTCTCAGAATAGTCC
AATTCATCACATCCCTTCACGAAGAAGTCCTGCAAAGACAATCGCACCACAGAATGCTCCAAGAGATGAGTCTAG
GGGCCGTTCCTCGTTTTATCCTGATGGTGGAGATCAGGAAACTGCAAAGACTGGGAAGTTCTTAAAAAGGTTCAC
AGATGAAGAGTCTAGAGTATTCCTGCTTGATAGGGGTAATACCAGGGATAAAGAGGCTTCAAAAGAGAAAGGATC
AGAGAAAGGGAGGGCAGAGGGAGAATGGGAAGATCAGGAAGCTCTAGATTACTTCAGTGATAAAGAGTCTGGAAA
ACAAAAGTTTAATGATTCAGAAGGGGATGACACAGAGGAGACAGAGGATTATAGACAGTTCAGGAAGTCAGTCCT
CGCAGATCAGGGTAAAAGTTTTGCTACTGCATCTCACCGGAATACTGAGGAGGAAGGACTCAAGTACAAGTCCAA
AGTTTCACTGAAAGGCAATAGAGAAAGTGATGGATTTAGAGAAGAAAAAAATTATAAACTTAAAGAGACTGGATA
TGTAGTGGAAAGGCCTAGCACTACAAAAGATAAGCACAAAGAAGAAGACAAAAATTCTGAAAGAATAACAGTAAA
GAAAGAAACTCAGTCACCTGAGCAGGTAAAGTCTGAAAAGCTCAAAGACCTCTTTGATTACAGTCCCCCTCTACA
CAAGAATCTGGATGCACGAGAAAAGTCTACCTTCAGAGAGGAAAGCCCACTTAGGATCAAAATGATAGCGAGTGA
TTCTCACCGTCCTGAAGTCAAACTCAAAATGGCACCTGTTCCTCTTGATGATTCTAACAGACCTGCTTCCTTGAC
TAAAGACAGGCTGCTTGCTAGTACACTTGTCCATTCTGTCAAGAAGGAGCAAGAATTCCGATCCATCTTTGACCA
CATTAAGTTGCCACAGGCCAGCAAAAGCACTTCAGAGTCATTTATTCAACACATTGTGTCCTTGGTTCATCATGT
TAAAGAGCAATACTTCAAGTCAGCTGCAATGACCCTAAACGAGCGGTTCACTTCGTATCAGAAAGCCACTGAAGA
ACATAGTACTCGGCAAAAGAGCCCTGAAATACACAGGAGAATTGACATCTCACCAAGTACCCTGAGGAAGCATAC
CCGTTTAGCAGGGGAAGAGAGAGTTTTTAAAGAAGAAAATCAAAAGGGAGATAAAAAATTAAGGTGTGACTCTGC
TGACCTTCGGCATGACATTGATCGCCGTAGAAAAGAAAGAAGTAAAGAACGGGGAGATTCCAAGGGCTCCAGGGA
ATCCAGTGGATCAAGAAAGCAGGAAAAAACTCCAAAAGATTACAAGGAATACAAATCTTACAAAGATGACAGTAA
ACATAAAAGAGAGCAAGATCATTCTCGATCTTCATCCTCTTCAGCATCACCTTCTTCTCCCAGTTCTCGAGAAGA
AAAGGAGAGTAAGAAGGAAAGAGAAGAAGAATTTAAAACTCACCATGAAATGAAAGAATACTCAGGCTTTGCAGG
AGTTAGCCGACCACGAGGAACCTTTTTTCGAATTAGAGGCAGAGGAAGAGCCAGAGGAGTTTTTGCTGGGACAAA
TACTGGTCCAAACAACTCAAATACTACTTTTCAAAAGAGACCGAAGGAAGAGGAATGGGATCCAGAATATACCCC
AAAGAGCAAGAAGTACTTCTTGCATGACGACAGAGATGATGGTGTGGATTATTGGGCCAAAAGAGGAAGAGGTCG
TGGTACTTTTCAACGTGGCAGAGGGCGCTTTAACTTCAAAAAATCAGGTAGCAGTCCTAAATGGACTCATGACAA
ATACCAAGGGGATGGGATTGTTGAAGATGAAGAAGAGACCATGGAAAATAATGAAGAAAAGAAGGACAGACGCAA
GGAAGAAAAGGAA**TAA**TAAATATGAAGTAAGATTACAACAGAGCAGAACTTGCACCCACCATTTTTTTTACCTGA
TTTTTGTTTTCAAATAAGAATGTAAGCATTTTACTTAAATTTTACTGTTTGCAAGTAGTCTATAGAAATTTTGTT
TTAAGTCTTCAAATATCTTGAGAAATAGTAGACTGTATGTTGAAAATTGTACTGAAATAAAGTAGAAAATTGTTA
CGTACCATATTTGTAACTATCAACTTTTAAAACTTTTAACGTTTTTGTTACATGCATTGTAATTCTGCTTTGTCT
ATAAGATATGGTCAAGTACAGCTCTGTGAAAGTTCTGATTCTCTTCCTTCCCTGTTTGTCAATGTTTTATTCTGA
AGTAAACGTTAGCTCTACATATAAATCCTGGAACAGAAATTGTTTATAGAGACTACACTAATTATTTTAACTGTA
TACATCTGTTTAATTTGAACACACTACATCGTAGGGTGACTGATTTTTGAAGTATACCACAGACAAAAAGTTGTT
ACTATGGTAAACTAAGCTAGTTTAACACTTGAGCAAATGCTTAAGAAGGAATTAAAAAAAAAAAGCTTTGCCAAT

FIGURE 5708B

AGCTAAAAAGTACAAGCTATTAAAAATCAGATTGAAAAGTTTTGAGAAAATGTTATTTTTACTGAAAGCAAGCAG
TGGCCTATAAAGAACATTCTTAGGAGCCTTTTCTATTTGCGTTCAAAACTGTGTGTTCTCTTTCTATTCCTATTT
GATAGTTTGAGTCATGGTCTTAGATATTAGCTATTTGTGAGAGGAAACTGGTTTGTAACAATACTGCAAATAGAA
ACCCCATTTCTACTGAACATCCTAGTTTTAAACAGAAGAAAAACTGTAATCCTGGGGTTGGTATGTAGGAGGTCT
ATCCTGCAGAATAAGTTGATACATTAGTACCTGATTTCATATCTTACATATTTATTTGAGCTGAACATTAGTTTG
TAGTGTAACTATTAGTAAAAATAGAGAAACACAGCATACTGTTCATTAATAGTATTTTAAAAAAATTGTTTTTCA
AATGTCACCAATAAAAGTTTTGGCAGGAAGCTTGTTGCGGCATTGATCTAACCTTTTTCCCCCCCATTTCAGTTG
CAGTTTTTGTAGAATGGCTTTTTCTTTTTCCTCTTAAGAGTTCTATTCTTCAGGTAGATAATTTTTCAAATGTGA
ATTATCTTTTGTGTCTATATTGATAGCTCTTAAAGGAGTGAAAATCTAAAATAGTAAATTTCAATGTTAAGTGTC
TGCTTTATGGGCATATATAAAAGTAGACACATTTCATTTGTTAATTTAGTTGTGTGTGTGTGTTAAAAGGAGCTA
ATGCTTATTCTGTTAATGTAAACTTTTGAAGATCTTAAGTGTATTGCTCTTTCATCTTAAACACTTTCGAGGATT
TGCAGTGCGTCTAGCACCTAGATTACAGCCAGGAACATTGGTTAAGAACTGTTGGAAACAAAACTAAAAGCAAAC
TCAACATATGTGATGTTTATGGCCCTCAGATCCTTAGTATTGTGTGATTTTCCCCCGTTAACATGTCTTTCTAAA
ATTGTCTATTAAAGCAGAGGAAATACCTGCCAAAGGAAGTATGTATTGCATTAATCAGGGCATAACTAATATTCT
CCTGTTCAGAATAATACTTATTTACGTGTGAAAGCAACATGGATGTGATTCCCAACACAGAATTTTCATGACCCT
TTTATTGTATACAAATAAATACCATAACAGTTACTTGGTTAGACATCAAATCTGTGTGCATGACTATGTGCTTAT
CCACTTAAGACAATAGGTAAAAGGGGATCTGAGAAATTATGTAATAGGGAGTGGGAATAAAACTACTTAATTCCT
GTGGGCAGGTTATATTTTAAGTTCAAATGCATTGCTTTAACCTTTGGTTACTTTTATTCTGTTAAACAGAATTGA
AGAAAGAGTATTATACCAGAGTGTAGTAGGCTAGGGTGATTGTAAGAACTCTGTAATAGAATGTCATTGTGGATG
TTACCTTTTTCAGATCCAAGCATATAAAAAGCCTGTATATTTTTTAAAAACACATCTTAACTCCACGCTTTACGA
TATTATAAAAGTTGAATGGTTCCTCTTGGTAAGGATATTTGCTTACAAGTGCTAGGAAATAACTCACTGATACCT
GCGTTAACATACTTTGTTTTGCCTAGAGAGGGGCAATAAAAATGAACCAAAGGATATTTCCAGAAAGGATTAAGA
AAGCTGTTTAAGAAGGCCATGACTCTTTAGGTGTGTATGTGTACCTTTCAGCATCCTAGGAATTTTTATACTAAA
AGCAAAATGTTTTTTCCAGTTAGTCTTCTTCAAGGAATTACTATTGTTCCTTTTGTCACAGGTAAAATCAGTGTT
GGGAATTATAATTTGAGAAAAATATTACCCAGTAACATTGAATGTAGATGGCTAAACGATTCTTACTCAGTGTGA
TGTATAATGATGCAACAGGGACCCTTGTAAATTGTCATACGCCAATAAAATGTCACAAGTAATAACTGCTGTTGT
TTGTTTACCTGTGTCTATTTCACACATCTTATTTCTGTGGCCTATTTTAGAATATCAGCGCATCTGTTAGGAAGA
TTACTGGTGTGGTAAGGCTTGATAAATGCTTTATAAACTCCCTCAAACCTTTCTTTACTGTTTTTTTGTTTTGTC
TTGTTTTTGTTTTTGTTTTTGTTTTTGTTTTTGTTTTTCCCTTGTCTCCCCTGGGAAAATGGGAAATTTTACAGT
TGGTAAATCTAAGCCAAAATTATTTTGAAATAAAGGAATTCTGGATGTCCAGTTTAGTCCTCGTTTTCTTACGTT
AATCTGGGACCTTATCACCCATAATATGGTGATTACTTCTCTTTCTAAAAACATAGTAGCTAGTAAATAAGTAAA
AAGAATTGTCTTTTCATTCACTTTAAGTAAGATGTGGTATAATTCTTACCATGTGCCATCCTGTCAGTTTTAACA
AAGCATTTTCACAGAAATTTGTGTACTAAGACAAACTGACACATTTTGACTCATACAAATGGCAAATTAGTCCTT
AAAAATTCTGTGAGAGAAATAACTCTGTGTGTACATACATATGCATGTAAAGTGTTGTGTAAGATCATTGGTAGC
TTAATTATACTGGATAATTGTAATGTTATATACAAATTTCTTATATAAAAGTATGCTGCATTATTAACATTTGTT
TAACTTTTCTTATTTTTCTTTTTCTGGGTTTCAACTGGAATCCCATTGGTGGGGATGTACCTTAAGTTTCCTTGT
GGAATAATAGACTTTCACATCCAGAAAGAGAAGTTCAGAGGCCTTTCTCAATTTACAGAGTTGAAGAGGAAAGGC
AAATGGAGGAATAAACTTCATTGTCATTGGGATTAATTTGGCTAGACTCAATCTCTTGAGCCTTAAAATGAGAAA
GTAATATCCATTACATGTTTAGAGTTCTCAAATAGTTGATACTATTATTAAATGTTTCAAATTTTATTGGGGTAG
ATACTAAAAATTAGTACACTGTCCTAATGAAGTTTAAATGAACAAGTTTTACATTTCTTAGGATTCAGGAATATA
TGGAATCTAGTTGTATTTAATTGACTTGAGAGCCACAGAGATTGTGTTGATTTATGAGCTGGACTCCTATTGTTT
TAGAAACATGCAGTAATGATTAACTTGTGTCAATGATGGTAATGAGACCAAACTTGTACATTTAATTAAGGGTAC
CAGTTCTTTTTATGTTACTAGACTATACCTTGGCCTTTAAAAATGAATCTCACTGATTAAAGAGAACAGGCATTA
TTAGGATAGCATTCCACCACAACTAGAAACATTCAAATAATGTGTCTTAATTGTAATCTGTATATAGGAAAATTT
TTCCTATGGATATTTTTGGTGTTTTACCACAGTGAACTGATTTGTAGCACTTATGAAGTGCAGAAGGTAATATTC
TTGAAAATAGAAAAAGGTTGGGTGAGCAGGCTTTAATGCCTTTCCCCCAAGAATATACATCGAATTTTTCTTAAT
CTTTTGGGGTTGGCCAGCTTCCAGATTTCATTAATAATGAGCTCTGCCTTTAATAAAAGTACATGATCATAGCTA
CACTGTATGTTTAGGTGGTGTGAAATGATTTATAATCACAGCTTGAACTGTGTTTGCTTGGTACTGTCATAGTGA

FIGURE 5708C

TTACAAATTTCATGGAATGCGAAGAGCAACAATAAATAAAAAATACCACTCACCCTCAAAA

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FIGURE 5709

MGRSNSRSHSSRSKSRSQSSSRSRSRSHSRKKRYSSRSRSRTYSRSRSRDRMYSRDYRRDYRNNRGMRRPYGYRG
RGRGYYQGGGGRYHRGGYRPVWNRRHSRSPRRGRSRSRSPKRRSVSSQRSRSRSRRSYRSSRSPRSSSSRSSSPY
SKSPVSKRRGSQEKQTKKAEGEPQEESPLKSKSQEEPKDTFEHDPSESIDEFNKSSATSGDIWPGLSAYDNSPRS
PHSPSPIATPPSQSSSCSDAPMLSTVHSAKNTPSQHSHSIQHSPERSGSGSVGNGSSRYSPSQNSPIHHIPSRRS
PAKTIAPQNAPRDESRGRSSFYPDGGDQETAKTGKFLKRFTDEESRVFLLDRGNTRDKEASKEKGSEKGRAEGEW
EDQEALDYFSDKESGKQKFNDSEGDDTEETEDYRQFRKSVLADQGKSFATASHRNTEEEGLKYKSKVSLKGNRES
DGFREEKNYKLKETGYVVERPSTTKDKHKEEDKNSERITVKKETQSPEQVKSEKLKDLFDYSPPLHKNLDAREKS
TFREESPLRIKMIASDSHRPEVKLKMAPVPLDDSNRPASLTKDRLLASTLVHSVKKEQEFRSIFDHIKLPQASKS
TSESFIQHIVSLVHHVKEQYFKSAAMTLNERFTSYQKATEEHSTRQKSPEIHRRIDISPSTLRKHTRLAGEERVF
KEENQKGDKKLRCDSADLRHDIDRRRKERSKERGDSKGSRESSGSRKQEKTPKDYKEYKSYKDDSKHKREQDHSR
SSSSSASPSSPSSREEKESKKEREEEFKTHHEMKEYSGFAGVSRPRGTFFRIRGRGRARGVFAGTNTGPNNSNTT
FQKRPKEEEWDPEYTPKSKKYFLHDDRDDGVDYWAKRGRGRGTFQRGRGRFNFKKSGSSPKWTHDKYQGDGIVED
EEETMENNEEKKDRRKEEKE

FIGURE 5710

CTGGGGTTGGCAGTCTGCTTAACAAGAXGCTGGGACCACCTCTGAATTAGTGAATCAGGGAGCTGCTGTGTGATC
CCCTCCTCCAGGCTTTCTTGGAGTTTGTCTCTGCCACTTCCTCAAGCCCTTTAAAAAGGCTCCTGTGCTTTAGAG
AGTWAGGATGTTAATGACCGTTCTTTTTTCTTGTACTTTATTAAGTACTAGTCTTACTAGACTAGTGCTTAAGTG
GCAGTGTCTGCCTTTGCCTTCTCCCATCTCTTTATGCTCCTTTCTTCCAACTTCTCACGTTTCTGTTTCTCGCAC
GGCCAGGTGTCCAGCATCCCATGCTGACTTGCGGTTGGCCAATCCCCTCCTCGTAGATTTCCTCCACATTTTCCT
CTTCCTCCTTTTCCTGTGGGAAGTTCTTTTTCTGGGCTGTGGCTGGTCTTACGTAGTTCGGTGGAAAAAGTATTG
AGGTAGTGTTAGATACTGTGCTGCACCTCCAGGAGTGTCCAATCTTTTGGCTTCCCTGGGCCACACTGGAACAAG
AAGAACTGTCTTGGGCCACACGTAAAATACACGGACACTAACGATAGCTGATGAGCTAAAAAAAAAAAAAAAAAA

FIGURE 5711

GAGAAGAGGATGACATTTATTCACTCAACTGAACACACACACACATACACACACACACACACGCAGCACTGAT
GGAGAGTACAGCTGCTTATATATTCATCTATAATTGCAAAGACAAAAGTGTATCTTCCAGAAGATGCCTCTGGTT
GCTAACCAGTCTCTGTGAAGAAGCTGCAGTTACCCAGGCTTCTGTAACTCAGGACATTGAAGTAGTCATGCAGCT
CGGCACAGTCCTCTCCCCGCTGCTCTCCACAGAGCCCAGCAGGTGCAGCTTCTGCCTGGACACAGCTTCCTGGGG
GTGAGGGAGCACTGGGGCTCCATTCCTCCTGTCCAGCTGATTTTCTCCTGAGGTCACCTTCCACAGAATGGATTC
TGAGGGCTTTCTTTCTAGTCAACGCGACCACCACGATGACTGCTGTGCAGATGACCACCAGCGTCGCGGCCATGG
CTCCAAGCAATGGAATCTGGAACCTGGCACCGTGCTCAGCCACTGAGCTTTCTAGGAA

FIGURE 5712

AACAATGGATATTCTGTAAAATATCCTGTACAAAACAAGACTATTGCCAGTAATGTATACAAATTGTCTTTTTGT
GTACTTCCAGCATAGGTTTGGATATATGAACATTTTTCTTTTATTGTTTTATCTTCACAGAAAATAAAAGGTGTT
AATTTGCTTTTTAAAACAAATTTAATTATCACATTTTAAATTACTTTGTGGACTGTGTTTTCAAAACTTTGCAAA
TTCATCTGTTACACAGAAAATTTTGACTTAAAACATCTGCTGAATTCCAAATTTCTGTAATAGCTACTGTATCTG
TGATAAACTTTCCTATATCTTTCCTTGCCATTTCTATGGATTTTATAATGAAAGAAAAAGGCATTGGAGACTGAA
GGCAGAAATGGTTGTGACAGTGCTGTTTGGCTTTTTCATTCTTCAAATGCCAAGTCATCCACTTTGTTTTCCTGT
TTAGGCTTTGCACAAATACAATTGCTTTCAGGAATCCTAAAGCAGCATTTTATTGAGTTTGAATTATTAAAGGTA
CAGAGGAAATGTGGTGATGTAGAACTTTTCCTAACACAGGTATCTAGGAAGTAAGTGCTGAGTTGATTTTCTAGG
TTCTTACGTATTTGAAAAATAAAATTGCAATTCGAGATAAGTGCTTGAGCACTCTACTTAAGTATTCTCTGTGTT
TTATGAAGAGAAAATGATCTGATTTTCCCTTATACTTCATTTTACAATACATATTCCCTTTTAACTTAAAAAAAT
TGTAAATGTGGGAGAAAAAACCCTGCAGGATGGAAACAATTATTAAGAATGTAGATCAATAAGTACTTTTTAGTG
ATGTGGCAGAAATCCCTGTTGATTCTAAGTTTTAGAGTGTCTTTTCCCCTATTTCTGACCTACAACTATAAACTA
CTCTCTATTAGGAGAACTAGACCACTTTCTTCATTCTTTTCTAAACTGCTGCAGATTGCCGTGAACTCTATCAAT
AGTCTCTTTTCCGCAGGCAAAGTGGCATTTTCTAAACATGTTTGCTTACTGCCAGGTGGTTTGAAATCTATGATT
TACTGCAGTAGTATGTGCTTAAAACAACTGTTGAGGTCTTTTAAGCAGGAAAGTTCAAAAGGAAGTGTCCTGATA
ATGGTACTGGTTTTTCTACAAATA**TAA**GTAGTCATTAGAAGTTTGCAACCACCACCAAGTCTGAGAGAACTCTGG
GATATTCTGTGGGTTTGGCATATTAGATAGAGAAAATGACAGATCTAGATGAAGGGAGCTTTTGGATGTGTGCCT
TTAAAAACTGATTATGTATAAATACTGATATTTCACATACGGAGATATTTGAAGACCCAAGTCTGCCTTTCACAG
AGCCCTCCATTCCAAGTTTAGTTTTTGTCAAAATATGAATCATTTTATTTGACTGTACTATCAGTACACAAATGC
ATGAGTATGTTTATACAGTGTTAGACTGATGTGAATTTGCATTTGTTACATTACATTGCCAGCGCATATCATTTA
GCAAGTTGGCATTAACATTTATGCTTTAATTAAATGCCAGTATACCTATGTGTGCAGCAGTAAAAAATTAGTGAG
AAAAAGCAACTTTTTGTCACTCTTAGGAAATATTTTGTCTTATTAGTGTTCTTGGCACATGTATATTACTAAAGT
AGATAATTCCAATGAGAAATACTACCAGATTATTGTTATAAAATTAATTTACAATGTCCCTGATATTGAGCTAAC
TCTTAAAAAAAACCAAACAAAACTCGTATCTGAGTGTAACTTTGCCAATATTTTAAAAGCCAAAATATTCTCTGGA
CAACAAATTTGTATTGCTCAGGGACAGTTTACCTTGCCTGGTAAACCTTCCCAAACAGAAATATAGCTATACTAT
CTTTGGTTTTGT

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FIGURE 5713

MWQKSLLILSFRVSFPLFLTYNYKLLSIRRTRPLSSFFSKLLQIAVNSINSLFSAGKVAFSKHVCLLPGGLKSMI
YCSSMCLKQLLRSFKQESSKGSVLIMVLVFLQI

FIGURE 5714

CCATGAAAAAAAAAAAAGCTGCAAGTTATAATGTTGACCAGGCACTGTTACTTCCACTTGATCACACTGTTTGGG
GCTCTCTTTGATGTACAAAACACTCCTAAGTTAATGAAATGCGTTGCAGCTGGCTAATGGCTGGGAAAGTGCAAA
CCCTGCATTGAACCCTTCCCATCAGACTATTCAATGGCTAGGTAATGTCAGGCCCGAGCTGGAGAAGGGGCAAAC
AGGCTCGTTGCCAGGCAGGCCCGGGACTCCTGGGCAAACGGCTGTGGAGGGGCTGGTATTTTTCTCCTTTCAATA
GAAGTGGTCTGTGCCTGCAGCAAATGAGAAATAAATCCATCAAGGCCAAGCTCAGGCTTATTTTGCTGGCTGCTA
GAATTTGCATAAGAGCCTTGTATATACAGGTAAACAAAGACTTCCTGGAATTACTAATGTGGAGGTGATCTGAGA
ACTGGGAACAAAGTAGGGCCTCATCTTATGCA

FIGURE 5715

MSGPSWRRGKQARCQAGPGLLGKRLWRGWYFSPFNRSGLCLQQMRNKSIKAKLRLILLAARICIRALYIQVNKDF
LELLMWR

FIGURE 5716

TCAATTTTCATTTCACCAATCTTGTTCGTGATTTAGGTGTTGTGTGTCATCCATTATATCTTTAATGGTGAAGAA
TATCCTAAAAACTCTGATGTTCTTAGGAATATTGTTCTTTTTTTAAAAATTATTTCAGGTACTTGTCTTGGGCCT
TAGACACAAATCAGGAAGAACGAGACAAGGGTAAAACAGTAGAAGTGGGTCGTGCCTATTTTGAAACCGAAAAGA
AGCATTTCACAATTCTAGATGCCCCTGGCCACAAGAGTTTTGTCCCAAATATGATTGGTGGTGCCTCTCAAGCTG
ATTTGGCTGTGCTGGTAAGAAAGACATTTCCAGTCCATCTGTATATTTGTTAGTAGCCCCGCTTATATCTTTAAA
TTTGAATTTATCTTCTAAAAGCTCAAATTCAGGTTGCAGTGAAATATAATGATGTACACGGTCACAGTTTTCATC
ATACTAATCTCTCTTCAAGAAATCTTCAAAATTTGATTTACTTCTGAAAATACGTTTCACCTTTTCTCTCCTGTT
GCTATTATCTATTACCATGTCAGAACTTAGTCTCCATTAAATGCCAAGCCCACCGTTAGGCACCATGGGTAAAAA
ATGAATAGGAAACCATCTGTTTCATACGGTCTTCAGTCATTTTGCGCTTTTCACAATGTACTGGTAGTAGATCAC
AATTTTTTTTCCTTTGTAGTTACAATAGCTAGAAAGTAAATGTTGGAATTTTAAAATATGCAGGTATACTAGATT
TTGGGAATGTGGGGGATTGGAAGCATCTAGACATTGTTTGATTTGTGACATTCAAAAGCAGGTACGTCATAACTC
GTTTGCTTCTATTTTCTTGCAAA

FIGURE 5717

MNRKPSVSYGLQSFCAFHNVLVVDHNFFSFVVTIARKKCWNFKICRYTRFWECGGLEASRHCLICDIQKQVRHNS
FASIFL

FIGURE 5718

GCTCCAAAGTCGTACTCTCATTTCATTTTCATGAGTCACAGCTGGGGCCTTGTGGGAAGAATCGAAGGTCAGCTT
ACTCAGGAGTGAGGGGCATCAGGTCCAGTCACAGGCCAGCCAGGGTGAGGACCAGGGTGGACCACTCAGCTCTGG
GACCCTGTGTGTGTGTAGGGAGGGAGAAGAGGTGGGAGGACCATGGGCTGCTTATCCCCAGGAGGTGGGACGAAG
GGGGAGGCCTGATGCTGGGAGGCTTGTGTGGTCCGCCACCAACAGATGGCTCCTACCAGGGCGACAGGGACGGAG
GCGCCGGTGGCAACTGGTGCTGGGTCAGAACCAAGCCACTGCGTGCTGTCGTGGGTGCAGAAGCTTAGCTTTGGG
GTAGAAGGGACAGTGGGCCAGGGGCCTTCCCTCAAGAAGCTCCAGCTCACTGAAAGCCCAAGCAGACCCCTGAAG
GACTATATCTCTGTGTGCCGAGATGCTCCCCTCCATGAGCTCCACCTTCATTGTGCATAGGACGCTGATTCTTAG
TACACAGCAGCAACAGAGCTTCAGCAGATGCCTTCTTGGGACCGCGCTTGACTCTAGTTCCTTCTCCCCGGGAGG
GAGAAAGGGAAGGAGCCTTTGAAATTTCCCCTTTCGCTATGTTTCACTGGTTTTTAAACAAATAGGGCTAAATAG
AGACCAAGAAGTTAACCATGTACCTTAACGTGCGGCTTTAGGCAAAATGTTATTCCAAAAAAAAAAAAAAAGCTT
CTAAAAATTCATGTACCATCAAGGAAATCTTCACATGAATGGGTTTAGAAGCCTTTCTTGATAGCAATGTGAACT
TGAAGAAATGTGTGACATCCCGTTTACTCCCATCAACAGGATCTATTTCCAAAACTCATGCTCCTGCCATTTCCC
CACAAGCATGCTGCG

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FIGURE 5719

SKVVLSFHFHESQLGPCGKNRRSAYSGVRGIRSSHRPARVRTRVDHSALGPCVCVGREKRWEDHGLLIPRRWDEG
GGLMLGGLCGPPPTDGSYQGDRDGGAGGNWCWVRTKPLRAVVGAEA

FIGURE 5720

GCTCGAGGCGTGGCGGGTGCGCAGTCCGCTGGGCAGAGGCTTGGGCCGCCGAGCTGGACCCGGACCGGTTTTGGG
TACTGTACTGGGGGCAGGGCAGAGAGGTGGGCGGCAGTTGGGGTGCGGTGATTGTAGTAGGCTAGGGCGCTTTCG
GGTCCCCATTGCAGCCCCCGGA**TGA**GCCCGCAGTATTTTCCTTATATGATCAGGTCCCATTGCGGGCGGCGCCGC
TTGCCCGGAGCCTGAGAGGATTATGAAAACGTGGCGAGCGAAATGGGGCCAGGGGACCTGGAGCAGGGGCGTGAG
GAGAGTAGGCAGCGGGTGAGGCTGGATGGGAGGGAGGTCTAGGGAGGCCTCTGCCGCGGGCACTGTGAGTCCTGG
CCGATGATGACGAGACCACTGCGCAATCTGAGTTCTGGGAACCAGGTGATGGAGTATGTTCTGAGAACAGACTGA
TGCC

FIGURE 5721

LEAWRVRSPLGRGLGRRAGPGPVLGTVLGAGQRGGRQLGCGDCSRLGRFRVPIAAPG

FIGURE 5722

TTTCAGTGCTGTAAGAAAGGACGGAGGCTGTTATCTATGGCAGATCTATCCAATAGAGGAGAGAAAGGACCGCAT
ACGCCTGGATCTCATCATATGCAATAAAGAGTTTGACCATCTGCCTCCAAGAAATGGGGCTGACTTTGCCATCAT
GGAGATGAAGAAGCTGCTTGAGGATCTGGGTTACAGTGTGGATGTAGAAGAGAATCTGACAGCCAGGCAAACCAT
GGGGAACAGTGGGTCAGAGACTGTCCAGCATCTTTGGGAGTCATGTCTTCACAGTCACCTAAGAACCTGGAGGAT
GCAGTTTGCAAGACATACCAGAGAAGGACTTCATTGTTTTCTGCTCTTCAACCTCATGTATACGTCTTTTGGTGG
TATTAAGTGATTTGTGGGCCTGAGGCTACCTTTGAATGATTCTACCAAATCAAGAATCCCTAAGAAACAATGATC
CGAGGGAATGTTGTGTGCTCTCCCATATTTTACATGATCTTAGATGTGATGTGAAAACAGATTCCTTCCCCCTCC
CACACCCACGTTTTTAAAAATTGTACTTTTCTTATAAGTGTTACAATTTAAAGCCAAAGGCATACCAAATATTAA
AGCAACACAACATAAGGAATCCCATTCACCACACACCATTTAAACACAAATGATGGATTCTGTTATTTATCAAAC
CCATTTAATGTTTTGTGTAGTGTTTTCATGGATTCCAGGAATGGCTTCCCTTTCTCAAATGATCAATTTCAAGTC
TTATTCTCCATATTTCCCATCTGATTCCACTATGAGCAGTGCCATTGCATGCCCTACTAGAACTGTGGATACGCT
TTAAAACAAGTGGAAGATGATAGGGTGGGACTCATTACGTCTAATCTTGGGGAACACTGATAACGTGTCCAGGAG
AGACAGCACAAGGGGCTCCATCTTCATCACACAACTCATCGCATGCTTCCAGAGATATTCCTGGCGCTGCCACCT
AGAGGAAGTATTTTGGAAGGTTCAGCAAGCATTTGAAAGTCCGGAGGCAACAGTCCAAATGCCCACCATAGAACG
AGTGTCCATGACAAGATATTTCTACCTCTTTCCTGGCAACTGAAAATGGTTAAGCATTGAGAGTTGTTGGTGGTG
TATGAAATAAATGAAAGTGTGATATTGGAGGAAACCACAAGCAGCCCAGCCCTCCTTTATCAACTTCAAGAAACA
CCTTTACTAGTACAGATTGAATGCTTAACATTTTGTATTTCAATAAAGGTGAAGACAAATG

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FIGURE 5723

FSAVRKDGGCYLWQIYPIEERKDRIRLDLIICNKEFDHLPPRNGADFAIMEMKKLLEDLGYSVDVEENLTARQTM
GNSGSETVQHLWESCLHSHLRTWRMQFARHTREGLHCFLLFNLMYTSFGGIK.

FIGURE 5724

CCGGGGCGGCGGTTGCATCAGATTCTAGGAAGTGTCTGTAGCCGCAGCTGCGGGTCCGGGATTCCCAGCCATGGC
AGATTCCTCCGGGCAGCAGGGCAAAGGCCGGCGTGTGCAGCCCCAGTGGTCCCCTCCTGCTGGGACCCAGCCATG
CAGACTCCACCTTTACAACAGCCTCACCAGGAACAAGGAAGTGTTCATACCTCAAGATGGGAAAAAGGTGACGTG
GTATTGCTGTGGGCCAACCGTCTATGACGCATCTCACATGGGGCACGCCAGGTCCTACATCTCTTTTGATATCTT
GAGAAGAGTGTTGAAGGATTACTTCAAATTTGATGTCTTTTATTGCATGAACATTACGGATATTGATGACAAGAT
CATCAAGAGGGCCCGGCAGAACCACCTGTTCGAGCAGTATCGGGAGAAGAGGCCTGAAGCGGCACAGCTCTTGGA
GGATGTTCAGGCCGCCCTGAAGCCATTTTCAGTAAAATTAAATGAGACCACGGATCCCGATAAAAAGCAGATGCT
CGAACGGATTCAGCACGCAGTGCAGCTTGCCACAGAGCCACTTGAGAAAGCTGTGCAGTCCAGACTCACGGGAGA
GGAAGTCAACAGCTGTGTGGAGGTGTTGCTGGAAGAAGCCAAGGATTTGCTCTCTGACTGGCTGGATTCTACACT
TGGCTGTGATGTCACTGACAATTCCATCTTCTCCAAGCTGCCCAAGTTCTGGGAGGGGGACTTCCACAGAGACAT
GGAAGCTCTGAATGTTCTCCCTCCAGATGTCTTAACCCGGGTTAGTGAGTATGTGCCAGAAATTGTGAACTTTGT
CCAGAAGATTGTGGACAACGGTTACGGCTATGTCTCCAATGGGTCTGTCTACTTTGATACAGCGAAGTTTGCTTC
TAGCGAGAAGCACTCCTATGGGAAGCTGGTGCCTGAGGCCGTTGGAGATCAGAAAGCCCTTCAAGAAGGGGAAGG
TGACCTGAGCATCTCTGCAGACCGCCTGAGTGAGAAGCGCTCTCCCAACGACTTTGCCTTATGGAAGGCCTCTAA
GCCCGGAGAACCGTCCTGGCCGTGCCCTTGGGGAAAGGGTCGTCCGGGCTGGCATATCGAGTGCTCGGCCATGGC
AGGCACCCTCCTAGGGGCTTCGATGGACATTCACGGAGGTGGGTTCGACCTCCGGTTCCCCCACCATGACAATGA
GCTGGCACAGTCGGAGGCCTACTTTGAAAACGACTGCTGGGTCAGGTACTTCCTGCACACAGGCCACCTGACCAT
TGCAGGCTGCAAAATGTCAAAGTCACTAAAAAACTTCATCACCATTAAAGATGCCTTGAAAAAGCACTCAGCACG
GCAGTTGCGGCTGGCCTTCCTCATGCACTCGTGGAAGGACACCCTGGACTACTCCAGCAACACCATGGAGTCAGC
GCTTCAATATGAGAAGTTCTTGAATGAGTTTTTCTTAAATGTGAAAGATATCCTTCGCGCTCCTGTTGACATCAC
TGGTCAGTTTGAGAAGTGGGGAGAAGAAGAAGCAGAACTGAATAAGAACTTTTATGACAAGAAGACAGCAATTCA
CAAAGCCCTCTGTGACAATGTTGACACCCGCACCGTCATGGAAGAGATGCGGGCCTTGGTCAGTCAGTGCAACCT
CTATATGGCAGCCCGGAAAGCCGTGAGGAAGAGGCCCAACCAGGCTCTGCTGGAGAACATCGCCCTGTACCTCAC
CCATATGCTGAAGATCTTTGGGGCCGTAGAAGAGGACAGCTCCCTGGGATTCCCGGTCGGAGGGCCTGGAACCAG
CCTCAGTCTCGAGGCCACAGTCATGCCCTACCTTCAGGTGTTATCAGAATTCCGAGAAGGAGTGCGGAAGATTGC
CCGAGAGCAAAAAGTCCCTGAGATTCTGCAGCTCAGCGATGCCCTGCGGGACAACATCCTGCCTGAGCTTGGGGT
GCGGTTTGAAGACCACGAAGGACTGCCCACAGTGGTGAAACTGGTAGACAGAAACACCTTATTAAAAGAGAGAGA
AGAAAAGAGACGGGTTGAAGAGGAGAAGAGGAAGAAGAAAGAGGAGGCGGCCCGGAGGAAACAGGAACAAGAAGC
AGCAAAGCTGGCCAAGATGAAGATTCCCCCCAGTGAGATGTTCTTGTCAGAAACCGACAAATACTCCAAGTTTGA
TGAAAATGGTCTGCCCACACATGACATGGAGGGCAAAGAGCTCAGCAAAGGGCAAGCCAAGAAGCTGAAGAAGCT
CTTCGAGGCTCAGGAGAAGCTCTACAAGGAATATCTGCAGATGGCCCAGAATGGAAGCTTCCAGTGAGGGGGCAC
AGGACTGACTTTTTAAACCATTGTGGACTAGTGGCTGCTGTCTGCCTCAGTGACAATGTCCCAGCGCTCCTATCA
TGTTTACAGTCACCCTTGGGTCCTAAATTAAGAGTTGTGTTCATGTAGGTTCGTGTCGTCGTTGGCTCTGAGACA
TTGATAATAAATTTTTCTCAACAGTGAAAAAAAAAAAAAAAAAAAAAA

FIGURE 5725

MADSSGQQGKGRRVQPQWSPPAGTQPCRLHLYNSLTRNKEVFIPQDGKKVTWYCCGPTVYDASHMGHARSYISFD
ILRRVLKDYFKFDVFYCMNITDIDDKIIKRARQNHLFEQYREKRPEAAQLLEDVQAALKPFSVKLNETTDPDKKQ
MLERIQHAVQLATEPLEKAVQSRLTGEEVNSCVEVLLEEAKDLLSDWLDSTLGCDVTDNSIFSKLPKFWEGDFHR
DMEALNVLPPDVLTRVSEYVPEIVNFVQKIVDNGYGYVSNGSVYFDTAKFASSEKHSYGKLVPEAVGDQKALQEG
EGDLSISADRLSEKRSPNDFALWKASKPGEPSWPCPWGKGRPGWHIECSAMAGTLLGASMDIHGGGFDLRFPHHD
NELAQSEAYFENDCWVRYFLHTGHLTIAGCKMSKSLKNFITIKDALKKHSARQLRLAFLMHSWKDTLDYSSNTME
SALQYEKFLNEFFLNVKDILRAPVDITGQFEKWGEEEAELNKNFYDKKTAIHKALCDNVDTRTVMEEMRALVSQC
NLYMAARKAVRKRPNQALLENIALYLTHMLKIFGAVEEDSSLGFPVGGPGTSLSLEATVMPYLQVLSEFREGVRK
IAREQKVPEILQLSDALRDNILPELGVRFEDHEGLPTVVKLVDRNTLLKEREEKRRVEEEKRKKKEEAARRKQEQ
EAAKLAKMKIPPSEMFLSETDKYSKFDENVSMVCPHMTWRAKSSAKGKPRS

FIGURE 5726

CAAATCCAGTCTCTAGCAGTTATGTTGTTAGAATGGATTCATCTGTGCTTATTTCACAATACTTCATTTATAGCA
ATGCTTTTCCTTAAGCTAATGTATAAATATTTCTAAAGGCCATTAATAGTAACAAAATAAGTAGGGGAAAAAATG
GACCTTCTGTATAAAAACCCCTTAGCTTTTTTTTTTCACAAGTTATAAGTGGAATAAGTTAATAACTGAGCTCGT
AAGTGTATCTCATAACTATAAGAGCTACATGAAGAAAATAGGAATAACACACCTGGTATTTAAACACAATCTTCA
AAATTCTTGCAACATTAAACATAGTAAAATGCCAGAATATAAAATGAGGTGTGCTAATGGTCACAGGATTGAGGC
CAGCATTACAGTTTGGGGTGATTTTTCTTTTATTTGCTCCCTCACTTTGTTTCCTAGATGCTAGTAGGGGTATCT
GGGTTGCTTGAGATACCATTTTGCAATTGCCCCTTCTCTTTCTGCCTACCATCTTCTCAGGCCCTGATGAGCTTA
TTGGTAGGCAACTGGGCTGCTTTAATGTTGAACTTGTACTTCTTTAGAAACTGAAGTGGAATCATTGAAAACTTT
CAATAAAGCTTTAAAGTTCCATTTACTTTTGAAGCACAGCTAAGCTCCTCTGAAGGCAGCTGGTTTGTTGCAAAC
TTAAAATTGTACTGAAAAGTTGCCACTTTTTATTTAGTAAGAAAACAAACATTCTGGCTCACTAGAGTTCAGAAA
AGTAATAATTTGAGCCAAAGGAATTTGAATTAAGAAAATAGAAACTAGGTTTCATGTATTTAAAAAATAGGAAAT
AAAATAGAAACTCAAATGCCATGAAGTTATCTTCCTCTTCCTTATATCCCCTAAGTTTGGGGATATAAGGAAGAG
GAAGATAACTTTCCAATTCCTAATAACCTAAATTATTTTGAAATAGTGTTTTCAGTGAAATGATGAATGTTTGAA
TGTTTGTTTGGTAATCAACATAACAATGCTAACAAAATTCCCACTTAGATTTTTTAACTTTTAAAAGTCAGCGTG
GTTTTGATAATTTGATATTTTAAATGNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNTGTTAATAAAC
TGATAGGATGGAGTGAGCAAAATTGTTTTCAGGGAAGATGGCACATTTTAGAAAAGACTTGCCCAGATGATCTTC
CATATTGCTCCCCCAATGTCATTTATCGCTCATGCCAATCCTCCTCTTGTTACCTGTGGCTATGGTAAAATTCCT
TTAACAAGCTTCATTGTGTCCAAGTATTTCAGAGACTTTTAAAAGCTGGGCATGACATAGCGTTTTGTGCTGTTA
AGACCTTAGCAGAGTCAGGTAGTTTACGGGTAATATTCAACCTTGTGCATCTGAATCTGTCATGGATTCCCTTCA
CTCAGCACTTTGCCACTAATTTGTATTACACTCTGTGGCCATATAATACTTGCACATTATGCAAAAAAAAATGTT
GATAGTATCTCCTTGCCACACAATATGCAGAGTTGACAACCTTTGAAAACCAAGGTAACTAATATGTATGTCCTA
GTTGTGTGGCGCTTGGTAACAAAGTCTGTACATATTATGTATAAAATGTGTATTGGTTAGCATTTAGTACTAAGA
AATTCTGAGTTTAAAATAAGTGATTTTTTTCAAAGTAGCGATATCTATATCTGTGTTTATCTAAAAATACTGGCT
TGAATAGAAAACATTCTCAGATGATTCAAGATTGAGTAAAAATGAGAATCCCATACATTCCATTATTAAATTCTG
CCCTATTCCCAATTGTTAGCATCTGGCTGATATTAAGGTCTTTGATTGTCACAATATTCTCAATAAATGAGACAT
TCTGAACTGCCTGGTGATATTTTCAAAAAGAGCAATTAAAATGTGTATTCCCTCTAATACAGCTGATAGAACTGT
TGTGTTAAAGCAAGTTGGAAATTTGCATGATAGTGTGGAAACCAATGGAGGTCCAAAATATTAATCATATCTAAA
ATATCAGAAAATATCAATACTAGTCTTCTTTATGCATATTTTTGACTTTTTAAGAGGGCTTATGAATTCAATGTT
TCTTCTGAGGCAATCCTTTTAATGTAAATACTAAATACTTGCATGTCTTTTGACAAAGGCTAAACTACAATCTAT
TAATATGCACATTTTTGATAAAATATAAAGTACCCTAATTAAAGAAATTGTGGTAGAAGGTGTATGTCCTGAATA
CTATACCTGTTTAACAATACCAAATGTTAAATAAAAATAGTTTGAAATTAATGTTTAAAA

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FIGURE 5727

QIQSLAVMLLEWIHLCLFHNTSFIAMLFLKLMYKYF

FIGURE 5728

TGAAGTGTTGGGATTACAGGCGTGCAGCTGCGCCCGGCCAATTTTAACTTTTCATAATAGATTTGTATATATTTA
TGGTAGTAAA**TGA**TAAAATAGACTAGTGTCTACATATATTATATGAATTCATGACACACCTTTTTCTTAGTTTTT
CAGTATTTCTAAGCTACATGGTGCATCTGCAAGTTTTTTAAATTGTTGCAAATTTCCAAAAAAATTTTCAATATA
TTTATCAAAATATGCATATAAGCGGTCCTATGCAGTTCAAACCCGTGTTTGAGAATCAACTTTATGACTTCCAGT
GTCATTCTCCACCATTTCTGCAGTTTATCACATTTTGCTTCAGGCAGATTTGGTAAATCTTCAATGATAGTTCTC
TAGGCCATTGTTTTGTAACATGATCAAATGCTTAATGGGAAATAGAATATGTATATGTATTCTTTGTCTACCAAC
TACCAAAGAAACAAATACTCCTCAGTTTGACTTGACTTAGTAAATAAACTTGTGTTGGGTTAATGGAGCTAATGG
TTATTTTACTTTCTGCTGAATCTGTTCTCTAACCTTTTGCCCTGAGGATTAATATTAAGTATATTGATGTACAAT
TTTTAGAATGTGCCTGCCCCCTCTCTTCTTAACGTGACATTGCTTACCTAACTCTGGGCTTAATACTTTTACTAT
TCTCATGTTTTATAAACAGAACAGTTTTGTGGTTATACTTCAAATTCTTTAGATATCATAAATCAATTATTTTAA
ACGTTTTGGCCTTAAGATCTTAACATTTAAGAACTTAACACTCAAGAACTTAATGCTCTGGAAAAATATTGATGT
CCCCAAAGGGTGTTTTCTTTTTCTTGCTT

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FIGURE 5729

EVLGLQACSCARPILTFHNRFVYIYGSK

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FIGURE 5730

AACACAAAACACAATGAAAAAATTGTTGAATCTTAAGCTGCATGTTGTGGAAAAGAACTGTACCAAGGNGGCATA
CAGAGATTAATGTCATCTTAGATGAACAATTTTTTCACCCTGCTAGTTTCCATTTGGGACATAGGGTGTTTGCTG
TGGTACCATGCATAGACACTCAGAGCTTAGCAGAGTTATGTCAGATTATCTCTCTAAAACAATGTGTTGTTCCTT
ACCAAAAAACGTAAGCCCCTCTGGCCGGACCTTATTTTGGTCATTATGGGAGGCAGAGCATTCCAAGGTCAAATG
ACGGGTTTTCCATCTGGGAAGTATTCTTTTGGTTGCTGGTGTTTCCTTGGGAGTGGATGTAAACCTTAAGTAGCC
AGTAGTGACCTTGAGTACCTCTGGATTACTAGGGAAGGGGAGGTAGGGATGGGAAGTTGGGCGGTACACCTGATT
ATAGCAAGCATGAAGATAATAGTTTTAAGTTTGCTGTTTTGAATCTGGGCACTAACTTCAATGCTTGCCGGGAAA
ATCTTATCTTGTAAAGCAAATCCTAGTGAGGTCACGAAGTGTGTCTCCTCCTCCAATTGGGGTTCAGCACTATGG
CTTGGTGCCCTCCATGTACCAATAGTTTTGGGTCAGGCCTAAGGGGTCCTTGGTCTTAGCTTTGCCCGGTTTGAA
TATTTTCTCTGCTGTTAACTGGGCAGGGTGGCATAGGTGGTCATCTTATTACCTTCTGTTGCCTGATGTGAGAAT
CAGGATACCCAAGTCTGGCTTTACCTTAAGCCACCAGATATGGACACATGTCTGCATTATCTTTGTATTCTTCTC
CAAGAAGGATGCTCCTAGTGAGTGAGCTGCCTTTCTTTGAGAGAGAGTGGGAAAGTTAATGAGTTCACATTTAGA
AAGTACTCTGGAGTCTTTGGTGATTCAAGGAGTGTTATTAAATTAGTGGGAGATATGATACGGAGTGGGGATGCT
AAATACATATGAGCTCCCCAAGGGTGAGTCATGTGTATGTGTACAGGAAATGCATCCTTATTTCATATAAGATCA
AGAGTTCAATCTTACACCTCCCTTGCCTCCCAATGGAAACCAAACATTCTTCAAAACTGCTGGATGCTTGCTTTT
CTTTACATAACTGCAGTTCAGTTGGAGGAGTGAGAGAAGTGAAGCTAATATTTACAGAGAGTACCTACTATGTGT
CAGATACTTTGCAATGTGCTTTACAGAAATACATAATCACATTCTTTAAACAACCCTTTGAGGTTGATGCCTTAA
TTCCCATTTTGTAGATAAGAAATTGAGTCCAGAATTAAGTTCAGATAATTTGCCCAAAGCCATAGAGTTTTCAAG
TCATAAATTTGATCTTAGACCTTTCTAGTTGCCAAGGCCTTCCTACTTAGACAGAATCCATTTGGAGAGAAAACT
TTCTAACATTCTTCTAAGAGGTCTTGATTCTTGGCACATTCTTCTGTGTGATGTGTTCTCTGTCAGGCTTGTCAT
TATAGGGGCAGGAAGAACGCACTCATTTCACTTATACATATCTACCATTGGGATGTGTTAGTAGTGGGAAAGTAA
A

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FIGURE 5731

TQNTMKKLLNLKLHVVEKNCTKXAYRD

FIGURE 5732

GTGTGAGGAATGAAACCGAGGGAAGGCCATTTTTAAGTAACATGCTGTCTTTTATCTTGTCAGCGCTGCCAGTTT
TTGTTTAGTATAGCATTCCAGTTTCTGTAATAATTTTAAATGGAAGTAAAGTAAGGAAAATGTATGATAACTGAC
TTTTTACTCTGATGTTACCATAGGGGTAATGAAGTTCATCGCAGATTGTTTTCTAACCTTCGGTGCATGTATTGA
AATAGATTTTTGTTTTAAAAATATGAGATTACATTTTTCTGGATCTGGTGTGCATTGGGGTAGAGAGGATGACTG
TCTTAAAAATAGATCGTGTATTCTGCCTAGAGCAAAGACTCTTAAGTCTTTTGGCTGAAAATGAACTGAGTATGG
ACAAAAATATTGAAGTATTCTACTTGTAAACTTACCGTATAATCAGTGTCTTGATAAAATAGTAGTTTTTGTTGG
TTGAATCTAAGAATGTGTTGGACTTGGGTAAATTTCAGACATGACCAACAACAAAAAACAAAAGCCCAATTCCTT
AACCTTTCCTGACTGAAACTTCTCAGGAAGAAACCAGTTTTGAATTGTATGACATAAATAAGATTGTCTTTTATT
ATAAGTTTTTAAACTATGTAATAAAACATTTGGGGATAACATCAGTTGAATGTGCTACTTTTAAAGCATTAAACC
ACTGACATAAGCCTTCTGTATTATAGAAACTTCTGAGTTACCAAAATTTAGTCTGGTACAGAGCCCTTGAATATG
TTGTGGTTCCCTCATTATGGCCCTTCATTCCCTTCTGTGTTAATAGTAAAGCATGTTGCCTAATAACTACAACCC
TGACCAAATTTGGGCCTGGATCTCATGGGTCACGTGGAGTTTTAAATACGATTTTTAATTTACTTGGGTAATTGA
GCTGAATCTTTAGTTTTCAGATTACTTTTTTAAACAGATAGGCTCTTAGAACAAATTATTAAAAACATAATACCC
CATTGGAGGGGAATCTGGATTAACTACCCACTGTTCCCACCCCCCCCAACTTTTGAAAAATTTTGGCCATATAGA
ATGCATGAAAAATCAGTATGATCTTATGAGGACTTTATAGTACTGTAAATCTTAGGAGCACTTTANNNNNNNNNN
NNNNNNNNNNNNNNNTACCAGTCAAATAGCAGTGGGAGATTGTATACCAACTTTAGTGACACTGATATTAGTAAGT
TCTGATAACCCACTACCATCGGACCAGCCTGGAGCACATTACTTTGGCCAGTGGAAAGTCTCTTGGAGAGACTTT
GAGGTTTGTGATGACAAATCATGCTATCGTTAAAGTTAAATACATATATATACACACCTAGAATATAAGCAGAAT
GGAAAAGTTGGCAGGGATGAATTCAAGAACATTAGAGTGAATTTTTTTCATTACAGAATTGTTAGTTCCTTTAGG
AACTTAGTCTCGTAGATGTATATATTTAATTAGCATAACTTGGACAGCACAAGATTAATGCTTTAACTTGTTTGC
AGGAGTTTAAAAAGCTGGTTTCTGTTGCCAATAGTTGGTTGGAAGGGAAAATGGAGATGCCACAAATAAAATTTT
TTGGATGTGCAAAACAGTTTTGATTTTATTTCTTACAAACTATAGGACTCCAAGCCCCCTGATCCTTGATCAGAA
CTACATTAACACCAAAAATCAAGTTATCAAAGCAGAGAGGAGGGTGCTAAAGGAGTTGGGATTTTGTGTTCATGT
CAAGCATCCTCATAAGGTGAGTTGTAGAGTACAGAAATTGGGTTCGTAAGTATTAGGACTTTTCTAAAAATTTTA
TTTTATATGAATTTATGTTTCTATCTGAGTGTTAACCTTGGTTTTAAAAAGCATTCTTTTAAAGGTTCAGGCTTC
ATCGAAAAACATTCTTTTGGATGTTGAGATTTATCAGTAAAATGACAGTCAAAAATGTAGGTTCAAATCTTAAAT
CTTAATTGTGTGCTCATAGAGAAGTTATTTTTGTTTCTGTGGTTAAAGTCCCAGTTTTTCCACCTAGAAAACAGA
GATGTAAAGTTCCTCATTCCAAGGAATAAATGTGTAGCTACAAAAGTATCTGGCACACTTATCATCATAGTAGAA
TGTTCTAAGTGTGTTGGCTGCTCACTGTTACCATTATTGGAAATTTGTTTCTCCCAACATCTCTTAGCTTTCATT
ATCAATATAAGCCATAGAGTGAGTTACCCGGGTCAGGACTACCTGGGTTAGAAATGTACCTTGGGAAATTAGGTG
AAATAATCTAGCACGGTGCCCATCACATAGTAAAGTGCCAATGAAAAATATTCTTTTAATTGCCTTTTTTCCTGT
ACAATTTTGAAATATGCTTCTAAACATAATTTATATAAAATCTAGTCATGTAGCAGTTCACATTAGAATCTTATG
TACATTTAAATTGGTCTGTATTATCGATGCACAATTAGAACTTGAGTCTAACATTTTCAATTACTTTTTTCATTG
AACTCTACTCCGAAAGAACTACCAGTATACTAAATTGAGTTTTTTTCCCTTGTCCTTCAGATCATTGTTATGTAT
TTACAAGTCTTAGAATGTGAACGTAATCAAACCCTGGTTCAAACTGCCTGGAATTAC**ATG**AATGACAGTCTTCGA
ACCAATGTGTTTGTTCGATTTCAACCAGAGACTATAGCATGTGCTTGCATCTACCTTGCAGCTAGAGCACTTCAG
ATTCCGTTGCCAACTCGTCCCCATTGGTTTCTTCTTTTTGGTACTACAGAAGAGGAAATCCAGGAAATCTGCATA
GAAACACTTAGGCTTTATACCAGAAAAAAGCCAAACTATGAATTACTGGAAAAAGAAGTAGAAAAAAGAAAAGTA
GCCTTACAAGAAGCCAAATTAAAAGCAAAGGGATTGAATCCGGATGGAACTCCAGCCCTTTCAACCCTGGGTGGA
TTTTCTCCAGCCTCCAAGCCATCATCACCAAGAGAAGTAAAAGCTGAAGAGACGACAAACTTGCAGCTTAAAATG
GGCACCAGTTCCCACACTGGCTTAATTTATATAACTGCTTGGCTGTATTGCGGG**TAA**TAATATTAGAAGCAAGAA
GCACTTCATTTTTAAAAGAGATGTTACTATAATATTGCTTAAATGCTTTAGCACTTGGACTTCTTGAGATGCAGA
TGTGTGATTTGGAGTGCTGGCTTATTTAAAGGTCAAGCCAAGGAGTTTGTGGTTCAGCCACAACTACTGTTTCCT
AAGACTATTGATGTGAAGGACTTAGTGAAGTAATTTTTATATTCTGGGCTTCCCAGCAAGATGTCCTTTTTATGA
CTGCCATGCTTCTTTTGGACTCAGTAAATATTTGTAATGTTAGAAAAGTCTCATTATTTTTATAAAATGCATGAC
ATTTTAAGTATGTGTTGCATAAAATGGATTATAGCAGT

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FIGURE 5733

MNDSLRTNVFVRFQPETIACACIYLAARALQIPLPTRPHWFLLFGTTEEEIQEICIETLRLYTRKKPNYELLEKE
VEKRKVALQEAKLKAKGLNPDGTPALSTLGGFSPASKPSSPREVKAEETTNLQLKMGTSSHTGLIYITAWLYCG

FIGURE 5734

ATTGAGGAGCGACTAATATAGCTCCCTGGCGTTGTAGGTGGGAGAAGTCAGGAGTGAGTTGCAGGTGCGGGCCGT
TCTTTTGGTTTTGTCCACGGATAGCTGAGTTACAGAGTAACTGTGTAGTCTGTGTGGTGCAGGGGGTGGCAGAGG
GGAAGGGGCAGGTGAGGCTTGGCATGAGGGGCTTCTCATTGCAGGCGTCCGAGGGAGTTCAGTGGAGGAGTAAGA
CCCAGGGAGAGCCCAGCTGGGCTGAGGCTTGTTTTCTGCACATGGGTTGCTCCACCGTGAATAGTTAATGAACTA
AGTGTCATTTTCACTAAATCTTTCCTTTGCACCAAACTCACTACCATTCTTCATGGAGTCTTTCTGGGGCTTCTG
TTTGCAATGACTCATCTGGGGAGAGGACGGAAGGACAGTCAGTGTCCAGCTTGGTTGGTAGATGGGTAGGTCAGA
TGGAGATGAGAAAGACCTTTTCCCCTCATCACTCTCACGCAGTTAATCCAGAGCCCCTTAGAGAGGTTTACAACT
GGAGCTGCTATTTAAAGGCCTAGATGAGAATGTAATAGTAATAATGATCCTCATTTTTATTCTCAGCTGACAGAG
CAAGGGAATGTGTGTGAATGCTAATCCATGCACATACATGTCTATAAATATTCTGCATGGAACCATCTGTGTCTA
TGTCAAGCTAAACTGGGGTTCATACCAGGGTCTCCAACCATAGCCCATCCCCACTGGGGTCCTTCCAGCTCACTC
GGCTTCTGGATGTACGACTCCCACAGGTGGAGGAAGGCCCCCAGAGAAGTCTGCTGAAAATTGTTATTCATGAAT
GGAGGTTGGACTTCTTCAGATACACTTCCCGAGTCTGTTAACATGGTGATGTGACGTTTGCCCTTCATGTTACTC
ATAGGGACTATTCTGTTAGCTACCAATTCTGCTGCTTTAAATAAAAACACCATTAAAAAACAAAAAGAAACCAAA
TTGTAATAAAATATTTGCATACATATTAAATCTGAAAGACCTATATCAAAATATAAAGGTCCTTCCTTTACAAAT
CAATAAATATACCTTTTTAAAAAAACAGACAAGACAG

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FIGURE 5735

IEERLI

FIGURE 5736

TGATCCACTCGCCTCAGCCGAAGTGCTGCGATTACAGACCTGAGCCACTGCGCCCAGCCTTGATCTTGAGGTAAG
AGGGTACTGTACAGCAGTTACTCTATCATAACACCTAAATAATACCTAAAGTTAAAGAGTTTTGATGAAGTTCTT
GGCAGCAGTGCTTTTCCCCTTCTGCTTTCCAAAAGGAGGTAAAAAGAAGCCAGTCAATTTCAAAAACCCCTATCC
TGCTTTTATTTTCAGCTACCTTGAAAGTGAGCTGAATCACCATGGAAATGTGCAAATGTGAGGTTTGCATACTTG
GTTTTAAGCCCTGAGCACCATATGCTAATCAGGCAATCAGGATTCTGTGCCTCCCTGCAGTCAGTTGCATTTCTA
TTTAAAAGTGCATTTTGGTTTGGAAGCCCCTTTCTGGAGCCTAACTACCAAAAGGCAGCAACTTTTTGTATCATT
ACAAAGAAAGCTGTGTAAGTGCACTCCCAAGCAAAGGTGTGGTAGGAGAGTAGCAGCCACAGAGGACCCAAGCCC
AAGTCTTGGCCTGAGTTAAGTTAGTGCTATTGCTCCCATTGACGTGCTATGATGTGAAGCCGTTTCTGGTACAGT
GTTCCTTTGCTCAGCACCTTAAAAGCTTGGATTTAATAGTAACTGGGTAACCTTAATCAGTAGTCAGAATTATCA
ACACTTTGCTTTATTTGACACAACCAGACTTTCTCAGTTCCTGTTCTGTATCTAGAGCAACGTCTTCATACTGTT
TTTTCACAAAATTTTTATTTAAAACAGTTGTGACAGCCGAAGGANNNNNNNNNNNNNNNNNNNNNNNNNATG
AAATAACTTGTACAACTGGTGCGTACCATGGCTCCAGCCAGATGCCCAAAGCACTGGCTATTAATTCCTGGAGTT
CAGATGGTCAGTTGAGTCTATCCTAGTTTTTTGCTTCACTTGTTCAATCATGGAACTTTCTAGAACGCTGCCACT
CTTCAAAGGCTTCTCAATTTCAAATTTGAAAACTTAATTCTCTCCCTCTTAGTTTCAAAGTTGTTACAGTGTTAT
CTATGTGAAGTATGTGGAAAGTTGGGGGCTGGGGATTTTCCTCCAGGCAGATTAAGAAACAGCTCTCCGGGTCGG
GCGCTGT

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FIGURE 5737

MKFLAAVLFPFCFPKGGKKKPVNFKNPYPAFIFSYLESELNHHGNVQM

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FIGURE 5738

CTAAAAGCTGCTGTACAAGCCTTTAAAGAAGCAAGACAAAATGTTGCTGAAGTTGAGTCATCAAAGAATGCTTCA
GAGGACAATCATTCTGAGAATACTTTGTATTCAAATGATAATGGAAGTAATTTACAGCGTGAAGCAACTGTCATC
AGTGAGCAAAAAGTCAAAGAAACCAAAATATTGGCGAAGAAACCAATACATAATTCAAAGGAAAAAATAGCAAAG
ATGGAACATGGACCTAAAGCAGTGACTATTGCAAATTCTCCATCAAAGCCTTCAGAAAAGGATTCTGTAGTTTCC
CTTGAGTCCCAGAAGACACCTGCTGACCCAAAACTGAAAACTCTAAGTCAAACCAAAAAAAACAAAGGATCTGAT
AGCTCACTCTCTGGTAACAGTGATGGCGGAGAAGAATTTTGTGAAGAGGAGAAGGAATATTTTGATGATAGCACA
GAAGAAAGGTTTTACAAGCAGTCTTCCATGTCTGAAGATAGTGATAGCGGTGACGACTTCTTCATTGGGAAAGTC
AGACGGACACGAAAGAAGGAAAGTAGTTGTCATTCTTCAGTTAAGGAACAAAAACCACTAGAAAAAGTGTTTCTT
AAAGAAGATACAGGTGAAACTCATGGGGATACAAGAAATGACAAAATCAAGCCAAGTACAGAAACCAGAAAGTTA
GAATCAGTGTTTTTCCACTCTTTATCTGGATCTAAAAGCTCTAGAAGAAATTTCAAAGAACAGGCTCCAAAAACA
AGATCCCTAGATTTTCCACAGAATGAGCCTCAGATCAAGAATCAGTTTAATAAGAAGCTATCAGGAAGACTTGAA
AATACAAAACAGCAATTGCAGCTGCCTCTTCATCCTTCATGGGAAGCAAGCAGAAGGCGAAAAGAACAGCAATCT
AATATTGCTGTGTTTCAGGGGAAAAAAATTACGTTTGATGATTGATTAGTGCCTCTTTCTGCAAACTTTTCCATC
TAAAAAAAAAAATGTTTTTTTTGGGACAGGATCTCATTCTGTTGCCCAGACTAGAGTACAATATTGCAATCACAG
CTCACTGCAGCCTCAAACTCCTGGGCTCAAGTGATCCTCCCACCTCTGCCTCCCAAAGGGCTGGGACTGCAGGTG
CATGCACTACCATGCCCAGCTTTCTCACCCCAGGCTCTGCAGCTATTACTTAAACTCGTATTTGAATAAGTCTCT
TGGGGAGAATTATAGAATGTTTGTTTTTGTATTTTTTTTTAAAGTAAATTCAACTTACGCTTATATAAGCCTTTC
ACAAATCCAATATGTACTTAAATTGATTTTTAATAATATCCCTCAGACTGTTTCCCTTATGAAGTAATTTGGGGA
TTTTAGTGATCTCATATTTTCTCTTTAGTGCTTATCATGAAATGTGCTTCACTGGTTCAGCTCTGTTGTTTCCTT
AAACATAAATGTCAATATATATTTAAAATAATAATGGAAACATAGGAAATCAGCTATTTAAACCAGATCACCCTT
GTTAAAAATCATTCTTGTTAGCAAACTAAAATAGTAACTTTTATTATGGATGTACAGATAAATATTAATTTTATT
ATAGTTTTAAGTACTTGTGATCATGTACTTTTTGATTCTAAAATAGTTGTCTAGGACAATTTTGGGATTCTTAAT
TATATTTTAGTTAAGAAAATTGTTTAAATATAGCAATACAACCAATAATTTGTTTTATGTTTCACTGCATATAAA
TATTTCCATTAAATCAAGAATGTATATTATCTAGTTTTTACTATACTTATTTTAAAATTTTTGAGGAATCATAGA
TTCTAATTTTTAAGAACAAATTCTGAAGGTGGTAGGATTAAAAGAATATTTCCACTGATGGCTAAGCAAAGAAGT
TGTAAGATGACTCACTGAGGAAGGGACTGCTTTATACATCACAGTACTGCTATTTAAAAGGAAAACAGAAATTTT
TAAATCCCTTCAAATGTTTCACTTTTGCTATGCTGGGAAAAATTTTGAAGTTCTTGGTAAACTGAATAATGCTAA
TCCATGTTTCCTGCACATTAGTTCCTTTAATGGCAGGGAAGGCCATCTGGTTAACCTGTATTCACAAACTCTCAA
GAGTTTCTACTTATTTCAGGAGCTTAAGAATTTAGATAACTCAGCCGGGCGTGGTGACTCATGCCTATAATCCCA
GCACTTTGGGAGGCTGAGGCGGGTAGATCGCTAGAGGCAAGGAGTTCAAAACCAGCCTGGGCAACATGGTGAAAC
CCTGTCTCTACTAAAAATACAGAAAATTATCCAGGCGTGGTGGCCGGCATCTGTAATTCCAGCTACTCAGAAGGC
TGAGGCATAAGAATTGCTTGAACCTGGGAGGTGGAGGTTGCAGTGAGCCAAGATTGCACCACTGCACTCCAGCCT
GGGTGACAGAGTATGACTGTCTCAAAAAAAAAAAAAAAAAAAAAA

FIGURE 5739

TTACAGTTTTCATAAGCCGTTTCTCCCAAGTTACATGTTGTGTGGCATTTCATGTAGGTTTGTGCTCTGTGTGTG
TTATTAGATTGTCTTCCAGTCAGAATTCCTGGCTGTTAAACTATTTCATCAGCAGGAGTTACATCCCTATGTTGT
AAGGGTAATGTCCAAAAGATACAGTAATTTTTAAAAATAATGATTAAAGGACTTTGTTAGAAACAAAGAGCTATT
TTGTATTTAGTATTTGCTGTGAAGTAGGTGATAAGTCGAATTTTTTAGCTTCTCTCTGAGAAAAATGAAGTGTAA
GTGAGGCGTTACTTTTCGACATTTTCTACATGTAGTTTCCTTTTGTCTATTTTTTAACTTTTTTTCCTCTATTAC
ACTGAAATACATATTTAATCTGATAAATTCTAGTCAAGTGCAAATACAAAATAACAAAAAGAATTAAAATCATCC
ATGGCTCTAACCACTTAGGATACCTCCTATTATAGTCTATGTACTTCCAGTCAGCTCTCATTTTCTCTCACTTTT
TCTTGCTCCATATCTCTGTCATTTTATTTTTAAGCAACATATTATAAAATGCTATTTTCTAAAACTTTTTAAAAA
TTTAAACATAAATAAAATTTTATTTAACTTGTATATTATTTATTGGTTTAGTTTTTTATTATGAATAATGGT

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FIGURE 5740

TVFISRFSQVTCCVAFHVGLCSVCVIRLSSSQNSWLLNYFISRSYIPML

FIGURE 5741

TAGTCTATTCATGTTTATCTCCTTTTTTATAAAATAGATTACTTTTAAACACCCCTGCTAATATTTCAGGATATTA
TCACTTACGTAGAGGTAGTGGTCCCATTTGCTTCTGTTCCATTTCCTGGTGTTATTCATGTGTGAAGAGAATCTT
TTTGGCTGGGTTGGCCTGCCTCAAAGCTGCTCCAAACTTATAATTCACCAAAAGTGACATCATCCCAGCCACCAC
CAAAGAATTATGATTGGAGTCGAGGCATTGCCCATGGAACACATAACTCTGCAGTGGTTTCCCCTACAAAATGTC
AGCCACTCTTACGATGGAATGTGCCCTTGCCTGCTGTGGGCACCGCTCAAATCTAACCCATCATTTTTCTTTTCA
TTTTGATTCACTTTTCCTTTCAGAGATTCAAACAAAAAGAAAAATGGGAACTGAAAAAATTTGGGGTTTTGAGGG
GTGAGGGAGAGACCTTATGGTAGAAAATAAAGTGTTTTTTTTGATATCTGAAATTTTATATGCTCAATTTAAATG
TTTTATTGCGTTTGTTTTTTCCAACCTGTGGAAACCCCTTAAATTCTTACTGAATGCATAGATCTTTTATTTGCA
TGAATGTCCTGTATGCCGGAAGACTAAGTGGGAGCACTGAATGCTTTGAAGTTCTGTGCCTGTGAGACTTGGGTA
TTTTAATACATTGTTACCCTATTGCATCAAATCACGCCTAGGGATGCATTCAATAAAGACTGCCCCCTCCCCGCT
TAGCTGCGCTGGGACTCCCTTCTGGAGGGCCAGAGTTTCTACTTTGTTTCTACTTTGACTCCTAAAATGAGGACT
GAAGGGAAAGCAGATGGCATTTTGTACCTCTGACAATGAAGCCTAAATTGTTTACGTTGGAGAGGGAGTGGGAGA
TAAGCTAAAGAATGTGATTTGTCTTCCATTTGAAGATACCAGGGAAAAGTCTTGTCAAGTAGCAGGCCACCGGTG
TCTAGTGTAGAGGAGACGATTTCTGTCGATAGAGAGCAAAGCCAGCCAGGCAAACGAACCCGTAAGCCGCCTGAG
GGACAGACAGGCATAAAACCTAATGAATGGGTAGGTAGACTTTGGGCAAGGCTAATTGCAGCAAGCTGTGTTCAG
TTCCCCGGCCTCTGTTAAGTAGTCATTTTTATACAATCTGTCGGAGGGAAGAGGAAATAGACCCACACGGTAAAT
GAACTTGTGGTGTTTAGCTAGGAAGTGGAGTTTGCTCTAAGTAGCTCTGGTAGCAGACTCCAGGGAGCACATGGC
AGGCGGACTCATCTGAGTATCTGTGCTGAGGAGTTGTGTTAAACTGTTGAAACACTTAGAAATTGCTATAGAAAA
AGAGTACTCCCAAAGTTGCCAGCTAATATGGTACCGAATTTCCTGAAAGACCTTTCTTTTGCCATGTGGTTTTTC
TATAAAGCTGAGTCAATTAGGCTTCTTTATCTCCCTGTCCTTGGCAATAAAACGACAAAAGCCGAGGGTTGAACA
GGTAGACACTGTTATCTNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNGCAGGTGATAACAGCTGAGG
TGAAAGAGCATTTTTTCTGGGAAGATACAGGGTGTTTAAAGGTACCTGTTTAGTGCACAGCACAGTTGCAGTACT
TTTAAATTGGAGACTGGAATATGTAAGTAGATGTTTGAATCTCTCTCTGTCTTTCAGTGTTACAGGTGAATCAAC
AAAATTAGAATATCTTTCTATTTAGTGACTGAAGAAGGCGGTCCATGCATATATCAGATCTAGTTTGGAGTCACA
GACTAGATTCTGGACCAGAGATGAAAGATATGCTTTGGGTACCTCTTTTTGATTAAATGTAGTTTTTAAAATAGT
GACTTGACTATACCTCAAGGAGTCTTCATAATCTTCTGCATGGGTATTTATAGGCAATAATGCTAAAGAAGACAG
TGCCAGTACAAGTGAAATGATAACATGATTGCAGTGTTACGGCTTTTGTTGATGAATTATTTGAACTGGGAGGAA
AAACACTTTGAGAACTAAATTTAAAGTAATTCTTCCGATATTATCAGTAAGACCTAAAGATGGTTGCTTTTAGAG
GACCTAAATGTATTAAATTCCTGATTTAGCATGCTTATAGCAAGGCTTCAAATATGTTTAATTCTACCAGCTTCT
TGAGCTTCTTAAGGAGAGTCATAGAATCATAGGGAATTAAAATGAATGTTAGAAATCTGTATCTCCTCTGACTTG
ACTGGATCACACCTAGAGCAACCCAAATGAAAAATGTACCTTGTTTTAAAGCTCTCCAGGGAAAAATATTCTAAA
ACTTCCCCTGATAACTTACTCCAATGCATAGTAACCCTGAGACTTAATATTTACAAATTGGTTTCTTATATATGG
ATGAAAGGAACTCTAAATGTATCGTATTATAAAAGGTATGCATTACATAAAGGACCTTTTATACAGGAAAAAAAG
TATTTAGATGAAAAAACTTCTTAATTATGGAGGTACATCTACAATACCTAAAATTAAAAATAAAATGAAGTGCAT
TTTCCTCCTAAGATTTTCTCATCAACCCCGAGAACCACTGCTGGAAATTACCTGAAGAAGAAATCTTACCTTGCT
CTGTATCTTTAGGAAATGTTTTACCTAATTTTAGAAGGAGGGGAAAAGAACGATAACATNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNGACACAAACACAGGCACACACTGTAGTTTCCTAAGCAGTTTGTTCTAATTCT
TCACATCCCCCTATCAAAATGTTTGCTTATAGCTTTCTTTGTATTGTCATTTAAGCCCATTTCTAATTGGTGATT
GTTGGAAATTGAATAAATGTGTTCAGTTTTTCATAATG

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FIGURE 5742

VYSCLSPFYKIDYF

FIGURE 5743

CAGGTATGAGCCACTGTGCCTGGCCTCATTATCCCTTTTAGAAATTATTGTCAATCTCTCTCATTCTACCTCCTG
GTAAGGAGCTACTACCAAATACTAAAGCTACTTTTTCTTACTCGTTCGTAGTACTGTCGAGAATCAGCTTATCTT
CACCCTCTTAGACTATATGTGAAAAGGCACAATAGGAAGTTTGGGCACATTAGAGACAAATGTGCTATACTTTAC
GGCTTAGCCTGCGCCCGGTTCTTATTTATCGTCAACTGTGGACAAAATGATTTTGTTTCATGAGACAAAGGGGGA
CCACCAACTTCTACGGTAATGTCTGCCTTTTGCTAGATAGACTGGCTATTACATAACCATATGTAGTTTATTTTT
AAGGAGAATTACATATTTTTCTTCACATGTCACTGTTAGAAGTAAATCCCAATAGTAAGATTTCCCTAAACAAAG
TATTTCTTGTAACATATAACTCATAATATTTAGAAATTACAGACTTTAACCTTTAGAATAATCATGGTTTGTTTT
GTTTTTGAACTTACTACCTCAGAGTCACATGGTATATATCCCCTATGATACCTGTAAAAGACATCTAAATTGGTC
AATTCTTAAATATTTTATTGTGCTAACACAAAAGTTTTATTTTATTTGGAGTGCATAAGATACAGAAACAATTCT
TTATGATCTTACATCTCTGTTTTTTTAATATTGCAAATAACATACCACTTTGACATAGGCAGTTTCTCACTTACA
AAAGTAAAATTTGAA**ATG**ATCAGTGGTCACCCCATCTGTATATTTTTGCCACCACTACCAGAAGAGCCATGTCAT
T

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FIGURE 5744

MISGHPICIFLPPLPEEPC

FIGURE 5745

AAAACCAAGTTGTCTTGGAACAAAGATGGCATTCTCCATGGAGTCAGATATCAGGATGGGAATCTGGTGATCCAA
TTCCCTGATTACTGTGGCATGATCCTCCACCATTCACACTCTACCCTGGACTCTGGGAAGGGACACTGCTGCCTT
GAAACTCTACAACCCTGAACCTTGATGCTGGTTGCTGCAGACAAGAACTGCTTCTACCCTGGGTCACTGTCACTG
CTAAGTGGAAAGTCATGAACTTGATGGTACCAGTCACTCTGGGCCTAAACCGACATAGCCAGGAAACGGTTCACC
CCCCACAAACAGAATCATCTAGACCTGTCCATGATTTGGAATCGTGGCCCAATACTTCCTGGCCCCAGAGAGAGA
AAAAAGTCTGACCACCCCCTACTCAAAGTGCCAACTCATTTCCTTCCCAGAATTAATCACTTCCCAAAATGTATG
ACTGTGTGAACATCAATTCCCTTCAGGGGAAAACCCCACTCCCACCTCTCAGGCTGTCATCTTACCCTATGACC

FIGURE 5746

CACACACACACAAAATTCCCCAGAGTGAACTTTTGCCAACTGTACCAGACTGGGACATTCCTCACATCAAAGAAC
TTTTACCAGAAATGACTGTGATTCCCAAGCTAGCCTCAATCATACCTCTCTAGTGCCCTCTACGGGAAATTTTTA
GGAAAACTATCTTGGGAATGTATTTTTCCAGTCCCAGAGAGTGTTAAATTGGTGAGTTTGGAATTCTTAGGATGC
TTTTTCTTTTTAATGAGGGACAAATAAATGCCACATATTTAACCGTGGTTAACTAGGAACTGCTTGACTTTGAGT
TTCTTTTTTGTTTTCTTCTAAATAAAACCTGGTTAAAAAAGGAGTG

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FIGURE 5747

HTHKIPQSELLPTVPDWDIPHIKELLPEMTVIPKLASIIPL

FIGURE 5748

ACTAAATTCTGCTGGAACCCAGCAAGTTTCTTTACTGGCATTGTTTGGTAAAGAGGGCCCCCTTCATTAAACTGG
AATATTGCAAGCAACACTCTGTGGCAGATGATCAAAACTGTCTGACACAATTTGAGCTTGCTATAGCAAGAAAGT
CTAACCTATTCCGGTGTTCTCTCTCCCATGAGACAAGCCGTTATATAGACTTAAACAGTGTTCCACCTGTTGGCT
AAAGCTGGGTTGAGTTAATGACTTTGTTCATGAGGGATGACAGGGATCCTTAGGGCCACCTCTCCCTAGTGGAGG
CATCATCACTTCATCTTACTCTTTCTTAGCAGTTACAATACCCCTAATATTTTGTGTCACTCCATTCTTAGACTA
ACATTCTTACGTATGAAATACATGATGAATTTGATCTGTGAAGCCTCTTAGGTAGCATTGTGTGTGCTGTGTGGT
TTTTCTGAGGGGATCCATAGGAAAATAAGGGCAGGGTTTTAAACGTTAATGATGGGCAATGAGGTAATGTAAGTT
ATGGGGTTAAATTTTTATTTCCCTTTTTTTCTGTAGAGAATAGTGACAGTGGTACAGGAAAGAAAG

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FIGURE 5749

LNSAGTQQVSLLALFGKEGPLH

FIGURE 5750

GTGTATTATGCCTCCATGACATTGTTACATTCTATGAGGAGCATCTGTCTCCTTTCTAGACTTGAACTGTGGTAG
AAAAAGCCCCCTTCTCTCTTCTATCTACTTAGATTTGGTGATGCTAGGAATGTAGTGTTTTAGATATTAATTCTA
TTTTTATTTATTCATTTTTACATCACCAATAGGATCTGAGGTGGAGATGGCGGGTATTATCACTGGCATTTTACA
GGTGAGAAAGCCCAAAGCCACTGAGGTAATTAATGGAATAATTGATTTTGAACTTGGGTCTGTCTGATTTCATGT
GCAAGATTATATACTTAGTGATTTTGATTTTAAGTTTATTCTTAACATTTTAAACCAGACTATTAACTCTTACCT
TTATAACCACAGATACAAAGAACTGTATCATTTATTTTCTGAATATAAAATATTAATGGTCAATATAAAAATACA
AAAATAGAGAACTATATACAACAGAAAAGCAAAATTACCCACTAATAACACTTTGATTTATATCCCTTTAGACAC
TGTTTAGAGTTTATACATATATGTAAATATGCTTGTATTTTAACAAAATTGAGATATTATATAAACTGTTTGTAG
CAGGGTGTTTAAAATTTTAACAATATGTTATGGATATCTTTCTGTGTCAATAAATGTGTATTTACATTAGAGTTC
CAAGCATTTGAACTGAATCTAGTCCAAAAATGATGTGTTTTATTTGGCCAGGGGACATTTTTTAAAAAAATCTTT
AAGCAATAGACAGCTTTTGAAATTCAGAAA**ATG**TTACGTACAATTCAATGTCCTGCATGTTTTAAAATACTGGAT
AATCTAACAACACAGAACACCTCCCACTCCCCACCTCACAACCACCACACATATACTTTCTTGCTTGGCATCAGT
TAA

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FIGURE 5751

MLRTIQCPACFKILDNLTTQNTSHSPPHNHHTYTFLLGIS

FIGURE 5752

GCCTAAAGGCAGGGCCCTCATGACTCTATCACCTACCAAAAGGCTCCACTTCTTTATACTATTGGAGGGGTAGAA
GGAACTTCCTTTCTAGACCTTGAAGGTTTAAGAATTTGAATCTATAAAACAAGCTGACAATAGACAGATTAACAG
GAGAAAAAGCATATACATTTTTTAATGTGGGCCAGATGGCAGAAGCTTAAATAACACCCCAAGCTACAGGAAGTG
AGGCCTCTGATGGGGAGGTAGTGACACAGGCTGTGGGAGGGGGTAGGGGGAGGAAGTCTGTGGTGAGCAAAGTTT
GCCTTATTACACTGATAAAGTGTAATTACACTAATAAA

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FIGURE 5753

PKGRALMTLSPTKRLHFFILLEG

FIGURE 5754

CTAGCAGGGTGAGGCGTAGCTCTGTCTCAAAATAGAGAAATAAAAATAATAATGGATAGTTAGTGCCCTGTGTTT
TTCCTGTGATTAAAAAAAAAAATACCTGTTTTGTATTTAACTTTGGGGTGGGATAAGGTATAGCCCACTTAGTCA
GTTGTGTCTAAGCCACTTGATGAACCAGTCAATCCAGTCTTCACCTTTAACAAATGCTGATTTCTTCAAGTGAGC
AAAATATCTCTTAAACTTTTTCCTATTTTCTCTATAAAGTTGCTTTTTTCTGAATTTTTTCTTTATGAGGCTTGA
TGGGCAGCCCTATCAGCAGACAATCATTCATTCACCCAACAAATATTTGAGTATCTGCTTCAAGCCAGGGGCAGT
GCTAAGCCCTGGAAGTGGTATCTTCTCCTTATCCGGGAGTGGGGCTACAGTGTTCATTCCAGAAGACTCAAGAAA
ATAGCAGATCATCACAAAAGTAGGTTTTACATAAATGAGGAGGAATCCACAGGGTTGTGTATATGTGTGTGTATT
TTAAATTCTGACATAAGTTGGAGCTTTAGGGTAGACTGTGACATAAGAGTAGTTTGTTTTCCAACTCATGTAATT
GCCGGCTGATTTTTGTCTTGAATTATGATAATGGTAACTTCTGTTGAAACAATTCTGTATTCATCTTAGCTTGGT
TGGGATGCAATAAAAGTTTTGTACTGGTAAAAATGATAATTTTCTTCCATG**ATG**ATTTTGAAGCTTTTCTGTAAC
NCCTGNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNTACTCTAGCCTGG
GCAGCCTCGTTCTTTAGAGTAAGACACTGTCTCTTTAAAAATAAACANGNAGAAACAAGAAAACAAAGAAAAGGC
TTT**TAG**TGAATATATTTTTAGGGTAGCAAGTGTAATTTTTATAAATTGCATTATTTGAATCTAATAAATACCCTC
AAAGCTGAAGTCGAATTCTGATTTTGATTGAAAATATTTTTTACTTAAAGGAAGAGGGATAGAATAAATGACACG
ATTAAGGAAAAGACTTCTTGTATAAGGCCGGGGTTTTTTAAATGATTTTTGCAAGTTAGTTGATACCGCAATACA
AGCCAGAGTACGATCACTGCCGTCGTA

FIGURE 5755

MILKLFCNXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXTLAWAASFFRVRHCLFKNKXX
ETRKQRKGF

FIGURE 5756

CTGCGCCTGGCGTCACCGACCGGTGCGGACAGGAAGAGGCTCTGGGCTGGCACATGTGTATGGCGGTGAGGCGGG
CGGGTACATGGCGGGCTCTGTGGGACTGGCGTTGTGCGGGCAGACGTTGGTGGTGCGGGGCGGCAGCCGATTCCT
GGCCACCTCCATAGCAAGCAGTGATGATGACAGCCTCTTCATCTATGACTGCAGTGCTGCAGAAAAGAAGTCACA
AGAAAATAAAGGGGAGGACGCGCCCTTGGACCAGGGGAGCGGTGCGATTCTGGCGTCCACCTTCTCCAAGTCTGG
CAGCTATTTTGCTTTAACCGATGACAGTAAGCGTCTGATTCTTTTCCGTACAAAACCATGGCAATGTCTGAGTGT
CAGGACCGTGGCAAGGAGGTGTACAGCCCTGACTTTCATAGCCTCGGAGGAGAAGGTCTTGGTGGCCGACAAGTC
TGGAGACGTCTACTCCTTTTCGGTGCTGGAGCCACACGGGTGTGGCCGTCTAGAGCTGGGGCACCTGTCTATGCT
GTTAGATGTGGCTGTGAGTCCTGATGACCGCTTCATCCTCACTGCCGACCGGGACGAGAAGATCCGAGTCAGCTG
GGCCGCGGCGCCCCATAGCATCGAGTCCTTCTGCTTGGGGCACACAGAGTTTGTGAGCCGTATCTCCGTGGTGCC
AACTCAGCCCGGGCTGCTTCTGTCCTCCTCTGGGGACGGCACCCTGAGGCTCTGGGAGTACAGGAGCGGCCGCCA
GCTGCACTGCTGTCACCTGGCCAGTCTGCAGGAGCTGGTGGACCCCCAGGCCCCCCAGAAGTTTGCCGCGTCCAG
GATTGCATTCTGGTGCCAGGAGAACTGCGTGGCGCTCCTGTGCGACGGCACTCCTGTGGTCTACATCTTCCAGCT
GGACGCCCGCAGACAGCAGTTGGTGTACAGGCAGCAGCTGGCGTTCCAGCACCAAGTGTGGGACGTGGCTTTCGA
GGAGACCCAGGGGCTGTGGGTGCTCCAGGACTGCCAGGAAGCCCCCCTGGTGCTCTACAGGCCTGTGGGCGACCA
GTGGCAGTCTGTTCCTGAGAGCACCGTGTTAAAGAAAGTCTCTGGTGTTCTTCGTGGGAACTGGGCCATGCTGGA
AGGCTCTGCCGGCGCAGACGCCAGCTTCAGCAGTCTCTACAAGGCCACGTTCGACAACGTGACCTCCTACCTGAA
GAAGAAAGAGGAGAGACTGCAGCAGCAGCTAGAGAAGAAGCAGCGGCGCCGGAGTCCCCCGCCTGGGCCCGACGG
GCATGCCAAGAAGATGAGACCGGGGGAGGCGACGCTAAGTTGCTGATCGTGGCGGTCTGTTTCTGTCGACTGTGG
ACCACTTATGTGCGATCCGTGGACCACTTGCGTGCGATCTGTCGGCCGACGATGAGCTTGTTCGGATGTAGCTCC
ATCGTAAGTCGAGGAGCATCTGTGATTTGTCCTCTGCTTATGGGATATGTTTTTCCGCTACTGAGTCTGTGTAGT
AAATTTTTGACTAGGAA

FIGURE 5757

MAGSVGLALCGQTLVVRGGSRFLATSIASSDDDSLFIYDCSAAEKKSQENKGEDAPLDQGSGAILASTFSKSGSY
FALTDDSKRLILFRTKPWQCLSVRTVARRCTALTFIASEEKVLVADKSGDVYSFSVLEPHGCGRLELGHLSMLLD
VAVSPDDRFILTADRDEKIRVSWAAAPHSIESFCLGHTEFVSRISVVPTQPGLLLSSSGDGTLRLWEYRSGRQLH
CCHLASLQELVDPQAPQKFAASRIAFWCQENCVALLCDGTPVVYIFQLDARRQQLVYRQQLAFQHQVWDVAFEET
QGLWVLQDCQEAPLVLYRPVGDQWQSVPESTVLKKVSGVLRGNWAMLEGSAGADASFSSLYKATFDNVTSYLKKK
EERLQQQLEKKQRRRSPPPGPDGHAKKMRPGEATLSC

FIGURE 5758

AATGTTACATATTACTTGTATATTACATTTTAACCTGAAGGACCATTCTATAAAACATTTCTTGATGTAATCTGA
GTAGGATTTCACATGGTAAACAACTAAATGAAAAAAGCACAGTCTCCATAATAAACAAAAATTAATTTTTAAAAA
CAAAATGTGTAACCCCATCACTCTGAATTTGGGTGGAGCAACTGCAATATGGAAATCCTTTGGGAATCACACCCA
TAATACTACTAAGACCACCTCCCAGTTCCCAATCTGGTCACTTCTCTCATGTAGGAAATGATAGGAATACCAACA
GTACCCACCATGGATTGGGTCTTGGGATTTTCTAAAAAGAAGGATAATTAGGATCCCTTGTGTTCTGATCACCTT
CTGCACACATTTCATGATCCATTTTGAAGATGGTGTTTCAGCGTCCTGTGCTTTCACAGTTGCGAACGGTAGAGG
TTATACAGTTTCATTCTAATTAAGTGCAGTCCTAACTGTAATACTGTTCTGTTTCATTTTCCAAAGTGAGCTCAC
CCATGGATGAGGTGCTAGCCTCCTTGAAGCGTGGTAGTTTTCATCTGAAAAAGGTTGAACAGCGAACTCTGCCTC
CTTTTCCTGATGAAGATGATAGTAATAATATCTTGGCACAAATAAGGAAAGGGGTAAAATTGAAGAAGGTACAGA
AGGATGTTTTGAGAGAATCCTTCACACTTCTACCCGATACAGACCCTCTAACACGGAGCATCCATGAAGCTCTTA
GAAGAATTAAAGAAGCATCCCCAGAGTCAGAGGACGAAGAGGAGGCTTTACCTTGCACAGACTGGGAGAACTAAC
AAGTGACATAACAGAAGAAAAATATCATTCAAGATTGGTTCTGATTCTTTTGGAAAATGACAGTTTAAGCACTTG
GTTCCTCAGTTGGATAACATTAGATCCAAAGTGCATTGGTTCAGTGGTGTGAAGAAAGGAAGCACAATTGGCAGG
TTATCACTTTCCAGTCGTTCCAATAGATGATGGTTAACATGAATTTTACATGTGCAATGTTCCTGACTGCAATGA
AGAAAAGGCCTTCTGGAGATTTCTGTTTTTTAAGCACATTCTCCTTCCATCCACATATTTACATCCTTGTAATGG
CCAGTTAAGCTAGGGCTTGCTGTAAGTTGGAAGAACACTGGGTTGACAGAGATCTACTGTGAGCTGTATTGGGAC
TGCTTTGAGAACCATCTTTCAATGCACTGAAAAGTCATCTGAAAAAATAGCTTCTTCCATATCAGCTTATATTAA
ATACTGTGACACTCTGAGAAAGTTTATCATCATGATAGCTGTAAGTCAGGCATTAAAATCAAATGGAAATACACC
TAAAATGTCCGCATTACTCATTTCCAAAGGATTTTTCATAAAGATGTTCAGCAACATCTGAAAAGCTGCATTTAT
GGAGATACATCTATTAATATGTTCACAACATGATACATTTAACATGGCATATTT

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FIGURE 5759

MLHITCILHFNLKDHSIKHFLM

FIGURE 5760

TAACTCACACAGAGCCAGCTGTGCAGGAGACCAGAGTTTTATTTATATTTATAGATATAAATTCATAAGAGTTTA
ATTAGCTCTCAGGCTCACTTCAGGTACATTTCATGACTCCAACTCCTGTTGTACAAAATATCCCTGCTTTTAAAC
AGTAGATTTAAAACAAACAACCTTGGTTTTCTGGGACTTTTCTTTTATGAGTATTTTTTTATTAATGTAAAGTTT
CAAAGAAGGCTAATCAAACACAAAAATATCTGCAAAGAGCCACAATAAGCCTTGAACAACATACAGTCAGTAAAA
CATCAAGGTTTAAATTGTTGCTTTAACTTCCTTTTGGCTGGAAGCTCCATATTCTGGTAATTCACCAAA**ATG**GCC
AACACAAGGAAAACAGGAGAGGCACCCAGTGTATGTTTTCTAGGCCTTTTAGAAAACATGGAGTTGGCCACATGC
ATGGGAGTCTATAAAAAAGGTGATACTGTAGACATCAAGGGAATGGGTATGGTTCAAAAAGGAATGCCTCACAAG
TGTTACCATGGCAAAAACTGGAAGAGTCTA**TAA**TGTTACTCAGCATGCTGTTAGCATTGCTGTAGGGAA

FIGURE 5761

MANTRKTGEAPSVCFLGLLENMELATCMGVYKKGDTVDIKGMGMVQKGMPHKCYHGKNWKSL

FIGURE 5762

TTATATTGATTTGTATCTTTCATTTTTTATATATTTAAACTACCTACTTATGTTAATTCTGTGCCATGGTAACTT
CCTTAATTCATGATTCATATGGGCATACATACAGTCATGGATACAACAGGCTTTCGTATATAAAATTATGAAAAA
GTTTATTCTTTTAACATTTTGTGGGGATACAACAGGTTTTCATATATAAATCATGAAAAAATGCATCTATTCTTC
TAACACTTTGTGAGGATACAACAGGTTTTCATATATAAAATTATGAAAAAAAATTCTTCTAACACCTTTGTGGGG
ATACAAAAGGTTTTCATATATAAAATCATGAAAAAGGNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNTGGGAAATGAATTTTTAAAAAAAAAACTTTATGTATTTCTACTTCTTCATTGGAAAGTCATTCGTATTTACTT
AAGTTTTCAAATATCACAGTGCAGATTAGAACAAAGTAGTTGTTTATAATTCTTCCGCATCCTCCAAGTGTATGG
AGAAGCTCGCATTCTTCTTGTTTTGTGCTGTCATTATTTTAGTTTGTTATCTTCGTCTACTTTAGTTTTCTCAGA
TAATGTTTAAATTATTTGGCAAATCATTTCTCAATTTTCAATGCATTAATTTCCTCCACCTGCTTTTCTGGAGTT
TCATGTGATACCCACTCTCCCCACACAGGATGACTTCTCGAGTTGAATGTTCATTCCATTTATTTTCATTCTTTC
TTGCTTAATGTTGTAAACAGGCGAGGTTCTAACTTTTCATCTGTGTACTACAAGCTCTCAAGTTCTTTCATGGGG
AGTTTGTATCATGGTCATTTTCTAGTATTTAGCATTTTCAGCTTTTGTTTCCTGTCAACTCAACATTAAAAGTTT
TTTAAAACGTCAAAAAAAAAAAAAAGGG

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FIGURE 5763

YIDLYLSFFIYLNYLLMLILCHGNFLNS

FIGURE 5764

AAAGCATTTTCCAGTAATTTGATTTTTCTGGCACCCTAACTAAGGGAAGTTGGCTTTTTAAATTTTACTTTGTTG
CAGAAGATTAAATTTAAGGTTGAGTTCCACTTTGTTTGCAATAGTTTGAAAAAGAATAGTTAATGCAGATTTTTT
TTTTAAATTTTTTTCCTTTTAAGCTTTGTGTCTTGTACAATGTGAGTTTGCCAAATTTTCTTCATCTGCTACAGA
TTAGGTATGCCATTGTTGCTGCCATGTGGCGGCGCACCCCGTGCTTCTTAAACGCACTGACTGGAGGTTTATCGC
ATCACTTGTTCACATGCACGGAGCCTGGTAACAGCCTCATCTGTATCTTGTTAGCTTCATTTTCTTATTTTTAAA
ATTTCATTATTTATAAACTCAACATAGCATTTAAAAATAAAGGCTAGTTTTAATTAATTAATGTTACTACAAAAA
GTCATTGCTAAAATTTTCATAGTGAAACAGATTTTAACTTTTGTTAAAATGTGCTATGCTTTAATTAAATTGTAT
TTACTCTACAAGCAGGGATGTTTTACCTGCCATTTTAACTGTATTTGCCAAATTCTAAATATAATTTTGAAAATT
GAAATTGAAGCTTATGTTTATGTGGCAAAAGTAAGCTTCAGGACTGGGCTGTGTATTTTTATTGGCATGTAACAG
TTAATATGAGCTCTACAAGAATTTGTTTTTAAGGAGCTAAAGCTATCAACAGCTGCAGATTTAAAAAATTATATA
TTAAAACTGTTAGGTTAGCTCAGTTGTACAACTTAGTGAATCTTGTATCCTGAGTTTCTGAAGGCTGGTGGATAG
GTATCTCTGAAATCATTGTGTTTTAGTCTTTTTACTGATAGTTTTGTATAGGGAATTCATCTTCTCTTTTAAAAT
AACTTTTTTCCTTTAATTTATTTCTATTACTTATTGTACATAAATTTTAAAATAAAAAATAAAAGAAAAAAAGTC
ACTTGTCTATCACCTGTTAATAGTTTAAACATTTTGGTTTATTTCCATTCATCCTTCCCCCCCATGCATTATTTA
CATATTTTTTTTTCTCTGTAGGCATATTTTAATTTGGATCACAGTTTACTACTTAGTATCTCCTTTTCATGACAT
TTGTAATTTCCCTGGTCATTATTTTTGAAAATGAGATTTCTTCATGGTTTTATTTCATTTTATTTTCATGCCTG

FIGURE 5765

MQIFFLNFFPFKLCVLYNVSLPNFLHLLQIRYAIVAAMWRRTPCFLNALTGGLSHHLFTCTEPGNSLICILLASF
SYF

FIGURE 5766

CATCTAACATTAAAGTTCCATGGCACATGGCTGCTCTCTTTCCTTTCCCCTGTTTTGGATTACATATATAAATGG
AGGAGTTTCTGCCTATACAAACTGTTTAATATTGAAAATGTTTCTCTCCCTCCAGACTATGAAGAAATCGGGAGT
GCACTTTTTGACTGTAGATTGTTCGAAGACACATTTGTAAATTTTCAAGCTAGGTATATGAGTTATATAACATCT
GAGCAGCATAGTTTTGAGAAATATTTATCACGATATTGAAACAATATACTGTACAGGTGATAAAAATATTTTAGA
AGAATGTTCATTGTTTTCTTAAATGAGAAAAGCCCAATTACAAAAACAGTATGGACCCCTGCCCTACCTGCCCAC
TACTACTACAGGATAAAAAATATCGTAGGTACTATGTGCACTAGACTATTAAGCTGCACCTGGTGGAGACAGTAG
TTGGTTGTAGGTAGTTGGAATATAGTGATTTTTGTCTGTTCTTTTACTGCTATATTTTCCAGATTTTCTATATAC
ACACAAATACTTTTATAATGAGAAAAACTCATTAAAAAAGTAGAGACAACAAAAAATTGATTCAAAAATTGGAGC
ATATTTTGGCCTGTGTGTGGCCCAGGCAGGAGCTGGTAAAGCTTCCTGCGGCTTCTCTGCTCTTGGGTGGCGAGG
CTATGATAAACCATCCCTCCGCTTGCCTCCCTCTCGCTTGGTGAGATAGGTCAAAATTTTAATTCTCCCACTATT
AATCCTCAAATCTAATTTAATTTCTTATCAGGGAGGGTTACGACTGATTTAAAGTTCATCNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNTGAGCAAGTAAGAATAGCCAAGAAATGTTTGCAGTAGAAAATCTCGTTTGGTTTG
GAGGAGGGAGATTTAGCCTTCCTATTAAATATCAACCATTTATTGAGTGAGTCCTCCTTTCAGCATTAAGATGCC
CTCAAGACAGGCTACACCTCCACTTGTTTATGAGTCTGGTCTGACTTCTCTATCAAGGCTGCCACACACAGCTGG
GCAGGTCGGGCACAGAGTCAAACAGCATTGGTGGATGGCTCCCCCTGAAGTTGCA

FIGURE 5767

HLTLKFHGTWLLSFLSPVLDYIYKWRSFCLYKLFNIENVSLPPDYEEIGSALFDCRLFEDTFVNFQARYMSYITS
EQHSFEKYLSRY

FIGURE 5768

CTCCCTTCTTATCTAAATCCACCATCAATTAGTGTCTTAAAAGATTTTGCTGCTTTAGCCACTGTAATGGGGTTT
GGAGACTGGCAGAAGAATAAAACCAAATAAGTATGTTTTAGATAAATGTTAATATGTATATATTGAGTCACAAGG
TATTAATCTGATATTAGCAAATCATGACTTCATACCATGCCATTATATTAATATAGTAAATCTTAGGTTTAGCAT
TGACTTCTGATTTCTAGAACCTCACTCTATCTGTAAATTGTTCATTCCAGTTATAAAAGTAATGAAGTATATGAA
AATGTTTCTGTTGTCATTTGTCTATATCAGAATGCATAAGTTATGAGAAAAGCGTGCTTTTTGTTTTTTAGTGTG
TATCATTTAACCTCTTGACAGTCATTAGGTTGACAGTGTTCACATCTGAGAGAACCTGATTTAGGTTCTTGAAAG
AATTTTGTGAAGGCCAAA

FIGURE 5769

LPSYLNPPSISVLKDFAALATVMGFGDWQKNKTK

FIGURE 5770

TAGGGCTTATTACCAAAGAACAGAAGGCTTTTTAAAAGTCATCTATTGTTTAGTGATTATTAAAAATAAGTCTTC
TGATGAGGATTACATATATCTAACTACTGTAAAATAGATTTCATGTCAGTGCTACATAATCAGTATCTAGGTTCA
GTACCTGAAAGTTCATTTGACCATGCCTTTTTATGATTTTAATCCTACCATAGTCATTTTTGTCCTATTTGCCAT
TCACGGAAAACTTTATCAGAATATAAGTAAATGATCTTGAAAACATTAATATTTATCTTTTTTGTACATACTATA
CATTTTCTTACCATACATATTATATGTTCTCTGACCTCTGGAACATTAACTCACAAATTGTTTCCGTTTTCCTTT
ACCTAGATTGCATGTAGATGTCAAAACTGTGCAAGCACCAAGGAATGCTAAATGTTGAGGAATGGTCATAGACTT
AGCAACCCACATATACTGAGATTGTTTATGAGAGCCATTTGGTCTGAGTAACATGTATAGGGTATGACTAAAGTA
GGTGGTAAGGCCAAAAAAGAGTAAGTGAGGTAAGGTGGGGGTGGGTTAGTGGATTTAAAAAAGTAATTTGTAGCTC
TACCTTCAGGAAATGTCAGTGATTCAACATTCAAATCTACCTAATCAACTGTATCTTTACTACCTATATAAGTTT
TGTATGTGAGAGAATGATTCTCATTTTGTATATGTGCATATTCAGTCTTCTGATTCATAGGTCCTAA**ATG**CTTTT
GTATTTATTTAGGCTTATTTTGAAGCCCAGAATATGGTCTTTTGTGGTAAATGTTCCATTTGAGCTCTTGAAAAG
AATGTATATTCTGGTGGTTTGGACAGATTGTGCTGTAACTATCAATAAAGTCAACGT

FIGURE 5771

MLLYLFRLILKPRIWSFVVNVPFELLKRMYILVVWTDCAVTINKVN

FIGURE 5772

AGGAAACATCTTTACACTTAGGGTTTGAGTTTCTGTATCTATAAAAAAAGGGTTTGGATTAAGTGATCCCTGGCAC
TTATAAAATGTTAGGGCTTAATATTATTCATAGATCGAGGATAGTTTCATTCTTAGTCGCCTCCTTAGTCACTCT
TCCTATACCAATCTGAGACCATTTTACAATTTAGAAAAGACAAATAACTGGTTGGGTTACTTGATAGTATAATAA
CCAAGAAAAATAATTTTAGAAGGAATTAAGTTTGAAACCACATGTTAACAAATTCTACCAAAGTGGGATTTGCCT
GTGATTAAAGATGCTGTAAACATTTGGGCCAGTAGTTATAATTTGAAAAATGTTTATAGCCAATATATAATTTTT
TATTTAAATATACAGTTTCATCAGTCTATTAGTATTTCATTAAGTCTAAGATGCCATCAGTGGTTAGCAAACACC
ACTGTTTTATGCACTGCTAAGAAAGAATAAAGGGCTGTGTGC

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FIGURE 5773

ETSLHLGFEFLYL

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FIGURE 5774

GGGCCAGTTCTGGGTTGGCTCTGTCTAGCCATCACATTGTGGTTTTGCTGTTATCTGCTGTTAGATTCGGCCGGA
ATCTAAGGGATAGAGATGTATCATGAGGTGGAAGCTCAGGCTACCTCTATCTTAGTTACAACAGTCAGAGCTCAT
GATGTCATGGTGGCCTCTGGCAGCTTGGGTTAGACCAGGTGGTTATTTGCCACCTGTAGGCTGGCACTTTCTACA
ACACTGTCACGCATCAGGGACGAGGGTACCGAGTGAGAGCAAAGGATAGGCTCCGCAAACTCATCTCCTCTCCTT
GGAGGCTTAACTGAGTGACTGTGGGTCGCTGGGTGTATTTTAATCTGGTGACATTCCACACTTTGTGTACTCACC
AGCACATACACGGTATTATTGGTTTCCTCAGAAGAGTGTGTATTTAAATACCTGCCAGGAAACTGTGCAGGTATT
TCACATTAAGTAGCATATGGGGCTCAGTGTAGTCAAGAAGTCACAGGGATTAGGAAAGAGAAAATGAATTGCTGT
CATTCTATATATGTTATATGCTTAGTAAATGTCAGAACAGTAGTCACAGAACCTCAGGATGTTTCTAGCATATTT
TGGCTTATAAATGTTTTGTCTACATAATGGATATCTATCAGTAGCTTTCAGAATTCAAGTAATTTTAATGAAATA
ACACTAAATGTTCAAGTATTAAAAGTAGTGGTAACAGTTAACAGCTATTGAGTGTTTACTATGTCCTCAGAACTA
TGCCAAGAACTTTATATATACTTGATCTCACATAAAAAACAAATAAGGTAGTAATTTGTCTTCCTTACCTGTTTG
CCTTTTCAACTAGAAGCCTATTGTTCTACATTCAAGAAAGTGAAAGTGGCTACACCTCTTAGAGAACATTTCTTT
AATGATACATCAGTGAGTATCTTTTATGGGTAATAATCTACCTATTTTAACTAGATACAAGTATGATAAGAAAGA
GACCTTTCAGTTAACTGAAGCTAAGCTCATCCTGTCTTCCTTACATTGCTAATATCTGACTTACAATTTACTAAT
ATTTGTAAGGTGTCATTTAAGTAGGTGTGGAAGCATTAGCCTAGATTTTGACTAGTTCTTTGGTGTCTTCTGCAG
CTCATAGAGGCACTATAATCACAACCCCCACCCGCGCCCCTCGC

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FIGURE 5775

ASSGLALSSHHIVVLLLSAVRFGRNLRDRDVS

FIGURE 5776

GGGCGAGAAGCAACTAGGGCCCTCATCACTTCGCCGCCGAATCCCCGGCGCCGCCCAGCGGGGCAGAGCCAGGCC
AGGGCCGCCCGCCCAACCTGGTCCGCTGCCTCTTCGGCCATGGAAGCTGCCGGCAGCCCTGCGGCTACGGAGACA
GCTTCTCCACTCTTCCTCCTCCTCCACCTCCGCCCATGAAATGGTGCACTCTCCCTTTAAGACTAAGATGGTGGC
TTGCTACGATCGGGACTCCACTTCCGGTGGGGAGGGGGGCGGGACCCCAGCCCGCTCACGCCGGAAGTGGTTTGC
GTTTTCAAGATGGCGACTCCCTATGTTACTGACGAGACCGGCGGGGTGGGAACCGCCAAACCTCTCCCTTCTTTT
TGACTTCACCCTTGGATACCATCAAGGCCAGAGGATGGAACCAAGATAACATAAAATAGGTGCTCCTTTGTGATA
ATGGGCTATTTGTATCTCTGAGGGCTTCCACACAGGATGGCCATTCAAGAAGCTTCTGCTCTGCCTTTCATTACA
GTCTATCTTTAGTCCTCCTAAACCTTCAGCTATAATCTCTATGCAATCAACTTAAATATATGTTTGTAGTATTGT
CCCTTTCTCCCAAATTCCATGTAAAACACTTGCCTGAATTGAATTGTTTCCACAAAGTTGTTTTCCCCTGTGGAC
TTTGTTTATATCAGTAGTTTTTATTTTCCCAATTTTCCAAATTCAAGAGTGATAATTATAAATAGTTGTGTTCTT
GTTTGTTATCTTTCTCACTAGAATGTATACTCTAAGAAGGCAAGAACCTTGCTTGCTTTATTCATTGTTGTATTC
CTAGCTTCTGTTACAGTGTCTGGCACAAGAGTAAGTGCTCAATAAAAATTTAAAATCCAAAAAAAAAAAAAAAAA
A

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FIGURE 5777

TTCCTGTCTTTAAGTCTCATTTTACATTTAATCCAGAAGATAAAAGGTGTAATAGTATTGGTGAGCCCAGTGAGC
TCCTCATTCATTCCTGTACTTCCTGTATACCAAAGGGTGTGGGCTCTCTTTAGTCCTACATACTCTCTTGGGGTT
TTATGATTCTCTTAAAACCTTAAGTTTCCACCTTAAGATTTTTGTAGACTTTCCTTTGGGATTTAGTTGTGACAG
GGTGCTGAAAATGCAAAAATATTTGTGTCTTCCATATTGACATACTTAGATAAATTAGATTGGTTTGGGGAACAC
TGAAGTTACAGAATGGAAAAGGAGGAAGGAGGAGTGCATAAAAGTAAAGAACATTTTTGAGATAACTAACATTTG
TTTTTTATAGCTATTTATTTTCCTGGGGTAAAAGAAAAATTGTGACAAGTATCCTAGAAGAAATTACAAGTTAAA
AGAACAATAACCATATCCTCTATTCTTAGTTTCTGATGCTTTGTTTTAAAACTTTGCCTTTACCACTTATATGGT
ATTAGGAAATAAAAAACATGGTACTTTGTTCTCCTGCTTCCTAGACGAAATCTAAGCAATATTTTATCCACTTCT
TTTTAGTAAAAGAAATACATATTGCCTGTTGGGGTCATGAGCTATGTAGGGAATGAAAAAATTTTTTAAAGGAGA
ATTATAAAGAGAAGGAGGATACAAGAGAAAGGAAAACGAAAGCTGGTGGGAAGTTGAGCCATGTTTATCTCTAGT
GGAATCCTTACCTTGTGTTTTAAAATTGTTAAATGTTTGTATATATGAGAAATCCCTGAAAAGTTATATGTAATT
TAAAAAAACAAAAAAAAAACAAAAAAAACTAGAGAGGCTTCCTTTTTAAAAGACTCTTCAGTTAAACCTTTTTTG
TAAAAGCCA

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FIGURE 5778

FLSLSLILHLIQKIKGVIVLVSPVSSSFIPVLPVYQRVWALFSPTYSLGVL

FIGURE 5779

AATATATATTCACTATTCTAGACTAATAGCAAGACCGGGGATCTTGTTTAGGAAGAAGCAGTCCCTGTTCTCCAG
AATTTGCAAAACCATTAAAAAAGCACCTACTTTAAGCCATTTTTTTTCAGCAAGGAGTCATTCTGCCAGAAAAAT
GTAGTACACAAATACAGGATAATATAACAAATGTAAAATTTCTCATTTCTAGTGAATTAAACTTTCCAGTAATTT
TACATCTCACCTCATTCTTATGATGCTCAGTTTGCTTAATTATTGGCAAACATAATGGTAAAATGTTTGTACTGT
ATTAGAGCTTTACTGTTCGATTATTAAGATATTTATCCAGTATCTTAGAGATGCTGGACTTCAATTTTCCTTATT
TTATCTTTTTAAAATAAAATATCATGCATGCTTCTGATTTGTT

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FIGURE 5780

IYIHYSRLIARPGILFRKKQSLFSRICKTIKKAPTLSHFFSARSHSARKM

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FIGURE 5781

GCACTGGAACAAGTTAGTTAATGGGTCTTGACATTAGATGAGTGCTTGTGCAGCTCAACTCCTCCCTGCTCTCCA
AAGAAGTGTCCTTCTCTGATATGGGCAGCATCACAATCCAGCCTCAAAAGAAGCCACCTTGAGCTTCCAAGACAC
AAAGCAGGGGATATGGAGAGGTGTCTGCACTAGAGTCTGGATGGTGCTACTGACAACAGTGAGTGTTCAGGGTGA
CTGCTAGTGCTGTGCAGTGCTGAGCGCCACATTCCATGGGACCACGTGTCCTTTAATAAACATATTCAGCGTGCG
CTTATGGAACTCATGGCTTCTAAAGCACAAGGCGTATGTTTCAAGCATAGTGCTATCCCTGAGCAGCATTTGTAA
GCCTCCAGTCTGCAACAGTGGGATTACCTACCAGGCTCAGCTGATGGACCGGGATGATATTGGAAGAGAGGCTGC
CAGCCTGAAGACTTACCTGGAAACATTTTCTCGTTGGTCTGGTTTTAATAAAATCACCAGATTCCACTAGAAGGA
AACCAAAGATTACAAAGGTCCAAATTAATATATGACAAAGTAGAAACGGAAACTGGGAGGAAATGAGGTGAAACA
CAGGGGATGATGTATTGGAAATAGGGAATGAAAACCGTACAGAGTAGAAACACCTGAAAGCAGTTCTGGAAACTC
CACATGCTCCTGCTGTACCAAGACCTGGTCCTATGTGTGCTGACCTTGTTCTTCTGCTCACATCTGCCACATCTG
CAAATGTGGCAACATTTTAGCTGTTTTCTATTAACACTGAAGTACTCTGAGAGCTTGGAAATTTTCAAGTGCAAA
ATCAGGTCCAGAGAACAGTAAAAAAA

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FIGURE 5782

HWNKLVNGS

FIGURE 5783

CTCTAGAGGACCCCGGTCAATTGCTACACCTTATGCGACTGACACATGCGGCCTGGTAGCTGGAGCCCGGGAAGT
GGTTCAACGCAATAAAGAGGCTTCTGGCTCCCAGCAAATGGCTCGGTAAGCATAGTATCCTCTGCCTGCAAGTCT
CTCCTGATGATGTCAGTATGCATACTGGGGTGGTTGAGATCATCTAGGTGGGGATGATGCACCCCAAACTAAAGC
CCCTCTCTCTCGCGGCTCGCTTTGCAGGGTGAGTGCAGACATCTGTAGCAATGGAAGGTAAGTGCCTTGTTTTGC
ATATTGAAGAATTACTAAATGCTTCTATTTCTGTTTCAGGTTTCTTGCTTTCTAAGATATACTACTGACTGAAAT
CATAGTGAATGGGAGCATCCAGTCAATTACTTAGAACAGATTTGTAGTTTGTACTTAAAGTGTGTGTGTGTATGT
GCATAGGTGTGTGTGGGCAGGCACATGTGGGGTAGGCTTATAAAGAAAACTGAATGCACAGTGTAACGCCTGCTA
CTCTCCCTGGTAAACAGCAATAGCTTTTTATTTCAAACTATTCGAAATATGTAACTTCCTTAAAATATTTTGACA
AGTGTCACAGGGCAAGTAGGGCTAATTTTTAAAAAGTGTGTAAGTATATTGTATTGGCATTTGATATGTTTTACC
CAGTTTAAATGATATTAACATTTGAAATATCTAAGATGGTATGGGAAGATACTAGAAAGAAGAACCATGCTGAGA
ATTTGCATGTTATAGAAATTAAAATATGTAGGACAAAGATTTAGTTGGTGAAGGGGAGATGTATGAAGTTCAAAG
TACAGTGATAATCATCATTCCATAGTTATGCCACACTTTTATAGCTTTTCAATATCTCACACAATTTGATTGTAA
AAATAATGCTTCTATTATTGTGATGAATGCAATTAGTGCTTCATGAAAGTTTTCCTTGAATATGTATCCATCCTT
CTTAAGGATAATCCAGCTATGTTCAGCTTTACAGAAAGAATATAGTAGAACCACTTATAACATTCAGACAGAACA
GTGATACGTGAATATTTTCCTTGAGAAGTTAGTGCTGTTTCAGTTTTTCTCTGACGGTATGCCTTATCAATAAAC
AATAAATAATGAGACACATGACCGGTTCCTCTCTATCAGCCTCCTTCTGAATCTCTTCATTCTGAGAGTTCTGCC
CATAAAGTTAGTCTTGCATTTATTTCTTCTTCTTGATTCCCAAGGAATGATTCAGTAGTACATTCTGTGAAGAAT
GTAATAC

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FIGURE 5784

SRGPRSIATPYATDTCGLVAGAREVVQRNKEASGSQQMAR

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FIGURE 5785

CCCAAACAAAACATACTCTAATCAGGGCAGTCGAACTTGAAAAGAGTCAGTGAGAAATCTGAAAGGAGGAAAAGC
CTGGCCACGAGGCTCCAAGTGAAATGAAAGCCATAAACACCAGCTTCGTCAACCTTGAAAGCTTCTAAAAGTGCC
CCTAAGCCTCCTTTTGAATCACTAAAAGTTTTCACTTACCTCCCTGTCTTTCTCAGATAAAATTTCCTCTTTCTC
AGCCATGAGTCTTAAAAAACAAAGCAAAACAAAACACTTCACACCTGCTTCTTATTCAGTTTTACACTAGTGGAA
AGAGAACGGGATTTAGAGTTGGAAGGCCAACGTGAGCGTCCTGCTGCCACTTAGTAGCTGTGTGACTCTGTATAA
GCTTCTAGGCTTTCTGTGCTCAATTTCTTCAACCGTTGACAATATGACCGTGTATCATCACATAATACACTATGA
TGTGAAGTTTATGTAGATGAAGAACTCTTTCAAGCTCACAAAGCACCAGATACATGTCAGATATTTCTAATGTTA
CACCAGTTTTTAATATCATGTTTCATTTCACATACGGTACTTGATATCTCAATTACATTAGAGGCTAAGACAGTT
TTCTACCAGCATGAGAACTGAAACACGATAGCATGCCTTTTATGGCGAAATGTGTTTGAACTTCAAACAACAAAT
ATATAAAACTTATTATGCAATACACCCTATCAGCAAATTAATTGAAGGCTGCCTCTAGATTGTTAGGTGTGGACG
ACAGGAACTTTATTTCCTACTTCTTTTGTACATGCCATTGCTGTTTAACAGTGTTGGGTTCATAACAGGTGATTA
GACAGTCTTGTTGATAGTTTGGAGAACCATCTTAATCATGACCTAGAATCATTCTTATTTCACAGCAACCTGTGT
CTTGACTAATGTTAAACTGACTAATTTGTTTTGAAGCTGAGAATGAGAAATTGGAGGTCCTTCTCATAGATCTGA
GATTCCTTTTTATTCCCGAGTTGGATAAATTAGGGTAAACAAATCAAATACTTGTAAAAATACTGTACAAAGGAA
TGACATATGCATGCTGGTTCCCTAGCAGGGTAATTCCATCAGCGCTTT

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FIGURE 5786

MTYACWFPSRVIPSAL

FIGURE 5787

TTTTTTTTTTTTTTAAACGTCTGACACTTTCTGGAATGATCCAAAAAGTCCTGTGTTGACACATGTTTAATTTCA
GGAAACACAGAAGTCATAATTTCAATATCAATAGCAAACTTCACAACGAAACTGCACCGAACGTCACAAGAGACC
AAAATATTTCCACAGTTGATCTTGGACAGTAAAAAAAATACTAATAACAGAAGAATAGCCGCTGTTCCAGCAGTC
CCCGCTCCCGAGGGAGCCGCTCGGATTCCCACCGGGTCCGCTCAAAGAGGGGCGTTGTCCTCCCCCAGGACGCAC
AGCCCGCGCGCGGCCAGCCCACTGCTCCCTGGCTTTTGCGCCCTGGCGGGGGCCGGGTGGGACCCCAAGCGGTGC
AACTCCXCGTGTGGGGCTGCGGGGTCCAAGGGTCCGGGCCGGCGGGGGCGGCGACGGCCGGGTATGGGCCCGACG
CTCCAGCGCC

FIGURE 5788

CCTTGAACTCTTAAGGATTAATGCTCTTGAGTTATGAGATATCCCTACATTCCAATAACTCTACCTTCTATTTTT
ATTGATTAAACTAGTTTGAGTAGTTTCTGTTCCTTTCTTCCAAAACAACCCACTGAGAACTTGGAAATAAGGCAA
ACTAGATTTCCCTCTAATAGTTAAATTGGCATTCTCTGAGAATATTTATAAATGTGTTAATTGAAAAATTTTNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNGTTGTTTTGTTTTTTTTGTGTTTTT
GTTTTGAGATAGAGTCTCGGTCTGTCGCCAGGCTGGAGTGCAGTGGTGAGAT

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FIGURE 5789

MLLSYEISLHSNNSTFYFY

FIGURE 5790

CAGCCATATTTTGTTCTTAAAGTGGGGTCTTTATTAACTTGTGGACATCATGGATTGTCTAACACCATCACAGTC
CCTGGCTCAGGATTC**TAA**TGTAGCATTATTTATTGGTTTGGATAAACCCAGCTGTGCTACACTGCAGAGTAAAAT
CTCTGAGTCATGATTCTGGACTTTGGGAGCTAGTTTTGAAACTCTGATTTATTGTAGAACTTAGGCTTGTACCAA
TTTTACAAATAAATTCTGTTCTAAGTTC

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FIGURE 5791

QPYFVLKVGSLLTCGHHGLSNTITVPGSGF

FIGURE 5792

CGGAAAGGCTTTTCCTCACTCATCATGTCACATTGAGGCAGGATAAAGGGAAGAGGGATCCTCTGTCTTACCAGA
TAAAGTGAAAGTCTTTCCAGGGTCCCCAACAGTCTTCCATGTATGCTTTCATTGTCAAGAATGTGTCACATGGTC
ATTTCTGCTTATTAGGGAATCTCAGGAATTACTTGGTAATGACTGGTGCTGGGCACCACGTTCTTCTGCAGGAAA
AGGAGTTTCTATTAGCAAGTAATAGATGTTATAATAGAGATGATAATACTGATGGAATGGACTCTGTGACAATAT
GGCACCAAATTATAAACAAGTCCCCTAAGGCCATACCTTGAGATAAGCAATATTAAAACATTTGCAGCTCACTGA
CTGCCAGATGTTGACTGATAACTCTCCCACCCCTATTCCACAAGCCATAAGTACAGCTTTGATTTGACAAGAGAC
TGATTTCAGTAACTTTCTGCTGATGAGAGACTACTGATCATGGACTTGTTCTGGCCAGTTTACAGAGGCTGCACA
CTGAGTGTCTTAGCCTCTGCTGCTTCACCTTTTGACATATTGAGCTTCACCTTTTGACATATTGGGCCTAAATAC
GTTTAAATGTTAAGTCTCTATGCCAAAGATGCATGCATGCACGTTTGCTTAATACACATGCAGGTGTCCCCCTTT
GTCAATATTCATATCTCCTCTTATAACCTGTTGAATATATATACCTAGCTAACCTGCGTAGCATAAATTCCTGTC
TTACCTTTCCTCCAAAGTGACTTGTTTTTCGCCTCTGCTGGAGGGTATCTATACTTCCCTGCAGGCTGAAACACT
TTATAAGAAATAAAGTTCTCTCGAAATTTATGAACCTTGAGACGAATGAGATGCAGACAGGCAGCACTGGAGAAT
GAACACTAGTTATGGATGCCTGGGCATAGCCCAGAGCCAGGGACTTCCCTGGGTGAGGTTGTCCTCATACTCAAC
TAGCCATCTGTTGGTGCTACAACAGCTCAAGCCTAAATCCTGAAATGTGCACTTTTCTTTTAGCTTGAAAAAAAT
TTAAAGCTACAGAAGAATTGCAAGAATTGTACAATAATATGTCTATATGTATGTATCATTGTTATATAATATGTA
TTATCATCATTGTTGAACTAATTTTAAATGTTGCAGACATCATGACCATGACCTTATNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
ATACTGTTATCTAATATACAGTCATATTTCAATTTTGTTTATCCTTCCAATACTGTTCCCTCCCCACCCTCCCAC
CCCAATTCAGGAGCCAATCTAGGATTATGACATGGATTTAGTTGCCATGTATCTTCAGTTTCAATTTTTCTTTGT
CTTTTCATAACATTGACTTTTTTTAAGAGAACAGCTGGTGGTTTNATAGAATTCCATCAATTTGGGTTTGTCAGA
TTATTGGCTTATGATTAGATTCAGTTATGAATTTTGGCAAGGATATTGCAGAAGTTATGATAGGTTCTTCTTAGT
GCAACTTATCACGATACACATGATGTCTGTTTGTCCCATTATTGGTGATGTTAACTTCCGTAACTTGCTCCATTG
AAAAGTACCCCCTTCCTTTCTGTAATTAAGTAATCTGTGGAGAAGATGCTTTGAAATTGTATACATATTTTATTT
CCTAAGAAACTTTCATCTATTGATAATTGTTTCCTGAATCAATTATTATTAAAGTTTGTTGTAAAATAATGAATT
TCTAACTCTATTAAAATTTCT

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FIGURE 5793

ERLFLTHHVTLRQDKGKRDPLSYQIK

FIGURE 5794

GAGAGTTAAACTTTACCTGAAAAGATGAAGTCAGCTTAAGTTAAAGTAAGGGAGGCTTGGCTTAAGNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNAAGGTGTCAGAC
TCTCCAGAAAAGACCTAATAAGAGAAGGAGATTCTCTACAGAATGCAGTTTCCCCCACAAGAGACAGCTTTGTAG
GGCCATTTCAAAATACGTCAAATAAATACATTGGGGGGTAAATTTCCTTTGGGGCCTGCTGTCATGTGATGCTAT
ACCAGAGTCAGGTTGGGATTTGGTATTTTATTGCCACAAAGGGTCTGTTTGGTTAGTCTTAAGATCTCTGTTTTA
ATGTTAATGCTGGTCAGTTGTATTTAAATTCCAAAGGGAAGAGGGTAATATGAGGCACCCTGTAATCTGACCATA
ATATGAGGCNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNGCTGTATATATATGTATACACACACTCCCCGCAT
AAATGTAAAAATTTTAAACTACCAATTCCTAGGCAAAGATGATTCTAACATTCTGTTCCTTTTGACAAGTGTCCA
ATTAGAGAATGCTGAGAATGTCCCCTGCATATCGGCTCTGTTGGAGAGCCCCTGATTTTTAGCAGACCTGTTTCA
TTCAAC**ATG**GGTTACCCAGGAGGTGGTCTTCATAAAAATGTTTCTTGGAGGCCAGGCGCCGT

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FIGURE 5795

MGYPGGGLHKNVSWRPG

FIGURE 5796

CTGGCATACAGGGACTGCTCTGCTCCAGGCATCTGCCACAATGTGGGTGCTTACACCTGCTGCTTTTGCTGGGAA
GCTCTTGAGTGTGTTCAGGCAACCTCTGAGCTCTCTGTGGAGGAGCCTGGTCCCGCTGTTCTGCTGGCTGAGGGC
AACCTTCTGGCTGCTAGCTACCAAGAGGAGAAAGCAGCAGCTGGTCCTGAGAGGGCCAGATGAGACCAAAGAGGA
GGAAGAGGACCCTCCTCTGCCCACCACCCCAACCAGCGTCAACTATCACTTCACTCGCCAGTGCAACTACAAATG
CGGCTTCTGTTTCCACACAGCCAAAACATCCTTTGTGCTGCCCCTTGAGGAAGCAAAGAGAGGATTGCTTTTGCT
TAAGGAAGCTGGTATGGAGAAGATCAACTTTTCAGGTGGAGAGCCATTTCTTCAAGACCGGGGAGAATACCTGGG
CAAGTTGGTGAGGTTCTGCAAAGTAGAGTTGCGGCTGCCCAGCGTGAGCATCGTGAGCAATGGAAGCCTGATCCG
GGAGAGGTGGTTCCAGAATTATGGTGAGTATTTGGACATTCTCGCTATCTCCTGTGACAGCTTTGACGAGGAAGT
CAATGTCCTTATTGGCCGTGGCCAAGGAAAGAAGAACCATGTGGAAAACCTTCAAAAGCTGAGGAGGTGGTGTAG
GGATTATAGAGTCGCTTTCAAGATAAATTCTGTCATTAATCGTTTCAACGTGGAAGAGGACATGACGGAACAGAT
CAAAGCACTAAACCCTGTCCGCTGGAAAGTGTTCCAGTGCCTCTTAATTGAGGGTGAGAATTGTGGAGAAGATGC
TCTAAGAGAAGCAGAAAGATTTGTTATTGGTGATGAAGAATTTGAAAGATTCTTGGAGCGCCACAAAGAAGTGTC
CTGCTTGGTGCCTGAATCTAACCAGAAGATGAAAGACTCCTACCTTATTCTGGATGAATATATGCGCTTTCTGAA
CTGTAGAAAGGGACGGAAGGACCCTTCCAAGTCCATCCTGGATGTTGGTGTAGAAGAAGCTATAAAATTCAGTGG
ATTTGATGAAAAGATGTTTCTGAAGCGAGGAGGAAAATACATATGGAGTAAGGCTGATCTGAAGCTGGATTGGTA
GAGCGGAAAGTGGAACGAGACTTCAACACACCAGTGGGAAAACTCCTAGAGTAACTGCCATTGTCTGCAATACTA
TCCCGTTGGTATTTCCCAGTGGCTGAAAACCTGATTTTCTGCTGCACGTGGCATCTGATTACCTGTGGTCACTGA
ACACACGAATAACTTGGATAGCAAATCCTGAGACAATGGAAAACCATTAACTTTACTTCATTGGCTTATAACCTT
GTTGTTATTGAAACAGCACTTCTGTTTTTGAGTTTGTTTTAGCTAAAAAGAAGGAATACACACAGGAATAATGAC
CCCAAAAATGCTTAGATAAGGCCCCTATACACAGGACCTGACATTTAGCTCAATGATGCGTTTGTAAGAAATAAG
CTCTAGTGATATCTGTGGGGGCAAAATTTAATTTGGATTTGATTTTTTAAAACAATGTTTACTGCGATTTCTATA
TTTCCATTTTGAAACTATTTCTTGTTCCAGGTTTGTTCATTTGACAGAGTCAGTATTTTTTGCCAAATATCCAGA
TAACCAGTTTTCACATCTGAGACATTACAAAGTATCTGCCTCAATTATTTCTGCTGGTTATAATGCNNNNNNNNN
NNNNNNNNNNNNNGCCATTGCAGTCTTGTACTTTTTACTGTGATGTACAGAAATAGTCAACAGATGTTTCCAAGA
ACATATGATATGATAATCCTACCAATTTTCAAGAAGTCTCTAGAAAGAGATAACACATGGAAAGATGGTGTGGTG
CAGCCCAGCCCACGGTGCCTGTTCCATGAATGCTGGCTACCTATGTGTGTGGTACCTGTTGTGTCCCTTTCTCTT
CAAAGATCCTGAGCAAAACAAAGATACGCTTTCCATTTGATGATGGAGTTGACATGGAGGCAGTGCTTGCATTGC
TTTGTTCGCCTATCATCTGGCCACATGAGGCTGTCAAGCAAAAGAATAGGAGTGTAGTTGAGTAGCTGGTTGGCC
CTACATCTCTGAGAAGTGACGTTACACTGGGTTGGCATAAGATATCCTAAAATCACGCTGGAACCTTGGGCAAGG
AAGAATGTGAGCAAGAGTAGAGAGAGTGCCTGGATTTCATGTCAGTGAAGCCATGTCACCATATCATATTTTTGA
ATGAACTCTGAGTCAGTTGAAATAGGGTACCATCTAGGTCAGTTTAAGAAGAGTCAGCTCAGAGAAAGCAAGCAT
AAGGGAAAATGTCACGTAAACTAGATCAGGGAACAAAATCCTCTCCTTGTGGAAATATCCCATGCAGTTTGTTGA
TACAACTTAGTATCTTATTGCCTAAAAAAAAATTTCTTATCATTGTTTCAAAAAAGCAAAATCATGGAAAATTTT
TGTTGTCCAGGCAAATAAAAGGTCATTTTAATTTAGCTGCAATTTCAGTGTTCCTCACTAGGTGGCATTTAAATG
TCGCCTGATGTCATTAAGCACCATCCAAAAAGTCTGCTTCATAATCTATTTTCAAGACTTGGTGATTCTGAAAGT
TTTGGTTTTTGTGACTTTGTTTCTCAGGAAAAAAAATATTCCTACTTAAATTTTAAGTCTATAATTCAATTTAAA
TATGTGTGTGTCTCATCCAGGATAGGATAGGTTGTCTTCTATTTTCCATTTTACCTATTTACTTTTTTTGTAAGA
AAAGAGAAAAATGAATTCTAAAGATGTTCCCCATGGGTTTTGATTGTGTCTAAGCTATGATGACCTTCATATAAT
CAGCATAAACATAAAACAAATTTTTTACTTAACATGAGTGCACTTTACTAATCCTCATGGCACAGT

FIGURE 5797

WHTGTALLQASATMWVLTPAAFAGKLLSVFRQPLSSLWRSLVPLFCWLRATFWLLATKRRKQQLVLRGPDETKEE
EEDPPLPTTPTSVNYHFTRQCNYKCGFCFHTAKTSFVLPLEEAKRGLLLLKEAGMEKINFSGGEPFLQDRGEYLG
KLVRFCKVELRLPSVSIVSNGSLIRERWFQNYGEYLDILAISCDSFDEEVNVLIGRGQGKKNHVENLQKLRRWCR
DYRVAFKINSVINRFNVEEDMTEQIKALNPVRWKVFQCLLIEGENCGEDALREAERFVIGDEEFERFLERHKEVS
CLVPESNQKMKDSYLILDEYMRFLNCRKGRKDPSKSILDVGVEEAIKFSGFDEKMFLKRGGKYIWSKADLKLDW

FIGURE 5798

GCAGAATCAATATGTGCACAGTTCTCTTTATCAGGCAAAAACACGTTTATTGAGACATGAAATGAGAATCAGGCT
GAAGGAATCATGCAGCTGAAAGATGATTATATTCATAGAAATGAAGAGATGAAATATTCAAAGAAGATGGCTACT
TTATTGTGAGACTTACCACTTTAACCTCATATGTTAACAGCACCTACCAAAAAATGATATGAGATAGAGCTAAAA
TACTGAAATTGCAAATGGACAAAATAAATCATGAAAATTTGTTTATTATTTCTTCAATAAATATTTCTAGGTGCT
TTGTGATTCTTTCATTTAGTCATTAAAGCCATTGCTTTACTATATTGCGTTGCCACTTTAAAAACAAGTTACTTG
ACATTGTTTTTGACAGATTTCACTATATTCTTATGTAATTAATTGATTATTTCTAAAATGTTTGAATAAACTTTG
TACTCCCTCTAAGGAGTATTTTATTCATTCTTTTAATTCCCAAATGAACTTTGAACTTACAGTGCTGTTGAATGC
CTTGGTAAGGACTTCTTGAAATTGCATAAACTATTCTTGTAAATGGTAAACTTGAGAATTTTCTTTGTTTCTTTT
TTCTCTATGTCTTAAAGAATGCCTTTAGAATCTAATTCATGTTGTATCAGATAAGAATGTTTCTGTGGTTTCTCG
TATCAGATGTGTAAAGAAATTATTACTGGGATGCCATTGGCTATGTCTCTTTCCCCTTCATGTAAAAATTCCAAG
TGTCAGTAAAACTTCTCTATAATATTTTCTTAAAACCATTTATAAATTTGTGTTATAATACTCCAGAAAATCAAT
GTAATAAGTGGTCATATATATCACCAACTATGGATATCAAAAAGTTGGGGTCACATCAGTGCTATTTATTTAATT
AAAATACATTGCATATTTCTATTAGCACAAACTTCTCTCTAAAAGGTCTGTGTAACTGCTTCTCATCATTATTTG
ATTGCTGTTATGGGATCCTGTCAAAACTGTGTAATTGTTTATTCTCCATTCCTCAAATACAAAATTGAGTAGGTT
G

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FIGURE 5799

QNQYVHSSLYQAKTRLLRHEMRIRLKESCS

FIGURE 5800

GTGAGAGGGGCTTTCACAAGATAACATTGTAGAATCATTCAGTGAGAACAAAAGTTGACTCAAGAAAGCAAGAGT
CTGGATTTAAATCCCTGGTAAAATTGCCTTAGTAAGCAATAATAAAATTTCCCAGCACATGACTGGGGTAAGTAA
TGAATTGTTGAAACCTGCAAAGAGCCCTAAATTATAAGAATTATGGGGGATCGGAGGAGGAAAATAAATGAAAAC
AGAAGACCATAAAAGAATACTTTGCATTCAGTAGAAAACCTGTCAGTACTGTAGGACAAAAAGGAATAGATTCTA
CATTTTACATCACCAGTGATGCCTCCTCATGGTTTAACCATTTCTTCCACATTCTGCCTAAAGGGAAAACTGTGT
CAGCAATTGCTTTTGGTTTTTAAAGTTATAGGTTGCTACTACATGGATGTGACTAAGAAAATACATAGATTATCT
TAAAATGGGCATGATGTAAAAGACTCAATCAGTAGGGTAACTAAAAACTTTGTAGTACTCTAGCTTTGGAAATCT
GAGAGGCCTATATAGTTCATTTGAGTGTTTGATCAAATTCTTATTGAGATTACAGCCTGTGCAAAATATTTGTGA
TGCATTTTTAAGTTTACTTAAGTACACTTTGAAATTCTTTAAAAATTTTAAAATCTTTAAAAGGACACAAGAGTG
TACCACATTGAGATTAAAATGTGTTTATTATTAATTTGTACATAATACTATAACAAATAATTGTTCTCAGGTATG
TTTAAGGCCTTATTTTAAAAGTTGATTCTTCAATTTCTAATTTAAAATAAGCTTTTAGTTTTTCTCAACTATGTA
TATGTAATGATTATAAATGCCTAGAGTAGTGTTTCCCAGACAACTAGAACCACACACAAATTAGTACCACCAAAA
AAAGTCGACGCGGCCGCTAATTTAGTAGTAGTAG

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FIGURE 5801

ERGFHKITL

FIGURE 5802A

CACAGTGGTCCTCCGCCGGCTACGGCGCTGCGTCACTGGTTTGCAGGCGCTTTCCTCTTGGAAGTGGCGACTGCT
GCGGGCCTGAGCGCTGGTCTCACGCGCCTCGGGAGCCAGGTTGGCGGCGCGATGAGGCGCAGCAAGGCTGACGTG
GAGCGGTACATCGCCTCGGTGCAGGGCTCCACCCCGTCGCCTCGACAGAAGTCAATGAAAGGATTCTATTTTGCA
AAGCTGTATTATGAAGCTAAAGAATATGATCTTGCTAAAAAATACATATGTACTTACATTAATGTGCAAGAGAGG
GATCCCAAAGCTCACAGATTTCTGGGTCTTCTTTATGAATTGGAAGAAAACACAGACAAAGCCGTTGAATGTTAC
AGGCGTTCAGTGGAATTAAACCCAACACAAAAAGATCTTGTGTTGAAGATTGCAGAATTGCTTTGTAAAAATGAT
GTTACTGATGGAAGAGCAAAATACTGGCTTGAAAGAGCAGCCAAACTTTTCCCAGGAAGTCCTGCAATTTATAAA
CTAAAGGAACAGCTTCTAGATTGTGAAGGTGAAGATGGATGGAATAAACTTTTTGACTTGATTCAGTCAGAACTT
TATGTAAGACCTGATGACGTCCATGTGAACATCCGGCTAGTGGAGGTGTATCGCTCAACTAAAAGATTGAAGGAT
GCTGTGGCCCACTGCCATGAGGCAGAGAGGAACATAGCTTTGCGTTCAAGTTTAGAATGGAATTCGTGTGTTGTA
CAGACCCTTAAGGAATATCTGGAGTCTTTACAGTGTTTGGAGTCTGATAAAAGTGACTGGCGAGCAACCAATACA
GACTTACTGCTGGCCTATGCTAATCTTATGCTTCTTACGCTTTCCACTAGAGATGTGCAGGAAAGTAGAGAATTA
CTGCAAAGTTTTGATAGTGCTCTTCAGTCTGTGAAATCTTTGGGTGGAAATGATGAACTGTCAGCTACTTTCTTA
GAAATGAAAGGACATTTCTACATGCATGCTGGTTCTCTGCTTTTGAAGATGGGTCAGCATAGTAGTAATGTTCAA
TGGCGAGCTCTTTCTGAGCTGGCTGCATTGTGCTATCTCATAGCATTTCAGGTTCCAAGACCAAAGATTAAATTA
ATAAAAGGTGAAGCTGGACAAAATCTGCTGGAAATGATGGCCTGTGACCGACTGAGCCAATCAGGGCACATGTTG
CTAAACTTAAGTCGTGGCAAGCAAGATTTTTTAAAAGAGATTGTTGAAACTTTTGCCAACAAAAGCGGGCAGTCT
GCATTATATGATGCTCTGTTTTCTAGTCAGTCACCTAAGGATACATCTTTTCTTGGTAGCGATGATATTGGAAAC
ATTGATGTACGAGAACCAGAGCTTGAAGATTTGACTAGATACGATGTTGGTGCTATTCGAGCACATAATGGTAGT
CTTCAGCACCTTACTTGGCTTGGCTTACAGTGGAATTCATTGCCTGCTTTACCTGGAATCCGAAAATGGCTAAAA
CAGCTTTTCCATCATTTGCCCCATGAAACCTCAAGGCTTGAAACAAATGCACCTGAATCAATATGTATTTTAGAT
CTTGAAGTATTTCTCCTTGGAGTAGTATATACCAGCCACTTACAATTAAAGGAGAAATGTAATTCTCACCACAGC
TCCTATCAGCCGTTATGCCTGCCCCTTCCTGTGTGTAAACAGCTTTGTACAGAAAGACAAAAATCTTGGTGGGAT
GCGGTTTGTACTCTGATTCACAGAAAAGCAGTACCTGGAAACGTAGCAAAATTGAGACTTCTAGTTCAGCATGAA
ATAAACACTCTAAGAGCCCAGGAAAAACATGGCCTTCAACCTGCTCTGCTTGTACATTGGGCAGAATGCCTTCAG
AAAACGGGCAGCGGTCTTAATTCTTTTTATGATCAACGAGAATACATAGGGAGAAGTGTTCATTATTGGAAGAAA
GTTTTGCCATTGTTGAAGATAATAAAAAAGAAGAACAGTATTCCTGAACCTATTGATCCTCTGTTTAAACATTTT
CATAGTGTAGACATTCAGGCATCAGAAATTGTTGAATATGAAGAAGACGCACACATAACTTTTGCTATATTGGAT
GCAGTAAATGGAAATATAGAAGATGCTGTGACTGCTTTTGAATCTATAAAAAGTGTTGTTTCTTATTGGAATCTT
GCACTGATTTTTCACAGGAAGGCAGAAGACATTGAAAATGATGCCCTTTCTCCTGAAGAACAAGAAGAATGCAAA
AATTATCTGAGAAAGACCAGGGACTACCTAATAAAGATTATAGATGACAGTGATTCAAATCTTTCAGTGGTCAAG
AAATTGCCTGTGCCCCTGGAGTCTGTAAAAGAGATGCTTAATTCAGTCATGCAGGAACTCGAAGACTATAGTGAA
GGAGGTCCTCTCTATAAAAATGGTTCTTTGCGAAATGCAGATTCAGAAATAAAACATTCTACACCGTCTCCTACC
AAATATTCACTATCACCAAGTAAAAGTTACAAGTATTCTCCCAAAACACCACCTCGATGGGCAGAAGATCAGAAT
TCTTTACTGAAAATGATTTGCCAACAAGTAGAGGCCATTAAGAAAGAAATGCAGGAGTTGAAACTAAATAGCAGT
AACTCAGCATCCCCTCATCGTTGGCCCACAGAGAATTATGGACCAGACTCGGTGCCTGATGGATATCAGGGGTCA
CAGACATTTCATGGGGCTCCACTAACAGTTGCAACTACTGGCCCTTCAGTATATTATAGTCAGTCACCAGCATAT
AATTCCCAGTATCTTCTCAGACCAGCAGCTAATGTTACTCCCACAAAGGGCCCAGTCTATGGCATGAATAGGCTT
CCACCCCAACAGCATATTTATGCCTATCCGCAACAGATGCACACACCGCCAGTGCAAAGCTCATCTGCTTGTATG
TTCTCTCAGGAGATGTATGGTCCTCCTGCATTGCGTTTTGAGTCTCCTGCAACGGGAATTCTATCGCCCAGGGGT
GATGATTACTTTAATTACAATGTTCAACAGACAAGCACAAATCCACCTTTGCCAGAACCAGGATATTTCACAAAA
CCTCCGATTGCAGCTCATGCTTCAAGATCTGCAGAATCTAAGACTATAGAATTTGGGAAAACTAATTTTGTTCAG
CCCATGCCGGGTGAAGGATTAAGGCCATCTTTGCCAACACAAGCACACACAACACAGCCAACTCCTTTTAAATTT
AACTCAAATTTCAAATCAAATGATGGTGACTTCACGTTTTCCTCACCACAGGTTGTGACACAGCCCCCTCCTGCA
GCTTACAGTAACAGTGAAAGCCTTTTAGGTCTCCTGACTTCAGATAAACCCTTGCAAGGAGATGGCTATAGTGGA
GCCAAACCAATTCCTGGTGGTCAAACCATTGGGCCTCGAAATACATTCAATTTTGGAAGCAAAAATGTGTCTGGA
ATTTCATTTACAGAAAACATGGGGTCGAGTCAGCAAAAGAATTCTGGTTTTCGGCGAAGTGATGATATGTTTACT
TTCCATGGTCCAGGGAAATCAGTATTTGGAACACCCACTTTAGAGACAGCAAACAAGAATCATGAGACAGATGGA

FIGURE 5802B

GGAAGTGCCCATGGGGATGATGATGATGACGGTCCTCACTTTGAGCCTGTAGTACCTCTTCCTGATAAGATTGAA
GTAAAAACTGGTGAGGAAGATGAAGAAGAATTCTTTTGCAACCGCGCGAAATTGTTTCGTTTCGATGTAGAATCC
AAAGAATGGAAAGAACGTGGGATTGGCAATGTAAAAATACTGAGGCATAAAACATCTGGTAAAATTCGCCTTCTA
ATGAGACGAGAGCAAGTATTGAAAATCTGTGCAAATCATTACATCAGTCCAGATATGAAATTGACACCAAATGCT
GGATCAGACAGATCTTTTGTATGGCATGCCCTTGATTATGCAGATGAGTTGCCAAAACCAGAACAACTTGCTATT
AGGTTCAAAACTCCTGAGGAAGCAGCACTTTTTAAATGCAAGTTTGAAGAAGCCCAGAGCATTTTAAAAGCCCCA
GGAACAAATGTAGCCATGGCGTCAAATCAGGCTGTCAGAATTGTAAAAGAACCCACAAGTCATGATAACAAGGAT
ATTTGCAAATCTGATGCTGGAAACCTGAATTTTGAATTTCAGGTTGCAAAGAAAGAAGGGTCTTGGTGGCATTGT
AACAGCTGCTCATTAAAGAATGCTTCAACTGCTAAGAAATGTGTATCATGCCAAAATCTAAACCCAAGCAATAAA
GAGCTCGTTGGCCCACCATTAGCTGAAACTGTTTTTACTCCTAAAACCAGCCCAGAGAATGTTCAAGATCGATTT
GCATTGGTGACTCCAAAGAAAGAAGGTCACTGGGATTGTAGTATTTGTTTAGTAAGAAATGAACCTACTGTATCT
AGGTGCATTGCGTGTCAGAATACAAAATCTGCTAACAAAAGTGGATCTTCATTTGTTCATCAAGCTTCATTTAAA
TTTGGCCAGGGAGATCTTCCTAAACCTATTAACAGTGATTTCAGATCTGTTTTTTCTACAAAGGAAGGACAGTGG
GATTGCAGTGCATGTTTGGTACAAAATGAGGGGAGCTCTACAAAATGTGCTGCTTGTCAGAATCCGAGAAAACAG
AGTCTACCTGCTACTTCTATTCCAACACCTGCCTCTTTTAAGTTTGGTACTTCAGAGACAAGTAAAACTCTAAAA
AGTGGATTTGAAGACATGTTTGCTAAGAAGGAAGGACAGTGGGATTGCAGTTCATGCTTAGTGCGAAATGAAGCA
AATGCTACAAGATGTGTTGCTTGTCAGAATCCGGATAAACCAAGTCCATCTACTTCTGTTCCAGCTCCTGCCTCT
TTTAAGTTTGGTACTTCAGAGACAAGCAAGGCTCCAAAGAGCGGATTTGAGGGAATGTTCACTAAGAAGGAGGGA
CAGTGGGATTGCAGTGTGTGCTTAGTAAGAAATGAAGCCAGTGCTACCAAATGTATTGCTTGTCAGAATCCAGGT
AAACAAAATCAAACTACTTCTGCAGTTTCAACACCTGCCTCTTCAGAGACAAGCAAGGCTCCAAAGAGCGGATTT
GAGGGAATGTTCACTAAGAAGGAGGGACAGTGGGATTGCAGTGTGTGCTTAGTAAGAAATGAAGCCAGTGCTACC
AAATGTATTGCTTGTCAGAATCCAGGTAAACAAAATCAAACTACTTCTGCAGTTTCAACACCTGCCTCTTCAGAG
ACAAGCAAGGCTCCAAAGAGCGGATTTGAGGGAATGTTCACTAAGAAGGAAGGACAGTGGGATTGCAGTGTGTGC
TTAGTAAGAAATGAAGCCAGTGCTACCAAATGTATTGCTTGTCAGTGTCCAAGTAAACAAAATCAAACAACTGCA
ATTTCAACACCTGCCTCTTCGGAGATAAGCAAGGCTCCAAAGAGTGGATTTGAAGGAATGTTCATCAGGAAAGGA
CAGTGGGATTGTAGTGTTTGCTGTGTACAAAATGAGAGTTCTTCCTTAAAATGTGTGGCTTGTGATGCCTCTAAA
CCAACTCATAAACCTATTGCAGAAGCTCCTTCAGCTTTCACACTGGGCTCAGAAATGAAGTTGCATGACTCTTCT
GGAAGTCAGGTGGGAACAGGATTTAAAAGTAATTTCTCAGAAAAAGCTTCTAAGTTTGGCAATACAGAGCAAGGA
TTCAAATTTGGGCATGTGGATCAAGAAAATTCACCTTCATTTATGTTTCAGGGTTCTTCTAATACAGAATTTAAG
TCAACCAAAGAAGGATTTTCCATCCCTGTGTCTGCTGATGGATTTAAATTTGGCATTTCGGAACCAGGAAATCAA
GAAAAGAAAAGTGAAAAGCCTCTTGAAAATGGTACTGGCTTCCAGGCTCAGGATATTAGTGGCCAGAAGAATGGC
CGTGGTGTGATTTTTGGCCAAACAAGTAGCACTTTTACATTTGCAGATCTTGCAAAATCAACTTCAGGAGAAGGA
TTTCAGTTTGGCAAAAAAGACCCCAATTTCAAGGGATTTTCAGGTGCTGGAGAAAAATTATTCTCATCACAATAC
GGTAAAATGGCCAATAAAGCAAACACTTCCGGTGACTTTGAGAAAGATGATGATGCCTATAAGACTGAGGACAGC
GATGACATCCATTTTGAACCAGTAGTTCAAATGCCCGAAAAAGTAGAACTTGTAACAGGAGAAGAAGATGAAAAA
GTTCTGTATTCACAGCGGGTAAAACTATTTAGATTTGATGCTGAGGTAAGTCAGTGGAAAGAAAGGGGCTTGGGG
AACTTAAAAATTCTCAAAAACGAGGTCAATGGCAAACTAAGAATGCTGATGCGAAGAGAACAAGTACTAAAAGTG
TGTGCTAATCATTGGATAACGACTACGATGAACCTGAAGCCTCTCTCTGGATCAGATAGAGCATGGATGTGGTTA
GCCAGTGATTTCTCTGATGGTGATGCCAAACTAGAGCAGTTGGCAGCAAAATTTAAAACACCAGAGCTGGCTGAA
GAATTCAAGCAGAAATTTGAGGAATGCCAGCGGCTTCTGTTAGACATACCACTTCAAACTCCCCATAAACTTGTA
GATACTGGCAGAGCTGCCAAGTTAATACAGAGAGCTGAAGAAATGAAGAGTGGACTGAAAGATTTCAAAACATTT
TTGACAAATGATCAAACAAAAGTCACTGAGGAAGAAAATAAGGGTTCAGGTACAGGTGCGGCCGGTGCCTCAGAC
ACAACAATAAAACCCAATCCTGAAAACACTGGGCCCACATTAGAATGGGATAACTATGATTTAAGGGAAGATGCT
TTGGATGATAGTGTCAGTAGTAGCTCAGTACATGCTTCTCCATTGGCAAGTAGCCCTGTGAGAAAAAATCTTTTC
CGTTTTGGTGAGTCAACAACAGGATTTAACTTCAGTTTTAAATCTGCTTTGAGTCCATCTAAGTCTCCTGCCAAG
TTGAATCAGAGTGGGACTTCAGTTGGCACTGATGAAGAATCTGATGTTACTCAAGAAGAAGAGAGAGATGGACAG
TACTTTGAACCTGTTGTTCCTTTACCTGATCTAGTTGAAGTATCCAGTGGTGAGGAAAATGAACAAGTTGTTTTT
AGTCACAGGGCAAAACTCTACAGATATGATAAAGATGTTGGTCAATGGAAAGAAAGGGGCATTGGTGATATAAAG

FIGURE 5802C

ATTTTACAGAATTATGATAATAAGCAAGTTCGTATAGTGATGAGAAGGGACCAAGTATTAAAACTTTGTGCCAAT
CACAGAATAACTCCAGACATGACTTTGCAAAATATGAAAGGGACAGAAAGAGTATGGTTGTGGACTGCATGTGAT
TTTGCAGATGGAGAAAGAAAAGTAGAGCATTTAGCTGTTCGTTTTAAACTACAGGATGTTGCAGACTCGTTTAAG
AAAATTTTTGATGAAGCAAAAACAGCCCAGGAAAAAGATTCTTTGATAACACCTCATGTTTCTCGGTCAAGCACT
CCCAGAGAGTCACCATGTGGCAAAATTGCTGTAGCTGTATTAGAAGAAACCACAAGAGAGAGGACAGATGTTATT
CAGGGTGATGATGTAGCAGATGCAACTTCAGAAGTTGAAGTGTCTAGCACATCTGAAACAACACCAAAAGCAGTG
GTTTCTCCTCCAAAGTTTGTATTTGGTTCAGAGTCTGTTAAAAGCATTTTTAGTAGTGAAAAATCAAAACCATTT
GCATTCGGCAACAGTTCAGCCACTGGGTCTTTGTTTGGATTTAGTTTTAATGCACCTTTGAAAAGTAACAATAGT
GAAACTAGTTCAGTAGCCCAGAGTGGATCTGAAAGCAAAGTGGAACCTAAAAAATGTGAACTGTCAAAGAACTCT
GATATCGAACAGTCTTCAGATAGCAAAGTCAAAAATCTCTTTGCTTCCTTTCCAACGGAAGAATCTTCAATCAAC
TACACATTTAAAACACCAGAAAAGGCAAAAGAGAAGAAAAAACCTGAAGATTCTCCCTCAGATGATGATGTTCTC
ATTGTATATGAACTAACTCCAACCGCTGAGCAGAAAGCCCTTGCAACCAAACTTAAACTTCCTCCAACTTTCTTC
TGCTACAAGAATAGACCAGATTATGTTAGTGAAGAAGAGGAGGATGATGAAGATTTCGAAACAGCTGTCAAGAAA
CTTAATGGAAAACTATATTTGGATGGCTCAGAAAAATGTAGACCCTTGGAAGAAAATACAGCAGATAATGAGAAA
GAATGTATTATTGTTTGGGAAAAGAAACCAACAGTTGAAGAGAAGGCAAAAGCAGATACGTTAAAACTTCCACCT
ACATTTTTTTGTGGAGTCTGTAGTGATACTGATGAAGACAATGGAAATGGGGAAGACTTTCAATCAGAGCTTCAA
AAAGTTCAGGAAGCTCAAAAATCTCAGACAGAAGAAATAACTAGCACAACTGACAGTGTATATACAGGTGGGACT
GAAGTGATGGTACCTTCTTTCTGTAAATCTGAAGAACCTGATTCTATTACCAAATCCATTAGTTCACCATCTGTT
TCCTCTGAAACTATGGACAAACCTGTAGATTTGTCAACTAGAAAGGAAATTGATACAGATTCTACAAGCCAAGGG
GAAAGCAAGATAGTTTCATTTGGATTTGGAAGTAGCACAGGGCTCTCATTTGCAGACTTGGCTTCCAGTAATTCT
GGAGATTTTGCTTTTGGTTCTAAAGATAAAAATTTCCAATGGGCAAATACTGGAGCAGCTGTGTTTGGAACACAG
TCAGTCGGAACCCAGTCAGCCGGTAAAGTTGGTGAAGATGAAGATGGTAGTGATGAAGAAGTAGTTCATAATGAA
GATATCCATTTTGAACCAATAGTGTCACTACCAGAGGTAGAAGTAAAATCTGGAGAAGAAGATGAAGAAATTTTG
TTTAAAGAGAGAGCCAAACTTTATAGATGGGATCGGGATGTCAGTCAGTGGAAGGAGCGCGGTGTTGGAGATATA
AAGATTCTTTGGCATACAATGAAGAATTATTACCGGATCCTAATGAGAAGAGACCAGGTTTTTAAAGTGTGTGCA
AACCACGTTATTACTAAAACAATGGAATTAAAGCCCTTAAATGTTTCAAATAATGCTTTAGTTTGGACTGCCTCA
GATTATGCTGATGGAGAAGCAAAAGTAGAACAGCTTGCAGTGAGATTTAAAACTAAAGAAGTAGCTGATTGTTTC
AAGAAAACATTTGAAGAATGTCAGCAGAATTTAATGAAACTCCAGAAAGGACATGTATCACTGGCAGCAGAATTA
TCAAAGGAGACCAATCCTGTGGTGTTTTTTGATGTTTGTGCGGACGGTGAACCTCTAGGGCGGATAACTATGGAA
TTATTTTCAAACATTGTTCCTCGGACTGCTGAGAACTTCAGAGCACTATGCACTGGAGAGAAAGGCTTTGGTTTC
AAGAATTCCATTTTTCACAGAGTAATTCCAGATTTTGTTTGCCAAGGAGGAGATATCACCAAACATGATGGAACA
GGCGGACAGTCCATTTATGGAGACAAATTTGAAGATGAAAATTTTGATGTGAAACATACTGGTCCTGGTTTACTA
TCCATGGCCAATCAAGGCCAGAATACCAATAATTCTCAATTTGTTATAACACTGAAGAAAGCAGAACATTTGGAC
TTTAAGCATGTAGTATTTGGGTTTGTTAAGGATGGCATGGATACTGTGAAAAAGATTGAATCATTTGGTTCTCCC
AAAGGGTCTGTTTGTCGAAGAATAACTATCACAGAATGTGGACAGATATAAAATCATTGTTGTTCATAGAAAATT
TCATCTGTATAAGCAGTTGGATTGAAGCTTAGCTATTACAATTTGATAGTTATGTTCAGCTTTTGAAAATGGACG
TTTCCGATTTACAAATGTAAAATTGCAGCTTATAGCTGTTGTCACTTTTTAATGTGTTATAATTGACCTTGCATG
GTGTGAAATAAAAGTTTAAACACTGGTGATTTCAGGTGTACTTGTGTTTATGTACTCCTGACGTATTAAAATGGA
ATAATACTAATCTTGTTAAAAGCAATAGACCTCAAACTATTGAAGGAATATGATATATGCAATTTAATTTTAATT
CCTTTTAAGATATTTGGACTTCCTGCATGGATATACTTACCATTTGAATAAAGGGACCACAACTTGGATAATTTA
ATTTTAGGTTTGAAATATATTTGGTAATCTTAACTATTGGTGTACTCATTTATGCATAGAGACTCGTTTATGAAT
GGGTAGAGCCACAGAACGTATAGAGTTAACCAAAGTGCTCTTCTCTAGAATCTTTACACCTCCTGTGTGGTTACA
AGTTAACTTTGTAAGTAGCGTACCTTCCTTCCTTAAAATATCTAGCTTCCTGTGCCCTTTCATAGATATTCGATT
AATTTTTACATTTTAAACAAGTTGACTATTTCCTTTAGGGGTTTTGTTTCAAACTTTTCTGTCATCTGTCTCTAC
TACCTCAGAAACTGCAGCTTGGTTCTGATGATAGAAATTGAATTTTTCCTTGTAGTTATTGTGATAAAGTATGAA
TATTTTTAGAAAGTCTATACCATGTTCTTTCGTTAAAGATTTGCTTTATACAAGATTGTTGCAGTACCTTTTTCT
GGTAAATTTTGTAGCAGAAATAAAATGACAATTCCTAAGAGCCAAAA

FIGURE 5803

MRRSKADVERYIASVQGSTPSPRQKSMKGFYFAKLYYEAKEYDLAKKYICTYINVQERDPKAHRFLGLLYELEEN
TDKAVECYRRSVELNPTQKDLVLKIAELLCKNDVTDGRAKYWLERAAKLFPGSPAIYKLKEQLLDCEGEDGWNKL
FDLIQSELYVRPDDVHVNIRLVEVYRSTKRLKDAVAHCHEAERNIALRSSLEWNSCVVQTLKEYLESLQCLESDK
SDWRATNTDLLLAYANLMLLTLSTRDVQESRELLQSFDSALQSVKSLGGNDELSATFLEMKGHFYMHAGSLLLKM
GQHSSNVQWRALSELAALCYLIAFQVPRPKIKLIKGEAGQNLLEMMACDRLSQSGHMLLNLSRGKQDFLKEIVET
FANKSGQSALYDALFSSQSPKDTSFLGSDDIGNIDVREPELEDLTRYDVGAIRAHNGSLQHLTWLGLQWNSLPAL
PGIRKWLKQLFHHLPHETSRLETNAPESICILDLEVFLLGVVYTSHLQLKEKCNSHHSSYQPLCLPLPVCKQLCT
ERQKSWWDAVCTLIHRKAVPGNVAKLRLLVQHEINTLRAQEKHGLQPALLVHWAECLQKTGSGLNSFYDQREYIG
RSVHYWKKVLPLLKIIKKKNSIPEPIDPLFKHFHSVDIQASEIVEYEEDAHITFAILDAVNGNIEDAVTAFESIK
SVVSYWNLALIFHRKAEDIENDALSPEEQEECKNYLRKTRDYLIKIIDDSDSNLSVVKKLPVPLESVKEMLNSVM
QELEDYSEGGPLYKNGSLRNADSEIKHSTPSPTKYSLSPSKSYKYSPKTPPRWAEDQNSLLKMICQQVEAIKKEM
QELKLNSSNSASPHRWPTENYGPDSVPDGYQGSQTFHGAPLTVATTGPSVYYSQSPAYNSQYLLRPAANVTPTKG
PVYGMNRLPPQQHIYAYPQQMHTPPVQSSSACMFSQEMYGPPALRFESPATGILSPRGDDYFNYNVQQTSTNPPL
PEPGYFTKPPIAAHASRSAESKTIEFGKTNFVQPMPGEGLRPSLPTQAHTTQPTPFKFNSNFKSNDGDFTFSSPQ
VVTQPPPAAYSNSESLLGLLTSDKPLQGDGYSGAKPIPGGQTIGPRNTFNFGSKNVSGISFTENMGSSQQKNSGF
RRSDDMFTFHGPGKSVFGTPTLETANKNHETDGGSAHGDDDDDGPHFEPVVPLPDKIEVKTGEEDEEEFFCNRAK
LFRFDVESKEWKERGIGNVKILRHKTSGKIRLLMRREQVLKICANHYISPDMKLTPNAGSDRSFVWHALDYADEL
PKPEQLAIRFKTPEEAALFKCKFEEAQSILKAPGTNVAMASNQAVRIVKEPTSHDNKDICKSDAGNLNFEFQVAK
KEGSWWHCNSCSLKNASTAKKCVSCQNLNPSNKELVGPPLAETVFTPKTSPENVQDRFALVTPKKEGHWDCSICL
VRNEPTVSRCIACQNTKSANKSGSSFVHQASFKFGQGDLPKPINSDFRSVFSTKEGQWDCSACLVQNEGSSTKCA
ACQNPRKQSLPATSIPTPASFKFGTSETSKTLKSGFEDMFAKKEGQWDCSSCLVRNEANATRCVACQNPDKPSPS
TSVPAPASFKFGTSETSKAPKSGFEGMFTKKEGQWDCSVCLVRNEASATKCIACQNPGKQNQTTSAVSTPASSET
SKAPKSGFEGMFTKKEGQWDCSVCLVRNEASATKCIACQNPGKQNQTTSAVSTPASSETSKAPKSGFEGMFTKKE
GQWDCSVCLVRNEASATKCIACQCPSKQNQTTAISTPASSEISKAPKSGFEGMFIRKGQWDCSVCCVQNESSSLK
CVACDASKPTHKPIAEAPSAFTLGSEMKLHDSSGSQVGTGFKSNFSEKASKFGNTEQGFKFGHVDQENSPSFMFQ
GSSNTEFKSTKEGFSIPVSADGFKFGISEPGNQEKKSEKPLENGTGFQAQDISGQKNGRGVIFGQTSSTFTFADL
AKSTSGEGFQFGKKDPNFKGFSGAGEKLFSSQYGKMANKANTSGDFEKDD

FIGURE 5804A

GGAAAGAAGTGGAATAATTAGGAACCTAGGGTGGGGTAGGGTAGCAGGACATTTCAAACATTAATGAGCATATGA
GATTCCAGGTCTTGTTAAAATGCAAATTCTGATTCAGCTGGTAGGTGAGGTCTGAGATTGTGCATTTCTAACAAG
CACTCAGATAATCTTAAGGCTGTTGGCCCCAGGGTCACACTTATAGTGATTTTCTAGAACCCAGTTGGGGAAGTG
AATCTTGGGCAGGAGAAATACACACCTCTTGCATTGAGTTTGGAGATCTCATCTGATATAACTTTTTAAGAAAGA
AAAATAATTTTCCAAATATCCAATTGATAAGCTTTCCCACTAAGTGGCTTTCCCACTAAGTGGCTGCGTTATGAA
AATTGCTTCACTTTGAAACTTCTGGTCTTGGTAATATAGAATTTCTGTGTTCTCACAGTGCTTGATTGAGAATAT
GATATTGAGATTATGGCATAAAATATAGTGGCTGTACAAAAAAAATACATTATTAGGATCTCTAACAATTATGTA
AAAGTCATTGCTTCATGGGTAGAGCTCAAACTTTGGTGTGAGACCTGGTTTTATTCTTGGCACTTACTCTGAGTT
GTCTTAGGCAAATTAATACCTTAAGCAAAAATATTCTCATGTACATTTTACATGAGAATTATAAATGAAGTACAT
AAAGTCCAGCAGTCACAAATGTTATCTATTATTACCATCGTCCTAAGACYGCAATCAGCTATAGTGAAAGTAGTC
TCAAAGATTGTTTCATAAATCATCAGATTCACCTAATTTTCTAAAGAATTTAAATAAGGAGATGGAATGAATAGA
TTGCATTTTGTTTCCATGCACAGGGGAACTGTGCATATTTCTTCTGTGACTCGGAAATGGTTTAACTTTTAAAAA
TCCCAAAATAGCTGAAGTTAGCAGACATGCAATTTACCAAGGATGATTGGAATTTTTATCTTTCCTGTAATAATA
CTATACCCAAGCACACTGCTCATGAGGAAAACATTTTTATGTGAATCTTTTACTCTTGGGGGCAAAGAATGCTGT
TTTTCTTTTTGATAACTATGTTTATAGAATCTAAATCACCCTGAGCAATTATTTCAACATCTAAAGTTATTATTA
CCATTCATGTTTCATTTATAGCTATTTGAATTTTGATGAATTTCAATATGGTGCTACAGTGATAGGGCAAGTGCA
AATAAGTTCAATATATGGGTACGGTCTAAAGCTATTTTAATTTTTTTATTACAACTGCT**ATG**AAGAAAATTAGGA
TATGCCATATTTTCACGTTTTACAGTTGGATGTCCTATGATGTTCTCTTCCAGAGAACAGAGCTCGGAGCTCTGG
AAATTTGGAGGCAACTGATATGTGCTCATGTCTGCATCTGTGTGGGTTGGCTGTATCTCAGGGACAGAGTCTGCA
GCAAAAAAGATATAATTTTGAGGACTGAACAAAATTCAGGAAGGACTATTCTCATTAAGGCAGTAACAGAGAAGA
ATTTTGAAACAAAAGATTTTCGAGCCTCTCTAGAAAATGGTGTTCTGCTGTGTGATTTGATTAATAAGCTTAAAC
CTGGCGTCATTAAGAAGATCAATAGACTGTCTACACCAATAGCAGGATTGGATAATATAAACGTTTTCTTGAAAG
CTTGTGAACAGATTGGATTGAAAGAAGCCCAGCTTTTCCATCCTGGAGATCTACAGGATTTATCAAATCGAGTCA
CTGTCAAGCAAGAAGAGACTGACAGGAGAGTGAAAAATGTTTTGATAACATTGTACTGGCTGGGAAGAAAAGCAC
AAAGCAACCCGTACTATAATGGTCCCCATCTTAATTTGAAAGCGTTTGAGAATCTTTTAGGACAAGCACTGACGA
AGGCACTCGAAGACTCCAGCTTCCTGAAAAGAAGTGGCAGGGACAGTGGCTACGGTGACATCTGGTGTCCTGAAC
GTGGAGAATTTCTTGCTCCTCCAAGGCACCATAAGAGAGAAGATTCCTTTGAAAGCTTGGACTCTTTGGGCTCGA
GGTCATTGACAAGCTGCTCCTCTGATATCACGTTGAGAGGGGGGCGTGAAGGTTTTGAAAGTGACACAGATTCGG
AATTTACATTCAAGATGCAGGATTATAATAAAGATGATATGTCGTATCGAAGGATTTCGGCTGTTGAGCCAAAGA
CTGCGTTACCCTTCAATCGTTTTTTACCCAACAAAAGTAGACAGCCATCCTATGTACCAGCACCTCTGAGAAAGA
AAAAGCCAGACAAACATGAGGATAACAGAAGAAGTTGGGCAAGCCCGGTTTATACAGAAGCAGATGGAACATTTT
CAAGACTCTTTCAAAAGATTTATGGTGAGAATGGGAGTAAGTCCATGAGTGATGTCAGCGCAGAAGATGTTCAAA
ACTTGCGTCAGCTGCGTTACGAGGAGATGCAGAAAATAAAATCACAATTAAAAGAACAAGATCAGAAATGGCAGG
ATGACCTTGCAAAATGGAAAGATCGTCGAAAAAGTTACACTTCAGATCTGCAGAAGAAAAAAGAAGAGAGAGAAG
AAATTGAAAAGCAGGCACTTGAGAAGTCTAAGAGAAGCTCTAAGACGTTTAAGGAAATGCTGCAGGACAGGGAAT
CCCAAAATCAAAAGTCTACAGTTCCGTCAAGAAGGAGAATGTATTCTTTTGATGATGTGCTGGAGGAAGGAAAGC
GACCCCCTACAATGACTGTGTCAGAAGCAAGTTACCAGAGTGAGAGAGTAGAAGAGAAGGGAGCAACTTATCCTT
CAGAAATTCCCAAAGAAGATTCTACCACTTTTGCAAAAAGAGAGGACCGTGTAACAACTGAAATTCAGCTTCCTT
CTCAAAGTCCTGTGGAAGAACAAAGCCCAGCCTCTTTGTCTTCTCTGCGTTCACGGAGCACACAAATGGAATCAA
CTCGTGTTTCAGCTTCTCTCCCCAGAAGTTACCGGAAAACTGATACAGTCAGGTTAACATCTGTGGTCACACCAA
GACCCTTTGGCTCTCAGACAAGGGGAATCTCATCACTCCCCAGATCTTACACGATGGATGATGCTTGGAAGTATA
ATGGAGATATTGAAGACATTAAGAGAACTCCAAACAATGTGGTCAGCACCCCTGCACCAAGCCCGGACGCAAGCC
AACTGGCTTCAAGCTTATCTAGCCAGAAAGAGGTAGCAGCAACAGAAGAAGATGTGACAAGGCTGCCCTCTCCTA
CATCCCCCTTCTCATCTCTTTCCCAAGACCAGGCTGCCACTTCTAAAGCCACATTGTCTTCCACATCTGGTCTTG
ATTTAATGTCTGAATCTGGAGAAGGGGAAATCTCCCCACAAAGAGAAGTCTCAAGATCCCAGGATCAGTTCAGTG
ATATGAGAATCAGCATAAACCAGACGCCTGGGAAGAGTCTTGACTTTGGGTTTACAATAAAATGGGATATTCCTG
GGATCTTCGTAGCATCAGTTGAAGCAGGTAGCCCAGCAGAATTTTCTCAGCTACAAGTAGATGATGAAATTATTG
CTATTAACAACACCAAGTTTTCATATAACGATTCAAAAGAGTGGGAGGAAGCCATGGCTAAGGCTCAAGAAACTG

FIGURE 5804B

GACACCTAGTGATGGATGTGAGGCGCTATGGAAAGGCTGGTTCACCTGAAACAAAGTGGATTGATGCAACTTCTG
GAATTTACAACTCAGAAAAATCTTCAAATCTATCTGTAACAACTGATTTCTCCGAAAGCCTTCAGAGTTCTAATA
TTGAATCCAAAGAAATCAATGGAATTCATGATGAAAGCAATGCTTTTGAATCAAAAGCATCTGAATCCATTTCTT
TGAAAAACTTAAAAAGGCGATCACAATTTTTTGAACAAGGAAGCTCTGATTCGGTGGTTCCTGATCTTCCAGTTC
CAACCATCAGTGCCCCGAGTCGCTGGGTGTGGGATCAAGAGGAGGAGCGGAAGCGGCAGGAGAGGTGGCAGAAGG
AGCAGGACCGCCTACTGCAGGAAAAATATCAACGTGAGCAGGAGAAACTGAGGGAAGAGTGGCAAAGGGCCAAAC
AGGAGGCAGAGAGAGAGAATTCCAAGTACTTGGATGAGGAACTGATGGTCCTAAGCTCAAACAGCATGTCTCTGA
CCACACGGGAGCCCTCTCTTGCCACCTGGGAAGCTACCTGGAGTGAAGGGTCCAAGTCTTCAGACAGAGAAGGAA
CCCGAGCAGGAGAAGAGGAGAGGAGACAGCCACAAGAGGAAGTTGTTCATGAGGACCAAGGAAAGAAGCCGCAGG
ATCAGCTTGTTATTGAGAGAGAGAGGAAATGGGAGCAACAGCTTCAGGAAGAGCAAGAGCAAAAGCGGCTTCAGG
CTGAGGCTGAGGAGCAGAAGCGTCCTGCGGAGGAGCAGAAGCGCCAGGCAGAGATAGAGCGGGAAACATCAGTCA
GAATATACCAGTACAGGAGGCCTGTTGATTCCTATGATATACCAAAGACAGAAGAAGCATCTTCAGGTTTTCTTC
CTGGTGACAGGAATAAATCCAGATCTACTACTGAACTGGATGATTACTCCACAAATAAAAATGGAAACAATAAAT
ATTTAGACCAAATTGGGAACATGACCTCTTCACAGAGGAGATCCAAGAAAGAACAAGTACCATCAGGAGCAGAAT
TGGAGAGGCAACAAATCCTTCAGGAAATGAGGAAGAGAACACCCCTTCACAATGACAACAGCTGGATCCGACAGC
GCAGTGCCAGTGTCAACAAAGAGCCTGTTAGTCTTCCTGGGATCATGAGAAGAGGCGAATCTTTAGATAACCTGG
ACTCCCCCCGATCCAATTCTTGGAGACAGCCTCCTTGGCTCAATCAGCCCACAGGATTCTATGCTTCTTCCTCTG
TGCAAGACTTTAGTCGCCCACCACCTCAGCTGGTGTCCACATCAAACCGTGCCTACATGCGGAACCCCTCCTCCA
GCGTGCCCCCACCTTCAGCTGGCTCCGTGAAGACCTCCACCACAGGTGTGGCCACCACACAGTCCCCCACCCCGA
GAAGCCATTCCCCTTCAGCTTCACAGTCAGGCTCTCAGCTGCGTAACAGGTCAGTCAGTGGGAAGCGCATATGCT
CCTACTGCAATAACATTCTGGGCAAAGGAGCCGCCATGATCATCGAGTCCCTGGGTCTTTGTTATCATTTGCATT
GTTTTAAGTGTGTTGCCTGTGAGTGTGACCTCGGAGGCTCTTCCTCAGGAGCTGAAGTCAGGATCAGAAACCACC
AACTGTACTGCAACGACTGCTATCTCAGATTCAAATCTGGACGGCCAACCGCCATG**TGA**TGTAAGCCTCCATACG
AAAGCACTGTTGCAGATAGAAGAAGAGGTGGTTGCTGCTCATGTAGATCTATAAATATGTGTTGTATGTCTTTTT
TGCTTTTTTTTTAAAAAAAAGAATAACTTTTTTTGCCTCTTTAGATTACATAGAAGCATTGTAGTCTTGGTAGAA
CCAGTATTTTTGTTGTTTATTTATAAGGTAATTGTGTGTGGGGAAAAGTGCAGTATTTACCTGTTGAATTCAGCA
TCTTGAGAGCACAAGGGAAAAAATAAGAACCTACGAATATTTTTGAGGCAGATAATGATCTAGTTTGACTTTCTA
GTTAGTGGTGTTTTGAAGAGGGTATTTTATTGTTTTTTAAAAAAAGGTTCTTAAACATTATTTGAAATAGTTAAT
ATAAATACATAATTGCATTTGCTCTGTTTATTGTAATGTATTCTAAATTAATGCAGAACCATATGGAAAATTTCA
TTAAAATCTATCCCCAAATGTGCTTTCTGTATCCTTCCTTCTACCTATTATTCTGATTTTTAAAAATGCAGTTAA
TGTACCATTTATTTGCTTGATGAAGGGAGCTCTATTTTCTTTACCAGAAATGTTGCTAAGTAATTCCCAATAGAA
AGCTGCTTATTTTCATTAATGAAAAATAACCATGGTTTGTATACTAGAAGTCTTCTTCAGAAACTGGTGAGCCTT
TCTGTTCAATTGCATTTGTAAATAAACTTGCTGATGCATTTAAAAAAAAARGTCGTCTTTTTCTTAGGTGTATGTG
TCTGACCTCAGGCCTTTTAGCCATATTTCAGTATGTGGCCTTTTTTGATGTTATGTTTTATCCAGTAGCTTTACT
AAGGTATAATTGATGTAATAAACTGCATATATTTAAAGTGTATACTTTGACAAATTTTGACATGGTGTATACCTT
CGAAACTATGCCACAGTCTGGATGTGTTTACTGAAACATTTTAATAAGGAAGTTTATTTTTGATAAAGTTATGTT
TTTGGATACAATATATTTGTATGGTGAGAGTGATGAATTGTTGGATCATTTGAATAAAATCTTTTACTAACCCCA
TGATAAAAGGAGAAGACAACAGTGAGCTTAGAATATCTATAAAGCAAAAAATGTAGTCTCTTGTTTAAAAAATCT
GGAGCGGGAATGCAAGGATACAAAACTTTAGCATGCTTTGAGCAAAAATTTAAACTTACTGGAATCTTTTATAAT
AATGTAAGTGGAATGGAGGATTCTAGGAACTGAGAACTGTATTGGAATAGGTTCAAAATATGTAAGAAATGCTAA
TGTGGGAGATAAAAATTTTATTTAGTACTTATTCTGATTATTATTAAAGTAATAATGTGTTCCTTGAGGATAACT
TGTCAAATGCCCCAAAGCATAAAGAATATAATTCTGAATCCCAAATTCCAAAGACAAGAACTCTGTGTTTGAATT
CATTCTGCATATAATTATTTATAAGTATAGATTGTGAATTTTTCCATGTTCTTAAAATTATTTTTATCTTTTTTC
ATGGTTGCATAGTGCTCCATTGTTTGGCCTTGGTAATATTTAGTTGATAATTCCATTACTGTGTATTTTTCACTT
GTTTCTAAGATCAAACATTTTAATATGTGCATGTTATATATAAATATGTAAATTCTGTGATACTCTATGATCATC
TCTTTCTTTATATTATTTTCATAGACATGAAATAGTTGCTCAGAGATTATGCATTTTAAGACACTCATAGTATAT
ATTGCCAAAGTGGTTTCCAGAAAGGCACTGCTGGCTTCGACTCCTATAAGCAGCACGTGGGCTTGTTCATCTCAC
TGCATGTTTATGAAGATACAGTTCTTTTGCCTTGTTCTCTGCCTGATGTGTATGCAGAGGCAGCCCTCAATATGC

FIGURE 5804C

AGTGGTTGAATAAATGAATGAAGAAACCACTAAAAAAAAA

FIGURE 5805

MKKIRICHIFTFYSWMSYDVLFQRTELGALEIWRQLICAHVCICVGWLYLRDRVCSKKDIILRTEQNSGRTILIK
AVTEKNFETKDFRASLENGVLLCDLINKLKPGVIKKINRLSTPIAGLDNINVFLKACEQIGLKEAQLFHPGDLQD
LSNRVTVKQEETDRRVKNVLITLYWLGRKAQSNPYYNGPHLNLKAFENLLGQALTKALEDSSFLKRSGRDSGYGD
IWCPERGEFLAPPRHHKREDSFESLDSLGSRSLTSCSSDITLRGGREGFESDTDSEFTFKMQDYNKDDMSYRRIS
AVEPKTALPFNRFLPNKSRQPSYVPAPLRKKKPDKHEDNRRSWASPVYTEADGTFSRLFQKIYGENGSKSMSDVS
AEDVQNLRQLRYEEMQKIKSQLKEQDQKWQDDLAKWKDRRKSYTSDLQKKKEEREEIEKQALEKSKRSSKTFKEM
LQDRESQNQKSTVPSRRRMYSFDDVLEEGKRPPTMTVSEASYQSERVEEKGATYPSEIPKEDSTTFAKREDRVTT
EIQLPSQSPVEEQSPASLSSLRSRSTQMESTRVSASLPRSYRKTDTVRLTSVVTPRPFGSQTRGISSLPRSYTMD
DAWKYNGDIEDIKRTPNNVVSTPAPSPDASQLASSLSSQKEVAATEEDVTRLPSPTSPFSSLSQDQAATSKATLS
STSGLDLMSESGEGEISPQREVSRSQDQFSDMRISINQTPGKSLDFGFTIKWDIPGIFVASVEAGSPAEFSQLQV
DDEIIAINNTKFSYNDSKEWEEAMAKAQETGHLVMDVRRYGKAGSPETKWIDATSGIYNSEKSSNLSVTTDFSES
LQSSNIESKEINGIHDESNAFESKASESISLKNLKRRSQFFEQGSSDSVVPDLPVPTISAPSRWVWDQEEERKRQ
ERWQKEQDRLLQEKYQREQEKLREEWQRAKQEAERENSKYLDEELMVLSSNSMSLTTREPSLATWEATWSEGSKS
SDREGTRAGEEERRQPQEEVVHEDQGKKPQDQLVIERERKWEQQLQEEQEQKRLQAEAEEQKRPAEEQKRQAEIE
RETSVRIYQYRRPVDSYDIPKTEEASSGFLPGDRNKSRSTTELDDYSTNKNGNNKYLDQIGNMTSSQRRSKKEQV
PSGAELERQQILQEMRKRTPLHNDNSWIRQRSASVNKEPVSLPGIMRRGESLDNLDSPRSNSWRQPPWLNQPTGF
YASSSVQDFSRPPPQLVSTSNRAYMRNPSSSVPPPSAGSVKTSTTGVATTQSPTPRSHSPSASQSGSQLRNRSVS
GKRICSYCNNILGKGAAMIIESLGLCYHLHCFKCVACECDLGGSSSGAEVRIRNHQLYCNDCYLRFKSGRPTAM

FIGURE 5806

TGCTTTGGAAGTGAGATGATTTTTTTTCAGTTAGGTGACATTTTTGTATTTGTAAGAAAACTATTTCTAGTACAT
GCACATATGAGAATACTGTCGCTGGTAATAGTTCTTAATAAGGGATGTATCAGCATCACGTGGGGAGCTTTTTCA
AAATATCTGTGCCCAGTTCCTACACCACAGAGATTCTGTAACCATAGTTGTATCATGGGGGATATAGGGACTTGG
AAAAAGTCCAAAGGATGTCTGATACATATCCTCCTTAAGAACCATTGACTTACAGGATAATAGCACCAAACCTCA
TATATAGTTACCCATAATTCAAAGGGGTTTACAACTAAACCTTGNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNCAGATTCTGACAGATAAAGTATCATTTCAGTAGTGGTTTTAGATGTGTTCTGTCTGCC
CATCTGATAACCGAAAATTTATCACTTTCATGAATAAGTGTTTTCAGACCAATATTCAATAGTTGGATAAATTTT
ACATTAATATATTTAAATTTATTCTGTCCTTATCAGGTGGTTTGATTTAATAATTTTAAATAATTAAAACAGAAA
TTAAGTCTAGTTTAAAAAAAATTGTCTCCAGTAAGCCTACCAAGAAATTTGGTATTTCATTAGGTC

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FIGURE 5807

CFGSEMIFFQLGDIFVFVRKLFLVHAHMRILSLVIVLNKGCISITWGAFSKYLCPVPTPQRFCNHSCIMGDIGTW
KKSKGCLIHILLKNH

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FIGURE 5808

TCCCCCTCAGATAAGGGGGTACTACTGAACTCCCATTGCAATCCTCCCTGTGCCAGTAAATGGCAGCTCTATTCC
TTCACACCAGAAAATCTCGTTATCCTTTATTTTTCACTTTCACATACCACATCGAATCCATTTCTTTTTTAATCC
TGTTTTCCCTAGTTTCAGAATATATCCACAATCCACTCTGGGTCCAAGCCACTTCTTGCCTGATATGATGGTGTT
AAAACATATTCCAGGTTATGCTACTTTTCTGCTAGTCCCTCAATGCCTTCCCATCTCACCTGGAATGTCAACATC
CTTACAGTGGCCTAGAAGGGCATTGTGATAATCTGTCCTACTTTTGGCCCCACCTCAGCCGCCACTGCCACTTCT
CTGACCTCATCTATTTCTTTTGTCACTTTGCTAAAGTCACACTGGCCTCCTTCCTTCACCCAGAACACCCTCAAA
GCATGTTCTGTCTCAGAGTCTTTGTCCTTGCTGTCTCTCAGTCTCAAAACTTCCCCCATATGCCTACATAGCTGA
CTCCCTCCCTTCAGGTCTCTGTACAAATATTCCTGTACTGTCAGAGACCTGTGTCAAATAACTTCTCATCCCCCC
ACTCATTTTCTGCTTCATTGCCTTTCACAGTACTTATCACCATATACTTTGCTTACTGGTCCGTCTCCAGTGCTT
TGAAGAATGCTTGGCAAATATTAGTCACTCAGTAAATATCTGTTGGATGAAAGAATGAATGAAAATAATAACAGA
GCTTTGGAATTTTTTAAAGGGTAAAAAACTATATGATTAATTTCAGTTTCAAAAAAAAAAAAAACACTGTCTCCAA
AGTTTATATCATAAAAGCATAGGTTTTATGTCATATAGAAAATAGAAAACCCTACAGATTTTCTTTCCTGGAAGG
CTATTGTGGATGGAAGACACCGGGCTATGACCCTGGCTATACTTTCTTGCTCCATGAATCATCCTAACAGGCCAA
GTTGCAGGAACGTAAGAAGGGCTGTCATATAGAACCATGAGAAAAGCAGTATTTCAAAACTCTTACATTTTTACA
GATAATGATCCATTTTAAGCTATTGGCATTGCAATAAATGCAGTTATTGGATGTGGGTGGGGATTCTGAATTTTG
TTTTCTGGTCTAAATGTTTAAAAAAACAATTTTTTTTTTCTGAAACAAGAAATAAACAACAGTGAAAGTATCCTC
CTGCCAAATGCAGCTTGAAGACAGCCTAATGACATTTGGGTCTTAACAATCTTCCAAGGACAACAATTCTGCCTC
CCTGGGAAGCCTCTAACATCTGTATATATTCAGCTCCACTGAATGTTGCATGAAGTTTCATTGTAGAAAATTGAC
ACATGCCTTCTGATTAATCTGTTGTTTCACTCAGTCTTGTAAAGGGCACACCCTGTAGTTTCCATTTGTTCAATC
ATGTATTTTCCTGCTCACTTAATAAATCTTTTTAAAAAATAAAGAAGGAAGATAACAAAATGATGTCATATGANG
CAATATAACAGTGAAAGANTTTTTTTTTTGGTCCTCATTACTTTTTGTGTCTTTTCACAAATCTGTTGAGATTAA
GGATAGTGTGTAATTCATGCTAAATAGCTAGGATCAAGGTCTTCACCTTTCCAGGACCAAAAGCATTTTGGAGTT
CCATGGTGCTTAGTTACAGATTCCTGANGTCCTGTTGAAAAATGCAGGACATTAGTTTCAGGGATAGATGGAAAA
TATGAAAAAGATGCTAAGAAATGGGACAAGGTGTCACAGTCATTGTGAACAATCTAGATTATCACAAACTCCAGT
TAAGATACAAAAACATTTTCAAAGTGAGTTCTCTATATGTGAAAAAAAATATTTTAGGGTGTTGGTTTTCTTTAA
AATTGTAACTCAACAGCTTAAATACATGTTTTTATATTTTCATAAGCAACTAAATCCATGTTCTATGACAATAAC
AATTTGATATAGGGTTATCTCCCTCCAAAAATTAGTCATCTTCATGTCCAAAGTTCAATGTTAATTTACCCATAG
TCATGAGGGCAGGGATCAGCAGCATCACGGTCTGATGAACATTTTCAGCACTGTACCCAGTGCTCCATGGATCTC
AGGTTATCTTTTATTATTAAACCCATTTAATAAGAGAGATGGCAGTTGAAAAATTGAAGGATTTAGAGCTAGAAG
GCATCACTGGAGCAGAAAGAAACAGCATAGCCTTCAGGTCAACTTGATACTCTTCCCCCATCTCATTCCTTCTCA
CTAGAATAGCCACATTCATAATTGGAAGCCTAGCCAGCTCAGGCCAAAGTTATCATTAGTCCAAGGAAAAATGAC
CAAAAAGGACAGCATAGTGAGTTTTGTATAAAAGCTCATTTAAAGATCGTCTTATTTGGAGATGGTGTGCCCTCA
TTTTAGTGTTACAATGTATTTGAGAGCTGATGCTGATAATAAATGGCTATTTTATTAAATGCTCTAGTTTGGCAA
AATTAAAAGTTGACAGTTTTGTTGTTCTTCACAAG

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FIGURE 5809

SPSDKGVLLNSHCNPPCASKWQLYSFTPENLVILYFSLSHTTSNPFLF

FIGURE 5810

GCCTCTTTTTTTTTTTAAATGTTTTTAAGTTTGGAATTGGTGTTTGGTTTTGGTAATGTAAGTCATGGTCAGTTT
GGGGACCGGGCCCCCAGTTTGTAGAGAGTACATTTCTTGGTGACTACAAAGTTCTACGTATACTAGGTAACTGTT
GTGTTTTAAAAATACATATTGCCCTTTTTATTGTCCTTTACTCAATCTGTGGGTTTCTGGAGAGGTATGTTAACA
TCTCTGGTCATGATTGTGGTGAATTTTATAACTCTGCTTTTGCTTTAATCATTTGAAGCCACTTAGCATCACAGA
GGTTCATGGCTATTATGCTGTATCTTCTTTATGTGTTTTTATTTACTTTTATTAAATACACAGTATCTTCACCCT
TGCAAATGCTTTTTTACTTGAATTCTAGTTTGCATACAGTAATAATGCCATATCTACATTTCTTTTGTTAGCCAA
GACCTATTTTATTTTCCTGTTTATTTCAACCATTGGTGTTTAATTTTAGATTGTCTTCTATAACAGCATTAAGTG
GATTTTTTAACTGACTCTGATAATGTCCTTTATTATTACCACTTTTAAATTATTCCTGCCATATTATTGACATTT
TAATTACAAATTGTTATTGAATATAGGCTGGGCGCAGTGACACACGCCTGTAATCC

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FIGURE 5811

LFFFLNVFKFGIGVWFW

FIGURE 5812

GCAAATTTTTGTTGGGAAGTGGACATTTTGTGTGTTGTAATATGGGAACTCTGAAAGTCAGATTCCACTGCCTCC
CTAGGGATTACTGTTGTTACTTACGAAAGCTGCATTTGTTTAGTGACTTTTCCAAACTGTCTTTGCAAAGAGTGT
ATATCTGGTTGCATGCGGTCACTGAAGTCTCTGTTCTTTTATCTCTGTGGTCTTTCAATGACTTGACAGAGAGTT
CCTTAAATGCTTAGATCCAATAAGAAAAAGAAAACAGAAAGAAAAAAAGAGTGTTCTCTCCCTTTAAGTTCACTT
GTCTAGTGCCACTAGGTAGGCAACTTCAGTTCGGGGGGTGTGCATGTGTGAAACAGTGGCCAGCGCTCTGGCAGCT
CCTCAGCAATCAAAAGTAGTGAACGAAACACATAACTTCAATTTTTGGAGGACAAAGCCCCTATTTCCTGCCCTA
GCACCAGCAAGCTGCAGCAGAAACTGCCATCCCAACAGTTGGTTACCACAGGGATGGGAGCTAGAGAATGATAAG
ATGCTATTCCAAATGCCAAAATTCACTAAAATTTACCAACTTTTTTCTTCATCAAGCACTCTTCTGGACACTGCA
AGTGTTTCATTAGACCCCAGAGTCCTAAAATATCACCTCAAGCAGTTCTTGCCATCTCAATAGTTACTTTGGTGA
AGATACTAACTCCTGAAGTTCCTACTCTGTCATCTTGACCTATGTCCTTAATTTTCAGCACCGATTTAGTTGATC
CAACCCTCCTTCTCAGTGTATGCGCGCACACACACTCATCCAATCTGTTCTCTACACAGAAAGAACCCTTTGTAA
GTGCCAGTGCCTATGTTTTTTTCACTTAAAAGATAATTTCATTCTTAACATGGAAAAAGCGGAGT

FIGURE 5813

KFLLGSGHFVCCNMGTLKVRFHCLPRDYCCYLRKLHLFSDFSKLSLQRVYIWLHAVTEVSVLLSLWSFNDLTESS
LNA

FIGURE 5814

TCATTTTTAAAGAGACTCCTGCTATGTTGCACAGACTTGTGAATTCCTGGTTTCAAGTTATCTTTCCCCCTATGT
CACTCAAGTAATGTGGACTACACTCATGTGACACCATGCCCATCTTTATGTTGTGTATCTTATTTTTGTTTTGTT
TTACTCTTGAATCAGCTCAGTCTGAAAATCTGTCTTTTAATTCATGGGGATTTTTTAGAATGATTTCTTGGAGGG
TTTTGTCTTTTGAATGTGTGGTCCCTTCTCTGCCTAGAACTTTTTTTTTTGAATGAGAC

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FIGURE 5815

MPIFMLCILFLFCFTLESAQSENLSFNSWGFFRMISWRVLSFECVVPSLPRTFFFE

FIGURE 5816

TTTTAACAATATTCATTTGCATTAGTTCCATTCCTTAGAGAAGTTCAAAATTAAAAATAAAGCAGTTTCTCACAC
ATTTAAAGATATAGAACAACTAATTTGGAAAGCCATGTGATGGCCCCTTGACCCAGGAAAGAAAAAATATATAAT
AAGTACATAAAACTACACAAATGTTTGCATTTCAGGATTATGAATTATAAGTCAGTTTGTTACTTCACCATAGCA
AGATGTTGTGAATCCACTAAAATGTTCTTTATGGGGATTGTAATTTAAAGACTGAAGAGCAGGAACGATCACTGG
TTACAACTGTATGACGTGGACTGGACAAAGACTCGAGATTAATATCCAAAAAAGTTTATAGATGGGTTTGAATAA
TAGATAATGGGTCATTTTTATAACATTTTACAATAATTAATTTTATTTCATCTTTTAATGTGGGGGGTGGGGAGG
TAGAGATATATATGCTAGAACTTGAACTTTAGAACTGTTACTCTCAGGTGTCAGGAACCTTAAAGAAGTTTGGAC
TTTTCTTTGCAGTTAGGAAATGTAAGTGTTCATTATAGATAATTTATAAAATATGAAAAACCAGAAGAAAACAAA
ATAATCTGTAGTTCTACCATGCAAAAATACCCCATTATTCACAGTTTGATATTTTCTTTAGTTTTTCTACATAGA
CATGATCATATTGTATAGTATATATGATTTTGTGTATTGCTTTAAGCACCTATATATGTTGACTCACGCGTTTGA
TGATTATCTNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNACATATATTTTTTTCCT
TAGGATTTTTTTAGAATAGATTTCATAGGTTTAAAATTTTATGATGCAAGTATATTTTCGAGGAATGGAAATATA
GGCTGAAGAGCCAGAACAAACACCTAAAATTCAATACTAATAACTTCAAGCCATTATATGAAGGTTTCAAATAGG
TGATTTAAAGCAGTGCAATGCATTTTATGCTAATTTTCGTTATGCTATTTGAAAAATAAAACCCTTCTTAATGCT
CAAAATTTGAAATAATGCAAATGCCGCAGATTTGTTTTTAGCCTGAATTATACACTGCACTGATAGTATGGCCAC
ACGGTGGCATTGCCGTGGCTCCTGAGCAGCAGCCCTGCCTGCTTGCCTCAATGCCTTGCAGCCAGCACTTGCTCA
GCCCGTGGGACTTCTAACAGCACTAATGTTGGTTTTGTAGTTATTTTCCTTTTTACTTTTGTAATGATTTAACTT
TTTTCACACCCTGTAATAAGCGTAATAGAAGCATTCATTAGTAACTTCCATAGTTAGAAAATTCTGGGTAACAAA
ATGCCCTAAAGGATGCCGGACATTGTCACAGTATGTTAGAGTGCTGTTAATTTGGAAGAGAGAACTATGAAAAAA
AAAAAATACTGAAGATTGTGCTGCAAAAATAAAAGGCAGCATTACAGCAAAGTACACAAGGGTGATTCTAGATGT
ATGTGCTTGGAAACAAATCTTTCCTATTTTATATTATTTATGTCTGGTTTATAACTAAGGGGACTTTATTCCTGT
GCAGCATCGCTGTGTGCATGTACACTCTGTGAAGCTTTATAAGTATTTGGCAGTCGTGAACATAAATGTAACAGG
AAATCCTGAGGAGTGGGGCTAAATCATCTTAAGAGCAATAAAC**ATG**GCCAGAATTTCTTTCTTTTTTTTCTGGTG
GTCCGGTTTGGTTTTGGAAATGGGAGTCTCGCTCAGGTCACCAGGCTGGACGTCCAGTGGCGCACAATCTCACGC
TCACTGGCTACACTCCATTTCCCAGGTCCAACGCAGATCTCTCCATGCCTCAGCCTCCCACGTACGCTGGGACT

FIGURE 5817

MARISFFFFWWSGLVLEMGVSLRSPGWTSSGAQSHAHWLHSISQVQRRSLHASASHVRW

FIGURE 5818

AAAAAAATAACAAAACGGGTAACTCTCACGTGGTAGGATATTCTTAATTCAGCACAGATAAAAACATTTTTGATT
GTATTTTTCTTATTTCTCTACCTTCATAAAGAGAGTACACGCCCTTCCTTTCCCAATAATTCAAGATCATTTTTA
TGATGTAGCTCTAAGTATATTTGAGGATTTGTTTTCTTTTGCAAAAGACCAAGGGAAAAACTAAAAAATTTATAG
GGCACATTTTAAAACTATATATATAACACACACACGTATATTCTGGCTTTTTAAAAAACAGGAATGTATTTGC
AACTGTGCTAGGTGTTTTTTTTTTTATTACTAAGGTTGTTTTAGGGGGGAAGGTAGGGGGAGAACAAGGAGGACC
AACATTACAGAAACTTCCCTAGTATGTACTGCTGTATTTGAGTATGATGCTACACTTTTCAACAAATTTTGTTGA
TCAACAATATA

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FIGURE 5819

MMLHFSTNFVDQQ

FIGURE 5820

CATAAAAAGTATTTGAGAAACACTGGGATTTCATTTATTGGGATTTGACCTACATTCTTTCTGGGAATATTGTCA
AGATGAGATATAGTTTGTAAATGAGGCTAGTGCAGTATGATTATTCTCTCAAGTTTGCATTTCATGAGTCATTTA
CTCATGCTGTGTTTTGTAGAGTCTTCCTGAAGGTGTTGGGTTCTCTGGTGGTGAGTATATCTTTCTTAAATTGCT
GCTGTGGTAGGCCTTGGTAAAGTTCAACTGGGTTGGATGGGGAAGTTCTTTGAACTCTTTCAAAAATCACCAAAC
TACAGATAATCGCAAATCTAGCAGAGGGAAAATATCAGTTATTTAACTTTGAAAACAAATCCAACTTTGTATTTT
AGAAATTACTTGCAAGACAGTAAGTCCATGATTTTACAACACAATTGCACTTGTAGGTTTAAAATTAGAAGTAAA
TAGCATAGTAAATGCTCATTCAATAGTTGTTTAATGAATTAAGTAATTATATTGTTTGTATAATTTTGAGGAACT
AGAAAGATGAGTGAGGCGATTTCAATGTGTACATGAGGGCAACAATCGTGTATAATATCTACTTGGCACTTCACA
GAGGGCATGACTCTTTCCATAAAAATATTTAGTATGTTCATGATGTCTTTTATCTAAAGAATTTCATGCTTTAGA
TATTAGTCAATTCTCAAAACACTACTCTGAGGAAGGTGAGTGACACACCCCTTTATAGACGAAGAATTTGCAGTT
GAGGCTGGTTAAATGTGACTAACTCAAGATTAACACTGGTGGTAGGAGACTTGTCTCTGGCCTCATTCTGTGCCC
ATGACCTGCTCTTTGACCTTCAGGAAGCTTTATAGCCTCCTCCTGTCCAACCTCCCTCCCTTAAAAA

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FIGURE 5821

MTCSLTFRKLYSLLLSNLPPL

FIGURE 5822

AGAGAGAAAGTGCTATTGAAACATCTTGTAGAATGTTGGCAGTTAAAAGGGCATATTACTACTCAATCAATATAA
AGAACTTTTGAACAAGCAGAGCCATCTGAAGTTTGAATGTGCTGCTTTCTGAGCTCCTTTAGATGGAGGTGTTCA
AACAGCCTAAATCTTTTGAGAATACCGTAGGGCATAAATCACAACTTTTTAAAAATGAGCCAGCTATTTGTTCTT
TATTATACATGAACTAAGAATATCCAGTTCTCTAAAACAAAATTTTGGTTTTTATACTGTTCACTTTCTAGCAAG
TACCAAAGTACCTTGTCTGTATATAAGACATGAGTGAAGAGGGAGGAGATGTGTGGAATAAGATGCATAACACAT
AGTCCTTAAGCTTAATTATGCCACCCTACATTTTATGATTTACGGATTTCGTATTATCCTTAGGAAGTTTACTGT
TTACTTGGGAGGTCTGATTTTGTTTGTTTTTATACTTTAAGTAAGTTGTGTCAAATCATTCTTGAAACATAAAGG
GTAAATATCTCCAAATGGGAAAATTAGACTTATACATAATAAATAGAGTAATACATGAAATATCACAAAGCAACT
TGTGACTAGGTGCCAAATGTGTGGGATGGGCAGAAGAGCAATAGGGACTTAGGAAAGAGAAGGAATGTCATGCTG
GTAGACTTCAGGGAAGTTTCATAAAAGGAAGAATTTTAACTCAGCGTAGAAAGATGGGTAAATTTTCCTCATGTG
AAGGTGTACTGCCTGGGGTGCTGCAGGCTGGAGATGAGTATTAAAATAGGAGGAGAGTGAGTGAAAGCACAGGAG
GAGGAAGGGTCAGGCAAGTTTGGTGAACACAGCAACTGGCTATAGAACAGGAGCAGTGGGAGAAAGTCCAGAAAG
GTCTGCTGAGCTTCAGTTGTACAAAGCTGTGGAGTTTGGCCTTTGGTCATGGCTAGATTAGGTCTGAAAGCCTTA
ATT

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FIGURE 5823

RESAIETSCRMLAVKRAYYYSINIKNF

FIGURE 5824

GGGTATGATCCTTTTTTCTCACCTGCTACCTACCTTTTAGGCCTCTTTCACTCGTGTAGTTTCAAGGAAAATATA
CTCAATTATGGAATACTTTCTACACATGATACATTTATCCCAAAAAAACTTGAAGTAATTTATGTAAATGAAATT
GCTTGATTAACTTCATAGGAAGTGTGCTGTTTGGAATATGATGACACAGCATGACAGTTACCAAGCATGACTTGA
GTTGTGCTAGGATATAGGTGTGCAAAGTTGGGGTTGTGTTCTATAGCAAAAGAATGCACTCCCAGCGTAAGCAAC
ACTGATGGAAGGGGCTCACAGGGTACTGGATATAATACTCTTAACAACTAATTTTTGGAGAATGAAAGGGCTTTT
CTTTCCCTCTTGTTGGCTGATTGGGATGGTATAATTAATGGGATTGAAGAGTTTGAGTAGGTTAAAAGGCAGATT
CATATTGGGTAACTTGGATCTGCCAGGATTGTATTTTTGAGCACTACTGGGTGGTTAGCATGATTGAGGAAAAAT
GATGGGAATAAGAAGTGGAAGTGGTCTTTGTATCACAAGTTGAATTTCTCACTTGGAGTAGTAGTGAAGTCACTA
CTGTAAGAGCTGGTCAGTGAATGTGGTTGCAGCATGGCCTTTGGGCAAGAAGTAACCCATTTAACTAAAACCAGC
TGGTTGGCCCCACTCAGATTTATCAAAGGGTTACTGGGTCCCTGGGGGTGGATATTGCTTATATTAGACTTAGAA
TAGCATACTGTTTTAATATTATATGAACTAAAATGTTTCTTTAAAAAAAGAGTGGTCTGTTAATGGATTTATGTA
GTGGTCAAGAATTTAGACTTCAGAGTCAAATAAACCTATATCAGTCCTAGTCCTACAGTTTACTAATTGTGAGAT
GTCAAGCAAGTTTTTGAACTCCTCTAAGCCTCTGTTTTCTTATCTNNNNNNNNNNNNNNNNNNNNNCGGGTTGA
GTGAATATTTAGTAAATTCTTAGTACATACTAGTTATTTGTAACTGTGAGACTGGTTTTTTGGTATGGTTTTCAC
ATTTGGGAGTAGAAATACCACTTCCTAAAGTCTGTTTTATCTCAAATTCTCTATCCAGGCATAGTGTAAAGTGAA
ATACCTAGATTTCTTGATTAATATACAGATAAT

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FIGURE 5825

GYDPFFSPATYLLGLFHSCSFKENILNYGILSTHDTFIPKKLEVIYVNEIA

FIGURE 5826

GACTTTGTAAACTGATTTCAGAGAAGCGATTAAGGAATTGTACTGTCTTTAAACAATATTTAGAATGCTTCAGTA
AAAGCATTTTTAAAAAATTTTTCTAATGATGTAGTAAATGTACCTAATATAAAGTTAAGTGGTTTTATTTAATAC
TTTTCACCTGACCATGATTATGTTATAAATAAGAGGATTTATAGTTTGCATGCCTGATATAATCTATTTAATTTC
CTTTACAAAATTTTTGTACATGAAAGATAAATGTCTTCATTTTACCAGCTACCTCCTTCCAGATTGAATGCTTCA
GTGCACTTTGATTTTCAAATTGGCTATTATTTTTTAATGTAATTAACCTTCACAATTTAAATTGAAGGATATTCT
GATCCTTAGGTTATAAATATGTGACTTGATGGTTTATGTAACATTCAAGTAGCATGTTTTCTATAACAATATGAT
AAAAGTTTTGATACATACCTTGTATGTTGCTTGACAGATCTGTTTTAGAAAACATTCCTCTGCCTTTTGAAATGA
AGCCATGTATTTGAAATTATTTCCCAAACAATTATATCTTAAGCGTGTGCTACATAGTAATCATAGTCATTTTAA
TTTAGATTATAAAGCTATATTTTAACTTTGAGGTTTGTGAATTTTCTTAGACATATTAATGACTTTATAGTTAAT
GGTGCTCTCAGATTTTATTTTTAAGTTAAAAATTTGCCAGGCGCGGTGGCTCA

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FIGURE 5827

LCKLISEKRLRNCTVFKQYLECFSKSIFKKFF

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FIGURE 5828

GGGCCCATCCTCTCACTGACCCTGGGGAGCCCTTGCAGTCTGTGTCTGGCCTGCCCCGTAACTCCAGCCCTGAGG
CCAGGCCCCCGTCACTCAGCTCTTCTCTGCACATAACTGCCCCTGCCCCACATTCAATGTCCCTAAAGGGCAGCC
CCGCTTCCTCCTGCAGGTCAGGAGCAAGCACGTGAGGTACAGCCCTCTGGGGGGTTCATACCCCACTTCCCAGGA
GCTTGAGGGGTGCAGGAAAGCCACGCCCGCTCCCCAGCAGGTAGCAAAAGTCCTAGGAGTTCTAGAACCATTCTT
CTCCTTCACCCCCTTGACGCAAATTTGCCGAGTGTGGACCTGACAGGCACAGCCAAACCAGGCCAGGTTGCACCC
TCACGGGGCACCACACTGCATGTGCAGGAAGCTACTGGGTGGCAGGCTCGGATTCAAACCCGGGTCTGTCTGAAT
GTGGGAACTGTGGGAGCAACTGCTCACTAACAACCTAATACCCAGATTCCCCTTCCTTCCTAAGAGAATCCTGAC
TCATCCTGGGAATCTACATGCACAGCTCAAAGACCATATATCCCAGCCTCCCTTGCAATTAGGGAAATGTAAGGG
GAAGTTTGGGGGAGAGACAAATGGCGCTTCCTCCAGTTTTCTGCTGCGGATGCAGACGCAATGGCTGGAGCACCA
GCAGTGTTCTTGCATCTTGAGGTGACTGTGAGGGTGGAAACCCCACTTGGAGGATGGCAGATCAGAAAGAAAGAA
GGAGCCACAGTCACTGATGATACTTGGGGGCCCAGGACTGCTGCTTGGGTTTCTTTTACATGAGACAGAAAGAAA
TTTGTGTCTTGTGTTAAATGACTGTTATTTCAGTTCTCTGTTACTTGCAGCCAAGAGCAATTCCTAACAAATACA
GGAGAAAACTTTATTCTTTATAGTTTCAAATACCATGGGCATGGGTTAATCCTCTGCTGGGTTTTTACCGCTTAG
ACAAGGTATGAATTATTAATAAAAGCACTCTATTAATAAAGATCTCTTCC

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FIGURE 5829

AHPLTDPGEPLQSVSGLPRNSSPEARPPSLSSSLHITAPAPHSMSLKGSPASSCRSGAST

FIGURE 5830

GAAATTGGGAGACAAACCCTTTCAAACCACAGTTCCAGATAAAGGCTCAGATTTCCAATTCCATCAACATGGAGG
ACTGAGCACGTGCAGAATCTTCTCCCATTACACATACATAAATATGGTGAATTAAAGATTTGTAGGTACCTGAAA
CATAAAAGGTATTTAAAATCACAGCAATAGACTACTGCTTACGACACATAGCCAAAGGAACTTACACTTGAGCAA
AGTCCTCAAGGGAAGGGGCTGTCATTTTAATCCCTGGGCAGAGATGAGAGACAATTGCCTTGTGCCCATGTGAGA
AGTAAAATATTTGCATCAAGCTGGAATTCTTAAAGGTTTGCACAGGCTACAAAAGGAGACTGAACAATCCCACCA
GCCTGCCCAGAGAAGTTACAAGGACGCTTGCTCTCCGCCCAAGCTCTGGGATGGAGGGGAAAAAAACTCTCATCT
AAAATAAAGGTCTCAACTCTGTGCCGAATTTGAGTGTGGAGTCTGAATTTACTCTGCCCACAAAGCAGGAAACCT
GCCATCAAATAATTAAGAAAAAAAAATTGTTCAGGACTGAAATTTCTGGGCCCCAGGAGATCAAATGCAAAACTA
TACTCTAGAGAAGTATCCACACCCAGGGCCATGGGAATCTCACAGGAAAATATTCTTGGCTAAAGATGACCTTAC
ATTAAAATTATAAGCAACAGGCT

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FIGURE 5831

KLGDKPFQTTVPDKGSDFQFHQHGGLSTCRIFSHYTYINMVN

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FIGURE 5832

TCGAATTCCTAATTTTTGTGGGACTCCTTAAGACCCACAAGTGACTTCTGTCTACACTACAGATGAACTGAATTG
ATCATCTAAAATACGTTTATAGCGTTCATTGTGCCAGTTGCTCATGGTTCTGCTAATTGGCCCAGGACTAGTTGT
GATCTGCAGACTGAAGCCAGAGTAAGTAAGAGAATTCAAGGCACTAAGACAACCAGGAACAGTTTTACCAAGGCA
AGTGGAAGCTGCTAGGCTCAGTGGTTGCATGCCTATAGATGGGGTAAATCATCCTGGTGCAAATATGGTATTCAC
ACCATAAATGTGTAGTGCAAGTTTCCTCTGTGGCCAATCACAGGGCTGCAAGCTGAAGCCCCAGTTTAGCTTATT
CTCCATACATAACTTCAAGGGGACTTTCTGGTGAACTTTTCCAAGAAGCTCCAAGCACAGATGGTTCAAATTTGC
AGTTTGGCTAGACTTTGTGACTGGATGTACATTAAATTAA

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FIGURE 5833

MVQICSLARLCDWMYIK

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FIGURE 5834

CTCTCGGAACTGGGGCAGCGGCCCGCTCACCTCGTGTCCGTTGCTGGCCGGGATGATTTCAGACTCGTTCACCAA
GGAAGACTTGATGTCAGCTAAATCGCCTTCCTCTTCGGGATGACTGATCTCGGCGAAGATCTTTTCCTTCTGAGG
ATCGCCCTCGTCCTTGAAGGGGATCATCTCGTCCGTGGCGCAGAGTTCCGGGTCCCCCCCCGCCGCCGCCACCTCC
TCCGGAGAGTTGGGGCATCCCGGCGGCTCTGTAATCTCCGCTCCGCTGTGGGAGCACCCGCGCAACAGCAGGAAA
GACAGAGGGGCCCCTTTGTGTGACTAAATTTGGCAAGAATATGGATCTGAGCCAGTCTTTCCACGTGTGCTCCCA
GCTCCCAGCTGAGAAGGCCAAGGGTTCTCTTCCGGATGCAGCCTTTTTGAAATTTATTCTTGGCCAAAAGAGGAA
GATAGTTCAAGGATTCTATCTTGCTTTTGGGGGGCAATGGAGAAACCCTGAAAACACTTAAGGAAAACCTGAGGC
CTTCTATAAGAAAATAAACTCCCTGAAAGGGGAGGCAGGGCCAAGGAATTTACTTATTTTTATAAATCTCTTTCC
TGGGTGGATATGGTAATGGATGTGTTTCTTGAATTGTGGTAAATGTACCTCATAAAATGGATGGACTGGGGCTAT
ATTCTCAGGCTTCCTGGGCTCTGTTGGCATTGGGCAAGCACGTAATGCCTGGTTTGAGGCTAGAAGCCAAAGCCA
CAACCTTCTTGCAGTACCAACTGAGCCATAGGGAGATTAATGCAGAACAAGGTCGTTAGTCTCATTGTTTATCCA
GTTACTAGCTGCATAGATTTTGTGTAAATTTCAGCTACAGTGGTTGCAGCCTGCCTTTGATGTGTGTAATCTGTA
CATTTTAGTGCTCCAGGAAAGTACCTGATTGACAAGATCTACATCCAATGCCCAGAAAACACATCCTACACAGGC
ACAGTGAAGCGTGGAGTTGAAGAATTTTCCAGTGAGTTCCATCAAAGTAAATAAACCAACCTAGAGCATCTAAAA
AAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 5835

TTGTTTTTCACATACACTTAATAAGTATGGTACACAATGCCAATGCCAAATACAAATTGATAACAAACACAGCAT
TCCCAACAGAGCTGTAATCTAGAAAACTGAGAAGGTCTGATTGATAAATCATCAACAACAATAATTGCTCTAAAA
CCTCCTTAACTGACTTCCTTGATTGTCCAATGCTCTCCATTACCTCTGTAAAACAGTCAGTTATCCCATGTCTAG
TGGGCACCCCTGCATGCTTCTTCTAACCACTGAGTGTCACAATGCCTACCAAGAATGCGTTTGCAGGTTCCTAAA
CCTGTTTATACCAGTTGCTATGTAAAATTGTTCCCAAGGGAAGTTGAATGCTCTGTAAAGGCCTAATAAAAGCAA
ATTACTGAACAAAACATGTTACAGTAAATTAATGAAGTGAAGAAGGAAAACTAAGTATGGAAGAGATAAAAATCA
TAACACTTTACTATTCAGAATGCATCCAACATAAAAAAATATTAAGATCTTAATCCAATTTTTAAAATCC

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FIGURE 5836

CFSHTLNKYGTQCQCQIQIDNKHSIPNRAVI

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FIGURE 5837

GGTTGTCCCAGGCTTGTTCTCGAACTCCTGGGGCTCAAAGCCAGTCTGCCCCGCCCTGAGCCCTCCCAAAGTTTC
TGGGGATTACAGGGTGTGAACCACCATGCCCCGCTGCCCCTTCTTTACTTAGCTATATTTTCCTTACTAAGAGTT
AGTTCCCTAGCCCATCAGAAAGATTCCCAGGCTGGCTACTTCGGGATGACCCTTGCATTTTTTATTGAAATCATT
TCTGAATCTTTTTTCCCCACTAGCTTTTAAGACATAGGAACTATATCTTGTTCAGCTTTGCACTTCCAATTATAA
AAAAATGCCTGGCGTGTGTTAGGCACTCAGAAAATGTTTGAACTGAACCAATGGTGTGTGTGTCTCTGCACACTC
TAAGTTAGTGTAAATCAGAACAGCTTGTTGTTGCTGCTTGTTTTGATCCAAGACCAAAGAGTGATTGATAAATGT
GCTAAGTATTTTCTGTGTTCTTAAGTATGTTTGGTGTAACATAATTTGGCATACACACATATTAAATTGCCTTCA
TTCTT

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FIGURE 5838

GCPRLVLELLGLKASLPRPEPSQSFWGLQGVNHHAPLPLLYLAIFSLLRVSSLAHQKDSQAGYFGMTLAFFIEII
SESFFPTSF

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FIGURE 5839

CTGAGGCCTGGTATCCCGTTGGGGTAGGAATGTGCTGATTTTGCTTGGGCAACGCACCCTCTCACTGGGCCTCAG
ACTCAATTTTCCTACATTGGAGGATACTTTAGAGGCAAAATGAGATTAATTTCATGAGGAGCCTAGCACAGTGCC
TGGTACCCTGGGAATGTTCAGGTCCTATTACCTGCCCTTCTGTCTTTCCCAGTGTCCTCTCCTCTTTTCTCTCTC
CCATCCCAGGGTCCAGGTTAATTGCAGTGCAATATTTGCATAGACGTGAGACCTCACCCGGGGAAATTCCCCCTG
GTGACCAACCAGGTTTCCTTTCTGAGGTCAGGCCACATCATCAGACACTGCTCCTTCCTCTCCGGCTTGCCACTG
CCACCGCTGGCTTTCGCCCCTGTCATCTGGTGGGTTTAGATCCTGGCACACAGATTTAGGCTCATCCTTTGACCT
TGGGCACTGTCCAGAGGGTGGGGATGTGGAGGCTGGGCTAGGGACCCAGAGCAAAACAGTGAGGGGATAGATATT
CAGGGAGAAGAGGAAAGGGCAGCAGGTAGGTGGTGGATAGGAAGCCTGGATTGCAATTTGAACTCATCAGTAACT
CCCTGGCTGCCCCTGGGGCACAAGCCTTCCCTTCTCTGAACCTTAGTTTCCCCTTCTATCCAGTGAGAAGATTGG
TCAAGATAATCTCTAAGCTTTGTTCCAGATCTGATAGACTAAGAAGCCACTTCCTTTGCTTCCACTTCCTTTGGC
AGCACAGTGTTGCAACATCTGTACTTGGATCCCCTTCCTTTGACAAGAATCTTGCAACATGCCACCCTGTATTAG
TTTCCTTGGAAAGCACAATTTTGCAAAAGGCCTCCCTGAATCCCATTTTTCAAATGCTGATAGA**ATG**ACACATAC
CTCCTCTCCACTTAGTGGCTTAGCTTGCGTTTTAACTTTTCCTTTCACACCCATCATACATACTGTTCTGTGACT
CCCCGAAAGAGGGATTCTCTCTACATTCTGAAATTTGTTGTCCCTATCCTGGTATTGAGAAGTCACCTTCCTGAT
ACAAAAAGAAGGAACAAGTTGGGAGACCACAGTGACTCAACGACAGTAAGTTCCTGGGATCACCTGAATCAGAAC
CAGCTGTTAAAAGGGCAGATTTGTCTC

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FIGURE 5840

MTHTSSPLSWLSLRFNFSFHTHHTYCSVTPRKRDSLYILKFVVPILVLRSHLPDTKRRNKLGDHSDSTTVSSWDH
LNQNQLLKGQIC

FIGURE 5841

TAGAATTAAGGAATTAACCTTAGAGAATGTTTACATTTTAAAGAGTGGAGAAGAATCAAAGAGTAGTCAAATATGATAGAAAATCCTGGGCGACTATTTCTGAGTTCTGTTTTGTTTTGTTTTTTTGCCCTTTAAGTAGCTCTCTTTAGTAGGAAAGGGAAGAATATTGACTTGGGTTAGTTAGTTCTGATTTCAAATTTCCCCTTTATCACTTACTTGGCAGTATTTAACCTTTTCAGAGTGTTTCACTGTCAGAAAATAGGAATTCAGGGTTGTGAAGATTACATAAAATAAATACATAAAGCACAGTGCTTGTGACAGAGTTTCTTTAACTTCATTAGCACCTTCCCTGTGACTTCAAGTATAGACAGGACTTTTATACATTAGAATGGAATATTTGTTTAACTTTGTTTATGTCTCTTGTTTTCTCCTTCCTTTTGCTTCCACTTAAAAA

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FIGURE 5842

RIKELTLENVYILKSGEESKSSQI

FIGURE 5843

CACACATGAGTTTTCAAACATTAAAACTATTACTTAATGCCCTTGTGACAAATTAGTGTTTTATGAAAATTGGTA
TTTTACCCCACAGTAAAATAGTAGTAAGGAAAGTGTATTGTTACCTTTTAGTAACTTAGTGAGACACTTAAGTTT
CTGTCTTGCATAAAATACTCTTTTAAGATAATTGTTGGATTTGGGATTTGCAGATGGTACTATAAAGTTAGCATT
CTTCTTTCTTGGCAATTAGCTAAAAACAACAAAGAGAGGGAAAAACTGACACACAAACCCAGCATTCCACTAAAC
TAGAAGACAGTTAAAAACCCCAAGCCACAAAATAGGTGGAAATGTTGCCAGGAGCAGTGGCCATCAGGCTGGCTG
CATGTGGGAAGAAGTAGGTAGGATGCCGTGGCTGTGGAGCTCAGAGACAACAAGAAACACCCATGAAACTGCAAG
GCCCCCCTGAGGTATAAAACCTAAACCCCTTGTTTACAAAAGTGAAGTGGGTTTCTTCAGCTCAAGGCAGGAGCT
TTCCTGCACCTGGTTTAATTCTAAGAAGTCGGGGAAATGAAGCCAAACAAGGAGTCACATAAACAAGCCATTTTT
GCAGGAAGTAATATGTGTCTATCTCTATAGCAGTTGGGGAGGAGATGACTGCATTGTGAAAAACCTCCAGACTGC
CTGTCTGCATTGGCTGTTGAGAAGTAAAATGCTAAACTGTCTCTTAGGTAAATCTCTGAATCACGAAAAAGTTGT
CAGTCCAGAACTGGAGGCACTCTGGCCTTCTGCATAAACCTCCTACAAATATCAGGTTCTGGACAACCAGCACTT
CTTCAGAGATGAATAATCAAAAGGAATTCATTAAGCTTGACTGCCACAAATGTTTGGAAATAAAAAAGGAAGAAA
GAAACAGAAAAACAAAGGACAGATGAAAAATAGAAGTAAAGTACTGGT**ATG**GAGCATCGACATGTTCGGGGTCCT
CTAGAGTCGCCCGAG

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FIGURE 5844

MEHRHVRGPLESP

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FIGURE 5845

CCTTTCCTTTCTTTTTAAATAGGCAATCAATATCTGATTTTATGAATGTCTGCCATTGTGCATGATTCAGCTAAG
TAAGCCCTAATGAGAATTCAAAGGTTATGACGACTTAGTCATAGGAGTCTATAATCTAATGCAGAAAAGAGATTT
ACAAAGCATAACAAGGCAGTGTTTTATGTTATGATATAGGTACGGTGAAATGAGTTTAGGGAAGGAAGCCGGGGA
AGGCTTCGTAGTAAAAGTGGCATTTAGTAGAACTCATGACGAGCTGAGGGATGCCAATAGTGAAAAGGCAATGAT
GTCAAGACTGTAAAGCTAAGGCTGTTTAGTGAATAGAGTATTCCAGTTTACCTAGAGTACAAGTTATGTGTGTAA
GTAAGGCCTTGTCCTNNNNNNNNNNNNNNNNNTCAGTCTAGTGAGGAAAAAATGTAAATAAACAAATGAATGAGT
ACATTTTGCATTCTGAGTTATGCAGAAAGTGCTTTGCAACATAGAGGAAAAAGCCCTAACTGTTGTGGTGGTTGA
GAGTTGATTGGAAAGCCTCATGGCGGGCTGAGTCTTGATGGAGCAGTACTTTGCCCAGTGGAAATAAGAAGAAAG
CATATAGAAGTTCTCCTTATCCTTTGGACTTGCAATACACACAAAACTTTCTGGGGCTTTCTAAGGAAATTTTAT
TTCAAGATTCTGCTAGGCAATAACTCTCCTTCCTTAAATTGAAGGGTAAGGACTCTAAGTTCTGCTTTTTCTTTT
CTCACTGAATTTGCTTAGGTTTTTTTTTCGNNNNNNNNNNNNNNNNNNNNNNNNCACCTTTCTCACTGGTATTGA
TCACTTTCTCTTCCTTAGTAAAGCTCCATTTGCTTCTCTCCTAACCTGGACATTATAGGAAGCACTGATGCTGTA
TTAAAATTTAGAGAAAGCTCCCAGTCTGTCTTTCCCAACATCCCTTCAGTTTCAATAAGC

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FIGURE 5846

FPFFLNRQSISDFMNVCHCA

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FIGURE 5847

GGACAAGGTGAACACGATAGGTTGATGCAGTGCATTAATGCTCATGAGCGGTTTAGAGAAGCAGTCAGAGATGAG
AGGATGGCAGCTAGCTGAAAGATAAGGACAGACAATGGAAGACCTTGAGTGGCTGGATGTAGATCGAGTGACATT
GCATAGGTTGAACAGGTGTTTTATACAGTTAATGAAATCCATTTTTGTTTTGTTAACTTTTAGCATTTTTTAAAA
GTATATATTGTATATAACATTCTTGGTAGAAAAGTTACAAAATGCTCATTAGTAAATAGAAAAGATGTCAATTAC
TCATACTACCACCATCCAGAAATATCACTCTGAACATGTTGGCACACATCCTTCCTAACATTTTTCTCTACACAT
AACACGTGTGTAAGACTTTTTTTTGAACAAAAAATAGAATCACAAACATGCTGATTTATTTTTTCCCCTTTATTG
GTCTTTAGCTCCCAAATGCCTCCTCACAGATACCCACTGTGATGTGTTTGATGTGTGTCCTGAACACGCATGCTT
CCTTATAAAAGGGCGTGTAGACTGGCACAAACTCCCTGGTACCACACACAGTGCCCAGCTGACCTTCTTATATGT
GTCCCGTCACAGAC

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FIGURE 5848

MLPYKRACRLAQTPWYHTQCPADLLICVPS

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FIGURE 5849

TAAAGAAACTGCTGTTTTTAAGATGATAGTTATATAATTGATGTAAAATTTCAGTAGACTGAAACTTCCTACATA
GTATGCTGGCGCTATATGTAACTTTGAAGGAAAGAGGAATAAGCAAAGAAACCTTTCACCCAACTATGATAGTTT
TATAAACCTCTTTCAAACAACTCGGGTGTCAATGTGGGCTCTAATATTAATTCTGTGACTGGATTTCTACCTTCT
TCACCAGTCTCATAGGGTTGTTTGATGAGCAAATGGAAGTGTATATAGGAAAACATTCTGAGCACAGTAAAGCAC
TGCACAAGTGACAGATAATGAAAGACACAGCTTTTTACTGAGTTTCCAACACCAGAAACTACCAATGGTAACAAA
AAAAAAAAGAATTTGGCAGCAATAAATTATAAGCCACCATTTATTCCTTAACAGTAATGGCCACTACTTACAGAG
CACTTACTGTGTGTCAGCCACTGTGATAATGGCTTTATCATTTAATCTTCTCAACAATGAGAATTAAAACCATTT
AATCTTCTCAACAATGCTTTTG

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FIGURE 5850

KETAVFKMIVI

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FIGURE 5851

GAATGATTATGACTAGAAAATTAAAGGCTAATTTGTGAACAAAAATCAGGATGGTTTTTAGAGGTACTCAGATGA
TATATGGAGCATTGTATACTCAGGTTTATAGCTTCATCAGCTTATTTTATTAACTTTTCACATCCTGCTTGGTCA
TTTCCCCTGTTGTCTTGAGTATACCACTATTAAATAATAGGACACAAACTACATTAACCAGTATTTTAATGCTTT
TTAAAATGTATTTAATAGGGAATTTGTCCCATTATAAAAATTATTTTTATATGGCTTTGCAAAATGGATATATTT
TCCAAATTATGAGAGTATTTATATATGCAATATTTATCAAGGGCTATAAAAAACATCATTTTTTTCATCCATTAT
TTCCAGTTTTGGGAATGTATTTTAAGGAAATCATTTTAAAGAAGGAAAAGCTGTGCATACATAGTTATTTATGGC
AGTATTATCTTCATTAGTGCTACAGCAAAATAGAACAACTTAGAAAATGCAGTGGAGAAGAAAACCCTACATAAA
TGTGAACACAGTCATGTAAAAATATGTGTGTAATGTAAACAAAAATGAATTTTAAAAAAGATTATCCATGTAAAA
GTACGAGGACCAGAAGGGGGAACATGGAGAAGTACAATAGTCATGGTTGGTTAAGACTATGGGTGGAAANCCTCC
NTANNATTTTCCTNTTTTNTTTNTAATAATAAAATTCCTAAAAGAGGGTTGGAAAACTGATGTTGGGTTGGGAAT
TTGATATTTTGTGAATTATTATATGGTTGACTGAGGAAGCAAAATTCTTTTGTGTGAAGAGGATTTAATGATCAG
TTATCAGGTACCACAGTATACAAGGGTGATTCCCTGAAGCCACAAACCTGT

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FIGURE 5852

GGGGGCCACAGCAGCCCAGTGGGCAGCACGGCAGAGGCATCACAGACGACCCCGTCCAGCGATGAGAATGTTGGG
TGCACACTGGAGTGGCTGCGAGTCATGACCTGGAGACTTCGGAAACTCAACAAGACTGCAGGGCACCCAGGGGCA
CCAGCCCCGGTCACCGCAGAGGATCAGTGCACTTTGCCATCTGGCAGATCAACTCATGGCACAGCTGTGACACAT
CACATTCACGCTTGTGAACCGAGACGCCATACCCCAGCGGTGCCGAGAGCAACAGTGCTGTGCAGGTCTGGGCAG
ATGAGGGCCTCCAGGACACGAGGACTCACTCGCTCACCCTGCCCAGTGGCAGAGGGGAAGTAACTNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNTTTGAGTTAGGTCAGTGTCTCAGCTGCTCTATCGGGCCTAT
AGGTTTCTTAGGCATGTTTAAGAAGCTGCCACTAAGGATATGGATATGCTGAACAGCTTAGAGCTTCTCATTGAA
ATTTAACCCTAACAGCTCCACTCTTGTCTGTTTTATTTGGTTTATGGCTTTATAAAACATCATTTGACTTTTCAG
TTTTCACTGCAAAAAAACTCAAAAGTTTGAAAATCAGAACTGATGCCTTTGGTTTCATCATCTTTAAAATATCTG
ATTCTTTCCAACATCCTAACTATAAAAACAGAAGGACTTTATTGCCAATAGTCTAAATTAAAAATCCACCTAGTA
AATACCAGTTTTCATTATATCTTAGTGATTTATGAGTGATGACTGATTAAACAAAAGTTGGATACATTTTTTTGA
GTAAAAAGGAAATATATACTTGCAG

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FIGURE 5853

GGHSSPVGSTAEASQTTPSSDENVGCTLEWLRVMTWRLRKLNKTAGHPGAPAPVTAEDQCTLPSGRSTHGTAVTH
HIHACEPRRHTPAVPRATVLCRSGQMRASRTRGLTRSPCPVAEGK

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FIGURE 5854

GGCAAGCTACTGGCACCTGCTGCTCTCAACTAACCTCCACACAATGGTGTTCGCATTTTGGAAGGTCTTTCTGAT
CCTAAGCTGCCTTGCAGGTCAGGTTAGTGTGGTGCAAGTGACCATCCCAGACGGTTTCGTGAACGTGACTGTTGG
ATCTAATGTCACTCTCATCTGCATCTACACCACCACTGTGGCCTCCCGAGAACAGCTTTCCATCCAGTGGTCTTT
CTTCCATAAGAAGGAGATGGAGCCAATTTCTATTTACTTTTCTCAAGGTGGACAAGCTGTAGCCATCGGGCAATT
TAAAGATCGAATTACAGGGTCCAACGATCCAGGTAATGCATCTATCACTATCTCGCATATGCAGCCAGCAGACAG
TGGAATTTACATCTGCGATGTTAACAACCCCCCAGACTTTCTCGGCCAAAACCAAGGCATCCTCAACGTCAGTGT
GTTAGTGAAACCTTCTAAGCCCCTTTGTAGCGTTCAAGGAAGACCAGAAACTGGCCACACTATTTCCCTTTCCTG
TCTCTCTGCGCTTGGAACACCTTCCCCTGTGTACTACTGGCATAAACTTGAGGGAAGAGACATCGTGCCAGTGAA
AGAAAACTTCAACCCAACCACCGGGATTTTGGTCATTGGAAATCTGACAAATTTTGAACAAGGTTATTACCAGTG
TACTGCCATCAACAGACTTGGCAATAGTTCCTGCGAAATCGATCTCACTTCTTCACATCCAGAAGTTGGAATCAT
TGTTGGGGCCTTGATTGGTAGCCTGGTAGGTGCCGCCATCATCATCTCTGTTGTGTGCTTCGCAAGGAATAAGGC
AAAAGCAAAGGCAAAAGAAAGAAATTCTAAGACCATCGCGGAACTTGAGCCAATGACAAAGATAAACCCAAGGGG
AGAAAGCGAAGCAATGCCAAGAGAAGACGCTACCCAACTAGAAGTAACTCTACCATCTTCCATTCATGAGACTGG
CCCTGATACCATCCAAGAACCAGACTATGAGCCAAAGCCTACTCAGGAGCCTGCCCCAGAGCCTGCCCCAGGATC
AGAGCCTATGGCAGTGCCTGACCTTGACATCGAGCTGGAGCTGGAGCCAGAAACGCAGTCGGAATTGGAGCCAGA
GCCAGAGCCAGAGCCAGAGTCAGAGCCTGGGGTTGTAGTTGAGCCCTTAAGTGAAGATGAAAAGGGAGTGGTTAA
GGCA**TAG**GCTGGTGGCCTAAGTACAGCATTAATCATTAAGGAACCCATTACTGCCATTTGGAATTCAAATAACCT
AACCAACCTCCACCTCCTCCTTCCATTTTGACCAACCTTCTTCTAACAAGGTGCTCATTCCTACTATGAATCCAG
AATAAACACGCCAAGATAACAGCTAAATCAGCAAGGGTTCCTGTATTACCAATATAGAATACTAACAATTTTACT
AACACGTAAGCATAACAAATGACAGGGCAAGTGATTTCTAACTTAGTTGAGTTTTGCAACAGTACCTGTGTTGTT
ATTTCAGAAAATATTATTTCTCTCTTTTTAACTACTCTTTTTTTTTATTTTAGACAGAGTCGCTTGAGCCCAGGA
GGTGGAGGTTGCAGTGGGCCGAGATTGTGCCACTGCACTCCAACCTGGGTGACAGAGTGAGATTCCATCTGAAAA
ACAAAAACAAAAACAGAAAACAAACAAACAAAAAACAAAAAATCCCCACAACTTTGTCAAATAATGTACAGGCAA
ACACTTTCAAATATAATTTCCTTCAGTGAATACAAAATGTTGATATCATAGGTGATGTACAATTTAGTTTTGAAT
GAGTTATTATGTTATCACTGTGTCTGATGTTATCTACTTTGAAAGGCAGTCCAGAAAAGTGTTCTAAGTGAACTC
TTAAGATCTATTTTAGATAATTTCAACTAATTAAATAACCTGTTTTACTGCCTGTACATTCCACATTAATAAAGC
GATACCAATCTTATATGAATGCTAATATTACTAAAATGCACTGATATCACTTCTTCTTCCCCTGTTGAAAAGCTT
TCTCATGATCATATTTCACCCACATCTCACCTTGAAGAAACTTACAGGTAGACTTACCTTTTCACTTGTGGAATT
AATCATATTTAAATCTTACTTTAAGGCTCAATAAATAATACTCATAAAAAAAAAAAAAAAAAAAAA

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FIGURE 5855

QVSVVQVTIPDGFVNVTVGSNVTLICIYTTTVASREQLSIQWSFFHKKEMEPISIYFSQGGQAVAIGQFKDRITG
SNDPGNASITISHMQPADSGIYICDVNNPPDFLGQNQGILNVSVLVKPSKPLCSVQGRPETGHTISLSCLSALGT
PSPVYYWHKLEGRDIVPVKENFNPTTGILVIGNLTNFEQGYYQCTAINRLGNSSCEIDLTSSHPEVGIIVGALIG
SLVGAAIIISVVCFARNKAKAKAKERNSKTIAELEPMTKINPRGESEAMPREDATQLEVTLPSSIHETGPDTIQE
PDYEPKPTQEPAPEPAPGSEPMAVPDLDIELELEPETQSELEPEPEPEPESEPGVVVEPLSEDEKGVVKA

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FIGURE 5856

GCTTACCACTTTCCTCCCTCCCCGAGCATCATGGATGTTGGGACTGTGAATCCAGGTCTCCGTTATCTAAATGGT
TGATGTTAGTGTTTCCTGTCATCACGTTTAGTATGCTTGTTGCCTTTACTATCATTATAGCTAAAATAATACTGC
TTTCAGAGATGTGTTGTATAATCGCATAATAATTTCAGAACGCCTTCATATTGAACCAGATATGAAGTGATACAG
TATCATTTATTCAAACTGCCTAAAAAGTAAAAAGTATAAACCATATACTATTTTTAAAACAGGTAGGTTAGATTT
AAATCACGTAGTTTAGAACTGTTGGAATGGTACTTTGAGTGATAGGATTTATGTTAGGCCTTCTTTAGTAATAGT
TAATATCATGTAATTAGCACTCGTTTACACACAATTTTAATGTGTTCGAATCCCTAGAGTCATCGAATTCAGAAT
TTATAGTATTTTATTTTACTTAGTTAATATTAACCTAAAAAAAAAAGCAAAATACAGGCATTATGCAGTTGAGTTG
TGTTAAGTGTGGACTGTAAAACAGGATAGTATTTGTTATAAAATATGTTTTTGTATGTGTTTAATATATAGCTTC
AAAAGGACATGTATGAAGAAAGATGTCTCAGCACATAGGTAGTTATAAACCAAGGGTTTGAGAGACTGACTTTAG
AATCTAGAATGAGTAAGAAAGTGATGGATCTGTACATTCATTTGTATTGAAGTTTGATTTTGCTTTCAGTTTCGT
TAATTAAGCCCCGGGAATCAGGGACCTTTCCTGGCACCCTCTACAGTGTTAGTGGCCTTTGTGGTAAAAGAAGTT
ATCTCAGATACTCATTTCATGCAATTACAGGCAAACTGGAAGGCACCTTAATGGTATGCAAGATGTGAAATGAAT
TACTATGTTGCATTCCACTCTGCCCCCACTCATGTACAATTATACTTTGTTTAAAAGTGCATAGTTTCAGTGGTA
TTTATTAGCTAGCAAATAAAACTTTAAATAAATAATGATGGTGTTGTGAACTGTCTTTTCAGGTGGTTGAATGAT
TCCTCTTTGTTCAAAATGAATTGTTTTTTTTTTAAATCAGGGTACATATGATTCATACATTTTTTCCATCGTCTA
G

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FIGURE 5857

LPLSSLPEHHGCWDCESRSPLSKWLMLVFPVITFSMLVAFTIIIAKIILLSEMCCIIA

FIGURE 5858

GTGGGCGGTACCCGAGGGAGAGTTCGAGCTTTTATTGGCGAGTTTTTATGGTCACTAGGTGGGCCTGCCCGTGGG
CCATTCTTCCCGTCCCCGGGGAGCCGGGGCGGGCGGGGGAGCGGGCGTTCCGCCGGGCAGTCCCCGGCTAGACTC
CCCAGCTTCTTACCACTCCAGGACTCAGTTTCTTAATTTGAGTTCCTAATTGGACCCGCCCTCAAGTTCTGGACA
CCCCGGGTGAAGACTGTAACGCGGCGGGTGCGGGAGGCGCGCGCTCCCGCCCCTGCTGCGGGCGGCTGGTAGCCT
CGGTGGCCGCCGCCGCGTTTGCTGGTGCCTGATCCTGCAGGCAGTTCTGGGCACGCAGAGATCGGCTACCGTGGC
CTGCCCTCCGAGGACCGGAAAATTAACACCCTTTAACTAGTGTCGCGTTATCTGCCGGGTGGTTCGCAGGAAGTC
CTGCGAACACGTTGTTGCCAGTTCTGTAAACGTGTTTAGATAGCTAAATATAGATCACAGTGCCACATCTTAGGG
GGCCCCACGGTCACCCCTGAGGCAGTGGCTGTTCACAATTGATTTTAGTGGATTTTAATGATTAATCACTTGCTC
TTGTGGGCAGCTTTTCAAAAATCACGTCTTTGTATTTGCAGCTACAGACTGGGTCCACCAGCTAAGAGGTTGGTT
TTTATTAGGGTTGTAAAATAGATTTAAAATCTGCTTGTTGTTGGCTGAGATTTAAAAGCAGATTTCTACTATTTA
AAAAAGATAGTTTGAAGATACTCCCCTAAAAAGTAAAGATTCTTCCATACTCGGCTCGGATGAGTTGTTTTCCTT
GTTTGAGGGATTCTAGGTCACACACTTCTATGTTTTAATTCCCGTGGTAATTCAAAATGTTTGAGAAGTGGGTTG
CGACTGTGTCGTTTTAAAATTGTACATTAAGCTGACGGTAATAAAATCTTCAAGACCA

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FIGURE 5859

VGGTRGRVRAFIGEFLWSLGGPARGPFFPSPGSRGGRGSGRSAGQSPARLPSFLPLQDSVS

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FIGURE 5860

TCACTGTATTGCCCAGGCTGAGTTTTCTTCTTCTTTTTTTTACATTTTGTTTGCCTAGAATTGTATTTGATTGTA
ATCAAATCATGTGTCACATCTTTTTTTCAATTTGTGTGATTATTTTGTGGCCCAATACATGATTTTTTTTGCGAA
TATTTCATGGACTTAAATAGATAAGTCCTCTCTCTACACATAATTAAATGGAGTGTGTGCTTTGCATTATTCAGT
TCCTTTATTCCCATCCTTGCTTTTGTCTGCAGATTTGTCCTATTCCAGAATGGGTATACTGAAACTTGGGTAAGG
GTGAGGCCAGCGTTCTGGGTGGCCCAGGCTACTATCCCACCCGTGCCACAGAATCCACACAGAGGCCCAGCGGCG
GCACTGGGTGGTGGGGAAGGGGGAGGCGGACCCAGGTTGGGGGGGCAGGCAGTCAGTGCGGTTGCCAGGAAGCGG
GAAAGGGCCACAATGGGGTCTGGGAGGTGGGCGGGGCGGAGCGGGGATGTCCAGCCACGTCGCTTTGTTTTCCCA
CGCTAGGAGCTACCACAACAGGTCAGTGCACCTCGGGGCACCGGGTCCCCCACGCAGGCCCTTCCCGGGGCACCC
TTTCCCAACAGCACGAAAATCTCCTGCCCCCACCCCACCCCCAGGTGATTCCCTTCACCAAGTCTGGGTCTAGAC
TTGGCCCCCGCGAGTTCACGTCCCTGCCTAATGCGCCTGGAGTCCGGGTGATGGCCCTGGATCCGCTCCCGGCCC
CAAGCTCCACACAGCCGGGAAGGAAGCTCGCGTTTGTTTTGCTGGCGCCAGGGATACGGTCCAGGCCCCGCCCCG
CCCCGCGCTGATCCCAGGGTAGTGGGAAAGTGCGCTCCCCAAGAATTTGCGGTGCAGGGGCCGCGGCCACCGCCT
TCTGTCCGCAGGTGCTGCGAGCCGTAAGCGCCCCCCACCCGCGCTATGGGCTCGGACGCCTGGGTGGGCCTTTGG
CGGCCACACCGGCCCCGCGGCCCCATCGCGGCGCACTACGGAGGCCCCGGGCCCAAATACAAGCTGCCGCCCAAC
ACCGGTAGAAGGGGCAGGCCCCGGGATTGAGGGGTGGGACGGCGCCTGGGGGAGGGAAGGGGAAGAGACCAGGGA
GGCCTGCGCTCGGGGCTGAACCGTGCCTGCTAGAGGGGAGAGGGGGTCTGTGCCGGGGGAGGGTCCGTGTTGCAG
ATGGGGCTTGGGGCTGGGCCCGGCCAGACGCTAACTCGGATGCTCCCAGGCTACGCCCTGCATGACCCGTCGCGG
CCGCGCGCCCCCGCCTTCACCTTCGGCGCGCGCTTCCCCACGCAGCAGACGACGTGCGGCCCCGGGCCAGGCCAC
CTGGTGCCCGCTCGC**ATG**ACCGTGCGCGGCACCGACGGCGCCCCCGCCTACTCCATCTACGGCCGCCCACGCCGC
TCAGCGCCCTTCCTCACTCCGGGACCTGGCAGGTACTTCCCGGAGCGAGCGGGGAACGCGACGTACCCCAGTGCG
CCTCGGCACACCATTGCTCCCCGAAACTGGGGTGTCCAGGCGGAACAGCAGAGCCCAGGTCCCGCGGCCTATACG
GTGCCCTCGCTCTTGGGTCCGCGCGTCATCGGCAAAGTCTCCGCCCCAACTTGCTCCATCTACGGCCGCAGAGCG
GCTGGCAGTTTCTTCGAGGACCTCAGCAAGACCCCGGGCCCCTGCGCCTATCAGGTCGTGAGTCCAGGGGTCTAC
AAGTCCCGGGCCCCCCAGTTCACGATTCTGGCGCGGACTTCGCTCCCCCAAGACAACACTCGGAAGCCAGGGCCC
GCGGCCTACAACGTGGATCAGGTGGCCTGGAGCCCAGGGTCAAGGGTCAGAGTCAGGAGAGTGGGGAGGGCC**TGA**
GGTCGGAGTGATGGGATCAGAGTCCCCGGGGGTCCA

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FIGURE 5861

MTVRGTDGAPAYSIYGRPRRSAPFLTPGPGRYFPERAGNATYPSAPRHTIAPRNWGVQAEQQSPGPAAYTVPSLL
GPRVIGKVSAPTCSIYGRRAAGSFFEDLSKTPGPCAYQVVSPGVYKSRAPQFTILARTSLPQDNTRKPGPAAYNV
DQVAWSPGSRVRVRRVGRA

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FIGURE 5862

GGCACGAGCCCCCAGCACATGGAAGCCCTGTTACAGTCCCTCGTGATAGTCTTGCTTGGGTTCAAATCCTTCTTA
AGTGAAGAGCTGGGCTCTGAGGTTTTGAACCTACTGACAAATAAACAGTATGAGTTGCTTTCAAAGAACCTTCGC
AAGACCAGAGAGTTGTTTGTTCATGGCTTACCTGGATCAGGGAAGACTATCTTGGCTCTTAGGATCATGGAGAAG
ATCAGGAATGTGTTTCACTGTGAACCGGCTAACATTCTCTACATCTGTGAAAACCAGCCCCTGAAGAAGTTGGTG
AGTTTCAGCAAGAAAAACATCTGCCAGCCAGTGACCCGGAAAACCTTCATGAAAAACAACTTTGAACACATCCAG
CACATTATCATTGATGACGCTCAGAATTTCCGTACTGAAGATGGGGACTGGTATGGGAAAGCAAAGTTCATCACT
CAGACAGCAAGGGATGGCCCAGGAGTTCTCTGGATCTTTCTGGACTACTTTCAGACCTATCACTTGAGTTGCAGT
GCCTCCCCCCTCCCTCAGACCAGTATCCAAGAGAAGAGATCAACAGAGTGGTCCGCAATGCAGGTCCAATAGCTA
ATTACCTCAACAAGTAATGCAGAAGCCCGACAAAATCCTCCACCTAACCTCCCCCCTGGGTCCCTGGTGATGCTC
TATGAACCTAAATGGGCTCAAGGTGTCCCAGGCAACTTAGAGATTATTGAAGACTTGAACTTGGAGGAGATACTG
ATCTATGTAGCGAATAAATGCCGTTTTCTCTTGCGGAATGGTTATTCTCCGAAGGATATTGCTGTGCTTTTCACC
AAAGCAAGTGAAGTGGAAAAATATAAAGACAGGCTTCTAACAGCAATGAGGAAGAGAAAACTGTCTCAGCTCCAT
GAGGAGTCTGATCTGTTACTACAGATCGGTGATGCGTCGGATGTTCTAACCGATCACATTGTGTTGGACAGTGTC
TGTCGATTTTCAGGCCTGGAAAGAAATATCGTGTTTGGAATCAATCCAGGAGTAGCCCCACCGGCTGGGGCCTAC
AATCTTCTGCTCTGTTTGGCTTCTAGGGCAAAAAGACATCTGTATATTCTGAAGGCTTCTGTGTGACAGGAAACC
CAAGCCTAAGAAACAATTAAGTGGTTCTCATCTCTAAAAAAAAAAAAAAAAAAAAA

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FIGURE 5863

MEALLQSLVIVLLGFKSFLSEELGSEVLNLLTNKQYELLSKNLRKTRELFVHGLPGSGKTILALRIMEKIRNVFH
CEPANILYICENQPLKKLVSFSKKNICQPVTRKTFMKNNFEHIQHIIIDDAQNFRTEDGDWYGKAKFITQTARDG
PGVLWIFLDYFQTYHLSCSASPLPQTSIQEKRSTEWSAMQVQ

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FIGURE 5864A

TTGGTATTATATACCGACATTTTAGGTTACCAAAATAGAATTGAGAACATTTTATAATGGCATCTAAATCTATCA
GATACTTTGCAATAAGTATACTGTTTGCACATTCTGATGTGCTATATCATTAGTAGTATGGGCATTCTAATGTTT
TGGAAGGGGTGTTCCCTATTCTATTTTTCTTCATAAAAAAAGAAGTAGGTCTTAGAAGCAGTGCTTTGCCAAAAA
GTATGTAATATACACATCTATACATTCATGCATCAAAATGTGTGGTTGTGAATATATTTGTGTATATTCACACGT
ATGTTTTGACAAGAAAGATGGCTTAGCTTCACAATTCTATCCTCGTTTAATGGAAAGAAGATAATATTTAGTAAG
CAATAAATTTGGACATAAATCAAGATATGAGCCAGATTTACCACCATTCATTCACTGAAAATATTTGCAGACAAT
TTTTCTGTTTGTCTGAAGAAATTCAGCCCTTTTAAAATGTTATCTAAAAGTCATAATTTGGGGAACATACATGGC
CTGGTAGACCGAATCTATATTCAA**ATG**ATTATGTATTTAAAAGAAAGACCTCAGAATTTAAAGAAACCATATATA
TTTTTTATTTACTACAAAAAAATTATACAATTTTATTTATGCCACACCAGCATTTTTATATTTGTTCATCTAATA
TCTCTGCTTATTTTTTTCATATTGAGAAAGAACACAAACTTTGATGCTTCTTTTATATTAAAAGACCACAAA**TAA**

GTTTATAGAGAACAGTAACACCAGCTCTCAGCATTTCCTTTTCAAGAGTCATAATTTCATCAAAATCATTTCTTA
TTCTTTGAGTCCTAGAGTTCTTATTCATCAAGTTTTAATTGACAGTGTTTATTTTCCCACATGTTGTCTTTGGAA
TAAGGCCATTCATGAAAGCAGTTTAATTAGTGAGTCTGCCACTCTATTCAAACCCTGAATCAAGGCTCTATCTGA
TTTTAATTTATGTAAAAAAAAAATAAAAATGTATAGTCATTTGCAAGTATAATGTGATAACTGCTGTGTTTATTTC
CTTTGTCTGGCATAAAGGGTGAGAAAAAGGTCATACATGTTGTTAAGGGTAGCAGTTTAGGAAGTGTTTTCTAAT
AATTTGTTTTGTTATATTGCAAATAATTGATATGCCACTTATTTCTGCAAGAAAAATAGGCTTGAAGTGGTTGGG
ATATTAATCATTTTGATAGTATCTACTTAAAGCATTGATCTGTTTTGACTTGTGGCTCTGAACCCTGGGCTAGGC
TGAGGGATAATAGTAGTGGAGTAGGGCAAAGATATAATATCCTATCCAGTGTTTTGTGACCACTTATTTGAAGAT
TAGTGTGGGACATGAGGACCTTGCTACTTTTTTGCCAAGATGCTGCAAGTCTCCCAAATCACTTCAACTGTGTTT
TTAAAACATGTTTAAGCAACAGAATTATTTTTTTGAAATTAGTCTATACGTTAGACAGTCTATACATGACAAACA
TGAAGATCTAATATCAAGATTTGGGAGACGGGATCTTGGAACTCCACCTGTTTGACCACTAGGACCACTGAGGCA
CCTCCAATAAGCTCTGTAGAGTGCCTCCAGCATAATTCAAAATCCACTGACCTAATCCATTATGGCTTTACTTAA
CATTGGAGTGATCCCGTAAAGAATATAGTATTGTAGTCTGAACTGGAACGGTAACTCGTAAGACTCAAGAAAGAC
CGTTTAAGGAAAATTGGCATAATACAAACTGTTCCTGTTGACTTAAGAATAACAGTAGGTTCACCTATCTGAGGA
AATTAAGTAGTTGATAGTTTAATGCTAGGCATCTTTTATGATAATAAAGTAAGATGTCTTCTTATGACAGTTAAT
TGAGTTGTATCATGATACAGAATGACAGATTTTGTTTCAAACAATTGCGTCAGAACCTTTGTAAGCAAATATTCT
AAGGAGAATCAATCTTATTTTTTAATTGAACTTTTTAAAATTAGGGATACTATAATAACTGATAAAGATGAATTT
CTGTGTTTCTAAAGAATCTAATTTCAATTACTACCATTAACATATAAATGTGCTTCCAAAATCCAAGCAGGTCCA
TACAATTTAGAGATTTGAACACTGTTATCATGCTTTAATTCAGTCATTCATTAAAATATTATCTATTCACTTATT
TGATGATTCCAAACATTTGATATTGTATTGTGTTTTTATAATTATTTGAAATCTGTTCACCAGTGCTTTGTAATG
GTTTTATTAATTGTGTAGCCATTGCTACTTAGATAGTAACCCACTGAGCAAAGGCAGTCATTTATTTTCATCCTT
GAAGTAGGGGAAGAAAATTATTAATTTATTAGTTCTACTTTTTCCTGCATTGCTTATTTTGTAAACATTTTATTA
TGAATAATCTGTTCTCTTTCACTGTATTAAAAGGAGAAGAAAATGAACATTTGAGAATGGAAAAAAGTAATAATA
TACAAATAATCTAGTGCTATAAAATGCATTATAGTAAGACACTTTTGGTGTCTTCGAGTGCACTATGTTGGAATA
AATTTTATACTTGTTGCTTAGTAAATCTCAGTCATACGTTTGGTTTGAAGCTGTTTTTTTTTTTTAATTTGAAGT
TTAATTTTAAAAGTGCCACATTGTAAAAGTTACCGTTAAATACTATGTAGTATAAAAAACCAACCCAAGCTATTG
TTAATGCTCTGAATGTTTTTCTTTGAAAATTTAAGTTTAGAGAAGAAATTCCTTCATTTTTCTCCCCTTTGCTAA
AAGAAAGAAAATCTATAATATGTAAGTCTATGAATCTTTAAATAACTGAAGGAATTTTAGCAGTACTTTGTATAA
TAAAAATATTTTTTAAACTATAACTTGCCTTAGAGCATGGGGTTTCAGAAAGTTTTGACGAAAAACTCATCTTCA
TTAAAGAGTCTGGATAACTTCATCAGATGGTAATTTAATATGTCATGAAGGGGACACTCAACATTGGGTCATCTA
CCGTCTAAATAAATACGGATTTCATGGTGGCATTTGAAGCACATTTTGCAAACATTATGATGTTCTATTGTCTTG
CTGAATTCTTTATTATAACACTACCTCAAGACAAATGATAGACTGTTGGTAAGGTAAATTGGGTTTTCAATGTCA
GGAACAAATAAAATTTTGCAAATAGAAGTCATCAAATAATTCAACAGGAAGACCATACTGGACACAGATGTTGTC
AGTTACTTCTGGACAATGTGGTAACATGGATATTTCAGTCACTGGTAACAATGTCAGGGTTAACACCCAATGAAT
TATTTGAAACAATTTGGGTTGCAAAATTTGAAATTAATTAGTCTATTTTGAGATTGATTTTCTACGTGGGCCAAT
TTTATGTCCATTACCTAAAGCCACAATCTCCCGCTCTAAGGAGTTAAAGGATGAAAACACCCAACTGCTACACTG
GAATGGCAGACTGGATATTCAAGCATTTTGGCATTTAATGCCTGCTAAATTTTTGTCCGATTATATATAGATTTG
ATGTATATTATTACCCAGTAAATTCTTCTTGGGAATTTTGTATACATTATGGAATATTAGGATAAGTTTTTGTAG

FIGURE 5864B

GTCAGAAGAATTTCAAGTAGTTTTTAGACAAAACATATCCATGAGTGTGAAAAAAGCTGTGTTGACGAATAGATT
ACATTTCACATTTACCAGCAAGTCAGTAAAAAATAGTGCTTATTTACATAGTCAATATAATTTAATGTTCTAAAA
ATAATATCTTCGATCTGCCCAATATTTAATGTATCATTTGAGATTTTTAAAAATGCAGCCGCTCCATTATGTAAA
CATTAAGATATGCCTATGTTTCTTTAACTATACAGCCTCTTTACAATAAATTTCTTGATTTTTGTGCACAGGATA
GTATTGCAACCTGCTATTTAGCCTTTGGTGCCTTAGAATTATTATAAATATTTAACAATATGTACATAATGTAAA
TACTGCCAAGAGATCAGTAAGGCCAAATATTTTCTCTATTCACTTTTTATTGCTCTTGCTTTCTATTGCTACTAA
AGCCTCTTTTATCCAGCTTTGTAATAGTTCCAACATTGTAGCGAATGTAAATGTTTACTTTCAATAAATCTGAAC
TTGTTCAAC

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FIGURE 5865

MIMYLKERPQNLKKPYIFFIYYKKIIQFYLCHTSIFIFVHLISLLIFFILRKNTNFDASFILKDHK

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FIGURE 5866

ATGAGGTGTTCAGGTTACACTCCAATCCTCATTCTATCAGAATGGAGCTGCCCAGGGGGTATTCCCATTGGAGAA
TTGGAACAAAAGGATTTTCAAAAAGCAACTCCAAAGGACATTTTATTGGGTTTAATTATACCTGGAACCTTAGTC
GTAAGAAGAAAGAAAAGGTAGATTTACAGATGAAATTC**TGA**TGTGAAGCCCTATTTAAAGAGTAATTTTTTTTCT
AGCTGTTAAAGAATACTGGTTTACATATGAATACTGAAAGCATGACTATTGTTACTTTTAATTACTAATATTTAG
GTAATTTGAAGCTCCTTTTGTTAAATTTTGCCCATATTAATTAAGAACAATGACAGGCTAATAGAGATTAAGTGT
GGTATATTCATTTAGTGGAATAATATACAACAATGAAAAGCAGTGAACTTATAACTCTAAGCAGGGCAGAAGAAT
ACATACGGTATGATGCCGTTTTTATAAAGTTTAATAACAGGAATAATCAGACAATCTATTTGTAGGTTTATGTAT
ATTATAGAAATTATTAAAATACCATAGAAAAGGGATGACAGTTATGAAAATGAGAACAGTGGTTACCCATGAAGG
GAAAGGCAGGCAGAGGGAAAAGGAGAGGAGTATGGATGGATGTGTTATTGCTCACATTCTAGTTCTTGAGTTTAC
AGGTTCTTATTATGACATTGAACTTCATAACTATCAAGCTATACTTATTTTGCAGAAACAAATATGTTAAAGTTG
TTCTCATTATCATTAAAGATAATTTGTCATCTTTATGGGTTAAATAAGAAAAACCAGAACATGTTTCAATAGATG
CCAAAAAGGCATTTTAAATCTGTATTTCCTAATTGTTCGAGAAACATAAAAGAAATTTTTGGAGATGCCAAGTTC
AAATATGACAAGACTCTAAGGAGAAAAACTGGATATTAAAGGTTTAAAAAAACAAGTTGACAAGGAGAACAGAGA
AGGCAGGTCTTGTTATCTAGAGCTAGACACCAGCTAATATCTTGGTAGTCAACTACTTGATAGAGTTGCTTTGTC
ATCTATCAGTGGAGAAAGAAAGTTTTCTCTCTGTCTGTGATCTCTCTCTCTCCAGTGGAAAGAAGGTGCAGGCAG
AGTTGCTGGTGTTATCAAGGGTGTGGGAGTGGAGGTTACTTTCCTTTCTGAGTTAACACTTGATGTTTTGGAGCA
GTGGCATTGTAAAGTGTCCTAGGAAAAAGTCCAGTCTAGAAAGGACAGATTAGGGGAATGAAAAGCAGCAGTTGG
TTGAATTTTAAAAGATGAGGTTCTTAGGGGGCTTAGGGTAATAAAACTCAGAATGCAATAGCCAAGTGATTAAAG
AACTAAATTGGGCCCACATCAGTAGAGGGTTGGTACCTAAGCAGCCATAGGAAAAGGGCAGTTCTTTATAATACA
TGAAAAGCCTAGGGTTTAATAACCACTTAGTAAGGTATGTTATGGATATCTTATTTTAGAGTAAGAATATAAGGC
ATAGCCATATTTATGAAGGTAGTAATACTCTACTAATCAATACTTAGAAGTTTTTGTTATGACTAATCTGAATGC
TTTTTAGTTTTTCCTTAATCTAGTTATGTTGGTAATTTATAAGTCAGTTTTCAGATTAGGAAAGAAGGTATTTGA
GGGTGTTCCATTTCCACTGAATAGTAAGATGATGCTTACTTAGATTTCCACAGCTGTTTGAAAGCTCTGTATTTG
GCTATAACGGAAAACTTTGTTAGGGATGCTTGATGTTTTGTGTTTTGTTTCTAAAGGAAGACAGTGTTTTGTTCC
TTCTTTAGAAAACTTGAAGAATAGAATAATGAGTCCAGGATTAATTTGGGATAAAGTCTTTTACTTCATAAATTC
TGATTCTGTAAAAAAAAAAAAATCTCTAACCTCTTTCAAGAATATTTAAGGTAATTGGTCAAAGGGCAAGTATCA
GTGATAACCTAAAATCTAGTTATTATTTTTATGCAGCCTTCATTGTTTTTCTGATTGAAAAACAAAGTGAATAAA
CATTTGTAAAGTGTATAAAATACACATAAGAATAAAGATGAGTAATAAAAGGGTCCCTAATAGTGAAAAACAGTT
TTATTCAATTTCTTTCTAGTCTTTTCTTCTTGCTCACACTTACATTTTTAAAATTGCAGGCTTAATGTGTTTATT
GCTTTTTTATATTCTTTTTTCATTAGCATGTATCATGAGCATTTTCCTATGTTATTAAATAATAAAAGTTGCTTT
TAAATAGCTACCTAACATTTCATTTTATGGATGCACTATCATTTAGCCATTCTCCTATTACATGTATGGTTTCTG
TATAACAATAATGGTATGATTAAAATCCGTGTGCATAAATTATTATTGCTATCTTTATTTCCTCAGGATAGATTC
CTAGATATGGCATTTATTAGGTCAGAATACTTCTAAAGTTTTCAATAACTGTCACCAAATCATTTATCCATCTGA
ATTCCCCAACCCCAGAAAGCTGCTGTGCT

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FIGURE 5867

EVFRLHSNPHSIRMELPRGYSHWRIGTKGFSKSNSKGHFIGFNYTWNLSRKKKEKVDLQMKF

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FIGURE 5868

GGCACGAGGGAGGTGTCGAGCGGCGTTATTTTTTTTTGCGGTTTGCCTTTTTTTTTCTTTTTTTTTTTTTGGAAC
CGCGGTTGTTTAAAAGCCTGAGGGAACCTGGAGGGGGGCTCCCACTCTCTACCTTCTTTCCTCCGAGTTTGTGAC
TCCGAG**ATG**GACAAAGTGTGTGCTGTTTTTGGAGGCTCCCGAGGCATTGGCAGAGCTGTGGCCCAGTTAATGGCC
CGGAAAGGCTACCGACTGGCGGTCATTGCCAGAAACCTGGAAGGGGCCAAAGCCGCCGCCGGTGACCTCGGCGGA
GATCATTTGGCATTTAGCTGTGATGTTGCTAAAGAACATGATGTTCAAAATACATTTGAAGAGATGGAGAAACAT
TTAGGTCGAGTAAATTTCTTGGTAAATGCAGCTGGTATTAACAGGGATGGTCTTTTAGTAAGAACAAAAACTGAA
GATATGGTATCTCAGCTTCATACTAACCTCTTGGGTTCCATGCTGACCTGTAAAGCTGCCATGAGGACTATGATT
CAACAACAGGGAGGGTCTATTGTTAATGTAGGAAGCATTGTTGGCTTAAAAGGCAACTCTGGCCAGTCCGTTTAC
AGTGCCAGTAAAGGAGGATTAGTTGGATTTTCACGTGCTCTTGCTAAAGAGGTAGCAAGAAAGAAAATTAGAGTG
AATGTAGTTGCACCAGGATTTGTACACACAGATATGACGAAAGACTTGAAAGAAGAACATTTAAAGAAAAATATT
CCTCTTGGGAGGTTTGGAGAAACTATTGAGGTGGCACATGCGGTTGTGTTTCTTTTAGAATCACCGTATATTACA
GGGCATGTTCTGGTAGTGGATGGGGGATTACAACTCATTTTG**TAA**TTTGCAGATTATTCAGTTATAGGGGTGATT
AGCATCAAGGGCACACTTTGGCTACTGATTAGACAATTATACCTACATGGGTAACATGTGCTAATCAAACCTGCT
GATGCTACAAATGTTAATTTCTGTCTTTATAAAAATATGTCTCAAAAGAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 5869

MDKVCAVFGGSRGIGRAVAQLMARKGYRLAVIARNLEGAKAAAGDLGGDHLAFSCDVAKEHDVQNTFEEMEKHLG
RVNFLVNAAGINRDGLLVRTKTEDMVSQLHTNLLGSMLTCKAAMRTMIQQQGGSIVNVGSIVGLKGNSGQSVYSA
SKGGLVGFSRALAKEVARKKIRVNVVAPGFVHTDMTKDLKEEHLKKNIPLGRFGETIEVAHAVVFLLESPYITGH
VLVVDGGLQLIL

FIGURE 5870

GTTCACTAAAGCTTTGGTGAAGACTCACATGTAGAAAGATGTAGCTGTTTTATTGCCGGCTTTTGTTCAGCAGAA
ACAAGCAAATAGAGAATCTTTGAAGGGCCTCTCTGGTGTCAGTAGGAAATCCTGATTTTTAGCTACGGTTGGTGT
GCACTAAGTCATCTTCAGAAGTTGGTAGGATTCTGTGAGTCCAGAGGACAGAGCTTATAGAGGCATTAGTATTGT
AGGACTAATTGTGGATCCTGGGTGCCCTGTTAAAGTAACCCTTGTCATCATTTATGCTAAAGATGATACCCTTCT
GGCAGTTTGCCACAGTACAATTCAGATGCATCTGCTTTTAACCCTTTTCCGTTATCATTGGAAGTCTGACAGTGC
GCTGCATAAACACCTTGAGTACCACAGCATTCCGTAATATCAATTTCTAGAAGAAGCCTCTTTCTAATAGTAGTG
TGGCCGGTGCTTATTAATCATCTAGCTACTGAGTTACTGTATTGGATTAAAATATATAAAGAGAGAGCACACCAA
ATCTATGCAGATTCCTTTATCCTAGTATGTCAGTTTCCTTTTCTATCTCTCATTTTTACCTTATTTACTGTAACA
AAGATTGTTGATTTTAAAGACTTATGGGTACCGTGCTCTCTTTTTAGTTAGGTAGGTTAAATGAGTATTCATAAA
AGCAAATGTTATTTTTCTACATTATGCAGATATTGAAATTGTGTATTATGAGCACCAGTTTGGTTAAGTACTTTT
TGTGGAACCAGTTAGAGCTAATATCTAAAAAAGGAAGAAAATGATTTGTGGAACCAGTTAGAGTTAATATCTAAA
AAAGGAAGAAA**ATG**AAAATTTCGTGGTCGAAGATAATTTGTTTGGACACA

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FIGURE 5871

MKISWSKIICLD

FIGURE 5872

TTACTTTGACAGCAGTATAAGGAGTGAGATAGACATGAACCTGAATTTCAATTTAAAATCATGGAAGAGAGGGAA
AAAAAACCAGCTTAAGAAAAATCAACTGATAAACTGCAAGAGAAAAATGCAACTTACATCACAAAAGCTAATTGC
TTTATTATTTAGAGAGTACTTAAAAATTAAAGACCAAACTTCTCTCCACCCAACAAAAATGGGCAAAGGACATAC
AGCTAGGTCACCAAGAAAGAAGGGCAAATAGGTGGTGAGTACATGTAAAGATACTTGATAGGACTTTTGCTTAGT
TGAATCTTTAGCAAATCTCTTTTATTTCTTGGGATTTTGAAGAAGTAATTTTTAAAGGAGGACTAGAAACTAAGT
GATTGGGAATTGGCCTTTTTAGAATTAAAATTTCCCATTACAAGAAAAAAAAAATCCTGTGTTCTTTTTTTTTTCC
AGAATGGAGTAGGTCAGTGAGCAATGTGATTAATAAATATTTCAATGTCTGTGANNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCTTCT
TAATTGCAAGAAAGCTGAAAGGTTTTTTTCTATTATATCAGTTATAATGATAAATACTGTATATACTAACTATGA
GTAAAATACTATATTGCCTAACTTGTATTATTAAGCAATTCTGCTAACCTGTGACCTTACATTTTCATCTGAAAA
GCAGGGGCTGGACACCAATTGCCCTATGAAGCTATTGCTAGTCCTAACATTCTTTGTTTTGTTTGCTTTTTTGGC
ACACTTAAGTGTGTACTATGAAGTTTATGATGCTTTAATGAAATTTTCTGTCTCTACCATTGTAATGAGAAAGGA
ATAAAATACTTTATTTTGCAAATCTAAAA

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FIGURE 5873

YFDSSIRSEIDMNLNFNLKSWKRGKKNQLKKNQLINCKRKMQLTSQKLIALLFREYLKIKDQTSLHPTKMGKGHT
ARSPRKKGK

FIGURE 5874

GTGAGACTTCTTTCTTCATTGTGGCTAGCTTTGAAAAGACCCTCTGAACTTCCTAAAGATATCAAGATGATATCA
CCAGACTTGCCCTTTTTGACAATTGTCTTGATCATAGTTAGTTGGACAACTTGTGGAGCACTAGCCATACTTCTT
TCTTATCTTTACTATGTGTTTAAGGTTGTTCATCTGCAAGCCAGCTTAACAACTTTTAAGAATAGCCAGCCTGTG
AATCCCAAACACTCTAGAAGAAGTGAAAAGAAATCCAATCATCATAAAGACTCCTCAATACACCATCTTCGTTTA
TCTGCCAACGATGCTGAAGATAGCCTTCGCATGCACAGTACTGTGATTAACTTACTAACATGGATTGTATTACTC
AGCATGCCTTCTCTAATTTATTGGCTAAAGAATCTTAGGTATTATTTTAAACTTAATCCTGATCCATGTAAACCT
TTGGCATTTATCCTTATTCCGACTATGGCAATTCTTGGAAATACTTACACTGTTTCAATAAAATCAAGTAAATTG
TTGAAGACTACTTCACAATTTCCACTTCCTCTGGCTGTTGGTGTGATTGCTTTTGGGTCAGCACATTTATATAGG
CTTCCATGCTTTGTCTTCATTCCTCTTTTACTCCATGCATTATGCAACTTTATGTAAGATTGGACTTAAGGAATG
ATGAAGATAATTTATGTGTTTAGGGCCAGTGATAAGAGGGAACACACAGATCCATCAGTATGGACAGCAAGATCC
TTTGGAGAAGACAAGTCTATTTTTACAATATTGAAAATAGGAAATTAGTTTTGTAATGTTTGAGGGAAGTAGTTG
AAGCATGGTTTTGTTTTGTGGTGTGGAATCCATGTACTAATCATTTTTGAAAAATTCATGAAGGGATATATGGTG
ATCACTATCATTGAGGACTCCTGTGCATATAAAATAGTCTGTTTTATCAACTGTAAA

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FIGURE 5875

MISPDLPFLTIVLIIVSWTTCGALAILLSYLYYVFKVVHLQASLTTFKNSQPVNPKHSRRSEKKSNHHKDSSIHH
LRLSANDAEDSLRMHSTVINLLTWIVLLSMPSLIYWLKNLRYYFKLNPDPCKPLAFILIPTMAILGNTYTVSIKS
SKLLKTTSQFPLPLAVGVIAFGSAHLYRLPCFVFIPLLLHALCNFM

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FIGURE 5876

CCATCATCAAGCAGATCTGTGCTCAGCCCTGTGCTGGGCTTTGAGGAAGATCTAGAGCTGGTACCAGGCCAGAGA
GGGAATGCTCTTTATCAAGTTCTTACTATGCTTTACCCACCTGATATCAAGGTAGAGGAGCATATTCCCTTTTCA
CTGCTGACAACACTTAATGAAATTCAGAGTGTCTGAGGTCACCAAGCTCATGAATCACT

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FIGURE 5877

PSSSRSVLSPVLGFEEDLELVPGQRGNALYQVLTMLYPPDIKVEEHIPFSLLTTLNEIQSV

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FIGURE 5878

CTTCCTATAGTGGTACATGTTACATCAGTTGCGCATATCTTGATTTTACAGAATCTGTCTTAAGTACCAATTTTG
GTTTTTCAAATCAATGTTTCTGAAATTTTTGAACACTGAAAGTGGTTTTAAATGAATATTCTGAATCTAGTTCTT
TAGAATCCTCTTTGAATTGTGAAATGCAAAATAATTGTTAGCAGTTTAACCTGAAAGATCTTTTTACATGATAAA
TGGGGGAGGAGAAAGACTGAAATGAAAATGTTGAAGACCCTGATTTGAAATTGAGTGTAAAGGTCTAGATACTGT
AAGTTTTAGAGTAGCTTTAGAGACAAAGCTAGTATCCCACTTGGTGAGATCAAGTAACTTGTGGTTTAAAATTTA
AAGTAACCAGTGGCCATTTTAACTTCACTAATTTCTCTTGGAGGAGCTAATTTTTAATTGCTCATGATTGTAAAA
CATACTTCCGGATGGTAAGGGAGATGTTAAGATGATTTGTCTTGAAGAATGGTAAACTTTTTCTTTGTTTATTGC
CTGTCATAAAAAGAGGGAAAGTAAAAAAAAAAAAGGTTCATAATCTTAAATCAGTCCAAAAATTTGAATTTTCTGT
ATTTCTGTTTAATTCAATGCGTTAATCTTTAGCATTGGTCAATACAGCCAAAAGATGAGGAAAACAAAGACTGAT
AGATACTAAGATAAGAAATAACTGCAACCATAAATGTATACAGGTTATGTGTCCATGAGCCATCTCTTCAGTTTG
CCCATA

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FIGURE 5879

SYSGTCYISCAYLDFTESVLSTNFGFSNQCF

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FIGURE 5880

TGTTTCAAATCTCCCATATACTACATCAGTGGTCTTCAAACTCTTCTGTTCCTAGACCCAAATAATTGTTTTTTA
AATTATGTAACTCCCTGCACATCTTTAAATAGACATCTATAATTTTTCATCATAAATTTGTTCCTTATTTCTTGT
TAACAGCAGATAGAAACAGTATTTTATAAGATGAAATATTGTGAGGATTGACTGCAATTGGAGTATTTCATGGTA
TGGCTTGATAAAATAAGTTTTAACTACCTTATCCATAATACACTCTGATCCTCAAATAAGTAAAATTTTAATCCA
TGTGTTTTGAAAACCCATGGATTAAACACACAGATTAGGAAGGAGTACCTATGGAATGTGAAGACCTGGAAACGG
ATTGCCTAAGAGTTATCCAAGCAAA

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FIGURE 5881

CFKSPIYYISGLQTLLFLDPNNCFLNYVTPCTSLNRHL

FIGURE 5882

TTGTCTTCTTGATAAGGCCATTGGCAATTAGTATACGGTAGTTTTAGGCTAAAGCTTTCTCAGAGATTAAAGTGC
TGGGGTACTATAAATTCTCATCTCCTTAATGTCTTCTTGTACCTAGATACCACAATCTACTTTAAATATATAAAA
TGCATTATTCTACATAAAAAGTCAGTTATTGAATACATGCTTCCAGTGAACCTTCTTAAACGTAAGATAGTGTAA
CTTGTTATACAAGTATTACTGTTCTGGATTTTTTGTTTACTATTTTAAAACTGAAAGAAAAAAATAGGTGTATAT
ACTTTTGGTTATTACGATTACACATAATTTTTTTAAAAAACATGTATGAATGGGAGCCTCTCTGTACCCCACCCA
TCACTAGCTTCCCCCTACTTCCCTTACCCTCCCAGGACCCCAGGTTGGGCATTGGCTCATTTTCATAAATAACCT
CATCCCAGACAGGGGTGAGGGAAGGTGTTGTGGCTGTTTTGTTTAAATTGGAGCTGTAAGAGGGATCATGTCATA
TTTTATGCCCTTCCTAGAAAGGGGACGGGACACCTGGTTTGCATTCCTGTATTGACCACTGCTGCCGTCACTCGT
CACATTGAGTTCACATCTCCTGAGAGTTTGTATAAATTCAGGTCAGCGCTGCTCCTATGCAGCCATCCAGTGTCA
TAGAAAAGCAATTCACTGATAACTGATCTCTCCATTCAGAAGTGTGCAGTTTTAATGTATAGCAATAAGAAATTG
TTATTTATCTATTACAAGCCTGGTTTGATTAAAAACAAAAAATAAAATGTTATTATGCTTGATGTTACATCTCAT
AAGTAACCAGCAATTCTGTGATATTTATTGAACATTTATTTTGGGTCAGATGTACCATACCAGGTACAGAATATG
TGCCATAA

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FIGURE 5883

MNGSLSVPHPSLASPYFPYPPRTPGWALAHFHK

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FIGURE 5884

TTCGGCTCGAGGCGTGGGGGGCGTGGCAGCCCGGCCCGTGGGCGGGTTTGGAGGAGCCAGTGTAATGCTAGAAGT
CCTAGAAGAAATTTGGAGTGTGCGTGCGCGCCGAGCGGTGAGTGCTCGGGGATGGGGGAGAGATGCGGGGCGATC
GGTGTGGACTTTTCCGGGGTGGTGTGGTCGGTTAGGAAGGTGTTAGAGTGTGTGTGTGTGGGATCATGCAAATAC
GTGATAACTGCGGTGGGAGCTCTGATGGTTGTGGAGAATAGGGACCGTGAACTCAGGTCTAGAGGGACGGGGTGG
GAGTTAGTGACATCAGATCCCTCGCCCCCGTGGAGTCCCTGGACACTTGACTGCCCGGGGGGAAGGGCTCGGAAG
CCCTCTGCGACCTGAGGGAGCTCCCTCTCAGGTCGGGACTGAAGGAGCCCCTGCTCCCAGGGTGTTTGGGTGGTC
TCCTTAAACACTTGAAAGAGGCAGAGGTTCGGAGGCCGGAGGGAGGCCCTGGTAGGGCAAGTCGGAGGGTACCAA
AGGGTTGGCATGCTGATATGAGAAAGGATGGTGTTTTAATTTGTGAGACCCAGAGCTAGTCACATTACGGCTCCG
GGCGTCTTTCTCATGTTAAACGGAAGGGTTTAGGCCTCAGAGTCGTCCTTGAGAATAGACGTGGGGTAGCAACTA
TTGAGTCCTGAGAGGATAGGGTTGGGGTTTGGGCAGATTGGCTGTGCACGTCTTCCTGAGCCCCTAGAGGTGGGG
AGGCACCAACAGGGTGTTTTGGTATCTGTCTGTACAAACAACCAGGCCAGGCGTCTGGTAAAGTTGGCCTGAGGT
AAAGTAGAAAAGTGAGGAAGTGGGCTTCGTAGGAAATCATTGGGGCTGGTGGCTGCTTGGGTGATCTCAAGCACT
TTGTGAGCCTGGGAAAACGGGCTATGATGTTAAGTGTGTGGGGAGTGCAAACAGTGGCTTCGGATCAGGCCTAAG
GCAGAGAAAGGGGTTGGATGGAGTCTGTGTTCCTGGCACCAAACTTAGAATTGGCTGGATATTTGAGAGGCCAGG
TTTGCCAGTGCTGGAATGCAGCTTACAGGTTGGTTAACACCTCACAGGTTCCTCAAGGGTAAGAAACCAGAATGA
CAAGCCATTATTAGAGTTCAGATTTTTGAATCCTGGGCTCCATTTGTTAAGAGCTTGAGACCATGTTATGAGGCA
CTGGACAAGTTTAGTAACTTCCGTGCCTTAGTTATCCCCCATGGAATGGGGATAATAATACCTATCTCACGGGGT
TGTTCTGGGGATGAAATAAGATAATATAAAGTGCTTAGCATAATGCCTGGGTTATGGTGAGAGATTTATGTGAAT
GCTGTGGCTGGGAACTAGTCTCATATTCTCAAGTTTTTCTGCAAGTTTTGATGGCGTCCCATTTCTCTCTTCCTG
GCTCGTTGTTGGTCTTCAGGCAGCAGTCCAAATTCCCTCATTCCTCCCTTCTAGCCCTCTCCCAGGATCCAGGCC
CTAGACTGGGCCACTTGCTCTGTCCCAGTTTGATTTTTTCATCCTAGGCCCCTTCTCCTCCCTGTCCGCGCCCCT
CTCCCGTTTCCCCCGCGCCCGCTGTCATAATAAGAGATTCAGGCTCTGAAGGGGCTTCTGGAAGGTAGCAAAGGT
GCGTCGTGTTCTCTCCCAGAGACAGGACCTCCAACTTCTCCGCCCTGGGTCTTTGGTACCAGGCCAGCAGATGTG
TACAGTTTGGGAGAGAGGAAAAGCCAGAGCTGCAGGAACAAGCTGAGGAGCGGGCAGATGGGAGTCCTGAAAAGA
GAGCCAGGCGTGGTGGGGGGAGGTGTGGGGAGGGGGCCCCCTTCCTACTAATCCTCTCTCCAGGAATCCCTGGCT
TTGGGACAGGACGGCTGTCGTTTTGTTGGGGGAGGCGCCCAGGCTGGGTGCATGTCCTGGGCCACCAGCCAAGAG
AACATGATGTTCCCAAGTGCGCTGGCCGCCGCCCTCTCGGGCTGGCCGCCTCCCAAACCGCTGCCTCTCCAGTCT
CTCCAGCCTCCCTGCCCCACATTCCGAGGCAGCTTCGCCCCGCCCCCTTCTTCCGCTTTGACGTCACTGCTGTCT
CCCGCCCCCTCGCCTCCATTGACGGCAGCAGGGCCTGGTTACTGTGGGGACGGTGAAGCAGGACAACAAGAGTCT
TGGGAGCAAGCNGNGGCTGCTGGAGGGCTGGAGCCTTTTGTCTATGCAAAAGACAGGGAGATGGAGGCGGGAGAT
CAAGGACTGCCTGGGTTAGGGGAGATCACACCTAAATCCCTGAAGGGGGAGAAAAACCATGTTTCCAGGGAAGAG
GTATCTGCAAACGAGATAAGGCCAAAGCCACAGTATGAGTTGGGGTGGAGAGGATCATTTTCAGGGAGAGGAGAC
TGAGAATCCAAGCTCCTGAATCNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNAGCCCGGC
CTCCAGGCTCCTGAATCTTTTGTTTTCCTGTTTCGATTTTTCTGGGTTAATTTATAACACGATCTTGTCTCAGCT
TTTCCACAGAGCCCTCCCCTTCACCCTTCCCTCATTGTTCAGGAAAGCTTAGGCCACGTGACAGTGAGGGGAGTG
CCCCCACAATGATTATGTCAGCAGCTGCTTGGAGGCCTGTTCATCTACTACCCACGTTTCCAGGGAGCCCTGCGA
GGAACTACTCATCACGGTCCTGGATGGAGGGGGCTGTGTAACTGCAGCTCTCCTGAGCCCAGACTAACATTTTAT
TGCCTGCAAATCGTGCCCCTGTTCTCTTTCTAGGACTACTCATCTCTTTTAGAGAATCAGAATTCCCAGCCCCCT
TTCTCCTGTTGACACTCTTTTCCCACCTCCCCAACCTATCCTTGTTT

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FIGURE 5885

MMFPSALAAALSGWPPPKPLPLQSLQPPCPTFRGSFAPPPSSALTSLLSPAPSPPLTAAGPGYCGDGEAGQQESW
EQAXAAGGLEPFVYAKDREMEAGDQGLPGLGEITPKSLKGEKNHVSREEVSANEIRPKPQYELGWRGSFSGRGD

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FIGURE 5886

GTTATGATCAAATTAGACTGTGCCTGATTGGGTGGTAAGATCACTCTGAAAGAAAGCTCACTGTGAAGAGATGAA
AGGTGGAGGCAGAGCTGTGAGGTCATGGGGAAAAGCCTGCTTTCCTTATAAGTCCTGCTGTTCATGTTGGAATAA
GGATCTGCTCTTCCTTGTTTCCATGCATTTTGCAGGATTCCAGGTACCATTACCACACTCTTCTGACCCATGAAA
CCAACTGGCTGCTCACACATCACCAAACAGGTTGGGGGTTAGCCTTCAGCACAGGTGGATACATCTGGGATTCAC
TGAGATTCCTGCCCTCTCCTGCTTCCTAGTGGTTTGGGACAGGCCCTCTGCCCATCGTCAGCAGTTTTTTGCTTT
CATACAAACCTGGAAGGCACTGGCATCTGCCTAGGAAAGTGGATCTGTGAAGAACAGATGAACTCAATCCTTTCT
GGAGTCTGACAAAGAAGGGATAGGCTTCCTTGACATTGCCTGGTCCTGACAAGGCCTCCCTGACATTACTCCTCC
AATTTCACAGTTACCTTCTGTAAATCTATTTTCTCATCTACTGAATAGAATCAGGCGCCCTTTTTGTCTTCCCAC
CTCTTATCTCTTGGCAATTTTAAGGGGAATTAATGCAAGAACAACTTTAGTGTCTCTTGGGAAAACAAGCCAACC
AAATACAAAACCCATTAAGCCTACTAGGGTGAGTCCTCTTAACATGGGAAGGCGATGATTATGCAAACACCAGAG
TTCCCTCCTCTTCAGTTCCTAAGAATAAAGAACAGGTATCAAGAACTTTCTTTAAAGTTAGTGTAACTATAGTTA
ACAAAGTATCCATTGAAGTTTAGTGCCTGTAGGACTGAGCCAGTGCTTTATCAACCCAACACATCATCACCATGT
GCATACTCTAGAAAAAAAAAATAGCTTCCTTAAAAGTTACAGAGGCTCTTAACGTGTTAAAACCGAAAAATCACAT
TTTTCTTGATTTCAAATATGTTCTACGGCCTTACTGTTGGGATGATATTTAGTATGTAACTTAGCATTCCAATTT
CTCAAGAATTTTTAGGCCGGGTGCGGTGGCTCATGCCTGTAGTCCC

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FIGURE 5887

MKGGGRAVRSWGKACFPYKSCCSCWNKDLLFLVSMHFAGFQVPLPHSSDP

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FIGURE 5888

AAAAAGAAAGACCCTAGCTGTCTGAATGATCTGAGCTAAGTCCCCAGACGTGCAAGTGTGGCCATCCTAGACCAC
TGAGCTCCAGCCAAGCCAGCTTGCATCAGAAGAACTGTCCAGAAAACTCACAGAATCATAAGAAATAATGCAGCG
CAGCTTAACTTGGACTCACCACCTATCAAGTGCTCGACAGCCACGTGTGCAGTGGTTCCTACGTGGAGCAGCATA
CATCCAGAGATGCAAATATTAATGAGGACAGTGCTAGTAACAGAGTTGCTGAGCAATCTATGTCCCCTTGTAAGA
ACCAGTGCCCCAGGGGAAGAAACAGAACTCCACAAGGTAGCAGTGTGGGTGTAGTACCCGCATGTGCCCATGTTA
TGGGAATGTAGATGGGGAGTGACCACCGCCAACAGAAGTGTGGCCATCTTGCCCGAGATGCCTGAGGACCTCCTA
TTTTTAGATGCTGCTGCCCAAGGCCTGTATTTCATGCTATGGCTTTTGTCATTTGAATTATCAGTAGCTGTCTCG
GAGCTATTACGCTTCACTGGGCCCTGGAGGATATTGTCTTATACAGTCCACTGGGTTTTGGATATGCAGTCTGTG
CCTTTCATTGCCTTCCTGGAAAATAATAACTAAACTCTTCCTCACCAAAAAA

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FIGURE 5889

MLWECRWGVTTANRSVAILPEMPEDLLFLDAAAQGLYFMLWLLSFELSVAVSELLRFTGPWRILSYTVHWVLDMQ
SVPFIAFLENNN

FIGURE 5890

CACTTAAGTCTACTTTAATGATAGATTGTCTCCACCCCGCCACCCCCTACATCTTCAGGACAAATGCACAGCTCT
TCCATGGTCACTGTCGCAGGAATGTTGAATATGCCTGGATCCATCATGGTACCACGTTACTCCTCCACGGCACTA
CATCTGGCCGCTAAACCAGCATTCGGCACATAAGCTTTTTTGATGGTTGTTAATTTTTTGATGGGGAGTATCAAC
TTCTTTTCAACAATTAATAGGTAGTTTATGAGTGGTTTACCCTATTTCTTAGTATTAGTTTTTTCCATTTCTGAC
TTCGCAGTATTGTTTAGGGACCAGAGGTGTCTCTGGGAATTGCTTTTTGACAGTCCTTATGTCCAGTCATCTTTG
GAAAAGATTGCTTATTAAAAATATTTTGTTGTTCCGTCATCTCATTGTCATTGGAGCACCAAGTGTCATTGGAAC
TCTGAAGCTCTCTCTGCCCTTTAGGTTTGGACCAAGTGCTGTCAAAGCCAGAGAAAGTAGGATTAAAGATACTGA
TCAGCCAGGACAGATAGGGGTTTTCTGCTGGAAACTGCGATACCTACCCTCGGTACATGGGGATAGCTCACATAA
GTGACTTGGTCACTTGGCAAGATTTCTTCGCTTCTCGGATAGCTGCAGGAATTAAAACATAGTGTATAGAATTTA
GGTGTTTTACACTAAAAATGATAATGTCTTGTTCCAATTAAGAATAGTAAACAGGTCCAAGTATAGACAATAAAT
GAGATTGGGATTCTGTTCTCATTTCTCAATGTGAACAGTTACTCCCATATCAGCATTATTTTCTATTTGGCCTTC
TTAAATACAGAGAAAAAATAGGATATATTAATAGTAGGTCACTTGAAAAAGAAAAGAAAAAAAGTTCCCCAGTTT
TCTAACTATAGGAGAGGAGTTCCTAAGGTTCTACGCATCCATTAGAACTCACAGAGGTACAAGGAGGCGTACTCT
TGAGTTTTGTTTAGAAAATCACCTCAGTAATGCCAAACCCTTCTTTAAAACACATTAATCTTTTCAAATCTTCCT
GAAAGCTTTGTCTATCTCCAGTTGATTGGGACTTCCGTATGTTAAAGAAAAATGAGAATTGTAGGAAAAGTTGAG
AGTATGAGGTACATTAGAAGTGACTTTAACACTCCACCAAAGTAATTTTACCTTATTTAGAGTTTGGATTTGAAA
TGGTTCAAAGGCTGTGAATTCAATATTTGATGTGATTTTGGGAAGTAAAGGGGAATGTCATTATCCTTTCGATAA
AATTGATATTATCAATCTGAAGAATGTTTCTTAGATCAGTTGTGTCCATAACTTGGGAGCATTAGCTGTGAGACC
TTGAAACAGATTGGCCATATTCTTATTTCACATTGATTATTTAAATGGACAATTTTAGGTTACTGGTCTTTATTC
ACTTGTTATTGAAACCACATGCACACTGACAATCAGTGAAAATCAC

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FIGURE 5891

LKSTLMIDCLHPATPYIFRTNAQLFHGHCRRNVEYAWIHHGTTLLLHGTTSGR

FIGURE 5892

CAGAAACACTGAGGTCAGATGTTATTCTTGCCAGTACTTTATAGATGAGGTGAAAGGAAGTAAAACTAAGGATGC
CCACATGTTAAACTCTGGAGAATTTGACCATGTTTCACAATGTGCAAAGTTTGCGTATGATTAATTGTACTGAGC
CTGCTACTCAGCGGTTTAGTTTACAATTCTTATGCCATGGGTCTTTCAGTAATCTGCCACGAAAGCTTGTGCTCG
CTATCCTAAAATAAATGGAAATGGGTGAATATGAGTGTTAGGACCACTGTAGTAATTGGGAAGAAAGTTACATTA
NNNN

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FIGURE 5893

MSVRTTVVIGKKVTLXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXFLEDLF

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FIGURE 5894A

GGTAGCTGGGTGCAGACGCCGTGGCGCTGGAGACCCAAACATGGCAAACCTGGAAGAAAGCTTCCCCCGAGGAGG
TACAAGAAAGATCCACAAACCAGAGAAAGCTTTCCAGCAGTCAGTTGAACAAGACAACTTATTTGATATTTCTAC
TGAAGAGGGATCCACCAAAAGAAAAAAGAGCCAGAAGGGGCCAGCAAAAACAAAAAAGTTGAAAATCGAAAAGAG
AGAAAGCAGCAAGTCCGCAAGAGAGAAGTTTGAAATCCTTAGTGTTGAGTCCCTGTGTGAGGGAATGCGTATTTT
GGGTTGCGTGAAAGAGGTGAATGAACTGGAACTGGTGATTAGTCTCCCCAATGGCCTCCAGGGCTTTGTGCAAGT
CACTGAAATCTGTGATGCCTACACCAAAAAGCTGAATGAGCAGGTGACACAAGAACAACCTCTGAAGGACCTACT
TCACTTGCCTGAACTTTTCTCACCTGGAATGCTGGTAAGATGTGTGGTGAGCAGTCTGGGCATCACAGACAGGGG
CAAGAAGAGTGTCAAGCTGTCTCTGAACCCCAAAAATGTCAACAGAGTGCTGAGTGCTGAGGCCCTGAAGCCTGG
CATGCTACTTACAGGTACCGTATCCAGCCTGGAAGACCATGGCTACCTAGTGGACATTGGTGTTGATGGGACCAG
AGCTTTTCTGCCACTGCTGAAAGCCCAGGAGTACATCAGACAGAAGAACAAAGGTGCTAAACTAAAGGTGGGTCA
GTACCTGAACTGCATTGTTGAAAAGGTGAAAGGCAACGGAGGAGTTGTTAGTCTGTCTGTTGGTCACTCAGAGGT
TTCTACGGCCATTGCTACTGAACAGCAGAGCTGGAACCTTAATAACTTGCTACCAGGACTGGTGGTCAAAGCTCA
GGTACAGAAGGTGACTCCATTTGGCCTTACGCTAAACTTCCTCACATTCTTCACGGGCGTGGTTGACTTTATGCA
CCTGGATCCCAAGAAAGCTGGAACATATTTCTCAAATCAGGCAGTGAGGGCCTGCATCCTTTGCGTCCATCCTCG
AACCAGAGTTGTGCACCTGAGCCTGCGCCCCATCTTCCTACAGCCTGGACGCCCACTCACCCGACTCTCTTGCCA
GAACCTTGGAGCAGTGCTGGATGATGTTCCTGTCCAGGGTTTTTTCAAAAAGGCTGGGGCCACCTTTAGGCTGAA
GGATGGGGTTCTGGCCTATGCCCGGCTCAGCCATCTCTCTGATTCTAAGAACGTCTTCAATCCTGAGGCCTTCAA
GCCAGGGAACACTCACAAGTGTAGAATTATTGACTACAGCCAAATGGATGAACTGGCCTTGCTCTCTCTACGAAC
GTCTATTATTGAAGCTCAGTACCTTAGATATCATGACATCGAACCTGGGGCAGTGGTAAAGGGCACAGTGCTAAC
CATAAAGTCATATGGGATGCTGGTGAAGGTGGGCGAGCAGATGAGGGGCCTGGTACCTCCCATGCACCTGGCTGA
CATCCTGATGAAGAATCCGGAGAAGAAGTACCACATCGGGGATGAGGTCAAGTGCCGGGTTTTGCTTTGTGACCC
TGAAGCCAAGAAGCTGATGATGACCCTGAAAAAAACCCTGATTGAGTCCAAACTACCTGTCATTACCTGCTATGC
CGATGCCAAGCCTGGTCTGCAGACACATGGCTTCATCATCAGGGTCAAGGACTATGGCTGCATTGTGAAGTTCTA
CAACAATGTGCAGGGACTGGTGCCCAAGCATGAGCTCAGTACTGAGTATATCCCTGACCCGGAGAGAGTTTTTTA
CACTGGCCAGGTGGTGAAGGTTGTCGTATTGAACTGTGAGCCATCCAAAGAGAGGATGCTCTTATCCTTCAAGCT
GTCGAGTGATCCAGAGCCAAAGAAAGAGCCTGCAGGACACAGTCAGAAGAAAGGAAAAGCCATTAACATTGGGCA
GTTGGTAGATGTGAAGGTTTTAGAGAAGACCAAAGATGGGCTGGAGGTGGCTGTCCTGCCCCACAACATCCGTGC
TTTCCTCCCCACATCTCATCTGTCGGACCACGTTGCCAACGGCCCATTGTTACATCATTGGCTCCAGGCAGGTGA
CATCCTTCACCGAGTCCTGTGTCTGAGCCAGAGCGAGGGGCGTGTTCTTCTTTGCAGGAAGCCAGCCTTGGTCTC
CACAGTAGAAGGTGGCCAGGATCCCAAGAACTTCTCAGAAATCCATCCTGGAATGCTGCTCATTGGTTTTGTGAA
GAGCATCAAGGACTATGGCGTGTTCATCCAGTTCCCCTCAGGTCTTAGCGGACTGGCCCCAAAAGCTATCATGAG
TGACAAATTTGTGACCTCCACAAGTGACCACTTTGTTGAGGGCCAGACAGTAGCGGCAAAGGTGACCAATGTGGA
TGAGGAGAAGCAGCGGATGCTGCTGTCACTGCGGCTGTCGGACTGTGGTCTGGGGGACTTGGCTATCACCAGCCT
CCTCCTCCTGAATCAGTGCCTGGAGGAGCTGCAGGGCGTGCGCAGCCTTATGAGCAACCGAGACTCTGTGTTGAT
CCAGACGCTGGCCGAGATGACCCCAGGAATGTTCCTTGACCTAGTGGTGCAGGAGGTGTTGGAAGATGGCTCTGT
GGTATTCAGTGGGGGTCCAGTGCCCGACCTGGTCCTGAAAGCCAGCAGATACCATCGCGCAGGGCAGGAGGTGGA
ATCTGGGCAGAAAAAGAAGGTTGTTATCTTAAATGTTGATCTTTTGAAGTTGGAAGTGCACGTTTCCCTTCACCA
GGACTTGGTGAATAGAAAAGCTAGAAAGCTGAGGAAAGGCAGCGAACACCAGGCGATTGTGCAGCACTTGGAGAA
GTCCTTTGCCATTGCCTCCTTGGTAGAGACGGGCCACCTGGCAGCTTTCTCCCTGACCTCTCACCTCAACGACAC
CTTCCGCTTTGACTCAGAGAAATTGCAGGTGGGACAGGGTGTCTCCCTAACCCTCAAGACCACAGAACCAGGAGT
GACTGGCCTTCTTTTGGCTGTGGAGGGGCCGGCTGCCAAGAGGACCATGAGGCCGACCCAGAAGGACTCTGAGAC
AGTTGATGAGGATGAAGAAGTGGATCCAGCTCTGACTGTAGGGACCATAAAGAAGCACACCCTCTCCATCGGGGA
CATGGTCACAGGGACTGTCAAGTCCATTAAGCCTACCCATGTGGTTGTGACTCTGGAAGATGGCATTATTGGCTG
TATCCATGCCTCCCACATTCTAGATGATGTTCCAGAGGGCACCTCTCCTACTACCAAGCTGAAGGTTGGGAAGAC
GGTCACTGCCCGAGTGATTGGCGGGCGAGACATGAAGACATTCAAGTATCTCCCAATAAGTCACCCCAGATTCGT
TCGAACCATCCCGGAGCTGAGTGTTCGGCCAAGTGAGCTGGAGGATGGCCACACTGCTCTTAACACTCACTCTGT
TAGCCCCATGGAGAAGATTAAACAGTACCAGGCCGGCCAGACTGTTACTTGCTTCTTAAAGAAATACAATGTGGT
GAAGAAATGGCTTGAGGTGGAGATTGCCCCAGACATCCGGGGGAGAATTCCCTTATTGCTCACTTCTCTGAGCTT

FIGURE 5894B

CAAGGTTCTGAAGCATCCAGATAAGAAGTTCCGGGTTGGCCAGGCCCTGAGGGCCACCGTTGTTGGCCCAGATTC
CTCCAAGACCTTCTTATGTCTGTCCCTCACAGGTCCTCACAAGCTTGAGGAAGGGGAAGTGGCCATGGGCCGAGT
GGTGAAGGTGACTCCCAACGAGGGGCTGACCGTCTCCTTCCCCTTTGGGAAGATAGGAACAGTCAGTATATTTCA
CATGAGTGACTCCTACTCCGAGACGCCCCTGGAAGACTTCGTCCCCCAGAAGGTTGTCAGATGTTACATCCTGTC
CACTGCAGACAACGTATTGACTTTGTCGCTGCGATCATCCAGAACAAACCCGGAGACGAAAAGCAAAGTAGAAGA
TCCAGAGATTAACTCCATCCAGGACATTAAGGAAGGGCAGCTTCTGAGGGGCTATGTAGGGTCCATCCAGCCACA
CGGTGTGTTCTTTCGCCTTGGCCCCTCCGTTGTGGGTTTGGCTCGGTACTCCCATGTCTCCCAGCACAGCCCGTC
CAAGAAAGCCCTTTATAACAAACACCTCCCTGAAGGGAAGCTGCTCACAGCCAGGGTCCTACGCCTTAACCACCA
GAAGAACCTGGTAGAGCTGTCTTTCCTCCCCGGAGACACTGGGAAGCCAGACGTGCTTTCTGCTTCCTTGGAAGG
GCAACTTACAAAGCAAGAGGAGAGGAAAACAGAGGCTGAGGAGAGAGACCAAAAAGGGGAAAAGAAAAATCAGAA
AAGGAACGAGAAGAAGAACCAGAAGGGGCAGGAGGAGGTGGAGATGCCCAGCAAGGAGAAGCAACAGCCCCAGAA
GCCACAGGCGCAGAAGCGGGGCGGGCGGGAGTGCCGGGAGTCTGGGAGTGAGCAGGAAAGAGTGAGCAAGAAGCC
AAAGAAAGCCGGCCTGTCAGAGGAGGACGACAGCCTTGTGGACGTGTACTATCGGGAGGGAAAAGAGGAGGCAGA
AGAGACGAATGTGCTGCCCAAGGAGAAGCAAACCAAGCCAGCAGAAGCGCCCCGGCTGCAGCTGTCTTCAGGCTT
CGCTTGGAATGTGGGACTAGACTCTCTGACCCCGGCCTTGCCACCTCTAGCAGAGAGCTCAGACAGCGAGGAGGA
TGAGAAGCCACACCAAGCCACGATAAAGAAAAGCAAGAAAGAAAGGGAGTTGGAGAAGCAGAAGGCAGAGAAGGA
ACTGTCCCGCATTGAGGAGGCGCTGATGGATCCTGGGCGGCAGCCAGAGTCCGCGGATGATTTTGACCGACTGGT
GCTGAGCTCCCCCAACAGCTCCATTCTGTGGCTGCAGTACATGGCTTTCCACCTGCAGGCCACGGAGATCGAGAA
GGCCCGTGCCGTGGCTGAGAGGGCCCTTAAGACCATCTCCTTCAGAGAGGAGCAGGAGAAGCTGAACGTGTGGGT
GGCTCTGCTGAACCTGGAGAACATGTACGGCTCTCAGGAGTCCCTGACCAAGGTCTTTGAGCGAGCCGTGCAGTA
CAACGAGCCTCTCAAAGTCTTTCTCCACCTGGCTGACATCTACGCCAAGTCAGAGAAATTCCAGGAAGCTGGTGA
ACTCTACAACCGGATGCTGAAGCGTTTCCGGCAGGAGAAAGCTGTGTGGATCAAATACGGCGCCTTCCTTCTGCG
GAGGAGCCAGGCTGCAGCCAGTCACCGCGTGCTGCAGCGAGCCCTGGAGTGCCTGCCTAGCAAGGAGCATGTGGA
TGTCATTGCCAAGTTTGCCCAGCTTGAGTTTCAGCTGGGGGATGCAGAGCGGGCCAAAGCCATTTTTGAGAACAC
GCTGAGCACCTACCCAAAGCGCACAGATGTCTGGTCGGTCTATATCGACATGACCATCAAGCACGGCAGCCAGAA
GGACGTCCGGGACATCTTTGAGCGGGTCATTCATCTGAGCTTGGCCCCCAAGAGAATGAAGTTCTTCTTCAAGCG
CTACCTGGACTACGAGAAGCAGCATGGCACTGAGAAGGATGTGCAGGCAGTCAAGGCCAAGGCCCTGGAGTATGT
GGAGGCCAAGAGCTCAGTGCTAGAGGAC**TAG**TGGCAGGCTGGCTCTGTGGGACACTGTCAACAATGGGCCAGCCC
GGCCCCGCCTCGAGTGCCTGGGCACTCGGAAAACTGTTACCTCAGGACTCTATTTAAATGCTGCTTTTTCTGCAG
CACGCTTGGGGAAATCCTGTCAGGATGAAAAGGAAGTTGAGATTTTTT

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FIGURE 5895

VAGCRRRGAGDPNMANLEESFPRGGTRKIHKPEKAFQQSVEQDNLFDISTEEGSTKRKKSQKGPAKTKKLKIEKR
ESSKSAREKFEILSVESLCEGMRILGCVKEVNELELVISLPNGLQGFVQVTEICDAYTKKLNEQVTQEQPLKDLL
HLPELFSPGMLVRCVVSSLGITDRGKKSVKLSLNPKNVNRVLSAEALKPGMLLTGTVSSLEDHGYLVDIGVDGTR
AFLPLLKAQEYIRQKNKGAKLKVGQYLNCIVEKVKGNGGVVSLSVGHSEVSTAIATEQQSWNLNNLLPGLVVKAQ
VQKVTPFGLTLNFLTFFTGVVDFMHLDPKKAGTYFSNQAVRACILCVHPRTRVVHLSLRPIFLQPGRPLTRLSCQ
NLGAVLDDVPVQGFFKKAGATFRLKDGVLAYARLSHLSDSKNVFNPEAFKPGNTHKCRIIDYSQMDELALLSLRT
SIIEAQYLRYHDIEPGAVVKGTVLTIKSYGMLVKVGEQMRGLVPPMHLADILMKNPEKKYHIGDEVKCRVLLCDP
EAKKLMMTLKKTLIESKLPVITCYADAKPGLQTHGFIIRVKDYGCIVKFYNNVQGLVPKHELSTEYIPDPERVFY
TGQVVKVVVLNCEPSKERMLLSFKLSSDPEPKKEPAGHSQKKGKAINIGQLVDVKVLEKTKDGLEVAVLPHNIRA
FLPTSHLSDHVANGPLLHHWLQAGDILHRVLCLSQSEGRVLLCRKPALVSTVEGGQDPKNFSEIHPGMLLIGFVK
SIKDYGVFIQFPSGLSGLAPKAIMSDKFVTSTSDHFVEGQTVAAKVTNVDEEKQRMLLSLRLSDCGLGDLAITSL
LLLNQCLEELQGVRSLMSNRDSVLIQTLAEMTPGMFLDLVVQEVLEDGSVVFSGGPVPDLVLKASRYHRAGQEVE
SGQKKKVVILNVDLLKLEVHVSLHQDLVNRKARKLRKGSEHQAIVQHLEKSFAIASLVETGHLAAFSLTSHLNDT
FRFDSEKLQVGQGVSLTLKTTEPGVTGLLLAVEGPAAKRTMRPTQKDSETVDEDEEVDPALTVGTIKKHTLSIGD
MVTGTVKSIKPTHVVVTLEDGIIGCIHASHILDDVPEGTSPTTKLKVGKTVTARVIGGRDMKTFKYLPISHPRFV
RTIPELSVRPSELEDGHTALNTHSVSPMEKIKQYQAGQTVTCFLKKYNVVKKWLEVEIAPDIRGRIPLLLTSLSF
KVLKHPDKKFRVGQALRATVVGPDSSKTFLCLSLTGPHKLEEGEVAMGRVVKVTPNEGLTVSFPFGKIGTVSIFH
MSDSYSETPLEDFVPQKVVRCYILSTADNVLTLSLRSSRTNPETKSKVEDPEINSIQDIKEGQLLRGYVGSIQPH
GVFFRLGPSVVGLARYSHVSQHSPSKKALYNKHLPEGKLLTARVLRLNHQKNLVELSFLPGDTGKPDVLSASLEG
QLTKQEERKTEAEERDQKGEKKNQKRNEKKNQKGQEEVEMPSKEKQQPQKPQAQKRGGRECRESGSEQERVSKKP
KKAGLSEEDDSLVDVYYREGKEEAEETNVLPKEKQTKPAEAPRLQLSSGFAWNVGLDSLTPALPPLAESSDSEED
EKPHQATIKKSKKERELEKQKAEKELSRIEEALMDPGRQPESADDFDRLVLSSPNSSILWLQYMAFHLQATEIEK
ARAVAERALKTISFREEQEKLNVWVALLNLENMYGSQESLTKVFERAVQYNEPLKVFLHLADIYAKSEKFQEAGE
LYNRMLKRFRQEKAVWIKYGAFLLRRSQAAASHRVLQRALECLPSKEHVDVIAKFAQLEFQLGDAERAKAIFENT
LSTYPKRTDVWSVYIDMTIKHGSQKDVRDIFERVIHLSLAPKRMKFFFKRYLDYEKQHGTEKDVQAVKAKALEYV
EAKSSVLED

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FIGURE 5896

CGGACGCGTGGGGAGAGGCTGTTTACCAGAACAGCATAACAAGGGCAGGTCTGACTGCAAGGCTGGGACTGGGAG
GCAGAGCCGCCGCCAAGGGGGCCTCGGTTAAACACTGGTCGTTCAATCACCTGCAAGACGAAGGAGGCAAGGATG

CTGTTGGCCTGGGTACAAGCATTCCTCGTCAGCAACATGCTCCTAGCAGAAGCCTATGGATCTGGAGGCTGTTTC
TGGGACAACGGCCACCTGTACCGGGAGGACCAGACCTCCCCCGCGCCGGGCCTCCGCTGCCTCAACTGGCTGGAC
GCGCAGAGCGGGCTGGCCTCGGCCCCCGTGTCGGGGGCCGGCAATCACAGTTACTGCCGAAACCCGGACGAGGAC
CCGCGCGGGCCCTGGTGCTACGTCAGTGGCGAGGCCGGCGTCCCTGAGAAACGGCCTTGCGAGGACCTGCGCTGT
CCAGAGACCACCTCCCAGGCCCTGCCAGCCTTCACGACAGAAATCCAGGAAGCGTCTGAAGGGCCAGGTGCAGAT
GAGGTGCAGGTGTTCGCTCCTGCCAACGCCCTGCCCGCTCGGAGTGAGGCGGCAGCTGTGCAGCCAGTGATTGGG
ATCAGCCAGCGGGTGCGGATGAACTCCAAGGAGAAAAAGGACCTGGGAACTCTGGGCTACGTGCTGGGCATTACC
ATGATGGTGATCATCATTGCCATCGGAGCTGGCATCATCTTGGGCTACTCCTACAAGAGGGGGAAGGATTTGAAA
GAACAGCATGATCAGAAAGTATGTGAGAGGGAGATGCAGCGAATCACTCTGCCCTTGTCTGCCTTCACCAACCCC
ACCTGTGAGATTGTGGATGAGAAGACTGTCGTGGTCCACACCAGCCAGACTCCAGTTGACCCTCAGGAGGGCAGC
ACCCCCCTTATGGGCCAGGCCGGGACTCCTGGGGCCTGAGCCCCCCCAGTGGGCAGGAGCCCATGCAGACACTGG
TGCAGGACAGCCCACCCTCCTACAGCTAGGAGGAACTACCACTTTGTGTTCTGGTTAAAACCCTACCACTCCCCC
GCTTTTTTGGCGAATCCTAGTAAGAGTGACAGAAGCAGGTGGCCCTGTGGGCTGAGGGTAAGGCTGGGTAGGGTC
CTAACAGTGCTCCTTGTCCATCCCTTGGAGCAGATTTTGTCTGTGGATGGAGACAGTGGCAGCTCCCACAGTGAT
GCTGCTGCTAAGGGCTTCCAAACATTGCCTGCACCCCTGGAACTGAACCAGGGATAGACGGGGAGCTCCCCCAGG
CTCCTCTGTGCTTTACTAAGATGGCCTCAGTCTCCACTGTGGGCTTGAGTGGCATACACTGTTATTCATGGTTAA
GGTAAAGCAGGTCAAGGGATGGCATTGAAAAAATATATTTAGTTTTTAAAATATTTGGGATGGAACTCCCTACTG
ACCTCTGAGAACTGGAAACGAGTTTGTACAGAAGTCAGAACTTTGGGTTGGGAATGAGATCTAGGTTGTGGCTGC
TGGTATGCTTCAGCTTGCTGGCAATGATGTGCCTTGACAACCGTGGGCCAGGCCTGGGCCCAGGGACTCTTCCTG
TTTCATAAGGAAAGGAAGAATTGCACTGAGCATTCCACTTAGGAAGAGGATAGAGAAGGATCTGCTCCGCCTTTG
GCCACAGGAGCAGAGGCAGACCTGGGATGCCCCAGTTTCTCTTCAGGGATGGATAGTGACCTGTCTTCATTTTGC
ACAGGTAAGAGAGTAGTTAGCTAACCTATGGGAATTATACTGTGGGGCCTTGTGAGCTGCTTCTAAGAGGCTAAC
CTGGAAACTAAGCTCAGAGGCAAGGTAATAAAGCACTTCAGGGCTTGCTCCCCAAGTGGGCCTGATTTAGCAGGT
GGTCCTGCGGGCGTCCAGGTCAGCACCTTCCTGTAGGGCACTGGGGCTAGGGTCACAGCCCCTAACTCATAAAGC
AATCAAAGAACCATTAGAAAGGGCTCATTAAGCCTTTTGGACACAGGACCCCAGAGAGGAAAAAGTGACTTGCCC
AAGGTCGTAAGCAAGCTACTGGCATGGCAAGAGCCCAGCTTCCTGACGGAGCGCAACATTTCTCCACTGCACTGT
GCTAGCAGCTCAGCAGGGCCTCTAACCTGTGATGTCACACTCAAGAGGCCTTGGCAGCTCCTAGCCATAGAGCTT
CCTTTCCAGAACCCTTCCACTGCCCAATGTGGAGACAGGGGTTAGTGGGGCTTTCTATGGAGCCATCTGCTTTGG
GGACCTAGACCTCAGGTGGTCTCTTGGTGTTAGTGATGCTGGAGAAGAGAATATTACTGGTTTCTACTTTTCTAT
AAAGGCATTTCTCTATATACATGTTTTATATACCTCATTCTGACACCTGCATATAGTGTGGGAAATTGCTCTGCA
TTTGACTTAATTAAAAAAAAAAAAAAA

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FIGURE 5897

MLLAWVQAFLVSNMLLAEAYGSGGCFWDNGHLYREDQTSPAPGLRCLNWLDAQSGLASAPVSGAGNHSYCRNPDE
DPRGPWCYVSGEAGVPEKRPCEDLRCPETTSQALPAFTTEIQEASEGPGADEVQVFAPANALPARSEAAAVQPVI
GISQRVRMNSKEKKDLGTLGYVLGITMMVIIIAIGAGIILGYSYKRGKDLKEQHDQKVCEREMQRITLPLSAFTN
PTCEIVDEKTVVVHTSQTPVDPQEGSTPLMGQAGTPGA

FIGURE 5898A

GTTTCCACAATAAAACTTTTTCTACCAGATGGTATGGAAGCCCGGCTCCGCTCAGATGTCATCCATGCACCATTA
CCAAGTCCTGTTGACAAAGTTGCTGCTAACACTCCAAGTATGTACTCTCAGGAACTATTCCAGCTTTCTCAGTAT
CTACAGGAGGCCTTACATCGGGAACAAATGTTGGAACAGAAGTTAGCCACGCTTCAGCGGCTACTAGCCATCACC
CAAGAGGCTTCAGATACCAGTTGGCAGGCTTTAATAGATGAAGATAGACTCTTATCACGGTTAGAAGTTATGGGA
AACCAATTACAGGCATGCTCCAAAAATCAAACAGAAGATAGTTTACGAAAGGAACTTATAGCATTACAAGAGGAT
AAACATAACTATGAGACAACAGCCAAAGAGTCCCTGAGGCGGGTTCTTCAGGAGAAAATTGAAGTGGTTAGAAAA
CTTTCAGAAGTTGAGCGAAGTCTGAGTAATACTGAAGATGAATGTACCCATCTGAAAGAAATGAATGAAAGGACT
CAGGAAGAATTAAGAGAATTAGCCAACAAATATAATGGAGCAGTTAATGAGATTAAAGATTTATCTGATAAATTA
AAGGTAGCAGAGGGAAAACAAGAGGAAATCCAACAGAAGGGACAGGCTGAGAAAAAAGAATTACAACATAAAATA
GATGAAATGGAAGAAAAAGAACAGGAGCTCCAGGCAAAAATAGAAGCTTTGCAAGCTGATAATGATTTCACCAAT
GAAAGGCTAACAGCTTTACAAGAGCACTTGCTTTCAAAGAGTGGCGGGGACTGCACTTTTATTCATCAATTCATA
GAATGCCAGAAGAAGCTGATCGTCGAAGGGCATCTAACCAAAGCGGTAGAAGAAACAAAGCTTTCAAAAGAAAAT
CAGACAAGAGCAAAAGAATCTGATTTTTCAGATACTCTGAGTCCAAGCAAGGAAAAAAGCAGTGACGACACTACA
GACGCCCAAATGGATGAGCAAGACCTAAATGAGCCTCTTGCCAAAGTGTCCCTTTTAAAAGATGACTTGCAGGGT
GCACAGTCAGAAATTGAGGCAAAGCAAGAAATACAGCATCTTCGAAAGGAATTGATCGAAGCCCAGGAGCTAGCT
AGAACAAGTAAACAAAAATGCTTTGAACTTCAAGCTCTTTTGGAAGAAGAAAGAAAAGCCTATCGAAATCAAGTT
GAGGAATCCACTAAACAAATACAGGTTCTTCAAGCCCAATTGCAGAGGTTACACATCGATACTGAGAATCTCCGG
GAGGAGAAGGACAGTGAAATCACAAGTACTAGAGATGAATTGCTTAGTGCCCGAGATGAAATTTTGCTCCTTCAT
CAAGCAGCAGCAAAGGTTGCCTCTGAGCGGGACACTGACATTGCTTCTTTACAAGAAGAGCTTAAGAAGGTGAGA
GCTGAGCTTGAGCGGTGGCGGAAAGCAGCGTCTGAATATGAGAAAGAAATCACAAGTCTGCAAAACAGTTTTCAG
CTTAGATGTCAACAGTGTGAGGACCAGCAGAGAGAAGAAGCAACAAGGTTGCAAGGTGAACTAGAGAAGTTGAGA
AAGGAATGGAATGCATTGGAAACCGAATGCCATTCTCTAAAAAGGGAAAATGTTTTGCTATCATCAGAACTGCAA
CGGCAAGAAAAAGAATTGCACAATTCTCAGAAGCAGAGTTTAGAGCTTACCAGTGATCTCAGCATCCTTCAAATG
TCTAGGAAAGAACTTGAGAATCAAGTGGGATCCTTGAAAGAACAGCATCTTCGGGATTCAGCTGATTTAAAAACT
CTTCTCAGTAAGGCAGAAAACCAAGCAAAGGATGTGCAGAAAGAGTATGAAAAGACACAGACTGTACTCTCAGAA
CTGAAGTTGAAGTTTGAAATGACTGAGCAGGAAAAGCAGTCAATCACAGATGAGCTCAAACAGTGTAAAAACAAC
CTGAAGCTGCTCCGAGAGAAAGGAAATAATAAACCCTGGCCCTGGATGCCCATGTTGGCTGCCCTGGTTGCAGTA
ACAGCCATCGTGCTGTACGTGCCAGGTCTGGCCAGAGCTTCTCCATGAGAGCGTTCCTTGAGTCCGTACACCGTC
CTCCCTCTAGAAGCTGGCATCACACTCATGCTGGGGACAAACAGAACCATTTTCTTCCTCTTTACCTCTTAAAAC
AGCAGAAGTACAAGAATACAGCTGTAGGGTCATTGCTTTAAATTATATAAAATGTATCTGTCTATAAAGAAGATA
TAAAATTGTGACTTTATTCTACTGTAAGCAATAATTTGCTTGCAATTTTTCATGTAATTTTTAAATTAGTATGTT
AAGATTCTGAATATTATGGTGGCCTAAAGTAGGCTTCTTGGTACACCAGATTATTTATAACATTAAATTTATGAG
TATTTTACTCTGAATTCTGATCACCAGATAATTCATTTTTCTGATTTGATAACTACCCAAACCAAACAACCAATA
CATACATGGGAAGAGAGGCCCTGTGTGCTCAGTGCCTATCAGTTTGAAATATATACACATATATATATTTTTTAC
ATATTTACGCCATTTTTACTTGTTATGAAACCACTGAGCTATTGGGAACAAGACTTAGAGACAACTATTTGCGTG
GATTTTTTTTTTTTTTTAAGGAAAAATACGTTTGGAAAATAAACTGTTATGGTGATAATTTGGGGAATATGTGCAC
GCTTGTTCAGCCTTAATGTGACTTGAAGATGTGGAGGACATCAACTTTGAAAAACTTTCCATGAGAGTATATTTT
CTTGAGCAAACTGAAGTATTTCTGGGAGCAAAAACATAGTAATTACACAATTTCAGTGCAGTCAACCAAAATGTT
GAGTCAATTGGAATGTAATTTATTAAACCATGTATTTAAAGAGATATTTTTCTTTAAAAGCCAAGTTACTTTCTC
ATATACAGCATTTTAGGAAGCATGATTTTTTTTTTCTATCATCTATTCCTCCAAGCATGTTTAATTGAAGAAAGT
ATTAATATCTCTTTAGATAAGCTTGTATTGACCTAATTTGGTTTATGATGTGTCAGAGCTAATTCATGTTCAGGG
TGAGCGTTGTACCTACCAACAAATTTCCTGGTTGGGTATGCAAATGGTTATTTTCTTTTTATTGTTGTTAATTGG
GACTTTCTGTTAATGAAAAGCACTATTCCCAAGATTAATAGTGTTCTATGCACAATGAAGCACCTAAAAACACTG
CTTGATATTATAAATTTAAAACACAAGTGAAAGTTTAGCCATGGTTTTGTGCGGCATCATAGTTATGTCAATAAA
GTTTATTTAGGTCATAGAATATCCTAAAGTATCACATAGTTAAATTTTTCAGTCAGTGAAGACCGGGAGGGAATG
TCAGTGAATTGGCTTGAATGTTCTGTGGCAATCCACAGGTCTAGCCAAATATTGCTAGGAGTTTAGGGTATAATT
TGCCTTGTGATGTTTGGCAGTCACTGTTTATACTTTAAAGGTTATATTTTAAGCTATTTGAGATTGCTTTTGGGA
AGATCACTAGATTTATGGAGGAATTAGTCACAAATGACTTGTAGAAAATACTGTCATATAGTTCATTTCATCATT

FIGURE 5898B

TTCTGTTGCAGGAAGCCACTCCACCACAGAATGCTAATATGCCAGTGGTACCCAGTACCTCTTGTATATAGGTTA
TTGCAAATATTGTTCTGAAATGCTTAACTTCAGAATTACATTTTTTAAAGTAAATAATTGTTTTAAATCTATTTT
GTAAAGATATAAAGTACAATAGAATTTCTGGAGTACAGATTAAACTATTTGCACTAACACACGTGACGTGCATGA
TTTAATAAAATAACTTTACTCTCCCT

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FIGURE 5899

CCCTTTAAAGGGTGACTCGTCCCACTTGTGTTCTCTCTCCTGGTGCAGAGTTGCAAGCAAGTTTATCAGAGTATC
GCCATGAAGTTCGTCCCCTGCCTCCTGCTGGTGACCTTGTCCTGCCTGGGGACTTTGGGTCAGGCCCCGAGGCAA
AAGCAAGGAAGCACTGGGGAGGAATTCCATTTCCAGACTGGAGGGAGAGATTCCTGCACTATGCGTCCCAGCAGC
TTGGGGCAAGGTGCTGGAGAAGTCTGGCTTCGCGTCGACTGCCGCAACACAGACCAGACCTACTGGTGTGAGTAC
AGGGGGCAGCCCAGCATGTGCCAGGCTTTTGCTGCTGACCCCAAACCTTACTGGAATCAAGCCCTGCAGGAGCTG
AGGCGCCTTCACCATGCGTGCCAGGGGGCCCCGGTGCTTAGGCCATCCGTGTGCAGGGAGGCTGGACCCCAGGCC
CATATGCAGCAGGTGACTTCCAGCCTCAAGGGCAGCCCAGAGCCCAACCAGCAGCCTGAGGCTGGGACGCCATCT
CTGAGGCCCAAGGCCACAGTGAAACTCACAGAAGCAACACAGCTGGGAAAGGACTCGATGGAAGAGCTGGGAAAA
GCCAAACCCACCACCCGACCCACAGCCAAACCTACCCAGCCTGGACCCAGGCCCGGAGGGAATGAGGAAGCAAAG
AAGAAGGCCTGGGAACATTGTTGGAAACCCTTCCAGGCCCTGTGCGCCTTTCTCATCAGCTTCTTCCGAGGGTGA

CAGGTGAAAGACCCCTACAGATCTGACCTCTCCCTGACAGACAACCATCTCTTTTTATATTATGCCGCTTTCAAT
CCAACGTTCTCACACTGGAAGAAGAGAGTTTCTAATCAGATGCAACGGCCCAAATTCTTGATCTGCAGCTTCTCT
GAAGTTTGGAAAAGAAACCTTCCTTTCTGGAGTTTGCAGAGTTCAGCAATATGATAGGGAACAGGTGCTGATGGG
CCCAAGAGTGACAAGCATACACAACTACTTATTATCTGTAGAAGTTTTGCTTTGTTGATCTGAGCCTTCTATGAA
AGTTTAAATATGTAACGCATTCATGAATTTCCAGTGTTCAGTAAATAGCAGCTATGTGTGTGCAAAATAAAAGAA
TGATTTCAGAAAT

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FIGURE 5900

MKFVPCLLLVTLSCLGTLGQAPRQKQGSTGEEFHFQTGGRDSCTMRPSSLGQGAGEVWLRVDCRNTDQTYWCEYR
GQPSMCQAFAADPKPYWNQALQELRRLHHACQGAPVLRPSVCREAGPQAHMQQVTSSLKGSPEPNQQPEAGTPSL
RPKATVKLTEATQLGKDSMEELGKAKPTTRPTAKPTQPGPRPGGNEEAKKKAWEHCWKPFQALCAFLISFFRG

FIGURE 5901

ATGGCTTTAGAGATCCACATGTCAGACCCCATGTGCCTCATCGAGAACTTTAATGAGCAGCTGAAGGTTAATCAG
GAAGCTTTGGAGATCCTGTCTGCCATTACGCAACCTGTAGTTGTGGTAGCGATTGTGGGCCTCTATCGCACTGGC
AAATCCTACCTGATGAACAAGCTGGCTGGGAAGAACAAGGGCTTCTCTGTTGCATCTACGGTGCAGTCTCACACC
AAGGGAATTTGGATATGGTGTGTGCCTCATCCCAACTGGCCAAATCACACATTAGTTCTGCTTGACACCGAGGGC
CTGGGAGATGTAGAGAAGGCTGACAACAAGAATGATATCCAGATCTTTGCACTGGCACTCTTACTGAGCAGCACC
TTTGTGTACAATACTGTGAACAAAATTGATCAGGGTGCTATCGACCTACTGCACAATGTGACAGAACTGACAGAT
CTGCTCAAGGCAAGAAACTCACCCGACCTTGACAGGGTTGAAGATCCTGCTGACTCTGCGAGCTTCTTCCCAGAC
TTAGTGTGGACTCTGAGAGATTTCTGCTTAGGCCTGGAAATAGATGGGCAACTTGTCACACCAGATGAATACCTG
GAGAATTCCCTAAGGCCAAAGCAAGGTAGTGATCAAAGAGTTCAAAATTTCAATTTGCCTCGTCTGTGTATACAG
AAGTTCTTTCCAAAAAAGAAATGCTTTATCTTTGACTTACCTGCTCACCAAAAAAAGCTTGCCCAACTTGAAACA
CTGCCTGATGATGAGCTAGAGCCTGAATTTGTGCAACAAGTGACAGAATTCTGTTCCTACATCTTTAGCCATTCT
ATGACCAAGACTCTTCCAGGTGGCATCATGGTCAATGGATCTCGTCTAAAGAACCTGGTGCTGACCTATGTCAAT
GCCATCAGCAGTGGGGATCTGCCTTGCATAGAGAATGCAGTCCTGGCCTTGGCTCAGAGAGAGAACTCAGCTGCA
GTGCAAAAGGCCATTGCCCACTATGACCAGCAAATGGGCCAGAAAGTGCAGCTGCCCATGGAAACCCTCCAGGAG
CTGCTGGACCTGCACAGGACCAGTGAGAGGGAGGCCATTGAAGTCTTCATGAAAAACTCTTTCAAGGATGTAGAC
CAAAGTTTCCAGAAAGAATTGGAGACTCTACTAGATGCAAAACAGAATGACATTTGTAAACGGAACCTGGAAGCA
TCCTCGGATTATTGCTCGGCTTTACTTAAGGATATTTTTGGTCCTCTAGAAGAAGCAGTGAAGCAGGGAATTTAT
TCTAAGCCAGGAGGCCATAATCTCTTCATTCAGAAAACAGAAGAACTGAAGGCAAAGTACTATCGGGAGCCTCGG
AAAGGAATACAGGCTGAAGAAGTTCTGCAGAAATATTTAAAGTCCAAGGAGTCTGTGAGTCATGCAATATTACAG
ACTGACCAGGCTCTCACAGAGACGGAAAAAAAGAAGAAAGAGGCACAAGTGAAAGCAGAAGCTGAAAAGGCTGAA
GCGCAAAGGTTGGCGGCGATTCAAAGGCAGAACGAGCAAATGATGCAGGAGAGGGAGAGACTCCATCAGGAACAA
GTGAGACAAATGGAGATAGCCAAACAAAATTGGCTGGCAGAGCAACAGAAAATGCAGGAACAACAGATGCAGGAA
CAGGCTGCACAGCTCAGCACAACATTCCAAGCTCAAAATAGAAGCCTTCTCAGTGAGCTCCAGCACGCCCAGAGG
ACTGTTAATAACGATGATCCATGTGTTTTACTCTAA

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FIGURE 5902

MALEIHMSDPMCLIENFNEQLKVNQEALEILSAITQPVVVVAIVGLYRTGKSYLMNKLAGKNKGFSVASTVQSHT
KGIWIWCVPHPNWPNHTLVLLDTEGLGDVEKADNKNDIQIFALALLLSSTFVYNTVNKIDQGAIDLLHNVTELTD
LLKARNSPDLDRVEDPADSASFFPDLVWTLRDFCLGLEIDGQLVTPDEYLENSLRPKQGSDQRVQNFNLPRLCIQ
KFFPKKKCFIFDLPAHQKKLAQLETLPDDELEPEFVQQVTEFCSYIFSHSMTKTLPGGIMVNGSRLKNLVLTYVN
AISSGDLPCIENAVLALAQRENSAAVQKAIAHYDQQMGQKVQLPMETLQELLDLHRTSEREAIEVFMKNSFKDVD
QSFQKELETLLDAKQNDICKRNLEASSDYCSALLKDIFGPLEEAVKQGIYSKPGGHNLFIQKTEELKAKYYREPR
KGIQAEEVLQKYLKSKESVSHAILQTDQALTETEKKKKEAQVKAEAEKAEAQRLAAIQRQNEQMMQERERLHQEQ
VRQMEIAKQNWLAEQQKMQEQQMQEQAAQLSTTFQAQNRSLLSELQHAQRTVNNDDPCVLL

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FIGURE 5903

CTTATTTTCTCAGAGATCAGCGATGGTGTAGAGGTCTCCGATGTGCTCTCCGTATGTTCAGACAACAGTTATGAC
ACATATGCCAACAGCACCGCCACCCCTGTGGGCCCCCGAGGGGGTGGCAGCCACACCAAGACCCTCATAGAGCGG
AGTGGGCGTTAGCTGAAGACATGTCTGTCCCACCTGTACCTGACACAGAAGCTGGGGAGCCTAGGAGAGCTGGTG
GAAGTGTGTCTGAACTCGGAGTGCTCTGGGAGCGGGCTCCACAGCCTCCTTGTGGGCTCCAGCCCCTTGTCAGCC
GCAGCCTCTCTTGAGGGGGACTCCCTGTCTCCTGAGGCCCAGCTGGGCCAGGACTCCATCCTTTCAGATGCCCCT
GCAGGCCTGGGGCTCCTTCTGGGAAGTATGGGGCCTAGGGCTTGGTCCCCCTCTTCTGAGGCCCTCTCCTGTATC
CCGACCTGGAAGCTTTGATGGGTC**ATG**GGCCATGCCATACCCCCTGTGGCAATGGAGTGTGTGGATGCTCACCTG
TGCCATCTGTCCTCCTGTCTGTGCCAGGAGGCACCTGAGTTCTCTGCTGTTATCCTGCCCCAAGGGCCTGGGCCG
AGCCTCTACCTGAAGCAACTCTGCTCTTCCTGTCAGTCTCAAAGCACAAGGAGGTTCAGCCCAGGAGGAAGCCAG
CTGCAATGTGGAGACACGTCCTCCTCCCCAACCCACCTCATGCCACCGCCAACCCCCTGCCCCAGGAGCGGGCCT
GAGCCACGTCCCCTAGGAGCAGCTGGAGATGGCCAAAAGAGTGAGCTCAGGACTACTGGATCCCATGCCCAGGTG
TCCAGCAGACCTCAAGGCAGAAGGGTCACC**TAA**CCCAGGAGTCCACAGACTGATGTGACCTCAGGTTCCCACATC
AGTGGCCACAGGGCAGGGCCCACCTGGTAGAAGTGTTCTGGATATGGCCAGGGTGGGTGTGTGGCTAAGTGGGCC
TGAACAGAGGGAACCTAGGGCCCTTGGCCAATGTGATTAAAGCTGCCATCTTGAAAAAAAAAAAAAAAAAAAAAA
AAAACCAAAAAAAAAAAAAAAAAA

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FIGURE 5904

MGHAIPPVAMECVDAHLCHLSSCLCQEAPEFSAVILPQGPGPSLYLKQLCSSCQSQSTRRFSPGGSQLQCGDTSS
SPTHLMPPPTPCPRSGPEPRPLGAAGDGQKSELRTTGSHAQVSSRPQGRRVT

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FIGURE 5905

ATTTAAAGGAGTCGGGTCTCTAACTGTTGATCTGTTTTTTTCCCTTCTGAGCAATGGAGCTTACCATCTTTATCC
TGAGACTGGCCATTTACATCCTGACATTTCCCTTGTACCTGCTGAACTTTCTGGGCTTGTGGAGCTGGATATGCA
AAAAATGGTTCCCCTACCTCTTGGTGAGGTTCACTGTGATATACAACGAACAGATGGCAAGCAAGAAGCGGGAGC
TCTTCAGTAACCTGCAGGAGTTTGCGGGCCCCTCCGGGAAACTCTCCCTGCTGGAAGTGGGCTGTGGCACGGGGG
CCAACTTCAAGTTCTACCCACCTGGGTGCAGGGTGACCTGTATTGACCCCAACCCCAACTTTGAGAAGTTTTTGA
TCAAGAGCATTGCAGAGAACCGACACCTGCAGTTTGAGCGCTTTGTGGTAGCTGCCGGGGAGAACATGCACCAGG
TGGCTGATGGCTCTGTGGATGTGGTGGTCTGCACCCTGGTGCTGTGCTCTGTGAAGAACCAGGAGCGGATTCTCC
GCGAGGTGTGCAGAGTGCTGAGACCGGGAGGGGCTTTCTATTTCATGGAGCATGTGGCAGCTGAGTGTTCGACTT
GGAATTACTTCTGGCAACAAGTCCTGGATCCTGCCTGGCACCTTCTGTTTGATGGGTGCAACCTGACCAGAGAGA
GCTGGAAGGCCCTGGAGCGGGCCAGCTTCTCTAAGCTGAAGCTGCAGCACATCCAGGCCCCACTGTCCTGGGAGT
TGGTGCGCCCTCATATCTATGGATATGCTGTGAAATAGTGTGAGCTGGCAGTTAAGAGCTGAATGGCTCAAAGAA
TTTAAAGCTTCAGTTTTACATTTAAAATGCTAAGTGGGAGAAGAGAAACCTTTTTTTTGGGGGGCGGTTTTTTTG
GTTTGTTGTTGGTTTTTTTTTTTTTTTTGGCGGGAAGAAAGAGTTTTGCTCTTGTTGCCCAGGCTGGAGTGCAG
TGACGTGATCTCCGCTCACTGCAACCTCCACCTCGCGGGTTTAGGCGATTCTTCTGCCTCAGCCTCCCTAGTAGC
TGGGATTGCAGGTGCCCACCACCATGCCCGGCTAATTTGTATTTTTAGTTGAGACAGGGTTTCGCTACGTTGGCC
AGGCTGGTCTTGAACTCCTGATCTCAGGCAATCCACCCACCTCGGCCTCCCAGAGTGCTGGGATGACAGGCGTGA
GCAACCGCACCCAGCTTAAGGTTTTTTTGTTTTGTTTTGAGACGGAGTTTTCGCTCTTGTTGCCCAGGCTGGAGT
GCAATGCTGTGATCTCGGCTTACCACAACCTCCACCTCCCGGGTTCAAGTGATTCACCTGCCTCAGCCTCCTGAG
TAGCTGGTATTACAGGCATGCGTCACCACGCCGGCTAATTTTGTACTTTTAGTAGAGATGGTGTTTCCCCACGTT
GGTCAGCCTGGCCAACATGGCAAAACCCTACTAAAGATACAAAAAAAAAAAAAAAATTAGCCGGGCGTGGTGGTGG
GTGCCTGTAGTCCCAGGTACTTGGAAGGCTGAGGCAGGAGAATCTCTTGAACCCAGAAGGCGAAGGTTGCGGTGA
GCCGAGATCATGCCATTGTACTCTAGCCTGGGTGACAAGAGCAAGACTCCGTCTCAAAAAAAAAAAAAAAAAAAA
AAGAAGTAGAGACAGGGAGACGGGGTCTCACTGTGTTGCCTAGGCCGGTCTTGAACTCCTGGGCTCAAGTGATTC
TCCCACCTTGACCTCCTAAATTGTTGGGATTACAGGTGTGAGACAGTGCACCTGGCCGAAATAGCTCAAGTTTCT
GAAAAACAAATCTGAATCTATTTGTTATTCTTAGCGTCACTGGTCTGGCTTTCAGAATTAACATACAAGGTTGCC
ACACCTAGTTCTGCCCAGCTTTATGTCTTTATTCCAGTATTCCACCAAAGTTTGTTTTCCTGCATTCCAGTTCTC
AAGTCTTAAGATAAAGATTGTACTTGACAGTTTAGTATATCCATAAAACTATTTGAGGTGGTTAAGGTTCTTGGG
TTCATTTTCCTTAATACTTTGCTGAATATTGTAGATTGTAGGCAATGAAAAAGTCTACTAAATTAGGAAAACCTT
GAATAATTAGGTATCCTAGGTAAGAGCCCCTAAACATCAAGCAATCTGTGAGTCTGTAAAGAAATAAATATTTTT
TGGATTATTCTTATCTAATTCCACCCCTGTTGGAAGATGATTTCTTTGTTCTTTGCAACTATGGAAGCTGTGAAA
ATCATCACAAGTGCCTCTGAAAGCGAGTGTTAGGTTGGTTAGAGGGTTTAATATTTTCTGCAATGGTTTGTAGGA
ATTTTAATAAATGTAGTATATTTTCTGAGATGATTTTGTAAAAGTACTATTTTAAATATCAAATCAACCAATAAA
TTCACATTTGTGTTAGGAACAG

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FIGURE 5906

MELTIFILRLAIYILTFPLYLLNFLGLWSWICKKWFPYLLVRFTVIYNEQMASKKRELFSNLQEFAGPSGKLSLL
EVGCGTGANFKFYPPGCRVTCIDPNPNFEKFLIKSIAENRHLQFERFVVAAGENMHQVADGSVDVVVCTLVLCSV
KNQERILREVCRVLRPGGAFYFMEHVAAECSTWNYFWQQVLDPAWHLLFDGCNLTRESWKALERASFSKLKLQHI
QAPLSWELVRPHIYGYAVK

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FIGURE 5907

TCTCAGGGCTTCATACAGGAAATCTATTGCTGTGTCAAGTTCCAGAGAAAAGCTTCTGTTCGTCCAAGTTACTAA
CCAGGCTAAACCACATAGACGTGAAGGAAGGGGCTAGAAGGAAGGGAGTGCCCCACTGTTGATGGGGTAAGAGGA
TCCTGTACTGAGAAGTTGACCAGAGAGGGTCTCACCATGCGCACAGTTCCTTCTGTACCTGTGTGGAGGAAAAGT
ACTGAGTGAAGGGCAGAAAAAGAGAAAACAGAAATGCTCTGCCCTTGGAGAACTGCTAACCTAGGGCTACTGTTG
ATTTTGACTATCTTCTTAGTGGCCGAAGCGGAGGGTGCTGCTCAACCAAACAACTCATTAATGCTGCAAACTAGC
AAGGAGAATCATGCTTTAGCTTCAAGCAGTTTATGTATGGATGAAAAACAGATTACACAGAACTACTCGAAAGTA
CTCGCAGAAGTTAACACTTCATGGCCTGTAAAGATGGCTACAAATGCTGTGCTTTGTTGCCCTCCTATCGCATTA
AGAAATTTGATCATAATAACATGGGAAATAATCCTGAGAGGCCAGCCTTCCTGCACAAAAGCCTACAGGAAAGAA
ACAAATGAGACCAAGGAAACCAACTGTACTGATGAGAGAATAACCTGGGTCTCCAGACCTGATCAGAATTCGGAC
CTTCAGATTCGTCCAGTGGCCATCACTCATGACGGGTATTACAGATGCATAATGGTAACACCTGATGGGAATTTC
CATCGTGGATATCACCTCCAAGTGTTAGTTACACCTGAACTGACCCTGTTTCAAAACAGGAATAGAACTGCAGTA
TGCAAGGCAGTTGCAGGGAAGCCAGCTGCGCAGATCTCCTGGATCCCAGAGGGCGATTGTGCCACTAAGCAAGAA
TACTGGAGCAATGGCACAGTGACTGTTAAGAGTACATGCCACTGGGAGGTCCACAATGTGTCTACCGTGACCTGC
CACGTCTCCCATTTGACTGGCAACAAGAGTCTGTACATAGAGCTACTTCCTGTTCCAGGTGCCAAAAAATCAGCA
AAATTATATATTCCATATATCATCCTTACTATTATTATTTTGACCATCGTGGGATTCATTTGGTTGTTGAAAGTC
AATGGCTGCAGAAAATATAAATTGAATAAAACAGAATCTACTCCAGTTGTTGAGGAGGATGAAATGCAGCCCTAT
GCCAGCTACACAGAGAAGAACAATCCTCTCTATGATACTACAAACAAGGTGAAGGCATCTCAGGCATTACAAAGT
GAAGTTGACACAGACCTCCATACTTTATAAGTTGTTGGACTCTAGTACCAAGAAACAACAACAAACGAGATACAT
TATAATTACTGTCTGATTTTCTTACAGTTCTAGAATGAAGACTTATATTGAAATTAGGTTTTCCAAGGTTCTTAG
AAGACATTTTAATGGATTCTCATTCATACCCTTGTATAATTGGAATTTTTGATTCTTAGCTGCTACCAGCTAGTT
CTCTGAAGAACTGATGTTATTACAAAGAAAATACATGCCCATGACCAAATATTCAAATTGTGCAGGACAGTAAAT
AATGAAAACCAAATTTCCTCAAGAAATAACTGAAGAAGGAGCAAGTGTGAACAGTTTCTTGTGTATCCTTTCAGA
ATATTTTAATGTACATATGACATGTGTATATGCCTATGGTATATGTGTCAATTTATGTGTCCCCTTACATATACA
TGCACATATCTTTGTCAAGGCACCAGTGGGAACAATACACTGCATTACTGTTCTATACATATGAAAACCTAATAA
TATAAGTCTTAGAGATCATTTTATATCATGACAAGTAGAGCTACCTCATTCTTTTTAATGGTTATATAAAATTCC
ATTGTATAGTTATATCATTATTTAATTAAAAACAACCCTAATGATGGATATTTAGATTCTTTTAAGTTTTGTTTA
TTTCTTTTAAGTTTTGTTTGTGGTATAAACAATACCACATAGAATGTTTCTTGTTCATATATCTCTTTGTTTTTG
AGTATATCTGTAGGATAACTTTCTTGAGTGGAATTGTCAGGTCAAAGGGTTTGTGCATTTTACTATTGATATATA
TGTTAAATTGTGTCAAATATATATGTCAAATTCCCTCCAACATTGTTTAAATGTGCCTTTCCCTAAATTTCTATT
TTAATAACTGTACTATTCCTGCTTCTACAGTTGCCACTTTCTCTTTTTAATCAACCAGATTAAATATGATGTGAG
ATTATAATAAGAATTATACTATTTAATAAAAATGGATTTATA

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FIGURE 5908

MLCPWRTANLGLLLILTIFLVAEAEGAAQPNNSLMLQTSKENHALASSSLCMDEKQITQNYSKVLAEVNTSWPVK
MATNAVLCCPPIALRNLIIITWEIILRGQPSCTKAYRKETNETKETNCTDERITWVSRPDQNSDLQIRPVAITHD
GYYRCIMVTPDGNFHRGYHLQVLVTPELTLFQNRNRTAVCKAVAGKPAAQISWIPEGDCATKQEYWSNGTVTVKS
TCHWEVHNVSTVTCHVSHLTGNKSLYIELLPVPGAKKSAKLYIPYIILTIIILTIVGFIWLLKVNGCRKYKLNKT
ESTPVVEEDEMQPYASYTEKNNPLYDTTNKVKASQALQSEVDTDLHTL

FIGURE 5909

GGCACGAGGTTTTCCTCGGCGCTTCTCCATGGAGGAGGCGGTGCGAACGGCTTCAGCCCCGAATGCTCGCATCTC
CCACTGGACGGCGACGAAGGCGGTGGCCGTGCGAGCGCAGGACTGGGCGGCCTGTGTGGGGGTGTGAGCCGCGGT
GCCCAAGGCTGCGCCGGCGAGGGGAAGCCGCGCGGCCGGCCGGCCGACTAGGGTTTGAAGACTGCTTCATTCTGC
CTCTAGTACCAGCGGTTTCTCTGTTCTGTGATCAATGTGATTCACAGGAACTCCTTAAGTAACAAACGAAATGAG
CCAGGGGCGTGGAAAATATGACTTCTATATTGGTCTGGGATTGGCTATGAGCTCCAGCATTTTCATTGGAGGAAG
TTTCATTTTGAAAAAAAAGGGCCTCCTTCGACTTGCCAGGAAAGGCTCTATGAGAGCAGGTCAAGGTGGCCATGC
ATATCTTAAGGAATGGTTGTGGTGGGCTGGACTGCTGTCAATGGGAGCTGGTGAGGTGGCCAACTTCGCTGCGTA
TGCGTTTGCACCAGCCACTCTAGTGACTCCACTAGGAGCTCTCAGCGTGCTAGTAAGTGCCATTCTTTCTTCATA
CTTTCTCAATGAAAGACTTAATCTTCATGGGAAAATTGGGTGTTTGCTAAGTATTCTAGGATCTACAGTTATGGT
CATTCATGCTCCAAAGGAAGAGGAGATTGAGACTTTAAATGAAATGTCTCACAAGCTAGGTGATCCAGGTTTTGT
GGTCTTTGCAACCCTTGTGGTCATTGTGGCCTTGATATTAATCTTCGTGGTGGGTCCTCGCCATGGACAGACAAA
CATTCTTGTGTACATAACAATCTGCTCTGTAATCGGCGCGTTTTCAGTCTCCTGTGTGAAGGGCCTGGGCATTGC
TATCAAGGAGCTGTTTGCAGGGAAGCCTGTGCTGCGGCATCCCCTGGCTTGGATTCTGCTGCTGAGCCTCATCGT
CTGTGTGAGCACACAGATTAATTACCTAAATAGGGCCCTGGATATATTCAACACTTCCATTGTGACTCCAATATA
TTATGTATTCTTTACAACATCAGTTTTAACTTGTTCAGCTATTCTTTTTAAGGAGTGGCAAGATATGCCTGTTGA
CGATGTCATTGGTACTTTGAGTGGCTTCTTTACAATCATTGTGGGGATATTCTTGTTGCATGCCTTTAAAGACGT
CGGCTTTAGTCTAGCAAGTCTGCCTGTGTCTTTTCGAAAAGACGAGAAAGCAATGAATGGCAATCTCTCTAATAT
GTATGAAGTTCTTAATAATAATGAAGAAAGCTTAACCTGTGGAATCGAACAACACACTGGTGAAAATGTCTCCCG
AAGAAATGGAAATCTGACAGCTTTTTAAGAAAGGTGTAATTAAAGGTTAATCTGTGATTGTTATGAAGTGAATTT
GAATATCATCAGAATGTGTCTGAAAAAACATTGTCCTCAAATAATGTTCTTTAAAGGCAATCTTTTTAAAGATTT
CACTAATTTGGACCAAGAAATTACTTTTCTTGTATTTAAACAAACAATGGTAGCTCACTAAAATGACCTCAGCAC
ATGACGATTTCTATTAACATTTTATTGTTGTAGAAGTATTTTACATTTTCATCCCTTCTCCAAAAGCCGAATGCA
CTAATGACAGTTTTAAGTCTATGAAAATGCTTTATTTTTTCATTGGTGATGAAAGTCTGAAATGTGCATTTGTCA
TCCCCACTCCATCAATCCCTGACCATGTAAGGCTTTTTTATTTTAAAAAAACAGAGTTATCCCAATACATTATCC
TGTGATTTACCTTACCTACAAAAGTGGCTCCTGTTTGTTTGATGATGATTGGTTTTATTTTTGAAATATTTATTA
AGGGAAAACTAAGTTACTGAATGAAGGAACCTCTTTCTTACAAAACAAAAAAAAGGGCAGAAATCACCCCAAGGA
ACGATTTCTCAGGTTGAGATGATCACCGTGAATCCGGCTTCCTCTGAGCATTCGATGGCCTTAGCACCTCATCAA
GCCAGCACATCCTGCCTGCTGTTGCAGCCTGGCTGGGTTTATTCTTCAGTTACCCTAATCCCATGATGCCTGGAA
CCTTGATTACCGTTTTACATCAGCTCTTGTACTTTTCAGTATATTTTCATAATGAGTTATATTGTCATTTAGACT
TTGAACAGCTCTGGGAAATAGAAGACTAGGGTTGTTTCTTAAATTTAGCTCATGTTATAATAAAAAGTTGAAATG
AAAAAAAAAAAAAAAAAAAA

FIGURE 5910

MSQGRGKYDFYIGLGLAMSSSIFIGGSFILKKKGLLRLARKGSMRAGQGGHAYLKEWLWWAGLLSMGAGEVANFA
AYAFAPATLVTPLGALSVLVSAILSSYFLNERLNLHGKIGCLLSILGSTVMVIHAPKEEEIETLNEMSHKLGDPG
FVVFATLVVIVALILIFVVGPRHGQTNILVYITICSVIGAFSVSCVKGLGIAIKELFAGKPVLRHPLAWILLLSL
IVCVSTQINYLNRALDIFNTSIVTPIYYVFFTTSVLTCSAILFKEWQDMPVDDVIGTLSGFFTIIVGIFLLHAFK
DVGFSLASLPVSFRKDEKAMNGNLSNMYEVLNNNEESLTCGIEQHTGENVSRRNGNLTAF

FIGURE 5911

GCGAGGCGGCCGCTGTCTTCTGCTGCGGCTTCCGCGACCACAAGTACTGCTGCGACGACCCGCACAGCTTCTTCC
CCTACGAGCACAGCTACATGTGGTGGCTCAGCATTGGCGCTCTCATAGGCCTGTCCGTAGCAGCAGTGGTTCTTC
TCGCCTTCATTGTTACCGCCTGTGTGCTCTGCTACCTGTTCATCAGCTCTAAGCCCCACACAAAGTTGGACCTGG
GCTTGAGCTTACAGACAGCAGGCCCTGAGGAGGTTTCTCCTGACTGCCAAGGTGTGAACACAGGCATGGCGGCAG
AAGTGCCAAAAGTGAGCCCTCTCCAGCAGAGTTACTCCTGCTTGAACCCGCAGCTGGAGAGCAATGAGGGGCAGG
CTGTGAACTCCAAACGCCTCCTCCATCATTGCTTCATGGCCACAGTGACCACCAGTGACATTCCAGGCAGCCCTG
AGGAAGCCTCTGTACCCAACCCTGACCTATGTGGACCAGTCCCATAAACATTCAATAAATGTCTCCATACCATCA
A

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FIGURE 5912

MWWLSIGALIGLSVAAVVLLAFIVTACVLCYLFISSKPHTKLDLGLSLQTAGPEEVSPDCQGVNTGMAAEVPKVS
PLQQSYSCLNPQLESNEGQAVNSKRLLHHCFMATVTTSDIPGSPEEASVPNPDLCGPVP

FIGURE 5913

GGCACGAGGGCTGCCTGGCGCTGCGGGCGGCGGGCCATGGTGGTTTGGATTGAGCCGGGCCCGGCCGGGGCGCCG
AGTCGGAGGGGGTGGCAGTGAGCGGCGGCAGAGGCTACGGGGCTCGGTTTGGCTGACTGGGGAGTCGGCAGGCGG
CAGGAACCATGCGAGGCCAGCGGAGCCTGCTGCTGGGCCCGGCCCGCCTCTGCCTCCGCCTCCTTCTGCTGCTGG
GTTACAGGCGCCGCTGTCCACCTCTACTCCGGGGTCTAGTACAGCGCTGGCGCTACGGCAAGGTCTGCCTGCGCT
CCCTGCTCTACAACTCCTTTGGGGGCAGTGACACCGCTGTTGATGCTGCCTTTGAGCCTGTCTACTGGCTGGTAG
ACAACGTGATCCGCTGGTTTGGAGTGGGCAGGAATGATATCGCCACCGTCTCCATCTGTAAGAAGTGCATTTACC
CCAAGCCAGCCCGAACACACCACTGCAGCATCTGCAACAGGTGTGTGCTGAAGATGGATCACCACTGCCCCTGGC
TAAACAATTGTGTGGGCCACTATAACCATCGGTACTTCTTCTCTTTCTGCTTTTTCATGACTCTGGGCTGTGTCT
ACTGCAGCTATGGAAGTTGGGACCTTTTCCGGGAGGCTTATGCTGCCATTGAGACTTATCACCAGACCCCACCAC
CCACCTTCTCCTTTCGAGAAAGGATGACTCACAAGAGTCTTGTCTACCTCTGGTTCCTGTGCAGTTCTGTGGCAC
TTGCCCTGGGTGCCCTAACTGTATGGCATGCTGTTCTCATCAGTCGAGGTGAGACTAGCATCGAAAGGCACATCA
ACAAGAAGGAGAGACGTCGGCTACAGGCCAAGGGCAGAGTATTTAGGAATCCTTACAACTACGGCTGCTTGGACA
ACTGGAAGGTATTCCTGGGTGTGGATACAGGAAGGCACTGGCTTACTCGGGTGCTCTTACCTTCTAGTCACTTGC
CCCATGGGAATGGAATGAGCTGGGAGCCCCCTCCCTGGGTGACTGCTCACTCAGCCTCTGTGATGGCAGTGTGAG
CTGGACTGTGTCAGCCACGACTCGAGCACTCATTCTGCTCCCTATGTTATTTCAAGGGCCTCCAAGGGCAGCTTT
TCTCAGAATCCTTGATCAAAAAGAGCCAGTGGGCCTGCCTTAGGGTACCATGCAGGACAATTCAAGGACCAGCCT
TTTTACCACTGCAGAAGAAAGACACAATGTGGAGAAATCTTAGGACTGACATCCCTTTACTCAGGCAAACAGAAG
TTCCAACCCCAGACTAGGGGTCAGGCAGCTAGCTACCTACCTTGCCCAGTGCTGACCCGGACCTCCTCCAGGATA
CAGCACTGGAGTTGGCCACCACCTCTTCTACTTGCTGTCTGAAAAAACACCTGACTAGTACAGCTGAGATCTTGG
CTTCTCAACAGGGCAAAGATACCAGGCCTGCTGCTGAGGTCACTGCCACTTCTCACATGCTGCTTAAGGGAGCAC
AAATAAAGGTATTCGATTTTTAAAGATAAAAAAAAAAAAAAAAAA

FIGURE 5914

MRGQRSLLLGPARLCLRLLLLLGYRRRCPPLLRGLVQRWRYGKVCLRSLLYNSFGGSDTAVDAAFEPVYWLVDNV
IRWFGVGRNDIATVSICKKCIYPKPARTHHCSICNRCVLKMDHHCPWLNNCVGHYNHRYFFSFCFFMTLGCVYCS
YGSWDLFREAYAAIETYHQTPPPTFSFRERMTHKSLVYLWFLCSSVALALGALTVWHAVLISRGETSIERHINKK
ERRRLQAKGRVFRNPYNYGCLDNWKVFLGVDTGRHWLTRVLLPSSHLPHGNGMSWEPPPWVTAHSASVMAV

FIGURE 5915A

AGTGCCCTCTGTCATTTAATCTCCACGGAGTCCTGAAGGTGCTTCCCAGGTTTGTCCCCATCACACAGATGAGGC
AATCGTTCTGTTAAGACTGTCCTTGGGTCATTATGTCAGCAATGAAATCGGTGCTGCCATTACTAAACCCTTACT
GTGTGCTGGCATTTGTGTATGCATGCATGTGTGTGCGTGCACACGTGTGTGTTTGCGTGTACATGTGCATGTGTG
TGTTGTGTGCCTGTGTGTGCACATGTAGAAAGAAAGTGATGTGTGGGAATGGAGAATTCCAACCCAGGAGGAGAC
TGTGCCTGGGGCTGCCACGAGAAGTGGTGACACTTCGAGAAACGGGTTCCAAATGCACGTTGCCTTCCAGTTCTC
TGTGTGACCTTGGGCAAGTCACTTCAGCTCCCTGAGCTTTGTTTTTAAAAATATTTTTTAAATGTATAAAACCAT
GGACCATTACATATGAAGAGAAATGTGTGTGCAAACATTCAGTTAATAATCACAAGGTGGAGGAGTGCCTGCTCA
GACCCAGAGCTGACACAGGGAACTCTCCCAGAAGGCTGCAGGGCTTCCCTCCCAACCCTCCAACGGCCCACTTGC
TGAGCCCGTGCTTATCTGTTCAGTGGAAATGCCATGTGCCACGTTCCTCAGAAGTAAAGCCACTAGGTAAGTGTG
ACACTCTGTGCCCAGCTTGGTGCAAAGCCCCTTGTGTGTGCTATCTTATTGACCTCCCAAATAGCATGGTAAGGT
CAGTACTGTCACTTCCCCCACTTTGAAGATGAGGAGAGCACAAATTCTAGATGGAAATGGAGGTCACGCAGTGGA
AATAGGATCCAGACAGATTAATCCAATCTCAAGCCTGAATTCTTCCATTCCACGCTACGCTTGAAGCTCAATCTC
TCTTCCTGGTTGATTCTCCCCACTTCCCCACCCCCAGATATATCCCATCGCTGCTTGGTGGACAGTAGCCATGAC
TGGGTTTTGGTAAAGGTTGCTGAATAATCAGGCTGCTGGTTAGTTTTTACATTTCACCTTTCCCAGTGAAATGGG
GCCCCATGAAAAAGGCAGCTCAAGTTGTAAATTACTCAAAGGAAGGACAGAAAGGTCTTCTGTTTGCACCTACCC
TAAGGATTTGGGGTAGACACTGGGAATTTACTAATTATGAATTCCAGTGCTTTCCTTGCTGAAAGAGAGGCGTGG
AATCAACGCTGAGTGAAGGCATCAAGTTTAAGCTGCTAATTACTTCCTGATCATGCAGAATAAAAGCTACGTCCC
TTGAAATACACCAGGCAGCTAAACATAATCTTTGCGTTTCCGTAGTGTTGGTTAAGGAATCCAGATGTTACTGCA
ATAACCACTCCATAAACAAAAGGAACACCCAGCTGTGAGAACTGGCTTCTCAGCATTCGTCCCAGCAGAGGCTCT
TCCGGGGCCAGCCCTGGAAGAACCCATCAGGGTTCTGATGGTTGCCCTGTTTCAGCACAGCCCTTATTGGCAGGC
AGACGGCTACGGGCACAGCCACAGGCTGAAGGTGAGTCCAGCACACAACTTTCTGACAGTGAACAGGAGTAAACA
TGGGACCCACCCGAAACCTTTGTCTGTTGACTTCTTAGCAAATGGAGGCAGCTCTAGGCTCTGGAGAGTTCGGGT
ATAGGAGACCATGACTTGAGCAGACTGATATAAGTGGAATGCAAACATATTTAGATGGCACAACTTAATTTAGAT
TTATCAGTGCTAATATAGAAAAAGCTAGTATTTATTGGGGCTTATTAGATTTTTAGTCTGAATCCTCACAACTTA
CGAGGGGGTTCGTTTTACAGACTATGATCTTGCATGATTTCCCCAAAGATGCTCATTAAGTATATGGTGAAAGTA
GAATTTGAATACAGAAGACCTGGTTCTGCTACTTTCTGTGTTTCTATTTGGTTCAAACCAGCCTTTCTTCTTTCA
AAACAACTTCAGTGCAATTCATGGTTTTGGAAAATAAACTTGATTTTGAGATTCAGACAATAAGTGCATTTTTAA
TGTTTATTCTTTTATCTTGAAAAACTGATATATTTATGAAATGATATGTGCTCACTCAGTGTCAACACTTCAAAC
AACACAGACAGTACAATGACAAATTGGAGATCAGCTCTAATCTCGGCCCCCAATTTAATGCATTGCTGAATATTC
TTCTGAACATAGTCCATCCCACACTGTCCCATGACACAAGACGCTCCAAGGGGCTGAAGATAGAGGGACTTCTGC
AGTCAAGAGAGCTGGGAAACTCTTGGACAGTCACAATGTGCATTTGGGTATTAAAGGCTCTGCAAAGTTCTGCAC
CAAATAAACCCTTGGATTGGCTTGATCCAATGCCATGTTTCCAAAACCTACTTGCCCGTGGGACACCTTAGTCCA
TAACACAGGTTGGCATTTCTTCTAGAGAGTGTGCTGTGAAAAACACTGGTCTCACAGCACCGTGCATTCATCCAG
CAGGTATTTACCAAGCAGGGACTTTGGGCCAGGTCCGTGCTAGGCTCTGCAGGTGGACCAGCCAGCCCTGACCTC
CATGGTGTCTCTTCTCATGGGAGAGGCTGCACAGCAGTCATTGAGAAAACGAAGAAACACACAGGTACTTTCAGA
TGCTGATAATGACTACCATGTGCTAAAAGAGCTCCAGGTGTTGTCTGTTTTGAGACAATCTTCTCGACAATGAGA
TAGAATGAACCATGCAAACTTTGGGGGCTACGATGGTTTTAGGAAAGAGCTAGAGTGAAAAATCCTTTGACATAT
ATACATACAAATAAAGATACATGTGTATAATTTTATGTAATTGACATCACATTATATGCTGGCACCTGCCTTTTT
TGCTTAATGAAAATGTCAAAGGTAATATTACCAATCAATCAATATATTTCACCATCGTGTTTAATTTCTGCAGAG
CACTTATTCAAGCACATACTGCATTTTTCTTAGTCACTCACTGGTGGGAATAGAAAGTTTTCTCAGGCATGCATT
TTTCCCACTTCTGAAATGATCTCCTTAGAATAAATTCCCCAAATTGTATTGCTGGGTTCAAAGGCATGAACATTT
TACATTTTTATACAATAATGTCAAACTACCTTCCGGAAATGATGCTCACTTTACTTTCCCTCCAAGACTGTGTGA
AAATGCCCATTTTCCTAAATGCTTACTATGACTGGTTTCCAACTACATTTTAATTCTTGTTCAATCTGATAGGCA
AAAAATGATATTTAATTTTTATTTGATTGATAATGACCTTGAACGTGCCCATTAGCCTTTTGCATGTATTCTTTT
ATGAAACATCTGTTCCTATCCTTCGTCAATGTTCCTCTTCATATGTTAACTTTTCTTATTGATTTGTTAGAGCAC
TTTGTATATTGTGAATATTAGCTTTTGTGATCAGAATTATGGAATTGTTGTTGTCTTTAGTTTTGCTTATCAAGT
TTAAAGCCATTCAGAGATGTTGTAAATGTGTATGTTGTTAAATTTATGTCTTATTTTGTGTTTTCTGATGCTCAT
ATGTTTAGAATGGTCAAGCAATCCCAACTTATGATTACATAAATATTCTCCCATATTTGCTCTTAGCATTTTTTT

FIGURE 5915B

TCTTTTCATGTAACCCTTTGTTCTTTCAGGAATTTACTTTGCGGTAAGAAATGGGCTGGCTTCCAGTTTTATGTT
TCCCAAATGGTGATTCAGCTGTTCCATTTCCATATTCTCCCTTATTAGAAATGACCACTATATTATGTTCTAAAA
TATCTGCGTACTTGTGTCCCTTCCTATAATCTCAGTTCATCTCTTTGAGCTATCTTTTGATTCCTTTTTCAAACC
ACACTGCTTTACTGAACTGTCATCATCTTATACATTTTTAATACTCAGCAAGACAAGTTTCTCAATGCCACTCTT
TTTCAGAGTTTTTCTGGTGGTTGTAAGATGTTTATTCTTCTGGATAAACTTTAGAATCACTCTTTTTGTCCAAGG
TAAAATATATCCCACATTGAGATCATACTGAATATACAGACTAATTCAGGAAAAAATGTATGTCTTTATTGCATT
GAGTCTTCTTATCCAATAAAAAAGATATGAATTTCCATGTATTGAAATCTTCACTGAGACTTATTTTTGGCTTTT
CACATGTCCTGCAAATGTATTGTTAAATTTATTTTTAGGTATTTTAGGGGAAATGATTTTCTAAAGTTTGTATTT
TCTAGCTTGTTATAATTTACATATGAGATAGTCATTGTTGTATATTATTTATAACTGATCATATTACTGTATTTG
TATTGTTTTAATAGTTTTTCTATTATTTTGGGTTTTCCTGGAATACAACCTTATTATCTACAAATTATGATTGTT
TTGCCTTTTCCAATGTTCATAACTGTTTTTATATTCTTGTCTGATTGCTTTGTTCAGCACTTCTAGAATAAAGTC
ATGCAATACTAATGA

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FIGURE 5916

MSAMKSVLPLLNPYCVLAFVYACMCVRAHVCVCVYMCMCVLCACVCTCRKKVMCGNGEFQPRRRLCLGLPREVVT
LRETGSKCTLPSSSLCDLGQVTSAP

FIGURE 5917

GGACTGTTAACTGTTTCTGGCAAACATGAAGTCAGGCCTCTGGTATTTCTTTCTCTTCTGCTTGCGCATTAAAGT
TTTAACAGGAGAAATCAATGGTTCTGCCAATTATGAGATGTTTATATTTCACAACGGAGGTGTACAAATTTTATG
CAAATATCCTGACATTGTCCAGCAATTTAAAATGCAGTTGCTGAAAGGGGGGCAAATACTCTGCGATCTCACTAA
GACAAAAGGAAGTGGAAACACAGTGTCCATTAAGAGTCTGAAATTCTGCCATTCTCAGTTATCCAACAACAGTGT
CTCTTTTTTTCTATACAACTTGGACCATTCTCATGCCAACTATTACTTCTGCAACCTATCAATTTTTGATCCTCC
TCCTTTTAAAGTAACTCTTACAGGAGGATATTTGCATATTTATGAATCACAACTTTGTTGCCAGCTGAAGTTCTG
GTTACCCATAGGATGTGCAGCCTTTGTTGTAGTCTGCATTTTGGGATGCATACTTATTTGTTGGCTTACAAAAAA
GAAGTATTCATCCAGTGTGCACGACCCTAACGGTGAATACATGTTCATGAGAGCAGTGAACACAGCCAAAAAATC
TAGACTCACAGATGTGACCCTATAATATGGAACTCTGGCACCCAGGCATGAAGCACGTTGGCCAGTTTTCCTCAA
CTTGAAGTGCAAGATTCTCTTATTTCCGGGACCACGGAGAGTCTGACTTAACTACATACATCTTCTGCTGGTGTT
TTGTTCAATCTGGAAGAATGACTGTATCAGTCAATGGGGATTTTAACAGACTGCCTTGGTACTGCCGAGTCCTCT
CAAAACAAACACCCTCTTGCAACCAGCTTTGGAGAAAGCCCAGCTCCTGTGTGCTCACTGGGAGTGGAATCCCTG
TCTCCACATCTGCTCCTAGCAGTGCATCAGCCAGTAAAACAAACACATTTACAAGAAAAATGTTTTAAAGATGCC
AGGGGTACTGAATCTGCAAAGCAAATGAGCAGCCAAGGACCAGCATCTGTCCGCATTTCACTATCATACTACCTC
TTCTTTCTGTAGGGATGAGAATTCCTCTTTTAATCAGTCAAGGGAGATGCTTCAAAGCTGGAGCTATTTTATTTC
TGAGATGTTGATGTGAACTGTACATTAGTACATACTCAGTACTCTCCTTCAATTGCTGAACCCCAGTTGACCATT
TTACCAAGACTTTAGATGCTTTCTTGTGCCCTCAATTTTCTTTTTAAAAATACTTCTACATGACTGCTTGACAGC
CCAACAGCCACTCTCAATAGAGAGCTATGTCTTACATTCTTTCCTCTGCTGCTCAATAGTTTTATATATCTATGC
ATACATATATACACACATATGTATATAAAATTCATAATGAATATATTTGCCTATATTCTCCCTACAAGAATATTT
TTGCTCCAGAAAGACATGTTCTTTTCTCAAATTCAGTTAAAATGGTTTACTTTGTTCAAGTTAGTGGTAGGAAAC
ATTGCCCGGAATTGAAAGCAAATTTATTTTATTATCCTATTTTCTACCATTATCTATGTTTTCATGGTGCTATTA
ATTACAAGTTTAGTTCTTTTTGTAGATCATATTAAAATTGCAAACAAAATCATCTTTAATGGGCCAGCATTCTCA
TGGGGTAGAGCAGAATATTCATTTAGCCTGAAAGCTGCAGTTACTATAGGTTGCTGTCAGACTATACCCATGGTG
CCTCTGGGCTTGACAGGTCAAAATGGTCCCCATCAGCCTGGAGCAGCCCTCCAGACCTGGGTGGAATTCCAGGGT
TGAGAGACTCCCCTGAGCCAGAGGCCACTAGGTATTCTTGCTCCCAGAGGCTGAAGTCACCCTGGGAATCACAGT
GGTCTACCTGCATTCATAATTCCAGGATCTGTGAAGAGCACATATGTGTCAGGGCACAATTCCCTCTCATAAAAA
CCACACAGCCTGGAAATTGGCCCTGGCCCTTCAAGATAGCCTTCTTTAGAATATGATTTGGCTAGAAAGATTCTT
AAATATGTGGAATATGATTATTCTTAGCTGGAATATTTTCTCTACTTCCTGTCTGCATGCCCAAGGCTTCTGAAG
CAGCCAATGTCGATGCAACAACATTTGTAACTTTAGGTAAACTGGGATTATGTTGTAGTTTAACATTTTGTAACT
GTGTGCTTATAGTTTACAAGTGAGACCCGATATGTCATTATGCATACTTATATTATCTTAAGCATGTGTAATGCT
GGATGTGTACAGTACAGTACTTAACTTGTAATTTGAATCTAGTATGGTGTTCTGTTTTCAGCTGACTTGGACAAC
CTGACTGGCTTTGCACAGGTGTTCCCTGAGTTGTTTGCAGGTTTCTGTGTGTGGGGTGGGGTATGGGGAGGAGAA
CCTTCATGGTGGCCCACCTGGCCTGGTTGTCCAAGCTGTGCCTCGACACATCCTCATCCCAAGCATGGGACACCT
CAAGATGAATAATAATTCACAAAATTTCTGTGAAATCAAATCCAGTTTTAAGAGGAGCCACTTATCAAAGAGATT
TTAACAGTAGTAAGAAGGCAAAGAATAAACATTTGATATTCAGCAACTGAAAAAAAAAAA

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FIGURE 5918

MKSGLWYFFLFCLRIKVLTGEINGSANYEMFIFHNGGVQILCKYPDIVQQFKMQLLKGGQILCDLTKTKGSGNTV
SIKSLKFCHSQLSNNSVSFFLYNLDHSHANYYFCNLSIFDPPPFKVTLTGGYLHIYESQLCCQLKFWLPIGCAAF
VVVCILGCILICWLTKKKYSSSVHDPNGEYMFMRAVNTAKKSRLTDVTL

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FIGURE 5919

CAGAGACCGAGGCTGCACCGGCAGAGGCTGCGGGGCGGACGCGCGGGCCGGCGCAGCCATGGTGAAGATTAGCTT
CCAGCCCGCCGTGGCTGGCATCAAGGGCGACAAGGCTGACAAGGCGTCGGCGTCGGCCCCTGCGCCGGCCTCGGC
CACCGAGATCCTGCTGACGCCGGCTAGGGAGGAGCAGCCCCCACAACATCGATCCAAGAGGGGGAGCTCAGTGGG
CGGCGTGTGCTACCTGTCGATGGGCATGGTCGTGCTGCTCATGGGCCTCGTGTTCGCCTCTGTCTACATCTACAG
ATACTTCTTTCTTGCACAGCTGGCCCGAGATAACTTCTTCCGCTGTGGTGTGCTGTATGAGGACTCCCTGTCCTC
CCAGGTCCGGACTCAGATGGAGCTGGAAGAGGATGTGAAAATCTACCTCGACGAGAACTACGAGCGCATCAACGT
GCCTGTGCCCCAGTTTGGCGGCGGTGACCCTGCAGACATCATCCATGACTTCCAGCGGGGTCTGACTGCGTACCA
TGATATCTCCCTGGACAAGTGCTATGTCATCGAACTCAACACCACCATTGTGCTGCCCCCTCGCAACTTCTGGGA
GCTCCTCATGAACGTGAAGAGGGGGACCTACCTGCCGCAGACGTACATCATCCAGGAGGAGATGGTGGTCACGGA
GCATGTCAGTGACAAGGAGGCCCTGGGGTCCTTCATCTACCACCTGTGCAACGGGAAAGACACCTACCGGCTCCG
GCGCCGGGCAACGCGGAGGCGGATCAACAAGCGTGGGGCCAAGAACTGCAATGCCATCCGCCACTTCGAGAACAC
CTTCGTGGTGGAGACGCTCATCTGCGGGGTGGTGTGAGGCCCTCCTCCCCCAGAACCCCCTGCCGTGTTCCTCTT
TTCTTCTTTCCGGCTGCTCTCTGGCCCTCCTCCTTCCCCCTGCTTAGCTTGTACTTTGGACGCGTTTCTATAGAG
GTGACATGTCTCTCCATTCCTCTCCAACCCTGCCCACCTCCCTGTACCAGAGCTGTGATCTCTCGGTGGGGGGCC
CATCTCTGCTGACCTGGGTGTGGCGGAGGGAGAGGCGATGCTGCAAAGTGTTTTCTGTGTCCCACTGTCTTGAAG
CTGGGCCTGCCAAAGCCTGGGCCCACAGCTGCACCGGCAGCCCAAGGGGAAGGACCGGTTGGGGGAGCCGGGCAT
GTGAGGCCCTGGGCAAGGGGATGGGGCTGTGGGGGCGGGGCGGCATGGGCTTCAGAAGTATCTGCACAATTAGAA
AAGTCCTCAGAAGCTTTTTCTTGGAGGGTACACTTTCTTCACTGTCCCTATTCCTAGACCTGGGGCTTGAGCTGA
GGATGGGACGATGTGCCCAGGGAGGGACCCACCAGAGCACAAGAGAAGGTGGCTACCTGGGGGTGTCCCAGGGAC
TCTGTCAGTGCCTTCAGCCCACCAGCAGGAGCTTGGAGTTTGGGGAGTGGGGATGAGTCCGTCAAGCACAACTGT
TCTCTGAGTGGAACCAAAGAAGCAAGGAGCTAGGACCCCCAGTCCTGCCCCCCAGGAGCACAAGCAGGGTCCCCT
CAGTCAAGGCAGTGGGATGGGCGGCTGAGGAACGGGGCAGGCAAGGTCACTGCTCAGTCACGTCCACGGGGGACG
AGCCGTGGGTTCTGCTGAGTAGGTGGAGCTCATTGCTTTCTCCAAGCTTGGAACTGTTTTGAAAGATAACACAGA
GGGAAAGGGAGAGCCACCTGGTACTTGTCCACCCTGCCTCCTCTGTTCTGAAATTCCATCCCCCTCAGCTTAGGG
GAATGCACCTTTTTCCCTTTCCTTCTCACTTTTGCATGTTTTTACTGATCATTCGATATGCTAACCGTTCTCAGC
CCTGAGCCTTGGAGAGGAGGGCTGTAACGCCTTCAGTCAGTCTCTGGGGATGAAACTCTTAAATGCTTTGTATAT
TTTCTCAATTAGATCTCTTTTCAGAAGTGTCTATAGAACAATAAAAATCTTTTACTTCTGAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAA

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FIGURE 5920

MVKISFQPAVAGIKGDKADKASASAPAPASATEILLTPAREEQPPQHRSKRGSSVGGVCYLSMGMVVLLMGLVFA
SVYIYRYFFLAQLARDNFFRCGVLYEDSLSSQVRTQMELEEDVKIYLDENYERINVPVPQFGGGDPADIIHDFQR
GLTAYHDISLDKCYVIELNTTIVLPPRNFWELLMNVKRGTYLPQTYIIQEEMVVTEHVSDKEALGSFIYHLCNGK
DTYRLRRRATRRRINKRGAKNCNAIRHFENTFVVETLICGVV

FIGURE 5921A

CGCGTGTCTACGCGGACGCACCGGCTAAGCTGCTTCTGCCGCCGCCGGCCGCCTGGGACCTTGCGGTGAGGCTGC
GCGGGGCCGAGGCCGCCTCCGAGCGCCAGGTTTATTCAGTCACCATGAAGCTGCTGCTGCTGCACCCGGCCTTCC
AGAGCTGCCTCCTGCTGACCCTGCTTGGCTTATGGAGAACCACCCCTGAGGCTCACGCTTCATCCCTGGGTGCAC
CAGCTATCAGCGCTGCCTCCTTCCTGCAGGATCTAATACATCGGTATGGCGAGGGTGACAGCCTCACTCTGCAGC
AGCTGAAGGCCCTGCTCAACCACCTGGATGTGGGAGTGGGCCGGGGTAATGTCACCCAGCACGTGCAAGGACACA
GGAACCTCTCCACGTGCTTTAGTTCTGGAGACCTCTTCACTGCCCACAATTTCAGCGAGCAGTCGCGGATTGGGA
GCAGCGAGCTCCAGGAGTTCTGCCCCACCATCCTCCAGCAGCTGGATTCCCGGGCCTGCACCTCGGAGAACCAGG
AAAACGAGGAGAATGAGCAGACGGAGGAGGGGCGGCCAAGCGCTGTTGAAGTGTGGGGATACGGTCTCCTCTGTG
TGACCGTCATCTCCCTCTGCTCCCTCCTGGGGGCCAGCGTGGTGCCCTTCATGAAGAAGACCTTTTACAAGAGGC
TGCTGCTCTACTTCATAGCTCTGGCGATTGGAACCCTCTACTCCAACGCCCTCTTCCAGCTCATCCCGGAGGCAT
TTGGTTTCAACCCTCTGGAAGATTATTATGTCTCCAAGTCTGCAGTGGTGTTTGGGGGCTTTTATCTTTTCTTTT
TCACAGAGAAGATCTTGAAGATTCTTCTTAAGCAGAAAAATGAGCATCATCATGGACACAGCCATTATGCCTCTG
AGTCGCTTCCCTCCAAGAAGGACCAGGAGGAGGGGGTGATGGAGAAGCTGCAGAACGGGGACCTGGACCACATGA
TTCCTCAGCACTGCAGCAGTGAGCTGGACGGCAAGGCGCCCATGGTGGACGAGAAGGTCATTGTGGGCTCGCTCT
CTGTGCAGGACCTGCAGGCTTCCCAGAGTGCTTGCTACTGGCTGAAAGGTGTCCGCTACTCTGATATCGGCACTC
TGGCCTGGATGATCACTCTGAGCGACGGCCTCCACAATTTCATCGATGGCCTGGCCATCGGTGCTTCCTTCACTG
TGTCAGTTTTCCAAGGCATCAGCACCTCGGTGGCCATCCTCTGTGAGGAGTTCCCACATGAGCTAGGAGACTTTG
TCATCCTGCTCAACGCTGGGATGAGCATCCAACAAGCTCTCTTCTTCAACTTCCTTTCTGCCTGCTGCTGCTACC
TGGGTCTGGCCTTTGGCATCCTGGCCGGCAGCCACTTCTCTGCCAACTGGATTTTTGCGCTAGCTGGAGGAATGT
TCTTGTATATTTCTCTGGCTGATATGTTCCCTGAGATGAATGAGGTCTGTCAAGAGGATGAAAGGAAGGGCAGCA
TCTTGATTCCATTTATCATCCAGAACCTGGGCCTCCTGACTGGATTCACCATCATGGTGGTCCTCACCATGTATT
CAGGACAGATCCAGATTGGGTAGGGCTCTGCCAAGAGCCTGTGGGACTGGAAGTCGGGCCCTGGGCTGCCCGATC
GCCAGCCCGAGGACTTACCATCCACAATGCACCACGGAAGAGGCCGTTCTATGAAAAACTGACACAGACTGTATT
CCTGCATTCAAATGTCAGCCGTTTGTAAAATGCTGTATCCTAGGAATAAGCTGCCCTGGTAACCAGTCTCTAGCT
AGTGCCTCTTGCCCTCTCCTCACCTCCTTTTCTCTCAGTGACTCTGGAACCTGAATGCAGCTTACAAGACAAGCC
TGACTTTTTTCTCTGATTACCTTGGCCTCCTCTTGGAACCAGTGCTGAAAGGTTTTGAATCCTTTACCCAACAAT
GCAAAAATAGAGCCAATGGTTATAACTTGGCTAGAAATATCAAGAGTTGAATCCATAGTGTGGGGCCCATGACTC
TAGCTGGGCACCTTGGACCTCCAGCTGGCCAATAGAAGAGACAGGAGACAGGAAGCCTTCCCATTTTTTCAAAGT
CTGTTTAATTGCCTATTACTTCTCTCAAAGAGAACCTGAAGTCAGAACACATGAGCAGGGTGAGAGGTGAGGCAA
GGTTCATCCTGAATGGGAGAGGAAGTCGAACCACTGCTGTGTGTCTTGTCAGGATGCTCACTTGTTCCTACTGAG
ATGCTGGATATTGATTTTGTAACAGCACCTGGTGTTTCACGGCTGTCCGAGTGAGCTAACGTGGCGGTGTGGCTG
CCTGGACCTCCTCTTTCAGGTTAACGCTGACAGAATGGAGGCTCAGGCTGTCTGCAAGAAAACAGTTGGTTTGGC
TGTGATTTTGACCTCCTCTTCCCCACTGCCATCTTCTAAGAGACTTTGTAGCTGCCTCCTAGAAGCACATTCTGA
GCACATTTGAGACCTCTGTGTTAGAGGGGAGACTGCACAAACTATCCTCCCCCAGGTTGAGACGTCTGCAGAGTG
GCAAGCTGACTTGTAGAAATGGGGTGCCATTTATGCTCTACTTAGACAAGGGTAATCAGAAATGGAATCAGTGCA
GGCAAAATTTAGGATTTGCCGCTTCCATAAATCAAAGCATGACTAATAGGGGGTCTCTGAAATGTAAGGGCACAA
ACTTCACTTAGGGCATCGCAGATGTTTGCAGAATGGTTGGCCTAATGATTATGCTACAGATGGGTTTTAAATGAC
CCGTCTAGGTTACTGCTTCCTTGCAAAAAAAGTCGAATCCTGCATTGAATTGAATATGAATTTCTCTAACTCTCT
CCAGAAAATGGATGGAGATAACTTGTCTTTAAAACTGTAGGCCAGCCTTAGCCACTGTGGAGCCCTTGCCTCCGA
GCTCTGGCTTCAAGGGGAGCTCTTCTCCAGGTTCACTAGGTGAATTGATTTATTATTATCATATTGATAATGTGA
GATTCTTTAGCCACTTTGGGGAGCCTGTCTCTCCAGAAGCCTTTCTTAGTGGTGCCCACAGTTGGAGCCCAGGGG
CCATGTTTGCAAACTGATTCATGTGCATGGCTGACAGGAGTACTGGTTCACTACCAATGCCTGAGCTTTTCTCTT
ACATAGAAAAACTGTCCACTCTCAGTAATCACAAGCAGCATCCGTTTTGTTTTCTCTTCTTGGGAGACATCTGTC
AAACCAGGAATATTCTTGAAAAGAACGTGAGCAGGAAAAACTGCTGGTGATACTTTTTTTAAGTTTTGTTTTTAT
CTTGCCTGTTGGCTTCAATACATTTGAGAATACGCTGAAGAGGGAAAATTTCAGTGATGGAGATTCTAGATTAAA
TATCAGGACTGATTTCCTGGTGGGATTATGGTCCAGTTTTACCAAAGAACCAATTCCTTGAATGTTGGAATCTAA
CTTTTTATATTGTCATTATTATTGTTGTTTTTAAACGGTTCTTTGTCTTTTCTGTTTTATTTTTCTCAAGCTGCT
TTCAGGAGCTAGCAGAAAATAACTCAAAGTTGAAGACTCTGGAAGATTTTGCTTTAACCTAACTCGCATTGATGT

FIGURE 5921B

ATTAAATTTATAATTTTAGCATTCCCAATAGATCCTATCATTCCTTAAACATAATACCCTTTGTCTTGGAGTAGA
ATACTAAGTTAGAGTTAGTGGATTTCTAGTTTAGGAGAGGAGCTCAAAACTATAATCTTTAACAAATTGAAAAAT
GAAATAGGGTGTTTTCCCTTTTTGTGCACACCTATATTACCTTAAGAAATTTCCTTCCATAGACAGCTGCCTCAA
AGGGAAATCCTCTTTAAACCGTAGTTGGCGCAGAGGTCAGTCCTAGTCGGAGCTTAGGAGGGGCGGAGACGCTCA
CATCGTCTGACTTGAGTCGCCACTGATTGTGGCAACAGCTTTGCCTCATGAGTCAAAAATTGGCAATTTCTTTTG
ATTTTTAGTTGTTGAATTTGCTGTTTCAAGCATTTGTACATATTAGAAGTCTAAGGAGTAGCAAGTCAGTGGGAG
GACTTTTTCACCCCTGGCATTAGCAGCTTCGACCTCATTTTCCAGATGCACCAGCTCCTATTAATAAGTTAGCAA
GGAAAGTGTATGTCACGTGCAGGAACAGTGAGGCAGGGACAGGGGTTCTGCTCCTTCTCACTTCACCACCGGCAC
ACAGCTTGCCCCTGTCTTTGCCCCCAAAGGTATTTTGTGTCTAGTGTCAAATTGGAGCTATTCTTCACTGGTCCT
TAACCTTGGGTTTTAAAAAGAAGGCTTCTCTGTTTGGGTAGCGTAAGAGCTGAGTATAGTAAGTCCTCTTCCAAA
GAGATGGCAATATGCTGGGCATCTACTTTAAAACAAAGTTGTCTGATTTTTGCAAGAGAGGTTAGGATTTTATTG
TTCTTATTTCCCTTTACAGTTCTGCAGTTCCATCACAGTATTTTTTTAAATAACTCAGGTGTATGAGCAGAAATT
AGAAAAGAAAATTAACTTATGTGGACTGTAAATGTTTTATTTGTAAGATTCTATAAATAAAGCTATATTCTGT

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FIGURE 5922

GGAGCCCATGATTTCCTGGAAGAGCCCTAGAGCTTTGCTTTTTCTCTCCTGCAGCACTTAACCGAAACCAGTTTT
GCAATCAATTCCTGTTCAAAGGCCACCCTACTCTTCCTATCCGTCTTTCTCCAGCCCAGACACTCACAGCCCCCT
GCCAGACCAGGGGACCTCGGAGAGGCAAGGACAGAGGTTCAGGATCTTCCTCTCCCTCGGGACCCAAGGCCACAA
AGGAGAGCTCCGTGGAGAGAAGAAAATCATTTGACTCCTGGGGACACAGATTTGCTGCCACAGAGGCTGATGGAC
AACCAGGCGGAGAGAGAAAGTGAGGCTGGTGTTGGTTTGCAAAGGGATGAGGATGACGCTCCTCTGTGTGAAGAC
GTGGAGCTACAAGACGGAGATCTGTCCCCCGAAGAAAAAATATTTTTGAGAGAATTTCCCAGATTGAAAGAAGAT
CTGAAAGGGAACATTGACAAGCTCCGTGCCCTCGCAGACGATATTGACAAAACCCACAAGAAATTCACCAAGGCT
AACATGGTGGCCACCTCTACTGCTGTCATCTCTGGAGTGATGAGCCTCCTGGGTTTAGCCCTTGCCCCAGCAACA
GGAGGAGGAAGCCTGCTGCTCTCCACCGCTGGTCAAGGTTTGGCAACAGCAGCTGGGGTCACCAGCATCGTGAGT
GGTACGTTGGAACGCTCCAAAAATAAAGAAGCCCAAGCACGGGCGGAAGACATACTGCCCACCTACGACCAAGAG
GACAGGGAGGATGAGGAAGAGAAGGCAGACTATGTCACAGCTGCTGGAAAGATTATCTATAATCTTAGAAACACC
TTGAAGTATGCCAAGAAAAACGTCCGTGCATTTTGGAAACTCAGAGCCAACCCACGCTTGGCCAATGCTACCAAG
CGTCTTCTGACCACTGGCCAAGTCTCCTCCCGGAGCCGCGTGCAGGTGCAAAAGGCCTTTGCGGGAACAACACTG
GCGATGACCAAAAATGCTCGCGTGCTGGGAGGTGTGATGTCCGCCTTCTCCCTTGGCTATGACTTGGCCACTCTC
TCAAAGGAATGGAAGCACCTGAAGGAAGGAGCAAGGACAAAGTTTGCGGAAGAGTTGAGAGCCAAGGCCTTGGAG
CTGGAGAGGAAACTCACAGAACTCACCCAGCTCTACAAGAGCTTGCAGCAGAAAGTGAGGTCAAGGGCCAGAGGG
GTGGGGAAGGATTTAACTGGGACCTGCGAAACCGAGGCTTACTGGAAGGAGTTAAGGGAGCATGTGTGGATGTGG
CTGTGGCTGTGTGTGTGTCTGTGTGTCTGTGTGTATGTACAGTTTACATGAATGTTCCTCAGGACATGGCATACA
ATGGCCTTGGAGGTCCAAATAATATCAAGTACATCTTGGAGATGAGGGTGCCTGTCCTGGACAGACCTCGGCATG
CCTTCTGTTTCTCCTTCAATGCTCCTTAAGGCCTATGTGCTGGGAAAAGGGTCTTCCCTGTTTGTTTGTTTGTTT
GTTTGTTTGTTTGTTTTGAGACTCCAGTCTGGGTGTCAGAATGAGACCCCATCTCAAAAAAAAAAAAAAAAAAAA
AAAAGAAGAAGAATACAGTCATGTATCTCTTGGTGACAGGGACGCATTCTGATAAATGTGTCATTAGGCAATTGC
ATTGTAGTGTGATTATCACAGATTGTACTTATACAAAACTTAGATGGCATAGCCTACTGCATACCTAGGCTATAT
GGGAGAGCCTATTGCTCCCAGGCTACGCACCTGTACAGCATGTGACTACTGAATACTATAGGCAATTGCAGCACA
ATGGGAAATATTTGTGTATCTAAACATATGTAAACAGAGAAAAAGGAAAGTAAAAATATGGCATAAAAGATAAGA
ATTGGCTCTCCTGTACAGGGCACTTACTACGAATGGAGCTTGCAGGGCTGAGAGTTGCTCCAGATGAGTCAGTGA
GTGGTGAATGAATGTGAAGGCCTAGGGCATTACTGTATACTACTGTAGGCTTTATAAACACAGCACACTTAGGGT
ACACAAAATGCATATTAAAACATTTTCTTCCTTCAGTATATTAGGCAATAGGAATTTTTCAAGTCCACTATAAAT
CTTATCAAACCATGGTTGTATATGCAGTTGACCGAAACATTGTTATTGGACACATAACTATAGTTGAAAGAATAA
GCAAAAAGTCTATCTAGGTGTGCTGTCTTGAGCAACTTTTAATTATTCTCCTGTCCTGCAATATGAGTTAATCTT
CTCTGATCGATGTAGATTCCAGGAAGGGGTGTCCAGGACAATTACCTTCCTTCTGGAGAAACTTCCCTTAATCAA
ATAAGAGAACTTCAAAGAAAATCCCTCCCTGTGCTTTGGAAGGGAAGGGAGGTGGGCAGCAGTGGGTCAGAGATA
GACCTTTGTTCTCTTATTTCTGAGGCCCTTCAGTCTCCTTTATTCAAAGCACTCAGCATGCCAAAGCACCCTATT
TTAGGGTATCTTTTTCTGAGCCCTAAACACTGTGTTGGGGATGTCAACTGTGACAGGAAAATATCTTGGGGCCCC
AGAATCACTAAGGAAAACTCAAGCTTAGGGAAACTTCTTAGGGCAAACCCACCTCCCACTCTATTCAAAGTTATC
TCTCTGCTCACTGAGATAGATACATATCTGATTGCCTCCTTTGGAAAGGCTAATCAGAAACTCAAAAGAATGCAA
CTGTTTGTGTCTCACCTATCTGTGACCTGGAAGCTCCCTCCCCACTGAACCAATGTTCTTCTTACATATATTGAT
TAATGTCTTATGTCTCCCTAAAATGTATAAAACCAAGGTATGCCCCAACCATCTTGGCCACATGTCATCAGGACT
TCCTGAGTCTGTGTCACAGTGTGTCCTCAACCTTGGCAAAATAAACTTTCTAAATTAACTGAGACCTGTCTCGGA
TTTTCTGGGTTCACATTTTGGAAACCATGAATGGATTCTGGGTGGAGATGCCCCTGACCCTTGACAAATCTATCG
GTGCTTGGTACCAGCATGAGCTAACTTTATGGCTCAAACCAATAGGACAATTTGCTGAGGTCTGAGAGGACTCCC
TCCAGAAAATCCCTGATCTCTTAAAATTTGGTA

FIGURE 5923

MDNQAERESEAGVGLQRDEDDAPLCEDVELQDGDLSPEEKIFLREFPRLKEDLKGNIDKLRALADDIDKTHKKFT
KANMVATSTAVISGVMSLLGLALAPATGGGSLLLSTAGQGLATAAGVTSIVSGTLERSKNKEAQARAEDILPTYD
QEDREDEEEKADYVTAAGKIIYNLRNTLKYAKKNVRAFWKLRANPRLANATKRLLTTGQVSSRSRVQVQKAFAGT
TLAMTKNARVLGGVMSAFSLGYDLATLSKEWKHLKEGARTKFAEELRAKALELERKLTELTQLYKSLQQKVRSRA
RGVGKDLTGTCETEAYWKELREHVWMWLWLCVCLCVCVYVQFT

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FIGURE 5924

ATGACAGTGAAGACCCTGCATGGCCCAGCCATGGTCAAGTACTTGCTGCTGTCGATATTGGGGCTTGCCTTTCTG
AGTGAGGCGGCAGCTCGGAAAATCCCCAAAGTAGGACATACTTTTTTCCAAAAGCCTGAGAGTTGCCCGCCTGTG
CCAGGAGGTAGTATGAAGCTTGACATTGGCATCATCAATGAAAACCAGCGCGTTTCCATGTCACGTAACATCGAG
AGCCGCTCCACCTCCCCCTGGAATTACACTGTCACTTGGGACCCCAACCGGTACCCCTCGGAAGTTGTACAGGCC
CAGTGTAGGAACTTGGGCTGCATCAATGCTCAAGGAAAGGAAGACATCTCCATGAATTCCGTTCCCATCCAGCAA
GAGACCCTGGTCGTCCGGAGGAAGCACCAAGGCTGCTCTGTTTCTTTCCAGTTGGAGAAGGTGCTGGTGACTGTT
GGCTGCACCTGCGTCACCCCTGTCATCCACCATGTGCAGTAA

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FIGURE 5925

MTVKTLHGPAMVKYLLLSILGLAFLSEAAARKIPKVGHTFFQKPESCPPVPGGSMKLDIGIINENQRVSMSRNIE
SRSTSPWNYTVTWDPNRYPSEVVQAQCRNLGCINAQGKEDISMNSVPIQQETLVVRRKHQGCSVSFQLEKVLVTV
GCTCVTPVIHHVQ

FIGURE 5926

CAAAAGGTGCAGGTATGAGCAGGTCTGAAGACTAACATTTTGTGAAGTTGTAAAACAGAAAACCTGTTAGAAATG

TGGTGGTTTCAGCAAGGCCTCAGTTTCCTTCCTTCAGCCCTTGTAATTTGGACATCTGCTGCTTTCATATTTTCA
TACATTACTGCAGTAACACTCCACCATATAGACCCGGCTTTACCTTATATCAGTGACACTGGTACAGTAGCTCCA
GAAAAATGCTTATTTGGGGCAATGCTAAATATTGCGGCAGTTTTATGCATTGCTACCATTTATGTTCGTTATAAG
CAAGTTCATGCTCTGAGTCCTGAAGAGAACGTTATCATCAAATTAAACAAGGCTGGCCTTGTACTTGGAATACTG
AGTTGTTTAGGACTTTCTATTGTGGCAAACTTCCAGAAAACAACCCTTTTTGCTGCACATGTAAGTGGAGCTGTG
CTTACCTTTGGTATGGGCTCATTATATATGTTTGTTCAGACCATCCTTTCCTACCAAATGCAGCCCAAAATCCAT
GGCAAACAAGTCTTCTGGATCAGACTGTTGTTGGTTATCTGGTGTGGAGTAAGTGCACTTAGCATGCTGACTTGC
TCATCAGTTTTGCACAGTGGCAATTTTGGGACTGATTTAGAACAGAAACTCCATTGGAACCCCGAGGACAAAGGT
TATGTGCTTCACATGATCACTACTGCAGCAGAATGGTCTATGTCATTTTCCTTCTTTGGTTTTTTCCTGACTTAC
ATTCGTGATTTTCAGAAAATTTCTTTACGGGTGGAAGCCAATTTACATGGATTAACCCTCTATGACACTGCACCT
TGCCCTATTAACAATGAACGAACACGGCTACTTTCCAGAGATATTTGATGAAAGGATAAAATATTTCTGTAATGA
TTATGATTCTCAGGGATTGGGGAAAGGTTCACAGAAGTTGCTTATTCTTCTCTGAAATTTTCAACCACTTAATCA
AGGCTGACAGTAACACTGATGAATGCTGATAATCAGGAAACATGAAAGAAGCCATTTGATAGATTATTCTAAAGG
ATATCATCAAGAAGACTATTAAAAACACCTATGCCTATACTTTTTTATCTCAGAAAATAAAGTCAAAAGACTATG

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FIGURE 5927

MWWFQQGLSFLPSALVIWTSAAFIFSYITAVTLHHIDPALPYISDTGTVAPEKCLFGAMLNIAAVLCIATIYVRY
KQVHALSPEENVIIKLNKAGLVLGILSCLGLSIVANFQKTTLFAAHVSGAVLTFGMGSLYMFVQTILSYQMQPKI
HGKQVFWIRLLLVIWCGVSALSMLTCSSVLHSGNFGTDLEQKLHWNPEDKGYVLHMITTAAEWSMSFSFFGFFLT
YIRDFQKISLRVEANLHGLTLYDTAPCPINNERTRLLSRDI

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FIGURE 5928

ACGAGGGGAGCTCCGGCTGCGTCTTCCCGCAGCGCTACCCGCC**ATG**CGCCTGCCGCGCCGGGCCGCGCTGGGGCT
CCTGCCGCTTCTGCTGCTGCTGCCGCCCGCGCCGGAGGCCGCCAAGAAGCCGACGCCCTGCCACCGGTGCCGGGG
GCTGGTGGACAAGTTTAACCAGGGGATGGTGGACACCGCAAAGAAGAACTTTGGCGGCGGGAACACGGCTTGGGA
GGAAAAGACGCTGTCCAAGTACGAGTCCAGCGAGATTCGCCTGCTGGAGATCCTGGAGGGGCTGTGCGAGAGCAG
CGACTTCGAATGCAATCAGATGCTAGAGGCGCAGGAGGAGCACCTGGAGGCCTGGTGGCTGCAGCTGAAGAGCGA
ATATCCTGACTTATTCGAGTGGTTTTGTGTGAAGACACTGAAAGTGTGCTGCTCTCCAGGAACCTACGGTCCCGA
CTGTCTCGCATGCCAGGGCGGATCCCAGAGGCCCTGCAGCGGGAATGGCCACTGCAGCGGAGATGGGAGCAGACA
GGGCGACGGGTCCTGCCGGTGCCACATGGGGTACCAGGGCCCGCTGTGCACTGACTGCATGGACGGCTACTTCAG
CTCGCTCCGGAACGAGACCCACAGCATCTGCACAGCCTGTGACGAGTCCTGCAAGACGTGCTCGGGCCTGACCAA
CAGAGACTGCGGCGAGTGTGAAGTGGGCTGGGTGCTGGACGAGGGCGCCTGTGTGGATGTGGACGAGTGTGCGGC
CGAGCCGCCTCCCTGCAGCGCTGCGCAGTTCTGTAAGAACGCCAACGGCTCCTACACGTGCGAAGATGTGGACGA
GTGCTCACTAGCAGAAAAAACCTGTGTGAGGAAAAACGAAAACTGCTACAATACTCCAGGGAGCTACGTCTGTGT
GTGTCCTGACGGCTTCGAAGAAACGGAAGATGCCTGTGTGCCGCCGGCAGAGGCTGAAGCCACAGAAGGAGAAAG
CCCGACACAGCTGCCCTCCCGCGAAGACCTG**TAA**TGTGCCGGACTTACCCTTTAAATTATTCAGAAGGATGTCCC
GTGGAAAATGTGGCCCTGAGGATGCCGTCTCCTGCAGTGGACAGCGGCGGGGAGAGGCTGCCTGCTCTCTAACGG
TTGATTCTCATTTGTCCCTTAAACAGCTGCATTTCTTGGTTGTTCTTAAACAGACTTGTATATTTTGATACAGTT
CTTTGTAATAAAATTGACCATTGTAGGTAATCAGGAAAAAAAAAAAAAAAAAAAA

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FIGURE 5929

MRLPRRAALGLLPLLLLLPPAPEAAKKPTPCHRCRGLVDKFNQGMVDTAKKNFGGGNTAWEEKTLSKYESSEIRL
LEILEGLCESSDFECNQMLEAQEEHLEAWWLQLKSEYPDLFEWFCVKTLKVCCSPGTYGPDCLACQGGSQRPCSG
NGHCSGDGSRQGDGSCRCHMGYQGPLCTDCMDGYFSSLRNETHSICTACDESCKTCSGLTNRDCGECEVGWVLDE
GACVDVDECAAEPPPCSAAQFCKNANGSYTCEDVDECSLAEKTCVRKNENCYNTPGSYVCVCPDGFEETEDACVP
PAEAEATEGESPTQLPSREDL

FIGURE 5930

GGACAGCTCGCGGCCCCCGAGAGCTCTAGCCGTCGAGGAGCTGCCTGGGGACGTTTGCCCTGGGGCCCCAGCCTG
GCCCGGGTCACCCTGGCATGAGGAGATGGGCCTGTTGCTCCTGGTCCCATTGCTCCTGCTGCCCGGCTCCTACGG
ACTGCCCTTCTACAACGGCTTCTACTACTCCAACAGCGCCAACGACCAGAACCTAGGCAACGGTCATGGCAAAGA
CCTCCTTAATGGAGTGAAGCTGGTGGTGGAGACACCCGAGGAGACCCTGTTCACCTACCAAGGGGCCAGTGTGAT
CCTGCCCTGCCGCTACCGCTACGAGCCGGCCCTGGTCTCCCCGCGGCGTGTGCGTGTCAAATGGTGGAAGCTGTC
GGAGAACGGGGCCCCAGAGAAGGACGTGCTGGTGGCCATCGGGCTGAGGCACCGCTCCTTTGGGGACTACCAAGG
CCGCGTGCACCTGCGGCAGGACAAAGAGCATGACGTCTCGCTGGAGATCCAGGATCTGCGGCTGGAGGACTATGG
GCGTTACCGCTGTGAGGTCATTGACGGGCTGGAGGATGAAAGCGGTCTGGTGGAGCTGGAGCTGCGGGGTGTGGT
CTTTCCTTACCAGTCCCCCAACGGGCGCTACCAGTTCAACTTCCACGAGGGCCAGCAGGTCTGTGCAGAGCAGGC
TGCGGTGGTGGCCTCCTTTGAGCAGCTCTTCCGGGCCTGGGAGGAGGGCCTGGACTGGTGCAACGCGGGCTGGCT
GCAGGATGCTACGGTGCAGTACCCCATCATGTTGCCCCGGCAGCCCTGCGGTGGCCCAGGCCTGGCACCTGGCGT
GCGAAGCTACGGCCCCCGCCACCGCCGCCTGCACCGCTATGATGTATTCTGCTTCGCTACTGCCCTCAAGGGGCG
GGTGTACTACCTGGAGCACCCTGAGAAGCTGACGCTGACAGAGGCAAGGGAGGCCTGCCAGGAAGATGATGCCAC
GATCGCCAAGGTGGGACAGCTCTTTGCCGCCTGGAAGTTCCATGGCCTGGACCGCTGCGACGCTGGCTGGCTGGC
AGATGGCAGCGTCCGCTACCCTGTGGTTCACCCGCATCCTAACTGTGGGCCCCCAGAGCCTGGGGTCCGAAGCTT
TGGCTTCCCCGACCCGCAGAGCCGCTTGTACGGTGTTTACTGCTACCGCCAGCACTAGGACCTGGGGCCCTCCCC
TGCCGCATTCCCTCACTGGCTGTGTATTTATTGAGTGGTTCGTTTTCCCTTGTGGGTTGGAGCCATTTTAACTGT
TTTTATACTTCTCAATTTAAATTTTCTTTAAACATTTTTTTACTATTTTTTGTAAAGCAAACAGAACCCAATGCC
TCCCTTTGCTCCTGGATGCCCCACTCCAGGAATCATGCTTGCTCCCCTGGGCCATTTGCGGTTTTGTGGGCTTCT
GGAGGGTTCCCCGCCATCCAGGCTGGTCTCCCTCCCTTAAGGAGGTTGGTGCCCAGAGTGGGCGGTGGCCTGTCT
AGAATGCCGCCGGGAGTCCGGGCATGGTGGGCACAGTTCTCCCTGCCCCTCAGCCTGGGGGAAGAAGAGGGCCTC
GGGGGCCTCCGGAGCTGGGCTTTGGGCCTCTCCTGCCCACCTCTACTTCTCTGTGAAGCCGCTGACCCCAGTCTG
CCCACTGAGGGGCTAGGGCTGGAAGCCAGTTCTAGGCTTCCAGGCGAAATCTGAGGGAAGGAAGAAACTCCCCTC
CCCGTTCCCCTTCCCCTCTCGGTTCCAAAGAATCTGTTTTGTTGTCATTTGTTTCTCCTGTTTCCCTGTGTGGGG
AGGGGCCCTCAGGTGTGTGTACTTTGGACAATAAATGGTGCTATGACTGCCTTCCGCCAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 5931

MGLLLLVPLLLLPGSYGLPFYNGFYYSNSANDQNLGNGHGKDLLNGVKLVVETPEETLFTYQGASVILPCRYRYE
PALVSPRRVRVKWWKLSENGAPEKDVLVAIGLRHRSFGDYQGRVHLRQDKEHDVSLEIQDLRLEDYGRYRCEVID
GLEDESGLVELELRGVVFPYQSPNGRYQFNFHEGQQVCAEQAAVVASFEQLFRAWEEGLDWCNAGWLQDATVQYP
IMLPRQPCGGPGLAPGVRSYGPRHRRLHRYDVFCFATALKGRVYYLEHPEKLTLTEAREACQEDDATIAKVGQLF
AAWKFHGLDRCDAGWLADGSVRYPVVHPHPNCGPPEPGVRSFGFPDPQSRLYGVYCYRQH

FIGURE 5932

CGGCCTCTCATTTCTCCTAGCCCTTCTGTTCTTCCTTGGCCAAGCTGCAGGGGATTTGGGGGATGTGGGACCTCC
AATTCCCAGCCCCGGCTTCAGCTCTTTCCCAGGTGTTGACTCCAGCTCCAGCTTCAGCTCCAGCTCCAGGTCGGG
CTCCAGCTCCAGCCGCAGCTTAGGCAGCGGAGGTTCTGTGTCCCAGTTGTTTTCCAATTTCACCGGCTCCGTGGA
TGACCGTGGGACCTGCCAGTGCTCTGTTTCCCTGCCAGACACCACCTTTCCCGTGGACAGAGTGGAACGCTTGGA
ATTCACAGCTCATGTTCTTTCTCAGAAGTTTGAGAAAGAACTTTCCAAAGTGAGGGAATATGTCCAATTAATTAG
TTTGTATGAAAAGAAACTGTTAAACCTAACTGTCCGAATTGACATCATGGGAGAAGGATACATTTCTTACACTGA
ACTGGACTTCGAGCTGATAAGGTAGAAGTGAAGGAGATGGAAAAACTGGTCATACAGCTGAAGGAGAGTTTTGGT
GGAAGCTCAGAAATTGTTGACCAGCTGGAGGTGGAGATAAGAAATATGACTCTCTTGGTAGAGAAGCTTGAGACA
CTAGACAAAAACAATGTCCTTGCCATTCGCCGAGAAATCGTGGCTCTGAAGACCAAGCTGAAAGAGTGTGAGGCC
TCTAAAGATCAAAACACCCCTGTCGTCCACCCTCCTCCCACTCCAGGGAGCTGTGGTCATGGTGGTGTGGTGAAC
ATCAGCAAACCGTCTGTGGTTCAGCTCAACTGGAGAGGGTTTTCTTATCTATATGGTGCTTGGGGTAGGGATTAC
TCTCCCCAGCATCCAAACAAAGGACTGTATTGGGTGGCGCCATTGAATACAGATGGGAGACTGTTGGAGTATTAT
ATACTGTACAACACACTGGATGATTTGCTATTGTATATAAATGCTCGAGAGTTGCGGATCACCTATGGCCAAGGT
AGTGGTACAGCAGTTTACAACAACAACATGTACGTCAACATGTACAACACCGGGAATATTGCCAGAGTTAACCTG
ACCACCAACACGATTGCTGTGACTCAAACTCTCCCTAATGCTGCCTATAATAACCGCTTTTCATATGCTAATGTT
GCTTGGCAAGCATATTGACTTTGCTGTGGATGAGAATGGATTGTGGGTTATTTATTCAACTGAAGCCAGCACTGG
TTAACATGGTGATTAGTAAACTCAATGACACCACACTTCAGGTGCTAAACACTTGGTATACCAAGCAGTATAAAC
CATCTGCTTCTAACGCCTTCATGGTATGTGGGGTTCTGTATGCCACCCGTACTATGAACACCAGAACAGAAGAGA
TTTTTTACTATTATGACACAAACACAGGGAAAGAGGGCAAACTAGACATTGTAATGCATAAGATGCAGGAAAAAG
TGCAGAGCATTAACTATAACCCTTTTGACCAGAAACTTTATGTCTATAACGATGGTTACCTTCTGAATTATGATC
TTTCTGTCTTGCAGAAGCCCCAGTAAGCTGTTTAGGAGTTAGGGTGAAAGAGAAAATGTTTGTTGAAAAAATAGT
CTTCTCCACTTACTTAGATATCTGCAGATATCTAAGTAAGTGGAGAAGACTATTTTTTCAACAAACATTTTCTCT
TTCACCCTAACTCCTAAACAGCTTACTGGGGCTTCTGCAAGACAGAAAGATCATAATTCAGAAGGTAACCATCGT
TATAGACATAAAGTTTCTGGTCAAAAGGGTTATAGTTAATGCTCTGCACTTTTTCCTGCATCTTATGCATTACAA
TGTCTAGTTTGCCCTCTTTCCCTGTGTTTGTGTCATAATAGTAAAAAATCTCTTCTGTTTGGCGTATAGGGATTC
TTTGTACAGGAAATATTGCCCAATGACTAGTCCTCATCCATGTAGCACCACTAATTCTTCCATGCCTGGAAGAAA
CCTGGGGACTTAGTTAGGTAGATTAATATCTGGAGCTCCTCGAGGGACCAAATCTCCAACTTTTTTTTCCCCTCA
CTAGCACCTGGAATGATGCTTTGTATGTGGCAGATAAGTAAATTTGGCATGCTTATATATTCTACATCTGTAAAG
TGCTGAGTTTTATGGAGAGAGGCCTTTTTATGCATTAAATTGTACATGGCAAATAAATCCCAGAAGGATCTGTAG
ATGAGGCACCTGCTTTTTCTTTTCTCTCATTGTCCACCTTACTAAAAGTCAGTAGAATCTTCTACCTCATAACTT
CCTTCCAAAGGCAGCTCAGAAGATTAGAACCAGACTTACTAACCAATTCCACCCCCCACCAACCCCCTTCTACTG
CCTACTTTAAAAAAATTAATAGTTTTCTATGGAACTGATCTAAGATTAGAAAAATTAATTTTCTTTAATTTCATT
ATGAACTTTTATTTACATGACTCTAAGACTATAAGAAAATCTGATGGCAGTGACAAAGTGCTAGCATTTATTGTT
ATCTAATAAAGACCTTGGAGCATATGTGCAACTTATGAGTGTATCAGTTGTTGCATGTAATTTTTGCCTTTGTTT
AAGCCTGGAACTTGTAAGAAAATGAAAATTTAATTTTTTTTTCTAGGACGAGCTATAGAAAAGCTATTGAGAGTA
TCTAGTTAATCAGTGCAGTAGTTGGAAACCTTGCTGGTGTATGTGATGTGCTTCTGTGCTTTTGAATGACTTTAT
CATCTAGTCTTTGTCTATTTTTCCTTTGATGTTCAAGTCCTAGTCTATAGGATTGGCAGTTTAAATGCTTTACTC
CCCCTTTTAAAATAAATGATTAAAATGTGCTTCGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 5933

MEKLVIQLKESFGGSSEIVDQLEVEIRNMTLLVEKLETLDKNNVLAIRREIVALKTKLKECEASKDQNTPVVHPP
PTPGSCGHGGVVNISKPSVVQLNWRGFSYLYGAWGRDYSPQHPNKGLYWVAPLNTDGRLLEYYILYNTLDDLLLY
INARELRITYGQGSGTAVYNNNMYVNMYNTGNIARVNLTTNTIAVTQTLPNAAYNNRFSYANVAWQAY

FIGURE 5934

CACCTGTCAGGACTTCAGAATCCTTGACCGATACCAGACTTCCTTGCCGTCCAGGAAGGGATTTCGACACCAGAC
CACCAAGTTTTTGTATCGCTTGGTAGGATCAGAAGATATGGCTGTGGACCAGAGTATTGTCAGCCCTTATACCTC
TCGGATCTTGAAACCTTATATCAGGCGTGATTATGAAACAAAGCCACCCAAACTGCAGCTCCTGTCACAGATTCG
TTCCCACCTGCACAGGAGCGACCCTCACTGGACGCCGGAGCCCGACGCACCTCTCGATTACTGTTATGTGCGGCC
AAATCACATCCCAACGATCAACTCCATGTGTCAGGAGTTTTTTTGGCCTGGCATTGACCTGTCTGAGTGTCTGCA
GTACCCAGACTTCAGTGTTGTTGTTCTTTATAAAAAAGTCATCATTGCCTTTGGCTTCATGGTTCCTGATGTGAA
ATACAATGAAGCTTACATTTCATTTCTGTTCGTCCACCCTGAATGGAGAAGAGCAGGGATTGCAACTTTCATGAT
CTATCATCTGATTCAGACCTGCATGGGCAAGGACGTAACCCTTCACGTCTCAGCAAGCAACCCCGCTATGCTACT
GTACCAGAAGTTTGGATTCAAGACTGAAGAATATGTATTAGATTTCTATGATAAATATTACCCATTGGAGAGTAC
AGAGTGTAAACACGCATTCTTTCTGAGGCTCCGGCGCTGATGCGAATACAGCTCACAGAGAAACGCATGTGCTAT
TGGAGAACAGGTCTTTGTGGAGATCTAAAGGCAGTGATTGATTTCACAGGGAGCTCTAATCTCTGTGATTACATG
GTCCTTCAAACTCCCAACCAAAGTGAGAAAAGCGGCATGCAGTGAAATGAGCAGTGAGCAGCCCTTTAGCAAAAT
CGCCCTCCAGTCCTTCCTGGAGATGCCTTCAGCCAGCATCCCAGACTCCACAGTTATTTATGAATGATGTCGTGA
TTCTCCCTCCACCTGACAGTTTGTAAGAGTGAAAGAGCATCTAACCTGATGCTCTTGGAGAGAGATAACCTGTCT
GTCATAACTTAAAGGATGAGAAAATGTGGTGTAGCTATTAAAGATTCATGCAGTCCCAAAAGGCACTGTCCTGGG
ATGATGAGAGATTATAAGGTGATTTCATAAAAGGAATCCAACCCTGTGCCCGGCCATTGATGTGTTGTCATTGAA
TCCAGGAGGATTTCTAGGGCACTGAAGTTTTGTTGTTTCTTTTGCTGACTTTGGTTACAGTCAGAAAAAATAAAC
TAGATGTTTGTGTCT

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FIGURE 5935

GACAGTGGAGGGCAGTGGAGAGGACCGCGCTGTCCTGCTGTCACCAAGAGCTGGAGACACCATCTCCCACCGAGA
GTCATGGCCCCATTGGCCCTGCACCTCCTCGTCCTCGTCCCCATCCTCCTCAGCCTGGTGGCCTCCCAGGACTGG
AAGGCTGAACGCAGCCAAGACCCCTTCGAGAAATGCATGCAGGATCCTGACTATGAGCAGCTGCTCAAGGTGGTG
ACCTGGGGGCTCAATCGGACCCTGAAGCCCCAGAGGGTGATTGTGGTTGGCGCTGGTGTGGCCGGGCTGGTGGCC
GCCAAGGTGCTCAGCGATGCTGGACACAAGGTCACCATCCTGGAGGCAGATAACAGGATCGGGGGCCGCATCTTC
ACCTACCGGGACCAGAACACGGGCTGGATTGGGGAGCTGGGAGCCATGCGCATGCCCAGCTCTCACAGGATCCTC
CACAAGCTCTGCCAGGGCCTGGGGCTCAACCTGACCAAGTTCACCCAGTACGACAAGAACACGTGGACGGAGGTG
CACGAAGTGAAGCTGCGCAACTATGTGGTGGAGAAGGTGCCCGAGAAGCTGGGCTACGCCTTGCGTCCCCAGGAA
AAGGGCCACTCGCCCGAAGACATCTACCAGATGGCTCTCAACCAGGCCCTCAAAGACCTCAAGGCACTGGGCTGC
AGAAAGGCGATGAAGAAGTTTGAAAGGCACACGCTCTTGGAATATCTTCTCGGGGAGGGGAACCTGAGCCGGCCG
GCCGTGCAGCTTCTGGGAGACGTGATGTCCGAGGATGGCTTCTTCTATCTCAGCTTCGCCGAGGCCCTCCGGGCC
CACAGCTGCCTCAGCGACAGACTCCAGTACAGCCGCATCGTGGGTGGCTGGGACCTGCTGCCGCGCGCGCTGCTG
AGCTCGCTGTCCGGGCTTGTGCTGTTGAACGCGCCCGTGGTGGCGATGACCCAGGGACCGCACGATGTGCACGTG
CAGATCGAGACCTCTCCCCCGGCGCGGAATCTGAAGGTGCTGAAGGCCGACGTGGTGCTGCTGACGGCGAGCGGA
CCGGCGGTGAAGCGCATCACCTTCTCGCCGCCGCTGCCCCGCCACATGCAGGAGGCGCTGCGGAGGCTGCACTAC
GTGCCGGCCACCAAGGTGTTCCTAAGCTTCCGCAGGCCCTTCTGGCGCGAGGAGCACATTGAAGGCGGCCACTCA
AACACCGATCGCCCGTCGCGCATGATTTTCTACCCGCCGCCGCGCGAGGGCGCGCTGCTGCTGGCCTCGTACACG
TGGTCGGACGCGGCGGCAGCGTTCGCCGGCTTGAGCCGGGAAGAGGCGTTGCGCTTGGCGCTCGACGACGTGGCG
GCATTGCACGGGCCTGTCGTGCGCCAGCTCTGGGACGGCACCGGCGTCGTCAAGCGTTGGGCGGAGGACCAGCAC
AGCCAGGGTGGCTTTGTGGTACAGCCGCCGGCGCTCTGGCAAACCGAAAAGGATGACTGGACGGTCCCTTATGGC
CGCATCTACTTTGCCGGCGAGCACACCGCCTACCCGCACGGCTGGGTGGAGACGGCGGTCAAGTCGGCGCTGCGC
GCCGCCATCAAGATCAACAGCCGGAAGGGGCCTGCATCGGACACGGCCAGCCCCGAGGGGCACGCATCTGACATG
GAGGGGCAGGGGCATGTGCATGGGGTGGCCAGCAGCCCCTCGCATGACCTGGCAAAGGAAGAAGGCAGCCACCCT
CCAGTCCAAGGCCAGTTATCTCTCCAAAACACGACCCACACGAGGACCTCGCATTAAAGTATTTTCGGAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 5936

MAPLALHLLVLVPILLSLVASQDWKAERSQDPFEKCMQDPDYEQLLKVVTWGLNRTLKPQRVIVVGAGVAGLVAA
KVLSDAGHKVTILEADNRIGGRIFTYRDQNTGWIGELGAMRMPSSHRILHKLCQGLGLNLTKFTQYDKNTWTEVH
EVKLRNYVVEKVPEKLGYALRPQEKGHSPEDIYQMALNQALKDLKALGCRKAMKKFERHTLLEYLLGEGNLSRPA
VQLLGDVMSEDGFFYLSFAEALRAHSCLSDRLQYSRIVGGWDLLPRALLSSLSGLVLLNAPVVAMTQGPHDVHVQ
IETSPPARNLKVLKADVVLLTASGPAVKRITFSPPLPRHMQEALRRLHYVPATKVFLSFRRPFWREEHIEGGHSN
TDRPSRMIFYPPPREGALLLASYTWSDAAAAFAGLSREEALRLALDDVAALHGPVVRQLWDGTGVVKRWAEDQHS
QGGFVVQPPALWQTEKDDWIVPYGRIYFAGEHTAYPHGWVETAVKSALRAAIKINSRKGPASDTASPEGHASDME
GQGHVHGVASSPSHDLAKEEGSHPPVQGQLSLQNTTHTRTSH

FIGURE 5937

GTTTTATTGCCACAACTAACCTCCTCGGACTCCTGCCTCACTCATTTACACCAACCACCCAACTATCTATAAACC
TAGCCATGGCCATCCCCTTATGAGCGGGCGCAGTGATTATAGGCTTTCGCTCTAAGATTAAAAATGCCCTAGCCC
ACTTCTTACCACAAGGCACACCTACACCCCTTATCCCCATACTAGTTATTATCGAAACCATCAGCCTACTCATTC
AACCAATAGCCCTGGCCGTACGCCTAACCGTAACATTACTGCAGGCCACCTACTCATGCACCTAATTGGAAGCGC
CACCCTAGCAATATCAACCATTAACCTTCCCTCTACACTTATCATCTTGACAATTCTAATTCTACTGACTATCCT
AGAAATCGCTGTCGCTTAATCCAAGCCTACGTTTTCACACTTCTAGTAAGCCTCTACCTGCACGACAACACATAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACCTTCCCCGCGCCGGCCG
GGTCCCGCCCGTTCCCCGGCACCAGAAGTTCCTTTGCGCGTCCGACGGCGACATGGGCGTCCCCACGGCCCTGGA
GGCCGGCAGCTGGCGCTGGGGATCCCTGCTCTTCGCTCTTTTCCTGGCTGCGTCCCTAGGTCCGGTGGCAGCCTT
AAAGGTCGCCACGCCGTATTCCCTGTATGTCTGTCCCGAGGGGCAAAACGTCACCCTCACCTGCAGGCTTTTGGG
CCCTGTGGACAAAGGGCACGATGTGACCTTCTACAAGACGTGGTACCGCAGCTCGAGGGGCGAGGTGCAAACCTG
TTAAAAGCGCCGGCCCATCCGAAACCTAACGTTCCAGGACCTTCACCTGCACCATGGAGGCCACCAGGCTGCCAA
CACCAGCCACGACCTGGCTCAGCGCCACGGGCTGGAGTCGGCCTCCGACCACCATGGCAACTTCTCCATCACCAT
GCGCAACCTGACCCTGCTGGATAGCGGCCTCTACTGCTGCCTGGTGGTGGAGATCAGGCACCACCACTCGGAGCA
CAGGGTCCATGGTGCCATGGAGCTGCAGGTGCAGACAGGCAAAGATGCACCATCCAACTGTGTGGTGTACCCATC
CTCCTCCCAGGAGAGTGAAAACATCACGGCTGCAGCCCTGGCTACGGGTGCCTGCATCGTAGGAATCCTCTGCCT
CCCCCTCATCCTGCTCCTGGTCTACAAGCAAAGGCAGGCAGCCTCCAACCGCCGTGCCCAGGAGCTGGTGCGGAT
GGACAGCAACATTCAAGGGATTGAAAACCCCGGCTTTGAAGCCTCACCACCTGCCCAGGGGATACCCGAGGCCAA
AGTCAGGCACCCCCTGTCCTATGTGGCCCAGCGGCAGCCTTCTGAGTCTGGGCGGCATCTGCTTTCGGAGCCCAG
CACCCCCCTGTCTCCTCCAGGCCCCGGAGACGTCTTCTTCCCATCCCTGGACCCTGTCCCTGACTCTCCAAACTT
TGAGGTCATCTAGCCCAGCTGGGGGACAGTGGGCTGTTGTGGCTGGGTCTGGGGCAGGTGCATTTGAGCCAGGGC
TGGCTCTGTGAGTGGCCTCCTTGGCCTCGGCCCTGGTTCCCTCCCTCCTGCTCTGGGCTCAGATACTGTGACATC
CCAAAAGCCCAGCCCCTCAACCCCTCTGGATGCTACATGGGGATGCTGGACGGCTCAGCCCCTGTTCCAAGGATT
TTGGGGTGCTGAGATTCTCCCCTAGAGACCTGAAATTCACCAGCTACAGATGCCAAATGACTTACATCTTAAGAA
GTCTCAAAACGTCCAGCCCTTCAGCAGCTCTCGTTCTGAGACATGAGCCTTGGGATGTGGCAGCATCAGTGGGAC
AAGATGGACACTGGGCCACCCTCCCAGGCACCAGACACAGGGCACGGTGGAGAGACTTCTCCCCCGTGGCCGCCT
TGGCTCCCCCGTTTTGCCCGAGGCTGCTCTTCTGTCAGACTTCCTCTTTGTACCACAGTGGCTCTGGGGCCAGGC
CTGCCTGCCCACTGGCCATCGCCACCTTCCCCAGCTGCCTCCTACCAGCAGTTTCTCTGAAGATCTGTCAACAGG
TTAAGTCAATCTGGGGCTTCCACTGCCTGCATTCCAGTCCCCAGAGCTTGGTGGTCCCGAAACGGGAAGTACATA
TTGGGGCATGGTGGCCTCCGTGAGCAAATGGTGTCTTGGGCAATCTGAGGCCAGGACAGATGTTGCCCCACCCAC
TGGAGATGGTGCTGAGGGAGGTGGGTGGGGCCTTCTGGGAAGGTGAGTGGAGAGGGGCACCTGCCCCCCGCCCTC
CCCATCCCCTACTCCCACTGCTCAGCGCGGGCCATTGCAAGGGTGCCACACAATGTCTTGTCCACCCTGGGACAC
TTCTGAGTATGAAGCGGGATGCTATTAAAAACTACATGGGGAAACAGGTGCAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAA

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FIGURE 5938

MRNLTLLDSGLYCCLVVEIRHHHSEHRVHGAMELQVQTGKDAPSNCVVYPSSSQESENITAAALATGACIVGILC
LPLILLLVYKQRQAASNRRAQELVRMDSNIQGIENPGFEASPPAQGIPEAKVRHPLSYVAQRQPSESGRHLLSEP
STPLSPPGPGDVFFPSLDPVPDSPNFEVI

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FIGURE 5939

GCAGTTGCGGCTCCAGGGCC**ATG**GCGGAGGAGCAGGGCCGGGAACGGGACTCGGTTCCCAAGCCGTCGGTGCTGT
TCCTCCACCCAGACCTGGGCGTGGGCGGCGCTGAGCGGCTGGTGTTGGACGCGGCGCTGGCGCTGCAGGCGCGCG
GGTGTAGCGTGAAGATCTGGACAGCGCACTACGACCCGGGCCACTGTTTCGCCGAGAGCCGCGAGCTACCGGTGC
GCTGTGCCGGGGACTGGCTGCCGCGAGGCCTGGGCTGGGGCGGCCGCGGCGCCGCCGTCTGCGCCTACGTGCGCA
TGGTTTTCCTGGCGCTCTACGTGCTGTTCCTCGCCGACGAGGAGTTCGACGTGGTAGTGTGCGACCAGGTGTCTG
CCTGTATCCCAGTGTTCAGGCTGGCTAGACGGCGGAAGAAGATCCTATTTTACTGTCACTTCCCAGATCTGCTTC
TCACCAAGAGAGATTCTTTTCTTAAACGACTATACAGGGCCCCAATTGACTGGATAGAGGAATACACCACAGGCA
TGGCAGACTGCATCTTAGTCAACAGCCAGTTCACAGCTGCTGTTTTTAAGGAAACATTCAAGTCCCTGTCTCACA
TAGACCCTGATGTCCTCTATCCATCTCTAAATGTCACCAGCTTTGACTCAGTTGTTCCTGAAAAGCTGGATGACC
TAGTCCCCAAGGGGAAAAAATTCCTGCTGCTCTCCATCAACAGATACGAAAGGAAGAAAAATCTGACTTTGGCAC
TGGAAGCCCTAGTACAGCTGCGTGGAAGATTGACATCCCAAGATTGGGAGAGGGTTCATCTGATCGTGGCAGGTG
GTTATGACGAGAGAGTCCTGGAGAATGTGGAACATTATCAGGAATTGAAGAAAATGGTCCAACAGTCCGACCTTG
GCCAGTATGTGACCTTCTTGAGGTCTTTCTCAGACAAACAGAAAATCTCCCTCCTCCACAGCTGCACGTGTGTGC
TTTACACACCAAGCAATGAGCACTTTGGCATTGTCCCTCTGGAAGCCATGTACATGCAGTGCCCAGTCATTGCTG
TTAATTCGGGTGGACCCTTGGAGTCCATTGACCACAGTGTCACAGGGTTTCTGTGTGAGCCTGACCCGGTGCACT
TCTCAGAAGCAATAGAAAAGTTCATCCGTGAACCTTCCTTAAAAGCCACCATGGGCCTGGCTGGAAGAGCCAGAG
TGAAGGAAAAATTTTCCCCTGAAGCATTTACAGAACAGCTCTACCGATATGTTACCAAACTGCTGGTA**TAA**TCAG
ATTGTTTTTAAGATCTCCATTAATGTCATTTTTATGGATTGTAGACCCAGTTTTGAAACCAAAAAAGAAACCTAG
AATCTAATGCAGAAGAGATCTTTTAAAAAATAAACTTGAGTCTTGAATGTGAGCCACTTTCCTATATACCACACC
TCCCTGTCCACTTTTCAGAAAAACCATGTCTTTTATGCTATAATCATTCCAAATTTTGCCAGTGTTAAGTTACAA
ATGTGGTGTCATTCCATGTTCAGCAGAGTATTTTAATTATATTTTCTCGGGATTATTGCTCTTCTGTCTATAAAT
TTTGAATGATACTGTGCCTTAATTGGTTTTCATAGTTTAAGTGTGTATCATTATCAAAGTTGATTAATTTGGCTT
CATAGTATAATGAGAGCAGGGCTATTGTAGTTCCCAGATTCAATCCACCGAAGTGTTCACTGTCATCTGTTAGGG
AATTTTTGTTTGTCCTGTCTTTGCCTGGATCCATAGCGAGAGTGCTCTGTATTTTTTTTAAGATAATTTGTATTT
TTGCACACTGAGATATAATAAAAGGTGTTTATCACAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 5940

MAEEQGRERDSVPKPSVLFLHPDLGVGGAERLVLDAALALQARGCSVKIWTAHYDPGHCFAESRELPVRCAGDWL
PRGLGWGGRGAAVCAYVRMVFLALYVLFLADEEFDVVVCDQVSACIPVFRLARRRKKILFYCHFPDLLLTKRDSF
LKRLYRAPIDWIEEYTTGMADCILVNSQFTAAVFKETFKSLSHIDPDVLYPSLNVTSFDSVVPEKLDDLVPKGKK
FLLLSINRYERKKNLTLALEALVQLRGRLTSQDWERVHLIVAGGYDERVLENVEHYQELKKMVQQSDLGQYVTFL
RSFSDKQKISLLHSCTCVLYTPSNEHFGIVPLEAMYMQCPVIAVNSGGPLESIDHSVTGFLCEPDPVHFSEAIEK
FIREPSLKATMGLAGRARVKEKFSPEAFTEQLYRYVTKLLV

FIGURE 5941

AGCAGGAGCAGGAGAGGGACAATGGAAGCTGCCCCGTCCAGGTTCATGTTCCTCTTATTTCTCCTCACGTGTGAG
CTGGCTGCAGAAGTTGCTGCAGAAGTTGAGAAATCCTCAGATGGTCCTGGTGCTGCCCAGGAACCCACGTGGCTC
ACAGATGTCCCAGCTGCCATGGAATTCATTGCTGCCACTGAGGTGGCTGTCATAGGCTTCTTCCAGGATTTAGAA
ATACCAGCAGTGCCCATACTCCATAGCATGGTGCAAAAATTCCCAGGCGTGTCATTTGGGATCAGCACTGATTCT
GAGGTTCTGACACACTACAACATCACTGGGAACACCATCTGCCTCTTTCGCCTGGTAGACAATGAACAACTGAAT
TTAGAGGACGAAGACATTGAAAGCATTGATGCCACCAAATTGAGCCGTTTCATTGAGATCAACAGCCTCCACATG
GTGACAGAGTACAACCCTGTGACTGTGATTGGGTTATTCAACAGCGTAATTCAGATTCATCTCCTCCTGATAATG
AACAAGGCCTCCCCAGAGTATGAAGAGAACATGCACAGATACCAGAAGGCAGCCAAGCTCTTCCAGGGGAAGATT
CTCTTTATTCTGGTGGACAGTGGTATGAAAGAAAATGGGAAGGTGATATCATTTTTCAAACTAAAGGAGTCTCAA
CTGCCAGCTTTGGCAATTTACCAGACTCTAGATGACGAGTGGGATACACTGCCCACAGCAGAAGTTTCCGTAGAG
CATGTGCAAAACTTTTGTGATGGATTCCTAAGTGGAAAATTGTTGAAAGAAAATCGTGAATCAGAAGGAAAGACT
CCAAAGGTGGAACTCTGACTTCTCCTTGGAACTACATATGGCCAAGTATCTACTTTATGCAAAGTAAAAAGGCAC
AACTCAAATCTCAGAGACACTAAACAACAGGATCACTAGGCCTGCCAACCACACACACGCACGTGCACACACG
CACGCACGCGTGCACACACACACGCGCACACACACACACACACAGAGCTTCATTTCCTGTCTTAAAATCTCGTTT
TCTCTTCTTCCTTCTTTTAAATTTCATATCCTCACTCCCTATCCAATTTCCTTCTTATCGTGCATTCATACTCTG
TAAGCCCATCTGTAACACACCTAGATCAAGGCTTTAAGAGACTCACTGTGATGCCTCTATGAAAGAGAGGCATTC
CTAGAGAAAGATTGTTCCAATTTGTCATTTAATATCAAGTTTGTATACTGCACATGACTTACACACAACATAGTT
CCTGCTCTTTTAAGGTTACCTAAGGGTTGAAACTCTACCTTCTTTCATAAGCACATGTCCGTCTCTGACTCAGGA
TCAAAAACCAAAGGATGGTTTTAAACACCTTTGTGAAATTGTCTTTTTGCCAGAAGTTAAAGGCTGTCTCCAAGT
CCCTGAACTCAGCAGAAATAGACCATGTGAAAACTCCATGCTTGGTTAGCATCTCCAACTCCCTATGTAAATCAA
CAACCTGCATAATAAATAAAAGGCAATCATGTTATA

FIGURE 5942

MEAAPSRFMFLLFLLTCELAAEVAAEVEKSSDGPGAAQEPTWLTDVPAAMEFIAATEVAVIGFFQDLEIPAVPIL
HSMVQKFPGVSFGISTDSEVLTHYNITGNTICLFRLVDNEQLNLEDEDIESIDATKLSRFIEINSLHMVTEYNPV
TVIGLFNSVIQIHLLLIMNKASPEYEENMHRYQKAAKLFQGKILFILVDSGMKENGKVISFFKLKESQLPALAIY
QTLDDEWDTLPTAEVSVEHVQNFCDGFLSGKLLKENRESEGKTPKVEL

FIGURE 5943

AGTGCGTGAGTTTGGTGGCGGCCGGCTGTGCAGAGACGCCATGTACCGGCTCCTGTCAGCAGTGACTGCCCGGGC
TGCCGCCCCCGGGGGCTTGGCCTCAAGCTGCGGACGACGCGGGGTCCATCAGCGCGCCGGGCTGCCGCCTCTCGG
CCACGGCTGGGTCGGGGGCCTCGGGCTGGGGCTGGGGCTGGCGCTCGGGGTGAAGCTGGCAGGTGGGCTGAGTGG
CGCGGCCCCGGCGCAGTCCCCCGCGGCCCCCGACCCTGAGGCGTCGCCTCTGGCCGAGCCGCCACAGGAGCAGTC
CCTCGCCCCGTGGTCTCCGCAGACCCCGGCGCCGCCCTGCTCCAGGTGCTTCGCCAGAGCCATCGAGAGCAGCCG
CGACCTGCTGCACAGGATCAAGGATGAGGTGGGCGCACCGGGCATAGTGGTTGGAGTTTCTGTAGATGGAAAAGA
AGTCTGGTCAGAAGGTTTAGGTTATGCTGATGTTGAGAACCGTGTACCATGTAAACCAGAGACAGTTATGCGAAT
TGCTAGCATCAGCAAAAGTCTCACCATGGTTGCTCTTGCCAAATTGTGGGAAGCGGGGAAACTGGATCTTGATAT
TCCAGTACAACATTATGTTCCCGAATTCCCAGAAAAAGAATATGAAGGTGAAAAGGTTTCTGTCACAACAAGATT
ACTGATTTCCCATTTAAGTGGAATTCGTCATTATGAAAAGGACATAAAAAAGGTGAAAGAAGAGAAAGCTTATAA
AGCCTTGAAGATGATGAAAGAGAATGTTGCATTTGAGCAAGAAAAAGAAGGCAAAAGTAATGAAAAGAATGATTT
TACTAAATTTAAAACAGAGCAGGAGAATGAAGCCAAATGCCGGAATTCAAAACCTGGCAAGAAAAAGAATGATTT
TGAACAAGGCGAATTATATTTGAGAGAAAAGTTTGAAAATTCAATTGAATCCCTAAGATTATTTAAAAATGATCC
TTTGTTCTTCAAACCTGGTAGTCAGTTTTTGTATTCAACTTTTGGCTATACCCTACTGGCAGCCATAGTAGAGAG
AGCTTCAGGATGTAAATATTTGGACTATATGCAGAAAATATTCCATGACTTGGATATGCTGACGACTGTGCAGGA
AGAAAACGAGCCAGTGATTTACAATAGAGCAAGGTAAATGAATACCTTCTGCTGTGTCTAGCTATATCGCATCTT
AACACTATTTTATTAATTAAAAGTCAAATTTTCTTTGTTTCCATTCCAAAATCAACCTGCCACATTTTGGGAGCT
TTTCTACATGTCTGTTTTCTCATCTGTAAAGTGAAGGAAGTAAAACATGTTTATAAAGTACACTAAGACCCTTTG
ATGAAAGATAGCAATAATATTAATAATTCAAACATGAATAACTAAACCAAAATTGCACCCACCATGAGCATCTGT
AATTTGCTCTTTAACCATTCCTTTTTTAGGTTTTAACTAATACTTTGTTTACGTGTTATTAGTTTTTAATTGTTT
TCATACTGTTTTGAAATAATTTTATACTTATAGAAAAGTTGCAAGAGTAGTACAAAGGATTCACATATCCTCTTT
ACTCAGATTCCCTTAATGTTAGTTTACCGCATTTGCATTACCTTTCTGTCTACATATGTGTTTGTTTCTGAACCA
TTTGGAAATAAGTTGTAGACGTGATACCCCTTTACCTATAAATATTTACATGTGTATTTTCTAAAAACAAGGACA
TTCAGGGCCGGGTGCAGTGGCTCACGCCTGTAATCCCAACACTTTGGAAGGCCGAGGTGGGTGGATCACCTGAGG
TCAGGAGTTCAAGACCAGCCTGGCCAATGTGGTGAAATCAACCCTCTCTCTACTAAAAATGCAAAAATTAGCCAG
GTGTGGTGGCGGGTGCCTATAATCCCAGCCACGCGGGAGGCTGAGGCAGGAGAATCGCTTGAACCCAGGAGGTGG
AGTTGCAGTAAGCCAAGATCGTGCCCCTGCACTTCAGGCTGGGCGAAAGAGTGAGACTCCATGTCAAAAAAGGAT

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FIGURE 5944

MYRLLSAVTARAAAPGGLASSCGRRGVHQRAGLPPLGHGWVGGLGLGLGLALGVKLAGGLSGAAPAQSPAAPDPE
ASPLAEPPQEQSLAPWSPQTPAPPCSRCFARAIESSRDLLHRIKDEVGAPGIVVGVSVDGKEVWSEGLGYADVEN
RVPCKPETVMRIASISKSLTMVALAKLWEAGKLDLDIPVQHYVPEFPEKEYEGEKVSVTTRLLISHLSGIRHYEK
DIKKVKEEKAYKALKMMKENVAFEQEKEGKSNEKNDFTKFKTEQENEAKCRNSKPGKKKNDFEQGELYLREKFEN
SIESLRLFKNDPLFFKPGSQFLYSTFGYTLLAAIVERASGCKYLDYMQKIFHDLDMLTTVQEENEPVIYNRAR

FIGURE 5945

GCAAGAGTGACACACAGGTGTTCAAAGACGCTTCTGGGGAGTGAGGGAAGCGGTTTACGAGTGACTTGGCTGGAG
CCTCAGGGGCGGGCACTGGCACGGAACACACCCTGAGGCCAGCCCTGGCTGCCCAGGCGGAGCTGCCTCTTCTCC
CGCGGGTTGGTGGACCCGCTCAGTACGGAGTTGGGGAAGCTCTTTCACTTCGGAGGATTGCTCAACAACC**ATG**CT
GGGCATCTGGACCCTCCTACCTCTGGTTCTTACGTCTGTTGCTAGATTATCGTCCAAAAGTGTTAATGCCCAAGT
GACTGACATCAACTCCAAGGGATTGGAATTGAGGAAGACTGTTACTACAGTTGAGACTCAGAACTTGGAAGGCCT
GCATCATGATGGCCAATTCTGCCATAAGCCCTGTCCTCCAGGTGAAAGGAAAGCTAGGGACTGCACAGTCAATGG
GGATGAACCAGACTGCGTGCCCTGCCAAGAAGGGAAGGAGTACACAGACAAAGCCCATTTTTCTTCCAAATGCAG
AAGATGTAGATTGTGTGATGAAGGACATGGCTTAGAAGTGGAAATAAACTGCACCCGGACCCAGAATACCAAGTG
CAGATGTAAACCAAACTTTTTTTGTAACTCTACTGTATGTGAACACTGTGACCCTTGCACCAAATGTGAACATGG
AATCATCAAGGAATGCACACTCACCAGCAACACCAAGTGCAAAGAGGAAGGATCCAGATCTAACTTGGGGTGGCT
TTGTCTTCTTCTTTTGCCAATTCCACTAATTGTTTGGGTGAAGAGAAAGGAAGTACAGAAAACATGCAGAAAGCA
CAGAAAGGAAAACCAAGGTTCTCATGAATCTCCAACCTTAAATCCTGAAACAGTGGCAATAAATTTATCTGATGT
TGACTTGAGTAAATATATCACCACTATTGCTGGAGTCATGACACTAAGTCAAGTTAAAGGCTTTGTTCGAAAGAA
TGGTGTCAATGAAGCCAAAATAGATGAGATCAAGAATGACAATGTCCAAGACACAGCAGAACAGAAAGTTCAACT
GCTTCGTAATTGGCATCAACTTCATGGAAAGAAAGAAGCGTATGACACATTGATTAAAGATCTCAAAAAAGCCAA
TCTTTGTACTCTTGCAGAGAAAATTCAGACTATCATCCTCAAGGACATTACTAGTGACTCAGAAAATTCAAACTT
CAGAAATGAAATCCAAAGCTTGGTC**TAG**AGTGAAAAACAACAAATTCAGTTCTGAGTATATGCAATTAGTGTTTG
AAAAGATTCTTAATAGCTGGCTGTAAATACTGCTTGGTTTTTTACTGGGTACATTTTATCATTTATTAGCGCTGA
AGAGCCAACATATTTGTAGATTTTTAATATCTCATGATTCTGCCTCCAAGGATGTTTAAAATCTAGTTGGGAAAA
CAAACTTCATCAAGAGTAAATGCAGTGGCATGCTAAGTACCCAAATAGGAGTGTATGCAGAGGATGAAAGATTAA
GATTATGCTCTGGCATCTAACATATGATTCTGTAGTATGAATGTAATCAGTGTATGTTAGTACAAATGTCTATCC
ACAGGCTAACCCCACTCTATGAATCAATAGAAGAAGCTATGACCTTTTGCTGAAATATCAGTTACTGAACAGGCA
GGCCACTTTGCCTCTAAATTACCTCTGATAATTCTAGAGATTTTACCATATTTCTAAACTTTGTTTATAACTCTG
AGAAGATCATATTTATGTAAAGTATATGTATTTGAGTGCAGAATTTAAATAAGGCTCTACCTCAAAGACCTTTGC
ACAGTTTATTGGTGTCATATTATACAATATTTCAATTGTGAATTCACATAGAAAACATTAAATTATAATGTTTGA
CTATTATATATGTGTATGCATTTTACTGGCTCAAAACTACCTACTTCTTTCTCAGGCATCAAAAGCATTTTGAGC
AGGAGAGTATTACTAGAGCTTTGCCACCTCTCCATTTTTGCCTTGGTGCTCATCTTAATGGCCTAATGCACCCCC
AAACATGGAAATATCACCAAAAAATACTTAATAGTCCACCAAAAGGCAAGACTGCCCTTAGAAATTCTAGCCTGG
TTTGGAGATACTAACTGCTCTCAGAGAAAGTAGCTTTGTGACATGTCATGAACCCATGTTTGCAATCAAAGATGA
TAAAATAGATTCTTATTTTTCCCCCACCCCCGAAAATGTTCAATAATGTCCCATGTAAAACCTGCTACAAATGGC
AGCTTATACATAGCAATGGTAAAATCATCATCTGGATTTAGGAATTGCTCTTGTCATACCCCCAAGTTTCTAAGA
TTTAAGATTCTCCTTACTACTATCCTACGTTTAAATATCTTTGAAAGTTTGTATTAAATGTGAATTTTAAGAAAT
AATATTTATATTTCTGTAAATGTAAACTGTGAAGATAGTTATAAACTGAAGCAGATACCTGGAACCACCTAAAGA
ACTTCCATTTATGGAGGATTTTTTTGCCCCTTGTGTTTGGAATTATAAAATATAGGTAAAAGTACGTAATTAAAT
A

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FIGURE 5946

MLGIWTLLPLVLTSVARLSSKSVNAQVTDINSKGLELRKTVTTVETQNLEGLHHDGQFCHKPCPPGERKARDCTV
NGDEPDCVPCQEGKEYTDKAHFSSKCRRCRLCDEGHGLEVEINCTRTQNTKCRCKPNFFCNSTVCEHCDPCTKCE
HGIIKECTLTSNTKCKEEGSRSNLGWLCLLLLPIPLIVWVKRKEVQKTCRKHRKENQGSHESPTLNPETVAINLS
DVDLSKYITTIAGVMTLSQVKGFVRKNGVNEAKIDEIKNDNVQDTAEQKVQLLRNWHQLHGKKEAYDTLIKDLKK
ANLCTLAEKIQTIILKDITSDSENSNFRNEIQSLV

FIGURE 5947

GGGCTGCTCCACGCTTTTGCCGGAGACAGAGACTGACATGGAACAGGGGAAGGGCCTGGCTGTCCTCATCCTGGC
TATCATTCTTCTTCAAGGTACTTTGGCCCAGTCAATCAAAGGAAACCACTTGGTTAAGGTGTATGACTATCAAGA
AGATGGTTCGGTACTTCTGACTTGTGATGCAGAAGCCAAAAATATCACATGGTTTAAAGATGGGAAGATGATCGG
CTTCCTAACTGAAGATAAAAAAAAAATGGAATCTGGGAAGTAATGCCAAGGACCCTCGAGGGATGTATCAGTGTAA
AGGATCACAGAACAAGTCAAAACCACTCCAAGTGTATTACAGAATGTGTCAGAACTGCATTGAACTAAATGCAGC
CACCATATCTGGCTTTCTCTTTGCTGAAATCGTCAGCATTTTCGTCCTTGCTGTTGGGGTCTACTTCATTGCTGG
ACAGGATGGAGTTCGCCAGTCGAGAGCTTCAGACAAGCAGACTCTGTTGCCCAATGACCAGCTCTACCAGCCCCT
CAAGGATCGAGAAGATGACCAGTACAGCCACCTTCAAGGAAACCAGTTGAGGAGGAATTGAACTCAGGACTCAGA
GTAGTCCAGGTGTTCTCCTCCTATTCAGTTCCCAGAATCAAAGCAATGCATTTTGGAAAGCTCCTAGCAGAGAGA
CTTTCAGCCCTAAATCTAGACTCAAGGTTCCCAGAGATGACAAATGGAGAAGAAAGGCCATCAGAGCAAATTTGG
GGGTTTCTCAAATAAAATAAAAATAAAAACAAATACTGTGTTTCAGAAGCGCCACCTATTGGGGAAAATTGT

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FIGURE 5948

MEQGKGLAVLILAIILLQGTLAQSIKGNHLVKVYDYQEDGSVLLTCDAEAKNITWFKDGKMIGFLTEDKKKWNLG
SNAKDPRGMYQCKGSQNKSKPLQVYYRMCQNCIELNAATISGFLFAEIVSIFVLAVGVYFIAGQDGVRQSRASDK
QTLLPNDQLYQPLKDREDDQYSHLQGNQLRRN

FIGURE 5949

AGCCCTCCCAGTTTCCGCGCGCCTCTTTGGCAGCTGGTCACATGGTGAGGGTGGGGGTGAGGGGGCCTCTCTAGC
TTGCGGCCTGTGTCTATGGTCGGGCCCTCTGCGTCCAGCTGCTCCGGACCGAGCTCGGGTGTATGGGGCCGTAGG
AACCGGCTCCGGGGCCCCGATAACGGGCCGCCCCCACAGCACCCCGGGCTGGCGTGAGGGTCTCCCTTGATCTGA
GAATGGCTACCTCTCGATATGAGCCAGTGGCTGAAATTGGTGTCGGTGCCTATGGGACAGTGTACAAGGCCCGTG
ATCCCCACAGTGGCCACTTTGTGGCCCTCAAGAGTGTGAGAGTCCCCAATGGAGGAGGAGGTGGAGGAGGCCTTC
CCATCAGCACAGTTCGTGAGGTGGCTTTACTGAGGCGACTGGAGGCTTTTGAGCATCCCAATGTTGTCCGGCTGA
TGGACGTCTGTGCCACATCCCGAACTGACCGGGAGATCAAGAGATGTTTCGTCGAAAGCCTCTCTTCTGTGGAAA
CTCTGAAGCCGACCAGTTGGGCAAAATCTTTGACCTGATTGGGCTGCCTCCAGAGGATGACTGGCCTCGAGATGT
ATCCCTGCCCCGTGGAGCCTTTCCCCCCAGAGGGCCCCGCCCAGTGCAGTCGGTGGTACCTGAGATGGAGGAGTC
GGGAGCACAGCTGCTGCTGGAAATGCTGACTTTTAACCCACACAAGCGAATCTCTGCCTTTCGAGCTCTGCAGCA
CTCTTATCTACATAAGGATGAAGGTAATCCGGAGTGAGCAATGGAGTGGCTGCCATGGAAGGAAGAAAAGCTGCC
ATTTCCCTTCTGGACACTGAGAGGGCAATCTTTGCCTTTATCTCTGAGGCTATGGAGGGTCCTCCTCCATCTTTC
TACAGAGATTACTTTGCTGCCTTAATGACATTCCCCTCCCACCTCTCCTTTTGAGGCTTCTCCTTCTCCTTCCCA
TTTCTCTACACTAAGGGGTATGTTCCCTCTTGTCCCTTTCCCTACCTTTATATTTGGGGTCCTTTTTTATACAGG
AAAAACAAAACAAAGAAATAATGGTCTTTTTTTTTTTTTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 5950

MATSRYEPVAEIGVGAYGTVYKARDPHSGHFVALKSVRVPNGGGGGGGLPISTVREVALLRRLEAFEHPNVVRLM
DVCATSRTDREIKRCFVESLSSVETLKPTSWAKSLT

FIGURE 5951

CGCAGCGGGTCCTCTCTATCTAGCTCCAGCCTCTCGCCTGCGCCCCACTCCCCGCGTCCCGCGTCCTAGCCGACC
ATGGCCGGGCCCCTGCGCGCCCCGCTGCTCCTGCTGGCCATCCTGGCCGTGGCCCTGGCCGTGAGCCCCGCGGCC
GGCTCCAGTCCCGGCAAGCCGCCGCGCCTGGTGGGAGGCCCCATGGACGCCAGCGTGGAGGAGGAGGGTGTGCGG
CGTGCACTGGACTTTGCCGTCGGCGAGTACAACAAAGCCAGCAACGACATGTACCACAGCCGCGCGCTGCAGGTG
GTGCGCGCCCGCAAGCAGATCGTAGCTGGGGTGAACTACTTCTTGGACGTGGAGCTGGGCCGAACCACGTGTACC
AAGACCCAGCCCAACTTGGACAACTGCCCCTTCCATGACCAGCCACATCTGAAAAGGAAAGCATTCTGCTCTTTC
CAGATCTACGCTGTGCCTTGGCAGGGCACAATGACCTTGTCGAAATCCACCTGTCAGGACGCCTAGGGTCTGTA
CCGGGCTGGCCTGTGCCTATCACCTCTTATGCACACCTCCCACCCCCTGTATTCCCACCCCTGGACTGGTGGCCC
CTGCCTTGGGGAAGGTCTCCCCATGTGCCTGCACCAGGAGACAGACAGAGAAGGCAGCAGGCGGCCTTTGTTGCT
CAGCAAGGGGCTCTGCCCTCCCTCCTTCCTTCTTGCTTCTCATAGCCCCGGTGTGCGGTGCATACACCCCCACCT
CCTGCAATAAAATAGTAGCATCGGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 5952

MAGPLRAPLLLLAILAVALAVSPAAGSSPGKPPRLVGGPMDASVEEEGVRRALDFAVGEYNKASNDMYHSRALQV
VRARKQIVAGVNYFLDVELGRTTCTKTQPNLDNCPFHDQPHLKRKAFCSFQIYAVPWQGTMTLSKSTCQDA

FIGURE 5953A

CTCCGGGCTGTCCCAGCTCGGCAAGCGCTGCCCAGGTCCTGGGGTGGTGGCAGCCAGCGGGAGCAGGAAAGGAAG
CATGTTCCCAGGCTGCCCACGCCTCTGGGTCCTGGTGGTCTTGGGCACCAGCTGGGTAGGCTGGGGGAGCCAAGG
GACAGAAGCGGCACAGCTAAGGCAGTTCTACGTGGCTGCTCAGGGCATCAGTTGGAGCTACCGACCTGAGCCCAC
AAACTCAAGTTTGAATCTTTCTGTAACTTCCTTTAAGAAAATTGTCTACAGAGAGTATGAACCATATTTTAAGAA
AGAAAAACCACAATCTACCATTTCAGGACTTCTTGGGCCTACTTTATATGCTGAAGTCGGAGACATCATAAAAGT
TCACTTTAAAAATAAGGCAGATAAGCCCTTGAGCATCCATCCTCAAGGAATTAGGTACAGTAAATTATCAGAAGG
TGCTTCTTACCTTGACCACACATTCCCTGCAGAGAAGATGGACGACGCTGTGGCTCCAGGCCGAGAATACACCTA
TGAATGGAGTATCAGTGAGGACAGTGGACCCACCCATGATGACCCTCCATGCCTCACACACATCTATTACTCCCA
TGAAAATCTGATCGAGGATTTCAACTCTGGGCTGATTGGGCCCCTGCTTATCTGTAAAAAAGGGACCCTAACTGA
GGGTGGGACACAGAAGACGTTTGACAAGCAAATCGTGCTACTATTTGCTGTGTTTGATGAAAGCAAGAGCTGGAG
CCAGTCATCATCCCTAATGTACACAGTCAATGGATATGTGAATGGGACAATGCCAGATATAACAGTTTGTGCCCA
TGACCACATCAGCTGGCATCTGCTGGGAATGAGCTCGGGGCCAGAATTATTCTCCATTCATTTCAACGGCCAGGT
CCTGGAGCAGAACCATCATAAGGTCTCAGCCATCACCCTTGTCAGTGCTACATCCACTACCGCAAATATGACTGT
GGGCCCAGAGGGAAAGTGGATCATATCTTCTCTCACCCCAAAACATTTGCAAGCTGGGATGCAGGCTTACATTGA
CATTAAAAACTGCCCAAAGAAAACCAGGAATCTTAAGAAAATAACTCGTGAGCAGAGGCGGCACATGAAGAGGTG
GGAATACTTCATTGCTGCAGAGGAAGTCATTTGGGACTATGCACCTGTAATACCAGCGAATATGGACAAAAAATA
CAGGTCTCAGCATTTGGATAATTTCTCAAACCAAATTGGAAAACATTATAAGAAAGTTATGTACACACAGTACGA
AGATGAGTCCTTCACCAAACATACAGTGAATCCCAATATGAAAGAAGATGGGATTTTGGGTCCTATTATCAGAGC
CCAGGTCAGAGACACACTCAAAATCGTGTTCAAAAATATGGCCAGCCGCCCCTATAGCATTTACCCTCATGGAGT
GACCTTCTCGCCTTATGAAGATGAAGTCAACTCTTCTTTCACCTCAGGCAGGAACAACACCATGATCAGAGCAGT
TCAACCAGGGGAAACCTATACTTATAAGTGGAACATCTTAGAGTTTGATGAACCCACAGAAAATGATGCCCAGTG
CTTAACAAGACCATACTACAGTGACGTGGACATCATGAGAGACATCGCCTCTGGGCTAATAGGACTACTTCTAAT
CTGTAAGAGCAGATCCCTGGACAGGCGAGGAATACAGAGGGCAGCAGACATCGAACAGCAGGCTGTGTTTGCTGT
GTTTGATGAGAACAAAAGCTGGTACCTTGAGGACAACATCAACAAGTTTTGTGAAAATCCTGATGAGGTGAAACG
TGATGACCCCAAGTTTTATGAATCAAACATCATGAGCACTATCAATGGCTATGTGCCTGAGAGCATAACTACTCT
TGGATTCTGCTTTGATGACACTGTCCAGTGGCACTTCTGTAGTGTGGGGACCCAGAATGAAATTTTGACCATCCA
CTTCACTGGGCACTCATTCATCTATGGAAAGAGGCATGAGGACACCTTGACCCTCTTCCCCATGCGTGGAGAATC
TGTGACGGTCACAATGGATAATGTTGGAACTTGGATGTTAACTTCCATGAATTCTAGTCCAAGAAGCAAAAAGCT
GAGGCTGAAATTCAGGGATGTTAAATGTATCCCAGATGATGATGAAGACTCATATGAGATTTTTGAACCTCCAGA
ATCTACAGTCATGGCTACACGGAAAATGCATGATCGTTTAGAACCTGAAGATGAAGAGAGTGATGCTGACTATGA
TTACCAGAACAGACTGGCTGCAGCATTAGGAATTAGGTCATTCCGAAACTCATCATTGAACCAGGAAGAAGAAGA
GTTCAATCTTACTGCCCTAGCTCTGGAGAATGGCACTGAATTCGTTTCTTCGAACACAGATATAATTGTTGGTTC
AAATTATTCTTCCCCAAGTAATATTAGTAAGTTCACTGTCAATAACCTTGCAGAACCTCAGAAAGCCCCTTCTCA
CCAACAAGCCACCACAGCTGGTTCCCCACTGAGACACCTCATTGGCAAGAACTCAGTTCTCAATTCTTCCACAGC
AGAGCATTCCAGCCCATATTCTGAAGACCCTATAGAGGATCCTCTACAGCCAGATGTCACAGGGATACGTCTACT
TTCACTTGGTGCTGGAGAATTCAGAAGTCAAGAACATGCTAAGCGTAAGGGACCCAAGGTAGAAAGAGATCAAGC
AGCAAAGCACAGGTTCTCCTGGATGAAATTACTAGCACATAAAGTTGGGAGACACCTAAGCCAAGACACTGGTTC
TCCTTCCGGAATGAGGCCCTGGGAGGACCTTCCTAGCCAAGACACTGGTTCTCCTTCCAGAATGAGGCCCTGGGA
GGACCCTCCTAGTGATCTGTTACTCTTAAAACAAAGTAACTCATCTAAGATTTTGGTTGGGAGATGGCATTTGGC
TTCTGAGAAAGGTAGCTATGAAATAATCCAAGATACTGATGAAGACACAGCTGTTAACAATTGGCTGATCAGCCC
CCAGAATGCCTCACGTGCTTGGGGAGAAAGCACCCCTCTTGCCAACAAGCCTGGAAAGCAGAGTGGCCACCCAAA
GTTTCCTAGAGTTAGACATAAATCTCTACAAGTAAGACAGGATGGAGGAAAGAGTAGACTGAAGAAAAGCCAGTT
TCTCATTAAGACACGAAAAAAGAAAAAAGAGAAGCACACACACCATGCTCCTTTATCTCCGAGGACCTTTCACCC
TCTAAGAAGTGAAGCCTACAACACATTTTCAGAAAGAAGACTTAAGCATTCGTTGGTGCTTCATAAATCCAATGA
AACATCTCTTCCCACAGACCTCAATCAGACATTGCCCTCTATGGATTTTGGCTGGATAGCCTCACTTCCTGACCA
TAATCAGAATTCCTCAAATGACACTGGTCAGGCAAGCTGTCCTCCAGGTCTTTATCAGACAGTGCCCCCAGAGGA
ACACTATCAAACATTCCCCATTCAAGACCCTGATCAAATGCACTCTACTTCAGACCCCAGTCACAGATCCTCTTC
TCCAGAGCTCAGTGAAATGCTTGAGTATGACCGAAGTCACAAGTCCTTCCCCACAGATATAAGTCAAATGTCCCC

FIGURE 5953B

TTCCTCAGAACATGAAGTCTGGCAGACAGTCATCTCTCCAGACCTCAGCCAGGTGACCCTCTCTCCAGAACTCAG
CCAGACAAACCTCTCTCCAGACCTCAGCCACACGACTCTCTCTCCAGAACTCATTCAGAGAAACCTTTCCCCAGC
CCTCGGTCAGATGCCCATTTCTCCAGACCTCAGCCATACAACCCTTTCTCCAGACCTCAGCCATACAACCCTTTC
TTTAGACCTCAGCCAGACAAACCTCTCTCCAGAACTCAGTCAGACAAACCTTTCTCCAGCCCTCGGTCAGATGCC
CCTTTCTCCAGACCTCAGCCATACAACCATTTCTCTAGACTTCAGCCAGACAAACCTCTCTCCAGAACTCAGCCA
TATGACTCTCTCTCCAGAACTCAGTCAGACAAACCTTTCCCCAGCCCTCGGTCAGATGCCCATTTCTCCAGACCT
CAGCCATACAACCCTTTCTCTAGACTTCAGCCAGACAAACCTCTCTCCAGAACTCAGTCAAACAAACCTTTCCCC
AGCCCTCGGTCAGATGCCCCTTTCTCCAGACCCCAGCCATACAACCCTTTCTCTAGACCTCAGCCAGACAAACCT
CTCTCCAGAACTCAGTCAGACAAACCTTTCCCCAGACCTCAGTGAGATGCCCCTCTTTGCAGATCTCAGTCAAAT
TCCCCTTACCCCAGACCTCGACCAGATGACACTTTCTCCAGACCTTGGTGAGACAGATCTTTCCCCAAACTTTGG
TCAGATGTCCCTTTCCCCAGACCTCAGCCAGGTGACTCTCTCTCCAGACATCAGTGACACCACCCTTCTCCCGGA
TCTCAGCCAGATATCACCTCCTCCAGACCTTGATCAGATATTCTACCCTTCTGAATCTAGTCAGTCATTGCTTCT
TCAAGAATTTAATGAGTCTTTTCCTTATCCAGACCTTGGTCAGATGCCATCTCCTTCATCTCCTACTCTCAATGA
TACTTTTCTATCAAAGGAATTTAATCCACTGGTTATAGTGGGCCTCAGTAAAGATGGTACAGATTACATTGAGAT
CATTCCAAAGGAAGAGGTCCAGAGCAGTGAAGATGACTATGCTGAAATTGATTATGTGCCCTATGATGACCCCTA
CAAAACTGATGTTAGGACAAACATCAACTCCTCCAGAGATCCTGACAACATTGCAGCATGGTACCTCCGCAGCAA
CAATGGAAACAGAAGAAATTATTACATTGCTGCTGAAGAAATATCCTGGGATTATTCAGAATTTGTACAAAGGGA
AACAGATATTGAAGACTCTGATGATATTCCAGAAGATACCACATATAAGAAAGTAGTTTTTCGAAAGTACCTCGA
CAGCACTTTTACCAAACGTGATCCTCGAGGGGAGTATGAAGAGCATCTCGGAATTCTTGGTCCTATTATCAGAGC
TGAAGTGGATGATGTTATCCAAGTTCGTTTTAAAAATTTAGCATCCAGACCGTATTCTCTACATGCCCATGGACT
TTCCTATGAAAAATCATCAGAGGGAAAGACTTATGAAGATGACTCTCCTGAATGGTTTAAGGAAGATAATGCTGT
TCAGCCAAATAGCAGTTATACCTACGTATGGCATGCCACTGAGCGATCAGGGCCAGAAAGTCCTGGCTCTGCCTG
TCGGGCTTGGGCCTACTACTCAGCTGTGAACCCAGAAAAAGATATTCACTCAGGCTTGATAGGTCCCCTCCTAAT
CTGCCAAAAAGGAATACTACATAAGGACAGCAACATGCCTGTGGACATGAGAGAATTTGTCTTACTATTTATGAC
CTTTGATGAAAAGAAGAGCTGGTACTATGAAAAGAAGTCCCGAAGTTCTTGGAGACTCACATCCTCAGAAATGAA
AAAATCCCATGAGTTTCACGCCATTAATGGGATGATCTACAGCTTGCCTGGCCTGAAAATGTATGAGCAAGAGTG
GGTGAGGTTACACCTGCTGAACATAGGCGGCTCCCAAGACATTCACGTGGTTCACTTTCACGGCCAGACCTTGCT
GGAAAATGGCAATAAACAGCACCAGTTAGGGGTCTGGCCCCTTCTGCCTGGTTCATTTAAAACTCTTGAAATGAA
GGCATCAAAACCTGGCTGGTGGCTCCTAAACACAGAGGTTGGAGAAAACCAGAGAGCAGGGATGCAAACGCCATT
TCTTATCATGGACAGAGACTGTAGGATGCCAATGGGACTAAGCACTGGTATCATATCTGATTCACAGATCAAGGC
TTCAGAGTTTCTGGGTTACTGGGAGCCCAGATTAGCAAGATTAAACAATGGTGGATCTTATAATGCTTGGAGTGT
AGAAAAACTTGCAGCAGAATTTGCCTCTAAACCTTGGATCCAGGTGGACATGCAAAAGGAAGTCATAATCACAGG
GATCCAGACCCAAGGTGCCAAACACTACCTGAAGTCCTGCTATACCACAGAGTTCTATGTAGCTTACAGTTCCAA
CCAGATCAACTGGCAGATCTTCAAAGGGAACAGCACAAGGAATGTGATGTATTTTAATGGCAATTCAGATGCCTC
TACAATAAAAGAGAATCAGTTTGACCCACCTATTGTGGCTAGATATATTAGGATCTCTCCAACTCGAGCCTATAA
CAGACCTACCCTTCGATTGGAACTGCAAGGTTGTGAGGTAAATGGATGTTCCACACCCCTGGGTATGGAAAATGG
AAAGATAGAAAACAAGCAAATCACAGCTTCTTCGTTTAAGAAATCTTGGTGGGGAGATTACTGGGAACCCTTCCG
TGCCCGTCTGAATGCCCAGGGACGTGTGAATGCCTGGCAAGCCAAGGCAAACAACAATAAGCAGTGGCTAGAAAT
TGATCTACTCAAGATCAAGAAGATAACGGCAATTATAACACAGGGCTGCAAGTCTCTGTCCTCTGAAATGTATGT
AAAGAGCTATACCATCCACTACAGTGAGCAGGGAGTGGAATGGAAACCATACAGGCTGAAATCCTCCATGGTGGA
CAAGATTTTTGAAGGAAATACTAATACCAAAGGACATGTGAAGAACTTTTTCAACCCCCCAATCATTTCCAGGTT
TATCCGTGTCATTCCTAAAACATGGAATCAAAGTATTGCACTTCGCCTGGAACTCTTTGGCTGTGATATTTACTA
GAATTGAACATTCAAAAACCCCTGGAAGAGACTCTTTAAGACCTCAAACCATTTAGAATGGGCAATGTATTTTAC
GCTGTGTTAAATGTTAACAGTTTTCCACTATTTCTCTTTCTTTTCTATTAGTGAATAAAATTTTATAC

FIGURE 5954

MFPGCPRLWVLVVLGTSWVGWGSQGTEAAQLRQFYVAAQGISWSYRPEPTNSSLNLSVTSFKKIVYREYEPYFKK
EKPQSTISGLLGPTLYAEVGDIIKVHFKNKADKPLSIHPQGIRYSKLSEGASYLDHTFPAEKMDDAVAPGREYTY
EWSISEDSGPTHDDPPCLTHIYYSHENLIEDFNSGLIGPLLICKKGTLTEGGTQKTFDKQIVLLFAVFDESKSWS
QSSSLMYTVNGYVNGTMPDITVCAHDHISWHLLGMSSGPELFSIHFNGQVLEQNHHKVSAITLVSATSTTANMTV
GPEGKWIISSLTPKHLQAGMQAYIDIKNCPKKTRNLKKITREQRRHMKRWEYFIAAEEVIWDYAPVIPANMDKKY
RSQHLDNFSNQIGKHYKKVMYTQYEDESFTKHTVNPNMKEDGILGPIIRAQVRDTLKIVFKNMASRPYSIYPHGV
TFSPYEDEVNSSFTSGRNNTMIRAVQPGETYTYKWNILEFDEPTENDAQCLTRPYYSDVDIMRDIASGLIGLLLI
CKSRSLDRRGIQRAADIEQQAVFAVFDENKSWYLEDNINKFCENPDEVKRDDPKFYESNIMSTINGYVPESITTL
GFCFDDTVQWHFCSVGTQNEILTIHFTGHSFIYGKRHEDTLTLFPMRGESVTVTMDNVGTWMLTSMNSSPRSKKL
RLKFRDVKCIPDDDEDSYEIFEPPESTVMATRKMHDRLEPEDEESDADYDYQNRLAAALGIRSFRNSSLNQEEEE
FNLTALALENGTEFVSSNTDIIVGSNYSSPSNISKFTVNNLAEPQKAPSHQQATTAGSPLRHLIGKNSVLNSSTA
EHSSPYSEDPIEDPLQPDVTGIRLLSLGAGEFRSQEHAKRKGPKVERDQAAKHRFSWMKLLAHKVGRHLSQDTGS
PSGMRPWEDLPSQDTGSPSRMRPWEDPPSDLLLLKQSNSSKILVGRWHLASEKGSYEIIQDTDEDTAVNNWLISP
QNASRAWGESTPLANKPGKQSGHPKFPRVRHKSLQVRQDGGKSRLKKSQFLIKTRKKKKEKHTHHAPLSPRTFHP
LRSEAYNTFSERRLKHSLVLHKSNETSLPTDLNQTLPSMDFGWIASLPDHNQNSSNDTGQASCPPGLYQTVPPEE
HYQTFPIQDPDQMHSTSDPSHRSSSPELSEMLEYDRSHKSFPTDISQMSPSSEHEVWQTVISPDLSQVTLSPELS
QTNLSPDLSHTTLSPELIQRNLSPALGQMPISPDLSHTTLSPDLSHTTLSLDLSQTNLSPELSQTNLSPALGQMP
LSPDLSHTTISLDFSQTNLSPELSHMTLSPELSQTNLSPALGQMPISPDLSHTTLSLDFSQTNLSPELSQTNLSP
ALGQMPLSPDPSHTTLSLDLSQTNLSPELSQTNLSPDLSEMPLFADLSQIPLTPDLDQMTLSPDLGETDLSPNFG
QMSLSPDLSQVTLSPDISDTTLLPDLSQISPPPDLDQIFYPSESSQSLLLQEFNESFPYPDLGQMPSPSSPTLND
TFLSKEFNPLVIVGLSKDGTDYIEIIPKEEVQSSEDDYAEIDYVPYDDPYKTDVRTNINSSRDPDNIAAWYLRSN
NGNRRNYYIAAEEISWDYSEFVQRETDIEDSDDIPEDTTYKKVVFRKYLDSTFTKRDPRGEYEEHLGILGPIIRA
EVDDVIQVRFKNLASRPYSLHAHGLSYEKSSEGKTYEDDSPEWFKEDNAVQPNSSYTYVWHATERSGPESPGSAC
RAWAYYSAVNPEKDIHSGLIGPLLICQKGILHKDSNMPVDMREFVLLFMTFDEKKSWYYEKKSRSSWRLTSSEMK
KSHEFHAINGMIYSLPGLKMYEQEWVRLHLLNIGGSQDIHVVHFHGQTLLENGNKQHQLGVWPLLPGSFKTLEMK
ASKPGWWLLNTEVGENQRAGMQTPFLIMDRDCRMPMGLSTGIISDSQIKASEFLGYWEPRLARLNNGGSYNAWSV
EKLAAEFASKPWIQVDMQKEVIITGIQTQGAKHYLKSCYTTEFYVAYSSNQINWQIFKGNSTRNVMYFNGNSDAS
TIKENQFDPPIVARYIRISPTRAYNRPTLRLELQGCEVNGCSTPLGMENGKIENKQITASSFKKSWWGDYWEPFR
ARLNAQGRVNAWQAKANNNKQWLEIDLLKIKKITAIITQGCKSLSSEMYVKSYTIHYSEQGVEWKPYRLKSSMVD
KIFEGNTNTKGHVKNFFNPPIISRFIRVIPKTWNQSIALRLELFGCDIY

FIGURE 5955

CTCGGAGTGTGATCTAAGCAGGTCGCGTACCTTCCTCAGGTGACTCCGGCCACAGCCCATTGTCCGCGGCCACCG
GCGGAGTTTAGCCGCAGACCTCGAAGCGCCCCGGGGTCCTTCCCGAACGGCAGCGGCTGCGGCGGGTCCATGGAG
AAGGGCCCTGTGCGGGCACCGGCGGGGAAGCCGCGGGGCGCCAGGTGCAGCAATGGGTTCCCCGAGCGGGATCCG
CCGCGGCCCGGGCCCAGCAGGCCGGCGGAGAAGCCCCCGCGGCCCGAGGCCAAGAGCGCGCAGCCCGCGGACGGC
TGGAAGGGCGAGCGGCCCCGCAGCGAGGAGGATAACGAGCTGAACCTCCCTAACCTGGCAGCCGCCTACTCGTCC
ATCCTGAGCTCGCTGGGCGAGAACCCCCAGCGGCAAGGGCTGCTCAAGACGCCCTGGAGGGCGGCCTCGGCCATG
CAGTTCTTCACCAAGGGCTACCAGGAGACCATCTCAGATGTCCTAAACGATGCTATATTTGATGAAGATCATGAT
GAGATGGTGATTGTGAAGGACATAGACATGTTTTCCATGTGTGAGCATCACTTGGTTCCATTTGTTGGAAAGGTC
CATATTGGTTATCTTCCTAACAAGCAAGTCCTTGGCCTCAGCAAACTTGCGAGGATTGTAGAAATCTATAGTAGA
AGACTACAAGTTCAGGAGCGCCTTACAAAACAAATTGCTGTAGCAATCACGGAAGCCTTGCGGCCTGCTGGAGTC
GGGGTAGTGGTTGAAGCAACGAAGTCAAATAAATATAATAAAGGGTTGAGCCCTCTACTTTCTTCTTGCCACCTT
TTTGTGGCAATATTAAAGTGAACTGCTAATAGTGTCTGCAGAACCATAGCTTCCACGCACCTGAACGAGCACAGA
ATGAACTGACGGTGGAAGACATTATGAGCTGTGTCCAACGTTTTAACCAAAGCGTATCGTACCAACGATCTGTGA
AAATGCACTGGAAGCTTCTGGTCCCGGTTTCCTTTGTGGTCTATGTGGGTCTTGTCCTCATTGTAACTCCGTATA
GATGGTATAGGTATTTTAATCCTGGAAGCTGTTGCCTTATTAATGATTATCTTAAAATTTCCTCCATTGGGGCAG
CGTGGGCCAAATTAAAACAAACAAAACCGCAACTCCTCCACAGAAACACAAACACAGTTATTCCATGAAGTTTAG
TATTTGGTTGACATAGTGCTCTTCAAATTCATCCCATTACCCTAAAAGTAATAACTTTGATGCTTGCTTTAACTT
TAGTCCCATCTCTGCCACTTTGATGCTATTTGGGTTATGATGGGGCAAGATGGCAGAGGTATTGGGTTTTTTTGT
TTTTTTCCATTCCTCTCTACTTCTGTTTCCTAGCTTTTTCTTTCTGGAGTTTAAGTACAGTGATGGTTGGCTTGA
GTACCTTTTTAAATCTAGCCCAGTATAAACATTAGCCTGCTTAATATTTAGACATTTATAGGTAGAATTCTGAGC
ACTCAACTCATGTTTGGCATTTTAAAGTAAAAACAAGTGTGACTTCGAGGACCAAAGAAATTGTCAGCTATACAT
TTATCTTTATGAACTCATTTATATTCCTTTTTAATGACTCGTTGTTCTAACATTTCCTAGAAGTGTTCTTATAAA
GGTCTAATGTATCCACAGGCTGTTGTCTTATTAGTAAATGCAAAGTAATGACTTTGTCTGTTTTACTCTAGTCTT
TAGTACTTCAAAATTACCTTTTCATATCCATGATCTTGAGTCCATTTGGGGGATTTTTAAGAATTTGATGTATTT
CAATACACTGTTCAAAATTAAATTGTTTAATTTTATGTATGAGTATGTATGTTCCTGAAGTTGGTCCTATTTAAA
TTATTAAACTATTGTAACTTTG

FIGURE 5956

MEKGPVRAPAGKPRGARCSNGFPERDPPRPGPSRPAEKPPRPEAKSAQPADGWKGERPRSEEDNELNLPNLAAAY
SSILSSLGENPQRQGLLKTPWRAASAMQFFTKGYQETISDVLNDAIFDEDHDEMVIVKDIDMFSMCEHHLVPFVG
KVHIGYLPNKQVLGLSKLARIVEIYSRRLQVQERLTKQIAVAITEALRPAGVGVVVEATKSNKYNKGLSPLLSSC
HLFVAILK

FIGURE 5957

TTGAACTCCTGGAGCCCGTCACCCAGGAAACCGGCCGCAATCGCCGGCCGACCTGAAGCTGGTTTCATGGCAGCC
TCAAAGAAGGCAGTTTTGGGGCCATTGGTGGGGGCGGTGGACCAGGGCACCAGTTCGACGCGCTTTTTGGTTTTC
AATTCAAAAACAGCTGAACTACTTAGTCATCATCAAGTAGAAATAAAACAAGAGTTCCCAAGAGAAGGATGGGTG
GAACAGGACCCTAAGGAAATTCTACATTCTGTCTATGAGTGTATAGAGAAAACATGTGAGAAACTTGGACAGCTC
AATATTGATATTTCCAACATAAAAGCTATTGGTGTCAGCAACCAGAGGGAAACCACTGTAGTCTGGGACAAGATA
ACTGGAGAGCCTCTCTACAATGCTGTGGTGTGGCTTGATCTAAGAACCCAGTCTACCGTTGAGAGTCTTAGTAAA
AGAATTCCAGGAAATAATAACTTTGTCAAGTCCAAGACAGGCCTTCCACTTAGCACTTACTTCAGTGCAGTGAAA
CTTCGTTGGCTCCTTGACAATGTGAGAAAAGTTCAAAAGGCCGTTGAAGAAAAACGAGCTCTTTTTGGGACTATT
GATTCATGGCTTATTTGGAGTTTGACAGGAGGAGTCAATGGAGGTGTCCACTGTACAGATGTAACAAATGCAAGT
AGGACTATGCTTTTCAACATTCATTCTTTGGAATGGGATAAACAACTCTGCGAATTTTTTGGAATTCCAATGGAA
ATTCTTCCAAATGTCCGGAGTTCTTCTGAGATCTATGGCCTAATGAAAGCTGGGGCCTTGGAAGGTGTGCCAATA
TCTGGGTGTTTAGGGGACCAGTCTGCTGCATTGGTGGGACAAATGTGCTTCCAGATTGGACAAGCCAAAAATACG
TATGGAACAGGATGTTTCTTACTATGTAATACAGGCCATAAGTGTGTATTTTCTGATCATGGCCTTCTCACCACA
GTGGCTTACAAACTTGGCAGAGACAAACCAGTATATTATGCTTTGGAAGGTTCTGTAGCTATAGCTGGTGCTGTT
ATTCGCTGGCTAAGAGACAATCTTGGAATTATAAAGACCTCAGAAGAAATTGAAAAACTTGCTAAAGAAGTAGGT
ACTTCTTATGGCTGCTACTTCGTCCCAGCATTTTCGGGGTTATATGCACCTTATTGGGAGCCCAGCGCAAGAGGG
ATAATCTGTGGACTCACTCAGTTCACCAATAAATGCCATATTGCTTTTGCTGCATTAGAAGCTGTTTGTTTCCAA
ACTCGAGAGATTTTGGATGCCATGAATCGAGACTGTGGAATTCCACTCAGTCATTTGCAGGTAGATGGAGGAATG
ACCAGCAACAAAATTCTTATGCAGCTACAAGCAGACATTCTGTATATACCAGTAGTGAAGCCCTCAATGCCCGAA
ACCACTGCACTGGGTGCGGCTATGGCGGCAGGGGCTGCAGAAGGAGTCGGCGTATGGAGTCTCGAACCCGAGGAT
TTGTCTGCCGTCACGATGGAGCGGTTTGAACCTCAGATTAATGCGGAGGAAAGTGAAATTCGTTATTCTACATGG
AAGAAAGCTGTGATGAAGTCAATGGGTTGGGTTACAACTCAATCTCCAGAAAGTGGTATTCCATAAAACCTACCA
ACTCATGGATTCCCAAGATGTGAGCTTTTTACATAATGAAAGAACCCAGCAATTCTGTCTCTTAATGCAATGACA
CTATTCATAGACTTTGATTTTATTTATAAGCCACTTGCTGCATGACCCTCCAAGTAGACCTGTGGCTTAAAATAA
AGAAAATGCAGCAAAAAGAATGCTATAGAAATATTTGGTGGTTTTTTTTTTTTTAAACATCCACAGTTAAGGTTG
GGCCAGCTACCTTTGGGGGTGACCCCCCCCATTGCCATAACATCCTGCTCCATTCCCTCTAAGATGTAGGAAGAA
TTCGGATCCTTACCATTGGAATCTTCCATCGAACATACTCAAACACTTTTGGGCCAGGATTTGAGTCTCTGCATG
ACATATACTTGATTAAAAGGTTATTACTAACCTGTTAAAAATC

FIGURE 5958

MAASKKAVLGPLVGAVDQGTSSTRFLVFNSKTAELLSHHQVEIKQEFPREGWVEQDPKEILHSVYECIEKTCEKL
GQLNIDISNIKAIGVSNQRETTVVWDKITGEPLYNAVVWLDLRTQSTVESLSKRIPGNNNFVKSKTGLPLSTYFS
AVKLRWLLDNVRKVQKAVEEKRALFGTIDSWLIWSLTGGVNGGVHCTDVTNASRTMLFNIHSLEWDKQLCEFFGI
PMEILPNVRSSSEIYGLMKAGALEGVPISGCLGDQSAALVGQMCFQIGQAKNTYGTGCFLLCNTGHKCVFSDHGL
LTTVAYKLGRDKPVYYALEGSVAIAGAVIRWLRDNLGIIKTSEEIEKLAKEVGTSYGCYFVPAFSGLYAPYWEPS
ARGIICGLTQFTNKCHIAFAALEAVCFQTREILDAMNRDCGIPLSHLQVDGGMTSNKILMQLQADILYIPVVKPS
MPETTALGAAMAAGAAEGVGVWSLEPEDLSAVTMERFEPQINAEESEIRYSTWKKAVMKSMGWVTTQSPESGIP

FIGURE 5959A

CCCTTCTGTAGGGGCAGAGAGGTTCTACTTCATTACTGCGTCTCCTGGGAAGGCCATCAGGACTGCTGGCTAAAG
TGGGAACCAGGACTCTTTGTGAGTTAAGAATTTGTGTATTTATATGTGTGTTATACACATTTTTTAAAAAACTGT
AACGACATCAGGTTGAGCAGTCGTCTCCGGGTGGTGAATTATGTGTATTTTTAAATTTTATACTATATTGTTATT
TTTCAAATGTTCGAAATTGAATATGTAGATTGTTGTTATCAGCAGAAAAATAAACATTATTCAAATACTCTATTC
AGTAAAGTAATTTATTGGGCGCCTTTGTCAAGCACGCATTTGCCTAGATGTGACTCTACAGATAAAATTCACTTG
GGGCCTCCCCTTACAGACAATCAGGCAGTGGAGACTGAGTGCCTGAATGGATAGACCAGCACTCAGACCACTATT
TTCAGTATCTGTTTTTCTTAACTCAGGGCCGTGGTTTTCAAACGTTTTTCGCCTTACGGTCACCCTTAGGGTCCC
CCGAGACCGGCCCAGACAGACAGATATACAAAAACACATACACAGTCATGAGCGTCCACCATTTCCCCACCAGGC
GCAGCACAGGCGGCTTCCCGGCACTGAGATGGGGGGGAGGAGGGAGAGAGCGCGAGGGGGGAGGGGAAAGCAGAG
AACGAAAGAGGCGGAGGCGGCCCCCGAACCCCGCTCTGGTCTTCATCATCACCACCCCTGGGTCCCCAGTTCCCA
CCCACACACCAACCTCTAACGATACCGGGTAATTTTCCTCCTTCTTCCCTCAAACGGCTATAGCGAGACGGTAGA
CGACGACCAGAACTACTTCTGCTCACGTAAGCGAGTAATCACGTGAGCGCCTACGTCATGTGAGATCTCGGTCAC
GTGAGCAACTCTCGGCTTAAACTCGGGATCACTAAGGTGCCGCACTTCCTTCTGGTATGGAAATAGGGCGGGTCA
ATATCAAGAAAGGAAGAGGGTGATTGGTTAGCGGAACGTCTTACGTGACTGATTATTGGTCTACCTCTGGGGATA
ACCGTCCCAGTTGCCAGAGAAACAATAACGTCATTATTTAATAAGTCATCGGTGATTGGTCCGCCCCTGAGGTTA
ATCTTAAAAGCCCAGGTTACCCGCGGAAATTTATGCTGTCCGGTCACCGTGACAATGCAGCTGAGGAACCCAGAA
CTACATCTGGGCTGCGCGCTTGCGCTTCGCTTCCTGGCCCTCGTTTCCTGGGACATCCCTGGGGCTAGAGCACTG
GACAATGGATTGGCAAGGACGCCTACCATGGGCTGGCTGCACTGGGAGCGCTTCATGTGCAACCTTGACTGCCAG
GAAGAGCCAGATTCCTGCATCAGGTATCAGATATTGGGTACTCCCTTCCCTTTGCTTTTCCATGTGTTTGGGTGT
GTTTGGGGAACTGGAGAGTCTCAACGGGAACAGTTGAGCCCGAGGGAGAGCTCCCCCACCCGACTCTGCTGCTGC
TTTTTTATCCCCAGCAAACTGTCCCGAATCAGGACTAGCCCTAAACTTTCTCTGTGTGACCTTTCCTGGGATGGG
AGTCCGGCCAGCGGCCCCTGTTTCTTTCTCTCTCTCTCTCTCTCTCGTTCTCCTTCTCTTTCTCTTTCTCTTCTT
TCCTCTCTCTTTCTCTCTCTCCCTGCCCGGTTCTCTTTTTTCACTGCTCCTTGCAGAGCAGGGCCACCCCATAGG
CAGTGTGCCCAAAGTAGCCCTGCCCGGTTCTATTCAGACCCTTCTTGTGAACTTCTGCTCTTCCTCTGCCGGGTG
CTAACCGTTAGAACATCTAGGGTGGGTAGGAGGAATGGGGAACTAAGATTCGTGCCATTTTTTCTCCTTTTGGGG
TCGTGGATTTCTCGGCAGTATCTCGAGGGAGTTAGAGAGACCATAAGGTCGCTGAGATCTCTCCCACCTCGCCCA
TGAGCGTGGCATCAGGCTGGAAGGTTGACATGGAGGAACTTTATACATTTACACCTTTGCGTGAGGGTTGAGGCT
GGATTAGATAGGTATTGAACATATCTGACCCTCACAATCCTTATCTGTAAATTGGGATTACAACCTTTTAATTTC
AGGGAGCTGACAAAAAAAATCTGAAAAATAGTTCTTATCTCACACAGGTGAGTTTTCAAGGAGATAACCTATTTA
AAGTACATAGCACAGCGCTTGACCATTCAACTGCGCTTACAGAGCAAATGTTCAATGGGAAAATGAATGTAAATC
TACAAATCTGAATGAATATGTGTATTTTTCTGGAGAGAGGATATTTACCTTTCTTCAAATTCTCAAAGGGCTCTG
TGATTTAAAAAAGGTTAGGAATCACTGATAGATGTTGGTAAAAGGTGGCAGTCACAGTACATTTCTGTGTCCATA
AGTTATTCCTATGAATATCTTTATAGATAAAGTCAGGATGTTGGTCAGACATCACAGAAGAAATTGGCCTTGTAA
GTTTCATGTGACCCTGTGGTACAGTATGTGTGGCAATTTTGCCCATCACGGATTTTTTTTTATTGGTATTTGCAT
CTGATTATAAAACTAATGCATGATCATTGCAAAAAATGTAGATAAAGAAGAGCAAAATGAAAATAAAGATTTCCC
CCCACCGTTCCACCACCCAGAAATAATCATGGTTTAAATGTTAATATACAACCTTACAATTGTTTTCTATATAAA
TGAAAACATAGATTTCTTTATTTCATTATTTTCCATAAAAAATGGATCATGTTTATGTCATGTTTGGCTAATGGC
AAGACCCTGGCACCCAGTCTGGGCTCAAATTCTGCCTCATTGTTACTTAGCCCTGTGACATTGGGTAAATTACAC
TTTTTTTTTTTTTTTTTTTTTGAGACGGGGTCTCGCTCTGTCGCCCAGGCTGGAGTGCAGTGGCACGATCTCGGC
TCACTGCAAGTCCGCCTCCTGGGTTCACGCCATTCTTCTGCCTCAGCCTCCCGAGTAGCTGGGACTACAGGCGCC
TGCCACCACGCCTGGCTCTTTTTTTTTTTTTTTTTTTTTTTAGTACAGACGGGGTTTCACCATGTTAGCCAGGGT
GGTCTCAATCTCCTGACCTCGTGATTCGCCCGCCTCAGCCTCCCAAAGTGCTGGTGTGAGCCACCGTGCCCAGCC
TTACTTTTTTTTTTGAGAGGGGGTCTCACTCTGTCACCCAGGTTGGAGTGCAGTGGCGCGATCTCTGCTCAGTGC
AAACTCCACCTCCCGGGTTTAAGCAGTTCTCCTGTCGTAGTCTCCTGAGTAGCTGGGATTACAGGCACACCACCA
CGGCCAGCTAATTTTTGTATTTTCAGTAGAGACGGGTTTCACCATGTTGCCCAAGCTGGTCTCGAACTCCTGGCC
TCAAGTGATCTGCCCGCCTTGGCCTCCCAGAGTGCTGGGATTACAGGTGTGAGCCACCGCACCCGGCCTCTTTTT
TCTTTTTTAGTCTATCATACCTTGCAAATACAGTGGTTCTTCCTATGTGTTGGTTTTGATATTTATGTAATCAAA
CACATCAGTTTTTCCTTTCTGATTTCTGACTTTGGGGTCATGCTGAGAAAGTCCTTTCCTACCTGAAGATAATAC

FIGURE 5959B

AGTATATACGTTTCTTACTAGTATTTTTGTGGATTTTTAAAATATTTAAATCTTTAGTCCATCTGAACTTGTTCT
TCTATCAGAAATGCCACATTTAATAAATAATAAGTCCCATGGTATCAGATGGCTGGAAGGACCTCTTTCGAAACT
TTGTTTAATTCCATTAATCTGTGTATTCTTATTCTAATGCTAATAGTTCCACACTAGCTTCCTTTATCTTTTTTT
TCTTTTTTTTTTTTTTTTTGAGCTGGAGTTTCGCTCTTGTTGCCCAGGCTGGAGTACAATGTCACGATCTCGGTT
CACCGCAACCTCCGCCTCCCAGGTTCAAGCAATTCTCCTGCCTCATCCTCGCGAGTAGCTGGAATTACAGGCATG
CGCCACCACGCCTAGCTATTTTGTATTTTTAGTAGAGATGGGGTTTCTCCATGTTGGTCAGGCTGGTCTCAAACT
CCCAGCCTCAGGTGATCTGCCTGCCTCGGCCTCCCAAAATGCTGTTATTACAGGCGTGAGCCACCACGCCCAGCC
TTCATCTTTTAATGAATGTACATGTATGTAATCTTTTAGGTGAACTTTTTGTAATGTTGTGCCAAGTTCCTTAAA
AAGCCCTTTTGGAAGCTGGGCAGGTGGCCACGCCTGTAATCCCAGCATTTTGGGAGTCTGAGGCAGGTGGATCAC
TTGAGGCCAGGAGTTCAAGACTAGCCTAGCCAAAATGCAAAACCCTGTCTCTACTAAAGATACAAAAATTAGCCG
GATGCGATGGCACATGCCTGTAATCTCAGCTACTCGGGAGGCTGAGGTAGAAGAATCGCTTGAACCGGGGAGGCA
GAGGTTGCAGTGAGCAAGATGGCGCCACTGCACTCCAGCCTGGGTGACAGAGGGAGACTCCATCTCAAAAAAAAA
AAAAAAAAAAAAAGATAAAAAGGAAACCTAAGTACTCTTGGGCTTTGTTAAGGATTTTGTTAAATATACAAAGGAT
TGCAGGGAAAATTAACTTATTTTTAATATTGAGTATGCTTATCCAAGAGCAAAATAATATTTCTCCATTTATTCA
AATCATTTAGGAGCATCATAGTTTTAACATATGGGCCTTGCACGTATCTTAAATTTATCTCTAGGCATTTTAGGT
TGTTCAGTTGTTCTTGTGAATGGGATCTTTTTCTCCAAATAGGATTATTGTTGATATCTGTTGATTATGTTAACT
TTGTAGTTTCTGACTTTACTGAACTGTCTTCTTAGATCTAATACTCTTTTCAATTTCATCATATATTTCTCATTC
CTATTTTGTTTGGGGTTTTTAGGGCGGGAATATTAACGGGATAAGAGAGACAAAAGAAAATCTGGAAAAACAATT
CATTTTACCTTACATTGCTTGTGATTACTACCACACTATTACTGGGTTGGAAAAAATTGTGAAATCCCAAGGTGC
CTAATAAATGGGAGGTACCTAAGTGTTCATTTAATGAATTGTAATGATTATTGGAATTTCTCTTTCAGTGAGAAG
CTCTTCATGGAGATGGCAGAGCTCATGGTCTCAGAAGGCTGGAAGGATGCAGGTTATGAGTACCTCTGCATTGAT
GACTGTTGGATGGCTCCCCAAAGAGATTCAGAAGGCAGACTTCAGGCAGACCCTCAGCGCTTTCCTCATGGGATT
CGCCAGCTAGCTAATTATGTGAGTTTATAGATAATGTTCTTGTTCATTCAGAGGACTGTAAGCACTTCTGTACAG
AAGCTTGTTTAGAAACAGCCCTCATGGCCGGGCGTGGTGGCTCACGCTGTAATCCCAACACTTTGGGAGGCCGAG
GCGGGTGGATCACCTGAGGTCAAGAGTTCAAGACCAGCCTGGCCAACATGGTGAAACCCCAACTCTATTAAAAGT
ACAAAAAATTAGCTGGGCATGGTGGTGAACGCCTGTAACCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCGCT
TGAACCCAGGAGGTGGAAGTTTCAGTGAGCTGAGATCACGCCATTGCACTCTAGCCTGGGCAACAAAAGAGAAAC
TCCATCTCAAAAAAAAAAACAAGGAAAAAAAGAAACAGCCCTCATGACACTTAGAAAGTAGAATAGCTGGCTGTT
ATCTGAACATTGAATTGTAAGGCTTATCAGGTGGACTTTGCATTCCATCAGCAGACAATTTTTTTTTTTTTTTTT
TTTTGAGATGGAGTCTCATTCTGTCTCCCAGGCTGGAGGGCAGTGGTGCGATCTCGGCTCACTGCAAGCTCCACC
TCCTGGGTTCATGCCATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGACCACAGGCACCCGCCACCATGCCCAGT
TAATTTTTTGTATTTTTAGTAGAGACGGGGTTTCACCATGTTAGCCAAGATGGTCTCGATCTCCTGACCTCGTGA
TCCGCCCACCTCGGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACCGCGCCTAGCCTACAAATGTTTTGTA
ATAGCTCTTGAGGCCCATCTTGGAGTTCTCCTTTTGCTAAAACCACTGAACTCTCTAGGAGGAAAAAGGAACTTG
GTTCTTGACATATGTGTGCATGTATTTCCATATAACCTTTAGGAAGCTATTGCAATGGTACTATAAACTAGAATT
TTAGAAGATAGAAGGAAAATATTCTGGAGATCATTGAAGAGAAATGGAGTCCAACACTAGTTAAAGATGATGAAG
ACAGATTTTTTTTTTTGACGGAGTCTCGCTCTGTCGCCCAGGCTGGAGTGCAGTGGCACAATCTCAGCTCACTGC
AACCCTCCACCTCTTGGGTTCAAGTGATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGACTACAGGCGCACACCA
CCACGCCCGGCTAATTTTTGTATTTTTAGTAGAGACAAGGTTTCACCATATTCGCCAGGCTGGTCTCGAACTCCT
GACCTTGTAATCCGCCCACCTTGGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACCACGCCCGGCCGATGA
AGACAGATTTTATTCAGTACTACCACAGTAGAGGAAAGAGCCAAGTTCAATTCCAAATACAACAAAGACAGGTGG
AGATTTATAGCCAATGAGCAGATTGAGGGGGTCAGTGGATGGAATATTTAAGAAGACATCAAGGGTAGGGAGCTT
CTTGCTAAAGCTTCATGTACTTAAACAAGAAGGGTGGGGGATGAGGGAAATTGATCAGATATCAATGGTGGCAGT
ATTGACTTAGCAGGATTCTTGCTAAGAGGTCTTGCTAGGACAGACATAGGAAGCCAAGGTGGAGGTCTAGTCGAA
AAGAAGGCTCATCAGAGAAGTCTAACTAAAGTTTGGTCAAGAAGAGTCTTTGTCAAGGTAAATCTATCATTTCCC
TCAAAAGGTAATTTTCAGGATCCCATCAGGAAGATTAGCATGGCTGCTAGCTTTCTCCTCAGTTCTGGGCTATAG
CTCACATGCCTAGTTTGAACTAGCTCAGCAGAACTGGGGGATTTATTCTTTGTCTTCCAACAAACTCATCTGGAT
GATTTTGGGGGTTTGTGGGGAAAAGCCCCCAATACCTGGTGAAGTAACCTTGTCTCTTCCCCCAGCCTGGAATGG

FIGURE 5959C

TTCTCTCTTTCTGCTACCTCACGATTGTGCTTCTACAATGGTGACTCTTTTCCTCCCTCTCATTTCAGGTTCACA
GCAAAGGACTGAAGCTAGGGATTTATGCAGATGTTGGAAATAAAACCTGCGCAGGCTTCCCTGGGAGTTTTGGAT
ACTACGACATTGATGCCCAGACCTTTGCTGACTGGGGAGTAGATCTGCTAAAATTTGATGGTTGTTACTGTGACA
GTTTGGAAAATTTGGCAGATGGTAATGTTTCATTCCAGAGATTTAGCCACAAAGGAAAGAACTTTGAGGCCATGG
TAGCTGAGCCAAAGAACCAATCTTCAGAATTTTAAATACCCTGTCACAATACTGGAAATAATTATTCTCCATGTG
CCAGAGCTCCCATCTCTTCTCTTTCAGTTCATTAATTAATTAATTAATTCATGTAAAATCCATGCATACCTAACC
ATAGCTAATATTGTGCACTTATAATTCAAGAGGGCTCTAAGAGTTAATTAGTAATTGTAACTCTCTATAACATCA
TTTAGGGGAGTCCAGGTTGTCAATCGGTCACAGAGAAAGAAGCATCTTCATTCCTGCCTTTCCTCAATATACACA
CCATCTCTGCACTACTTCCTCAGAACAATCCCAGCAGTCTGGGAGGTACTTTACACAATTTAAGCACAGAGCAAC
TGCCTGTCCCTGCTGCTAGTTTAAACATGAACCTTCCAGGTAGCCTCTTCTTAAAATATACAGCCCCAGCTGGGC
ATGATGGCTCATGCCTGTAATCCTAGCACTTTGGGAGGCTGAGGCGGGTGGATTACTTGAGGTCAGGAGTTCGAG
ACCACCCTGGCCAACATGGTGAAACCCCATCTCTAGTAAAAATACAAAAATTAGCTGACTTTGGTGGCACATGCC
TGTAATCCCAGCTACTTGGGAAGCTGAGACAGAAGAGTCACTTGAACCTGGGAAACAGAGGTTGCAGTGAGCCAA
GATCGCACCACTGCACTCCACCCTGGATGACAGACTGAACCCCATCTCAAAAAATTAAAATAAAATAAAATAAAA
TAACTATATATATAGCCCCAGCTGGAAATTCATTTCTTTCCCTTATTTTACCCATTGTTTTCTCATACAGGTTAT
AAGCACATGTCCTTGGCCCTGAATAGGACTGGCAGAAGCATTGTGTACTCCTGTGAGTGGCCTCTTTATATGTGG
CCCTTTCAAAAGGTGAGATAGTGAGCCCAGAATCCAATAGAACTGTACTGATAGATAGAACTTGACAACAAAGGA
AACCAAGGTCTCCTTCAAAGTCCAACGTTACTTACTATCATCCTACCATCTCTCCCAGGTTCCAACCACTTCTCA
CCATCCCCACTGCTGTAATTATAGCCTAAGCTACCATCACCTGGAAAGTCATCCTTGTGTCTTCCCCTTTATTTC
ACCATTCATGTCCTGTCTATCAACAGTCCTTCCACCAGTATCTCTAAAATATCTCCTGAATCAGCCCACTTCCTT
CCATCTTCACTACATGCACCCTGGCCTTCCAAGCTACTATCGGCTCTCAACCAGACTGCTGGGACCACCTGATCT
CTCTGCTTCCACTCTGTCTCAACCCCCATCTATTTTCCAAGCAGCACTAGAGTTATCATATTAAAATGTAAATAT
CAGTTTTTTTTTTAAAGAAAAAAACCCTGAGACTTAACAGAGTTATAAAAAATATAAATGTCATCATCAGTTCCC
TGCTTAAAACCCTTAACTCGCTTCCAATTGCACTTGGAATGAAACCAAACTGCACTGATCCAGCCCTTGCCTGCC
TCCCCAAAGTCCAAGGGGTCATGGCTCTTTCCCTGGCTACACTGGTTTTCTTTCTGTCCCTCAACACTGCAAGCC
TATTGCTGCCCCAGGGCCTTTACACTTGCTTTTTTTCTGCCTAGAACAGTTCTTCCCCAAAGATTTTTAAAGGGC
CGGGCTCCTTAACATTGAAGTCGCAGACCAAACGCCACATATGCAGACAGTTCTTCTCTAACTACTTTAAAATAG
CCCTCTGTCCATTCATTCTTCATCACATTAACCTGTTTAATTTTCTTCTCAGAGCTCCACACTATTTGGAAGTAT
TTGTTGACTTGTTACCATGTCTCCCCACTAGAGTGTAAGTTTCATGAGGGCAGGGACCTTGTCTGACTTTGACTG
TATCTCTCGCATATGGTTAAGTGTTAAATAGTTATTTATGGAATGAATCCCTATTATTCCCTCATTATCTCTGCA
AAATAGTCTTTTTTCTCAACATCTTAAACCTGATATCCCACCTGCCTATCTACAAACTTTTTTTTTGCGACAGAG
TCTCACTGTCACCCAGGCTAGAGTGCAGTGGCGCCATCTCGGCTCACTGCAACCTCCGCCTCCCGGGTTTAAGCG
ATTCTCTTGCCTCAGCCTCCCAGTAGCTGGGATTATAGGCGTGCGCTACCACATCTGGCTAATTTTTGTATTTTT
AGTAGAGATGGTTTCACCATGTTGGCCAGGCTTGTCTCGAACTCCTGACCTCAGATGATCCACCTGCCTCGGCCT
CCCAAAGTGCTGGGATTACAGGCATGAGCCACCGTGCCCAGCCTCTACAAACTTTTTATTCCATTAACAAACTAT
ATGCTGGGATTTAAGTTTTCTTAATACTTGATGGAGTCCTATGTAATTTTCGAGCTTTTAATTTTACTAAGACCA
TTTTAGTTCTGATTATAGAAGTAAATTAACTTTAAGGGATTTCAAGTTATATGGCCTACTTCTGAAGCAAACTTC
TTACAGTGAAAATTCATTATAAGGGTTTAGACCTCCTTATGGAGACGTTCAATCTGTAAACTCAAGAGAAGGCTA
CAAGTGCCTCCTTTAAACTGTTTTCATCTCACAAGGATGTTAGTAGAAAGTAAACAGAAGAGTCATATCTGTTTT
CACAGCCCAATTATACAGAAATCCGACAGTACTGCAATCACTGGCGAAATTTTGCTGACATTGATGATTCCTGGA
AAAGTATAAAGAGTATCTTGGACTGGACATCTTTTAACCAGGAGAGAATTGTTGATGTTGCTGGACCAGGGGGTT
GGAATGACCCAGATATGGTAAAAACTTGAGCCCTCCTTGTTCAAGACCCTGCGGTAGGCTTGTTTCCTATTTTGA
CATTCAAGGTAAATACAGGTAAAGTTCCTGGGAGGAGGCTTTATGTGAGAGTACTTAGAGCAGGATGCTGTGGAA
AGTGGTTTCTCCATATGGGTCATCTAGGTAACTTTAAGAATGTTTCCTCCTCTCTTGTTTGAATTATTTCATTCT
TTTTCTCAGTTAGTGATTGGCAACTTTGGCCTCAGCTGGAATCAGCAAGTAACTCAGATGGCCCTCTGGGCTATC
ATGGCTGCTCCTTTATTCATGTCTAATGACCTCCGACACATCAGCCCTCAAGCCAAAGCTCTCCTTCAGGATAAG
GACGTAATTGCCATCAATCAGGACCCCTTGGGCAAGCAAGGGTACCAGCTTAGACAGGTAAATAAGAGTATATAT
TTTAAGATGGCTTTATATACCCAATACCAACTTTGTCTTGGGCCTAAATCTATTTTTTTCCCTTGCTCTTGATGT

FIGURE 5959D

TACTATCAGTAATAAAGCTTCTTGCTAGAAACATTACTTTATTTCCAAAATAATGCTACAGGATCATTTTAATTT
TTCCTACAAGTGCTTGATAGTTCTGACATTAAGAATGAATGCCAAACTAACAGGGCCACTTATCACTAGTTGCTA
AGCAACCACACTTTCTTGGTTTTTCAGGGAGACAACTTTGAAGTGTGGGAACGACCTCTCTCAGGCTTAGCCTGG
GCTGTAGCTATGATAAACCGGCAGGAGATTGGTGGACCTCGCTCTTATACCATCGCAGTTGCTTCCCTGGGTAAA
GGAGTGGCCTGTAATCCTGCCTGCTTCATCACACAGCTCCTCCCTGTGAAAAGGAAGCTAGGGTTCTATGAATGG
ACTTCAAGGTTAAGAAGTCACATAAATCCCACAGGCACTGTTTTGCTTCAGCTAGAAAATACAATGCAGATGTCA
TTAAAAGACTTACTTTAAAATGTTTATTTTATTGCCAACTACTACTTCCTGTCCACCTTTTTCTCCATTCACTTT
AAAAGCTCAAGGCTAGGTGGCTCATGCCTGTAATCCCAGCACTTTGGGAGGCTGAGGCGGGCAGATCACCTGAGG
TCGGGACTTTGAGACCCGCCTGGACAACATGGTGAAACCCCATTTCTAATAAAAATATAAAAATTAGCCAGGTGT
GGTGGCGCACCTGTGGTCCCAGCTACTCTGGGGGCTGAGGCATGAGAATCGCTTGAACCCGGGAGTGGAGGTTGC
ATTGAGCTGAGATCATGCCACCTCACTCCAGCCTGGGCAACAAAGATTCCATCTCAAAAAAAAAAAAAAAGCCAG
GCACAGTGGCTCATGCCTGGAATCCCAGCACTTTTGGAAGCTGAGGCAGGCAGATCACTTGAGGTTAGGATTTCA
AGACCAGCCTGGCTAACATAGTAAAGCCCTGTCTCTACTAAAAATACAAAAATTAGCCAGGTATGGTGGCGAGCT
TCTGTAGCCCCAGCTACTCAGGAGACTGAGGCAGGAGAATCACTTGAACCCGGGAAGTGGGGGGGTGCAGTGACC
CAAGATCACGCCACTGCATTCCAGCCTGGGCAACAGAGCAAGACTCCATCTCAAAAAAAAAAGTTCTATTTCCTT
GAATAAAATTTTCCGAAGTTTAAACTTTAGGAATAAAACTATTAAACCCGTATTTACTCATCCAGATACCCACCC
CCCTTGTTGAGATTCTCTCCCAATTATCAAAATGTGTAGCATATTTAACTACCAAGAGCTAAACATCATTAAGAC
TGAAATGTATTAAGAAGGATGTATAGGCCAGGCACGGTGTCTCACGCCTGTAATCCCAACACTTTGGGAGGCCAA
GTCGGGCGGATCACGAGGTCAGGAGATGGAGACCATCCTGGCCAACATGGTGAAACCCCCTCTCTACTAAAAATA
CAAAAATTAGCCAGGCAGGTGGCAGGCACCTGTAATCCCAGCTACTCCAGAGGCTGAGGCAGGACAATCACTTGA
ACCTGGGAGGCAGAGGCTGCAGTGAGCTGAGGTTGTACCAATTGCACTCCAGCCTAGGTAACGAGCAACACTCCA
TCTCAAAAAAAGAAAAAAAAAAAGATGTATAATTTGGAACTGTTAAGAGGCATTTTAAAGA

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FIGURE 5960

GGCACGAGGAAAACATGTTCGAGTTCTGGGATTGGGTGGGAGGACGCTACTCGCTGTGGTCGGCCATCGGACTCT
CCATTGCCCTGCACGTGGGTTTTGACAACTTCGAGCAGCTGCTCTCGGGGGCTCACTGGATGGACCAGCACTTCC
GCACGACGCCCCTGGAGAAGAACGCCCCCGTCTTGCTGGCCCTGCTGGGTATCTGGTACATCAACTGCTTTGGGT
GTGAGACACACGCCATGCTGCCCTATGACCAGTACCTGCACCGCTTTGCTGCGTACTTCCAGCAGGGCGACATGG
AGTCCAATGGGAAATACATCACCAAATCTGGAACCCGTGTGGACCACCAGACAGGCCCCATTGTGTGGGGGGAGC
CAGGGACCAATGGCCAGCATGCTTTTTACCAGCTCATCCACCAAGGCACCAAGATGATACCCTGTGACTTCCTCA
TCCCGGTCCAGACCCAGCACCCCATACGGAAGGGTCTGCATCACAAGATCCTCCTGGCCAACTTCTTGGCCCAGA
CAGAGGCCCTGATGAGGGGAAAATCGACGGAGGAGGCCCGAAAGGAGCTCCAGGCTGCGGGCAAGAGTCCAGAGG
ACCTTGAGAGGCTGCTGCCACATAAGGTCTTTGAAGGAAATCGCCCAACCAACTCTATTGTGTTCACCAAGCTCA
CACCATTCATGCTTGGAGCCTTGGTCGCCATGTATGAGCACAAGATCTTCGTTCAGGGCATCATCTGGGACATCA
ACAGCTTTGACCAGTGGGGAGTGGAGCTGGGAAAGCAGCTGGCTAAGAAAATAGAGCCTGAGCTTGATGGCAGTG
CTCAAGTGACCTCTCACGACGCTTCTACCAATGGGCTCATCAACTTCATCAAGCAGCAGCGCGAGGCCAGAGTCC
AATAAACTCGTGCTCATCTGCAGCCTCCTCTGTGACTCCCCTTTCTCTTCTCGTCCCTCCTCCCCGGAGCCGGCA
CTGCATGTTCCTGGACACCACCCAGAGCACCCTCTGGTTGTGGGCTTGGACCACGAGCCCTTAGCAGGGAAGGCT
GGTCTCCCCCAGCCTAACCCCCAGCCCCTCCATGTCTATGCTCCCTCTGTGTTAGAATTGGCTGAAGTGTTTTTG
TGCAGCTGACTTTTCTGACCCATGTTCACGTTGTTCACATCCCATGTAGAAAAATAAAGATGCCACGGAGGAGGT
TGTAGGCTCAGCCTCTGATTTTTTTTTTCCTGTGATGGTGCTTTATGTAGCAGAGGGCAGGAGCGCTCAGCAGGA
CGCAGGCTGTGCCTCTGCGGACACTTAACACTAAGTGGTGAGCGGGTCTAGAGTGGAGCAAGGTGCCCTGAGAAG
ACAATAGTGGGGTGGGGGCACAATCAGTCAGGACGGCAACTTGGCCTGTGTCACCAAATCCCAAGACTGTTTTCC
ACTCCTCACCTCTGTGACTGGAGAAATTGGATACTCTGTTCACTCGATGGTTCTAAAAACTGCATTGAGATTATG
TTTGTTTCGGGTGAATTCCTGGACAAGACCGAGGATGACTGCCATCTCCTGGCAAGACGCTCAGGTAGTTCTTTT
GCTTTAAAAGGCAGATATTGAAAACTGGAATTTTTTTTTTTTGAGTCTCGCTCTGTCACCCAGACTGGAGTGCAG
TGGTGCAATCTCGGCTCACTGCAACCTCCGCCTCCCGGGTTCAAGCTATTCTCCTGCCTCAGCCTCCCGAGTAGC
TGGGATTACACGGCGCACACCACCATACCCAGCTAATTTTTGTATTTTTAGTAGTGAAGGGGTTTTACCATGTTG
GGCAGGCTGGTCTTGAACTCCTGACCTCAGGTGATCTGCCCGCCTCAGCCTCCCACAGTGCTGGGATTACAGGTA
TGAGCCACCACGCCCGGCCCATTTTTTTTTTTTTTTTGACAACTTTTTTTTTTTTTGAGACAGGGTCTTGTTCC
ATTGCCCAGACTGGAGTGCAGTGGCATGATCACAGCTCACTGCAGCCAGTAATCCTCTTGCCTCAGCCTCCCAAG
TAGTTGAGACTACAGGTTGTACCACTATGCCCTGCTAGTTTTTTCATTTTTTGTAGAGAGACGGGTCTTTTTTTT
TTTTGAGACGGAGTCTCGCTCTGTCGCCCAAGCTGGAGTGCAGTAGCACGGTCTCAGCTCATTGCAAGCTCCGCC
TCCCAGGTTCACGCCATTCTCCTGCCTCAGACTCCTGTGTAGCTGGGAGTACAGGCACCTGCCACCATGCCCGGC
TAATTTTTTATATATTTTTTTAGCAGAGACAGTGTCTCACTGTGTTAGTCAGGATGGTCTCGATCTCCTGACCTC
GTGATCCGCCCGCCTCAGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACCGCGCCCAGCAAGGCGGGTCTT
GCTGTGTTTCCCAGACTAGACTGGTCTTGAATTCCAGGGCTCAAGAGATCTCCCACCTCAGCCTCCCACAGTGCT
GGGATTACAGGCGTGAGCCGCCACACCCAGCCTATTCAAAATTTTTTTTTCTTAGAGACAGGGTCTTTGTTGCCC
AGGCTGGACTGCAGTGATACAATCATAGCTGACTGAAGCCTCAAATTCCCAGGCTAAGGTGATCTTCTCACCTCA
GCCTTCCAAGTAGCTGGGTCCGCAGATGCATGCCAGTACACCCAGCTCATTTAAAAAAAAATTTTTTTCTTTTTT
GAGAGTCTTGCTTTGTTGCCCAGGCTGGAGTGCAGTGGTGTGATCTCGGCTCACTGCAAGCTCCACCTCCCGGCT
TCACGCCATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGACTACAGGTGCCCGCCACCACACCCGGCTAATTTTT
TGTATTTTTAGTAGAGACGGGGTTTCACCGTGTTAGCCAGGATGGTCTTGATCTCCTGACCTCATGATCCGCCTG
CTTTGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGTCACCGCGCCCGGCTCATTTTAAAATTTTTGTAGATCA
GTGTACTGTTGTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 5961

TCTTGCTGCGCCTCCGCCTCCTCCTCTGCTCCGCCACCGGCTTCCTCCTCCTGAGCAGTCAGCCCGCGCGCCGGC
CGGCTCCGTTATGGCGACCCGCAGCCCTGGCGTCGTGATTAGTGATGATGAACCAGGTTATGACCTTGATTTATT
TTGCATACCTAATCATTATGCTGAGGATTTGGAAAGGGTGTTTATTCCTCATGGACTAATTATGGACAGGACTGA
ACGTCTTGCTCGAGATGTGATGAAGGAGATGGGAGGCCATCACATTGTAGCCCTCTGTGTGCTCAAGGGGGGCTA
TAAATTCTTTGCTGACCTGCTGGATTACATCAAAGCACTGAATAGAAATAGTGATAGATCCATTCCTATGACTGT
AGATTTTATCAGACTGAAGAGCTATTGTAATGACCAGTCAACAGGGGACATAAAAGTAATTGGTGGAGATGATCT
CTCAACTTTAACTGGAAAGAATGTCTTGATTGTGGAAGATATAATTGACACTGGCAAAACAATGCAGACTTTGCT
TTCCTTGGTCAGGCAGTATAATCCAAAGATGGTCAAGGTCGCAAGCTTGCTGGTGAAAAGGACCCCACGAAGTGT
TGGATATAAGCCAGACTTTGTTGGATTTGAAATTCCAGACAAGTTTGTTGTAGGATATGCCCTTGACTATAATGA
ATACTTCAGGGATTTGAATCATGTTTGTGTCATTAGTGAAACTGGAAAAGCAAAATACAAAGCCTAAGATGAGAG
TTCAAGTTGAGTTTGGAAACATCTGGAGTCCTATTGACATCGCCAGTAAAATTATCAATGTTCTAGTTCTGTGGC
CATCTGCTTAGTAGAGCTTTTTGCATGTATCTTCTAAGAATTTTATCTGTTTTGTACTTTAGAAATGTCAGTTGC
TGCATTCCTAAACTGTTTATTTGCACTATGAGCCTATAGACTATCAGTTCCCTTTGGGCGGATTGTTGTTTAACT
TGTAAATGAAAAAATTCTCTTAAACCACAGCACTATTGAGTGAAACATTGAACTCATATCTGTAAGAAATAAAGA
GAAGATATATTAGTTTTTTAATTGGTATTTTAATTTTTATATATGCAGGAAAGAATAGAAGTGATTGAATATTGT
TAATTATACCACCGTGTGTTAGAAAAGTAAGAAGCAGTCAATTTTCACATCAAAGACAGCATCTAAGAAGTTTTG
TTCTGTCCTGGAATTATTTTAGTAGTGTTTCAGTAATGTTGACTGTATTTTCCAACTTGTTCAAATTATTACCAG
TGAATCTTTGTCAGCAGTTCCCTTTTAAATGCAAATCAATAAATTCCCAAAAATTT

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FIGURE 5962

MATRSPGVVISDDEPGYDLDLFCIPNHYAEDLERVFIPHGLIMDRTERLARDVMKEMGGHHIVALCVLKGGYKFF
ADLLDYIKALNRNSDRSIPMTVDFIRLKSYCNDQSTGDIKVIGGDDLSTLTGKNVLIVEDIIDTGKTMQTLLSLV
RQYNPKMVKVASLLVKRTPRSVGYKPDFVGFEIPDKFVVGYALDYNEYFRDLNHVCVISETGKAKYKA

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FIGURE 5963

GCTATAAGGATCACGCGCCCCAGTCGACGCTGAGCTCCTCTGCTACTCAGAGTTGCAACCTCAGCCTCGCTATGG
CTCCCAGCAGCCCCCGGCCCGCGCTGCCCGCACTCCTGGTCCTGCTCGGGGCTCTGTTCCCAGGACCTGGCAATG
CCCAGACATCTGTGTCCCCCTCAAAAGTCATCCTGCCCCGGGGAGGCTCCGTGCTGGTGACATGCAGCACCTCCT
GTGACCAGCCCAAGTTGTTGGGCATAGAGACCCCGTTGCCTAAAAAGGAGTTGCTCCTGCCTGGGAACAACCGGA
AGGTGTATGAACTGAGCAATGTGCAAGAAGATAGCCAACCAATGTGCTATTCAAACTGCCCTGATGGGCAGTCAA
CAGCTAAAACCTTCCTCACCGTGTACTGGACTCCAGAACGGGTGGAACTGGCACCCCTCCCCTCTTGGCAGCCAG
TGGGCAAGAACCTTACCCTACGCTGCCAGGTGGAGGGTGGGGCACCCCGGGCCAACCTCACCGTGGTGCTGCTCC
GTGGGGAGAAGGAGCTGAAACGGGAGCCAGCTGTGGGGGAGCCCGCTGAGGTCACGACCACGGTGCTGGTGAGGA
GAGATCACCATGGAGCCAATTTCTCGTGCCGCACTGAACTGGACCTGCGGCCCCAAGGGCTGGAGCTGTTTGAGA
ACACCTCGGCCCCCTACCAGCTCCAGACCTTTGTCCTGCCAGCGACTCCCCCACAACTTGTCAGCCCCCGGGTCC
TAGAGGTGGACACGCAGGGGACCGTGGTCTGTTCCCTGGACGGGCTGTTCCCAGTCTCGGAGGCCCAGGTCCACC
TGGCACTGGGGGACCAGAGGTTGAACCCCACAGTCACCTATGGCAACGACTCCTTCTCGGCCAAGGCCTCAGTCA
GTGTGACCGCAGAGGACGAGGGCACCCAGCGGCTGACGTGTGCAGTAATACTGGGGAACCAGAGCCAGGAGACAC
TGCAGACAGTGACCATCTACAGCTTTCCGGCGCCCAACGTGATTCTGACGAAGCCAGAGGTCTCAGAAGGGACCG
AGGTGACAGTGAAGTGTGAGGCCCACCCTAGAGCCAAGGTGACGCTGAATGGGGTTCCAGCCCAGCCACTGGGCC
CGAGGGCCCAGCTCCTGCTGAAGGCCACCCCAGAGGACAACGGGCGCAGCTTCTCCTGCTCTGCAACCCTGGAGG
TGGCCGGCCAGCTTATACACAAGAACCAGACCCGGGAGCTTCGTGTCCTGTATGGCCCCCGACTGGACGAGAGGG
ATTGTCCGGGAAACTGGACGTGGCCAGAAAATTCCCAGCAGACTCCAATGTGCCAGGCTTGGGGGAACCCATTGC
CCGAGCTCAAGTGTCTAAAGGATGGCACTTTCCCACTGCCCATCGGGGAATCAGTGACTGTCACTCGAGATCTTG
AGGGCACCTACCTCTGTCGGGCCAGGAGCACTCAAGGGGAGGTCACCCGCAAGGTGACCGTGAATGTGCTCTCCC
CCCGGTATGAGATTGTCATCATCACTGTGGTAGCAGCCGCAGTCATAATGGGCACTGCAGGCCTCAGCACGTACC
TCTATAACCGCCAGCGGAAGATCAAGAAATACAGACTACAACAGGCCCAAAAAGGGACCCCCATGAAACCGAACA
CACAAGCCACGCCTCCCTGAACCTATCCCGGGACAGGGCCTCTTCCTCGGCCTTCCCATATTGGTGGCAGTGGTG
CCACACTGAACAGAGTGGAAGACATATGCCATGCAGCTACACCTACCGGCCCTGGGACGCCGGAGGACAGGGCAT
TGTCCTCAGTCAGATACAACAGCATTTGGGGCCATGGTACCTGCACACCTAAAACACTAGGCCACGCATCTGATC
TGTAGTCACATGACTAAGCCAAGAGGAAGGAGCAAGACTCAAGACATGATTGATGGATGTTAAAGTCTAGCCTGA
TGAGAGGGGAAGTGGTGGGGGAGACATAGCCCCACCATGAGGACATACAACTGGGAAATACTGAAACTTGCTGCC
TATTGGGTATGCTGAGGCCCCACAGACTTACAGAAGAAGTGGCCCTCCATAGACATGTGTAGCATCAAAACACAA
AGGCCCACACTTCCTGACGGATGCCAGCTTGGGCACTGCTGTCTACTGACCCCAACCCTTGATGATATGTATTTA
TTCATTTGTTATTTTACCAGCTATTTATTGAGTGTCTTTTATGTAGGCTAAATGAACATAGGTCTCTGGCCTCAC
GGAGCTCCCAGTCCATGTCACATTCAAGGTCACCAGGTACAGTTGTACAGGTTGTACACTGCAGGAGAGTGCCTG
GCAAAAAGATCAAATGGGGCTGGGACTTCTCATTGGCCAACCTGCCTTTCCCCAGAAGGAGTGATTTTTCTATCG
GCACAAAAGCACTATATGGACTGGTAATGGTTCACAGGTTCAGAGATTACCCAGTGAGGCCTTATTCCTCCCTTC
CCCCCAAAACTGACACCTTTGTTAGCCACCTCCCCACCCACATACATTTCTGCCAGTGTTCACAATGACACTCAG
CGGTCATGTCTGGACATGAGTGCCCAGGGAATATGCCCAAGCTATGCCTTGTCCTCTTGTCCTGTTTGCATTTCA
CTGGGAGCTTGCACTATTGCAGCTCCAGTTTCCTGCAGTGATCAGGGTCCTGCAAGCAGTGGGGAAGGGGGCCAA
GGTATTGGAGGACTCCCTCCCAGCTTTGGAAGCCTCATCCGCGTGTGTGTGTGTGTGTGTATGTGTAGACAAGCT
CTCGCTCTGTCACCCAGGCTGGAGTGCAGTGGTGCAATCATGGTTCACTGCAGTCTTGACCTTTTGGGCTCAAGT
GATCCTCCCACCTCAGCCTCCTGAGTAGCTGGGACCATAGGCTCACAACACCACACCTGGCAAATTTGATTTTTT
TTTTTTTTTTCAGAGACGGGGTCTCGCAACATTGCCCAGACTTCCTTTGTGTTAGTTAATAAAGCTTTCTCAACT
GCC

FIGURE 5964

MAPSSPRPALPALLVLLGALFPGPGNAQTSVSPSKVILPRGGSVLVTCSTSCDQPKLLGIETPLPKKELLLPGNN
RKVYELSNVQEDSQPMCYSNCPDGQSTAKTFLTVYWTPERVELAPLPSWQPVGKNLTLRCQVEGGAPRANLTVVL
LRGEKELKREPAVGEPAEVTTTVLVRRDHHGANFSCRTELDLRPQGLELFENTSAPYQLQTFVLPATPPQLVSPR
VLEVDTQGTVVCSLDGLFPVSEAQVHLALGDQRLNPTVTYGNDSFSAKASVSVTAEDEGTQRLTCAVILGNQSQE
TLQTVTIYSFPAPNVILTKPEVSEGTEVTVKCEAHPRAKVTLNGVPAQPLGPRAQLLLKATPEDNGRSFSCSATL
EVAGQLIHKNQTRELRVLYGPRLDERDCPGNWTWPENSQQTPMCQAWGNPLPELKCLKDGTFPLPIGESVTVTRD
LEGTYLCRARSTQGEVTRKVTVNVLSPRYEIVIITVVAAAVIMGTAGLSTYLYNRQRKIKKYRLQQAQKGTPMKP
NTQATPP

FIGURE 5965A

GCGCGACCGTCCCGGGGGTGGGGCCGGGCGCAGCGGCGAGAGGAGGCGAAGGTGGCTGCGGTAGCAGCAGCGCGG
CAGCCTCGGACCCAGCCCGGAGCGCAGGGCGGCCGCTGCAGGTCCCCGCTCCCCTCCCCGTGCGTCCGCCCATGG
CCGCCGCCGGGCAGCTGTGCTTGCTCTACCTGTCGGCGGGGCTCCTGTCCCGGCTCGGCGCAGCCTTCAACTTGG
ACACTCGGGAGGACAACGTGATCCGGAAATATGGAGACCCCGGGAGCCTCTTCGGCTTCTCGCTGGCCATGCACT
GGCAACTGCAGCCCGAGGACAAGCGGCTGTTGCTCGTGGGGGCCCCGCGCGGAGAAGCGCTTCCACTGCAGAGAG
CCAACAGAACGGGAGGGCTGTACAGCTGCGACATCACCGCCCGGGGGCCATGCACGCGGATCGAGTTTGATAACG
ATGCTGACCCCACGTCAGAAAGCAAGGAAGATCAGTGGATGGGGGTCACCGTCCAGAGCCAAGGTCCAGGGGGCA
AGGTCGTGACATGTGCTCACCGATATGAAAAAAGGCAGCATGTTAATACGAAGCAGGAATCCCGAGACATCTTTG
GGCGGTGTTATGTCCTGAGTCAGAATCTCAGGATTGAAGACGATATGGATGGGGGAGATTGGAGCTTTTGTGATG
GGCGATTGAGAGGCCATGAGAAATTTGGCTCTTGCCAGCAAGGTGTAGCAGCTACTTTTACTAAAGACTTTCATT
ACATTGTATTTGGAGCCCCGGGTACTTATAACTGGAAAGGGATTGTTCGTGTAGAGCAAAAGAATAACACTTTTT
TTGACATGAACATCTTTGAAGATGGGCCTTATGAAGTTGGTGGAGAGACTGAGCATGATGAAAGTCTCGTTCCTG
TTCCTGCTAACAGTTACTTAGGTTTTTCTTTGGACTCAGGGAAAGGTATTGTTTCTAAAGATGAGATCACTTTTG
TATCTGGTGCTCCCAGAGCCAATCACAGTGGAGCCGTGGTTTTGCTGAAGAGAGACATGAAGTCTGCACATCTCC
TCCCTGAGCACATATTCGATGGAGAAGGTCTGGCCTCTTCATTTGGCTATGATGTGGCGGTGGTGGACCTCAACA
AGGATGGGTGGCAAGATATAGTTATTGGAGCCCCACAGTATTTTGATAGAGATGGAGAAGTTGGAGGTGCAGTGT
ATGTCTACATGAACCAGCAAGGCAGATGGAATAATGTGAAGCCAATTCGTCTTAATGGAACCAAAGATTCTATGT
TTGGCATTGCAGTAAAAAATATTGGAGATATTAATCAAGATGGCTACCCAGATATTGCAGTTGGAGCTCCGTATG
ATGACTTGGGAAAGGTTTTTATCTATCATGGATCTGCAAATGGAATAAATACCAAACCAACACAGGTTCTCAAGG
GTATATCACCTTATTTTGGATATTCAATTGCTGGAAACATGGACCTTGATCGAAATTCCTACCCTGATGTTGCTG
TTGGTTCCCTCTCAGATTCAGTAACTATTTTCAGATCCCGGCCTGTGATTAATATTCAGAAAACCATCACAGTAA
CTCCTAACAGAATTGACCTCCGCCAGAAAACAGCGTGTGGGGCGCCTAGTGGGATATGCCTCCAGGTTAAATCCT
GTTTTGAATATACTGCTAACCCCGCTGGTTATAATCCTTCAATATCAATTGTGGGCACACTTGAAGCTGAAAAAG
AAAGAAGAAAATCTGGGCTATCCTCAAGAGTTCAGTTTCGAAACCAAGGTTCTGAGCCCAAATATACTCAAGAAC
TAACTCTGAAGAGGCAGAAACAGAAAGTGTGCATGGAGGAAACCCTGTGGCTACAGGATAATATCAGAGATAAAC
TGCGTCCCATTCCCATAACTGCCTCAGTGGAGATCCAAGAGCCAAGCTCTCGTAGGCGAGTGAATTCACTTCCAG
AAGTTCTTCCAATTCTGAATTCAGATGAACCCAAGACAGCTCATATTGATGTTCACTTCTTAAAAGAGGGATGTG
GAGACGACAATGTATGTAACAGCAACCTTAAACTAGAATATAAATTTTGCACCCGAGAAGGAAATCAAGACAAAT
TTTCTTATTTACCAATTCAAAAAGGTGTACCAGAACTAGTTCTAAAAGATCAGAAGGATATTGCTTTAGAAATAA
CAGTGACAAACAGCCCTTCCAACCCAAGGAATCCCACAAAAGATGGCGATGACGCCCATGAGGCTAAACTGATTG
CAACGTTTCCAGACACTTTAACCTATTCTGCATATAGAGAACTGAGGGCTTTCCCTGAGAAACAGTTGAGTTGTG
TTGCCAACCAGAATGGCTCGCAAGCTGACTGTGAGCTCGGAAATCCTTTTAAAAGAAATTCAAATGTCACTTTTT
ATTTGGTTTTAAGTACAACTGAAGTCACCTTTGACACCCCATATCTGGATATTAATCTGAAGTTAGAAACAACAA
GCAATCAAGATAATTTGGCTCCAATTACAGCTAAAGCAAAAGTGGTTATTGAACTGCTTTTATCGGTCTCGGGAG
TTGCTAAACCTTCCCAGGTGTATTTTGGAGGTACAGTTGTTGGCGAGCAAGCTATGAAATCTGAAGATGAAGTGG
GAAGTTTAATAGAGTATGAATTCAGGGTAATAAACTTAGGTAAACCTCTTACAAACCTCGGCACAGCAACCTTGA
ACATTCAGTGGCCAAAAGAAATTAGCAATGGGAAATGGTTGCTTTATTTGGTGAAAGTAGAATCCAAAGGATTGG
AAAAGGTAACTTGTGAGCCACAAAAGGAGATAAACTCCCTGAACCTAACGGAGTCTCACAACTCAAGAAAGAAAC
GGGAAATTACTGAAAAACAGATAGATGATAACAGAAAATTTTCTTTATTTGCTGAAAGAAAATACCAGACTCTTA
ACTGTAGCGTGAACGTGAACTGTGTGAACATCAGATGCCCGCTGCGGGGGCTGGACAGCAAGGCGTCTCTTATTT
TGCGCTCGAGGTTATGGAACAGCACATTTCTAGAGGAATATTCCAAACTGAACTACTTGGACATTCTCATGCGAG
CCTTCATTGATGTGACTGCTGCTGCCGAAAATATCAGGCTGCCAAATGCAGGCACTCAGGTTCGAGTGACTGTGT
TTCCCTCAAAGACTGTAGCTCAGTATTCGGGAGTACCTTGGTGGATCATCCTAGTGGCTATTCTCGCTGGGATCT
TGATGCTTGCTTTATTAGTGTTTATACTATGGAAGTGTGGTTTCTTCAAGAGAAATAAGAAAGATCATTATGATG
CCACATATCACAAGGCTGAGATCCATGCTCAGCCATCTGATAAAGAGAGGCTTACTTCTGATGCATAGTATTGAT
CTACTTCTGTAATTGTGTGGATTCTTTAAACGCTCTAGGTACGATGACAGTGTTCCCCGATACCATGCTGTAAGG
ATCCGGAAAGAAGAGCGAGAGATCAAAGATGAAAAGTATATTGATAACCTTGAAAAAAAACAGTGGATCACAAAG
TGGAACAGAAATGAAAGCTACTCATAGCGGGGGCCTAAAAAAAAAAAAAGCTTCACAGTACCCAAACTGCTTTTTC

FIGURE 5965B

CAACTCAGAAATTCAATTTGGATTTAAAAGCCTGCTCAATCCCTGAGGACTGATTTCAGAGTGACTACACACAGT
ACGAACCTACAGTTTTAACTGTGGATATTGTTACGTAGCCTAAGGCTCCTGTTTTGCACAGCCAAATTTAAAACT
GTTGGAATGGATTTTTCTTTAACTGCCGTAATTTAACTTTCTGGGTTGCCTTTGTTTTTGGCGTGGCTGACTTAC
ATCATGTGTTGGGGAAGGGCCTGCCCAGTTGCACTCAGGTGACATCCTCCAGATAGTGTAGCTGAGGAGGCACCT
ACACTCACCTGCACTAACAGAGTGGCCGTCCTAACCTCGGGCCTGCTGCGCAGACGTCCATCACGTTAGCTGTCC
CACATCACAAGACTATGCCATTGGGGTAGTTGTGTTTCAACGGAAAGTGCTGTCTTAAACTAAATGTGCAATAGA
AGGTGATGTTGCCATCCTACCGTCTTTTCCTGTTTCCTAGCTGTGTGAATACCTGCTCACGTCAAATGCATACAA
GTTTCATTCTCCCTTTCACTAAAAACACACAGGTGCAACAGACTTGAATGCTAGTTATACTTATTTGTATATGGT
ATTTATTTTTTCTTTTCTTTACAAACCATTTTGTTATTGACTAACAGGCCAAAGAGTCTCCAGTTTACCCTTCAG
GTTGGTTTAATCAATCAGAATTAGAATTAGAGCATGGGAGGGTCATCACTATGACCTAAATTATTTACTGCAAAA
AGAAAATCTTTATAAATGTACCAGAGAGAGTTGTTTTAATAACTTATCTATAAACTATAACCTCTCCTTCATGAC
AGCCTCCACCCCACAACCCAAAAGGTTTAAGAAATAGAATTATAACTGTAAAGATGTTTATTTCAGGCATTGGAT
ATTTTTTACTTTAGAAGCCTGCATAATGTTTCTGGATTTACATACTGTAACATTCAGGAATTCTTGGAGAAGATG
GGTTTATTCACTGAACTCTAGTGCGGTTTACTCACTGCTGCAAATACTGTATATTCAGGACTTGAAAGAAATGGT
GAATGCCTATGGAACTAGTGGATCCAAACTGATCCAGTATAAGACTACTGAATCTGCTACCAAAACAGTTAATCA
GTGAGTCGAGTGTTCTATTTTTTGTTTTGTTTCCTCCCCTATCTGTATTCCCAAAAATTACTTTGGGGCTAATTT
AACAAGAACTTTAAATTGTGTTTTAATTGTAAAAATGGCAGGGGGTGGAATTATTACTCTATACATTCAACAGAG
ACTGAATAGATATGAAAGCTGATTTTTTTTAATTACCATGCTTCACAATGTTAAGTTATATGGGGAGCAACAGCA
AACAGGTGCTAATTTGTTTTGGATATAGTATAAGCAGTGTCTGTGTTTTGAAAGAATAGAACACAGTTTGTAGTG
CCACTGTTGTTTTGGGGGGGGCTTTTTTTCTTTTTCCGGAAAATCCTTAAACCTTAAGATACTAAGGACGTTGTT
TTGGTTGTACTTGGAATTCTTAGTCACAAAATATATTTTGTTTACAAAAATTTCTGTAAAACAGGTTATAACAGT
GTTTAAAGTCTCAGTTTCTTGCTTGGGGAACTTGTGTCCCTAATGTGTTAGATTGCTAGATTGCTAAGGAGCTGA
TACTTGACAGTTTTTTAGACCTGTGTTACTAAAAAAAAGATGAATGTCGGAAAAGGGTGTTGGGAGGGTGGTCAA
CAAAGAAACAAAGATGTTATGGTGTTTAGACTTATGGTTGTTAAAAATGTCATCTCAAGTCAAGTCACTGGTCTG
TTTGCATTTGATACATTTTTGTACTAACTAGCATTGTAAAATTATTTCATGATTAGAAATTACCTGTGGATATTT
GTATAAAAGTGTGAAATAAATTTTTTATAAAAGTGTTCATTGTTTCGTAACACAGCATTGTATATGTGAAGCAAA
CTCTAAAATTATAAATGACAACCTGAATTATCTATTTCATCAAAAAAAAAAAAAAAAAAAACTTTATGGGCACAA
CTGG

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FIGURE 5966

MAAAGQLCLLYLSAGLLSRLGAAFNLDTREDNVIRKYGDPGSLFGFSLAMHWQLQPEDKRLLLVGAPRGEALPLQ
RANRTGGLYSCDITARGPCTRIEFDNDADPTSESKEDQWMGVTVQSQGPGGKVVTCAHRYEKRQHVNTKQESRDI
FGRCYVLSQNLRIEDDMDGGDWSFCDGRLRGHEKFGSCQQGVAATFTKDFHYIVFGAPGTYNWKGIVRVEQKNNT
FFDMNIFEDGPYEVGGETEHDESLVPVPANSYLGFSLDSGKGIVSKDEITFVSGAPRANHSGAVVLLKRDMKSAH
LLPEHIFDGEGLASSFGYDVAVVDLNKDGWQDIVIGAPQYFDRDGEVGGAVYVYMNQQGRWNNVKPIRLNGTKDS
MFGIAVKNIGDINQDGYPDIAVGAPYDDLGKVFIYHGSANGINTKPTQVLKGISPYFGYSIAGNMDLDRNSYPDV
AVGSLSDSVTIFRSRPVINIQKTITVTPNRIDLRQKTACGAPSGICLQVKSCFEYTANPAGYNPSISIVGTLEAE
KERRKSGLSSRVQFRNQGSEPKYTQELTLKRQKQKVCMEETLWLQDNIRDKLRPIPITASVEIQEPSSRRRVNSL
PEVLPILNSDEPKTAHIDVHFLKEGCGDDNVCNSNLKLEYKFCTREGNQDKFSYLPIQKGVPELVLKDQKDIALE
ITVTNSPSNPRNPTKDGDDAHEAKLIATFPDTLTYSAYRELRAFPEKQLSCVANQNGSQADCELGNPFKRNSNVT
FYLVLSTTEVTFDTPYLDINLKLETTSNQDNLAPITAKAKVVIELLLSVSGVAKPSQVYFGGTVVGEQAMKSEDE
VGSLIEYEFRVINLGKPLTNLGTATLNIQWPKEISNGKWLLYLVKVESKGLEKVTCEPQKEINSLNLTESHNSRK
KREITEKQIDDNRKFSLFAERKYQTLNCSVNVNCVNIRCPLRGLDSKASLILRSRLWNSTFLEEYSKLNYLDILM
RAFIDVTAAAENIRLPNAGTQVRVTVFPSKTVAQYSGVPWWIILVAILAGILMLALLVFILWKCGFFKRNKKDHY
DATYHKAEIHAQPSDKERLTSDA

FIGURE 5967

CAGGGCAGACTGGTAGCAAAGCCCCCACGCCCAGCCAGGAGCACCGCCGCGGACTCCAGCACACCGAGGGACATG

CTGGGCCTGCGCCCCCCACTGCTCGCCCTGGTGGGGCTGCTCTCCCTCGGGTGCGTCCTCTCTCAGGAGTGCACG
AAGTTCAAGGTCAGCAGCTGCCGGGAATGCATCGAGTCGGGGCCCGGCTGCACCTGGTGCCAGAAGCTGAACTTC
ACAGGGCCGGGGGATCCTGACTCCATTCGCTGCGACACCCGGCCACAGCTGCTCATGAGGGGCTGTGCGGCTGAC
GACATCATGGACCCCACAAGCCTCGCTGAAACCCAGGAAGACCACAATGGGGGCCAGAAGCAGCTGTCCCCACAA
AAAGTGACGCTTTACCTGCGACCAGGCCAGGCAGCAGCGTTCAACGTGACCTTCCGGCGGGCCAAGGGCTACCCC
ATCGACCTGTACTATCTGATGGACCTCTCCTACTCCATGCTTGATGACCTCAGGAATGTCAAGAAGCTAGGTGGC
GACCTGCTCCGGGCCCTCAACGAGATCACCGAGTCCGGCCGCATTGGCTTCGGGTCCTTCGTGGACAAGACCGTG
CTGCCGTTCGTGAACACGCACCCTGATAAGCTGCGAAACCCATGCCCCAACAAGGAGAAAGAGTGCCAGCCCCCG
TTTGCCTTCAGGCACGTGCTGAAGCTGACCAACAACTCCAACCAGTTTCAGACCGAGGTCGGGAAGCAGCTGATT
TCCGGAAACCTGGATGCACCCGAGGGTGGGCTGGACGCCATGATGCAGGTCGCCGCCTGCCCGGAGGAAATCGGC
TGGCGCAACGTCACGCGGCTGCTGGTGTTTGCCACTGATGACGGCTTCCATTTCGCGGGCGACGGAAAGCTGGGC
GCCATCCTGACCCCCAACGACGGCCGCTGTCACCTGGAGGACAACTTGTACAAGAGGAGCAACGAATTCGACTAC
CCATCGGTGGGCCAGCTGGCGCACAAGCTGGCTGAAAACAACATCCAGCCCATCTTCGCGGTGACCAGTAGGATG
GTGAAGACCTACGAGAAACTCACCGAGATCATCCCCAAGTCAGCCGTGGGGGAGCTGTCTGAGGACTCCAGCAAT
GTGGTCCATCTCATTAAGAATGCTTACAATAAACTCTCCTCCAGGGTCTTCCTGGATCACAACGCCCTCCCCGAC
ACCCTGAAAGTCACCTACGACTCCTTCTGCAGCAATGGAGTGACGCACAGGAACCAGCCCAGAGGTGACTGTGAT
GGCGTGCAGATCAATGTCCCGATCACCTTCCAGGTGAAGGTCACGGCCACAGAGTGCATCCAGGAGCAGTCGTTT
GTCATCCGGGCGCTGGGCTTCACGGACATAGTGACCGTGCAGGTTCTTCCCCAGTGTGAGTGCCGGTGCCGGGAC
CAGAGCAGAGACCGCAGCCTCTGCCATGGCAAGGGCTTCTTGGAGTGCGGCATCTGCAGGTGTGACACTGGCTAC
ATTGGGAAAAACTGTGAGTGCCAGACACAGGGCCGGAGCAGCCAGGAGCTGGAAGGAAGCTGCCGGAAGGACAAC
AACTCCATCATCTGCTCAGGGCTGGGGGACTGTGTCTGCGGGCAGTGCCTGTGCCACACCAGCGACGTCCCCGGC
AAGCTGATATACGGGCAGTACTGCGAGTGTGACACCATCAACTGTGAGCGCTACAACGGCCAGGTCTGCGGCGGC
CCGGGGAGGGGGCTCTGCTTCTGCGGGAAGTGCCGCTGCCACCCGGGCTTTGAGGGCTCAGCGTGCCAGTGCGAG
AGGACCACTGAGGGCTGCCTGAACCCGCGGCGTGTTGAGTGTAGTGGTCGTGGCCGGTGCCGCTGCAACGTATGC
GAGTGCCATTCAGGCTACCAGCTGCCTCTGTGCCAGGAGTGCCCCGGCTGCCCCTCACCCTGTGGCAAGTACATC
TCCTGCGCCGAGTGCCTGAAGTTCGAAAAGGGCCCCTTTGGGAAGAACTGCAGCGCGGCGTGTCCGGGCCTGCAG
CTGTCGAACAACCCCGTGAAGGGCAGGACCTGCAAGGAGAGGGACTCAGAGGGCTGCTGGGTGGCCTACACGCTG
GAGCAGCAGGACGGGATGGACCGCTACCTCATCTATGTGGATGAGAGCCGAGAGTGTGTGGCAGGCCCCAACATC
GCCGCCATCGTCGGGGGCACCGTGGCAGGCATCGTGCTGATCGGCATTCTCCTGCTGGTCATCTGGAAGGCTCTG
ATCCACCTGAGCGACCTCCGGGAGTACAGGCGCTTTGAGAAGGAGAAGCTCAAGTCCCAGTGGAACAATGATAAT
CCCCTTTTCAAGAGCGCCACCACGACGGTCATGAACCCCAAGTTTGCTGAGAGTTAGGAGCACTTGGTGAAGACA
AGGCCGTCAGGACCCACCATGTCTGCCCCATCACGCGGCCGAGACATGGCTTGGCCACAGCTCTTGAGGATGTCA
CCAATTAACCAGAAATCCAGTTATTTTCCGCCCTCAAAATGACAGCCATGGCCGGCCGGTGCTTCTGGGGGCTCG
TCGGGGGGACAGCTCCACTCTGACTGGCACAGTCTTTGCATGGAGACTTGAGGAGGGCTTGAGGTTGGTGAGGTT
AGGTGCGTGTTTCCTGTGCAAGTCAGGACATCAGTCTGATTAAAGGTGGTGCCAATTTATTTACATTTAAACTTG
TCAGGGTATAAAATGACATCCCATTAATTATATTGTTAATCAATCACGTGTATAGAAAAAAAAATAAAACTTCAA
T

FIGURE 5968

MLGLRPPLLALVGLLSLGCVLSQECTKFKVSSCRECIESGPGCTWCQKLNFTGPGDPDSIRCDTRPQLLMRGCAA
DDIMDPTSLAETQEDHNGGQKQLSPQKVTLYLRPGQAAAAFNVTFRRAKGYPIDLYYLMDLSYSMLDDLRNVKKLG
GDLLRALNEITESGRIGFGSFVDKTVLPFVNTHPDKLRNPCPNKEKECQPPFAFRHVLKLTNNSNQFQTEVGKQL
ISGNLDAPEGGLDAMMQVAACPEEIGWRNVTRLLVFATDDGFHFAGDGKLGAILTPNDGRCHLEDNLYKRSNEFD
YPSVGQLAHKLAENNIQPIFAVTSRMVKTYEKLTEIIPKSAVGELSEDSSNVVHLIKNAYNKLSSRVFLDHNALP
DTLKVTYDSFCSNGVTHRNQPRGDCDGVQINVPITFQVKVTATECIQEQSFVIRALGFTDIVTVQVLPQCECRCR
DQSRDRSLCHGKGFLECGICRCDTGYIGKNCECQTQGRSSQELEGSCRKDNNSIICSGLGDCVCGQCLCHTSDVP
GKLIYGQYCECDTINCERYNGQVCGGPGRGLCFCGKCRCHPGFEGSACQCERTTEGCLNPRRVECSGRGRCRCNV
CECHSGYQLPLCQECPGCPSPCGKYISCAECLKFEKGPFGKNCSAACPGLQLSNNPVKGRTCKERDSEGCWVAYT
LEQQDGMDRYLIYVDESRECVAGPNIAAIVGGTVAGIVLIGILLLVIWKALIHLSDLREYRRFEKEKLKSQWNND
NPLFKSATTTVMNPKFAES

FIGURE 5969

CTAGCACTCTGACCTAGCAGTCAACATGAAGGCTCTCATTGTTCTGGGGCTTGTCCTCCTTTCTGTTACGGTCCA
GGGCAAGGTCTTTGAAAGGTGTGAGTTGGCCAGAACTCTGAAAAGATTGGGAATGGATGGCTACAGGGGAATCAG
CCTAGCAAACTGGATGTGTTTGGCCAAATGGGAGAGTGGTTACAACACACGAGCTACAAACTACAATGCTGGAGA
CAGAAGCACTGATTATGGGATATTTCAGATCAATAGCCGCTACTGGTGTAATGATGGCAAAACCCCAGGAGCAGT
TAATGCCTGTCATTTATCCTGCAGTGCTTTGCTGCAAGATAACATCGCTGATGCTGTAGCTTGTGCAAAGAGGGT
TGTCCGTGATCCACAAGGCATTAGAGCATGGGTGGCATGGAGAAATCGTTGTCAAAACAGAGATGTCCGTCAGTA
TGTTCAAGGTTGTGGAGTGTAACTCCAGAATTTTCCTTCTTCAGCTCATTTTGTCTCTCTCACATTAAGGGAGTA
GGAATTAAGTGAAAGGTCACACTACCATTATTTCCCCTTCAAACAAATAATATTTTTACAGAAGCAGGAGCAAAA
TATGGCCTTTCTTCTAAGAGATATAATGTTCACTAATGTGGTTATTTTACATTAAGCCTACAACATTTTTCAGTT
TGCAAATAGAACTAATACTGGTGAAAATTTACCTAAAACCTTGGTTATCAAATACATCTCCAGTACATTCCGTTC
TTTTTTTTTTTTGAGACAGTCTCGCTCTGTCGCCCAGGCTGGAGTGCAGTGGCGCAATCTCGGCTCACTGCAACC
TCCACCTCCCGGGTTCACGCCATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGATTACGGGCGCCCGCCACCACG
CCCGGCTAATTTTTTGTATTTTTAGTAGAGACAGGGTTTCACCGTGTTAGCCAGGATGGTCTCGATCTCCTGACC
TTGTGATCCACCCACCTCGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACTGCGCCCGGCCACATTCAGT
TCTTATCAAAGAAATAACCCAGACTTAATCTTGAATGATACGATTATGCCCAATATTAAGTAAAAAATATAAGAA
AAGGTTATCTTAAATAGATCTTAGGCAAAATACCAGCTGATGAAGGCATCTGATGCCTTCATCTGTTCAGTCATC
TCCAAAAACAGTAAAAATAACCACTTTTTGTTGGGCAATATGAAATTTTTAAAGGAGTAGAATACCAAATGATAG
AAACAGACTGCCTGAATTGAGAATTTTGATTTCTTAAAGTGTGTTTCTTTCTAAATTGCTGTTCCTTAATTTGAT
TAATTTAATTCATGTATTATGATTAAATCTGAGGCAGATGAGCTTACAAGTATTGAAATAATTACTAATTAATCA
CAAATGTGAAGTTATGCATGATGTAAAAAATACAAACATTCTAATTAAAGGCTTTGCAACAC

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FIGURE 5970

MKALIVLGLVLLSVTVQGKVFERCELARTLKRLGMDGYRGISLANWMCLAKWESGYNTRATNYNAGDRSTDYGIF
QINSRYWCNDGKTPGAVNACHLSCSALLQDNIADAVACAKRVVRDPQGIRAWVAWRNRCQNRDVRQYVQGCGV

FIGURE 5971

CTTGGCTCTTCTGGCGCCAAAATGTCGTTCGTGGCAGGGGTTATTCGGCGGCTGGACGAGACAGTGGTGAACCGC
ATCGCGGCGGGGGAAGTTATCCAGCGGCCAGCTAATGCTATCAAAGAGATGATTGAGAACTGTTTAGATGCAAAA
TCCACAAGTATTCAAGTGATTGTTAAAGAGGGAGGCCTGAAGTTGATTCAGATCCAAGACAATGGCACCGGGATC
AGGAAAGAAGATCTGGATATTGTATGTGAAAGGTTCACTACTAGTAAACTGCAGTCCTTTGAGGATTTAGCCAGT
ATTTCTACCTATGGCTTTCGAGGTGAGGCTTTGGCCAGCATAAGCCATGTGGCTCATGTTACTATTACAACGAAA
ACAGCTGATGGAAAGTGTGCATACAGAGCAAGTTACTCAGATGGAAAACTGAAAGCCCCTCCTAAACCATGTGCT
GGCAATCAAGGGACCCAGATCACGGTGGAGGACCTTTTTTACAACATAGCCACGAGGAGAAAAGCTTTAAAAAAT
CCAAGTGAAGAATATGGGAAAATTTTGGAAGTTGTTGGCAGGTATTCAGTACACAATGCAGGCATTAGTTTCTCA
GTTAAAAAACAAGGAGAGACAGTAGCTGATGTTAGGACACTACCCAATGCCTCAACCGTGGACAATATTCGCTCC
ATCTTTGGAAATGCTGTTAGTCGAGAACTGATAGAAATTGGATGTGAGGATAAAACCCTAGCCTTCAAAATGAAT
GGTTACATATCCAATGCAAACTACTCAGTGAAGAAGTGCATCTTCTTACTCTTCATCAACCATCGTCTGGTAGAA
TCAACTTCCTTGAGAAAAGCCATAGAAACAGTGTATGCAGCCTATTTGCCCAAAAACACACACCCATTCCTGTAC
CTCAGTTTAGAAATCAGTCCCCAGAATGTGGATGTTAATGTGCACCCCACAAAGCATGAAGTTCACTTCCTGCAC
GAGGAGAGCATCCTGGAGCGGGTGCAGCAGCACATCGAGAGCAAGCTCCTGGGCTCCAATTCCTCCAGGATGTAC
TTCACCCAGACTTTGCTACCAGGACTTGCTGGCCCCTCTGGGGAGATGGTTAAATCCACAACAAGTCTGACCTCG
TCTTCTACTTCTGGAAGTAGTGATAAGGTCTATGCCCACCAGATGGTTCGTACAGATTCCCGGGAACAGAAGCTT
GATGCATTTCTGCAGCCTCTGAGCAAACCCCTGTCCAGTCAGCCCCAGGCCATTGTCACAGAGGATAAGACAGAT
ATTTCTAGTGGCAGGGCTAGGCAGCAAGATGAGGAGATGCTTGAACTCCCAGCCCCTGCTGAAGTGGCTGCCAAA
AATCAGAGCTTGGAGGGGGATACAACAAAGGGGACTTCAGAAATGTCAGAGAAGAGAGGACCTACTTCCAGCAAC
CCCAGAAAGAGACATCGGGAAGATTCTGATGTGGAAATGGTGGAAGATGATTCCCGAAAGGAAATGACTGCAGCT
TGTACCCCCCGGAGAAGGATCATTAACCTCACTAGTGTTTTGAGTCTCCAGGAAGAAATTAATGAGCAGGGACAT
GAGGTTCTCCGGGAGATGTTGCATAACCACTCCTTCGTGGGCTGTGTGAATCCTCAGTGGGCCTTGGCACAGCAT
CAAACCAAGTTATACCTTCTCAACACCACCAAGCTTAGTGAAGAACTGTTCTACCAGATACTCATTTATGATTTT
GCCAATTTTGGTGTTCTCAGGTTATCGGAGCCAGCACCGCTCTTTGACCTTGCCATGCTTGCCTTAGATAGTCCA
GAGAGTGGCTGGACAGAGGAAGATGGTCCCAAAGAAGGACTTGCTGAATACATTGTTGAGTTTCTGAAGAAGAAG
GCTGAGATGCTTGCAGACTATTTCTCTTTGGAAATTGATGAGGAAGGGAACCTGATTGGATTACCCCTTCTGATT
GACAACTATGTGCCCCCTTTGGAGGGACTGCCTATCTTCATTCTTCGACTAGCCACTGAGGTGAATTGGGACGAA
GAAAAGGAATGTTTTGAAAGCCTCAGTAAAGAATGCGCTATGTTCTATTCCATCCGGAAGCAGTACATATCTGAG
GAGTCGACCCTCTCAGGCCAGCAGAGTGAAGTGCCTGGCTCCATTCCAAACTCCTGGAAGTGGACTGTGGAACAC
ATTGTCTATAAAGCCTTGCGCTCACACATTCTGCCTCCTAAACATTTCACAGAAGATGGAAATATCCTGCAGCTT
GCTAACCTGCCTGATCTATACAAAGTCTTTGAGAGGTGTTAAATATGGTTATTTATGCACTGTGGGATGTGTTCT
TCTTTCTCTGTATTCCGATACAAAGTGTTGTATCAAAGTGTGATATACAAAGTGTACCAACATAAGTGTTGGTAG
CACTTAAGACTTATACTTGCCTTCTGATAGTATTCCTTTATACACAGTGGATTGATTATAAATAAATAGATGTGT
CTTAACATA

FIGURE 5972

MSFVAGVIRRLDETVVNRIAAGEVIQRPANAIKEMIENCLDAKSTSIQVIVKEGGLKLIQIQDNGTGIRKEDLDI
VCERFTTSKLQSFEDLASISTYGFRGEALASISHVAHVTITTKTADGKCAYRASYSDGKLKAPPKPCAGNQGTQI
TVEDLFYNIATRRKALKNPSEEYGKILEVVGRYSVHNAGISFSVKKQGETVADVRTLPNASTVDNIRSIFGNAVS
RELIEIGCEDKTLAFKMNGYISNANYSVKKCIFLLFINHRLVESTSLRKAIETVYAAYLPKNTHPFLYLSLEISP
QNVDVNVHPTKHEVHFLHEESILERVQQHIESKLLGSNSSRMYFTQTLLPGLAGPSGEMVKSTTSLTSSSTSGSS
DKVYAHQMVRTDSREQKLDAFLQPLSKPLSSQPQAIVTEDKTDISSGRARQQDEEMLELPAPAEVAAKNQSLEGD
TTKGTSEMSEKRGPTSSNPRKRHREDSDVEMVEDDSRKEMTAACTPRRRIINLTSVLSLQEEINEQGHEVLREML
HNHSFVGCVNPQWALAQHQTKLYLLNTTKLSEELFYQILIYDFANFGVLRLSEPAPLFDLAMLALDSPESGWTEE
DGPKEGLAEYIVEFLKKKAEMLADYFSLEIDEEGNLIGLPLLIDNYVPPLEGLPIFILRLATEVNWDEEKECFES
LSKECAMFYSIRKQYISEESTLSGQQSEVPGSIPNSWKWTVEHIVYKALRSHILPPKHFTEDGNILQLANLPDLY
KVFERC

FIGURE 5973

GACAATATCAGGTGAGCTGTGGAGGTGGGGTCCTTGGAAGCTGGATGACAGCAGCTGGCAAGGGGATAAGAGAGC
AGTGAGCCCCTCCCTCAAGGAGGTCTGGCTTTATCCATAGACAGGGCCCTCTGAGGTGGGGCTGAGGTACAAAGG
GGGATTGAGCAGCCCAGGAGAAGAGAGATGGGGGTTCCCTTCTTCTCTTCTCTCAGATGCATGGTGGACTTAGGA
CCTTGCTGGGCTGGGGGTCTCACTGCAGAGATGAAGCTGCTTCTGGCCCTAGCAGGGCTCCTGGCCATTCTGGCC
ACGCCCCAGCCCTCTGAAGGTGCTGCTCCAGCTGTCCTGGGGGAGGTGGACACCTCGTTGGTGCTGAGCTCCATG
GAGGAGGCCAAGCAGCTGGTGGACAAGGCCTACAAGGAGCGGCGGGAAAGCATCAAGCAGCGGCTTCGCAGCGGC
TCAGCCAGCCCCATGGAACTCCTATCCTACTTCAAGCAGCCGGTGGCAGCCACCAGGACGGCGGTGAGGGCCGCT
GACTACCTGCACGTGGCTCTAGACCTGCTGGAGAGGAAGCTGCGGTCCCTGTGGCGAAGGCCATTCAATGTCACT
GATGTGCTGACGCCCGCCCAGCTGAATGTGTTGTCCAAGTCAAGCGGCTGCGCCTACCAGGACGTGGGGGTGACT
TGCCCGGAGCAGGACAAATACCGCACCATCACCGGGATGTGCAACAACAGACGCAGCCCCACGCTGGGGGCCTCC
AACCGTGCCTTTGTGCGCTGGCTGCCGGCGGAGTATGAGGACGGCTTCTCTCTTCCCTACGGCTGGACGCCCGGG
GTCAAGCGCAACGGCTTCCCGGTGGCTCTGGCTCGCGCGGTCTCCAACGAGATCGTGCGCTTCCCCACTGATCAG
CTGACTCCGGACCAGGAGCGCTCACTCATGTTCATGCAATGGGGCCAGCTGTTGGACCACGACCTCGACTTCACC
CCTGAGCCGGCCGCCCGGGCCTCCTTCGTCACTGGCGTCAACTGCGAGACCAGCTGCGTTCAGCAGCCGCCCTGC
TTCCCGCTCAAGATCCCGCCCAATGACCCCCGCATCAAGAACCAAGCCGACTGCATCCCGTTCTTCCGCTCCTGC
CCGGCTTGCCCCGGGAGCAACATCACCATCCGCAACCAGATCAACGCGCTCACTTCCTTCGTGGACGCCAGCATG
GTGTACGGCAGCGAGGAGCCCCTGGCCAGGAACCTGCGCAACATGTCCAACCAGCTGGGGCTGCTGGCCGTCAAC
CAGCGCTTCCAAGACAACGGCCGGGCCCTGCTGCCCTTTGACAACCTGCACGATGACCCCTGTCTCCTCACCAAC
CGCTCAGCGCGCATCCCCTGCTTCCTGGCAGGGGACACCCGTTCCAGTGAGATGCCCGAGCTCACCTCCATGCAC
ACCCTCTTACTTCGGGAGCACAACCGGCTGGCCACAGAGCTCAAGAGCCTGAACCCTAGGTGGGATGGGGAGAGG
CTCTACCAGGAAGCCCGGAAGATCGTGGGGGCCATGGTCCAGATCATCACTTACCGGGACTACCTGCCCCTGGTG
CTGGGGCCAACGGCCATGAGGAAGTACCTGCCCACGTACCGTTCCTACAATGACTCAGTGGACCCACGCATCGCC
AACGTCTTCACCAATGCCTTCCGCTACGGCCACACCCTCATCCAACCCTTCATGTTCCGCCTGGACAATCGGTAC
CAGCCCATGGAACCCAACCCCCGTGTCCCCCTCAGCAGGGTCTTTTTTGCCTCCTGGAGGGTCGTGCTGGAAGGT
GGCATTGACCCCATCCTCCGGGGCCTCATGGCCACCCCTGCCAAGCTGAATCGTCAGAACCAAATTGCAGTGGAT
GAGATCCGGGAGCGATTGTTTGAGCAGGTCATGAGGATTGGGCTGGACCTGCCTGCTCTGAACATGCAGCGCAGC
AGGGACCACGGCCTCCCAGGATACAATGCCTGGAGGCGCTTCTGTGGGCTCCCGCAGCCTGAAACTGTGGGCCAG
CTGGGCACGGTGCTGAGGAACCTGAAATTGGCGAGGAAACTGATGGAGCAGTATGGCACGCCCAACAACATCGAC
ATCTGGATGGGCGGCGTGTCCGAGCCTCTGAAGCGCAAAGGCCGCGTGGGCCCACTCCTCGCCTGCATCATCGGT
ACCCAGTTCAGGAAGCTCCGGGATGGTGATCGGTTTTGGTGGGAGAACGAGGGTGTGTTCAGCATGCAGCAGCGA
CAGGCCCTGGCCCAGATCTCATTGCCCCGGATCATCTGCGACAACACAGGCATCACCACCGTGTCTAAGAACAAC
ATCTTCATGTCCAACTCATATCCCCGGGACTTTGTCAACTGCAGTACACTTCCTGCATTGAACCTGGCTTCCTGG
AGGGAAGCCTCCTAGAGGCCAGGTAAGGGGGTGCAGCAGTGAGGGGTATATCTGGGCTGGCCAGTTGGAACCACG
GAGATCTCCTTGCCCTAGATGAGCCCAGCCCTGTTCTGGGTGCAGCTGAGAAAATGAGTGACTAGACGTTCATTT
GTGTGCTCATGTATGTGCGAAGTATATAAATTGGCTTTTCATGCGTGTGTGTTGTCTGAACATGGGGAGTGTTTC
ATGGGTTATGTGTATGTGCCATTTATGTGAGTGTGTGTTTGTGCTGATGAGAATACTGAGTATGTGGAAGGCAGC
AGAGCGGACTGGTGAGGAGCACAGCTCAGGAACTAGACTGCCTGGGTTCCAATCCTGGCTCTGTGGCTTGCTAGC
TATGTGACCTTGAGCAAATTACCCTCCTTAAACAAGAGTTTTCTTCCTTGTAAATTACATCTGTCATGGTTTCTT
GGAGGGCCCACTTGTATCCTCTGGTTCTTCATTTATTGAGCACCTACTACATGCAAGGCACTGTACTAGGCGTGA
GAAGCATATAGAGGCAAGAAAGAGATACCAAGATGCCATCTGTGTCCTGGTTAGCAGAGCTGGACCAGTGGTGCC
TTGGAGGGATAAGCCAGCTGCAGCTGGGCTGTGTGGTTGACTTATGGGCCCAGCCAGCCAGGCTCAGGCCATGGC
TCCCCTTTTTCTTCCTCACCCTGATTTCTTGCTTATTCACTGAAGTTCTCCTGAAGAGGAACTGGGCCTGTTGCC
CTTTCTGTACCATTTATTTGCTCCCAATGTTTATGATAATAAAGGCACCGCTGATGGGGACCTCC

FIGURE 5974

MGVPFFSSLRCMVDLGPCWAGGLTAEMKLLLALAGLLAILATPQPSEGAAPAVLGEVDTSLVLSSMEEAKQLVDK
AYKERRESIKQRLRSGSASPMELLSYFKQPVAATRTAVRAADYLHVALDLLERKLRSLWRRPFNVTDVLTPAQLN
VLSKSSGCAYQDVGVTCPEQDKYRTITGMCNNRRSPTLGASNRAFVRWLPAEYEDGFSLPYGWTPGVKRNGFPVA
LARAVSNEIVRFPTDQLTPDQERSLMFMQWGQLLDHDLDFTPEPAARASFVTGVNCETSCVQQPPCFPLKIPPND
PRIKNQADCIPFFRSCPACPGSNITIRNQINALTSFVDASMVYGSEEPLARNLRNMSNQLGLLAVNQRFQDNGRA
LLPFDNLHDDPCLLTNRSARIPCFLAGDTRSSEMPELTSMHTLLLREHNRLATELKSLNPRWDGERLYQEARKIV
GAMVQIITYRDYLPLVLGPTAMRKYLPTYRSYNDSVDPRIANVFTNAFRYGHTLIQPFMFRLDNRYQPMEPNPRV
PLSRVFFASWRVVLEGGIDPILRGLMATPAKLNRQNQIAVDEIRERLFEQVMRIGLDLPALNMQRSRDHGLPGYN
AWRRFCGLPQPETVGQLGTVLRNLKLARKLMEQYGTPNNIDIWMGGVSEPLKRKGRVGPLLACIIGTQFRKLRDG
DRFWWENEGVFSMQQRQALAQISLPRIICDNTGITTVSKNNIFMSNSYPRDFVNCSTLPALNLASWREAS

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FIGURE 5975

GGAATGGTACTTTAGAGTTCACCTACAACAATGGTGTTGGTTGGGTTGTGCTTCACTTCTGCGGTAACCCTGTGG
ACTTTCCCTCCATAGAAAGGCTTCGTGTGGAATATCACTGTCGCTGAGTACCCAGTCTTGGCACAGTTGATGCTG
ACTTTTCCTCCGAGCTCCACCCACGGGATGGTGAGAATGGACCGGGCGTAGGCACTAGGCAGGGTGAATACGTAC
TCCTCCCCGTGTTCCAGGAGCCTCAACACACCTTCCCCTATCATAGAGACCCCCACGGACATGCCCATGAACTTG
CCCTCGTGCCGAATTCGGCACGAGGCTGCGAACCACGTGGGTCCCGGGCGCGTTTCGGGTGCTGGCGGCTGCAGC
CGGAGTTCAAACCTAAGCAGCTGGAAGGAACCATGGCCAACTGTGAGCGTACTTTCATTGCGATCAAACCAGATG
GGGTCCAGCGGGGTCTTGTGGGAGAGATTATCAAGCGTTTTGAGCAGAAAGGATTCCGCCTTGTTGGTCTGAAAT
TCATGCAAGCTTCCGAAGATCTTCTCAAGGAACACTACGTTGACCTGAAGGACCGTCCATTCTTTGCCGGCCTGG
TGAAATACATGCACTCAGGGCCGGTAGTTGCCATGGTCTGGGAGGGGCTGAATGTGGTGAAGACGGGCCGAGTCA
TGCTCGGGGAGACCAACCCTGCAGACTCCAAGCCTGGGACCATCCGTGGAGACTTCTGCATACAAGTTGGCAGGA
ACATTATACATGGCAGTGATTCTGTGGAGAGTGCAGAGAAGGAGATCGGCTTGTGGTTTCACCCTGAGGAACTGG
TAGATTACACGAGCTGTGCTCAGAACTGGATCTATGAATGACAGGAGGGCAGACCACATTGCTTTTCACATCCAT
TTCCCCTCCTTCCCATGGGCAGAGGACCAGGCTGTAGGAAATCTAGTTATTTACAGGAACTTCATCATAATTTGG
AGGGAAGCTCTTGGAGCTGTGAGTTCTCCCTGTACAGTGTTACCATCCCCGACCATCTGATTAAAATGCTTCCTC
CCAGCATAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 5976

MANCERTFIAIKPDGVQRGLVGEIIKRFEQKGFRLVGLKFMQASEDLLKEHYVDLKDRPFFAGLVKYMHSGPVVA
MVWEGLNVVKTGRVMLGETNPADSKPGTIRGDFCIQVGRNIIHGSDSVESAEKEIGLWFHPEELVDYTSCAQNWI
YE

FIGURE 5977A

TCTTGTTTCCTATCCTTTGTGACTTTTTTTGCATTATATATAAGGATGCCGAAATACTGTTTATTGTTGATAGTT
TACAAAATTGAATCTTACATTAGTGCATAATTTTGGTGAATGTTGAAGATTATGGTAGATTGCCTTACATTTCTG
CATATTGTTTGCACCTTGGAATGATAGCACTGGCATGAATTATAGAGCTGAGGATCTAAAGATTTTTACTTTGAT
TTATCCCATTATCATCTGCAGGGAAACAATTGCTTTTACTGATTAAAAATGCAGGCTGGGCACAGCGGCTCACGC
CTGTAAXCCCAGTACTTTGGGAGGCCGAGGCGGGCGGATCACAAGGTCAAGAGATCGAGACCATCCTGGCCAACC
AACATGGTGAAACCTCATCTCTACTAAAAATACAAAAATTAGCTGGGTGTGGTGGCGCGTGCCTGTAATCCCAGC
TACTTCAGGATGCTGAGGCAGGAGAATCGCTTGAACCCGGGAGGTGGAGGTTGCAGTGAGCCGAGATCGCACCAC
TGCACTCCAGCCTGGGCGACAGAGCGAAACTCCGTCTCAAAAAAAAAAAAAAAAAAAAGAAAAAAGAAAATTATA
TAGAAATAAAATTCCAGCTATTCCAAAACTTGCACCTTGAATACAGGTACAGAATTGCTAAAACCGTGTACCATT
TTGTAGTTTTAGCATGCTTTTGTGTAACTGCATCTGGTGTTTGATCCTCATGAGAGCCCTGTTAAGGAAGGGTAC
ATATTATTGTCCTCATTTTCCTTCGAAAACACATCAGAGTTTGTATTTTGACTGTCAGCATTCAAATACAAGTCT
TTTATTTATAAAATTTTGGTCTTTATACTGTGGCTAAAAATCTTAAATCACTTGTCATGATTTGAAATGGTTTAT
ACCGATTTTTTTTGACATTTATACACACATACACATATTTTTAATTGTCTATAATAAAATCATGCTCATCTTTGA
AAAAATATTAGGAGTACTACAGTGGATACCTACATACTTGCTATTCAGCATACCTGGTTTTTTGTTTGTTTTTTG
AGACAGTCTTCTCTGTGGTCCAGGTTGGAGTGCAGTGGCACGATCTCAGCTCATTGCAACCTCCGTCTCCCAGGC
TCAAGTGATTGTCCTGCCTCAGCCTCCCAAGTAGCTGGGACTGCAGGTACACATCACCACGCCCAGCTAATTTTT
TGTATTTTTGGTAGAGACGGGGTTTCACCATGTTGGCCAGGCTGGTCTCCAACTCCTGACCTCAAGTGATCAGCC
CACCTCGGCCTCCCAGAGTGCTGGGATTACAGGTTGTGAGCCACTGCACCTGGCCTGTTTTTAAATTCACATAAA
TATGTTTTATATTTTTCATTAGGGAGAAGAAGGTTGTGTCTACAATTTTTAAGACATTGGGGAGATTTAGATGCC
AGTAGTAACTTAAAAGAGAAATAATTGCAAATTCTTTTTCCTCTTGAGTATACTTTCATTTAAGGTACAGTGTTC
TGTAAGTTACTTTTACCGTTAAACTTCTTAAXGAAGCTTATTGTTTGTCTTACATTTTTAGGTTGGATTTTTCTT
AAGTCACATGTCTAATAAAAAAAACCCTTAAATACCTCATTTATTCGTCTTCGTTAGTGAATGCATTGTTGTACA
TATTAGATTTTTCTCTTTAGATAACTCAGCTTCCCCTATTAAGTGCCACATGTATTACAAAATTTTATTTATGTT
TTATTGTTTAATAAACTCTTGAGAACTAGATACATTTTAATCATTTGTAATACTTACATTTTCTAAAACACTTCA
TTTTTCCCTGGTTTCTTCAACAAAGAGATGCATGTAGTACAAGGATAGCTTTACCTGTGTTAGAAGATTGTTTCA
CACATTTACATCAACTGCATAGTCCTGTTTTTGTTGGGCCCTAATGCCAGCATCACTTTTTGCTACTGCTGTTTC
TGCCTTAAAGGCAATATGCCTCTGTCTAGTTTGCTGATTCTGATACTCTTTCCCCTGGAAAGTAGGTAATCAAGT
TTGTGAGGAGCTGTGTGTTTAAGGAGTCCATAAATCCTTGTGGGGAGCCCTAGGTGTATAGAGCATAGCTGTAGG
GCAGAGGCCTTTGACACTTATTCTGGATATGCAGTGGCCTTTGCCTATGGGGTTCATGGGTCAGAGCGCTGTTGT
GACCTTTGAATAAATGGGTTGTTATGATAATTGTTTTAAGGGAGGAGAGTTATTCTGATATCCTTTGTATTGATA
TTGCTCTTATTTATTATTGAGCTGGATTTAAGTATTAATCATTTAAGGTCAAATGTCTAATGTATATATGTTCTT
AAATGGCTACGACCCAGTTACCATAGCAATTTAGTGAAATAACTATAATGGAACATTTTTTTTCAATTTGGCTTC
TCTTTTTTTTCTGTCCACCAGGGAGTAACTATTCCCAGTCAGAGGCGCTATGTGTATTATTATAGCTACCTGTTA
AAGAATCATCTGGATTATAGACCAGTGGCACTGTTGTTTCACAAGATGATGTTTGAAACTATTCCAATGTTCAGT
GGCGGAACTTGCAGTAAGTGCTTGAAATTCTCATCCTTCCATGTATTGGAACAGTTTTCTTAACCATATCTAGAA
GTTTACATAAAAATTTAGAAAGAAATTTACCACATTTGAAATTTATGCAGGAGACTATATTTCTGAAGCATTTGA
ACAAATTAATTAGCTTTGTTGTTCAACTCATTGGGCTAAAGAAGCCAAAAGCAATGGGTTTTAATGTAGTCGAAG
CCAAATTATATTTATGAAAGAAATATTCTGTGTTATAACCACCAAATACAGCCCAATTCTGACTAGATGATGGAA
GAACCTGTCCCATCAGAGGTCCAGCATGAGGTCCAGCAGAGGTCCACCAGAGGAGTTCAGCAATTTGCTGCTCTT
AGGGCAGGGATCAATTCCTTAATATCTTAGGAAGACTAGGTATTGACAGTAATGGTGACAAAGCAATGAAAAGGA
AAGGAAGAAGTGATAAGACATGGCAGCAAGCTGAAGTATGATGAGTAAAGAATAGGAATCAAAGTATGTGGAGTG
TTAGAGAAAACCTGGATTTAGATCCAGATTCTAGTCCTATCTCTGTCATTAATCTATTGCGTAACCCTGAGCATA
TCATCTACCTCTCTTTGAGTTTGCTTGTCAXTAAAATGAAAGAGACTTTGAAATCTGAGACTTCCTGGATAAGTA
CTAAATACAGATTATGTCACTGATGTCTGCCTCTATTTATTTCTCCCTTTTACCCTAATCTCTATAAGTCTACCT
CAGTCATCCTGATCCTATTCTACTTCTCTGATGTTGTTGTCAGATAGGTGTGATCATCCTCATCAGATCTTTTCT
GTATTCTTAGAGACAGATAACTTTATCAAAGACCACAGATTTATTAGTATAGCATGTTAAAGTCTTCTAAAGAGT
CTCATTGATGCTCTTTTCATCTCAGTACAATTTTTAAAACTGCTGAATGCAAGGTACTGAGCTGTTGGAAGTGAC
TGACAGATGAATGTAACAGATTCATAGAGAAGGGAAAAAGGAAGAAAAACTCATGCTCTTCCTATAGTATTGATA

FIGURE 5977B

TCAGTGTAAGAGCCAAGAGAAAGGTATAAAGTATCATGCAGATATTAAGGGGAAAXGAAAACATTCACTTTAGTA
ATCTTTCCTCATTTTCTAGTTTCCTCTTATGTACTATGATTTAATACTGTAGTAAAGTTTTAATAAAATATGAGC
TATATGTAATTAAGTGGGAGGTTGTGGGGCTAGGCACGAGGCTCACACGTGTAACCCCAGCACTTTGGGAGGCTG
AGGCAGGCGGATCGCTTGATCTCAGGAGTTCGAGACCAGCCTGGACAACAAGGTGAAACCCCATCTCTACTAAAA
ACACAAAAATTAXCTGGGCATAGTGGCACACACCTGTAXTCCCAGCTTCTTGGGAGGCTGAGGCAGGAGAATCGC
TTGAATCCAGGAGGCATAGGTTGCAGTTAGCCGAGATCATGCCACTGCACTGCAXCCTGGACATCXGAXCAAGAC
TTTGTCTTAGAAATAAATAAATAAATATAAAATAAAATAAATGGGAAGTTGTGTATATAAATTATAAATGCTACA
TTCAGAAAAGCTTTTGAAGGTTGTCAGACAGTTTCTTAAAGGAAGTTCACCAGTTCTTTATTGAACATTGAAGAA
AACATACAGTTTAGACTGGCATTAAAACTGAAAGAAGTGGCCAGACGCAGTGGTAGACGCAGTGGTTCACGCCTG
TAATCCCAGCACTTTGGGAGGTCAAGGTGGATGGATCACCTGAGGTCAGGAGTTTGAGATCAGGCTGGCCGACAT
GGTGAAACCCTGTCTXTTACTAAAAATACAAAAATTAGCCAGGCATGGTGATGCGTGCCTGTAGTCCCAGCTACT
TGGGAGGCTGAGGCAGGAGAATTGCTTGAAGCCGAAGGTGGAGGTTGCAGTGAGCCGAGATTGCGTCATTGCACT
CCAGCCAGGGCGGTAAGAGTGAGGCTCCGTCTTAAAAAAAAAATAAGTAAATAAATTAAAAACTACTGAAAGAAG
TATTACAGGCAATGGGAAATAGCTTGAGTGGAAGTGCAGCAGAAGGAAAAAGCTGGACAAGAATGTAGTGTCAGA
GAATAGGTATGGAACGTGTGAGTGACTGTTAGAGGATCTTGAATGGGGATAACAGACTTGATTTCATAAATACTG
AGATGTCATGATAATACTTGAGGACTAAACCATGTTTTAAGGACAGTTGTATGCAAAGTTGTAATCGCAAGAGGA
AAAAATAGTGGAAAAGAAACCAGTAATAAAACTTGCCTTAATGCAGGTATGCTAAGACAATCAAATGGGATTTCA
TTAATTTTTTATTTGCCATTTATAGCCAAAGATTTTGTAAAAGTTTTGAGCCCAGTCAGGTGAAATAGTCTCAGA
AAGAAAGAAAAGTGAATCTGAGACTTGGAGACATTAATGTTGATATTTTGGTTTTAAACGTGTTTTAAATCCGGT
AAAAGTGAGCTTCTCACATGACAATAXXXCAGTGGGTACTTGGGAGTATGGGTTCGAATCTAGGTAGGAGATATA
TCGATATTTTGGGCATCATCAGGAAAGGGAGAGTAGTTAAGCCTTTCATATAAATAATGGTGTGGCGTTTGTGCA
TGGGAXGTCTTGGAGGAAAGGAAGAAAAGGAGAGGGTGAGGACTGAGATAAGAATGGCAACTTGGGTTTAGGAAG
AAGAAGAGGAATCAATGTAGAGAACAGATAGTGCTGAAAAATACAGCATCTTCTGTAGGGATTGGCAGCTTTTTC
TTGATTTTTGTCTTAATATTTCTAAGAGATGGAAAAAGCTACTATATTCTAGACATTTAACAGGGTTAAAAATGT
TACTAAAAGATGATCAATGTGGTTTTCATTCAAGACTATAACAATATGTATATATCCAAGGAAATTTAATTCTGA
CTTAAAAAAAATTGTTTTGCTTGTATAGATTTAGGGACACAAGTGTAATTTTGTTACATGCATAGAGTGTATAGTT
TCAAGTCAGGGCTTTTAGGTTGTCCATCATCTGAATAATATACATTGTACCCATTAAGTAATTTCTCATCTTCTA
CTCACCGTTTCAAGTCTCCACTATTTATCATTCCATTCTTTACATTCTGATTTTCATTTACTAGGTGTATTAGTC
TGTTTTTGCATTGCTTTAAAGAAATACCTGAGACTGAGTATTAAACAGGTTTAACCTGTTTTCTTTATGAATTCT
TCTTTAATTGGCTCATGGTTCTGCACGCTGTACAGAAAGCATAGCAGCATCTGCTTCTGGGGAGGCCTCAGGAAG
CCTCCAATCATGGCTGAAGGCAAAAGGGGAGCATGGTGAGAATGGGAGCAAGAAAGAGAAGGAGTGGTGGGGAGA
AGGTGCCACCCACTTTTAAATGCCAGCTCACTTACCACCAAGAGGATGGCCCAAGCCATTCATGTGGGATCTGCC
CCCCATGATTCAAGCTTCTTCCCACCCAGGCCCCCACCTCTAGCACTGGGGATTACAATTCAACCTGAGATTTGG
GAGGGAAAGATATCCAAACTATATCACTAGGTCTGGATCTTGTTATTTATTTTTTGGAACATAGTCATATATATC
CAAGGATATATATTGTAGAAGTCCACAGAACCATACTAATGXXGGAXTTCTGCTTAGCTAGGTCTTATCTATCTG
AAACATGATATTCATATTGCAGAGAAGATTATTTTCTTTAGTGATTGAGGAAATCTTTACTACTTATACATTTTT
AATATAATACTATAATATTTGAAGATGCACATTTTAGATGTAGTTTAATTGAAACCTGGAAATACTXTTAATTTG
CTTTTTAAAGTCCTAAAATCAGGATTATCAGATTCTGAATTAATGGAGTTTAAATCAAAAAGATTACAAGGCAGT
TTTTCAGTTTTATTCTGGTTAATTTTATCACAGCTTTGGGAACCTACTTTGTTTATTTGCTTCTTTGAAGTTAGA
TTTCCCCAGTGAAATTTCAGGTATCACATAAAGTCTTATGAAATGGCTCATTGCACTTTGAACTTTGAGTCAAGG
AAGTGAAATTTATTGATAGATTGTTGGTGTAATATTTATCCTGTTTGTGGTAGCTTTTTTGAATAATAAGTGTCT
TAGAAGACCATGTTGGAGTAGCCTGCATGCTTTTATCAAACATATTAATTATGTGATGGCTGATACTGCTTTAGA
TATTACATAGAAATAGTAGTAGGTGTTTACTAAACTGGAAATTTCATTTAACTTGGTTTAGCTTTGCCTTGTTCT
CAGTCACATTGATAAAAATGTAAGACTTXTGTTTATCTTTTAGAATAATGACACCTTTTGGTGCTGAGAATTTTT
TGTTTTATATATATATATATATATACGTAATATAAATACAAAATATATTTAAATATGTATAATATTTCTCATACA
CTTTATGTAACTTTGTGTTCCTGTTTCTCTATTATCTTGGCATGTTTTCTTCAAATGGCACTTCTTAACCTCCTA
AGGTTAATAAATTTCTTTGTAATGGACTTTTGTTTTCTAATTCCTCAGCGTATGACAAATGAATTATACTTTGTC
AAATTATTTAGGTAACTTTCAGTTTTTGAAGTCCTGGGATCATAACATTCATCAGTCTTTAATTTCTGTCATTAA

FIGURE 5977C

GGTCATTAGCTATAAATGAATTTATGAGTAGATTTAAAAAATAAAACATACAATCCTTCCCTTAACACACTTTCC
CACCATTTGGTTCAACTGCTAGTGTAAAAGCATGATGAATTTTGAGAAGTTATATTTTACCAGTTACTTTATTTT
TTACCAGTTATTTAAAACAGACATGAGCCAAAGCCAGAATACTTGTTAATGAAAATGAGGTGTTTTGGAGGAAAG
GAAGGTTGTGCTGCAGTTTTTACTTGAAATCTGTTACATTTCTTTACAGAAATTTCAAATCTCTTGTTTCCTGTT
ATGATGGTGGCATTATATACCTTTAAAATGTGAGCTATAGGAAAATGAATGATGGTTAATTTTTTAATAAATATT
TAGACTTGTGTTTTTGAAATTTTTTATAACATTGTTATAGGTTTTATCCTCTTTCTCTTGTGAACATGTAGTGGX
XTGTATTXTGTGATCTTTGCCGCATGCTAGAGACTTAAGAATACTATAGCAAATATCTGTCTTCGCTTACATTTA
AAAATTTTTCGTGACTACTCCCTGTTGATATCTGTCTTAAAAGTTACTTTTGATGTAGTTCACAAATGTACCAGA
TAATTATTTCATCGTTTTTAATGCTTAAAGTTTTTATTTGTATTAGGATTTTTAGTATGATTTTAATGTTAAAGT
TTTGAAGTTACTCTGCCACTAGAAGTCTAATTTTGGGACTTACTATTCATGAAATAGGAATTGACTTTTATATAA
GTAATAGGACCTTATTTTGAAGGTTCAAACTGGAGAAAATCTTACATTGTTTATATTTTTATTTCATTTATTTCA
GTTGATTTGCTTGAGATCAAGATTGCAGATACAGAATCCATATTTCGTGTATATTGCTGATATTAATCATTAAAA
TCGTTTTTGACAGTTTGACAGTTAAAGGCATTTCCCTGTGAAATAATACTGGTATGTATTTAACCATGCAGATCC
TCAGTTTGTGGTCTGCCAGCTAAAGGTGAAGATATATTCCTCCAATTCAGGACCCACACGACGGGAAGACAAGTT
CATGTACTTTGAGTTCCCTCAGCCGTTACCTGTGTGTGGTGATATCAAAGTAGAGTTCTTCCACAAACAGAACAA
GATGCTAAAAAAGGTTTGTACTTTACTTTCATTGGGAGAAATATCCAAAATAAGGACAGATTAAAAGCTATATTT
TATTTTATGACATGTAAGGAACTATAATTTGTTTTCTATTAGATCTGCCAGGTGTTTTGCTTACTCTGGCATTGG
TGAGACATTATAAGGGTAAATAATCCTGTTTGAAGGAAAAGGCCTTATGGCATTGTAACATGAGAGGAATTTTTC
TTAACAAGGATGGTTAACTGAGAAGAAATTAGCATGGGACCAATATTTTAAAAATTTTGGTCTATAGGTAGAAAT
GAGATCTGTTCTGTGGTCTTATGTAGTGACACAAACCACTTTTTCTCCATTTTGGCTTATGTTTCTTTTTCTTTC
CTTTTTTTTTTTTTCCTTTTTGTTAGAGAGAGGGTCTTGTTCTATTGCCCAGGCTGAGTAGCTAAGACTACAACA
TXTGCCACCACACCCAGCTAATTTTTTTTATTTTTATTTTTGTAGGGACAGGGTCTCACTATGTTGCCCAGGCTG
GTCTCAAACTCCTGGGCACAAGCAGTCCTCACGCTTTGGCATCCCAAAGAGTTGGAATTACAGGTGTGCGCCATC
ATGCCTGGCCTTAACGTTTCTTAAGACTTGATTATTTTCTATTTAGCTTCTGTGGATTTACTTGATTAATTTTTT
TAATAGGAGAGAAATCAGTATGAAGAGGAAGTAATAAAGAATGAAAACATGGTATTTAAATGTGCAGGTTTAGAA
AGTTAATGAAGTTTGAATTTGATTGATCTGTATTTAGAGAAGGCAACGTCTTATTATTTTAAAACCAACTATCCG
CCCTGTGCGGTGGCTCACGCCTGTAATTCCAGCACTTTGGGAGGCTGAGGTGGGCAGATCAGCTGAGGTCAGGAG
TTCGAGACCAGCCTGGCCAACATGGTTAAACCCCATCTCTACTAAAAATACAAAAAAATTAGCCGGGTGTGGTGG
CAGGCGCCTGTTTTCCCCAGTAATTCAGGAGGCTTGGAGGCAGAAAATTGCTGAACCCGAGAGGCGGAGGTTGCA
GTAAGCCAAGGATGCACCATTGAACTCCAGCCTGGGGCAACAAGAGTGAACTCCATTCAAAAAAAAGAAAAAAAA
AACAACAACTATCTTCATTTAAAATATTAAATGTGAATATTTAAAGTGAGACTAAGGTGCAACATTTTTAGATAG
TAATGAAGAAAAGGACTAACTTTGTAGTGTTGCTGCCTTGTTAAACATACTAGATAGCATATTGCCAATCTTTAA
ACATTCTCAATGATAGGATTTATTACTTTTTCTGATTTTTAGCTTTTCTTTTGAAAGAAAATAAGAGGAAGTTTC
ATTTACTGCAAAATTTTAAATGCTGCTTTGATGTATCAGTAGAGATATAATTTTCCTTTATCCAGAATCCAAGTA
GCTGGAAAAAAAAAATCAAAATATGCTGAACTTTTTTTTTTTTAGCCAGAAACCCATTTCCTATCGTCTGTACAAA
TAAAAGTTAAATATATCTCAATAACTTAGAAAAATTATTTTTTGATAATCCAGGAAGTATTAGCAACTGTTTTAA
AATTAAGATAACTAGTAAGTTTTATTTAGCTTTCAAAAATAGGCATCTACATCATCATCTCTGCATACCTTTAGG
AATTTCCTAATTCTTATTTCCCTTCATCTGTACTTTAACACATGCAAAATTGAAGGTTAGATTAAATATTTATGA
TTTATTTGTTTATCCCTTGACTACATAAATTCCCATTTTATTGATTTTCCXTGCCTTATTTAAGAATATGCTATG
ATTAAAACACAAAAAATTTTXGTATAACCCATATATATATAGAATTCACCTTTTTGTTATTTAAATATTATTGGC
TTATTTTCTTCTAAGTAAAATACAATTACTGGCTAAAATAATTGAAATAAGCAAAAAAAAAATTTTAAAGACCTT
GTATACAAGATTACTTTGCCAGGTACTGTTAAAAGATGCAATGACATTTAAGACGTAACATCCTTAAGGATCTTA
TTTTCTGGGGGATAAAAAACTTTAAGGTAAATTAGAATAAAAGATTTAAATGGCAXTTTAAGGTACCAGGTACCA
GATAAGATGTCACAAGGCTGTATATCATTAATTGCCAAATGATTTATACAGGCCAGATTTCTTTGTTGGTCCATT
GGAGGTTTAAAGTGATGACTTCTGTTGTGTTTTTXTTATTAAGAAGGTATTATCTTATTAGTAGGAAGTGATTTT
TTTTAAGAACAAGCATTTTATAACATCAAAAGAAATCAGTAGTACTCTTTCCTACCCCCTCATATTTATTCTGAA
AGTATTCAAGCATTATATTGTCATGTAAGAAACTGGAGCTTCTCATGTTTGTATTGCTGTAGAAGTAAACATGTA
TTTGCCATGCGTCATCAGGGAAGTTGCACTCACCGTCCAAGAACTTTTGTTAAAGTAAATCTTGGAATAGGTAGC

FIGURE 5977D

TCATTTGAAATGTAGAAAAAATTAAATCCATATCTGAATTTTGTTTATATGTATGTACACGTAAACTAAAAACGT
ATTTAAAGCTAGTATTAGATGAGAAAAGAGGTTTTTTTACTTAAAATTTTAAGGCAAAAGTAGTTTATCTTAGAT
CTTGTGAGATTGTATTTTTGGTTTAAAATTTGAGAATTTGAGTGAAGAAAAATCATGTGAATGAAAATGCAACAG
ATAACTCAGATTGCCTTATAATAGTCTTTGTGTTTACCTTTATTCAGAATATCAAATGATAGTTTATTTTGTTGA
CTTTTTGCAAATGTTTAACATAGGTGACAGATTTXCTTTTTTAAAAAAATAAAACATCATTAATTAAATATGTCA
TTTCATTTCTTTTTCTTTTCTTTTTTTTTTTTTTAGGACAAAATGTTTCACTTTTGGGTAAATACATTCTTCATA
CCAGGACCAGAGGAAACCTCAGAAAAAGTAGAAAATGGAAGTCTATGTGATCAAGAAATCGATAGCATTTGCAGT
ATAGAGCGTGCAGATAATGACAAGGAATATCTAGTACTTACTTTAACAAAAAATGATCTTGACAAAGCAAATAAA
GACAAAGCCAACCGATACTTTTCTCCAAATTTTAAGGTCAGTTAAATTAAACATTTTGTGGGGGTTGGTGACTTG
TATGTATGTGATGTGTGTTTAATTCTAGGAGTACAGCTGATGAAGAACTTGCTTGACAAGTTTTTAACTTATGTA
TTATTTCGAAGCAGTGTTTACGTAGCAGTAACATGAAAGTTTCTAATAAAATACCCAATGTACACAAGCGTCAAA
AAAGCTGCATTTTTCCTTTTCCTAATTCTTTGTTGTTTGCTGAAATCTGGGGCAAAGGTGCGCGGAGGGGGCTAA
ATGACTGGGATATGAAGTAGGAATGGGAGAGGAAAGAAATAGATGGGAACTCAGGTCATTTGGGAATGATTCATA
TGGAATGTTTTTACTGCTTCCACTCCTGTCTGCCTTCCAATTTATTCTCAATCCCTCAGAGTGATCTTAAAAATA
GACTTGATTGTGTCACTTCTGTTTACACTTTATAAGGACCTTGTGTTTTTTTTTTTTACCATGACCTACAAGGCC
CAGCATAATTTAGCACAGGGCTACCTCCTACATCAGCACTAGTCACCTTCTCTCCTTGTTTCTTGAGATTCAGTC
ATACTGGTCTTTCTTCAGTTCTTCAAAATGCTAAGCTTCTGCCTCTTCTAGTCTTTCCAGTTATTTTCCTTCTCC
CTGTACCTTTTCATCTCAGCCTTTTCCCCTGACCTTCCATAGCTATCTTCATATTTCCAGCCTTAGCTTCAATCT
CATATTCTCTGAAGTCCTTTGATTGTCCTCCCGTTATTCTTTTTTTAAAAATCCTATTTCCTTATATTGTATCTT
AGAATTATTTGGTTTGTTTCATTTTTGCCTATGTGTGATATATGTATTTCCACATAGGTATATATATCTACTTAT
AGACAAGAATTCTTCAGATTAAAAAAATCTGATTTGTAAACATTCCCAAGTGGXTGTTTACCATTTTTTTCTTCC
CCCTTCTTATTCTACCTGATTTTCCCCTGTTCATTCACCACACTCGTTTCTTTCTCTTTTTTACTCTCTCTTAAT
TTTTCATTCAATTTTTATAACATGTAATAAATCTAACTGTAGCGTCTGAGTATTAAGAATATTGCTAGTAATACT
TCACCTGTAATCCCAGCACTTTGGGAGGCTAAGGCAGGCGGATCACTTGAGGCCCAGGAGTTTAAGACCAGCCGG
CCAATATGGCGAAACCCTATCTGCACTACAAATACAAAAATTAGCTGGGCATGGTGTCGCACACCTGTAATCCCA
GCTACTTGGGAGGCTGAGGCACAAGAATTGCTTGAGCCTGTGAGATGGAGGTTGCAGTGAGCCGAGATCACACCA
GTGCACGTGCACTTCAGCCTGGGCAACAGAGCAAGACTCTGTCTTAAAAAAAAAAAAAAAAAAAATATATACACA
CACACACACACACACACACACACACACACACACACTATTACTACCAATATACATACATATATGTATGTATGTATG
TATGTATATTGGTAGTAATAGTAATACTTGGGCCCCTGCACGTTTTAAGTGAAAATAGATCTAATATTAAATGTC
TTTAGCCCTTAAATTTTTTTTAAGTGTTCAGAAGTTTCCCTTTAAAAAAATTTTTAATATATAATAATTGTACAT
ATTTATGGGATACAGAGTGATATTTTCATGTATGCAGTGTGTGATGATCAAATCAGGATAATTAGCATATGGATC
ACCTCAAACATTTGTCATTTCTTTGTGTTAGGAACATTCAAAATTCTGTCTTCTAGCTATTTGAAAATATACAGT
AAATTATTGTTGACTAGTTACAGTTCTATAGAACACTATAATTTATTCCTCCTGTGTGTAATTTTTTATCTTTTA
ACCAACATCTCCCTATCCTCCCCTCCCACTCCCTTTCCCGGCCTCTTAATAACCACACTCTTATGAGCTCAACTT
TTTTAGCTTCCATATATGAGTGAGAACATACGGTATTTATCTTTCTGTACCTGACTTATTTTACTTAACATCATG
TCCTCCGGGGCTAGACATTCTCTTTAGAATCCACAGGTTTCCTTTCTTTTCTCTAAATCTGCATTTTGCTCAGCCA
TTAACTTTTAAAATGTCTTTTTCCCTTTAGTTTTATTGTTTTCTATTTTAATATTGCAAGATGTTTTATATTTGT
GATTACAAATAAAAACTCCATTATTAGTAAACAAATACAATGTCATATAGTAGTAAGTGCTATAAAAAATAGACA
GGATAGAAAGTAATCTTGGTTTGTATGTTTTTTGTTTTTTAGCAAAGATGATTAGAGAAGGCCCAACCAAGCAGA
TAACATTTAAGCAGAGGCCTAAATCATATAAGTGAGTTATACAAATATCTGGGAAAAGGAGTTAAGAGTACAGAT
GCAAAAGCCCTTAGACAAGAGAATGAGCTTGGTATATCTGAAGAGTGGATAAGTCATTTTGACTGAAACAGAGTG
GACAAGAAAACCAGTCCAAGTGTAAAGATACTAGTGTGTGTTCAGCATAGGAAGGATGTAATCTGAATTTTGTGT
TTAATATTCCCTGTGTTCATGCTTTCAAAATACAGATGAGTGAGGAAAGTAGGGAGAAGGGGTAATAAAGGAAGC
TGAGAGATCAGTTAAGAGGTACTTGAATAGTTTAGTAAAGATGAGAGAAGATGTTTGCTXCTTGTTGCCCCTCAC
TGCTTAGAATAGTGGCAGTGAAGGGTACCXXGAAGCTGTCAGATTXACTTAAAGAGTTTXCTGATGCAGTGGATG
TTGGTTGTAAGAGAAGAATTGATAATGACTCTTGGATAATAGGGGAGGGAGGGGCTGTCXATATAATATAATGAA
GAAGGGATTTGAAGTCATTTCTGATTTAAATCTCACATCCACTACCTACTTTTAATAGATATGTAGCCTTTAACA
AGTTCCCTAACCTTTCTGGGCCTTAGCTACCTCCCCTTGGAAATGGAAATACCTAACATGTAAGGTTGTTTTGAC

FIGURE 5977E

AGTTATTTTCACTAGGCATGTAAAGGCACTTGACTCTCTGTTATAGACCACTGTATTATGTTAATGTCCCTCTCC
TTCCTCCCTTTAGGTAAAGTTTTTAGGGCTAATXAATCCCGAATATCAATGTTGATCAGTAGTTTGTGTTTGTGT
AGTGTTGTTTATATCAAAACTACATTGAAGCCGGGCACAGTGGTTXAACGCCTAAAATCGCAACACTTTGGGAGG
CCAAGGTGGGCCTTCCCCACTTGACTAAGGAGTTTGAGACCAGCCTGGGCAACATGGTGAAATCCCATCTCTACA
AAAAATATAAAAGCTAGCTGGGTGTGGTGGCATGCACCTGTAGTCCTAGCTACTTGGGAGGCTGAGGTTGATCCT
GGGAGTTTGAGCCTGCAGTGAGCTGTGAAGATGCCACTGCACTCTAGTCTGGGTGACAGAGCAAGACCCTGTCTC
AAAAACACACACACACACACACACACACACAAAGAAATACATTGATTTTTCACATAGGTAGTAAGAGAAACATTC
TTTTTGAACTCAGCTGTTTGTGAATTGAATTTTGTAATTCAAATGCTATATTATGTAAACTATTGATGACTTTCA
ATCTGCATTTATTTTGTATAATTATTTAGTTAATATTTGCCACTTATATTCCTTAAAAAATAAAATTGAGGTTGG
GCGTGGTGGCTCACACTTGTAATCCCAGCACTTTGGGAGGCTGAGGCAGGCAGATTGCXTGAGCTCAGGAGTTTG
AGATCAGCCTGGGCAACATCATGAACCCCATTTXTACTAAAATACAAAAATTATCTGGGCATGGTGGTGTACACC
TGTAGCCCTAGCTGTTTGGGAGGCTAAGGCACGAGATTGCTTGAACCCGGGAGGCAGAGGTTGCAGTGAGCCAAG
ATCATGCCACTGCACTCCAGCTTGGCAACAGAGCAAGACTCTTGTCTCCAGAAATAAAAATAAATAAATTGTATT
AACATCCTGATAGTTTATCTGTTTAGTACCTAGCAAGAAAGAAAATGTTGAACATCTTAAGAAGAGGGTCATTTA
AAAGGCCTCTTAAAGATCATGTTTGTTACAGTGCTTAAAAATTAATATGTTCATCTGCAAAATGGAATAAAAAAT
CTGTTAAAAATATATTTCACTAAATAGTTAAGATGAGTCATATTTGTGGGTTTTCATTTTAAATTTTCTTTCTCT
AGGTGAAGCTGTACTTCACAAAAACAGTAGAGGAGCCGTCAAATCCAGAGGCTAGCAGTTCAACTTCTGTAACAC
CAGATGTTAGTGACAATGAACCTGATCATTATAGATATTCTGACACCACTGACTCTGATCCAGAGAATGAACCTT
TTGATGAAGATCAGCATACACAAATTACAAAAGTCTGAATTTTTTTTTATCAAGAGGGATAAAACACCATGAAAA
TAAACTTGAATAAACTGAAAATGGACCTTTTTTTTTTTAATGGCAATAGGACATTGTGTCAGATTACCAGTTATA
GGAACAATTCTCTTTTCCTGACCAATCTTGTTTTACCCTATACATCCACAGGGTTTTGACACTTGTTGTCCAGTT
GAAAAAAGGTTGTGTAGCTGTGTCATGTATATACCTTTTTGTGTCAAAAGGACATTTAAAATTCAATTAGGATTA
ATAAAGATGGCACTTTCCCGTTTTATTCCAGTTTTATAAAAAGTGGAGACAGACTGATGTGTATACGTAGGAATT
TTTTCCTTTTGTGTTCTGTCACCAACTGAAGTGGCTAAAGAGCTTTGTGATATACTGGTTCACATCCTACCCCTT
TGCACTTGTGGCAACAGATAAGTTTGCAGTTGGCTAAGAGAGGTTTCCGAAAGGTTTTGCTACCATTCTAATGCA
TGTATTCGGGTTAGGGCAATGGAGGGGAATGCTCAGAAAGGAAATAATTTTATGCTGGACTCTGGACCATATACC
ATCTCCAGCTATTTACACACACCTTTCTTTAGCATGCTACAGTTATTAATCTGGACATTCGAGGAATTGGCCGCT
GTCACTGCTTGTTGTTTGCGCATTTTTTTTTAAAGCATATTGGTGCTAGAAAAGGCAGCTAAAGGAAGTGAATCT
GTATTGGGGTACAGGAATGAACCTTCTGCAACATCTTAAGATCCACAAATGAAGGGATATAAAAATAATGTCATA
GGTAAGAAACACAGCAACAATGACTTAACCATATAAATGTGGAGGCTATCAACAAAGAATGGGCTTGAAACATTA
TAAAAATTGACAATGATTTATTAAATATGTTTTCTCAATTGTAACGACTTCTCCATCTCCTGTGTAATCAAGGCC
AGTGCTAAAATTCAGATGCTGGTAGTACCTACATCAGTCAACAACTTACACTTATTTTACTAGTTTTCAATCATA
ATACCTGCTGTGGATGCTTCATGTGCTGCCTGCAAGCTTCTTTTTTCTCATTAAATATAAAATATTTTGTAATGC
TGCACAGAAATTTTCAATTTGAGATTCTACAGTAAGCGTTTTTTTTCCTTGAAGATTTATGATGCACTTATTCAA
TAGCTGTCAGCCGTTCCACCCTTTTGACCTTACACATTCTATTACAATGAATTTTGCAGTTTTGCACATTTTTTA
AATGTCATTAACTGTTAGGGAATTTTACTTGAATACTGAATACATATAAATGGTTATATAAAAAAAGACATTTTG
GGTTAAAAAGGAAATTAGAGTT

FIGURE 5978

GCTTGCCCGTCGGTCGCTAGCTCGCTCGGTGCGCGTCGTCCCGCTCCATGGCGCTCTTCGTGCGGCTGCTGGCTC
TCGCCCTGGCTCTGGCCCTGGGCCCCGCCGCGACCCTGGCGGGTCCCGCCAAGTCGCCCTACCAGCTGGTGCTGC
AGCACAGCAGGCTCCGGGGCCGCCAGCACGGCCCCAACGTGTGTGCTGTGCAGAAGGTTATTGGCACTAATAGGA
AGTACTTCACCAACTGCAAGCAGTGGTACCAAAGGAAAATCTGTGGCAAATCAACAGTCATCAGCTACGAGTGCT
GTCCTGGATATGAAAAGGTCCCTGGGGAGAAGGGCTGTCCAGCAGCCCTACCACTCTCAAACCTTTACGAGACCC
TGGGAGTCGTTGGATCCACCACCACTCAGCTGTACACGGACCGCACGGAGAAGCTGAGGCCTGAGATGGAGGGGC
CCGGCAGCTTCACCATCTTCGCCCCTAGCAACGAGGCCTGGGCCTCCTTGCCAGCTGAAGTGCTGGACTCCCTGG
TCAGCAATGTCAACATTGAGCTGCTCAATGCCCTCCGCTACCATATGGTGGGCAGGCGAGTCCTGACTGATGAGC
TGAAACACGGCATGACCCTCACCTCTATGTACCAGAATTCCAACATCCAGATCCACCACTATCCTAATGGGATTG
TAACTGTGAACTGTGCCCGGCTCCTGAAAGCCGACCACCATGCAACCAACGGGGTGGTGCACCTCATCGATAAGG
TCATCTCCACCATCACCAACAACATCCAGCAGATCATTGAGATCGAGGACACCTTTGAGACCCTTCGGGCTGCTG
TGGCTGCATCAGGGCTCAACACGATGCTTGAAGGTAACGGCCAGTACACGCTTTTGGCCCCGACCAATGAGGCCT
TCGAGAAGATCCCTAGTGAGACTTTGAACCGTATCCTGGGCGACCCAGAAGCCCTGAGAGACCTGCTGAACAACC
ACATCTTGAAGTCAGCTATGTGTGCTGAAGCCATCGTTGCGGGGCTGTCTGTAGAGACCCTGGAGGGCACGACAC
TGGAGGTGGGCTGCAGCGGGGACATGCTCACTATCAACGGGAAGGCGATCATCTCCAATAAAGACATCCTAGCCA
CCAACGGGGTGATCCACTACATTGATGAGCTACTCATCCCAGACTCAGCCAAGACACTATTTGAATTGGCTGCAG
AGTCTGATGTGTCCACAGCCATTGACCTTTTCAGACAAGCCGGCCTCGGCAATCATCTCTCTGGAAGTGAGCGGT
TGACCCTCCTGGCTCCCCTGAATTCTGTATTCAAAGATGGAACCCCTCCAATTGATGCCCATACAAGGAATTTGC
TTCGGAACCACATAATTAAAGACCAGCTGGCCTCTAAGTATCTGTACCATGGACAGACCCTGGAAACTCTGGGCG
GCAAAAAACTGAGAGTTTTTGTTTATCGTAATAGCCTCTGCATTGAGAACAGCTGCATCGCGGCCCACGACAAGA
GGGGGAGGTACGGGACCCTGTTCACGATGGACCGGGTGCTGACCCCCCCAATGGGGACTGTCATGGATGTCCTGA
AGGGAGACAATCGCTTTAGCATGCTGGTAGCTGCCATCCAGTCTGCAGGACTGACGGAGACCCTCAACCGGGAAG
GAGTCTACACAGTCTTTGCTCCCACAAATGAAGCCTTCCGAGCCCTGCCACCAAGAGAACGGAGCAGACTCTTGG
GAGATGCCAAGGAACTTGCCAACATCCTGAAATACCACATTGGTGATGAAATCCTGGTTAGCGGAGGCATCGGGG
CCCTGGTGCGGCTAAAGTCTCTCCAAGGTGACAAGCTGGAAGTCAGCTTGAAAAACAATGTGGTGAGTGTCAACA
AGGAGCCTGTTGCCGAGCCTGACATCATGGCCACAAATGGCGTGGTCCATGTCATCACCAATGTTCTGCAGCCTC
CAGCCAACAGACCTCAGGAAAGAGGGGATGAACTTGCAGACTCTGCGCTTGAGATCTTCAAACAAGCATCAGCGT
TTTCCAGGGCTTCCCAGAGGTCTGTGCGACTAGCCCCTGTCTATCAAAAGTTATTAGAGAGGATGAAGCATTAGC
TTGAAGCACTACAGGAGGAATGCACCACGGCAGCTCTCCGCCAATTTCTCTCAGATTTCCACAGAGACTGTTTGA
ATGTTTTCAAAACCAAGTATCACACTTTAATGTACATGGGCCGCACCATAATGAGATGTGAGCCTTGTGCATGTG
GGGGAGGAGGGAGAGAGATGTACTTTTTAAATCATGTTCCCCCTAAACATGGCTGTTAACCCACTGCATGCAGAA
ACTTGGATGTCACTGCCTGACATTCACTTCCAGAGAGGACCTATCCCAAATGTGGAATTGACTGCCTATGCCAAG
TCCCTGGAAAAGGAGCTTCAGTATTGTGGGGCTCATAAAACATGAATCAAGCAATCCAGCCTCATGGGAAGTCCT
GGCACAGTTTTTGTAAAGCCCTTGCACAGCTGGAGAAATGGCATCATTATAAGCTATGAGTTGAAATGTTCTGTC
AAATGTGTCTCACATCTACACGTGGCTTGGAGGCTTTTATGGGGCCCTGTCCAGGTAGAAAAGAAATGGTATGTA
GAGCTTAGATTTCCCTATTGTGACAGAGCCATGGTGTGTTTGTAATAATAAAACCAAAGAAACATA

FIGURE 5979

MALFVRLLALALALALGPAATLAGPAKSPYQLVLQHSRLRGRQHGPNVCAVQKVIGTNRKYFTNCKQWYQRKICG
KSTVISYECCPGYEKVPGEKGCPAALPLSNLYETLGVVGSTTTQLYTDRTEKLRPEMEGPGSFTIFAPSNEAWAS
LPAEVLDSLVSNVNIELLNALRYHMVGRRVLTDELKHGMTLTSMYQNSNIQIHHYPNGIVTVNCARLLKADHHAT
NGVVHLIDKVISTITNNIQQIIEIEDTFETLRAAVAASGLNTMLEGNGQYTLLAPTNEAFEKIPSETLNRILGDP
EALRDLLNNHILKSAMCAEAIVAGLSVETLEGTTLEVGCSGDMLTINGKAIISNKDILATNGVIHYIDELLIPDS
AKTLFELAAESDVSTAIDLFRQAGLGNHLSGSERLTLLAPLNSVFKDGTPPIDAHTRNLLRNHIIKDQLASKYLY
HGQTLETLGGKKLRVFVYRNSLCIENSCIAAHDKRGRYGTLFTMDRVLTPPMGTVMDVLKGDNRFSMLVAAIQSA
GLTETLNREGVYTVFAPTNEAFRALPPRERSRLLGDAKELANILKYHIGDEILVSGGIGALVRLKSLQGDKLEVS
LKNNVVSVNKEPVAEPDIMATNGVVHVITNVLQPPANRPQERGDELADSALEIFKQASAFSRASQRSVRLAPVYQ
KLLERMKH

FIGURE 5980

TAACTGAGCGAGGAGCAATTGATTAATAGCTCGGCGAGGGGACTCACTGACTGTTATAATAACACTACACCAGCA
ACTCCTGGCTTCCCAGCAGCCGGAACACAGACAGGAGAGAGTCAGTGGCAAATAGACATTTTTCTTATTTCTTAA
AAAACAGCAACTTGTTTGCTACTTTTATTTCTGTTGATTTTTTTTTCTTGGTGTGTGTGGTGGTTGTTTTTAAGT
GTGGAGGGCAAAAGGAGATACCATCCCAGGCTCAGTCCAACCCCTCTCCAAAACGGCTTTTCTGACACTCCAGGT
AGCGAGGGAGTTGGGTCTCCAGGTTGTGCGAGGAGCAA**ATG**ATGACCGCCAAGGCCGTAGACAAAATCCCAGTAA
CTCTCAGTGGTTTTGTGCACCAGCTGTCTGACAACATCTACCCGGTGGAGGACCTCGCCGCCACGTCGGTGACCA
TCTTTCCCAATGCCGAACTGGGAGGCCCCTTTGACCAGATGAACGGAGTGGCCGGAGATGGCATGATCAACATTG
ACATGACTGGAGAGAAGAGGTCGTTGGATCTCCCATATCCCAGCAGCTTTGCTCCCGTCTCTGCACCTAGAAACC
AGACCTTCACTTACATGGGCAAGTTCTCCATTGACCCTCAGTACCCTGGTGCCAGCTGCTACCCAGAAGGCATAA
TCAATATTGTGAGTGCAGGCATCTTGCAAGGGGTCACTTCCCCAGCTTCAACCACAGCCTCATCCAGCGTCACCT
CTGCCTCCCCCAACCCACTGGCCACAGGACCCCTGGGTGTGTGCACCATGTCCCAGACCCAGCCTGACCTGGACC
ACCTGTACTCTCCGCCACCGCCTCCTCCTCCTTATTCTGGCTGTGCAGGAGACCTCTACCAGGACCCTTCTGCGT
TCCTGTCAGCAGCCACCACCTCCACCTCTTCCTCTCTGGCCTACCCACCACCTCCTTCCTATCCATCCCCCAAGC
CAGCCACGGACCCAGGTCTCTTCCCAATGATCCCAGACTATCCTGGATTCTTTCCATCTCAGTGCCAGAGAGACC
TACATGGTACAGCTGGCCCAGACCGTAAGCCCTTTCCCTGCCCACTGGACACCCTGCGGGTGCCCCCTCCACTCA
CTCCACTCTCTACAATCCGTAACTTTACCCTGGGGGGCCCCAGTGCTGGGGTGACCGGACCAGGGGCCAGTGGAG
GCAGCGAGGGACCCCGGCTGCCTGGTAGCAGCTCAGCAGCAGCAGCAGCCGCCGCCGCCGCCGCCTATAACCCAC
ACCACCTGCCACTGCGGCCCATTCTGAGGCCTCGCAAGTACCCCAACAGACCCAGCAAGACGCCGGTGCACGAGA
GGCCCTACCCGTGCCCAGCAGAAGGCTGCGACCGGCGGTTCTCCCGCTCTGACGAGCTGACACGGCACATCCGAA
TCCACACTGGGCATAAGCCCTTCCAGTGTCGGATCTGCATGCGCAACTTCAGCCGCAGTGACCACCTCACCACCC
ATATCCGCACCCACACCGGTGAGAAGCCCTTCGCCTGTGACTACTGTGGCCGAAAGTTTGCCCGGAGTGATGAGA
GGAAGCGCCACACCAAGATCCACCTGAGACAGAAAGAGCGGAAAAGCAGTGCCCCCTCTGCATCGGTGCCAGCCC
CCTCTACAGCCTCCTGCTCTGGGGGCGTGCAGCCTGGGGGTACCCTGTGCAGCAGTAACAGCAGCAGTCTTGGCG
GAGGGCCGCTCGCCCCTTGCTCCTCTCGGACCCGGACACCT**TGA**GATGAGACTCAGGCTGATACACCAGCTCCCA
AAGGTCCCGGAGGCCCTTTGTCCACTGGAGCTGCACAACAAACACTACCACCCTTTCCTGTCCCTCTCTCCCTTT
GTTGGGCAAAGGGCTTTGGTGGAGCTAGCACTGCCCCCTTTCCACCTAGAAGCAGGTTCTTCCTAAAACTTAGCC
CATTCTAGTCTCTCTTAGGTGAGTTGACTATCAACCCAAGGCAAAGGGGAGGCTCAGAAGGAGGTGGTGTGGGGA
TCCCCTGGCCAAGAGGGCTGAGGTCTGACCCTGCTTTAAAGGGTTGTTTGACTAGGTTTTGCTACCCCACTTCCC
CTTATTTTGACCCATCACAGGTTTTTGACCCTGGATGTCAGAGTTGATCTAAGACGTTTTCTACAATAGGTTGGG
AGATGCTGATCCCTTCAAGTGGGGACAGCAAAAAGACAAGCAAAACTGATGTGCACTTTATGGCTTGGGACTGAT
TTGGGGGACATTGTACAGTGAGTGAAGTATAGCCTTTATGCCACACTCTGTGGCCCTAAAATGGTGAATCAGAGC
ATATCTAGTTGTCTCAACCCTTGAAGCAATATGTATTATATACTCAGAGAACAGAAGTGCAATGTGATGGGAGGA
ACGTAGCAATATCTGCTCCTTTTCGAGTTGTTTGAGAAATGTAGGCTATTTTTTCAGTGTATATCCACTCAGATT
TTGTGTATTTTTGATGTACCCACACTGTTCTCTAAATTCTGAATCTTTGGGAAAAAATGTAAAGCATTTATGATC
TCAGAGGTTAACTTATTTAAGGGGGATGTACATATTCTCTGAAACTAGGATGCATGCAATTGTGTTGGAAGTGTC
CTTGGTCGCCTTGTGTGATGTAGACAAATGTTACAAGGCTGCATGTAAATGGGTTGCCTTATTATGGAGAAAAAA
ATCACTCCCTGAGTTTAGTATGGCTGTATATTTATGCCTATTAATATTTGGAATTTTTTTTAGAAAGTATATTTT
TGTATGCTTTGTTTTGTGACTTAAAAGTGTTACCTTTGTAGTCAAATTTCAGATAAGAATGTACATAATGTTACC
GGAGCTGATTTGTTTGGTCATTAGCTCTTAATAGTTGTGAAAAAATAAATCTATTCTAACGCAAAACCACTAACT
GAAGTTCAGATATAATGGATGGTTTGTGACTATAGTGTAAATAAATACTTTTCAACAAT

FIGURE 5981

MMTAKAVDKIPVTLSGFVHQLSDNIYPVEDLAATSVTIFPNAELGGPFDQMNGVAGDGMINIDMTGEKRSLDLPY
PSSFAPVSAPRNQTFTYMGKFSIDPQYPGASCYPEGIINIVSAGILQGVTSPASTTASSSVTSASPNPLATGPLG
VCTMSQTQPDLDHLYSPPPPPPPYSGCAGDLYQDPSAFLSAATTSTSSSLAYPPPPSYPSPKPATDPGLFPMIPD
YPGFFPSQCQRDLHGTAGPDRKPFPCPLDTLRVPPPLTPLSTIRNFTLGGPSAGVTGPGASGGSEGPRLPGSSSA
AAAAAAAAAYNPHHLPLRPILRPRKYPNRPSKTPVHERPYPCPAEGCDRRFSRSDELTRHIRIHTGHKPFQCRIC
MRNFSRSDHLTTHIRTHTGEKPFACDYCGRKFARSDERKRHTKIHLRQKERKSSAPSASVPAPSTASCSGGVQPG
GTLCSSNSSSLGGGPLAPCSSRTRTP

FIGURE 5982

GAATTCCCCCCCCCCCCCCCCGAGAGACTGGATGGACCCACAAGGGTGACAGCCCAGGCGGACCGATCTTCCCAT
CCCACATCCTCCGGCGCGATGCCAAAAAGAGGCTGACGGCAACTGGGCCTTCTGCAGAGAAAGACCTCCGCTTCA
CTGCCCCGGCTGGTCCCAAGGGTCAGGAAG**ATG**GATTCATACCTGCTGATGTGGGGACTGCTCACGTTCATCATG
GTGCCTGGCTGCCAGGCAGAGCTCTGTGACGATGACCCGCCAGAGATCCCACACGCCACATTCAAAGCCATGGCC
TACAAGGAAGGAACCATGTTGAACTGTGAATGCAAGAGAGGTTTCCGCAGAATAAAAAGCGGGTCACTCTATATG
CTCTGTACAGGAAACTCTAGCCACTCGTCCTGGGACAACCAATGTCAATGCACAAGCTCTGCCACTCGGAACACA
ACGAAACAAGTGACACCTCAACCTGAAGAACAGAAAGAAAGGAAAACCACAGAAATGCAAAGTCCAATGCAGCCA
GTGGACCAAGCGAGCCTTCCAGGTCACTGCAGGGAACCTCCACCATGGGAAAATGAAGCCACAGAGAGAATTTAT
CATTTCGTGGTGGGGCAGATGGTTTATTATCAGTGCGTCCAGGGATACAGGGCTCTACACAGAGGTCCTGCTGAG
AGCGTCTGCAAAATGACCCACGGGAAGACAAGGTGGACCCAGCCCCAGCTCATATGCACAGGTGAAATGGAGACC
AGTCAGTTTCCAGGTGAAGAGAAGCCTCAGGCAAGCCCCGAAGGCCGTCCTGAGAGTGAGACTTCCTGCCTCGTC
ACAACAACAGATTTTCAAATACAGACAGAAATGGCTGCAACCATGGAGACGTCCATATTTACAACAGAGTACCAG
GTAGCAGTGGCCGGCTGTGTTTTCCTGCTGATCAGCGTCCTCCTCCTGAGTGGGCTCACCTGGCAGCGGAGACAG
AGGAAGAGTAGAAGAACAATC**TAG**AAAACCAAAAGAACAAGAATTTCTTGGTAAGAAGCCGGGAACAGACAACAG
AAGTCATGAAGCCCAAGTGAAATCAAAGGTGCTAAATGGTCGCCCAGGAGACATCCGTTGTGCTTGCCTGCGTTT
TGGAAGCTCTGAAGTCACATCACAGGACACGGGGCAGTGGCAACCTTGTCTCTATGCCAGCTCAGTCCCATCAGA
GAGCGAGCGCTACCCACTTCTAAATAGCAATTTCGCCGTTGAAGAGGAAGGGCAAAACCACTAGAACTCTCCATC
TTATTTTCATGTATATGTGTTCATTAAAGCATGAATGGTATGGAACTCTCTCCACCCTATATGTAGTATAAAGAA
AAGTAGGTTTACATTCATCTCATTCCAACTTCCCAGTTCAGGAGTCCCAAGGAAAGCCCCAGCACTAACGTAAAT
ACACAACACACACACTCTACCCTATACAACTGGACATTGTCTGCGTGGTTCCTTTCTCAGCCGCTTCTGACTGCT
GATTCTCCCGTTCACGTTGCCTAATAAACATCCTTCAAGAACTCTGGGCTGCTACCCAGAAATCATTTTACCCTT
GGCTCAATCCTCTAAGCTAACCCCCTTCTACTGAGCCTTCAGTCTTGAATTTCTAAAAAACAGAGGCCATGGCAG
AATAATCTTTGGGTAACTTCAAAACGGGGCAGCCAAACCCATGAGGCAATGTCAGGAACAGAAGGATGAATGAGG
TCCCAGGCAGAGAATCATACTTAGCAAAGTTTTACCTGTGCGTTACTAATTGGCCTCTTTAAGAGTTAGTTTCTT
TGGGATTGCTATGAATGATACCCTGAATTTGGCCTGCACTAATTTGATGTTTACAGGTGGACACACAAGGTGCAA
ATCAATGCGTACGTTTCCTGAGAAGTGTCTAAAAACACCAAAAAGGGATCCGTACATTCAATGTTTATGCAAGGA
AGGAAAGAAAGAAGGAAGTGAAGAGGGAGAAGGGATGGAGGTCACACTGGTAGAACGTAACCACGGAAAAGAGCG
CATCAGGCCTGGCACGGTGGCTCAGGCCTATAACCCCAGCTCCCTAGGAGACCAAGGCGGGAGCATCTCTTGAGG
CCAGGAGTTTGAGACCAGCCTGGGCAGCATAGCAAGACACATCCCTACAAAAAATTAGAAATTGGCTGGATGTGG
TGGCATACGCCTGTAGTCCTAGCCACTCAGGAGGCTGAGGCAGGAGGATTGCTTGAGCCCAGGAGTTCGAGGCTG
CAGTCAGTCATGATGGCACCACTGCACTCCAGCCTGGGCAACAGAGCAAGATCCTGTCTTTAAGGAAAAAAAGAC
AAGGGAATTC

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FIGURE 5983

MDSYLLMWGLLTFIMVPGCQAELCDDDPPEIPHATFKAMAYKEGTMLNCECKRGFRRIKSGSLYMLCTGNSSHSS
WDNQCQCTSSATRNTTKQVTPQPEEQKERKTTEMQSPMQPVDQASLPGHCREPPPWENEATERIYHFVVGQMVYY
QCVQGYRALHRGPAESVCKMTHGKTRWTQPQLICTGEMETSQFPGEEKPQASPEGRPESETSCLVTTTDFQIQTE
MAATMETSIFTTEYQVAVAGCVFLLISVLLLSGLTWQRRQRKSRRTI

FIGURE 5984

GGCGAATGGAGCAGGGGCGCGCAGATAATTAAAGATTTACACACAGCTGGAAGAAATCATAGAGAAGCCGGGCGT
GGTGGCTCATGCCTATAATCCCAGCACTTTTGGAGGCTGAGGCGGGCAGATCACTTGAGATCAGGAGTTCGAGAC
CAGCCTGGTGCCTTGGCATCTCCCAATGGGGTGGCTTTGCTCTGGGCTCCTGTTCCCTGTGAGCTGCCTGGTCCT
GCTGCAGGTGGCAAGCTCTGGGAACATGAAGGTCTTGCAGGAGCCCACCTGCGTCTCCGACTACATGAGCATCTC
TACTTGCGAGTGGAAGATGAATGGTCCCACCAATTGCAGCACCGAGCTCCGCCTGTTGTACCAGCTGGTTTTTCT
GCTCTCCGAAGCCCACACGTGTATCCCTGAGAACAACGGAGGCGCGGGGTGCGTGTGCCACCTGCTCATGGATGA
CGTGGTCAGTGCGGATAACTATACACTGGACCTGTGGGCTGGGCAGCAGCTGCTGTGGAAGGGCTCCTTCAAGCC
CAGCGAGCATGTGAAACCCAGGGCCCCAGGAAACCTGACAGTTCACACCAATGTCTCCGACACTCTGCTGCTGAC
CTGGAGCAACCCGTATCCCCCTGACAATTACCTGTATAATCATCTCACCTATGCAGTCAACATTTGGAGTGAAAA
CGACCCGGCAGATTTCAGAATCTATAACGTGACCTACCTAGAACCCTCCCTCCGCATCGCAGCCAGCACCCTGAA
GTCTGGGATTTCCTACAGGGCACGGGTGAGGGCCTGGGCTCAGTGCTATAACACCACCTGGAGTGAGTGGAGCCC
CAGCACCAAGTGGCACAACTCCTACAGGGAGCCCTTCGAGCAGCACCTCCTGCTGGGCGTCAGCGTTTCCTGCAT
TGTCATCCTGGCCGTCTGCCTGTTGTGCTATGTCAGCATCACCAAGATTAAGAAAGAATGGTGGGATCAGATTCC
CAACCCAGCCCGCAGCCGCCTCGTGGCTATAATAATCCAGGATGCTCAGGGGTCACAGTGGGAGAAGCGGTCCCG
AGGCCAGGAACCAGCCAAGTGCCCACACTGGAAGAATTGTCTTACCAAGCTCTTGCCCTGTTTTCTGGAGCACAA
CATGAAAAGGGATGAAGATCCTCACAAGGCTGCCAAAGAGATGCCTTTCCAGGGCTCTGGAAAATCAGCATGGTG
CCCAGTGGAGATCAGCAAGACAGTCCTCTGGCCAGAGAGCATCAGCGTGGTGCGATGTGTGGAGTTGTTTGAGGC
CCCGGTGGAGTGTGAGGAGGAGGAGGAGGTAGAGGAAGAAAAAGGGAGCTTCTGTGCATCGCCTGAGAGCAGCAG
GGATGACTTCCAGGAGGGAAGGGAGGGCATTGTGGCCCGGCTAACAGAGAGCCTGTTCCTGGACCTGCTCGGAGA
GGAGAATGGGGGCTTTTGCCAGCAGGACATGGGGGAGTCATGCCTTCTTCCACCTTCGGGAAGTACGAGTGCTCA
CATGCCCTGGGATGAGTTCCCAAGTGCAGGGCCCAAGGAGGCACCTCCCTGGGGCAAGGAGCAGCCTCTCCACCT
GGAGCCAAGTCCTCCTGCCAGCCCGACCCAGAGTCCAGACAACCTGACTTGCACAGAGACGCCCCTCGTCATCGC
AGGCAACCCTGCTTACCGCAGCTTCAGCAACTCCCTGAGCCAGTCACCGTGTCCCAGAGAGCTGGGTCCAGACCC
ACTGCTGGCCAGACACCTGGAGGAAGTAGAACCCGAGATGCCCTGTGTCCCCCAGCTCTCTGAGCCAACCACTGT
GCCCCAACCTGAGCCAGAAACCTGGGAGCAGATCCTCCGCCGAAATGTCCTCCAGCATGGGGCAGCTGCAGCCCC
CGTCTCGGCCCCCACCAGTGGCTATCAGGAGTTTGTACATGCGGTGGAGCAGGGTGGCACCCAGGCCAGTGCGGT
GGTGGGCTTGGGTCCCCCAGGAGAGGCTGGTTACAAGGCCTTCTCAAGCCTGCTTGCCAGCAGTGCTGTGTCCCC
AGAGAAATGTGGGTTTGGGGCTAGCAGTGGGGAAGAGGGGTATAAGCCTTTCCAAGACCTCATTCCTGGCTGCCC
TGGGGACCCTGCCCCAGTCCCTGTCCCCTTGTTCACCTTTGGACTGGACAGGGAGCCACCTCGCAGTCCGCAGAG
CTCACATCTCCCAAGCAGCTCCCCAGAGCACCTGGGTCTGGAGCCGGGGGAAAAGGTAGAGGACATGCCAAAGCC
CCCACTTCCCCAGGAGCAGGCCACAGACCCCCTTGTGGACAGCCTGGGCAGTGGCATTGTCTACTCAGCCCTTAC
CTGCCACCTGTGCGGCCACCTGAAACAGTGTCATGGCCAGGAGGATGGTGGCCAGACCCCTGTCATGGCCAGTCC
TTGCTGTGGCTGCTGCTGTGGAGACAGGTCCTCGCCCCCTACAACCCCCCTGAGGGCCCCAGACCCCTCTCCAGG
TGGGGTTCCACTGGAGGCCAGTCTGTGTCCGGCCTCCCTGGCACCCTCGGGCATCTCAGAGAAGAGTAAATCCTC
ATCATCCTTCCATCCTGCCCCTGGCAATGCTCAGAGCTCAAGCCAGACCCCCAAAATCGTGAACTTTGTCTCCGT
GGGACCCACATACATGAGGGTCTCTTAGGTGCATGTCCTCTTGTTGCTGAGTCTGCAGATGAGGACTAGGGCTTA
TCCATGCCTGGGAAATGCCACCTCCTGGAAGGCAGCCAGGCTGGCAGATTTCCAAAAGACTTGAAGAACCATGGT
ATGAAGGTGATTGGCCCCACTGACGTTGGCCTAACACTGGGCTGCAGAGACTGGACCCCGCCCAGCATTGGGCTG
GGCTCGCCACATCCCATGAGAGTAGAGGGCACTGGGTCGCCGTGCCCCACGGCAGGCCCCTGCAGGAAAACTGAG
GCCCTTGGGCACCTCGACTTGTGAACGAGTTGTTGGCTGCTCCCTCCACAGCTTCTGCAGCAGACTGTCCCTGTT
GTAACTGCCCAAGGCATGTTTTGCCCACCAGATCATGGCCCACGTGGAGGCCCACCTGCCTCTGTCTCACTGAAC
TAGAAGCCGAGCCTAGAAACTAACACAGCCATCAAGGGAATGACTTGGGCGGCCTTGGGAAATCGATGAGAAATT
GAACTTCAGGGAGGGTGGTCATTGCCTAGAGGTGCTCATTCATTTAACAGAGCTTCCTTAGGTTGATGCTGGAGG
CAGAATCCCGGCTGTCAAGGGGTGTTCAGTTAAGGGGAGCAACAGAGGACATGAAAAATTGCTATGACTAAAGCA
GGGACAATTTGCTGCCAAACACCCATGCCCAGCTGTATGGCTGGGGGCTCCTCGTATGCATGGAACCCCCAGAAT
AAATATGCTCAGCCACCCTGTGGGCCGGGCAATCCAGACAGCAGGCATAAGGCACCAGTTACCCTGCATGTTGGC
CCAGACCTCAGGTGCTAGGGAAGGCGGGAACCTTGGGTTGAGTAATGCTCGTCTGTGTGTTTTAGTTTCATCACC
TGTTATCTGTGTTTGCTGAGGAGAGTGGAACAGAAGGGGTGGAGTTTTGTATAAATAAAGTTTCTTTGTCTC

FIGURE 5985

MGWLCSGLLFPVSCLVLLQVASSGNMKVLQEPTCVSDYMSISTCEWKMNGPTNCSTELRLLYQLVFLLSEAHTCI
PENNGGAGCVCHLLMDDVVSADNYTLDLWAGQQLLWKGSFKPSEHVKPRAPGNLTVHTNVSDTLLLTWSNPYPPD
NYLYNHLTYAVNIWSENDPADFRIYNVTYLEPSLRIAASTLKSGISYRARVRAWAQCYNTTWSEWSPSTKWHNSY
REPFEQHLLLGVSVSCIVILAVCLLCYVSITKIKKEWWDQIPNPARSRLVAIIIQDAQGSQWEKRSRGQEPAKCP
HWKNCLTKLLPCFLEHNMKRDEDPHKAAKEMPFQGSGKSAWCPVEISKTVLWPESISVVRCVELFEAPVECEEEE
EVEEEKGSFCASPESSRDDFQEGREGIVARLTESLFLDLLGEENGGFCQQDMGESCLLPPSGSTSAHMPWDEFPS
AGPKEAPPWGKEQPLHLEPSPPASPTQSPDNLTCTETPLVIAGNPAYRSFSNSLSQSPCPRELGPDPLLARHLEE
VEPEMPCVPQLSEPTTVPQPEPETWEQILRRNVLQHGAAAAPVSAPTSGYQEFVHAVEQGGTQASAVVGLGPPGE
AGYKAFSSLLASSAVSPEKCGFGASSGEEGYKPFQDLIPGCPGDPAPVPVPLFTFGLDREPPRSPQSSHLPSSSP
EHLGLEPGEKVEDMPKPPLPQEQATDPLVDSLGSGIVYSALTCHLCGHLKQCHGQEDGGQTPVMASPCCGCCCGD
RSSPPTTPLRAPDPSPGGVPLEASLCPASLAPSGISEKSKSSSSFHPAPGNAQSSSQTPKIVNFVSVGPTYMRVS

FIGURE 5986

TTTCCAGCCATGGCTGCCATTACCTGACCAGCGCCACAGCCGGTCTCTCTGCAGGCGCCGGGAGAAGTGACCAGA
GCAATTTCTGCTTTTCACAGGGCGGGTTTCTCAACGGTGACTTGTGGGCAGTGCCTTCTGCTGAGCGAGTCATGG
CCCGAAGGCAGAACTAACTGTGCCTGCAGTCTTCACTCTCAGGATGCAGCCGAGGTGGGCCCAAGGGGCCACGAT
GTGGCTTGGAGTCCTGCTGACCCTTCTGCTCTGTTCAAGCCTTGAGGGTCAAGAAAACTCTTTCACAATCAACAG
TGTTGACATGAAGAGCCTGCCGGACTGGACGGTGCAAAATGGGAAGAACCTGACCCTGCAGTGCTTCGCGGATGT
CAGCACCACCTCTCACGTCAAGCCTCAGCACCAGATGCTGTTCTATAAGGATGACGTGCTGTTTTACAACATCTC
CTCCATGAAGAGCACAGAGAGTTATTTTATTCCTGAAGTCCGGATCTATGACTCAGGGACATATAAATGTACTGT
GATTGTGAACAACAAAGAGAAAACCACTGCAGAGTACCAGGTGTTGGTGGAAGGAGTGCCCAGTCCCAGGGTGAC
ACTGGACAAGAAAGAGGCCATCCAAGGTGGGATCGTGAGGGTCAACTGTTCTGTCCCAGAGGAAAAGGCCCCAAT
ACACTTCACAATTGAAAAACTTGAACTAAATGAAAAAATGGTCAAGCTGAAAAGAGAGAAGAATTCTCGAGACCA
GAATTTTGTGATACTGGAATTCCCCGTTGAGGAACAGGACCGCGTTTTATCCTTCCGATGTCAAGCTAGGATCAT
TTCTGGGATCCATATGCAGACCTCAGAATCTACCAAGAGTGAACTGGTCACCGTGACGGAATCCTTCTCTACACC
CAAGTTCCACATCAGCCCCACCGGAATGATCATGGAAGGAGCTCAGCTCCACATTAAGTGCACCATTCAAGTGAC
TCACCTGGCCCAGGAGTTTCCAGAAATCATAATTCAGAAGGACAAGGCGATTGTGGCCCACAACAGACATGGCAA
CAAGGCTGTGTACTCAGTCATGGCCATGGTGGAGCACAGTGGCAACTACACGTGCAAAGTGGAGTCCAGCCGCAT
ATCCAAGGTCAGCAGCATCGTGGTCAACATAACAGAACTATTTTCCAAGCCCGAACTGGAATCTTCCTTCACACA
TCTGGACCAAGGTGAAAGACTGAACCTGTCCTGCTCCATCCCAGGAGCACCTCCAGCCAACTTCACCATCCAGAA
GGAAGATACGATTGTGTCACAGACTCAAGATTTCACCAAGATAGCCTCAAAGTCGGACAGTGGGACGTATATCTG
CACTGCAGGTATTGACAAAGTGGTCAAGAAAAGCAACACAGTCCAGATAGTCGTATGTGAAATGCTCTCCCAGCC
CAGGATTTCTTATGATGCCCAGTTTGAGGTCATAAAAGGACAGACCATCGAAGTCCGTTGCGAATCGATCAGTGG
AACTTTGCCTATTTCTTACCAACTTTTAAAAACAAGTAAAGTTTTGGAGAATAGTACCAAGAACTCAAATGATCC
TGCGGTATTCAAAGACAACCCCACTGAAGACGTCGAATACCAGTGTGTTGCAGATAATTGCCATTCCCACGCCAA
AATGTTAAGTGAGGTTCTGAGGGTGAAGGTGATAGCCCCGGTGGATGAGGTCCAGATTTCTATCCTGTCAAGTAA
GGTGGTGGAGTCTGGAGAGGACATTGTGCTGCAATGTGCTGTGAATGAAGGATCTGGTCCCATCACCTATAAGTT
TTACAGAGAAAAAGAGGGCAAACCCTTCTATCAAATGACCTCAAATGCCACCCAGGCATTTTGGACCAAGCAGAA
GGCTAACAAGGAACAGGAGGGAGAGTATTACTGCACAGCCTTCAACAGAGCCAACCACGCCTCCAGTGTCCCCAG
AAGCAAAATACTGACAGTCAGAGTCATTCTTGCCCCATGGAAGAAAGGACTTATTGCAGTGGTTATCATCGGAGT
GATCATTGCTCTCTTGATCATTGCGGCCAAATGTTATTTTCTGAGGAAAGCCAAGGCCAAGCAGATGCCAGTGGA
AATGTCCAGGCCAGCAGTACCACTTCTGAACTCCAACAACGAGAAAATGTCAGATCCCAATATGGAAGCTAACAG
TCATTACGGTCACAATGACGATGTCGGAAACCATGCAATGAAACCAATAAATGATAATAAAGAGCCTCTGAACTC
AGACGTGCAGTACACGGAAGTTCAAGTGTCCTCAGCTGAGTCTCACAAAGATCTAGGAAAGAAGGACACAGAGAC
AGTGTACAGTGAAGTCCGGAAAGCTGTCCCTGATGCCGTGGAAAGCAGATACTCTAGAACGGAAGGCTCCCTTGA
TGGAACTTAGACAGCAAGGCCAGATGCACATCCCTGGAAGGACATCCATGTTCCGAGAAGAACAGATGATCCCTG
TATTTCAAGACCTCTGTGCACTTATTTATGAACCTGCCCTGCTCCCACAGAACACAGCAATTCCTCAGGCTAAGC
TGCCGGTTCTTAAATCCATCCTGCTAAGTTAATGTTGGGTAGAAAGAGATACAGAGGGGCTGTTGAATTTCCCAC
ATACACTCCTTCCACCAAGTTGGAACATCCTTGGAAATTGGAAGAGCACAAGAGGAGATCCAGGGCAAGGCCATT
GGGATATTCTGAAACTTGAATATTTTGTTTTGTGCAGAGATAAAGACCTTTTCCATGCACCCTCATACACAGAAA
CCAATTTTCTTTTTTATACTCAATCATTTCTAGCGCATGGCCTGGTTAGAGGCTGGTTTTTTCTCTTTTCCTTTG
GTCCTTCAAAGGCTTGTAGTTTTGGGTAGTCCTTGTTCTTTGGAAATACACAGTGCTGACCAGACAGCCTCCCCC
TGTCCCCTCTATGACCTCGCCCTCCACAAATGGGAAAACCAGACTACTTGGGAGCACCGCCTGTGAAATACCAAC
CTGAAGACACGGTTCATTCAGGCAACGCACAAAACAGAAAATGAAGGTGGAACAAGCACAGATGTTCTTCAACTG
TTTTTGTCTACACTCTTTCTCTTTTCCTCTACCATGCTGAAGGCTGAAAGACAGGAAGATGGTGCCATCAGCAAA
TATTATTCTTAATTGAAAACTTGAAAAAAAAAAAAAAAA

FIGURE 5987

MQPRWAQGATMWLGVLLTLLLCSSLEGQENSFTINSVDMKSLPDWTVQNGKNLTLQCFADVSTTSHVKPQHQMLF
YKDDVLFYNISSMKSTESYFIPEVRIYDSGTYKCTVIVNNKEKTTAEYQVLVEGVPSPRVTLDKKEAIQGGIVRV
NCSVPEEKAPIHFTIEKLELNEKMVKLKREKNSRDQNFVILEFPVEEQDRVLSFRCQARIISGIHMQTSESTKSE
LVTVTESFSTPKFHISPTGMIMEGAQLHIKCTIQVTHLAQEFPEIIIQKDKAIVAHNRHGNKAVYSVMAMVEHSG
NYTCKVESSRISKVSSIVVNITELFSKPELESSFTHLDQGERLNLSCSIPGAPPANFTIQKEDTIVSQTQDFTKI
ASKSDSGTYICTAGIDKVVKKSNTVQIVVCEMLSQPRISYDAQFEVIKGQTIEVRCESISGTLPISYQLLKTSKV
LENSTKNSNDPAVFKDNPTEDVEYQCVADNCHSHAKMLSEVLRVKVIAPVDEVQISILSSKVVESGEDIVLQCAV
NEGSGPITYKFYREKEGKPFYQMTSNATQAFWTKQKANKEQEGEYYCTAFNRANHASSVPRSKILTVRVILAPWK
KGLIAVVIIGVIIALLIIAAKCYFLRKAKAKQMPVEMSRPAVPLLNSNNEKMSDPNMEANSHYGHNDDVGNHAMK
PINDNKEPLNSDVQYTEVQVSSAESHKDLGKKDTETVYSEVRKAVPDAVESRYSRTEGSLDGT

FIGURE 5988

AGTTTCCTCGGCAGCGGTAGGCGAGAGCACGCGGAGGAGCGTGCGCGGGGGCCCCGGGAGACGGCGGCGGTGGCG
GCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACAGCAGCGCACTCGGTGCCCCGCGCAGGGTCGCG**ATG**

CTGCCCGGTTTGGCACTGCTCCTGCTGGCCGCCTGGACGGCTCGGGCGCTGGAGGTACCCACTGATGGTAATGCT
GGCCTGCTGGCTGAACCCCAGATTGCCATGTTCTGTGGCAGACTGAACATGCACATGAATGTCCAGAATGGGAAG
TGGGATTCAGATCCATCAGGGACCAAAACCTGCATTGATACCAAGGAAGGCATCCTGCAGTATTGCCAAGAAGTC
TACCCTGAACTGCAGATCACCAATGTGGTAGAAGCCAACCAACCAGTGACCATCCAGAACTGGTGCAAGCGGGGC
CGCAAGCAGTGCAAGACCCATCCCCACTTTGTGATTCCCTACCGCTGCTTAGTTGGTGAGTTTGTAAGTGATGCC
CTTCTCGTTCCTGACAAGTGCAAATTCTTACACCAGGAGAGGATGGATGTTTGCGAAACTCATCTTCACTGGCAC
ACCGTCGCCAAAGAGACATGCAGTGAGAAGAGTACCAACTTGCATGACTACGGCATGTTGCTGCCCTGCGGAATT
GACAAGTTCCGAGGGGTAGAGTTTGTGTGTTGCCCACTGGCTGAAGAAAGTGACAATGTGGATTCTGCTGATGCG
GAGGAGGATGACTCGGATGTCTGGTGGGGCGGAGCAGACACAGACTATGCAGATGGGAGTGAAGACAAAGTAGTA
GAAGTAGCAGAGGAGGAAGAAGTGGCTGAGGTGGAAGAAGAAGAAGCCGATGATGACGAGGACGATGAGGATGGT
GATGAGGTAGAGGAAGAGGCTGAGGAACCCTACGAAGAAGCCACAGAGAGAACCACCAGCATTGCCACCACCACC
ACCACCACCACAGAGTCTGTGGAAGAGGTGGTTCGAGAGGTGTGCTCTGAACAAGCCGAGACGGGGCCGTGCCGA
GCAATGATCTCCCGCTGGTACTTTGATGTGACTGAAGGGAAGTGTGCCCCATTCTTTTACGGCGGATGTGGCGGC
AACCGGAACAACTTTGACACAGAAGAGTACTGCATGGCCGTGTGTGGCAGCGCCATGTCCCAAAGTTTACTCAAG
ACTACCCAGGAACCTCTTGCCCGAGATCCTGTTAAACTTCCTACAACAGCAGCCAGTACCCCTGATGCCGTTGAC
AAGTATCTCGAGACACCTGGGGATGAGAATGAACATGCCCATTTCCAGAAAGCCAAAGAGAGGCTTGAGGCCAAG
CACCGAGAGAGAATGTCCCAGGTCATGAGAGAATGGGAAGAGGCAGAACGTCAAGCAAAGAACTTGCCTAAAGCT
GATAAGAAGGCAGTTATCCAGCATTTCCAGGAGAAAGTGGAATCTTTGGAACAGGAAGCAGCCAACGAGAGACAG
CAGCTGGTGGAGACACACATGGCCAGAGTGGAAGCCATGCTCAATGACCGCCGCCGCCTGGCCCTGGAGAACTAC
ATCACCGCTCTGCAGGCTGTTCCTCCTCGGCCTCGTCACGTGTTCAATATGCTAAAGAAGTATGTCCGCGCAGAA
CAGAAGGACAGACAGCACACCCTAAAGCATTTCGAGCATGTGCGCATGGTGGATCCCAAGAAAGCCGCTCAGATC
CGGTCCCAGGTTATGACACACCTCCGTGTGATTTATGAGCGCATGAATCAGTCTCTCTCCCTGCTCTACAACGTG
CCTGCAGTGGCCGAGGAGATTCAGGATGAAGTTGATGAGCTGCTTCAGAAAGAGCAAAACTATTCAGATGACGTC
TTGGCCAACATGATTAGTGAACCAAGGATCAGTTACGGAAACGATGCTCTCATGCCATCTTTGACCGAAACGAAA
ACCACCGTGGAGCTCCTTCCCGTGAATGGAGAGTTCAGCCTGGACGATCTCCAGCCGTGGCATTCTTTTGGGGCT
GACTCTGTGCCAGCCAACACAGAAAACGAAGTTGAGCCTGTTGATGCCCGCCCTGCTGCCGACCGAGGACTGACC
ACTCGACCAGGTTCTGGGTTGACAAATATCAAGACGGAGGAGATCTCTGAAGTGAAGATGGATGCAGAATTCCGA
CATGACTCAGGATATGAAGTTCATCATCAAAAATTGGTGTTCTTTGCAGAAGATGTGGGTTCAAACAAAGGTGCA
ATCATTGGACTCATGGTGGGCGGTGTTGTCATAGCGACAGTGATCGTCATCACCTTGGTGATGCTGAAGAAGAAA
CAGTACACATCCATTCATCATGGTGTGGTGGAGGTTGACGCCGCTGTCACCCCAGAGGAGCGCCACCTGTCCAAG
ATGCAGCAGAACGGCTACGAAAATCCAACCTACAAGTTCTTTGAGCAGATGCAGAAC**TAG**ACCCCCGCCACAGCA
GCCTCTGAAGTTGGACAGCAAAACCATTGCTTCACTACCCATCGGTGTCCATTTATAGAATAATGTGGGAAGAAA
CAAACCCGTTTTATGATTTACTCATTATCGCCTTTTGACAGCTGTGCTGTAACACAAGTAGATGCCTGAACTTGA
ATTAATCCACACATCAGTAATGTATTCTATCTCTCTTTACATTTTGGTCTCTATACTACATTATTAATGGGTTTT
GTGTACTGTAAAGAATTTAGCTGTATCAAACTAGTGCATGAATAGATTCTCTCCTGATTATTTATCACATAGCCC
CTTAGCCAGTTGTATATTATTCTTGTGGTTTGTGACCCAATTAAGTCCTACTTTACATATGCTTTAAGAATCGAT
GGGGGATGCTTCATGTGAACGTGGGAGTTCAGCTGCTTCTCTTGCCTAAGTATTCCTTTCCTGATCACTATGCAT
TTTAAAGTTAAACATTTTTAAGTATTTCAGATGCTTTAGAGAGATTTTTTTTCCATGACTGCATTTTACTGTACA
GATTGCTGCTTCTGCTATATTTGTGATATAGGAATTAAGAGGATACACACGTTTGTTTCTTCGTGCCTGTTTTAT
GTGCACACATTAGGCATTGAGACTTCAAGCTTTTCTTTTTTTGTCCACGTATCTTTGGGTCTTTGATAAAGAAAA
GAATCCCTGTTCATTGTAAGCACTTTTACGGGGCGGGTGGGGAGGGGTGCTCTGCTGGTCTTCAATTACCAAGAA
TTCTCCAAAACAATTTTCTGCAGGATGATTGTACAGAATCATTGCTTATGACATGATCGCTTTCTACACTGTATT
ACATAAATAAATTAAATAAAATAACCCCGGGCAAGACTTTTCTTTGAAGGATGACTACAGACATTAAATAATCGA
AGTAATTTTGGGTGGGGAGAAGAGGCAGATTCAATTTTCTTTAACCAGTCTGAAGTTTCATTTATGATACAAAAG
AAGATGAAAATGGAAGTGGCAATATAAGGGGATGAGGAAGGCATGCCTGGACAAACCCTTCTTTTAAGATGTGTC
TTCAATTTGTATAAAATGGTGTTTTCATGTAAATAAATACATTCTTGGAGGAGC

FIGURE 5989

MLPGLALLLLAAWTARALEVPTDGNAGLLAEPQIAMFCGRLNMHMNVQNGKWDSDPSGTKTCIDTKEGILQYCQE
VYPELQITNVVEANQPVTIQNWCKRGRKQCKTHPHFVIPYRCLVGEFVSDALLVPDKCKFLHQERMDVCETHLHW
HTVAKETCSEKSTNLHDYGMLLPCGIDKFRGVEFVCCPLAEESDNVDSADAEEDDSDVWWGGADTDYADGSEDKV
VEVAEEEEVAEVEEEEEADDDEDDEDGDEVEEEAEEPYEEATERTTSIATTTTTTTESVEEVVREVCSEQAETGPC
RAMISRWYFDVTEGKCAPFFYGGCGGNRNNFDTEEYCMAVCGSAMSQSLLKTTQEPLARDPVKLPTTAASTPDAV
DKYLETPGDENEHAHFQKAKERLEAKHRERMSQVMREWEEAERQAKNLPKADKKAVIQHFQEKVESLEQEAANER
QQLVETHMARVEAMLNDRRRLALENYITALQAVPPRPRHVFNMLKKYVRAEQKDRQHTLKHFEHVRMVDPKKAAQ
IRSQVMTHLRVIYERMNQSLSLLYNVPAVAEEIQDEVDELLQKEQNYSDDVLANMISEPRISYGNDALMPSLTET
KTTVELLPVNGEFSLDDLQPWHSFGADSVPANTENEVEPVDARPAADRGLTTRPGSGLTNIKTEEISEVKMDAEF
RHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIATVIVITLVMLKKKQYTSIHHGVVEVDAAVTPEERHLS
KMQQNGYENPTYKFFEQMQN

FIGURE 5990

CGGCTCTGCCCAGGTTAAGGGCCACGGCAAGAAGGTGGCCGACGCGCTGACCAACGCCGTGGCGCACGTGGACGA
CATGCCCAACGCGCTGTCCGCCCTGAGCGACCTGCACGCGCACAAGCTTCGGGTGGACCCGGTCAACTTCAAGCT
CCTAAGCCACTGCCTGCTGGTGACCCTGGCCGCCGACCTCCCCGCCGAGTTCACCCCTGCGGTGCACGCCTCCCT
GGACAAGTTCCTGGCTTCTGTGAGCACCGTGCTGACCTCCAAATACCGTTAAGCTGGAGCCTCGGTGGCCATGCT
TCTTGCCCCTTGGGCC

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FIGURE 5991

CCAGGGTTTCCAGCTAGGACACAGCAGGTCGTGATCCGGGTCGGGACACTGCCTGGCAGAGGCTGCGAGCATGGG
GCCCTGGGGCTGGAAATTGCGCTGGACCGTCGCCTTGCTCCTCGCCGCGGCGGGGACTGCAGTGGGCGACAGATG
TGAAAGAAACGAGTTCCAGTGCCAAGACGGGAAATGCATCTCCTACAAGTGGGTCTGCGATGGCAGCGCTGAGTG
CCAGGATGGCTCTGATGAGTCCCAGGAGACGTGCTTGTCTGTCACCTGCAAATCCGGGGACTTCAGCTGTGGGGG
CCGTGTCAACCGCTGCATTCCTCAGTTCTGGAGGTGCGATGGCCAAGTGGACTGCGACAACGGCTCAGACGAGCA
AGGCTGTCCCCCCAAGACGTGCTCCCAGGACGAGTTTCGCTGCCACGATGGGAAGTGCATCTCTCGGCAGTTCGT
CTGTGACTCAGACCGGGACTGCTTGGACGGCTCAGACGAGGCCTCCTGCCCGGTGCTCACCTGTGGTCCCGCCAG
CTTCCAGTGCAACAGCTCCACCTGCATCCCCCAGCTGTGGGCCTGCGACAACGACCCCGACTGCGAAGATGGCTC
GGATGAGTGGCCGCAGCGCTGTAGGGGTCTTTACGTGTTCCAAGGGGACAGTAGCCCCTGCTCGGCCTTCGAGTT
CCACTGCCTAAGTGGCGAGTGCATCCACTCCAGCTGGCGCTGTGATGGTGGCCCCGACTGCAAGGACAAATCTGA
CGAGGAAAACTGCGCTGTGGCCACCTGTCGCCCTGACGAATTCCAGTGCTCTGATGGAAACTGCATCCATGGCAG
CCGGCAGTGTGACCGGGAATATGACTGCAAGGACATGAGCGATGAAGTTGGCTGCGTTAATGTGACACTCTGCGA
GGGACCCAACAAGTTCAAGTGTCACAGCGGCGAATGCATCACCCTGGACAAAGTCTGCAACATGGCTAGAGACTG
CCGGGACTGGTCAGATGAACCCATCAAAGAGTGCGGGACCAACGAATGCTTGGACAACAACGGCGGCTGTTCCCA
CGTCTGCAATGACCTTAAGATCGGCTACGAGTGCCTGTGCCCCGACGGCTTCCAGCTGGTGGCCCAGCGAAGATG
CGAAGATATCGATGAGTGTCAGGATCCCGACACCTGCAGCCAGCTCTGCGTGAACCTGGAGGGTGGCTACAAGTG
CCAGTGTGAGGAAGGCTTCCAGCTGGACCCCCACACGAAGGCCTGCAAGGCTGTGGGCTCCATCGCCTACCTCTT
CTTCACCAACCGGCACGAGGTCAGGAAGATGACGCTGGACCGGAGCGAGTACACCAGCCTCATCCCCAACCTGAG
GAACGTGGTCGCTCTGGACACGGAGGTGGCCAGCAATAGAATCTACTGGTCTGACCTGTCCCAGAGAATGATCTG
CAGCACCCAGCTTGACAGAGCCCACGGCGTCTCTTCCTATGACACCGTCATCAGCAGGGACATCCAGGCCCCCGA
CGGGCTGGCTGTGGACTGGATCCACAGCAACATCTACTGGACCGACTCTGTCCTGGGCACTGTCTCTGTTGCGGA
TACCAAGGGCGTGAAGAGGAAAACGTTATTCAGGGAGAACGGCTCCAAGCCAAGGGCCATCGTGGTGGATCCTGT
TCATGGCTTCATGTACTGGACTGACTGGGGAACTCCCGCCAAGATCAAGAAAGGGGGCCTGAATGGTGTGGACAT
CTACTCGCTGGTGACTGAAAACATTCAGTGGCCCAATGGCATCACCCTAGATCTCCTCAGTGGCCGCCTCTACTG
GGTTGACTCCAAACTTCACTCCATCTCAAGCATCGATGTCAATGGGGGCAACCGGAAGACCATCTTGGAGGATGA
AAAGAGGCTGGCCCACCCCTTCTCCTTGGCCGTCTTTGAGGACAAAGTATTTTGGACAGATATCATCAACGAAGC
CATTTTCAGTGCCAACCGCCTCACAGGTTCCGATGTCAACTTGTTGGCTGAAAACCTACTGTCCCCAGAGGATAT
GGTCCTCTTCCACAACCTCACCCAGCCAAGAGGAGTGAACTGGTGTGAGAGGACCACCCTGAGCAATGGCGGCTG
CCAGTATCTGTGCCTCCCTGCCCCGCAGATCAACCCCCACTCGCCCAAGTTTACCTGCGCCTGCCCGGACGGCAT
GCTGCTGGCCAGGGACATGAGGAGCTGCCTCACAGAGGCTGAGGCTGCAGTGGCCACCCAGGAGACATCCACCGT
CAGGCTAAAGGTCAGCTCCACAGCCGTAAGGACACAGCACACAACCACCCGGCCTGTTCCCGACACCTCCCGGCT
GCCTGGGGCCACCCCTGGGCTCACCACGGTGGAGATAGTGACAATGTCTCACCAAGCTCTGGGCGACGTTGCTGG
CAGAGGAAATGAGAAGAAGCCCAGTAGCGTGAGGGCTCTGTCCATTGTCCTCCCCATCGTGCTCCTCGTCTTCCT
TTGCCTGGGGGTCTTCCTTCTATGGAAGAACTGGCGGCTTAAGAACATCAACAGCATCAACTTTGACAACCCCGT
CTATCAGAAGACCACAGAGGATGAGGTCCACATTTGCCACAACCAGGACGGCTACAGCTACCCCTCGAGACAGAT
GGTCAGTCTGGAGGATGACGTGGCGTGAACATCTGCCTGGAGTCCCGTCCCTGCCCAGAACCCTTCCTGAGACCT
CGCCGGCCTTGTTTTATTCAAAGACAGAGAAGACCAAAGCATTGCCTGCCAGAGCTTTGTTTTATATATTTATTC
ATCTGGGAGGCAGAACAGGCTTCGGACAGTGCCCATGCAATGGCTTGGGTTGGGATTTTGGTTTCTTCCTTTCCT
CGTGAAGGATAAGAGAAACAGGCCCGGGGGGACCAGGATGACACCTCCATTTCTCTCCAGGAAGTTTTGAGTTTC
TCTCCACCGTGACACAATCCTCAAACATGGAAGATGAAAGGGCAGGGGATGTCAGGCCCAGAGAAGCAAGTGGCT
TTCAACACACAACAGCAGATGGCACCAACGGGACCCCCTGGCCCTGCCTCATCCACCAATCTCTAAGCCAAACCC
CTAAACTCAGGAGTCAACGTGTTTACCTCTTCTATGCAAGCCTTGCTAGACAGCCAGGTTAGCCTTTGCCCTGTC
ACCCCCGAATCATGACCCACCCAGTGTCTTTCGAGGTGGGTTTGTACCTTCCTTAAGCCAGGAAAGGGATTCATG
GCGTCGGAAATGATCTGGCTGAATCCGTGGTGGCACCGAGACCAAACTCATTCACCAAATGATGCCACTTCCCAG
AGGCAGAGCCTGAGTCACCGGTCACCCTTAATATTTATTAAGTGCCTGAGACACCCGGTTACCTTGGCCGTGAGG
ACACGTGGCCTGCACCCAGGTGTGGCTGTCAGGACACCAGCCTGGTGCCCATCCTCCCGACCCCTACCCACTTCC
ATTCCCGTGGTCTCCTTGCACTTTCTCAGTTCAGAGTTGTACACTGTGTAAAAAAAAAAAAAAAAAAAAAA

FIGURE 5992

MGPWGWKLRWTVALLLAAAGTAVGDRCERNEFQCQDGKCISYKWVCDGSAECQDGSDESQETCLSVTCKSGDFSC
GGRVNRCIPQFWRCDGQVDCDNGSDEQGCPPKTCSQDEFRCHDGKCISRQFVCDSDRDCLDGSDEASCPVLTCGP
ASFQCNSSTCIPQLWACDNDPDCEDGSDEWPQRCRGLYVFQGDSSPCSAFEFHCLSGECIHSSWRCDGGPDCKDK
SDEENCAVATCRPDEFQCSDGNCIHGSRQCDREYDCKDMSDEVGCVNVTLCEGPNKFKCHSGECITLDKVCNMAR
DCRDWSDEPIKECGTNECLDNNGGCSHVCNDLKIGYECLCPDGFQLVAQRRCEDIDECQDPDTCSQLCVNLEGGY
KCQCEEGFQLDPHTKACKAVGSIAYLFFTNRHEVRKMTLDRSEYTSLIPNLRNVVALDTEVASNRIYWSDLSQRM
ICSTQLDRAHGVSSYDTVISRDIQAPDGLAVDWIHSNIYWTDSVLGTVSVADTKGVKRKTLFRENGSKPRAIVVD
PVHGFMYWTDWGTPAKIKKGGLNGVDIYSLVTENIQWPNGITLDLLSGRLYWVDSKLHSISSIDVNGGNRKTILE
DEKRLAHPFSLAVFEDKVFWTDIINEAIFSANRLTGSDVNLLAENLLSPEDMVLFHNLTQPRGVNWCERTTLSNG
GCQYLCLPAPQINPHSPKFTCACPDGMLLARDMRSCLTEAEAAVATQETSTVRLKVSSTAVRTQHTTTRPVPDTS
RLPGATPGLTTVEIVTMSHQALGDVAGRGNEKKPSSVRALSIVLPIVLLVFLCLGVFLLWKNWRLKNINSINFDN
PVYQKTTEDEVHICHNQDGYSYPSRQMVSLEDDVA

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FIGURE 5993

CTTTTGATATGGTGTACTGGACAGGAGACATCCCCGCACATGATGTCTGGCACCAGACTCGTCAGGACCAACTGC
GGGCCCTGACCACCGTCACAGCACTTGTGAGGAAGTTCCTGGGGCCAGTGCCAGTGTACCCTGCTGTGGGTAACC
ATGAAAGCATACCTGTCAATAGCTTCCCTCCCCCCTTCATTGAGGGCAACCACTCCTCCCGCTGGCTCTATGAAG
CGATGGCCAAGGCTTGGGAGCCCTGGCTGCCTGCCGAAGCCCTGCGCACCCTCAGGTACTTATCGTCCGTGGAAA
CCCAGGAAGGGAAAAGAAAGGTGCATATAATTGGCCACATTCCCCCAGGGCACTGTCTGAAGAGCTGGAGCTGGA
ATTATTACCGAATTGTAGCCAGGTATGAGAACACCCTGGCTGCTCAGTTCTTTGGCCACACTCATGTGGATGAAT
TTGAGGTCTTCTATGATGAAGAGACTCTGAGCCGGCCGCTGGCTGTAGCCTTCCTGGCACCCAGTGCAACTACCT
ACATCGGCCTTAATCCTGGTTACCGTGTGTACCAAATAGATGGAAACTACTCCAGGAGCTCTCACGTGGTCCTGG
ACCATGAGACCTACATCCTGAATCTGACCCAGGCAAACATACCGGGAGCCATACCGCACTGGCAGCTTCTCTACA
GGGCTCGAGAAACCTATGGGCTGCCCAACACACTGCCTACCGCCTGGCACAACCTGGTATATCGCATGCGGGGCG
ACATGCAACTTTTCCAGACCTTCTGGTTTCTCTACCATAAGGGCCACCCACCCTCGGAGCCCTGTGGCACGCCCT
GCCGTCTGGCTACTCTTTGTGCCCAGCTCTCTGCCCGTGCTGACAGCCCTGCTCTGTGCCGCCACCTGATGCCAG
ATGGGAGCCTCCCAGAGGCCCAGAGCCTGTGGCCAAGGCCACTGTTTTGCTAGGGCCCCAGGGCCCACATTTGGG
AAAGTTCTTGATGTAGGAAAGGGTGAAAAAGCCCAAATGCTGCTGTGGTTCAACCAGGCAAGATCATCCGGTGAA
AGAACCAGTCCCTGGGCCCCAAGGATGCCGGGGAAACAGGACCTTCTCCTTTCCTGGAGCTGGTTTAGCTGGATA
TGGGAGGGGGTTTGGCTGCCTGTGCCCAGGAGCTAGACTGCCTTGAGGCTGCTGTCCTTTCACAGCCATGGAGTA
GAGGCCTAAGTTGACACTGCCCTGGGCAGACAAGACAGGAGCTGTCGCCCCAGGCCTGTGCTGCCCAGCCAGGAA
CCCTGTACTGCTGCTGCGACCTGATGCTGCCAGTCTGTTAAAATAAAGATAAGAGACTTGGACTCCAAAAAAACA
AAAAAAAAAAA

FIGURE 5994

GGCGGTCCCCTGTTCTCCCCGCTCAGGTGCGGCGCTGTGGCAGGAAGCCACCCCCTCGGTCGGCCGGTGCGCGGG
GCTGTTGCGCCATCCGCTCCGGCTTTCGTAACCGCACCCTGGGACGGCCCAGAGACGCTCCAGCGCGAGTTCCTC
AAATGTTTTCCTGCGTTGCCAGGACCGTCCGCCGCTCTGAGTCATGTGCGAGTGGGAAGTCGCACTGACACTGAG
CCGGGCCAGAGGGAGAGGAGCCGAGCGCGGCGCGGGGCCGAGGGACTCGCAGTGTGTGTAGAGAGCCGGGCTCCT
GCGGATGGGGGCTGCCCCCGGGGCCTGAGCCCGCCTGCCCGCCCACCGCCCCGCCCCGCCCCTGCCACCCCTGCC
GCCCGGTTCCCATTAGCCTGTCCGCCTCTGCGGGACCATGGAGTGGTAGCCGAGGAGGAAGC**ATG**CTGGCCGTCG
GCTGCGCGCTGCTGGCTGCCCTGCTGGCCGCGCCGGGAGCGGCGCTGGCCCCAAGGCGCTGCCCTGCGCAGGAGG
TGGCAAGAGGCGTGCTGACCAGTCTGCCAGGAGACAGCGTGACTCTGACCTGCCCGGGGGTAGAGCCGGAAGACA
ATGCCACTGTTCACTGGGTGCTCAGGAAGCCGGCTGCAGGCTCCCACCCCAGCAGATGGGCTGGCATGGGAAGGA
GGCTGCTGCTGAGGTCGGTGCAGCTCCACGACTCTGGAAACTATTCATGCTACCGGGCCGGCCGCCCAGCTGGGA
CTGTGCACTTGCTGGTGGATGTTCCCCCCGAGGAGCCCCAGCTCTCCTGCTTCCGGAAGAGCCCCCTCAGCAATG
TTGTTTGTGAGTGGGGTCCTCGGAGCACCCCATCCCTGACGACAAAGGCTGTGCTCTTGGTGAGGAAGTTTCAGA
ACAGTCCGGCCGAAGACTTCCAGGAGCCGTGCCAGTATTCCCAGGAGTCCCAGAAGTTCTCCTGCCAGTTAGCAG
TCCCGGAGGGAGACAGCTCTTTCTACATAGTGTCCATGTGCGTCGCCAGTAGTGTCGGGAGCAAGTTCAGCAAAA
CTCAAACCTTTCAGGGTTGTGGAATCTTGCAGCCTGATCCGCCTGCCAACATCACAGTCACTGCCGTGGCCAGAA
ACCCCCGCTGGCTCAGTGTCACCTGGCAAGACCCCCACTCCTGGAACTCATCTTTCTACAGACTACGGTTTGAGC
TCAGATATCGGGCTGAACGGTCAAAGACATTCACAACATGGATGGTCAAGGACCTCCAGCATCACTGTGTCATCC
ACGACGCCTGGAGCGGCCTGAGGCACGTGGTGCAGCTTCGTGCCCAGGAGGAGTTCGGGCAAGGCGAGTGGAGCG
AGTGGAGCCCGGAGGCCATGGGCACGCCTTGGACAGAATCCAGGAGTCCTCCAGCTGAGAACGAGGTGTCCACCC
CCATGCAGGCACTTACTACTAATAAAGACGATGATAATATTCTCTTCAGAGATTCTGCAAATGCGACAAGCCTCC
CAGTGCAAGATTCTTCTTCAGTACCACTGCCCACATTCCTGGTTGCTGGAGGGAGCCTGGCCTTCGGAACGCTCC
TCTGCATTGCCATTGTTCTGAGGTTCAAGAAGACGTGGAAGCTGCGGGCTCTGAAGGAAGGCAAGACAAGCATGC
ATCCGCCGTACTCTTTGGGGCAGCTGGTCCCGGAGAGGCCTCGACCCACCCCAGTGCTTGTTCCTCTCATCTCCC
CACCGGTGTCCCCCAGCAGCCTGGGGTCTGACAATACCTCGAGCCACAACCGACCAGATGCCAGGGACCCACGGA
GCCCTTATGACATCAGCAATACAGACTACTTCTTCCCCAGA**TAG**CTGGCTGGGTGGCACCAGCAGCCTGGACCCT
GTGGATGACAAAACACAAACGGGCTCAGCAAAAGATGCTTCTCACTGCCATGCCAGCTTATCTCAGGGGTGTGCG
GCCTTTGGCTTCACGGAAGAGCCTTGCGGAAGGTTCTACGCCAGGGGAAAATCAGCCTGCTCCAGCTGTTCAGCT
GGTTGAGGTTTCAAACCTCCCTTTCCAAATGCCCAGCTTAAAGGGGTTAGAGTGAACTTGGGCCACTGTGAAGAG
AACCATATCAAGACTCTTTGGACACTCACACGGACACTCAAAAGCTGGGCAGGTTGGTGGGGGCCTCGGTGTGGA
GAAGCGGCTGGCAGCCCACCCCTCAACACCTCTGCACAAGCTGCACCCTCAGGCAGGTGGGATGGATTTCCAGCC
AAAGCCTCCTCCAGCCGCCATGCTCCTGGCCCACTGCATCGTTTCATCTTCCAACTCAAACTCTTAAAACCCAAG
TGCCCTTAGCAAATTCTGTTTTTCTAGGCCTGGGGACGGCTTTTACTTAAACGCCAAGGCCTGGGGGAAGAAGCT
CTCTCCTCCCTTTCTTCCCTACAGTTCAAAAACAGCTGAGGGTGAGTGGGTGAATAATACAGTATGTCAGGGCCT
GGTCGTTTTCAACAGAATTATAATTAGTTCCTCATTAGCAGTTTTGCCTAAATGTGAATGATGATCCTAGGCATT
TGCTGAATACAGAGGCAACTGCATTGGCTTTGGGTTGCAGGACCTCAGGTGAGAAGCAGAGGAAGGAGAGGAGAG
GGGCACAGGGTCTCTACCATCCCCTGTAGAGTGGGAGCTGAGTGGGGGATCACAGCCTCTGAAAACCAATGTTCT
CTCTTCTCCACCTCCCACAAAGGAGAGCTAGCAGCAGGGAGGGCTTCTGCCATTTCTGAGATCAAAACGGTTTTA
CTGCAGCTTTGTTTGTTGTCAGCTGAACCTGGGTAACTAGGGAAGATAATATTAAGGAAGACAATGTGAAAAGAA
AAATGAGCCTGGCAAGAATGCGTTTAAACTTGGTTTTTAAAAAACTGCTGACTGTTTTCTCTTGAGAGGGTGGAA
TATCCAATATTCGCTGTGTCAGCATAGAAGTAACTTACTTAGGTGTGGGGGAAGCACCATAACTTTGTTTAGCCC
AAAACCAAGTCAAGTGAAAAAGGAGGAAGAGAAAAAATATTTTCCTGCCAGGCATGGAGGCCCACGCACTTCGGG
AGGTCGAGGCAGGAGGATCACTTGAGTCCAGAAGTTTGAGATCAGCCTGGGCAATGTGATAAAACCCCATCTCTA
CAAAAAGCATAAAAATTAGCCAAGTGTGGTAGAGTGTGCCTGAAGTCCCAGATACTTGGGGGGCTGAGGTGGGAG
GATCTCTTGAGCCTGGGAGGTCAAGGCTGCAGTGAGCCGAGATTGCACCACTGCACTCCAGCCTGGGGTGACAGA
GCAAGTGAGACCCTGTCTC

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FIGURE 5995

MLAVGCALLAALLAAPGAALAPRRCPAQEVARGVLTSLPGDSVTLTCPGVEPEDNATVHWVLRKPAAGSHPSRWA
GMGRRLLLRSVQLHDSGNYSCYRAGRPAGTVHLLVDVPPEEPQLSCFRKSPLSNVVCEWGPRSTPSLTTKAVLLV
RKFQNSPAEDFQEPCQYSQESQKFSCQLAVPEGDSSFYIVSMCVASSVGSKFSKTQTFQGCGILQPDPPANITVT
AVARNPRWLSVTWQDPHSWNSSFYRLRFELRYRAERSKTFTTWMVKDLQHHCVIHDAWSGLRHVVQLRAQEEFGQ
GEWSEWSPEAMGTPWTESRSPPAENEVSTPMQALTTNKDDDNILFRDSANATSLPVQDSSSVPLPTFLVAGGSLA
FGTLLCIAIVLRFKKTWKLRALKEGKTSMHPPYSLGQLVPERPRPTPVLVPLISPPVSPSSLGSDNTSSHNRPDA
RDPRSPYDISNTDYFFPR

FIGURE 5996

AAACCACAAGACAGACTTGCAAAAGAAGGCATGCACAGCTCAGCACTGCTCTGTTGCCTGGTCCTCCTGACTGGG
GTGAGGGCCAGCCCAGGCCAGGGCACCCAGTCTGAGAACAGCTGCACCCACTTCCCAGGCAACCTGCCTAACATG
CTTCGAGATCTCCGAGATGCCTTCAGCAGAGTGAAGACTTTCTTTCAAATGAAGGATCAGCTGGACAACTTGTTG
TTAAAGGAGTCCTTGCTGGAGGACTTTAAGGGTTACCTGGGTTGCCAAGCCTTGTCTGAGATGATCCAGTTTTAC
CTGGAGGAGGTGATGCCCCAAGCTGAGAACCAAGACCCAGACATCAAGGCGCATGTGAACTCCCTGGGGGAGAAC
CTGAAGACCCTCAGGCTGAGGCTACGGCGCTGTCATCGATTTCTTCCCTGTGAAAACAAGAGCAAGGCCGTGGAG
CAGGTGAAGAATGCCTTTAATAAGCTCCAAGAGAAAGGCATCTACAAAGCCATGAGTGAGTTTGACATCTTCATC
AACTACATAGAAGCCTACATGACAATGAAGATACGAAACTGAGACATCAGGGTGGCGACTCTATAGACTCTAGGA
CATAAATTAGAGGTCTCCAAAATCGGATCTGGGGCTCTGGGATAGCTGACCCAGCCCCTTGAGAAACCTTATTGT
ACCTCTCTTATAGAATATTTATTACCTCTGATACCTCAACCCCCATTTCTATTTATTTACTGAGCTTCTCTGTGA
ACGATTTAGAAAGAAGCCCAATATTATAATTTTTTTCAATATTTATTATTTTCACCTGTTTTTAAGCTGTTTCCA
TAGGGTGACACACTATGGTATTTGAGTGTTTTAAGATAAATTATAAGTTACATAAGGGAGGAAAAAAAATGTTCT
TTGGGGAGCCAACAGAAGCTTCCATTCCAAGCCTGACCACGCTTTCTAGCTGTTGAGCTGTTTTCCCTGACCTCC
CTCTAATTTATCTTGTCTCTGGGCTTGGGGCTTCCTAACTGCTACAAATACTCTTAGGAAGAGAAACCAGGGAGC
CCCTTTGATGATTAATTCACCTTCCAGTGTCTCGGAGGGATTCCCCTAACCTCATTCCCCAACCACTTCATTCTT
GAAAGCTGTGGCCAGCTTGTTATTTATAACAACCTAAATTTGGTTCTAGGCCGGGCGCGGTGGCTCACGCCTGTA
ATCCCAGCACTTTGGGAGGCTGAGGCGGGTGGATCACTTGAGGTCAGGAGTTCCTAACCAGCCTGGTCAACATGG
TGAAACCCCGTCTCTACTAAAAATACAAAAATTAGCCGGGCATGGTGGCGCGCACCTGTAATCCCAGCTACTTGG
GAGGCTGAGGCAAGAGAATTGCTTGAACCCAGGAGATGGAAGTTGCAGTGAGCTGATATCATGCCCCTGTACTCC
AGCCTGGGTGACAGAGCAAGACTCTGTCTCAAAAAAATAAAAATAAAAATAAATTTGGTTCTAATAGAACTCAGT
TTTAACTAGAATTTATTCAATTCCTCTGGGAATGTTACATTGTTTGTCTGTCTTCATAGCAGATTTTAATTTTGA
ATAAATAAATGTATCTTATTCACATC

FIGURE 5997

MHSSALLCCLVLLTGVRASPGQGTQSENSCTHFPGNLPNMLRDLRDAFSRVKTFFQMKDQLDNLLLKESLLEDFK
GYLGCQALSEMIQFYLEEVMPQAENQDPDIKAHVNSLGENLKTLRLRLRRCHRFLPCENKSKAVEQVKNAFNKLQ
EKGIYKAMSEFDIFINYIEAYMTMKIRN

FIGURE 5998

ACCAACCTCTTCGAGGCACAAGGCACAACAGGCTGCTCTGGGATTCTCTTCAGCCAATCTTCATTGCTCAAGTGT
CTGAAGCAGCCATGGCAGAAGTACCTGAGCTCGCCAGTGAAATGATGGCTTATTACAGTGGCAATGAGGATGACT
TGTTCTTTGAAGCTGATGGCCCTAAACAGATGAAGTGCTCCTTCCAGGACCTGGACCTCTGCCCTCTGGATGGCG
GCATCCAGCTACGAATCTCCGACCACCACTACAGCAAGGGCTTCAGGCAGGCCGCGTCAGTTGTTGTGGCCATGG
ACAAGCTGAGGAAGATGCTGGTTCCCTGCCCACAGACCTTCCAGGAGAATGACCTGAGCACCTTCTTTCCCTTCA
TCTTTGAAGAAGAACCTATCTTCTTCGACACATGGGATAACGAGGCTTATGTGCACGATGCACCTGTACGATCAC
TGAACTGCACGCTCCGGGACTCACAGCAAAAAAGCTTGGTGATGTCTGGTCCATATGAACTGAAAGCTCTCCACC
TCCAGGGACAGGATATGGAGCAACAAGTGGTGTTCTCCATGTCCTTTGTACAAGGAGAAGAAAGTAATGACAAAA
TACCTGTGGCCTTGGGCCTCAAGGAAAAGAATCTGTACCTGTCCTGCGTGTTGAAAGATGATAAGCCCACTCTAC
AGCTGGAGAGTGTAGATCCCAAAAATTACCCAAAGAAGAAGATGGAAAAGCGATTTGTCTTCAACAAGATAGAAA
TCAATAACAAGCTGGAATTTGAGTCTGCCCAGTTCCCCAACTGGTACATCAGCACCTCTCAAGCAGAAAACATGC
CCGTCTTCCTGGGAGGGACCAAAGGCGGCCAGGATATAACTGACTTCACCATGCAATTTGTGTCTTCCTAAAGAG
AGCTGTACCCAGAGAGTCCTGTGCTGAATGTGGACTCAATCCCTAGGGCTGGCAGAAAGGGAACAGAAAGGTTTT
TGAGTACGGCTATAGCCTGGACTTTCCTGTTGTCTACACCAATGCCCAACTGCCTGCCTTAGGGTAGTGCTAAGA
GGATCTCCTGTCCATCAGCCAGGACAGTCAGCTCTCTCCTTTCAGGGCCAATCCCCAGCCCTTTTGTTGAGCCAG
GCCTCTCTCACCTCTCCTACTCACTTAAAGCCCGCCTGACAGAAACCACGGCCACATTTGGTTCTAAGAAACCCT
CTGTCATTCGCTCCCACATTCTGATGAGCAACCGCTTCCCTATTTATTTATTTATTTGTTTGTTTGTTTTATTCA
TTGGTCTAATTTATTCAAAGGGGGCAAGAAGTAGCAGTGTCTGTAAAAGAGCCTAGTTTTTAATAGCTATGGAAT
CAATTCAATTTGGACTGGTGTGCTCTCTTTAAATCAAGTCCTTTAATTAAGACTGAAAATATATAAGCTCAGATT
ATTTAAATGGGAATATTTATAAATGAGCAAATATCATACTGTTCAATGGTTCTGAAATAAACTTCTCTGAAG

FIGURE 5999

MAEVPELASEMMAYYSGNEDDLFFEADGPKQMKCSFQDLDLCPLDGGIQLRISDHHYSKGFRQAASVVVAMDKLR
KMLVPCPQTFQENDLSTFFPFIFEEEPIFFDTWDNEAYVHDAPVRSLNCTLRDSQQKSLVMSGPYELKALHLQGQ
DMEQQVVFSMSFVQGEESNDKIPVALGLKEKNLYLSCVLKDDKPTLQLESVDPKNYPKKKMEKRFVFNKIEINNK
LEFESAQFPNWYISTSQAENMPVFLGGTKGGQDITDFTMQFVSS

FIGURE 6000A

CTTCAGATAGATTATATCTGGAGTGAAGGATCCTGCCACCTACGTATCTGGCATAGTGTGAGTCCTCATAAATGC
TTACTGGTTTGAAGGGCAACAAAATAGTGAACAGAGTGAAAATCCCCACTAAGATCCTGGGTCCAGAAAAAGATG
GGAAACCTGTTTAGCTCACCCGTGAGCCCATAGTTAAAACTCTTTAGACAACAGGTTGTTTCCGTTTACAGAGAA
CAATAATATTGGGTGGTGAGCATCTGTGTGGGGGTTGGGGTGGGATAGGGGATACGGGGAGAGTGGAGAAAAAGG
GGACACAGGGTTAATGTGAAGTCCAGGATCCCCCTCTACATTTAAAGTTGGTTTAAGTTGGCTTTAATTAATAGC
AACTCTTAAGATAATCAGAATTTTCTTAACCTTTTAGCCTTACTGTTGAAAAGCCCTGTGATCTTGTACAAATCA
TTTGCTTCTTGGATAGTAATTTCTTTTACTAAAATGTGGGCTTTTGACTAGATGAATGTAAATGTTCTTCTAGCT
CTGATATCCTTTATTCTTTATATTTTCTAACAGATTCTGTGTAGTGGGATGAGCAGAGAACAAAAACAAAATAAT
CCAGTGAGAAAAGCCCGTAAATAAACCTTCAGACCAGAGATCTATTCTCCAGCTTATTTTAAGCTCAACTTAAAA
AGAAGAACTGTTCTCTGATTCTTTTCGCCTTCAATACACTTAATGATTTAACTCCACCCTCCTTCAAAAGAAACA
GCATTTCCTACTTTTATACTGTCTATATGATTGATTTGCACAGCTCATCTGGCCAGAAGAGCTGAGACATCCGTT
CCCCTACAAGAAACTCTCCCCGGTAAGTAACCTCTCAGCTGCTTGGCCTGTTAGTTAGCTTCTGAGATGAGTAAA
AGACTTTACAGGAAACCCATAGAAGACATTTGGCAAACACCAAGTGCTCATACAATTATCTTAAAATATAATCTT
TAAGATAAGGAAAGGGTCACAGTTTGGAATGAGTTTCAGACGGTTATAACATCAAAGATACAAAACATGATTGTG
AGTGAAAGACTTTAAAGGGAGCAATAGTATTTTAATAACTAACAATCCTTACCTCTCAAAAGAAAGATTTGCAGA
GAGATGAGTCTTAGCTGAAATCTTGAAATCTTATCTTCTGCTAAGGAGAACTAAACCCTCTCCAGTGAGATGCCT
TCTGAATATGTGCCCACAAGAAGTTGTGTCTAAGTCTGGTTCTCTTTTTTCTTTTTCCTCCAGACAAGAGGGAAG
CCTAAAAATGGTCAAAATTAATATTAAATTACAAACGCCAAATAAAATTTTCCTCTAATATATCAGTTTCATGGC
ACAGTTAGTATATAATTCTTTATGGTTCAAAATTAAAAATGAGCTTTTCTAGGGGCTTCTCTCAGCTGCCTAGTC
TAAGGTGCAGGGAGTTTGAGACTCACAGGGTTTAATAAGAGAAAATTCTCAGCTAGAGCAGCTGAACTTAAATAG
ACTAGGCAAGACAGCTGGTTATAAGACTAAACTACCCAGAATGCATGACATTCATCTGTGGTGGCAGACGAAACA
TTTTTTATTATATTATTTCTTGGGTATGTATGACAACTCTTAATTGTGGCAACTCAGAAACTACAAACACAAACT
TCACAGAAAATGTGAGGATTTTACAATTGGCTGTTGTCATCTATGACCTTCTCTGGGACTTGGGCACCCGGCCAT
TTCACTCTGACTACATCATGTCACCAAACATCTGATGGTCTTGCCTTTTAATTCTCTTTTCGAGGACTGAGAGGG
AGGGTAGCATGGTAGTTAAGAGTGCAGGCTTCCCGCATTCAAAATCGGTTGCTTACTAGCTGTGTGGCTTTGAGC
AAGTTACTCACCCTCTCTGTGCTTCAAGGTCCTTGTCTGCAAAATGTGAAAAATATTTCCTGCCTCATAAGGTTG
CCCTAAGGATTAAATGAATGAATGGGTATGATGCTTAGAACAGTGATTGGCATCCAGTATGTGCCCTCGAGGCCT
CTTAATTATTACTGGCTTGCTCATAGTGCATGTTCTTTGTGGGCTAACTCTAGCGTCAATAAAAATGTTAAGACT
GAGTTGCAGCCGGGCATGGTGGCTCATGCCTGTAATCCCAGCATTCTAGGAGGCTGAGGCAGGAGGATCGCTTGA
GCCCAGGAGTTCGAGACCAGCCTGGGCAACATAGTGTGATCTTGTATCTATAAAAATAAACAAAATTAGCTTGGT
GTGGTGGCGCCTGTAGTCCCCAGCCACTTGGAGGGGTGAGGTGAGAGGATTGCTTGAGCCCGGGATGGTCCAGGC
TGCAGTGAGCCATGATCGTGCCACTGCACTCCAGCCTGGGCGACAGAGTGAGACCCTGTCTCACAACAACAACAA
CAACAACAAAAAGGCTGAGCTGCACCATGCTTGACCCAGTTTCTTAAAATTGTTGTCAAAGCTTCATTCACTCCA
TGGTGCTATAGAGCACAAGATTTTATTTGGTGAGATGGTGCTTTCATGAATTCCCCCAACAGAGCCAAGCTCTCC
ATCTAGTGGACAGGGAAGCTAGCAGCAAACCTTCCCTTCACTACAAAACTTCATTGCTTGGCCAAAAAGAGAGTT
AATTCAATGTAGACATCTATGTAGGCAATTAAAAACCTATTGATGTATAAAACAGTTTGCATTCATGGAGGGCAA
CTAAATACATTCTAGGACTTTATAAAAGATCACTTTTTATTTATGCACAGGGTGGAACAAG**ATG**GATTATCAAGT
GTCAAGTCCAATCTATGACATCAATTATTATACATCGGAGCCCTGCCAAAAAATCAATGTGAAGCAAATCGCAGC
CCGCCTCCTGCCTCCGCTCTACTCACTGGTGTTCATCTTTGGTTTTGTGGGCAACATGCTGGTCATCCTCATCCT
GATAAACTGCAAAAGGCTGAAGAGCATGACTGACATCTACCTGCTCAACCTGGCCATCTCTGACCTGTTTTTCCT
TCTTACTGTCCCCTTCTGGGCTCACTATGCTGCCGCCCAGTGGGACTTTGGAAATACAATGTGTCAACTCTTGAC
AGGGCTCTATTTTATAGGCTTCTTCTCTGGAATCTTCTTCATCATCCTCCTGACAATCGATAGGTACCTGGCTGT
CGTCCATGCTGTGTTTGCTTTAAAAGCCAGGACGGTCACCTTTGGGGTGGTGACAAGTGTGATCACTTGGGTGGT
GGCTGTGTTTGCGTCTCTCCCAGGAATCATCTTTACCAGATCTCAAAAAGAAGGTCTTCATTACACCTGCAGCTC
TCATTTTCCATACAGTCAGTATCAATTCTGGAAGAATTTCCAGACATTAAAGATAGTCATCTTGGGGCTGGTCCT
GCCGCTGCTTGTCATGGTCATCTGCTACTCGGGAATCCTAAAAACTCTGCTTCGGTGTCGAAATGAGAAGAAGAG
GCACAGGGCTGTGAGGCTTATCTTCACCATCATGATTGTTTATTTTCTCTTCTGGGCTCCCTACAACATTGTCCT
TCTCCTGAACACCTTCCAGGAATTCTTTGGCCTGAATAATTGCAGTAGCTCTAACAGGTTGGACCAAGCTATGCA

FIGURE 6000B

GGTGACAGAGACTCTTGGGATGACGCACTGCTGCATCAACCCCATCATCTATGCCTTTGTCGGGGAGAAGTTCAG
AAACTACCTCTTAGTCTTCTTCCAAAAGCACATTGCCAAACGCTTCTGCAAATGCTGTTCTATTTTCCAGCAAGA
GGCTCCCGAGCGAGCAAGCTCAGTTTACACCCGATCCACTGGGGAGCAGGAAATATCTGTGGGCTTGTGACACGG
ACTCAAGTGGGCTGGTGACCCAGTCAGAGTTGTGCACATGGCTTAGTTTTCATACACAGCCTGGGCTGGGGGTGG
GGTGGGAGAGGTCTTTTTTAAAAGGAAGTTACTGTTATAGAGGGTCTAAGATTCATCCATTTATTTGGCATCTGT
TTAAAGTAGATTAGATCTTTTAAGCCCATCAATTATAGAAAGCCAAATCAAAATATGTTGATGAAAAATAGCAAC
CTTTTTATCTCCCCTTCACATGCATCAAGTTATTGACAAACTCTCCCTTCACTCCGAAAGTTCCTTATGTATATT
TAAAAGAAAGCCTCAGAGAATTGCTGATTCTTGAGTTTAGTGATCTGAACAGAAATACCAAAATTATTTCAGAAA
TGTACAACTTTTTACCTAGTACAAGGCAACATATAGGTTGTAAATGTGTTTAAAACAGGTCTTTGTCTTGCTATG
GGGAGAAAAGACATGAATATGATTAGTAAAGAAATGACACTTTTCATGTGTGATTTCCCCTCCAAGGTATGGTTA
ATAAGTTTCACTGACTTAGAACCAGGCGAGAGACTTGTGGCCTGGGAGAGCTGGGGAAGCTTCTTAAATGAGAAG
GAATTTGAGTTGGATCATCTATTGCTGGCAAAGACAGAAGCCTCACTGCAAGCACTGCATGGGCAAGCTTGGCTG
TAGAAGGAGACAGAGCTGGTTGGGAAGACATGGGGAGGAAGGACAAGGCTAGATCATGAAGAACCTTGACGGCAT
TGCTCCGTCTAAGTCATGAGCTGAGCAGGGAGATCCTGGTTGGTGTTGCAGAAGGTTTACTCTGTGGCCAAAGGA
GGGTCAGGAAGGATGAGCATTTAGGGCAAGGAGACCACCAACAGCCCTCAGGTCAGGGTGAGGATGGCCTCTGCT
AAGCTCAAGGCGTGAGGATGGGAAGGAGGGAGGTATTCGTAAGGATGGGAAGGAGGGAGGTATTCGTGCAGCATA
TGAGGATGCAGAGTCAGCAGAACTGGGGTGGATTTGGTTTGGAAGTGAGGGTCAGAGAGGAGTCAGAGAGAATCC
CTAGTCTTCAAGCAGATTGGAGAAACCCTTGAAAAGACATCAAGCACAGAAGGAGGAGGAGGAGGTTTAGGTCAA
GAAGAAGATGGATTGGTGTAAAAGGATGGGTCTGGTTTGCAGAGCTTGAACACAGTCTCACCCAGACTCCAGGCT
GTCTTTCACTGAATGCTTCTGACTTCATAGATTTCCTTCCCATCCCAGCTGAAATACTGAGGGGTCTCCAGGAGG
AGACTAGATTTATGAATACACGAGGTATGAGGTCTAGGAACATACTTCAGCTCACACATGAGATCTAGGTGAGGA
TTGATTACCTAGTAGTCATTTCATGGGTTGTTGGGAGGATTCTATGAGGCAACCACAGGCAGCATTTAGCACATA
CTACACATTCAATAAGCATCAAACTCTTAGTTACTCATTCAGGGATAGCACTGAGCAAAGCATTGAGCAAAGGGG
TCCCATATAGGTGAGGGAAGCCTGAAAAACTAAGATGCTGCCTGCCCAGTGCACACAAGTGTAGGTATCATTTTC
TGCATTTAACCGTCAATAGGCAAAGGGGGGAAGGGACATATTCATTTGGAAATAAGCTGCCTTGAGCCTTAAAAC
CCACAAAAGTACAATTTACCAGCCTCCGTATTTCAGACTGAATGGGGGTGGGGGGGGCGCCTTAGGTACTTATTC
CAGATGCCTTCTCCAGACAAACCAGAAGCAACAGAAAAAATCGTCTCTCCCTCCCTTTGAAATGAATATACCCCT
TAGTGTTTGGGTATATTCATTTCAAAGGGAGAGAGAGAGGTTTTTTTCTGTTCTTTCTCATATGATTGTGCACAT
ACTTGAGACTGTTTTGAATTTGGGGGATGGCTAAAACCATCATAGTACAGGTAAGGTGAGGGAATAGTAAGTGGT
GAGAACTACTCAGGGAATGAAGGTGTCAGAATAATAAGAGGTGCTACTGACTTTCTCAGCCTCTGAATATGAACG
GTGAGCATTGTGGCTGTCAGCAGGAAGCAACGAAGGGAAATGTCTTTCCTTTTGCTCTTAAGTTGTGGAGAGTGC
AACAGTAGCATAGGACCCTACCCTCTGGGCCAAGTCAAAGACATTCTGACATCTTAGTATTTGCATATTCTTATG
TATGTGAAAGTTACAAATTGCTTGAAAGAAAATATGCATCTAATAAAAAACACCTTCTA

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FIGURE 6001

MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILILINCKRLKSMTDIYLLNLAIS
DLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIGFFSGIFFIILLTIDRYLAVVHAVFALKARTVTFGVVTSV
ITWVVAVFASLPGIIFTRSQKEGLHYTCSSHFPYSQYQFWKNFQTLKIVILGLVLPLLVMVICYSGILKTLLRCR
NEKKRHRAVRLIFTIMIVYFLFWAPYNIVLLLNTFQEFFGLNNCSSSNRLDQAMQVTETLGMTHCCINPIIYAFV
GEKFRNYLLVFFQKHIAKRFCKCCSIFQQEAPERASSVYTRSTGEQEISVGL

FIGURE 6002

GCAGAGCACAGCATCGTCGGGACCAGACTCGTCTCAGGCCAGTTGCAGCCTTCTCAGCCAAACGCCGACCAAGGA
AAACTCACTACCATGAGAATTGCAGTGATTTGCTTTTGCCTCCTAGGCATCACCTGTGCCATACCAGTTAAACAG
GCTGATTCTGGAAGTTCTGAGGAAAAGCAGCTTTACAACAAATACCCAGATGCTGTGGCCACATGGCTAAACCCT
GACCCATCTCAGAAGCAGAATCTCCTAGCCCCACAGACCCTTCCAAGTAAGTCCAACGAAAGCCATGACCACATG
GATGATATGGATGATGAAGATGATGATGACCATGTGGACAGCCAGGACTCCATTGACTCGAACGACTCTGATGAT
GTAGATGACACTGATGATTCTCACCAGTCTGATGAGTCTCACCATTCTGATGAATCTGATGAACTGGTCACTGAT
TTTCCCACGGACCTGCCAGCAACCGAAGTTTTCACTCCAGTTGTCCCCACAGTAGACACATATGATGGCCGAGGT
GATAGTGTGGTTTATGGACTGAGGTCAAAATCTAAGAAGTTTCGCAGACCTGACATCCAGTACCCTGATGCTACA
GACGAGGACATCACCTCACACATGGAAAGCGAGGAGTTGAATGGTGCATACAAGGCCATCCCCGTTGCCCAGGAC
CTGAACGCGCCTTCTGATTGGGACAGCCGTGGGAAGGACAGTTATGAAACGAGTCAGCTGGATGACCAGAGTGCT
GAAACCCACAGCCACAAGCAGTCCAGATTATATAAGCGGAAAGCCAATGATGAGAGCAATGAGCATTCCGATGTG
ATTGATAGTCAGGAACTTTCCAAAGTCAGCCGTGAATTCCACAGCCATGAATTTCACAGCCATGAAGATATGCTG
GTTGTAGACCCCAAAAGTAAGGAAGAAGATAAACACCTGAAATTTCGTATTTCTCATGAATTAGATAGTGCATCT
TCTGAGGTCAATTAAAAGGAGAAAAAATACAATTTCTCACTTTGCATTTAGTCAAAAGAAAAAATGCTTTATAGC
AAAATGAAAGAGAACATGAAATGCTTCTTTCTCAGTTTATTGGTTGAATGTGTATCTATTTGAGTCTGGAAATAA
CTAATGTGTTTGATAATTAGTTTAGTTTGTGGCTTCATGGAAACTCCCTGTAAACTAAAAGCTTCAGGGTTATGT
CTATGTTCATTCTATAGAAGAAATGCAAACTATCACTGTATTTTAATATTTGTTATTCTCTCATGAATAGAAATT
TATGTAGAAGCAAACAAAATACTTTTACCCACTTAAAAAGAGAATATAACATTTTATGTCACTATAATCTTTTGT
TTTTTAAGTTAGTGTATATTTTGTTGTGATTATCTTTTTGTGGTGTGAATAAATCTTTTATCTTGAATGTAATAA
GAATTTGGTGGTGTCAATTGCTTATTTGTTTTCCCACGGTTGTCCAGCAATTAATAAAACATAACCTTTTTTACT
GCCTAAAAAAAAAAAAAAAAAAAA

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FIGURE 6003

MRIAVICFCLLGITCAIPVKQADSGSSEEKQLYNKYPDAVATWLNPDPSQKQNLLAPQTLPSKSNESHDHMDDMD
DEDDDDHVDSQDSIDSNDSDDVDDTDDSHQSDESHHSDESDELVTDFPTDLPATEVFTPVVPTVDTYDGRGDSVV
YGLRSKSKKFRRPDIQYPDATDEDITSHMESEELNGAYKAIPVAQDLNAPSDWDSRGKDSYETSQLDDQSAETHS
HKQSRLYKRKANDESNEHSDVIDSQELSKVSREFHSHEFHSHEDMLVVDPKSKEEDKHLKFRISHELDSASSEVN

FIGURE 6004

AGCAGAGCACACAAGCTTCTAGGACAAGAGCCAGGAAGAAACCACCGGAAGGAACCATCTCACTGTGTGTAAACA
TGACTTCCAAGCTGGCCGTGGCTCTCTTGGCAGCCTTCCTGATTTCTGCAGCTCTGTGTGAAGGTGCAGTTTTGC
CAAGGAGTGCTAAAGAACTTAGATGTCAGTGCATAAAGACATACTCCAAACCTTTCCACCCCAAATTTATCAAAG
AACTGAGAGTGATTGAGAGTGGACCACACTGCGCCAACACAGAAATTATTGTAAAGCTTTCTGATGGAAGAGAGC
TCTGTCTGGACCCCAAGGAAAACTGGGTGCAGAGGGTTGTGGAGAAGTTTTTGAAGAGGGCTGAGAATTCATAAA
AAAATTCATTCTCTGTGGTATCCAAGAATCAGTGAAGATGCCAGTGAAACTTCAAGCAAATCTACTTCAACACTT
CATGTATTGTGTGGGTCTGTTGTAGGGTTGCCAGATGCAATACAAGATTCCTGGTTAAATTTGAATTTCAGTAAA
CAATGAATAGTTTTTCATTGTACCATGAAATATCCAGAACATACTTATATGTAAAGTATTATTTATTTGAATCTA
CAAAAAACAACAAATAATTTTTAAATATAAGGATTTTCCTAGATATTGCACGGGAGAATATACAAATAGCAAAAT
TGAGCCAAGGGCCAAGAGAATATCCGAACTTTAATTTCAGGAATTGAATGGGTTTGCTAGAATGTGATATTTGAA
GCATCACATAAAAATGATGGGACAATAAATTTTGCCATAAAGTCAAATTTAGCTGGAAATCCTGGATTTTTTTCT
GTTAAATCTGGCAACCCTAGTCTGCTAGCCAGGATCCACAAGTCCTTGTTCCACTGTGCCTTGGTTTCTCCTTTA
TTTCTAAGTGGAAAAAGTATTAGCCACCATCTTACCTCACAGTGATGTTGTGAGGACATGTGGAAGCACTTTAAG
TTTTTTCATCATAACATAAATTATTTTCAAGTGTAACTTATTAACCTATTTATTATTTATGTATTTATTTAAGCA
TCAAATATTTGTGCAAGAATTTGGAAAAATAGAAGATGAATCATTGATTGAATAGTTATAAAGATGTTATAGTAA
ATTTATTTTATTTTAGATATTAAATGATGTTTTATTAGATAAATTTCAATCAGGGTTTTTAGATTAAACAAAGAA
ACAATTGGGTACCCAGTTAAATTTTCATTTCAGATAAACAACAAATAATTTTTTAGTATAAGTACATTATTGTTT
ATCTGAAAGTTTTAATTGAACTAACAATCCTAGTTTGATACTCCCAGTCTTGTCATTGCCAGCTGTGTTGGTAGT
GCTGTGTTGAATTACGGAATAATGAGTTAGAACTATTAAAACAGCCAAAACTCCACAGTCAATATTAGTAATTTC
TTGCTGGTTGAAACTTGTTTATTATGTACAAATAGATTCTTATAATATTATTTAAATGACTGCATTTTTAAATAC
AAGGCTTTATATTTTTAACTTTAAGATGTTTTTATGTGCTCTCCAAATTTTTTTTACTGTTTCTGATTGTATGGA
AATATAAAAGTAAATATGAAACATTTAAAATATAATTTGTTGTCAAAGTAAAAAAAAAAAAAAA

FIGURE 6005

MTSKLAVALLAAFLISAALCEGAVLPRSAKELRCQCIKTYSKPFHPKFIKELRVIESGPHCANTEIIVKLSDGRE
LCLDPKENWVQRVVEKFLKRAENS

FIGURE 6006

GATCCAAACATGAGCCGCCTGCCCGTCCTGCTCCTGCTCCAACTCCTGGTCCGCCCCGGACTCCAAGCTCCCATG
ACCCAGACAACGTCCTTGAAGACAAGCTGGGTTAACTGCTCTAACATGATCGATGAAATTATAACACACTTAAAG
CAGCCACCTTTGCCTTTGCTGGACTTCAACAACCTCAATGGGGAAGACCAAGACATTCTGATGGAAAATAACCTT
CGAAGGCCAAACCTGGAGGCATTCAACAGGGCTGTCAAGAGTTTACAGAACGCATCAGCAATTGAGAGCATTCTT
AAAAATCTCCTGCCATGTCTGCCCCTGGCCACGGCCGCACCCACGCGACATCCAATCCATATCAAGGACGGTGAC
TGGAATGAATTCCGGAGGAAACTGACGTTCTATCTGAAAACCCTTGAGAATGCGCAGGCTCAACAGACGACTTTG
AGCCTCGCGATCTTTTAGTCCAACGTCCAGCTCGTTCTCTGGGCCTTCTCACCACAGCGCCTCGGGACATCAAAA
ACAGCAGAACTTCTGAAACCTCTGGGTCATCTCTCACACATTCCAGGACCAGAAGCATTTCACCTTTTCCTGCGG
CATCAGATGAATTGTTAATTATCTAATTTCTGAAATGTGCAGCTCCCATTTGGCCTTGTGCGGTTGTGTTCTCA

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FIGURE 6007

MSRLPVLLLLQLLVRPGLQAPMTQTTSLKTSWVNCSNMIDEIITHLKQPPLPLLDFNNLNGEDQDILMENNLRRP
NLEAFNRAVKSLQNASAIESILKNLLPCLPLATAAPTRHPIHIKDGDWNEFRRKLTFYLKTLENAQAQQTTLSLA
IF

FIGURE 6008A

AAGAAAAATXXTCTTTGTAATATAAAACCGCCAGTGTTAGTGTTGCCATTGCTGTAATTCTCTTGTCCATTTCTT
CATAGTTATAATATTGCTGCTGAAGCTCCTGCCATCACACCCAAATTGGAATTAAGGGGAAAGACAGGGTTCAGC
CACTTTTGTCTCCTATTACCAGGAAAGCAAAATAATTTTACATACTTTGCATTGATCGAAACATGCTGCATGGCT
ACATGTAGCAGCAAAAGAGGCTGAAAATGTGGGTGTTTGGCTGGATACATTGGTACCCCAAACTAATCAGAATTC
TACCATCAAGAAAAAGGCATACATCCAGTGCTTTGTAACAAAAGTGTTTGCCACAGGCTGGGAATCCTTTGAGTT
TTCTCTTCAGTGTCTGCAAAGAGCAGGGATGGAAGTCAGAGATGTGGGATGGCTTAAGGGAATTTAGCAAAACAC
CTGTTTCTCTTTACCTTGTTTACCACCAAGACACTCCCTTCCCCATAGTGCAGTGGAACACTGACGAGCCATCAT
CACTCCTAAGAAACAATACAAAATGAAAAAAAAAACAGTATTGCCATACTCTTACAGTGGAGGCGAGGAAATCTTA
TGAGTTTGTCCCCACTGGCTATTATAGTTCAGAGTGCTAAGCTAAAGAACCCCTCACCTTTTCAATCTACTGTGT
AGAAGCTATATTTACTTACCTGCACATACCTCCAAATATGTATCCTAGAAATCAGATTTGAAATCTTATAAATCC
CAGAAGTAGGAAGTTCGTATTTCAAGAACTACTTTTCAAATTAGTGTTTTAATTCAACAAGCATTTAGTGAGTGC
CCACAGTTCCCCAGGCACCTCCTTAAGTGCTGAGAATATAGGGGTGAACTGGACCCATAAAGCCCTGGAGTATAT
ATCCTGGTGGGAGAGGCAGATAAAAGATCTGCAGAAAAACAGGAGTTCAGGAGGATTAAGAGCTGAAATCAGGAG
GCAGACTTCTGGGCTTGAATACAAATTCTGCGGCTTCCTGGCTTTGTGGTTTTGGGCAAATTACCTGCCTCTCTA
TGCCTCAGTTTCTCCATCTGTAAGATAATAAGAATAATTATAGTACTTCATAGAGTTACACTGAGATTGCTTTTT
TGACTCATAGTGATTAAACACAGCCATACTGAAGGGCCAGGAAGCTAAGATGTAGACAGTGTTTTAAAGGGTAAA
AAATGGTGATGACAAATTACTCCCCACCTCATTTGGCAGCCGAGTGTATTACATGGCTTAATGCATGTAAAGTAC
TTAGAAATGTTGCTAGTATGGTCAGGCCCAGTGGCTCATGCCTGTAATCCCAGAACTTTGGGAGGCCAAGGCGGG
CGGATCACGAGGTCAGGAGTTCAAGACCAGCCTGGCCAACATAGTGAAACCTCGTCTCTACTAAAAATACAAAAA
ATTAGCCGGGCGTGGTGGAGGGTGCCTGTAATTCTAGCTACTCGGGAGGCTGAGGCAGGAGAATCGCTTGAACCC
GGGAGGCAGAGGTTGCAGCGAACCTGGATTGTGCCACCGCACTCCAGCCTGGTGACAGAGGGAGACTCTGTCTCA
AAAAAAAAAAAAAAAAAAAAGAAATGTTACTAGTATGTAGTAAGTTCTCAGTAAATGTTAGCTACTATACTCTTT
CAAGTGCTGGGTTTTTACTTGATGTCATACAGTGTTATATAAGATCTCCAAAGATACTGAGGAGTCCTCAAGGCC
AATTTTAACAAGCATGGTTGCCGCATTCTTGTGCTTATAGTTGAACATTTCTTCTTTCAGACACTTGCACAAAGG
GATACTTCTAAGATGCATTTGCATTAGGTGGCAAACTTCATCCTGGGTATGAAAAACATTGAGATTTGGGAATAA
AGCATAGTAAGACTGAGGTTGCAATTACTAAAGGAAAACCCCAACAGAGATAAGTGAAGTTCTGCAATATCATGC
ACCCTCCCCCAACCCGCTCTGTCTCCCCAGGCCCCCCTTCGTTAGAACACCCATGACTGGCTATATTATATCAGC
ATTTCCCATAATGTAAAAAGGGAAAATACAGACCTGGGCGTTCATGGAAAGTATTCTAACTCTCACAACCAGAAT
CCCTGTCTTTGAATTTTTTTTCTTGGTTTTTAGATCTTTAACTTTTCCTTCAGCATTTCAGTACTCAACTTTTTG
AAAATCATCTTTTCTGAGGAATGATATTTCCTGGCACAGCATCATCTCTGTCAAGTGACTCAGTTTGATTTTTTT
GTTTGTTAGTATAAAGTGGCCCCAACTTACAGAGAAAAAGTGGGCTCTTGGTATCAGTTTGATGTCAGGGTTTTT
CCGTGTTTGAGAGGGAGCTTTAAATACCACTCGATTTGAAGGTGTCTGCAAGCGAGCTCCAGTCCGCTGTCAAGA
TGCTTCTGGCCATGGTCCTTACCTCTGCCCTGCTCCTGTGCTCCGTGGCAGGCCAGGGGTGTCCAACCTTGGCGG
GGATCCTGGACATCAACTTCCTCATCAACAAGATGCAGGTAGGCTGCAGGGGGAGCCCATGGGAAAGACAGCTAC
TGACAAAGTGAAATATGTATGAGGATGAAAAAACTCGGGGCTGACTAAAGGTTCTTATCTCTCTATCTACTTTAG
GAAGATCCAGCTTCCAAGTGCCACTGCAGTGCTAATGTGAGTGAATGCTCTTTAAGAACTTTCCAAATTAATTTT
AATTTTCACATCTGGAATCTTCACTCTGAAATTTCCCTTGCAGGTGACCAGTTGTCTCTGTTTGGGCATTCCCTC
TGTAAGTATAGTGAAATAACATAATGTTGACCTTGGATTTTTTTGGTTTGTTTTTAAGTAAAAATAAGTTGCTTT
ATTTAATATTTAATGTTATACATTGTTGCTTAATTTAATTGTTACAGATTAGTATTCCCTGTTAAAACCACATTG
TTACAAATTATTCCCTTTTAAAACTACGATCTTGAAATCCTATATTATGAACATTTCTTTGTATTTAATTAACTT
TATGCCTCTTGAGAAGTTTGAACACTTTTCAACATTAAAAAAAGAATCCTGAATATCTTTTTAGATAGGTGGCCA
TGTGCACAATTAAATAAAACTGGAACTAAGGATATAATAATTGCTGTAGCTCATATCATATTGCTTTCTAACTCA
TTTACTGATAACTCTAGAGTTGTGAAACAATGTAAATAAAATGACAACTCCTTATCTTTCATCTGTCATGAATGA
TCTATGCGCTATACCTCCCCCTCCCTGCCTCCTCCCTTCCTCCCCACCACCCTGTTGTCTGTCTAGCTGATTAGA
GTGACTGTTGGTTTGAATGCTGCCCTCTGGGCAGGTAGAGGATCTGAGGTTGTGAGTGGAAGGAGGGCTTCCAGA
GGGCCACTGCCCACTACGGCAGGAAGGATGGGTGGCAGGAAAGTTCTGATTCCTAATTCAAACTCCTGGTTAGGG
TGAGGAGGAGGCACTTCTCCAAGGTGCAGTGCTTTATTCTTTCTCATGCAAGGCCTGGGAGAATCTGAAGAATCT
GAGCTTCTTGCCCTGGCTAGGGTAAGACATCGCACCCATCGCGGTCCATCCATTAGATGAGAAGAGGATAGAGTG

FIGURE 6008B

CCTTCTGGGCAGGAACCAGGCAGACAGCACAGCCCCTGTCCCTTGGAGTACAGTCCATGTTTTTAGCTGCTGCTG
AAATACCAGCTGCATTCAATTGTCACATCCCATTAGCTGGTGTGAAAAGGCTTTTCCTCACTCTGCACTTTCAGA
CTTACAAGCCTTGAAGCCGGGAAGCACCCGTTGAAAAGAACATTCAGAGCCGACTATTTCAGGGCCCAGAGCCCT
CATGTTTCCTGGATGTAACATACAGGAAGTCTCCTCCAGGGGATGTCACTGTGGAAAAATGGCATCCCCTTTAAA
TACGGGAGATCACTTCCTACATTGGCAAGGGACCTGTCTAAAAATAATGCAAGTTTGAGTAATGGTGATTAAATA
AAAATCATCTCTATTATATTGCTCTTTGTGATATATTTCCAAAGCTGTCCTCAGAATATTTCTTTGAATAAATCC
TTACTATTTACCAGGACAACTGCACCAGACCATGCTTCAGTGAGAGACTGTCTCAGATGACCAATACCACCATGC
AAACAAGATACCCACTGATTTTCAGTCGGGTGAAAAAATCAGTTGAAGTACTAAAGAACAACAAGTGTCCAGTAA
GTTTGTTTTCATATGTGATATGTTCCTGTTGGTGATTTCTATGTGAATGGTGATGCCAACCCTGTTTGAACACAA
AAGGATGATAAAGTTGGAATTGGTAGTTCAAGGTTGATAAAAGACATCTAAGAATTTTAATCAGAAGTAATATAA
TTAAAGTGAGATCCACTGAAACAATAGAATTAAAGTGAGATAGATCATTGTTCCTGACGAGGCCATTTACTTCTC
TCTACTATGGAATAATGAAAGAATCCTTTCTGAGTGTAATTAGAAGCTACAATCTAGAGAATCAGGGATGTAGCT
CACATAATACTAAATTATCCTAGAGATTCAATGTACTAACTGAATGGATGTTGTTAACAGGGATTTTTTTTTCCT
GTTGGTTAAGGAGGTTTTGTTTTGTTTTGGAGACAGAGTCTTGCTCTGTTGCCCAGGCTGGAGTGCAGTGGTGCC
ATCTGAGCTCACTGCAGCCTCTGCCTCCCGGGTTCAAGTGATTATCCTGCCTCAGCCTCCCGAGTAGCTGGCATT
ACAGGTGCGTGCCACCATGCCTGGCTAATTTTTGTATTTTTAATAGAGATGGGGTTTCACCATGTTGGCCAGGTT
GCTCTCCAACTCCTGAACTCAAGTGATTTGCCCGCCTTGACCTCCCAAAGTGCTGGGATGACAGGTGTGAGCCAC
CATGCCTGGCCTGCATTAAGGAGGTATTTAAAGGGCAATGCACCCAGGTCAAGGTGGAAGCTTGCTACTCATCCT
GAATGCCCATCCACACATTCTTTTCTTCAGCATATACCCTAGTCCCTGACAGCAGACTGGGATGGCAAGTTGGGT
AGAGGTGACCTCCCTCTGTTTTTTGGGTATTAGCATCTCCACACAAGATCCTAGAAGGCTGAAAGCCCTGAGCTC
AGCTGTTTAGCTGCATGCGTTTCTACCATCAATGGCATCTAGTTCTAAGTGCTTAATATATGCTGTCTCACTGAA
TAAATACATACCTTAGGGACAATTATTCAATTTATTACTCTCAGTGAGGTTAACTAATTTGCCTAAGGCTGCATA
TTTGATAAGTGGCAGAGCTGAGATTTGAACTCAGGCCTATATGACCTCAGAGCCCCACTCTTAGCCATTGTACTG
TCAAATGACCTTGGAAAGACAACCTAAAAGGATAATGATACAATTTTAGGCCTCAAAGAGTCCCCAGAAAAGGCT
TTCTCTAATGCAGAGATTTAGGGCCACTTAATAGGGGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG
TGTGTAAAGACCCCTGAAATCCAATTTGAGGTCAACCACCTATGCTGTCTTTACACCACATGAGCTAGCCTGGAC
CTGCCCACCTATTTGCTCTGTGTCTCAAGCCACTTCCCTTCCCATCCCCACAATCCTCACCACCGACTCTGGCTC
TTGGCAGGTAGGCTTCTGGGGCTGCTTGGCTCTACATCATTTGAGTCACTCTGTCCTTATCAACTTTCATCCCCA
CAGTATTTTTCCTGTGAACAGCCATGCAACCAAACCACGGCAGGCAACGCGCTGACATTTCTGAAGAGTCTTCTG
GAAATTTTCCAGAAAGAAAAGATGAGAGGGATGAGAGGCAAGATATGAAGATGAAATATTATTTATCCTATTTAT
TAAATTTAAAAAGCTTTCTCTTTAAGTTGCTACAATTTAAAAATCAAGTAAGCTACTCTAAATCAGTATCAGTTG
TGATTATTTGTTTAACATTGTATGTCTTTATTTTGAAATAAATACATATGTGGAAAAAACAACATGAGCTGGTCT
CTTGGCAATTATTCATTTCTTGCTGCTCAGAACAAAGAAAGCTACAAGTGTTGTTAAGGGGAAGAATAGATCAGA
GACTCCTGTAGGAGTCTCTGTGATAAGACTCCTGATGCTGAATACAGACCCTCAGGCTCATAGGCTGTGGCTGGA
GCTGCAGGAGGGCTGCAGGGAGCAGTTACAAAGAATGTCTATGAGGACCATCTGAGGGTTGCCACTAGGGGAGGC
TGAAGGCATGTCTGACACTGCTAAGAGGGCTAGGGTCCTGAGAAACTGGCCTTGTGCCTGAAAGAGGAGAAGGCA
GCAGCTTGGAAGTGGGAGACTGCTCAAGAATGTGGGCATGCAGAATAAATGCTTAATAATTAAGTGCTTAACCCA
CTAGTTATGGTAGGAAGTAGATATTATTATTATGCATTTCTGTTTTATATATACTGAAACCAAAGCTTAGAAAGT
CTGCATGGCATTCCCAAGATCCCACAGGTGGTGAGATTTAGAAGAAGGATTCACCCCTCGTGCTCTCTGCTTCCA
AACCCTTTGCTGTTTGCATTCTGCCCCTTTCTTATTCTCTTTATACCAAGGGTGTGCATTGTGCTTCTTCCAACC
ACAGCCTGAGGGTAAAATAGACCCATCATAATTCCAGTCCACACTCTCATATCCAGAAACCTAGGGAGTCAGGTT
T

FIGURE 6009

GGCACGAGGGTGTGCGTGATGGAGAAAATTGGGCACCAGGGCTGCTCCCGAGATTCTCAGATCTGATTTCCACGC
TTGCTACCAAAATAGTCTGGGCAGGCCACTTTTGGAAGTAGGCGTTATCTAGTGAGCAGGCGGCCGCTTTCGATT
TCGCTTTCCCCTAAATGGCTGAGCTTCTCGCCAGCGCAGGATCAGCCTGTTCCTGGGACTTTCCGAGAGCCCCGC
CCTCGTTCCCTCCCCCAGCCGCCAGTAGGGGAGGACTCGGCGGTACCCGGAGCTTCAGGCCCCACCGGGGCGCGG
AGAGTCCCAGGCCCGGCCGGGACCGGGACGGCGTCCGAGTGCCAATGGCTAGCTCTAGGTGTCCCGCTCCCCGCG
GGTGCCGCTGCCTCCCCGGAGCTTCTCTCGCATGGCTGGGGACAGTACTGCTACTTCTCGCCGACTGGGTGCTGC
TCCGGACCGCGCTGCCCCGCATATTCTCCCTGCTGGTGCCCACCGCGCTGCCACTGCTCCGGGTCTGGGCGGTGG
GCCTGAGCCGCTGGGCCGTGCTCTGGCTGGGGGCCTGCGGGGTCCTCAGGGCAACGGTTGGCTCCAAGAGCGAAA
ACGCAGGTGCCCAGGGCTGGCTGGCTGCTTTGAAGCCATTAGCTGCGGCACTGGGCTTGGCCCTGCCGGGACTTG
CCTTGTTCCGAGAGCTGATCTCATGGGGAGCCCCCGGGTCCGCGGATAGCACCAGGCTACTGCACTGGGGAAGTC
ACCCTACCGCCTTCGTTGTCAGTTATGCAGCGGCACTGCCCGCAGCAGCCCTGTGGCACAAACTCGGGAGCCTCT
GGGTGCCCGGCGGTCAGGGCGGCTCTGGAAACCCTGTGCGTCGGCTTCTAGGCTGCCTGGGCTCGGAGACGCGCC
GCCTCTCGCTGTTCCTGGTCCTGGTGGTCCTCTCCTCTCTTGGGGAGATGGCCATTCCATTCTTTACGGGCCGCC
TCACTGACTGGATTCTACAAGATGGCTCAGCCGATACCTTCACTCGAAACTTAACTCTCATGTCCATTCTCACCA
TAGCCAGTGCAGTGCTGGAGTTCGTGGGTGACGGGATCTATAACAACACCATGGGCCACGTGCACAGCCACTTGC
AGGGAGAGGTGTTTGGGGCTGTCCTGCGCCAGGAGACGGAGTTTTTCCAACAGAACCAGACAGGTAACATCATGT
CTCGGGTAACAGAGGACACGTCCACCCTGAGTGATTCTCTGAGTGAGAATCTGAGCTTATTTCTGTGGTACCTGG
TGCGAGGCCTATGTCTCTTGGGGATCATGCTCTGGGGATCAGTGTCCCTCACCATGGTCACCCTGATCACCCTGC
CTCTGCTTTTCCTTCTGCCCAAGAAGGTGGGAAAATGGTACCAGTTGCTGGAAGTGCAGGTGCGGGAATCTCTGG
CAAAGTCCAGCCAGGTGGCCATTGAGGCTCTGTCGGCCATGCCTACAGTTCGAAGCTTTGCCAACGAGGAGGGCG
AAGCCCAGAAGTTTAGGGAAAAGCTGCAAGAAATAAAGACACTCAACCAGAAGGAGGCTGTGGCCTATGCAGTCA
ACTCCTGGACCACTAGTATTTCAGGTATGCTGCTGAAAGTGGGAATCCTCTACATTGGTGGGCAGCTGGTGACCA
GTGGGGCTGTAAGCAGTGGGAACCTTGTCACATTTGTTCTCTACCAGATGCAGTTCACCCAGGCTGTGGAGGTAC
TGCTCTCCATCTACCCCAGAGTACAGAAGGCTGTGGGCTCCTCAGAGAAAATATTTGAGTACCTGGACCGCACCC
CTCGCTGCCCACCCAGTGGTCTGTTGACTCCCTTACACTTGGAGGGCCTTGTCCAGTTCCAAGATGTCTCCTTTG
CCTACCCAAACCGCCCAGATGTCTTAGTGCTACAGGGGCTGACATTCACCCTACGCCCTGGCGAGGTGACGGCGC
TGGTGGGACCCAATGGGTCTGGGAAGAGCACAGTGGCTGCCCTGCTGCAGAATCTGTACCAGCCCACCGGGGGAC
AGCTGCTGTTGGATGGGAAGCCCCTTCCCCAATATGAGCACCGCTACCTGCACAGGCAGGTGGCTGCAGTGGGAC
AAGAGCCACAGGTATTTGGAAGAAGTCTTCAAGAAAATATTGCCTATGGCCTGACCCAGAAGCCAACTATGGAGG
AAATCACAGCTGCTGCAGTAAAGTCTGGGGCCCATAGTTTCATCTCTGGACTCCCTCAGGGCTATGACACAGAGG
TAGACGAGGCTGGGAGCCAGCTGTCAGGGGGTCAGCGACAGGCAGTGGCGTTGGCCCGAGCATTGATCCGGAAAC
CGTGTGTACTTATCCTGGATGATGCCACCAGTGCCCTGGATGCAAACAGCCAGTTACAGGTGGAGCAGCTCCTGT
ACGAAAGCCCTGAGCGGTACTCCCGCTCAGTGCTTCTCATCACCCAGCACCTCAGCCTGGTGGAGCAGGCTGACC
ACATCCTCTTTCTGGAAGGAGGCGCTATCCGGGAGGGGGGAACCCACCAGCAGCTCATGGAGAAAAAGGGGTGCT
ACTGGGCCATGGTGCAGGCTCCTGCAGATGCTCCAGAATGAAAGCCTTCTCAGACCTGCGCACTCCATCTCCCTC
CCTTTTCTTCTCTCTGTGGTGGAGAACCACAGCTGCAGAGTAGGCAGCTGCCTCCAGGATGAGTTACTTGAAATT
TGCCTTGAGTGTGTTACCTCCTTTCCAAGCTCCTCGTGATAATGCAGACTTCCTGGAGTACAAACACAGGATTTG
TAATTCCTTACTGTAACGGAGTTTAGAGCCAGGGCTGATGCTTTGGTGTGGCCAGCACTCTGAAACTGAGAAATG
TTCAGAATGTACGGAAAGATGATCAGCTATTTTCAACATAACTGAAGGCATATGCTGGCCCATAAACACCCTGTA
GGTTCTTGATATTTATAATAAAATTGGTGTTTTGTAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6010

MAELLASAGSACSWDFPRAPPSFPPPAASRGGLGGTRSFRPHRGAESPRPGRDRDGVRVPMASSRCPAPRGCRCL
PGASLAWLGTVLLLLADWVLLRTALPRIFSLLVPTALPLLRVWAVGLSRWAVLWLGACGVLRATVGSKSENAGAQ
GWLAALKPLAAALGLALPGLALFRELISWGAPGSADSTRLLHWGSHPTAFVVSYAAALPAAALWHKLGSLWVPGG
QGGSGNPVRRLLGCLGSETRRLSLFLVLVVLSSLGEMAIPFFTGRLTDWILQDGSADTFTRNLTLMSILTIASAV
LEFVGDGIYNNTMGHVHSHLQGEVFGAVLRQETEFFQQNQTGNIMSRVTEDTSTLSDSLSENLSLFLWYLVRGLC
LLGIMLWGSVSLTMVTLITLPLLFLLPKKVGKWYQLLEVQVRESLAKSSQVAIEALSAMPTVRSFANEEGEAQKF
REKLQEIKTLNQKEAVAYAVNSWTTSISGMLLKVGILYIGGQLVTSGAVSSGNLVTFVLYQMQFTQAVEVLLSIY
PRVQKAVGSSEKIFEYLDRTPRCPPSGLLTPLHLEGLVQFQDVSFAYPNRPDVLVLQGLTFTLRPGEVTALVGPN
GSGKSTVAALLQNLYQPTGGQLLLDGKPLPQYEHRYLHRQVAAVGQEPQVFGRSLQENIAYGLTQKPTMEEITAA
AVKSGAHSFISGLPQGYDTEVDEAGSQLSGGQRQAVALARALIRKPCVLILDDATSALDANSQLQVEQLLYESPE
RYSRSVLLITQHLSLVEQADHILFLEGGAIREGGTHQQLMEKKGCYWAMVQAPADAPE

FIGURE 6011A

CCAGGCTTGTCCCTGCTACCCCCACCCAGCCTTTCCTGAGGCCTCAGGCCTGCCACCAAGCCCCCAGCTCCTTCT
CCCCGCAGGGACCCAAACACAGGCCTCAGGACTCAACACAGCTTTTCCCTCCAACCCCGTTTTCTCTCCCTCAAG
GACTCAGCTTTCTGAAGCCCCTCCCAGTTCTAGTTCTATCTTTTTCCTGCATCCTGTCTGGAAGTTAGAAGGAAA
CAGACCACAGACCTGGTCCCCAAAAGAAATGGAGGCAATAGGTTTTGAGGGGCATGGGGACGGGGTTCAGCCTCC
AGGGTCCTACACACAAATCAGTCAGTGGCCCAGAAGACCCCCCTCGGAATCGGAGCAGGGAGGATGGGGAGTGTG
AGGGGTATCCTTGATGCTTGTGTGTCCCCAACTTTCCAAATCCCCGCCCCCGCGATGGAGAAGAAACCGAGACAG
AAGGTGCAGGGCCCACTACCGCTTCCTCCAGATGAGCTCATGGGTTTCTCCACCAAGGAAGTTTTCCGCTGGTTG
AATGATTCTTTCCCCGCCCTCCTCTCGCCCCAGGGACATATAAAGGCAGTTGTTGGCACACCCAGCCAGCAGACG
CTCCCTCAGCAAGGACAGCAGAGGACCAGCTAAGAGGGAGAGAAGCAACTACAGACCCCCCCTGAAAACAACCCT
CAGACGCCACATCCCCTGACAAGCTGCCAGGCAGGTTCTCTTCCTCTCACATACTGACCCACGGCTCCACCCTCT
CTCCCCTGGAAAGGACACCATGAGCACTGAAAGCATGATCCGGGACGTGGAGCTGGCCGAGGAGGCGCTCCCCAA
GAAGACAGGGGGGCCCCAGGGCTCCAGGCGGTGCTTGTTCCTCAGCCTCTTCTCCTTCCTGATCGTGGCAGGCGC
CACCACGCTCTTCTGCCTGCTGCACTTTGGAGTGATCGGCCCCCAGAGGGAAGAGGTGAGTGCCTGGCCAGCCTT
CATCCACTCTCCCACCCAAGGGGAAATGGAGACGCAAGAGAGGGAGAGAGATGGGATGGGTGAAAGATGTGCGCT
GATAGGGAGGGATGGAGAGAAAAAAACGTGGAGAAAGACGGGGATGCAGAAAGAGATGTGGCAAGAGATGGGGAA
GAGAGAGAGAGAAAGATGGAGAGACAGGATGTCTGGCACATGGAAGGTGCTCACTAAGTGTGTATGGAGTGAATG
AATGAATGAATGAATGAACAAGCAGATATATAAATAAGATATGGAGACAGATGTGGGGTGTGAGAAGAGAGATGG
GGGAAGAAACAAGTGATATGAATAAAGATGGTGAGACAGAAAGAGCGGGAAATATGACAGCTAAGGAGAGAGATG
GGGGAGATAAGGAGAGAAGAAGATAGGGTGTCTGGCACACAGAAGACACTCAGGGAAAGAGCTGTTGAATGCCTG
GAAGGTGAATACACAGATGAATGGAGAGAGAAAACCAGACACCTCAGGGCTAAGAGCGCAGGCCAGACAGGCAGC
CAGCTGTTCCTCCTTTAAGGGTGACTCCCTCGATGTTAACCATTCTCCTTCTCCCCAACAGTTCCCCAGGGACCT
CTCTCTAATCAGCCCTCTGGCCCAGGCAGTCAGTAAGTGTCTCCAAACCTCTTTCCTAATTCTGGGTTTGGGTTT
GGGGGTAGGGTTAGTACCGGTATGGAAGCAGTGGGGGAAATTTAAAGTTTTGGTCTTGGGGGAGGATGGATGGAG
GTGAAAGTAGGGGGGTATTTTCTAGGAAGTTTAAGGGTCTCAGCTTTTTCTTTTCTCTCTCCTCTTCAGGATCAT
CTTCTCGAACCCCGAGTGACAAGCCTGTAGCCCATGTTGTAGGTAAGAGCTCTGAGGATGTGTCTTGGAACTTGG
AGGGCTAGGATTTGGGGATTGAAGCCCGGCTGATGGTAGGCAGAACTTGGAGACAATGTGAGAAGGACTCGCTGA
GCTCAAGGGAAGGGTGGAGGAACAGCACAGGCCTTAGTGGGATACTCAGAACGTCATGGCCAGGTGGGATGTGGG
ATGACAGACAGAGAGGACAGGAACCGGATGTGGGGTGGGCAGAGCTCGAGGGCCAGGATGTGGAGAGTGAACCGA
CATGGCCACACTGACTCTCCTCTCCCTCTCTCCCTCCCTCCAGCAAACCCTCAAGCTGAGGGGCAGCTCCAGTGG
CTGAACCGCCGGGCCAATGCCCTCCTGGCCAATGGCGTGGAGCTGAGAGATAACCAGCTGGTGGTGCCATCAGAG
GGCCTGTACCTCATCTACTCCCAGGTCCTCTTCAAGGGCCAAGGCTGCCCCTCCACCCATGTGCTCCTCACCCAC
ACCATCAGCCGCATCGCCGTCTCCTACCAGACCAAGGTCAACCTCCTCTCTGCCATCAAGAGCCCCTGCCAGAGG
GAGACCCCAGAGGGGGCTGAGGCCAAGCCCTGGTATGAGCCCATCTATCTGGGAGGGGTCTTCCAGCTGGAGAAG
GGTGACCGACTCAGCGCTGAGATCAATCGGCCCGACTATCTCGACTTTGCCGAGTCTGGGCAGGTCTACTTTGGG
ATCATTGCCCTGTGAGGAGGACGAACATCCAACCTTCCCAAACGCCTCCCCTGCCCCAATCCCTTTATTACCCCC
TCCTTCAGACACCCTCAACCTCTTCTGGCTCAAAAAGAGAATTGGGGGCTTAGGGTCGGAACCCAAGCTTAGAAC
TTTAAGCAACAAGACCACCACTTCGAAACCTGGGATTCAGGAATGTGTGGCCTGCACAGTGAAGTGCTGGCAACC
ACTAAGAATTCAAACTGGGGCCTCCAGAACTCACTGGGGCCTACAGCTTTGATCCCTGACATCTGGAATCTGGAG
ACCAGGGAGCCTTTGGTTCTGGCCAGAATGCTGCAGGACTTGAGAAGACCTCACCTAGAAATTGACACAAGTGGA
CCTTAGGCCTTCCTCTCTCCAGATGTTTCCAGACTTCCTTGAGACACGGAGCCCAGCCCTCCCCATGGAGCCAGC
TCCCTCTATTTATGTTTGCACTTGTGATTATTTATTATTTATTTATTATTTATTTATTTACAGATGAATGTATTT
ATTTGGGAGACCGGGGTATCCTGGGGGACCCAATGTAGGAGCTGCCTTGGCTCAGACATGTTTTCCGTGAAAACG
GAGCTGAACAATAGGCTGTTCCCATGTAGCCCCCTGGCCTCTGTGCCTTCTTTTGATTATGTTTTTTAAAATATT
TATCTGATTAAGTTGTCTAAACAATGCTGATTTGGTGACCAACTGTCACTCATTGCTGAGCCTCTGCTCCCCAGG
GGAGTTGTGTCTGTAATCGCCCTACTATTCAGTGGCGAGAAATAAAGTTTGCTTAGAAAAGAAACATGGTCTCCT
TCTTGGAATTAATTCTGCATCTGCCTCTTCTTGTGGGTGGGAAGAAGCTCCCTAAGTCCTCTCTCCACAGGCTTT
AAGATCCCTCGGACCCAGTCCCATCCTTAGACTCCTAGGGCCCTGGAGACCCTACATAAACAAAGCCCAACAGAA
TATTCCCCATCCCCCAGGAAACAAGAGCCTGAACCTAATTACCTCTCCCTCAGGGCATGGGAATTTCCAACTCTG

FIGURE 6011B

GGAATTCCAATCCTTGCTGGGAAAATCCTGCAGCTCAGGTGAGATTTCCGGCTGTTGCAGCTGGCCAGCAGTCCG
GAGAGAGCTGGAGAGGAGCCGCATTCTCAGGTACCTGAATCACACAGCCAAGGGACTTCCAGAGATTCGGGTGTC
TAGGCTTCAAATCACCCTGTCCTAACTCTGCAACCTGAACCAGCCACTTAACCTATCTATCCAATGGGGATAGGA
ATGTCCACCACACATAGGGCATGTGAGAGAAGGCCTGACCTCCATCAGAGGACCTCACTCAGCCCTTGGCACAGT
GGGCACTTAGTGAATTCTGGCTTCCTTCAACCAGTTTCCAGCTGTTCTATCCCCTTCCATTCTCTCAGTGGGTGA
AATCGAAGAGACTGAGGACAATAAAGAACAAGGAACCGAACTGCCGGACGTGGTGGCATGCACCTGTAATCCTAC
CACTTTGCAAGGCCAAGGTGAGAGGATCGCTTGAACCCAGGAGTTCCAGAGCAACCTGGGCAACATAGTGAGATC
CTGTCTCTATTTTTTAAAAAAGAATGAAACATAGGAATAAGATGTGGGTGAAGGACTCACATGCCGGCTTGGTCC
CACTGGTCTTTGTGGTGAAGGAGGGGAGAGGTGAGAGGTGGGTAATCCGGAAAGAGAAAAGCACCCCCTCCCTGG
ATGAAGGCTCTTCTGGAGAGAGTCAAAGACAAATAAGGGTGGGGCGCAGTGGCTCATGCCTGTTATCCCAACACT
TTGGGAGGCTGAGGTGGGAGGACCACTTGAGCCCACTAGTTCAAGACCAGCCTGTGCAACATAGCAAGACCTTGT
TTCTAGAAAAAAAATTAAAGATTAGTCAGGTGTAGTGGTGCATGCCTGTAATCCTAGCTCCTCAGGAGGCTGAGG
CAGGAGGATCACTCAAGCCCAGGAGTTTGAGGTTACAGTAAGCTATGATCATGCCACTGTACCCCCGTCTGGGTG
ACAGAACGAGACCCTGTCTCAAAAAAATAATAATTCCAAAAACAAATATGGAGACGGAAATTGAGCCCCCCTAGA
CTGGGAGCCCCCACTGAGTTCGGAAATTAGGCTTTACCTCCAGCCCTGGGGTGCCAGGCAGGAGAAAACCATGTG
GTAGGCTGAGGGGGTAGGGTGACCCATTGGGGTGACCTAGATAGGGCCTTGGGTCACCCTCTGCCTCCTCCAGCC
TGTGGCTGAAAGTCAGCCATGAAGTAATGG

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FIGURE 6012A

TATTGGCCATAACCCTTATGATGGGTCAGGAAGGGATCACCCCTTTCTGCCCCTACAGAAATAATAGCTAAGACT
AGTAAAGCATAAAAGGCAAAGGGGCAGGTCCTCAAGTAGAGAAGAACAGGAGAAATAGCTCATACACACCCAGAA
TGTTACTTACATGTCCCTCCATGTTACACCAAGACCCCTCAGGGACCTTGTGCCTGGGGAGAGAAGTGGTCTGCC
CCATGCAACAGTGGGCTTTACCCCGGGTCACCACCAGCCCCAGCTCCAACCCCTCTAACACTCTCCAAGTAAAAT
CACATCAGTAGCAGTAATAATATTTGAGGTGACAAGTTGGTATTATCTCAAACTTAGGAAAAGTGAATAAAGTCA
TCTTTAGAAACTGCTTTTTTTAAACCTTGTAACTTGCAAGCTAAGTGAAAATGGGCTCATGTATGAGAATGTTCG
TGTTAGACATTTTTTGTGTTAGACAAAAACTAGAAACAAACCAAATCCCCATCAACAGAATATATTAGAATATAT
TGATACAATAGAATATTACATCATAATTTTTTTTAAAAACATTACTGATACATACAACCACGTATATGAATCTCA
CAAACATAATGCTGACTGAAAGAAGTCAAACAGAAATGAGTACATTCTGTGTGATTTCATTTATATGATGCCCCA
AACCAGGAGGAAATAATCTATGGTGATAAAAGTGAGAGAGTGGTTGGTTATCTTTGGAGGGTATCAGCAGGGAGG
GGGCATGAGGGAACCTGCTGGGGACCTGAAAATACGTGGAGCTGGGTGGTGGCTACATACAGATGGAAAAATTCA
TCAGCTGTACACTTAAGAGGTGTCCACCTCATACCTAAGTTACATATCAATAAAAAGGAAAAAAATTTTGGAAAC
TTTTTTTTTTTTTTTTGAGACAGAGTCTTGCTCTGTCCCCCAGGCTGGAATACAGTGGTGCGATCTTGACTCACT
GCAGCCTCCGCCTCCCAGGTTCAAATAATTCTCCAGCCTCAGCCTCCCGAGTAGCTGGGACTGCAGATGCGCACC
AGCACGCCTGGCTAATTTTTGTATTTATTATAGAGATGGGGTTTCACCATGTTGGCCAGCTGGTCTCAAACTCCT
GACCTCAAGTAATCCGCCCACCTCAGACTCCCAAAGTGCCAGGATTACAGGTGTGAGCCACTGCACCAGGCCTGG
AACAATTTTAAAATAATGTATTGGCTCTGCAAATGCAGCTTCAGAACAAGTCCCTTAGCTGTCCCCACCCCACCC
TAAGTCACCACCCTTAAGCCTCACCCATGTGGAATTCTGAAACTTCCTTTGTAGAAAACTTTGGAAGGTGTCTGC
CACATTGATCCTGGAATGTGTGTTTATTTGGGGTTATATAAATCTGTTCTGTGGAAGCCACCTGAAGTCAGGAAG
AGATGGAGGGCATCCTTCAGGAGTGAGATGAGACCTCATCATACTTGACTGTCCAGCATCATCTCTGAGTAAGGG
GACCAAAAAATTTATCTTCCAAACTAGGACACTTTCAAGAGTGGAAGGGGGATCCATTAATATTTTCACCTGGAC
AAGAGGCAAACACCAGAATGTCCCCGATGAAGGGGATATATAATGGACCTTCTTGATGTGAAACCTGCCAGATGG
GCTGGAAAGTCCGTATACTGGGACAAGTATGATTTGAGTTGTTTGGGACAAGGACAGGGGTACAAGAGAAGGAAA
TGGGCAAAGAGAGAAGCCTGTACTCAGCCAAGGGTGCAGAGATGTTATATATGATTGCTCTTCAGGGAACCGGGC
CTCCAGCTCACACCCCAGCTGCTCAACCGCCTCCTCTCTGAATTGACTGTCCCTTCTTTGGAACTCTAGGCCTGA
CCCCACTCCCTGGCCCTCCCAGCCCACGATTCCCCTGACCCGACTCCCTTTCCCAGAACTCAGTCGCCTGAACCC
CCAGCCTGTGGTTCTCTCCTAGGCCTCAGCCTTTCCTGCCTTTGACTGAAACAGCAGTATCTTCTAAGCCCTGGG
GGCTTCCCCGGGCCCCAGCCCCGACCTAGAACCCGCCCGCTGCCTGCCACGCTGCCACTGCCGCTTCCTCTATAA
AGGGACCTGAGCGTCCGGGCCCAGGGGCTCCGCACAGCAGGTGAGGCTCTCCTGCCCCATCTCCTTGGGCTGCCC
GTGCTTCGTGCTTTGGACTACCGCCCCGCAGTGTCCTGCCCTCTGCCTGGGCCTCGGTCCCTCCTGCACCTGCTG
CCTGGATCCCCGGCCTGCCTGGGCCTGGGCCTTGGTGGGTTTGGTTTTGGTTTCCTTCTCTGTCTCTGACTCTCC
ATCTGTCAGTCTCATTGTCTCTGTCACACATTCTCTGTTTCTGCCATGATTCCTCTCTGTTCCCTTCCTGTCTCT
CTCTGTCTCCCTCTGCTCACCTTGGGGTTTCTCTGACTGCATCTTGTCCCCTTCTCTGTCGATCTCTCTCTCGGG
GGTCGGGGGGTGCTGTCTCCCAGGGCGGGAGGTCTGTCTTCCGCCGCGTGCCCCGCCCCGCTCACTGTCTCTCTC
TCTCTCTCTCTCTTTCTCTGCAGGTTCTCCCCATGACACCACCTGAACGTCTCTTCCTCCCAAGGGTGTGTGGCA
CCACCCTACACCTCCTCCTTCTGGGGCTGCTGCTGGTTCTGCTGCCTGGGGCCCAGGTGAGGCAGCAGGAGAATG
GGGGCTGCTGGGGTGGCTCAGCCAAACCTTGAGCCCTAGAGCCCCCCTCAACTCTGTTCTCCCCTAGGGGCTCCC
TGGTGTTGGCCTCACACCTTCAGCTGCCCAGACTGCCCGTCAGCACCCCAAGATGCATCTTGCCCACAGCACCCT
CAAACCTGCTGCTCACCTCATTGGTAAACATCCACCTGACCTCCCAGACATGTCCCCACCAGCTCTCCTCCTACC
CCTGCCTCAGGAACCCAAGCATCCACCCCTCTCCCCCAACTTCCCCCACGCTAAAAAAAACAGAGGGAGCCCACT
CCTATGCCTCCCCCTGCCATCCCCCAGGAACTCAGTTGTTCAGTGCCCACTTCCTCAGGGATTGAGACCTCTGAT
CCAGACCCCTGATCTCCCACCCCCATCCCCTATGGCTCTTCCTAGGAGACCCCAGCAAGCAGAACTCACTGCTCT
GGAGAGCAAACACGGACCGTGCCTTCCTCCAGGATGGTTTCTCCTTGAGCAACAATTCTCTCCTGGTCCCCACCA
GTGGCATCTACTTCGTCTACTCCCAGGTGGTCTTCTCTGGGAAAGCCTACTCTCCCAAGGCCACCTCCTCCCCAC
TCTACCTGGCCCATGAGGTCCAGCTCTTCTCCTCCCAGTACCCCTTCCATGTGCCTCTCCTCAGCTCCCAGAAGA
TGGTGTATCCAGGGCTGCAGGAACCCTGGCTGCACTCGATGTACCACGGGGCTGCGTTCCAGCTCACCCAGGGAG
ACCAGCTATCCACCCACACAGATGGCATCCCCCACCTAGTCCTCAGCCCTAGTACTGTCTTCTTTGGAGCCTTCG
CTCTGTAGAACTTGGAAAAATCCAGAAAGAAAAAATAATTGATTTCAAGACCTTCTCCCCATTCTGCCTCCATTC

FIGURE 6012B

TGACCATTTCAGGGGTCGTCACCACCTCTCCTTTGGCCATTCCAACAGCTCAAGTCTTCCCTGATCAAGTCACCG
GAGCTTTCAAAGAAGGAATTCTAGGCATCCCAGGGGACCACACCTCCCTGAACCATCCCTGATGTCTGTCTGGCT
GAGGATTTCAAGCCTGCCTAGGAATTCCCAGCCCAAAGCTGTTGGTCTGTCCCACCAGCTAGGTGGGGCCTAGAT
CCACACACAGAGGAAGAGCAGGCACATGGAGGAGCTTGGGGGATGACTAGAGGCAGGGAGGGGACTATTTATGAA
GGCAAAAAAATTAAATTATTTATTTATGGAGGATGGAGAGAGGGGAATAATAGAAGAACATCCAAGGAGAAACAG
AGACAGGCCCAAGAGATGAAGAGTGAGAGGGCATGCGCACAAGGCTGACCAAGAGAGAAAGAAGTAGGCATGAGG
GATCACAGGGCCCCAGAAGGCAGGGAAAGGCTCTGAAAGCCAGCTGCCGACCAGAGCCCCACACGGAGGCATCTG
CACCCTCGATGAAGCCCAATAAACCTCTTTTCTCTGAAATGCTGTCTGCTTGTGTGTGTGTGTCTGGGAGTGAGA
ACTTCCCAGTCTATCTAAGGAATGGAGGGAGGGACAGAGGGCTCAAAGGGAGCAAGAGCTGTGGGGAGAACAAAA
GGATAAGGGCTCAGAGAGCTTCAGGGATATGTGATGGACTCACCAGGTGAGGCCGCCAGACTGCTGCAGGGGAAG
CAAAGGAGAAGCTGAGAAGATGAAGGAAAAGTCAGGGTCTGGAGGGGCGGGGGTCAGGGAGCTCCTGGGAGATAT
GGCCACATGTAGCGGCTCTGAGGAATGGGTTACAGGAGACCTCTGGGGAGATGTGACCACAGCAATGGGTAGGAG
AATGTCCAGGGCTATGGAAGTCGAGTATGGGGACCCCCCCTTAACGAAGACAGGGCCATGTAGAGGGCCCCAGGG
AGTGAAAGAGCCTCCAGGACCTCCAGGTATGGAATACAGGGGACGTTTAAGAAGATATGGCCACACACTGGGGCC
CTGAGAAGTGAGAGCTTCATGAAAAAAATCAGGGACCCCAGAGTTCCTTGGAAGCCAAGACTGAAACCAGCATTA
TGAGTCTCCGGGTCAGAATGAAAGAAGAAGGCCTGCCCCAGTGGGGTCTGTGAATTCCCGGGGGTGATTTCACTC
CCCGGGGCTGTCCCAGGCTTGTCCCTGCTACCCCCACCCAGCCTTTCCTGAGGCCTCAAGCCTGCCACCAAGCCC
CCAGCTCCTTCTCCCCGCAGGGACCCAAACACAGGCCTCAGGACTCAACACAGCTTTTCCCTCCAACCCCGTTTT
CTCTCCCTCAAGGACTCAGCTTTCTGAAGCCCCTCCCAGTTCTAGTTCTATCTTTTTCCTGCATCCTGTCTGGAA
GTTAGAAG

FIGURE 6013

GGCCACGAGGGCGGCTCCCGCGCTCGCAGGGCCGTGCCACCTGCCCGCCCGCCCGCTCGCTCGCTCGCCCGCCGC
GCCGCGCTGCCGACCGCCAGCATGCTGCCGAGAGTGGGCTGCCCCGCGCTGCCGCTGCCGCCGCCGCCGCTGCTG
CCGCTGCTGCCGCTGCTGCTGCTGCTACTGGGCGCGAGTGGCGGCGGCGGCGGGGCGCGCGCGGAGGTGCTGTTC
CGCTGCCCGCCCTGCACACCCGAGCGCCTGGCCGCCTGCGGGCCCCCGCCGGTTGCGCCGCCCGCCGCGGTGGCC
GCAGTGGCCGGAGGCGCCCGCATGCCATGCGCGGAGCTCGTCCGGGAGCCGGGCTGCGGCTGCTGCTCGGTGTGC
GCCCGGCTGGAGGGCGAGGCGTGCGGCGTCTACACCCCGCGCTGCGGCCAGGGGCTGCGCTGCTATCCCCACCCG
GGCTCCGAGCTGCCCCTGCAGGCGCTGGTCATGGGCGAGGGCACTTGTGAGAAGCGCCGGGACGCCGAGTATGGC
GCCAGCCCGGAGCAGGTTGCAGACAATGGCGATGACCACTCAGAAGGAGGCCTGGTGGAGAACCACGTGGACAGC
ACCATGAACATGTTGGGCGGGGGAGGCAGTGCTGGCCGGAAGCCCCTCAAGTCGGGTATGAAGGAGCTGGCCGTG
TTCCGGGAGAAGGTCACTGAGCAGCACCGGCAGATGGGCAAGGGTGGCAAGCATCACCTTGGCCTGGAGGAGCCC
AAGAAGCTGCGACCACCCCCTGCCAGGACTCCCTGCCAACAGGAACTGGACCAGGTCCTGGAGCGGATCTCCACC
ATGCGCCTTCCGGATGAGCGGGGCCCTCTGGAGCACCTCTACTCCCTGCACATCCCCAACTGTGACAAGCATGGC
CTGTACAACCTCAAACAGTGCAAGATGTCTCTGAACGGGCAGCGTGGGGAGTGCTGGTGTGTGAACCCCAACACC
GGGAAGCTGATCCAGGGAGCCCCCACCATCCGGGGGGACCCCGAGTGTCATCTCTTCTACAATGAGCAGCAGGAG
GCTCGCGGGGTGCACACCCAGCGGATGCAGTAGACCGCAGCCAGCCGGTGCCTGGCGCCCCTGCCCCCCGCCCCT
CTCCAAACACCGGCAGAAAACGGAGAGTGCTTGGGTGGTGGGTGCTGGAGGATTTTCCAGTTCTGACACACGTAT
TTATATTTGGAAAGAGACCAGCACCGAGCTCGGCACCTCCCCGGCCTCTCTCTTCCCAGCTGCAGATGCCACACC
TGCTCCTTCTTGCTTTCCCCGGGGGAGGAAGGGGGTTGTGGTCGGGGAGCTGGGGTACAGGTTTGGGGAGGGGGA
AGAGAAATTTTTATTTTTGAACCCCTGTGTCCCTTTTGCATAAGATTAAAGGAAGGAAAAGTAAAAAAAAAAAAA
AAAAAAAAAAAA

FIGURE 6014

MLPRVGCPALPLPPPPLLPLLPLLLLLLGASGGGGGARAEVLFRCPPCTPERLAACGPPPVAPPAAVAAVAGGAR
MPCAELVREPGCGCCSVCARLEGEACGVYTPRCGQGLRCYPHPGSELPLQALVMGEGTCEKRRDAEYGASPEQVA
DNGDDHSEGGLVENHVDSTMNMLGGGGSAGRKPLKSGMKELAVFREKVTEQHRQMGKGGKHHLGLEEPKKLRPPP
ARTPCQQELDQVLERISTMRLPDERGPLEHLYSLHIPNCDKHGLYNLKQCKMSLNGQRGECWCVNPNTGKLIQGA
PTIRGDPECHLFYNEQQEARGVHTQRMQ

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FIGURE 6015

TTCTGCCCTCGAGCCCACCGGGAACGAAAGAGAAGCTCTATCTCGCCTCCAGGAGCCCAGCTATGAACTCCTTCT
CCACAAGCGCCTTCGGTCCAGTTGCCTTCTCCCTGGGGCTGCTCCTGGTGTTGCCTGCTGCCTTCCCTGCCCCAG
TACCCCCAGGAGAAGATTCCAAAGATGTAGCCGCCCCACACAGACAGCCACTCACCTCTTCAGAACGAATTGACA
AACAAATTCGGTACATCCTCGACGGCATCTCAGCCCTGAGAAAGGAGACATGTAACAAGAGTAACATGTGTGAAA
GCAGCAAAGAGGCACTGGCAGAAAACAACCTGAACCTTCCAAAGATGGCTGAAAAAGATGGATGCTTCCAATCTG
GATTCAATGAGGAGACTTGCCTGGTGAAAATCATCACTGGTCTTTTGGAGTTTGAGGTATACCTAGAGTACCTCC
AGAACAGATTTGAGAGTAGTGAGGAACAAGCCAGAGCTGTGCAGATGAGTACAAAAGTCCTGATCCAGTTCCTGC
AGAAAAAGGCAAAGAATCTAGATGCAATAACCACCCCTGACCCAACCACAAATGCCAGCCTGCTGACGAAGCTGC
AGGCACAGAACCAGTGGCTGCAGGACATGACAACTCATCTCATTCTGCGCAGCTTTAAGGAGTTCCTGCAGTCCA
GCCTGAGGGCTCTTCGGCAAATGTAGCATGGGCACCTCAGATTGTTGTTGTTAATGGGCATTCCTTCTTCTGGTC
AGAAACCTGTCCACTGGGCACAGAACTTATGTTGTTCTCTATGGAGAACTAAAAGTATGAGCGTTAGGACACTAT
TTTAATTATTTTTAATTTATTAATATTTAAATATGTGAAGCTGAGTTAATTTATGTAAGTCATATTTATATTTTT
AAGAAGTACCACTTGAAACATTTTATGTATTAGTTTTGAAATAATAATGGAAAGTGGCTATGCAGTTTGAATATC
CTTTGTTTCAGAGCCAGATCATTTCTTGGAAAGTGTAGGCTTACCTCAAATAAATGGCTAACTTATACATATTTT
TAAAGAAATATTTATATTGTATTTATATAATGTATAAATGGTTTTTATACCAATAAATGGCATTTTAAAAAATTC

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FIGURE 6016

MNSFSTSAFGPVAFSLGLLLVLPAAFPAPVPPGEDSKDVAAPHRQPLTSSERIDKQIRYILDGISALRKETCNKS
NMCESSKEALAENNLNLPKMAEKDGCFQSGFNEETCLVKIITGLLEFEVYLEYLQNRFESSEEQARAVQMSTKVL
IQFLQKKAKNLDAITTPDPTTNASLLTKLQAQNQWLQDMTTHLILRSFKEFLQSSLRALRQM

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FIGURE 6017

GGGAGACCCAAGCTTCTAGAGATCCCTCGACCTCGAGATCCATTGTGCTCTAAAGAGCGGACCCCAGCCTCTGCC
AGGTTCGGTCCGCCATCCTCGTCCCGTCCTCCGCCGGCCCCTGCCCCGCGCCCAGGGATCCTCCAGCTCCTTTCG
CCCGCGCCCTCCGTTCGCTCCGGACACC**ATG**GACAAGTTTTGGTGGCACGCAGCCTGGGGACTCTGCCTCGTGCC
GCTGAGCCTGGCGCAGATCGATTTGAATATAACCTGCCGCTTTGCAGGTGTATTCCACGTGGAGAAAAATGGTCG
CTACAGCATCTCTCGGACGGAGGCCGCTGACCTCTGCAAGGCTTTCAATAGCACCTTGCCCACAATGGCCCAGAT
GGAGAAAGCTCTGAGCATCGGATTTGAGACCTGCAGGTATGGGTTCATAGAAGGGCATGTGGTGATTCCCCGGAT
CCACCCCAACTCCATCTGTGCAGCAAACAACACAGGGGTGTACATCCTCACATACAACACCTCCCAGTATGACAC
ATATTGCTTCAATGCTTCAGCTCCACCTGAAGAAGATTGTACATCAGTCACAGACCTGCCCAATGCCTTTGATGG
ACCAATTACCATAACTATTGTTAACCGTGATGGCACCCGCTATGTCCAGAAAGGAGAATACAGAACGAATCCTGA
AGACATCTACCCCAGCAACCCTACTGATGATGACGTGAGCAGCGGCTCCTCCAGTGAAAGGAGCAGCACTTCAGG
AGGTTACATCTTTTACACCTTTTCTACTGTACACCCCATCCCAGACGAAGACAGTCCCTGGATCACCGACAGCAC
AGACAGAATCCCTGCTACCACTTTGATGAGCACTAGTGCTACAGCAACTGAGACAGCAACCAAGAGGCAAGAAGC
CTGGGATTGGTTTTCATGGTTGTTTCTACCATCAGAGTCAAAGAATCATCTTCACACAACAACACAAATGGCTGG
TACGTCTTCAAATACCATCTCAGCAGGCTGGGAGCCAAATGAAGAAAATGAAGATGAAAGAGACAGACACCTCAG
TTTTTCTGGATCAGGCATTGATGATGATGAAGATTTTATCTCCAGCACCATTTCAACCACACCACGGGCCTTTGA
CCACACAAAACAGAACCAGGACTGGACCCAGTGGAACCCAAGCCATTCAAATCCGGAAGTGCTACTTCAGACAAC
CACAAGGATGACTGATGTAGACAGAAATGGCACCACTGCTTATGAAGGAAACTGGAACCCAGAAGCACACCCTCC
CCTCATTCACCATGAGCATCATGAGGAAGAAGAGACCCCACATTCTACAAGCACAATCCAGGCAACTCCTAGTAG
TACAACGGAAGAAACAGCTACCCAGAAGGAACAGTGGTTTGGCAACAGATGGCATGAGGGATATCGCCAAACACC
CAGAGAAGACTCCCATTCGACAACAGGGACAGCTGCAGCCTCAGCTCATACCAGCCATCCAATGCAAGGAAGGAC
AACACCAAGCCCAGAGGACAGTTCCTGGACTGATTTCTTCAACCCAATCTCACACCCCATGGGACGAGGTCATCA
AGCAGGAAGAAGGATGGATATGGACTCCAGTCATAGTACAACGCTTCAGCCTACTGCAAATCCAAACACAGGTTT
GGTGGAAAATTTGGACAGGACAGGACCTCTTTCAATGACAACGCAGCAGAGTAATTCTCAGAGCTTCTCTACATC
ACATGAAGGCTTGGAAGAAGATAAAGACCATCCAACAACTTCTACTCTGACATCAAGCAATAGGAATGATGTCAC
AGGTGGAAGAAGAGACCCAAATCATTCTGAAGGCTCAACTACTTTACTGGAAGGTTATACCTCTCATTACCCACA
CACGAAGGAAAGCAGGACCTTCATCCCAGTGACCTCAGCTAAGACTGGGTCCTTTGGAGTTACTGCAGTTACTGT
TGGAGATTCCAACTCTAATGTCAATCGTTCCTTATCAGGAGACCAAGACACATTCCACCCCAGTGGGGGGTCCCA
TACCACTCATGGATCTGAATCAGATGGACACTCACATGGGAGTCAAGAAGGTGGAGCAAACACAACCTCTGGTCC
TATAAGGACACCCCAAATTCCAGAATGGCTGATCATCTTGGCATCCCTCTTGGCCTTGGCTTTGATTCTTGCAGT
TTGCATTGCAGTCAACAGTCGAAGAAGGTGTGGGCAGAAGAAAAAGCTAGTGATCAACAGTGGCAATGGAGCTGT
GGAGGACAGAAAGCCAAGTGGACTCAACGGAGAGGCCAGCAAGTCTCAGGAAATGGTGCATTTGGTGAACAAGGA
GTCGTCAGAAACTCCAGACCAGTTTATGACAGCTGATGAGACAAGGAACCTGCAGAATGTGGACATGAAGATTGG
GGTG**TAA**CACCTACACCATTATCTTGGAAAGAAACAACCGTTGGAAACATAACCATTACAGGGAGCTGGGACACT
TAACAGATGCAATGTGCTACTGATTGTTTCATTGCGAATCTTTTTTAGCATAAAATTTTCTACTCTTTTTGTTTT
TTGTGTTTTGTTCTTTAAAGTCAGGTCCAATTTGTAAAAACAGCATTGCTTTGTAAATTAGGGCCCAATTAATAA
TCAGCAAGAATTTGATCGTTCAGTTCCACTTGGAGGCCTTCATCCTCGGGTGTGCTATGGATGGCTTCTAACAAA
AACTACACATATGTATTCCTGATCGCCAACCTTTCCCCCACCAGCTAAGGACATTTCCCAGGGTTAATAGGGCCT
GGTCCCTGGGAGGAAATTTGAATGGGTCCATTTTGCCCTTCCATAGCCTAATCCCTGGGCATTGCTTTCCACTGA
GGTTGGGGTGTACTAGTTACACATCTTCAACAGACCCCCTCTAGAAATTTTTCAGATGCTTCTGGGAGACACCAA
AGGGTGAAGCTATTTATCTGTAGTAAACTATTTATCTGTGTTTTTGAAATATTAAACCCTGGATCAGTCCTTTGA
TCAGTATAATTTTTTAAAGTTACTTTGTCAGAGGCACAAAAGGGTTTAAACTGATTCATAATAAATATCTGTACT
TCTTCGATCTTCAAAA

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FIGURE 6018

MDKFWWHAAWGLCLVPLSLAQIDLNITCRFAGVFHVEKNGRYSISRTEAADLCKAFNSTLPTMAQMEKALSIGFE
TCRYGFIEGHVVIPRIHPNSICAANNTGVYILTYNTSQYDTYCFNASAPPEEDCTSVTDLPNAFDGPITITIVNR
DGTRYVQKGEYRTNPEDIYPSNPTDDDVSSGSSSERSSTSGGYIFYTFSTVHPIPDEDSPWITDSTDRIPATTLM
STSATATETATKRQEAWDWFSWLFLPSESKNHLHTTTQMAGTSSNTISAGWEPNEENEDERDRHLSFSGSGIDDD
EDFISSTISTTPRAFDHTKQNQDWTQWNPSHSNPEVLLQTTTRMTDVDRNGTTAYEGNWNPEAHPPLIHHEHHEE
EETPHSTSTIQATPSSTTEETATQKEQWFGNRWHEGYRQTPREDSHSTTGTAAASAHTSHPMQGRTTPSPEDSSW
TDFFNPISHPMGRGHQAGRRMDMDSSHSTTLQPTANPNTGLVENLDRTGPLSMTTQQSNSQSFSTSHEGLEEDKD
HPTTSTLTSSNRNDVTGGRRDPNHSEGSTTLLEGYTSHYPHTKESRTFIPVTSAKTGSFGVTAVTVGDSNSNVNR
SLSGDQDTFHPSGGSHTTHGSESDGHSHGSQEGGANTTSGPIRTPQIPEWLIILASLLALALILAVCIAVNSRRR
CGQKKKLVINSGNGAVEDRKPSGLNGEASKSQEMVHLVNKESSETPDQFMTADETRNLQNVDMKIGV

FIGURE 6019A

ACCTAGCATTGGATGAAGATACTATTATCAAGCCAGTTTTACAGGTAAGGAGACTGAGTCATAGAAGATTTAAGA
AGTTAACTCACAATCATATAGCTAGATAGTAGAGGAGTCAGGAATCAAGTTTGCCCCATAACTGCAATACTGTTA
TGTACACAGTACAGGTAGAAATGCAAAGTGGGTTTGAACCAAAGAGTGGAGGGCTTTTTGTGCCATCCCAAAGTG
TTGTACTTCATAAATAAATTACAAAGGAGGAGAAAGAATCCTATTTTTTTTTTGTATCTGAAAGACAAAGAAATA
AAAAGTTAAAAAGATTCTCTGTTAGTACTGATTATTTGGAACAATAAATTGTTTAGAGCTATGCTGTTCAATATA
GTAGCACCTAGCAGTATGTGCCCATTAAGCGTTTGAAATACGACTAGACCAAATTGAGATGCACCGTAGGCTTAA
AATATACACTGTATTTCTTTCCTTTTTCCTTTTTTCCTTTTTTTTTTTTGAGACGGAATCTTACTCTGTCACCTA
GGCTGGAGTGTAGTGGCGCGATCTCGGCTCACTGCAACCTCCACCTTCTGGGTTCAAGCCATTCTCCTGCCTCAG
CCTCCCTAGTAGCTGAGATTACAGGCATACACCACCATGCCTGGCTAATTTTTTTGTATTTTTAGTAGAGATGGG
GTTTCACCATATTGGCTAGGCTGGTCTCAAACTCCTGACCTTGTGATCCACCCGCCTCAACCTCCCAAAGTGCTG
GGATTACAGGTGTGAGCCACTGCGTCTGGAACTCCCCCTGGGAATATTCTCTACACTGTATTTCAAGGATTTAAT
ATGACAAAAAGAATGTCAAATACCTTATTAACAATGTAGTATATTGATGCATACTGAAGTACTATTTGGGATATA
TTGGTTTAAATACAATATATTTTAAAATTATATTTACCTTTTAAAAAAACTTTTATTAATGAGGCTACTAGATCA
TTTAAATTTACCTGTGTGGCTTGTATTGTATTTCTACTGGGCAGTGCTGATCTAGAGCAATTTGAAACTTGTGGT
AGATATTTTACTAACCAACTCTGATGAAGGACTTCCTCACCAAATTGTTCTTTTAACCGCATTCTTTCCTTGCTT
TCTGGTCATTTGCAAGAAAAATTTTAAAAGGCTGCCCCTTTGTAAAGGTTTGAGAGGCCCTAGAATTTCGTTTTT
CACTTGTTCCCAACCACAAGCAAATGATCAATGTGCTTTGTGAATGAAGAGTCAACATTTTACCAGGGCGAAGTG
GGGAGGTACAAAAAAATTTCCAGTCCTTGAATGGTGTGAAGTAAAAGTGCCTTCAAAGAATCCCACCAGAATGGC
ACAGGTGGGCATAATGGGTCTGTCTCATCGTCAAAGGACCCAAGGAGTCTAAAGGAAACTCTAACTACAACACCC
AAATGCCACAAAACCTTAGTTATTAATACAAACTATCATCCCTGCCTATCTGTCACCATCTCATCTTAAAAAACT
TGTGAAAATACGTAATCCTCAGGAGACTTCAATTAGGTATAAATACCAGCAGCCAGAGGAGGTGCAGCACATTGT
TCTGATCATCTGAAGATCAGCTATTAGAAGAGAAAGATCAGTTAAGTCCTTTGGACCTGATCAGCTTGATACAAG
AACTACTGATTTCAACTTCTTTGGCTTAATTCTCTCGGAAACGATGAAATATACAAGTTATATCTTGGCTTTTCA
GCTCTGCATCGTTTTGGGTTCTCTTGGCTGTTACTGCCAGGACCCATATGTAAAAGAAGCAGAAAACCTTAAGAA
ATATTTTGTAAGTATGACTTTTTAATAGTACTTGTTTGTGGTTGAAAATGACTGAATATCGACTTGCTGTAGCAT
CTCTGATAGGCTGTCATCTCTTGTAGGCAGTCATTTTGAGATTTGGTGTTATTTTGTTAATTATTGACTAGATGA
GTTCCTTGACTAAATAATCTAGATATTGTTTTAACCTTCTGCTCAGTTTGTATAGAGACTTAAAAGGGATTTATG
AATTTTCCAAAAGATGGGCATAATATGGGTATGAAGCATAATGATGTTAATAATTTTGTGGTGGGAACTCATTCA
GTTGTGATAGTCAAGGAGTATGCAGATTGAAAAAAATGATTGGTTATTAGTTTTTGACTTCTCAGACTCTAAGGT
CAAGATTAGCATTAAAAAGGTAATAGGAAATGTTTACAAATTAAAGTCAAAAAGGTCCTTAAAGCTTTGGCTTAA
AAAAATAACTGATAGGTGATTTTCTCCAAAAAGTGATTTCAACATTCTGCTTCTCTATCTATATTACTTGTGAAG
TATTCCGGAACTTCGTTGCTCACTGGGATTTTGGAAGAATTATGATTCTGGCTAAGGAATGTTTAAAAATTTTAA
GTGAATTTTTTGAGTTTCTTTTAAAATTTTATTGATGGTTAATGAAAAGTTTTTACATTTTAAATATTTCATTAT
TTGTTTAAAACTTAGCTGTTATAATTATAGCTGTCATAATAATATTCAGACATTCACAATTGATTTTATTCTTAC
AACACAAAATCAAATCTCACACACACACACACACACACACACACTCGCACATGTTTGGAACTATCTTTTAAAGCTCG
TATAATAATACCCTACAGGAAGGCACAGTAGATGTAATAGAAACCTGTACCATTGGGGGGCAGTATTTTATAGTG
GGGTGGCTTTGCTGTTTTTTGTTTTTGTATTTTTTAGCCTAGCTTGAAAATACTTTCTTTAGCTTACTATAGTTT
TTGGGACCTTTGGAGTATCAGCTTTGTTGAGCTCATTTGTGACATTGCAATTTAATGGTTATATTGGGAAATAAA
AAAGCTAAAAGAACATAATAGTCTTTGTCTATATCTCACATAAGCCTTTTGGGAATACTTATTGTTAGAACTAAG
CAGAAGAGTTGAAAAGGAAATCAGTGAATATTGTCACATCTGAGTTCAATGAAACTTGAAATATATTTTTAAGGC
AATTTATGGGCTAATTGTAAACCAATTTTTTCTTTTTTTTTTTTTAGAATGCAGGTCATTCAGATGTAGCGGATAA
TGGAACTCTTTTCTTAGGCATTTTGAAGAATTGGAAAGAGGTAAGCTGAATATTCCCATTTGGCTAATTTTCCTG
TTGCTTGCTTTCTGATGGATAAATTCACATCATCCTCTGTTTGTGCTCTTTCCTTCCAAGGAGAGTGACAGAAAA
ATAATGCAGAGCCAAATTGTCTCCTTTTACTTCAAACTTTTTAAAAACTTTAAAGATGACCAGAGCATCCAAAAG
AGTGTGGAGACCATCAAGGAAGACATGAATGTCAAGTTTTTCAATAGCAACAAAAAGAAACGAGATGACTTCGAA
AAGCTGACTAATTATTCGGTGAGGCTATTTAAATTCTTTCTTTGGTTTCATTGCCGAGGGTCTTGCAAAGCATTT
ATTCTCCAGAAAGTAGACATTAGCTATTTAACAGTTGCTAAAGCTATGAACTCAACTCATGGCTGAAACTCTACC
TTACTATTTCCATTCGTGTTTGGGTGACTTTGCAAAGCCAGTAAGAGAATCGCTGAAGTATGTAATGTAGAGAAA

FIGURE 6019B

TGCTGGCATTGTAACTATTGCGTAAAGACAGGTGAGTTGACAAATCCAGTGAAGAGGAAGTAGGTGAGGAAGAAG
CAGGGAGTACTGAGAAGCAGTTCTCTCATTGTCCCTTGCTCATATGATGGAAATTCTCTTACTTTGAATGAGAGG
CTGTCTGTCTTAATGGAAAGAGCAGTGGGAGGAGCTGAGAAGATGTGTGTTCTCCTCCCAACTCAGCCACCAAGG
AACTGTGATGAATCACATGGCTGGCTGGGGCTCAGTTTCCTCATCTTAAAAGGAAACTGTTAGGTTCACTGTATA
AGTTTGATGACCTTCTTTGCTCCAAAACTCTACAATGCAAAGAATAGAAAATGAGAATGAGATAGAAGAAAGCTA
CAGTCTTTGAATAGGTACCAGGGACACCCCACTGCAAGTCTCTAGCCAACCTATCAGATTGTACTGCCCAATTAG
AAGCAAGAATGGTTGCTGTTTGTTTGTTTTTAGGGAAAAATAGATAGAATTTATACCTTATGAAAAGATTGTTCT
ATCAACTCTCTATCAACTTTCAGAATATCTCAGCTGGAGAACTCCTTAGACTCCTAAGTCTTACCTCATGAACTT
GTATCTTTAAGTTATGGCTTCTATAAACAGAAAGATAACGTTGAGGCATAAAGACAAATCATGTTTTTCAAAATG
TTTTCTAGAAGACAAAGGCCTCTAGATTCCTTTGGGGTTGACTTTGATATAAATGGGCTCAAATGAGAGGGACCA
GGGTCTTCAAGCTAGCATTTGTGTTCTTAGGATATGTGCTCAGCTTTCACTATTGCTGGGCCTGCCTCTCACTCC
TCTCATGTAAGCCCCCAGAAACAGAAAGGAGAGACATGGCAACAGGTCTCCTTTGGTTATAAACTAGACACTCAG
CACTTGTTTCTAATCCAGTGGTGCCCCTGGCTTACTGTTCAGTCCTGGATAAGTCTCTTAGTTTCTTGGTGATGA
TTTGAACATTGGAAAGTAAAATCTGTCACTTGCAAACACACAGCTTGTCGAAAATTTTTTCTACTCTGCAGGAAC
TGGGCCTTAAAAAAATGAAAAAAAATCTGTGGTTTCTTCCTTCTGGAAGCTACAAACCTCCTGTTTCTTGATGGG
CAATCTTGAGTGAGCTCTATTAATTATTATTCTCTTTGGCTCAGTTGCTAAGCTATTTTATGCATGTTATGCCCT
TTGACAATTAGTCTTTAGCTGTAATCCCCCAGCCATCCTCAGAAATGTGGTGAGGTAGCCATAGTGTTCCCAAGA
TTAGAAAAAATGTAATGGCAGAGCCAAGAGGAAGGTAAATGGTCCACATCTTATGAAGCATCATCTAAATGGCCC
TATTGGTTAGAGTGAGGAGATGCAAGTAGTTCAATTTGCTTGCCTAGAAGGCAGGGTACTGGAAAAGTTGTTGCA
ATTCTTAATTTTAAACTTTATATATCAGTAAGCCATATATAAATATGATTGGGGGTGTTTATTTTAAAATCTATT
ATGGAAATTGAGAGACTGACCTAATCTGGGAGAAATTAAAAATTACAGTTTTCACTCGTTTTGGATTTGGTGTTT
TCTAGGGTACCTAACCTAGATCAGTGGTTCTCAAACTTAGGTGGATGTCAGAATCACCTGGGGAGCTTAGTGAAT
GCACAGGGCACAGTCCTTCCACTTCATGCACCTGGATCTCTGAGGTCTTTGACAGGTTTCCGGATTAATCTGCTA
TGCACAACAGTGAGAATCATTGACCTATAGTTACTCATTTGATGCATACAGGAAAGACTGAAGTATAAAGTGATA
TAATTGGTAGATTGATGATAGAGAGGTCATAGAAACAGTCTCATCCTCCTTTAGATGAGAAAATAGAAGTTCAGA
GAGGTTAAGTAGCTGGCTCAAGGTCAGAATTATTGCATGCATGAGATTCAAACCCACCTTTTTATGCTGACTCCA
CAACCAGGAGTCTTTTCACTATATAATTTCAAGAATTCTATAGAAGTAGATTTAAAGATATGTGATGGACTCCAC
CACATTATAGCACAACTAGAAATGTAATTGTAATTTTTAGCTTCAACTGCTGAAGAAGTAAATATTGTATATTAA
GGTAATACGGTCCATTTTTTAAAGGAATACTTTTATTTTCACTGACCATCATGACATTAGCAGAATATCCTGATG
GCTTATATGCCTGAAATTAATTTTGCTCTTTTCTTTCCCGATAGGTAACTGACTTGAATGTCCAACGCAAAGCAA
TACATGAACTCATCCAAGTGATGGCTGAACTGTCGCCAGCAGCTAAAACAGGGAAGCGAAAAAGGAGTCAGATGC
TGTTTCGAGGTCGAAGAGCATCCCAGTAATGGTTGTCCTGCCTGCAATATTTGAATTTTAAATCTAAATCTATTT
ATTAATATTTAACATTATTTATATGGGGAATATATTTTTAGACTCATCAATCAAATAAGTATTTATAATAGCAAC
TTTTGTGTAATGAAAATGAATATCTATTAATATATGTATTATTTATAATTCCTATATCCTGTGACTGTCTCACTT
AATCCTTTGTTTTCTGACTAATTAGGCAAGGCTATGTGATTACAAGGCTTTATCTCAGGGGCCAACTAGGCAGCC
AACCTAAGCAAGATCCCATGGGTTGTGTGTTTATTTCACTTGATGATACAATGAACACTTATAAGTGAAGTGATA
CTATCCAGTTACTGCCGGTTTGAAAATATGCCTGCAATCTGAGCCAGTGCTTTAATGGCATGTCAGACAGAACTT
GAATGTGTCAGGTGACCCTGATGAAAACATAGCATCTCAGGAGATTTCATGCCTGGTGCTTCCAAATATTGTTGA
CAACTGTGACTGTACCCAAATGGAAAGTAACTCATTTGTTAAAATTATCAATATCTAATATATATGAATAAAGTG
TAAGTTCACAACTACTTATGCTGTGTTGGACTTTTTCTAAGTGAGACCTGGAGTGAAAGAACTACCTATTAATGA
ATTAGTAGGGAGGGGAGTCTTCTTAGCTGTGGAAATTTTAGAGTTGCATTTGGTTCCATTAAATGTGGTATTTCT
TTCCACTAGCATTTTGTTGGCTTTCGCTTTTCCAGTTAGCAGCTCTTTGAATTATCTTTCTAAGATACAGATTTA
ATTATGTCACTATTCAATTCAGAGGTTCTGCTATGGAATGTAGTTTAAACTGCTTAGCTTGGCACACAGAGATTT
ATTTCTAGCCCCTTCTCCACCTTCCTATTTCCTCCTTCATTTCAGAATCTTCCTCTCCCTCATCCAATGCTGGCA
AACACCAGTGGGGGTGGAGTAGTGGGTGTAAGCTCTAGGGAGAAGGCTTGGATTGGAATCCAAGTTATTCCATTA
CAAGTAGTGTGACCTTTAATACATTATGTATATTGTCTAAGTTTCAGCTTTATTGTCTGAAAAAGAAAAATAATT
GTGTGTTCCTCATAATATTGTGGTACGAATTGATTCTTTCACTCAAGAAATATTTACTGGAGTACCTACTACATG
CCTGGTGCTGTTGTAGACCTTGAGATACCTTACTCAAGCAAAACAGCCAAGGATCCCTGCCCCTGGGGAATTTGA

FIGURE 6019C

AATTAAGCAAGGGACAGATAAACAATGAACAAAATACATAATATGTAAGTCTATTGCATGGCATTCTCTAAGGTG
ATTGGTGTCATGGAAAAATAGTTAAAGGAGAGCAGGACAGGGAAATTAGGAGTCCTATGTATGGTGGAGTGGGAG
GGCTAGAGGTTTAAAAGGGTAATTATATGTGGCCTTATTGAGGAGATGCCATTTGAGGAAGCGCTTTAAGAAGTA
AGAGAGGTAGCTATTTGAATTCCAGGCAAAAGGTATATCCTTGCAAAGGCTCTGAAGAGATTTTCCTGGAGTGGT
AGAAGAACCAGCAGACCAGTGTGCTGGGCCCAGAAGACGGAAGAGAAAATCAGCCACACTTGAGAGGAATTCAGG
GGAAGCAATGTCCTTAGGGGAGGGCCAGTTTATCTTTTGAGAAGGAGGAAGTTGAGGATATGATGGATTTGGTTA
GTTCTGGGCTGTAAA

FIGURE 6020A

TGGCTTCCTTGTGGTTCCTCAGTGGTGCCTGCAACCCCTGGTTCACCTCCTTCCAGGTTCTGGCTCCTTCCAGCC
ATGGCTCTCAGAGTCCTTCTGTTAACAGCCTTGACCTTATGTCATGGGTTCAACTTGGACACTGAAAACGCAATG
ACCTTCCAAGAGAACGCAAGGGGCTTCGGGCAGAGCGTGGTCCAGCTTCAGGGATCCAGGGTGGTGGTTGGAGCC
CCCCAGGAGATAGTGGCTGCCAACCAAAGGGGCAGCCTCTACCAGTGCGACTACAGCACAGGCTCATGCGAGCCC
ATCCGCCTGCAGGTCCCCGTGGAGGCCGTGAACATGTCCCTGGGCCTGTCCCTGGCAGCCACCACCAGCCCCCCT
CAGCTGCTGGCCTGTGGTCCCACCGTGCACCAGACTTGCAGTGAGAACACGTATGTGAAAGGGCTCTGCTTCCTG
TTTGGATCCAACCTACGGCAGCAGCCCCAGAAGTTCCCAGAGGCCCTCCGAGGGTGTCCTCAAGAGGATAGTGAC
ATTGCCTTCTTGATTGATGGCTCTGGTAGCATCATCCCACATGACTTTCGGCGGATGAAGGAGTTTGTCTCAACT
GTGATGGAGCAATTAAAAAAGTCCAAAACCTTGTTCTCTTTGATGCAGTACTCTGAAGAATTCCGGATTCACTTT
ACCTTCAAAGAGTTCCAGAACAACCCTAACCCAAGATCACTGGTGAAGCCAATAACGCAGCTGCTTGGGCGGACA
CACACGGCCACGGGCATCCGCAAAGTGGTACGAGAGCTGTTTAACATCACCAACGGAGCCCGAAAGAATGCCTTT
AAGATCCTAGTTGTCATCACGGATGGAGAAAAGTTTGGCGATCCCTTGGGATATGAGGATGTCATCCCTGAGGCA
GACAGAGAGGGAGTCATTCGCTACGTCATTGGGGTGGGAGATGCCTTCCGCAGTGAGAAATCCCGCCAAGAGCTT
AATACCATCGCATCCAAGCCGCCTCGTGATCACGTGTTCCAGGTGAATAACTTTGAGGCTCTGAAGACCATTCAG
AACCAGCTTCGGGAGAAGATCTTTGCGATCGAGGGTACTCAGACAGGAAGTAGCAGCTCCTTTGAGCATGAGATG
TCTCAGGAAGGCTTCAGCGCTGCCATCACCTCTAATGGCCCCTTGCTGAGCACTGTGGGGAGCTATGACTGGGCT
GGTGGAGTCTTTCTATATACATCAAAGGAGAAAAGCACCTTCATCAACATGACCAGAGTGGATTCAGACATGAAT
GATGCTTACTTGGGTTATGCTGCCGCCATCATCTTACGGAACCGGGTGCAAAGCCTGGTTCTGGGGGCACCTCGA
TATCAGCACATCGGCCTGGTAGCGATGTTCAGGCAGAACACTGGCATGTGGGAGTCCAACGCTAATGTCAAGGGC
ACCCAGATCGGCGCCTACTTCGGGGCCTCCCTCTGCTCCGTGGACGTGGACAGCAACGGCAGCACCGACCTGGTC
CTCATCGGGGCCCCCCATTACTACGAGCAGACCCGAGGGGGCCAGGTGTCCGTGTGCCCCTTGCCCAGGGGGAGG
GCTCGGTGGCAGTGTGATGCTGTTCTCTACGGGGAGCAGGGCCAACCCTGGGGCCGCTTTGGGGCAGCCCTAACA
GTGCTGGGGGACGTAAATGGGGACAAGCTGACGGACGTGGCCATTGGGGCCCCAGGAGAGGAGGACAACCGGGGT
GCTGTTTACCTGTTTCACGGAACCTCAGGATCTGGCATCAGCCCCTCCCATAGCCAGCGGATAGCAGGCTCCAAG
CTCTCTCCCAGGCTCCAGTATTTTGGTCAGTCACTGAGTGGGGGCCAGGACCTCACAATGGATGGACTGGTAGAC
CTGACTGTAGGAGCCCAGGGGCACGTGCTGCTGCTCAGGTCCCAGCCAGTACTGAGAGTCAAGGCAATCATGGAG
TTCAATCCCAGGGAAGTGGCAAGGAATGTATTTGAGTGTAATGATCAGGTGGTGAAAGGCAAGGAAGCCGGAGAG
GTCAGAGTCTGCCTCCATGTCCAGAAGAGCACACGGGATCGGCTAAGAGAAGGACAGATCCAGAGTGTTGTGACT
TATGACCTGGCTCTGGACTCCGGCCGCCCACATTCCCGCGCCGTCTTCAATGAGACAAAGAACAGCACACGCAGA
CAGACACAGGTCTTGGGGCTGACCCAGACTTGTGAGACCCTGAAACTACAGTTGCCGAATTGCATCGAGGACCCA
GTGAGCCCCATTGTGCTGCGCCTGAACTTCTCTCTGGTGGGAACGCCATTGTCTGCTTTCGGGAACCTCCGGCCA
GTGCTGGCGGAGGATGCTCAGAGACTCTTCACAGCCTTGTTTCCCTTTGAGAAGAATTGTGGCAATGACAACATC
TGCCAGGATGACCTCAGCATCACCTTCAGTTTCATGAGCCTGGACTGCCTCGTGGTGGGTGGGCCCCGGGAGTTC
AACGTGACAGTGACTGTGAGAAATGATGGTGAGGACTCCTACAGGACACAGGTCACCTTCTTCTTCCCGCTTGAC
CTGTCCTACCGGAAGGTGTCCACACTCCAGAACCAGCGCTCACAGCGATCCTGGCGCCTGGCCTGTGAGTCTGCC
TCCTCCACCGAAGTGTCTGGGGCCTTGAAGAGCACCAGCTGCAGCATAAACCACCCCATCTTCCCGGAAAACTCA
GAGGTCACCTTTAATATCACGTTTGATGTAGACTCTAAGGCTTCCCTTGGAAACAAACTGCTCCTCAAGGCCAAT
GTGACCAGTGAGAACAACATGCCCAGAACCAACAAAACCGAATTCCAACTGGAGCTGCCGGTGAAATATGCTGTC
TACATGGTGGTCACCAGCCATGGGGTCTCCACTAAATATCTCAACTTCACGGCCTCAGAGAATACCAGTCGGGTC
ATGCAGCATCAATATCAGGTCAGCAACCTGGGGCAGAGGAGCCCCCCCATCAGCCTGGTGTTCTTGGTGCCCGTC
CGGCTGAACCAGACTGTCATATGGGACCGCCCCCAGGTCACCTTCTCCGAGAACCTCTCGAGTACGTGCCACACC
AAGGAGCGCTTGCCCTCTCACTCCGACTTTCTGGCTGAGCTTCGGAAGGCCCCCGTGGTGAACTGCTCCATCGCT
GTCTGCCAGAGAATCCAGTGTGACATCCCGTTCTTTGGCATCCAGGAAGAATTCAATGCTACCCTCAAAGGCAAC
CTCTCGTTTGACTGGTACATCAAGACCTCGCATAACCACCTCCTGATCGTGAGCACAGCTGAGATCTTGTTTAAC
GATTCCGTGTTCACCCTGCTGCCGGGACAGGGGGCGTTTGTGAGGTCCCAGACGGAGACCAAAGTGGAGCCGTTC
GAGGTCCCCAACCCCCTGCCGCTCATCGTGGGCAGCTCTGTCGGGGGACTGCTGCTCCTGGCCCTCATCACCGCC
GCGCTGTACAAGCTCGGCTTCTTCAAGCGGCAATACAAGGACATGATGAGTGAAGGGGGTCCCCCGGGGGCCGAA
CCCCAGTAGCGGCTCCTTCCCGACAGAGCTGCCTCTCGGTGGCCAGCAGGACTCTGCCCAGACCACACGAGCCCC

FIGURE 6020B

CAGGCTGCTGGACACGTCGGACAGCGAAGTATCCCCGACAGGACGGGCTTGGGCTTCCATTTGTGTGTGTGCAAG
TGTGTATGTGCGTGTGTGCGAGTGTGTGCAAGTGTCTGTGTGCAAGTGTGTGCACGTGTGCGTGTGCGTGCATGT
GCACTCGCACGCCCATGTGTGAGTGTGTGCAAGTATGTGAGTGTGTCCAGTGTGTGTGCGTGTGTCCATGTGTGT
GCAGTGTGTGCATGTGTGCGAGTGTGTGCATGTGTGTGCTCAGGGGCTGTGGCTCACGTGTGTGACTCAGAGTGT
CTCTGGCGTGTGGGTAGGTGACGGCAGCGTAGCCTCTCCGGCAGAAGGGAACTGCCTGGGCTCCCTTGTGCGTGG
GTAAGCCGCTGCTGGGTTTTCCTCCGGGAGAGGGGACGGTCAATCCTGTGGGTGAAGAGAGAGGGAAACACAGCA
GCATCTCTCCACTGAAAGAAGTGGGACTTCCCGTCGCCTGCGAGCCTGCGGCCTGCTGGAGCCTGCGCAGCTTGG
ATGGATACTCCATGAGAAAAGCCGTGGGTGGAACCAGGAGCCTCCTCCACACCAGCGCTGATGCCCAATAAAGAT
GCCCACTGAGGAATCATGAAGCTTCCTTTCTGGATTCATTTATTATTTCAATGTGACTTTAATTTTTTGGATGGA
TAAGCCTGTCTATGGTACAAAAATCACAAGGCATTCAAGTGTACAGTGAAAAGTCTCCCTTTCCAGATATTCAAG
TCACCTCCTTAAAGGTAGTCAAGATTGTGTTTTGAGGTTTCCTTCAGACAGATTCCAGGCGATGTGCAAGTGTAT
GCACGTGTGCACACACCACACACATACACACACACAAGCTTTTTTACACAAATGGTAGCATACTTTATATTGGTC
TGTATCTTGCTTTTTTTCACCAATATTTCTCAGACATCGGTTCATATTAAGACATAAATTACTTTTTCATTCTTT
TATACCGCTGCATAGTATTCCATTGTGTGAGTGTACCATAATGTATTTAACCAGTCTTCTTTTGATATACTATTT
TCATCTCTTGTTATTGCATCTGCTGAGTTAATAAATCAAATATATGTCAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAT

FIGURE 6021

MALRVLLLTALTLCHGFNLDTENAMTFQENARGFGQSVVQLQGSRVVVGAPQEIVAANQRGSLYQCDYSTGSCEP
IRLQVPVEAVNMSLGLSLAATTSPPQLLACGPTVHQTCSENTYVKGLCFLFGSNLRQQPQKFPEALRGCPQEDSD
IAFLIDGSGSIIPHDFRRMKEFVSTVMEQLKKSKTLFSLMQYSEEFRIHFTFKEFQNNPNPRSLVKPITQLLGRT
HTATGIRKVVRELFNITNGARKNAFKILVVITDGEKFGDPLGYEDVIPEADREGVIRYVIGVGDAFRSEKSRQEL
NTIASKPPRDHVFQVNNFEALKTIQNQLREKIFAIEGTQTGSSSSFEHEMSQEGFSAAITSNGPLLSTVGSYDWA
GGVFLYTSKEKSTFINMTRVDSDMNDAYLGYAAAIILRNRVQSLVLGAPRYQHIGLVAMFRQNTGMWESNANVKG
TQIGAYFGASLCSVDVDSNGSTDLVLIGAPHYYEQTRGGQVSVCPLPRGRARWQCDAVLYGEQGQPWGRFGAALT
VLGDVNGDKLTDVAIGAPGEEDNRGAVYLFHGTSGSGISPSHSQRIAGSKLSPRLQYFGQSLSGGQDLTMDGLVD
LTVGAQGHVLLLRSQPVLRVKAIMEFNPREVARNVFECNDQVVKGKEAGEVRVCLHVQKSTRDRLREGQIQSVVT
YDLALDSGRPHSRAVFNETKNSTRRQTQVLGLTQTCETLKLQLPNCIEDPVSPIVLRLNFSLVGTPLSAFGNLRP
VLAEDAQRLFTALFPFEKNCGNDNICQDDLSITFSFMSLDCLVVGGPREFNVTVTVRNDGEDSYRTQVTFFFPLD
LSYRKVSTLQNQRSQRSWRLACESASSTEVSGALKSTSCSINHPIFPENSEVTFNITFDVDSKASLGNKLLLKAN
VTSENNMPRTNKTEFQLELPVKYAVYMVVTSHGVSTKYLNFTASENTSRVMQHQYQVSNLGQRSPPISLVFLVPV
RLNQTVIWDRPQVTFSENLSSTCHTKERLPSHSDFLAELRKAPVVNCSIAVCQRIQCDIPFFGIQEEFNATLKGN
LSFDWYIKTSHNHLLIVSTAEILFNDSVFTLLPGQGAFVRSQTETKVEPFEVPNPLPLIVGSSVGGLLLLALITA
ALYKLGFFKRQYKDMMSEGGPPGAEPQ

FIGURE 6022A

GTTGGCCCCCGTTACTTTTCCTCTGGGAAATATGGCGCACGCTGGGAGAACAGGGTACGATAACCGGGAGATAGT
GATGAAGTACATCCATTATAAGCTGTCGCAGAGGGGCTACGAGTGGGATGCGGGAGATGTGGGCGCCGCGCCCCC
GGGGGCCGCCCCCGCGCCGGGCATCTTCTCCTCGCAGCCCGGGCACACGCCCCATACAGCCGCATCCCGGGACCC
GGTCGCCAGGACCTCGCCGCTGCAGACCCCGGCTGCCCCCGGCGCCGCCGCGGGGCCTGCGCTCAGCCCGGTGCC
ACCTGTGGTCCACCTGACCCTCCGCCAGGCCGGCGACGACTTCTCCCGCCGCTACCGCCGCGACTTCGCCGAGAT
GTCCAGGCAGCTGCACCTGACGCCCTTCACCGCGCGGGGACGCTTTGCCACGGTGGTGGAGGAGCTCTTCAGGGA
CGGGGTGAACTGGGGGAGGATTGTGGCCTTCTTTGAGTTCGGTGGGGTCATGTGTGTGGAGAGCGTCAACCGGGA
GATGTCGCCCCTGGTGGACAACATCGCCCTGTGGATGACTGAGTACCTGAACCGGCACCTGCACACCTGGATCCA
GGATAACGGAGGCTGGGATGCCTTTGTGGAACTGTACGGCCCCAGCATGCGGCCTCTGTTTGATTTCTCCTGGCT
GTCTCTGAAGACTCTGCTCAGTTTGGCCCTGGTGGGAGCTTGCATCACCCTGGGTGCCTATCTGGGCCACAAGTG
AAGTCAACATGCCTGCCCCAAACAAATATGCAAAAGGTTCACTAAAGCAGTAGAAATAATATGCATTGTCAGTGA
TGTTCCATGAAACAAAGCTGCAGGCTGTTTAAGAAAAAATAACACACATATAAACATCACACACACAGACAGACA
CACACACACACAACAATTAACAGTCTTCAGGCAAAACGTCGAATCAGCTATTTACTGCCAAAGGGAAATATCATT
TATTTTTTACATTATTAAGAAAAAAAGATTTATTTATTTAAGACAGTCCCATCAAAACTCCTGTCTTTGGAAATC
CGACCACTAATTGCCAAGCACCGCTTCGTGTGGCTCCACCTGGATGTTCTGTGCCTGTAAACATAGATTCGCTTT
CCATGTTGTTGGCCGGATCACCATCTGAAGAGCAGACGGATGGAAAAAGGACCTGATCATTGGGGAAGCTGGCTT
TCTGGCTGCTGGAGGCTGGGGAGAAGGTGTTCATTCACTTGCATTTCTTTGCCCTGGGGGCTGTGATATTAACAG
AGGGAGGGTTCCTGTGGGGGGAAGTCCATGCCTCCCTGGCCTGAAGAAGAGACTCTTTGCATATGACTCACATGA
TGCATACCTGGTGGGAGGAAAAGAGTTGGGAACTTCAGATGGACCTAGTACCCACTGAGATTTCCACGCCGAAGG
ACAGCGATGGGAAAAATGCCCTTAAATCATAGGAAAGTATTTTTTTAAGCTACCAATTGTGCCGAGAAAAGCATT
TTAGCAATTTATACAATATCATCCAGTACCTTAAGCCCTGATTGTGTATATTCATATATTTTGGATACGCACCCC
CCAACTCCCAATACTGGCTCTGTCTGAGTAAGAAACAGAATCCTCTGGAACTTGAGGAAGTGAACATTTCGGTGA
CTTCCGCATCAGGAAGGCTAGAGTTACCCAGAGCATCAGGCCGCCACAAGTGCCTGCTTTTAGGAGACCGAAGTC
CGCAGAACCTGCCTGTGTCCCAGCTTGGAGGCCTGGTCCTGGAACTGAGCCGGGGCCCTCACTGGCCTCCTCCAG
GGATGATCAACAGGGCAGTGTGGTCTCCGAATGTCTGGAAGCTGATGGAGCTCAGAATTCCACTGTCAAGAAAGA
GCAGTAGAGGGGTGTGGCTGGGCCTGTCACCCTGGGGCCCTCCAGGTAGGCCCGTTTTCACGTGGAGCATGGGAG
CCACGACCCTTCTTAAGACATGTATCACTGTAGAGGGAAGGAACAGAGGCCCTGGGCCCTTCCTATCAGAAGGAC
ATGGTGAAGGCTGGGAACGTGAGGAGAGGCAATGGCCACGGCCCATTTTGGCTGTAGCACATGGCACGTTGGCTG
TGTGGCCTTGGCCCACCTGTGAGTTTAAAGCAAGGCTTTAAATGACTTTGGAGAGGGTCACAAATCCTAAAAGAA
GCATTGAAGTGAGGTGTCATGGATTAATTGACCCCTGTCTATGGAATTACATGTAAAACATTATCTTGTCACTGT
AGTTTGGTTTTATTTGAAAACCTGACAAAAAAAAAAGTTCCAGGTGTGGAATATGGGGGTTATCTGTACATCCTGG
GGCATTAAAAAAAAAATCAATGGTGGGGAACTATAAAGAAGTAACAAAAGAAGTGACATCTTCAGCAAATAAACT
AGGAAATTTTTTTTTCTTCCAGTTTAGAATCAGCCTTGAAACATTGATGGAATAACTCTGTGGCATTATTGCATT
ATATACCATTTATCTGTATTAACTTTGGAATGTACTCTGTTCAATGTTTAATGCTGTGGTTGATATTTCGAAAGC
TGCTTTAAAAAAATACATGCATCTCAGCGTTTTTTTGTTTTTAATTGTATTTAGTTATGGCCTATACACTATTTG
TGAGCAAAGGTGATCGTTTTCTGTTTGAGATTTTTATCTCTTGATTCTTCAAAAGCATTCTGAGAAGGTGAGATA
AGCCCTGAGTCTCAGCTACCTAAGAAAAACCTGGATGTCACTGGCCACTGAGGAGCTTTGTTTCAACCAAGTCAT
GTGCATTTCCACGTCAACAGAATTGTTTATTGTGACAGTTATATCTGTTGTCCCTTTGACCTTGTTTCTTGAAGG
TTTCCTCGTCCCTGGGCAATTCCGCATTTAATTCATGGTATTCAGGATTACATGCATGTTTGGTTAAACCCATGA
GATTCATTCAGTTAAAAATCCAGATGGCAAATGACCAGCAGATTCAAATCTATGGTGGTTTGACCTTTAGAGAGT
TGCTTTACGTGGCCTGTTTCAACACAGACCCACCCAGAGCCCTCCTGCCCTCCTTCCGCGGGGGCTTTCTCATGG
CTGTCCTTCAGGGTCTTCCTGAAATGCAGTGGTGCTTACGCTCCACCAAGAAAGCAGGAAACCTGTGGTATGAAG
CCAGACCTCCCCGGCGGGCCTCAGGGAACAGAATGATCAGACCTTTGAATGATTCTAATTTTTAAGCAAAATATT
ATTTTATGAAAGGTTTACATTGTCAAAGTGATGAATATGGAATATCCAATCCTGTGCTGCTATCCTGCCAAAATC
ATTTTAATGGAGTCAGTTTGCAGTATGCTCCACGTGGTAAGATCCTCCAAGCTGCTTTAGAAGTAACAATGAAGA
ACGTGGACGCTTTTAATATAAAGCCTGTTTTGTCTTCTGTTGTTGTTCAAACGGGATTCACAGAGTATTTGAAAA
ATGTATATATATTAAGAGGTCACGGGGGCTAATTGCTGGCTGGCTGCCTTTTGCTGTGGGGTTTTGTTACCTGGT
TTTAATAACAGTAAATGTGCCCAGCCTCTTGGCCCCAGAACTGTACAGTATTGTGGCTGCACTTGCTCTAAGAGT

FIGURE 6022B

AGTTGATGTTGCATTTTCCTTATTGTTAAAAACATGTTAGAAGCAATGAATGTATATAAAAGCCTCAACTAGTCA
TTTTTTTCTCCTCTTCTTTTTTTTCATTATATCTAATTATTTTGCAGTTGGGCAACAGAGAACCATCCCTATTTT
GTATTGAAGAGGGATTCACATCTGCATCTTAACTGCTCTTTATGAATGAAAAAACAGTCCTCTGTATGTACTCCT
CTTTACACTGGCCAGGGTCAGAGTTAAATAGAGTATATGCACTTTCCAAATTGGGGACAAGGGCTCTAAAAAAAG
CCCCAAAAGGAGAAGAACATCTGAGAACCTCCTCGGCCCTCCCAGTCCCTCGCTGCACAAATACTCCGCAAGAGA
GGCCAGAATGACAGCTGACAGGGTCTATGGCCATCGGGTCGTCTCCGAAGATTTGGCAGGGGCAGAAAACTCTGG
CAGGCTTAAGATTTGGAATAAAGTCACAGAATCAAGGAAGCACCTCAATTTAGTTCAAACAAGACGCCAACATTC
TCTCCACAGCTCACTTACCTCTCTGTGTTCAGATGTGGCCTTCCATTTATATGTGATCTTTGTTTTATTAGTAAA
TGCTTATCATCTAAAGATGTAGCTCTGGCCCAGTGGGAAAAATTAGGAAGTGATTATAAATCGAGAGGAGTTATA
ATAATCAAGATTAAATGTAAATAATCAGGGCAATCCCAACACATGTCTAGCTTTCACCTCCAGGATCTATTGAGT
GAACAGAATTGCAAATAGTCTCTATTTGTAATTGAACTTATCCTAAAACAAATAGTTTATAAATGTGAACTTAAA
CTCTAATTAATTCCAACTGTACTTTTAAGGCAGTGGCTGTTTTTAGACTTTCTTATCACTTATAGTTAGTAATGT
ACACCTACTCTATCAGAGAAAAACAGGAAAGGCTCGAAATACAAGCCATTCTAAGGAAATTAGGGAGTCAGTTGA
AATTCTATTCTGATCTTATTCTGTGGTGTCTTTTGCAGCCCAGACAAATGTGGTTACACACTTTTTAAGAAATAC
AATTCTACATTGTCAAGCTTATGAAGGTTCCAATCAGATCTTTATTGTTATTCAATTTGGATCTTTCAGGGATTT
TTTTTTTAAATTATTATGGGACAAAGGACATTTGTTGGAGGGGTGGGAGGGAGGAACAATTTTTAAATATAAAAC
ATTCCCAAGTTTGGATCAGGGAGTTGGAAGTTTTCAGAATAACCAGAACTAAGGGTATGAAGGACCTGTATTGGG
GTCGATGTGATGCCTCTGCGAAGAACCTTGTGTGACAAATGAGAAACATTTTGAAGTTTGTGGTACGACCTTTAG
ATTCCAGAGACATCAGCATGGCTCAAAGTGCAGCTCCGTTTGGCAGTGCAATGGTATAAATTTCAAGCTGGATAT
GTCTAATGGGTATTTAAACAATAAATGTGCAGTTTTAACTAACAGGATATTTAATGACAACCTTCTGGTTGGTAG
GGACATCTGTTTCTAAATGTTTATTATGTACAATACAGAAAAAAATTTTATAAAATTAAGCAATGTGAAACTGAA
TTGGAGAGTGATAATACAAGTCCTTTAGTCTTACCCAGTGAATCATTCTGTTCCATGTCTTTGGACAACCATGAC
CTTGGACAATCATGAAATATGCATCTCACTGGATGCAAAGAAAATCAGATGGAGCATGAATGGTACTGTACCGGT
TCATCTGGACTGCCCCAGAAAAATAACTTCAAGCAAACATCCTATCAACAACAAGGTTGTTCTGCATACCAAGCT
GAGCACAGAAGATGGGAACACTGGTGGAGGATGGAAAGGCTCGCTCAATCAAGAAAATTCTGAGACTATTAATAA
ATAAGACTGTAGTGTAGATACTGAGTAAATCCATGCACCTAAACCTTTTGGAAAATCTGCCGTGGGCCCTCCAGA
TAGCTCATTTCATTAAGTTTTTCCCTCCAAGGTAGAATTTGCAAGAGTGACAGTGGATTGCATTTCTTTTGGGGA
AGCTTTCTTTTGGTGGTTTTGTTTATTATACCTTCTTAAGTTTTCAACCAAGGTTTGCTTTTGTTTTGAGTTACT
GGGGTTATTTTTGTTTTAAATAAAAATAAGTGTACAATAAGTGTTTTTGTATTGAAAGCTTTTGTTATCAAGATT
TTCATACTTTTACCTTCCATGGCTCTTTTTAAGATTGATACTTTTAAGAGGTGGCTGATATTCTGCAACACTGTA
CACATAAAAAATACGGTAAGGATACTTTACATGGTTAAGGTAAAGTAAGTCTCCAGTTGGCCACCATTAGCTATA
ATGGCACTTTGTTTGTGTTGTTGGAAAAAGTCACATTGCCATTAAACTTTCCTTGTCTGTCTAGTTAATATTGTG
AAGAAAAATAAAGTACAGTGTGAGATACTG

FIGURE 6023

MAHAGRTGYDNREIVMKYIHYKLSQRGYEWDAGDVGAAPPGAAPAPGIFSSQPGHTPHTAASRDPVARTSPLQTP
AAPGAAAGPALSPVPPVVHLTLRQAGDDFSRRYRRDFAEMSRQLHLTPFTARGRFATVVEELFRDGVNWGRIVAF
FEFGGVMCVESVNREMSPLVDNIALWMTEYLNRHLHTWIQDNGGWDAFVELYGPSMRPLFDFSWLSLKTLLSLAL
VGACITLGAYLGHK

FIGURE 6024

GATCATGCAGCTGCACCACAGCAAGCACCACGCGGCCTACGTGAACAACCTGAACGTCACCGAGGAGAAGTACCA
GGAGGCGTTGGCCAAGGGAGATGTTACAGCCCAGATAGCTCTTCAGCCTGCACTGAAGTTCAATGGTGGTGGTCA
TATCAATCATAGCATTTTCTGGACAAACCTCAGCCCTAACGGTGGTGGAGAACCCAAAGGGGAGTTGCTGGAAGC
CATCAAACGTGACTTTGGTTCCTTTGACAAGTTTAAGGAGAAGCTGACGGCTGCATCTGTTGGTGTCCAAGGCTC
AGGTTGGGGTTGGCTTGGTTTCAATAAGGAACGGGGACACTTACAAATTGCTGCTTGTCCAAATCAGGATCCACT
GCAAGGAACAACAGGCCTTATTCCACTGCTGGGGATTGATGTGTGGGAGCACGCTTACTACCTTCAGTATAAAAA
TGTCAGGCCTGATTATCTAAAAGCTATTTGGAATGTAATCAACTGGGAGAATGTAACTGAAAGATACATGGCTTG
CAAAAAG**TAA**

FIGURE 6025

IMQLHHSKHHAAYVNNLNVTEEKYQEALAKGDVTAQIALQPALKFNGGGHINHSIFWTNLSPNGGGEPKGELLEA
IKRDFGSFDKFKEKLTAASVGVQGSGWGWLGFNKERGHLQIAACPNQDPLQGTTGLIPLLGIDVWEHAYYLQYKN
VRPDYLKAIWNVINWENVTERYMACKK

FIGURE 6026

AAACAGAGAGAGATAGAGAAAGAGAAAGACAGAGGTGTTTCCCTTAGCTATGGAAACTCTATAAGAGAGATCCAG
CTTGCCTCCTCTTGAGCAGTCAGCAACAGGGTCCCGTCCTTGACACCTCAGCCTCTACAGGACTGAGAAGAAGTA
AAACCGTTTGCTGGGGCTGGCCTGACTCACCAGCTGCCATGCAGCAGCCCTTCAATTACCCATATCCCCAGATCT
ACTGGGTGGACAGCAGTGCCAGCTCTCCCTGGGCCCCTCCAGGCACAGTTCTTCCCTGTCCAACCTCTGTGCCCA
GAAGGCCTGGTCAAAGGAGGCCACCACCACCACCGCCACCGCCACCACTACCACCTCCGCCGCCGCCGCCACCAC
TGCCTCCACTACCGCTGCCACCCCTGAAGAAGAGAGGGAACCACAGCACAGGCCTGTGTCTCCTTGTGATGTTTT
TCATGGTTCTGGTTGCCTTGGTAGGATTGGGCCTGGGGATGTTTCAGCTCTTCCACCTACAGAAGGAGCTGGCAG
AACTCCGAGAGTCTACCAGCCAGATGCACACAGCATCATCTTTGGAGAAGCAAATAGGCCACCCCAGTCCACCCC
CTGAAAAAAAGGAGCTGAGGAAAGTGGCCCATTTAACAGGCAAGTCCAACTCAAGGTCCATGCCTCTGGAATGGG
AAGACACCTATGGAATTGTCCTGCTTTCTGGAGTGAAGTATAAGAAGGGTGGCCTTGTGATCAATGAAACTGGGC
TGTACTTTGTATATTCCAAAGTATACTTCCGGGGTCAATCTTGCAACAACCTGCCCCTGAGCCACAAGGTCTACA
TGAGGAACTCTAAGTATCCCCAGGATCTGGTGATGATGGAGGGGAAGATGATGAGCTACTGCACTACTGGGCAGA
TGTGGGCCCGCAGCAGCTACCTGGGGGCAGTGTTCAATCTTACCAGTGCTGATCATTTATATGTCAACGTATCTG
AGCTCTCTCTGGTCAATTTTGAGGAATCTCAGACGTTTTTCGGCTTATATAAGCTCTAAGAGAAGCACTTTGGGA
TTCTTTCCATTATGATTCTTTGTTACAGGCACCGAGAATGTTGTATTCAGTGAGGGTCTTCTTACATGCATTTGA
GGTCAAGTAAGAAGACATGAACCAAGTGGACCTTGAGACCACAGGGTTCAAAATGTCTGTAGCTCCTCAACTCAC
CTAATGTTTATGAGCCAGACAAATGGAGGAATATGACGGAAGAACATAGAACTCTGGGCTGCCATGTGAAGAGGG
AGAAGCATGAAAAAGCAGCTACCCAGGTGTTCTACACTCATCTTAGTGCCTGAGAGTATTTAGGCAGATTGAAAA
GGACACCTTTTAACTCACCTCTCAAGGTGGGCCTTGCTACCTCAAGGGGGACTGTCTTTCAGATACATGGTTGTG
ACCTGAGGATTTAAGGGATGGAAAAGGAAGACTAGAGGCTTGCATAATAAGCTAAAGAGGCTGAAAGAGGCCAAT
GCCCCACTGGCAGCATCTTCACTTCTAAATGCATATCCTGAGCCATCGGTGAAACTAACAGATAAGCAAGAGAGA
TGTTTTGGGGACTCATTTCATTCCTAACACAGCATGTGTATTTCCAGTGCCAATTGTAGGGGTGTGTGTGTGTGT
GTGTGTGTGTGTGTATGACTAAAGAGAGAATGTAGATATTGTGAAGTACATATTAGGAAAATATGGGTTGCATTT
GGTCAAGATTTTGAATGCTTCCTGACAATCAACTCTAATAGTGCTTAAAAATCATTGATTGTCAGCTACTAATGA
TGTTTTCCTATAATATAATAAATATTTATGTAGATGTGCATTTTTGTGAAATGAAAACATGTAATAAAAAGTATA
TGTTAGGATACAAAT

FIGURE 6027

MQQPFNYPYPQIYWVDSSASSPWAPPGTVLPCPTSVPRRPGQRRPPPPPPPPPLPPPPPPPPLPPLPLPPLKKRG
NHSTGLCLLVMFFMVLVALVGLGLGMFQLFHLQKELAELRESTSQMHTASSLEKQIGHPSPPPEKKELRKVAHLT
GKSNSRSMPLEWEDTYGIVLLSGVKYKKGGLVINETGLYFVYSKVYFRGQSCNNLPLSHKVYMRNSKYPQDLVMM
EGKMMSYCTTGQMWARSSYLGAVFNLTSADHLYVNVSELSLVNFEESQTFFGLYKL

FIGURE 6028

CAGGACTGCCTGAGACAAGCCACAAGCTGAACAGAGAAAGTGGATTGAACAAGGACGCATTTCCCCAGTACATCC
ACAACATGCTGTCCACATCTCGTTCTCGGTTTATCAGAAATACCAACGAGAGCGGTGAAGAAGTCACCACCTTTT
TTGATTATGATTACGGTGCTCCCTGTCATAAATTTGACGTGAAGCAAATTGGGGCCCAACTCCTGCCTCCGCTCT
ACTCGCTGGTGTTCATCTTTGGTTTTGTGGGCAACATGCTGGTCGTCCTCATCTTAATAAACTGCAAAAAGCTGA
AGTGCTTGACTGACATTTACCTGCTCAACCTGGCCATCTCTGATCTGCTTTTTCTTATTACTCTCCCATTGTGGG
CTCACTCTGCTGCAAATGAGTGGGTCTTTGGGAATGCAATGTGCAAATTATTCACAGGGCTGTATCACATCGGTT
ATTTTGGCGGAATCTTCTTCATCATCCTCCTGACAATCGATAGATACCTGGCTATTGTCCATGCTGTGTTTGCTT
TAAAAGCCAGGACGGTCACCTTTGGGGTGGTGACAAGTGTGATCACCTGGTTGGTGGCTGTGTTTGCTTCTGTCC
CAGGAATCATCTTTACTAAATGCCAGAAAGAAGATTCTGTTTATGTCTGTGGCCCTTATTTTCCACGAGGATGGA
ATAATTTCCACACAATAATGAGGAACATTTTGGGGCTGGTCCTGCCGCTGCTCATCATGGTCATCTGCTACTCGG
GAATCCTGAAAACCCTGCTTCGGTGTCGAAACGAGAAGAAGAGGCATAGGGCAGTGAGAGTCATCTTCACCATCA
TGATTGTTTACTTTCTCTTCTGGACTCCCTATAACATTGTCATTCTCCTGAACACCTTCCAGGAATTCTTCGGCC
TGAGTAACTGTGAAAGCACCAGTCAACTGGACCAAGCCACGCAGGTGACAGAGACTCTTGGGATGACTCACTGCT
GCATCAATCCCATCATCTATGCCTTCGTTGGGGAGAAGTTCAGAAGGTATCTCTCGGTGTTCTTCCGAAAGCACA
TCACCAAGCGCTTCTGCAAACAATGTCCAGTTTTCTACAGGGAGACAGTGGATGGAGTGACTTCAACAAACACGC
CTTCCACTGGGGAGCAGGAAGTCTCGGCTGGTTTATAAAACGAGGAGCAGTTTGATTGTTGTTTATAAAGGGAGA
TAACAATCTGTATATAACAACAAACTTCAAGGGTTTGTTGAACAATAGAAACCTGTAAAGCAGGTGCCCAGGAAC
CTCAGGGCTGTGTGTACTAATACAGACTATGTCACCCAATGCATATCCAACATGTGCTCAGGGAATAATCCAGAA
AAACTGTGGGTAGAGACTTTGACTCTCCAGAAAGCTCATCTCAGCTCCTGAAAAATGCCTCATTACCTTGTGCTA
ATCCTCTTTTTCTAGTCTTCATAATTTCTTCACTCAATCTCTGATTCTGTCAATGTCTTGAAATCAAGGGCCAGC
TGGAGGTGAAGAAGAGAATGTGACAGGCACAGATGAATGGGAGTGAGGGATAGTGGGGTCAGGGCTGAGAGGAGA
AGGAGGGAGACATGAGCATGGCTGAGCCTGGACAAAGACAAAGGTGAGCAAAGGGCTCACGCATTCAGCCAGGAG
ATGATACTGGTCCTTAGCCCCATCTGCCACGTGTATTTAACCTTGAAGGGTTCACCAGGTCAGGGAGAGTTTGGG
AACTGCAATAACCTGGGAGTTTTGGTGGAGTCCGATGATTCTCTTTTGCATAAGTGCATGACATATTTTTGCTTT
ATTACAGTTTATCTATGGCACCCATGCACCTTACATTTGAAATCTATGAAATATCATGCTCCATTGTTCAGATGC
TTCTTAGGCCACATCCCCCTGTCTAAAAATTCAGAAAATTTTTGTTTATAAAAGATGCATTATCTATGATATGCT
AATATATGTATATGCAATATAAAATTTAG

FIGURE 6029

MLSTSRSRFIRNTNESGEEVTTFFDYDYGAPCHKFDVKQIGAQLLPPLYSLVFIFGFVGNMLVVLILINCKKLKC
LTDIYLLNLAISDLLFLITLPLWAHSAANEWVFGNAMCKLFTGLYHIGYFGGIFFIILLTIDRYLAIVHAVFALK
ARTVTFGVVTSVITWLVAVFASVPGIIFTKCQKEDSVYVCGPYFPRGWNNFHTIMRNILGLVLPLLIMVICYSGI
LKTLLRCRNEKKRHRAVRVIFTIMIVYFLFWTPYNIVILLNTFQEFFGLSNCESTSQLDQATQVTETLGMTHCCI
NPIIYAFVGEKFRRYLSVFFRKHITKRFCKQCPVFYRETVDGVTSTNTPSTGEQEVSAGL

FIGURE 6030

ATGAAGCTCTTTTGGTTGCTTTTCACCATTGGGTTCTGCTGGGCTCAGTATTCCTCAAATACACAACAAGGACGA
ACATCTATTGTTCATCTGTTTGAATGGCGATGGGTTGATATTGCTCTTGAATGTGAGCGATATTTAGCTCCCAAG
GGATTTGGAGGGGTTCAGGTCTCTCCACCAAATGAAAATGTTGCCATTCACAACCCTTTCAGACCTTGGTGGGAA
AGATACCAACCAGTTAGCTATAAATTATGCACAAGATCTGGAAATGAAGATGAATTTAGAAACATGGTGACTAGA
TGCAACAATGTTGGGGTTCGTATTTATGTGGATGCTGTAATTAATCATATGTGTGGTAATGCTGTGAGTGCAGGA
ACAAGCAGTACCTGTGGAAGTTACTTCAACCCTGGAAGTAGGGACTTTCCAGCAGTCCCATATTCTGGATGGGAT
TTTAATGATGGTAAATGTAAAACTGGAAGTGGAGATATCGAGAACTATAATGATGCTACTCAGGTCAGAGATTGT
CGTCTGTCTGGTCTTCTCGATCTTGCACTGGGGAAGGATTATGTGCGTTCTAAGATTGCCGAATATATGAACCAT
CTCATTGACATTGGTGTTGCAGGGTTCAGAATTGATGCTTCCAAGCACATGTGGCCTGGAGACATAAAGGCAATT
TTGGACAAACTGCATAATCTAAACAGTAACTGGTTCCCGGAAGGTAGTAAACCTTTCATTTACCAGGAGGTAATT
GATCTGGGTGGTGAGCCAATTAAAAGCAGTGACTACTTTGGTAATGGCCGGGTGACAGAATTCAAGTATGGTGCA
AAACTCGGCACAGTTATTCGCAAGTGGAATGGAGAGAAGATGTCTTACTTAAAGAACTGGGGAGAAGGTTGGGGT
TTCATGCCTTCTGACAGAGCGCTTGTCTTTGTGGATAACCATGACAATCAACGAGGACATGGCGCTGGAGGAGCC
TCTATACTTACCTTCTGGGATGCTAGGCTGTACAAAATGGCAGTTGGATTTATGCTTGCTCATCCTTATGGATTT
ACACGAGTAATGTCAAGCTACCGTTGGCCAAGATATTTTGAAAATGGAAAXGATGTTAATGATTGGGTTGGGCCA
CCAAATGATAATGGAGTAACTAAAGAAGTTACTATTAATCCAGACACTACTTGTGGCAATGACTGGGTCTGTGAA
CATCGATGGCGCCAAATAAGGAACATGGTTAATTTCCGCAATGTAGTGGATGGCCAGCCTTTTACAAACTGGTAT
GATAATGGGAGCAACCAAGTGGCTTTTGGGAGAGGAAACAGAGGATTCATTGTTTTCAACAATGATGACTGGACA
TTTTCTTTAACTTTGCAAACTGGTCTTCCTGCTGGCACATACTGTGATGTCATTTCTGGAGATAAAATTAATGGC
AACTGCACAGGCATTAAAATCTACGTTTCTGATGATGGCAAAGCTCATTTTTCTATTAGTAACTCTGCTGAAGAT
CCATTTATTGCAATTCATGCTGAATCTAAATTGTAA

FIGURE 6031

MKLFWLLFTIGFCWAQYSSNTQQGRTSIVHLFEWRWVDIALECERYLAPKGFGGVQVSPPNENVAIHNPFRPWWE
RYQPVSYKLCTRSGNEDEFRNMVTRCNNVGVRIYVDAVINHMCGNAVSAGTSSTCGSYFNPGSRDFPAVPYSGWD
FNDGKCKTGSGDIENYNDATQVRDCRLSGLLDLALGKDYVRSKIAEYMNHLIDIGVAGFRIDASKHMWPGDIKAI
LDKLHNLNSNWFPEGSKPFIYQEVIDLGGEPIKSSDYFGNGRVTEFKYGAKLGTVIRKWNGEKMSYLKNWGEGWG
FMPSDRALVFVDNHDNQRGHGAGGASILTFWDARLYKMAVGFMLAHPYGFTRVMSSYRWPRYFENGXDVNDWVGP
PNDNGVTKEVTINPDTTCGNDWVCEHRWRQIRNMVNFRNVVDGQPFTNWYDNGSNQVAFGRGNRGFIVFNNDDWT
FSLTLQTGLPAGTYCDVISGDKINGNCTGIKIYVSDDGKAHFSISNSAEDPFIAIHAESKL

FIGURE 6032

AGTGTGAAATCTTCAGAGAAGAATTTCTCTTTAGTTCTTTGCAAGAAGGTAGAGATAAAGACACTTTTTCAAAAA
TGGCAATGGTATCAGAATTCCTCAAGCAGGCCTGGTTTATTGAAAATGAAGAGCAGGAATATGTTCAAACTGTGA
AGTCATCCAAAGGTGGTCCCGGATCAGCGGTGAGCCCCTATCCTACCTTCAATCCATCCTCGGATGTCGCTGCCT
TGCATAAGGCCATAATGGTTAAAGGTGTGGATGAAGCAACCATCATTGACATTCTAACTAAGCGAAACAATGCAC
AGCGTCAACAGATCAAAGCAGCATATCTCCAGGAAACAGGAAAGCCCCTGGATGAAACACTTAAGAAAGCCCTTA
CAGGTCACCTTGAGGAGGTTGTTTTAGCTCTGCTAAAAACTCCAGCGCAATTTGATGCTGATGAACTTCGTGCTG
CCATGAAGGGCCTTGGAACTGATGAAGATACTCTAATTGAGATTTTGGCATCAAGAACTAACAAAGAAATCAGAG
ACATTAACAGGGTCTACAGAGAGGAACTGAAGAGAGATCTGGCCAAAGACATAACCTCAGACACATCTGGAGATT
TTCGGAACGCTTTGCTTTCTCTTGCTAAGGGTGACCGATCTGAGGACTTTGGTGTGAATGAAGACTTGGCTGATT
CAGATGCCAGGGCCTTGTATGAAGCAGGAGAAAGGAGAAAGGGGACAGACGTAAACGTGTTCAATACCATCCTTA
CCACCAGAAGCTATCCACAACTTCGCAGAGTGTTTCAGAAATACACCAAGTACAGTAAGCATGACATGAACAAAG
TTCTGGACCTGGAGTTGAAAGGTGACATTGAGAAATGCCTCACAGCTATCGTGAAGTGCGCCACAAGCAAACCAG
CTTTCTTTGCAGAGAAGCTTCATCAAGCCATGAAAGGTGTTGGAACTCGCCATAAGGCATTGATCAGGATTATGG
TTTCCCGTTCTGAAATTGACATGAATGATATCAAAGCATTCTATCAGAAGATGTATGGTATCTCCCTTTGCCAAG
CCATCCTGGATGAAACCAAAGGAGATTATGAGAAAATCCTGGTGGCTCTTTGTGGAGGAAACTAAACATTCCCTT
GATGGTCTCAAGCTATGATCAGAAGACTTTAATTATATATTTTCATCCTATAAGCTTAAATAGGAAAGTTTCTTC
AACAGGATTACAGTGTAGCTACCTACATGCTGAAAAATATAGCCTTTAAATCATTTTTATATTATAACTCTGTAT
AATAGAGATAAGTCCATTTTTTAAAAATGTTTTCCCCAAACCATAAAACCCTATACAAGTTGTTCTAGTAACAAT
ACATGAGAAAGATGTCTATGTAGCTGAAAATAAAATGACGTCACAAGAC

FIGURE 6033

MAMVSEFLKQAWFIENEEQEYVQTVKSSKGGPGSAVSPYPTFNPSSDVAALHKAIMVKGVDEATIIDILTKRNNA
QRQQIKAAYLQETGKPLDETLKKALTGHLEEVVLALLKTPAQFDADELRAAMKGLGTDEDTLIEILASRTNKEIR
DINRVYREELKRDLAKDITSDTSGDFRNALLSLAKGDRSEDFGVNEDLADSDARALYEAGERRKGTDVNVFNTIL
TTRSYPQLRRVFQKYTKYSKHDMNKVLDLELKGDIEKCLTAIVKCATSKPAFFAEKLHQAMKGVGTRHKALIRIM
VSRSEIDMNDIKAFYQKMYGISLCQAILDETKGDYEKILVALCGGN

FIGURE 6034

GTAAGTCTGCTGGCCTCCGCCATCTTAGTAAAGTAACAGTCCCATGAAACAAAGATGCAGTCGGGCACTCACTGG
AGAGTTCTGGGCCTCTGCCTCTTATCAGTTGGCGTTTGGGGGCAAGATGGTAATGAAGAAATGGGTGGTATTACA
CAGACACCATATAAAGTCTCCATCTCTGGAACCACAGTAATATTGACATGCCCTCAGTATCCTGGATCTGAAATA
CTATGGCAACACAATGATAAAAACATAGGCGGTGATGAGGATGATAAAAACATAGGCAGTGATGAGGATCACCTG
TCACTGAAGGAATTTTCAGAATTGGAGCAAAGTGGTTATTATGTCTGCTACCCCAGAGGAAGCAAACCAGAAGAT
GCGAACTTTTATCTCTACCTGAGGGCAAGAGTGTGTGAGAACTGCATGGAGATGGATGTGATGTCGGTGGCCACA
ATTGTCATAGTGGACATCTGCATCACTGGGGGCTTGCTGCTGCTGGTTTACTACTGGAGCAAGAATAGAAAGGCC
AAGGCCAAGCCTGTGACACGAGGAGCGGGTGCTGGCGGCAGGCAAAGGGGACAAAACAAGGAGAGGCCACCACCT
GTTCCCAACCCAGACTATGAGCCCATCCGGAAAGGCCAGCGGGACCTGTATTCTGGCCTGAATCAGAGACGCATC
TGACCCTCTGGAGAACACTGCCTCCCGCTGGCCCAGGTCTCCTCTCCAGTCCCCCTGCGACTCCCTGTTTCCTGG
GCTAGTCTTGGACCCCACGAGAGAGAATCGTTCCTCAGCCTCATGGTGAACTCGCGCCCTCCAGCCTGATCCCCC
GCTCCCTCCTCCCTGCCTTCTCTGCTGGTACCCAGTCCTAAAATATTGCTGCTTCCTCTTCCTTTGAAGCATCAT
CAGTAGTCACACCCTCACAGCTGGCCTGCCCTCTTGCCAGGATATTTATTTGTGCTATTCACTCCCTTCCCTTTG
GATGTAACTTCTCCGTTCAGTTCCCTCCTTTTCTTGCATGTAAGTTGTCCCCCATCCCAAAGTATTCCATCTACT
TTTCTATCGCCGTCCCCTTTTGCAGCCCTCTCTGGGGATGGACTGGGTAAATGTTGACAGAGGCCCTGCCCCGTT
CACAGATCCTGGCCCTGAGCCAGCCCTGTGCTCCTCCCTCCCCCAACACTCCCTACCAACCCCCTAATCCCCTAC
TCCCTCCAACCCCCCCTCCCACTGTAGGCCACTGGATGGTCATTTGGCATCTCCGTATATGTGCTCTGGCTCCTC
AGCTGAGAGAGAAAAAAATAAACTGTATTTGGCTGC

FIGURE 6035

MQSGTHWRVLGLCLLSVGVWGQDGNEEMGGITQTPYKVSISGTTVILTCPQYPGSEILWQHNDKNIGGDEDDKNI
GSDEDHLSLKEFSELEQSGYYVCYPRGSKPEDANFYLYLRARVCENCMEMDVMSVATIVIVDICITGGLLLLVYY
WSKNRKAKAKPVTRGAGAGGRQRGQNKERPPPVPNPDYEPIRKGQRDLYSGLNQRRI

FIGURE 6036

CGCTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTATTAACAAGTGTAACTCTTTATTAAGATGGAATTGTTC
TTATTAAAGAAATAGATGAAAATGGTTAAGTACAATTAAATGGCTCCAAAAGTCTTACAATGAAAACAACAGTCC
TGCCAGTTGTTCTTTCCAGAGGCAAATACTTTTCATTCTCTTAGTTTTTCCTTCCGTTAGTTACCTTCATGGGTT
TTTCCAAATTATTGTTTTTACTATTCACCCATCTGCCTCAGTCTGGGCCAAATCTATTGCCCAATCTTCAATTGG
TTGCGACTTTTTTGTCTCTTCCCGATTCTGGCATTCCAGAGGGTCAATAGGTTCCTTCTCCACGTGCTTTTGAGG
GAAATGCCCCCCCCCCCAAAAAACTTTTCACACCACCTTGAACAGACTCTAAACTTAGGCACTACAGTTACTAAGC
AGCCTTTGGATTCTTTGTTTTTGAAGTTAGATCTTTTCAGCTATTAGTGGAAAATGTGCCTCACTCTACTCCAGG
ATTACCAATAGAAATGAAAGGACAGAAATGGCATTAGTGTTTAGAGAAGATTATGTATATATGGCTGTGTGAACA
CTGAAAATTATGAGGGTCAACATAAAATCAGCATTACAGGTACTAAAACATAAATCCTGATGGCTTTCACCGTTT
TCTTAAGAGCAAAATTGCAAAAAGTGATATTAACAGTCATCCTAGACGAATATGAGCAAATGATTTGTTTTTCCT
TAAAAGAGCCTCCAAGTGTATTGTGATCATTTTCACACTGATCAAAGAGAGCACCCTTCTGTCAACAGGTATCTG
CAGTTTTCAGGACCTGGCAGAAATTCTTCTATGTTCTGCCTTTAAAGGTCAGGTACAAAAGCAGAGACAGCTGCC
AGGCCCCTCTGCCCAGAGCTAAGTGTCTGGGACCATGAGTGGGAAGGACAGGCTTGAGCCTCCTTGGTCCTCCAG
ACAGCATGGGGCGCTACTTGCCCCTTCTGCAGCTGCGCGCGGCAAAGCTGTGGCCTGGCCGTGGCCTCCTGCCCC
ATGCAACAGTTGGTGGACAGACCGTACCTGGCACACGGCGCCTTGTGCACTTTCCAACATTTTGATGCCAACCGT
CGCTAGTCACTGAGCCCTGACATTTGATCTCTGGCCTTGACCGCAGATTTCGGAAACTTCTGGCAGCCCAGTGTC
TACTGGAAGGCCCAAGCCGCTTGCCAGAAAGCTGCGCCCCGCCCAAAAGCACTGGGTTCTGCAGTCCAGGCCCTT
CCTCAGCTCCCAGGTCCAGGAGAACTGCAAGGTCACCTACTTCCACAGGAAGCACTGGGTCCGCATCCGGCCCCT
CCGCACCACTCCTCCCAGCTGGGACTACACCCGCATCTGCATCCAGAGAGAGATGGTCCCCGCCCGCATCCGCGT
CCTGAGAGAGATGGTCCCCGAGGCCTGGAGGTGCTTTCCCAACAGGCTGCCGCTGCTGAGCAACATCAGGCCTGA
TTTCTCCAAGGCTCCCCTGGCCTACGTGAAGCGGTGGCTTTGGACCGCCCGCCACCCCCACAGCCTGTCCGCAGC
CTGGTGACCGTGAAAATCGCCCCGCCAGAGAGCAGAGGAAGCCCGACGCCCAGGCCATCTGCCTTCAGGTCTGTG
ATGAGAAACGGAGTGGCCTGCTCCGTTGTGCCCAGGTCTAGGCCGCTGAGCAGAGCCCTCACTCCCAGGCAGAGT
TGTCTGAATCCTTCCTG

FIGURE 6037

CTCCCTCCAGGCAGCCCTTGGCTGGTCCCTGCGAGCCCGTGGAGACTGCCAGAGATGTCCTCTTTCGGTTACAGG
ACCCTGACTGTGGCCCTCTTCACCCTGATCTGCTGTCCAGGATCGGATGAGAAGGTATTCGAGGTACACGTGAGG
CCAAAGAAGCTGGCGGTTGAGCCCAAAGGGTCCCTCGAGGTCAACTGCAGCACCACCTGTAACCAGCCTGAAGTG
GGTGGTCTGGAGACCTCTCTAGATAAGATTCTGCTGGACGAACAGGCTCAGTGGAAACATTACTTGGTCTCAAAC
ATCTCCCATGACACGGTCCTCCAATGCCACTTCACCTGCTCCGGGAAGCAGGAGTCAATGAATTCCAACGTCAGC
GTGTACCAGCCTCCAAGGCAGGTCATCCTGACACTGCAACCCACTTTGGTGGCTGTGGGCAAGTCCTTCACCATT
GAGTGCAGGGTGCCCACCGTGGAGCCCCTGGACAGCCTCACCCTCTTCCTGTTCCGTGGCAATGAGACTCTGCAC
TATGAGACCTTCGGGAAGGCAGCCCCTGCTCCGCAGGAGGCCACAGCCACATTCAACAGCACGGCTGACAGAGAG
GATGGCCACCGCAACTTCTCCTGCCTGGCTGTGCTGGACTTGATGTCTCGCGGTGGCAACATCTTTCACAAACAC
TCAGCCCCGAAGATGTTGGAGATCTATGAGCCTGTGTCGGACAGCCAGATGGTCATCATAGTCACGGTGGTGTCG
GTGTTGCTGTCCCTGTTCGTGACATCTGTCCTGCTCTGCTTCATCTTCGGCCAGCACTTGCGCCAGCAGCGGATG
GGCACCTACGGGGTGCGAGCGGCTTGGAGGAGGCTGCCCCAGGCCTTCCGGCCATAGCAACCATGAGTGGCATGG
CCACCACCACGGTGGTCACTGGAACTCAGTGTGACTCCTCAGGGTTGAGGTCCAGCCCTGGCTGAAGGACTGTGA
CAGGCAGCAGAGACTTGGGACATTGCCTTTTCTAGCCCGAATACAAACACCTGGACTTAAAAAAAAAAAAAAAAA
A

FIGURE 6038

MSSFGYRTLTVALFTLICCPGSDEKVFEVHVRPKKLAVEPKGSLEVNCSTTCNQPEVGGLETSLDKILLDEQAQW
KHYLVSNISHDTVLQCHFTCSGKQESMNSNVSVYQPPRQVILTLQPTLVAVGKSFTIECRVPTVEPLDSLTLFLF
RGNETLHYETFGKAAPAPQEATATFNSTADREDGHRNFSCLAVLDLMSRGGNIFHKHSAPKMLEIYEPVSDSQMV
IIVTVVSVLLSLFVTSVLLCFIFGQHLRQQRMGTYGVRAAWRRLPQAFRP

FIGURE 6039

GCTTTTGTCCCCCGCCCGCCGCTTCTGTCCGAGAGGCCGCCCGCGAGGCGCATCCTGACCGCGAGCGTCGGGTCC
CAGAGCCGGGCGCGGCTGGGGCCCGAGGCTAGCATCTCTCGGGAGCCGCAAGGCGAGAGCTGCAAAGTTTAATTA
GACACTTCAGAATTTTGATCACCTAATGTTGATTTCAGATGTAAAAGTCAAGAGAAGACTCTAAAAATAGCAAAG
ATGCTTTTGAGCCAGAATGCCTTCATCGTCAGATCACTTAATTTGGTTCTCATGGTGTATATCAGCCTCGTGTTT
GGTATTTCATATGATTCGCCTGATTACACAGATGAATCTTGCACTTTCAAGATATCATTGCGAAATTTCCGGTCC
ATCTTATCATGGGAATTAAAAAACCACTCCATTGTACCAACTCACTATACATTGCTGTATACAATCATGAGTAAA
CCAGAAGATTTGAAGGTGGTTAAGAACTGTGCAAATACCACAAGATCATTTTGTGACCTCACAGATGAGTGGAGA
AGCACACACGAGGCCTATGTCACCGTCCTAGAAGGATTCAGCGGGAACACAACGTTGTTCAGTTGCTCACACAAT
TTCTGGCTGGCCATAGACATGTCTTTTGAACCACCAGAGTTTGAGATTGTTGGTTTTACCAACCACATTAATGTG
ATGGTGAAATTTCCATCTATTGTTGAGGAAGAATTACAGTTTGATTTATCTCTCGTCATTGAAGAACAGTCAGAG
GGAATTGTTAAGAAGCATAAACCCGAAATAAAAGGAAACATGAGTGGAAATTTCACCTATATCATTGACAAGTTA
ATTCCAAACACGAACTACTGTGTATCTGTTTATTTAGAGCACAGTGATGAGCAAGCAGTAATAAAGTCTCCCTTA
AAATGCACCCTCCTTCCACCTGGCCAGGAATCAGAATCAGCAGAATCTGCCAAAATAGGAGGAATAATTACTGTG
TTTTTGATAGCATTGGTCTTGACAAGCACCATAGTGACACTGAAATGGATTGGTTATATATGCTTAAGAAATAGC
CTCCCCAAAGTCTTGAGGCAAGGTCTCACTAAGGGCTGGAATGCAGTGGCTATTCACAGGTGCAGTCATAATGCA
CTACAGTCTGAAACTCCTGAGCTCAAACAGTCGTCCTGCCTAAGCTTCCCCAGTAGCTGGGATTACAAGCGTGCA
TCCCTGTGCCCCAGTGATTAAGTTTTATTATGTAGAAAATAAAGAGCAAACAGTTACAAAAGAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAA

FIGURE 6040

MLLSQNAFIVRSLNLVLMVYISLVFGISYDSPDYTDESCTFKISLRNFRSILSWELKNHSIVPTHYTLLYTIMSK
PEDLKVVKNCANTTRSFCDLTDEWRSTHEAYVTVLEGFSGNTTLFSCSHNFWLAIDMSFEPPEFEIVGFTNHINV
MVKFPSIVEEELQFDLSLVIEEQSEGIVKKHKPEIKGNMSGNFTYIIDKLIPNTNYCVSVYLEHSDEQAVIKSPL
KCTLLPPGQESESAESAKIGGIITVFLIALVLTSTIVTLKWIGYICLRNSLPKVLRQGLTKGWNAVAIHRCSHNA
LQSETPELKQSSCLSFPSSWDYKRASLCPSD

FIGURE 6041A

TAGACGCACCCTCTGAAGATGGTGACTCCCTCCTGAGAAGCTGGACCCCTTGGTAAAAGACAAGGCCTTCTCCAA
GAAGAATATGAAAGTGTTACTCAGACTTATTTGTTTCATAGCTCTACTGATTTCTTCTCTGGAGGCTGATAAATG
CAAGGAACGTGAAGAAAAAATAATTTTAGTGTCATCTGCAAATGAAATTGATGTTCGTCCCTGTCCTCTTAACCC
AAATGAACACAAAGGCACTATAACTTGGTATAAAGATGACAGCAAGACACCTGTATCTACAGAACAAGCCTCCAG
GATTCATCAACACAAAGAGAAACTTTGGTTTGTTCCTGCTAAGGTGGAGGATTCAGGACATTACTATTGCGTGGT
AAGAAATTCATCTTACTGCCTCAGAATTAAAATAAGTGCAAAATTTGTGGAGAATGAGCCTAACTTATGTTATAA
TGCACAAGCCATATTTAAGCAGAAACTACCCGTTGCAGGAGACGGAGGACTTGTGTGCCCTTATATGGAGTTTTT
TAAAAATGAAAATAATGAGTTACCTAAATTACAGTGGTATAAGGATTGCAAACCTCTACTTCTTGACAATATACA
CTTTAGTGGAGTCAAAGATAGGCTCATCGTGATGAATGTGGCTGAAAAGCATAGAGGGAACTATACTTGTCATGC
ATCCTACACATACTTGGGCAAGCAATATCCTATTACCCGGGTAATAGAATTTATTACTCTAGAGGAAAACAAACC
CACAAGGCCTGTGATTGTGAGCCCAGCTAATGAGACAATGGAAGTAGACTTGGGATCCCAGATACAATTGATCTG
TAATGTCACCGGCCAGTTGAGTGACATTGCTTACTGGAAGTGGAATGGGTCAGTAATTGATGAAGATGACCCAGT
GCTAGGGGAAGACTATTACAGTGTGGAAAATCCTGCAAACAAAAGAAGGAGTACCCTCATCACAGTGCTTAATAT
ATCGGAAATTGAAAGTAGATTTTATAAACATCCATTTACCTGTTTTGCCAAGAATACACATGGTATAGATGCAGC
ATATATCCAGTTAATATATCCAGTCACTAATTTCCAGAAGCACATGATTGGTATATGTGTCACGTTGACAGTCAT
AATTGTGTGTTCTGTTTTCATCTATAAAATCTTCAAGATTGACATTGTGCTTTGGTACAGGGATTCCTGCTATGA
TTTTCTCCCAATAAAAGCTTCAGATGGAAAGACCTATGACGCATATATACTGTATCCAAAGACTGTTGGGGAAGG
GTCTACCTCTGACTGTGATATTTTTGTGTTTAAAGTCTTGCCTGAGGTCTTGGAAAAACAGTGTGGATATAAGCT
GTTCATTTATGGAAGGGATGACTACGTTGGGGAAGACATTGTTGAGGTCATTAATGAAAACGTAAAGAAAAGCAG
AAGACTGATTATCATTTTAGTCAGAGAAACATCAGGCTTCAGCTGGCTGGGTGGTTCATCTGAAGAGCAAATAGC
CATGTATAATGCTCTTGTTCAGGATGGAATTAAAGTTGTCCTGCTTGAGCTGGAGAAAATCCAAGACTATGAGAA
AATGCCAGAATCGATTAAATTCATTAAGCAGAAACATGGGGCTATCCGCTGGTCAGGGGACTTTACACAGGGACC
ACAGTCTGCAAAGACAAGGTTCTGGAAGAATGTCAGGTACCACATGCCAGTCCAGCGACGGTCACCTTCATCTAA
ACACCAGTTACTGTCACCAGCCACTAAGGAGAAACTGCAAAGAGAGGCTCACGTGCCTCTCGGGTAGCATGGAGA
AGTTGCCAAGAGTTCTTTAGGTGCCTCCTGTCTTATGGCGTTGCAGGCCAGGTTATGCCTCATGCTGACTTGCAG
AGTTCATGGAATGTAACTATATCATCCTTTATCCCTGAGGTCACCTGGAATCAGATTATTAAGGGAATAAGCCAT
GACGTCAATAGCAGCCCAGGGCACTTCAGAGTAGAGGGCTTGGGAAGATCTTTTAAAAAGGCAGTAGGCCCGGTG
TGGTGGCTCACGCCTATAATCCCAGCACTTTGGGAGGCTGAAGTGGGTGGATCACCAGAGGTCAGGAGTTCGAGA
CCAGCCCAGCCAACATGGCAAAACCCCATCTCTACTAAAAATACAAAAATGAGCTAGGCATGGTGGCACACGCCT
GTAATCCCAGCTACACCTGAGGCTGAGGCAGGAGAATTGCTTGAACCGGGGAGACGGAGGTTGCAGTGAGCCGAG
TTTGGGCCACTGCACTCTAGCCTGGCAACAGAGCAAGACTCCGTCTCAAAAAAAGGGCAATAAATGCCCTCTCTG
AATGTTTGAACTGCCAAGAAAAGGCATGGAGACAGCGAACTAGAAGAAAGGGCAAGAAGGAAATAGCCACCGTCT
ACAGATGGCTTAGTTAAGTCATCCACAGCCCAAGGGCGGGGCTATGCCTTGTCTGGGGACCCTGTAGAGTCACTG
ACCCTGGAGCGGCTCTCCTGAGAGGTGCTGCAGGCAAAGTGAGACTGACACCTCACTGAGGAAGGGAGACATATT
CTTGGAGAACTTTCCATCTGCTTGTATTTTCCATACACATCCCCAGCCAGAAGTTAGTGTCCGAAGACCGAATTT
TATTTTACAGAGCTTGAAAACTCACTTCAATGAACAAAGGGATTCTCCAGGATTCCAAAGTTTTGAAGTCATCTT
AGCTTTCCACAGGAGGGAGAGAACTTAAAAAAGCAACAGTAGCAGGGAATTGATCCACTTCTTAATGCTTTCCTC
CCTGGCATGACCATCCTGTCCTTTGTTATTATCCTGCATTTTACGTCTTTGGAGGAACAGCTCCCTAGTGGCTTC
CTCCGTCTGCAATGTCCCTTGCACAGCCCACACATGAACCATCCTTCCCATGATGCCGCTCTTCTGTCATCCCGC
TCCTGCTGAAACACCTCCCAGGGGCTCCACCTGTTCAGGAGCTGAAGCCCATGCTTTCCCACCAGCATGTCACTC
CCAGACCACCTCCCTGCCCTGTCCTCCAGCTTCCCCTCGCTGTCCTGCTGTGTGAATTCCCAGGTTGGCCTGGTG
GCCATGTCGCCTGCCCCCAGCACTCCTCTGTCTCTGCTCTTGCCTCGACCCTTCCTCCTCCTTTGCCTAGGAGGC
CTTCTCGCATTTTCTCTAGCTGATCAGAATTTTACCAAAATTCAGAACATCCTCCAATTCCACAGTCTCTGGGAG
ACTTTCCCTAAGAGGCGACTTCCTCTCCAGCCTTCTCTCTCTGGTCAGGCCCACTGCAGAGATGGTGGTGAGCAC
ATCTGGGAGGCTGGTCTCCCTCCAGCTGGAATTGCTGCTCTCTGAGGGAGAGGCTGTGGTGGCTGTCTCTGTCCC
TCACTGCCTTCCAGGAGCAATTTGCACATGTAACATAGATTTATGTAATGCTTTATGTTTAAAAACATTCCCCAA
TTATCTTATTTAATTTTTGCAATTATTCTAATTTTATATATAGAGAAAGTGACCTATTTTTTAAAAAAATCACAC
TCTAAGTTCTATTGAACCTAGGACTTGAGCCTCCATTTCTGGCTTCTAGTCTGGTGTTCTGAGTACTTGATTTCA

FIGURE 6041B

GGTCAATAACGGTCCCCCCTCACTCCACACTGGCACGTTTGTGAGAAGAAATGACATTTTGCTAGGAAGTGACCG
AGTCTAGGAATGCTTTTATTCAAGACACCAAATTCCAAACTTCTAAATGTTGGAATTTTCAAAAATTGTGTTTAG
ATTTTATGAAAAACTCTTCTACTTTCATCTATTCTTTCCCTAGAGGCAAACATTTCTTAAAATGTTTCATTTTCA
TTAAAAATGAAAGCCAAATTTATATGCCACCGATTGCAGGACACAAGCACAGTTTTAAGAGTTGTATGAACATGG
AGAGGACTTTTGGTTTTTATATTTCTCGTATTTAATATGGGTGAACACCAACTTTTATTTGGAATAATAATTTTC
CTCCTAAACAAAAACACATTGAGTTTAAGTCTCTGACTCTTGCCTTTCCACCTGCTTTCTCCTGGGCCCGCTTTG
CCTGCTTGAAGGAACAGTGCTGTTCTGGAGCTGCTGTTCCAACAGACAGGGCCTAGCTTTCATTTGACACACAGA
CTACAGCCAGAAGCCCATGGAGCAGGGATGTCACGTCTTGAAAAGCCTATTAGATGTTTTACAAATTTAATTTTG
CAGATTATTTTAGTCTGTCATCCAGAAAATGTGTCAGCATGCATAGTGCTAAGAAAGCAAGCCAATTTGGAAACT
TAGGTTAGTGACAAAATTGGCCAGAGAGTGGGGGTGATGATGACCAAGAATTACAAGTAGAATGGCAGCTGGAAT
TTAAGGAGGGACAAGAATCAATGGATAAGCGTGGGTGGAGGAAGATCCAAACAGAAAAGTGCAAAGTTATTCCCC
ATCTTCCAAGGGTTGAATTCTGGAGGAAGAAGACACATTCCTAGTTCCCCGTGAACTTCCTTTGACTTATTGTCC
CCACTAAAACAAAACAAAAAACTTTTAATGCCTTCCACATTAATTAGATTTTCTTGCAGTTTTTTTATGGCATTT
TTTTAAAGATGCCCTAAGTGTTGAAGAAGAGTTTGCAAATGCAACAAAAATATTTAATTACCGGTTGTTAAAACT
GGTTTAGCACAATTTATATTTTCCCTCTCTTGCCTTTCTTATTTGCAATAAAAGGTATTGAGCCATTTTTTAAAT
GACATTTTTGATAAATTATGTTTGTACTAGTTGATGAAGGAGTTTTTTTTAACCTGTTTATATAATTTTGCAGCA
GAAGCCAAATTTTTTGTATATTAAAGCACCAAATTCATGTACAGCATGCATCACGGATCAATAGACTGTACTTAT
TTTCCAATAAAATTTTCAAACTTTGTACTGTTAAA

FIGURE 6042

MKVLLRLICFIALLISSLEADKCKEREEKIILVSSANEIDVRPCPLNPNEHKGTITWYKDDSKTPVSTEQASRIH
QHKEKLWFVPAKVEDSGHYYCVVRNSSYCLRIKISAKFVENEPNLCYNAQAIFKQKLPVAGDGGLVCPYMEFFKN
ENNELPKLQWYKDCKPLLLDNIHFSGVKDRLIVMNVAEKHRGNYTCHASYTYLGKQYPITRVIEFITLEENKPTR
PVIVSPANETMEVDLGSQIQLICNVTGQLSDIAYWKWNGSVIDEDDPVLGEDYYSVENPANKRRSTLITVLNISE
IESRFYKHPFTCFAKNTHGIDAAYIQLIYPVTNFQKHMIGICVTLTVIIVCSVFIYKIFKIDIVLWYRDSCYDFL
PIKASDGKTYDAYILYPKTVGEGSTSDCDIFVFKVLPEVLEKQCGYKLFIYGRDDYVGEDIVEVINENVKKSRRL
IIILVRETSGFSWLGGSSEEQIAMYNALVQDGIKVVLLELEKIQDYEKMPESIKFIKQKHGAIRWSGDFTQGPQS
AKTRFWKNVRYHMPVQRRSPSSKHQLLSPATKEKLQREAHVPLG

FIGURE 6043A

GCAGCCAGAGCTCAGCAGGGCCCTGGAGAGATGGCCACGGTCCCAGCACCGGGGAGGACTGGAGAGCGCGCGCTG
CCACCGCCCCATGTCTCAGCCAGGGCTTCCTTCCTCGGCTCCACCCTGTGGATGTAATGGCGGCCCCTGCTCTGT
CCTGGCGTCTGCCCCTCCTCATCCTCCTCCTGCCCCTGGCTACCTCTTGGGCATCTGCAGCGGTGAATGGCACTT
CCCAGTTCAGATGCTTCTACAACTCGAGAGCCAACATCTCCTGTCTCTGGAGCCAAGATGGGGCTCTGCAGGACA
CTTCCTGCCAAGTCCATGCCTGGCCGGACAGACGGCGGTGGAACCAAACCTGTGAGCTGCTCCCCGTGAGTCAAG
CATCCTGGGCCTGCAACCTGATCCTCGGAGCCCCAGATTCTCAGAAACTGACCACAGTTGACATCGTCACCCTGA
GGGTGCTGTGCCGTGAGGGGGTGCGATGGAGGGTGATGGCCATCCAGGACTTCAAGCCCTTTGAGAACCTTCGCC
TGATGGCCCCCATCTCCCTCCAAGTTGTCCACGTGGAGACCCACAGATGGAACATAAGCTGGGAAATCTCCCAAG
CCTCCCACTACTTTGAAAGACACCTGGAGTTCGAGGCCCGGACGCTGTCCCCAGGCCACACCTGGGAGGAGGCCC
CCCTGCTGACTCTCAAGCAGAAGCAGGAATGGATCTGCCTGGAGACGCTCACCCCAGACACCCAGTATGAGTTTC
AGGTGCGGGTCAAGCCTCTGCAAGGCGAGTTCACGACCTGGAGCCCCTGGAGCCAGCCCCTGGCCTTCAGGACAA
AGCCTGCAGCCCTTGGGAAGGACACCATTCCGTGGCTCGGCCACCTCCTCGTGGGCCTCAGCGGGGCTTTTGGCT
TCATCATCTTAGTGTACTTGCTGATCAACTGCAGGAACACCGGGCCATGGCTGAAGAAGCTCCTGAAGTGTAACA
CCCCAGACCCCTCGAAGTTCTTTTCCCAGCTGAGCTCAGAGCATGGAGGAGACGTCCAGAAGTGGCTCTCTTCGC
CCTTCCCCTGATCGTCCTTCAGCCCTGGCGGCCTGGCACCTGAGATCTCGCCACTAGAAGTGCTGGAGAGGGACA
AGGTGACGCAGCTGCTCCTGCAGCAGGACAAGGTGCCTGAGCCCGCATCCTTAAGCAGCAACCACTCGCTGACCA
GCTGCTTCACCAACCAGGGTTACTTCTTCTTCCACCTCCCGGATGCCTTGGAGATAGAGGCCTGCCAGGTGTACT
TTACTTACGACCCCTACTCAGAGGAAGACCCTGATGAGGGTGTGGCCGGGGCACCCACAGGGTCTTCCCCCCAAC
CCCTGCAGCCTCTGTCAGGGGAGGACGACGCCTACTGCACCTTCCCCTCCAGGGATGACCTGCTGCTCTTCTCCC
CCAGTCTCCTCGGTGGCCCCAGCCCCCCAAGCACTGCCCCTGGGGGCAGTGGGGCCGGTGAAGAGAGGATGCCCC
CTTCTTTGCAAGAAAGAGTCCCCAGAGACTGGGACCCCCAGCCCCTGGGGCCTCCCACCCCAGGAGTCCCAGACC
TGGTGGATTTTCAGCCACCCCCTGAGCTGGTGCTGCGAGAGGCTGGGGAGGAGGTCCCTGACGCTGGCCCCAGGG
AGGGAGTCAGTTTCCCCTGGTCCAGGCCTCCTGGGCAGGGGGAGTTCAGGGCCCTTAATGCTCGCCTGCCCCTGA
ACACTGATGCCTACTTGTCCCTCCAAGAACTCCAGGGTCAGGACCCAATCCACTTGGTGTAGACAGATGGCCAGG
GTGGGAGGCAGGCAGCTGCCTGCTCTGCGCCGAGCCTCAGAAGGACCCTGTTGAGGGTCCTCAGTCCACTGCTGA
GGACACTCAGTGTCCAGTTGCAGCTGGACTTCTCCACCCGGATGGCCCCCACCCAGTCCTGCACACTTGGTCCAT
CCATTTCCAAACCTCCACTGCTGCTCCCGGGTCCTGCTGCCCGAGCCAGGAACTGTGTGTGTTGCAGGGGGGCAG
TAACTCCCCAACTCCCTCGTTAATCACAGGATCCCACGAATTTAGGCTCAGAAGCATCGCTCCTCTCCAGCCCTG
CAGCTATTCACCAATATCAGTCCTCGCGGCTCTCCAGGGCTCCCTGCCCTGACCTCTTCCCTGGGTTTTCTGCCC
CAGCCTCCTCCTTCCCTCCCCTCCCCGTCCACAGGGCAGCCTGAGCGTGCTTTCCAAAACCCAAATATGGCCACG
CTCCCCCTCGGTTCAAAACCTTGCACAGGTCCCACTGCCCTCAGCCCCACTTCTCAGCCTGGTACTTGTACCTCC
GGTGTCGTGTGGGGACATCCCCTTCTGCAATCCTCCCTACCGTCCTCCCGAGCCACTCAGAGCTCCCTCACACCC
CCTCTGTTGCACATGCTATTCCCTGGGGCTGCTGTGCGCTCCCCCTCATCTAGGTGACAAACTTCCCTGACTCTT
CAAGTGCCGGTTTTGCTTCTCCTGGAGGGAAGCACTGCCTCCCTTAATCTGCCAGAAACTTCTAGCGTCAGTGCT
GGAGGGAGAAGCTGTCAGGGACCCAGGGCGCCTGGAGAAAGAGGCCCTGTTACTATTCCTTTGGGATCTCTGAGG
CCTCAGAGTGCTTGGCTGCTGTATCTTTAATGCTGGGGCCCAAGTAAGGGCACAGATCCCCCCGACAAAGTGGAT
GCCTGCTGCATCTTCCCACAGTGGCTTCACAGACCCACAAGAGAAGCTGATGGGGAGTAAACCCTGGAGTCCGAG
GCCCAGGCAGCAGCCCCGCCTAGTGGTGGGCCCTGATGCTGCCAGGCCTGGGACCTCCCACTGCCCCCTCCACTG
GAGGGGTCTCCTCTGCAGCTCAGGGACTGGCACACTGGCCTCCAGAAGGGCAGCTCCACAGGGCAGGGCCTCATT
ATTTTTCACTGCCCCAGACACAGTGCCCAACACCCCGTCGTATACCCTGGATGAACGAATTAATTACCTGGCACC
ACCTCGTCTGGGCTCCCTGCGCCTGACATTCACACAGAGAGGCAGAGTCCCGTGCCCATTAGGTCTGGCATGCCC
CCTCCTGCAAGGGGCTCAACCCCCTACCCCGACCCCTCCACGTATCTTTCCTAGGCAGATCACGTTGCAATGGCT
CAAACAACATTCCACCCCAGCAGGACAGTGACCCCAGTCCCAGCTAACTCTGACCTGGGAGCCCTCAGGCACCTG
CACTTACAGGCCTTGCTCACAGCTGATTGGGCACCTGACCACACGCCCCCACAGGCTCTGACCAGCAGCCTATGA
GGGGGTTTGGCACCAAGCTCTGTCCAATCAGGTAGGCTGGGCCTGAACTAGCCAATCAGATCAACTCTGTCTTGG
GCGTTTGAACTCAGGGAGGGAGGCCCTTGGGAGCAGGTGCTTGTGGACAAGGCTCCACAAGCGTTGAGCCTTGGA
AAGGTAGACAAGCGTTGAGCCACTAAGCAGAGGACCTTGGGTTCCCAATACAAAAATACCTACTGCTGAGAGGGC
TGCTGACCATTTGGTCAGGATTCCTGTTGCCTTTATATCCAAAATAAACTCCCCTTTCTTGAGGTTGTCTGAGTC

FIGURE 6043B

TTGGGTCTATGCCTTGAAAAAAGCTGAATTATTGGACAGTCTCACCTCCTGCCATAGGGTCCTGAATGTTTCAGA
CCACAAGGGGCTCCACACCTTTGCTGTGTGTTCTGGGGCAACCTACTAATCCTCTCTGCAAGTCGGTCTCCTTAT
CCCCCCAAATGGAAATTGTATTTGCCTTCTCCACTTTGGGAGGCTCCCACTTCTTGGGAGGGTTACATTTTTAA
GTCTTAATCATTTGTGACATATGTATCTATACATCCGTATCTTTTAATGATCCGTGTGTACCATCTTTGTGATTA
TTTCCTTAATATTTTTTCTTTAAGTCAGTTCATTTTCGTTGAAATACATTTATAAAGAAAAATCTTTGTTACTCT
GTAAATGAAAAAACCCATTTTCGCTATAAATAAAAGGTAACTGTACAAAATAAGTACAAT

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FIGURE 6044

MAAPALSWRLPLLILLLPLATSWASAAVNGTSQFRCFYNSRANISCLWSQDGALQDTSCQVHAWPDRRRWNQTCE
LLPVSQASWACNLILGAPDSQKLTTVDIVTLRVLCREGVRWRVMAIQDFKPFENLRLMAPISLQVVHVETHRWNI
SWEISQASHYFERHLEFEARTLSPGHTWEEAPLLTLKQKQEWICLETLTPDTQYEFQVRVKPLQGEFTTWSPWSQ
PLAFRTKPAALGKDTIPWLGHLLVGLSGAFGFIILVYLLINCRNTGPWLKKLLKCNTPDPSKFFSQLSSEHGGDV
QKWLSSPFP

FIGURE 6045

ATGCACTTTCTTTGCCAAAGGCAAACGCAGAACGTTTCAGAGCCATGAGGATGCTTCTGCATTTGAGTTTGCTAG
CTCTTGGAGCTGCCTACGTGTATGCCATCCCCACAGAAATTCCCACAAGTGCATTGGTGAAAGAGACCTTGGCAC
TGCTTTCTACTCATCGAACTCTGCTGATAGCCAATGAGACTCTGAGGATTCCTGTTCCTGTACATAAAAATCACC
AACTGTGCACTGAAGAAATCTTTCAGGGAATAGGCACACTGGAGAGTCAAACTGTGCAAGGGGGTACTGTGGAAA
GACTATTCAAAAACTTGTCCTTAATAAAGAAATACATTGACGGCCAAAAAAAAAAAGTGTGGAGAAGAAAGACGGA
GAGTAAACCAATTCCTAGACTACCTGCAAGAGTTTCTTGGTGTAATGAACACCGAGTGGATAATAGAAAGTTGAAG
ACTAAACTGGTTTGTTGCAGCCAAAGATTTTGGAGGAGAAGGACATTTTACTGCAGTGAGAATGAGGGCCAAGAA
AGAGTCAGGCCTTAATTTTCAATATAATTTAACTTCAGAGGGAAAGTAAATATTTCAGGCATACTGACACTTTGC
CAGAAAGCATAAAATTCTTAAAATATATTTCAGATATCAGAATCATTGAAGTATTTTCCTCCAGGCAAAATTGAT
ATACTTTTTTCTTATTTAACTTAACATTCTGTAAAATGTCTGTTAACTTAATAGTATTTATGAAATGGTTAAGAA
TTTGGTAAATTAGTATTTATTTAATGTTATGTTGTGTTCTAATAAAACAAAAATAGACAACTGTTC

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FIGURE 6046

MRMLLHLSLLALGAAYVYAIPTEIPTSALVKETLALLSTHRTLLIANETLRIPVPVHKNHQLCTEEIFQGIGTLE
SQTVQGGTVERLFKNLSLIKKYIDGQKKKCGEERRRVNQFLDYLQEFLGVMNTEWIIES

FIGURE 6047A

GAATTCCGGGCCGCTTAGTGTTGAATGTTCCCCACCGAGAGCGCATGGCTTGGGAAGCGAGGCGCGAACCCGGGC
CCCGAAGCCGCCGTCCGGGAGACGGTGATGCTGTTGCTGTGCCTGGGGGTCCCGACCGGCCGCCCCTACAACGTG
GACACTGAGAGCGCGCTGCTTTACCAGGGCCCCCACAACACGCTGTTCGGCTACTCGGTCGTGCTGCACAGCCAC
GGGGCGAACCGATGGCTCCTAGTGGGTGCGCCCACTGCCAACTGGCTCGCCAACGCTTCAGTGATCAATCCCGGG
GCGATTTACAGATGCAGGATCGGAAAGAATCCCGGCCAGACGTGCGAACAGCTCCAGCTGGGTAGCCCTAATGGA
GAACCTTGTGGAAAGACTTGTTTGGAAGAGAGAGACAATCAGTGGTTGGGGGTCACACTTTCCAGACAGCCAGGA
GAAAATGGATCCATCGTGACTTGTGGGCATAGATGGAAAAATATATTTTACATAAAGAATGAAAATAAGCTCCCC
ACTGGTGGTTGCTATGGAGTGCCCCCTGATTTACGAACAGAACTGAGTAAAAGAATAGCTCCGTGTTATCAAGAT
TATGTGAAAAAATTTGGAGAAAATTTTGCATCATGTCAAGCTGGAATATCCAGTTTTTACACAAAGGATTTAATT
GTGATGGGGGCCCCAGGATCATCTTACTGGACTGGCTCTCTTTTTGTCTACAATATAACTACAAATAAATACAAG
GCTTTTTTAGACAAACAAAATCAAGTAAAATTTGGAAGTTATTTAGGATATTCAGTCGGAGCTGGTCATTTTCGG
AGCCAGCATACTACCGAAGTAGTCGGAGGAGCTCCTCAACATGAGCAGATTGGTAAGGCATATATATTCAGCATT
GATGAAAAAGAACTAAATATCTTACATGAAATGAAAGGTAAAAAGCTTGGATCGTACTTTGGAGCTTCTGTCTGT
GCTGTGGACCTCAATGCAGATGGCTTCTCAGATCTGCTCGTGGGAGCACCCATGCAGAGCACCATCAGAGAGGAA
GGAAGAGTGTTTGTGTACATCAACTCTGGCTCGGGAGCAGTAATGAATGCAATGGAAACAAACCTCGTTGGAAGT
GACAAATATGCTGCAAGATTTGGGGAATCTATAGTTAATCTTGGCGACATTGACAATGATGGCTTTGAAGATGTT
GCTATCGGAGCTCCACAAGAAGATGACTTGCAAGGTGCTATTTATATTTACAATGGCCGTGCAGATGGGATCTCG
TCAACCTTCTCACAGAGAATTGAAGGACTTCAGATCAGCAAATCGTTAAGTATGTTTGGACAGTCTATATCAGGA
CAAATTGATGCAGATAATAATGGCTATGTAGATGTAGCAGTTGGTGCTTTTCGGTCTGATTCTGCTGTCTTGCTA
AGGACAAGACCTGTAGTAATTGTTGACGCTTCTTTAAGCCACCCTGAGTCAGTAAATAGAACGAAATTTGACTGT
GTTGAAAATGGATGGCCTTCTGTGTGCATAGATCTAACACTTTGTTTCTCATATAAGGGCAAGGAAGTTCCAGGT
TACATTGTTTTGTTTTATAACATGAGTTTGGATGTGAACAGAAAGGCAGAGTCTCCACCAAGATTCTATTTCTCT
TCTAATGGAACTTCTGACGTGATTACAGGAAGCATACAGGTGTCCAGCAGAGAAGCTAACTGTAGAACACATCAA
GCATTTATGCGGAAAGATGTGCGGGACATCCTCACCCCAATTCAGATTGAAGCTGCTTACCACCTTGGTCCTCAT
GTCATCAGTAAACGAAGTACAGAGGAATTCCCACCACTTCAGCCAATTCTTCAGCAGAAGAAAGAAAAAGACATA
ATGAAAAAAACAATAAACTTTGCAAGGTTTTGTGCCCATGAAAATTGTTCTGCTGATTTACAGGTTTCTGCAAAG
ATTGGGTTTTTGAAGCCCCATGAAAATAAAACATATCTTGCTGTTGGGAGTATGAAGACATTGATGTTGAATGTG
TCCTTGTTTAATGCTGGAGATGATGCATATGAAACGACTCTACATGTCAAACTACCCGTGGGTCTTTATTTCATT
AAGATTTTAGAGCTGGAAGAGAAGCAAATAAACTGTGAAGTCACAGATAACTCTGGCGTGGTACAACTTGACTGC
AGTATTGGCTATATATATGTAGATCATCTCTCAAGGATAGATATTAGCTTTCTCCTGGATGTGAGCTCACTCAGC
AGAGCGGAAGAGGACCTCAGTATCACAGTGCATGCTACCTGTGAAAATGAAGAGGAAATGGACAATCTAAAGCAC
AGCAGAGTGACTGTAGCAATACCTTTAAAATATGAGGTTAAGCTGACTGTTCATGGGTTTGTAAACCCAACTTCA
TTTGTGTATGGATCAAATGATGAAAATGAGCCTGAAACGTGCATGGTGGAGAAAATGAACTTAACTTTCCATGTT
ATCAACACTGGCAATAGTATGGCTCCCAATGTTAGTGTGGAAATAATGGTACCAAATTCTTTTAGCCCCCAAACT
GATAAGCTGTTCAACATTTTGGATGTCCAGACTACTACTGGAGAATGCCACTTTGAAAATTATCAAAGAGTGTGT
GCATTAGAGCAGCAAAAGAGTGCAATGCAGACCTTGAAAGGCATAGTCCGGTTCTTGTCCAAGACTGATAAGAGG
CTATTGTACTGCATAAAAGCTGATCCACATTGTTTAAATTTCTTGTGTAATTTTGGGAAAATGGAAAGTGGAAAA
GAAGCCAGTGTTCATATCCAACTGGAAGGCCGGCCATCCATTTTAGAAATGGATGAGACTTCAGCACTCAAGTTT
GAAATAAGAGCAACAGGTTTTCCAGAGCCAAATCCAAGAGTAATTGAACTAAACAAGGATGAGAATGTTGCGCAT
GTTCTACTGGAAGGACTACATCATCAAAGACCCAAACGTTATTTCACCATAGTGATTATTTCAAGTAGCTTGCTA
CTTGGACTTATTGTACTTCTGTTGATCTCATATGTTATGTGGAAGGCTGGCTTCTTTAAAAGACAATACAAATCT
ATCCTACAAGAAGAAAACAGAAGAGACAGTTGGAGTTATATCAACAGTAAAAGCAATGATGATTAAGGACTTCTT
TCAAATTGAGAGAATGGAAAACAGACTCAGGTTGTAGTAAAGAAATTTAAAAGACACTGTTTACAAGAAAAAATG
AATTTTGTTTGGACTTCTTTTACTCATGATCTTGTGACATATTATGTCTTCATGCAAGGGGAAAATCTCAGCAAT
GATTACTCTTTGAGATAGAAGAACTGCAAAGGTAATAATACAGCCAAAGATAATCTCTCAGCTTTTAAATGGGTA
GAGAAACACTAAAGCATTCAATTTATTCAAGAAAAGTAAGCCCTTGAAGATATCTTGAAATGAAAGTATAACTGA
GTTAAATTATACTGGAGAAGTCTTAGACTTGAAATACTACTTACCATATGTGCTTGCCTCAGTAAAATGAACCCC
ACTGGGTGGGCAGAGGTTCATTTCAAATACATCTTTGATACTTGTTCAAAATATGTTCTTTAAAAATATAATTTT

FIGURE 6047B

TTAGAGAGCTGTTCCCAAATTTTCTAACGAGTGGACCATTATCACTTTAAAGCCCTTTATTTATAATACATTTCC
TACGGGCTGTGTTCCAACAACCATTTTTTTTCAGCAGACTATGAATATTATAGTATTATAGGCCAAACTGGCAAA
CTTCAGACTGAACATGTACACTGGTTTGAGCTTAGTGAAATGACTTCCGGAATCT

FIGURE 6048

MFPTESAWLGKRGANPGPEAAVRETVMLLLCLGVPTGRPYNVDTESALLYQGPHNTLFGYSVVLHSHGANRWLLV
GAPTANWLANASVINPGAIYRCRIGKNPGQTCEQLQLGSPNGEPCGKTCLEERDNQWLGVTLSRQPGENGSIVTC
GHRWKNIFYIKNENKLPTGGCYGVPPDLRTELSKRIAPCYQDYVKKFGENFASCQAGISSFYTKDLIVMGAPGSS
YWTGSLFVYNITTNKYKAFLDKQNQVKFGSYLGYSVGAGHFRSQHTTEVVGGAPQHEQIGKAYIFSIDEKELNIL
HEMKGKKLGSYFGASVCAVDLNADGFSDLLVGAPMQSTIREEGRVFVYINSGSGAVMNAMETNLVGSDKYAARFG
ESIVNLGDIDNDGFEDVAIGAPQEDDLQGAIYIYNGRADGISSTFSQRIEGLQISKSLSMFGQSISGQIDADNNG
YVDVAVGAFRSDSAVLLRTRPVVIVDASLSHPESVNRTKFDCVENGWPSVCIDLTLCFSYKGKEVPGYIVLFYNM
SLDVNRKAESPPRFYFSSNGTSDVITGSIQVSSREANCRTHQAFMRKDVRDILTPIQIEAAYHLGPHVISKRSTE
EFPPLQPILQQKKEKDIMKKTINFARFCAHENCSADLQVSAKIGFLKPHENKTYLAVGSMKTLMLNVSLFNAGDD
AYETTLHVKLPVGLYFIKILELEEKQINCEVTDNSGVVQLDCSIGYIYVDHLSRIDISFLLDVSSLSRAEEDLSI
TVHATCENEEEMDNLKHSRVTVAIPLKYEVKLTVHGFVNPTSFVYGSNDENEPETCMVEKMNLTFHVINTGNSMA
PNVSVEIMVPNSFSPQTDKLFNILDVQTTTGECHFENYQRVCALEQQKSAMQTLKGIVRFLSKTDKRLLYCIKAD
PHCLNFLCNFGKMESGKEASVHIQLEGRPSILEMDETSALKFEIRATGFPEPNPRVIELNKDENVAHVLLEGLHH
QRPKRYFTIVIISSSLLLGLIVLLLISYVMWKAGFFKRQYKSILQEENRRDSWSYINSKSNDD

FIGURE 6049

AGCCCAGAGAGAAAGTCTGACTTGCCCCACAGCCAGTGAGTGACTGCAGCAGCACCAGAATCTGGTCTGTTTCCT
GTTTGGCTCTTCTACCACTACGGCTTGGGATCTCGGGCATGGTGGCTTTGCCAATGGTCCTTGTTTTGCTGCTGG
TCCTGAGCAGAGGTGAGAGTGAATTGGACGCCAAGATCCCATCCACAGGGGATGCCACAGAATGGCGGAATCCTC
ACCTGTCCATGCTGGGGTCCTGCCAGCCAGCCCCCTCCTGCCAGAAGTGCATCCTCTCACACCCCAGCTGTGCAT
GGTGCAAGCAACTGAACTTCACCGCGTCGGGAGAGGCGGAGGCGCGGCGCTGCGCCCGACGAGAGGAGCTGCTGG
CTCGAGGCTGCCCGCTGGAGGAGCTGGAGGAGCCCCGCGGCCAGCAGGAGGTGCTGCAGGACCAGCCGCTCAGCC
AGGGCGCCCGCGGAGAGGGTGCCACCCAGCTGGCGCCGCAGCGGGTCCGGGTCACGCTGCGGCCTGGGGAGCCCC
AGCAGCTCCAGGTCCGCTTCCTTCGTGCTGAGGGATACCCGGTGGACCTGTACTACCTTATGGACCTGAGCTACT
CCATGAAGGACGACCTGGAACGCGTGCGCCAGCTCGGGCACGCTCTGCTGGTCCGGCTGCAGGAAGTCACCCATT
CTGTGCGCATTGGTTTTGGTTCCTTTGTGGACAAAACGGTGCTGCCCTTTGTGAGCACAGTACCCTCCAAACTGC
GCCACCCCTGCCCCACCCGGCTGGAGCGCTGCCAGTCACCATTCAGCTTTCACCATGTGCTGTCCCTGACGGGGG
ACGCACAAGCCTTCGAGCGGGAGGTGGGGCGCCAGAGTGTGTCCGGCAATCTGGACTCGCCTGAAGGTGGCTTCG
ATGCCATTCTGCAGGCTGCACTCTGCCAGGAGCAGATTGGCTGGAGAAATGTGTCCCGGCTGCTGGTGTTCACTT
CAGACGACACATTCCATACAGCTGGGGACGGGAAGTTGGGCGGCATTTTCATGCCCAGTGATGGGCACTGCCACT
TGGACAGCAATGGCCTCTACAGTCGCAGCACAGAGTTTGACTACCCTTCTGTGGGTCAGGTAGCCCAGGCCCTCT
CTGCAGCAAATATCCAGCCCATCTTTGCTGTCACCAGTGCCGCACTGCCTGTCTACCAGGAGCTGAGTAAACTGA
TTCCTAAGTCTGCAGTTGGGGAGCTGAGTGAGGACTCCAGCAACGTGGTACAGCTCATCATGGATGCTTATAATA
GCCTGTCTTCCACTGTGACCCTTGAACACTCTTCACTCCCTCCTGGGGTCCACATTTCTTACGAATCCCAGTGTG
AGGGTCCTGAGAAGAGGGAGGGTAAGGCTGAGGATCGAGGACAGTGCAACCACGTCCGAATCAACCAGACGGTGA
CTTTCTGGGTTTCTCTCCAAGCCACCCACTGCCTCCCAGAGCCCCATCTCCTGAGGCTCCGGGCCCTTGGCTTCT
CAGAGGAGCTGATTGTGGAGTTGCACACGCTGTGTGACTGTAATTGCAGTGACACCCAGCCCCAGGCTCCCCACT
GCAGTGATGGCCAGGGACACCTACAATGTGGTGTATGCAGCTGTGCCCCTGGCCGCCTAGGTCGGCTCTGTGAGT
GCTCTGTGGCAGAGCTGTCCTCCCCAGACCTGGAATCTGGGTGCCGGGCTCCCAATGGCACAGGGCCCCTGTGCA
GTGGAAAGGGTCACTGTCAATGTGGACGCTGCAGCTGCAGTGGACAGAGCTCTGGGCATCTGTGCGAGTGTGACG
ATGCCAGCTGTGAGCGACATGAGGGCATCCTCTGCGGAGGCTTTGGTCGCTGCCAATGTGGAGTATGTCACTGTC
ATGCCAACCGCACGGGCAGAGCATGCGAATGCAGTGGGGACATGGACAGTTGCATCAGTCCCGAGGGAGGGCTCT
GCAGTGGGCATGGACGCTGCAAATGCAACCGCTGCCAGTGCTTGGACGGCTACTATGGTGCTCTATGCGACCAAT
GCCCAGGCTGCAAGACACCATGCGAGAGACACCGGGACTGTGCAGAGTGTGGGGCCTTCAGGACTGGCCCACTGG
CCACCAACTGCAGTACAGCTTGTGCCCATACCAATGTGACCCTGGCCTTGGCCCCTATCTTGGATGATGGCTGGT
GCAAAGAGCGGACCCTGGACAACCAGCTGTTCTTCTTCTTGGTGGAGGATGACGCCAGAGGCACGGTCGTGCTCA
GAGTGAGACCCCAAGAAAAGGGAGCAGACCACACGCAGGCCATTGTGCTGGGCTGCGTAGGGGGCATCGTGGCAG
TGGGGCTGGGGCTGGTCCTGGCTTACCGGCTCTCGGTGGAAATCTATGACCGCCGGGAATACAGTCGCTTTGAGA
AGGAGCAGCAACAACTCAACTGGAAGCAGGACAGTAATCCTCTCTACAAAAGTGCCATCACGACCACCATCAATC
CTCGCTTTCAAGAGGCAGACAGTCCCACTCTCTGAAGGAGGGAGGGACACTTACCCAAGGCTCTTCTCCTTGGAG
GACAGTGGGAACTGGAGGGTGAGAGGAAGGGTGGGTCTGTAAGACCTTGGTAGGGGACTAATTCACTGGCGAGGT
GCGGCCACCACCCTACTTCATTTTCAGAGTGACACCCAAGAGGGCTGCTTCCCATGCCTGCAACCTTGCATCCAT
CTGGGCTACCCCACCCAAGTATACAATAAAGTCTTACCTCAG

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FIGURE 6050

MVALPMVLVLLLVLSRGESELDAKIPSTGDATEWRNPHLSMLGSCQPAPSCQKCILSHPSCAWCKQLNFTASGEA
EARRCARREELLARGCPLEELEEPRGQQEVLQDQPLSQGARGEGATQLAPQRVRVTLRPGEPQQLQVRFLRAEGY
PVDLYYLMDLSYSMKDDLERVRQLGHALLVRLQEVTHSVRIGFGSFVDKTVLPFVSTVPSKLRHPCPTRLERCQS
PFSFHHVLSLTGDAQAFEREVGRQSVSGNLDSPEGGFDAILQAALCQEQIGWRNVSRLLVFTSDDTFHTAGDGKL
GGIFMPSDGHCHLDSNGLYSRSTEFDYPSVGQVAQALSAANIQPIFAVTSAALPVYQELSKLIPKSAVGELSEDS
SNVVQLIMDAYNSLSSTVTLEHSSLPPGVHISYESQCEGPEKREGKAEDRGQCNHVRINQTVTFWVSLQATHCLP
EPHLLRLRALGFSEELIVELHTLCDCNCSDTQPQAPHCSDGQGHLQCGVCSCAPGRLGRLCECSVAELSSPDLES
GCRAPNGTGPLCSGKGHCQCGRCSCSGQSSGHLCECDDASCERHEGILCGGFGRCQCGVCHCHANRTGRACECSG
DMDSCISPEGGLCSGHGRCKCNRCQCLDGYYGALCDQCPGCKTPCERHRDCAECGAFRTGPLATNCSTACAHTNV
TLALAPILDDGWCKERTLDNQLFFFLVEDDARGTVVLRVRPQEKGADHTQAIVLGCVGGIVAVGLGLVLAYRLSV
EIYDRREYSRFEKEQQQLNWKQDSNPLYKSAITTTINPRFQEADSPTL

FIGURE 6051

GAGCGGGCTGAGGGTAGGAAGTAGCCGCTCCGAGTGGAGGCGACTGGGGGCTGAAGAGCGCGCCGCCCTCTCGTC
CCACTTTCCAGGTGTGTGATCCTGTAAAATTAAATCTTCCAAGATGATCTGGTATATATTAATTATAGGAATTCT
GCTTCCCCAGTCTTTGGCTCATCCAGGCTTTTTTACTTCAATTGGTCAGATGACTGATTTGATCCATACTGAGAA
AGATCTGGTGACTTCTCTGAAAGATTATATTAAGGCAGAAGAGGACAAGTTAGAACAAATAAAAAAATGGGCAGA
GAAGTTAGATCGGCTAACTAGTACAGCGACAAAAGATCCAGAAGGATTTGTTGGGCATCCAGTAAATGCATTCAA
ATTAATGAAACGTCTGAATACTGAGTGGAGTGAGTTGGAGAATCTGGTCCTTAAGGATATGTCAGATGGCTTTAT
CTCTAACCTAACCATTCAGAGACCAGTACTTTCTAATGATGAAGATCAGGTTGGGGCAGCCAAAGCTCTGTTACG
TCTCCAGGATACCTACAATTTGGATACAGATACCATCTCAAAGGGTAATCTTCCAGGAGTGAAACACAAATCTTT
TCTAACGGCTGAGGACTGCTTTGAGTTGGGCAAAGTGGCCTATACAGAAGCAGATTATTACCATACGGAACTGTG
GATGGAACAAGCCCTAAGGCAACTGGATGAAGGCGAGATTTCTACCATAGATAAAGTCTCTGTTCTAGATTATTT
GAGCTATGCGGTATATCAGCAGGGAGACCTGGATAAGGCACTTTTGCTCACAAAGAAGCTTCTTGAACTAGATCC
TGAACATCAGAGAGCTAATGGTAACTTAAAATATTTTGAGTATATAATGGCTAAAGAAAAAGATGTCAATAAGTC
TGCTTCAGATGACCAATCTGATCAGAAAACTACACCAAAGAAAAAAGGGGTTGCTGTGGATTACCTGCCAGAGAG
ACAGAAGTACGAAATGCTGTGCCGTGGGGAGGGTATCAAAATGACCCCTCGGAGACAGAAAAAACTCTTTTGCCG
CTACCATGATGGAAACCGTAATCCTAAATTTATTCTGGCTCCAGCTAAACAGGAGGATGAATGGGACAAGCCTCG
TATTATTCGCTTCCATGATATTATTTCTGATGCAGAAATTGAAATCGTCAAAGACCTAGCAAAACCAAGGCTGAG
CCGAGCTACAGTACATGACCCTGAGACTGGAAAATTGACCACAGCACAGTACAGAGTATCTAAGAGTGCCTGGCT
CTCTGGCTATGAAAATCCTGTGGTGTCTCGAATTAATATGAGAATACAAGATCTAACAGGACTAGATGTTTCCAC
AGCAGAGGAATTACAGGTAGCAAATTATGGAGTTGGAGGACAGTATGAACCCCATTTTGACTTTGCACGGAAAGA
TGAGCCAGATGCTTTCAAAGAGCTGGGGACAGGAAATAGAATTGCTACATGGCTGTTTTATATGAGTGATGTGTC
TGCAGGAGGAGCCACTGTTTTTCCTGAAGTTGGAGCTAGTGTTTGGCCCAAAAAAGGAACTGCTGTTTTCTGGTA
TAATCTGTTTGCCAGTGGAGAAGGAGATTATAGTACACGGCATGCAGCCTGTCCAGTGCTAGTTGGCAACAAATG
GGTATCCAATAAATGGCTCCATGAACGTGGACAAGAATTTCGAAGACCTTGTACGTTGTCAGAATTGGAATGACA
AACAGGCTTCCCTTTTTCTCCTATTGTTGTACTCTTATGTGTCTGATATACACATTTCCATAGTCTTAACTTTCA
GGAGTTTACAATTGACTAACACTCCATGATTGATTCAGTCATGAACCTCATCCCATGTTTCATCTGTGGACAATT
GCTTACTTTGTGGGTTCTTTTAAAAGTAACACGAAATCATCATATTGCATAAAACCTTAAAGTTCTGTTGGTATC
ACAGAAGACAAGGCAGAGTTTAAAGTGAGGAATTTTATATTTAAAGAACTTTTTGGTTGGATAAAAACATAATTT
GAGCATCCAGTTTTAGTATTTCACTACATCTCAGTTGGTGGGTGTTAAGCTAGAATGGGCTGTGTGATAGGAAAC
AAATGCCTTACAGATGTGCCTAGGTGTTCTGTTTACCTAGTGTCTTACTCTGTTTTCTGGATCTGAAGACTAGTA
ATAAACTAGGACACTAACTGGGTTCCATGTGATTGCCCTTTCATATGATCTTCTAAGTTGATTTTTTTCCTCCCA
AGTCTTTTTTAAAGAAAGTATACTGTATTTTACCAACCCCCTCTCTTTTCTTTTAGCTCCTCTGTGGTGAATTAA
ACGTACTTGAGTTAAAATATTTCGATTTTTTTTTTTTTTTAATGGAAAGTCCTGCATAACAACACTGGGCCTTC
TTAACTAAAATGCTCACCACTTAGCCTGTTTTTTTATCCCTTTTTTAAAATGACAGATGATTTTGTTCAGGAATT
TTGCTGTTTTTCTTAGTGCTAATACCTTGCCTCTTATTCCTGCTACAGCAGGGTGGTAATATTGGCATTCTGATT
AAATACTGTGCCTTAGGAGACTGGAAGTTTAAAAATGTACAAGTCCTTTCAGTGATGAGGGAATTGATTTTTTTT
AAAAGTCTTTTTCTTAGAAAGCCAAAATGTTTGTTTTTTTAAGATTCTGAAATGTGTTGTGACAACAATGACCTA
TTTATGATCTTAAATCTTTTTT

FIGURE 6052

MIWYILIIGILLPQSLAHPGFFTSIGQMTDLIHTEKDLVTSLKDYIKAEEDKLEQIKKWAEKLDRLTSTATKDPE
GFVGHPVNAFKLMKRLNTEWSELENLVLKDMSDGFISNLTIQRPVLSNDEDQVGAAKALLRLQDTYNLDTDTISK
GNLPGVKHKSFLTAEDCFELGKVAYTEADYYHTELWMEQALRQLDEGEISTIDKVSVLDYLSYAVYQQGDLDKAL
LLTKKLLELDPEHQRANGNLKYFEYIMAKEKDVNKSASDDQSDQKTTPKKKGVAVDYLPERQKYEMLCRGEGIKM
TPRRQKKLFCRYHDGNRNPKFILAPAKQEDEWDKPRIIRFHDIISDAEIEIVKDLAKPRLSRATVHDPETGKLTT
AQYRVSKSAWLSGYENPVVSRINMRIQDLTGLDVSTAEELQVANYGVGGQYEPHFDFARKDEPDAFKELGTGNRI
ATWLFYMSDVSAGGATVFPEVGASVWPKKGTAVFWYNLFASGEGDYSTRHAACPVLVGNKWVSNKWLHERGQEFR
RPCTLSELE

FIGURE 6053A

GTTCTGAATGATGACTGACGCGGGTTTGGGTGATACCCCTCACAGCCCCTGTCATTCCGGAGTCATAAGGCACCC
GCGCGTCTAGCCCCAGCGCCAGGGCACGCGAGCGGCGCCGCAGGGAGGAAAGCTTCCGCCTGCGGGCCGGACAAA
AGTCCCGCCTGCCCACGGCTTTTTGCCCGCCGCTCGTGACCGAGACGCCTCGCCGCGGCCAGCTCGCTGCTCTCG
CTGGCGGATGGTGTGTGGCCGCCGCAGGACGCCCGCCGTGCCCGGGCCATGAAGTAGCGGCTGCTGGCGGCGCCG
CTGCCCAACCGCCAGCCCCAGCCCCGCGCTGCGCTGCCCGGTCCTCTCCCGGCGGGGTCGTATCGGCGTGGACATG
GCTGGCCGCGTCCCTAGCCTGCTAGTTCTCCTTGTTTTTCCAAGCAGCTGTTTGGCTTTCCGAAGCCCACTTTC
TGTCTTTAAGAGGTTTAAAGAAACTACCAGACCATTTTCCAATGAATGTCTTGGTACCACCAGACCCGTAGTTCC
TATTGATTCATCAGATTTTGCATTGGATATTCGCATGCCTGGGGTTACACCTAAACAGTCCGATACATACTTCTG
CATGTCTATGCGAATACCAGTGGATGAGGAAGCCTTCGTGATTGACTTCAAGCCTCGAGCCAGCATGGATACTGT
CCATCACATGTTACTTTTTGGATGCAATATGCCTTCATCCACTGGAAGTTACTGGTTTTGTGATGAAGGAACCTG
TACAGATAAAGCCAATATTCTGTATGCCTGGGCGAGAAATGCTCCCCCTACCCGGCTCCCCAAAGGTGTTGGATT
CAGAGTTGGAGGAGAGACTGGAAGTAAATACTTTGTACTACAGGTACACTATGGGGATATTAGTGCTTTTAGAGA
TAATAACAAGGACTGTTCTGGTGTGTCCTTACACCTCACACGTCTGCCACAGCCTTTAATTGCTGGCATGTACCT
TATGATGTCTGTTGACACTGTTATCCCAGCAGGAGAAAAAGTGGTGAATTCTGACATTTCATGCCATTATAAAAA
TTATCCAATGCATGTCTTTGCCTATAGAGTTCACACTCACCATTTAGGTAAGGTAGTAAGTGGATACAGAGTAAG
AAATGGACAGTGGACACTGATTGGACGGCAGAGCCCTCAGCTGCCACAGGCTTTCTACCCTGTGGGGCATCCAGT
TGATGTAAGTTTTGGTGACCTACTGGCTGCAAGATGTGTATTCACTGGTGAAGGAAGGACAGAAGCCACACACAT
TGGTGGCACGTCTAGTGATGAAATGTGCAACTTATACATTATGTATTACATGGAAGCCAAGCATGCAGTTTCTTT
CATGACCTGTACCCAGAATGTAGCTCCAGATATGTTCAGAACCATACCACCAGAGGCCAACATTCCAATTCCCGT
GAAGTCTGATATGGTTATGATGCATGAACATCATAAAGAAACAGAATATAAAGATAAGATTCCTTTACTACAGCA
GCCAAAACGAGAAGAAGAAGAAGTGTTAGACCAGGATTTCCACATGGAAGAGGCACTGGATTGGCCTGGAGTATA
CTTGTTACCAGGCCAGGTTTCTGGGGTGGCTCTAGACCCTAAGAATAACCTGGTGATTTTCCACAGAGGTGACCA
TGTCTGGGATGGAAACTCGTTTGACAGCAAGTTTGTTTACCAGCAAATAGGACTCGGACCAATTGAAGAAGACAC
TATTCTTGTCATAGATCCAAATAATGCTGCAGTACTCCAGTCCAGTGGAAAAAATCTGTTTTACTTGCCACATGG
CTTGAGTATAGATAAAGATGGGAATTATTGGGTCACAGACGTGGCTCTCCATCAGGTGTTCAAACTGGATCCAAA
CAATAAAGAAGGCCCTGTATTAATCCTGGGAAGGAGCATGCAACCAGGCAGTGACCAGAATCACTTCTGTCAACC
CACTGATGTGGCTGTGGATCCAGGCACTGGAGCCATTTATGTATCAGATGGTTACTGCAACAGCAGGATTGTGCA
GTTTTCACCAAGTGGAAAGTTCATCACACAGTGGGGAGAAGAGTCTTCAGGGAGCAGTCCTCTGCCAGGCCAGTT
CACTGTTCCTCACAGCTTGGCTCTTGTGCCTCTTTTGGGCCAATTATGTGTGGCAGACCGGGAAAATGGTCGGAT
CCAGTGTTTTAAAACTGACACCAAAGAATTTGTGAGAGAGATTAAGCATTCATCATTTGGAAGAAATGTATTTGC
AATTTCATATATACCAGGCTTGCTCTTTGCAGTGAATGGGAAGCCTCATTTTGGGGACCAAGAACCTGTACAAGG
ATTTGTGATGAACTTTTCCAATGGGGAAATTATCGACATCTTCAAGCCAGTGCGCAAGCACTTTGATATGCCTCA
TGATATTGTTGCATCTGAAGATGGGACTGTGTACATTGGAGATGCTCATACCAACACCGTGTGGAAGTTCACCTT
GACTGAGAAATTGGAACATCGATCAGTTAAAAAGGCTGGCATTGAGGTCCAGGAAATCAAAGAAGCCGAGGCAGT
TGTTGAAACCAAAATGGAGAACAAACCCACCTCCTCAGAATTGCAGAAGATGCAAGAGAAACAGAAACTGATCAA
AGAGCCAGGCTCGGGAGTGCCTGTTGTTCTCATTACAACCCTTCTGGTTATTCCGGTGGTTGTCCTGCTGGCCAT
TGCCATATTTATTCGGTGGAAAAAATCAAGGGCCTTTGGAGATTCTGAACACAAACTCGAGACGAGTTCAGGAAG
AGTACTGGGAAGATTTAGAGGAAAGGGAAGTGGAGGCTTAAACCTTGGTAATTTCTTTGCAAGCCGTAAGGGCTA
CAGTCGAAAAGGGTTTGACCGGCTTAGCACTGAGGGCAGTGACCAAGAGAAAGAGGATGATGGAAGTGAATCAGA
AGAGGAGTATTCAGCACCTCTGCCTGCGCTCGCACCTTCCTCCTCCTGAAAACCAAGCTTTGATTTAGATTGAGT
AAGATTTACCCAGAATGTCAGATTCCTTTCCCTTTAGCACGTTTAAAGTTCTGTGTATTTAATTGTAAACTGTAC
TAGTCTGTGTGGGACTGTACACACTTTATTTACTTCGTTTTGGTTAAGTTGGCTTCTGTTTCTAGTTGAGGAGTT
TCCTAAAAGTTCATAACAGTGCCATTGTCTTTATATGAACATAGACTAGAGAAACCGTCCTCTTTTTCCATCATA
ATTCTAATCTAACAATGGAAGATTTGCCCATTTACACTTTTGAGACTTTTTGGTGGATGTAAATAACCCCATTCT
TTGCTTGAACACAGTATTTTCCCAATAGCACTTTCATTGCCAGTGTCTTTCTTTGGTGCCTTTCCTGTTCAGCAT
TCTTAGCCTGTGGCAGTAAAGAGAAACTTTGTGCTACATGACGACAAAGCTGCTAAATCTCCTATTTTTTTAAAA
TCACTAACATTATATTGCAATGAAGGAAATAAAAAAGTCTCTATTTAAATTCTTTTTTAAATTTTCTTCAGTTGG
TGTGTTTTTGGGATGTCTTATTTTTAGATGGTTACACTGTTAGAACACTATTTTCAGAATCTGAATGTAATTTGT

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FIGURE 6053B

GTAATAAAGTGTTTTCAGAGCAAAAAAAAAAAAAAA

FIGURE 6054

MAGRVPSLLVLLVFPSSCLAFRSPLSVFKRFKETTRPFSNECLGTTRPVVPIDSSDFALDIRMPGVTPKQSDTYF
CMSMRIPVDEEAFVIDFKPRASMDTVHHMLLFGCNMPSSTGSYWFCDEGTCTDKANILYAWARNAPPTRLPKGVG
FRVGGETGSKYFVLQVHYGDISAFRDNNKDCSGVSLHLTRLPQPLIAGMYLMMSVDTVIPAGEKVVNSDISCHYK
NYPMHVFAYRVHTHHLGKVVSGYRVRNGQWTLIGRQSPQLPQAFYPVGHPVDVSFGDLLAARCVFTGEGRTEATH
IGGTSSDEMCNLYIMYYMEAKHAVSFMTCTQNVAPDMFRTIPPEANIPIPVKSDMVMMHEHHKETEYKDKIPLLQ
QPKREEEEVLDQDFHMEEALDWPGVYLLPGQVSGVALDPKNNLVIFHRGDHVWDGNSFDSKFVYQQIGLGPIEED
TILVIDPNNAAVLQSSGKNLFYLPHGLSIDKDGNYWVTDVALHQVFKLDPNNKEGPVLILGRSMQPGSDQNHFCQ
PTDVAVDPGTGAIYVSDGYCNSRIVQFSPSGKFITQWGEESSGSSPLPGQFTVPHSLALVPLLGQLCVADRENGR
IQCFKTDTKEFVREIKHSSFGRNVFAISYIPGLLFAVNGKPHFGDQEPVQGFVMNFSNGEIIDIFKPVRKHFDMP
HDIVASEDGTVYIGDAHTNTVWKFTLTEKLEHRSVKKAGIEVQEIKEAEAVVETKMENKPTSSELQKMQEKQKLI
KEPGSGVPVVLITTLLVIPVVVLLAIAIFIRWKKSRAFGDSEHKLETSSGRVLGRFRGKGSGGLNLGNFFASRKG
YSRKGFDRLSTEGSDQEKEDDGSESEEEYSAPLPALAPSSS

FIGURE 6055

GGGCCGCCGTCGGCGCGCTGGGTGCGGGAAGGGGGCTCTGGATTTCGGTCCCTCCCCTTTTTCCTCTGAGTCTCG
GAACGCTCCAGCTCTCAGACCCTCTTCCTCCCAGGTAAAGGCCGGGAGAGGAGGGCGCATCTCTTTTCCAGGCAC
CCCACCATGGCAATGCCTCCAATGACTCCCAGTCTGAGGACTGCGAGACGCGACAGTGGCTTCCCCCAGGCGAA
AGCCCAGCCATCAGCTCCGTCATGTTCTCGGCCGGGGTGCTGGGGAACCTCATAGCACTGGCGCTGCTGGCGCGC
CGCTGGCGGGGGGGACGTGGGGTGCAGCGCCGGCCGCAGGAGCTCCCTCTCCTTGTTCCACGTGCTGGTGACCGAG
CTGGTGTTCACCGACCTGCTCGGGACCTGCCTCATCAGCCCAGTGGTACTGGCTTCGTACGCGCGGAACCAGACC
CTGGTGGCACTGGCGCCCGAGAGCCGCGCGTGCACCTACTTCGCTTTCGCCATGACCTTCTTCAGCCTGGCCACG
ATGCTCATGCTCTTCGCCATGGCCCTGGAGCGCTACCTCTCGATCGGGCACCCCTACTTCTACCAGCGCCGCGTC
TCGGCCTCCGGGGGCCTGGCCGTGCTGCCTGTCATCTATGCAGTCTCCCTGCTCTTCTGCTCGCTGCCGCTGCTG
GACTATGGGCAGTACGTCCAGTACTGCCCCGGGACCTGGTGCTTCATCCGGCACGGGCGGACCGCTTACCTGCAG
CTGTACGCCACCCTGCTGCTGCTTCTCATTGTCTCGGTGCTCGCCTGCAACTTCAGTGTCATTCTCAACCTCATC
CGCATGCACCGCCGAAGCCGGAGAAGCCGCTGCGGACCTTCCCTGGGCAGTGGCCGGGGCGGCCCCGGGGCCCGC
AGGAGAGGGGAAAGGGTGTCCATGGCGGAGGAGACGGACCACCTCATTCTCCTGGCTATCATGACCATCACCTTC
GCCGTCTGCTCCTTGCCTTTCACGATTTTTGCATATATGAATGAAACCTCTTCCCGAAAGGAAAAATGGGACCTC
CAAGCTCTTAGGTTTTTATCAATTAATTCAATAATTGACCCTTGGGTCTTTGCCATCCTTAGGCCTCCTGTTCTG
AGACTAATGCGTTCAGTCCTCTGTTGTCGGATTTCATTAAGAACACAAGATGCAACACAAACTTCCTGTTCTACA
CAGTCAGATGCCAGTAAACAGGCTGACCTTTGAGGTCAGTAGTTTAAAAGTTCTTAGTTATATAGCATCTGGAAG
ATCATTTTGAAATTGTTCCCTGGAGAAATGAAAACAGTGTGTAAACAAAATGAAGCTGCCCTAATAAAAAGGAGT
ATACAAACATTTAAGCTGTGGTCAAGGCTACAGATGTGCTGACAAGGCACTTCATGTAAAGTGTCAGAAGGAGCT
ACAAAACCTACCCTCAATGAGCATGGTACTTGGCCTTTGGAGGAACAATCGGCTGCATTGAAGATCCAGCTGCCT
ATTGATTTAAGCTTTCCTGTTGAATGACAAAGTATGTGGTTTTGTAATTTGTTTGAAACCCCAAACAGTGACTGT
ACTTTCTATTTTAATCTTGCTACTACCGTTATACACATATAGTGTACAGCCAGACCAGATTAAACTTCATATGTA
ATCTCTAGGAAGTCAATATGTGGAAGCAACCAAGCCTGCTGTCTTGTGATCACTTAGCGAACCCTTTATTTGAAC
AATGAAGTTGAAAATCATAGGCACCTTTTACTGTGATGTTTGTGTATGTGGGAGTACTCTCATCACTACAGTATT
ACTCTTACAAGAGTGGACTCAGTGGGTTAACATCAGTTTTGTTTACTCATCCTCCAGGAACTGCAGGTCAAGTTG
TCAGGTTATTTATTTTATAATGTCCATATGCTAATAGTGATCAAGAAGACTTTAGGAATGGTTCTCTCAACAAGA
AATAATAGAAATGTCTCAAGGCAGTTAATTCTCATTAATACTCTTATTATCCTATTTCTGGGGGAGGATGTACGT
GGCCATGTATGAAGCCAAATATTAGGCTTAAAAACTGAAAAATCTGGTTCATTCTTCAGATATACTGGAACCCTT
TTAAAGTTGATATTGGGGCCATGAGTAAAATAGATTTTATAAGATGACTGTGTTGTACCAAAATTCATCTGTCTA
TATTTTATTTAGGGGAACATGGTTTGACTCATCTTATATGGGAAACCATGTAGCAGTGAGTCATATCTTAATATA
TTTCTAAATGTTTGGCATGTAAATGTAAACTCAGCATCAAAATATTTCAGTGAATTTGCACTGTTTAATCATAGT
TACTGTGTAAACTCATCTGAAATGTTACAAAAATAAACTATAAAACA

FIGURE 6056

MGNASNDSQSEDCETRQWLPPGESPAISSVMFSAGVLGNLIALALLARRWRGDVGCSAGRRSSLSLFHVLVTELV
FTDLLGTCLISPVVLASYARNQTLVALAPESRACTYFAFAMTFFSLATMLMLFAMALERYLSIGHPYFYQRRVSA
SGGLAVLPVIYAVSLLFCSLPLLDYGQYVQYCPGTWCFIRHGRTAYLQLYATLLLLLLIVSVLACNFSVILNLIRM
HRRSRRSRCGPSLGSGRGGPGARRRGERVSMAEETDHLILLAIMTITFAVCSLPFTIFAYMNETSSRKEKWDLQA
LRFLSINSIIDPWVFAILRPPVLRLMRSVLCCRISLRTQDATQTSCSTQSDASKQADL

FIGURE 6057

CGGCACAGCCTCACACCTGAACGCTGTCCTCCCGCAGACGAGACCGGCGGGCACTGCAAAGCTGGGACTCGTCTT
TGAAGGAAAAAAAAATAGCGAGTAAGAAATCCAGCACCATTCTTCACTGACCCATCCCGCTGCACCTCTTGTTTCC
CAAGTTTTTGAAAGCTGGCAACTCTGACCTCGGTGTCCAAAAATCGACAGCCACTGAGACCGGCTTTGAGAAGCC
GAAGATTTGGCAGTTTCCAGACTGAGCAGGACAAGGTGAAAGCAGGTTGGAGGCGGGTCCAGGACATCTGAGGGC
TGACCCTGGGGGCTCGTGAGGCTGCCACCGCTGCTGCCGCTACAGACCCAGCCTTGCACTCCAAGGCTGCGCACC
GCCAGCCACTATC**ATG**TCCACTCCCGGGGTCAATTCGTCCGCCTCCTTGAGCCCCGACCGGCTGAACAGCCCAGT
GACCATCCCGGCGGTGATGTTCATCTTCGGGGTGGTGGGCAACCTGGTGGCCATCGTGGTGCTGTGCAAGTCGCG
CAAGGAGCAGAAGGAGACGACCTTCTACACGCTGGTATGTGGGCTGGCTGTCACCGACCTGTTGGGCACTTTGTT
GGTGAGCCCGGTGACCATCGCCACGTACATGAAGGGCCAATGGCCCGGGGGCCAGCCGCTGTGCGAGTACAGCAC
CTTCATTCTGCTCTTCTTCAGCCTGTCCGGCCTCAGCATCATCTGCGCCATGAGTGTCGAGCGCTACCTGGCCAT
CAACCATGCCTATTTCTACAGCCACTACGTGGACAAGCGATTGGCGGGCCTCACGCTCTTTGCAGTCTATGCGTC
CAACGTGCTCTTTTGCGCGCTGCCCAACATGGGTCTCGGTAGCTCGCGGCTGCAGTACCCAGACACCTGGTGCTT
CATCGACTGGACCACCAACGTGACGGCGCACGCCGCCTACTCCTACATGTACGCGGGCTTCAGCTCCTTCCTCAT
TCTCGCCACCGTCCTCTGCAACGTGCTTGTGTGCGGCGCGCTGCTCCGCATGCACCGCCAGTTCATGCGCCGCAC
CTCGCTGGGCACCGAGCAGCACCACGCGGCCGCGGCCGCCTCGGTTGCCTCCCGGGGCCACCCCGCTGCCTCCCC
AGCCTTGCCGCGCCTCAGCGACTTTCGGCGCCGCCGGAGCTTCCGCCGCATCGCGGGCGCCGAGATCCAGATGGT
CATCTTACTCATTGCCACCTCCCTGGTGGTGCTCATCTGCTCCATCCCGCTCGTGGTGCGAGTATTCGTCAACCA
GTTATATCAGCCAAGTTTGGAGCGAGAAGTCAGTAAAAATCCAGATTTGCAGGCCATCCGAATTGCTTCTGTGAA
CCCCATCCTAGACCCCTGGATATATATCCTCCTGAGAAAGACAGTGCTCAGTAAAGCAATAGAGAAGATCAAATG
CCTCTTCTGCCGCATTGGCGGGTCCCGCAGGGAGCGCTCCGGACAGCACTGCTCAGACAGTCAAAGGACATCTTC
TGCCATGTCAGGCCACTCTCGCTCCTTCATCTCCCGGGAGCTGAAGGAGATCAGCAGTACATCTCAGACCCTCCT
GCCAGACCTCTCACTGCCAGACCTCAGTGAAAATGGCCTTGGAGGCAGGAATTTGCTTCCAGGTGTGCCTGGCAT
GGGCCTGGCCCAGGAAGACACCACCTCACTGAGGACTTTGCGAATATCAGAGACCTCAGACTCTTCACAGGGTCA
GGACTCAGAGAGTGTCTTACTGGTGGATGAGGCTGGTGGGAGCGGCAGGGCTGGGCCTGCCCCTAAGGGGAGCTC
CCTGCAAGTCACATTTCCCAGTGAAACACTGAACTTATCAGAAAAATGTATA**TAA**TAGGCAAGGAAAGAAATACA
GTACTGTTTCTGGACCCTTATAAAATCCTGTGCAATAGACACATACATGTCACATTTAGCTGTGCTCAGAAGGGC
TATCATCA

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FIGURE 6058

MSTPGVNSSASLSPDRLNSPVTIPAVMFIFGVVGNLVAIVVLCKSRKEQKETTFYTLVCGLAVTDLLGTLLVSPV
TIATYMKGQWPGGQPLCEYSTFILLFFSLSGLSIICAMSVERYLAINHAYFYSHYVDKRLAGLTLFAVYASNVLF
CALPNMGLGSSRLQYPDTWCFIDWTTNVTAHAAYSYMYAGFSSFLILATVLCNVLVCGALLRMHRQFMRRTSLGT
EQHHAAAAASVASRGHPAASPALPRLSDFRRRRSFRRIAGAEIQMVILLIATSLVVLICSIPLVVRVFVNQLYQP
SLEREVSKNPDLQAIRIASVNPILDPWIYILLRKTVLSKAIEKIKCLFCRIGGSRRERSGQHCSDSQRTSSAMSG
HSRSFISRELKEISSTSQTLLPDLSLPDLSENGLGGRNLLPGVPGMGLAQEDTTSLRTLRISETSDSSQGQDSES
VLLVDEAGGSGRAGPAPKGSSLQVTFPSETLNLSEKCI

FIGURE 6059

GCTCTCATTACCTTCTGCCCATCACTTAATAAATAGCCAGCCAATTCATCAACATTCTGGTACACTGTTGGAGAG
ATGAGACAGTCACACCAGCTGCCCCTAGTGGGGCTCTTACTGTTTTCTTTTATTCCAAGCCAACTATGCGAGATT
TGTGAGGTAAGTGAAGAAAACTACATCCGCCTAAAACCTCTGTTGAATACAATGATCCAGTCAAACTATAACAGG
GGAACCAGCGCTGTCAATGTTGTGTTGTCCCTCAAACTTGTTGGAATCCAGATCCAAACCCTGATGCAAAAGATG
ATCCAACAAATCAAATACAATGTGAAAAGCAGATTGTCAGATGTAAGCTCGGGAGAGCTTGCCTTGATTATACTG
GCTTTGGGAGTATGTCGTAACGCTGAGGAAAACTTAATATATGATTACCACCTGATCGACAAGCTAGAAAATAAA
TTCCAAGCAGAAATTGAAAATATGGAAGCACACAATGGCACTCCCCTGACTAACTACTACCAGCTCAGCCTGGAC
GTTTTGGCCTTGTGTCTGTTCAATGGGAACTACTCAACCGCCGAAGTTGTCAACCACTTCACTCCTGAAAATAAA
AACTATTATTTTGGTAGCCAGTTCTCAGTAGATACTGGTGCAATGGCTGTCCTGGCTCTGACCTGTGTGAAGAAG
AGTCTAATAAATGGGCAGATCAAAGCAGATGAAGGCAGTTTAAAGAACATCAGTATTTATACAAAGTCACTGGTA
GAAAAGATTCTGTCTGAGAAAAAAGAAAATGGTCTCATTGGAAACACATTTAGCACAGGAGAAGCCATGCAGGCC
CTCTTTGTATCATCAGACTATTATAATGAAAATGACTGGAATTGCCAACAAACTCTGAATACAGTGCTCACGGAA
ATTTCTCAAGGAGCATTCAGCAATCCAAACGCTGCAGCCCAGGTCTTACCTGCCCTGATGGGAAAGACCTTCTTG
GATATTAACAAAGACTCTTCTTGCGTCTCTGCTTCAGGTAACTTCAACATCTCCGCTGATGAGCCTATAACTGTG
ACACCTCCTGACTCACAATCATATATCTCCGTCAATTACTCTGTGAGAATCAATGAAACATATTTCACCAATGTC
ACTGTGCTAAATGGTTCTGTCTTCCTCAGTGTGATGGAGAAAGCCCAGAAAATGAATGATACTATATTTGGTTTC
ACAATGGAGGAGCGCTCATGGGGGCCCTATATCACCTGTATTCAGGGCCTATGTGCCAACAATAATGACAGAACC
TACTGGGAACTTCTGAGTGGAGGCGAACCACTGAGCCAAGGAGCTGGTAGTTACGTTGTCCGCAATGGAGAAAAC
TTGGAGGTTCGCTGGAGCAAATACTAATAAGCCCAAACTTTCCTCAGCTGCATAAAATCCATTTGCAGTGGAGTT
CCATGTTTATTGTCCTTATGCCTTCTTCTTCATTTATCCCAGTACGAGCAGGAGAGTTAATAACCTCCCCTTCTC
TCTCTACATGTTCAATAAAAGTTGTTGAAAGATTAACAACTGT

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FIGURE 6060

MRQSHQLPLVGLLLFSFIPSQLCEICEVSEENYIRLKPLLNTMIQSNYNRGTSAVNVVLSLKLVGIQIQTLMQKM
IQQIKYNVKSRLSDVSSGELALIILALGVCRNAEENLIYDYHLIDKLENKFQAEIENMEAHNGTPLTNYYQLSLD
VLALCLFNGNYSTAEVVNHFTPENKNYYFGSQFSVDTGAMAVLALTCVKKSLINGQIKADEGSLKNISIYTKSLV
EKILSEKKENGLIGNTFSTGEAMQALFVSSDYYNENDWNCQQTLNTVLTEISQGAFSNPNAAAQVLPALMGKTFL
DINKDSSCVSASGNFNISADEPITVTPPDSQSYISVNYSVRINETYFTNVTVLNGSVFLSVMEKAQKMNDTIFGF
TMEERSWGPYITCIQGLCANNNDRTYWELLSGGEPLSQGAGSYVVRNGENLEVRWSKY

FIGURE 6061A

TGAGGAACTGCGTGTGGAGTCAGCCCAGTCTGGATGCACAGGAGGATGCTGGCGGCACAGTGAGTGAGGCCTGGT
GCCAGAGCTGTGCGGACCCCTTGTTGGCCATGGAGCAGCAGGCCCAGAGGCCCTCTCCCCAGCCCTGCTTGCCTG
CCTCGGAGAGGACAGAGGCCTAGGCCCACGGGGGAGGGTGTTGGCAGACAGATGCCCTCCAGGCCCTGGGGCCTC
CTTAACGGCCCCTTAACGACACGCGTGCCAAGGGTGGAGGATGCCAGCCAAGGGGCGCTACTTCCTCAACGAGGG
CGAGGAGGGCCCTGACCAAGATGCGCTCTACGAGAAGTACCAGCTCACCAGCCAGCATGGGCCGCTGCTGCTCAC
GCTCCTGCTGGTGGCCGCCACTGCCTGCGTGGCCCTCATCATCATTGCCTTCAGCCAGGGGGACCCCTCCAGACA
CCAGGCCATTCTGGGCATGGCGTTCCTGGTGCTGGCGGTGTTTGCGGCCCTCTCTGTGCTGATGTACGTCGAGTG
TCTCCTGCGGCGCTGGCTCAGGGCCTTGGCGCTGCTCACCTGGGCCTGCTTGGTGGCGCTGGGCTATGTGCTGGT
GTTCGACGCATGGACAAAGGCGGCCTGTGCGTGGGAGCAGGTGCCCTTCTTCCTGTTCATTGTCTTCGTGGTGTA
CACACTACTGCCCTTCAGCATGCGGGGCGCTGTCGCCGTTGGGGCCGTCTCCACTGCCTCCCACCTCCTGGTGCT
CGGTTCTTTGATGGGAGGCTTCACGACACCCAGTGTCCGGGTGGGGCTGCAGCTGCTGGCCAACGCAGTCATCTT
CCTGTGTGGGAACCTGACAGGCGCCTTCCACAAGCACCAAATGCAGGATGCGTCCCGGGACCTCTTCACCTACAC
TGTGAAGTGCATCCAGATCCGCCGGAAGCTGCGCATCGAGAAGCGCCAGCAGGAGAACCTGCTGCTGTCAGTGCT
TCCGGCCCACATCTCCATGGGCATGAAGCTGGCCATCATCGAACGGCTCAAGGAGCATGGTGACCGTCGCTGCAT
GCCTGACAACAACTTCCACAGCCTCTACGTCAAGAGGCACCAGAATGTCAGCATCCTCTATGCGGACATCGTGGG
CTTCACGCAGCTGGCCAGCGACTGTTCTCCCAAGGAGCTGGTGGTGGTGCTGAATGAGCTCTTTGGCAAGTTCGA
CCAGATCGCCAAGGCCAACGAGTGCATGCGAATCAAGATCCTCGGCGACTGCTACTACTGTGTATCGGGCCTGCC
CGTGTCGCTGCCTACCCACGCCCGGAACTGCGTGAAGATGGGGCTGGACATGTGCCAGGCCATCAAGCAGGTGCG
GGAGGCCACGGGCGTGGACATCAACATGCGTGTGGGCATACACTCGGGGAATGTGCTGTGCGGGGTCATCGGGCT
GCGCAAGTGGCAGTATGACGTGTGGTCCCACGACGTGTCCCTGGCCAACCGGATGGAGGCAGCCGGAGTACCCGG
CCGGGTGCACATCACGGAGGCCACGCTAAAGCACCTGGACAAGGCGTACGAGGTGGAGGATGGGCACGGGCAGCA
GCGGGACCCCTACCTCAAGGAGATGAACATCCGCACCTACCTGGTCATCGACCCCCGGAGCCAGCAGCCACCCCC
GCCCAGCCAACACCTCCCCAGGCCCAAGGGGGACGCGGCCCTGAAGATGCGGGCGTCAGTGCGCATGACCCGGTA
CCTCGAGTCCTGGGGGGCGGCACGGCCCTTTGCACATCTCAACCACCGTGAGAGCGTGAGCAGTGGTGAGACCCA
CGTCCCCAACGGGCGGAGGCCTAAGAGCGTTCCCCAGCGCCACCGCCGGACCCCAGACAGAAGCATGTCCCCCAA
GGGGCGGTCGGAGGATGACTCGTACGATGACGAGATGCTGTCAGCCATTGAGGGGCTCAGCTCCACGAGGCCCTG
CTGCTCCAAGTCCGATGACTTCTACACCTTTGGGTCCATCTTCCTGGAGAAGGGCTTTGAGCGCGAGTACCGCCT
GGCACCCATCCCCCGGGCCCGCCACGACTTTGCCTGCGCCAGCCTGATCTTCGTCTGCATCCTGCTCGTCCATGT
CCTGCTCATGCCCAGGACGGCGGCACTGGGTGTGTCCTTCGGGCTGGTGGCCTGTGTACTGGGGCTGGTGCTGGG
CCTGTGCTTTGCCACCAAGTTCTCGAGGTGCTGCCCAGCTCGGGGGACGCTCTGCACTATCTCTGAGAGGGTGGA
GACACAGCCCCTGCTGAGGCTGACCCTGGCCGTCCTGACCATCGGCAGCCTGCTCACTGTGGCCATCATCAACCT
GCCCCTGATGCCTTTCCAAGTTCCAGAGCTGCCTGTTGGCAATGAGACAGGCCTACTGGCCGCGAGCAGCAAGAC
AAGAGCCCTGTGTGAGCCCCTCCCGTACTACACCTGCAGCTGTGTCCTGGGCTTCATCGCCTGCTCGGTCTTCCT
GAGGATGAGCCTGGAGCCAAAGGTTGTGCTGCTGACAGTGGCCCTGGTGGCCTACCTGGTGCTCTTCAACCTCTC
CCCATGCTGGCAGTGGGACTGCTGCGGCCAAGGCCTGGGCAACCTCACCAAGCCCAACGGCACCACCAGTGGCAC
CCCTAGCTGTTCCTGGAAGGACCTGAAGACCATGACCAATTTCTACCTGGTCCTGTTCTACATCACCCTGCTTAC
ACTCTCCAGACAGATTGACTATTACTGCCGCTTGGACTGCCTATGGAAGAAGAAGTTCAAGAAGGAGCACGAGGA
GTTTGAGACCATGGAGAACGTGAACCGCCTTCTTCTGGAGAACGTCCTGCCAGCCCACGTGGCTGCCCACTTTAT
CGGTGACAAGTTAAACGAGGACTGGTACCATCAGTCCTATGACTGCGTCTGTGTCATGTTTGCCTCCGTGCCGGA
CTTCAAAGTGTTCTACACAGAGTGCGATGTCAACAAAGAAGGGCTGGAGTGCCTACGCCTGCTCAATGAGATCAT
TGCCGACTTCGACGAGCTCCTACTGAAGCCCAAGTTCAGCGGCGTGGAGAAGATCAAGACCATCGGCAGCACGTA
CATGGCAGCTGCAGGGCTCAGCGTCGCCTCAGGGCACGAGAACCAGGAGCTGGAGCGGCAGCATGCCCACATTGG
TGTCATGGTGGAGTTCAGCATCGCCCTGATGAGTAAGCTGGACGGCATCAACAGGCACTCCTTCAACTCCTTCCG
CCTCCGCGTCGGCATAAACCATGGGCCTGTGATTGCTGGAGTGATTGGGGCCCGAAAACCTCAGTATGACATCTG
GGGAAACACTGTCAATGTGGCCAGCCGAATGGAAAGCACTGGAGAACTTGGGAAAATCCAGGTTACCGAGGAGAC
CTGCACCATCCTCCAGGGCCTCGGGTACTCTTGTGAATGCCGTGGCCTGATCAACGTCAAAGGCAAAGGCGAGCT
GAGGACTTACTTTGTCTGTACGGACACTGCCAAGTTTCAGGGGCTGGGGCTGAACTGAGGGCTCCTGCTGGATTC
CGAAAAGGCCGGGAAGCCAGTCTCCTTCCCTGAAGCAAGCCCAGGAGAAGACTCTCCGCCCCACGCCAATCCCAA

FIGURE 6061B

AGGCATGCAGATGGCTGTGCATGTTGGCTTCTTTGGACCTGCACTGGAGGATTTCTCAGACACATGCACCAGATT
CTGGCTCGAAGCAGCCACTGAGCCATAATGCGCAGGGGAGGCCAGAAGCTCTGTGCCTGGTCTGTAACAGTTTCC
AGGCCAGCTGGAGAATGTTCACTGGTTCGGGGCTGACTTTGAGATCTTTGTTCCCTGAGGTGCCAGGCAGGCAAC
TTTAGCACATGATGAAAACAGACTTCCACCTCAGTGGCCTGTGGGCACGCACAAGTGAGGTCTGTTTTTCTAGAC
ACCAAGGGGGAGTAAGCTGAGCTGTCTAGCACGGATTGGAGACTCCCTCTCCCTGGTGGGCCTGGCAATGACAGC
ATTTCTCACAGAGGCATTCTGGTAAATGAAGCTGAAAGGGGTGTTTTACATCTGTAAACGGTTTCAAACAGGTAG
AGAGAAAAACACCACAATTAACACTGTTACTTTTTGCCTTGTCTGGCATGTTTGTTTTAAATGAATACATTAATG
GGGTTTTTATCCTTTTGAATGACTTTTCAGACACTAGACATAAATCTCTTCCCTCCAGTGTATGCTCTGCCTTTT
TAACCACTGACATGTAAGGAGGACTACTGTCTAGCATCAGCTTATGGGGTCAGCTGGCTGTGGGGATAGAGTCCT
GAGGAATGTGGTCACAGCAAGAAGGCGGGGAGCAGCAGAGCCTTGCCTTTGAATGAGGCAGCTTGTGAGGCAAGC
ATTCTGGAGAGAGGTGCTTTGAAAGTAAGGTGCGGCCTTTCACCTCTTCCTTGATTACTCACACATCTTTGCGTT
CTCCCCTGCCGTCCTTCAACTGTATCTTACTTTTCTTACCAGAAAGGAATGGAGTCTGTTTAGAGACAACTTGGA
CAACCTGTGAGTGCATCTCTTCTTTCCTTTAGTCTTCACAGCTAACTCTGGAGAGCTTCAAAACTAGAAGGATCT
ACTCCGCATGGGTGCATGCAGAGGCTCCTGGATCTGGGAAGCCCGCCCCCTCACAAATGCTGAGCCGTTCTTGCT
CTGAAACTGCGTGAGTCAAGGCAAATGCAAAAAGCCAGGTTTTGGGGATGTGTCTTACTGTGCTTCAACTTCCCA
AGGAATTGAAAGTCAACCTAACTGTAACAACAGGGTGAGAAATGACCAAACTGCCCGTGACTTTTTCTGAATGGA
CTTCATAACCGGAAGACTTAACCGGTGGCCTCATCACCAGAGCATCGCCAGGATTTCTAATGCACTCAGTTTCCC
TACATAGCAGGGATTCTTAGCTAGGTGTCCCCATGAACCCCGTAAAGTTCTACACAAAGTCTTGCATACAGGAGC
CTTTACAAGATGATTATACAGGGTTGCAGATTGGGTGACTGACCAGACTTGTTGGGGTCCTGGGATGAGTTGCCC
CGGGCTGCAAATTAAGAGTACAGCTAAGTGCGGGGGTGGCGGTGGAGGGAACGAAAATTGAACCTGTCTGCCTGT
GCTGTGTCGTGTGGCTTTATCAGCCCGAGGAAGGGCAGGTGTATTCTAATTTGCACAAAGGTGCTGGGTAGACTA
GTGGCAGCTCTCATGTGCTGCACATAAGTGGAATCAGTATGAATAGAAGAACTTGCTGTATAAAGGAATTTCATG
GCAACAATGCTGGTAAGGGCAATTAGCCTCGCTTAAGTTGCCTTTTTTACACACCAAAACTTTTTACATGAAGGG
CTGGTTTCACATGAATACTATACTGAAATCTGTGCCACACCAAAACTTTTTACATGAAGGGCTGGTTTCACATGA
ATACTATACTGAAATCTGTGCTCTCAAGATCTAGCAGTGACCAGGGCTGCCCGGCGGGGGCTCTCCTGGCAAGTC
AGGAAGGTTTCTGTTGCTAATATAACATAGAAACACATTAGTGCACTGGGCCTCTCTGAGGTCAGCATATTTGTA
CTCTTGGAATATTTGTTTTTTTCTTCAGTAACAACAGAAACCCCAGTTGGGAGTTTAACAAATAACTGACTACCA
CTCACTCATGCATTTTTATTTCCAATTAAAGCAAAGCACTGTGCTGTGCTCAGATAATAATAGTTTGTAAGTAAA
AGTTTTTAGTTTTCAGTGTTCAGGTTATAGAATATAACTGACCATAAAAATTACCTGCAGGTATTTTCTTTTTAT
GAACTTGTTTTTAAATTACCAAGTAATTACTGGTGTCATTTTGTTTTATGACAGACACACGTATCTAACAAACAA
ACAAACAGTGACCTTCTCCATGGGTCAAGGACTTCCTTACAATTTCTCCTGAGTTAACTTTTGTGAAAATAATAC
CTAAGGTTTTCTGGCTTATTGAGGAAATTTCCTAACAAACAAACAAACAAACAAACAGAAGAGAAGATCATTAAC
CACTGTATACTTTGTGTATATAATAGGTCAGTGTAAAGAAATATGATTTGAGGTGGTGCATGCAAGTAACTAGGG
TTTATTCTATATAATGAATATTTATAGATCTGTAACATTTGTTTCAAAATGCTGTTTCATTTTTATAAAGTACCA
GTGTTTAGCTGCTTTTTATACATTAAATTAGCAATTTGAAAAACTC

FIGURE 6062

MPAKGRYFLNEGEEGPDQDALYEKYQLTSQHGPLLLTLLLVAATACVALIIIAFSQGDPSRHQAILGMAFLVLAV
FAALSVLMYVECLLRRWLRALALLTWACLVALGYVLVFDAWTKAACAWEQVPFFLFIVFVVYTLLPFSMRGAVAV
GAVSTASHLLVLGSLMGGFTTPSVRVGLQLLANAVIFLCGNLTGAFHKHQMQDASRDLFTYTVKCIQIRRKLRIE
KRQQENLLLSVLPAHISMGMKLAIIERLKEHGDRRCMPDNNFHSLYVKRHQNVSILYADIVGFTQLASDCSPKEL
VVVLNELFGKFDQIAKANECMRIKILGDCYYCVSGLPVSLPTHARNCVKMGLDMCQAIKQVREATGVDINMRVGI
HSGNVLCGVIGLRKWQYDVWSHDVSLANRMEAAGVPGRVHITEATLKHLDKAYEVEDGHGQQRDPYLKEMNIRTY
LVIDPRSQQPPPPSQHLPRPKGDAALKMRASVRMTRYLESWGAARPFAHLNHRESVSSGETHVPNGRRPKSVPQR
HRRTPDRSMSPKGRSEDDSYDDEMLSAIEGLSSTRPCCSKSDDFYTFGSIFLEKGFEREYRLAPIPRARHDFACA
SLIFVCILLVHVLLMPRTAALGVSFGLVACVLGLVLGLCFATKFSRCCPARGTLCTISERVETQPLLRLTLAVLT
IGSLLTVAIINLPLMPFQVPELPVGNETGLLAASSKTRALCEPLPYYTCSCVLGFIACSVFLRMSLEPKVVLLTV
ALVAYLVLFNLSPCWQWDCCGQGLGNLTKPNGTTSGTPSCSWKDLKTMTNFYLVLFYITLLTLSRQIDYYCRLDC
LWKKKFKKEHEEFETMENVNRLLLENVLPAHVAAHFIGDKLNEDWYHQSYDCVCVMFASVPDFKVFYTECDVNKE
GLECLRLLNEIIADFDELLLKPKFSGVEKIKTIGSTYMAAAGLSVASGHENQELERQHAHIGVMVEFSIALMSKL
DGINRHSFNSFRLRVGINHGPVIAGVIGARKPQYDIWGNTVNVASRMESTGELGKIQVTEETCTILQGLGYSCEC
RGLINVKGKGELRTYFVCTDTAKFQGLGLN

FIGURE 6063

AGCAGAGCTTTCCCXCCATGXXAGAAGCTTCATGAGTCACACATTACATCTTTGGGTTGATTGAATGCCACTGAA
ACATTTCTAGTAGCCTGGAGXAGTTGACCTACCTGTGGAGATGCCTGCCATTAAATGGCATCCTGATGGCTTAAT
ACACATCACTCTTCTGTGXAGGGTTTTAATTTTCAACACAGCTTACTCTGTAGCATCATGTTTACATTGTATGTA
TAAAGATTATACXAAGGTGCAATTGTGTATTTCTTCCTTAAAATGTATCAGTATAGGATTTAGAATCTCCATGTT
GAAACTCTAAATGCATAGAAATAAAAATAATAAAAAATTTTTCATTTTGCCTTTTCAGCCTAGTATTAAAACTGA
TAAAAGCAAAGCCATGCACAAAACTACCTCCCTAGAGAAAGGCTAGTCCCTTTTCTTCCCCATTCATTTCATTATT
GAACATAGTAGAAAACAGCATATTCTTATCAAATTTGATGAAAAGCGCCAACACGTTTGAACTGAAATACGACTT
GTCATGTGAACTGTACCGAATGTCTACGTATTCCACTTTTCCTGCTGGGGTTCCTGTCTCAGAAAGGAGTCTTGC
TCGTGCTGGTTTCTATTACACTGGTGTGAATGACAAGGTCAAATGCTTCTGTTGTGGCCTGATGCTGGATAACTG
GAAAAGAGGAGACAGTCCTACTGAAAAGCATAAAAAGTTGTATCCTAGCTGCAGATTCGTTCAGAGTCTAAATTC
CGTTAACAACTTGGAAGCTACCTCTCAGCCTACTTTTCCTTCTTCAGTAACACATTCCACACACTCATTACTTCC
GGGTACAGAAAACAGTGGATATTTCCGTGGCTCTTATTCAAACTCTCCATCAAATCCTGTAAACTCCAGAGCAAA
TCAAGAATTTTCTGCCTTGATGAGAAGTTCCTACCCCTGTCCAATGAATAACGAAAATGCCAGATTACTTACTTT
TCAGACATGGCCATTGACTTTTCTGTCGCCAACAGATCTGGCACGAGCAGGCTTTTACTACATAGGACCTGGAGA
CAGAGTGGCTTGCTTTGCCTGTGGTGGAAAATTGAGCAATTGGGAACCGAAGGATAATGCTATGTCAGAACACCT
GAGACATTTTCCCAAATGCCCATTTATAGAAAATCAGCTTCAAGACACTTCAAGATACACAGTTTCTAATCTGAG
CATGCAGACACATGCAGCCCGCTTTAAAACATTCTTTAACTGGCCCTCTAGTGTTCTAGTTAATCCTGAGCAGCT
TGCAAGTGCGGGTTTTTATTATGTGGGTAACAGTGATGATGTCAAATGCTTTTGCTGTGATGGTGGACTCAGGTG
TTGGGAATCTGGAGATGATCCATGGGTTCAACATGCCAAGTGGTTTCCAAGGTGTGAGTACTTGATAAGAATTAA
AGGACAGGAGTTCATCCGTCAAGTTCAAGCCAGTTACCCTCATCTACTTGAACAGCTGCTATCCACATCAGACAG
CCCAGGAGATGAAAATGCAGAGTCATCAATTATCCATTTGGAACCTGGAGAAGACCATTCAGAAGATGCAATCAT
GATGAATACTCCTGTGATTAATGCTGCCGTGGAAATGGGCTTTAGTAGAAGCCTGGTAAAACAGACAGTTCAGAG
AAAAATCCTAGCAACTGGAGAGAATTATAGACTAGTCAATGATCTTGTGTTAGACTTACTCAATGCAGAAGATGA
AATAAGGGAAGAGGAGAGAGAAAGAGCAACTGAGGAAAAAGAATCAAATGATTTATTATTAATCCGGAAGAATAG
AATGGCACTTTTTCAACATTTGACTTGTGTAATTCCAATCCTGGATAGTCTACTAACTGCCGGAATTATTAATGA
ACAAGAACATGATGTTATTAAACAGAAGACACAGACGTCTTTACAAGCAAGAGAACTGATTGATACGATTTTAGT
AAAAGGAAATATTGCAGCCACTGTATTCAGAAACTCTCTGCAAGAAGCTGAAGCTGTGTTATATGAGCATTTATT
TGTGCAACAGGACATAAAATATATTCCCACAGAAGATGTTTCAGATCTACCAGTGGAAGAACAATTGCGGAGACT
ACCAGAAGAAAGAACATGTAAAGTGTGTATGGACAAAGAAGTGTCCATAGTGTTTATTCCTTGTGGTCATCTAGT
AGTATGCAAAGATTGTGCTCCTTCTTTAAGAAAGTGTCCTATTTGTAGGAGTACAATCAAGGGTACAGTTCGTAC
ATTTCTTTCATGAAGAAGAACCAAAACATCGTCTAAACTTTAGAATTAATTTATTAAATGTATTATAACTTTAAC
TTTTATCCTAATTTGGTTTCCTTAAAATTTTTATTTATTTACAACTCAAAAAACATTGTTTTGTGTAACATATTT
ATATATGTATCTAAACCATATGAACATATATTTTTTAGAAACTAAGAGAATGATAGGCTTTTGTTCTTATGAACG
AAAAAGAGGTAGCACTACAAACACAATATTCAATCCAAATTTCAGCATTATTGAAATTGTAAGTGAAGTAAAACT
TAAGATATTTGAGTTAACCTTTAAGAATTTTAAATATTTTGGCATTGTACTAATACCGGGAACATGAAGCCAGGT
GTGGTGGTATGTACCTGTAGTCCCAGGCTGAGGCAAGAGAATTACTTGAGCCCAGGAGTTTGAATCCATCCTGGG
CAGCATACTGAGACCCTGCCTTTAAAAACXAACAGXACCAAAXCCAAACACCAGGGACACATTTCTCTGTCTTTT
TTGATCAGTGTCCTATACATCGAAGGTGTGCATATATGTTGAATCACATTTTAGGGACATGGTGTTTTTATAAAG
AATTCTGTGAGXAAAAATTTAATAAAGCAACCXAAATTACTCTTAAAAAAAAAAAAAAAAAAAAA

FIGURE 6064

MNIVENSIFLSNLMKSANTFELKYDLSCELYRMSTYSTFPAGVPVSERSLARAGFYYTGVNDKVKCFCCGLMLDN
WKRGDSPTEKHKKLYPSCRFVQSLNSVNNLEATSQPTFPSSVTHSTHSLLPGTENSGYFRGSYSNSPSNPVNSRA
NQEFSALMRSSYPCPMNNENARLLTFQTWPLTFLSPTDLARAGFYYIGPGDRVACFACGGKLSNWEPKDNAMSEH
LRHFPKCPFIENQLQDTSRYTVSNLSMQTHAARFKTFFNWPSSVLVNPEQLASAGFYYVGNSDDVKCFCCDGGLR
CWESGDDPWVQHAKWFPRCEYLIRIKGQEFIRQVQASYPHLLEQLLSTSDSPGDENAESSIIHLEPGEDHSEDAI
MMNTPVINAAVEMGFSRSLVKQTVQRKILATGENYRLVNDLVLDLLNAEDEIREEERERATEEKESNDLLLIRKN
RMALFQHLTCVIPILDSLLTAGIINEQEHDVIKQKTQTSLQARELIDTILVKGNIAATVFRNSLQEAEAVLYEHL
FVQQDIKYIPTEDVSDLPVEEQLRRLPEERTCKVCMDKEVSIVFIPCGHLVVCKDCAPSLRKCPICRSTIKGTVR
TFLS

FIGURE 6065

ATGACCTCCAGAGGTTTCCAGCGAAGCTGTAACAATCCACCCTGCAGCTCTATGACAGGGAGGAGGGCGAATCAA
ATCCATCATCTTACGCCAGACTTCAGCCTGCGGGAGCTGCTGCCTCCAAAGAAAGCGGGGACCTGGGCGGACTGC
GTCTCTCCCCCGTGTGGAGAACGTGACAGATGTGAAGGTTGGGCTGACAGACACACGGCCTGCAGCAGCCCAGCC
AGCACCTGCCAAGTCCACACTCAGGACTGTGACAGCCTCAACAACATGAGGTCCAGACACATTCACTGTGGAAGG
CTCTGCCACGCGAACAAAGCTGTCAGCTCTAGCAAAAGGGACACTGCCTTCTTCCTCCCTCACTTCTCACCTGGT
AAGCCCGGGAATCAAAACAGCAAAAATGAGCCCCCAAAAAAGAGAGAGAGAGAGAGAAGCAGCCACTGTTACCCA
GCAGCACCCGCTGCACAGGCAGAAGCACCTCTGGTGCCACTTTCAAGACAAAACAAGAGCACAGTTGAAACATCT
AATTTGAAAATGTTGATCTCCTTTCCTAAGACATTGCTAAGGGGCCCACAGGAAGGCTGGTGGCACCAGGGAATA
AACCCTGGAAGTGGTGCAGCCACTCTGGGACCAGGCAGCTCCGAGAGGCCTCAATCCATCGAGGCCAGCTGCTCG
ATGGCACGGCGCACTTTCTTCGCAGTTTCCTCAAATTCTTTCTTCTTATTGTTGGTTTCCTTTGCAATTTTGTTC
TTGGCTCTTTCTCTGTCCAGTTTCAAAAATTCACCAAGGGTTAATTCTTCAAACTGCTTCTTGACAGAAAGGAAA
GCGCAACCGGACGAATGCTTTTTATGTTCCTCTATGGGGTCGTCATCTGGCTCCCAGCCTTCCAGCTCCTTGAAG
CAGAAGAAACACTGGGCCAAGTCTGGCTCGTTCTCAGTGGGGCAGTGGATGAAGCCAGCCTCGGCCATCCGCTCC
GGGGTGCAGCGCAGCCCTCCAAGAAGGGCCAGTTCT

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FIGURE 6066

MTSRGFQRSCNNPPCSSMTGRRANQIHHLTPDFSLRELLPPKKAGTWADCVSPPCGERDRCEGWADRHTACSSPA
STCQVHTQDCDSLNNMRSRHIHCGRLCHANKAVSSSKRDTAFFLPHFSPGKPGNQNSKNEPPKKRERERSSHCYP
AAPAAQAEAPLVPLSRQNKSTVETSNLKMLISFPKTLLRGPQEGWWHQGINPGSGAATLGPGSSERPQSIEASCS
MARRTFFAVSSNSFFLLLVSFAILFLALSLSSFKNSPRVNSSNCFLTERKAQPDECFLCSSMGSSSGSQPSSSLK
QKKHWAKSGSFSVGQWMKPASAIRSGVQRSPPRRASS

FIGURE 6067A

GTTTGTTAGGGAGTCGTGTGCGTGCCTTGGTCGCTTCTGTAGCTCCGAGGGCAGGTTGCGGAAGAAAGCCCAGGC
GGTCTGTGGCCCAGAGGAAAGGCCTGCAGCAGGACGAGGACCTGAGCCAGGAATGCAGGATGGCGGCGGTGAAGA
AGGAAGGGGGTGCTCTGAGTGAAGCCATGTCCCTGGAGGGAGATGAATGGGAACTGAGTAAAGAAAATGTACAAC
CTTTAAGGCAAGGGCGGATCATGTCCACGCTTCAGGGAGCACTGGCACAAGAATCTGCCTGTAACAATACTCTTC
AGCAGCAGAAACGGGCATTTGAATATGAAATTCGATTTTACACTGGAAATGACCCTCTGGATGTTTGGGATAGGT
ATATCAGCTGGACAGAGCAGAACTATCCTCAAGGTGGGAAGGAGAGTAATATGTCAACGTTATTAGAAAGAGCTG
TAGAAGCACTACAAGGAGAAAAACGATATTATAGTGATCCTCGATTTCTCAATCTCTGGCTTAAATTAGGGCGTT
TATGCAATGAGCCTTTGGATATGTACAGTTACTTGCACAACCAAGGGATTGGTGTTTCACTTGCTCAGTTCTATA
TCTCATGGGCAGAAGAATATGAAGCTAGAGAAAACTTTAGGAAAGCAGATGCGATATTTCAGGAAGGGATTCAAC
AGAAGGCTGAACCACTAGAAAGACTACAGTCCCAGCACCGACAATTCCAAGCTCGAGTGTCTCGGCAAACTCTGT
TGGCACTTGAGAAAGAAGAAGAGGAGGAAGTTTTTGAGTCTTCTGTACCACAACGAAGCACACTAGCTGAACTAA
AGAGCAAAGGGAAAAAGACAGCAAGAGCTCCAATCATCCGTGTAGGAGGTGCTCTCAAGGCTCCAAGCCAGAACA
GAGGACTCCAAAATCCATTTCCTCAACAGATGCAAAATAATAGTAGAATTACTGTTTTTGATGAAAATGCTGATG
AGGCTTCTACAGCAGAGTTGTCTAAGCCTACAGTCCAGCCATGGATAGCACCCCCCATGCCCAGGGCCAAAGAGA
ATGAGCTGCAAGCAGGCCCTTGGAACACAGGCAGGTCCTTGGAACACAGGCCTCGTGGCAATACAGCTTCACTGA
TAGCTGTACCCGCTGTGCTTCCCAGTTTCACTCCATATGTGGAAGAGACTGCACAACAGCCAGTTATGACACCAT
GTAAAATTGAACCTAGTATAAACCACATCCTAAGCACCAGAAAGCCTGGAAAGGAAGAAGGAGATTCTCTACAAA
GGGTTCAGAGCCATCAGCAAGCGTCTGAGGAGAAGAAAGAGAAGATGATGTATTGTAAGGAGAAGATTTATGCAG
GAGTAGGGGAATTCTCCTTTGAAGAAATTCGGGCTGAAGTTTTCCGGAAGAAATTAAAAGAGCAAAGGGAAGCCG
AGCTATTGACCAGTGCAGAGAAGAGAGCAGAAATGCAGAAACAGATTGAAGAGATGGAGAAGAAGCTAAAAGAAA
TCCAAACTACTCAGCAAGAAAGAACAGGTGATCAGCAAGAAGAGACGATGCCTACAAAGGAGACAACTAAACTGC
AAATTGCTTCCGAGTCTCAGAAAATACCAGGAATGACTCTATCCAGTTCTGTTTGTCAAGTAAACTGTTGTGCCA
GAGAAACTTCACTTGCGGAGAACATTTGGCAGGAACAACCTCATTCTAAAGGTCCCAGTGTACCTTTCTCCATTT
TTGATGAGTTTCTTCTTTCAGAAAAGAAGAATAAAAGTCCTCCTGCAGATCCCCCACGAGTTTTAGCTCAACGAA
GACCCCTTGCAGTTCTCAAAACCTCAGAAAGCATCACCTCAAATGAAGATGTGTCTCCAGATGTTTGTGATGAAT
TTACAGGAATTGAACCCTTGAGCGAGGATGCCATTATCACAGGCTTCAGAAATGTAACAATTTGTCCTAACCCAG
AAGACACTTGTGACTTTGCCAGAGCAGCTCGTTTTGTATCCACTCCTTTTCATGAGATAATGTCCTTGAAGGATC
TCCCTTCTGATCCTGAGAGACTGTTACCGGAAGAAGATCTAGATGTAAAGACCTCTGAGGACCAGCAGACAGCTT
GTGGCACTATCTACAGTCAGACTCTCAGCATCAAGAAGCTGAGCCCAATTATTGAAGACAGTCGTGAAGCCACAC
ACTCCTCTGGCTTCTCTGGTTCTTCTGCCTCGGTTGCAAGCACCTCCTCCATCAAATGTCTTCAAATTCCTGAGA
AACTAGAACTTACTAATGAGACTTCAGAAAACCCTACTCAGTCACCATGGTGTTCACAGTATCGCAGACAGCTAC
TGAAGTCCCTACCAGAGTTAAGTGCCTCTGCAGAGTTGTGTATAGAAGACAGACCAATGCCTAAGTTGGAAATTG
AGAAGGAAATTGAATTAGGTAATGAGGATTACTGCATTAAACGAGAATACCTAATATGTGAAGATTACAAGTTAT
TCTGGGTGGCGCCAAGAAACTCTGCAGAATTAACAGTAATAAAGGTATCTTCTCAACCTGTCCCATGGGACTTTT
ATATCAACCTCAAGTTAAAGGAACGTTTAAATGAAGATTTTGATCATTTTTGCAGCTGTTATCAATATCAAGATG
GCTGTATTGTTTGGCACCAATATATAAACTGCTTCACCCTTCAGGATCTTCTCCAACACAGTGAATATATTACCC
ATGAAATAACAGTGTTGATTATTTATAACCTTTTGACAATAGTGGAGATGCTACACAAAGCAGAAATAGTCCATG
GTGACTTGAGTCCAAGGTGTCTGATTCTCAGAAACAGAATCCACGATCCCTATGATTGTAACAAGAACAATCAAG
CTTTGAAGATAGTGGACTTTTCCTACAGTGTTGACCTTAGGGTGCAGCTGGATGTTTTTACCCTCAGCGGCTTTC
GGACTGTACAGATCCTGGAAGGACAAAAGATCCTGGCTAACTGTTCTTCTCCCTACCAGGTAGACCTGTTTGGTA
TAGCAGATTTAGCACATTTACTATTGTTCAAGGAACACCTACAGGTCTTCTGGGATGGGTCCTTCTGGAAACTTA
GCCAAAATATTTCTGAGCTAAAAGATGGTGAATTGTGGAATAAATTCTTTGTGCGGATTCTGAATGCCAATGATG
AGGCCACAGTGTCTGTTCTTGGGGAGCTTGCAGCAGAAATGAATGGGGTTTTTGACACTACATTCCAAAGTCACC
TGAACAAAGCCTTATGGAAGGTAGGGAAGTTAACTAGTCCTGGGGCTTTGCTCTTTCAGTGAGCTAGGCAATCAA
GTCTCACAGATTGCTGCCTCAGAGCAATGGTTGTATTGTGGAACACTGAAACTGTATGTGCTGTAATTTAATTTA
GGACACATTTAGATGCACTACCATTGCTGTTCTACTTTTTGGTACAGGTATATTTTGACGTCACTGATATTTTTT
ATACAGTGATATACTTACTCATGGCCTTGTCTAACTTTTGTGAAGAACTATTTTATTCTAAACAGACTCATTACA
AATGGTTACCTTGTTATTTAACCCATTTGTCTCTACTTTTCCCTGTACTTTTCCCATTTGTAATTTGTAAAATGT

FIGURE 6067B

TCTCTTATGATCACCATGTATTTTGTAAATAATAAAATAGTATCTGTTAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6068

MAAVKKEGGALSEAMSLEGDEWELSKENVQPLRQGRIMSTLQGALAQESACNNTLQQQKRAFEYEIRFYTGNDPL
DVWDRYISWTEQNYPQGGKESNMSTLLERAVEALQGEKRYYSDPRFLNLWLKLGRLCNEPLDMYSYLHNQGIGVS
LAQFYISWAEEYEARENFRKADAIFQEGIQQKAEPLERLQSQHRQFQARVSRQTLLALEKEEEEEVFESSVPQRS
TLAELKSKGKKTARAPIIRVGGALKAPSQNRGLQNPFPQQMQNNSRITVFDENADEASTAELSKPTVQPWIAPPM
PRAKENELQAGPWNTGRSLEHRPRGNTASLIAVPAVLPSFTPYVEETAQQPVMTPCKIEPSINHILSTRKPGKEE
GDSLQRVQSHQQASEEKKEKMMYCKEKIYAGVGEFSFEEIRAEVFRKKLKEQREAELLTSAEKRAEMQKQIEEME
KKLKEIQTTQQERTGDQQEETMPTKETTKLQIASESQKIPGMTLSSSVCQVNCCARETSLAENIWQEQPHSKGPS
VPFSIFDEFLLSEKKNKSPPADPPRVLAQRRPLAVLKTSESITSNEDVSPDVCDEFTGIEPLSEDAIITGFRNVT
ICPNPEDTCDFARAARFVSTPFHEIMSLKDLPSDPERLLPEEDLDVKTSEDQQTACGTIYSQTLSIKKLSPIIED
SREATHSSGFSGSSASVASTSSIKCLQIPEKLELTNETSENPTQSPWCSQYRRQLLKSLPELSASAELCIEDRPM
PKLEIEKEIELGNEDYCIKREYLICEDYKLFWVAPRNSAELTVIKVSSQPVPWDFYINLKLKERLNEDFDHFCSC
YQYQDGCIVWHQYINCFTLQDLLQHSEYITHEITVLIIYNLLTIVEMLHKAEIVHGDLSPRCLILRNRIHDPYDC
NKNNQALKIVDFSYSVDLRVQLDVFTLSGFRTVQILEGQKILANCSSPYQVDLFGIADLAHLLLFKEHLQVFWDG
SFWKLSQNISELKDGELWNKFFVRILNANDEATVSVLGELAAEMNGVFDTTFQSHLNKALWKVGKLTSPGALLFQ

FIGURE 6069

CGGCAGCCAGCCTATTCTTTGGCCGGGTCGGTGCGAGTGGTCGGCTGGGCAGAGTGCACGCTGCTTGGCGCCGCA
GGCTGATCCCGCCGTCCACTCCCGGGAGCAGTGATGTTGGGCAACTCTGCGCCGGGGCCTGCGACCCGCGAGGCG
GGCTCGGCGCTGCTAGCATTGCAGCAGACGGCGCTCCAAGAGGACCAGGAGAATATCAACCCGGAAAAGGCAGCG
CCCGTCCAACAACCGCGGACCCGGGCCGCGCTGGCGGTACTGAAGTCCGGGAACCCGCGGGGTCTAGCGCAGCAG
CAGAGGCCGAAGACGAGACGGGTTGCACCCCTTAAGGATCTTCCTGTAAATGATGAGCATGTCACCGTTCCTCCT
TGGAAAGCAAACAGTAAACAGCCTGCGTTCACCATTCATGTGGATGAAGCAGAAAAAGAAGCTCAGAAGAAGCCA
GCTGAATCTCAAAAAATAGAGCGTGAAGATGCCCTGGCTTTTAATTCAGCCATTAGTTTACCTGGACCCAGAAAA
CCATTGGTCCCTCTTGATTATCCAATGGATGGTAGTTTTGAGTCACCACATACTATGGACATGTCAATTGTATTA
GAAGATGAAAAGCCAGTGAGTGTTAATGAAGTACCAGACTACCATGAGGATATTCACACATACCTTAGGGAAATG
GAGGTTAAATGTAAACCTAAAGTGGGTTACATGAAGAAACAGCCAGACATCACTAACAGTATGAGAGCTATCCTC
GTGGACTGGTTAGTTGAAGTAGGAGAAGAATATAAACTACAGAATGAGACCCTGCATTTGGCTGTGAACTACATT
GATAGGTTCCTGTCTTCCATGTCAGTGCTGAGAGGAAAACTTCAGCTTGTGGGCACTGCTGCTATGCTGTTAGCC
TCAAAGTTTGAAGAAATATACCCCCCAGAAGTAGCAGAGTTTGTGTACATTACAGATGATACCTACACCAAGAAA
CAAGTTCTGAGAATGGAGCATCTAGTTTTGAAAGTCCTTACTTTTGACTTAGCTGCTCCAACAGTAAATCAGTTT
CTTACCCAATACTTTCTGCATCAGCAGCCTGCAAACTGCAAAGTTGAAAGTTTAGCAATGTTTTTGGGAGAATTA
AGTTTGATAGATGCTGACCCATACCTCAAGTATTTGCCATCAGTTATTGCTGGAGCTGCCTTTCATTTAGCACTC
TACACAGTCACGGGACAAAGCTGGCCTGAATCATTAATACGAAAGACTGGATATACCCTGGAAAGTCTTAAGCCT
TGTCTCATGGACCTTCACCAGACCTACCTCAAAGCACCACAGCATGCACAACAGTCAATAAGAGAAAAGTACAAA
AATTCAAAGTATCATGGTGTTTCTCTCCTCAACCCACCAGAGACACTAAATCTGTAACAATGAAAGACTGCCTTT
GTTTTCTAAGATGTAAATCACTCAAAGTATATGGTGTACAGTTTTTAACTTAGGTTTTAATTTTACAATCATTTC
TGAATACAGAAGTTGTGGCCAAGTACAAATTATGGTATCTATTACTTTTTAAATGGTTTTAATTTGTATATCTTT
TGTATATGTATCTGTCTTAGATATTTGGCTAATTTTAAGTGGTTTTGTTAAAGTATTAATGATGCCAGCTGTCAG
GATAATAAATTGATTTGGAAAACTTAAAAAAA

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FIGURE 6070

MLGNSAPGPATREAGSALLALQQTALQEDQENINPEKAAPVQQPRTRAALAVLKSGNPRGLAQQQRPKTRRVAPL
KDLPVNDEHVTVPPWKANSKQPAFTIHVDEAEKEAQKKPAESQKIEREDALAFNSAISLPGPRKPLVPLDYPMDG
SFESPHTMDMSIVLEDEKPVSVNEVPDYHEDIHTYLREMEVKCKPKVGYMKKQPDITNSMRAILVDWLVEVGEEY
KLQNETLHLAVNYIDRFLSSMSVLRGKLQLVGTAAMLLASKFEEIYPPEVAEFVYITDDTYTKKQVLRMEHLVLK
VLTFDLAAPTVNQFLTQYFLHQQPANCKVESLAMFLGELSLIDADPYLKYLPSVIAGAAFHLALYTVTGQSWPES
LIRKTGYTLESLKPCLMDLHQTYLKAPQHAQQSIREKYKNSKYHGVSLLNPPETLNL

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FIGURE 6071

GTCTTGTGTGGTTGCAGCAAGGCAAAGAGTGTGGGGCGTCTCTGTGTTCCAGGGCCAGTGCTCTTCTGGGTGATC
CTGGTGTTGGTTGTGGTGGTCGGCTCCAGCGCCTTCCTCCTGTGCCACCGGAGGGCCTGCAGGAAGCGAATTCGG
CAGAAGCTCCACCTGTGCTACCCGGTCCAGACCTCCCAGCCCAAGCTAGAGCTTGTGGATTCCAGACCCAGGAGG
AGCTCAACGCAGCTGAGGAGCGGTGCGTCGGTGACAGAACCCGTCGCGGAAGAGCGAGGGTTAATGAGCCAGCCA
CTGATGGAGACCTGCCACAGCGTGGGCGCAGCCTACCTGGAGAGCCTGCCGCTGCAGGATGCCAGCCCGGCCGGG
GGCCCCTCGTCCCCCAGGGACCTTCCTGAGCCCCGGGTGTCCACGGAGCACACCAATAACAAGATTGAGAAAATC
TACATCATGAAGGCTGACACCGTGATCGTGGGGACCGTGAAGGCTGAGCTGCCGGAGGGCCGGGGCCTGGCGGGG
CCAGCAGAGCCCGAGTTGGAGGAGGAGCTGGAGGCGGACCATACCCCCCACTACCCCGAGCAGGAGACAGAACCG
CCTCTGGGCAGCTGCAGCGATGTCATGCTCTCAGTGGAAGAGGAAGGGAAAGAAGACCCCTTGCCCACAGCTGCC
TCTGGAAAGTGAGGCCTGGGCTGGGCTGGGGCTAGGAGGGCAGCAGGGTGGCCTCTGGGAGGCCAGGATGGCACT
GTTGGCACCGAGGTTGGGGGCAGAGGCCCATCTGGCCTGAACTGAGGCTCCAGCATCTAGTGGTGGACCGGCCGG
TCACTGCAGGGGTCTGGTGGTCTCTGCTTGCATCCCCAACTTAGCTGTCCCCTGACCCAGAGCCTAGGGGATCCG
GGGCTTGTACAGAAGAGACAGTCCAAGGGGACTGGATCCCAGCAGTGATGTTGGTTGAGGCAGCAAACAGATGGC
AGGATGGGCACTGCCGAGAACAGCATTGGTCCCAGAGCCCTGGGCATCAGACCTTAACCACCAGGCCCACAGCCC
AGCGAGGGAGAGGTCGTGAGGCCAGCTCCCGGGGCCCCTGTAACCCTACTCTCCTCTCTCCCTGGACCTCAGAGG
TGACACCCATTGGGCCCTTCCGGCATGCCCCCAGTTACTGTAAATGTGGCCCCCAGTGGGCATGGAGCCAGTGCC
TGTGGTTGTTTCTCCAGAGTCAAAAGGGAAGTCGAGGGATGGGGCGTCGTCAGCTGGCACTGTCTCTGCTGCAGC
GGCCACACTGTACTCTGCACTGGTGTGAGGGCCCCTGCCTGGACTGTGGGACCCTCCTGGTGCTGCCCACCTTCC
CTGTCCTGTAGCCCCCTCGGTGGGCCCAGGGCCTAGGGGCCCAGGATCAAGTCACTCATCTCAGAATGTCCCCAC
CAATCCCCGCCACAGCAGGCGCCTCGGGTCCCAGATGTCTGCAGCCCTCAGCAGCTGCAGACCGCCCCTCACCAA
CCCAGAGAACCTGCTTTACTTTGCCCAGGGACTTCCTCCCCATGTGAACATGGGGAACTTCGGGCCCTGCCTGGA
GTCCTTGACCGCTCTCTGTGGGCCCCACCCACTCTGTCCTGGGAAATGAAGAAGCATCTTCCTTAGGTCTGCCCT
GCTTGCAAATCCACTAGCACCGACCCCACCACCTGGTTCCGGCTCTGCACGCTTTGGGGTGTGGATGTCGAGAGG
CACCACGGCCTCACCCAGGCATCTGCTTTACTCTGGACCATAGGAAACAAGACCGTTTGGAGGTTTCATCAGGAT
TTTGGGTTTTTCACATTTCACGCTAAGGAGTAGTGGCCCTGACTTCCGGTCGGCTGGCCAGCTGACTCCCTAGGG
CCTTCAGACGTGTATGCAAATGAGTGATGGATAAGGATGAGTCTTGGAGTTGCGGGCAGCCTGGAGACTCGTGGA
CTTACCGCCTGGAGGCAGGCCCGGGAAGGCTGCTGTTTACTCATCGGGCAGCCACGTGCTCTCTGGAGGAAGTGA
TAGTTTCTGAAACCGCTCAGATGTTTTGGGGAAAGTTGGAGAAGCCGTGGCCTTGCGAGAGGTGGTTACACCAGA
ACCTGGACATTGGCCAGAAGAAGCTTAAGTGGGCAGACACTGTTTGCCCAGTGTTTGTGCAAGGATGGAGTGGGT
GTCTCTGCATCACCCACAGCCGCAGCTGTAAGGCACGCTGGAAGGCACACGCCTGCCAGGCAGGGCAGTCTGGCG
CCCATGATGGGAGGGATTGACATGTTTCAACAAAATAATGCACTTCCTTACCTAGTGGCCCTTCACACAACTTTT
GAATCTCTAAAAATCCATAAAATCCTTAAAGAACTGTAAAAAAAAAAAAAAA

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FIGURE 6072

MSQPLMETCHSVGAAYLESLPLQDASPAGGPSSPRDLPEPRVSTEHTNNKIEKIYIMKADTVIVGTVKAELPEGR
GLAGPAEPELEEELEADHTPHYPEQETEPPLGSCSDVMLSVEEEGKEDPLPTAASGK

FIGURE 6073

GGGGCCAGTCGTTCGCCGGAAAGCATTTGTCTCCCACCTCATCATAACAACAATTAATTTCCTCTGGGGCCTGAG
GAGGGCAGAATTTCAACCTTCGGTGTGCTTGGGAGTGGCGATTGTGATTTACACGACAAAATGCCGAGGTGCTCG
GTGGAGTCATGGCAGTGCCCTTTGTGGAAGACTGGGACTTGGTGCAAACCCTGGGAGAAGGTGCCTATGGAGAAG
TTCAACTTGCTGTGAATAGAGTAACTGAAGAAGCAGTCGCAGTGAAGATTGTAGATATGAAGCGTGCCGTAGACT
GTCCAGAAAATATTAAGAAAGAGATCTGTATCAATAAAATGCTAAATCATGAAAATGTAGTAAAATTCTATGGTC
ACAGGAGAGAAGGCAATATCCAATATTTATTTCTGGAGTACTGTAGTGGAGGAGAGCTTTTTGACAGAATAGAGC
CAGACATAGGCATGCCTGAACCAGATGCTCAGAGATTCTTCCATCAACTCATGGCAGGGGTGGTTTATCTGCATG
GTATTGGAATAACTCACAGGGATATTAAACCAGAAAATCTTCTGTTGGATGAAAGGGATAACCTCAAAATCTCAG
ACTTTGGCTTGGCAACAGTATTTCGGTATAATAATCGTGAGCGTTTGTTGAACAAGATGTGTGGTACTTTACCAT
ATGTTGCTCCAGAACTTCTGAAGAGAAGAGAATTTCATGCAGAACCAGTTGATGTTTGGTCCTGTGGAATAGTAC
TTACTGCAATGCTCGCTGGAGAATTGCCATGGGACCAACCCAGTGACAGCTGTCAGGAGTATTCTGACTGGAAAG
AAAAAAAAACATACCTCAACCCTTGGAAAAAAATCGATTCTGCTCCTCTAGCTCTGCTGCATAAAATCTTAGTTG
AGAATCCATCAGCAAGAATTACCATTCCAGACATCAAAAAAGATAGATGGTACAACAAACCCCTCAAGAAAGGGG
CAAAAAGGCCCCGAGTCACTTCAGGTGGTGTGTCAGAGTCTCCCAGTGGATTTTCTAAGCACATTCAATCCAATT
TGGACTTCTCTCCAGTAAACAGTGCTTCTAGTGAAGAAAATGTGAAGTACTCCAGTTCTCAGCCAGAACCCCGCA
CAGGTCTTTCCTTATGGGATACCAGCCCCTCATACATTGATAAATTGGTACAAGGGATCAGCTTTTCGCAGCCCA
CATGTCCTGATCATATGCTTTTGAATAGTCAGTTACTTGGCACCCCAGGATCCTCACAGAACCCCTGGCAGCGGT
TGGTCAAAAGAATGACACGATTCTTTACCAAATTGGATGCAGACAAATCTTATCAATGCCTGAAAGAGACTTGTG
AGAAGTTGGGCTATCAATGGAAGAAAAGTTGTATGAATCAGGTTACTATATCAACAACTGATAGGAGAAACAATA
AACTCATTTTCAAAGTGAATTTGTTAGAAATGGATGATAAAATATTGGTTGACTTCCGGCTTTCTAAGGGTGATG
GATTGGAGTTCAAGAGACACTTCCTGAAGATTAAAGGGAAGCTGATTGATATTGTGAGCAGCCAGAAGGTTTGGC
TTCCTGCCACATGATCGGACCATCGGCTCTGGGGAATCCTGGTGAATATAGTGCTGCTATGTTGACATTATTCTT
CCTAGAGAAGATTATCCTGTCCTGCAAACTGCAAATAGTAGTTCCTGAAGTGTTCACTTCCCTGTTTATCCAAAC
ATCTTCCAATTTATTTTGTTTGTTCGGCATACAAATAATACCTATATCTTAATTGTAAGCAAAACTTTGGGGAAA
GGATGAATAGAATTCATTTGATTATTTCTTCATGTGTGTTTAGTATCTGAATTTGAAACTCATCTGGTGGAAACC
AAGTTTCAGGGGACATGAGTTTTCCAGCTTTTATACACACGTATCTCATTTTTATCAAAACATTTTGTTTAATTC
AAAAAGTACATATTTCTTCCATGTTGATTTAATTCTAAGATGAACCAATAAAGACATAATTCTTGCAAAAAAAAA
AAAAAAAAAAAAAAAAA

FIGURE 6074

MAVPFVEDWDLVQTLGEGAYGEVQLAVNRVTEEAVAVKIVDMKRAVDCPENIKKEICINKMLNHENVVKFYGHRR
EGNIQYLFLEYCSGGELFDRIEPDIGMPEPDAQRFFHQLMAGVVYLHGIGITHRDIKPENLLLDERDNLKISDFG
LATVFRYNNRERLLNKMCGTLPYVAPELLKRREFHAEPVDVWSCGIVLTAMLAGELPWDQPSDSCQEYSDWKEKK
TYLNPWKKIDSAPLALLHKILVENPSARITIPDIKKDRWYNKPLKKGAKRPRVTSGGVSESPSGFSKHIQSNLDF
SPVNSASSEENVKYSSSQPEPRTGLSLWDTSPSYIDKLVQGISFSQPTCPDHMLLNSQLLGTPGSSQNPWQRLVK
RMTRFFTKLDADKSYQCLKETCEKLGYQWKKSCMNQVTISTTDRRNNKLIFKVNLLEMDDKILVDFRLSKGDGLE
FKRHFLKIKGKLIDIVSSQKVWLPAT

FIGURE 6075

GGCACGAGCCCAGAAACAAAGACTTCACGGACAAAGTCCCTTGGAACCAGAGAGAAGCCGGGATGGAAACTCCAA
ACACCACAGAGGACTATGACACGACCACAGAGTTTGACTATGGGGATGCAACTCCGTGCCAGAAGGTGAACGAGA
GGGCCTTTGGGGCCCAACTGCTGCCCCCTCTGTACTCCTTGGTATTTGTCATTGGCCTGGTTGGAAACATCCTGG
TGGTCCTGGTCCTTGTGCAATACAAGAGGCTAAAAAACATGACCAGCATCTACCTCCTGAACCTGGCCATTTCTG
ACCTGCTCTTCCTGTTCACGCTTCCCTTCTGGATCGACTACAAGTTGAAGGATGACTGGGTTTTTGGTGATGCCA
TGTGTAAGATCCTCTCTGGGTTTTATTACACAGGCTTGTACAGCGAGATCTTTTTCATCATCCTGCTGACGATTG
ACAGGTACCTGGCCATCGTCCACGCCGTGTTTGCCTTGCGGGCACGGACCGTCACTTTTGGTGTCATCACCAGCA
TCATCATTTGGGCCCTGGCCATCTTGGCTTCCATGCCAGGCTTATACTTTTCCAAGACCCAATGGGAATTCACTC
ACCACACCTGCAGCCTTCACTTTCCTCACGAAAGCCTACGAGAGTGGAAGCTGTTTCAGGCTCTGAAACTGAACC
TCTTTGGGCTGGTATTGCCTTTGTTGGTCATGATCATCTGCTACACAGGGATTATAAAGATTCTGCTAAGACGAC
CAAATGAGAAGAAATCCAAAGCTGTCCGTTTGATTTTTGTCATCATGATCATCTTTTTTCTCTTTTGGACCCCCT
ACAATTTGACTATACTTATTTCTGTTTTCCAAGACTTCCTGTTCACCCATGAGTGTGAGCAGAGCAGACATTTGG
ACCTGGCTGTGCAAGTGACGGAGGTGATCGCCTACACGCACTGCTGTGTCAACCCAGTGATCTACGCCTTCGTTG
GTGAGAGGTTCCGGAAGTACCTGCGGCAGTTGTTCCACAGGCGTGTGGCTGTGCACCTGGTTAAATGGCTCCCCT
TCCTCTCCGTGGACAGGCTGGAGAGGGTCAGCTCCACATCTCCCTCCACAGGGGAGCATGAACTCTCTGCTGGGT
TCTGACTCAGACCATAGGAGGCCAACCCAAAATAAGCAGGCGTGACCTGCCAGGCACACTGAGCCAGCAGCCTGG
CTCTCCCAGCCAGGTTCTGACTCTTGGCACAGCATGGAGTCACAGCCACTTGGGATAGAGAGGGAATGTAATGGT
GGCCTGGGGCTTCTGAGGCTTCTGGGGCTTCAGTCTTTTCCATGAACTTCTCCCCTGGTAGAAAGAAGATGAATG
AGCAAAACCAAATATTCCAGAGACTGGGACTAAGTGTACCAGAGAAGGGCTTGGACTCAAGCAAGATTTCAGATT
TGTGACCATTAGCATTTGTCAACAAAGTCACCCACTTCCCACTATTGCTTGCACAAACCAATTAAACCCAGTAGT
GGTGACTGTGGGCTCCATTCAAAGTGAGCTCCTAAGCCATGGGAGACACTGATGTATGAGGAATTTCTGTTCTTC
CATCACCTCCCCCCCCCCGCCACCCTCCCACTGCCAAGAACTTGGAAATAGTGATTTCCACAGTGACTCCACTCT
GAGTCCCAGAGCCAATCAGTAGCCAGCATCTGCCTCCCCTTCACTCCCACCGCAGGATTTGGGCTCTTGGAATCC
TGGGGAACATAGAACTCATGACGGAAGAGTTGAGACCTAACGAGAAATAGAAATGGGGGAACTACTGCTGGCAGT
GGAACTAAGAAAGCCCTTAGGAAGAATTTTTATATCCACTAAAATCAAACAATTCAGGGAGTGGGCTAAGCACGG
GCCATATGAATAACATGGTGTGCTTCTTAAAATAGCCATAAAGGGGAGGGACTCATCATTTCCATTTACCCTTCT
TTTCTGACTATTTTTCAGAATCTCTCTTCTTTTCAAGTTGGGTGATATGTTGGTAGATTCTAATGGCTTTATTGC
AGCGATTAATAACAGGCAAAAGGAAGCAGGGTTGGTTTCCCTTCTTTTTGTTCTTCATCTAAGCCTTCTGGTTTT
ATGGGTCAGAGTTCCGACTGCCATCTTGGACTTGTCAGCAAAAAAAAAAAAAAAAA

FIGURE 6076

METPNTTEDYDTTTEFDYGDATPCQKVNERAFGAQLLPPLYSLVFVIGLVGNILVVLVLVQYKRLKNMTSIYLLN
LAISDLLFLFTLPFWIDYKLKDDWVFGDAMCKILSGFYYTGLYSEIFFIILLTIDRYLAIVHAVFALRARTVTFG
VITSIIIWALAILASMPGLYFSKTQWEFTHHTCSLHFPHESLREWKLFQALKLNLFGLVLPLLVMIICYTGIIKI
LLRRPNEKKSKAVRLIFVIMIIFFLFWTPYNLTILISVFQDFLFTHECEQSRHLDLAVQVTEVIAYTHCCVNPVI
YAFVGERFRKYLRQLFHRRVAVHLVKWLPFLSVDRLERVSSTSPSTGEHELSAGF

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FIGURE 6077

TGCGCGGCTTCCTGCCTCCATGCCACTCCAGACTGCACCGGCATGGCACTGACTGCCCACCCCTCCTGCCTCCTG
GCCCTGTTGGTGGCAGGCCTAGCCCAAGGCATCAGAGGCCCCCTTAGGGCCCAGGACCTAGGTCCCCAGCCGCTA
GAGCTGAAAGAGGCCTTCAAGTTGTTCCAGATCCAGTTCAACCGGAGTTACCTGAGCCCAGAAGAGCATGCTCAC
CGCCTGGACATCTTTGCCCACAACCTGGCCCAGGCTCAGAGGCTGCAGGAGGAGGACTTGGGCACAGCTGAGTTT
GGGGTGACTCCATTCAGTGACCTCACAGAGGAGGAGTTTGGCCAGCTCTATGGCTATCGGAGGGCAGCTGGAGGG
GTCCCCAGCATGGGCAGAGAAATAAGGTCTGAAGAGCCAGAGGAGTCAGTACCTTTCAGCTGTGACTGGCGGAAG
GTGGCCGGCGCCATCTCACCCATCAAGGACCAGAAAAACTGCAACTGCTGCTGGGCCATGGCAGCGGCAGGCAAC
ATAGAGACCCTGTGGCGCATCAGTTTCTGGGATTTTGTGGACGTCTCCGTGCAGGAACTGCTGGACTGTGGCCGC
TGTGGGGATGGCTGCCACGGTGGCTTCGTCTGGGACGCGTTCATAACTGTCCTCAACAACAGCGGCCTGGCCAGT
GAAAAGGACTACCCGTTCCAGGGCAAAGTCAGAGCCCACAGGTGCCACCCCAAGAAGTACCAGAAGGTGGCCTGG
ATCCAGGACTTCATCATGCTGCAGAACAACGAGCACAGAATTGCGCAGTACCTGGCCACTTATGGCCCCATCACC
GTGACCATCAACATGAAGCCCCTTCAGCTATACCGGAAAGGTGTGATCAAGGCCACACCCACCACCTGTGACCCC
CAGCTTGTGGACCACTCTGTCCTGCTGGTGGGTTTTGGCAGCGTCAAGTCAGAGGAGGGGATATGGGCAGAGACA
GTCTCATCGCAGTCTCAGCCTCAGCCTCCACACCCCACCCCATACTGGATCCTGAAGAACTCCTGGGGGGCCCAA
TGGGGAGAGAAGGGCTATTTCCGGCTGCACCGAGGGAGCAATACCTGTGGCATCACCAAGTTCCCGCTCACTGCC
CGTGTGCAGAAACCGGATATGAAGCCCCGAGTCTCCTGCCCTCCCTGACCACCTGGCCCCCTCAGCTCTGTCCTG
TTAGGCCAACTGCCTCCTTGCCAGCCCCACCCCCAGGTTTTTGCCCATCCTCCCAATCTCAATACAGCCTGAATA
AACCAAGACAAGACCTC

FIGURE 6078

MALTAHPSCLLALLVAGLAQGIRGPLRAQDLGPQPLELKEAFKLFQIQFNRSYLSPEEHAHRLDIFAHNLAQAQR
LQEEDLGTAEFGVTPFSDLTEEEFGQLYGYRRAAGGVPSMGREIRSEEPEESVPFSCDWRKVAGAISPIKDQKNC
NCCWAMAAAGNIETLWRISFWDFVDVSVQELLDCGRCGDGCHGGFVWDAFITVLNNSGLASEKDYPFQGKVRAHR
CHPKKYQKVAWIQDFIMLQNNEHRIAQYLATYGPITVTINMKPLQLYRKGVIKATPTTCDPQLVDHSVLLVGFGS
VKSEEGIWAETVSSQSQPQPPHPTPYWILKNSWGAQWGEKGYFRLHRGSNTCGITKFPLTARVQKPDMKPRVSCP
P

FIGURE 6079

TCTAAAGGTCGGGGGCAGCAGCAAGATGCGAAGCGAGCCGTACAGATCCCGGGCTCTCCGAACGCAACTTCGCCC
TGCTTGAGCGAGGCTGCGGTTTCCGAGGCCCTCTCCAGCCAAGGAAAAGCTACACAAAAAGCCTGGATCACTCAT
CGAACCACCCCTGAAGCCAGTGAAGGCTCTCTCGCCTCGCCCTCTAGCGTTCGTCTGGAGTAGCGCCACCCCGGC
TTCCTGGGGACACAGGGTTGGCACCATGGGGCCCACCAGCGTCCCGCTGGTCAAGGCCCACCGCAGCTCGGTCTC
TGACTACGTCAACTATGATATCATCGTCCGGCATTACAACTACACGGGAAAGCTGAATATCAGCGCGGACAAGGA
GAACAGCATTAAACTGACCTCGGTGGTGTTCATTCTCATCTGCTGCTTTATCATCCTGGAGAACATCTTTGTCTT
GCTGACCATTTGGAAAACCAAGAAATTCCACCGACCCATGTACTATTTTATTGGCAATCTGGCCCTCTCAGACCT
GTTGGCAGGAGTAGCCTACACAGCTAACCTGCTCTTGTCTGGGGCCACCACCTACAAGCTCACTCCCGCCCAGTG
GTTTCTGCGGGAAGGGAGTATGTTTGTGGCCCTGTCAGCCTCCGTGTTCAGTCTCCTCGCCATCGCCATTGAGCG
CTATATCACAATGCTGAAAATGAAACTCCACAACGGGAGCAATAACTTCCGCCTCTTCCTGCTAATCAGCGCCTG
CTGGGTCATCTCCCTCATCCTGGGTGGCCTGCCTATCATGGGCTGGAACTGCATCAGTGCGCTGTCCAGCTGCTC
CACCGTGCTGCCGCTCTACCACAAGCACTATATCCTCTTCTGCACCACGGTCTTCACTCTGCTTCTGCTCTCCAT
CGTCATTCTGTACTGCAGAATCTACTCCTTGGTCAGGACTCGGAGCCGCCGCCTGACGTTCCGCAAGAACATTTC
CAAGGCCAGCCGCAGCTCTGAGAATGTGGCGCTGCTCAAGACCGTAATTATCGTCCTGAGCGTCTTCATCGCCTG
CTGGGCACCGCTCTTCATCCTGCTCCTGCTGGATGTGGGCTGCAAGGTGAAGACCTGTGACATCCTCTTCAGAGC
GGAGTACTTCCTGGTGTTAGCTGTGCTCAACTCCGGCACCAACCCCATCATTTACACTCTGACCAACAAGGAGAT
GCGTCGGGCCTTCATCCGGATCATGTCCTGCTGCAAGTGCCCGAGCGGAGACTCTGCTGGCAAATTCAAGCGACC
CATCATCGCCGGCATGGAATTCAGCCGCAGCAAATCGGACAATTCCTCCCACCCCCAGAAAGACGAAGGGGACAA
CCCAGAGACCATTATGTCTTCTGGAAACGTCAACTCTTCTTCCTAGAACTGGAAGCTGTCCACCCACCGGAAGCG
CTCTTTACTTGGTCGCTGGCCACCCCAGTGTTTGGAAAAAAATCTCTGGGCTTCGACTGCTGCCAGGGAGGAGCT
GCTGCAAGCCAGAGGGAGGAAGGGGGAGAATACGAACAGCCTGGTGGTGTCGGGTGTTGGTGGGTAGAGTTAGTT
CCTGTGAACAATGCACTGGGAAGGGTGGAGATCAGGTCCCGGCCTGGAATATATATTCTACCCCCCTGGAGCTTT
GATTTTGCACTGAGCCAAAGGTCTAGCATTGTCAAGCTCCTAAAGGGTTCATTTGGCCCCTCCTCAAAGACTAAT
GTCCCCATGTGAAAGCGTCTCTTTGTCTGGAGCTTTGAGGAGATGTTTTCCTTCACTTTAGTTTCAAACCCAAGT
GAGTGTGTGCACTTCTGCTTCTTTAGGGATGCCCTGTACATCCCACACCCCACCCTCCCTTCCCTTCATACCCCT
CCTCAACGTTCTTTTACTTTATACTTTAACTACCTGAGAGTTATCAGAGCTGGGGTTGTGGAATGATCGATCATC
TATAGCAAATAGGCTATGTTGAGTACGTAGGCTGTGGGAAGATGAAGATGGTTTGGAGGTGTAAAACAATGTCCT
TCGCTGAGGCCAAAGTTTCCATGTAAGCGGGATCCGTTTTTTGGAATTTGGTTGAAGTCACTTTGATTTCTTTAA
AAAACATCTTTTCAATGAAATGTGTTACCATTTCATATCCATTGAAGCCGAAATCTGCATAAGGAAGCCCACTTT
ATCTAAATGATATTAGCCAGGATCCTTGGTGTCCTAGGAGAAACAGACAAGCAAAACAAAGTGAAAACCGAATGG
ATTAACTTTTGCAAACCAAGGGAGATTTCTTAGCAAATGAGTCTAACAAATATGACATCCGTCTTTCCCACTTTT
GTTGATGTTTATTTCAGAATCTTGTGTGATTCATTTCAAGCAACAACATGTTGTATTTTGTTGTGTTAAAAGTAC
TTTTCTTGATTTTTGAATGTATTTGTTTCAGGAAGAAGTCATTTTATGGATTTTTCTAACCCGTGTTAACTTTTC
TAGAATCCACCCTCTTGTGCCCTTAAGCATTACTTTAACTGGTAGGGAACGCCAGAACTTTTAAGTCCAGCTATT
CATTAGATAGTAATTGAAGATATGTATAAATATTACAAAGAATAAAAATATATTACTGTCTCTTTAGTATGGTTT
TCAGTGCAATTAAACCGAGAGATGTCTTGTTTTTTTAAAAAGAATAGTATTTAATAGGTTTCTGACTTTTGTGGA
TCATTTTGCACATAGCTTTATCAACTTTTAAACATTAATAAACTGATTTTTTTAAAG

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FIGURE 6080

MGPTSVPLVKAHRSSVSDYVNYDIIVRHYNYTGKLNISADKENSIKLTSVVFILICCFIILENIFVLLTIWKTKK
FHRPMYYFIGNLALSDLLAGVAYTANLLLSGATTYKLTPAQWFLREGSMFVALSASVFSLLAIAIERYITMLKMK
LHNGSNNFRLFLLISACWVISLILGGLPIMGWNCISALSSCSTVLPLYHKHYILFCTTVFTLLLLSIVILYCRIY
SLVRTRSRRLTFRKNISKASRSSENVALLKTVIIVLSVFIACWAPLFILLLLDVGCKVKTCDILFRAEYFLVLAV
LNSGTNPIIYTLTNKEMRRAFIRIMSCCKCPSGDSAGKFKRPIIAGMEFSRSKSDNSSHPQKDEGDNPETIMSSG
NVNSSS

FIGURE 6081

AAACACGGTGAAAAGAAACCGCCCATTACACACCCCAGTACACCAGCAGAGGAAACTTATAACCTCGGGAGGCAG
GTCCTTCCCCTCAGTGCGGTCACATACTTCCAGAAGAGCGGACCAGGGCTGCTGCCAGCACCTGCCACTCAGAGC
GCCTCTGTCGCTGGGACCCTTCAGAACTCTCTTTGCTCACAAGTTACCAAAAAAAAAAGAGCCAACATGTTGGTA
TTGCTGGCTGGTATCTTTGTGGTCCACATCGCTACTGTTATTATGCTATTTGTTAGCACCATTGCCAATGTCTGG
TTGGTTTCCAATACGGTAGATGCATCAGTAGGTCTTTGGAAAAACTGTACCAACATTAGCTGCAGTGACAGCCTG
TCATATGCCAGTGAAGATGCCCTCAAGACAGTGCAGGCCTTCATGATTCTCTCTATCATCTTCTGTGTCATTGCC
CTCCTGGTCTTCGTGTTCCAGCTCTTCACCATGGAGAAGGGAAACCGGTTCTTCCTCTCAGGGGCCACCACACTG
GTGTGCTGGCTGTGCATTCTTGTGGGGGTGTCCATCTACACTAGTCATTATGCGAATCGTGATGGAACGCAGTAT
CACCACGGCTATTCCTACATCCTGGGCTGGATCTGCTTCTGCTTCAGCTTCATCATCGGCGTTCTCTATCTGGTC
CTGAGAAAGAAATAAGGCCGGACGAGTTCATGGGGATCTGGGGGGTGGGGAGGAGGAAGCCGTTGAATCTGGGAG
GGAAGTGGAGGTTGCTGTACAGGAAAAACCGAGATAGGGGAGGGGGGAGGGGGAAGCAAAGGGGGGAGGTCAAAT
CCCAAACCATTACTGAGGGGATTCTCTACTGCCAAGCCCCTGCCCTGGGGAGAAAGTAGTTGGCTAGTACTTTGA
TGCTCCCTTGATGGGGTCCAGAGAGCCTCCCTGCAGCCACCAGACTTGGCCTCCAGCTGTTCTTAGTGACACACA
CTGTCTGGGGCCCCATCAGCTGCCACAACACCAGCCCCACTTCTGGGTCATGCACTGAGGTCCACAGACCTACTG
CACTGAGTTAAAATAGCGGTACAAGTTCTGGCAAGAGCAGATACTGTCTTTGTGCTGAATACGCTAAGCCTGGAA
GCCATCCTGCCCTTCTGACCCAAAGCAAAACATCACATTCCAGTCTGAAGTGCCTACTGGGGGGCTTTGGCCTGT
GAGCCATTGTCCCTCTTTGGAACAGATATTTAGCTCTGTGGAATTCAGTGACAAAATGGGAGGAGGAAAGAGAGT
TTGTAAGGTCATGCTGGTGGGTTAGCTAAACCAAGAAGGAGACCTTTTCACAATGGAAAACCTGGGGGATGGTCA
GAGCCCAGTCGAGACCTCACACACGGCTGTCCCTCATGGAGACCTCATGCCATGGTCTTTGCTAGGCCTCTTGCT
GAAAGCCAAGGCAGCTCTTCTGGAGTTTCTCTAAAGTCACTAGTGAACAATTCGGTGGTAAAAGTACCACACAAA
CTATGGGATCCAAGGGGCAGTCTTGCAACAGTGCCATGTTAGGGTTATGTTTTTAGGATTCCCCTCAATGCAGTC
AGTGTTTCTTTTAAGTATACAACAGGAGAGAGATGGACATGGCTCATTGTAGCACAATCCTATTACTCTTCCTCT
AACATTTTTGAGGAAGTTTTGTCTAATTATCAATATTGAGGATCAGGGCTCCTAGGCTCAGTGGTAGCTCTGGCT
TAGACACCACCTGGAGTGATCACCTCTTGGGGACCCTGCCTATCCCACTTCACAGGTGAGGCATGGCAATTCTGG
AAGCTGATTAAAACACACATAAACCAAAACCAAACAACAGGCCCTTGGGTGAAAGGTGCTATATAATTGTGAAGT
ATTAAGCCTACCGTATTTCAGCCATGATAAGAACAGAGTGCCTGCATTCCCAGGAAAATACGAAAATCCCATGAG
ATAAATAAAAATATAGGTGATGGGCAGATCTTTTCTTTAAAATAAAAAAGCAAAAACTCTTGTGGTACCTAGTCA
GATGGTAGACGAGCTGTCTGCTGCCGCAGGAGCACCTCTATACAGGACTTAGAAGTAGTATGTTATTCCTGGTTA
AGCAGGCATTGCTTTGCCCTGGAGCAGCTATTTTAAGCCATCTCAGATTCTGTCTAAAGGGGTTTTTTGGGAAGA
CGTTTTCTTTATCGCCCTGAGAAGATCTACCCCAGGGAGAATCTGAGACATCTTGCCTACTTTTCTTTATTAGCT
TTCTCCTCATCCATTTCTTTTATACCTTTCCTTTTTGGGGAGTTGTTATGCCATGATTTTTGGTATTTATGTAAA
AGGATTATTACTAATTCTATTTCTCTATGTTTATTCTAGTTAAGGAAATGTTGAGGGCAAGCCACCAAATTACCT
AGGCTGAGGTTAGAGAGATTGGCCAGCAAAAACTGTGGGAAGATGAACTTTGTCATTATGATTTCATTATCACAT
GATTATAGAAGGCTGTCTTAGTGCAAAAAACATACTTACATTTCAGACATATCCAAAGGGAATACTCACATTTTG
TTAAGAAGTTGAACTATGACTGGAGTAAACCATGTATTCCCTTATCTTTTACTTTTTTTCTGTGACATTTATGTC
TCATGTAATTTGCATTACTCTGGTGGATTGTTCTAGTACTGTATTGGGCTTCTTCGTTAATAGATTATTTCATAT
ACTATAATTGTAAATATTTTGATACAAATGTTTATAACTCTAGGGATATAAAAACAGATTCTGATTCCCA

FIGURE 6082

MLVLLAGIFVVHIATVIMLFVSTIANVWLVSNTVDASVGLWKNCTNISCSDSLSYASEDALKTVQAFMILSIIFC
VIALLVFVFQLFTMEKGNRFFLSGATTLVCWLCILVGVSIYTSHYANRDGTQYHHGYSYILGWICFCFSFIIGVL
YLVLRKK

FIGURE 6083A

GCGATCCGGGCGCCACCCCGCGGTCATCGGTCACCGGTCGCTCTCAGGAACAGCAGCGCAACCTCTGCTCCCTGC
CTCGCCTCCCGCGCGCCTAGGTGCCTGCGACTTTAATTAAAGGGCCGTCCCCTCGCCGAGGCTGCAGCACCGCCC
CCCCGGCTTCTCGCGCCTCAAAATGAGTAGCTCCCACTCTCGGGCGGGCCAGAGCGCAGCAGGCGCGGCTCCGGG
CGGCGGCGTCGACACGCGGGACGCCGAGATGCCGGCCACCGAGAAGGACCTGGCGGAGGACGCGCCGTGGAAGAA
GATCCAGCAGAACACTTTCACGCGCTGGTGCAACGAGCACCTGAAGTGCGTGAGCAAGCGCATCGCCAACCTGCA
GACGGACCTGAGCGACGGGCTGCGGCTTATCGCGCTGTTGGAGGTGCTCAGCCAGAAGAAGATGCACCGCAAGCA
CAACCAGCGGCCCACTTTCCGCCAAATGCAGCTTGAGAACGTGTCGGTGGCGCTCGAGTTCCTGGACCGCGAGAG
CATCAAACTGGTGTCCATCGACAGCAAGGCCATCGTGGACGGGAACCTGAAGCTGATCCTGGGCCTCATCTGGAC
CCTGATCCTGCACTACTCCATCTCCATGCCCATGTGGGACGAGGAGGAGGATGAGGAGGCCAAGAAGCAGACCCC
CAAGCAGAGGCTCCTGGGCTGGATCCAGAACAAGCTGCCGCAGCTGCCCATCACCAACTTCAGCCGGGACTGGCA
GAGCGGCCGGGCCCTGGGCGCCCTGGTGGACAGCTGTGCCCCGGGCCTGTGTCCTGACTGGGACTCTTGGGACGC
CAGCAAGCCCGTTACCAATGCGCGAGAGGCCATGCAGCAGGCGGATGACTGGCTGGGCATCCCCCAGGTGATCAC
CCCCGAGGAGATTGTGGACCCCAACGTGGACGAGCACTCTGTCATGACCTACCTGTCCCAGTTCCCCAAGGCCAA
GCTGAAGCCAGGGGCTCCCTTGCGCCCCAAACTGAACCCGAAGAAAGCCCGTGCCTACGGGCCAGGCATCGAGCC
CACAGGCAACATGGTGAAGAAGCGGGCAGAGTTCACTGTGGAGACCAGAAGTGCTGGCCAGGGAGAGGTGCTGGT
GTACGTGGAGGACCCGGCCGGACACCAGGAGGAGGCAAAAGTGACCGCCAATAACGACAAGAACCGCACCTTCTC
CGTCTGGTACGTCCCCGAGGTGACGGGGACTCATAAGGTTACTGTGCTCTTTGCTGGCCAGCACATCGCCAAGAG
CCCCTTCGAGGTGTACGTGGATAAGTCACAGGGTGACGCCAGCAAAGTGACAGCCCAAGGTCCCGGCCTGGAGCC
CAGTGGCAACATCGCCAACAAGACCACCTACTTTGAGATCTTTACGGCAGGAGCTGGCACGGGCGAGGTCGAGGT
TGTGATCCAGGACCCCATGGGACAGAAGGGCACGGTAGAGCCTCAGCTGGAGGCCCGGGGCGACAGCACATACCG
CTGCAGCTACCAGCCCACCATGGAGGGCGTCCACACCGTGCACGTCACGTTTGCCGGCGTGCCCATCCCTCGCAG
CCCCTACACTGTCACTGTTGGCCAAGCCTGTAACCCGAGTGCCTGCCGGGCGGTTGGCCGGGGCCTCCAGCCCAA
GGGTGTGCGGGTGAAGGAGACAGCTGACTTCAAGGTGTACACAAAGGGCGCTGGCAGTGGGGAGCTGAAGGTCAC
CGTGAAGGGCCCCAAGGGAGAGGAGCGCGTGAAGCAGAAGGACCTGGGGGATGGCGTGTATGGCTTCGAGTATTA
CCCCATGGTCCCTGGAACCTATATCGTCACCATCACGTGGGGTGGTCAGAACATCGGGCGCAGTCCCTTCGAAGT
GAAGGTGGGCACCGAGTGTGGCAATCAGAAGGTACGGGCCTGGGGCCCTGGGCTGGAGGGCGGCGTCGTTGGCAA
GTCAGCAGACTTTGTGGTGGAGGCTATCGGGGACGACGTGGGCACGCTGGGCTTCTCGGTGGAAGGGCCATCGCA
GGCTAAGATCGAATGTGACGACAAGGGCGACGGCTCCTGTGATGTGCGCTACTGGCCGCAGGAGGCTGGCGAGTA
TGCCGTTCACGTGCTGTGCAACAGCGAAGACATCCGCCTCAGCCCCTTCATGGCTGACATCCGTGACGCGCCCCA
GGACTTCCACCCAGACAGGGTGAAGGCACGTGGGCCTGGATTGGAGAAGACAGGTGTGGCCGTCAACAAGCCAGC
AGAGTTCACAGTGGATGCCAAGCACGGTGGCAAGGCCCCACTTCGGGTCCAAGTCCAGGACAATGAAGGCTGCCC
TGTGGAGGCGTTGGTCAAGGACAACGGCAATGGCACTTACAGCTGCTCCTACGTGCCCAGGAAGCCGGTGAAGCA
CACAGCCATGGTGTCCTGGGGAGGCGTCAGCATCCCCAACAGCCCCTTCAGGGTGAATGTGGGAGCTGGCAGCCA
CCCCAACAAGGTCAAAGTATACGGCCCCGGAGTAGCCAAGACAGGGCTCAAGGCCCACGAGCCCACCTACTTCAC
TGTGGACTGCGCCGAGGCTGGCCAGGGGGACGTCAGCATCGGCATCAAGTGTGCCCCTGGAGTGGTAGGCCCCGC
CGAAGCTGACATCGACTTCGACATCATCCGCAATGACAATGACACCTTCACGGTCAAGTACACGCCCCGGGGGGC
TGGCAGCTACACCATTATGGTCCTCTTTGCTGACCAGGCCACGCCCACCAGCCCCATCCGAGTCAAGGTGGAGCC
CTCTCATGACGCCAGTAAGGTGAAGGCCGAGGGCCCTGGCCTCAGTCGCACTGGTGTCGAGCTTGGCAAGCCCAC
CCACTTCACAGTAAATGCCAAAGCTGCTGGCAAAGGCAAGCTGGACGTCCAGTTCTCAGGACTCACCAAGGGGGA
TGCAGTGCGAGATGTGGACATCATCGACCACCATGACAACACCTACACAGTCAAGTACACGCCTGTCCAGCAGGG
TCCAGTAGGCGTCAATGTCACTTATGGAGGGGATCCCATCCCTAAGAGCCCTTTCTCAGTGGCAGTATCTCCAAG
CCTGGACCTCAGCAAGATCAAGGTGTCTGGCCTGGGAGAGAAGGTGGACGTTGGCAAAGACCAGGAGTTCACAGT
CAAATCAAAGGGTGCTGGTGGTCAAGGCAAAGTGGCATCCAAGATTGTGGGCCCCTCGGGTGCAGCGGTGCCCTG
CAAGGTGGAGCCAGGCCTGGGGGCTGACAACAGTGTGGTGCGCTTCCTGCCCCGTGAGGAAGGGCCCTATGAGGT
GGAGGTGACCTATGACGGCGTGCCCGTGCCTGGCAGCCCCTTTCCTCTGGAAGCTGTGGCCCCCACCAAGCCTAG
CAAGGTGAAGGCGTTTGGGCCGGGGCTGCAGGGAGGCAGTGCGGGCTCCCCCGCCCGCTTCACCATCGACACCAA
GGGCGCCGGCACAGGTGGCCTGGGCCTGACGGTGGAGGGCCCCTGTGAGGCGCAGCTCGAGTGCTTGGACAATGG
GGATGGCACATGTTCCGTGTCCTACGTGCCCACCGAGCCCGGGGACTACAACATCAACATCCTCTTCGCTGACAC

FIGURE 6083B

CCACATCCCTGGCTCCCCATTCAAGGCCCACGTGGTTCCCTGCTTTGACGCATCCAAAGTCAAGTGCTCAGGCCC
CGGGCTGGAGCGGGCCACCGCTGGGGAGGTGGGCCAATTCCAAGTGGACTGCTCGAGCGCGGGCAGCGCGGAGCT
GACCATTGAGATCTGCTCGGAGGCGGGGCTTCCGGCCGAGGTGTACATCCAGGACCACGGTGATGGCACGCACAC
CATTACCTACATTCCCCTCTGCCCCGGGGCCTACACCGTCACCATCAAGTACGGCGGCCAGCCCGTGCCCAACTT
CCCCAGCAAGCTGCAGGTGGAACCTGCGGTGGACACTTCCGGTGTCCAGTGCTATGGGCCTGGTATTGAGGGCCA
GGGTGTCTTCCGTGAGGCCACCACTGAGTTCAGTGTGGACGCCCGGGCTCTGACACAGACCGGAGGGCCGCACGT
CAAGGCCCGTGTGGCCAACCCCTCAGGCAACCTGACGGAGACCTACGTTCAGGACCGTGGCGATGGCATGTACAA
AGTGGAGTACACGCCTTACGAGGAGGGACTGCACTCCGTGGACGTGACCTATGACGGCAGTCCCGTGCCCAGCAG
CCCCTTCCAGGTGCCCGTGACCGAGGGCTGCGACCCCTCCCGGGTGCGTGTCCACGGGCCAGGCATCCAAAGTGG
CACCACCAACAAGCCCAACAAGTTCACTGTGGAGACCAGGGGAGCTGGCACGGGCGGCCTGGGCCTGGCTGTAGA
GGGCCCCTCCGAGGCCAAGATGTCCTGCATGGATAACAAGGACGGCAGCTGCTCGGTCGAGTACATCCCTTATGA
GGCTGGCACCTACAGCCTCAACGTCACCTATGGTGGCCATCAAGTGCCAGGCAGTCCTTTCAAGGTCCCTGTGCA
TGATGTGACAGATGCGTCCAAGGTCAAGTGCTCTGGGCCCGGCCTGAGCCCAGGCATGGTTCGTGCCAACCTCCC
TCAGTCCTTCCAGGTGGACACAAGCAAGGCTGGTGTGGCCCCATTGCAGGTCAAAGTGCAAGGGCCCAAAGGCCT
GGTGGAGCCAGTGGACGTGGTAGACAACGCTGATGGCACCCAGACCGTCAATTATGTGCCCAGCCGAGAAGGGCC
CTACAGCATCTCAGTACTGTATGGAGATGAAGAGGTACCCCGGAGCCCCTTCAAGGTCAAGGTGCTGCCTACTCA
TGATGCCAGCAAGGTGAAGGCCAGTGGCCCCGGGCTCAACACCACTGGCGTGCCTGCCAGCCTGCCCGTGGAGTT
CACCATCGATGCAAAGGACGCCGGGGAGGGCCTGCTGGCTGTCCAGATCACGGATCCCGAAGGCAAGCCGAAGAA
GACACACATCCAAGACAACCATGACGGCACGTATACAGTGGCCTACGTGCCAGACGTGACAGGTCGCTACACCAT
CCTCATCAAGTACGGTGGTGACGAGATCCCCTTCTCCCCGTACCGCGTGCGTGCCGTGCCCACCGGGGACGCCAG
CAAGTGCACTGTCACAGTGTCAATCGGAGGTCACGGGCTAGGTGCTGGCATCGGCCCCACCATTCAGATTGGGGA
GGAGACGGTGATCACTGTGGACACTAAGGCGGCAGGCAAAGGCAAAGTGACGTGCACCGTGTGCACGCCTGATGG
CTCAGAGGTGGATGTGGACGTGGTGGAGAATGAGGACGGCACTTTCGACATCTTCTACACGGCCCCCCAGCCGGG
CAAATACGTCATCTGTGTGCGCTTTGGTGGCGAGCACGTGCCCAACAGCCCCTTCCAAGTGACGGCTCTGGCTGG
GGACCAGCCCTCGGTGCAGCCCCCTCTACGGTCTCAGCAGCTGGCCCCACAGTACACCTACGCCCAGGGCGGCCA
GCAGACTTGGGCCCCGGAGAGGCCCCTGGTGGGTGTCAATGGGCTGGATGTGACCAGCCTGAGGCCCTTTGACCT
TGTCATCCCCTTCACCATCAAGAAGGGCGAGATCACAGGGGAGGTTCGGATGCCCTCAGGCAAGGTGGCGCAGCC
CACCATCACTGACAACAAAGACGGCACCGTGACCGTGCGGTATGCACCCAGCGAGGCTGGCCTGCACGAGATGGA
CATCCGCTATGACAACATGCACATCCCAGGAAGCCCCTTGCAGTTCTATGTGGATTACGTCAACTGTGGCCATGT
CACTGCCTATGGGCCTGGCCTCACCCATGGAGTAGTGAACAAGCCTGCCACCTTCACCGTCAACACCAAGGATGC
AGGAGAGGGGGGCCTGTCTCTGGCCATTGAGGGCCCGTCCAAAGCAGAAATCAGCTGCACTGACAACCAGGATGG
GACATGCAGCGTGTCCTACCTGCCTGTGCTGCCGGGGGACTACAGCATTCTAGTCAAGTACAATGAACAGCACGT
CCCAGGCAGCCCCTTCACTGCTCGGGTCACAGGTGACGACTCCATGCGTATGTCCCACCTAAAGGTCGGCTCTGC
TGCCGACATCCCCATCAACATCTCAGAGACGGATCTCAGCCTGCTGACGGCCACTGTGGTCCCGCCCTCGGGCCG
GGAGGAGCCCTGTTTGCTGAAGCGGCTGCGTAATGGCCACGTGGGGATTTCATTCGTGCCCAAGGAGACGGGGGA
GCACCTGGTGCATGTGAAGAAAAATGGCCAGCACGTGGCCAGCAGCCCCATCCCGGTGGTGATCAGCCAGTCGGA
AATTGGGGATGCCAGTCGTGTTCGGGTCTCTGGTCAGGGCCTTCACGAAGGCCACACCTTTGAGCCTGCAGAGTT
TATCATTGATACCCGCGATGCAGGCTATGGTGGGCTCAGCCTGTCCATTGAGGGCCCCAGCAAGGTGGACATCAA
CACAGAGGACCTGGAGGACGGGACGTGCAGGGTCACCTACTGCCCCACAGAGCCAGGCAACTACATCATCAACAT
CAAGTTTGCCGACCAGCACGTGCCTGGCAGCCCCTTCTCTGTGAAGGTGACAGGCGAGGGCCGGGTGAAAGAGAG
CATCACCCGCAGGCGTCGGGCTCCTTCAGTGGCCAACGTTGGTAGTCATTGTGACCTCAGCCTGAAAATCCCTGA
AATTAGCATCCAGGATATGACAGCCCAGGTGACCAGCCCATCGGGCAAGACCCATGAGGCCGAGATCGTGGAAGG
GGAGAACCACACCTACTGCATCCGCTTTGTTCCCGCTGAGATGGGCACACACACAGTCAGCGTCAAGTACAAGGG
CCAGCACGTGCCTGGGAGCCCCTTCCAGTTCACCGTGGGGCCCCTAGGGGAAGGGGGAGCCCACAAGGTCCGAGC
TGGGGGCCCTGGCCTGGAGAGAGCTGAAGCTGGAGTGCCAGCCGAATTCAGTATCTGGACCCGGGAAGCTGGTGC
TGGAGGCCTGGCCATTGCTGTCGAGGGCCCCAGCAAGGCTGAGATCTCTTTTGAGGACCGCAAGGACGGCTCCTG
TGGTGTGGCTTATGTGGTCCAGGAGCCAGGTGACTACGAAGTCTCAGTCAAGTTCAACGAGGAACACATTCCCGA
CAGCCCCTTCGTGGTGCCTGTGGCTTCTCCGTCTGGCGACGCCCGCCGCCTCACTGTTTCTAGCCTTCAGGAGTC

FIGURE 6083C

AGGGCTAAAGGTCAACCAGCCAGCCTCTTTTGCAGTCAGCCTGAACGGGGCCAAGGGGGCGATCGATGCCAAGGT
GCACAGCCCCTCAGGAGCCCTGGAGGAGTGCTATGTCACAGAAATTGACCAAGATAAGTATGCTGTGCGCTTCAT
CCCTCGGGAGAATGGCGTTTACCTGATTGACGTCAAGTTCAACGGTACCCACATCCCTGGAAGCCCCTTCAAGAT
CCGAGTTGGGGAGCCTGGGCATGGAGGGGACCCAGGCTTGGTGTCTGCTTACGGAGCAGGTCTGGAAGGCGGTGT
CACAGGGAACCCAGCTGAGTTCGTCGTGAACACGAGCAATGCGGGAGCTGGTGCCCTGTCGGTGACCATTGACGG
CCCCTCCAAGGTGAAGATGGATTGCCAGGAGTGCCCTGAGGGCTACCGCGTCACCTATACCCCCATGGCACCTGG
CAGCTACCTCATCTCCATCAAGTACGGCGGCCCCTACCACATTGGGGGCAGCCCCTTCAAGGCCAAAGTCACAGG
CCCCCGTCTCGTCAGCAACCACAGCCTCCACGAGACATCATCAGTGTTTGTAGACTCTCTGACCAAGGCCACCTG
TGCCCCCCAGCATGGGGCCCCGGGTCCTGGGCCTGCTGACGCCAGCAAGGTGGTGGCCAAGGGCCTGGGGCTGAG
CAAGGCCTACGTAGGCCAGAAGAGCAGCTTCACAGTAGACTGCAGCAAAGCAGGCAACAACATGCTGCTGGTGGG
GGTTCATGGCCCAAGGACCCCCTGCGAGGAGATCCTGGTGAAGCACGTGGGCAGCCGGCTCTACAGCGTGTCCTA
CCTGCTCAAGGACAAGGGGGAGTACACACTGGTGGTCAAATGGGGGCACGAGCACATCCCAGGCAGCCCCTACCG
CGTTGTGGTGCCC**TGA**GTCTGGGGCCCGTGCCAGCCGGCAGCCCCCAAGCCTGCCCCGCTACCCAAGCAGCCCCG
CCCTCTTCCCCTCAACCCCGGCCCAGGCCGCCCTGGCCGCCCGCCTGTCACTGCAGCTGCCCCTGCCCTGTGCCG
TGCTGCGCTCACCTGCCTCCCCAGCCAGCCGCTGACCTCTCGGCTTTCACTTGGGCAGAGGGAGCCATTTGGTGG
CGCTGCTTGTCTTCTTTGGTTCTGGGAGGGGTGAGGGATGGGG

FIGURE 6084

MSSSHSRAGQSAAGAAPGGGVDTRDAEMPATEKDLAEDAPWKKIQQNTFTRWCNEHLKCVSKRIANLQTDLSDGL
RLIALLEVLSQKKMHRKHNQRPTFRQMQLENVSVALEFLDRESIKLVSIDSKAIVDGNLKLILGLIWTLILHYSI
SMPMWDEEEDEEAKKQTPKQRLLGWIQNKLPQLPITNFSRDWQSGRALGALVDSCAPGLCPDWDSWDASKPVTNA
REAMQQADDWLGIPQVITPEEIVDPNVDEHSVMTYLSQFPKAKLKPGAPLRPKLNPKKARAYGPGIEPTGNMVKK
RAEFTVETRSAGQGEVLVYVEDPAGHQEEAKVTANNDKNRTFSVWYVPEVTGTHKVTVLFAGQHIAKSPFEVYVD
KSQGDASKVTAQGPGLEPSGNIANKTTYFEIFTAGAGTGEVEVVIQDPMGQKGTVEPQLEARGDSTYRCSYQPTM
EGVHTVHVTFAGVPIPRSPYTVTVGQACNPSACRAVGRGLQPKGVRVKETADFKVYTKGAGSGELKVTVKGPKGE
ERVKQKDLGDGVYGFEYYPMVPGTYIVTITWGGQNIGRSPFEVKVGTECGNQKVRAWGPGLEGGVVGKSADFVVE
AIGDDVGTLGFSVEGPSQAKIECDDKGDGSCDVRYWPQEAGEYAVHVLCNSEDIRLSPFMADIRDAPQDFHPDRV
KARGPGLEKTGVAVNKPAEFTVDAKHGGKAPLRVQVQDNEGCPVEALVKDNGNGTYSCSYVPRKPVKHTAMVSWG
GVSIPNSPFRVNVGAGSHPNKVKVYGPGVAKTGLKAHEPTYFTVDCAEAGQGDVSIGIKCAPGVVGPAEADIDFD
IIRNDNDTFTVKYTPRGAGSYTIMVLFADQATPTSPIRVKVEPSHDASKVKAEGPGLSRTGVELGKPTHFTVNAK
AAGKGKLDVQFSGLTKGDAVRDVDIIDHHDNTYTVKYTPVQQGPVGVNVTYGGDPIPKSPFSVAVSPSLDLSKIK
VSGLGEKVDVGKDQEFTVKSKGAGGQGKVASKIVGPSGAAVPCKVEPGLGADNSVVRFLPREEGPYEVEVTYDGV
PVPGSPFPLEAVAPTKPSKVKAFGPGLQGGSAGSPARFTIDTKGAGTGGLGLTVEGPCEAQLECLDNGDGTCSVS
YVPTEPGDYNINILFADTHIPGSPFKAHVVPCFDASKVKCSGPGLERATAGEVGQFQVDCSSAGSAELTIEICSE
AGLPAEVYIQDHGDGTHTITYIPLCPGAYTVTIKYGGQPVPNFPSKLQVEPAVDTSGVQCYGPGIEGQGVFREAT
TEFSVDARALTQTGGPHVKARVANPSGNLTETYVQDRGDGMYKVEYTPYEEGLHSVDVTYDGSPVPSSPFQVPVT
EGCDPSRVRVHGPGIQSGTTNKPNKFTVETRGAGTGGLGLAVEGPSEAKMSCMDNKDGSCSVEYIPYEAGTYSLN
VTYGGHQVPGSPFKVPVHDVTDASKVKCSGPGLSPGMVRANLPQSFQVDTSKAGVAPLQVKVQGPKGLVEPVDVV
DNADGTQTVNYVPSREGPYSISVLYGDEEVPRSPFKVKVLPTHDASKVKASGPGLNTTGVPASLPVEFTIDAKDA
GEGLLAVQITDPEGKPKKTHIQDNHDGTYTVAYVPDVTGRYTILIKYGGDEIPFSPYRVRAVPTGDASKCTVTVS
IGGHGLGAGIGPTIQIGEETVITVDTKAAGKGKVTCTVCTPDGSEVDVDVVENEDGTFDIFYTAPQPGKYVICVR
FGGEHVPNSPFQVTALAGDQPSVQPPLRSQQLAPQYTYAQGGQQTWAPERPLVGVNGLDVTSLRPFDLVIPFTIK
KGEITGEVRMPSGKVAQPTITDNKDGTVTVRYAPSEAGLHEMDIRYDNMHIPGSPLQFYVDYVNCGHVTAYGPGL
THGVVNKPATFTVNTKDAGEGGLSLAIEGPSKAEISCTDNQDGTCSVSYLPVLPGDYSILVKYNEQHVPGSPFTA
RVTGDDSMRMSHLKVGSAADIPINISETDLSLLTATVVPPSGREEPCLLKRLRNGHVGISFVPKETGEHLVHVKK
NGQHVASSPIPVVISQSEIGDASRVRVSGQGLHEGHTFEPAEFIIDTRDAGYGGLSLSIEGPSKVDINTEDLEDG
TCRVTYCPTEPGNYIINIKFADQHVPGSPFSVKVTGEGRVKESITRRRRAPSVANVGSHCDLSLKIPEISIQDMT
AQVTSPSGKTHEAEIVEGENHTYCIRFVPAEMGTHTVSVKYKGQHVPGSPFQFTVGPLGEGGAHKVRAGGPGLER
AEAGVPAEFSIWTREAGAGGLAIAVEGPSKAEISFEDRKDGSCGVAYVVQEPGDYEVSVKFNEEHIPDSPFVVPV
ASPSGDARRLTVSSLQESGLKVNQPASFAVSLNGAKGAIDAKVHSPSGALEECYVTEIDQDKYAVRFIPRENGVY
LIDVKFNGTHIPGSPFKIRVGEPGHGGDPGLVSAYGAGLEGGVTGNPAEFVVNTSNAGAGALSVTIDGPSKVKMD
CQECPEGYRVTYTPMAPGSYLISIKYGGPYHIGGSPFKAKVTGPRLVSNHSLHETSSVFVDSLTKATCAPQHGAP
GPGPADASKVVAKGLGLSKAYVGQKSSFTVDCSKAGNNMLLVGVHGPRTPCEEILVKHVGSRLYSVSYLLKDKGE
YTLVVKWGHEHIPGSPYRVVVP

FIGURE 6085A

GGCGGCCAGGGGCGGGCGGCCGCAGAGCAGCACCGGCCGTGGCTCCGGTAGCAGCAAGTTCGAACCCCGCTCCCG
CTCCGCTTCGGTTCTCGCTCCTTCGCCCTTGGGCCTCCAAACACCAGTCCCCGGCAGCTCGTTGCGCATTGCGCT
CTCCCCGCCACCAGGATGCCGGTAACCGAGAAGGATCTAGCTGAGGACGCGCCTTGGAAGAAGATCCAGCAGAAC
ACGTTCACACGCTGGTGCAACGAGCACCTCAAGTGCGTGAACAAACGCATCGGCAACCTGCAGACCGACCTGAGC
GACGGGCTGCGGCTCATCGCGCTGCTCGAGGTGCTCAGCCAGAAGCGCATGTACCGCAAGTACCATCAGCGGCCC
ACCTTTCGCCAGATGCAGCTCGAGAATGTGTCCGTGGCGCTCGAGTTCCTGGACCGTGAGAGCATCAAGCTCGTG
TCCATCGATAGCAAAGCCATTGTGGATGGGAACCTGAAGCTCATCTTGGGTCTGGTGTGGACGCTGATCCTCCAC
TACTCCATCTCCATGCCCGTGTGGGAGGATGAAGGGGATGATGATGCCAAGAAGCAGACGCCAAAGCAGAGGCTG
CTGGGGTGGATTCAGAACAAGATCCCCTACTTGCCCATCACCAACTTTAACCAGAACTGGCAAGACGGCAAAGCC
CTGGGAGCCCTGGTAGACAGCTGTGCTCCAGGTCTGTGCCCAGACTGGGAATCCTGGGACCCGCAGAAGCCTGTG
GATAATGCACGAGAAGCCATGCAGCAGGCAGATGACTGGCTGGGTGTCCCACAGGTCATCACTCCTGAAGAAATC
ATTCACCCGGATGTGGACGAGCACTCAGTTATGACTTACCTGTCCCAGTTCCCCAAAGCCAAGCTCAAGCCGGGG
GCTCCTCTCAAACCCAAACTCAACCCGAAGAAAGCCAGGGCCTATGGCAGAGGAATCGAGCCCACTGGAAACATG
GTGAAGCAGCCAGCCAAGTTCACTGTGGACACCATCAGCGCCGGGCAAGGAGACGTGATGGTGTTTGTTGAGGAC
CCAGAAGGGAACAAAGAGGAGGCACAAGTGACCCCTGACAGTGACAAGAACAAGACATACTCTGTGGAGTATCTG
CCCAAGGTCACCGGGCTACACAAAGTCACAGTCCTCTTTGCAGGACAGCACATCTCCAAGAGCCCATTTGAAGTG
AGTGTTGACAAGGCCCAGGGAGATGCCAGTAAAGTCACTGCAAAAGGTCCAGGGTTGGAAGCTGTAGGGAACATC
GCCAATAAGCCCACCTACTTTGACATCTATACGGCAGGAGCTGGTGTGGGTGACATTGGTGTGGAGGTGGAAGAT
CCCCAGGGGAAGAACACCGTGGAGTTGCTCGTGGAAGACAAAGGAAACCAGGTGTATCGATGTGTGTACAAACCC
ATGCAGCCTGGCCCTCACGTGGTCAAGATCTTCTTTGCTGGGGACACTATTCCTAAGAGTCCCTTCGTTGTGCAG
GTTGGGGAAGCCTGCAATCCAAATGCCTGCCGGGCCAGTGGCCGAGGCCTACAACCCAAAGGCGTCCGTATCCGG
GAGACCACAGATTTCAAGGTTGACACCAAAGCTGCAGGAAGTGGGGAGCTCGGTGTAACCATGAAGGGTCCTAAG
GGTCTGGAGGAGCTGGTGAAGCAGAAAGACTTTCTGGATGGGGTCTACGCATTCGAGTATTACCCCAGCACCCCG
GGGAGATACAGCATTGCCATCACATGGGGGGGACACCACATTCCAAAGAGCCCCTTTGAAGTTCAAGTTGGCCCT
GAAGCGGGTATGCAGAAAGTCCGTGCTTGGGGCCCTGGGCTCCATGGTGGGATTGTCGGGCGGTCAGCGGACTTC
GTGGTAGAATCCATTGGCTCTGAAGTGGGGTCTCTGGGGTTTGCCATTGAAGGCCCCTCTCAGGCAAAGATTGAG
TACAACGACCAGAATGATGGATCGTGTGATGTCAAATACTGGCCCAAGGAGCCTGGCGAATATGCTGTTCACATC
ATGTGTGACGACGAAGACATCAAGGACAGCCCGTACATGGCCTTCATCCACCCAGCCACGGGAGGCTACAACCCT
GATCTGGTTCGAGCATACGGGCCAGGTTTGGAGAAATCTGGATGCATTGTCAACAACCTGGCCGAGTTCACTGTG
GATCCTAAGGATGCTGGAAAAGCTCCCTTAAAGATATTTGCTCAGGATGGGGAAGGCCAACGCATTGACATCCAG
ATGAAGAACCGGATGGACGGCACATATGCATGCTCATACACCCCGGTGAAGGCCATCAAGCACACCATTGCTGTG
GTCTGGGGAGGCGTGAACATCCCGCACAGCCCCTACAGGGTCAACATCGGGCAAGGTAGCCATCCTCAGAAGGTC
AAAGTGTTTGGGCCAGGTGTGGAGAGAAGTGGTCTGAAGGCAAATGAACCTACACACTTCACGGTGGACTGTACT
GAGGCTGGGGAAGGTGATGTCAGTGTTGGCATTAAGTGTGATGCCCGGGTGTTAAGTGAAGATGAGGAAGACGTG
GATTTTGACATTATTCACAATGCCAATGATACGTTCACAGTCAAATATGTGCCTCCTGCTGCTGGGCGATACACT
ATCAAAGTTCTCTTTGCATCTCAGGAAATCCCCGCCAGCCCTTTCAGAGTCAAAGTTGACCCTTCCCACGATGCC
AGCAAAGTGAAGGCAGAAGGCCCAGGGCTCAGCAAAGCAGGTGTGGAAAATGGGAAACCGACCCACTTCACTGTC
TACACCAAGGGGGCTGGGAAAGCCCCGCTCAACGTGCAGTTCAACAGCCCTCTTCCTGGCGATGCAGTGAAGGAT
TTGGATATCATCGATAATTATGACTACTCTCACACGGTTAAATATACACCCACCCAACAGGGCAACATGCAGGTT
CTGGTGACTTACGGTGGCGATCCCATCCCTAAAAGCCCTTTCACTGTGGGTGTTGCTGCACCGCTGGATCTGAGC
AAGATAAAACTCAATGGGCTGGAAAACAGGGTGGAAGTTGGGAAGGATCAGGAGTTCACCGTTGATACCAGGGGG
GCAGGAGGCCAGGGGAAGCTGGACGTGACAATCCTCAGCCCCTCTCGGAAGGTCGTGCCATGCCTAGTGACACCT
GTGACAGGCCGGGAGAACAGCACGGCCAAGTTCATCCCTCGGGAGGAGGGGCTGTATGCTGTAGACGTGACCTAC
GATGGACACCCTGTGCCCGGGAGCCCCTACACAGTGGAGGCCTCGCTGCCACCAGATCCCAGCAAGGTGAAGGCC
CACGGTCCCGGCCTCGAAGGTGGTCTCGTGGGCAAGCCTGCCGAGTTCACCATCGATACCAAAGGAGCTGGTACT
GGAGGTCTGGGCTTAACGGTGGAAGGTCCGTGCGAGGCCAAAATCGAGTGCTCCGACAATGGTGATGGGACCTGC
TCCGTCTCTTACCTTCCCACAAAACCCGGGGAGTACTTCGTCAACATCCTCTTTGAAGAAGTCCACATACCTGGG
TCTCCCTTCAAAGCTGACATTGAAATGCCCTTTGACCCCTCTAAAGTCGTGGCATCGGGGCCAGGTCTCGAGCAC

FIGURE 6085B

GGGAAGGTGGGTGAAGCTGGCCTCCTTAGCGTCGACTGCTCGGAAGCGGGACCGGGGGCCCTGGGCCTGGAAGCT
GTCTCGGACTCGGGAACAAAAGCCGAAGTCAGTATTCAGAACAACAAAGATGGCACCTACGCGGTGACCTACGTG
CCCCTGACGGCCGGCATGTACACGTTGACCATGAAGTATGGTGGCGAACTCGTGCCACACTTCCCCGCCCGGGTC
AAGGTGGAGCCCGCCGTGGACACCAGCAGGATCAAAGTCTTTGGACCAGGAATAGAAGGGAAAGATGTGTTCCGG
GAAGCTACCACCGACTTTACAGTTGACTCTCGGCCGCTGACCCAGGTTGGGGGTGACCACATCAAGGCCCACATT
GCCAACCCCTCAGGGGCCTCCACCGAGTGCTTTGTCACAGACAATGCGGATGGGACCTACCAGGTGGAATACACA
CCCTTTGAGAAAGGTCTCCATGTAGTGGAGGTGACATATGATGACGTGCCTATCCCAAACAGTCCCTTCAAGGTG
GCTGTCACTGAAGGCTGCCAGCCATCTAGGGTGCAAGCCCAAGGACCTGGATTGAAAGAGGCCTTTACCAACAAG
CCCAATGTCTTCACCGTGGTTACCAGAGGCGCAGGAATTGGTGGGCTTGGCATAACTGTTGAGGGACCATCAGAG
TCGAAGATAAATTGCAGAGACAACAAGGATGGCAGCTGCAGTGCTGAGTACATTCCTTTCGCGCCGGGGGATTAC
GATGTTAATATCACATATGGAGGAGCCCACATCCCCGGCAGCCCCTTCAGGGTTCCTGTGAAGGATGTTGTGGAC
CCCAGCAAGGTCAAGATTGCCGGCCCCGGGCTGGGCTCAGGCGTCCGAGCCCGTGTCCTGCAGTCCTTCACGGTG
GACAGCAGCAAGGCTGGCCTGGCTCCGCTGGAAGTGAGGGTTCTGGGCCCACGAGGCTTGGTGGAGCCAGTGAAC
GTGGTGGACAATGGAGATGGCACACACACAGTAACCTACACCCCATCTCAGGAGGGACCTTACATGGTCTCAGTT
AAATATGCTGATGAAGAGATTCCTCGCAGTCCCTTCAAGGTCAAGGTCCTTCCCACATATGATGCCAGCAAAGTG
ACTGCCAGTGGCCCCGGCCTTAGTTCCTATGGTGTGCCTGCCAGTCTACCTGTGGACTTTGCAATTGATGCCCGA
GATGCCGGGGAAGGCCTGCTTGCTGTTCAAATAACGGACCAAGAAGGAAAACCCAAAAGAGCCATTGTCCATGAC
AATAAAGATGGCACGTATGCTGTCACCTACATCCCCGACAAGACTGGGCGCTATATGATTGGAGTCACCTACGGG
GGTGACGACATCCCACTTTCTCCTTATCGCATCCGAGCCACACAGACGGGTGATGCCAGCAAGTGCCTGGCCACG
GGTCCTGGAATCGCCTCCACTGTGAAAACTGGCGAAGAAGTAGGCTTTGTGGTTGATGCCAAGACTGCCGGGAAG
GGTAAAGTGACCTGCACGGTTCTGACCCCAGATGGCACTGAGGCCGAGGCCGATGTCATTGAGAATGAAGATGGA
ACCTATGACATCTTCTACACAGCTGCCAAGCCGGGCACATATGTGATCTATGTGCGCTTCGGTGGTGTTGATATT
CCTAACAGCCCCTTCACTGTCATGGCCACAGATGGGGAAGTCACAGCCGTGGAGGAGGCACCGGTAAATGCATGT
CCCCCTGGATTCAGGCCCTGGGTGACCGAAGAGGCCTATGTCCCAGTGAGTGACATGAACGGCCTGGGATTTAAG
CCTTTTGACCTGGTCATTCCGTTTGCTGTCAGGAAAGGAGAAATCACTGGAGAGGTCCACATGCCTTCTGGGAAG
ACAGCCACACCTGAGATTGTGGACAACAAGGACGGCACGGTCACTGTTAGATATGCCCCCACTGAGGTCGGGCTC
CATGAGATGCACATCAAATACATGGGCAGCCACATCCCTGAGAGCCCACTCCAGTTCTACGTGAACTACCCCAAC
AGTGGAAGTGTTTCTGCATACGGTCCAGGCCTCGTGTATGGAGTGGCCAACAAAACTGCCACCTTCACCATCGTC
ACAGAGGATGCAGGAGAAGGTGGTCTGGACTTGGCTATTGAGGGCCCCTCAAAAGCAGAAATCAGCTGCATTGAC
AATAAAGATGGGACATGCACAGTGACCTACCTGCCGACTCTGCCAGGCGACTACAGCATTCTGGTCAAGTACAAT
GACAAGCACATCCCTGGCAGCCCCTTCACAGCCAAGATCACAGATGACAGCAGGCGGTGCTCCCAGGTGAAGTTG
GGCTCAGCCGCTGACTTCCTGCTCGACATCAGTGAGACTGACCTCAGCAGCCTGACGGCCAGCATTAAGGCCCCA
TCTGGCCGAGACGAGCCCTGTCTCCTGAAGAGGCTGCCCAACAACCACATTGGCATCTCCTTCATCCCCCGGGAA
GTGGGCGAACATCTGGTCAGCATCAAGAAAAATGGCAACCATGTGGCCAACAGCCCCGTGTCTATCATGGTGGTC
CAGTCGGAGATTGGTGACGCCCGCCGAGCCAGAGTCTATGGCCGCGGCCTGTCAGAAGGCCGGACTTTCGAGATG
TCTGACTTCATCGTGGACACAAGGGATGCAGGTTATGGTGGCATATCCTTGGCGGTGGAAGGCCCCAGCAAAGTG
GACATCCAGACGGAGGACCTGGAAGATGGCACCTGCAAAGTCTCCTACTTCCCTACCGTGCCTGGGGTTTATATC
GTCTCCACCAAATTCGCTGACGAGCACGTGCCTGGGAGCCCATTTACCGTGAAGATCAGTGGGGAGGGAAGAGTC
AAAGAGAGCATCACCCGCACCAGTCGGGCCCCGTCCGTGGCCACTGTCGGGAGCATTTGTGACCTGAACCTGAAA
ATCCCAGAAATCAACAGCAGTGATATGTCGGCCCACGTCACCAGCCCCTCTGGCCGTGTGACTGAGGCAGAGATT
GTGCCCATGGGGAAGAACTCACACTGCGTCCGGTTTGTGCCCCAGGAGATGGGCGTGCACACGGTCAGCGTCAAG
TACCGTGGGCAGCACGTCACCGGCAGCCCCTTCCAGTTCACCGTGGGGCCACTTGGTGAAGGAGGCGCCCACAAG
GTGCGGGCAGGAGGCCCTGGCCTGGAGAGAGGAGAAGCGGGAGTCCCAGCTGAGTTCAGCATTTGGACCCGGGAA
GCAGGCGCTGGAGGCCTCTCCATCGCTGTTGAGGGCCCCAGTAAGGCCGAGATTACATTCGATGACCATAAAAAT
GGGTCGTGCGGTGTATCTTATATTGCCCAAGAGCCTGGTAACTACGAGGTGTCCATCAAGTTCAATGATGAGCAC
ATCCCGGAAAGCCCCTACCTGGTGCCGGTCATCGCACCCTCCGACGACGCCCGCCGCCTCACTGTTATGAGCCTT
CAGGAATCGGGATTAAAAGTTAACCAGCCAGCATCCTTTGCTATAAGGTTGAATGGCGCAAAAGGCAAGATTGAT
GCAAAGGTGCACAGCCCCTCTGGAGCCGTGGAGGAGTGCCACGTGTCTGAGCTGGAGCCAGATAAGTATGCTGTT

FIGURE 6085C

CGCTTCATCCCTCATGAGAATGGTGTCCACACCATCGATGTCAAGTTCAATGGGAGCCACGTGGTTGGAAGCCCC
TTCAAAGTGCGCGTTGGGGAGCCTGGACAAGCGGGGAACCCTGCCCTGGTGTCCGCCTATGGCACGGGACTCGAA
GGGGGCACCACAGGTATCCAGTCGGAATTCTTTATTAACACCACCCGAGCAGGTCCAGGGACATTATCCGTCACC
ATCGAAGGCCCATCCAAGGTTAAAATGGATTGCCAGGAAACACCTGAAGGGTACAAAGTCATGTACACCCCCATG
GCTCCTGGTAACTACCTGATCAGTGTCAAATACGGTGGGCCCAACCACATCGTGGGCAGTCCCTTCAAGGCCAAG
GTGACAGGCCAGCGTCTAGTTAGCCCTGGCTCAGCCAACGAGACCTCATCCATCCTGGTGGAGTCAGTGACCAGG
TCGTCTACAGAGACCTGCTATAGCGCCATTCCCAAGGCATCCTCGGACGCCAGCAAGGTGACCTCTAAGGGGGCA
GGGCTCTCAAAGGCCTTTGTGGGCCAGAAGAGTTCCTTCCTGGTGGACTGCAGCAAAGCTGGCTCCAACATGCTG
CTGATCGGGGTCCATGGGCCCACCACCCCCTGCGAGGAGGTCTCCATGAAGCATGTAGGCAACCAGCAATACAAC
GTCACATACGTCGTCAAGGAGAGGGGCGATTATGTGCTGGCTGTGAAGTGGGGGGAGGAACACATCCCTGGCAGC
CCTTTTCATGTCACAGTGCCT**TAA**AACAGTTTTCTCAAATCCTGGAGAGAGTTCTTGTGGTTGCCTTTGTTGCTT
GTTTGTAATTCATTTTATACAAAGCCCTCCAGCCTGTTTGTGGGGCTGAAACCCCATCCCTAAAATATTGCTGTT
GTAAAATGCCTTCAGAAATAAGTCCTAGACTGGACTCTTGAGGGACATATTGGAGAATCTTAAGAAATGCAAGCT
TGTTCAGGGGGCTGAGAAGATCCTGAGTACACTAGGTGCAAACCAGAACTCTTGGTGGAACAGACCAGCCACTGC
AGCAGACAGACCAGGAACACAATGAGACTGACATTTCAAAAAAACAAAACTGGCTAGCCTGAGCTGCTGGTTCAC
TCTTCAGCATTTATGAAACAAGGCTAGGGGAAGATGGGCAGAGAAAAAGGGGACACCTAGTTTGGTTGTCATTTG
GCAAAGGAGATGACTTAAAAATCCGCTTAATCTCTTCCAGTGTCCGTGTTAATGTATTTGGCTATTAGATCACTA
GCACTGCTTTACCGCTCCTCATCGCCAACACCCCCATGCTCTGTGGCCTTCTTACACTTCTCAGAGGGCAGAGTG
GCAGCCGGGCACCCTACAGAAACTCAGAGGGCAGAGTGGCAGCCAGGCCCACATGTCTCTCAAGTACCTGTCCCC
TCGCTCTGGTGATTATTTCTTGCAGAATCACCACACGAGACCATCCCGGCAGTCATGGTTTTGCTTTAGTTTTCC
AAGTCCGTTTCAGTCCCTTCCTTGGTCTGAAGAAATTCTGCAGTGGCGAGCAGTTTCCCACTTGCCAAAGATCCC
TTTTAACCAACACTAGCCCTTGTTTTTAACACACGCTCCAGCCCTTCATCAGCCTGGGCAGTCTTACCAAAATGT
TTAAAGTGATCTCAGAGGGGCCCATGGATTAACGCCCTCATCCCAAGGTCCGTCCCATGACATAACACTCCACAC
CCGCCCCAGCCAACTTCATGGGTCACTTTTTCTGGAAAATAATGATCTGTACAGACAGGACAGAATGAAACTCTG
CGGGTCTTTGGCCTGAAAGTTGGGAATGGTTGGGGGAGAGAAGGGCAGCAGCTTATTGGTGGTCTTTTCACCATT
GGCAGAAACAGTGAGAGCTGTGTGGTGCAGAAATCCAGAAATGAGGTGTAGGGAATTTTGCCTGCCTTCCTGCAG
ACCTGAGCTGGCTTTGGAATGAGGTTAAAGTGTCAGGGACGTTGCCTGAGCCCAAATGTGTAGTGTGGTCTGGGC
AGGCAGACCTTTAGGTTTTGCTGCTTAGTCCTGAGGAAGTGGCCACTCTTGTGGCAGGTGTAGTATCTGGGGCGA
GTGTTGGGGGTAAAAGCCCACCCTACAGAAAGTGGAACAGCCCGGAGCCTGATGTGAAAGGACCACGGGTGTTGT
AAGCTGGGACACGGAAGCCAAACTGGAATCAAACGCCGACTGTAAATTGTATCTTATAACTTATTAAATAAAACA
TTTGCTCCGTAAAAAAAAAAAAA

FIGURE 6086

MPVTEKDLAEDAPWKKIQQNTFTRWCNEHLKCVNKRIGNLQTDLSDGLRLIALLEVLSQKRMYRKYHQRPTFRQM
QLENVSVALEFLDRESIKLVSIDSKAIVDGNLKLILGLVWTLILHYSISMPVWEDEGDDDAKKQTPKQRLLGWIQ
NKIPYLPITNFNQNWQDGKALGALVDSCAPGLCPDWESWDPQKPVDNAREAMQQADDWLGVPQVITPEEIIHPDV
DEHSVMTYLSQFPKAKLKPGAPLKPKLNPKKARAYGRGIEPTGNMVKQPAKFTVDTISAGQGDVMVFVEDPEGNK
EEAQVTPDSDKNKTYSVEYLPKVTGLHKVTVLFAGQHISKSPFEVSVDKAQGDASKVTAKGPGLEAVGNIANKPT
YFDIYTAGAGVGDIGVEVEDPQGKNTVELLVEDKGNQVYRCVYKPMQPGPHVVKIFFAGDTIPKSPFVVQVGEAC
NPNACRASGRGLQPKGVRIRETTDFKVDTKAAGSGELGVTMKGPKGLEELVKQKDFLDGVYAFEYYPSTPGRYSI
AITWGGHHIPKSPFEVQVGPEAGMQKVRAWGPGLHGGIVGRSADFVVESIGSEVGSLGFAIEGPSQAKIEYNDQN
DGSCDVKYWPKEPGEYAVHIMCDDEDIKDSPYMAFIHPATGGYNPDLVRAYGPGLEKSGCIVNNLAEFTVDPKDA
GKAPLKIFAQDGEGQRIDIQMKNRMDGTYACSYTPVKAIKHTIAVVWGGVNIPHSPYRVNIGQGSHPQKVKVFGP
GVERSGLKANEPTHFTVDCTEAGEGDVSVGIKCDARVLSEDEEDVDFDIIHNANDTFTVKYVPPAAGRYTIKVLF
ASQEIPASPFRVKVDPSHDASKVKAEGPGLSKAGVENGKPTHFTVYTKGAGKAPLNVQFNSPLPGDAVKDLDIID
NYDYSHTVKYTPTQQGNMQVLVTYGGDPIPKSPFTVGVAAPLDLSKIKLNGLENRVEVGKDQEFTVDTRGAGGQG
KLDVTILSPSRKVVPCLVTPVTGRENSTAKFIPREEGLYAVDVTYDGHPVPGSPYTVEASLPPDPSKVKAHGPGL
EGGLVGKPAEFTIDTKGAGTGGLGLTVEGPCEAKIECSDNGDGTCSVSYLPTKPGEYFVNILFEEVHIPGSPFKA
DIEMPFDPSKVVASGPGLEHGKVGEAGLLSVDCSEAGPGALGLEAVSDSGTKAEVSIQNNKDGTYAVTYVPLTAG
MYTLTMKYGGELVPHFPARVKVEPAVDTSRIKVFGPGIEGKDVFREATTDFTVDSRPLTQVGGDHIKAHIANPSG
ASTECFVTDNADGTYQVEYTPFEKGLHVVEVTYDDVPIPNSPFKVAVTEGCQPSRVQAQGPGLKEAFTNKPNVFT
VVTRGAGIGGLGITVEGPSESKINCRDNKDGSCSAEYIPFAPGDYDVNITYGGAHIPGSPFRVPVKDVVDPSKVK
IAGPGLGSGVRARVLQSFTVDSSKAGLAPLEVRVLGPRGLVEPVNVVDNGDGTHTVTYTPSQEGPYMVSVKYADE
EIPRSPFKVKVLPTYDASKVTASGPGLSSYGVPASLPVDFAIDARDAGEGLLAVQITDQEGKPKRAIVHDNKDGT
YAVTYIPDKTGRYMIGVTYGGDDIPLSPYRIRATQTGDASKCLATGPGIASTVKTGEEVGFVVDAKTAGKGKVTC
TVLTPDGTEAEADVIENEDGTYDIFYTAAKPGTYVIYVRFGGVDIPNSPFTVMATDGEVTAVEEAPVNACPPGFR
PWVTEEAYVPVSDMNGLGFKPFDLVIPFAVRKGEITGEVHMPSGKTATPEIVDNKDGTVTVRYAPTEVGLHEMHI
KYMGSHIPESPLQFYVNYPNSGSVSAYGPGLVYGVANKTATFTIVTEDAGEGGLDLAIEGPSKAEISCIDNKDGT
CTVTYLPTLPGDYSILVKYNDKHIPGSPFTAKITDDSRRCSQVKLGSAADFLLDISETDLSSLTASIKAPSGRDE
PCLLKRLPNNHIGISFIPREVGEHLVSIKKNGNHVANSPVSIMVVQSEIGDARRARVYGRGLSEGRTFEMSDFIV
DTRDAGYGGISLAVEGPSKVDIQTEDLEDGTCKVSYFPTVPGVYIVSTKFADEHVPGSPFTVKISGEGRVKESIT
RTSRAPSVATVGSICDLNLKIPEINSSDMSAHVTSPSGRVTEAEIVPMGKNSHCVRFVPQEMGVHTVSVKYRGQH
VTGSPFQFTVGPLGEGGAHKVRAGGPGLERGEAGVPAEFSIWTREAGAGGLSIAVEGPSKAEITFDDHKNGSCGV
SYIAQEPGNYEVSIKFNDEHIPESPYLVPVIAPSDDARRLTVMSLQESGLKVNQPASFAIRLNGAKGKIDAKVHS
PSGAVEECHVSELEPDKYAVRFIPHENGVHTIDVKFNGSHVVGSPFKVRVGEPGQAGNPALVSAYGTGLEGGTTG
IQSEFFINTTRAGPGTLSVTIEGPSKVKMDCQETPEGYKVMYTPMAPGNYLISVKYGGPNHIVGSPFKAKVTGQR
LVSPGSANETSSILVESVTRSSTETCYSAIPKASSDASKVTSKGAGLSKAFVGQKSSFLVDCSKAGSNMLLIGVH
GPTTPCEEVSMKHVGNQQYNVTYVVKERGDYVLAVKWGEEHIPGSPFHVTVP

FIGURE 6087

TGGAAAGGGCTGTCACCCGGCTTGGCCCCTTCCACACCCAACTGGGGCAAGCCTGACCCGGCGACAGGAGGCATG
AGGGGCCCCCGGCCGAAATGACAGTGCTGGCGCCAGCCTGGAGCCCAACAACCTATCTCCTCCTGCTGCTGCTGC
TGAGCTCGGGACTCAGTGGGACCCAGGACTGCTCCTTCCAACACAGCCCCATCTCCTCCGACTTCGCTGTCAAAA
TCCGTGAGCTGTCTGACTACCTGCTTCAAGATTACCCAGTCACCGTGGCCTCCAACCTGCAGGACGAGGAGCTCT
GCGGGGCGCTCTGGCGGCTGGTCCTGGCACAGCGCTGGATGGAGCGGCTCAAGACTGTCGCTGGGTCCAAGATGC
AAGGCTTGCTGGAGCGCGTGAACACGGAGATACACTTTGTCACCAAATGTGCCTTTCAGCCCCCCCCCAGCTGTC
TTCGCTTCGTCCAGACCAACATCTCCCGCCTCCTGCAGGAGACCTCCGAGCAGCTGGTGGCGCTGAAGCCCTGGA
TCACTCGCCAGAACTTCTCCCGGTGCCTGGAGCTGCAGTGTCAGCCCGACTCCTCAACCCTGCCACCCCCATGGA
GTCCCCGGCCCCTGGAGGCCACAGCCCCGACAGCCCCGCAGCCCCCTCTGCTCCTCCTACTGCTGCTGCCCGTGG
GCCTCCTGCTGCTGGCCGCTGCCTGGTGCCTGCACTGGCAGAGGACGCGGCGGAGGACACCCCGCCCTGGGGAGC
AGGTGCCCCCCGTCCCCAGTCCCCAGGACCTGCTGCTTGTGGAGCACTGACCTGGCCAAGGCCTCATCCTGGGGA
GGATACGTAGGCACACAGAGGGGAGTCACCAGCC

FIGURE 6088

MTVLAPAWSPTTYLLLLLLLSSGLSGTQDCSFQHSPISSDFAVKIRELSDYLLQDYPVTVASNLQDEELCGALWR
LVLAQRWMERLKTVAGSKMQGLLERVNTEIHFVTKCAFQPPPSCLRFVQTNISRLLQETSEQLVALKPWITRQNF
SRCLELQCQPDSSTLPPPWSPRPLEATAPTAPQPPLLLLLLLPVGLLLLAAAWCLHWQRTRRRTPRPGEQVPPVP
SPQDLLLVEH

FIGURE 6089

TAGGATGGAAAGGCAGATGTAAAGTCCCTCATGGCGAAATATAACACGGGGGGCAACCCGACAGAGGATGTCTCA
GTCAATAGCCGACCCTTCAGAGTCACAGGGCCAAACTCATCTTCAGGAATACAAGCAAGAAAGAACTTATTCAAC
AACCAAGGAAATGCCAGCCCTCCTGCAGGACCCAGCAATGTACCTAAGTTTGGGTCCCCAAAGCCACCTGTGGCA
GTCAAACCTTCTTCTGAGGAAAAGCCTGACAAGGAACCCAAGCCCCCGTTTCTAAAGCCCACTGGAGCAGGCCAA
AGATTCGGAACACCAGCCAGCTTGACCACCAGAGACCCCGAGGCGAAAGTGGGATTTCTGAAACCTGTAGGCCCC
AAGCCCATCAACTTGCCCAAAGAAGATTCCAAACCTACATTTCCCTGGCCTCCTGGAAACAAGCCATCTCTTCAC
AGTGTAAACCAAGACCATGACTTAAAGCCACTAGGCCCGAAATCTGGGCCTACTCCTCCAACCTCAGAAAATGAA
CAGAAGCAAGCGTTTCCCAAATTGACTGGGGTTAAAGGGAAATTTATGTCAGCATCACAAGATCTTGAACCCAAG
CCCCTCTTCCCCAAACCCGCCTTTGGCCAGAAGCCGCCCCTAAGTACCGAGAACTCCCATGAAGACGAAAGCCCC
ATGAAGAATGTGTCTTCATCAAAAGGGTCCCCAGCTCCCCTGGGAGTCAGGTCCAAAAGCGGCCCTTTAAAACCA
GCAAGGGAAGACTCAGAAAATAAAGACCATGCAGGGGAGATTTCAAGTTTGCCCTTTCCTGGAGTGGTTTTGAAA
CCTGCTGCGAGCAGGGGAGGCCTAGGTCTCTCCAAAAATGGTGAAGAAAAAAAGGAAGATAGGAAGATAGATGCT
GCTAAGAACACCTTCCAGAGCAAAATAAATCAGGAAGAGTTGGCCTCAGGGACTCCTCCTGCCAGGTTCCCTAAG
GCCCCTTCTAAGCTGACAGTGGGGGGGCCATGGGGCCAAAGTCAGGAAAAGGAAAAGGGAGACAAGAATTCAGCC
ACCCCGAAACAGAAGCCATTGCCTCCCTTGTTTACCTTGGGTCCACCTCCACCAAAACCCAACAGACCACCAAAT
GTTGACCTGACGAAATTCCACAAAACCTCTTCTGGAAACAGTACTAGCAAAGGCCAGACGTCTTACTCAACAACT
TCCCTGCCACCACCTCCACCATCCCATCCGGCCAGCCAACCACCATTGCCAGCATCTCACCCATCACAACCACCA
GTCCCAAGCCTACCTCCCAGAAACATTAAACCTCCGTTTGACCTAAAAAGCCCTGTCAATGAAGACAATCAAGAT
GGTGTCACGCACTCTGATGGTGCTGGAAATCTAGATGAGGAACAAGACAGTGAAGGAGAAACATATGAAGACATA
GAAGCATCCAAAGAAAGAGAGAAGAAAAGGGAAAAGGAAGAAAAGAAGAGGTTAGAGCTGGAGAAAAAGGAACAG
AAAGAGAAAGAAAAGAAAGAACAAGAAATAAAGAAGAAATTTAAACTAACAGGCCCTATTCAAGTCATCCATCTT
GCAAAAGCTTGTTGTGATGTCAAAGGAGGAAAGAATGAACTGAGCTTCAAGCAAGGAGAGCAAATTGAAATCATC
CGCATCACAGACAACCCAGAAGGAAAATGGTTGGGCAGAACAGCAAGGGGTTCATATGGCTATATTAAAACAACT
GCTGTAGAGATTGACTATGATTCTTTGAAACTGAAAAAAGACTCTCTTGGTGCCCCTTCAAGACCTATTGAAGAT
GACCAAGAAGTATATGATGATGTTGCAGAGCAGGATGATATTAGCAGCCACAGTCAGAGTGGAAGTGGAGGGATA
TTCCCTCCACCACCAGATGATGACATTTATGATGGGATTGAAGAGGAAGATGCTGATGATGGTTTCCCTGCTCCT
CCTAAACAATTGGACATGGGAGATGAAGTTTACGATGATGTGGATACCTCTGATTTCCCTGTTTCATCAGCAGAG
ATGAGTCAAGGAACTAATTTTGGAAAAGCTAAGACAGAAGAAAAGGACCTTAAGAAGCTAAAAAAGCAGGAAAAA
GAAGAAAAAGACTTCAGGAAAAAATTTAAATATGATGGTGAAATTAGAGTCCTATATTCAACTAAAGTTACAACT
TCCATAACTTCTAAAAAGTGGGGAACCAGAGATCTACAGGTAAAACCTGGTGAATCTCTAGAAGTTATACAAACC
ACAGATGACACAAAAGTTCTCTGCAGAAATGAAGAAGGGAAATATGGTTATGTCCTTCGGAGTTACCTAGCGGAC
AATGATGGAGAGATCTATGATGATATTGCTGATGGCTGCATCTATGACAATGACTAGCACTCAACTTTGGTCATT

FIGURE 6090

MAKYNTGGNPTEDVSVNSRPFRVTGPNSSSGIQARKNLFNNQGNASPPAGPSNVPKFGSPKPPVAVKPSSEEKPD
KEPKPPFLKPTGAGQRFGTPASLTTRDPEAKVGFLKPVGPKPINLPKEDSKPTFPWPPGNKPSLHSVNQDHDLKP
LGPKSGPTPPTSENEQKQAFPKLTGVKGKFMSASQDLEPKPLFPKPAFGQKPPLSTENSHEDESPMKNVSSSKGS
PAPLGVRSKSGPLKPAREDSENKDHAGEISSLPFPGVVLKPAASRGGLGLSKNGEEKKEDRKIDAAKNTFQSKIN
QEELASGTPPARFPKAPSKLTVGGPWGQSQEKEKGDKNSATPKQKPLPPLFTLGPPPPKPNRPPNVDLTKFHKTS
SGNSTSKGQTSYSTTSLPPPPPSHPASQPPLPASHPSQPPVPSLPPRNIKPPFDLKSPVNEDNQDGVTHSDGAGN
LDEEQDSEGETYEDIEASKEREKKREKEEKKRLELEKKEQKEKEKKEQEIKKKFKLTGPIQVIHLAKACCDVKGG
KNELSFKQGEQIEIIRITDNPEGKWLGRTARGSYGYIKTTAVEIDYDSLKLKKDSLGAPSRPIEDDQEVYDDVAE
QDDISSHSQSGSGGIFPPPPDDDIYDGIEEEDADDGFPAPPKQLDMGDEVYDDVDTSDFPVSSAEMSQGTNFGKA
KTEEKDLKKLKKQEKEEKDFRKKFKYDGEIRVLYSTKVTTSITSKKWGTRDLQVKPGESLEVIQTTDDTKVLCRN
EEGKYGYVLRSYLADNDGEIYDDIADGCIYDND

FIGURE 6091A

CGCTCCCCGCTCCCGTGGCTGCCGCCGCCCCGGGGAAGAAGAGACAGGGGTGGGGTTTGGGGGAAGCGAGAGAGG
AGGGGAGAGACCCTGGCCAGGCTGGAGCCTGGATTCGAGGGGAGGAGGGACGGGAGGAGGAGAAAGGTGGAGGAG
AAGGGAGGGGGGAGCGGGGAGGAGCGGCCGGGCCTGGGGCCTTGAGGCCCGGGGAGAGCCGGGGAGCCGGGCCCG
CGCGCCGAGATGTTGCTGCTGCTGCTACTGGCGCCACTCTTCCTCCGCCCCCCGGGCGCGGGCGGGGCGCAGACC
CCCAACGCCACCTCAGAAGGTTGCCAGATCATACACCCGCCCTGGGAAGGGGGCATCAGGTACCGGGGCCTGACT
CGGGACCAGGTGAAGGCTATCAACTTCCTGCCAGTGGACTATGAGATTGAGTATGTGTGCCGGGGGGAGCGCGAG
GTGGTGGGGCCCAAGGTCCGCAAGTGCCTGGCCAACGGCTCCTGGACAGATATGGACACACCCAGCCGCTGTGTC
CGAATCTGCTCCAAGTCTTATTTGACCCTGGAAAATGGGAAGGTTTTCCTGACGGGTGGGGACCTCCCAGCTCTG
GACGGAGCCCGGGTGGATTTCCGGTGTGACCCCGACTTCCATCTGGTGGGCAGCTCCCGGAGCATCTGTAGTCAG
GGCCAGTGGAGCACCCCCAAGCCCCACTGCCAGGTGAATCGAACGCCACACTCAGAACGGCGCGCAGTGTACATC
GGGGCACTGTTTCCCATGAGCGGGGGCTGGCCAGGGGGCCAGGCCTGCCAGCCCGCGGTGGAGATGGCGCTGGAG
GACGTGAATAGCCGCAGGGACATCCTGCCGGACTATGAGCTCAAGCTCATCCACCACGACAGCAAGTGTGATCCA
GGCCAAGCCACCAAGTACCTATATGAGCTGCTCTACAACGACCCTATCAAGATCATCCTTATGCCTGGCTGCAGC
TCTGTCTCCACGCTGGTGGCTGAGGCTGCTAGGATGTGGAACCTCATTGTGCTTTCCTATGGCTCCAGCTCACCA
GCCCTGTCAAACCGGCAGCGTTTCCCCACTTTCTTCCGAACGCACCCATCAGCCACACTCCACAACCCTACCCGC
GTGAAACTCTTTGAAAAGTGGGGCTGGAAGAAGATTGCTACCATCCAGCAGACCACTGAGGTCTTCACTTCGACT
CTGGACGACCTGGAGGAACGAGTGAAGGAGGCTGGAATTGAGATTACTTTCCGCCAGAGTTTCTTCTCAGATCCA
GCTGTGCCCGTCAAAAACCTGAAGCGCCAGGATGCCCGAATCATCGTGGGACTTTTCTATGAGACTGAAGCCCGG
AAAGTTTTTTGTGAGGTGTACAAGGAGCGTCTCTTTGGGAAGAAGTACGTCTGGTTCCTCATTGGGTGGTATGCT
GACAATTGGTTCAAGATCTACGACCCTTCTATCAACTGCACAGTGGATGAGATGACTGAGGCGGTGGAGGGCCAC
ATCACAACTGAGATCGTCATGCTGAATCCTGCCAATACCCGCAGCATTTCCAACATGACATCCCAGGAATTTGTG
GAGAAACTAACCAAGCGACTGAAAAGACACCCTGAGGAGACAGGAGGCTTCCAGGAGGCACCGCTGGCCTATGAT
GCCATCTGGGCCTTGGCACTGGCCCTGAACAAGACATCTGGAGGAGGCAGCCGTTCCGGCGTGCGCCTGGAGGAC
TTCAACTACAACAACCAGACCATTACCGACCAAATCTACCGGGCAATGAACTCCTCGTCCTTTGAGGGTGTCTCT
GGCCATGTGGTGTTTGATGCCAGCGGCTCTCGGATGGCATGGACGCTTATCGAGCAGCTTCAGGGTGGCAGCTAC
AAGAAGATTGGCTACTATGACAGCACCAAGGATGATCTTTCCTGGTCCAAAACAGATAAATGGATTGTTATATCC
AGAACTCACAGCCCAACCTGACAACCTGACTGCTGTGGGCTGCTCACTGGCTTTAGCTGCTGTCTTCCCCCTGGG
GCTCGATGGTTACCACATTGGGAGGAACCAGTTTCCTTTCGTCTGCCAGGCCCGCCTCTGGCTCCTGGGCCTGGG
CTTTAGTCTGGGCTACGGTTCCATGTTCACCAAGATTTGGTGGGTCCACACGGTCTTCACAAAGAAGGAAGAAAA
GAAGGAGTGGAGGAAGACTCTGGAACCCTGGAAGCTGTATGCCACAGTGGGCCTGCTGGTGGGCATGGATGTCCT
CACTCTCGCCATCTGGCAGATCGTGGACCCTCTGCACCGGACCATTGAGACATTTGCCAAGGAGGAACCTAAGGA
AGATATTGACGTCTCTATTCTGCCCCAGCTGGAGCATTGCAGCTCCAGGAAGATGAATACATGGCTTGGCATTTT
CTATGGTTACAAGGGGCTGCTGCTGCTGCTGGGAATCTTCCTTGCTTATGAGACCAAGAGTGTGTCCACTGAGAA
GATCAATGATCACCGGGCTGTGGGCATGGCTATCTACAATGTGGCAGTCCTGTGCCTCATCACTGCTCCTGTCAC
CATGATTCTGTCCAGCCAGCAGGATGCAGCCTTTGCCTTTGCCTCTCTTGCCATAGTTTTCTCCTCCTATATCAC
TCTTGTTGTGCTCTTTGTGCCCAAGATGCGCAGGCTGATCACCCGAGGGGAATGGCAGTCGGAGGCGCAGGACAC
CATGAAGACAGGGTCATCGACCAACAACAACGAGGAGGAGAAGTCCCGGCTGTTGGAGAAGGAGAACCGTGAACT
GGAAAAGATCATTGCTGAGAAAGAGGAGCGTGTCTCTGAACTGCGCCATCAACTCCAGTCTCGGCAGCAGCTCCG
CTCCCGGCGCCACCCACCGACACCCCCAGAACCCTCTGGGGGCCTGCCCAGGGGACCCCCTGAGCCCCCCGACCG
GCTTAGCTGTGATGGGAGTCGAGTGCATTTGCTTTATAAGTGAGGGTAGGGTGAGGGAGGACAGGCCAGTAGGGG
GAGGGAAAGGGAGAGGGGAAGGGCAGGGGACTCAGGAAGCAGGGGGTCCCCATCCCCAGCTGGGAAGAACATGCT
ATCCAATCTCATCTCTTGTAAATACATGTCCCCCTGTGAGTTCTGGGCTGATTTGGGTCTCTCATACCTCTGGGA
AACAGACCTTTTTCTCTCTTACTGCTTCATGTAATTTTGTATCACCTCTTCACAATTTAGTTCGTACCTGGCTTG
AAGCTGCTCACTGCTCACACGCTGCCTCCTCAGCAGCCTCACTGCATCTTTCTCTTCCCATGCAACACCCTCTTC
TAGTTACCACGGCAACCCCTGCAGCTCCTCTGCCTTTGTGCTCTGTTCCTGTCCAGCAGGGGTCTCCCAACAAGT
GCTCTTTCCACCCCAAAGGGGCCTCTCCTTTTCTCCACTGTCATAATCTCTTTCCATCTTACTTGCCCTTCTATA
CTTTCTCACATGTGGCTCCCCCTGAATTTTGCTTCCTTTGGGAGCTCATTCTTTTCGCCAAGGCTCACATGCTCC
TTGCCTCTGCTCTGTGCACTCACGCTCAGCACACATGCATCCTCCCCTCTCCTGCGTGTGCCCACTGAACATGCT

FIGURE 6091B

CATGTGTACACACGCTTTTCCCGTATGCTTTCTTCATGTTCAGTCACATGTGCTCTCGGGTGCCCTGCATTCACA
GCTACGTGTGCCCCTCTCATGGTCATGGGTCTGCCCTTGAGCGTGTTTGGGTAGGCATGTGCAATTTGTCTAGCA
TGCTGAGTCATGTCTTTCCTATTTGCACACGTCCATGTTTATCCATGTACTTTCCCTGTGTACCCTCCATGTACC
TTGTGTACTTTCTTCCCTTAAATCATGGTATTCTTCTGACAGAGCCATATGTACCCTACCCTGCACATTGTTATG
CACTTTTCCCCAATTCATGTTTGGTGGGGCCATCCACACCCTCTCCTTGTCACAGAATCTCCATTTCTGCTCAGA
TTCCCCCCATCTCCATTGCATTCATGTACTACCCTCAGTCTACACTCACAATCATCTTCTCCCAAGACTGCTCCC
TTTTGTTTTGTGTTTTTTTGAGGGGAATTAAGGAAAAATAAGTGGGGGCAGGTTTGGAGAGCTGCTTCCAGTGGA
TAGTTGATGAGAATCCTGACCAAAGGAAGGCACCCTTGACTGTTGGGATAGACAGATGGACCTATGGGGTGGGAG
GTGGTGTCCCTTTCACACTGTGGTGTCTCTTGGGGAAGGATCTCCCCGAATCTCAATAAACCAGTGAACAGTGTG
ACTCGGCAAAAAAAAAAAA

FIGURE 6092

MLLLLLLAPLFLRPPGAGGAQTPNATSEGCQIIHPPWEGGIRYRGLTRDQVKAINFLPVDYEIEYVCRGEREVVG
PKVRKCLANGSWTDMDTPSRCVRICSKSYLTLENGKVFLTGGDLPALDGARVDFRCDPDFHLVGSSRSICSQGQW
STPKPHCQVNRTPHSERRAVYIGALFPMSGGWPGGQACQPAVEMALEDVNSRRDILPDYELKLIHHDSKCDPGQA
TKYLYELLYNDPIKIILMPGCSSVSTLVAEAARMWNLIVLSYGSSSPALSNRQRFPTFFRTHPSATLHNPTRVKL
FEKWGWKKIATIQQTTEVFTSTLDDLEERVKEAGIEITFRQSFFSDPAVPVKNLKRQDARIIVGLFYETEARKVF
CEVYKERLFGKKYVWFLIGWYADNWFKIYDPSINCTVDEMTEAVEGHITTEIVMLNPANTRSISNMTSQEFVEKL
TKRLKRHPEETGGFQEAPLAYDAIWALALALNKTSGGGSRSGVRLEDFNYNNQTITDQIYRAMNSSSFEGVSGHV
VFDASGSRMAWTLIEQLQGGSYKKIGYYDSTKDDLSWSKTDKWIVISRTHSPT

FIGURE 6093A

AAAGAGCTGGAGGCGCGCAGGCCGGCTCCGCTCCGGCCCCGGACGATGCGGCGCGCCCAGGATGCTGCCGTGCCT
CGTAGTGCTGCTGGCGGCGCTCCTCAGCCTCCGTCTTGGCTCAGACGCTCATGGGACAGAGCTGCCCAGCCCTCC
GTCTGTGTGGTTTGAAGCAGAATTTTTCCACCACATCCTCCACTGGACACCCATCCCAAATCAGTCTGAAAGTAC
CTGCTATGAAGTGGCGCTCCTGAGGTATGGAATAGAGTCCTGGAACTCCATCTCCAACTGTAGCCAGACCCTGTC
CTATGACCTTACCGCAGTGACCTTGGACCTGTACCACAGCAATGGCTACCGGGCCAGAGTGCGGGCTGTGGACGG
CAGCCGGCACTCCAACTGGACCGTCACCAACACCCGCTTCTCTGTGGATGAAGTGACTCTGACAGTTGGCAGTGT
GAACCTAGAGATCCACAATGGCTTCATCCTCGGGAAGATTCAGCTACCCAGGCCCAAGATGGCCCCCGCGAATGA
CACATATGAAAGCATCTTCAGTCACTTCCGAGAGTATGAGATTGCCATTCGCAAGGTGCCGGGAAACTTCACGTT
CACACACAAGAAAGTAAAACATGAAAACTTCAGCCTCCTAACCTCTGGAGAAGTGGGAGAGTTCTGTGTCCAGGT
GAAACCATCTGTCGCTTCCCGAAGTAACAAGGGGATGTGGTCTAAAGAGGAGTGCATCTCCCTCACCAGGCAGTA
TTTCACCGTGACCAACGTCATCATCTTCTTTGCCTTTGTCCTGCTGCTCTCCGGAGCCCTCGCCTACTGCCTGGC
CCTCCAGCTGTATGTGCGGCGCCGAAAGAAGCTACCCAGTGTCCTGCTCTTCAAGAAGCCCAGCCCCTTCATCTT
CATCAGCCAGCGTCCCTCCCCAGAGACCCAAGACACCATCCACCCGCTTGATGAGGAGGCCTTTTTGAAGGTGTC
CCCAGAGCTGAAGAACTTGGACCTGCACGGCAGCACAGACAGTGGCTTTGGCAGCACCAAGCCATCCCTGCAGAC
TGAAGAGCCCCAGTTCCTCCTCCCTGACCCTCACCCCCAGGCTGACAGAACGCTGGGAAACGGGGAGCCCCCTGT
GCTGGGGGACAGCTGCAGTAGTGGCAGCAGCAATAGCACAGACAGCGGGATCTGCCTGCAGGAGCCCAGCCTGAG
CCCCAGCACAGGGCCCACCTGGGAGCAACAGGTGGGGAGCAACAGCAGGGGCCAGGATGACAGTGGCATTGACTT
AGTTCAAAACTCTGAGGGCCGGGCTGGGGACACACAGGGTGGCTCGGCCTTGGGCCACCACAGTCCCCCGGAGCC
TGAGGTGCCTGGGGAAGAAGACCCAGCTGCTGTGGCATTCCAGGGTTACCTGAGGCAGACCAGATGTGCTGAAGA
GAAGGCAACCAAGACAGGCTGCCTGGAGGAAGAATCGCCCTTGACAGATGGCCTTGGCCCCAAATTCGGGAGATG
CCTGGTTGATGAGGCAGGCTTGCATCCACCAGCCCTGGCCAAGGGCTATTTGAAACAGGATCCTCTAGAAATGAC
TCTGGCTTCCTCAGGGGCCCCAACGGGACAGTGGAACCAGCCCACTGAGGAATGGTCACTCCTGGCCTTGAGCAG
CTGCAGTGACCTGGGAATATCTGACTGGAGCTTTGCCCATGACCTTGCCCCTCTAGGCTGTGTGGCAGCCCCAGG
TGGTCTCCTGGGCAGCTTTAACTCAGACCTGGTCACCCTGCCCCTCATCTCTAGCCTGCAGTCAAGTGAGTGACT
CGGGCTGAGAGGCTGCTTTTGATTTTAGCCATGCCTGCTCCTCTGCCTGGACCAGGAGGAGGGCCCTGGGGCAGA
AGTTAGGCACGAGGCAGTCTGGGCACTTTTCTGCAAGTCCACTGGGGCTGGCCCAGCCAGGCTGCAGGGCTGGTC
AGGGTGTCTGGGGCAGGAGGAGGCCAACTCACTGAACTAGTGCAGGGTATGTGGGTGGCACTGACCTGTTCTGTT
GACTGGGGCCCTGCAGACTCTGGCAGAGCTGAGAAGGGCAGGGACCTTCTCCCTCCTAGGAACTCTTTCCTGTAT
CATAAAGGATTATTTGCTCAGGGGAACCATGGGGCTTTCTGGAGTTGTGGTGAGGCCACCAGGCTGAAGTCAGCT
CAGACCCAGACCTCCCTGCTTAGGCCACTCGAGCATCAGAGCTTCCAGCAGGAGGAAGGGCTGTAGGAATGGAAG
CTTCAGGGCCTTGCTGCTGGGGTCATTTTTAGGGGAAAAAGGAGGATATGATGGTCACATGGGGAACCTCCCCTC
ATCGGGCCTCTGGGGCAGGAAGCTTGTCACTGGAAGATCTTAAGGTATATATTTTCTGGACACTCAAACACATCA
TAATGGATTCACTGAGGGGAGACAAAGGGAGCCGAGACCCTGGATGGGGCTTCCAGCTCAGAACCCATCCCTCTG
GTGGGTACCTCTGGCACCCATCTGCAAATATCTCCCTCTCTCCAACAAATGGAGTAGCATCCCCCTGGGGCACTT
GCTGAGGCCAAGCCACTCACATCCTCACTTTGCTGCCCCACCATCTTGCTGACAACTTCCAGAGAAGCCATGGTT
TTTTGTATTGGTCATAACTCAGCCCTTTGGGCGGCCTCTGGGCTTGGGCACCAGCTCATGCCAGCCCCAGAGGGT
CAGGGTTGGAGGCCTGTGCTTGTGTTTGCTGCTAATGTCCAGCTACAGACCCAGAGGATAAGCCACTGGGCACTG
GGCTGGGGTCCCTGCCTTGTTGGTGTTCAGCTGTGTGATTTTGGACTAGCCACTTGTCAGAGGGCCTCAATCTCC
CATCTGTGAAATAAGGACTCCACCTTTAGGGGACCCTCCATGTTTGCTGGGTATTAGCCAAGCTGGTCCTGGGAG
AATGCAGATACTGTCCGTGGACTACCAAGCTGGCTTGTTTCTTATGCCAGAGGCTAACAGATCCAATGGGAGTCC
ATGGTGTCATGCCAAGACAGTATCAGACACAGCCCCAGAAGGGGGCATTATGGGCCCTGCCTCCCCATAGGCCAT
TTGGACTCTGCCTTCAAACAAAGGCAGTTCAGTCCACAGGCATGGAAGCTGTGAGGGGACAGGCCTGTGCGTGCC
ATCCAGAGTCATCTCAGCCCTGCCTTTCTCTGGAGCATTCTGAAAACAGATATTCTGGCCCAGGGAATCCAGCCA
TGACCCCCACCCCTCTGCCAAAGTACTCTTAGGTGCCAGTCTGGTAACTGAACTCCCTCTGGAGGCAGGCTTGAG
GGAGGATTCCTCAGGGTTCCCTTGAAAGCTTTATTTATTTATTTTGTTCATTTATTTATTGGAGAGGCAGCATTG
CACAGTGAAAGAATTCTGGATATCTCAGGAGCCCCGAAATTCTAGCTCTGACTTTGCTGTTTCCAGTGGTATGAC
CTTGGAGAAGTCACTTATCCTCTTGGAGCCTCAGTTTCCTCATCTGCAGAATAATGACTGACTTGTCTAATTCAT
AGGGATGTGAGGTTCTGCTGAGGAAATGGGTATGAATGTGCCTTGAACACAAAGCTCTGTCAATAAGTGATACAT

FIGURE 6093B

GTTTTTTATTCCAATAAATTGTCAAGACCACA

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FIGURE 6094

MLPCLVVLLAALLSLRLGSDAHGTELPSPPSVWFEAEFFHHILHWTPIPNQSESTCYEVALLRYGIESWNSISNC
SQTLSYDLTAVTLDLYHSNGYRARVRAVDGSRHSNWTVTNTRFSVDEVTLTVGSVNLEIHNGFILGKIQLPRPKM
APANDTYESIFSHFREYEIAIRKVPGNFTFTHKKVKHENFSLLTSGEVGEFCVQVKPSVASRSNKGMWSKEECIS
LTRQYFTVTNVIIFFAFVLLLSGALAYCLALQLYVRRRKKLPSVLLFKKPSPFIFISQRPSPETQDTIHPLDEEA
FLKVSPELKNLDLHGSTDSGFGSTKPSLQTEEPQFLLPDPHPQADRTLGNGEPPVLGDSCSSGSSNSTDSGICLQ
EPSLSPSTGPTWEQQVGSNSRGQDDSGIDLVQNSEGRAGDTQGGSALGHHSPPEPEVPGEEDPAAVAFQGYLRQT
RCAEEKATKTGCLEEESPLTDGLGPKFGRCLVDEAGLHPPALAKGYLKQDPLEMTLASSGAPTGQWNQPTEEWSL
LALSSCSDLGISDWSFAHDLAPLGCVAAPGGLLGSFNSDLVTLPLISSLQSSE

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FIGURE 6095A

TGCAGAGAACAGAGAAAGGACATCTGCGAGGAAAGTTCCCTGATGGCTGTCAACAAAGTGCCACGTCTCTATGGC
TGTGTACGCTGAGCACACGATTTTATCGCGCCTATCATATCTTGGTGCATAAACGCACCTCACCTCGGTCAACCC
TTGCTCCGTCTTATGAGACAGGCTTTATTATCCGCATTTTATATGAGGGGAATCTGACGGTGGAGAGAGAATTAT
CTTGCTCAAGGCGACACAGCAGAGCCCACAGGTGGCAGAATCCCACCCGAGCCCGCTTCGACCCGCGGGGTGGAA
ACCACGGGCGCCCGCCCGGCTGCGCTTCCAGAGCTGAACTGAGAAGCGAGTCCTCTCCGCCCTGCGGCCACCGCC
CAGCCCCGACCCCCGCCCCGGCCCGATCCTCACTCGCCGCCAGCTCCCCGCGCCCACCCCGGAGTTGGTGGCGCA
GAGGCGGGAGGCGGAGGCGGGAGGGCGGGCGCTGGCACCGGGAACGCCCGAGCGCCGGCAGAGAGCGCGGAGAGC
GCGACACGTGCGGCCCAGAGCACCGGGGCCACCCGGTCCCCGCAGGCCCGGGACCGCGCCCGCTGGCAGGCGACA
CGTGGAAGAATACGGAGTTCTATACCAGAGTTGATTGTTG**ATG**GCACATACTTTTAGAGGATGCTCATTGGCATT
TATGTTTATAATCACGTGGCTGTTGATTAAAGCAAAAATAGATGCGTGCAAGAGAGGCGATGTGACTGTGAAGCC
TTCCCATGTAATTTTACTTGGATCCACTGTCAATATTACATGCTCTTTGAAGCCCAGACAAGGCTGCTTTCACTA
TTCCAGACGTAACAAGTTAATCCTGTACAAGTTTGACAGAAGAATCAATTTTCACCATGGCCACTCCCTCAATTC
TCAAGTCACAGGTCTTCCCCTTGGTACAACCTTGTTTGTCTGCAAACTGGCCTGTATCAATAGTGATGAAATTCA
AATATGTGGAGCAGAGATCTTCGTTGGTGTTGCTCCAGAACAGCCTCAAAATTTATCCTGCATACAGAAGGGAGA
ACAGGGGACTGTGGCCTGCACCTGGGAAAGAGGACGAGACACCCACTTATACACTGAGTATACTCTACAGCTAAG
TGGACCAAAAAATTTAACCTGGCAGAAGCAATGTAAAGACATTTATTGTGACTATTTGGACTTTGGAATCAACCT
CACCCCTGAATCACCTGAATCCAATTTCACAGCCAAGGTTACTGCTGTCAATAGTCTTGGAAGCTCCTCTTCACT
TCCATCCACATTCACATTCTTGGACATAGTGAGGCCTCTTCCTCCGTGGGACATTAGAATCAAATTTCAAAAGGC
TTCCGTGAGCAGATGTACCCTTTATTGGAGAGATGAGGGACTGGTACTGCTTAATCGACTCAGATATCGGCCCAG
TAACAGCAGGCTCTGGAATATGGTTAATGTTACAAAGGCCAAAGGAAGACATGATTTGCTGGATCTGAAACCATT
TACAGAATATGAATTTCAGATTTCCTCTAAGCTACATCTTTATAAGGGAAGTTGGAGTGATTGGAGTGAATCATT
GAGAGCACAAACACCAGAAGAAGAGCCTACTGGGATGTTAGATGTCTGGTACATGAAACGGCACATTGACTACAG
TAGACAACAGATTTCTCTTTTCTGGAAGAATCTGAGTGTCTCAGAGGCAAGAGGAAAAATTCTCCACTATCAGGT
GACCTTGCAGGAGCTGACAGGAGGGAAAGCCATGACACAGAACATCACAGGACACACCTCCTGGACCACAGTCAT
TCCTAGAACCGGAAATTGGGCTGTGGCTGTGTCTGCAGCAAATTCAAAAGGCAGTTCTCTGCCCACTCGTATTAA
CATAATGAACCTGTGTGAGGCAGGGTTGCTGGCTCCTCGCCAGGTCTCTGCAAACTCAGAGGGCATGGACAACAT
TCTGGTGACTTGGCAGCCTCCCAGGAAAGATCCCTCTGCTGTTCAGGAGTACGTGGTGGAATGGAGAGAGCTCCA
TCCAGGGGGTGACACACAGGTCCCTCTAAACTGGCTACGGAGTCGACCCTACAATGTGTCTGCTCTGATTTCAGA
GAACATAAAATCCTACATCTGTTATGAAATCCGTGTGTATGCACTCTCAGGGGATCAAGGAGGATGCAGCTCCAT
CCTGGGTAACTCTAAGCACAAAGCACCACTGAGTGGCCCCCACATTAATGCCATCACAGAGGAAAAGGGGAGCAT
TTTAATTTCATGGAACAGCATTCCAGTCCAGGAGCAAATGGGCTGCCTCCTCCATTATAGGATATACTGGAAGGA
ACGGGACTCCAACTCCCAGCCTCAGCTCTGTGAAATTCCCTACAGAGTCTCCCAAAATTCACATCCAATAAACAG
CCTGCAGCCCCGAGTGACATATGTCCTGTGGATGACAGCTCTGACAGCTGCTGGTGAAAGTTCCCACGGAAATGA
GAGGGAATTTTGTCTGCAAGGTAAAGCCAATTGGATGGCGTTTGTGGCACCAAGCATTTGCATTGCTATCATCAT
GGTGGGCATTTTCTCAACGCATTACTTCCAGCAAAAGGTGTTTGTTCTCCTAGCAGCCCTCAGACCTCAGTGGTG
TAGCAGAGAAATTCCAGATCCAGCAAATAGCACTTGCGCTAAGAAATATCCCATTGCAGAGGAGAAGACACAGCT
GCCCTTGGACAGGCTCCTGATAGACTGGCCCACGCCTGAAGATCCTGAACCGCTGGTCATCAGTGAAGTCCTTCA
TCAAGTGACCCCAGTTTTCAGACATCCCCCCTGCTCCAACTGGCCACAAAGGGAAAAAGGAATCCAAGGTCATCA
GGCCTCTGAGAAAGACATGATGCACAGTGCCTCAAGCCCACCACCTCCAAGAGCTCTCCAAGCTGAGAGCAGACA
ACTGGTGGATCTGTACAAGGTGCTGGAGAGCAGGGGCTCCGACCCAAAGCCAGAAAACCCAGCCTGTCCCTGGAC
GGTGCTCCCAGCAGGTGACCTTCCCACCCATGATGGCTACTTACCCTCCAACATAGATGACCTCCCCTCACATGA
GGCACCTCTCGCTGACTCTCTGGAAGAACTGGAGCCTCAGCACATCTCCCTTTCTGTTTTCCCCTCAAGTTCTCT
TCACCCACTCACCTTCTCCTGTGGTGATAAGCTGACTCTGGATCAGTTAAAGATGAGGTGTGACTCCCTCATGCT
C**TGA**GTGGTGAGGCTTCAAGCCTTAAAGTCAGTGTGCCCTCAACCAGCACAGCCTGCCCCAATTCCCCCAGCCCC
TGCTCCAGCAGCTGTCATCTCTGGGTGCCACCATCGGTCTGGCTGCAGCTAGAGGACAGGCAAGCCAGCTCTGGG
GGAGTCTTAGGAACTGGGAGTTGGTCTTCACTCAGATGCCTCATCTTGCCTTTCCCAGGGCCTTAAAATTACATC
CTTCACTGTGTGGACCTAGAGACTCCAACTTGAATTCCTAGTAACTTTCTTGGTATGCTGGCCAGAAAGGGAAAT
GAGGAGGAGAGTAGAAACCACAGCTCTTAGTAGTAATGGCATACAGTCTAGAGGACCATTCATGCAATGACTATT

FIGURE 6095B

TCTAAAGCACCTGCTACACAGCAGGCTGTACACAGCAGATCAGTACTGTTCAACAGAACTTCCTGAGATGATGGA
AATGTTCTACCTCTGCACTCACTGTCCAGTACATTAGACACTAGGCACATTGGCTGTTAATCACTTGGAATGTGT
TTAGCTTGACTGAGGAATTAAATTTTGATTGTAAATTTAAATCGCCACACATGGCTAGTGGCTACTGTATTGGAG
TGCACAGCTCTAGATGGCTCCTAGATTATTGAGAGCCTCCAAAACAAATCAACCTAGTTCTATAGATGAAGACAT
AAAAGACACTGGTAAACACCAATGTAAAAGGGCCCCCAAGGTGGTCATGACTGGTCTCATTTGCAGAAGTCTAAG
AATGTACCTTTTTCTGGCCGGGCGTGGTAGCTCATGCCTGTAATCCCAGCACTTTGGGAGGCTGA

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FIGURE 6096

MAHTFRGCSLAFMFIITWLLIKAKIDACKRGDVTVKPSHVILLGSTVNITCSLKPRQGCFHYSRRNKLILYKFDR
RINFHHGHSLNSQVTGLPLGTTLFVCKLACINSDEIQICGAEIFVGVAPEQPQNLSCIQKGEQGTVACTWERGRD
THLYTEYTLQLSGPKNLTWQKQCKDIYCDYLDFGINLTPESPESNFTAKVTAVNSLGSSSSLPSTFTFLDIVRPL
PPWDIRIKFQKASVSRCTLYWRDEGLVLLNRLRYRPSNSRLWNMVNVTKAKGRHDLLDLKPFTEYEFQISSKLHL
YKGSWSDWSESLRAQTPEEEPTGMLDVWYMKRHIDYSRQQISLFWKNLSVSEARGKILHYQVTLQELTGGKAMTQ
NITGHTSWTTVIPRTGNWAVAVSAANSKGSSLPTRINIMNLCEAGLLAPRQVSANSEGMDNILVTWQPPRKDPSA
VQEYVVEWRELHPGGDTQVPLNWLRSRPYNVSALISENIKSYICYEIRVYALSGDQGGCSSILGNSKHKAPLSGP
HINAITEEKGSILISWNSIPVQEQMGCLLHYRIYWKERDSNSQPQLCEIPYRVSQNSHPINSLQPRVTYVLWMTA
LTAAGESSHGNEREFCLQGKANWMAFVAPSICIAIIMVGIFSTHYFQQKVFVLLAALRPQWCSREIPDPANSTCA
KKYPIAEEKTQLPLDRLLIDWPTPEDPEPLVISEVLHQVTPVFRHPPCSNWPQREKGIQGHQASEKDMMHSASSP
PPPRALQAESRQLVDLYKVLESRGSDPKPENPACPWTVLPAGDLPTHDGYLPSNIDDLPSHEAPLADSLEELEPQ
HISLSVFPSSSLHPLTFSCGDKLTLDQLKMRCDSLML

FIGURE 6097

AGTGGAAAGTTCTCCGGCAGCCCTGAGATCTCAAGAGTGACATTTGTGAGACCAGCTAATTTGATTAAAATTCTC
TTGGAATCAGCTTTGCTAGTATCATACCTGTGCCAGATTTCATCATGGGAAACAGCTGTTACAACATAGTAGCCA
CTCTGTTGCTGGTCCTCAACTTTGAGAGGACAAGATCATTGCAGGATCCTTGTAGTAACTGCCCAGCTGGTACAT
TCTGTGATAATAACAGGAATCAGATTTGCAGTCCCTGTCCTCCAAATAGTTTCTCCAGCGCAGGTGGACAAAGGA
CCTGTGACATATGCAGGCAGTGTAAAGGTGTTTTCAGGACCAGGAAGGAGTGTTCCTCCACCAGCAATGCAGAGT
GTGACTGCACTCCAGGGTTTCACTGCCTGGGGGCAGGATGCAGCATGTGTGAACAGGATTGTAAACAAGGTCAAG
AACTGACAAAAAAAGGTTGTAAAGACTGTTGCTTTGGGACATTTAACGATCAGAAACGTGGCATCTGTCGACCCT
GGACAAACTGTTCTTTGGATGGAAAGTCTGTGCTTGTGAATGGGACGAAGGAGAGGGACGTGGTCTGTGGACCAT
CTCCAGCCGACCTCTCTCCGGGAGCATCCTCTGTGACCCCGCCTGCCCCTGCGAGAGAGCCAGGACACTCTCCGC
AGATCATCTCCTTCTTTCTTGCGCTGACGTCGACTGCGTTGCTCTTCCTGCTGTTCTTCCTCACGCTCCGTTTCT
CTGTTGTTAAACGGGGCAGAAAGAAACTCCTGTATATATTCAAACAACCATTTATGAGACCAGTACAAACTACTC
AAGAGGAAGATGGCTGTAGCTGCCGATTTCCAGAAGAAGAAGAAGGAGGATGTGAACTGTGAAATGGAAGTCAAT
AGGGCTGTTGGGACTTTCTTGAAAAGAAGCAAGGAAATATGAGTCATCCGCTATCACAGCTTTCAAAAGCAAGAA
CACCATCCTACATAATACCCAGGATTCCCCCAACACACGTTCTTTTCTAAATGCCAATGAGTTGGCCTTTAAAAA
TGCACCACTTTTTTTTTTTTTTTTGACAGGGTCTCACTCTGTCACCCAGGCTGGAGTGCAGTGGCACCACCATGG
CTCTCTGCAGCCTTGACCTCTGGGAGCTCAAGTGATCCTCCTGCCTCAGTCTCCTAGTAGCTGGAACTACAAGGA
AGGGCCACCACACCTGACTAACTTTTTTGTTTTTTGTTTGGTAAAGATGGCATTTCGCCATGTTGTACAGGCTGG
TCTCAAACTCCTAGGTTCACTTTGGCCTCCCAAAGTGCTGGGATTACAGACATGAACTGCCAGGCCCGGCCAAAA
TAATGCACCACTTTTAACAGAACAGACAGATGAGGACAGAGCTGGTGATAAAAAAAAAAAAAAAA

FIGURE 6098

MGNSCYNIVATLLLVLNFERTRSLQDPCSNCPAGTFCDNNRNQICSPCPPNSFSSAGGQRTCDICRQCKGVFRTR
KECSSTSNAECDCTPGFHCLGAGCSMCEQDCKQGQELTKKGCKDCCFGTFNDQKRGICRPWTNCSLDGKSVLVNG
TKERDVVCGPSPADLSPGASSVTPPAPAREPGHSPQIISFFLALTSTALLFLLFFLTLRFSVVKRGRKKLLYIFK
QPFMRPVQTTQEEDGCSCRFPEEEEGGCEL

FIGURE 6099

GAGACATTCCTCAATTGCTTAGACATATTCTGAGCCTACAGCAGAGGAACCTCCAGTCTCAGCACCATGAATCAA
ACTGCGATTCTGATTTGCTGCCTTATCTTTCTGACTCTAAGTGGCATTCAAGGAGTACCTCTCTCTAGAACCGTA
CGCTGTACCTGCATCAGCATTAGTAATCAACCTGTTAATCCAAGGTCTTTAGAAAAACTTGAAATTATTCCTGCA
AGCCAATTTTGTCCACGTGTTGAGATCATTGCTACAATGAAAAAGAAGGGTGAGAAGAGATGTCTGAATCCAGAA
TCGAAGGCCATCAAGAATTTACTGAAAGCAGTTAGCAAGGAAATGTCTAAAAGATCTCCTTAAAACCAGAGGGGA
GCAAAATCGATGCAGTGCTTCCAAGGATGGACCACACAGAGGCTGCCTCTCCCATCACTTCCCTACATGGAGTAT
ATGTCAAGCCATAATTGTTCTTAGTTTGCAGTTACACTAAAAGGTGACCAATGATGGTCACCAAATCAGCTGCTA
CTACTCCTGTAGGAAGGTTAATGTTCATCATCCTAAGCTATTCAGTAATAACTCTACCCTGGCACTATAATGTAA
GCTCTACTGAGGTGCTATGTTCTTAGTGGATGTTCTGACCCTGCTTCAAATATTTCCCTCACCTTTCCCATCTTC
CAAGGGTACTAAGGAATCTTTCTGCTTTGGGGTTTATCAGAATTCTCAGAATCTCAAATAACTAAAAGGTATGCA
ATCAAATCTGCTTTTTAAAGAATGCTCTTTACTTCATGGACTTCCACTGCCATCCTCCCAAGGGGCCCAAATTCT
TTCAGTGGCTACCTACATACAATTCCAAACACATACAGGAAGGTAGAAATATCTGAAAATGTATGTGTAAGTATT
CTTATTTAATGAAAGACTGTACAAAGTATAAGTCTTAGATGTATATATTTCCTATATTGTTTTCAGTGTACATGG
AATAACATGTAATTAAGTACTATGTATCAATGAGTAACAGGAAAATTTTAAAAATACAGATAGATATATGCTCTG
CATGTTACATAAGATAAATGTGCTGAATGGTTTTCAAATAAAAATGAGGTACTCTCCTGGAAATATTAAGAAAGA
CTATCTAAATGTTGAAAGATCAAAAGGTTAATAAAGTAATTATAACT

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FIGURE 6100

MNQTAILICCLIFLTLSGIQGVPLSRTVRCTCISISNQPVNPRSLEKLEIIPASQFCPRVEIIATMKKKGEKRCL
NPESKAIKNLLKAVSKEMSKRSP

FIGURE 6101

CGCGGACCCGGCCGGCCCAGGCCCGCGCCCGCCGCGGCCCTGAGAGGCCCCGGCAGGTCCCGGCCCGGCGGCGGC
AGCCATGGCCGGGGGGGCCGGGCCCGGGGGAGCCCGCAGCCCCCGGCGCCCAGCACTTCTTGTACGAGGTGCCGCC
CTGGGTCATGTGCCGCTTCTACAAAGTGATGGACGCCCTGGAGCCCGCCGACTGGTGCCAGTTCGCCGCCCTGAT
CGTGCGCGACCAGACCGAGCTGCGGCTGTGCGAGCGCTCCGGGCAGCGCACGGCCAGCGTCCTGTGGCCCTGGAT
CAACCGCAACGCCCGTGTGGCCGACCTCGTGCACATCCTCACGCACCTGCAGCTGCTCCGTGCGCGGGACATCAT
CACAGCCTGGCACCCTCCCGCCCCGCTTCCGTCCCCAGGCACCACTGCCCCGAGGCCCAGCAGCATCCCTGCACC
CGCCGAGGCCGAGGCCTGGAGCCCCCGGAAGTTGCCATCCTCAGCCTCCACCTTCCTCTCCCCAGCTTTTCCAGG
CTCCCAGACCCATTCAGGGCCTGAGCTCGGCCTGGTTCCAAGCCCTGCTTCCCTGTGGCCTCCACCGCCATCTCC
AGCCCCTTCTTCTACCAAGCCAGGCCCAGAGAGCTCAGTGTCCCTCCTGCAGGGAGCCCGCCCCTCTCCGTTTTG
CTGGCCCCTCTGTGAGATTTCCCGGGGCACCCACAACTTCTCGGAGGAGCTCAAGATCGGGGAGGGTGGCTTTGG
GTGCGTGTACCGGGCGGTGATGAGGAACACGGTGTATGCTGTGAAGAGGCTGAAGGAGAACGCTGACCTGGAGTG
GACTGCAGTGAAGCAGAGCTTCCTGACCGAGGTGGAGCAGCTGTCCAGGTTTCGTCACCCAAACATTGTGGACTT
TGCTGGCTACTGTGCTCAGAACGGCTTCTACTGCCTGGTGTACGGCTTCCTGCCCAACGGCTCCCTGGAGGACCG
TCTCCACTGCCAGACCCAGGCCTGCCCACCTCTCTCCTGGCCTCAGCGACTGGACATCCTTCTGGGTACAGCCCG
GGCAATTCAGTTTCTACATCAGGACAGCCCCAGCCTCATCCATGGAGACATCAAGAGTTCCAACGTCCTTCTGGA
TGAGAGGCTGACACCCAAGCTGGGAGACTTTGGCCTGGCCCGGTTCAGCCGCTTTGCCGGGTCCAGCCCCAGCCA
GAGCAGCATGGTGGCCCGGACACAGACAGTGCGGGGCACCCTGGCCTACCTGCCCGAGGAGTACATCAAGACGGG
AAGGCTGGCTGTGGACACGGACACCTTCAGCTTTGGGGTGGTAGTGCTAGAGACCTTGGCTGGTCAGAGGGCTGT
GAAGACGCACGGTGCCAGGACCAAGTATCTGAAAGACCTGGTGGAAGAGGAGGCTGAGGAGGCTGGAGTGGCTTT
GAGAAGCACCCAGAGCACACTGCAAGCAGGTCTGGCTGCAGATGCCTGGGCTGCTCCCATCGCCATGCAGATCTA
CAAGAAGCACCTGGACCCCAGGCCCGGGCCCTGCCCACCTGAGCTGGGCCTGGGCCTGGGCCAGCTGGCCTGCTG
CTGCCTGCACCGCCGGGCCAAAAGGAGGCCTCCTATGACCCAGGTGTACGAGAGGCTAGAGAAGCTGCAGGCAGT
GGTGGCGGGGGTGCCCGGGCATTTGGAGGCCGCCAGCTGCATCCCCCCTTCCCCGCAGGAGAACTCCTACGTGTC
CAGCACTGGCAGAGCCCACAGTGGGGCTGCTCCATGGCAGCCCCTGGCAGCGCCATCAGGAGCCAGTGCCCAGGC
AGCAGAGCAGCTGCAGAGAGGCCCCAACCAGCCCGTGGAGAGTGACGAGAGCCTAGGCGGCCTCTCTGCTGCCCT
GCGCTCCTGGCACTTGACTCCAAGCTGCCCTCTGGACCCAGCACCCCTCAGGGAGGCCGGCTGTCCTCAGGGGGA
CACGGCAGGAGAATCGAGCTGGGGGAGTGGCCCAGGATCCCGGCCCACAGCCGTGGAAGGACTGGCCCTTGGCAG
CTCTGCATCATCGTCGTCAGAGCCACCGCAGATTATCATCAACCCTGCCCGACAGAAGATGGTCCAGAAGCTGGC
CCTGTACGAGGATGGGGCCCTGGACAGCCTGCAGCTGCTGTCGTCCAGCTCCCTCCCAGGCTTGGGCCTGGAACA
GGACAGGCAGGGGCCCGAAGAAAGTGATGAATTTCAGAGCTGATGTGTTCACCTGGGCAGATCCCCCAAATCCGG
AAGTCAAAGTTCTCATGGTCAGAAGTTCTCATGGTGCACGAGTCCTCAGCACTCTGCCGGCAGTGGGGGTGGGGG
CCCATGCCCGCGGGGGAGAGAAGGAGGTGGCCCTGCTGTTCTAGGCTCTGTGGGCATAGGCAGGCAGAGTGGAAC
CCTGCCTCCATGCCAGCATCTGGGGGCAAGGAAGGCTGGCATCATCCAGTGAGGAGGCTGGCGCATGTTGGGAGG
CTGCTGGCTGCACAGACCCGTGAGGGGAGGAGAGGGGCTGCTGTGCAGGGGTGTGGAGTAGGGAGCTGGCTCCCC
TGAGAGCCATGCAGGGCGTCTGCAGCCCAGGCCTCTGGCAGCAGCTCTTTGCCCATCTCTTTGGACAGTGGCCAC
CCTGCACAATGGGGCCGACGAGGCCTAGGGCCCTCCTACCTGCTTACAATTTGGAAAAGTGTGGCCGGGTGCGGT
GGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCAAGGCAGGAGGATCGCTGGAGCCCAGTAGGTCAAGACCAG
CCAGGGCAACATGATGAGACCCTGTCTCTGCCAAAAAATTTTTTAAACTATTAGCCTGGCGTGGTAGCGCACGCC
TGTGGTCCCAGCTGCTGGGGAGGCTGAAGTAGGAGGATCATTTATGCTTGGGAGGTCGAGGCTGCAGTGAGTCAT
GATTGTATGACTGCACTCCAGCCTGGGTGACAGAGCAAGACCCTGTTTCAAAAAGAAAAACCCTGGGAAAAGTGA
AGTATGGCTGTAAGTCTCATGGTTCAGTCCTAGCAAGAAGCGAGAATTCTGAGATCCTCCAGAAAGTCGAGCAGC
ACCCACCTCCAACCTCGGGCCAGTGTCTTCAGGCTTTACTGGGGACCTGCGAGCTGGCCTAATGTGGTGGCCTGC
AAGCCAGGCCATCCCTGGGCGCCACAGACGAGCTCCGAGCCAGGTCAGGCTTCGGAGGCCACAAGCTCAGCCTCA
GGCCCAGGCACTGATTGTGGCAGAGGGGCCACTACCCAAGGTCTAGCTAGGCCCAAGACCTAGTTACCCAGACAG
TGAGAAGCCCCTGGAAGGCAGAAAAGTTGGGAGCATGGCAGACAGGGAAGGGAAACATTTTCAGGGAAAAGACAT
GTATCACATGTCTTCAGAAGCAAGTCAGGTTTCATGTAACCGAGTGTCCTCTTGCGTGTCCAAAAGTAGCCCAGG
GCTGTAGCACAGGCTTCACAGTGATTTTGTGTTCAGCCGTGAGTCACACTACATGCCCCCGTGAAGCTGGGCATT
GGTGACGTCCAGGTTGTCCTTGAGTAATAAAAACGTATGTTCCCTAAAAAAAAAAAAA

FIGURE 6102

MAGGPGPGEPAAPGAQHFLYEVPPWVMCRFYKVMDALEPADWCQFAALIVRDQTELRLCERSGQRTASVLWPWIN
RNARVADLVHILTHLQLLRARDIITAWHPPAPLPSPGTTAPRPSSIPAPAEAEAWSPRKLPSSASTFLSPAFPGS
QTHSGPELGLVPSPASLWPPPPSPAPSSTKPGPESSVSLLQGARPSPFCWPLCEISRGTHNFSEELKIGEGGFGC
VYRAVMRNTVYAVKRLKENADLEWTAVKQSFLTEVEQLSRFRHPNIVDFAGYCAQNGFYCLVYGFLPNGSLEDRL
HCQTQACPPLSWPQRLDILLGTARAIQFLHQDSPSLIHGDIKSSNVLLDERLTPKLGDFGLARFSRFAGSSPSQS
SMVARTQTVRGTLAYLPEEYIKTGRLAVDTDTFSFGVVVLETLAGQRAVKTHGARTKYLKDLVEEEAEEAGVALR
STQSTLQAGLAADAWAAPIAMQIYKKHLDPRPGPCPPELGLGLGQLACCCLHRRAKRRPPMTQVYERLEKLQAVV
AGVPGHLEAASCIPPSPQENSYVSSTGRAHSGAAPWQPLAAPSGASAQAAEQLQRGPNQPVESDESLGGLSAALR
SWHLTPSCPLDPAPLREAGCPQGDTAGESSWGSGPGSRPTAVEGLALGSSASSSSEPPQIIINPARQKMVQKLAL
YEDGALDSLQLLSSSSLPGLGLEQDRQGPEESDEFQS

FIGURE 6103

GGGGAGACGTTCGCACACCTGGGTGCCAGCGCCCCAGAGGTCCCGGGACAGCCCGAGGCGCCGCGCCCGCCGCCC
CGAGCTCCCCAAGCCTTCGAGAGCGGCGCACACTCCCGGTCTCCACTCGCTCTTCCAACACCCGCTCGTTTTGGC
GGCAGCTCGTGTCCCAGAGACCGAGTTGCCCCAGAGACCGAGACGCCGCCGCTGCGAAGGACCA**ATG**AGAGCCCC
GCTGCTACCGCCGGCGCCGGTGGTGCTGTCGCTCTTGATACTCGGCTCAGGCCATTATGCTGCTGGATTGGACCT
CAATGACACCTACTCTGGGAAGCGTGAACCATTTTCTGGGGACCACAGTGCTGATGGATTTGAGGTTACCTCAAG
AAGTGAGATGTCTTCAGGGAGTGAGATTTCCCCTGTGAGTGAAATGCCTTCTAGTAGTGAACCGTCCTCGGGAGC
CGACTATGACTACTCAGAAGAGTATGATAACGAACCACAAATACCTGGCTATATTGTCGATGATTCAGTCAGAGT
TGAACAGGTAGTTAAGCCCCCCCAAAACAAGACGGAAAGTGAAAATACTTCAGATAAACCCAAAAGAAAGAAAAA
GGGAGGCAAAAATGGAAAAAATAGAAGAAACAGAAAGAAGAAAAATCCATGTAATGCAGAATTTCAAAATTTCTG
CATTCACGGAGAATGCAAATATATAGAGCACCTGGAAGCAGTAACATGCAAATGTCAGCAAGAATATTTCGGTGA
ACGGTGTGGGGAAAAGTCCATGAAAACTCACAGCATGATTGACAGTAGTTTATCAAAAATTGCATTAGCAGCCAT
AGCTGCCTTTATGTCTGCTGTGATCCTCACAGCTGTTGCTGTTATTACAGTCCAGCTTAGAAGACAATACGTCAG
GAAATATGAAGGAGAAGCTGAGGAACGAAAGAAACTTCGACAAGAGAATGGAAATGTACATGCTATAGCA**TAA**CT
GAAGATAAAATTACAGGATATCACATTGGAGTCACTGCCAAGTCATAGCCATAAATGATGAGTCGGTCCTCTTTC
CAGTGGATCATAAGACAATGGACCCTTTTTGTTATGATGGTTTTAAACTTTCAATTGTCACTTTTTATGCTATTT
CTGTATATAAAGGTGCACGAAGGTAAAAAGTATTTTTTCAAGTTGTAAATAATTTATTTAATATTTAATGGAAGT
GTATTTATTTTACAGCTCATTAAACTTTTTTAACCAAACAGATCAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6104

MRAPLLPPAPVVLSLLILGSGHYAAGLDLNDTYSGKREPFSGDHSADGFEVTSRSEMSSGSEISPVSEMPSSSEP
SSGADYDYSEEYDNEPQIPGYIVDDSVRVEQVVKPPQNKTESENTSDKPKRKKKGGKNGKNRRNRKKKNPCNAEF
QNFCIHGECKYIEHLEAVTCKCQQEYFGERCGEKSMKTHSMIDSSLSKIALAAIAAFMSAVILTAVAVITVQLRR
QYVRKYEGEAEERKKLRQENGNVHAIA

FIGURE 6105

GATGCAAGAAGTTTCTAGGAAAGGCCGGACACCAGGTTTTGAGCAAAATTTTGGACTGTGAAGCAAGGCATTGGT
GAAGACAAAATGGCCTCGCCGGCTGACAGCTGTATCCAGTTCACCCGCCATGCCAGTGATGTTCTTCTCAACCTT
AATCGTCTCCGGAGTCGAGACATCTTGACTGATGTTGTCATTGTTGTGAGCCGTGAGCAGTTTAGAGCCCATAAA
ACGGTCCTCATGGCCTGCAGTGGCCTGTTCTATAGCATCTTTACAGACCAGTTGAAATGCAACCTTAGTGTGATC
AATCTAGATCCTGAGATCAACCCTGAGGGATTCTGCATCCTCCTGGACTTCATGTACACATCTCGGCTCAATTTG
CGGGAGGGCAACATCATGGCTGTGATGGCCACGGCTATGTACCTGCAGATGGAGCATGTTGTGGACACTTGCCGG
AAGTTTATTAAGGCCAGTGAAGCAGAGATGGTTTCTGCCATCAAGCCTCCTCGTGAAGAGTTCCTCAACAGCCGG
ATGCTGATGCCCCAAGACATCATGGCCTATCGGGGTCGTGAGGTGGTGGAGAACAACCTGCCACTGAGGAGCGCC
CCTGGGTGTGAGAGCAGAGCCTTTGCCCCCAGCCTGTACAGTGGCCTGTCCACACCGCCAGCCTCTTATTCCATG
TACAGCCACCTCCCTGTCAGCAGCCTCCTCTTCTCCGATGAGGAGTTTCGGGATGTCCGGATGCCTGTGGCCAAC
CCCTTCCCCAAGGAGCGGGCACTCCCATGTGATAGTGCCAGGCCAGTCCCTGGTGAGTACAGCCGGCCGACTTTG
GAGGTGTCCCCCAATGTGTGCCACAGCAATATCTATTCACCCAAGGAAACAATCCCAGAAGAGGCACGAAGTGAT
ATGCACTACAGTGTGGCTGAGGGCCTCAAACCTGCTGCCCCCTCAGCCCGAAATGCCCCCTACTTCCCTTGTGAC
AAGGCCAGCAAAGAAGAAGAGAGACCCTCCTCGGAAGATGAGATTGCCCTGCATTTCGAGCCCCCCAATGCACCC
CTGAACCGGAAGGGTCTGGTTAGTCCACAGAGCCCCCAGAAATCTGACTGCCAGCCCAACTCGCCCACAGAGTCC
TGCAGCAGTAAGAATGCCTGCATCCTCCAGGCTTCTGGCTCCCCTCCAGCCAAGAGCCCCACTGACCCCAAAGCC
TGCAACTGGAAGAAATACAAGTTCATCGTGCTCAACAGCCTCAATCAGAATGCCAAACCAGAGGGGCCTGAGCAG
GCTGAGCTGGGCCGCCTTTCCCCACGAGCCTACACGGCCCCACCTGCCTGCCAGCCACCCATGGAGCCTGAGAAC
CTTGACCTCCAGTCCCCAACCAAGCTGAGTGCCAGCGGGGAGGACTCCACCATCCCACAAGCCAGCCGGCTCAAT
AACATCGTTAACAGGTCCATGACGGGCTCTCCCCGCAGCAGCAGCGAGAGCCACTCACCACTCTACATGCACCCC
CCGAAGTGCACGTCCTGCGGCTCTCAGTCCCCACAGCATGCAGAGATGTGCCTCCACACCGCTGGCCCCACGTTC
CCTGAGGAGATGGGAGAGACCCAGTCTGAGTACTCAGATTCTAGCTGTGAGAACGGGGCCTTCTTCTGCAATGAG
TGTGACTGCCGCTTCTCTGAGGAGGCCTCACTCAAGAGGCACACGCTGCAGACCCACAGTGACAAACCCTACAAG
TGTGACCGCTGCCAGGCCTCCTTCCGCTACAAGGGCAACCTCGCCAGCCACAAGACCGTCCATACCGGTGAGAAA
CCCTATCGTTGCAACATCTGTGGGGCCCAGTTCAACCGGCCAGCCAACCTGAAAACCCACACTCGAATTCACTCT
GGAGAGAAGCCCTACAAATGCGAAACCTGCGGAGCCAGATTTGTACAGGTGGCCCACCTCCGTGCCCATGTGCTT
ATCCACACTGGTGAGAAGCCCTATCCCTGTGAAATCTGTGGCACCCGTTTCCGGCACCTTCAGACTCTGAAGAGC
CACCTGCGAATCCACACAGGAGAGAAACCTTACCATTGTGAGAAGTGTAACCTGCATTTCCGTCACAAAAGCCAG
CTGCGACTTCACTTGCGCCAGAAGCATGGCGCCATCACCAACACCAAGGTGCAATACCGCGTGTCAGCCACTGAC
CTGCCTCCGGAGCTCCCCAAAGCCTGCTGAAGCATGGAGTGTTGATGCTTTCGTCTCCAGCCCCTTCTCAGAATC
TACCCAAAGGATACTGTAACACTTTACAATGTTCATCCCATGATGTAGTGCCTCTTTCATCCACTAGTGCAAATC
ATAGCTGGGGGTTGTGGGTGGTGGGGGTCGGGGCCTGGGGGACTGGGAGCCGCAGCAGCTCCCCCTCCCCCACTG
CCATAAAACATTAAGAAAATCATATTGCTTCTTCTCCTATGTGTAAGGTGAACCATGTCAGCAAAAAGCAAAATC
ATTTTATATGTCAAAGCGGGGGAG

FIGURE 6106

MASPADSCIQFTRHASDVLLNLNRLRSRDILTDVVIVVSREQFRAHKTVLMACSGLFYSIFTDQLKCNLSVINLD
PEINPEGFCILLDFMYTSRLNLREGNIMAVMATAMYLQMEHVVDTCRKFIKASEAEMVSAIKPPREEFLNSRMLM
PQDIMAYRGREVVENNLPLRSAPGCESRAFAPSLYSGLSTPPASYSMYSHLPVSSLLFSDEEFRDVRMPVANPFP
KERALPCDSARPVPGEYSRPTLEVSPNVCHSNIYSPKETIPEEARSDMHYSVAEGLKPAAPSARNAPYFPCDKAS
KEEERPSSEDEIALHFEPPNAPLNRKGLVSPQSPQKSDCQPNSPTESCSSKNACILQASGSPPAKSPTDPKACNW
KKYKFIVLNSLNQNAKPEGPEQAELGRLSPRAYTAPPACQPPMEPENLDLQSPTKLSASGEDSTIPQASRLNNIV
NRSMTGSPRSSSESHSPLYMHPPKCTSCGSQSPQHAEMCLHTAGPTFPEEMGETQSEYSDSSCENGAFFCNECDC
RFSEEASLKRHTLQTHSDKPYKCDRCQASFRYKGNLASHKTVHTGEKPYRCNICGAQFNRPANLKTHTRIHSGEK
PYKCETCGARFVQVAHLRAHVLIHTGEKPYPCEICGTRFRHLQTLKSHLRIHTGEKPYHCEKCNLHFRHKSQLRL
HLRQKHGAITNTKVQYRVSATDLPPELPKAC

FIGURE 6107

GGAAAACAGCAGAGGTGACAGAGCAGCCGTGCTCGAAGCGTTCCTGGAGCCCAAGCTCTCCTCCACAGGTGAAGA
CAGGGCCAGCAGGAGACACC**ATG**GGGCACCTCTCAGCCCCACTTCACAGAGTGCGTGTACCCTGGCAGGGGCTTC
TGCTCACAGCCTCACTTCTAACCTTCTGGAACCCGCCCACCACTGCCCAGCTCACTACTGAATCCATGCCATTCA
ATGTTGCAGAGGGGAAGGAGGTTCTTCTCCTTGTCCACAATCTGCCCCAGCAACTTTTTGGCTACAGCTGGTACA
AAGGGGAAAGAGTGGATGGCAACCGTCAAATTGTAGGATATGCAATAGGAACTCAACAAGCTACCCCAGGGCCCG
CAAACAGCGGTCGAGAGACAATATACCCCAATGCATCCCTGCTGATCCAGAACGTCACCCAGAATGACACAGGAT
TCTACACCCTACAAGTCATAAAGTCAGATCTTGTGAATGAAGAAGCAACTGGACAGTTCCATGTATACCCGGAGC
TGCCCAAGCCCTCCATCTCCAGCAACAACTCCAACCCTGTGGAGGACAAGGATGCTGTGGCCTTCACCTGTGAAC
CTGAGACTCAGGACACAACCTACCTGTGGTGGATAAACAATCAGAGCCTCCCGGTCAGTCCCAGGCTGCAGCTGT
CCAATGGCAACAGGACCCTCACTCTACTCAGTGTCACAAGGAATGACACAGGACCCTATGAGTGTGAAATACAGA
ACCCAGTGAGTGCGAACCGCAGTGACCCAGTCACCTTGAATGTCACCTATGGCCCGGACACCCCCACCATTTCCC
CTTCAGACACCTATTACCGTCCAGGGGCAAACCTCAGCCTCTCCTGCTATGCAGCCTCTAACCCACCTGCACAGT
ACTCCTGGCTTATCAATGGAACATTCCAGCAAAGCACACAAGAGCTCTTTATCCCTAACATCACTGTGAATAATA
GTGGATCCTATACCTGCCACGCCAATAACTCAGTCACTGGCTGCAACAGGACCACAGTCAAGACGATCATAGTCA
CTGAGCTAAGTCCAGTAGTAGCAAAGCCCCAAATCAAAGCCAGCAAGACCACAGTCACAGGAGATAAGGACTCTG
TGAACCTGACCTGCTCCACAAATGACACTGGAATCTCCATCCGTTGGTTCTTCAAAAACCAGAGTCTCCCGTCCT
CGGAGAGGATGAAGCTGTCCCAGGGCAACACCACCCTCAGCATAAACCCTGTCAAGAGGGAGGATGCTGGGACGT
ATTGGTGTGAGGTCTTCAACCCAATCAGTAAGAACCAAAGCGACCCCATCATGCTGAACGTAAACTGTAAG**TGA**C
TCCTCACCCCTTCCTATATGTCCCTCTAGGATTACTCTGTCAATGGTGTGCAAAATGGATAAAACTCACAGGAGG
CAGAATATCAATGAAGAGACCATTATAGCAAACAGAATTGCAAAGTGGTTAAGAGCTCAGCTCAGGCCGGGCACA
GTGGCTCACGCCTGTGATCCCAGCAGTTTGGGAGGCCAAGGCGGGCGGATCACGAGGGCAGGAGATCGAGGCCAT
CCTGGCTAATATGGTGAAACCCCGTGTCTACTAGAAATACAAAAAAAAAATTAGCCGGGCATGGTGGCGGGCGCCT
GTGGTCCCAGCTACTCGGGAGGCTGAGGCGGGAGAATGGCGTGAACCTGGGAGGCGGAGCTTTCAGTGAGCCGAG
ATGGTGCCACTGCACTCCAGTCTGGGCAACAGGGCAAGACTCTGTCTC

FIGURE 6108

MGHLSAPLHRVRVPWQGLLLTASLLTFWNPPTTAQLTTESMPFNVAEGKEVLLLVHNLPQQLFGYSWYKGERVDG
NRQIVGYAIGTQQATPGPANSGRETIYPNASLLIQNVTQNDTGFYTLQVIKSDLVNEEATGQFHVYPELPKPSIS
SNNSNPVEDKDAVAFTCEPETQDTTYLWWINNQSLPVSPRLQLSNGNRTLTLLSVTRNDTGPYECEIQNPVSANR
SDPVTLNVTYGPDTPTISPSDTYYRPGANLSLSCYAASNPPAQYSWLINGTFQQSTQELFIPNITVNNSGSYTCH
ANNSVTGCNRTTVKTIIVTELSPVVAKPQIKASKTTVTGDKDSVNLTCSTNDTGISIRWFFKNQSLPSSERMKLS
QGNTTLSINPVKREDAGTYWCEVFNPISKNQSDPIMLNVNCK

FIGURE 6109

AGGGGGAGCCCAGGAGACCAGAACATGAACTCCTTCAATTATACCACCCCTGATTATGGGCACTATGATGACAAG
GATACCCTGGACCTCAACACCCCTGTGGATAAAACTTCTAACACGCTGCGTGTTCCAGACATCCTGGCCTTGGTC
ATCTTTGCAGTCGTCTTCCTGGTGGGAGTGCTGGGCAATGCCCTGGTGGTCTGGGTGACGGCATTCGAGGCCAAG
CGGACCATCAATGCCATCTGGTTCCTCAACTTGGCGGTAGCCGACTTCCTCTCCTGCCTGGCGCTGCCCATCTTG
TTCACGTCCATTGTACAGCATCACCACTGGCCCTTTGGCGGGGCCGCCTGCAGCATCCTGCCCTCCCTCATCCTG
CTCAACATGTACGCCAGCATCCTGCTCCTGGCCACCATCAGCGCCGACCGCTTTCTGCTGGTGTTTAAACCCATC
TGGTGCCAGAACTTCCGAGGGGCCGGCTTGGCCTGGATCGCCTGTGCCGTGGCTTGGGGTTTAGCCCTGCTGCTG
ACCATACCCTCCTTCCTGTACCGGGTGGTCCGGGAGGAGTACTTTCCACCAAAGGTGTTGTGTGGCGTGGACTAC
AGCCACGACAAACGGCGGGAGCGAGCCGTGGCCATCGTCCGGCTGGTCCTGGGCTTCCTGTGGCCTCTACTCACG
CTCACGATTTGTTACACTTTCATCCTGCTCCGGACGTGGAGCCGCAGGGCCACGCGGTCCACCAAGACACTCAAG
GTGGTGGTGGCAGTGGTGGCCAGTTTCTTTATCTTCTGGTTGCCCTACCAGGTGACGGGGATAATGATGTCCTTC
CTGGAGCCATCGTCACCCACCTTCCTGCTGCTGAATAAGCTGGACTCCCTGTGTGTCTCCTTTGCCTACATCAAC
TGCTGCATCAACCCCATCATCTACGTGGTGGCCGGCCAGGGCTTCCAGGGCCGACTGCGGAAATCCCTCCCCAGC
CTCCTCCGGAACGTGTTGACTGAAGAGTCCGTGGTTAGGGAGAGCAAGTCATTCACGCGCTCCACAGTGGACACT
ATGGCCCAGAAGACCCAGGCAGTGTAGGCGACAGCCTCATGGGCCACTGTGGCCCGATGTCCCCTTCCTTCCCGG
CCATTCTCCCTCTTGTTTTCACTTCACTTTTCGTGGGATGGTGTTACCTTAGCTAACTAACTCTCCTCCATGTTG
CCTGTCTTTCCCAGACTTGTCCCTCCTTTTCCAGCGGGACTCTTCTCATCCTTCCTCATTTGCAAGGTGAACACT
TCCTTCTAGGGAGCACCCTCCCACCCCCCACCCCCCCCCCACACACCATCTTTCCATCCCAGGCTTTTGAAAAACA
AACAGAAACCCGTGTATCTGGGATATTTCCATATGGCAATAGGTGTGAACAGGGAACTCAGAATACAGACAAGTA
GAAAGATTCTCGCTTAAAAAAATGTATTTATTTTATGGCAAGTTGGAAAATATGTAACTGGAATCTCAAAAGTTC
TTTGGGACAAAACAGAAGTCCATGGAGTTATCTAAGCTCTTGTAAGTGAGTTAATTTAAAAAAGAAAATTAGGCT
GAGAGCAGTGGCTCACGCCTGTAATCCCAGAACTTTGGGAGGCTAAGGTGGGTGGATCACCTGAGGTCAAGAGTT
CCAGACCAGGCTGGCCAGCATGGTGAAACCCCGTCTGTACTAAAAATACAAAAAATTAACTGGGCATGGTAGTGG
GTGCCTGTAATCCCAGCTACTTGGGAGGCTGAGGTGGGAGAATTGCTCGAACCTTGGAGGTGGAGGTTGTGGTGA
GCCATGATCGCACCACTGCACTCTAGCCTGGGTGACCGAGGGAGGCTCTGTCTCAAAAGCAAAGCAAAAACAAAA
ACAAAAACACCTAAAAAACCTGCAGTTTTGTTTGTACTTTGTTTTTAAATTATGCTTTCTATTTTGAGATCATTG
CAAACTCAACACAATTGTAAGTAATGATACAGAGGGATCTTGTGTACCCTTCACCCAGCCTCCCCCAATGGCAAC
ATCTTGCAAAACTACAATGTAGTCTCATAACCAGGATATTGACATTGATACAGTGAAGATACAGGACATTCTCAT
CACCACAGGGATCCCCAGGATGCCCACTTCCCTCCACCCCCACACCCCAGCCGTGTCCCTAACCCCTGGCAACCA
GGAATCCACTCTCCATTTCTATAATGTTGTCATTTCAAGAATGTTATTCAATGGAATCATATAGTATGTAACCTG
TTTTGAGCTTAAAAAAAAAAGTATACATGACTTTAATGAGGAAAATAAAAATGAATATTGAAAAAAAAAACTTTA
GAG

FIGURE 6110

MNSFNYTTPDYGHYDDKDTLDLNTPVDKTSNTLRVPDILALVIFAVVFLVGVLGNALVVWVTAFEAKRTINAIWF
LNLAVADFLSCLALPILFTSIVQHHHWPFGGAACSILPSLILLNMYASILLLATISADRFLLVFKPIWCQNFRGA
GLAWIACAVAWGLALLLTIPSFLYRVVREEYFPPKVLCGVDYSHDKRRERAVAIVRLVLGFLWPLLTLTICYTFI
LLRTWSRRATRSTKTLKVVVAVVASFFIFWLPYQVTGIMMSFLEPSSPTFLLLNKLDSLCVSFAYINCCINPIIY
VVAGQGFQGRLRKSLPSLLRNVLTEESVVRESKSFTRSTVDTMAQKTQAV

FIGURE 6111A

GCGCTCTCAGGCGGGCTCCGGCGGCAGCGACGCGAGCGCGGCGATGGGGAGCGGCGGCGTGGTCCACTGTAGGTG
TGCCAAGTGTTTCTGTTATCCTACAAAGCGAAGAATAAGGAGGAGGCCCCGAAACCTGACCATCTTGAGTCTCCC
CGAAGATGTGCTCTTTCACATCCTGAAATGGCTTTCTGTAGAGGACATCCTGGCCGTCCGAGCTGTACACTCCCA
GCTGAAGGACCTGGTGGACAACCACGCCAGTGTGTGGGCATGTGCCAGCTTCCAGGAGCTGTGGCCGTCTCCAGG
GAACCTGAAGCTCTTTGAAAGGGCTGCTGAAAAGGGGAATTTCGAAGCTGCTGTGAAGCTGGGCATAGCCTACCT
CTACAATGAAGGCCTGTCTGTGTCTGATGAGGCCCGCGCAGAAGTGAATGGCCTGAAGGCCTCTCGCTTCTTCAG
TCTCGCTGAGCGGCTGAATGTGGGTGCCGCACCTTTCATCTGGCTCTTCATCCGCCCTCCGTGGTCGGTGAGCGG
AAGCTGCTGCAAGGCCGTGGTTCACGAGAGCCTCAGGGCAGAGTGCCAGCTGCAGAGGACTCACAAAGCATCCAT
ATTGCACTGCTTGGGCAGAGTGCTGAGTCTGTTCGAGGATGAGGAGAAGCAGCAGCAGGCCCATGACCTGTTTGA
GGAGGCTGCTCATCAGGGATGTCTGACCAGCTCCTACCTCCTCTGGGAAAGCGACAGGAGGACAGATGTGTCAGA
TCCTGGGCGATGCCTCCACAGCTTCCGAAAACTCAGGGACTACGCTCGCAAAGGCTGCTGGGAAGCGCAGCTGTC
TTTAGCCAAAGCCTGTGCAAATGCAAACCAGCTTGGACTGGAGGTGAGAGCTTCCAGTGAGATCGTCTGCCAGCT
ATTTCAGGCTTCCCAGGCTGTCAGTAAACAACAAGTCTTCTCCGTGCAGAAGGGACTCAATGACACAATGAGGTA
CATTCTGATCGACTGGCTGGTGGAAGTTGCCACCATGAATGACTTCACAAGCCTGTGCCTGCACCTGACCGTGGA
GTGTGTGGACCGGTACCTGCGGAGGAGGCTGGTGCCGCGGTACAGGCTCCAGCTGCTGGGCATCGCCTGCATGGT
CATCTGCACCCGGTTTATCAGTAAAGAGATCCTGACCATCCGGGAGGCCGTATGGCTCACGGACAACACTTACAA
GTACGAGGACCTGGTGAGAATGATGGGCGAGATCGTCTCCGCCTTGGAAGGGAAGATTCGAGTCCCCACTGTGGT
GGATTACAAGGAGGTCCTGCTGACGCTAGTCCCTGTGGAGCTGAGAACCCAGCACCTGTGCAGCTTCCTCTGCGA
GCTCTCCCTGCTGCACACCAGCCTGTCCGCCTACGCCCCAGCCCGCCTGGCTGCCGCAGCCCTGCTCCTGGCCAG
ACTGACGCACGGGCAGACACAGCCCTGGACCACTCAGCTGTGGGACCTCACCGGATTCTCCTATGAAGACCTCAT
TCCCTGCGTCTTGAGCCTCCATAAGAAGTGCTTCCATGATGACGCCCCCAAGGACTACAGGCAAGTCTCTCTGAC
CGCCGTGAAGCAGCGGTTTGAGGACAAGCGCTATGGAGAAATCAGCCAGGAAGAGGTGCTGAGCTACAGCCAGTT
GTGTGCTGCATTAGGAGTGACACAAGACAGCCCCGACCCCCCGACTTTCCTCAGCACAGGGGAGATCCACGCCTT
CCTCAGCTCTCCCTCGGGGCGGAGAACCAAACGGAAGCGGGAGAACAGCCTCCAGGAAGACAGAGGCAGCTTCGT
TACCACCCCCACTGCGGAGCTGTCCAGCCAGGAGGAGACCGTGCTGGGCAGCTTCCTCGACTGGAGCCTGGACTG
CTGCTCTGGCTATGAAGGCGACCAGGAGAGTGAGGGCGAGAAGGAGGGCGACGTGACAGCTCCCAGCGGCATCCT
CGATGTCACCGTGGTCTACCTGAACCCAGAACAGCATTGCTGCCAGGAATCCAGTGATGAGGAGGCTTGTCCAGA
GGCAAAGGGACCCCAGGACCCACAGGCACTGGCGCTGGACACCCAGATCCCTGCAACCCCTGGACCCAAACCCCT
GGTCCGCACCAGCCGGGAGCCAGGGAAGGACGTCACGACCTCAGGGTACTCCTCCGTCAGCACCGCAAGTCCCAC
AAGCTCCGTGGACGGTGGCTTGGGGGCCCTGCCCCAACCTACCTCAGTGCTGTCCCTGCACAGTGACTCGCACAC
ACAGCCCTGCCACCATCAGGCCAGGAAGTCATGTTTACAGTGTCGTCCCCCAAGTCCCCCGGAGAGCAGTGTTCC
CCAGCAACAGGTGAAGCGGATAAACCTATGCATACACAGTGAGGAGGAGGACATGAACCTGGGCCTTGTGAGGCT
GTAAGTGTGTCAGCACATTTGCCGCAGTGGATGTGTACTGAGGGGGCTGGAGGCGAAGGGTGGGAGCATAGCATA
GGAACGCTGCATAGACCATGGAGGCCTTTGCGCAGAGAGCAGAGAGGATGACTTGCGGCCACCAAGTTTCTGTCT
CCGCGGGAGTCCCGTGCAAGCCATCAGAATGTTGAAATGAGGGTGAAGAGCTCAGATCCCTCTCTTTGGAAAGTT
TAGCCTGGAAGCAGTTGGCCACACTGTGTGGAGGGCACCTCTCTGTCCCTTCCGTGTCTCACTGTCTCTGGAAGC
TTCAGCCCATGTGTGTCCTGGTGTTCCCAGCCCCACCAGAGCCCCGTGCCGGGAGCTGACAGCTTTCACGCTTAA
GGCACGTGTGACCTGGGTAGTCAGACACCACTTGAGCCCCTGCCCACATCTGCTGGTTTGGGGCTTCAGTGGGGA
GCTGACAGCTGTGAGCACACCACTGTCCCCTCATCCACCTCGGCCTGCATGGGGCACCCACTTCCTTCTGGGTGG
GGCTTCCATGGTAAGGGGGCCTGCGTCCCTGCACACTGCGAGGACTGCCTTGCCACAGGCCCACTCCCTACGACA
CGTGACTCGTTTTAGAGCTCTGTCCCAGAGGCGTTCGTATGTGACCCACAGATGGCGTCAATGTGAACACCTCTC
TTTGTGCTGAATTTCTGGGCCATTCTTTTCCTGTCTTATTTCTAAATTTCCTTCTTCCAAGATGAAAACAAAAGA
AAAACTTAAAACAGAAGGTATTAAAAAAACAAGAGATTCCCACCATTATTTAGGTTCACCTGCAAAACAAAAATC
TTACTCCAGCCCCTCAATGCCATCCTGACACACTTTATGCAAAAAGAATTTTCCCAGATAGGCTAGCCAGAAAAA
ACTTCAAGTCCTCTGTAACATCTGAGGTGACCAAGAGGCAGAAGAGCAGAGCAGTCGGGGGCCGTGTCCTGGCTG
ATCCCAACTGCAGCTCTGCTGTGGGGGCCCGTGGGAGGGAGGCAGACCCCTGGGCTTTCCTGCTGGCCACGGAGA
CTCTGCTCCTGCATGGAAAGGGAGCCTGGGAGCCAGCAGCCCACGCCTGGGGAGCCTGCCTGGGGCCATGTGACC
ATGGCCTCTCCCTGGGAACGGGCTGACCACAACACACCCTGCTGCCATCCACTTCTGTTTACTCTGCAAATGTAA

FIGURE 6111B

GAAAGAACCACTTGGCCAGAAGTGTCCCCCAGATGCTTTTTTTTTTTTTTTTTTGGAGACAGTTTTGCTCTTGTC
TCCCCGGCTGGAGTGCAGTGGCATGATCTCAACTCTCAACTCACTGTAACCTCCGCCTCCCGGATACTCCTGCCT
CAGCCTCCTGGGTAGCTGGGATTACAAGCACCCAACCACGCCCAGCTAATTTTTGTATTTTCGGTAGAGACGGGA
TTTCACCATGTTGGCCAGGCTAGTCTCGAACTCATGACCTCAAGTGATCCGCCCACTTCGGTCTCCCAAAGTGCT
GGGATTACAGGCATGAGCCACGGCGCCTGGCCCCCAAATGCTCTTGAACCGGAAACCCAGGGATGGGAGATGCTC
ACTGAGCTGCTGCTTTTATGTGTGCTGGTGCTATGTGTGTTCATGTCCGCGGCAGCTGTCTTTTTGCTACTATAA
GGGAATTCTGGCCACCCTGGGTGGGGTGTGGTCGGGGTGAGAACCCAAGCGTTGGAACTGTAGACCCGTCCTGTC
GACTGTGTGCCCCTGGGCATGTGTGAGCCTCAGTTTCCTCATCTGTAAGGGGGGCAATGATACCTACCTCACAGG
GGGTTGTGAGGATTAAATGTGAGGAGGATAGTGGCAAC

FIGURE 6112

MGSGGVVHCRCAKCFCYPTKRRIRRRPRNLTILSLPEDVLFHILKWLSVEDILAVRAVHSQLKDLVDNHASVWAC
ASFQELWPSPGNLKLFERAAEKGNFEAAVKLGIAYLYNEGLSVSDEARAEVNGLKASRFFSLAERLNVGAAPFIW
LFIRPPWSVSGSCCKAVVHESLRAECQLQRTHKASILHCLGRVLSLFEDEEKQQQAHDLFEEAAHQGCLTSSYLL
WESDRRTDVSDPGRCLHSFRKLRDYARKGCWEAQLSLAKACANANQLGLEVRASSEIVCQLFQASQAVSKQQVFS
VQKGLNDTMRYILIDWLVEVATMNDFTSLCLHLTVECVDRYLRRRLVPRYRLQLLGIACMVICTRFISKEILTIR
EAVWLTDNTYKYEDLVRMMGEIVSALEGKIRVPTVVDYKEVLLTLVPVELRTQHLCSFLCELSLLHTSLSAYAPA
RLAAAALLLARLTHGQTQPWTTQLWDLTGFSYEDLIPCVLSLHKKCFHDDAPKDYRQVSLTAVKQRFEDKRYGEI
SQEEVLSYSQLCAALGVTQDSPDPPTFLSTGEIHAFLSSPSGRRTKRKRENSLQEDRGSFVTTPTAELSSQEETV
LGSFLDWSLDCCSGYEGDQESEGEKEGDVTAPSGILDVTVVYLNPEQHCCQESSDEEACPEAKGPQDPQALALDT
QIPATPGPKPLVRTSREPGKDVTTSGYSSVSTASPTSSVDGGLGALPQPTSVLSLHSDSHTQPCHHQARKSCLQC
RPPSPPESSVPQQQVKRINLCIHSEEEDMNLGLVRL

FIGURE 6113

GCCGCGCCGGCTCTGGGCACTCAGCATCGTTTCCTTTTCCTCCGCTGGAGCAGCTATGGCGGCGGTGAAGACCCT
GAACCCCAAGGCCGAGGTGGCCCGAGCGCAGGCGGCGCTGGCGGTCAACATCAGCGCAGCGCGGGGTCTGCAGGA
CGTGCTAAGGACCAACCTGGGGCCCAAGGGCACCATGAAGATGCTCGTTTCTGGCGCTGGAGACATCAAACTTAC
TAAAGACGGCAATGTGCTGCTTCACGAAATGCAAATTCAACACCCAACAGCTTCCTTAATAGCAAAGGTAGCAAC
AGCCCAGGATGATATAACTGGTGATGGTACGACTTCTAATGTCCTAATCATTGGAGAGCTGCTGAAACAGGCGGA
TCTCTACATTTCTGAAGGCCTTCATCCTAGAATAATCACTGAAGGATTTGAAGCTGCAAAGGAAAAGGCCCTTCA
GTTTTTGGAAGAAGTCAAAGTAAGCAGAGAGATGGACAGGGAAACACTTATAGATGTGGCCAGAACATCTCTTCG
TACTAAAGTTCATGCTGAACTTGCAGATGTCTTAACAGAGGCTGTAGTGGACTCCATTTTGGCCATTAAAAAGCA
AGATGAACCTATTGATCTCTTCATGATTGAGATCATGGAGATGAAACATAAATCTGAAACTGATACAAGCTTAAT
CAGAGGGCTTGTTTTGGACCACGGAGCACGGCATCCTGATATGAAGAAAAGGGTGGAGGATGCATACATCCTCAC
TTGTAACGTGTCATTAGAGTATGAGAAAACAGAAGTGAATTCTGGCTTTTTTTACAAGAGTGCAGAAGAGAGAGA
AAAACTCGTGAAAGCTGAAAGAAAATTCATTGAAGATAGGGTTAAAAAAATAATAGAACTGAAAAGGAAAGTCTG
TGGCGATTCAGATAAAGGATTTGTTGTTATTAATCAAAAGGGAATTGACCCCTTTTCCTTAGATGCTCTTTCAAA
AGAAGGCATAGTCGCTCTGCGCAGAGCTAAAAGGAGAAATATGGAGAGGCTGACTCTTGCTTGTGGTGGGGTAGC
CCTGAATTCTTTTGACGACCTAAGTCCTGACTGCTTGGGACATGCAGGACTTGTATATGAGTATACATTGGGAGA
AGAGAAGTTTACCTTTATTGAGAAATGTAACAACCCTCGTTCTGTCACATTATTGATCAAAGGACCAAATAAGCA
CACACTCACTCAGATCAAAGATGCAGTGAGGGACGGCTTGAGGGCTGTCAAAAATGCTATTGATGATGGCTGTGT
GGTTCCAGGTGCTGGTGCCGTGGAAGTGGCAATGGCAGAAGCCCTGATTAAACATAAGCCCAGTGTAAAGGGCAG
GGCACAGCTTGGAGTCCAAGCATTTGCTGATGCATTGCTCATTATTCCCAAGGTTCTTGCTCAGAACTCTGGTTT
TGACCTTCAGGAAACATTAGTTAAAATTCAAGCAGAACATTCAGAATCAGGTCAGCTTGTGGGTGTGGACCTGAA
CACAGGTGAGCCAATGGTGGCAGCAGAAGTAGGCGTATGGGATAACTATTGTGTAAAGAAACAGCTTCTTCACTC
CTGCACTGTGATTGCCACCAACATTCTCTTGGTTGATGAGATCATGCGAGCTGGAATGTCTTCTCTGAAAGGTTG
AATTGAAGCTTCCTCTGTATCTGAATCTTGAAGACTGCAAAGTGATCCTGAGGATTACAGCTGTGGAATTTTTGT
CCAAGCTTCAAATAATTTTGAAAGAAATTTTCCCATATGAAAAAAGGAGAGAACACTGGCATCTGTTGAAATTTG
GAAGTTCTGAAATTATAGTATTTTTAAAAATTGCACTGAAGTGTATACACATAAAGCAGGTCTTTTATCCAGTGA
ACAGGATGTTTTGCTTTAGCAGCAGTGACATAAAATTCCATGTTAGATAAGCATATGTTACTTACCTTGTTATTA
AATATTTCTTGAAAAGCAAATTTTAATGGTTAATTTTATGTGGACGTATGTTAAATTATCCAAACTACCCTATTG
TTAAGCATTTGGTTTTAAAATTTTTATGCTAATATAAATGCTCAAGTAATTTAAAATATTGAAAGCATCCCTGTT
GGTATAAATTTCTGAGTAAATGCATTGGATCAGTTGGACTTTGAACGCCCTTTGAAATGGCTTTGCTAAAATGCT
CCCGCCACAAAGTTGTAGGAAATGGGAAGAGGAGTCAACTAGAGGCAAGGGAGTTGAGAGAGCTGCAACTGTAAA
GGGCAAGAACAGGCAGAGGTAAAAAGATGATGGAAGGTGTGGTGACTAAGGGCCACGGTTATTGGGTGAAATTTG
AGATGTAGGCCAACTGTATTTTCAAGCTTCTGAACTTAAGGCAAAATATTCATCGCAAAGTCTCTAGCGTCATAT
TTTTCTCACCCAAATTACGTTTCCACGAGTTATTATATATAGTTGGTCTATCTCTGCAGTCCTTGAAGGTGAAGT
TGTGTGTTACTAGGCTGTGTTTTGGGATGTCAGCAGTGGCCTGAAGTGAGTTGTGCAATAAATGTTAAGTTGAAA
CCTCAAAAAAAA

FIGURE 6114

MAAVKTLNPKAEVARAQAALAVNISAARGLQDVLRTNLGPKGTMKMLVSGAGDIKLTKDGNVLLHEMQIQHPTAS
LIAKVATAQDDITGDGTTSNVLIIGELLKQADLYISEGLHPRIITEGFEAAKEKALQFLEEVKVSREMDRETLID
VARTSLRTKVHAELADVLTEAVVDSILAIKKQDEPIDLFMIEIMEMKHKSETDTSLIRGLVLDHGARHPDMKKRV
EDAYILTCNVSLEYEKTEVNSGFFYKSAEEREKLVKAERKFIEDRVKKIIELKRKVCGDSDKGFVVINQKGIDPF
SLDALSKEGIVALRRAKRRNMERLTLACGGVALNSFDDLSPDCLGHAGLVYEYTLGEEKFTFIEKCNNPRSVTLL
IKGPNKHTLTQIKDAVRDGLRAVKNAIDDGCVVPGAGAVEVAMAEALIKHKPSVKGRAQLGVQAFADALLIIPKV
LAQNSGFDLQETLVKIQAEHSESGQLVGVDLNTGEPMVAAEVGVWDNYCVKKQLLHSCTVIATNILLVDEIMRAG
MSSLKG

FIGURE 6115

GTCTCCCCCACTGTCAGCACCTCTTCTGTGTGGTGAGTGGACCGCTTACCCCACTAGGTGAAGATGTCAGCCCAG
GAGAGCTGCCTCAGCCTCATCAAGTACTTCCTCTTCGTTTTCAACCTCTTCTTCTTCGTCCTCGGCAGCCTGATC
TTCTGCTTCGGCATCTGGATCCTCATCGACAAGACCAGCTTCGTGTCCTTTGTGGGCTTGGCCTTCGTGCCTCTG
CAGATCTGGTCCAAAGTCCTGGCCATCTCAGGAATCTTCACCATGGGCATCGCCCTCCTGGGTTGTGTGGGGGCC
CTCAAGGAGCTCCGCTGCCTCCTGGGCCTGTATTTTGGGATGCTGCTGCTCCTGTTTGCCACACAGATCACCCTG
GGAATCCTCATCTCCACTCAGCGGGCCCAGCTGGAGCGAAGCTTGCGGGACGTCGTAGAGAAAACCATCCAAAAG
TACGGCACCAACCCCGAGGAGACCGCGGCCGAGGAGAGCTGGGACTATGTGCAGTTCCAGCTGCGCTGCTGCGGC
TGGCACTACCCGCAGGACTGGTTCCAAGTCCTCATCCTGAGAGGTAACGGGTCGGAGGCGCACCGCGTGCCCTGC
TCCTGCTACAACTTGTCGGCGACCAACGACTCCACAATCCTAGATAAGGTGATCTTGCCCCAGCTCAGCAGGCTT
GGACACCTGGCGCGGTCCAGACACAGTGCAGACATCTGCGCTGTCCCTGCAGAGAGCCACATCTACCGCGAGGGC
TGCGCGCAGGGCCTCCAGAAGTGGCTGCACAACAACCTTATTTCCATAGTGGGCATTTGCCTGGGCGTCGGCCTA
CTCGAGCTCGGGTTCATGACGCTCTCGATATTCCTGTGCAGAAACCTGGACCACGTCTACAACCGGCTCGCTCGA
TACCGTTAGGCCCCGCCCTCCCCAAAGTCCCGCCCCGCCCCCGTCACGTGCGCTGGGCACTTCCCTGCTGCCTGT
AAATATTTGTTTAATCCCCAGTTCGCCTGGAGCCCTCCGCCTTCACATTCCCCTGGGGACCCACGTGGCTGCGTG
CCCCTGCTGCTGTCACCTCTCCCACGGGACCTGGGGCTTTCGTCCACAGCTTCCTGTCCCCATCTGTCGGCCTAC

FIGURE 6116

MSAQESCLSLIKYFLFVFNLFFFVLGSLIFCFGIWILIDKTSFVSFVGLAFVPLQIWSKVLAISGIFTMGIALLG
CVGALKELRCLLGLYFGMLLLLFATQITLGILISTQRAQLERSLRDVVEKTIQKYGTNPEETAAEESWDYVQFQL
RCCGWHYPQDWFQVLILRGNGSEAHRVPCSCYNLSATNDSTILDKVILPQLSRLGHLARSRHSADICAVPAESHI
YREGCAQGLQKWLHNNLISIVGICLGVGLLELGFMTLSIFLCRNLDHVYNRLARYR

FIGURE 6117

CCCGCCTGGAGCCCTATGGCCAACTGCGAGTTCAGCCCGGTGTCCGGGGACAAACCCTGCTGCCGGCTCTCTAGG
AGAGCCCAACTCTGTCTTGGCGTCAGTATCCTGGTCCTGATCCTCGTCGTGGTGCTCGCGGTGGTCGTCCCGAGG
TGGCGCCAGCAGTGGAGCGGTCCGGGCACCACCAAGCGCTTTCCCGAGACCGTCCTGGCGCGATGCGTCAAGTAC
ACTGAAATTCATCCTGAGATGAGACATGTAGACTGCCAAAGTGTATGGGATGCTTTCAAGGGTGCATTTATTTCA
AAACATCCTTGCAACATTACTGAAGAAGACTATCAGCCACTAATGAAGTTGGGAACTCAGACCGTACCTTGCAAC
AAGAAATAAACTATCAATCTTGCCCAGACTGGAGAAAGGACTGCAGCAACAACCCTGTTTCAGTATTCTGGAAAA
CGGTTTCCCGCAGGTTTGCAGAAGCTGCCTGTGATGTGGTCCATGTGATGCTCAATGGATCCCGCAGTAAAATCT
TTGACAAAAACAGCACTTTTGGGAGTGTGGAAGTCCATAATTTGCAACCAGAGAAGGTTCAGACACTAGAGGCCT
GGGTGATACATGGTGGAAGAGAAGATTCCAGAGACTTATGCCAGGATCCCACCATAAAAGAGCTGGAATCGATTA
TAAGCAAAAGGAATATTCAATTTTCCTGCAAGAATATCTACAGACCTGACAAGTTTCTTCAGTGTGTGAAAAATC
CTGAGGATTCATCTTGCACATCTGAGATCTGAGCCAGTCGCTGTGGTTGTTTTAGCTCCTTGACTCCTTGTGGTT
TATGTCATCATACATGACTCAGCATACCTGCTGGTGCAGAGCTGAAGATTTTGGAGGGTCCTCCACAATAAGGTC
AATGCCAGAGACGGAAGCCTTTTTCCCCAAAGTCTTAAAATAACTTATATCATCAGCATACCTTTATTGTGATCT
ATCAATAGTCAAGAAAAATTATTGTATAAGATTAGAATGAAAATTGTATGTTAAGTTACTT

FIGURE 6118

MANCEFSPVSGDKPCCRLSRRAQLCLGVSILVLILVVVLAVVVPRWRQQWSGPGTTKRFPETVLARCVKYTEIHP
EMRHVDCQSVWDAFKGAFISKHPCNITEEDYQPLMKLGTQTVPCNKK

FIGURE 6119

GGGAAGTTCTGGAAGGAAGCATGTGCTCCAGAGGTTGGGATTCGTGTCTGGCTCTGGAATTGCTACTGCTGCCTC
TGTCACTCCTGGTGACCAGCATTCAAGGTCACTTGGTACATATGACCGTGGTCTCCGGCAGCAACGTGACTCTGA
ACATCTCTGAGAGCCTGCCTGAGAACTACAAACAACTAACCTGGTTTTATACTTTCGACCAGAAGATTGTAGAAT
GGGATTCCAGAAAATCTAAGTACTTTGAATCCAAATTTAAAGGCAGGGTCAGACTTGATCCTCAGAGTGGCGCAC
TGTACATCTCTAAGGTCCAGAAAGAGGACAACAGCACCTACATCATGAGGGTGTTGAAAAAGACTGGGAATGAGC
AAGAATGGAAGATCAAGCTGCAAGTGCTTGACCCTGTACCCAAGCCTGTCATCAAAATTGAGAAGATAGAAGACA
TGGATGACAACTGTTATCTGAAACTGTCATGTGTGATACCTGGCGAGTCTGTAAACTACACCTGGTATGGGGACA
AAAGGCCCTTCCCAAAGGAGCTCCAGAACAGTGTGCTTGAAACCACCCTTATGCCACATAATTACTCCAGGTGTT
ATACTTGCCAAGTCAGCAATTCTGTGAGCAGCAAGAATGGCACCGTCTGCCTCAGTCCACCCTGTACCCTGGCCC
GGTCCTTTGGAGTAGAATGGATTGCAAGTTGGCTAGTGGTCACGGTGCCCACCATTCTTGGCCTGTTACTTACCT
GAGATGAGCTCTTTTAACTCAAGCGAAACTTCAAGGCCAGAAGATCTTGCCTGTTGGTGATCATGCTCCTCACCA
GGACAGAGACTGTATAGGCTGACCAGAAGCATGCTGCTGAATTATCAACGAGGATTTTCAAGTTAACTTTTAAAT
ACTGGTTATTATTTAATTTTATATCCCTTTGTTGTTTTCTAGTACACAGAGATATAGAGATACACATGCTTTTTT
CCCACCCAAAATTGTGACAACATTATGTGAATGTTTTATTATTTTTTAAAATAAACATTTGATATAATTATCAAT
TAACTGAA

FIGURE 6120

MCSRGWDSCLALELLLLPLSLLVTSIQGHLVHMTVVSGSNVTLNISESLPENYKQLTWFYTFDQKIVEWDSRKSK
YFESKFKGRVRLDPQSGALYISKVQKEDNSTYIMRVLKKTGNEQEWKIKLQVLDPVPKPVIKIEKIEDMDDNCYL
KLSCVIPGESVNYTWYGDKRPFPKELQNSVLETTLMPHNYSRCYTCQVSNSVSSKNGTVCLSPPCTLARSFGVEW
IASWLVVTVPTILGLLLT

FIGURE 6121

AGACTCAACAAGAGCTCCAGCAAAGACTTTCACTGTAGCTTGACTTGACCTGAGATTAACTAGGGAATCTTGAGA
ATAAAGATGAGCTCTGAAAATTGTTTCGTAGCAGAGAACAGCTCTTTGCATCCGGAGAGTGGACAAGAAAATGAT
GCCACCAGTCCCCATTTCTCAACACGTCATGAAGGGTCCTTCCAAGTTCCTGTCCTGTGTGCTGTAATGAATGTG
GTCTTCATCACCATTTTAATCATAGCTCTCATTGCCTTATCAGTGGGCCAATACAATTGTCCAGGCCAATACACA
TTCTCAATGCCATCAGACAGCCATGTTTCTTCATGCTCTGAGGACTGGGTTGGCTACCAGAGGAAATGCTACTTT
ATTTCTACTGTGAAGAGGAGCTGGACTTCAGCCCAAAATGCTTGTTCTGAACATGGTGCTACTCTTGCTGTCATT
GATTCTGAAAAGGACATGAACTTTCTAAAACGATACGCAGGTAGAGAGGAACACTGGGTTGGACTGAAAAAGGAA
CCTGGTCACCCATGGAAGTGGTCAAATGGCAAAGAATTTAACAACTGGTTCAACGTTACAGGGTCTGACAAGTGT
GTTTTTCTGAAAAACACAGAGGTCAGCAGCATGGAATGTGAGAAGAATTTATACTGGATATGTAACAAACCTTAC
AAATAAGGAAACATGTTCACTTATTGACTATTATAGAATGGAACTCAAGGAAATCTGTGTCAGTGGATGCTG
CTCTGTGGTCCGAAGTCTTCCATAGAGACTTTGTGAAAAAAAATTTTATAGTGTCTTGGGAATTTTCTTCCAAAC
AGAACTATGGAAAAAAAGGAAGAAATTCCAGGAAAATCTGCACTGTGGGCTTTTATTGCCATGAGCTAGAAGCAT
CACAGGTTGACCAATAACCATGCCCAAGAATGAGAAGAATGACTATGCAACCTTTGGATGCACTTTATATTATTT
TGAATCCAGAAATAATGAAATAACTAGGCGTGGACTTACTATTTATTGCTGAATGACTACCAACAGTGAGAGCCC
TTCATGCATTTGCACTACTGGAAGGAGTTAGATGTTGGTACTAGATACTGAATGTAAACAAAGGAATTATGGCTG
GTAACATAGGTTTTTAGTCTAATTGAATCCCTTAAACTCAGGGAGCATTTATAAATGGACAAATGCTTATGAAAC
TAAGATTTGTAATATTTCTCTCTTTTTAGAGAAATTTGCCAATTTACTTTGTTATTTTTCCCCAAAAAGAATGGG
ATGATCGTGTATTTATTTTTTTACTTCCTCAGCTGTAGACAGGTCCTTTTCGATGGTACATATTTCTTTGCCTTT
ATAATCTTTTATACAGTGTCTTACAGAGAAAAGACATAAGCAAAGACTATGAGGAATATTTGCAAGACATAGAAT
AGTGTTGGAAAATGTGCAATATGTGATGTGGCAAATCTCTATTAGGAAATATTCTGTAATCTTCAGACCTAGAAT
AATACTAGTCTTATAATAGGTTTGTGACTTTCCTAAATCAATTCTATTACGTGCAATACTTCAATACTTCATTTA
AAATATTTTTATGTGCAATAAAATGTATTTGTTTGTATTTTGTGTTCAGTACAATTATAAGCTGTTTTTATATAT
GTGAAATAAAAGTAGAATAAACACAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6122

MSSENCFVAENSSLHPESGQENDATSPHFSTRHEGSFQVPVLCAVMNVVFITILIIALIALSVGQYNCPGQYTFS
MPSDSHVSSCSEDWVGYQRKCYFISTVKRSWTSAQNACSEHGATLAVIDSEKDMNFLKRYAGREEHWVGLKKEPG
HPWKWSNGKEFNNWFNVTGSDKCVFLKNTEVSSMECEKNLYWICNKPYK

FIGURE 6123

TGCTACCAAGACAGCCACGAAGATCCTACCAAAATGAAGCGCTTCCTCTTCCTCCTACTCACCATCAGCCTCCTG
GTTATGGTACAGATACAAACTGGACTCTCAGGACAAAACGACACCAGCCAAACCAGCAGCCCCTCAGCATCCAGC
AACATAAGCGGAGGCATTTTCCTTTTCTTCGTGGCCAATGCCATAATCCACCTCTTCTGCTTCAGTTGAGGTGAC
ACGTCTCAGCCTTAGCCCTGTGCCCCCTGAAACAGCTGCCACCATCACTCGCAAGAGAATCCCCTCCATCTTTGG
GAGGGGTTGATGCCAGACATCACCAGGTTGTAGAAGTTGACAGGCAGTGCCATGGGGGCAACAGCCAAAATAGGG
GGGTAATGATGTAGGGGCCAAGCAGTGCCCAGCTGGGGGTCAATAAAGTTACCCTTGT

FIGURE 6124

MKRFLFLLLTISLLVMVQIQTGLSGQNDTSQTSSPSASSNISGGIFLFFVANAIIHLFCFS

FIGURE 6125

GCCGCGGCTGCGGAACGGGCGGAGGCTGCCGGTTTCGTAACCGTCGCTCCTCCTCGCTGACTCGCGGGCTGTGAG
GCCTGGGTCGGCTCGGGCCGCACCGCGCGGGGCCGCTCGGAGTGGAGGCCGCCTGGGGGCAGGCGGGCTAGAGGA
GCAGGTACATGTGAAGATTTTTTGGCAGCTTAGCGTGGAAACCATTGATCACCCTGCTCTCATTTCTACCTGTTC
TGTGTTGGCAAGGGAGAGTGCCCAA**ATG**AGCAAGATATCGCAGCAAAACAGCACTCCAGGGGTGAACGGAATTAG
TGTTATCCATACCCAGGCACATGCCAGCGGCTTACAGCAGGTTCCTCAGCTGGTGCCTGCTGGCCCTGGGGGAGG
AGGCAAAGCTGTGGCTCCCAGCAAGCAGAGCAAAAAGAGTTCGCCCATGGATCGAAACAGTGACGAGTATCGGCA
ACGCCGAGAGAGGAACAACATGGCTGTGAAAAAGAGCCGGTTGAAAAGCAAGCAGAAAGCACAAGACACACTGCA
GAGAGTCAATCAGCTCAAAGAAGAGAATGAACGGTTGGAAGCAAAAATCAAATTGCTGACCAAGGAATTAAGTGT
ACTCAAAGATTTGTTTCTTGAGCATGCACACAACCTTGCAGACAACGTACAGTCCATTAGCACTGAAAATACGAC
AGCAGATGGCGACAATGCAGGACAG**TAG**ACCTCACCCTTTCCAGACTTTAGAGCTTGTGGCTTGAATGTTAAAGG
TGTGACCACCGACACCACTCATGTCAATGGCTGAAAGTTGTCCATTTCCATGACTCAAAGACCCATTGGAGGCTA
TTTTCTGGGATCAGCACTGAAGAGTTGATTAGCTAAAAATGTTAGCCTTGTAATTCGAATATCTGGTTTTAAATG
ATAGAGGTTTTTGTGGGAATCAAAATCCCCCAAATGTTAAGGTATATGGTAAAAAAAGAAATATCTGGGATCCCG
ATGTTCTTAATAAATCCTGACTTCCC

FIGURE 6126

MSKISQQNSTPGVNGISVIHTQAHASGLQQVPQLVPAGPGGGGKAVAPSKQSKKSSPMDRNSDEYRQRRERNNMA
VKKSRLKSKQKAQDTLQRVNQLKEENERLEAKIKLLTKELSVLKDLFLEHAHNLADNVQSISTENTTADGDNAGQ

FIGURE 6127

GCGGTGGTGGACACGTCGAGCCGGGTAGAAGTGGAGGGGCCGTTCGAAGAGTCGTGAGGGGGTGACGGGTTAAGA
TTCGGAGAGAGAGGTGCTAGTGGCTGGACTTGACCTGGAAAGAATCTTCTGCTGACTCTCAACTTTTCCTGGAAA
AAATGGATCATTCCCACCATATGGGGATGAGCTATATGGACTCCAACAGTACCATGCAACCTTCTCACCATCACC
CAACCACTTCAGCCTCACACTCCCATGGTGGAGGAGACAGCAGCATGATGATGATGCCTATGACCTTCTACTTTG
GCTTTAAGAATGTGGAACTACTGTTTTCCGGTTTGGTGATCAATACAGCTGGAGAAATGGCTGGAGCTTTTGTGG
CAGTGTTTTTACTAGCAATGTTCTATGAAGGACTCAAGATAGCCCGAGAGAGCCTGCTGCGTAAGTCACAAGTCA
GCATTCGCTACAATTCCATGCCTGTCCCAGGACCAAATGGAACCATCCTTATGGAGACACACAAAACTGTTGGGC
AACAGATGCTGAGCTTTCCTCACCTCCTGCAAACAGTGCTGCACATCATCCAGGTGGTCATAAGCTACTTCCTCA
TGCTCATCTTCATGACCTACAACGGGTACCTCTGCATTGCAGTAGCAGCAGGGGCCGGTACAGGATACTTCCTCT
TCAGCTGGAAGAAGGCAGTGGTAGTGGATATCACAGAGCATTGCCATTGACATCAAACTCTATGGCGTGGCCTTA
TCGATTGCAGTGGGAAGTTGTTGAAGACTTGAAGACGTGATTCCTGCTCCAATCATCCCTTCTTGCTCCTCTTTG
TGCACGTACACACACACACACACACACACACACACACACACACACCCCTGCTCAACAGAGGTTTAGTTTACAGTCTC
TGAACTAAAGTAGTAACCTCCCAAATTGTTTTTTCTAATAAGCTGAGATTCCCATTTCTCTTAAGGAGAAGCCAC
CCATGAGATGTCTTTTCCTTCTCCATCATCTTAGAGCCAAGTTATATGTTCTTGTCTAATCCATGTAGCTTTTTG
TTCAATGACTTGATCATCTGCTTCCTTTTTGAATTTTTAACAGATAGTAAGTAAATTTGGTGGTTTTTTCCCCTG
GGTCAGTGATGGAAAGGGGTTAACTTCAGCCAGGATTGATGGCAGCTGAGGGAAATTCTTGCCCAACTAAACCCA
GAACTCAAACTTAACATTAGAAAATAAGGTCCAGGGCCGGACACAGTGGCCCATGCCTGTAATCCCAGCACTTTG
GGGGGCCAAGGCAGGCTGGATCACCTGAGGACAGGAGTTCGAGACCAGTCTGGCCAACATGGGGAAACCCCGTCT
CTACTAAAAATACAAAAATTAGCCGGGCATGGTGGTGGGCGCCTGTAATCCCAGCTACTCAGAAGGCTGAGGCAG
GAGAATCACTTGAACCTAGGAGGCGGAGGTTGCAGTGAGCCAAGATGGCGCCATTGCACTCCAGCCTGGGTGACA
AGAGTGAAACTCCATCTCAAAAAAAAAGAAAAGAAGGTCCAGCTTTTGGATTCAATGAGTGGGAAATACATTGTG
CCTTTCTCTAGATGTGATACGTTATACCAAAATCTTTGTAGTGTGCAGAGCGGTGGTTTGAGACTAAATACAGGC
TTAGAACTTGCAGAGTGTGTATTCTTGGATGGCTGATGCATCGACTTGCATTCCCACTTAACACTTTGATTAGCC
ATGAACTTGCCAATCAAAAAATGACAATCAATTTGAGAAAATAGAAATAGATATTTTTAAATAAAACCATTCACA
GTTT

FIGURE 6128

MDHSHHMGMSYMDSNSTMQPSHHHPTTSASHSHGGGDSSMMMMPMTFYFGFKNVELLFSGLVINTAGEMAGAFVA
VFLLAMFYEGLKIARESLLRKSQVSIRYNSMPVPGPNGTILMETHKTVGQQMLSFPHLLQTVLHIIQVVISYFLM
LIFMTYNGYLCIAVAAGAGTGYFLFSWKKAVVVDITEHCH

FIGURE 6129

ATGACCATGGAAACAGTTGAATCCCAGCATGATGGAAGTATAACAGCTTCTTTGACAGAGAGCAAGTCTGCTCAT
GTGCAGACTCAGACTGGGCAAATTTCAATCCCTGCTTTAGCTCAGTGCAGTGAGCTGAGATCAGGCACCAGAAGA
GGCTCCCCAGCTGTAACTCTAGTGCAGTTACCTTCGGGCCAAACTATACATGTCCAGGGAGTAATTCAGACACCA
CAGCCATGGGTTATTCAGTCATCAGAAATACACACCGTTCAGGTAGCAGCAATTGCAGAGACAGATGAATCTGCA
GAATCAGAAGGTGTAATTGATTCTCATAAACGTAGAGAAATCCTTTCACGAAGACCCTCTTATAGGAAAATACTG
AATGAACTGTCCTCTGATGTGCCTGGTGTTCCCAAGATTGAAGAAGAGAGATCAGAGGAAGAAGGAACACCACCT
AGTATTGCTACCATGGCAGTACCAACTAGCATATATCAGACTAGCACGGGGCAATACATTGCTATAGCCCAAGGT
GGAACAATCCAGATTTCTAACCCAGGATCTGATGGTGTTCAGGGACTGCAGGCATTAACAATGACAAATTCAGGA
GCTCCTCCACCAGGTGCTACAATTGTACAGTACGCAGCACAATCAGCTGATGGCACACAGCAGTTCTTTGTCCCA
GGCAGCCAGGTTGTTGTTCAAGCTGCCACTGGTGACATGCCAACTTACCAGATCCGAGCTCCTACTGCTGCTTTG
CCACAGGGAGTGGTGATGGCTGCATCGCCCGGAAGTTTGCACAGTCCCCAGCAGCTGGCAGAAGAAGCAACACGC
AAACGAGAGCTGAGGCTAATGAAAAACAGGGAAGCTGCCAAAGAATGTCGACGTCGAAAGAAAGAATATGTAAAA
TGCCTGGAGAGCCGAGTTGCAGTGCTGGAAGTCCAGAACAAGAAGCTTATAGAGGAACTTGAAACCTTGAAAGAC
ATTTGTTCTCCCAAAACTGATTACTAGAAATATTTAACTATGAACTGATTACAGA

FIGURE 6130

MTMETVESQHDGSITASLTESKSAHVQTQTGQISIPALAQCSELRSGTRRGSPAVTLVQLPSGQTIHVQGVIQTP
QPWVIQSSEIHTVQVAAIAETDESAESEGVIDSHKRREILSRRPSYRKILNELSSDVPGVPKIEEERSEEEGTPP
SIATMAVPTSIYQTSTGQYIAIAQGGTIQISNPGSDGVQGLQALTMTNSGAPPPGATIVQYAAQSADGTQQFFVP
GSQVVVQAATGDMPTYQIRAPTAALPQGVVMAASPGSLHSPQQLAEEATRKRELRLMKNREAAKECRRRKKEYVK
CLESRVAVLEVQNKKLIEELETLKDICSPKTDY

FIGURE 6131

GGAAATGACTGCTGTCCATGCAGGCAACATAAACTTCAAGTGGGATCCTAAAAGTCTAGAGATCAGGACTCTGGC
AGTTGAGAGACTGTTGGAGCCTCTTGTTACACAGGTTACAACCCTTGTAAACACCAATAGTAAAGGGCCCTCTAA
TAAGAAGAGAGGTCGTTCTAAGAAGGCCCATGTTTTGGCTGCATCTGTTGAACAAGCAACTGAGAATTTCTTGGA
GAAGGGGGATAAAATTGCAAAAGAGAGCCAGTTTCTCAAGGAGGAGCTTGTGGTTGCTGTAGAAGATGTTCGAAA
ACAAGGTGATTTGATGAAGGCTGCTGCTGGAGAGTTCGCAGATGATCCCTGCTCTTCTGTGAAGCGAGGCAACAT
GGTTCGGGCAGCTCGAGCTTTGCTCTCTGCTGTTACCCGGTTGCTCATTTTGGCTGACATGGCAGATGTCTACAA
ATTACTTGTTCAGCTGAAAGTTGTGGAAGATGGTATATTGAAACTGAGGAATGCTGGCAATGAACAAGACTTAGG
GAATCAGTATAAAGCCCTAAAACCTGAAGTGGATAAGCTGAACATTATGGCAGCAAAAAGACAACAGGAATTGAA
AGATGTTGGGCATCGTGATCAGATGGCTGCGGCTAGAGGAATCCTGCAGAGCAACGTTCCGATCCTCTATACTGC
ATCCCAGGCATGCCTACAGCACCCTGATGTCGCAGCCTATAAGGCCAACAGGGACCTGATATACAAGCAGCTGCA
GCAGGCGGTCACAGGGATTTCCAATGCAGCCCAGGCCACTGCCTCAGACGATGCCTCACAGCACCAGGGTGGAGG
AGGAGGAGAACTGGCATATGCACTCAATAACTTTGACAAACAAATCATTGTGGACCCCTTGAGCTTCAGCGAGGA
GCGCTTTAGGCCTTCCCTGGAGGAGCGTCTGGAAAGCATCATTAGTGGGGCTGCCTTGATGGCCGACTCGTCCTG
CACGCGTGATGACCGTCGTGAGCGAATTGTGGCAGAGTGTAATGCTGTCCGCCAGGCCTGCAGGACCTGCGTTTC
GGAGTACATGGGCAATGCTGGACGTAAAGAAAGAAGTGATGCACTCAATTCTGCAATAGATAAAATGACCAAGAA
GACCAGGGACTTGCGTAGACAGCTTCGCAAAGCTGTCATGGACCACGTTTCAGATTCTTTCCTGGAAACCAATGT
TCCACTTTTGGTATTGATTGAAGCTGCAAAGAATGGAAATGAGAAAGAAGTTAAGGAATATGCCCAAGTTTTCCG
TGAACATGCCAACAAATTGATTGAGGTTGCCAACTTGGCCTGTTCCATCTCAAATAATGAAGAAGGTGTAAAGCT
TGTTCGAATGTCTGCAAGCCAGTTAGAAGCCGGTTGTCCTCAGGTTATTAATGCTGCAACCTGGGCTTTAGCACC
AAAACCACAGAGTAAACTGGCCCAAGAGAACATGGATCTTTTTAAAGAACAATGGGAAAAACAAGTCCGTGTTCT
CACAGATGCTGTCGATGACATTACTTCCATTGATGACTTCTTGGCTGTCTCAGAGAATCACATTTTGGAAGATGT
GAACAAATGTGTCATTGCTCTCCAAGAGAAGGATGTGGATGGCCTGGACCGCACAGCTGGTGCAATTCGAGGCCG
GGCAGCCCGGGTCATTCACGTAGTCACCTCAGAGATGGACAACTATGAGCCAGGAGTCTACACAGAGAAGGTTCT
GGAAGCCACTAAGCTGCTCTCCAACACAGTCATGCCACGTTTTACTGAGCAAGTAGAAGCAGCCGTGGAAGCCCT
CAGCTCGGACCCTGCCCAGCCCATGGATGAGAATGAGTTTATCGATGCTTCCCGCCTGGTATATGATGGCATCCG
GGACATCAGGAAAGCAGTGCTGATGATAAGGACCCCTGAGGAGTTGGATGACTCTGACTTTGAGACAGAGGATTT
TGATGTCAGAAGCGAGACGAGCGTCCAGACAGAAGACGATCAGCTGATAGCTGGCCAGAGTGCCCGGGCGATCAT
GGCTCAGCTTCCCCAGGAGCAAAAAGCGAAGATTCGGGAACAGGTGGCCAGCTTCCAGGAAGAAAAGAGCAAGCT
GGATGCTGAAGTGTCCAAATGGGACGACAGTGGCAATGACATCATTGTGCTGGCCAAGCAGATGTGCATGATTAT
GATGGAGATGACAGACTTTACCCGAGGTAAAGGACCACTCAAAAATACATCGGATGTCATCAGTGCTGCCAAGAA
AATTGCTGAGGCAGGATCCAGGATGGACAAGCTTGGCCGGACCATTCGAGACCATTGCCCCGACTCGGCTTGCAA
GCAGGACCTGCTGGCCTACCTGCAACGCATCGCCCTCTACTGCCACCAGCTGAACATCTGCAGCAAGGTCAAGGC
CGAGGTGCAGAATCTCGGCGGGGAGCTTGTTGTCTCTGGGGTGGACAGCGCCATGTCCCTGATCCAGGCAGCCAA
GAACTTGATGAATGCTGTGGTGCAGACAGTGAAGGCATCCTACGTCGCCTCTACCAAATACCAAAAGTCACAGGG
TATGGCTTCCCTCAACCTTCCTGCTGTGTCAATGAAGATGAAGGCACCAGAGAAAAAGCCATTGGTGAAGAGAGA
GAAACAGGATGAGACACAGACCAAGATTAAACGGGCATCTCAGAAGAAGCACGTGAACCCAGTGCAGGCCCTCAG
CGAGTTCAAAGCTATGGACAGCATCTAAGTCTGCCCAGGCCGGCCGCCCCCACCCCTCTGGCTCCTGAATATCAG
TCACTGTTCGTCACTCAAATGAATTTGCTAAATACAACACTGATACTAGATTCCACAGGGAAATGGGCAGACTGA
ACCAGTCCAGGTGGTGAATTTTCCAAGAACATAGTTTAAGTTGATTAAAAATGCTTTTAGAATGCAGGAGCCTAC
TTCTAGCTGTATTTTTTGTATGCTTAAATAAAATAAAATTCATAACCAAGAGATCCACATTAGCTTGTTAGTAAT
GCTCTGACCAAGCCGAGATGCCATTCTCTTAGTGATGGCGGCGTTAGGTTTGAGAGAAGGAATTGGCTCAACTTC
AGTTGAGAGGGTGCAGTCCAGACAGCTTGACTGCTTTTAAATGACCAAAGATGACCTGTGGTAAGCAACCTGGCA
TCTTAGGAAGCAGTCCTTGAGAAGGCATGTTCCAGAAAGGTCTCTGAGGACAAACTCACTCAGTAAAACATAATG
TATCATGAAGAAAACTGATTCTCTATGACATGAAATGAAAATTTTAATGCATTGTTATAATTACTAATGTACGCT
GCTGCAGGACATTAATAAAGTTGCTTTTTTAGGCTACAGTGTCTCGATGCCATAATCAGAACACACTTTTTTTCC
TCTTTCTCCCAGCTTCAAATGCACAATTCATCATTGGGCTCACTTCTAATAACTGCAGTGTTTCCGCCTTGCGTT
GCAG

FIGURE 6132

MTAVHAGNINFKWDPKSLEIRTLAVERLLEPLVTQVTTLVNTNSKGPSNKKRGRSKKAHVLAASVEQATENFLEK
GDKIAKESQFLKEELVVAVEDVRKQGDLMKAAAGEFADDPCSSVKRGNMVRAARALLSAVTRLLILADMADVYKL
LVQLKVVEDGILKLRNAGNEQDLGNQYKALKPEVDKLNIMAAKRQQELKDVGHRDQMAAARGILQSNVPILYTAS
QACLQHPDVAAYKANRDLIYKQLQQAVTGISNAAQATASDDASQHQGGGGGELAYALNNFDKQIIVDPLSFSEER
FRPSLEERLESIISGAALMADSSCTRDDRRERIVAECNAVRQACRTCVSEYMGNAGRKERSDALNSAIDKMTKKT
RDLRRQLRKAVMDHVSDSFLETNVPLLVLIEAAKNGNEKEVKEYAQVFREHANKLIEVANLACSISNNEEGVKLV
RMSASQLEAGCPQVINAATWALAPKPQSKLAQENMDLFKEQWEKQVRVLTDAVDDITSIDDFLAVSENHILEDVN
KCVIALQEKDVDGLDRTAGAIRGRAARVIHVVTSEMDNYEPGVYTEKVLEATKLLSNTVMPRFTEQVEAAVEALS
SDPAQPMDENEFIDASRLVYDGIRDIRKAVLMIRTPEELDDSDFETEDFDVRSETSVQTEDDQLIAGQSARAIMA
QLPQEQKAKIREQVASFQEEKSKLDAEVSKWDDSGNDIIVLAKQMCMIMMEMTDFTRGKGPLKNTSDVISAAKKI
AEAGSRMDKLGRTIRDHCPDSACKQDLLAYLQRIALYCHQLNICSKVKAEVQNLGGELVVSGVDSAMSLIQAAKN
LMNAVVQTVKASYVASTKYQKSQGMASLNLPAVSMKMKAPEKKPLVKREKQDETQTKIKRASQKKHVNPVQALSE
FKAMDSI

FIGURE 6133

GGCTCCGGCAACCGCTCCGGCAACGCCAACCGCTCCGCTGCGCGCAGGCTGGGCTGCAGGCTCTCGGCTGCAGCG
CTGGGCTGGTGTGCAGTGGTGCGACCACGGCTCACGGCAGCCTCAGCCACCCAGATGTAAGCGATCTGGTTCCCA
CCTCAGCCTCCCGAGTAGTGGATCTAGGATCCGGCTTCCAACATGTGGCAGCTCTGGGCCTCCCTCTGCTGCCTG
CTGGTGTTGGCCAATGCCCGGAGCAGGCCCTCTTTCCATCCCGTGTCGGATGAGCTGGTCAACTATGTCAACAAA
CGGAATACCACGTGGCAGGCCGGGCACAACTTCTACAACGTGGACATGGGCTACTTGAAGAGGCTATGTGGTACC
TTCCTGGGTGGGCCCAAGCCACCCCAGAGAGTTATGTTTACCGAGGACCTGAAGCTGCCTGCAAGCTTCGATGCA
CGGGAACAATGGCCACAGTGTCCCACCATCAAAGAGATCAGAGACCAGGGCTCCTGTGGCTCCTGCTGGGCCTTC
GGGGCTGTGGAAGCCATCTCTGACCGGATCTGCATCCACACCAATGCGCACGTCAGCGTGGAGGTGTCGGCGGAG
GACCTGCTCACCTGCTGTGGCAGCATGTGTGGGGACGGCTGTAATGGTGGCTATCCTGCTGAAGCTTGGAACTTC
TGGACAAGAAAAGGCCTGGTTTCTGGTGGCCTCTATGAATCCCATGTAGGGTGCAGACCGTACTCCATCCCTCCC
TGTGAGCACCACGTCAACGGCTCCCGGCCCCCATGCACGGGGGAGGGAGATACCCCCAAGTGTAGCAAGATCTGT
GAGCCTGGCTACAGCCCGACCTACAAACAGGACAAGCACTACGGATACAATTCCTACAGCGTCTCCAATAGCGAG
AAGGACATCATGGCCGAGATCTACAAAAACGGCCCCGTGGAGGGAGCTTTCTCTGTGTATTCGGACTTCCTGCTC
TACAAGTCAGGAGTGTACCAACACGTCACCGGAGAGATGATGGGTGGCCATGCCATCCGCATCCTGGGCTGGGGA
GTGGAGAATGGCACACCCTACTGGCTGGTTGCCAACTCCTGGAACACTGACTGGGGTGACAATGGCTTCTTTAAA
ATACTCAGAGGACAGGATCACTGTGGAATCGAATCAGAAGTGGTGGCTGGAATTCCACGCACCGATCAGTACTGG
GAAAAGATCTAATCTGCCGTGGGCCTGTCGTGCCAGTCCTGGGGGCGAGATCGGGGTAGAAATGCATTTTATTCT
TTAAGTTCACGTAAGATACAAGTTTCAGACAGGGTCTGAAGGACTGGATTGGCCAAACATCAGACCTGTCTTCCA
AGGAGACCAAGTCCTGGCTACATCCCAGCCTGTGGTTACAGTGCAGACAGGCCATGTGAGCCACCGCTGCCAGCA
CAGAGCGTCCTTCCCCCTGTAGACTAGTGCCGTAGGGAGTACCTGCTGCCCCAGCTGACTGTGGCCCCCTCCGTG
ATCCATCCATCTCCAGGGAGCAAGACAGAGACGCAGGAATGGAAAGCGGAGTTCCTAACAGGATGAAACTTCCCC
CATCAGTTCCCCCAGTACCTCCAAGCAAGTAGCTTTCCACATTTGTCACAGAAATCAGAGGAGAGATGGTGTTGG
GAGCCCTTTGGAGAACGCCAGTCTCCCAGGCCCCCTGCATCTATCGAGTTTGCAATGTCACAACCTCTCTGATCT
TGTGCTCAGCATGATTCTTTAATAGAAGTTTTATTTTTTCGTGCACTCTGCTAATCATGTGGGTGAGCCAGTGGA
ACAGCGGGAGACCTGTGCTAGTTTTACAGATTGCCTCCTAATGACGCGGCTCAAAAGGAAACCAAGTGGTCAGGA
GTTGTTTCTGACCCACTGATCTCTACTACCACAAGGAAAATAGTTTAGGAGAAACCAGCTTTTACTGTTTTTGAA
AAATTACAGCTTCACCCTGTCAAGTTAACAAGGAATGCCTGTGCCAATAAAAGGTTTCTCCAAAAAAAAAAAAAA
AAAA

FIGURE 6134

MWQLWASLCCLLVLANARSRPSFHPVSDELVNYVNKRNTTWQAGHNFYNVDMGYLKRLCGTFLGGPKPPQRVMFT
EDLKLPASFDAREQWPQCPTIKEIRDQGSCGSCWAFGAVEAISDRICIHTNAHVSVEVSAEDLLTCCGSMCGDGC
NGGYPAEAWNFWTRKGLVSGGLYESHVGCRPYSIPPCEHHVNGSRPPCTGEGDTPKCSKICEPGYSPTYKQDKHY
GYNSYSVSNSEKDIMAEIYKNGPVEGAFSVYSDFLLYKSGVYQHVTGEMMGGHAIRILGWGVENGTPYWLVANSW
NTDWGDNGFFKILRGQDHCGIESEVVAGIPRTDQYWEKI

FIGURE 6135

AGAACCGCGACCTCCGCAACCTTGAGCGGCATCCGTGGAGTGCGCCTGCAGCTACGACCGCAGCAGGAAAGCGCC
GCCGGCCAGGCCCAGCTGTGGCCGGACAGGGACTGGAAGAGAGGACGCGGTCGAGTAGGTGTGCACCAGCCCTGG
CAACGAGAGCGTCTACCCCGAACTCTGCTGGCCTTGAGGTGGGGAAGCCGGGGAGGGCAGTTGAGGACCCCGCGG
AGGCGCGTGACTGGTTGAGCGGGCAGGCCAGCCTCCGAGCCGGGTGGACACAGGTTTTAAAACATGAATCCTACA
CTCATCCTTGCTGCCTTTTGCCTGGGAATTGCCTCAGCTACTCTAACATTTGATCACAGTTTAGAGGCACAGTGG
ACCAAGTGGAAGGCGATGCACAACAGATTATACGGCATGAATGAAGAAGGATGGAGGAGAGCAGTGTGGGAGAAG
AACATGAAGATGATTGAACTGCACAATCAGGAATACAGGGAAGGGAAACACAGCTTCACAATGGCCATGAACGCC
TTTGGAGACATGACCAGTGAAGAATTCAGGCAGGTGATGAATGGCTTTCAAAACCGTAAGCCCAGGAAGGGGAAA
GTGTTCCAGGAACCTCTGTTTTATGAGGCCCCCAGATCTGTGGATTGGAGAGAGAAAGGCTACGTGACTCCTGTG
AAGAATCAGGGTCAGTGTGGTTCTTGTTGGGCTTTTAGTGCTACTGGTGCTCTTGAAGGACAGATGTTCCGGAAA
ACTGGGAGGCTTATCTCACTGAGTGAGCAGAATCTGGTAGACTGCTCTGGGCCTCAAGGCAATGAAGGCTGCAAT
GGTGGCCTAATGGATTATGCTTTCCAGTATGTTCAGGATAATGGAGGCCTGGACTCTGAGGAATCCTATCCATAT
GAGGCAACAGAAGAATCCTGTAAGTACAATCCCAAGTATTCTGTTGCTAATGACACCGGCTTTGTGGACATCCCT
AAGCAGGAGAAGGCCCTGATGAAGGCAGTTGCAACTGTGGGGCCCATTTCTGTTGCTATTGATGCAGGTCATGAG
TCCTTCCTGTTCTATAAAGAAGGCATTTATTTTGAGCCAGACTGTAGCAGTGAAGACATGGATCATGGTGTGCTG
GTGGTTGGCTACGGATTTGAAAGCACAGAATCAGATAACAATAAATATTGGCTGGTGAAGAACAGCTGGGGTGAA
GAATGGGGCATGGGTGGCTACGTAAAGATGGCCAAAGACCGGAGAAACCATTGTGGAATTGCCTCAGCAGCCAGC
TACCCCACTGTGTGAGCTGGTGGACGGTGATGAGGAAGGACTTGACTGGGGATGGCGCATGCATGGGAGGAATTC
ATCTTCAGTCTACCAGCCCCCGCTGTGTCGGATACACACTCGAATCATTGAAGATCCGAGTGTGATTTGAATTCT
GTGATATTTTCACACTGGTAAATGTTACCTCTATTTTAATTACTGCTATAAATAGGTTTATATTATTGATTCACT
TACTGACTTTGCATTTTCGTTTTTAAAAGGATGTATAAATTTTTACCTGTTTAAATAAAATTTAATTTCAAATGT

FIGURE 6136

MNPTLILAAFCLGIASATLTFDHSLEAQWTKWKAMHNRLYGMNEEGWRRAVWEKNMKMIELHNQEYREGKHSFTM
AMNAFGDMTSEEFRQVMNGFQNRKPRKGKVFQEPLFYEAPRSVDWREKGYVTPVKNQGQCGSCWAFSATGALEGQ
MFRKTGRLISLSEQNLVDCSGPQGNEGCNGGLMDYAFQYVQDNGGLDSEESYPYEATEESCKYNPKYSVANDTGF
VDIPKQEKALMKAVATVGPISVAIDAGHESFLFYKEGIYFEPDCSSEDMDHGVLVVGYGFESTESDNNKYWLVKN
SWGEEWGMGGYVKMAKDRRNHCGIASAASYPTV

FIGURE 6137

GTCTGCCCTCTCTGCTCGCCCTGCCTAGCTTGAGGATCTGTCACCCCAGCCATGAGGATTATCGCCCTCCTCGCT
GCTATTCTCTTGGTAGCCCTCCAGGTCCGGGCAGGCCCACTCCAGGCAAGAGGTGATGAGGCTCCAGGCCAGGAG
CAGCGTGGGCCAGAAGACCAGGACATATCTATTTCCTTTGCATGGGATAAAAGCTCTGCTCTTCAGGTTTCAGGC
TCAACAAGGGGCATGGTCTGCTCTTGCAGATTAGTATTCTGCCGGCGAACAGAACTTCGTGTTGGGAACTGCCTC
ATTGGTGGTGTGAGTTTCACATACTGCTGCACGCGTGTCGATTAACGTTCTGCTGTCCAAGAGAATGTCATGCTG
GGAACGCCATCATCGGTGGTGTTAGCTTCACATGCTTCTGCAGCTGAGCTTGCAGAATAGAGAAAAATGAGCTCA
TAATTTGCTTTGAGAGCTACAGGAAATGGTTGTTTCTCCTATACTTTGTCCTTAACATCTTTCTTGATCCTAAAT
ATATATCTCGTAACAAG

6845/8433

FIGURE 6138

MRIIALLAAILLVALQVRAGPLQARGDEAPGQEQRGPEDQDISISFAWDKSSALQVSGSTRGMVCSCRLVFCRRT
ELRVGNCLIGGVSFTYCCTRVD

6846/8433

FIGURE 6139

GCAGTTCTGGTCCTCCTAGGAGCGGCCGCCTGCGCGGCGCGGCCCCGTGGTCGGATGCTGGGCGGCAGAGAGGCC
GAGGCGCACGCGCGGCCCTACATGGCGTCGGTGCAGCTGAACGGCGCGCACCTGTGCGCAGGCGTCCTGGTGGCG
GAGCGGTGGGTGCTGAGCGCGGCGCACTGCCTGGAGGACGCGGCCGACGGGAAGGTGCAGGTTCTCCTGGGCGCG
CACTCCCTGTCGCAGCCGGAGCCCTCCAAGCGCCTGTACGACGTGCTCCGCGCAGTGCCCCACCCGGACAGCCAG
CCCGACACCATCGACCACGACCTCCTGCTGCTACAGCTGTCGGAGAAGGCCACACTGGGCCCTGCTGTGCGCCCC
CTGCCCTGGCAGCGCGTGGACCGCGACGTGGCACCGGGAACTCTCTGCGACGTGGCCGGCTGGGGCATAGTCAAC
CACGCGGGCCGCCGCCCGGACAGCCTGCAGCACGTGCTCTTGCCAGTGCTGGACCGCGCCACCTGCAACCGGCGC
ACGCACCACGACGGCGCCATCACCGAGCGCTTGATGTGCGCGGAGAGCAATCGCCGGGACAGCTGCAAGGGTGAC
TCCGGGGGCCCGCTGGTGTGCGGGGGCGTGCTCGAGGGCGTGGTCACCTCGGGCTCGCGCGTTTGCGGCAACCGC
AAGAAGCCCGGGATCTACACCCGCGTGGCGAGCTATGCGGCCTGGATCGACAGCGTCCTGGCCTAGGGTGCCGGG
GCCTGAAGGTCAGGGTCACCCAAGCAACAAAGTCCCGAGCAATGAAGTCATCCACTCCTGCATCTGGTTGGTCTT
TATTGAGCACCTACTATATGCAGAAGGGGAGGCCGAGGTGGGAGGATCATTGGATCTCAGGAGTTGGAGATCAGC
ATGGGCCACGTAGCGCGACTCCATCTCTACAAATAAATAAAAATTAGCTGGGCAATTGGCGGGCATGGAGGTGGG
TGCTTGTAGTTCCAGCTACTCAGGAGGCTGAGGTGGGAGGATGACTTGAACGCAGGAGGCTGAGGCTGCAGTGAG
TTGTGATTGCACCACTGCCCT

FIGURE 6140

MLGGREAEAHARPYMASVQLNGAHLCAGVLVAERWVLSAAHCLEDAADGKVQVLLGAHSLSQPEPSKRLYDVLRA
VPHPDSQPDTIDHDLLLLQLSEKATLGPAVRPLPWQRVDRDVAPGTLCDVAGWGIVNHAGRRPDSLQHVLLPVLD
RATCNRRTHHDGAITERLMCAESNRRDSCKGDSGGPLVCGGVLEGVVTSGSRVCGNRKKPGIYTRVASYAAWIDS
VLA

FIGURE 6141

CGCGCGTCTCCGCCGCCCGCGTGACTTCTGCCTGCGCTCCTTCTCTGAACGCTCACTTCCGAGGAGACGCCGACG
ATGAAGACACCGTGGAAGATTCTTCTGGGACTGCTGGGTGCTGCTGCGCTTGTCACCATCATCACCGTGCCCGTG
GTTCTGCTGAACAAAGGCACAGATGATGCTACAGCTGACAGTCGCAAAACTTACACTCTAACTGATTACTTAAAA
AATACTTATAGACTGAAGTTATACTCCTTAAGATGGATTTCAGATCATGAATATCTCTACAAACAAGAAAATAAT
ATCTTGGTATTCAATGCTGAATATGGAAACAGCTCAGTTTTCTTGGAGAACAGTACATTTGATGAGTTTGGACAT
TCTATCAATGATTATTCAATATCTCCTGATGGGCAGTTTATTCTCTTAGAATACAACTACGTGAAGCAATGGAGG
CATTCCTACACAGCTTCATATGACATTTATGATTTAAATAAAAGGCAGCTGATTACAGAAGAGAGGATTCCAAAC
AACACACAGTGGGTCACATGGTCACCAGTGGGTCATAAATTGGCATATGTTTGGAACAATGACATTTATGTTAAA
ATTGAACCAAATTTACCAAGTTACAGAATCACATGGACGGGGAAAGAAGATATAATATATAATGGAATAACTGAC
TGGGTTTATGAAGAGGAAGTCTTCAGTGCCTACTCTGCTCTGTGGTGGTCTCCAAACGGCACTTTTTTAGCATAT
GCCCAATTTAACGACACAGAAGTCCCACTTATTGAATACTCCTTCTACTCTGATGAGTCACTGCAGTACCCAAAG
ACTGTACGGGTTCCATATCCAAAGGCAGGAGCTGTGAATCCAACTGTAAAGTTCTTTGTTGTAAATACAGACTCT
CTCAGCTCAGTCACCAATGCAACTTCCATACAAATCACTGCTCCTGCTTCTATGTTGATAGGGGATCACTACTTG
TGTGATGTGACATGGGCAACACAAGAAAGAATTTCTTTGCAGTGGCTCAGGAGGATTCAGAACTATTCGGTCATG
GATATTTGTGACTATGATGAATCCAGTGGAAGATGGAACTGCTTAGTGGCACGGCAACACATTGAAATGAGTACT
ACTGGCTGGGTTGGAAGATTTAGGCCTTCAGAACCTCATTTTACCCTTGATGGTAATAGCTTCTACAAGATCATC
AGCAATGAAGAAGGTTACAGACACATTTGCTATTTCCAAATAGATAAAAAAGACTGCACATTTATTACAAAAGGC
ACCTGGGAAGTCATCGGGATAGAAGCTCTAACCAGTGATTATCTATACTACATTAGTAATGAATATAAAGGAATG
CCAGGAGGAAGGAATCTTTATAAAATCCAACTTATTGACTATACAAAAGTGACATGCCTCAGTTGTGAGCTGAAT
CCGGAAAGGTGTCAGTACTATTCTGTGTCATTCAGTAAAGAGGCGAAGTATTATCAGCTGAGATGTTCCGGTCCT
GGTCTGCCCCTCTATACTCTACACAGCAGCGTGAATGATAAAGGGCTGAGAGTCCTGGAAGACAATTCAGCTTTG
GATAAAATGCTGCAGAATGTCCAGATGCCCTCCAAAAAACTGGACTTCATTATTTTGAATGAAACAAAATTTTGG
TATCAGATGATCTTGCCTCCTCATTTTGATAAATCCAAGAAATATCCTCTACTATTAGATGTGTATGCAGGCCCA
TGTAGTCAAAAAGCAGACACTGTCTTCAGACTGAACTGGGCCACTTACCTTGCAAGCACAGAAAACATTATAGTA
GCTAGCTTTGATGGCAGAGGAAGTGGTTACCAAGGAGATAAGATCATGCATGCAATCAACAGAAGACTGGGAACA
TTTGAAGTTGAAGATCAAATTGAAGCAGCCAGACAATTTTCAAAAATGGGATTTGTGGACAACAAACGAATTGCA
ATTTGGGGCTGGTCATATGGAGGGTACGTAACCTCAATGGTCCTGGGATCGGGAAGTGGCGTGTTCAAGTGTGGA
ATAGCCGTGGCGCCTGTATCCCGGTGGGAGTACTATGACTCAGTGTACACAGAACGTTACATGGGTCTCCCAACT
CCAGAAGACAACCTTGACCATTACAGAAATTCAACAGTCATGAGCAGAGCTGAAAATTTTAAACAAGTTGAGTAC
CTCCTTATTCATGGAACAGCAGATGATAACGTTCACTTTCAGCAGTCAGCTCAGATCTCCAAAGCCCTGGTCGAT
GTTGGAGTGGATTTCCAGGCAATGTGGTATACTGATGAAGACCATGGAATAGCTAGCAGCACAGCACACCAACAT
ATATATACCCACATGAGCCACTTCATAAAACAATGTTTCTCTTTACCTTAGCACCTCAAAATACCATGCCATTTA
AAGCTTATTAAAACTCATTTTTGTTTTCATTATCTCAAAACTGCACTGTCAAGATGATGATGATCTTTAAAATAC
ACACTCAAATCAAGAAACTTAAGGTTACCTTTGTTCCCAAATTTCATACCTATCATCTTAAGTAGGGACTTCTGT
CTTCACAACAGATTATTACCTTACAGAAGTTTGAATTATCCGGTCGGGTTTTATTGTTTAAAATCATTTCTGCAT
CAGCTGCTGAAACAACAAATAGGAATTGTTTTTATGGAGGCTTTGCATAGATTCCCTGAGCAGGATTTTAATCTT
TTTCTAACTGGACTGGTTCAAATGTTGTTCTCTTCTTTAAAGGGATGGCAAGATGTGGGCAGTGATGTCACTAGG
GCAGGGACAGGATAAGAGGGATTAGGGAGAGAAGATAGCAGGGCATGGCTGGGAACCCAAGTCCAAGCATACCAA
CACGAGCAGGCTACTGTCAGCTCCCCTCGGAGAAGAGCTGTTCACCACGAGACTGGCACAGTTTTCTGAGAAAGA
CTATTCAAACAGTCTCAGGAAATCAAATATCGAAAGCACTGACTTCTAAGTAAACCACAGCAGTTGAAAGACTCC
AAAGAAATGTAAGGGAAACTGCCAGCAACGCAGCCCCCAGGTGCCAGTTATGGCTATAGGTGCTACAAAAACACA
GCAAGGGTGATGGGAAAGCATTGTAAATGTGCTTTTAAAAAAAAATACTGATGTTCCTAGTGAAAGAGGCAGCTT
GAAACTGAGATGTGAACACATCAGCTTGCCCTGTTAAAAGATGAAAATATTTGTATCACAAATCTTAACTTGAAG
GAGTCCTTGCATCAATTTTTCTTATTTCATTTCTTTGAGTGTCTTAATTAAAAGAATATTTTAACTTCCTTGGAC
TCATTTTAAAAAATGGAACATAAAATACAATGTTATGTATTATTATTCCCATTCTACATACTATGGAATTTCTCC
CAGTCATTTAATAAATGTGCCTTCATTTTTTC

FIGURE 6142

MKTPWKILLGLLGAAALVTIITVPVVLLNKGTDDATADSRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENN
ILVFNAEYGNSSVFLENSTFDEFGHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPN
NTQWVTWSPVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSPNGTFLAY
AQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSSVTNATSIQITAPASMLIGDHYL
CDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWNCLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKII
SNEEGYRHICYFQIDKKDCTFITKGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLIDYTKVTCLSCELN
PERCQYYSVSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFIILNETKFW
YQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASFDGRGSGYQGDKIMHAINRRLGT
FEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSMVLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPT
PEDNLDHYRNSTVMSRAENFKQVEYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQH
IYTHMSHFIKQCFSLP

FIGURE 6143

CGGGGGGGCCCGACCACCGCGGGGCCGGGACGCGATGGCGGCGGCAGAGCCCGCGAGCTCGGGCCAGCAGGCGCC
GGCAGGGCAGGGGCAGGGCCAGCGGCCGCCGCCGCAGCCTCCGCAGGCGCAAGCCCCGCAGCCGCCCCCGCCGCC
GCAGCTCGGGGGCGCGGGGGGCGGCAGCAGCAGGCACGAGAAGAGCCTGGGGCTGCTCACTACCAAGTTCGTGTC
GCTGCTGCAGGAGGCCAAGGACGGCGTTCTGGATCTCAAAGCGGCTGCTGATACTTTGGCTGTGAGGCAAAAAAG
GAGAATTTATGATATCACCAATGTCTTAGAGGGAATTGACTTGATTGAAAAAAAGTCAAAAAACAGTATCCAGTG
GAAAGGTGTAGGTGCTGGCTGTAATACTAAAGAAGTCATAGATAGATTAAGATATCTTAAAGCTGAAATTGAAGA
TCTAGAACTGAAGGAAAGAGAACTTGATCAGCAGAAGTTGTTGCTACAGCAAAGCATCAAAAATGTGATGGACGA
TTCCATTAATAATAGATTTTCCTATGTAACTCATGAAGACATCTGTAATTGCTTTAATGGTGATACACTTTTGGC
CATTCAGGCACCTTCTGGTACACAACTGGAGGTACCCATTCCAGAAATGGGTCAGAATGGACAAAAGAAATACCA
GATCAATCTAAAGAGTCATTCAGGACCTATCCATGTGCTGCTTATAAATAAAGAGTCGAGTTCATCTAAGCCCGT
GGTTTTTCCTGTTCCCCCACCTGATGACCTCACACAGCCTTCCTCCCAGTCCTTGACTCCAGTGACTCCACAGAA
ATCCAGCATGGCAACTCAAAATCTGCCTGAGCAACATGTCTCTGAAAGAAGCCAGGCTCTGCAGCAGACATCAGC
TACAGATATATCTTCAGCAGGATCTATTAGTGGAGATATCATTGATGAGTTAATGTCTTCTGACGTGTTTCCTCT
CTTAAGGCTTTCTCCTACCCCGGCAGATGACTACAACTTTAATTTAGATGATAACGAAGGAGTTTGTGATCTGTT
TGATGTCCAGATACTAAATTATTAGATTCCATGGAAACTTGGGACTGTTATCTACCTCTAACTGTGTAACATTTT
AGACTTCTTAATAACCTAAATATTTAAAATAATGAATGTAACACCTTTTTTAGTTCACTGATTCTGAAGTGTTCT
TCCCTAATACTTTCTTTACTTCACAAAACTTCAACCATAAAAACAAAGGGCTCTGATTGCTTTAGGGGATAAGTG
ATTTAATATTCACAAACGTCCCCACTCCCAAAAGTAACTATATTCTGGATTTCAACTTTTCTTCTAATTGTGAAT
CCTTCCGTTTTTTCTTCTTAAGGAGGAAAGTTAAAGGACACTACAGGTCATCAAAAACAAGTTGGCCAAGGACTC
ATTACTTGTCTTATATTTTTACTGCCACTAAACTGCCTGTATTTCTGTATGTCCTTCTATCCAAACAGACGTTCA
CTGCCACTTGTAAAGTGAAGGATGTAAACGAGGATATATAACTGTTTCAGTGAACAGATTTTGTGAAGTGCCTTC
TGTTTTAGCACTTTAAGTTTATCACATTTTGTTGACTTCTGACATTCCACTTTCCTAGGTTATAGGAAAGATCTG
TTTATGTAGTTTGTTTTTAAAATGTGCCAATGCCTGTACATTAACAGATTTTTAAAAATAAAATTGTATAAAACA
TTAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6144

MAAAEPASSGQQAPAGQGQGQRPPPQPPQAQAPQPPPPPQLGGAGGGSSRHEKSLGLLTTKFVSLLQEAKDGVLD
LKAAADTLAVRQKRRIYDITNVLEGIDLIEKKSKNSIQWKGVGAGCNTKEVIDRLRYLKAEIEDLELKERELDQQ
KLLLQQSIKNVMDDSINNRFSYVTHEDICNCFNGDTLLAIQAPSGTQLEVPIPEMGQNGQKKYQINLKSHSGPIH
VLLINKESSSSKPVVFPVPPPDDLTQPSSQSLTPVTPQKSSMATQNLPEQHVSERSQALQQTSATDISSAGSISG
DIIDELMSSDVFPLLRLSPTPADDYNFNLDDNEGVCDLFDVQILNY

FIGURE 6145

ATGAGTCAGCAGCGGCCGGCGAGGAAGTTACCCAGTCTCCTCCTGGACCCGACGGAGGAGACGGTTCGCCGTCGG
TGCCGAGACCCCATCAACGTGGAGGGCCTGCTGCCATCAAAAATAAGGATTAATTTAGAAGATAATGTACAATAT
GTGTCCATGAGAAAAGCTCTAAAAGTGAAGAGACCTCGTTTTGATGTATCGCTGGTTTATTTAACTCGAAAATTT
ATGGATCTTGTCAGATCTGCTCCCGGGGGTATTCTTGACTTAAACAAGGTTGCAACGAAACTGGGAGTCCGAAAG
CGGAGAGTGTATGACATCACCAATGTCTTAGATGGAATCGACCTCGTTGAAAAGAAATCCAAGAACCATATTAGA
TGGATAGGATCTGATCTTAGCAATTTTGGAGCAGTTCCCCAACAAAAGAAGCTACAGGAGGAACTTTCTGACTTA
TCAGCAATGGAAGATGCTTTGGATGAGTTAATTAAGGATTGTGCTCAGCAGCTGTTTGAGTTAACAGATGACAAA
GAAAATGAAAGACTAGCATATGTGACCTATCAAGACATTCATAGCATTCAGGCCTTCCATGAACAGATCGTCATT
GCAGTTAAAGCTCCAGCAGAAACCAGATTGGATGTTCCAGCTCCCAGAGAAGACTCTATCACAGTGCACATAAGG
AGCACCAACGGACCTATCGATGTCTATTTGTGTGAAGTGGAGCAGGGTCAGACCAGTAACAAAAGGTCTGAAGGT
GTCGGGACCTCTTCATCTGAGAGCACTCATCCAGAAGGCCCTGAGGAAGAAGAAAATCCTCAGCAAAGTGAAGAA
TTGCTTGAAGTAAGCAACTGATGGCATTTGAGAATTTATGTATCACTGAGTTTTTTGGGAATATCTTCGTGGAGA
ATTACGCATCAAATTTGATTCTCAGAGCAATAAATTATCCATGAAGTGCTCTCGTTCTCAGTAGCGGCATCATGG
CCAGTAGTGTCTTTGAGGAGTTCACCACTTAGATTACTGAGTAATTGTGGTTTCCACATTTGAAAACAACTCCTT
TTATAATTATTCACTGCTTTTTGTCAGTGAAATAGACATCTTGCCTCCTCAAGTAGCTTCATCACAGAGTGTCAT
GAAGACAGACAGTCAGGCTGAAATGGACAGTTCTTTGTGGACTCTACCCTTCCCTTCAAGGAGTATGTCATATAT
CACAAAAGAAATTGCCTTACACTGGTTCACGTTTGCAGTTACCTGTTGTACATTGCATAGATGTACACACGAATT
TAAATGTGATGTCTTTGTATATATCTGTATAATGTTGAGATTACTTACGAAATATGTCTGAGTGACACTTTTCAC
CCTTGTACAGCCAAAATAATGTATATATGGAAAGTGACAGACAAATTCTCTAATCTCTTTGGTATCTATAACTTA
TTAGAATCCTCTGGATGAGGGTTAGAAGAGACTTTTTCCAAACTTCTACATGTAGAAGTATCATAAATGTGCTAC
ACATTTATGTTTGTGGATTTAATTAAAGTATTTTAATATGGTTTTCAGTGCTAAAATTGGAGTCAGATACTTCTT
GGTTTTAAGCTGTCTACCTAATTGCTGTCTCCCAGCAGACTGGTGGCATGCCCAGTGGCTTTGGGGGCAAGGATA
GAAATGCCATCAGGAAATAGCTGAATTCATTGTGAAACATGAATTCAGTCATGGTGATAATTGGAAACTCCTTTC
AGGTTTTTGCAAGTAGATTTTGTAATGTTTGTGTATGCAGCCTTGCTGTTGAGTCAGTCCAAGGGGTTTTACTTA
GGACAAGTTGTACCTTGCCCTCTCTCCAGCTCTGCTCCCACATTTTCACATACCTAGCTGTTTCTACCTCATTGG
GTAACTCATTTACCACTCTGTGCCTCAGTTTACTCTGTAGTTTACCATTAGACTGTGAGCTCCTTGAGGGACTTT
GTCATAATCACTGTTACATCCCAGTGCCTCACACCATGCCTGGCCCTTAAGAAGTGCTCAATAAATGTCTGAACA
AATAAAAAAAAAAAAAAA

FIGURE 6146

MSQQRPARKLPSLLLDPTEETVRRRCRDPINVEGLLPSKIRINLEDNVQYVSMRKALKVKRPRFDVSLVYLTRKF
MDLVRSAPGGILDLNKVATKLGVRKRRVYDITNVLDGIDLVEKKSKNHIRWIGSDLSNFGAVPQQKKLQEELSDL
SAMEDALDELIKDCAQQLFELTDDKENERLAYVTYQDIHSIQAFHEQIVIAVKAPAETRLDVPAPREDSITVHIR
STNGPIDVYLCEVEQGQTSNKRSEGVGTSSSESTHPEGPEEEENPQQSEELLEVSN

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FIGURE 6147

GCCCCGCCGCCGGCAGTGGACCGCTGTGCGCGAACCCTGAACCCTACGGTCCCGACCCGCGGGCGAGGCCGGGTA
CCTGGGCTGGGATCCGGAGCAAGCGGGCGAGGGCAGCGCCCTAAGCAGGCCCGGAGCGATGGCAGCCTTGATGAC
CCCGGGAACCGGGGCCCCACCCGCGCCTGGTGACTTCTCCGGGGAAGGGAGCCAGGGACTTCCCGACCCTTCGCC
AGAGCCCAAGCAGCTCCCGGAGCTGATCCGCATGAAGCGAGACGGAGGCCGCCTGAGCGAAGCGGACATCAGGGG
CTTCGTGGCCGCTGTGGTGAATGGGAGCGCGCAGGGCGCACAGATCGGGGCCATGCTGATGGCCATCCGACTTCG
GGGCATGGATCTGGAGGAGACCTCGGTGCTGACCCAGGCCCTGGCTCAGTCGGGACAGCAGCTGGAGTGGCCAGA
GGCCTGGCGCCAGCAGCTTGTGGACAAGCATTCCACAGGGGGTGTGGGTGACAAGGTCAGCCTGGTCCTCGCACC
TGCCCTGGCGGCATGTGGCTGCAAGGTGCCAATGATCAGCGGACGTGGTCTGGGGCACACAGGAGGCACCTTGGA
TAAGCTGGAGTCTATTCCTGGATTCAATGTCATCCAGAGCCCAGAGCAGATGCAAGTGCTGCTGGACCAGGCGGG
CTGCTGTATCGTGGGTCAGAGTGAGCAGCTGGTTCCTGCGGACGGAATCCTATATGCAGCCAGAGATGTGACAGC
CACCGTGGACAGCCTGCCACTCATCACAGCCTCCATTCTCAGTAAGAAACTCGTGGAGGGGCTGTCCGCTCTGGT
GGTGGACGTTAAGTTCGGAGGGGCCGCCGTCTTCCCCAACCAGGAGCAGGCCCGGGAGCTGGCAAAGACGCTGGT
TGGCGTGGGAGCCAGCCTAGGGCTTCGGGTCGCGGCAGCGCTGACCGCCATGGACAAGCCCCTGGGTCGCTGCGT
GGGCCACGCCCTGGAGGTGGAGGAGGCGCTGCTCTGCATGGACGGCGCAGGCCCGCCAGACTTAAGGGACCTGGT
CACCACGCTCGGGGGCGCCCTGCTCTGGCTCAGCGGACACGCGGGGACTCAGGCTCAGGGCGCTGCCCGGGTGGC
CGCGGCGCTGGACGACGGCTCGGCCCTTGGCCGCTTCGAGCGGATGCTGGCGGCGCAGGGCGTGGATCCCGGTCT
GGCCCGAGCCCTGTGCTCGGGAAGTCCCGCAGAACGCCGGCAGCTGCTGCCTCGCGCCCGGGAGCAGGAGGAGCT
GCTGGCGCCCGCAGATGGCACCGTGGAGCTGGTCCGGGCGCTGCCGCTGGCGCTGGTGCTGCACGAGCTCGGGGC
CGGGCGCAGCCGCGCTGGGGAGCCGCTCCGCCTGGGGGTGGGCGCAGAGCTGCTGGTCGACGTGGGTCAGAGGCT
GCGCCGTGGGACCCCCTGGCTCCGCGTGCACCGGGACGGCCCCGCGCTCAGCGGCCCGCAGAGCCGCGCCCTGCA
GGAGGCGCTCGTACTCTCCGACCGCGCGCCATTCGCCGCCCCCTCGCCCTTCGCAGAGCTCGTTCTGCCGCCGCA
GCAATAAAGCTCCTTTGCCGCGAAA

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FIGURE 6148

MAALMTPGTGAPPAPGDFSGEGSQGLPDPSPEPKQLPELIRMKRDGGRLSEADIRGFVAAVVNGSAQGAQIGAML
MAIRLRGMDLEETSVLTQALAQSGQQLEWPEAWRQQLVDKHSTGGVGDKVSLVLAPALAACGCKVPMISGRGLGH
TGGTLDKLESIPGFNVIQSPEQMQVLLDQAGCCIVGQSEQLVPADGILYAARDVTATVDSLPLITASILSKKLVE
GLSALVVDVKFGGAAVFPNQEQARELAKTLVGVGASLGLRVAAALTAMDKPLGRCVGHALEVEEALLCMDGAGPP
DLRDLVTTLGGALLWLSGHAGTQAQGAARVAAALDDGSALGRFERMLAAQGVDPGLARALCSGSPAERRQLLPRA
REQEELLAPADGTVELVRALPLALVLHELGAGRSRAGEPLRLGVGAELLVDVGQRLRRGTPWLRVHRDGPALSGP
QSRALQEALVLSDRAPFAAPSPFAELVLPPQQ

FIGURE 6149

GGGATCAGTCTTCCCGCGTCCGCCGATTCCTCCTCCTTGGTCGCCGCGTCCTTGGCTGGCGTCAGAAAAATGGCT
ACAAACTTCCTAGCACATGAGAAGATCTGGTTCGACAAGTTCAAATATGACGACGCAGAAAGGAGATTCTACGAG
CAGATGAACGGGCCTGTGCGAGGTGCCTCCCGCCAGGAGAACGGCGCCACGGTGATCCTCCGTGACATTGCGAGA
GCCAGAGAGAACATCCAGAAATCCCTGGCTGGAAGCTCAGGCCCCGGGGCCTCCAGCGGCACCAGCGGAGACCAC
GGTGAGCTCGTCGTCCGGATTGCCAGTCTGGAAGTGGAGAACCAGAGTCTGCGTGGCGTGGTACAGGAGCTGCAG
CAGGCCATCTCCAAGCTGGAGGCCCGGCTGAACGTGCTGGAGAAGAGCTCGCCTGGCCACCGGGCCACGGCCCCA
CAGACCCAGCACGTATCTCCCATGCGCCAAGTGGAGCCCCCAGCCAAGAAGCCAGCCACACCAGCAGAGGATGAC
GAGGATGATGACATTGACCTGTTTGGCAGTGACAATGAGGAGGAGGACAAGGAGGCGGCACAGCTGCGGGAGGAG
CGGCTACGGCAGTACGCGGAGAAGAAGGCCAAGAAGCCTGCACTGGTGGCCAAGTCCTCCATCCTGCTGGATGTC
AAGCCTTGGGATGATGAGACGGACATGGCCCAGCTGGAGGCCTGTGTGCGCTCTATCCAGCTGGACGGGCTGGTC
TGGGGGGCTTCCAAGCTGGTGCCCGTGGGCTACGGTATCCGGAAGCTACAGATTCAGTGTGTGGTGGAGGACGAC
AAGGTGGGGACAGACTTGCTGGAGGAGGAGATCACCAAGTTTGAGGAGCACGTGCAGAGTGTCGATATCGCAGCT
TTCAACAAGATCTGAAGCCTGAGTGTGTGTACGTGCGCGCGTGCGTGAGGGCCCTGCCACGATTAAAGACTGAGA
CCGGCAAAAAAAAAAA

FIGURE 6150

MATNFLAHEKIWFDKFKYDDAERRFYEQMNGPVRGASRQENGATVILRDIARARENIQKSLAGSSGPGASSGTSG
DHGELVVRIASLEVENQSLRGVVQELQQAISKLEARLNVLEKSSPGHRATAPQTQHVSPMRQVEPPAKKPATPAE
DDEDDDIDLFGSDNEEEDKEAAQLREERLRQYAEKKAKKPALVAKSSILLDVKPWDDETDMAQLEACVRSIQLDG
LVWGASKLVPVGYGIRKLQIQCVVEDDKVGTDLLEEEITKFEEHVQSVDIAAFNKI

FIGURE 6151

GCCGCCGCCGCCATCCGCCGCCGCAGCCAGCTTCCGCCGCCGCAGGACCGGCCCCTGCCCCAGCCTCCGCAGCCG
CGGCGCGTCCACGCCCGCCCGCGCCCAGGGCGAGTCGGGGTCGCCGCCTGCACGCTTCTCAGTGTTCCCCGCGCC
CCGCATGTAACCCGGCCAGGCCCCCGCAACTGTGTCCCCTGCAGCTCCAGCCCCGGGCTGCACCCCCCCGCCCCG
ACACCAGCTCTCCAGCCTGCTCGTCCAGGATGGCCGCGGCCAAGGCCGAGATGCAGCTGATGTCCCCGCTGCAGA
TCTCTGACCCGTTCGGATCCTTTCCTCACTCGCCCACCATGGACAACTACCCTAAGCTGGAGGAGATGATGCTGC
TGAGCAACGGGGCTCCCCAGTTCCTCGGCGCCGCCGGGGCCCCAGAGGGCAGCGGCAGCAACAGCAGCAGCAGCA
GCAGCGGGGGCGGTGGAGGCGGCGGGGGCGGCAGCAACAGCAGCAGCAGCAGCAGCACCTTCAACCCTCAGGCGG
ACACGGGCGAGCAGCCCTACGAGCACCTGACCGCAGAGTCTTTTCCTGACATCTCTCTGAACAACGAGAAGGTGC
TGGTGGAGACCAGTTACCCCAGCCAAACCACTCGACTGCCCCCCATCACCTATACTGGCCGCTTTTCCCTGGAGC
CTGCACCCAACAGTGGCAACACCTTGTGGCCCGAGCCCCTCTTCAGCTTGGTCAGTGGCCTAGTGAGCATGACCA
ACCCACCGGCCTCCTCGTCCTCAGCACCATCTCCAGCGGCCTCCTCCGCCTCCGCCTCCCAGAGCCCACCCCTGA
GCTGCGCAGTGCCATCCAACGACAGCAGTCCCATTTACTCAGCGGCACCCACCTTCCCCACGCCGAACACTGACA
TTTTCCCTGAGCCACAAAGCCAGGCCTTCCCGGGCTCGGCAGGGACAGCGCTCCAGTACCCGCCTCCTGCCTACC
CTGCCGCCAAGGGTGGCTTCCAGGTTCCCATGATCCCCGACTACCTGTTTCCACAGCAGCAGGGGGATCTGGGCC
TGGGCACCCCAGACCAGAAGCCCTTCCAGGGCCTGGAGAGCCGCACCCAGCAGCCTTCGCTAACCCCTCTGTCTA
CTATTAAGGCCTTTGCCACTCAGTCGGGCTCCCAGGACCTGAAGGCCCTCAATACCAGCTACCAGTCCCAGCTCA
TCAAACCCAGCCGCATGCGCAAGTACCCCAACCGGCCCAGCAAGACGCCCCCCCACGAACGCCCTTACGCTTGCC
CAGTGGAGTCCTGTGATCGCCGCTTCTCCCGCTCCGACGAGCTCACCCGCCACATCCGCATCCACACAGGCCAGA
AGCCCTTCCAGTGCCGCATCTGCATGCGCAACTTCAGCCGCAGCGACCACCTCACCACCCACATCCGCACCCACA
CAGGCGAAAAGCCCTTCGCCTGCGACATCTGTGGAAGAAAGTTTGCCAGGAGCGATGAACGCAAGAGGCATACCA
AGATCCACTTGCGGCAGAAGGACAAGAAAGCAGACAAAAGTGTTGTGGCCTCTTCGGCCACCTCCTCTCTCTCTT
CCTACCCGTCCCCGGTTGCTACCTCTTACCCGTCCCCGGTTACTACCTCTTATCCATCCCCGGCCACCACCTCAT
ACCCATCCCCTGTGCCCACCTCCTTCTCCTCTCCCGGCTCCTCGACCTACCCATCCCCTGTGCACAGTGGCTTCC
CCTCCCCGTCGGTGGCCACCACGTACTCCTCTGTTCCCCCTGCTTTCCCGGCCCAGGTCAGCAGCTTCCCTTCCT
CAGCTGTCACCAACTCCTTCAGCGCCTCCACAGGGCTTTCGGACATGACAGCAACCTTTTCTCCCAGGACAATTG
AAATTTGCTAAAGGGAAAGGGGAAAGAAAGGGAAAAGGGAGAAAAAGAAACACAAGAGACTTAAAGGACAGGAGG
AGGAGATGGCCATAGGAGAGGAGGGTTCCTCTTAGGTCAGATGGAGGTTCTCAGAGCCAAGTCCTCCCTCTCTAC
TGGAGTGGAAGGTCTATTGGCCAACAATCCTTTCTGCCCACTTCCCCTTCCCCAATTACTATTCCCTTTGACTTC
AGCTGCCTGAAACAGCCATGTCCAAGTTCTTCACCTCTATCCAAAGAACTTGATTTGCATGGATTTTGGATAAAT
CATTTCAGTATCATCTCCATCATATGCCTGACCCCTTGCTCCCTTCAATGCTAGAAAATCGAGTTGGCAAAATGG
GGTTTGGGCCCCTCAGAGCCCTGCCCTGCACCCTTGTACAGTGTCTGTGCCATGGATTTCGTTTTTCTTGGGGTA
CTCTTGATGTGAAGATAATTTGCATATTCTATTGTATTATTTGGAGTTAGGTCCTCACTTGGGGGAAAAAAAAAA
AAAAGAAAAGCCAAGCAAACCAATGGTGATCCTCTATTTTGTGATGATGCTGTGACAATAAGTTTGAACCCTTTT
TTTTGAAACAGCAGTCCCAGTATTCTCAGAGCATGTGTCAGAGTGTTGTTCCGTTAACCTTTTTGTAAATACTGC
TTGACCGTACTCTCACATGTGGCAAAATATGGTTTGGTTTTTCTTTTTTTTTTTTTTTGAAAGTGTTTTTTCTTC
GTCCTTTTGGTTTAAAAAGTTTCACGTCTTGGTGCCTTTTGTGTGATGCGCCTTGCTGATGGCTTGACATGTGCA
ATTGTGAGGGACATGCTCACCTCTAGCCTTAAGGGGGGCAGGGAGTGATGATTTGGGGGAGGCTTTGGGAGCAAA
ATAAGGAAGAGGGCTGAGCTGAGCTTCGGTTCTCCAGAATGTAAGAAAACAAAATCTAAAACAAAATCTGAACTC
TCAAAAGTCTATTTTTTTAACTGAAAATGTAAATTTATAAATATATTCAGGAGTTGGAATGTTGTAGTTACCTAC
TGAGTAGGCGGCGATTTTTGTATGTTATGAACATGCAGTTCATTATTTTGTGGTTCTATTTTACTTTGTACTTGT
GTTTGCTTAAACAAAGTGACTGTTTGGCTTATAAACACATTGAATGCGCTTTATTGCCCATGGGATATGTGGTGT
ATATCCTTCCAAAAAATTAAAACGAAAATAAAGTA

FIGURE 6152

MAAAKAEMQLMSPLQISDPFGSFPHSPTMDNYPKLEEMMLLSNGAPQFLGAAGAPEGSGSNSSSSSSGGGGGGGG
GSNSSSSSSTFNPQADTGEQPYEHLTAESFPDISLNNEKVLVETSYPSQTTRLPPITYTGRFSLEPAPNSGNTLW
PEPLFSLVSGLVSMTNPPASSSSAPSPAASSASASQSPPLSCAVPSNDSSPIYSAAPTFPTPNTDIFPEPQSQAF
PGSAGTALQYPPPAYPAAKGGFQVPMIPDYLFPQQQGDLGLGTPDQKPFQGLESRTQQPSLTPLSTIKAFATQSG
SQDLKALNTSYQSQLIKPSRMRKYPNRPSKTPPHERPYACPVESCDRRFSRSDELTRHIRIHTGQKPFQCRICMR
NFSRSDHLTTHIRTHTGEKPFACDICGRKFARSDERKRHTKIHLRQKDKKADKSVVASSATSSLSSYPSPVATSY
PSPVTTSYPSPATTSYPSPVPTSFSSPGSSTYPSPVHSGFPSPSVATTYSSVPPAFPAQVSSFPSSAVTNSFSAS
TGLSDMTATFSPRTIEIC

FIGURE 6153

GCGCCGCCGTCGCCACCGCCACCGCCACCGCCACTACCACCGTCTGAGTCTGCAGTCCCGAGATCCCAGCCATCA
TGTCCATAGAGAAGATCTGGGCCCGGGAGATCCTGGACTCCCGCGGGAACCCCACAGTGGAGGTGGATCTCTATA
CTGCCAAAGGTCTTTTCCGGGCTGCAGTGCCCAGTGGAGCCTCTACGGGCATCTATGAGGCCCTGGAGCTGAGGG
ATGGAGACAAACAGCGTTACTTAGGCAAAGGTGTCCTGAAGGCAGTGGACCACATCAACTCCACCATCGCGCCAG
CCCTCATCAGCTCAGGTCTCTCTGTGGTGGAGCAAGAGAAACTGGACAACCTGATGCTGGAGTTGGATGGGACTG
AGAACAAATCCAAGTTTGGGGCCAATGCCATCCTGGGTGTGTCTCTGGCCGTGTGTAAGGCAGGGGCAGCTGAGC
GGGAACTGCCCCTGTATCGCCACATTGCTCAGCTGGCCGGGAACTCAGACCTCATCCTGCCTGTGCCGGCCTTCA
ACGTGATCAATGGTGGCTCTCATGCTGGCAACAAGCTGGCCATGCAGGAGTTCATGATCCTCCCAGTGGGAGCTG
AGAGCTTTCGGGATGCCATGCGACTAGGTGCAGAGGTCTACCATACACTCAAGGGAGTCATCAAGGACAAATACG
GCAAGGATGCCACCAATGTGGGGGATGAAGGTGGCTTTGCCCCCAATATCCTGGAGAACAGTGAAGCCTTGGAGC
TGGTGAAGGAAGCCATCGACAAGGCTGGCTACACGGAAAAGATCGTTATTGGCATGGATGTTGCTGCCTCAGAGT
TTTATCGTGATGGCAAATATGACTTGGACTTCAAGTCTCCCACTGATCCTTCCCGATACATCACTGGGGACCAGC
TGGGGGCACTCTACCAGGACTTTGTCAGGGACTATCCTGTGGTCTCCATTGAGGACCCATTTGACCAGGATGATT
GGGCTGCCTGGTCCAAGTTCACAGCCAATGTAGGGATCCAGATTGTGGGTGATGACCTGACAGTGACCAACCCAA
AACGTATTGAGCGGGCAGTGGAAGAAAAGGCCTGCAACTGTCTGCTGCTCAAGGTCAACCAGATCGGCTCGGTCA
CTGAAGCCATCCAAGCGTGCAAGCTGGCCCAGGAGAATGGCTGGGGGGTCATGGTGAGTCATCGCTCAGGAGAGA
CTGAGGACACATTCATTGCTGACCTGGTGGTGGGGCTGTGCACAGGCCAGATCAAGACTGGTGCCCCGTGCCGTT
CTGAACGTCTGGCTAAATACAACCAGCTCATGAGAATTGAGGAAGAGCTGGGGGGATGAAGCTCGCTTTGCCGGAC
ATAACTTCCGTAATCCCAGTGTGCTGTGATTCCTCTGCTTGCCTGGAGACGTGGAACCTCTGTCTCATCCTCCTG
GAACCTTGCTGTCCTGATCTGTGATAGTTCACCCCCTGAGATCCCCTGAGCCCCAGGGTGCCCAGAACTTCCCTG
ATTGACCTGCTCCGCTGCTCCTTGGCTTACCTGACCTCTTGCTGTCTCTGCTCGCCCTCCTTTCTGTGCCCTACT
CATTGGGGTTCCGCACTTTCCACTTCTTCCTTTCTCTTTCTCTCTTCCCTCAGAAACTAGAAATGTGAATGAGGA
TTATTATAAAAGGGGGTCCGTGGAAGAATGATCAGCATCTGTGATGGGAGCGTCAGGGTTGGTGTGCTGAGGTGT
TAGAGAGGGACCATGTGTCACTTGTGCTTTGCTCTTGTCCCACGTGTCTTCCACTTTGCATATGAGCCGTGAACT
GTGCATAGTGCTGGGATGGAGGGGAGTGTTGGGCATGTGATCACGCCTGGCTAATAAGGCTTTAGTGTATTTATT
TATTTATTTATTTTATTTGTTTTTCATTCATCCCATTAATCATTTCCCCATAACTCAATGGCCTAAAACTGGCCT
GACTTGGGGGAACGATGTGTCTGTATTTCATGTGGCTGTAGATCCCAAGATGACTGGGGTGGGAGGTCTTGCTAG
AATGGGAAGGGTCATAGAAAGGGCCTTGACATCAGTTCCTTTGTGTGTACTCACTGAAGCCTGCGTTGGTCCAGA
GCGGAGGCTGTGTGCCTGGGGGAGTTTTCCTCTATACATCTCTCCCCAACCCTAGGTTCCCTGTTCTTCCTCCAG
CTGCACCAGAGCAACCTCTCACTCCCCATGCCACGTTCCACAGTTGCCACCACCTCTGTGGCATTGAAATGAGCA
CCTCCATTAAAGTCTGAATCAGTG

FIGURE 6154

MSIEKIWAREILDSRGNPTVEVDLYTAKGLFRAAVPSGASTGIYEALELRDGDKQRYLGKGVLKAVDHINSTIAP
ALISSGLSVVEQEKLDNLMLELDGTENKSKFGANAILGVSLAVCKAGAAERELPLYRHIAQLAGNSDLILPVPAF
NVINGGSHAGNKLAMQEFMILPVGAESFRDAMRLGAEVYHTLKGVIKDKYGKDATNVGDEGGFAPNILENSEALE
LVKEAIDKAGYTEKIVIGMDVAASEFYRDGKYDLDFKSPTDPSRYITGDQLGALYQDFVRDYPVVSIEDPFDQDD
WAAWSKFTANVGIQIVGDDLTVTNPKRIERAVEEKACNCLLLKVNQIGSVTEAIQACKLAQENGWGVMVSHRSGE
TEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEELGDEARFAGHNFRNPSVL

FIGURE 6155

GGCACGAGGCCGCCCCAGACACAGCGCTCGCCGAGGGTCGCTTGGACCCTGATCTTACCCGTGGGCACCCTGCGC
TCTGCCTGCCGCGAAGACCGGCTCCCCGACCCGCAGAAGTCAGGAGAGAGGGTGAAGCGGAGCAGCCCGAGGCGG
GGCAGCCTCCCGGAGCAGCGCCGCGCAGAGCCCGGGACA**ATG**GGGCCGCGGCGGCTGCTGCTGGTGGCCGCCTGC
TTCAGTCTGTGCGGCCCGCTGTTGTCTGCCCGCACCCGGGCCCGCAGGCCAGAATCAAAAGCAACAAATGCCACC
TTAGATCCCCGGTCATTTCTTCTCAGGAACCCCAATGATAAATATGAACCATTTTGGGAGGATGAGGAGAAAAAT
GAAAGTGGGTTAACTGAATACAGATTAGTCTCCATCAATAAAAGCAGTCCTCTTCAAAAACAACTTCCTGCATTC
ATCTCAGAAGATGCCTCCGGATATTTGACCAGCTCCTGGCTGACACTCTTTGTCCCATCTGTGTACACCGGAGTG
TTTGTAGTCAGCCTCCCACTAAACATCATGGCCATCGTTGTGTTCATCCTGAAAATGAAGGTCAAGAAGCCGGCG
GTGGTGTACATGCTGCACCTGGCCACGGCAGATGTGCTGTTTGTGTCTGTGCTCCCCTTTAAGATCAGCTATTAC
TTTTCCGGCAGTGATTGGCAGTTTGGGTCTGAATTGTGTCGCTTCGTCACTGCAGCATTTTACTGTAACATGTAC
GCCTCTATCTTGCTCATGACAGTCATAAGCATTGACCGGTTTCTGGCTGTGGTGTATCCCATGCAGTCCCTCTCC
TGGCGTACTCTGGGAAGGGCTTCCTTCACTTGTCTGGCCATCTGGGCTTTGGCCATCGCAGGGGTAGTGCCTCTG
CTCCTCAAGGAGCAAACCATCCAGGTGCCCGGGCTCAACATCACTACCTGTCATGATGTGCTCAATGAAACCCTG
CTCGAAGGCTACTATGCCTACTACTTCTCAGCCTTCTCTGCTGTCTTCTTTTTTGTGCCGCTGATCATTTCCACG
GTCTGTTATGTGTCTATCATTCGATGTCTTAGCTCTTCCGCAGTTGCCAACCGCAGCAAGAAGTCCCGGGCTTTG
TTCCTGTCAGCTGCTGTTTTCTGCATCTTCATCATTTGCTTCGGACCCACAAACGTCCTCCTGATTGTGCATTAC
TCATTCCTTTCTCACACTTCCACCACAGAGGCTGCCTACTTTGCCTACCTCCTCTGTGTCTGTGTCAGCAGCATA
AGCTGCTGCATCGACCCCCTAATTTACTATTACGCTTCCTCTGAGTGCCAGAGGTACGTCTACAGTATCTTATGC
TGCAAAGAAAGTTCCGATCCCAGCAGTTATAACAGCAGTGGGCAGTTGATGGCAAGTAAAATGGATACCTGCTCT
AGTAACCTGAATAACAGCATATACAAAAAGCTGTTAACT**TAG**GAAAAGGGACTGCTGGGAGGTTAAAAAGAAAAG
TTTATAAAAGTGAATAACCTGAGGATTCTATTAGTCCCCACCCAAACTTTATTGATTCACCTCCTAAAACAACAG
ATGTACGACTTGCATACCTGCTTTTTATGGGAGCTGTCAAGCATGTATTTTTGTCAATTACCAGAAAGATAACAG
GACGAGATGACGGTGTTATTCCAAGGGAATATTGCCAATGCTACAGTAATAAATGAATGTCACTTCTGGATATAG
CTAGGTGACATATACATACTTACATGTGTGTATATGTAGATGTATGCACACACATATATTATTTGCAGTGCAGTA
TAGAATAGGCACTTTAAAACACTCTTTCCCCGCACCCCAGCAATTATGAAAATAATCTCTGATTCCCTGATTTAA
TATGCAAAGTCTAGGTTGGTAGAGTTTAGCCCTGAACATTTCATGGTGTTCATCAACAGTGAGAGACTCCATAGT
TTGGGCTTGTACCACTTTTGCAAATAAGTGTATTTTGAAATTGTTTGACGGCAAGGTTTAAGTTATTAAGAGGTA
AGACTTAGTACTATCTGTGCGTAGAAGTTCTAGTGTTTTCAATTTTAAACATATCCAAGTTTGAATTCCTAAAAT
TATGGAAACAGATGAAAAGCCTCTGTTTTGATATGGGTAGTATTTTTTACATTTTACACACTGTACACATAAGCC
AAAACTGAGCATAAGTCCTCTAGTGAATGTAGGCTGGCTTTCAGAGTAGGCTATTCCTGAGAGCTGCATGTGTCC
GCCCCCGATGGAGGACTCCAGGCAGCAGACACATGCCAGGGCCATGTCAGACACAGATTGGCCAGAAACCTTCCT
GCTGAGCCTCACAGCAGTGAGACTGGGGCCACTACATTTGCTCCATCCTCCTGGGATTGGCTGTGAACTGATCAT
GTTTATGAGAAACTGGCAAAGCAGAATGTGATATCCTAGGAGGTAATGACCATGAAAGACTTCTCTACCCATCTT
AAAAACAACGAAAGAAGGCATGGACTTCTGGATGCCCATCCACTGGGTGTAAACACATCTAGTAGTTGTTCTGAA
ATGTCAGTTCTGATATGGAAGCACCCATTATGCGCTGTGGCCACTCCAATAGGTGCTGAGTGTACAGAGTGGAAT
AAGACAGAGACCTGCCCTCAAGAGCAAAGTAGATCATGCATAGAGTGTGATGTATGTGTAATAAATATGTTTCAC
ACAAACAAGGCCTGTCAGCTAAAGAAGTTTGAACATTTGGGTTACTATTTCTTGTGGTTATAACTTAATGAAAAC
AATGCAGTACAGGACATATATTTTTTAAAATAAGTCTGATTTAATTGGGCACTATTTATTTACAAATGTTTTGCT
CAATAGATTGCTCAAATCAGGTTTTCTTTTAAGAATCAATCATGTCAGTCTGCTTAGAAATAACAGAAGAAAATA
GAATTGACATTGAAATCTAGGAAAATTATTCTATAATTTCCATTTACTTAAGACTTAATGAGACTTTAAAAGCAT
TTTTTAACCTCCTAAGTATCAAGTATAGAAAATCTTCATGGAATTCACAAAGTAATTTGGAAATTAGGTTGAAAC
ATATCTCTTATCTTACGAAAAAATGGTAGCATTTTAAACAAAATAGAAAGTTGCAAGGCAAATGTTTATTTAAAA
GAGCAGGCCAGGCGCGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCTGAGGCGGGTGGATCACGAGGTC
AGGAGATCGAGACCATCCTGGCTAACACGGTGAAACCCGTCTCTACTAAAAATGCAAAAAAAATTAGCCGGGCGT
GGTGGCAGGCACCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCAGGAGACTGGCGTGAACCCAGGAGGCGGACCT
TGTAGTGAGCCGAGATCGCGCCACTGTGCTCCAGCCTGGGCAACAGAGCAAGACTCCATCTCAAAAAATAAAAAT
AAATAAAAAATAAAAAAAAAAAAAAAAA

FIGURE 6156

MGPRRLLLVAACFSLCGPLLSARTRARRPESKATNATLDPRSFLLRNPNDKYEPFWEDEEKNESGLTEYRLVSIN
KSSPLQKQLPAFISEDASGYLTSSWLTLFVPSVYTGVFVVSLPLNIMAIVVFILKMKVKKPAVVYMLHLATADVL
FVSVLPFKISYYFSGSDWQFGSELCRFVTAAFYCNMYASILLMTVISIDRFLAVVYPMQSLSWRTLGRASFTCLA
IWALAIAGVVPLLLKEQTIQVPGLNITTCHDVLNETLLEGYYAYYFSAFSAVFFFVPLIISTVCYVSIIRCLSSS
AVANRSKKSRALFLSAAVFCIFIICFGPTNVLLIVHYSFLSHTSTTEAAYFAYLLCVCVSSISCCIDPLIYYYAS
SECQRYVYSILCCKESSDPSSYNSSGQLMASKMDTCSSNLNNSIYKKLLT

FIGURE 6157

CTGAGTGGAGCCACC**ATG**GCCCGGGGGCTCGCTGTCCTGCTAGTCTTGTTCCTGCATATCAAGAACCTGCCTGCC
CAGGCTGCGGACACATGTCCAGAGGTGAAGGTGGTGGGCCTGGAGGGCTCTGACAAGCTCACCATTCTCCGAGGC
TGCCCGGGGCTGCCCGGGGCCCCAGGGCCAAAGGGAGAGGCAGGTGTCATTGGAGAGAGAGGAGAACGCGGTCTC
CCTGGAGCCCCTGGAAAGGCAGGACCAGTGGGGCCCAAAGGAGACCGAGGAGAGAAGGGGATGCGTGGAGAGAAA
GGAGACGCTGGGCAGTCTCAGTCGTGTGCGACAGGCCCACGCAACTGCAAGGACCTGCTAGACCGGGGGTATTTC
CTGAGCGGCTGGCACACCATCTACCTGCCCGACTGCCGGCCCCTGACTGTGCTCTGTGACATGGACACGGACGGA
GGGGGCTGGACCGTTTTCCAGCGGAGGATGGATGGCTCTGTGGACTTCTATCGGGACTGGGCCGCATACAAGCAG
GGCTTCGGCAGTCAGCTGGGGGAGTTCTGGCTGGGGAACGACAACATCCACGCCCTGACTGCCCAGGGAAGCAGC
GAGCTCCGTGTAGACCTGGTGGACTTTGAGGGCAACCACCAGTTTGCTAAGTACAAATCATTCAAGGTGGCTGAC
GAGGCAGAGAAGTACAAGCTGGTACTGGGAGCCTTTGTCGGGGGCAGTGCGGGTAATTCTCTAACGGGCCACAAC
AACAACTTCTTCTCCACCAAAGACCAAGACAATGATGTGAGTTCTTCGAATTGTGCTGAGAAGTTCCAGGGAGCC
TGGTGGTACGCCGACTGTCATGCTTCAAACCTCAATGGTCTCTACCTCATGGGACCCCATGAGAGCTATGCCAAT
GGTATCAACTGGAGTGCGGCGAAGGGGTACAAATATAGCTACAAGGTGTCAGAGATGAAGGTGCGGCCCGCC**TAG**

ACGGGCCAGGACCCCTCCACATGCACCTGCTAGTGGGGAGGCCACACCCACAAGCGCTGCGTCGTGGAAGTCACC
CCATTTCCCCAGCCAGACACACTCCCATGACGCCCACAGCTGCCCCTTTGCCCCCAGCTCAGTCAAGCCGCCACA
TGCCCACAACCTCACCAGAGGGAGAATTATGTTTCTAAATATGTTTACTTTGGGACAGAAAAAAAAAAA

FIGURE 6158

MARGLAVLLVLFLHIKNLPAQAADTCPEVKVVGLEGSDKLTILRGCPGLPGAPGPKGEAGVIGERGERGLPGAPG
KAGPVGPKGDRGEKGMRGEKGDAGQSQSCATGPRNCKDLLDRGYFLSGWHTIYLPDCRPLTVLCDMDTDGGGWTV
FQRRMDGSVDFYRDWAAYKQGFGSQLGEFWLGNDNIHALTAQGSSELRVDLVDFEGNHQFAKYKSFKVADEAEKY
KLVLGAFVGGSAGNSLTGHNNNFFSTKDQDNDVSSSNCAEKFQGAWWYADCHASNLNGLYLMGPHESYANGINWS
AAKGYKYSYKVSEMKVRPA

FIGURE 6159

GAATTCCCAAACGTGCACAGGGGAGTGAGGGCAGGGCGCTCGCAGGGGGCACGCAGGGAGGGCCCAGGGCGCCAG
GGAGGCCGCGCCGGGCTAATCCGAAGGGGCTGCGAGGTCAGGCTGTAACCGGGTCAATGTGTGGAATATTGGGGG
GCTCGGCTGCAGACTTGGCCAAATGGACGGGACTATTAAGGAGGCTCTGTCGGTGGTGAGCGACGACCAGTCCCT
CTTTGACTCAGCGTACGGAGCGGCAGCCCATCTCCCCAAGGCCGACATGACTGCCTCGGGGAGTCCTGACTACGG
GCAGCCCCACAAGATCAACCCCCTCCCACCACAGCAGGAGTGGATCAATCAGCCAGTGAGGGTCAACGTCAAGCG
GGAGTATGACCACATGAATGGATCCAGGGAGTCTCCGGTGGACTGCAGCGTTAGCAAATGCAGCAAGCTGGTGGG
CGGAGGCGAGTCCAACCCCATGAACTACAACAGCTATATGGACGAGAAGAATGGCCCCCCTCCTCCCAACATGAC
CACCAACGAGAGGAGAGTCATCGTCCCCGCAGACCCCACACTGTGGACACAGGAGCATGTGAGGCAATGGCTGGA
GTGGGCCATAAAGGAGTACAGCTTGATGGAGATCGACACATCCTTTTTCCAGAACATGGATGGCAAGGAACTGTG
TAAAATGAACAAGGAGGACTTCCTCCGCGCCACCACCCTCTACAACACGGAAGTGCTGTTGTCACACCTCAGTTA
CCTCAGGGAAAGTTCACTGCTGGCCTATAATACAACCTCCCACACCGACCAATCCTCACGATTGAGTGTCAAAGA
AGACCCTTCTTATGACTCAGTCAGAAGAGGAGCTTGGGGCAATAACATGAATTCTGGCCTCAACAAAAGTCCTCC
CCTTGGAGGGGCACAAACGATCAGTAAGAATACAGAGCAACGGCCCCAGCCAGATCCGTATCAGATCCTGGGCCC
GACCAGCAGTCGCCTAGCCAACCCTGGAAGCGGGCAGATCCAGCTGTGGCAATTCCTCCTGGAGCTGCTCTCCGA
CAGCGCCAACGCCAGCTGTATCACCTGGGAGGGGACCAACGGGGAGTTCAAAATGACGGACCCCGATGAGGTGGC
CAGGCGCTGGGGCGAGCGGAAAAGCAAGCCCAACATGAATTACGACAAGCTGAGCCGGGCCCTCCGTTATTACTA
TGATAAAAACATTATGACCAAAGTGCACGGCAAAAGATATGCTTACAAATTTGACTTCCACGGCATTGCCCAGGC
TCTGCAGCCACATCCGACCGAGTCGTCCATGTACAAGTACCCTTCTGACATCTCCTACATGCCTTCCTACCATGC
CCACCAGCAGAAGGTGAACTTTGTCCCTCCCCATCCATCCTCCATGCCTGTCACTTCCTCCAGCTTCTTTGGAGC
CGCATCACAATACTGGACCTCCCCCACGGGGGGAATCTACCCCAACCCCAACGTCCCCCGCCATCCTAACACCCA
CGTGCCTTCACACTTAGGCAGCTACTACTAGAAGCTTCTTCTAGCTGAAGCCCATCCTGCACACTTACTGGATGC
TTTGGACTCAACAGGACATATGTGGCCTTGAAGGGAAGACAAAACTGGATGTTCTTTCTTGTTGGATAGAACCTT
TGTATTTGTTCTTTAAAAACATTTTTTTTAATGTTGGTAACTTTTGCTTCCTCTACCTGAACAAAGAGATGAATA
ATTCCATGGGCCAGTATGCCAGTTTGAATTCTCAGTCTCCTAGCATCTTGTGAGTTGCATATTAAGATTACTGGA
ATGGTTAAGTCATGGTTCTGAGAAAGAAGCTGTACGTTTTCTTTATGTTTTTATGACCAAAGCAGTTTCTTGTCA
ATACACGGGGTTCAGTATGACACAGAATCATGGACTTAACCCGTCATGTTCTGGTTTGAGATTTAGTGACAAATA
GAGGTGGGAAGCTTATAATCTAATTTTAGGAGGACCAAATTCAGCGGATGGCAACTGGAACATTGATTGTAAGGC
CAGTGAAGTTTTCACCCAACTGGAATTTGATGGAAAGAAGGTTTGTGTGTTTAAGACGCCAAGGGCATTGCAGAA
TCCCTCTCAGTGGACAGTATGCACTCAGCTGACCACTCTCTCTAGAAATAGTCAAGATATGAACTAAGAAATTTT
AATGCAAATACATACATTCCTGAAAGACGGGGAATTAAATTACTAATTTTTTTTTTTTAAATGATGACAGTGGTC
CCAGAACTTGGAAAAGTTGTAGGGATTTCTAAACTCAAGCAGATTCGCAAGTGCTGTGCGCTTGTCAGACCATCA
GACCAGGGCCAACCAATCAGAAGGCAACTTACTGTATAAATTATGCAGAGTTATTTTCCTATATCTCACAGTATT
AAAAAATAAATAATTAAAAATTAAGAATAAATAAACGAGTTGACCTCGGTCACAAAAGCAGTTTTACTATCGAAT
CAATCGCTGTTATTTTTTTTTAATGTAATTTGTACATCTTTTTTCAATCTGTACATTTGGGCTGTCTTGTATGTT
TTTATGCTCCTTTTTAAAAAGCATAATATGCCTATAGCTGAAAAGGAAACAGGGCTGTTTAAGTCACTGACTTAT
GAGAAAGCAAAGCACTGGTACAGTTATTTAACAGGCATACACAAGCAGGGAAAAGATAATCCATTTAGATCTTTA
ATGCTTTGGAAATGCGTGTAACAGTACTGCAATAATCACAGCTCTGGGAAAAACAACGAAACTTTCCCTTGTGGA
GAGGAGGGATTTTCCTGCTCTATATAAGCAACATATTTTTAGACATTAAAATATATATAATTTTGCAGGTAATTG
TTGACTTTTTTAACTATATTAAGTGTTAAGCTGACAACTGTCAAAGAAGACCATGTTGTAAAATAATTTGACTAA
ATAAATGGTTCCTTCTCTCAAAAAAAAAAAAA

FIGURE 6160

MDGTIKEALSVVSDDQSLFDSAYGAAAHLPKADMTASGSPDYGQPHKINPLPPQQEWINQPVRVNVKREYDHMNG
SRESPVDCSVSKCSKLVGGGESNPMNYNSYMDEKNGPPPPNMTTNERRVIVPADPTLWTQEHVRQWLEWAIKEYS
LMEIDTSFFQNMDGKELCKMNKEDFLRATTLYNTEVLLSHLSYLRESSLLAYNTTSHTDQSSRLSVKEDPSYDSV
RRGAWGNNMNSGLNKSPPLGGAQTISKNTEQRPQPDPYQILGPTSSRLANPGSGQIQLWQFLLELLSDSANASCI
TWEGTNGEFKMTDPDEVARRWGERKSKPNMNYDKLSRALRYYYDKNIMTKVHGKRYAYKFDFHGIAQALQPHPTE
SSMYKYPSDISYMPSYHAHQQKVNFVPPHPSSMPVTSSSFFGAASQYWTSPTGGIYPNPNVPRHPNTHVPSHLGS
YY

FIGURE 6161

AGGCGCCCGCCCGCCGCGCGTGATTCTCGCCTCGCCGCAGCCCAGCCCTGCGCGCCTTGCCCGGCGGCCCCCGCC
CGGCCGCTCCGGGCCCCTGGCCCCGCGGAGCGATGCTGCTGCTGGCTGCCGCCTTCCTCGTGGCCTTCGTGCTGC
TGCTGTACATGGTGTCTCCGCTCATCAGCCCCAAGCCCCTCGCCCTGCCCGGGGCGCATGTGGTGGTTACAGGAG
GTTCCAGTGGCATCGGGAAGTGCATTGCTATCGAGTGCTATAAACAAGGAGCTTTTATAACTCTGGTTGCACGAA
ATGAGGATAAGCTGCTGCAGGCAAAGAAAGAAATTGAAATGCACTCTATTAATGACAAACAGGTGGTGCTTTGCA
TATCAGTTGATGTATCTCAAGACTATAACCAAGTAGAGAATGTCATAAAACAAGCACAGGAGAAACTGGGTCCAG
TGGACATGCTGGTAAATTGTGCAGGAATGGCAGTGTCAGGAAAATTTGAAGATCTTGAAGTTAGTACCTTTGAAA
GGTTAATGAGCATCAATTACCTGGGCAGCGTGTACCCCAGCCGGGCCGTGATCACCACCATGAAGGAGCGCCGGG
TGGGCAGGATCGTGTTTGTGTCCTCCCAGGCAGGACAGTTGGGATTATTCGGTTTCACAGCCTACTCTGCATCCA
AGTTTGCCATAAGGGGATTGGCAGAAGCTTTGCAGATGGAGGTGAAGCCATATAATGTCTACATCACAGTTGCTT
ACCCACCAGACACAGACACACCTGGCTTTGCCGAAGAAAACAGAACAAAGCCTTTGGAGACTCGACTTATTTCAG
AGACCACATCTGTGTGCAAACCAGAACAGGTGGCCAAACAAATTGTTAAAGATGCCATACAAGGAAATTTCAACA
GTTCCCTTGGCTCAGATGGGTACATGCTCTCGGCCCTGACCTGTGGGATGGCTCCAGTAACTTCTATTACTGAGG
GGCTCCAGCAGGTGGTCACCATGGGCCTTTTCCGCACTATTGCTTTGTTTTACCTTGGAAGTTTTGACAGCATAG
TTCGTCGCTGCATGATGCAGAGAGAAAAATCTGAAAATGCAGACAAAACTGCCTAATCTTCTTACCCCTTGGAAG
AAGACTGTTTCCAAATAATTTGAACAGCTTGCTGCTAAATGGGACCCAATTTTTGGCCTATAGACACTTATGTAT
TGTTTTCGAATACGTCAGATTGGACCAGTGCTCTTCAGGAATGTGGCTGCAAGCAAGGGGCTAGAAGTTCACCTC
CTGACAGTATTATTAATACTATGCAAATATGGAATAGGAGACCATTTGATTTTCTAGGCTTTGTGGTAGAGAGGT
GAAGGTATGAGAATTAATAGCGTGTGAACAAAGTAAAGAACAGGATTCCAGAATGATCATTAAATTTGTTTCTAT
TTATTCTTTTTTGCCCCCCTAGAGATTAAGTCCAGAAATGTACTTTCTGGCACATAAAGAAATCTTGAGGACTTT
GTTTAAACCTTCCATAAAAAAACAATTTTCGGTTTCTCGGGTTCTCTCTCTCTGTCTCTCTGTCTCTCTGTCTCT
CTGTCTCTCTGTCTCTCTCTCTCTCTCTCTTTCTTTCTTTGTGTATTTTATTCAAGATGAGTTGGACCCATTGCC
AGTGAGTCTGAATGTCACTGACAGCCCTGTGTTGTGCTCAGGACTCACTCTGCTGCTGGTGGAAACTCATGGCTT
CTCTCTCTCTTTGATCCCATAAAGCTACGAGGGGGACGGGAGAGGGCAGTGCAATGGGAAGTAAAGAGATATTTT
CCAGTAGGAAAAGCAATGCTTTCTTGTCTTTAGACTCAAATGCTTAGGGAACGTTTCATTTCTCATTCATGGGGA
AAGGCAGCCTCCTTAAATGTTTTCTGAAGAGCGGTAAAATCTAGAAGCTTAAGAATTTACAGTTCCTTCAATAAC
CATGATGACCTGAAGTTCACCTATCCCATTTTAGCATCTACTTGTTTTTCCCATCTCTTCCTTTCCAATTTTGCT
TATACTGCTGTAATATTTTTGTAAAAAAAAAAAAAAAGGAAAAAAAAGACCAGCTAAAATTTTCGACTTGACTTT
TTAACTTAACTCATGAATTAATTAAAGCAAATGAAAAAATTAAAAAGTGTGACTTTTTCTCGGAGCATATATGTA
GCTTTTAGGAAAGGCTGATGATGGTATAAAGTTTGCTCATTAAGAAAAAAAGACAAGGCTGATTTTGAAGAGAGT
TGCTTTTGAAATAAAATGATCA

FIGURE 6162

MLLLAAAFLVAFVLLLYMVSPLISPKPLALPGAHVVVTGGSSGIGKCIAIECYKQGAFITLVARNEDKLLQAKKE
IEMHSINDKQVVLCISVDVSQDYNQVENVIKQAQEKLGPVDMLVNCAGMAVSGKFEDLEVSTFERLMSINYLGSV
YPSRAVITTMKERRVGRIVFVSSQAGQLGLFGFTAYSASKFAIRGLAEALQMEVKPYNVYITVAYPPDTDTPGFA
EENRTKPLETRLISETTSVCKPEQVAKQIVKDAIQGNFNSSLGSDGYMLSALTCGMAPVTSITEGLQQVVTMGLF
RTIALFYLGSFDSIVRRCMMQREKSENADKTA

FIGURE 6163

GAACCGTTTACTCGCTGCTGTGCCCATCTATCAGCAGGCTCCGGGCTGAAGATTGCTTCTCTTCTCTCCTCCAAG
GTCTAGTGACGGAGCCCGCGCGCGGCGCCACCATGCGGCAGAAGGCGGTATCGCTTTTCTTGTGCTACCTGCTGC
TCTTCACTTGCAGTGGGGTGGAGGCAGGTAAGAAAAAGTGCTCGGAGAGCTCGGACAGCGGCTCCGGGTTCTGGA
AGGCCCTGACCTTCATGGCCGTCGGAGGAGGACTCGCAGTCGCCGGGCTGCCCGCGCTGGGCTTCACCGGCGCCG
GCATCGCGGCCAACTCGGTGGCTGCCTCGCTGATGAGCTGGTCTGCGATCCTGAATGGGGGCGGCGTGCCCGCCG
GGGGGCTAGTGGCCACGCTGCAGAGCCTCGGGGCTGGTGGCAGCAGCGTCGTCATAGGTAATATTGGTGCCCTGA
TGGGCTACGCCACCCACAAGTATCTCGATAGTGAGGAGGATGAGGAGTAGCCAGCAGCTCCCAGAACCTCTTCTT
CCTTCTTGGCCTAACTCTTCCAGTTAGGATCTAGAACTTTGCCTTTTTTTTTTTTTTTTTTTTTTGAGATGG
GTTCTCACTATATTGTCCAGGCTAGAGTGCAGTGGCTATTCACAGATGCGAACATAGTACACTGCAGCCTCCAAC
TCCTAGCCTCAAGTGATCCTCCTGTCTCAACCTCCCAAGTAGGATTACAAGCATGCGCCGACGATGCCCAGAATC
CAGAACTTTGTCTATCACTCTCCCCAACAACCTAGATGTGAAAACAGAATAAACTTCACCCAGAAAA

FIGURE 6164

MRQKAVSLFLCYLLLFTCSGVEAGKKKCSESSDSGSGFWKALTFMAVGGGLAVAGLPALGFTGAGIAANSVAASL
MSWSAILNGGGVPAGGLVATLQSLGAGGSSVVIGNIGALMGYATHKYLDSEEDEE

FIGURE 6165

GGCACGAGGGGAGTCAGTGATTTGAACGAAGTACTTTCAGTTTCATATTACTCTAAATCCATTACAAATCTGCTT
AGCTTCTAAATATTTCATCAATGAGGAAATCCCAGCCCTACAACTTCGGAACAGTGAAATATTAGTCCAGGGATC
CAGTGAGAGACACAGAAGTGCTAGAAGCCAGTGCTCGTGAACTAAGGAGAAAAAGAACAGACAAGGGAACAGCCT
GGAC**ATG**GCATCAGAGATCCACATGACAGGCCCAATGTGCCTCATTGAGAACACTAATGGGCGACTGATGGCGAA
TCCAGAAGCTCTGAAGATCCTTTCTGCCATTACACAGCCTATGGTGGTGGTGGCAATTGTGGGCCTCTACCGCAC
AGGCAAATCCTACCTGATGAACAAGCTGGCTGGAAAGAAAAAGGGCTTCTCTCTGGGCTCCACGGTGCAGTCTCA
CACTAAAGGAATCTGGATGTGGTGTGTGCCCCACCCCAAGAAGCCAGGCCACATCCTAGTTCTGCTGGACACCGA
GGGTCTGGGAGATGTAGAGAAGGGTGACAACCAGAATGACTCCTGGATCTTCGCCCTGGCCGTCCTCCTGAGCAG
CACCTTCGTGTACAATAGCATAGGAACCATCAACCAGCAGGCTATGGACCAACTGTACTATGTGACAGAGCTGAC
ACATAGAATCCGATCAAAATCCTCACCTGATGAGAATGAGAATGAGGTTGAGGATTCAGCTGACTTTGTGAGCTT
CTTCCCAGACTTTGTGTGGACACTGAGAGATTTCTCCCTGGACTTGGAAGCAGATGGACAACCCCTCACACCAGA
TGAGTACCTGACATACTCCCTGAAGCTGAAGAAAGGTACCAGTCAAAAAGATGAAACTTTTAACCTGCCCAGACT
CTGTATCCGGAAATTCTTCCCAAAGAAAAAATGCTTTGTCTTTGATCGGCCCGTTCACCGCAGGAAGCTTGCCCA
GCTCGAGAAACTACAAGATGAAGAGCTGGACCCCGAATTTGTGCAACAAGTAGCAGACTTCTGTTCCTACATCTT
TAGTAATTCCAAAACTAAAACTCTTTCAGGAGGCATCCAGGTCAACGGGCCTCGTCTAGAGAGCCTGGTGCTGAC
CTACGTCAATGCCATCAGCAGTGGGGATCTGCCGTGCATGGAGAACGCAGTCCTGGCCTTGGCCCAGATAGAGAA
CTCAGCTGCAGTGCAAAAGGCTATTGCCCACTATGAACAGCAGATGGGCCAGAAGGTGCAGCTGCCCACAGAAAG
CCTCCAGGAGCTGCTGGACCTGCACAGGGACAGTGAGAGAGAGGCCATTGAAGTCTTCATCAGGAGTTCCTTCAA
AGATGTGGACCATCTATTTCAAAAGGAGTTAGCGGCCCAGCTAGAAAAAAAGCGGGATGACTTTTGTAAACAGAA
TCAGGAAGCATCATCAGATCGTTGCTCAGGTTTACTTCAGGTCATTTTCAGTCCTCTAGAAGAAGAAGTGAAGGC
GGGAATTTATTCGAAACCAGGGGGCTATCGTCTCTTTGTTCAGAAGCTACAAGACCTGAAGAAAAAGTACTATGA
GGAACCGAGGAAGGGGATACAGGCTGAAGAGATTCTGCAGACATACTTGAAATCCAAGGAGTCTATGACTGATGC
AATTCTCCAGACAGACCAGACTCTCACAGAAAAAGAAAAGGAGATTGAAGTGGAACGTGTGAAAGCTGAGTCTGC
ACAGGCTTCAGCAAAAATGTTGCAGGAAATGCAAAGAAAGAATGAGCAGATGATGGAACAGAAGGAGAGGAGTTA
TCAGGAACACTTGAAACAACTGACTGAGAAGATGGAGAACGACAGGGTCCAGTTGCTGAAAGAGCAAGAGAGGAC
CCTCGCTCTTAAACTTCAGGAACAGGAGCAACTACTAAAAGAGGGATTTCAAAAAGAAAGCAGAATAATGAAAAA
TGAGATACAGGATCTCCAGACGAAAATGAGACGACGAAAGGCATGTACCATAAGC**TAA**AGACCAGAGCCTTCCTG
TCACCCCTAACCAAGGCATAATTGAAACAATTTTAGAATTTGGAACAAGCGTCACTACATTTGATAATAATTAGA
TCTTGCATCATAACACCAAAAGTTTATAAAGGCATGTGGTACAATGATCAAAATCATGTTTTTTCTTAAAAAAAA
AAAAAAAAAA

FIGURE 6166

MASEIHMTGPMCLIENTNGRLMANPEALKILSAITQPMVVVAIVGLYRTGKSYLMNKLAGKKKGFSLGSTVQSHT
KGIWMWCVPHPKKPGHILVLLDTEGLGDVEKGDNQNDSWIFALAVLLSSTFVYNSIGTINQQAMDQLYYVTELTH
RIRSKSSPDENENEVEDSADFVSFFPDFVWTLRDFSLDLEADGQPLTPDEYLTYSLKLKKGTSQKDETFNLPRLC
IRKFFPKKKCFVFDRPVHRRKLAQLEKLQDEELDPEFVQQVADFCSYIFSNSKTKTLSGGIQVNGPRLESLVLTY
VNAISSGDLPCMENAVLALAQIENSAAVQKAIAHYEQQMGQKVQLPTESLQELLDLHRDSEREAIEVFIRSSFKD
VDHLFQKELAAQLEKKRDDFCKQNQEASSDRCSGLLQVIFSPLEEEVKAGIYSKPGGYRLFVQKLQDLKKKYYEE
PRKGIQAEEILQTYLKSKESMTDAILQTDQTLTEKEKEIEVERVKAESAQASAKMLQEMQRKNEQMMEQKERSYQ
EHLKQLTEKMENDRVQLLKEQERTLALKLQEQEQLLKEGFQKESRIMKNEIQDLQTKMRRRKACTIS

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FIGURE 6167

AACACATTTCATCTGGGCTTCTTAAATCTAAATCTTTAAAATGACTAAGTTTTCTTCCTTTTCTCTGTTTTTCCT
AATAGTTGGGGCTTATATGACTCATGTGTGTTTCAATATGGAAATTATTGGAGGGAAAGAAGTGTCACCTCATTC
CAGGCCATTTATGGCCTCCATCCAGTATGGCGGACATCACGTTTGTGGAGGTGTTCTGATTGATCCACAGTGGGT
GCTGACAGCAGCCCACTGCCAATATCGGTTTACCAAAGGCCAGTCTCCCACTGTGGTTTTAGGCGCACACTCTCT
CTCAAAGAATGAGGCCTCCAAACAAACACTGGAGATCAAAAAATTTATACCATTCTCAAGAGTTACATCAGATCC
TCAATCAAATGATATCATGCTGGTTAAGCTTCAAACAGCCGCAAAACTCAATAAACATGTCAAGATGCTCCACAT
AAGATCCAAAACCTCTCTTAGATCTGGAACCAAATGCAAGGTTACTGGCTGGGGAGCCACCGATCCAGATTCATT
AAGACCTTCTGACACCCTGCGAGAAGTCACTGTTACTGTCCTAAGTCGAAAACTTTGCAACAGCCAAAGTTACTA
CAACGGCGACCCTTTTATCACCAAAGACATGGTCTGTGCAGGAGATGCCAAAGGCCAGAAGGATTCCTGTAAGGG
TGACTCAGGGGGCCCCTTGATCTGTAAAGGTGTCTTCCACGCTATAGTCTCTGGAGGTCATGAATGTGGTGTTGC
CACAAAGCCTGGAATCTACACCCTGTTAACCAAGAAATACCAGACTTGGATCAAAAGCAACCTTGTCCCGCCTCA
TACAAATTAAGTTACAAATAATTTTATTGGATGCACTTGCTTCTTTTTTCCTAATATGCTCGCAGGTTAGAGTTG
GGTGTAAGTAAAGCAGAGCACATATGGGGTCCATTTTTGCACTTGTAAGTCATTTTATTAAGGAATCAAGTTCTT
TTTCACTTGTATCACTGATGTATTTCTACCATGCTGGTTTTATTCTAAATAAAATTTAGAAGACT

FIGURE 6168

MTKFSSFSLFFLIVGAYMTHVCFNMEIIGGKEVSPHSRPFMASIQYGGHHVCGGVLIDPQWVLTAAHCQYRFTKG
QSPTVVLGAHSLSKNEASKQTLEIKKFIPFSRVTSDPQSNDIMLVKLQTAAKLNKHVKMLHIRSKTSLRSGTKCK
VTGWGATDPDSLRPSDTLREVTVTVLSRKLCNSQSYYNGDPFITKDMVCAGDAKGQKDSCKGDSGGPLICKGVFH
AIVSGGHECGVATKPGIYTLLTKKYQTWIKSNLVPPHTN

FIGURE 6169

CAGCTCTCTGTCAGAATGGCCACCATGGTACCATCCGTGTTGTGGCCCAGGGCCTGCTGGACTCTGCTGGTCTGC
TGTCTGCTGACCCCAGGTGTCCAGGGGCAGGAGTTCCTTTTGCGGGTGGAGCCCCAGAACCCTGTGCTCTCTGCT
GGAGGGTCCCTGTTTGTGAACTGCAGTACTGATTGTCCCAGCTCTGAGAAAATCGCCTTGGAGACGTCCCTATCA
AAGGAGCTGGTGGCCAGTGGCATGGGCTGGGCAGCCTTCAATCTCAGCAACGTGACTGGCAACAGTCGGATCCTC
TGCTCAGTGTACTGCAATGGCTCCCAGATAACAGGCTCCTCTAACATCACCGTGTACGGGCTCCCGGAGCGTGTG
GAGCTGGCACCCCTGCCTCCTTGGCAGCCGGTGGGCCAGAACTTCACCCTGCGCTGCCAAGTGGAGGGTGGGTCG
CCCCGGACCAGCCTCACGGTGGTGCTGCTTCGCTGGGAGGAGGAGCTGAGCCGGCAGCCCGCAGTGGAGGAGCCA
GCGGAGGTCACTGCCACTGTGCTGGCCAGCAGAGACGACCACGGAGCCCCTTTCTCATGCCGCACAGAACTGGAC
ATGCAGCCCCAGGGGCTGGGACTGTTCGTGAACACCTCAGCCCCCCGCCAGCTCCGAACCTTTGTCCTGCCCGTG
ACCCCCCCGCGCCTCGTGGCCCCCCGGTTCTTGGAGGTGGAAACGTCGTGGCCGGTGGACTGCACCCTAGACGGG
CTTTTTCCAGCCTCAGAGGCCCAGGTCTACCTGGCGCTGGGGGACCAGATGCTGAATGCGACAGTCATGAACCAC
GGGGACACGCTAACGGCCACAGCCACAGCCACGGCGCGCGCGGATCAGGAGGGTGCCCGGGAGATCGTCTGCAAC
GTGACCCTAGGGGGCGAGAGACGGGAGGCCCGGGAGAACTTGACGGTCTTTAGCTTCCTAGGACCCATTGTGAAC
CTCAGCGAGCCCACCGCCCATGAGGGGTCCACAGTGACCGTGAGTTGCATGGCTGGGGCTCGAGTCCAGGTCACG
CTGGACGGAGTTCCGGCCGCGGCCCCGGGGCAGCCAGCTCAACTTCAGCTAAATGCTACCGAGAGTGACGACGGA
CGCAGCTTCTTCTGCAGTGCCACTCTCGAGGTGGACGGCGAGTTCTTGCACAGGAACAGTAGCGTCCAGCTGCGA
GTCCTGTATGGTCCCAAAATTGACCGAGCCACATGCCCCCAGCACTTGAAATGGAAAGATAAAACGAGACACGTC
CTGCAGTGCCAAGCCAGGGGCAACCCGTACCCCGAGCTGCGGTGTTTGAAGGAAGGCTCCAGCCGGGAGGTGCCG
GTGGGGATCCCGTTCTTCGTCAACGTAACACATAATGGTACTTATCAGTGCCAAGCGTCCAGCTCACGAGGCAAA
TACACCCTGGTCGTGGTGATGGACATTGAGGCTGGGAGCTCCCACTTTGTCCCCGTCTTCGTGGCGGTGTTACTG
ACCCTGGGCGTGGTGACTATCGTACTGGCCTTAATGTACGTCTTCAGGGAGCACCAACGGAGCGGCAGTTACCAT
GTTAGGGAGGAGAGCACCTATCTGCCCCTCACGTCTATGCAGCCGACAGAAGCAATGGGGGAAGAACCGTCCAGA
GCTGAGTGACGCTGGGATCCGGGATCAAAGTTGGCGGGGGCTTGGCTGTGCCCTCAGATTCCGCACCAATAAAGC
CTTCAAACTCCCTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6170

MATMVPSVLWPRACWTLLVCCLLTPGVQGQEFLLRVEPQNPVLSAGGSLFVNCSTDCPSSEKIALETSLSKELVA
SGMGWAAFNLSNVTGNSRILCSVYCNGSQITGSSNITVYGLPERVELAPLPPWQPVGQNFTLRCQVEGGSPRTSL
TVVLLRWEEELSRQPAVEEPAEVTATVLASRDDHGAPFSCRTELDMQPQGLGLFVNTSAPRQLRTFVLPVTPPRL
VAPRFLEVETSWPVDCTLDGLFPASEAQVYLALGDQMLNATVMNHGDTLTATATATARADQEGAREIVCNVTLGG
ERREARENLTVFSFLGPIVNLSEPTAHEGSTVTVSCMAGARVQVTLDGVPAAAPGQPAQLQLNATESDDGRSFFC
SATLEVDGEFLHRNSSVQLRVLYGPKIDRATCPQHLKWKDKTRHVLQCQARGNPYPELRCLKEGSSREVPVGIPF
FVNVTHNGTYQCQASSSRGKYTLVVVMDIEAGSSHFVPVFVAVLLTLGVVTIVLALMYVFREHQRSGSYHVREES
TYLPLTSMQPTEAMGEEPSRAE

FIGURE 6171

ATGAAGGCGCTGAGCCCGGTGCGCGGCTGCTACGAGGCGGTGTGCTGCCTGTCGGAACGCAGTCTGGCCATCGCC
CGGGGCCGAGGGAAGGGCCCGGCAGCTGAGGAGCCGCTGAGCTTGCTGGACGACATGAACCACTGCTACTCCCGC
CTGCGGGAACTGGTACCCGGAGTCCCGAGAGGCACTCAGCTTAGCCAGGTGGAAATCCTACAGCGCGTCATCGAC
TACATTCTCGACCTGCAGGTAGTCCTGGCCGAGCCAGCCCCTGGACCCCCTGATGGCCCCCACCTTCCCATCCAG
ACAGCCGAGCTCGCTCCGGAACTTGTCATCTCCAACGACAAAAGGAGCTTTTGCCACTGA

FIGURE 6172

MKALSPVRGCYEAVCCLSERSLAIARGRGKGPAAEEPLSLLDDMNHCYSRLRELVPGVPRGTQLSQVEILQRVID
YILDLQVVLAEPAPGPPDGPHLPIQTAELAPELVISNDKRSFCH

FIGURE 6173

CTCTCTCTCTATCTCTCTCAGAATGACAATTCTAGGTACAACTTTTGGCATGGTTTTTTCTTTACTTCAAGTCGT
TTCTGGAGAAAGTGGCTATGCTCAAAATGGAGACTTGGAAGATGCAGAACTGGATGACTACTCATTCTCATGCTA
TAGCCAGTTGGAAGTGAATGGATCGCAGCATTCACTGACCTGTGCTTTTGAGGACCCAGATGTCAACACCACCAA
TCTGGAATTTGAAATATGTGGGGCCCTCGTGGAGGTAAAGTGCCTGAATTTCAGGAAACTACAAGAGATATATTT
CATCGAGACAAAGAAATTCTTACTGATTGGAAAGAGCAATATATGTGTGAAGGTTGGAGAAAAGAGTCTAACCTG
CAAAAAAATAGACCTAACCACTATAGTTAAACCTGAGGCTCCTTTTGACCTGAGTGTCATCTATCGGGAAGGAGC
CAATGACTTTGTGGTGACATTTAATACATCACACTTGCAAAAGAAGTATGTAAAAGTTTTAATGCATGATGTAGC
TTACCGCCAGGAAAAGGATGAAAACAAATGGACGCATGTGAATTTATCCAGCACAAAGCTGACACTCCTGCAGAG
AAAGCTCCAACCGGCAGCAATGTATGAGATTAAAGTTCGATCCATCCCTGATCACTATTTTAAAGGCTTCTGGAG
TGAATGGAGTCCAAGTTATTACTTCAGAACTCCAGAGATCAATAATAGCTCAGGGGAGATGGATCCTATCTTACT
AACCATCAGCATTTTGAGTTTTTTCTCTGTCGCTCTGTTGGTCATCTTGGCCTGTGTGTTATGGAAAAAAAGGAT
TAAGCCTATCGTATGGCCCAGTCTCCCCGATCATAAGAAGACTCTGGAACATCTTTGTAAGAAACCAAGAAAAAA
TTTAAATGTGAGTTTCAATCCTGAAAGTTTCCTGGACTGCCAGATTCATAGGGTGGATGACATTCAAGCTAGAGA
TGAAGTGGAAGGTTTTCTGCAAGATACGTTTCCTCAGCAACTAGAAGAATCTGAGAAGCAGAGGCTTGGAGGGGA
TGTGCAGAGCCCCAACTGCCCATCTGAGGATGTAGTCGTCACTCCAGAAAGCTTTGGAAGAGATTCATCCCTCAC
ATGCCTGGCTGGGAATGTCAGTGCATGTGACGCCCCTATTCTCTCCTCTTCCAGGTCCCTAGACTGCAGGGAGAG
TGGCAAGAATGGGCCTCATGTGTACCAGGACCTCCTGCTTAGCCTTGGGACTACAAACAGCACGCTGCCCCCTCC
ATTTTCTCTCCAATCTGGAATCCTGACATTGAACCCAGTTGCTCAGGGTCAGCCCATTCTTACTTCCCTGGGATC
AAATCAAGAAGAAGCATATGTCACCATGTCCAGCTTCTACCAAAACCAGTGAAGTGTAAGAAACCCAGACTGAAC
TTACCGTGAGCGACAAAGATGATTTAAAAGGGAAGTCTAGAGTTCCTAGTCTCCCTCACAGCACAGAGAAGACAA
AATTAGCAAAACCCCACTACACAGTCTGCAAGATTCTGAAACATTGCTTTGACCACTCTTCCTGAGTTCAGTGGC
ACTCAACATGAGTCAAGAGCATCCTGCTTCTACCATGTGGATTTGGTCACAAGGTTTAAGGTGACCCAATGATTC
AGCTATTT

FIGURE 6174

MTILGTTFGMVFSLLQVVSGESGYAQNGDLEDAELDDYSFSCYSQLEVNGSQHSLTCAFEDPDVNTTNLEFEICG
ALVEVKCLNFRKLQEIYFIETKKFLLIGKSNICVKVGEKSLTCKKIDLTTIVKPEAPFDLSVIYREGANDFVVTF
NTSHLQKKYVKVLMHDVAYRQEKDENKWTHVNLSSTKLTLLQRKLQPAAMYEIKVRSIPDHYFKGFWSEWSPSYY
FRTPEINNSSGEMDPILLTISILSFFSVALLVILACVLWKKRIKPIVWPSLPDHKKTLEHLCKKPRKNLNVSFNP
ESFLDCQIHRVDDIQARDEVEGFLQDTFPQQLEESEKQRLGGDVQSPNCPSEDVVVTPESFGRDSSLTCLAGNVS
ACDAPILSSSRSLDCRESGKNGPHVYQDLLLSLGTTNSTLPPPFSLQSGILTLNPVAQGQPILTSLGSNQEEAYV
TMSSFYQNQ

FIGURE 6175

AAGCCACCCAGCCTATGCATCCGCTCCTCAATCCTCTCCTGTTGGCACTGGGCCTCATGGCGCTTTTGTTGACCA
CGGTCATTGCTCTCACTTGCCTTGGCGGCTTTGCCTCCCCAGGCCCTGTGCCTCCCTCTACAGCCCTCAGGGAGC
TCATTGAGGAGCTGGTCAACATCACCCAGAACCAGAAGGCTCCGCTCTGCAATGGCAGCATGGTATGGAGCATCA
ACCTGACAGCTGGCATGTACTGTGCAGCCCTGGAATCCCTGATCAACGTGTCAGGCTGCAGTGCCATCGAGAAGA
CCCAGAGGATGCTGAGCGGATTCTGCCCGCACAAGGTCTCAGCTGGGCAGTTTTCCAGCTTGCATGTCCGAGACA
CCAAAATCGAGGTGGCCCAGTTTGTAAAGGACCTGCTCTTACATTTAAAGAAACTTTTTCGCGAGGGACGGTTCA
ACTGAAACTTCGAAAGCATCATTATTTGCAGAGACAGGACCTGACTATTGAAGTTGCAGATTCATTTTTCTTTCT
GATGTCAAAAATGTCTTGGGTAGGCGGGAAGGAGGGTTAGGGAGGGGTAAAATTCCTTAGCTTAGACCTCAGCCT
GTGCTGCCCGTCTTCAGCCTAGCCGACCTCAGCCTTCCCCTTGCCCAGGGCTCAGCCTGGTGGGCCTCCTCTGTC
CAGGGCCCTGAGCTCGGTGGACCCAGGGATGACATGTCCCTACACCCCTCCCCTGCCCTAGAGCACACTGTAGCA
TTACAGTGGGTGCCCCCCTTGCCAGACATGTGGTGGGACAGGGACCCACTTCACACACAGGCAACTGAGGCAGAC
AGCAGCTCAGGCACACTTCTTCTTGGTCTTATTTATTATTGTGTGTTATTTAAATGAGTGTGTTTGTCACCGTTG
GGGATTGGGGAAGACTGTGGCTGCTGGCACTTGGAGCCAAGGGTTCAGAGACTCAGGGCCCCAGCACTAAAGCAG
TGGACCCCAGGAGTCCCTGGTAATAAGTACTGTGTACAGAATTCTGCTACCTCACTGGGGTCCTGGGGCCTCGGA
GCCTCATCCGAGGCAGGGTCAGGAGAGGGGCAGAACAGCCGCTCCTGTCTGCCAGCCAGCAGCCAGCTCTCAGCC
AACGAGTAATTTATTGTTTTTCCTCGTATTTAAATATTAAATATGTTAGCAAAGAGTTAATATATAGAAGGGTAC
CTTGAACACTGGGGGAGGGGACATTGAACAAGTTGTTTCATTGACTATCAAACTGAAGCCAGAAATAAAGTTGGT
GACAGATA

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FIGURE 6176

MALLLTTVIALTCLGGFASPGPVPPSTALRELIEELVNITQNQKAPLCNGSMVWSINLTAGMYCAALESLINVSG
CSAIEKTQRMLSGFCPHKVSAGQFSSLHVRDTKIEVAQFVKDLLLHLKKLFREGRFN

FIGURE 6177

CCCAGAGCAGCGCTCGCCACCTCCCCCCGGCCTGGGCAGCGCTCGCCCGGGGAGTCCAGCGGTGTCCTGTGGAGC
TGCCGCCATGGCCCCGCGGCGGGCGCGCGGCTGCCGGACCCTCGGTCTCCCGGCGCTGCTACTGCTGCTGCTGCT
CCGGCCGCCGGCGACGCGGGGCATCACGTGCCCTCCCCCCATGTCCGTGGAACACGCAGACATCTGGGTCAAGAG
CTACAGCTTGTACTCCAGGGAGCGGTACATTTGTAACTCTGGTTTCAAGCGTAAAGCCGGCACGTCCAGCCTGAC
GGAGTGCGTGTTGAACAAGGCCACGAATGTCGCCCACTGGACAACCCCCAGTCTCAAATGCATTAGAGACCCTGC
CCTGGTTCACCAAAGGCCAGCGCCACCCTCCACAGTAACGACGGCAGGGGTGACCCCACAGCCAGAGAGCCTCTC
CCCTTCTGGAAAAGAGCCCGCAGCTTCATCTCCCAGCTCAAACAACACAGCGGCCACAACAGCAGCTATTGTCCC
GGGCTCCCAGCTGATGCCTTCAAAATCACCTTCCACAGGAACCACAGAGATAAGCAGTCATGAGTCCTCCCACGG
CACCCCCTCTCAGACAACAGCCAAGAACTGGGAACTCACAGCATCCGCCTCCCACCAGCCGCCAGGTGTGTATCC
ACAGGGCCACAGCGACACCACTGTGGCTATCTCCACGTCCACTGTCCTGCTGTGTGGGCTGAGCGCTGTGTCTCT
CCTGGCATGCTACCTCAAGTCAAGGCAAACTCCCCCGCTGGCCAGCGTTGAAATGGAAGCCATGGAGGCTCTGCC
GGTGACTTGGGGGACCAGCAGCAGAGATGAAGACTTGGAAAACTGCTCTCACCACCTATGAAACTCGGGGAAACC
AGCCCAGCTAAGTCCGGAGTGAAGGAGCCTCTCTGCTTTAGCTAAAGACGACTGAGAAGAGGTGCAAGGAAGCGG
GCTCCAGGAGCAAGCTCACCAGGCCTCTCAGAAGTCCCAGCAGGATCTCACGGACTGCCGGGTCGGCGCCTCCTG
CGCGAGGGAGCAGGTTCTCCGCATTCCCATGGGCACCACCTGCCTGCCTGTCGTGCCTTGGACCCAGGGCCCAGC
TTCCCAGGAGAGACCAAAGGCTTCTGAGCAGGATTTTTATTTCATTACAGTGTGAGCTGCCTGGAATACATGTGG
TAATGAAATAAAAACCCTGCCCCGAATCTTCCGTCCCTCATCCTAACTTGCAGTTCACAGAGAAAAGTGACATAC
CCAAAGCTCTCTGTCAATTACAAGGCTTCTCCTGGCGTGGGAGACGTCTACAGGGAAGACACCAGCGTTTGGGCT
TCTAACCACCCTGTCTCCAGCTGCTCTGCACACATGGACAGGGACCTGGGAAAGGTGGGAGAGATGCTGAGCCCA
GCGAATCCTCTCCATTGAAGGATTCAGGAAGAAGAAAACTCAACTCAGTGCCATTTTACGAATATATGCGTTTAT
ATTTATACTTCCTTGTCTATTATATCTATACATTATATATTATTTGTATTTTGACATTGTACCTTGTATAAACAA
AATAAAACATCTATTTTCAATATTTTTAAAATGCA

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FIGURE 6178

MAPRRARGCRTLGLPALLLLLLLRPPATRGITCPPPMSVEHADIWVKSYSLYSRERYICNSGFKRKAGTSSLTEC
VLNKATNVAHWTTPSLKCIRDPALVHQRPAPPSTVTTAGVTPQPESLSPSGKEPAASSPSSNNTAATTAAIVPGS
QLMPSKSPSTGTTEISSHESSHGTPSQTTAKNWELTASASHQPPGVYPQGHSDTTVAISTSTVLLCGLSAVSLLA
CYLKSRQTPPLASVEMEAMEALPVTWGTSSRDEDLENCSHHL

FIGURE 6179

TCTCCTTGTTTTGCTTTCGATCTGGACTGTTCTCAGGCAAGCCGGGGAGTAACTTTTAGTTTTGCTCCTGCGATT
ATTCAACTGACGGGCTTTCATTTCCATTTCACACACCCTAGCAACACTTATACCTTGCGGAATTGTATTGGTAGC
GTGAAAAAAGCACACTGAGAGGGCACCATGCCGGTGGAAAGGATGCGCATGCGCCCGTGGCTGGAGGAGCAGATA
AACTCCAACACGATCCCGGGGCTCAAGTGGCTTAACAAGGAAAAGAAGATTTTTCAGATCCCCTGGATGCATGCG
GCTAGACATGGGTGGGATGTGGAAAAAGATGCACCACTCTTTAGAAACCGGGCAATCCATACAGGAAAGCATCAA
CCAGGAGTAGATAAACCTGATCCCAAAACATGGAAGGCGAATTTCAGATGCGCCATGAATTCCTTGCCTGATATT
GAAGAAGTCAAGGATAAAAGCATAAAGAAAGGAAATAATGCCTTCAGGGTCTACCGAATGCTGCCCCTATCAGAA
CGGCCTTCTAAGAAAGGAAAGAAACCAAAGACAGAAAAAGAAGACAAAGTTAAGCACATCAAGCAAGAACCAGTT
GAGTCATCTCTGGGGCTTAGTAATGGAGTAAGTGATCTTTCTCCTGAGTATGCGGTCCTGACTTCAACTATAAAA
AATGAAGTGGATAGTACGGTGAACATCATAGTTGTAGGACAGTCCCATCTGGACAGCAACATTGAGAATCAAGAG
ATTGTCACCAATCCGCCAGACATTTGCCAAGTTGTAGAGGTGACCACTGAGAGCGACGAGCAGCCGGTCAGCATG
AGCGAGCTCTACCCTCTGCAGATCTCCCCCGTGTCTTCCTATGCAGAAAGCGAAACGACTGATAGTGTGCCCAGC
GATGAAGAGAGTGCCGAGGGGCGGCCACACTGGCGGAAGAGGAATATTGAAGGCAAACAGTACCTCAGCAACATG
GGGACTCGAGGCTCCTACCTGCTGCCCGGCATGGCGTCCTTCGTCACTTCCAACAAACCGGACCTCCAGGTCACC
ATCAAAGAGGAGAGCAATCCGGTGCCTTACAACAGCTCCTGGCCCCCTTTTCAAGACCTCCCCCTTTCTTCCTCC
ATGACCCCAGCATCCAGCAGCAGTCGGCCAGACCGGGAGACCCGGGCCAGCGTCATCAAGAAAACATCGGATATC
ACCCAGGCCCGCGTCAAGAGCTGTTAAGCCTCTGACTCTCCGCGGTGGTTGTTGGGGCTTCTTGGCTTTGTTTTG
TTGTTTGTTTGTATTTTATTTTTTTCTCTCTGACACCTATTTTAGACAAATCTAAGGGAAAAAGCCTTGACAATA
GAACATTGATTGCTGTGTCCAACTCCAGTACCTGGAGCTTCTCTTTAACTCAGGACTCCAGCCCATTGGTAGACG
TGTGTTTCTAGAGCCTGCTGGATCTCCCAGGGCTACTCACTCAAGTTCAAGGACCAACAAGGGCAGTGGAGGTGC
TGCATTGCCTGCGGTCAAGGCCAGCAAGGTGGAGTGGATGCCTCAGAACGGACGAGATAATGTGAACTAGCTGGA
ATTTTTTATTCTTGTGAATATGTACATAGGCAGCACTAGCGACATTGCAGTCTGCTTCTGCACCTTATCTTAAAG
CACTTACAGATAGGCCTTCTTGTGATCTTGCTCTATCTCACAGCACACTCAGCACCCCCTTCTCTGCCCATTCCC
CAGCCTCTCTTCCTATCCCATCCCATCCCATCCCATCCCATCCCATCCCATCCCGCTCTTTTCCTACTTTTCCTT
CCCTCAAAGCTTCCATTCCACATCCGGAGGAGAAGAAGGAAATGAATTTCTCTACAGATGTCCCATTTTCAGACT
GCTTTAAAAAAAATCCTTCTAATCTGCTATGCTTGAATGCCACGCGGTACAAAGGAAAAAGTATCATGGAAATAT
TATGCAAATTCCCAGATTTGAAGACAAAAATACTCTAATTCTAACCAGAGCAAGCTTTTTTATTTTTTATACAGG
GGAATATTTTATTCAAGGTAAAATTCTAAATAAAATATAATTGTTTTTTATCTTTTCTACAGCAAATTTATAATT
TTAAGATTCCTTTTCTTGTTTATCAGCAGTTGTTATTACATCCTTGTGGCACATTTTTTTTTAATTTTGTAAAGG
TGAAAAAAGCTTTTATGAGCTCATCTAGCAATCAGATTTTCCTGTGGA

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FIGURE 6180

MPVERMRMRPWLEEQINSNTIPGLKWLNKEKKIFQIPWMHAARHGWDVEKDAPLFRNRAIHTGKHQPGVDKPDPK
TWKANFRCAMNSLPDIEEVKDKSIKKGNNAFRVYRMLPLSERPSKKGKKPKTEKEDKVKHIKQEPVESSLGLSNG
VSDLSPEYAVLTSTIKNEVDSTVNIIVVGQSHLDSNIENQEIVTNPPDICQVVEVTTESDEQPVSMSELYPLQIS
PVSSYAESETTDSVPSDEESAEGRPHWRKRNIEGKQYLSNMGTRGSYLLPGMASFVTSNKPDLQVTIKEESNPVP
YNSSWPPFQDLPLSSSMTPASSSSRPDRETRASVIKKTSDITQARVKSC

FIGURE 6181A

GTCCGCCAAAACCTGCGCGGATAGGGAAGAACAGCACCCCGGCGCCGATTGCCGTACCAAACAAGCCTAACGTCC
GCTGGGCCCCGGACGCCGCGCGGAAAAGATGAATTTACAACCAATTTTCTGGATTGGACTGATCAGTTCAGTTTG
CTGTGTGTTTGCTCAAACAGATGAAAATAGATGTTTAAAAGCAAATGCCAAATCATGTGGAGAATGTATACAAGC
AGGGCCAAATTGTGGGTGGTGCACAAATTCAACATTTTTACAGGAAGGAATGCCTACTTCTGCACGATGTGATGA
TTTAGAAGCCTTAAAAAAGAAGGGTTGCCCTCCAGATGACATAGAAAATCCCAGAGGCTCCAAAGATATAAAGAA
AAATAAAAATGTAACCAACCGTAGCAAAGGAACAGCAGAGAAGCTCAAGCCAGAGGATATTCATCAGATCCAACC
ACAGCAGTTGGTTTTGCGATTAAGATCAGGGGAGCCACAGACATTTACATTAAAATTCAAGAGAGCTGAAGACTA
TCCCATTGACCTCTACTACCTTATGGACCTGTCTTATTCAATGAAAGACGATTTGGAGAATGTAAAAAGTCTTGG
AACAGATCTGATGAATGAAATGAGGAGGATTACTTCGGACTTCAGAATTGGATTTGGCTCATTTGTGGAAAAGAC
TGTGATGCCTTACATTAGCACAACACCAGCTAAGCTCAGGAACCCTTGCACAAGTGAACAGAACTGCACCACCCC
ATTTAGCTACAAAAATGTGCTCAGTCTTACTAATAAAGGAGAAGTATTTAATGAACTTGTTGGAAAACAGCGCAT
ATCTGGAAATTTGGATTCTCCAGAAGGTGGTTTCGATGCCATCATGCAAGTTGCAGTTTGTGGATCACTGATTGG
CTGGAGGAATGTTACACGGCTGCTGGTGTTTTCCACAGATGCCGGGTTTCACTTTGCTGGAGATGGGAAACTTGG
TGGCATTGTTTTACCAAATGATGGACAATGTCACCTGGAAAATAATATGTACACAATGAGCCATTATTATGATTA
TCCTTCTATTGCTCACCTTGTCCAGAAACTGAGTGAAAATAATATTCAGACAATTTTTGCAGTTACTGAAGAATT
TCAGCCTGTTTACAAGGAGCTGAAAAACTTGATCCCTAAGTCAGCAGTAGGAACATTATCTGCAAATTCTAGCAA
TGTAATTCAGTTGATCATTGATGCATACAATTCCCTTTCCTCAGAAGTCATTTTGGAAAACGGCAAATTGTCAGA
AGGAGTAACAATAAGTTACAAATCTTACTGCAAGAACGGGGTGAATGGAACAGGGGAAAATGGAAGAAAATGTTC
CAATATTTCCATTGGAGATGAGGTTCAATTTGAAATTAGCATAACTTCAAATAAGTGTCCAAAAAAGGATTCTGA
CAGCTTTAAAATTAGGCCTCTGGGCTTTACGGAGGAAGTAGAGGTTATTCTTCAGTACATCTGTGAATGTGAATG
CCAAAGCGAAGGCATCCCTGAAAGTCCCAAGTGTCATGAAGGAAATGGGACATTTGAGTGTGGCGCGTGCAGGTG
CAATGAAGGGCGTGTTGGTAGACATTGTGAATGCAGCACAGATGAAGTTAACAGTGAAGACATGGATGCTTACTG
CAGGAAAGAAAACAGTTCAGAAATCTGCAGTAACAATGGAGAGTGCGTCTGCGGACAGTGTGTTTGTAGGAAGAG
GGATAATACAAATGAAATTTATTCTGGCAAATTCTGCGAGTGTGATAATTTCAACTGTGATAGATCCAATGGCTT
AATTTGTGGAGGAAATGGTGTTTGCAAGTGTCGTGTGTGTGAGTGCAACCCCAACTACACTGGCAGTGCATGTGA
CTGTTCTTTGGATACTAGTACTTGTGAAGCCAGCAACGGACAGATCTGCAATGGCCGGGGCATCTGCGAGTGTGG
TGTCTGTAAGTGTACAGATCCGAAGTTTCAAGGGCAAACGTGTGAGATGTGTCAGACCTGCCTTGGTGTCTGTGC
TGAGCATAAAGAATGTGTTCAGTGCAGAGCCTTCAATAAAGGAGAAAAGAAAGACACATGCACACAGGAATGTTC
CTATTTTAACATTACCAAGGTAGAAAGTCGGGACAAATTACCCCAGCCGGTCCAACCTGATCCTGTGTCCCATTG
TAAGGAGAAGGATGTTGACGACTGTTGGTTCTATTTTACGTATTCAGTGAATGGGAACAACGAGGTCATGGTTCA
TGTTGTGGAGAATCCAGAGTGTCCCACTGGTCCAGACATCATTCCAATTGTAGCTGGTGTGGTTGCTGGAATTGT
TCTTATTGGCCTTGCATTACTGCTGATATGGAAGCTTTTAATGATAATTCATGACAGAAGGGAGTTTGCTAAATT
TGAAAAGGAGAAAATGAATGCCAAATGGGACACGGGTGAAAATCCTATTTATAAGAGTGCCGTAACAACTGTGGT
CAATCCGAAGTATGAGGGAAAATGAGTACTGCCCGTGCAAATCCCACAACACTGAATGCAAAGTAGCAATTTCCA
TAGTCACAGTTAGGTAGCTTTAGGGCAATATTGCCATGGTTTTACTCATGTGCAGGTTTTGAAAATGTACAATAT
GTATAATTTTTAAAATGTTTTATTATTTTGAAAATAATGTTGTAATTCATGCCAGGGACTGACAAAAGACTTGAG
ACAGGATGGTTATTCTTGTCAGCTAAGGTCACATTGTGCCTTTTTGACCTTTTCTTCCTGGACTATTGAAATCAA
GCTTATTGGATTAAGTGATATTTCTATAGCGATTGAAAGGGCAATAGTTAAAGTAATGAGCATGATGAGAGTTTC
TGTTAATCATGTATTAAAACTGATTTTTAGCTTTACATATGTCAGTTTGCAGTTATGCAGAATCCAAAGTAAATG
TCCTGCTAGCTAGTTAAGGATTGTTTTAAATCTGTTATTTTGCTATTTGCCTGTTAGACATGACTGATGACATAT
CTGAAAGACAAGTATGTTGAGAGTTGCTGGTGTAAAATACGTTTGAAATAGTTGATCTACAAAGGCCATGGGAAA
AATTCAGAGAGTTAGGAAGGAAAAACCAATAGCTTTAAAACCTGTGTGCCATTTTAAGAGTTACTTAATGTTTGG
TAACTTTTATGCCTTCACTTTACAAATTCAAGCCTTAGATAAAAGAACCGAGCAATTTTCTGCTAAAAAGTCCTT
GATTTAGCACTATTTACATACAGGCCATACTTTACAAAGTATTTGCTGAATGGGGACCTTTTGAGTTGAATTTAT
TTTATTATTTTTATTTTGTTTAATGTCTGGTGCTTTCTATCACCTCTTCTAATCTTTTAATGTATTTGTTTGCAA
TTTTGGGGTAAGACTTTTTTATGAGTACTTTTTCTTTGAAGTTTTAGCGGTCAATTTGCCTTTTTAATGAACATG
TGAAGTTATACTGTGGCTATGCAACAGCTCTCACCTACGCGAGTCTTACTTTGAGTTAGTGCCATAACAGACCAC
TGTATGTTTACTTCTCACCATTTGAGTTGCCCATCTTGTTTCACACTAGTCACATTCTTGTTTTAAGTGCCTTTA

FIGURE 6181B

GTTTTAACAGTTCA

FIGURE 6182

MNLQPIFWIGLISSVCCVFAQTDENRCLKANAKSCGECIQAGPNCGWCTNSTFLQEGMPTSARCDDLEALKKKGC
PPDDIENPRGSKDIKKNKNVTNRSKGTAEKLKPEDIHQIQPQQLVLRLRSGEPQTFTLKFKRAEDYPIDLYYLMD
LSYSMKDDLENVKSLGTDLMNEMRRITSDFRIGFGSFVEKTVMPYISTTPAKLRNPCTSEQNCTTPFSYKNVLSL
TNKGEVFNELVGKQRISGNLDSPEGGFDAIMQVAVCGSLIGWRNVTRLLVFSTDAGFHFAGDGKLGGIVLPNDGQ
CHLENNMYTMSHYYDYPSIAHLVQKLSENNIQTIFAVTEEFQPVYKELKNLIPKSAVGTLSANSSNVIQLIIDAY
NSLSSEVILENGKLSEGVTISYKSYCKNGVNGTGENGRKCSNISIGDEVQFEISITSNKCPKKDSDSFKIRPLGF
TEEVEVILQYICECECQSEGIPESPKCHEGNGTFECGACRCNEGRVGRHCECSTDEVNSEDMDAYCRKENSSEIC
SNNGECVCGQCVCRKRDNTNEIYSGKFCECDNFNCDRSNGLICGGNGVCKCRVCECNPNYTGSACDCSLDTSTCE
ASNGQICNGRGICECGVCKCTDPKFQGQTCEMCQTCLGVCAEHKECVQCRAFNKGEKKDTCTQECSYFNITKVES
RDKLPQPVQPDPVSHCKEKDVDDCWFYFTYSVNGNNEVMVHVVENPECPTGPDIIPIVAGVVAGIVLIGLALLLI
WKLLMIIHDRREFAKFEKEKMNAKWDTGENPIYKSAVTTVVNPKYEGK

FIGURE 6183

CTGCCAGGGTTGGGTGCGCCGCTGAACGGATGGCTGAGGGAGCCCCGCGGATCGTTAGGAAAGCCGGCCAGCTGA
TCGTCGTGTGTTGCCACCCATTCATGTCAAGATGACTAAGTTTGGATTTTTGCGATTGTCCTATGAGAAGCAGGA
CACACTTTTGAAGCTTCTCATTCTGTCAATGGCTGCTGTATTATCCTTCTCCACTCGTCTGTTTGCTGTCCTGAG
ATTTGAAAGTGTTATCCATGAGTTTGATCCGTACTTTAATTATCGGACTACCAGGTTCCTGGCTGAGGAGGGGTT
TTATAAATTCCATAACTGGTTTGATGACCGAGCCTGGTACCCTTTGGGACGAATCATTGGAGGAACAATTTACCC
AGGTTTAATGATCACCTCTGCTGCAATCTACCATGTACTCCATTTTTTCCACATCACCATCGACATTCGGAATGT
CTGTGTGTTCCTGGCCCCTCTCTTCTCCTCCTTCACCTCCATCGTCACGTACCTCCTTACCAAAGAGCTCAAGGA
TGCAGGGGCTGGGCTTCTTGCTGCTGCCATGATTGCTGTAGTTCCTGGATATATCTCCCGATCTGTGGCTGGCTC
CTATGATAATGAAGGGATTGCCATCTTTTGCATGCTACTCACCTACTACATGTGGATCAAGGCAGTAAAGACTGG
TTCCATCTGTTGGGCAGCTAAGTGTGCCCTTGCTTATTTCTACATGGTCTCGTCATGGGGAGGTTATGTGTTCCT
GATCAACTTAATTCCTCTCCACGTCCTCGTGCTGATGCTCACAGGCCGTTTCTCTCACCGGATCTATGTGGCCTA
CTGTACTGTTTACTGCCTGGGTACTATACTTTCTAGGCAGATCTCCTTTGTGGGTTTCCAGCCTGTCCTTTCATC
AGAGCACATGGCAGGGTTTGGGGTCTTTGGTCTCTGCCAGATCCATGCCTTTGTGGATTACCTGCGCAGCAAGTT
GAATCCACAACAATTTGAAGTTCTTTTCCGGAGCGTCATCTCTCTGGTAGGCTTTGTCCTTCTCACCGTGGGAGC
TCTCCTCATGCTGACAGGAAAAATATCTCCCTGGACGGGGCGTTTCTACTCACTGCTGGATCCCTCTTATGCTAA
GAACAACATCCCCATCATTGCTTCTGTGTCTGAGCATCAGCCCACAACCTGGTCCTCATACTATTTTGACCTGCA
GCTCCTCGTCTTCATGTTTCCAGTTGGCCTCTATTACTGCTTTAGCAACCTGTCTGATGCCCGGATTTTTATCAT
CATGTATGGTGTGACCAGCATGTACTTTTCAGCTGTAATGGTGCGTCTAATGCTAGTGTTGGCACCTGTTATGAG
CATTCTCTCTGGCATTGGAGTCTCCCAGGTGCTGTCCACATACATGAAGAATCTGGACATAAGTCGCCCAGACAA
GAAGAGCAAGAAGCAACAGGATTCCACCTACCCTATTAAGATTGAAGTGGCAAGTGGGATGATACTGGTCATGGC
TTTCTTTCTCATCACCTACACCTTTCATTCAACCTGGGTGACCAGTGAGGCCTACTCTTCTCCGTCCATTGTACT
ATCTGCCCGTGGTGGGGATGGCAGTAGGATCATATTTGATGACTTCCGAGAAGCATATTATTGGCTTCGTCATAA
TACTCCAGAGGATGCGAAGGTCATGTCCTGGTGGGATTATGGCTATCAGATTACAGCTATGGCAAACCGAACAAT
TTTAGTGGACAATAACACATGGAATAATACCCATATTTCTCGAGTAGGGCAGGCAATGGCGTCCACAGAGGAAAA
AGCCTATGAGATCATGAGGGAGCTCGATGTCAGCTATGTGCTGGTCATTTTTGGAGGCCTCACTGGGTATTCCTC
TGATGATATCAACAAGTTTCTTTGGATGGTCCGGATTGGAGGGAGCACAGATACAGGCAAACATATCAAGGAGAA
TGACTATTATACTCCAACTGGGGAGTTCCGTGTGGACCGTGAAGGTTCTCCAGTGCTGCTCAACTGCCTCATGTA
CAAGATGTGTTACTATCGCTTTGGACAGGTTTACACAGAAGCCAAGCGTCCTCCAGGCTTTGACCGTGTCCGAAA
TGCTGAGATTGGGAATAAAGACTTTGAGCTTGATGTCCTGGAGGAAGGCTATACCACAGAACATTGGCTGGTCAG
GATATACAAGGTAAAGGACCTGGATAATCGAGGCTTGTCAAGGACATAAATGTCACGTCCAGCTCTGATATCTTC
GCACTGAGCACATCACATTTAGGACGTTGAAGATTTTTTTTTTTTTTTTTTTTTAATATGCAGTTTGTAAGAAC
AAAACTGGATGGCATCCGAATTGTCTGGAAGTTTTGTCTTGGGCATGATGGGCTGGGCCAAATGAAATGATTTTT
ATAATTCTAAACAGGTTACCAAATGAAATGTCATGGCTTTACTTTGGTCAATTAAAGGGGGGAATTTTTTTA

FIGURE 6184

MTKFGFLRLSYEKQDTLLKLLILSMAAVLSFSTRLFAVLRFESVIHEFDPYFNYRTTRFLAEEGFYKFHNWFDDR
AWYPLGRIIGGTIYPGLMITSAAIYHVLHFFHITIDIRNVCVFLAPLFSSFTSIVTYLLTKELKDAGAGLLAAAM
IAVVPGYISRSVAGSYDNEGIAIFCMLLTYYMWIKAVKTGSICWAAKCALAYFYMVSSWGGYVFLINLIPLHVLV
LMLTGRFSHRIYVAYCTVYCLGTILSRQISFVGFQPVLSSEHMAGFGVFGLCQIHAFVDYLRSKLNPQQFEVLFR
SVISLVGFVLLTVGALLMLTGKISPWTGRFYSLLDPSYAKNNIPIIASVSEHQPTTWSSYYFDLQLLVFMFPVGL
YYCFSNLSDARIFIIMYGVTSMYFSAVMVRLMLVLAPVMSILSGIGVSQVLSTYMKNLDISRPDKKSKKQQDSTY
PIKIEVASGMILVMAFFLITYTFHSTWVTSEAYSSPSIVLSARGGDGSRIIFDDFREAYYWLRHNTPEDAKVMSW
WDYGYQITAMANRTILVDNNTWNNTHISRVGQAMASTEEKAYEIMRELDVSYVLVIFGGLTGYSSDDINKFLWMV
RIGGSTDTGKHIKENDYYTPTGEFRVDREGSPVLLNCLMYKMCYYRFGQVYTEAKRPPGFDRVRNAEIGNKDFEL
DVLEEGYTTEHWLVRIYKVKDLDNRGLSRT

FIGURE 6185

GCCATTGCCATTCCCGTGGACCTGGACAGCCAAGTCAACAACCTCTTTCTCAAGTCCCACAGCATTGTGCAGAAA
CAGCCATGAACTGGCGGCTCTCAGCCCGAAATGCCGCACGCAGGGACTCTGTTCTGGCAGCTTCCAGAGACTACC
GGAATATCATTGAGAGATTGCAGGACATCGTCTCCGCGCTGGAGGACCGTCTCAGGCCCCTGGTGCAGGCAGAGT
TATCTGTGCTCGTGGATGTTCTCCACAGACCCGAGCTGCTTTTCCCAGAGAACACAGACGCCAGAAGGAAATGTG
AAAGTGGCGGTTTCATTTGCAAGTTAATAAAGCATACAAAACAGCTGCTAGAAGAAAATGAAGAGAAGCTCTGCA
TTAAGGTCCTACAGACCCTGAGGGAAATGATGACCAAAGATAGAGGCTATGGAGAAAAGGGTGAGGCGCTCAGGC
AAGTTCTGGTCAACCGTTACTATGGAAACGTCAGACCTTCGGGACGAAGAGAGAGCCTTACCAGCTTTGGCAATG
GC

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FIGURE 6186

HCHSRGPGQPSQQPLSQVPQHCAETAMNWRLSARNAARRDSVLAASRDYRNIIERLQDIVSALEDRLRPLVQAEL
SVLVDVLHRPELLFPENTDARRKCESGGFICKLIKHTKQLLEENEEKLCIKVLQTLREMMTKDRGYGEKGEALRQ
VLVNRYYGNVRPSGRRESLTSFGN

FIGURE 6187

GGCACGAGGGCGAGGCGGGAGTGGAGGTGCGCGGAGTCAGGCAGACAGACAGACACAGCCAGCCAGCCAGGTCGG
CAGTATAGTCCGAACTGCAAATCTTATTTTCTTTTCACCTTCTCTCTAACTGCCCAGAGCTAGCGCCTGTGGCTC
CCGGGCTGGTGTTTCGGGAGTGTCCAGAGAGCCTGGTCTCCAGCCGCCCCCGGGAGGAGAGCCCTGCTGCCCAGG
CGCTGTTGACAGCGGCGGAAAGCAGCGGTACCCACGCGCCCGCCGGGGGAAGTCGGCGAGCGGCTGCAGCAGCAA
AGAACTTTCCCGGCTGGGAGGACCGGAGACAAGTGGCAGAGTCCCGGAGCGAACTTTTGCAAGCCTTTCCTGCGT
CTTAGGCTTCTCCACGGCGGTAAAGACCAGAAGGCGGCGGAGAGCCACGCAAGAGAAGAAGGACGTGCGCTCAGC
TTCGCTCGCACCGGTTGTTGAACTTGGGCGAGCGCGAGCCGCGGCTGCCGGGCGCCCCCTCCCCCTAGCAGCGGA
GGAGGGGACAAGTCGTCGGAGTCCGGGCGGCCAAGACCCGCCGCCGGCCGGCCACTGCAGGGTCCGCACTGATCC
GCTCCGCGGGGAGAGCCGCTGCTCTGGGAAGTGAGTTCGCCTGCGGACTCCGAGGAACCGCTGCGCCCGAAGAGC
GCTCAGTGAGTGACCGCGACTTTTCAAAGCCGGGTAGCGCGCGCGAGTCGACAAGTAAGAGTGCGGGAGGCATCT
TAATTAACCCTGCGCTCCCTGGAGCGAGCTGGTGAGGAGGGCGCAGCGGGGACGACAGCCAGCGGGTGCGTGCGC
TCTTAGAGAAACTTTCCCTGTCAAAGGCTCCGGGGGGGCGCGGGTGTCCCCCGCTTGCCAGAGCCCTGTTGCGGCC
CCGAAACTTGTGCGCGCAGCCCAAACTAACCTCACGTGAAGTGACGGACTGTTCT**ATG**ACTGCAAAGATGGAAAC
GACCTTCTATGACGATGCCCTCAACGCCTCGTTCCTCCCGTCCGAGAGCGGACCTTATGGCTACAGTAACCCCAA
GATCCTGAAACAGAGCATGACCCTGAACCTGGCCGACCCAGTGGGGAGCCTGAAGCCGCACCTCCGCGCCAAGAA
CTCGGACCTCCTCACCTCGCCCGACGTGGGGCTGCTCAAGCTGGCGTCGCCCGAGCTGGAGCGCCTGATAATCCA
GTCCAGCAACGGGCACATCACCACCACGCCGACCCCCACCCAGTTCCTGTGCCCCAAGAACGTGACAGATGAGCA
GGAGGGCTTCGCCGAGGGCTTCGTGCGCGCCCTGGCCGAACTGCACAGCCAGAACACGCTGCCCAGCGTCACGTC
GGCGGCGCAGCCGGTCAACGGGGCAGGCATGGTGGCTCCCGCGGTAGCCTCGGTGGCAGGGGGCAGCGGCAGCGG
CGGCTTCAGCGCCAGCCTGCACAGCGAGCCGCCGGTCTACGCAAACCTCAGCAACTTCAACCCAGGCGCGCTGAG
CAGCGGCGGCGGGGCGCCCTCCTACGGCGCGGCCGGCCTGGCCTTTCCCGCGCAACCCCAGCAGCAGCAGCAGCC
GCCGCACCACCTGCCCCAGCAGATGCCCGTGCAGCACCCGCGGCTGCAGGCCCTGAAGGAGGAGCCTCAGACAGT
GCCCGAGATGCCCGGCGAGACACCGCCCCTGTCCCCCATCGACATGGAGTCCCAGGAGCGGATCAAGGCGGAGAG
GAAGCGCATGAGGAACCGCATCGCTGCCTCCAAGTGCCGAAAAAGGAAGCTGGAGAGAATCGCCCGGCTGGAGGA
AAAAGTGAAAACCTTGAAAGCTCAGAACTCGGAGCTGGCGTCCACGGCCAACATGCTCAGGGAACAGGTGGCACA
GCTTAAACAGAAAGTCATGAACCACGTTAACAGTGGGTGCCAACTCATGCTAACGCAGCAGTTGCAAACATTT**TG**
AAGAGAGACCGTCGGGGGCTGAGGGGCAACGAAAAAAAAAAAAAAAAAA

FIGURE 6188

MTAKMETTFYDDALNASFLPSESGPYGYSNPKILKQSMTLNLADPVGSLKPHLRAKNSDLLTSPDVGLLKLASPE
LERLIIQSSNGHITTTPTPTQFLCPKNVTDEQEGFAEGFVRALAELHSQNTLPSVTSAAQPVNGAGMVAPAVASV
AGGSGSGGFSASLHSEPPVYANLSNFNPGALSSGGGAPSYGAAGLAFPAQPQQQQQPPHHLPQQMPVQHPRLQAL
KEEPQTVPEMPGETPPLSPIDMESQERIKAERKRMRNRIAASKCRKRKLERIARLEEKVKTLKAQNSELASTANM
LREQVAQLKQKVMNHVNSGCQLMLTQQLQTF

FIGURE 6189

GAGCGGCCAGGCCAGCCTCGGAGCCAGCAGGGAGCTGGGAGCTGGGGGAAACGACGCCAGGAAAGCTATCGCGCC
AGAGAGGGCGACGGGGGCTCGGGAAGCCTGACAGGGCTTTTGCGCACAGCTGCCGGCTGGCTGCTACCCGCCCGC
GCCAGCCCCCGAGAACGCGCGACCAGGCACCCAGTCCGGTCACCGCAGCGGAGAGCTCGCCGCTCGCTGCAGCGA
GGCCCGGAGCGGCCCCGCAGGGACCCTCCCCAGACCGCCTGGGCCGCCCGG**ATG**TGCACTAAAATGGAACAGCCC
TTCTACCACGACGACTCATACACAGCTACGGGATACGGCCGGGCCCCTGGTGGCCTCTCTCTACACGACTACAAA
CTCCTGAAACCGAGCCTGGCGGTCAACCTGGCCGACCCCTACCGGAGTCTCAAAGCGCCTGGGGCTCGCGGACCC
GGCCCAGAGGGCGGCGGTGGCGGCAGCTACTTTTCTGGTCAGGGCTCGGACACCGGCGCGTCTCTCAAGCTCGCC
TCTTCGGAGCTGGAACGCCTGATTGTCCCCAACAGCAACGGCGTGATCACGACGACGCCTACACCCCCGGGACAG
TACTTTTACCCCCGCGGGGGTGGCAGCGGTGGAGGTGCAGGGGGCGCAGGGGGCGGCGTCACCGAGGAGCAGGAG
GGCTTCGCCGACGGCTTTGTCAAAGCCCTGGACGATCTGCACAAGATGAACCACGTGACACCCCCCAACGTGTCC
CTGGGCGCTACCGGGGGGCCCCCGGCTGGGCCCGGGGGCGTCTACGCCGGCCCGGAGCCACCTCCCGTTTACACC
AACCTCAGCAGCTACTCCCCAGCCTCTGCGTCCTCGGGAGGCGCCGGGGCTGCCGTCGGGACCGGGAGCTCGTAC
CCGACGACCACCATCAGCTACCTCCCACACGCGCCGCCCTTCGCCGGTGGCCACCCGGCGCAGCTGGGCTTGGGC
CGCGGCGCCTCCACCTTCAAGGAGGAACCGCAGACCGTGCCGGAGGCGCGCAGCCGGGACGCCACGCCGCCGGTG
TCCCCCATCAACATGGAAGACCAAGAGCGCATCAAAGTGGAGCGCAAGCGGCTGCGGAACCGGCTGGCGGCCACC
AAGTGCCGGAAGCGGAAGCTGGAGCGCATCGCGCGCCTGGAGGACAAGGTGAAGACGCTCAAGGCCGAGAACGCG
GGGCTGTCGAGTACCGCCGGCCTCCTCCGGGAGCAGGTGGCCCAGCTCAAACAGAAGGTCATGACCCACGTCAGC
AACGGCTGTCAGCTGCTGCTTGGGGTCAAGGGACACGCCTTC**TGA**ACGTCCCCTGCCCCTTTACGGACACCCCCT
CGCTTGGACGGCTGGGCACACGCCTCCCACTGGGGTCCAGGGAGCAGGCGGTGGGCACCCACCCTGGGACCTAGG
GGCGCCGCAAACCACACTGGACTCCGGCCCTCCTACCCTGCGCCCAGTCCTTCCACCTCGACGTTTACAAGCCCC
CCCTTCCACTTTTTTTTGTATGTTTTTTTTCTGCTGGAAACAGACTCGATTCATATTGAATATAATATATTTGTG
TATTTAACAGGGAGGGGAAGAGGGGGCGATCGCGGCGGAGCTGGCCCCGCCGCCTGGTACTCAAGCCCGCGGGGA
CATTGGGAAGGGGACCCCCGCCCCCTGCCCTCCCCTCTCTGCACCGTACTGTGGAAAAGAAACACGCACTTAGTC
TCTAAAGAGTTTATTTTAAGACGTGTTTGTGTTTGTGTGTGTTTGTTCTTTTTATTGAATCTATTTAAGTAAAAA
AAAAATTGGTTCTTTAAAAAAAAAAAAAAAAA

FIGURE 6190

MCTKMEQPFYHDDSYTATGYGRAPGGLSLHDYKLLKPSLAVNLADPYRSLKAPGARGPGPEGGGGGSYFSGQGSD
TGASLKLASSELERLIVPNSNGVITTTPTPPGQYFYPRGGGSGGGAGGAGGGVTEEQEGFADGFVKALDDLHKMN
HVTPPNVSLGATGGPPAGPGGVYAGPEPPPVYTNLSSYSPASASSGGAGAAVGTGSSYPTTTISYLPHAPPFAGG
HPAQLGLGRGASTFKEEPQTVPEARSRDATPPVSPINMEDQERIKVERKRLRNRLAATKCRKRKLERIARLEDKV
KTLKAENAGLSSTAGLLREQVAQLKQKVMTHVSNGCQLLLGVKGHAF

FIGURE 6191A

GAGTGGGAGAAGGATGGTCGCCCTCCACAGTGCAATGGCTGACCACATGAGCACTGAGGACCCAGAGGCCTGCCC
CTGGCTCAGAACCCAGCCTTCCTCTCACTCCTCCAATCCTATCCTTCATTCAAGAGGCCACCCTGAGGGTGTGAA
TGCTATGCATCAAATTTGGGCTCGGACGTATGCGATTTATGATTCTAGCTCCACCACTCTGAGCTGGGACCTTGG
CTCTCCTCTCTGAGCCTCTTTGCTTGTCTGCTAACTGGGGATGGTCGTGCCTACCGTCTGTGGCTGTTGGGCGGG
TTCAAGGAGGGAGTCGGTGGCACAGCCTCATGCCACGGTGCCTGCTGTGCCCACAGGGTGTCTGCTGCACAGCCC
TGCTGGTGGCCGTGGTGGCCCGGAAGCTGGAGTTTAACAAGGCAGAGAAGCACGTGCACAACTTCATGATGGATA
TCCAGTATACCAAAGAGGTGAGATGGGCATATGGCACCCATGGGACACCCCTCTTCCAAGAAGCAGGAGTCCAGG
CGCCCCTGCTTCCCCTAGGACCCAAGAGTCCCAGCCCTAGCCCTGCCTTCCCAGAACCGTAAGGGTCTATCTCCA
CGGACACTGTGCCACCCACCCCCAGATGAAGGAGTCCGCTGCCCGAGTGCTACAAGAAGCCTGGATGTTCTACAA
ACATACTCGCAGGAAGGAGTCTCATGCTGCCCGCAGGCATCAGCGCAAGCTGCTGGCCGCCATCAACGCGTGAGG
GCCGCTTTGTATGCACACGTGTCCATGTGCACCCATGTCCAAGTCACCTCTCTGCACGGCTGTGTGTGTGCATGT
CCATGCCTGTCCAGGTCAGGACACCCAGGTGTGGTCTCACTCAACATCCAGGTCTCACCTGGATCTGACCGTGCA
TGACTCTATGTGTCTGTGCTGGTTTGTCTCCGCATATCTCGGTGTGTCTGCGGGACCTGGGTACCTGGGTTTCTA
CTGGGGATGGGGGCTCGTGGGGAGGCAGGGTGCATCCCCTCCCACTCTTTCAGCTCTTCGACAACTTTGTTTCTT
TGTTTTGTTTCTTCATGTGCCTCTCCTCCCTTCATTCCTCCCCTGAGCTACAGCTACATTCAGGGACCAGGCTTG
TAAAACTGACTCCCCACTTGTTCCCACAGGTTCCGCCAGGTGCGGCTGAAACACCGGAAGCTCCGGGAACAAGTG
AACTCCATGGTGGACATCTCCAAGGTACTAGGATCCCGTGGGAGGAGGTCTTGAAGAAGGGGGAGGTTGGGGCCA
CAGGGAGGGAAATCTGGCCCTAGAACAGGGAACCTTGGCAGGGGCCTGGCACACACAGCCTGTCAGTAAAGGTCT
GTGGTTGAATGAAGGAAGGAAGGAATGAATGATGCAACACAGAGCTTCTTACATTCATGAAAGGCACAGATCCCT
TACAAACTGAAAAAAAAAAAAATTGCACAAAGAACCCCAGTGTTTGGTTTCAAATTATCTTTATTGTTAAGTTACT
TACATGTGGACGGATATAAAATTCCTTCCAACTACAGCTCATACAATAAAACCAAAGCAAATTTACAAACCAAGC
CCATAGACGGCAAAACCAATACAATTAAAATGAACAACACTGACAAGGACACAGGTGACATTGTTTCCGTAAAAC
TCAATCTCTGCTGCTCTTGTGGAGGGGTACTCAGGGCAACAGGGACGTCCATGCAAGTTTGCCTGGCCAAGGCGT
GACTCAGCTACCCGCCCCCTTCTTCTGCTGAGACCATTTGATTTCGCCAGTGCTTAGGACAATGATGTCACAACA
CCCCTTGGCCTGCTCACAAGCATCTTCTGCTTATCTGGTGGCCTTTGCTTTTTCTCGGTAGCCCACGACAGTTCA
AACAAGTGGCCCCTTGGCAACAATGCCATGGTAAAGCCCGTCCAGATCCAGGCCCCAAAACCGATTGGCAGGTCT
TAATGCAAGCAATGGCCCAAATTTGCAGGAATTGGCAGGTGGAAATTTCTTGAAGGTTTCAAACCAAAACCCCCG
AATTCAAGAAATTTCATAGAAAATCCACAAACCTCAGGATCAACTAGTGAATCCTAGCCAGAGAATGCAGTAAAA
GACTATGTGGATTTGGAAGTCAGGCATCATCCATGCTAGAAATATTTAATGAGCACCTGCTATGTTCTAGGTCTT
ATTTCAGGAGCTGCTTTGGGCATGTCATTTAACTGTTCCATGCCTGTTTCCTCAGCTGTAAGACAGGAACAGGAT
TCCCACTCCCTGTGGCTTTTGGGAGGATTTTAAACCATATAGGGAAACACCTGGGCAGGTAGCTGGGAAGTGGTA
GGTGGTCAATACATGGTAACGTTATTGTCGAGGGTAATCCTCAGAGGACCATAAGGATGTGGTCAATATTGGTTC
CATTGCCTTACGCTATGGAGTAGGTGGGGGTCGACCCCAGCCCCGACACCTCTGATCCTCTCCTCCCACCCAGAT
GCACATGATCCTGTATGACCTGCAGCAGAATCTGAGCAGCTCACACCGGGCCCTGGAGAAACAGATTGACACGCT
GGCGGGGAAGCTGGATGCCCTGACTGAGCTGCTTAGCACTGCCCTGGGGCCGAGGCAGCTTCCAGAACCCAGCCA
GCAGTCCAAGTAGCTGGTGAGGGGGCTGGGACTTGGGCAGGAAGGCATCCTGGAGGAAGGGTTCCTGTGGCCAGC
ACCCTATGTGGCTAAGGGGCGGGGGATGGCTGGGAGACAAGGCCGCCTTTTCTCATCAGCTCTGGCACTGTCTGG
AGGAAAGGACTCAGTTCGGGGCTGGACTGGCAGTGAAGGAAGATGGTGTACCCTCTCCCCTTCACTGACCCTTGA
TGGCCTTCTCCTCTTTGCTTGGTCTCTCTTCTCTTCTGCCTGTCCTGGGCACATTGTCTGGCTGTCATCCAATGT
CTCTGTCTAAATGCCCTCCTGCCCCCTGGCCTCGGGGCCCGGAAACACCTGCCCCCTGTCTCCCACTTCTGCCCA
CCGGTTTCTGTCTGCACCTCGGTGTGTCCCACTCTCACTCTCCCTCTTACTGGCCTGCCTCTCCATCAGTCTCTC
TGTCTCTCCAGGGACCCACGAGGAGGGAACCAAGGCTACTTTCCCCAAGTACTGAGGTGGTGGACATCGTCTCTG
CCACTCCTGACCCAGCCCTGAACAAAGCACCTCAAGTGCAAAGGACCAAAGGGGGCCCTGGCTTGGAGTGGGTTG
GCTTGCTGATGGCTTGCTGGAGGGGACGCTGGCTAAAGTGGGTAGGCCTTGGCCCACCTGAGGCCCCAGGTGGGA
ACATGGTCACCCCCACTCTGCATACCCTCATCAAAAACACTCTCACTATGCTGCTATGGACGACCTCCAGCTCTC
AGTTACAAGTGCAGGCGACTGGAGGCAGGACTCCTGGGTCCCTGGGAAAGAGGGTACTAGGGGCCCGGATCCAGG
ATTCTGGGAGGCTTCAGTTACCGCTGGCCGAGCTGAAGAACTGGGTATGAGGCTGGGGCGGGGCTGGAGGTGGCG
CCCCCTGGTGGGACAACAAAGAGGACACCATTTTTCCAGAGCTGCAGAGAGCACCTGGTGGGGAGGAAGAAGTGT

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FIGURE 6191B

AAGTCACCAGCCTCTGCTCTTATCTTTGTAATAAATGTTAAAGCCAG

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FIGURE 6192

AAAGCAGAATTGAGAGTTTGTTCTTACACACAAGTTTAATGCCACCTTCCTCTGTCTGCCATGGACCAACAAGCA
ATATATGCTGAGTTAAACTTACCCACAGACTCAGGCCCAGAAAGTTCTTCACCTTCATCTCTTCCTCGGGATGTC
TGTCAGGGTTCACCTTGGCATCAATTTGCCCTGAAACTTAGCTGTGCTGGGATTATTCTCCTTGTCTTGGTTGTT
ACTGGGTTGAGTGTTTCAGTGACATCCTTAATACAGAAATCATCAATAGAAAAATGCAGTGTGGACATTCAACAG
AGCAGGAATAAAACAACAGAGAGACCGGGTCTCTTAAACTGCCCAATATATTGGCAGCAACTCCGAGAGAAATGC
TTGTTATTTTCTCACACTGTCAACCCTTGGAATAACAGTCTAGCTGATTGTTCCACCAAAGAATCCAGCCTGCTG
CTTATTCGAGATAAGGATGAATTGATACACACACAGAACCTGATACGTGACAAAGCAATTCTGTTTTGGATTGGA
TTAAATTTTTCATTATCAGAAAAGAACTGGAAGTGGATAAACGGCTCTTTTTTAAATTCTAATGACTTAGAAATT
AGAGGTGATGCTAAAGAAAACAGCTGTATTTCCATCTCACAGACATCTGTGTATTCTGAGTACTGTAGTACAGAA
ATCAGATGGATCTGCCAAAAAGAACTAACACCTGTGAGAAATAAAGTGTATCCTGACTCTTGA

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FIGURE 6193

MDQQAIYAELNLPTDSGPESSSPSSLPRDVCQGSPWHQFALKLSCAGIILLVLVVTGLSVSVTSLIQKSSIEKCS
VDIQQSRNKTTERPGLLNCPIYWQQLREKCLLFSHTVNPWNNSLADCSTKESSLLLIRDKDELIHTQNLIRDKAI
LFWIGLNFSLSEKNWKWINGSFLNSNDLEIRGDAKENSCISISQTSVYSEYCSTEIRWICQKELTPVRNKVYPDS

FIGURE 6194

TCTCCCTCCGCCTCCCGAGCACCAGCGCGCTCTGAGCTGCCCCCAGGGTCCCTCCCCCGCCGCCAGCAGCCCATT
TGGAGGGAGGAAGTAAGGGAAGAGGAGAGGAAGGGGAGCCGGACCGACTACCCAGACAGAGCCGGTGAATGGGTT
TGTGGTGACCCCCGCCCCCCACCCCACCCTCCCTTCCCACCCGACCCCCAACCCCCATCCCCAGTTCGAGCCGCC
GCCCGAAAGGCCGGGCCGTCGTCTTAGGAGGAGTCGCCGCCGCCGCCACCTCCGCC**ATG**GAGCTGATCACCATTC
TCGAGAAGACCGTGTCTCCCGATCGGCTGGAGCTGGAAGCGGCGCAGAAGTTCCTGGAGCGTGCGGCCGTGGAGA
ACCTGCCCACTTTCCTTGTGGAACTGTCCAGAGTGCTGGCAAATCCAGGAAACAGTCAGGTTGCCAGAGTTGCAG
CTGGTCTACAAATCAAGAACTCTTTGACATCTAAAGATCCAGATATCAAGGCACAATATCAGCAGAGGTGGCTTG
CTATTGATGCTAATGCTCGACGAGAAGTCAAGAACTATGTTTTGCAGACATTGGGTACAGAAACTTACCGGCCTA
GTTCTGCCTCACAGTGTGTGGCTGGTATTGCTTGTGCAGAGATCCCAGTAAACCAGTGGCCAGAACTCATTCCTC
AGCTGGTGGCCAATGTCACAAACCCCAACAGCACAGAGCACATGAAGGAGTCGACATTGGAAGCCATCGGTTATA
TTTGCCAAGATATAGACCCAGAGCAGCTACAAGATAAATCCAATGAGATTCTGACTGCCATAATCCAGGGGATGA
GGAAAGAAGAGCCTAGTAATAATGTGAAGCTAGCTGCTACGAATGCACTCCTGAACTCATTGGAGTTCACCAAAG
CAAACTTTGATAAAGAGTCTGAAAGGCACTTTATTATGCAGGTGGTCTGTGAAGCCACACAGTGTCCAGATACGA
GGGTACGAGTGGCTGCTTTACAGAATCTGGTGAAGATAATGTCCTTATATTATCAGTACATGGAGACATATATGG
GTCCTGCTCTTTTTGCAATCACAATCGAAGCAATGAAAAGTGACATTGATGAGGTGGCTTTACAAGGGATAGAAT
TCTGGTCCAATGTCTGTGATGAGGAAATGGATTTGGCCATTGAAGCTTCAGAGGCAGCAGAACAAGGACGGCCCC
CTGAGCACACCAGCAAGTTTTATGCGAAGGGAGCACTACAGTATCTGGTTCCAATCCTCACACAGACACTAACTA
AACAGGACGAAAATGATGATGACGATGACTGGAACCCCTGCAAAGCAGCAGGGGTGTGCCTCATGCTTCTGGCCA
CCTGCTGTGAAGATGACATTGTCCCACATGTCCTCCCCTTCATTAAAGAACACATCAAGAACCCAGATTGGCGGT
ACCGGGATGCAGCAGTGATGGCTTTTGGTTGTATCTTGGAAGGACCAGAGCCCAGTCAGCTCAAACCACTAGTTA
TACAGGCTATGCCCACCCTAATAGAATTAATGAAAGACCCCAGTGTAGTTGTTCGAGATACAGCTGCATGGACTG
TAGGCAGAATTTGTGAGCTGCTTCCTGAAGCTGCCATCAATGATGTCTACTTGGCTCCCCTGCTACAGTGTCTGA
TTGAGGGTCTCAGTGCTGAACCCAGAGTGGCTTCAAATGTGTGCTGGGCTTTCTCCAGTCTGGCTGAAGCTGCTT
ATGAAGCTGCAGACGTTGCTGATGATCAGGAAGAACCAGCTACTTACTGCTTATCTTCTTCATTTGAACTCATAG
TTCAGAAGCTCCTAGAGACTACAGACAGACCTGATGGACACCAGAACAACCTGAGGAGTTCTGCATATGAATCTC
TGATGGAAATTGTGAAAAACAGTGCCAAGGATTGTTATCCTGCTGTCCAGAAAACGACTTTGGTCATCATGGAAC
GACTGCAACAGGTTCTTCAGATGGAGTCACATATCCAGAGCACATCCGATAGAATCCAGTTCAATGACCTTCAGT
CTTTACTCTGTGCAACTCTTCAGAATGTTCTTCGGAAAGTGCAACATCAAGATGCTTTGCAGATCTCTGATGTGG
TTATGGCCTCCCTGTTAAGGATGTTCCAAAGCACAGCTGGGTCTGGGGGAGTACAAGAGGATGCCCTGATGGCAG
TTAGCACACTGGTGGAAGTGTTGGGTGGTGAATTCCTCAAGTACATGGAGGCCTTTAAACCCTTCCTGGGCATTG
GATTAAAAAATTATGCTGAATACCAGGTTTGTTTGGCAGCTGTGGGCTTAGTGGGAGACTTGTGCCGTGCCCTGC
AATCCAACATCATACCTTTCTGTGACGAGGTGATGCAGCTGCTTCTGGAAAATTTGGGGAATGAGAACGTCCACA
GGTCTGTGAAGCCGCAGATTCTGTCAGTGTTTGGTGATATTGCCCTTGCTATTGGAGGAGAGTTTAAAAAATACT
TAGAGGTTGTATTGAATACTCTTCAGCAGGCCTCCCAAGCCCAGGTGGACAAGTCAGACTATGACATGGTGGATT
ATCTGAATGAGCTAAGGGAAAGCTGCTTGGAAGCCTATACTGGAATCGTCCAGGGATTAAAGGGGGATCAGGAGA
ACGTACACCCGGATGTGATGCTGGTACAACCCAGAGTAGAATTTATTCTGTCTTTCATTGACCACATTGCTGGAG
ATGAGGATCACACAGATGGAGTAGTAGCTTGTGCTGCTGGACTAATAGGGGACTTATGTACAGCATTTGGGAAGG
ATGTACTGAAATTAGTAGAAGCTAGGCCAATGATCCATGAATTGTTAACTGAAGGGCGGAGATCGAAGACTAACA
AAGCAAAAACCCTTGCTACATGGGCAACAAAAGAACTGAGGAAACTGAAGAACCAAGCT**TGA**TCTGTTACCATTG
GGATGATAACCTGAGGACCCCCACTGGAAATCTCCCATCTTTTGAAAAACCTGGAAGTGAGGAGTGTGCACGGAT
GCTGAATGTTTGGGAATGAGAGGATGAGTGAGTGAGGCTTGAAAACACACCACATTGAAAATCCTGCCACAGCAG
CAGCCGCAGCCGCCAACAGCAGCGCTGTTAGTGAGCTAAGTAAGCACTGACTTCGTAGAAAACCATAACATCGGC
CATCTTGGAAAAGAGAAAAACAATGGAGTTACTTATTTAAAAAAAAAAAAAAAAAA

FIGURE 6195

MELITILEKTVSPDRLELEAAQKFLERAAVENLPTFLVELSRVLANPGNSQVARVAAGLQIKNSLTSKDPDIKAQ
YQQRWLAIDANARREVKNYVLQTLGTETYRPSSASQCVAGIACAEIPVNQWPELIPQLVANVTNPNSTEHMKEST
LEAIGYICQDIDPEQLQDKSNEILTAIIQGMRKEEPSNNVKLAATNALLNSLEFTKANFDKESERHFIMQVVCEA
TQCPDTRVRVAALQNLVKIMSLYYQYMETYMGPALFAITIEAMKSDIDEVALQGIEFWSNVCDEEMDLAIEASEA
AEQGRPPEHTSKFYAKGALQYLVPILTQTLTKQDENDDDDDWNPCKAAGVCLMLLATCCEDDIVPHVLPFIKEHI
KNPDWRYRDAAVMAFGCILEGPEPSQLKPLVIQAMPTLIELMKDPSVVVRDTAAWTVGRICELLPEAAINDVYLA
PLLQCLIEGLSAEPRVASNVCWAFSSLAEAAYEAADVADDQEEPATYCLSSSFELIVQKLLETTDRPDGHQNNLR
SSAYESLMEIVKNSAKDCYPAVQKTTLVIMERLQQVLQMESHIQSTSDRIQFNDLQSLLCATLQNVLRKVQHQDA
LQISDVVMASLLRMFQSTAGSGGVQEDALMAVSTLVEVLGGEFLKYMEAFKPFLGIGLKNYAEYQVCLAAVGLVG
DLCRALQSNIIPFCDEVMQLLLENLGNENVHRSVKPQILSVFGDIALAIGGEFKKYLEVVLNTLQQASQAQVDKS
DYDMVDYLNELRESCLEAYTGIVQGLKGDQENVHPDVMLVQPRVEFILSFIDHIAGDEDHTDGVVACAAGLIGDL
CTAFGKDVLKLVEARPMIHELLTEGRRSKTNKAKTLATWATKELRKLKNQA

FIGURE 6196

ACAGGGGTGAAGGCCCAGAGACCAGCAGAACGGCATCCCAGCCACGACGGCCACTTTGCTCTGTCTGCTGTCCGC
CACGGCCCTGCTCTGTTCCCTGGGACACCCCCGCCCCCACCTCCTCAGGCTGCCTGATCTGCCCAGCTTTCCAGC
TTTCCTCTGGATTCCGGCCTCTGGTCATCCCTCCCCACCCTCTCTCCAAGGCCCTCTCCTGGTCTCCCTTCTTCT
AGAACCCCTTCCTCCACCTCCCTCTCTGCAGAACTTCTCCTTTACCCCCCACCCCCCACCACTGCCCCCTTTCCT
TTTCTGACCTCCTTTTGGAGGGCTCAGCGCTGCCCAGACCATAGGAGAG**ATG**TGGGAGGCTCAGTTCCTGGGCTT
GCTGTTTCTGCAGCCGCTTTGGGTGGCTCCAGTGAAGCCTCTCCAGCCAGGGGCTGAGGTCCCGGTGGTGTGGGC
CCAGGAGGGGGCTCCTGCCCAGCTCCCCTGCAGCCCCACAATCCCCCTCCAGGATCTCAGCCTTCTGCGAAGAGC
AGGGGTCACTTGGCAGCATCAGCCAGACAGTGGCCCGCCCGCTGCCGCCCCCGGCCATCCCCTGGCCCCCGGCCC
TCACCCGGCGGCGCCCTCCTCCTGGGGGCCCAGGCCCCGCCGCTACACGGTGCTGAGCGTGGGTCCCGGAGGCCT
GCGCAGCGGGAGGCTGCCCCTGCAGCCCCGCGTCCAGCTGGATGAGCGCGGCCGGCAGCGCGGGGACTTCTCGCT
ATGGCTGCGCCCAGCCCGGCGCGCGGACGCCGGCGAGTACCGCGCCGCGGTGCACCTCAGGGACCGCGCCCTCTC
CTGCCGCCTCCGTCTGCGCCTGGGCCAGGCCTCGATGACTGCCAGCCCCCCAGGATCTCTCAGAGCCTCCGACTG
GGTCATTTTGAACTGCTCCTTCAGCCGCCCTGACCGCCCAGCCTCTGTGCATTGGTTCCGGAACCGGGGCCAGGG
CCGAGTCCCTGTCCGGGAGTCCCCCCATCACCACTTAGCGGAAAGCTTCCTCTTCCTGCCCCAAGTCAGCCCCAT
GGACTCTGGGCCCTGGGGCTGCATCCTCACCTACAGAGATGGCTTCAACGTCTCCATCATGTATAACCTCACTGT
TCTGGGTCTGGAGCCCCCAACTCCCTTGACAGTGTACGCTGGAGCAGGTTCCAGGGTGGGGCTGCCCTGCCGCCT
GCCTGCTGGTGTGGGGACCCGGTCTTTCCTCACTGCCAAGTGGACTCCTCCTGGGGGAGGCCCTGACCTCCTGGT
GACTGGAGACAATGGCGACTTTACCCTTCGACTAGAGGATGTGAGCCAGGCCCAGGCTGGGACCTACACCTGCCA
TATCCATCTGCAGGAACAGCAGCTCAATGCCACTGTCACATTGGCAATCATCACAGTGACTCCCAAATCCTTTGG
GTCACCTGGATCCCTGGGGAAGCTGCTTTGTGAGGTGACTCCAGTATCTGGACAAGAACGCTTTGTGTGGAGCTC
TCTGGACACCCCATCCCAGAGGAGTTTCTCAGGACCTTGGCTGGAGGCACAGGAGGCCCAGCTCCTTTCCCAGCC
TTGGCAATGCCAGCTGTACCAGGGGGAGAGGCTTCTTGGAGCAGCAGTGTACTTCACAGAGCTGTCTAGCCCAGG
TGCCCAACGCTCTGGGAGAGCCCCAGGTGCCCTCCCAGCAGGCCACCTCCTGCTGTTTCTCACCCTTGGTGTCCT
TTCTCTGCTCCTTTTGGTGACTGGAGCCTTTGGCTTTCACCTTTGGAGAAGACAGTGGCGACCAAGACGATTTTC
TGCCTTAGAGCAAGGGATTCACCCTCCGCAGGCTCAGAGCAAGATAGAGGAGCTGGAGCAAGAACCGGAGCCGGA
GCCGGAGCCGGAACCGGAGCCCGAGCCCGAGCCCGAGCCGGAGCAGCTC**TGA**CCTGGAGCTGAGGCAGCCAGCAG
ATCTCAGCAGCCCAGTCCAAATAAACGTCCTGTCTAGCAGC

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FIGURE 6197

MWEAQFLGLLFLQPLWVAPVKPLQPGAEVPVVWAQEGAPAQLPCSPTIPLQDLSLLRRAGVTWQHQPDSGPPAAA
PGHPLAPGPHPAAPSSWGPRPRRYTVLSVGPGGLRSGRLPLQPRVQLDERGRQRGDFSLWLRPARRADAGEYRAA
VHLRDRALSCRLRLRLGQASMTASPPGSLRASDWVILNCSFSRPDRPASVHWFRNRGQGRVPVRESPHHHLAESF
LFLPQVSPMDSGPWGCILTYRDGFNVSIMYNLTVLGLEPPTPLTVYAGAGSRVGLPCRLPAGVGTRSFLTAKWTP
PGGGPDLLVTGDNGDFTLRLEDVSQAQAGTYTCHIHLQEQQLNATVTLAIITVTPKSFGSPGSLGKLLCEVTPVS
GQERFVWSSLDTPSQRSFSGPWLEAQEAQLLSQPWQCQLYQGERLLGAAVYFTELSSPGAQRSGRAPGALPAGHL
LLFLTLGVLSLLLLVTGAFGFHLWRRQWRPRRFSALEQGIHPPQAQSKIEELEQEPEPEPEPEPEPEPEPEQL

FIGURE 6198A

ATGAACCTCTGAAAACTGCCGGCATCTGAGGTTTCCTCCAAGGCCCTCTGAAGTGCAGCCCATAATGAAGGTCTT
GGCGGCAGGAGTTGTGCCCCTGCTGTTGGTTCTGCACTGGAAACATGGGGCGGGGAGCCCCCTCCCCATCACCCC
TGTCAACGCCACCTGTGCCATACGCCACCCATGTCACAACAACCTCATGAACCAGATCAGGAGCCAACTGGCACA
GCTCAATGGCAGTGCCAATGCCCTCTTTATTCTCTATTACACAGCCCAGGGGGAGCCGTTCCCCAACAACCTGGA
CAAGCTATGTGGCCCCAACGTGACGGACTTCCCGCCCTTCCACGCCAACGGCACGGAGAAGGCCAAGCTGGTGGA
GCTGTACCGCATAGTCGTGTACCTTGGCACCTCCCTGGGCAACATCACCCGGGACCAGAAGATCCTCAACCCCAG
TGCCCTCAGCCTCCACAGCAAGCTCAACGCCACCGCCGACATCCTGCGAGGCCTCCTTAGCAACGTGCTGTGCCG
CCTGTGCAGCAAGTACCACGTGGGCCATGTGGACGTGACCTACGGCCCTGACACCTCGGGTAAGGATGTCTTCCA
GAAGAAGAAGCTGGGCTGTCAACTCCTGGGGAAGTATAAGCAGATCATCGCCGTGTTGGCCCAGGCCTTCTAGCA
GGAGGTCTTGAAGTGTGCTGTGAACCGAGGGATCTCAGGAGTTGGGTCCAGATGTGGGGGCCTGTCCAAGGGTGG
CTGGGGCCCAGGGCATCGCTAAACCCAAATGGGGGCTGCTGGCAGACCCCGAGGGTGCCTGGCCAGTCCACTCCA
CTCTGGGCTGGGCTGTGATGAAGCTGAGCAGAGTGGAAACTTCCATAGGGAGGGAGCTAGAAGAAGGTGCCCCTT
CCTCTGGGAGATTGTGGACTGGGGAGCGTGGGCTGGACTTCTGCCTCTACTTGTCCCTTTGGCCCCTTGCTCACT
TTGTGCAGTGAACAAACTACACAAGTCATCTACAAGAGCCCTGACCACAGGGTGAGACAGCAGGGCCCAGGGGAG
TGGACCAGCCCCCAGCAAATTATCACCATCTGTGCCTTTGCTGCCCCTTAGGTTGGGACTTAGGTGGGCCAGAGG
GGCTAGGATCCCAAAGGACTCCTTGTCCCCTAGAAGTTTGATGAGTGGAAGATAGAGAGGGGCCTCTGGGATGGA
AGGCTGTCTTCTTTTGAGGATGATCAGAGAACTTGGGCATAGGAACAATCTGGCAGAAGTTTCCAGAAGGAGGTC
ACTTGGCATTCAGGCTCTTGGGGAGGCAGAGAAGCCACCTTCAGGCCTGGGAAGGAAGACACTGGGAGGAGGAGA
GGCCTGGAAAGCTTTGGTAGGTTCTTCGTTCTCTTCCCCGTGATCTTCCCTGCAGCCTGGGATGGCCAGGGTCTG
ATGGCTGGACCTGCAGCAGGGGTTTGTGGAGGTGGGTAGGGCAGGGGCAGGTTGCTAAGTCAGGTGCAGAGGTTC
TGAGGGACCCAGGCTCTTCCTCTGGGTAAAGGTCTGTAAGAAGGGGCTGGGGTAGCTCAGAGTAGCAGCTCACAT
CTGAGGCCCTGGGAGGTCTTGTGAGGTCACACAGAGGTACTTGAGGGGGACTGGAGGCCGTCTCTGGTCCCCAGG
GCAAGGGAACAGCAGAACTTAGGGTCAGGGTCTCAGGGAACCCTGAGCTCCAAGCGTGCTGTGCGTCTGACCTGG
CATGATTTCTATTTATTATGATATCCTATTTATATTAACTTATTGGTGCTTTCAGTGGCCAAGTTAATTCCCCTT
TCCCTGGTCCCTACTCAACAAAATATGATGATGGCTCCCGACACAAGCGCCAGGGCCAGGGCTTAGCAGGGCCTG
GTCTGGAAGTCGACAATGTTACAAGTGGAATAAGCTTACGGGTGAAGCTCAGAGAAGGGTCGGATCTGAGAGAAT
GGGGAGGCCTGAGTGGGAGTGGGGGGCCTTGCTCCACCCCCATCCCCTACTGTGACTTGCTTTAGCGTGTCAGGG
TCCAGGCTGCAGGGGCTGGGCCAATTTGTGGAGAGGCCGGGTGCCTTTCTGTCTTGCTTCCAGGGGGCTGGTTCA
CACTGTTCTTGGGCGCCCCAGCATTGTGTTGTGAGGCGCACTGTTCCTGGCAGATATTGTGCCCCCTGGAGCAGT
GGGCAAGACAGTCCTTGTGGCCCACCCTGTCCTTGTTTCTGTGTCCCCATGCTGCCTCTGAAATAGCGCCCTGGA
ACAACCCTGCCCCTGCACCCAGCATGCTCCGACACAGCAGGGAAGCTCCTCCTGTGGCCCGGACACCCATAGACG
GTGCGGGGGGCCTGGCTGGGCCAGACCCCAGGAAGGTGGGGTAGACTGGGGGGATCAGCTGCCCATTGCTCCCAA
GAGGAGGAGAGGGAGGCTGCAGACGCCTGGGACTCAGACCAGGAAGCTGTGGGCCCTCCTGCTCCACCCCCATCC
CACTCCCACCCATGTCTGGGCTCCCAGGCAGGGAACCCGATCTCTTCCTTTGTGCTGGGGCCAGGCGAGTGGAGA
AACGCCCTCCAGTCTGAGAGCAGGGGAGGGAAGGAGGCAGCAGAGTTGGGGCAGCTGCTCAGAGCAGTGTTCTGG
CTTCTTCTCAAACCCTGAGCGGGCTGCCGGCCTCCAAGTTCCTCCGACAAGATGATGGTACTAATTATGGTACTT
TTCACTCACTTTGCACCTTTCCCTGTCGCTCTCTAAGCACTTTACCTGGATGGCGCGTGGGCAGTGTGCAGGCAG
GTCCTGAGGCCTGGGGTTGGGGTGGAGGGTGCGGCCCGGAGTTGTCCATCTGTCCATCCCAACAGCAAGACGAGG
ATGTGGCTGTTGAGATGTGGGCCACACTCACCCTTGTCCAGGATGCAGGGACTGCCTTCTCCTTCCTGCTTCATC
CGGCTTAGCTTGGGGCTGGCTGCATTCCCCCAGGATGGGCTTCGAGAAAGACAAACTTGTCTGGAAACCAGAGTT
GCTGATTCCACCCGGGGGGCCCGGCTGACTCGCCCATCACCTCATCTCCCTGTGGACTTGGGAGCTCTGTGCCAG
GCCCACCTTGCGGCCCTGGCTCTGAGTCGCTCTCCCACCCAGCCTGGACTTGGCCCCATGGGACCCATCCTCAGT
GCTCCCTCCAGATCCCGTCCGGCAGCTTGGCGTCCACCCTGCACAGCATCACTGAATCACAGAGCCTTTGCGTGA
AACAGCTCTGCCAGGCCGGGAGCTGGGTTTCTCTTCCCTTTTTATCTGCTGGTGTGGACCACACCTGGGCCTGGC
CGGAGGAAGAGAGAGTTTACCAAGAGAGATGTCTCCGGGCCCTTATTTATTATTTAAACATTTTTTTAAAAAGCA
CTGCTAGTTTACTTGTCTCTCCTCCCCATCGTCCCCATCGTCCTCCTTGTCCCTGACTTGGGGCACTTCCACCCT
GACCCAGCCAGTCCAGCTCTGCCTTGCCGGCTCTCCAGAGTAGACATAGTGTGTGGGGTTGGAGCTCTGGCACCC
GGGGAGGTAGCATTTCCCTGCAGATGGTACAGATGTTCCTGCCTTAGAGTCATCTCTAGTTCCCCACCTCAATCC

FIGURE 6198B

CGGCATCCAGCCTTCAGTCCCGCCCACGTGCTAGCTCCGTGGGCCCACCGTGCGGCCTTAGAGGTTTCCCTCCTT
CCTTTCCACTGAAAAGCACATGGCCTTGGGTGACAAATTCCTCTTTGATGAATGTACCCTGTGGGGATGTTTCAT
ACTGACAGATTATTTTTATTTATTCAATGTCATATTTAAAATATTTATTTTTTATACCAAATGAATCACTTTTTT
TTTTAAGAAAAAAAAAGAGAAATGAATAAAGAATCTACTCTTCG

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FIGURE 6199

MKVLAAGVVPLLLVLHWKHGAGSPLPITPVNATCAIRHPCHNNLMNQIRSQLAQLNGSANALFILYYTAQGEPFP
NNLDKLCGPNVTDFPPFHANGTEKAKLVELYRIVVYLGTSLGNITRDQKILNPSALSLHSKLNATADILRGLLSN
VLCRLCSKYHVGHVDVTYGPDTSGKDVFQKKKLGCQLLGKYKQIIAVLAQAF

FIGURE 6200A

GAATTCCTGGGCTCAGAGGTCCTCCCACCTTAGCCTTCTGAGTAGCTAGGACTACAGACACCAGCTACCACATGA
GGCTTTGTAGAAATGGGGTCTTACTATGTTGCCCAGGCTGATTTTGAACTCCTGGTCTCAAGCAATCTTTCCACC
TTAGCCTTCCAAAGTGCTGGAATTACAGGAGTGGGCCACTGCACCTGGCTCTATTAACATTTTTTATTTGCTTTA
TCACATATTTATCAATCCATCTCACTTTTAAATATCTTTTAAAATTACAAATATCAGTACATTTTACATCTAAAC
CCTTCAGAAGCTTAACATTGACTGGAGTTCAGTATTTATTTCCCCATTTCTTTTCTGGCCTGAGGAAGGCAAATT
TTACATACAAATCTCAAGTCAGTACTCTTTTTTTTTTTTGAGACGGAGTCTTGCTCTGTTGCCCAGGCTGGAGTC
CAGTGGTGTGATCTTGGCTCACTGCAACCTCTGCCTTCTGGGTACAAGCGATTCTCCTGTCTCAGCCTCCCAAGT
AGCTGGGACTACAGGTTTGTGCCACCATATCCAGCTAATTTTTGTATTTTTAATGGAGAAGGGGTTTCACCATGT
TGGCCAGGCTGGTCTCAAACTCTTGACCTCAAGTGATCCACCTGCCTTGGTCTCCTAAAGTGCTGGGATTATAGG
TGTGAGCCATCTCGCCTGGCCTAATACTGTTTTGTTTGTTTGTTTTTGTTTTTAAGACAGAGTCTTGTTCTTGTC
ACCCAGGCTGGAGTGCAATGGCATGATTTCGGCTCACTGCAACTTCCGCCTCCTGGGTTCAAGTGATTCTCCTGC
CTCAGCCTCCCAAGTAGCTGGAATTAAAGGTGCCTACCACCACGCCCCGCTAATTTTTATATTTTTAGTAGAGAT
GGGGTTTCACCATGTTGATCAGGCTGCTCTCGAGCTCCTTACCTCAGATGATCCACCTTCCTTGGCCTCCCAAAG
TGCTGGTATTATAGGCAAGAGCCACTGCGCCCAGCCCCAGTATTCAGTTTTTAAACTGTCTTGTTATCAAGGCTC
TGGAGCCAGATGCCTGGGTTCAAATTCTGGTTCTGCCACTGACTCTGTGAGCTCCATAAGTTTCTTAACCTCTCT
GTACCTCAGTTTCCTCTTAGGGTTTTTGTCAGGATTATAATTATTGGCTGGGCATGATGGCTCATGCTTGTAATC
CCAGCACTTTAGGAGGCCAACACGGGCAGATCACGTGAGTCCAGGAGTTTGAGCCCAGCCTGGGCAATGTGGCAA
AAATCCATCTCTACAAAAAATGCAAAAATTAGCTGGGCATGGTGGCATGTGCCTATAGTCCCAGCTATTCAGGAG
GCTGAGGTAGGTGAATCCATAGATCCTGGGAGGTCAAGGCTGCAGTGAGCCATGATCCTGCCATTGCATTCCAGT
CTGGGTGACATAGCGAGACCCTGTCTCAAAAAAAAAAATTATTAAAGTGTGTAAATCAGTGGCATAAACATGTTA
AGTGCATTTTGTGGGTCAGCTATATTATTATTAGTATTACGGAAACACATAGAGATGTTACCAAGAAGGGGAGAT
GATTGGAGCCACTTCCAGCTTCCTTGGACCTGGTCTTTCTTCCCTTGACTCTTTTTTTTTTTTTTTTTTTTTTT
TGAGAGAGAGAGTCTCAGCCTGTTGCCCAGGCTGGAGTGCAATGGTGCAATCTTGGCTCACTGCAACCTCTGCCT
CCCAGGTTTAAGTGATTCTCCTGCCTCAGCCTCCTGTGTAGCTGGAATTACAGGCGCGTGCCACCACGCCCGGCT
AACTTTTTGTATCTTTAGTAGAGACAGGGTTTCACCATGTTGGCCAGGCTGGTCTCGAACTCCTGACCTCAAGTG
ATCCACCTGCCTCAGCCTCCCAAAGTGTTGGGATTACAGGTGTAAGCCACTACCCCGGCTACTCCCTTGACTCTT
AACCACTCATGCTGCCTACATCTACCATTCATGTGGTCCTTGCTGCTTTGTTTTGGTTATTCCTGCATTTATTTG
TCCTTTTATTCATTTATGTATAAACATTTAGTAAGCACCTACTAATGGATAGGGCTCATTGTAGACTTGGAAGCT
CTCTGAGGGTGGGAGTATGCCTCGTCCATCTGTCTTTACTTTTTGTAGCAAGGGAGGTAAAGCTCCATTTCCATC
CCTCCTTAGTGAGTCAGTAGTCAGTGGTGAGGCTAAGGCTTACCTCTCCCTTTCTCACTCAGCACAGGGGGCTGG
AGATGAGCAAGGGAACGGGAGGAGGTCAGCCCAGTATGGGAATCAGTTCTTCTCAGGGAACCCAGACATCCATCC
CTCAAGATTCCAGTCCTTGTCCTAGTCCGGCCCTTGACCTCAGAGACGGGATCAGCTCTTCCTCCAGCACCTACC
TTGAGGGTATAGAAGAATGCAAACCACATTGGAAACCTGGAGATCTGTGTTCTCATTTCAGCTCTGCTGACTGGC
TTCCTGCAAGCTACCTTCCCTCCCTGGGCCTCAGTTTCTCTCTCTGCTGAGCCAGAAGATGTCTAAAGACCCCTT
TGGTTCCACCCTGAGAGCCTGTCTCCCTAACCTCAACTTCTTCCCCAGTTCAGAGAACCCAGGCATCCAGCTGCC
CCACCCCAGCTCTGGGTAAACAGGAAGCTGGGTGAGGGGAGCAGGGGTGTGCGGAAAGTCCCAGCCAGGTGTGCA
GGTCTACAGGGAGGGGGTGGGCCCGTCCCTGAGGTATGAAAGCCCCCTGCTCTGGCTCTGGTTCAGTCTCAATGG
GGGCACTGGGGCTGGAGGGCAGGGGTGGGAGGCTCCAGGGGAGGGGTTCCCTCCTGCTAGCTGTGGCAGGAGCCA
CTTCTCTGGTGACCTTGTTGCTGGCGGTGCCTATCACTGTCCTGGCTGTGCTGGCCTTAGTGCCCCAGGATCAGG
GAGGACTGGTGAGTGGCTGCAACAGGCCCTGGTGGAGAGTTGTATCTTGCGGATGCTTGGCTCCCTCTGGTTGTG
CCTGTGGTCTTTTGCCCCCTCTGGCTCAGCTGGCTCGGCTGTCCCTGGTGGGGATGTCTTGTCTCTTTGCTGACT
CTCTTTCCATGTTCCTGTGATGTTGTGCTTGTGTCCCGACATAAGCCCCTTGTGTCTCCTCTCCTCTTCCCGAGG
TACATCTGTTTCTCCGCCCAAGTACCTATGCCTTGCTTGTTCTCCCTTCTAAGGAGGTGTGTGTTGGGGATGGTG
CTGGTAGGAGAAACCCCAGGCCTGCAGCTTGGGTCCACTTTCAGAGGGGTAGGGGTGACATGAGCTGAATCTGAA
CTCTGGGCACTGTGACCCCACCCAACCAGGTAACGGAGACGGCCGACCCCGGGGCACAGGCCCAGCAAGGACTGG
GTAAGAGCAGACTGTCTCTCCTTCCCCGCTTCAGACCCTCAGGGGCTCCCAGCTCCCTGCTGCGTCCCCAGATAC
CTCTTCCTCTAGGAATCCAGGCTCCCCATCCCTGCGCCCTGTTCTCTCAAGGGTAGCCTGCATGGGTGGCTGCCC
TGCCCCCAATCGTGGACTCTTTGCCCCTTCCAGGGTTTCAGAAGCTGCCAGAGGAGGAGCCAGAAACAGATCTCA

FIGURE 6200B

GCCCCGGGCTCCCAGCTGCCCACCTCATAGGTAAGGACCTCCAAGACCTGAATAAGAGTGTAAATAATCCGAAGG
TTCCAGTTCTGCTCGCCCAGAGTCCTTCGGCTCCATGATTCCAGTGCTCGGTTTCCCACCCGCTTCACGACCTTT
TGTCGCTCGTGCCCACTCTTACGCTCGTCCCCGCAGTGTAGTTTCTTCTTCCCTCCGGTGCAAGCAAAAGCCGGC
CTGGAGGTCCCCACTACAGCGTTCTGCACCCCACATCCGTGTTCCCTCGGCCCCCAACTCGCACTCATCCCAGAA
ACAGCACCATCCCTCCTCCCCCGGCCCGGCTCGGCTCCCGCAGGGGCTAAAAGCCGCCACTTCCCCAGAAGTCCC
AAGCCTTTAGGATCGCATTCCCAAGAGCGCGTCGGCCCGTGTCTCCGCAGGCGCTCCGCTGAAGGGGCAGGGGCT
AGGCTGGGAGACGACGAAGGAACAGGCGTTTCTGACGAGCGGGACGCAGTTCTCGGACGCCGAGGGGCTGGCGCT
CCCGCAGGACGGCCTCTATTACCTCTACTGTCTCGTCGGCTACCGGGGCCGGGCGCCCCCTGGCGGCGGGGACCC
CCAGGGCCGCTCGGTCACGCTGCGCAGCTCTCTGTACCGGGCGGGGGGCGCCTACGGGCCGGGCACTCCCGAGCT
GCTGCTCGAGGGCGCCGAGACGGTGACTCCAGTGCTGGACCCGGCCAGGAGACAAGGGTACGGGCCTCTCTGGTA
CACGAGCGTGGGGTTCGGCGGCCTGGTGCAGCTCCGGAGGGGCGAGAGGGTGTACGTCAACATCAGTCACCCCGA
TATGGTGGACTTCGCGAGAGGGAAGACCTTCTTTGGGGCCGTGATGGTGGGGTGAGGGAATATGAGTGCGTGGTG
CGAGTGCGTGAATATTGGGGGCCCGGACGCCCAGGACCCCATGGCAGTGGGAAAAATGTAGGAGACTGTTTGGAA
ATTGATTTTGAACCTGATGAAAATAAAGAATGGAAAGCTTCAGTGCTGCCGATAAAGATGCTGAGTTGCGACACA
CGTCTTAATTCAGGGTGGGTGCACGGGTGCGGGTTAAATATTCTCAGTACTCTTCTGGTTGCTTGAAACAATTCA
TCACAACACAGTGTATGGCCTTTGCTCCTAGGGATGATGGTCTGCCTGTCCCACCCCCTCCCTGCCTCTGAATGG
CCAGGCCCCACCATTAGCCCAGTTGGAGGGTGGGAGGAAGGGGGACTTCTCAAACTCCGAAGCTTCTCTAGGCAT
CCTGATTTTCAGGGCCACATGGTCCCAACCAGACTCTGCACCATACTCTTTTCTCTTGGGTACCCCCCAACAGTG
AGAGGGGTCATTACAGAGCCCAGCAAGCACCACTCAGAAAGGCCCAGCAGCAGAGTAAGCCCCTATCATGACAGA
GGAATGAAGCCTGGAGGGGCCCCGCACTTCTCCCCCTAGAGCTGCCTGAAGGCCTCTCTGTCTCCTACCCGACAG
TCAACTCTTCTCCTCCAAGGAGCTTAATTCAAGGCTCATGGGGTCTGAAGGGAGGAGGCTGAAGGAGAAAGAAGG
GGAGAATATTAGAGAGAGATGGGGATGGCAGGAAGGAGCCTGTGGTGCCTGAAAACACCAGGAAGTTCTGGGGAG
GAGGAAAAACCGATGCCCCACTTAGGGTGTCCCATTTAGGGTGAGACGGAAAATCCTCACCTTTTTTTCACACTT
TAGGTCCCCCTTCCCAAAAGTGAGTAAGTGTGGGTGCTTCTGGGATGAGTAACAGTGTCCCCCATTACTTCATGG
CTGACTTTCAGCCACAGGCTGGAGGAGGCAGAGGGTGACCCAAGGCCCTATCTAGGTCACCCCAATGGGTCACCC
TACCCCCTCAGCCTACCACATGGTTTTCTCCTGCCTGGCACCCCAGGGCTGGAGGTAAAGCCTAATTTCCGAACT
CAGTGGGGGCTCCCAGTCTAGGGGGGCTCAATTTCCGTCTCCATATTTGTTTTTGGAATTATTATTTTTTTGAGA
CAGGGTCTCGTTCTGTCACCCAGACGGGGGTACAGTGGCATGATCATAGCTTACTGTAACCTCAAACTCCTGGGC
TTGAGTGATCCTCCTGCCTCAGCCTCCTGAGGAGCTAGGATTACAGGCATGCACCACTACACCTGACTAATCTTT
AATTTTTTTTCTAGAAACAAGGTCTTGCTATGTTGCACAGGCTGGTCTTGAACTAGTGGGCTCAAGTGGTCCTCC
CACCTCAGCCTCCCAAAGTGTTGGGATAACAGGCATGAGCCACTGCGCCCCACCCTTATTTGTCTTTGACTCTCT
CCAGAAGAGCCTTCATCCAGGGAGGGGGTGCTTTTCTCTTTCCGGATTACCCACCTCTCACCTCTCCCCTCCTTC
ACCACAAAGACCAGTGGGACCAAGCCGGCATGTGAGTCCTTCACCCACATCTTATTCCTATGTTTCATTCTTTTT
TAAAAAATAGAGACAGGATCTCACTATGTTGCCCAGGTTGCTCTGGAACTCCTGGGTTCAAGCGATCCTCTCACC
TTGGCCTTGCAAAGTGGTAGGATTACAGGTGCATGCCACCACGTCCGGCAGTTCGGTTCCTTGTTCTTTATTGTC
CTCAGTCTCTTCGATTTCACCCACTGAGAGAATGGAAGGGGATAGAACAGCTGGAAACTGGTTGAAGGAAGCCAG
AATTC

FIGURE 6201

GACTCCTAGGGGCTTGCAGACCTAGTGGGAGAGAAAGAACATCGCAGCAGCCAGGCAGAACCAGGACAGGTGAGG
TGCAGGCTGGCTTTCCTCTCGCAGCGCGGTGTGGAGTCCTGTCCTGCCTCAGGGCTTTTCGGAGCCTGGATCCTC
AAGGAACAAGTAGACCTGGCCGCGGGGAGTGGGGAGGGAAGGGGTGTCTATTGGGCAACAGGGCGGCAAAGCCCT
GAATAAAGGGGCGCAGGGCAGGCGCAAGTGCAGAGCCTTCGTTTGCCAAGTCGCCTCCAGACCGCAGAC**ATG**AAA
CTTGTCTTCCTCGTCCTGCTGTTCCTCGGGGCCCTCGGACTGTGTCTGGCTGGCCGTAGGAGAAGGAGTGTTCAG
TGGTGCGCCGTATCCCAACCCGAGGCCACAAAATGCTTCCAATGGCAAAGGAATATGAGAAAAGTGCGTGGCCCT
CCTGTCAGCTGCATAAAGAGAGACTCCCCCATCCAGTGTATCCAGGCCATTGCGGAAAACAGGGCCGATGCTGTG
ACCCTTGATGGTGGTTTCATATACGAGGCAGGCCTGGCCCCCTACAAACTGCGACCTGTAGCGGCGGAAGTCTAC
GGGACCGAAAGACAGCCACGAACTCACTATTATGCCGTGGCTGTGGTGAAGAAGGGCGGCAGCTTTCAGCTGAAC
GAACTGCAAGGTCTGAAGTCCTGCCACACAGGCCTTCGCAGGACCGCTGGATGGAATGTCCCTACAGGGACACTT
CGTCCATTCTTGAATTGGACGGGTCCACCTGAGCCCATTGAGGCAGCTGTGGCCAGGTTCTTCTCAGCCAGCTGT
GTTCCCGGTGCAGATAAAGGACAGTTCCCCAACCTGTGTCGCCTGTGTGCGGGGACAGGGGAAAACAAATGTGCC
TTCTCCTCCCAGGAACCGTACTTCAGCTACTCTGGTGCCTTCAAGTGTCTGAGAGACGGGGCTGGAGACGTGGCT
TTTATCAGAGAGAGCACAGTGTTTGAGGACCTGTCAGACGAGGCTGAAAGGGACGAGTATGAGTTACTCTGCCCA
GACAACACTCGGAAGCCAGTGGACAAGTTCAAAGACTGCCATCTGGCCCGGGTCCCTTCTCATGCCGTTGTGGCA
CGAAGTGTGAATGGCAAGGAGGATGCCATCTGGAATCTTCTCCGCCAGGCACAGGAAAAGTTTGGAAAGGACAAG
TCACCGAAATTCCAGCTCTTTGGCTCCCCTAGTGGGCAGAAAGATCTGCTGTTCAAGGACTCTGCCATTGGGTTT
TCGAGGGTGCCCCCGAGGATAGATTCTGGGCTGTACCTTGGCTCCGGCTACTTCACTGCCATCCAGAACTTGAGG
AAAAGTGAGGAGGAAGTGGCTGCCCGGCGTGCGCGGGTCGTGTGGTGTGCGGTGGGCGAGCAGGAGCTGCGCAAG
TGTAACCAGTGGAGTGGCTTGAGCGAAGGCAGCGTGACCTGCTCCTCGGCCTCCACCACAGAGGACTGCATCGCC
CTGGTGCTGAAAGGAGAAGCTGATGCCATGAGTTTGGATGGAGGATATGTGTACACTGCATGCAAATGTGGTTTG
GTGCCTGTCCTGGCAGAGAACTACAAATCCCAACAAAGCAGTGACCCTGATCCTAACTGTGTGGATAGACCTGTG
GAAGGATATCTTGCTGTGGCGGTGGTTAGGAGATCAGACACTAGCCTTACCTGGAACTCTGTGAAAGGCAAGAAG
TCCTGCCACACCGCCGTGGACAGGACTGCAGGCTGGAATATCCCCATGGGCCTGCTCTTCAACCAGACGGGCTCC
TGCAAATTTGATGAATATTTCAGTCAAAGCTGTGCCCCTGGGTCTGACCCGAGATCTAATCTCTGTGCTCTGTGT
ATTGGCGACGAGCAGGGTGAGAATAAGTGCGTGCCCAACAGCAACGAGAGATACTACGGCTACACTGGGGCTTTC
CGGTGCCTGGCTGAGAATGCTGGAGACGTTGCATTTGTGAAAGATGTCACTGTCTTGCAGAACACTGATGGAAAT
AACAATGAGGCATGGGCTAAGGATTTGAAGCTGGCAGACTTTGCGCTGCTGTGCCTCGATGGCAAACGGAAGCCT
GTGACTGAGGCTAGAAGCTGCCATCTTGCCATGGCCCCGAATCATGCCGTGGTGTCTCGGATGGATAAGGTGGAA
CGCCTGAAACAGGTGCTGCTCCACCAACAGGCTAAATTTGGGAGAAATGGATCTGACTGCCCGGACAAGTTTTGC
TTATTCCAGTCTGAAACCAAAAACCTTCTGTTCAATGACAACACTGAGTGTCTGGCCAGACTCCATGGCAAAACA
ACATATGAAAAATATTTGGGACCACAGTATGTCGCAGGCATTACTAATCTGAAAAAGTGCTCAACCTCCCCCCTC
CTGGAAGCCTGTGAATTCCTCAGGAAG**TAA**AACCGAAGAAGATGGCCCAGCTCCCCAAGAAAGCCTCAGCCATTC
ACTGCCCCCAGCTCTTCTCCCCAGGTGTGTTGGGGCCTTGGCTCCCCTGCTGAAGGTGGGGATTGCCCATCCATC
TGCTTACAATTCCCTGCTGTCGTCTTAGCAAGAAGTAAAATGAGAAATTTTGTTGATATTCAAAAAAAA

FIGURE 6202

MKLVFLVLLFLGALGLCLAGRRRRSVQWCAVSQPEATKCFQWQRNMRKVRGPPVSCIKRDSPIQCIQAIAENRAD
AVTLDGGFIYEAGLAPYKLRPVAAEVYGTERQPRTHYYAVAVVKKGGSFQLNELQGLKSCHTGLRRTAGWNVPTG
TLRPFLNWTGPPEPIEAAVARFFSASCVPGADKGQFPNLCRLCAGTGENKCAFSSQEPYFSYSGAFKCLRDGAGD
VAFIRESTVFEDLSDEAERDEYELLCPDNTRKPVDKFKDCHLARVPSHAVVARSVNGKEDAIWNLLRQAQEKFGK
DKSPKFQLFGSPSGQKDLLFKDSAIGFSRVPPRIDSGLYLGSGYFTAIQNLRKSEEEVAARRARVVWCAVGEQEL
RKCNQWSGLSEGSVTCSSASTTEDCIALVLKGEADAMSLDGGYVYTACKCGLVPVLAENYKSQQSSDPDPNCVDR
PVEGYLAVAVVRRSDTSLTWNSVKGKKSCHTAVDRTAGWNIPMGLLFNQTGSCKFDEYFSQSCAPGSDPRSNLCA
LCIGDEQGENKCVPNSNERYYGYTGAFRCLAENAGDVAFVKDVTVLQNTDGNNNEAWAKDLKLADFALLCLDGKR
KPVTEARSCHLAMAPNHAVVSRMDKVERLKQVLLHQQAKFGRNGSDCPDKFCLFQSETKNLLFNDNTECLARLHG
KTTYEKYLGPQYVAGITNLKKCSTSPLLEACEFLRK

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FIGURE 6203

GCTCCGGCCAGCCGCGGTCCAGAGCGCGCGAGGTTCGGGGAGCTCCGCCAGGCTGCTGGTACCTGCGTCCGCCCG
GCGAGCAGGACAGGCTGCTTTGGTTTGTGACCTCCAGGCAGGACGGCCATCCTCTCCAGAATGAAGATCTTCTTG
CCAGTGCTGCTGGCTGCCCTTCTGGGTGTGGAGCGAGCCAGCTCGCTGATGTGCTTCTCCTGCTTGAACCAGAAG
AGCAATCTGTACTGCCTGAAGCCGACCATCTGCTCCGACCAGGACAACTACTGCGTGACTGTGTCTGCTAGTGCC
GGCATTGGGAATCTCGTGACATTTGGCCACAGCCTGAGCAAGACCTGTTCCCCGGCCTGCCCCATCCCAGAAGGC
GTCAATGTTGGTGTGGCTTCCATGGGCATCAGCTGCTGCCAGAGCTTTCTGTGCAATTTCAGTGCGGCCGATGGC
GGGCTGCGGGCAAGCGTCACCCTGCTGGGTGCCGGGCTGCTGCTGAGCCTGCTGCCGGCCCTGCTGCGGTTTGGC
CCCTGACCGCCCAGACCCTGTCCCCCGATCCCCCAGCTCAGGAAGGAAAGCCCAGCCCTTTCTGGATCCCACAGT
GTATGGGAGCCCCTGACTCCTCACGTGCCTGATCTGTGCCCTTGGTCCCAGGTCAGGCCCACCCCCTGCACCTCC
ACCTGCCCCAGCCCCTGCCTCTGCCCAAGTGGGCCAGCTGCCCTCACTTCTGGGGTGGATGATGTGACCTTCCTT
GGGGGACTGCGGAAGGGACGAGGGTTCCCTGGAGTCTTACGGTCCAACATCAGACCAAGTCCCATGGACATGCTG
ACAGGGTCCCCAGGGAGACCGTGTCAGTAGGGATGTGTGCCTGGCTGTGTACGTGGGTGTGCAGTGCACGTGAGA
GCACGTGGCGGCTTCTGGGGGCCATGTTTGGGGAGGGAGGTGTGCCAGCAGCCTGGAGAGCCTCAGTCCCTGTAG
CCCCCTGCCCTGGCACAGCTGCATGCACTTCAAGGGCAGCCTTTGGGGGTTGGGGTTTCTGCCACTTCCGGGTCT
AGGCCCTGCCCAAATCCAGCCAGTCCTGCCCCAGCCCACCCCCACATTGGAGCCCTCCTGCTGCTTTGGTGCCTC
AAATAAATACAGATGTCCCC

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FIGURE 6204

MKIFLPVLLAALLGVERASSLMCFSCLNQKSNLYCLKPTICSDQDNYCVTVSASAGIGNLVTFGHSLSKTCSPAC
PIPEGVNVGVASMGISCCQSFLCNFSAADGGLRASVTLLGAGLLLSLLPALLRFGP

FIGURE 6205

GGCACGAGGACCGACCGCATTGCGGCTTGGTTTTCTCACCCAGTGCATGTGGCAGGAGCGGTGAGATCACTGCCT
CACGGCGATCCTGGACTGACGGTCACGACTGCCTACCCTCTAACCCTGTTCTGAGCTGCCCCTTGCCCACACACC
CCAAACCTGTGTGCAGGATCCGCCTCCATGGAGCTACAGCCTCCTGAAGCCTCGATCGCCGTCGTGTCGATTCCG
CGCCAGTTGCCTGGCTCACATTCGGAGGCTGGTGTCCAGGGTCTCAGCGCGGGGGACGACTCAGAGTTGGGGTCT
CACTGTGTTGCCCAGACTGGTCTCGAACTCTTGGCCTCAGGTGATCCTCTTCCCTCAGCTTCCCAGAATGCCGAG
ATGATAGAGACGGGGTCTGACTGTGTTACCCAGGCTGGTCTTCAACTCTTGGCCTCAAGTGATCCTCCTGCCTTA
GCTTCCAAGAATGCTGAGGTTACAGGCACC**ATG**AGCCAGGACACCGAGGTGGATATGAAGGAGGTGGAGCTGAAT
GAGTTAGAGCCCGAGAAGCAGCCGATGAACGCGGCGTCTGGGGCGGCCATGTCCCTGGCGGGAGCCGAGAAGAAT
GGTCTGGTGAAGATCAAGGTGGCGGAAGACGAGGCGGAGGCGGCAGCCGCGGCTAAGTTCACGGGCCTGTCCAAG
GAGGAGCTGCTGAAGGTGGCAGGCAGCCCCGGCTGGGTACGCACCCGCTGGGCACTGCTGCTGCTCTTCTGGCTC
GGCTGGCTCGGCATGCTTGCTGGTGCCGTGGTCATAATCGTGCGAGCGCCGCGTTGTCGCGAGCTACCGGCGCAG
AAGTGGTGGCACACGGGCGCCCTCTACCGCATCGGCGACCTTCAGGCCTTCCAGGGCCACGGCGCGGGCAACCTG
GCGGGTCTGAAGGGGCGTCTCGATTACCTGAGCTCTCTGAAGGTGAAGGGCCTTGTGCTGGGTCCAATTCACAAG
AACCAGAAGGATGATGTCGCTCAGACTGACTTGCTGCAGATCGACCCCAATTTTGGCTCCAAGGAAGATTTTGAC
AGTCTCTTGCAATCGGCTAAAAAAAAAGAGCATCCGTGTCATTCTGGACCTTACTCCCAACTACCGGGGTGAGAAC
TCGTGGTTCTCCACTCAGGTTGACACTGTGGCCACCAAGGTGAAGGATGCTCTGGAGTTTTGGCTGCAAGCTGGC
GTGGATGGGTTCCAGGTTCGGGACATAGAGAATCTGAAGGATGCATCCTCATTCTTGGCTGAGTGGCAAAATATC
ACCAAGGGCTTCAGTGAAGACAGGCTCTTGATTGCGGGGACTAACTCCTCCGACCTTCAGCAGATCCTGAGCCTA
CTCGAATCCAACAAAGACTTGCTGTTGACTAGCTCATACCTGTCTGATTCTGGTTCTACTGGGGAGCATACAAAA
TCCCTAGTCACACAGTATTTGAATGCCACTGGCAATCGCTGGTGCAGCTGGAGTTTGTCTCAGGCAAGGCTCCTG
ACTTCCTTCTTGCCGGCTCAACTTCTCCGACTCTACCAGCTGATGCTCTTCACCCTGCCAGGGACCCCTGTTTTC
AGCTACGGGGATGAGATTGGCCTGGATGCAGCTGCCCTTCCTGGACAGCCTATGGAGGCTCCAGTCATGCTGTGG
GATGAGTCCAGCTTCCCTGACATCCCAGGGGCTGTAAGTGCCAACATGACTGTGAAGGGCCAGAGTGAAGACCCT
GGCTCCCTCCTTTCCTTGTTCCGGCGGCTGAGTGACCAGCGGAGTAAGGAGCGCTCCCTACTGCATGGGGACTTC
CACGCGTTCTCCGCTGGGCCTGGACTCTTCTCCTATATCCGCCACTGGGACCAGAATGAGCGTTTTCTGGTAGTG
CTTAACTTTGGGGATGTGGGCCTCTCGGCTGGACTGCAGGCCTCCGACCTGCCTGCCAGCGCCAGCCTGCCAGCC
AAGGCTGACCTCCTGCTCAGCACCCAGCCAGGCCGTGAGGAGGGCTCCCCTCTTGAGCTGGAACGCCTGAAACTG
GAGCCTCACGAAGGGCTGCTGCTCCGCTTCCCCTACGCGGCC**TGA**CTTCAGCCTGACATGGACCCACTACCCTTC
TCCTTTCCTTCCCAGGCCCTTTGGCTTCTGATTTTTCTCTTTTTTAAAAACAAACAAACAAACTGTTGCAAAAAA
AAAAAAAAAAAA

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FIGURE 6206

MSQDTEVDMKEVELNELEPEKQPMNAASGAAMSLAGAEKNGLVKIKVAEDEAEAAAAAKFTGLSKEELLKVAGSP
GWVRTRWALLLLFWLGWLGMLAGAVVIIVRAPRCRELPAQKWWHTGALYRIGDLQAFQGHGAGNLAGLKGRLDYL
SSLKVKGLVLGPIHKNQKDDVAQTDLLQIDPNFGSKEDFDSLLQSAKKKSIRVILDLTPNYRGENSWFSTQVDTV
ATKVKDALEFWLQAGVDGFQVRDIENLKDASSFLAEWQNITKGFSEDRLLIAGTNSSDLQQILSLLESNKDLLLT
SSYLSDSGSTGEHTKSLVTQYLNATGNRWCSWSLSQARLLTSFLPAQLLRLYQLMLFTLPGTPVFSYGDEIGLDA
AALPGQPMEAPVMLWDESSFPDIPGAVSANMTVKGQSEDPGSLLSLFRRLSDQRSKERSLLHGDFHAFSAGPGLF
SYIRHWDQNERFLVVLNFGDVGLSAGLQASDLPASASLPAKADLLLSTQPGREEGSPLELERLKLEPHEGLLLRF
PYAA

FIGURE 6207

CCATGGCTCAGCCTCTGGGTCCAGAGCCTCAGCTCCTACCTCTTCCCTCCTTGCCAGCCCCTGATGCCTGCCAGA
CTTTTGCCTCTGCTGGAGCCCCTGCCTGACCAGCTTCCCCTCCCTGTCTGGTTGGGATTTGGGGGCTGAGCTGTC
TGGGGTCCCAGGGCCAACCA**ATG**CAGTGCCGGCTCCCGCGGGGCCTGGCTGGAGCCCTCCTCACCCTCCTGTGCA
TGGGGCTCCTGTGTCTGCGGTACCACTTGAACCTGTCCCCGCAGCGGGTACAAGGGACCCCCGAGCTGAGCCAGC
CGAACCCGGGGCCCCCTAAGCTACAGCTACACGATGTCTTCATTGCAGTGAAGACGACCCGGGCTTTCCACCGCT
TGCGCCTGGAGCTGCTGCTTGACACGTGGGTTTCCAGGACCAGGGAACTGACATTTGTCTTCACCGACAGCCCAG
ACAAAGGCCTCCAGGAGAGACTGGGGTCCCACCTTGTGGTCACCAACTGCTCCGCGGAACACAGCCACCCAGCTC
TGTCCTGCAAGATGGCTGCTGAGTTCGACACCTTCTTGGCCAGTGGGCTTAGGTGGTTCTGCCATGTGGACGATG
ACAACTATGTGAACCCAAGGGCGCTGCTGCAGCTTCTGAGAGCCTTCCCGCTGGCCCGCGACGTCTATGTGGGAA
GGCCCAGCCTGAACCGGCCCATCCATGCCTCAGAGCCACAGCCCCACAACCGCACGAGGCTGGTACAGTTCTGGT
TTGCCACTGGGGGTGCTGGCTTCTGCATCAATCGCAAACTGGCTTTGAAGATGGCTCCGTGGGCCAGTGGCTCCC
GTTTCATGGACACATCTGCTCTCATCCGGCTGCCTGATGACTGCACCATGGGCTATATCATTGAGTGCAAGCTGG
GCGGCCGCCTGCAGCCCAGCCCCCTCTTTCACTCCCACCTGGAGACCCTGCAGCTGCTGAGGACTGCACAGCTCC
CAGAACAGGTCACCCTCAGCTACGGTGTCTTTGAGGGGAAACTCAACGTCATTAAGCTACAGGGCCCCTTCTCCC
CGGAGGAGGACCCCTCCAGATTTCGCTCCCTCCATTGTCTGCTCTATCCAGATACACCCTGGTGTCCCCAGCTGG
GTGCCCGA**TGA**ATCCTGAACTGCTGGGCAAAGGTTGGGCAGAGACTTCTGGGTGTGCCTTGGCTCCCAAGGTGGC
ACTGTGGGTCCCTGGCAAGTGTCTTGTGATAGGCAGTCCCTGGCAGGGCCTTCGGGTGGTTGGCAAGCCCAGGAT
CTGAGTGGCAATTGGCACTGAAGGCACCCCAGGCCCCTGGGAGGTGAGTTAGACAGCCCAGGGGACCAGGTGGAC
CAGGTGGTGGCCAGAGAGGCTCCAGGGGCTAGACTCCCTCAGGAGGCTGAATTGAAAAAGGGCAGGGGGCACTTG
AGCTGGGCTGGGGCTCAGGGGTCCTAACCCTTTAGGCAGTGACATGGCCTCTGGGTGGGGTCTGXCCGTTGGCCC
TGGCTAATGTCTCTCAGTCATTCCCCCTGGGGCTCAAGCGCTGGGCCGCCCACTCCTGCCTCCCTCATCTGTGTC
CCGAGTTCCTGAAGGGACATGGGTGGAATGATGGCAGAATCCAGGGTCCTGCAGCACCTGCTGTTGTTGCCAACC
AGTCTCCCAAAGCTCCTTGCTCCCCACCCCTTGCGAACAGGACCAGATTTTGTTTGGAGCCTCAGCATGCCGGGG
CCCAGATGATGGAGCATAACGGGTCCCAGCCAATTGTGATGATCCTTTTTGCTCATTTCCCAGCCTTTCTTGCTG
TTAGGGGCTACCATGGGACCAGCTCTGGCCAGAGGGAACTAAGCAAATCCAATAGAGATGTTTCTGGGGAAGGTT
TTGCAGCCCACTCCCCATCTTCCTGCTATAAATGTGGGTGTGATGGCTGGATCTGGGGCAGCCACCTTGCTACCA
TGAAGGAAAGGCCAAGACAATCATCCACAGCTATTCCCTCCAGCATCTGGTTCTGTACAAAAATTAAATGCTTAT
TTGTTTAAGTCAAAAAA

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FIGURE 6208

MQCRLPRGLAGALLTLLCMGLLCLRYHLNLSPQRVQGTPELSQPNPGPPKLQLHDVFIAVKTTRAFHRLRLELLL
DTWVSRTRELTFVFTDSPDKGLQERLGSHLVVTNCSAEHSHPALSCKMAAEFDTFLASGLRWFCHVDDDNYVNPR
ALLQLLRAFPLARDVYVGRPSLNRPIHASEPQPHNRTRLVQFWFATGGAGFCINRKLALKMAPWASGSRFMDTSA
LIRLPDDCTMGYIIECKLGGRLQPSPLFHSHLETLQLLRTAQLPEQVTLSYGVFEGKLNVIKLQGPFSPEEDPSR
FRSLHCLLYPDTPWCPQLGAR

FIGURE 6209

ATCCAATACAGGAGTGACTTGGAACTCCATTCTATCACTATGAAGAAAAGTGGTGTTCTTTTCCTCTTGGGCATC
ATCTTGCTGGTTCTGATTGGAGTGCAAGGAACCCCAGTAGTGAGAAAGGGTCGCTGTTCCTGCATCAGCACCAAC
CAAGGGACTATCCACCTACAATCCTTGAAAGACCTTAAACAATTTGCCCCAAGCCCTTCCTGCGAGAAAATTGAA
ATCATTGCTACACTGAAGAATGGAGTTCAAACATGTCTAAACCCAGATTCAGCAGATGTGAAGGAACTGATTAAA
AAGTGGGAGAAACAGGTCAGCCAAAAGAAAAAGCAAAAGAATGGGAAAAAACATCAAAAAAAGAAAGTTCTGAAA
GTTCGAAAATCTCAACGTTCTCGTCAAAAGAAGACTACATAAGAGACCACTTCACCAATAAGTATTCTGTGTTAA
AAATGTTCTATTTTAATTATACCGCTATCATTCCAAAGGAGGATGGCATATAATACAAAGGCTTATTAATTTGAC
TAGAAAATTTAAAACATTACTCTGAAATTGTAACTAAAGTTAGAAAGTTGATTTTAAGAATCCAAACGTTAAGAA
TTGTTAAAGGCTATGATTGTCTTTGTTCTTCTACCACCCACCAGTTGAATTTCATCATGCTTAAGGCCATGATTT
TAGCAATACCCATGTCTACACAGATGTTCACCCAACCACATCCCACTCACAACAGCTGCCTGGAAGAGCAGCCCT
AGGCTTCCACGTACTGCAGCCTCCAGAGAGTATCTGAGGCACATGTCAGCAAGTCCTAAGCCTGTTAGCATGCTG
GTGAGCCAAGCAGTTTGAAATTGAGCTGGACCTCACCAAGCTGCTGTGGCCATCAACCTCTGTATTTGAATCAGC
CTACAGGCCTCACACACAATGTGTCTGAGAGATTCATGCTGATTGTTATTGGGTATCACCACTGGAGATCACCAG
TGTGTGGCTTTCAGAGCCTCCTTTCTGGCTTTGGAAGCCATGTGATTCCATCTTGCCCGCTCAGGCTGACCACTT
TATTTCTTTTTGTTCCCCTTTGCTTCATTCAAGTCAGCTCTTCTCCATCCTACCACAATGCAGTGCCTTTCTTCT
CTCCAGTGCACCTGTCATATGCTCTGATTTATCTGAGTCAACTCCTTTCTCATCTTGTCCCCAACACCCCACAGA
AGTGCTTTCTTCTCCCAATTCATCCTCACTCAGTCCAGCTTAGTTCAAGTCCTGCCTCTTAAATAAACCTTTTTG
GACACACAAATTATCTTAAAACTCCTGTTTCACTTGGTTCAGTACCACATGGGTGAACACTCAATGGTTAACTAA
TTCTTGGGTGTTTATCCTATCTCTCCAACCAGATTGTCAGCTCCTTGAGGGCAAGAGCCACAGTATATTTCCCTG
TTTCTTCCACAGTGCCTAATAATACTGTGGAACTAGGTTTTAATAATTTTTTAATTGATGTTGTTATGGGCAGGA
TGGCAACCAGACCATTGTCTCAGAGCAGGTGCTGGCTCTTTCCTGGCTACTCCATGTTGGCTAGCCTCTGGTAAC
CTCTTACTTATTATCTTCAGGACACTCACTACAGGGACCAGGGATGATGCAACATCCTTGTCTTTTTATGACAGG
ATGTTTGCTCAGCTTCTCCAACAATAAGAAGCACGTGGTAAAACACTTGCGGATATTCTGGACTGTTTTTAAAAA
ATATACAGTTTACCGAAAATCATATAATCTTACAATGAAAAGGACTTTATAGATCAGCCAGTGACCAACCTTTTC
CCAACCATACAAAAATTCCTTTTCCCGAAGGAAAAGGGCTTTCTCAATAAGCCTCAGCTTTCTAAGATCTAACAA
GATAGCCACCGAGATCCTTATCGAAACTCATTTTAGGCAAATATGAGTTTTATTGTCCGTTTACTTGTTTCAGAG
TTTGTATTGTGATTATCAATTACCACACCATCTCCCATGAAGAAAGGGAACGGTGAAGTACTAAGCGCTAGAGGA
AGCAGCCAAGTCGGTTAGTGGAAGCATGATTGGTGCCCAGTTAGCCTCTGCAGGATGTGGAAACCTCCTTCCAGG
GGAGGTTCAGTGAATTGTGTAGGAGAGGTTGTCTGTGGCCAGAATTTAAACCTATACTCACTTTCCCAAATTGAA
TCACTGCTCACACTGCTGATGATTTAGAGTGCTGTCCGGTGGAGATCCCACCCGAACGTCTTATCTAATCATGAA
ACTCCCTAGTTCCTTCATGTAACTTCCCTGAAAAATCTAAGTGTTTCATAAATTTGAGAGTCTGTGACCCACTTA
CCTTGCATCTCACAGGTAGACAGTATATAACTAACAACCAAAGACTACATATTGTCACTGACACACACGTTATAA
TCATTTATCATATATATACATACATGCATACACTCTCAAAGCAAATAATTTTTCACTTCAAAACAGTATTGACTT
GTATACCTTGTAATTTGAAATATTTTCTTTGTTAAAATAGAATGGTATCAATAAATAGACCATTAATCAG

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FIGURE 6210

MKKSGVLFLLGIILLVLIGVQGTPVVRKGRCSCISTNQGTIHLQSLKDLKQFAPSPSCEKIEIIATLKNGVQTCL
NPDSADVKELIKKWEKQVSQKKKQKNGKKHQKKKVLKVRKSQRSRQKKTT

FIGURE 6211

ATTGAGAGTGGCTCTAACAAGTGCCATTTTTCCTTGTTAGCTTTCATTTCTCAGCCCTTTACAAGATTAAAATAG
TCTGCAGTTTAATCTCTCCAAAGCTTTACGGACAGTGATTCTGTCCTAAACAAGACAGTGACTCCAGGATTTCTG
AAGACTATTGTGGAAGAAGCATCCATTAAGGCCAAGCTATAACATCAGAA**ATG**GTGAATGAATACAAGAAAATTC
TTTTGCTGAAAGGATTTGAGCTCATGGATGATTATCATTTTACATCAATTAAGTCCTTACTGGCCTATGATTTAG
GACTAACTACAAAAATGCAAGAGGAATACAACAGAATTAAGATTACAGATTTGATGGAAAAAAAGTTCCAAGGCG
TTGCCTGTCTAGACAAACTAATAGAACTTGCCAAAGATATGCCATCACTTAAAAACCTTGTTAACAATCTTCGAA
AAGAGAAGTCAAAAGTTGCTAAGAAAATTAAAACACAAGAAAAAGCTCCAGTGAAAAAAATAAACCAGGAAGAAG
TGGGTCTTGCGGCACCTGCACCCACCGCAAGAAACAAACTGACATCGGAAGCAAGAGGGAGGATTCCTGTAGCTC
AGAAAAGAAAAACTCCAAACAAAGAAAAGACTGAAGCCAAAAGGAATAAGGTGTCCCAAGAGCAGAGTAAGCCCC
CAGGTCCCTCAGGAGCCAGCACATCTGCAGCTGTGGATCATCCCCCACTACCCCAGACCTCATCATCAACTCCAT
CCAACACTTCGTTTACTCCGAATCAGGAAACCCAGGCCCAACGGCAGGTGGATGCAAGAAGAAATGTTCCCCAAA
ACGACCCAGTGACAGTGGTGGTACTGAAAGCAACAGCGCCATTTAAATACGAGTCCCCAGAAAATGGGAAAAGCA
CAATGTTTCATGCTACAGTGGCCAGTAAGACTCAATATTTCCATGTGAAAGTCTTCGACATCAACTTGAAAGAGA
AATTTGTAAGGAAGAAGGTCATTACCATATCTGATTACTCTGAATGTAAAGGAGTAATGGAAATAAAGGAAGCAT
CATCTGTGTCTGACTTTAATCAAAATTTTGAGGTCCCAAACAGAATTATCGAAATAGCAAATAAAACTCCCAAGA
TCAGTCAACTTTACAAGCAAGCATCTGGAACAATGGTGTATGGGTTGTTTATGTTACAAAAGAAAAGCGTACACA
AGAAGAACACAATTTATGAAATACAGGATAATACAGGATCCATGGATGTAGTGGGGAGTGGAAAATGGCACAATA
TCAAGTGTGAGAAAGGAGATAAACTTCGACTCTTCTGCCTTCAACTGAGAACAGTTGACCGCAAGCTGAAACTGG
TGTGTGGAAGTCACAGCTTCATCAAGGTCATCAAGGCCAAGAAAAACAAGGAAGGACCAATGAATGTTAAT**TGA**A
ATATGAAAGCTGAAATGCAACAAACAACTTCCGCTTAAAACAATTAAGTTGTTAATAACTGTGATTTTGTAAATT
TCAGTAATTCATTTAAATGATGTTTCAGTAGATATATTCTAGCATATTAAGAGCTTTTATAACTGAGTTATAGAT
TAGTTTGCTTTCTGGAATAAAATTTTCTTCTTATACTCTTCCTTTTTTTTAGATATTACATTTTGCTTTTATGAC
ATTCACGAGGCAAAAAACCG

FIGURE 6212

MVNEYKKILLLKGFELMDDYHFTSIKSLLAYDLGLTTKMQEEYNRIKITDLMEKKFQGVACLDKLIELAKDMPSL
KNLVNNLRKEKSKVAKKIKTQEKAPVKKINQEEVGLAAPAPTARNKLTSEARGRIPVAQKRKTPNKEKTEAKRNK
VSQEQSKPPGPSGASTSAAVDHPPLPQTSSSTPSNTSFTPNQETQAQRQVDARRNVPQNDPVTVVVLKATAPFKY
ESPENGKSTMFHATVASKTQYFHVKVFDINLKEKFVRKKVITISDYSECKGVMEIKEASSVSDFNQNFEVPNRII
EIANKTPKISQLYKQASGTMVYGLFMLQKKSVHKKNTIYEIQDNTGSMDVVGSGKWHNIKCEKGDKLRLFCLQLR
TVDRKLKLVCGSHSFIKVIKAKKNKEGPMNVN

FIGURE 6213

GCTGACGCCTTCGAGCGCGGCCCGGGGCCCGGAGCGGCCGGAGCAGCCCGGGTCCTGACCCCGGCCCGGCTCCCG
CTCCGGGCTCTGCCGGCGGGCGGGCGAGCGCGGCGCGGTCCGGGCCGGGGGGATGTCTCGGCGGACGCGCTGCGA
GGATCTGGATGAGCTGCACTACCAGGACACAGATTCAGATGTGCCGGAGCAGAGGGATAGCAAGTGCAAGGTCAA
ATGGACCCATGAGGAGGACGAGCAGCTGAGGGCCCTGGTGAGGCAGTTTGGACAGCAGGACTGGAAGTTCCTGGC
CAGCCACTTCCCTAACCGCACTGACCAGCAATGCCAGTACAGGTGGCTGAGAGTTTTGAATCCAGACCTTGTCAA
GGGGCCATGGACCAAAGAGGAAGACCAAAAAGTCATCGAGCTGGTTAAGAAGTATGGCACAAAGCAGTGGACACT
GATTGCCAAGCACCTGAAGGGCCGGCTGGGGAAGCAGTGCCGTGAACGCTGGCACAACCACCTCAACCCTGAGGT
GAAGAAGTCTTGCTGGACCGAGGAGGAGGACCGCATCATCTGCGAGGCCCACAAGGTGCTGGGCAACCGCTGGGC
CGAGATCGCCAAGATGTTGCCAGGGAGGACAGACAATGCTGTGAAGAATCACTGGAACTCTACCATCAAAAGGAA
GGTGGACACAGGAGGCTTCTTGAGCGAGTCCAAAGACTGCAAGCCCCCAGTGTACTTGCTGCTGGAGCTCGAGGA
CAAGGACGGCCTCCAGAGTGCCCAGCCCACGGAAGGCCAGGGAAGTCTTCTGACCAACTGGCCCTCCGTCCCTCC
TACCATAAAGGAGGAGGAAAACAGTGAGGAGGAACTTGCAGCAGCCACCACATCGAAGGAACAGGAGCCCATCGG
TACAGATCTGGACGCAGTGCGAACACCAGAGCCCTTGGAGGAATTCCCGAAGCGTGAGGACCAGGAAGGCTCCCC
ACCAGAAACGAGCCTGCCTTACAAGTGGGTGGTGGAGGCAGCTAACCTCCTCATCCCCGCTGTGGGTTCTAGCCT
CTCTGAAGCCCTGGACTTGATCGAGTCGGACCCTGATGCTTGGTGTGACCTGAGTAAATTTGACCTCCCTGAGGA
ACCATCTGCAGAGGACAGTATCAACAACAGCCTAGTGCAGCTGCAAGCGTCACATCAGCAGCAAGTCCTGCCACC
CCGCCAGCCTTCCGCCCTGGTGCCCAGTGTGACCGAGTACCGCCTGGATGGCCACACCATCTCAGACCTGAGCCG
GAGCAGCCGGGGCGAGCTGATCCCCATCTCCCCCAGCACTGAAGTCGGGGGCTCTGGCATTGGCACACCGCCCTC
TGTGCTCAAGCGGCAGAGGAAGAGGCGTGTGGCTCTGTCCCCTGTCACTGAGAATAGCACCAGTCTGTCCTTCCT
GGATTCCTGTAACAGCCTCACGCCCAAGAGCACACCTGTTAAGACCCTGCCCTTCTCGCCCTCCCAGTTTCTGAA
CTTCTGGAACAAACAGGACACATTGGAGCTGGAGAGCCCCTCGCTGACATCCACCCCAGTGTGCAGCCAGAAGGT
GGTGGTCACCACACCACTGCACCGGGACAAGACACCCCTGCACCAGAAACATGCTGCGTTTGTAACCCCAGATCA
GAAGTACTCCATGGACAACACTCCCCACACGCCAACCCCGTTCAAGAACGCCCTGGAGAAGTACGGACCCCTGAA
GCCCCTGCCACAGACCCCGCACCTGGAGGAGGACTTGAAGGAGGTGCTGCGTTCTGAGGCTGGCATCGAACTCAT
CATCGAGGACGACATCAGGCCCGAGAAGCAGAAGAGGAAGCCTGGGCTGCGGCGGAGCCCCATCAAGAAAGTCCG
GAAGTCTCTGGCTCTTGACATTGTGGATGAGGATGTGAAGCTGATGATGTCCACACTGCCCAAGTCTCTATCCTT
GCCGACAACTGCCCCTTCAAACTCTTCCAGCCTCACCCTGTCAGGTATCAAAGAAGACAACAGCTTGCTCAACCA
GGGCTTCTTGCAGGCCAAGCCCGAGAAGGCAGCAGTGGCCCAGAAGCCCCGAAGCCACTTCACGACACCTGCCCC
TATGTCCAGTGCCTGGAAGACGGTGGCCTGCGGGGGGACCAGGGACCAGCTTTTCATGCAGGAGAAAGCCCGGCA
GCTCCTGGGCCGCCTGAAGCCCAGCCACACATCTCGGACCCTCATCTTGTCCTGAGGTGTTGAGGGTGTCACGAG
CCCATTCTCATGTTTACAGGGGTTGTGGGGGCAGAGGGGGTCTGTGAATCTGAGAGTCATTCAGGTGACCTCCTG
CAGGGAGCCTTCTGCCACCAGCCCCTCCCCAGACTCTCAGGTGGAGGCAACAGGGCCATGTGCTGCCCTGTTGCC
GAGCCCAGCTGTGGGCGGCTCCTGGTGCTAACAACAAAGTTCCACTTCCAGGTCTGCCTGGTTCCCTCCCCAAGG
CCACAGGGAGCTCCGTCAGCTTCTCCCAAGCCCACGTCAGGCCTGGCCTCATCTCAGACCCTGCTTAGGATGGGG
GATGTGGCCAGGGGTGCTCCTGTGCTCACCCTCTCTTGGTGCATTTTTTTGGAAGAATAAAATTGCCTCTCTCTT
TG

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FIGURE 6214

MSRRTRCEDLDELHYQDTDSDVPEQRDSKCKVKWTHEEDEQLRALVRQFGQQDWKFLASHFPNRTDQQCQYRWLR
VLNPDLVKGPWTKEEDQKVIELVKKYGTKQWTLIAKHLKGRLGKQCRERWHNHLNPEVKKSCWTEEEDRIICEAH
KVLGNRWAEIAKMLPGRTDNAVKNHWNSTIKRKVDTGGFLSESKDCKPPVYLLLELEDKDGLQSAQPTEGQGSLL
TNWPSVPPTIKEEENSEEELAAATTSKEQEPIGTDLDAVRTPEPLEEFPKREDQEGSPPETSLPYKWVVEAANLL
IPAVGSSLSEALDLIESDPDAWCDLSKFDLPEEPSAEDSINNSLVQLQASHQQQVLPPRQPSALVPSVTEYRLDG
HTISDLSRSSRGELIPISPSTEVGGSGIGTPPSVLKRQRKRRVALSPVTENSTSLSFLDSCNSLTPKSTPVKTLP
FSPSQFLNFWNKQDTLELESPSLTSTPVCSQKVVVTTPLHRDKTPLHQKHAAFVTPDQKYSMDNTPHTPTPFKNA
LEKYGPLKPLPQTPHLEEDLKEVLRSEAGIELIIEDDIRPEKQKRKPGLRRSPIKKVRKSLALDIVDEDVKLMMS
TLPKSLSLPTTAPSNSSSLTLSGIKEDNSLLNQGFLQAKPEKAAVAQKPRSHFTTPAPMSSAWKTVACGGTRDQL
FMQEKARQLLGRLKPSHTSRTLILS

FIGURE 6215A

TTCGGCACGAGGCGCGGTTGCACGTCGGCCCCAGCCCTGAGGAGCCGGACCGATGTGGAAACTGCTGCCCGCCGC
GGGCCCGGCAGGAGGAGAACCATACAGACTTTTGACTGGCGTTGAGTACGTTGTTGGAAGGAAAAACTGTGCCAT
TCTAATTGAAAATGATCAGTCGATCAGCCGAAATCATGCTGTGTTAACTGCTAACTTTTCTGTAACCAACCTGAG
TCAAACAGATGAAATCCCTGTATTGACATTAAAAGATAATTCTAAGTATGGTACCTTTGTTAATGAGGAAAAAAT
GCAGAATGGCTTTTCCCGAACTTTGAAGTCGGGGGATGGTATTACTTTTGGAGTGTTTGGAAGTAAATTCAGAAT
AGAGTATGAGCCTTTGGTTGCATGCTCTTCTTGTTTAGATGTCTCTGGGAAAACTGCTTTAAATCAAGCTATATT
GCAACTTGGAGGATTTACTGTAAACAATTGGACAGAAGAATGCACTCACCTTGTCATGGTATCAGTGAAAGTTAC
CATTAAAACAATATGTGCACTCATTTGTGGACGTCCAATTGTAAAGCCAGAATATTTTACTGAATTCCTGAAAGC
AGTTCAGTCCAAGAAGCAGCCTCCACAAATTGAAAGTTTTTACCCACCTCTTGATGAACCATCTATTGGAAGTAA
AAATGTTGATCTGTCAGGACGGCAGGAAAGAAAACAAATCTTCAAAGGGAAAACATTTATATTTTTGAATGCCAA
ACAGCATAAGAAATTGAGTTCCGCAGTTGTCTTTGGAGGTGGGGAAGCTAGGTTGATAACAGAAGAGAATGAAGA
AGAACATAATTTCTTTTTGGCTCCGGGAACGTGTGTTGTTGATACAGGAATAACAAACTCACAGACCTTAATTCC
TGACTGTCAGAAGAAATGGATTCAGTCAATAATGGATATGCTCCAAAGGCAAGGTCTTAGACCTATTCCTGAAGC
AGAAATTGGATTGGCGGTGATTTTCATGACTACAAAGAATTACTGTGATCCTCAGGGCCATCCCAGTACAGGATT
AAAGACAACAACTCCAGGACCAAGCCTTTCACAAGGCGTGTCAGTTGATGAAAAACTAATGCCAAGCGCCCCAGT
GAACACTACAACATACGTAGCTGACACAGAATCAGAGCAAGCAGATACATGGGATTTGAGTGAAAGGCCAAAAGA
AATCAAAGTCTCCAAAATGGAACAAAAATTCAGAATGCTTTCACAAGACGCACCCACTGTAAAGGAGTCCTGCAA
AACAAGCTCTAATAATAATAGTATGGTATCAAATACTTTGGCTAAGATGAGAATCCCAAACTATCAGCTTTCACC
AACTAAATTGCCAAGTATAAATAAAAGTAAAGATAGGGCTTCTCAGCAGCAGCAGACCAACTCCATCAGAAACTA
CTTTCAGCCGTCTACCAAAAAAAGGGAAAGGGATGAAGAAAATCAAGAAATGTCTTCATGCAAATCAGCAAGAAT
AGAAACGTCTTGTTCTCTTTTAGAACAAACACAACCTGCTACACCCTCATTGTGGAAAAATAAGGAGCAGCATCT
ATCTGAGAATGAGCCTGTGGACACAAACTCAGACAATAACTTATTTACAGATACAGATTTAAAATCTATTGTGAA
AAATTCTGCCAGTAAATCTCATGCTGCAGAAAAGCTAAGATCAAATAAAAAAAGGGAAATGGATGATGTGGCCAT
AGAAGATGAAGTATTGGAACAGTTATTCAAGGACACAAAACCAGAGTTAGAAATTGATGTGAAAGTTCAAAAACA
GGAGGAAGATGTCAATGTTAGAAAAAGGCCAAGGATGGATATAGAAACAAATGACACTTTCAGTGATGAAGCAGT
ACCAGAAAGTAGCAAAATATCTCAAGAAAATGAAATTGGGAAGAAACGTGAACTCAAGGAAGACTCACTATGGTC
AGCTAAAGAAATATCTAACAATGACAAACTTCAGGATGATAGTGAGATGCTTCCAAAAAAGCTGTTATTGACTGA
ATTTAGATCACTGGTGATTAAAAACTCTACTTCCAGAAATCCGTCTGGCATAAATGATGATTATGGTCAACTAAA
AAATTTCAAGAAATTCAAAAAGGTCACATATCCTGGAGCAGGAAAACTTCCACACATCATTGGAGGATCAGATCT
AATAGCTCATCATGCTCGAAAGAATACAGAACTAGAAGAGTGGCTAAGGCAGGAAATGGAGGTACAAAATCAACA
TGCAAAAGAAGAGTCTCTTGCTGATGATCTTTTTAGATACAATCCTTATTTAAAAAGGAGAAGATAACTGAGGAT
TTTAAAAAGAAGCCATGGAAAAACTTCCTAGTAAGCATCTACTTCAGGCCAACAAGGTTATATGAATATATAGTG
TATAGAAGCGATTTAAGTTACAATGTTTTATGGCCTAAATTTATTAAATAAAATGCACAAAACTTTGATTCTTTT
GTATGTAACAATTGTTTGTTCTGTTTTCAGGCTTTGTCATTGCATCTTTTTTTCATTTTTAAATGTGTTTTGTTT
ATTAAATAGTTAATATAGTCACAGTTCAAAATTCTAAATGTACGTAAGGTAAAGACTAAAGTCACCCTTCCACCA
TTGTCCTAGCTACTTGGTTCCCCTCAGAAAAAAATTCATGATACTCATTTCTTATGAATCTTTCCAGGGATTTTT
GAGTCCTATTCAAATTCCTATTTTTAAATAATTTCCTACACAAATGATAGCATAACATATGCAGTGTTCTACACC
TTGCTTTTTTACTTAGTAGATTAAAAATTATAGGAATATCAATATAATGTTTTTAATATTTTTTCTTTTCCATTA
TGCTGTAGTCTTACCTAAACTCTGGTGATCCAAACAAAATGGCTTCAGTGGTGCAGATGTCACCTACATGTTATT
CTAGTACTAGAAACTGAAGACCATGTGGAGACTTCATCAAACATGGGTTTAGTTTTCACCAGAATGGAAAGACCT
GTACCCCTTTTTGGTGGTCTTACTGAGCTGGGTGGGTGTCTGTTTTGAGCTTATTTAGAGTCCTAGTTTTCCTAC
TTATAAAGTAGAAATGGTGAGATTGTTTTCTTTTTCTACCTTAAAGGGAGATGGTAAGAAACAATGAATGTCTTT
TTTCAAACTTTATTGACAAGTGATTTTCAAGTCTGTGTTCAAAAATATATTCATGTACCTGTGATCCAGCAAGAA
GGGAGTTCCAGTCAAGAGTCACTACAACTGATTAGTTGTTTAGAGAATGAGAAATGGAACAGTGAGGAATGGAGG
CCATATTTCCATGACTTCCCTTGTAAACAGAAGCAACAGAAGGGACAAGAGGCTGGCCTCTACATCACTCTCACC
TTCCAAATCTTGTGGAAGTGCATCTACTTGCCAGAACCAAATTAACTTACTTCCAAGTTCTGGCTGCTTGCAGGT
GGAACTCCAGCTGCAAGGGAGTTAGGGAAATGAAGGTCTTTTTTTAAAAGCTTCTCAGCCTTCCTAGGGAACAGA
AATTGGGTGAGCCAATCTGCAATTTCTACTACAGGCATTGAGACCAGTTAGATTATTGAAATATTATAGAGAGTT

FIGURE 6215B

ATGAACACTTAAATTATGATAGTGGTATGACATTGGATAGAACATGGGATACTTTAGAAGTAGAATTGACAGGGC
ATATTAGTTGATGAAATGGAGTCATTTGAGTCTCTTAATAGCCATGTATCATAATTACCAAGTGAAGCTGGTGGA
ACATATGGTCTCCATTTTACAGTTAAGGAATATAATGGACAGATTAATATTGTTCTCTGTCATGCCCACAATCCC
TTTCTAAGGAAGACTGCCCTACTATAGCAGTTTTTATATTTGTCAATTTATGAATATAATGAATGAGGAGTTCTG
GTACCTCCTGTCTTTACAAATATTGGGTGTTGTCCAGTATTTTTCCCTTTTTAACCATTCCAATCGGTGTGTAGT
GATGTTTCATTTTGGTTTTAATTTGTATATCCCTGATAGCTATAATTGGGTCATAGAAATTCTTTATACATTCTA
GATGCAAGTCTCTTGTCGGATATATGTATTGAGATATTACACCTAGTCTGTGGCTTGACTGTTTTCTTTATGTCT
TTTGATGAATAGAAGTTTTAAATTTTGACAAGGTCAAATTTATTTTTTTCTTTTGTTTGATATTTTTTCTCTCCA
ATTTAACCCCAAGATTTCAGATATTCTGCTCTATTATATAAACTTTATATTTTTATATTTGTGATCTACCTTGAA
TTGATATGTATGTTGTGAATTATGGATCAGGGTTCTTTTTTTCCCCCATACAAGTATCCAGTCATTGTAACACTG
TTTATTGAAAGAATTATCCTTTCCTCATTAAATTACCTTGCCAATTAGTCTCGTGCCGAATTCCTGCAGCCCGGG
GGATCCACTAGTTCTAGAGCGGCCGCCACCGCGGTGGAGCTCCAGCTTTTGTTCCCTT

FIGURE 6216

MWKLLPAAGPAGGEPYRLLTGVEYVVGRKNCAILIENDQSISRNHAVLTANFSVTNLSQTDEIPVLTLKDNSKYG
TFVNEEKMQNGFSRTLKSGDGITFGVFGSKFRIEYEPLVACSSCLDVSGKTALNQAILQLGGFTVNNWTEECTHL
VMVSVKVTIKTICALICGRPIVKPEYFTEFLKAVQSKKQPPQIESFYPPLDEPSIGSKNVDLSGRQERKQIFKGK
TFIFLNAKQHKKLSSAVVFGGGEARLITEENEEEHNFFLAPGTCVVDTGITNSQTLIPDCQKKWIQSIMDMLQRQ
GLRPIPEAEIGLAVIFMTTKNYCDPQGHPSTGLKTTTPGPSLSQGVSVDEKLMPSAPVNTTTYVADTESEQADTW
DLSERPKEIKVSKMEQKFRMLSQDAPTVKESCKTSSNNNSMVSNTLAKMRIPNYQLSPTKLPSINKSKDRASQQQ
QTNSIRNYFQPSTKKRERDEENQEMSSCKSARIETSCSLLEQTQPATPSLWKNKEQHLSENEPVDTNSDNNLFTD
TDLKSIVKNSASKSHAAEKLRSNKKREMDDVAIEDEVLEQLFKDTKPELEIDVKVQKQEEDVNVRKRPRMDIETN
DTFSDEAVPESSKISQENEIGKKRELKEDSLWSAKEISNNDKLQDDSEMLPKKLLLTEFRSLVIKNSTSRNPSGI
NDDYGQLKNFKKFKKVTYPGAGKLPHIIGGSDLIAHHARKNTELEEWLRQEMEVQNQHAKEESLADDLFRYNPYL
KRRR

FIGURE 6217

CATGATTCCCAAGCTTGGCACGAGGGTCCGCAAGCCCGGCTGAGAGCGCGCCATGGGGCAGGCGGGCTGCAAGGG
GCTCTGCCTGTCGCTGTTCGACTACAAGACCGAGAAGTATGTCATCGCCAAGAACAAGAAGGTGGGCCTGCTGTA
CCGGCTGCTGCAGGCCTCCATCCTGGCGTACCTGGTCGTATGGGTGTTCCTGATAAAGAAGGGTTACCAAGACGT
CGACACCTCCCTGCAGAGTGCTGTCATCACCAAAGTCAAGGGCGTGGCCTTCACCAACACCTCGGATCTTGGGCA
GCGGATCTGGGATGTCGCCGACTACGTCATTCCAGCCCAGGAAAAGAACGTCTTTTTTGTGGTCACCAACCTGAT
TGTGACCCCCAACCAGCGGCAGAACGTCTGTGCTGAGAATGAAGGCATTCCTGATGGCGCGTGCTCCAAGGACAG
CGACTGCCACGCTGGGGAAGCGGTTACAGCTGGAAACGGAGTGAAGACCGGCCGCTGCCTGCGGAGAGAGAACTT
GGCCAGGGGCACCTGTGAGATCTTTGCCTGGTGCCCGTTGGAGACAAGCTCCAGGCCGGAGGAGCCATTCCTGAA
GGAGGCCGAAGACTTCACCATTTTCATAAAGAACCACATCCGTTTCCCCAAATTCAACTTCTCCAACAATGTGAT
GGACGTCAAGGACAGATCTTTCCTGAAATCATGCCACTTTGGCCCCAAGAACCACTACTGCCCCATCTTCCGACT
GGGCTCCGTGATCCGCTGGGCCGGGAGCGACTTCCAGGATATAGCCCTGGAGGGTGGCGTGATAGGAATTAATAT
TGAATGGAACTGTGATCTTGATAAAGCTGCCTCTGAGTGCCACCCTCACTATTCTTTTAGCCGTCTGGACAATAA
ACTTTCAAAGTCTGTCTCCTCCGGGTACAACTTCAGATTTGCCAGATATTACCGAGACGCAGCCGGGGTGGAGTT
CCGCACCCTGATGAAAGCCTACGGGATCCGCTTTGACGTGATGGTGAACGGCAAGGGTGCCTCCTTCTGCGACCT
GGTACTCATCTACCTCATCAAAAAGAGAGAGTTTTACCGTGACAAGAAGTACCAGGAAGTGAGGGGCCTAGAAGA
CAGTTCCCAGGAGGCCGAGGACGAGGCATCGGGGCTGGGGCTATCTGAGCAGCTCACATCTGGGCCAGGGCTGCT
GGGGATGCCGGAGCAGCAGGAGCTGCAGGAGCCACCCGAGGCGAACGTTGGAAGCAGCAGTCAGAAGGGGAACGG
ATCTGTGTGCCCACAGCTCCTGGAGCCCCACAGGAGCACGTGAATTGCCTCTGCTTACGTTCAGGCCCTGTCCTA
AACCCAGCCGTCTAGCACCCAGTGATCCCATGCCTTTGGGAATCCCAGGATGCTGCCCAACGGGAAATTTGTACA
TTGGGTGCTATGAATGCCACATCACAGGGACCAGCCATCACAGAGCAAAGTGACCTCCACGTCTGATGCTGGGGT
CATCAGGACGGACCCATCATGGCTATCTTTTTGCCCCACCCCCTGCCGTCAGTTCTTCCTTTCTCCGTGGCTGGC
TTCCCGCACTAGGGAACGGGTTGTAAATGGGGAACATGACTTCCTTCCGGAGTCCTTGAGCACCTCAGCTAAGGA
CCGCAGTGCCCTGTAGAGTTCCTAGATTACCTCACTGGGAATAGCATTGTGCGTGTCCGGAAAAGGGCTCCATTT
GGTTCCAGCCCACTCCCCTCTGCAAGTGCCGCAGCTTCCCTCAGGCATACTCTCCAGTGGATCCAAGTACTCTCT
CTCCTAAAGACACCACCTTCCTGCCAGCTGTTTGCCCTTAGGCCAGTACACAGAATTGAAAGTGGGGGAGGTGGC
AGACGCTTTCTGGGACCTGCCCAAGATATGTATTCTCTGACACTCTTATTTGGTCATAAAACAATAAATGGTGTC
AATTTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 6218

MGQAGCKGLCLSLFDYKTEKYVIAKNKKVGLLYRLLQASILAYLVVWVFLIKKGYQDVDTSLQSAVITKVKGVAF
TNTSDLGQRIWDVADYVIPAQEKNVFFVVTNLIVTPNQRQNVCAENEGIPDGACSKDSDCHAGEAVTAGNGVKTG
RCLRRENLARGTCEIFAWCPLETSSRPEEPFLKEAEDFTIFIKNHIRFPKFNFSNNVMDVKDRSFLKSCHFGPKN
HYCPIFRLGSVIRWAGSDFQDIALEGGVIGINIEWNCDLDKAASECHPHYSFSRLDNKLSKSVSSGYNFRFARYY
RDAAGVEFRTLMKAYGIRFDVMVNGKGASFCDLVLIYLIKKREFYRDKKYQEVRGLEDSSQEAEDEASGLGLSEQ
LTSGPGLLGMPEQQELQEPPEANVGSSSQKGNGSVCPQLLEPHRST

FIGURE 6219A

GCGGGGAAGCAGCAGCGGCCAGGATGAATCCCAGGTGCTCTGGAGCTGGATGGTGAAGGTCGGCACTCTTCACCC
TCCCGAGCCCTGCCCGTCTCGGCCCCATGCCCCCACCAGTCAGCCCCGGGCCACAGGCAGTGAGCAGGCACCTGG
GAGCCGAGGCCCTATGACCAGGCCAAGGAGACGGGCGCTCCAGGGTCCCAGCCACCTGTCCCCCCCCATGGAGCTG
AGGCCCTGGTTGCTATGGGTGGTAGCAGCAACAGGAACCTTGGTCCTGCTAGCAGCTGATGCTCAGGGCCAGAAG
GTCTTCACCAACACGTGGGCTGTGCGCATCCCTGGAGGCCCAGCGGTGGCCAACAGTGTGGCACGGAAGCATGGG
TTCCTCAACCTGGGCCAGATCTTCGGGGACTATTACCACTTCTGGCATCGAGGAGTGACGAAGCGGTCCCTGTCG
CCTCACCGCCCGCGGCACAGCCGGCTGCAGAGGGAGCCTCAAGTACAGTGGCTGGAACAGCAGGTGGCAAAGCGA
CGGACTAAACGGGACGTGTACCAGGAGCCCACAGACCCCAAGTTTCCTCAGCAGTGGTACCTGTCTGGTGTCACT
CAGCGGGACCTGAATGTGAAGGCGGCCTGGGCGCAGGGCTACACAGGGCACGGCATTGTGGTCTCCATTCTGGAC
GATGGCATCGAGAAGAACCACCCGGACTTGGCAGGCAATTATGATCCTGGGGCCAGTTTTGATGTCAATGACCAG
GACCCTGACCCCCAGCCTCGGTACACACAGATGAATGACAACAGGCACGGCACACGGTGTGCGGGGGAAGTGGCT
GCGGTGGCCAACAACGGTGTCTGTGGTGTAGGTGTGGCCTACAACGCCCGCATTGGAGGGGTGCGCATGCTGGAT
GGCGAGGTGACAGATGCAGTGGAGGCACGCTCGCTGGGCCTGAACCCCAACCACATCCACATCTACAGTGCCAGC
TGGGGCCCCGAGGATGACGGCAAGACAGTGGATGGGCCAGCCCGCCTCGCCGAGGAGGCCTTCTTCCGTGGGGTT
AGCCAGGGCCGAGGGGGGCTGGGCTCCATCTTTGTCTGGGCCTCGGGGAACGGGGGCCGGGAACATGACAGCTGC
AACTGCGACGGCTACACCAACAGTATCTACACGCTGTCCATCAGCAGCGCCACGCAGTTTGGCAACGTGCCGTGG
TACAGCGAGGCCTGCTCGTCCACACTGGCCACGACCTACAGCAGTGGCAACCAGAATGAGAAGCAGATCGTGACG
ACTGACTTGCGGCAGAAGTGCACGGAGTCTCACACGGGCACCTCAGCCTCTGCCCCCTTAGCAGCCGGCATCATT
GCTCTCACCCTGGAGGCCAATAAGAACCTCACATGGCGGGACATGCAACACCTGGTGGTACAGACCTCGAAGCCA
GCCCACCTCAATGCCAACGACTGGGCCACCAATGGTGTGGGCCGGAAAGTGAGCCACTCATATGGCTACGGGCTT
TTGGACGCAGGCGCCATGGTGGCCCTGGCCCAGAATTGGACCACAGTGGCCCCCCAGCGGAAGTGCATCATCGAC
ATCCTCACCGAGCCCAAAGACATCGGGAAACGGCTCGAGGTGCGGAAGACCGTGACCGCGTGCCTGGGCGAGCCC
AACCACATCACTCGGCTGGAGCACGCTCAGGCGCGGCTCACCCTGTCCTATAATCGCCGTGGCGACCTGGCCATC
CACCTGGTCAGCCCCATGGGCACCCGCTCCACCCTGCTGGCAGCCAGGCCACATGACTACTCCGCAGATGGGTTT
AATGACTGGGCCTTCATGACAACTCATTCCTGGGATGAGGATCCCTCTGGCGAGTGGGTCCTAGAGATTGAAAAC
ACCAGCGAAGCCAACAACTATGGGACGCTGACCAAGTTCACCCTCGTACTCTATGGCACCGCCCCTGAGGGGCTG
CCCGTACCTCCAGAAAGCAGTGGCTGCAAGACCCTCACGTCCAGTCAGGCCTGTGTGGTGTGCGAGGAAGGCTTC
TCCCTGCACCAGAAGAGCTGTGTCCAGCACTGCCCTCCAGGCTTCGCCCCCCAAGTCCTCGATACGCACTATAGC
ACCGAGAATGACGTGGAGACCATCCGGGCCAGCGTCTGCGCCCCCTGCCACGCCTCATGTGCCACATGCCAGGGG
CCGGCCCTGACAGACTGCCTCAGCTGCCCCAGCCACGCCTCCTTGGACCCTGTGGAGCAGACTTGCTCCCGGCAA
AGCCAGAGCAGCCGAGAGTCCCCGCCACAGCAGCAGCCACCTCGGCTGCCCCCGGAGGTGGAGGCGGGGCAACGG
CTGCGGGCAGGGCTGCTGCCCTCACACCTGCCTGAGGTGGTGGCCGGCCTCAGCTGCGCCTTCATCGTGCTGGTC
TTCGTCACTGTCTTCCTGGTCCTGCAGCTGCGCTCTGGCTTTAGTTTTCGGGGGGTGAAGGTGTACACCATGGAC
CGTGGCCTCATCTCCTACAAGGGGCTGCCCCCTGAAGCCTGGCAGGAGGAGTGCCCGTCTGACTCAGAAGAGGAC
GAGGGCCGGGGCGAGAGGACCGCCTTTATCAAAGACCAGAGCGCCCTCTGATGAGCCCACTGCCCACCCCCTCAA
GCCAATCCCCTCCTTGGGCACTTTTTAATTCACCAAAGTATTTTTTTATCTTGGGACTGGGTTTGGACCCCAGCT
GGGAGGCAAGAGGGGTGGAGACTGTTTCCCATCCTACCCTCGGGCCCACCTGGCCACCTGAGGTGGGCCCAGGAC
CAGCTGGGGCGTGGGGAGGGCCGTACCCCACCCTCAGCACCCCTTCCATGTGGAGAAAGGAGTGAAACCTTTAGG
GCAGCTTGCCCCGGCCCCGGCCCCAGCCAGAGTTCCTGCGGAGTGAAGAGGGGCAGCCCTTGCTTGTTGGGATTC
CTGACCCAGGCCGCAGCTCTTGCCCTTCCCTGTCCCTCTAAAGCAATAATGGTCCCATCCAGGCAGTCGGGGGCT
GGCCTAGGAGATATCTGAGGGAGGAGGCCACCTCTCCAAGGGCTTCTGCACCCTCCACCCTGTCCCCCAGCTCTG
GTGAGTCTTGGCGGCAGCAGCCATCATAGGAAGGGACCAAGGCAAGGCAGGTGCCTCCAGGTGTGCACGTGGCAT
GTGGCCTGTGGCCTGTGTCCCATGACCCACCCCTGTGCTCCGTGCCTCCACCACCACTGGCCACCAGGCTGGCGC
AGCCAAGGCCGAAGCTCTGGCTGAACCCTGTGCTGGTGTCCTGACCACCCTCCCCTCTCTTGCACCCGCCTCTCC
CGTCAGGGCCCAAGTCCCTGTTTTCTGAGCCCGGGCTGCCTGGGCTGTTGGCACTCACAGACCTGGAGCCCCTGG
GTGGGTGGTGGGGAGGGGCGCTGGCCCAGCCGGCCTCTCTGGCCTCCCACCCGATGCTGCTTTCCCCTGTGGGGA
TCTCAGGGGCTGTTTGAGGATATATTTTCACTTTGTGATTATTTCACTTTAGATGCTGATGATTTGTTTTTGTAT
TTTTAATGGGGGTAGCAGCTGGACTACCCACGTTCTCACACCCACCGTCCGCCCTGCTCCTCCCTGGCTGCCCTG

FIGURE 6219B

GCCCTGAGGTGTGGGGGCTGCAGCATGTTGCTGAGGAGTGAGGAATAGTTGAGCCCCAAGTCCTGAAGAGGCGGG
CCAGCCAGGCGGGCTCAAGGAAAGGGGGTCCCAGTGGGAGGGGCAGGCTGACATCTGTGTTTCAAGTGGGGCTCG
CCATGCCGGGGGTTCATAGGTCACTGGCTCTCCAAGTGCCAGAGGTGGGCAGGTGGTGGCACTGAGCCCCCCCAA
CACTGTGCCCTGGTGGAGAAAGCACTGACCTGTCATGCCCCCCTCAAACCTCCTCTTCTGACGTGCCTTTTGCAC
CCCTCCCATTAGGACAATCAGTCCCCTCCCATCTGGGAGTCCCCTTTTCTTTTCTACCCTAGCCATTCCTGGTAC
CCAGCCATCTGCCCAGGGGTGCCCCCTCCTCTCCCATCCCCCTGCCCTCGTGGCCAGCCCGGCTGGTTTTGTAAG
ATACTGGGTTGGTGCACAGTGATTTTTTTCTTGTAATTTAAACAGGCCCAGCATTGCTGGTTCTATTTAATGGAC
ATGAGATAATGTTAGAGGTTTTAAAGTGATTAAACGTGCAGACTATGCAAACCAG

FIGURE 6220

MELRPWLLWVVAATGTLVLLAADAQGQKVFTNTWAVRIPGGPAVANSVARKHGFLNLGQIFGDYYHFWHRGVTKR
SLSPHRPRHSRLQREPQVQWLEQQVAKRRTKRDVYQEPTDPKFPQQWYLSGVTQRDLNVKAAWAQGYTGHGIVVS
ILDDGIEKNHPDLAGNYDPGASFDVNDQDPDPQPRYTQMNDNRHGTRCAGEVAAVANNGVCGVGVAYNARIGGVR
MLDGEVTDAVEARSLGLNPNHIHIYSASWGPEDDGKTVDGPARLAEEAFFRGVSQGRGGLGSIFVWASGNGGREH
DSCNCDGYTNSIYTLSISSATQFGNVPWYSEACSSTLATTYSSGNQNEKQIVTTDLRQKCTESHTGTSASAPLAA
GIIALTLEANKNLTWRDMQHLVVQTSKPAHLNANDWATNGVGRKVSHSYGYGLLDAGAMVALAQNWTTVAPQRKC
IIDILTEPKDIGKRLEVRKTVTACLGEPNHITRLEHAQARLTLSYNRRGDLAIHLVSPMGTRSTLLAARPHDYSA
DGFNDWAFMTTHSWDEDPSGEWVLEIENTSEANNYGTLTKFTLVLYGTAPEGLPVPPESSGCKTLTSSQACVVCE
EGFSLHQKSCVQHCPPGFAPQVLDTHYSTENDVETIRASVCAPCHASCATCQGPALTDCLSCPSHASLDPVEQTC
SRQSQSSRESPPQQQPPRLPPEVEAGQRLRAGLLPSHLPEVVAGLSCAFIVLVFVTVFLVLQLRSGFSFRGVKVY
TMDRGLISYKGLPPEAWQEECPSDSEEDEGRGERTAFIKDQSAL

FIGURE 6221

AGGTCTCAGCCGGTCGTCGCGACGTTCGCCCGCTCGCTCTGAGGCTCCTGAAGCCGAAACTAGCTAGACTTTCCT
CCTTCCCGCCTGCCTGTAGCGGCGTTGTTGCCACTCCGCCACCATGTTCGAGGCGCGCCTGGTCCAGGGCTCCAT
CCTCAAGAAGGTGTTGGAGGCACTCAAGGACCTCATCAACGAGGCCTGCTGGGATATTAGCTCCAGCGGTGTAAA
CCTGCAGAGCATGGACTCGTCCCACGTCTCTTTGGTGCAGCTCACCCTGCGGTCTGAGGGCTTCGACACCTACCG
CTGCGACCGCAACCTGGCCATGGGCGTGAACCTCACCAGTATGTCCAAAATACTAAAATGCGCCGGCAATGAAGA
TATCATTACACTAAGGGCCGAAGATAACGCGGATACCTTGGCGCTAGTATTTGAAGCACCAAACCAGGAGAAAGT
TTCAGACTATGAAATGAAGTTGATGGATTTAGATGTTGAACAACTTGGAATTCCAGAACAGGAGTACAGCTGTGT
AGTAAAGATGCCTTCTGGTGAATTTGCACGTATATGCCGAGATCTCAGCCATATTGGAGATGCTGTTGTAATTTC
CTGTGCAAAAGACGGAGTGAAATTTTCTGCAAGTGGAGAACTTGGAAATGGAAACATTAAATTGTCACAGACAAG
TAATGTCGATAAAGAGGAGGAAGCTGTTACCATAGAGATGAATGAACCAGTTCAACTAACTTTTGCACTGAGGTA
CCTGAACTTCTTTACAAAAGCCACTCCACTCTCTTCAACGGTGACACTCAGTATGTCTGCAGATGTACCCCTTGT
TGTAGAGTATAAAATTGCGGATATGGGACACTTAAAATACTACTTGGCTCCCAAGATCGAGGATGAAGAAGGATC
TTAGGCATTCTTAAAATTCAAGAAAATAAAACTAAGCTCTTTGAGAACTGCTTCTAAGATGCCAGCATATACTGA
AGTCTTTTCTGTCACCAAATTTGTACCTCTAAGTACATATGTAGATATTGTTTTCTGTAAATAACCTATTTTTTT
TCTCTATTCTCTCCAATTTGTTTAAAGAATAAAGTCCAAAGTCTGATCTGGTCTAGTTAACCTAGAAGTATTTTT
GTCTCTTAGAAATACTTGTGATTTTTATAATACAAAAGGGTCTTGACTCTAAATGCAGTTTTAAGAAGTGTTTTT
GAATTTAAATAAAGTTACTTGAATTTCAAAC

FIGURE 6222

MFEARLVQGSILKKVLEALKDLINEACWDISSSGVNLQSMDSSHVSLVQLTLRSEGFDTYRCDRNLAMGVNLTSM
SKILKCAGNEDIITLRAEDNADTLALVFEAPNQEKVSDYEMKLMDLDVEQLGIPEQEYSCVVKMPSGEFARICRD
LSHIGDAVVISCAKDGVKFSASGELGNGNIKLSQTSNVDKEEEAVTIEMNEPVQLTFALRYLNFFTKATPLSSTV
TLSMSADVPLVVEYKIADMGHLKYYLAPKIEDEEGS

FIGURE 6223

GAGCACCGCACACTCACTTCACCCTGGTTCAACACCCCCACGAGGTTGACCCCGTCATTATGTTAGAGATTATGC
ATTTTCCACATAGGGAAACTGAGGCTCAGGGGTGTTAAGTGACTCACCCAAGGTCACACGGCTAGGAAGTTGCTG
CACGCTCCTATGCTCCATTTCCTCTGGGAGCCTATCAACCCAGATAAAGCGGGACCTCCTCTCTGGTAGAGGTGC
AGGGGGCAGTACTCAACATGATCACAGAGGGAGCGCAGGCCCCTCGATTGTTGCTGCCGCCGCTGCTCCTGCTGC
TCACCCTGCCAGCCACAGGCTCAGACCCCGTGCTCTGCTTCACCCAGTATGAAGAATCCTCCGGCAAGTGCAAGG
GCCTCCTGGGGGGTGGTGTCAGCGTGGAAGACTGCTGTCTCAACACTGCCTTTGCCTACCAGAAACGTAGTGGTG
GGCTCTGTCAGCCTTGCAGGTCCCCACGATGGTCCCTGTGGTCCACATGGGCCCCCTGTTCGGTGACGTGCTCTG
AGGGCTCCCAGCTGCGGTACCGGCGCTGTGTGGGCTGGAATGGGCAGTGCTCTGGAAAGGTGGCACCTGGGACCC
TGGAGTGGCAGCTCCAGGCCTGTGAGGACCAGCAGTGCTGTCCTGAGATGGGCGGCTGGTCTGGCTGGGGGCCCT
GGGAGCCTTGCTCTGTCACCTGCTCCAAAGGGACCCGGACCCGCAGGCGAGCCTGTAATCACCCTGCTCCCAAGT
GTGGGGGCCACTGCCCAGGACAGGCACAGGAATCAGAGGCCTGTGACACCCAGCAGGTCTGCCCCACACACGGGG
CCTGGGCCACCTGGGGCCCCTGGACCCCCTGCTCAGCCTCCTGCCACGGTGGACCCCACGAACCTAAGGAGACAC
GAAGCCGCAAGTGTTCTGCACCTGAGCCCTCCCAGAAACCTCCTGGGAAGCCCTGCCCGGGGCTAGCCTACGAGC
AGCGGAGGTGCACCGGCCTGCCACCCTGCCCAGTGGCTGGGGGCTGGGGGCCTTGGGGCCCTGTGAGCCCCTGCC
CTGTGACCTGTGGCCTGGGCCAGACCATGGAACAACGGACGTGCAATCACCCTGTGCCCCAGCATGGGGGCCCCT
TCTGTGCTGGCGATGCCACCCGGACCCACATCTGCAACACAGCTGTGCCCTGCCCTGTGGATGGGGAGTGGGACT
CGTGGGGGGAGTGGAGCCCCTGTATCCGACGGAACATGAAGTCCATCAGCTGTCAAGAAATCCCGGGCCAGCAGT
CACGCGGGAGGACCTGCAGGGGCCGCAAGTTTGACGGACATCGATGTGCCGGGCAACAGCAGGATATCCGGCACT
GCTACAGCATCCAGCACTGCCCCTTGAAAGGATCATGGTCAGAGTGGAGTACCTGGGGGCTGTGCATGCCCCCCT
GTGGACCTAATCCTACCCGTGCCCGCCAGCGCCTCTGCACACCCTTGCTCCCCAAGTACCCGCCCACCGTTTCCA
TGGTCGAAGGTCAGGGCGAGAAGAACGTGACCTTCTGGGGGAGACCGCTGCCACGGTGTGAGGAGCTACAAGGGC
AGAAGCTGGTGGTGGAGGAGAAACGACCATGTCTACACGTGCCTGCTTGCAAAGACCCTGAGGAAGAGGAACTCT
AACACTTCTCTCCTCCACTCTGAGCCCCCTGACCTTCCAAACCTCAATAAA

FIGURE 6224

MITEGAQAPRLLLPPLLLLLTLPATGSDPVLCFTQYEESSGKCKGLLGGGVSVEDCCLNTAFAYQKRSGGLCQPC
RSPRWSLWSTWAPCSVTCSEGSQLRYRRCVGWNGQCSGKVAPGTLEWQLQACEDQQCCPEMGGWSGWGPWEPCSV
TCSKGTRTRRRACNHPAPKCGGHCPGQAQESEACDTQQVCPTHGAWATWGPWTPCSASCHGGPHEPKETRSRKCS
APEPSQKPPGKPCPGLAYEQRRCTGLPPCPVAGGWGPWGPVSPCPVTCGLGQTMEQRTCNHPVPQHGGPFCAGDA
TRTHICNTAVPCPVDGEWDSWGEWSPCIRRNMKSISCQEIPGQQSRGRTCRGRKFDGHRCAGQQQDIRHCYSIQH
CPLKGSWSEWSTWGLCMPPCGPNPTRARQRLCTPLLPKYPPTVSMVEGQGEKNVTFWGRPLPRCEELQGQKLVVE
EKRPCLHVPACKDPEEEEL

FIGURE 6225

ATCAACATTGTCTGTAATTCAGCTTATGTTGTAAACGTAGCCAGTCACATTCACATGGAAACTGCTACAGTTAAA
AGTACACTAGACCCAGAACTGCTTAATTTGTTTCACTTATTCTCAAATGCTGCATGCTACATGCCAAACAGGTGA
GACAGCTGGTCATGTACAGTGACATTGTCTGTCATCATTTGCTCATATGGGGATACTTAAACAATTAAAAACTGA
CAATGGACTCGCTTATACTAGTCATGCTTTTCAAAATTTCTTATAGCTTTGGGCTATAACCCATAAAATTGGAAT
TCCTTATAATCCTAAAGGACAAGGCATTGTAGAGCAGGCACATTGAACATTACAACACATGTTGAAAAGACGAAA
GGGGTATAGGAGGCCAACTACCACCTCAATCAAAACTACATTTAGCCTTATTTACTTCACATTTTTGGACTCCTG
GTACAGATGGTAAGACTCCAGCAGAAAGACATTGGCAAGTGTTAGAGGAAAAGAGGAAAGTTTATCTGAAAGCAT
TATGGAAATCCCTGGAAGGACAATGGAAAGGTTGGGTGGATTTACTGACGTGGAGAAGAGGGTATGCTTGTGTTT
TCACAGGAGATGGACAAGCCGTGTGGGTGCCCTCAAGGTGTGTGCAACCATGGAATGGGAGACTGGAGGAACCCA
GGGTGGCCAACCATGGGTCCGGTCCCTCTGGTGTGAGCCATGAGCCAGCTGAGCCTGAGTGCGAAGACGGAGAGA
AGGCCGACCACAGTCATGACATCAACCCCCATAACCTGGGGACAACTCAAGAAAACCACACAGGAGGCTGAGAAA
CTACTGGAGCACCAGGGACAGTCTGTAAAGTTGGATGGACCACCAATGGGAAAATGAGAGCTGCCCACCCTGGCC
TTACACTCCTTCAATTAATACATAAACAGAAAGGAGGATATACAGAGAGCCAAAGGCCCATGGGACGTGACCAAC
ATTCCACTGAGTCTATACGATCAAACAGCAAACTGTTTATCATGAATACAGAATGTGGGCAAACTCATGACTGTG
CCTGCCCCAGAAGGTTTGCTGAGGGCAATTGCTTCCTGACGCCAAGCTCCTTGAGGTTATCTATTGGGACATCCA
GAGAATGCAGTCTTGCAAGCCTACTCTGGACCGAGCAGCTGACCCCCTCTTCCACTTCCCTTCACACTATCTCTT
TTGCCTAATAAATACGGAAGGCTGTGTACAAGGTCAGGTCCCTTGTCCACTAGAGGCAAGGTGCTTCCTGACCCT
TCTTCCAAATATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 6226

MRAAHPGLTLLQLIHKQKGGYTESQRPMGRDQHSTESIRSNSKLFIMNTECGQTHDCACPRRFAEGNCFLTPSSL
RLSIGTSRECSLASLLWTEQLTPSSTSLHTISFA

FIGURE 6227

CAGAGCCGGCGCAGGGGAAGCGCCCGGGGCCCCGGGTGCAGCAGCGCCCGCCGCCTCCCGGGCCTCCCCGGCCCG
CAGCCCGGGGTCCCGGGCCCCGGGGCCGGCACCTCTCGGGCTCCGGCTCCCCGCGCGCAAGATGGCTGACCCGGC
TGCGGGGCCGCCGCCGAGCGAGGGCGAGGAGAGCACCGTGCGCTTCGCCCGCAAAGGCGCCCTCCGGCAGAAGAA
CGTGCATGAGGTCAAGAACCACAAATTCACCGCCCGCTTCTTCAAGCAGCCCACCTTCTGCAGCCACTGCACCGA
CTTCATCTGGGGCTTCGGGAAGCAGGGATTCCAGTGCCAAGTTTGCTGCTTTGTGGTGCACAAGCGGTGCCATGA
ATTTGTCACATTCTCCTGCCCTGGCGCTGACAAGGGTCCAGCCTCCGATGACCCCCGCAGCAAACACAAGTTTAA
GATCCACACGTACTCCAGCCCCACGTTTTGTGACCACTGTGGGTCACTGCTGTATGGACTCATCCACCAGGGGAT
GAAATGTGACACCTGCATGATGAATGTGCACAAGCGCTGCGTGATGAATGTTCCCAGCCTGTGTGGCACGGACCA
CACGGAGCGCCGCGGCCGCATCTACATCCAGGCCCACATCGACAGGGACGTCCTCATTGTCCTCGTAAGAGATGC
TAAAAACCTTGTACCTATGGACCCCAATGGCCTGTCAGATCCCTACGTAAAACTGAAACTGATTCCCGATCCCAA
AAGTGAGAGCAAACAGAAGACCAAAACCATCAAATGCTCCCTCAACCCTGAGTGGAATGAGACATTTAGATTTCA
GCTGAAAGAATCGGACAAAGACAGAAGACTGTCAGTAGAGATTTGGGATTGGGATTTGACCAGCAGGAATGACTT
CATGGGATCTTTGTCCTTTGGGATTTCTGAACTTCAGAAGGCCAGTGTTGATGGCTGGTTTAAGTTACTGAGCCA
GGAGGAAGGCGAGTACTTCAATGTGCCTGTGCCACCAGAAGGAAGTGAGGCCAATGAAGAACTGCGGCAGAAATT
TGAGAGGGCCAAGATCAGTCAGGGAACCAAGGTCCCGGAAGAAAAGACGACCAACACTGTCTCCAAATTTGACAA
CAATGGCAACAGAGACCGGATGAAACTGACCGATTTTAACTTCCTAATGGTGCTGGGGAAAGGCAGCTTTGGCAA
GGTCATGCTTTCAGAACGAAAAGGCACAGATGAGCTCTATGCTGTGAAGATCCTGAAGAAGGACGTTGTGATCCA
AGATGATGACGTGGAGTGCACTATGGTGGAGAAGCGGGTGTTGGCCCTGCCTGGGAAGCCGCCCTTCCTGACCCA
GCTCCACTCCTGCTTCCAGACCATGGACCGCCTGTACTTTGTGATGGAGTACGTGAATGGGGGCGACCTCATGTA
TCACATCCAGCAAGTCGGCCGGTTCAAGGAGCCCCATGCTGTATTTTACGCTGCAGAAATTGCCATCGGTCTGTT
CTTCTTACAGAGTAAGGGCATCATTTACCGTGACCTAAAACTTGACAACGTGATGCTCGATTCTGAGGGACACAT
CAAGATTGCCGATTTTGGCATGTGTAAGGAAAACATCTGGGATGGGGTGACAACCAAGACATTCTGTGGCACTCC
AGACTACATCGCCCCCGAGATAATTGCTTATCAGCCCTATGGGAAGTCCGTGGATTGGTGGGCATTTGGAGTCCT
GCTGTATGAAATGTTGGCTGGGCAGGCACCCTTTGAAGGGGAGGATGAAGATGAACTCTTCCAATCCATCATGGA
ACACAACGTAGCCTATCCCAAGTCTATGTCCAAGGAAGCTGTGGCCATCTGCAAAGGGCTGATGACCAAACACCC
AGGCAAACGTCTGGGTTGTGGACCTGAAGGCGAACGTGATATCAAAGAGCATGCATTTTTCCGGTATATTGATTG
GGAGAAACTTGAACGCAAAGAGATCCAGCCCCCTTATAAGCCAAAAGCTAGAGACAAGAGAGACACCTCCAACTT
CGACAAAGAGTTCACCAGACAGCCTGTGGAACTGACCCCCACTGATAAACTCTTCATCATGAACTTGGACCAAAA
TGAATTTGCTGGCTTCTCTTATACTAACCCAGAGTTTGTCATTAATGTGTAGGTGAATGCAAACTCCATCGTTGA
GCCTGGGGTGTAAGACTTCAAGCCAAGCGTATGTATCAATTCTAGTCTTCCAGGATTCACGGTGCACATGCTGGC
ATTCAACATGTGGAAAGCTTGTCTTAGAGGCCTTTCTTGTATGTGTAGCTTGCTAGTTTGTTTTCTACATTTGAA
AATGTTTAGTTTAGAATAAGCGCATTATCCAATTATAGAGGTACAATTTTCCAAACTTCCAGAAACTCATCAAAT
GAACAGACAATGTCAAAACTACTGTGTCTGATACCAAAATGCTTCAGTATTTGTAATTTTTCAAGTCAGAAGCTG
ATGTTCCTGGTAAAAGTTTTTACAGTTATTCTATAATATCTTCTTTGAATGCTAAGCATGAGCGATATTTTTAAA
AATTGTGAGTAAGCTTCGGAATTC

FIGURE 6228

MADPAAGPPPSEGEESTVRFARKGALRQKNVHEVKNHKFTARFFKQPTFCSHCTDFIWGFGKQGFQCQVCCFVVH
KRCHEFVTFSCPGADKGPASDDPRSKHKFKIHTYSSPTFCDHCGSLLYGLIHQGMKCDTCMMNVHKRCVMNVPSL
CGTDHTERRGRIYIQAHIDRDVLIVLVRDAKNLVPMDPNGLSDPYVKLKLIPDPKSESKQKTKTIKCSLNPEWNE
TFRFQLKESDKDRRLSVEIWDWDLTSRNDFMGSLSFGISELQKASVDGWFKLLSQEEGEYFNVPVPPEGSEANEE
LRQKFERAKISQGTKVPEEKTTNTVSKFDNNGNRDRMKLTDFNFLMVLGKGSFGKVMLSERKGTDELYAVKILKK
DVVIQDDDVECTMVEKRVLALPGKPPFLTQLHSCFQTMDRLYFVMEYVNGGDLMYHIQQVGRFKEPHAVFYAAEI
AIGLFFLQSKGIIYRDLKLDNVMLDSEGHIKIADFGMCKENIWDGVTTKTFCGTPDYIAPEIIAYQPYGKSVDWW
AFGVLLYEMLAGQAPFEGEDEDELFQSIMEHNVAYPKSMSKEAVAICKGLMTKHPGKRLGCGPEGERDIKEHAFF
RYIDWEKLERKEIQPPYKPKARDKRDTSNFDKEFTRQPVELTPTDKLFIMNLDQNEFAGFSYTNPEFVINV

FIGURE 6229

GCGGCGGCGGCGGCGCAGTTTGCTCATACTTTGTGACTTGCGGTCACAGTGGCATTCAGCTCCACACTTGGTAGA
ACCACAGGCACGACAAGCATAGAAACATCCTAAACAATCTTCATCGAGGCATCGAGGTCCATCCCAATAAAAATC
AGGAGACCCTGGCTATCATAGACCTTAGTCTTCGCTGGTATACTCGCTGTCTGTCAACCAGCGGTTGACTTTTTT
TAAGCCTTCTTTTTTCTCTTTTACCAGTTTCTGGAGCAAATTCAGTTTGCCTTCCTGGATTTGTAAATTGTAATG
ACCTCAAAACTTTAGCAGTTCTTCCATCTGACTCAGGTTTGCTTCTCTGGCGGTCTTCAGAATCAACATCCACAC
TTCCGTGATTATCTGCGTGCATTTTGGACAAAGCTTCCAACCAGGATACGGGAAGAAGAA**ATG**GCTGGTGATCTT
TCAGCAGGTTTCTTCATGGAGGAACTTAATACATACCGTCAGAAGCAGGGAGTAGTACTTAAATATCAAGAACTG
CCTAATTCAGGACCTCCACATGATAGGAGGTTTACATTTCAAGTTATAATAGATGGAAGAGAATTTCCAGAAGGT
GAAGGTAGATCAAAGAAGGAAGCAAAAAATGCCGCAGCCAAATTAGCTGTTGAGATACTTAATAAGGAAAAGAAG
GCAGTTAGTCCTTTATTATTGACAACAACGAATTCTTCAGAAGGATTATCCATGGGGAATTACATAGGCCTTATC
AATAGAATTGCCCAGAAGAAAAGACTAACTGTAAATTATGAACAGTGTGCATCGGGGGTGCATGGGCCAGAAGGA
TTTCATTATAAATGCAAAATGGGACAGAAAGAATATAGTATTGGTACAGGTTCTACTAAACAGGAAGCAAAACAA
TTGGCCGCTAAACTTGCATATCTTCAGATATTATCAGAAGAAACCTCAGTGAAATCTGACTACCTGTCCTCTGGT
TCTTTTGCTACTACGTGTGAGTCCCAAAGCAACTCTTTAGTGACCAGCACACTCGCTTCTGAATCATCATCTGAA
GGTGACTTCTCAGCAGATACATCAGAGATAAATTCTAACAGTGACAGTTTAAACAGTTCTTCGTTGCTTATGAAT
GGTCTCAGAAATAATCAAAGGAAGGCAAAAAGATCTTTGGCACCCAGATTTGACCTTCCTGACATGAAAGAAACA
AAGTATACTGTGGACAAGAGGTTTGGCATGGATTTTAAAGAAATAGAATTAATTGGCTCAGGTGGATTTGGCCAA
GTTTTCAAAGCAAAACACAGAATTGACGGAAAGACTTACGTTATTAAACGTGTTAAATATAATAACGAGAAGGCG
GAGCGTGAAGTAAAAGCATTGGCAAAACTTGATCATGTAAATATTGTTCACTACAATGGCTGTTGGGATGGATTT
GATTATGATCCTGAGACCAGTGATGATTCTCTTGAGAGCAGTGATTATGATCCTGAGAACAGCAAAAATAGTTCA
AGGTCAAAGACTAAGTGCCTTTTCATCCAAATGGAATTCTGTGATAAAGGGACCTTGGAACAATGGATTGAAAAA
AGAAGAGGCGAGAAACTAGACAAAGTTTTGGCTTTGGAACTCTTTGAACAAATAACAAAAGGGGTGGATTATATA
CATTCAAAAAAATTAATTCATAGAGATCTTAAGCCAAGTAATATATTCTTAGTAGATACAAAACAAGTAAAGATT
GGAGACTTTGGACTTGTAACATCTCTGAAAAATGATGGAAAGCGAACAAGGAGTAAGGGAACTTTGCGATACATG
AGCCCAGAACAGATTTCTTCGCAAGACTATGGAAAGGAAGTGGACCTCTACGCTTTGGGGCTAATTCTTGCTGAA
CTTCTTCATGTATGTGACACTGCTTTTGAAACATCAAAGTTTTTCACAGACCTACGGGATGGCATCATCTCAGAT
ATATTTGATAAAAAAGAAAAAACTCTTCTACAGAAATTACTCTCAAAGAAACCTGAGGATCGACCTAACACATCT
GAAATACTAAGGACCTTGACTGTGTGGAAGAAAAGCCCAGAGAAAAATGAACGACACACATGT**TAG**AGCCCTTCT
GAAAAAGTATCCTGCTTCTGATATGCAGTTTTCCTTAAATTATCTAAAATCTGCTAGGGAATATCAATAGATATT
TACCTTTTATTTTAATGTTTCCTTTAATTTTTTACTATTTTTACTAATCTTTCTGCAGAAACAGAAAGGTTTTCT
TCTTTTTGCTTCAAAAACATTCTTACATTTTACTTTTTCCTGGCTCATCTCTTTATTCTTTTTTTTTTTTTAAA
GACAGAGTCTCGCTCTGTTGCCCAGGCTGGAGTGCAATGACACAGTCTTGGCTCACTGCAACTTCTGCCTCTTGG
GTTCAAGTGATTCTCCTGCCTCAGCCTCCTGAGTAGCTGGATTACAGGCATGTGCCACCCACCCAACTAATTTTT
GTGTTTTTAATAAAGACAGGGTTTCACCATGTTGGCCAGGCTGGTCTCAAACTCCTGACCTCAAGTAATCCACCT
GCCTCGGCCTCCCAAAGTGCTGGGATTACAGGGATGAGCCACCGCGCCCAGCCTCATCTCTTTGTTCTAAAGATG
GAAAAACCACCCCCAAATTTTCTTTTTATACTATTAATGAATCAATCAATTCATATCTATTTATTAAATTTCTAC
CGCTTTTAGGCCAAAAAAATGTAAGATCGTTCTCTGCCTCACATAGCTTACAAGCCAGCTGGAGAAATATGGTAC
TCATTAAAAAAAAAAAAAAAGTGATGTACAACC

FIGURE 6230

MAGDLSAGFFMEELNTYRQKQGVVLKYQELPNSGPPHDRRFTFQVIIDGREFPEGEGRSKKEAKNAAAKLAVEIL
NKEKKAVSPLLLTTTNSSEGLSMGNYIGLINRIAQKKRLTVNYEQCASGVHGPEGFHYKCKMGQKEYSIGTGSTK
QEAKQLAAKLAYLQILSEETSVKSDYLSSGSFATTCESQSNSLVTSTLASESSSEGDFSADTSEINSNSDSLNSS
SLLMNGLRNNQRKAKRSLAPRFDLPDMKETKYTVDKRFGMDFKEIELIGSGGFGQVFKAKHRIDGKTYVIKRVKY
NNEKAEREVKALAKLDHVNIVHYNGCWDGFDYDPETSDDSLESSDYDPENSKNSSRSKTKCLFIQMEFCDKGTLE
QWIEKRRGEKLDKVLALELFEQITKGVDYIHSKKLIHRDLKPSNIFLVDTKQVKIGDFGLVTSLKNDGKRTRSKG
TLRYMSPEQISSQDYGKEVDLYALGLILAELLHVCDTAFETSKFFTDLRDGIISDIFDKKEKTLLQKLLSKKPED
RPNTSEILRTLTVWKKSPEKNERHTC

FIGURE 6231

CGCGCTATGTACGCCCTCTTCCTCCTGGCCAGCCTCCTGGGCGCGGCTCTAGCCGGCCCGGTCCTTGGACTGAAA
GAATGCACCAGGGGCTCGGCAGTGTGGTGCCAGAATGTGAAGACGGCGTCCGACTGCGGGGCAGTGAAGCACTGC
CTGCAGACCGTTTGGAACAAGCCAACAGTGAAATCCCTTCCCTGCGACATATGCAAAGACGTTGTCACCGCAGCT
GGTGATATGCTGAAGGACAATGCCACTGAGGAGGAGATCCTTGTTTACTTGGAGAAGACCTGTGACTGGCTTCCG
AAACCGAACATGTCTGCTTCATGCAAGGAGATAGTGGACTCCTACCTCCCTGTCATCCTGGACATCATTAAAGGA
GAAATGAGCCGTCCTGGGGAGGTGTGCTCTGCTCTCAACCTCTGCGAGTCTCTCCAGAAGCACCTAGCAGAGCTG
AATCACCAGAAGCAGCTGGAGTCCAATAAGATCCCAGAGCTGGACATGACTGAGGTGGTGGCCCCCTTCATGGCC
AACATCCCTCTCCTCCTCTACCCTCAGGACGGCCCCCGCAGCAAGCCCCAGCCAAAGGATAATGGGGACGTTTGC
CAGGACTGCATTCAGATGGTGACTGACATCCAGACTGCTGTACGGACCAACTCCACCTTTGTCCAGGCCTTGGTG
GAACATGTCAAGGAGGAGTGTGACCGCCTGGGCCCTGGCATGGCCGACATATGCAAGAACTATATCAGCCAGTAT
TCTGAAATTGCTATCCAGATGATGATGCACATGCAACCCAAGGAGATCTGTGCGCTGGTTGGGTTCTGTGATGAG
GTGAAAGAGATGCCCATGCAGACTCTGGTCCCCGCCAAAGTGGCCTCCAAGAATGTCATCCCTGCCCTGGAACTG
GTGGAGCCCATTAAGAAGCACGAGGTCCCAGCAAAGTCTGATGTTTACTGTGAGGTGTGTGAATTCCTGGTGAAG
GAGGTGACCAAGCTGATTGACAACAACAAGACTGAGAAAGAAATACTCGACGCTTTTGACAAAATGTGCTCGAAG
CTGCCGAAGTCCCTGTCGGAAGAGTGCCAGGAGGTGGTGGACACGTACGGCAGCTCCATCCTGTCCATCCTGCTG
GAGGAGGTCAGCCCTGAGCTGGTGTGCAGCATGCTGCACCTCTGCTCTGGCACGCGGCTGCCTGCACTGACCGTT
CACGTGACTCAGCCAAAGGACGGTGGCTTCTGCGAAGTGTGCAAGAAGCTGGTGGGTTATTTGGATCGCAACCTG
GAGAAAAACAGCACCAAGCAGGAGATCCTGGCTGCTCTTGAGAAAGGCTGCAGCTTCCTGCCAGACCCTTACCAG
AAGCAGTGTGATCAGTTTGTGGCAGAGTACGAGCCCGTGCTGATCGAGATCCTGGTGGAGGTGATGGATCCTTCC
TTCGTGTGCTTGAAAATTGGAGCCTGCCCCTCGGCCCATAAGCCCTTGTTGGGAACTGAGAAGTGTATATGGGGC
CCAAGCTACTGGTGCCAGAACACAGAGACAGCAGCCCAGTGCAATGCTGTCGAGCATTGCAAACGCCATGTGTGG
AACTAGGAGGAGGAATATTCCATCTTGGCAGAAACCACAGCATTGGTTTTTTTCTACTTGTGTGTCTGGGGGAAT
GAACGCACAGATCTGTTTGACTTTGTTATAAAAATAGGGCTCCCCCACCTCCCCCATTTCTGTGTCCTTTATTGT
AGCATTGCTGTCTGCAAGGGAGCCCCTAGCCCCTGGCAGACATAGCTGCTTCAGTGCCCCTTTTCTCTCTGCTAG
ATGGATGTTGATGCACTGGAGGTCTTTTAGCCTGCCCTTGCATGGCGCCTGCTGGAGGAGGAGAGAGCTCTGCTG
GCATGAGCCACAGTTTCTTGACTGGAGGCCATCAACCCTCTTGGTTGAGGCCTTGTTCTGAGCCCTGACATGTGC
TTGGGCACTGGTGGGCCTGGGCTTCTGAGGTGGCCTCCTGCCCTGATCAGGGACCCTCCCCGCTTTCCTGGGCCT
CTCAGTTGAACCAAAGCAGCAAAACAAAGGCAGTTTTATATGAAAGATTAGAAGCCTGGAATAATCAGGCTTTTT
AAATGATGTAATTCCCACTGTAATAGCATAGGGATTTTGGAAGCAGCTGCTGGTGGCTTGGGACATCAGTG

FIGURE 6232

MYALFLLASLLGAALAGPVLGLKECTRGSAVWCQNVKTASDCGAVKHCLQTVWNKPTVKSLPCDICKDVVTAAGD
MLKDNATEEEILVYLEKTCDWLPKPNMSASCKEIVDSYLPVILDIIKGEMSRPGEVCSALNLCESLQKHLAELNH
QKQLESNKIPELDMTEVVAPFMANIPLLLYPQDGPRSKPQPKDNGDVCQDCIQMVTDIQTAVRTNSTFVQALVEH
VKEECDRLGPGMADICKNYISQYSEIAIQMMMHMQPKEICALVGFCDEVKEMPMQTLVPAKVASKNVIPALELVE
PIKKHEVPAKSDVYCEVCEFLVKEVTKLIDNNKTEKEILDAFDKMCSKLPKSLSEECQEVVDTYGSSILSILLEE
VSPELVCSMLHLCSGTRLPALTVHVTQPKDGGFCEVCKKLVGYLDRNLEKNSTKQEILAALEKGCSFLPDPYQKQ
CDQFVAEYEPVLIEILVEVMDPSFVCLKIGACPSAHKPLLGTEKCIWGPSYWCQNTETAAQCNAVEHCKRHVWN

FIGURE 6233

GGCACGAGGATGGAGGAGGGAGGCCGGGACAAGGCGCCGGTGCAGCCCCAGCAGTCTCCAGCGGCGGCCCCCGGC
GGCACGGACGAGAAGCCGAGCGGCAAGGAGCGGCGGGATGCCGGGGACAAGGACAAAGAACAGGAGCTGTCTGAA
GAGGATAAACAGCTTCAAGATGAACTGGAGATGCTCGTGGAACGACTAGGGGAGAAGGATACATCCCTGTATCGA
CCAGCGCTGGAGGAATTGCGAAGGCAGATTCGTTCTTCTACAACTTCCATGACTTCAGTGCCCAAGCCTCTCAAA
TTTCTGCGTCCACACTATGGCAAACTGAAGGAAATCTATGAGAACATGGCCCCTGGGGAGAATAAGCGTTTTGCT
GCTGACATCATCTCCGTTTTGGCCATGACCATGAGTGGGGAGCGTGAGTGCCTCAAGTATCGGCTAGTGGGCTCC
CAGGAGGAATTGGCATCATGGGGTCATGAGTATGTCAGGCATCTGGCAGGAGAAGTGGCTAAGGAGTGGCAGGAG
CTGGATGACGCAGAGAAGGTCCAGCGGGAGCCTCTGCTCACTCTGGTGAAGGAAATCGTCCCCTATAACATGGCC
CACAATGCAGAGCATGAGGCTTGCGACCTGCTTATGGAAATTGAGCAGGTGGACATGCTGGAGAAGGACATTGAT
GAAAATGCATATGCAAAGGTCTGCCTTTATCTCACCAGTTGTGTGAATTACGTGCCTGAGCCTGAGAACTCAGCC
CTACTGCGTTGTGCCCTGGGTGTGTTCCGAAAGTTTAGCCGCTTCCCTGAAGCTCTGAGATTGGCATTGATGCTC
AATGACATGGAGTTGGTAGAAGACATCTTCACCTCCTGCAAGGATGTGGTAGTACAGAAACAGATGGCATTCATG
CTAGGCCGGCATGGGGTGTTCCTGGAGCTGAGTGAAGATGTCGAGGAGTATGAGGACCTGACAGAGATCATGTCC
AATGTACAGCTCAACAGCAACTTCTTGGCCTTAGCTCGGGAGCTGGACATCATGGAGCCCAAGGTGCCTGATGAC
ATCTACAAAACCCACCTAGAGAACAACAGGTTTGGGGGCAGTGGCTCTCAGGTGGACTCTGCCCGCATGAACCTG
GCCTCCTCTTTTGTGAATGGCTTTGTGAATGCAGCTTTTGGCCAAGACAAGCTGCTAACAGATGATGGCAACAAA
TGGCTTTACAAGAACAAGGACCACGGAATGTTGAGTGCAGCTGCATCTCTTGGGATGATTCTGCTGTGGGATGTG
GATGGTGGCCTCACCCAGATTGACAAGTACCTGTACTCCTCTGAGGACTACATTAAGTCAGGAGCTCTTCTTGCC
TGTGGCATAGTGAACTCTGGGGTCCGGAATGAGTGTGACCCTGCTCTGGCACTGCTCTCAGACTATGTTCTCCAC
AACAGCAACACCATGAGACTTGGTTCCATCTTTGGGCTAGGCTTGGCTTATGCTGGCTCAAATCGTGAAGATGTC
CTAACACTGCTGCTGCCTGTGATGGGAGATTCAAAGTCCAGCATGGAGGTGGCAGGTGTCACAGCTTTAGCCTGT
GGAATGATAGCAGTAGGGTCCTGCAATGGAGATGTAACTTCCACTATCCTTCAGACCATCATGGAGAAGTCAGAG
ACTGAGCTCAAGGATACTTATGCTCGTTGGCTTCCTCTTGGACTGGGTCTCAACCACCTGGGGAAGGGTGAGGCC
ATCGAGGCAATCCTGGCTGCACTGGAGGTTGTGTCAGAGCCATTCCGCAGTTTTGCCAACACACTGGTGGATGTG
TGTGCATATGCAGGCTCTGGGAATGTGCTGAAGGTGCAGCAGCTGCTCCACATTTGTAGCGAACACTTTGACTCC
AAAGAGAAGGAGGAAGACAAAGACAAGAAGGAAAAGAAAGACAAGGACAAGAAGGAAGCCCCTGCTGACATGGGA
GCACATCAGGGAGTGGCTGTTCTGGGGATTGCCCTTATTGCTATGGGGGAGGAGATTGGTGCAGAGATGGCATTA
CGAACCTTTGGCCACTTGCTGAGATATGGGGAGCCTACACTCCGGAGGGCTGTACCTTTAGCACTGGCCCTCATC
TCTGTTTCAAATCCACGACTCAACATCCTGGATACCCTAAGCAAATTCTCTCATGATGCTGATCCAGAAGTTTCC
TATTACTCCATTTTTGCCATGGGCATGGTGGGCAGTGGTACCAATAATGCCCGTCTGGCTGCAATGCTGCGCCAG
TTAGCTCAATATCATGCCAAGGACCCAAACAACCTCTTCATGGTGCGCTTGGCACAGGGCCTGACACATTTAGGG
AAGGGCACCCTTACCCTCTGCCCCTACCACAGCGACCGGCAGCTTATGAGCCAGGTGGCCGTGGCTGGACTGCTC
ACTGTGCTTGTCTCTTTCCTGGATGTTCGAAACATTATTCTAGGCAAATCACACTATGTATTGTATGGGCTGGTG
GCTGCCATGCAGCCCCGAATGCTGGTTACGTTTGATGAGGAGCTGCGGCCATTGCCAGTGTCTGTCCGTGTGGGC
CAGGCAGTGGATGTGGTGGGCCAGGCTGGCAAGCCGAAGACTATCACAGGGTTCCAGACGCATACAACCCCAGTG
TTGTTGGCCCACGGGGAACGGGCAGAATTGGCCACTGAGGAGTTTCTTCCTGTTACCCCCATTCTGGAAGGTTTT
GTTATCCTTCGGAAGAACCCCAATTATGATCTCTAAGTGACCACCAGGGGCTCTGAACTGCAGCTGATGTTATCA
GCAGGCCATGCATCCTGCTGCCAAGGGTGGACACGGCTGCAGACTTCTGGGGGAATTGTCGCCTCCTGCTCTTTT
GTTACTGAGTGAGATAAGGTTGTTCAATAAAGACTTTTATCCCCAAGGTCAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 6234

MEEGGRDKAPVQPQQSPAAAPGGTDEKPSGKERRDAGDKDKEQELSEEDKQLQDELEMLVERLGEKDTSLYRPAL
EELRRQIRSSTTSMTSVPKPLKFLRPHYGKLKEIYENMAPGENKRFAADIISVLAMTMSGERECLKYRLVGSQEE
LASWGHEYVRHLAGEVAKEWQELDDAEKVQREPLLTLVKEIVPYNMAHNAEHEACDLLMEIEQVDMLEKDIDENA
YAKVCLYLTSCVNYVPEPENSALLRCALGVFRKFSRFPEALRLALMLNDMELVEDIFTSCKDVVVQKQMAFMLGR
HGVFLELSEDVEEYEDLTEIMSNVQLNSNFLALARELDIMEPKVPDDIYKTHLENNRFGGSGSQVDSARMNLASS
FVNGFVNAAFGQDKLLTDDGNKWLYKNKDHGMLSAAASLGMILLWDVDGGLTQIDKYLYSSEDYIKSGALLACGI
VNSGVRNECDPALALLSDYVLHNSNTMRLGSIFGLGLAYAGSNREDVLTLLLPVMGDSKSSMEVAGVTALACGMI
AVGSCNGDVTSTILQTIMEKSETELKDTYARWLPLGLGLNHLGKGEAIEAILAALEVVSEPFRSFANTLVDVCAY
AGSGNVLKVQQLLHICSEHFDSKEKEEDKDKKEKKDKDKKEAPADMGAHQGVAVLGIALIAMGEEIGAEMALRTF
GHLLRYGEPTLRRAVPLALALISVSNPRLNILDTLSKFSHDADPEVSYYSIFAMGMVGSGTNNARLAAMLRQLAQ
YHAKDPNNLFMVRLAQGLTHLGKGTLTLCPYHSDRQLMSQVAVAGLLTVLVSFLDVRNIILGKSHYVLYGLVAAM
QPRMLVTFDEELRPLPVSVRVGQAVDVVGQAGKPKTITGFQTHTTPVLLAHGERAELATEEFLPVTPILEGFVIL
RKNPNYDL

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FIGURE 6235

GTGATGCGTAGTTCCGGCTGCCGGTTGACATGAAGAAGCAGCAGCGGCTAGGGCGGCGGTAGCTGCAGGGGTCGG
GGATTGCAGCGGGCCTCGGGGCTAAGAGCGCGACGCGGCCTAGAGCGGCAGACGGCGCAGTGGGCCGAGAAGGAG
GCGCAGCAGCCGCCCTGGCCCGTCATGGAGATGGAAAAGGAGTTCGAGCAGATCGACAAGTCCGGGAGCTGGGCG
GCCATTTACCAGGATATCCGACATGAAGCCAGTGACTTCCCATGTAGAGTGGCCAAGCTTCCTAAGAACAAAAAC
CGAAATAGGTACAGAGACGTCAGTCCCTTTGACCATAGTCGGATTAAACTACATCAAGAAGATAATGACTATATC
AACGCTAGTTTGATAAAAATGGAAGAAGCCCAAAGGAGTTACATTCTTACCCAGGGCCCTTTGCCTAACACATGC
GGTCACTTTTGGGAGATGGTGTGGGAGCAGAAAAGCAGGGGTGTCGTCATGCTCAACAGAGTGATGGAGAAAGGT
TCGTTAAAATGCGCACAATACTGGCCACAAAAAGAAGAAAAAGAGATGATCTTTGAAGACACAAATTTGAAATTA
ACATTGATCTCTGAAGATATCAAGTCATATTATACAGTGCGACAGCTAGAATTGGAAAACCTTACAACCCAAGAA
ACTCGAGAGATCTTACATTTCCACTATACCACATGGCCTGACTTTGGAGTCCCTGAATCACCAGCCTCATTCTTG
AACTTTCTTTTCAAAGTCCGAGAGTCAGGGTCACTCAGCCCGGAGCACGGGCCCGTTGTGGTGCACTGCAGTGCA
GGCATCGGCAGGTCTGGAACCTTCTGTCTGGCTGATACCTGCCTCTTGCTGATGGACAAGAGGAAAGACCCTTCT
TCCGTTGATATCAAGAAAGTGCTGTTAGAAATGAGGAAGTTTCGGATGGGGCTGATCCAGACAGCCGACCAGCTG
CGCTTCTCCTACCTGGCTGTGATCGAAGGTGCCAAATTCATCATGGGGGACTCTTCCGTGCAGGATCAGTGGAAG
GAGCTTTCCCACGAGGACCTGGAGCCCCCACCCGAGCATATCCCCCCACCTCCCCGGCCACCCAAACGAATCCTG
GAGCCACACAATGGGAAATGCAGGGAGTTCTTCCCAAATCACCAGTGGGTGAAGGAAGAGACCCAGGAGGATAAA
GACTGCCCCATCAAGGAAGAAAAAGGAAGCCCCTTAAATGCCGCACCCTACGGCATCGAAAGCATGAGTCAAGAC
ACTGAAGTTAGAAGTCGGGTCGTGGGGGGAAGTCTTCGAGGTGCCCAGGCTGCCTCCCCAGCCAAAGGGGAGCCG
TCACTGCCCGAGAAGGACGAGGACCATGCACTGAGTTACTGGAAGCCCTTCCTGGTCAACATGTGCGTGGCTACG
GTCCTCACGGCCGGCGCTTACCTCTGCTACAGGTTCCTGTTCAACAGCAACACATAGCCTGACCCTCCTCCACTC
CACCTCCACCCACTGTCCGCCTCTGCCCGCAGAGCCCACGCCCGACTAGCAGGCATGCCGCGGTAGGTAAGGGCC
GCCGGACCGCGTAGAGAGCCGGGCCCCGGACGGACGTTGGTTCTGCACTAAAACCCATCTTCCCCGGATGTGTGT
CTCACCCCTCATCCTTTTACTTTTTGCCCCTTCCACTTTGAGTACCAAATCCACAAGCCATTTTTTGAGGAGAGT
GAAAGAGAGTACCATGCTGGCGGCGCAGAGGGAAGGGGCCTACACCCGTCTTGGGGCTCGCCCCACCCAGGGCTC
CCTCCTGGAGCATCCCAGGCGGGCGGCACGCCAACAGCCCCCCCCTTGAATCTGCAGGGAGCAACTCTCCACTCC
ATATTTATTTAAACAATTTTTTCCCCAAAGGCATCCATAGTGCACTAGCATTTTCTTGAACCAATAATGTATTAA
AATTTTTTGATGTCAGCCTTGCATCAAGGGCTTTATCAAAAAGTACAATAATAAATCCTCAGGTAGTACTGGGAA
TGGAAGGCTTTGCCATGGGCCTGCTGCGTCAGACCAGTACTGGGAAGGAGGACGGTTGTAAGCAGTTGTTATTTA
GTGATATTGTGGGTAACGTGAGAAGATAGAACAATGCTATAATATATAATGAACACGTGGGTATTTAATAAGAAA
CATGATGTGAGATTACTTTGTCCCGCTTATTCTCCTCCCTGTTATCTGCTAGATCTAGTTCTCAATCACTGCTCC
CCCGTGTGTATTAGAATGCATGTAAGGTCTTCTTGTGTCCTGATGAAAAATATGTGCTTGAAATGAGAAACTTTG
ATCTCTGCTTACTAATGTGCCCCATGTCCAAGTCCAACCTGCCTGTGCATGACCTGATCATTACATGGCTGTGGT
TCCTAAGCCTGTTGCTGAAGTCATTGTCGCTCAGCAATAGGGTGCAGTTTTCCAGGAATAGGCATTTGCCTAATT
CCTGGCATGACACTCTAGTGACTTCCTGGTGAGGCCCAGCCTGTCCTGGTACAGCAGGGTCTTGCTGTAACTCAG
ACATTCCAAGGGTATGGGAAGCCATATTCACACCTCACGCTCTGGACATGATTTAGGGAAGCAGGGACACCCCCC
GCCCCCCACCTTTGGGATCAGCCTCCGCCATTCCAAGTCAACACTCTTCTTGAGCAGACCGTGATTTGGAAGAGA
GGCACCTGCTGGAAACCACACTTCTTGAAACAGCCTGGGTGACGGTCCTTTAGGCAGCCTGCCGCCGTCTCTGTC
CCGGTTCACCTTGCCGAGAGAGGCGCGTCTGCCCCACCCTCAAACCCTGTGGGGCCTGATGGTGCTCACGACTCT
TCCTGCAAAGGGAACTGAAGACCTCCACATTAAGTGGCTTTTTAACATGAAAAACACGGCAGCTGTAGCTCCCGA
GCTACTCTCTTGCCAGCATTTTCACATTTTGCCTTTCTCGTGGTAGAAGCCAGTACAGAGAAATTCTGTGGTGGG
AACATTCGAGGTGTCACCCTGCAGAGCTATGGTGAGGTGTGGATAAGGCTTAGGTGCCAGGCTGTAAGCATTCTG
AGCTGGGCTTGTTGTTTTTAAGTCCTGTATATGTATGTAGTAGTTTGGGTGTGTATATATAGTAGCATTTCAAAA
TGGACGTACTGGTTTAACCTCCTATCCTTGGAGAGCAGCTGGCTCTCCACCTTGTTACACATTATGTTAGAGAGG
TAGCGAGCTGCTCTGCTATATGCCTTAAGCCAATATTTACTCATCAGGTCATTATTTTTTACAATGGCCATGGAA
TAAACCATTTTTACAAAA

FIGURE 6236

MEMEKEFEQIDKSGSWAAIYQDIRHEASDFPCRVAKLPKNKNRNRYRDVSPFDHSRIKLHQEDNDYINASLIKME
EAQRSYILTQGPLPNTCGHFWEMVWEQKSRGVVMLNRVMEKGSLKCAQYWPQKEEKEMIFEDTNLKLTLISEDIK
SYYTVRQLELENLTTQETREILHFHYTTWPDFGVPESPASFLNFLFKVRESGSLSPEHGPVVVHCSAGIGRSGTF
CLADTCLLLMDKRKDPSSVDIKKVLLEMRKFRMGLIQTADQLRFSYLAVIEGAKFIMGDSSVQDQWKELSHEDLE
PPPEHIPPPPRPPKRILEPHNGKCREFFPNHQWVKEETQEDKDCPIKEEKGSPLNAAPYGIESMSQDTEVRSRVV
GGSLRGAQAASPAKGEPSLPEKDEDHALSYWKPFLVNMCVATVLTAGAYLCYRFLFNSNT

FIGURE 6237

GCTGTTGTCGCTCGCTCAGCGTCTCCCTCTCGGCCGCCCTCTCCTCGGGACGATGGCGCGCGGTGGCCGCGGCCG
CCGCCTGGGGTTAGCCCTGGGGCTGCTGCTGGCGCTGGTGCTGGCGCCGCGGGTTCTGCGGGCCAAGCCCACGGT
GCGCAAAGAGCGCGTGGTGCGGCCCGACTCGGAGCTGGGCGAGCGGCCCCCTGAGGACAACCAGAGCTTCCAGTA
CGACCACGAGGCCTTCCTGGGCAAGGAGGACTCCAAGACCTTCGACCAGCTCACCCCGGACGAGAGCAAGGAGAG
GCTAGGGAAGATTGTTGATCGAATCGACAATGATGGGGATGGCTTTGTCACTACTGAGGAGCTGAAAACCTGGAT
CAAACGGGTGCAGAAAAGATACATCTTTGATAATGTCGCCAAAGTCTGGAAGGATTATGATAGGGACAAGGATGA
TAAAATTTCCTGGGAAGAATACAAACAAGCCACCTATGGTTACTACCTAGGAAACCCCGCAGAGTTTCATGATTC
TTCAGATCATCACACCTTTAAAAAGATGCTGCCACGTGATGAGAGAAGATTCAAAGCTGCAGACCTCAATGGTGA
CCTGACAGCTACTCGGGAGGAGTTCACTGCCTTTCTGCATCCTGAAGAGTTTGAACATATGAAGGAAATTGTGGT
TTTGGAAACCCTGGAGGACATCGACAAGAACGGGGATGGGTTTGTGGATCAGGATGAGTATATTGCGGATATGTT
TTCCCATGAGGAGAATGGCCCTGAGCCAGACTGGGTTTTATCAGAACGGGAGCAGTTTAACGAATTCCGGGATCT
GAACAAGGACGGGAAGTTAGACAAAGATGAGATTCGCCACTGGATCCTCCCTCAAGATTATGATCACGCACAGGC
TGAGGCCAGGCATCTGGTATATGAATCAGACAAAAACAAGGATGAGAAGCTAACTAAAGAGGAAATATTGGAGAA
CTGGAACATGTTTGTTGGAAGCCAAGCTACCAATTACGGGGAAGATCTCACAAAAAATCATGATGAGCTTTGATA
GACACTCACCAGAATATGGCAGACTGTCATAGGCATTCTGTTATTGTCTTGGATTGTTGCTACAATTGTCTAATT
ACAGCAGTTGTGATCCCACAAAAAGCAAGTTTATACCTCAGATTGGGGTATAAAAATTGTTTTTCGCTCAGTATT
TACTGGAAAATGGACATCACTAGTCTTTCAGTAAGATTTCTCTCAAAACACGTGAAAACCTTGGTAAATTGCAAT
TCTTTCTGGGGATATATTGGTACAACATGACTTAAAACTTTTTTTTTTCTATTAAAACTTAAAGGGGAACAAAAC
TTGAAAAAGCCCTGTTCTTCAGAAGGTGAGTGGGTTGAGGGAGGCAGTAATATGAAGTGACTGCTGTGTATTTTA
ACTACCAGATTTTTATATTTGCCACTGTTAGATAGTTGGAAAGGGGAAATTCTGTTTAAGCGAAAGTGGTATCAT
CCTAGGTAAGCTTATTTCAGAACAAGTCTAATATATCAGATTCTTTCTTTTCGACTTTATACTCTGAGTTATTAC
TTACTGTAAGTGGTGTATATGAAACCTCCATGCATTTTCCAGTATGGATCTGCTAATATGCACAGTAAATCCATG
TCTTTGTTTGTTTTTCTATTAAGAAGCAATCAAGAAAGATAATGTGAAAAAGAAAGGAATTTAGAGGTAGGGAAA
AGATGAATGTCAGACATGTGAAGAACTATAGTAAAAATGATAAACCACCTAAATATCCTTGAACCTACCTTAAAA
TGCCAATGAGGTAGGCCTGATCTTTGAATAGTGGCTAGGATACAATGCATTTCCTCAGTGATCACTGATTAGAAT
GAGTTGGTGGGATCCTTGGGAAGCCAAACGGAGCGGGGTTCTGGATCATGTCCCATCCAGTCCAGTGAATCCCCG
ACCCGCAGACCTGCCCCCCCCGCAACAGCTTATACCATGGAATGAGGACAAGGTGATACTCTGAGCTGTGGACTG
AACTGGCAGACACAACCTGTACAGATTGAAATTTCACCTTGTAAGGAGGAAGTGAATGAAATAAAGGATCCCCCT
AAGG

FIGURE 6238

MARGGRGRRLGLALGLLLALVLAPRVLRAKPTVRKERVVRPDSELGERPPEDNQSFQYDHEAFLGKEDSKTFDQL
TPDESKERLGKIVDRIDNDGDGFVTTEELKTWIKRVQKRYIFDNVAKVWKDYDRDKDDKISWEEYKQATYGYYLG
NPAEFHDSSDHHTFKKMLPRDERRFKAADLNGDLTATREEFTAFLHPEEFEHMKEIVVLETLEDIDKNGDGFVDQ
DEYIADMFSHEENGPEPDWVLSEREQFNEFRDLNKDGKLDKDEIRHWILPQDYDHAQAEARHLVYESDKNKDEKL
TKEEILENWNMFVGSQATNYGEDLTKNHDEL

FIGURE 6239

GCAAAACTCTGTCTTACACAGGATGACTTGGAATTAGAGTCCTTATAGCAGAAAGAGCAGCAGGGCTGTCCTTGG
GTATCCGTTGCTCAGCCAAGTCATCAAATAAAAAGGATGATTGCACAAGTGGACTATGTACCAATCTGTGGGTTT
CTGCATGGCCAAGAGCCAGACCCTCCCTCTGGGCTCTGCTGGCCCAACCCACCAAGGGATGCTTTATTTAAACAG
TTCCAAGTAGGGGAGACCAGCTGCCCCTGAACCCCAGAACAACCAGCTGGATCAGTTCTCACAGGAGCTACAGCG
CGGAGACTGGGTAAGTCAACGATCCCCAGAGCTGGGACAGAAGGGGCAGCAATGGGGCAGCAACTGAGGGAGAAG
AGAGCTGACGTTAGTGCTTAGGAGACGTTGCACACTTTGCAGACAGGAAGTAAAGGAAATGGGACCCCAGAGTGG
CCGCAGAGGGGCCTGTGGGGTAAGACACTACAGTGTGTGTCATAACCAAGACCCGATCAGGGAGTAGTTACTTCT
CTTCTTTTCTTACAGGAAAC**ATG**GTTCCAAAACTGTTCACTTCCCAAATTTGTCTGCTTCTTCTGTTGGGGCTTC
TGGCTGTGGAGGGCTCACTCCATGTCAAACCTCCACAGTTTACCTGGGCTCAATGGTTTGAAACCCAGCACATCA
ATATGACCTCCCAGCAATGCACCAATGCAATGCAGGTCATTAACAATTATCAACGGCGATGCAAAAACCAAAATA
CTTTCCTTCTTACAACTTTTGCTAACGTAGTTAATGTTTGTGGTAACCCAAATATGACCTGTCCTAGTAACAAAA
CTCGCAAAAACTGTCACCACAGTGGAAGCCAGGTGCCTTTAATCCACTGTAACCTCACAACTCCAAGTCCACAGA
ATATTTCAAACTGCAGGTATGCGCAGACACCAGCAAACATGTTCTATATAGTTGCATGTGACAACAGAGATCAAC
GACGAGACCCTCCACAGTATCCGGTGGTTCCAGTTCACCTGGATAGAATCATC**TAA**GCTCCTGTATCAGCACTCC
TCATCATCACTCATCTGCCAAGCTCCTCAATCATAGCCAAGATCCCATCTCTCCATATACTTTGGGTATCAGCAT
CTGTCCTCATCAGTCTCCATACCCCTTCAGCTTTCCTGAGCTGAAGTGCCTTGTGAACCCTGCAATAAACTGCTT
TGCAAATTCATCTG

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FIGURE 6240

MVPKLFTSQICLLLLLGLLAVEGSLHVKPPQFTWAQWFETQHINMTSQQCTNAMQVINNYQRRCKNQNTFLLTTF
ANVVNVCGNPNMTCPSNKTRKNCHHSGSQVPLIHCNLTTPSPQNISNCRYAQTPANMFYIVACDNRDQRRDPPQY
PVVPVHLDRII

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FIGURE 6241

GCATCACTTGCTGCTGACACGCCGACCGCCTGCTGCTTCAGCTACACCTCCCGGCAGATTCCACAGAATTTCATA
GCTGACTACTTTGAGACGAGCAGCCAGTGCTCCAAGCCCGGTGTCATCTTCCTAACCAAGCGAAGCCGGCAGGTC
TGTGCTGACCCCAGTGAGGAGTGGGTCCAGAAATATGTCAGCGACCTGGAGCTGAGTGCCTGAGGGGTCCAGAAG

FIGURE 6242

CTTCTGAGTTCTGCAGCCTCACCTCTGAGAAAACCTCTTTTCGACCAATACCATGAAGCTCTGCGTGACTGTCCT
GTCTCTCCTCATGCTAGTAGCTGCCTTCTGCTCTCCAGCGCTCTCAGCACCAATGGGCTCAGACCCTCCCACCGC
CTGCTGCTTTTCTTACACCGCGAGGAAGCTTCCTCGCAACTTTGTGGTAGATTACTATGAGACCAGCAGCCTCTG
CTCCCAGCCAGCTGTGGTATTCCAAACCAAAAGAAGCAAGCAAGTCTGTGCTGATCCCAGTGAATCCTGGGTCCA
GGAGTACGTGTATGACCTGGAACTGAACTGAGCTGCTCAGAGACAGGAAGTCTTCAGGGAAGGTCACCTGAGCCC
GGATGCTTCTCCATGAGACACATCTCCTCCATACTCAGGACTCCTCTCCGCAGTTCCTGTCCCTTCTCTTAATTT
AATCTTTTTTATGTGCCGTGTTATTGTATTAGGTGTCATTTCCATTATTTATATTAGTTTAGCCAAAGGATAAGT
GTCCCCTATGGGGATGGTCCACTGTCACTGTTTCTCTGCTGTTGCAAATACATGGATAACACATTTGATTCTGTG
TGTTTTCATAATAAAACTTTAAAATAAAATGCAGAAT

FIGURE 6243

MKLCVTVLSLLMLVAAFCSPALSAPMGSDPPTACCFSYTARKLPRNFVVDYYETSSLCSQPAVVFQTKRSKQVCA
DPSESWVQEYVYDLELN

FIGURE 6244

CAGGACAGAGCATGGATCGCCTACAGACTGCACTCCTGGTTGTCCTCGTCCTCCTTGCTGTGGCGCTTCAAGCAA
CTGAGGCAGGCCCCTACGGCGCCAACATGGAAGACAGCGTCTGCTGCCGTGATTACGTCCGTTACCGTCTGCCCC
TGCGCGTGGTGAAACACTTCTACTGGACCTCAGACTCCTGCCCGAGGCCTGGCGTGGTGTTGCTAACCTTCAGGG
ATAAGGAGATCTGTGCCGATCCCAGAGTGCCCTGGGTGAAGATGATTCTCAATAAGCTGAGCCAATGAAGAGCCT
ACTCTGATGACCGTGGCCTTGGCTCCTCCAGGAAGGCTCAGGAGCCCTACCTCCCTGCCATTATAGCTGCTCCCC
GCCAGAAGCCTGTGCCAACTCTCTGCATTCCCTGATCTCCATCCCTGTGGCTGTCACCCTTGGTCACCTCCGTGC
TGTCACTGCCATCTCCCCCCTGACCCCTCTAACCCATCCTCTGCCTCCCTCCCTGCAGTCAGAGGGTCCTGTTCC
CATCAGCGATTCCCCTGCTTAAACCCTTCCATGACTCCCCACTGCCCTAAGCTGAGGTCAGTCTCCCAAGCCTGG
CATGTGGCCCTCTGGATCTGGGTTCCATCTCTGTCTCCAGCCTGCCCACTTCCCTTCATGAATGTTGGGTTCTAG
CTCCCTGTTCTCCAAACCCATACTACACATCCCACTTCTGGGTCTTTGCCTGGGATGTTGCTGACACCCAGAAAG
TCCCACCACCTGCACATGTGTAGCCCCACCAGCCCTCCAAGGCATTGCTCGCCCAAGCAGCTGGTAATTCCATTT
CATGTATTAGATGTCCCCTGGCCCTCTGTCCCCTCTTAATAACCCTAGTCACAGTCTCCGCAGATTCTTGGGATT
TGGGGGTTTTCTCCCCCACCTCTCCACTAGTTGGACCAAGGTTTCTAGCTAAGTTACTCTAGTCTCCAAGCCTCT
AGCATAGAGCACTGCAGACAGGCCCTGGCTCAGAATCAGAGCCCAGAAAGTGGCTGCAGACAAAATCAATAAAAC
TAATGTCCCTCCCCTCTCCCTGCCAAAAGGCAGTTACATATCAATACAGAGACTCAAGGTCACTAGAAATGGGCC
AGCTGGGTCAATGTGAAGCCCCAAATTTGCCCAGATTCACCTTTCTTCCCCCACTCCCTTTTTTTTTTTTTTTTT
GAGATGGAGTTTCGCTCTTGTCACCCACGCTGGAGTGCAATGGTGTGGTCTTGGCTTATTGAAGCCTCTGCCTCC
TGGGTTCAAGTGATTCTCTTGCCTCAGCCTCCTGAGTAGCTGGGATTACAGGTTCCTGCTACCACGCCCAGCTAA
TTTTTGTATTTTTAGTAGAGACGAGGCTTCACCATGTTGGCCAGGCTGGTCTCGAACTCCTGTCCTCAGGTAATC
CGCCCACCTCAGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACAGTGCCTGGCCTCTTCCCTCTCCCCACC
CCCCCCCCAACTTTTTTTTTTTTTTATGGCAGGGTCTCACTCTGTCGCCCAGGCTGGAGTGCAGTGGCGTGATCT
CGGCTCACTACAACCTCGACCTCCTGGGTTCAAGCGATTCTCCCACCCCAGCCTCCCAAGTAGCTGGGATTACAG
GTGTGTGCCACTACGGCTGGCTAATTTTTGTATTTTTAGTAGAGACAGGTTTCACCATATTGGCCAGGCTGGTCT
TGAACTCCTGACCTCAAGTGATCCACCTTCCTTGTGCTCCCAAAGTGCTGAGATTACAGGCGTGAGCTATCACAC
CCAGCCTCCCCCTTTTTTTCCTAATAGGAGACTCCTGTACCTTTCTTCGTTTTACCTATGTGTCGTGTCTGCTTA
CATTTCCTTCTCCCCTCAGGCTTTTTTTGGGTGGTCCTCCAACCTCCAATACCCAGGCCTGGCCTCTTCAGAGTA
CCCCCCATTCCACTTTCCCTGCCTCCTTCCTTAAATAGCTGACAATCAAATTCATGCTATGGTGTGAAAGACTAC
CTTTGACTTGGTATTATAAGCTGGAGTTATATATGTATTTGAAAACAGAGTAAATACTTAAGAGGCCAAATAGAT
GAATGGAAGAATTTTAGGAACTGTGAGAGGGGGACAAGGTGGAGCTTTCCTGGCCCTGGGAGGAAGCTGGCTGTG
GTAGCGTAGCGCTCTCTCTCTCTGTCTGTGGCAGGAGGCAAAGAGTAGGGTGTAATTGAGTGAAGGAATCCTGGG
TAGAGACCATTCTCAGGTGGTTGGGCCAGGCTAAAGACTGGGATTTGGGTCTATCTATGCCTTTCTGGCTGATTT
TTGTAGAGACGGGGTTTTGCCATGTTACCCAGGCTGGTCTCAAACTCCTGGGCTCAAGCGATCCTCCTGGCTCAG
CCTCCCAAAGTGCTGGGATTACAGGCGTGAGTCACTGCGCCTGGCTTCCTCTTCCTCTTGAGAAATATTCTTTTC
ATACAGCAAGTATGGGACAGCAGTGTCCCAGGTAAAGGACATAAATGTTACAAGTGTCTGGTCCTTTCTGAGGGA
GGCTGGTGCCGCTCTGCAGGGTATTTGAACCTGTGGAATTGGAGGAGGCCATTTCACTCCCTGAACCCAGCCTGA
CAAATCACAGTGAGAATGTTCACCTTATAGGCTTGCTGTGGGGCTCAGGTTGAAAGTGTGGGGAGTGACACTGCC
TAGGCATCCAGCTCAGTGTCATCCAGGGCCTGTGTCCCTCCCGAACCCAGGGTCAACCTGCCTACCACAGGCACT
AGAAGGACGAATCTGCCTACTGCCCATGAACGGGGCCCTCAAGCGTCCTGGGATCTCCTTCTCCCTCCTGTCCTG
TCCTTGCCCCTCAGGACTGCTGGAAAATAAATCCTTTAAAATAGAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 6245

MDRLQTALLVVLVLLAVALQATEAGPYGANMEDSVCCRDYVRYRLPLRVVKHFYWTSDSCPRPGVVLLTFRDKEI
CADPRVPWVKMILNKLSQ

FIGURE 6246

ATTTTCCTGGGGCTCCGGGGCGCGGAGAAGCTGCATCCCAGAGGAGCGCGTCCAGGAGCGGACCCGGGAGTGTTT
CAAGAGCCAGTGACAAGGACCAGGGGCCCAAGTCCCACCAGCC**ATG**CAGACCTGCCCCCTGGCATTCCCTGGCCA
CGTTTCCCAGGCCCTTGGGACCCTCCTGTTTTTGGCTGCCTCCTTGAGTGCTCAGAATGAAGGCTGGGACAGCCC
CATCTGCACAGAGGGGGTAGTCTCTGTGTCTTGGGGCGAGAACACCGTCATGTCCTGCAACATCTCCAACGCCTT
CTCCCATGTCAACATCAAGCTGCGTGCCCACGGGCAGGAGAGCGCCATCTTCAATGAGGTGGCTCCAGGCTACTT
CTCCCGGGACGGCTGGCAGCTCCAGGTTCAGGGAGGCGTGGCACAGCTGGTGATCAAAGGCGCCCGGGACTCCCA
TGCTGGGCTGTACATGTGGCACCTCGTGGGACACCAGAGAAATAACAGACAAGTCACGCTGGAGGTTTCAGGTGC
AGAACCCCAGTCCGCCCCTGACACTGGGTTCTGGCCTGTGCCAGCGGTGGTCACTGCTGTCTTCATCCTCTTGGT
CGCTCTGGTCATGTTCGCCTGGTACAGGTGCCGCTGTTCCCAGCAACGCCGGGAGAAGAAGTTCTTCCTCCTAGA
ACCCCAGATGAAGGTCGCAGCCCTCAGAGCGGGAGCCCAGCAGGGCCTGAGCAGAGCCTCCGCTGAACTGTGGAC
CCCAGACTCCGAGCCCACCCCAAGGCCGCTGGCACTGGTGTTCAAACCCTCACCACTTGGAGCCCTGGAGCTGCT
GTCCCCCCAACCCTTGTTTCCATATGCCGCAGACCCA**TAG**CCGCCTGCAAGGCAGAGAGGACACAGGAGAGCCAG
CCCTGAGTGCCGACCTTGGGTGGCGGGGCCTGGGTCTCTCGTCCCACCCGGAGGGCACAGACACCGGCTTGCTTG
GCAGGCTGGGCCTCTGTGTCACCCACTCCTGGGTGCGTGCAGACCCTTCCCCTCCACCCCCCAGGTCTTCCAAGC
TCTGCTTCCTCAGTTTCCAAAATGGAACCACCTCACCTCCGCAGCACCCGACTTACCAGGACGCATGCCCCTCCC
TCTGCCCTCATCAAACCCACAGACCCGGACTCCCTTTCTGCCACCCCAGGCTGGTCCGGCCCCAGGTGTGGGGTC
CGCTCTCTCCACTCCCAGGGCTCCGCGCCCAAGTGAGGGGGCCCCTGCCGGAGCCTCAGACACACTGGAGTTCAG
GGCTGGGGGGGCCTTGGCACATACCTGTCCCTTGGCTATGAGCAGGCTTTGGGGGCCCTTCCGCGGCAGCCCCGG
GGGCCGAGGTAGGGTCTGGGGGCTTAGAGGCTGGGATGGCTCCTGGCCCCACCGCCAGGGGGCAAGCGCAGGCCG
GGCTGGGAGGCGGCGGCGGCGGCTCGGGCTGGGGGGTCAGGTGGACGCTGCCTCCGGGGCTGGTCGCGCATCCCT
CAGTCCCTCGGCCACCCGGGGGTCGCTCCCTCGTGCCCACCGCACCTGCCGAGCCTCTTTGGACCCAGATCTGTT
CATGCTTTTGTCTTCGTCACTGCGGCGGGGCCCTTTGATGTCTTCATCTGTATGGGGTGGAAAAATCACCGGGAA
TCCCCCTTCAGTTCTTTGAAAAAGTTCCATGACTCGAATATCTGAAATGAAGAAAACAAACCGACTCACAAACCT
CCAAGTAGCTCCAAATGCAATTTTTAAAATGGAAAACAAAAATCTGAAAGAAACGTCTTTAGTGGCTTTAAGCCC
CAAAACGTCCCTAAGGCGTCCTCGAGATGAAGACGGGGGGGAGCCCCCAGCCAGGTGGAGACCCCGCAGGACGCG
GCGGCGCCCGGTGACCGAGGCCTCGCACAGCCGGCCGCCCTGAGGGTCGGGCCGGAGCCAGGGTCCAAGAGGGGC
GCGTTTGTGTCTCGGGTTAAAATAAGGTTCCGTCCGCGTGCTGGGTCAGA

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FIGURE 6247

MQTCPLAFPGHVSQALGTLLFLAASLSAQNEGWDSPICTEGVVSVSWGENTVMSCNISNAFSHVNIKLRAHGQES
AIFNEVAPGYFSRDGWQLQVQGGVAQLVIKGARDSHAGLYMWHLVGHQRNNRQVTLEVSGAEPQSAPDTGFWPVP
AVVTAVFILLVALVMFAWYRCRCSQQRREKKFFLLEPQMKVAALRAGAQQGLSRASAELWTPDSEPTPRPLALVF
KPSPLGALELLSPQPLFPYAADP

FIGURE 6248

GGTTCAGGAACCTGCTGGTTCTGATACATAAATCAGACAGCCTCTGCTGCATGACACGAAGCTTGCTTCTGCCTG
GCATCTGTGAGCAGCTGCCAGGCTCCGGCCAGGATCCCTTCCTTCTCCTCATTGGCTGATGGATCCCAAGGGGCT
CCTCTCCTTGACCTTCGTGCTGTTTCTCTCCCTGGCTTTTGGGGCAAGCTACGGAACAGGTGGGCGCATGATGAA
CTGCCCAAAGATTCTCCGGCAGTTGGGAAGCAAAGTGCTGCTGCCCCTGACATATGAAAGGATAAATAAGAGCAT
GAACAAAAGCATCCACATTGTCGTCACAATGGCAAAATCACTGGAGAACAGTGTCGAGAACAAAATAGTGTCTCT
TGATCCATCCGAAGCAGGCCCTCCACGTTATCTAGGAGATCGCTACAAGTTTTATCTGGAGAATCTCACCCTGGG
GATACGGGAAAGCAGGAAGGAGGATGAGGGATGGTACCTTATGACCCTGGAGAAAAATGTTTCAGTTCAGCGCTT
TTGCCTGCAGTTGAGGCTTTATGAGCAGGTCTCCACTCCAGAAATTAAAGTTTTAAACAAGACCCAGGAGAACGG
GACCTGCACCTTGATACTGGGCTGCACAGTGGAGAAGGGGGACCATGTGGCTTACAGCTGGAGTGAAAAGGCGGG
CACCCACCCACTGAACCCAGCCAACAGCTCCCACCTCCTGTCCCTCACCCTCGGCCCCCAGCATGCTGACAATAT
CTACATCTGCACCGTGAGCAACCCTATCAGCAACAATTCCCAGACCTTCAGCCCGTGGCCCGGATGCAGGACAGA
CCCCTCAGAAACAAAACCATGGGCAGTGTATGCTGGGCTGTTAGGGGGTGTCATCATGATTCTCATCATGGTGGT
AATACTACAGTTGAGAAGAAGAGGTAAAACGAACCATTACCAGACAACAGTGGAAAAAAAAAGCCTTACGATCTA
TGCCCAAGTCCAGAAACCAGGTCCTCTTCAGAAGAAACTTGACTCCTTCCCAGCTCAGGACCCTTGCACCACCAT
ATATGTTGCTGCCACAGAGCCTGTCCCAGAGTCTGTCCAGGAAACAAATTCCATCACAGTCTATGCTAGTGTGAC
ACTTCCAGAGAGCTGACACCAGAGACCAACAAAGGGACTTTCTGAAGGAAAATGGAAAAACCAAAATGAACACTG
AACTTGGCCACAGGCCCAAGTTTCCTCTGGCAGACATGCTGCACGTCTGTACCCTTCTCAGATCAACTCCCTGGT
GATGTTTCTTCCACATACATCTGTGAAATGAACAAGGAAGTGAGGCTTCCCAAGAATTTAGCTTGCTGTGCAGTG
GCTGCAGGCGCAGAACAGAGCGTTACTTGATAACAGCGTTCCATCTTTGTGTTGTAGCAGATGAAATGGACAGTA
ATGTGAGTTCAGACTTTGGGCATCTTGCTCTTGGCTGGAACTGATAATAAAAATCAGACTGAAAGCCAGGACATC
TGAGTACCTATCTCACACACTGACCACCAGTCACAAAGTCTGGAAAAGTTTACATTTTGGCTATCTTTACTTTGT
TCTGGGAGCTGATCATGATAACCTGCAGACCTGATCAAGCCTCTGTGCCTCAGTTTCTCTCTCAGGATAAAGAGT
GAATAGAGGCCGAAGGGTGAATTTCTTATTATACATAAAACACTCTGATATTATTGTATAAAGGAAGCTAAGAAT
ATTATTTTATTTGCAAAACCCAGAAGCTAAAAAGTCAATAAACAGAAAGAATGATTTTGAGAAA

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FIGURE 6249

MDPKGLLSLTFVLFLSLAFGASYGTGGRMMNCPKILRQLGSKVLLPLTYERINKSMNKSIHIVVTMAKSLENSVE
NKIVSLDPSEAGPPRYLGDRYKFYLENLTLGIRESRKEDEGWYLMTLEKNVSVQRFCLQLRLYEQVSTPEIKVLN
KTQENGTCTLILGCTVEKGDHVAYSWSEKAGTHPLNPANSSHLLSLTLGPQHADNIYICTVSNPISNNSQTFSPW
PGCRTDPSETKPWAVYAGLLGGVIMILIMVVILQLRRRGKTNHYQTTVEKKSLTIYAQVQKPGPLQKKLDSFPAQ
DPCTTIYVAATEPVPESVQETNSITVYASVTLPES

FIGURE 6250

TCTACACTTAAAATGCCACCAGCAGTTGGAGGTCCAGTTGGATACACCCCCCCAGATGGAGGCTGGGGCTGGGCA
GTGGTAATTGGAGCTTTCATTTCCATCGGCTTCTCTTATGCATTTCCCAAATCAATTACTGTCTTCTTCAAAGAG
ATTGAAGGTATATTCCATGCCACCACCAGCGAAGTGTCATGGATATCCTCCATAATGTTGGCTGTCATGTATGGT
GGAGGTCCTATCAGCAGTATCCTGGTGAATAAATATGGAAGTCGTATAGTCATGATTGTTGGTGGCTGCTTGTCA
GGCTGTGGCTTGATTGCAGCTTCTTTCTGTAACACCGTACAGCAACTATACGTCTGTATTGGAGTCATTGGAGGT
CTTGGGCTTGCCTTCAACTTGAATCCAGCTCTGACCATGATTGGCAAGTATTTCTACAAGAGGCGACCATTGGCC
AACGGACTGGCCATGGCAGGCAGCCCTGTGTTCCTCTGTACTCTGGCCCCCCTCAATCAGGTTTTCTTCGGTATC
TTTGGATGGAGAGGAAGCTTTCTAATTCTTGGGGGCTTGCTACTAAACTGCTGTGTTGCTGGAGCCCTCATGCGA
CCAATCGGGCCCAAGCCAACCAAGGCAGGGAAAGATAAGTCTAAAGCATCCCTTGAGAAAGCTGGAAAATCTGGT
GTGAAAAAAGATCTGCATGATGCAAATACAGATCTTATTGGAAGACACCCTAAACAAGAGAAACGATCAGTCTTC
CAAACAATTAATCAGTTCCTGGACTTAACCCTATTCACCCACAGAGGCTTTTTGCTATACCTCTCTGGAAATGTG
ATCATGTTTTTTGGACTCTTTGCACCTTTGGTGTTTCTTAGTAGTTATGGGAAGAGTCAGCATTATTCTAGTGAG
AAGTCTGCCTTCCTTCTTTCCATTCTGGCTTTTGTTGACATGGTAGCCCGACCATCTATGGGACTTGTAGCCAAC
ACAAAGCCAATAAGACCTCGAATTCAGTATTTCTTTGCGGCTTCCGTTGTTGCAAATGGAGTGTGTCATATGCTA
GCACCTTTATCCACTACCTATGTTGGATTCTGTGTCTATGCGGGATTCTTTGGATTTGCCTTCGGGTGGCTCAGC
TCCGTATTGTTTGAAACATTGATGGACCTTGTTGGACCCCAGAGGTTCTCCAGCGCTGTGGGATTGGTGACCATT
GTGGAATGCTGTCCTGTCCTCCTGGGGCCACCACTTTTAGGTCGGCTCAATGACATGTATGGAGACTACAAATAC
ACATACTGGGCATGTGGCGTCGTCCTAATTATTTCAGGTATCTATCTCTTCATTGGCATGGGCATCAATTATCGA
CTTTTGGCAAAAGAACAGAAAGCAAACGAGCAGAAAAAGGAAAGTAAAGAGGAAGAGACCAGTATAGATGTTGCT
GGGAAGCCAAATGAAGTTACCAAAACAGCAGAATCTCCGGACCAGAAAGACACAGAAGGAGGGCCCAAGGAGGAG
GAAAGTCCAGTCTGAATCCATGGGGCTGAAGGGTAAATTGAGCAGTTCATGACCCAGGATATCTGAAAATATTCT
ACTGGCCTGTAATCTACCAGTGGTGCTCAATGCAAATAGTAGACATTTGTGTGGAAATCATACCAGTTGTTCATT
GATGGGATTTTTGTTTGACTCCTTACCAATAGCCTGAATTTGAGGAGGGAATGATTGGTAGCAAAGGATGGGGGA
AAGAAGTAGGTTCTGTTTTGTTTTGTTTTAATCTTAGCTTTTAATAGTGTCATAAAGATTATAATATGTGCCTTA
AGTTTTAGTCTTTAGAACTCTAGAGAGCCTTAACTTCTTAAACCATTTTTGCTGAATTCATCTATTTCGAGTGTT
GTGTTAAAAGGAAAAATAACAACTAACTTGTTTGAGGCAAATCTAAAATTTAAAATTAATCTTGCTTCATTGTTA
CATGTAATATATTTCAGACATTTTCACTGGAAGATTTATGAACAGAAATATTGGTTGAAAGTTAGAGATTTTACA
AAATGCTGACAAAAATATTTTCCTAGCATCAGTAGATTTCTGGCATATGTTTCTGCTAGCTATATATTTAGGAAA
TTCAAAGCATAAAACTTTGGCAACATCTTGGCTGTTCTAGACACAGTGTACTTGTCAACCCCTCTCAGGTACCTT
TTCTTGGGATGCTTATTAGAAGCCAAGTAAAGTGCTTAAGGTTTGTTTTCATTAAATTAGCTATTTCTGCTCCCC
TGTTCAAAGATGCATTTTGAGTGTTTATAGATCACTGCCCTTTTTGAAATCACCTGGTATTATTTTTCTTACTGG
AAAAGTTAGTATTAAAATCTACAGAACTACATATTTGTGCCTCCTTGGTAAATACAACACATCTAATTAAATGTA
GACAGATATTTCAAACATCAGCTGAATTCACTTAAGTTTTTCCAAAACCTCAGTTAAACTGTGAAGCTATTGGAA
TTTTTTTTTCCTGGAATTTTTCCCCTTTGATTCACAGTGGTCCCATTTATATCTGCTTCTAGCTTAGTGCTATGT
GTGAGATATGTGTGTGTTTGGTGTTTTT

FIGURE 6251

MPPAVGGPVGYTPPDGGWGWAVVIGAFISIGFSYAFPKSITVFFKEIEGIFHATTSEVSWISSIMLAVMYGGGPI
SSILVNKYGSRIVMIVGGCLSGCGLIAASFCNTVQQLYVCIGVIGGLGLAFNLNPALTMIGKYFYKRRPLANGLA
MAGSPVFLCTLAPLNQVFFGIFGWRGSFLILGGLLLNCCVAGALMRPIGPKPTKAGKDKSKASLEKAGKSGVKKD
LHDANTDLIGRHPKQEKRSVFQTINQFLDLTLFTHRGFLLYLSGNVIMFFGLFAPLVFLSSYGKSQHYSSEKSAF
LLSILAFVDMVARPSMGLVANTKPIRPRIQYFFAASVVANGVCHMLAPLSTTYVGFCVYAGFFGFAFGWLSSVLF
ETLMDLVGPQRFSSAVGLVTIVECCPVLLGPPLLGRLNDMYGDYKYTYWACGVVLIISGIYLFIGMGINYRLLAK
EQKANEQKKESKEEETSIDVAGKPNEVTKTAESPDQKDTEGGPKEEESPV

FIGURE 6252A

CCGGCCCAGCGGCTCTCCTGGCCTCGCGCTGCACATTCTCTCCTGGCGGCGGCGCCACCTGCAGTAGCGTTCGCC
CGAACATGGCGACACGGAGCAGCAGGAGGGAGTCGCGACTCCCGTTCCTATTCACCCTGGTCGCACTGCTGCCGC
CCGGAGCTCTCTGCGAAGTCTGGACGCAGAGGCTGCACGGCGGCAGCGCGCCCTTGCCCCAGGACCGGGGCTTCC
TCGTGGTGCAGGGCGACCCGCGCGAGCTGCGGCTGTGGGCGCGCGGGGATGCCAGGGGGGCGAGCCGCGCGGACG
AGAAGCCGCTCCGGAGGAAACGGAGCGCTGCCCTGCAGCCCGAGCCCATCAAGGTGTACGGACAGGTTAGTCTGA
ATGATTCCCACAATCAGATGGTGGTGCACTGGGCTGGAGAGAAAAGCAACGTGATCGTGGCCTTGGCCCGAGATA
GCCTGGCATTGGCGAGGCCCAAGAGCAGTGATGTGTACGTGTCTTACGACTATGGAAAATCATTCAAGAAAATTT
CAGACAAGTTAAACTTTGGCTTGGGAAATAGGAGTGAAGCTGTTATCGCCCAGTTCTACCACAGCCCTGCGGACA
ACAAGCGGTACATCTTTGCAGACGCTTATGCCCAGTACCTCTGGATCACGTTTGACTTCTGCAACACTCTTCAAG
GCTTTTCCATCCCATTTCGGGCAGCTGATCTCCTCCTACACAGTAAGGCCTCCAACCTTCTCTTGGGCTTTGACA
GGTCCCACCCCAACAAGCAGCTGTGGAAGTCAGATGACTTTGGCCAGACCTGGATCATGATTCAGGAACATGTCA
AGTCCTTTTCTTGGGGAATTGATCCCTATGACAAACCAAATACCATCTACATTGAACGACACGAACCCTCTGGCT
ACTCCACTGTCTTCCGAAGTACAGATTTCTTCCAGTCCCGGGAAAACCAGGAAGTGATCCTTGAGGAAGTGAGAG
ATTTTCAGCTTCGGGACAAGTACATGTTTGCTACAAAGGTGGTGCATCTCTTGGGCAGTGAACAGCAGTCTTCTG
TCCAGCTCTGGGTCTCCTTTGGCCGGAAGCCCATGAGAGCAGCCCAGTTTGTCACAAGACATCCTATTAATGAAT
ATTACATCGCAGATGCCTCCGAGGACCAGGTGTTTGTGTGTGTCAGCCACAGTAACAACCGCACCAATTTATACA
TCTCAGAGGCAGAGGGGCTGAAGTTCTCCCTGTCCTTGGAGAACGTGCTCTATTACAGCCCAGGAGGGGCCGGCA
GTGACACCTTGGTGAGGTATTTTGCAAATGAACCATTTGCTGACTTCCACCGAGTGGAAGGATTGCAAGGAGTCT
ACATTGCTACTCTGATTAATGGTTCTATGAATGAGGAGAACATGAGATCGGTCATCACCTTTGACAAAGGGGGAA
CCTGGGAGTTTCTTCAGGCTCCAGCCTTCACGGGATATGGAGAGAAAATCAATTGTGAGCTTTCCCAGGGCTGTT
CCCTTCATCTGGCTCAGCGCCTCAGTCAGCTCCTCAACCTCCAGCTCCGGAGAATGCCCATCCTGTCCAAGGAGT
CGGCTCCAGGCCTCATCATCGCCACTGGCTCAGTGGGAAAGAACTTGGCTAGCAAGACAAACGTGTACATCTCTA
GCAGTGCTGGAGCCAGGTGGCGAGAGGCACTTCCTGGACCTCACTACTACACATGGGGAGACCACGGCGGAATCA
TCACGGCCATTGCCCAGGGCATGGAAACCAACGAGCTAAAATACAGTACCAATGAAGGGGAGACCTGGAAAACAT
TCATCTTCTCTGAGAAGCCAGTGTTTGTGTATGGCCTCCTCACAGAACCTGGGGAGAAGAGCACTGTCTTCACCA
TCTTTGGCTCGAACAAAGAGAATGTCCACAGCTGGCTGATCCTCCAGGTCAATGCCACGGATGCCTTGGGAGTTC
CCTGCACAGAGAATGACTACAAGCTGTGGTCACCATCTGATGAGCGGGGGAATGAGTGTTTGCTGGGACACAAGA
CTGTTTTCAAACGGCGGACCCCCCATGCCACATGCTTCAATGGAGAGGACTTTGACAGGCCGGTGGTCGTGTCCA
ACTGCTCCTGCACCCGGGAGGACTATGAGTGTGACTTCGGTTTCAAGATGAGTGAAGATTTGTCATTAGAGGTTT
GTGTTCCAGATCCGGAATTTTCTGGAAAGTCATACTCCCCTCCTGTGCCTTGCCCTGTGGGTTCTACTTACAGGA
GAACGAGAGGCTACCGGAAGATTTCTGGGGACACTTGTAGCGGAGGAGATGTTGAAGCGCGACTGGAAGGAGAGC
TGGTCCCCTGTCCCCTGGCAGAAGAGAACGAGTTCATTCTGTATGCTGTGAGGAAATCCATCTACCGCTATGACC
TGGCCTCGGGAGCCACCGAGCAGTTGCCTCTCACCGGGCTACGGGCAGCAGTGGCCCTGGACTTTGACTATGAGC
ACAACTGTTTGTATTGGTCCGACCTGGCCTTGGACGTCATCCAGCGCCTCTGTTTGAATGGAAGCACAGGGCAAG
AGGTGATCATCAATTCTGGCCTGGAGACAGTAGAAGCTTTGGCTTTTGAACCCCTCAGCCAGCTGCTTTACTGGG
TAGATGCAGGCTTCAAAAAGATTGAGGTAGCTAATCCAGATGGCGACTTCCGACTCACAATCGTCAATTCCTCTG
TGCTTGATCGTCCCAGGGCTCTGGTCCTCGTGCCCCAAGAGGGGGTGATGTTCTGGACAGACTGGGGAGACCTGA
AGCCTGGGATTTATCGGAGCAATATGGATGGTTCTGCTGCCTATCACCTGGTGTCTGAGGATGTGAAGTGGCCCA
ATGGCATCTCTGTGGACGACCAGTGGATTTACTGGACGGATGCCTACCTGGAGTGCATAGAGCGGATCACGTTCA
GTGGCCAGCAGCGCTCTGTCATTCTGGACAACCTCCCGCACCCCTATGCCATTGCTGTCTTTAAGAATGAAATCT
ACTGGGATGACTGGTCACAGCTCAGCATATTCCGAGCTTCCAAATACAGTGGGTCCCAGATGGAGATTCTGGCAA
ACCAGCTCACGGGGCTCATGGACATGAAGATTTTCTACAAGGGGAAGAACACTGGAAGCAATGCCTGTGTGCCCA
GGCCATGCAGCCTGCTGTGCCTGCCCAAGGCCAACAACAGTAGAAGCTGCAGGTGTCCAGAGGATGTGTCCAGCA
GTGTGCTTCCATCAGGGGACCTGATGTGTGACTGCCCTCAGGGCTATCAGCTCAAGAACAATACCTGTGTCAAAG
AAGAGAACACCTGTCTTCGCAACCAGTATCGCTGCAGCAACGGGAACTGTATCAACAGCATTTGGTGGTGTGACT
TTGACAACGACTGTGGAGACATGAGCGATGAGAGAAACTGCCCTACCACCATCTGTGACCTGGACACCCAGTTTC
GTTGCCAGGAGTCTGGGACTTGTATCCCACTGTCCTATAAATGTGACCTTGAGGATGACTGTGGAGACAACAGTG
ATGAAAGTCATTGTGAAATGCACCAGTGCCGGAGTGACGAGTACAACTGCAGTTCCGGCATGTGCATCCGCTCCT

FIGURE 6252B

CCTGGGTATGTGACGGGGACAACGACTGCAGGGACTGGTCTGATGAAGCCAACTGTACCGCCATCTATCACACCT
GTGAGGCCTCCAACTTCCAGTGCCGAAACGGGCACTGCATCCCCCAGCGGTGGGCGTGTGACGGGGATACGGACT
GCCAGGATGGTTCCGATGAGGATCCAGTCAACTGTGAGAAGAAGTGCAATGGATTCCGCTGCCCAAACGGCACTT
GCATCCCATCCAGCAAACATTGTGATGGTCTGCGTGATTGCTCTGATGGCTCCGATGAACAGCACTGCGAGCCCC
TCTGTACGCACTTCATGGACTTTGTGTGTAAGAACCGCCAGCAGTGCCTGTTCCACTCCATGGTCTGTGACGGAA
TCATCCAGTGCCGCGACGGGTCCGATGAGGATGCGGCGTTTGCAGGATGCTCCCAAGATCCTGAGTTCCACAAGG
TATGTGATGAGTTCGGTTTCCAGTGTCAGAATGGAGTGTGCATCAGTTTGATTTGGAAGTGCGACGGGATGGATG
ATTGCGGCGATTATTCTGATGAAGCCAACTGCGAAAACCCCACAGAAGCCCCAAACTGCTCCCGCTACTTCCAGT
TTCGGTGTGAGAATGGCCACTGCATCCCCAACAGATGGAAATGTGACAGGGAGAACGACTGTGGGGACTGGTCTG
ATGAGAAGGATTGTGGAGATTCACATATTCTTCCCTTCTCGACTCCTGGGCCCTCCACGTGTCTGCCCAATTACT
ACCGCTGCAGCAGTGGGACCTGCGTGATGGACACCTGGGTGTGCGACGGGTACCGAGATTGTGCAGATGGCTCTG
ACGAGGAAGCCTGCCCCTTGCTTGCAAACGTCACTGCTGCCTCCACTCCCACCCAACTTGGGCGATGTGACCGAT
TTGAGTTCGAATGCCACCAACCGAAGACGTGTATTCCCAACTGGAAGCGCTGTGACGGCCACCAAGATTGCCAGG
ATGGCCGGGACGAGGCCAATTGCCCCACACACAGCACCTTGACTTGCATGAGCAGGGAGTTCCAGTGCGAGGACG
GGGAGGCCTGCATTGTGCTCTCGGAGCGCTGCGACGGCTTCCTGGACTGCTCGGACGAGAGCGATGAAAAGGCCT
GCAGTGATGAGTTGACTGTGTACAAAGTACAGAATCTTCAGTGGACAGCTGACTTCTCTGGGGATGTGACTTTGA
CCTGGATGAGGCCCAAAAAAATGCCCTCTGCATCTTGTGTATATAATGTCTACTACAGGGTGGTTGGAGAGAGCA
TATGGAAGACTCTGGAGACCCACAGCAATAAGACAAACACTGTATTAAAAGTCTTGAAACCAGATACCACGTATC
AGGTTAAAGTACAGGTTCAGTGTCTCAGCAAGGCACACAACACCAATGACTTTGTGACCCTGAGGACCCCAGAGG
GATTGCCAGATGCCCCTCGAAATCTCCAGCTGTCACTCCCCAGGGAAGCAGAAGGTGTGATTGTAGGCCACTGGG
CTCCTCCCATCCACACCCATGGCCTCATCCGTGAGTACATTGTAGAATACAGCAGGAGTGGTTCCAAGATGTGGG
CCTCCCAGAGGGCTGCTAGTAACTTTACAGAAATCAAGAACTTATTGGTCAACACTCTATACACCGTCAGAGTGG
CTGCGGTGACTAGTCGTGGAATAGGAAACTGGAGCGATTCTAAATCCATTACCACCATAAAAGGAAAAGTGATCC
CACCACCAGATATCCACATTGACAGCTATGGTGAAAATTATCTAAGCTTCACCCTGACCATGGAGAGTGATATCA
AGGTGAATGGCTATGTGGTGAACCTTTTCTGGGCATTTGACACCCACAAGCAAGAGAGGAGAACTTTGAACTTCC
GAGGAAGCATATTGTCACACAAAGTTGGCAATCTGACAGCTCATACATCCTATGAGATTTCTGCCTGGGCCAAGA
CTGACTTGGGGGATAGCCCTCTGGCATTTGAGCATGTTATGACCAGAGGGGTTCGCCCACCTGCACCTAGCCTCA
AGGCCAAAGCCATCAACCAGACTGCAGTGGAATGTACCTGGACCGGCCCCCGGAATGTGGTTTATGGTATTTTCT
ATGCCACGTCCTTTCTTGACCTCTATCGCAACCCGAAGAGCTTGACTACTTCACTCCACAACAAGACGGTCATTG
TCAGTAAGGATGAGCAGTATTTGTTTCTGGTCCGTGTAGTGGTACCCTACCAGGGGCCATCCTCTGACTACGTTG
TAGTGAAGATGATCCCGGACAGCAGGCTTCCACCCCGTCACCTGCATGTGGTTCATACGGGCAAAACCTCCGTGG
TCATCAAGTGGGAATCACCGTATGACTCTCCTGACCAGGACTTGTTGTATGCAATTGCAGTCAAAGATCTCATAA
GAAAGACTGACAGGAGCTACAAAGTAAAATCCCGTAACAGCACTGTGGAATACACCCTTAACAAGTTGGAGCCTG
GCGGGAAATACCACATCATTGTCCAACTGGGGAACATGAGCAAAGATTCCAGCATAAAAATTACCACAGTTTCAT
TATCAGCACCTGATGCCTTAAAAATCATAACAGAAAATGATCATGTTCTTCTGTTTTGGAAAAGCCTGGCTTTAA
AGGAAAAGCATTTTAATGAAAGCAGGGGCTATGAGATACACATGTTTGATAGTGCCATGAATATCACAGCTTACC
TTGGGAATACTACTGACAATTTCTTTAAAATTTCCAACCTGAAGATGGGTCATAATTACACGTTCACCGTCCAAG
CAAGATGCCTTTTTGGCAACCAGATCTGTGGGGAGCCTGCCATCCTGCTGTACGATGAGCTGGGGTCTGGTGCAG
ATGCATCTGCAACGCAGGCTGCCAGATCTACGGATGTTGCTGCTGTGGTGGTGCCCATCTTATTCCTGATACTGC
TGAGCCTGGGGGGTGGGGTTTGCCATCCTGTACACGAAGCACCGGAGGCTGCAGAGCAGCTTCACCGCCTTCGCCA
ACAGCCACTACAGCTCCAGGCTGGGGTCCGCAATCTTCTCCTCTGGGGATGACCTGGGGGGAAGATGATGAAGATG
CCCCTATGATAACTGGATTTTCAGATGACGTCCCCATGGTGATAGCCTGAAAGAGCTTTCCTCACTAGAAACCAA
ATGGTGTAAATATTTTATTTGATAAAGATAGTTGATGGTTTATTTTAAAAGATGCACTTTGAGTTGCAATATGTT
ATTTTTATATGGGCC

FIGURE 6253

MATRSSRRESRLPFLFTLVALLPPGALCEVWTQRLHGGSAPLPQDRGFLVVQGDPRELRLWARGDARGASRADEK
PLRRKRSAALQPEPIKVYGQVSLNDSHNQMVVHWAGEKSNVIVALARDSLALARPKSSDVYVSYDYGKSFKKISD
KLNFGLGNRSEAVIAQFYHSPADNKRYIFADAYAQYLWITFDFCNTLQGFSIPFRAADLLLHSKASNLLLGFDRS
HPNKQLWKSDDFGQTWIMIQEHVKSFSWGIDPYDKPNTIYIERHEPSGYSTVFRSTDFFQSRENQEVILEEVRDF
QLRDKYMFATKVVHLLGSEQQSSVQLWVSFGRKPMRAAQFVTRHPINEYYIADASEDQVFVCVSHSNNRTNLYIS
EAEGLKFSLSLENVLYYSPGGAGSDTLVRYFANEPFADFHRVEGLQGVYIATLINGSMNEENMRSVITFDKGGTW
EFLQAPAFTGYGEKINCELSQGCSLHLAQRLSQLLNLQLRRMPILSKESAPGLIIATGSVGKNLASKTNVYISSS
AGARWREALPGPHYYTWGDHGGIITAIAQGMETNELKYSTNEGETWKTFIFSEKPVFVYGLLTEPGEKSTVFTIF
GSNKENVHSWLILQVNATDALGVPCTENDYKLWSPSDERGNECLLGHKTVFKRRTPHATCFNGEDFDRPVVVSNC
SCTREDYECDFGFKMSEDLSLEVCVPDPEFSGKSYSPPVPCPVGSTYRRTRGYRKISGDTCSGGDVEARLEGELV
PCPLAEENEFILYAVRKSIYRYDLASGATEQLPLTGLRAAVALDFDYEHNCLYWSDLALDVIQRLCLNGSTGQEV
IINSGLETVEALAFEPLSQLLYWVDAGFKKIEVANPDGDFRLTIVNSSVLDRPRALVLVPQEGVMFWTDWGDLKP
GIYRSNMDGSAAYHLVSEDVKWPNGISVDDQWIYWTDAYLECIERITFSGQQRSVILDNLPHPYAIAVFKNEIYW
DDWSQLSIFRASKYSGSQMEILANQLTGLMDMKIFYKGKNTGSNACVPRPCSLLCLPKANNSRSCRCPEDVSSSV
LPSGDLMCDCPQGYQLKNNTCVKEENTCLRNQYRCSNGNCINSIWWCDFDNDCGDMSDERNCPTTICDLDTQFRC
QESGTCIPLSYKCDLEDDCGDNSDESHCEMHQCRSDEYNCSSGMCIRSSWVCDGDNDCRDWSDEANCTAIYHTCE
ASNFQCRNGHCIPQRWACDGDTDCQDGSDEDPVNCEKKCNGFRCPNGTCIPSSKHCDGLRDCSDGSDEQHCEPLC
THFMDFVCKNRQQCLFHSMVCDGIIQCRDGSDEDAAFAGCSQDPEFHKVCDEFGFQCQNGVCISLIWKCDGMDDC
GDYSDEANCENPTEAPNCSRYFQFRCENGHCIPNRWKCDRENDCGDWSDEKDCGDSHILPFSTPGPSTCLPNYYR
CSSGTCVMDTWVCDGYRDCADGSDEEACPLLANVTAASTPTQLGRCDRFEFECHQPKTCIPNWKRCDGHQDCQDG
RDEANCPTHSTLTCMSREFQCEDGEACIVLSERCDGFLDCSDESDEKACSDELTVYKVQNLQWTADFSGDVTLTW
MRPKKMPSASCVYNVYYRVVGESIWKTLETHSNKTNTVLKVLKPDTTYQVKVQVQCLSKAHNTNDFVTLRTPEGL
PDAPRNLQLSLPREAEGVIVGHWAPPIHTHGLIREYIVEYSRSGSKMWASQRAASNFTEIKNLLVNTLYTVRVAA
VTSRGIGNWSDSKSITTIKGKVIPPPDIHIDSYGENYLSFTLTMESDIKVNGYVVNLFWAFDTHKQERRTLNFRG
SILSHKVGNLTAHTSYEISAWAKTDLGDSPLAFEHVMTRGVRPPAPSLKAKAINQTAVECTWTGPRNVVYGIFYA
TSFLDLYRNPKSLTTSLHNKTVIVSKDEQYLFLVRVVVPYQGPSSDYVVVKMIPDSRLPPRHLHVVHTGKTSVVI
KWESPYDSPDQDLLYAIAVKDLIRKTDRSYKVKSRNSTVEYTLNKLEPGGKYHIIVQLGNMSKDSSIKITTVSLS
APDALKIITENDHVLLFWKSLALKEKHFNESRGYEIHMFDSAMNITAYLGNTTDNFFKISNLKMGHNYTFTVQAR
CLFGNQICGEPAILLYDELGSGADASATQAARSTDVAAVVVPILFLILLSLGVGFAILYTKHRRLQSSFTAFANS
HYSSRLGSAIFSSGDDLGEDDEDAPMITGFSDDVPMVIA

FIGURE 6254

CCATCCTAATACGACTCACTATAGGGCTCGAGCGGCCGCCCGGGCAGGTACGCCCTATACAACTTGGCTTCACAT
ACTTTTACACTAACTTTATATGATTTTTAAAAACTGGTCTGATCGGACTTCTCGTCCTGGGACACTGTTTACTGG
AGTCTGGCCGGCTCTCCGTGCTCCTCTTGGTACCTCATTTTGGGGAGAACCTTAAACCCACTCGAGCAGATAATC
TCCGCCTTGACCGGTGCCACCAAAGAAGGGTTGGAACCATGTGGACTTTTCTGGGCATTGCCACTTTCACCTATT
TTTATAAGAAGTTCGGGGACTTCATCACTTTGGCCAACAGGGAGGTCCTGTTGTGCGTGCTGGTGTTCCTCTCGC
TGGGCCTGGTGCTCTCCTACCGCTGTCGCCACCGAAACGGGGGTCTCCTCGGGCGCCAGCGGAGCGGCTCCCAGT
TCGCCCTCTTCTCGGATATTCTCTCAGGCCTGCCTTTCATTGGCTTCTTCTGGGCCAAATCCCCCCCTGAATCAG
AAAATAAGGAGCAGCTCGGGGCCAGGAGGCGCAGAAAAGGAACCAATATTTCAGAAACAAGCTTAATAGGAACAG
CTGCCTGTACATCAACATCTTCTCAGAATGACCCAGAAGTTATCATCGTGGGAGCTGGCGTGCTTGGCTCTGCTT
TGGTAGCTGTGCTTTCCAGAGATGGAAGAAAGGTGACAGTCATTGAGAGAGACTTAAAAGAGCCTGACAGAATAG
TTGGAGAATTCCTGCAGCCGGGTGGTTATCATGTTCTCAAAGACCTTGGTCTTGGAGATACAGTGGAAGGTCTTG
ATGCCCAGGTTGTAAATGGTTACATGATTCATGATCAGGAAAGCAAATCAGAGGTTCAGATTCCTTACCCTCTGT
CAGAAAACAATCAAGTGCAGAGTGGAAGAGCTTTCCATCACGGAAGATTCATCATGAGTCTCCGGAAAGCAGCTA
TGGCAGAGCCCAATGCAAAGTTTATTGAAGGTGTTGTGTTACAGTTATTAGAGGAAGATGATGTTGTGATGGGAG
TTCAGTACAAGGATAAAGAGACTGGAGATATCAAGGAACTCCATGCTCCACTGACTGTTGTTGCAGATGGGCTTT
TCTCCAAGTTCAGGAAAAGCCTGGTCTCCAATAAAGTTTCTGTATCATCTCATTTTGTTGGCTTTCTTATGAAGA
ATGCACCACAGTTTAAAGCAAATCATGCTGAACTTATTTTAGCTAACCCGAGTCCAGTTCTCATCTACCGGATTT
CATCCAGTGAAACTCGAGTACTTGTTGACATTAGAGGAGAAATGCCAAGGAATTTAAGAGAATACATGGTTGAAA
AAATTTACCCACAAATACCTGATCACCTGAAAGAACCATTCTTAGAAGCCACTGACAATTCTCATCTGAGGTCCA
TGCTAGCAAGCTTCCTTCCTCCTTCATCAGTGAAGAAACGAGGTGTTCTTCTTTTGGGAGACGCATATAATATGA
GGCATCCACTTACTGGTGGAGGAATGACTGTTGCTTTTAAAGATATAAAACTATGGAGAAAACTGCTAAAGGGTA
TCCCTGACCTTTATGATGATGCAGCTATTTTCGAGGCCAACAAATCATTTTACTGGGCAAGAAAAACATCTCATT
CCTTTGTCGTGAATATCCTTGCTCAGGCTCTTTATGAATTATTTTCTGCCACAGATGATTCCCTGCATCAACTAA
GAAAAGCCTGTTTTCTTTATTTCAAACTTGGTGGCGAATGTGTTGCGGGTCCTGTTGGGCTGCTTTCTGTATTGT
CTCCTAACCCTCTAGCTTTAATTGGACACTTCTTTGCTGTTGCAATCTATGCCGTGTATTTTTGCTTTAAGTCAG
AACCTTGGATTACAAAACCTCGAGCCCTTCTCAGTAGTAGTGCTGTATTGTACAAAGCGTGTTCTGTAATATTTC
CTCTAATTTACTCAGAAATGAAGTATATGGTTCATTAAGCTTAAAGGGGAACCATTTGTGAATGAATATTTGGAA
CTTACCAAGTCCTAAGAGACTTTTGGAAGAGGATATATATAGCATAGTACCATACCACTTATAAAGTGGAAACTC
TTGGACCAAGATTTGGATTAATTTGTTTTTGAAGTTTTTTGTATATAAATATGTAAATACATGCTTTAATTTGCA
ATTTAAAATGAAGGGGTTAAATAAGTTAGACATTTGAAAGAAATGATTGTTACCATAAATTAGTGCTAATGCTGA
GGAGAACTACAGTTTTTCTTTTGAATTTAGTATTTGAGATGAGTTGTTGGGACATGCAAATAAAATGAAGAATGA
C

FIGURE 6255

MWTFLGIATFTYFYKKFGDFITLANREVLLCVLVFLSLGLVLSYRCRHRNGGLLGRQRSGSQFALFSDILSGLPF
IGFFWAKSPPESENKEQLGARRRRKGTNISETSLIGTAACTSTSSQNDPEVIIVGAGVLGSALVAVLSRDGRKVT
VIERDLKEPDRIVGEFLQPGGYHVLKDLGLGDTVEGLDAQVVNGYMIHDQESKSEVQIPYPLSENNQVQSGRAFH
HGRFIMSLRKAAMAEPNAKFIEGVVLQLLEEDDVVMGVQYKDKETGDIKELHAPLTVVADGLFSKFRKSLVSNKV
SVSSHFVGFLMKNAPQFKANHAELILANPSPVLIYRISSSETRVLVDIRGEMPRNLREYMVEKIYPQIPDHLKEP
FLEATDNSHLRSMLASFLPPSSVKKRGVLLLGDAYNMRHPLTGGGMTVAFKDIKLWRKLLKGIPDLYDDAAIFEA
NKSFYWARKTSHSFVVNILAQALYELFSATDDSLHQLRKACFLYFKLGGECVAGPVGLLSVLSPNPLALIGHFFA
VAIYAVYFCFKSEPWITKPRALLSSSAVLYKACSVIFPLIYSEMKYMVH

FIGURE 6256

CTGGCTAGACAATATCATCGACCTTGTGAAAAAGTACATCCTGGCCCTTTGGAACGAAGGGTACATCATGGGCTT
TATCAGTAAGGAGCGGGAGCGGGCCATCTTGAGCACTAAGCCTCCAGGCACCTTCCTGCTAAGATTCAGTGAAAG
CAGCAAAGAAGGAGGCGTCACTTTCACTTGGGTGGAGAAGGACATCAGCGGTAAGACCCAGATCCAGTCCGTGGA
ACCATACACAAAGCAGCAGCTGAACAACATGTCATTTGCTGAAATCATCATGGGCTATAAGATCATGGATGCTAC
CAATATCCTGGTGTCTCCACTGGTCTATCTCTATCCTGACATTCCCAAGGAGGAGGCATTCGGAAAGTATTGTCG
GCCAGAGAGCCAGGAGCATCCTGAAGCTGACCCAGGTAGCGCTGCCCCA

FIGURE 6257

GCCCAGGTGACTGACTAATCCGCCGCCTTCAGGAGACAGAATTGGCCAAGGCCTGAAGGCCCCGGAGTGCACCAG
CGGCATGTACAAAGAGACCGTCTACTCCGCCTTCAATCTGCTCATGCATTACCCACCCCCCTCGGGAGCAGGGCA
GCACCCCCAGCCGCAGCCCCCGCTGCACAAGGCCAATCAGCCCCCCCACGGTGTCCCCCAACTCTCTCTCTACGA
ACATTTCAACAGCCCACATCCCACCCCTGCACCTGCGGACATCAGCCAGAAGCAAGTTCACAGGCCTCTGCAGAC
CCCTGACCTCTCTGGCTTCTACTCCCTGACCTCAGGCAGCATGGGGCAGCTCCCCCACACTGTGAGCTGGTTCAC
CCACCCATCCTTGATGCTAGGTTCTGGTGTACCTGGTCACCCAGCAGCCATCCCCCACCCGGCCATTGTGCCCCC
CTCAGGGAAGCAGGAGCTGCAGCCCTTCGACCGCAACCTGAAGACACAAGCAGAGTCCAAGGCAGAGAAGGAGGC
CAAGAAGCCAACCATCAAGAAGCCCCTCAATGCCTTCATGCTGTACATGAAGGAGATGAGAGCCAAGGTCATTGC
AGAGTGCACACTTAAGGAGAGCGCTGCCATCAACCAGATCCTGGGCCGCAGGTGGCACGCGCTGTCGCGAGAAGA
GCAGGCCAAGTACTATGAGCTGGCCCGCAAGGAGAGGCAGCTGCACATGCAGCTATACCCAGGCTGGTCAGCGCG
GGACAACTACGGGAAGAAGAAGAGGCGGTCGAGGGAAAAGCACCAAGAATCCACCACAGACCCTGGCTCGCCTAA
GAAATGCCGTGCTCGCTTTGGCCTCAACCAGCAGACGGATTGGTGTGGTCCGTGCAGATAACTCTCTTCACTATT
CCTAGGAGGAAAAAGAAATGCATTCGGTACTTACCCGGAGAAGGCCGCTGCCCCAGCCCCGTTCCTTCCGATGAC
AGTGCTCTAGGCTGCCCCGGGTCCCCAGCTCCCCAGGACTCACCCTCATACCATCTGCTGCCCCGCTTCCCCACA
GAACTGCTTACTAGCCCTGCGGAGCGGCACCTACATCCCCAGGTCTCTCCACTGCTCTCAGCCTCCCAACCCCAG
GGCCCCCACAGGCCCCCCGCAGCACCCTGCAGAGCACACAGGTACAGCAACAGGAATCTCAGAGACAGGTGGCCT
AGCAGGCACAGGACACCTGGCCGCCTCCAGGAGCCTACCCCCTGAAAATGACAGAGACCCAGATCTCATGGAAAC
TGGCAGGGGTCCTGTTAACGTCATCTCAGGGTCCAGACCCTGAAGATTTCAGAGGCTGCAGAACTTCTGCCTGAA
CCTGGGGGTCATCGATTCAAACTGCTCCAAGTGGTGGGAATCAGATCTGTCTTGATGTGTCATCTAATTAAGGGAA
TCCCTTGTACCTATGACTCCGTCGATCTATTCTTTGTACCATCTGTCTTGCCAGCCAGAAGCCTCTGCCTCCCTA
GCTTTTCTGCTATAGGTCAGAGATGGGCTGAACTGAGCCTAGCTACCTTCTCTACCCATCTCCCCCATCCCCCAC
TGCCACACCCTCCCCATTCAGACACTTCATGGACCAAGAATGAGCTGGTTTGTCAAACAACATGTGAGCATGGTC
ACAAGCACAAAGCTCAAGATGACAGCTCTTCTAAGGAAATGGAGAAGCTCTGTTTATAAAAACAAAAACAAAACC
AGCTGCTACTCATAAGTTGGACCAGAGGAAGCCCCTTACTATGATCTCAGGAGCTTGCAAGAAGCAGGAAGGGGA
ATGGAATAGGTTAAGTTTAGGCCTATCAACCTAAGCAACAGAAATAATCTGACACTACCTTATCAGGCAAATTGG
GGAGGGGAGGGTGTATCTAGCTCTAGTTCAAATTATTTGGAAGTGTTCCCTGAGAAACCCACCAGCCTAAGAAGC
TCTGGCCCCAGGCTTGTCACTAGCAGCTGCAGTCAACAGTTCAAAGAAGTCATGGCCCAAATCCAGTGTGCACCC
CTCCCCATTCACAGAGCCTTTTTCACAATTCCATTTCCAGTTCATCTATGGCAGTCCAGCCAGCTTCTGGGCAGC
TTGAGAGGGCAAACCCAAAACCTCATGACAGCCAGAGCCTGTCTTTCAGCATTCAGTCGCCTGGGAAGCTCCAGT
TTCCCCATGGGGCTGCGGGACAGAGGACCATTACAACTAGATCAAGGAGCCCAGAAAACCTCCAGTAGTGGACAA
CAGGTTTTCACCATAGCCTACGTTAACCCATTTTTGAGCCAAGCTTCAACCCTCAGCCTTGAAAAACAAGTCTTT
AATTTAATTTTTGTTTTTTGCCTAAATCCAAAGAAAAAGGGCTGCCGGGCCAGGCGCGGTCGTCACGCCTGTAAT
CCCAGCACTTTGGCAGGCCGAGGCAGGTGGATCACCTGACGTCAGTAGTTTGAGACCAGCCTGGCCAACATGGTG
AAACCCTGTATCTACTAAAAATACAAAAATTAGCCGGACGTGGTGGTGCGCGCATGTAATCCCAGCTACTCGGGA
GGCTGAGGCGGAAGAATCACTTGAACCCGGGAGGCGGAGGTTCCAGTGAGCCGAGATGGCGCTATTGCACTCCAG
TCTGGGTAACAGGGAGACTGCATCTCAAAAAAAAAAAAAAAAAAAAAGGGCTGTCCATGTATTCACACACCCCTC
AAAAAAAGCCTTTAGTTCCTACTTTAGCCACTGGTTTCTCAGAATCCAAAGATCACATATTCTAGTGTAACACTG
CAAGAAGTCTTGAGAAAAAGATTATTGTAGTGTTCAAAATATTTTTGTATTGTTAATGCATCATCATAGAAAAAC
TTTTAAACATGAGAATAAAGATACTTTTTACTGGGTTTGTTTTTCAAAGCCTGAAAAAAA

FIGURE 6258

MYKETVYSAFNLLMHYPPPSGAGQHPQPQPPLHKANQPPHGVPQLSLYEHFNSPHPTPAPADISQKQVHRPLQTP
DLSGFYSLTSGSMGQLPHTVSWFTHPSLMLGSGVPGHPAAIPHPAIVPPSGKQELQPFDRNLKTQAESKAEKEAK
KPTIKKPLNAFMLYMKEMRAKVIAECTLKESAAINQILGRRWHALSREEQAKYYELARKERQLHMQLYPGWSARD
NYGKKKRRSREKHQESTTDPGSPKKCRARFGLNQQTDWCGPCR

FIGURE 6259A

GGCGGCTCGGGACGGAGGACGCGCTAGTGTGAGTGCGGGCTTCTAGAACTACACCGACCCTCGTGTCCTCCCTTC
ATCCTGCGGGGCTGGCTGGAGCGGCCGCTCCGGTGCTGTCCAGCAGCCATAGGGAGCCGCACGGGGAGCGGGAAA
GCGGTCGCGGCCCCAGGCGGGGCGGCCGGGATGGAGCGGGGCCGCGAGCCTGTGGGGAAGGGGCTGTGGCGGCGC
CTCGAGCGGCTGCAGGTTCTTCTGTGTGGCAGTTCAGAATGATGGATCAAGCTAGATCAGCATTCTCTAACTTGT
TTGGTGGAGAACCATTGTCATATACCCGGTTCAGCCTGGCTCGGCAAGTAGATGGCGATAACAGTCATGTGGAGA
TGAAACTTGCTGTAGATGAAGAAGAAAATGCTGACAATAACACAAAGGCCAATGTCACAAAACCAAAAAGGTGTA
GTGGAAGTATCTGCTATGGGACTATTGCTGTGATCGTCTTTTTCTTGATTGGATTTATGATTGGCTACTTGGGCT
ATTGTAAAGGGGTAGAACCAAAAACTGAGTGTGAGAGACTGGCAGGAACCGAGTCTCCAGTGAGGGAGGAGCCAG
GAGAGGACTTCCCTGCAGCACGTCGCTTATATTGGGATGACCTGAAGAGAAAGTTGTCGGAGAAACTGGACAGCA
CAGACTTCACCAGCACCATCAAGCTGCTGAATGAAAATTCATATGTCCCTCGTGAGGCTGGATCTCAAAAAGATG
AAAATCTTGCGTTGTATGTTGAAAATCAATTTCGTGAATTTAAACTCAGCAAAGTCTGGCGTGATCAACATTTTG
TTAAGATTCAGGTCAAAGACAGCGCTCAAAACTCGGTGATCATAGTTGATAAGAACGGTAGACTTGTTTACCTGG
TGGAGAATCCTGGGGGTTATGTGGCGTATAGTAAGGCTGCAACAGTTACTGGTAAACTGGTCCATGCTAATTTTG
GTACTAAAAAAGATTTTGAGGATTTATACACTCCTGTGAATGGATCTATAGTGATTGTCAGAGCAGGGAAAATCA
CCTTTGCAGAAAAGGTTGCAAATGCTGAAAGCTTAAATGCAATTGGTGTGTTGATATACATGGACCAGACTAAAT
TTCCCATTGTTAACGCAGAACTTTCATTCTTTGGACATGCTCATCTGGGGACAGGTGACCCTTACACACCTGGAT
TCCCTTCCTTCAATCACACTCAGTTTCCACCATCTCGGTCATCAGGATTGCCTAATATACCTGTCCAGACAATCT
CCAGAGCTGCTGCAGAAAAGCTGTTTGGGAATATGGAAGGAGACTGTCCCTCTGACTGGAAAACAGACTCTACAT
GTAGGATGGTAACCTCAGAAAGCAAGAATGTGAAGCTCACTGTGAGCAATGTGCTGAAAGAGATAAAAATTCTTA
ACATCTTTGGAGTTATTAAAGGCTTTGTAGAACCAGATCACTATGTTGTAGTTGGGGCCCAGAGAGATGCATGGG
GCCCTGGAGCTGCAAAATCCGGTGTAGGCACAGCTCTCCTATTGAAACTTGCCCAGATGTTCTCAGATATGGTCT
TAAAAGATGGGTTTCAGCCCAGCAGAAGCATTATCTTTGCCAGTTGGAGTGCTGGAGACTTTGGATCGGTTGGTG
CCACTGAATGGCTAGAGGGATACCTTTCGTCCCTGCATTTAAAGGCTTTCACTTATATTAATCTGGATAAAGCGG
TTCTTGGTACCAGCAACTTCAAGGTTTCTGCCAGCCCACTGTTGTATACGCTTATTGAGAAAACAATGCAAAATG
TGAAGCATCCGGTTACTGGGCAATTTCTATATCAGGACAGCAACTGGGCCAGCAAAGTTGAGAAACTCACTTTAG
ACAATGCTGCTTTCCCTTTCCTTGCATATTCTGGAATCCCAGCAGTTTCTTTCTGTTTTTGCGAGGACACAGATT
ATCCTTATTTGGGTACCACCATGGACACCTATAAGGAACTGATTGAGAGGATTCCTGAGTTGAACAAAGTGGCAC
GAGCAGCTGCAGAGGTCGCTGGTCAGTTCGTGATTAAACTAACCCATGATGTTGAATTGAACCTGGACTATGAGA
GGTACAACAGCCAACTGCTTTCATTTGTGAGGGATCTGAACCAATACAGAGCAGACATAAAGGAAATGGGCCTGA
GTTTACAGTGGCTGTATTCTGCTCGTGGAGACTTCTTCCGTGCTACTTCCAGACTAACAACAGATTTCGGGAATG
CTGAGAAAACAGACAGATTTGTCATGAAGAAACTCAATGATCGTGTCATGAGAGTGGAGTATCACTTCCTCTCTC
CCTACGTATCTCCAAAAGAGTCTCCTTTCCGACATGTCTTCTGGGGCTCCGGCTCTCACACGCTGCCAGCTTTAC
TGGAGAACTTGAAACTGCGTAAACAAAATAACGGTGCTTTTAATGAAACGCTGTTCAGAAACCAGTTGGCTCTAG
CTACTTGGACTATTCAGGGAGCTGCAAATGCCCTCTCTGGTGACGTTTGGGACATTGACAATGAGTTTTAAATGT
GATACCCATAGCTTCCATGAGAACAGCAGGGTAGTCTGGTTTCTAGACTTGTGCTGATCGTGCTAAATTTTCAGT
AGGGCTACAAAACCTGATGTTAAAATTCCATCCCATCATCTTGGTACTACTAGATGTCTTTAGGCAGCAGCTTTT
AATACAGGGTAGATAACCTGTACTTCAAGTTAAAGTGAATAACCACTTAAAAAATGTCCATGATGGAATATTCCC
CTATCTCTAGAATTTTAAGTGCTTTGTAATGGGAACTGCCTCTTTCCTGTTGTTGTTAATGAAAATGTCAGAAAC
CAGTTATGTGAATGATCTCTCTGAATCCTAAGGGCTGGTCTCTGCTGAAGGTTGTAAGTGGTTCGCTTACTTTGA
GTGATCCTCCAACTTCATTTGATGCTAAATAGGAGATACCAGGTTGAAAGACCTCTCCAAATGAGATCTAAGCCT
TTCCATAAGGAATGTAGCAGGTTTCCTCATTCCTGAAAGAAACAGTTAACTTTCAGAAGAGATGGGCTTGTTTTC
TTGCCAATGAGGTCTGAAATGGAGGTCCTTCTGCTGGATAAAATGAGGTTCAACTGTTGATTGCAGGAATAAGGC
CTTAATATGTTAACCTCAGTGTCATTTATGAAAAGAGGGGACCAGAAGCCAAAGACTTAGTATATTTTCTTTTCC
TCTGTCCCTTCCCCCATAAGCCTCCATTTAGTTCTTTGTTATTTTTGTTTCTTCCAAAGCACATTGAAAGAGAAC
CAGTTTCAGGTGTTTAGTTGCAGACTCAGTTTGTCAGACTTTAAAGAATAATATGCTGCCAAATTTTGGCCAAAG
TGTTAATCTTAGGGGAGAGCTTTCTGTCCTTTTGGCACTGAGATATTTATTGTTTATTTATCAGTGACAGAGTTC
ACTATAAATGGTGTTTTTTTAATAGAATATAATTATCGGAAGCAGTGCCTTCCATAATTATGACAGTTATACTGT
CGGTTTTTTTTAAATAAAAGCAGCATCTGCTAATAAAACCCAACAGATACTGGAAGTTTTGCATTTATGGTCAAC

FIGURE 6259B

ACTTAAGGGTTTTAGAAAACAGCCGTCAGCCAAATGTAATTGAATAAAGTTGAAGCTAAGATTTAGAGATGAATT
AAATTTAATTAGGGGTTGCTAAGAAGCGAGCACTGACCAGATAAGAATGCTGGTTTTCCTAAATGCAGTGAATTG
TGACCAAGTTATAAATCAATGTCACTTAAAGGCTGTGGTAGTACTCCTGCAAAATTTTATAGCTCAGTTTATCCA
AGGTGTAACTCTAATTCCCATTTGCAAAATTTCCAGTACCTTTGTCACAATCCTAACACATTATCGGGAGCAGTG
TCTTCCATAATGTATAAAGAACAAGGTAGTTTTTACCTACCACAGTGTCTGTATCGGAGACAGTGATCTCCATAT
GTTACACTAAGGGTGTAAGTAATTATCGGGAACAGTGTTTCCCATAATTTTCTTCATGCAATGACATCTTCAAAG
CTTGAAGATCGTTAGTATCTAACATGTATCCCAACTCCTATAATTCCCTATCTTTTAGTTTTAGTTGCAGAAACA
TTTTGTGGTCATTAAGCATTGGGTGGGTAAATTCAACCACTGTAAAATGAAATTACTACAAAATTTGAAATTTAG
CTTGGGTTTTTGTTACCTTTATGGTTTCTCCAGGTCCTCTACTTAATGAGATAGCAGCATACATTTATAATGTTT
GCTATTGACAAGTCATTTTAATTTATCACATTATTTGCATGTTACCTCCTATAAACTTAGTGCGGACAAGTTTTA
ATCCAGAATTGACCTTTTGACTTAAAGCAGAGGGACTTTGTATAGAAGGTTTGGGGGCTGTGGGGAAGGAGAGTC
CCCTGAAGGTCTGACACGTCTGCCTACCCATTCGTGGTGATCAATTAAATGTAGGTATGAATAAGTTCGAAGCTC
CGTGAGTGAACCATCATATAAACGTGTAGTACAGCTGTTTGTCATAGGGCAGTTGGAAACGGCCTCCTAGGGAAA
AGTTCATAGGGTCTCTTCAGGTTCTTAGTGTCACTTACCTAGATTTACAGCCTCACTTGAATGTGTCACTACTCA
CAGTCTCTTTAATCTTCAGTTTTATCTTTAATCTCCTCTTTTATCTTGGACTGACATTTAGCGTAGCTAAGTGAA
AAGGTCATAGCTGAGATTCCTGGTTCGGGTGTTACGCACACGTACTTAAATGAAAGCATGTGGCATGTTCATCGT
ATAACACAATATGAATACAGGGCATGCATTTTGCAGCAGTGAGTCTCTTCAGAAAACCCTTTTCTACAGTTAGGG
TTGAGTTACTTCCTATCAAGCCAGTACGTGCTAACAGGCTCAATATTCCTGAATGAAATATCAGACTAGTGACAA
GCTCCTGGTCTTGAGATGTCTTCTCGTTAAGGAGTAGGGCCTTTTGGAGGTAAAGGTATA

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FIGURE 6260

MMDQARSAFSNLFGGEPLSYTRFSLARQVDGDNSHVEMKLAVDEEENADNNTKANVTKPKRCSGSICYGTIAVIV
FFLIGFMIGYLGYCKGVEPKTECERLAGTESPVREEPGEDFPAARRLYWDDLKRKLSEKLDSTDFTSTIKLLNEN
SYVPREAGSQKDENLALYVENQFREFKLSKVWRDQHFVKIQVKDSAQNSVIIVDKNGRLVYLVENPGGYVAYSKA
ATVTGKLVHANFGTKKDFEDLYTPVNGSIVIVRAGKITFAEKVANAESLNAIGVLIYMDQTKFPIVNAELSFFGH
AHLGTGDPYTPGFPSFNHTQFPPSRSSGLPNIPVQTISRAAAEKLFGNMEGDCPSDWKTDSTCRMVTSESKNVKL
TVSNVLKEIKILNIFGVIKGFVEPDHYVVVGAQRDAWGPGAAKSGVGTALLLKLAQMFSDMVLKDGFQPSRSIIF
ASWSAGDFGSVGATEWLEGYLSSLHLKAFTYINLDKAVLGTSNFKVSASPLLYTLIEKTMQNVKHPVTGQFLYQD
SNWASKVEKLTLDNAAFPFLAYSGIPAVSFCFCEDTDYPYLGTTMDTYKELIERIPELNKVARAAAEVAGQFVIK
LTHDVELNLDYERYNSQLLSFVRDLNQYRADIKEMGLSLQWLYSARGDFFRATSRLTTDFGNAEKTDRFVMKKLN
DRVMRVEYHFLSPYVSPKESPFRHVFWGSGSHTLPALLENLKLRKQNNGAFNETLFRNQLALATWTIQGAANALS
GDVWDIDNEF

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FIGURE 6261A

TCTTTAAGATTTGTAGCTACTAAGAAAGAAAGGAGCTTTTTTTCCTTGGGCCTTCAAACTGAAAGAACCGCATGA
GCCTGACGGCGCATGGTCTTAACATCAGGCTGTGCAGGAAGAAGCTATCTGCAGATGGATGCCAGCACACACAAG
GAAGCAGAGCTCTGGCAACATTGAGTCAAAGCAAGGACACAACATCAGAGGGACGGCAGAGAATCCTTGTGTGTA
GTCTTTGGTGGCAGTTTGAAAATTGCAAGGAGGGACTTTAAGACTACTTCTGATTTGCAAAGATGGTCTGTGCTC
CGAGCAGGCTAAAGTGACTGGACGAGACGCACTGTTGGAGAAATAAAAATGACTTCCCATTATGTGATTGCCATC
TTTGCCCTGATGAGCTTCTGTTTAGCCACTGCAGGTCCAGAGCCTGGTGCACTGTGTGAACTGTCACCTGTCAGT
GCCTCCCATCCTGTCCAGGCCTTGATGGAGAGCTTCACTGTTTTGTCAGGCTGTGCCAGCAGAGGCACAACTGGG
CTGCCACAGGAGGTGCATGTCCTGAATCTCGCACTGCGCCAGGGGCCTGGCCAGCTACAGAGAGAGGTCACACTT
CACCTGAATCCCATCTCCTCAGTCCACATCCACCACAAGTCTGTTGTGTTCCTGCTCAACTCCCCACACCCCCTG
GTGTGGCATCTGAAGACAGAGAGACTTGCCACTGGGGTCTCCAGACTGTTTTTGGTGTCTGAGGGTTCTGTGGTC
CAGTTTTCATCAGCAAACTTCTCCTTGACAGCAGAAACAGAAGAAAGGAACTTCCCCCATGGAAATGAACATCTG
TTAAATTGGGCCCGAAAAGAGTATGGAGCAGTTACTTCATTCACCGAACTCAAGATAGCAAGAAACATTTATATT
AAAGTGGGGGAAGATCAAGTGTTCCCTCCAAAGTGCAACATAGGGAAGAATTTTCTCTCACTCAATTACCTTGCT
GAGTACCTTCAACCCAAAGCAGCAGAAGGGTGTGTGATGTCCAGCCAGCCCCAGAATGAGGAAGTACACATCATC
GAGCTAATCACCCCCAACTCTAACCCCTACAGTGCTTTCCAGGTGGATATAACAATTGATATAAGACCTTCTCAA
GAGGATCTTGAAGTGGTCAAAAATCTCATCCTGATCTTGAAGTGCAAAAAGTCTGTCAACTGGGTGATCAAATCT
TTTGATGTTAAGGGAAGCCTGAAAATTATTGCTCCTAACAGTATTGGCTTTGGAAAAGAGAGTGAAAGATCTATG
ACAATGACCAAATCAATAAGAGATGACATTCCTTCAACCCAAGGGAATCTGGTGAAGTGGGCTTTGGACAATGGC
TATAGTCCAATAACTTCATACACAATGGCTCCTGTGGCAATAGTATTTCATCTTCGGCTTGAAAATAATGAGGAG
ATGGGAGATGAGGAAGTCCACACTATTCCTCCTGAGCTACGGATCCTGCTGGACCCTGGTGCCCTGCCTGCCCTG
CAGAACCCGCCCATCCGGGGAGGGGAAGGCCAAAATGGAGGCCTTCCGTTTCCTTTCCCAGATATTTCCAGGAGA
GTCTGGAATGAAGAGGGAGAAGATGGGCTCCCTCGGCCAAAGGACCCTGTCATTCCCAGCATACAACTGTTTCCT
GGTCTCAGAGAGCCAGAAGAGGTGCAAGGGAGCGTGGATATTGCCCTGTCTGTCAAATGTGACAATGAGAAGATG
ATCGTGGCTGTAGAAAAAGATTCTTTTCAGGCCAGTGGCTACTCGGGGATGGACGTCACCCTGTTGGATCCTACC
TGCAAGGCCAAGATGAATGGCACACACTTTGTTTTGGAGTCTCCTCTGAATGGCTGCGGTACTCGGCCCCGGTGG
TCAGCCCTTGATGGTGTGGTCTACTATAACTCCATTGTGATACAGGTTCCAGCCCTTGGGGACAGTAGTGGTTGG
CCAGATGGTTATGAAGATCTGGAGTCAGGTGATAATGGATTTCCGGGAGATATGGATGAAGGAGATGCTTCCCTG
TTCACCCGACCTGAAATCGTGGTGTTTAATTGCAGCCTTCAGCAGGTGAGGAACCCCAGCAGCTTCCAGGAACAG
CCCCACGGAAACATCACCTTCAACATGGAGCTATACAACACTGACCTCTTTTTGGTGCCCTCCCAGGGCGTCTTC
TCTGTGCCAGAGAATGGACACGTTTATGTTGAGGTATCTGTTACTAAGGCTGAACAAGAACTGGGATTTGCCATC
CAAACGTGCTTTATCTCTCCATATTCGAACCCTGATAGGATGTCTCATTACACCATTATTGAGAATATTTGTCCT
AAAGATGAATCTGTGAAATTCTACAGTCCCAAGAGAGTGCACTTCCCTATCCCGCAAGCTGACATGGATAAGAAG
CGATTCAGCTTTGTCTTCAAGCCTGTCTTCAACACCTCACTGCTCTTTCTACAGTGTGAGCTGACGCTGTGTACG
AAGATGGAGAAGCACCCCCAGAAGTTGCCTAAGTGTGTGCCTCCTGACGAAGCCTGCACCTCGCTGGACGCCTCG
ATAATCTGGGCCATGATGCAGAATAAGAAGACGTTCACCAAGCCCCTTGCTGTGATCCACCATGAAGCAGAATCT
AAAGAAAAAGGTCCAAGCATGAAGGAACCAAATCCAATTTCTCCACCAATTTTCCATGGTCTGGACACCCTAACC
GTGATGGGCATTGCGTTTGCAGCCTTTGTGATCGGAGCACTCCTGACGGGGGCCTTGTGGTACATCTATTCTCAC
ACAGGGGAGACAGCAGGAAGGCAGCAAGTCCCCACCTCCCCGCCAGCCTCGGAAAACAGCAGTGCTGCCCACAGC
ATCGGCAGCACGCAGAGCACGCCTTGCTCCAGCAGCAGCACGGCCTAGCCCAACCCAGGCCCAACCCGGCCCAAC
CCAGCCCAGCCCAGCTCAGCTCAGCTACTCCAAGGGCAGGACCAATGGCTGAGCCTCGTGTCCAGACTCAGAGGG
CTGGATTTTGGTTCCCTTGTAAAGACAGAGTGAATTTCAGTATAAAGATCACCCGTTGTATTCACCCCACACCCA
GGGCTAGTATAAACATGACCCTGGGCTTCTGTACCACACTAGAATTCATGTGAGAAAGCTAAAATGGTGGTCTTC
TCCACCAGCCCCTCACAGGCTTGGGGGTTTTCTATGTGAAACACATGCCAGTTTTTAAAATGCTGCTTTGTCCAG
GTGAGAACATCCATAATTTGGGGCCCTGAGTTTTACCCAGACTCAAGGAGTTGGTAAAGGGTTAATAGCCAGATA
GTAGAACCAGTGAGGAGATGCGGCCAAAGATTCTTTATATCTGAACCAAGATGTAAAACAAGAAATGCTTTGAGG
CTTTCTAAGCGATCCTCCTGTCTAATTTGCACCTTTGTCTGGATGCACTCTTCTGACCTTGCTGCCACAACCTGT
GGGGTCTGATGTGTCCCAAGATGGGTGCTGCCCTCAGGGACTGCACCCTGACAAGTGTTAAGGCAACATTCCTTG
CTTGTGCCCTGGGCCAAAACCAATGCTGATGACCTTATCAGCTTCCTGTTTCTTCCCATACTGCATACACCACTG

FIGURE 6261B

CAAAATGTCTTAATGCAAATTTTGTATTTCTTACAGGCCTACAGAAATTGAAAATGACCAAAATCAGGAACCACA
GATTTGTGCCCATTCCTAATATTTTGTTCTGCAAATTAATGTATAATTTGAGGTGAAATTCAGTTATAAAGTCAA
GGACGAATTTGCACAGTGATATATTTCTATGTGTATGCAAGTACAAGTATATAATATGTCACCTGGCACATTCAT
TTTCTCAGTTGAAGAAGAGAAAATTTGAAAATGTCCTTATGCTTTTAGAGTTGCAACTTAAGTATATTTGGTAGG
GTGAGTGTTTCCACTCAAAATATGTCAACTTAAAAAAAAAATAGGCCCTTTCATAAAAACCAAACTGTAGCAAGAT
GCAAATGCATGGCAAATCTGTCGGTCTCCAGTTGGTTATCTGAATAGTGTCACCAATTCCACCAAGACAGTGCTG
AGATTGGAAAGGGCACTCATTTGGATTGCCTTACTTCTCTTGCCTTAAATATATCCCATATATTTAATATGTCAA
AAAGGGCTTGAGGTGAATTTCATTAAATGGAATAATATGATGCCACTTTGCAGCTAAAATAAGCTCAGTGATACC
TCCTTGTT

FIGURE 6262

MTSHYVIAIFALMSFCLATAGPEPGALCELSPVSASHPVQALMESFTVLSGCASRGTTGLPQEVHVLNLALRQGP
GQLQREVTLHLNPISSVHIHHKSVVFLLNSPHPLVWHLKTERLATGVSRLFLVSEGSVVQFSSANFSLTAETEER
NFPHGNEHLLNWARKEYGAVTSFTELKIARNIYIKVGEDQVFPPKCNIGKNFLSLNYLAEYLQPKAAEGCVMSSQ
PQNEEVHIIELITPNSNPYSAFQVDITIDIRPSQEDLEVVKNLILILKCKKSVNWVIKSFDVKGSLKIIAPNSIG
FGKESERSMTMTKSIRDDIPSTQGNLVKWALDNGYSPITSYTMAPVAIVFHLRLENNEEMGDEEVHTIPPELRIL
LDPGALPALQNPPIRGGEGQNGGLPFPFPDISRRVWNEEGEDGLPRPKDPVIPSIQLFPGLREPEEVQGSVDIAL
SVKCDNEKMIVAVEKDSFQASGYSGMDVTLLDPTCKAKMNGTHFVLESPLNGCGTRPRWSALDGVVYYNSIVIQV
PALGDSSGWPDGYEDLESGDNGFPGDMDEGDASLFTRPEIVVFNCSLQQVRNPSSFQEQPHGNITFNMELYNTDL
FLVPSQGVFSVPENGHVYVEVSVTKAEQELGFAIQTCFISPYSNPDRMSHYTIIENICPKDESVKFYSPKRVHFP
IPQADMDKKRFSFVFKPVFNTSLLFLQCELTLCTKMEKHPQKLPKCVPPDEACTSLDASIIWAMMQNKKTFTKPL
AVIHHEAESKEKGPSMKEPNPISPPIFHGLDTLTVMGIAFAAFVIGALLTGALWYIYSHTGETAGRQQVPTSPPA
SENSSAAHSIGSTQSTPCSSSSTA

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FIGURE 6263

CGGCGCGATGCGCGGAGACCCCCGCGGGGGCGGCGGCGGCCGTGAGCCCCGATGAGGCCCGAGCGTCCCCGGCCG
CGCGGCAGCGCCCCCGGCCCGATGGAGACCCCGCCGTGGGACCCAGCCCGCAACGACTCGCTGCCGCCCACGCTG
ACCCCGGCCGTGCCCCCCTACGTGAAGCTTGGCCTCACCGTCGTCTACACCGTGTTCTACGCGCTGCTCTTCGTG
TTCATCTACGTGCAGCTCTGGCTGGTGCTGCGTTACCGCCACAAGCGGCTCAGCTACCAGAGCGTCTTCCTCTTT
CTCTGCCTCTTCTGGGCCTCCCTGCGGACCGTCCTCTTCTCCTTCTACTTCAAAGACTTCGTGGCGGCCAATTCG
CTCAGCCCCTTCGTCTTCTGGCTGCTCTACTGCTTCCCTGTGTGCCTGCAGTTTTTCACCCTCACGCTGATGAAC
TTGTACTTCACGCAGGTGATTTTCAAAGCCAAGTCAAAATATTCTCCAGAATTACTCAAATACCGGTTGCCCCTC
TACCTGGCCTCCCTCTTCATCAGCCTTGTTTTCCTGTTGGTGAATTTAACCTGTGCTGTGCTGGTAAAGACGGGA
AATTGGGAGAGGAAGGTTATCGTCTCTGTGCGAGTGGCCATTAATGACACGCTCTTCGTGCTGTGTGCCGTCTCT
CTCTCCATCTGTCTCTACAAAATCTCTAAGATGTCCTTAGCCAACATTTACTTGGAGTCCAAGGGCTCCTCCGTG
TGTCAAGTGACTGCCATCGGTGTCACCGTGATACTGCTTTACACCTCTCGGGCCTGCTACAACCTGTTCATCCTG
TCATTTTCTCAGAACAAGAGCGTCCATTCCTTTGATTATGACTGGTACAATGTATCAGACCAGGCAGATTTGAAG
AATCAGCTGGGAGATGCTGGATACGTATTATTTGGAGTGGTGTTATTTGTTTGGGAACTCTTACCTACCACCTTA
GTCGTTTATTTCTTCCGAGTTAGAAATCCTACAAAGGACCTTACCAACCCTGGAATGGTCCCCAGCCATGGATTC
AGTCCCAGATCTTATTTCTTTGACAACCCTCGAAGATATGACAGTGATGATGACCTTGCCTGGAACATTGCCCCT
CAGGGACTTCAGGGAGGTTTTGCTCCAGATTACTATGATTGGGGACAACAAACTAACAGCTTCCTGGCACAAGCA
GGAACTTTGCAAGACTCAACTTTGGATCCTGACAAACCAAGCCTTGGGTAGCATCAGTTAACAGTTTTATGGACG
ATTCCTCAGATGAAAAGCTTCAGAAAAGCATAGTGACAGCTGAATTTTTAGGGCACTTTTCCTTAAGAAATAGAA
CTTGATTTTTATTTGTTACAGGTTTCCAATGGCCCCATAGGAATAAGCAATAATGTAGACTGATAAACCCTTATT
TTAGTACTAAAGAGGGAGCCTTGCTATTTCAGTGGGTATAATTTAAACTTTTTAAAGAAAATCTGTACTTTTATA
AAGATGTATTTTGTATAACTTAAATAATAATGCTAAAGTATACTAGGGTTTTTTTTTCTTGAGAATGTTACTGCA
ATCATGTTGTAGTTTGCACAGACTTTTATGCATAATTCACTTTAAAAATATAGAATATATGGTCTAATAGTTTTT
TAAAGCTTTTGGACTAAAGTATTCCACAAATCTTACCTCTTTAGGTCACTGATGGTCACTCCGATTCTGAGTGCC
ACATTGGTAGACTCCTAAAATACAGTTGACAACTTAGCCAATTGCAACTCCAGTGTTGATAATTAAAATGAAATG
GTAAAGCAGCAGACTGTAAGGTCTTTAGAGATTTTTTTTTAAGGTTCAGGCCGTAGGTTCCTCAAGGAATCTCTT
AAGTTTTGCCCAAAGACTGGTACTTCCTTTCAGTAGGGCGCTAATGTATACACATTAATGATAAGTTGATAACAT
TAAAAATGTAGCTGACTTATCCTATTAAACCTCCTCTGCTATGTTCAC

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FIGURE 6264

MRPERPRPRGSAPGPMETPPWDPARNDSLPPTLTPAVPPYVKLGLTVVYTVFYALLFVFIYVQLWLVLRYRHKRL
SYQSVFLFLCLFWASLRTVLFSFYFKDFVAANSLSPFVFWLLYCFPVCLQFFTLTLMNLYFTQVIFKAKSKYSPE
LLKYRLPLYLASLFISLVFLLVNLTCAVLVKTGNWERKVIVSVRVAINDTLFVLCAVSLSICLYKISKMSLANIY
LESKGSSVCQVTAIGVTVILLYTSRACYNLFILSFSQNKSVHSFDYDWYNVSDQADLKNQLGDAGYVLFGVVLFV
WELLPTTLVVYFFRVRNPTKDLTNPGMVPSHGFSPRSYFFDNPRRYDSDDDLAWNIAPQGLQGGFAPDYYDWGQQ
TNSFLAQAGTLQDSTLDPDKPSLG

FIGURE 6265A

GAATTCGGGCGCCGCCCGCCCGGCAGTCAGGCAGCGTCGCCGCCGTGGTAGCAGCCTCAGCCGTTTCTGGAGTCT
CGGGCCCACAGTCACCGCCGCTTACCTGCGCCTCCTCGAGCCTCCGGAGTCCCCGTCCGCCCGCACAGGCCGGTT
CGCCGTCTGCGTCTCCCCCACGCCGCCTCGCCTGCCGCCGCGCTCGTCCCTCCGGGCCGACATGAGTGGGGACCA
CCTCCACAACGATTCCCAGATCGAAGCGGATTTCCGATTGAATGATTCTCATAAACACAAAGATAAACACAAAGA
TCGAGAACACCGGCACAAAGAACACAAGAAGGAGAAGGACCGGGAAAAGTCCAAGCATAGCAACAGTGAACATAA
AGATTCTGAAAAGAAACACAAAGAGAAGGAGAAGACCAAACACAAAGATGGAAGCTCAGAAAAGCATAAAGACAA
ACATAAAGACAGAGACAAGGAAAAACGAAAAGAGGAAAAGGTTCGAGCCTCTGGGGATGCAAAAATAAAGAAGGA
GAAGGAAAATGGCTTCTCTAGTCCACCACAAATTAAAGATGAACCTGAAGATGATGGCTATTTTGTTCCTCCTAA
AGAGGATATAAAGCCATTAAAGAGACCTCGAGATGAGGATGATGTTGATTATAAACCTAAGAAAATTAAAACAGA
AGATACCAAGAAGGAGAAGAAAAGAAAACTAGAAGAAGAAGAGGATGGTAAATTGAAAAAACCCAAGAATAAAGA
TAAAGATAAAAAAGTTCCTGAGCCAGATAACAAGAAAAAGAAGCCGAAGAAAGAAGAGGAACAGAAGTGGAAATG
GTGGGAAGAAGAGCGCTATCCTGAAGGCATCAAGTGGAAATTCCTAGAACATAAAGGTCCAGTATTTGCCCCACC
ATATGAGCCTCTTCCAGAGAATGTCAAGTTTTATTATGATGGTAAAGTCATGAAGCTGAGCCCCAAAGCAGAGGA
AGTAGCTACGTTCTTTGCAAAAATGCTCGACCATGAATATACTACCAAGGAAATATTTAGGAAAAATTTCTTTAA
AGACTGGAGAAAGGAAATGACTAATGAAGAGAAGAATATTATCACCAACCTAAGCAAATGTGATTTTACCCAGAT
GAGCCAGTATTTCAAAGCCCAGACGGAAGCTCGGAAACAGATGAGCAAGGAAGAGAAACTGAAAATCAAAGAGGA
GAATGAAAAATTACTGAAAGAATATGGATTCTGTATTATGGATAACCACAAAGAGAGGATTGCTAACTTCAAGAT
AGAGCCTCCTGGACTTTTCCGTGGCCGCGGCAACCACCCCAAGATGGGCATGCTGAAGAGACGAATCATGCCCGA
GGATATAATCATCAACTGTAGCAAAGATGCCAAGGTTCCTTCTCCTCCTCCAGGACATAAGTGGAAAGAAGTCCG
GCATGATAACAAGGTTACTTGGCTGGTTTCCTGGACAGAGAACATCCAAGGTTCCATTAAATACATCATGCTTAA
CCCTAGTTCACGAATCAAGGGTGAGAAGGACTGGCAGAAATACGAGACTGCTCGGCGGCTGAAAAAATGTGTGGA
CAAGATCCGGAACCAGTATCGAGAAGACTGGAAGTCCAAAGAGATGAAAGTCCGGCAGAGAGCTGTAGCCCTGTA
CTTCATCGACAAGCTTGCTCTGAGAGCAGGCAATGAAAAGGAGGAAGGAGAAACAGCGGACACTGTGGGCTGCTG
CTCACTTCGTGTGGAGCACATCAATCTACACCCAGAGTTGGATGGTCAGGAATATGTGGTAGAGTTTGACTTCCT
CGGGAAGGACTCCATCAGATACTATAACAAGGTCCCTGTTGAGAAACGAGTTTTTAAGAACCTACAACTATTTAT
GGAGAACAAGCAGCCCGAGGATGATCTTTTTGATAGACTCAATACTGGTATTCTGAATAAGCATCTTCAGGATCT
CATGGAGGGCTTGACAGCCAAGGTATTCCGTACGTACAATGCCTCCATCACGCTACAGCAGCAGCTAAAAGAACT
GACAGCCCCGGATGAGAACATCCCAGCGAAGATCCTTTCTTATAACCGTGCCAATCGAGCTGTTGCAATTCTTTG
TAACCATCAGAGGGCACCACCAAAAACTTTTGAGAAGTCTATGATGAACTTGCAAACTAAGATTGATGCCAAGAA
GGAACAGCTAGCAGATGCCCGGAGAGACCTGAAAAGTGCTAAGGCTGATGCCAAGGTCATGAAGGATGCAAAGAC
GAAGAAGGTAGTAGAGTCAAAGAAGAAGGCTGTTCAGAGACTGGAGGAACAGTTGATGAAGCTGGAAGTTCAAGC
CACAGACCGAGAGGAAAATAAACAGATTGCCCTGGGAACCTCCAAACTCAATTATCTGGACCCTAGGATCACAGT
GGCTTGGTGCAAGAAGTGGGGTGTCCCAATTGAGAAGATTTACAACAAAACCCAGCGGGAGAAGTTTGCCTGGGC
CATTGACATGGCTGATGAAGACTATGAGTTTTAGCCAGTCTCAAGAGGCAGAGTTCTGTGAAGAGGAACAGTGTG
GTTTGGGAAAGATGGATAAACTGAGCCTCACTTGCCCTCGTGCCTGGGGGAGAGAGGCAGCAAGTCTTAACAAAC
CAACATCTTTGCGAAAAGATAAACCTGGAGATATTATAAGGGAGAGCTGAGCCAGTTGTCCTATGGACAACTTAT
TTAAAAATATTTCAGATATCAAAATTCTAGCTGTATGATTTGTTTTGAATTTTGTTTTTATTTTCAAGAGGGCAA
GTGGATGGGAATTTGTCAGCGTTCTACCAGGCAAATTCACTGTTTCACTGAAATGTTTGGATTCTCTTAGCTACT
GTATGCAAAGTCCGATTATATTGGTGCGTTTTTACAGTTAGGGTTTTGCAATAACTTCTATATTTTAATAGAAAT
AAATTCCTAAACTCCCTTCCCTCTCTCCCATTTCAGGAATTTAAAATTAAGTAGAACAAAAAACCCAGCGCACCT
GTTAGAGTCGTCACTCTCTATTGTCATGGGGATCAATTTTCATTAAACTTGAAGCAGTCGTGGCTTTGGCAGTGT
TTTGGTTCAGACACCTGTTCACAGAAAAAGCATGATGGGAAAATATTTCCTGACTTGAGTGTTCCTTTTTAAATG
TGAATTTTTTTTTTTTTTAATTATTTTAAAATATTTAAACCTTTTTCTTGATCTTAAAGATCGTGTAGATTGGGG
TTGGGGAGGGATGAAGGGCGAGTGAATCTAAGGATAATGAAATAATCAGTGACTGAAACCATTTTCCCATCATCC
TTTGTTCTGAGCATTCGCTGTACCCTTTAAGATATCCATCTTTTTCTTTTTAACCCTAATCTTTCACTTGAAAGA
TTTTATTGTATAAAAAGTTTCACAGGTCAATAAACTTAGAGGAAAATGAGTATTTGGTCCAAAAAAAGGAAAAAT
AATCAAGATTTTAGGGCTTTTATTTTTCTTTTGTAATTGTGTAAAAAATGGAAAAAAACATAAAAAGCAGAATT
TTAATGTGAAGACATTTTTTGCTATAATCATTAGTTTTAGAGGCATTGTTAGTTTAGTGTGTGTGCAGAGTCCAT

FIGURE 6265B

TTCCCACATCTTTCCTCAAGTATCTTCTATTTTTATCATGAATTC

FIGURE 6266

MSGDHLHNDSQIEADFRLNDSHKHKDKHKDREHRHKEHKKEKDREKSKHSNSEHKDSEKKHKEKEKTKHKDGSSE
KHKDKHKDRDKEKRKEEKVRASGDAKIKKEKENGFSSPPQIKDEPEDDGYFVPPKEDIKPLKRPRDEDDVDYKPK
KIKTEDTKKEKKRKLEEEEDGKLKKPKNKDKDKKVPEPDNKKKKPKKEEEQKWKWWEEERYPEGIKWKFLEHKGP
VFAPPYEPLPENVKFYYDGKVMKLSPKAEEVATFFAKMLDHEYTTKEIFRKNFFKDWRKEMTNEEKNIITNLSKC
DFTQMSQYFKAQTEARKQMSKEEKLKIKEENEKLLKEYGFCIMDNHKERIANFKIEPPGLFRGRGNHPKMGMLKR
RIMPEDIIINCSKDAKVPSPPPGHKWKEVRHDNKVTWLVSWTENIQGSIKYIMLNPSSRIKGEKDWQKYETARRL
KKCVDKIRNQYREDWKSKEMKVRQRAVALYFIDKLALRAGNEKEEGETADTVGCCSLRVEHINLHPELDGQEYVV
EFDFLGKDSIRYYNKVPVEKRVFKNLQLFMENKQPEDDLFDRLNTGILNKHLQDLMEGLTAKVFRTYNASITLQQ
QLKELTAPDENIPAKILSYNRANRAVAILCNHQRAPPKTFEKSMMNLQTKIDAKKEQLADARRDLKSAKADAKVM
KDAKTKKVVESKKKAVQRLEEQLMKLEVQATDREENKQIALGTSKLNYLDPRITVAWCKKWGVPIEKIYNKTQRE
KFAWAIDMADEDYEF

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FIGURE 6267

GGCACGAGGTAGAAACCATGAAAAAATTAGATATTGTTTTGTGACTTTTAGACAGTGGTAAATATAGAACCATGA
ATTCTGGTCACATTCCATTTCTCTCCAACATGAAGGATCAAAAAATGTTTTTCAATGTGTTCTTTGTTCCACTGG
AAACTTAGAGTCATGAGTTTATGAGCTGATTTGGTCACCTTCCTCTGCCTTTGTTCACTGTGAGTTCTGATGTCT
TAGTGACTTAGTTCTTAGAAGCTCACGCCTTAGTTTGAAACAGATTCTCCACGGTGGTCCCCAAAACACTGTCTG
CATATCCATAAGAATTGAGCGCTATGGGTGTTAACGTGCATGAGGATCAGTTTGCAGCAGCAAGTACAAAAGGAG
AAGAGGAACATCCGTTGAATGAGTGTGTTTTGTACATAACTTCAGATACTTGTGAACATGCCTTATATTTGTCCA
ACAACTGTCAGAATAAAGAACATTCTAAAATGAGAAAAAAAAAACAGGACCCGTCGCC**ATG**GGCCGTGTGATCCGT
GGACAGAGGAAGGGCGCCGGGTCTGTGTTCCGCGCGCACGTGAAGCACCGTAAAGGCGCTGCGCGCCTGCGCGCC
GTGGATTTCGCTGAGCGGCACGGCTACATCAAGGGCATCGTCAAGGACATCATCCACGACCCGGGCCGCGGCGCG
CCCCTCGCCAAGGTGGTCTTCCGGGATCCGTATCGGTTTAAGAAGCGGACGGAGCTGTTCATTGCCGCCGAGGGC
ATTCACACGGGCCAGTTTGTGTATTGCGGCAAGAAGGCCCAGCTCAACATTGGCAATGTGCTCCCTGTGGGCACC
ATGCCTGAGGGTACAATCGTGTGCTGCCTGGAGGAGAAGCCTGGAGACCGTGGCAAGCTGGCCCGGGCATCAGGG
AACTATGCCACCGTTATCTCCCACAACCCTGAGACCAAGAAGACCCGTGTGAAGCTGCCCTCCGGCTCCAAGAAG
GTTATCTCCTCAGCCAACAGAGCTGTGGTTGGTGTGGTGGCTGGAGGTGGCCGAATTGACAAACCCATCTTGAAG
GCTGGCCGGGCGTACCACAAATATAAGGCAAAGAGGAACTGCTGGCCACGAGTACGGGGTGTGGCCATGAATCCT
GTGGAGCATCCTTTTGGAGGTGGCAACCACCAGCACATCGGCAAGCCCTCCACCATCCGCAGAGATGCCCCTGCT
GGCCGCAAAGTGGGTCTCATTGCTGCCCGCCGGACTGGACGTCTCCGGGGAACCAAGACTGTGCAGGAGAAAGAG
AAC**TAG**TGCTGAGGGCCTCAATAAAGTTTGTGTTTATGCCACAAAAAAAAAAAAAAAAAA

FIGURE 6268

MGRVIRGQRKGAGSVFRAHVKHRKGAARLRAVDFAERHGYIKGIVKDIIHDPGRGAPLAKVVFRDPYRFKKRTEL
FIAAEGIHTGQFVYCGKKAQLNIGNVLPVGTMPEGTIVCCLEEKPGDRGKLARASGNYATVISHNPETKKTRVKL
PSGSKKVISSANRAVVGVVAGGGRIDKPILKAGRAYHKYKAKRNCWPRVRGVAMNPVEHPFGGGNHQHIGKPSTI
RRDAPAGRKVGLIAARRTGRLRGTKTVQEKEN

FIGURE 6269

GTGAAGCAGATCGAGAGCAAGACTGCTTTTCAGGAAGCCTTGGACGCTGCAGGTGATAAACTTGTAGTAGTTGAC
TTCTCAGCCACGTGGTGTGGGCCTTGCAAAATGATCAAGCCTTTCTTTCATGATGTTGCTTCAGAGTGTGAAGTC
AAATGCATGCCAACATTCCAGTTTTTTAAGAAGGGACAAAAGGTGGGTGAATTTTCTGGAGCCAATAAGGAAAAG
CTTGAAGCCACCATTAATGAATTAGTCTAG

FIGURE 6270A

CGCTGCGCCACATCCCACCGGCCCTTACACTGTGGTGTCCAGCAGCATCCGGCTTCATGGGGGGACTTGAACCCT
GCAGCAGGCTCCTGCTCCTGCCTCTCCTGCTGGCTGTAAGTGGTGAGTTAGGGGCTTCCGTGGCTGCCTCCCGGG
TCCCTGGGCTCAGCTTGGGGCAGGGCAGGGAGTGGGGTGGAACGAGAGAACCAAAAGTGGGTGTTGGGATGGGAG
CAGGTCCCCAACCTCCCAAAGCCTGTGGGTTTCTCCCAGAGCCCAAGCCCCCAAGTTTTGTCGTCCGCTACAAGC
AGGGGAGAAGAGACATCTAAGTGTGTTGCCACAGGACAAGTTGTGCAGAAGTAACGCACATAGTCCGGTGGCCCA
GACGCCAGCCCCCTGAGTCCCGCCAGACACGCTCTCCCCCTTGCTAACCTCTTGGCTGTCAGGATCCACCTTCCC
TGGCTTCTAAACTTGCCTCCCCCACCCCCGTCATAACTCTGTGCCTCAGTTTACCTTCTTTTTCCTCCTCAGGTC
TCCGTCCTGTCCAGGCCCAGGCCCAGAGCGGTAGGCCTAGACCCAGCAGTCCCTCTCTCTACCTCCCAGAGACCT
CCCTGTCTCCGTCTCTCCCACACCCTTTCCAAACCTCCCTGCCGCTGACCCCCCTCCCCACAGTTCCCAGCACAC
ACTGACCTCCCCTGACCCCTGTGCTGCAGATTGCAGTTGCTCTACGGTGAGCCCGGGCGTGCTGGCAGGGATCGT
GATGGGAGACCTGGTGCTGACAGTGCTCATTGCCCTGGCCGTGTACTTCCTGGGCCGGCTGGTCCCTCGGGGGCG
AGGGGCTGCGGAGGGTGAGTGGGGCTAGCAGGGGACATCCTGAGGACTTGCCTAGATGGGGGTGGGGGGCTGGGT
AAACTCCCAGATCTCAAACATCCAAAGGGATGGTAATGGAGGTGCTGATTTGGAATGACAAAACACCCTCAACTC
ACCACTCTGCCTGTCTCTGCACCCCACAACACCCCTCACCTCCAGCAGCGACCCGGAAACAGCGTATCACTGAGA
CCGAGTCGCCTTATCAGGTGAGAAAACCAGACTGTCCTCCTCACATTTCACTCCTGCCAGGGATATCTGCCCCAG
ATACTCCTTCATGCCATCAGAGGGACCTCAAAGCCACTCTGCCTAAAGCACCCCCAAACCTTGAAGGCACATGGG
ACATCTGTCCAAAACTGGGCCGAATGATCAACCACAAGCTTATGGTCAGCTTAAAATGTGTGAAGAGGGGCTGGG
CACGGTGACTCAAACCTGTAATCCCAGCACTTTGGGAGACAGAGGCGGGTGGATCACTTGAGGTCAGGAGTTCGA
GACCAACATGGTGAAACCCTGTCTCTACTAAAAATACAAAATTAGCTGGGCGTGGTAACGCATGCCTGTAATCCC
AGCTACTTGGGAGGCTGAGGCAGGAGAATCCTTTGACCCAGGAGGCGGAGGTTGCAGTGAGCCAAGATCACGCAA
TTGCACTCCAGCCTGGGCAACAAGAGGAAAACTCTGTCAAAAAAAAAAAAAGCGTGAAGAGTTAAAAAGAAAAAAA
AAAGGGTGGCTTTGCCTTTGTAAGTGTAAACACAGGCCTTGCCAGAAGTCAGGCCAGGAATTTTCTGGAAGAAAC
CCAGCCCTAGGACGACTGATTTCTGGGAGACGCTCTCAGTAGGGCAGAGAATGTCATTCAGCCCTACCTTGGTAA
CTCTAAAGAGAGGAGTCCTAGAATCTCTTTTTTGGGTTTGAGGACCCTTCATCCCTTTGAGAAACTAAGAAAATC
TAGACTCCCAGAAAAATCTACACAAAAAATACAAAATTGTGCATATAATCTGAGAGCAGTGTAAATGTTCTTTAT
AATTAAAAAAAATTTTTTTTTGGCCAGGCATGGTGGCACACACCTGTAATCCCAGCACTTTGGGAGGCCAAGGTG
GGTGGATCACGAGGTCAGGAGTTCAAGACCAGCCAGGCCAGGATGGTGAAACCCCATCTCTACTAAAAATACAAA
AATTAGCTGGGCATGGTGTCATGCGCCTGTAATTCCAGCTTCTCAGGAGGCTGAGGCAAGAGAATCGCTTGAACC
CAGGGGGCGGAGGTTGCAGTGAGCCTGGGCGACAGAGTGAGACTCCATCTCAAAAAAAAAAAAAAAGACAGGGGTC
TCACTATGTTGCCCCAGCTGGTCTCAAACTCCCAGTCTCAAGTGATCCTCCCGCCTCAGCCTCCGAAAATCTTGG
GATTACAGGCTCAAGCAACCATGCTGGTTGAGTATTCTTGAAGCTCTTTTTTCTTTCTCTACTTTAATTTTTTTT
TTTTTTTGAGATGGAGTCTCATTCTGTCACCCAGGCTGGAGTGCAATGGTGTGGTCTCAGCTCACTGCAACCTCC
ACCTCCCAGGTTCAAGCGATTCTCTTGCCTGAGCCTCCCGAGTAGCTGGAACTACAGGTGCATGCCACCACACCC
GGCTAATTTTTGTATTTTTAGTAGAGATGGGGTTTCACTATGTTGGCCAGGCTGGTCTCAATCTCCTGACCTCGT
GATCCGCCCACCTTTCCCTCCCAAAGTGCTGGGATTAGAGGTGTGAGCCACCGCGCCCGGCCTTAATTTTTTTTT
TTTTTTTAAAGTAGAGATAGGTTCTCACTATGTTGCCCAGGCTGGTCTCAAACTCCTGGGCTCAAGAGATCCTGT
TACCTCGGTCTCCCAAAGTGCTGGGATTATAGGCATGAGTCACCATGCCTGGCTGAAGCTCTTTTTAAAAACTAT
AGAGTATACAAGAGAATCTAGTCATCTATCCCCCTCTCTGTCAATGTTCCTTTTTAACCCTTTAGGGGGTCATGA
GATTCTCTAAGACCTCTCCCCTGAAGAATGCACGCCCAGACTAGTCATCATATATGATTTTAGGGTTTCTGTCTG
AGGCCTGCCCCTGGGGGCCACATAGATCCTCCCCCTACCCCAAGTGTGAACACTGCTGTGTGAAGTCTGATATAT
TGTCTGCAACCAGCTTTGCCTATTCACCTCACTTGTGGATAAAGTTTCTTTGTGAAGTCTAAGAATCTCAGGTTT
GGCTCTGTGATATCCAGAAGACCGAGGGGCCCTTCCAGTTACTGGTGGCAGTGAAATTTTAGGGCAAAGCATTAC
CCGGATGTATTTATTCCCTCTGTGGATGTGTCTAGCACCTATAAGTGCTAAATGCTGGGGACACAGTGACAGAGT
TTATATCCTAGTTAAGACAAACTTAAAGCAAATGAACAAATAAAATAATTTTGGGAGGCACAGTAAAGGAAATAA
ACAGGCTTTTTTTTTTTTTTTTACAGTGGCTGGAGTGTGGGGGGAAGAAACTACAGAGGGGAAATTGAGAAATGC
CTCTCTGAGGAGGTGACGTGAGCTGAGACTTGAAGGGAGAGGGGATCTAGGGGAACAGAGTTTTAGGCAGAGGAA
ACAGCACACGCAGGGACCCTGAGGCTGGGGCACACTGATGAGGCAGAGGAGAAGGGGGAACATTGAATGTACTTG
AATAAAATCCGGATCTCTTTCATGGCTATAAGGCTGAAGAAGCTGCCAGGGGCCTTGCAGGCCACTGGGAGAAGG

FIGURE 6270B

CTGGATTTTATTTGGTGGGTCCCTTCCACTGATGGCCCCCATTCCTTTAGGAGCTCCAGGGTCAGAGGTCGGATG
TCTACAGCGACCTCAACACACAGAGGCCGTATTACAAATGAGCCCGAATCATGACAGTCAGCAACATGATACCTG
GATCCAGCCATTCCTGAAGCCCACCCTGCACCTCATTCCAACTCCTACCGCGATACAGACCCACAGAGTGCCATC
CCTGAGAGACCAGACCGCTCCCCAATACTCTCCTAAAATAAACATGAAGCAC

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FIGURE 6271

ATGGTTGGGTTCAAGGCCACAGATGTGCCCCCTACTGCCACTGTGAAGTTTCTTGGGGCTGGCACAGCTGCCTGC
ATCGCAGATCTCATCACCTTTCCTCTGGATACTGCTAAAGTCCGGTTACAGATCCAAGGAGAAAGTCAGGGGCCA
GTGCGCGCTACAGCCAGCGCCCAGTACCGCGGTGTGATGGGCACCATTCTGACCATGGTGCGTACTGAGGGCCCC
CGAAGCCTCTACAATGGGCTGGTTGCCGGCCTGCAGCGCCAAATGAGCTTTGCCTCTGTCCGCATCGGCCTGTAT
GATTCTGTCAAACAGTTCTACACCAAGGGCTCTGAGCATGCCAGCATTGGGAGCCGCCTCCTAGCAGGCAGCACC
ACAGGTGCCCTGGCTGTGGCTGTGGCCCAGCCCACGGATGTGGTAAAGGTCCGATTCCAAGCTCAGGCCCGGGCT
GGAGGTGGTCGGAGATACCAAAGCACCGTCAATGCCTACAAGACCATTGCCCGAGAGGAAGGGTTCCGGGGCCTC
TGGAAAGGGACCTCTCCCAATGTTGCTCGTAATGCCATTGTCAACTGTGCTGAGCTGGTGACCTATGACCTCATC
AAGGATGCCCTCCTGAAAGCCAACCTCATGACAGATGACCTCCCTTGCCACTTCATTTCTGCCTTTGGGGCAGGC
TTCTGCACCACTGTCATCGCCTCCCCTGTAGACGTGGTCAAGACGAGATACATGAACTCTGCCCTGGGCCAGTAC
AGTAGCGCTGGCCACTGTGCCCTTACCATGCTCCAGAAGGAGGGGCCCCGAGCCTTCTACAAAGGGTTCATGCCC
TCCTTTCTCCGCTTGGGTTCCTGGAACGTGGTGATGTTCGTCACCTATGAGCAGCTGAAACGAGCCCTCATGGCT
GCCTGCACTTCCCGAGAGGCTCCCTTCTGA

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FIGURE 6272

MVGFKATDVPPTATVKFLGAGTAACIADLITFPLDTAKVRLQIQGESQGPVRATASAQYRGVMGTILTMVRTEGP
RSLYNGLVAGLQRQMSFASVRIGLYDSVKQFYTKGSEHASIGSRLLAGSTTGALAVAVAQPTDVVKVRFQAQARA
GGGRRYQSTVNAYKTIAREEGFRGLWKGTSPNVARNAIVNCAELVTYDLIKDALLKANLMTDDLPCHFISAFGAG
FCTTVIASPVDVVKTRYMNSALGQYSSAGHCALTMLQKEGPRAFYKGFMPSFLRLGSWNVVMFVTYEQLKRALMA
ACTSREAPF

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FIGURE 6273

CTCCCAGCCCGTCTCCCCGCTCCAGTTTAGAACCTAATTCCCAATTCCCGGACCGGGCCCAGCCCTGGGCTCTTA
CTGTCCGCTTTTGCTGGGACCTGTTCCACAAATGGGCGTCTTCTGCCTTGGGCCGTGGGGGTTGGGCCGGAAGCT
GCGGACGCCTGGGAAGGGGCCGCTGCAGCTCTTGAGCCGCCTCTGCGGGGACCACTTGCAGGCCATCCCAGCCAA
GAAGGCCCCGGCTGGGCAGGAGGAGCCTGGGACGCCGCCCTCCTCGCCGCTGAGTGCCGAGCAGTTGGACCGGAT
CCAGAGGAACAAGGCCGCGGCCCTGCTCAGACTCGCGGCCCGCAACGTGCCCGTGGGCTTTGGAGAGAGCTGGAA
GAAGCACCTCAGCGGGGAGTTCGGGAAACCGTATTTTATCAAGCTAATGGGATTTGTTGCAGAAGAAAGAAAGCA
TTACACTGTTTATCCACCCCCACACCAAGTCTTCACCTGGACCCAGATGTGTGACATAAAAGATGTGAAGGTTGT
CATCCTGGGACAGGATCCATATCATGGACCTAATCAAGCTCACGGGCTCTGCTTTAGTGTTCAAAGGCCTGTTCC
GCCTCCGCCCAGTTTGGAGAACATTTATAAAGAGTTGTCTACAGACATAGAGGATTTTGTTCATCCTGGCCATGG
AGATTTATCTGGGTGGGCCAAGCAAGGTGTTCTCCTTCTCAACGCTGTCCTCACGGTTCGTGCCCATCAAGCCAA
CTCTCATAAGGAGCGAGGCTGGGAGCAGTTCACTGATGCAGTTGTGTCCTGGCTAAATCAGAACTCGAATGGCCT
TGTTTTCTTGCTCTGGGGCTCTTATGCTCAGAAGAAGGGCAGTGCCATTGATAGGAAGCGGCACCATGTACTACA
GACGGCTCATCCCTCCCCTTTGTCAGTGTATAGAGGGTTCTTTGGATGTAGACACTTTTCAAAGACCAATGAGCT
GCTGCAGAAGTCTGGCAAGAAGCCCATTGACTGGAAGGAGCTGTGATCATCAGCTGAGGGGTGGCCTTTGAGAAG
CTGCTGTTAACGTATTTGCCAGTTACGAAGTTCCACTGAAAATTTTCCTATTAATTCTTAAGTACTCTGCATAAG
GGGGAAAAGCTTCCAGAAAGCAGCCATGAACCAGGCTGTCCAGGAATGGCAGCTGTATCCAACCACAAACAACAA
AGGCTACCCTTTGACCAAATGTCTTTCTCTGCAACATGGCTTCGGCCTAAAATATGCAGAAGACAGATGAGGTCA
AATACTCAGTTGGCTCTCTTTATCTCCCTTGCCTTTATGGTGAAACAGGGGAGATGTGCACCTTTCAGGCACAGC
CCTAGTTTGGCGCCTGCTGCTCCTTGGTTTTGCCTGGTTAGACTTTCAGTGACAGATGTTGGGGTGTTTTTGCTT
AGAAAGGTCCCCTTGTCTCAGCCTTGCAGGGCAGGCATGCCAGTCTCTGCCAGTTCCACTGCCCCCTTGATCTTT
GAAGGAGTCCTCAGGCCCCTCGCAGCATAAGGATGTTTTGCAACTTTCCAGAATCTGGCCCAGAAATTAGGGCTC
AATTTCCTGATTGTAGTAGAGGTTAAGATTGCTGTGAGCTTTATCAGATAAGAGACCGAGAGAAGTAAGCTGGGT
CTTGTTATTCCTTGGGTGTTGGTGGAATAAGCAGTGGAATTTGAACAAGGAAGAGGAGAAAAGGGAATTTTGTCT
TTATGGGGTGGGGTGATTTTCTCCTAGGGTTATGTCCAGTTGGGGTTTTTAAGGCAGCACAGACTGCCAAGTACT
GTTTTTTTTAACCGACTGAAATCACTTTGGGATATTTTTTCCTGCAACACTGGAAAGTTTTAGTTTTTTAAGAAG
TACTCATGCAGATATATATATATATATTTTTCCCAGTCCTTTTTTTAAGAGACGGTCTTTATTGGGTCTGCACCT
CCATCCTTGATCTTGTTAGCAATGCTGTTTTTGCTGTTAGTCGGGTTAGAGTTGGCTCTACGCGAGGTTTGTTAA
TAAAAGTTTGTTAAAAGTTCAAAAAAAAAAAAAAAAA

FIGURE 6274

MGVFCLGPWGLGRKLRTPGKGPLQLLSRLCGDHLQAIPAKKAPAGQEEPGTPPSSPLSAEQLDRIQRNKAAALLR
LAARNVPVGFGESWKKHLSGEFGKPYFIKLMGFVAEERKHYTVYPPPHQVFTWTQMCDIKDVKVVILGQDPYHGP
NQAHGLCFSVQRPVPPPPSLENIYKELSTDIEDFVHPGHGDLSGWAKQGVLLLNAVLTVRAHQANSHKERGWEQF
TDAVVSWLNQNSNGLVFLLWGSYAQKKGSAIDRKRHHVLQTAHPSPLSVYRGFFGCRHFSKTNELLQKSGKKPID
WKEL

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FIGURE 6275

GCCGCTCGCTCGGCTCCGCTCCCTGGCTCGGCTCCCTGCCTCCGCGTCGCAGCCCCCGCCGTAGCCGCCTCCGAG
CCCGCCGCCACATCCTCTGAGAAGATGGCTGTGCCACCCACGTATGCCGATCTTGGCAAATCTGCCAGGGATGTC
TTCACCAAGGGCTATGGATTTGGCTTAATAAAGCTTGATTTGAAAACAAAATCTGAGAATGGATTGGAATTTACA
AGCTCAGGCTCAGCCAACACTGAGACCACCAAAGTGACGGGCAGTCTGGAAACCAAGTACAGATGGACTGAGTAC
GGCCTGACGTTTACAGAGAAATGGAATACCGACAATACACTAGGCACCGAGATTACTGTGGAAGATCAGCTTGCA
CGTGGACTGAAGCTGACCTTCGATTCATCCTTCTCACCTAACACTGGGAAAAAAAATGCTAAAATCAAGACAGGG
TACAAGCGGGAGCACATTAACCTGGGCTGCGACATGGATTTCGACATTGCTGGGCCTTCCATCCGGGGTGCTCTG
GTGCTAGGTTACGAGGGCTGGCTGGCCGGCTACCAGATGAATTTTGAGACTGCAAAATCCCGAGTGACCCAGAGC
AACTTTGCAGTTGGCTACAAGACTGATGAATTCCAGCTTCACACTAATGTGAATGACGGGACAGAGTTTGGCGGC
TCCATTTACCAGAAAGTGAACAAGAAGTTGGAGACCGCTGTCAATCTTGCCTGGACAGCAGGAAACAGTAACACG
CGCTTCGGAATAGCAGCCAAGTATCAGATTGACCCTGACGCCTGCTTCTCGGCTAAAGTGAACAACTCCAGCCTG
ATAGGTTTAGGATACACTCAGACTCTAAAGCCAGGTATTAAACTGACACTGTCAGCTCTTCTGGATGGCAAGAAC
GTCAATGCTGGTGGCCACAAGCTTGGTCTAGGACTGGAATTTCAAGCATAAATGAATACTGTACAATTGTTTAAT
TTTAAACTATTTTGCAGCATAGCTACCTTCAGAATTTAGTGTATCTTTTAATGTTGTATGTCTGGGATGCAAGTA
TTGCTAAATATGTTAGCCCTCCAGGTTAAAGTTGATTCAGCTTTAAGATGTTACCCTTCCAGAGGTACAGAAGAA
ACCTATTTCCAAAAAAGGTCCTTTCAGTGGTAGACTCGGGGAGAACTTGGTGGCCCCTTTGAGATGCCAGGTTTC
TTTTTTATCTAGAAATGGCTGCAAGTGGAAGCGGATAATATGTAGGCACTTTGTAAATTCATATTGAGTAAATGA
ATGAAATTGTGATTTCCTGAGAATCGAACCTTGGTTCCCTAACCCTAATTGATGAGAGGCTCGCTGCTTGATGGT
GTGTACAAACTCACCTGAATGGGACTTTTTTAGACAGATCTTCATGACCTGTTCCCACCCCAGTTCATCATCATC
TCTTTTACACCAAAAGGTCTGCAGGGTGTGGTAACTGTTTCTTTTGTGCCATTTTGGGGTGGAGAAGGTGGATGT
GATGAAGCCAATAATTCAGGACTTATTCCTTCTTGTGTTGTGTTTTTTTTTGGCCCTTGCACCAGAGTATGAAAT
AGCTTCCAGGAGCTCCAGCTATAAGCTTGGAAGTGTCTGTGTGATTGTAATCACATGGTGACAACACTCAGAATC
TAAATTGGACTTCTGTTGTATTCTCACCACTCAATTTGTTTTTTAGCAGTTTAATGGGTACATTTTAGAGTCTTC
CATTTTGTTGGAATTAGATCCTCCCCTTCAAATGCTGTAATTAACAACACTTAAAAAACTTGAATAAAATATTGA
AACCTC

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FIGURE 6276

MAVPPTYADLGKSARDVFTKGYGFGLIKLDLKTKSENGLEFTSSGSANTETTKVTGSLETKYRWTEYGLTFTEKW
NTDNTLGTEITVEDQLARGLKLTFDSSFSPNTGKKNAKIKTGYKREHINLGCDMDFDIAGPSIRGALVLGYEGWL
AGYQMNFETAKSRVTQSNFAVGYKTDEFQLHTNVNDGTEFGGSIYQKVNKKLETAVNLAWTAGNSNTRFGIAAKY
QIDPDACFSAKVNNSSLIGLGYTQTLKPGIKLTLSALLDGKNVNAGGHKLGLGLEFQA

FIGURE 6277

ACATACTTCTTCCTCCTTCGGAAGGGCTGGTAACTTGTTGAGCGGACGGAACGGCGGCGGCGGCGGCACCATCCA
GGCGGGCACCATGGCACGTCCGCGCTCTGGGCGCTCTGGCTGCTGCTCGCGCTGTGCTGGGCGCCCCGGGAGAG
CGGCGCCACCGGAACCGGGAGAAAAGCCAAATGTGAACCCTCCCAATTCCAGTGCACAAATGGTCGCTGTATTAC
GCTGTTGTGGAAATGTGATGGGGATGAAGACTGTGTTGACGGCAGTGATGAAAAGAACTGTGTAAAGAAGACGTG
TGCTGAATCTGACTTCGTGTGCAACAATGGCCAGTGTGTTCCCAGCCGATGGAAGTGTGATGGAGATCCTGACTG
CGAAGATGGTTCAGATGAAAGCCCAGAACAGTGCCATATGAGAACATGCCGCATACATGAAATCAGCTGTGGCGC
CCATTCTACTCAGTGTATCCCAGTGTCCTGGAGATGTGATGGTGAAAATGATTGTGACAGTGGAGAAGATGAAGA
AAACTGTGGCAATATAACATGTAGTCCCGACGAGTTCACCTGCTCCAGTGGCCGCTGCATCTCCAGGAACTTTGT
TTGCAATGGCCAGGATGACTGCAGCGATGGCAGTGATGAGCTGGACTGTGCCCCGCCAACCTGTGGCGCCCATGA
GTTCCAGTGCAGCACCTCCTCCTGCATCCCCATCAGCTGGGTATGCGACGATGATGCAGACTGCTCCGACCAATC
TGATGAGTCCCTGGAGCAGTGTGGCCGTCAGCCAGTCATACACACCAAGTGTCCAGCCAGCGAAATCCAGTGCGG
CTCTGGCGAGTGCATCCATAAGAAGTGGCGATGTGATGGGGACCCTGACTGCAAGGATGGCAGTGATGAGGTCAA
CTGTCCCTCTCGAACTTGCCGACCTGACCAATTTGAATGTGAGGATGGCAGCTGCATCCATGGCAGCAGGCAGTG
TAATGGTATCCGAGACTGTGTCGATGGTTCCGATGAAGTCAACTGCAAAAATGTCAATCAGTGCTTGGGCCCTGG
AAAATTCAAGTGCAGAAGTGGAGAATGCATAGATATCAGCAAAGTATGTAACCAGGAGCAGGACTGCAGGGACTG
GAGTGATGAGCCCCTGAAAGAGTGTCATATAAACGAATGCTTGGTAAATAATGGTGGATGTTCTCATATCTGCAA
AGACCTAGTTATAGGCTACGAGTGTGACTGTGCAGCTGGGTTTGAACTGATAGATAGGAAAACCTGTGGAGATAT
TGATGAATGCCAAAATCCAGGAATCTGCAGTCAAATTTGTATCAACTTAAAAGGCGGTTACAAGTGTGAATGTAG
TCGTGGCTATCAAATGGATCTTGCTACTGGCGTGTGCAAGGCAGTAGGCAAAGAGCCAAGTCTGATCTTCACTAA
TCGAAGAGACATCAGGAAGATTGGCTTAGAGAGGAAAGAATATATCCAACTAGTTGAACAGCTAAGAAACACTGT
GGCTCTCGATGCTGACATTGCTGCCCAGAAACTATTCTGGGCCGATCTAAGCCAAAAGGCTATCTTCAGTGCCTC
AATTGATGACAAGGTTGGTAGACATGTTAAAATGATCGACAATGTCTATAATCCTGCAGCCATTGCTGTTGATTG
GGTGTACAAGACCATCTACTGGACTGATGCGGCTTCTAAGACTATTTCAGTAGCTACCCTAGATGGAACCAAGAG
GAAGTTCCTGTTTAACTCTGACTTGCGAGAGCCTGCCTCCATAGCTGTGGACCCACTGTCTGGCTTTGTTTACTG
GTCAGACTGGGGTGAACCAGCTAAAATAGAAAAAGCAGGAATGAATGGATTCGATAGACGTCCACTGGTGACAGC
GGATATCCAGTGGCCTAACGGAATTACACTTGACCTTATAAAAAGTCGCCTCTATTGGCTTGATTCTAAGTTGCA
CATGTTATCCAGCGTGGACTTGAATGGCCAAGATCGTAGGATAGTACTAAAGTCTCTGGAGTTCCTAGCTCATCC
TCTTGCACTAACAATATTTGAGGATCGTGTCTACTGGATAGATGGGGAAAATGAAGCAGTCTATGGTGCCAATAA
ATTCACTGGATCAGAGCTAGCCACTCTAGTCAACAACCTGAATGATGCCCAAGACATCATTGTCTATCATGAACT
TGTACAGCCATCAGGTAAAAATTGGTGTGAAGAAGACATGGAGAATGGAGGATGTGAATACCTATGCCTGCCAGC
ACCACAAATTAATGATCACTCTCCAAAATATACCTGTTCCTGTCCCAGTGGGTACAATGTAGAGGAAAATGGCCG
AGACTGTCAAAGTACTGCAACTACWGTGACTTACAGTGAGACAAAAGATACGAACACAACAGAAATTTCAGCAAC
TAGTGGACTAGTTCCTGGAGGGATCAATGTGACCACAGCAGTATCAGAGGTCAGTGTTCCCCCAAAAGGGACTTC
TGCCGCATGGGCCATTCTTCCTCTCTTGCTCTTAGTGATGGCAGCAGTAGGTGGCTACTTGATGTGGCGGAATTG
GCAACACAAGAACATGAAAAGCATGAACTTTGACAATCCTGTGTACTTGAAAACCACTGAAGAGGACCTCTCCAT
AGACATTGGTAGACACAGTGCTTCTGTTGGACACACGTACCCAGCAATATCAGTTGTAAGCACAGATGATGATCT
AGCTTGACTTCTGTGACAAATGTTGACCTTTGAGGTCTAAACAAATAATACCCCCGTCGGAATGGTAACCGAGCC
AGCAGCTGAAGTCTCTTTTTCTTCCTCTCGGCTGGAAGAACATCAAGATACCTTTGCGTGGATCAAGCTTGTGTA
CTTGACCGTTTTTATATTACTTTTGTAAATATTCTTGTCCACATTCTACTTCAGCTTTGGATGTGGTTACCGAGT
ATCTGTAACCCTTGAATTTCTAGACAGTATTGCCACCTCTGGCCAAATATGCACTTTCCCTAGAAAGCCATATTC
CAGCAGTGAAACTTGTGCTATAGTGTATACCACCTGTACATACATTGTATAGGCCATCTGTAAATATCCCAGAGA
ACAATCACTATTCTTAAGCACTTTGAAAATATTTCTATGTAAATTATTGTAAACTTTTTCAATGGTTGGGACAAT
GGCAATAGGACAAAACGGGTTACTAAGATGAAATTGCCAAAAAAATTTATAAACTAATTTTGTACGTATGAATGA
TATCTTTGACCTCAATGGAGGTTTGCAAAGACTGAGTGTTCAAACTACTGTACATTTTTTTCAAGTGCTAAAAAA
ATTAAACCAGCAGCTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6278

MGTSALWALWLLLALCWAPRESGATGTGRKAKCEPSQFQCTNGRCITLLWKCDGDEDCVDGSDEKNCVKKTCAES
DFVCNNGQCVPSRWKCDGDPDCEDGSDESPEQCHMRTCRIHEISCGAHSTQCIPVSWRCDGENDCDSGEDEENCG
NITCSPDEFTCSSGRCISRNFVCNGQDDCSDGSDELDCAPPTCGAHEFQCSTSSCIPISWVCDDDADCSDQSDES
LEQCGRQPVIHTKCPASEIQCGSGECIHKKWRCDGDPDCKDGSDEVNCPSRTCRPDQFECEDGSCIHGSRQCNGI
RDCVDGSDEVNCKNVNQCLGPGKFKCRSGECIDISKVCNQEQDCRDWSDEPLKECHINECLVNNGGCSHICKDLV
IGYECDCAAGFELIDRKTCGDIDECQNPGICSQICINLKGGYKCECSRGYQMDLATGVCKAVGKEPSLIFTNRRD
IRKIGLERKEYIQLVEQLRNTVALDADIAAQKLFWADLSQKAIFSASIDDKVGRHVKMIDNVYNPAAIAVDWVYK
TIYWTDAASKTISVATLDGTKRKFLFNSDLREPASIAVDPLSGFVYWSDWGEPAKIEKAGMNGFDRRPLVTADIQ
WPNGITLDLIKSRLYWLDSKLHMLSSVDLNGQDRRIVLKSLEFLAHPLALTIFEDRVYWIDGENEAVYGANKFTG
SELATLVNNLNDAQDIIVYHELVQPSGKNWCEEDMENGGCEYLCLPAPQINDHSPKYTCSCPSGYNVEENGRDCQ
STATTVTYSETKDTNTTEISATSGLVPGGINVTTAVSEVSVPPKGTSAAWAILPLLLLVMAAVGGYLMWRNWQHK
NMKSMNFDNPVYLKTTEEDLSIDIGRHSASVGHTYPAISVVSTDDDLA

FIGURE 6279

GCACTGGCCAGACCCAGCCAGGGATCCTCGTATTCGTCGAGCCTAATTTCCAGCAGCCGGGTAGGCCTCACCAGA
GGCTCCTTTCCGTGAGGCCGCCCCCAATTCCTGCCCCTATTCTCTGCCTGGGAGATGGCTTCCCCGAGCCCCCCG
CCGGAGTCGAAGGAGGAGTGGGATTATCTGGACCCAGCTCAGAGAAGCCTGTATAAAGATGTCATGATGGAGAAT
TATGGAAACCTGGTCTCACTGGATGTTTTGAACAGAGATAAGGATGAGGAGCCAACTGTAAAACAAGAGATTGAA
GAAATTGAGGAAGAAGTGGAACCACAGGGTGTAATAGTTACAAGAATCAAAAGTGAAATTGACCAGGATCCTATG
GGTAGAGAAACATTTGAACTTGTTGGTAGGTTAGATAAACAAAGAGGGATCTTCCTATGGGAAATACCAAGGGAA
TCTTTGACCCAGGAACAGAGAATGTTCAGAGAAAACACTAACATTATCCGTAAAAGACCAAACTCAGAAGAGAAA
TGCCATAAATGTGAAGAATGTGGAAAGGGTTTTGTCCGCAAGGCCCATTTCATTCAACATCAAAGGGTCCATACT
GGTGAGAAACCTTTTCAGTGCAATGAATGTGGGAAAAGTTTTAGTCGCAGTTCATTTGTTATTGAACATCAGAGA
ATTCACACTGGGGAAAGGCCCTATGAGTGTAATTACTGTGGAAAAACCTTTAGTGTGAGCTCAACCCTTATTAGA
CATCAGAGAATCCACACTGGAGAAAGACCCTATCAGTGTAATCAGTGTAAACAGAGCTTCAGCCAGAGAAGGAGC
CTTGTTAAACATCAAAGGATTCATACAGGTGAGAAACCCCATAAATGTAGTGACTGTGGGAAAGCCTTCAGTTGG
AAATCACACCTTATTGAGCATCAAAGAACTCACACTGGTGAGAAACCTTATCACTGTACCAAATGTAAGAAGAGC
TTTAGTCGAAATTCATTGCTTGTTGAGCATCAAAGAATTCACACTGGGGAAAGACCCCATAAATGTGGTGAATGT
GGGAAAGCCTTTCGATTAAGCACATACCTTATACAACACCAAAAAATTCACACTGGCGAGAAGCCTTTTCTTTGT
ATTGAGTGTGGAAAAAGTTTCAGTCGGAGCTCATTCCTTATTGAACATCAGAGGATCCATACTGGTGAAAGACCT
TATCAGTGCAAAGAGTGTGGGAAAAGTTTCAGTCAGCTTTGCAACCTTACTCGTCATCAGAGAATTCACACAGGA
GACAAGCCCCATAAATGTGAGGAATGTGGAAAAGCCTTTAGTAGAAGCTCAGGTCTTATTCAGCATCAGAGAATT
CACACCAGGGAGAAGACTTATCCATACAATGAAACTAAGGAAAGTTTTGATCCAAATTGCAGTCTTGTTATACAG
CAGGAAGTCTACCCTAAGGAGAAATCTTATAAATGTGATGAATGTGGGAAAACTTTTAGTGTTAGTGCTCATCTT
GTACAACATCAAAGAATCCACACTGGTGAAAAGCCCTATCTATGTACTGTCTGTGGGAAGAGCTTCAGCCGGAGC
TCATTTCTTATTGAACATCAGAGAATCCACACTGGAGAGAGACCCTATCTGTGCAGACAGTGTGGAAAAAGCTTT
AGTCAGCTTTGTAATCTTATTCGACATCAGGGTGTTCACACAGGTAATAAACCCCATAAATGTGATGAATGTGGA
AAGGCCTTTAGCCGGAACTCGGGTCTTATTCAGCATCAGAGAATACACACAGGAGAGAAACCTTATAAGTGTGAG
AAGTGCGACAAAAGTTTCAGTCAACAGCGCAGTCTTGTCAACCATCAGATGATCCATGCAGAGGTGAAAACCCAA
GAAACCCATGAATGTGATGCTTGTGGTGAAGCCTTTAATTGCCGTATTTCTCTTATTCAGCATCAGAAATTGCAC
ACAGCATGGATGCAATAAATGTAGAGCAATACATAAGCTCAATTTGATTTGAGACTAGTACCCAAGTGCAGTTTT
AGTATGGCTCAACATGGATCAGATTTAGTGATAAAGCAAATTCTCCTTGGGCCTCAGGCAAATAGTTTCTAAAGA
TTCTGTGAATAGTGGACAACTGCCCATGAGCATTTGACTTCCCTTACTCTTTGATGATCGTAGAGAAAGACTTGG
TAATTTATCTAAGTATCTTTAATAAATCTTTCAGCAGAGAGATTAAACCTAGGTTCAGAGCATGGGTGCTCTGAG
GGACAAAGTTGGATTAGTATAAGGGAGCTGGAGCAGCTGATAGTGGAAAACAGAATAATGATTCAAAGAGTCTTC
TGTCACCATGTCATATTGTGGGTCTTTCAGTTCCATGATATGTTTGGCTCTGCATGCCAAAGTCCCAGTGATTAA
GCATATATAAGTTGTCAAGGAAACAAAGCCCAAATGTTTTTAAAACAAGTATACAGTTTTTGTCATTGTTTAAGA
AAGCCATTTGTTTGGCATGTGAGTTAAAGGCAGTTCCAATGCCTGATGGTTCCCCAGATCTATGAAATGGGTGGA
CCATTAACCTTACATGTAAAGATTATGTTAGTAATTAAGAAACCCTAACAAAGGTGTTACCAAGGAACCTTTGGG
AGTGCCTTTTTTGTTTTTCAAGATGGACCCAAAAAAAGTGGAGGAAGATATTGTTCTTTTGTGCCCTCCTACCTG
TGAGAGATATTTGTAGTCCTATGTGAATGAGCTTATCCCTCCACAACCAGGTGCATATGAAAGTGTACATATTAT
GACTGCCAAGTATTGGAAATGAAAAGACCTGGAGTCTATGCTAGGAAGCTGAGATATTTTGGTATTGCATTGGTT
TTTATGGTAACTAGGTTTTGCATGCAATTAAAAATCCTTATTTCTTGTTCTAGGGCTTCCCTTAGTTAATGGTTA
TTATAAACCTATTAATTCATCTGTTTTAACCATTAAAACCTGTTTTGTTTTTCGCTTTGAAAAAAAAAAAAAAAA
AA

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FIGURE 6280

MASPSPPPESKEEWDYLDPAQRSLYKDVMMENYGNLVSLDVLNRDKDEEPTVKQEIEEIEEEVEPQGVIVTRIKS
EIDQDPMGRETFELVGRLDKQRGIFLWEIPRESLTQEQRMFRENTNIIRKRPNSEEKCHKCEECGKGFVRKAHFI
QHQRVHTGEKPFQCNECGKSFSRSSFVIEHQRIHTGERPYECNYCGKTFSVSSTLIRHQRIHTGERPYQCNQCKQ
SFSQRRSLVKHQRIHTGEKPHKCSDCGKAFSWKSHLIEHQRTHTGEKPYHCTKCKKSFSRNSLLVEHQRIHTGER
PHKCGECGKAFRLSTYLIQHQKIHTGEKPFLCIECGKSFSRSSFLIEHQRIHTGERPYQCKECGKSFSQLCNLTR
HQRIHTGDKPHKCEECGKAFSRSSGLIQHQRIHTREKTYPYNETKESFDPNCSLVIQQEVYPKEKSYKCDECGKT
FSVSAHLVQHQRIHTGEKPYLCTVCGKSFSRSSFLIEHQRIHTGERPYLCRQCGKSFSQLCNLIRHQGVHTGNKP
HKCDECGKAFSRNSGLIQHQRIHTGEKPYKCEKCDKSFSQQRSLVNHQMIHAEVKTQETHECDACGEAFNCRISL
IQHQKLHTAWMQ

FIGURE 6281

ATGGAGGGGATCAGTATATACACTTCAGATAACTACACCGAGGAAATGGGCTCAGGGGACTATGACTCCATGAAG
GAACCCTGTTTCCGTGAAGAAAATGCTAATTTCAATAAAATCTTCCTGCCCACCATCTACTCCATCATCTTCTTA
ACTGGCATTGTGGGCAATGGATTGGTCATCCTGGTCATGGGTTACCAGAAGAAACTGAGAAGCATGACGGACAAG
TACAGGCTGCACCTGTCAGTGGCCGACCTCCTCTTTGTCATCACGCTTCCCTTCTGGGCAGTTGATGCCGTGGCA
AACTGGTACTTTGGGAACTTCCTATGCAAGGCAGTCCATGTCATCTACACAGTCAACCTCTACAGCAGTGTCCTC
ATCCTGGCCTTCATCAGTCTGGACCGCTACCTGGCCATCGTCCACGCCACCAACAGTCAGAGGCCAAGGAAGCTG
TTGGCTGAAAAGGTGGTCTATGTTGGCGTCTGGATCCCTGCCCTCCTGCTGACTATTCCCGACTTCATCTTTGCC
AACGTCAGTGAGGCAGATGACAGATATATCTGTGACCGCTTCTACCCCAATGACTTGTGGGTGGTTGTGTTCCAG
TTTCAGCACATCATGGTTGGCCTTATCCTGCCTGGTATTGTCATCCTGTCCTGCTATTGCATTATCATCTCCAAG
CTGTCACACTCCAAGGGCCACCAGAAGCGCAAGGCCCTCAAGACCACAGTCATCCTCATCCTGGCTTTCTTCGCC
TGTTGGCTGCCTTACTACATTGGGATCAGCATCGACTCCTTCATCCTCCTGGAAATCATCAAGCAAGGGTGTGAG
TTTGAGAACACTGTGCACAAGTGGATTTCCATCACCGAGGCCCTAGCTTTCTTCCACTGTTGTCTGAACCCCATC
CTCTATGCTTTCCTTGGAGCCAAATTTAAAACCTCTGCCCAGCACGCACTCACCTCTGTGAGCAGAGGGTCCAGC
CTCAAGATCCTCTCCAAAGGAAAGCGAGGTGGACATTCATCTGTTTCCACTGAGTCTGAGTCTTCAAGTTTTCAC
TCCAGCTAA

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FIGURE 6282

MEGISIYTSDNYTEEMGSGDYDSMKEPCFREENANFNKIFLPTIYSIIFLTGIVGNGLVILVMGYQKKLRSMTDK
YRLHLSVADLLFVITLPFWAVDAVANWYFGNFLCKAVHVIYTVNLYSSVLILAFISLDRYLAIVHATNSQRPRKL
LAEKVVYVGVWIPALLLTIPDFIFANVSEADDRYICDRFYPNDLWVVVFQFQHIMVGLILPGIVILSCYCIIISK
LSHSKGHQKRKALKTTVILILAFFACWLPYYIGISIDSFILLEIIKQGCEFENTVHKWISITEALAFFHCCLNPI
LYAFLGAKFKTSAQHALTSVSRGSSLKILSKGKRGGHSSVSTESESSSFHSS

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FIGURE 6283

GGCACGAGGCTCTTGGTACCTCAGCGCGAGCGCCAGGCGTCCGGCCGCCGTGGCTATGTTCGTGTCCGATTTCCG
CAAAGAGTTCTACGAGGTGGTCCAGAGCCAGAGGGTCCTTCTCTTCGTGGCCTCGGACGTGGATGCTCTGTGTGC
GTGCAAGATCCTTCAGGCCTTGTTCCAGTGTGACCACGTGCAATATACGCTGGTTCCAGTTTCTGGGTGGCAAGA
ACTTGAAACTGCATTTCTTGAGCATAAAGAACAGTTTCATTATTTTATTCTCATAAACTGTGGAGCTAATGTAGA
CCTATTGGATATTCTTCAACCTGATGAAGACACTATATTCTTTGTGTGTGACACCCATAGGCCAGTCAATGTCGT
CAATGTATACAACGATACCCAGATCAAATTACTCATTAAACAAGATGATGACCTTGAAGTTCCCGCCTATGAAGA
CATCTTCAGGGATGAAGAGGAGGATGAAGAGCATTCAGGAAATGACAGTGATGGGTCAGAGCCTTCTGAGAAGCG
CACACGGTTAGAAGAGGAGATAGTGGAGCAAACCATGCGGAGGAGGCAGCGGCGAGAGTGGGAGGCCCGGAGAAG
AGACATCCTCTTTGACTACGAGCAGTATGAATATCATGGGACATCGTCAGCCATGGTGATGTTTGAGCTGGCTTG
GATGCTGTCCAAGGACCTGAATGACATGCTGTGGTGGGCCATCGTTGGACTAACAGACCAGTGGGTGCAAGACAA
GATCACTCAAATGAAATACGTGACTGATGTTGGTGTCCTGCAGCGCCACGTTTCCCGCCACAACCACCGGAACGA
GGATGAGGAGAACACACTCTCCGTGGACTGCACACGGATCTCCTTTGAGTATGACCTCCGCCTGGTGCTCTACCA
GCACTGGTCCCTCCATGACAGCCTGTGCAACACCAGCTATACCGCAGCCAGGTTCAAGCTGTGGTCTGTGCATGG
ACAGAAGCGGCTCCAGGAGTTCCTTGCAGACATGGGTCTTCCCCTGAAGCAGGTGAAGCAGAAGTTCCAGGCCAT
GGACATCTCCTTGAAGGAGAATTTGCGGGAAATGATTGAAGAGTCTGCAAATAAATTTGGGATGAAGGACATGCG
CGTGCAGACTTTCAGCATTCATTTTGGGTTCAAGCACAAGTTTCTGGCCAGCGACGTGGTCTTTGCCACCATGTC
TTTGATGGAGAGCCCCGAGAAGGATGGCTCAGGGACAGATCACTTCATCCAGGCTCTGGACAGCCTCTCCAGGAG
TAACCTGGACAAGCTGTACCATGGCCTGGAACTCGCCAAGAAGCAGCTGCGAGCCACCCAGCAGACCATTGCCAG
CTGCCTTTGCACCAACCTCGTCATCTCCCAGGGGCCTTTCCTGTACTGCTCTCTCATGGAGGGCACTCCAGATGT
CATGCTGTTCTCTAGGCCGGCATCCCTAAGCCTGCTCAGCAAACACCTGCTCAAGTCCTTTGTGTGTTCGACAAA
GAACCGGCGCTGCAAACTGCTGCCCCTGGTGATGGCTGCCCCCCTGAGCATGGAGCATGGCACAGTGACCGTGGT
GGGCATCCCCCCAGAGACCGACAGCTCGGACAGGAAGAACTTTTTTGGGAGGGCGTTTGAGAAGGCAGCGGAAAG
CACCAGCTCCCGGATGCTGCACAACCATTTTGACCTCTCAGTAATTGAGCTGAAAGCTGAGGATCGGAGCAAGTT
TCTGGACGCACTTATTTCCCTCCTGTCCTAGGAATTTGATTCTTCCAGAATGACCTTCTTATTTATGTAACTGGC
TTTCATTTAGATTGTAAGTTATGGACATGATTTGAGATGTAGAAGCCATTTTTTATTAAATAAAATGCTTATTTT
AAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 6284

MFVSDFRKEFYEVVQSQRVLLFVASDVDALCACKILQALFQCDHVQYTLVPVSGWQELETAFLEHKEQFHYFILI
NCGANVDLLDILQPDEDTIFFVCDTHRPVNVVNVYNDTQIKLLIKQDDDLEVPAYEDIFRDEEEDEEHSGNDSDG
SEPSEKRTRLEEEIVEQTMRRRQRREWEARRRDILFDYEQYEYHGTSSAMVMFELAWMLSKDLNDMLWWAIVGLT
DQWVQDKITQMKYVTDVGVLQRHVSRHNHRNEDEENTLSVDCTRISFEYDLRLVLYQHWSLHDSLCNTSYTAARF
KLWSVHGQKRLQEFLADMGLPLKQVKQKFQAMDISLKENLREMIEESANKFGMKDMRVQTFSIHFGFKHKFLASD
VVFATMSLMESPEKDGSGTDHFIQALDSLSRSNLDKLYHGLELAKKQLRATQQTIASCLCTNLVISQGPFLYCSL
MEGTPDVMLFSRPASLSLLSKHLLKSFVCSTKNRRCKLLPLVMAAPLSMEHGTVTVVGIPPETDSSDRKNFFGRA
FEKAAESTSSRMLHNHFDLSVIELKAEDRSKFLDALISLLS

FIGURE 6285

ATGGAAGACCTGGGGGAAAACACCATGGTTTTATCCACCCTGAGATCTTTGAACAACTTCATCTCTCAGCGTGTG
GAGGGAGGCTCTGGACTGGATATTTCTACCTCGGCCCCAGGTTCTCTGCAGATGCAGTACCAGCAGAGCATGCAG
CTGGAGGAAAGAGCAGAGCAGATCCGTTCGAAGTCCCACCTCATCCAGGTGGAGCGGGAGAAAATGCAGATGGAG
CTGAGTCACAAGAGGGCTCGAGTGGAGCTGGAGAGAGCAGCCAGCACCAGTGCCAGGAACTACGAGCGTGAGGTC
GACCGCAACCAGGAGCTCCTGACGCGCATCCGGCAGCTTCAGGAGCGGGAGGCCGGGGCGGAGGAGAAGATGCAG
GAGCAGCTGGAGCGCAACAGGCAGTGTCAGCAGAACTTGGATGCTGCCAGCAAGAGGCTGCGTGAGAAAGAGGAC
AGTCTGGCCCAGGCTGGCGAGACCATCAACGCACTGAAGGGGAGGATCTCGGAACTGCAGTGGAGCGTGATGGAC
CAGGAGATGCGGGTGAAGCGCCTGGAGTCGGAGAAGCAGGAGCTGCAGGAGCAGCTGGACCTGCAACACAAAAAA
TGCCAGGAAGCCAATCAGAAAATCCAGGAACTCCAGGCCAGCCAAGAAGCAAGAGCAGACCACGAGCAGCAGATT
AAGGATCTGGAGCAGAAGCTGTCCCTGCAAGAGCAGGATGCAGCGATTGTGAAGAACATGAAGTCTGAGCTGGTA
CGGCTCCCTAGGCTGGAACGGGAGCTGAAGCAGCTGCGGGAGGAGAGCGCGCACCTGCGGGAGATGAGAGAGACC
AACGGGCTGCTCCAGGAAGAGCTGGAAGGGCTGCAGAGGAAGCTGGGGCGCCAGGAGAAGATGCAGGAGACGCTG
GTTGGCTTGGAGCTGGAGAACGAGAGGCTGCTGGCCAAGCTGCAAAGCTGGGAGAGACTGGACCAGACCATGGGC
CTGAGCATCAGGACTCCAGAAGACCTTTCCAGATTCGTGGTTGAGCTGCAGCAGAGGGAGCTTGCCTTGAAGGAC
AAGAACAGCGCCGTCACCAGCAGCGCCCGGGGGCTGGAGAAGGCCAGGCAGCAGCTGCAGGAGGAGCTCCGGCAG
GTCAGCGGCCAGCTGTTGGAGGAGAGGAAGAAGCGCGAGACCCACGAGGCGCTGGCCCGGAGGCTCCAGAAACGG
GTCCTGCTGCTCACCAAGGAGCGGGACGGTATGCGGGCCATCCTGGGGTCCTACGACAGCGAGCTGACCCCGGCC
GAGTACTCACCCCAGCTGACGCGGCGCATGCGGGAGGCTGAGGATATGGTGCAGAAGGTGCACAGCCACAGCGCC
GAGATGGAGGCTCAGCTGTCGCAGGCCCTGGAGGAGCTGGGAGGCCAGAAACAAAGAGCAGACATGCTGGAGATG
GAGCTGAAGATGCTGAAGTCTCAGTCCAGCTCTGCCGAACAGAGCTTCCTGTTCTCCAGGGAGGAGGCGGACACG
CTCAGGTTGAAGGTCGAGGAGCTGGAAGGCGAGCGGAGTCGGCTGGAGGAGGAAAAGAGGATGCTGGAGGCACAG
CTGGAGCGGCGAGCTCTGCAGGGTGACTATGACCAGAGCAGGACCAAAGTGCTGCACATGAGCCTGAACCCCACC
AGTGTGGCCAGGCAGCGCCTGCGCGAGGACCACAGCCAGCTGCAGGCGGAGTGCGAGCGACTGCGCGGGCTCCTG
CGCGCCATGGAGAGAGGAGGCACCGTCCCAGCCGACCTTGAGGCTGCCGCCGCGAGTCTGCCATCGTCCAAGGAG
GTGGCAGAGCTGAAGAAGCAGGTGGAGAGTGCCGAGCTGAAGAACCAGCGGCTCAAGGAGGTTTTCCAGACCAAG
ATCCAGGAGTTCCGCAAGGCCTGCTACACGCTCACCGGCTACCAGATCGACATCACCACGGAGAACCAGTACCGG
CTGACCTCGCTGTACGCCGAGCACCCAGGCGACTGCCTCATCTTCAAGGCCACCAGCCCCTCGGGTTCCAAGATG
CAGCTACTGGAGACAGAGTTCTCACACACCGTGGGCGAGCTCATCGAGGTGCACCTGCGGCGCCAGGACAGCATC
CCTGCCTTCCTCAGCTCGCTCACCCTCGAGCTCTTCAGCCGCCAGACCGTGGCGTAGCCTGCAGGCTCGGGGGCA
TAGCCGGAGCCACTCTGCTTGGCCTGACCTGCAGGTCCCCTGCCCCGCCAGCCACAGGCTGGGTGCACGTCCTGC
CTCTCCAGCCCCACAGGGCAGCAGCATGACTGACAGACACGCTGGGACCTACGTCGGGCTTCCTGCTGGGGCGGC
CAGCACCCTCTCCACGTGCAGACCCCATGCGTCCCGGAGCCTGGTGTGTGGGCGTCGGCCACCAGCCTGGGTTCC
TCACCTTGTGAAATAAAATCTTCT

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FIGURE 6286

MEDLGENTMVLSTLRSLNNFISQRVEGGSGLDISTSAPGSLQMQYQQSMQLEERAEQIRSKSHLIQVEREKMQME
LSHKRARVELERAASTSARNYEREVDRNQELLTRIRQLQEREAGAEEKMQEQLERNRQCQQNLDAASKRLREKED
SLAQAGETINALKGRISELQWSVMDQEMRVKRLESEKQELQEQLDLQHKKCQEANQKIQELQASQEARADHEQQI
KDLEQKLSLQEQDAAIVKNMKSELVRLPRLERELKQLREESAHLREMRETNGLLQEELEGLQRKLGRQEKMQETL
VGLELENERLLAKLQSWERLDQTMGLSIRTPEDLSRFVVELQQRELALKDKNSAVTSSARGLEKARQQLQEELRQ
VSGQLLEERKKRETHEALARRLQKRVLLLTKERDGMRAILGSYDSELTPAEYSPQLTRRMREAEDMVQKVHSHSA
EMEAQLSQALEELGGQKQRADMLEMELKMLKSQSSSAEQSFLFSREEADTLRLKVEELEGERSRLEEEKRMLEAQ
LERRALQGDYDQSRTKVLHMSLNPTSVARQRLREDHSQLQAECERLRGLLRAMERGGTVPADLEAAAAASLPSSKE
VAELKKQVESAELKNQRLKEVFQTKIQEFRKACYTLTGYQIDITTENQYRLTSLYAEHPGDCLIFKATSPSGSKM
QLLETEFSHTVGELIEVHLRRQDSIPAFLSSLTLELFSRQTVA

FIGURE 6287

GAGAAGGCACTGCACGGCCACCCCCAACTGCCCCGCACTGTCCCTACCCGGGCAGCCATGCGAGCGGCTGGAACT
CTGCTGGCCTTCTGCTGCCTGGTCTTGAGCACCACTGGGGGCCCTTCCCCAGATACTTGTTCCCAGGACCTTAAC
TCACGTGTGAAGCCAGGATTTCCTAAAACAATAAAGACCAATGACCCAGGAGTCCTCCAAGCAGCCAGATACAGT
GTTGAAAAGTTCAACAACTGCACGAACGACATGTTCTTGTTCAAGGAGTCCCGCATCACAAGGGCCCTAGTTCAG
ATAGTGAAAGGCCTGAAATATATGCTCGAGGTGGAAATTGGCAGAACTACCTGCAAGAAAAACCAGCACCTGCGT
CTGGATGACTGTGACTTCCAAACCAACCACACCTTGAAGCAGACTCTGAGCTGCTACTCTGAAGTCTGGGTCGTG
CCCTGGCTCCAGCACTTCGAGGTGCCTGTCCTCCGTTGTCACTGACCCCCGCCTCTTCAGCAAGACCACAGCCAT
GACAAACACCAGGATGCATGCTCCTTGTCCCCTCCCACCCGCCTCATGACCCAGCCTCACAGACCCTCTCAGGCC
TCTGACGAGTGAGCGGGTGAAGTGCCACTGGGTCACCGCAGGGCAGCTGGAATGGCAGCATGGTAGCGCCTCCTA
ACAGATTAAATAGATCACATTTGCTTCTAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 6288

MRAAGTLLAFCCLVLSTTGGPSPDTCSQDLNSRVKPGFPKTIKTNDPGVLQAARYSVEKFNNCTNDMFLFKESRI
TRALVQIVKGLKYMLEVEIGRTTCKKNQHLRLDDCDFQTNHTLKQTLSCYSEVWVVPWLQHFEVPVLRCH

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FIGURE 6289

ATTCCTCGGTATATCTTGGGGACTGGAGGACCTGTCTGGTTATTATACAGACGCATAACTGGAGGTGGGATCCAC
ACAGCTCAGAACAGCTGGATCTTGCTCAGTCTCTGCCAGGGGAAGATTCCTTGGAGGAGGCCCTGCAGCGAC**ATG**

GAGGGAGCTGCTTTGCTGAGAGTCTCTGTCCTCTGCATCTGGATGAGTGCACTTTTCCTTGGTGTGGGAGTGAGG
GCAGAGGAAGCTGGAGCGAGGGTGCAACAAAACGTTCCAAGTGGGACAGATACTGGAGATCCTCAAAGTAAGCCC
CTCGGTGACTGGGCTGCTGGCACCATGGACCCAGAGAGCAGTATCTTTATTGAGGATGCCATTAAGTATTTCAAG
GAAAAAGTGAGCACACAGAATCTGCTACTCCTGCTGACTGATAATGAGGCCTGGAACGGATTCGTGGCTGCTGCT
GAACTGCCCAGGAATGAGGCAGATGAGCTCCGTAAAGCTCTGGACAACCTTGCAAGACAAATGATCATGAAAGAC
AAAAACTGGCACGATAAAGGCCAGCAGTACAGAAACTGGTTTCTGAAAGAGTTTCCTCGGTTGAAAAGTGAGCTT
GAGGATAACATAAGAAGGCTCCGTGCCCTTGCAGATGGGGTTCAGAAGGTCCACAAAGGCACCACCATCGCCAAT
GTGGTGTCTGGCTCTCTCAGCATTTCCTCTGGCATCCTGACCCTCGTCGGCATGGGTCTGGCACCCTTCACAGAG
GGAGGCAGCCTTGTACTCTTGGAACCTGGGATGGAGTTGGGAATCACAGCAGCTTTGACCGGGATTACCAGCAGT
ACCATAGACTACGGAAAGAAGTGGTGGACACAAGCCCAAGCCCACGACCTGGTCATCAAAAGCCTTGACAAATTG
AAGGAGGTGAAGGAGTTTTTGGGTGAGAACATATCCAACTTTCTTTCCTTAGCTGGCAATACTTACCAACTCACA
CGAGGCATTGGGAAGGACATCCGTGCCCTCAGACGAGCCAGAGCCAATCTTCAGTCAGTACCGCATGCCTCAGCC
TCACGCCCCCGGGTCACTGAGCCAATCTCAGCTGAAAGCGGTGAACAGGTGGAGAGAGTTAATGAACCCAGCATC
CTGGAAATGAGCAGAGGAGTCAAGCTCACGGATGTGGCCCCTGTAGGCTTCTTTCTTGTGCTGGATGTAGTCTAC
CTCGTGTACGAATCAAAGCACTTACATGAGGGGGCAAAGTCAGAGACAGCTGAGGAGCTGAAGAAGGTGGCTCAG
GAGCTGGAGGAGAAGCTAAACATGCTCAACAATAATTATAAGATTCTGCAGGCGGACCAAGAACTG**TGA**CCACAG
GGCAGGGCAGCCACCAGGAGAGATATGCCTGGCAGGGGCCAGGACAAAATGCAAACTTTTTTTTTTCTGAGACGG
AGTCTTGCTCTGTCGCCAAGGTGGAGCTTGCAGTGAGCCGAGATATCGCCACTGCACTCCAGCCTGGGTGACAGA
GCGAGACTCCGTCTCAAAAAAAAAAAAAAAAAAAGAATATATTGACGGAAGAATAGAGAGGAGGCTTGAAGGAACC
AGCAATGAGAAGGCCAGGAAAAGAAAGAGCTGAAAATGGAGAAAGCCCAAGAGTTAGAACAGTTGGATACAGGAG
AAGAAACAGCGGCTCCACTACAGACCCAGCCCCAGGTTCAATGTCCTCCGAAGAATGAAGTCTTTCCCTGGTGAT
GGTCCCCTGCCCTGTCTTTCCAGCATCCACTCTCCCTTGTCCTCCTGGGGGCACATCTCAGTCAGGCAGCGGCTT
CCTGATGATGGTCGTTGGGGTGGTTGTCATGTGATGGGTCCCCTCCAGGTTACTAAAGGGTGCATGTCCCCTGCT
TGAACACTGAAGGGCAGGTGGTGGGCCATGGCCATGGTCCCCAGCTGAGGAGCAGGTGTCCCTGAGAACCCAAAC
TTCCCAGAGAGTATGTGAGAACCAACCAATGAAAACAGTCCCATCGCTCTTACCCGGTAAGTAAACAGTCAGAAA
ATTAGCATGAAAGCAGTTTAGCATTGGGAGGAAGCTCAGATCTCTAGAGCTGTCTTGTCGCCGCCCAGGATTGAC
CTGTGTGTAAGTCCCAATAAACTCACCTACTCATCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 6290

MEGAALLRVSVLCIWMSALFLGVGVRAEEAGARVQQNVPSGTDTGDPQSKPLGDWAAGTMDPESSIFIEDAIKYF
KEKVSTQNLLLLLTDNEAWNGFVAAAELPRNEADELRKALDNLARQMIMKDKNWHDKGQQYRNWFLKEFPRLKSE
LEDNIRRLRALADGVQKVHKGTTIANVVSGSLSISSGILTLVGMGLAPFTEGGSLVLLEPGMELGITAALTGITS
STIDYGKKWWTQAQAHDLVIKSLDKLKEVKEFLGENISNFLSLAGNTYQLTRGIGKDIRALRRARANLQSVPHAS
ASRPRVTEPISAESGEQVERVNEPSILEMSRGVKLTDVAPVGFFLVLDVVYLVYESKHLHEGAKSETAEELKKVA
QELEEKLNMLNNNYKILQADQEL

FIGURE 6291

GGACACCGGGCCATGCACGCCCCCAACTGAAGCTGCATCTCAAAGCCGAAGATTCCAGCAGCCCAGGGGATTTCA
AAGAGCTCAGACTCAGAGGAACATCTGCGGAGAGACCCCCGAAGCCCTCTCCAGGGCAGTCCTCATCCAGACGCT
CCGCTAGTGCAGACAGGAGCGCGCAGTGGCCCCGGCTCGCCGCGCCATGGAGCGGATCCCCAGCGCGCAACCACC
CCCCGCCTGCCTGCCCAAAGCACCGGGACTGGAGCACGGAGACCTACCAGGGATGTACCCTGCCCACATGTACCA
AGTGTACAAGTCAAGACGGGGAATAAAGCGGAGCGAGGACAGCAAGGAGACCTACAAATTGCCGCACCGGCTCAT
CGAGAAAAAGAGACGTGACCGGATTAACGAGTGCATCGCCCAGCTGAAGGATCTCCTACCCGAACATCTCAAACT
TACAACTTTGGGTCACTTGGAAAAAGCAGTGGTTCTTGAACTTACCTTGAAGCATGTGAAAGCACTAACAAACCT
AATTGATCAGCAGCAGCAGAAAATCATTGCCCTGCAGAGTGGTTTACAAGCTGGTGAGCTGTCAGGGAGAAATGT
CGAAACAGGTCAAGAGATGTTCTGCTCAGGTTTCCAGACATGTGCCCGGGAGGTGCTTCAGTATCTGGCCAAGCA
CGAGAACACTCGGGACCTGAAGTCTTCGCAGCTTGTCACCCACCTCCACCGGGTGGTCTCGGAGCTGCTGCAGGG
TGGTACCTCCAGGAAGCCATCAGACCCAGCTCCCAAAGTGATGGACTTCAAGGAAAAACCCAGCTCTCCGGCCAA
AGGTTCGGAAGGTCCTGGGAAAAACTGCGTGCCAGTCATCCAGCGGACTTTCGCTCACTCGAGTGGGGAGCAGAG
CGGCAGCGACACGGACACAGACAGTGGCTATGGAGGAGAATCGGAGAAGGGCGACTTGCGCAGTGAGCAGCCGTG
CTTCAAAAGTGACCACGGACGCAGGTTCACGATGGGAGAAAGGATCGGCGCAATTAAGCAAGAGTCCGAAGAACC
CCCCACAAAAAAGAACCGGATGCAGCTTTCGGATGATGAAGGCCATTTCACTAGCAGTGACCTGATCAGCTCCCC
GTTCCTGGGCCCACACCCACACCAGCCTCCTTTCTGCCTGCCCTTCTACCTGATCCCACCTTCAGCGACTGCCTA
CCTGCCCATGCTGGAGAAGTGCTGGTATCCCACCTCAGTGCCAGTGCTATACCCAGGCCTCAACGCCTCTGCCGC
AGCCCTCTCTAGCTTCATGAACCCAGACAAGATCTCGGCTCCCTTGCTCATGCCCCAGAGACTCCCTTCTCCCTT
GCCAGCTCATCCGTCCGTCGACTCTTCTGTCTTGCTCCAAGCTCTGAAGCCAATCCCCCCTTTAAACTTAGAAAC
CAAAGACTAAACTCTCTAGGGGATCCTGCTGCTTTGCTTTCCTTCCTCGCTACTTCCTAAAAAGCAACAAAAAAG
TTTTTGTGAATGCTGCAAGATTGTTGCATTGTGTATACTGAGATAATCTGAGGCATGGAGAGCAGATTCAGGGTG
TGTGTGTGTGTGTGTGTGTGTGTGTATGTGCGTGTGCGTGCACATGTGTGCCTGCGTGTTGGTATAGGACTTT
AAAGCTCCTTTTGGCATAGGGAAGTCACGAAGGATTGCTTGACATCAGGAGACTTGGGGGGGATTGTAGCAGACG
TCTGGGCTTTTCCCCACCCAGAGAATAGCCCCCTTCGATACACATCAGCTGGATTTTCAAAAGCTTCAAAGTCTT
GGTCTGTGAGTCACTCTTCAGTTTGGGAGCTGGGTCTGTGGCTTTGATCAGAAGGTACTTTCAAAAGAGGGCTTT
CCAGGGCTCAGCTCCCAACCAGCTGTTAGGACCCCACCCTTTTGCCTTTATTGTCGACGTGACTCACCAGACGTC
GGGGAGAGAGAGCAGTCAGACCGAGCTTTCTGCTAACATGGGGAGGTAGCAGGCACTGGCATAGCACGGTAGTGG
TTTGGGGAGGTTTCCGCAGGTCTGCTCCCCACCCCTGCCTCGGAAGAATAAAGAGAATGTAGTTCCCTACTCAGG
CTTTCGTAGTGATTAGCTTACTAAGGAACTGAAAATGGGCCCCTTGTACAAGCTGAGCTGCCCCGGAGGGAGGGA
GGAGTTCCCTGGGCTTCTGGCACCTGTTTCTAGGCCTAACCATTAGTACTTACTGTGCAGGGAACCAAACCAAGG
TCTGAGAAATGCGGACACCCCGAGCGAGCACCCCAAAGTGCACAAAGCTGAGTAAAAAGCTGCCCCCTTCAAACA
GAACTAGACTCAGTTTTCAATTCCATCCTAAAACTCCTTTTAACCAAGCTTAGCTTCTCAAAGGCCTAACCAAGC
CTTGGCACCGCCAGATCCTTTCTGTAGGCTAATTCCTCTTGCCCAACGGCATATGGAGTGTCCTTATTGCTAAAA
AGGATTCCGTCTCCTTCAAAGAAGTTTTATTTTTGGTCCAGAGTACTTGTTTTCCCGATGTGTCCAGCCAGCTCC
GCAGCAGCTTTTCAAGATGCACTATGCCTGATTGCTGATCGTGTTTTAACTTTTTCTTTTCCTGTTTTTATTTTG
GTATTAAGTCGTTGCCTTTATTTGTAAAGCTGTTATAAATATATATTATATAAATATATTAAAAAGGAAAATGTT
TCAGATGTTTATTTGTATAATTACTTGATTCACACAGTGAGAAAAAATGAATGTATTCCTGTTTTTGAAGAGAAG
AATAATTTTTTTTTCTCTAGGGAGAGGTACAGTGTTTATATTTTGGAGCCTTCCTGAAGGTGTAAAATTGTAAAT
ATTTTTATCTATGAGTAAATGTTAAGTAGTTGTTTTAAAATACTTAATAAAATAATTCTTTTCCTGTGGAAG

FIGURE 6292

MERIPSAQPPPACLPKAPGLEHGDLPGMYPAHMYQVYKSRRGIKRSEDSKETYKLPHRLIEKKRRDRINECIAQL
KDLLPEHLKLTTLGHLEKAVVLELTLKHVKALTNLIDQQQQKIIALQSGLQAGELSGRNVETGQEMFCSGFQTCA
REVLQYLAKHENTRDLKSSQLVTHLHRVVSELLQGGTSRKPSDPAPKVMDFKEKPSSPAKGSEGPGKNCVPVIQR
TFAHSSGEQSGSDTDTDSGYGGESEKGDLRSEQPCFKSDHGRRFTMGERIGAIKQESEEPPTKKNRMQLSDDEGH
FTSSDLISSPFLGPHPHQPPFCLPFYLIPPSATAYLPMLEKCWYPTSVPVLYPGLNASAAALSSFMNPDKISAPL
LMPQRLPSPLPAHPSVDSSVLLQALKPIPPLNLETKD

FIGURE 6293

ATGGGGGACGCTCCCAGCCCTGAAGAGAAACTGCACCTTATCACCCGGAACCTGCAGGAGGTTCTGGGGGAAGAG
AAGCTGAAGGAGATACTGAAGGAGCGGGAACTTAAAATTTACTGGGGAACGGCAACCACGGGCAAACCACATGTG
GCTTACTTTGTGCCCATGTCAAAGATTGCAGACTTCTTAAAGGCAGGGTGTGAGGTAACAATTCTGTTTGCGGAC
CTCCACGCATACCTGGATAACATGAAAGCCCCATGGGAACTTCTAGAACTCCGAGTCAGTTACTATGAGAATGTG
ATCAAAGCAATGCTGGAGAGCATTGGTGTGCCCTTGGAGAAGCTCAAGTTCATCAAAGGCACTGATTACCAGCTC
AGCAAAGAGTACACACTAGATGTGTACAGACTCTCCTCCGTGGTCACACAGCACGATTCCAAGAAGGCTGGAGCT
GAGGTGGTAAAGCAGGTGGAGCACCCTTTGCTGAGTGGCCTCTTATACCCCGGACTGCAGGCTTTGGATGAAGAG
TATTTAAAAGTAGATGCCCAATTTGGAGGCATTGATCAGAGAAAGATTTTCACCTTTGCAGAGAAGTACCTCCCT
GCACTTGGCTATTCAAAACGGGTCCATCTGATGAATCCTATGGTTCCAGGATTAACAGGCAGCAAAATGAGCTCT
TCAGAAGAGGAGTCCAAGATTGATCTCCTTGATCGGAAGGAGGATGTGAAGAAAAAACTGAAGAAGGCCTTCTGT
GAGCCAGGAAATGTGGAGAACAATGGGGTTCTGTCCTTCATCAAGCATGTCCTTTTTCCCCTTAAGTCCGAGTTT
GTGATCCTACGAGATGAGAAATGGGGTGGAAACAAAACCTACACAGCTTACGTGGACCTGGAAAAGGACTTTGCT
GCTGAGGTTGTACATCCTGGAGACCTGAAGAATTCTGTTGAAGTCGCACTGAACAAGTTGCTGGATCCAATCCGG
GAAAAGTTTAATACCCCTGCCCTGAAAAAACTGGCCAGCGCTGCCTACCCAGATCCCTCAAAGCAGAAGCCAATG
GCCAAAGGCCCTGCCAAGAATTCAGAACCAGAGGAGGTCATCCCATCCCGGCTGGATATCCGTGTGGGGAAAATC
ATCACTGTGGAGAAGCACCCAGATGCAGACAGCCTGTATGTAGAGAAGATTGACGTGGGGGAAGCTGAACCACGG
ACTGTGGTGAGCGGCCTGGTACAGTTCGTGCCCAAGGAGGAACTGCAGGACAGGCTGGTAGTGGTGCTGTGCAAC
CTGAAACCCCAGAAGATGAGAGGAGTCGAGTCCCAAGGCATGCTTCTGTGTGCTTCTATAGAAGGGATAAACCGC
CAGGTTGAACCTCTGGACCCTCCGGCAGGCTCTGCTCCTGGTGAGCACGTGTTTGTGAAGGGCTATGAAAAGGGC
CAACCAGATGAGGAGCTCAAGCCCAAGAAGAAAGTCTTCGAGAAGTTGCAGGCTGACTTCAAAATTTCTGAGGAG
TGCATCGCACAGTGGAAGCAAACCAACTTCATGACCAAGCTGGGCTCCATTTCCTGTAAATCGCTGAAAGGGGGG
AACATTAGCTAGCCAGCCCAGCATCTTCCCCCCTTCTTCCACCACTGAGTCATCTGCTGTCTCTTCAGTCTGCTC
CATCCATCACCCATTTACCCATCTCTCAGGACA

FIGURE 6294

MGDAPSPEEKLHLITRNLQEVLGEEKLKEILKERELKIYWGTATTGKPHVAYFVPMSKIADFLKAGCEVTILFAD
LHAYLDNMKAPWELLELRVSYYENVIKAMLESIGVPLEKLKFIKGTDYQLSKEYTLDVYRLSSVVTQHDSKKAGA
EVVKQVEHPLLSGLLYPGLQALDEEYLKVDAQFGGIDQRKIFTFAEKYLPALGYSKRVHLMNPMVPGLTGSKMSS
SEEESKIDLLDRKEDVKKKLKKAFCEPGNVENNGVLSFIKHVLFPLKSEFVILRDEKWGGNKTYTAYVDLEKDFA
AEVVHPGDLKNSVEVALNKLLDPIREKFNTPALKKLASAAYPDPSKQKPMAKGPAKNSEPEEVIPSRLDIRVGKI
ITVEKHPDADSLYVEKIDVGEAEPRTVVSGLVQFVPKEELQDRLVVVLCNLKPQKMRGVESQGMLLCASIEGINR
QVEPLDPPAGSAPGEHVFVKGYEKGQPDEELKPKKKVFEKLQADFKISEECIAQWKQTNFMTKLGSISCKSLKGG
NIS

FIGURE 6295

AGGAATGTTGGTGCTCCCAGCACCTAGCACCGGGAGACTGGAGAGGTTTCCAGGAGAGTGACCCGAGTAGGTCCC
CTCCTAATTCTGGAGCCGTCCCTCGGGCTGCGCAGTGGAGCGCCGAGGTGGCGGGAGGCTGCGGGGAGCCTGCGC
GGCCAAGCACCATCTGCAGTCAGGAGCTCCCGGGCAGCTTGCAGGGCGCAGTTTTTGAAAGCGGGTGCTGCGTGC
GGACCGCGGGCCTGCAGGGATCTTTTGCCAGAAATGAGGGCATACTGGCCTGACGTAATTCACTCGTTTCCCAAT
CGCAGCCGCTTCTGGAAGC**ATG**AGTGGGAAAAGCATGGGACCTGCGCCGCCCAGGTGGATGCGCTCAACTCCCAG
AAGAAGTACTTTGGCAGAAGCCTGGAACTCTACAGGGAGCTGGACCTCAACAGGTGGGTGCGCCCTTCCCCCGGC
TGCACTTCCCAGTGGGGATCTCTGCTGTCGCCCAAGCCTGACAGCTGGATCCAGGGGAGTGGGTGTAGACCTCAC
TGCCCTCCAGCAGCTTCTGCATGTGCACTATTCGACTACTGGGATCATTCCTGAGGAATGTTCTGAGCCTACCAA
GCCTTTCCAGATCATTCTACATCACGATCACACAGAGTGGGTGCAGAGTATTGGGATGCCCATCTGGGCACCATC
TCATCATCAGAGTCGGCCA**TAG**GGAAAACGATGACTCCAACCAGCATGTGCCGAACTCTGTGGCCAAGACAGTCT
GACAATAAGTTATTGCCCACAGAGGATGTCTAAGTCTTTGTGTCCACTCTGTGATCGTGATCTAGAATTTTCTAC
CAAGGCTTGATGGGGAACTAGGATATTCTTCTGCAATGATTCAGAATTTTACAGTGTACCTTTATACTTTAATAA
GTGAATTCTATATATGGTAGTTTGGTAGGATTCTGTGTAGAAGTGCTTTAGGAGGTGATTGAAAGCTGTAGGGAC
TTACCATACGGTTATGTATTGCTTGGTGATGGGGTATAAAATTGTCATGTGAACATCTTGGAGTGCACTTACTTA
GCTGATACAGCCCACGACACACATATGCTTTGTGGTATAGCCTGTTGCTTCGAGGCTACAAACCTGTACAGTGTG
TGACTCTACTGAGTACTGTAGGCACCTGTATGTAACACAATGGTAAGGATTTGTGTATCTAAACATATCTCAACA
TAGAAAAGGCACAGTAGAAATGTGGTCATATGGGACCGCCCTCGTACATGCAGGCCTTCACTGACTGAATGTCGT
AATGTGGCGCATGACTGTGTTTAAAGATTTGTCCAAATGCAGTTTACCAGGATAAGCCTGGAATCCGATTTCAAT
TGCTGTCTTTTAAAGCAGGTGTGGCAAACGGGTGGTGATGTGTGTGCCAGCTCCACTCGGTGGTGGCCCCAGCGC
TCCCATGCTCCGAAGGAGTCAGGAACTGGAAAGGGTACCTGCCTGGAGCAGTTTGTGTGTGTGCTAAGGGGTGGG
GAAGGCGGGGACTGGGAACCATGTATTTGCAGTCCATGTTGACACATTTGTTGCATAAAGTCATAGAAAACACTT
TCCTTTAAGAGTGTCTTAATTTTTACCATGAAATATGATACCTGAAAAGAACAAGAAAGCAAAGTGGACCTTCAT
TATACAGCTAACTTTTTTAAATTTAAATTTTAGTGTGCTTCTAAAATTGGGGATAAAACCATCCATCAATTACTA
CCAAGTAAGTCTTGCTTTTGCTTCTTTTCTCGTGTGTCTCTCCCGGGGACCTCCAGTAGGGCCGTTTCAGCCTCT
GAGTCAATGGGCTGTAAATTGCCCCAGTGCAAACCCCCTTCCTACTTAAATGTTATCATGTGAACAGATTTTATT
TGCATTTTATTTTCCTGCGCATGTTGAGTAGGAGCTGAAGGCTGCTTAGACCAGTGATTTGGAAGCACAGATTTC
ATGGCTCCCTTTGTGAGAAGTGTGTGCTCCAGGGTCCGGCAGAGCAGGTGGAATCTGCAGTTTGAAGAGTCACAT
TCACTTTTATAACGTAGTCTTATATTTGTTTGTGGTTTGTTTTCATGATAAAATTGTGATTTGTTTTATGATAAA
AGAAACTATAGATATTTAAGCATGACAAGATGTTATTAGCTGGTAAGCATATACAAAAAGTTGCTTTTTGCCAGG
TGTGGTGACTCACGCCTATAAATCCCAGGACCTTGGGAGGCTCAGGCTGGAGGATTGCTTGTGGCTAGAATTTCG
AGACCAGCCTGGGCAGCAGAGTGAGACCTCTAGAAAGAAGTAAAAGTAGCTGAGCATGATAGTATGTGTCTGTGG
TCTCAGCTATTCAGGAAGCTAAGGTCAGAGGATTGCCTGCGCCCAGGAATTTGAGGCTGCAGTGAGCCATGGTCG
CCCCACTGCACTCCAGTCTGGGCGACAGCCAGATCACGTCTCTTT

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FIGURE 6296

MSGKSMGPAPPRWMRSTPRRSTLAEAWNSTGSWTSTGGCALPPAALPSGDLCCRPSLTAGSRGVGVDLTALQQLL
HVHYSTTGIIPEECSEPTKPFQIILHHDHTEWVQSIGMPIWAPSHHQSRP

FIGURE 6297

CAGCGCACCCCCGGACGCTATGGCCCACCCCTCCGGCTGGCCCCTTCTGTAGGATGGTAGCACACAACCAGGTGG
CAGCCGACAATGCAGTCTCCACAGCAGCAGAGCCCCGACGGCGGCCAGAACCTTCCTCCTCTTCCTCCTCCTCGC
CCGCGGCCCCCGCGCGCCCGCGGCCGTGCCCCGCGGTCCCGGCCCCGGCCCCCGGCGACACGCACTTCCGCACAT
TCCGTTCGCACGCCGATTACCGGCGCATCACGCGCGCCAGCGCGCTCCTGGACGCCTGCGGATTCTACTGGGGGC
CCCTGAGCGTGCACGGGGCGCACGAGCGGCTGCGCGCCGAGCCCGTGGGCACCTTCCTGGTGCGCGACAGCCGCC
AGCGGAACTGCTTTTTCGCCCTTAGCGTGAAGATGGCCTCGGGACCCACGAGCATCCGCGTGCACTTTCAGGCCG
GCCGCTTTCACCTGGATGGCAGCCGCGAGAGCTTCGACTGCCTCTTCGAGCTGCTGGAGCACTACGTGGCGGCGC
CGCGCCGCATGCTGGGGGCCCCGCTGCGCCAGCGCCGCGTGCGGCCGCTGCAGGAGCTGTGCCGCCAGCGCATCG
TGGCCACCGTGGGCCGCGAGAACCTGGCTCGCATCCCCCTCAACCCCGTCCTCCGCGACTACCTGAGCTCCTTCC
CCTTCCAGATTTGACCGGCAGCGCCCGCCGTGCACGCAGCATTAACTGGGATGCCGTGTTATTTTGTTATTACTT
GCCTGGAACCATGTGGGTACCCTCCCCGGCCTGGGTTGGAGGGAGCGGATGGGTGTAGGGGCGAGGCGCCTCCCG
CCCTCGGCTGGAGACGAGGCCGCAGACCCCTTCTCACCTCTTGAGGGGGTCCTCCCCCTCCTGGTGCTCCCTCTG
GGTCCCCCTGGTTGTTGTAGCAGCTTAACTGTATCTGGAGCCAGGACCTGAACTCGCACCTCCTACCTCTTCATG
TTTACATATACCCAGTATCTTTGCACAAACCAGGGGTTGGGGGAGGGTCTCTGGCTTTATTTTTCTGCTGTGCAG
AATCCTATTTTATATTTTTTAAAGTCAGTTTA

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FIGURE 6298

MVAHNQVAADNAVSTAAEPRRRPEPSSSSSSSPAAPARPRPCPAVPAPAPGDTHFRTFRSHADYRRITRASALLD
ACGFYWGPLSVHGAHERLRAEPVGTFLVRDSRQRNCFFALSVKMASGPTSIRVHFQAGRFHLDGSRESFDCLFEL
LEHYVAAPRRMLGAPLRQRRVRPLQELCRQRIVATVGRENLARIPLNPVLRDYLSSFPFQI

FIGURE 6299

GGCATCACCGGCCAGCCGGGTGGAGTGAGCGGCGCTGGGCTCGGGCTCCGGCTCCGCGGGCGGAAGAGGCGGCGG
CGGCGGCAGAAGCGGCGGCGGCGGCGGCGGCGGGAGCCGAGGAGGAGGTTCCGGACGCTGCTTAGGAACCGGGGA
CTCAGGAGTGCCCGCGCCCTGAGCGCTCAGCTCCAGAGGCGTC**ATG**GCTGAGTACGGGACCCTCCTGCAAGACCT
GACCAACAACATCACCCTTGAAGATCTAGAACAGCTCAAGTCGGCCTGCAAGGAAGACATCCCCAGCGAAAAGAG
TGAGGAGATCACTACTGGCAGTGCCTGGTTTAGCTTCCTGGAGAGCCACAACAAGCTGGACAAAGACAACCTCTC
CTACATTGAGCACATCTTTGAGATCTCCCGCCGTCCTGACCTACTCACTATGGTGGTTGACTACAGAACCCGTGT
GCTGAAAATCTCTGAGGAGGATGAGCTGGACACCAAGCTAACCCGTATCCCCAGTGCCAAGAAGTACAAAGACAT
TATCCGGCAGCCCTCTGAGGAAGAGATCATCAAATTGGCTCCCCCACCGAAGAAGGCC**TGA**GCAAGGGGGAGGAA
GAGGAGGAAGGTTGGACCTTCATCAGACCACTCCCTTCCCCCATCCTCCAGGAGAGGGGGCAAGGGCAACCCACC
ATCTACCCACTTACTAACCTGGTCCTAACCCCCTTACTGTGCGCGTGTGTGTGCGTGTGCGCACGCTCTGGCTGT
TTGTCTATATGTCTAGCTCATCTAGTTCCTCTTCTTAAGGGGATGGGGGTCAGGGGCTAGGGGAGGGGGCTGAGT
TTCCCCACTTTAGGAGGAGGTGGGGGCTATTTCTATGCAAATAGAAATCAGCACATTCCTCCTACTTCCCTTTCC
TCCACTCCCCCCATATCTTTAAAGTGTGGAAGCAGAAAGGACCTGCATTTTCCTACATTGAGGAGCTGACATAGG
GGTAAGGTATGGGAGAGGTAGGTGGATCCAGGGAAAAGCAGTGGGGACGGAAGGCAAAGAGACCACTCAACCCCC
ACCTGGAAGGGGCAAAGAAAAGCCAGAGTTCCATGTTTGTACTCCTGTGCTGGACTGTTTCCTGAGTACCAGCAG
GTCCCTTTTTGTCTCTCATGGGCCTAGCATAGGTATGAGCCAGGGATCCTTTCCTGGTCCCTAAGATCAAACCCC
ATGGAGCAGCCAGCGTTAGATGCCCCCACCCACCTGTACTCTGGAGAGACTGTGCTGGGAACATGTACCACTGAG
CCTGAGATGGGGATGAGGGCAGAGAGAGGGGAGCCCCCTCTTCCACTCAGTTGTTCCTACTCAGACTGTTGCACT
CTAAACCTAGGGAGGTTGAAGAATGAGACCCTTAGGTTTTAACACGAATCCTGACACCACCATCTATAGGGTCCC
AACTTGGTTATTGTAGGCAACCTTCCCTCTCTCCTTGGTGAAGAACATCCCAAGCCAGAAAGAAGTTAACTACAG
TGTTTTCCTTTGCACCGATCCCCACCCCAATTCAATCCCGGAAGGGACTTACTTAGGAAACCCTTCTTTACTAGA
TATCCTGGCCCCCTGGGCTTGTGAACACCTCCTAGCCACATCACTACAGTACAGTGAGTGACCCCAGCCTCCTGC
CTACCCCAAGATGCCCCTCCCCACCCTGACCGTGCTAACTGTGTGTACATATATATTCTACATATATGTATATTA
AAACTGCACTGCCATGTCTGCCCTTTTTTGTGGTGTCTAGCATTAACTTATTGTCTAGGCCAGAGCGGGGGTGGG
AGGGGAATGCCACAGTGAAGGGAGTGGCAGAATCAAATTGCTACATAGTCCAAACAAAAAAGAAGGCTTTTTCAA
AAAACATTAAATTCACATGCAGTCTCAGAGACTATTTAGACAAAGTTCAAGTTAGGAGCTTTTAGGATGTGGGAG
TAAAACTTTAATGGGAGGGGAGGGCTGGCTGCTGGAAGAAGGAAGAAGCCAGACTGGTTAGACAGTACTCTTAAC
TCCTAGCCCAGCCTAGCGTGCCCTGCCCCTCTGGCCACTGCTGCAGACACCTGCCTTAACACACACACCTCTAGG
ACTCCACAGTTTTGCCTTAAAGGACCTTCCCAAGTCTCCCTTTCCCTGTCTGGCTTCTCCCTTAAGAAGAGAGAG
ATACTTGTAGAATTGGGTGGGGGGAATGAGCATGAACTGTCCTTCCATTTGGGATATGTTACGTTAGAGTGAGAG
AGAGAATAAGGAGCCTTTCTTATGGAAGAAATGGGAGAAGAGAGACAGGGTTCTTTTCAGCAGAGTCTAGTAGTT
TCTCTGTAAGGCAAAATAATCTAAAAAGACTAACCTGCCCACCCACTCCTTATATTGCTGTGAGATTGCCCCTAT
CTTGTGCTCTTCTGTCTGCAGTGTGCACGGCCTTGTTCTAACCCGGAATAAAGGTGATTGATTGTATTGCAAAAA
AAAAAAAAAAA

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FIGURE 6300

MAEYGTLLQDLTNNITLEDLEQLKSACKEDIPSEKSEEITTGSAWFSFLESHNKLDKDNLSYIEHIFEISRRPDL
LTMVVDYRTRVLKISEEDELDTKLTRIPSAKKYKDIIRQPSEEEIIKLAPPPKKA

FIGURE 6301

AATTAAGGAATTCAAGATGAATATTGAAGCTCTTCGGGAGAATCTTTATTTTCAGTCCAAAGAGAACCTTTCTGT
GACATTGGAAGTCATCTTGGAGCGTATGGAGGACTTTACTGATTCTGCCTACACCAGCCATGAGCACAGAGAGCG
CATCTTGGAACTGTCAACTCAGGCGAGAATGGAACTGCAGCAGTTAATTTCTGTGTGGATTCAAGCTCAAAGCAA
GAAAACAAAAAGCATCGCTGAAGAACTGGAACTCAGTATTTTGAAAATCAGTCACAGTCTTAATGAACTTAAGAA
AGAAATAATTTCTGCTGCTGAAACATTGACATTGCATCCATCTAGTAAAATTGCTAAAGAAAACCTAGATGTATT
TTGTGAAGCTTGGGAATCCCAAATTAGTGACATGTCAACACTGCTGAGAGAAATCAATGACGTGTTTGAAGGAAG
ACGAGGAGAGAAGTATGGCTACCTTTCACTTCCAAAGCCAATGAAGAATAATGCAAACCTGAAATCATTAAAGCC
AGACAAGCCTGACTCTGAGGAGCAAGCCAAGATAGCAAAGCTTGGACTTAAGCTGGGTTTGCTCACCTCTGACGC
TGACTGCGAAATTGAGAAGTGGGAAGATCAGGAGAATGAGATTGTTCAATATGGACGGAACATGTCCAGTATGGC
CTATTCTCTGTATTTATTTACTAGAGGAGAGGGGCCACTGAAAACTTCCCAGGATTTAATTCATCAACTAGAGGT
TTTTGCTGCAGAGGGTTTAAAGCTTACTTCCAGTGTTCAAGCTTTTTCAAAACAGCTGAAAGACGATGACAAGCT
TATGCTTCTCCTGGAAATAAACAAGCTAATTCCTCTATGCCACCAGCTCCAGACAGTAACTAAGACTTCTTTGCA
GAATAAAGTATTTCTAAAGGTTGACAAGTGTATTACGAAGACAAGATCCATGATGGCTCTCTTAGTCCAACTTCT
TTCACTTTGTTATAAACTGCTGAAGAAGCTTCAGATGGAAAATAACGGATGGGTCTCAGTTACAAATAAGGACAC
TATGGATAGTAAAACTTGAGAAGCTTTTGGGGTCAGATCTCTGGAACATCATGTGATGAAGCTGACATTTTTAAA
AATCAAATGATCCTTTATCTTTTCAGAAATTCATCAATTTTATAAAGAAAACAATATTGAAATTTTGCTCTATTT
TCTGATCATGAAACTGATTGTAAAGCTTTTTGACAACTAATAAATGTCTTGGTAATTGCTAAAAAAAAAAAAA

FIGURE 6302

CGAGACTCCATCTCAAAAACAAAACAAATAAACGAACAAAAAAACCCACAACGTATTATTTTCTTGTTTACGAGG
TTTCTTGTCTCTCTGGCTCCACCAGAAGAGGAGCAGGGACCCTTCTTGCTGTTGTTCATTGCTGCATCCCCCACA
CCGAGAGCAGAGCCTGGCATGGGCAGAAAGTCCTCAGTCGATATTTGGTGGCCCCAAGCGAATGAAGCATCCAAG
AAGGGAAAGCTGGGGGCTCCCCACTGCACTTGCCACCTGAGTCACATTTTCAGAAGCCTCTGGAAAGTCGTGCAC
AGCCCAGGAGTGTTGAGCAATTTCGGTTTCCTCTGAGGTTGAAGGACCCAGGCGTGTCAGCCCTGCTCCAGACAC
CTTGGGC**ATG**GAGGAGAGTGTCGTACGGCCCTCAGTGTTTGTGGTGGATGGACAGACCGACATCCCATTCACGAG
GCTGGGACGAAGCCACCGGAGACAGTCGTGCAGTGTGGCCCGGGTGGGTCTGGGTCTCTTGCTGTTGCTGATGGG
GGCTGGGCTGGCCGTCCAAGGCTGGTTCCTCCTGCAGCTGCACTGGCGTCTAGGAGAGATGGTCACCCGCCTGCC
TGACGGACCTGCAGGCTCCTGGGAGCAGCTGATACAAGAGCGAAGGTCTCACGAGGTCAACCCAGCAGCGCATCT
CACAGGGGCCAACTCCAGCTTGACCGGCAGCGGGGGGCCGCTGTTATGGGAGACTCAGCTGGGCCTGGCCTTCCT
GAGGGGCCTCAGCTACCACGATGGGGCCCTTGTGGTCACCAAAGCTGGCTACTACTACATCTACTCCAAGGTGCA
GCTGGGCGGTGTGGGCTGCCCGCTGGGCCTGGCCAGCACCATCACCCACGGCCTCTACAAGCGCACACCCCGCTA
CCCCGAGGAGCTGGAGCTGTTGGTCAGCCAGCAGTCACCCTGCGGACGGGCCACCAGCAGCTCCCGGGTCTGGTG
GGACAGCAGCTTCCTGGGTGGTGTGGTACACCTGGAGGCTGGGGAGAAGGTGGTCGTCCGTGTGCTGGATGAACG
CCTGGTTCGACTGCGTGATGGTACCCGGTCTTACTTCGGGGCTTTCATGGTG**TGA**AGGAAGGAGCGTGGTGCATT
GGACATGGGTCTGACACGTGGAGAACTCAGAGGGTGCCTCAGGGGAAAGAAAACTCACGAAGCAGAGGCTGGGCG
TGGTGGCTCTCGCCTGTAATCCCAGCACTTTGGGAGGCCAAGGCAGGCGGATCACCTGAGGTCAGGAGTTCGAGA
CCAGCCTGGCTAACATGGCAAAACCCCATCTCTACTAAAAATACAAAAATTAGCCGGACGTGGTGGTGCCTGCCT
GTAATCCAGCTACTCAGGAGGCTGAGGCAGGATAATTTTGCTTAAACCCGGGAGGCGGAGGTTGCAGTGAGCCGA
GATCACACCACTGCACTCCAACCTGGGAAACGCAGTGAGACTGTGCCTCAAAAAAAAAAAAAAAAA

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FIGURE 6303

MEESVVRPSVFVVDGQTDIPFTRLGRSHRRQSCSVARVGLGLLLLLMGAGLAVQGWFLLQLHWRLGEMVTRLPDG
PAGSWEQLIQERRSHEVNPAAHLTGANSSLTGSGGPLLWETQLGLAFLRGLSYHDGALVVTKAGYYYIYSKVQLG
GVGCPLGLASTITHGLYKRTPRYPEELELLVSQQSPCGRATSSSRVWWDSSFLGGVVHLEAGEKVVVRVLDERLV
RLRDGTRSYFGAFMV

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FIGURE 6304

TTTCCTCACTGACTATAAAAGAATAGAGAAGGAAGGGCTTCAGTGACCGGCTGCCTGGCTGACTTACAGCAGTCA
GACTCTGACAGGATCATGGCTATGATGGAGGTCCAGGGGGGACCCAGCCTGGGACAGACCTGCGTGCTGATCGTG
ATCTTCACAGTGCTCCTGCAGTCTCTCTGTGTGGCTGTAACTTACGTGTACTTTACCAACGAGCTGAAGCAGATG
CAGGACAAGTACTCCAAAAGTGGCATTGCTTGTTTCTTAAAAGAAGATGACAGTTATTGGGACCCCAATGACGAA
GAGAGTATGAACAGCCCCTGCTGGCAAGTCAAGTGGCAACTCCGTCAGCTCGTTAGAAAGATGATTTTGAGAACC
TCTGAGGAAACCATTTCTACAGTTCAAGAAAAGCAACAAAATATTTCTCCCCTAGTGAGAGAAAGAGGTCCTCAG
AGAGTAGCAGCTCACATAACTGGGACCAGAGGAAGAAGCAACACATTGTCTTCTCCAAACTCCAAGAATGAAAAG
GCTCTGGGCCGCAAAATAAACTCCTGGGAATCATCAAGGAGTGGGCATTCATTCCTGAGCAACTTGCACTTGAGG
AATGGTGAACTGGTCATCCATGAAAAAGGGTTTTACTACATCTATTCCCAAACATACTTTCGATTTCAGGAGGAA
ATAAAAGAAAACACAAAGAACGACAAACAAATGGTCCAATATATTTACAAATACACAAGTTATCCTGACCCTATA
TTGTTGATGAAAAGTGCTAGAAATAGTTGTTGGTCTAAAGATGCAGAATATGGACTCTATTCCATCTATCAAGGG
GGAATATTTGAGCTTAAGGAAAATGACAGAATTTTTGTTTCTGTAACAAATGAGCACTTGATAGACATGGACCAT
GAAGCCAGTTTTTTCGGGGCCTTTTTAGTTGGCTAACTGACCTGGAAAGAAAAAGCAATAACCTCAAAGTGACTA
TTCAGTTTTCAGGATGATACACTATGAAGATGTTTCAAAAAATCTGACCAAAACAAACAAACAGAAA

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FIGURE 6305

MAMMEVQGGPSLGQTCVLIVIFTVLLQSLCVAVTYVYFTNELKQMQDKYSKSGIACFLKEDDSYWDPNDEESMNS
PCWQVKWQLRQLVRKMILRTSEETISTVQEKQQNISPLVRERGPQRVAAHITGTRGRSNTLSSPNSKNEKALGRK
INSWESSRSGHSFLSNLHLRNGELVIHEKGFYYIYSQTYFRFQEEIKENTKNDKQMVQYIYKYTSYPDPILLMKS
ARNSCWSKDAEYGLYSIYQGGIFELKENDRIFVSVTNEHLIDMDHEASFFGAFLVG

FIGURE 6306A

CGGCAGGGTTGGAAAATGATGGAAGAGGCGGAGGTGGAGGCGACCGAGTGCTGAGAGGAACCTGCGGAATCGGCC
GAGATGGGGTCTGGCGCGCGCTTTCCCTCGGGGACCCTTCGTGTCCGGTGGTTGCTGTTGCTTGGCCTGGTGGGC
CCAGTCCTCGGTGCGGCGCGGCCAGGCTTTCAACAGACCTCACATCTTTCTTCTTATGAAATTATAACTCCTTGG
AGATTAACTAGAGAAAGAAGAGAAGCCCCTAGGCCCTATTCAAAACAAGTATCTTATGTTATTCAGGCTGAAGGA
AAAGAGCATATTATTCACTTGGAAAGGAACAAAGACCTTTTGCCTGAAGATTTTGTGGTTTATACTTACAACAAG
GAAGGGACTTTAATCACTGACCATCCCAATATACAGAATCATTGTCATTATCGGGGCTATGTGGAGGGAGTTCAT
AATTCATCCATTGCTCTTAGCGACTGTTTTGGACTCAGAGGATTGCTGCATTTAGAGAATGCGAGTTATGGGATT
GAACCCCTGCAGAACAGCTCTCATTTTGAGCACATCATTTATCGAATGGATGATGTCTACAAAGAGCCTCTGAAA
TGTGGAGTTTCCAACAAGGATATAGAGAAAGAAACTGCAAAGGATGAAGAGGAAGAGCCTCCCAGCATGACTCAG
CTACTTCGAAGAAGAAGAGCTGTCTTGCCACAGACCCGGTATGTGGAGCTGTTCATTGTCGTAGACAAGGAAAGG
TATGACATGATGGGAAGAAATCAGACTGCTGTGAGAGAAGAGATGATTCTCCTGGCAAACTACTTGGATAGTATG
TATATTATGTTAAATATTCGAATTGTGCTAGTTGGACTGGAGATTTGGACCAATGGAAACCTGATCAACATAGTT
GGGGGTGCTGGTGATGTGCTGGGGAACTTCGTGCAGTGGCGGGAAAAGTTTCTTATCACACGTCGGAGACATGAC
AGTGCACAGCTAGTTCTAAAGAAAGGTTTTGGTGGAACTGCAGGAATGGCATTTGTGGGAACAGTGTGTTCAAGG
AGCCACGCAGGCGGGATTAATGTGTTTGGACAAATCACTGTGGAGACATTTGCTTCCATTGTTGCTCATGAATTG
GGTCATAATCTTGGAATGAATCACGATGATGGGAGAGATTGTTCCTGTGGAGCAAAGAGCTGCATCATGAATTCA
GGAGCATCGGGTTCCAGAAACTTTAGCAGTTGCAGTGCAGAGGACTTTGAGAAGTTAACTTTAAATAAAGGAGGA
AACTGCCTTCTTAATATTCCAAAGCCTGATGAAGCCTATAGTGCTCCCTCCTGTGGTAATAAGTTGGTGGACGCT
GGGGAAGAGTGTGACTGTGGTACTCCAAAGGAATGTGAATTGGACCCTTGCTGCGAAGGAAGTACCTGTAAGCTT
AAATCATTTGCTGAGTGTGCATATGGTGACTGTTGTAAAGACTGTCGGTTCCTTCCAGGAGGTACTTTATGCCGA
GGAAAAACCAGTGAGTGTGATGTTCCAGAGTACTGCAATGGTTCTTCTCAGTTCTGTCAGCCAGATGTTTTTATT
CAGAATGGATATCCTTGCCAGAATAACAAAGCCTATTGCTACAACGGCATGTGCCAGTATTATGATGCTCAATGT
CAAGTCATCTTTGGCTCAAAAGCCAAGGCTGCCCCCAAAGATTGTTTCATTGAAGTGAATTCTAAAGGTGACAGA
TTTGGCAATTGTGGTTTCTCTGGCAATGAATACAAGAAGTGTGCCACTGGGAATGCTTTGTGTGGAAAGCTTCAG
TGTGAGAATGTACAAGAGATACCTGTATTTGGAATTGTGCCTGCTATTATTCAAACGCCTAGTCGAGGCACCAAA
TGTTGGGGTGTGGATTTCCAGCTAGGATCAGATGTTCCAGATCCTGGGATGGTTAACGAAGGCACAAAATGTGGT
GCTGGAAAGATCTGTAGAAACTTCCAGTGTGTAGATGCTTCTGTTCTGAATTATGACTGTGATGTTCAGAAAAAG
TGTCATGGACATGGGGTATGTAATAGCAATAAGAATTGTCACTGTGAAAATGGCTGGGCTCCCCCAAATTGTGAG
ACTAAAGGATACGGAGGAAGTGTGGACAGTGGACCTACATACAATGAAATGAATACTGCATTGAGGGACGGACTT
CTGGTCTTCTTCTTCCTAATTGTTCCCCTTATTGTCTGTGCTATTTTTATCTTCATCAAGAGGGATCAACTGTGG
AGAAGCTACTTCAGAAAGAAGAGATCACAAACATATGAGTCAGATGGCAAAAATCAAGCAAACCCTTCTAGACAG
CCGGGGAGTGTTCCTCGACATGTTTCTCCAGTGACACCTCCCAGAGAAGTTCCTATATATGCAAACAGATTTGCA
GTACCAACCTATGCAGCCAAGCAACCTCAGCAGTTCCCATCAAGGCCACCTCCACCACAACCGAAAGTATCATCT
CAGGGAAACTTAATTCCTGCCCGTCCTGCTCCTGCACCTCCTTTATATAGTTCCCTCACTTGATTTTTTTAACCT
TCTTTTTGCAAATGTCTTCAGGGAACTGAGCTAATACTTTTTTTTTTCTTGATGTTTTCTTGAAAAGCCTTTCT
GTTGCAACTATGAATGAAAACAAAACACCACAAAACAGACTTCACTAACACAGAAAAACAGAAACTGAGTGTGAG
AGTTGTGAAATACAAGGAAATGCAGTAAAGCCAGGGAATTTACAATAACATTTCCGTTTCCATCATTGAATAAGT
CTTATTCAGTCATCGGTGAGGTTAATGCACTAATCATGGATTTTTTGAACATGTTATTGCAGTGATTCTCAAATT
AACTGTATTGGTGTAAGATTTTTGTCATTAAGTGTTTAAGTGTTATTCTGAATTTTCTACCTTAGTTATCATTAA
TGTAGTTCCTCATTGAACATGTGATAATCTAATACCTGTGAAAACTGACTAATCAGCTGCCAATAATATCTAATA
TTTTTCATCATGCACGAATTAATAATCATCATACTCTAGAATCTTGTCTGTCACTCACTACATGAATAAGCAAAT
ATTGTCTTCAAAAGAATGCACAAGAACCACAATTAAGATGTCATATTATTTTGAAAGTACAAAATATACTAAAAG
AGTGTGTGTGTATTCACGCAGTTACTCGCTTCCATTTTTATGACCTTTCAACTATAGGTAATAACTCTTAGAGAA
ATTAATTTAATATTAGAATTTCTATTATGAATCATGTGAAAGCATGACATTCGTTCACAATAGCACTATTTTAAA
TAAATTATAAGCTTTAAGGTACGAAGTATTTAATAGATCTAATCAAATATGTTGATTCATGGCTATAATAAAGCA
GGAGCAATTATAAAATCTTCAATCAATTGAACTTTTACAAAACCACTTGAGAATTTCATGAGCACTTTAAAATCT
GAACTTTCAAAGCTTGCTATTAAATCATTTAGAATGTTTACATTTACTAAGGTGTGCTGGGTCATGTAAAATATT
AGACACTAATATTTTCATAGAAATTAGGCTGGAGAAAGAAGGAAGAAATGGTTTTCTTAAATACCTACAAAAAAG

FIGURE 6306B

TTACTGTGGTATCTATGAGTTATCATCTTAGCTGTGTTAAAAATGAATTTTTACTATGGCAGATATGGTATGGAT
CGTAAAATTTTAAGCACTAAAAATTTTTTCATAACCTTTCATAATAAAGTTTAATAATAGGTTTATTAACTGAAT
TTCATTAGTTTTTTAAAAGTGTTTTTGGTTTGTGTATATATACATATACAAATACAACATTTACAATAAATAAAA
TACTTGAAATTCTCAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6307

MGSGARFPSGTLRVRWLLLLGLVGPVLGAARPGFQQTSHLSSYEIITPWRLTRERREAPRPYSKQVSYVIQAEGK
EHIIHLERNKDLLPEDFVVYTYNKEGTLITDHPNIQNHCHYRGYVEGVHNSSIALSDCFGLRGLLHLENASYGIE
PLQNSSHFEHIIYRMDDVYKEPLKCGVSNKDIEKETAKDEEEEPPSMTQLLRRRRAVLPQTRYVELFIVVDKERY
DMMGRNQTAVREEMILLANYLDSMYIMLNIRIVLVGLEIWTNGNLINIVGGAGDVLGNFVQWREKFLITRRRHDS
AQLVLKKGFGGTAGMAFVGTVCSRSHAGGINVFGQITVETFASIVAHELGHNLGMNHDDGRDCSCGAKSCIMNSG
ASGSRNFSSCSAEDFEKLTLNKGGNCLLNIPKPDEAYSAPSCGNKLVDAGEECDCGTPKECELDPCCEGSTCKLK
SFAECAYGDCCKDCRFLPGGTLCRGKTSECDVPEYCNGSSQFCQPDVFIQNGYPCQNNKAYCYNGMCQYYDAQCQ
VIFGSKAKAAPKDCFIEVNSKGDRFGNCGFSGNEYKKCATGNALCGKLQCENVQEIPVFGIVPAIIQTPSRGTKC
WGVDFQLGSDVPDPGMVNEGTKCGAGKICRNFQCVDASVLNYDCDVQKKCHGHGVCNSNKNCHCENGWAPPNCET
KGYGGSVDSGPTYNEMNTALRDGLLVFFFLIVPLIVCAIFIFIKRDQLWRSYFRKKRSQTYESDGKNQANPSRQP
GSVPRHVSPVTPPREVPIYANRFAVPTYAAKQPQQFPSRPPPPQPKVSSQGNLIPARPAPAPPLYSSLT

FIGURE 6308

GGCACGAGGAGTGAATCAGGCACCGGAGTGCAGGTTCGGGGGTGGAATCCTTGGGCCGCTGGGCAAGCGGCGAGA
CCTGGCCAGGGCCAGCGAGCCGAGGACAGAGGGCGCGCGGAGGGCCGGGCCGCAGCCCCGGCCGCTTGCAGACCC
CGCC**ATG**GACCCGTTCCTGGTGCTGCTGCACTCGGTGTCGTCCAGCCTGTCGAGCAGCGAGCTGACCGAGCTCAA
GTTCCTATGCCTCGGGCGCGTGGGCAAGCGCAAGCTGGAGCGCGTGCAGAGCGGCCTAGACCTCTTCTCCATGCT
GCTGGAGCAGAACGACCTGGAGCCCGGGCACACCGAGCTCCTGCGCGAGCTGCTCGCCTCCCTGCGGCGCCACGA
CCTGCTGCGGCGCGTCGACGACTTCGAGGCGGGGGCGGCGGCCGGGGCCGCGCCTGGGGAAGAAGACCTGTGTGC
AGCATTTAACGTCATATGTGATAATGTGGGGAAAGATTGGAGAAGGCTGGCTCGTCAGCTCAAAGTCTCAGACAC
CAAGATCGACAGCATCGAGGACAGATACCCCCGCAACCTGACAGAGCGTGTGCGGGAGTCACTGAGAATCTGGAA
GAACACAGAGAAGGAGAACGCAACAGTGGCCCACCTGGTGGGGGCTCTCAGGTCCTGCCAGATGAACCTGGTGGC
TGACCTGGTACAAGAGGTTCAGCAGGCCCGTGACCTCCAGAACAGGAGTGGGGCCATGTCCCCGATGTCATGGAA
CTCAGACGCATCTACCTCCGAAGCGTCC**TGA**TGGGCCGCTGCTTTGCGCTGGTGGACCACAGGCATCTACACAGC
CTGGACTTTGGTTCTCTCCAGGAAGGTAGCCCAGCACTGTGAAGACCCAGCAGGAAGCCAGGCTGAGTGAGCCAC
AGACCACCTGCTTCTGAACTCAAGCTGCGTTTATTAATGCCTCTCCCGCACCAGGCCGGGCTTGGGCCCTGCACA
GATATTTCCATTTCTTCCTCACTATGACACTGAGCAAGATCTTGTCTCCACTAAATGAGCTCCTGCGGGAGTAGT
TGGAAAGTTGGAACCGTGTCCAGCACAGAAGGAATCTGTGCAGATGAGCAGTCACACTGTTACTCCACAGCGGAG
GAGACCAGCTCAGAGGCCCAGGAATCGGAGCGAAGCAGAGAGGTGGAGAACTGGGATTTGAACCCCCGCCATCCT
TCACCAGAGCCCATGCTCAACCACTGTGGCGTTCTGCTGCCCCTGCAGTTGGCAGAAAGGATGTTTTGTCCCATT
TCCTTGGAGGCCACCGGGACAGACCTGGACACTAGGGTCAGGCGGGGTGCTGTTGTGGTGGGGAGAGGCATGGCT
GGGGTGGGGGTGGGGAGACCTGGTTGGCCGTGGTCCAGCTCTTGGCCCCTGTGTGAGTTGAGTCTCCTCTCTGAG
ACTGCTAAGTAGGGGCAGTGATGGTTGCCAGGACGAATTGAGATAATATCTGTGAGGTGCTGATGAGTGATTGAC
ACACAGCACTCTCTAAATCTTCCTTGTGAGGATTATGGGTCCTGCAATTCTACAGTTTCTTACTGTTTTGTATCA
AAATCACTATCTTTCTGATAACAGAATTGCCAAGGCAGCGGGATCTCGTATCTTTAAAAAGCAGTCCTCTTATTC
CTAAGGTAATCCTATTAAAACACAGCTTTACAACTTCCATATTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAA

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FIGURE 6309

MDPFLVLLHSVSSSLSSSELTELKFLCLGRVGKRKLERVQSGLDLFSMLLEQNDLEPGHTELLRELLASLRRHDL
LRRVDDFEAGAAAGAAPGEEDLCAAFNVICDNVGKDWRRLARQLKVSDTKIDSIEDRYPRNLTERVRESLRIWKN
TEKENATVAHLVGALRSCQMNLVADLVQEVQQARDLQNRSGAMSPMSWNSDASTSEAS

FIGURE 6310

ACTCCGAATGCGAAGTTCTGTCTTGTCATAGCCAAGCACGCTGCTTCTTGGATTGACCTGGCAGGATGGCGCCAC
CACCAGCTAGAGTACATCTAGGTGCGTTCCTGGCAGTGACTCCGAATCCCGGGAGCGCAGCGAGTGGGACAGAGG
CAGCCGCGGCCACACCCAGCAAAGTGTGGGGCTCTTCCGCGGGGAGGATTGAACCACGAGGCGGGGGCCGAGGAG
CGCTCCCTACCTCCATGGGACAGCACGGACCCAGTGCCCGGGCCCGGGCAGGGCGCGCCCCAGGACCCAGGCCGG
CGCGGGAAGCCAGCCCTCGGCTCCGGGTCCACAAGACCTTCAAGTTTGTCGTCGTCGGGGTCCTGCTGCAGGTCG
TACCTAGCTCAGCTGCAACCATCAAACTTCATGATCAATCAATTGGCACACAGCAATGGGAACATAGCCCTTTGG
GAGAGTTGTGTCCACCAGGATCTCATAGATCAGAACATCCTGGAGCCTGTAACCGGTGCACAGAGGGTGTGGGTT
ACACCAATGCTTCCAACAATTTGTTTGCTTGCCTCCCATGTACAGCTTGTAAATCAGATGAAGAAGAGAGAAGTC
CCTGCACCACGACCAGGAACACAGCATGTCAGTGCAAACCAGGAACTTTCCGGAATGACAATTCTGCTGAGATGT
GCCGGAAGTGCAGCAGAGGGTGCCCCAGAGGGATGGTCAAGGTCAAGGATTGTACGCCCTGGAGTGACATCGAGT
GTGTCCACAAAGAATCAGGCAATGGACATAATATATGGGTGATTTTGGTTGTGACTTTGGTTGTTCCGTTGCTGT
TGGTGGCTGTGCTGATTGTCTGTTGTTGCATCGGCTCAGGTTGTGGAGGGGACCCCAAGTGCATGGACAGGGTGT
GTTTCTGGCGCTTGGGTCTCCTACGAGGGCCTGGGGCTGAGGACAATGCTCACAACGAGATTCTGAGCAACGCAG
ACTCGCTGTCCACTTTCGTCTCTGAGCAGCAAATGGAAAGCCAGGAGCCGGCAGATTTGACAGGTGTCACTGTAC
AGTCCCCAGGGGAGGCACAGTGTCTGCTGGGACCGGCAGAAGCTGAAGGGTCTCAGAGGAGGAGGCTGCTGGTTC
CAGCAAATGGTGCTGACCCCACTGAGACTCTGATGCTGTTCTTTGACAAGTTTGCAAACATCGTGCCCTTTGACT
CCTGGGACCAGCTCATGAGGCAGCTGGACCTCACGAAAAATGAGATCGATGTGGTCAGAGCTGGTACAGCAGGCC
CAGGGGATGCCTTGTATGCAATGCTGATGAAATGGGTCAACAAAACTGGACGGAACGCCTCGATCCACACCCTGC
TGGATGCCTTGGAGAGGATGGAAGAGAGACATGCAAAAGAGAAGATTCAGGACCTCTTGGTGGACTCTGGAAAGT
TCATCTACTTAGAAGATGGCACAGGCTCTGCCGTGTCCTTGGAGTGAAAGACTCTTTTTACCAGAGGTTTCCTCT
TAGGTGTTAGGAGTTAATACATATTAGGTTTTTTTTTTTTTAACATGTATACAAAGTAAATTCTTAGCCAGGTG
TAGTGGCTCATGCCTGTAATCCCAGCACTTTGGGAGGCTGAGGCGGGTGGATCACTTGAGGTCAGAAGTTCAAGA
CCAGCCTGACCAACATCGTGAAATGCCGTCTTTACAAAAAAATACAAAAATTAACTGGAAAAAAAAAAAAAAA

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FIGURE 6311

MAPPPARVHLGAFLAVTPNPGSAASGTEAAAATPSKVWGSSAGRIEPRGGGRGALPTSMGQHGPSARARAGRAPG
PRPAREASPRLRVHKTFKFVVVGVLLQVVPSSAATIKLHDQSIGTQQWEHSPLGELCPPGSHRSEHPGACNRCTE
GVGYTNASNNLFACLPCTACKSDEEERSPCTTTRNTACQCKPGTFRNDNSAEMCRKCSRGCPRGMVKVKDCTPWS
DIECVHKESGNGHNIWVILVVTLVVPLLLVAVLIVCCCIGSGCGGDPKCMDRVCFWRLGLLRGPGAEDNAHNEIL
SNADSLSTFVSEQQMESQEPADLTGVTVQSPGEAQCLLGPAEAEGSQRRRLLVPANGADPTETLMLFFDKFANIV
PFDSWDQLMRQLDLTKNEIDVVRAGTAGPGDALYAMLMKWVNKTGRNASIHTLLDALERMEERHAKEKIQDLLVD
SGKFIYLEDGTGSAVSLE

FIGURE 6312

CTCTCTGGATAGGAAGAAATATAGTAGAACCCTTTGAAAATGGATATTTTCACATATTTTCGTTCAGATACAAAA
GCTGGCAGTTACTGAAATAAGGACTTGAAGTTCCTTCCTCTTTTTTTATGTCTTAAGAGCAGGAAATAAAGAGAC
AGCTGAAGGTGTAGCCTTGACCAACTGAAAGGGAAATCTTCATCCTCTGAAAAAACATATGTGATTCTCAAAAAA
CGCATCTGGAAAATTGATAAAGAAGCGATTCTGTAGATTCTCCCAGCGCTGTTGGGCTCTCAATTCCTTCTGTGA
AGGACAACATATGGTGATGGGGAAATCAGAAGCTTTGAGACCCTCTACACCTGGATATGAATCCCCCTTCTAATA
CTTACCAGAAATGAAGGGGATACTCAGGGCAGAGTTCTGAATCTCAAAACACTCTACTCTGGCAAAGGAATGAAG
TTATTGGAGTGATGACAGGAACACGGGAGAACAATGCTCTGTTTGGGCTGGATATTTCTTTGGCTTGTTGCAGGA
GAGCGAATTAAAGGATTTAATATTTCAGGTTGTTCCACAAAAAAACTCCTTTGGACATATTCTACAAGGAGTGAA
GAGGAATTTGTCTTATTTTGTGATTTACCAGAGCCACAGAAATCACATTTCTGCCACAGAAATCGACTCTCACCA
AAACAAGTCCCTGAGCACCTGCCCTTCATGGGTAGTAACGACCTATCTGATGTCCAATGGTACCAACAACCTTCG
AATGGAGATCCATTAGAGGACATTAGGAAAAGCTATCCTCACATCATTCAGGACAAATGTACCCTTCACTTTTTG
ACCCCAGGGGTGAATAATTCTGGGTCATATATTTGTAGACCCAAGATGATTAAGAGCCCCTATGATGTAGCCTGT
TGTGTCAAGATGATTTTAGAAGTTAAGCCCCAGACAAATGCATCCTGTGAGTATTCCGCATCACATAAGCAAGAC
CTACTTCTTGGGAGCACTGGCTCTATTTCTTGCCCCAGTCTCAGCTGCCAAAGTGATGCACAAAGTCCAGCGGTA
ACCTGGTACAAGAATGGAAAACTCCTCTCTGTGGAAAGGAGCAACCGAATCGTAGTGGATGAAGTTTATGACTAT
CACCAGGGCACATATGTATGTGATTACACTCAGTCGGATACTGTGAGTTCGTGGACAGTCAGAGCTGTTGTTCAA
GTGAGAACCATTGTGGGAGACACTAAACTCAAACCAGATATTCTGGATCCTGTCGAGGACACACTGGAAGTAGAA
CTTGGAAAGCCTTTAACTATTAGCTGCAAAGCACGATTTGGCTTTGAAAGGGTCTTTAACCCTGTCATAAAATGG
TACATCAAAGATTCTGACCTAGAGTGGGAAGTCTCAGTACCTGAGGCGAAAAGTATTAAATCCACTTTAAAGGAT
GAAATCATTGAGCGTAATATCATCTTGGAAAAAGTCACTCAGCGTGATCTTCGCAGGAAGTTTGTTTGCTTTGTC
CAGAACTCCATTGGAAACACAACCCAGTCCGTCCAACTGAAAGAAAAGAGAGGAGTGGTGCTCCTGTACATCCTG
CTTGGCACCATCGGGACCCTGGTGGCCGTGCTGGCGGCGAGTGCCCTCCTCTACAGGCACTGGATTGAAATAGTG
CTGCTGTACCGGACCTACCAGAGCAAGGATCAGACGCTTGGGGATAAAAAGGATTTTGATGCTTTCGTATCCTAT
GCAAAATGGAGCTCTTTTCCAAGTGAGGCCACTTCATCTCTGAGTGAAGAACACTTGGCCCTGAGCCTATTTCCT
GATGTTTTAGAAAACAAATATGGATATAGCCTGTGTTTGCTTGAAAGAGATGTGGCTCCAGGAGGAGTGTATGCA
GAAGACATTGTGAGCATTATTAAGAGAAGCAGAAGAGGAATATTTATCTTGAGCCCCAACTATGTCAATGGACCC
AGTATCTTTGAACTACAAGCAGCAGTGAATCTTGCCTTGGATGATCAAACACTGAAACTCATTTTAATTAAGTTC
TGTTACTTCCAAGAGCCAGAGTCTCTACCTCATCTCGTGAAAAAAGCTCTCAGGGTTTTGCCCACAGTTACTTGG
AGAGGCTTAAAATCAGTTCCTCCCAATTCTAGGTTCTGGGCCAAAATGCGCTACCACATGCCTGTGAAAAACTCT
CAGGGATTCACGTGGAACCAGCTCAGAATTACCTCTAGGATTTTTCAGTGGAAAGGACTCAGTAGAACAGAAACC
ACTGGGAGGAGCTCCCAGCCTAAGGAATGGTGAAATGAGCCCTGGAGCCCCCTCCAGTCCAGTCCCTGGGATAGA
GATGTTGCTGGACAGAACTCACAGCTCTGTGTGTGTGTTCAGGCTGATAGGAAATTCAAAGAGTCTCCTGCCA
GCACCAAGCAAGCTTGATGGACAATGGAATGGGATTGAGACTGTGGTTTAGAGCCTTTGATTTCCTGGACTGGAC
AGACGGCGAGTGAATTCTCTAGACCTTGGGTACTTTCAGTACACAACACCCCTAAGATTTCCCAGTGGTCCGAGC
AGAATCAGAAAATACAGCTACTTCTGCCTTATGGCTAGGGAACTGTCATGTCTACCATGTATTGTACATATGACT
TTATGTATACTTGCAATCAAATAAATATTATTTTATTAGAAAAAAAACCGGAATTC

FIGURE 6313

MLCLGWIFLWLVAGERIKGFNISGCSTKKLLWTYSTRSEEEFVLFCDLPEPQKSHFCHRNRLSPKQVPEHLPFMG
SNDLSDVQWYQQPSNGDPLEDIRKSYPHIIQDKCTLHFLTPGVNNSGSYICRPKMIKSPYDVACCVKMILEVKPQ
TNASCEYSASHKQDLLLGSTGSISCPSLSCQSDAQSPAVTWYKNGKLLSVERSNRIVVDEVYDYHQGTYVCDYTQ
SDTVSSWTVRAVVQVRTIVGDTKLKPDILDPVEDTLEVELGKPLTISCKARFGFERVFNPVIKWYIKDSDLEWEV
SVPEAKSIKSTLKDEIIERNIILEKVTQRDLRRKFVCFVQNSIGNTTQSVQLKEKRGVVLLYILLGTIGTLVAVL
AASALLYRHWIEIVLLYRTYQSKDQTLGDKKDFDAFVSYAKWSSFPSEATSSLSEEHLALSLFPDVLENKYGYSL
CLLERDVAPGGVYAEDIVSIIKRSRRGIFILSPNYVNGPSIFELQAAVNLALDDQTLKLILIKFCYFQEPESLPH
LVKKALRVLPTVTWRGLKSVPPNSRFWAKMRYHMPVKNSQGFTWNQLRITSRIFQWKGLSRTETTGRSSQPKEW

FIGURE 6314

GCCATTTGAAGCAGAATCCAAACCATGAATTGTAGAGAATTACCCTTGACCCTTTGGGTGCTTATATCTGTAAGC
ACTGCAGAATCTTGTACTTCACGTCCCCACATTACTGTGGTTGAAGGGGAACCTTTCTATCTGAAACATTGCTCG
TGTTCACTTGCACATGAGATTGAAACAACCACCAAAAGCTGGTACAAAAGCAGTGGATCACAGGAACATGTGGAG
CTGAACCCAAGGAGTTCCTCGAGAATTGCTTTGCATGATTGTGTTTTGGAGTTTTGGCCAGTTGAGTTGAATGAC
ACAGGATCTTACTTTTTCCAAATGAAAAATTATACTCAGAAATGGAAATTAAATGTCATCAGAAGAAATAAACAC
AGCTGTTTCACTGAAAGACAAGTAACTAGTAAAATTGTGGAAGTTAAAAAATTTTTTCAGATAACCTGTGAAAAC
AGTTACTATCAAACACTGGTCAACAGCACATCATTGTATAAGAACTGTAAAAAGCTACTACTGGAGAACAATAAA
AACCCAACGATAAAGAAGAACGCCGAGTTTGAAGATCAGGGGTATTACTCCTGCGTGCATTTCCTTCATCATAAT
GGAAAACTATTTAATATCACCAAAACCTTCAATATAACAATAGTGGAAGATCGCAGTAATATAGTTCCGGTTCTT
CTTGGACCAAAGCTTAACCATGTTGCAGTGGAATTAGGAAAAAACGTAAGGCTCAACTGCTCTGCTTTGCTGAAT
GAAGAGGATGTAATTTATTGGATGTTCGGGGAAGAAAATGGATCGGATCCTAATATACATGAAGAGAAAGAAATG
AGAATTATGACTCCAGAAGGCAAATGGCATGCTTCAAAAGTATTGAGAATTGAAAATATTGGTGAAAGCAATCTA
AATGTTTTATATAATTGCACTGTGGCCAGCACGGGAGGCACAGACACCAAAAGCTTCATCTTGGTGAGAAAAGCA
GACATGGCTGATATCCCAGGCCACGTCTTCACAAGAGGAATGATCATAGCTGTTTTGATCTTGGTGGCAGTAGTG
TGCCTAGTGACTGTGTGTGTCATTTATAGAGTTGACTTGGTTCTATTTTATAGACATTTAACGAGAAGAGATGAA
ACATTAACAGATGGAAAAACATATGATGCTTTTGTGTCTTACCTAAAAGAATGCCGACCTGAAAATGGAGAGGAG
CACACCTTTGCTGTGGAGATTTTGCCCAGGGTGTTGGAGAAACATTTTGGGTATAAGTTATGCATATTTGAAAGG
GATGTAGTGCCTGGAGGAGCTGTTGTTGATGAAATCCACTCACTGATAGAGAAAAGCCGAAGACTAATCATTGTC
CTAAGTAAAAGTTATATGTCTAATGAGGTCAGGTATGAACTTGAAAGTGGACTCCATGAAGCATTGGTGGAAAGA
AAAATTAAAATAATCTTAATTGAATTTACACCTGTTACTGACTTCACATTCTTGCCCCAATCACTAAAGCTTTTG
AAATCTCACAGAGTTCTGAAGTGGAAGGCCGATAAATCTCTTTCTTATAACTCAAGGTTCTGGAAGAACCTTCTT
TACTTAATGCCTGCAAAAACAGTCAAGCCAGGTAGAGACGAACCGGAAGTCTTGCCTGTTCTTTCCGAGTCTTAA

TCTTCAGAAACAGTGAACGCCAAAAAGAACTCAAGATATTCTGGGGACTGAGCATATGAACCTGTTCATAACAAA
GGCTGTGACTCGAAATAATTAACTTTGTCAAAATCCTGCTCACAATTTGAAGATGAAACTTGTCATTAGGTTGGC
GGGAATGAGACTAAAGATTGCGCTGTGGGCTGTGGTCACGTGCTCCCAGAAGACCTGGAATTCAAAAGAAATGGA
GCTATTCTTTTTCTCCCTCTTTCATAACTGGATGCAGCTGCTCATACTCAATCCCATATTCAGCAAGTGTGAAGC
TGGACGTGATGCAAAATAACCGATGCCCTACAAAAAGGGCGCATCTTTAAGAGTTTTAATGCCAGTGCTTAATTC
GAATGAGGGGATTTTAAGTGTCTGAAGAGGCATTTTCTAGGGACCAGTGGGTGACTGAGTAACTGAAATGCTGCT
TTCACTCCCTAACACCATGGATCTGGTTGTGCATAGGATGTGGGAGGAGGGGCTGGCAGGGCCGCCTTCAGAGGC
TGCAGGGCCTCAGCCTCAGGATGCATTTAATGTATCCTGGCCACAGTTGCAGCCAACGGTTCTTGAAAGCTCGGT
AAGGCCCTGCAACGCAGAGCCTGCTTATGTGGATCTATTTATGGGAACTTCTTAAAAGGACCCCAGAATAGCTCT
TTATCTTTCACAAGAGACACAAATTCTAATTGAGTTAATTATCTGGGCCTTTCACTTTGGATGCTCTGAAACATT
TGTTGATTTTGTGTGAATGTTTATATCAAAATGTTTGCCAGGTTGTATTAGCCATTGAATAGCAAAAAACTGATA
GTTACTTGCTTGTTTTTTAAAAATTACATATTAAAAATGCCCTTGGCATAAGGCAGCATGGTGTGGCAGTTAAGA
GATGGGCTGTGCAGCCCATCCTGAGCTCCAGTCCTGAGTTTGCTACTTACTTCTGTGGCCTCTGGAACCTTATCC
AACCTCTTGGTGCTTCAGTTTCCTCATCTGTGAAATTAGAATTTATAATAATTGCACCTACCTCCCAGGGGTAAC
TAAATGAATAAATATAATAAAGTACTTACAGTGGTTCCTGACACAGACTCAGCACTCCGTCAGTGTTGCCATGAC
TATTTTTATTATCATTATTAATGATTACTTAGATCAATTATTTAGCAGTGGACTAATGGAAGCTACAGAGCAGGG
AAGGGAAGCAGATCTAGGGAGGAAGGCAGTTTTGATTTGAGGAGGTTTGCACATGTAGAGAAGCATACTGGAGAA
GCATATCCAGAGGGCGAAAGATATCTCTCCATTGTGCATCTGCCTCTTTTGACGTTGGAAGACACATGTCTTACT
CCCCAAAGGGAGCCCAGCACTGGGAGCCTTCTTGATGATCTCAAAAATAATAGCTATTCAAGAAAATCACCAAGT
GACTGTGAAACCGTCAGTTCGGAAGGCTGGTTAGAACATGTGGGAGCAACATGAATGTTCTACAAAAGTTTAAAG
CAGAGATTGTTTCAAATGGGTGTAGTAGATATTACTGAAAACCAAAAAAGAGTGAGATTGTCAGTGTAAGAATGT
GATTTAATGTTTGTAGTGCTTACAATTTTGTGTACCAACTGGATGACTAAAAAGAGTAAAATAACTTAATTAATA
GCTCATATTTTATGTGTGAAAACATGTTAGTGAACATATATAATCAAAATAGATTTCATTGCTATTGCATAGTCT
CTAATACATAGAATGATTTTGCTTTTCTCTTTTATTATACTTGCTTTAAAATACTTGAAATATATTTTGCATTAA
ATGCATTTCAAGTTAAATGTCTTAAATGTATACATTAGATGTGTGTTTTAAAATGCATAAAACACGTTGAAA

FIGURE 6315

MNCRELPLTLWVLISVSTAESCTSRPHITVVEGEPFYLKHCSCSLAHEIETTTKSWYKSSGSQEHVELNPRSSSR
IALHDCVLEFWPVELNDTGSYFFQMKNYTQKWKLNVIRRNKHSCFTERQVTSKIVEVKKFFQITCENSYYQTLVN
STSLYKNCKKLLLENNKNPTIKKNAEFEDQGYYSCVHFLHHNGKLFNITKTFNITIVEDRSNIVPVLLGPKLNHV
AVELGKNVRLNCSALLNEEDVIYWMFGEENGSDPNIHEEKEMRIMTPEGKWHASKVLRIENIGESNLNVLYNCTV
ASTGGTDTKSFILVRKADMADIPGHVFTRGMIIAVLILVAVVCLVTVCVIYRVDLVLFYRHLTRRDETLTDGKTY
DAFVSYLKECRPENGEEHTFAVEILPRVLEKHFGYKLCIFERDVVPGGAVVDEIHSLIEKSRRLIIVLSKSYMSN
EVRYELESGLHEALVERKIKIILIEFTPVTDFTFLPQSLKLLKSHRVLKWKADKSLSYNSRFWKNLLYLMPAKTV
KPGRDEPEVLPVLSES

FIGURE 6316

GGCTTACTCACTATAGGGCTCGAGCGGCCGCCCGGGCAGGTCTAGAATTCAGCGGCCGCTGAATTCTAGCGGAGG
CGGCGGCGGCGGCCGCGGCCGAGGTCGAGGCGATCAGTGGGTGACCGCGGCTGCGAGGGACTTTGTCATCCGTCC
TCCAGGATCTGGGGAGAAAGAGCCCCATCCCTTCTCTCTCTGCCACCATTTCGGACACCCCGCAGGGACTCGTTT
TGGGATTCGCACTGACTTCAAGGAAGGACGCGAACCCTTCTCTGACCCCAGCTCGGGCGGCCACCTGTCTTTGCC
GCGGTGACCCTTCTCTC**ATG**ACCCTGCGGTGCCTTGAGCCCTCCGGGAATGGCGGGGAAGGGACGCGGAGCCAGT
GGGGGACCGCGGGGTCGGCGGAGGAGCCATCCCCGCAGGCGGCGCGTCTGGCGAAGGCCCTGCGGGAGCTCGGTC
AGACAGGATGGTACTGGGGAAGTATGACTGTTAATGAAGCCAAAGAGAAATTAAAAGAGGCACCAGAAGGAACTT
TCTTGATTAGAGATAGCTCGCATTCAGACTACCTACTAACAATATCTGTTAAAACATCAGCTGGACCAACTAATC
TTCGAATCGAATACCAAGACGGAAAATTCAGATTGGACTCTATCATATGTGTCAAATCCAAGCTTAAACAATTTG
ACAGTGTGGTTCATCTGATCGACTACTATGTTCAGATGTGCAAGGATAAGCGGACAGGTCCAGAAGCCCCCCGGA
ACGGCACTGTTCACCTTTATCTGACCAAACCGCTCTACACGTCAGCACCATCTCTGCAGCATCTCTGTAGGCTCA
CCATTAACAAATGTACCGGTGCCATCTGGGGACTGCCTTTACCAACAAGACTAAAAGATTACTTGGAAGAATATA
AATTCCAGGTA**TAA**ATGTTTCTCTTTTTTTAAACATGTCTCACATAGAGTATCTCCGAATGCAGCTATGTAAAAG
AGAACCAAAACTTGAGTGCTCTGGATAACTATATGGAATGCTTTCTAAGAACAGCTGAAGCTAATCTAATTTAAA
TTTAACAGCTTGAAGAGGTAGCTAGGTGTTTAAAGTTCCTCCAGATACTTTTACCTGAGTGATGCTTCCCTTCCT
AAGGCTGACCAAGACCTGTTGATCCTTTTAGATTAAAAATAAAATGTCGCATGTAAAGGCTGAAGTCGCGTTTTA
TCAGAATGCCTTGCCTTCTTAGGTTCTTTTCCATTATGTCAAAGGTCCAGGCTCCAGTAGGAGAGAAAGAACTCC
TCATAGGAATACTGAAGAAGTGGGAAGGAACCAAGCTGACACAGGCCTCACTGCAATTTGATATGCCTGCTGATC
AGAGTCTCTTGGGCATTTTATATTTTGCATTCTGATGTACCTAGGAGTTTTGTTAAACAGATGATGTATGTGAGT
ATTTATCCCATTTTATGCAATTAACCAAATCAACCAAAAAAAAGTGACCATGAAGTCCTGTATTTGTCTTTTTACT
ACATGTAGGAACTCTCATGTGAATGAGTACTGTAGTAATCCATTCTATGGGAGCCTTATTTCAGAAATATTTCAA
ACTGGTGCAAATGGAAAAGACTTTCTCTTTTCCTTTAAAGCTAAAGACAAGAATATCATGCTATACAGGTGCAAC
TCAATCCCCGTTAATAAAAACCAATGTAGGTATAGGCATTCTACCCTTTCAAATAGCTGTGTCCCAACCTGTTGC
CATTGATTTTTTGGAAATGGCTTTAGAAATATCCAAGTTGTCCTTGAATTGTCTAACCATGGACATAAACAGTTG
TCTCCCTTCTACTGTGTAGAATACTTTGACTTAATTTTCTTCCAGATACAGGGGGATACCTGCCTGTTTTTCAAA
GTGTTTATTTACTGCTGTTACTATTTGATTAGAATGTATTAAATAAAAAAAACCTGATTTCTAAAAAAAAAA

FIGURE 6317

MTLRCLEPSGNGGEGTRSQWGTAGSAEEPSPQAARLAKALRELGQTGWYWGSMTVNEAKEKLKEAPEGTFLIRDS
SHSDYLLTISVKTSAGPTNLRIEYQDGKFRLDSIICVKSKLKQFDSVVHLIDYYVQMCKDKRTGPEAPRNGTVHL
YLTKPLYTSAPSLQHLCRLTINKCTGAIWGLPLPTRLKDYLEEYKFQV

FIGURE 6318

ACTTGGCCTTACACTCCGCTCGGCTCACCATGTGTCACTCTCGCAGCTGCCACCCGACCATGACCATCCTGCAGG
CCCCGACCCCGGCCCCCTCCACCATCCCGGGACCCCGGCGGGGCTCCGGTCCTGAGATCTTCACCTTCGACCCTC
TCCCGGAGCCCGCAGCGGCCCCTGCCGGGCGCCCCAGCGCCTCTCGCGGGCACCGAAAGCGCAGCCGCAGGGTTC
TCTACCCTCGAGTGGTCCGGCGCCAGCTGCCAGTCGAGGAACCGAACCCAGCCAAAAGGCTTCTCTTTCTGCTGC
TCACCATCGTCTTCTGCCAGATCCTGATGGCTGAAGAGGGTGTGCCGGCGCCCCTGCCTCCAGAGGACGCCCCTA
ACGCCGCATCCCTGGCGCCCACCCCTGTGTCCCCCGTCCTCGAGCCCTTTAATCTGACTTCGGAGCCCTCGGACT
ACGCTCTGGACCTCAGCACTTTCCTCCAGCAACACCCGGCCGCCTTCTAACTGTGACTCCCCGCACTCCCCAAAA
AGAATCCGAAAAACCACAAAGAAACACCAGGCGTACCTGGTGCGCGAGAGCGTATCCCCAACTGGGACTTCCGAG
GCAACTTGAACTCAGAACACTACAGCGGAGACGCCACCCGGTGCTTGAGGCGGGACCGAGGCGCACAGAGACCGA
GGCGCATAGAGACCGAGGCACAGCCCAGCTGGGGCTAGGCCCGGTGGGAAGGAGAGCGTCGTTAATTTATTTCTT
ATTGCTCCTAATTAATATTTATATGTATTTATGTACGTCCTCCTAGGTGATGGAGATGTGTACGTAATATTTATT
TTAACTTATGCAAGGGTGTGAGATGTTCCCCCTGCTGTAAATGCAGGTCTCTTGGTATTTATTGAGCTTTGTGGG
ACTGGTGGAAGCAGGACACCTGGAACTGCGGCAAAGTAGGAGAAGAAATGGGGAGGACTCGGGTGGGGGAGGACG
TCCCGGCTGGGATGAAGTCTGGTGGTGGGTCGTAAGTTTAGGAGGTGACTGCATCCTCCAGCATCTCAACTCCGT
CTGTCTACTGTGTGAGACTTCGGCGGACCATTAGGAATGAGATCCGTGAGATCCTTCCATCTTCTTGAAGTCGCC
TTTAGGGTGGCTACGAGGTAGAGGGGTGGGGGTTGGTGGGCTGTCACGGAGCGACTGTCGAGATCGCCTAGTATG
TTCTGTGAACACAAATAAAATTGATTTACTGTCTGC

FIGURE 6319

MCHSRSCHPTMTILQAPTPAPSTIPGPRRGSGPEIFTFDPLPEPAAAPAGRPSASRGHRKRSRRVSLPSSGEYRR
SGHSRCALPWSHWGTTRLQSLDLTCLLFCLPLVRRQLPVEEPNPAKRLLFLLLTIVFCQILMAEEGVPAPLPPED
APNAASLAPTPVSPVLEPFNLTSEPSDYALDLSTFLQQHPAAF

FIGURE 6320A

CACTGGGAGAGTTTATGTGGCCGAGGCAGACAAGTGGAATTAGGCCTTGCTGCAGGGGACTTCATTTCCTTCTCA
GTACTGGACCCATTTATGAGGAGGTGGCTTATGAAAGTGTGATGTTCGCGTATTTCTTGACAGGCAGTGGCGTGA
TCTTGGCTCACTGCAACCTCCGACTCCCTGGTTCAAGCGATTCTCCTGCCTCAGCCTCCTGAGTGGGGATTACAG
GCCACAGCAAACACAGGTGTGCAGGAACCGTTTGTC**ATG**GAAGCCAGGGAGCCTGGGAGGCCCACACCCACCTAC
CATCTTGTCCCTAACACCAGCCAGTCCCAGGTGGAAGAAGATGTCAGCTCGCCACCTCAAAGGTCCTCCGAAACT
ATGCAGCTGAAGAAGGAGATCTCCCTGCTGAATGGGGTCAGCCTGGTGGTGGGCAACATGATCGGCTCAGGGATC
TTTGTCTCACCCAAGGGTGTGCTGGTACACACTGCCTCCTATGGGATGTCACTGATTGTGTGGGCCATTGGTGGG
CTCTTCTCTGTTGTGGGTGCCCTTTGTTATGCAGAGCTGGGGACCACCATCACCAAGTCGGGAGCCAGCTACGCT
TATATTCTAGAGGCCTTTGGGGGCTTCATTGCCTTCATCCGCCTGTGGGTCTCACTGCTAGTTGTTGAGCCCACC
GGTCAGGCCATCATCGCCATCACCTTTGCCAACTACATCATCCAGCCGTCCTTCCCCAGCTGTGATCCCCCATAC
CTGGCCTGCCGTCTCCTGGCTGCTGCTTGCATATGTCTGCTGACATTTGTGAACTGTGCCTATGTCAAGTGGGGC
ACACGTGTGCAGGACACGTTCACTTACGCCAAGGTCGTAGCGCTCATTGCCATCATTGTCATGGGCCTTGTTAAA
CTGTGCCAGGGACACTCTGAGCACTTTCAGGACGCCTTTGAGGGTTCCTCCTGGGACATGGGAAACCTCTCTCTT
GCCCTCTACTCTGCCCTCTTCTCTTACTCAGGTTGGGACACCCTTAATTTTGTAACAGAAGAAATCAAAAACCCA
GAAAGAAATTTGCCCTTGGCCATTGGGATTTCTATGCCAATTGTGACGCTCATCTACATCCTGACCAATGTGGCC
TATTACACAGTGCTGAACATTTCAGATGTCCTTAGCAGTGATGCTGTGGCTGTGACATTTGCTGACCAGACGTTT
GGCATGTTCAGCTGGACCATCCCCATTGCTGTTGCCCTGTCCTGCTTTGGGGGCCTCAATGCATCCATCTTTGCT
TCATCAAGGTTGTTCTTCGTGGGCTCCCGGGAGGGCCACCTACCGGACCTTCTGTCCATGATCCACATTGAGCGT
TTTACACCTATCCCTGCTTTACTGTTCAATTGCACCATGGCACTCATCTACCTCATCGTGGAGGATGTTTTCCAG
CTTATCAACTACTTCAGCTTCAGCTACTGGTTCTTCGTGGGCCTGTCTGTTGTTGGACAGCTCTACCTCCGCTGG
AAGGAGCCCAAGCGGCCCCGGCCTCTCAAGCTGAGCGTGTTTTTCCCCATCGTGTTCTGCATATGCTCCGTGTTT
CTGGTGATAGTGCCCCTCTTCACTGACACCATTAATTCCCTCATTGGCATCGGGATTGCCCTTTCTGGAGTCCCT
TTCTACTTCATGGGTGTTTACCTGCCAGAGTCCCGGAGGCCATTGTTTATTCGGAATGTCCTGGCTGCTATCACC
AGAGGCACCCAGCAGCTTTGCTTTTGTGTCCTGACTGAGCTTGATGTAGCCGAAGAAAAAAAGGATGAGAGGAAA
ACTGAC**TAG**AGGTCAGAGGTGGCTTTCTGAGGCCTGGAAGGCAGGCCAACCAGCAAAATCCTGATAACAAGACTC
TGTGGGCCCAACTCTCCTGAATTAAAGGAGCCTTTTGACCCAATCATATAGTGGGGCTCAGGGCCAGTGCTCACT
CTTATTGGTAAGCTATAGGAGACTCAGGATCTGGGCCAACCTCAAGGTGGGGGCTTCAGAGGGTGGGGGGAAGAT
TGGGGAACGGGGGGAATGGTCATTTAGTTTTACTCCTGATAGGTAGATGCAGCTCTTACAGATATTTACTTGGTA
AAGTGCAGTGGGGAAGAGGGAATGCTAGGTTGATAGGGCTGGTGGCTTCTGAATTTGGTATTTGAACTAGGAGTC
CCTATAGAGGGGCTGCTTTATGGGAAGTTTTTCTCTGACCAGGTACAACACCTGACTTTAAAGGCCTGAAATGCT
ACCATTTCTTCCTCTGGCTCAAAATTCTTCCCTGGGGAGAGAGTTATATTCCCTTATTTATTGATATTTAGTCCA
GAACACCAGTTCTAACGAAGCATGCGTGTCTCTTCATCTACAGGATGCAATAGGCTGATTGTATTTAAAAATCAA
AGTACCCAAAACTGAGTCCCTTTGGGCTCAGAAATGTCTGTGGTATTGGGTCAGACTCTGACCACAGATTTTATG
CTGTTTAGCACAATTTCTATTGAGTCTTACCTGCAACAATGAACCTTAAAGATTTTTTTACTCACGTACCTGTTA
CACTTTAGCATACAGATAGATCATAGATCACGTTACAAGCACTTGGCTCAGGTCCAGCAAGGACAGATGAACAAA
TTCCTGAGTCAGAAGTCTGTTAATATTGCTGTTTTGAAGGACAATCCTTTATTTTACTTGAGACCTTACATCTTT
GTTCTAGCTGACAGTAAATCTCTGGGTTTCTGTTACGAACTCTAAGAGGGCTGAAACTTCTGATATTCAGGTGGA
TCACCTGAATTCTCTCAGCTGTCAATGGCTTGGAGAACATCTCATGGGCCCAAGTCATCAAATAACCTGTTCCTC
TCTGTAAGGGCAGTGTGAGGGACTGCTGTGCAGACCCAAGCAATCCCAACCTGGTGCTAGGTCATTTCACTTTTC
TGAAAACCTCACATCAGGCTGCATCCTCTTCTGTCCCTGGCACCAGGCTTTGTTTACACTTGGAGCCACCTTGGT
GTGGGTCACCGGGACAGTGTACTCCTCTCCTGCCAGCCTCCCCTTCCCCGAGGTGTGGTGGCTGCAGTCTCAGGA
AGAGCTTGGTACTTGTGGGGACTTCTGTTTTCTCCCTGTGGAGATCAGTGAAGACTGGGAGGAAAGCTGCTTCAA
CCTGAGTCCGGCTCTTCAGCAGGCTGCACAAGTGGAAGCAACTAATTCTGGTGCTCAGGCTGGGCTCTCCACCCA
AGTTAGGCCTGCTCTGGCCTAATGGATCTTACTGTATGAGCAGGACGGCTGCATTGGATTGTACAACTGTTTTGT
GATGCCCCCAGACACTGTCATCCTAGGCCGAGAAGAACCTGCTAGCTTGACATACCCCATGGGCTTATCCTTAGG
TTTTGGAATTGGTCAACAGTGAGGCAGTCTCCCTTCCTGACCATTCTTCTCCACCCAGTCACAGATAAGGGAATA
ACCTTGGCCATATATTTGCTCAATAAAGATTGAAGGAAGCATGGTCATAGTTGCCCTGGGTTCAGAGCATAATGC
ATATGTGAAGCATGGGGTGACATTCCTACTGTCATGGGTTTGGGATTTGTAACGGCAAATTCCTGCCCGACGACA

FIGURE 6320B

GGGTGTCTTATGCAAAGGCTGACTTGCCTGAACGCTAAGAACATGACTTCTGTCTGAGCTAAGCTGGCACCCATC
CCAGGGCTCCTCTGGAGCTAATCCTTTAAGCAAAATGTGCTTGCCTTTTAAAGATCCCTGACCCCAGCTTTAGCT
TTCTCCACCAGATAACCAGCTAATCCCAGGAATTTGCTGCCCCCCACCAGTGGCTTCTAGGGAAAGCAAGGACCT
CACATGCCAGGTGCCCTAGTACTTGCTTAGTGAGCCATGTCATCCTCCTTTCATTTTTGGATGGTGACAGCATTT
TTCCCCTCTGTGCTGGATACAGACTTCTCCCAGGATCCTCTCTTTGGGAGCGAAGCCAGAGGATCCCTACAGCAC
TCAAGCTTCATGGTGGAATTAATTTCTGCCAGCTCTTTGTTGTCTGTCTCCTTAAATCCTTTTCCTGGTGTGCTT
ATTATCCCTTTTGCAGTGAGTACAGTTTATTAAGTTGTCAGCCCTTTAATATTGGGGAAACTTAATGAGTATAAA
TAGCAGGGAGCACATTGTAACAGCACAGTGTTTTGTTTTTTTCACCCGGTTGCTGTATGAGAATGGCTTTCAATC
CTTTGTTTCTATGCCTACAGACAGAAAGCAAGATGTCTAATATTAGACATACAAGTTGCTGCCTGTTATAACGGT
GAATTATACCTTTGTGCATGCCTAGGATGTTTGTTGTTTTAATTAGCTGCAATATATACGGCCTGTGTACACAGA
ATTTAATCACTTCGGCAGGTTGAACAACTCCATGTAGATAAGAGCAAGTGTAGGCAAAGGTTTAGAAAATGGACA
TAAAGTCAAAGAATGATGGCAGGTAGGATGAAGGAGAGATACTTAGGAAATCCTAAAAGAGGCGGCAAGAAGGTA
CCTCCCTGTGTAACTCACCTTCCCCCATGACAGTAAGAGACACTCACAGGCTATGAGGGTACACCCCTAGCTGAA
TGTTCTGTGTTGTTTCCTTAGACCTGTGGTGTCCGCTGCAACAGCTACTAGCCACGTGTAGCTAATTACATTAAA
ATGAAATAAAATTAAAAGCTCAGTTTCTCAGTTGCGCTAATCACATTTCAAGTGCTCAGCAGCCACCCGTGTCTA
CTACTACACAGTGCAGACACAGAACATATCATCACTGCAGATAGTTCTACTGGACAATGTTACGCTAGAATAAAC
ACCAAGGCAGTCAGTTAAGGCAGCTATGGTTTGGAAAGGCATACGGACAGAGTCTGCTTAGAAGAGATACAAGTT
GTTAATAAAATTGATCCTGTTGATAGTAGTTTGTTTTTGTGGTGGGTGCTGTGAAGAGTAAACATTACTCAGTGG
AAAGCTAAGTTCAGAAGGTACTTTGTTTTTCCTCCCTTGCCTTAAGTCCTTGGTATTTATAATCAATGCTGAACC
TTCTATTTCACTACCGCTCCCTGTTTTAGATATTCAGATTTAAAAGGTTTTCAAAGAATTACTTTCTTCCATGTT
CAAAGCTAGATTTTACTAAACACATGTATCACATTCATATATATTGTTTCTTGGCCCCACTGCCAAAGGAAGTCA
GTCAGTAATTTCACAACCGTTATCAGAGTTTGGAAGCAGAAATAGCTGTTAACTAAAATCTCCCACTGCTCAGAC
TACTTTCTGCCCTAATGGCCATTACTATCCAGTCTGTATTGCTACAAGGGACCCACTGGTACCCCTTTTAGATTC
TATCAAAAGGAACAGGGTTTTCCTAGAGGCAGGCAGCCTGGTGGTATGGCACAGCAGAAGCTTACTGCTAATGAA
ATGGGAACCTCCCCCTCCCTTGTGGTTTCAGCACAGAACCTGAATGCCAGGAAAAATTCCTGGGCCAAGAAGCTA
AAGCTAAAGAAACCTTCCTTTTTTCAACGTTTTTTTTCTTTCAAACTGTAGGGTCACTTTTGATTGAGGCAAAG
GGGTCCTACTGTAAGTGGAAAAGACTCACTCCCCTAACATAAGTTTTCACTGTGGTGGGATGGTGCCGCCCGATA
TGCTTGATATGCTTTTCCTTCCACATGTTAAGCTAGGAAACCTAACAGGATGTCAGCAGGGCAGTTAACTCTGGA
CTCAGAGCCCTCAAGGGCATGTGGCAGAACCTCATGGACATCACAAGACCATCAGTCTGAATCCAGGTCGTGGGG
GCTGTCATAGCCGAACTCCTTCTGCACATCCAGAGGGTACTTGCTCCACATCCGCTGTCTGCTGCTGCCTCTTTC
CTCCTCACTCAGGCTGTTGTAGTCAGCAGAGCCTAGAATGACATCCCGGGAGTGGATTCTAAATGTGATTTTCCT
AGGCTACTGCAGGAGCCCCTTCTCTTCTCAGAAAGGTCTGTTTTTGTTCCCGATTGTAATGCAAAATCCTTGCTC
AATAAATAAAAAAGAATATAGAATTCTTTTTTTTTTAAAGAAGGAATCACTTTCCTATCATCTAAACCAAGTTCC
TTCACACTGGAGTATTTTGTCACTTCTCCCCTCCGTGGAGTATTTTGTCACTTCTCCCCTCCGTATAGGATTTTT
TGTTGTTGTAAGAGTTGTAGTCATATTGTAAATATTTTTGTACCTTTCTCCTTTTAACGTGTTATTGACAAACCT
CCCCAAAAGAATATGCAATTGTTTGATTCATTTCTCTGTTATCAGACACCAATAAATTCTTTTTGTTGGGC

FIGURE 6321

MEAREPGRPTPTYHLVPNTSQSQVEEDVSSPPQRSSETMQLKKEISLLNGVSLVVGNMIGSGIFVSPKGVLVHTA
SYGMSLIVWAIGGLFSVVGALCYAELGTTIITKSGASYAYILEAFGGFIAFIRLWVSLLVVEPTGQAIIAITFANY
IIQPSFPSCDPPYLACRLLAAACICLLTFVNCAYVKWGTRVQDTFTYAKVVALIAIIVMGLVKLCQGHSEHFQDA
FEGSSWDMGNLSLALYSALFSYSGWDTLNFVTEEIKNPERNLPLAIGISMPIVTLIYILTNVAYYTVLNISDVLS
SDAVAVTFADQTFGMFSWTIPIAVALSCFGGLNASIFASSRLFFVGSREGHLPDLLSMIHIERFTPIPALLFNCT
MALIYLIVEDVFQLINYFSFSYWFFVGLSVVGQLYLRWKEPKRPRPLKLSVFFPIVFCICSVFLVIVPLFTDTIN
SLIGIGIALSGVPFYFMGVYLPESRRPLFIRNVLAAITRGTQQLCFCVLTELDVAEEKKDERKTD

FIGURE 6322

CAGAACGGCCGATCTCCAGCCCAAGATGATTCCAGCAGTGGTCTTGCTCTTACTCCTTTTGGTTGAACAAGCAGC
GGCCCTGGGAGAGCCTCAGCTCTGCTATATCCTGGATGCCATCCTGTTTCTGTATGGAATTGTCCTCACCCTCCT
CTACTGTCGACTGAAGATCCAAGTGCGAAAGGCAGCTATAACCAGCTATGAGAAATCAGATGGTGTTTACACGGG
CCTGAGCACCAGGAACCAGGAGACTTACGAGACTCTGAAGCATGAGAAACCACCACAGTAGCTTTAGAATAGATG
CGGTCATATTCTTCTTTGGCTTCTGGTTCTTCCAGCCCTCATGGTTGGCATCACATATGCCTGCATGCCATTAAC
ACCAGCTGGCCCTACCCCTATAATGATCCTGTGTCCTAAATTAATATACACCAGTGGTTCCTCCTCCCTGTTAAA
GACTAATGCTCAGATGCTGTTTACGGATATTTATATTCTAGTCTCACTCTCTTGTCCCACCCTTCTTCTCTTCCC
CATTCCCAACTCCAGCTAAAATATGGGAAGGGAGAACCCCCAATAAAACTGCCATGGACTGGACTC

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FIGURE 6323

MIPAVVLLLLLLVEQAAALGEPQLCYILDAILFLYGIVLTLLYCRLKIQVRKAAITSYEKSDGVYTGLSTRNQET
YETLKHEKPPQ

FIGURE 6324A

GGATCCTTCTGCCTTGACCTCCCAAGTGCTGGAATTGCAGGCATGAGCCATTGCACCCGGCTTTTTTTTTTTTTT
TTCTTTGAGACAGGCACTTGCACTGTTGCCTAGACTGGAGTGCAGTAGCGGGATTAGAGTTCACTGCAGCCTCAA
CCTCCCAAGCTCAAGCGATCCTCCCACCTTACCCTTCCTGAATGGATGGGGCCACAGGTGTGTACCATCACACGT
AGTTAATTTTTAAACTTTTTCAGAGACGGGGTTTCTCCATGTTGCCCAGGCTGGTCTTGAACTCCCGGCTTCCAG
TGATCCTCCTGCCTCAGCTTCCCAAAGTGCTGGGATTACAGGCATGAACCACTGCACCCAACCTTTTTTCATTCC
CTTAACGAAACCTTTGGATGAACAAAAATTCTTAATTTCAGTGAAGTTCAGTTTATCGACTTCAATTTATACATT
TTATAAAGTTTATGAATTTTTTTTTTTTTTTTTAGACGGAGTCTTGCTCTGTCGCCCAGGCTGGAGTGCAGTGGC
TATACCCAGGTGTGATCATAACTCACTCCAGCCTCAAACTCCTGGGCTCAAGGATTCCTCCTGCCTCAGTCTCCA
GAGTAGGTGGGACCACAGGCACATCCACCACACTGGCTAATTTTTTTTATTTGTAGTGGAGACTACGTCTTACTG
TTTGCCCAGGCTGGTCTCCAACTCCTGGGTTCAAGTGATCCACCTCATTCTCCCAAAGCGCTGGGATTGTAGGAG
TGAGCCACTGCACCCAGCCTGTCTGCTAATATTATGTTTAAGAGTTCTGAATCTTTTTTTAAATTTTTTAAAATT
TTTAATTTTTTATTTTTTTTGAGACAGTCTTGCTCTGTCGCCCAGGCTGGAGTGCAATGGTGCAATCTTGGCTCA
ATGCAACCTCCGCCTTCTGGGTTCAAGCGATTCTCCTGCCTTAGCCTCCTGAGTAGCTGGGATTACAGGTACACT
CCACCATGCCTGGCTAATTTTTTTGTATTTTTAGTAGAGATGGGATTTCACCATGTTGGTCAGGCTGGTCTCGAC
CTCCTGACCTCGTGATCCTCCTGCCTCCACCCCCCAAAGCGCCAGGATTCTAGGTGTGAGCCACCACACCTGTCC
TGAATCTATATTTATGAGAGACATTGGCCTTAAGCTCTCTTTTTTTTTTTTTTTTTTTTTTTGAGATGGAGTC
TCGCTCTGTCACCCAGGCTGGAGTGCAGTGGCGCAATCTCGGCTCACTGCAAGCTCCGCCTCCCGGGTTCACGCC
ATTCTCCTGCCTCAGCCTCCCAAGTGGCTGGGACTACAGGCGCGGCCACCACGCCCGGCTAATTTTTTGTATTTT
TAGTAGAGATGGGGTTTCACCGTGTTAGCCGGGATAGTCTCAATCTCCTGACCTCGTGATCCGCCTGCCTCGGCC
TCCCAAAGTGCTGGGATTACAGGCGTGAGCCACCGCGCCTGGCCAAGTTCTCTTTCTTATAATGTGCTTTGTTGT
CAAGATGATGCTGACCTCATAAAATATGCTGGGAGAGTGTTTCCTCTGTTTTATGGCCTGAAGAGTTAGTGTAGG
AATAGAATCATTTCTACATTGGAAGAATTCACTAATTGATGTCTTCTGGACCTGGAATTTTAGTTTTTGGAAAGT
TTTAAACTATGATTAAAAATTTTAAATAGGCCGGGTGTGGTGCATCATGCCTGTAATCCCAGCACTTTGGGAGGC
TGAGGCAGGTAGATCACAATGTCAGGAATTTGAGACCAGCCTGGCCAATATGGTGAAACACCGTCTCTACTAAAA
ATAAAAAAATTACCCGGCATGGTGGTGCATGCACCTGTAGTCCCAGCCACTCGGGAGGCTGTGGAAGAAGAAACT
CTTGAACCCAGGAAGTGGGGGTTGCAGTGAGTCGAGATCGTGCCACTGCACTCCAGCCTGGGTGACAGAGCGAGA
CTCTTATCTCAAAAACAAAAGGCTAGGCGTGGTGGCTCACACCTGTAATCCCAACACTTTGGAGGCCCAGGCGGA
TGGATCATGAGGTCAGGAGATTGAGACCATCCTGGCTAAGACGGTGAAACCCCGTCTCTACTAAAAATACAAAAA
ATTAGCCAAGTGTGGTGGTGGGCACCTATAGTCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATGGCGTGAACCC
AGGAGGCGGAGCTTGCAGTGAGCCGAGATCGCGCCACTGCACTCCAGCCTGGGAGACAGAGCAAGATTCCATCTC
AAAAAAAAAAAAAAAATTTAAATAGTTATAGGACTACAGACGTTTTAAATTTCCTCTTGTGTCAGTTTAGAAGGT
TGTATTTATCAGGAATGTGTTCAGTTCATCTAAATTTTCAAATGTGTTGCTGTGGAATTTTTCATAATTATCCTC
TATCTTTTTTTTTTTTTCTTTTTTTCTGAGACGGGGTCTCACTCTGTCGCCCAGGCTGGAGTGCAGTGGCACGAT
CCTGGCTCACTGCAACATCTGCCTCCCAGGTTCAAGCAATTCTCCTGCCTCAGCCTCCTGAGTAGCTGGGACTAC
AGGTGCCCGGCTAATTTTTGTATTTTTAGTAGAGATGGGGTTTCACCATGTTGGCCAGTGTGGTCTCGAACTCCT
GACCTCAGGTGATCCACCCACTTTGGCCTCCCAAAGTGTTGCGATTACAGGCGTGAGCCAACATGCCCAGCCCAA
GGAGGTGACATCTTGAGGGGACACCTTCGGGGTGGACAGTTGAGTCTCTGTCACCTAGGAAGTGCCTCCCCTTTT
ACCACTGTATTATCTGCGGTTAGCACAGTGCAAACATGGAGGCCTCTTTCTGTCCCTATCCAGCCCTGGCTCTGG
GAGTGGTGGGCTCGCGACTTAGGCCTGTCTGCCTGATTTCCTGCAGAGCCCCCCTCCATGCGCCTGAAGGCCCGA
CCCAGCAGCCCTGGCTTTTCCGTGCTTACCTGCAGCGCCTTCTCCTTCTACCCTCCGGAGCTGCAACTTCGGTTC
CTGCGGAATGGGCTGGCCGCTGGCACCGGCCAGGGTGACTTCGGCCCCAACAGTGACGGATCCTTCCACGCCTCG
TCGTCACTAACAGTCAAAAGTGGCGATGAGCACCACTACTGCTGCATTGTGCAGCACGCGGGGCTGGCGCAGCCC
CTCAGGGTGGAGCTGGGTGAGGTCCCGCCAGGTGGTGATGCTCCTGGTTTCCCGTTGCCTTGTCTCACTGCTGCG
CCGGTCCTTCCTGAGTCTGACCTTCCTCCCCACTGCTGCCACCTCCTTGAATCTGACTGCCTTGAACCTCACGCC
TGTCAGTGCCCCCAAAACCTGATGGCTTGTCCTTCCCAAGGCCAACTGCCTTCCGTCTCCTGCTGCTTCTGGCCT
CACTGAGTCTGAAGAGCTGTTAACTACCATGGCCAGTCCTCCCTGAGTCTGACCATCTTCCATCCTGCTGCTGCT
GCTGCTGCTGCTGCGGGTCTTCCTGGAATCTGACCATTCGTTGTCTGCTATGCCCGTACCTCACCAAGACTGACT
GCCTGCTGCTTTGCTACTGCCCGGGCCCATGAGACTGACTTCCCACTGCTCTGCCTGCCTCTCCCCACTGCACTG

FIGURE 6324B

GCACAGCCCGCCTTGCCGCTGCTGATCCATTGCCGGTGTGACCGCGGCCGCTCGTGCTGTAGCTGGTTCTTACGT
CCAACCTGGGGGCAGTCTGCCAGATCGCCTGCCTGGCCTCGCCTCTGCCCATCAGACACTTGGTGCTGGAATCTC
CGAGGCTGGGAGGGACTGGGAGCGCCCCAGTTCTGTGTCCTGACTGGGTGGGGTGGAGGGGCTGCTCCACATCTC
ACAGCGTTCTCTGGCTGCAGAATCTCCAGCCAAGTCCTCCGTGCTCGTGGTGGGAATCGTCATCGGTGTCTTGCT
ACTCACGGCAGCGGCTGTAGGAGGAGCTCTGTTGTGGAGAAGGATGAGGAGTGGGCTGCCAGGTGGGGGGCAGCG
GGAGGAAGAGCCTCTGAGAGAGGGACAGAGACCCCAAGAGAGGGGCACACAGACCTGGGAGGACAGAGACCCAGA
GAGGGGGGACAGAGATCAGAGAGAGGTGGAGACAGAAACCCAGAGATGGGAGAACAGAGGTGCAGAGAGAGGGGG
ACGGAGACAGAGACCCAGAGACGGGGGAACAGAGACCCAGAGGGACAGAGAGAGGTGCGGACAGAGGGAGGGGGA
GACAGACCCAGAGGAGGGAGGCAAAGATGTAGAAAGAGGGGGGACGGAAAATTGGGAGAAGGGGAGACAAAGGCC
CAGAAGGAAGGGGATAGAGACTGAGGAAGAGTGTGTGAGACACACACACAAATGGGGGACGCCAGTCAGACCCAG
AGCGCCTCAGAGATTCTGATGACCTCTCCCTCTCTCTCTCTCCTCAGCCCCTTGGATCTCCCTTCGTGGAGACGA
CACCGGGGTCCTCCTGCCCACCCCAGGGGAGGCCCAGGATGCTGATTTGAAGGATGTAAATGTGATTCCAGCCAC
CGCCTGACCATCCGCCATTCCGACTGCTAAAAGCGAATGTAGTCAGGCCCCTTTCATGCTGTGAGACCTCCTGGA
ACACTGGCATCTCTGAGCCTCCAGAAGGGGTTCTGGGCCTAGTTGTCCTCCCTCTGGAGCCCCGTCCTGTGGTCT
GCCTCAGTTTCCCCTCCTAATACATATGGCTGTTTTCCACCTCGATAATATAACACGAGTTTGGGCCCGAATCAG
TGTGTTCTCATCATTTTTCAGGCAGGGGAGGTAAGGGAATAAGTCGGGGGACTGAATGGCGGCTGGGCCTCGGAT
CTCTCCTACAGGTAACATGCTGCCACAGGGGAACCTGCCAGTTTTATACATCAGGTCATGTAT

FIGURE 6325

AGTAAAAGTCCACAGTTACCGTGAGAGAAAAAAAGAGGAGAAAGCAGTGCAGCCAAACTCGGAAGAAAAGAGAGG
AGGAAAAGGACTCGACTTTCACATTGGAACAACCTTCTTTCCAGTGCTAAGGCTCTCTGATCTGGGGAACAACAC
CTGGAC**ATG**GCTCCAGAGATCAACTTGCCGGGCCCAATGAGCCTCATTGATAACACTAAAGGGCAGCTGGTGGTG
AATCCAGAAGCTCTGAAGATCCTATCTGCAATTACGCAGCCTGTGGTGGTGGTGGCGATTGTGGGCCTCTATCGC
ACAGGCAAATCCTACCTGATGAACAAGCTGGCTGGGAAGAAAAACGGCTTCTCTCTAGGCTCCACAGTGAAGTCT
CACACCAAGGGAATCTGGATGTGGTGTGTGCCTCATCCCAAGAAGCCAGAACACACCCTAGTTCTGCTCGACACT
GAGGGCCTGGGAGATATAGAGAAGGGTGACAATGAGAATGACTCCTGGATCTTTGCCTTGGCCATCCTCCTGAGC
AGCACCTTCGTGTACAATAGCATGGGAACCATCAACCAGCAGGCCATGGACCAACTTCACTATGTGACAGAGCTG
ACAGATCGAATCAAGGCAAACTCCTCACCTGGTAACAATTCTGTAGACGACTCAGCTGACTTTGTGAGCTTTTTT
CCAGCATTTGTGTGGACTCTCAGAGATTTCACCCTGGAACTGGAAGTAGATGGAGAACCCATCACTGCTGATGAC
TACTTGGAGCTTTCGCTAAAGCTAAGAAAAGGTACTGATAAGAAAAGTAAAAGCTTTAATGATCCTCGGTTGTGC
ATCCGAAAGTTCTTCCCCAAGAGGAAGTGCTTCGTCTTCGATTGGCCCGCTCCTAAGAAGTACCTTGCTCACCTA
GAGCAGCTAAAGGAGGAAGAGCTGAACCCTGATTTCATAGAACAAGTTGCAGAATTTTGTTCCTACATCCTCAGC
CATTCCAATGTCAAGACTCTTTCAGGTGGCATTGCAGTCAATGGGCCTCGTCTAGAGAGCCTGGTGCTGACCTAC
GTCAATGCCATCAGCAGTGGGGATCTACCCTGCATGGAGAACGCAGTCCTGGCCTTGGCCCAGATAGAGAACTCA
GCCGCAGTGGAAAAGGCTATTGCCCACTATGAACAGCAGATGGGCCAGAAGGTGCAGCTGCCCACGGAAACCCTC
CAGGAGCTGCTGGACCTGCACAGGGACAGTGAGAGAGAGGCCATTGAAGTCTTCATGAAGAACTCTTTCAAGGAT
GTGGACCAAATGTTCCAGAGGAAATTAGGGGCCCAGTTGGAAGCAAGGCGAGATGACTTTTGTAAGCAGAATTCC
AAAGCATCATCAGATTGTTGCATGGCTTTACTTCAGGATATATTTGGCCCTTTAGAAGAAGATGTCAAGCAGGGA
ACATTTTCTAAACCAGGAGGTTACCGTCTCTTTACTCAGAAGCTGCAGGAGCTGAAGAATAAGTACTACCAGGTG
CCAAGGAAGGGGATACAGGCCAAAGAGGTGCTGAAAAAATATTTGGAGTCCAAGGAGGATGTGGCTGATGCACTT
CTACAGACTGATCAGTCACTCTCAGAAAAGGAAAAAGCGATTGAAGTGGAACGTATAAAGGCTGAATCTGCAGAA
GCTGCAAAGAAAATGTTGGAGGAAATACAAAAGAAGAATGAGGAGATGATGGAACAGAAAGAGAAGAGTTATCAG
GAACATGTGAAACAATTGACTGAGAAGATGGAGAGGGACAGGGCCCAGTTAATGGCAGAGCAAGAGAAGACCCTC
GCTCTTAAACTTCAGGAACAGGAACGCCTTCTCAAGGAGGGATTCGAGAATGAGAGCAAGAGACTTCAAAAAGAC
ATATGGGATATCCAGATGAGAAGCAAATCATTGGAGCCAATATGTAACATACTC**TAA**AAGTCCAAGGAGCAAAAT
TTGCCTGTCCAGCTCCCTCTCCCCAAGAAACAACATGAATGAGCAACTTCAGAGTGTCAAACAACTGCCATTAAA
CTTAACTCAAAATCATGATGCATGCATTTTTGTTGAACCATAAAGTTTGCAAAGTAAAGGTTAAGTATGAGGTCA
ATGTTTT

FIGURE 6326

MAPEINLPGPMSLIDNTKGQLVVNPEALKILSAITQPVVVVAIVGLYRTGKSYLMNKLAGKKNGFSLGSTVKSHT
KGIWMWCVPHPKKPEHTLVLLDTEGLGDIEKGDNENDSWIFALAILLSSTFVYNSMGTINQQAMDQLHYVTELTD
RIKANSSPGNNSVDDSADFVSFFPAFVWTLRDFTLELEVDGEPITADDYLELSLKLRKGTDKKSKSFNDPRLCIR
KFFPKRKCFVFDWPAPKKYLAHLEQLKEEELNPDFIEQVAEFCSYILSHSNVKTLSGGIAVNGPRLESLVLTYVN
AISSGDLPCMENAVLALAQIENSAAVEKAIAHYEQQMGQKVQLPTETLQELLDLHRDSEREAIEVFMKNSFKDVD
QMFQRKLGAQLEARRDDFCKQNSKASSDCCMALLQDIFGPLEEDVKQGTFSKPGGYRLFTQKLQELKNKYYQVPR
KGIQAKEVLKKYLESKEDVADALLQTDQSLSEKEKAIEVERIKAESAEAAKKMLEEIQKKNEEMMEQKEKSYQEH
VKQLTEKMERDRAQLMAEQEKTLALKLQEQERLLKEGFENESKRLQKDIWDIQMRSKSLEPICNIL

FIGURE 6327

TGAGAAGATGCAACCAATCCTGCTTCTGCTGGCCTTCCTCCTGCTGCCCAGGGCAGATGCAGGGGAGATCATCGG
GGGACATGAGGCCAAGCCCCACTCCCGCCCCTACATGGCTTATCTTATGATCTGGGATCAGAAGTCTCTGAAGAG
GTGCGGTGGCTTCCTGATACAAGACGACTTCGTGCTGACAGCTGCTCACTGTTGGGGAAGCTCCATAAATGTCAC
CTTGGGGGCCCACAATATCAAAGAACAGGAGCCGACCCAGCAGTTTATCCCTGTGAAAAGACCCATCCCCCATCC
AGCCTATAATCCTAAGAACTTCTCCAACGACATCATGCTACTGCAGCTGGAGAGAAAGGCCAAGCGGACCAGAGC
TGTGCAGCCCCTCAGGCTACCTAGCAACAAGGCCCAGGTGAAGCCAGGGCAGACATGCAGTGTGGCCGGCTGGGG
GCAGACGGCCCCCCTGGGAAAACACTCACACACACTACAAGAGGTGAAGATGACAGTGCAGGAAGATCGAAAGTG
CGAATCTGACTTACGCCATTATTACGACAGTACCATTGAGTTGTGCGTGGGGGACCCAGAGATTAAAAAGACTTC
CTTTAAGGGGGACTCTGGAGGCCCTCTTGTGTGTAACAAGGTGGCCCAGGGCATTGTCTCCTATGGACGAAACAA
TGGCATGCCTCCACGAGCCTGCACCAAAGTCTCAAGCTTTGTACACTGGATAAAGAAAACCATGAAACGCTACTA
ACTACAGGAAGCAAACTAAGCCCCCGCTGTAATGAAACACCTTCTCTGGAGCCAAGTCCAGATTTACACTGGGAG
AGGTGCCAGCAACTGAATAAATACCTCTCCCAGTGTAAATCTGGAGCCAAGTCCAGATTTACACTGGGAGAGGTG
CCAGCAACTGAATAAATACCTCTTAGCTGAGTGG

FIGURE 6328

MQPILLLLAFLLLPRADAGEIIGGHEAKPHSRPYMAYLMIWDQKSLKRCGGFLIQDDFVLTAAHCWGSSINVTLG
AHNIKEQEPTQQFIPVKRPIPHPAYNPKNFSNDIMLLQLERKAKRTRAVQPLRLPSNKAQVKPGQTCSVAGWGQT
APLGKHSHTLQEVKMTVQEDRKCESDLRHYYDSTIELCVGDPEIKKTSFKGDSGGPLVCNKVAQGIVSYGRNNGM
PPRACTKVSSFVHWIKKTMKRY

FIGURE 6329A

TAACGAGGAACTTTTCGCCGGCGCCGGGCCGCCTCTGAGGCCAGGGCAGGACACGAACGCGCGGAGCGGCGGCGG
CGACTGAGAGCCGGGGCCGCGGCGGCGCTCCCTAGGAAGGGCCGTACGAGGCGGCGGGCCCGGCGGGCCTCCCGG
AGGAGGCGGCTGCGCCATGGACGAGCCACCCTTCAGCGAGGCGGCTTTGGAGCAGGCGCTGGGCGAGCCGTGCGA
TCTGGACGCGGCGCTGCTGACCGACATCGAAGACATGCTTCAGCTTATCAACAACCAAGACAGTGACTTCCCTGG
CCTATTTGACCCACCCTATGCTGGGAGTGGGGCAGGGGGCACAGACCCTGCCAGCCCCGATACCAGCTCCCCAGG
CAGCTTGTCTCCACCTCCTGCCACATTGAGCTCCTCTCTTGAAGCCTTCCTGAGCGGGCCGCAGGCAGCGCCCTC
ACCCCTGTCCCCTCCCCAGCCTGCACCCACTCCATTGAAGATGTACCCGTCCATGCCCGCTTTCTCCCCTGGGCC
TGGTATCAAGGAAGAGTCAGTGCCACTGAGCATCCTGCAGACCCCCACCCCACAGCCCCTGCCAGGGGCCCTCCT
GCCACAGAGCTTCCCAGCCCCAGCCCCACCGCAGTTCAGCTCCACCCCTGTGTTAGGCTACCCCAGCCCTCCGGG
AGGCTTCTCTACAGGAAGCCCTCCCGGGAACACCCAGCAGCCGCTGCCTGGCCTGCCACTGGCTTCCCCGCCAGG
GGTCCCGCCCGTCTCCTTGCACACCCAGGTCCAGAGTGTGGTCCCCCAGCAGCTACTGACAGTCACAGCTGCCCC
CACGGCAGCCCCTGTAACGACCACTGTGACCTCGCAGATCCAGCAGGTCCCGGTCCTGCTGCAGCCCCACTTCAT
CAAGGCAGACTCGCTGCTTCTGACAGCCATGAAGACAGACGGAGCCACTGTGAAGGCGGCAGGTCTCAGTCCCCT
GGTCTCTGGCACCACTGTGCAGACAGGGCCTTTGCCGACCCTGGTGAGTGGCGGAACCATCTTGGCAACAGTCCC
ACTGGTCGTAGATGCGGAGAAGCTGCCTATCAACCGGCTCGCAGCTGGCAGCAAGGCCCCGGCCTCTGCCCAGAG
CCGTGGAGAGAAGCGCACAGCCCACAACGCCATTGAGAAGCGCTACCGCTCCTCCATCAATGACAAAATCATTGA
GCTCAAGGATCTGGTGGTGGGCACTGAGGCAAAGCTGAATAAATCTGCTGTCTTGCGCAAGGCCATCGACTACAT
TCGCTTTCTGCAACACAGCAACCAGAAACTCAAGCAGGAGAACCTAAGTCTGCGCACTGCTGTCCACAAAAGCAA
ATCTCTGAAGGATCTGGTGTCGGCCTGTGGCAGTGGAGGGAACACAGACGTGCTCATGGAGGGCGTGAAGACTGA
GGTGGAGGACACACTGACCCCACCCCCCTCGGATGCTGGCTCACCTTTCCAGAGCAGCCCCTTGTCCCTTGGCAG
CAGGGGCAGTGGCAGCGGTGGCAGTGGCAGTGACTCGGAGCCTGACAGCCCAGTCTTTGAGGACAGCAAGGCAAA
GCCAGAGCAGCGGCCGTCTCTGCACAGCCGGGGCATGCTGGACCGCTCCCGCCTGGCCCTGTGCACGCTCGTCTT
CCTCTGCCTGTCCTGCAACCCCTTGGCCTCCTTGCTGGGGGCCCGGGGGCTTCCCAGCCCCTCAGATACCACCAG
CGTCTACCATAGCCCTGGGCGCAACGTGCTGGGCACCGAGAGCAGAGATGGCCCTGGCTGGGCCCAGTGGCTGCT
GCCCCCAGTGGTCTGGCTGCTCAATGGGCTGTTGGTGCTCGTCTCCTTGGTGCTTCTCTTTGTCTACGGTGAGCC
AGTCACACGGCCCCACTCAGGCCCCGCCGTGTACTTCTGGAGGCATCGCAAGCAGGCTGACCTGGACCTGGCCCG
GGGAGACTTTGCCCAGGCTGCCCAGCAGCTGTGGCTGGCCCTGCGGGCACTGGGCCGGCCCCTGCCCACCTCCCA
CCTGGACCTGGCTTGTAGCCTCCTCTGGAACCTCATCCGTCACCTGCTGCAGCGTCTCTGGGTGGGCCGCTGGCT
GGCAGGCCGGGCAGGGGGCCTGCAGCAGGACTGTGCTCTGCGAGTGGATGCTAGCGCCAGCGCCCGAGACGCAGC
CCTGGTCTACCATAAGCTGCACCAGCTGCACACCATGGGGAAGCACACAGGCGGGCACCTCACTGCCACCAACCT
GGCGCTGAGTGCCCTGAACCTGGCAGAGTGTGCAGGGGATGCCGTGTCTGTGGCGACGCTGGCCGAGATCTATGT
GGCGGCTGCATTGAGAGTGAAGACCAGTCTCCCACGGGCCTTGCATTTTCTGACACGCTTCTTCCTGAGCAGTGC
CCGCCAGGCCTGCCTGGCACAGAGTGGCTCAGTGCCTCCTGCCATGCAGTGGCTCTGCCACCCCGTGGGCCACCG
TTTCTTCGTGGATGGGGACTGGTCCGTGCTCAGTACCCCATGGGAGAGCCTGTACAGCTTGGCCGGGAACCCAGT
GGACCCCCTGGCCCAGGTGACTCAGCTATTCCGGGAACATCTCTTAGAGCGAGCACTGAACTGTGTGACCCAGCC
CAACCCCAGCCCTGGGTCAGCTGATGGGGACAAGGAATTCTCGGATGCCCTCGGGTACCTGCAGCTGCTGAACAG
CTGTTCTGATGCTGCGGGGGCTCCTGCCTACAGCTTCTCCATCAGTTCCAGCATGGCCACCACCACCGGCGTAGA
CCCGGTGGCCAAGTGGTGGGCCTCTCTGACAGCTGTGGTGATCCACTGGCTGCGGCGGGATGAGGAGGCGGCTGA
GCGGCTGTGCCCGCTGGTGGAGCACCTGCCCCGGGTGCTGCAGGAGTCTGAGAGACCCCTGCCCAGGGCAGCTCT
GCACTCCTTCAAGGCTGCCCGGGCCCTGCTGGGCTGTGCCAAGGCAGAGTCTGGTCCAGCCAGCCTGACCATCTG
TGAGAAGGCCAGTGGGTACCTGCAGGACAGCCTGGCTACCACACCAGCCAGCAGCTCCATTGACAAGGCCGTGCA
GCTGTTCCTGTGTGACCTGCTTCTTGTGGTGCGCACCAGCCTGTGGCGGCAGCAGCAGCCCCCGGCCCCGGCCCC
AGCAGCCCAGGGCACCAGCAGCAGGCCCCAGGCTTCCGCCCTTGAGCTGCGTGGCTTCCAACGGGACCTGAGCAG
CCTGAGGCGGCTGGCACAGAGCTTCCGGCCCGCCATGCGGAGGGTGTTCCTACATGAGGCCACGGCCCGGCTGAT
GGCGGGGGCCAGCCCCACACGGACACACCAGCTCCTCGACCGCAGTCTGAGGCGGCGGGCAGGCCCCGGTGGCAA
AGGAGGCGCGGTGGCGGAGCTGGAGCCGCGGCCCACGCGGCGGGAGCACGCGGAGGCCTTGCTGCTGGCCTCCTG
CTACCTGCCCCCCGGCTTCCTGTCGGCGCCCGGGCAGCGCGTGGGCATGCTGGCTGAGGCGGCGCGCACACTCGA
GAAGCTTGGCGATCGCCGGCTGCTGCACGACTGTCAGCAGATGCTCATGCGCCTGGGCGGTGGGACCACTGTCAC

FIGURE 6329B

TTCCAGCTAGACCCCGTGTCCCCGGCCTCAGCACCCCTGTCTCTAGCCACTTTGGTCCCGTGCAGCTTCTGTCCT
GCGTCGAAGCTTTGAAGGCCGAAGGCAGTGCAAGAGACTCTGGCCTCCACAGTTCGACCTGCGGCTGCTGTGTGC
CTTCGCGGTGGAAGGCCCGAGGGGCGCGATCTTGACCCTAAGACCGGCGGCCATGATGGTGCTGACCTCTGGTGG
CCGATCGGGGCACTGCAGGGGCCGAGCCATTTTGGGGGGCCCCCCTCCTTGCTCTGCAGGCACCTTAGTGGCTTT
TTTCCTCCTGTGTACAGGGAAGAGAGGGGTACATTTCCCTGTGCTGACGGAAGCCAACTTGGCTTTCCCGGACTG
CAAGCAGGGCTCTGCCCCAGAGGCCTCTCTCTCCGTCGTGGGAGAGAGACGTGTACATAGTGTAGGTCAGCGTGC
TTAGCCTCCTGACCTGAGGCTCCTGTGCTACTTTGCCTTTTGCAAACTTTATTTTCATAGATTGAGAAGTTTTGT
ACAGAGAATTAAAAATGAAATTATTTATA

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FIGURE 6330

MDEPPFSEAALEQALGEPCDLDAALLTDIEDMLQLINNQDSDFPGLFDPPYAGSGAGGTDPASPDTSSPGSLSPP
PATLSSSLEAFLSGPQAAPSPLSPPQPAPTPLKMYPSMPAFSPGPGIKEESVPLSILQTPTPQPLPGALLPQSFP
APAPPQFSSTPVLGYPSPPGGFSTGSPPGNTQQPLPGLPLASPPGVPPVSLHTQVQSVVPQQLLTVTAAPTAAPV
TTTVTSQIQQVPVLLQPHFIKADSLLLTAMKTDGATVKAAGLSPLVSGTTVQTGPLPTLVSGGTILATVPLVVDA
EKLPINRLAAGSKAPASAQSRGEKRTAHNAIEKRYRSSINDKIIELKDLVVGTEAKLNKSAVLRKAIDYIRFLQH
SNQKLKQENLSLRTAVHKSKSLKDLVSACGSGGNTDVLMEGVKTEVEDTLTPPPSDAGSPFQSSPLSLGSRGSGS
GGSGSDSEPDSPVFEDSKAKPEQRPSLHSRGMLDRSRLALCTLVFLCLSCNPLASLLGARGLPSPSDTTSVYHSP
GRNVLGTESRDGPGWAQWLLPPVVWLLNGLLVLVSLVLLFVYGEPVTRPHSGPAVYFWRHRKQADLDLARGDFAQ
AAQQLWLALRALGRPLPTSHLDLACSLLWNLIRHLLQRLWVGRWLAGRAGGLQQDCALRVDASASARDAALVYHK
LHQLHTMGKHTGGHLTATNLALSALNLAECAGDAVSVATLAEIYVAAALRVKTSLPRALHFLTRFFLSSARQACL
AQSGSVPPAMQWLCHPVGHRFFVDGDWSVLSTPWESLYSLAGNPVDPLAQVTQLFREHLLERALNCVTQPNPSPG
SADGDKEFSDALGYLQLLNSCSDAAGAPAYSFSISSSMATTTGVDPVAKWWASLTAVVIHWLRRDEEAAERLCPL
VEHLPRVLQESERPLPRAALHSFKAARALLGCAKAESGPASLTICEKASGYLQDSLATTPASSSIDKAVQLFLCD
LLLVVRTSLWRQQQPPAPAPAAQGTSSRPQASALELRGFQRDLSSLRRLAQSFRPAMRRVFLHEATARLMAGASP
TRTHQLLDRSLRRRAGPGGKGGAVAELEPRPTRREHAEALLLASCYLPPGFLSAPGQRVGMLAEAARTLEKLGDR
RLLHDCQQMLMRLGGGTTVTSS

FIGURE 6331

ATGGCACAGCACGGGGCGATGGGCGCGTTTCGGGCCCTGTGCGGCCTGGCGCTGCTGTGCGCGCTCAGCCTGGGT
CAGCGCCCCACCGGGGGTCCCGGGTGCGGCCCTGGGCGCCTCCTGCTTGGGACGGGAACGGACGCGCGCTGCTGC
CGGGTTCACACGACGCGCTGCTGCCGCGATTACCCGGGCGAGGAGTGCTGTTCCGAGTGGGACTGCATGTGTGTC
CAGCCTGAATTCCACTGCGGAGACCCTTGCTGCACGACCTGCCGGCACCACCCTTGTCCCCCAGGCCAGGGGGTA
CAGTCCCAGGGGAAATTCAGTTTTGGCTTCCAGTGTATCGACTGTGCCTCGGGGACCTTCTCCGGGGGCCACGAA
GGCCACTGCAAACCTTGGACAGACTGCACCCAGTTCGGGTTTCTCACTGTGTTCCCTGGGAACAAGACCCACAAC
GCTGTGTGCGTCCCAGGGTCCCCGCCGGCAGAGCCGCTTGGGTGGCTGACCGTCGTCCTCCTGGCCGTGGCCGCC
TGCGTCCTCCTCCTGACCTCGGCCCAGCTTGGACTGCACATCTGGCAGCTGAGGAGTCAGTGCATGTGGCCCCGA
GAGACCCAGCTGCTGCTGGAGGTGCCGCCGTCGACCGAAGACGCCAGAAGCTGCCAGTTCCCCGAGGAAGAGCGG
GGCGAGCGATCGGCAGAGGAGAAGGGGCGGCTGGGAGACCTGTGGGTGTGA

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FIGURE 6332

MAQHGAMGAFRALCGLALLCALSLGQRPTGGPGCGPGRLLLGTGTDARCCRVHTTRCCRDYPGEECCSEWDCMCV
QPEFHCGDPCCTTCRHHPCPPGQGVQSQGKFSFGFQCIDCASGTFSGGHEGHCKPWTDCTQFGFLTVFPGNKTHN
AVCVPGSPPAEPLGWLTVVLLAVAACVLLLTSAQLGLHIWQLRSQCMWPRETQLLLEVPPSTEDARSCQFPEEER
GERSAEEKGRLGDLWV

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FIGURE 6333

GGCGAGAGGCGGGCTGAGGCGGCCCAGCGGCGGCAGGTGAGGCGGAACCAACCCTCCTGGCCATGGGAGGGGCCG
TGGTGGACGAGGGCCCCACAGGCGTCAAGGCCCCTGACGGCGGCTGGGGCTGGGCCGTGCTCTTCGGCTGTTTCG
TCATCACTGGCTTCTCCTACGCCTTCCCCAAGGCCGTCAGTGTCTTCTTCAAGGAGCTCATACAGGAGTTTGGGA
TCGGCTACAGCGACACAGCCTGGATCTCCTCCATCCTGCTGGCCATGCTCTACGGGACAGGTCCGCTCTGCAGTG
TGTGCGTGAACCGCTTTGGCTGCCGGCCCGTCATGCTTGTGGGGGGTCTCTTTGCGTCGCTGGGCATGGTGGCTG
CGTCCTTTTGCCGGAGCATCATCCAGGTCTACCTCACCACTGGGGTCATCACGGGGTTGGGTTTGGCACTCAACT
TCCAGCCCTCGCTCATCATGCTGAACCGCTACTTCAGCAAGCGGCGCCCCATGGCCAACGGGCTGGCGGCAGCAG
GTAGCCCTGTCTTCCTGTGTGCCCTGAGCCCGCTGGGGCAGCTGCTGCAGGACCGCTACGGCTGGCGGGGCGGCT
TCCTCATCCTGGGCGGCCTGCTGCTCAACTGCTGCGTGTGTGCCGCACTCATGAGGCCCCTGGTGGTCACGGCCC
AGCCGGGCTCGGGGCCGCCGCGACCCTCCCGGCGCCTGCTAGACCTGAGCGTCTTCCGGGACCGCGGCTTTGTGC
TTTACGCCGTGGCCGCCTCGGTCATGGTGCTGGGGCTCTTCGTCCCGCCCGTGTTCGTGGTGAGCTACGCCAAGG
ACCTGGGCGTGCCCGACACCAAGGCCGCCTTCCTGCTCACCATCCTGGGCTTCATTGACATCTTCGCGCGGCCGG
CCGCGGGCTTCGTGGCGGGGCTTGGGAAGGTGCGGCCCTACTCCGTCTACCTCTTCAGCTTCTCCATGTTCTTCA
ACGGCCTCGCGGACCTGGCGGGCTCTACGGCGGGCGACTACGGCGGCCTCGTGGTCTTCTGCATCTTCTTTGGCA
TCTCCTACGGCATGGTGGGGGCCCTGCAGTTCGAGGTGCTCATGGCCATCGTGGGCACCCACAAGTTCTCCAGTG
CCATTGGCCTGGTGCTGCTGATGGAGGCGGTGGCCGTGCTCGTCGGGCCCCCTTCGGGAGGCAAACTCCTGGATG
CGACCCACGTCTACATGTACGTGTTCATCCTGGCGGGGGCCGAGGTGCTCACCTCCTCCCTGATTTTGCTGCTGG
GCAACTTCTTCTGCATTAGGAAGAAGCCCAAAGAGCCACAGCCTGAGGTGGCGGCCGCGGAGGAGGAGAAGCTCC
ACAAGCCTCCTGCAGACTCGGGGGTGGACTTGCGGGAGGTGGAGCATTTCCTGAAGGCTGAGCCTGAGAAAAACG
GGGAGGTGGTTCACACCCCGGAAACAAGTGTCTGAGTGGCTGGGCGGGGCCGGCAGGCACAGGGAGGAGGTACAG
AAGCCGGCAACGCTTGCTATTTATTTTACAAACTGGACTGGCTCAGGCAGGGCCACGGCTGGGCTCCAGCTGCCG
GCCCAGCGGATCGTCGCCCGATCAGTGTTTTGAGGGGGAAGGTGGCGGGGTGGGAACCGTGTCATTCCAGAGTGG
ATCTGCGGTGAAGCCAAGCCGCAAGGTTACAAGGCATCCTCACCAGGGGCCCCGCCTGCTGCTCCCAGGTGGCCT
GCGGCCACTGCTATGCTCAAGGACCTGGAAACCCATGCTTCGAGACAACGTGACTTTAATGGGAGGGTGGGTGGG
CCGCAGACAGGCTGGCAGGGCAGGTGCTGCGTGGGGCCCTCTCCAGCCCGTCCTACCCTGGGCTCACATGGGGCC
TGTGCCCACCCCTCTTGAGTGTCTTGGGGACAGCTCTTTCCACCCCTGGAAGATGGAAATAAACCTGCGTGTGGG
TGGAGTGTTCTCGTGCCGAATTCAAAAAGCTT

FIGURE 6334

MGGAVVDEGPTGVKAPDGGWGWAVLFGCFVITGFSYAFPKAVSVFFKELIQEFGIGYSDTAWISSILLAMLYGTG
PLCSVCVNRFGCRPVMLVGGLFASLGMVAASFCRSIIQVYLTTGVITGLGLALNFQPSLIMLNRYFSKRRPMANG
LAAAGSPVFLCALSPLGQLLQDRYGWRGGFLILGGLLLNCCVCAALMRPLVVTAQPGSGPPRPSRRLLDLSVFRD
RGFVLYAVAASVMVLGLFVPPVFVVSYAKDLGVPDTKAAFLLTILGFIDIFARPAAGFVAGLGKVRPYSVYLFSF
SMFFNGLADLAGSTAGDYGGLVVFCIFFGISYGMVGALQFEVLMAIVGTHKFSSAIGLVLLMEAVAVLVGPPSGG
KLLDATHVYMYVFILAGAEVLTSSLILLLGNFFCIRKKPKEPQPEVAAAEEEKLHKPPADSGVDLREVEHFLKAE
PEKNGEVVHTPETSV

FIGURE 6335

GACTGTCTCAGTGGAGCTGGGTCATCTCAGGCCTTGGCTCCTTGAACTTTTGGCCGCCATGTGCTTCCCGAAGGT
CCTCTCTGATGACATGAAGAAGCTGAAGGCCCGAATGCACCAGGCCATAGAAAGATTTTATGATAAAATGCAAAA
TGCAGAATCAGGACGTGGACAGGTGATGTCGAGCCTGGCAGAGCTGGAGGACGACTTCAAAGAGGGCTACCTGGA
GACAGTGGCGGCTTATTATGAGGAGCAGCACCCAGAGCTCACTCCTCTACTTGAAAAAGAAAGAGATGGATTACG
GTGCCGAGGCAACAGATCCCCTGTCCCGGATGTTGAGGATCCCGCAACCGAGGAGCCTGGGGAGAGCTTTTGTGA
CAAGGTCATGAGATGGTTCCAGGCCATGCTGCAGCGGCTGCAGACCTGGTGGCACGGGGTTCTGGCCTGGGTGAA
GGAGAAGGTGGTGGCCCTGGTCCATGCAGTGCAGGCCCTCTGGAAACAGTTCCAGAGTTTCTGCTGCTCTCTGTC
AGAGCTCTTCATGTCCTCTTTCCAGTCCTACGGAGCCCCACGGGGGGACAAGGAGGAGCTGACACCCCAGAAGTG
CTCTGAACCCCAATCCTCAAAATGAAGATACTGACACCACCTTTGCCCTCCCCGTCACCGCGCACCCACCCTGAC
CCCTCCCTCAGCTGTCCTGTGCCCCGCCCTCTCCCGCACACTCAGTCCCCCTGCCTGGCGTTCCTGCCGCAGCTC
TGACCTGGTGCTGTCGCCCTGGCATCTTAATAAAACCTGCTTATACTTCCCTGGAAAAAAAAAAAAAAAAAAAA
AA

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FIGURE 6336

MCFPKVLSDDMKKLKARMHQAIERFYDKMQNAESGRGQVMSSLAELEDDFKEGYLETVAAYYEEQHPELTPLLEK
ERDGLRCRGNRSPVPDVEDPATEEPGESFCDKVMRWFQAMLQRLQTWWHGVLAWVKEKVVALVHAVQALWKQFQS
FCCSLSELFMSSFQSYGAPRGDKEELTPQKCSEPQSSK

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FIGURE 6337

ATGTATTTCCAGTACCAGATCATCATGACCATGATCGTCCATAAGAACTGGGTGGACCTGGCCTGGGCCGTCAGC
TACTACATCCGGTTCTTCATCACCTACATCCCTTTCTACGGCATCCTGGGAGCCCTCCTTTTCCTCAACTTCATC
AGGTTCCTGGAGAGCCACTGGTTTGTGTGGGTCACACAGATGAATCACATCGTCATGGAGATTGACCAGGAGGCC
TACCGTGACTGGTTCAGTAGCCAGCTGACAGCCACCTGCAACGTGGAGCAGTCCTTCTTCAACGACTGGTTCAGT
GGACACCTTAGCTTGCAGATTGAGCACCACCTCTTCCCCACCATGCCCCGGCACAACTTACACAAGATCGCCCCG
CTGGTGAAGTCTCTATGTGCCAAGCATGGCATTGAATACCAGGAGAAGCCGCTACTGAGGGCCCTGCTGGACATC
ATCAGGTCCCTGAAGAAGTCTGGGAAGCTGTGGCTGGACGCCTACCTTCACAAATGAAGCCACAGCCCCCGGGAC
ACTGTGGGGAAGGGGTGCAGGTGGGGTGATGGCCAGAGGAATGATGGGCCTTTGTTCTGAGGGGTGTCCGAGAGG
CTGGTGTATGCACTGCTCACGGACCCCATGTTGGATCTTTCTCCCTTTCTCCTCTCCTTTTTCTCTTCACATCTC
CCCCATAGCACCCTGCCCTCATGGGACCTGCCCTCCCTCAGCCGTCAGCCATCAGCCATGGCCCTCCCAGTGCCT
CCTAGCCCCTTCTTCCAAGGAGCAGAGAGGTGGCCACCGGGGGTGGCTCTGTCCTACCTCCACTCTCTGCCCCTA
AAGATGGGAGGAGACCAGCGGTCCATGGGTCTGGCCTGTGAGTCTCCCCTTGCAGCCTGGTCACTAGGCATCACC
CCCGCTTTGGTTCTTCAGATGCTCTTGGGGTTCATAGGGGCAGGTCCTAGTCGGGCAGGGCCCCTGACCCTCCCG
GCCTGGCTTCACTCTCCCTGACGACTGCCATTGGTCCACCCTTTCATAGAGAGGCCTGCTTTGTTACAAAGCTCG
GGTCTCCCTCCTGCAGCTCGGTTAAGTACCCGAGGCCTCTCTTAAGATGTCCAGGGCCCCAGGCCCGCGGGCACA
GCCAGCCCAAACCTTGGGCCCTGGAAGAGTCCTCCACCCCATCACTAGAGTGCTCTGACCCTGGGCTTTCACGGG
CCCCATTCCACCGCCTCCCCAACTTGAGCCTGTGACCTTGGGACCAAAGGGGGAGTCCCTCGTCTCTTGTGACTC
AGCAGAGGCAGTGGCCACGTTCAGGGAGGGGCCGGCTGGCCTGGAGGCTCAGCCCACCCTCCAGCTTTTCCTCAG
GGTGTCCTGAGGTCCAAGATTCTGGAGCAATCTGACCCTTCTCCAAAGGCTCTGTTATCAGCTGGGCAGTGCCAG
CCAACCCCTGGCCATTTGGCCCCAGGGGACGTGGGCCCTGCAGGCTGCAGGAGGGCACTGGAGCTGGGAGGTCTC
GTCCCAGCCCTCCCCATCTCGGGGCTGCTGTGTGGACGGCGCTGCCTCAGGCACTCTCCTGTCTGAACCTGCCCT
TACTGTGTTTAACCTGTTGCTCCAGGATGCATTCTGATAGGAGGGGGCGGCAGGGCTGGGCCTTGTGACAATCTG
CCTTTCACCACATGGCCTTGCCTCGGTGGCCCTGACTGTCAGGGAGGGCCAGGGAGGCAGAGCGGGAGGGAGTCT
CAGGAGGAGGCTGCCCTGAGGGGCTGGGGAGGGGGTACCTCATGAGGACCAGGGTGGAGCTGAGAAGAGGAGGAG
GTGGGGGCTGGAGGTGCTGGTAGCTGAGGGGACGGGCAAGTGAGAGGGGAGGGAGGGAAGTCCTGGGAGGATCCT
GAGCTGCTGTTGCAGTCTAACCCACTAATCAGTTCTTAGATTCAGGGGAAGGGCAGGCACCAACAACTCAGAATG
GGGGCTTTCGGGGAGGGCGCCTAGTCCCCCCAGCTCTAAGCAGCCAGGAGGGACCTGCATCTAAGCATCTGGGTT
GCCATGGCAATGGCATGCCCCCCAGCTACTGTATGCCCCCGACCCCCGCAGAGGCAGAATGAACCCATAGGGAGC
TGATCGTAATGTTTATCATGTTACTTCCCCACCCCTACATTTTTTGAAATAAAATAAGGAATTTT

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FIGURE 6338

MYFQYQIIMTMIVHKNWVDLAWAVSYYIRFFITYIPFYGILGALLFLNFIRFLESHWFVWVTQMNHIVMEIDQEA
YRDWFSSQLTATCNVEQSFFNDWFSGHLSLQIEHHLFPTMPRHNLHKIAPLVKSLCAKHGIEYQEKPLLRALLDI
IRSLKKSGKLWLDAYLHK

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FIGURE 6339

AGTACCGCTGCGGCCGGGGGATTGGGCCGGGGTCTCCACCGCCGACCGAGGGGAGCGGCGTCCGCTCGGCCCTGC
TTTTTGCGACCTGCCGTCAGCCCCACGTCGCCGGCCTGGAGGGGCGAAGAGGACGAGGGGCGCAAGGCTTCCTCC
GGGGACATTGGCTCCCTGGATTATCAAGCAGTTTGTAGTTGACATTGAATCCAGGCTGAGGATGGAAGGTGTGGA
ACTTAAAGAAGAATGGCAAGATGAAGATTTTCCGATACCTTTACCAGAAGATGATAGTATTGAAGCAGATATACT
AGCTATAACTGGACCAGAGGACCAGCCTGGCTCACTAGAAGTTAATGGAAATAAAGTGAGAAAGAAACTAATGGC
TCCAGACATTAGCCTGACACTGGATCCTAGTGATGGCTCTGTATTGTCAGATGATTTGGATGAAAGTGGGGAGAT
TGACTTAGATGGCTTAGACACACCGTCAGAGAATAGTAATGAGTTTGAGTGGGAAGATGATCTTCCAAAACCCAA
GACTACTGAAGTAATTAGGAAAGGCTCAATTACTGAATACACAGCAGCAGAGGAAAAAGAAGATGGACGACGCTG
GCGTATGTTCAGGATTGGAGAACAGGACCACAGGGTTGATATGAAGGCAATTGAACCCTATAAAAAAGTTATCAG
CCATGGGGGATATTATGGGGATGGATTAAATGCCATTGTTGTATTTGCTGTCTGTTTCATGCCTGAAAGTAGTCA
GCCTAACTATAGATACCTGATGGACAATCTTTTTAAATATGTTATTGGCACTTTGGAGCTATTAGTAGCAGAAAA
CTACATGATAGTTTATTTAAATGGTGCAACAACTCGAAGAAAAATGCCCAGTCTGGGATGGCTCAGGAAATGTTA
TCAGCAAATTGATAGAAGGTTACGGAAAAATCTAAAATCCCTAATCATTGTACATCCTTCTTGGTTTATCAGAAC
ACTTCTGGCTGTTACAAGACCATTTATTAGCTCGAAATTCAGCCAAAAAATTAGATACGTGTTTAATTTGGCAGA
ACTAGCAGAACTTGTCCCCATGGAATACGTTGGCATACCAGAATGCATAAAACAAGTTGATCAAGAACTTAATGG
AAAACAAGATGAACCGAAAAATGAACAGTAAGTTTGGCATCTAGTCCAAACAAGACTGAAGAATGTGCTGATGGA
GCAGTGCTGTTTCTGCATTCATAATGCATTTATTGGCCCATATTTTTATGTAACCTGTTACAAAATAGACTTGAC
TTTTTCATAATGGACTTTTGTATTATACAAGGGACTGTTCACTGCTGTACTGGTTTGCAAATTTCTTGAATTTAG
CTCTTTAATAGCTAACTGTATTATTATCGTTTTATATTTTATATTGCTAAATAGAGAACCACACTTTATATAAAG
TAGTTTTTGCATTTGTTTATTGAATGATGCATCTTCTTCGGTGAAATATTTATATGCATAAATGGCAAAGGAAAG
AAATAATATATATTTTTATGTCATTGAGCAATATTTTTTCAATGTGTACCTGTCTTATGGAAGAAATATGCAGGT
ATATAAGACCACGATTTTCTAAGCTGCCATATAAGAATTTTTGTTTTTGTAAATGGTTAAATACATTTCCTGGGT
AACTTAGGAAATTAAGCTTTTTCATAAGGCAACAGATGGTAAACTGATTGTCATGAATACCCAAAGATCATGTAT
ATAATCGAAGTGTATTAGTACCATCCCAAGGTTTTTTTCTCATTTAACATATTTGTTTCATAATTCAGCAAGTAC
AGATGCAAGCGCATTGCACACTTTTTCCTTTCTAAACTTAAAGACAAGTCAAAAAGCCATTCTTAGAACTAGAGG
ATTTAAGCAGGGTCGGAATTACGGGTTTGTATATATGTATATACTCGTTTGTATATATGTATATACTGGGACATT
TTATCTTCTGGCCCAAAGTCAGAACTTTATAAAAATCTTGAGTTTGTTCACTTAATGTGAAATAAGCTATGTGTC
CAGGGTATTGCTCCCCTGAGTGTATATGAGTGCTGAGTAGTATTGCAGAGAATGTGATGAGTTATCACTGTCACA
ACTTTTTCTATAGAAAACAGGGGCTGCTTTTAAACTCTCACTATGGGACACTTTACCAAAATACTTCCATATCAA
TTATTTGAACCCGGTAGTTTGTTTGACCTAGTTAGATTGTGGTGTTTATTCAAGTTTGAAATCATGTTTGACAAT
ACTGTAAATTAGGTTAATTTTGAAGTCTTAGCATCATCATATTGTGCTGTTTTGGATAACACGTTTGTTCAAGAA
CATTTAAACTGTTTCTTTGGTGTCCTTTACATTGAAATAAATTGTGTTTGTGCCTCC

FIGURE 6340

MEGVELKEEWQDEDFPIPLPEDDSIEADILAITGPEDQPGSLEVNGNKVRKKLMAPDISLTLDPSDGSVLSDDLD
ESGEIDLDGLDTPSENSNEFEWEDDLPKPKTTEVIRKGSITEYTAAEEKEDGRRWRMFRIGEQDHRVDMKAIEPY
KKVISHGGYYGDGLNAIVVFAVCFMPESSQPNYRYLMDNLFKYVIGTLELLVAENYMIVYLNGATTRRKMPSLGW
LRKCYQQIDRRLRKNLKSLIIVHPSWFIRTLLAVTRPFISSKFSQKIRYVFNLAELAELVPMEYVGIPECIKQVD
QELNGKQDEPKNEQ

FIGURE 6341

GCGGCGGACTCGGCTTGTTGTGTTGCTGCCTGAGTGCCGGAGACGGTCCTGCTGCTGCCGCAGTCCTGCCAGCTG
TCCGACGATGTCGTCCCACCTAGTCGAGCCGCCGCCGCCCCTGCACAACAACAACAACAACTGCGAGGAAAATGA
GCAGTCTCTGCCCCCGCCGGCCGGCCTCAACAGTTCCTGGGTGGAGCTACCCATGAACAGCAGCAATGGCAATGA
TAATGGCAATGGGAAAAATGGGGGGCTGGAACACGTACCATCCTCATCCTCCATCCACAATGGAGACATGGAGAA
GATTCTTTTGGATGCACAACATGAATCAGGACAGAGTAGTTCCAGAGGCAGTTCTCACTGTGACAGCCCTTCGCC
ACAAGAAGATGGGCAGATCATGTTTGATGTGGAAATGCACACCAGCAGGGACCATAGCTCTCAGTCAGAAGAAGA
AGTTGTAGAAGGAGAGAAGGAAGTCGAGGCTTTGAAGAAAAGTGCGGACTGGGTATCAGACTGGTCCAGTAGACC
CGAAAACATTCCACCCAAGGAGTTCCACTTCAGACACCCTAAACGTTCTGTGTCTTTAAGCATGAGGAAAAGTGG
AGCCATGAAGAAAGGGGGTATTTTCTCCGCAGAATTTCTGAAGGTGTTCATTCCATCTCTCTTCCTTTCTCATGT
TTTGGCTTTGGGGCTAGGCATCTATATTGGAAAGCGACTGAGCACACCCTCTGCCAGCACCTACTGAGGGAAAGG
AAAAGCCCCTGGAAATGCGTGTGACCTGTGAAGTGGTGTATTGTCACAGTAGCTTATTTGAACTTGAGACCATTG
TAAGCATGACCCAACCTACCACCCTGTTTTTACATATCCAATTCCAGTAACCCTCAAATTCAATATTTTATTCAA
ACTCTGTTGAGGCATTTTACTAACCTTATACCCTTTTTGGCCTGAAGACATTTTAGAATTTCCTAACAGAGTTTA
CTGTTGTTTAGAAATTTGCAAGGGCTTCTTTTCCGCAAATGCCACCAGCAGATTATAATTTTGTCGGCAATGCTA
TTATCTCTAATTAGTGCCACCAGACTAGACCTGTATCATTCATGGTATAAATTTTACTCTTCCAACATAACTACC
ATCTCTCTCTTAAAACGAGATCAGGTTAGCAAATGATGTAAAAGAAGCTTTATTGTCTAGTTGTTTTTTTTCCCC
CAAGACAAAGGCAAGTTTCCCTAAGTTTGAGTTGATAGTTATTAAAAAGAAAACAAAACAAAAAAAAAAGGCAAG
GCACAACAAAAAAATATCCTGGGCAATAAAAAAAATATTTTAAACCAAAAAAAAAAAAAAA

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FIGURE 6342

MSSHLVEPPPPLHNNNNNCEENEQSLPPPAGLNSSWVELPMNSSNGNDNGNGKNGGLEHVPSSSSIHNGDMEKIL
LDAQHESGQSSSRGSSHCDSPSPQEDGQIMFDVEMHTSRDHSSQSEEEVVEGEKEVEALKKSADWVSDWSSRPEN
IPPKEFHFRHPKRSVSLSMRKSGAMKKGGIFSAEFLKVFIPSLFLSHVLALGLGIYIGKRLSTPSASTY

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FIGURE 6343

GTGGAATTC**ATG**GCATCTACTTCGTATGACTATTGCAGAGTGCCCATGGAAGACGGGGATAAGCGCTGTAAGCTT
CTGCTGGGGATAGGAATTCTGGTGCTCCTGATCATCGTGATTCTGGGGGTGCCCTTGATTATCTTCACCATCAAG
GCCAACAGCGAGGCCTGCCGGGACGGCCTTCGGGCAGTGATGGAGTGTCGCAATGTCACCCATCTCCTGCAACAA
GAGCTGACCGAGGCCCAGAAGGGCTTTCAGGATGTGGAGGCCCAGGCCGCCACCTGCAACCACACTGTGATGGCC
CTAATGGCTTCCCTGGATGCAGAGAAGGCCCAAGGACAAAAGAAAGTGGAGGAGCTTGAGGGAGAGATCACTACA
TTAAACCATAAGCTTCAGGACGCGTCTGCAGAGGTGGAGCGACTGAGAAGAGAAAACCAGGTCTTAAGCGTGAGA
ATCGCGGACAAGAAGTACTACCCCAGCTCCCAGGACTCCAGCTCCGCTGCGGCGCCCCAGCTGCTGATTGTGCTG
CTGGGCCTCAGCGCTCTGCTGCAG**TGA**GATCCCAGGAAGCTGGCACATCTTGGAAGGTCCGTCCTGCTCGGCTTT
TCGCTTGAACATTCCCTTGATCTCATCAGTTCTGAGCGGGTCATGGGGCAACACGGTTAGCGGGGAGAGCACGGG
GTAGCCGGAGAAGGGCCTCTGGAGCAGGTCTGGAGGGGCCATGGGGCAGTCCTGGGTGTGGGGACACAGTCGGGT
TGACCCAGGGCTGTCTCCCTCCAGAGCCTCCCTCCGGACAATGAGTCCCCCCTCTTGTCTCCCACCCTGAGATTG
GGCATGGGGTGCGGTGTGGGGGGCATGTGCTGCCTGTTGTTATGGGTTTTTTTTGCGGGGGGGGTTGCTTTTTTC
TGGGGTCTTTGAGCTCCAAAAAATAAACACTTCCTTTGAGGGAGAGCAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAA

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FIGURE 6344

MASTSYDYCRVPMEDGDKRCKLLLGIGILVLLIIVILGVPLIIFTIKANSEACRDGLRAVMECRNVTHLLQQELT
EAQKGFQDVEAQAATCNHTVMALMASLDAEKAQGQKKVEELEGEITTLNHKLQDASAEVERLRRENQVLSVRIAD
KKYYPSSQDSSSAAAPQLLIVLLGLSALLQ

FIGURE 6345

GAATTCCGGCCATGAAGACCCAAAGGAATGGCCACTCCCTGGGGCGGTGGTCACTGGTGCTCCTGCTGCTGGGCC
TGGTGATGCCTCTGGCCATCATTGCCCAGGTCCTCAGCTACAAGGAAGCTGTCCTTCGTGCTATAGATGGCATCA
ACCAGCGGTCCTCGGATGCTAACCTCTACCGCCTCCTGGACCTGGACCCCAGGCCCACGATGGATGGGGACCCAG
ACACGCCAAAGCCTGTGAGCTTCACAGTGAAGGAGACAGTGTGCCCCAGGACGACACAGCAGTCACCAGAGGATT
GTGACTTCAAGAAGGACGGGCTGGTGAAGCGGTGTATGGGGACAGTGACCCTCAACCAGGCCAGGGGCTCCTTTG
ACATCAGTTGTGATAAGGATAACAAGAGATTTGCCCTGCTGGGTGATTTCTTCCGGAAATCTAAAGAGAAGATTG
GCAAAGAGTTTAAAAGAATTGTCCAGAGAATCAAGGATTTTTTGCGGAATCTTGTACCCAGGACAGAGTCCTAGT
GTGTGCCCTACCCTGGCTCAGGCTTCTGGGCTCTGAGAAATAAACTATGAGAGCAATTTCAAAAAAAAAAAAAAA
AAAAAACCGGAATTC

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FIGURE 6346

MKTQRNGHSLGRWSLVLLLLGLVMPLAIIAQVLSYKEAVLRAIDGINQRSSDANLYRLLDLDPRPTMDGDPDTPK
PVSFTVKETVCPRTTQQSPEDCDFKKDGLVKRCMGTVTLNQARGSFDISCDKDNKRFALLGDFFRKSKEKIGKEF
KRIVQRIKDFLRNLVPRTES

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FIGURE 6347

AGTGCAGACGCGGCTCCTAGCGGATGGGTGCTATTGTGAGGCGGTTGTAGAAGTTAATAAAGGTATCCATGGAGA
ACACTGAAAACTCAGTGGATTCAAAATCCATTAAAAATTTGGAACCAAAGATCATACATGGAAGCGAATCAATGG
ACTCTGGAATATCCCTGGACAACAGTTATAAAATGGATTATCCTGAGATGGGTTTATGTATAATAATTAATAATA
AGAATTTTCATAAAAGCACTGGAATGACATCTCGGTCTGGTACAGATGTCGATGCAGCAAACCTCAGGGAAACAT
TCAGAAACTTGAAATATGAAGTCAGGAATAAAAATGATCTTACACGTGAAGAAATTGTGGAATTGATGCGTGATG
TTTCTAAAGAAGATCACAGCAAAAGGAGCAGTTTTGTTTGTGTGCTTCTGAGCCATGGTGAAGAAGGAATAATTT
TTGGAACAAATGGACCTGTTGACCTGAAAAAAATAACAAACTTTTTCAGAGGGGATCGTTGTAGAAGTCTAACTG
GAAAACCCAAACTTTTCATTATTCAGGCCTGCCGTGGTACAGAACTGGACTGTGGCATTGAGACAGACAGTGGTG
TTGATGATGACATGGCGTGTCATAAAATACCAGTGGAGGCCGACTTCTTGTATGCATACTCCACAGCACCTGGTT
ATTATTCTTGGCGAAATTCAAAGGATGGCTCCTGGTTCATCCAGTCGCTTTGTGCCATGCTGAAACAGTATGCCG
ACAAGCTTGAATTTATGCACATTCTTACCCGGGTTAACCGAAAGGTGGCAACAGAATTTGAGTCCTTTTCCTTTG
ACGCTACTTTTCATGCAAAGAAACAGATTCCATGTATTGTTTCCATGCTCACAAAAGAACTCTATTTTTATCACT
AAAGAAATGGTTGGTTGGTGGTTTTTTTTAGTTTGTATGCCAAGTGAGAAGATGGTATATTTGGTACTGTATTTC
CCTCTCATTTTGACCTACTCTCATGCTGCAGAGGGTACTTTAAGACATACTCCTTCCATCAAATAGAACCACTAT
GAAGCTACCTCAAACTTCCAGTCAGGTAGTTGCAATTGAATTAAATTAGGAATAAATAAAAATGGATACTGGTGC
AGTCATTATGAGAGGCAATGATTGTTAATTTACAGCTTTCATGATTAGCAAGTTACAGTGATGCTGTGCTATGAA
TTTTCAAGTAATTGTGAAAAAGTTAAACATTGAAGTAATGAATTTTTATGATATTCCCCCCACTTAAGACTGTGT
ATTCTAGTTTTGTCAAACTGTAGAAATGATGATGTGGAAGAACTTAGGCATCTGTGGGCATGGTCAAAGGCTCAA
ACCTTTATTTTAGAATTGATATACACGGATGACTTAACTGCATTTTAGACCATTTATCTGGGATTATGGTTTTGT
GATGTTTGTCCTGAACACTTTTGTTGTAAAAAAATAATAATAATAATGTTTAATATTGAGAAAGAAACTAATATT
TTATGTGAGAGAAAGTGTGAGCAAACTAACTTGACTTTTAAGGCTAAAACTTAACATTCATAGAGGGGTGGAGTT
TTAACTGTAAGGTGCTACAATGCCCCTGGATCTACCAGCATAAATATCTTCTGATTTGTCCCTATGCATATCAGT
TGAGCTTCATATACCAGCAATATATCTGAAGAGCTATTATATAAAAACCCCAAACTGTTGATTATTAGCCAGGTA
ATGTGAATAAATTCTATAGGAACATATGAAAATACAACTTAAATAATAAACAGTGGAATATAAGGAAAGCAATAA
ATGAATGGGCTGAGCTGCCTGTAACTTGAGAGTAGATGGTTTGAGCCTGAGCAGAGACATGACTCAGCCTGTTCC
ATGAAGGCAGAGCCATGGACCACGCAGGAAGGGCCTACAGCCCATTTCTCCATACGCACTGGTATGTGTGGATGA
TGCTGCCAGGGCGCCATCGCCAAGTAAGAAAGTGAAGCAAATCAGAAACTTGTGAAGTGGAAATGTTCTAAAGGT
GGTGAGGCAATAAAAATCATAGTACTCTTTGTAGCAAAATTCTTAAGTATGTTATTTTCTGTTGAAGTTTACAAT
CAAAGGAAAATAGTAATGTTTTATACTGTTTACTGAAAGAAAAAGACCTATGAGCACATAGGACTCTAGACGGCA
TCCAGCCGGAGGCCAGAGCTGAGCACTCAGCCCGGGAGGCAGGCTCCAGGCCTCAGCAGGTGCGGAGCCGTCACT
GCACCAAGTCTCACTGGCTGTCAGTATGACATTTCACGGGAGATTTCTTGTTGCTCAAAAAATGAGCTCGCATTT
GTCAATGACAGTTTCTTTTTTCTTACTAGACCTGTAACTTTTGTAAATACACACAGCATGTAATGGTATCTTAAA
GTGTGTTTCTATGTGACAATTTTGTACAAATTTGTTATTTTCCATTTTTATTTCAAAATATACATTCAAACTTAA
AATT

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FIGURE 6348

MENTENSVDSKSIKNLEPKIIHGSESMDSGISLDNSYKMDYPEMGLCIIINNKNFHKSTGMTSRSGTDVDAANLR
ETFRNLKYEVRNKNDLTREEIVELMRDVSKEDHSKRSSFVCVLLSHGEEGIIFGTNGPVDLKKITNFFRGDRCRS
LTGKPKLFIIQACRGTELDCGIETDSGVDDDMACHKIPVEADFLYAYSTAPGYYSWRNSKDGSWFIQSLCAMLKQ
YADKLEFMHILTRVNRKVATEFESFSFDATFHAKKQIPCIVSMLTKELYFYH

FIGURE 6349A

AGTGGCGTCGGAACTGCAAAGCACCTGTGAGCTTGCGGAAGTCAGTTCAGACTCCAGCCCGCTCCAGCCCGGCCC
GACCCGACCGCACCCGGCGCCTGCCCTCGCTCGGCGTCCCCGGCCAGCCATGGGCCCTTGGAGCCGCAGCCTCTC
GGCGCTGCTGCTGCTGCTGCAGGTCTCCTCTTGGCTCTGCCAGGAGCCGGAGCCCTGCCACCCTGGCTTTGACGC
CGAGAGCTACACGTTCACGGTGCCCCGGCGCCACCTGGAGAGAGGCCGCGTCCTGGGCAGAGTGAATTTTGAAGA
TTGCACCGGTCGACAAAGGACAGCCTATTTTTCCCTCGACACCCGATTCAAAGTGGGCACAGATGGTGTGATTAC
AGTCAAAAGGCCTCTACGGTTTCATAACCCACAGATCCATTTCTTGGTCTACGCCTGGGACTCCACCTACAGAAA
GTTTTCCACCAAAGTCACGCTGAATACAGTGGGGCACCACCACCGCCCCCCGCCCCATCAGGCCTCCGTTTCTGG
AATCCAAGCAGAATTGCTCACATTTCCCAACTCCTCTCCTGGCCTCAGAAGACAGAAGAGAGACTGGGTTATTCC
TCCCATCAGCTGCCCAGAAAATGAAAAAGGCCCATTTCCTAAAAACCTGGTTCAGATCAAATCCAACAAAGACAA
AGAAGGCAAGGTTTTCTACAGCATCACTGGCCAAGGAGCTGACACACCCCCTGTTGGTGTCTTTATTATTGAAAG
AGAAACAGGATGGCTGAAGGTGACAGAGCCTCTGGATAGAGAACGCATTGCCACATACACTCTCTTCTCTCACGC
TGTGTCATCCAACGGGAATGCAGTTGAGGATCCAATGGAGATTTTGATCACGGTAACCGATCAGAATGACAACAA
GCCCGAATTCACCCAGGAGGTCTTTAAGGGGTCTGTCATGGAAGGTGCTCTTCCAGGAACCTCTGTGATGGAGGT
CACAGCCACAGACGCGGACGATGATGTGAACACCTACAATGCCGCCATCGCTTACACCATCCTCAGCCAAGATCC
TGAGCTCCCTGACAAAAATATGTTCACCATTAACAGGAACACAGGAGTCATCAGTGTGGTCACCACTGGGCTGGA
CCGAGAGAGTTTCCCTACGTATACCCTGGTGGTTCAAGCTGCTGACCTTCAAGGTGAGGGGTTAAGCACAACAGC
AACAGCTGTGATCACAGTCACTGACACCAACGATAATCCTCCGATCTTCAATCCCACCACGTACAAGGGTCAGGT
GCCTGAGAACGAGGCTAACGTCGTAATCACCACACTGAAAGTGACTGATGCTGATGCCCCCAATACCCCAGCGTG
GGAGGCTGTATACACCATATTGAATGATGATGGTGGACAATTTGTCGTCACCACAAATCCAGTGAACAACGATGG
CATTTTGAAAACAGCAAAGGGCTTGGATTTTGAGGCCAAGCAGCAGTACATTCTACACGTAGCAGTGACGAATGT
GGTACCTTTTGAGGTCTCTCTCACCACCTCCACAGCCACCGTCACCGTGGATGTGCTGGATGTGAATGAAGCCCC
CATCTTTGTGCCTCCTGAAAAGAGAGTGGAAGTGTCCGAGGACTTTGGCGTGGGCCAGGAAATCACATCCTACAC
TGCCCAGGAGCCAGACACATTTATGGAACAGAAAATAACATATCGGATTTGGAGAGACACTGCCAACTGGCTGGA
GATTAATCCGGACACTGGTGCCATTTCCACTCGGGCTGAGCTGGACAGGGAGGATTTTGAGCACGTGAAGAACAG
CACGTACACAGCCCTAATCATAGCTACAGACAATGGTTCTCCAGTTGCTACTGGAACAGGGACACTTCTGCTGAT
CCTGTCTGATGTGAATGACAACGCCCCCATACCAGAACCTCGAACTATATTCTTCTGTGAGAGGAATCCAAAGCC
TCAGGTCATAAACATCATTGATGCAGACCTTCCTCCCAATACATCTCCCTTCACAGCAGAACTAACACACGGGGC
GAGTGCCAACTGGACCATTCAGTACAACGACCCAACCCAAGAATCTATCATTTTGAAGCCAAAGATGGCCTTAGA
GGTGGGTGACTACAAAATCAATCTCAAGCTCATGGATAACCAGAATAAAGACCAAGTGACCACCTTAGAGGTCAG
CGTGTGTGACTGTGAAGGGGCCGCCGGCGTCTGTAGGAAGGCACAGCCTGTCGAAGCAGGATTGCAAATTCCTGC
CATTCTGGGGATTCTTGGAGGAATTCTTGCTTTGCTAATTCTGATTCTGCTGCTCTTGCTGTTTCTTCGGAGGAG
AGCGGTGGTCAAAGAGCCCTTACTGCCCCCAGAGGATGACACCCGGGACAACGTTTATTACTATGATGAAGAAGG
AGGCGGAGAAGAGGACCAGGACTTTGACTTGAGCCAGCTGCACAGGGGCCTGGACGCTCGGCCTGAAGTGACTCG
TAACGACGTTGCACCAACCCTCATGAGTGTCCCCCGGTATCTTCCCCGCCCTGCCAATCCCGATGAAATTGGAAA
TTTTATTGATGAAAATCTGAAAGCGGCTGATACTGACCCCACAGCCCCGCCTTATGATTCTCTGCTCGTGTTTGA
CTATGAAGGAAGCGGTTCCGAAGCTGCTAGTCTGAGCTCCCTGAACTCCTCAGAGTCAGACAAAGACCAGGACTA
TGACTACTTGAACGAATGGGGCAATCGCTTCAAGAAGCTGGCTGACATGTACGGAGGCGGCGAGGACGACTAGGG
GACTCGAGAGAGGCGGGCCCCAGACCCATGTGCTGGGAAATGCAGAAATCACGTTGCTGGTGGTTTTTCAGCTCC
CTTCCCTTGAGATGAGTTTCTGGGGAAAAAAAAGAGACTGGTTAGTGATGCAGTTAGTATAGCTTTATACTCTCT
CCACTTTATAGCTCTAATAAGTTTGTGTTAGAAAAGTTTCGACTTATTTCTTAAAGCTTTTTTTTTTTCCCATC
ACTCTTTACATGGTGGTGATGTCCAAAAGATACCCAAATTTTAATATTCCAGAAGAACAACTTTAGCATCAGAAG
GTTCACCCAGCACCTTGCAGATTTTCTTAAGGAATTTTGTCTCACTTTTAAAAAGAAGGGGAGAAGTCAGCTACT
CTAGTTCTGTTGTTTTGTGTATATAATTTTTTAAAAAAAATTTGTGTGCTTCTGCTCATTACTACACTGGTGTGT
CCCTCTGCCTTTTTTTTTTTTTTTAAGACAGGGTCTCATTCTATCGGCCAGGCTGGAGTGCAGTGGTGCAATCAC
AGCTCACTGCAGCCTTGTCCTCCCAGGCTCAAGCTATCCTTGCACCTCAGCCTCCCAAGTAGCTGGGACCACAGG
CATGCACCACTACGCATGACTAATTTTTTAAATATTTGAGACGGGGTCTCCCTGTGTTACCCAGGCTGGTCTCAA
ACTCCTGGGCTCAAGTGATCCTCCCATCTTGGCCTCCCAGAGTATTGGGATTACAGACATGAGCCACTGCACCTG
CCCAGCTCCCCAACTCCCTGCCATTTTTTAAGAGACAGTTTCGCTCCATCGCCCAGGCCTGGGATGCAGTGATGT

FIGURE 6349B

GATCATAGCTCACTGTAACCTCAAACTCTGGGGCTCAAGCAGTTCTCCCACCAGCCTCCTTTTTATTTTTTTGTA
CAGATGGGGTCTTGCTATGTTGCCCAAGCTGGTCTTAAACTCCTGGCCTCAAGCAATCCTTCTGCCTTGGCCCCC
CAAAGTGCTGGGATTGTGGGCATGAGCTGCTGTGCCCAGCCTCCATGTTTTAATATCAACTCTCACTCCTGAATT
CAGTTGCTTTGCCCAAGATAGGAGTTCTCTGATGCAGAAATTATTGGGCTCTTTTAGGGTAAGAAGTTTGTGTCT
TTGTCTGGCCACATCTTGACTAGGTATTGTCTACTCTGAAGACCTTTAATGGCTTCCCTCTTTCATCTCCTGAGT
ATGTAACTTGCAATGGGCAGCTATCCAGTGACTTGTTCTGAGTAAGTGTGTTCATTAATGTTTATTTAGCTCTGA
AGCAAGAGTGATATACTCCAGGACTTAGAATAGTGCCTAAAGTGCTGCAGCCAAAGACAGAGCGGAACTATGAAA
AGTGGGCTTGGAGATGGCAGGAGAGCTTGTCATTGAGCCTGGCAATTTAGCAAACTGATGCTGAGGATGATTGAG
GTGGGTCTACCTCATCTCTGAAAATTCTGGAAGGAATGGAGGAGTCTCAACATGTGTTTCTGACACAAGATCCGT
GGTTTGTACTCAAAGCCCAGAATCCCCAAGTGCCTGCTTTTGATGATGTCTACAGAAAATGCTGGCTGAGCTGAA
CACATTTGCCCAATTCCAGGTGTGCACAGAAAACCGAGAATATTCAAAATTCCAAATTTTTTCTTAGGAGCAAGA
AGAAAATGTGGCCCTAAAGGGGGTTAGTTGAGGGGTAGGGGGTAGTGAGGATCTTGATTTGGATCTCTTTTTATT
TAAATGTGAATTTCAACTTTTGACAATCAAAGAAAAGACTTTTGTTGAAATAGCTTTACTGTTTCTCAAGTGTTT
TGGAGAAAAAAATCAACCCTGCAATCACTTTTTGGAATTGTCTTGATTTTTCGGCAGTTCAAGCTATATCGAATA
TAGTTCTGTGTAGAGAATGTCACTGTAGTTTTGAGTGTATACATGTGTGGGTGCTGATAATTGTGTATTTTCTTT
GGGGGTGGAAAAGGAAAACAATTCAAGCTGAGAAAAGTATTCTCAAAGATGCATTTTTATAAATTTTATTAAACA
ATTTTGTTAAACCATAAAAAAAAAAAAA

FIGURE 6350

MGPWSRSLSALLLLLQVSSWLCQEPEPCHPGFDAESYTFTVPRRHLERGRVLGRVNFEDCTGRQRTAYFSLDTRF
KVGTDGVITVKRPLRFHNPQIHFLVYAWDSTYRKFSTKVTLNTVGHHHRPPPHQASVSGIQAELLTFPNSSPGLR
RQKRDWVIPPISCPENEKGPFPKNLVQIKSNKDKEGKVFYSITGQGADTPPVGVFIIERETGWLKVTEPLDRERI
ATYTLFSHAVSSNGNAVEDPMEILITVTDQNDNKPEFTQEVFKGSVMEGALPGTSVMEVTATDADDDVNTYNAAI
AYTILSQDPELPDKNMFTINRNTGVISVVTTGLDRESFPTYTLVVQAADLQGEGLSTTATAVITVTDTNDNPPIF
NPTTYKGQVPENEANVVITTLKVTDADAPNTPAWEAVYTILNDDGGQFVVTTNPVNNDGILKTAKGLDFEAKQQY
ILHVAVTNVVPFEVSLTTSTATVTVDVLDVNEAPIFVPPEKRVEVSEDFGVGQEITSYTAQEPDTFMEQKITYRI
WRDTANWLEINPDTGAISTRAELDREDFEHVKNSTYTALIIATDNGSPVATGTGTLLLILSDVNDNAPIPEPRTI
FFCERNPKPQVINIIDADLPPNTSPFTAELTHGASANWTIQYNDPTQESIILKPKMALEVGDYKINLKLMDNQNK
DQVTTLEVSVCDCEGAAGVCRKAQPVEAGLQIPAILGILGGILALLILILLLLLFLRRRAVVKEPLLPPEDDTRD
NVYYYDEEGGGEEDQDFDLSQLHRGLDARPEVTRNDVAPTLMSVPRYLPRPANPDEIGNFIDENLKAADTDPTAP
PYDSLLVFDYEGSGSEAASLSSLNSSESDKDQDYDYLNEWGNRFKKLADMYGGGEDD

FIGURE 6351A

TGAGGAATCAACAGCCGCCATCTTGTCGCGGACCCGACCGGGGCTTCGAGCGCGATCTACTCGGCCCCGCCGGTC
CCGGGCCCCACAACCGCCCGCGCTCGCTCCTCTCCCTCGCAGCCGGCAGGGCCCCCGACCCCCGTCCGGGCCCTC
GCCGGCCCGGCCGCCCGTGCCCGGGGCTGTTTTCGCGAGCAGGTGAAAATGGCTGAGAACTTGCTGGACGGACCG
CCCAACCCCAAAAGAGCCAAACTCAGCTCGCCCGGTTTCTCGGCGAATGACAGCACAGATTTTGGATCATTGTTT
GACTTGGAAAATGATCTTCCTGATGAGCTGATACCCAATGGAGGAGAATTAGGCCTTTTAAACAGTGGGAACCTT
GTTCCAGATGCTGCTTCCAAACATAAACAACTGTCGGAGCTTCTACGAGGAGGCAGCGGCTCTAGTATCAACCCA
GGAATAGGAAATGTGAGCGCCAGCAGCCCCGTGCAGCAGGGCCTGGGTGGCCAGGCTCAAGGGCAGCCGAACAGT
GCTAACATGGCCAGCCTCAGTGCCATGGGCAAGAGCCCTCTGAGCCAGGGAGATTCTTCAGCCCCCAGCCTGCCT
AAACAGGCAGCCAGCACCTCTGGGCCCACCCCCGCTGCCTCCCAAGCACTGAATCCGCAAGCACAAAAGCAAGTG
GGGCTGGCGACTAGCAGCCCTGCCACGTCACAGACTGGACCTGGTATCTGCATGAATGCTAACTTTAACCAGACC
CACCCAGGCCTCCTCAATAGTAACTCTGGCCATAGCTTAATTAATCAGGCTTCACAAGGGCAGGCGCAAGTCATG
AATGGATCTCTTGGGGCTGCTGGCAGAGGAAGGGGAGCTGGAATGCCGTACCCTACTCCAGCCATGCAGGGCGCC
TCGAGCAGCGTGCTGGCTGAGACCCTAACGCAGGTTTCCCCGCAAATGACTGGTCACGCGGGACTGAACACCGCA
CAGGCAGGAGGCATGGCCAAGATGGGAATAACTGGGAACACAAGTCCATTTGGACAGCCCTTTAGTCAAGCTGGA
GGGCAGCCAATGGGAGCCACTGGAGTGAACCCCCAGTTAGCCAGCAAACAGAGCATGGTCAACAGTTTGCCCACC
TTCCCTACAGATATCAAGAATACTTCAGTCACCAACGTGCCAAATATGTCTCAGATGCAAACATCAGTGGGAATT
GTACCCACACAAGCAATTGCAACAGGCCCCACTGCAGATCCTGAAAAACGCAAACTGATACAGCAGCAGCTGGTT
CTACTGCTTCATGCTCATAAGTGTCAGAGACGAGAGCAAGCAAACGGAGAGGTTCGGGCCTGCTCGCTCCCGCAT
TGTCGAACCATGAAAAACGTTTTGAATCACATGACGCATTGTCAGGCTGGGAAAGCCTGCCAAGTTGCCCATTGT
GCATCTTCACGACAAATCATCTCTCATTGGAAGAACTGCACACGACATGACTGTCCTGTTTGCCTCCCTTTGAAA
AATGCCAGTGACAAGCGAAACCAACAAACCATCCTGGGGTCTCCAGCTAGTGGAATTCAAAACACAATTGGTTCT
GTTGGCACAGGGCAACAGAATGCCACTTCTTTAAGTAACCCAAATCCCATAGACCCCAGCTCCATGCAGCGAGCC
TATGCTGCTCTCGGACTCCCCTACATGAACCAGCCCCAGACGCAGCTGCAGCCTCAGGTTCCTGGCCAGCAACCA
GCACAGCCTCAAACCCACCAGCAGATGAGGACTCTCAACCCCCTGGGAAATAATCCAATGAACATTCCAGCAGGA
GGAATAACAACAGATCAGCAGCCCCCAAACTTGATTTCAGAATCAGCTCTTCCGACTTCCCTGGGGGCCACAAAC
CCACTGATGAACGATGGCTCCAACTCTGGTAACATTGGAACCCTCAGCACTATACCAACAGCAGCTCCTCCTTCT
AGCACCGGTGTAAGGAAAGGCTGGCACGAACATGTCACTCAGGACCTGCGGAGCCATCTAGTGCATAAACTCGTC
CAAGCCATCTTCCCAACACCTGATCCCGCAGCTCTAAAGGATCGCCGCATGGAAAACCTGGTAGCCTATGCTAAG
AAAGTGGAAGGGGACATGTACGAGTCTGCCAACAGCAGGGATGAATATTATCACTTATTAGCAGAGAAAATCTAC
AAGATACAAAAAGAACTAGAAGAAAAACGGAGGTCGCGTTTACATAAACAAGGCATCTTGGGGAACCAGCCAGCC
TTACCAGCCCCGGGGGCTCAGCCCCCTGTGATTCCACAGGCACAACCTGTGAGACCTCCAAATGGACCCCTGTCC
CTGCCAGTGAATCGCATGCAAGTTTCTCAAGGGATGAATTCATTTAACCCCATGTCCTTGGGGAACGTCCAGTTG
CCACAAGCACCCATGGGACCTCGTGCAGCCTCCCCAATGAACCACTCTGTCCAGATGAACAGCATGGGCTCAGTG
CCAGGGATGGCCATTTCTCCTTCCCGAATGCCTCAGCCTCCGAACATGATGGGTGCACACACCAACAACATGATG
GCCCAGGCGCCCGCTCAGAGCCAGTTTCTGCCACAGAACCAGTTCCCGTCATCCAGCGGGGCGATGAGTGTGGGC
ATGGGGCAGCCGCCAGCCCAAACAGGCGTGTCACAGGGACAGGTGCCTGGTGCTGCTCTTCCTAACCCTCTCAAC
ATGCTGGGGCCTCAGGCCAGCCAGCTACCTTGCCCTCCAGTGACACAGTCACCACTGCACCCAACACCGCCTCCT
GCTTCCACGGCTGCTGGCATGCCATCTCTCCAGCACACGACACCACCTGGGATGACTCCTCCCCAGCCAGCAGCT
CCCACTCAGCCATCAACTCCTGTGTCGTCTTCCGGGCAGACTCCCACCCCGACTCCTGGCTCAGTGCCCAGTGCT
ACCCAAACCCAGAGCACCCCTACAGTCCAGGCAGCAGCCCAGGCCCAGGTGACCCCGCAGCCTCAAACCCCAGTT
CAGCCCCCGTCTGTGGCTACCCCTCAGTCATCGCAGCAACAGCCGACGCCTGTGCACGCCCAGCCTCCTGGCACA
CCGCTTTCCCAGGCAGCAGCCAGCATTGATAACAGAGTCCCTACCCCCTCCTCGGTGGCCAGCGCAGAAACCAAT
TCCCAGCAGCCAGGACCTGACGTACCTGTGCTGGAAATGAAGACGGAGACCCAAGCAGAGGACACTGAGCCCGAT
CCTGGTGAATCCAAAGGGGAGCCCAGGTCTGAGATGATGGAGGAGGATTTGCAAGGAGCTTCCCAAGTTAAAGAA
GAAACAGACATAGCAGAGCAGAAATCAGAACCAATGGAAGTGGATGAAAAGAAACCTGAAGTGAAAGTAGAAGTT
AAAGAGGAAGAAGAGAGTAGCAGTAACGGCACAGCCTCTCAGTCAACATCTCCTTCGCAGCCGCGCAAAAAAATC
TTTAAACCAGAGGAGTTACGCCAGGCCCTCATGCCAACCCTAGAAGCACTGTATCGACAGGACCCAGAGTCATTA
CCTTTCCGGCAGCCTGTAGATCCCCAGCTCCTCGGAATTCCAGACTATTTTGACATCGTAAAGAATCCCATGGAC

FIGURE 6351B

CTCTCCACCATCAAGCGGAAGCTGGACACAGGGCAATACCAAGAGCCCTGGCAGTACGTGGACGACGTCTGGCTC
ATGTTCAACAATGCCTGGCTCTATAATCGCAAGACATCCCGAGTCTATAAGTTTTGCAGTAAGCTTGCAGAGGTC
TTTGAGCAGGAAATTGACCCTGTCATGCAGTCCCTTGGATATTGCTGTGGACGCAAGTATGAGTTTTCCCCACAG
ACTTTGTGCTGCTATGGGAAGCAGCTGTGTACCATTCCTCGCGATGCTGCCTACTACAGCTATCAGAATAGGTAT
CATTTCTGTGAGAAGTGTTTCACAGAGATCCAGGGCGAGAATGTGACCCTGGGTGACGACCCTTCACAGCCCCAG
ACGACAATTTCAAAGGATCAGTTTGAAAAGAAGAAAAATGATACCTTAGACCCCGAACCTTTCGTTGATTGCAAG
GAGTGTGGCCGGAAGATGCATCAGATTTGCGTTCTGCACTATGACATCATTTGGCCTTCAGGTTTTGTGTGCGAC
AACTGCTTGAAGAAAACTGGCAGACCTCGAAAAGAAAACAAATTCAGTGCTAAGAGGCTGCAGACCACAAGACTG
GGAAACCACTTGGAAGACCGAGTGAACAAATTTTTGCGGCGCCAGAATCACCCTGAAGCCGGGGAGGTTTTTGTC
CGAGTGGTGGCCAGCTCAGACAAGACGGTGGAGGTCAAGCCCGGGATGAAGTCACGGTTTGTGGATTCTGGGGAA
ATGTCTGAATCTTTCCCATATCGAACCAAAGCTCTGTTTGCTTTTGAGGAAATTGACGGCGTGGATGTCTGCTTT
TTTGGAATGCACGTCCAAGAATACGGCTCTGATTGCCCCCCTCCAAACACGAGGCGTGTGTACATTTCTTATCTG
GATAGTATTCATTTCTTCCGGCCACGTTGCCTCCGCACAGCCGTTTACCATGAGATCCTTATTGGATATTTAGAG
TATGTGAAGAAATTAGGGTATGTGACAGGGCACATCTGGGCCTGTCCTCCAAGTGAAGGAGATGATTACATCTTC
CATTGCCACCCACCTGATCAAAAAATACCCAAGCCAAAACGACTGCAGGAGTGGTACAAAAAGATGCTGGACAAG
GCGTTTGCAGAGCGGATCATCCATGACTACAAGGATATTTTCAAACAAGCAACTGAAGACAGGCTCACCAGTGCC
AAGGAACTGCCCTATTTTGAAGGTGATTTCTGGCCCAATGTGTTAGAAGAGAGCATTAAGGAACTAGAACAAGAA
GAAGAGGAGAGGAAAAAGGAAGAGAGCACTGCAGCCAGTGAAACCACTGAGGGCAGTCAGGGCGACAGCAAGAAT
GCCAAGAAGAAGAACAACAAGAAAACCAACAAGAACAAAAGCAGCATCAGCCGCGCCAACAAGAAGAAGCCCAGC
ATGCCCAACGTGTCCAATGACCTGTCCCAGAAGCTGTATGCCACCATGGAGAAGCACAAGGAGGTCTTCTTCGTG
ATCCACCTGCACGCTGGGCCTGTCATCAACACCCTGCCCCCCATCGTCGACCCCGACCCCCTGCTCAGCTGTGAC
CTCATGGATGGGCGCGACGCCTTCCTCACCCTCGCCAGAGACAAGCACTGGGAGTTCTCCTCCTTGCGCCGCTCC
AAGTGGTCCACGCTCTGCATGCTGGTGGAGCTGCACACCCAGGGCCAGGACCGCTTTGTCTACACCTGCAACGAG
TGCAAGCACCACGTGGAGACGCGCTGGCACTGCACTGTGTGCGAGGACTACGACCTCTGCATCAACTGCTATAAC
ACGAAGAGCCATGCCCATAAGATGGTGAAGTGGGGGCTGGGCCTGGATGACGAGGGCAGCAGCCAGGGCGAGCCA
CAGTCAAAGAGCCCCCAGGAGTCACGCCGGGTGAGCATCCAGCGCTGCATCCAGTCGCTGGTGCACGCGTGCCAG
TGCCGCAACGCCAACTGCTCGCTGCCATCCTGCCAGAAGATGAAGCGGGTGGTGCAGCACACCAAGGGCTGCAAA
CGCAAGACCAACGGGGGCTGCCCGGTGTGCAAGCAGCTCATCGCCCTCTGCTGCTACCACGCCAAGCACTGCCAA
GAAAACAAATGCCCCGTGCCCTTCTGCCTCAACATCAAACACAAGCTCCGCCAGCAGCAGATCCAGCACCGCCTG
CAGCAGGCCCAGCTCATGCGCCGGCGGATGGCCACCATGAACACCCGCAACGTGCCTCAGCAGAGTCTGCCTTCT
CCTACCTCAGCACCGCCCGGGACCCCCACACAGCAGCCCAGCACACCCCAGACGCCGCAGCCCCCTGCCCAGCCC
CAACCCTCACCCGTGAGCATGTCACCAGCTGGCTTCCCCAGCGTGGCCCGGACTCAGCCCCCCACCACGGTGTCC
ACAGGGAAGCCTACCAGCCAGGTGCCGGCCCCCCCACCCCCGGCCCAGCCCCCTCCTGCAGCGGTGGAAGCGGCT
CGGCAGATCGAGCGTGAGGCCCAGCAGCAGCAGCACCTGTACCGGGTGAACATCAACAACAGCATGCCCCCAGGA
CGCACGGGCATGGGGACCCCGGGGAGCCAGATGGCCCCCGTGAGCCTGAATGTGCCCCGACCCAACCAGGTGAGC
GGGCCCGTCATGCCCAGCATGCCTCCCGGGCAGTGGCAGCAGGCGCCCCTTCCCCAGCAGCAGCCCATGCCAGGC
TTGCCCAGGCCTGTGATATCCATGCAGGCCCAGGCGGCCGTGGCTGGGCCCCGGATGCCCAGCGTGCAGCCACCC
AGGAGCATCTCACCCAGCGCTCTGCAAGACCTGCTGCGGACCCTGAAGTCGCCCAGCTCCCCTCAGCAGCAACAG
CAGGTGCTGAACATTCTCAAATCAAACCCGCAGCTAATGGCAGCTTTCATCAAACAGCGCACAGCCAAGTACGTG
GCCAATCAGCCCGGCATGCAGCCCCAGCCTGGCCTCCAGTCCCAGCCCGGCATGCAACCCCAGCCTGGCATGCAC
CAGCAGCCCAGCCTGCAGAACCTGAATGCCATGCAGGCTGGCGTGCCGCGGCCCGGTGTGCCTCCACAGCAGCAG
GCGATGGGAGGCCTGAACCCCCAGGGCCAGGCCTTGAACATCATGAACCCAGGACACAACCCCAACATGGCGAGT
ATGAATCCACAGTACCGAGAAATGTTACGGAGGCAGCTGCTGCAGCAGCAGCAGCAACAGCAGCAGCAACAACAG
CAGCAACAGCAGCAGCAGCAAGGGAGTGCCGGCATGGCTGGGGGCATGGCGGGGCACGGCCAGTTCCAGCAGCCT
CAAGGACCCGGAGGCTACCCACCGGCCATGCAGCAGCAGCAGCGCATGCAGCAGCATCTCCCCCTCCAGGGCAGC
TCCATGGGCCAGATGGCGGCTCAGATGGGACAGCTTGGCCAGATGGGGCAGCCGGGGCTGGGGGCAGACAGCACC
CCCAACATCCAGCAAGCCCTGCAGCAGCGGATTCTGCAGCAACAGCAGATGAAGCAGCAGATTGGGTCCCCAGGC
CAGCCGAACCCCATGAGCCCCCAGCAACACATGCTCTCAGGACAGCCACAGGCCTCGCATCTCCCTGGCCAGCAG

FIGURE 6351C

ATCGCCACGTCCCTTAGTAACCAGGTGCGGTCTCCAGCCCCTGTCCAGTCTCCACGGCCCCAGTCCCAGCCTCCA
CATTCCAGCCCGTCACCACGGATACAGCCCCAGCCTTCGCCACACCACGTCTCACCCCAGACTGGTTCCCCCCAC
CCCGGACTCGCAGTCACCATGGCCAGCTCCATAGATCAGGGACACTTGGGGAACCCCGAACAGAGTGCAATGCTC
CCCCAGCTGAACACCCCCAGCAGGAGTGCGCTGTCCAGCGAACTGTCCCTGGTCGGGGACACCACGGGGGACACG
CTAGAGAAGTTTGTGGAGGGCTTG**TAG**CATTGTGAGAGCATCACCTTTTCCCTTTCATGTTCTTGGACCTTTTGT
ACTGAAAATCCAGGCATCTAGGTTCTTTTTATTCCTAGATGGAACTGCGACTTCCGAGCCATGGAAGGGTGGATT
GATGTTTAAAGAAACAATACAAAGAATATATTTTTTTGTTAAAAACCAGTTGATTTAAATATCTGGTCTCTCTCT
TTGGTTTTTTTTTGGCGGGGGGGTGGGGGGGGTTCTTTTTTTTTCCGTTTTGTTTTTGTTTGGGGGGAGGGGGGTT
TTGTTTGGATTCTTTTTGTCGTCATTGCTGGTGACTCATGCCTTTTTTTAACGGGAAAAACAAGTTCATTATATT
CATATTTTTTATTTGTATTTTCAAGACTTTAAACATTTATGTTTAAAAGTAAGAAGAAAAATAATATTCAGAACT
GATTCCTGAAATAATGCAAGCTTATAATGTATCCCGATAACTTTGTGATGTTTCGGGAAGATTTTTTTCTATAGT
GAACTCTGTGGGCGTCTCCCAGTATTACCCTGGATGATAGGAATTGACTCCGGCGTGCACACACGTACACACCCA
CACACATCTATCTATACATAATGGCTGAAGCCAAACTTGTCTTGCAGATGTAGAAATTGTTGCTTTGTTTCTCTG
ATAAAACTGGTTTTAGACAAAAAATAGGGATGATCACTCTTAGACCATGCTAATGTTACTAGAGAAGAAGCCTTC
TTTTCTTTCTTCTATGTGAAACTTGAAATGAGGAAAAGCAATTCTAGTGTAAATCATGCAAGCGCTCTAATTCCT
ATAAATACGAAACTCGAGAAGATTCAATCACTGTATAGAATGGTAAAATACCAACTCATTTCTTATATCATATTG
TTAAATAAACTGTGTGCAACAGACAAAAAGGGTGGTCCTTCTTGAATTCATGTACATGGTATTAACACTTAGTGT
TCGGGGTTTTTTGTTATGAAAATGCTGTTTTCAACATTGTATTTGGACTATGCATGTGTTTTTTCCCCATTGTAT
ATAAAGTACCGCTTAAAATTGATATAAATTACTGAGGTTTTTAACATGTATTCTGTTCTTTAAGATCCCCTGTAA
GAATGTTTAAGGTTTTTATTTATTTATATATATTTTTTGGTCTGTTCTTTGTAAAAAAAAAAAAAAAAA

FIGURE 6352

MAENLLDGPPNPKRAKLSSPGFSANDSTDFGSLFDLENDLPDELIPNGGELGLLNSGNLVPDAASKHKQLSELLR
GGSGSSINPGIGNVSASSPVQQGLGGQAQGQPNSANMASLSAMGKSPLSQGDSSAPSLPKQAASTSGPTPAASQA
LNPQAQKQVGLATSSPATSQTGPGICMNANFNQTHPGLLNSNSGHSLINQASQGQAQVMNGSLGAAGRGRGAGMP
YPTPAMQGASSSVLAETLTQVSPQMTGHAGLNTAQAGGMAKMGITGNTSPFGQPFSQAGGQPMGATGVNPQLASK
QSMVNSLPTFPTDIKNTSVTNVPNMSQMQTSVGIVPTQAIATGPTADPEKRKLIQQQLVLLLHAHKCQRREQANG
EVRACSLPHCRTMKNVLNHMTHCQAGKACQVAHCASSRQIISHWKNCTRHDCPVCLPLKNASDKRNQQTILGSPA
SGIQNTIGSVGTGQQNATSLSNPNPIDPSSMQRAYAALGLPYMNQPQTQLQPQVPGQQPAQPQTHQQMRTLNPLG
NNPMNIPAGGITTDQQPPNLISESALPTSLGATNPLMNDGSNSGNIGTLSTIPTAAPPSSTGVRKGWHEHVTQDL
RSHLVHKLVQAIFPTPDPAALKDRRMENLVAYAKKVEGDMYESANSRDEYYHLLAEKIYKIQKELEEKRRSRLHK
QGILGNQPALPAPGAQPPVIPQAQPVRPPNGPLSLPVNRMQVSQGMNSFNPMSLGNVQLPQAPMGPRAASPMNHS
VQMNSMGSVPGMAISPSRMPQPPNMMGAHTNNMMAQAPAQSQFLPQNQFPSSSGAMSVGMGQPPAQTGVSQGQVP
GAALPNPLNMLGPQASQLPCPPVTQSPLHPTPPPASTAAGMPSLQHTTPPGMTPPQPAAPTQPSTPVSSSGQTPT
PTPGSVPSATQTQSTPTVQAAAQAQVTPQPQTPVQPPSVATPQSSQQQPTPVHAQPPGTPLSQAAASIDNRVPTP
SSVASAETNSQQPGPDVPVLEMKTETQAEDTEPDPGESKGEPRSEMMEEDLQGASQVKEETDIAEQKSEPMEVDE
KKPEVKVEVKEEEESSSNGTASQSTSPSQPRKKIFKPEELRQALMPTLEALYRQDPESLPFRQPVDPQLLGIPDY
FDIVKNPMDLSTIKRKLDTGQYQEPWQYVDDVWLMFNNAWLYNRKTSRVYKFCSKLAEVFEQEIDPVMQSLGYCC
GRKYEFSPQTLCCYGKQLCTIPRDAAYYSYQNRYHFCEKCFTEIQGENVTLGDDPSQPQTTISKDQFEKKKNDTL
DPEPFVDCKECGRKMHQICVLHYDIIWPSGFVCDNCLKKTGRPRKENKFSAKRLQTTRLGNHLEDRVNKFLRRQN
HPEAGEVFVRVVASSDKTVEVKPGMKSRFVDSGEMSESFPYRTKALFAFEEIDGVDVCFFGMHVQEYGSDCPPPN
TRRVYISYLDSIHFFRPRCLRTAVYHEILIGYLEYVKKLGYVTGHIWACPPSEGDDYIFHCHPPDQKIPKPKRLQ
EWYKKMLDKAFAERIIHDYKDIFKQATEDRLTSAKELPYFEGDFWPNVLEESIKELEQEEEERKKEESTAASETT
EGSQGDSKNAKKKNNKKTNKNKSSISRANKKKPSMPNVSNDLSQKLYATMEKHKEVFFVIHLHAGPVINTLPPIV
DPDPLLSCDLMDGRDAFLTLARDKHWEFSSLRRSKWSTLCMLVELHTQGQDRFVYTCNECKHHVETRWHCTVCED
YDLCINCYNTKSHAHKMVKWGLGLDDEGSSQGEPQSKSPQESRRVSIQRCIQSLVHACQCRNANCSLPSCQKMKR
VVQHTKGCKRKTNGGCPVCKQLIALCCYHAKHCQENKCPVPFCLNIKHKLRQQQIQHRLQQAQLMRRRMATMNTR
NVPQQSLPSPTSAPPGTPTQQPSTPQTPQPPAQPQPSPVSMSPAGFPSVARTQPPTTVSTGKPTSQVPAPPPPAQ
PPPAAVEAARQIEREAQQQQHLYRVNINNSMPPGRTGMGTPGSQMAPVSLNVPRPNQVSGPVMPSMPPGQWQQAP
LPQQQPMPGLPRPVISMQAQAAVAGPRMPSVQPPRSISPSALQDLLRTLKSPSSPQQQQQVLNILKSNPQLMAAF
IKQRTAKYVANQPGMQPQPGLQSQPGMQPQPGMHQQPSLQNLNAMQAGVPRPGVPPQQQAMGGLNPQGQALNIMN
PGHNPNMASMNPQYREMLRRQLLQQQQQQQQQQQQQQQQQQQGSAGMAGGMAGHGQFQQPQGPGGYPPAMQQQQRM
QQHLPLQGSSMGQMAAQMGQLGQMGQPGLGADSTPNIQQALQQRILQQQQMKQQIGSPGQPNPMSPQQHMLSGQP
QASHLPGQQIATSLSNQVRSPAPVQSPRPQSQPPHSSPSPRIQPQPSPHHVSPQTGSPHPGLAVTMASSIDQGHL
GNPEQSAMLPQLNTPSRSALSSELSLVGDTTGDTLEKFVEGL

FIGURE 6353A

GATCAATACTGAGGCCGCGTCGACCCCCTTGAGCCGAGACCCCCCCCCAGCCCAGCCCCCACCCCACCCCCCGCA
CACGCCCCACCCCCCCCCACGACCCAGCCTCATACCGCACCAGCTGAGGCACCCAAGAGGATTACCCCCTGGGGCC
CTCTCCCGCCCCCCAAAAAAGAGAAGATCCCCTCTCCTGGCCCATCCCTTCCCTTCTTCCCTCCCCCCTCCCCCC
GAACTTTCCCTCTCGCATGCTTTTCCCCTGCACCACGGATCGCCTCTCGGATGCCGCTTGCCTGGAAGCTGCGTT
AGGAGCGAGCGGCGGCGGTGGCGGCGGTGGCGGCGGCGGCGGCAGCTCGGGAGTGCTATGACCGGCAAACTCGCC
GAGAAGCTGCCGGTGACCATGAGCAGTTTGCTAAACCAACTGCCTGACAATCTGTACCCCGAGGAGATCCCCAGC
GCGCTCAACCTCTTCTCCGGCAGCAGCGACTCGGTAGTCCATTACAATCAGATGGCTACAGAGAATGTAATGGAC
ATCGGTCTGACCAACGAGAAGCCCAACCCGGAACTCTCTTACTCCGGCTCCTTCCAGCCAGCCCCCGGGAACAAG
ACCGTGACCTACTTGGGAAAGTTCGCCTTCGACTCCCCTTCCAACTGGTGCCAGGACAACATCATTAGCCTCATG
AGCGCCGGCATCTTGGGGGTGCCCCCGGCTTCAGGGGCGCTAAGCACGCAGACGTCCACGGCCAGCATGGTGCAG
CCACCGCAGGGTGACGTGGAGGCCATGTATCCCGCGCTACCCCCCTACTCCAACTGCGGCGACCTCTACTCAGAG
CCCGTGTCTTTCCACGACCCCCAGGGCAATCCCGGGCTCGCCTATTCCCCCCAGGATTACCAATCGGCCAAGCCG
GCGTTGGACAGCAATCTCTTCCCCATGATTCCTGACTACAACCTCTACCACCACCCCAACGACATGGGCTCCATT
CCGGAGCACAAGCCCTTCCAGGGCATGGACCCCATCCGGGTCAACCCGCCCCCTACTACCCCTCTGGAGACCATC
AAGGCATTCAAAGACAAGCAGATCCACCCGGGCTTTGGCAGCCTGCCCCAGCCGCCGCTCACCCTCAAGCCCATC
CGGCCCCGCAAGTACCCCAACCGGCCTAGCAAGACACCGCTCCACGAACGGCCCCACGCGTGCCCGGCCGAGGGC
TGCGACCGCCGTTTCAGCCGTTCGGACGAGCTGACCCGGCACCTGCGCATCCACACGGGCCACAAGCCCTTCCAG
TGCCGGATCTGCATGCGGAGCTTCAGCCGCAGCGACCACCTCACCACTCACATCCGCACTCATACGGGCGAGAAG
CCCTTTGCCTGCGAGTTCTGCGGGCGCAAGTTTGCGCGCAGCGACGAGCGCAAGCGCCACGCCAAGATCCACCTC
AAGCAAAAGGAGAAGAAGGCGGAGAAGGGCGGTGCACCCTCTGCATCCTCGGCGCCCCCCGTGTCGCTGGCCCCC
GTGGTCACCACCTGCGCCTGAGGATCGGGCCCCCAGATCCCCACTTTTCCCCTCCAGTGCCTCCCGGCTGCTAGC
CTGAAAGCAGCGGGAAAGCCAGCCACGGAGGCGTAGGGGCCGCGCCCTGGCCTCTCCATGGACGTGCGGCCCCTT
GCTTCCCCTTCGATGCCCCCGGTTCCCAACCTTTCACGCCGGCCAGCGGTCAGGGGCCAGGGCTGGAGGCGCCTT
CCCCTCGCGGTCCCCCACTTAGCCAAGGCGTGGGGGCGGAAAGGTGGCGTCTAGCCCGCTTTGTTCAGTTCGGAT
CGCCTTGATCCAGGGGCCGCCGGGCCGCGCCAAGGACCTGCAAGGGACTGAAGGCGGAGCCCATCCAACCCTCGC
CCGACCCAAACACCTCATTGTTTCCCCCACGTCTCCCTCTATACCCCCTCGAAGACTCGAGAGGGGGAGGGGGTA
AGGAGCGCACCAAAGCGCAGAGCTTGCTGCCCGCCGCACGCACGCGCGCCTGCGTGCGGGGATGCGCGCGAGTGT
GTGCGTGCTCGCGTGTGTGTGTATGTGTGTGTGTGAGTGTGTGTGTGTGCGCGCGCGCAAGCGTGTGTGTTTAAG
ACTCTTGAGCTGAACTGGGCTGTGTTTACCCCAAACTCTTCCCCACCTCGGGTCCCCAAGCCGCTGGGAGATGTC
CCATGCTGGGGGTCCGCACGTGGCTGGAGGAGGTGGTCTTCCATCCGCTCTGAAATCATGTTTCTTAGAGAAATG
CCTCGGATGCCGCCGACGCGGTGCTGCTGCCGCCGCTTCGGGTTTGGCCCCTCAGAACCCCTCCTTTTCTGAGCG
CTTCCCTCTTAGGCCTCAGGGCAGTTTGATCTGTGGGGAGAAAGAGCAGCCATCGCTGAGCCTGCCTTTTAAAAT
ATATGTGTATTTCCTTAGCCCCACTCTAAGAAATCTATGTTCCTGAGTTTGCCCCCTGCCCTCCCACTCCTTCCC
CTTTTCCCCTCTAAACCTTCTCCCATCTCTTTCAAAATCTTTTCCCAGAAAGGCAGGCTTCAACCAGCCACTCCA
GCTTTGTGTCTTCTCTCAATTACATAGCAATTTCTCCTTCCCACCATCATGGGGAAGCTGGCTCTGCTTTTGCCC
TTTGTCATCACCAACACAACAGATAGAATTTAAATATAAGTATATGGTGTGCGTGTGTATGTATGTGTATGTATA
TGCATGCATGTGTATAAAGATGCACATGCGTACATATACATAACATACACACAATATGTATTCCTAGCAAAATAA
AATCTCTAAGGTACTTGGTTATCCAGTGCAGTGCACCGGAATAAAGAGAATTTGTAGGCGTATACAGCTTTAAAT
GATTTATTTTTTATGAAAATGTTAACTGATGAGATTATATCTACATACGTGTGTTATGTGTGTGGATATAGATGC
ACACATATCTGTACATATACATGTGAGTGTACATATATACACATATACACATCTATGTATGGATATGTGTGTATA
CACATATACACATCTCTGTCCAAAATTTCCTCAAAGATATGGGGATTTTTTCATGAATCCATGTGGATGAATGAG
GTGTCTCCTTTCCATACCCAGTCTCACCTTCTCCCCACCCTACCTCACCTCTTCTCAGGCACCCCTCTTCCCCAG
CTGTCCTGCCAGCCCTTCTCGTACAGGGTGGCTCCTTTGAAGTGGAGTAATAGGGAAGGTTGCTCTCTGCCACAG
CTTGCAGCATGGTCTTGACTGAATGTACTGTTCCTGTTAGCGTTACTTCTCCTGTGGTCAGTAAGTTGCCCAGAG
AGAAGGAACAAAGGTCTGGAGTTTACAGAATGTCTGTTTTTAAAGTCACTTTATGCGTTTTCCACTTTTTTCTTT
TTTAAGAAAAAGAAGTACCATTTTTGTTTTGTTTTGTTTTGATTTTTGGTGGTGGATAAATAATACTAAAAGGAC
TCTAGTGGAAAGGGGGGATATCGAAGAGCAGGGGGTTGTGAATTTCCAGGTACTTGGACTTTTTGTAGAAGTAGA
GAGAAGAAGATGAAGTTTGCCAGGAGGGCCCATATTTTTTCAGCTGAAGGGTAAAATCTTTCTTTGCAGAGACAG

FIGURE 6353B

TATTTTGCTGAATACTTTTTATAATGTGATGATTATTAAAAAAGCAAAAATTTTGGTCACTTCCAAGCTAGAAGG
AGGAATCAGATACCCTTTAATATTTTTTCCTCGCTCCTTCTGGTATATGCATGTCACTGCATGATAATTGAGTTT
TCCTTTGTTTTAATAAAACTGTTCTCAGACATTAAGCTAAACTAAGAGAAAAATAACTTTGTTGCCAAAAGGTTG
TGCTATCCAGATTTTTTATATGTCTGCATGTTTAAAAAAAAAAAAAGCAACAAAAGAAAATGCACTCTAACTTATG
TGAACTGAGAGAAAAAAATCAGGTTTTAAACAGGAAAACCTATGGGGAATGATATTTTTTGAAAGACTTTTGTAT
AAAGTTGAGTACTTAGAAAAAAGACAAACCAGATGTAATATATTTTGTGGATGTTTTTATTTCTTGGATTTATAG
TACCTTATACTAAGGTTAAAAAAATATGCTTGATATTGTGAAAAGGTGAAATTCTTCACCAACATTTCATTTGCT
CCTTTGTCATATTGTAATGCCAATATAATATAGTTAATGAAAACAGCATTTTTAAAAACCGAAATATTGAAATGG
TGTAATGTTGTACCATTTGCACTGTGAGCAAATGCTAATACAGTAAATATATTGTGTTTGCTGACAATCAAAAAA
AAAAAAAAAAAAAA

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FIGURE 6354

MTGKLAEKLPVTMSSLLNQLPDNLYPEEIPSALNLFSGSSDSVVHYNQMATENVMDIGLTNEKPNPELSYSGSFQ
PAPGNKTVTYLGKFAFDSPSNWCQDNIISLMSAGILGVPPASGALSTQTSTASMVQPPQGDVEAMYPALPPYSNC
GDLYSEPVSFHDPQGNPGLAYSPQDYQSAKPALDSNLFPMIPDYNLYHHPNDMGSIPEHKPFQGMDPIRVNPPPT
TPLETIKAFKDKQIHPGFGSLPQPPLTLKPIRPRKYPNRPSKTPLHERPHACPAEGCDRRFSRSDELTRHLRIHT
GHKPFQCRICMRSFSRSDHLTTHIRTHTGEKPFACEFCGRKFARSDERKRHAKIHLKQKEKKAEKGGAPSASSAP
PVSLAPVVTTCA

FIGURE 6355A

CGGAGGGGGCGGGCCGGGCTGCGTTCGCTCCAGCCGCGGCTCTACAGCAGCGGGCGGCGGGACCCGGGACCCAGC
TTGGCGACGGCGATTCTCGACGCGGGCCCCCAGGATTCTCCCGGCGCCCCACCTCTGGAGCAGCCCCTGCCGCCA
GCGTCAGGTCCACCCCGGAATCCCAGGGACTCTCGGCGCCGAACGGACCCGGGCCGGTGCAACGGGGTCCCCGGA
CTGGAGAAGACGCGGGTGGCACCGTGCGAGCTCCAGGAGCCCCGGGTCCACTGCGAGGCCTCGGGGGGCGCAGAC
CTGCAGAGACTGCGGCCAACGGGAAGAAATAAAGGGATTATAGTCCACCCAATTCACAGACTTCTGAGACTCAGA
CACGAGGAGAGATAGAGAACCGCCAATCTCTAGATCAACAAGCAAAGGAGGTGCCAAGCCTGTTTGTCTTCATTG
TGACACTGGAGTCTAGATGCTGGGAAGTCCAAGATCAGGGTGCCGGCATGGTCAGTTCCTGGCGAAGCCTCTCTT
CTAGGTTTCAGACTGCCCTCTTCTTTGTTGTGTCCTCGAATGGCAGAAAAAGGGGTGGCTGTTGGAGGAAGGGAG
GAGAGTAAATGAAGAGAAAGAACTGGAATAACCCCTTGCAGAAAAAAAAAAAAAGGGAAGCTTAGCTGTACACCC
TGAGTCTTGCAAAAGCTGCAGCCCCACCCAGGAGCAGGGTGGTGGCTGGGGCGATGGTGGACGCCCTGAAGATGT
CCCATGGCTACTGAAGGGGCTGCCCAGTTAGGGAACAGAGTGGCGGGC**ATG**GTGTGTAGCCTATGGGTGCTGCTC
CTGGTGTCTTCAGTTCTGGCTCTGGAAGAGGTATTGCTGGACACCACCGGAGAGACATCTGAGATTGGCTGGCTC
ACCTACCCACCAGGGGGGTGGGACGAGGTGAGTGTTCTGGACGACCAGCGACGCCTGACTCGGACCTTTGAGGCA
TGTCATGTGGCAGGGGCCCCTCCAGGCACCGGGCAGGACAATTGGTTGCAGACACACTTTGTGGAGCGGCGCGGG
GCCCAGAGGGCGCACATTCGACTCCACTTCTCTGTGCGGGCATGCTCCAGCCTGGGTGTGAGCGGCGGCACCTGC
CGGGAGACCTTCACCCTTTACTACCGTCAGGCTGAGGAGCCCGACAGCCCTGACAGCGTTTCCTCCTGGCACCTC
AAACGCTGGACCAAGGTGGACACAATTGCAGCAGACGAGAGCTTTCCCTCCTCCTCCTCCTCCTCCTCCTCTTCT
TCCTCTGCAGCGTGGGCTGTGGGACCCCACGGGGCTGGGCAGCGGGCTGGACTGCAACTGAACGTCAAAGAGCGG
AGCTTTGGGCCTCTCACCCAACGCGGCTTCTACGTGGCCTTCCAGGACACGGGGGCCTGCCTGGCCCTGGTCGCT
GTCAGGCTCTTCTCCTACACCTGCCCTGCCGTGCTCCGATCCTTTGCTTCCTTTCCAGAGACGCAGGCCAGTGGG
GCTGGGGGGGCCTCCCTGGTGGCAGCTGTGGGCACCTGTGTGGCTCATGCAGAGCCAGAGGAGGATGGAGTAGGG
GGCCAGGCAGGAGGCAGCCCCCCCCAGGCTGCACTGCAACGGGGAGGGCAAGTGGATGGTAGCTGTCGGGGGCTGC
CGCTGCCAGCCTGGATACCAACCAGCACGAGGAGACAAGGCCTGCCAAGCCTGCCCACGGGGGCTCTATAAGTCT
TCTGCTGGGAATGCTCCCTGCTCACCATGCCCTGCCCGCAGTCACGCTCCCAACCCAGCAGCCCCCGTTTGCCCC
TGCCTGGAGGGCTTCTACCGGGCCAGTTCCGACCCACCAGAGGCCCCCTGCACTGGTCCTCCATCGGCTCCCCAG
GAGCTTTGGTTTGAGGTGCAAGGCTCAGCACTCATGCTACACTGGCGCCTGCCTCGGGAGCTGGGGGGTCGAGGG
GACCTGCTCTTCAATGTCGTGTGCAAGGAGTGTGAAGGCCGCCAGGAACCTGCCAGCGGTGGTGGGGGCACTTGT
CACCGCTGCAGGGATGAGGTCCACTTCGACCCTCGCCAGAGAGGCCTGACTGAGAGCCGAGTGTTAGTGGGGGGA
CTCCGGGCACACGTACCCTACATCTTAGAGGTGCAGGCTGTTAATGGGGTGTCTGAGCTCAGCCCTGACCCTCCT
CAGGCTGCAGCCATCAATGTCAGCACCAGCCATGAAGTGCCCTCTGCTGTCCCTGTGGTGCACCAGGTGAGCCGG
GCATCCAACAGCATCACGGTGTCCTGGCCGCAGCCCGACCAGACCAATGGGAACATCCTGGACTATCAGCTCCGC
TACTATGACCAGGCAGAAGACGAATCCCACTCCTTCACCCTGACCAGCGAGACCAACACTGCCACCGTGACACAG
CTGAGCCCTGGCCACATCTATGGTTTCCAGGTGCGGGCCCGGACTGCTGCCGGCCACGGCCCCTACGGGGGCAAA
GTCTATTTCCAGACACTTCCTCAAGGGGAGCTGTCTTCCCAGCTTCCGGAAAGACTCTCCTTGGTGATCGGCTCC
ATCCTGGGGGCTTTGGCCTTCCTCCTGCTGGCAGCCATCACCGTGCTGGCGGTCGTCTTCCAGCGGAAGCGGCGT
GGGACTGGCTACACGGAGCAGCTGCAGCAATACAGCAGCCCAGGACTCGGGGTGAAGTATTACATCGACCCCTCC
ACCTACGAGGACCCCTGTCAGGCCATCCGAGAACTTGCCCGGGAAGTCGATCCTGCTTATATCAAGATTGAGGAG
GTCATTGGGACAGGCTCTTTTGGAGAAGTGCGCCAGGGCCGCCTGCAGCCACGGGGACGGAGGGAGCAGACTGTG
GCCATCCAGGCCCTGTGGGCCGGGGGCGCCGAAAGCCTGCAGATGACCTTCCTGGGCCGGGCCGCAGTGCTGGGT
CAGTTCCAGCACCCCAACATCCTGCGGCTGGAGGGCGTGGTCACCAAGAGCCGACCCCTCATGGTGCTGACGGAG
TTCATGGAGCTTGGCCCCCTGGACAGCTTCCTCAGGCAGCGGGAGGGCCAGTTCAGCAGCCTGCAGCTGGTGGCC
ATGCAGCGGGGAGTGGCTGCTGCCATGCAGTACCTGTCCAGCTTTGCCTTCGTCCATCGCTCGCTGTCTGCCCAC
AGCGTGCTGGTGAATAGCCACTTGGTGTGCAAGGTGGCCCGTCTTGGCCACAGTCCTCAGGGCCCAAGTTGTTTG
CTTCGCTGGGCAGCCCCAGAGGTCATTGCACATGGAAAGCATACAACATCCAGTGATGTCTGGAGCTTTGGGATA
CTCATGTGGGAAGTGATGAGTTATGGAGAACGGCCTTACTGGGACATGAGTGAGCAGGAGGTACTAAATGCAATA
GAGCAGGAGTTCCGGCTGCCCCCGCCTCCAGGCTGTCCTCCTGGATTACATCTACTTATGTTGGACACTTGGCAG
AAGGACCGTGCCCGGCGGCCTCATTTTGACCAGCTGGTGGCTGCATTTGACAAGATGATCCGCAAGCCAGATACC
CTGCAGGCTGGCGGGGACCCAGGGGAAAGGCCTTCCCAGGCCCTTCTGACCCCTGTGGCCCTGGACTTTCCTTGT

FIGURE 6355B

CTGGACTCACCCCAGGCCTGGCTTTCAGCCATTGGACTGGAGTGCTACCAGGACAACTTCTCCAAGTTTGGCCTC
TGTACCTTCAGTGATGTGGCTCAGCTCAGCCTAGAAGACCTGCCTGCCCTGGGCATCACCCTGGCTGGCCACCAG
AAGAAGCTGCTGCACCACATCCAGCTCCTTCAGCAACACCTGAGGCAGCAGGGCTCAGTGGAGGTCTGAGAATGA
CGATACCCGTGACTCAGCCCTGGACACTGGTCCGAGAAGGGACATGTGGGACGTGAGCCGGGCTCCAACAGCCTC
TGTGAGAGATGCCCCACACCAAACCCAACCCTCCCGATGGCTGCATTCCCTGGTCCTCCGCCTCTCCACCAGCCC
CCTCCTCATTAAAGGGAAAGAAGGGAATTTGCAAA

FIGURE 6356

MVCSLWVLLLVSSVLALEEVLLDTTGETSEIGWLTYPPGGWDEVSVLDDQRRLTRTFEACHVAGAPPGTGQDNWL
QTHFVERRGAQRAHIRLHFSVRACSSLGVSGGTCRETFTLYYRQAEEPDSPDSVSSWHLKRWTKVDTIAADESFP
SSSSSSSSSSAAWAVGPHGAGQRAGLQLNVKERSFGPLTQRGFYVAFQDTGACLALVAVRLFSYTCPAVLRSFA
SFPETQASGAGGASLVAAVGTCVAHAEPEEDGVGGQAGGSPPRLHCNGEGKWMVAVGGCRCQPGYQPARGDKACQ
ACPRGLYKSSAGNAPCSPCPARSHAPNPAAPVCPCLEGFYRASSDPPEAPCTGPPSAPQELWFEVQGSALMLHWR
LPRELGGRGDLLFNVVCKECEGRQEPASGGGGTCHRCRDEVHFDPRQRGLTESRVLVGGLRAHVPYILEVQAVNG
VSELSPDPPQAAAAINVSTSHEVPSAVPVVHQVSRASNSITVSWPQPDQTNGNILDYQLRYYDQAEDESHSFTLTS
ETNTATVTQLSPGHIYGFQVRARTAAGHGPYGGKVYFQTLPQGELSSQLPERLSLVIGSILGALAFLLLAAITVL
AVVFQRKRRGTGYTEQLQQYSSPGLGVKYYIDPSTYEDPCQAIRELAREVDPAYIKIEEVIGTGSFGEVRQGRLQ
PRGRREQTVAIQALWAGGAESLQMTFLGRAAVLGQFQHPNILRLEGVVTKSRPLMVLTEFMELGPLDSFLRQREG
QFSSLQLVAMQRGVAAAMQYLSSFAFVHRSLSAHSVLVNSHLVCKVARLGHSPQGPSCLLRWAAPEVIAHGKHTT
SSDVWSFGILMWEVMSYGERPYWDMSEQEVLNAIEQEFRLPPPPGCPPGLHLLMLDTWQKDRARRPHFDQLVAAF
DKMIRKPDTLQAGGDPGERPSQALLTPVALDFPCLDSPQAWLSAIGLECYQDNFSKFGLCTFSDVAQLSLEDLPA
LGITLAGHQKKLLHHIQLLQQHLRQQGSVEV

FIGURE 6357

GGGGGCTGTAGCTGGTGAGAGGAAGTCCTAGAGGCTATGGACACTCTGCTGCTGGGATCACCGAGATGAGCAGCA
GCTGCTCAGGGCTGAGCAGGGTCCTGGTGGCCGTGGCTACAGCCCTGGTGTCTGCCTCCTCCCCCTGCCCCCAGG
CCTGGGGCCCCCCAGGGGTCCAGTATGGGCAGCCAGGCAGGTCCGTGAAGCTGTGTTGTCCTGGAGTGACTGCCG
GGGACCCAGTGTCCTGGTTTCGGGATGGGGAGCCAAAGCTGCTCCAGGGACCTGACTCTGGGCTAGGGCATGAAC
TGGTCCTGGCCCAGGCAGACAGCACTGATGAGGGCACCTACATCTGCCAGACCCTGGATGGTGCACTTGGGGGCA
CAGTGACCCTGCAGCTGGGCTACCCTCCAGCCCGCCCTGTTGTCTCCTGCCAAGCAGCCGACTATGAGAACTTCT
CTTGCACTTGGAGTCCCAGCCAGATCAGCGGTTTACCCACCCGCTACCTCACCTCCTACAGGAAGAAGACAGTCC
TAGGAGCTGATAGCCAGAGGAGGAGTCCATCCACAGGGCCCTGGCCATGCCCACAGGATCCCCTAGGGGCTGCCC
GCTGTGTTGTCCACGGGGCTGAGTTCTGGAGCCAGTACCGGATTAATGTGACTGAGGTGAACCCACTGGGTGCCA
GCACACGCCTGCTGGATGTGAGCTTGCAGAGCATCTTGCGCCCTGACCCACCCCAGGGCCTGCGGGTAGAGTCAG
TACCAGGTTACCCCCGACGCCTGCGAGCCAGCTGGACATACCCTGCCTCCTGGCCGTGCCAGCCCCACTTCCTGC
TCAAGTTCCGTTTGCAGTACCGTCCGGCGCAGCATCCAGCCTGGTCCACGGTGGAGCCAGCTGGACTGGAGGAGG
TGATCACAGATGCTGTGGCTGGGCTGCCCCATGCTGTACGAGTCAGTGCCCGGGACTTTCTAGATGCTGGCACCT
GGAGCACCTGGAGCCCGGAGGCCTGGGGAACTCCGAGCACTGGGACCATACCAAAGGAGATACCAGCATGGGGCC
AGCTACACACGCAGCCAGAGGTGGAGCCTCAGGTGGACAGCCCTGCTCCTCCAAGGCCCTCCCTCCAACCACACC
CTCGGCTACTTGATCACAGGGACTCTGTGGAGCAGGTAGCTGTGCTGGCGTCTTTGGGAATCCTTTCTTTCCTGG
GACTGGTGGCTGGGGCCCTGGCACTGGGGCTCTGGCTGAGGCTGAGACGGGGTGGGAAGGATGGATCCCCAAAGC
CTGGGTTCTTGGCCTCAGTGATTCCAGTGGACAGGCGTCCAGGAGCTCCAAACCTGTAGAGGACCCAGGAGGGCT
TCGGCAGATTCCACCTATAATTCTGTCTTGCTGGTGTGGATAGAAACCAGGCAGGACAGTAGATCCCTATGGTTG
GATCTCAGCTGGAAGTTCTGTTTGGAGCCCATTTCTGTGAGACCCTGTATTTCAAATTTGCAGCTGAAAGGTGCT
TGTACCTCTGATTTCACCCCAGAGTTGGAGTTCTGCTCAAGGAACGTGTGTAATGTGTACATCTGTGTCCATGTG
TGACCATGTGTCTGTGAGGCAGGGAACATGTATTCTCTGCATGCATGTATGTAGGTGCCTGGGGAGTGTGTGTGG
GTCCTTGGCTCTTGGCCTTTCCCCTTGCAGGGGTTGTGCAGGTGTGAATAAAGAGAATAAGGAAGTTCTTGGAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACCTCGGG

FIGURE 6358

MSSSCSGLSRVLVAVATALVSASSPCPQAWGPPGVQYGQPGRSVKLCCPGVTAGDPVSWFRDGEPKLLQGPDSGL
GHELVLAQADSTDEGTYICQTLDGALGGTVTLQLGYPPARPVVSCQAADYENFSCTWSPSQISGLPTRYLTSYRK
KTVLGADSQRRSPSTGPWPCPQDPLGAARCVVHGAEFWSQYRINVTEVNPLGASTRLLDVSLQSILRPDPPQGLR
VESVPGYPRRLRASWTYPASWPCQPHFLLKFRLQYRPAQHPAWSTVEPAGLEEVITDAVAGLPHAVRVSARDFLD
AGTWSTWSPEAWGTPSTGTIPKEIPAWGQLHTQPEVEPQVDSPAPPRPSLQPHPRLLDHRDSVEQVAVLASLGIL
SFLGLVAGALALGLWLRLRRGGKDGSPKPGFLASVIPVDRRPGAPNL

FIGURE 6359

GGAATTCCAATGAATGAATGAATGAATGAGTGAATGAATCAACGAAGGAGTGAGTCAAGGCCCGGGAACCACAGA
CTCCAAGCCTACGCAGAGCCCGGGAAGGGGGATTCCGGAGGGGCGGGGCCTCTTTCCGGAAGCGCCCGCCGGGGG
CGGGGAGGGGGCGGGGCCATCCGCGTGAGGCGACCCTGTTGGTCCGGAGGGGCGGGGCGAGGAGGAGGACGGCCT
TGGGCGGTTCGGCTGCCCACAGTAACCGCTGGGTGGACCTGGCCAGCGCTCCGAACCTTGTCCTCGCTGCGCGCC
GGCCCCTCGGAGCCCCACAGCCCGGGAAGGAGGCGGCCGCGGGCGGGGCGCCCGCTCTGCCAAGCGGACCCGCAA
CCCGGAAAGGCGGCGCGGCGGAGCCTGGAGCCGGATCCTGCTCAGACCGGGCCCCGGCCGGCCAGAGCCGCGGGC
ATGTCGGAGGCGCGGAAGGGGCCGGACGAGGCGGAGGAGAGCCAGTACGACTCTGGCATTGAGTCTCTGCGCTCT
CTGCGCTCCCTACCCGAGTCCACCTCGGCTCCAGCCTCCGGGCCCTCGGACGGCAGCCCCCAGCCCTGCACCCAT
CCTCCGGGACCCGTCAAGGAACCACAGGAGAAGGAAGACGCGGATGGGGAGCGGGCTGATTCCACCTATGGCTCC
TCCTCGCTCACCTACACCCTGTCCTTGCTGGGGGGCCCCGAGGCTGAGGACCCGCCCCCACGCCTGCCACTCCCC
CACGTGGGGGCGCTGAGCCCTCAGCAGCTGGAAGCACTCACTTACATCTCCGAGGACGGAGACACGCTGGTCCAC
CTGGCAGTGATTCATGAGGCCCCAGCGGTGCTGCTCTGTTGCCTGGCTTTGCTGCCCCAGGAGGTCCTGGACATT
CAAAATAACCTTTACCAGACAGCACTCCATCTGGCTGTACATCTGGACCAACCGGGCGCAGTTCGGGCACTGGTG
CTGAAGGGGGCCAGCCGGGCACTACAGGACCGGCATGGAGACACAGCCCTTCATGTGGCCTGCCAGCGCCAGTCT
TGGCCTGTGCCCGCTGCCTGCTGGAAGGGCGGGCCAGAGCCAGGCAGAGGAACATCTCACTCTCTGGACCTCCAG
CTGCAAAACTGGCAAGGTCTGGCTTGTCTCCACATTGCCACCCTTCAGAAGAACCAACCACTCATGGAATTGCTG
CTTCGGAATGGAGCTGACATTGATGTGCAGGAGGGCTCCAGTGGTAAGACAGCGCTGCACCTGGCTGTGGAAACC
CAAGAGCGGGGCCTGGTACAGTTCCTGCTCCAGGCTGGTGCCCAGGTAGATGCCCGCATGCTGAACGGGTGCACA
CCCCTGCACCTGGCAGCTGGCCGGGGTCTCATGGGCATCTCATCCACTCTGTGCAAGGCGGGTGCTGACTCCCTG
CTGCGGAATGTGGAGGATGAGACGCCCCAGGACCTGACTGAGGAATCCCTTGTCCTTTTGCCCTTTGATGACCTG
AAGATCTCAGGGAAACTGCTGCTGTGTACCGACTGAAGCCAGGCAGGGTCTGGGATCCTCAGGGCTCCACCTCTC
CATCTGGAAGCCGGAGCCATAACTGCTGCAGTTTGGGCCCAGGCTATGTGCTCTTCTGGTGCCCTAGGGACTGCT
GTGGCCAGAGCCTGGGGCCAGCCAGTACAGTCCTGAGCCGAGGAGGAGGGACTGCAAGTGGAAGAGAGCCAGTCT
GGAAGGAAGAGCTTTCCAGGTGGACAGGGCTTCTTGGAAGACCCCCAAAGCCCCAGGTATCCTGGGTGAAGCCTG
TTTGCCTCTCTTGAAAATGGCAGGTGCTCTTGTTTTACCCATGTTGGGTCAGCCTGAAACTGCCAACCAGTAGGA
AGCATGGACTCTCCTGAGTGAGAAGAGACTGAAATAGGAGCAAGCAGAACCCTGAGAGGTGTCCATCTTCTTGCT
GTTGAGGACCCTGAAACACCGTTGTTTAAAGACTTCACACAGAAGGCTCTGAACTGAGCCACTGGGGAAGGGAAG
TTTCAGTAACATGACACTAAAATGGCAGAGACGTTAAAAAAA

FIGURE 6360

MNQRRSESRPGNHRLQAYAEPGKGDSGGAGPLSGSARRGRGGGGAIRVRRPCWSGGAGRGGGRPWAVRLPTVTAG
WTWPALRTLSSLRAGPSEPHSPGRRRPRAGRPLCQADPQPGKAARRSLEPDPAQTGPRPARAAGMSEARKGPDEA
EESQYDSGIESLRSLRSLPESTSAPASGPSDGSPQPCTHPPGPVKEPQEKEDADGERADSTYGSSSLTYTLSLLG
GPEAEDPPPRLPLPHVGALSPQQLEALTYISEDGDTLVHLAVIHEAPAVLLCCLALLPQEVLDIQNNLYQTALHL
AVHLDQPGAVRALVLKGASRALQDRHGDTALHVACQRQSWPVPAACWKGGPEPGRGTSHSLDLQLQNWQGLACLH
IATLQKNQPLMELLLRNGADIDVQEGSSGKTALHLAVETQERGLVQFLLQAGAQVDARMLNGCTPLHLAAGRGLM
GISSTLCKAGADSLLRNVEDETPQDLTEESLVLLPFDDLKISGKLLLCTD

FIGURE 6361A

CAGCCAGGGCCACCCCAGGGGCTATAAGAGCAACTAGATTTCTGGAGCAGCTCGGGGATGGGTGCCATTTGAGCC
CAGCTTGGCTCCCCCTCCTGGCTGGCCTCCTTCCTGCCCTTCTGCCTGCCTGTGTCTGCTGAGATTCTGCAAAGA
GGAACGTTGGCACCATGTCTCTGCTCAACCCTGTCCTGCTGCCCCCCAAGGTGAAGGCCTATCTGAGCCAAGGGG
AGCGCTTCATCAAATGGGATGATGAAACTACAGTTGCCTCTCCAGTTATCCTCCGTGTGGATCCTAAGGGCTACT
ACTTATACTGGACGTATCAAAGTAAGGAGATGGAGTTTCTGGATATCACCAGCATCCGGGATACTCGCTTTGGGA
AGTTTGCCAAGATGCCCAAGAGCCAGAAGCTCCGGGACGTCTTCAACATGGACTTTCCTGATAACAGTTTCCTGC
TGAAGACACTCACGGTGGTGTCCGGCCCGGACATGGTGGACCTCACCTTCCACAACTTCGTCTCCTACAAGGAGA
ACGTGGGCAAGGCCTGGGCTGAGGACGTACTGGCCCTAGTCAAACATCCGCTGACGGCCAACGCCTCCCGCAGCA
CCTTCCTGGACAAGATCCTTGTGAAGCTCAAGATGCAGCTCAACTCTGAAGGGAAGATTCCGGTGAAGAACTTTT
TCCAGATGTTTCCTGCTGACCGCAAGCGGGTGGAAGCTGCTCTCAGTGCCTGCCACCTCCCCAAAGGCAAAAATG
ACGCCATCAATCCTGAGGACTTCCCAGAACCTGTCTACAAGAGTTTCCTCATGAGCCTCTGTCCTCGGCCAGAAA
TAGATGAGATCTTCACTTCTTACCATGCTAAGGCCAAACCCTACATGACGAAGGAGCACCTGACCAAATTCATCA
ACCAGAAACAGCGGGACTCCCGGCTTAACTCCCTGCTGTTCCCGCCAGCACGGCCTGACCAGGTGCAGGGCCTCA
TCGACAAGTATGAGCCCAGTGGCATCAATGCACAGAGGGGCCAGCTGTCACCTGAAGGCATGGTCTGGTTTCTCT
GTGGGCCAGAGAACAGCGTGCTGGCCCAGGACAAGCTGCTGCTCCACCACGACATGACGCAGCCACTCAATCATT
ACTTCATCAACTCGTCCCACAACACCTACCTGACAGCCGGCCAGTTCTCAGGCCTCTCCTCGGCTGAGATGTACC
GCCAGGTGCTGCTCTCTGGCTGCCGTTGCGTGGAGCTAGACTGCTGGAAGGGGAAACCCCCTGACGAGGAGCCCA
TTATCACCCATGGCTTCACCATGACCACAGACATCTTCTTCAAAGAAGCAATTGAGGCTATTGCAGAAAGTGCCT
TTAAGACCTCCCCCTATCCCATCATCCTGTCGTTTGAGAACCATGTGGACTCACCCCGCCAGCAGGCTAAGATGG
CTGAGTATTGCCGGACGATCTTTGGGGATATGCTGCTCACAGAGCCCCTGGAAAAGTTCCCACTAAAACCAGGTG
TCCCCCTGCCCAGCCCTGAGGATCTCAGGGGCAAGATCCTCATCAAGAACAAGAAGAACCAGTTTTCTGGCCCCA
CCTCCTCCAGTAAGGATACCGGTGGGGAGGCTGAGGGCAGCAGCCCACCCAGTGCCCCTGCAGTGTGGGCTGGCG
AGGAAGGGACTGAGCTGGAGGAGGAGGAGGTGGAAGAGGAAGAGGAGGAGGAGTCAGGAAACCTGGATGAAGAAG
AGATTAAGAAGATGCAGTCGGATGAGGGCACAGCGGGCCTGGAAGTGACGGCTTATGAGGAGATGTCCAGCCTAG
TCAATTACATCCAGCCCACCAAGTTCGTCTCCTTTGAGTTCTCTGCCCAAAAGAACCGAAGTTATGTCATCTCGT
CCTTCACAGAGCTCAAGGCATATGACCTGCTCTCCAAGGCCTCGGTGCAGTTTGTGGACTACAACAAGCGCCAGA
TGAGCCGCATTTACCCCAAGGGAACCCGCATGGACTCCTCCAACTACATGCCCCAGATGTTCTGGAATGCTGGAT
GCCAGATGGTTGCCCTCAACTTCCAGACGATGGACTTGCCCATGCAGCAGAACATGGCAGTATTTGAGTTCAACG
GGCAGAGCGGCTACCTCCTCAAGCATGAGTTCATGCGCCGGCCGGACAAGCAGTTCAACCCCTTCTCAGTGGACC
GCATCGACGTGGTGGTGGCCACCACCCTTTCCATTACGGTGATCTCTGGGCAGTTCCTGTCAGAACGCAGCGTGC
GCACCTATGTAGAAGTGGAGCTGTTTGGCCTTCCTGGGGACCCCAAGAGGCGCTATCGAACTAAGCTGTCACCCA
GTACTAACTCCATCAATCCTGTCTGGAAGGAGGAGCCCTTTGTCTTTGAGAAGATCTTGATGCCTGAGCTGGCCT
CCCTCAGAGTGGCTGTGATGGAGGAAGGCAACAAGTTTCTTGGACACCGCATCATCCCCATCAATGCCCTAAATT
CTGGGTACCACCACCTGTGCCTGCACAGTGAGAGCAACATGCCCCTCACCATGCCTGCGCTCTTCATCTTCCTGG
AGATGAAGGACTACATACCTGGTGCTTGGGCAGATCTCACTGTGGCCCTCGCCAACCCCATTAAGTTCTTCAGTG
CCCATGACACGAAGTCTGTGAAGCTCAAGGAGGCCATGGGAGGTCTGCCTGAGAAGCCCTTCCCACTGGCGAGTC
CAGTTGCCAGCCAGGTCAATGGGGCGTTGGCCCCAACGAGCAATGGGTCACCAGCAGCCAGGGCCGGGGCCAGGG
AAGAGGCTATGAAAGAAGCTGCGGAGCCGCGGACCGCCAGCCTGGAGGAGCTCCGGGAGCTAAAGGGCGTGGTGA
AGCTGCAGCGGCGGCACGAGAAGGAGCTGCGAGAGTTGGAGCGGCGCGGAGCGCGGCGCTGGGAGGAGCTGCTGC
AGCGGGGCGCGGCGCAGCTGGCGGAGCTCGGGCCACCGGGCGTGGGGGGCGTCGGGGCCTGCAAGCTCGGTCCCG
GCAAGGGCTCTCGCAAGAAGAGGAGCCTGCCCCGCGAGGAGAGCGCCGGAGCCGCGCCGGGCGAGGGCCCTGAGG
GCGTGGACGGGCGCGTGCGGGAGCTGAAAGACAGGCTGGAGCTGGAGCTGCTGCGGCAGGGCGAGGAGCAGTACG
AGTGCGTTCTGAAGCGCAAGGAGCAGCACGTGGCCGAGCAAATCTCCAAAATGATGGAGCTGGCCAGAGAGAAAC
AGGCGGCAGAGCTGAAGGCCCTGAAGGAGACGTCGGAGAACGACACCAAAGAGATGAAGAAAAAGCTGGAGACAA
AGAGACTGGAGCGGATCCAGGGCATGACCAAAGTCACCACAGACAAGATGGCCCAGGAGAGGTTGAAGAGAGAGA
TTAACAACTCCCACATCCAGGAAGTAGTGCAGGTGATCAAGCAGATGACGGAGAACTTGGAGAGGCACCAGGAGA
AGCTGGAGGAGAAGCAGGCGGCTTGCCTGGAACAGATACGGGAGATGGAAAAGCAGTTCCAGAAGGAGGCGCTGG
CAGAGTACGAGGCCAGGATGAAGGGTCTGGAGGCAGAGGTGAAGGAGTCGGTGAGGGCCTGCCTCAGGACCTGCT

FIGURE 6361B

TTCCCTCCGAGGCCAAGGACAAGCCTGAGAGGGCCTGCGAGTGCCCCCCAGAGCTGTGTGAGCAGGACCCACTCA
TAGCAAAGGCAGATGCCCAGGAGAGCCGCCTC**TGA**TGCCCCCATCCCACTGGGACATTTAGCAAGGAGGTTCAGC
CCCTTCTCTGGGATGTGGTTCTATTCCCCCAGGAAAAAGGAGCCCCAGCCTTCTGAGGCTGTGGGAACCTGTGGC
TGCCTTGGACGCTGCAGCCCCCTCCTCAACGGCCAGGCCAGAGTCTGAGACAGGACCCAGGCACCCTCACGGCAG
GGCCTCTCTGGGGCCTAGAAGTCTTCTCAAGCTGACTTCCTACCTCCCCCTCCATCTCTAGATAAGTGTCATATA
TTTGTTGAGGGCAAAAGACTATGGACTGGAAGGCAGAAAGTGGGATCCTGGCCCCACTCTGCCTTTCCTATTGAG
CAACCAGCTCTGGGCTCAGTTTCCTCACCTGGAGGGTTGGACCCACTCACCTCCACTCTAGCCCCGAACCCTCCT
GCCCCAGGCTTCCAGGCCCCATCAGGCCTGCCCTGAGTTGGCCTTGTCCACTCCTTGAGGCAGATCCTGGCACTA
CCTCACAGCTCCCTGGGGACGGCCACTCCCTGGCTGAGGGCCCTCCCCTCCCCTCTGCCTGTCCGGAACGGGAGG
CTGAAATGGAAAAGCTGCCTTGGCCCTGCTTGGCTGAGTCACAAGGGGCAGTGGGCTCTTGGGTGCTGTTCCACC
CTGACCCTGGCTCACCCCTCTTCCTAGGCCTGGGGGCAGGCAGTTCCTACCATGTACCCCTCTCAGGCTGCCTGC
CTGACAAGGTCAGCATCATTTGCTCTCCTGAATTTATGAGGTTTATTTATTTTTCTCTTTCCTACTCCTATTAAA
GAACCTCGTCCCAGTGAAA

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FIGURE 6362

MSLLNPVLLPPKVKAYLSQGERFIKWDDETTVASPVILRVDPKGYYLYWTYQSKEMEFLDITSIRDTRFGKFAKM
PKSQKLRDVFNMDFPDNSFLLKTLTVVSGPDMVDLTFHNFVSYKENVGKAWAEDVLALVKHPLTANASRSTFLDK
ILVKLKMQLNSEGKIPVKNFFQMFPADRKRVEAALSACHLPKGKNDAINPEDFPEPVYKSFLMSLCPRPEIDEIF
TSYHAKAKPYMTKEHLTKFINQKQRDSRLNSLLFPPARPDQVQGLIDKYEPSGINAQRGQLSPEGMVWFLCGPEN
SVLAQDKLLLHHDMTQPLNHYFINSSHNTYLTAGQFSGLSSAEMYRQVLLSGCRCVELDCWKGKPPDEEPIITHG
FTMTTDIFFKEAIEAIAESAFKTSPYPIILSFENHVDSPRQQAKMAEYCRTIFGDMLLTEPLEKFPLKPGVPLPS
PEDLRGKILIKNKKNQFSGPTSSSKDTGGEAEGSSPPSAPAVWAGEEGTELEEEEVEEEEEEESGNLDEEEIKKM
QSDEGTAGLEVTAYEEMSSLVNYIQPTKFVSFEFSAQKNRSYVISSFTELKAYDLLSKASVQFVDYNKRQMSRIY
PKGTRMDSSNYMPQMFWNAGCQMVALNFQTMDLPMQQNMAVFEFNGQSGYLLKHEFMRRPDKQFNPFSVDRIDVV
VATTLSITVISGQFLSERSVRTYVEVELFGLPGDPKRRYRTKLSPSTNSINPVWKEEPFVFEKILMPELASLRVA
VMEEGNKFLGHRIIPINALNSGYHHLCLHSESNMPLTMPALFIFLEMKDYIPGAWADLTVALANPIKFFSAHDTK
SVKLKEAMGGLPEKPFPLASPVASQVNGALAPTSNGSPAARAGAREEAMKEAAEPRTASLEELRELKGVVKLQRR
HEKELRELERRGARRWEELLQRGAAQLAELGPPGVGGVGACKLGPGKGSRKKRSLPREESAGAAPGEGPEGVDGR
VRELKDRLELELLRQGEEQYECVLKRKEQHVAEQISKMMELAREKQAAELKALKETSENDTKEMKKKLETKRLER
IQGMTKVTTDKMAQERLKREINNSHIQEVVQVIKQMTENLERHQEKLEEKQAACLEQIREMEKQFQKEALAEYEA
RMKGLEAEVKESVRACLRTCFPSEAKDKPERACECPPELCEQDPLIAKADAQESRL

FIGURE 6363

AGACAAAAAGTAACCTTCCTGAAGAGGACATGTGATTGGAAGTTGTCAATTGTTGAAGCATTGGTAACTCCAGTC
TCTAACGTTTTAGAAAATCATAACAAGCGGTTCTGTACCCTGTAAAGAACAGAAACCTGGAAATCTAAGGCTCAA
AGACATCCAAGTAATTGGTATCTGGGAGATTTGGGATTCAAACCCAGCTCTGCTTGACTTGGTGAACTACTGAGT
TCTTCATTATGTCTGATGGAGATTATGATTACCTCATCAAGTTTTTAGCTTTGGGAGACTCTGGTGTAGGGAAGA
CCAGTGTACTTTACCAATATACAGATGGTAAATTTAACTCCAAATTTATCACAACAGTGGGCATTGATTTCAGGC
CAAAAAGAGTGGTGTACAGAGCCAGTGGGCCGGATGGACCAGTAGGTAGAGGCCAGAGAATCCACCTGCAGTTAT
GGGACACAGCAGGGCAGGAGAGGTTTCGTAGCTTAACGACAGCGTTCTTCAGAGATGCTATGGGTTTTCTTCTAC
TTTTTGATCTGACAAATGAGCAAAGTTTCCTCAATGTCAGAAACTGGATAAGCCAGCTACAGATGCATGCATATT
GTGAAAACCCAGATATAGTGCTGTGTGGAAACAAGAGTGATCTGGAGGACCAGAGAGTAGTGAAAGAGGAGGAAG
CCATAGCACTCGCAGAGAAATATGGAATCCCCTACTTTGAAACTAGTGCTGCCAATGGGACAAACATAAGCCAAG
CAATTGAGATGCTTCTGGACCTGATAATGAAGCGAATGGAACGGTGTGTGGACAAGTCCTGGATTCCTGAAGGAG
TGGTGCGATCAAATGGTCATGCCTCTACGGATCAGTTAAGTGAAGAAAAGGAGAAAGGGGCATGTGGCTGTTGAG
AAGTCAAGTAACGACATAGTAGTTCAGGTGGCCCATGCCTGGGATCTTCTCTATGATTGATACATGGCACAGTGA
GAGATTAATGGGCATTGTGTACAAATTGCTTCTCACCATCCCCATTAGACCTACGAATAAAGCATCCGGTTCTAA
AATTAAAAAAA

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FIGURE 6364

MSDGDYDYLIKFLALGDSGVGKTSVLYQYTDGKFNSKFITTVGIDFRPKRVVYRASGPDGPVGRGQRIHLQLWDT
AGQERFRSLTTAFFRDAMGFLLLFDLTNEQSFLNVRNWISQLQMHAYCENPDIVLCGNKSDLEDQRVVKEEEAIA
LAEKYGIPYFETSAANGTNISQAIEMLLDLIMKRMERCVDKSWIPEGVVRSNGHASTDQLSEEKEKGACGC

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FIGURE 6365

ATGTGCTGTACCAAGAGTTTGCTCCTGGCTGCTTTGATGTCAGTGCTGCTACTCCACCTCTGCGGCGAATCAGAA
GCAGCAAGCAACTTTGACTGCTGTCTTGGATACACAGACCGTATTCTTCATCCTAAATTTATTGTGGGCTTCACA
CGGCAGCTGGCCAATGAAGGCTGTGACATCAATGCTATCATCTTTCACACAAAGAAAAAGTTGTCTGTGTGCGCA
AATCCAAAACAGACTTGGGTGAAATATATTGTGCGTCTCCTCAGTAAAAAAGTCAAGAACATGTAAAAACTGTGG
CTTTTCTGGAATGGAATTGGACATAGCCCAAGAACAGAAAGAACCTTGCTGGGGTTGGAGGTTTCACTTGCACAT
CATGGAGGGTTTAGTGCTTATCTAATTTGTGCCTCACTGGACTTGTCCAATTAATGAAGTTGATTCATATTGCAT
CATAGTTTGCTTTGTTTAAGCATCACATTAAAGTTAAACTGTATTTTATGTTATTTATAGCTGTAGGTTTTCTGT
GTTTAGCTATTTAATACTAATTTTCCATAAGCTATTTTGGTTTAGTGCAAAGTATAAAATTATATTTGGGGGGGA
ATAAGATTATATGGACTTTTTTGCAAGCAACAAGCTATTTTTTAAAAMMAACTATTTAACATTCTTTTGTTTATA
TTGTTTTGTCTCCTAAATTGTTGTAATTGCATTATAAAATAAGAAAAATATTAATAAGACAAATATTGAAAATAA
AGAAACAAAAAGTT

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FIGURE 6366

MCCTKSLLLAALMSVLLLHLCGESEAASNFDCCLGYTDRILHPKFIVGFTRQLANEGCDINAIIFHTKKKLSVCA
NPKQTWVKYIVRLLSKKVKNM

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FIGURE 6367

CTGCAGGAGGAGTGTGACTATGTGCAGATGATCGAGGTGCAGCACAAGCAGTGCCTGGAGGAGGCCCAGCTGGAG
AATGAGACAATAGGCTGCAGCAAGATGTGGGACAACCTCACCTGCTGGCCAGCCACCCCTCGGGGCCAGGTAGTT
GTCTTGGCCTGTCCCCTCATCTTCAAGCTCTTCTCCTCCATTCAAGGCCGCAATGTAAGCCGCAGCTGCACCGAC
GAAGGCTGGACGCACCTGGAGCCTGGCCCGTACCCCATTGCCTGTGGTTTGGATGACAAGGCAGCGAGTTTGGAT
GAGCAGCAGACCATGTTCTACGGTTCTGTGAAGACCGGCTACACCATTGGCTACGGCCTGTCCCTCGCCACCCTT
CTGGTCGCCACAGCTATCCTGAGCCTGTTCAGGAAGCTCCACTGCACGCGGAACTACATCCACATGCACCTCTTC
ATATCCTTCATCCTGAGGGCTGCCGCTGTCTTCATCAAAGACTTGGCCCTCTTCGACAGCGGGGAGTCGGACCAG
TGCTCCGAGGGCTCGGTGGGCTGTAAGGCAGCCATGGTCTTTTTCCAATATTGTGTCATGGCTAACTTCTTCTGG
CTGCTGGTGGAGGGCCTCTACCTGTACACCCTGCTTGCCGTCTCCTTCTTCTCTGAGCGGAAGTACTTCTGGGGG
TACATACTCATCGGCTGGGGGGTACCCAGCACATTCACCATGGTGTGGACCATCGCCAGGATCCATTTTGAGGAT
TATGGGTGCTGGGACACCATCAACTCCTCACTGTGGTGGATCATAAAGGGCCCCATCCTCACCTCCATCTTGGTA
AACTTCATCCTGTTTATTTGCATCATCCGAATCCTGCTTCAGAAACTGCGGCCCCCAGATATCAGGAAGAGTGAC
AGCAGTCCATACTCAAGGCTAGCCAGGTCCACACTCCTGCTGATCCCCCTGTTTGGAGTACACTACATCATGTTC
GCCTTCTTTCCGGACAATTTTAAGCCTGAAGTGAAGATGGTCTTTGAGCTCGTCGTGGGGTCTTTCCAGGGTTTT
GTGGTGGCTATCCTCTACTGCTTCCTCAATGGTGAGGTGCAGGCGGAGCTGAGGCGGAAGTGGCGGCGCTGGCAC
CTGCAGGGCGTCCTGGGCTGGAACCCCAAATACCGGCACCCGTCGGGAGGCAGCAACGGCGCCACGTGCAGCACG
CAGGTTTCCATGCTGACCCGCGTCAGCCCAGGTGCCCGCCGCTCCTCCAGCTTCCAAGCCGAAGTCTCCCTGGTC
TGACCACCAGGATCCCAGGGGCCCAAGGCGCTCCGCCCCTTCCACTCACCCCGGCAGACGAGCAGAGGCCTGCCC
GGGCGCGGCCAGCCCCGGCCCTGGGCTCGGAGGCTGCCCCCGGCCCCCTGGTCTCTGGTCCGGACACTCCTAGAG
AACGCAGCCCTAGAGCCTGCCTGGAGCGTTTCTAGCAAGTGAGAGAGATGGGAGCTCCTCTCCTGGAGATTCGAG
GTGGAACTCAGTCATTAGACTCCTCCTCCAAAGGCCCCCTACGCCAATCAAGGGCAAAAAGTCTACATACTTTCA
TCCTGACTCTGCCCCCTGCTGGCTCTTCTGCCCAATTGGAGGAAAGCAACCGGTGGATCCTCAAACAACACTGGT
GTGACCTGAGGGCAGAAAGGTTCTGCCCGGGAAGGTCACCAGCACCAACACCACGGTAGTGCCTGAAATTTCACC
ATTGCTGTCAAGTTCCTTTGGGTTAAGCATTACCACTCAGGCATTTGACTGAAGATGCAGCTCACTACCCCATTC
TCTCTTTACGCTTAGCTATCAGCTTTTCAAAGTGGGTTATTCTGGAGTTTTTGTTTGGAGAGCACACCTATCTTA
GTGGTTCCCACCGAAGTGGACTGGCCCCTGGGTCAGTCTGGTGGGAGGACGGTGCAACCCAAGGACTGAGGGACT
CTGAAGCCTCTGGAAATGAGAAGGCAGCCACCAGCGAATGCTAGGTCTCAGACTAAGCCTACCTGCTCTCCAAGT
CTCAGTGGCTTCATCTGTCAAGTGGGATCTGTCACACCAGCCATACTTATCTCTCTGTGCTGTGGAAGCAACAGG
AATCAAGAGCTGCCCTCCTTGTCCACCCACCTATGTGCCAACTGTTGTAACTAGGCTCAGAGATGTGCACCCATG
GGCTCTGACAGAAAGCAGATACCTCACCCTGCTACACATACAGGATTTGAACTCAGATCTGTCTGATAGGAATGT
GAAAGCACAGACTCTTACTGCTAACTTTTGTGTATCGTAACCAGCCAGATCCTCTTGGTTATTTGTTTACCACTT
GTATTATTAATGCCATTATCCCT

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FIGURE 6368

GAGCTGCCGTAGCGGACCCAGCACAGCCAGGAGCGTCCGGGATGAGCTCAGCCGCGGCCGACCACTGGGCGTGGT
TGCTGGTGCTCAGCTTCGTGTTTGGATGCAATGTTCTTAGGATCCTCCTCCCGTCCTTCTCATCCTTCATGTCCA
GGGTGCTGCAGAAGGACGCGGAGCAGGAGTCACAGATGAGAGCGGAGATCCAGGACATGAAGCAGGAGCTCTCCA
CAGTCAACATGATGGACGAGTTTGCCAGATATGCCAGGCTGGAAAGAAAGATCAACAAGATGACGGATAAGCTCA
AAACCCATGTGAAAGCTCGGACAGCTCAATTAGCCAAGATAAAATGGGTGATAAGTGTCGCTTTCTACGTATTGC
AGGCTGCCCTGATGATCTCACTCATTTGGAAGTATTATTCTGTCCCTGTGGCTGTCGTGCCGAGTAAATGGATAA
CCCCTCTAGACCGCCTGGTAGCCTTTCCTACTAGAGTAGCAGGTGGTGTTGGAATTACCTGTTGGATTTTAGTCT
GTAACAAAGTTGTCGCTATTGTGCTTCATCCGTTCAGCTGAACAGGAGGATGGATACAGCCGCGAGGCTAAAAAA
CGGATTTCCTCTTCCTAGCTTAAAATCTGATTTACACTGTTTTGTTTTTTAAGAAACAAAAGTGCATAGTTTAGA
TTTTTTTTTTGTTGAATATGTTTGTTCTTGGACTTTATGAGATAGTCTTATAAGAATCACGATTTTCTACACCTG
TCATTGAGCCAAGAAAGTCCAGTTTATGACACGTATGTACTAGTGAACACCGTCCTCGATCTGTACGAAATGTGA
AATGTTTAGGGACATCTCCATGCTGTCACTTGTGATTTGCCCTCTTATGTATTTTGGTCATATTGCCAACTGGAA
AGTCAAAATTTTCTAACAACTTTAAGTAAGTTCTTTGAAGACTTAGTGCTGTTTTTAATCCAGTTTAGAAAGTAA
CTTAATTTTAATACCGCTACTAAAAATTCGAAAATTTCTTCTTTAATCACATTCAATATGGTTAAAAGAACAACA
CTAATTGACATTGCGTGGGCTTTTTCTCCCTTTGTTTAAAATGTCATTTGTTGAGCAAGAGTTGTATAGTATTAT
CTACTTACTTGAGGCTGTTAATTTTTCATTACAGTGTTTTGTAAATGTATCCACGAGACCATGATGCATTGTTTT
GTGCTCAACTTGTGTTTTGTATTTAAAGCATTTTGAATGAAGTGTATTTTATAAGCATTTAATATTTATGCTCTT
TAGAATGGAACACAGAAAACAAACCTTATAAGTCCTGATTAAATTAATCTGAACCAAAAAAAAAAAAAAAAAAA
AAAAAAAAAA

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FIGURE 6369

MSSAAADHWAWLLVLSFVFGCNVLRILLPSFSSFMSRVLQKDAEQESQMRAEIQDMKQELSTVNMMDEFARYARL
ERKINKMTDKLKTHVKARTAQLAKIKWVISVAFYVLQAALMISLIWKYYSVPVAVVPSKWITPLDRLVAFPTRVA
GGVGITCWILVCNKVVAIVLHPFS

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FIGURE 6370

GCCCCCACCATCAAGGGGAAGAAAGTGCTCTTCGGATTCCGGTTCGCCCTGGCCTCCCGCAGCCGCCGCGGGACC
GGCCCCCAGCACACCCCCGGGGCGCCGGGCGCGGGGCAGCCGCCCGGACGCGCGCGGGCCTCAGGCGCCGCCGGG
ACCCCAGCCCCCCAAACTTTGGCAAGTTGCGGGCGCCGAGCGCACCCGGAGGCGCGGGGCGCGGCCGCAGGCGGA
GCCGCCCCCTGACGCCGGGCCGCCCCCTCCCGGCCCCGGCCGCCCCGCCGGCTCCGCGGAAAGTTTGCGGCCGCC
CCTGCGCCGCACCCGGGGCCTGGGTGAGACTGCGGCGGCGGCAGGGCGCGGACGGCCATATTTGCCGGCGCGGCC
CGAGCCGCCGACAACAAAAAGTGCGCGGGCGCTCGGCGGGCGCTCGGACGGGCGCGGGGCTGCAGCGCTACCGCC
CGGCCTCGCCGCCGCCGCCGCCCTCGCGGCCTGGCCCCGCCGCGCCCGGCGCGCCCGCCGCCCGGGGGG**ATG**

TCTTACAAACCGAACTTGGCCGCGCACATGCCCGCCGCCGCCCTCAACGCCGCTGGGAGTGTCCACTCGCCTTCC
ACCAGCATGGCAACGTCTTCACAGTACCGCCAGCTGCTCAGTGACTACGGGCCACCGTCCCTAGGCTACACCCAG
GGAACTGGGAACAGCCAGGTGCCCCAAAGCAAATACGCGGAGCTGCTGGCCATCATTGAAGAGCTGGGGAAGGAG
ATCAGACCCACGTACGCAGGGAGCAAGAGTGCCATGGAGAGGCTGAAGCGCGGCATCATTCACGCTAGAGGACTG
GTTCGGGAGTGCTTGGCAGAAACGGAACGGAATGCCAGATCC**TAG**CTGCCTTGTTGGTTTTGAAGGATTTCCATC
TTTTTACAAGATGAGAAGTTACAGTTCATCTCCCCTGTTCAGATGAAACCCTTGTTTTCAAAATGGTTACAGTTT
CGTTTTTCCTCCCATGGTTCACTTGGCTCTGAACCTACAGTCTCAAAGATTGAGAAAAGATTTTGCAGTTAATTA
GGATTTGCATTTTAAGTAGTTAGGAACTGCCCAGGTTTTTTTTGTTTTTTAAGCATTGATTTAAAAGATGCACGG
AAAGTTATCTTACAGCAAACTGTAGTTTGCCTCCAAGACACCATTGTCTCCCTTTAATCTTCTCTTTTGTATACA
TTTGTTACCCATGGTGTTCTTTGTTCCTTTTCATAAGCTAATACCACTGTAGGGATTTTGTTTTGAACGCATATT
GACAGCACGCTTTACTTAGTAGCCGGTTCCCATTTGCCATACAATGTAGGTTCTGCTTAATGTAACTTCTTTTTT
GCTTAAGCATTTGCATGACTATTAGTGCTTCAAAGTCAATTTTTAAAAATGCACAAGTTATAAATACAGAAGAAA
GAGCAACCCACCAAACCTAACAAGGACCCCCGAACACTTTCATACTAAGACTGTAAGTAGATCTCAGTTCTGCGT
TTATTGTAAGTTGATAAAAACATCTGGAAGAAAATGACTAAAACTGTTTGCATCTTTGTATGTATTTATTACTTG
ATGTAATAAAGCTTATTTTCATTAACAATTTGTATTAAAAAAAAAAAAAAAA

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FIGURE 6371

MSYKPNLAAHMPAAALNAAGSVHSPSTSMATSSQYRQLLSDYGPPSLGYTQGTGNSQVPQSKYAELLAIIEELGK
EIRPTYAGSKSAMERLKRGIIHARGLVRECLAETERNARS

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FIGURE 6372

AAACCTTGGCCATGGTCACTTCCTCTTTTCCAATCTCTGTGGCAGTTTTTGCCCTAATAACCCTGCAGGTTGGTA
CTCAGGACAGTTTTATAGCTGCAGTGTATGAACATGCTGTCATTTTGCCAAATAAAACAGAAACACCAGTTTCTC
AGGAGGATGCCTTGAATCTCATGAACGAGAATATAGACATTCTGGAGACAGCGATCAAGCAGGCAGCTGAGCAGG
GTGCTCGAATCATTGTGACTCCAGAAGATGCACTTTATGGATGGAAATTTACCAGGGAAACTGTTTTCCCTTATC
TGGAGGATATCCCAGACCCTCAGGTGAACTGGATTCCGTGTCAAGACCCCCACAGATTTGGTCACACACCAGTAC
AAGCAAGACTCAGCTGCCTGGCCAAGGACAACTCTATCTATGTCTTGGCAAATTTGGGGGACAAAAAGCCATGTA
ATTCCCGTGACTCCACATGTCCTCCTAATGGCTACTTTCAATACAATACCAATGTGGTGTATAATACAGAAGGAA
AACTCGTGGCACGTTACCATAAGTACCACCTGTACTCTGAGCCTCAGTTTAATGTCCCTGAAAAGCCGGAGTTGG
TGACTTTCAACACCGCATTTGGAAGGTTTGGCATTTTCACGTGCTTTGATATATTCTTCTATGATCCTGGTGTTA
CCCTGGTGAAAGATTTCCATGTGGACACCATACTGTTTCCCACAGCTTGGATGAACGTTTTGCCCCTTTTGACAG
CTATTGAATTCCATTCAGCTTGGGCAATGGGAATGGGAGTTAATCTTCTTGTGGCCAACACACATCATGTCAGCC
TAAATATGACAGGAAGTGGTATTTATGCACCAAATGGTCCCAAAGTGTATCATTATGACATGAAGACAGAGTTGG
GAAAACTTCTCCTTTCAGAGGTGGATTCACATCCCCTATCCTCGCTTGCCTACCCAACAGCTGTTAATTGGAATG
CCTACGCCACCACCATCAAACCATTTCCAGTACAGAAAAACACTTTCAGGGGATTTATTTCCAGGGATGGGTTCA
ACTTCACAGAACTTTTTGAAAATGCAGGAAACCTTACAGTCTGTCAAAAGGAGCTTTGCTGTCATTTAAGCTACA
GAATGTTACAAAAAGAAGAGAATGAAGTATACGTTCTAGGAGCTTTTACAGGATTACATGGCCGAAGGAGAAGAG
AGTACTGGCAGGTCTGCACAATGCTGAAGTGCAAAACTACTAATTTGACAACTTGTGGACGGCCAGTAGAAACTG
CTTCTACAAGATTTGAAATGTTCTCCCTCAGTGGCACATTTGGAACAGAGTATGTTTTTCCTGAAGTGCTACTTA
CCGAAATTCATCTGTCACCTGGAAAATTTGAGGTGCTGAAAGATGGGCGTTTGGTAAACAAGAATGGATCATCTG
GGCCTATACTAACAGTGTCACTCTTTGGGAGGTGGTACACAAAGGACTCACTTTACAGCTCATGTGGGACCAGCA
ATTCAGCAATAACTTACCTGCTAATATTCATATTATTAATGATCATAGCTTTGCAAAATATTGTAATGTTATAGG
GCGTCTCTTTATCACTCAGCTTCTGCATCATATGCTTGGCTGAATGTGTTTATCGGCTTCCCAAGTTTACTAAGA
AACTTTGAAGGGCTATTTCAGTAGTATAGACCAGTGAGTCCTAAATATTTTTTCTCATCAATAATTATTTTTTAA
GTATTATGATAATGTTGTCCATTTTTTTGGCTACTCTGAAATGTTGCAGTGTGGAACAATGGAAAGAGCCTGGGT
GTTTGGGTCAGATAAATGAAGATCAAACTCCAGCTCCAGCCTCATTTGCTTGAGACTTTGTGTGTATGGGGGACT
TGTATGTATGGGAGTGAGGAGTTTCAGGGCCATTGCAAACATAGCTGTGCCCTTGAAGAGAATAGTAATGATGGG
AATTTAGAGGTTTATGACTGAATTCCCTTTGACATTAAAGACTATTTGAATTCAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAA

FIGURE 6373

MVTSSFPISVAVFALITLQVGTQDSFIAAVYEHAVILPNKTETPVSQEDALNLMNENIDILETAIKQAAEQGARI
IVTPEDALYGWKFTRETVFPYLEDIPDPQVNWIPCQDPHRFGHTPVQARLSCLAKDNSIYVLANLGDKKPCNSRD
STCPPNGYFQYNTNVVYNTEGKLVARYHKYHLYSEPQFNVPEKPELVTFNTAFGRFGIFTCFDIFFYDPGVTLVK
DFHVDTILFPTAWMNVLPLLTAIEFHSAWAMGMGVNLLVANTHHVSLNMTGSGIYAPNGPKVYHYDMKTELGKLL
LSEVDSHPLSSLAYPTAVNWNAYATTIKPFPVQKNTFRGFISRDGFNFTELFENAGNLTVCQKELCCHLSYRMLQ
KEENEVYVLGAFTGLHGRRRREYWQVCTMLKCKTTNLTTCGRPVETASTRFEMFSLSGTFGTEYVFPEVLLTEIH
LSPGKFEVLKDGRLVNKNGSSGPILTVSLFGRWYTKDSLYSSCGTSNSAITYLLIFILLMIIALQNIVML

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FIGURE 6374

GGCACGAGGCCAGGGCCCGGGATCGCCGAGCCCGACCTCGGGCGCCCCGCCGGTCACCTCCGCGCGGACACCAGC
CCTGCAGAGCCCAGGGAGATGGAAGACTTCGCCCGAGGGGCGGCCTCCCCAGGCCCCTCCCGGCCTGGCCTGGTT
CCCGTCAGCATCATCGGGGCTGAGGATGAGGATTTTGAGAACGAGCTGGAGACAAACTCAGAAGAGCAAAACAGC
CAGTTCCAGAGCCTGGAGCAGGTGAAGCGGCGCCCAGCCCACCTCATGGCCCTCCTGCAGCACGTGGCCCTGCAG
TTTGAGCCAGGACCCCTGGTTCTCCGGGTGCCGGTCCCTCCCAACGTCGCCTTTGAACTTGACCGCACTAGGGCT
GACCTCATCTCCGAGGATGTCCAGCGGCGGTTCGTGCAGGAGGTGGTGCAAAGCCAGCAGGTAGCCGTGGGCCGG
CAGCTGGAGGACTTCCGTTCCAAGCGGCTCATGGGCATGACGCCCTGGGAGCAGGAGCTGGCCCAGCTGGAGGCT
TGGGTTGGGCGGGACCGAGCCAGCTACGAGGCCCGGGAGCGGCACGTGGCGGAGCGGCTGCTCATGCACCTGGAG
GAGATGCAACATACCATCTCTACCGACGAAGAAAAGAGTGCTGCCGTGGTCAACGCCATTGGCCTGTACATGCGC
CACCTTGGGGTGCGGACCAAGAGTGGAGACAAGAAGTCGGGGAGGAACTTCTTCCGGAAAAAGGTGATGGGGAAC
CGGCGGTCGGACGAGCCTGCCAAGACCAAGAAGGGGCTGAGCAGCATCCTGGATGCCGCCCGCTGGAACCGGGGA
GAGCCCCAGGTTCCAGATTTTCGACACCTCAAAGCAGAGGTTGATGCCGAGAAGCCAGGTGCTACAGACCGGAAG
GGAGGCGTGGGGATGCCCTCTCGGGACCGGAATATCGGGGCTCCTGGGCAGGACACCCCTGGAGTCTCTCTGCAC
CCTCTGTCCCTGGACAGCCCAGACCGGGAACCAGGTGCTGACGCCCCCCTGGAGCTGGGGGACTCATCCCCGCAG
GGCCCAATGAGCCTGGAGTCCTTGGCGCCCCCAGAGAGTACCGACGAGGGGGCCGAAACCGAGAGCCCCGAGCCT
GGAGATGAGGGGGAGCCGGGGCGGTCGGGACTGGAGCTTGAACCAGAAGAGCCTCCCGGCTGGCGGGAACTCGTC
CCCCCAGACACCCTGCACAGCCTGCCCAAGAGCCAGGTGAAGCGGCAGGAGGTCATCAGCGAGCTGCTGGTGACA
GAGGCGGCCCACGTGCGCATGCTGCGGGTGCTGCACGACCTCTTCTTCCAGCCCATGGCAGAATGCCTGTTCTTC
CCCTTGGAGGAGCTGCAGAACATCTTCCCCAGCCTGGACGAGCTCATCGAGGTGCATTCCCTGTTCCTCGATCGC
CTGATGAAGCGGAGGCAGGAGAGTGGCTACCTCATCGAGGAGATCGGAGACGTGCTGCTGGCCCGGTTTGATGGT
GCTGAGGGCTCCTGGTTCCAGAAAATCTCCTCCCGCTTCTGCAGCCGCCAGTCATTTGCCTTAGAGCAGCTCAAA
GCCAAGCAACGCAAGGACCCTCGGTTCTGTGCCTTCGTGCAGGAAGCTGAGAGCCGCCCGCGGTGCCGCCGCCTG
CAGCTGAAGGACATGATCCCCCACGGAGATGCAGCGGCTGACCAAGTACCCCCTGCTCCTGCAGAGCATCGGGCAG
AACACAGAAGAGCCCACAGAACGGGAGAAAGTGGAGCTGGCAGCCGAGTGCTGCCGGGAAATTCTACACCACGTC
AACCAAGCCGTGCGTGACATGGAGGACCTGCTGAGGCTCAAGGACTATCAGCGGCGCCTGGACTTGTCCCACCTT
CGGCAGAGCAGCGACCCTATGCTGAGCGAGTTCAAGAACCTGGACATCACCAAGAAGAAATTGGTCCACGAGGGC
CCACTGACGTGGCGGGTGACTAAGGACAAGGCAGTGGAGGTGCATGTGCTGCTGCTGGACGACCTGCTGCTGCTG
CTCCAGCGCCAGGACGAGCGGCTGCTGCTCAAGTCCCATAGCCGGACACTGACGCCCACGCCCGATGGCAAGACC
ATGCTGCGGCCCGTGCTGCGGCTCACCTCCGCCATGACCCGCGAGGTGGCCACCGATCACAAAGCCTTCTACGTC
CTTTTTACCTGGGACCAGGAGGCCCAGATATACGAGCTGGTGGCACAGACTGTGTCGGAGCGGAAAAACTGGTGT
GCTCTCATCACTGAGACTGCCGGATCCCTGAAAGTCCCTGCCCCTGCCTCTCGCCCTAAGCCCCGGCCCAGCCCG
AGCAGCACCCGAGAACCCCTCCTCAGCAGCTCTGAGAACGGCAATGGTGGCCGAGAGACGTCTCCAGCTGATGCC
CGGACCGAGAGAATCCTCAGTGACCTCCTGCCCTTCTGCAGACCAGGCCCCGAGGGCCAGCTCGCTGCCACGGCC
CTTCGGAAAGTGCTGTCCCTGAAGCAGCTTCTGTTTCCGGCGGAGGAAGACAATGGGGCGGGGCCTCCTCGAGAT
GGGGATGGGGTCCCAGGGGGCGGCCCCCTGAGCCCAGCACGGACCCAGGAAATCCAGGAGAACCTGCTCAGCTTG
GAGGAGACCATGAAGCAGCTGGAGGAGTTGGAGGAGGAATTTTGCCGCCTGAGACCCCTCCTGTCTCAGCTTGGG
GGGAACTCTGTCCCCCAGCCTGGCTGCACTTGAGGTTCCCGCCCAGGAAGGCCTTTTGCAAGAAGGAGAGGAATG
GGGGAGAGGACGTGAGGGACCACCCCCACCCACACAGCTGCCGCAGCATCTCACACCCCGAGGGCCTGAGGAGAG
GGAGCTGTGGGCCACGCCTGGGAGGGGCCCAGCTGGGGTTACTGGCCCCGCATGAGCCTCGGCCATCTCTCCCTC
CTGCCCTCTGCTTGGGGGACTCAGGGCTCCATTCTGGAGGGCACCACGGTGACCCGGGCCATCTCAGTATTGCCT
GTGGGGGCCACCCCTCCACCCCCACCCCCAAGTGCCTTCGCTCTGTTTTTATACCCTGAATTGGAGGTTTATTTT
TTAATATATATTATCTAAGAAGAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 6375

MEDFARGAASPGPSRPGLVPVSIIGAEDEDFENELETNSEEQNSQFQSLEQVKRRPAHLMALLQHVALQFEPGPL
VLRVPVPPNVAFELDRTRADLISEDVQRRFVQEVVQSQQVAVGRQLEDFRSKRLMGMTPWEQELAQLEAWVGRDR
ASYEARERHVAERLLMHLEEMQHTISTDEEKSAAVVNAIGLYMRHLGVRTKSGDKKSGRNFFRKKVMGNRRSDEP
AKTKKGLSSILDAARWNRGEPQVPDFRHLKAEVDAEKPGATDRKGGVGMPSRDRNIGAPGQDTPGVSLHPLSLDS
PDREPGADAPLELGDSSPQGPMSLESLAPPESTDEGAETESPEPGDEGEPGRSGLELEPEEPPGWRELVPPDTLH
SLPKSQVKRQEVISELLVTEAAHVRMLRVLHDLFFQPMAECLFFPLEELQNIFPSLDELIEVHSLFLDRLMKRRQ
ESGYLIEEIGDVLLARFDGAEGSWFQKISSRFCSRQSFALEQLKAKQRKDPRFCAFVQEAESRPRCRRLQLKDMI
PTEMQRLTKYPLLLQSIGQNTEEPTEREKVELAAECCREILHHVNQAVRDMEDLLRLKDYQRRLDLSHLRQSSDP
MLSEFKNLDITKKKLVHEGPLTWRVTKDKAVEVHVLLLDDLLLLLQRQDERLLLKSHSRTLTPTPDGKTMLRPVL
RLTSAMTREVATDHKAFYVLFTWDQEAQIYELVAQTVSERKNWCALITETAGSLKVPAPASRPKPRPSPSSTREP
LLSSSENGNGGRETSPADARTERILSDLLPFCRPGPEGQLAATALRKVLSLKQLLFPAEEDNGAGPPRDGDGVPG
GGPLSPARTQEIQENLLSLEETMKQLEELEEEFCRLRPLLSQLGGNSVPQPGCT

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FIGURE 6376

ACGAGGCGGAGGCGGCCTGCCGGGGTGGTTCGGCTTCCCGTTGCCGCCTCGGGCGCTGTACCCAGAGCTCGAAGA
GGAGCAGCGCGGCCGCGCGGACCCGGCAAGGCTGGGCCGGACTCGGGGCTCCCGAGGGACGCCATGCGGGGAGGC
AGGGGCGCCCCTTTCTGGCTGTGGCCGCTGCCCAAGCTGGCGCTGCTGCCTCTGTTGTGGGTGCTTTTCCAGCGG
ACGCGTCCCCAGGGCAGCGCCGGGCCACTGCAGTGCTACGGAGTTGGACCCTTGGGCGACTTGAACTGCTCGTGG
GAGCCTCTTGGGGACCTGGGAGCCCCCTCCGAGTTACACCTCCAGAGCCAAAAGTACCGTTCCAACAAAACCCAG
ACTGTGGCAGTGGCAGCCGGACGGAGCTGGGTGGCCATTCCTCGGGAACAGCTCACCATGTCTGACAAACTCCTT
GTCTGGGGCACTAAGGCAGGCCAGCCTCTCTGGCCCCCCGTCTTCGTGAACCTAGAAACCCAAATGAAGCCAAAC
GCCCCCCGGCTGGGCCCTGACGTGGACTTTTCCGAGGATGACCCCCTGGAGGCCACTGTCCATTGGGCCCCACCT
ACATGGCCATCTCATAAAGTTCTGATCTGCCAGTTCCACTACCGAAGATGTCAGGAGGCGGCCTGGACCCTGCTG
GAACCGGAGCTGAAGACCATACCCCTGACCCCTGTTGAGATCCAAGATTTGGAGCTAGCCACTGGCTACAAAGTG
TATGGCCGCTGCCGGATGGAGAAAGAAGAGGATTTGTGGGGCGAGTGGAGCCCCATTTTGTCCTTCCAGACACCG
CCTTCTGCTCCAAAAGATGTGTGGGTATCAGGGAACCTCTGTGGGACGCCTGGAGGAGAGGAACCTTTGCTTCTA
TGGAAGGCCCCAGGGCCCTGTGTGCAGGTGAGCTACAAAGTCTGGTTCTGGGTTGGAGGTCGTGAGCTGAGTCCA
GAAGGAATTACCTGCTGCTGCTCCCTAATTCCCAGTGGGGCGGAGTGGGCCAGGGTGTCCGCTGTCAACGCCACA
AGCTGGGAGCCTCTCACCAACCTCTCTTTGGTCTGCTTGGATTCAGCCTCTGCCCCCCGTAGCGTGGCAGTCAGC
AGCATCGCTGGGAGCACGGAGCTACTGGTGACCTGGCAACCGGGGCCTGGGGAACCACTGGAGCATGTAGTGGAC
TGGGCTCGAGATGGGGACCCCCTGGAGAAACTCAACTGGGTCCGGCTTCCCCCTGGGAACCTCAGTGCTCTGTTA
CCAGGGAATTTCACTGTCGGGGTCCCCTATCGAATCACTGTGACCGCAGTCTCTGCTTCAGGCTTGGCCTCTGCA
TCCTCCGTCTGGGGGTTCAGGGAGGAATTAGCACCCCTAGTGGGGCCAACGCTTTGGCGACTCCAAGATGCCCCT
CCAGGGACCCCCGCCATAGCGTGGGGAGAGGTCCCAAGGCACCAGCTTCGAGGCCACCTCACCCACTACACCTTG
TGTGCACAGAGTGGAACCAGCCCCTCCGTCTGCATGAATGTGAGTGGCAACACACAGAGTGTCACCCTGCCTGAC
CTTCCTTGGGGTCCCTGTGAGCTGTGGGTGACAGCATCTACCATCGCTGGACAGGGCCCTCCTGGTCCCATCCTC
CGGCTTCATCTACCAGATAACACCCTGAGGTGGAAAGTTCTGCCAGGCATCCTATTCTTGTGGGGCTTGTTCCTG
TTGGGGTGTGGCCTGAGCCTGGCCACCTCTGGAAGGTGCTACCACCTAAGGCACAAAGTGCTGCCCCGCTGGGTC
TGGGAGAAAGTTCCTGATCCTGCCAACAGCAGTTCAGGCCAGCCCCACATGGAGCAAGTACCTGAGGCCCAGCCC
CTTGGGGACTTGCCCATCCTGGAAGTGGAGGAGATGGAGCCCCCGCCGGTTATGGAGTCCTCCCAGCCCGCCCAG
GCCACCGCCCCGCTTGACTCTGGGTATGAGAAGCACTTCCTGCCCACACCTGAGGAGCTGGGCCTTCTGGGGCCC
CCCAGGCCACAGGTTCTGGCCTGAACCACACGTCTGGCTGGGGGCTGCCAGCCAGGCTAGAGGGATGCTCATGCA
GGTTGCACCCCAGTCCTGGATTAGCCCTCTTGATGGATGAAGACACTGAGGACTCAGAGAGGCTGAGTCACTTAC
CTGAGGACACCCAGCCAGGCAGAGCTGGGATTGAAGGACCCCTATAGAGAAGGGCTTGGCCCCCATGGGGAAGAC
ACGGATGGAAGGTGGAGCAAAGGAAAATACATGAAATTGAGAGTGGCAGCTGCCTGCCAAAATCTGTTCCGCTGT
AACAGAACTGAATTTGGACCCCAGCACAGTGGCTCACGCCTGTAATCCCAGCACTTTGGCAGGCCAAGGTGGAAG
GATCACTTAGAGCTAGGAGTTTGAGACCAGCCTGGGCAATATAGCAAGACCCCTCACTACAAAAATAAAACATCA
AAAACAAAAACAATTAGCTGGGCATGATGGCACACACCTGTAGTCCGAGCCACTTGGGAGGCTGAGGTGGGAGGA
TCGGTTGAGCCCAGGAGTTCGAAGCTGCAGGGACCTCTGATTGCACCACTGCACTCCAGGCTGGGTAACAGAATG
AGACCTTATCTCAAAAATAAACAAACTAATAAAAAGCA

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FIGURE 6377

MRGGRGAPFWLWPLPKLALLPLLWVLFQRTRPQGSAGPLQCYGVGPLGDLNCSWEPLGDLGAPSELHLQSQKYRS
NKTQTVAVAAGRSWVAIPREQLTMSDKLLVWGTKAGQPLWPPVFVNLETQMKPNAPRLGPDVDFSEDDPLEATVH
WAPPTWPSHKVLICQFHYRRCQEAAWTLLEPELKTIPLTPVEIQDLELATGYKVYGRCRMEKEEDLWGEWSPILS
FQTPPSAPKDVWVSGNLCGTPGGEEPLLLWKAPGPCVQVSYKVWFWVGGRELSPEGITCCCSLIPSGAEWARVSA
VNATSWEPLTNLSLVCLDSASAPRSVAVSSIAGSTELLVTWQPGPGEPLEHVVDWARDGDPLEKLNWVRLPPGNL
SALLPGNFTVGVPYRITVTAVSASGLASASSVWGFREELAPLVGPTLWRLQDAPPGTPAIAWGEVPRHQLRGHLT
HYTLCAQSGTSPSVCMNVSGNTQSVTLPDLPWGPCELWVTASTIAGQGPPGPILRLHLPDNTLRWKVLPGILFLW
GLFLLGCGLSLATSGRCYHLRHKVLPRWVWEKVPDPANSSSGQPHMEQVPEAQPLGDLPILEVEEMEPPPVMESS
QPAQATAPLDSGYEKHFLPTPEELGLLGPPRPQVLA

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FIGURE 6378

TCGGAGGAGCCAGCCGAAATCCTGCCGCCTGCCCGGGACGAGGAGGAGGAGGAGGAAGAGGGGATGGAGCAGGGG
CTGGAGGAGGAAGAAGAGGTGGATCCCCGGATCCAGGGAGAACTGGAGAAGTTAAATCAGTCCACGGATGATATC
AACAGACGGGAGACTGAACTTGAGGATGCTCGTCAGAAGTTCCGCTCTGTTCTGGTTGAAGCAACGGTGAAACTG
GATGAACTGGTGAAGAAAATTGGCAAAGCTGTGGAAGACTCCAAGCCCTACTGGGAGGCACGGAGGGTGGCGAGG
CAGGCTCAGCTGGAAGCTCAGAAAGCCACGCAGGACTTCCAGAGGGCCACAGAGGTGCTCCGTGCCGCCAAGGAG
ACCATCTCCCTGGCCGAGCAGCGGCTGCTGGAGGATGACAAGCGGCAGTTCGACTCCGCCTGGCAGGAGATGCTG
AATCACGCCACTCAGAGGGTCATGGAGGCGGAGCAGACCAAGACCAGGAGCGAGCTGGTGCATAAGGAGACGGCA
GCCAGGTACAATGCCGCCATGGGCCGCATGCGACAGCTGGAGAAGAAACTCAAGAGAGCCATCAACAAGTCCAAG
CCTTATTTTGAACTCAAGGCAAAGTACTATGTGCAGCTCGAGCAACTGAAAAAGACTGTGGATGACCTGCAGGCC
AAACTGACCCTGGCAAAAGGCGAGTACAAGATGGCCCTGAAGAACCTGGAGATGATCTCAGATGAGATCCACGAG
CGGCGGCGCTCCAGTGCCATGGGGCCTCGGGGATGCGGTGTTGGTGCTGAGGGCAGCAGCACATCTGTGGAGGAT
CTGCCAGGGAGCAAACCTGAGCCTGATGCCATTTCTGTGGCCTCGGAGGCCTTTGAAGATGACAGCTGTAGCAAC
TTTGTGTCTGAAGATGACTCGGAAACCCAGTCCGTGTCCAGCTTTAGTTCAGGACCAACAAGCCCGTCTGAGATG
CCTGACCAGTTCCCTGCGGTTGTGAGGCCTGGCAGCCTGGATCTGCCCAGCCCTGTGTCCCTGTCAGAGTTTGGG
ATGATGTTCCCAGTGTTGGGCCCTCGAAGTGAATGCAGCGGGGCCTCCTCCCCTGAATGTGAAGTAGAACGAGGA
GACAGGGCAGAAGGGGCAGAGAATAAAACAAGTGACAAAGCCAACAACAACCGGGGCCTCAGCAGTAGCAGTGGC
AGTGGTGGCAGCAGTAAGAGCCAAAGCAGCACCTCCCCTGAGGGCCAGGCCTTGGAGAACCGGATGAAGCAGCTC
TCCCTACAGTGCTCAAAGGGAAGAGATGGAATTATTGCTGACATAAAAATGGTGCAGATTGGCTGATTCATCCTG
GGCCCTGGCCGATGTGCATATCAACATTTATACATGGAACTGGAGAACATTGTGCCAATAATCATTTAATATATG
CCAAATCTTACACGTCTACTCTAAACTGCTCTAATGAAGTTTCAGTGACCTTGAGGGCTAAAGATTGTTCTTCTG
GGTAAGAGCTCTTGGGCTGGTTTTTCAGAGCAGAGTTCTTGTTGTGGGTAGACTGTGACTAGGTTCACAGCCTTT
GTGGAACATTCCGTATAACGGCATTGTGGAAGCAATAACTAGTTCCTATGAAAGAACCAGAGCTGGGAAGATGGC
TGGGAAGCCAGGCCAAAGTGGGGGCAACAGCTTGCTTCTCTTTCTCTTCTCACCCTCAGTTTGTATGGGAAAATG
GAGATGTCCTCTCCACTTTATCCCACGATATCTAAATGAAAAAGAAAGAAAACCCACACACAAAGCAAAAACTCA
AGTATTAAGAGCACATATTTTTGACCCAGTGGAGGCTTAAAAAAAAAAAAAATCCAAGAACACAATTCATTTTCAC
CACCTCTGGTGTTCAGAGGGGGCTTTTAAAAAAGCGTGTATGCTGGGATACCCATTAAAACCATTTTCTAGAAGG
CTACCATGAGCTGCACTTTTTGGGGTGGGAAAGGTGAATGCCAGTGGGGATGCGGGGGGATGAGGGTAGGAGGGA
CTTATAGAAGGGGATTTGTGGCTGTGGGGGAGAAGGTTCTACAGCATAAGCCTTATCCTGCCAGCCAAGGGGATT
TATTCTAAGAGAAGTGCATGTGAAGAATGGTTGCCACTGTTATTAGATTGACAAGATGTTAATTTCTCTGTAGGT
TGTAACTTTAAAAATAAATGAAATTATTTAAGGGTTATGCTGCACTAGTATTCCTTAGAGGAAACAGTTCTTTAA
AGTTAGGAAAGGGAGTAGGCAGGCATGTGTTGGCAAAGGCTGTTAATAGTAGTTAAGTGTTAAGACTGCTTTTCT
TTAACGTTTTCATGGTAATGCATATTTAGAGCACTGTATTTTTGTCTTGTTAAGAAAATTTAGCATTTCTAAAAG
AAAAAAGCAACCCTCTTTCAAACTGTTAATTCTGTCACAGCCTGTATATTTTAGTCATTTGTAAATCTCTTCATA
CAATAGTGACTTCTTTTTTGACTGATACAGTATCTTAATTACAAGGTTATTTTGTACTTGTCTTAATACACTAAG
TGTAATAAAAACGGCTTGAG

FIGURE 6379

MEQGLEEEEEVDPRIQGELEKLNQSTDDINRRETELEDARQKFRSVLVEATVKLDELVKKIGKAVEDSKPYWEAR
RVARQAQLEAQKATQDFQRATEVLRAAKETISLAEQRLLEDDKRQFDSAWQEMLNHATQRVMEAEQTKTRSELVH
KETAARYNAAMGRMRQLEKKLKRAINKSKPYFELKAKYYVQLEQLKKTVDDLQAKLTLAKGEYKMALKNLEMISD
EIHERRRSSAMGPRGCGVGAEGSSTSVEDLPGSKPEPDAISVASEAFEDDSCSNFVSEDDSETQSVSSFSSGPTS
PSEMPDQFPAVVRPGSLDLPSPVSLSEFGMMFPVLGPRSECSGASSPECEVERGDRAEGAENKTSDKANNNRGLS
SSSGSGGSSKSQSSTSPEGQALENRMKQLSLQCSKGRDGIIADIKMVQIG

FIGURE 6380A

CCTTGGCCGAGACCGGTCCTCTGCGGAGAGGGCCCCGCCCTCTGTGAAGGCCCGCCCGGGAATTGGCGGCGGCGC
TGCAGCCATTTCCGGTTTCGGGGAGGTGGGTGGGGTGCGGAGCGGGACTTGGAGCAGCCGCCGCCGCTGCCACCG
CCTACAGAGCCTGCCTTGCGCCTGGTGCTGCCAGGAAGATGCGGCCGGAGCCCGGAGGCTGCTGCTGCCGCCGCA
CGGTGCGGGCGAATGGCTGCGTGGCGAACGGGGAAGTACGGAACGGGTACGTGAGGAGCAGCGCTGCAGCCGCAG
CCGCAGCCGCCGCCGGCCAGATCCATCATGTTACACAAAATGGAGGACTATATAAAAGACCGTTTAATGAAGCTT
TTGAAGAAACACCAATGCTGGTTGCTGTGCTCACGTATGTGGGGTATGGCGTACTCACCCTCTTTGGATATCTTC
GAGATTTCTTGAGGTATTGGAGAATTGAAAAGTGTCACCATGCAACAGAAAGAGAAGAACAAAAGGACTTTGTGT
CATTGTATCAAGATTTTGAAAACTTTTATACAAGGAATCTGTACATGAGGATAAGAGACAACTGGAATCGGCCAA
TCTGTAGTGTGCCTGGAGCCAGGGTGGACATCATGGAGAGACAGTCTCATGATTATAACTGGTCCTTCAAGTATA
CAGGGAATATAATAAAGGGTGTTATAAACATGGGTTCCTACAACTATCTTGGATTTGCACGGAATACTGGATCAT
GTCAAGAAGCAGCCGCCAAAGTCCTTGAGGAGTATGGAGCTGGAGTGTGCAGTACTCGGCAGGAAATTGGAAACC
TGGACAAGCATGAAGAACTAGAGGAGCTTGTAGCAAGGTTCTTAGGAGTAGAAGCTGCTATGGCGTATGGCATGG
GATTTGCAACGAATTCAATGAACATTCCTGCTCTTGTTGGCAAAGGTTGCCTGATTCTGAGTGATGAACTGAACC
ATGCATCACTGGTTCTGGGAGCCAGACTGTCAGGAGCAACCATTAGAATCTTCAAACACAACAATATGCAAAGCC
TAGAGAAGCTATTGAAAGATGCCATTGTTTATGGTCAGCCTCGGACACGAAGGCCCTGGAAGAAAATTCTCATCC
TTGTGGAAGGAATATATAGCATGGAGGGATCTATTGTTCGTCTTCCTGAAGTGATTGCCCTCAAGAAGAAATACA
AGGCATACTTGTATCTGGATGAGGCTCACAGCATTGGCGCCCTGGGCCCCACAGGCCGGGGTGTGGTGGAGTACT
TTGGCCTGGATCCCGAGGATGTGGATGTTATGATGGGAACGTTCACAAAGAGTTTTGGTGCTTCTGGAGGATATA
TTGGAGGCAAGAAGGAGCTGATAGACTACCTGCGAACACATTCTCATAGTGCAGTGTATGCCACGTCATTGTCAC
CTCCTGTAGTGGAGCAGATCATCACCTCCATGAAGTGCATCATGGGGCAGGATGGCACCAGCCTTGGTAAAGAGT
GTGTACAACAGTTAGCTGAAAACACCAGGTATTTCAGGAGACGCCTGAAAGAGATGGGCTTCATCATCTATGGAA
ATGAAGACTCTCCAGTAGTGCCTTTGATGCTCTACATGCCTGCCAAAATTGGCGCCTTTGGACGGGAGATGCTGA
AGCGGAACATCGGTGTCGTTGTGGTTGGATTTCCTGCCACCCCAATTATTGAGTCCAGAGCCAGGTTTTGCCTGT
CAGCAGCTCATACCAAAGAAATACTTGATACTGCTTTAAAGGAGATAGATGAAGTTGGGGACCTATTGCAGCTGA
AGTATTCCCGTCATCGGTTGGTACCTCTACTGGACAGGCCCTTTGACGAGACGACGTATGAAGAAACAGAAGACTT
GAGCCTTTTTGGTGCTCCCTCAGAGGAACTCTCCCTCACCCAGGACAGCCTGTGGCCTTTGTGAGCCAGTTCCAG
GAACCACACTTCTGTGGCCATCTCACGTGAAAGACATTGCCTCAGCTACTGAAGGTGGCCACCTCCACTCTAAAT
GACATTTTGTAAATAGTAAAAAACTGCTTCTAATCCTTCCTTTGCTAAATCTCACCTTTAAAAACGAAGGTGACT
CACTTTGCTTTTTCAGTCCATTAAAAAAACATTTTATTTTGCAACCATTCTACTTGTGAAATCACGCTGACCCTA
GCCTGTCTCTGGCTAACCACACAGGCCATTCCCCTCTCCCAGCACCTTGCAGACTTGGGCCCATCAAGAGCTACT
GCTGGCCCTGGCTCCGCAGCCTGGATACTTACCTGGCCCTCCTCCCTAGGGAGCAAGTGCCTTCCACTTACTTCC
CATCCAGGTCTCAGAGGTCTCAAGGCCAACCTTGGAATCCTTATTTAACCATTCAAGTAATCAACGGAAGTTTTC
ACCCTTTAATCTTAAGTTTAGCCTTTTAAGAAAAACAGTAAGCGATGACTGCTGAAAGGCTCATTGTGTAATCTC
CCAAGGGTTTGGTCTTATTCCATTTTCTTCTGGTCACCAGATGATTTCTTCCTTTACCATCAAATACTTCTTCAT
AATGGTCACAGTCTGAGGATGTGCGCAAATTCTGGTTCTTCCCAAGCTCTAACCGTAACACGTCCCACCCCCTTT
TTAAAGCACTTACTGTTTTCAGAGCACCCATATCCCACCCTGGTGAGAAGGCCACTCTCACATCTGAGTGTTGGG
TACAAAGCTGCTCCGTAGAGTGATGTGCACTCCTGGTGGGTGAGGGGCAGGGGCAGTGGCAGTGTGCAAAGAATT
GATTACTCCTTGCAGAGCCTGTGGCTTGCATTTCCTACTGCTTTCTACGTTTGAAAATTATGACAGTCTCTGGCT
AGGTCTGGGTCCAGATTAGGATTTAAACTGATAAAGGAAACTGTTGGTAAATCCTCTGCTCAGAAAGCATTTATC
ATGTTCCTATTTAAGGATTAGGTTTATTAATTTAGGCCTCTTAGAAGCTAACCCACTTAAATATTACTCTTCTGA
ATGCTAGTTCTCTTTTATTCTTGATGTCCTAAGTCAATTGAATCTGGCATCTGGGGCTAGGGTCTGCCTGTCTAC
ATATTTTTTATTTTTTTCTGAGAAATTCTGAACACATAGATCTCTTTCCTAAACTGACATTTTCTATTTTGACTG
TTTTCATACTATAACCAGGTAAAGGGACTTCTTTCAGAGAGCTTTATACTGCCTGACCAAAGAACAAATCTGAAA
ATCACCATTTTAAAGTTATTTTTTCAGTTGAACCAAAGTTTAAGTGAAGAGGACTTTTGGCATATTATACCCAGG
ATCAGTTTGTCTTTTTGTATCCATCAAGTATTACAGGAGAAGGATTGGGAACAGAATGGAAAAACAGTGTATGAA
AGTCATGTTACAGGCCGAGTGCGGTGGCTCACACCTGTAATCCTAGCACTTTGGGAGGCTGAGGCAGGTGGCTCA
CTTGAGGTCAGGAATTCAAGACCAGCCTGGCCAACATGGTGAAACCCCGTCTCTACTAAAAAGACAAAAAATTAG
CTGGGCGTGGTGGCGGGCACCTATAATCCCACCTACTTGGTAGGCTGAGGCAGGAGAATCGCTTGAACCCAGGAG

FIGURE 6380B

GCGGAGGTTGCAGTGAGACGAGATTGTGCCACTGCACTCTAGCCTGGGTGACAGAGCAAAACTGTGTCTCAAAAA
AAAAAAAGTCATGTTACACATTTAAGTTTTTGAAATTGCTCCTTTTATCGGTAAAGATTCTCAATCCAAATTCTC
CTGGGTGTGTTGTCATCAGCTGTGATATGTTTGTGCACATTACGTATAGCAGAGGATGTAAGCAATATTATTGTT
TGTGAAGTTTTGTTTTTAATGTCTTGAGTATGAGTTATGTTTAGTCACTGTCAGCATCTGAGAACTTTAATAAGC
CCTTGAGATATTCCAAAGTTTTATTTTACTTTTTTAAAGAACAGAAAAAGATGAATGAAAGAACCAAGGAGAGAT
GCAGAGACTATATTTAGCATGTATAGGTTAAAGTAAGAAGGAGGTTGTGGTAACTAAATAGGAGTCCTATAAAAT
CAAATACATTGTCAACCTTTTCTGCACATCTAGTTTCCTACCATAGAATCCCACTGGAATACCACATAGCTTTTG
CACTGCAGTTACTATTTACTAATGTAAACGTAGGGTTTGTAAAAGTCACAAACTTATAAGCAATGAACTTACCTG
CTAGTCTTTTTATTTTGGCTTGCATGAAGTCACTGCAAATTCAAATGTCAGTACCGGCATTTAAAATATATCTAT
ATCACTTTGTTGGTACAAAGTTATTTCAAGATAAGTGTAATTTTGTTACAAGTTTATTTTGAAGAGACAAATCTC
CTGTGATCTATGCAGGACCTCTGTACTTTCTAAAGAACAAAATGTTATGTAGACATTATACATGGTTGGTTGTCT
CTTCTTGAAACTGTAATGTAAATCTAGGGTCCAGTCATATCCTAGGTATCATCATTTATCCAAGTACTTGGAGGA
ATACAAGTATATATAAATACAGTCATTGAGAATAAGTCGATTTGAGGCATACAAGAGTAGTTTCTTACACAGTTT
AACACAGCCTGATTCAAGACTCTGATAGGATTCAAACAGATACCGGTTAACCATGACTACCAAAACTGATCATCT
GAGTCGATTGATAGAGGTGTGACTAGTCCTTAGCACTTTTTCTCATTCCTCTTTTTATTCAGCATTGCTGTTACC
TATTTCAGGTTTATAAGACCTCTTTCAGCAGATCACATCAGAAGCCAGGAAATGCATAGCTAGGAGATGTCAAAA
GCCCATATGAGGAGTGGACCAAGCAGCAGTGGCGGTTTCTCCTCGCATCTTTTTTTTTTTAAGCTTTAACTTAGC
AGGGGCATGGACTTTATAGCACTTTTTCAACTTTTTGCTTTGCTTTGGATAAGAAATCCTTACCTTTAAAAAAAG
CTTCTAGTCTCCATAACCCCCAAAGTACTGCTTATTTGTTTGAAGAATCCAGCCATCGTAGTGCTTTAGTCACTA
TCGTAAACATTCATGATAGGGCAAGGATTTTAAAACAGGATTCTTGCTTCTGTAGTCATCAAGGTGAACAGAAGC
ATCCTACACAACCACTAAGGGCTCTATGTTTGTGTCATGCCTCTTCAAACACCAAGGAGTTGAACATGCTTCCAG
TGATTTGTCTCCGTAATGCCTTCTTCCTTTATTTGGCCTTTCTTTCTTTCTGTACCTTCAAGTTCTTGATTTTTA
AAATTCCAACTCTAGAGAAAACCAATATATGGTGGTGCTGGGCTTTGAAGATAGCATATCAGACGCCTTGGTTCT
GTTTGTACACTTAGCCTTACATTTCAGGAGGAGGCTTTTCATTAGGGGCTTAAGCTAGCTCCTTTGGCTTTTAAA
AAAAATTTTTTTTCAAATTTCTTCATTACCTAAGGGAGCCTGCATCTAAATTTCTCAACTAGTTCAGCCTAGCTG
AATTTTCTAGTGTGTAATACACTTTGCTTCCTTCTTATTGGTGAAAACCAGGGGGATGAGTGGCTTCCATGGAGA
GATTTCCTGATTTCTCAGGGAGGAAAAAAGTGATGACATTTACCACTACTTTTATGTTTTTCCCCTTTTTCCAAA
TTGATAAGGATTTCTGGTTCCTAGTGATCCGGGATTGGGCAACAGTGCAGAACTGCCAGTCATGCCGTAGGCCGT
GAAGAAAGAATGTGAGTAACTGTTGTTTTGCAAGGATTTGTAGGGTTATGGGCAGTTGTTGTTTGAAGCATTGCT
ATGACCTAATTCCCAAGGTATCTTTCCTCTCTTGGTGTTCTAGGTAAGCCAATGAGCTTTAATCTCTACTTGCTA
TAACCGTGTGCTTAGAAAAAGAGGTGAGAGTAGTGGTTTTCCTTCAAACTGTCCACATTCATGAAGATTATGAAT
TGTTAGGACAGCCAGGGCAAGATAGACCCTGTCTCTACAAAAATTTTTTTCTAAATTAACCGGGCATGGTGGTGC
CTGCCTGTAGTCCCACCTGTGTGGGAGAATCACTTGAGCCTGGGAGGTCAAGGCTGCAGTGAGCCATGATTGCAC
CCCTGCACTCCAGCCTGGGTGACAGAGTGAGACCCTGGCTCAATAAGAGGGGGAAAAAAAATTGTTAGGAGCTGG
GTGCGGATGCAGCCTGCAATCCCAGCTACTTGAGAGGCTGAGGCCGGAGGATTGCTTAAACCCAAGAATTTGAGC
GTAGCCTGGGCAACACAGCAAGACCCCATCTAAGAAAAAAATGTTTTTTAAATCAGCTTAGCCCAAAGGGGTTGT
GAATGGGGAGGTATAAAAAGCAAAGATTATTTTTTGGCTACTAAGCCAAGAACTTACAGGGATTTTTTTTTTCAG
TCCCAGAACCTACAGATACCCTGCTACTTGCTTCACGTGGATGCTCAGTGCCCAGCAGCCATCTTAATACATTAA
ACCAGTTTAAAAAATACCTTCCATGTGGAGAAAAACATGTCTTTTTCTCGCCTCAACTTTATCCACATGAAATGT
GTGCCCATGGCTGGGCGCAGTGGCTCACCTGTAATCCCAACACTTTGGGAGGCTGAAGCAGGCAGATTGCTTGAG
GCCAGGAGTTCGAGAACAGTCTGGCCAACATGGCGAAACCTCATCTCTACTAAAATTACAAAAATTAGCCGGGCA
TGGTGGCACATGCCTGTAATCCCAGCTACGTCAGGAGGCTGAGGCACAGGAATTGCTTGAACCCAAGAGGCAGAG
GATGCAATGAGCCAAGATCACACCACTGCACTCCAGCCTTGGCGACAGAGGGAGACTCTGTCTC

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FIGURE 6381

MRPEPGGCCCRRTVRANGCVANGEVRNGYVRSSAAAAAAAAAGQIHHVTQNGGLYKRPFNEAFEETPMLVAVLTY
VGYGVLTLFGYLRDFLRYWRIEKCHHATEREEQKDFVSLYQDFENFYTRNLYMRIRDNWNRPICSVPGARVDIME
RQSHDYNWSFKYTGNIIKGVINMGSYNYLGFARNTGSCQEAAAKVLEEYGAGVCSTRQEIGNLDKHEELEELVAR
FLGVEAAMAYGMGFATNSMNIPALVGKGCLILSDELNHASLVLGARLSGATIRIFKHNNMQSLEKLLKDAIVYGQ
PRTRRPWKKILILVEGIYSMEGSIVRLPEVIALKKKYKAYLYLDEAHSIGALGPTGRGVVEYFGLDPEDVDVMMG
TFTKSFGASGGYIGGKKELIDYLRTHSHSAVYATSLSPPVVEQIITSMKCIMGQDGTSLGKECVQQLAENTRYFR
RRLKEMGFIIYGNEDSPVVPLMLYMPAKIGAFGREMLKRNIGVVVVGFPATPIIESRARFCLSAAHTKEILDTAL
KEIDEVGDLLQLKYSRHRLVPLLDRPFDETTYEETED

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FIGURE 6382

CCAGCGGCCGCCGACGCTAGGAGGCCGCGCTCCGCCCCCGCTACCATGAGGCCCCGGAAAGCCTTCCTGCTCCTG
CTGCTCTTGGGGCTGGTGCAGCTGCTGGCCGTGGCGGGTGCCGAGGGCCCGGACGAGGATTCTTCTAACAGAGAA
AATGCCATTGAGGATGAAGAGGAGGAGGAGGAGGAAGATGATGATGAGGAAGAAGACGACTTGGAAGTTAAGGAA
GAAAATGGAGTCTTGGTCCTAAATGATGCAAACTTTGATAATTTTGTGGCTGACAAAGACACAGTGCTGCTGGAG
TTTTATGCTCCATGGTGTGGACATTGCAAGCAGTTTGCTCCGGAATATGAAAAAATTGCCAACATATTAAAGGAT
AAAGATCCTCCCATTCCTGTTGCCAAGATCGATGCAACCTCAGCGTCTGTGCTGGCCAGCAGGTTTGATGTGAGT
GGCTACCCCACCATCAAGATCCTTAAGAAGGGGCAGGCTGTAGACTACGAGGGCTCCAGAACCCAGGAAGAAATT
GTTGCCAAGGTCAGAGAAGTCTCCCAGCCCGACTGGACGCCTCCACCAGAAGTCACGCTTGTGTTGACCAAAGAG
AACTTTGATGAAGTTGTGAATGATGCAGATATCATTCTGGTGGAGTTTTATGCCCCATGGTGTGGACACTGCAAG
AAACTTGCCCCCGAGTATGAGAAGGCCGCCAAGGAGCTCAGCAAGCGTTCTCCTCCAATTCCCCTGGCAAAGGTC
GACGCCACCGCAGAAACAGACCTGGCCAAGAGGTTTGATGTCTCTGGCTATCCCACCCTGAAAATTTTCCGCAAA
GGAAGGCCTTATGACTACAACGGCCCACGAGAAAAATATGGAATCGTTGATTACATGATCGAGCAGTCCGGGCCT
CCCTCCAAGGAGATTCTGACCCTGAAGCAGGTCCAGGAGTTCCTGAAGGATGGAGACGATGTCATCATCATCGGG
GTCTTTAAGGGGGAGAGTGACCCAGCCTACCAGCAATACCAGGATGCCGCTAACAACCTGAGAGAAGATTACAAA
TTTCACCACACTTTCAGCACAGAAATAGCAAAGTTCTTGAAAGTCTCCCAGGGGCAGTTGGTTGTAATGCAGCCT
GAGAAATTCCAGTCCAAGTATGAGCCCCGGAGCCACATGATGGACGTCCAGGGCTCCACCCAGGACTCGGCCATC
AAGGACTTCGTGCTGAAGTACGCCCTGCCCCTGGTTGGCCACCGCAAGGTGTCAAACGATGCTAAGCGCTACACC
AGGCGCCCCCTGGTGGTCGTCTACTACAGTGTGGACTTCAGCTTTGATTACAGAGCTGCAACTCAGTTTTGGCGG
AGCAAAGTCCTAGAGGTGGCCAAGGACTTCCCTGAGTACACCTTTGCCATTGCGGACGAAGAGGACTATGCTGGG
GAGGTGAAGGACCTGGGGCTCAGCGAGAGTGGGGAGGATGTCAATGCCGCCATCCTGGACGAGAGTGGGAAGAAG
TTCGCCATGGAGCCAGAGGAGTTTGACTCTGACACCCTCCGCGAGTTTGTCACTGCTTTCAAAAAAGGAAAACTG
AAGCCAGTCATCAAATCCCAGCCAGTGCCCAAGAACAACAAGGGACCCGTCAAGGTCGTGGTGGGAAAGACCTTT
GACTCCATTGTGATGGACCCCAAGAAGGACGTCCTCATCGAGTTCTACGCGCCATGGTGCGGGCACTGCAAGCAG
CTAGAGCCCGTGTACAACAGCCTGGCCAAGAAGTACAAGGGCCAAAAGGGCCTGGTCATCGCCAAGATGGACGCC
ACTGCCAACGACGTCCCCAGCGACCGCTATAAGGTGGAGGGCTTCCCCACCATCTACTTCGCCCCCAGTGGGGAC
AAAAAGAACCCAGTTAAATTTGAGGGTGGAGACAGAGATCTGGAGCATTTGAGCAAGTTTATAGAAGAACATGCC
ACAAAACTGAGCAGGACCAAGGAAGAGCTTTGAAGGCCTGAGGTCTGCGGAAGGTGGGAGGAGGCAGACGCCCTG
CGTGGCCCATGGTCGGGGCGTCCACCGGAGGCCGGCAACAAACGACAGTATCTCGGATTCCTTTTTTTTTTTTT
TAATTTTTTATACTTTGTTGTTTCACTTCATGCTCTGAATACTGAATAACCATGAATGACTGAATAGTTTAGTCC
AGATTTTTACAGAGGATACATCTATTTTTATCATTATTTGGGGTTTGAAAAATTTTTTTTTACACCTTCTAATTT
CTTTATTTCTCAAAGCAGATAATTCTTCTGTGTGAAAATGTTTTCTTTTTTTAATTTAAGGTTTAAAATTCCTTT
TCCAAATCATGTTGATTTTGCTCTTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAGAAGGGCTGGGA
CCAACCGGGTGAGATCCACAAGTCTCTGGATGTGGCTGAAGGCAAATACACAATTGAAGTACTTTCTGTTTTGAA
GTGCTTTCCCTTTTGAATCTGGTTTGAAACATGCAGCTTCTGTCTCTAGCCCAAGGAAAGACCAAAACATAGGGA
AATAAAAGCATTTATCTTTGTCTTGGAAGTAATTGTTGAAGTTGTGCAGTTGATCAGTGCACAGTTAGCTGCAAT
GTTTATAGAAATTGATTGTTAAACCAAATTTACACTGGCATGTGTGGTGTAGTTTCTAAAAGGCACTTCACATTT
GAAATTTTTCTTACCTTAGAAAGTTTCTAGTGATCTAAATGTCTAGTTTTGTATTCTTTTGTGTGTGTTCACTGT
TTCTCAGTATTACCACTTGAATAATTCTCTGTACAGGGGGGTTTGTGCTATACACTGGGATGTCTAATTGCAGCA
ATAAAGCCTTTCTTT

FIGURE 6383

MRPRKAFLLLLLLGLVQLLAVAGAEGPDEDSSNRENAIEDEEEEEEEDDDEEEDDLEVKEENGVLVLNDANFDNF
VADKDTVLLEFYAPWCGHCKQFAPEYEKIANILKDKDPPIPVAKIDATSASVLASRFDVSGYPTIKILKKGQAVD
YEGSRTQEEIVAKVREVSQPDWTPPPEVTLVLTKENFDEVVNDADIILVEFYAPWCGHCKKLAPEYEKAAKELSK
RSPPIPLAKVDATAETDLAKRFDVSGYPTLKIFRKGRPYDYNGPREKYGIVDYMIEQSGPPSKEILTLKQVQEFL
KDGDDVIIIGVFKGESDPAYQQYQDAANNLREDYKFHHTFSTEIAKFLKVSQGQLVVMQPEKFQSKYEPRSHMMD
VQGSTQDSAIKDFVLKYALPLVGHRKVSNDAKRYTRRPLVVVYYSVDFSFDYRAATQFWRSKVLEVAKDFPEYTF
AIADEEDYAGEVKDLGLSESGEDVNAAILDESGKKFAMEPEEFDSDTLREFVTAFKKGKLKPVIKSQPVPKNNKG
PVKVVVGKTFDSIVMDPKKDVLIEFYAPWCGHCKQLEPVYNSLAKKYKGQKGLVIAKMDATANDVPSDRYKVEGF
PTIYFAPSGDKKNPVKFEGGDRDLEHLSKFIEEHATKLSRTKEEL

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FIGURE 6384

CCGGGGATCCACGCGCGCCGCCACCCCTGCCCGCCCGACAGCGCCGCCGCCTGCCCCGCCATGGTCGACAGAAG
GAGCTGGTGTCCCGCTGCGGGGAGATGCTCCACATCCGCTACCGGTTGCTCCGACAGGCGCTGGCCGAGTGCCTG
GGGACCCTCATCCTCGTGATGTTTGGCTGTGGCTCCGTGGCCCAGGTTGTGCTCAGCCGGGGCACCCACGGTGGT
TTCCTCACCATCAACCTGGCCTTTGGCTTTGCTGTCACTCTGGGCATCCTCATCGCTGGCCAGGTCTCTGGGGCC
CACCTGAACCCTGCCGTGACCTTTGCCATGTGCTTCCTGGCTCGTGAGCCCTGGATCAAGCTGCCCATCTACACC
CTGGCACAGACGCTGGGAGCCTTCTTGGGTGCTGGAATAGTTTTTGGGCTGTATTATGATGCAATCTGGCACTTT
GCCGACAACCAGCTTTTTGTTTCGGGCCCCAATGGCACAGCCGGCATCTTTGCTACCTACCCCTCTGGACACTTG
GATATGATCAATGGCTTCTTTGACCAGTTCATAGGCACAGCCTCCCTTATCGTGTGTGTGCTGGCCATTGTTGAC
CCTTACAACAACCCCGTCCCCCGAGGCCTGGAGGCCTTCACCGTGGGCCTGGTGGTCCTGGTCATTGGCACCTCC
ATGGGCTTCAACTCCGGCTATGCCGTCAACCCTGCCCGGGACTTTGGCCCCCGCCTTTTTACAGCCCTTGCGGGC
TGGGGCTCTGCAGTCTTCACGACCGGCCAGCATTGGTGGTGGGTGCCCATCGTGTCCCCACTCCTGGGCTCCATT
GCGGGTGTCTTCGTGTACCAGCTGATGATCGGCTGCCACCTGGAGCAGCCCCCACCCTCCAACGAGGAAGAGAAT
GTGAAGCTGGCCCATGTGAAGCACAAGGAGCAGATCTGAGTGGCAAGGGCCATCTCCCACTCCGCTGCCCTGGCC
TTGAGCATCCACTGACTGTCCAAGGCCACTCCCAAGAAGCCCCCCTTCACGATCCACCCTTTCAGGCTAAGGAGC
TCCCTATCTACCCTCACCCCACGAAGACAGCCCCTTCAGGATTTCCACTGGACCTTGCCCAAATAGCACCTTAGG
CCACTGCCCCTAAGCTGGGGTGGAACCGGAATTTGGGTCAATACATCCTTTTGTCTCCCAAGGGAAGAGAATGGG
CAGCAGGTATGTGTGTGTGTGTGCATGTGTGCATGTGTGTGCATGTGTGTGCAGGGGTGTGTGTGTGGGGGGGGT
TCCCAGATATTCAGGGCAAGACCAGTCGGAAGGATCTGCTATTGGGGACCCAGAGACAGGGAGGCAGCCTGTCCA
TCTGTGCATAAGGAGAGGAAAGTTCCAGGGTGTGTATGTTTTCAGGGGCCTTCACATGGAGGAGCTGCAGATAGA
TATGTGTTTCTCCGGAA

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FIGURE 6385

MGRQKELVSRCGEMLHIRYRLLRQALAECLGTLILVMFGCGSVAQVVLSRGTHGGFLTINLAFGFAVTLGILIAG
QVSGAHLNPAVTFAMCFLAREPWIKLPIYTLAQTLGAFLGAGIVFGLYYDAIWHFADNQLFVSGPNGTAGIFATY
PSGHLDMINGFFDQFIGTASLIVCVLAIVDPYNNPVPRGLEAFTVGLVVLVIGTSMGFNSGYAVNPARDFGPRLF
TALAGWGSAVFTTGQHWWWVPIVSPLLGSIAGVFVYQLMIGCHLEQPPPSNEEENVKLAHVKHKEQI

FIGURE 6386A

ACTTGTAGGAAAGCCTCTTTGCATTTAGACGTAATTGAACTGGAAGGAAGGAGACTGGCCAGGGAATAGGGGGAA
AGAAATTCTCCCGTTGCTCCTCCTACTGTTTATCACTTGCCTCCGGACTGTCTTCCAAACCAAGCTCAGCTGCAT
CAAGGTGGCAGCAGAATACCCTGTGCAAGTGCCAGCGTCTTCTTAGCCGCTCTGTGCATCCCAGGCTGCCCTGTT
ATCTGGCCACCGTCCCTGGCCATTGGGACTGCTTCTG**ATG**GCTCTGGCCTCTGCTGCCCCAGGGAGCATCTTCTG
TAAGCAGCTCCTTTTCTCTCTCCTGGTTTTAACATTACTTTGCGATGCTTGTCAGAAAGTTTATCTTCGAGTTCC
TTCTCATCTTCAGGCTGAAACACTTGTAGGCAAAGTGAATCTGGAGGAGTGTCTCAAGTCGGCCAGCCTAATCCG
GTCCAGTGACCCTGCCTTCAGAATTCTAGAAGATGGCTCAATTTACACAACACATGACCTCATTTTGTCTTCTGA
AAGGAAAAGTTTTTCCATTTTCCTTTCAGATGGTCAGAGACGGGAACAACAAGAGATAAAAGTTGTACTGTCAGC
AAGAGAAAACAAGTCTCCTAAGAAGAGACATACCAAAGACACAGCCCTCAAGCGCAGCAAGAGACGATGGGCTCC
TATTCCAGCTTCATTGATGGAGAACTCGTTGGGTCCATTTCCACAACACGTTCAGCAGATCCAATCTGATGCTGC
ACAGAATTACACCATCTTTTATTCCATAAGTGGGCCAGGCGTGGACAAAGAACCCTTCAATTTGTTTTACATAGA
GAAAGACACTGGGGATATCTTTTGTACAAGGAGCATTGACCGTGAGAAATACGAACAGTTTGCGTTATATGGCTA
TGCAACAACTGCAGATGGCTATGCACCAGAATATCCACTCCCTTTGATCATCAAAATTGAAGATGATAATGATAA
CGCCCCATATTTTGAACACAGAGTGACTATCTTTACTGTGCCTGAAAATTGCCGATCCGGAACTTCAGTGGGAAA
AGTGACCGCCACAGACCTTGACGAACCTGACACTCTCCATACTCGTCTGAAATATAAAATCTTACAACAAATCCC
AGATCATCCAAAGCATTTCTCCATACACCCAGATACCGGTGTCATCACCACAACTACACCTTTTCTGGATAGAGA
AAAATGTGATACTTACCAGTTAATAATGGAAGTGCGAGACATGGGTGGTCAGCCTTTCGGTTTATTTAATACAGG
AACAATTACTATTTCACTTGAGGATGAAAATGACAATCCACCATCTTTCACAGAAACTTCTTATGTTACAGAAGT
AGAAGAAAACAGAATTGACGTGGAGATTTTGCGAATGAAGGTACAGGATCAGGATTTGCCAAACACTCCTCACTC
AAAGGCTGTATACAAAATCTTACAAGGAAATGAAAATGGAAACTTCATAATTAGCACAGATCCAAATACAAATGA
AGGAGTGCTGTGTGTTGTCAAGCCATTGAACTATGAAGTCAATCGCCAAGTTATTTTGCAAGTTGGTGTCATTAA
CGAGGCACAATTCTCTAAAGCAGCGAGCTCACAAACTCCTACAATGTGCACTACAACTGTCACCGTTAAAATTAT
AGACAGTGATGAGGGCCCTGAATGCCACCCTCCAGTGAAAGTTATTCAGAGTCAAGATGGCTTCCCAGCTGGCCA
AGAACTCCTTGGATACAAAGCACTGGACCCGGAAATATCCAGTGGTGAAGGCTTAAGGTATCAGAAGTTAGGGGA
TGAAGATAACTGGTTTGAAATTAATCAACACACTGGCGACTTGAGAACTCTAAAAGTACTAGATAGAGAATCCAA
ATTTGTAAAAAACAACCAATACAATATTTCAGTTGTTGCAGTGGATGCAGTTGGCCGATCTTGCACTGGAACATT
AGTAGTTCATTTGGATGATTACAACGATCACGCACCTCAAATTGACAAAGAAGTGACCATTTGTCAGAATAATGA
GGATTTTGCTGTTCTGAAACCTGTAGATCCAGATGGACCTGAAAATGGACCACCTTTTCAATTCTTTCTGGATAA
TTCTGCCAGTAAAAACTGGAACATAGAAGAAAAGGATGGTAAAACTGCCATTCTTCGTCAACGGCAAAATCTTGA
TTATAACTATTATTCTGTGCCTATTCAAATAAAAGACAGGCATGGTTTAGTTGCAACACATATGTTAACAGTGAG
AGTATGTGACTGTTCAACTCCATCTGAGTGTAGAATGAAGGATAAAAGTACAAGAGACGTTAGACCAAATGTAAT
ACTTGGAAGATGGGCTATTCTTGCTATGGTGTTGGGTTCTGTATTGTTATTATGTATTCTGTTTACATGTTTCTG
TGTCACTGCTAAGAGAACAGTCAAGAAATGTTTTCCAGAAGACATAGCCCAGCAAAATTTAATTGTATCAAATAC
TGAAGGACCTGGAGAAGAAGTAACGGAAGCAAATATTAGACTCCCCATGCAGACATCCAACATTTGTGACACAAG
CATGTCTGTTGGTACTGTTGGTGGCCAGGGAATCAAAACACAGCAAAGTTTTGAGATGGTCAAAGGAGGCTACAC
TTTGGATTCCAACAAAGGAGGTGGACATCAGACCTTGGAGTCCGTCAAGGGAGTGGGGCAGGGAGATACTGGCAG
ATATGCGTACACGGACTGGCAGAGTTTCACCCAACCTCGGCTTGGCGAAAAGGTGTATTTGTGTGGACAAGATGA
GGAGCATAAACATTGTGAAGACTACGTTTGTTCGTATAACTATGAAGGCAAAGGTTCTCTGGCCGGCTCAGTAGG
TTGCTGCAGCGATCGGCAGGAAGAAGAGGGACTGGAGTTTCTAGATCACCTGGAACCCAAATTTAGGACATTAGC
AAAGACATGCATCAAGAAATAAATGTGCCTTTTAATAGTGTAATATCCACAGATGCATAAGTAGGAATTTATTAC
TTGCAGAATGTTAGCAGCATCTGCTAATGTTTTTGTTTATGGAGGTAAACTTTGTCATGTATAGGTAAGGGTACT
ATAAATATGAGATTCCCCTACATTCTCCTTGTCTGGTATAACTTCCATGTTCTCTAGAAATCAAGGTTTTGTTTG
TTAATTCTCTTTTATATGCATGTATATATTGCCCTTTTCACGACTGTACTGTACACCTTCTTGCACCTTTTATTT
GCAAACTGATGTTACTTTTTGTGCTGTGGAAGAGCATTTGGGAAAGCTGGGTATTATAGAGGCCAATGAAAGATG
AATTTGCATTGTAGATGTACGAATTAAATATGTTCTTCAAAATCTTGGGGAGAATTATGTTCTTAGAACATAGTT
GGTGCCAGATAATTGCATTCTCTCCACCTGAGTGGTTTAAAAAGGACTTTTAAGTATTCTTCAGTGCAATCTTCA
GTTTTGTGATTAAGTTCATTTCTCTTTTACACTTTTGTACTCCTCAGAGCAGTGCTCCCAGCATTGTTTTCTTTC
AGGATCCTTCAGAGCTCAGTCCCTGGACCTCTGCCCATGTGGATTTGTTGTTAGGTCACTCCAACTTCTAAGGTT

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FIGURE 6386B

CTTGGAAAGATAAGGACCAGAACAAGCTCATAGCAAATTGAGGGGCAGAGATTTTATGAAGATTACATGAGAAGA
TTTCCATGAAAGAATTGCAGCCCTGAGGTCCATGGGTTGACTTATGCTCACAAATATGTTTCGTTTGCTCAACAT
GGTTTACTACTAACATTTTAAAAATATAAATACTTTAGCAAAAACATTCACTCTTGAGTTTGACATAGGCCTGCC
TTATCTGTGGTTGCCACCTGCCATCTCCAAGCATTTGGACAACTAGCCCTGATGCATTAGGCTGCAACTCTGATA
TACAGAGACTAGCACCTTGAATATGCCAGAAATTGAATTACCATCTGTATTAGAACTTAAGACTCAGCCTAAATT
TACAGTTACTTTAAGAAAATGGGCAGTCAGAATTAGGGACTAGAATGTATATGAGAAACCCCCACTCTACTAAAA
ATATAAGAAATTAGCCGGACATGGTGGCGAATGACTGTAATCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATCG
CTTGAATCCAGGAGGCGGAGGTTGCAGTGAGCCGAGATTGCCACTGCACTCCAGCCTGGGCAACAAGAGCGAAAC
TCCGTCTCAAAAAAAAAAAAAAAAA

FIGURE 6387

MALASAAPGSIFCKQLLFSLLVLTLLCDACQKVYLRVPSHLQAETLVGKVNLEECLKSASLIRSSDPAFRILEDG
SIYTTHDLILSSERKSFSIFLSDGQRREQQEIKVVLSARENKSPKKRHTKDTALKRSKRRWAPIPASLMENSLGP
FPQHVQQIQSDAAQNYTIFYSISGPGVDKEPFNLFYIEKDTGDIFCTRSIDREKYEQFALYGYATTADGYAPEYP
LPLIIKIEDDNDNAPYFEHRVTIFTVPENCRSGTSVGKVTATDLDEPDTLHTRLKYKILQQIPDHPKHFSIHPDT
GVITTTTPFLDREKCDTYQLIMEVRDMGGQPFGLFNTGTITISLEDENDNPPSFTETSYVTEVEENRIDVEILRM
KVQDQDLPNTPHSKAVYKILQGNENGNFIISTDPNTNEGVLCVVKPLNYEVNRQVILQVGVINEAQFSKAASSQT
PTMCTTTVTVKIIDSDEGPECHPPVKVIQSQDGFPAGQELLGYKALDPEISSGEGLRYQKLGDEDNWFEINQHTG
DLRTLKVLDRESKFVKNNQYNISVVAVDAVGRSCTGTLVVHLDDYNDHAPQIDKEVTICQNNEDFAVLKPVDPDG
PENGPPFQFFLDNSASKNWNIEEKDGKTAILRQRQNLDYNYYSVPIQIKDRHGLVATHMLTVRVCDCSTPSECRM
KDKSTRDVRPNVILGRWAILAMVLGSVLLLCILFTCFCVTAKRTVKKCFPEDIAQQNLIVSNTEGPGEEVTEANI
RLPMQTSNICDTSMSVGTVGGQGIKTQQSFEMVKGGYTLDSNKGGGHQTLESVKGVGQGDTGRYAYTDWQSFTQP
RLGEESIRGHTLIKN

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FIGURE 6388

GGGCTGCGCTGTCCAGCTGTGGCTATGGCCCCAGCCCCGAGATGAGGAGGGAGAGAACTAGGGGCCCGCAGGCCT
GGGAATTTCCGTCCCCCACCAAGTCCGGATGCTCACTCCAAAGTCTCAGCAGGCCCCTGAGGGAGGGAGCTGTCA
GCCAGGGAAAACCGAGAACACCATCACCATGACAACCAGTCACCAGCCTCAGGACAGATACAAAGCTGTCTGGCT
TATCTTCTTCATGCTGGGTCTGGGAACGCTGCTCCCGTGGAATTTTTTCATGACGGCCACTCAGTATTTCACAAA
CCGCCTGGACATGTCCCAGAATGTGTCCTTGGTCACTGCTGAACTGAGCAAGGACGCCCAGGCGTCAGCCGCCCC
TGCAGCACCCTTGCCTGAGCGGAACTCTCTCAGTGCCATCTTCAACAATGTCATGACCCTATGTGCCATGCTGCC
CCTGCTGTTATTCACCTACCTCAACTCCTTCCTGCATCAGAGGATCCCCCAGTCCGTACGGATCCTGGGCAGCCT
GGTGGCCATCCTGCTGGTGTTTCTGATCACTGCCATCCTGGTGAAGGTGCAGCTGGATGCTCTGCCCTTCTTTGT
CATCACCATGATCAAGATCGTGCTCATTAATTCATTTGGTGCCATCCTGCAGGGCAGCCTGTTTGGTCTGGCTGG
CCTTCTGCCTGCCAGCTACACGGCCCCCATCATGAGTGGCCAGGGCCTAGCAGGCTTCTTTGCCTCCGTGGCCAT
GATCTGCGCTATTGCCAGTGGCTCGGAACTATCAGAAAGTGCCTTCGGCTACTTTATCACAGCCTGTGCTGTTAT
CATTTTGACCATCATCTGTTACCTGGGCCTGCCCCGCCTGGAATTCTACCGCTACTACCAGCAGCTCAAGCTTGA
AGGACCCGGGGAGCAGGAGACCAAGTTGGACCTCATTAGCAAAGGAGAGGAGCCAAGAGCAGGCAAAGAGGAATC
TGGAGTTTCAGTCTCCAACTCTCAGCCCACCAATGAAAGCCACTCTATCAAAGCCATCCTGAAAAATATCTCAGT
CCTGGCTTTCTCTGTCTGCTTCATCTTCACTATCACCATTGGGATGTTTCCAGCCGTGACTGTTGAGGTCAAGTC
CAGCATCGCAGGCAGCAGCACCTGGGAACGTTACTTCATTCCTGTGTCCTGTTTCTTGACTTTCAATATCTTTGA
CTGGTTGGGCCGGAGCCTCACAGCTGTATTCATGTGGCCTGGGAAGGACAGCCGCTGGCTGCCAAGCCTGGTGCT
GGCCCGGCTGGTGTTTGTGCCACTGCTGCTGCTGTGCAACATTAAGCCCCGCCGCTACCTGACTGTGGTCTTCGA
GCACGATGCCTGGTTCATCTTCTTCATGGCTGCCTTTGCCTTCTCCAACGGCTACCTCGCCAGCCTCTGCATGTG
CTTCGGGCCCAAGAAAGTGAAGCCAGCTGAGGCAGAGACCGCAGGAGCCATCATGGCCTTCTTCCTGTGTCTGGG
TCTGGCACTGGGGGCTGTTTTCTCCTTCCTGTTCCGGGCAATTGTGTGACAAAGGATGGACAGAAGGACTGCCTG
CCTCCCTCCCTGTCTGCCTCCTGCCCCTTCCTTCTGCCAGGGGTGATCCTGAGTGGTCTGGCGGTTTTTTCTTCT
AACTGACTTCTGCTTTCCACGGCGTGTGCTGGGCCCGGATCTCCAGGCCCTGGGGAGGGAGCCTCTGGACGGACA
GTGGGGACATTGTGGGTTTGGGGCTCAGAGTCGAGGGACGGGGTGTAGCCTCGGCATTTGCTTGAGTTTCTCCAC
TCTTGGCTCTGACTGATCCCTGCTTGTGCAGGCCAGTGGAGGCTCTTGGGCTTGGAGAACACGTGTGTCTCTGTG
TATGTGTCTGTGTGTCTGCGTCCGTGTCTGTCAGACTGTCTGCCTGTCCTGGGGTGGCTAGGAGCTGGGTCTGAC
CGTTGTATGGTTTGACCTGATATACTCCATTCTCCCCTGCGCCTCCTCCTCTGTGTTTTTTCCATGTCCCCCTCC
CAACTCCCCATGCCCAGTTTTTACCCATCATGCACCCTGTACAGTTGCCACGTTACTGCCTTTTTTAAAAATATA
TTTGACAGAAACCAGGTGCCTTCAGAGGCTCTCTGATTTAAATAAACCTTTCTTGTTTTTTT

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FIGURE 6389

MTTSHQPQDRYKAVWLIFFMLGLGTLLPWNFFMTATQYFTNRLDMSQNVSLVTAELSKDAQASAAPAAPLPERNS
LSAIFNNVMTLCAMLPLLLFTYLNSFLHQRIPQSVRILGSLVAILLVFLITAILVKVQLDALPFFVITMIKIVLI
NSFGAILQGSLFGLAGLLPASYTAPIMSGQGLAGFFASVAMICAIASGSELSESAFGYFITACAVIILTIICYLG
LPRLEFYRYYQQLKLEGPGEQETKLDLISKGEEPRAGKEESGVSVSNSQPTNESHSIKAILKNISVLAFSVCFIF
TITIGMFPAVTVEVKSSIAGSSTWERYFIPVSCFLTFNIFDWLGRSLTAVFMWPGKDSRWLPSLVLARLVFVPLL
LLCNIKPRRYLTVVFEHDAWFIFFMAAFAFSNGYLASLCMCFGPKKVKPAEAETAGAIMAFFLCLGLALGAVFSF
LFRAIV

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FIGURE 6390

CGGAGGAGCGGAGCGGTGCGGAGGCTCTGCTCGGATCGAGGTCTGCAGCGCACGTTCGGGAGC**ATG**AGTGCTGCA
GTGACTGCAGGGAAGCTGGCACGGGCACCGGCCGACCCTGGGAAAGCCGGGGTCCCCGGAGTTGCAGCTCCCGGA
GCTCCGGCGGCGGCTCCACCGGCGAAAGAGATCCCGGAGGTCCTAGTGGACCCACGCAGCCGGCGGCGCTATGTG
CGGGGCCGCTTTTTGGGCAAGGGCGGCTTTGCCAAGTGCTTCGAGATCTCGGACGTCGACACCAAGGAGGTGTTC
GCGGGCAAGATTGTGCCTAAGTCTCTGCTGCTCAAGCCGCACCAGAGGGAGAAGATGTCCATGGAAATATCCATT
CACCGCAGCCTCGCCCACCAGCACGTCGTAGGATTCCACGGCTTTTTCGAGGACAACGACTTCGTGTTCGTGGTG
TTGGAGCTCTGCCGCCGGAGGTCTCTCCTGGAGCTGCACAAGAGGAGGAAAGCCCTGACTGAGCCTGAGGCCCGA
TACTACCTACGGCAAATTGTGCTTGGCTGCCAGTACCTGCACCGAAACCGAGTTATTCATCGAGACCTCAAGCTG
GGCAACCTTTTCCTGAATGAAGATCTGGAGGTCAAAATAGGGGATTTTGGACTGGCAACCAAAGTCGAATATGAC
GGGGAGAGGAAGAAGACCCTGTGTGGGACTCCTAATTACATAGCTCCCGAGGTGCTGAGCAAGAAAGGGCACAGT
TTCGAGGTGGATGTGTGGTCCATTGGGTGTATCATGTATACCTTGTTAGTGGGCAAACCACCTTTTGAGACTTCT
TGCCTAAAAGAGACCTACCTCCGGATCAAGAAGAATGAATACAGTATTCCCAAGCACATCAACCCCGTGGCCGCC
TCCCTCATCCAGAAGATGCTTCAGACAGATCCCACTGCCCGCCCAACCATTAACGAGCTGCTTGGTGACGAGTTC
TTTACTTCTGGCTATATCCCTGCCCGTCTCCCCATCACCTGCCTGACCATTCCACCAAGGTTTTCGATTGCTCCC
AGCAGCCTGGACCCCAGCAACCGGAAGCCCCTCACAGTCCTCAATAAAGGCTTGGAGAACCCCCTGCCTGAGCGT
CCCCGGGAAAAAGAAGAACCAGTGGTTCGAGAGACAGGTGAGGTGGTCGACTGCCACCTCAGTGACATGCTGCAG
CAGCTGCACAGTGTCAATGCCTCCAAGCCCTCGGAGCGTGGGCTGGTCAGGCAAGAGGAGGCTGAGGATCCTGCC
TGCATCCCCATCTTCTGGGTCAGCAAGTGGGTGGACTATTCGGACAAGTACGGCCTTGGGTATCAGCTCTGTGAT
AACAGCGTGGGGGTGCTCTTCAATGACTCAACACGCCTCATCCTCTACAATGATGGTGACAGCCTGCAGTACATA
GAGCGTGACGGCACTGAGTCCTACCTCACCGTGAGTTCCCATCCCAACTCCTTGATGAAGAAGATCACCCTCCTT
AAATATTTCCGCAATTACATGAGCGAGCACTTGCTGAAGGCAGGTGGCAACATCACGCCGCGGCAAGGTGATGAG
CTCGCCCGGCTGCCCTACCTACGGACCTGGTTCCGCACCCGCAGCGCCATCATCCTGCACCTCAGCAACGGCAGC
GTGCAGATCAACTTCTTCCAGGATCACACCAAGCTCATCTTGTGCCCACTGATGGCAGCCGTGACCTACATCGAC
GAGAAGCGGGACTTCCGCACATACCGCCTGAGTCTCCTGGAGGAGTACGGCTGCTGCAAGGAGCTGGCCAGCCGG
CTCCGTTACGCCCGCACTATGGTGGACAAGCTGCTGAGCTCACGCTCGGCCAGCAACCGTCTCAAGGCCTCC**TAA**

TAGCTGCCCTCCCCTCCGGACTGGTGCCCTCCTCACTCCCACCTGCATCTGGGGCCCATACTGGTTGGCTCCCGC
GGTGCCATGTCTGCAGTGTGCCCCCCAGCCCCGGTGGCTGGGCAGAGCTGCATCATCCTTGCAGGTGGGGGTTGC
TGTGTAAGTTATTTTTGTACATGTTCGGGTGTGGGTTCTACAGCCTTGTCCCCCTCCCCCTCAACCCCACCATAT
GAATTGTACAGAATATTTCTATTGAATTC

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FIGURE 6391

MSAAVTAGKLARAPADPGKAGVPGVAAPGAPAAAPPAKEIPEVLVDPRSRRRYVRGRFLGKGGFAKCFEISDVDT
KEVFAGKIVPKSLLLKPHQREKMSMEISIHRSLAHQHVVGFHGFFEDNDFVFVVLELCRRRSLLELHKRRKALTE
PEARYYLRQIVLGCQYLHRNRVIHRDLKLGNLFLNEDLEVKIGDFGLATKVEYDGERKKTLCGTPNYIAPEVLSK
KGHSFEVDVWSIGCIMYTLLVGKPPFETSCLKETYLRIKKNEYSIPKHINPVAASLIQKMLQTDPTARPTINELL
GDEFFTSGYIPARLPITCLTIPPRFSIAPSSLDPSNRKPLTVLNKGLENPLPERPREKEEPVVRETGEVVDCHLS
DMLQQLHSVNASKPSERGLVRQEEAEDPACIPIFWVSKWVDYSDKYGLGYQLCDNSVGVLFNDSTRLILYNDGDS
LQYIERDGTESYLTVSSHPNSLMKKITLLKYFRNYMSEHLLKAGGNITPRQGDELARLPYLRTWFRTRSAIILHL
SNGSVQINFFQDHTKLILCPLMAAVTYIDEKRDFRTYRLSLLEEYGCCKELASRLRYARTMVDKLLSSRSASNRL
KAS

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FIGURE 6392

CCGTCCCCGGCGGCCCCATGCCCCGATGCCCCGCGGGGGCC**ATG**GACGAGGGGCCCGTGGACCTGCGCACCCGGC
CCAAGGCCGCCGGACTCCCGGGCGCCGCGCTGCCGCTCCGCAAGCGCCCGCTGCGCGCGCCCTCCCCGGAGCCCG
CCGCTCCCCGCGGCGCTGCGGGCCTTGTCGTCCCCCTGGACCCTCTGCGCGGCGGCTGCGACCTGCCGGCGGTCC
CCGGGCCCCCCCACGGCCTGGCCCGGCCGGAGGCGCTTTACTACCCCGGAGCCTTACTGCCTTTGTACCCCACTC
GGGCCATGGGCTCCCCGTTTCCTCTGGTGAACCTGCCTACACCCCTATACCCCATGATGTGCCCCATGGAACACC
CCCTTTCTGCTGACATCGCCATGGCCACCCGTGCAGATGAGGACGGAGACACGCCTCTCCATATTGCTGTGGTGC
AGGGTAACCTGCCAGCTGTGCACCGGCTGGTCAACCTCTTCCAGCAGGGGGGCCGGGAGCTCGACATCTACAACA
ACCTACGGCAGACACCGCTCCACCTGGCTGTGATCACCACATTACCGTCTGTGGTCCGGCTCCTGGTGACAGCTG
GTGCCAGCCCCATGGCGCTGGACCGCCATGGCCAGACGGCCGCTCACCTGGCGTGCGAGCACCGCAGCCCGACCT
GCCTGCGAGCCCTGCTGGACAGCGCAGCTCCGGGCACGTTGGACCTGGAGGCCCGCAATTATGACGGGCTCACCG
CCCTGCACGTGGCAGTGAACACCGAGTGCCAAGAAACCGTGCAGCTCTTGCTAGAGCGCGGTGCCGACATCGACG
CAGTGGACATTAAGAGCGGCCGCTCCCCGCTCATCCACGCCGTGGAAAACAACAGCCTTAGCATGGTGCAGCTGC
TGCTGCAGCACGGCGCCAACGTGAACGCGCAAATGTACTCCGGCAGCTCCGCCCTGCACTCAGCGTCCGGCCGCG
GGCTCCTCCCGCTGGTGCGCACGCTGGTCCGCAGCGGCGCTGACAGCAGCCTCAAGAACTGCCACAACGACACGC
CGCTCATGGTGGCGCGCAGCCGCAGGGTCATCGACATCCTGAGGGGGAAGGCCACCCGGCCTGCTTCCACCTCCC
AGCCAGACCCCTCCCCTGACCGGAGCGCCAACACCTCCCCCGAGAGCAGCAGCCGCCTCAGCTCCAATGGTCTTC
TCTCCGCATCACCATCCTCCTCACCCTCCCAGTCTCCCCCCAGGGACCCCCCTGGATTCCCCATGGCTCCTCCCA
ATTTCTTCCTTCCTTCCCCATCTCCACCCGCCTTCCTGCCCTTTGCTGGGGTCCTCCGAGGCCCTGGCCGGCCGG
TGCCCCCCTCCCCAGCTCCAGGAGGCAGC**TGA**GGGGGATGGGGGGGCAGATCTTGGACTCATGAGGAGGGGCCCC
CCTGCCCAGAGGGGTCAACCCTTCTGGAAACTGTGAAGATCTGACTTCGCCCCCCCCCCCCCCCATCTTCGGGAC
CAGGATTTGCACAGAAGCACATGCACCTACCCATACACCCCCTCTTCTGAGCACAGATGTTCCCCCATCTCGCTC
CCTCCCAGGACTCTGACCCCAGCATTCTCAGGCACCAGTCCCTGTCCGGAATGCCACCCACATCTTCCATTTCCA
TGTCCCCTCCCAGAGCTGGTGGACCCAGGGAACAGCCACTCCCCTCCACTCTCTACCAGATAACTGAGGAGGGGA
GAGGTGGGCCGTAACGGGCACGGATCACGATGTAAATTATTAAGCATTTTGGTTGGATTTCTTTTGTAATAAACT
ATTTTTGTACCAT

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FIGURE 6393

MDEGPVDLRTRPKAAGLPGAALPLRKRPLRAPSPEPAAPRGAAGLVVPLDPLRGGCDLPAVPGPPHGLARPEALY
YPGALLPLYPTRAMGSPFPLVNLPTPLYPMMCPMEHPLSADIAMATRADEDGDTPLHIAVVQGNLPAVHRLVNLF
QQGGRELDIYNNLRQTPLHLAVITTLPSVVRLLVTAGASPMALDRHGQTAAHLACEHRSPTCLRALLDSAAPGTL
DLEARNYDGLTALHVAVNTECQETVQLLLERGADIDAVDIKSGRSPLIHAVENNSLSMVQLLLQHGANVNAQMYS
GSSALHSASGRGLLPLVRTLVRSGADSSLKNCHNDTPLMVARSRRVIDILRGKATRPASTSQPDPSPDRSANTSP
ESSSRLSSNGLLSASPSSSPSQSPPRDPPGFPMAPPNFFLPSPSPPAFLPFAGVLRGPGRPVPPSPAPGGS

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FIGURE 6394

ATGAAGCCGCCCAGTTCAATACAAACAAGTGAGTTTGACTCATCAGATGAAGAGCCTATTGAAGATGAACAGACT
CCAATTCATATATCATGGCTATCTTTGTCACGAGTGAATTGTTCTCAGTTTCTCGGTTTATGTGCTCTTCCAGGT
TGTAAATTTAAAGATGTTAGAAGAAATGTCCAAAAAGATACAGAAGAACTAAAGAGCTGTGGTATACAAGACATA
TTTGTTTTCTGCACCAGAGGGGAACTGTCAAAATATAGAGTCCCAAACCTTCTGGATCTCTACCAGCAATGTGGA
ATTATCACCCATCATCATCCAGTCGCAGATGGAGGGACTCCCGACATAGCCAGCTGCTGTGAAATAATGGAAGAG
CTTACAACCTGCCTTACCTTAATACACTGCTATGGAGGACTTGGGAGATCTTGTCTTGTAGCTGCTTGTCTCCTA
CTATACCTGTCTGACACAATATCACCAGAGCAAGCCATAGACAGCCTGCGAGACCTAAGAGGATCCGGGGCAATA
CAGACCATCAAGCAATACAGTTATCTTCATGAGTTTCGGGACATATTAGCTGCACATCTATCATCAAGAGATTCA
CAATCAAGATCTGTATCAAGATAAAGGAATTCAAATAGCATATATATGACCATG

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FIGURE 6395

MKPPSSIQTSEFDSSDEEPIEDEQTPIHISWLSLSRVNCSQFLGLCALPGCKFKDVRRNVQKDTEELKSCGIQDI
FVFCTRGELSKYRVPNLLDLYQQCGIITHHHPVADGGTPDIASCCEIMEELTTCLTLIHCYGGLGRSCLVAACLL
LYLSDTISPEQAIDSLRDLRGSGAIQTIKQYSYLHEFRDILAAHLSSRDSQSRSVSR

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FIGURE 6396

GGATCCCAGTGGCCCGGCGTGCTCGGCTCCCACAGGCCTGCAGCCAGCATCGCACCGAACCTTCGGGGGGCCGCG
GCTGGAGCGCTCGGCCGGCGTGGGAGCGCAAGGCCGCAGATGCAATCTTCTTACCGCGAAGAAGCCAGGGGAATA
GGTAGCCACATCTTGTTTGCAGATAAGAAAGGAAGCTAACGCAGTATCTGCAAAGCCAGGAGTCTGACTCAGTAC
TTTTCTCACTCATGCATACAAGCAGCTAAAAATGACACAGCTTATTTACCATGCCCCTGACACTGCACTGAGCAC
TTTATGAGCTTGAACTCTGTTAATCTCACGACCACCTCATGAGACTCTCCAGAAAGAGCAACAGTA**ATG**GAGTAC
ATGAGCACTGGAAGTGACAATAAAGAAGAGATTGATTTATTAATTAAACATTTAAATGTGTCTGATGTAATAGAC
ATTATGGAAAATCTTTATGCAAGTGAAGAGCCAGCAGTTTATGAACCCAGTCTAATGACCATGTGTCAAGACAGT
AATCAAAACGATGAGCGTTCTAAGTCTCTGCTGCTTAGTGGCCAAGAGGTACCATGGTTGTCATCAGTCAGATAT
GGAACTGTGGAGGATTTGCTTGCTTTTGCAAACCATATATCCAACACTGCAAAGCATTTTTATGGACAACGACCA
CAGGAATCTGGAATTTTATTAAACATGGTCATCACTCCCCAAAATGGACGTTACCAAATAGATTCCGATGTTCTC
CTGATCCCCTGGAAGCTGACTTACAGGAATATTGGTTCTGATTTTATTCCTCGGGGCGCCTTTGGAAAGGTATAC
TTGGCTCAAGATATAAAGACGAAGAAAAGAATGGCGTGTAAACTGATCCCAGTAGATCAATTTAAGCCATCTGAT
GTGGAAATTCAGGCTTGCTTCCGGCACGAGAACATCGCAGAGCTGTATGGCGCAGTCCTGTGGGGTGAAACTGTC
CATCTCTTTATGGAAGCAGGCGAGGGAGGGTCTGTTCTGGAGAAACTGGAGAGCTGTGGACCAATGAGAGAATTT
GAAATTATTTGGGTGACAAAGCATGTTCTCAAGGGACTTGATTTTCTACACTCAAAGAAAGTGATCCATCATGAT
ATTAAACCTAGCAACATTGTTTTCATGTCCACAAAAGCTGTTTTGGTGGATTTTGGCCTAAGTGTTCAAATGACC
GAAGATGTCTATTTTCCTAAGGACCTCCGAGGAACAGAGATTTACATGAGCCCAGAGGTCATCCTGTGCAGGGGC
CATTCAACCAAAGCAGACATCTACAGCCTGGGGGCCACGCTCATCCACATGCAGACGGGCACCCCACCCTGGGTG
AAGCGCTACCCTCGCTCAGCCTATCCCTCCTACCTGTACATAATCCACAAGCAAGCACCTCCACTGGAAGACATT
GCAGATGACTGCAGTCCAGGGATGAGAGAGCTGATAGAAGCTTCCCTGGAGAGAAACCCCAATCACCGCCCAAGA
GCCGCAGACCTACTAAAACATGAGGCCCTGAACCCGCCCAGAGAGGATCAGCCACGCTGTACGAGTCTGGACTCT
GCCCTCTTGGAGCGCAAGAGGCTGCTGAGTAGGAAGGAGCTGGAACTTCCTGAGAACATTGCTGATTCTTCGTGC
ACAGGAAGCACCGAGGAATCTGAGATGCTCAAGAGGCAACGCTCTCTCTACATCGACCTCGGCGCTCTGGCTGGC
TACTTCAATCTTGTTCGGGGACCACCAACGCTTGAATATGGC**TGA**AGGATGCCATGTTTGCCTCTAAATTAAGAC
AGCATTGATCTCCTGGAGGCTGGTTCTGCTGCCTCTACACAGGGGCCCGTTACAGTGAATGGTGCCATTTTCGAA
GGAGCAGTGTGACCTCCTGTGACCCATGAATGTGCCTCCAAGCGGCCCTGTGTGTTTGACATGTGAAGCTATTTG
ATATGCACCAGGTCTCAAGGTTCTCATTTCTCAGGTGACGTGATTCTAAGGCAGGAATTTGAGAGTTCACAGAAG
GATCGTGTCTGCTGACTGTTTCATTCACTGTGCACTTTGCTCAAAATTTTAAAAATACCAATCACAAGGATAATA
GAGTAGCCTAAAATTACTATTCTTGGTTCTTATTTAAGTATGGAATATTCATTTTACTCAGAATAGCCTGTTTTG
TGTATATTGGTGTATATTATATAACTCTTTGAGCCTTTATTGGTAAATTCTGGTATACATTGAATTCATTATAAT
TTGGGTGACTAGAACAACTTGAAGATTGTAGCAATAAGCTGGACTAGTGTCCTAAAAATGGCTAACTGATGAATT
AGAAGCCATCTGACAGACGGCCACTAGTGACAGTTTCTTTTGTGTTCCTATGGAAACATTTTATACTGTACATGC
TATGCTGAAGACATTCAAAACGTGATGTTTTGAATGTGGATAAAACTGTGTAAACCACATAATTTTGTACATCCA
AGGATGAGGTGTGACCTTTAAGAAAAATGAAAACTTTTGTAAATTATTGATGATTTTGTAATTCTTATGACTAAA
TTTTCTTTTAAGCATTTGTATATTAAAATAGCATACTGTGTATGTTTTATATCAAATGCCTTCATGAATCTTTCA
TACATATATATATTTGTAACATGTAAAGTATGTGAGTAGTCTTATGTAAAGTATGTTTTTACATTATGCAAATAA
AACCCAATACTTTTGTCCAATGTGGTTGGTCAAATCAACTGAATAAATTCAGTATTTTGCCTT

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FIGURE 6397

MEYMSTGSDNKEEIDLLIKHLNVSDVIDIMENLYASEEPAVYEPSLMTMCQDSNQNDERSKSLLLSGQEVPWLSS
VRYGTVEDLLAFANHISNTAKHFYGQRPQESGILLNMVITPQNGRYQIDSDVLLIPWKLTYRNIGSDFIPRGAFG
KVYLAQDIKTKKRMACKLIPVDQFKPSDVEIQACFRHENIAELYGAVLWGETVHLFMEAGEGGSVLEKLESCGPM
REFEIIWVTKHVLKGLDFLHSKKVIHHDIKPSNIVFMSTKAVLVDFGLSVQMTEDVYFPKDLRGTEIYMSPEVIL
CRGHSTKADIYSLGATLIHMQTGTPPWVKRYPRSAYPSYLYIIHKQAPPLEDIADDCSPGMRELIEASLERNPNH
RPRAADLLKHEALNPPREDQPRCTSLDSALLERKRLLSRKELELPENIADSSCTGSTEESEMLKRQRSLYIDLGA
LAGYFNLVRGPPTLEYG

FIGURE 6398

CTGTTTCTTTTTGTGTTTGACAGCTAAAGAAAAGAAGCCCTCTTACAACAGGGGTCTATGTGAAAATGCCCCCAA
CAGAGCCAGAATGTGAAAAGCAATTTCAGCCTTATTTTATTCCCATCAATTGAGAAACCATTATGAAGAAGAGAG
TCCATATTTCAATTTCCAAGAGCTGAGGCAATTCTAACTTTTTTGCTATCCAGCTATTTTTATTTGTTTGTGCAT
TTGGGGGAATTCATCTCTCTTTAATATAAAGTTGGATGCGGAACCCAAATTACGTGTACTACAATTTAAAGCAAA
GGAGTAGAAAGACAGAGCTGGGATGTTTCTGTCACATCAGCTCCACTTTCAGTGAAAGCATCACTTGGGATTAAT
ATGGGGATGCAGCATTATGATGTGGGTCAAGGAATTAAGTTAGGGAATGGCACAGCCCAAAGAAGGAAAAGGCAG
GGAGCGAGGGAGAAGACTATATTGTACACACCTTATATTTACGTATGAGACGTTTATAGCCGAAATGATCTTTTC
AAGTTAAATTTTATGCCTTTTATTTCTTAAACAAATGTATGATTACATCAAGGCTTCAAAAATACTACATGGCTA
TGTTTTAGCCAGTGATGCTAAAGGTTGTATTGCATATATACATATATATATATATATATATATATATATATATAT
ATATATATATATATATATATATATTTTAATTTGATAGTATTGTGCATAGAGCCACGTATGTTTTTGTGTATTTGTTA
ATGGTGTGAATATAAACACTATATGGCGAGTGTCTTTCCACCTTGGGTCCCAGGGAAGTTTTGTGGAGGAGCTCA
GGACACTAATACACCAGGTAGAACACAAGGTCATTTGCTAACTAGCTTGGAAACTGGATGAGGTCATAGCAGTGC
TTGATTGCGTGGAATTGTGCTGAGTTGGTGTTGACATGTGCTTTGGGGCTTTTACACCAGTTCCTTTCAATGGTT
TGCAAGGAAGCCACAGCTGGTGGTATCTGAGTTGACTTGACAGAACACTGTCTTGAAGACAATGGCTTACTCCAG
GAGACCCACAGGTATGACCTTCTAGGAAGCTCCAGTTCGATGGGCCCAATTCTTACAAACATGTGGTTAATGCCA
TGGACAGAAGAAGGCAGCAGGTGGCAGAATGGGGTGCATGAAGGTTTCTGAAATTAACACTGCTTGTGTTTTTAA
CTCAATATTTTCCATGAAAATGCAACAACATGTATAATATTTTTAATTAAATAAAAATCTGTGGTGGT

FIGURE 6399

CTATAGAAGACCTGGGACAGAGGACTGCTGTCTGCCCTCTCTGGTCACCCTGCCTAGCTAGAGGATCTGTGACCC
CAGCCATGAGGACCCTCGCCATCCTTGCTGCCATTCTCCTGGTGGCCCTGCAGGCCCAGGCTGAGCCACTCCAGG
CAAGAGCTGATGAGGTTGCTGCAGCCCCGGAGCAGATTGCAGCGGACATCCCAGAAGTGGTTGTTTCCCTTGCAT
GGGACGAAAGCTTGGCTCCAAAGCATCCAGGCTCAAGGAAAAACATGGCCTGCTATTGCAGAATACCAGCGTGCA
TTGCAGGAGAACGTCGCTATGGAACCTGCATCTACCAGGGAAGACTCTGGGCATTCTGCTGCTGAGCTTGCAGAA
AAAGAAAAATGAGCTCAAAATTTGCTTTGAGAGCTACAGGGAATTGCTATTACTCCTGTACCTTCTGCTCAATTT
CCTTTCCTCATCCCAAATAAATGCCTTGGTACAAGAAAAG

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FIGURE 6400

MRTLAILAAILLVALQAQAEPLQARADEVAAAPEQIAADIPEVVVSLAWDESLAPKHPGSRKNMACYCRIPACIA
GERRYGTCIYQGRLWAFCC

FIGURE 6401

GCAGCCGGGCGGCCGCAGAAGCGCCCAGGCCCGCGCGCCACCCCTCTGGCGCCACCGTGGTTGAGCCCGTGACGT
TTACACTCATTCATAAAACGCTTGTTATAAAAGCAGTGGCTGCGGCGCCTCGTACTCCAACCGCATCTGCAGCGA
GCAACTGAGAAGCCAAGACTGAGCCGGCGGCCGCGGCGCAGCGAACGAGCAGTGACCGTGCTCCTACCCAGCTCT
GCTTCACAGCGCCCACCTGTCTCCGCCCCTCGGCCCCTCGCCCGGCTTTGCCTAACCGCCACGATGATGTTCTCG
GGCTTCAACGCAGACTACGAGGCGTCATCCTCCCGCTGCAGCAGCGCGTCCCCGGCCGGGGATAGCCTCTCTTAC
TACCACTCACCCGCAGACTCCTTCTCCAGCATGGGCTCGCCTGTCAACGCGCAGGTAAGGCTGGCTTCCCGTCGC
CGCGGGGCCGGGGGCTTGGGGTCGCGGAGGAGGAGACACCGGGCGGGACGCTCCAGTAGATGAGTAGGGGGCTCC
CTTGTGCCTGGAGGGAGGCTGCCGTGGCCGGAGCGGTGCCGGCTCGGGGGCTCGGGACTTGCTCTGAGCGCACGC
ACGCTTGCCATAGTAAGAATTGGTTCCCCCTTCGGGAGGCAGGTTCGTTCTGAGCAACCTCTGGTCTGCACTCCA
GGACGGATCTCTGACATTAGCTGGAGCAGACGTGTCCCAAGCACAAACTCGCTAACTAGAGCCTGGCTTCTTCGG
GGAGGTGGCAGAAAGCGGCAATCCCCCCTCCCCCGGCAGCCTGGAGCACGGAGGAGGGATGAGGGAGGAGGGTGC
AGCGGGCGGGTGTGTAAGGCAGTTTCATTGATAAAAAGCGAGTTCATTCTGGAGACTCCGGAGCGGCGCCTGCGT
CAGCGCAGACGTCAGGGATATTTATAACAAACCCCCTTTCAAGCAAGTGATGCTGAAGGGATAACGGGAACGCAG
CGGCAGGATGGAAGAGACAGGCACTGCGCTGCGGAATGCCTGGGAGGAAAAGGGGGAGACCTTTCATCCAGGATG
AGGGACATTTAAGATGAAATGTCCGTGGCAGGATCGTTTCTCTTCACTGCTGCATGCGGCACTGGGAACTCGCCC
CACCTGTGTCCGGAACCTGCTCGCTCACGTCGGCTTTCCCCTTCTGTTTTGTTCTAGGACTTCTGCACGGACCTG
GCCGTCTCCAGTGCCAACTTCATTCCCACGGTCACTGCCATCTCGACCAGTCCGGACCTGCAGTGGCTGGTGCAG
CCCGCCCTCGTCTCCTCTGTGGCCCCATCGCAGACCAGAGCCCCTCACCCTTTCGGAGTCCCCGCCCCCTCCGCT
GGGGCTTACTCCAGGGCTGGCGTTGTGAAGACCATGACAGGAGGCCGAGCGCAGAGCATTGGCAGGAGGGGCAAG
GTGGAACAGGTGAGGAACTCTAGCGTACTCTTCCTGGGAATGTGGGGGCTGGGTGGGAAGCAGCCCCGGAGATGC
AGGAGCCCAGTACAGAGGATGAAGCCACTGATGGGGCTGGCTGCACATCCGTAACTGGGAGCCCTGGCTCCAAGC
CCATTCCATCCCAACTCAGACTCTGAGTCTCACCCTAAGAAGTACTCTCATAGTTTCTTCCCTAAGTTTCTTACC
GCATGCTTTCAGACTGGGCTCTTCTTTGTTCTCTTGCTGAGGATCTTATTTTAAATGCAAGTCACACCTATTCTG
CAACTGCAGGTCAGAAATGGTTTCACAGTGGGGTGCCAGGAAGCAGGGAAGCTGCAGGAGCCAGTTCTACTGGGG
TGGGTGAATGGAGGTGATGGCAGACACTTTTACTGAATGTCGGTCTTTTTTTGTGATTATTCTAGTTATCTCCAG
AAGAAGAAGAGAAAAGGAGAATCCGAAGGGAAAGGAATAAGATGGCTGCAGCCAAATGCCGCAACCGGAGGAGGG
AGCTGACTGATACACTCCAAGCGGTAGGTACTCTGTGGGTTGCTCCTTTTTAAAACTTAAGGGAAAGTTGGAGAT
TGAGCATAAGGGCCCTTGAGTAAGACTGTGTCTTATGCTTTCCTTTATCCCTCTGTATACAGGAGACAGACCAAC
TAGAAGATGAGAAGTCTGCTTTGCAGACCGAGATTGCCAACCTGCTGAAGGAGAAGGAAAAACTAGAGTTCATCC
TGGCAGCTCACCGACCTGCCTGCAAGATCCCTGATGACCTGGGCTTCCCAGAAGAGATGTCTGTGGCTTCCCTTG
ATCTGACTGGGGGCCTGCCAGAGGTTGCCACCCCGGAGTCTGAGGAGGCCTTCACCCTGCCTCTCCTCAATGACC
CTGAGCCCAAGCCCTCAGTGGAACCTGTCAAGAGCATCAGCAGCATGGAGCTGAAGACCGAGCCCTTTGATGACT
TCCTGTTCCCAGCATCATCCAGGCCCAGTGGCTCTGAGACAGCCCGCTCCGTGCCAGACATGGACCTATCTGGGT
CCTTCTATGCAGCAGACTGGGAGCCTCTGCACAGTGGCTCCCTGGGGATGGGGCCCATGGCCACAGAGCTGGAGC
CCCTGTGCACTCCGGTGGTCACCTGTACTCCCAGCTGCACTGCTTACACGTCTTCCTTCGTCTTCACCTACCCCG
AGGCTGACTCCTTCCCCAGCTGTGCAGCTGCCCACCGCAAGGGCAGCAGCAGCAATGAGCCTTCCTCTGACTCGC
TCAGCTCACCCACGCTGCTGGCCCTGTGAGGGGGCAGGGAAGGGGAGGCAGCCGGCACCCACAAGTGCCACTGCC
CGAGCTGGTGCATTACAGAGAGGAGAAACACATCTTCCCTAGAGGGTTCCTGTAGACCTAGGGAGGACCTTATCT
GTGCGTGAAACACACCAGGCTGTGGGCCTCAAGGACTTGAAAGCATCCATGTGTGGACTCAAGTCCTTACCTCTT
CCGGAGATGTAGCAAAACGCATGGAGTGTGTATTGTTCCCAGTGACACTTCAGAGAGCTGGTAGTTAGTAGCATG
TTGAGCCAGGCCTGGGTCTGTGTCTCTTTTCTCTTTCTCCTTAGTCTTCTCATAGCATTAACTAATCTATTGGGT
TCATTATTGGAATTAACCTGGTGCTGGATATTTTCAAATTGTATCTAGTGCAGCTGATTTTAACAATAACTACTG
TGTTCCTGGCAATAGTGTGTTCTGATTAGAAATGACCAATATTATACTAAGAAAAGATACGACTTTATTTTCTGG
TAGATAGAAATAAATAGCTATATCCATGTACTGTAGTTTTTCTTCAACATCAATGTTCATTGTAATGTTACTGAT
CATGCATTGTTGAGGTGGTCTGAATGTTCTGACATTAACAGTTTTCCATGAAAACGTTTTATTGTGTTTTTAATT
TATTTATTAAGATGGATTCTCAGATATTTATATTTTTATTTTATTTTTTTCTACCTTGAGGTCTTTTGACATGTG
GAAAGTGAATTTGAATGAAAAATTTAAGCATTGTTTGCTTATTGTTCCAAGACATTGTCAATAAAAGCATTTAAG
TTGAATGCGACCAACCTTGTGCTCTTTTCATTCTGGAAGT

FIGURE 6402

GCTGCTGCGACAGTCCACTACCTTTTTCGAGAGTGACTCCCGTTGTCCCAAGGCTTCCCAGAGCGAACCTGTGCG
GCTGCAGGCACCGGCGCGTCGAGTTTCCGGCGTCCGGAAGGACCGAGCTCTTCTCGCGGATCCAGTGTTCCGTTT
CCAGCCCCCAATCTCAGAGCCGAGCCGACAGAGAGCAGGGAACCGGCATGGCCAAAGCCGCGGCGATCGGCATCG
ACCTGGGCACCACCTACTCCTGCGTGGGGGTGTTCCAACACGGCAAGGTGGAGATCATCGCCAACGACCAGGGCA
ACCGCACCACCCCCAGCTACGTGGCCTTCACGGACACCGAGCGGCTCATCGGGGATGCGGCCAAGAACCAGGTGG
CGCTGAACCCGCAGAACACCGTGTTTGACGCGAAGCGGCTGATCGGCCGCAAGTTCGGCGACCCGGTGGTGCAGT
CGGACATGAAGCACTGGCCTTTCCAGGTGATCAACGACGGAGACAAGCCCAAGGTGCAGGTGAGCTACAAGGGGG
ACACCAAGGCATTCTACCCCGAGGAGATCTCGTCCATGGTGCTGACCAAGATGAAGGAGATCGCCGAGGCGTACC
TGGGCTACCCGGTGACCAACGCGGTGATCACCGTGCCGGCCTACTTCAACGACTCGCAGCGCCAGGCCACCAAGG
ATGCGGGTGTGATCGCGGGGCTCAACGTGCTGCGGATCATCAACGAGCCCACGGCCGCCGCCATCGCCTACGGCC
TGGACAGAACGGGCAAGGGGGAGCGCAACGTGCTCATCTTTGACCTGGGCGGGGGCACCTTCGACGTGTCCATCC
TGACGATCGACGACGGCATCTTCGAGGTGAAGGCCACGGCCGGGGACACCCACCTGGGTGGGGAGGACTTTGACA
ACAGGCTGGTGAACCACTTCGTGGAGGAGTTCAAGAGAAAACACAAGAAGGACATCAGCCAGAACAAGCGAGCCG
TGAGGCGGCTGCGCACCGCCTGCGAGAGGGCCAAGAGGACCCTGTCGTCCAGCACCCAGGCCAGCCTGGAGATCG
ACTCCCTGTTTGAGGGCATCGACTTCTACACGTCCATCACCAGGGCGAGGTTCGAGGAGCTGTGCTCCGACCTGT
TCCGAAGCACCCTGGAGCCCGTGGAGAAGGCTCTGCGCGACGCCAAGCTGGACAAGGCCCAGATTCACGACCTGG
TCCTGGTCGGGGGCTCCACCCGCATCCCCAAGGTGCAGAAGCTGCTGCAGGACTTCTTCAACGGGCGCGACCTGA
ACAAGAGCATCAACCCCGACGAGGCTGTGGCCTACGGGGCGGCGGTGCAGGCGGCCATCCTGATGGGGGACAAGT
CCGAGAACGTGCAGGACCTGCTGCTGCTGGACGTGGCTCCCCTGTCGCTGGGGCTGGAGACGGCCGGAGGCGTGA
TGACTGCCCTGATCAAGCGCAACTCCACCATCCCCACCAAGCAGACGCAGATCTTCACCACCTACTCCGACAACC
AACCCGGGGTGCTGATCCAGGTGTACGAGGGCGAGAGGGCCATGACGAAAGACAACAATCTGTTGGGGCGCTTCG
AGCTGAGCGGCATCCCTCCGGCCCCCAGGGGCGTGCCCCAGATCGAGGTGACCTTCGACATCGATGCCAACGGCA
TCCTGAACGTCACGGCCACGGACAAGAGCACCGGCAAGGCCAACAAGATCACCATCACCAACGACAAGGGCCGCC
TGAGCAAGGAGGAGATCGAGCGCATGGTGCAGGAGGCGGAGAAGTACAAAGCGGAGGACGAGGTGCAGCGCGAGA
GGGTGTCAGCCAAGAACGCCCTGGAGTCCTACGCCTTCAACATGAAGAGCGCCGTGGAGGATGAGGGGCTCAAGG
GCAAGATCAGCGAGGCCGACAAGAAGAAGGTGCTGGACAAGTGTCAAGAGGTCATCTCGTGGCTGGACGCCAACA
CCTTGGCCGAGAAGGACGAGTTTGAGCACAAGAGGAAGGAGCTGGAGCAGGTGTGTAACCCCATCATCAGCGGAC
TGTACCAGGGTGCCGGTGGTCCCGGGCCTGGGGGCTTCGGGGCTCAGGGTCCCAAGGGAGGGTCTGGGTCAGGCC
CCACCATTGAGGAGGTAGATTAGGGGCCTTTCCAAGATTGCTGTTTTTGTTTTGGAGCTTCAAGACTTTGCATTT
CCTAGTATTTCTGTTTGTCAGTTCTCAATTTCCTGTGTTTGCAATGTTGAAATTTTTTGGTGAAGTACTGAACTT
GCTTTTTTTCCGGTTTCTACATGCAGAGATGAATTTATACTGCCATCTTACGACTATTTCTTCTTTTTAATACAC
TTAACTCAGGCCATTTTTTAAGTTGGTTACTTCAAAGTAAATAAACTTTAAAATTCAAGTGA

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FIGURE 6403

MAKAAAIGIDLGTTYSCVGVFQHGKVEIIANDQGNRTTPSYVAFTDTERLIGDAAKNQVALNPQNTVFDAKRLIG
RKFGDPVVQSDMKHWPFQVINDGDKPKVQVSYKGDTKAFYPEEISSMVLTKMKEIAEAYLGYPVTNAVITVPAYF
NDSQRQATKDAGVIAGLNVLRIINEPTAAAIAYGLDRTGKGERNVLIFDLGGGTFDVSILTIDDGIFEVKATAGD
THLGGEDFDNRLVNHFVEEFKRKHKKDISQNKRAVRRLRTACERAKRTLSSSTQASLEIDSLFEGIDFYTSITRA
RFEELCSDLFRSTLEPVEKALRDAKLDKAQIHDLVLVGGSTRIPKVQKLLQDFFNGRDLNKSINPDEAVAYGAAV
QAAILMGDKSENVQDLLLLDVAPLSLGLETAGGVMTALIKRNSTIPTKQTQIFTTYSDNQPGVLIQVYEGERAMT
KDNNLLGRFELSGIPPAPRGVPQIEVTFDIDANGILNVTATDKSTGKANKITITNDKGRLSKEEIERMVQEAEKY
KAEDEVQRERVSAKNALESYAFNMKSAVEDEGLKGKISEADKKKVLDKCQEVISWLDANTLAEKDEFEHKRKELE
QVCNPIISGLYQGAGGPGPGGFGAQGPKGGSGSGPTIEEVD

FIGURE 6404

GAGGATGAAAAACTGAAGAAGCTGGTGGAACAGAATGGAACAGATGACTGGAAAGTTATTGCCAATTATCTCCCG
AATCGAACAGATGTGCAGTGCCAGCACCGATGGCAGAAAGTACTAAACCCTGAGCTCATCAAGGGTCCTTGGACC
AAAGAAGAAGATCAGAGAGTGATAGAGCTTGTACAGAAATACGGTCCGAAACGTTGGTCTGTTATTGCCAAGCAC
TTAAAGGGGAGAATTGGAAAACAATGTAGGGAGAGGTGGCATAACCACTTGAATCCAGAAGTTAAGAAAACCTCC
TGGACAGAAGAGGAAGACAGAATTATTTACCAGGCACACAAGAGACTGGGGAACAGATGGGCAGAAATCGCAAAG
CTACTGCCTGGACGAACTGATAATGCTATCAAGAACCACTGGAATTCTACAATGCGTCGGAAGGTCGAACAGGAA
GGTTATCTGCAGGAGTCTTCAAAAGCCAGCCAGCCAGCAGTGGCCACAAGCTTCCAGAAGAACAGTCATTTGATG
GGTTTTGCTCAGGCTCCGCCTACAGCTCAACTCCCTGCCACTGGCCAGCCCACTGTTAACAACGACTATTCCTAT
TACCACATTTCTGAAGCACAAAATGTCTCCAGTCATGTTCCATACCCTGTAGCGTTACATGTAAATATAGTCAAT
GTCCCTCAGCCAGCTGCCGCAGCCATTCAGAGACACTATAATGATGAAGACCCTGAGAAGGAAAAGCGAATAAAG
GAATTAGAATTGCTCCTAATGTCAACCGAGAATGAGCTAAAAGGACAGCAGGTGCTACCAACACAGAACCACACA
TGCAGCTACCCCGGGTGGCACAGCACCACCATTGCCGACCACACCAGACCTCATGGAGACAGTGCACCTGTTTCC
TGTTTGGGAGAACACCACTCCACTCCATCTCTGCCAGCGGATCCTGGCTCCCTACCTGAAGAAAGCGCCTCGCCA
GCAAGGTGCATGATCGTCCACCAGGGCACCATTCTGGATAATGTTAAGAACCTCTTAGAATTTGCAGAAACACTC
CAATTTATAGATTCTTTCTTAAACACTTCCAGTAACCATGAAAACTCAGACTTGGAAATGCCTTCTTTAACTTCC
ACCCCCCTCATTGGTCACAAATTGACTGTTACAACACCATTTCATAGAGACCAGACTGTGAAAACTCAAAAGGAA
AATACTGTTTTTAGAACCCCAGCTATCAAAAGGTCAATCTTAGAAAGCTCTCCAAGAACTCCTACACCATTCAAA
CATGCACTTGCAGCTCAAGAAATTAAATACGGTCCCCTGAAGATGCTACCTCAGACACCCTCTCATCTAGTAGAA
GATCTGCAGGATGTGATCAAACAGGAATCTGATGAATCTGGAATTGTTGCTGAGTTTCAAGAAAATGGACCACCC
TTACTGAAGAAAATCAAACAAGAGGTGGAATCTCCAACTGATAAATCAGGAAACTTCTTCTGCTCACACCACTGG
GAAGGGGACAGTCTGAATACCCAACTGTTCACGCAGACCTCGCCTGTGGCAGATGCACCGAATATTCTTACAAGC
TCCGTTTTAATGGCACCAGCATCAGAAGATGAAGACAATGTTCTCAAAGCATTTACAGTACCTAAAAACAGGTCC
CTGGCGAGCCCCTTGCAGCCTTGTAGCAGTACCTGGGAACCTGCATCCTGTGGAAAGATGGAGGAGCAGATGACA
TCTTCCAGTCAAGCTCGTAAATACGTGAATGCATTCTCAGCCCGGACGCTGGTCATGTGAGACATTTCCAGAAAA
GCATTATGGTTTTCAGAACACTTCAAGTTGACTTGGGATATATCATTCCTCAACATGAAACTTTTCATGAATGGG
AGAAGAACCTATTTTTGTTGTGGTACAACAGTTGAGAGCAGCACCAAGTGCATTTAGTTGAATGAAGTCTTCTTG
GATTTCACCCAACTAAAAGGATTTTTAAAAATAAATAACAGTCTTACCTAAATTATTAGGTAATGAATTGTAGCC
AGTTGTTAATATCTTAATGCAGATTTTTTTAAAAAAAAACATAAAATGATTTATCTGTATTTTAAAGGATCCAAC
AGATCAGTATTTTTTCCTGTGATGGGTTTTTTGAAATTTGACACATTAAAAGGTACTCCAGTATTTCACTTTTCT
CGATCACTAAACATATGCATATATTTTTAAAAATCAGTAAAAGCATTACTCTAAGTGTAGACTTAATACCATGTG
ACATTTAATCCAGATTGTAAATGCTCATTTATGGTTAATGACATTGAAGGTACATTTATTGTACCAAACCATTTT
ATGAGTTTTCTGTTAGCTTGCTTTAAAAATTATTACTGTAAGAAATAGTTTTATAAAAAATTATATTTTTATTCA
GTAATTTAATTTTGTAAATGCCAAATGAAAAACGTTTTTTGCTGCTATGGTCTTAGCCTGTAGACATGCTGCTAG
TATCAGAGGGGCAGTAGAGCTTGGACAGAAAGAAAAGAAACTTGGTGTTAGGTAATTGACTATGCACTAGTATTT
CAGACTTTTTAATTTTATATATATATACATTTTTTTTCCTTCTGCAATACATTTGAAAACTTGTTTGGGAGACTC
TGCATTTTTTATTGTGGTTTTTTTGTTATTGTTGGTTTATACAAGCATGCGTTGCACTTCTTTTTTGGGAGATGT
GTGTTGTTGATGTTCTATGTTTTGTTTTGAGTGTAGCCTGACTGTTTTATAATTTGGGAGTTCTGCATTTGATCC
GCATCCCCTGTGGTTTCTAAGTGTATGGTCTCAGAACTGTTGCATGGATCCTGTGTTTGCAACTGGGGAGACAGA
AACTGTGGTTGATAGCCAGTCACTGCCTTAAGAACATTTGATGCAAGATGGCCAGCACTGAACTTTTGAGATATG
ACGGTGTACTTACTGCCTTGTAGCAAAATAAAGATGTGCCCTTATTTTACCT

FIGURE 6405

ATGGTCGACTACCTAGCAAATAAGCCCAAGGGTCAGAATTCTTTGGCTTTACACAAAGTCATCATGGTGGGCAGT
GGTGGCGTGGGCAAGTCAGCTCTGACTCTACAGTTCATGTACGATGAGTTTGTGGAGGACTATGAGCCTACCAAA
GCAGACAGCTATCGGAAGAAGGTAGTGCTAGATGGGGAGGAAGTCCAGATCGATATCTTAGATACAGCTGGGCAG
GAGGACTACGCTGCAATTAGAGACAACTACTTCCGAAGTGGGGAGGGGTTCCTCTGTGTTTTCTCTATTACAGAA
ATGGAATCCTTTGCAGCTACAGCTGACTTCAGGGAGCAGATTTTAAGAGTAAAAGAAGATGAGAATGTTCCATTT
CTACTGGTTGGTAACAAATCAGATTTAGAAGATAAAAGACAGGTTTCTGTAGAAGAGGCAAAAAACAGAGCTGAG
CAGTGGAATGTTAACTACGTGGAAACATCTGCTAAAACACGAGCTAATGTTGACAAGGTATTTTTTGATTTAATG
AGAGAAATTCGAGCGAGAAAGATGGAAGACAGCAAAGAAAAGAATGGAAAAAAGAAGAGGAAAAGTTTAGCCAAG
AGAATCAGAGAAAGATGCTGCATTTTATAA

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FIGURE 6406

MVDYLANKPKGQNSLALHKVIMVGSGGVGKSALTLQFMYDEFVEDYEPTKADSYRKKVVLDGEEVQIDILDTAGQ
EDYAAIRDNYFRSGEGFLCVFSITEMESFAATADFREQILRVKEDENVPFLLVGNKSDLEDKRQVSVEEAKNRAE
QWNVNYVETSAKTRANVDKVFFDLMREIRARKMEDSKEKNGKKKRKSLAKRIRERCCIL

FIGURE 6407

GAAGAGCAGCAAAGCTGAAGTAGCAGCAACAGCACCAGCAGCAACAGCAAAAAAACAAACATGAGTGTGAAGGGC
ATGGCTATAGCCTTGGCTGTGATATTGTGTGCTACAGTTGTTCAAGGCTTCCCCATGTTCAAAAGAGGACGCTGT
CTTTGCATAGGCCCTGGGGTAAAAGCAGTGAAAGTGGCAGATATTGAGAAAGCCTCCATAATGTACCCAAGTAAC
AACTGTGACAAAATAGAAGTGATTATTACCCTGAAAGAAAATAAAGGACAACGATGCCTAAATCCCAAATCGAAG
CAAGCAAGGCTTATAATCAAAAAAGTTGAAAGAAAGAATTTTTAAAAAATATCAAAACATATGAAGTCCTGGAAAA
GGGCATCTGAAAAACCTAGAACAAGTTTAACTGTGACTACTGAAATGACAAGAATTCTACAGTAGGAAACTGAGA
CTTTTCTATGGTTTTGTGACTTTCAACTTTTGTACAGTTATGTGAAGGATGAAAGGTGGGTGAAAGGACCAAAAA
CAGAAATACAGTCTTCCTGAATGAATGACAATCAGAATTCCACTGCCCAAAGGAGTCCAACAATTAAATGGATTT
CTAGGAAAAGCTACCTTAAGAAAGGCTGGTTACCATCGGAGTTTACAAAGTGCTTTCACGTTCTTACTTGTTGTA
TTATACATTCATGCATTTCTAGGCTAGAGAACCTTCTAGATTTGATGCTTACAACTATTCTGTTGTGACTATGAG
AACATTTCTGTCTCTAGAAGTTATCTGTCTGTATTGATCTTTATGCTATATTACTATCTGTGGTTACAGTGGAGA
CATTGACATTATTACTGGAGTCAAGCCCTTATAAGTCAAAAGCATCTATGTGTCGTAAAGCATTCCTCAAACATT
TTTTCATGCAAATACACACTTCTTTCCCCAAATATCATGTAGCACATCAATATGTAGGGAAACATTCTTATGCAT
CATTTGGTTTGTTTTATAACCAATTCATTAAATGTAATTCATAAAATGTACTATGAAAAAAATTATATGCTATGG
GATACTGGCAACAGTGCACATATTTCATAACCAAATTAGCAGCACCGGTCTTAATTTGATGTTTTTCAACTTTTA
TTCATTGAGATGTTTTGAAGCAATTAGGATATGTGTGTTTACTGTACTTTTTGTTTTGATCCGTTTGTATAAATG
ATAGCAATATCTTGGACACATTTGAAATACAAAATGTTTTTGTCTACCAAAGAAAAATGTTGAAAAATAAGCAAA
TGTATACCTAGCAATCACTTTTACTTTTTGTAATTCTGTCTCTTAGAAAAATACATAATCTAACCAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAA

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FIGURE 6408

MSVKGMAIALAVILCATVVQGFPMFKRGRCLCIGPGVKAVKVADIEKASIMYPSNNCDKIEVIITLKENKGQRCL
NPKSKQARLIIKKVERKNF

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FIGURE 6409

GGCACGAGGATTTCCTCATCGTCAAGCTTTGTTCCTCGTGGGGGCTAGAAATCTCTTTCCAGTTCCAGATTGTGA
AGGGTTCCTGAGTAAGCAGCGTGTCTCCATCCCCCTCTCTAGGGGCTCTTGGATGGACCTTGCACTCTAGAAGGG
ACAATGGACTTCTGGCTTTGGCCACTTTACTTCCTGCCAGTATCGGGGGCCCTGAGGATCCTCCCAGAAGTAAAG
GTAGAGGGGGAGCTGGGCGGATCAGTTACCATCAAGTGCCCACTTCCTGAAATGCATGTGAGGATATATCTGTGC
CGGGAGATGGCTGGATCTGGAACATGTGGTACCGTGGTATCCACCACCAACTTCATCAAGGCAGAATACAAGGGC
CGAGTTACTCTGAAGCAATACCCACGCAAGAATCTGTTCCTAGTGGAGGTAACACAGCTGACAGAAAGTGACAGC
GGAGTCTATGCCTGCGGAGCGGGCATGAACACAGACCGGGGAAAGACCCAGAAAGTCACCCTGAATGTCCACAGT
GAATACGAGCCATCATGGGAAGAGCAGCCAATGCCTGAGACTCCAAAATGGTTTCATCTGCCCTATTTGTTCCAG
ATGCCTGCATATGCCAGTTCTTCCAAATTCGTAACCAGAGTTACCACACCAGCTCAAAGGGGCAAGGTCCCTCCA
GTTCACCACTCCTCCCCCACCACCCAAATCACCCACCGCCCTCGAGTGTCCAGAGCATCTTCAGTAGCAGGTGAC
AAGCCCCGAACCTTCCTGCCATCCACTACAGCCTCAAAAATCTCAGCTCTGGAGGGGCTGCTCAAGCCCCAGACG
CCCAGCTACAACCACCACACCAGGCTGCACAGGCAGAGAGCACTGGACTATGGCTCACAGTCTGGGAGGGAAGGC
CAAGGATTTCACATCCTGATCCCGACCATCCTGGGCCTTTTCCTGCTGGCACTTCTGGGGCTGGTGGTGAAAAGG
GCCGTTGAAAGGAGGAAAGCCCTCTCCAGGCGGGCCCGCCGACTGGCCGTGAGGATGCGCGCCCTGGAGAGCTCC
CAGAGGCCCCGCGGGTCGCCGCGACCGCGCTCCCAAAACAACATCTACAGCGCCTGCCCGCGGCGCGCTCGTGGA
GCGGACGCTGCAGGCACAGGGGAGGCCCCCGTTCCCGGCCCCGGAGCGCCGTTGCCCCCCGCCCCGCTGCAGGTG
TCTGAATCTCCCTGGCTCCATGCCCCATCTCTGAAGACCAGCTGTGAATACGTGAGCCTCTACCACCAGCCTGCC
GCCATGATGGAGGACAGTGATTCAGATGACTACATCAATGTTCCTGCCTGACAACTCCCCAGCTATCCCCCAACC
CCAGGCTCGGACTGTGGTGCCAAGGAGTCTCATCTATCTGCTGATGTCCAATACCTGCTTCATGTGTTCTCAGAG
CCCTCATCACTTCCCATGCCCCATCTCGACTCCCATCCCCATCTATCTGTGCCCTGAGCATGGCTCTGCCCCCAG
GTCGTCTTGCACACCTTGGCAGCCCCCTGTAGTTGACAGGTAAGCTGTAGGCATGTAGAGCAATTGTCCCAATGC
CACTTGCTTCCTTTCCAAGCCGTCGAACAGACTGTGGGATTTGCAGAGTGTTTCTTCCATGTCTTTGACCACAGG
GTTGTTGCTGCCCAGGCTCTAGATCACATGGCATCAGGCTGGGGCAGAGGCATAGCTATTGTCTCGGGCATCCTT
CCCAGGGTTGGGTCTTACACAAATAGAAGGCTCTTGCTCTGAGTTATGTGACATGCCTCAGCCCCATGGACTAAG
CAGGGGTCTGGTATAAAAACACTCCTGGAAACGCCTTTGCCCTGATCCAAATGTTAGCACTTGCTAGTGAACGTC
TACTTATCTCAAGTTCTATGCTAAAGGCAATTTATCTTGATGTGATGATAAACCAAACTTATTAGCAAGATATGC
ATATATATCAAAAAAAAAAAAAAAAAA

FIGURE 6410

MDFWLWPLYFLPVSGALRILPEVKVEGELGGSVTIKCPLPEMHVRIYLCREMAGSGTCGTVVSTTNFIKAEYKGR
VTLKQYPRKNLFLVEVTQLTESDSGVYACGAGMNTDRGKTQKVTLNVHSEYEPSWEEQPMPETPKWFHLPYLFQM
PAYASSSKFVTRVTTPAQRGKVPPVHHSSPTTQITHRPRVSRASSVAGDKPRTFLPSTTASKISALEGLLKPQTP
SYNHHTRLHRQRALDYGSQSGREGQGFHILIPTILGLFLLALLGLVVKRAVERRKALSRRARRLAVRMRALESSQ
RPRGSPRPRSQNNIYSACPRRARGADAAGTGEAPVPGPGAPLPPAPLQVSESPWLHAPSLKTSCEYVSLYHQPAA
MMEDSDSDDYINVPA

FIGURE 6411A

GAATTCCATTTACGCGTTGCTGAATCTCCTGTGGACAAACCACCAATAGGCCAGGACTGTCCTGTGGACAGACGG
GGTGAGCCTCTTCTTGTGTCTGGAGATTCTGAAAAGATTTGATCACCAGGAGATTTTTCGGGACATTACCAAACC
ACTCATTTTAGTGGCTGCCTCCGGGTGATGATGGCTGTGTGAACGACTGCCATGGCCCACCGGAAGCTTGAGAGC
GTGGGGAGCGGCATGTTGGACCATAGGGTGAGACCAGGTCCTGTCCCTCACAGCCAGGAGCCCGAGAGCGAGGAC
ATGGAGCTGCCCTTGGAGGGCTATGTGCCCGAGGGCCTGGAGCTGGCTGCCCTGCGGCCAGAGAGCCCCGCGCCA
GAGGAACAGGAGTGCCACAACCACAGCCCCGATGGGGACTCCAGCTCTGACTACGTGAACAACACCTCTGAGGAG
GAGGACTATGACGAGGGCCTCCCTGAGGAGGAGGAGGGCATCACCTACTACATCCGCTACTGCCCTGAGGACGAC
AGCTACCTAGAGGGCATGGACTGCAACGGGGAGGAGTACCTGGCCCACAGTGCACACCCTGTGGACACTGATGAG
TGCCAGGAGGCCGTGGAGGAGTGGACGGACTCGGCGGGCCCGCACCCCCACGGCCACGAGGCTGAAGGCAGCCAG
GACTACCCAGACCGCCAACTGCCCATTCCGGAGATGAGCCCTCCGTCCTTGAGGCCCATGACCAGGAAGAAGATG
GTCACTATGTGCCAGCAAAGAGGGCTACCAGGACTACTACCCCGAGGAGGCCAACGGGAACACCGGCGCCTCCCC
CTACCGCCTGAGGCTGGGGATGGGGACCTGGAGGACCAGGAGGAGGACATTGACCAGATCGTGGCAGAGATCAAG
ATGAGTCTGAGCATGACCAGCATCACCAGCGCCAGTGAGGCCAGCCCCGAGCATGGGCCTGAGCCAGGGCCTGAG
GACTCTGTAGAGGCCTGCCCACCCATCAAGGCCAGCTGCAGCCCCAGCAGGCACGAGGCGAGGCCCAAGTCGCTG
AACCTCCTTCCCGAGGCCAAGCACCCCGGAGACCCCCAGAGAGGCTTCAAGCCCAAGACCAGGACCCCAGAAGAG
AGGCTGAAGTGGCCCCACGAGCAGGTTTGCAATGGTCTGGAGCAGCCAAGGAAGCAGCAGCGCTCTGATCTCAAT
GGACCTGTTGACAATAACAACATTCCAGAGACAAAGAAGGTGGCATCATTTCCAAGTTTTGTGGCTGTTCCAGGG
CCCTGCGAACCAGAAGACCTCATCGACGGGATCATCTTTGCTGCCAATTACCTGGGGTCCACCCAGCTGCTATCA
GAACGGAACCCTTCCAAAAACATCAGAATGATGCAAGCGCAGGAGGCCGTCAGCCGGGTCAAGAGGATGCAAAAG
GCTGCTAAGATCAAGAAAAAAGCGAATTCTGAGGGGGATGCCCAGACGCTGACGGAAGTGGACCTCTTCATTTCC
ACCCAGAGGATCAAGGTTTTAAATGCAGACACGCAGGAAACCATGATGGACCACGCCTTGCGTACCATCTCCTAC
ATCGCCGACATTGGGAACATTGTAGTGCTGATGGCCAGACGCCGCATGCCCCGGTCAGCCTCTCAGGACTGCATC
GAGACCACGCCCGGGGCCCAGGAAGGCAAGAAGCAGTATAAGATGATCTGCCATGTGTTCGAGTCGGAGGATGCC
CAGCTCATCGCCCAGTCTATCGGCCAGGCCTTCAGCGTGGCCTACCAGGAGTTCCTGCGAGCCAATGGCATCAAC
CCCGAAGACTTGAGCCAGAAGGAATACAGCGACATCATCAACACCCAGGAGATGTACAACGACGACCTCATCCAC
TTCTCAAACTCGGAGAACTGCAAGGAGCTGCAGCTGGAGAAGCACAAGGGCGAGATCCTGGGCGTGGTGGTGGTG
GAGTCGGGCTGGGGCTCCATCCTGCCCACGGTGATCCTGGCCAACATGATGAATGGCTGCCCGGCTGCCCGCTCG
GGGAAGCTGAGCATCGGGGACCAGATCATGTCCATCAATGGCACCAGCCTGGTGGGGCTGCCCCTCGCCACCTGC
CAAGGCATCATCAAGGGCCTGAAGAACCAGACACAGGTGAAGCTCAACATTGTCAGCTGTCCCCCGGTCACCACG
GTCCTTATCAAGCGGCCAGACCTCAAGTACCAGCTGGGCTTCAGCGTGCAGAATGGAATTATCTGCAGCCTCATG
AGAGGGGGCATTGCTGAGCGAGGGGGCGTCCGTGTGGGCCACCGCATCATCGAGATCAACGGGCAGAGCGTGGTG
GCCACAGCCCACGAGAAGATAGTCCAAGCTCTGTCCAACTCGGTCGGAGAGATCCACATGAAGACCATGCCCGCC
GCCATGTTCAGGCTCCTCACGGGTCAGGAGACCCCGCTGTACATCTAGGCCACCCCAGCCTGGCCACGCAGCCAG
GACACCGGGCAGGGCCGCCCGGCCAGAGGAGCTGGGAGCCGGGCCGCAGACTTGACCCCGACGCCACAGCCCAGC
CACGGACGCTGGCTCCCCAAAGGGTGTGCCCTCACCACCCACTTGATTTTTTTCATTTTGCCAAAAAGGGGTATG
TCTTTATCAAAGGAGAGTCACAGAACAAATGTTTGTTTGTAAAGCGTTCCAAGTATTTTGCCACGTTCTGGACTG
TCTTCTCCCTGCACAAGCCAGGGTGTGTCTCGGTAGCTGTGCGTGGTGTGGAGTGTGTGTCTTTCCTCCCTGAAG
CTGTGCGGAGCGAACTGGCGCCTCCGAGGGACGCGGCTCCCGGGGCAGGGCAGCCGTCACCCCTGCCTCCCGCCC
CCTTGGCTGGGACGTCTGGGGTCCTGTGGGGCCCCCACAATGGTCCAAACAGCTGCCTCTGCCACTGACTGCAGG
GACACGGGCAGCCTGGCTCCCAGGACACGACTTGTAATGAAAGTTTGGGGACATGTGATTGATTGATTGATTGAT
TGTAAATAAAGGATGATGGCCACAACATGAAAACTCCATATTTATTTAGATGCTATTATTACTGTTTGGACTTTT
ATTTTGGCAGGCTTTTTTCCAGACTCTAGGGTTTTCCAATGTGACTAATGACCACACCTGCCTCTCCCGTCGTCT
CTTCTGGGCACCCTCCCACCCGGCTGCATACCCGGCCAGGCTCCACAGAGACAGGAGGGCACAGGTGTCTGCCCC
TCTTTAAATCGATCTACACACATCCACGCACATGCGACCCCGAGGAAACGAAACCCACTCTAGAAAACGCGACCT
TGGCCGCACCTAAAGCAGCCAGCCGTGAGTGCAGACCCCTTGGCCAGCGTGGCGCAGTGGCCCTGAGCAGTAGTG
GCATGTGTGTAGATCAAGTCGGATACTAGTCCAGCTCGGTTCATTAGTTAGCGATCCATGTAATCTGACGTCATC
TTGTCTCGAAGTCTCTTTTTTTGCCCAGGCCTTGAAGAATACACTGTGACTTAAGAAGCCTTACCGCGGCGTAAC
TAAAGCTTTAGGATGACTGTATTCGAGGAGTGCCGTGTGTTGCATGCAGCTACCCGTAGGAAGACTTCGCGCATA

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FIGURE 6411B

TCACTAATAAACCTGAAGTCGTGATGAAAAAAAAAAAAAAAAAAA

FIGURE 6412

MAHRKLESVGSGMLDHRVRPGPVPHSQEPESEDMELPLEGYVPEGLELAALRPESPAPEEQECHNHSPDGDSSSD
YVNNTSEEEDYDEGLPEEEEGITYYIRYCPEDDSYLEGMDCNGEEYLAHSAHPVDTDECQEAVEEWTDSAGPHPH
GHEAEGSQDYPDRQLPIPEMSPPSLRPMTRKKMVTMCQQRGLPGLLPRGGQREHRRLPLPPEAGDGDLEDQEEDI
DQIVAEIKMSLSMTSITSASEASPEHGPEPGPEDSVEACPPIKASCSPSRHEARPKSLNLLPEAKHPGDPQRGFK
PKTRTPEERLKWPHEQVCNGLEQPRKQQRSDLNGPVDNNNIPETKKVASFPSFVAVPGPCEPEDLIDGIIFAANY
LGSTQLLSERNPSKNIRMMQAQEAVSRVKRMQKAAKIKKKANSEGDAQTLTEVDLFISTQRIKVLNADTQETMMD
HALRTISYIADIGNIVVLMARRRMPRSASQDCIETTPGAQEGKKQYKMICHVFESEDAQLIAQSIGQAFSVAYQE
FLRANGINPEDLSQKEYSDIINTQEMYNDDLIHFSNSENCKELQLEKHKGEILGVVVVESGWGSILPTVILANMM
NGCPAARSGKLSIGDQIMSINGTSLVGLPLATCQGIIKGLKNQTQVKLNIVSCPPVTTVLIKRPDLKYQLGFSVQ
NGIICSLMRGGIAERGGVRVGHRIIEINGQSVVATAHEKIVQALSNSVGEIHMKTMPAAMFRLLTGQETPLYI

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FIGURE 6413

AGCTGAAGTTGAGGATCTCTTACTCTCTAAGCCACGGAATTAACCCGAGCAGGC**ATG**GAGGCCTCTGCTCTCACC
TCATCAGCAGTGACCAGTGTGGCCAAAGTGGTCAGGGTGGCCTCTGGCTCTGCCGTAGTTTTGCCCCTGGCCAGG
ATTGCTACAGTTGTGATTGGAGGAGTTGTGGCCATGGCGGCTGTGCCCATGGTGCTCAGTGCCATGGGCTTCACT
GCGGCGGGAATCGCCTCGTCCTCCATAGCAGCCAAGATGATGTCCGCGGCGGCCATTGCCAATGGGGGTGGAGTT
GCCTCGGGCAGCCTTGTGGGTACTCTGCAGTCACTGGGAGCAACTGGACTCTCCGGATTGACCAAGTTCATCCTG
GGCTCCATTGGGTCTGCCATTGCGGCTGTCATTGCGAGGTTCTAC**TAG**CTCCCTGCCCCTCGCCCTGCAGAGAAG
AGAACCATGCCAGGGGAGAAGGCACCCAGCCATCCTGACCCAGCGAGGAGCCAACTATCCCAAATATACCTGGGT
GAAATATACCAAATTCTGCATCTCCAGAGGAAAATAAGAAATAAAGATGAATTGTTGCAACTCTTAAAAAAA

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FIGURE 6414

MEASALTSSAVTSVAKVVRVASGSAVVLPLARIATVVIGGVVAMAAVPMVLSAMGFTAAGIASSSIAAKMMSAAA
IANGGGVASGSLVGTLQSLGATGLSGLTKFILGSIGSAIAAVIARFY

FIGURE 6415A

TCAAAGCAGGTGTCTTGGTGTATTGACCACCAACCGAGGACACGGTCTTGGTCAGAGAATGGGAGGAGGCGGGGA
CCATGTTCATTTCATTTATTTTTTTCCCCTTTTTGTGAGAGAAAGGGCCAGTTATTCTAAGGCACGGTCAGACCA
ATTTCCTTTGTGCCTTTGCTGAGGTTCTGAGCTATCCAGGTCAGGGAGAACAGTGACCTTGTGGCTCCTTTTTCG
ATTTTTAAAAAGAACCCACTGCTGCTCTGGGGAGCACGTGCTCTGAGAACAAAAGCAACACTTAACTGCAATCTG
TGTAGTCTAGAACGGCTATTGCTCTTCCTCCCCTATCATCCGCAGAAGGCTTGGAAGAACAGATGGAGTCTGCAT
TTAAGCTGAGTGGCTTTGTTAGACCAAAGGCGATCAAATTCCAGAGCCCCACGCTTTCCCGCACAGGTCCCTGGT
CACCGGCTCGGGAACCTGAGGATGCTGGCAAGAACGCACACAGTGAGGGAAGGGCCACGCCCGCGACCTGTGGGC
TGAGTGGATTAGAAATTACGATGATGTCACAATATGGGTGACACGCCGGTGTCGGTGTAGGGTGCCGGGGGCAGG
GGGCCCTGCAGGGGCGTGGAGTGGCATTGTGCTGTCACAGGGGCTCGGGCGTCTTAGGCACCCATGTGGGTGGCG
CACTAGAAGGGGCACTGCTCTGTCCGAGTGCTGCCCTTGGGGCGAGGCGGGCATGTGGCTCTACAAGGTGGAGTC
CAGGCGGCCAAAGTTTGGAAAGGTAGGGAAGGACCCCCCCGCCCTCCGCCTCGTCCGCCCTGCCCTTGTTCTCGA
GAATGGGGAGCTGGTTCGGACCTAGTCCGGGGTCCACTGCCACGCCCTCTTCCACGGCGAGACCACCCCCCTAGT
CCCAGGCCCACACCTGGGGATGCTCCCCAGGCGCCCTGCAACCCCCGGCATTGTCCTCCTGCCCTCCGGGACAGG
ACTACACTTCCCGAGGTGCTTCGGGGTCCCGGGGGGCGGCGCTCCACGCGGGTTGTGGGGGGCGGGGGCGGCACG
TGCCGCCGCTCTCGGCCAATGCGGAGCCCCGCGCGGAGGTCACGTGCCTCTGTTTGGCGCTTTTGTGCGCGCCCG
GGTCTGTTGGTGCTCAGAGTGTGGTCAGGCGGCTCGGACTGAGCAGGTGGGTGCGGGGCTCGGAGGAGGCGGCGG
CTGGCTGAGGCCAGCAAGAGGGACGCGGTCGGCGGGAGGGGCTGGGCCGTGGCAGCGACCCCCTGCTGCAGGGCG
GCGGGCGGGGCTGCGGGCCTCGGAGGGGTTGGTGGGCGGGGGTCGCTCCGCTTTGTGTGGCTCGGGCGGACGTCG
CCTTTGTCCCCGCTCTCCGGGGGCGCGGCTGTTCGTGGGCAGGGGGCTGGGCGATCACCGGGCGGTACGCTCCGG
GGTGCCGTCCGCAAGGAGACAATAGGGGGCCGTGGGCCCATCGTTTACCTCCCTCCCTCCCTCCCTTCCCTGCGG
GCCCCGCCGGGTTCCCCATTGTCTGAAGGGTCGGGGCGGTGCCAGGGACCAGCGGCTTTAGGACCAAACTGGCGG
GTCAGCCCAGGGCCGCGACCCTCCCTGCGACCGTGCCCACTGGCGACCGCAGCTGGTGATTGAGGGAGGGCGGCG
CTCCCGGGCCCCACGAGGGTTCTTCTGTCTTCGCGGCCGGACGCGCGGACAGCTTGGGTGGCGGCAGGTTGGGCA
TGGGGACGGCGGGAGGCGGTGGCGAGCTCACCGCGGGACCACCCGGGGGCCTGTTCCCGGGGCCTGCCCCACCCG
CTGAACTGTGAAGGGGGTGGTGGCGGCGGCCTGGAGGTGTTTTTGGCGGGAGTTGGGGGGGGCGTCCGCGCAGGG
GGAGTCAGGCAGGGGCGGAGTTACCCGGATTGGACCGTTAGCCCCGCCCACCCCTCCCCTTCCCACGCGCGCGGG
CTCCGGGGTGTTGAGTTCGGGGAGATTCGAAAAGGCGCGGGGAGGAAGGGGGCGGGGCCAGGGGCCGGAGCGCAA
GGCGTGCTCTGATTGGCCGGGGGCGACCGGTCCTCTTTTCCTCGCCCGGACCAGGCCACGCCATCCTGGGTCCGG
TGCTGCGTCTAATTCTCTGCTTTTCTTAAATCTTGTCGCTGCCTCTGATTTTAATTCCTAGCTTTTGGGAACCTG
TCATCCTACGTTTTTGGTACTAGCTGGCGTCTACAAAAGTCATAATGTTAAAAAGATCAACAAGAGATACAGCAT
TTTTCATGACATAACGGCAGCAAATATAAGTCAAAATCTAGAGGTTCATAAACATTTTGCTTGCTGTTGGGCAAG
GAAGCTTAAACCTGAGGGACAATAGGAGTTCAACATTATTGGTTACTATTAGCTTGGGCGTTTTCTTATCCACCA
CGTCAGACACAGACAAAGCAGGGGTGGGTATTTCATTTGCACAATGAGTTGTAGGCAGTATTAAGATGGCTCCGG
GGGCACTGTTGAGTTGAATCTGGAATATCTTCTTACAGTTTCGGTGAAATGTTAAAGAGTTTATGGGGGAAAAAT
TCTTCACCCTTGTGACTTTGTCTGATTTTAAAAATCCAAGAGTTTTGTGACCGAGAAAGCTCAGTTAACTTGATT
TTCTGGAACCAATATCATATTCAGGTCATATTTCCCAATGTTTATTTAGTAGATTTTGATAATTTTTTTCGTGGT
TAATTTAGACGTCTTTATTCCACGTATTTTTCTGACGAATGTATGTAGATGTGATGTGAGATTTTTTTGGGTTGA
TGACATATAGAAAGGCAAAGAAAGTGATTGCATGTTTTTGAAAATCATTTTCAGGACTTTCCTTATCCCAGTTGA
TTGTGCAGAATACACTGCCTGTCGCTTGTCTTCTATTCACCATGGCTTCTTCTGGTAGGTAATCTATTTGGAAAA
TCTGAAATTGTAATGGGCTTATGATTTTAGATTGAGATGGCTCAGGTCTTCGCCTTTGATTTGGCACTTATGTTT
TGGTCTTACCAAAACCTATTTTATGAATAGGAGAAGAATTTAAAAATGATTATCACTTGAATGTGCCGAGAGCTC
GTAATTGTTTATTGGACAGTTTGGCTTAGTCTGAAGCAAATTGTGGAGTTTGCACAAGTCTTTTGTTTATGAAAG
CGATTGTCAGATACTGATGTCTCAAAACAGTATTTATTAATCCAAAAATGTTGAGCTTTGTTTTTCTGGGAGATG
GTTTTTATTTTTTTTGAGACAGGGTCTCACCTTGTTGCCCAGGCTGGAGTGCAGTGGCTTAATTATAGCTCATTG
CAGCCTTGACTTCTGGAGCTCAAGTGGGCTCAAGCGATTCTCCCACCTCAGCCTCCATAGCATCTGGGACTATCG
ACATGGGCCACCACACCCACCTAATCAAAAAAAATTTTTTTTGTAGAGATGGGCTTTCCCTTTGTTGCCCAGGCT
GGTCTCAAACTTCAGGGCTCAAGGGATCTTCCCATGTTGGCCTCCCACGGTGCTGGGATTATAGGCATGAGCCAT
GGTACCTGGCCTTGGGAAATGGTATTTAGATAATAATATCTTGCCTGCAAATACATCTTCCCCTAGTGTCAGTAG

FIGURE 6415B

ACTGATAGGAATAAAAAGGGGAAAAAAAACACAACTTTCCTCATCAGCCCTAGTTTAATACATTAAATTGATTTG
GGTTTTAGAAAATTATAGTACAGTTTATTAGAACAGGAGAATCCTGGTTTTCTGAATTATAAATATAATCAATTC
TAGATATCCAGGTGAAAGAACTGGAGAAGCGTGCCTCAGGCCAGGCTTTTGAGCTGATTCTCAGCCCTCGGTCAA
AAGAATCTGTTCCAGAATTCCCCCTTTCCCCTCCAAAGAAGAAGGATCTTTCCCTGGAGGAAATTCAGAAGAAAT
TAGAAGCTGCAGAAGAAAGACGCAAGGTAAACGAAGCAATTCACAGAAAGCAGGATATTAATTTATGTAATGGGC
AGATCAATTTTATTTCTATAACAGGAAGAAAACAGAATTGTAGCTACACTGTGATTATTACATATGCCAGTGACT
GGAAGGAAATACCAGTCCTCATTTATTGAACTCCTGTTACATGCCCGCTCCTTTGTTTATATTTTTCTCCTTTAA
TACATGGTGTTGCCTCAAATAATGGAAATTAGAAACAGTTTCAGGAATGTTAAGTCGTTTTTCTGCAGTCATACA
ACTAGTAAGTGTTGGGGTCAGAATTCAAGCCCTGGTCTATCTTAAACCAAAGCTCATGCTTCTCTCATGCTTCCT
CTTTGAAAAGATTTGTTGCCAGATGATTCTTTGGCACTTTGGTTTTGTTTTTTGAGAGCTGTACAATAACATTTT
AAATTGCTAGTGTGATTGTGTTGCTCAGCTGGTATCATGGTAGCTTTTCTCTTATCTAAACAATTCTATTATAAA
GTAACTATCTTTAAAAGCTAATCAGAAGAATCAATAAATATTAATATGCTAGTTGTAGAAAATTTGGGAAATACA
GAAATTTATAAATGGAAATTAAAAGTATTCATTATCCCGCTTCCGAGAAGCAACCAGTGTTAACATTTTGGTGTG
TTTCTTTCCATTCAATGTTACTCATTAACAACTGTACATAACTTTTCATTTAACTCCCTTTCTCAACAACCCTGA
TAGGATTGATTTTAAAGCTGGGGCAAGTGAGGCACAAAAGGTAAGGTAATAACCTTCCCCAGACCAGCATAGTGA
TTTGTAGTATACACACACACCCCGCCCGAAGAGCCTCAGTGCTTACACTAAGGAGTCGTCTTCTATCGAATAGTG
TGAGTTCATGGAGTAGGAGGAAGCAATACAACCCAAGGTTGGACAGTGGAAAGCTTTTTAGACATCAACCCTGGC
CCTGTAGTCATTAGCCTGTGCTTTACATAGTAACTGGCTAAATATAATGAAACTCCCATCATGACTAGGATTTGG
CAGAAGAGAATCAATAGAACCAGTGTCAGATGCTCTGTGGTTATCCTGCAAGTCAGTGGTTCCAATGTGTTTTGA
GAACAAGCTGTTCTGTTGAAGGGGTCATACCAAGGTATGGTCTGGTAATTAATGCAGTTTCCTGAGACAAAAGCT
AATAAGCCTTTTCCTTGAAACAAATTTTTCTGTCTTAAATAGTAATCTACAGACTTAGTCTTGAATTTCCTATCA
TTGTTTTATCAGTTATGGTTAAAATTTTTACAATGAGCTAGTTTTCTTTGGGTAGCTTTTGAAGTTAAATAGTGA
AATTCTTTACAATAAAAGTGCCACTCGCAAGTACATATTCCTCAAGTCATCCAGATACCATTAAGCAGTAAATCT
TACAAGGATTTCCTTAAGGACTAATTGGGTAAGATTTCTGAACAGATAAGCACTTTTCCAAAGTTAAATACAAAT
ACTAGAAAAAGAATATCATTTTCACAGTATTTTATGATAGGGATAATTCAGGTCCTAATTTTGGTGTTATTTAAA
GGGACCTTATTTTCTGCCCCTTTTCAATCCCCTTAGTAAATTATTTTTATTGTAATTTTAACTTATGCTGAATAC
ATTTTATTTTTTGAGGCAGAGTCTCTGTCACCCAGGGTGGAGTGCAGTGGCACGATCTCAGTTCACTGCAACCTC
CACCTCCCGGGTTCAAGCAATTCTCCTGCCTCAGCCTCCCAAGTAACTTAGACTACAGGCACCCGCCACCACGCC
CGGCTAATTTTTGTATTTTTAGTATAGGTAGGATTTCACCATGTTGGCCAGGCTGGTCTTGAACTCCTGACCTCA
AATGATCCACCCACCTTGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACCACACCCAGCCTGAATACATT
TTAGAGTGCCTAGCCTATTAAACTTTTTTTTCCAGTCCCATGAAGCTGAGGTCTTGAAGCAGCTGGCTGAGAAAC
GAGAGCACGAGAAAGAAGTGCTTCAGAAGGCAATAGAAGAGAACAACAACTTCAGTAAAATGGCAGAAGAGAAAC
TGACCCACAAAATGGAAGCTAATAAAGAGAACCGAGAGGCACAAATGGCTGCCAAACTGGAACGTTTGCGAGAGA
AGGTTGGTTTCTTACTTTGTAAAAGGGTTGAGCTTGGAGTTTGATGCACCAATGAGTTGGCTTGAACTAAGTGCT
TTGATAAAAGGTGTTTGGTGTCTTTTTGTCATCCATTTTGGGGCTTAACATATTAAATGAAAGGTATATTTTAAG
ATGGAATATTCAGTAATTCCCAGCATAATTGCACAGTCCTTGGAAGTCCAGTAGGCAGCTTGTTAGGTTCTACAA
GGGACCCAGGAGATTTGATGATGATGTCTCAGAACTTAAATTGTGTGGTTCCCACAGGCTGTAATATATGCACTG
AGGTTGTGTTGGGCCTCTTTGAGGTGGGGGCTGGGGGTCGTGACTTGACAGGGCTTTTTTTTTTTTTTTTTTTT
TTGACTGATGACACCTTACCCTTCCTTTACAGGATAAGCACATTGAAGAAGTGCGGAAGAACAAAGAATCCAAAG
ACCCTGCTGACGAGACTGAAGCTGACTAATTTGTTCTGAGAACTGACTTTCTCCCCATCCCCTTCCTAAATATCC
AAAGACTGTACTGGCCAGTGTCATTTTATTTTTTCCCTCCTGACAAATATTTTAGAAGCTAATGTAGGACTGTAT
AGGTAGATCCAGATCCAGACTGTAAGATGTTGTTTTAGGGGCTAAAGGGGAGAAACTGAAAGTGTTTTACTCTTT
TTCTAAAGTGTTGGTCTTTCTAATGTAGCTATTTTTCTTGTTGCATCTTTTCTACTTCAGTACACTTGGTGTACT
GGGTTAATGGCTAGTACTGTATTGGCTCTGTGAAAACATATTTGTGAAAAGAGTATGTAGTGGCTTCTTTTGAAC
TGTTAGATGCTGAATATCTGTTCACTTTTCAATCCCAATTCTGTCCCAATCTTACCAGATGCTACTGGACTTGAA
TGGTTAATAAAACTGCACAGTGCTGTTGGTGGCAGTGACTTCTTTTGAGTTAGGTTAATAAATCAAGCCATAGAG
CCCCTCCTGGTTGATACTTGTTCCAGATGGGGCCTTTGGGGCTGGTAGAAATACCCAACGCACAAATGACCGCAC
GTTCTCTGCCCCGTTTCTTGCCCCAGTGTGGTTTGCATTGTCTCCTTCCACAATGACTGCTTTGTTTGGATGCCT

FIGURE 6415C

CAGCCCAGGTCAGCTGTTACTTTCTTTCAGATGTTTATTTGCAAACAACCATTTTTTGTTCTGTGTCCCTTTTAA
AAGGCAGATTAAAAGCACAAGCGTGTTTCTAGAGAACAGTTGAGAGAGAATCTCAAGATTCTACTTGGTGGTTTG
CTTGCTCTACGTTACAGGTGGGGCATGTCCTCATCCTTTCCTGCCATAAAAGCTATGACACGAGAATCAGAATAT
TAATAAAACTTTATGTACTGCTGTAGCAACTCCTGTGAAATGACTAAAGGGAACCTTAATTATTTCTAAAGTAGC
ATTTGACTCGGGTGGTTAAGGTTGGCAGATACGTCATCTTGTATCCAGAGGCTGTAATAGTCCCCATTGTCAGTG
CTTTGCCTCTCAATTCAGGGAACGCCTTTGGCAGCTTTCCTGTGCTATTTGAGAAATAGCCTAATTATACATATT
TTGTGCCTCTCAGACATCTGTATAAAAGCTCTTGGAAGCCAAGCACTTATAGCAAAAGATGATTGCTAATACTGC
GGTGGGGTCCATGTGTTCGTAACGCATGTGCCTCTGCTGCTTGGGCTGTATCTTGAGATTGGGGTTTTACCAAAC
TTATTCATGAGAACAATAACAGCCTACCTCAACTTACCTCCTAAGATTGTTAGGATTAAATGGGTTTGTGGCAAG
AGAGCACACTTAGAACATAGATATTTAGCATTCCGTATAAATCACGATTACTGTTTTCAACCAGAGGCTAATGAG
TGATCTAAGTTTATACTCTTGAGTTGGAAATTATGCAGTTTTTATATTCCTTAAATTGACTTTTAAATTTACTTA
AATGATCAATCAGAGGAATTCTGAACAAAGCTT

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FIGURE 6416

TGCTGCAGCCGCTGCCGCCGATTCCGGATCTCATTGCCACGCGCCCCCGACGACCGCCCGACGTGCATTCCCGAT
TCCTTTTGGTTCCAAGTCCAATATGGCAACTCTAAAGGATCAGCTGATTTATAATCTTCTAAAGGAAGAACAGAC
CCCCCAGAATAAGATTACAGTTGTTGGGGTTGGTGCTGTTGGCATGGCCTGTGCCATCAGTATCTTAATGAAGGA
CTTGGCAGATGAACTTGCTCTTGTTGATGTCATCGAAGACAAATTGAAGGGAGAGATGATGGATCTCCAACATGG
CAGCCTTTTCCTTAGAACACCAAAGATTGTCTCTGGCAAAGACTATAATGTAACTGCAAACTCCAAGCTGGTCAT
TATCACGGCTGGGGCACGTCAGCAAGAGGGAGAAAGCCGTCTTAATTTGGTCCAGCGTAACGTGAACATATTTAA
ATTCATCATTCCTAATGTTGTAAAATACAGCCCGAACTGCAAGTTGCTTATTGTTTCAAATCCAGTGGATATCTT
GACCTACGTGGCTTGGAAGATAAGTGGTTTTCCCAAAAACCGTGTTATTGGAAGTGGTTGCAATCTGGATTCAGC
CCGATTCCGTTACCTGATGGGGGAAAGGCTGGGAGTTCACCCATTAAGCTGTCATGGGTGGGTCCTTGGGGAACA
TGGAGATTCCAGTGTGCCTGTATGGAGTGGAATGAATGTTGCTGGTGTCTCTCTGAAGACTCTGCACCCAGATTT
AGGGACTGATAAAGATAAGGAACAGTGGAAAGAGGTTCACAAGCAGGTGGTTGAGAGTGCTTATGAGGTGATCAA
ACTCAAAGGCTACACATCCTGGGCTATTGGACTCTCTGTAGCAGATTTGGCAGAGAGTATAATGAAGAATCTTAG
GCGGGTGCACCCAGTTTCCACCATGATTAAGGGTCTTTACGGAATAAAGGATGATGTCTTCCTTAGTGTTCCTTG
CATTTTGGGACAGAATGGAATCTCAGACCTTGTGAAGGTGACTCTGACTTCTGAGGAAGAGGCCCGTTTGAAGAA
GAGTGCAGATACACTTTGGGGGATCCAAAAGGAGCTGCAATTTTAAAGTCTTCTGATGTCATATCATTTCACTGT
CTAGGCTACAACAGGATTCTAGGTGGAGGTTGTGCATGTTGTCCTTTTTATCTGATCTGTGATTAAAGCAGTAAT
ATTTTAAGATGGACTGGGAAAAACATCAACTCCTGAAGTTAGAAATAAGAATGGTTTGTAAAATCCACAGCTATA
TCCTGATGCTGGATGGTATTAATCTTGTGTAGTCTTCAACTGGTTAGTGTGAAATAGTTCTGCCACCTCTGACGC
ACCACTGCCAATGCTGTACGTACTGCATTTGCCCCTTGAGCCAGGTGGATGTTTACCGTGTGTTATATAACTTCC
TGGCTCCTTCACTGAACATGCCTAGTCCAACATTTTTTCCCAGTGAGTCACATCCTGGGATCCAGTGTATAAATC
CAATATCATGTCTTGTGCATAATTCTTCCAAAGGATCTTATTTTGTGAACTATATCAGTAGTGTACATTACCATA
TAATGTAAAAAGATCTACATACAAACAATGCAACCAACTATCCAAGTGTTATACCAACTAAAACCCCCAATAAAC
CTTGAACAGTG

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FIGURE 6417

MATLKDQLIYNLLKEEQTPQNKITVVGVGAVGMACAISILMKDLADELALVDVIEDKLKGEMMDLQHGSLFLRTP
KIVSGKDYNVTANSKLVIITAGARQQEGESRLNLVQRNVNIFKFIIPNVVKYSPNCKLLIVSNPVDILTYVAWKI
SGFPKNRVIGSGCNLDSARFRYLMGERLGVHPLSCHGWVLGEHGDSSVPVWSGMNVAGVSLKTLHPDLGTDKDKE
QWKEVHKQVVESAYEVIKLKGYTSWAIGLSVADLAESIMKNLRRVHPVSTMIKGLYGIKDDVFLSVPCILGQNGI
SDLVKVTLTSEEEARLKKSADTLWGIQKELQF

FIGURE 6418

CTCTAAAGCTTAGAGCCAAGATGGCGGGATCCAGGCAAAGGGGTCTCCGGGCCAGAGTTCGGCCGCTGTTCTGCG
CCTTGCTGCTGTCACTCGGTCGCTTCGTCCGGGGCGACGGCGTGGGAGGAGACCCCGCGGTCGCGTTGCCACATC
GCCGTTTCGAGTACAAATACAGCTTCAAGGGGCCGCACCTGGTGCAGAGCGACGGGACCGTGCCCTTCTGGGCCC
ACGCGGGGAATGCTATTCCAAGTTCAGATCAAATTCGAGTAGCACCATCTTTAAAAAGCCAAAGAGGCTCAGTGT
GGACAAAGACAAAAGCGGCCTTTGAGAACTGGGAAGTTGAGGTGACATTTCGAGTGACTGGAAGAGGTCGAATTG
GAGCTGATGGCCTAGCAATTTGGTATGCAGAAAATCAAGGCTTGGAGGGCCCTGTGTTTGGATCAGCTGATCTGT
GGAATGGTGTTGGAATATTTTTTGATTCTTTTGACAATGATGGAAAGAAAAATAATCCTGCTATAGTAATTATAG
GCAACAATGGACAAATCCATTATGACCATCAAAATGACGGGGCTAGTCAAGCTTTGGCAAGTTGCCAGAGGGACT
TCCGCAACAAACCCTATCCTGTCCGAGCAAAGATTACCTATTACCAGAACACACTGACAGTAATGATCAATAATG
GCTTTACACCAGATAAAAATGATTATGAATTTTGTGCCAAAGTGGAAAATATGATTATCCCTGCACAAGGGCATT
TTGGAATATCTGCTGCAACTGGAGGTCTTGCAGATGACCATGATGTCCTTTCTTTTCTGACTTTCCAGTTGACTG
AACCTGGAAAAGAGCCGCCCACACCAGATAAAGAAATTTCGGAAAAGGAAAAAGAAAAGTATCAGGAGGAATTTG
AGCACTTTCAACAAGAATTGGATAAAAAAAAAAGAGGAATTCCAGAAGGGCCACCCCGACCTCCAAGGGCAGCCTG
CGGAGGAAATATTTGAGAGTGTAGGAGATCGAGAGCTAAGACAAGTCTTTGAAGGACAGAATCGTATTCATCTTG
AAATCAAGCAGCTGAACCGGCAGTTAGATATGATTCTTGATGAACAGAGAAGATATGTCTCTTCCTTAACAGAGG
AAATCTCTAAAAGAGGAGCAGGAATGCCTGGGCAGCATGGGCAGATTACTCAACAAGAACTGGATACTGTTGTGA
AAACTCAGCATGAGATTCTGAGACAAGTAAATGAAATGAAAAATTCCATGAGTGAAACCGTCAGACTGGTCAGTG
GAATGCAGCACCCTGGCTCTGCTGGAGGCGTCTATGAGACAACACAGCACTTCATTGACATCAAAGAGCACCTGC
ACATAGTAAAGAGGGACATAGATAACTTAGTGCAGCGAAATATGCCATCAAATGAAAAGCCGAAATGCCCAGAAC
TACCACCATTTCCATCATGTTTGTCTACGGTCCACTTCATTATATTTGTTGTGGTGCAAACTGTATTATTCATTG
GTTATATCATGTATAGGTCTCAGCAAGAAGCAGCTGCCAAAAAATTCTTTTGACTACCATTTTCCTGTGTACTTC
ATCTATTTGTGTACAAAATGATGTCGTTTTGAGGGAATTTAAGTATTTAAATTGCTTCATAGTCTAAATTATTAA
TTTTCTTAATAAAATAACTGTTTAAACATTGATTTGCAGTTAAGAATAAACCTTAAAGCAAAGACAACCACATTT
TAATTTGTTCACAGTATGTAAATCTGTCTAAATTTCAGTGAATTTCTGGTCAGTATGATGCAGCCTCTGAGCAGA
TATTGACCAGTAAGAGGGTAAATAAAGTGGGGGCAACCCCTGGATATGAATGTTACCCCCTAAGTCTCCAATATT
GCAGGTTTCCCTGTATAACGTAAACACACTTGCCCTCATGCCTCCCAGAATATGAGGTCTAATTAAGAAGTCCCA
TCAGGTTTATTTTGTAACCAAAGTCTTTTTTAGAGGTCAGACTTCCTAATCAAAGGCCTGGGCCTGCAGTCCTTT
CATCTTAATGCAACTTCCTTTGAAATCAAAGAATATTTTGTCTGAGAGCTTTAAGGATCTGGTAATAGACTTCAA
AATGTTAAGTGAAATTTTTTTTCCTCTATTTATCAATGATATATTTCACTTTTAAAGGAAATTTTGGAGGAAAAT
ATAGCTGCTTTTTGCCTAAAAAACCTTGTGGGTGGAAATATTCCTCTGAGAATGGCTTTTATAGGTATTTTGCCT
GGTAATGTATTCATTCATGATTGCCCATATTCTTGAATGTTTCTTCATTCCAATGGGGTCAGGTCAATATTATGA
AAATAATTTTTATATTTATATTTGTAACTAAGAATTTATTTCTCCCTTTACTACACGATGTAAATTCACGTCAAA
TTCGATGATCTGAGGATTTAAATTCACAAAACCTGCCACTACATTCTGGTTTACATTAGTTACTTCATGCTGGCT
GGGGTTAGTGACCATTTGCATACTCTTTTAAATCAAGGAGGCTGTAGTAGAGGCAGTTTTAAGATTCTTGAAGGC
AAAATTTGAAAAACAGTGAATACTTCTAATTGTTTCCTTTTAGTGCCAGAACTAAGACATTGTGAAGCACTTGTT
AGTAAACTTAACCTTGAAATGTCAGACTGGAAGGAGTTTTTATGTCTTTGTGCATACTTCTGGGTATTACAGAAA
CAGTCTGTAAATAACATTTTAAGATGCAAATTTAATTCTGTTCACAGCTGATTTATACTGATTT

FIGURE 6419

MAGSRQRGLRARVRPLFCALLLSLGRFVRGDGVGGDPAVALPHRRFEYKYSFKGPHLVQSDGTVPFWAHAGNAIP
SSDQIRVAPSLKSQRGSVWTKTKAAFENWEVEVTFRVTGRGRIGADGLAIWYAENQGLEGPVFGSADLWNGVGIF
FDSFDNDGKKNNPAIVIIGNNGQIHYDHQNDGASQALASCQRDFRNKPYPVRAKITYYQNTLTVMINNGFTPDKN
DYEFCAKVENMIIPAQGHFGISAATGGLADDHDVLSFLTFQLTEPGKEPPTPDKEISEKEKEKYQEEFEHFQQEL
DKKKEEFQKGHPDLQGQPAEEIFESVGDRELRQVFEGQNRIHLEIKQLNRQLDMILDEQRRYVSSLTEEISKRGA
GMPGQHGQITQQELDTVVKTQHEILRQVNEMKNSMSETVRLVSGMQHPGSAGGVYETTQHFIDIKEHLHIVKRDI
DNLVQRNMPSNEKPKCPELPPFPSCLSTVHFIIFVVVQTVLFIGYIMYRSQQEAAAKKFF

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FIGURE 6420

CGAGGAGCGAGCGAGCTAGCTAGAGGCAGCCGCGCCCGCCGCCGCCCCTGCTCTGTATGCCGCTCTCCCCCGGCG
CGGCCGCCGCCGATCGCAGCAGCAGGAGCCGCCGCCGCCGCGGTTGATGTGGTTGGGCCGGGGCTGAGGAGGCCG
CCAAGATGCCGCAGTCCAAGTCCCGGAAGATCGCGATCCTGGGCTACCGGTCTGTGGGGAAATCCTCATTGACGA
TTCAATTTGTTGAAGGCCAATTTGTGGACTCCTACGATCCAACCATAGAAAACACTTTTACAAAGTTGATCACAG
TAAATGGACAAGAATATCATCTTCAACTTGTAGACACAGCTGGGCAAGATGAATATTCTATCTTTCCTCAGACCT
ACTCCATAGATATTAATGGCTATATTCTTGTGTATTCTGTTACATCAATCAAAAGTTTTGAAGTGATTAAAGTTA
TCCATGGCAAATTATTGGATATGGTGGGGAAAGTACAAATACCTATTATGTTGGTTGGGAATAAGAAAGACCTGC
ATATGGAAAGGGTGATCAGTTATGAAGAAGGGAAAGCTTTGGCAGAATCTTGGAATGCAGCTTTTTTGGAATCTT
CTGCTAAAGAAAATCAGACTGCTGTTGATGTTTTTAGAAGGATAATTTTGGAGGCAGAAAAAATGGATGGGGCAG
CTTCACAAGGCAAGTCTTCATGCTCGGTGATGTGATTCTGCTGTGAAGCCTGAGGACACTGGGAATATATTCTAC
CTGAAGAAGCAAACTGCCCGTTCTCCTTGAAGATCAACTATGCTTCTTTTTTCTTCTGTTAACCTGAAAGATACC
ATTTGGGTCAGAGCTCCCCTCCCTTCAGATTATGTTAACTCTGAGTCTGTCCAAATGAGTTCACTTCCATTTTCA
AATTTTAAGCAATCATATTTTCAATTTATATATTGTATTTCTTAATATTATGACCAAGAATTTTATCGGCATTAA
TTTTTCAGTGTAGTTTGTTGTTTAAAATAATGTAATCATCAAAATGATGCATATTGTTACAXTACTATTAACTAG
GCTTCAATATATCAGTGTTTATTXAAAATGTGTTAATGTATACTTGTAAATAAAATAGCTGCAAACCTGGGAAAT
TXCCCCXAGAAXCGAGGAAGXTXA

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FIGURE 6421

MPQSKSRKIAILGYRSVGKSSLTIQFVEGQFVDSYDPTIENTFTKLITVNGQEYHLQLVDTAGQDEYSIFPQTYS
IDINGYILVYSVTSIKSFEVIKVIHGKLLDMVGKVQIPIMLVGNKKDLHMERVISYEEGKALAESWNAAFLESSA
KENQTAVDVFRRIILEAEKMDGAASQGKSSCSVM

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FIGURE 6422

GGTCTTTGAGCGCTAACGTCTTTCTGTCTCCCCGCGGTGGTGATGACGGTGAAAACTGAGGCTGCTAAGGGCACC
CTCACTTACTCCAGGATGAGGGGCATGGTGGCAATTCTCATCGCTTTCATGAAGCAGAGGAGGATGGGTCTGAAC
GACTTTATTCAGAAGATTGCCAATAACTCCTATGCATGCAAACACCCTGAAGTTCAGTCCATCTTGAAGATCTCC
CAACCTCAGGAGCCTGAGCTTATGAATGCCAACCCTTCTCCTCCACCAAGTCCTTCTCAGCAAATCAACCTTGGC
CCGTCGTCCAATCCTCATGCTAAACCATCTGACTTTCACTTCTTGAAAGTGATCGGAAAGGGCAGTTTTGGAAAG
GTTCTTCTAGCAAGACACAAGGCAGAAGAAGTGTTCTATGCAGTCAAAGTTTTACAGAAGAAAGCAATCCTGAAA
AAGAAAGAGGAGAAGCATATTATGTCGGAGCGGAATGTTCTGTTGAAGAATGTGAAGCACCCTTTCCTGGTGGGC
CTTCACTTCTCTTTCCAGACTGCTGACAAATTGTACTTTGTCCTAGACTACATTAATGGTGGAGAGTTGTTCTAC
CATCTCCAGAGGGAACGCTGCTTCCTGGAACCACGGGCTCGTTTCTATGCTGCTGAAATAGCCAGTGCCTTGGGC
TACCTGCATTCACTGAACATCGTTTATAGAGACTTAAAACCAGAGAATATTTTGCTAGATTCACAGGGACACATT
GTCCTTACTGACTTCGGACTCTGCAAGGAGAACATTGAACACAACAGCACAACATCCACCTTCTGTGGCACGCCG
GAGTATCTCGCACCTGAGGTGCTTCATAAGCAGCCTTATGACAGGACTGTGGACTGGTGGTGCCTGGGAGCTGTC
TTGTATGAGATGCTGTATGGCCTGCCGCCTTTTTATAGCCGAAACACAGCTGAAATGTACGACAACATTCTGAAC
AAGCCTCTCCAGCTGAAACCAAATATTACAAATTCCGCAAGACACCTCCTGGAGGGCCTCCTGCAGAAGGACAGG
ACAAAGCGGCTCGGGGCCAAGGATGACTTCATGGAGATTAAGAGTCATGTCTTCTTCTCCTTAATTAACTGGGAT
GATCTCATTAATAAGAAGATTACTCCCCCTTTTAACCCAAATGTGAGTGGGCCCAACGACCTACGGCACTTTGAC
CCCGAGTTTACCGAAGAGCCTGTCCCCAACTCCATTGGCAAGTCCCCTGACAGCGTCCTCGTCACAGCCAGCGTC
AAGGAAGCTGCCGAGGCTTTCCTAGGCTTTTCCTATGCGCCTCCCACGGACTCTTTCCTCTGAACCCTGTTAGGG
CTTGGTTTTAAAGGATTTTATGTGTGTTTCCGAATGTTTTAGTTAGCCTTTTGGTGGAGCCGCCAGCTGACAGGA
CATCTTACAAGAGAATTTGCACATCTCTGGAAGCTTAGCAATCTTATTGCACACTGTTCGCTGGAAGCTTTTTGA
AGAGCACATTCTCCTCAGTGAGCTCATGAGGTTTTCATTTTTATTCTTCCTTCCAACGTGGTGCTATCTCTGAAA
CGAGCGTTAGAGTGCCGCCTTAGACGGAGGCAGGAGTTTCGTTAGAAAGCGGACGCTGTTCTAAAAAAGGTCTCC
TGCAGATCTGTCTGGGCTGTGATGACGAATATTATGAAATGTGCCTTTTCTGAAGAGATTGTGTTAGCTCCAAAG
CTTTTCCTATCGCAGTGTTTCAGTTCTTTATTTTCCCTTGTGGATATGCTGTGTGAACCGTCGTGTGAGTGTGGT
ATGCCTGATCACAGATGGATTTTGTTATAAGCATCAATGTGACACTTGCAGGACACTACAACGTGGGACATTGTT
TGTTTCTTCCATATTTGGAAGATAAATTTATGTGTAGACTTTTTTGTAAGATACGGTTAATAACTAAAATTTATT
GAAATGGTCTTGCAATGACTCGTATTCAGATGCTTAAAGAAAGCATTGCTGCTACAAATATTTCTATTTTTAGAA
AGGGTTTTTATGGACCAATGCCCCAGTTGTCAGTCAGAGCCGTTGGTGTTTTTCATTGTTTAAAATGTCACCTGT
AAAATGGGCATTATTTATGTTTTTTTTTTGCATTCCTGATAATTGTATGTATTGTATAAAGAACGTCTGTACATT
GGGTTATAACACTAGTATATTTAAACTTACAGGCTTATTTGTAATGTAAACCACCATTTTAATGTACTGTAATTA
ACATGGTTATAATACGTACAATCCTTCCCTCATCCCATCACACAACCTTTTTTGTGTGTGATAAACTGATTTTGG
TTTGCAATAAAACCTTGAAAAATATTTAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 6423

MTVKTEAAKGTLTYSRMRGMVAILIAFMKQRRMGLNDFIQKIANNSYACKHPEVQSILKISQPQEPELMNANPSP
PPSPSQQINLGPSSNPHAKPSDFHFLKVIGKGSFGKVLLARHKAEEVFYAVKVLQKKAILKKKEEKHIMSERNVL
LKNVKHPFLVGLHFSFQTADKLYFVLDYINGGELFYHLQRERCFLEPRARFYAAEIASALGYLHSLNIVYRDLKP
ENILLDSQGHIVLTDFGLCKENIEHNSTTSTFCGTPEYLAPEVLHKQPYDRTVDWWCLGAVLYEMLYGLPPFYSR
NTAEMYDNILNKPLQLKPNITNSARHLLEGLLQKDRTKRLGAKDDFMEIKSHVFFSLINWDDLINKKITPPFNPN
VSGPNDLRHFDPEFTEEPVPNSIGKSPDSVLVTASVKEAAEAFLGFSYAPPTDSFL

FIGURE 6424

GTAACCGCTACTCCCGGACACCAGACCACCGCCTTCCGTACACAGGGGCCCGCATCCCACCCTCCCGGACCTAAG
AGCCTGGGTCCCCTGTTTCCGGAGGTCCGCTTCCCGGCCCCCAGATTCTGGCATCCCAGCCCTCAGTGTCCAAGA
CCCAGGCAGCCCGGGTCCCCGCCTCCCGGATCCAGGCGTCCGGGATCTGCGCCACCAGAACCTAGCCTCCTGCAG
ACCTCCGCCATCTGGGGGCACTCAACCTCCTGGAGCCAAGGGCCCCACGTCCCACCCAGAGAAACTCTCGTATTC
CCAGCTCCTAGGGCCAAGGAACCCGGGCGCTCCGAACTCCCAGCTTTCGGACATCTGGCACACGGGGCAGAGCAG
AGAAGCTCAGCGCCCAGCCTGGGGAATTTAAACACTCCAGCTTCCAAGAGCCAAGGAACTTCAGTGCTGTGAACT
CACAACTCTAAGGAGCCCTCCAAAGTTCCAGTCTCCAGGTGCTGTTACTCAACTCAGTCCTAGGAACGTCGGGTC
CTGGGAAGGAGCCCAAGCGCTCCCAGCCAGCTTCCAGGCGCTAAGAAACCCCGGTGCTTCCCATC**ATG**GTGGCCG
ATCCTCCTCGAGACTCCAAGGGGCTCGCAGCGGCGGAGCCCACCGCCAACGGGGGCCTGGCGCTGGCCTCCATCG
AGGACCAAGGCGCGGCAGCAGGCGGCTACTGCGGTTCCCGGGACCAGGTGCGCCGCTGCCTTCGAGCCAACCTGC
TTGTGCTGCTGACAGTGGTGGCCGTGGTGGCCGGCGTGGCGCTGGGACTGGGGGTGTCGGGGGCCGGGGGTGCGC
TGGCGTTGGGCCCGGAGCGCTTGAGCGCCTTCGTCTTCCCGGGCGAGCTGCTGCTGCGTCTGCTGCGGATGATCA
TCTTGCCGCTGGTGGTGTGCAGCTTGATCGGCGGCGCCGCCAGCCTGGACCCCGGCGCGCTCGGCCGTCTGGGCG
CCTGGGCGCTGCTCTTTTTCCTGGTCACCACGCTGCTGGCGTCGGCGCTCGGAGTGGGCTTGGCGCTGGCTCTGC
AGCCGGGCGCCGCCTCCGCCGCCATCAACGCCTCCGTGGGAGCCGCGGGCAGTGCCGAAAATGCCCCCAGCAAGG
AGGTGCTCGATTCGTTCCTGGATCTTGCGAGAAATATCTTCCCTTCCAACCTGGTGTCAGCAGCCTTTCGCTCAT
ACTCTACCACCTATGAAGAGAGGAATATCACCGGAACCAGGGTGAAGGTGCCCGTGGGGCAGGAGGTGGAGGGGA
TGAACATCCTGGGCTTGGTAGTGTTTGCCATCGTCTTTGGTGTGGCGCTGCGGAAGCTGGGGCCTGAAGGGGAGC
TGCTTATCCGCTTCTTCAACTCCTTCAATGAGGCCACCATGGTTCTGGTCTCCTGGATCATGTGGTACGCCCCTG
TGGGCATCATGTTCCTGGTGGCTGGCAAGATCGTGGAGATGGAGGATGTGGGTTTACTCTTTGCCCGCCTTGGCA
AGTACATTCTGTGCTGCCTGCTGGGTCACGCCATCCATGGGCTCCTGGTACTGCCCCTCATCTACTTCCTCTTCA
CCCGCAAAAACCCCTACCGCTTCCTGTGGGGCATCGTGACGCCGCTGGCCACTGCCTTTGGGACCTCTTCCAGTT
CCGCCACGCTGCCGCTGATGATGAAGTGCGTGGAGGAGAATAATGGCGTGGCCAAGCACATCAGCCGTTTCATCC
TGCCCATCGGCGCCACCGTCAACATGGACGGTGCCGCGCTCTTCCAGTGCGTGGCCGCAGTGTTCATTGCACAGC
TCAGCCAGCAGTCCTTGGACTTCGTAAAGATCATCACCATCCTGGTCACGGCCACAGCGTCCAGCGTGGGGGCAG
CGGGCATCCCTGCTGGAGGTGTCCTCACTCTGGCCATCATCCTCGAAGCAGTCAACCTCCCGGTCGACCATATCT
CCTTGATCCTGGCTGTGGACTGGCTAGTCGACCGGTCCTGTACCGTCCTCAATGTAGAAGGTGACGCTCTGGGGG
CAGGACTCCTCCAAAATTATGTGGACCGTACGGAGTCGAGAAGCACAGAGCCTGAGTTGATACAAGTGAAGAGTG
AGCTGCCCCTGGATCCGCTGCCAGTCCCCACTGAGGAAGGAAACCCCCTCCTCAAACACTATCGGGGGCCCGCAG
GGGATGCCACGGTCGCCTCTGAGAAGGAATCAGTCATG**TAA**ACCCCGGGAGGGACCTTCCCTGCCCTGCTGGGGG
TGCTCTTTGGACACTGGATTATGAGGAATGGATAAATGGATGAGCTAGGGCTCTGGGGGTCTGCCTGCACACTCT
GGGGAGCCAGGGGCCCCAGCACCCTCCAGGACAGGAGATCTGGGATGCCTGGCTGCTGGAGTACATGTGTTCACA
AGGGTTACTCCTCAAAACCCCCAGTTCTCACTCATGTCCCCAACTCAAGGCTAGAAAACAGCAAGATGGAGAAAT
AATGTTCTGCTGCGTCCCCACCGTGACCTGCCTGGCCTCCCCTGTCTCAGGGAGCAGGTCACAGGTCACCATGGG
GAATTCTAGCCCCCACTGGGGGGATGTTACAACACCATGCTGGTTATTTTGGCGGCTGTAGTTGTGGGGGGATGT
GTGTGTGCACGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTTCTGTGACCTCCTGTCCCCATGGTACGTC
CCACCCTGTCCCCAGATCCCCTATTCCCTCCACAATAACAGAAACACTCCCAGGGACTCTGGGGAGAGGCTGAGG
ACAAATACCTGCTGTCACTCCAGAGGACATTTTTTTTAGCAATAAAATTGAGTGTCAACTATTTAAAAAAAAAAA
AAAAAA

FIGURE 6425

MVADPPRDSKGLAAAEPTANGGLALASIEDQGAAAGGYCGSRDQVRRCLRANLLVLLTVVAVVAGVALGLGVSGA
GGALALGPERLSAFVFPGELLLRLLRMIILPLVVCSLIGGAASLDPGALGRLGAWALLFFLVTTLLASALGVGLA
LALQPGAASAAINASVGAAGSAENAPSKEVLDSFLDLARNIFPSNLVSAAFRSYSTTYEERNITGTRVKVPVGQE
VEGMNILGLVVFAIVFGVALRKLGPEGELLIRFFNSFNEATMVLVSWIMWYAPVGIMFLVAGKIVEMEDVGLLFA
RLGKYILCCLLGHAIHGLLVLPLIYFLFTRKNPYRFLWGIVTPLATAFGTSSSSATLPLMMKCVEENNGVAKHIS
RFILPIGATVNMDGAALFQCVAAVFIAQLSQQSLDFVKIITILVTATASSVGAAGIPAGGVLTLAIILEAVNLPV
DHISLILAVDWLVDRSCTVLNVEGDALGAGLLQNYVDRTESRSTEPELIQVKSELPLDPLPVPTEEGNPLLKHYR
GPAGDATVASEKESVM

FIGURE 6426A

CGTTGTTTGGCGTGTTTTTTTTTTTGTTTTTTGTCACTGCCTGCCTGGGTCCTGCCCGAGGTCTCCATCCTCGGT
TTCCCTGTCCTTGCCCCGGGCCCTGGGAGTGCTCTGGAAGGCTGCGCAGTATTGGAGGGGACAGAATGACCTTCC
GGCCTTGAGTCCCTGGGGAGCAGATGGACCCTACTGGAAGTCAGTTGGATTCAGATTTCTCTCAGCAAGATACTC
CTTGCCTGATAATTGAAGATTCTCAGCCTGAAAGCCAGGTTCTAGAGGATGATTCTGGTTCTCACTTCAGTATGC
TATCTCGACACCTTCCTAATCTCCAGACGCACAAAGAAAATCCTGTGTTGGATGTTGTGTCCAATCCTGAACAAA
CAGCTGGAGAAGAACGAGGAGACGGTAATAGTGGGTTCAATGAACATTTGAAAGAAAACAAGGTTGCAGACCCTG
TGGATTCTTCTAACTTGGACACATGTGGTTCCATCAGTCAGGTCATTGAGCAGTTACCTCAGCCAAACAGGACAA
GCAGTGTTCTGGGAATGTCAGTGGAATCTGCTCCTGCTGTGGAGGAAGAGAAGGGAGAAGAGTTGGAACAGAAGG
AGAAAGAGAAGGAAGAAGATACTTCAGGCAATACTACACATTCCCTTGGTGCTGAAGATACTGCCTCATCACAGT
TGGGTTTTGGGGTTCTGGAACTCTCCCAGAGCCAGGATGTTGAGGAAAATACTGTGCCATATGAAGTGGACAAAG
AGCAGCTACAATCAGTAACCACCAACTCTGGTTATACCAGGCTGTCTGATGTGGATGCTAATACTGCAATTAAGC
ATGAAGAACAGTCCAACGAAGATATCCCCATAGCAGAACAGTCCAGCAAGGACATCCCTGTGACAGCACAGCCCA
GTAAGGATGTACATGTTGTAAAAGAGCAAAATCCACCACCTGCAAGGTCAGAGGACATGCCTTTTAGCCCCAAAG
CATCTGTTGCTGCTATGGAAGCAAAAGAACAGTTGTCTGCACAAGAACTTATGGAAAGTGGACTGCAGATTCAGA
AGTCACCAGAGCCTGAGGTTTTGTCAACTCAGGAAGACTTGTTTGACCAGAGCAATAAAACAGTATCTTCTGATG
GTTGCTCTACTCCTTCAAGGGAGGAAGGTGGGTGTTCTTTGGCTTCCACTCCTGCCACCACTCTGCATCTCCTGC
AGCTCTCTGGTCAGAGGTCCCTTGTTCAGGACAGTCTTTCCACGAATTCTTCAGATCTTGTTGCTCCTTCTCCTG
ATGCTTTCCGATCTACTCCTTTTATCGTTCCTAGCAGTCCCACAGAGCAAGAAGGGAGACAAGATAAGCCAATGG
ACACGTCAGTGTTATCTGAAGAAGGAGGAGAGCCTTTTCAGAAGAAACTTCAAAGTGGTGAACCAGTGGAGTTAG
AAAACCCCCCTCTCCTGCCTGAGTCCACTGTATCACCACAAGCCTCAACACCAATATCTCAGAGCACACCAGTCT
TCCCTCCTGGGTCACTTCCTATCCCATCCCAGCCTCAGTTTTCTCATGACATTTTTATTCCTTCCCCAAGTCTGG
AAGAACAATCAAATGATGGGAAGAAAGATGGAGATATGCATAGTTCATCTTTGACAGTTGAGTGTTCTAAAACTT
CAGAGATTGAACCAAAGAATTCCCCTGAGGATCTTGGGCTATCTTTGACAGGGGATTCTTGCAAGTTGATGCTTT
CTACAAGTGAATATAGTCAGTCCCCAAAGATGGAGAGCTTGAGTTCTCACAGAATTGATGAAGATGGAGAAAACA
CACAGATTGAGGATACGGAACCCATGTCTCCAGTTCTCAATTCTAAATTTGTTCCTGCTGAAAATGATAGTATCC
TGATGAATCCAGCACAGGATGGTGAAGTACAACTGAGTCAGAATGATGACAAAACAAAGGGAGATGATACAGACA
CCAGGGATGACATTAGTATTTTAGCCACTGGTTGCAAGGGCAGAGAAGAAACGGTAGCAGAAGATGTTTGTATTG
ATCTCACTTGTGATTCGGGGAGTCAGGCAGTTCCGTCACCAGCTACTCGATCTGAGGCACTTTCTAGTGTGTTAG
ATCAGGAGGAAGCTATGGAAATTAAAGAACACCATCCAGAGGAGGGGTCTTCAGGGTCTGAGGTGGAAGAAATCC
CTGAGACACCTTGTGAAAGTCAAGGAGAGGAACTCAAAGAAGAAAATATGGAGAGTGTTCCGTTGCACCTTTCTC
TGACTGAAACTCAGTCCCAAGGGTTGTGTCTTCAAAAGGAAATGCCAAAAAAAGAATGCTCAGAAGCTATGGAAG
TTGAAACCAGTGTGATTAGTATTGATTCCCCTCAAAAGTTGGCAATACTTGACCAAGAATTGGAACATAAGGAAC
AGGAAGCTTGGGAAGAAGCTACTTCAGAGGACTCCAGTGTTGTCATTGTAGATGTGAAAGAGCCATCTCCCAGAG
TTGATGTTTCTTGTGAACCTTTGGAGGGAGTGGAGAAGTGCTCAGATTCCCAGTCATGGGAGGATATTGCTCCAG
AAATAGAACCATGTGCTGAGAATAGATTAGACACCAAGGAAGAAAAGAGTGTAGAATATGAAGGAGATCTGAAAT
CAGGGACTGCAGAAACAGAACCTGTAGAGCAAGATTCTTCACAGCCTTCCTTACCTTTAGTGAGAGCAGATGATC
CTTTAAGACTTGACCAGGAGTTGCAGCAGCCCCAAACTCAGGAGAAAACAAGTAATTCATTAACAGAAGACTCAA
AAATGGCTAATGCAAAGCAGCTAAGCTCAGATGCAGAGGCCCAGAAGCTGGGGAAGCCCTCTGCCCATGCCTCAC
AAAGCTTCTGTGAAAGTTCTAGTGAAACCCCATTTCATTTCACTTTGCCTAAAGAAGGTGATATCATCCCACCAT
TGACTGGTGCAACCCCACCTCTTATTGGGCACCTAAAATTGGAGCCCAAGAGACACAGTACTCCTATTGGTATTA
GCAACTATCCAGAAAGCACCATAGCAACCAGTGATGTCATGTCTGAAAGCATGGTGGAGACCCATGATCCCATAC
TTGGGAGTGGAAAAGGGGATTCTGGGGCTGCCCCAGACGTGGATGATAAATTATGTCTAAGAATGAAACTGGTTA
GTCCTGAGACTGAGGCGAGTGAAGAGTCTTTGCAGTTCAACCTGGAAAAGCCTGCAACTGGTGAAAGAAAAAATG
GATCTACTGCTGTTGCTGAGTCTGTTGCCAGTCCCCAGAAGACCATGTCTGTGTTGAGCTGTATCTGTGAAGCCA
GGCAAGAGAATGAGGCTCGAAGTGAGGATCCCCCCACCACACCCATCAGGGGGAACTTGCTCCACTTTCCAAGTT
CTCAAGGAGAAGAGGAGAAAGAAAAATTGGAGGGTGACCATACAATCAGGCAGAGTCAACAGCCTATGAAGCCCA
TTAGTCCTGTCAAGGACCCTGTTTCTCCTGCTTCCCAGAAGATGGTCATACAAGGGCCATCCAGTCCTCAAGGAG
AGGCAATGGTGACAGATGTGCTAGAAGACCAGAAAGAAGGACGGAGTACTAATAAGGAAAATCCTAGTAAGGCCT

FIGURE 6426B

TGATTGAAAGGCCCAGCCAAAATAACATAGGAATCCAAACCATGGAGTGTTCCTTGAGGGTCCCAGAAACTGTTT
CAGCAGCAACCCAGACTATAAAGAATGTGTGTGAGCAGGGGACCAGTACAGTGGACCAGAACTTTGGAAAGCAAG
ATGCCACAGTTCAGACTGAGAGGGGGAGTGGTGAGAAACCAGTCAGTGCTCCTGGGGATGATACAGAGTCGCTCC
ATAGCCAGGGAGAAGAAGAGTTTGATATGCCTCAGCCTCCACATGGCCATGTCTTACATCGTCACATGAGAACAA
TCCGGGAAGTACGCACACTTGTCACTCGTGTCATTACAGATGTGTATTATGTGGATGGAACAGAAGTAGAAAGAA
AAGTAACTGAGGAGACTGAAGAGCCAATTGTAGAGTGTCAGGAGTGTGAAACTGAAGTTTCCCCTTCACAGACTG
GGGGCTCCTCAGGTGACCTGGGGGATATCAGCTCCTTCTCCTCCAAGGCATCCAGCTTACACCGCACATCAAGTG
GGACAAGTCTCTCAGCTATGCACAGCAGTGGAAGCTCAGGGAAAGGAGCCGGACCACTCAGAGGGAAAACCAGCG
GGACAGAACCCGCAGATTTTGCCTTACCCAGCTCCCGAGGAGGCCCAGGAAAACTGAGTCCTAGAAAAGGGGTCA
GTCAGACAGGGACGCCAGTGTGTGAGGAGGATGGTGATGCAGGCCTTGGCATCAGACAGGGAGGGAAGGCTCCAG
TCACGCCTCGTGGGCGTGGGCGAAGGGGCCGCCCACCTTCTCGGACCACTGGAACCAGAGAAACAGCTGTGCCTG
GCCCCTTGGGCATAGAGGACATTTCACCTAACTTGTCACCAGATGATAAATCCTTCAGCCGTGTCGTGCCCCGAG
TGCCAGACTCCACCAGACGAACAGATGTGGGTGCTGGTGCTTTGCGTCGTAGTGACTCTCCAGAAATTCCTTTCC
AGGCTGCTGCTGGCCCTTCTGATGGCTTAGATGCCTCCTCTCCAGGAAATAGCTTTGTAGGGCTCCGTGTTGTAG
CCAAGTGGTCATCCAATGGCTACTTTTACTCTGGGAAAATCACACGAGATGTCGGAGCTGGGAAGTATAAATTGC
TCTTTGATGATGGGTACGAATGTGATGTGTTGGGCAAAGACATTCTGTTATGTGACCCCATCCCGCTGGACACTG
AAGTGACGGCCCTCTCGGAGGATGAGTATTTCAGTGCAGGAGTGGTGAAAGGACATAGGAAGGAGTCTGGGGAAC
TGTACTACAGCATTGAAAAAGAAGGCCAAAGAAAGTGGTATAAGCGAATGGCTGTCATCCTGTCCTTGGAGCAAG
GAAACAGACTGAGAGAGCAGTATGGGCTTGGCCCCTATGAAGCAGTAACACCTCTTACAAAGGCAGCAGATATCA
GCTTAGACAATTTGGTGGAAGGGAAGCGGAAACGGCGCAGTAACGTCAGCTCCCCAGCCACCCCTACTGCCTCCA
GTAGCAGCAGCACAACCCCTACCCGAAAGATCACAGAAAGTCCTCGTGCCTCCATGGGAGTTCTCTCAGGCAAAA
GAAAACTTATCACTTCTGAAGAGGAACGGTCCCCTGCCAAGCGAGGTCGCAAGTCTGCCACAGTAAAACCTGGTG
CAGTAGGGGCAGGAGAGTTTGTGAGCCCCTGTGAGAGTGGAGACAACACCGGTGAACCCTCTGCCCTGGAAGAGC
AGAGAGGGCCTTTGCCTCTCAACAAGACCTTGTTTCTGGGCTACGCATTTCTCCTTACCATGGCCACAACCAGTG
ACAAGTTGGCCAGCCGCTCCAAACTGCCAGATGGTCCTACAGGAAGCAGTGAAGAAGAGGAGGAATTTTTGGAAA
TTCCTCCTTTCAACAAGCAGTATACAGAATCCCAGCTTCGAGCAGGAGCTGGCTATATCCTTGAAGATTTCAATG
AAGCCCAGTGTAACACAGCTTACCAGTGTCTTCTAATTGCGGATCAGCATTGTCGAACCCGGAAGTACTTCCTGT
GCCTTGCCAGTGGGATTCCTTGTGTGTCTCATGTCTGGGTCCATGATAGTTGCCATGCCAACCAGCTCCAGAACT
ACCGTAATTATCTGTTGCCAGCTGGGTACAGCCTTGAGGAGCAAAGAATTCTGGACTGGCAACCCCGTGAAAATC
CTTTCCAGAATCTGAAGGTACTCTTGGTATCAGACCAACAGCAGAACTTCCTGGAGCTCTGGTCTGAGATCCTCA
TGACTGGTGGTGCAGCCTCTGTGAAGCAGCACCATTCAAGTGCCCATAACAAAGATATTGCTTTAGGGGTATTTG
ATGTGGTGGTGACGGACCCCTCATGCCCAGCCTCGGTGCTGAAGTGTGCTGAAGCATTGCAGCTGCCTGTGGTGT
CACAAGAGTGGGTGATCCAGTGCCTCATTGTTGGGGAGAGAATTGGATTCAAGCAGCATCCAAAATATAAACACG
ATTATGTTTCTCAC**TAA**AGATACTTGGTCTTACTGGTTTTATTCCCTGCTATCGTGGAGATTGTGTTTTAACCAG
GTTTTAAATGTGTCTTGTGTGTAACTGGATTCCTTGCATGGATCTTGTATATAGTTTTATTTGCTGAACTTTTAT
GATAAAATAAATGTTGAATCTCTTTGGTTGTAGTAACTGGG

FIGURE 6427

MDPTGSQLDSDFSQQDTPCLIIEDSQPESQVLEDDSGSHFSMLSRHLPNLQTHKENPVLDVVSNPEQTAGEERGD
GNSGFNEHLKENKVADPVDSSNLDTCGSISQVIEQLPQPNRTSSVLGMSVESAPAVEEEKGEELEQKEKEKEEDT
SGNTTHSLGAEDTASSQLGFGVLELSQSQDVEENTVPYEVDKEQLQSVTTNSGYTRLSDVDANTAIKHEEQSNED
IPIAEQSSKDIPVTAQPSKDVHVVKEQNPPPARSEDMPFSPKASVAAMEAKEQLSAQELMESGLQIQKSPEPEVL
STQEDLFDQSNKTVSSDGCSTPSREEGGCSLASTPATTLHLLQLSGQRSLVQDSLSTNSSDLVAPSPDAFRSTPF
IVPSSPTEQEGRQDKPMDTSVLSEEGGEPFQKKLQSGEPVELENPPLLPESTVSPQASTPISQSTPVFPPGSLPI
PSQPQFSHDIFIPSPSLEEQSNDGKKDGDMHSSSLTVECSKTSEIEPKNSPEDLGLSLTGDSCKLMLSTSEYSQS
PKMESLSSHRIDEDGENTQIEDTEPMSPVLNSKFVPAENDSILMNPAQDGEVQLSQNDDKTKGDDTDTRDDISIL
ATGCKGREETVAEDVCIDLTCDSGSQAVPSPATRSEALSSVLDQEEAMEIKEHHPEEGSSGSEVEEIPETPCESQ
GEELKEENMESVPLHLSLTETQSQGLCLQKEMPKKECSEAMEVETSVISIDSPQKLAILDQELEHKEQEAWEEAT
SEDSSVVIVDVKEPSPRVDVSCEPLEGVEKCSDSQSWEDIAPEIEPCAENRLDTKEEKSVEYEGDLKSGTAETEP
VEQDSSQPSLPLVRADDPLRLDQELQQPQTQEKTSNSLTEDSKMANAKQLSSDAEAQKLGKPSAHASQSFCESSS
ETPFHFTLPKEGDIIPPLTGATPPLIGHLKLEPKRHSTPIGISNYPESTIATSDVMSESMVETHDPILGSGKGDS
GAAPDVDDKLCLRMKLVSPETEASEESLQFNLEKPATGERKNGSTAVAESVASPQKTMSVLSCICEARQENEARS
EDPPTTPIRGNLLHFPSSQGEEEKEKLEGDHTIRQSQQPMKPISPVKDPVSPASQKMVIQGPSSPQGEAMVTDVL
EDQKEGRSTNKENPSKALIERPSQNNIGIQTMECSLRVPETVSAATQTIKNVCEQGTSTVDQNFGKQDATVQTER
GSGEKPVSAPGDDTESLHSQGEEEFDMPQPPHGHVLHRHMRTIREVRTLVTRVITDVYYVDGTEVERKVTEETEE
PIVECQECETEVSPSQTGGSSGDLGDISSFSSKASSLHRTSSGTSLSAMHSSGSSGKGAGPLRGKTSGTEPADFA
LPSSRGGPGKLSPRKGVSQTGTPVCEEDGDAGLGIRQGGKAPVTPRGRGRRGRPPSRTTGTRETAVPGPLGIEDI
SPNLSPDDKSFSRVVPRVPDSTRRTDVGAGALRRSDSPEIPFQAAAGPSDGLDASSPGNSFVGLRVVAKWSSNGY
FYSGKITRDVGAGKYKLLFDDGYECDVLGKDILLCDPIPLDTEVTALSEDEYFSAGVVKGHRKESGELYYSIEKE
GQRKWYKRMAVILSLEQGNRLREQYGLGPYEAVTPLTKAADISLDNLVEGKRKRRSNVSSPATPTASSSSSTTPT
RKITESPRASMGVLSGKRKLITSEEERSPAKRGRKSATVKPGAVGAGEFVSPCESGDNTGEPSALEEQRGPLPLN
KTLFLGYAFLLTMATTSDKLASRSKLPDGPTGSSEEEEEFLEIPPFNKQYTESQLRAGAGYILEDFNEAQCNTAY
QCLLIADQHCRTRKYFLCLASGIPCVSHVWVHDSCHANQLQNYRNYLLPAGYSLEEQRILDWQPRENPFQNLKVL
LVSDQQQNFLELWSEILMTGGAASVKQHHSSAHNKDIALGVFDVVVTDPSCPASVLKCAEALQLPVVSQEWVIQC
LIVGERIGFKQHPKYKHDYVSH

FIGURE 6428

GGTAGTTGGTTGTGGGCACTGGGTTAGAGGTATCACGTGGGGGCACTTTCGTCTTAGCTTTTGGACAAGACGCAG
GCGCAACCCACGGCTGCTGCGGGGATCCTTGTGGCCCTTCCGGTCGGTGGAACCAATCCGTGCACAGAGAAGCGG
GGCGAACTGAGGCGAGTGAAGTGGACTCTGAGGGCTACCGCTACCGCCACTGCTGCGGCAGGGGCGTGGAGGGCA
GAGGGCCGCGGAGGCCGCAGTTGCAAACATGGCTCAGAGCAGAGACGGCGGAAACCCGTTCGCCGAGCCCAGCGA
GCTTGACAACCCCTTTCAGGACCCAGCTGTGATCCAGCACCGACCCAGCCGGCAGTATGCCACGCTTGACGTCTA
CAACCCTTTTGAGACCCGGGAGCCACCACCAGCCTATGAGCCTCCAGCCCCTGCCCCATTGCCTCCACCCTCAGC
TCCCTCCTTGCAGCCCTCGAGAAAGCTCAGCCCCACAGAACCTAAGAACTATGGCTCATACAGCACTCAGGCCTC
AGCTGCAGCAGCCACAGCTGAGCTGCTGAAGAAACAGGAGGAGCTCAACCGGAAGGCAGAGGAGTTGGACCGAAG
GGAGCGAGAGCTGCAGCATGCTGCCCTGGGGGGCACAGCTACTCGACAGAACAATTGGCCCCCTCTACCTTCTTT
TTGTCCAGTTCAGCCCTGCTTTTTCCAGGACATCTCCATGGAGATCCCCCAAGAATTTCAGAAGACTGTATCCAC
CATGTACTACCTCTGGATGTGCAGCACGCTGGCTCTTCTCCTGAACTTCCTCGCCTGCCTGGCCAGCTTCTGTGT
GGAAACCAACAATGGCGCAGGCTTTGGGCTTTCTATCCTCTGGGTCCTCCTTTTCACTCCCTGCTCCTTTGTCTG
CTGGTACCGCCCCATGTATAAGGCTTTCCGGAGTGACAGTTCATTCAATTTCTTCGTTTTCTTCTTCATTTTCTT
CGTCCAGGATGTGCTCTTTGTCCTCCAGGCCATTGGTATCCCAGGTTGGGGATTCAGTGGCTGGATCTCTGCTCT
GGTGGTGCCGAAGGGCAACACAGCAGTATCCGTGCTCATGCTGCTGGTCGCCCTGCTCTTCACTGGCATTGCTGT
GCTAGGAATTGTCATGCTGAAACGGATCCACTCCTTATACCGCCGCACAGGTGCCAGCTTTCAGAAGGCCCAGCA
AGAATTTGCTGCTGGTGTCTTCTCCAACCCTGCGGTGCGAACCGCAGCTGCCAATGCAGCCGCTGGGGCTGCTGA
AAATGCCTTCCGGGCCCCGTGACCCCTGACTGGGATGCCCTGGCCCTGCTACTTGAGGGAGCTGACTTAGCTCCC
GTCCCTAAGGTCTCTGGGACTTGGAGAGACATCACTAACTGATGGCTCCTCCGTAGTGCTCCCAATCCTATGGCC
ATGACTGCTGAACCTGACAGGCGTGTGGGGAGTTCACTGTGACCTAGTCCCCCCATCAGGCCACACTGCTGCCAC
CTCTCACACGCCCCAACCCAGCTTCCCTCTGCTGTGCCACGGCTGTTGCTTCGGTTATTTAAATAAAAAGAAAGT
GGAACTGGAACTGACAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6429

MAQSRDGGNPFAEPSELDNPFQDPAVIQHRPSRQYATLDVYNPFETREPPPAYEPPAPAPLPPPSAPSLQPSRKL
SPTEPKNYGSYSTQASAAAATAELLKKQEELNRKAEELDRRERELQHAALGGTATRQNNWPPLPSFCPVQPCFFQ
DISMEIPQEFQKTVSTMYYLWMCSTLALLLNFLACLASFCVETNNGAGFGLSILWVLLFTPCSFVCWYRPMYKAF
RSDSSFNFFVFFFIFFVQDVLFVLQAIGIPGWGFSGWISALVVPKGNTAVSVLMLLVALLFTGIAVLGIVMLKRI
HSLYRRTGASFQKAQQEFAAGVFSNPAVRTAAANAAAGAAENAFRAP

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FIGURE 6430

CGCCTTTGCCCGAAGCCCGGGGACGAACCGACGGACCGACCGCCTGGCGCACGGACGCGGGCGCTCGCTTTGTGT
TCGGGGCTAGCGTCGGCGAGGCTTGAGCTTGCAGCGCGCGGCTTCCCTGCTTTCTCGCGGCCACCCCGGCTCCGG
CGGCCTCGGCGCGCGAGGGGCTGGAGGTGCGGGAGCCGCTCTCCGCCGGTCGGTCCCCGCGCGGCTGAGCCCAGG
CCGCCAGCGCCGCGGCCCCGTGCGGTGTCCCTGAGCTCCTGCTCCCCGCCGGGCTGCTCCGAGCAACGGTGCTTC
GGAGCTCCAAACTCGGGCTGCCGGGGCAAGTGTCTTCATGAACCCAGAGGATGTCCGGGAAGCACTACAAGGGTC
CTGAAGTCAGTTGTTGCATCAAATACTTCATATTTGGCTTCAATGTCATATTTTGGTTTTTGGGAATAACATTTC
TTGGAATTGGACTGTGGGCATGGAATGAAAAAGGAGTTCTGTCCAACATCTCTTCCATCACCGATCTCGGCGGCT
TTGACCCAGTTTGGCTCTTCCTTGTGGTGGGAGGAGTGATGTTCATTTTGGGATTTGCAGGGTGCATTGGAGCGC
TACGGGAAAACACTTTCCTTCTCAAGTTTTTTTCTGTGTTCCTGGGAATTATTTTCTTCCTGGAGCTCACTGCCG
GAGTTCTAGCATTTGTTTTCAAAGACTGGATCAAAGACCAGCTGTATTTCTTTATAAACAACAACATCAGAGCAT
ATCGGGATGACATTGATTTGCAAAACCTCATAGACTTCACCCAGGAATATTGGCAGTGCTGTGGGGCTTTTGGAG
CTGATGATTGGAACCTAAATATTTACTTCAATTGCACAGATTCCAATGCAAGTCGAGAGCGATGTGGCGTTCCAT
TCTCCTGCTGCACTAAAGATCCCGCAGAAGATGTCATCAACACTCAGTGTGGCTATGATGCCAGGCAAAAACCAG
AAGTTGACCAGCAGATTGTAATCTACACGAAAGGCTGTGTGCCCCAGTTTGAGAAGTGGTTGCAGGACAATTTAA
CCATCGTTGCTGGTATTTTCATAGGCATTGCATTGCTGCAGATATTTGGGATATGCCTGGCCCAGAATTTGGTTA
GCGATATCGAAGCTGTCAGGGCGAGCTGGTAGACCCCCTGCAACCGCTGCTGCAAGACACTGGACAGACCCAGCT
TTCGGGACCCTCCCGCGTGCCGAACTGATCTTCGAGCTGCATGGACCTAATCACAGATGCAGCCTGCAGTCTCGC
CTAATGGAGCTGCCATTAGGGGAGTGTAAAACTGGGAAATGCTGCTCACTGACAGAATTAAAAAAAAAAAATAACC
AGTATGAAAGTCGTTGCGCCGTGAATCTCTACTGTAGCCATGAATTTATGGACAGTTAGATGCTTACCAAAAAAG
AAAAAAAA

FIGURE 6431

MSGKHYKGPEVSCCIKYFIFGFNVIFWFLGITFLGIGLWAWNEKGVLSNISSITDLGGFDPVWLFLVVGGVMFIL
GFAGCIGALRENTFLLKFFSVFLGIIFFLELTAGVLAFVFKDWIKDQLYFFINNNIRAYRDDIDLQNLIDFTQEY
WQCCGAFGADDWNLNIYFNCTDSNASRERCGVPFSCCTKDPAEDVINTQCGYDARQKPEVDQQIVIYTKGCVPQF
EKWLQDNLTIVAGIFIGIALLQIFGICLAQNLVSDIEAVRASW

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FIGURE 6432

TCTGGGCGCGCGCGACGTCAGTTTGAGTTCTGTGTTCTCCCCGCCCGTGTCCCGCCCGACCCGCGCCCGCG**ATG**C
TGGCGCTGCGCTGCGGCTCCCGCTGGCTCGGCCTGCTCTCCGTCCCGCGCTCCGTGCCGCTGCGCCTCCCCGCGG
CCCGCGCCTGCAGCAAGGGCTCCGGCGACCCGTCCTCTTCCTCCTCCTCCGGGAACCCGCTCGTGTACCTGGACG
TGGACGCCAACGGGAAGCCGCTCGGCCGCGTGGTGCTGGAGCTGAAGGCAGATGTCGTCCCAAAGACAGCTGAGA
ACTTCAGAGCCCTGTGCACTGGTGAGAAGGGCTTCGGCTACAAAGGCTCCACCTTCCACAGGGTGATCCCTTCCT
TCATGTGCCAGGCGGGCGACTTCACCAACCACAATGGCACAGGCGGGAAGTCCATCTACGGAAGCCGCTTTCCTG
ACGAGAACTTTACACTGAAGCACGTGGGGCCAGGTGTCCTGTCCATGGCTAATGCTGGTCCTAACACCAACGGCT
CCCAGTTCTTCATCTGCACCATAAAGACAGACTGGTTGGATGGCAAGCATGTTGTGTTCGGTCACGTCAAAGAGG
GCATGGACGTCGTGAAGAAAATAGAATCTTTCGGCTCTAAGAGTGGGAGGACATCCAAGAAGATTGTCATCACAG
ACTGTGGCCAGTTGAGC**TAA**TCTGTGGCCAGGGTGCTGGCATGGTGGCAGCTGCAAATGTCCATGCACCCAGGTG
GCCGCGTTGGGCTGTCAGCCAAGGTGCCTGAAACGATACGTGTGCCCACTCCACTGTCACAGTGTGCCTGAGGAA
GGCTGCTAGGGATGTTAGACCTCGGCCAGGACCCACCACATTGCTTCCTAATACCCACCCTTCCTCACGACCTCA
TTTCTGGGCATCTTTGTGGACATGATGTCACCCACCCCTTGTCAAGCATTGCCTGTGATTGCCCAGCCCAGATTC
ATCTGTGCCTTGGACATGGTGATGGTGATGGGTTGCCATCCAAGTGAAAGTCTTTTCCTTGACCAAGGGGGACAG
TCAGTTTTGCAAAAGGACTCTAATACCTGTTTAATATTGTCTTCCTAATTGGGATAATTTAATTAACAAGATTGA
CTAGAAGTGAAACTGCAACACTAACTTCCCCGTGCTGTGGTGTGACCTGAGTTGGTGACACAGGCCACAGACCCC
AGAGCTTGGCTTTTGAAACACAACTCAGGGCTTTTGTGAAGGTTCCCCCGCTGAGATCTTTCCTCCTGGTTACTG
TGAAGCCTGTTGGTTTGCTGCTGTCGTTTTTGAGGAGGGCCCATGGGGGTAGGAGCAGTTGAACCTGGGAACAAA
CCTCACTTGAGCTGTGCCTAGACAATGTGAATTCCTGTGTTGCTAACAGAAGTGGCCTGTAAGCTCCTGTGCTCC
GGAGGGAAGCATTTCCTGGTAGGCTTTGATTTTTCTGTGTGTTAAAGAAATTCAATCTACTCATGATGTGTTATG
CATAAAACATTTCTGGAACATGGATTTGTGTTCACCTTAAATGTGAAAATAAATCCTATTTTCTATGGAAAAAAA
AAAAAAAAAAAAAAAA

FIGURE 6433

MLALRCGSRWLGLLSVPRSVPLRLPAARACSKGSGDPSSSSSSGNPLVYLDVDANGKPLGRVVLELKADVVPKTA
ENFRALCTGEKGFGYKGSTFHRVIPSFMCQAGDFTNHNGTGGKSIYGSRFPDENFTLKHVGPGVLSMANAGPNTN
GSQFFICTIKTDWLDGKHVVFGHVKEGMDVVKKIESFGSKSGRTSKKIVITDCGQLS

FIGURE 6434A

GGAAGCTGTGAGAGCGCGGTTGCGGGGTCGCATTGTGGCTACGGCTTTGCGTCCCCGGCGGGCAGCCCAGGCTGG
TCCCCGCCTCCGCTCTCCCCACCGGCGGGGAAAGCAGCTGGTGTGGGAGGAAAGGCTCCATCCCCCGCCCCCTCT
CTCCCGCTGTTGGCTGGCAGGATCTTTTGGCAGTCCTGTGGCCTCGCTCCCCGCCCGGATCCTCCTGACCCTGAG
ATTCGCGGGTCTCACGTCCCGTGCACGCCTTGCTTCGGCCTCAGTTAAGCCTTTGTGGACTCCAGGTCCCTGGTG
AGATTAGAAACGTTTGCAAAC**ATG**TCCCGGATCGAAAAGATGAGCATTCTGGGCGTGCGGAGTTTTGGAATAGAG
GACAAAGATAAGCAAATTATCACTTTCTTCAGCCCCCTTACAATTTTGGTTGGACCCAATGGGGCGGGAAAGACG
ACCATCATTGAATGTCTAAAATATATTTGTACTGGAGATTTCCCTCCTGGAACCAAAGGAAATACATTTGTACAC
GATCCCAAGGTTGCTCAAGAAACAGATGTGAGAGCCCAGATTCGTCTGCAATTTCGTGATGTCAATGGAGAACTT
ATAGCTGTGCAAAGATCTATGGTGTGTACTCAGAAAAGCAAAAAGACAGAATTTAAAACTCTGGAAGGAGTCATT
ACTAGAACAAAGCATGGTGAAAAGGTCAGTCTGAGCTCTAAGTGTGCAGAAATTGACCGAGAAATGATCAGTTCT
CTTGGGGTTTCCAAGGCTGTGCTAAATAATGTCATTTTCTGTCATCAAGAAGATTCTAATTGGCCTTTAAGTGAA
GGAAAGGCTTTGAAGCAAAAGTTTGATGAGATTTTTTCAGCAACAAGATACATTAAAGCCTTAGAAACACTTCGG
CAGGTACGTCAGACACAAGGTCAGAAAGTAAAAGAATATCAAATGGAACTAAAATATCTGAAGCAATATAAGGAA
AAAGCTTGTGAGATTCGTGATCAGATTACAAGTAAGGAAGCCCAGTTAACATCTTCAAAGGAAATTGTCAAATCC
TATGAGAATGAACTTGATCCATTGAAGAATCGTCTAAAAGAAATTGAACATAATCTCTCTAAAATAATGAAACTT
GACAATGAAATTAAAGCCTTGGATAGCCGAAAGAAGCAAATGGAGAAAGATAATAGTGAACTGGAAGAGAAAATG
GAAAAGGTTTTTCAAGGGACTGATGAGCAACTAAATGACTTATATCACAATCACCAGAGAACAGTAAGGGAGAAA
GAAAGGAAATTGGTAGACTGTCATCGTGAACTGGAAAAACTAAATAAAGAATCTAGGCTTCTCAATCAGGAAAAA
TCAGAACTGCTTGTTGAACAGGGTCGTCTACAGCTGCAAGCAGATCGCCATCAAGAACATATCCGAGCTAGAGAT
TCATTAATTCAGTCTTTGGCAACACAGCTAGAATTGGATGGCTTTGAGCGTGGACCATTCAGTGAAAGACAGATT
AAAAATTTTCACAAACTTGTGAGAGAGAGACAAGAAGGGGAAGCAAAAACTGCCAACCAACTGATGAATGACTTT
GCAGAAAAAGAGACTCTGAAACAAAAACAGATAGATGAGATAAGAGATAAGAAAACTGGACTGGGAAGAATAATT
GAGTTAAAATCAGAAATCCTAAGTAAGAAGCAGAATGAGCTGAAAAATGTGAAGTATGAATTACAGCAGTTGGAA
GGATCTTCAGACAGGATTCTTGAACTGGACCAGGAGCTCATAAAAGCTGAACGTGAGTTAAGCAAGGCTGAGAAA
AACAGCAATGTAGAAACCTTAAAAATGGAAGTAATAAGTCTCCAAAATGAAAAAGCAGACTTAGACAGGACCCTG
CGTAAACTTGACCAGGAGATGGAGCAGTTAAACCATCATACAACAACACGTACCCAAATGGAGATGCTGACCAAA
GACAAAGCTGACAAAGATGAACAAATCAGAAAAATAAAATCTAGGCACAGTGATGAATTAACCTCACTGTTGGGA
TATTTTCCCAACAAAAAACAGCTTGAAGACTGGCTACATAGTAAATCAAAAGAAATTAATCAGACCAGGGACAGA
CTTGCCAAATTGAACAAGGAACTAGCTTCATCTGAGCAGAATAAAAATCATATAAATAATGAACTAAAAAGAAAG
GAAGAGCAGTTGTCCAGTTACGAAGACAAGCTGTTTGATGTTTGTGGTAGCCAGGATTTTGAAAGTGATTTAGAC
AGGCTTAAAGAGGAAATTGAAAAATCATCAAAACAGCGAGCCATGTTGGCTGGAGCCACAGCAGTTTACTCCCAG
TTCATTACTCAGCTAACAGACGAAAACCAGTCATGTTGCCCCGTTTGTCAGAGAGTTTTTCAGACAGAGGCTGAG
TTACAAGAAGTCATCAGTGATTTGCAGTCTAAACTGCGACTTGCTCCAGATAAACTCAAGTCAACAGAATCAGAG
CTAAAAAAAAAGGAAAAGCGGCGTGATGAAATGCTGGGACTTGTGCCCATGAGGCAAAGCATAATTGATTTGAAG
GAGAAGGAAATACCAGAATTAAGAAACAAACTGCAGAATGTCAATAGAGACATACAGCGCCTAAAGAACGACATA
GAAGAACAAGAAACACTCTTGGGTACAATAATGCCTGAAGAAGAAAGTGCCAAAGTATGCCTGACAGATGTTACA
ATTATGGAGAGGTTCCAGATGGAACTTAAAGATGTTGAAAGAAAAATTGCACAACAAGCAGCTAAGCTACAAGGA
ATAGACTTAGATCGAACTGTCCAACAAGTCAACCAGGAGAAACAAGAGAAACAGCACAAGTTAGACACAGTTTCT
AGTAAGATTGAATTGAATCGTAAGCTTATACAGGACCAGCAGGAACAGATTCAACATCTAAAAAGTACAACAAAT
GAGCTAAAATCTGAGAAACTTCAGATATCCACTAATTTGCAACGTCGTCAGCAACTGGAGGAGCAGACTGTGGAA
TTATCCACTGAAGTTCAGTCTTTGTACAGAGAGATAAAGGATGCTAAAGAGCAGGTAAGCCCTTTGGAAACAACA
TTGGAAAAGTTCCAGCAAGAAAAAGAAGAATTAATCAACAAAAAAAATACAAGCAACAAAATAGCACAGGATAAA
CTGAATGATATTAAAGAGAAGGTTAAAAATATTCATGGCTATATGAAAGACATTGAGAATTATATTCAAGATGGG
AAAGACGACTATAAGAAGCAAAAAGAAACTGAACTTAATAAAGTAATAGCTCAACTAAGTGAATGCGAGAAACAC
AAAGAAAAGATAAATGAAGATATGAGACTCATGAGACAAGATATTGATACACAGAAGATACAAGAAAGGTGGCTA
CAAGATAACCTTACTTTAAGAAAAAGAAATGAGGAACTAAAAGAAGTTGAAGAAGAAAGAAAACAACATTTGAAG
GAAATGGGTCAAATGCAGGTTTTGCAAATGAAAAGTGAACATCAGAAGTTGGAAGAGAACATAGACAATATAAAA
AGAAATCATAATTTGGCATTAGGGCGACAGAAAGGTTATGAAGAAGAAATTATTCATTTTAAGAAAGAACTTCGA

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FIGURE 6434B

GAACCACAATTTCGGGATGCTGAGGAAAAGTATAGAGAAATGATGATTGTTATGAGGACAACAGAACTTGTGAAC
AAGGATCTCGATATTTATTATAAGACTCTTGACCAAGCAATAATGAAATTTCACAGTATGAAAATGGAAGAAATC
AATAAAATTATACGTGACCTGTGGCGAAGTACCTATCGTGGACAAGATATTGAATACATAGAAATACGGTCTGAT
GCCGATGAAAATGTATCAGCTTCTGATAAAAGGCGGAATTATAACTACCGAGTGGTGATGCTGAAGGGAGACACA
GCCTTGGATATGCGAGGACGATGCAGTGCTGGACAAAAGGTATTAGCCTCACTCATCATTCGCCTGGCCCTGGCT
GAAACGTTCTGCCTCAACTGTGGCATCATTGCCTTGGATGAGCCAACAACAAATCTTGACCGAGAAAACATTGAA
TCTCTTGCACATGCTCTGGTTGAGATAATAAAAAGTCGCTCACAGCAGCGTAACTTCCAGCTTCTGGTAATCACT
CATGATGAAGATTTTGTGGAGCTTTTAGGACGTTCTGAATATGTGGAGAAATTCTACAGGATTAAAAAGAACATC
GATCAGTGCTCAGAGATTGTGAAATGCAGTGTTAGCTCCCTGGGATTCAATGTTCATTAAAAATATCCAAGATTT
AAATGCCATAGAAATGTAGGTCCTCAGAAAGTGTATAATAAGAAACTTATTTCTCATATCAACTTAGTCAATAAG
AAAATATATTCTTTCAAAGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6435

MSRIEKMSILGVRSFGIEDKDKQIITFFSPLTILVGPNGAGKTTIIECLKYICTGDFPPGTKGNTFVHDPKVAQE
TDVRAQIRLQFRDVNGELIAVQRSMVCTQKSKKTEFKTLEGVITRTKHGEKVSLSSKCAEIDREMISSLGVSKAV
LNNVIFCHQEDSNWPLSEGKALKQKFDEIFSATRYIKALETLRQVRQTQGQKVKEYQMELKYLKQYKEKACEIRD
QITSKEAQLTSSKEIVKSYENELDPLKNRLKEIEHNLSKIMKLDNEIKALDSRKKQMEKDNSELEEKMEKVFQGT
DEQLNDLYHNHQRTVREKERKLVDCHRELEKLNKESRLLNQEKSELLVEQGRLQLQADRHQEHIRARDSLIQSLA
TQLELDGFERGPFSERQIKNFHKLVRERQEGEAKTANQLMNDFAEKETLKQKQIDEIRDKKTGLGRIIELKSEIL
SKKQNELKNVKYELQQLEGSSDRILELDQELIKAERELSKAEKNSNVETLKMEVISLQNEKADLDRTLRKLDQEM
EQLNHHTTTRTQMEMLTKDKADKDEQIRKIKSRHSDELTSLLGYFPNKKQLEDWLHSKSKEINQTRDRLAKLNKE
LASSEQNKNHINNELKRKEEQLSSYEDKLFDVCGSQDFESDLDRLKEEIEKSSKQRAMLAGATAVYSQFITQLTD
ENQSCCPVCQRVFQTEAELQEVISDLQSKLRLAPDKLKSTESELKKKEKRRDEMLGLVPMRQSIIDLKEKEIPEL
RNKLQNVNRDIQRLKNDIEEQETLLGTIMPEEESAKVCLTDVTIMERFQMELKDVERKIAQQAAKLQGIDLDRTV
QQVNQEKQEKQHKLDTVSSKIELNRKLIQDQQEQIQHLKSTTNELKSEKLQISTNLQRRQQLEEQTVELSTEVQS
LYREIKDAKEQVSPLETTLEKFQQEKEELINKKNTSNKIAQDKLNDIKEKVKNIHGYMKDIENYIQDGKDDYKKQ
KETELNKVIAQLSECEKHKEKINEDMRLMRQDIDTQKIQERWLQDNLTLRKRNEELKEVEEERKQHLKEMGQMQV
LQMKSEHQKLEENIDNIKRNHNLALGRQKGYEEEIIHFKKELREPQFRDAEEKYREMMIVMRTTELVNKDLDIYY
KTLDQAIMKFHSMKMEEINKIIRDLWRSTYRGQDIEYIEIRSDADENVSASDKRRNYNYRVVMLKGDTALDMRGR
CSAGQKVLASLIIRLALAETFCLNCGIIALDEPTTNLDRENIESLAHALVEIIKSRSQQRNFQLLVITHDEDFVE
LLGRSEYVEKFYRIKKNIDQCSEIVKCSVSSLGFNVH

FIGURE 6436

CGCGCGGCCCCTGTCCTCCGGCCCGAGATGAATCCTGCGGCAGAAGCCGAGTTCAACATCCTCCTGGCCACCGAC
TCCTACAAGGTTACTCACTATAAACAATATCCACCCAACACAAGCAAAGTTTATTCCTACTTTGAATGCCGTGAA
AAGAAGACAGAAAACTCCAAATTAAGGAAGGTGAAATATGAGGAAACAGTATTTTATGGGTTGCAGTACATTCTT
AATAAGTACTTAAAAGGTAAAGTAGTAACCAAAGAGAAAATCCAGGAAGCCAAAGATGTCTACAAAGAACATTTC
CAAGATGATGTCTTTAATGAAAAGGGATGGAACTACATTCTTGAGAAGTATGATGGGCATCTTCCAATAGAAATA
AAAGCTGTTCCTGAGGGCTTTGTCATTCCCAGAGGAAATGTTCTCTTCACGGTGGAAAACACAGATCCAGAGTGT
TACTGGCTTACAAATTGGATTGAGACTATTCTTGTTCAGTCCTGGTATCCAATCACAGTGGCCACAAATTCTAGA
GAGCAGAAGAAAATATTGGCCAAATATTTGTTAGAAACTTCTGGTAACTTAGATGGTCTGGAATACAAGTTACAT
GATTTTGGCTACAGAGGAGTCTCTTCCCAAGAGACTGCTGGCATAGGAGCATCTGCTCACTTGGTTAACTTCAAA
GGAACAGATACAGTAGCAGGACTTGCTCTAATTAAAAAATATTATGGAACGAAAGATCCTGTTCCAGGCTATTCT
GTTCCAGCAGCAGAACACAGTACCATAACAGCTTGGGGGAAAGACCATGAAAAAGATGCTTTTGAACATATTGTA
ACACAGTTTTCATCAGTGCCTGTATCTGTGGTCAGCGATAGCTATGACATTTATAATGCGTGTGAGAAAATATGG
GGTGAAGATCTAAGACATTTAATAGTATCGAGAAGTACACAGGCACCACTAATAATCAGACCTGATTCTGGAAAC
CCTCTTGACACTGTGTTAAAGGTTTTGGAGATTTTAGGTAAGAAGTTTCCTGTTACTGAGAACTCAAAGGGTTAC
AAGTTGCTGCCACCTTATCTTAGAGTTATTCAAGGGGATGGAGTAGATATTAATACCTTACAAGAGATTGTAGAA
GGCATGAAACAAAAAATGTGGAGTATTGAAAATATTGCCTTCGGTTCTGGTGGAGGTTTGCTACAGAAGTTGACA
AGAGATCTCTTGAATTGTTCCTTCAAGTGTAGCTATGTTGTAACTAATGGCCTTGGGATTAACGTCTTCAAGGAC
CCAGTTGCTGATCCCAACAAAAGGTCCAAAAAGGGCCGATTATCTTTACATAGGACGCCAGCAGGGAATTTTGTT
ACACTGGAGGAAGGAAAAGGAGACCTTGAGGAATATGGTCAGGATCTTCTCCATACTGTCTTCAAGAATGGCAAG
GTGACAAAAAGCTATTCATTTGATGAAATAAGAAAAAATGCACAGCTGAATATTGAACTGGAAGCAGCACATCAT
TAGGCTTTATGACTGGGTGTGTGTTGTGTGTATGTAATACATAATGTTTATTGTACAGATGTGTGGGGTTTGTGT
TTTATGATACATTACAGCCAAATTATTTGTTGGTTTATGGACATACTGCCCTTTCATTTTTTTCTTTTCCAGTG
TTTAGGTGATCTCAAATTAGGAAATGCATTTAACCATGTAAAAGATGAGTGCTAAAGTAAGCTTTTTAGGGCCCT
TTGCCAATAGGTAGTCATTCAATCTGGTATTGATCTTTTCACAAATAACAGAACTGAGAAACTTTTATATATAAC
TGATGATCACATAAAACAGATTTGCATAAAATTACCATGATTGCTTTATGTTTATATTTAACTTGTATTTTTGTA
CAAACAAGATTGTGTAAGATATATTTGAAGTTTCAGTGATTTAACAGTCTTTCCAACTTTTCATGATTTTTATGA
GCACAGACTTTCAAGAAAATACTTGAAAATAAATTACATTGCCTTTTGTCCATTAATCAGCAAATAAAACATGGC
CTTAACAAAGTTGTTTGTGTTATTGTACAATTTGAAAATTATGTCGGGACATACCCTATAGAATTACTAACCTTA
CTGCCCCTTGTAGAATATGTATTAATCATTCTACATTAAAGAAAATAATGGTTCTTACTGGAATGTCTAGGCACT
GTACAGTTATTATATATCTTGGTTGTTGTATTGTACCAGTGAAATGCCAAATTTGAAAGGCCTGTACTGCAATTT
TATATGTCAGAGATTGCCTGTGGCTCTAATATGCACCTCAAGATTTTAAGGAGATAATGTTTTTAGAGAGAATTT
CTGCTTCCACTATAGAATATATACATAAATGTAAAATACTTACAAAAGTGG

FIGURE 6437

MNPAAEAEFNILLATDSYKVTHYKQYPPNTSKVYSYFECREKKTENSKLRKVKYEETVFYGLQYILNKYLKGKVV
TKEKIQEAKDVYKEHFQDDVFNEKGWNYILEKYDGHLPIEIKAVPEGFVIPRGNVLFTVENTDPECYWLTNWIET
ILVQSWYPITVATNSREQKKILAKYLLETSGNLDGLEYKLHDFGYRGVSSQETAGIGASAHLVNFKGTDTVAGLA
LIKKYYGTKDPVPGYSVPAAEHSTITAWGKDHEKDAFEHIVTQFSSVPVSVVSDSYDIYNACEKIWGEDLRHLIV
SRSTQAPLIIRPDSGNPLDTVLKVLEILGKKFPVTENSKGYKLLPPYLRVIQGDGVDINTLQEIVEGMKQKMWSI
ENIAFGSGGGLLQKLTRDLLNCSFKCSYVVTNGLGINVFKDPVADPNKRSKKGRLSLHRTPAGNFVTLEEGKGDL
EEYGQDLLHTVFKNGKVTKSYSFDEIRKNAQLNIELEAAHH

FIGURE 6438

CCGCAGCCATGACCCCGCAGCTTCTCCTGGCCCTTGTCCTCTGGGCCAGCTGCCCGCCCTGCAGTGGAAGGAAAG
GGCCCCCAGCAGCTCTGACACTGCCCCGGGTGCAATGCCGAGCCTCTCGGTACCCGATCGCCGTGGATTGCTCCT
GGACCCTGCCGCCTGCTCCAAACTCCACCAGCCCCGTGTCCTTCATTGCCACGTACAGGCTCGGCATGGCTGCCC
GGGGCCACAGCTGGCCCTGCCTGCAGCAGACGCCAACGTCCACCAGCTGCACCATCACGGATGTCCAGCTGTTCT
CCATGGCTCCCTACGTGCTCAATGTCACCGCCGTCCACCCCTGGGGCTCCAGCAGCAGCTTCGTGCCTTTCATAA
CAGAGCACATCATCAAGCCCGACCCTCCAGAAGGCGTGCGCCTAAGCCCCCTCGCTGAGCGCCAGCTACAGGTGC
AGTGGGAGCCTCCCGGGTCCTGGCCCTTCCCAGAGATCTTCTCACTGAAGTACTGGATCCGTTACAAGCGTCAGG
GAGCTGCGCGCTTCCACCGGGTGGGGCCCATTGAAGCCACGTCCTTCATCCTCAGGGCTGTGCGGCCCCGAGCCA
GGTACTACGTCCAAGTGGCGGCTCAGGACCTCACAGACTACGGGGAACTGAGTGACTGGAGTCTCCCCGCCACTG
CCACAATGAGCCTGGGCAAGTAGCAAGGGCTTCCCGCTGCCTCCAGACAGCACCTGGGTCCTCGCCACCCTAAGC
CCCGGGACACCTGTTGGAGGGCGGATGGGATCTGCCTAGCCTGGGCTGGAGTCCTTGCTTTGCTGCTGCTGAGCT
GCCGGGCAACCTCAGATGACCGACTTTTCCCTTTGAGCCTCAGTTTCTCTAGCTGAGAAATGGAGATGTACTACT
CTCTCCTTTACCTTTACCTTTACCACAGTGCAGGGCTGACTGAACTGTCACTGTGAGATATTTTTTATTGTTTAA
TTAGAAAAGAATTGTTGTTGGGCTGGGCGCAGTGGATCGCACCTGTAATCCCAGTCACTGGGAAGCCGACGTGGG
AGGGTAGCTTGAGGCCAGGAGCTCGAAACCAGTCCGGGCCACACAGCAAGACCCCATCTCTAAAAAATTAATATA
AATATAAAATAAAAAAAAAAAAAA

FIGURE 6439

MTPQLLLALVLWASCPPCSGRKGPPAALTLPRVQCRASRYPIAVDCSWTLPPAPNSTSPVSFIATYRLGMAARGH
SWPCLQQTPTSTSCTITDVQLFSMAPYVLNVTAVHPWGSSSSFVPFITEHIIKPDPPEGVRLSPLAERQLQVQWE
PPGSWPFPEIFSLKYWIRYKRQGAARFHRVGPIEATSFILRAVRPRARYYVQVAAQDLTDYGELSDWSLPATATM
SLGK

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FIGURE 6440

CTGATGAAAGTGCTTCCAAACTGAAAATTGGACGTGCCTTTACGATGGTAAGCGTTAACAGCTCCCACTGCTTCT
ATAATGACTCCTTTAAGTACACTTTGTATGGGTGCATGTTCAGCATGGTGTTTGTGCTTGGGTTAGTATCCAATT
GTGTTGCCATATACATTTTCATCTGCGTCCTCAAAGTCCGAAATGAAACTACAACTTACATGATTAACTTGGCAA
TGTCAGACTTGCTTTTTGTTTTTACTTTACCCTTCAGGATTTTTTACTTCACAACACGGAATTGGCCATTTGGAG
ATTTACTTTGTAAGATTTCTGTGATGCTGTTTTATACCAACATGTACGGAAGCATTCTGTTCTTAACCTGTATTA
GTGTAGATCGATTTCTGGCAATTGTCTACCCATTTAAGTCAAAGACTCTAAGAACCAAAAGAAATGCAAAGATTG
TTTGCACTGGCGTGTGGTTAACTGTGATCGGAGGAAGTGCACCCGCCGTTTTTGTTCAGTCTACCCACTCTCAGG
GTAACAATGCCTCAGAAGCCTGCTTTGAAAATTTTCCAGAAGCCACATGGAAAACATATCTCTCAAGGATTGTAA
TTTTCATCGAAATAGTGGGATTTTTTATTCCTCTAATTTTAAATGTAACTTGTTCTAGTATGGTGCTAAAAACTT
TAACCAAACCAGTTACATTAAGTAGAAGCAAAATAAACAAAACTAAGGTTTTAAAAATGATTTTTGTACATTTGA
TCATATTCTGTTTCTGTTTTGTTCCTTACAATATCAATCTTATTTTATATTCTCTTGTGAGAACACAAACATTTG
TTAATTGCTCAGTAGTGGCAGCAGTAAGGACAATGTACCCAATCACTCTCTGTATTGCTGTTTCCAACTGTTGTT
TTGACCCTATAGTTTACTACTTTACATCGGACACAATTCAGAATTCAATAAAAATGAAAAACTGGTCTGTCAGGA
GAAGTGACTTCAGATTCTCTGAAGTTCATGGTGCAGAGAATTTTATTCAGCATAACCTACAGACCTTAAAAAGTA
AGATATTTGACAATGAATCTGCTGCCTGAAATAAAACCATTAGGACTCACTGGGACAGAACTTTCAAG

FIGURE 6441

MVSVNSSHCFYNDSFKYTLYGCMFSMVFVLGLVSNCVAIYIFICVLKVRNETTTYMINLAMSDLLFVFTLPFRIF
YFTTRNWPFGDLLCKISVMLFYTNMYGSILFLTCISVDRFLAIVYPFKSKTLRTKRNAKIVCTGVWLTVIGGSAP
AVFVQSTHSQGNNASEACFENFPEATWKTYLSRIVIFIEIVGFFIPLILNVTCSSMVLKTLTKPVTLSRSKINKT
KVLKMIFVHLIIFCFCFVPYNINLILYSLVRTQTFVNCSVVAAVRTMYPITLCIAVSNCCFDPIVYYFTSDTIQN
SIKMKNWSVRRSDFRFSEVHGAENFIQHNLQTLKSKIFDNESAA

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FIGURE 6442

GGCACGAGGGTTACCCCTTTGCTTTGTTTTATCGGCATTACCTTTTCTACAAGGAGACCTACCTCATCCACCTCT
TCCATACCTTTACAGGCCTCTCAATTGCTTATTTTAACTTTGGAAACCAGCTCTACCACTCCCTGCTGTGTATTG
TGCTTCAGTTCCTCATCCTTCGACTAATGGGCCGCACCATCACTGCCGTCCTCACTACCTTTTGCTTCCAGATGG
CCTACCTTCTGGCTGGATACTATTACACTGCCACCGGCAACTACGATATCAAGTGGACAATGCCACATTGTGTTC
TGACTTTGAAGCTGATTGGTTTGGCTGTTGACTACTTTGACGGAGGGAAAGATCAGAATTCCTTGTCCTCTGAGC
AACAGAAATATGCCATACGTGGTGTTCCTTCCCTGCTGGAAGTTGCTGGTTTCTCCTACTTCTATGGGGCCTTCT
TGGTAGGGCCCCAGTTCTCAATGAATCACTACATGAAGCTGGTGCAGGGAGAGCTGATTGACATACCAGGAAAGA
TACCAAACAGCATCATTCCTGCTCTCAAGCGCCTGAGTCTGGGCCTTTTCTACCTAGTGGGCTACACACTGCTCA
GCCCCCACATCACAGAAGACTATCTCCTCACTGAAGACTATGACAACCACCCCTTCTGGTTCCGCTGCATGTACA
TGCTGATCTGGGGCAAGTTTGTGCTGTACAAATATGTCACCTGTTGGCTGGTCACAGAAGGAGTATGCATTTTGA
CGGGCCTGGGCTTCAATGGCTTTGAAGAAAAGGGCAAGGCAAAGTGGGATGCCTGTGCCAACATGAAGGTGTGGC
TCTTTGAAACAAACCCCCGCTTCACTGGCACCATTGCCTCATTCAACATCAACACCAACGCCTGGGTGGCCCGCT
ACATCTTCAAACGACTCAAGTTCCTTGGAAATAAAGAACTCTCTCAGGGTCTCTCGTTGCTATTCCTGGCCCTCT
GGCACGGCCTGCACTCAGGATACCTGGTCTGCTTCCAGATGAAATTCCTCATTGTTATTGTGGAAAGACAGGCTG
CCAGGCTCATTCAAGAGAGCCCCACCCTGAGCAAGCTGGCCGCCATTACTGTCCTCCAGCCCTTCTACTATTTGG
TGCAACAGACCATCCACTGGCTCTTCATGGGTTACTCCATGACTGCCTTCTGCCTCTTCACGTGGGACAAATGGC
TTAAGGTGTATAAATCCATCTATTTCCTTGGCCACATCTTCTTCCTGAGCCTACTATTCATATTGCCTTATATTC
ACAAAGCAATGGTGCCAAGGAAAGAGAAGTTAAAGAAGATGGAATAATCCATTTCCCTGGTGGCCTGTGCGGGAC
TGGTGCAGAAACTACTCGTCTCCCTTTTCACAGCACTCCTTTGCCCCAGAGCAGAGAATGGAAAAGCCAGGGAGG
TGGAAGATCGATGCTTCCAGCTGTGCCTCTGCTGCCAGCCAAGTCTTCATTTGGGGCCAAAGGGGAAACTTTTTT
TTGGAGAAGGCGTCTTGCTTTGTCACCCACGCTGGAATGCAGTGGCGGGATCTCAGCTCACCGCAACCTCCACCT
CCTGGGTTCAAGTGATTTTCCTGCCTCAGCCTCCCAAGTAGCTGGGAATACAGGCACGCCACCATGCCCAGCTAA
TTTTTGTATTTTCAGTAGAAACGGGATTTCACCACGTTGGCCAGGCTGGTCTCGAACTCCTGACCGCAAGTGATC
CACCCGCCTCCGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACCGTGCCCGGCCCAAAGGGGAAACTCTTG
TGGGAGGAGCAGAGGGGCTCACATCTCCCCTCTGATTCCCCCATGCACATTGCCTTATCTCTCCCCATCTAGCCA
GGAATCTATTGTGTTTTTCTTCTGCCAATTTACTATGATTGTGTATGTGCCGCTACCACCACCCCCCCCATGGGG
GGGTGGAGAGGGGTGCAAGGCCCTGCCTGCTCCACTTTTTCTACCTTGGAACTGTATTAGATAAAATCACTTCTG
TTTGTTCAGTTTTTCAAAAAAAAAAAAAAAAAA

FIGURE 6443

MGRTITAVLTTFCFQMAYLLAGYYYTATGNYDIKWTMPHCVLTLKLIGLAVDYFDGGKDQNSLSSEQQKYAIRGV
PSLLEVAGFSYFYGAFLVGPQFSMNHYMKLVQGELIDIPGKIPNSIIPALKRLSLGLFYLVGYTLLSPHITEDYL
LTEDYDNHPFWFRCMYMLIWGKFVLYKYVTCWLVTEGVCILTGLGFNGFEEKGKAKWDACANMKVWLFETNPRFT
GTIASFNINTNAWVARYIFKRLKFLGNKELSQGLSLLFLALWHGLHSGYLVCFQMKFLIVIVERQAARLIQESPT
LSKLAAITVLQPFYYLVQQTIHWLFMGYSMTAFCLFTWDKWLKVYKSIYFLGHIFFLSLLFILPYIHKAMVPRKE
KLKKME

FIGURE 6444

GGGCTGCAGGAATTCGGCACGAGCTTAGCTGAAGATGACTGACAGTGTTATTTATTCCATGTTAGAGTTGCCTAC
GGCAACCCAAGCCCAGAATGACTATGGACCACAGCAAAAATCTTCCTCTTCCAGGCCTTCTTGTTCTTGCCTTGT
GGCAATAGCTTTGGGGCTTCTGACTGCAGTTCTTCTGAGTGTGCTGCTATACCAGTGGATCCTGTGCCAGGGCTC
CAACTACTCCACTTGTGCCAGCTGTCCTAGCTGCCCAGACCGCTGGATGAAATATGGTAACCATTGTTATTATTT
CTCAGTGGAGGAAAAGGACTGGAATTCTAGTCTGGAATTCTGCCTAGCCAGAGACTCACACCTCCTTGTGATAAC
GGACAATCAGGAAATGAGCCTGCTCCAAGTTTTCCTCAGTGAGGCCTTTTGCTGGATTGGTCTGAGGAACAATTC
TGGCTGGAGGTGGGAAGATGGATCACCTCTAAACTTCTCAAGGATTTCTTCTAATAGCTTTGTGCAGACATGCGG
TGCCATCAACAAAAATGGTCTTCAAGCCTCAAGCTGTGAAGTTCCTTTACACTGGGTGTGTAAGAAGGTCAGACT
TTGATAGATGACCACTCTGTCCTGACCCTCAGATCTGTCATGTATCCCTAAAAGGAGGGAGCTGGCCACTGGCTG
TTGGGAAA

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FIGURE 6445

MTDSVIYSMLELPTATQAQNDYGPQQKSSSSRPSCSCLVAIALGLLTAVLLSVLLYQWILCQGSNYSTCASCPSC
PDRWMKYGNHCYYFSVEEKDWNSSLEFCLARDSHLLVITDNQEMSLLQVFLSEAFCWIGLRNNSGWRWEDGSPLN
FSRISSNSFVQTCGAINKNGLQASSCEVPLHWVCKKVRL

FIGURE 6446

CTACCCCTTTGTGAGCAGTCTAGGACTTTGTACACCTGTTAAGTAGGGAGAAGGCAGGGGAGGTGGCTGGTTTAA
GGGGAACTTGAGGGAAGTAGGGAAGACTCCTCTTGGGACCTTTGGAGTAGGTGACACATGAGCCCAGCCCCAGCT
CACCTGCCAATCCAGCTGAGGAGCTCACCTGCCAATCCAGCTGAGGCTGGGCAGAGGTGGGTGAGAAGAGGGAAA
ATTGCAGGGACCTCCAGTTGGGCCAGGCCAGAAGCTGCTGTAGCTTTAACCAGACAGCTCAGACCTGTCTGGAGG
CTGCCAGTGACAGGTTAGGTTTAGGGCAGAGAAGAAGCAAGACC**ATG**GTGGGGAAGATGTGGCCTGTGTTGTGGA
CACTCTGTGCAGTCAGGGTGACCGTCGATGCCATCTCTGTGGAAACTCCGCAGGACGTTCTTCGGGCTTCGCAGG
GAAAGAGTGTCACCCTGCCCTGCACCTACCACACTTCCACCTCCAGTCGAGAGGGACTTATTCAATGGGATAAGC
TCCTCCTCACTCATACGGAAAGGGTGGTCATCTGGCCGTTTTCAAACAAAAACTACATCCATGGTGAGCTTTATA
AGAATCGCGTCAGCATATCCAACAATGCTGAGCAGTCCGATGCCTCCATCACCATTGATCAGCTGACCATGGCTG
ACAACGGCACCTACGAGTGTTCTGTCTCGCTGATGTCAGACCTGGAGGGCAACACCAAGTCACGTGTCCGCCTGT
TGGTCCTCGTGCCACCCTCCAAACCAGAATGCGGCATCGAGGGAGAGACCATAATTGGGAACAACATCCAGCTGA
CCTGCCAATCAAAGGAGGGCTCACCAACCCCTCAGTACAGCTGGAAGAGGTACAACATCCTGAATCAGGAGCAGC
CCCTGGCCCAGCCAGCCTCAGGTCAGCCTGTCTCCCTGAAGAATATCTCCACAGACACATCGGGTTACTACATCT
GTACCTCCAGCAATGAGGAGGGGACGCAGTTCTGCAACATCACGGTGGCCGTCAGATCTCCCTCCATGAACGTGG
CCCTGTATGTGGGCATCGCGGTGGGCGTGGTTGCAGCCCTCATTATCATTGGCATCATCATCTACTGCTGCTGCT
GCCGAGGGAAGGACGACAACACTGAAGACAAGGAGGATGCAAGGCCGAACCGGGAAGCCTATGAGGAGCCACCAG
AGCAGCTAAGAGAACTTTCCAGAGAGAGGGAGGAGGAGGATGACTACAGGCAAGAAGAGCAGAGGAGCACTGGGC
GTGAATCCCCGGACCACCTCGACCAG**TGA**CAGGCCAGCAGCAGAGGGCGGCGGAGGAAGGGTTAGGGGTTCATTC
TCCCGCTTCCTGGCCTCCCTTCTCCTTTCTAAGCCCTGTTCTCCTGTCCCTCCATCCCAGACATTGATGGGGACA
TTTCTTCCCCAGTGTCAGCTGTGGGGAACATGGCTGGCCTGGTAAGGGGGTCCCTGTGCTGATCCTGCTGACCTC
ACTGTCCTGTGAAGTAACCCCTCCTGGCTGTGACACCTGGTGCGGGCCTGGCCCTCACTCAAGACCAGGCTGCAG
CCTCCACTTCCCTCGTAGTTGGCAGGAGCTCCTGGAAGCACAGCGCTGAGCATGGGGCGCTCCCACTCAGAACTC
TCCAGGGAGGCGATGCCAGCCTTGGGGGGTGGGGGCTGTCCTGCTCACCTGTGTGCCCAGCACCTGGAGGGGCAC
CAGGTGGAGGGTTTGCACTCCACACATCTTTCTTGAATGAATGAAAGAATAAGTGAGTATGCTTGGGCCCTGCAT
TGGCCTGGCCTCCAGCTCCCACTCCCTTTCCAACCTCACTTCCCGTAGCTGCCAGTATGTTCCAAACCCTCCTGG
GAAGGCCACCTCCCACTCCTGCTGCACAGGCCCTGGGGAGCTTTTGCCCACACACTTTCCATCTCTGCCTGTCAA
TATCGTACCTGTCCCTCCAGGCCCATCTCAAATCACAAGGATTTCTCTAACCCTATCCTAATTGTCCACATACGT
GGAAACAATCCTGTTACTCTGTCCCACGTCCAATCATGGGCCACAAGGCACAGTCTTCTGAGCGAGTGCTCTCAC
TGTATTAGAGCGCCAGCTCCTTGGGGCAGGGCCTGGGCCTCATGGCTTTTGCTTTCCCTGAAGCCCTAGTAGCTG
GCGCCCATCCTAGTGGGCACTTAAGCTTAATTGGGGAAACTGCTTTGATTGGTTGTGCCTTCCCTTCTCTGGTCT
CCTTGAGATGATCGTAGACACAGGGATGATTCCCACCCAAACCCACGTATTCATTCAGTGAGTTAAACACGAATT
GATTTAAAGTGAACACACACAAGGGAGCTTGCTTGCAGATGGTCTGAGTTCTTGTGTCCTGGTAATTCCTCTCCA
GGCCAGAATAATTGGCATGTCTCCTCAACCCACATGGGGTTCCTGGTTGTTCCTGCATCCCGATACCTCAGCCCT
GGCCCTGCCCAGCCCATTTGGGCTCTGGTTTTCTGGTGGGGCTGTCCTGCTGCCCTCCCACAGCCTCCTTCTGTT
TGTCGAGCATTTCTTCTACTCTTGAGAGCTCAGGCAGCGTTAGGGCTGCTTAGGTCTCATGGACCAGTGGCTGGT
CTCACCCAACTGCAGTTTACTATTGCTATCTTTTCTGGATGATCAGAAAAATAATTCCATAAATCTATTGTCTAC
TTGCGATTTTTTAAAAAATGTATATTTTTATATATATTGTTAAATCCTTTGCTTCATTCCAAATGCTTTCAGTAA
TAATAAAATTGTGGGTGG

FIGURE 6447

MVGKMWPVLWTLCAVRVTVDAISVETPQDVLRASQGKSVTLPCTYHTSTSSREGLIQWDKLLLTHTERVVIWPFS
NKNYIHGELYKNRVSISNNAEQSDASITIDQLTMADNGTYECSVSLMSDLEGNTKSRVRLLVLVPPSKPECGIEG
ETIIGNNIQLTCQSKEGSPTPQYSWKRYNILNQEQPLAQPASGQPVSLKNISTDTSGYYICTSSNEEGTQFCNIT
VAVRSPSMNVALYVGIAVGVVAALIIIGIIIYCCCCRGKDDNTEDKEDARPNREAYEEPPEQLRELSREREEEDD
YRQEEQRSTGRESPDHLDQ

FIGURE 6448A

TCTTGAGAGTGTTCAACCATAGAAATCTAATGGTTGGTTGGTGTCTTTTCAGTCAAATGCTACATGTTTTTCACT
CCAATATTTGGCATGCATATAGAATTTTGTGCGTCAAGTTGGCCTTTTCCTTTTTCTAATTGGTTCTGGTCTTTT
TTGGAGAGGTTAGAGACACAATACAACTTTAAAAAGAGTGCATGTGTACACACAGCCACCCACCCACCCACACCC
TCTTCCCGGATTGCCCTCCACCCCCATGATTATAAAGATGCTTATGGTGCTCTTAAAATCTCTCTCATGTCAGTT
GCCATTTGCATTGAGCTCAAAAAATAATATTAAGGCTTTTGGCTTCACTAAACAAAAGCAAATACAATTTCTGCT
TGCAATTCTATCCTTTACCCACCCTGCAGTGCAGGGCCCAGTCAAGTGTGAGATAAGCAGGGGAGGTCCAGAGAG
AGGCCGGTAGAGGCACTGCACAAGCCTTGCCAGCGTCACCTCCCACCTCCTGGTCCCTTTCACTGCTAAGACATG
CAACTGCTCCATGACAGCCTTGTGCCTTTTGCCAAATGTCCAGAAATTTTGCGAATCTAAGTATTAAAAACACAC
TGATTTGGTGGTGCTAATAAGAATAGAAAAAGGTCATTTGAACAGATCTATTTTATGAATGAATACAGACCTAAA
AATCCTTAAGAAAACACAAATTTCAGAGAACAATTTCAACATTGTTCTGTCGAACGTTATACTCAGTCCTGAACC
ACATTACTTTCCTGTCTACGTTTCATTTCCTGGGGGCTTGCCAAGTGATAAACAGACTCAGGCGTGTGTGGTAGA
GTTCGGGTTTTTTAGCACGAAGTGGGTGGCTGGAGTTTGCTTGAAAACATCAATTGACTTTGTGATCATTACAGA
AATGCTGGTGTAAGGTGTTCAGAAGACAATGGAGAAAAAATGGAAATACTGTGCTGTCTATTACATCATCCAGAT
ACATTTTGTCAAGGGAGTTTGGGAAAAAACAGTCAACACAGAAGAAAATGTTTATGCTACACTTGGCTCTGATGT
CAACCTGACCTGCCAAACACAGACAGTAGGCTTCTTCGTGCAGATGCAATGGTCCAAGGTCACCAATAAGATAGA
CCTGATTGCTGTCTATCATCCCCAATACGGCTTCTACTGTGCCTATGGGAGACCCTGTGAGTCACTTGTGACTTT
CACAGAAACTCCTGAGAATGGGTCAAAATGGACTCTGCACTTAAGGAATATGTCTTGTTCAGTCAGTGGAAGGTA
CGAGTGTATGCTTGTTCTGTATCCAGAGGGCATTCAGACTAAAATCTACAACCTTCTCATTCAGACACACGTTAC
AGCAGATGAATGGAACAGCAACCATACGATAGAAATAGAGATAAATCAGACTCTGGAAATACCATGCTTTCAAAA
TAGCTCCTCAAAAATTTCATCTGAGTTCACCTATGCATGGTCGGTGGAGGATAATGGAACTCAGGAAACACTTAT
CTCCCAAAATCACCTCATCAGCAATTCCACATTACTTAAAGATAGAGTCAAGCTTGGTACAGACTACAGACTCCA
CCTCTCTCCAGTCCAAATCTTCGATGATGGGCGGAAGTTCTCTTGCCACATTAGAGTCGGTCCTAACAAAATCTT
GAGGAGCTCCACCACAGTCAAGGTTTTTGCTAAACCAGAAATCCCTGTGATTGTGGAAAATAACTCCACGGATGT
CTTGGTAGAGAGAAGATTTACCTGCTTACTAAAGAATGTATTTCCCAAAGCAAATATCACATGGTTTATAGATGG
AAGTTTTCTTCATGATGAAAAAGAAGGAATATATATTACTAATGAAGAGAGAAAAGGCAAAGATGGATTTTTGGA
ACTGAAGTCTGTTTTAACAAGGGTACATAGTAATAAACCAGCCCAATCAGACAACTTGACCATTTGGTGTATGGC
TCTGTCTCCAGTCCCAGGAAATAAAGTGTGGAACATCTCATCAGAAAAGATCACTTTTCTCTTAGGTTCTGAAAT
TTCCTCAACAGACCCTCCACTGAGTGTTACAGAATCTACCCTTGACACCCAACCTTCTCCAGCCAGCAGTGTATC
TCCTGCAAGATATCCAGCTACATCTTCAGTGACCCTTGTAGATGTGAGTGCCTTGAGGCCAAACACCACTCCTCA
ACCCAGCAATTCCAGTATGACTACCCGAGGCTTCAACTATCCCTGGACCTCCAGTGGGACAGATACCAAAAAATC
AGTTTCACGGATACCTAGTGAAACATACAGTTCATCCCCCTCAGGTGCAGGCTCAACACTTCATGACAATGTCTT
TACCAGCACAGCCAGAGCATTTTCAGAAGTCCCCACAACTGCCAATGGATCTACGAAAACTAATCACGTCCATAT
CACTGGTATTGTGGTCAATAAGCCCAAAGATGGAATGTCCTGGCCAGTGATTGTAGCAGCTTTACTCTTTTGCTG
CATGATATTGTTTGGTCTTGGAGTGAGAAAATGGTGTCAGTACCAAAAAGAAATAATGGAAAGACCTCCACCTTT
CAAGCCACCACCACCTCCCATCAAGTACACTTGCATTCAAGAGCCCAACGAAAGTGATCTGCCTTATCATGAGAT
GGAGACCCTCTAGTCTCGTGAGACTTTGCCCCATGGCAGAACTCTGCTGGAATCCTATTGAGAAGGTAGACATTG
TGCTTTATTAATATAGTCGCTCTTCAGCCATGCCTTTGCTGCAGCTGAAATGGAAGTCAGAAGTGAGTGACCTGT
TTTCCCAGCAACTCACCCTCTTTCATCTCCAAACGCCTGAAGCTTAACCAAGAGTGAGAGGATATGTCATGTTCA
CACTCAATGCAATTCGTAGTGGTTTTCTTGCTTATTGTAAGAAGTACATATTAGTCTGCCATCTTTAAAAAAAAT
ACAGTATTTTCATTTAAATTCTCTGATGGAGGGACAACAATGGTTTCAACTGTATGCCCATGCCTGATCCTCTTA
TTTGAACATCTATCAACATTGTAAACTCTTTGCCAAAATCCTGGGGCTTTGCTGCATTCCCTAAGATAATTATAG
GAAAAAGAAAATGTAAAAGTGCTAACAAGGCTGCCAAGTAATGGAGAAGTATGGTTAGCCTTCATATTGAAATTC
TGTTGCTTATTTTCATGGAAGGAAACAGAATACTTTGCACAGGAACCACATTTTCAATCCTCCTTCACTGTCTTC
CTACCATGTTCAGCCCAGACTCCTGCCACATGGACCAGGATGAAGAGGGATCAAAGAGATAATTAGCCAAAAACC
CAGTAGCCTAGAAGATACAAAACTCCACTGGCCTCTAAAATTATATTAGCCAAGAGTGGTTTCATTTGAGTGCCT
TCGTGTGTATGTCCATCAAACTGGAACCAAACTGTTTTGTAAGTAAACAGGCAGCCTAAGCCCAACCCTACTTTC
TAATTCCGGTTATTCTCTTTTTCATCTGGGGATTTACCTGTTCATTTAATCTGCCTGTTTTGATCTGTTTTGAAA
AAGATAAAGAGCCTCAAATCAGACCAGCACTGATTAATTAACCCTGCTCCTACCAATCTTTTTTAAAGCAGTTGA

FIGURE 6448B

AGCAGAATGTATAGGTGTCAGAGAAGAAACCTAGTCAGCCAGACGTGCTCTGTATTCAGCAATAGTTTGTGAATG
AATAAATTACTAATCCTCCTTGTCGCTTGAAACCTTCCCACACTCCCTGCTCCAGGAGGGAAAAACAGATGTTGT
TGACAGATAGAGTGATAGGCAAATTCTGTGTGGACTTTAGTCCCAAAAGGAAACTTTAGTTCACTTGCAGTATGC
TTATCCTTGACTGCACATGAGAATGCCTTGTGCAGAGTTATTTGGAGATTATGTCTTTTTCTTAAACACCATGGC
TGTCACACTTCAGTTCAATTAAATCAGAATGTCTGAGGAGTGAGACACAGGCATCAACACTCTCAAATGATTCAC
ATGTTCAGCCAAAGTTGAGAACCATCGAGCCTGTGGAAGTTCTTTCTCATGGCTCAGAATCTTAGGTAGGTGCTT
AACTCTTGTGGTGGCCAGCCTCCAAGATGAGCCCCAGTGTTCTTGCCTCCTACTATTCACATCTTTATGTGGTCC
CCTCCAATGCTGAATACAGATGATTTGTGTAACCTGAGGCCAGGATTAAGGTGAGGCAATCAATGTACCTAGGGA
AAAAATTTAAGGAGGTATTCACACTCAGGGTCATGCACTTGCACAATGTTGAGAATGAGTACCACTCTCACCATT
GGTATAGCCAAAAAAAGCTTGGAAGTGACCAAGGCTAGGTCACAAAATACACTGTGGCTTCTTCTTTGATCTCTC
TTTGACCATACTGACACTGGGAAAAGCCCATTCCCATGCCATGAAGACACCAAGGCAGCCCTATTGAGAAATCTA
CCTGTCGTGGCCGGGCGCAGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGTGGGTGGATCACGAG
GTCAGGAGATCGAGACCATCCTGGCTAACACAGTGAAACCCCGTCTCTACTAAAAATACAAAAATTAGCCGGGTG
TGGTGTCGGGCACCTGTAGTCCCAGCTACTCAGGAGGCTGAGGCAGGAGAAGGGTGGGAACCCGGGAGGCAGAGC
TTGCAGTGAGCCGAGATTGTGCCACTGCACACTCCAATCTGGGTGAAAGACCGAGACTCCGCCTCAAAAAAAAAA
AAAAAAGAAAGAAAGAAAGAAAGAAAGAAAGAAATCTACCTGTCAAGGAACTAAGGTATTTTGCTAACAAGCACC
AACTTGCCAGCCATGTAAGGGAGCCATCTTGGAAGCAGATCCTCCAGCCTCCAGTCAAGTCTTCAGATAATTGCA
ACTTCAGTTGATCTTTTGACCAAGACCTCAAGAGAGCCAGAACTACCCAGCTAAGCCTTTTACTAAATTTCTGAA
CTTCTAACACTATTAGATAATAAGTGCTTATTGTTTAACACCATTAATTTTGAGTATAATTTGTTACATAGCGAC
AGATAACTATACAGCTCAACAACTAGAAAAATAAACTGTTTACCTGCCTTAATTATTTATCTTTAGTTCCTTATT
AGTTCTCAAGAAACAAATGCTAGCTTCATATGTATGGCTGTTGCTTTGCTTCATGTGTATGGCTATTTGTATTTA
ACAAGACTTAATCATCAGTAATTTGTATAC

FIGURE 6449

MEKKWKYCAVYYIIQIHFVKGVWEKTVNTEENVYATLGSDVNLTCQTQTVGFFVQMQWSKVTNKIDLIAVYHPQY
GFYCAYGRPCESLVTFTETPENGSKWTLHLRNMSCSVSGRYECMLVLYPEGIQTKIYNLLIQTHVTADEWNSNHT
IEIEINQTLEIPCFQNSSSKISSEFTYAWSVEDNGTQETLISQNHLISNSTLLKDRVKLGTDYRLHLSPVQIFDD
GRKFSCHIRVGPNKILRSSTTVKVFAKPEIPVIVENNSTDVLVERRFTCLLKNVFPKANITWFIDGSFLHDEKEG
IYITNEERKGKDGFLELKSVLTRVHSNKPAQSDNLTIWCMALSPVPGNKVWNISSEKITFLLGSEISSTDPPLSV
TESTLDTQPSPASSVSPARYPATSSVTLVDVSALRPNTTPQPSNSSMTTRGFNYPWTSSGTDTKKSVSRIPSETY
SSSPSGAGSTLHDNVFTSTARAFSEVPTTANGSTKTNHVHITGIVVNKPKDGMSWPVIVAALLFCCMILFGLGVR
KWCQYQKEIMERPPPFKPPPPPIKYTCIQEPNESDLPYHEMETL

FIGURE 6450

CTCTGCTGTGCTGCCTCAAACGCGGAGGGCTGCGTGCAGTGGGAGCGGGCTCCAGGAGCCCGAGCCTCCAGCCGT
CCTCAGAGCAAGGCAGCACCGAGGCCTGGCCACAGCAATATCCATCTGGAAGCTCTTCCCTTCACTCCCAACTCT
GAGGTTGCCTAACTCTTTATTAAAAATTCAGAAGGGGGAATGCCAGCCCCTAGCATGGACTGTGATGTTTCCACT
CTGGTTGCCTGTGTGGTGGATGTCGAGGTCTTTACCAATCAGGAGGTTAAGGAAAAATTTGGGGGACTGTTTCGG
ACTTATGATGACTGTGTGACGTTCCAGCTATTTAAGAGTTTCAGACGTGTCCGTATAAACTTCAGCAATCCTAAA
TCTGCAGCCCGAGCTAGGATAGAGCTTCATGAAACCCAATTCAGAGGGAAAAAATTAAAGCTCTACTTTGCACAG
GTTCAGACTCCAGAGACAGATGGAGACAAACTGCACTTGGCTCCACCCCAGCCTGCCAAACAGTTTCTCATCTCG
CCCCCTTCCTCCCCACCTGTTAGCTGGCAGCCCATCAACGATGCCACGCCAGTCCTCAACTATGACCTCCTCTAT
GCTGTGGCCAAACTAGGACCAGGAGAGAAGTATGAGCTCCATGCAGGGACTGAGTCCACCCCAAGTGTCGTCGTG
CACGTGTGCGACAGTGACATAGAGGAAGAAGAGGACCCAAAGACTTCCCCAAAGCCAAAAATCATCCAAACTCGG
CGTCCTGGCCTGCCACCCTCCGTGTCCAACTGAGCTGCCTGCTCCTTCTCGATAATAGCCGTCTCCTCTTTATCA
TGCTTTTTCCCCCTGTTGTTTGTCAAAAAAAATTGCCTTTAAATTCCTGGGTGTTTGGTTGTTTGAGATTCCTTC
CTTGTTATCAAGCCTCTCGGACAAAAGGGCTAGGAAAAGGTGATATGTCTCCTGATCATATCATACCCATTAAGT
ATAACCCATTATTTAGAAGGTTCTAGGGAAAAAAGTAGTATTTTCTTATTAAACAATCAGCACAGCCTATATCTT
TGTTCTCTCATGTTGATCCAAGCCAGAGACATCGGTAACAAATAGCACCTGTGTTGTTTGTGAGGTGTTTCAGTC
CCAGTCCTGATGTGTGTGCGTTGTTCTCTCCTGGCCACTTAAATAGGACCATATGTAAACTTGACTTTGACTGCA
TGAGATATCCCTATCTGGTCTCACTCAGTCCTCTGCATCCCAACATTCCCAGGACATGCATGATCACCAGCATTT
ATTTTCATTATTTGAGGATATCTTATAACTCACAGATTGTCAGCATCCAGCCATGTCCTATCTAGATTAGGAAAA
TGATCAGAATATTCCAGCTCAACAAGTCTGGGTATACTCACTATTGTGAGTCAATACACCATAGCTCTGTTGAAA
TTCCTGGAGGCAAAATTGACCTTGGCCCCAAAGATATTCCTCAATAGATTTCAAACACCACTCCCCTGTAGAACT
CTCCCAGCCTCGTTGGGGAGGCTTGTCCAGGGTGATAGAGACTGATTTCAGACAAACCTATTTATTACAAAAGTT
TCATGGTGTCTGAATGATTGTTTTCTCTCTTTGTATATTTGTACAAATGTTTCAGCTGTGCTTTTAAAAAATCTG
GATGTTTTTTATTTAGTGATTGTTCGACAATTAGCTGCTTCAAAACATAATGTGCATTGCTTATGAATGCCTTCA
TATACTAATACAGATACTCTGATAATATTACACTCTAATAAGGATAATGCTGAATTTTGAAAGGACACAAAACAT
CTAATGCCAATATATACATGGTTAGCCAACATCTTTGCTATCAAGACCACTTGTTTTAAATAAAGATGCAAGTGT
CAGTTGTAGATTATTGGGATGAAGCTAAATCCCCAGAATGCAGCAGCAGCTGAGCATGTTAAAATGGGGAAGGAT
GATAGCTACATGTATGCCGGTCCTACTCACGCGACACCCGTGTGCTCAAAAAAGTTACTTGTTTTTGTTACGTGT
GATTTTCCTATTTCTCTAGCCCAAAGTGCATTACAGAAGATACACCTATAGAACCATTACCTTCTGCTATGTGTG
CCAGGGCTCATCTACTCCTGTACATTAATGGATTACTTTAGATGCAAATGCAGATTACAATGGAGTGGGGAAGTA
CTTTCATTACCCAAGCCTCAGAAAAACACACAAGAACAATAACACAGCAAACAGATTGAGGGATTGTTGTGGTTT
TTGACTAAGGTGTATGTTAGTTTCATCAGAAACTTAAAACATAGACTGATCACTCAGAAATTAAAGTCCGTTTTA
CTGTGAATATAGCAATATAGTACTGGACACAGTACTGGTGAAACTGAGGAGAGCATTGCTTGTAAAATCCTGAGT
TTCCATAAGGAAAATGAAAACTCCTTTTAAAAATAAAATCTGAGGAGTGTACAATAAGCATATGCTTTGACTTTC
CTTTGCTGTGGAGGTTTTTGGTTTTTCATTGATGATAAACGACTACAGACTTAGTAGTGGAGAAATGGTGTCCTC
TAGTGGAAGAAATAGTAGCTCCGCTATTCAGATGCAGAGCACTGCAGCATCCAGCCTTTCAAAGCTGACTCTTCT
CAATCATCTGTGGGTCATTTGACTTGATTTTTTAAGCTACCCTGAATTTCCAGAATGCAGGTTCTAAAGAAATCT
AGATGAGAGAAAGTATTTGAAAATGATTTTTAAATGTTTTTTAAAAGACACATCTGACATTTTTAACAACTTAGT
AAAAGTTGAAATGACCATTCTGTGTAGTCATAAAAGAAACACAATGAAGTGTATGGCCTCTGGAGTTAGTCTTAG
TAAAACTTATTGCTCTGTGTCAATGTTAACCTGTCTCAGATCAAGTAATTCCTTCACTAGGTTGGGTTTGGGGAG
GGGGGAAAAGAGGGGCTTTTCCTAGGAGAACGATAAGAAATGGAAAGACTCCTTGAAGTGTTGCAAGGGAACCTC
CTAGCACTGTGAAAGTCAGAATCGCCTCAGCATTTCCATGACGCACATTATGCAAATCTCTTTAGCACTATTTTA
AGGTTGAAAACTTTAACAATGAAGGGGAAGGGGAAGATTTCCACCAACTGAATCATTTGTGCACGTGTATAGCTC
AAAGAGCTTAGACTTCAAATATATCTGGTGAATG

FIGURE 6451

MDCDVSTLVACVVDVEVFTNQEVKEKFGGLFRTYDDCVTFQLFKSFRRVRINFSNPKSAARARIELHETQFRGKK
LKLYFAQVQTPETDGDKLHLAPPQPAKQFLISPPSSPPVSWQPINDATPVLNYDLLYAVAKLGPGEKYELHAGTE
STPSVVVHVCDSDIEEEEDPKTSPKPKIIQTRRPGLPPSVSN

FIGURE 6452

CAGAGGGCTGCTGGCTGGCTAAGTCCCTCCCGCTCCCGGCTCTCGCCTCACTAGGAGCGGCTCTCGGTGCAGCGG
GACAGGGCGAAGCGGCCTGCGCCCACGGAGCGCGCGACACTGCCCGGAAGGGACCGCCACCCTTGCCCCCTCAGC
TGCCCACTCGTGATTTCCAGCGGCCTCCGCGCGCGCACGATGCCCTCGGCCACCAGCCACAGCGGGAGCGGCAGC
AAGTCGTCCGGACCGCCACCGCCGTCGGGTTCCTCCGGGAGTGAGGCGGCCGCGGGAGCCGGGGCCGCCGCGCCG
GCTTCTCAGCACCCCGCAACCGGCACCGGCGCTGTCCAGACCGAGGCCATGAAGCAGATTCTCGGGGTGATCGAC
AAGAAACTTCGGAACCTGGAGAAGAAAAAGGGTAAGCTTGATGATTACCAGGAACGAATGAACAAAGGGGAAAGG
CTTAATCAAGATCAGCTGGATGCCGTTTCTAAGTACCAGGAAGTCACAAATAATTTGGAGTTTGCAAAAGAATTA
CAGAGGAGTTTCATGGCACTAAGTCAAGATATTCAGAAAACAATAAAGAAGACAGCACGTCGGGAGCAGCTTATG
AGAGAAGAAGCTGAACAGAAACGTTTAAAAACTGTACTTGAGCTACAGTATGTTTTGGACAAATTGGGAGATGAT
GAAGTGCGGACTGACCTGAAACAAGGTTTGAATGGAGTGCCAATATTGTCCGAAGAGGAGTTGTCATTGTTGGAT
GAATTCTATAAGCTAGTAGACCCTGAACGGGACATGAGCTTGAGGTTGAATGAACAGTATGAACATGCCTCCATT
CACCTGTGGGACCTGCTGGAAGGGAAGGAAAAACCTGTATGTGGAACCACCTATAAAGTTCTAAAGGAAATTGTT
GAGCGTGTTTTTCAGTCAAACTACTTTGACAGCACCCACAACCACCAGAATGGGCTGTGTGAGGAAGAAGAGGCA
GCCTCAGCACCTGCAGTTGAAGACCAGGTACCTGAAGCTGAACCTGAGCCAGCAGAAGAGTACACTGAGCAAAGT
GAAGTTGAATCAACAGAGTATGTAAATAGACAGTTCATGGCAGAAACACAGTTCACCAGTGGTGAAAAGGAGCAG
GTAGATGAGTGGACAGTTGAAACGGTTGAGGTGGTAAATTCACTCCAGCAGCAACCTCAGGCTGCATCCCCTTCA
GTACCAGAGCCCCACTCTTTGACTCCAGTGGCTCAGGCAGATCCCCTTGTGAGAAGACAGCGAGTACAAGACCTT
ATGGCACAAATGCAGGGTCCCTATAATTTCATACAGGATTCAATGCTGGATTTTGAAAATCAGACACTTGATCCT
GCCATTGTATCTGCACAGCCTATGAATCCAACACAAAACATGGACATGCCCCAGCTGGTTTGCCCTCCAGTTCAT
TCTGAATCTAGACTTGCTCAGCCTAATCAAGTTCCTGTACAACCAGAAGCGACACAGGTTCCTTTGGTATCATCC
ACAAGTGAGGGGTACACAGCATCTCAACCCTTGTACCAGCCTTCTCATGCTACAGAGCAACGACCACAGAAGGAA
CCAATTGATCAGATTCAGGCAACAATCTCTTTAAATACAGACCAGACTACAGCATCATCATCCCTTCCTGCTGCG
TCTCAGCCTCAAGTATTTCAGGCTGGGACAAGCAAACCTTTACATAGCAGTGGAATCAATGTAAATGCAGCTCCA
TTCCAATCCATGCAAACGGTGTTCAATATGAATGCCCCAGTTCCTCCTGTTAATGAACCAGAAACTTTAAAACAG
CAAAATCAGTACCAGGCCAGTTATAACCAGAGCTTTTCTAGTCAGCCTCACCAAGTAGAACAAACAGAGCTTCAG
CAAGAACAGCTTCAAACAGTGGTTGGCACTTACCATGGTTCCCCAGACCAGTCCCATCAAGTGACTGGTAACCAC
CAGCAGCCTCCTCAGCAGAACACTGGATTTCCACGTAGCAATCAGCCCTATTACAATAGTCGTGGTGTGTCTCGT
GGAGGCTCCCGTGGTGCTAGAGGCTTGATGAATGGATACCGGGGCCCTGCCAATGGATTCAGAGGAGGATATGAT
GGTTACCGCCCTTCATTCTCTAACACTCCAAACAGTGGTTATACACAGTCTCAGTTCAGTGCTCCCCGGGATTAC
TCTGGCTATCAACGGGATGGATATCAGCAGAATTTCAAGCGAGGCTCTGGGCAGAGTGGACCACGGGGAGCCCCA
CGAGGTCGTGGAGGGCCCCCAAGACCCAACAGAGGGATGCCGCAAATGAACACTCAGCAAGTGAATTAATCTGAT
TCACAGGATTATGTTTAATCGCCAAAAACACACTGGCCAGTGTACCATAATATGTTACCAGAAGAGTTATTATCT
ATTTGTTCTCCCTTTCAGGAAACTTATTGTAAAGGGACTGTTTTCATCCCATAAAGACAGGACTACAATTGTCAG
CTTTCTATTACCTGGATATGGAAGGAAACTATTTTTACTCTGCATGTTCTGTCCTAAGCGTCATCTTGAGCCTTG
CACATGATACTCAGATTCCTCACCCTTGCTTAGGAGTAAAACAATATACTTTACAGGGTGATAATAATCTCCATA
GTTATTTGAAGTGGCTTGAAAAAGGCAAGATTGACTTTTATGACATTGGATAAAATCTACAAATCAGCCCTCGAG
TTATTCAATGATAACTGACAAACTAAATTATTTCCCTAGAAAGGAAGATGAAAGGAGTGGAGTGTGGTTTGGCAG
AACAACTGCATTTCACAGCTTTTCCAGTTAAATTGGAGCACTGAACGTTCAGATGCATACCAAATTATGCATGGG
TCCTAATCACACATATAAGGCTGGCTACCAGCTTTGACACAGCACTGTTCATCTGGCCAAACAACTGTGGTTAAA
AACACATGTAAAATGCTTTTTAACAGCTGATACTGTATAAGACAAAGCCAAGATGCAAAATTAGGCTTTGATTGG
CACTTTTTGAAAAATATGCAACAAATATGGGATGTAATCCGGATGGCCGCTTCTGTACTTAATGTGAAATATTTA
GATACCTTTTTGAACACTTAACAGTTTCTTTGAGACAATGACTTTTGTAAGGATTGGTACTATCTATCATTCCTT
ATGACATGTACATTGTCTGTCACTAATCCTTGGATTTTGCTGTATTGTCACCTAAATTGGTACAGGTACTGATGA
AAATCTCTAGTGGATAATCATAACACTCTCGGTCACATGTTTTTCCTTCAGCTTGAAAGCTTTTTTTTAAAAGGA
AAAGATACCAAATGCCTGCTGCTACCACCCTTTTCAATTGCTATCTTTTGAAAGGCACCAGTATGTGTTTTAGAT
TGATTTCCCTGTTTCAGGGAAATCACGGACAGTAGTTTCAGTTCTGATGGTATAAGCAAAACAAATAAAACGTTT
ATAAAAGTTAAAAAAAAAAAAAAAAAA

FIGURE 6453

MKQILGVIDKKLRNLEKKKGKLDDYQERMNKGERLNQDQLDAVSKYQEVTNNLEFAKELQRSFMALSQDIQKTIK
KTARREQLMREEAEQKRLKTVLELQYVLDKLGDDEVRTDLKQGLNGVPILSEEELSLLDEFYKLVDPERDMSLRL
NEQYEHASIHLWDLLEGKEKPVCGTTYKVLKEIVERVFQSNYFDSTHNHQNGLCEEEEAASAPAVEDQVPEAEPE
PAEEYTEQSEVESTEYVNRQFMAETQFTSGEKEQVDEWTVETVEVVNSLQQQPQAASPSVPEPHSLTPVAQADPL
VRRQRVQDLMAQMQGPYNFIQDSMLDFENQTLDPAIVSAQPMNPTQNMDMPQLVCPPVHSESRLAQPNQVPVQPE
ATQVPLVSSTSEGYTASQPLYQPSHATEQRPQKEPIDQIQATISLNTDQTTASSSLPAASQPQVFQAGTSKPLHS
SGINVNAAPFQSMQTVFNMNAPVPPVNEPETLKQQNQYQASYNQSFSSQPHQVEQTELQQEQLQTVVGTYHGSPD
QSHQVTGNHQQPPQQNTGFPRSNQPYYNSRGVSRGGSRGARGLMNGYRGPANGFRGGYDGYRPSFSNTPNSGYTQ
SQFSAPRDYSGYQRDGYQQNFKRGSGQSGPRGAPRGRGGPPRPNRGMPQMNTQQVN

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FIGURE 6454

CTGACTCTCTGAGGCTCATTTTGCAGTTGTTGAAATTGTCCCCGCAGTTTTCAATCATGTCTGAACCAATCAGAG
TCCTTGTGACTGGAGCAGCTGGTCAAATTGCATATTCACTGCTGTACAGTATTGGAAATGGATCTGTCTTTGGTA
AAGATCAGCCTATAATTCTTGTGCTGTTGGATATCACCCCCATGATGGGTGTCCTGGACGGTGTCCTAATGGAAC
TGCAAGACTGTGCCCTTCCCCTCCTGAAAGATGTCATCGCAACAGATAAAGAAGACGTTGCCTTCAAAGACCTGG
ATGTGGCCATTCTTGTGGGCTCCATGCCAAGAAGGGAAGGCATGGAGAGAAAAGATTTACTGAAAGCAAATGTGA
AAATCTTCAAATCCCAGGGTGCAGCCTTAGATAAATACGCCAAGAAGTCAGTTAAGGTTATTGTTGTGGGTAATC
CAGCCAATACCAACTGCCTGACTGCTTCCAAGTCAGCTCCATCCATCCCCAAGGAGAACTTCAGTTGCTTGACTC
GTTTGGATCACAACCGAGCTAAAGCTCAAATTGCTCTTAAACTTGGTGTGACTGCTAATGATGTAAAGAATGTCA
TTATCTGGGGAAACCATTCCTCGACTCAGTATCCAGATGTCAACCATGCCAAGGTGAAATTGCAAGGAAAGGAAG
TTGGTGTTTATGAAGCTCTGAAAGATGACAGCTGGCTCAAGGGAGAATTTGTCACGACTGTGCAGCAGCGTGGCG
CTGCTGTCATCAAGGCTCGAAAACTATCCAGTGCCATGTCTGCTGCAAAAGCCATCTGTGACCACGTCAGGGACA
TCTGGTTTGGAACCCCAGAGGGAGAGTTTGTGTCCATGGGTGTTATCTCTGATGGCAACTCCTATGGTGTTCCTG
ATGATCTGCTCTACTCATTCCCTGTTGTAATCAAGAATAAGACCTGGAAGTTTGTTGAAGGTCTCCCTATTAATG
ATTTCTCACGTGAGAAGATGGATCTTACTGCAAAGGAACTGACAGAAGAAAAAGAAAGTGCTTTTGAATTTCTTT
CCTCTGCCTGACTAGACAATGATGTTACTAAATGCTTCAAAGCTGAAGAATCTAAATGTCGTCTTTGACTCAAGT
ACCAAATAATAATAATGCTATACTTAAATTACTTGTGAAAAACAACACATTTTAAAGATTACGTGCTTCTTGGTA
CAGGTTTGTGAATGACAGTTTATCGTCATGCTGTTAGTGTGCATTCTAAATAAATATATATTCAAATG

FIGURE 6455

MSEPIRVLVTGAAGQIAYSLLYSIGNGSVFGKDQPIILVLLDITPMMGVLDGVLMELQDCALPLLKDVIATDKED
VAFKDLDVAILVGSMPRREGMERKDLLKANVKIFKSQGAALDKYAKKSVKVIVVGNPANTNCLTASKSAPSIPKE
NFSCLTRLDHNRAKAQIALKLGVTANDVKNVIIWGNHSSTQYPDVNHAKVKLQGKEVGVYEALKDDSWLKGEFVT
TVQQRGAAVIKARKLSSAMSAAKAICDHVRDIWFGTPEGEFVSMGVISDGNSYGVPDDLLYSFPVVIKNKTWKFV
EGLPINDFSREKMDLTAKELTEEKESAFEFLSSA

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FIGURE 6456

CCCACGCGTCCGGTCAGAGCTGGAGGGCCGGGCACCGCGGCCATGGAGGGTCAACGCTGGCTGCCGCTGGAGGCC
AATCCCGAGGTCACCAACCAGTTTCTTAAACAATTAGGTCTACATCCTAACTGGCAATTCGTTGATGTATATGGA
ATGGATCCTGAACTCCTTAGCATGGTACCAAGACCAGTCTGTGCAGTCTTACTTCTCTTTCCTATTACAGAAAAG
TATGAAGTATTCAGAACAGAAGAGGAAGAAAAAATAAAATCTCAGGGACAAGATGTTACATCATCAGTATATTTC
ATGAAGCAAACAATCAGCAATGCCTGTGGAACAATTGGACTGATTCATGCTATTGCAAACAATAAAGACAAGATG
CACTTTGAATCTGGATCAACCTTGAAAAAATTCCTGGAGGAATCTGTGTCAATGAGCCCTGAAGAACGAGCCAGA
TACCTGGAGAACTATGATGCCATCCGAGTTACTCATGAGACCAGTGCCCATGAAGGTCAGACTGAGGCACCAAGT
ATAGATGAGAAAGTAGATCTTCATTTTATTGCATTAGTTCATGTAGATGGGCATCTCTATGAATTAGATGGGCGG
AAGCCATTTCCAATTAACCATGGTGAAACTAGTGATGAAACTTTATTAGAGGATGCCATAGAAGTTTGCAAGAAG
TTTATGGAGCGCGACCCTGATGAACTAAGATTTAATGCGATTGCTCTTTCTGCAGCATAGCTTGTCAATAATGGA
AACACCAAAAACTGTATTATTTGCAACTAAATTTTCTCTGCCATACACTAACTCAAAAATTTTGATATTTTCATT
AACTTGATGATTAAACTTTATGTGAGTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAA

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FIGURE 6457

MEGQRWLPLEANPEVTNQFLKQLGLHPNWQFVDVYGMDPELLSMVPRPVCAVLLLFPITEKYEVFRTEEEEKIKS
QGQDVTSSVYFMKQTISNACGTIGLIHAIANNKDKMHFESGSTLKKFLEESVSMSPEERARYLENYDAIRVTHET
SAHEGQTEAPSIDEKVDLHFIALVHVDGHLYELDGRKPFPINHGETSDETLLEDAIEVCKKFMERDPDELRFNAI
ALSAA

FIGURE 6458

GATGCCTGATCTCATCAATCTAGCGGGAGAGACAGGATAACCTGTCCGAGAGTATAGCGCCACTTATGACTCCGC
CGGAAAAATTACTTTAAAAATCGCCAAAAATTACTTGGAGCAAAGGGCAGTCCGGCGGCGTTCGCCAAGGTGGCG
CAGTCGGTTTTGACCTGTAGCAGAGAACCAATTCTGGAGAACAGCCTCACTTCTTTGATTGAATACTTACATAAT
GCATTGGAACATGACATGAGATTAAGGTTTAATAATGATAGAATGAAGACCACAATAAAAGAGACCACAATCCTT
AGCTCAGCAATTCTTACCTTTCTTACCTATTTGATGAAGATGTCTTTTGAAAGGTGTACTGCAAGGAACAAAATG
TTTGTAAATTCTCCCTTTTACCCAAGGGTGGATAATTACTGTACCTCCTCATGGAAAAAGTTTTATTTAAAGTGT
TATTTCTCATTGAATACTATCAAAAAGGAAAAAAAAATGACCTAAACTTTTGAGATAGATTTGGCTCTAGTAAGT
ATTTAGTTATATCACTTGCATATCTGGGAGAAGAAATAAGAGACTATCATCAGTACATTCCCATCTACTAAAAAA
ATTTATTTTACACATGTCAAGGGATTACTTATAACTTCCATTTTATTACTAATAGCTTGAACCCTTTTAATGAAG
ACCTAACTCCTCCACCAGAAATTTAAGTTTATGTTCTTACTTTGTTTACTTATAAAATACATCTCAGGTATTTCG
GATGTCTTTTTTTTTTCTAAGCCTATATGAAATGAAAAATATATTGGCAAAGTAAATGTTTAAACCTTTTACGTT
AAAATTACTTTGAAAGATGAAAAGTTAGTGCTGTTTTTGTCACGTTATACTGAAATTAAATGTTTATAATTTATA
TTTTGGGTTTATGTATAAATCATGGAATTTATGCAAAAATATGAGTAGTACAGATTCTCCTCTAATTCTGTAGGA
CTTTGAATAATGTGATATTTTTCTTATAATTGGACCCTTGTGTTTTGAAGAAATGCCAACTGCTTGAAGAATCTC
CTTGTTATTTGTATTATTTGCTATAGGGTTAGATGTTGAGAAATTCTGCTGACAAAAAATTTTAAGCCAGTTTTA
CACTAAATGTTCCTCAGTCTGATTAATTTGTTATTGGATGTATTCTGTATCTTTCTTTTGTAATTTGTGACTTTT
ATCCACTTAGCACGAATGATTCTATTAAAGAAAATCATTAGGAAGTGGTAGAAACTTTAAATCGCCCCAGAGTTT
GCCTGTTTCCATATTTTATTATCTTATAATCTTCGGGAGTGCTTACACTTATGGAGCTAACATTTTCAGAGATAC
AGCTTCTTATAGTAACACTAAAACTTTCTTCCTCTTTGGACTGAATACCTATAATTATAACTATATGGTAGTTTA
AGTTTCCTTGTGATTAGTCAAAAATACCATTTTAGTATGAAGCAATGAAGTCTATTATTTGTTGTCCCATAATTG
AGAAAGCTTAAATACACCTTTTATGTAAGAGTTTAGTAAGATTCTAGCTTAGTCTACACAGATTTTTATATCAAT
TTGTTTATATTTTTATTAATGTCATTTCTGGAAGTGTGAAAATGTTAATGTTCAACAAGCAACATTAAAAATAGA
TTTGAAACATTTATATATAGAGAGGTACACATTTATTTACTGTTTAGGTACTGAAGATTATCACTTAATAAAAAA
TATATATCCCAAAAAAAAAAAAAAA

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FIGURE 6459

MRLRFNNDRMKTTIKETTILSSAILTFLTYLMKMSFERCTARNKMFVNSPFYPRVDNYCTSSWKKFYLKCYFSLN
TIKKEKKMT

FIGURE 6460

CTGTCCTCGGAGCAGGCGGAGTAAAGGGACTTGAGCGAGCCAGTTGCCGGATTATTCTATTTCCCCTCCCTCTCT
CCCGCCCCGTATCTCTTTTCACCCTTCTCCCACCCTCGCTCGCGTAGCCATGGCGGAGCCATCGGCGGCCACTCA
GTCCCATTCCATCTCCTCGTCGTCCTTCGGAGCCGAGCCGTCCGCGCCCGGCGGCGGCGGGAGCCCAGGAGCCTG
CCCCGCCCTGGGGACGAAGAGCTGCAGCTCCTCCTGTGCGGTGCACGATCTGATTTTCTGGAGAGATGTGAAGAA
GACTGGGTTTGTCTTTGGCACCACGCTGATCATGCTGCTTTCCCTGGCAGCTTTCAGTGTCATCAGTGTGGTTTC
TTACCTCATCCTGGCTCTTCTCTCTGTCACCATCAGCTTCAGGATCTACAAGTCCGTCATCCAAGCTGTACAGAA
GTCAGAAGAAGGCCATCCATTCAAAGCCTACCTGGACGTAGACATTACTCTGTCCTCAGAAGCTTTCCATAATTA
CATGAATGCTGCCATGGTGCACATCAACAGGGCCCTGAAACTCATTATTCGTCTCTTTCTGGTAGAAGATCTGGT
TGACTCCTTGAAGCTGGCTGTCTTCATGTGGCTGATGACCTATGTTGGTGCTGTTTTTAACGGAATCACCCTTCT
AATTCTTGCTGAACTGCTCATTTTCAGTGTCCCGATTGTCTATGAGAAGTACAAGACCCAGATTGATCACTATGT
TGGCATCGCCCGAGATCAGACCAAGTCAATTGTTGAAAAGATCCAAGCAAAACTCCCTGGAATCGCCAAAAAAAA
GGCAGAATAAGTACATGGAAACCAGAAATGCAACAGTTACTAAAACACCATTTAATAGTTATAACGTCGTTACTT
GTACTATGAAGGAAAATACTCAGTGTCAGCTTGAGCCTGCATTCCAAGCTTTTTTTTTAATTTGGTGTTTTCTCC
CATCCTTTCCCTTTAACCCTCAGTATCAAGCACAAAAATTGATGGACTGATAAAAGAACTATCTTAGAACTCAGA
AGAAGAAAGAATCAAATTCATAGGATAAGTCAATACCTTAATGGTGGTAGAGCCTTTACCTGTAGCTTGAAAGGG
GAAAGATTGGAGGTAAGAGAGAAAATGAAAGAACACCTCTGGGTCCTTCTGTCCAGTTTTCAGCACTAGTCTTAC
TCAGCTATCCATTATAGTTTTGCCCTTAAGAAGTCATGATTAASTTATGAAAAAATTATTTGGGGGACAGGAGTG
TGGATACCTTCCTTGGGTTTTTTTTTGCAGCCCTCAAATCCCTATCTTCCTGCCCCACAATGTGAGCAGCTACCC
CTGGATACTCCTTTTCTTTAATGATTTAACTATCAACTTGATAAATAACTTATAGGTGATAGTGATAATTCCTGA
TTCCAAGAATGCCATCTGATAAAAAAGAATAGAAATGGAAAGTGGGACTGAGAGGGAGTCAGCAGGCATGCTGCG
GTGGCGGTCACTCCCTCTGCCACTATCCCCAGGGAAGGAAAGGCTCCGCCATTTGGGAAAGTGGTTTCTACGTCA
CTGGACACCGGTTCTGAGCATTAGTTTGAGAACTCGTTCCCGAATGTGCTTTCCTCCCTCTCCCCTGCCCACCTC
AAGTTTAATAAATAAGGTTGTACTTTTCTTACTATAAAATAAATGTCTGTAACTGCTGTGCACTGCTGTAAACTT
GTTAGAGAAAAAAATAACCTGCATGTGGGCTCCTCAGTTATTGAGTTTTTGTGATCCTATCTCAGTCTGGGGGGG
AACATTCTCAAGAGGTGAAATACAGAAAGCCTTTTTTTCTTGATCTTTTCCCGAGATTCAAATCTCCGATTCCCA
TTTGGGGGCAAGTTTTTTTCTTCACCTTCAATATGAGAATTCAGCGAACTTGAAAGAAAAATCATCTGTGAGTTC
CTTCAGGTTCTCACTCATAGTCATGATCCTTCACAGGGAATATGCACTGGCGAGTTTAAAGTAAGGGCTATGATA
TTTGATGGTCCCAAAGTACGGCAGCTGCAAAAAGTATTGGAAGGAAATTGTCTACGTGTCTTGGAAAAATTAGTT
AGGAATTTGGATGGGTAAAAGGTACCCTTGCCTTACTCCATCTTATTTTCTTAGCCCCCTTTGAGTGTTTTAACT
GGTTTCATGTCCTAGTAGGAAGTGCATTCTCCATCCTCATCCTCTGCCCTCCCAGGAAGTCAGTGATTGTCTTTT
TGGGCTTCCCCTCCAAAGGACCTTCTGCAGTGGAAGTGCCACATCCAGTTCTTTTCTTTTGTTGCTGCTGTGTTT
AGATAATTGAAGAGATCTTTGTGCCACACAGGATTTTTTTTTTTTTAAGAAAAACCTATAGATGAAAAATTACT
AATGAAACTGTGTGTACGTGTCTGTGCGTGCAACATAAAAATACAGTAGCACCTAAGGAGCTTGAATCTTGGTTC
CTGTAAAATTTCAAATTGATGTGGTATTAATAAAAAAAAAAAAAAACAC

FIGURE 6461

MAEPSAATQSHSISSSSFGAEPSAPGGGGSPGACPALGTKSCSSSCAVHDLIFWRDVKKTGFVFGTTLIMLLSLA
AFSVISVVSYLILALLSVTISFRIYKSVIQAVQKSEEGHPFKAYLDVDITLSSEAFHNYMNAAMVHINRALKLII
RLFLVEDLVDSLKLAVFMWLMTYVGAVFNGITLLILAELLIFSVPIVYEKYKTQIDHYVGIARDQTKSIVEKIQA
KLPGIAKKKAE

FIGURE 6462

CTAAAGCTGGGTTGGTAGCTCCTACCTACTGTGTGGCAAGAAGGTATGGGTCATGAACAGAACCAAGGAGCTGCG
CTGCTACAGATGTTACCACTTCTGTGGCTGCTACCCCACTCCTGGGCCGTCCCTGAAGCTCCTACTCCAATGTGG
CCAGATGACCTGCAAAACCACACATTCCTGCACACAGTGTACTGCCAGGATGGGAGTCCCAGTGTGGGACTCTCT
GAGGCCTACGACGAGGACCAGCTTTTCTTCTTCGACTTTTCCCAGAACACTCGGGTGCCTCGCCTGCCCGAATTT
GCTGACTGGGCTCAGGAACAGGGAGATGCTCCTGCCATTTTATTTGACAAAGAGTTCTGCGAGTGGATGATCCAG
CAAATAGGGCCAAAACTTGATGGGAAAATCCCGGTGTCCAGAGGGTTTCCTATCGCTGAAGTGTTCACGCTGAAG
CCCCTGGAGTTTGGCAAGCCCAACACTTTGGTCTGTTTTGTCAGTAATCTCTTCCCACCCATGCTGACAGTGAAC
TGGCACGATCATTCCGTCCCTGTGGAAGGATTTGGGCCTACTTTTGTCTCAGCTGTCGATGGACTCAGCTTCCAG
GCCTTTTCTTACTTAAACTTCACACCAGAACCTTCTGACATTTTCTCCTGCATTGTGACTCACGAAATTGACCGC
TACACAGCAATTGCCTATTGGGTACCCCGGAACGCACTGCCCTCAGATCTGCTGGAGAATGTGCTGTGTGGCGTG
GCCTTTGGCCTGGGTGTGCTGGGCATCATCGTGGGCATTGTTCTCATCATCTACTTCCGGAAGCCTTGCTCAGGT
GACTGATTCTTCCAGACCAGAGTTTGATGCCAGCAGCTTCGGCCATCCAAACAGAGGATGCTCAGATTTCTCACA
TCCTGCCCAGGATCTCCTCTTAGGGTAGAAGAAGTCTCTGGGACATCCCTGGGGTGTGTGTGTAGATTTCCCACC
TGGGGACTCTGCTGTCCCTGGGCTTGCATCCCAGGGATCCCAGAGTGGCCTGCCTATCACAACCACATCCCTTCC
CCCCACAAGGCAATAAATCTCATTTCTTTAAAAAAAAAAAAAAAAAAAAA

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FIGURE 6463

MGHEQNQGAALLQMLPLLWLLPHSWAVPEAPTPMWPDDLQNHTFLHTVYCQDGSPSVGLSEAYDEDQLFFFDFSQ
NTRVPRLPEFADWAQEQGDAPAILFDKEFCEWMIQQIGPKLDGKIPVSRGFPIAEVFTLKPLEFGKPNTLVCFVS
NLFPPMLTVNWHDHSVPVEGFGPTFVSAVDGLSFQAFSYLNFTPEPSDIFSCIVTHEIDRYTAIAYWVPRNALPS
DLLENVLCGVAFGLGVLGIIVGIVLIIYFRKPCSGD

FIGURE 6464

TAGTGATCTTTTCTGAGTGTCTCCTACTTGCGACAAGGTGGACTTGGGAGGAAAGCCGTCTGCCAAAGCCTGAAG
CCTCCAAGCCATAAACAACCCCAATGGCCTCCCACGAAGTTGATAATGCAGAGCTGGGGTCAGCCTCTGCCCATG
GTACCCCAGGCAGTGAGACGGGACCAGAAGAGCTGAATACTTCTGTCTACCACCCCATAAATGGATCACCAGATT
ATCAGAAAGCAAAATTACAAGTTCTTGGGGCCATCCAGATCCTGAATGCAGCAATGATTCTGGCTTTGGGTGTCT
TTCTGGGTTCCTTGCAATACCCATACCACTTCCAAAAGCACTTCTTTTTCTTCACCTTCTACACAGGCTACCCGA
TTTGGGGTGCTGTGTTTTTCTGTAGTTCAGGAACCTTGTCTGTTGTAGCAGGGATAAAACCCACAAGAACATGGA
TACAGAACAGTTTTGGAATGAACATTGCCAGTGCTACAATTGCACTAGTGGGGACTGCTTTTCTCTCACTAAATA
TAGCAGTTAATATCCAGTCATTAAGGAGTTGTCACTCTTCATCAGAGTCACCGGACCTATGCAATTACATGGGCT
CCATATCAAATGGCATGGTGTCTCTACTGCTGATTCTCACCTTGCTGGAATTATGCGTAACTATCTCTACCATAG
CCATGTGGTGCAATGCAAACTGCTGTAATTCAAGAGAGGAAATTTCCTCACCTCCCAATTCTGTGTAATCAAGAA
TACCTCCTTATGAAAATAATTCTGAGAGCATGAATATTTGACCTTAAATCTCCAGTGACTCAGAGCTTCACCCAC
AAACTCAGGAGAACATAAGCCTGCTCGTAAAGCTCAATCCTTCTATCATGGCACCAATCACAAGAACCTTGGACG
TTTGACTGACTCTATCCTTTCTCTCCTAACTATAAATCCTATTTGTGTGTCGTGGGTATGGAAGGACAGATATAT
TTCTTTAGGCATTCTTGGATATCTGTAACTTCTATGATCATTACTCCAAAGTTGTTTCCAGAAATTGGTTCTATT
TCTTCTTATCCACCTACTCCATTGCTTTATGAGGTTTAAGGAAGGAAGGCGGTATAATCCCTATTCAATATATTT
TTTCTAAAATCCAACTTCTGACCGCCCAGTAGGAAGAAAAATGAGACATTTTTTCCATTACAGAGAAATGCTTCT
TGACTTTAACATCAGCATTATAAAAAGTGTCAAATAAAAAATTACCATCATTATCATTAAAATAAATTTTCACTG
TATTTGAGATGGGAGGGTTAAGGCTCAGGGATTTTATTTCAGTGAACTGCTGGAACTCACACATGCCCTGATATG
TAAATGATGATTTATGTTGGCGAGTCTGAGAGCAAGCCCAAATGTGTTCTTCAAAGGACAATGGGAAACTGTAAA
GTAGAGAACTAAAGAATAAGGCCTTTAGAATCTGACACATCTGGGTTCAAATTCTGAAACTGTCACTTATTACCT
GTATGAACATGGGCAAATTATCTAATCTCTCTGATCTATTTTTCCTCATCTGTAAAATAGGTGTAATAATAACAA
CTACTTTGTCGGTTGCTCTGAGGGTTAAATGAAAATAAAAAGAAAATGTGAAACAGCACCACAGGTACTTG

FIGURE 6465

MASHEVDNAELGSASAHGTPGSEAGPEELNTSVYQPIDGSPDYQKAKLQVLGAIQILNAAMILALGVFLGSLQYP
YHFQKHFFFFTFYTGYPIWGAVFFCSSGTLSVVAGIKPTRTWIQNSFGMNIASATIALVGTAFLSLNIAVNIQSL
RSCHSSSESPDLCNYMGSISNGMVSLLLILTLLELCVTISTIAMWCNANCCNSREEISSPPNSV

FIGURE 6466

AAAGGTTAGTGTTTTAGTGTCTCTGTCATTTGACAGTTAATATTATGAATAGTTGTGCCCACAGTCTTAGAACTC
CTTCCATGACATTGTCCCTCCATACTGACACTTCTCTTTCCTGCAGGTGAGGAGTAAGAGGAGCAGGCTCCTGCA
CAGTGACTACATGAACATGACTCCCCGCCGCCCCGGGCCCACCCGCAAGCATTACCAGCCCTATGCCCCACCACG
CGACTTCGCAGCCTATCGCTCCTGACACGGACGCCTATCCAGAAGCCAGCCGGCTGGCAGCCCCCATCTGCTCAA
TATCACTGCTCTGGATAGGAAATGACCGCCATCTCCAGCCGGCCACCTCAGGCCCCTGTTGGGCCACCAATGCCA
ATTTTTCTCGAGTGACTAGACCAAATATCAAGATCATTTTGAGACTCTGAAATGAAGTAAAAGAGATTTCCTGTG
ACAGGCCAAGTCTTACAGTGCCATGGCCCACATTCCAACTTACCATGTACTTAGTGACTTGACTGAGAAGTTAGG
GTAGAAAACAAAAAGGGAGTGGATTCTGGGAGCCTCTTCCCTTTCTCACTCACCTGCACATCTCAGTCAAGCAAA
GTGTGGTATCCACAGACATTTTAGTTGCAGAAGAAAGGCTAGGAAATCATTCCTTTTGGTTAAATGGGTGTTTAA
TCTTTTGGTTAGTGGGTTAAACGGGGTAAGTTAGAGTAGGGGGAGGGATAGGAAGACATATTTAAAAACCATTAA
AACACTGTCTCCCACTCATGAAATGAGCCACGTAGTTCCTATTTAATGCTGTTTTCCTTTAGTTTAGAAATACAT
AGACATTGTCTTTTATGAATTCTGATCATATTTAGTCATTTTGACCAAATGAGGGATTTGGTCAAATGAGGGATT
CCCTCAAAGCAATATCAGGTAAACCAAGTTGCTTTCCTCACTCCCTGTCATGAGACTTCAGTGTTAATGTTCACA
ATATACTTTCGAAAGAATAAAATAGTTCTCCTACATGAAGAAAGAATATGTCAGGAAATAAGGTCACTTTATGTC
AAAATTATTTGAGTACTATGGGACCTGGCGCAGTGGCTCATGCTTGTAATCCCAGCACTTTGGGAGGCCGAGGTG
GGCAGATCACTTGAGATCAGGACCAGCCTGGTCAAGATGGTGAAACTCCGTCTGTACTAAAAATACAAAATTTAG
CTTGGCCTGGTGGCAGGCACCTGTAATCCCAGCTGCCCAGGAGGCTGAGGCATGAGAATCGCTTGAACCTGGCAG
GCGGAGGTTGCAGTGAGCCGAGATAGTGCCACAGCTCTCCAGCCTGGGCGACAGAGTGAGACTCCATCTCAAACA
ACAACAACAACAACAACAACAACAACAAACCACAAAATTATTTGAGTACTGTGAAGGATTATTTGTCTAACAGTT
CATTCCAATCAGACCAGGTAGGAGCTTTCCTGTTTCATATGTTTCAGGGTTGCACAGTTGGTCTCTTTAATGTCG
GTGTGGAGATCCAAAGTGGGTTGTGGAAAGAGCGTCCATAGGAGAAGTGAGAATACTGTGAAAAGGGATGTTAGC
ATTCATTAGAGTATGAGGATGAGTCCCAAGAAGGTTCTTTGGAAGGAGGACGAATAGAATGGAGTAATGAAATTC
TTGCCATGTGCTGAGGAGATAGCCAGCATTAGGTGACAATCTTCCAGAAGTGGTCAGGCAGAAGGTGCCCTGGTG
AGAGCTCCTTTACAGGGACTTTATGTGGTTTAGGGCTCAGAGCTCCAAAACTCTGGGCTCAGCTGCTCCTGTACC
TTGGAGGTCCATTCACATGGGAAAGTATTTTGGAATGTGTCTTTTGAAGAGAGCATCAGAGTTCTTAAGGGACTG
GGTAAGGCCTGACCCTGAAATGACCATGGATATTTTTCTACCTACAGTTTGAGTCAACTAGAATATGCCTGGGGA
CCTTGAAGAATGCCCTTCAGTGGCCCTCACCATTTGTTCATGCTTCAGTTAATTCAGGTGTTGAAGGAGCTTAGG
TTTTAGAGGCACGTAGACTTGGTTCAAGTCTCGTTAGTAGTTGAATAGCCTCAGGCAAGTCACTGCCCACCTAAG
ATGATGGTTCTTCAACTATAAATGGAGATAATGGTTACAAATGTCTCTTCCTATAGTATAATCTCCATAAGGGCA
TGGCCCAAGTCTGTCTTTGACTCTGCCTATCCCTGACGTTTAGTAGCATGCCCGACATACAATGTTAGCTATTGG
TATTATTGCCATATAGATAAATTATGTATAAAAATTAAACTGGGCAATAGCCTAAGAAGGGGGGAATATTGTAAC
ACAAATTTAAACCCACTACGCAGGGATGAGGTGCTATAATATGAGGACCTTTTAACTTCCATCATTTTCCTGTTT
CTTGAAATAGTTTATCTTGTAATGAAATATAAGGCACCTCCCACTTTTATGTATAGAAAGAGGTCTTTTAATTTT
TTTTTAATGTGAGAAGGAAGGGAGGAGTAGGAATCTTGAGATTCCATATCGAAAATACTGTACTTTGGTTGATTT
TTAAGTGGGCTTCCATTCCATGGATTTAATCAGTCCCAAGAAGATCAAACTCAGCAGTACTTGGGTGCTGAAGAA
CTGTTGGATTTACCCTGGCACGTGTGCCACTTGCCCAGCTTCTTGGGCACACAGAGTTCTTCAATCCAAGTTATC
AGATTGTATTTGAAAATGACAGAGCTGGAGAGTTTTTTGAAATGGCAGTGGCAAATAAATAAATACTTTTTTTTA
AATGGAAAGACTTGATCTATGGTAATAAATGATTTTGTTTTCTGACTGGAAAAATAGGCCTACTAAAGATGAATC
ACACTTGAGATGTTTCTTACTCACTCTGCACAGAAACAAAGAAGAAATGTTATACAGGGAAGTCCGTTTTCACTA
TTAGTATGAACCAAGAAATGGTTCAAAAACAGTGGTAGGAGCAATGCTTTCATAGTTTCAGATATGGTAGTTATG
AAGAAAACAATGTCATTTGCTGCTATTATTGTAAGAGTCTTATAATTAATGGTACTCCTATAATTTTTGATTGTG
AGCTCACCTATTTGGGTTAAGCATGCCAATTTAAAGAGACCAAGTGTATGTACATTATGTTCTACATATTCAGTG
ATAAAATTACTAAACTACTATATGTCTGCTTTAAATTTGTACTTTAATATTGTCTTTTGGTATTAAGAAAGATAT
GCTTT

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FIGURE 6467

AATTAAGAGAAAAAAAGTGAATATGGTTTTTGCTCACAGAATGGATAACAGCAAGCCACATTTGATTATTCCTAC
ACTTCTGGTGCCCCTCCAAAACCGCAGCTGCACTGAAACAGCCACACCTCTGCCAAGCCAATACCTGATGGAATT
AAGTGAGGAGCACAGTTGGATGAGCAACCAAACAGACCTTCACTATGTGCTGAAACCCGGGGAAGTGGCCACAGC
CAGCATCTTCTTTGGGATTCTGTGGTTGTTTTCTATCTTCGGCAATTCCCTGGTTTGTTTGGTCATCCATAGGAG
TAGGAGGACTCAGTCTACCACCAACTACTTTGTGGTCTCCATGGCATGTGCTGACCTTCTCATCAGCGTTGCCAG
CACGCCTTTCGTCCTGCTCCAGTTCACCACTGGAAGGTGGACGCTGGGTAGTGCAACGTGCAAGGTTGTGCGATA
TTTTCAATATCTCACTCCAGGTGTCCAGATCTACGTTCTCCTCTCCATCTGCATAGACCGGTTCTACACCATCGT
CTATCCTCTGAGCTTCAAGGTGTCCAGAGAAAAAGCCAAGAAAATGATTGCGGCATCGTGGATCTTTGATGCAGG
CTTTGTGACCCCTGTGCTCTTTTTCTATGGCTCCAACTGGGACAGTCATTGTAACTATTTCCTCCCCTCCTCTTG
GGAAGGCACTGCCTACACTGTCATCCACTTCTTGGTGGGCTTTGTGATTCCATCTGTCCTCATAATTTTATTTTA
CCAAAAGGTCATAAAATATATTTGGAGAATAGGCACAGATGGCCGAACGGTGAGGAGGACAATGAACATTGTCCC
TCGGACAAAAGTGAAAACTATCAAGATGTTCCTCATTTTAAATCTGTTGTTTTTGCTCTCCTGGCTGCCTTTTCA
TGTAGCTCAGCTATGGCACCCCCATGAACAAGACTATAAGAAAAGTTCCCTTGTTTTCACAGCTATCACATGGAT
ATCCTTTAGTTCTTCAGCCTCTAAACCTACTCTGTATTCAATTTATAATGCCAATTTTCGGAGAGGGATGAAAGA
GACTTTTTGCATGTCCTCTATGAAATGTTACCGAAGCAATGCCTATACTATCACAACAAGTTCAAGGATGGCCAA
AAAAAACTACGTTGGCATTTCAGAAATCCCTTCCATGGCCAAAACTATTACCAAAGACTCGATCTATGACTCATT
TGACAGAGAAGCCAAGGAAAAAAAGCTTGCTTGGCCCATTAACTCAAATCCACCAAATACTTTTGTCTAAGTTCT
CATTCTTTCAATTGTTATGCACCAGAGATTAAAAAGCTTTAACTATAAAAACAGAAGCTATTTACATATTTGTTT
TCACTCAACTTTCCAAGGGAAATGTTTTATTTTGTAAAATGCATTCATTTGTTTACTGT

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FIGURE 6468

MVFAHRMDNSKPHLIIPTLLVPLQNRSCTETATPLPSQYLMELSEEHSWMSNQTDLHYVLKPGEVATASIFFGIL
WLFSIFGNSLVCLVIHRSRRTQSTTNYFVVSMACADLLISVASTPFVLLQFTTGRWTLGSATCKVVRYFQYLTPG
VQIYVLLSICIDRFYTIVYPLSFKVSREKAKKMIAASWIFDAGFVTPVLFFYGSNWDSHCNYFLPSSWEGTAYTV
IHFLVGFVIPSVLIILFYQKVIKYIWRIGTDGRTVRRTMNIVPRTKVKTIKMFLILNLLFLLSWLPFHVAQLWHP
HEQDYKKSSLVFTAITWISFSSSASKPTLYSIYNANFRRGMKETFCMSSMKCYRSNAYTITTSSRMAKKNYVGIS
EIPSMAKTITKDSIYDSFDREAKEKKLAWPINSNPPNTFV

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FIGURE 6469

ATGAGGAACTCCTATAGATTTCTGGCATCCTCTCTCTCAGTTGTCGTTTCTCTCCTGCTAATTCCTGAAGATGTC
TGTGAAAAAATTATTGGAGGAAATGAAGTAACTCCTCATTCAAGACCCTACATGGTCCTACTTAGTCTTGACAGA
AAAACCATCTGTGCTGGGGCTTTGATTGCAAAAGACTGGGTGTTGACTGCAGCTCACTGTAACTTGAACAAAAGG
TCCCAGGTCATTCTTGGGGCTCACTCAATAACCAGGGAAGAGCCAACAAAACAGATAATGCTTGTTAAGAAAGAG
TTTCCCTATCCATGCTATGACCCAGCCACACGCGAAGGTGACCTTAAACTTTTACAGCTGACGGAAAAAGCAAAA
ATTAACAAATATGTGACTATCCTTCATCTACCTAAAAAGGGGGATGATGTGAAACCAGGAACCATGTGCCAAGTT
GCAGGGTGGGGGAGGACTCACAATAGTGCATCTTGGTCCGATACTCTGAGAGAAGTCAATATCACCATCATAGAC
AGAAAAGTCTGCAATGATCGAAATCACTATAATTTTAACCCTGTGATTGGAATGAATATGGTTTGTGCTGGAAGC
CTCCGAGGTGGAAGAGACTCGTGCAATGGAGATTCTGGAAGCCCTTTGTTGTGCGAGGGTGTTTTCCGAGGGGTC
ACTTCCTTTGGCCTTGAAAATAAATGCGGAGACCCTCGTGGGCCTGGTGTCTATATTCTTCTCTCAAAGAAACAC
CTCAACTGGATAATTATGACTATCAAGGGAGCAGTTTAAATAACCGTTTCCTTTCATTTACTGTGGCTTCTTAAT
CTTTTCACAAATAAAATCAATTTG

FIGURE 6470

MRNSYRFLASSLSVVVSLLLIPEDVCEKIIGGNEVTPHSRPYMVLLSLDRKTICAGALIAKDWVLTAAHCNLNKR
SQVILGAHSITREEPTKQIMLVKKEFPYPCYDPATREGDLKLLQLTEKAKINKYVTILHLPKKGDDVKPGTMCQV
AGWGRTHNSASWSDTLREVNITIIDRKVCNDRNHYNFNPVIGMNMVCAGSLRGGRDSCNGDSGSPLLCEGVFRGV
TSFGLENKCGDPRGPGVYILLSKKHLNWIIMTIKGAV

FIGURE 6471

TATATTGGCAGTTATTGAGGGTAAAGCAATATATTGTAACAGAATGTATAAATATTTTTGATAAAACAGTCTATA
TTTTATTAAAAAATGAATTATAACCCATTTTCAGTTTTGCCTGCATCATAAGAGTGAGCACTCCATTGCTTTCTT
TCCTGGCCACACTGCTACAATCCAGCACTAACTATCCATGTCCAGGGTAAGGATCGAGATCGAGAAGCCCACACT
GCCAGTGAAAAAGCTACGTCTTTACTGCATAAATTAGAGGAAGCAATTTCGGAACAACGGAACCTTCAAACTATA
AATACTGAATTATCGAACACTTGCCAGGCACTTCAGCAGAAGACAAGGAAACTGAAGAAGCTTTTTAGATGAGGA
ATTTCCTCACTATGATTCCCTGTCCTGCGCAGATGCAATTCAACAACCTCTTCAAGAAAAATTGAAGCAGTGTTG
CCACAAACTATATGGTGGTCAAGAAGCAAGAATACATCAGACACCCCTGACCTTGAAACATACGTGCTGGTACAC
ACCTCTGCTGGATGCCTTATCTCTGGATAGTTTTACAGCAGTTCCAACCCTGGAATCAACACCTTTCTCAGGTGT
AGCCAACCAAATCCACACTCTGTGTGAAAGGCCCACATATGGAGAAGTAAAGGATGGTGCTTTGGATGTAAAAAG
ACAACACAAGTGCCCAGGCCCCACAAGTGGCCCCAGCCCAGGAACGAATCTCTCAGGCTGCATCAGGATGAATGA
TGACCCAAGTATGGAAGAGAATGGTGTTGAACGCGTGTGTCCTGAGAGCCTGCTGCAGTCCAGGGGATATTCCTC
ACTACCATTACCCAGACACACTTCATCGACAGACGGTACTATAACTTCAAGTGATCCTGGATTAGAAATTCTGAA
TATGGCTTCTTGTGACCTTGACAGAAACTCGCTCTGTAAGAAAGAGGAGGATACAAGATCAGCTTCTCCCACGAT
AGAGGCCCAAGGCACAAGTCCAGCTCATGATAATATTGCATTCCAAGACTCTACGAGTAAGGATAAAACCATATT
AAATCTGGAAGCCAAAGAGGAACCAGAAACAATAGAAGAACATAAAAAAGAACATGCTTCAGGAGACTCTGTGGT
TTCCCCTCTTCCTGTAACCACTGTGAAATCGGTTAACGTTAGACAAAGTGAGAACACTTCTGCTAATGAGAAGGA
GGTGGAGGCAGAATTTCTCAGATTATCTTTGGGATTTAAGTGTGACTGGTTTACCTTGGAGAAGAGAGTGAAGCT
TGAAGAGAGGTCCCGTGACTGGGCAGAAGAAAATTTGAAGAAAGAAATCACTAACTCTTTAAAACTATTAGAGTC
TTTAACACCTCTGTGTGAAGATGACAACCAGGCACAGGAAATCATTAAGAAGCTGGAGAAGAGTATAAAGTTTCT
TAGCCAGTGTGCAGCACGAGTGGCCAGTAGGGCTGAGATGTTGGGAGCCATCAATCAGGAAAGCCGGGTTAGTAA
AGCAGTTGAAGTGATGATTCAGCACGTAGAAAACTTGAAGAGGATGTATGCCAAAGAGCACGCTGAATTAGAAGA
ACTGAAACAGGTTCTTCTGCAGAATGAAAGGTCTTTCAATCCTCTTGAAGATGATGATGACTGCCAAATTAAAAA
ACGTTCAGCTTCTCTAAACTCCAAGCCATCTTCTCTACGAAGAGTGACTATTGCCTCTTTACCCAGAAATATTGG
AAATGCAGGAATGGTGGCTGGGATGGAAAATAATGATCGATTCAGTAGAAGGTCAAGCAGTTGGCGTATTTTGGG
GTCAAAGCAGAGTGAACACCGTCCCTCATTACCTCGATTTATTAGCACCTATTCCTGGGCAGATGCTGAAGAAGA
AAAATGTGAACTAAAAACTAAAGATGACTCAGAGCCATCTGGAGAAGAAACAGTAGAAAGGACAAGGAAGCCAAG
TCTTTCTGAAAAGAAAAATAATCCATCAAAGTGGGATGTCTCTTCAGTTTATGACACAATAGCTTCCTGGGCAAC
AAATCTCAAGTCCTCCATCAGAAAGGCTAATAAGGCCCTCTGGCTCTCTATTGCATTCATTGTACTGTTTGCAGC
TTTGATGAGCTTCCTCACAGGCCAATTATTCCAGAAGTCTGTGGATGCCGCTCCCACACAGCAAGAGGACTCATG
GACGTCTCTAGAACATATCTTGTGGCCATTTACCAGACTCCGACACAATGGGCCACCACCAGTGTGACAGCAGGA
CATCCTAATATATGGATCTTGATTTTTAAGTTTCAGTATCTGAACTTCGTAAATTAGTAACTTTTAGCTGGGAAA
GTATAGCATGAAACCAGAGGTTCTCAGAATGACCGTAAGATAGCTTACATTTCCTCTTTTTGCCTTTATCTCCCC
AACTAAAATACAATGGG

FIGURE 6472

LESTPFSGVANQIHTLCERPTYGEVKDGALDVKRQHKCPGPTSGPSPGTNLSGCIRMNDDPSMEENGVERVCPES
LLQSRGYSSLPLPRHTSSTDGTITSSDPGLEILNMASCDLDRNSLCKKEEDTRSASPTIEAQGTSPAHDNIAFQD
STSKDKTILNLEAKEEPETIEEHKKEHASGDSVVSPLPVTTVKSVNVRQSENTSANEKEVEAEFLRLSLGFKCDW
FTLEKRVKLEERSRDWAEENLKKEITNSLKLLESLTPLCEDDNQAQEIIKKLEKSIKFLSQCAARVASRAEMLGA
INQESRVSKAVEVMIQHVENLKRMYAKEHAELEELKQVLLQNERSFNPLEDDDDCQIKKRSASLNSKPSSLRRVT
IASLPRNIGNAGMVAGMENNDRFSRRSSSWRILGSKQSEHRPSLPRFISTYSWADAEEEKCELKTKDDSEPSGEE
TVERTRKPSLSEKKNNPSKWDVSSVYDTIASWATNLKSSIRKANKALWLSIAFIVLFAALMSFLTGQLFQKSVDA
APTQQEDSWTSLEHILWPFTRLRHNGPPPV

FIGURE 6473

CCCCGACGGAGCCGCGCCGGGGCGAGTCCGACCCCTCCCTCCGGGCCCCCTCCGGGCCGCGCTGCCGCCTCGGCC
CTGCGTGTGGGAATGATGTGCGCATTGGAGGGTCTAAGTTCTTCACGCGCCTGGGGAGGCCTCCCTTTTCTTTCT
TAGGCAACCAAAGCGTATTAATCCTACTGATCAGTAAATCCGAGGCAGCAGCAGGAGAGACAAACGTTATTTTCC
CGCTTGATTCCAAGAACCTCTTCGATTTTTATTTTTATTTTTAAAGAGGGAGACGATGGACTGAGCTGATCCGCA
CCATGGAGTCTCGGGTCTTACTGAGAACATTCTGTTTGATCTTCGGTCTCGGAGCAGTTTGGGGGCTTGGTGTGG
ACCCTTCCCTACAGATTGACGTCTTAACAGAGTTAGAACTTGGGGAGTCCACGACCGGAGTGCGTCAGGTCCCGG
GGCTGCATAATGGGACGAAAGCCTTTCTCTTTCAAGATACTCCCAGAAGCATAAAAGCATCCACTGCTACAGCTG
AACAGTTTTTTCAGAAGCTGAGAAATAAACATGAATTTACTATTTTGGTGACCCTAAAACAGACCCACTTAAATT
CAGGAGTTATTCTCTCAATTCACCACTTGGATCACAGGTACCTGGAACTGGAAAGTAGTGGCCATCGGAATGAAG
TCAGACTGCATTACCGCTCAGGCAGTCACCGCCCTCACACAGAAGTGTTTCCTTACATTTTGGCTGATGACAAGT
GGCACAAGCTCTCCTTAGCCATCAGTGCTTCCCATTTGATTTTACACATTGACTGCAATAAAATTTATGAAAGGG
TAGTAGAAAAGCCCTCCACAGACTTGCCTCTAGGCACAACATTTTGGCTAGGACAGAGAAATAATGCGCATGGAT
ATTTTAAGGGTATAATGCAAGATGTCCAATTACTTGTCATGCCCCAGGGATTTATTGCTCAGTGCCCAGATCTTA
ATCGCACCTGTCCAACTTGCAATGACTTCCATGGACTTGTGCAGAAAATCATGGAGCTACAGGATATTTTAGCCA
AAACATCAGCCAAGCTGTCTCGAGCTGAACAGCGAATGAATAGATTGGATCAGTGCTATTGTGAAAGGACTTGCA
CCATGAAGGGAACCACCTACCGAGAATTTGAGTCCTGGATAGACGGCTGTAAGAACTGCACATGCCTGAATGGAA
CCATCCAGTGTGAAACTCTAATCTGCCCAAATCCTGACTGCCCACTTAAGTCGGCTCTTGCGTATGTGGATGGCA
AATGCTGTAAGGAATGCAAATCGATATGCCAATTTCAAGGACGAACCTACTTTGAAGGAGAAAGAAATACAGTCT
ATTCCTCTTCTGGAGTATGTGTTCTCTATGAGTGCAAGGACCAGACCATGAAACTTGTTGAGAGTTCAGGCTGTC
CAGCTTTGGATTGTCCAGAGTCTCATCAGATAACCTTGTCTCACAGCTGTTGCAAAGTTTGTAAAGGTTATGACT
TTTGTTCTGAAAGGCATAACTGCATGGAGAATTCCATCTGCAGAAATCTGAATGACAGGGCTGTTTGTAGCTGTC
GAGATGGTTTTAGGGCTCTTCGAGAGGATAATGCCTACTGTGAAGACATCGATGAGTGTGCTGAAGGGCGCCATT
ACTGTCGTGAAAATACAATGTGTGTCAACACCCCGGGTTCTTTTATGTGCATCTGCAAAACTGGATACATCAGAA
TTGATGATTATTCATGTACAGAACATGATGAGTGTATCACAAATCAGCACAACTGTGATGAAAATGCTTTATGCT
TCAACACTGTTGGAGGACACAACTGTGTTTGCAAGCCGGGCTATACAGGGAATGGAACGACATGCAAAGCATTTT
GCAAAGATGGCTGTAGGAATGGAGGAGCCTGTATTGCCGCTAATGTGTGTGCCTGCCCACAAGGCTTCACTGGAC
CCAGCTGTGAAACGGACATTGATGAATGCTCTGATGGTTTTGTTCAATGTGACAGTCGTGCTAATTGCATTAACC
TGCCTGGATGGTACCACTGTGAGTGCAGAGATGGCTACCATGACAATGGGATGTTTTCACCAAGTGGAGAATCGT
GTGAAGATATTGATGAGTGTGGGACCGGGAGGCACAGCTGTGCCAATGATACCATTTGCTTCAATTTGGATGGCG
GATATGATTGTCGATGTCCTCATGGAAAGAATTGCACAGGGGACTGCATCCATGATGGAAAAGTTAAGCACAATG
GTCAGATTTGGGTGTTGGAAAATGACAGGTGCTCTGTGTGCTCATGTCAGAATGGATTCGTTATGTGTCGACGGA
TGGTCTGTGACTGTGAGAATCCCACAGTTGATCTTTTTTGCTGCCCTGAATGTGACCCAAGGCTTAGTAGTCAGT
GCCTCCATCAAAATGGGGAAACTTTGTATAACAGTGGTGACACCTGGGTCCAGAATTGTCAACAGTGCCGCTGCT
TGCAAGGGGAAGTTGATTGTTGGCCCCTGCCTTGCCCAGATGTGGAGTGTGAATTCAGCATTCTCCCAGAGAATG
AGTGCTGCCCGCGCTGTGTCACAGACCCTTGCCAGGCTGACACCATCCGCAATGACATCACCAAGACTTGCCTGG
ACGAAATGAATGTGGTTCGCTTCACCGGGTCCTCTTGGATCAAACATGGCACTGAGTGTACTCTCTGCCAGTGCA
AGAATGGCCACATCTGTTGCTCAGTGGATCCACAGTGCCTTCAGGAACTGTGAAGTTAACTGTCTCATGGGAGAT
TTCTGTTAAAAGAATGTTCTTTCATTAAAAGACCAAAAAGAAGTTAAAACTTAAATTGGGTGATTTGTGGGCAGC
TAAATGCAGCTTTGTTAATAGCTGAGTGAACTTTCAATTATGAAATTTGTGGAGCTTGACAAAATCACAAAAGGA
AAATTACTGGGGCAAAATTAGACCTCAAGTCTGCCTCTACTGTGTCTCACATCACCATGTAGAAGAATGGGCGTA
CAGTATATACCGTGACATCCTGAACCCTGGATAGAAAGCCTGAGCCCATTGGATCTGTGAAAGCCTCTAGCTTCA
CTGGTGCAGAAAATTTTCCTCTAGATCAGAATCTTCAAGAATCAGTTAGGTTCCTCACTGCAAGAAATAAAATGT
CAGGCAGTGAATGAATTATATTTTCAGAAGTAAAGCAAAGAAGCTATAACATGTTGTGTACAGTACACTCTGAAA
AGAAATCTGAAACAAGTTATTGTAATGATAAAAATAATGCACAGGCATGGTTACTTAATATTTTCTAACAGGAAA
AGTCATCCCTATTTCCTTGTTTTACTGCACTTAATATTATTTGGTTGAATTTGTTCAGTATAAGCTCGTTCTTGT
GCAAAATTAAATAAATATTTCTCTTACCTTATAAAAAAAAAAAAAAA

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FIGURE 6474

MESRVLLRTFCLIFGLGAVWGLGVDPSLQIDVLTELELGESTTGVRQVPGLHNGTKAFLFQDTPRSIKASTATAE
QFFQKLRNKHEFTILVTLKQTHLNSGVILSIHHLDHRYLELESSGHRNEVRLHYRSGSHRPHTEVFPYILADDKW
HKLSLAISASHLILHIDCNKIYERVVEKPSTDLPLGTTFWLGQRNNAHGYFKGIMQDVQLLVMPQGFIAQCPDLN
RTCPTCNDFHGLVQKIMELQDILAKTSAKLSRAEQRMNRLDQCYCERTCTMKGTTYREFESWIDGCKNCTCLNGT
IQCETLICPNPDCPLKSALAYVDGKCCKECKSICQFQGRTYFEGERNTVYSSSGVCVLYECKDQTMKLVESSGCP
ALDCPESHQITLSHSCCKVCKGYDFCSERHNCMENSICRNLNDRAVCSCRDGFRALREDNAYCEDIDECAEGRHY
CRENTMCVNTPGSFMCICKTGYIRIDDYSCTEHDECITNQHNCDENALCFNTVGGHNCVCKPGYTGNGTTCKAFC
KDGCRNGGACIAANVCACPQGFTGPSCETDIDECSDGFVQCDSRANCINLPGWYHCECRDGYHDNGMFSPSGESC
EDIDECGTGRHSCANDTICFNLDGGYDCRCPHGKNCTGDCIHDGKVKHNGQIWVLENDRCSVCSCQNGFVMCRRM
VCDCENPTVDLFCCPECDPRLSSQCLHQNGETLYNSGDTWVQNCQQCRCLQGEVDCWPLPCPDVECEFSILPENE
CCPRCVTDPCQADTIRNDITKTCLDEMNVVRFTGSSWIKHGTECTLCQCKNGHICCSVDPQCLQEL

FIGURE 6475

TTGGAGCTGCCGCCGCCGGGACTCCCGTCCCAGCAGGACATGGATTTGATTGACATACTTTGGAGGCAAGATATA
GATCTTGGAGTAAGTCGAGAAGTATTTGACTTCAGTCAGCGACGGAAAGAGTATGAGCTGGAAAAACAGAAAAAA
CTTGAAAAGGAAAGACAAGAACAACTCCAAAAGGAGCAAGAGAAAGCCTTTTTCACTCAGTTACAACTAGATGAA
GAGACAGGTGAATTTCTCCCAATTCAGCCAGCCCAGCACACCCAGTCAGAAACCAGTGGATCTGCCAACTACTCC
CAGGTTGCCCACATTCCCAAATCAGATGCTTTGTACTTTGATGACTGCATGCAGCTTTTGGCGCAGACATTCCCG
TTTGTAGATGACAATGAGGTTTCTTCGGCTACGTTTCAGTCACTTGTTCCTGATATTCCCGGTCACATCGAGAGC
CCAGTCTTCATTGCTACTAATCAGGCTCAGTCACCTGAAACTTCTGTTGCTCAGGTAGCCCCTGTTGATTTAGAC
GGTATGCAACAGGACATTGAGCAAGTTTGGGAGGAGCTATTATCCATTCCTGAGTTACAGTGTCTTAATATTGAA
AATGACAAGCTGGTTGAGACTACCATGGTTCCAAGTCCAGAAGCCAAACTGACAGAAGTTGACAATTATCATTTT
TACTCATCTATACCCTCAATGGAAAAAGAAGTAGGTAACTGTAGTCCACATTTTCTTAATGCTTTTGAGGATTCC
TTCAGCAGCATCCTCTCCACAGAAGACCCCAACCAGTTGACAGTGAACTCATTAAATTCAGATGCCACAGTCAAC
ACAGATTTTGGTGATGAATTTTATTCTGCTTTCATAGCTGAGCCCAGTATCAGCAACAGCATGCCCTCACCTGCT
ACTTTAAGCCATTCACTCTCTGAACTTCTAAATGGGCCCATTGATGTTTCTGATCTATCACTTTGCAAAGCTTTC
AACCAAAACCACCCTGAAAGCACAGCAGAATTCAATGATTCTGACTCCGGCATTTCACTAAACACAAGTCCCAGT
GTGGCATCACCAGAACACTCAGTGGAATCTTCCAGCTATGGAGACACACTACTTGGCCTCAGTGATTCTGAAGTG
GAAGAGCTAGATAGTGCCCCTGGAAGTGTCAAACAGAATGGTCCTAAAACACCAGTACATTCTTCTGGGGATATG
GTACAACCCTTGTCACCATCTCAGGGGCAGAGCACTCACGTGCATGATGCCCAATGTGAGAACACACCAGAGAAA
GAATTGCCTGTAAGTCCTGGTCATCGGAAAACCCCATTCACAAAAGACAAACATTCAAGCCGCTTGGAGGCTCAT
CTCACAAGAGATGAACTTAGGGCAAAAGCTCTCCATATCCCATTCCCTGTAGAAAAAATCATTAACCTCCCTGTT
GTTGACTTCAACGAAATGATGTCCAAAGAGCAGTTCAATGAAGCTCAACTTGCATTAATTCGGGATATACGTAGG
AGGGGTAAGAATAAAGTGGCTGCTCAGAATTGCAGAAAAAGAAAACTGGAAAATATAGTAGAACTAGAGCAAGAT
TTAGATCATTTGAAAGATGAAAAAGAAAAATTGCTCAAAGAAAAAGGAGAAAATGACAAAAGCCTTCACCTACTG
AAAAAACAACTCAGCACCTTATATCTCGAAGTTTTCAGCATGCTACGTGATGAAGATGGAAAACCTTATTCTCCT
AGTGAATACTCCCTGCAGCAAACAAGAGATGGCAATGTTTTCCTTGTTCCCAAAAGTAAGAAGCCAGATGTTAAG
AAAAACTAGATTTAGGAGGATTTGACCTTTTCTGAGCTAGTTTTTTTGTACTATTATACTAAAAGCTCCTACTGT
GATGTGAAATGCTCATACTTTATAAGTAATTCTATGCAAAATCATAGCCAAAACTAGTATAGAAAATAATACGAA
ACTTTAAAAAGCATTGGAGTGTCAGTATGTTGAATCAGTAGTTTCACTTTAACTGTAAACAATTTCTTAGGACAC
CATTTGGGCTAGTTTCTGTGTAAGTGTAAATACTACAAAAACTTATTTATACTGTTCTTATGTCATTTGTTATAT
TCATAGATTTATATGATGATATGACATCTGGCTAAAAAGAAATTATTGCAAAACTAACCACGATGTACTTTTTTA
TAAATACTGTATGGACAAAAAATGGCATTTTTTATAATTAAATTGTTTAGCTCTGGCAAAAAAAAAAAATTTTTT
AAGAGCTGGTACTAATAAAGGATTATTATGACTGTTAAAAAAAAAAAAAAAAAA

FIGURE 6476

MDLIDILWRQDIDLGVSREVFDFSQRRKEYELEKQKKLEKERQEQLQKEQEKAFFTQLQLDEETGEFLPIQPAQH
TQSETSGSANYSQVAHIPKSDALYFDDCMQLLAQTFPFVDDNEVSSATFQSLVPDIPGHIESPVFIATNQAQSPE
TSVAQVAPVDLDGMQQDIEQVWEELLSIPELQCLNIENDKLVETTMVPSPEAKLTEVDNYHFYSSIPSMEKEVGN
CSPHFLNAFEDSFSSILSTEDPNQLTVNSLNSDATVNTDFGDEFYSAFIAEPSISNSMPSPATLSHSLSELLNGP
IDVSDLSLCKAFNQNHPESTAEFNDSDSGISLNTSPSVASPEHSVESSSYGDTLLGLSDSEVEELDSAPGSVKQN
GPKTPVHSSGDMVQPLSPSQGQSTHVHDAQCENTPEKELPVSPGHRKTPFTKDKHSSRLEAHLTRDELRAKALHI
PFPVEKIINLPVVDFNEMMSKEQFNEAQLALIRDIRRRGKNKVAAQNCRKRKLENIVELEQDLDHLKDEKEKLLK
EKGENDKSLHLLKKQLSTLYLEVFSMLRDEDGKPYSPSEYSLQQTRDGNVFLVPKSKKPDVKKN

FIGURE 6477A

TGCCTTGACCAGGACTTGGGACTTTGCGAAAGGATCGCGGGGCCCGGAGAGGTGTTGGAGAGCACAATGGCTGAA
CAAGTCCTTCCTCAGGCTTTGTATTTGAGCAATATGCGGAAAGCTGTGAAGATACGGGAGAGAACTCCAGAAGAC
ATTTTTAAACCTACTAATGGGATCATTCATCATTTTAAAACCATGCACCGATACACACTGGAAATGTTCAGAACT
TGCCAGTTTTGTCCTCAGTTTCGGGAGATCATCCACAAAGCCCTCATCGACAGAAACATCCAGGCCACCCTGGAA
AGCCAGAAGAAACTCAACTGGTGTCGAGAAGTCCGGAAGCTTGTGGCGCTGAAAACGAACGGTGACGGCAATTGC
CTCATGCATGCCACTTCTCAGTACATGTGGGGCGTTCAGGACACAGACTTGGTACTGAGGAAGGCGCTGTTCAGC
ACGCTCAAGGAAACAGACACACGCAACTTTAAATTCCGCTGGCAACTGGAGTCTCTCAAATCTCAGGAATTTGTT
GAAACGGGGCTTTGCTATGATACTCGGAACTGGAATGATGAATGGGACAATCTTATCAAAATGGCTTCCACAGAC
ACACCCATGGCCCGAAGTGGACTTCAGTACAACTCACTGGAAGAAATACACATATTTGTCCTTTGCAACATCCTC
AGAAGGCCAATCATTGTCATTTCAGACAAAATGCTAAGAAGTTTGGAATCAGGTTCCAATTTCGCCCCTTTGAAA
GTGGGTGGAATTTACTTGCCTCTCCACTGGCCTGCCCAGGAATGCTACAGATACCCCATTGTTCTCGGCTATGAC
AGCCATCATTTTGTACCCTTGGTGACCCTGAAGGACAGTGGGCCTGAAATCCGAGCTGTTCCACTTGTTAACAGA
GACCGGGGAAGATTTGAAGACTTAAAAGTTCACTTTTTGACAGATCCTGAAAATGAGATGAAGGAGAAGCTCTTA
AAAGAGTACTTAATGGTGATAGAAATCCCCGTCCAAGGCTGGGACCATGGCACAACTCATCTCATCAATGCCGCA
AAGTTGGATGAAGCTAACTTACCAAAAGAAATCAATCTGGTAGATGATTACTTTGAACTTGTTCAGCATGAGTAC
AAGAAATGGCAGGAAAACAGCGAGCAGGGGAGGAGAGAGGGGCACGCCCAGAATCCCATGGAACCTTCCGTGCCC
CAGCTTTCTCTCATGGATGTAAAATGTGAAACGCCCAACTGCCCCTTCTTCATGTCTGTGAACACCCAGCCTTTA
TGCCATGAGTGCTCAGAGAGGCGGCAAAAGAATCAAAACAAACTCCCAAAGCTGAACTCCAAGCCGGGCCCTGAG
GGGCTCCCTGGCATGGCGCTCGGGGCCTCTCGGGGAGAAGCCTATGAGCCCTTGGCGTGGAACCCTGAGGAGTCC
ACTGGGGGGCCTCATTCGGCCCCACCGACAGCACCCAGCCCTTTTCTGTTCAGTGAGACCACTGCCATGAAGTGC
AGGAGCCCCGGCTGCCCCTTCACACTGAATGTGCAGCACAACGGATTTTGTGAACGTTGCCACAACGCCCGGCAA
CTTCACGCCAGCCACGCCCCAGACCACACAAGGCACTTGGATCCCGGGAAGTGCCAAGCCTGCCTCCAGGATGTT
ACCAGGACATTTAATGGGATCTGCAGTACTTGCTTCAAAAGGACTACAGCAGAGGCCTCCTCCAGCCTCAGCACC
AGCCTCCCTCCTTCCTGTCACCAGCGTTCCAAGTCAGATCCCTCGCGGCTCGTCCGGAGCCCCTCCCCGCATTCT
TGCCACAGAGCTGGAAACGACGCCCCTGCTGGCTGCCTGTCTCAAGCTGCACGGACTCCTGGGGACAGGACGGGG
ACGAGCAAGTGCAGAAAAGCCGGCTGCGTGTATTTTGGGACTCCAGAAAACAAGGGCTTTTGCACACTGTGTTTC
ATCGAGTACAGAGAAAACAAACATTTTGCTGCTGCCTCAGGGAAAGTCAGTCCCACAGCGTCCAGGTTCCAGAAC
ACCATTCCGTGCCTGGGGAGGGAATGCGGCACCCTTGGAAGCACCATGTTTGAAGGATACTGCCAGAAGTGTTTC
ATTGAAGCTCAGAATCAGAGATTTCATGAGGCCAAAAGGACAGAAGAGCAACTGAGATCGAGCCAGCGCAGAGAT
GTGCCTCGAACCACACAAAGCACCTCAAGGCCCAAGTGCGCCCGGGCCTCCTGCAAGAACATCCTGGCCTGCCGC
AGCGAGGAGCTCTGCATGGAGTGTCAGCATCCCAACCAGAGGATGGGCCCTGGGGCCCACCGGGGTGAGCCTGCC
CCCGAAGACCCCCCCAAGCAGCGTTGCCGGGCCCCCGCCTGTGATCATTTTGGCAATGCCAAGTGCAACGGCTAC
TGCAACGAATGCTTTCAGTTCAAGCAGATGTATGGCTAACCGGAAACAGGTGGGTCACCTCCTGCAAGAAGTGGG
GCCTCGAGCTGTCAGTCATCATGGTGCTATCCTCTGAACCCCTCAGCTGCCACTGCAACAGTGGGCTTAAGGGTG
TCTGAGCAGGAGAGGAAAGATAAGCTCTTCGTGGTGCCCACGATGCTCAGGTTTGGTAACCCGGGAGTGTTCCCA
GGTGGCCTTAGAAAGCAAAGCTTGTAACTGGCAAGGGATGATGTCAGATTCAGCCCAAGGTTCCTCCTCTCCTAC
CAAGCAGGAGGCCAGGAACTTCTTTGGACTTGGAAGGTGTGCGGGGACTGGCCGAGGCCCCTGCACCCTGCGCAT
CAGGACTGCTTCATCGTCTTGGCTGAGAAAGGGAAAAGACACACAAGTCGCGTGGGTTGGAGAAGCCAGAGCCAT
TCCACCTCCCCTCCCCCAGCATCTCTCAGAGATGTGAAGCCAGATCCTCATGGCAGCGAGGCCCTCTGCAAGAAG
CTCAAGGAAGCTCAGGGAAAATGGACGTATTCAGAGAGTGTTTGTAGTTCATGGTTTTTCCCTACCTGCCCGGTT
CCTTTCCTGAGGACCCGGCAGAAATGCAGAACCATCCATGGACTGTGATTCTGAGGCTGCTGAGACTGAACATGT
TCACATTGACAGAAAAACAAGCTGCTCTTTATAATATGCACCTTTTAAAAAATTAGAATATTTTACTGGGAAGAC
GTGTAACTCTTTGGGTTATTACTGTCTTTACTTCTAAAGAAGTTAGCTTGAACTGAGGAGTAAAAGTGTGTACAT
ATATAATATACCCTTACATTATGTATGAGGGATTTTTTTAAATTATATTGAAATGCTGCCCTAGAAGTACAATAG
GAAGGCTAAATAATAATAACCTGTTTTCTGGTTGTTGTTGGGGCATGAGCTTGTGTATACACTGCTTGCATAAAC
TCAACCAGCTGCCTTTTTAAAGGGAGCTCTAGTCCTTTTTGTGTAATTCACTTTATTTATTTTATTACAAACTTC
AAGATTATTTAAGTGAAGATATTTCTTCAGCTCTGGGGAAAATGCCACAGTGTTCTCCTGAGAGAACATCCTTGC
TTTGAGTCAGGCTGTGGGCAAGTTCCTGACCACAGGGAGTAAATTGGCCTCTTTGATACACTTTTGCTTGCCTCC

FIGURE 6477B

CCAGGAAAGAAGGAATTGCATCCAAGGTATACATACATATTCATCGATGTTTCGTGCTTCTCCTTATGAAACTCC
AGCTATGTAATAAAAAACTATACTCTGTGTTCTGTTAATGCCTCTGAGTGTCCTACCTCCTTGGAGATGAGATAG
GGAAGGAGCAGGGATGAGACTGGCAATGGTCACAGGGAAAGATGTGGCCTTTTGTGATGGTTTTATTTTCTGTTA
ACACTGTGTCCTGGGGGGGCTGGGAAGTCCCCTGCATCCCATGGTACCCTGGTATTGGGACAGCAAAAGCCAGTA
ACCATGAGTATGAGGAAATCTCTTTCTGTTGCTGGCTTACAGTTTCTCTGTGTGCTTTGTGGTTGCTGTCATATT
TGCTCTAGAAGAAAAAAAAAAAAGGAGGGGAAATGCATTTTCCCCAGAGATAAAGGCTGCCATTTTGGGGGTCTG
TACTTATGGCCTGAAAATATTTGTGATCCATAACTCTACACAGCCTTTACTCATACTATTAGGCACACTTTCCCC
TTAGAGCCCCCTAAGTTTTTCCCAGACGAATCTTTATAATTTCCTTTCCAAAGATACCAAATAAACTTCAGTGTT
TTCATCTAATTCTCTTAAAGTTGATATCTTAATATTTTGTGTTGATCATTATTTCCATTCTTAATGTGAAAAAAA
GTAATTATTTATACTTATTATAAAAAGTATTTGAAATTTGCACATTTAATTGTCCCTAATAGAAAGCCACCTATT
CTTTGTTGGATTTCTTCAAGTTTTTCTAAATAAATGTAACTTTTCACAAGAGTCAACATTAAAAAATAAATTATT
T

FIGURE 6478

MAEQVLPQALYLSNMRKAVKIRERTPEDIFKPTNGIIHHFKTMHRYTLEMFRTCQFCPQFREIIHKALIDRNIQA
TLESQKKLNWCREVRKLVALKTNGDGNCLMHATSQYMWGVQDTDLVLRKALFSTLKETDTRNFKFRWQLESLKSQ
EFVETGLCYDTRNWNDEWDNLIKMASTDTPMARSGLQYNSLEEIHIFVLCNILRRPIIVISDKMLRSLESGSNFA
PLKVGGIYLPLHWPAQECYRYPIVLGYDSHHFVPLVTLKDSGPEIRAVPLVNRDRGRFEDLKVHFLTDPENEMKE
KLLKEYLMVIEIPVQGWDHGTTHLINAAKLDEANLPKEINLVDDYFELVQHEYKKWQENSEQGRREGHAQNPMEP
SVPQLSLMDVKCETPNCPFFMSVNTQPLCHECSERRQKNQNKLPKLNSKPGPEGLPGMALGASRGEAYEPLAWNP
EESTGGPHSAPPTAPSPFLFSETTAMKCRSPGCPFTLNVQHNGFCERCHNARQLHASHAPDHTRHLDPGKCQACL
QDVTRTFNGICSTCFKRTTAEASSSLSTSLPPSCHQRSKSDPSRLVRSPSPHSCHRAGNDAPAGCLSQAARTPGD
RTGTSKCRKAGCVYFGTPENKGFCTLCFIEYRENKHFAAASGKVSPTASRFQNTIPCLGRECGTLGSTMFEGYCQ
KCFIEAQNQRFHEAKRTEEQLRSSQRRDVPRTTQSTSRPKCARASCKNILACRSEELCMECQHPNQRMGPGAHRG
EPAPEDPPKQRCRAPACDHFGNAKCNGYCNECFQFKQMYG

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FIGURE 6479

GTAGTGGTGCCGACTTCCTGTTGTTTGAGGCCGGGTTGGGGGTGTGCGATTGTGTGGGACGGTCTGGGGCAGCCC
AGCAGCGGCTGACCCTCTGCCTGCGGGGAAGGGAGTCGCCAGGCGGCCGTCATGGCGGTGTCGGAGAGCCAGCTC
AAGAAAATGGTGTCCAAGTACAAATACAGAGACCTAACTGTACGTGAAACTGTCAATGTTATTACTCTATACAAA
GATCTCAAACCTGTTTTGGATTCATATGTTTTTAACGATGGCAGTTCCAGGGAACTAATGAACCTCACTGGAACA
ATCCCTGTGCCTTATAGAGGTAATACATACAATATTCCAATATGCCTATGGCTACTGGACACATACCCATATAAT
CCCCCTATCTGTTTTGTTAAGCCTACTAGTTCAATGACTATTAAAACAGGAAAGCATGTTGATGCAAATGGGAAG
ATATATCTTCCTTATCTACATGAATGGAAACACCCACAGTCAGACTTGTTGGGGCTTATTCAGGTCATGATTGTG
GTATTTGGAGATGAACCTCCAGTCTTCTCTCGTCCTATTTCGGCATCCTATCCGCCATACCAGGCAACGGGGCCA
CCAAATACTTCCTACATGCCAGGCATGCCAGGTGGAATCTCTCCATACCCATCCGGATACCCTCCCAATCCCAGT
GGTTACCCAGGCTGTCCTTACCCACCTGGTGGTCCATATCCTGCCACAACAAGTTCTCAGTACCCTTCTCAGCCT
CCTGTGACCACTGTTGGTCCCAGTAGGGATGGCACAATCAGCGAGGACACCATCCGAGCCTCTCTCATCTCTGCG
GTCAGTGACAAACTGAGATGGCGGATGAAGGAGGAAATGGATCGTGCCCAGGCAGAGCTCAATGCCTTGAAACGA
ACAGAAGAAGACCTGAAAAAGGGTCACCAGAAACTGGAAGAGATGGTTACCCGTTTAGATCAAGAAGTAGCCGAG
GTTGATAAAAACATAGAACTTTTGAAAAAGAAGGATGAAGAACTCAGTTCTGCTCTGGAAAAAATGGAAAATCAG
TCTGAAAACAATGATATCGATGAAGTTATCATTCCCACAGCTCCCTTATACAAACAGATCCTGAATCTGTATGCA
GAAGAAAACGCTATTGAAGACACTATCTTTTACTTGGGAGAAGCCTTGAGAAGGGGCGTGATAGACCTGGATGTC
TTCCTGAAGCATGTACGTCTTCTGTCCCGTAAACAGTTCCAGCTGAGGGCACTAATGCAAAAAGCAAGAAAGACT
GCCGGTCTCAGTGACCTCTACTGACTTCTCTGATACCAGCTGGAGGTTGAGCTCTTCTTAAAGTATTCTTCTCTT
CCTTTTATCAGTAGGTGCCCAGAATAAGTTATTGCAGTTTATCATTCAAGTGTAAAATATTTTGAATCAATAATA
TATTTTCTGTTTTCTTTTGGTAAAGACTGGCTTTTATTAATGCACTTTCTATCCTCTGTAAACTTTTTGTGCTGA
ATGTTGGGACTGCTAAATAAAATTTGTTGCATAAAAAAAAAAAAAAAAAA

FIGURE 6480

MPAVEETQITKYLSKYKYVAATKKDVVDVVTSFRSLTYDLQRFVFNDGSSKELFTIQGTIPVVYKNNTYYIPICI
WLMDTHPQNAPMCFVKPTPTMQIKVSMYVDHNGKVYLPYLHDWQPHSSDLLSLIQVMIVTFGDHPPVYSKPKEQI
AAPYPTNSYMPQPGAPGGSNSFLPYPTAGGAGGSNFPPYPTGSNVGPYPPTPAGPAGGSGYPAYPNFIQPTAGGY
PPAAGYNPSNPSSTGTITEEHIKASIISAIDDKLRRRVQEKVNQYQAEIETLNRTKQELLEGSAKIDAIIERLER
EHIDMQKNISILKDKEQELEKALEDLESAEAINPDEAVTTTAPLYRQLLNAYADEAATEDAIYYLGEGLRGGVID
LETFLKHVRQLSRKQFILRATMQKCRQKAGLAG

FIGURE 6481

GGAGGGTGGGCAGCACTCGCTTTATTGTCCAGCATTCCACATGGATAGTCGCCACACCTTTGCCCCTGCTGCGAT
GACCCTGTCGCCACTTCTGCTGTTCCTGCCACCGCTGCTGCTGCTGCTGGACGTCCCCACGGCGGCGGTGCAGGC
GTCCCCTCTGCAAGCGTTAGACTTCTTTGGGAATGGGCCACCAGTTAACTACAAGACAGGCAATCTATACCTGCG
GGGGCCCCTGAAGAAGTCCAATGCACCGCTTGTCAATGTGACCCTCTACTATGAAGCACTGTGCGGTGGCTGCCG
AGCCTTCCTGATCCGGGAGCTCTTCCCAACATGGCTGTTGGTCATGGAGATCCTCAATGTCACGTCGGTGCCCTA
CGGAAACGCACAGGAACAAAATGTCAGTGGCAGGTGGGAGTTCAAGTGCCAGCTTGGAGAAGAGGAGTGCAAATT
CAACAAGGTGGAGGCCTGCGTGTTGGATGAACTTGACATGGAGCTAGCCTTCCTGACCATGTCTGGCATGGCATG
GAAGAGTTTGAGGACATGGAGAGAAGTCTGCCACTATGCCTGCAGCTCTACGCCCCAGGGCTGTCGCCAGAACTA
TCATGGAGTGTGCAATGGGGGACCGCGGCATGCAGCTCATGCACGCCAACGCCCAGCGGACAGATGCTCTCCAGC
CACCGCACGAGTATGTGCCCTGGGTCACCGTCAATGGGAAACCCTTGGAAGATCAGACCCAGCTCCTTACCCTTG
TCTGCCAGTTGTACCAGGGCAAGAAGCCGGATGTCTGCCCTTCCTCAACCAGCTCCCTCCGGAGTGTTTGCTTCG
AGTGTTGGCCGGTGGGCTGCGGAGAGCTCATGGAAGGCGAGTGGGAACTCGGCTGCCTGCCTTTTTTTCTGATCC
AGACCCTCGGCACCTGCTACTTACCAACTGGAAAATTTTATGCATCCCATGAAGCCCAGATACACAAAATTCCAC
CCCTAGATCAAGAATCCTGCTCCACTAAGAATGGTGCTAAAGTAAAACTAGTTTAAT

FIGURE 6482

MDSRHTFAPAAMTLSPLLLFLPPLLLLLDVPTAAVQASPLQALDFFGNGPPVNYKTGNLYLRGPLKKSNAPLVNV
TLYYEALCGGCRAFLIRELFPTWLLVMEILNVTSVPYGNAQEQNVSGRWEFKCQLGEEECKFNKVEACVLDELDM
ELAFLTMSGMAWKSLRTWREVCHYACSSTPQGCRQNYHGVCNGGPRHAAHARQRPADRCSPATARVCALGHRQWE
TLGRSDPAPYPCLPVVPGQEAGCLPFLNQLPPECLLRVLAGGLRRAHGRRVGTRLPAFFSDPDPRHLLLTNWKIL
CIP

FIGURE 6483

ATGGCTACAGAACATGTTAATGGAAATGGTACTGAAGAGCCCATGGATACTACTTCTGCAGTTATCCATTCAGAA
AATTTTCAGACATTGCTTGATGCTGGTTTACCACAGAAAGTTGCTGAAAAACTAGATGAAATTTACGTTGCAGGG
CTAGTTGCACATAGTGATTTAGATGAAAGAGCTATTGAAGCTTTAAAAGAATTCAATGAAGACGGTGCATTGGCA
GTTCTTCAACAGTTTAAAGACAGTGATCTCTCTCATGTTCAGAACAAAAGTGCCTTTTTATGTGGAGTCATGAAG
ACTTACAGGCAGAGAGAAAAACAAGGGACCAAAGTAGCAGATTCTAGTAAAGGACCAGATGAGGCAAAAATTAAG
GCACTCTTGGAAAGAACAGGCTACACACTTGATGTGACCACTGGACAGAGGAAGTATGGAGGACCACCTCCAGAT
TCCGTTTATTCAGGTCAGCAGCCTTCTGTTGGCACTGAGATATTTGTGGGAAAGATCCCAAGAGATCTATTTGAG
GATGAACTTGTTCCATTATTTGAGAAAGCTGGACCTATATGGGATCTTCGTCTAATGATGGATCCACTCACTGGT
CTCAATAGAGGTTATGCGTTTGTCACTTTTTGTACAAAAGAAGCAGCTCAGGAGGCTGTTAAACTGTATAATAAT
CATGAAATTCGTTCTGGAAAACATATTGGTGTCTGCATCTCAGTTGCCAACAATAGGCTTTTTGTGGGCTCTATT
CCTAAGAGTAAAACCAAGGAACAGATTCTTGAAGAATTTAGCAAAGTAACAGAGGGTCTTACAGACGTCATTTTA
TACCACCAACCGGATGACAAGAAAAAAAACAGGAGCTTTTGCTTTCTTGAATATGAAGATCACAAAACAGCTGCC
CAGGCAAGGCGTAGGTTAATGAGTGGTAAAGTCAAGGTCTGGGGGAATGTTGGAACTGTTGAATGGGCTGATCCT
ATAGAAGATCCTGATCCTGAGGTTATGGCAAAGGTAAAAGTGCTGTTTGTACGCAACCTTGCCAATACTGTAACA
GAAGAGATTTTAGAAAAGGCATTTAGTCAGTTTGGGAAACTGGAACGAGTGAAGAAGTTAAAAGATTATGCGTTC
ATTCATTTTGATGAGCGAGATGGTGCTGTCAAGGCTATGGAAGAAATGAATGGCAAAGACTTGGAGGGAGAAAAT
ATTGAAATTGTTTTTGCCAAGCCACCAGATCAGAAAAGGAAAGAAAGAAAAGCTCAGAGGCAAGCAGCAAAAAAT
CAAATGTATGACGATTACTACTATTATGGTCCACCTCATATGCCCCCTCCAACAAGAGGTCGAGGGCGTGGAGGT
AGAGGTGGTTATGGATATCCTCCAGATTATTATGGATATGAAGATTATTATGATTATTATGGTTATGATTACCAT
AACTATCGTGGTGGATATGAAGATCCATACTATGGTTATGAAGATTTTCAAGTTGGAGCTAGAGGAAGGGGTGGT
AGAGGAGCAAGGGGTGCTGCTCCATCCAGAGGTCGTGGGGCTGCTCCTCCCCGCGGTAGAGCCGGTTATTCACAG
AGAGGAGGTCCTGGATCAGCAAGAGGCGTTCGAGGTGCGAGAGGAGGTGCCCAACAACAAAGAGGCCGCGGGGTA
CGTGGTGCGAGGGGTGGCCGCGGTGGAAATGTAGGAGGAAAGCGCAAAGCTGATGGGTACAACCAGCCAGATTCC
AAGCGGCGCCAGACCAATAATCAGAACTGGGGCTCCCAACCCATTGCTCAGCAACCGCTCCAAGGTGGTGATCAT
TCTGGTAACTATGGTTACAAATCTGAAAACCAGGAGTTTTATCAGGATACTTTTGGGCAACAGTGGAAGTAG

FIGURE 6484

MATEHVNGNGTEEPMDTTSAVIHSENFQTLLDAGLPQKVAEKLDEIYVAGLVAHSDLDERAIEALKEFNEDGALA
VLQQFKDSDLSHVQNKSAFLCGVMKTYRQREKQGTKVADSSKGPDEAKIKALLERTGYTLDVTTGQRKYGGPPPD
SVYSGQQPSVGTEIFVGKIPRDLFEDELVPLFEKAGPIWDLRLMMDPLTGLNRGYAFVTFCTKEAAQEAVKLYNN
HEIRSGKHIGVCISVANNRLFVGSIPKSKTKEQILEEFSKVTEGLTDVILYHQPDDKKKNRSFCFLEYEDHKTAA
QARRRLMSGKVKVWGNVGTVEWADPIEDPDPEVMAKVKVLFVRNLANTVTEEILEKAFSQFGKLERVKKLKDYAF
IHFDERDGAVKAMEEMNGKDLEGENIEIVFAKPPDQKRKERKAQRQAAKNQMYDDYYYYGPPHMPPPTRGRGRGG
RGGYGYPPDYYGYEDYYDYYGYDYHNYRGGYEDPYYGYEDFQVGARGRGGRGARGAAPSRGRGAAPPRGRAGYSQ
RGGPGSARGVRGARGGAQQQRGRGVRGARGGRGGNVGGKRKADGYNQPDSKRRQTNNQNWGSQPIAQQPLQGGDH
SGNYGYKSENQEFYQDTFGQQWK

FIGURE 6485

GGCCCCTTGTCTGCAGAGATGGCTCCCAATGCTTCCTGCCTCTGTGTGCATGTCCGTTCCGAGGAATGGGATTTA
ATGACCTTTGATGCCAACCCATATGACAGCGTGAAAAAAATCAAAGAACATGTCCGGTCTAAGACCAAGGTTCCT
GTGCAGGACCAGGTTCTTTTGCTGGGCTCCAAGATCTTAAAGCCACGGAGAAGCCTCTCATCTTATGGCATTGAC
AAAGAGAAGACCATCCACCTTACCCTGAAAGTGGTGAAGCCCAGTGATGAGGAGCTGCCCTTGTTTCTTGTGGAG
TCAGGTGATGAGGCAAAGAGGCACCTCCTCCAGGTGCGAAGGTCCAGCTCAGTGGCACAAGTGAAAGCAATGATC
GAGACTAAGACGGGTATAATCCCTGAGACCCAGATTGTGACTTGCAATGGAAAGAGACTGGAAGATGGGAAGATG
ATGGCAGATTACGGCATCAGAAAGGGCAACTTACTCTTCCTGGCATCTTATTGTATTGGAGGGTGACCACCCTGG
GGATGGGGTGTTGGCAGGGGTCAAAAAGCTTATTTCTTTTAATCTCTTACTCAACGAACACATCTTCTGATGATT
TCCCAAAATTAATGAGAATGAGATGAGTAGAGTAAGATTTGGGTGGGATGGGTAGGATGAAGTATATTGCCCAAC
TCTATGTTTCTTTGATTCTAACACAATTAATTAAGTGACATGATTTTTACTAATGTATTACTGAGACTAGTAAAT
AAATTTTTAAGGCAAAATAGAGCATTC

FIGURE 6486

MAPNASCLCVHVRSEEWDLMTFDANPYDSVKKIKEHVRSKTKVPVQDQVLLLGSKILKPRRSLSSYGIDKEKTIH
LTLKVVKPSDEELPLFLVESGDEAKRHLLQVRRSSSVAQVKAMIETKTGIIPETQIVTCNGKRLEDGKMMADYGI
RKGNLLFLASYCIGG

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FIGURE 6487

AGAAGCGGCGCTCGCGCCAAGGGACGTGTTTCTGCGCTCGCGTGGTCATGGAGGCGCTGCCGCTGCTAGCCGCGA
CAACTCCGGACCACGGCCGCCACCGAAGGCTGCTTCTGCTGCCGCTACTGCTGTTCCTGCTGCCGGCTGGAGCTG
TGCAGGGCTGGGAGACAGAGGAGAGGCCCCGGACTCGCGAAGAGGAGTGCCACTTCTACGCGGGTGGACAAGTGT
ACCCGGGAGAGGCATCCCGGGTATCGGTCGCCGACCACTCCCTGCACCTAAGCAAAGCGAAGATTTCCAAGCCAG
CGCCCTACTGGGAAGGAACAGCTGTGATCGATGGAGAATTTAAGGAGCTGAAGTTAACTGATTATCGTGGGAAAT
ACTTGGTTTTCTTCTTCTACCCACTTGATTTCACATTTGTGTGTCCAACTGAAATTATCGCTTTTGGCGACAGAC
TTGAAGAATTCAGATCTATAAATACTGAAGTGGTAGCATGCTCTGTTGATTCACAGTTTACCCATTTGGCCTGGA
TTAATACCCCTCGAAGACAAGGAGGACTTGGGCCAATAAGGATTCCACTTCTTTCAGATTTGACCCATCAGATCT
CAAAGGACTATGGTGTATACCTAGAGGACTCAGGCCACACTCTTAGAGGTCTCTTCATTATTGATGACAAAGGAA
TCCTAAGACAAATTACTCTGAATGATCTTCCTGTGGGTAGATCAGTGGATGAGACACTACGTTTGGTTCAAGCAT
TCCAGTACACTGACAAACACGGAGAAGTCTGCCCTGCTGGCTGGAAACCTGGTAGTGAAACAATAATCCCAGATC
CAGCTGGAAAGCTGAAGTATTTCGATAAACTGAATTGAGAAATACTTCTTCAAGTTATGATGCTTGAAAGTTCTC
AATAAAGTTCACGGTTTCATTACCAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6488

MEALPLLAATTPDHGRHRRLLLLPLLLFLLPAGAVQGWETEERPRTREEECHFYAGGQVYPGEASRVSVADHSLH
LSKAKISKPAPYWEGTAVIDGEFKELKLTDYRGKYLVFFFYPLDFTFVCPTEIIAFGDRLEEFRSINTEVVACSV
DSQFTHLAWINTPRRQGGLGPIRIPLLSDLTHQISKDYGVYLEDSGHTLRGLFIIDDKGILRQITLNDLPVGRSV
DETLRLVQAFQYTDKHGEVCPAGWKPGSETIIPDPAGKLKYFDKLN

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FIGURE 6489

GGGGACAGCCTGGACTCAGAGCTCAAGTCTGAACTCTACCTCCAGACAGAATGAAGTTCATCTCGACATCTCTGC
TTCTCATGCTGCTGGTCAGCAGCCTCTCTCCAGTCCAAGGTGTTCTGGAGGTCTATTACACAAGCTTGAGGTGTA
GATGTGTCCAAGAGAGCTCAGTCTTTATCCCTAGACGCTTCATTGATCGAATTCAAATCTTGCCCCGTGGGAATG
GTTGTCCAAGAAAAGAAATCATAGTCTGGAAGAAGAACAAGTCAATTGTGTGTGTGGACCCTCAAGCTGAATGGA
TACAAAGAATGATGGAAGTATTGAGAAAAAGAAGTTCTTCAACTCTACCAGTTCCAGTGTTTAAGAGAAAGATTC
CCTGATGCTGATATTTCCACTAAGAACACCTGCATTCTTCCCTTATCCCTGCTCTGGATTTTAGTTTTGTGCTTA
GTTAAATCTTTTCCAGGAAAAAGAACTTCCCCATACAAATAAGCATGAGACTATGTAAAAATAACCTTGCAGAAG
CTGATGGGGCAAACTCAAGCTTCTTCACTCACAGCACCCTATATACACTTGGAGTTTGCATTCTTATTCATCAGG
GAGGAAAGTTTCTTTGAAAATAGTTATTCAGTTATAAGTAATACAGGATTATTTTGATTATATACTTGTTGTTTA
ATGTTTAAAATTTCTTAGAAAACAATGGAATGAGAATTTAAGCCTCAAATTTGAACATGTGGCTTGAATTAAGAA
GAAAATTATGGCATATATTAAAAGCAGGCTTCTATGAAAGACTCAAAAAGCTGCCTGGGAGGCAGATGGAACTTG
AGCCTGTCAAGAGGCAAAGGAATCCATGTAGTAGATATCCTCTGCTTAAAAACTCACTACGGAGGAGAATTAAGT
CCTACTTTTAAAGGATTTCTTTATAAAATTTACTGTCTAAGATTAATAGCATTCGAAGATCCCCAGACTTCATAG
AATACTCAGGGAAAGCATTTAAAGGGTGATGTACACATGTATCCTTTCACACATTTGCCTTGACAAACTTCTTTC
ACTCACATCTTTTTCACTGACTTTTTTTGTGGGGGGCGGGGCCGGGGGGACTCTGGTATCTAATTCTTTAATGAT
TCCTATAAATCTAATGACATTCAATAAAGTTGAGCAAACATTTTACAAAAAAAAAAAAAAAAAAAAAAAAAAAA
A

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FIGURE 6490

MKFISTSLLLMLLVSSLSPVQGVLEVYYTSLRCRCVQESSVFIPRRFIDRIQILPRGNGCPRKEIIVWKKNKSIV
CVDPQAEWIQRMMEVLRKRSSSTLPVPVFKRKIP

FIGURE 6491

GTTCCAAGGTTTGCGGCCCGGTCTCGGAGAAGAGGGGAGAGTGGAGGGCCGCTGAATAAGCTTCCAAAATGATGC
CCACACCAGTTATCCTATTGAAAGAGGGGACTGATAGCTCCCAAGGCATCCCCCAGCTTGTGAGTAACATCAGTG
CCTGCCAGGTGATTGCTGAGGCTGTAAGAACTACCCTGGGTCCCCGTGGCATGGACAAGCTTATTGTAGATGGCA
GAGGCAAAGCAACAATTTCTAATGATGGGGCCACAATTCTGAAACTTCTTGATGTTGTCCATCCTGCAGCAAAGA
CTTTGGTAGACATTGCCAAATCCCAAGATGCTGAGGTGGGTGATGGCACCACCTCAGTGACCTTGCTGGCTGCAG
AGTTTCTGAAGCAGGTGAAACCCTATGTGGAGGAAGGTTTACACCCCCAGATCATCATTCGAGCTTTCCGCACAG
CCACCCAGCTGGCAGTTAACAAGATCAAAGAGATTGCTGTGACCGTGAAGAAGGCAGATAAAGTGGAGCAGAGGA
AGCTGCTGGAAAAGTGTGCCATGACCGCTCTGAGCTCCAAGCTGATCTCCCAGCAGAAAGCTTTCTTTGCTAAGA
TGGTGGTGGATGCAGTGATGATGCTCGATGATTTGCTGCAGCTTAAAATGATTGGAATCAAGAAGGTACAGGGTG
GAGCCCTCGAGGATTCTCAGCTGGTAGCTGGTGTTGCATTCAAGAAGACTTTCTCTTACGCTGGGTTTGAAATGC
AACCCAAAAAGTACCACAATCCCAAGATTGCCCTTTTGAATGTCGAGCTCGAGTTGAAAGCTGAGAAAGACAATG
CTGAGATAAGAGTCCACACAGTTGAGGATTATCAGGCAATTGTTGATGCTGAGTGGAACATTCTCTATGACAAGT
TAGAGAAGATCCATCATTCTGGAGCCAAAGTTGTCTTGTCCAAACTCCCCATTGGGGATGTGGCCACCCAGTACT
TTGCTGACAGGGACATGTTCTGTGCTGGCCGAGTACCTGAGGAGGATCTGAAGAGGACAATGATGGCCTGTGGAG
GCTCAATCCAGACCAGTGTGAATGCTCTGTCAGCAGATGTGCTGGGTCGATGCCAGGTGTTTGAAGAGACCCAGA
TTGGAGGCGAGAGGTACAATTTTTTTACTGGCTGCCCCAAGGCCAAGACATGCACCTTCATTCTCCGTGGCGGCG
CCGAGCAGTTTATGGAGGAGACAGAGCGGTCCCTGCATGATGCCATCATGATCGTCAGGAGGGCCATCAAGAATG
ATTCAGTGGTGGCTGGTGGCGGGGCCATTGAGATGGAACTCTCCAAGTACCTGCGGGATTACTCAAGGACTATTC
CAGGAAAACAGCAGCTGTTGATTGGGGCTTATGCCAAGGCCTTGGAGATTATCCCACGCCAGCTGTGTGACAATG
CTGGCTTTGATGCCACAAACATTCTCAACAAGCTGCGGGCTCGGCATGCCCAGGGGGGTACATGGTATGGAGTAG
ACATCAACAACGAGGACATTGCTGACAACTTTGAAGCTTTCGTGTGGGAGCCAGCTATGGTGCGGATCAATGCGC
TGACAGCAGCCTCTGAGGCTGCGTGCCTGATCGTGTCTGTAGATGAAACCATCAAGAACCCCCGCTCGACTGTGG
ATGCTCCCACAGCAGCAGGCCGGGGCCGTGGTCGTGGCCGCCCCCACTGAGAGGCACCCCACCCATCACATGGCT
GGCTGGCTGCTGGGTGCACTTACCCTCCTTGGCTTGGTTACTTCATTTTACAAGGAAGGGGTAGTAATTGGCCCA
CTCTCTTCTTACTGGAGGCTATTTAAATAAAATGTAAGACTTCAAAAAAAAAAAAAAAAAAAA

FIGURE 6492

MMPTPVILLKEGTDSSQGIPQLVSNISACQVIAEAVRTTLGPRGMDKLIVDGRGKATISNDGATILKLLDVVHPA
AKTLVDIAKSQDAEVGDGTTSVTLLAAEFLKQVKPYVEEGLHPQIIIRAFRTATQLAVNKIKEIAVTVKKADKVE
QRKLLEKCAMTALSSKLISQQKAFFAKMVVDAVMMLDDLLQLKMIGIKKVQGGALEDSQLVAGVAFKKTFSYAGF
EMQPKKYHNPKIALLNVELELKAEKDNAEIRVHTVEDYQAIVDAEWNILYDKLEKIHHSGAKVVLSKLPIGDVAT
QYFADRDMFCAGRVPEEDLKRTMMACGGSIQTSVNALSADVLGRCQVFEETQIGGERYNFFTGCPKAKTCTFILR
GGAEQFMEETERSLHDAIMIVRRAIKNDSVVAGGGAIEMELSKYLRDYSRTIPGKQQLLIGAYAKALEIIPRQLC
DNAGFDATNILNKLRARHAQGGTWYGVDINNEDIADNFEAFVWEPAMVRINALTAASEAACLIVSVDETIKNPRS
TVDAPTAAGRGRGRGRPH

FIGURE 6493

GAATTGAACCACCCATTTTCCTTTCTTAGCCAAATCACCAAAATGTCCAGTTAGAACAAGAATTTAGCATTCTGC
AAAAGAAGTTAACAGCTGAGATAACGAGGAAATATTCTGAAATGGATCCCAAATATTTCATCTTAATTTTGTTTT
GTGGACACCTGAACAATACATTTTTTTCAAAGACAGAGACAATTACAACAGAGAAGCAGTCACAGCCTACCTTAT
TCACATCATCAATGTCACAGGTATTGGCTAATTCTCAAAACACAACAGGGAATCCTTTGGGTCAACCAACACAAT
TCAGCGACACTTTTTCTGGACAATCAATATCACCTGCCAAAGTCACTGCTGGACAACCAACACCAGCTGTCTATA
CCTCTTCTGAAAAACCAGAAGCACATACTTCTGCTGGACAACCACTTGCCTACAACACCAAACAACCAACACCAA
TAGCCAACACCTCCTCCCAGCAAGCCGTGTTCACCTCTGCCAGACAACTACCATCTGCCCGTACTTCTACCACAC
AACCACCAAAGTCATTTGTCTATACTTTTACTCAACAATCATCATCTGTCCAGATCCCTTCTAGAAAACAAATAA
CTGTTCATAATCCATCCACACAACCAACATCAACTGTCAAAAATTCACCTAGGAGTACACCAGGATTTATCTTAG
ATACTACCAGTAACAAACAAACCCCACAAAAAAACAATTATAATTCAATAGCTGCCATACTAATTGGTGTACTTC
TGACTTCTATGTTGGTAGCTATAATCATCATTGTACTTTGGAAATGCTTAAGGAAACCAGTTTTAAATGATCAAA
ATTGGGCAGGTAGATCTCCATTTGCTGATGGAGAAACCCCTGACATTTGTATGGATAACATCAGAGAAAATGAAA
TATCCACAAAACGTACATCAATCATTTCACTTACACCCTGGAAACCAAGCAAAAGCACACTTTTAGCAGATGACT
TAGAAATTAAGTTGTTTGAATCAAGTGAAAACATTGAAGACTCCAACAACCCCAAAACAGAGAAAATAAAAGATC
AAGTAAATGGTACATCAGAAGATAGTGCTGATGGTTCAACAGTTGGAACTGCTGTTTCTTCTTCAGATGATGCAG
GTCTGCCTCCACCACCTCCCCTTCTGGATTTGGAAGGACAGGAAAGTAACCAATCTGACAAACCCACAATGACAA
TTGTATCTCCTCTTCCAAATGATTCTACTAGTCTCCCTCCATCTCTGGACTGTCTCAATCAAGACTGTGGAGATC
ATAAATCTGAGATAATACAATCATTTCCACCGCTTGACTCACTTAACTTGCCCCTGCCACCAGTAGATTTTATGA
AAAACCAAGAAGATTCCAACCTTGAGATCCAGTGTCAGGAGTTCTCTATTCCTCCCAACTCTGATCAAGATCTTA
ATGAATCCCTGCCACCTCCACCTGCAGAACTGTTATAATATTACAACTTGCTTTTTAGCTGATCTTCCATCCTC
AAATGACTCTTTTTTCTTTATATGTTAACATATATAAAATGGCAACTGATAGTCAATTTTGATTTTTATTCAGGA
ACTATCTGAAATCTGCTCAGAGCCTATGTGCATAGATGAAACTTTTTTTTAAAAAAAGTTATTTAACAGTAATCT
ATTTACTAATTATAGTACCTATCTTTAAAGTATAGTACATTTTACATATGTAAATGGTATGTTTCAATAATTTAA
GAACTCTGAAACAATCTACATATACTTATTACCCAGTACAGTTTTTTTTCCCCTGAAAAGCTGTGTATAAAATTA
TGGTGAATAAACTTTTATGTTTCCATTTCAAAGACCAGGGTGGAGAGGAATAAGAGACTAAGTATATGCTTCAAG
TTTTAAATTAATACCTCAAGTATTAAATAAATATTCCAAGTTTGTGGGAATGGGAGATTAAAATGCATGTTTGAG
AGTAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6494

MDPKYFILILFCGHLNNTFFSKTETITTEKQSQPTLFTSSMSQVLANSQNTTGNPLGQPTQFSDTFSGQSISPAK
VTAGQPTPAVYTSSEKPEAHTSAGQPLAYNTKQPTPIANTSSQQAVFTSARQLPSARTSTTQPPKSFVYTFTQQS
SSVQIPSRKQITVHNPSTQPTSTVKNSPRSTPGFILDTTSNKQTPQKNNYNSIAAILIGVLLTSMLVAIIIIVLW
KCLRKPVLNDQNWAGRSPFADGETPDICMDNIRENEISTKRTSIISLTPWKPSKSTLLADDLEIKLFESSENIED
SNNPKTEKIKDQVNGTSEDSADGSTVGTAVSSSDDAGLPPPPPLLDLEGQESNQSDKPTMTIVSPLPNDSTSLPP
SLDCLNQDCGDHKSEIIQSFPPLDSLNLPLPPVDFMKNQEDSNLEIQCQEFSIPPNSDQDLNESLPPPPAELL

FIGURE 6495

TGGACTTGGATCCGAGGCAGACGAGGAAGCTGAGAAAACCCTGGCGTTGACCCCGTGGACCTGGGCGCCCCGGGA
AGGTCCAGCGCTTGGTCCAGGCAGGCGGGGATGTGCGGTGACCACCCTGGTCCTGAAAAGTCCAGCCCCGAATCT
CCCTCCCTCCTAGACCTGGAGGCCTGGAACAGCCAGCCGCCCACGGACGCCAGAGCCGGGAACCCTGACGGCACT
TAGCTGCTGACAAACAACCTGCTCCGTGGACGCCTGAAACACCAGTCTTTGGGGCCAGTGCCTCAGTTTCAATCC
AGGTAACCTTTAAATGAAACTTGCCTAAAATCTTAGGTCATACACAGAAGAGACTCCAATCGACAAGAAGCTGGA
AAAGAATG**ATG**TTGTCCTTAAACAACCTACAGAATATCATCTATAACCCGGTAATCCCGTATGTTGGCACCATTC
CCGATCAGCTGGATCCTGGAACTTTGATTGTGATATGTGGGCATGTTCCTAGTGACGCAGACAGATTCCAGGTGG
ATCTGCAGAATGGCAGCAGTGTGAAACCTCGAGCCGATGTGGCCTTTCATTTCAATCCTCGTTTCAAAAGGGCCG
GCTGCATTGTTTGCAATACTTTGATAAATGAAAAATGGGGACGGGAAGAGATCACCTATGACACGCCTTTCAAAA
GAGAAAAGTCTTTTGAGATCGTGATTATGGTGCTAAAGGACAAATTCCAGGTGGCTGTAAATGGAAAACATACTC
TGCTCTATGGCCACAGGATCGGCCCAGAGAAAATAGACACTCTGGGCATTTATGGCAAAGTGAATATTCACTCAA
TTGGTTTTAGCTTCAGCTCGGACTTACAAAGTACCCAAGCATCTAGTCTGGAACTGACAGAGATAAGTAGAGAAA
ATGTTCCAAAGTCTGGCACGCCCCAGCTTCAGACTGTCTCTCCCTCCTGGGATTTACAGGGTCATGGCTCTGAAA
CATTCTGTAGTGTTCTTTGGACACGAGTTTTCCTGGAGATCGCTTTCTGCAGGCCTATTGGTCTGACTGTGGCTT
CTTTTCAGAGCCTGCCATTCGCTGCAAGGTTGAACACCCCCATGGGCCCTGGACGAACTGTCGTCGTTAAAGGAG
AAGTGAATGCAAATGCCAAAAGCTTTAATGTTGACCTACTAGCAGGAAAATCAAAGGATATTGCTCTACACTTGA
ACCCACGCCTGAATATTAAAGCATTTGTAAGAAATTCTTTTCTTCAGGAGTCCTGGGGAGAAGAAGAGAGAAATA
TTACCTCTTTCCCATTTAGTCCTGGGATGTACTTTGAGATGATAATTTACTGTGATGTTAGAGAATTCAAGGTTG
CAGTAAATGGCGTACACAGCCTGGAGTACAAACACAGATTTAAAGAGCTCAGCAGTATTGACACGCTGGAAATTA
ATGGAGACATCCACTTACTGGAAGTAAGGAGCTGG**TAG**CCTACCTACACAGCTGCTACAAAAACCAAAATACAGA
ATGGCTTCTGTGATACTGGCCTTGCTGAAACGCATCTCACTGTCATTCTATTGTTTATATTGTTAAAATGAGCTT
GTGCACCATTAGATCCTGCTGGGTGTTCTCAGTCCTTGCCATGAAGTATGGTGGTGTCTAGCACTGAATGGGGAA
ACTGGGGGCAGCAACACTTATAGCCAGTTAAAGCCACTCTGCCCTCTCTCCTACTTTGGCTGACTCTTCAAGAAT
GCCATTCAACAAGTATTTATGGAGTACCTACTATAATACAGTAGCTAACATGTATTGAGCACAGATTTTTTTTGG
TAAAACTGTGAGGAGCTAGGATATATACTTGGTGAAACAAACCAGTATGTTCCCTGTTCTCTTGAGCTTCGACTC
TTCTGTGCTCTATTGCTGCGCACTGCTTTTTCTACAGGCATTACATCAACTCCTAAGGGGTCCTCTGGGATTAGT
TAAGCAGCTATTAAATCACCCGAAGACACTAATTTACAGAAGACACAACTCCTTCCCCAGTGATCACTGTCATAA
CCAGTGCTCTACCGTATCCCATCACTGAGGACTGATGTTGACTGACATCATTTTATCGTAATAAACATGTGGCTC
TATTAGCTGCAAGCTTTACCAAGTAATTGGCATGACATCTGAGCACAGAAATTAAGGCAAAAAACCAAAGCAAAA
CAAATACATGGTGCTGAAATTAACTTGATGCCAAGCCCAAGGCAGCTGATTTCTGTGTATTTGAACTTAGGGCAA
ATCAGAGTCTACACAGACGCCTACAGAAAGTTTCAGGAAGAGGCAAGATGCATTCAATTTGAAAGATATTTATGG
GCAACAAAGTAAGGTCAGGATTAGACTTCAGGCATTCATAAGGCAGGCACTATCAGAAAGTGTACGCCAACTAAG
GGACCCACAAAGCAGGCAGAGGTAATGCAGAAATCTGTTTTGTTCCCATGAAATCACCAATCAAGGCCTCCGTTC
TTCTAAAGATTAGTCCATCATCATTAGCAACTGAGATCAAAGCACTCTTCCACTTTACGTGATTAAAATCAAACC
TGTATCAGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6496

MLSLNNLQNIIYNPVIPYVGTIPDQLDPGTLIVICGHVPSDADRFQVDLQNGSSVKPRADVAFHFNPRFKRAGCI
VCNTLINEKWGREEITYDTPFKREKSFEIVIMVLKDKFQVAVNGKHTLLYGHRIGPEKIDTLGIYGKVNIHSIGF
SFSSDLQSTQASSLELTEISRENVPKSGTPQLQTVSPSWDLQGHGSETFCSVLWTRVFLEIAFCRPIGLTVASFQ
SLPFAARLNTPMGPGRTVVVKGEVNANAKSFNVDLLAGKSKDIALHLNPRLNIKAFVRNSFLQESWGEEERNITS
FPFSPGMYFEMIIYCDVREFKVAVNGVHSLEYKHRFKELSSIDTLEINGDIHLLEVRSW

FIGURE 6497

GGAATTCCCGCCCGGCCCGGCCCCGCGCCCCGCAGCCCCGGGCGCCGCGCGTCCTGCCCGGCCTGCGGCCCAGCC
CTTGCGCCGCTCGTCCGACCCGCGATCGTCCACCAGACCGTGCCTCCCGGCCGCCCGGGCCCCGCGTGC**ATG**CTT
CGGTCTGGGCCAGCCTCTGGGCCGTCCGTCCCCACTGGCCGGGCCATGCCGAGTCGCCGCGTCGCCAGACCGCCG
GCTGCGCCGGAGCTGGGGGCCTTAGGGTCCCCCGACCTCTCCTCACTCTCGCTCGCCGTTTCCAGGAGCACAGAT
GAATTGGAGATCATCGACGAGTACATCAAGGAGAACGGCTTCGGCCTGGACGGGGGACAGCCGGGCCCGGGCGAG
GGGCTGCCACGCCTGGTGTCTCGCGGGGCTGCGTCCCTGAGCACGGTCACCCTGGGCCCTGTGGCGCCCCCAGCC
ACGCCGCCGCCTTGGGGCTGCCCCCTGGGCCGACTAGTGTCCCCAGCGCCGGGCCCGGGCCCGCAGCCGCACCTG
GTCATCACGGAGCAGCCCAAGCAGCGCGGCATGCCGTTCCGCTACGAGTGCGAGGGCCGCTCGGCCGGCAGCATC
CTTGGGGAGAGCAGCACCGAGGCCAGCAAGACGCTGCCCGCCATCGAGCTCCGGGATTGTGGAGGGCTGCGGGAG
GTGGAGGTGACTGCCTGCCTGGTGTGGAAGGACTGGCCTCACCGAGTCCACCCCCACAGCCTCGTGGGGAAAGAC
TGCACCGACGGCATCTGCAGGGTGCGGCTCCGGCCTCACGTCAGCCCCCGGCACAGTTTTAACAACCTGGGCATC
CAGTGTGTGAGGAAGAAGGAGATTGAGGCTGCCATTGAGCGGAAGATTCAACTGGGCATTGACCCCTACAACGCT
GGGTCCCTGAAGAACCATCAGGAAGTAGACATGAATGTGGTGAGGATCTGCTTCCAGGCCTCATATCGGGACCAG
CAGGGACAGATGCGCCGGATGGATCCTGTGCTTTCCGAGCCCGTCTATGACAAGAAATCCACAAACACATCAGAG
CTGCGGATTTGCCGAATTAACAAGGAAAGCGGGCCGTGCACCGGTGGCGAGGAGCTCTACTTGCTCTGCGACAAG
GTGCAGAAAGAGGACATATCAGTGGTGTTCAGCAGGGCCTCCTGGGAAGGTCGGGCTGACTTCTCCCAGGCCGAC
GTGCACCGCCAGATTGCCATTGTGTTCAAGACGCCGCCCTACGAGGACCTGGAGATTGTCGAGCCCGTGACAGTC
AACGTCTTCCTGCAGCGGCTCACCGATGGGGTCTGCAGCGAGCCATTGCCTTTCACGTACCTGCCTCGCGACCAT
GACAGCTACGGCGTGGACAAGAAGGCGAAACGGGGGATGCCCGACGTCCTTGGGGAGCTGAACAGCTCTGACCCC
CATGGCATCGAGAGCAAACGGCGGAAGAAAAAGCCGGCCATCCTGGACCACTTCCTGCCCAACCACGGCTCAGGC
CCGTTCCTCCCGCCGTCAGCCCTGCTGCCAGACCCTGACTTCTTCTCTGGCACCGTGTCCCTGCCCGGCCTGGAG
CCCCCTGGCGGGCCTGACCTCCTGGACGATGGCTTTGCCTACGACCCTACGGCCCCCACACTCTTCACCATGCTG
GACCTGCTGCCCCCCGGCACCGCCACACGCTAGCGCTGTTGTGTGCAGCGGAGGTGCCGGGGCCGTGGTTGGGGAG
ACCCCCGGCCCTGAACCACTGACACTGGACTCGTACCAGGCCCCGGGCCCCGGGGATGGAGGCACCGCCAGCCTT
GTGGGCAGCAACATGTTCCCCAATCATTACCGCGAGGCGGCCTTTGGGGGCGGCCTCCTATCCCCGGGGCCTGAA
GCCACG**TAG**CCCCGCGATGCCAGAGGAGGGGCACTGGGTGGGGAGGGAGGTGGAGGAGCCGTGCAATCCCAACCA
GGATGTCTAGCACCCCCATCCCCTTGGCCCTTCCTCATGCTTCTGAAGTGGACATATTCAGCCTTGGCGAGAAGC
TCCGTTGCACGGGTTTCCCCTTGAGCCCATTTTACAGATGAGGAAACTGAGTCCGGAGAGGAAAAGGGACATGGC
TCCCGTGCACTAGCTTGTTACAGCTGCCTCTGTCCCCACATGTGGGGGCACCTTCTCCAGTAGGATTCGGAAAAG
ATTGTACATATGGGAGGAGGGGGCAGATTCCTGGCCCTCCCTCCCCAGACTTGACTTGAAGGTGGGGGGTAGGTT
GGTTGTTCAGAGTCTTCCCAATAAAGATGAGTTTTTGAGCCTCAAAAAAAAAAAAAAGGAATTCC

FIGURE 6498

MLRSGPASGPSVPTGRAMPSRRVARPPAAPELGALGSPDLSSLSLAVSRSTDELEIIDEYIKENGFGLDGGQPGP
GEGLPRLVSRGAASLSTVTLGPVAPPATPPPWGCPLGRLVSPAPGPGPQPHLVITEQPKQRGMPFRYECEGRSAG
SILGESSTEASKTLPAIELRDCGGLREVEVTACLVWKDWPHRVHPHSLVGKDCTDGICRVRLRPHVSPRHSFNNL
GIQCVRKKEIEAAIERKIQLGIDPYNAGSLKNHQEVDMNVVRICFQASYRDQQGQMRRMDPVLSEPVYDKKSTNT
SELRICRINKESGPCTGGEELYLLCDKVQKEDISVVFSRASWEGRADFSQADVHRQIAIVFKTPPYEDLEIVEPV
TVNVFLQRLTDGVCSEPLPFTYLPRDHDSYGVDKKAKRGMPDVLGELNSSDPHGIESKRRKKKPAILDHFLPNHG
SGPFLPPSALLPDPDFFSGTVSLPGLEPPGGPDLLDDGFAYDPTAPTLFTMLDLLPPAPPHASAVVCSGGAGAVV
GETPGPEPLTLDSYQAPGPGDGGTASLVGSNMFPNHYREAAFGGGLLSPGPEAT

FIGURE 6499A

CGGCGGCGGCTGCGGCTTAGTCGGTGGCGGCCGGCGGCGGCTGCGGGCTGAGCGGCGAGTTTCCGATTTAAAGCT
GAGCTGCGAGGAAAATGGCGGCGGGAGGATCAAAATACTTGCTGGATGGTGGACTCAGAGACCAATAAAAATAAA
CTGCTTGAACATCCTTTGACTGGTTAGCCAGTTGCTGATGTATATTCAAGATGAGTGGATTAGGAGAAAACTTGG
ATCCACTGGCCAGTGATTCACGAAAACGCAAATTGCCATGTGATACTCCAGGACAAGGTCTTACCTGCAGTGGTG
AAAAACGGAGACGGGAGCAGGAAAGTAAATATATTGAAGAATTGGCTGAGCTGATATCTGCCAATCTTAGTGATA
TTGACAATTTCAATGTCAAACCAGATAAATGTGCGATTTTAAAGGAAACAGTAAGACAGATACGTCAAATAAAAG
AGCAAGGAAAAACTATTTCCAATGATGATGATGTTCAAAAAGCCGATGTATCTTCTACAGGGCAGGGAGTTATTG
ATAAAGACTCCTTAGGACCGCTTTTACTTCAGGCATTGGATGGTTTCCTATTTGTGGTGAATCGAGACGGAAACA
TTGTATTTGTATCAGAAAATGTCACACAATACCTGCAATATAAGCAAGAGGACCTGGTTAACACAAGTGTTTACA
ATATCTTACATGAAGAAGACAGAAAGGATTTTCTTAAGAATTTACCAAAATCTACAGTTAATGGAGTTTCCTGGA
CAAATGAGACCCAAAGACAAAAAAGCCATACATTTAATTGCCGTATGTTGATGAAAACACCACATGATATTCTGG
AAGACATAAACGCCAGTCCTGAAATGCGCCAGAGATATGAAACAATGCAGTGCTTTGCCCTGTCTCAGCCACGAG
CTATGATGGAGGAAGGGGAAGATTTGCAATCTTGTATGATCTGTGTGGCACGCCGCATTACTACAGGAGAAAGAA
CATTTCCATCAAACCCTGAGAGCTTTATTACCAGACATGATCTTTCAGGAAAGGTTGTCAATATAGATACAAATT
CACTGAGATCCTCCATGAGGCCTGGCTTTGAAGATATAATCCGAAGGTGTATTCAGAGATTTTTTAGTCTAAATG
ATGGGCAGTCATGGTCCCAGAAACGTCACTATCAAGAAGCTTATCTTAATGGCCATGCAGAAACCCCAGTATATC
GATTCTCGTTGGCTGATGGAACTATAGTGACTGCACAGACAAAAAGCAAACTCTTCCGAAATCCTGTAACAAATG
ATCGACATGGCTTTGTCTCAACCCACTTCCTTCAGAGAGAACAGAATGGATATAGACCAAACCCAAATCCTGTTG
GACAAGGGATTAGACCACCTATGGCTGGATGCAACAGTTCGGTAGGCGGCATGAGTATGTCGCCAAACCAAGGCT
TACAGATGCCGAGCAGCAGGGCCTATGGCTTGGCAGACCCTAGCACCACAGGGCAGATGAGTGGAGCTAGGTATG
GGGGTTCCAGTAACATAGCTTCATTGACCCCTGGGCCAGGCATGCAATCACCATCTTCCTACCAGAACAACAACT
ATGGGCTCAACATGAGTAGCCCCCCACATGGGAGTCCTGGTCTTGCCCCAAACCAGCAGAATATCATGATTTCTC
CTCGTAATCGTGGGAGTCCAAAGATAGCCTCACATCAGTTTTCTCCTGTTGCAGGTGTGCACTCTCCCATGGCAT
CTTCTGGCAATACTGGGAACCACAGCTTTTCCAGCAGCTCTCTCAGTGCCCTGCAAGCCATCAGTGAAGGTGTGG
GGACTTCCCTTTTATCTACTCTGTCATCACCAGGCCCCAAATTGGATAACTCTCCCAATATGAATATTACCCAAC
CAAGTAAAGTAAGCAATCAGGATTCCAAGAGTCCTCTGGGCTTTTATTGCGACCAAAATCCAGTGGAGAGTTCAA
TGTGTCAGTCAAATAGCAGAGATCACCTCAGTGACAAAGAAAGTAAGGAGAGCAGTGTTGAGGGGGCAGAGAATC
AAAGGGGTCCTTTGGAAAGCAAAGGTCATAAAAAATTACTGCAGTTACTTACCTGTTCTTCTGATGACCGGGGTC
ATTCCTCCTTGACCAACTCCCCCCTAGATTCAAGTTGTAAAGAATCTTCTGTTAGTGTCACCAGCCCCTCTGGAG
TCTCCTCCTCTACATCTGGAGGAGTATCCTCTACATCCAATATGCATGGGTCACTGTTACAAGAGAAGCACCGGA
TTTTGCACAAGTTGCTGCAGAATGGGAATTCACCAGCTGAGGTAGCCAAGATTACTGCAGAAGCCACTGGGAAAG
ACACCAGCAGTATAACTTCTTGTGGGGACGGAAATGTTGTCAAGCAGGAGCAGCTAAGTCCTAAGAAGAAGGAGA
ATAATGCACTTCTTAGATACCTGCTGGACAGGGATGATCCTAGTGATGCACTCTCTAAAGAACTACAGCCCCAAG
TGGAAGGAGTGGATAATAAAATGAGTCAGTGCACCAGCTCCACCATTCCTAGCTCAAGTCAAGAGAAAGACCCTA
AAATTAAGACAGAGACAAGTGAAGAGGGATCTGGAGACTTGGATAATCTAGATGCTATTCTTGGTGATCTGACTA
GTTCTGACTTTTACAATAATTCCATATCCTCAAATGGTAGTCATCTGGGGACTAAGCAACAGGTGTTTCAAGGAA
CTAATTCTCTGGGTTTGAAAAGTTCACAGTCTGTGCAGTCTATTCGTCCTCCATATAACCGAGCAGTGTCTCTGG
ATAGCCCTGTTTCTGTTGGCTCAAGTCCTCCAGTAAAAAATATCAGTGCTTTCCCCATGTTACCAAAGCAACCCA
TGTTGGGTGGGAATCCAAGAATGATGGATAGTCAGGAAAATTATGGCTCAAGTATGGGTGGGCCAAACCGAAATG
TGACTGTGACTCAGACTCCTTCCTCAGGAGACTGGGGCTTACCAAACTCAAAGGCCGGCAGAATGGAACCTATGA
ATTCAAACTCCATGGGAAGACCAGGAGGAGATTATAATACTTCTTTACCCAGACCTGCACTGGGTGGCTCTATTC
CCACATTGCCTCTTCGGTCTAATAGCATACCAGGTGCGAGACCAGTATTGCAACAGCAGCAGCAGATGCTTCAAA
TGAGGCCTGGTGAAATCCCCATGGGAATGGGGGCTAATCCCTATGGCCAAGCAGCAGCATCTAACCAACTGGGTT
CCTGGCCCGATGGCATGTTGTCCATGGAACAAGTTTCTCATGGCACTCAAAATAGGCCTCTTCTTAGGAATTCCC
TGGATGATCTTGTTGGGCCACCTTCCAACCTGGAAGGCCAGAGTGACGAAAGAGCATTATTGGACCAGCTGCACA
CTCTTCTCAGCAACACAGATGCCACAGGCCTGGAAGAAATTGACAGAGCTTTGGGCATTCCTGAACTTGTCAATC
AGGGACAGGCATTAGAGCCCAAACAGGATGCTTTCCAAGGCCAAGAAGCAGCAGTAATGATGGATCAGAAGGCAG
GATTATATGGACAGACATACCCAGCACAGGGGCCTCCAATGCAAGGAGGCTTTCATCTTCAGGGACAATCACCAT

FIGURE 6499B

CTTTTAACTCTATGATGAATCAGATGAACCAGCAAGGCAATTTTCCTCTCCAAGGAATGCACCCACGAGCCAACA
TCATGAGACCCCGGACAAACACCCCCAAGCAACTTAGAATGCAGCTTCAGCAGAGGCTGCAGGGCCAGCAGTTTT
TGAATCAGAGCCGACAGGCACTTGAATTGAAAATGGAAAACCCTACTGCTGGTGGTGCTGCGGTGATGAGGCCTA
TGATGCAGCCCCAGCAGGGTTTTCTTAATGCTCAAATGGTCGCCCAACGCAGCAGAGAGCTGCTAAGTCATCACT
TCCGACAACAGAGGGTGGCTATGATGATGCAGCAGCAGCAGCAGCAGCAACAGCAGCAGCAGCAGCAGCAGCAGC
AGCAACAGCAACAGCAACAGCAACAGCAGCAACAGCAGCAAACCCAGGCCTTCAGCCCACCTCCTAATGTGACTG
CTTCCCCCAGCATGGATGGGCTTTTGGCAGGACCCACAATGCCACAAGCTCCTCCGCAACAGTTTCCATATCAAC
CAAATTATGGAATGGGACAACAACCAGATCCAGCCTTTGGTCGAGTGTCTAGTCCTCCCAATGCAATGATGTCGT
CAAGAATGGGTCCCTCCCAGAATCCCATGATGCAACACCCGCAGGCTGCATCCATCTATCAGTCCTCAGAAATGA
AGGGCTGGCCATCAGGAAATTTGGCCAGGAACAGCTCCTTTTCCCAGCAGCAGTTTGCCCACCAGGGGAATCCTG
CAGTGTATAGTATGGTGCACATGAATGGCAGCAGTGGTCACATGGGACAGATGAACATGAACCCCATGCCCATGT
CTGGCATGCCTATGGGTCCTGATCAGAAATACTGCTGACATCTCTGCACCAGGACCTCTTAAGGAAACCACTGTA
CAAATGACACTGCACTAGGATTATTGGGAAGGAATCATTGTTCCAGGCATCCATCTTGGAAGAAAGGACCAGCTT
TGAGCTCCATCAAGGGTATTTTAAGTGATGTCATTTGAGCAGGACTGGATTTTAAGCCGAAGGGCAATATCTACG
TGTTTTTCCCCCCTCCTTCTGCTGTGTATCATGGTGTTCAAAACAGAAATGTTTTTTGGCATTCCACCTCCTAGG
GATATAATTCTGGAGACATGGAGTGTTACTGATCATAAAACTTTTGTGTCACTTTTTTCTGCCTTGCTAGCCAAA
ATCTCTTAAATACACGTAGGTGGGCCAGAGAACATTGGAAGAATCAAGAGAGATTAGAATATCTGGTTTCTCTAG
TTGCAGTATTGGACAAAGAGCATAGTCCCAGCCTTCAGGTGTAGTAGTTCTGTGTTGACCCTTTGTCCAGTGGAA
TTGGTGATTCTGAATTGTCCTTTACTAATGGTGTTGAGTTGCTCTGTCCCTATTATTTGCCCTAGGCTTTCTCCT
AATGAAGGTTTTCATTTGCCATTCATGTCCTGTAATACTTCACCTCCAGGAACTGTCATGGATGTCCAAATGGCT
TTGCAGAAAGGAAATGAGATGACAGTATTTAATCGCAGCAGTAGCAAACTTTTCACATGCTAATGTGCAGCTGAG
TGCACTTTATTTAAAAAGAATGGATAAATGCAATATTCTTGAGGTCTTGAGGGAATAGTGAAACACATTCCTGGT
TTTTGCCTACACTTACGTGTTAGACAAGAACTATGATTTTTTTTTTAAAGTACTGGTGTCACCCTTTGCCTATAT
GGTAGAGCAATAATGCTTTTTAAAAATAAACTTCTGAAAACCCAAGGCCAGGTACTGCATTCTGAATCAGAATCT
CGCAGTGTTTCTGTGAATAGATTTTTTTGTAAATATGACCTTTAAGATATTGTATTATGTAAAATATGTATATAC
CTTTTTTTGTAGGTCACAACAACTCATTTTTACAGAGTTTGTGAAGCTAAATATTTAACATTGTTGATTTCAGTA
AGCTGTGTGGTGAGGCTACCAGTGGAAGAGACATCCCTTGACTTTTGTGGCCTGGGGGAGGGGTAGTGCTCCACA
GCTTTTCCTTCCCCACCCCCCAGCCTTAGATGCCTCGCTCTTTTCAATCTCTTAATCTAAATGCTTTTTAAAGAG
ATTATTTGTTTAGATGTAGGCATTTTAATTTTTTAAAAATTCCTCTACCAGAACTAAGCACTTTGTTAATTTGGG
GGGAAAGAATAGATATGGGGAAATAAACTTAAAAAAAAATCAGGAATTTAAAAAAACGAGCAATTTGAAGAGAAT
CTTTTGGATTTTAAGCAGTCCGAAATAATAGCAATTCATGGGCTGTGTGTGTGTGTGTATGTGTGTGTGTGTGTG
TGTATGTTTAATTATGTTACCTTTTCATCCCCTTTAGGAGCGTTTTCAGATTTTGGTTGCTAAGACCTGAATCCC
ATATTGAGATCTCGAGTAGAATCCTTGGTGTGGTTTCTGGTGTCTGCTCAGCTGTCCCCTCATTCTACTAATGTG
ATGCTTTCATTATGTCCCTGTGGATTAGAATAGTGTCAGTTATTTCTTAAGTAACTCAGTACCCAGAACAGCCAG
TTTTACTGTGATTCAGAGCCACAGTCTAACTGAGCACCTTTTAAACCCCTCCCTCTTCTGCCCCCTACCACTTTT
CTGCTGTTGCCTCTCTTTGACACCTGTTTTAGTCAGTTGGGAGGAAGGGAAAAATCAAGTTTAATTCCCTTTATC
TGGGTTAATTCATTTGGTTCAAATAGTTGACGGAATTGGGTTTCTGAATGTCTGTGAATTTCAGAGGTCTCTGCT
AGCCTTGGTATCATTTTCTAGCAATAACTGAGAGCCAGTTAATTTTAAGAATTTCACACATTTAGCCAATCTTTC
TAGATGTCTCTGAAGGTAAGATCATTTAATATCTTTGATATGCTTACGAGTAAGTGAATCCTGATTATTTCCAGA
CCCACCACCAGAGTGGATCTTATTTTCAAAGCAGTATAGACAATTATGAGTTTGCCCTCTTTCCCCTACCAAGTT
CAAAATATATCTAAGAAAGATTGTAAATCCGAAAACTTCCATTGTAGTGGCCTGTGCTTTTCAGATAGTATACTC
TCCTGTTTGGAGACAGAGGAAGAACCAGGTCAGTCTGTCTCTTTTTCAGCTCAATTGTATCTGACCCTTCTTTAA
GTTATGTGTGTGGGGAGAAATAGAATGGTGCTCTTATCTTTCTTGACTTTAAAAAAATTATTAAAAACAAAAAAA
AAAAAAAAAA

FIGURE 6500

MSGLGENLDPLASDSRKRKLPCDTPGQGLTCSGEKRRREQESKYIEELAELISANLSDIDNFNVKPDKCAILKET
VRQIRQIKEQGKTISNDDDVQKADVSSTGQGVIDKDSLGPLLLQALDGFLFVVNRDGNIVFVSENVTQYLQYKQE
DLVNTSVYNILHEEDRKDFLKNLPKSTVNGVSWTNETQRQKSHTFNCRMLMKTPHDILEDINASPEMRQRYETMQ
CFALSQPRAMMEEGEDLQSCMICVARRITTGERTFPSNPESFITRHDLSGKVVNIDTNSLRSSMRPGFEDIIRRC
IQRFFSLNDGQSWSQKRHYQEAYLNGHAETPVYRFSLADGTIVTAQTKSKLFRNPVTNDRHGFVSTHFLQREQNG
YRPNPNPVGQGIRPPMAGCNSSVGGMSMSPNQGLQMPSSRAYGLADPSTTGQMSGARYGGSSNIASLTPGPGMQS
PSSYQNNNYGLNMSSPPHGSPGLAPNQQNIMISPRNRGSPKIASHQFSPVAGVHSPMASSGNTGNHSFSSSSLSA
LQAISEGVGTSLLSTLSSPGPKLDNSPNMNITQPSKVSNQDSKSPLGFYCDQNPVESSMCQSNSRDHLSDKESKE
SSVEGAENQRGPLESKGHKKLLQLLTCSSDDRGHSSLTNSPLDSSCKESSVSVTSPSGVSSSTSGGVSSTSNMHG
SLLQEKHRILHKLLQNGNSPAEVAKITAEATGKDTSSITSCGDGNVVKQEQLSPKKKENNALLRYLLDRDDPSDA
LSKELQPQVEGVDNKMSQCTSSTIPSSSQEKDPKIKTETSEEGSGDLDNLDAILGDLTSSDFYNNSISSNGSHLG
TKQQVFQGTNSLGLKSSQSVQSIRPPYNRAVSLDSPVSVGSSPPVKNISAFPMLPKQPMLGGNPRMMDSQENYGS
SMGGPNRNVTVTQTPSSGDWGLPNSKAGRMEPMNSNSMGRPGGDYNTSLPRPALGGSIPTLPLRSNSIPGARPVL
QQQQQMLQMRPGEIPMGMGANPYGQAAASNQLGSWPDGMLSMEQVSHGTQNRPLLRNSLDDLVGPPSNLEGQSDE
RALLDQLHTLLSNTDATGLEEIDRALGIPELVNQGQALEPKQDAFQGQEAAVMMDQKAGLYGQTYPAQGPPMQGG
FHLQGQSPSFNSMMNQMNQQGNFPLQGMHPRANIMRPRTNTPKQLRMQLQQRLQGQQFLNQSRQALELKMENPTA
GGAAVMRPMMQPQQGFLNAQMVAQRSRELLSHHFRQQRVAMMMQQQQQQQQQQQQQQQQQQQQQQQQQQQQQTQA
FSPPPNVTASPSMDGLLAGPTMPQAPPQQFPYQPNYGMGQQPDPAFGRVSSPPNAMMSSRMGPSQNPMMQHPQAA
SIYQSSEMKGWPSGNLARNSSFSQQQFAHQGNPAVYSMVHMNGSSGHMGQMNMNPMPMSGMPMGPDQKYC

FIGURE 6501

GCAGACCTTGCTTCATGAGCAAGCTCATCTCTGGAACAAACTGGCAAAGCATCTCTGCTGGTGTTCATCAGAACA
GACACCATGGCAGAGCATGATTACCATGAAGACTATGGGTTCAGCAGTTTCAATGACAGCAGCCAGGAGGAGCAT
CAAGACTTCCTGCAGTTCAGCAAGGTCTTTCTGCCCTGCATGTACCTGGTGGTGTTTGTCTGTGGTCTGGTGGGG
AACTCTCTGGTGCTGGTCATATCCATCTTCTACCATAAGTTGCAGAGCCTGACGGATGTGTTCCTGGTGAACCTA
CCCCTGGCTGACCTGGTGTTTGTCTGCACTCTGCCCTTCTGGGCCTATGCAGGCATCCATGAATGGGTGTTTGGC
CAGGTCATGTGCAAGAGCCTACTGGGCATCTACACTATTAACTTCTACACGTCCATGCTCATCCTCACCTGCATC
ACTGTGGATCGTTTCATTGTAGTGGTTAAGGCCACCAAGGCCTACAACCAGCAAGCCAAGAGGATGACCTGGGGC
AAGGTCACCAGCTTGCTCATCTGGGTGATATCCCTGCTGGTTTCCTTGCCCCAAATTATCTATGGCAATGTCTTT
AATCTCGACAAGCTCATATGTGGTTACCATGACGAGGCAATTTCCACTGTGGTTCTTGCCACCCAGATGACACTG
GGGTTCTTCTTGCCACTGCTCACCATGATTGTCTGCTATTCAGTCATAATCAAAACACTGCTTCATGCTGGAGGC
TTCCAGAAGCACAGATCTCTAAAGATCATCTTCCTGGTGATGGCTGTGTTCCTGCTGACCCAGATGCCCTTCAAC
CTCATGAAGTTCATCCGCAGCACACACTGGGAATACTATGCCATGACCAGCTTTCACTACACCATCATGGTGACA
GAGGCCATCGCATACCTGAGGGCCTGCCTTAACCCTGTGCTCTATGCCTTTGTCAGCCTGAAGTTTCGAAAGAAC
TTCTGGAAACTTGTGAAGGACATTGGTTGCCTCCCTTACCTTGGGGTCTCACATCAATGGAAATCTTCTGAGGAC
AATTCCAAGACTTTTTCTGCCTCCCACAATGTGGAGGCCACCAGCATGTTCCAGTTATAGGCCTTGCCAGGGTTT
CGAGAAGCTGCTCTGGAATTTGCAAGTCATGGCTGTGCCCTCTTGATGTGGTGAGGCAGGCTTTGTTTATAGCTT
GCGCATTCTCATGGAGAAGTTATCAGACACTCTGGCTGGTTTGGAATGCTTCTTCTCAGGCATGAACATGTACTG
TTCTCTTCTTGAACACTCATGCTGAAAGCCCAAGTAGGGGGTCTAAAATTTTTAAGGACTTTCCTTCCTCCATCT
CCAAGAATGCTGAAACCAAGGGGGATGACATGTGACTCCTATGATCTCAGGTTCTCCTTGATTGGGACTGGGGCT
GAAGGTTGAAGAGGTGAGCACGGCCAACAAAGCTGTTGATGGTAGGTGGCACACTGGGTGCCCAAGCTCAGAAGG
CTCTTCTGACTACTGGGCAAAGAGTGTAGATCAGAGCAGCAGTGAAAACAAGTGCTGGCACCACCAGGCACCTCA
CAGAAATGAGATCAGGCTCTGCCTCACCTTGGGGCTTGACTTTTGTATAGGTAGATGTTCAGATTGCTTTGATTA
ATCCAGAATAACTAGCACCAGGGACTATGAATGGGCAAAACTGAATTATAAGAGGCTGATAATTCCAGTGGTCCA
TGGAATGCTTGAAAAATGTGCAAAACAGCGTTTAAGACTGTAATGAATCTAAGCAGCATTTCTGAAGTGGACTCT
TTGGTGGCTTTGCATTTTAAAAATGAAATTTTCCAATGTCTGCCACACAAACGTATGTAAATGTATATACCCACA
CACATACACACATATGTCATATATTACTAGCATATGAGTTTCATAGCTAAGAAATAAAACTGTTAAAGTCTCCAA
ACT

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FIGURE 6502

MAEHDYHEDYGFSSFNDSSQEEHQDFLQFSKVFLPCMYLVVFVCGLVGNSLVLVISIFYHKLQSLTDVFLVNLPL
ADLVFVCTLPFWAYAGIHEWVFGQVMCKSLLGIYTINFYTSMLILTCITVDRFIVVVKATKAYNQQAKRMTWGKV
TSLLIWVISLLVSLPQIIYGNVFNLDKLICGYHDEAISTVVLATQMTLGFFLPLLTMIVCYSVIIKTLLHAGGFQ
KHRSLKIIFLVMAVFLLTQMPFNLMKFIRSTHWEYYAMTSFHYTIMVTEAIAYLRACLNPVLYAFVSLKFRKNFW
KLVKDIGCLPYLGVSHQWKSSEDNSKTFSASHNVEATSMFQL

FIGURE 6503

CCACGCGTCCGCGCTCCCCTCAGCTCCTGCAGTGCTAATTAAGGGAGGGAGCAGCGGGGAGCTTGCAGTGACCAA
GAGGGTGTTGAGGCTAGGAGGCCACGATAAACAGGATACGATAAAAGTCCTTAACCAAGACGCAGATGGGAAGAA
GCGTTAGAGCGAGCAGCACTCACATCTCAAGAACCAGCCTTTCAAACAGTTTCCAGAGATGGATTATCCTACTTT
ACTTTTGGCTCTTCTTCATGTATACAGAGCTCTATGTGAAGAGGTGCTTTGGCATACATCAGTTCCCTTTGCCGA
GAACATGTCTCTAGAATGTGTGTATCCATCAATGGGCATCTTAACACAGGTGGAGTGGTTCAAGATCGGGACCCA
GCAGGATTCCATAGCCATTTTCAGCCCTACTCATGGCATGGTCATAAGGAAGCCCTATGCTGAGAGGGTTTACTT
TTTGAATTCAACGATGGCTTCCAATAACATGACTCTTTTCTTTCGGAATGCCTCTGAAGATGATGTTGGCTACTA
TTCCTGCTCTCTTTACACTTACCCACAGGGAACTTGGCAGAAGGTGATACAGGTGGTTCAGTCAGATAGTTTTGA
GGCAGCTGTGCCATCAAATAGCCACATTGTTTCGGAACCTGGAAAGAATGTCACACTCACTTGTCAGCCTCAGAT
GACGTGGCCTGTGCAGGCAGTGAGGTGGGAAAAGATCCAGCCCCGTCAGATCGACCTCTTAACTTACTGCAACTT
GGTCCATGGCAGAAATTTCACCTCCAAGTTCCCAAGACAAATAGTGAGCAACTGCAGCCACGGAAGGTGGAGCGT
CATCGTCATCCCCGATGTCACAGTCTCAGACTCGGGGCTTTACCGCTGCTACTTGCAGGCCAGCGCAGGAGAAAA
CGAAACCTTCGTGATGAGATTGACTGTAGCCGAGGGTAAAACCGATAACCAATATACCCTCTTTGTGGCTGGAGG
GACAGTTTTATTGTTGTTGTTTGTTATCTCAATTACCACCATCATTGTCATTTTCCTTAACAGAAGGAGAAGGAG
AGAGAGAAGAGATCTATTTACAGAGTCCTGGGATACACAGAAGGCACCCAATAACTATAGAAGTCCCATCTCTAC
CGGTCAACCTACCAATCAATCCATGGATGATACAAGAGAGGATATTTATGTCAACTATCCAACCTTCTCTCGCAG
ACCAAAGACTAGAGTTTAAGCTTATTCTTGACATGAGTGCATTAGTAATGACTCTTATGTACTCATGCATGGATC
TTTATGCAATTTTTTTCCACTACCCAAGGTCTACCTTAGATACTAGTTGTCTGAATTGAGTTACTTTGATAGGAA
AAATACTTCATTACCTAAAATCATTTTTCATAGAACTGTTTCAGAAAACCTGACTCTAACTGGTTTATATACAAA
AGAAAACTTACTGTATCATATAACAGAATGATCCAGGGGAGATTAAGCTTTGGGCAAGGGCTATTTACCAGGGCT
TAAATGTTGTGTCTAGAATTAAGTATGGGCATAAACTGGCTTCTGAATCCCTTTCCAGAGTGTTGGATCCATTTC
CCTGGTCTTGGCCTCACTCTCATGCAGGCTTTCCTCTTGTGTTGGCAAGATGGCTGCCAACTCTTGGCAATTCAT
ACATCCTTGTTTCTGTCTGGTAGAGAGTTTGCTTCTCAAATGGAGCAAACAAATTTGATTATTTTTTCATTGTTA
AATAGGCAACATGACCAGAAAGGATGGAATGGCTTAAGTAAACTAAGGGTTCACTTCTAGAGCTGAGAAGCAGGG
TCAAAGCACAATACTGGGCAATTCAGAGCATGGTTAGAAGAGGAAAGGGGAGTCTCAAAGCTGGAGAGTTTACCA
ACAAATATTGACTGCAGTGATTAACCAAGACATTTTTGTTAACTAAAAAGTGAAATATGGGATGGATTCTAGAAA
TGGGGTATCTCTGTCCATACTTCTAGAATCCACTCTATCAGCATAGTCCAGAAGAATACCTGGCAGTAGAAGAAA
TGAATATTCAAGAGGAAGATAAATGCGAGAGGGCAATCCTTTACTATTCTCATATTTATTTATCTCTCATTCTGT
ATAGAATTCTTGCCGCCATCCCAGGTCTAGCCTTAGGAGCAAATGTAGTAGATAGTCGAATAATAAATAACTTAA
TGTTTTGGACATATTTTGTCTACTTTTGAGAATTATTTTTAATATGTAAATTCTCTCAAAAGGGTCAGGCACCTA
GTTATTATTTTTTAATGATTATGTGAAAGTTGAATATAATATACCACTAAAAGTGACAGTTGAAAGTGGTGGCAT
AGGATGGTAGGGTAGAAATTTGGGAGGGAAAAAAGAAATTGGGAGGGTACAGGCAACAGGAGAAAGGAATCAAAC
CACAGAAAAATACAAAGGGAAACTTCTGCTTCACTATTCAGACAAAGACAGCCCTAATGACATCACCAACAGTCA
AAGCAATTAGAGACCATACCTAATATTGTTTAAATTCTAGATGTAGGCTAACAATGAAAAGTATTTGCCAAACTG
AATAAAACTGTCATGGTTACCTTGAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6504

MDYPTLLLALLHVYRALCEEVLWHTSVPFAENMSLECVYPSMGILTQVEWFKIGTQQDSIAIFSPTHGMVIRKPY
AERVYFLNSTMASNNMTLFFRNASEDDVGYYSCSLYTYPQGTWQKVIQVVQSDSFEAAVPSNSHIVSEPGKNVTL
TCQPQMTWPVQAVRWEKIQPRQIDLLTYCNLVHGRNFTSKFPRQIVSNCSHGRWSVIVIPDVTVSDSGLYRCYLQ
ASAGENETFVMRLTVAEGKTDNQYTLFVAGGTVLLLLFVISITTIIVIFLNRRRRRERRDLFTESWDTQKAPNNY
RSPISTGQPTNQSMDDTREDIYVNYPTFSRRPKTRV

FIGURE 6505

CCGGGCTCTACCCAGAGCAAGACCCTGATGGCTGCGGTGTTTCTGGTAACGCTTTATGAATACTCGCCGCTTTTC
TACATCGCGGTGGTCTTTACCTGCTTCATCGTGACCACCGGCCTGGTATTGGGATGGTTTGGTTGGGATGTTCCA
GTAATTCTGAGAAATTCAGAAGAGACCCAGTTCAGCACAAGAGTTTTCAAAAAGCAAATGAGACAAGTCAAGAAT
CCTTTTGGCTTAGAGATCACTAATCCATCTTCAGCTTCAATTACAACTGGCATAACCTTGACAACAGATTGCCTT
GAAGATAGCCTCCTTACATGCTACTGGGGGTGCAGTGTTCAAAAATTATATGAAGCTCTGCAGAAGCATGTTTAT
TGCTTCAGAATAAGCACTCCCCAAGCATTAGAAGATGCTCTGTATAGTGAATATCTCTATCAGGAACAGTATTTT
ATTAAAAAGGATAGCAAAGAAGAAATATATTGCCAGTTACCAAGAGATACTAAAATTGAAGACTTTGGTACAGTA
CCCAGATCTCGCTATCCATTGGTAGCGCTATTGACCTTAGCTGATGAGGATGACCGGGAAATTTATGATATTATT
TCCATGGTGTCAGTGATTCATATTCCTGATAGGACTTATAAACTATCCTGCAGAATATTGTATCAATATTTACTC
TTGGCTCAAGGTCAATTTCATGATCTTAAGCAACTTTTCATGTCTGCAAATAATAATTTCACTCCCTCCAACAAT
TCCTCTTCAGAAGAAAAAAACACAGACAGAAGTTTGTTGGAAAAGGTGGGACTCTCTGAAAGTGAAGTTGAGCCA
TCGGAAGAGAACAGCAAGGACTGTGTTGTTTGCCAGAATGGGACTGTGAACTGGGTACTCTTACCATGCAGACAC
ACATGCCTGTGTGATGGCTGTGTGAAGTATTTTCAGCAGTGCCCAATGTGCAGGCAGTTTGTTCAGGAATCTTTT
GCACTTTGCAGTCAAAAAGAGCAAGATAAAGACAAACCGAAGACTCTTTGAAGACATCGTAACACTGAAAAGTAC
ACTTTCTACTAAAGATGCAGAAATTGATGATCTTGGAATTCATCATAACATGGAATCTACAGTACTGACCATCAA
TGAAAATTATATTTTAACTTCATATTTGTATGGTACTTGGATGATAAAAATTAATTATTCCTTTCTGCTTAGTGA
ATGAATACTGGAATCCATCTGTGTTGATACAATAAAAATTCATTCAACTCTTGAAAAG

FIGURE 6506

MAAVFLVTLYEYSPLFYIAVVFTCFIVTTGLVLGWFGWDVPVILRNSEETQFSTRVFKKQMRQVKNPFGLEITNP
SSASITTGITLTTDCLEDSLLTCYWGCSVQKLYEALQKHVYCFRISTPQALEDALYSEYLYQEQYFIKKDSKEEI
YCQLPRDTKIEDFGTVPRSRYPLVALLTLADEDDREIYDIISMVSVIHIPDRTYKLSCRILYQYLLLAQGQFHDL
KQLFMSANNNFTPSNNSSSEEKNTDRSLLEKVGLSESEVEPSEENSKDCVVCQNGTVNWVLLPCRHTCLCDGCVK
YFQQCPMCRQFVQESFALCSQKEQDKDKPKTL

FIGURE 6507

TGCCAAGCCCTGCCATGTAGTGCACGCAGGACATCAACAAACACAGATAACAGGAAATGATCCATTCCCTGTGGT
CACTTATTCTAAAGGCCCCAACCTTCAAAGTTCAAGTAGTGATATGGATGACTCCACAGAAAGGGAGCAGTCACG
CCTTACTTCTTGCCTTAAGAAAAGAGAAGAAATGAAACTGAAGGAGTGTGTTTCCATCCTCCCACGGAAGGAAAG
CCCCTCTGTCCGATCCTCCAAAGACGGAAAGCTGCTGGCTGCAACCTTGCTGCTGGCACTGCTGTCTTGCTGCCT
CACGGTGGTGTCTTTCTACCAGGTGGCCGCCCTGCAAGGGGACCTGGCCAGCCTCCGGGCAGAGCTGCAGGGCCA
CCACGCGGAGAAGCTGCCAGCAGGAGCAGGAGCCCCCAAGGCCGGCCTGGAGGAAGCTCCAGCTGTCACCGCGGG
ACTGAAAATCTTTGAACCACCAGCTCCAGGAGAAGGCAACTCCAGTCAGAACAGCAGAAATAAGCGTGCCGTTCA
GGGTCCAGAAGAAACAGTCACTCAAGACTGCTTGCAACTGATTGCAGACAGTGAAACACCAACTATACAAAAAGG
ATCTTACACATTTGTTCCATGGCTTCTCAGCTTTAAAAGGGGAAGTGCCCTAGAAGAAAAAGAGAATAAAATATT
GGTCAAAGAAACTGGTTACTTTTTTATATATGGTCAGGTTTTATATACTGATAAGACCTACGCCATGGGACATCT
AATTCAGAGGAAGAAGGTCCATGTCTTTGGGGATGAATTGAGTCTGGTGACTTTGTTTCGATGTATTCAAAATAT
GCCTGAAACACTACCCAATAATTCCTGCTATTCAGCTGGCATTGCAAAACTGGAAGAAGGAGATGAACTCCAACT
TGCAATACCAAGAGAAAATGCACAAATATCACTGGATGGAGATGTCACATTTTTTGGTGCATTGAAACTGCTGTG
ACCTACTTACACCATGTCTGTAGCTATTTTCCTCCCTTTCTCTGTACCTCTAAGAAGAAAGAATCTAACTGAAAA
TA

FIGURE 6509

GCGAGACCCAGCCTAAAGAGAGCCCGGAGCCAGCGTGGGAGGCCGCTGCCGTCGCGCGCCTTGGTTTTTCTGTTC
CTTTTTTTTTTTTTTTTTTTAACTTCCTGCCTATACACACGCAGCCATCAGCCCACAAAGACATGACTACCAACG
CGGGCCCCTTGCACCCATACTGGCCTCAGCACCTAAGACTGGACAACTTTGTACCTAATGACCGCCCCACCTGGC
ATATACTGGCTGGCCTCTTCTCTGTCACAGGGGTCTTAGTCGTGACCACATGGCTGTTGTCAGGTCGTGCTGCGG
TTGTCCCATTGGGGACTTGGCGGCGACTGTCCCTGTGCTGGTTTGCAGTGTGTGGGTTCATTCACCTGGTGATCG
AGGGCTGGTTCGTTCTCTACTACGAAGACCTGCTTGGAGACCAAGCCTTCTTATCTCAACTCTGGAAAGAGTATG
CCAAGGGAGACAGCCGATACATCCTGGGTGACAACTTCACAGTGTGCATGGAAACCATCACAGCTTGCCTGTGGG
GACCACTCAGCCTGTGGGTGGTGATCGCCTTTCTCCGCCAGCATCCCCTCCGCTTCATTCTACAGCTTGTGGTCT
CTGTGGGCCAGATCTATGGGGATGTGCTCTACTTCCTGACAGAGCACCGCGACGGATTCCAGCACGGAGAGCTGG
GCCACCCTCTCTACTTCTGGTTTTACTTTGTCTTCATGAATGCCCTGTGGCTGGTGCTGCCTGGAGTCCTTGTGC
TTGATGCTGTGAAGCACCTCACTCATGCCCAGAGCACGCTGGATGCCAAGGCCACAAAAGCCAAGAGCAAGAAGA
ACTGAGGAGTGGTGGACCAGGCTCGAACACTGGCCGAGGAGGAGCTCTCTGCCTGCCAGAAGAGTCTAGTCCTGC
TCCCACAGTTTGGAGGGACAAAGCTAATTGATCTGTCACACTCAGGCTCATGGGCAGGCACAAGAAGGGGAATAA
AGGGGCTGTGTGAAGGCACTGCTGGGAGCCATTAGAACACAGATACAAGAGAAGCCAGGAGGTCTATGATGGTGA
CGATTTTTAAAATCAGGAAATAAAAGATCTTGACTCTAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6508

MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCCLTVVSFYQVAALQGD
LASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAPGEGNSSQNSRNKRAVQGPEETVTQDCLQLI
ADSETPTIQKGSYTFVPWLLSFKRGSALEEKENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELS
LVTLFRCIQNMPETLPNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL

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FIGURE 6511

GAATTCCGCCCAGACGCAGGCTTCTTCTCGGGTCTTGGTCCTGCATCCTCTCTCTCCCAGAGCCTCCGTTAGGGG
GTGGGAAAGGACTTTGCCATAGGTCGCTGAGGCCACCATCTGCTCTCTTACTGGCCAAGGGCGTAAAAAGATAGT
CTTCCCATTAGCTAGAGAGCAAACCCCAGAAAGCCTATTGGTTGCGCCGTCCGCGGGCCTTGGTCCGCTTTGAAG
GCGGGCTGCGGCTGCGAGAGGAGGGCGGGCGGGAGGCTAGCTGTTGTCGTGGTTGCTCGGAGGCACGTGTGCAGT
CCCGGAAGCGGCGAGGGGAAACTGCTCCGCGCGCGCCCGCGGGAGGAGGAACCGCCCGGTCCTTTAGGGTCCGGG
CCCGGCCGGGCC**ATG**GATTCAATGCCTGAGCCCGCGTCCCGCTGTCTTCTGCTTCTTCCCTTGCTGCTGCTGCTG
CTGCTGCTGCTGCCGGCCCCGGAGCTGGGCCCGAGCCAGGCCGGAGCTGAGGAGAACGACTGGGTTCGCCTGCCC
AGCAAATGCGAAGTGTGTAAATATGTTGCTGTGGAGCTGAAGTCAGCCTTTGAGGAAACCGGCAAGACCAAGGAG
GTGATTGGCACGGGCTATGGCATCCTGGACCAGAAGGCCTCTGGAGTCAAATACACCAAGTCGGACTTGCGGTTA
ATCGAAGTCACTGAGACCATTTGCAAGAGGCTCCTGATTATAGCCTGCACAAGGAGAGGACCGGCAGCAATCGAT
TTGCCAAGGGCATGTCAGAGACCTTTGAGACATTACACAACCTGGTACACAAAGGGGTCAAGGTGG**TGA**TGGACA
TCCCCTATGAGCTGTGGAACGAGACTTCTGCAGAGGTGGCTGACCTCAAGAAXCAGTGTGATGTGCTGGTGGAAG
AGTTTGAGGAGGTGATCGAGGACTGGTACAGGAACCACCAGGAGGAAGACCTGACTGAATTC

FIGURE 6510

MTTNAGPLHPYWPQHLRLDNFVPNDRPTWHILAGLFSVTGVLVVTTWLLSGRAAVVPLGTWRRLSLCWFAVCGFI
HLVIEGWFVLYYEDLLGDQAFLSQLWKEYAKGDSRYILGDNFTVCMETITACLWGPLSLWVVIAFLRQHPLRFIL
QLVVSVGQIYGDVLYFLTEHRDGFQHGELGHPLYFWFYFVFMNALWLVLPGVLVLDAVKHLTHAQSTLDAKATKA
KSKKN

7250/8433

FIGURE 6512

MDSMPEPASRCLLLLPLLLLLLLLLPAPELGPSQAGAEENDWVRLPSKCEVCKYVAVELKSAFEETGKTKEVIGT
GYGILDQKASGVKYTKSDLRLIEVTETICKRLLIIACTRRGPAAIDLPRACQRPLRHYTTWYTKGSRW

FIGURE 6513

CTGCATGTGTGTGTCTCATAGACACTTCAGATTTACCAAGCCTAAAATGGATCTTGTCCTTAGTTTCATATCTCA
CAGTTAATGCATCATCATCTCACATTTTCCCCTTTCTGTCATTAGTCTTCACTTTCCTTACCACTCCAAACTTGT
TATTCCTTATTCCCGAATTCTTGAGTTTATTCCCTTTCTGTAGTAAGTTTGTGCATTTGTATCAGCCTCTACTCT
AAGACAGAAATACCATCACCTTACTTCTCCGGTCACAATATTTACTGGCTTCCTATTACTTAACTGCAGGATGAA
ATTTAAACCCTAAGCGTGATTTATGAGACCCCTTTATTATTTCTCCCTTGCCTATCTCTGTTGCCTCCTGTCTTA
CCTTTTCTTCATTATTCTATATGGTCCCCTCCCCATGGCCCCCACAAGTGACACATGACTCTTAGCCCATCCCAC
ATTTGGTTATGCCTTTGCCCACACAGTTTCCTGGGGCAGCAGTGTCTTCCTTTTTCTCCCTACTCATGCATACAA
GCTACCTAATAAACACTTATTCCTTCTTCAGAGTGCCAGATGTCTATTCTCACCATCATGGATTCTTTGGTGCAC
CTTTGTGTTTCTATTGTATATTTTACATATTATTTGTCTCAGGACAATGTAATTGTTTCCATCTTTCTCTTCACT
AGTATAATATCTTTATGGGCAGGGACTTACATTTTTATTTTTTTTTATCCCCAGAGTTTAGTATAATATCTGGTA
CTACGTATTTATTATTTCTCAATAAATATTTGAGAAAGGAATGAACCTTTCTTTGGTAATATGAGTATTTTTATT
TGCAAAAAAAAAAAGTAAAGTGTGGTATGCCATATTTAGTAGAGATGTTAATTCTGAAATGATTATTATTTAATG
TCCATTGAACTACTAGTTTTATATGACTACTTGAGAACTAAGTATAGTTAACGGTATTAATCATCAGATAACATT
GCTGTATGAACCATAAGATTTTGGTATGTTTTGCAGATCAAGGATCTGGATTTTGCATAACTGGTAAAATAGAAG
CTGGTTATATCCAAACTGGTGACCGACTACTGGCAATGCCTCCTAATGAAACTTGTACCGTGAAAGGAATCACTC
TGCATGATGAACCTGTCGACTGGGCGGCAGCAGGCGATCATGTTAGTCTTACTTTGGTTGGGATGGATATCATCA
AAATCAATGTTGGCTGCATATTTTGTGGCCCCAAAGTACCCATTAAAGCTTGCACTCGTTTCAGAGCCCGAATCC
TCATCTTTAATATTGAAATTCCTATCACTAAAGGATTTCCTGTGCTGTTACACTACCAAACTGTCAGTGAACCCG
CCGTTATTAAACGATTGATTAGTGTCTTAAACAAAAGCACGGGTGAAGTCACAAAGAAAAAGCCTAAGTTTTTGA
CTAAAGGCCAGAATGCATTGGTAGAGCTACAGACACAAAGACCAATAGCTCTTGAGCTATATAAAGACTTTAAAG
AGCTGGGGAGGTTCATGCTACGTTACGGTGGTTCTACAATAGCTGCTGGTGTTGTCACTGAGATAAAAGAATGAT
GGGTCAGAATTTCTACCACGTTTCTGGATACAGTGAAATAGCTAACCTCTGTTTCAAGAATGCAGTTATTAAGTC
AAAGGAACAATGTGCAATTGATATGTTTTTAGATGAGAGAGAAAAATTAAAGCTAAAATTAGCTGCAAAGAAGTA
TTAATAATCACCTCTGCAAAAATTCTAAGTTGCCAACTGGCAAAGAAAGTCTAATGTTAAAAACAACTTTGCCTT
TGAAACGTTAATAAATGGATTTACTTTGCTAAGATTTATGGCAAGTGTCAAAAATAGTATCTGAAGATACTGAAT
CATCATGAAATGAACTCTACTTCTGGCCAAAGCACAATGTATTTGCAGTTTTCTCTTTTGATTCAATTATACTGC
ACATGTTTTAAGGAAAAGTAACTTAATTGGGTTTTTCAGGCAGTTGATATTTGACCTAAGCTTTTTTTTTTTTTT
TTTTTCCAGTTAATGCTAAGAAAAGATTTGGGGAAGGTTATAATAAAAGTATTTTGTGGTGACCATAAGAATGTC
CCTCCCCAAACAAGTAAACTTGTGAAAGTTTAATTTGGAATTAGTGGAAGCTGTTCCTTTGAAAGCCAAGATATT
ATTTAAGTTGTAAAGCCAGCTAATAAAATGCCTTAGTTTGAGCATAATAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6514

MNHKILVCFADQGSGFCITGKIEAGYIQTGDRLLAMPPNETCTVKGITLHDEPVDWAAAGDHVSLTLVGMDIIKI
NVGCIFCGPKVPIKACTRFRARILIFNIEIPITKGFPVLLHYQTVSEPAVIKRLISVLNKSTGEVTKKKPKFLTK
GQNALVELQTQRPIALELYKDFKELGRFMLRYGGSTIAAGVVTEIKE

FIGURE 6515

CGCACTCCCTGCTGGGTGAGCAGCACTGTAAAGATGAAGCTGGCTAACTGGTACTGGCTGAGCTCAGCTGTTCTT
GCCACTTACGGTTTTTTGGTTGTGGCAAACAATGAAACAGAGGAAATTAAAGATGAAAGAGCAAAGGATGTCTGC
CCAGTGAGACTAGAAAGCAGAGGGAAATGCGAAGAGGCAGGGGAGTGCCCCTACCAGGTAAGCCTGCCCCCCTTG
ACTATTCAGCTCCCGAAGCAATTCAGCAGGATCGAGGAGGTGTTCAAAGAAGTCCAAAACCTCAAGGAAATCGTA
AATAGTCTAAAGAAATCTTGCCAAGACTGCAAGCTGCAGGCTGATGACAACGGAGACCCAGGCAGAAACGGACTG
TTGTTACCCAGTACAGGAGCCCCGGGAGAGGTTGGTGATAACAGAGTTAGAGAATTAGAGAGTGAGGTTAACAAG
CTGTCCTCTGAGCTAAAGAATGCCAAAGAGGAGATCAATGTACTTCATGGTCGCCTGGAGAAGCTGAATCTTGTA
AATATGAACAACATAGAAAATTATGTTGACAGCAAAGTGGCAAATCTAACATTTGTTGTCAATAGTTTGGATGGC
AAATGTTCAAAGTGTCCCAGCCAAGAACAAATACAGTCACGTCCAGTTCAACATCTAATATATAAAGATTGCTCT
GACTACTACGCAATAGGCAAAAGAAGCAGTGAGACCTACAGAGTTACACCTGATCCCAAAAATAGTAGCTTTGAA
GTTTACTGTGACATGGAGACCATGGGGGGAGGCTGGACAGTGCTGCAGGCACGTCTCGATGGGAGCACCAACTTC
ACCAGAACATGGCAAGACTACAAAGCAGGCTTTGGAAACCTCAGAAGGGAATTTTGGCTGGGGAACGATAAAATT
CATCTTCTGACCAAGAGTAAGGAAATGATTCTGAGAATAGATCTTGAAGACTTTAATGGTGTCGAACTATATGCC
TTGTATGATCAGTTTTATGTGGCTAATGAGTTTCTCAAATATCGTTTACACGTTGGTAACTATAATGGCACAGCT
GGAGATGCATTACGTTTCAACAAACATTACAACCACGATCTGAAGTTTTTCACCACTCCAGATAAAGACAATGAT
CGATATCCTTCTGGGAACTGTGGGCTGTACTACAGTTCAGGCTGGTGGTTTGATGCATGTCTTTCTGCAAACTTA
AATGGCAAATATTATCACCAAAAATACAGAGGTGTCCGTAATGGGATTTTCTGGGGTACCTGGCCTGGTGTAAGT
GAGGCACACCCTGGTGGCTACAAGTCCTCCTTCAAAGAGGCTAAGATGATGATCAGACCCAAGCACTTTAAGCCA
TAAATCACTCTGTTCATTCCTCCAGGTATTCGTTATCTAATAGGGCAATTAATTCCTTCAGCACTTTAGAATATG
CCTTGTTTCATATTTTTCATAGCTAAAAAATGTTTGACATCCTTTGAGATATTTTATTACTAAAATCTGCC

FIGURE 6516

MKLANWYWLSSAVLATYGFLVVANNETEEIKDERAKDVCPVRLESRGKCEEAGECPYQVSLPPLTIQLPKQFSRI
EEVFKEVQNLKEIVNSLKKSCQDCKLQADDNGDPGRNGLLLPSTGAPGEVGDNRVRELESEVNKLSSELKNAKEE
INVLHGRLEKLNLVNMNNIENYVDSKVANLTFVVNSLDGKCSKCPSQEQIQSRPVQHLIYKDCSDYYAIGKRSSE
TYRVTPDPKNSSFEVYCDMETMGGGWTVLQARLDGSTNFTRTWQDYKAGFGNLRREFWLGNDKIHLLTKSKEMIL
RIDLEDFNGVELYALYDQFYVANEFLKYRLHVGNYNGTAGDALRFNKHYNHDLKFFTTPDKDNDRYPSGNCGLYY
SSGWWFDACLSANLNGKYYHQKYRGVRNGIFWGTWPGVSEAHPGGYKSSFKEAKMMIRPKHFKP

FIGURE 6517

TTTTCCCGCGAAACTCGGCGGCTGAGCGTGGAGGTTCTTGTCTCCCCTGGTTTGTGAAGTGCGGAAAACCAGAGG
CGCAGTCATGTCGGGATTCGACGATCCTGGCATTTTCTACAGCGACAGCTTCGGGGGCGACGCCCAGGCCGACGA
GGGGCAGGCCCGCAAATCGCAGCTGCAGAGGCGCTTCAAGGAGTTCCTGCGGCAGTACCGAGTGGGCACCGACCG
CACGGGCTTCACCTTCAAATACAGGGATGAACTCAAGCGGCATTACAACCTGGGGGAGTACTGGATTGAGGTGGA
GATGGAGGATCTGGCCAGCTTTGATGAGGACCTGGCCGACTACTTGTACAAGCAGCCAGCCGAGCACCTGCAGCT
GCTGGAGGAAGCTGCCAAGGAGGTAGCTGATGAGGTGACCCGGCCCCGGCCTTCTGGGGAGGAGGTGCTCCAGGA
CATCCAGGTCATGCTCAAGTCGGACGCCAGCCCTTCCAGCATTCGTAGCCTGAAGTCGGACATGATGTCACACCT
GGTGAAGATCCCTGGCATCATCATCGCGGCCTCTGCGGTCCGTGCCAAGGCCACCCGCATCTCTATCCAGTGCCG
CAGCTGCCGCAACACCCTCACCAACATTGCCATGCGCCCTGGCCTCGAGGGCTATGCCCTGCCCAGGAAGTGCAA
CACAGATCAGGCTGGACGCCCCAAATGCCCATTGGACCCGTACTTCATCATGCCCGACAAATGCAAATGCGTGGA
CTTCCAGACCCTGAAGCTGCAGGAGCTGCCTGATGCAGTCCCCCACGGGGAGATGCCCAGACACATGCAGCTCTA
CTGCGACAGGTACCTGTGTGACAAGGTCGTCCCTGGGAACAGGGTTACCATCATGGGCATCTACTCCATCAAGAA
GTTTGGCCTGACTACCAGCAGGGGCCGTGACAGGGTGGGCGTGGGCATCCGAAGCTCCTACATCCGTGTCCTGGG
CATCCAGGTGGACACAGATGGCTCTGGCCGCAGCTTTGCTGGGGCCGTGAGCCCCCAGGAGGAGGAGGAGTTCCG
TCGCCTGGCTGCCCTCCCAAATGTCTATGAGGTCATCTCCAAGAGCATCGCCCCCTCCATCTTTGGGGGCACAGA
CATGAAGAAGGCCATTGCCTGCCTGCTCTTTGGGGGCTCCCGAAAGAGGCTCCCTGATGGACTTACTCGCCGAGG
AGACATCAACCTGCTGATGCTAGGGGACCCTGGGACAGCCAAGTCCCAGCTTCTGAAGTTTGTGGAGAAGTGTTC
TCCCATTGGGGTATACACGTCTGGGAAAGGCAGCAGCGCAGCTGGACTGACAGCCTCGGTGATGAGGGACCCTTC
GTCCCGGAATTTCATCATGGAGGGCGGAGCCATGGTCCTGGCCGATGGTGGGGTCGTCTGTATTGACGAGTTTGA
CAAGATGCGAGAAGATGACCGTGTGGCAATCCACGAAGCCATGGAGCAGCAGACCATCTCTATCGCCAAGGCTGG
GATCACCACCACCCTGAACTCCCGCTGCTCCGTCCTGGCTGCTGCCAACTCAGTGTTCGGCCGCTGGGATGAGAC
GAAGGGGGAGGACAACATTGACTTCATGCCCACCATCTTGTCGCGCTTCGACATGATCTTCATCGTCAAGGATGA
GCACAATGAGGTGAGGGATGTGATGCTGGCCAAGCATGTCATCACTCTGCACGTGAGTGCACTGACACAGACACA
GGCTGTGGAGGGCGAGATTGACCTGGCCAAGCTGAAGAAGTTTATTGCCTACTGCCGAGTGAAGTGTGGCCCCCG
GCTGTCAGCAGAGGCTGCAGAGAAACTGAAGAACCGCTACATCATCATGCGGACGGGGCCCGTCAGCACGAGAGG
GACAGTGACCGCGTCCAGCATCCCCATCACTGTGCGGCAGTTGGAGGCCATTGTGCGCATCGCGGAAGCCCTCAG
CAAGATGAAGCTGCAGCCCTTCGCCACAGAGGCAGATGTGGAGGAGGCCCTGCGGCTCTTCCAAGTGTCCACGTT
GGATGCTGCCTTGTCCGGTACCCTGTCAGGGGTGGAGGGCTTCACCAGCCAGGAGGACCAGGAGATGCTGAGCCG
CATCGAGAAGCAGCTCAAGCGCCGCTTTGCCATTGGCTCCCAGGTGTCTGAGCACAGCATCATCAAGGACTTCAC
CAAGCAGAAATACCCGGAGCACGCCATCCACAAGGTGCTGCAGCTCATGCTGCGGCGCGGCGAGATCCAGCATCG
CATGCAGCGCAAGGTTCTCTACCGCCTCAAGTGAGTCGCGCCGCTCACTGGACTCATGGACTCGCCACGCTCGCC
CTCCTTGCCGCTGCCTGCCATTGACAATGTTGCTGGGACCTCTGCCTCCCCACTGCAGCCCTCGAACTTCCCAGG
CACCCTCCTTTCTGCCCCAGAGGAAGGAGCTGTAGTGTCCTGCTGCCTCTGGGCGCCCGCTCTAGCGGGTTCTGG
GAAGTGTGCTTTTGGCATCCGTTAATAATAAAGCCACGGTGTGTTCAGGT

FIGURE 6518

MSGFDDPGIFYSDSFGGDAQADEGQARKSQLQRRFKEFLRQYRVGTDRTGFTFKYRDELKRHYNLGEYWIEVEME
DLASFDEDLADYLYKQPAEHLQLLEEAAKEVADEVTRPRPSGEEVLQDIQVMLKSDASPSSIRSLKSDMMSHLVK
IPGIIIAASAVRAKATRISIQCRSCRNTLTNIAMRPGLEGYALPRKCNTDQAGRPKCPLDPYFIMPDKCKCVDFQ
TLKLQELPDAVPHGEMPRHMQLYCDRYLCDKVVPGNRVTIMGIYSIKKFGLTTSRGRDRVGVGIRSSYIRVLGIQ
VDTDGSGRSFAGAVSPQEEEEFRRLAALPNVYEVISKSIAPSIFGGTDMKKAIACLLFGGSRKRLPDGLTRRGDI
NLLMLGDPGTAKSQLLKFVEKCSPIGVYTSGKGSSAAGLTASVMRDPSSRNFIMEGGAMVLADGGVVCIDEFDKM
REDDRVAIHEAMEQQTISIAKAGITTTLNSRCSVLAAANSVFGRWDETKGEDNIDFMPTILSRFDMIFIVKDEHN
EVRDVMLAKHVITLHVSALTQTQAVEGEIDLAKLKKFIAYCRVKCGPRLSAEAAEKLKNRYIIMRTGPVSTRGTV
TASSIPITVRQLEAIVRIAEALSKMKLQPFATEADVEEALRLFQVSTLDAALSGTLSGVEGFTSQEDQEMLSRIE
KQLKRRFAIGSQVSEHSIIKDFTKQKYPEHAIHKVLQLMLRRGEIQHRMQRKVLYRLK

FIGURE 6519

TTGGAACACCTGGCGAGTCCTCGGTGTCGGTGGCCGGCAGTCATCTCGCGGCCGTTCAGAATTATAAGGCTGTCT
GCAGAGATTTGAAAA**ATG**GCAACAAATGAAAGTGTCAGCATCTTTAGTTCAGCATCCTTGGCTGTGGAATATGTA
GATTCACTTTTACCTGAGAATCCTCTGCAAGAACCATTTAAAAATGCTTGGAACTATATGTTGAATAATTATACA
AAGTTCCAGATTGCAACATGGGGATCCCTTATAGTTCATGAAGCCCTTTATTTCTTATTCTGTTTACCTGGATTT
TTATTTCAATTTATACCTTATATGAAAAAATACAAAATTCAAAAGGATAAGCCAGAGACATGGGAAAACCAATGG
AAGTGTTTCAAAGTTCTTCTCTTTAATCACTTCTGTATCCAGCTGCCTTTGATTTGTGGAACCTATTATTTTACA
GAGTATTTCAATATTCCTTATGATTGGGAAAGAATGCCAAGATGGTATTTTCTTTTGGCAAGATGCTTTGGTTGT
GCAGTCATTGAAGATACTTGGCACTATTTTCTGCATAGACTCTTACACCACAAAAGAATATACAAGTATATTCAT
AAAGTTCATCATGAGTTTCAGGCTCCATTTGGAATGGAAGCTGAATATGCACATCCTTTGGAGACTCTAATTCTT
GGAACTGGATTTTTCATTGGAATCGTGCTTTTGTGTGATCATGTAATTCTTCTTTGGGCATGGGTGACCATTCGT
TTATTAGAAACTATTGATGTCCATAGTGGTTATGATATTCCTCTCAACCCTTTAAATCTGATCCCTTTCTATGCT
GGTTCTCGGCATCATGATTTCCACCACATGAACTTCATTGGAAACTATGCTTCAACATTTACATGGTGGGATCGA
ATTTTTGGAACAGACTCTCAGTATAATGCCTATAATGAAAAGAGGAAGAAGTTTGAGAAAAAAGACTGAA**TAA**ATA
TCTCACGTAAACCTTCCTGAAAGATAAACGTTTTCCTGAATTCAGAAACTAGTAGCTAACATTGCTTCTGGAGAG
CAGAAATAAGCATGTCTTCTGGCTACTAAGTGATAAAAAGAACATTAACAACCTTTAATTACCTTCCTAGTGGGA
ACTTTTTCTACTTTACCTACAAGTTCTATATATGTAGAAATGAATAAATATATATTTAAGTACAGTTTTCATGAG
GAAGTTTTAAAAGACCATGTTCCTAAGCTTCCAAGAAGGTTTTGGATACTAGAAGTATTAATCTATGGCTTTTCT
CCCAGTAAAACCATAGGCCTGAAGTTCACATTGGGTCTTTAAATCTTTTAGATATATACTGGTCATTTCAGAAAA
TTCTTCATAGTGGTATTGGCCTTATATTTAACTTTTTTTTTATTTTTTTTTTGAGACAAAGCCACACTCTGTCTC
CTTGTCTGGAGTGTGGTGGCACAGTCTCAGCTCACTGCAACCTCTGCCTCCCAGTTCAAGCAATTCTTCTGCCTC
AGCCTCCCAAGTAGCTGGGATTACAGGCACCCGCCACCACGCCCAGCTAATTTTTGTATTTTTGTAGAGATGGGG
TTTCTCGATGTTGGCCAGGCTGGTCTCAAACTTCTGACCTCAAGTGATCTGCCCACCTTGGCCTCCCAAAGTGCT
GGGATTACAGGTGTAAGCCACTGCGCCCGGCCTTTTTAACTTTAAACATGTTTTAGAATTCACCTAAAGATCAAA
ATATCATGGATTGAAC

FIGURE 6520

MATNESVSIFSSASLAVEYVDSLLPENPLQEPFKNAWNYMLNNYTKFQIATWGSLIVHEALYFLFCLPGFLFQFI
PYMKKYKIQKDKPETWENQWKCFKVLLFNHFCIQLPLICGTYYFTEYFNIPYDWERMPRWYFLLARCFGCAVIED
TWHYFLHRLLHHKRIYKYIHKVHHEFQAPFGMEAEYAHPLETLILGTGFFIGIVLLCDHVILLWAWVTIRLLETI
DVHSGYDIPLNPLNLIPFYAGSRHHDFHHMNFIGNYASTFTWWDRIFGTDSQYNAYNEKRKKFEKKTE

FIGURE 6521A

GGCAGGGTGACTGGGGTCCCATGACAGCTGCTGTGACCCCAGCACCTTCCTCAGGATGTGGGGGCCTGGCAGAGG
GCTGGGCCCACAGTTGGGGCTACTTCCTGTGCTGAAGGAAGTCCTCTTGCCATTCCTGCTGCCCTGCCGCTGCCT
CCCTGGGAACCCATGTGTCCTTGTGGCCCCTCTGAGCAGCCCCCTCCTCCTTCAGGGCAGGAACTGCTGCCACAA
CCTCAGGCTGGGCACCAAACACCCGTGCCCGCCAATGCGGCCCAGCCCCCGGAGAGTCAGGCCCACAGAGCATGC
CCATGTGGGCCGGCGGTGTGGGGAGCCCTCGGCGGGGCATGGCCCCTGCGTCCACAGATGACCTCTTTGCCCGCA
AGCTGCGCCAGCCAGCAAGGCCCCCGCTGACACCGCACACCTTCGAGCCGAGGCCAGTCCGGGGCCCACTCCTGC
GCAGCGGCAGCGATGCAGGCGAGGCCAGGCCCCCCACGCCAGCCAGCCCCCGTGCCCGTGCCCACAGCCACGAAG
AGGCCAGCCGACCTGCAGCCACTTCCACCCGGCTCTTCACTGACCCGCTGGCACTGCTGGGGCTGCCAGCAGAGG
AACCAGAGCCTGCCTTCCCACCAGTGCTTGAGCCTCGATGGTTTGCCCACTATGACGTGCAAAGCCTGCTCTTTG
ATTGGGCTCCGAGGTCTCAGGGGATGGGGAGCCACTCAGAGGCCAGCTCTGGGACCCTGGCTTCAGCCGAGGACC
AGGCTGCCAGCTCGGACCTGCTGCATGGGGCACCTGGCTTTGTGTGTGAGCTCGGGGGTGAGGGTGAGCTAGGCC
TGGGTGGACCAGCATTCCCACCTGTGCCCCCTGCACTGCCCAACGCGGCCGTGTCCATCCTGGAGGAGCCACAGA
ACCGAACCTCGGCCTACAGCCTGGAGCACGCAGACCTGGGTGCTGGCTACTACCGCAAATACTTCTATGGCAAAG
AACATCAGAACTTCTTCGGGATGGACGAGTCGCTGGGCCCGGTGGCAGTGAGCCTGCGGCGGGAGGAGAAGGAGG
GCAGCGGAGGGGGCACCCTGCACAGCTACCGCGTCATCGTGCGGACCACGCAGCTCCGGACACTCCGTGGCACCA
TCTCGGAGGACGCGCTGCCGCCGGGGCCCCCACGGGGTCTGTCCCCAAGGAAACTTCTGGAGCACGTGGCGCCGC
AGCTGAGCCCCAGCTGCCTGCGCCTGGGCTCAGCTTCACCCAAGGTACCACGGACGCTGCTCACACTGGATGAGC
AAGTGCTGAGCTTCCAACGCAAGGTGGGCATCCTGTACTGCCGGGCGGGCCAGGGCTCGGAGGAGGAGATGTACA
ACAACCAGGAGGCGGGACCGGCCTTCATGCAGTTTCTCACCTTGCTGGGCGATGTGGTGCGGCTCAAAGGCTTTG
AGAGTTACCGGGCCCAGCTAGACACCAAAACGGATTCCACAGGCACGCACTCCCTCTACACCACATACCAGGACC
ACGAGATCATGTTCCACGTGTCCACGATGCTGCCTTACACCCCTAATAACCAGCAGCAGCTCCTCCGGAAGCGCC
ACATTGGCAACGACATTGTGACCATCGTGTTCCAGGAGCCTGGCAGCAAGCCCTTCTGCCCCACCACCATCCGCT
CGCACTTCCAGCACGTGTTCCTAGTGGTGCGGGCACACACACCCTGCACGCCACACACCACCTACAGGGTGGCCG
TGAGCCGCACCCAGGACACCCCTGCCTTCGGGCCAGCTCTGCCTGCTGGCGGAGGCCCCTTCGCAGCCAACGCCG
ACTTCCGGGCCTTCCTGCTGGCCAAAGCGCTGAATGGTGAGCAGGCGGCCGGCCACGCGCGCCAGTTCCACGCCA
TGGCCACGCGCACCCGCCAGCAGTACCTGCAAGACCTGGCCACCAACGAGGTGACCACTACGTCGCTGGACTCGG
CTTCACGCTTCGGCCTGCCCTCCCTGGGTGGGAGGCGCCGGGCGGCCCCTCGGGGCCCAGGCGCCGAGCTGCAGG
CAGCGGGCTCACTGGTGTGGGGAGTGCGCGCGGCGCCCGGGGCGCGGGTCGCCGCCGGGGCTCAGGCGAGCGGCC
CCGAAGGCATCGAGGTGCCCTGCCTGCTGGGCATCTCGGCCGAGGCTCTGGTGCTGGTGGCGCCGCGCGACGGCC
GCGTAGTGTTCAATTGCGCCTGTCGCGACGTGCTGGCCTGGACCTTCTCCGAGCAGCAGCTGGACCTGTACCACG
GCCGCGGGGAGGCGATCACGCTGCGCTTCGACGGGTCCCCCGGCCAAGCCGTGGGCGAGGTGGTGGCGCGCCTGC
AGCTGGTGAGCCGTGGCTGCGAGACCCGCGAGCTGGCGCTGCCCCGCGACGGTCAAGGCCGCCTGGGCTTCGAGG
TGGACGCCGAGGGATTCGTCACGCACGTGGAGCGCTTCACATTCGCCGAGACGGCGGGGCTGCGGCCCGGGGCGC
GCCTCCTGCGCGTGTGCGGCCAGACGCTGCCCAGCCTCCGGCCCGAGGCCGCTGCCCAGCTCCTGCGCTCGGCGC
CCAAGGTCTGCGTCACCGTCCTGCCCCCCGACGAGAGCGGCCGGCCCCGCAGGAGTTTTTCGGAGCTGTACACGC
TGTCGCTGCAGGAGCCTAGCCGGCGGGGGGCCCCAGATCCTGTGCAGGATGAGGTCCACGGGGTGACCCTGCTGC
CCACCACAAAGCAGCTGCTGCACCTGTGCCTGCAAGATGGTGGCAGTCCTCCAGGGCCTGGGGATCTGGCCGAGG
AGAGGACTGAGTTCCTGCACAGCCAGAACTCGCTGTCACCACGCAGCTCTCTGTCGGATGAGGCCCCAGTCCTGC
CCAACACCACCCCGGACCTCCTCCTGGCCACCACAGCCAAGCCATCAGTACCCAGTGCTGACAGTGAGACACCCC
TGACCCAGGACAGGCCAGGCAGTCCCAGTGGCTGTGAGGACAAGGGCAACCCGGCGCCGGAGCTGAGGGCGTCTT
TTCTGCCACGTACCTTGTCTCTGCGGAACTCCATCAGCAGGATCATGTCGGAGGCGGGCAGTGGGACCCTGGAGG
ACGAGTGGCAGGCCATCTCGGAGATTGCCTCTACTTGCAACACCATTCTGGAGTCGCTGTCCCGAGAGGGACAGC
CCATCCCAGAGAGTGGAGACCCTAAGGGAACTCCAAAATCTGATGCTGAGCCAGAGCCTGGGAACCTCTCAGAGA
AGGTCTCTCACTTGGAGTCCATGCTCAGGAAGCTGCAGGAGGACCTGCAGAAGGAGAAGGCGGACAGGGCGGCCC
TGGAGGAGGAGGTGCGGAGCCTGAGACACAACAACCGGCGGCTGCAGGCGGAGTCTGAGAGTGCAGCCACACGCC
TCCTCCTGGCCTCCAAGCAGCTGGGCTCACCCACCGCCGACCTGGCCTGAGCCGTCTGGAACCACTTGGGCCCAT
GAGGGCACTGTGGTCACACTGGGCCCTCCTCAGGAACTCTCCCTGCGGCAGAGGCGTGTCTTAGCACTGCCCCCC
TCCCTAGCCCCTTATTTGGTGGCGGAAGTGGCCTCCACCCCTTCCCTGTTAGTACAATATTCTGTGGAGAAAAGA

FIGURE 6521B

GGACTTCAGGGAGTAAAAAAGCCACTGATGAAAGAAGAAAACTTTAGAGCACAATGGATCTCGAGGTCGAGGGAT
CTCTAGGGAATTGCTGCAGCAGCTTTTAGAGCAGAAGTGACACTTCCGTACAGGCCTAGAAGTAAAGGCAACATC
CACTGAGGAGCAGTTCTTTGATTTGCACCACCACCGGATCCCCCGGGCTGCAGGAATTCGATATCAAGCTTATCG
ATACCGTCGACCTCGAGGGGGGGCCCGGTACCCAATTCGCCCTATAGTGAGTCGTATTAC

FIGURE 6522

MPMWAGGVGSPRRGMAPASTDDLFARKLRQPARPPLTPHTFEPRPVRGPLLRSGSDAGEARPPTPASPRARAHSH
EEASRPAATSTRLFTDPLALLGLPAEEPEPAFPPVLEPRWFAHYDVQSLLFDWAPRSQGMGSHSEASSGTLASAE
DQAASSDLLHGAPGFVCELGGEGELGLGGPAFPPVPPALPNAAVSILEEPQNRTSAYSLEHADLGAGYYRKYFYG
KEHQNFFGMDESLGPVAVSLRREEKEGSGGGTLHSYRVIVRTTQLRTLRGTISEDALPPGPPRGLSPRKLLEHVA
PQLSPSCLRLGSASPKVPRTLLTLDEQVLSFQRKVGILYCRAGQGSEEEMYNNQEAGPAFMQFLTLLGDVVRLKG
FESYRAQLDTKTDSTGTHSLYTTYQDHEIMFHVSTMLPYTPNNQQQLLRKRHIGNDIVTIVFQEPGSKPFCPTTI
RSHFQHVFLVVRAHTPCTPHTTYRVAVSRTQDTPAFGPALPAGGGPFAANADFRAFLLAKALNGEQAAGHARQFH
AMATRTRQQYLQDLATNEVTTTSLDSASRFGLPSLGGRRRAAPRGPGAELQAAGSLVWGVRAAPGARVAAGAQAS
GPEGIEVPCLLGISAEALVLVAPRDGRVVFNCACRDVLAWTFSEQQLDLYHGRGEAITLRFDGSPGQAVGEVVAR
LQLVSRGCETRELALPRDGQGRLGFEVDAEGFVTHVERFTFAETAGLRPGARLLRVCGQTLPSLRPEAAAQLLRS
APKVCVTVLPPDESGRPRRSFSELYTLSLQEPSRRGAPDPVQDEVHGVTLLPTTKQLLHLCLQDGGSPPGPGDLA
EERTEFLHSQNSLSPRSSLSDEAPVLPNTTPDLLLATTAKPSVPSADSETPLTQDRPGSPSGCEDKGNPAPELRA
SFLPRTLSLRNSISRIMSEAGSGTLEDEWQAISEIASTCNTILESLSREGQPIPESGDPKGTPKSDAEPEPGNLS
EKVSHLESMLRKLQEDLQKEKADRAALEEEVRSLRHNNRRLQAESESAATRLLLASKQLGSPTADLA

FIGURE 6523

TGAACCGAGGCAAGGGGGCGCGGCGCACGCAGTATGGCGCCCAACATCTACTTGGTTCGCCAGCGGATCAGTCGA
CTCGGCCAGAGGATGTCCGGCTTCCAGATCAACCTCAACCCGCTCAAGGAGCCACTCGGCTTCATCAAGGTCCTC
GAGTGGATTGCTTCTATCTTTGCTTTTGCCACCTGTGGAGGTTTTAAGGGCCAAACAGAAATTCAAGTGAATTGT
CCTCCTGCAGTTACTGAGAATAAAACTGTTACAGCTACTTTTGGTTATCCATTCAGGTTGAATGAGGCATCATTT
CAGCCACCTCCAGGTGTAAACATATGTGATGTAAATTGGAAAGATTACGTCCTCATAGGCGATTACTCTTCTTCT
GCACAATTCTATGTTACCTTTGCAGTCTTTGTGTTCCTGTACTGCATTGCTGCCCTTCTGCTTTATGTTGGCTAC
ACGAGTCTGTATCTGGATAGTCGTAAACTTCCTATGATAGACTTTGTTGTTACACTTGTTGCCACTTTTTTGTGG
TTGGTGAGCACTTCAGCCTGGGCTAAAGCTCTGACAGATATTAAAATAGCTACTGGTCACAATATTATTGATGAA
CTTCCGCCTTGTAAGAAGAAAGCAGTACTGTGTTACTTTGGCTCTGTGACCAGTATGGGATCCCTAAATGTATCT
GTGATATTTGGCTTTCTAAATATGATACTCTGGGGAGGAAATGCTTGGTTTGTGTACAAGGAGACCAGCCTACAC
AGTCCATCAAATACATCTGCCCCTCATAGCCAAGGAGGTATTCCACCTCCTACCGGAATATAATTAAAGGGAGAA
ATACACTGTATGAAGTATATGTTGATACTATGACATGTTGCCAACACCTTGAGAAGCATTATTTGTTTCTAATAA
AAGTAATGGCTTTGTCAATATATTGGTGGGTTTAAAACTTTGCTGCTTTTTTACATAAAGCCTGTGCCTTTCCTA
GAAAGTTAAGATGTAAATGTATTCTCACATGTAAATTTGAAAGTTCAGGGGTCTATTATGAAATGGATTACACAT
TTTAAATGAACCCATAATTTTTTTCACTAAAGCTGTTTGCCCTCCAAAGTGTTTACACCTAAGCCTAACATGTAT
CGCTCATTCAGAAAACTGTTATATTGTCATACCATAGTAGGAAGAAAAACCTTTATTTGGAATATACACTACTGT
AAGTTTGTACAGATCATATACCTACCACCTGTCTTTGCTTAAAGAGCCTTGATTACATAAATATGTAGGAAAAAA
CATATTGAGTTCAAAATTTATATCTAACATTGTTTATGTTATGATTTTTTTTAATTGCAAAGACTAGGTGTATAT
TTTTTTCTGTTTTTCTAAATGACCCGTGGTACTTAATAGGTGTACTAAAATTGTGTTGGGAGCAGGGATTTGGAA
ATTTCTGAGAGATGTGTAGTTAATTAGTAATTCTGTTTCATGAGATATGATCTGTTATGCTAGTGGTTTAATAGG
CTTGCTATGTAAGTAGAACGTGGCTCAACTAGATATCTTATATGTATGGGCATTACCTCTTAGTGATATTTGTTT
CCTGTCCTTTGTTGCTCATGCTGTTTAAGTGCAGGCTGAGACCCAGCCTCTTTGTAAGTACAGTAAAATAATCCA
CCGTTTTTTACAGACCCTAGTCAAAGGGTTAAAAAAATTAAGATTGCTTTCCATGTTTGAAATTTACCATTGAGA
GTCAATGAAGTTGCTATTTTGAGTTTAGCATTGATATTGTGAAAATAAGTGCAATTTGGATTTCATGTTTCTTAA
TATTCATTCTTGTTTCACAAATGAATGATTAAGGAATTATGCATCATAAAGGAACCTAAGTGAGGTATATGATGA
GTGTATTGTCTTTGCACACACATATAGGTATATTCTGAATACAAGCTTATTCATTTTGCTTCCTAATCTTTTTGT
TGTACAGGGATTCAGGTTTCTTATTCTTACAACATGATTGTTTATATGTGAAGCACATCTTGCTGTTGCCTTATT
TTTGATGCTTTTATTCATGACAAGAATTGTCAATATAAGAATGTATATCTTTGCCGCAACCAATTTAATAAAGGA
GTTGAAAGAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6524

MAPNIYLVRQRISRLGQRMSGFQINLNPLKEPLGFIKVLEWIASIFAFATCGGFKGQTEIQVNCPPAVTENKTVT
ATFGYPFRLNEASFQPPPGVNICDVNWKDYVLIGDYSSSAQFYVTFAVFVFLYCIAALLLYVGYTSLYLDSRKLP
MIDFVVTLVATFLWLVSTSAWAKALTDIKIATGHNIIDELPPCKKKAVLCYFGSVTSMGSLNVSVIFGFLNMILW
GGNAWFVYKETSLHSPSNTSAPHSQGGIPPPTGI

FIGURE 6525

CAGAGGAGGGGACGGCAGCACCATGGACCCCCGCTTGTCCACTGTCCGCCAGACCTGCTGCTGCTTCAATGTCCG
CATCGCAACCACCGCCCTGGCCATCTACCATGTGATCATGAGCGTCTTGTTGTTCATCGAGCACTCAGTAGAGGT
GGCCCATGGCAAGGCGTCCTGCAAGCTCTCCCAGATGGGCTACCTCAGGATCGCTGACCTGATCTCCAGCTTCCT
GCTCATCACCATGCTCTTCATCATCAGCCTGAGCCTACTGATCGGGGTAGTCAAGAACCGGGAGAAGTACCTGCT
GCCCTTCCTGTCCCTGCAAATCATGGACTATCTCCTGTGCCTGCTCACACTGCTGGGCTCCTACATTGAGCTGCC
CGCCTACCTCAAGTTGGCCTCCCGGAGCCGTGCTAGCTCCTCCAAGTTCCCCCTGATGACGCTGCAGCTGCTGGA
CTTCTGCCTGAGCATCCTGACCCTCTGCAGCTCCTACATGGAAGTGCCCACCTATCTCAACTTCAAGTCCATGAA
CCACATGAATTACCTCCCCAGCCAGGAGGATATGCCTCATAACCAGTTCATCAAGATGATGATCATCTTTTCCAT
CGCCTTCATCACTGTCCTTATCTTCAAGGTCTACATGTTCAAGTGCGTGTGGCGGTGCTACAGATTGATCAAGTG
CATGAACTCGGTGGAGGAGAAGAGAAACTCCAAGATGCTCCAGAAGGTGGTCCTGCCGTCCTACGAGGAAGCCCT
GTCTTTGCCATCGAAGGACCCAGAGGGGGGGCCAGCACCACCCCCATACTCAGAGGTGTGACCCTCGGCAGGGCC
CAGGCCCAGTGTTGGGAGGGGTGGAGCTGCCTCATAATCTGCTTTTTTGGTTTGGTGGCCCCTGTGGCCTGGGTG
GGCCCTCCCGCCCCTCCCTGGCAGGACAATCTGCTTGTGTCTCCCTCGCTGGCCTGCTCCTCCTGCAGGGGCTGT
GAGCTGCTCACAACTGGGTCAACGCTTTAGGCTGAGTCACTCCTCGGGTCTCTCCATAATTCAGCCCAACAATGT
TTGGTTTATTTCAATCAGCTCTGACACTTGTTTAGACGATTGGGCATTCTAAAGTTGGTGAGTTTGTCAAGCAAC
TATCGACTTGATCAGTTCAGCAAGCAACTGACAAATCAAAAACCCACTTGTCAGTTCAATAAAATAATTTGGGCA
AACAACAGACTATTGGATTGATTTATAAATAGGTGGCAGTTCACATAGGAATTTAATCAAGTAATCATTAATTAG
TTACCCCCTATATATAAATATATGTAATCAATTTCTTCAAATAGCTTGGTTACATGATAATCAATTAGCCAACCA
TGAGTCATTTAGAATAGTGATAAATAGAATACACAGAATAGTGATGAAATTCAATTTAAAAAATCACGTTAGCCT
CCAAACCATTTAATTCAAATGAACCCATCAACTGGATGCCAACTCTGGCGAATGTAGGACCTCTGAGTGGGTGTA
TAATTGTTAATTCAAATGAAATTCATTTAAACAGTTGACAAACTGTCATTCAACAATTAGGTCCAGGAAATAACA
GTTATTTCATCATAAAACAGTCCCTTCAAACACACAATTGGTCTGCTGAAGGGTTGTCATCAACAATCCAATGCT
CACCTATTCAGTTGCTCTGTGGTCAGTGTGGCTGCATAACAGTGGATTCCATGAAAGGAGTCATTTTAGTGATGA
GCTGCCAGTCCATTCCCAGGCCAGGCTGTCGCTGGCCATCCATTCAGTCGATTCAGTCATAGGCGAATCTGTTCT
GCCCGAGGCTTGTGGTCAAGCAAAAATTCAGCCCTGAAATCAGGCACATCTGTTCGGTGGACTAAACCCACAGGT
TAGTTCAGTCAAAGCAGGGAACCCCCTTGTGGGCACTGACCCTGCCACTGGGGTCATGGCGGTTGTGACAGCTGG
GGAGGTTTGCCCCCAACAGCCCTCCTGTGCCTGCTTCCCTGTGTGTCGGGGTCCTCCAGGGAGCTGACCCAGAGG
TGGAGGCCACGGAGGCAGGGTCTCTGGGGACTGTCGGGGGGTACAGAGGGAGAAGGCTCTTCAAGAGCTCCCTGG
CAATACCCCCTTGTGTAATTGCTTTGTGTGCGACAGGGAGGAAGTTTCAATAAAGCAGCAACAAGCTTCCAAAAA
AAAAAAAAAAAA

FIGURE 6526

MDPRLSTVRQTCCCFNVRIATTALAIYHVIMSVLLFIEHSVEVAHGKASCKLSQMGYLRIADLISSFLLITMLFI
ISLSLLIGVVKNREKYLLPFLSLQIMDYLLCLLTLLGSYIELPAYLKLASRSRASSSKFPLMTLQLLDFCLSILT
LCSSYMEVPTYLNFKSMNHMNYLPSQEDMPHNQFIKMMIIFSIAFITVLIFKVYMFKCVWRCYRLIKCMNSVEEK
RNSKMLQKVVLPSYEEALSLPSKDPEGGPAPPPYSEV

FIGURE 6527

ACGCGGGCACGCACACACGGAAGCACGCCTCCACTTAACTCGCGCCGCCGCGGCAGCTCGAGTCCACCAGCAGCG
CCGTCCGCTTGACCGAGATGCTGCGGGCCTGTCAGTTATCGGGTGTGACCGCCGCCGCCCAGAGTTGTCTCTGTG
GGAAGTTTGTCCTCCGTCCATTGCGACCATGCCGCAGATACTCTACTTCAGGCAGCTCTGGGTTGACTACTGGCA
AAATTGCTGGAGCTGGCCTTTTGTTTGTTGGTGGAGGTATTGGTGGCACTATCCTATATGCCAAATGGGATTCCC
ATTTCCGGGAAAGTGTAGAGAAAACCATACCTTACTCAGACAAACTCTTCGAGATGGTTCTTGGTCCTGCAGCTT
ATAATGTTCCATTGCCAAAGAAATCGATTCAGTCGGGTCCACTAAAAATCTCTAGTGTATCAGAAGTAATGAAAG
AATCTAAACAGTCTGCCTCACAACTCCAAAAACAAAAGGGAGATACTCCAGCTTCAGCAACAGCACCTACAGAAG
CGGCTCAAATTATTTCTGCAGCAGGTGATACCCTGTCGGTCCCAGCCCCTGCAGTTCAGCCTGAGGAATCTTTAA
AAACTGATCACCCTGAAATTGGTGAAGGAAAACCCACACCTGCACTTTCAGAAGAAGCATCCTCATCTTCTATAA
GGGAGCGACCACCTGAAGAAGTTGCAGCTCGCCTTGCACAACAGGAAAAACAAGAACAAGTTAAAATTGAGTCTC
TAGCCAAGAGCTTAGAAGATGCTCTGAGGCAAACTGCAAGTGTCACTCTGCAGGCTATTGCAGCTCAGAATGCTG
CGGTCCAGGCTGTCAATGCACACTCCAACATATTGAAAGCCGCCATGGACAATTCTGAGATTGCAGGCGAGAAGA
AATCTGCTCAGTGGCGCACAGTGGAGGGTGCATTGAAGGAACGCAGAAAGGCAGTAGATGAAGCTGCCGATGCCC
TTCTCAAAGCCAAAGAAGAGTTAGAGAAGATGAAAAGTGTGATTGAAAATGCAAAGAAAAAAGAGGTTGCTGGGG
CCAAGCCTCATATAACTGCTGCAGAGGGTAAACTTCACAACATGATAGTTGATCTGGATAATGTGGTCAAAAAGG
TCCAAGCAGCTCAGTCTGAGGCTAAGGTTGTATCTCAGTATCATGAGCTGGTGGTCCAAGCTCGGGATGACTTTA
AACGAGAGCTGGACAGTATTACTCCAGAAGTCCTTCCTGGATGGAAAGGAATGAGTGTTTCAGACTTAGCTGACA
AGCTCTCTACTGATGATCTGAACTCCCTCATTGCTCATGCACATCGTCGTATTGATCAGCTGAACAGAGAGCTGG
CAGAACAGAAGGCCACCGAAAAGCAGCACATCACGTTAGCCTTGGAGAAACAAAAGCTGGAAGAAAAGCGGGCAT
TTGACTCTGCAGTAGCAAAAGCATTAGAACATCACAGAAGTGAAATACAGGCTGAACAGGACAGAAAGATAGAAG
AAGTCAGAGATGCCATGGAAAATGAAATGAGAACCCAGCTTCGCCGACAGGCAGCTGCCCACACTGATCACTTGC
GAGATGTCCTTAGGGTACAAGAACAGGAATTGAAGTCTGAATTTGAGCAGAACCTGTCTGAGAAACTCTCTGAAC
AAGAATTACAATTTCGTCGTCTCAGTCAAGAGCAAGTTGACAACTTTACTCTGGATATAAATACTGCCTATGCCA
GACTCAGAGGAATCGAACAGGCTGTTCAGAGCCATGCAGTTGCTGAAGAGGAAGCCAGAAAAGCCCACCAACTCT
GGCTTTCAGTGGAGGCATTAAAGTACAGCATGAAGACCTCATCTGCAGAAACACCTACTATCCCGCTGGGTAGTG
CAGTTGAGGCCATCAAAGCCAACTGTTCTGATAATGAATTCACCCAAGCTTTAACCGCAGCTATCCCTCCAGAGT
CCCTGACCCGTGGGGTGTACAGTGAAGAGACCCTTAGAGCCCGTTTCTATGCTGTTCAAAAACTGGCCCGAAGGG
TAGCAATGATTGATGAAACCAGAAATAGCTTGTACCAGTACTTCCTCTCCTACCTACAGTCCCTGCTCCTATTCC
CACCTCAGCAACTGAAGCCGCCCCCAGAGCTCTGCCCTGAGGATATAAACACATTTAAATTACTGTCATATGCTT
CCTATTGCATTGAGCATGGTGATCTGGAGCTAGCAGCAAAGTTTGTCAATCAGCTGAAGGGGGAATCCAGACGAG
TGGCACAGGACTGGCTGAAGGAAGCCCGAATGACCCTAGAAACGAAACAGATAGTGGAAATCCTGACAGCATATG
CCAGCGCCGTAGGAATAGGAACCACTCAGGTGCAGCCAGAGTGAGGTTTAGGAAGATTTTCATAAAGTCATATTT
CATGTCAAAGGAAATCAGCAGTGATAGATGAAGGGTTCGCAGCGAGAGTCCCGGACTTGTCTAGAAATGAGCAGG
TTTACAAGTACTGTTCTAAATGTTAACACCTGTTGCATTTATATTCTTTCCATTTGCTATCATGTCAGTGAACGC
CAGGAGTGCTTTCTTTGCAACTTGTGTAACATTTTCTGTTTTTTCAGGTTTTACTGATGAGGCTTGTGAGGCCAA
TCAAAATAATGTTTGTGATCTCTACTACTGTTGATTTTGCCCTCGGAGCAAACTGAATAAAGCAACAAGATG

FIGURE 6528

MLRACQLSGVTAAAQSCLCGKFVLRPLRPCRRYSTSGSSGLTTGKIAGAGLLFVGGGIGGTILYAKWDSHFRESV
EKTIPYSDKLFEMVLGPAAYNVPLPKKSIQSGPLKISSVSEVMKESKQSASQLQKQKGDTPASATAPTEAAQIIS
AAGDTLSVPAPAVQPEESLKTDHPEIGEGKPTPALSEEASSSSIRERPPEEVAARLAQQEKQEQVKIESLAKSLE
DALRQTASVTLQAIAAQNAAVQAVNAHSNILKAAMDNSEIAGEKKSAQWRTVEGALKERRKAVDEAADALLKAKE
ELEKMKSVIENAKKKEVAGAKPHITAAEGKLHNMIVDLDNVVKKVQAAQSEAKVVSQYHELVVQARDDFKRELDS
ITPEVLPGWKGMSVSDLADKLSTDDLNSLIAHAHRRIDQLNRELAEQKATEKQHITLALEKQKLEEKRAFDSAVA
KALEHHRSEIQAEQDRKIEEVRDAMENEMRTQLRRQAAAHTDHLRDVLRVQEQELKSEFEQNLSEKLSEQELQFR
RLSQEQVDNFTLDINTAYARLRGIEQAVQSHAVAEEEARKAHQLWLSVEALKYSMKTSSAETPTIPLGSAVEAIK
ANCSDNEFTQALTAAIPPESLTRGVYSEETLRARFYAVQKLARRVAMIDETRNSLYQYFLSYLQSLLLFPPQQLK
PPPELCPEDINTFKLLSYASYCIEHGDLELAAKFVNQLKGESRRVAQDWLKEARMTLETKQIVEILTAYASAVGI
GTTQVQPE

FIGURE 6529

CTCTGTTTTCTCAAAGCTGAAGTCGGCTAGGTTTGCAAAGCTGTGGGCTGAGCACTCAGGCAATCACACTCTCAG
AAACTGCGGCGGCTCTGGACTGCAGCCTCCCAAGGCTCCATGCCAGACAAAGCATGCGTGTCACACTTGCTACAA
TAGCCTGGATGGTTTCTTTTGTCTCCAATTATTCACACACAGCAAATATTTTGCCAGATATCGAAAATGAAGATT
TCATCAAAGACTGCGTTCGAATCCATAACAAGTTCCGATCAGAGGTGAAACCAACAGCCAGTGATATGCTATACA
TGACTTGGGACCCAGCACTAGCCCAAATTGCAAAAGCATGGGCCAGCAATTGCCAGTTTTCACATAATACACGGC
TGAAGCCACCCCACAAGCTGCACCCAAACTTCACTTCACTGGGAGAGAACATCTGGACTGGGTCTGTGCCCATTT
TTTCTGTGTCTTCCGCCATCACAAACTGGTATGACGAAATCCAGGACTATGACTTCAAGACTCGGATATGCAAAA
AAGTCTGTGGCCACTACACTCAGGTTGTTTGGGCAGATAGTTACAAAGTTGGCTGCGCAGTTCAATTTTGCCCTA
AAGTTTCTGGCTTTGACGCTCTTTCCAATGGAGCACATTTTATATGCAACTACGGACCAGGAGGGAATTACCCAA
CTTGGCCATATAAGAGAGGAGCCACCTGCAGTGCCTGCCCCAATAATGACAAGTGTTTGGACAATCTCTGTGTTA
ACCGACAGCGAGACCAAGTGAAACGTTACTACTCTGTTGTATATCCAGGCTGGCCCATATATCCACGTAACAGAT
ACACTTCTCTCTTTCTCATTGTTAATTCAGTAATTCTAATACTGTCTGTTATAATTACCATTTTGGTACAGCTCA
AGTACCCTAATTTAGTTCTTTTGGACTAATACAATTCAGGAAAGAAAAAACCCAAAAACCAACCTCATTCACATA
TGGCTTTTTTTTAACCAATAACAATTAGGTGTACTTCTATTTTAAAACATTTCAGAAAAAAATATATGTTATAGC
AATACTCTTAC

FIGURE 6530

MRVTLATIAWMVSFVSNYSHTANILPDIENEDFIKDCVRIHNKFRSEVKPTASDMLYMTWDPALAQIAKAWASNC
QFSHNTRLKPPHKLHPNFTSLGENIWTGSVPIFSVSSAITNWYDEIQDYDFKTRICKKVCGHYTQVVWADSYKVG
CAVQFCPKVSGFDALSNGAHFICNYGPGGNYPTWPYKRGATCSACPNNDKCLDNLCVNRQRDQVKRYYSVVYPGW
PIYPRNRYTSLFLIVNSVILILSVIITILVQLKYPNLVLLD

FIGURE 6531

ATGACCCCCATCCTCACGGTCCTGATCTGTCTCGGGCTGAGTCTGGGCCCCAGGACCCACGTGCAGGCAGGGCAC
CTCCCCAAGCCCACCCTCTGGGCTGAGCCAGGCTCTGTGATCATCCAGGGAAGTCCTGTGACCCTCAGGTGTCAG
GGGAGCCTTCAGGCTGAGGAGTACCATCTATATAGGGAAAACAAATCAGCATCCTGGGTTAGACGGATACAAGAG
CCTGGGAAGAATGGCCAGTTCCCCATCCCATCCATCACCTGGGAACACGCAGGGCGGTATCACTGTCAGTACTAC
AGCCACAATCACTCATCAGAGTACAGTGACCCCCTGGAGCTGGTGGTGACAGGAGCCTACAGCAAACCCACCCTC
TCAGCTCTGCCCAGCCCTGTGGTGACCTTAGGAGGGAACGTGACCCTCCAGTGTGTCTCACAGGTGGCATTTGAC
GGCTTCATTCTGTGTAAGGAAGGAGAAGATGAACACCCACAACGCCTGAACTCCCATTCCCATGCCCGTGGGTGG
TCCTGGGCCATCTTCTCCGTGGGCCCCGTGAGCCCGAGTCGCAGGTGGTCGTACAGGTGCTATGCTTATGACTCG
AACTCTCCCTATGTGTGGTCTCTACCCAGTGATCTCCTGGAGCTCCTGGTCCCAGGTGTTTCTAAGAAGCCATCA
CTCTCAGTGCAGCCAGGTCCTATGGTGGCCCCTGGGGAGAGCCTGACCCTCCAGTGTGTCTCTGATGTCGGCTAC
GACAGATTTGTTCTGTATAAGGAGGGAGAACGTGACTTCCTCCAGCGCCCTGGTTGGCAGCCCCAGGCTGGGCTC
TCCCAGGCCAACTTCACCCTGGGCCCTGTGAGCCCCTCCCACGGGGGCCAGTACAGATGCTACAGTGCACACAAC
CTCTCCTCCGAGTGGTCGGCCCCCAGTGACCCCCTGGACATCCTGATCACAGGACAGTTCTATGACAGACCCTCT
CTCTCGGTGCAGCCGGTCCCCACAGTAGCCCCAGGAAAGAACGTGACCCTGCTGTGTCAGTCACGGGGGCAGTTC
CACACTTTCCTTCTGACCAAGGAGGGGGCAGGCCATCCCCCACTGCATCTGAGATCAGAGCACCAAGCTCAGCAG
AACCAGGCTGAATTCCGCATGGGTCCTGTGACCTCAGCCCACGTGGGGACCTACAGATGCTACAGCTCACTCAGC
TCCAACCCCTACCTGCTGTCTCTCCCCAGTGACCCCCTGGAGCTCGTGGTCTCAGAAGCAGCTGAGACCCTCAGC
CCATCACAAAACAAGACAGACTCCACGACTACATCCCTAGGCCAACACCCCCAGGATTACACAGTGGAGAATCTC
ATCCGCATGGGTGTGGCTGGCTTGGTCCTGGTGGTCCTCGGGATTCTGCTATTTGAGGCTCAGCACAGCCAGAGA
AGCCTACAAGATGCAGCCGGGAGGTGAACAGCAGAGAGGACAATGCATACTTCAGCGTGGTGGAGCCTCAGGGAC
A

FIGURE 6532

MTPILTVLICLGLSLGPRTHVQAGHLPKPTLWAEPGSVIIQGSPVTLRCQGSLQAEEYHLYRENKSASWVRRIQE
PGKNGQFPIPSITWEHAGRYHCQYYSHNHSSEYSDPLELVVTGAYSKPTLSALPSPVVTLGGNVTLQCVSQVAFD
GFILCKEGEDEHPQRLNSHSHARGWSWAIFSVGPVSPSRRWSYRCYAYDSNSPYVWSLPSDLLELLVPGVSKKPS
LSVQPGPMVAPGESLTLQCVSDVGYDRFVLYKEGERDFLQRPGWQPQAGLSQANFTLGPVSPSHGGQYRCYSAHN
LSSEWSAPSDPLDILITGQFYDRPSLSVQPVPTVAPGKNVTLLCQSRGQFHTFLLTKEGAGHPPLHLRSEHQAQQ
NQAEFRMGPVTSAHVGTYRCYSSLSSNPYLLSLPSDPLELVVSEAAETLSPSQNKTDSTTTSLGQHPQDYTVENL
IRMGVAGLVLVVLGILLFEAQHSQRSLQDAAGR

FIGURE 6533

GAATTCGGCACGAGCGCGCGGCGAATCTCAACGCTGCGCCGTCTGCGGGCGCTTCCGGGCCACCAGTTTCTCTGC
TTTCCACCCTGGCGCCCCCCAGCCCTGGCTCCCCAGCTGCGCTGCCCCGGGCGTCCACGCCCTGCGGGCTTAGCG
GGTTCAGTGGGCTCAATCTGCGCAGCGCCACCTCC**ATG**TTGACCAAGCCTCTACAGGGGCCTCCCGCGCCCCCCG
GGACCCCCACGCCGCCGCCAGGAGGCAAGGATCGGGAAGCGTTCGAGGCCGAGTATCGACTCGGCCCCCTCCTGG
GTAAGGGGGGCTTTGGCACCGTCTTCGCAGGACACCGCCTCACAGATCGACTCCAGGTGGCCATCAAAGTGATTC
CCCGGAATCGTGTGCTGGGCTGGTCCCCCTTGTCAGACTCAGTCACATGCCCACTCGAAGTCGCACTGCTATGGA
AAGTGGGTGCAGGTGGTGGGCACCCTGGCGTGATCCGCCTGCTTGACTGGTTTGAGACACAGGAAGGCTTCATGC
TGGTCCTCGAGCGGCCTTTGCCCGCCCAGGATCTCTTTGACTATATCACAGAGAAGGGCCCACTGGGTGAAGGCC
CAAGCCGCTGCTTCTTTGGCCAAGTAGTGGCAGCCATCCAGCACTGCCATTCCCGTGGAGTTGTCCATCGTGACA
TCAAGGATGAGAACATCCTGATAGACCTACGCCGTGGCTGTGCCAAACTCATTGATTTTGGTTCTGGTGCCCTGC
TTCATGATGAACCCTACACTGACTTTGATGGGACAAGGGTGTACAGCCCCCCAGAGTGGATCTCTCGACACCAGT
ACCATGCACTCCCGGCCACTGTCTGGTCACTGGGCATCCTCCTCTATGACATGGTGTGTGGGGACATTCCCTTTG
AGAGGGACCAGGAGATTCTGGAAGCTGAGCTCCACTTCCCAGCCCATGTCTCCCCAGACTGCTGTGCCCTAATCC
GCCGGTGCCTGGCCCCCAAACCTTCTTCCCGACCCTCACTGGAAGAGATCCTGCTGGACCCCTGGATGCAAACAC
CAGCCGAGGATGTTACCCCTCAACCCCTCCAAAGGAGGCCCTGCCCCTTTGGCCTGGTCCTTGCTACCCTAAGCC
TGGCCTGGCCTGGCCTGGCCCCCAATGGTCAGAAGAGCCATCCCATGGCCATGTCACAGGGA**TAG**ATGGACATTT
GTTGACTTGGTTTTACAGGTCATTACCAGTCATTAAAGTCCAGTATTACTAAGGTAAGGGATTGAGGATCAGGGG
TTAGAAGACATAAACCAAGTTTGCCCAGTTCCCTTCCCAATCCTACAAAGGAGCCTTCCTCCCAGAACCTGTGGT
CCCTGATTTTGGAGGGGGAACTTCTTGCTTCTCATTTTGCTAAGGAAGTTTATTTTGGTGAAGTTGTTCCCATTT
TGAGCCCCGGGACTCTTATTTTGATGATGTGTCACCCCACATTGGCACCTCCTACTACCACCACACAAACTTAGT
TCATATGCTTTTACTTGGGCAAGGGTGCTTTCCTTCCAATACCCCAGTAGCTTTTATTTTAGTAAAGGGACCCTT
TCCCCTAGCCTAGGGTCCCATATTGGGTCAAGCTGCTTACCTGCCTCAGCCCAGGATTTTTTATTTTGGGGGAGG
TAATGCCCTGTTGTTACCCCAAGGCTTCTTTTTTTTTTTTTTTTTTTTGGGTGAGGGGACCCTACTTTGTTATC
CCAAGTGCTCTTATTCTGGTGAGAAGAACCTTAATTCCATAATTTGGGAAGGAATGGAAGATGGACACCACCGGA
CACCACCAGACAATAGGATGGGATGGATGGTTTTTTGGGGGATGGGCTAGGGGAAATAAGGCTTGCTGTTTGTTT
TCCTGGGGCGCTCCCTCCAATTTTGCAGATTTTTGCAACCTCCTCCTGAGCCGGGATTGTCCAATTACTAAAATG
TAAATAATCACGTATTGTGGGGAGGGGAGTTCCAAGTGTGCCCTCCTTTTTTTTCCTGCCTGGATTATTTAAAAA
GCCATGTGTGGAAACCCACTATTTAATAAAAGTAATAGAATCAGAAAAAAAAAAAAAAAAAAA

FIGURE 6534

MLTKPLQGPPAPPGTPTPPPGGKDREAFEAEYRLGPLLGKGGFGTVFAGHRLTDRLQVAIKVIPRNRVLGWSPLS
DSVTCPLEVALLWKVGAGGGHPGVIRLLDWFETQEGFMLVLERPLPAQDLFDYITEKGPLGEGPSRCFFGQVVAA
IQHCHSRGVVHRDIKDENILIDLRRGCAKLIDFGSGALLHDEPYTDFDGTRVYSPPEWISRHQYHALPATVWSLG
ILLYDMVCGDIPFERDQEILEAELHFPAHVSPDCCALIRRCLAPKPSSRPSLEEILLDPWMQTPAEDVTPQPLQR
RPCPFGLVLATLSLAWPGLAPNGQKSHPMAMSQG

FIGURE 6535

GGCACGAGCTCGGCTCCTGGAAAG**ATG**GAGGCAGCGGAGACAGAGGCGGAAGCTGCAGCCCTAGAGGTCCTGGCT
GAGGTGGCAGGCATCTTGGAACCTGTAGGCCTGCAGGAGGAGGCAGAACTGCCAGCCAAGATCCTGGTTGAGTTT
GTGGTGGACTCTCAGAAGAAAGACAAGCTGCTCTGCAGCCAGCTTCAGGTAGCGGATTTCCTGCAGAACATCCTG
GCTCAGGAGGACACTGCTAAGGGTCTCGACCCCTTGGCTTCTGAAGACACGAGCCGACAGAAGGCAATTGCAGCT
AAGGAACAATGGAAAGAGCTGAAGGCCACCTACAGGGAGCACGTAGAGGCCATCAAAATTGGCCTCACCAAGGCC
CTGACTCAGATGGAGGAAGCCCAGAGGAAACGGACACAACTCCGGGAAGCCTTTGAGCAGCTCCAGGCCAAGAAA
CAAATGGCCATGGAGAAACGCAGAGCAGTCCAGAACCAGTGGCAGCTACAACAGGAGAAGCATCTGCAGCATCTG
GCGGAGGTTTCTGCAGAGGTGAGGGAGCGTAAGACAGGGACTCAGCAGGAGCTTGACAGGGTGTTTCAGAAACTT
GGAAACCTGAAGCAGCAGGCAGAACAGGAGCGGGACAAGCTGCAGAGGTATCAGACCTTCCTCCAGCTTCTGTAT
ACCCTGCAGGGTAAGCTGTTGTTCCCTGAGGCTGAGGCTGAGGCAGAGAATCTTCCAGATGATAAACCCCAGCAG
CCGACTCGACCCCAGGAGCAGAGTACAGGAGACACCATGGGGAGAGACCCTGGTGTGTCCTTCAAGGCTGTTGGT
CTACAACCTGCTGGAGATGTAAATTTGCCA**TGA**CTTCCTGGAGGACAGCAGCATGGAGAAAGATCCTAGAAAAGG
CCTCTGACTTCCCTCACCTCCCAACCATCATTACAGGAAAGACTGTGAACTCCTGAGTTCAGCTTGATTTCTGAC
TACATCCCAGCAAGCTCTGGCATCTGTGGATTAAAATCCCTGGATCTCTCTCAGTTGTGTATTTGTTCATCTTCA
TATGCTGGCAGGAACAACTATTAATACAGATACTCAGAAGCCAATAACATGACAGGAGCTGGGACTGGTTTGAAC
ACAGGGTGTGCAGATGGGGAGGGGGTACTGGCCTTGGGCCTCCTATGATGCAGACATGGTGAATTTAATTCAAGG
AGGAGGAGAATGTTTTAGGCAGGTGGTTATATGTGGGAAGATAATTTTATTCATGGATCCAAATGTTTGTTGAGT
CCTTTCTTTGTGCTAAGGTTCTTGCGGTGAACCAGAATTATAACAGTGAGCTCATCTGACTGTTTTAGGATGTAC
AGCCTAGTGTTAACATTCTTGGTATCTTTTTGTGCCTTATCTAAAACATTTCTCGATCACTGGTTTCAGATGTTC
ATTTATTATATTCTTTTCAAAGATTCAGAGATTGGCTTTTGTCATCCACTATTGTATGTTTTGTTTCATTGACCT
CTAGTGATACCTTGATCTTTCCCACTTTCTGTTTTCGGATTGGAGAAGATGTACCTTTTTTGTCAACTCTTACTT
TTATCAGATGATCAACTCACGTATTTGGATCTTTATTTGTTTTCTCAAATAAATATTTAAGGTTAAAAAAAAAAA
AAAAAAAA

FIGURE 6536

MEAAETEAEAAALEVLAEVAGILEPVGLQEEAELPAKILVEFVVDSQKKDKLLCSQLQVADFLQNILAQEDTAKG
LDPLASEDTSRQKAIAAKEQWKELKATYREHVEAIKIGLTKALTQMEEAQRKRTQLREAFEQLQAKKQMAMEKRR
AVQNQWQLQQEKHLQHLAEVSAEVRERKTGTQQELDRVFQKLGNLKQQAEQERDKLQRYQTFLQLLYTLQGKLLF
PEAEAEAENLPDDKPQQPTRPQEQSTGDTMGRDPGVSFKAVGLQPAGDVNLP

FIGURE 6537

GAATTCGCACTGCTCTGAGAATTTGTGAGCAGCCCCTAACAGGCTGTTACTTCACTACAACTGACGATATGATCA
TCTTAATTTACTTATTTCTCTTGCTATGGGAAGACACTCAAGGATGGGGATTCAAGGATGGAATTTTTCATAACT
CCATATGGCTTGAACGAGCAGCCGGTGTGTACCACAGAGAAGCACGGTCTGGCAAATACAAGCTCACCTACGCAG
AAGCTAAGGCGGTGTGTGAATTTGAAGGCGGCCATCTCGCAACTTACAAGCAGCTAGAGGCAGCCAGAAAAATTG
GATTTCATGTCTGTGCTGCTGGATGGATGGCTAAGGGCAGAGTTGGATACCCCATTGTGAAGCCAGGGCCCAACT
GATGATTTGGAAAAACTGGCATTATTGATTATGGAATCCGTCTCAATAGGAGTGAAAGATGGGATGCCTATTGCT
ACAACCCACACGCAAAGGAGTGTGGTGGCGTCTTTACAGATCCAAAGCGAATTTTTAAATCTCCAGGCTTCCCAA
ATGAGTACGAAGATAACCAAATCTGCTACTGGCACATTAGACTCAAGTATGGTCAGCGTATTCACCTGAGTTTTT
TAGATTTTGACCTTGAAGATGACCCAGGTTGCTTGGCTGATTATGTTGAAATATATGACAGTTACGATGATGTCC
ATGGCTTTGTGGGAAGATACTGTGGAGATGAGCTTCCAGATGACATCATCAGTACAGGAAATGTCATGACCTTGA
AGTTTCTAAGTGATGCTTCAGTGACAGCTGGAGGTTTCCAAATCAAATATGTTGCAATGGATCCTGTATCCAAAT
CCAGTCAAGGAAAAAATACAAGTACTACTTCTACTGGAAATAAAAACTTTTTAGCTGGAAGATTTAGCCACTTAT
AAAAAAAAAAAAGGATGATCAAAACACACAGTGTTTATGTTGGAATCTTTTGGAACTCCTTTGATCTCACTGTTA
TTATTAACATTTATTTATTATTTTTCTAAATGTGAAAGAAATACATAATTTAGGGAAAATTGGAAAATATAGGAA
ACTTTAAACGAGAAAATGAAACCTCTCATAATCCCACTGCATAGAAATAACAAGCGTTAACATTTTCATATTTTT
TTCTTTCAGTCATTTTTGTATTTGTGGTATATGTATATATGTACCTATATGTATTTGCATTTGAAATTTTGGAAT
CCTGCTCTATGTACAGTTTTGTATTATACTTTTTAAATCTTGAACTTTATGAACATTTTCTGAAATCATTGATTA
TTCTACAAAAACATGATTTTAAACAGCTGTAAAATATTCTATGATATGAATGTTTTATGCATTATTTAAGCCTGT
CTCTATTGTTGGAATTTCAGGTCATTTTCATAAATATTGTTGCAATAAATATCCTTCGGAATTC

FIGURE 6538

MIILIYLFLLLWEDTQGWGFKDGIFHNSIWLERAAGVYHREARSGKYKLTYAEAKAVCEFEGGHLATYKQLEAAR
KIGFHVCAAGWMAKGRVGYPIVKPGPNXXFGKTGIIDYGIRLNRSERWDAYCYNPHAKECGGVFTDPKRIFKSPG
FPNEYEDNQICYWHIRLKYGQRIHLSFLDFDLEDDPGCLADYVEIYDSYDDVHGFVGRYCGDELPDDIISTGNVM
TLKFLSDASVTAGGFQIKYVAMDPVSKSSQGKNTSTTSTGNKNFLAGRFSHL

FIGURE 6539

GGTGGCGTGGGGACTCCCTGAAAGCAGAGCGGCAGGGCGCCCGGAAGTCGTGAGTCGAGTCTTCCCGGGCTAATC
CATGCCGGGTTGGAGGCTGCTGACGCAGGTCGGCGCCCAGGTGCTGGGTCGACTCGGGGACGGCCTGGGTGCTGC
CCTGGGCCCGGGGAACAGAACACACATCTGGCTTTTTGTTAGAGGTCTTCATGGAAAGAGTGGTACATGGTGGGA
TGAGCATCTTTCTGAAGAAAATGTCCCATTCATTAAGCAGTTGGTCTCTGATGAAGATAAAGCCCAATTAGCAAG
TAAACTGTGTCCTCTGAAAGATGAACCATGGCCTATACATCCTTGGGAACCAGGTTCCTTTAGAGTTGGTCTTAT
TGCCTTGAAGCTGGGCATGATGCCTTTATGGACCAAGGATGGTCAAAAGCATGTGGTCACATTACTTCAGGTACA
AGACTGTCATGTCTTAAAATATACGTCAAAGGAAAACTGTAATGGAAAAATGGCAACCCTGTCTGTAGGAGGAAA
AACTGTATCACGTTTTCGTAAAGCTACATCCATATTGGAATTTTACCGGGAACTTGGATTGCCGCCGAAACAGAC
AGTTAAAATCTTTAATATAACAGATAATGCTGCAATTAAACCAGGCACTCCTCTTTATGCTGCTCACTTTCGTCC
AGGACAGTATGTGGATGTCACAGCCAAAACTATTGGTAAAGGTTTTCAAGGTGTCATGAAAAGATGGGGATTTAA
AGGCCAGCCTGCTACGCATGGTCAAACGAAAACCCACAGGAGACCTGGAGCTGTTGCAACTGGTGATATTGGCAG
AGTCTGGCCTGGAACTAAAATGCCTGGAAAAATGGGAAACATATACAGGACAGAATATGGACTGAAAGTGTGGAG
AATAAACACAAAGCACAACATAATCTATGTAAATGGCTCTGTACCTGGACATAAAAATTGCTTAGTAAAGGTCAA
AGATTCTAAACTGCCTGCATATAAGGATCTCGGTAAAAATCTACCATTCCCTACATATTTTCCTGATGGAGATGA
AGAGGAACTGCCAGAAGATTTGTATGATGAAAACGTGTGTCAGCCCGGTGCGCCTTCTATTACATTTGCCTAACA
TCTTTGGACGTGGCAGAACCTTACATATTCTGTGAGCTTCGATGAGCCAGAGTGATATCATAACCACCAGAAATC
ATACTCTCCTTTCTTAGTCACAACAAAATCACACATGTCATCTTTGTCAAGGGCATAAATATATCATTCATACCC
CCATTAAATTTTGTTAGAAAAATTACCACATTAAATATATGAGTTAAGTAGATTGGATTTGCTGAAATTGGTGTT
GGGCATATTAGCAAAATATTCTTAATTTGTGGACTCGATTCTTTTTTACTACATATTTCCCAAGTTATCTTAAGA
TGTCTGTAAATTTAACTTTTATTAAAGTTTTGTCAATCTTTGTGAAATAGTGGTTGTGGAACAGTAGAAAACCAT
ATGGGGACTATAGTGCAACCTATTTGGGTAAAGAAACCATTTGCTAAAATGGAGAAAGTAAATAGATTTTTATTT
AAATTACAGAAACATGTTAAAGGCCGGACAAAGGAAAGACAATAAAATCATAAATTATC

FIGURE 6540

MPGWRLLTQVGAQVLGRLGDGLGAALGPGNRTHIWLFVRGLHGKSGTWWDEHLSEENVPFIKQLVSDEDKAQLAS
KLCPLKDEPWPIHPWEPGSFRVGLIALKLGMMPLWTKDGQKHVVTLLQVQDCHVLKYTSKENCNGKMATLSVGGK
TVSRFRKATSILEFYRELGLPPKQTVKIFNITDNAAIKPGTPLYAAHFRPGQYVDVTAKTIGKGFQGVMKRWGFK
GQPATHGQTKTHRRPGAVATGDIGRVWPGTKMPGKMGNIYRTEYGLKVWRINTKHNIIYVNGSVPGHKNCLVKVK
DSKLPAYKDLGKNLPFPTYFPDGDEEELPEDLYDENVCQPGAPSITFA

FIGURE 6541

GCCGCCGCCGCCGCCCTCTCGGCCATCGCTGCCTCCGCCGCCTGCTCCACCTCGAGGGACGCGAGCGGGCGGCGG
GGCTGGCCGTGAGAGAGACAGGAGAGGAAGGAGGGCAGGGGCGGAGTTGCCCGCCTTAGCCCCCGCCCCCGGCCG
CGGCCCCGGGCCCTGCCCCGCGCGGCCCTGCCCGGCCCACCGAGCCCTGGTGTGGCAGCGGCTCATGGCGGCCGT
GGGGCCCCCGCAGCAGCAGGTGCGGATGGCCCATCAGCAGGTCTGGGCGGCGCTCGAAGTGGCGCTCCGGGTGCC
CTGCCTTTACATCATCGACGCCATCTTCAACTCCTACCCGGATTCCAGCCAAAGCCGGTTCTGCATCGTGCTCCA
GATCTTCCTCCGGCTCTTTGGTGTATTTGCATCCAGTATTGTTCTGATCTTGTCACAACGATCACTTTTCAAGTT
TTACACGTACAGCTCAGCCTTTCTGTTAGCTGCAACTTCAGTGTTGGTGAATTATTATGCTTCTTTGCACATTGA
CTTCTATGGTGCCTACAACACGTCAGCTTTTGGAATTGAGCTGCTTCCTCGAAAAGGTCCCTCGCTGTGGATGGC
ACTTATCGTTCTACAGCTAACATTTGGAATTGGATACGTTACACTACTCCAGATTCATTCCATCTATTCACAATT
AATTATTTTGGATCTCTTGGTTCCTGTAATAGGCTTAATCACAGAGCTACCATTACACATCAGAGAGACTTTACT
GTTTACTTCTTCCTTGATTCTCACATTAAATACAGTGTTTGTCCTGGCAGTGAAACTGAAGTGGTTTTATTATTC
CACACGATATGTTTATCTTTTGGTGAGGCACATGTATCGAATTTATGGATTACAGTTATTGATGGAGGACACATG
GAAGAGGATTCGTTTCCCAGACATACTACGAGTCTTTTGGCTAACAAGAGTTACAGCTCAGGCTACAGTGTTAAT
GTACATCTTAAGGATGGCAAATGAAACTGATTCCTTCTTTATTTCTTGGGATGATTTTTGGGACCTCATTTGCAA
TCTTATAATTAGTGGGTGCGATTCTACACTAACTGTACTGGGCATGAGTGCTGTAATTTCCTCAGTAGCCCATTA
TTTGGGGCTTGGAATATTGGCCTTTATTGGATCAACTGAGGAAGATGACAGGCGTCTTGGCTTTGTTGCACCTGT
TTTATTTTTTATTTTGGCTCTTCAGACTGGGTTAAGTGGGCTAAGACCAGAAGAGAGACTTATTCGCTTAAGTAG
AAACATGTGCCTTTTATTAACTGCAGTCCTGCATTTTATCCATGGAATGACAGACCCTGTATTAATGTCTCTCAG
TGCCTCTCATGTGTCATCTTTTCGTAGACATTTTCCTGTGCTGTTTGTCTCTGCTTGCCTGTTTATTCTTCCTGT
CTTACTCAGTTATGTTCTTTGGCATCACTATGCACTAAATACATGGTTGTTTGCAGTTACAGCATTTTGTGTGGA
ACTGTGCTTAAAAGTAATTGTTTCTCTCACTGTTTATACGTTATTCATGATTGATGGCTACTATAATGTCCTCTG
GGAAAAGCTTGACGATTATGTCTACTACGTTCGTTCAACAGGCAGTATTATTGAATTTATATTTGGAGTTGTAAT
GTTTGGAAATGGGGCTTACACTATGATGTTTGAGTCGGGAAGTAAAATTCGGGCTTTTATGATGTGCCTACATGC
ATATTTTAACATCTACTTACAAGCCAAAAATGGCTGGAAGACATTTATGAATCGTAGGACTGCTGTGAAGAAAAT
TAATTCACTTCCTGAAATAAAAGGGAGCCGCTTACAAGAAATAAATGATGTATGTGCAATCTGCTATCATGAGTT
TACAACATCTGCTCGTATTACACCGTGTAATCATTATTTCCATGCACTTTGCCTTCGGAAATGGCTGTACATTCA
AGATACTTGTCCAATGTGCCATCAGAAAGTATACATCGAAGATGATATCAAGGATAATTCAAATGTATCTAACAA
CAATGGATTTATTCCACCCAATGAAACTCCAGAGGAAGCTGTAAGAGAAGCTGCTGCTGAATCTGACAGGGAATT
GAACGAAGATGACAGTACAGATTGTGATGATGATGTTCAAAGAGAAAGAAATGGAGTGATTCAGCACACAGGCGC
AGCAGCTGAAGAATTTAATGATGATACTGACTGATGAAAATAGCATTTATTAATGATTGAGGTATTTGTTTAAAA
TTCAGTTCATCCAAAATGGAGTAATATCCTTCACCTTCAGTGTGTAACCAAGCACAAAAACAGTATCAATGTTGA
ATCTGTGAATGGTTTTCCGTTTACTGTGATGTGCTACTGTAAATATACCTCTTTAATTACTTCTGGTCTCTTTGG
TGACCTGTTTAAATTTGTGTACATTATTGTACATAGAATAAAATGTTTTCACATTTTTATGACAAAAAAAAAAAA
AAAAAA

FIGURE 6542

MAAVGPPQQQVRMAHQQVWAALEVALRVPCLYIIDAIFNSYPDSSQSRFCIVLQIFLRLFGVFASSIVLILSQRS
LFKFYTYSSAFLLAATSVLVNYYASLHIDFYGAYNTSAFGIELLPRKGPSLWMALIVLQLTFGIGYVTLLQIHSI
YSQLIILDLLVPVIGLITELPLHIRETLLFTSSLILTLNTVFVLAVKLKWFYYSTRYVYLLVRHMYRIYGLQLLM
EDTWKRIRFPDILRVFWLTRVTAQATVLMYILRMANETDSFFISWDDFWDLICNLIISGCDSTLTVLGMSAVISS
VAHYLGLGILAFIGSTEEDDRRLGFVAPVLFFILALQTGLSGLRPEERLIRLSRNMCLLLTAVLHFIHGMTDPVL
MSLSASHVSSFRRHFPVLFVSACLFILPVLLSYVLWHHYALNTWLFAVTAFCVELCLKVIVSLTVYTLFMIDGYY
NVLWEKLDDYVYYVRSTGSIIEFIFGVVMFGNGAYTMMFESGSKIRAFMMCLHAYFNIYLQAKNGWKTFMNRRTA
VKKINSLPEIKGSRLQEINDVCAICYHEFTTSARITPCNHYFHALCLRKWLYIQDTCPMCHQKVYIEDDIKDNSN
VSNNNGFIPPNETPEEAVREAAAESDRELNEDDSTDCDDDVQRERNGVIQHTGAAAEEFNDDTD

FIGURE 6543

ATGGATTTATCTGCTCTTCGCGTTGAAGAAGTACAAAATGTCATTAATGCTATGCAGAAAATCTTAGAGTGTCCC
ATCTGTCTGGAGTTGATCAAGGAACCTGTCTCCACAAAGTGTGACCACATATTTTGCAAATTTTGCATGCTGAAA
CTTCTCAACCAGAAGAAAGGGCCTTCACAGTGTCCTTTATGTAAGAATGATATAACCAAAAGGAGCCTACAAGAA
AGTACGAGATTTAGTCAACTTGTTGAAGAGCTATTGAAAATCATTTGTGCTTTTCAGCTTGACACAGGTTTGGAG
TATGCAAACAGCTATAATTTTGCAAAAAAGGAAAATAACTCTCCTGAACATCTAAAAGATGAAGTTTCTATCATC
CAAAGTATGGGCTACAGAAACCGTGCCAAAAGACTTCTACAGAGTGAACCCGAAAATCCTTCCTTGCAGGAAACC
AGTCTCAGTGTCCAACTCTCTAACCTTGGAACTGTGAGAACTCTGAGGACAAAGCAGCGGATACAACCTCAAAAG
ACGTCTGTCTACATTGAATTGGGATCTGATTCTTCTGAAGATACCGTTAATAAGGCAACTTATTGCAGTGTGGGA
GATCAAGAATTGTTACAAATCACCCCTCAAGGAACCAGGGATGAAATCAGTTTGGATTCTGCAAAAAAGGCTGCT
TGTGAATTTTCTGAGACGGATGTAACAAATACTGAACATCGTCAACCCAGTAATAATGATTTGAACACCACTGAG
AAGCGTGTAGCTGAGAGGCATCCAGAAAAGTATCAGGGTGAAGCAGCATCTGGGTGTGAGAGTGAAACAAGCGTC
TCTGAAGACTGCTCAGGGCTATCCTCTCAGAGTGACATTTTAACCACTCAGCAGAGGGATACCATGCAACATAAC
CTGATAAAGCTCCAGCAGGAAATGGCTGAACTAGAAGCTGTGTTAGAACAGCATGGGAGCCAGCCTCCTAACAGC
TACCCTTCCATCATAAGTGACTCCTCTGCCCTTGAGGACCTGCGAAATCCAGAACAAAGCACATCAGAAAAAGTA
TTAACTTCACAGAAAAGTAGTGAATACCCTATAAGCCAGAATCCAGAAGGCCTTTCTGCTGACAAGTTTGAGGTG
TCTGCAGATAGTTCTACCAGTAAAAATAAAGAACCAGGAGTGGAAAGGTCATCCCCTTCTAAATGCCCATCATTA
GATGATAGGTGGTACATGCACAGTTGCTCTGGGAGTCTTCAGAATAGAAACTACCCATCTCAAGAGGAGCTCATT
AAGGTTGTTGATGTGGAGGAGCAACAGCTGGAAGAGTCTGGGCCACACGATTTGACGGAAACATCTTACTTGCCA
AGGCAAGATCTAGAGGGAACCCCTTACCTGGAATCTGGAATCAGCCTCTTCTCTGATGACCCTGAATCTGATCCT
TCTGAAGACAGAGCCCCAGAGTCAGCTCGTGTTGGCAACATACCATCTTCAACCTCTGCATTGAAAGTTCCCCAA
TTGAAAGTTGCAGAATCTGCCCAGGGTCCAGCTGCTGCTCATACTACTGATACTGCTGGGTATAATGCAATGGAA
GAAAGTGTGAGCAGGGAGAAGCCAGAATTGACAGCTTCAACAGAAAGGGTCAACAAAAGAATGTCCATGGTGGTG
TCTGGCCTGACCCCAGAAGAATTTATGCTCGTGTACAAGTTTGCCAGAAAACACCACATCACTTTAACTAATCTA
ATTACTGAAGAGACTACTCATGTTGTTATGAAAACAGATGCTGAGTTTGTGTGTGAACGGACACTGAAATATTTT
CTAGGAATTGCGGGAGGAAAATGGGTAGTTAGCTATTTCTGGGTGACCCAGTCTATTAAAGAAAGAAAAATGCTG
AATGAGCATGATTTTGAAGTCAGAGGAGATGTGGTCAATGGAAGAAACCACCAAGGTCCAAAGCGAGCAAGAGAA
TCCCAGGACAGAAAGATCTTCAGGGGGCTAGAAATCTGTTGCTATGGGCCCTTCACCAACATGCCCACAGATCAA
CTGGAATGGATGGTACAGCTGTGTGGTGCTTCTGTGGTGAAGGAGCTTTCATCATTCACCCTTGGCACAGGTGTC
CACCCAATTGTGGTTGTGCAGCCAGATGCCTGGACAGAGGACAATGGCTTCCATGCAATTGGGCAGATGTGTGAG
GCACCTGTGGTGACCCGAGAGTGGGTGTTGGACAGTGTAGCACTCTACCAGTGCCAGGAGCTGGACACCTACCTG
ATACCCCAGATCCCCCACAGCCACTACTGA

FIGURE 6544

MDLSALRVEEVQNVINAMQKILECPICLELIKEPVSTKCDHIFCKFCMLKLLNQKKGPSQCPLCKNDITKRSLQE
STRFSQLVEELLKIICAFQLDTGLEYANSYNFAKKENNSPEHLKDEVSIIQSMGYRNRAKRLLQSEPENPSLQET
SLSVQLSNLGTVRTLRTKQRIQPQKTSVYIELGSDSSEDTVNKATYCSVGDQELLQITPQGTRDEISLDSAKKAA
CEFSETDVTNTEHRQPSNNDLNTTEKRVAERHPEKYQGEAASGCESETSVSEDCSGLSSQSDILTTQQRDTMQHN
LIKLQQEMAELEAVLEQHGSQPPNSYPSIISDSSALEDLRNPEQSTSEKVLTSQKSSEYPISQNPEGLSADKFEV
SADSSTSKNKEPGVERSSPSKCPSLDDRWYMHSCSGSLQNRNYPSQEELIKVVDVEEQQLEESGPHDLTETSYLP
RQDLEGTPYLESGISLFSDDPESDPSEDRAPESARVGNIPSSTSALKVPQLKVAESAQGPAAAHTTDTAGYNAME
ESVSREKPELTASTERVNKRMSMVVSGLTPEEFMLVYKFARKHHITLTNLITEETTHVVMKTDAEFVCERTLKYF
LGIAGGKWVVSYFWVTQSIKERKMLNEHDFEVRGDVVNGRNHQGPKRARESQDRKIFRGLEICCYGPFTNMPTDQ
LEWMVQLCGASVVKELSSFTLGTGVHPIVVVQPDAWTEDNGFHAIGQMCEAPVVTREWVLDSVALYQCQELDTYL
IPQIPHSHY

FIGURE 6545

TCAGACCTGTAGGCCTGATAGACTGATTAAACCACAGAAGGTGACCTGCTGAGAAAAGTGGTACAAATACTGGGA
AAAACCTGCTCTTCTGCGTTAAGTGGGAGACAATGTCACAAGTTAAAAGCTCTTATTCCTATGATGCCCCCTCGG
ATTTCATCAATTTTTCATCCTTGGATGATGAAGGAGATACTCAAAACATAGATTCATGGTTTGAGGAGAAGGCCA
ATTTGGAGAATAAGTTACTGGGGAAGAATGGAACTGGAGGGCTTTTTCAGGGCAAAACTCCTTTGAGAAAGGCTA
ATCTTCAGCAAGCTATTGTCACACCTTTGAAACCAGTTGACAACACTTACTACAAAGAGGCAGAAAAAGAAAATC
TTGTGGAACAATCCATTCCGTCAAATGCTTGTTCTTCCCTGGAAGTTGAGGCAGCCATATCAAGAAAAACTCCAG
CCCAGCCTCAGAGAAGATCTCTTAGGCTTTCTGCTCAGAAGGATTTGGAACAGAAAGAAAAGCATCATGTAAAAA
TGAAAGCCAAGAGATGTGCCACTCCTGTAATCATCGATGAAATTCTACCCTCTAAGAAAATGAAAGTTTCTAACA
ACAAAAAGAAGCCAGAGGAAGAAGGCAGTGCTCATCAAGATACTGCTGAAAAGAATGCATCTTCCCCAGAGAAAG
CCAAGGGTAGACATACTGTGCCTTGTATGCCACCTGCAAAGCAGAAGTTTCTAAAAAGTACTGAGGAGCAAGAGC
TGGAGAAGAGTATGAAAATGCAGCAAGAGGTGGTGGAGATGCGGAAAAAGAATGAAGAATTCAAGAAACTTGCTC
TGGCTGGAATAGGGCAACCTGTGAAGAAATCAGTGAGCCAGGTCACCAAATCAGTTGACTTCCACTTCCGCACAG
ATGAGCGAATCAAACAACATCCTGAGAACCAGGAGGAATATAAGGAAGTGAACTTTACATCTGAACTACGAAAGC
ATCCTTCATCTCCTGCCCGAGTGACTAAGGGATGTACCATTGTTAAGCCTTTCAACCTGTCCCAAGGAAAGAAAA
GAACATTTGATGAAACAGTTTCTACATATGTGCCCCTTGCACAGCAAGTTGAAGACTTCCATAAACGAACCCCTA
ACAGATATCATTTGAGGAGCAAGAAGGATGATATTAACCTGTTACCCTCCAAATCTTCTGTGACCAAGATTTGCA
GAGACCCACAGACTCCTGTACTGCAAACCAAACACCGTGCACGGGCTGTGACCTGCAAAAGTACAGCAGAGCTGG
AGGCTGAGGAGCTCGAGAAATTGCAACAATACAAATTCAAAGCACGTGAACTTGATCCCAGAATACTTGAAGGTG
GGCCCATCTTGCCCAAGAAACCACCTGTGAAACCACCCACCGAGCCTATTGGCTTTGATTTGGAAATTGAGAAAA
GAATCCAGGAGCGAGAATCAAAGAAGAAAACAGAGGATGAACACTTTGAATTTCATTCCAGACCTTGCCCTACTA
AGATTTTGGAAGATGTTGTGGGTGTTCCTGAAAAGAAGGTACTTCCAATCACCGTCCCCAAGTCACCAGCCTTTG
CATTGAAGAACAGAATTCGAATGCCCACCAAAGAAGATGAGGAAGAGGACGAACCGGTAGTGATAAAAGCTCAAC
CTGTGCCACATTATGGGGTGCCTTTTAAGCCCCAAATCCCAGAGGCAAGAACTGTGGAAATATGCCCTTTCTCCT
TTGATTCTCGAGACAAAGAACGTCAGTTACAGAAGGAGAAGAAAATAAAAGAACTGCAGAAAGGGGAGGTGCCCA
AGTTCAAGGCACTTCCCTTGCCTCATTTTGACACCATTAACCTGCCAGAGAAGAAGGTAAAGAATGTGACCCAGA
TTGAACCTTTCTGCTTGGAGACTGACAGAAGAGGTGCTCTGAAGGCACAGACTTGGAAGCACCAGCTGGAAGAAG
AACTGAGACAGCAGAAAGAAGCAGCTTGTTTCAAGGCTCGTCCAAACACCGTCATCTCTCAGGAGCCCTTTGTTC
CCAAGAAAGAGAAGAAATCAGTTGCTGAGGGCCTTTCTGGTTCTCTAGTTCAGGAACCTTTTCAGCTGGCTACTG
AGAAGAGAGCCAAAGAGCGGCAGGAGCTGGAGAAGAGAATGGCTGAGGTAGAAGCCCAGAAAGCCCAGCAGTTGG
AGGAGGCCAGACTACAGGAGGAAGAGCAGAAAAAAGAGGAGCTGGCCAGGCTACGGAGAGAACTGGTGCATAAGG
CAAATCCAATACGCAAGTACCAGGGTCTGGAGATAAAGTCAAGTGACCAGCCTCTGACTGTGCCTGTATCTCCCA
AATTCTCCACTCGATTCCACTGCTAAACTCAGCTGTGAGCTGCGGATACCGCCCGGCAATGGGACCTGCTCTTAA
CCTCAAACCTAGGACCGTCTTGCTTTGTCATTGGGCATGGAGAGAACCCATTTCTCCAGACTTTTACCTACCCGT
GCCTGAGAAAGCATACTTGACAACTGTGGACTCCAGTTTTGTTGAGAATTGTTTTCTTACATTACTAAGGCTAAT
AATGAGATGTAACTCATGAATGTCTCGATTAGACTCCATGTAGTTACTTCCTTTAAACCATCAGCCGGCCTTTTA
TATGGGTCTTCACTCTGACTAGAATTTAGTCTCTGTGTCAGCACAGTGTAATCTCTATTGCTATTGCCCCTTACG
ACTCTCACCCTCTCCCCAACTTTTTTTAAAAATTTTAACCAGAAAATAAAGATAGTTAAATCCTAAGATAGAGAT
TAAGTCATGGTTTAAATGAGGAACAATCAGTAAATCAGATTCTGTCCTCTTCTCTGCATACCGTGAATTTATAGT
TAAGGATCCCTTTGCTGTGAGGGTAGAAAACCTCACCAACTGCACCAGTGAGGAAGAAGACTGCGTGGATTCATG
GGGAGCCTCACAGCAGCCACGCAGCAGGCTCTGGGTGGGGCTGCCGTTAAGGCACGTTCTTTCCTTACTGGTGCT
GATAACAACAGGGAACCGTGCAGTGTGCATTTTAAGACCTGGCCTGGAATAAATACGTTTTGTCTTTCCCTC

FIGURE 6546

MSQVKSSYSYDAPSDFINFSSLDDEGDTQNIDSWFEEKANLENKLLGKNGTGGLFQGKTPLRKANLQQAIVTPLK
PVDNTYYKEAEKENLVEQSIPSNACSSLEVEAAISRKTPAQPQRRSLRLSAQKDLEQKEKHHVKMKAKRCATPVI
IDEILPSKKMKVSNNKKKPEEEGSAHQDTAEKNASSPEKAKGRHTVPCMPPAKQKFLKSTEEQELEKSMKMQQEV
VEMRKKNEEFKKLALAGIGQPVKKSVSQVTKSVDFHFRTDERIKQHPENQEEYKEVNFTSELRKHPSSPARVTKG
CTIVKPFNLSQGKKRTFDETVSTYVPLAQQVEDFHKRTPNRYHLRSKKDDINLLPSKSSVTKICRDPQTPVLQTK
HRARAVTCKSTAELEAEELEKLQQYKFKARELDPRILEGGPILPKKPPVKPPTEPIGFDLEIEKRIQERESKKKT
EDEHFEFHSRPCPTKILEDVVGVPEKKVLPITVPKSPAFALKNRIRMPTKEDEEEDEPVVIKAQPVPHYGVPFKP
QIPEARTVEICPFSFDSRDKERQLQKEKKIKELQKGEVPKFKALPLPHFDTINLPEKKVKNVTQIEPFCLETDRR
GALKAQTWKHQLEEELRQQKEAACFKARPNTVISQEPFVPKKEKKSVAEGLSGSLVQEPFQLATEKRAKERQELE
KRMAEVEAQKAQQLEEARLQEEEQKKEELARLRRELVHKANPIRKYQGLEIKSSDQPLTVPVSPKFSTRFHC

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FIGURE 6547A

GGCACGAGGCTCGCCGCGGACTCAAGATGGCGGCGTGTGGACGTGTACGGAGGATGTTCCGCTTGTCGGCGGCGC
TGCATCTGCTGCTGCTATTCGCGGCCGGGGGCAGAAACTCCCCGGCCAGGGCGTCCCACAGCCAGGGCCAGGGTC
CCGGGGCCAACTTTGTGTCCTTCGTAGGGCAGGCCGGAGGCGGCGGCCCGGCGGGTCAGCAGCTGCCCCAGCTGC
CTCAGTCATCGCAGCTTCAGCAGCAACAGCAGCAGCAGCAACAGCAACAGCAGCCTCAGCCGCCGCAGCCGCCTT
TCCCGGCGGGTGGGCCTCCGCGGCGGGGAGGAGCGGGGGCTGGTGGGGGCTGGAAGCTGGCGGAGGAAGAGTCCT
GCAGGGAGGACGTGACCCGCGTGTGCCCTAAGCACACCTGGAGCAACAACCTGGCGGTGCTCGAGTGCCTGCAGG
ATGTGAGGGAGCCTGAAAATGAAATTTCTTCAGACTGCAATCATTTGTTGTGGAATTATAAGCTGAACCTAACTA
CAGATCCCAAATTTGAATCTGTGGCCAGAGAGGTTTGCAAATCTACTATAACAGAGATTAAAGAATGTGCTGATG
AACCGGTTGGAAAAGGTTACATGGTTTCCTGCTTAGTGGATCACCGAGGCAACATCACTGAGTATCAGTGTCACC
AGTACATTACCAAGATGACGGCCATCATTTTTAGTGATTACCGTTTAATCTGTGGCTTCATGGATGACTGCAAAA
ATGACATCAACATTCTGAAATGTGGCAGTATTCGGCTTGGAGAAAAGGATGCACATTCACAAGGTGAGGTGGTAT
CATGCTTGGAGAAAGGCCTGGTGAAAGAAGCAGAAGAAAGAGAACCCAAGATTCAAGTTTCTGAACTCTGCAAGA
AAGCCATTCTCCGGGTGGCTGAGCTGTCATCGGATGACTTTCACTTAGACCGGCATTTATATTTTGCTTGCCGAG
ATGATCGGGAGCGTTTTTGTGAAAATACACAAGCTGGTGAGGGCAGAGTGTATAAGTGCCTCTTTAACCATAAAT
TTGAAGAATCCATGAGTGAAAAGTGTCGAGAAGCACTTACAACCCGCCAAAAGCTGATTGCCCAGGATTATAAAG
TCAGTTATTCATTGGCCAAATCCTGTAAAAGTGACTTGAAGAAATACCGGTGCAATGTGGAAAACCTTCCGCGAT
CGCGTGAAGCCAGGCTCTCCTACTTGTTAATGTGCCTGGAGTCAGCTGTACACAGAGGGCGACAAGTCAGCAGTG
AGTGCCAGGGGGAGATGCTGGATTACCGACGCATGTTGATGGAAGACTTTTCTCTGAGCCCTGAGATCATCCTAA
GCTGTCGGGGGGAGATTGAACACCATTGTTCCGGATTACATCGAAAAGGACGGACCCTACACTGTCTGATGAAGG
TAGTTCGAGGGGAGAAGGGGAACCTTGGAATGAACTGCCAGCAGGCGCTTCAAACACTGATTCAGGAGACTGACC
CTGGTGCAGATTACCGCATTGATCGAGCTTTGAATGAAGCTTGTGAATCTGTAATCCAGACAGCCTGCAAACATA
TAAGATCTGGAGACCCAATGATCTCGTCGTGCCTGATGGAACATTTATACACAGAGAAGATGGTAGAAGACTGTG
AACACCGTCTCTTAGAGCTGCAGTATTTCATCTCCCGGGATTGGAAGCTGGACCCTGTCCTGTACCGCAAGTGCC
AGGGAGACGCTTCTCGTCTTTGCCACACCCACGGTTGGAATGAGACCAGTGAATTTATGCCTCAGGGAGCTGTGT
TCTCTTGTTTATACAGACACGCCTACCGCACTGAAGAACAGGGAAGGAGGCTCTCACGGGAGTGCCGAGCTGAAG
TCCAAAGGATCCTACACCAGCGTGCCATGGATGTCAAGCTGGATCCTGCCCTCCAGGATAAGTGCCTGATTGATC
TGGGAAAATGGTGCAGTGAGAAAACAGAGACTGGACAGGAGCTGGAGTGCCTTCAGGACCATCTGGATGACTTGG
TGGTGGAGTGTAGAGATATAGTTGGCAACCTCACTGAGTTAGAATCAGAGGATATCCAAATAGAAGCCTTGCTGA
TGAGAGCCTGTGAGCCCATAATTCAGACATTCTGCCACGATGCGGATAACCAGATAGACTCTGGGGACCTGATGG
AGTGTCTGATACAGAACAAACACCAGAAGGACATGAACGAGAAGTGTGCCATCGGAGTTACCCACTTCCAGCTGG
TGCAGATGAAGGATTTTCGGTTTTCTTACAAGTTTAAAATGGCCTGCAAGGAGGACGTGTTGAAGCTTTGCCCAA
ACATAAAAAAAGAAGGTGGACGTGGTGATCTGCCTGAGCACGACCGTGCGCAATGACACTCTGCAGGAAGCCAAGG
AGCACAGGGTGTCCCTGAAGTGCCGCAGGCAGCTCCGTGTGGAGGAGCTGGAGATGACGGAGGACATCCGCTTGG
AGCCAGATCTATACGAAGCCTGCAAGAGTGACATCAAAAACTTCTGTTCCGCTGTGCAATATGGCAACGCTCAGA
TTATCGAATGTCTGAAAGAAAACAAGAAGCAGCTAAGCACCCGCTGCCACCAAAAAGTATTTAAGCTGCAGGAGA
CAGAGATGATGGACCCAGAGCTAGACTACACCCTCATGAGGGTCTGCAAGCAGATGATAAAGAGGTTCTGTCCGG
AAGCAGATTCTAAAACCATGTTGCAGTGCTTGAAGCAAAATAAAAACAGTGAATTGATGGATCCCAAATGCAAAC
AGATGATAACCAAGCGCCAGATCACCCAGAACACAGATTACCGCTTAAACCCCATGTTAAGAAAAGCCTGTAAAG
CTGACATTCCTAAATTCTGTCACGGTATCCTGACTAAGGCCAAGGATGATTCAGAATTAGAAGGACAAGTCATCT
CTTGCCTGAAGCTGAGATATGCTGACCAGCGCCTGTCTTCAGACTGTGAAGACCAGATCCGAATCATTATCCAGG
AGTCCGCCCTGGACTACCGCCTGGATCCTCAGCTCCAGCTGCACTGCTCAGACGAGATCTCCAGTCTATGTGCTG
AAGAAGCAGCAGCCCAAGAGCAGACAGGTCAGGTGGAGGAGTGCCTCAAGGTCAACCTGCTCAAGATCAAAACAG
AATTGTGTAAAAAGGAAGTGCTAAACATGCTGAAGGAAAGCAAAGCAGACATCTTTGTTGACCCGGTACTTCATA
CTGCTTGTGCCCTGGACATTAAACACCACTGCGCAGCACTCACCCCTGGCCGCGGGCGTCAAATGTCCTGTCTCA
TGGAAGCACTGGAGGATAAGCGGGTGAGGTTACAGCCCGAGTGCAAAAAGCGCCTCAATGACCGGATTGAGATGT
GGAGTTACGCAGCAAAGGTGGCCCCAGCAGATGGCTTCTCTGATCTTGCCATGCAAGTAATGACGTCTCCATCTA
AGAACTACATTCTCTCTGTGATCAGTGGGAGCATCTGTATATTGTTCCTGATTGGCCTGATGTGTGGACGGATCA
CCAAGCGAGTGACACGAGAGCTCAAGGACAGGTAGAGCCACCTTGACCACCAAAGGAACTACCTATCCAGTGCCC

FIGURE 6547B

AGTTTGTACAGCCCTCTTGTATAGCATCCCCACTCACCTCGCTCTTCTCAGAAGTGACACCAACCCCGTGTTAGA
GCATTAGCAGATGTCCACTGCGTTGTCCCATCCAGCCTCCACTCGTGTCCATGGTGTCCTCCTCCTCCTCACCGT
GCAGCAGCAGCAGCTGGTCGCTGGGGTTACTGCCTTTGTTTGGCAAACTTGGGTTTACCTGCCTGTAGACAAGTC
TCTCTCATACCAACAGAACTTCCGGTACTTCCAGAACCAACTCACCTGACCTGCAACTCAAAGGCTTTTTTAAGA
AAACCACCA

FIGURE 6548

MAACGRVRRMFRLSAALHLLLLFAAGGRNSPARASHSQGQGPGANFVSFVGQAGGGGPAGQQLPQLPQSSQLQQQ
QQQQQQQQQPQPPQPPFPAGGPPRRGGAGAGGGWKLAEEESCREDVTRVCPKHTWSNNLAVLECLQDVREPENEI
SSDCNHLLWNYKLNLTTDPKFESVAREVCKSTITEIKECADEPVGKGYMVSCLVDHRGNITEYQCHQYITKMTAI
IFSDYRLICGFMDDCKNDINILKCGSIRLGEKDAHSQGEVVSCLEKGLVKEAEEREPKIQVSELCKKAILRVAEL
SSDDFHLDRHLYFACRDDRERFCENTQAGEGRVYKCLFNHKFEESMSEKCREALTTRQKLIAQDYKVSYSLAKSC
KSDLKKYRCNVENLPRSREARLSYLLMCLESAVHRGRQVSSECQGEMLDYRRMLMEDFSLSPEIILSCRGEIEHH
CSGLHRKGRTLHCLMKVVRGEKGNLGMNCQQALQTLIQETDPGADYRIDRALNEACESVIQTACKHIRSGDPMIS
SCLMEHLYTEKMVEDCEHRLLELQYFISRDWKLDPVLYRKCQGDASRLCHTHGWNETSEFMPQGAVFSCLYRHAY
RTEEQGRRLSRECRAEVQRILHQRAMDVKLDPALQDKCLIDLGKWCSEKTETGQELECLQDHLDDLVVECRDIVG
NLTELESEDIQIEALLMRACEPIIQTFCHDADNQIDSGDLMECLIQNKHQKDMNEKCAIGVTHFQLVQMKDFRFS
YKFKMACKEDVLKLCPNIKKKVDVVICLSTTVRNDTLQEAKEHRVSLKCRRQLRVEELEMTEDIRLEPDLYEACK
SDIKNFCSAVQYGNAQIIECLKENKKQLSTRCHQKVFKLQETEMMDPELDYTLMRVCKQMIKRFCPEADSKTMLQ
CLKQNKNSELMDPKCKQMITKRQITQNTDYRLNPMLRKACKADIPKFCHGILTKAKDDSELEGQVISCLKLRYAD
QRLSSDCEDQIRIIIQESALDYRLDPQLQLHCSDEISSLCAEEAAAQEQTGQVEECLKVNLLKIKTELCKKEVLN
MLKESKADIFVDPVLHTACALDIKHHCAALTPGRGRQMSCLMEALEDKRVRLQPECKKRLNDRIEMWSYAAKVAP
ADGFSDLAMQVMTSPSKNYILSVISGSICILFLIGLMCGRITKRVTRELKDR

FIGURE 6549

CTCTTTATAATTTAGTTTCCATAGAAGTTATATGTGCATTTAAAAAAATTCAATGCTGGAGCGACCGTGTCTGGG
GAGCCGAGCCCCGCTTCTCGCTGCGGTGAGCCCGGACTGGGGCACGCACTGCGCAGACTCCCCGCTGCAGTGGGC
GGAGTCCCACAGGCCCCGCCCCTCCTCCCACCCTCGTTCAGCCTGTCCAGACAGAAGCTGGGGCCCAGCGGAGGT
AGCAGCAGACGCCTGAGAGCGAGGCCGAGGCCCTCAGGGTTTGGAGACCCTGACACACCCACCTTCTCACCTGGG
CTCTGCGTATCCCCCAGCCTTGAGGGAAGATGAAGCCTAAACTGATGTACCAGGAGCTGAAGGTGCCTGCAGAGG
AGCCCGCCAATGAGCTGCCCATGAATGAGATTGAGGCGTGGAAGGCTGCGGAAAAGAAAGCCCGCTGGGTCCTGC
TGGTCCTCATTCTGGCGGTTGTGGGCTTCGGAGCCTG**ATG**ACTCAGCTGTTTCTATGGGAATACGGCGACTTGCA
TCTCTTTGGGCCCAACCAGCGCCCAGCCCCCTGCTATGACCCTTGCGAAGCAGTGCTGGTGGAAAGCATTCCTGA
GGGCCTGGACTTCCCCAATGCCTCCACGGGGAACCCTTCCACCAGCCAGGCCTGGCTGGGCCTGCTCGCCGGTGC
GCACAGCAGCCTGGACATCGCCTCCTTCTACTGGACCCTCACCAACAATGACACCCACACGCAGGAGCCCTCTGC
CCAGCAGGGTGAGGAGGTCCTCCGGCAGCTGCAGACCCTGGCACCAAAGGGCGTGAACGTCCGCATCGCTGTGAG
CAAGCCCAGCGGGCCCCAGCCACAGGCGGACCTGCAGGCTCTGCTGCAGAGCGGTGCCCAGGTCCGCATGGTGGA
CATGCAGAAGCTGACCCATGGCGTCCTGCATACCAAGTTCTGGGTGGTGGACCAGACCCACTTCTACCTGGGCAG
TGCCAACATGGACTGGCGTTCACTGACCCAGGTCAAGGAGCTGGGCGTGGTCATGTACAACTGCAGCTGCCTGGC
TCGAGACCTGACCAAGATCTTTGAGGCCTACTGGTTCCTGGGCCAGGCAGGCAGCTCCATCCCATCAACTTGGCC
CCGGTTCTATGACACCCGCTACAACCAAGAGACACCAATGGAGATCTGCCTCAATGGAACCCCTGCTCTGGCCTA
CCTGGCGAGTGCGCCCCCACCCCTGTGTCCAAGTGGCCGCACTCCAGACCTGAAGGCTCTACTCAACGTGGTGGA
CAATGCCCGGAGTTTCATCTACGTCGCTGTCATGAACTACCTGCCCACTCTGGAGTTCTCCCACCCTCACAGGTT
CTGGCCTGCCATTGACGATGGGCTGCGGCGGGCCACCTACGAGCGTGGCGTCAAGGTGCGCCTGCTCATCAGCTG
CTGGGGACACTCGGAGCCATCCATGCGGGCCTTCCTGCTCTCTCTGGCTGCCCTGCGTGACAACCATACCCACTC
TGACATCCAGGTGAAACTCTTTGTGGTCCCCGCGGATGAGGCCCAGGCTCGAATCCCATATGCCCGTGTCAACCA
CAACAAGTACATGGTGACTGAACGCGCCACCTACATCGGAACCTCCAACTGGTCTGGCAACTACTTCACGGAGAC
GGCGGGCACCTCGCTGCTGGTGACGCAGAATGGGAGGGGCGGCCTGCGGAGCCAGCTGGAGGCCATTTTCCTGAG
GGACTGGGACTCCCCTTACATTCATGACCTTGACACCTCAGCTGACAGCGTGGGCAACGCCTGCCGCCTGCTC**TG**
AGGCCCGATCCAGTGGGCAGGCCAAGGCCTGCTGGGCCCCCGCGGACCCAGGTGCTCTGGGTCACGGTCCCTGTC
CCCGCACCCCCGCTTCTGTCTGCCCCATTGTGGCTCCTCAGGCTCTCTCCCCTGCTCTCCCACCTCTACCTCCAC
CCCCACCGGCCTGACGCTGTGGCCCCGGGACCCAGCAGAGCTGGGGGAGGGATCAGCCCCCAAAGAAATGGGGGT
GCATGCTGGCCTGCCCCCTGGCCCACCCCCACTTTCCAGGGCAAAAAGGGCCCAGGGTTATAATAAGTAAATAAC
TTGTCTGTAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6550

MTQLFLWEYGDLHLFGPNQRPAPCYDPCEAVLVESIPEGLDFPNASTGNPSTSQAWLGLLAGAHSSLDIASFYWT
LTNNDTHTQEPSAQQGEEVLRQLQTLAPKGVNVRIAVSKPSGPQPQADLQALLQSGAQVRMVDMQKLTHGVLHTK
FWVVDQTHFYLGSANMDWRSLTQVKELGVVMYNCSCLARDLTKIFEAYWFLGQAGSSIPSTWPRFYDTRYNQETP
MEICLNGTPALAYLASAPPPLCPSGRTPDLKALLNVVDNARSFIYVAVMNYLPTLEFSHPHRFWPAIDDGLRRAT
YERGVKVRLLISCWGHSEPSMRAFLLSLAALRDNHTHSDIQVKLFVVPADEAQARIPYARVNHNKYMVTERATYI
GTSNWSGNYFTETAGTSLLVTQNGRGGLRSQLEAIFLRDWDSPYIHDLDTSADSVGNACRLL

FIGURE 6551A

CGGTGCTGGAGAAGTTTGCGCTGCGGTTCGTGAGCGCAGGGTGCGGGCCCCGCCGGCCGCTGCGCGCCCGCTGCC
ATGGCTTTCCGCAGGAGGACGAAAAGTTACCCGCTCTTCAGCCAGGAGTTCGTCATCCACAACCATGCGGACATC
GGCTTCTGCCTGGTGCTCTGCGTCCTCATCGGGCTTATGTTCGAGGTCACAGCCAAGACTGCCTTTCTATTTATT
TTACCTCAGTATAACATTAGCGTGCCTACAGCAGACAGTGAGACCGTGCACTACCACTATGGCCCTAAGGACCTG
GTCACAATCTTGTTCTACATCTTCATCACCATCATCTTGCATGCTGTGGTTCAGGAGTACATTTTAGATAAAATC
AGCAAACGGCTTCATCTCTCCAAAGTCAAACACAGCAAGTTCAATGAATCTGGACAGCTGGTCGTCTTTCATTTC
ACCTCGGTGATTTGGTGCTTCTACGTGGTGGTGACGGAAGGATACTTAACAAACCCAAGAAGCCTCTGGGAAGAC
TACCCGCATGTGCACCTCCCCTTCCAGGTGAAGTTTTTCTACCTATGCCAGCTGGCCTACTGGCTGCACGCACTT
CCTGAGCTATACTTCCAGAAGGTACGGAAGGAGGAAATTCCCCGCCAGCTCCAGTATATTTGCCTGTACCTGGTG
CATATAGCTGGAGCATACCTCTTAAACCTGAGCCGCCTGGGCCTGATCTTGCTGCTGCTGCAGTACTCAACTGAG
TTCCTCTTCCACACGGCTAGACTCTTCTACTTTGCAGATGAAAACAACGAGAAACTGTTCAGTGCCTGGGCTGCT
GTTTTTGGGGTTACCCGCCTCTTCATCCTCACCCTTGCCGTGCTGGCCATTGGCTTTGGACTGGCTCGCATGGAA
AACCAGGCATTTGATCCCGAGAAAGGGAACTTCAACACTTTGTTTTGCAGGCTCTGCGTGCTGCTGCTGGTGTGT
GCCGCCCAGGCCTGGCTCATGTGGCGCTTCATCCACTCCCAGCTGCGGCACTGGCGGGAATACTGGAATGAGCAG
AGTGCAAAGCGGAGAGTCCCAGCCACACCCAGACTACCAGCCAGGCTCATCAAGAGGGAATCTGGTTACCATGAA
AATGGAGTGGTGAAGGCAGAGAACGGAACCTCCCCACGGACTAAGAAACTCAAGTCTCCCTAAGGCCAAAGTGCT
AAGAACAGGAATCCTCTTGGTGGGGGCCGAGCAGGGGGCAAGGAGCCCAGGCCCCCTCCCTGCCTCCTCCTTCCT
GCCTGTGATGCTCCGTCTCAAACAGCCGAAACCTGTCTTGCAATGGGGGGAGGGGGCGTTTCGCTTTCCTTCTTC
TTGGCTTCCTCTTATTCTTCCACAAACCATTCTCAATAAAGCCAAAAATCTTTCTCTTTCTCCCCCTCAGGCCAC
CTCCTGTCCTCACTCCTGTCCTGTGCTGGCTTTTCTGGAACGCCAGGCGCCCATGGCTGGCACCTTTCTGCTTGC
TCTGTTTCTTGCCTTATGGCTGCTGCTTTTCCTTTTTACTTCCTATTTTCACCTTATCTTGCAATTTTTCTGTCT
GATTTTTACAATGGGAGGGGAGCTAAGATTGCAGTCCTGTCCTTCGGTCCCCCAGGGCCTGCCGGTCAGAAGCCT
GGGGCTGGTAGGCCCTTGGTGGTCCTCATGTGGATGGGCAAGAAGAGAGCGGCCATCTCGGATCATAATCTCCTT
GGTGCTGATTAACTGACGAGATATATGATTCCAGTTCTGCATGTACCATCTTGAGGCACAGCAGCCACTGCTCGT
TGTAAATGCCAAGGCATTTGGCTTTGGGACGTGACAACTCAATCCAGAAGGATGGTGTGAACTCGGTTGGGTCCC
GTGACTCGAGCTCCTACCAGTGGCTGGCCGCGGATTGGAAGCCAGCCTGCTGTCGCTCTGTGGGGAGGACATGTC
TTCCCACTGCTTAGAGCGAGAGCAGAGCAAACTGCGCAGCAGGCACCTCCAGAAAGGTAATGGTGGCAGAACCCA
CAGTGGAGTCGACCTAGGCCTTTCTCCAGCAGTCCCAGTCGCCATTGCTTTTTCAGCCATTCACAAGCATTCAAA
ACCAAACCAAACAGCAGTTCATATACCTGCCTGAGATAGGCTGGTCCTCACCTCCAGAGCCAGCCAGCCCCGTCA
GGGGCCAAACTTACTACCTTGACTTCATCTCTAGCTGCAGAAACACTAAGTCTCAAGGGCTTCAGCCCCATGCTG
GTCCCTTGGTGTTCAGGGAGGGTCACTTGGACCGCTGTTCATCTGGCCGCCCTTGTTGAGTGTTCTTTGGAATTG
TCGTTTTTTGAGCACAACTACAGCATTTTAGACTGCATGAAACCATGACTGACTGAGAGTCACTCTCTGGGTAGA
TGATAGGCGCCTTTCTGGCCCCTTCCCTCACAGATTCTTTCCCCTCCCCTCCACCTGAAGAGAAGGCCTCCAAGT
CCTTTTGGTGCCTTGTGAGGACTTTTAGAAGGGGCGTTCAGCTTTAAAAAGCCGGTCCTAATTACGGCCGGACGC
AGTAGCTTACGCCTGTTATCCCAGCACTTTGGGAGGTCGAGGTGGGCAGATCACCTGAGGTTAGGAGTTCAAGAC
CAGCCTGGCCAACATGGTGAAACCCCATCTCTACTAAAAATACAAAAAATTAGGTGTAGTGGCAGGCACCTGTAA
TCCCAGCTACTCGGGAGGCTGAGGCAGGAGAATCGCTTGAACCTAGAAGGTGGAGGTTGCAGTGAGCGGAGATTG
TACCATGGCACTCCAGCCTGGACAACAAGAGCGAAATTCTGTCTAAAAAAACAAAAGTCCCAATTAAGAACCTCC
GAACTCTGTTTTGAGGCAAAGGGGAGTAGTTCTTGGTAGGTGCAGGAATAGTAGTGTCATTTGGAATACTGGTCA
TCTTTCTGACATCACAGTAGAAACCAAACCTTGGATTTAGATTCAAAAGGGGGGAAATGGGTCTTTTCATCAAGG
CAACTCCCCTTCTCCAAGTCACTTACATCATAGATAAATTTTAGCTTCCCAGTAACTGAGGGATTTGTTTCCTAA
CGCCATTGGAGGCCTTCATCCCTCTCTACGATAAGGTTGCAGAAATGGGAAGAGCTACCCGTGGTTGCTTTTGAT
TACCCTTAGGAAGTGAGACAGTGTTTTTGAAAATATGTATTTCTCCCATTTCTCCCTCTCCTTCCCTGACACTTC
TCTGGGCTGCACAGCAGAAACGTTGGTAAAAGGGCAGTTTGGTTTCAACACAGCAGACCTGATATGGGATCCCTT
AGCCACTTTAGTCAAACAGCCCTGACAGAGTCTATAATTGAGTTCAGGCCCCCCACCTTGCCTAATAACTGCAAA
TCGCATGTTCAGCCAGCAGCCTCCTAAGCCCACCTTCCTCCCCCATTAGAGAACACCCATCCTAGGTGCTCTCCA
GGCTGTGTCATTGGCAGGGCTTCACATGCAGGAGGCCTCTCTCAGGTGAGTCCAGGTTAAACTGTTGAGTTGTGG
CTTCAACAGATATGTATGGCATGCTGGGATGTGCCAGGTGCCTGCGTTGTGCCAGTTGCTGGAGAGGTAGTGTGA

FIGURE 6551B

GCAGAGCAGCTGAAATCTTGCCATCAAGCAACCCTCATTCTCATGCCTGTAGGTTTCCATTGCTCTGTCCCAGGA
CACTTGCGTGCCAGAGACGCCACAACTTCATGTCCCTGTCTCTTGCAAGCTCCCCGTGCTGCCAGTACTTCATGC
CTTGGATGTGGTCCCACCAGCCCAGTGGCTGGGGTCAGCTTAGGCTCTGCTTCCCAGTGGACGGGTGTGCTAAGG
GTTTATTTTATGTAAAAAAAAAAAAAAAACAAAAAAAAACCCTGAGACCATGAGTGGGGCTGGCATCTTGCCAGC
CTGGGCTTCAGGGATGTTTGGGGGGGGTGGTTAGAGGGTAGTTGTAGGGTACTTTGTCACCCCCCTCCCCCTGCC
ACCCTCCCTGGCACGTTTATTTCACAGCAGAGCCAAGTCTGTGGCAGGTTGACACAGACTGTGTTGCCAGAGCTG
AAATAATTCCACTTCATCCTATGAGCGTGTTGGGCTAGCTTGTTCTAATTTTGGCCACTTTGGCTGTTTTCTTCA
GTTTTATGCATTCTCTCCTGCCCCAAAGTGCCAAGCCATTTGTGAAGGCTCTGCCAGACACCTCCAAGCTTGAGA
GCTCAGCACCATGCACCAAGAGCAGGAGAAAAGACGTAAACCTACCCCAGCAACTGTGGCCTCTCGACAGCCCTG
GCTAACTAACTTACATTTGTGGGGAAGCCAACAGACACAGCAGGAGGAGAGGGAGGTGGCGCTGGTGGACCAAGG
ATCTGTGCTACCCGCTCCCCTCCTTGGAGGTGCAGTGATGATGGGAGTTATTTTTACCATCCGGGCGCTGATAGC
TGCACTATTAATAAATTGCATGTGTTCCTTTTGAAGGTAGGGGATGGTTCTGGGTGAGAGGGGAGCAGGCTGAGC
CGGCGGGGGATCTGCTGTCCTCCCTTTTGAGTCAGTTCTAATCCCATGTGTGTCTGGGCCACCAGACCGAAATGG
TTGCTGAGAAACTTGTCTGTTCATGTCCCAAGGCATAACTTCCCAACATTTAAGAAACCCCAATAGACACCTCTG
CCCTGGCCACGTTCACAGATCCTTCTCTTGACCGGAAACCCTGGGACCCTAAGAACCCCTGAAGCTTGGGGTGGG
TGTGTGCTTCTGGGGTCTCTTTTGGGACCTCCTTTGTCAGTACCCCTTCTTTTTTCTAAGCAGCTAATAAGAGGT
TGGGTGAAAGAGTGCATCTCCTCCCAGGATTCCACAACAAAATTCTTATCTTCCATGGATGCTTTAATTGGAAGT
GGGTTGCCGACCCCCTTGTGCCTAGAAAAGGCCTTTGCTTGGGTTTCCTTTGTATGCTTCAGCCTTCCTAGTTGG
TTTTTCTAGGCCTGGTGTGAGAGGTAGGGAAGTCTGCACATAACTAATTCTTTTGCTTAAGGGCCTATGGCACAA
GTGCACAAACTTCAATTCTTGATGTTCTAAGCTCTCTCCTCTAACAGAGGGAGTGCTGAAAGCTTTTGAGTCAAG
ACAATGGAGTGCTCTTCCTCCCTCACTCTGCCTTCCGAGCTTATGGTTCCTTTTCTCAGGAGAGGATTTTCAGGA
TTATTGGAGGATTAGGTCATTGTCAGATGACTGGAAAACCTAAATAGGATCTCTCTCCAGCTCAAGGTTGTCCCA
GTGAGGAAGACTTTACCAACTTCTCACTCTACCCCACTACTCACATGAGTGTTAGCTCCACCTTGCAAAGGCTGA
AGACCAGTTCTCCCCAGTGAAAGCTGCCTCATTCTTTTATGGAGTTCCCTGGAGTGGCAGAGCTATAAAGACGAG
CATTGGGATTTGCAGTCTCCATGTAGCCTTTCGTGCTTGGCAACCCCTGTAGACTTTTTGTCCCAAGCAGATTGC
GTGCGTGCGCCTGTGTGTGAGAATAAGTGCCTTACTTTGCTGTGTGGTTTTCAACTTGTACTCCGTGGCCAGCCC
CCAGTTGCCAGGGCTCGACGGCAGCCAAGGACACCATACCTCAGTATAGTTATATATAAAATGGACACGGATTGT
GACAGTTTCACCCCATTTGTTTCTAACCCCGCTGCCCAGGATTAGGGTCTGTGGTGTGTTCTGTTTTGTTTTTGG
TTTCTCCCTTGTGTCAGTTCTCTTCTGGCCCAGCTGGGTGGCTGTGGAAGTCTGTGAGGTGGCCCAACCACAAGC
ATACCTATTAAGAGAAGCCCAGAGCTTCCAGCCCCCACTTCGAAAACTCTCCTCTGGCCCCACATAGCAAACTCC
TTCTCCGTTATTTTCCCCACCCCCAGATTTTTTTTAAAAGGCCCACTTGCCATAACCTCTTTTGGTCTATTTTGC
TTCCCATTCAGCCCAAAGTTTATATGATAAAGGTGTTTACTTTTACTTCCCAGTCTCCAAGTGCTAACACATAAA
CACATACATGTCTGACTGTTGCAGAACTGTTCGAGCTCCTAATTCAGTGTTACCTTGTTTTAGTCGCAGCAACCC
TCTCCCCTACCCCTTGCCCGCCCACGTTTTTCTCACTCTTCCGGGTTGTGCAATAACTCTCCCAGCCAGTGGTCC
TTTCCACAGCCTTTCTGTCCCTTAAAACACCTGCAACTGGGGGAGAAATGGGACCCATGGGAGGGGGAGTCATCA
TCCCTTACACAAGAAATAGCCACTTTCCTTTTGTTGTCATTCTTGTGATCCTGGGTGGGTTTCTGTGGCACTCTT
TTAGAACATGTAGCATCATCTTAGAGGTCTATTTTTAAAAAATGTGTTGAAGAGGAAAAAACCATTCTCACGATG
GGGCTTAAGTCATTGTCCAGGAATAAGATTGGCGTGGTGCCCATGACATCACCGTCACTCTGCCTAAAAGCACTC
TAGAGCTACTTGTTCACGTGGAGAGGAAGGATATTTTGCGAAGCAACAGCCGCAGGTGGAGAGCCCTGTTCACCT
GATAGGGTCTAGCTGTGACAGTAAATATAATACCGCTGTTTCCTTGGGTACAGATTTGAGTGTTCATGTGATGAG
ACTGTAAACCTCATTTTTCGGTTCCTCTGTTTAAAAAAACATCTGAAGGATGAACTAAGGCTGCTGGTGCCCTGA
GCAACTGATAATGCAAATGTGGACAAAGTGTCTGTTTTCTACTCTAGCCTGTTCATATGGACCAAATTTCAACAA
GGAACTCAAGGAAAATTTGTACCTGCCGTATTTATGCTTTCATGTAAAAAAGGGTTGGGGGGAGGGGTGTCTTTT
TGCTTTTGGTGAACTTTTTTTCAAAATCATTTTTCCACTGTTTCTGTCTGGTTTTAAAACAAATTACAGTTTTGT
ATGGATTTTTTAAATGTACATTTTGGAACAAATGATCAAATATTTTCTGAAATAACAATAAAAGGCAGAAAATT

FIGURE 6552

MAFRRRTKSYPLFSQEFVIHNHADIGFCLVLCVLIGLMFEVTAKTAFLFILPQYNISVPTADSETVHYHYGPKDL
VTILFYIFITIILHAVVQEYILDKISKRLHLSKVKHSKFNESGQLVVFHFTSVIWCFYVVVTEGYLTNPRSLWED
YPHVHLPFQVKFFYLCQLAYWLHALPELYFQKVRKEEIPRQLQYICLYLVHIAGAYLLNLSRLGLILLLLQYSTE
FLFHTARLFYFADENNEKLFSAWAAVFGVTRLFILTLAVLAIGFGLARMENQAFDPEKGNFNTLFCRLCVLLLVC
AAQAWLMWRFIHSQLRHWREYWNEQSAKRRVPATPRLPARLIKRESGYHENGVVKAENGTSPRTKKLKSP

FIGURE 6553

TAGCTGGCTGAGAGGGGACTGGGCGCCGGCGGGGAAGGAGGAGCGCTAGGTCGGTGTACGACCGAGATTAGGGTG
CGTGCCAGCTCCGGGAGGCCGCGGTGAGGGGCCGGGCCCAAGCTGCCGACCCGAGCCGATCGTCAGGGTCGCCAG
CGCCTCAGCTCTGTGGAGGAGCAGCAGTAGTCGGAGGGTGCAGGATATTAGAAATGGCTACTCCCCAGTCAATTT
TCATCTTTGCAATCTGCATTTTAATGATAACAGAATTAATTCTGGCCTCAAAAAGCTACTATGATATCTTAGGTG
TGCCAAAATCGGCATCAGAGCGCCAAATCAAGAAGGCCTTTCACAAGTTGGCCATGAAGTACCACCCTGACAAAA
ATAAGAGCCCGGATGCTGAAGCAAAATTCAGAGAGATTGCAGAAGCATATGAAACACTCTCAGATGCTAATAGAC
GAAAAGAGTATGATACACTTGGACACAGTGCTTTTACTAGTGGTAAAGGACAAAGAGGTAGTGGAAGTTCTTTTG
AGCAGTCATTTAACTTCAATTTTGATGACTTATTTAAAGACTTTGGCTTTTTTGGTCAAAACCAAAACACTGGAT
CCAAGAAGCGTTTTGAAAATCATTTCCAGACACGCCAGGATGGTGGTTCCAGTAGACAAAGGCATCATTTCCAAG
AATTTTCTTTTGGAGGTGGATTATTTGATGACATGTTTGAAGATATGGAGAAAATGTTTTCTTTTAGTGGTTTTG
ACTCTACCAATCAGCATACAGTACAGACTGAAAATAGATTTCATGGATCTAGCAAGCACTGCAGGACTGTCACTC
AACGAAGAGGAAATATGGTTACTACATACACTGACTGTTCAGGACAGTAGTTCTTATTCTATTCTCACTAAATCC
AACTGGTTGACTCTTCCTCATTATCTTTGATGCTAAACAATTTTCTGTGAACTATTTTGACAAGTGCATGATTTC
ACTTTAAACAATTTGATATAGCTATTAAATATATTTAAGGGTTTTTTTTTTTTTGACAAATTCAACATTCAACGA
GTAGACAAAATGCTAATTATTTCCCTGATTAGGAAAGTTTCTTTAAAAAACACGTAATTTTGCCTAGTGCTTTTT
CTCTACCTGCCCTTGGGCTCACTAATATCACCAGTATTATTACCAAGAAAATATTGAGTTTACCTGATTAAACTT
TAAAAGTTAATTGTAGATTTAAATTGTGTGAACCTAATGATTTTTGCAGTGAAACCTTTACTAATTCAAAGTTGC
ATGTTCTATGACATCTGTGACTTGCGTTGCAGAGTGTACATGAAACTGTATAATTGAGTCATTCAGTAAAGGAGA
ACAGTATCTTGGTTAATTGCTACTGAAAGGTTGAGAAAGGAATGGTTTGATATTTACCACAGCGCTGTGCCTTTC
TACAGTAGAACTGGGGTAAAGGAAATGGTTTTATTGCCCATAGTCATTTAGGCTGGAAAAAAGTTGAAAACTTAA
CGAAATATTGCCAAGAGATTGTTATGTGTTTGGTTCCAGCCTAAAAATGATTTTGTAGTGTTGAAATCATAGCTA
CTTACATAGCTTTTTCATATTTCTTTCTTAGTTGTTGGCACTCTTAGGTCTTAGTATGGATTTATGTGTTTGTGT
GTGTGTAGTTTATCCTCTCTCTCATCTTTATCTAGAGATTGACTGATACCTCATTCTGTTTGTAAAACCAGCCAG
TAATTTCTGTGCAACCTTACTATGTGCAATATTTTTAAATCCTGAGAAATGTGTGCTTTTGTTTTCGGATAGACT
TATTTCTTTAGTTCTGCACTTTTCCACATTATACTCCATATGAGTATTAATCCTATGGATACATATTAAAACAAG
TGTCTCATACAACATTGTATGTGAGAGAAATATAAATATTTACAACCTGAAAAA

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FIGURE 6554

MATPQSIFIFAICILMITELILASKSYYDILGVPKSASERQIKKAFHKLAMKYHPDKNKSPDAEAKFREIAEAYE
TLSDANRRKEYDTLGHSAFTSGKGQRGSGSSFEQSFNFNFDDLFKDFGFFGQNQNTGSKKRFENHFQTRQDGGSS
RQRHHFQEFSFGGGLFDDMFEDMEKMFSFSGFDSTNQHTVQTENRFHGSSKHCRTVTQRRGNMVTTYTDCSGQ

FIGURE 6555A

CCGGGCCGCCCGCGTGCCCAAGCCCACGTGAGAGGGCAGGACGCCTGAGAGCTTGAGGCCACACGAGGCTGTGGA
GCGGCGTGACTCAAACGTGGCGCGCATCAGCTCGCACACTTCCAAACCTCGCGATAGCTACTGGCCCTGGGCGAG
CCGTTGGGATTGCGCTTGCGCACAGCGTGTCTTCTGGATCGCCATACCTACCCTGTGGTCCTCATCTTCCTGGCC
TCATAGCTCCTCCTCGCCAAGCATGTCTTCCCCGTTGCAAAGAGCTGTGGGAGATACCAAGAGGGCCTTGTCTGC
ATCTTCTAGTTCCTCTGCCAGTCTACCCTTTGATGACAGGGACTCAAACCATACCTCAGAGGGGAATGGCGACTC
TTTGTTAGCTGATGAAGACACTGACTTTGAAGACAGCTTGAATCGCAATGTGAAGAAGAGAGCAGCAAAACGACC
ACCGAAAACAACACCGGTGGCAAAACATCCAAAGAAAGGGTCCCGAGTGGTACATCGTCATAGCCGGAAACAGTC
AGAGCCACCAGCCAATGATCTTTTCAATGCTGTGAAAGCCGCCAAAAGTGACATGCAGTCTTTGGTAGATGAGTG
GCTGGATAGCTACAAGCAAGACCAGGATGCAGGATTTCTGGAGCTTGTTAACTTTTTCATCCAATCTTGCGGATG
TAAAGGCATTGTGACCCCTGAGATGTTCAAGAAGATGTCCAACTCAGAGATCATCCAGCACCTAACAGAGCAGTT
TAATGAGGACTCGGGGGACTACCCTCTCATAGCTCCAGGTCCATCCTGGAAGAAGTTCCAGGGCAGCTTCTGTGA
ATTTGTGAGGACATTGGTCTGTCAGTGCCAGTACAGCCTCCTCTATGATGGCTTCCCTATGGACGACCTCATCTC
CCTGCTCACTGGCCTCTCAGACTCACAAGTCCGCGCCTTCCGTCACACTAGCACCCTGGCTGCTATGAAACTGAT
GACCTCCCTGGTAAAAGTTGCCCTCCAACTGAGTGTGCACCAAGATAACAATCAGCGTCAGTATGAGGCTGAAAG
AAACAAGGGGCCAGGGCAGAGGGCACCTGAGCGGCTGGAGAGCCTGTTGGAGAAACGCAAAGAGCTCCAAGAGCA
TCAAGAGGAGATTGAGGGGATGATGAATGCCCTCTTCAGGGGTGTCTTTGTTCATCGGTACAGGGATGTCCTTCC
TGAGATCCGTGCTATCTGCATTGAGGAAATTGGGTGTTGGATGCAAAGCTACAGCACGTCTTTCCTCACCGACAG
CTATTTAAAATATATTGGTTGGACTCTGCATGATAAGCACCGAGAAGTCCGCGTGAAGTGCGTGAAGGCTCTGAA
AGGGCTGTACGGTAACCGGGACCTGACCGCACGCCTGGAGCTCTTCACCAGCCGCTTCAAGGACCGGATGGTTTC
CATGATCATGGACAGAGAGTACAGTGTGGCAGTGGAGGCCGTCAGATTACTGATACTTATACTTAAGAACATGGA
AGGGTTGCTGACGGACGCGGATTGTGAGAGCGTCTACCCCGTTGTGTATCCTTCTAATCGAGGCCTGGCTTCTGC
CGCAGGCGAATTTCTGTACTGGAAACTTTTCTACCCTGAGTGCGAGATAAGAACGATGGGTGGAAGAGAGCAACG
CCAGAGCCCAGGCGCCCAGAGGACTTTCTTCCAGCTTCTGCTGTCCTTCTTTGTGGAGAGCGAGCTCCATGACCA
CGCTGCTTACTTAGTAGACAGTCTGTGGGACTGTGCAGGGGCTCGGCTGAAGGACTGGGAGGGTCTGACAAGCCT
GCTGCTGGAGAAGGACCAGAACCTGGGTGATGTGCAGGAGAGCACACTGATAGAAATCCTTGTGTCCAGTGCCCG
GCAAGCTTCAGAGGGGCACCCGCCTGTGGGCCGGGTCACTGGGAGGAAGGGCTTAACCTCTAAGGAGCGCAAGAC
CCAAGCCGATGACAGGGTGAAGTTGACTGAGCACCTCATCCCCCTGCTGCCCCAGCTCCTGGCCAAGTTCTCAGC
TGATGCAGAGAAGGTCACTCCCCTGCTCCAGCTTCTCAGCTGCTTTGACCTCCACATCTACTGCACTGGGCGCTT
GGAGAAGCACCTGGAGCTGTTCCTGCAGCAACTCCAGGAGGTGGTGGTGAAGCATGCAGAGCCAGCGGTGCTTGA
GGCTGGGGCGCATGCCCTCTACCTGCTCTGTAATCCCGAATTCACTTTCTTCAGCCGGGCGGACTTTGCCCGCAG
CCAGCTAGTAGATTTGCTGACTGACCGCTTCCAGCAGGAGCTTGAAGAGCTGTTACAGTCGTCCTTCCTAGATGA
GGATGAGGTATATAATCTGGCAGCCACTCTGAAACGCCTCTCTGCCTTCTACAACACTCATGACCTGACTCGCTG
GGAGCTCTATGAGCCATGTTGCCAACTCCTGCAGAAGGCTGTGGACACAGGAGAGGTTCCTCACCAGGTTATCCT
GCCAGCCTTGACTCTTGTCTATTTTTCCATTCTCTGGACACTAACCCACATTTCTAAATCAGATGCTTCCCAGAA
GCAGCTGTCGAGTTTGAGGGACAGAATGGTGGCCTTCTGTGAACTCTGCCAGAGTTGCCTCTCAGATGTGGATAC
TGAGATCCAGGAGCAGGCTTTTGTCTTATTAAGTGATCTACTTCTCATCTTTAGCCCTCAGATGATAGTTGGGGG
CCGTGATTTCCTTAGGCCACTTGTCTTTTTTCCTGAAGCTACTCTCCAGTCTGAGCTAGCCAGCTTCCTCATGGA
CCACGTCTTCATCCAGCCGGGAGACCTGGGCAGTGGTGATTCCCAGGAGGATCATTTACAGATAGAGCGGCTACA
CCAGCGGCGCCGCCTCCTAGCCGGGTTCTGCAAGCTGTTGCTTTATGGGGTGCTGGAGATGGATGCAGCCTCAGA
TGTTTTCAAACACTACAACAAGTTCTACAATGACTATGGTGACATTATCAAGGAAACATTAACTAGAGCAAGGCA
GATTGACCGAAGTCATTGTTCCCGAATCCTGCTGCTGAGCCTXAAGCAGCTGTACACAGAACTGCTGCAGGAGCA
TGGGCCCCAGGGCCTGAATGAGCTTCCTGCCTTCATCGAGATGAGGGACCTGGCCCGGAGGTTTGCCTTGAGTTT
TGGACCCCAGCAGCTGCAGAACCGTGACCTCGTGGTCATGCTACACAAGGAAGGCATCCAGTTCTCCTTGTCTGA
GCTTCCTCCAGCTGGCTCCTCCAATCAGCCTCCAAATCTGGCATTCCTGGAGCTCCTTTCAGAGTTTTCCCCCCG
ACTCTTCCATCAGGACAAGCAGCTTTTGCTGTCCTATCTAGAAAAGTGCCTGCAGCATGTCTCCCAGGCACCTGG
CCATCCCTGGGGCCCAGTCACCACCTACTGCCACTCCCTCAGCCCTGTGGAGAACACAGCAGAGACCAGCCCTCA
GGTCCTCCCCAGCTCCAAGAGGAAGCGCGTTGAAGGGCCTGCCAAGCCTAACAGAGAGGACGTCTCCTCGTCCCA
GGAAGAAAGTCTGCAGCTGAACAGCATCCCGCCCACGCCCACCCTCACCTCCACAGCTGTGAAGAGCAGGCAGCC

FIGURE 6555B

CCTGTGGGGGTTGAAAGAGATGGAGGAAGAAGATGGCTCAGAGTTGGATTTTGCCCAGGGGCAGCCCGTCGCAGG
CACCGAGAGGTCAAGGTTCTTGGGTCCACAATATTTCCAGACTCCACACAACCCTTCAGGTCCTGGCCTGGGCAA
CCAGCTGATGCGACTCAGCCTTATGGAAGAGGACGAGGAAGAAGAGTTAGAAATCCAGGATGAGTCAAATGAAGA
ACGGCAGGATACAGACATGCAAGCAAGTAGCTACTCTTCCACCAGTGAGCGCGGGCTGGACCTCTTAGATTCTAC
AGAGCTGGATATTGAGGATTTC**TGA**CAGGACTCTGGGCCCCTCCCCAGCTCCACTCCCTACCTCAAGAATGTGAC
CATTTGGAAAAGGCAAAGAGAAAAGGAGCAAAATGAAGCATTCCCCCAGGCTTCAGCCCTGGGCTCTGAGGGGAA
AGAGTTGGGCATTGTTTTTCTAACCTAACCTTTCCCTCTGGGGTAGAGAAGCCGAGAGACCCTGTCCTCCCTAAT
GCACTGTGGCCCAGTCCCCTTGCCTTTTTCCTGTTCTGTTTGGAGTGGAGAAGGGCAGCACCTCTGTGTTTAATG
GAAATAGCCCATAGTCTCCTGGATTTTTGGAACATCTTTCTCAGCCTATTTTGTGTCCTAATGATTCGCTCAATA
AACATGTTTGAATCC

FIGURE 6556

MSSPLQRAVGDTKRALSASSSSSASLPFDDRDSNHTSEGNGDSLLADEDTDFEDSLNRNVKKRAAKRPPKTTPVA
KHPKKGSRVVHRHSRKQSEPPANDLFNAVKAAKSDMQSLVDEWLDSYKQDQDAGFLELVNFFIQSCGCKGIVTPE
MFKKMSNSEIIQHLTEQFNEDSGDYPLIAPGPSWKKFQGSFCEFVRTLVCQCQYSLLYDGFPMDDLISLLTGLSD
SQVRAFRHTSTLAAMKLMTSLVKVALQLSVHQDNNQRQYEAERNKGPGQRAPERLESLLEKRKELQEHQEEIEGM
MNALFRGVFVHRYRDVLPEIRAICIEEIGCWMQSYSTSFLTDSYLKYIGWTLHDKHREVRVKCVKALKGLYGNRD
LTARLELFTSRFKDRMVSMIMDREYSVAVEAVRLLILILKNMEGLLTDADCESVYPVVYPSNRGLASAAGEFLYW
KLFYPECEIRTMGGREQRQSPGAQRTFFQLLLSFFVESELHDHAAYLVDSLWDCAGARLKDWEGLTSLLLEKDQN
LGDVQESTLIEILVSSARQASEGHPPVGRVTGRKGLTSKERKTQADDRVKLTEHLIPLLPQLLAKFSADAEKVTP
LLQLLSCFDLHIYCTGRLEKHLELFLQQLQEVVVKHAEPAVLEAGAHALYLLCNPEFTFFSRADFARSQLVDLLT
DRFQQELEELLQSSFLDEDEVYNLAATLKRLSAFYNTHDLTRWELYEPCCQLLQKAVDTGEVPHQVILPALTLVY
FSILWTLTHISKSDASQKQLSSLRDRMVAFCELCQSCLSDVDTEIQEQAFVLLSDLLLIFSPQMIVGGRDFLRPL
VFFPEATLQSELASFLMDHVFIQPGDLGSGDSQEDHLQIERLHQRRRLLAGFCKLLLYGVLEMDAASDVFKHYNK
FYNDYGDIIKETLTRARQIDRSHCSRILLLSLKQLYTELLQEHGPQGLNELPAFIEMRDLARRFALSFGPQQLQN
RDLVVMLHKEGIQFSLSELPPAGSSNQPPNLAFLELLSEFSPRLFHQDKQLLLSYLEKCLQHVSQAPGHPWGPVT
TYCHSLSPVENTAETSPQVLPSSKRKRVEGPAKPNREDVSSSQEESLQLNSIPPTPTLTSTAVKSRQPLWGLKEM
EEEDGSELDFAQGQPVAGTERSRFLGPQYFQTPHNPSGPGLGNQLMRLSLMEEDEEEELEIQDESNEERQDTDMQ
ASSYSSTSERGLDLLLDSTELDIEDF

FIGURE 6557

GGGCCAGGCCGCGCCCCCGCGTGCGTGCGCGGCCCGGCAGAGCCGTGCGGGCGCCCGCGTACTCACTAGCTGAGG
TGGCAGTGGTTCCACCAACATGGAGCTCTCGCAGATGTCGGAGCTCATGGGGCTGTCGGTGTTGCTTGGGCTGCT
GGCCCTGATGGCGACGGCGGCGGTAGCGCGGGGGTGGCTGCGCGCGGGGGAGGAGAGGAGCGGCCGGCCCGCCTG
CCAAAAAGCAAATGGATTTCCACCTGACAAATCTTCGGGATCCAAGAAGCAGAAACAATATCAGCGGATTCGGAA
GGAGAAGCCTCAACAACACAACTTCACCCACCGCCTCCTGGCTGCAGCTCTGAAGAGCCACAGCGGGAACATATC
TTGCATGGACTTTAGCAGCAATGGCAAATACCTGGCTACCTGTGCAGATGATCGCACCATCCGCATCTGGAGCAC
CAAGGACTTCCTGCAGCGAGAGCACCGCAGCATGAGAGCCAACGTGGAGCTGGACCACGCCACCCTGGTGCGCTT
CAGCCCTGACTGCAGAGCCTTCATCGTCTGGCTGGCCAACGGGGACACCCTCCGTGTCTTCAAGATGACCAAGCG
GGAGGATGGGGGCTACACCTTCACAGCCACCCCAGAGGACTTCCCTAAAAAGCACAAGGCGCCTGTCATCGACAT
TGGCATTGCTAACACAGGGAAGTTTATCATGACTGCCTCCAGTGACACCACTGTCCTCATCTGGAGCCTGAAGGG
TCAAGTGCTGTCTACCATCAACACCAACCAGATGAACAACACACACGCTGCTGTATCTCCCTGTGGCAGATTTGT
AGCCTCGTGTGGCTTCACCCCAGATGTGAAGGTTTGGGAAGTCTGCTTTGGAAAGAAGGGGGAGTTCCAGGAGGT
GGTGCGAGCCTTCGAACTAAAGGGCCACTCCGCGGCTGTGCACTCGTTTGCTTTCTCCAACGACTCACGGAGGAT
GGCTTCTGTCTCCAAGGATGGTACATGGAAACTGTGGGACACAGATGTGGAATACAAGAAGAAGCAGGACCCCTA
CTTGCTGAAGACAGGCCGCTTTGAAGAGGCGGCGGGTGCCGCGCCGTGCCGCCTGGCCCTCTCCCCCAACGCCCA
GGTCTTGGCCTTGGCCAGTGGCAGTAGTATTCATCTCTACAATACCCGGCGGGGCGAGAAGGAGGAGTGCTTTGA
GCGGGTCCATGGCGAGTGTATCGCCAACTTGTCCTTTGACATCACTGGCCGCTTTCTGGCCTCCTGTGGGGACCG
GGCGGTGCGGCTGTTTCACAACACTCCTGGCCACCGAGCCATGGTGGAGGAGATGCAGGGCCACCTGAAGCGGGC
CTCCAACGAGAGCACCCGCCAGAGGCTGCAGCAGCAGCTGACCCAGGCCCAAGAGACCCTGAAGAGCCTGGGTGC
CCTGAAGAAGTGACTCTGGGAGGGCCCGGCGCAGAGGATTGAGGAGGAGGGATCTGGCCTCCTCATGGCGCTGCT
GCCATCTTTCCTCCCAGGTGGAAGCCTTTCAGAAGGAGTCTCCTGGTTTTCTTACTGGTGGCCCTGCTTCTTCCC
ATTGAAACTACTCTTGTCTACTTAGGTCTCTCTCTTCTTGCTGGCTGTGACTCCTCCCTGACTAGTGGCCAAGGT
GCTTTTCTTCCTCCCAGGCCCAGTGGGTGGAATCTGTCCCCACCTGGCACTGAGGAGAATGGTAGAGAGGAGAGG
AGAGAGAGAGAGAATGTGATTTTTGGCCTTGTGGCAGCACATCCTCACACCCAAAGAAGTTTGTAAATGTTCCAG
AACAACCTAGAGAACACCTGAGTACTAAGCAGCAGTTTTGCAAGGATGGGAGACTGGGATAGCTTCCCATCACAG
AACTGTGTTCCATCAAAAAGACACTAAGGGATTTCCTTCTGGGCCTCAGTTCTATTTGTAAGATGGAGAATAATC
CTCTCTGTGAACTCCTTGCAAAGATGATATGAGGCTAAGAGAATATCAAGTCCCCAGGTCTGGAAGAAAAGTAGA
AAAGAGTAGTACTATTGTCCAATGTCATGAAAGTGGTAAAAGTGGGAACCAGTGTGCTTTGAAACCAAATTAGAA
ACACATTCCTTGGGAAGGCAAAGTTTTCTGGGACTTGATCATACATTTTATATGGTTGGGACTTCTCTCTTCGGG
AGATGATATCTTGTTTAAGGAGACCTCTTTTCAGTTCATCAAGTTCATCAGATATTTGAGTGCCCACTCTGTGCC
CAAATAAATATGAGCTGGGGATTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAA

FIGURE 6558

MELSQMSELMGLSVLLGLLALMATAAVARGWLRAGEERSGRPACQKANGFPPDKSSGSKKQKQYQRIRKEKPQQH
NFTHRLLAAALKSHSGNISCMDFSSNGKYLATCADDRTIRIWSTKDFLQREHRSMRANVELDHATLVRFSPDCRA
FIVWLANGDTLRVFKMTKREDGGYTFTATPEDFPKKHKAPVIDIGIANTGKFIMTASSDTTVLIWSLKGQVLSTI
NTNQMNNTHAAVSPCGRFVASCGFTPDVKVWEVCFGKKGEFQEVVRAFELKGHSAAVHSFAFSNDSRRMASVSKD
GTWKLWDTDVEYKKKQDPYLLKTGRFEEAAGAAPCRLALSPNAQVLALASGSSIHLYNTRRGEKEECFERVHGEC
IANLSFDITGRFLASCGDRAVRLFHNTPGHRAMVEEMQGHLKRASNESTRQRLQQQLTQAQETLKSLGALKK

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FIGURE 6559

GTATCTGTGGTAAACCCAGTGACACGGGGGAGATGACATACAAAAAGGGCAGGACCTGAGAAAGATTAAGCTGCA
GGCTCCCTGCCCATAAAACAGGGTGTGAAAGGCATCTCAGCGGCTGCCCCACC**ATG**GCTACCTGGGCCCTCCTGC
TCCTTGCAGCCATGCTCCTGGGCAACCCAGGTCTGGTCTTCTCTCGTCTGAGCCCTGAGTACTACGACCTGGCAA
GAGCCCACCTGCGTGATGAGGAGAAATCCTGCCCGTGCCTGGCCCAGGAGGGCCCCCAGGGTGACCTGTTGACCA
AAACACAGGAGCTGGGCCGTGACTACAGGACCTGTCTGACGATAGTCCAAAAACTGAAGAAGATGGTGGATAAGC
CCACCCAGAGAAGTGTTTCCAATGCTGCGACCCGGGTGTGTAGGACGGGGAGGTCACGATGGCGCGACGTCTGCA
GAAATTTCATGAGGAGGTATCAGTCTAGAGTTACCCAGGGCCTCGTGGCCGGAGAAACTGCCCAGCAGATCTGTG
AGGACCTCAGGTTGTGTATACCTTCTACAGGTCCCCTC**TGA**GCCCTCTCACCTTGTCCTGTGGAAGAAGCACAGG
CTCCTGTCCTCAGATCCCGGGAACCTCAGCAACCTCTGCCGGCTCCTCGCTTCCTCGATCCAGAATCCACTCTCC
AGTCTCCCTCCCCTGACTCCCTCTGCTGTCCTCCCCTCTCACGAGAATAAAGTGTCAAGCAAGAAAAAAA

FIGURE 6560

MATWALLLLAAMLLGNPGLVFSRLSPEYYDLARAHLRDEEKSCPCLAQEGPQGDLLTKTQELGRDYRTCLTIVQK
LKKMVDKPTQRSVSNAATRVCRTGRSRWRDVCRNFMRRYQSRVTQGLVAGETAQQICEDLRLCIPSTGPL

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FIGURE 6561

GCCAGTCACCTTCAGTTTCTGGAGCTGGCCGTCAACATGTCCTTTCCTAAGGCGCCCTTGAAACGATTCAATGAC
CCTTCTGGTTGTGCACCATCTCCAGGTGCTTATGATGTTAAAACTTTAGAAGTATTGAAAGGACCAGTATCCTTT
CAGAAATCACAAAGATTTAAACAACAAAAAGAATCTAAACAAAATCTTAATGTTGACAAAGATACTACCTTGCCT
GCTTCAGCTAGAAAAGTTAAGTCTTCGGAATCAAAGGAATCTCAAAAGAATGATAAAGATTTGAAGATATTAGAG
AAAGAGATTCGTGTTCTTCTACAGGAACGTGGTGCCCAGGACAGCCGGATCCAGGATCTGGAAACTGAGTTGGAA
AAGATGGAAGCAAGGCTAAATGCTGCACTAAGGGAAAAAACATCTCTCTCTGCAAATAATGCTACACTGGAAAAA
CAACTTATTGAATTGACCAGGACTAATGAACTACTAAAATCTAAGTTTTCTGAAAATGGTAACCAGAAGAATTTG
AGAATTCTAAGCTTGGAGTTGATGAAACTTAGAAACAAAAGAGAAACAAAGATGAGGGGTATGATGGCTAAGCAA
GAAGGCATGGAGATGAAGCTGCAGGTCACCCAAAGGAGTCTCGAAGAGTCTCAAGGGAAAATAGCCCAACTGGAG
GGAAAACTTGTTTCAATAGAGAAAGAAAAGATTGATGAAAAATCTGAAACAGAAAAACTCTTGGAATACATCGAA
GAAATTAGTTGTGCTTCAGATCAAGTGGAAAAATACAAGCTAGATATTGCCCAGTTAGAAGAAAATTTGAAAGAG
AAGAATGATGAAATTTTAAGCCTTAAGCAGTCTCTTGAGGAGAATATTGTTATATTATCTAAACAAGTAGAAGAT
CTAAATGTGAAATGTCAGCTGCTTGAAAAAGAAAAAGAAGACCATGTCAACAGGAATAGAGAACACAACGAAAAT
CTAAATGCAGAGATGCAAAACTTAAAACAGAAGTTTATTCTTGAACAACAGGAACGTGAAAAGCTTCAACAAAAA
GAATTACAAATTGATTCACTTCTGCAACAAGAGAAAGAATTATCTTCGAGTCTTCATCAGAAGCTCTGTTCTTTT
CAAGAGGAAATGGTTAAAGAGAAGAATCTGTTTGAGGAAGAATTAAAGCAAACACTGGATGAGCTTGATAAATTA
CAGCAAAAGGAGGAACAAGCTGAAAGGCTGGTCAAGCAATTGGAAGAGGAAGCAAAATCTAGAGCTGAAGAATTA
AAACTCCTAGAAGAAAAGCTGAAAGGGAAGGAGGCTGAACTGGAGAAAAGTAGTGCTGCTCATACCCAGGCCACC
CTGCTTTTGCAGGAAAAGTATGACAGTATGGTGCAAAGCCTTGAAGATGTTACTGCTCAATTTGAAAGCTATAAA
GCGTTAACAGCCAGTGAGATAGAAGATCTTAAGCTGGAGAACTCATCATTACAGGAAAAAGCGGCCAAGGCTGGG
AAAAATGCAGAGGATGTTCAGCATCAGATTTTGGCAACTGAGAGCTCAAATCAAGAATATGTAAGGATGCTTCTA
GATCTGCAGACCAAGTCAGCACTAAAGGAAACAGAAATTAAAGAAATCACAGTTTCTTTTCTTCAAAAAATAACT
GATTTGCAGAACCAACTCAAGCAACAGGAGGAAGACTTTAGAAAACAGCTGGAAGATGAAGAAGGAAGAAAAGCT
GAAAAAGAAAATACAACAGCAGAATTAACTGAAGAAATTAACAAGTGGCGTCTCCTCTATGAAGAACTATATAAT
AAAACAAAACCTTTTCAGCTACAACTAGATGCTTTTGAAGTAGAAAAACAGGCATTGTTGAATGAACATGGTGCA
GCTCAGGAACAGCTAAATAAAATAAGAGATTCATATGCTAAATTATTGGGTCATCAGAATTTGAAACAAAAAATC
AAGCATGTTGTGAAGTTGAAAGATGAAAATAGCCAACTCAAATCGGAAGTATCAAAACTCCGCTGTCAGCTTGCT
AAAAAAAAACAAAGTGAGACAAAACTTCAAGAGGAATTGAATAAAGTTCTAGGTATCAAACACTTTGATCCTTCA
AAGGCTTTTCATCATGAAAGTAAAGAAAATTTTGCCCTGAAGACCCCATTAAAAGAAGGCAATACAAACTGTTAC
CGAGCTCCTATGGAGTGTCAAGAATCATGGAAGTAAACATCTGAGAAACCTGTTGAAGATTATTTCATTCGTCTT
GTTGTTATTGATGTTGCTGTTATTATATTTGACATGGGTATTTTATAATGTTGTATTTAATTTTAACTGCCAATC
CTTAAATATGTGAAAGGAACATTTTTTACCAAAGTGTCTTTTGACATTTTATTTTTTCTTGCAAATACCTCCTCC
CTAATGCTCACCTTTATCACCTCATTCTGAACCCTTTCGCTGGCTTTCCAGCTTAGAATGCATCTCATCAACTTA
AAAGTCAGTATCATATTATTATCCTCCTGTTCTGAAACCTTAGTTTCAAGAGTCTAAACCCCAGATTCTTCAGCT
TGATCCTGGAGGTCTTTTCTAGTCTGAGCTTCTTTAGCTAGGCTAAAACACCTTGGCTTGTTATTGCCTCTACTT
TGATTCTGATAATGCTCACTTGGTCCTACCTATTATCCTTCTACTTGTCCAGTTCAAATAAGAAATAAGGACAAG
CCTAACTTCATAGAAACCTCTCTATTTTTAATCAGTTGTTTAATAATTTACAGGTTCTTAGGCTCCATCCTGTTT
GTATGAAATTATAATCTGTGGATTGGCCTTTAAGCCTGCATTCTTAACAAACTCTTCAGTTAATTCTTAGATACA
CTAAAAATCTGAGAAACTCTACATGTAACTATTTCTTCAGAGTTTGTCATATACTGCTTGTCATCTGCATGTCTA
CTCAGCATTTGATTAACATTTGTGTAATATGAAATAAAATTACACAGTAAGTCATTTAACCAAAAAAAAAAAAAA
AA

FIGURE 6562

MSFPKAPLKRFNDPSGCAPSPGAYDVKTLEVLKGPVSFQKSQRFKQQKESKQNLNVDKDTTLPASARKVKSSESK
ESQKNDKDLKILEKEIRVLLQERGAQDSRIQDLETELEKMEARLNAALREKTSLSANNATLEKQLIELTRTNELL
KSKFSENGNQKNLRILSLELMKLRNKRETKMRGMMAKQEGMEMKLQVTQRSLEESQGKIAQLEGKLVSIEKEKID
EKSETEKLLEYIEEISCASDQVEKYKLDIAQLEENLKEKNDEILSLKQSLEENIVILSKQVEDLNVKCQLLEKEK
EDHVNRNREHNENLNAEMQNLKQKFILEQQEREKLQQKELQIDSLLQQEKELSSSLHQKLCSFQEEMVKEKNLFE
EELKQTLDELDKLQQKEEQAERLVKQLEEEAKSRAEELKLLEEKLKGKEAELEKSSAAHTQATLLLQEKYDSMVQ
SLEDVTAQFESYKALTASEIEDLKLENSSLQEKAAKAGKNAEDVQHQILATESSNQEYVRMLLDLQTKSALKETE
IKEITVSFLQKITDLQNQLKQQEEDFRKQLEDEEGRKAEKENTTAELTEEINKWRLLYEELYNKTKPFQLQLDAF
EVEKQALLNEHGAAQEQLNKIRDSYAKLLGHQNLKQKIKHVVKLKDENSQLKSEVSKLRCQLAKKKQSETKLQEE
LNKVLGIKHFDPSKAFHHESKENFALKTPLKEGNTNCYRAPMECQESWK

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FIGURE 6563

CGGTTCTCCAAGCACCCAGCATCCTGCTAGACGCGCCGCGCACCGACGGAGGGGACATGGGCAGAGCAATGGTGG
CCAGGCTGGGGCTGGGGCTGCTGCTGCTGGCACTGCTCCTACCCACGCAGATTTATTCCAGTGAAACAACAACTG
GAACTTCAAGTAACTCCTCCCAGAGTACTTCCAACTCTGGGTTGGCCCCAAATCCAACTAATGCCACCACCAAGG
CGGCTGGTGGTGCCCTGCAGTCAACAGCCAGTCTCTTCGTGGTCTCACTCTCTCTTCTGCATCTCTACTCTTAAG
AGACTCAGGCCAAGAAACGTCTTCTAAATTTCCCCATCTTCTAAACCCAATCCAAATGGCGTCTGGAAGTCCAAT
GTGGCAAGGAAAAACAGGTCTTCATCGAATCTACTAATTCCACACCTTTTATTGACACAGAAAATGTTGAGAATC
CCAAATTTGATTGATTTGAAGAACATGTGAGAGGTTTGACTAGATGATGAATGCCAATATTAAATCTGCTGGAGT
TTCATGTACAAGATGAAGGAGAGGCAACATCCAAAATAGTTAAGACATGATTTCCTTGAATGTGGCTTGAGAAAT
ATGGACACTTAATACTACCTTGAAAATAAGAATAGAAATAAAGGATGGGATTGTGGAATGGAGATTCAGTTTTCA
TTGGTTCATTAATTCTATAAGGCCATAAAACAGGTAATATAAAAAGCTTCCATCGATCTATTTATATGTACATGA
GAAGGAATCCCCAGGTGTTACTGTAATTCCTCAACGTATTGTTTCGACGGCACTAATTTAATGCCGATATACTCT
AGATGAATGTTTACATTGTTGAGCTATTGCTGTTCTCTTGGGAACTGAACTCACTTTCCTCCTGAGGCTTTGGAT
TTGACATTGCATTTGACCTTTTAGGTAGTAATTGACATGTGCCAGGGCAATGATGAATGAGAATCTACCCCAGAT
CCAAGCATCCTGAGCAACTCTTGATTATCCATATTGAGTCAAATGGTAGGCATTTCCTATCACCTGTTTCCATTC
AACAAGAGCACTACATTCTTTTAGCTAAACGGATTCCAAAGAGTAGAATTGCATTGACCACGACTAATTTCAAAA
TGCTTTTTATTATTATTATTTTTTAGACAGTCTCACTTTGTCGCCCAGGCCGGAGTGCAGTGGTGCGATCTCAGA
TCAGTGTACCATTTGCCTCCCGGGCTCAAGCGATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGATTACAGGCAC
CTGCCACCATGCCCGGCTAATTTTTGTAATTTTAGTAGAGACAGGGTTTCACCATGTTGCCCAGGCTGGTTTAGA
ACTCCTGACCTCAGGTGATCCACCCGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGCTTGAGCCCCCGCGCCCA
GCCATCAAAATGCTTTTTATTTCTGCATATGTTTGAATACTTTTTACAATTTAAAAAAATGATCTGTTTTGAAGG
CAAAATTGCAAATCTTGAAATTAAGAAGGCAAAATGTAAAGGAGTCAAACTATAAATCAAGTATTTGGGAAGTGA
AGACTGGAAGCTAATTTGCATAAATTCACAAACTTTTATACTCTTTCTGTATATACATTTTTTTTCTTTAAAAAA
CAACTATGGATCAGAATAGCAACATTTAGAACACTTTTTGTTATCAGTCAATATTTTTAGATAGTTAGAACCTGG
TCCTAAGCCTAAAAGTGGGCTTGATTCTGCAGTAAATCTTTTACAACTGCCTCGACACACATAAACCTTTTTAAA
AATAGACACTCCCCGAAGTCTTTTGTTTGTATGGTCACACACTGATGCTTAGATGTTCCAGTAATCTAATATGGC
CACAGTAGTCTTGATGACCAAAGTCCTTTTTTTCCATCTTTAGAAAACTACATGGGAACAAACAGATCGAACAGT
TTTGAAGCTACTGTGTGTGTGAATGAACACTCTTGCTTTATTCCAGAATGCTGTACATCTATTTTGGATTGTATA
TTGTGGTTGTGTATTTACGCTTTGATTCATAGTAACTTCTTATGGAATTGATTTGCATTGAACGACAAACTGTAA
ATAAAAAGAAACGGTG

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FIGURE 6564

MGRAMVARLGLGLLLLALLLPTQIYSSETTTGTSSNSSQSTSNSGLAPNPTNATTKAAGGALQSTASLFVVSLSL
LHLYS

FIGURE 6565

AGGCAAAATGCATGACAGTAACAATGTGGAGAAAGACATTACACCATCTGAATTGCCTGCAAACCCAGGTTGTGT
GCATTCAAAAGAGCATTCTATTAAAGCTACCTTAATTTGGCGCTTATTTTTCTTAATCATGTTTCTGACAATCAT
AGTGTGTGGAATGGTTGCTGCTTTAAGTGCAATAAGAGCTAACTGCCATCAAGAGCCATCAGTATGTCTTCAAGC
TGCATGCCCAGAAAGCTGGATTGGTTTTCAAAGAAAGTGTTTCTATTTTTCTGATGACACCAAGAACTGGACATC
AAGTCAGAGGTTTTGTGACTCACAAGATGCTGATCTTGCTCAGGTTGAAAGCTTCCAGGAACTGAATTTCCTGTT
GAGATATAAAGGCCCATCTGATCACTGGATTGGGCTGAGCAGAGAACAAGGCCAACCATGGAAATGGATAAATGG
TACTGAATGGACAAGACAGTAAGTTCTAAAAATCTGGCAGTAATATTTGTATTTGAATTTACTTTGCATTAAATC
TGAAGTGTTCTCTAGTTACATGCTTTAAAAAATTCTCATTTTAAGGTTAGTCATGAAAGAAGATGGTGCCAACTT
GTATGTTGCAAAGGTTTCACAAGTTCCTCGAATGAATCCAAGACCTGTCATGGTGAGGTAGACTGACTGTGAACT
TGGCTCCAGGCTTATCTATGTCATTTTCAAACACTTTCATTTTAAGCAAACCATACAATATCTTTAAGTCTGTTC
CTTACCTCCACAACAAAATTAAATTGCACTTGTCCTCCTGATTTCACAGGGTTGATGTGAGGAACAGAGGTTTTG
ATGTATCAGGGAAAGATTATGAGTGACAGCAATTATACCTATTATTTAAAATAAGACAATAGTTTTAAAATTTTA
AAATGGGTAAAGTTTGGCACTAGAAAATTTAATCTCAATTGTATATTTATAGGATCTTCAGATTACTAAAAAGAT
TTGAGATAATGCTGGAAAAATTGGATTCACACAATTTCACTCAATGTTTGTCTGAGAGATGAGACAGTTTTGAAA
AGCTACTTTATTGTAATACATTCATCAATATTGGAAATATAACTTTATTTAATAAAAAGAGCCCCAGACTGGACA
TTGGCAGGTTTGAAATGAGTTTTTTCTCATTAGCTTTTGACCTTGGATGGGATGGTAAGTTTTAGAAATCAGAGA
ACATGTACATTTATACATTGTTGTATCTACACTGCCTTGCACATTGTGACTGCTTCATAAATATCTAGAATTAAC
TTTTATTTCTTATTTTACAATACGGAAGTAGTAAATTTTCTCTACCTAATTCTTAAAATGGTTTTTTGTTTGTTT
GTATTTTTGAGAGACAGGGTCTTACTCTGTTACCCAGGCTGGAGTGCAGTAGTACCATCGTGGCTCACTGCAGCC
TTGACTTCCCTGGCTCAAGTGAGCCTCCCATCTCAGGCTCCTGAGTAGCTGGGACTACAGGTTTCCTATCCTGGG
AGCAGGAGAGTGTGCCTATTTGAATGACAAAGGTGCCAGTAGTGCCAGGCACTACACAGAGAGGAAGTGGATTTG
TTCCAAATCAGATATACATGTCTAGATGTTACAGCAAAGCCCCAACTAATCTTTAGAAGCATATTGGAACTGATA
ACTCCATTTTAAAATGAGCAAAGAATTTATTTCTTATACCAACAGGTATATGAAAATATGCTCAATATCACTAAT
AACTGGGAAAATACAAATCAAAATCATAGTAAAATATTACCTGTTTTCATGGTGCTAATATTACCTGTTCTCCCA
CTGCTAATGACATACCCGAGACTGAGTAATTTATAAATAAAAGAGATTTAATTGAAAAAAAAAAAAAAA

FIGURE 6566

MHDSNNVEKDITPSELPANPGCVHSKEHSIKATLIWRLFFLIMFLTIIVCGMVAALSAIRANCHQEPSVCLQAAC
PESWIGFQRKCFYFSDDTKNWTSSQRFCDSQDADLAQVESFQELNFLLRYKGPSDHWIGLSREQGQPWKWINGTE
WTRQ

FIGURE 6567

CTTCGCGGCTTGGTAACATAAAAGTTTGTTTCACCACGTAAGCCGGACCTCGCACTCCGGTCCCGGTCTCGTCGC
CAAGATGGTGAAGCCCAAGTACAAAGGACGGAGCACCATCAACCCGTCCAAGGCCAGCACAAACCCAGATCGAGT
GCAGGGAGCAGGAGGCCAAAACATGAGGGACCGGGCCACCATCCGGCGCCTGAATATGTATAGGCAAAAGGAGCG
CAGGAACAGTCGTGGTAAAATAATTAAACCCCTGCAATATCAATCAACGGTGGCTTCTGGCACAGTGGCAAGAGT
AGAGCCAAATATTAAATGGTTTGGAAACACACGTGTGATTAAGCAGTCATCATTACAAAAATTTCAAGAGGAAAT
GGATACAGTTATGAAGGATCCATACAAAGTTGTCATGAAGCAAAGCAAGTTACCAATGTCTCTTCTCCATGATCG
AATCCGGCCTCATAACTTGAAGGTGCACATTCTTGATACTGAAAGTTTTGAAACTACATTTGGCCCTAAGTCACA
GAGGAAACGACCAAACTTATTTGCAAGTGATATGCAGTCTCTTATCGAAAATGCTGAAATGTCCACTGAGAGCTA
TGACCAGGGCAAGGATCGTGATTTGGTAACTGAAGACACTGGTGTGAGAAATGAAGCTCAAGAAGAGATCTATAA
AAAGGGACAGTCCAAAAGAATATGGGGTGAGCTCTACAAGGTGATAGATTCATCAGATGTTGTAGTTCAAGTTCT
TGATGCTAGAGATCCAATGGGTACTCGTTCCCCTCACATTGAAACTTACCTGAAGAAGGAAAAACCTTGGAAACA
CCTCATTTTTGTACTTAACAAATGTGACCTTGTTCCAACCTGGGCAACAAAACGGTGGGTTGCTGTCCTCTCCCA
GGATTATCCAACACTTGCTTTCCATGCAAGCCTTACTAACCCGTTTGGCAAGGGAGCATTCATTCAGCTTCTGCG
GCAGTTTGGAAAGTTGCACACTGACAAGAAACAGATCAGTGTTGGGTTCATTGGCTATCCAAATGTTGGCAAGAG
CTCTGTGATAAATACATTGCGTTCTAAGAAAGTTTGCAACGTGGCTCCCATTGCAGGTGAAACAAAGGTCTGGCA
GTATATTACTTTGATGCGTCGGATATTCCTGATTGACTGTCCAGGTGTGGTTTACCCCTCTGAGGACTCCGAGAC
AGACATTGTGCTAAAAGGAGTTGTTCAAGTAGAAAAAATTAAGAGTCCTGAAGACCACATTGGTGCTGTACTTGA
ACGAGCAAAGCCAGAATATATCAGCAAAACATACAAGATTGATTCTTGGGAGAATGCTGAGGACTTTCTTGAGAA
GCTCGCTTTCCGGACTGGGAAGTTACTAAAGGGTGGAGAGCCCGACTTGCAGACTGTGGGTAAGATGGTCCTCAA
TGACTGGCAGAGGGGCCGGATTCCTTTCTTTGTCAAGCCACCCAATGCAGAGCCACTTGTGGCCCCCCAGCTTCT
ACCCTCCTCATCTTTGGAAGTTGTCCCAGAAGCAGCCCAGAACAATCCAGGGGAGGAAGTCACAGAAACTGCAGG
TGAAGGGTCAGAATCCATCATTAAGGAAGAAACAGAAGAGAACAGTCACTGTGATGCTAACACAGAGATGCAGCA
GATTCTCACACGAGTTCGGCAGAACTTTGGTAAAATCAACGTGGTGCCTCAGTTTTCTGGGGATGACCTGGTTCC
TGTGGAGGTGTCAGATCTTGAGGAAGAGCTTGAGAGCTTTTCTGATGAAGAGGAGGAGGAACAGGAGCAACAAAG
AGATGATGCGGAAGAGTCTTCCTCGGAGCCTGAGGAGGAAAATGTGGGAAACGACACCAAAGCCGTTATTAAAGC
ACTGGATGAGAAGATTGCCAAATATCAGAAGTTTCTAGACAAAGCCAAAGCCAAAAAGTTTTCAGCAGTCAGAAT
ATCCAAGGGACTGAGTGAAAAGATATTTGCAAAACCTGAAGAACAAAGAAAAACACTGGAAGAAGATGTAGATGA
CAGAGCACCTTCCAAAAAGGGAAAGAAGCGGAAGGCACAAAGGGAAGAGGAACAGGAACATTCAAATAAAGCTCC
CAGGGCGCTTACATCAAAAGAACGGAGGCGAGCAGTACGACAGCAACGGCCGAAAAAAGTTGGTGTGCGCTACTA
TGAAACACACAACGTGAAAAATAGGAACAGGAACAAAAAGAAGACCAATGACTCAGAGGGACAGAAACACAAACG
CAAAAAATTCAGACAAAAGCAGTAATGTTTAAAAGGTTTTTATTAAATTATACAAAAACAGGCAAAAAAAAAAAA
AAAAAA

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FIGURE 6568

MVKPKYKGRSTINPSKASTNPDRVQGAGGQNMRDRATIRRLNMYRQKERRNSRGKIIKPLQYQSTVASGTVARVE
PNIKWFGNTRVIKQSSLQKFQEEMDTVMKDPYKVVMKQSKLPMSLLHDRIRPHNLKVHILDTESFETTFGPKSQR
KRPNLFASDMQSLIENAEMSTESYDQGKDRDLVTEDTGVRNEAQEEIYKKGQSKRIWGELYKVIDSSDVVVQVLD
ARDPMGTRSPHIETYLKKEKPWKHLIFVLNKCDLVPTWATKRWVAVLSQDYPTLAFHASLTNPFGKGAFIQLLRQ
FGKLHTDKKQISVGFIGYPNVGKSSVINTLRSKKVCNVAPIAGETKVWQYITLMRRIFLIDCPGVVYPSEDSETD
IVLKGVVQVEKIKSPEDHIGAVLERAKPEYISKTYKIDSWENAEDFLEKLAFRTGKLLKGGEPDLQTVGKMVLND
WQRGRIPFFVKPPNAEPLVAPQLLPSSSLEVVPEAAQNNPGEEVTETAGEGSESIIKEETEENSHCDANTEMQQI
LTRVRQNFGKINVVPQFSGDDLVPVEVSDLEEELESFSDEEEEEQEQQRDDAEESSSEPEEENVGNDTKAVIKAL
DEKIAKYQKFLDKAKAKKFSAVRISKGLSEKIFAKPEEQRKTLEEDVDDRAPSKKGKKRKAQREEEQEHSNKAPR
ALTSKERRRAVRQQRPKKVGVRYYETHNVKNRNRNKKKTNDSEGQKHKRKKFRQKQ

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FIGURE 6569

GAATTCGGCCAAAGAGGCCTATGCTTCTCTGAAGACTTGCAGCAAGGCTTGCTGAGGCTCACAGAAGATAGCCCC
AGTGTTTTGGAGTGGTTTTGAATGTGATTCTGAGATCAGACTGACTGAGCTGGAATCCTGGCTTTATATCTTACC
AGCTACACAACCTTGGAGTCTTAGAAATTTTTTCTTTTCAATAAGCAGTCATCCTTACTTTCCCTCAAGATGACA
AACAGTTCGTTCTTCTGCCCAGTTTATAAAGATCTGGAGCCATTCACGTATTTTTTTTATTTAGTTTTCCTTGTT
GGAATTATTGGAAGTTGTTTTGCAACCTGGGCTTTTATACAGAAGAATACGAATCACAGGTGTGTGAGCATCTAC
TTAATTAATTTGCTTACAGCCGATTTCCTGCTTACTCTGGCATTACCAGTGAAAATTGTTGTTGACTTGGGTGTG
GCACCTTGGAAGCTGAAGATATTCCACTGCCAAGTAACAGCCTGCCTCATCTATATCAATATGTATTTATCAATT
ATCTTCTTAGCATTTGTCAGCATTGACCGCTGTCTTCAGCTGACACACAGCTGCAAGATCTACCGAATACAAGAA
CCCGGATTTGCCAAAATGATATCAACCGTTGTGTGGCTAATGGTCCTTCTTATAATGGTGCCAAATATGATGATT
CCCATCAAAGACATCAAGGAAAAGTCAAATGTGGGTTGTATGGAGTTTAAAAAGGAATTTGGAAGAAATTGGCAT
TTGCTGACAAATTTCATATGTGTAGCAATATTTTTAAATTTCTCAGCCATCATTTTAATATCCAATTGCCTTGTA
ATTCGACAGCTCTACAGAAACAAAGATAATGAAAATTACCCAAATGTGAAAAAGGCTCTCATCAACATACTTTTA
GTGACCACGGGCTACATCATATGCTTTGTTCCTTACCACATTGTCCGAATCCCGTATACCCTCAGCCAGACAGAA
GTCATAACTGATTGCTCAACCAGGATTTCACTCTTCAAAGCCAAAGAGGCTACACTGCTCCTGGCTGTGTCGAAC
CTGTGCTTTGATCCTATCCTGTACTATCACCTCTCAAAAGCATTCCGCTCAAAGGTCACTGAGACTTTTGCCTCA
CCTAAAGAGACCAAGGCTCAGAAAGAAAAATTAAGATGTGAAAATAATGCATAAAAGACAGGATTTTTTGTGCTA
CCAATTCTGGCCTTACTGGACCATAAAGTTAATTATAGCTTTGAAAGATAAAAAAAAAAAAAAAAGCGGCCGC

FIGURE 6570

MTNSSFFCPVYKDLEPFTYFFYLVFLVGIIGSCFATWAFIQKNTNHRCVSIYLINLLTADFLLTLALPVKIVVDL
GVAPWKLKIFHCQVTACLIYINMYLSIIFLAFVSIDRCLQLTHSCKIYRIQEPGFAKMISTVVWLMVLLIMVPNM
MIPIKDIKEKSNVGCMEFKKEFGRNWHLLTNFICVAIFLNFSAIILISNCLVIRQLYRNKDNENYPNVKKALINI
LLVTTGYIICFVPYHIVRIPYTLSQTEVITDCSTRISLFKAKEATLLLAVSNLCFDPILYYHLSKAFRSKVTETF
ASPKETKAQKEKLRCENNA

FIGURE 6571A

CGCCCGCGCGCCCCGGGAGCCTACCCAGCACGCGCTCCGCGCCCACTGGTTCCCTCCAGCCGCCGCCGTCCAGCC
GAGTCCCCACTCCGGAGTCGCCGCTGCCGCGGGGACATGGTCCTCTGCGTTCAGGGGTAAGCGCGGCTCTCTGCC
CCCTTCCCGGCCACCACGAGGGGCGCACGGGAGAACAGGGGCTTCGTGCTAGCTGCCGGGCATTGGGAGGGCTTG
ACGGGCCAGAGGTGACTGAGCGCAGACGGACCTCAGGAGCAAGGCTCTGTGTGGGGCTGTGACACTCCCACTCCC
CGCCCCCACACACTTACCTCAATTCCCACTGTGGATTGGGAAACCGGGGGCTGGCCGGCTAAAGGAGGAACTCAC
AGGGTGGGCTCAGCCTGGGTTCTCATTGGAGCAGATGGATGCTAACGGCACGGCGTCCCCCAAGATGTGGCCAAC
AATCCCAGATATTCTTCTGGGCCCAGAGCACTCTACGCTAGCCTGCCTGCTGCCCTGCCTGCTAGTAACCTTGGA
CCAGCCCCTGGCCCCCTCTGTCCTGGTGTCCCCTCTCCTGCCCCAGGCTAGCAAGTAGGCTCTTCTTGGGAAGCC
AGCCGCAGATCCTTGCCTTTCCTCAGGCTGGCCACCTGATGGTCTGCAACTCTCGGGAGGCCCTGGGTTTGGCCT
GGTCCTGCTTGGGGTACCCCCACAATCGTCTCACAACCCTGTCTCAGCCCAGTCTGGGATCCCAATGTGAGAAGG
ACCTTGGCTCCTGCCTCTCATCTTCAAATTTCCCAGACTTGAGGTAAGGGACAGTGGAGAGGGGATGCTGATAAG
ACAGAGTCTTGACCTGAGCTGAGCATTCCTGGCCATCCACTCTGTCCTGAACCTCAGCAACCCCTTCAACCAAAG
GGTCTGATGCTGGCCATGGTGATGTGACAGGAGCTCAGGAAGCTCCAAGGAGAGAGGAAGAAGGTATAAATGGGT
GTTCTGCACTCAGGGAGGACTGGGTGGCTGTGCTTATCGCAACTGGCCTGGTGCCAAGTGAGGGAGGGTGGAAGG
TGAGGCCAAGGAAGAGGACATGGAGGTGCTGGGAAGACTACTTCTCCCTTGCTGTCTCCAGCAAGTTCCTTCCTC
CTGTCTGCATTCTGGGACTCCTGAATACCTGCCCCACCACTGCCTTCCACCCCAGGAGCCTCCCCCTGCATTCCG
GGGTCCCATAGCCTCTTTCACTTTTTACCCTAGGTGAGCACCCCCTTGTAAGCTCAGGGCTACTGTTGGGTGTCA
GGGAACAAAGTTTTAGACTGCTGCGCTCCAAAGCGGGCACACACATGTACCTAGAACACACCAGCCACTGTCCCC
ACCATGATGATGACACAGCCATGGACACACCCCTGCCCAGGTACACACTCACCAGGAGCTTGTGGTGATCAACAC
AGCTATTCATACACCCAGCTACCACATCAGCCCCAAAGGTGCCCACACCTACATGTGGGATCTGAGGACCGGCTA
AGCTATCTGGACGTGGCCACCCACAGAGGTTCCAGCCTGACTGGCTAGCCACCAACCATGCTCCTGGGAAGGTAG
CTCTGGGCCCCAGCAAGCAGGTCATCTCAAAATTTGGCCTCCAGCTCTCCAAGAGGGATTTCCAAGATCCCACAG
TACAGCCAGGGTAGGTGTGGAAAAGTTTTTGTCAGGCTGTGGTGTGCCAGAGTTGTGTGGCCCTTTCTCACTGTG
AGTGGTCATAGGGCCATGATTTGTTAGAACCTAGAGGGTCACCTATAACCTACACAGGAGTCAGGTCTGGCTCCT
GCCACCAGCTCCTGCCTGCGCCTTCCTGCCTCACAAGCAATACTGGCGCTGTTTGCCCATGCTGTCCTCTCTACC
TGGGGTCCCTTCCCCCAGCTCCTTCCTTTGGCCTGGAAGACACAGCTCAGGAGCAAGCAGACCCTGACTCCCCCG
TGACACCTGCAGTTTTATGACTTTGCATTATAATTACTCTTAGTGTCATCTTCCCCAGCCAGTCTGGTTCTCCTT
GAGGGCAAGGCCATGGTTTCATTATGGCGGTGTCCTGAGGCCCAGCCAGGGACTAGACCCAGAACTAAGGCTTGG
AGATGTATTTTGCAAGGAGTGAGGGAGGAGCAGCTGTCTTCCTGGGGAAGTAGAGCCAGTCCCTGCTGCCCTCCC
AAGGAGGAAGCCCTAGTATCACCCTGCTGGGTGGGCTTCCCCTAGGAGAAAGCTGCTACTCAGATTTTGGTCGGC
TCAGTTCCCCCAACCCCAGCCATCCAAGAATATGGTGTTACTGAACCTCTCAGTGCATGGGTTGGTGGGACCCTT
TATTGCGGAAAAGGGAAACTGAAGCCCAGTGAAGAGCAAGCTTTGTACAAGATCGTAGAGCCTGGTAGGGCTGGC
TTGCCAGGGTGGGAACTGGAGTGTGGATTAGGTCCCTGCCCTTGGTGGGAGCTCATACTGACAGGAGGTGAGACT
TGCCAGTGCCTTTAGAGGCCACTGTCCACCCCAGACCCTCCACTGGGAGAAGCAGAGGCCAGGATAGGCTGACTT
GTATGGGTAGGGGATTATTTCAGTCTCTAAGTCCTGGCCAGTGTGGACCTAGGTCCCTCTGAGAGACACTCCTAT
CCATGGGGAGGTAGCGTGTGACCTCAGGCAGCCTACCATAATCCTGGGGCTTCTCTGGAGGACCCCACACAGATC
TATCATAGGATAAATCTACTTGTCTGTCGTAGATCTATCTCAACTAGGACCATTCATCAGTGGGCCATTTAATCA
GCCCACTTCAGCCAGGAGGGCACAAACATGAAGCTACTTTGCACTGAATCCTATCAGTGTGGTGAGAACATTAGA
CATGCCTATAGGGAATGATCTGTGTTTTTGGTTGATATAAAATAGAGAGCAATTAATTACTGTTTAGTAAATGCA
GGGCAGTGGAAAAGAATCTTTCAAAAGAGGATCCCCACATGGAAACAATCAAGGTGGCTTTTGTGATGACAAGTG
GGGAACGAGATACTGGACTAACTGAGCCCATGGCTGGGTAGAGGGGAAGCTGAGGCTCATAGTGAGATGGGCCAG
CCAGAGGTCATGAAACTAGTCTGGGGCATAGGGGGGTCTCTGGAGATGGGGGAAGC**ATG**GGTCCTCCACTCACTG
CTCATCCACTGCCTTCTAGACCTCGTCCTTTGCTGGCTGTGGAGCGGACTGGGCAGCGGCCCCTGTGGGCCCCGT
CCCTGGAACTGCCCAAGCCAGTCATGCAGCCCTTGCCTGCTGGGGCCTTCCTCGAGGAGGTGGCAGAGGGTACCC
CAGCCCAGACAGAGAGTGAGCCAAAGGTGCTGGACCCAGAGGAGGATCTGCTGTGCATAGCCAAGACCTTCTCCT
ACCTTCGGGAATCTGGCTGGTATTGGGGTTCCATTACGGCCAGCGAGGCCCGACAACACCTGCAGAAGATGCCAG
AAGGCACGTTCTTAGTACGTGACAGCACGCACCCCAGCTACCTGTTCACGCTGTCAGTGAAAACCACTCGTGGCC
CCACCAATGTACGCATTGAGTATGCCGACTCCAGCTTCCGTCTGGACTCCAACTGCTTGTCCAGGCCACGCATCC

FIGURE 6571B

TGGCCTTTCCGGATGTGGTCAGCCTTGTGCAGCACTATGTGGCCTCCTGCACTGCTGATACCCGAAGCGACAGCC
CCGATCCTGCTCCCACCCCGGCCCTGCCTATGCCTAAGGAGGATGCGCCTAGTGACCCAGCACTGCCTGCTCCTC
CACCAGCCACTGCTGTACACCTAAAACTGGTGCAGCCCTTTGTACGCAGAAGCAGTGCCCGCAGCCTGCAACACC
TGTGCCGCCTTGTCATCAACCGTCTGGTGGCCGACGTGGACTGCCTGCCACTGCCCCGGCGCATGGCCGACTACC
TCCGACAGTACCCCTTCCAGCTCTGACTGTACGGGGCAATCTGCCCACCCTCACCCAGTCGCACCCTGGAGGGGA
CATCAGCCCCAGCTGGACTTGGGCCCCCACTGTCCCTCCTCCAGGCATCCTGGTGCCTGCATACCTCTGGCAGCT
GGCCCAGGAAGAGCCAGCAAGAGCAAGGCATGGGAGAGGGGAGGTGTCACACAACTTGGAGGTAAATGCCCCCAG
GCCGCATGTGGCTTCATTATACTGAGCCATGTGTCAGAGGATGGGGAGACAGGCAGGACCTTGTCTCACCTGTGG
GCTGGGCCCAGACCTCCACTCGCTTGCCTGCCCTGGCCACCTGAACTGTATGGGCACTCTCAGCCCTGGTTTTTC
AATCCCCAGGGTCGGGTAGGACCCCTACTGGCAGCCAGCCTCTGTTTCTGGGAGGATGACATGCAGAGGAACTGA
GATCGACAGTGACTAGTGACCCCTTGTTGAGGGGTAAGCCAGGCTAGGGGACTGCACAATTATACACTATTTATT
TATTTATTCTCCTTGGGGTTGGTGTCAGGGGCGAGCCAACCCCACCTCTATGCCCTGAGCCCTGGTAGTCCAGAG
ACCCCAACTCTGCCCTGGCTTCTCTGGTTCTTCCCTGTGGAAAGCCCATCCTGAGACATCTTGCTGGAACCAAGG
CAATCCTGGATGTCCTGGTACTGACCCACCCGTCTGTGAATGTGTCCACTCTCTTCTGCCCCCAGCCATATTTGG
GGAGGATGGACAACTACAATAGGTAAGAAAATGCAGCCGGAGCCTCAGTCCCCAGCAGAGCCTGTGTCTCACCCC
CTCACAGGACAGAGCTGTATCTGCATAGAGCTGGTCTCACTGTGGCGCAGGCCCCGGGGGGGAGTGCCTGTGCTGT
CAGGAAGAGGGGGTGCTGGTTTGAGGGCCACCACTGCAGTTCTGCTAGGTCTGCTTCCTGCCCAGGAAGGTGCCT
GCACATGAGAGGAGAGAAATACACGTCTGATAAGACTTCATGAAATAATAATTATAGCAAAGAACAGTTTGGTGG
TCTTTTCTCTTCCACTGATTTTTCTGTAATGACATTATACCTTTATTACCTCTTTATTTTATTACCTCTATAATA
AAATGATACCTTTCATGT

FIGURE 6572

MGPPLTAHPLPSRPRPLLAVERTGQRPLWAPSLELPKPVMQPLPAGAFLEEVAEGTPAQTESEPKVLDPEEDLLC
IAKTFSYLRESGWYWGSITASEARQHLQKMPEGTFLVRDSTHPSYLFTLSVKTTRGPTNVRIEYADSSFRLDSNC
LSRPRILAFPDVVSLVQHYVASCTADTRSDSPDPAPTPALPMPKEDAPSDPALPAPPPATAVHLKLVQPFVRRSS
ARSLQHLCRLVINRLVADVDCLPLPRRMADYLRQYPFQL

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FIGURE 6573

GCACGAGGGCGCTTTTGTCTCCGGTGAGTTTTGTGGCGGGAAGCTTCTGCGCTGGTGCTTAGTAACCGACTTTCC
TCCGGACTCCTGCACGACCTGCTCCTACAGCCGGCGATCCACTCCCGGCTGTTCCCCCGGAGGGTCCAGAGGCCT
TTCAGAAGGAGAAGGCAGCTCTGTTTCTCTGCAGAGGAGTAGGGTCCTTTCAGCCATGAAGCATGTGTTGAACCT
CTACCTGTTAGGTGTGGTACTGACCCTACTCTCCATCTTCGTTAGAGTGATGGAGTCCCTAGAAGGCTTACTAGA
GAGCCCATCGCCTGGGACCTCCTGGACCACCAGAAGCCAACTAGCCAACACAGAGCCCACCAAGGGCCTTCCAGA
CCATCCATCCAGAAGCATGTGATAAGACCTCCTTCCATACTGGCCATATTTTGGAACACTGACCTAGACATGTCC
AGATGGGAGTCCCATTCCTAGCAGACAAGCTGAGCACCGTTGTAACCAGAGAACTATTACTAGGCCTTGAAGAAC
CTGTCTAACTGGATGCTCATTGCCTGGGCAAGGCCTGTTTAGGCCGGTTGCGGTGGCTCATGCCTGTAATCCTAG
CACTTTGGGAGGCTGAGGTGGGTGGATCACCTGAGGTCAGGAGTTCGAGACCAGCCTCGCCAACATGGCGAAACC
CCATCTCTACTAAAAATACAAAAGTTAGCTGGGTGTGGTGGCAGAGGCCTGTAATCCCAGTTCCTTGGGAGGCTG
AGGCGGGAGAATTGCTTGAACCCGGGGACGGAGGTTGCAGTGAACCGAGATCGCACTGCTGTACCCAGCCTGGGC
CACAGTGCAAGACTCCATCTCAAAAAAAAAAAGAAAAGAAAAAGCCTGTTTAATGCACAGGTGTGAGTGGATTGC
TTATGGCTATGAGATAGGTTGATCTCGCCCTTACCCCGGGGTCTGGTGTATGCTGTGCTTTCCTCAGCAGTATGG
CTCTGACATCTCTTAGATGTCCCAACTTCAGCTGTTGGGAGATGGTGATATTTTCAACCCTACTTCCTAAACATC
TGTCTGGGGTTCCTTTAGTCTTGAATGTCTTATGCTCAATTATTTGGTGTTGAGCCTCTCTTCCACAAGAGCTCC
TCCATGTTTGGATAGCAGTTGAAGAGGTTGTGTGGGTGGGCTGTTGGGAGTGAGGATGGAGTGTTCAGTGCCCAT
TTCTCATTTTACATTTTAAAGTCGTTCCTCCAACATAGTGTGTATTGGTCTGAAGGGGGTGGTGGGATGCCAAAG
CCTGCTCAAGTTATGGACATTGTGGCCACCATGTGGCTTAAATGATTTTTTCTAACTAATAAAGTGGAATATATA
TTTCAAAAAAAAAAAAAAAAA

FIGURE 6574

MKHVLNLYLLGVVLTLLSIFVRVMESLEGLLESPSPGTSWTTRSQLANTEPTKGLPDHPSRSM

FIGURE 6575A

CAGGGGCGCGGCGGGGCCGGAGAGAGGCGGTCCCCTGGGAGGACGGGGTCTCCCCTCGTTGCCTTTGTAGTGGAG
AAGGTGGACAAGTGGCAGTCGGCGTGATCGCAGGGAAGCGGGGCCGGCGCGGGCGGCCGAGGGTCCAGGCGAGCC
CGCGGGCGGACGGGAG**ATG**CCGCTGCTACACCGAAAGCCGTTTGTGAGACAGAAGCCGCCCGCGGACCTGCGGCC
CGACGAGGAAGTTTTCTACTGTAAAGTCACCAACGAGATCTTCCGCCACTACGATGACTTTTTTGAACGAACCAT
TCTGTGCAACAGCCTTGTGTGGAGTTGTGCTGTGACGGGTAGACCTGGACTGACGTATCAGGAAGCACTTGAGTC
AGAAAAAAAAGCAAGACAGAATCTTCAGAGTTTTCCAGAACCACTAATTATTCCAGTTTTATACTTGACCAGCCT
TACCCATCGTTCGCGCTTACATGAAATTTGTGATGATATCTTTGCATATGTCAAGGATCGATATTTTGTCGAAGA
AACTGTGGAAGTCATTAGGAACAATGGTGCAAGGTTGCAGTGTAGGATTTTGGAAGTCCTCCCTCCATCACATCA
AAATGGTTTTGCTAATGGACATGTTAACAGTGTGGATGGAGAAACTATTATCATCAGTGATAGTGATGATTCAGA
AACACAAAGCTGTTCTTTTCAAAATGGGAAGAAAAAAGATGCAATTGATCCCTTACTATTCAAGTATAAAGTGCA
ACCCACTAAAAAAGAATTACATGAGTCTGCTATTGTTAAAGCAACACAAATCAGCCGGAGAAAACACCTATTTTC
TCGTGATAAACTAAAGCTTTTTCTGAAGCAACACTGTGAACCACAAGATGGAGTCATTAAAATAAAGGCATCATC
TCTTTCAACGTATAAAATAGCAGAACAAGATTTTTCTTATTTCTTCCCTGATGATCCACCCACATTTATCTTCAG
TCCTGCTAACAGACGAAGAGGGAGACCTCCCAAACGAATACATATTAGTCAAGAGGACAATGTTGCTAATAAACA
GACTCTTGCAAGTTATAGGAGCAAAGCTACTAAAGAAAGAGATAAACTTTTGAAACAAGAAGAAATGAAGTCACT
GGCTTTTGAAAAGGCTAAATTAAAAAGAGAAAAAGCAGATGCCCTAGAAGCGAAGAAAAAAGAAAAAGAAGATAA
AGAGAAAAAGAGGGAAGAATTGAAAAAAATTGTTGAAGAAGAGAGACTAAAGAAAAAAGAAGAAAAAGAGAGGCT
TAAAGTAGAAAGAGAAAAGGAAAGAGAGAAGTTACGTGAAGAAAAGCGAAAGTATGTGGAATACTTAAAACAGTG
GAGTAAACCTAGAGAAGATATGGAATGTGATGACCTTAAGGAACTTCCAGAACCAACACCAGTGAAAACTAGACT
ACCTCCTGAAATCTTTGGTGATGCTCTGATGGTTTTGGAGTTCCTTAATGCATTTGGGGAACTTTTTGATCTTCA
AGATGAGTTTCCTGATGGAGTAACCCTAGAAGTATTAGAGGAAGCTCTTGTAGGAAATGACAGTGAAGGCCCACT
GTGTGAATTGCTTTTTTTCTTCCTGACTGCAATCTTCCAGGCAATAGCTGAAGAAGAAGAGGAAGTAGCCAAAGA
GCAACTAACTGATGCTGACACCAAAGATTTAACAGAGGCTTTGGATGAAGATGCAGACCCCACAAAATCTGCACT
GTCTGCAGTTGCATCTTTGGCAGCTGCATGGCCACAGTTACACCAGGGCTGCAGTTTGAAAAGTTTGGATCTTGA
TAGCTGCACTCTTTCAGACATCCTCAGACTGCACATCTTAGCTTCAGGTGCTGATGTAACATCAGCAAATGCAAA
GTATAGATATCAAAAACGAGGAGGATTTGATGCTACAGATGATGCTTGTATGGAGCTTCGTTTGAGCAATCCCAG
TCTAGTGAAGAAACTGTCAAGCACCTCAGTGTATGATTTGACACCAGGAGAAAAAATGAAGATACTCCATGCTCT
CTGTGGAAAGCTACTGACCCTAGTTTCAACTAGGGATTTTATTGAAGATTATGTTGATATATTACGACAGGCAAA
GCAGGAGTTCCGGGAATTAAAAGCAGAACAACATCGAAAAGAGAGGGAAGAAGCAGCTGCCAGAATTCGTAAAAG
GAAGGAAGAAAAACTTAAGGAGCAAGAACAAAAAATGAAAGAGAAACAAGAAAAACTGAAAGAAGATGAGCAAAG
AAATTCAACGGCAGATATATCTATTGGGGAGGAAGAAAGGGAAGATTTTGATACTAGCATTGAGAGCAAAGACAC
AGAGCAAAAGGAATTAGATCAAGATATGGTCACTGAAGATGAAGATGACCCAGGATCACATAAAAGAGGCAGAAG
GGGGAAAAGAGGACAAAATGGATTTAAAGAATTTACAAGGCAAGAACAGATCAACTGTGTAACAAGAGAGCCTCT
TACTGCTGATGAGGAAGAAGCATTAAAACAGGAACACCAACGAAAAGAGAAAGAGCTCTTAGAAAAAATCCAAAG
TGCCATAGCCTGTACCAATATCTTTCCCTTGGGTCGCGACCGCATGTATAGACGATACTGGATTTTCCCTTCTAT
TCCTGGACTCTTTATTGAAGAGGATTATTCTGGTCTTACTGAAGACATGCTGTTGCCTAGACCTTCATCATTTCA
GAATAATGTACAGTCTCAAGATCCTCAGGTATCCACTAAAACTGGAGAGCCTTTGATGTCTGAATCTACCTCCAA
CATTGACCAAGGTCCACGTGACCATTCTGTGCAGCTGCCAAAACCAGTGCATAAGCCAAATCGGTGGTGCTTTTA
CAGTTCTTGTGAACAGCTAGACCAGCTTATTGAAGCTCTTAATTCTAGAGGACATAGAGAAAGTGCCTTAAAAGA
AACTTTGTTACAAGAGAAAAGCAGAATATGTGCACAGCTAGCCCGTTTTTCTGAAGAGAAATTTCATTTTTCAGA
CAAACCTCAGCCTGATAGCAAACCAACATATAGTCGGGGAAGATCTTCCAATGCATATGATCCATCTCAGATGTG
TGCAGAAAAGCAACTTGAACTAAGGCTGAGAGATTTTCTTTTAGATATTGAAGATAGAATCTACCAAGGAACATT
AGGAGCCATCAAGGTTACAGATCGACATATCTGGAGATCAGCATTAGAAAGTGGACGGTATGAGCTGTTAAGTGA
GGAAAACAAGGAAAATGGGATAATTAAAACTGTGAATGAAGACGTAGAAGAGATGGAAATTGATGAACAAACAAA
GGTCATAGTAAAAGACAGACTTTTGGGGATAAAAACAGAAACTCCAAGTACTGTATCAACAAATGCAAGTACACC
ACAATCAGTGAGCAGTGTGGTTCATTATCTGGCAATGGCACTCTTTCAAATAGAGCAGGGCATTGAGCGGCGTTT
TCTGAAAGCTCCACTTGATGCCAGTGACAGTGGGCGTTCTTATAAAACAGTTCTGGACCGTTGGAGAGAGTCTCT
CCTTTCTTCTGCTAGTCTATCCCAAGTTTTTCTTCACCTATCCACCTTGGATCGTAGCGTGATATGGTCTAAATC

FIGURE 6575B

TATACTGAATGCGCGTTGCAAGATATGTCGAAAGAAAGGCGATGCTGAAAACATGGTTCTTTGTGATGGCTGTGA
TAGGGGTCATCATACCTACTGTGTTCGACCAAAGCTCAAGACTGTGCCTGAAGGAGACTGGTTTTGTCCAGAATG
TCGACCAAAGCAACGTTCTAGAAGACTCTCCTCTAGACAGAGACCATCCTTGGAAAGTGATGAAGATGTGGAAGA
CAGTATGGGAGGTGAGGATGATGAAGTTGATGGCGATGAAGAAGAAGGTCAAAGTGAGGAGGAAGAGTATGAGGT
AGAACAAGATGAAGATGACTCTCAAGAAGAGGAAGAAGTCAGCCTACCCAAACGAGGAAGACCACAAGTTAGATT
GCCAGTTAAAACAAGAGGGAAACTTAGCTCTTCTTTCTCTAGTCGTGGCCAACAACAAGAACCTGGAAGATACCC
TTCAAGGAGTCAGCAGAGCACACCCAAAACAACTGTTTCTTCTAAAACTGGTAGAAGCCTAAGAAAGATAAACTC
TGCTCCTCCTACAGAAACAAAATCTTTAAGAATTGCCAGTCGTTCTACTCGCCACAGTCATGGCCCACTGCAAGC
AGATGTATTTGTGGAATTGCTTAGTCCTCGTAGAAAACGCAGAGGCAGGAAAAGTGCTAATAAAACACCAGAAAA
TAGTCCCAACTTCCCTAACTTCAGAGTCATTGCCACAAAGTCAAGTGAACAGTCAAGATCTGTAAATATTGCTTC
AAAACTTTCTCTCCAAGAGAGTGAATCCAAAAGAAGATGCAAAAAAAAGACAATCTCCAGAGCCATCGCCTGTGAC
ACTGGGTCGAAGGAGTTCTGGCCGACAGGGAGGAGTTCATGAATTGTCTGCTTTTGAACAACTTGTTGTAGAATT
GGTACGACATGATGACAGCTGGCCTTTTTTGAAACTTGTTTCTAAAATCCAGGTCCCAGACTACTATGACATCAT
CAAAAAGCCCATTGCCTTAAATATAATTCGTGAAAAAGTGAATAAGTGTGAATATAAATTAGCATCTGAGTTTAT
TGATGACATTGAGTTAATGTTTTCGAACTGCTTTGAATACAACCCTCGTAACACAAGTGAAGCAAAAGCTGGAAC
TAGGCTTCAAGCATTTTTTCATATTCAGGCTCAAAAGCTTGGACTCCACGTCACACCCAGTAATGTGGACCAAGT
TAGCACACCACCGGCTGCGAAAAAGTCACGAATCTGACTTTGTCCTTCTAAAGGATATATTTGAAGAAAAACAAA
TTGTTCATGAAAATGGAACATTAAATCATGCTGTATAAAGCAATAACAAACAATTGATTGACCACATGAAAGTGT
GGCCTGCACTATATTCTCAATTTTAATATTAAGCACTCAGGAGAATGTAGGAAAGATATCCTTTGCTACAGTTTT
GTTCAGTATCTAATAAGTTTGATAGATGTATTGGATACAGTACTGGTTTACAGAGGTTTTTGTACATTTTTGAGA
TCATTCATGTGTCCAGAGATCTTGGAAAATATTTTTTCACCCACGATTTATTTTGTTATTGATGATTTTTTTTTA
AAGTGGTGGTATTAAGGGAGAGTTATCTACATGGATGAGTCTTCCGCTATAGCACAGTTTAGAAAAGGTGTTTAT
GTCTTAATTAATTGTTTGAGTACATTCTTTCAACACTACACATGAATGAATCCAATCTTATAACCTTGAAGTGCT
GTACCAGTGCTGGCTGCAGGTATTAAGTCCAAGTTTATTAACTAGATATTTATTTAGTATTGAGAGTAATTTGTG
AATTTGTTTTGTATTTATAAAATTTATACCTGAAAAATGTTCCTTAATGTTTTAAACCTTTTACTGTGTTTTTAT
TCCTCTAACTTCCTTAATGATCAATCAAAAAAAGTAACACCCTCCCTTTTTCCTGACAGTTCTTTCAGCTTTACA
GAACTGTATTATAAGTTTCTATGTATAACTTTTTAACTGTACAAATAAAATAACATTTTTTCAAATAAAAAAAAA
AAAAAAAA

FIGURE 6576

MPLLHRKPFVRQKPPADLRPDEEVFYCKVTNEIFRHYDDFFERTILCNSLVWSCAVTGRPGLTYQEALESEKKAR
QNLQSFPEPLIIPVLYLTSLTHRSRLHEICDDIFAYVKDRYFVEETVEVIRNNGARLQCRILEVLPPSHQNGFAN
GHVNSVDGETIIISDSDDSETQSCSFQNGKKKDAIDPLLFKYKVQPTKKELHESAIVKATQISRRKHLFSRDKLK
LFLKQHCEPQDGVIKIKASSLSTYKIAEQDFSYFFPDDPPTFIFSPANRRRGRPPKRIHISQEDNVANKQTLASY
RSKATKERDKLLKQEEMKSLAFEKAKLKREKADALEAKKKEKEDKEKKREELKKIVEEERLKKKEEKERLKVERE
KEREKLREEKRKYVEYLKQWSKPREDMECDDLKELPEPTPVKTRLPPEIFGDALMVLEFLNAFGELFDLQDEFPD
GVTLEVLEEALVGNDSEGPLCELLFFFLTAIFQAIAEEEEEVAKEQLTDADTKDLTEALDEDADPTKSALSAVAS
LAAAWPQLHQGCSLKSLDLDSCTLSDILRLHILASGADVTSANAKYRYQKRGGFDATDDACMELRLSNPSLVKKL
SSTSVYDLTPGEKMKILHALCGKLLTLVSTRDFIEDYVDILRQAKQEFRELKAEQHRKEREEAAARIRKRKEEKL
KEQEQKMKEKQEKLKEDEQRNSTADISIGEEEREDFDTSIESKDTEQKELDQDMVTEDEDDPGSHKRGRRGKRGQ
NGFKEFTRQEQINCVTREPLTADEEEALKQEHQRKEKELLEKIQSAIACTNIFPLGRDRMYRRYWIFPSIPGLFI
EEDYSGLTEDMLLPRPSSFQNNVQSQDPQVSTKTGEPLMSESTSNIDQGPRDHSVQLPKPVHKPNRWCFYSSCEQ
LDQLIEALNSRGHRESALKETLLQEKSRICAQLARFSEEKFHFSDKPQPDSKPTYSRGRSSNAYDPSQMCAEKQL
ELRLRDFLLDIEDRIYQGTLGAIKVTDRHIWRSALESGRYELLSEENKENGIIKTVNEDVEEMEIDEQTKVIVKD
RLLGIKTETPSTVSTNASTPQSVSSVVHYLAMALFQIEQGIERRFLKAPLDASDSGRSYKTVLDRWRESLLSSAS
LSQVFLHLSTLDRSVIWSKSILNARCKICRKKGDAENMVLCDGCDRGHHTYCVRPKLKTVPEGDWFCPECRPKQR
SRRLSSRQRPSLESDEDVEDSMGGEDDEVDGDEEEGQSEEEEYEVEQDEDDSQEEEEVSLPKRGRPQVRLPVKTR
GKLSSSFSSRGQQQEPGRYPSRSQQSTPKTTVSSKTGRSLRKINSAPPTETKSLRIASRSTRHSHGPLQADVFVE
LLSPRRKRRGRKSANKTPENSPNFPNFRVIATKSSEQSRSVNIASKLSLQESESKRRCKKRQSPEPSPVTLGRRS
SGRQGGVHELSAFEQLVVELVRHDDSWPFLKLVSKIQVPDYYDIIKKPIALNIIREKVNKCEYKLASEFIDDIEL
MFSNCFEYNPRNTSEAKAGTRLQAFFHIQAQKLGLHVTPSNVDQVSTPPAAKKSRI

FIGURE 6577

GTAACGGATGGTGCGCCAACGTGAGAGGAAACCCGTGCGCGGCTGCGCTTTCCTGTCCCCAAGCCGTTCTAGACG
CGGATGAAGTGCAAAACAAACTTCTCCATAGAGGAGTTGTTGCAAAGTTCCAGTTTATACCAAACAGTAATCAGA
TTCCATTGGAAGCTAAAGATTTTGAGAGCCTTTTGTACTATATGCAACTAACTTGATTTCAAGCTTGGGAACTTT
TAAAAAAAACATTAAAGCAAAATGAAAAATGCTTTCTGAAAGCAGCTCCTTTTTGAAAGGTGTGATGCTTGGAAG
CCATTTTCTGTGCTTTGATCCACTAATGCTAAGGACACATTAGGATTGGTCATGGAAATAGA**ATG**CACCACCATG
AGCATCATCACCTACAAGCTCCTAACAAAGAAGATATCTTGAAAATTTCAGAGGATGAGCGCATGGAGCTCAGTA
AGAGCTTTCGAGTATACTGTATTATCCTTGTAAAACCCAAAGATGTGAGTCTTTGGGCTGCAGTAAAGGAGACTT
GGACCAAACACTGTGACAAAGCAGAGTTCTTCAGTTCTGAAAATGTTAAAGAGTTTGAGTCAATTAATATGGACA
CAAATGACATGTGGTTAATGATGAGAAAAGCTTACAAATACGCCTTTGATAAGTATAGAGACCAATACAACTGGT
TCTTCCTTGCACGCCCCACTACGTTTGCTATCATTGAAAACCTAAAGTATTTTTTGTTAAAAAAGGATCCATCAC
AGCCTTTCTATCTAGGCCACACTATAAAATCTGGAGACCTTGAATATGTGGGTATGGAAGGAGGAATTGTCTTAA
GTGTAGAATCAATGAAAAGACTTAACAGCCTTCTCAATATCCCAGAAAAGTGTCCTGAACAGGGAGGGATGATTT
GGAAGATATCCGAAGATAAACAGCTAGCAGTTTGCCTGAAATATGCTGGAGTATTTGCAGAAAATGCAGAAGATG
CTGATGGAAAAGATGTATTTAATACCAAATCTGTTGGGCTTTCTATTAAAGAGGCAATGACTTATCACCCCAACC
AGGTAGTAGAAGGCTGTTGTTCAGATATGGCTGTTACTTTTAATGGACTGACTCCAAATCAGATGCATGTGATGA
TGTATGGGGTATACCGCCTTAGGGCATTTGGGCATATTTTCAATGATGCATTGGTTTTCTTACCTCCAAATGGTT
CTGACAATGAC**TGA**GAAGTGGTAGAAAAGCGTGAATATGATCTTTGTATAGGACGTGTGTTGTCATTATTTGTAG
TAGTAACTACATATCCAATACAGCTGTATGTTTCTTTTTCTTTTCTAATTTGGTGGCACTGGTATAACCACCCAT
TAAAGTCAGTAGTACATTTTTAAATGAGGGTGGTTTTTTTCTTTAAAACACATGAACATTGTAAATGTGTTGGAA
AAAAGTGTTTTAAGAATAATAATTTTGCAAATAAACTATTAATAAATATTATATGTGATAAATTCTAACC

FIGURE 6578

MHHHEHHHLQAPNKEDILKISEDERMELSKSFRVYCIILVKPKDVSLWAAVKETWTKHCDKAEFFSSENVKEFES
INMDTNDMWLMMRKAYKYAFDKYRDQYNWFFLARPTTFAIIENLKYFLLKKDPSQPFYLGHTIKSGDLEYVGMEG
GIVLSVESMKRLNSLLNIPEKCPEQGGMIWKISEDKQLAVCLKYAGVFAENAEDADGKDVFNTKSVGLSIKEAMT
YHPNQVVEGCCSDMAVTFNGLTPNQMHVMMYGVYRLRAFGHIFNDALVFLPPNGSDND

FIGURE 6579

CGGACGCGTGGGCGTTACTCACTCTTCCTCCTTCCCCTCCTCGCCGACTCCCGGGCTCTGGGCCCCTGGGGGAGG
GAAGAGGCCTCCTATCTACTCCTCTGCCCCAGTCCCCTCCTTGCGTCAGTCCCAGTGAGGGATAAGCGCCTGGCG
GAAGGCGCAGGGAGGTGTTTCTCTGCTTCAGGAGTGCCCGCCGGCCCTTGCAGCTGCTGGAAGACCCATTTATCT
CATGCTTCTTGTTTTCTTTGGGGACCTGCAGGGGAAGGAAGCAGGGTGACGGTTTGGTATCCCCACCTAAGACCC
TCCCCTTTCCCCTGAGGCCAGCCGTCAGCCCCTGGCAGGGGGTCTTGGAAGCCAGAGGTTTTTGCTCAGGGCAGG
GAAAGGGCTGCAGGATCCCCGGGGGCTGCCGGAGGTCGGTCTCACTGACATCATGGCTGACCCCAGCATCGCCTG
GTCCCACAG**ATG**TCGCCCTCTGGTCGCCTGTGTCTTCTTACCATCGTTGGCCTGATTCTCCCCACCAGAGGACAG
ACGTTGAAAGATACCACGTCCAGTTCTTCAGCAGACTCAACTATCATGGACATTCAGGTCCCGACACGAGCCCCA
GATGCAGTCTACACAGAACTCCAGCCCACCTCTCCAACCCCAACCTGGCCTGCTGATGAAACACCACAACCCCAG
ACCCAGACCCAGCAACTGGAAGGAACGGATGGGCCTCTAGTGACAGATCCAGAGACACACAAGAGCACCAAAGCA
GCTCATCCCACTGATGACACCACGACGCTCTCTGAGAGACCATCCCCAAGCACAGACGTCCAGACAGACCCCCAG
ACCCTCAAGCCATCTGGTTTTCATGAGGATGACCCCTTCTTCTATGATGAACACACCCTCCGGAAACGGGGGCTG
TTGGTCGCAGCTGTGCTGTTCATCACAGGCATCATCATCCTCACCAGTGGCAAGTGCAGGCAGCTGTCCCGGTTA
TGCCGGAATCATTGCAGG**TGA**GTCCATCAGAAACAGGAGCTGACAACCCGCTGGGCACCCGAAGACCAAGCCCCC
TGCCAGCTCACCGTGCCCAGCCTCCTGCATCCCCTCGAAGAGCCTGGCCAGAGAGGGAAGACACAGATGATGAAG
CTGGAGCCAGGGCTGCCGGTCCGAGTCTCCTACCTCCCCCAACCCTGCCCGCCCCTGAAGGCTACCTGGCGCCTT
GGGGGCTGTCCCTCAAGTTATCTCCTCTGTTAAGACAAAAAGTAAAGCACTGTGGTCTTTGAAAAAAAAAAAAAA
AAAAAAAA

FIGURE 6580

MSPSGRLCLLTIVGLILPTRGQTLKDTTSSSSADSTIMDIQVPTRAPDAVYTELQPTSPTPTWPADETPQPQTQT
QQLEGTDGPLVTDPETHKSTKAAHPTDDTTTLSERPSPSTDVQTDPQTLKPSGFHEDDPFFYDEHTLRKRGLLVA
AVLFITGIIILTSGKCRQLSRLCRNHCR

FIGURE 6581

GGGATAGCCGGACGGGGATCTGAGCTGGCAGGATGAATGTGGGGGTGGCACACAGCGAAGTAAACCCCAACACCC
GAGTGATGAATAGCCGAGGCATCTGGCTGGCCTACATCATCTTGGTAGGATTGCTGCATATGGTTCTACTCAGCA
TCCCCTTCTTCAGCATTCCTGTTGTCTGGACCCTGACCAACGTCATCCATAACCTGGCTACGTATGTCTTCCTTC
ATACGGTGAAAGGGACACCCTTTGAGACTCCTGACCAAGGAAAGGCCCGGCTACTGACACACTGGGAGCAAATGG
ACTATGGGCTCCAGTTTACCTCTTCCCGCAAGTTCCTCAGCATCTCTCCTATTGTGCTCTATCTCCTGGCCAGCT
TCTATACCAAGTATGATGCTGCGCACTTCCTCATCAACACAGCCTCATTGCTAAGTGTACTGCTGCCGAAGTTGC
CCCAGTTCCATGGGGTTCGTGTCTTTGGCATCAACAAATACTGAGGGATGGGTTTTGGGACAGCTCCATGGGCAT
GGGGAAGGCACTGAAACAGAGGACTATAAAACATCCTTCTCTTATTCTCCATACTGTCTTCTACACCTTTAAAGC
CTGAGAACTATACAACCTTTCCCAGACTCCCAAGAAGAGAAGAGATTGGCAAATGGGGCTCCTGGGCCCAGTCCT
GCTAGTGGCAAGTTTCTTTGAATCAGGAAGGCAGGTGAGGTAAGGGCCAAATCACTCTCCTCCATAGCAGGAAGC
CATTTGGGCAGCTTCTTTGGTGATTACATCTTTCCATATCTTTTACACTTACCACCTTCCAGCTCTGTTTTGCTG
TGTATTTTTCTTACAATAATTTTTTTCAGCTATAGCTGCAGTTTAATCAGGATGGGTAGAGAGCTGTCCTCATAA
GGCTGGGGGTGGGAAGATGGAATACTGACCTAATGTATAAAACTTAAAACAATTCTCCAATCCCCTCTCCTTTGG
TCCAGTAGGAGGTGCCCTTCACTCTAAGCTTAACACTTAGTAGGGAAGAGATTCTCAAATGAGAAAAAGGGCTCC
GGCTATATGGGCAACAAAGAGGGAAGATACAGGTTGCCAGTTATACATTTATAGAAAGATAATCCCCTGGCTTTA
AATAGTCATGTACATACAAATATGAACAAACTTAAAAAAAAAATACAAACCCTTGGATCACATGGGGGCTTCTGG
GAACCCCCGTATTCTTCCCCCTCACCCAAGGGCAGTGGGCATGAATCTACTTTTTAAAAATGATTAATTTTGACA
AAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6582

MNVGVAHSEVNPNTRVMNSRGIWLAYIILVGLLHMVLLSIPFFSIPVVWTLTNVIHNLATYVFLHTVKGTPFETP
DQGKARLLTHWEQMDYGLQFTSSRKFLSISPIVLYLLASFYTKYDAAHFLINTASLLSVLLPKLPQFHGVRVFGI
NKY

FIGURE 6583

GAGATACCCGGCCAGACACCCTCACCTGCGGTGCCCAGCTGCCCAGGCTGAGGCAAGAGAAGGCCAGAAACC**ATG**

CCCATGGGGTCTCTGCAACCGCTGGCCACCTTGTACCTGCTGGGGATGCTGGTCGCTTCCTGCCTCGGACGGCTC
AGCTGGTATGACCCAGATTTCCAGGCAAGGCTCACCCGTTCCAACTCGAAGTGCCAGGGCCAGCTGGAGGTCTAC
CTCAAGGACGGATGGCACATGGTTTGCAGCCAGAGCTGGGGCCGGAGCTCCAAGCAGTGGGAGGACCCCAGTCAA
GCGTCAAAAGTCTGCCAGCGGCTGAACTGTGGGGTGCCCTTAAGCCTTGGCCCCTTCCTTGTCACCTACACACCT
CAGAGCTCAATCATCTGCTACGGACAACTGGGCTCCTTCTCCAACTGCAGCCACAGCAGAAATGACATGTGTCAC
TCTCTGGGCCTGACCTGCTTAGAACCCCAGAAGACAACACCTCCAACGACAAGGCCCCCGCCCACCACAACTCCA
GAGCCCACAGCTCCTCCCAGGCTGCAGCTGGTGGCACAGTCTGGCGGCCAGCACTGTGCCGGCGTGGTGGAGTTC
TACAGCGGCAGCCTGGGGGGTACCATCAGCTATGAGGCCCAGGACAAGACCCAGGACCTGGAGAACTTCCTCTGC
AACAACCTCCAGTGTGGCTCCTTCTTGAAGCATCTGCCAGAGACTGAGGCAGGCAGAGCCCAAGACCCAGGGGAG
CCACGGGAACACCAGCCCTTGCCAATCCAATGGAAGATCCAGAACTCAAGCTGTACCTCCCTGGAGCATTGCTTC
AGGAAAATCAAGCCCCAGAAAAGTGGCCGAGTTCTTGCCCTCCTTTGCTCAGGTTTCCAGCCCAAGGTGCAGAGC
CGTCTGGTGGGGGGCAGCAGCATCTGTGAAGGCACCGTGGAGGTGCGCCAGGGGGCTCAGTGGGCAGCCCTGTGT
GACAGCTCTTCAGCCAGGAGCTCGCTGCGGTGGGAGGAGGTGTGCCGGGAGCAGCAGTGTGGCAGCGTCAACTCC
TATCGAGTGCTGGACGCTGGTGACCCAACATCCCGGGGGCTCTTCTGTCCCCATCAGAAGCTGTCCCAGTGCCAC
GAACTTTGGGAGAGAAATTCCTACTGCAAGAAGGTGTTTGTCACATGCCAGGATCCAAACCCCGCAGGCCTGGCC
GCAGGCACGGTGGCAAGCATCATCCTGGCCCTGGTGCTCCTGGTGGTGCTGCTGGTCGTGTGCGGCCCCCTTGCC
TACAAGAAGCTAGTGAAGAAATTCCGCCAGAAGAAGCAGCGCCAGTGGATTGGCCCAACGGGAATGAACCAAAAC
ATGTCTTTCCATCGCAACCACACGGCAACCGTCCGATCCCATGCTGAGAACCCCACAGCCTCCCACGTGGATAAC
GAATACAGCCAACCTCCCAGGAACTCCCGCCTGTCAGCTTATCCAGCTCTGGAAGGGGTTCTGCATCGCTCCTCC
ATGCAGCCTGACAACTCCTCCGACAGTGACTATGATCTGCATGGGGCTCAGAGGCTG**TAA**AGAACTGGGATCCAT
GAGCAAAAAGCCGAGAGCCAGACCTGTTTGTCCTGAGAAAACTGTCCGCTCTTCACTTGAAATCATGTCCCTATT
TCTACCCCGGCCAGAACATGGACAGAGGCCAGAAGCCTTCCGGACAGGCGCTGCTGCCCCGAGTGGCAGGCCAGC
TCACACTCTGCTGCACAACAGCTCGGCCGCCCCTCCACTTGTGGAAGCTGTGGTGGGCAGAGCCCCAAAACAAGC
AGCCTTCCAACTAGAGACTCGGGGGTGTCTGAAGGGGGCCCCCTTTCCCTGCCCGCTGGGGAGCGGCGTCTCAGT
GAAATCGGCTTTCTCCTCAGACTCTGTCCCTGGTAAGGAGTGACAAGGAAGCTCACAGCTGGGCGAGTGCATTTT
GAATAGTTTTTTGTAAGTAGTGCTTTTCCTCCTTCCTGACAAATCGAGCGCTTTGGCCTCTTCTGTGCAGCATCC
ACCCCTGCGGATCCCTCTGGGGAGGACAGGAAGGGGACTCCCGGAGACCTCTGCAGCCGTGGTGGTCAGAGGCTG
CTCACCTGAGCACAAAGACAGCTCTGCACATTCACCGCAGCTGCCAGCCAGGGGTCTGGGTGGGCACCACCCTGA
CCCACAGCGTCACCTCACTCCCTCTGTCTTATGACTCCCCTCCCCAACCCCCTCATCTAAAGACACCTTCCTTTC
CACTGGCTGTCAAGCCACAGGGCACCAGTGCCACCCAGGGCCCTGCACAAAGGGGCGCCTAGTAAACCTT

FIGURE 6584

MPMGSLQPLATLYLLGMLVASCLGRLSWYDPDFQARLTRSNSKCQGQLEVYLKDGWHMVCSQSWGRSSKQWEDPS
QASKVCQRLNCGVPLSLGPFLVTYTPQSSIICYGQLGSFSNCSHSRNDMCHSLGLTCLEPQKTTPPTTRPPPTTT
PEPTAPPRLQLVAQSGGQHCAGVVEFYSGSLGGTISYEAQDKTQDLENFLCNNLQCGSFLKHLPETEAGRAQDPG
EPREHQPLPIQWKIQNSSCTSLEHCFRKIKPQKSGRVLALLCSGFQPKVQSRLVGGSSICEGTVEVRQGAQWAAL
CDSSSARSSLRWEEVCREQQCGSVNSYRVLDAGDPTSRGLFCPHQKLSQCHELWERNSYCKKVFVTCQDPNPAGL
AAGTVASIILALVLLVVLLVVCGPLAYKKLVKKFRQKKQRQWIGPTGMNQNMSFHRNHTATVRSHAENPTASHVD
NEYSQPPRNSRLSAYPALEGVLHRSSMQPDNSSDSDYDLHGAQRL

FIGURE 6585A

TCAAGACCACCCTGGCTAACACGGTGAAACCCTGTCTCTACTAAAAATACAAAAAATTAGCCGGGCGGGGTGGTG
GGCGCCTGTAGTCCCAGCTACTCGGGAGGCTGAGGGAGGAGAATGGCGTGAACCTGGGAGGCGGAGTTTGCAGTG
AGCAGAGATCGCGCCATTGCACTCCAGCCTGGGTGACAGACAGAGACTCTGTCTCAAAAAAGAAAAAAAAAGAAA
AAAAGAAAAAGAAAGTGTGGTCTCTGTTGCCTACATCACCATCACCTTGAGTCCTACATCCTTTGAATGAGTCTT
GGGGGTGTGCCCTAGAAAATCATTGGCCAATTCCCGAAGCCAGTACATGTAGAAGCCAAATCTGAGTTATGCAAA
TACATTATTTTTCTATTGTTCAACTTACCTCTATTTGGGTCTCCATTCTACCTGCCTGCAAGAAAACATTCTCTC
AGTCACTTCCAGGTGAACTCCGTCATCCCACTCCTTCTCCCACCTCCACCATTGATCTAAATTTGGGGAGTTCCT
CTGAGCCACAGCCTAGGTGGGGTGGGGTGGGAAGGGGCTGCTGGATGAGAGTCCTCTTTCTGAGATGAATCCTCC
TGGGCCCTTCATCTCCGTGGGTCACACATGCCCTCATTTCTACTCTGCTGCTGCCGTCCCCACGATCCAATAGCA
ATAGCACGACCCCTGGCCTTGACCGTGTATCTGGGGCTCTGTCCCTTCCACATCACCCCCAAACCAGCATCAAAT
GTCTTGTCTGGCTCTGCACTAGGCTCCCCTCAGTTAGTGCAGGGGTGTCCAACTGGGGGCGGAAGGGCTTCCTGT
GCCTGCCTCTTCCAATCCTCCATGTCTTATTTATACCCTGACAGACATGAAGGGTTTTGAACTTAAAAGGCTGGG
AATTTGGCATCTTTTGTTCTCTGACTAAGAAAGAGGAAATCATTTCAAGACCAAAAAGCAGGGAGCCAGCATCTC
ACAGCATGGATCTGAGACCCCCCGTGGAAGCTGCTCTTTTCTTTCTCATCACATAAGCGTGAGCCCGGGACTGTC
AGTGCACAAGGACCAGGGACGCGGCTGCTCCTCTGAGGGGGAGGAAGCCAAGAGTATCTTCTCTTAGATTGGGCT
GAGTTCCCACACCCAGCACACACATTCCCTGCTCACTCACCTCCCACAGACAGCTGGGAAATGACACCTCTGGTG
ACAGAGCCACTCTCCGGGCTTCTGTGGGGAGCGGGTGGGGCACTGCAGTGGGGGAGGATCTCACACCCGGAGGCC
CTGGGAAGCCAGGGTGGGGGAGGGAGGAAGCTGGTTCCTGTTTGTCTTAGAGATCAAGGCCATCAGCCTCCCTGC
ACCTTCCAGGGATGTAGTAAGCACCCCCACCCCAGGGCCAAAGGGCCTCGCCTAAAATGCCTCCTGCACCCTTGA
GGCTTGCTTTGACCCCCTGCACTCCACCAAGAGCGACAGCTCCCCTGGGTCCCATCTTCTCTGACAAGCTGGGTG
GGAGTGTATACAGCTGCTGGGTGTGCTTAGAGGGCCTAATGGAGACCAGCCAGGGATAATCTCCTATGTTATCCA
CATCAAGCCATTTAACAAATATGGATTTAGTACCTACATATGCAATGTATTTGGGGTCCAGAGAGAGGAGGGCAA
CGGTCCAAGGTCACACCTGCGAGGCGAATACGCATGTAAAGCAGCACCTTGTAACCTGTGCCCACTGTGCCTACT
ACTAAAGAAAAATAAATGAGAGAAAAAGAAAAAAGGCTTTTTTTTTTTTGGCCCAGGCCCTGTGCCTGGGACCA
AAGCCTGAGCCCTTTCCTGCAGTCGGGTCGCTGACCTAAGCCTGGGGCAAAGCTAGGTCTTGGCCAGTCAGCAGC
CACCACGTGAAGCAGCCCCTGCCCCCATCACCCCCGGCAGCCTTGTGCCCTCCTCCTCGGGGTCCTCAGCTCACC
CCACCTCAGTCGGGCCTGCTCCAGCGGTTAAGTACCCCTAGTCTGAACCTTAATCGTGAGGCGGGGCAGCCCCCT
CCCCACACCCTGTAGACACTCCCCCGTCCTCCGCCCCCTGGACTTGTTTGGGCGGGAAGAGCCTGCCTCATCTTT
TCTTCCTACCCTCCTACCCAGTGGCCAGGGACCCCAGGCTTCCTCTGAGACATCCACCAGCGGTGATGGGTTGGG
ACCAATCTCCCCCACTCCTCTCCACCCTAGCAGTAAGGTCCCCGCTCTCGATACTGCCCCAGCACCTGCACTGGC
CCTCTCTGATTTCCCAACTCCAGCCCATTCCAAGTGCTGAAGGCGGGTCGCTAGGTGCTGGGACCTGGGCGCGGG
GCAAGACCTTGGGCTGTGTGGGGTGCAGGCTGGGTTTACTGGGTTCACGATTGAGGGAGTGGTCTGGGGGTTAGG
TGTAGGGCCAGGCTGCGTTGTGCTCTAAGGGGCAGGCGGCAGGCGGTTTGGGGGGGCTGTGGTCAGACAGGGTGG
GGTGGCGGTGGGTTTGGGGAAGCCGCAGCAGCCCGCCTTGGGGTCCCGCGAGTGCCGAGGGAGCTGCCGGGGCAT
GGTGGCGCGGGGCCCGTGGTCCTGCCCGGCACGACCCCCGCCCCGCAGCGCCCCGCAGCGCCCCGCCCCCGCGGC
CCCGCTCGCGACGCGTCTCCCGCGGCGCCCCGCCCCCCGCCCGCAGTGCCCGGATGCGGGTGACGCGCGGCCGCCA
TCTTTCCGTCCCGGGCAGCCAGCGCCAGTCGGAGCCAGCGCGAGCGCCGCCGCCATCACTGCCGCTGCCAAGTCC
TCCACCCGCTGCCCCCGCCATGTGAGTCGGCCGCCCGCCACCCTCACCGCGCTTCCCTGCGCCGGCCGCCGCCCT
TGGCAACCGGCCGTCGGGAGTGCCCGGGGTCTCTTCTGCGTTCCCCGCGCCCCGGGGCCAGGCCCAAGCCGGTGA
CTGCGCGCGGGCGGCCGAGGAGCCCCGCGTCCCGGGCTGGCCGGCTCGGGCGATGGCCGCGGGAAGGAGCGGACC
CAGTGTCCTCCTGCCCCTCCCCGCCCCTGTCACCGCGGCCGCCTGTCTTTTCGGGTCGACCCGGATCGCATCTGT
GAGGTCGCCCTCAGTTGACAGGCGGGGAAACTGAGGCCGGGGGGGCCTCGCTCAAGGTCACGCAGCTCATCGGCG
GCAGGGCTGGACCGAGACCAGGGCTTACATCGGGTGGCCTTCCTCCCGAAAAGGAGGACTGGAGGGACXAGGATG
GACAGGTGGATGGGCGGAGCCCTGGCTGCGGGGCCGGGAGGCTGCAAGCCCTGGGTCTTAATCCGTCCCTGCTCC
TCAGGTCTGCTACCGCTGCCACGGCCCCCCCTGCTGCCCCGGCTGGGGAGGGTGGTCCCCCTGCACCCCCTCCAA
ACCTCACCAGTAACAGGAGACTGCAGCAGACCCAGGCCCAGGTGGATGAGGTGAGTGTGGGGGGAGTCAAAACCA
GTAGGAGGGCCCCTGGGGGTTGGGGATAGGTGTAGGGGCCCATTTTGGTTTGGGAGTGATGACAGTTCACGCCTT
TGGGTTTGCGGACAAAGATACCATGCCCCATCCCTGTCTCCCTGTCAGCACGCACTTGGAAGGGCGCTGGGGGTG

FIGURE 6585B

TTAATCAGCTTTGCTAGCCTGGGGTGTGCCAGCCTGGGCAGGTGTGCTCTGGTGATGGACAGAGCGCCTGAGGTT
CCATAGAGGGAGGGTGTTGCTATGACATXTGAGATGTCACCAGCATGCCCCTGATGTGTGCTCCTTGCATGTCCC
CAGGTGTGCTAGGCATGTTCTGTGTGTCCTTGGCATGTTAACCTGGCAGTATCAGGGTGCATGTTCCATGTGTGG
CACGGTGGGCACATGTTTGAGGATTGCCCTCACTGAGGTGGGCCTTGGCACACCCCCCTGCCTCGTGGGCCCTTC
TCCCAGGTGGTGGACATCATGAGGGTGAACGTGGACAAGGTCCTGGAGCGAGACCAGAAGCTGTCGGAGCTGGAC
GACCGTGCAGATGCACTCCAGGCGGGGGCCTCCCAGTTTGAAACAAGCGCAGCCAAGCTCAAGCGCAAATACTGG
TGGAAAAACCTCAAGGTAAGGGTGGGGACAGGAAGGAGGACAGGTGGGTGAATGGGGTATCATAGTTTGTCTTAC
TGATCCTCGCCTCTCACCCCCAGATGATGATCATCTTGGGAGTGATTTGCGCCATCATCCTCATCATCATCATAG
GTGAGTAGGGTGAGAATGGCCGGGGCCCTTTCCCTGGAGAGGTTTCCCCAGTGGATTCTAGGTTTTGAAGGTCAT
TAATCTAGTTTTTACTCTTCAGCCAAAAACACATATAGCTGCTAATGGCAATTCTGATTCATCTAGAGCCAAAAA
CTTTGATGTTATTTAGCCTGCATTTTGCCTAGTTCTTGGCAGTCTTGTTAACATTTGGAAATAGGAAAGCTGGTG
TATCCATTGAGGACCCTTTAGGCCTAAGAGCCCAGTCTGAGAACCCTGGAATTGAGGAGTGGGAGAAAGGAAAGG
ACCAGGGGCTTGAGACATGACCAGGAAGCCAACCACCCCATTATTTGAGAGCTTGCGGTCTCAGAGGCTCAGAGG
ATTAGGGTCTGTGGCTTCAAGGCCATACCATGGAGCGGAAGGGACCTCAGAACCTACCTGTCTAGCCCCTTGCTT
TGTAGATGGAAAAACTGAGTCCAAGAGAGGGTGTCAGCCAGCTGGGGAGTGGGGAGGATTGGAGCAGGGCCAGGC
CTGACACACTGCTTTCTTGTTCTCTCTCTTTCTCTCCCCTCTCCCTCTTCCTCATCTTCTTCCCCTCTCTCCACA
GTTTACTTCAGCTCTTAAATCCCCGAGGAGTCTGCCCTGCCTAGAGAAGGGCCTCTCCCCCAACCCTCAGCCGTT
CCTCCACCTCTCAGCCATATCTTTCAGCCCCCCCTCCCCTGGATCCGTGTGTGTGTGTGTCCGTGTGTGTGTCCC
CCTGTAAATAGCCAGCTGTTATTTATACATATATAATATTATATATATTTGGTCTGTTTGTAGTTTTATTACTAG
ATGATTTTTCCGGTTGTCCTTAACACCCCTTCCTGAGGTTCCCTTCACCCCTCTCTCTTGCCTTCCTTCCCTTTC
CCTTTCTTCCTGACTAGCCCCAAGTCCCTTCATTTGCATCTGCTATGCAATAGTCCCTCTCCTTTCCTTCTTCTT
CCCTCAGATTTAGCTGATCCTTCCTCCCACCCTGGCCTTCCTTTCCTCTTTCCTCCTCACTCTCCCCGTCATGCT
CCCTCTGCCCCGCCCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACCACCAGCACCTGTCCAGGCTTCCTT
AGGTACATCTTCTTTGTATCCATTGGGAGGCTCTGAGACTGGCCCCACTTGGTCCTAAAAATCCCAAGGTCTTTG
GGAGCGTCCAGCATGTTAATTAGCGTATCATTACATACTGCTATCCCTTTCCATTTCTTTTTGTTCCATCACTCT
TCTCTCAACCTGTGTTTCTTTTTTTACTGAGGAGTTAGTCCCCATTAGTTCTTGTATCACATTTTCATTTGCACG
ACATTACTCGCAGGTGGTGGGGAGCCTGGGCTTTTGGGGAACCAGGCTGCTCTGGTCCCCAGCATTGCCTCCTCC
TAGCCCCTCTAGTCCAGTTTGCCTCCCTTACCCTCATTTTCCAAACCTCTTGTACCCTCCTCTCCCTCCCCCAGT
GGTATGTAAGTGTCTTGAAGTTCAGTATGTTATGATGGACCAATAATTCTGCCCTTCGGGTTTCTCCCTACATTC
CTGCTCCCCAGTTTTCATGTGGGGTACTCAACTGACATTCCCATGGGGTTTCCCTCCCATCTGCCTGATCCACCT
CCTCCTCCCACCACAAGATCAATTGTTGGCCACAATTGATCTCTTGTAGAGGGGTGGCTACCAGTGTGTGTGTGG
GGGTCATCACTGCCTTGGGGAGGAGTGGGGCAGGGCAGAGAATCCCCCCAATTCCTGCCTGAAATCTCTGGCCTC
ACCCCTGCTGGGGGTTGGACTGAAAACCCTCCTCCCCAATTTGGGGGGTGTTGCCCCATCACTGCCCAGCTCCTC
TGACTGCCCCCCCTGAATTTAGGGTGGGGGTACTAGTCACTGCCAATGTGTGTATGGGACTTGCTGGAAAACGGG
GATGCTTGCCCCTCTCCAGGACTATTGAGCCCAGAGAGAGCTGTCCTCTCATTGGGTGAACTGATTGAGGAAGGG
TCTATTGTCTTTTTAAATGGCACAATTTTAAGGGTTTGAGGGTACAGTCCCTTAACCTGCCACGGGAGGGGGCCC
CCAAACTTTCTTCCCCCCCCACACTTCTGGTTTTCTGTGTGGAGGGGGAGCAGGGATATCTAAGCTGTGGTGTGAA
AGGGTAGGAGAGATGCTGGAGGTGGGGGTGCTGTGTTCTAGACCCCCCATATTATCCCAGTGTCCCCTGCCCCCC
TCTTCCCCCACCCCATGCCCCCAATTCTGTGGCGCATCCAGATTGTGAAAATGTACAATAAATGTGTAATGAGTA
ACCAGGTGTTGTCTAAGATCTTTTTTATTTTTCTATTTTTTTTTTTTTGGTTGGGGGAGAATAAGATCTTTTCTTA
ACCAATGGGAATAATATTGGATCGGAAGGTATACCAGGAAGGTTGAGAAGATACATTGGTAATGGACTGGACTTT
GCAAGAGGCCCTGACCTTGGGCAGGGCAAAGTGTGATTCTCAAAGTGGCCACAGGGGGGCACTAGGAGTTGGTAA
TGGGAAGTGTCATAGCCAGCCCGTGTCTCTAAGCCCGGTGCGCCCTATGGTCTAGGGTTCCCAGCTTTCGTTTCC
CTTTACTGGGGCATGTTCCTGCTGTTGGACTCCTTTCTACTCCTCGATTTAACTTCTAGA

FIGURE 6586

GGCACGAGGCCCAGTTGTTGATCTTATGCAAGACGCTGCACGACCCCGCGCCCGCTTGTCGCCACGGCACTTGAG
GCAGCCGGAGATACTCTGAGTTACTCGGAGCCCGACGCCTGAGGGTGAGATGAACGCGCTGGCCTCCCTAACCGT
CCGGACCTGTGATCGCTTCTGGCAGACCGAACCGGCGCTCCTGCCCCCGGGGTGACGCGCAGCTCCCAGCCGCCC
AGACAC**ATG**GCCCCAGGCCAAGCACCCCATCAGGCTACCCCGTGGAGGGATGCCCACCCTTTCTTCCTCCTGTCC
CCAGTGATGGGCCTCCTCAGCCGCGCCTGGAGCCGCCTGAGGGGCCTGGGACCTCTAGAGCCCTGGCTGGTGGAA
GCAGTAAAAGGAGCAGCTCTGGTAGAAGCTGGCCTGGAGGGAGAAGCTAGGACTCCTCTGGCAATCCCCCATACC
CCTTGGGGCAGACGCCCTGAAGAGGAGGCTGAAGACAGTGGAGGCCCTGGAGAGGACAGAGAAACACTGGGGCTG
AAAACCAGCAGTTCCCTTCCTGAAGCCTGGGGACTTTTGGATGATGATGATGGCATGTATGGTGAGCGAGAGGCA
ACCAGTGTCCCTAGAGGGCAGGGAAGTCAATTTGCAGATGGCCAGCGTGCTCCCCTGTCTCCCAGCCTTCTGATA
AGGACACTGCAAGGTTCTGATAAGAACCCAGGGGAGGAGAAAGCCGAGGAAGAGGGAGTTGCTGAAGAGGAGGGA
GTTAACAAGTTCTCTTATCCACCATCACACCGGGAGTGTTGTCCAGCCGTGGAGGAGGAGGACGATGAAGAAGCT
GTAAAGAAAGAAGCTCACAGAACCTCTACTTCTGCCTTGTCTCCAGGATCCAAGCCCAGCACTTGGGTGTCTTGC
CCAGGGGAGGAAGAGAATCAAGCCACGGAGGATAAAAGAACAGAAAGAAGTAAAGGAGCCAGGAAGACCTCCGTG
TCCCCCCGATCTTCAGGCTCCGACCCCAGGTCCTGGGAGTATCGTTCAGGAGAGGCGTCCGAGGAGAAGGAGGAA
AAGGCACACAAAGAAACTGGGAAAGGAGAAGCTGCCCCAGGGCCGCAATCCTCAGCCCCAGCCCAGAGGCCCCAG
CTCAAGTCCTGGTGGTGCCAACCCAGTGATGAAGAGGAGGGTGAGGTCAAGGCTTTGGGGGCAGCTGAGAAGGAT
GGAGAAGCTGAGTGTCCTCCCTGCATCCCCCCACCAAGTGCCTTCCTGAAGGCCTGGGTGTATTGGCCAGGAGAG
GACACAGAGGAAGAGGAAGATGAGGAAGAAGATGAGGACAGTGACTCTGGATCAGATGAGGAAGAGGGAGAAGCT
GAGGCTTCCTCTTCCACTCCTGCTACAGGTGTCTTCTTGAAGTCCTGGGTCTATCAGCCAGGAGAGGACACAGAG
GAGGAGGAAGATGAGGACAGTGATACAGGATCAGCCGAGGATGAAAGAGAAGCTGAGACTTCTGCTTCCACACCC
CCTGCAAGTGCTTTCTTGAAGGCCTGGGTGTATCGGCCAGGAGAGGACACGGAGGAGGAGGAAGATGAGGATGTG
GATAGTGAGGATAAGGAAGATGATTCAGAAGCAGCCTTGGGAGAAGCTGAGTCAGACCCACATCCCTCCCACCCG
GACCAGAGGGCCCACTTCAGGGGCTGGGGATATCGACCTGGAAAAGAGACAGAGGAAGAGGAAGCTGCTGAGGAC
TGGGGAGAAGCTGAGCCCTGCCCCTTCCGAGTGGCCATCTATGTACCTGGAGAGAAGCCACCGCCTCCCTGGGCT
CCTCCTAGGCTGCCCCTCCGACTGCAAAGGCGGCTCAAGCGCCCAGAAACCCCTACTCATGATCCGGACCCTGAG
ACTCCCCTAAAGGCCAGAAAGGTGCGCTTCTCCGAGAAGGTCACTGTCCATTTCCTGGCTGTCTGGGCAGGGCCG
GCCCAGGCCGCCCGCCAGGGCCCCTGGGAGCAGCTTGCTCGGGATCGCAGCCGCTTCGCACGCCGCATCACCCAG
GCCCAGGAGGAGCTGAGCCCCTGCCTCACCCCTGCTGCCCGGGCCAGAGCCTGGGCACGCCTCAGGAACCCACCT
TTAGCCCCCATCCCTGCCCTCACCCAGACCTTGCCTTCCTCCTCTGTCCCTTCGTCCCCAGTCCAGACCACGCCC
TTGAGCCAAGCTGTGGCCACACCTTCCCGCTCGTCTGCTGCTGCAGCGGCTGCCCTGGACCTCAGTGGGAGGCGT
GGC**TGA**GACCAACTGGTTTGCCTATAATTTATTAACTATTTATTTTTTCTAAGTGTGGGTTTATATAAGGAATAA
AGCCTTTTGATTTGTAAAAAAAAAAAAAAAAAA

FIGURE 6587

MAPGQAPHQATPWRDAHPFFLLSPVMGLLSRAWSRLRGLGPLEPWLVEAVKGAALVEAGLEGEARTPLAIPHTPW
GRRPEEEAEDSGGPGEDRETLGLKTSSSLPEAWGLLDDDDGMYGEREATSVPRGQGSQFADGQRAPLSPSLLIRT
LQGSDKNPGEEKAEEEGVAEEEGVNKFSYPPSHRECCPAVEEEDDEEAVKKEAHRTSTSALSPGSKPSTWVSCPG
EEENQATEDKRTERSKGARKTSVSPRSSGSDPRSWEYRSGEASEEKEEKAHKETGKGEAAPGPQSSAPAQRPQLK
SWWCQPSDEEEGEVKALGAAEKDGEAECPPCIPPPSAFLKAWVYWPGEDTEEEEDEEEDEDSDSGSDEEEGEAEA
SSSTPATGVFLKSWVYQPGEDTEEEEDEDSDTGSAEDEREAETSASTPPASAFLKAWVYRPGEDTEEEEDEDVDS
EDKEDDSEAALGEAESDPHPSHPDQRAHFRGWGYRPGKETEEEEAAEDWGEAEPCPFRVAIYVPGEKPPPPWAPP
RLPLRLQRRLKRPETPTHDPDPETPLKARKVRFSEKVTVHFLAVWAGPAQAARQGPWEQLARDRSRFARRITQAQ
EELSPCLTPAARARAWARLRNPPLAPIPALTQTLPSSSVPSSPVQTTPLSQAVATPSRSSAAAAAALDLSGRRG

FIGURE 6588

GGCTGGAAGCCGGAAGCGAGCAAAGTGGAGCCGACTCGAACTCCACCGGCACGAGGGCGGAAAAGAAAGCCTCAG
AACGTTCGCTCGCTGCGTCCCCAGCCGGGGCCGAGCCCTCCGCGACGCCACCCGGGCC**ATG**GGGGCCGCACGCAG
CCCGCCGTCCGCTGTCCCGGGGCCCCTGCTGGGGCTGCTCCTGCTGCTCCTGGGCGTGCTGGCCCCGGGTGGCGC
CTCCCTGCGACTCCTGGACCACCGGGCGCTGGTCTGCTCCCAGCCGGGGCTAAACTGCACGGTCAAGAATAGTAC
CTGCCTGGATGACAGCTGGATTCACCCTCGAAACCTGACCCCCTCCTCCCCAAAGGACCTGCAGATCCAGCTGCA
CTTTGCCCACACCCAACAAGGAGACCTGTTCCCCGTGGCTCACATCGAATGGACACTGCAGACAGACGCCAGCAT
CCTGTACCTCGAGGGTGCAGAGTTATCTGTCCTGCAGCTGAACACCAATGAACGTTTGTGCGTCAGGTTTGAGTT
TCTGTCCAAACTGAGGCATCACCACAGGCGGTGGCGTTTTACCTTCAGCCACTTTGTGGTTGACCCTGACCAGGA
ATATGAGGTGACCGTTCACCACCTGCCCAAGCCCATCCCTGATGGGGACCCAAACCACCAGTCCAAGAATTTCCT
TGTGCCTGACTGTGAGCACGCCAGGATGAAGGTAACCACGCCATGCATGAGCTCAGGCAGCCTGTGGGACCCCAA
CATCACCGTGGAGACCCTGGAGGCCCACCAGCTGCGTGTGAGCTTCACCCTGTGGAACGAATCTACCCATTACCA
GATCCTGCTGACCAGTTTTCCGCACATGGAGAACCACAGTTGCTTTGAGCACATGCACCACATACCTGCGCCCAG
ACCAGAAGAGTTCCACCAGCGATCCAACGTCACACTCACTCTACGCAACCTTAAAGGGTGCTGTCGCCACCAAGT
GCAGATCCAGCCCTTCTTCAGCAGCTGCCTCAATGACTGCCTCAGACACTCCGCGACTGTTTCCTGCCCAGAAAT
GCCAGACACTCCAGAACCAATTCCGGACTACATGCCCCTGTGGGTGTACTGGTTCATCACGGGCATCTCCATCCT
GCTGGTGGGCTCCGTCATCCTGCTCATCGTCTGCATGACCTGGAGGCTAGCTGGGCCTGGAAGTGAAAAATACAG
TGATGACACCAAATACACCGATGGCCTGCCTGCGGCTGACCTGATCCCCCCACCGCTGAAGCCCAGGAAGGTCTG
GATCATCTACTCAGCCGACCACCCCCTCTACGTGGACGTGGTCCTGAAATTCGCCCAGTTCCTGCTCACCGCCTG
CGGCACGGAAGTGGCCCTGGACCTGCTGGAAGAGCAGGCCATCTCGGAGGCAGGAGTCATGACCTGGGTGGGCCG
TCAGAAGCAGGAGATGGTGGAGAGCAACTCTAAGATCATCGTCCTGTGCTCCCGCGGCACGCGCGCCAAGTGGCA
GGCGCTCCTGGGCCGGGGGGCGCCTGTGCGGCTGCGCTGCGACCACGGAAAGCCCGTGGGGGACCTGTTCACTGC
AGCCATGAACATGATCCTCCCGGACTTCAAGAGGCCAGCCTGCTTCGGCACCTACGTAGTCTGCTACTTCAGCGA
GGTCAGCTGTGACGGCGACGTCCCCGACCTGTTCGGCGCGGCGCCGCGGTACCCGCTCATGGACAGGTTCGAGGA
GGTGTACTTCCGCATCCAGGACCTGGAGATGTTCCAGCCGGGCCGCATGCACCGCGTAGGGGAGCTGTCGGGGGA
CAACTACCTGCGGAGCCCGGGCGGCAGGCAGCTCCGCGCCGCCCTGGACAGGTTCCGGGACTGGCAGGTCCGCTG
TCCCGACTGGTTCGAATGTGAGAACCTCTACTCAGCAGATGACCAGGATGCCCCGTCCCTGGACGAAGAGGTGTT
TGAGGAGCCACTGCTGCCTCCGGGAACCGGCATCGTGAAGCGGGCGCCCCTGGTGCGCGAGCCTGGCTCCCAGGC
CTGCCTGGCCATAGACCCGCTGGTCGGGGAGGAAGGAGGAGCAGCAGTGGCAAAGCTGGAACCTCACCTGCAGCC
CCGGGGTCAGCCAGCGCCGCAGCCCCTCCACACCCTGGTGCTCGCCGCAGAGGAGGGGGCCCTGGTGGCCGCGGT
GGAGCCTGGGCCCCTGGCTGACGGTGCCGCAGTCCGGCTGGCACTGGCGGGGGAGGGCGAGGCCTGCCCGCTGCT
GGGCAGCCCGGGCGCTGGGCGAAATAGCGTCCTCTTCCTCCCCGTGGACCCCGAGGACTCGCCCCTTGGCAGCAG
CACCCCCATGGCGTCTCCTGACCTCCTTCCAGAGGACGTGAGGGAGCACCTCGAAGGCTTGATGCTCTCGCTCTT
CGAGCAGAGTCTGAGCTGCCAGGCCCAGGGGGGCTGCAGTAGACCCGCCATGGTCCTCACAGACCCACACACGCC
CTACGAGGAGGAGCAGCGGCAGTCAGTGCAGTCTGACCAGGGCTACATCTCCAGGAGCTCCCCGCAGCCCCCCGA
GGGACTCACGGAAATGGAGGAAGAGGAGGAAGAGGAGCAGGACCCAGGGAAGCCGGCCCTGCCACTCTCTCCCGA
GGACCTGGAGAGCCTGAGGAGCCTCCAGCGGCAGCTGCTTTTCCGCCAGCTGCAGAAGAACTCGGGCTGGGACAC
GATGGGGTCAGAGTCAGAGGGGCCCAGTGCA**TGA**GGGCGGCTCCCCAGGGACCGCCCAGATCCCAGCTTTGAGAG
AGGAGTGTGTGTGCACGTATTCATCTGTGTGTACATGTCTGCATGTGTATATGTTCGTGTGTGAAATGTAGGCTT
TAAAATGTAAATGTCTGGATTTTAATCCCAGGCATCCCTCCTAACTTTTCTTTGTGCAGCGGTCTGGTTATCGTC
TATCCCCAGGGGAATCCACACAGCCCGCTCCCAGGAGCTAATGGTAGAGCGTCCTTGAGGCTCCATTATTCGTTC
ATTCAGCATTTATTGTGCACCTACTATGTGGCGGGCATTTGGGATACCAAGATAAATTGCATGCGGCATGGCCCC
AGCCATGAAGGAACTTAACCGCTAGTGCCGAGGACACGTTAAACGAACAGGATGGGCCGGGCACGGTGGCTCACG
CCTGTAATCCCAGCACACTGGGAGGCCGAGGCAGGTGGATCACTCTGAGGTCAGGAGTTTGAGCCAGCCTGGCCA
ACATGGTGAAACCCCATCTCCACTAAAAATAGAAAAATTAGCCGGGCATGGTGACACATGCCTGTAGTCCTAGCT
ACTTGGGAGGCTGAGGCAGGAGAATTGCTTGAATCTGGGAGGCAGAGGTTGCAGTGAGCCGAGATTGTGCCATTG
CACTGCAGCCTGGATGACAGAGCGAGACTCTATCTCAAAAAAAAAAAAAAAAAA

FIGURE 6589

MGAARSPPSAVPGPLLGLLLLLLGVLAPGGASLRLLDHRALVCSQPGLNCTVKNSTCLDDSWIHPRNLTPSSPKD
LQIQLHFAHTQQGDLFPVAHIEWTLQTDASILYLEGAELSVLQLNTNERLCVRFEFLSKLRHHHRRWRFTFSHFV
VDPDQEYEVTVHHLPKPIPDGDPNHQSKNFLVPDCEHARMKVTTPCMSSGSLWDPNITVETLEAHQLRVSFTLWN
ESTHYQILLTSFPHMENHSCFEHMHHIPAPRPEEFHQRSNVTLTLRNLKGCCRHQVQIQPFFSSCLNDCLRHSAT
VSCPEMPDTPEPIPDYMPLWVYWFITGISILLVGSVILLIVCMTWRLAGPGSEKYSDDTKYTDGLPVADLIPPPL
KPRKVWIIYSADHPLYVDVVLKFAQFLLTACGTEVALDLLEEQAISEAGVMTWVGRQKQEMVESNSKIIVLCSRG
TRAKWQALLGRGAPVRLRCDHGKPVGDLFTAAMNMILPDFKRPACFGTYVVCYFSEVSCDGDVPDLFGAAPRYPL
MDRFEEVYFRIQDLEMFQPGRMHRVGELSGDNYLRSPGGRQLRAALDRFRDWQVHCPDWFECENLYSADDQDAPS
LDEEVFEEPLLPPGTGIVKRAPLVREPGSQACLAIDPLVGEEGGAAVAKLEPHLQPRGQPAPQPLHTLVLAAEEG
ALVAAVEPGPLADGAAVRLALAGEGEACPLLGSPGAGRNSVLFLPVDPEDSPLGSSTPMASPDLLPEDVREHLEG
LMLSLFEQSLSCQAQGGCSRPAMVLTDPHTPYEEEQRQSVQSDQGYISRSSPQPPEGLTEMEEEEEEEQDPGKPA
LPLSPEDLESLRSLQRQLLFRQLQKNSGWDTMGSESEGPSA

FIGURE 6590

GGTCGCTTGGTGGCTCCGTCTGTTGTCCGTCCGCCCGCGGGTGCCATCATGGCGGACGCGGCCAGTCAGGTGCTC
CTGGGCTCCGGTCTCACCATCCTGTCCCAGCCGCTCATGTACGTGAAAGTGCTCATCCAGGTGGGATATGAGCCT
CTTCCTCCAACAATAGGACGAAATATTTTTGGGCGGCAAGTGTGTCAGCTTCCTGGTCTCTTTAGTTATGCTCAG
CACATTGCCAGTATCGATGGGAGGCGCGGGTTGTTCACAGGCTTAACTCCAAGACTGTGTTCGGGAGTCCTTGGA
ACTGTGGTCCATGGTAAAGTTTTACAGCATTACCAGGAGAGTGACAAGGGTGAGGAGTTAGGACCTGGAAATGTA
CAGAAAGAAGTCTCATCTTCCTTTGACCACGTTATCAAGGAGACAACTCGAGAGATGATCGCTCGTTCTGCTGCT
ACCCTCATCACACATCCCTTCCATGTGATCACTCTGAGATCTATGGTACAGTTCATTGGCAGAGAATCCAAGTAC
TGTGGACTTTGTGATTCCATAATAACCATCTATCGGGAAGAGGGCATTCTAGGATTTTTCGCGGGTCTTGTTCCT
CGCCTTCTAGGTGACATCCTTTCTTTGTGGCTGTGTAACTCACTGGCCTACCTCGTCAATACCTATGCACTGGAC
AGTGGGGTTTCTACCATGAATGAAATGAAGAGTTATTCTCAAGCTGTCACAGGATTTTTTGCGAGTATGTTGACC
TATCCCTTTGTGCTTGTCTCCAATCTTATGGCTGTCAACAACTGTGGTCTTGCTGGTGGATGCCCTCCTTACTCC
CCAATATATACGTCTTGGATAGACTGTTGGTGCATGCTACAAAAAGAGGGGAATATGAGCCGAGGAAATAGCTTA
TTTTTCCGGAAGGTCCCCTTTGGGAAGACTTATTGTTGTGACCTGAAAATGTTAATTTGAAGATGTGGGGCAGGG
ACAGTGACATTTCTGTAGTCCCAGATGCACAGAATTATGGGAGAGAATGTTGATTTCTATACAGTGTGGCGCGCT
TTTTTAATAATCATTTAATCTTGGGAAAATTAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6591

MADAASQVLLGSGLTILSQPLMYVKVLIQVGYEPLPPTIGRNIFGRQVCQLPGLFSYAQHIASIDGRRGLFTGLT
PRLCSGVLGTVVHGKVLQHYQESDKGEELGPGNVQKEVSSSFDHVIKETTREMIARSAATLITHPFHVITLRSMV
QFIGRESKYCGLCDSIITIYREEGILGFFAGLVPRLLGDILSLWLCNSLAYLVNTYALDSGVSTMNEMKSYSQAV
TGFFASMLTYPFVLVSNLMAVNNCGLAGGCPPYSPIYTSWIDCWCMLQKEGNMSRGNSLFFRKVPFGKTYCCDLK
MLI

FIGURE 6592

GGCACCAGGTCCCCGGCGAAGTTCTGCGCTGGTCGGCGGAGTAGCAAGTGGCCATGGGGAGCCTCAGCGGTCTGC
GCCTGGCAGCAGGAAGCTGTTTTAGGTTATGTGAAAGAGATGTTTCCTCATCTCTAAGGCTTACCAGAAGCTCTG
ATTTGAAGAGAATAAATGGATTTTGCACAAAACCACAGGAAAGTCCCGGAGCTCCATCCCGCACTTACAACAGAG
TGCCTTTACACAAACCTACGGATTGGCAGAAAAAGATCCTCATATGGTCAGGTCGCTTCAAAAAGGAAGATGAAA
TCCCAGAGACTGTCTCGTTGGAGATGCTTGATGCTGCAAAGAACAAGATGCGAGTGAAGATCAGCTATCTAATGA
TTGCCCTGACGGTGGTAGGATGCATCTTCATGGTTATTGAGGGCAAGAAGGCTGCCCAAAGACACGAGACTTTAA
CAAGCTTGAACTTAGAAAAGAAAGCTCGTCTGAAAGAGGAACAGCTATGAAGGCCAAAACAGAGTAGCAGAGGTA
TCCGTGTTGGCTGGATTTTGAAAATCCAGGAATTATGTTATAACGTGCCTGTATTAAAAAGGATGTGGTATGAGG
ATCCATTTCATAAAGTATGATTTGCCCAAACCTGTACCATTTCCGTATTTCTGCTGTAGAAGTAGAAATAAATTT
TCTTAAATAATGACTGTGTTTTATTGTTTTGATCCAAGTCAAGTGTAGCCTCTCAGCCTTTTGGAGAAAAATGAA
ACAATTTATTTCAACTTGAATACCAACTCTTCAGAGAAGCAGGTACCATA

FIGURE 6593

MGSLSGLRLAAGSCFRLCERDVSSSLRLTRSSDLKRINGFCTKPQESPGAPSRTYNRVPLHKPTDWQKKILIWSG
RFKKEDEIPETVSLEMLDAAKNKMRVKISYLMIALTVVGCIFMVIEGKKAAQRHETLTSLNLEKKARLKEEQL

FIGURE 6594

GGCACGAGGAGGAGAGTCAGGCCAATGGGGCCGCAGTTCTTTCTTTTTTTTTTCTTTATTCTTATTTTTGGAGAC
AGGGTCTCGCTCTGTTGCCCAGGCTGGAGTGCGGTGGTGCGATCACGGTTCCATGCAGCCCCCGACCTCCCGGGC
TCAGGTGATTCTCCCGCCTCAGCACCGCGAGCAGCTAGGACCACAGGCGCGAGCCACTGCGTCCGGCCGGCGGGA
CTTATTTGTCAGGCGGGGATTGGGTTCCGCCAGCCTAAAGGGAGGGGTAAGCGCCAGAATATGAATCGCCGGGAA
GCTGGGAGAAAGCTCCGGGAAACCCTGAGCAGCCAGGTCGCCTGCTCCGCCCGCTCCCGCTCCCGATCTCTGATT
GCTCCTAACTGACGTCACTCCCGGTCTGTCCCCGCCCACTCGGTGCTGCCATTGGCAGTCGGTCGTGGGTCTGAG
AGTCACTGGAGCTACCAGAAGCATC**ATG**GGGCCCTGGGGAGAGCCAGAGCTCCTGGTGTGGCGCCCCGAGGCGGT
AGCTTCAGAGCCTCCAGTGCCTGTGGGGCTGGAGGTGAAGTTGGGGGCCCTGGTGCTGCTGCTGGTGCTCACCCT
CCTCTGCAGCCTGGTGCCCATCTGTGTGCTGCGCCGGCCAGGAGCTAACCATGAAGGCTCAGCTTCCCGCCAGAA
AGCCCTGAGCCTAGTAAGCTGTTTCGCGGGGGGCGTCTTTTTGGCCACTTGTCTCCTGGACCTGCTGCCTGACTA
CCTGGCTGCCATAGATGAGGCCCTGGCAGCCTTGCACGTGACGCTCCAGTTCCCACTGCAAGAGTTCATCCTGGC
CATGGGCTTCTTCCTGGTCCTGGTGATGGAGCAGATCACACTGGCTTACAAGGAGCAGTCAGGGCCGTCACCTCT
GGAGGAAACAAGGGCTCTGCTGGGAACAGTGAATGGTGGGCCGCAGCATTGGCATGATGGGCCAGGGGTCCCACA
GGCGAGTGGAGCCCCAGCAACCCCCTCAGCCTTGCGTGCCTGTGTACTGGTGTTCTCCCTGGCCCTCCACTCCGT
GTTCGAGGGGCTGGCGGTAGGGCTGCAGCGAGACCGGGCTCGGGCCATGGAGCTGTGCCTGGCTTTGCTGCTCCA
CAAGGGCATCCTGGCTGTCAGCCTGTCCCTGCGGCTGTTGCAGAGCCACCTTAGGGCACAGGTGGTGGCTGGCTG
TGGGATCCTCTTCTCATGCATGACACCTCTAGGCATCGGGCTGGGTGCAGCTCTGGCAGAGTCGGCAGGACCTCT
GCACCAGCTGGCCCAGTCTGTGCTAGAGGGCATGGCAGCTGGCACCTTTCTCTATATCACCTTTCTGGAAATCCT
GCCCCAGGAGCTGGCCAGTTCTGAGCAAAGGATCCTCAAGGTCATTCTGCTCCTAGCAGGCTTTGCCCTGCTCAC
TGGCCTGCTCTTCATCCAAATC**TAG**GGGGCTTCAAGAGAGGGGCAGGGGAGATTGATGATCAGGTGCCCCTGTTC
TCCCTTCCCTCCCCCAGTTGTGGGGAATAGGAAGGAAAGGGGAAGGGAAATACTGAGGACCAAAAAGTTCTCTGG
GAGCTAAAGATAGAGCCTTTGGGGCTATCTGACTAATGAGAGGGAAGTGGGCAGACAAGAGGCTGGCCCCAGTCC
CAAGGAACAAGAGATGGTCAAGTCGCTAGAGACATATCAGGGGACATTAGGATTGGGGAAGACACTTGACTGCTA
GAATCAGAGGTTGGACACTATACATAAGGACAGGCTCACATGGGAGGCTGGAGGTGGGTACCCAGCTGCTGTGGA
ACGGGTATGGACAGGTCATAAACCTAGAGTCAGTGTCCTGTTGGTCCTAGCCCATTTCAGCACCCTGCCACTTGG
AGTGGACCCCTCCTACTCTTCTTAGCGCCTACCCTCATACCTATCTCCCTCCTCCCATCTCCTAGGGGACTGGCG
CCAAATGGTCTCTCCCTGCCAATTTTGGTATCTTCTCTGGCCTCTCCAGTCCTGCTTACTCCTCTATTTTTAAAG
TGCCAAACAAATCCCCTTCCTCTTTCTCAAAGCACAGTAATGTGGCACTGAGCCCTACCCAGCACCTCAGTGAAG
GGGGCCTGCTTGCTCTTTATTTTGGTCCCGGATCCTGGGGTGGGGCAGAAATATTTTCTGGGCTGGGGTAGGAGG
AAGGTTGTTGCAGCCATCTACTGCTGCTGTACCCTAGGAATATGGGGACATGGACATGGTGTCCCATGCCCAGAT
GATAAACACTGAGCTGCCAAAACATTTTTTTAAATACACCCGAGGAGCCCAAGGGGGAAGGGCAATGCCTACCCC
CAGCGTTATTTTTGGGGAGGGAGGGCTGTGCATAGGGACATATTCTTTAGAATCTATTTTATTAACTGACCTGTT
TTGGGACCTGTTACCCAAATAAAAGATGTTTCTAGAAAAAAAAAAAAAAAAAAA

FIGURE 6595

MGPWGEPELLVWRPEAVASEPPVPVGLEVKLGALVLLLVLTLLCSLVPICVLRRPGANHEGSASRQKALSLVSCF
AGGVFLATCLLDLLPDYLAAIDEALAALHVTLQFPLQEFILAMGFFLVLVMEQITLAYKEQSGPSPLEETRALLG
TVNGGPQHWHDGPGVPQASGAPATPSALRACVLVFSLALHSVFEGLAVGLQRDRARAMELCLALLLHKGILAVSL
SLRLLQSHLRAQVVAGCGILFSCMTPLGIGLGAALAESAGPLHQLAQSVLEGMAAGTFLYITFLEILPQELASSE
QRILKVILLLAGFALLTGLLFIQI

FIGURE 6596

GCCACCACCAGTATTGGGGATGCTGAGCTGCGGGGTACGGGCCTGAGGAGGGATGGGAGTAAGAAGTGCTGTGGA
AACCGTCAGGCCATGAACCAGGCTGACCCTCGGCTCAGAGCAGTGTGCTTGTGGACTCTCACATCTGCAGCCATG
AGCAGAGGCGACAACTGCACGGATCTACTCGCACTGGGAATCCCCTCCATAACCCAGGCCTGGGGACTGTGGGTC
CTCTTAGGGGCTGTGACGCTGCTATTTCTCATCTCGCTGGCTGCACACTTGTCCCAGTGGACCAGGGGCCGGAGC
AGGAGCCATCCGGGGCAGGGACGCTCTGGAGAGTCTGTGGAAGAGGTCCCGCTGTATGGGAACCTGCATTATCTA
CAGACAGGACGGCTGTCTCAAGACCCAGAGCCAGACCAGCAGGATCCAACTCTTGGAGGCCCTGCCAGGGCTGCA
GAGGAGGTGATGTGCTATACCAGCCTGCAGCTGCGGCCTCCTCAGGGTCGGATCCCCGGTCCTGGAACCCCCGTC
AAGTACTCGGAGGTGGTGCTGGACTCTGAGCCAAAGTCCCAGGCCTCGGGCCCCGAGCCGGAGCTCTATGCCTCA
GTATGTGCCCAGACCCGCAGGGCCCGGGCCTCCTTCCCGGATCAGGCCTATGCCAACAGCCAGCCTGCAGCCAGC
TGAGATGGAGGGCCTGGCACAGCGGGGCGTGCACTGCCCCAGCCCCCCGTAGCAGGGGCATGACTGTTTCCCAAC
CAGCACCCAAAGACGGGCTGCCATTGCCAAGTCACAGGATGTGATCTACCCCGGACTTCCTATCTGAGCTTCAAG
GGAGACATCTCAGGGCAAAGCTTTCGTGATGGAGGAGGCAAAGACAGTAGCCCCCTCCTTATTTCTTTTTTCTAT
CTGTTCCTCTTAGCCCCCAAACTCCCAGGTTCTCACTTCCTTCTTCTGGAGTTTAACCAGATCCTCCCCACCCCC
GCTCCCTCATAGTCTACCCCCACGCCTCAGTGTCTCCTCAGGCACAGGAAGTGGGCGGTGGGGGAGGGGTAAGGG
CCTGACAGTGGGTGGGTGGGTATATTCCTCAGGAGTCCACAGACTGGAGTGGACCTGGAACTTAGAGACGGGAGG
GACCCGAGCCTGGCTTTTGACCTAAGAACCCTAGCAGGAGAATACAGTCTCCATCCTGCTGTCTCTGTCCTGTCC
CAAGTTTTCAAATAAAACTTTCCAAAAAAGTG

FIGURE 6597

MNQADPRLRAVCLWTLTSAAMSRGDNCTDLLALGIPSITQAWGLWVLLGAVTLLFLISLAAHLSQWTRGRSRSHP
GQGRSGESVEEVPLYGNLHYLQTGRLSQDPEPDQQDPTLGGPARAAEEVMCYTSLQLRPPQGRIPGPGTPVKYSE
VVLDSEPKSQASGPEPELYASVCAQTRRARASFPDQAYANSQPAAS

FIGURE 6598

ACGCGTCCGAGCTGGCTCAGGGCGTCCGCTAGGCTCGGACGACCTGCTGAGCCTCCCAAACCGCTTCCATAAGGC
TTTGCCTTTCCAACTTCAGCTACAGTGTTAGCTAAGTTTGGAAAGAAGGAAAAAAGAAAATCCCTGGGCCCCTTT
TCTTTTGTTCTTTGCCAAAGTCGTCGTTGTAGTCTTTTTGCCCAAGGCTGTTGTGTTTTTAGAGGTGCTATCTCC
AGTTCCTTGCACTCCTGTTAACAAGCACCTCAGCGAGAGCAGCAGCAGCGATAGCAGCCGCAGAAGAGCCAGCGG
GGTCGCCTAGTGTC**ATG**ACCAGGGCGGGAGATCACAACCGCCAGAGAGGATGCTGTGGATCCTTGGCCGACTACC
TGACCTCTGCAAAATTCCTTCTCTACCTTGGTCATTCTCTCTCTACTTGGGGAGATCGGATGTGGCACTTTGCGG
TGTCTGTGTTTCTGGTAGAGCTCTATGGAAACAGCCTCCTTTTGACAGCAGTCTACGGGCTGGTGGTGGCAGGGT
CTGTTCTGGTCCTGGGAGCCATCATCGGTGACTGGGTGGACAAGAATGCTAGACTTAAAGTGGCCCAGACCTCGC
TGGTGGTACAGAATGTTTCAGTCATCCTGTGTGGAATCATCCTGATGATGGTTTTCTTACATAAACATGAGCTTC
TGACCATGTACCATGGATGGGTTCTCACTTCCTGCTATATCCTGATCATCACTATTGCAAATATTGCAAATTTGG
CCAGTACTGCTACTGCAATCACAATCCAAAGGGATTGGATTGTTGTTGTTGCAGGAGAAGACAGAAGCAAACTAG
CAAATATGAATGCCACAATACGAAGGATTGACCAGTTAACCAACATCTTAGCCCCCATGGCTGTTGGCCAGATTA
TGACATTTGGCTCCCCAGTCATCGGCTGTGGCTTTATTTCGGGATGGAACTTGGTATCCATGTGCGTGGAGTACG
TCCTGCTCTGGAAGGTTTACCAGAAAACCCCAGCTCTAGCTGTGAAAGCTGGTCTTAAAGAAGAGGAAACTGAAT
TGAAACAGCTGAATTTACACAAAGATACTGAGCCAAAACCCCTGGAGGGAACTCATCTAATGGGTGTGAAAGACT
CTAACATCCATGAGCTTGAACATGAGCAAGAGCCTACTTGTGCCTCCCAGATGGCTGAGCCCTTCCGTACCTTCC
GAGATGGATGGGTCTCCTACTACAACCAGCCTGTGTTTCTGGCTGGCATGGGTCTTGCTTTCCTTTATATGACTG
TCCTGGGCTTTGACTGCATCACCACAGGGTACGCCTACACTCAGGGACTGAGTGGTTCCATCCTCAGTATTTTGA
TGGGAGCATCAGCTATAACTGGAATAATGGGAACTGTAGCTTTTACTTGGCTACGTCGAAAATGTGGTTTGGTTC
GGACAGGTCTGATCTCAGGATTGGCACAGCTTTCCTGTTTGATCTTGTGTGTGATCTCTGTATTCATGCCTGGAA
GCCCCCTGGACTTGTCCGTTTCTCCTTTTGAAGATATCCGATCAAGGTTCATTCAAGGAGAGTCAATTACACCTA
CCAAGATACCTGAAATTACAACTGAAATATACATGTCTAATGGGTCTAATTCTGCTAATATTGTCCCGGAGACAA
GTCCTGAATCTGTGCCCATAATCTCTGTCAGTCTGCTGTTTGCAGGCGTCATTGCTGCTAGAATCGGTCTTTGGT
CCTTTGATTTAACTGTGACACAGTTGCTGCAAGAAAATGTAATTGAATCTGAAAGAGGCATTATAAATGGTGTAC
AGAACTCCATGAACTATCTTCTTGATCTTCTGCATTTCATCATGGTCATCCTGGCTCCAAATCCTGAAGCTTTTG
GCTTGCTCGTATTGATTTCAGTCTCCTTTGTGGCAATGGGCCACATTATGTATTTCCGATTTGCCCAAAATACTC
TGGGAAACAAGCTCTTTGCTTGCGGTCCTGATGCAAAAGAAGTTAGGAAGGAAAATCAAGCAAATACATCTGTTG
TT**TGA**GACAGTTTAACTGTTGCTATCCTGTTACTAGATTATATAGAGCACATGTGCTTATTTTGTACTGCAGAAT
TCCAATAAATGGCTGGGTGTTTTGCTCTGTTTTTACCACAGCTGTGCCTTGAGAACTAAAAGCTGTTTAGGAAAC
CTAAGTCAGCAGAAATTAACTGATTAATTTCCCTTATGTTGAGGCATGGAAAAAAAATTGGAAAAGAAAAACTCA
GTTTAAATACGGAGACTATAATGATAACACTGAATTCCCCTATTTCTCATGAGTAGATACAATCTTACGTAAAAG
AGTGGTTAGTCACGTGAATTCAGTTATCATTTGACAGATTCTTATCTGTACTAGAATTCAGATATGTCAGTTTTC
TGCAAAACTCACTCTTGTTCAAGACTAGCTAATTTATTTTTTTGCATCTTAGTTATTTTTAAAAACAAATTCTTC
AAGTATGAAGACTAAATTTTGATAACTAATATTATCCTTATTGATCCTATTGATCTTAAGGTATTTACATGTATG
TGGAAAAACAAAACACTTAACTAGAATTCTCTAATAAGGTTTATGGTTTAGCTTAAAGAGCACCTTTGTATTTTT
ATTATCAGATGGGGCAACATATTGTATGAAGCATATGTAGCACTTCACAGCATGGTTATCATGTAAGCTGCAGGT
AGAAGCAAAGCTGTAAAGTAGATTTATCACACAATGACTGCATACAGACTTCAAATATGTCAATAGTTTGGTCAT
AGAACCTAGAAGCCAAAAGCCACACAGAAGGGCAAGAATCCCAATTTAACTCATGTTATCATCATTAGTGATCTG
TGTTGTAGAACATGAGGGTGTAAGCCTTCAGCCTGGCAAGTTACATGTAGAAAGCCCACACTTGTGAAGGTTTTG
TTTTACAAATCACTTGATTTAACACACTCAGGTAGAATATTTTTATTTTTACTGTTTTATACCCAGAAGTTATTT
CTACATTGTTCTACAGCAAGAATATTCATAAAAGTATCCCTTTCAAATGCCTTTGAGAAGAATAGAAGAAAAAAA
GTTTGTATATATTTTAAAAAATTGTTTTAAAAGTCAGTTTGCAACATGTCTGTACCAAGATGGTACTTTGCCTTA
ACCGTTTATATGCACTTTCATGGAGACTGCAATACGTTGCTATGAGCACTTTCTTTATCCTTGGAGTTTAATCCT
TTGCTTCATCTTTCTACAGTATGACATAATGATTTGCTATGTTGTAAAATCTTTGTAAAAAATTTCTATATAAAA
ATATTTTGAAAATCTTAAAAAAAAAAAAAAAA

FIGURE 6599

MTRAGDHNRQRGCCGSLADYLTSAKFLLYLGHSLSTWGDRMWHFAVSVFLVELYGNSLLLTAVYGLVVAGSVLVL
GAIIGDWVDKNARLKVAQTSLVVQNVSVILCGIILMMVFLHKHELLTMYHGWVLTSCYILIITIANIANLASTAT
AITIQRDWIVVVAGEDRSKLANMNATIRRIDQLTNILAPMAVGQIMTFGSPVIGCGFISGWNLVSMCVEYVLLWK
VYQKTPALAVKAGLKEEETELKQLNLHKDTEPKPLEGTHLMGVKDSNIHELEHEQEPTCASQMAEPFRTFRDGWV
SYYNQPVFLAGMGLAFLYMTVLGFDCITTGYAYTQGLSGSILSILMGASAITGIMGTVAFTWLRRKCGLVRTGLI
SGLAQLSCLILCVISVFMPGSPLDLSVSPFEDIRSRFIQGESITPTKIPEITTEIYMSNGSNSANIVPETSPESV
PIISVSLLFAGVIAARIGLWSFDLTVTQLLQENVIESERGIINGVQNSMNYLLDLLHFIMVILAPNPEAFGLLVL
ISVSFVAMGHIMYFRFAQNTLGNKLFACGPDAKEVRKENQANTSVV

FIGURE 6600A

GATGAGATTGATGATTCTTTCTCCTGGAAAACCTTTCATCACAGAGATTCATCTCAGCATTAAAGGGCAGTATTT
AAAGTCAGTTGGCAAGCAGTGGAATAAGATTTTTGTAAAGAAACCTTGTGCAGCATGGATTCTCTACCAGATGAA
TTTTTTGTGAGGCATCCTGCTGTGGAGGATCAGAGGAAGGAAGAAACTGAGAATAAGCTAGAAAAATCATCTGGT
CAACTGAACAAACAGGAAAATGACATACCTACTGATCTTGTCCCTGTTAACCTACTATTAGAAGTGAAGAAGTTA
TTAAATGCAATTAATACTCTACCAAAAGGTGTGGTTCCTCACATTAAGAAGTTCTTACAAGAAGATTTTTCCTTC
CAAACTATGCAGAGAGAAGTTGCAGCTAACAGCCAGAATGGTGAGGAAATTGTTCCTGCTTTGACTTTACGTTTC
TTGATTACACAGCTAGAAGCAGCACTTAGGAACATTCAAGCTGGCAATTATACCGCACACCAGATTAATATTGGT
TATTATTTGACATTACTGTTTTTATATGGAGTAGCACTCACTGAAAGAGGAAAGAAAGAGGATTATACAGAAGCT
GAGAATAAATTTCTGGTGATGAAGATGATGATCCAAGAAAATGAAATTTGTGAAAACTTTATGTCTTTAGTTTAT
TTTGGACGTGGTTTACTGCGATGTGCTCAAAAGAGATATAATGGAGGACTGCTAGAATTTCATAAAAGCTTACAA
GAAATTGGAGACAAAAATGACCATTGGTTTGACATAGATCCTACAGAAGATGAAGATTTACCTACAACTTTTAAA
GATCTTCTTAATAATTTTATCAAGACAACTGAAAGCAATATAATGAAGCAGACGATTTGTAGTTACCTAGATTGT
GAACGATCTTGTGAAGCTGACATTTTGAAGAACACCAGTTATAAGGGATTTTTTCAGTTAATGTGCAGTAAAAGT
TGCTGTGTTTATTTCCATAAAATTTGCTGGAAAAAGTTCAAGAATTTAAAGTATCCAGGTGAAAATGATCAGAGT
TTTAGTGGGAAAAAATGTTTGAAGGAAGGATGTACAGGTGACATGGTAAGGATGCTGCAATGTGATGTACCTGGA
ATTGTTAAAATTTTGTTTGAAGTTGTGAGAAAGGATGAATATATCACCATTGAAAATTTAGGAGCAAGTTATAGA
AAGTTGATATCTCTGAAAATAACTGATACTGATATAAGACCGAAGATCAGTTTAAAATTTAATACAAAAGATGAA
ATGCCTATCTTCAAGCTTGATTATAATTATTTCTATCATCTGCTTCATATAATTATTATTTCTGGTACTGACATT
GTTCGACAAATATTTGATGAGGCTATGCCACCTCCTCTTTTGAAAAAAGAGCTTCTTATACACAAGAATGTGCTG
GAATCCTACTACAACCATCTTTGGACCAATCATCCTTTGGGTGGATCATGGCATCTGCTTTATCCTCCTAACAAG
GAGTTACCGCAATCCAAACAGTTTGACTTATGCCTCCTGTTAGCTCTTATAAAACATTTAAATGTGTTCCCTGCA
CCCAAAAAAGGATGGAATATGGAACCGCCATCTTCTGACATCTCTAAATCTGCAGACATCCTGAGACTGTGCAAA
TACAGGGATATCCTCCTTAGTGAGATTTTGATGAATGGTCTCACTGAGTCACAGTTCAATTCAATTTGGAAAAAA
GTTTCAGATATTCTTCTGCGCCTTGGGATGATGCAAGAGGATATTGACAAAGTGAAGGAGAATCCCATTGAGAAT
ATCTCCCTTGATTACCATCAGCTATCTGTCTACCTAGGCATACCAGTACCAGAAATCATACAGAGGATGTTATCC
TGCTATCAACAAGGAATTGCTCTACAGTCAATAACAGGCAGTCAGCGTATTGAAATAGAAGAGTTACAGAATGAG
GAAGAAGAACTAAGTCCACCTCTCATGGAGTACAATATAAATGTGAAATCACACCCTGAGATACAGTTTGCAGAA
ATTAATAAAGATGGGACCTCAATACCCAGTGAATCTTCAACAGAATCTCTTAAAGATCTCCAGGAAGTTAAGAGT
AAACAAAGGAAAAAGAAGAAGACTAAGAATAAAAAGAATAAAGACTCAAAAGAAGACCAAGTCCCATATGTGGTA
GAAAAGGAAGAGCAGTTGAGGAAAGAACAAGCAAATCCACACTCAGTCAGTAGACTTATAAAAGATGATGCAAGT
GATGTTCAAGAGGATTCTGCAATGGAAGACAAGTTCTATAGCCTGGATGAATTGCATATTCTGGACATGATAGAG
CAGGGCTCAGCTGGCAAAGTAACTACAGACTATGGAGAAACTGAAAAGGAAAGGCTTGCTCGTCAAAGGCAGCTT
TATAAATTGCACTATCAGTGTGAAGATTTCAAAAGACAGTTGAGAACAGTGACTTTTCGGTGGCAAGAAAACCAA
ATGCAGATTAAAAAGAAAGACAAAATTATCGCATCTCTTAATCAACAAGTTGCTTTTGGAATCAATAAGGTTTCC
AAATTACAGCGTCAAATCCATGCTAAAGATAATGAAATCAAGAACCTTAAAGAGCAACTTTCTATGAAAAGATCT
CAGTGGGAAATGGAAAAACATAATCTGGAAAGCACAATGAAAACATACGTAAGCAAACTGAACGCAGAAACTAGC
AGAGCTTTAACAGCCGAGGTGTATTTCTTACAGTGTCGTAGGGATTTTGGTTTGCTTCATCTAGAGCAGACTGAA
AAGGAATGTCTCAATCAGCTTGCCAGGGTGACTCACATGGCAGCAAGCAACCTAGAATCACTTCAATTAAAGGCT
GCGGTAGACAGTTGGAATGCCATTGTGGCAGATGTTAGAAACAAGATTGCATTCCTCAGGACACAGTACAATGAA
CAAATAAACAAAGTCAAGCAAGGATTTGCCTTGAGTACCTTGCCTCCAGTCCAGCTTCCTCCTCCACCACCCAGT
CCTGAGATACTGATGCAGCAGTTCTTAGGAAGACCCCTTGTGAAAGAATCTTTCTTTAGACCCATACTTACTGTT
CCTCAAATGCCTGCAGTTTGCCCGGGAGTCGTCTCTGCAACTGGCCAACCTAGAGCCCCCCTGATGACTGGCATA
GCCTGGGCTCTGCCAGCGCCTGTGGGAGACGCTGTGCCTCCCAGTGCAGGTCTGCGGAGTGATCCCTCCATCATG
AATTGGGAGAGAATTACAGACAGGCTGAAAACTGCCTTTCCACAGCAAACCAGAAAGGAACTTACAGATTTCTTA
CGGAAATTGAAGGATGCTTATGGAAAATCCTTGTCTGAACTGACATTTGATGAAATTGTTTGCAAGATTTCCCAG
TTTATTGACCCCAAAAAGTCTCAGAGTCAAGGAAAATCAGTGTCAAATGTTAATTGTGTTTCACCTAGTCATTCT
CCATCACAGCCTGATGCTGCCCAGCCCCCAAAACCAGCCTGGAGGCCACTCACTTCACAGGGTCCTGCCACATGG
GAAGGAGCCAGTAATCCAGATGAGGAAGAGGAAGAAGAAGAGCCTTGTGTGATCTGTCATGAGAATCTGTCTCCA

FIGURE 6600B

GAAAATCTTTCAGTTTTGCCTTGCGCTCACAAATTCCATGCTCAGTGCATTAGACCATGGTTGATGCAACAGGGG
ACATGTCCAACGTGCAGACTCCACGTTTTGCTACCAGAAGAATTCCCTGGTCACCCCAGCCGGCAGTTGCCCAAG
ATCTGATACAAGGTCGGGGTGTCTATGCAAAGGAAGCTCAGTTTTCTTTTATTATGAGCTGCTTGTTTGAGTGGT
GTAAAACTATGTGCTCTTCAATATAGTGCTAAAGAAGCCAGCTAATTTTATCAAAGCAGCAGCCAAAGAAGTCAG
GACAAATCTTCAGGACTTGTGAAATGAACTGAAAGAGCTTGAAGCAGATGGAATTTTAATAGTTACACTATATAT
GCTCTTAGTAGGTTTTTTTCTTGTAGTGGAAACATAACTGTTAGCATATTTCTTAGGATGTTTTTTCTTGTCTTT
TTAAATTCTTATTTCACTCATCCTTTACTCTCCCCTCAAGTATTCTACACTTTAATTTCCTGAAATAAATTTAAG
GAAAAGGGAAATAGTAAAGAAGTAGGAATGGGTGCAGCACACCAGCATGGCACATGAATACACATGTAACTAACC
TGCACATTGTGCACATGTACCCTAAAACTTAAAGTATAATAATAAT

FIGURE 6601

MDSLPDEFFVRHPAVEDQRKEETENKLEKSSGQLNKQENDIPTDLVPVNLLLEVKKLLNAINTLPKGVVPHIKKF
LQEDFSFQTMQREVAANSQNGEEIVPALTLRFLITQLEAALRNIQAGNYTAHQINIGYYLTLLFLYGVALTERGK
KEDYTEAENKFLVMKMMIQENEICENFMSLVYFGRGLLRCAQKRYNGGLLEFHKSLQEIGDKNDHWFDIDPTEDE
DLPTTFKDLLNNFIKTTESNIMKQTICSYLDCERSCEADILKNTSYKGFFQLMCSKSCCVYFHKICWKKFKNLKY
PGENDQSFSGKKCLKEGCTGDMVRMLQCDVPGIVKILFEVVRKDEYITIENLGASYRKLISLKITDTDIRPKISL
KFNTKDEMPIFKLDYNYFYHLLHIIIISGTDIVRQIFDEAMPPPLLKKELLIHKNVLESYYNHLWTNHPLGGSWH
LLYPPNKELPQSKQFDLCLLLALIKHLNVFPAPKKGWNMEPPSSDISKSADILRLCKYRDILLSEILMNGLTESQ
FNSIWKKVSDILLRLGMMQEDIDKVKENPIENISLDYHQLSVYLGIPVPEIIQRMLSCYQQGIALQSITGSQRIE
IEELQNEEEELSPPLMEYNINVKSHPEIQFAEINKDGTSIPSESSTESLKDLQEVKSKQRKKKKTKNKKNKDSKE
DQVPYVVEKEEQLRKEQANPHSVSRLIKDDASDVQEDSAMEDKFYSLDELHILDMIEQGSAGKVTTDYGETEKER
LARQRQLYKLHYQCEDFKRQLRTVTFRWQENQMQIKKKDKIIASLNQQVAFGINKVSKLQRQIHAKDNEIKNLKE
QLSMKRSQWEMEKHNLESTMKTYVSKLNAETSRALTAEVYFLQCRRDFGLLHLEQTEKECLNQLARVTHMAASNL
ESLQLKAAVDSWNAIVADVRNKIAFLRTQYNEQINKVKQGFALSTLPPVQLPPPPPSPEILMQQFLGRPLVKESF
FRPILTVPQMPAVCPGVVSATGQPRAPLMTGIAWALPAPVGDAVPPSAGLRSDPSIMNWERITDRLKTAFPQQTR
KELTDFLRKLKDAYGKSLSELTFDEIVCKISQFIDPKKSQSQGKSVSNVNCVSPSHSPSQPDAAQPPKPAWRPLT
SQGPATWEGASNPDEEEEEEEPCVICHENLSPENLSVLPCAHKFHAQCIRPWLMQQGTCPTCRLHVLLPEEFPGH
PSRQLPKI

FIGURE 6602

GACGTGAACGGTCGTTGCAGAGATTGCGGGCGGCTGAGACGCCGCCTGCCTGGCACCTAGGAGCGCAGCGGAGCC
CCGACACCGCCGCCGCCGCCATGGAGTCCGAGACCGAACCCGAGCCCGTCACGCTCCTGGTGAAGAGCCCCAACC
AGCGCCACCGCGACTTGGAGCTGAGTGGCGACCGCGGCTGGAGTGTGGGCCACCTCAAGGCCCACCTGAGCCGCG
TCTACCCCGAGCGTCCGCGTCCAGAGGACCAGAGGTTAATTTATTCTGGGAAGCTGTTGTTGGATCACCAATGTC
TCAGGGACTTGCTTCCAAAGCAGGAAAAACGGCATGTTTTGCATCTGGTGTGCAATGTGAAGAGTCCTTCAAAAA
TGCCAGAAATCAACGCCAAGGTGGCTGAATCCACAGAGGAGCCTGCTGGTTCTAATCGGGGACAGTATCCTGAGG
ATTCCTCAAGTGATGGTTTAAGGCAAAGGGAAGTTCTTCGGAACCTTTCTTCCCCTGGATGGGAAAACATCTCAA
GGCCTGAAGCTGCCCAGCAGGCATTCCAAGGCCTGGGTCCTGGTTTCTCCGGTTACACACCCTATGGGTGGCTTC
AGCTTTCCTGGTTCCAGCAGATATATGCACGACAGTACTACATGCAATATTTAGCAGCCACTGCTGCATCAGGGG
CTTTTGTTCCACCACCAAGTGCACAAGAGATACCTGTGGTCTCTGCACCTGCTCCAGCCCCTATTCACAACCAGT
TTCCAGCTGAAAACCAGCCTGCCAATCAGAATGCTGCTCCTCAAGTGGTTGTTAATCCTGGAGCCAATCAAAATT
TGCGGATGAATGCACAAGGTGGCCCTATTGTGGAAGAAGATGATGAAATAAATCGAGATTGGTTGGATTGGACCT
ATTCAGCAGCTACATTTTCTGTTTTTCTCAGTATCCTCTACTTCTACTCCTCCCTGAGCAGATTCCTCATGGTCA
TGGGGGCCACCGTTGTTATGTACCTGCATCACGTTGGGTGGTTTCCATTTAGACCGAGGCCGGTTCAGAACTTCC
CAAATGATGGTCCTCCTCCTGACGTTGTAAATCAGGACCCCAACAATAACTTACAGGAAGGCACTGATCCTGAAA
CTGAAGACCCCAACCACCTCCCTCCAGACAGGGATGTACTAGATGGCGAGCAGACCAGCCCCTCCTTTATGAGCA
CAGCATGGCTTGTCTTCAAGACTTTCTTTGCCTCTCTTCTTCCAGAAGGCCCCCCAGCCATCGCAAACTGATGGT
GTTTGTGCTGTAGCTGTTGGAGGCTTTGACAGGAATGGACTGGATCACCTGACTCCAGCTAGATTGCCTCTCCTG
GACATGGCAATGATGAGTTTTTAAAAAACAGTGTGGATGATGATATGCTTTTGTGAGCAAGCAAAAGCAGAAACG
TGAAGCCGTGATACAAATTGGTGAACAAAAAATGCCCAAGGCTTCTCATGTCTTTATTCTGAAGAGCTTTAATAT
ATACTCTATGTAGTTTAATAAGCACTGTACGTAGAAGGCCTTAGGTGTTGCATGTCTATGCTTGAGGAACTTTTC
CAAATGTGTGTGTCTGCATGTGTGTTTGTACATAGAAGTCATAGATGCAGAAGTGGTTCTGCTGGTACGATTTGA
TTCCTGTTGGAATGTTTAAATTACACTAAGTGTACTACTTTATATAATCAATGAAATTGCTAGACATGTTTTAGC
AGGACTTTTCTAGGAAAGACTTATGTATAATTGCTTTTTAAAATGCAGTGCTTTACTTTAAACTAAGGGGAACTT
TGCGGAGGTGAAAACCTTTGCTGGGTTTTCTGTTCAATAAAGTTTTACTATGAATGACCCTGAAAAAAAAAAAAA
AAAAAAAAA

FIGURE 6603

MESETEPEPVTLLVKSPNQRHRDLELSGDRGWSVGHLKAHLSRVYPERPRPEDQRLIYSGKLLLDHQCLRDLLPK
QEKRHVLHLVCNVKSPSKMPEINAKVAESTEEPAGSNRGQYPEDSSSDGLRQREVLRNLSSPGWENISRPEAAQQ
AFQGLGPGFSGYTPYGWLQLSWFQQIYARQYYMQYLAATAASGAFVPPPSAQEIPVVSAPAPAPIHNQFPAENQP
ANQNAAPQVVVNPGANQNLRMNAQGGPIVEEDDEINRDWLDWTYSAATFSVFLSILYFYSSLSRFLMVMGATVVM
YLHHVGWFPFRPRPVQNFPNDGPPPDVVNQDPNNNLQEGTDPETEDPNHLPPDRDVLDGEQTSPSFMSTAWLVFK
TFFASLLPEGPPAIAN

FIGURE 6604A

CACGCCCCGCGCTGCTGGGTCCCGCCAGACACGCCGCCGCCGCAGGAAAGTCTACAGTTTGGTACCCCAGGACTC
GCTGGTCAGGAAAGCCCTGCAGGACATGAGTGTTAGGCCCGACGCCTGGCCCTTGGCAGCTTGGGAGGTGGCTGG
GGCTGCTTTTGCCTTTGCCAGAGACAGCTCCAACTGAGGACCTCTCCAACGGGCCCATCCACAGTCCTTCCTTCC
CCTAGTGTCTGGGAAGACAGGCGCG**ATG**ATGGACTCCCCGTTCCTGGAGCTGTGGCAGTCCAAGGCAGTGTCCAT
CAGGGAGCAGCTGGGACTCGGGGACCGGCCCAACGACTCCTATTGCTACAACTCGGCCAAAAACAGCACCGTGCT
CCAGGGGGTCACCTTTGGTGGCATCCCCACTGTCCTGCTCATAGACGTCAGCTGCTTCCTGTTCTTAATCTTGGT
GTTTTCTATTATAAGAAGAAGATTCTGGGACTATGGCCGCATTGCCCTGGTGTCAGAAGCAGACAGCGAGTCCAG
ATTTCAGAGATTGTCATCGACTTCCTCCTCAGGTCAACAAGACTTTGAAAATGAGCTGGGATGCTGTCCCTGGCT
GACTGCCATCTTCCGTCTGCATGATGACCAGATCCTGGAATGGTGTGGGGAGGACGCCATCCACTACCTGTCCTT
CCAGAGGCACATCATCTTCCTGTTGGTGGTGGTCAGCTTTTTGTCCCTGTGTGTCATCCTGCCTGTCAACCTCTC
AGGGGATTTGCTGGACAAAGACCCGTATAGTTTTGGGAGGACAACAATAGCAAACCTACAGACTGACAATGACCT
CCTTTGGCTGCACACCATCTTTGCTGTCATTTACCTCTTCTTCACTGTGGGTTTCATGCGGCACCACACTCAGTC
CATTAAGTACAAAGAGGAGAACCTGGTGAGGCGGACCCTGTTCATCACAGGACTCCCCAGAGATGCCAGGAAGGA
GACTGTGGAGAGCCACTTCCGGGACGCGTATCCCACGTGTGAGGTGGTTGATGTGCAGCTGTGCTACAACGTGGC
CAAACTGATCTACCTGTGCAAGGAGAAAAAGAAGACTGAGAAGAGCCTGACCTATTACACAAACCTGCAGGTGAA
GACAGGCCAGCGGACCCTCATCAACCCCAAGCCCTGTGGCCAGTTTTGCTGCTGTGAAGTGCTGGGCTGTGAGTG
GGAAGACGCCATCTCTTACTACACACGGATGAAGGACAGGCTGCTGGAGAGGATCACAGAGGAAGAACGCCACGT
CCAGGACCAGCCCCTGGGAATGGCCTTCGTCACCTTCCAGGAGAAGTCCATGGCCACCTACATCCTGAAAGATTT
CAATGCCTGCAAGTGTCAGAGCCTTCAGTGCAAAGGTGAGCCCCAGCCGTCCTCCCATAGCAGGGAGCTCTATAC
CTCCAAGTGGACAGTCACCTTTGCTGCTGACCCTGAGGACATCTGCTGGAAGAACCTCTCTATCCAGGGCCTCCG
CTGGTGGCTACAGTGGCTGGGCATCAACTTCACCCTCTTCCTGGGGCTATTTTTCCTGACCACACCCTCCATCAT
CCTGTCCACCATGGACAAGTTTAATGTCACCAAACCCATCCATGCGCTGAATAACCCGATCATCAGCCAGTTCTT
CCCCACCCTCCTGCTCTGGTCCTTCTCGGCCCTGCTCCCCTCCATTGTCTACTACTCTACACTGCTGGAGTCTCA
CTGGACCAAGTCGGGGGAAAACCAGATCATGATGACCAAAGTCTACATATTCTTGATCTTCATGGTGCTGATCCT
GCCCTCCCTGGGTCTCACCAGTCTAGATTTTTTCTTCCGGTGGCTCTTTGACAAAACTTCCTCGGAGGCCTCCAT
CAGGTTGGAGTGCGTCTTCCTGCCTGACCAGGGTGCCTTCTTTGTGAACTATGTCATCGCCTCGGCCTTCATCGG
CAATGGCATGGAGCTGCTGCGGCTGCCAGGTCTCATCCTCTATACCTTCCGCATGATCATGGCCAAGACGGCTGC
TGACCGCAGGAATGTCAAGCAGAACCAGGCCTTCCAGTACGAGTTTGGAGCCATGTATGCATGGATGCTGTGTGT
CTTCACTGTCATCGTGGCCTACAGCATCACTTGTCCCATCATCGCGCCATTTGGCCTCATCTACATCCTGCTCAA
GCACATGGTGGACCGGCACAACCTCTACTTCGTCTACCTCCCAGCCAAGCTGGAGAAGGGGATCCACTTTGCCGC
TGTGAACCAGGCCTTGGCAGCCCCCATCCTGTGCCTCTTCTGGCTCTACTTCTTTTCCTTCCTGCGCCTGGGTAT
GAAGGCCCCCGCCACTCTGTTCACCTTCCTGGTGCTGCTGCTCACCATCCTGGTCTGCCTGGCTCACACCTGCTT
TGGATGCTTCAAGCACCTCAGCCCTCTGAACTACAAAACAGAAGAGCCTGCAAGTGACAAAGGAAGTGAGGCAGA
GGCCCACATGCCCCCACCGTTCACACCCTACGTGCCTCGGATTCTGAACGGCTTGGCCTCGGAGAGGACAGCACT
GTCTCCGCAGCAGCAGCAGCAGCAGACCTATGGTGCCATCCACAACATCAGCGGGACTATCCCTGGACAGTGCTT
GGCGCAGAGCGCCACGGGCAGTGTGGCTGCTGCCCCCCAGGAGGCC**TGA**GGCTGGGTCTCACTGCTCTGAAAAGA
CACAACCAGAATGGCCTGGGGCTCAGGCCCTTGGCTGAGTGGGAATGCGTTGGGACTGCCCAGCTGAGCTATCAG
GTGCCCATCTTTTCTGGTCCCAGCAGTGGTGAGGAGAGCACAGGCAGGCCTCGCCCCTCCCTTGCTCACCCAGTT
TCCCCTCCGGCACAAGCTTCCAGCTCTGCAGCTGGGGTGACATCCCCAGTGGTTTGTCGCCAAGACCATGTGGTG
GACTTTTCGCCCCCCAAACTGATGAGTCCGGGAGAATATATGGAGAGAGAGATGTAACAAGGGGAAGGCCTCCTC
CCTTCTGAGCACACACACAACCGATAACCAAAGAGATGCTGCAGTCCAGGTCTGAGGTCCCGCTGGCATCCAGCT
CCCTGCTCCATGGCCAGTCCCTCCCCAGCCCAGCAGTCCCTCCAGGCTACATCCAGGAGTAAGCTATGGGGAACA
GGTTGGGAGGTGGCCAGTGCTCCTGCCAGCTGTGCACACATCTCTGTATCCCGCTAGAGTTCTGTGTTTTTGTAT
CATGTTGTCAGGGACGCTAGCTGGGTCAGGGTTACCCCATAGCAGGCAGGGACAAGGACCACTCATAATATGCCC
ATTGGACCACAGTTAAGATCCAGCCTCTCTCACCTCTTCAGGGCTGAGTGCATGAGTCTGCACCTCCAGGCAGGC
TCTGTGCAGTACTCACCCCCTCCGTCTGCTCCCTCCAAGGTGTGGGGGTGGGCAGTGCTCAGGGCCTCCTCGGAG
CCAAAGGACAGCATGGTCGGCACAGAGGAAGGGGTACCTGGGCTGGGTGCAGGGCCATCCCACTGCCCTTGAGCT
GTGGCTCTGGCAGGAAGGAGGGGCAGCCCATCCCTCTTCTCCCTCCTGGGGATTCTGGGGAATGGGATGCAACTT

FIGURE 6604B

AAGACTTCTGCCTGAGAAGCCTCCTCCCTGCTGCCTCCAGGGGGCACCAAGGCACAAGCCTGTGCAGTAGGGGCG
GGATGGGGGTGTGGAAGAGCAGGTCCAGGCTCCTAGCACAACTGGCCTGGGGCCTTGGCACCTCTGTAGGCCCTG
CCTGTGCCTGTCCGCTGGCCTGGGGGGCCTGGGCTTATCTGGGCCTTCTCACTCAGGGACTCTCTTGACGCTGAC
TTGCCCCCGCAGCGGTGGCCAGTGCTGCCTCTGCTCCAAGCTGCCCCTGCGCTGGGAGGGGTGGGGGCGGTGCCA
TTGGTCTGGTGCAGCATAGCCCTGGCCAGTGGCCTCATCCCCAGCAGGCCTCCCGTGCCTCTGCCAGCAAGGAGG
GGCCGGCCAGCTCTGCTTGCACAGGGGGCCCCATGTGGGGTCAGCGCACGCTCATGTCACTGAGTTCCAGCCGCT
TTTAGAGTAAAGTCGTTTATCATC

FIGURE 6605

MMDSPFLELWQSKAVSIREQLGLGDRPNDSYCYNSAKNSTVLQGVTFGGIPTVLLIDVSCFLFLILVFSIIRRRF
WDYGRIALVSEADSESRFQRLSSTSSSGQQDFENELGCCPWLTAIFRLHDDQILEWCGEDAIHYLSFQRHIIFLL
VVVSFLSLCVILPVNLSGDLLDKDPYSFGRTTIANLQTDNDLLWLHTIFAVIYLFFTVGFMRHHTQSIKYKEENL
VRRTLFITGLPRDARKETVESHFRDAYPTCEVVDVQLCYNVAKLIYLCKEKKKTEKSLTYYTNLQVKTGQRTLIN
PKPCGQFCCCEVLGCEWEDAISYYTRMKDRLLERITEEERHVQDQPLGMAFVTFQEKSMATYILKDFNACKCQSL
QCKGEPQPSSHSRELYTSKWTVTFAADPEDICWKNLSIQGLRWWLQWLGINFTLFLGLFFLTTPSIILSTMDKFN
VTKPIHALNNPIISQFFPTLLLWSFSALLPSIVYYSTLLESHWTKSGENQIMMTKVYIFLIFMVLILPSLGLTSL
DFFFRWLFDKTSSEASIRLECVFLPDQGAFFVNYVIASAFIGNGMELLRLPGLILYTFRMIMAKTAADRRNVKQN
QAFQYEFGAMYAWMLCVFTVIVAYSITCPIIAPFGLIYILLKHMVDRHNLYFVYLPAKLEKGIHFAAVNQALAAP
ILCLFWLYFFSFLRLGMKAPATLFTFLVLLLTILVCLAHTCFGCFKHLSPLNYKTEEPASDKGSEAEAHMPPPFT
PYVPRILNGLASERTALSPQQQQQQTYGAIHNISGTIPGQCLAQSATGSVAAAPQEA

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FIGURE 6606A

CTGAGAGCGACATGTCCCCGGCGGCTCAGGCGGAGCGGCCCGTGGCGCTGTTTTTCTGAGTCCGGGGTGGCCTGG
CAGCCGGCCGAGGACGAGGGTCGGCGGGGGCTGCCCCCGTGGTGGTGGCCGCCATGCTGGGAGCCTGGGCGGTTG
AGGGAACCGCTGTGGCGCTCCTGCGACTGCTGCTGCTGCTGCCGCCGGCGATCCGGGGACCCGGGCTCGGCG
TGGCCGGCGTGGCCGGCGCGGCGGGGGCCGGGCTGCCCGAGAGCGTCATTTGGGCGGTCAACGCGGGTGGAGAGG
CGCATGTGGACGTGCACGGGATCCACTTCCGCAAGGACCCTTTGGAAGGCCGGGTGGGCCGAGCCTCAGACTATG
GCATGAAACTGCCAATCCTGCGTTCCAACCCTGAGGACCAGATCCTGTATCAAACTGAGCGGTACAATGAGGAGA
CCTTTGGCTACGAAGTGCCCATCAAAGAGGAGGGGGACTACGTGCTGGTCTTGAAATTTGCAGAGGTCTACTTTG
CACAGTCCCAGCAAAAGGTATTTGATGTACGATTGAATGGCCACGTCGTGGTGAAGGACTTGGATATCTTTGATC
GTGTTGGGCATAGCACAGCTCACGATGAAATTATACCTATGAGCATCAGAAAGGGGAAGCTGAGTGTCCAGGGGG
AGGTGTCCACCTTCACAGGGAAACTCTACATTGAGTTTGTCAAGGGGTACTATGACAATCCCAAGGTCTGTGCAC
TCTACATCATGGCTGGGACAGTGGATGATGTACCAAAGCTTCAGCCTCATCCGGGATTGGAGAAGAAAGAAGAGG
AAGAAGAAGAAGAAGAATATGATGAAGGGTCTAATCTCAAAAAACAGACCAATAAGAACCGGGTGCAGTCAGGCC
CCCGCACACCCAACCCCTATGCCTCGGACAACAGCAGCCTCATGTTTCCCATCCTGGTGGCCTTCGGAGTCTTCA
TTCCAACCCTCTTCTGCCTCTGCCGGTTGTGAGAACAAATGACTATCCTGAACAGGGTGGAGGGGTGTGGGAAAG
AAACCAGCCATATTGGTTTTGGTTTCTGTATTTTTCACAATGATTAATGAACAAAAACAAAGAGAAAAAAAACAC
ACATCAATTAAAGGAGACAAAAAGAGGCAGAGCGAGTAGAGAGCAGCCCTCATTCACCACCTGGTCCCAGACGTG
CTTCAGTCCTCGTCCTCTCTTTGTGGCTGGCTCCCAGCCTTCTCTTTCCTCTTGAGGATACTTAGGGTAAACTGG
ATCCTTCCTGCTCAAGGATCCTCATTTGTATACCTAGTGGAAAGGACTCTGAACTCAGAGGAGTCACTGTTCCTT
TTTTTAGGTTAGAAATTAACAGCAGGGAAATGCCATCTTATTACCTGAGACGACCAGCACTGGGAGTTAGGTACG
GTCTGAAGTTATGTCTAGATAAGACTTCAGACGTCCTGGGATTGAAAGAATGTGTGTGAAGGGGTAGAATTTGTG
CGGTAAAGACTTAAAAAAAAAAGTAGGGAGATTAAAAAAAAAGAAAGAAAATGCTTCCTTATCTGGAAGCCTTTC
TGGATTAATCCAGTGATGGTCCCACCTTTAGTGTTTGAGCTTTGTCATTGCTTGTCTCCCTGGCATGTGCCAGTT
ATAGACTGTCCAGCATCCAAGACGTTTCGGTTATGTCGGGTCCTCAGATCGCCTCTGACTTGTTACCACAACAAA
TCATTTTGATTTCAGTGCCTGTTGGGGACTTGATTTCTTCTCAGGTTTTGTTTGTTTGTTTGTTTCCTTAATCTG
GCTCATTTGAAATTTCTTCTCCCTCTCAACCATCCCACTAAGTTATAGCCAAGAAGGGAAGGAGACACGGGGATT
TGGGGTTCTCTGCTTGAATGTCTTCTCCTTTACCACCTCACCTTGTTGGTACCTCCCTCCCTGGATCTCTGAGCC
AGCAGCCAGGAGGACCTGACCCAGCAGTTCTTTACTGGCCCCTTTGTAGGGCCTTGCTGCCAGGGGGCAGGGATG
CTTTCCAGCCTGCAGCAACAGAACACTTGACCTTAAAAGTCTCTTCTGGTCTTTGGATTAGAAAAGGCTTATGTT
AGCATAGCTTAAGAGCAACCTCAGAGACTTGAGCCCTACTAAGTGACTGACCACTGTTTAGAGTGTCTGGTATCT
GATGTTCATTTATTCCCATGTTCTTGTGTGTCACAGTTCAGCCAGTTTTGGTTTATGCCTAGAGCTACTTCAAGG
AACTAGACTAATTAGCTATATAGGCCCAGCGATGCTTCTTATTGATCTTAATAGTATGCCCTTCCTTCCCCTGTC
CTTTCATTTCTCTATCCAAGTAGCAGTCAGGTTCTTGGTGTGATGGGACTGAAAGAATTCCAGTCAGCCAGAGCC
TTGGCAGCTCTGAAGCTAACCTTAGCATCTAAGTGTCGATCTTGAATTCCCTGAAAAAATTTCTATAGGAAATGA
AGCTTCCCTGGTCCCCTCCTTTCTGGCCATTGTCATCCATTTCCCAGTTAGGGCAACAATGAAGGAGGACCCAGC
CAAGCTAGAAGGAATTTTGTGGATGGGAGACAGCAGGATTAGCTTCAGCTTGGGCTGGAGCAGTCAATATAGGAT
CTCAGGCCAGGCCCGCTTTTCTAGAATGTGTTTAATTTTGAGTTTGCTTTATTAGATATGTTTTTTAAGAGCTCT
GTATATTTGAACTGCTCCTTATGTGACAAAATAGGTAGCTCTTGGGCTCATGTCCTGGGTTTTGGCTCTTTAATG
ATTACTCCAGGCCAGCATTTAGTCGTTTGAGAATTGTAGCCTGTTGTTTTCGCTGTGACTTGGGTCTCAGTGCTA
GGGTATTGAGTCAGGCAGCTGGAGGGTTGTGGCCCGAGGCTGCAGTCAGAGGTATACTTCCCATAGTGCTTCACA
CAGCTCCCCTGCTTCTAAAGGATAAGGTACTGTAGCCTTGGTCCTGGGGACCACCTGCCTGGGGCAGTGGACATC
CTAACTAAACAGGCTTCTGGCAGTAGCTTTGGTTCCTATCCCATCGAAATTCCCCAAAGCCCTGGGCCACTGCCA
TTGGGTTAGTCAAGATGAAGGAGGAGGACTGGCTGCCTCCATTTTGCCTTGTTTGTTAGTTTGCCTGGGTCTGTC
TGAGGAAGGAGGGGGTCCCGCCTTCCACCTCAACACATCCCTTCAGTGACTCAGAGTCTCAGAAGGAAACCCTGA
CTCCTGGGGCCATTTCCTAATGGTACTGTAAGCCAAGCAGCTTTGCTTCTGCCTCTGTTTCCAAGCCCACCCTTT
TCCCCTGAGCTCAGGGTTAGGGATGGGCGCTTTCCTCTCTGGTTGTGAACGAAAGGAAGGAACATCTTTCTATGG
CTAACAAAAACTAAAGGGGAAGTGAGGAAACAGGAAGAAGTATGGTGGGGGCTGGGGTAGACTCCCCTGGAGCCA
AGCCTATCCAGCTAACAAGAGCTCCCTGGGGCTGGTCACAGCTGGCTCATGATGCTGAACTTGAAAGTTTTTTTG
TTTTTGTTTTTGTTTTGTGGCTCCTCCAAGATATAGGTACATGAAGTTTAGGTTAAAGGGGTGGGATTCTTTATT

FIGURE 6606B

TTTATTTTTGTATTGTATGTGTCAAGAATTACTCTGTTGTTCACCTTTTGCTTTTTGCACTGTTTGTTCTCTTAT
CTGTATTTTGAGCTTAGTGCTAGGACTGAGAGGCTGCACCATAGGGAATGTATGGGAGATGGTGAGGGGTGCCAG
TGAGGGGTGCGTGGAGGAGAGGCCTGGGCTCCTCTACTGGATCTACACTCTGTCCCAGGTTTTTAGATCCCACTG
AGCCCAGCTGACTGAAAACAAGGACAGTCAGGGTGAAACTTCTTTTGCCAGAAGTGTGGCCTGAGTTGAATTTCT
GGGAGGATGACGCAGATGTCTGCTGCAGAGCTGGGCTGAGAGTTCTGCAGTCTAGCTCTGACTTAGGTCAGGGGC
CTGTTGGTCTCTCATTGGACGTTTTTGGGTCTCACTCATGCTTACTGAAACATTGTGCCAAGAAACTCTGTGGGA
TTTGTGTCCCTTAAACCAGACTCACTTTTCTGAAAAATCTCCATTGTTGAGGAGAGGCTGCTCAATCGACACCCC
GAGTTCTCATGACTGGGAAGATAGTTTTCTTCAGGTGTCAATGGCGTTAGACTCCCAGGAAGACTAGCCCTGCCC
ACAGGGCCACCTGTTGGTTTGAGAGCGTGTTCGTGTTCTCTTGCCCTCCCTGCCTAAGAGCTACTGGGATCACGT
TAGCGGGCATTTAGGCTTTGATGAGAGGGCACAGTTTGAGTTAGGTTTACCTCCCCCTTTCTGTGCCTGGGAACT
GTTTGGTCCAGCTTTAGAACTGTGGTTTTGACTTCCTTATCTCTTGGGAGAAGCTTCTGTTTTAAGGAATTTCTC
TTCCTTCTTCTCCTGCCTCTAGCCTCTCCTGGAAAGGCCTGGATATGGTTTCTAAAATCTCAGCTGAGAACTTCA
GAAAACAGCAGCAGTATTTTCCTTTTCCTAGTGCTAAAATCCCTTTCCCTAGAAATTGGCTCACCTTGGGAAACC
CAGGGAAAGAATCAGCAGGTTCTCTGCCCTCCCTAGGGGTTGGGGAAGGACCCACCCCGGTCAGCACAGTGCCTT
TTCCTCTCCTGCTCTGAGCCAGGGTGGGGCATTCCCTCTAGATTCAGGTTTGGGCAGGGGTCCTATAGTCCCTGC
CATGGGGCTGCTTCCCTGTCCCTTCCCTCCCCTTTGCTGGCCTACTCTGGCATAATTCAAGTGTCTTCTTGCCTT
GGGGATCCTTAGTGGCATCAAATGGCAACATGGAATATTGTCCTCCATGCCCCTCCAGAAGGACCTAGGAGAGTA
GGTGAGCTTTCCAAAGTGAGAGACGAATCTTTCTTTCTTTTTTTTTTTAAAGGGCAGGATGGGTATGCTTTGGGC
TTTCTCCTTCTGTGGCCCCGGAGGAAGGAGAGACTGAGGCAAGGCAAAGTGATAGTACACTGAAGCAGAACCGGA
AACACCCAGGAACTGTTCAGAAATCTCAGAAGAAATCTGCTTCTCTTCGATGGAAAGATATAATTAACGATCAAA
GAGCTCTAAGAAAATTGCAAAGAAGCCTTAATGTTCAAGCTTTAGAAAGATCAGAGCAATTTTTCTCTTTCAGTC
CAAACTAAGACTCTCTGTATTTAAATCTCTCTGGGGCAAGAGGGCTAGATTTCCTCATTTTGTTATGAGACTAGA
TTGGTACCAGTAGATCAGCTGCCTAGCGAGGGCAGGTTTCTTCTTTGCATCTGTGTGGCTTGCTTCCAGTCTGGC
CTGTCCTTTCCAGCTGCCTTTTGTCTAGCCTGCTATGGGGGGCCAGATTATCTTGATAAGAGCAGGTGATTTGGG
GACTAGCTGGGTTGGTAGGAAAAGAGCAGGATGGATCTCTTGGGACAGGTTCCCCCAGGAGTATAAACACAAGGA
GCCAGGATTGTCCTGGCAGCCAAGGAAACAGTAGTGCCTGTTTGAGTTGGCAGAGAGGGCCTTGGCACCTCTTGC
ATCCAGGCAGTCTTGTGAGATGGGGGCACATAGCACTGGGGAAAGCAGAACTCCATTCTCACCTCTATTTTGAGC
TTCAGTGCTTTATTTCAGTATGAGGAAAAACAACAACAAACTGAAGTGCGCTTTCCGTCCTTTCAAAGGACAACT
GTCGGGAAGGGAGAGCCGAGTTGCGAGGTAGGAGGGGAGCACTGGCAGGGAGAGACATTCTTGACTCCTCTCTTC
CCTGGTGTGTTGTGATCCAGGGAATGAAAAGAAATTTGACCCTGGATTGGTTCTCTCCTTGGACTTAAGGAATCT
TACCTTTTCCTTCCACAAAGTTCTCCCAGGCAAGGACCAGCTGCCCATTCTGAGCCCAGGGCAGCCTCTTCAACC
ATTATTGGTCTAACCTGGCTTGTCAGGAAACCAAGCCCACCCTTCCACATTGGGCCTGGCTGCTCTATTCTGTAC
CAAGTACTGGAGAAAAAGCATCAAGTTCTTAGCCCTTGTAGCTTCTACCCTAGTTTCCCATCCTCTCTCTGTGGA
GGCCAAACCAACTCTTTGCCAGCAGCCACAACATGCATTGACAGCGGCACAGTGAGATATAACTGATGGGCTTTG
AACCTGGTTGGCCGGGGAAGCTGTAGGGGTGGATAGAGCTGGCTTTCCTTCTGGGCTGTCTCCATCTGACCCTAC
CCCTTCCATGTCCCACCCCACTCCCACCAAAAAGTACAAAATCAGGATGTTTTTCACTGTCCATTGCTTTGTGTT
TTAATAAACAATTTGCAGTGAC

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FIGURE 6607

MLGAWAVEGTAVALLRLLLLLLPPAIRGPGLGVAGVAGAAGAGLPESVIWAVNAGGEAHVDVHGIHFRKDPLEGR
VGRASDYGMKLPILRSNPEDQILYQTERYNEETFGYEVPIKEEGDYVLVLKFAEVYFAQSQQKVFDVRLNGHVVV
KDLDIFDRVGHSTAHDEIIPMSIRKGKLSVQGEVSTFTGKLYIEFVKGYYDNPKVCALYIMAGTVDDVPKLQPHP
GLEKKEEEEEEEEYDEGSNLKKQTNKNRVQSGPRTPNPYASDNSSLMFPILVAFGVFIPTLFCLCRL

FIGURE 6608A

CGGACGCGTGGGAACGAAGCCACCCATTACGGTATGATGATGTCAAACGTGATGCTGATGCTACAGTTACAGCCC
CTGCTGGCGCAGCCTCTCTGATTCTCTCTCCCTCTCCGCGTCCAGTGCTGGGCTTTTTCAGACAAGTGCATCTCC
TAACCAGGTCACATTTCAGCCGCGACCCACTCTCCGCCAGTCACCGGAGGCAGACCGCGGGAGGAGAGCTGAGGA
CAGCCGCGTGCGCTTCGCCAGCAGCGGGGTGGGAGGAAGGACATTAAAATACTGCAGAAGTCAAGACCCCCCAGG
TCGAACCCAGACCACG**ATG**CGCGCCCCGGGCTGCGGGCGGCTGGTGCTGCCGCTGCTGCTCCTGGCCGCGGCAGC
CCTGGCCGAAGGCGACGCCAAGGGGCTCAAGGAGGGCGAGACCCCCGGCAATTTCATGGAGGACGAGCAATGGCT
GTCGTCCATCTCGCAGTACAGCGGCAAGATCAAGCACTGGAACCGCTTCCGAGACGAAGTGGAGGATGACTATAT
CAAGAGCTGGGAGGACAATCAGCAAGGAGATGAAGCCCTGGATACCACCAAGGACCCCTGCCAGAAGGTGAAGTG
CAGCCGCCACAAGGTGTGCATTGCCCAGGGCTACCAGCGGGCCATGTGCATCAGTCGCAAGAAGCTGGAGCACAG
GATCAAGCAGCCGACCGTGAAACTCCATGGAAACAAAGACTCCATCTGCAAGCCCTGCCACATGGCCCAGCTTGC
CTCTGTCTGCGGCTCAGATGGCCACACTTACAGCTCTGTGTGTAAGCTGGAGCAACAGGCGTGCCTGAGCAGCAA
GCAGCTGGCGGTGCGATGCGAGGGCCCCTGCCCCTGCCCCACGGAGCAGGCTGCCACCTCCACCGCCGATGGCAA
ACCAGAGACTTGCACCGGTCAGGACCTGGCTGACCTGGGAGATCGGCTGCGGGACTGGTTCCAGCTCCTTCATGA
GAACTCCAAGCAGAATGGCTCAGCCAGCAGTGTAGCCGGCCCGGCCAGCGGGCTGGACAAGAGCCTGGGGGCCAG
CTGCAAGGACTCCATTGGCTGGATGTTCTCCAAGCTGGACACCAGTGCTGACCTCTTCCTGGACCAGACGGAGCT
GGCCGCCATCAACCTGGACAAGTACGAGGTCTGCATCCGTCCCTTCTTCAACTCCTGTGACACCTACAAGGATGG
CCGGGTCTCTACTGCTGAGTGGTGCTTCTGCTTCTGGAGGGAGAAGCCCCCCTGCCTGGCAGAGCTGGAGCGCAT
CCAGATCCAGGAGGCCGCCAAGAAGAAGCCAGGCATCTTCATCCCGAGCTGCGACGAGGATGGCTACTACCGGAA
GATGCAGTGTGACCAGAGCAGCGGTGACTGCTGGTGTGTGGACCAGCTGGGCCTGGAGCTGACTGGCACGCGCAC
GCATGGGAGCCCCGACTGCGATGACATCGTGGGCTTCTCGGGGGACTTTGGAAGCGGTGTCGGCTGGGAGGATGA
GGAGGAGAAGGAGACGGAGGAAGCAGGCGAGGAGGCCGAGGAGGAGGAGGGCGAGGCAGGCGAGGCTGACGACGG
GGGCTACATCTGG**TAG**ACGCCCTCAGAAGCCGGCTGCCGGGGGGGACTCAACAGCAGAGCTCTGAGCAGCAGCAG
GCAACTTCGAGAACGGATCCAGAAATGCAGTCAGAAGGACCCTGCTCCACCTGGGGGGACTGGGAGTGTGAGTGT
GCATGGCATGTGTGTGGCACAGATGGCTGGGACGGGTGACAGTGTGAGTGCATGTGTGCATGCATGTGTGTATGT
GTGTGTGTGTGTGGCATGCGCTGACAAATGTGTCCTTGATCCACACTGCTCCTGGCAGAGTGAGTAACCCAAAGG
CCCCTTCGGCCTCCTTGTAGCTGTTTTCTTTCCTTTTGTTGTTGGTTTTAAAATACATTCACACACAAATACAAA
TTGACAGGTCAAAATCCATGAAATGAGATCCCCCAGCCGTGTCCTCCAGCCCAGCCCTGACCCCTTGGTTTCTAC
CCTGGCTCCCCTTGGTTTCTACCCTGGCTCAACCGACCCCTGTCTGCCCTTCTCCCTCCTGCTTCTGAGGTCAAG
CTCTGGCCTGCGAGCCTGTCCCCATTGCAAAGGGGAGGGAGGGGCAGGGAGCTGTCTACCAGCTGAGGTCCTCCC
AAAACTGGGCCGATGTGGTGTGACATCCCCACCAGCCTCAGATGAGACGGGCCAGGACGCCCAGCCACAGCAAGC
CCTGTCCCTTTGCCGGATCCCCAAACACTAGAGAAGCTCTCCTAACCCAAGGCGGAGAATGAAGGTGGTGGCGGC
AGAGGAGGAGGGCAGCAGCTGAGAGGCCAGGGACAGGGTGCCTCGCCAAGCTGTCTGAGGTCTGTCCCAGGTGGC
CCAGGTGGTGCAGGTAGAACAGGGTGAGGAGAGGGGGTCGGCTCAACAGGAGGAGGCTGTGGCTGCAGAGCCTGG
AGGAGCTTTTAGGTGTTGAGATGGGGCAGCTCTGAATCCTAGACCCTGGAATAGCCTGTCCCTTTTCTCTGGGTC
TCGTGGTGGAGCCATGATCTGGGCTGCTCTCTTGGGGACACTGGGTGGTGGTTACACAGTTGACCTCTGCCTGGC
TCCCCCTTGGTGCAACTCCTGCCTCCATCCCCCTTGCTGGGGTCCCCTCATCCACTTGAGGGCGCCTGAGGGCCA
GGAGCAGCAGGCAAGGAGCCTGGGTCTAGGCTAAGGGGGTGTGTGCCCACCTCCTCCCTGACCCTTAACACTCCT
GTCCTGCCCAGACCAACAGAGAGAGCTGTCCCTGAGACCCCGGAGAGAAGCAGCTGCCGAAAGCTGCAGCCTTTC
CGCACTCTGAGACCATGATCTTCCTCCTGCCAGGGGAGAGCCACCCACAGGCCATGTCCAGCCCCACTTCCCTCA
GCCCCCAGGGCTTCCTTCTGGCCCCTCTGAGGATTCCCTAGGGCTGCCCCGCAGAGGGGCTTCCCCAAGCTCTGT
TTTGAAGCCTGCAATGTGGAAAAGTGAGAAGTCAGAGGGAACAGGACAGGTGCAGCCGGGCTCTGAGGCCACACC
TCACACCTCGCTGTTCCCCAACATCCCCTGAGCAGTGTGAGCTCATCTCACCAGATGAGAAGAGGCCCTGTGCAT
TTCTTTTGTTTGTTTGTTGCTGTTTTCCCCCACCCATCCAGTTCTCCTCAGCAAAGCAAATTCCTTAACACCTTT
GGTGGAGAATTTCTTACCCAGACTTGGGGCTGTGATGCCCTTCAGTGCGTGGTGAGTGCAGCGTGTGTGCGTGTG
CCTGTGTGTGAACCTGGGGGCCATCCTGGTGGCCTGGGAGCGTGAGGAGAGGCCCCCTGTGTGCTGGGTGAGTGG
TGGGTGTGGGGTCAATGCAGTGAGGCTCTCTGGGTGAGGCTCCCAACCTGGCAGTCCCCAGCCTCCCAGCATCTG
TGAGCGTCTGTTGGACTTTACAGAAGAGCCTCATCCCGTCTGCCCCTCACTCTGCCCTGGAATCAACATCTTCCG
AGTCCTTCTTGGGGGAAATAGCAGAGCCCCACTTAACTCCATAAACTGCTTCCCATTCCGCAGCCCAGTTCTGAT

FIGURE 6608B

TGTTGAGGTGTCGCGTCGTTCCAGGTCCCCCAGTCCCCTCTTTCTCCTGTCCTCTCTCTGTCCTTCACCTCCCCA
CTCCAGCCCCGGCTCAGTTCAGGGAAATGCTGTTCCATATCAGCCCTCTGCTCTCTGAGGCAGCCGCGCCTCTGA
CTCGGAGCTACTTGAAACTTCTGCTCTTGCTAGGATTGGAGTCTACCTATCTCTTCCATTTGTCCCAGCTGGAGT
TCTGGAACTTTCCTCCTCGGGGTGGGGGTGGGGGTTGTTAAGGATGCTGGGGGGCCTGGGGAAGGAAGGAGTTCA
GAGGAAGGGTGTCCCCTGTCCTCTTGATGTCACCCTCCGCTCCTGGGACACGTGCTCTCTCTGTCTCTGGGTCTT
CTGGCTGTGCACGTTTGTGTGTCCTTGTAAATATGTTTTAGGAAGAAAGCAAAAGGGACTGAACTAGCCTCTGGT
AGGATTGCAGGGGTCCAGCCTTGCCTGTTTCCGAAGCCCCCACACTGCCTTTCGCCCCACTGAGACTGGTCCCCT
CAAAAGGTAGACAAAACAGCAGCTCCCTGTGGAGCTGAAGGGCGGCCTCAAAGTGGCTTTTTGTTAGACAAGGTT
AAGGTTTCCTCATGAGCAAGGTTGCAGATCGGTCCTTCCTCAGCTCCTTGATTTGTGACCTTGACCAAGGGGCCT
GCCACCCAGCCCCTCCAGTGCCCTCTCCTCGATGCCTCGCTCCTTCCTGCCCCCACTCCCCTGGCTTAGGCAGGT
AGGGGAATTAGGGCCATGCTGGAAGAAGCTTAACCATGTGTTCAAAGAACGGTTTCTTGCTTGCTTGGTCCTGGA
ACTCCCCTTGGCTGCCCCAGGCCTCCTTGGCCCATGGGTGCTGGGGGAGGTGGATGTCAGATCTGGTAGGTTGCA
GCAGAGAAAATAAATGTGCCTTGAGAGACCACTCAGAGAGGGTCCAAGGGTGATGGAGAAGGAAGCATGGCCTGG
GAGCTTGGAAGGGAGGGGTGGTGGGTGGCGGCATCTTGACTGCCCCCTGTTGTCCCACACGTGGGGGGTGGTCAC
CCCCCTTCACTCCAGCCCGCCTGCCTTCAGCCTTCCATGAGCTTCACCTGCTTCCAACTTCACTTTGGAGGGGGT
GGGGTCCGTTGGCATCAACACGGGGACCCTCTGCTTCACCAAAGCCCGAGCCCTCAGCCCCTGGGGAGAACAAAT
GGCTGAGCTTTGATACCTGGGGTCGTCGAGAGGCTGCGGGCTGGCGGCAGTCCCAGGGGAGAGACACCACAGAAG
GAGACCCAGACATCCCGAGGAAGTTCCCAGCAGAGCAAACTGCTTTCCAGCCTGAAGCCTGCTTAAACTGTGTGA
TGTGCAATAACTGAGCTTAGAGTTAGGAATTGTGTTCAAGTGCTTGGATTTCCGTCTGTAGATTTAACTGCTGAA
ATTGTATCTCTCAGTAATTTTAGATGTCTTTTAAAAAATTGAAAAACAAAGTGTTAGACTGTGTGCGTGTGCGTT
GATGGGCACTCAAGAGTCCCGTGAGTCATCCAGCCCTGCCTTTCCCCTGCGCCCCCATCCTCTCACGTCCCGCCC
TGCCTCCACTTGGGGACCCTGCCTCGTGTCGTCTTTATCTGCCTATTACTCAGCCTAAGGAAACAAGTACACTCC
ACACATGCATAAAGGAAATCAAATGTTATTTTTAAGAAAATGGAAAATAAAAACTTTATAAACACC

FIGURE 6609

MRAPGCGRLVLPLLLLAAAALAEGDAKGLKEGETPGNFMEDEQWLSSISQYSGKIKHWNRFRDEVEDDYIKSWED
NQQGDEALDTTKDPCQKVKCSRHKVCIAQGYQRAMCISRKKLEHRIKQPTVKLHGNKDSICKPCHMAQLASVCGS
DGHTYSSVCKLEQQACLSSKQLAVRCEGPCPCPTEQAATSTADGKPETCTGQDLADLGDRLRDWFQLLHENSKQN
GSASSVAGPASGLDKSLGASCKDSIGWMFSKLDTSADLFLDQTELAAINLDKYEVCIRPFFNSCDTYKDGRVSTA
EWCFCFWREKPPCLAELERIQIQEAAKKKPGIFIPSCDEDGYYRKMQCDQSSGDCWCVDQLGLELTGTRTHGSPD
CDDIVGFSGDFGSGVGWEDEEEKETEEAGEEAEEEEGEAGEADDGGYIW

FIGURE 6610A

TGCAACTCCGAGCGTGAGTCCAGGCTAAGGGGACGCCGGCCGGGGAAGAGGCGCGGCGGGAGAAGCGACCGCAGC
GGGAGCCCGGCCACCGAGGGCTGCCGGCACTAGGCGCAGAGCCGCCAGCGCTCGGAAGCCCGCGGGGTGCGGGAG
CGGGAACAGACTTCTTTTGTAGAATTATCCTATGGAATGATATTTTCATA**ATG**AGTCAACAAGGTTACGTGGCTA
CACCTCCGTATTCTCAGCCTCAGCCTGGAATAGGCCTTTCTCCACCTCATTATGGGCACTATGGGGATCCGTCGC
ACACAGCATCTCCAACAGGTATGATGAAGCCAGCAGGGCCTTTGGGGGCCACCGCCACTAGGGGAATGTTGCCTC
CGGGTCCCCCACCTCCTGGACCCCATCAGTTTGGTCAGAATGGAGCTCATGCCACTGGTCACCCTCCCCAAAGAT
TTCCAGGCCCTCCACCTGTCAACAATGTGGCATCCTCACATGCACCATACCAACCCTCTGCACAATCTTCTTATC
CAGGTCCTATATCCACTTCATCTGTCACCCAGCTGGGCAGCCAGCTCAGTGCTATGCAAATCAACAGCTATGGTT
CAGGCATGGCTCCTCCAAGCCAGGGACCCCCTGGCCCTCTGTCAGCCACATCATTGCAGACTCCTCCACGACCTC
CACAGCCTTCCATTTTGCAGCCTGGATCTCAAGTTCTTCCACCACCACCCACCACACTCAATGGTCCTGGTGCCT
CACCTTTGCCTCTACCAATGTACAGACCAGATGGGCTCTCTGGGCCTCCTCCTCCAAATGCCCAGTACCAGCCCC
CACCTCTTCCAGGCCAGACCTTGGGTGCTGGATATCCTCCGCAGCAGGCCAACTCTGGTCCCCAGATGGCAGGCG
CACAACTGTCTTACCCAGGAGGCTTCCCTGGAGGTCCTGCACAGATGGCTGGTCCGCCACAGCCCCAGAAGAAGC
TGGATCCTGACTCTATCCCTAGCCCAATCCAGGTGATTGAGAATGATAGAGCCAGCAGAGGAGGACAAGTTTATG
CCACCAACACCAGAGGCCAGATCCCTCCCCTGGTCACTACAGATTGCATGATACAAGACCAAGGAAATGCCAGTC
CTCGATTCATCCGTTGTACAACATACTGTTTTCCATGCACGTCAGATATGGCTAAGCAAGCTCAGATTCCATTAG
CTGCTGTCATCAAGCCCTTTGCCACCATTCCTTCAAATGAGAGTCCCCTTTACTTGGTAAATCACGGCGAGAGTG
GACCAGTCAGATGCAACAGGTGCAAGGCCTACATGTGCCCATTTATGCAGTTCATCGAAGGAGGAAGGAGATATC
AGTGTGGATTTTGCAACTGTGTGAATGATGTTCCACCATTCTATTTCCAACATCTGGACCACATTGGAAGAAGAC
TGGACCACTATGAGAAACCAGAGTTATCTCTAGGATCTTATGAATATGTTGCCACTTTGGATTATTGCAGAAAGA
GTAAGCCTCCCAACCCACCAGCCTTTATCTTCATGATTGATGTTTCATATAGTAACATAAAGAATGGACTTGTCA
AGCTCATATGTGAAGAACTGAAGACCATGCTGGAAAAAATTCCAAAGGAAGAGCAAGAAGAGACGTCTGCAATTC
GAGTGGGTTTTATCACATATAACAAAGTTCTCCATTTCTTTAATGTGAAGAGTAATCTGGCCCAGCCTCAGATGA
TGGTGGTGACTGATGTTGGAGAAGTCTTTGTTCCTTTGTTGGATGGTTTCCTTGTCAACTATCAAGAATCCCAAT
CTGTGATTCATAATTTGTTGGACCAGATTCCAGACATGTTTGCAGACTCTAATGAAAATGAGACTGTCTTTGCTT
CTGTCATCCAGGCTGGCATGGAAGCACTAAAGGCAGCAGACTGTCCTGGGAAGCTGTTCATCTTCCATTCTTCCT
TGCCAACTGCTGAAGCACCAGGGAAGCTCAAAAACAGAGATGACAAAAAACTGGTTAATACAGACAAAGAGAAGA
TACTTTTCCAGCCCCAAACAAATGTCTATGACTCATTGGCCAAGGACTGCGTGGCTCACGGCTGCTCTGTGACAC
TCTTCCTCTTTCCTAGTCAGTATGTGGACGTGGCCTCGCTGGGGCTGGTTCCTCAGCTCACTGGAGGAACCCTTT
ACAAATACAACAATTTCCAGATGCACTTGGATAGACAACAATTTTTGAACGACCTCAGAAATGATATTGAAAAGA
AAATAGGCTTTGATGCTATTATGAGGGTTCGTACCAGCACAGGTTTCAGAGCCACTGATTTCTTTGGTGGAATCT
TGATGAACAACACCACCGATGTAGAAATGGCTGCCATCGATTGTGACAAGGCAGTGACCGTGGAGTTCAAGCACG
ATGACAAACTCAGTGAAGACAGTGGAGCCTTAATCCAGTGTGCTGTGCTTTACACGACAATCAGTGGTCAAAGAA
GACTTCGGATTCACAATCTTGGCTTAAACTGCAGCTCTCAGCTAGCTGATCTTTATAAGAGCTGTGAGACAGATG
CTCTTATCAACTTCTTTGCCAAGTCAGCTTTTAAAGCAGTTCTCCACCAGCCTTTGAAGGTCATCCGGGAAATTC
TAGTTAATCAGACTGCCCATATGTTGGCATGTTACCGGAAGAATTGTGCAAGTCCTTCTGCAGCAAGCCAGCTTA
TTCTACCAGATTCCATGAAAGTATTGCCAGTGTACATGAATTGCTTGTTGAAAAACTGTGTACTACTCAGCAGAC
CAGAGATCTCAACTGATGAACGAGCATACCAGAGACAGCTGGTCATGACCATGGGTGTGGCTGACTCTCAGCTTT
TCTTCTACCCACAACTTCTGCCCATACACACGTTAGATGTCAAGAGTACAATGTTACCTGCTGCCGTTCGTTGCT
CTGAGTCCCGTCTTTCAGAAGAAGGAATATTCTTACTGGCTAATGGTCTACACATGTTCCTGTGGTTGGGAGTAA
GCAGCCCACCAGAACTGATCCAAGGAATATTTAATGTGCCATCTTTTGCACATATCAACACAGATATGACATTGC
TGCCTGAAGTGGGAAACCCATACTCTCAACAACTCAGAATGATAATGGGTATTATCCAACAAAAGAGGCCATATT
CAATGAAGCTCACAATTGTAAAGCAGCGAGAACAACCAGAAATGGTTTTCCGACAGTTCCTGGTAGAAGACAAAG
GACTTTACGGAGGCTCTTCTTATGTGGATTTCCTTTGTTGTGTTCACAAGGAGATCTGTCAGCTGCTTAAT**TAA**T
TGAAACTTCTCTGTCATTGATGTTGCATTTCCAAGGAGATAATCTCCTTCTTGGTGCCTAATTTTCTAGATGATA
ATAGGCTAGTTTTGATTTCTTGCTCATTTTCAGAATAACTTTCCAGGAAGAGATGGCATTTAGAACTTCAGCTTT
GGTGCTCAGGTATAAAGCCAATTAAGGTACAATTGTACCATAAAGGGAACAATCTGTTTCTGATTGCACAGTTTC
TAATTTTTAAAACTGATGTGGTTTGCATTTCATAAAAGGCAAAGTTTACAGAACCATAAACATTCTCAATTTTCT

FIGURE 6610B

TTATGCTAGACATATAAATTATTTTTCAAACTGTATAGATTTGGGGTAAAAAGTTGTCTCAGTTCCTCTCCCAAT
TGCAATGAGAAAAAAAAGCTTAATTTTTACATTATACTTAATTTTCTAAAACCATGTAACTCCATTGAACATTTT
TCAACTTAAGGTCTGCATAGCAGACTTTTAATAACCTTGGGATTTATCTGGTAGAACAATATGTGTTCTACATTT
TTTTCATAATTATATATTGTGTATGTTAAAACTATTTTCCAGTTGTTTTGTCTGTAAAACTGTCTTTATCAATAT
GCTTAATGGTTCTTTGTACAATTTTGAAAGTTTCTACCTGTATATAATGGATGTTAACCAGTATCAATAAATCAC
TTCGTATAATCTT

FIGURE 6611

MSQQGYVATPPYSQPQPGIGLSPPHYGHYGDPSHTASPTGMMKPAGPLGATATRGMLPPGPPPPGPHQFGQNGAH
ATGHPPQRFPGPPPVNNVASSHAPYQPSAQSSYPGPISTSSVTQLGSQLSAMQINSYGSGMAPPSQGPPGPLSAT
SLQTPPRPPQPSILQPGSQVLPPPPTTLNGPGASPLPLPMYRPDGLSGPPPPNAQYQPPPLPGQTLGAGYPPQQA
NSGPQMAGAQLSYPGGFPGGPAQMAGPPQPQKKLDPDSIPSPIQVIENDRASRGGQVYATNTRGQIPPLVTTDCM
IQDQGNASPRFIRCTTYCFPCTSDMAKQAQIPLAAVIKPFATIPSNESPLYLVNHGESGPVRCNRCKAYMCPFMQ
FIEGGRRYQCGFCNCVNDVPPFYFQHLDHIGRRLDHYEKPELSLGSYEYVATLDYCRKSKPPNPPAFIFMIDVSY
SNIKNGLVKLICEELKTMLEKIPKEEQEETSAIRVGFITYNKVLHFFNVKSNLAQPQMMVVTDVGEVFVPLLDGF
LVNYQESQSVIHNLLDQIPDMFADSNENETVFASVIQAGMEALKAADCPGKLFIFHSSLPTAEAPGKLKNRDDKK
LVNTDKEKILFQPQTNVYDSLAKDCVAHGCSVTLFLFPSQYVDVASLGLVPQLTGGTLYKYNNFQMHLDRQQFLN
DLRNDIEKKIGFDAIMRVRTSTGFRATDFFGGILMNNTTDVEMAAIDCDKAVTVEFKHDDKLSEDSGALIQCAVL
YTTISGQRRLRIHNLGLNCSSQLADLYKSCETDALINFFAKSAFKAVLHQPLKVIREILVNQTAHMLACYRKNCA
SPSAASQLILPDSMKVLPVYMNCLLKNCVLLSRPEISTDERAYQRQLVMTMGVADSQLFFYPQLLPIHTLDVKST
MLPAAVRCSESRLSEEGIFLLANGLHMFLWLGVSSPPELIQGIFNVPSFAHINTDMTLLPEVGNPYSQQLRMIMG
IIQQKRPYSMKLTIVKQREQPEMVFRQFLVEDKGLYGGSSYVDFLCCVHKEICQLLN

FIGURE 6612

GAACAGTGTTACCTTGGAGCCTACAATGAGAGGTATTTCAAAATGAGTGAAGCATGACTCTCACAGATGAAGGCC
TAGACGCAGGATCTTTAATGGAAAAACACTTGGGCCACTTCAAGACGACAAACGCTCACTGGGCAAAACACCTTC
ACTGAAAAGAGACCTCATATTATGCAAAAAAAATCTTAAGAGGCCTCTGCCTTCAGAAGTTACAAGATGATCAAT
TCAACCTCCACACAGCCTCCAGATGAATCCTGCTCTCAGAACCTCCTGATCACTCAGCAGATCATTCCTGTGCTG
TACTGTATGGTCTTCATTGCGGGAATCCTACTCAATGGAGTGTCAGGATGGATATTCTTTTACGTGCCCAGCTCT
AAGAGTTTCATCATCTATCTCAAGAACATTGTTATTGCTGACTTTGTGATGAGCCTGACTTTTCCTTTCAAGATC
CTTGGTGACTCAGGCCTTGGTCCCTGGCAGCTGAACGTGTTTGTGTGCAGGGTCTCTGCCGTGCTCTTCTACGTC
AACATGTACGTCAGCATTGTGTTCTTTGGGCTCATCAGCTTTGACAGGTATTATAAAATTGTAAAGCCTCTTTGG
ACTTCTTTCATCCAGTCAGTGAGTTACAGCAAACTTCTGTCAGTGATAGTATGGATGCTCATGCTCCTCCTTGCT
GTTCCAAATATTATTCTCACCAACCAGAGTGTTAGGGAGGTTACACAAATAAAATGTATAGAACTGAAAAGTGAA
CTGGGACGGAAGTGGCACAAAGCATCAAACTACATCTTCGTGGCCATCTTCTGGATTGTGTTTCTTTTGTTAATC
GTTTTCTATACTGCTATCACAAAGAAAATCTTTAAGTCCCACCTTAAGTCAAGTCGGAATTCCACTTCGGTCAAA
AAGAAATCTAGCCGCAACATATTCAGCATCGTGTTTGTGTTTTTTGTCTGTTTTGTACCTTACCATATTGCCAGA
ATCCCCTACACAAAGAGTCAGACCGAAGCTCATTACAGCTGCCAGTCAAAAGAAATCTTGCGGTATATGAAAGAA
TTCACTCTGCTACTATCTGCTGCAAATGTATGCTTGGACCCTATTATTTATTTCTTTCTATGCCAGCCGTTTAGG
GAAATCTTATGTAAGAAATTGCACATTCCATTAAAAGCTCAGAATGACCTAGACATTTCCAGAATCAAAAGAGGA
AATACAACACTTGAAAGCACAGATACTTTGTGAGTTCCTACCCTCTTCCAAAGAAAGACCACGTGTGCATGTTGT
CATCTTCAATTACATAACAGAAATCAATAAGATATGTGCCCTCATCATAAATATCATCTCTAGCACTGCCATCCA
ATTTAGTTCAATAAAATTCAAATATAAGTTTCCATGCTTTTTTGTAACATCAAAGAAAACATACCCATCAGTAAT
TTCTCTAATACTGACCTTTCTATTCTCTATTAATAAAAAATTAATACATACAATTATTCAATTCTATTATATTAA
AATAAGTTAAAGTTTATAACCACTAGTCTGGTCAGTTAATGTAGAAATTTAAATAGTAAATAAAACACAACATAA
TCAAAGACAACTCACTCAGGCATCTTCTTTCTCTAAATACCAGAATCTAGTATGTAATTGTTTTCAACACTGTCC
TTAAAGACTAACTTGAAAGCAGGCACAGTTTGATGAAGGGCTAGAGAGCTGTTTGCAATAAAAAGTCAGGTTTTT
TTCCTGATTTGAAGAAGCAGGAAAAGCTGACACCCAGACAATCACTTAAGAAACCCCTTATTGATGTATTTCATG
GCACTGCAAAGGAAGAGGAATATTAATTGTATACTTAGCAAGAAAATTTTTTTTTTCTGATAGCACTTTGAGGAT
ATTAGATACATGCTAAATATGTTTTCTACAAAGACTTACGTCATTTAATGAGCCTGGGGTTCTGGTGTTAGAATA
TTTTTAAGTAGGCTTTACTGAGAGAAACTAAATATTGGCATACGTTATCAGCAACTTCCCCTGTTCAATAGTATG
GGAAAAATAAGATGACTGGGAAAAAGACACACCCACACCGTAGAACATATATTAATCTACTGGCGAATGGGAAAG
GAGACCATTTTCTTAGAAAGCAAATAAACTTGATTTTTTTAAATCTAAAATTTACATTAATGAGTGCAAAATAAC
ACATAAAATGAAAATTCACACATCACATTTTTCTGGAAAACAGACGGATTTTACTTCTGGAGACATGGCATACGG
TTACTGACTTATGAGCTACCAAAACTAAATTCTTTCTCTGCTATTAACTGGCTAGAAGACATTCATCTATTTTTC
AAATGTTCTTTCAAAACATTTTTATAAGTAATGTTTGTATCTATTTCATGCTTTACTGTCTATATACTAATAAAG
AAATGTTTTAATACTG

FIGURE 6613

MINSTSTQPPDESCSQNLLITQQIIPVLYCMVFIAGILLNGVSGWIFFYVPSSKSFIIYLKNIVIADFVMSLTFP
FKILGDSGLGPWQLNVFVCRVSAVLFYVNMYVSIVFFGLISFDRYYKIVKPLWTSFIQSVSYSKLLSVIVWMLML
LLAVPNIILTNQSVREVTQIKCIELKSELGRKWHKASNYIFVAIFWIVFLLLIVFYTAITKKIFKSHLKSSRNST
SVKKKSSRNIFSIVFVFFVCFVPYHIARIPYTKSQTEAHYSCQSKEILRYMKEFTLLLSAANVCLDPIIYFFLCQ
PFREILCKKLHIPLKAQNDLDISRIKRGNTTLESTDTL

FIGURE 6614A

GCTCCGGGCCGCGCTGCCCGCGCTCCTGCTGCCGTTGCTGGGCCTCGCCGCTGCTGCCGTCGCGGACTGTCCTTC
ATCTACTTGGATTCAGTTCCAAGACAGTTGTTACATTTTTCTCCAAGAAGCCATCAAAGTAGAAAGCATAGAGGA
TGTCAGAAATCAGTGTACTGACCATGGAGCGGACATGATAAGCATACATAATGAAGAAGAAAATGCTTTTATACT
GGATACTTTGAAAAAGCAATGGAAAGGCCCAGATGATATCCTACTAGGCATGTTTTATGACACAGATGATGCGAG
TTTCAAGTGGTTTGATAATTCAAATATGACATTTGATAAGTGGACAGACCAAGATGATGATGAGGATTTAGTTGA
CACCTGTGCTTTTCTGCACATCAAGACAGGTGAATGGAAAAAAGGAAATTGTGAAGTTTCTTCTGTGGAAGGAAC
ACTATGCAAAACAGCTATCCCATACAAAAGGAAATATTTATCAGATAACCACATTTTAATATCAGCATTGGTGAT
TGCTAGCACGGTAATTTTGACAGTTTTGGGAGCAATCATTTGGTTCCTGTACAAAAAACATTCTGATTCTCGTTT
CACCACAGTTTTTTCAACCGCACCCCAATCACCTTATAATGAAGACTGTGTTTTGGTAGTTGGAGAAGAAAATGA
ATATCCTGTTCAATTTGACTAAGTTTTTGGTAATCTTGCACTAAGACATCAACAAATGCCCTGGCAGAGATAACT
TGGGAAAGATTTTAATATAAAACTTGACATTGGATATTAGAGCTTTAATGGTATTCCTTATTCCAGTAACATTTT
TATGTACTCATCTGCTGTGAAAAGTCTTTAGGTTCATTAAAAAAACAGGTTTTAGAAATGATCTTAGATCTAATA
TAGTGATTTTAAGCATCCCGTCAAAGGCAGAATCTGTCACTTGAATGAAGGAAAGCTTAAAGCCCAAGCAGATAA
AAATAAAAGCCCAGCCTATTTGTCTTGCCTGCTGTATCTTCCCTATTTAGTTGACCCACTTTAGTTTATATGTTT
ATTAGTAAACATGAAATGGGGAATAAGTGATTTTAAGTACATCCCATACATTTAAATATCTTTGATAATTGTTAT
TTTTTTGGCAGATAATTCCTCTAGAATGTGTATCTTTTTATGATTTAGATGAAGAAAATTTTACAACTTTTAACA
CCCCACACCAATTTTAGTTTCATTACTTTTACACACACCATTTTATCACAAATGACTCAAGTTTTAATGAATGTT
TATAAATTATTTGAAACAAAATATGATCGCTGTGTCCAGGATGGCATAGAGAAAGCTGGCAATTAGGTTAACACT
TACATATTATAGTGCCCCTTTAAGGATTTCTCTCTTGCCACCATACCTTTTGTACTTTCCCCTATACAAGATGTA
TCTCATTCTCCTCAAGCATTTATAAATTTTTCCTTCAATGACATGAAAACTGTGCAAGCAAAAACCGAAGAAAAA
CACTTAAGTACAACTGTAGTGACAGTGATCAAAGTTTTCAGTGCATTTATTGTACATTTTAAGAAAAAGGTGAAA
ATCATTTGGGGAGTAAAAAAATGAAAAAGCTGAAACGAGTAATTTTCCTCACCATCAATAAACCAAAAACAGGAA
AGATAAAGAATGTATAAATTTCACGTAAATTAGTCACGTATCACTTATCAATGGGGATACGTTCTAAGAAATGCA
TAGTTAGGGAATCTTGTGTGAAAATCAGCTTGTATTTACACAAACCCAGATGGTAGAGCCTATTTTGTCCCAAAC
CTACACAGCATGTTACTGTGCTGAATACTGCAGACAATTGTAACACAATATTTGTGTATCTAAATATAGAAAAGG
TACAGTAAAAATATGGTCTACTAAGGAAACACTGTTCTATATGTGGTCCATTACTGACTGAAGTATACTGTCTAG
AAGTCTGAGGCTCAAAGAAAAGTAATCCCTCTTCTGAATCCACACCCCATCAATTATCTTACTTTCTTCTGGGGA
GATAGATAGATATACTATCTCACTAGCTTGACTAATGGCAACAAAGTTCCAGCTTGTGTAGTCTCTTTTTATTGA
CCACATGAATCGAAAACACTCATCACAATTAATGGCACTATCATTAATGAGACATGAGTAACTAAAAAGTGATAG
AAAACTATTACAGTGCGGCTACATGGTACTGAAAATGCAGGCATTACACCAGCTGTTACACAAGCACAAGCATGC
TCTGTAAGAGCTTTACATTTCTGAGATTTTGTATAGTGATTGAGATGTCTATTTTATTATTGATAGACTATTACT
AATGTCAATATTGAACACTACCCTGGAATTCCTGCCTGGTTTTCCTACCCAAATTGTACCACTCCTTGAAGAACT
ACAGGCACAGTAAAAAAATATGGCGTATTATGTGAACTAAAAGAGTTCTAAAGGAGTTCTTAAAGGAGTGGTAGA
ATTTGGGTAGGAAAGTGATTAAGTCCAACTTAAAACCAACAGTCTCAAACGTCTACAACTACAATGTCCAATGAG
CCACTAGCCACATGAGGCTATTTAAGTAAATTTAGTTTAAAATCCAGTTTTCGAATTACATTAGCCACATTGTCA
AGTGTTCAAATCACAGGTGGTTAGTGGCTACTGTACTGGGCAACATACATTATAGAACATTTTCATTATAGGAAG
TTTTATTGGGCAGTGCTGCTCTTAAATCCTACCTTCCACTCAACTCCCATACAACTTTCTTTTGTACATTTTGAT
ACTTTCTACCTAATGGCAGCTCTTCCAAAATAGCTGCTTTAAACTCTGATTTAATTTTCAATATTTGGTTTCATT
TTTCAACAGGCCAAGAGGCCTCTGGTAATGAAGTGCTATATATATATATATATGACGGAGTCTCACTGTGCTGCC
CAGGCTACAGTGCAGTGGCTCGATCTTGGCTCTCTCCAATCTCCGCCTTGCAGGTTTTCAAGCAATTCTCCTGCC
TCAGCCTCCTTAGTAGCTGGGACCACAGACATCTGTCACCACACCCAGCTAACTTTTTGTATTTTTGGTAGAGAC
GGGGTTTCGCCATATTGACTGGGCTGGTCTCAAACTCCTGACCTCAAGTGATCCACCCACCTTGGTCTCCCAAAG
TGCTGGGATTACATGCGTGAGCCACCACACTTGGCCTACATTTTTTCTTTATATACCAGAACATCTATAACAGGC
ACCTTATCTACTCATTAGTGAAGAGATAATTGGATTACACAGGCAGGCTTGTTTACTACATCCAGAATGTAGAAA
CTGCTTTCTTCAACATCTTGGTTCTAGCTAGTAATAACAATATAATTCTTTGGCAGATATTCAGAATAACATTTT
AAACTACATTTTCTTAGAAAATTGCATTCTTGTAGTGAGCAGTGTATGGTCTCTTTTGTTCAGAATTTAAAACTG
ATAACCAATGAAAGCCTTTTCTCTTATTCCTCTACCGTCATTTACATGATAATCTGAAGCTAATATGACAATATT
TAAATACTAAGTGGTACTAGGGAACTACAAGAATACTGTAAAGCTTAAGCCATTGTTATCACTGTCATTTAGCAT

FIGURE 6614B

TTAATAACAAAACTATACAGAATTATGTGCATACCAATGAATGTTTTGTACCATCTAGTTAAATTTTTTAAATAA
AGTTTTATGGGTTAAGCAG

FIGURE 6615

MISIHNEEENAFILDTLKKQWKGPDDILLGMFYDTDDASFKWFDNSNMTFDKWTDQDDDEDLVDTCAFLHIKTGE
WKKGNCEVSSVEGTLCKTAIPYKRKYLSDNHILISALVIASTVILTVLGAIIWFLYKKHSDSRFTTVFSTAPQSP
YNEDCVLVVGEENEYPVQFD

FIGURE 6616A

AAATGTAGAGAAGCAGCCGATAAAATAGCATTGCCTGAAGAAGTTTGGAGGCTGAGAGCAGCAGTAGACTGGCCA
ACTGCAGAGCAAGTTGTTTCTCCAGCCGTGCGGTGCAGCCTCATGCCCCCAACCCAGCTTAGCCACTGTAAGAAG
ACGTTCACTGTACAGACGACCAAACTTGCCGTGGAAGAGACAGTTGTGAGATTCCCTTGCAAATTTACATACGAG
AATGGCTTGTGAAATCATGCCTCTGCAAAGTTCACAGGAAGATGAAAGACCTCTGTCACCTTTCTATTTGAGTGC
TCATGTACCCCAAGTCAGCAATGTGTCTGCAACCGGAGAACTCTTAGAAAGAACCATCCGATCAGCTGTAGAACA
ACATCTTTTTGATGTTAATAACTCTGGAGGTCAAAGTTCAGAGGACTCAGAATCTGGAACACTATCAGCATCTTC
TGCCACATCTGCCAGACAGCGCCGCCGCCAGTCCAAGGAGCAGGATGAAGTTCGACATGGGAGAGACAAGGGACT
TATCAACAAAGAAAATACTCCTTCTGGGTTCAACCACCTTGATGATTGTATTTTGAATACTCAGGAAGTCGAAAA
GGTACACAAAAATACTTTTGGTTGTGCTGGAGAAAGGAGCAAGCCTAAACGTCAGAAATCCAGTACTAAACTTTC
TGAGCTTCATGACAATCAGGACGGTCTTGTGAATATGGAAAGTCTCAATTCCACACGATCTCATGAGAGAACTGG
ACCTGATGATTTTGAATGGATGTCTGATGAAAGGAAAGGAAATGAAAAAGATGGTGGACACACTCAGCATTTTGA
GAGCCCCACAATGAAGATCCAGGAGCATCCCAGCCTATCTGACACCAAACAGCAGAGAAATCAAGATGCCGGTGA
CCAGGAGGAGAGCTTTGTCTCCGAAGTGCCCCAGTCGGACCTGACTGCATTGTGTGATGAAAAGAACTGGGAAGA
GCCTATCCCTGCTTTCTCCTCCTGGCAGCGGGAGAACAGTGACTCTGATGAAGCCCACCTCTCGCCGCAGGCTGG
GCGCCTGATCCGTCAGCTGCTGGACGAAGACAGCGACCCCATGCTCTCTCCTCGGTTCTACGCTTATGGGCAGAG
CAGGCAATACCTGGATGACACAGAAGTGCCTCCTTCCCCACCAAACTCCCATTCTTTCATGAGGCGGCGAAGCTC
CTCTCTGGGGTCCTATGATGATGAGCAAGAGGACCTGACACCTGCCCAGCTCACACGAAGGATTCAGAGCCTTAA
AAAGAAGATCCGGAAGTTTGAAGATAGATTCGAAGAAGAGAAGAAGTACAGACCTTCCCACAGTGACAAAGCAGC
CAATCCGGAGGTTCTGAAATGGACAAATGACCTTGCCAAATTCCGGAGACAACTTAAAGAATCAAAACTAAAGAT
ATCTGAAGAGGACCTAACTCCCAGGATGCGGCAGCGAAGCAACACACTCCCCAAGAGTTTTGGTTCCCAACTTGA
GAAAGAAGATGAGAAGAAGCAAGAGCTGGTGGATAAAGCAATAAAGCCCAGTGTTGAAGCCACATTGGAATCTAT
TCAGAGGAAGCTCCAGGAGAAGCGAGCGGAAAGCAGCCGCCCTGAGGACATTAAGGATATGACCAAAGACCAGAT
TGCTAATGAGAAAGTGGCTCTGCAGAAAGCTCTGTTATATTATGAAAGCATTCATGGACGGCCGGTAACAAAGAA
CGAACGGCAGGTGATGAAGCCACTATACGACAGGTACCGGCTGGTCAAACAGATCCTCTCCCGAGCTAACACCAT
ACCCATCATTGGTTCCCCCTCCAGCAAGCGGAGAAGCCCTTTGCTGCAGCCAATTATCGAGGGCGAAACTGCTTC
CTTCTTCAAGGAGATAAAGGAAGAAGAGGAGGGGTCAGAAGACGATAGCAATGTGAAGCCAGACTTCATGGTCAC
TCTGAAAACCGATTTCAGTGCACGATGCTTTCTGGACCAATTCGAAGATGACGCTGATGGATTTATTTCCCCAAT
GGATGATAAAATACCATCAAAATGCAGCCAGGACACAGGGCTTTCAAATCTCCATGCTGCCTCAATACCTGAACT
CCTGGAACACCTCCAGGAAATGAGAGAAGAAAAGAAAAGGATTCGAAAGAAACTTCGGGATTTTGAAGACAACTT
TTTCAGACAGAATGGAAGAAATGTCCAGAAGGAAGACCGCACTCCTATGGCTGAAGAATACAGTGAATATAAGCA
CATAAAGGCGAAACTGAGGCTCCTGGAGGTGCTCATCAGCAAGAGAGACACTGATTCCAAGTCCATGTGAGGGGC
ATGGCCAAGCACAGGGGGCTGGCAGCTGCGGTGAGAGTTTACTGTCCCCAGAGAAAGTGCAGCTCTGGAAGGCAG
CCTTGGGGCTGGCCCTGCAAAGCATGCAGCCCTTCTGCCTCTAGACCATTTGGCATCGGCTCCTGTTTCCATTGC
CTGCCTTAGAAACTGGCTGGAAGAAGACAATGTGACCTGACTTAGGCATTTTGTAATTGGAAAGTCAAGACTGCA
GTATGTGCACATGCGCACGCGCATGCACGCACACACACACACAGTAGTGGAGCTTTCCTAACACTAGCAGAGATT
AATCACTACATTAGACAACACTCATCTACAGAGAATATACACTGTTCTTCCCTGGATAACTGAGAAACAAGAGAC
CATTCTCTGTCTAACTGTGATAAAAACAAGCTCAGGACTTTATTCTATAGAGCAAACTTGCTGTGGAGGGCCATG
CTCTCCTTGGACCCAGTTAACTGCAAACGTGCATTGGAGCCCTATTTGCTGCCGCTGCCATTCTAGTGACCTTTC
CACAGAGCTGCGCCTTCCTCACGTGTGTGAAAGGTTTTCCCCTTCAGCCCTCAGGTAGATGGAAGCTGCATCTGC
CCACGATGGCAGTGCAGTCATCATCTTCAGGATGTTTCTTCAGGACTTCCTCAGCTGACAAGGAATTTTGGTCCC
TGCCTAGGACCGGGTCATCTGCAGAGGACAGAGAGATGGTAAGCAGCTGTATGAATGCTGATTTTAAAACCAGGT
CATGGGAGAAGAGCCTGGAGATTCTTTCCTGAACACTGACTGCACTTACCAGTCTGATTTTATCGTCAAACACCA
AGCCAGGCTAGCATGCTCATGGCAATCTGTTTGGGGCTGTTTTGTTGTGGCACTAGCCAAACATAAAGGGGCTTA
AGTCAGCCTGCATACAGAGGATCGGGGAGAGAAGGGGCCTGTGTTCTCAGCCTCCTGAGTACTTACCAGAGTTTA
ATTTTTTTAAAAAAAATCTGCACTAAAATCCCCAAACTGACAGGTAAATGTAGCCCTCAGAGCTCAGCCCAAGGC
AGAATCTAAATCACACTATTTTCGAGATCATGTATAAAAAGAAAAAAAAGAAGTCATGCTGTGTGGCCAATTATA
ATTTTTTTCAAAGACTTTGTCACAAAACTGTCTATATTAGACATTTTGGAGGGACCAGGAAATGTAAGACACCAA
ATCCTCCATCTCTTCAGTGTGCCTGATGTCACCTCATGATTTGCTGTTACTTTTTTAACTCCTGCGCCAAGGACA

FIGURE 6616B

GTGGGTTCTGTGTCCACCTTTGTGCTTTGCGAGGCCGAGCCCAGGCATCTGCTCGCCTGCCACGGCTGACCAGAG
AAGGTGCTTCAGGAGCTCTGCCTTAGACGACGTGTTACAGTATGAACACACAGCAGAGGCACCCTCGTATGTTTT
GAAAGTTGCCTTCTGAAAGGGCACAGTTTTAAGGAAAAGAAAAAGAATGTAAAACTATACTGACCCGTTTTCAGT
TTTAAAGGGTCGTGAGAAACTGGCTGGTCCAATGGGATTTACAGCAACATTTTCCATTGCTGAAGTGAGGTAGCA
GCTCTCTTCTGTCAGCTGAATGTTAAGGATGGGGAAAAAGAATGCCTTTAAGTTTGCTCTTAATCGTATGGAAGC
TTGAGCTATGTGTTGGAAGTGCCCTGGTTAATCCATACACAAAGACGGTACATAATCCTACAGGTTTAAATGTAC
ATAAAAATATAGTTTGGAATTCTTTGCTCTACTGTTTACATTGCAGATTGCTATAATTTCAAGGAGTGAGATTAT
AAATAAAATGATGCACTTTAGGATGTTTCCTATTTTTGAAATCTGAACATGAATCATTCACATGACCAAAAATTG
TGTTTTTTTAAAAATACATGTCTAGTCTGTCCTTTAATAGCTCTCTTAAATAAGCTATGATATTAATCAGATCAT
TACCAGTTAGCTTTTAAAGCACATTTGTTTAAGACTATGTTTTTGGAAAAATACGCTACAGAATTTTTTTTTAAG
CTACAAATAAATGAGATGCTACTAATTGTTTTGGAATCTGTTGTTTCTGCCAAAGGTAAATTAACTAAAGATTTA
TTCAGGAATCCCCATTTGAATTTGTATGATTCAATAAAAGAAAACACCAAGTAAGTTATATAAAAT

FIGURE 6617

MACEIMPLQSSQEDERPLSPFYLSAHVPQVSNVSATGELLERTIRSAVEQHLFDVNNSGGQSSEDSESGTLSASS
ATSARQRRRQSKEQDEVRHGRDKGLINKENTPSGFNHLDDCILNTQEVEKVHKNTFGCAGERSKPKRQKSSTKLS
ELHDNQDGLVNMESLNSTRSHERTGPDDFEWMSDERKGNEKDGGHTQHFESPTMKIQEHPSLSDTKQQRNQDAGD
QEESFVSEVPQSDLTALCDEKNWEEPIPAFSSWQRENSDSDEAHLSPQAGRLIRQLLDEDSDPMLSPRFYAYGQS
RQYLDDTEVPPSPPNSHSFMRRRSSSLGSYDDEQEDLTPAQLTRRIQSLKKKIRKFEDRFEEEKKYRPSHSDKAA
NPEVLKWTNDLAKFRRQLKESKLKISEEDLTPRMRQRSNTLPKSFGSQLEKEDEKKQELVDKAIKPSVEATLESI
QRKLQEKRAESSRPEDIKDMTKDQIANEKVALQKALLYYESIHGRPVTKNERQVMKPLYDRYRLVKQILSRANTI
PIIGSPSSKRRSPLLQPIIEGETASFFKEIKEEEEGSEDDSNVKPDFMVTLKTDFSARCFLDQFEDDADGFISPM
DDKIPSKCSQDTGLSNLHAASIPELLEHLQEMREEKKRIRKKLRDFEDNFFRQNGRNVQKEDRTPMAEEYSEYKH
IKAKLRLLEVLISKRDTDSKSM

FIGURE 6618

CCGGAGGAGTCCGAGAGGAAGCGGAGGCGCGAGCTGGAGGCGGCGGCTCCCGTCGGCCTCCGGCAGGACTGAGCG
CTGGGAGGCCGGAAGGCGGGCGCGCACGGCGGAGAGGCGGGCGGGAGGCCGGAGCATATTAATGAAAAGTGCCAT
AAACTGAAAAACCAAACATGAGGGTAGCAGGTGCTGCAAAGTTGGTGGTAGCTGTGGCAGTGTTTTTACTGACAT
TTTATGTTATTTCTCAAGTATTTGAAATAAAAATGGATGCAAGTTTAGGAAATCTATTTGCAAGATCAGCATTGG
ACACAGCTGCACGTTCTACAAAGCCTCCCAGATATAAGTGTGGGATCTCAAAAGCTTGCCCTGAGAAGCATTTTG
CTTTTAAAATGGCAAGTGGAGCAGCCAACGTGGTGGGACCCAAAATCTGCCTGGAAGATAATGTTTTAATGAGTG
GTGTTAAGAATAATGTTGGAAGAGGGATCAATGTTGCCTTGGCAAATGGAAAAACAGGAGAAGTATTAGACACTA
AATATTTTGACATGTGGGGAGGAGATGTGGCACCATTTATTGAGTTTCTGAAGGCCATACAAGATGGAACAATAG
TTTTAATGGGAACATACGATGATGGAGCAACCAAACTCAATGATGAGGCACGGCGGCTCATTGCTGATTTGGGGA
GCACATCTATTACTAATCTTGGTTTTAGAGACAACTGGGTCTTCTGTGGTGGGAAGGGCATTAAGACAAAAAGCC
CTTTTGAACAGCACATAAAGAACAATAAGGATACAAACAAATATGAAGGATGGCCTGAAGTTGTAGAAATGGAAG
GATGCATCCCCCAGAAGCAAGACTAATGGAAATGTGGAGAGAATTGAAGAAAGCGCACTTTCACTCTTAATGGGA
GAGCTATAAATGGCAGAGCTATGTGTAAATATTTTAAGAGCATGCAGCCATCTTGGTGTGTGCATGAGTATTGTC
TCTTTTGATATCAGGATTATTTATTGCTAACGTAAATAGATAGCATTGTAAATAATCATCACAATGATCAAATCA
CTGAACCATGTCTCCGCACATTTCCCTAAAAGTACAATGTTTAGACTGCTATGGTAATACATATTTTAAATTCTA
AAAGCATACACAATGTGTAACTGAATGGTTTGTGAAAAATATATTGATATATATACTAGTTGCTATGAAAATATC
ATGGAATAATAGGGATTTTAGGGTGGATACTTTATTTTCTTTTATGTTTCTATATGTTGCGTTGTGATGACATTA
TCTTTTAAATTAAAAAGAGATTTGGCTAGTTGTGTGTGTAATGTTACTTTACAGTCCGACTCTCCTGATGTACCT
CTTTTCATGATCTTTTTCTTTCCTTCCCAAGAAACTGAGGAATGTTTAATATGAAAACATACATCGGATATGTGA
AAAGCACAACAAAATTCTTAATGTACACAGTAAAAAAGTAAATATATAAATGTAGATGGCATTTAGGACCACAGC
TTGCTGGATTTGTGTTAGCTATGGGAATAACTTGATTTTGTATAAGCTATTTAGAGTGAGGCTGGAGGTGGCAGC
TTCACAGAACTGGAGAACCAGGCCAAGTCCCCTCCCCAACCTAATTAGGTCATTCAGGACAGCTAAGTCAGTATA
TTTAGAGCAATACTAGCATACGTTTTTCTTAATTGTTATCAGCATTGACCAAGTGGTTTGGAAGGAGGCATGCTT
TAATATCACAATAATTTTGATTTGTAAACCAAGAAATTAATCCTGTGTTTATCTAACTTCATAATAGCAATTATT
GCCCGAAGCTATAGTGGCATATTTACAAAAGTTCTTATTACTGGGCGGACTGATAACATTTAAAAAATAATTGTG
TTTGACCCCAAATGACTTTATACCCAATTCTACATAAAAATATAGAAGATCTATCTTTTTTTGTTACCTTCAGAT
GTTCACTAAATAACTCAGTTTTTAAGCAGAAGTTTTCAGGGCATTAAATATATGTTGTGTATGAAGTATCTCAAA
CTGGAACATAAATTTAGTGATCAAACTGCCATTCACAGTGTAAGGCAGCACTTAAATTTCGAACCTAAAGTTTAG
ATGCATTGTATAAAAAAACCTAAAAGCAGTATCTGTTATTTAGCTGTAAACCAAGTTGGAAGCTATTCGGATAAT
TTCTTAAATATTGATGAACTTTGGAGTACTGTTTCTTCCTTCAAACTGAATGTAATTAATTCATGAATAAATGCA
CCTTATATGTTTAAACAATCTTTGTATACTTTTGGGATTTTTGGTGCTTATATGCTAAATCACATTCAGCATGTG
TATTTTGACATTTAAAATACTTCCCTCAATTCTGTAAATTAAAAGAATAGTTATTTTACAGTTCCAGGGATTGTG
AAATAAATGTTGCAGTTTTTTAAAATAATGAAAATAAATACTCTTGGTTTTGCTTTGTGAAAAAAAAAAAAAAAA

FIGURE 6619

MRVAGAAKLVVAVAVFLLTFYVISQVFEIKMDASLGNLFARSALDTAARSTKPPRYKCGISKACPEKHFAFKMAS
GAANVVGPKICLEDNVLMSGVKNNVGRGINVALANGKTGEVLDTKYFDMWGGDVAPFIEFLKAIQDGTIVLMGTY
DDGATKLNDEARRLIADLGSTSITNLGFRDNWVFCGGKGIKTKSPFEQHIKNNKDTNKYEGWPEVVEMEGCIPQK
QD

FIGURE 6620A

CAGCTGCCAGCCGAGGAGGCGCGGCGGAGAGGGGACTGCGGTCAGCTGCGTCCACTTGGGGCTGTGCGGCGGTCC
CGCGCCCGGCGATGTTCCCGGGCACTCCCTGAGTAGCGGCAGCTTATCCCCCGCCCGCTAGCCCGCCCTGGTCCC
CGGCTCGCTCGCTGGCTGGCGCGGCCCCGGCCCCGCTCTGCGTCGGCCCCGCCGCGGTGGAGGCGCGCGAGGGGG
ACGCGGCCGGGGATGAGCGGATTGCGGGTGAACTCGCCGCCCGGGGGCCCCGCGAAGCCGTGAGCCGCTGCTTTT
CTCCGAGTCGCCGCCCTGCCCTTGGATTTGAGATCATGTCCATCCACATCGTGGCGCTGGGGAACGAGGGGGACA
CATTCCACCAGGACAACCGGCCGTCGGGGCTTATCCGCACTTACCTGGGGAGAAGCCCTCTGGTCTCCGGGGACG
AGAGCAGCTTGTTGCTGAACGCGGCCAGCACGGTCGCGCGTCCGGTGTTCACCGAGTATCAGGCCAGTGCGTTTG
GGAATGTCAAGCTGGTGGTCCACGACTGTCCCGTCTGGGACATATTTGACAGTGATTGGTACACTTCTCGAAATC
TAATTGGGGGCGCTGACATCATTGTGATCAAATACAACGTTAATGACAAGTTTTCATTCCATGAAGTAAAGGATA
ATTATATTCCAGTGATAAAAAGAGCATTAAATTCAGTTCCAGTAATTATTGCTGCTGTTGGTACCAGACAAAATG
AAGAGTTACCTTGTACATGCCCACTATGTACCTCAGACAGAGGGAGCTGTGTTAGTACAACTGAAGGGATCCAAC
TTGCAAAAGAACTAGGAGCAACCTATCTTGAACTCCACAGCCTTGATGACTTCTACATAGGAAAGTATTTTGGAG
GAGTGTTGGAGTATTTTATGATTCAAGCCTTAAATCAGAAGACAAGTGAAAAAATGAAGAAAAGAAAAATGAGCA
ACTCCTTTCATGGAATTAGACCACCTCAACTTGAACAACCAGAAAAAATGCCTGTCTTAAAGGCTGAAGCGTCAC
ATTATAACTCTGACTTAAATAACTTGCTGTTCTGCTGCCAGTGTGTGGACGTGGTATTTTATAACCCCGATTTAA
AGAAAGTTGTAGAGGCCCACAAGATCGTTCTCTGCGCTGTAAGCCATGTTTTCATGCTGCTTTTCAATGTGAAGA
GTCCCACTGACATTCAGGATTCCAGTATCATCCGAACTACCCAGGATCTTTTTGCTATAAACAGAGATACTGCAT
TTCCAGGTGCTAGCCATGAATCTTCAGGCAACCCACCATTACGAGTCATTGTTAAAGACGCCCTCTTCTGTTCTT
GTTTATCAGACATCCTTCGCTTCATTTATTCAGGTGCTTTTCAGTGGGAAGAATTGGAAGAAGATATCAGGAAGA
AGTTGAAAGATTCTGGGGATGTTTCAAATGTAATCGAGAAAGTTAAATGCATTTTAAAAACACCAGGAAAGATTA
ATTGCCTAAGGAATTGCAAAACCTATCAAGCCAGAAAACCTTTGTGGTTTTATAACACTTCCCTCAAGTTTTTCC
TTAATAAGCCGATGCTTGCCGATGTTGTCTTCGAAATTCAAGGTACGACAGTGCCAGCCCACAGGGCCATCCTGG
TGGCCCGTTGTGAAGTGATGGCAGCCATGTTTAATGGTAATTACATGGAAGCAAAGAGTGTCCTGATTCCCGTTT
ATGGTGTTTCCAAAGAGACTTTCTTGTCATTTTTAGAATACCTGTACACAGACTCCTGCTGCCCAGCTGGCATAT
TCCAGGCCATGTGTCTCCTGATCTGTGCCGAGATGTACCAAGTGTCCAGACTGCAGCACATCTGTGAGCTGTTCA
TCATTACCCAGCTGCAGAGCATGCCAAGCAGGGAACTGGCATCCATGAACCTTGATATAGTTGACCTGCTTAAAA
AGGCCAAGTTTCACCACTCTGATTGCCTTTCAACCTGGCTACTTCATTTCATTGCTACTAACTACCTCATCTTCA
GTCAAAAGCCTGAATTTCAGGATCTTTCAGTGGAAGAACGCAGTTTTGTTGAAAAGCACAGATGGCCGTCGAATA
TGTACTTGAAGCAGCTTGCGGAATACAGGAAGTATATTCACTCCCGGAAATGTCGTTGCTTAGTAATGTAACCTG
GAGCTTTTATACACTACATTTCTTTTTTATTATTATGAAGAATGGGATACCTCCAGGTTCCAGTAAAATTCTTCT
GACCGAAACCAATGTGGGTGTTAGAAAAATTACCATATAGCTTAATATGTTTATTAGTTCTCTTTGGAAAAAAAC
TACCACTGTGGTCTTAAAAGGGAACAAAATATACCATAGGCTAAAACTAAGGCTTTCACTCTAGAATGCAAAGCT
GTTTTGCAGCTGTTTTCCCTTAAAGATGTCCTGTTGCTTTAGTGATATTTAGACCCCTCTCAGTTAAGAAATGCT
TAGATTAAAAAAAAAAAATTACGTAGGATTAATACAGAAATTTAATCATGTCTGATTAATTGCTCTATTAAAATA
AGGGGCATTTAAAGACCCAGCATAACCATTTGTATAATGAGAAATCTAGGGGAAAACCAATCAGTCCAACATGAG
ATTTTAGGAATAGAAATTTGCCGGCCATTTGGAAAGTGAAATGCCACTTAGTTCTCAATTGATGACAGTGTTTGA
ATCATCATAAAAAAAATACCTGCTTTTCATCTGGACAACCCAATTGAGCCACTTTATCTCCTTTTGGCAATCTGA
GTAGGCGGGGAACCTAGGCAGGGCTGGCTTTCTTAGCGTGTAACTTGTGTAGCAGCACAGGGCCCACACTTAGAA
GGACCCCACACTTGGTTCAAGGCTCTGCTATAGCGGAAATTCTTAATAATGTTTGAAGAAGGGCCCCATGATTTC
ATTTTGTGCTGAGCCCTCAAAATTATGTCTGTTTCGTGGTGGGAAATATCCTATGTTTTCTTGCTCAAACACCTT
TCTCTCTGAAAGCAGAAAAAGGCACTGATATAAAGGGAAGAGAAGGAGGCTCACCGGAGGGAAGAGAACATAGTG
AAGATTCCCGCCTTTGGGGAGGTCTGGACCACCCAGGGCCTCCACTGCCACCTTGGCTGGCAAGGGAGAAATGTG
TTGTGTTGTCTTAGCTTTAAAACAGTCACAGTTCTTGCTCTATCATAGATGAACAAATACTTTCTTGATCATTCT
GTAAGACCAGGAGGTTGGTAAGAGTGACTAACCAGCCTAACTTTAATACACATGTATAAAGATGTTCACAGAGAA
AGATGCTCTGTAGAGAATTTGCTACCGAAGTTGGCTCAAGAATTTGTTTTTAGTGTTATTTACCAAGATTAGGAC
GTCAGTGGCTTAAATTCTTTGAATTCTTTTCAAGGACTGCAAGATTATTTGATAAAGAGTAGCATGAATCTTGTG
CTCTAATATTACACAGTAAGTTCAAAGAAAGGATGTAAGTCAAAGACTTGTTACATAGAGGGAAAATGGACTGGG
ATAGAGGACAGACTGATAGTTTCTTTCTTTCATATCACATGTATAGAGAAATAATTATATCAGAAACTCACAAAC

FIGURE 6620B

CTAGACATGGAAAAACAGATTACTGTCTATTGTCAGCATCATTTTCATCTGTAAGTCACTACTGGAATATATTTT
TCTTTTAATTTCCAGTGACTTTAGAATACACACAGTTTTTCCGACTTTTCAAAAATTTGATTAAATGGTTTTATA
GTATAATATTGGGACCCCATACCGTTAGCCCTTGTATGTATACCAACACTGCCAAAGTAAAACATTAGGTCAGGC
ATGGTGGCTCAGGCCTGTAATCCCAGCATTTTGGGAGGCTGAGGCAAGTGGATAACTTGAGGTCATGAGTTCGAA
ACCAGCCTGGCCAAAACAGTGAAACCCCGTCTCTACTAAAAATACAAAATTAGCCAGATGTGGTGGCGCACACCT
GTAATCCCAGCTACTCAGGAAGCTGAGGCAGGAAAATCGCTTGAACCTGGGAGGTGGAAGTTGCAGTGAGCCGAG
ATCGCACCACTGCACTCCAGCCTGGGTGACAAGAGCGAAACTCCATCTC

FIGURE 6621

MSIHIVALGNEGDTFHQDNRPSGLIRTYLGRSPLVSGDESSLLLNAASTVARPVFTEYQASAFGNVKLVVHDCPV
WDIFDSDWYTSRNLIGGADIIVIKYNVNDKFSFHEVKDNYIPVIKRALNSVPVIIAAVGTRQNEELPCTCPLCTS
DRGSCVSTTEGIQLAKELGATYLELHSLDDFYIGKYFGGVLEYFMIQALNQKTSEKMKKRKMSNSFHGIRPPQLE
QPEKMPVLKAEASHYNSDLNNLLFCCQCVDVVFYNPDLKKVVEAHKIVLCAVSHVFMLLFNVKSPTDIQDSSIIR
TTQDLFAINRDTAFPGASHESSGNPPLRVIVKDALFCSCLSDILRFIYSGAFQWEELEEDIRKKLKDSGDVSNVI
EKVKCILKTPGKINCLRNCKTYQARKPLWFYNTSLKFFLNKPMLADVVFEIQGTTVPAHRAILVARCEVMAAMFN
GNYMEAKSVLIPVYGVSKETFLSFLEYLYTDSCCPAGIFQAMCLLICAEMYQVSRLQHICELFIITQLQSMPSRE
LASMNLDIVDLLKKAKFHHSDCLSTWLLHFIATNYLIFSQKPEFQDLSVEERSFVEKHRWPSNMYLKQLAEYRKY
IHSRKCRCLVM

FIGURE 6622A

GGCGAGCTAAGCCGGAGGATGTGCAGCTGCGGCGGCGGCGCCGGCTACGAAGAGGACGGGGACAGGCGCCGTGCG
AACCGAGCCCAGCCAGCCGGAGGACGCGGGCAGGGCGGGACGGGAGCCCGGACTCGTCTGCCGCCGCCGTCGTCG
CCGTCGTGCCGGCCCCGCGTCCCCGCGCGCGAGCGGGAGGAGCCGCCGCCACCTCGCGCCCGAGCCGCCGCTAGC
GCGCGCCGGGCATGGTCCCCTCTTAAAGGCGCAGGCCGCGGCGGCGGGGGCGGGCGTGCGGAACAAAGCGCCGGC
GCGGGGCCTGCGGGCGGCTCGGGGGCCGCGATGGGCGCGGCGGGCCCGCGGCGGCGGCGGCGCTGCCCGGGCCGG
GCCTCGCGGCGCTAGGGCGGGCTGGCCTCCGCGGGCGGGGGCAGCGGGCTGAGGGCGCGCGGGGCCTGCGGCGGC
GGCGGCGGCGGCGGCGGCCCGGCGGGCGGAGCGGCGCGGGC**ATG**GCCGCGCGCGGCCGGCGCGCCTGGCTCA
GCGTGCTGCTCGGGCTCGTCCTGGGCTTCGTGCTGGCCTCGCGGCTCGTCCTGCCCCGGGCTTCCGAGCTGAAGC
GAGCGGGCCCACGGCGCCGCGCCAGCCCCGAGGGCTGCCGGTCCGGGCAGGCGGCGGCTTCCCAGGCCGGCGGGG
CGCGCGGCGATGCGCGCGGGGCGCAGCTCTGGCCGCCCGGCTCGGACCCAGATGGCGGCCCGCGCGACAGGAACT
TTCTCTTCGTGGGAGTCATGACCGCCCAGAAATACCTGCAGACTCGGGCCGTGGCCGCCTACAGAACATGGTCCA
AGACAATTCCTGGGAAAGTTCAGTTCTTCTCAAGTGAGGGTTCTGACACATCTGTACCAATTCCAGTAGTGCCAC
TACGGGGTGTGGACGACTCCTACCCGCCCCAGAAGAAGTCCTTCATGATGCTCAAGTACATGCACGACCACTACT
TGGACAAGTATGAATGGTTTATGAGAGCAGATGATGACGTGTACATCAAAGGAGACCGTCTGGAGAACTTCCTGA
GGAGTTTGAACAGCAGCGAGCCCCTCTTTCTTGGGCAGACAGGCCTGGGCACCACGGAAGAAATGGGAAAACTGG
CCCTGGAGCCTGGTGAGAACTTCTGCATGGGGGGGCCTGGCGTGATCATGAGCCGGGAGGTGCTTCGGAGAATGG
TGCCGCACATTGGCAAGTGTCTCCGGGAGATGTACACCACCCATGAGGACGTGGAGGTGGGAAGGTGTGTCCGGA
GGTTTGCAGGGGTGCAGTGTGTCTGGTCTTATGAGATGCAGCAGCTTTTTTATGAGAATTACGAGCAGAACAAAA
AGGGGTACATTAGAGATCTCCATAACAGTAAAATTCACCAAGCTATCACATTACACCCCAACAAAAACCCACCCT
ACCAGTACAGGCTCCACAGCTACATGCTGAGCCGCAAGATATCCGAGCTCCGCCATCGCACAATACAGCTGCACC
GCGAAATTGTCCTGATGAGCAAATACAGCAACACAGAAATTCATAAAGAGGACCTCCAGCTGGGAATCCCTCCCT
CCTTCATGAGGTTTCAGCCCCGCCAGCGAGAGGAGATTCTGGAATGGGAGTTTCTGACTGGAAAATACTTGTATT
CGGCAGTTGACGGCCAGCCCCCTCGAAGAGGAATGGACTCCGCCCAGAGGGAAGCCTTGGACGACATTGTCATGC
AGGTCATGGAGATGATCAATGCCAACGCCAAGACCAGAGGGCGCATCATTGACTTCAAAGAGATCCAGTACGGCT
ACCGCCGGGTGAACCCCATGTATGGGGCTGAGTACATCCTGGACCTGCTGCTTCTGTACAAAAAGCACAAAGGGA
AGAAAATGACGGTCCCTGTGAGGAGGCACGCGTATTTACAGCAGACTTTCAGCAAAATCCAGTTTGTGGAGCATG
AGGAGCTGGATGCACAAGAGTTGGCCAAGAGAATCAATCAGGAATCTGGATCCTTGTCCTTTCTCTCAAACTCCC
TGAAGAAGCTCGTCCCCTTTCAGCTCCCTGGGTCGAAGAGTGAGCACAAAGAACCCAAAGATAAAAAGATAAACA
TACTGATTCCTTTGTCTGGGCGTTTCGACATGTTTGTGAGATTTATGGGAAACTTTGAGAAGACGTGTCTTATCC
CCAATCAGAACGTCAAGCTCGTGGTTCTGCTTTTCAATTCTGACTCCAACCCTGACAAGGCCAAACAAGTTGAAC
TGATGACAGATTACCGCATTAAGTACCCTAAAGCCGACATGCAGATTTTGCCTGTGTCTGGAGAGTTTTCAAGAG
CCCTGGCCCTGGAAGTAGGATCCTCCCAGTTTAACAATGAATCTTTGCTCTTCTTCTGCGACGTCGACCTCGTCT
TTACTACAGAATTCCTTCAGCGATGTCGAGCAAATACAGTTCTGGGCCAACAAATATATTTTCCAATCATCTTCA
GCCAGTATGACCCAAAGATTGTTTATAGTGGGAAAGTTCCCAGTGACAACCATTTTGCCTTTACTCAGAAAACTG
GCTTCTGGAGAAACTATGGGTTTGGCATCACGTGTATTTATAAGGGAGATCTTGTCCGAGTGGGTGGCTTTGATG
TTTCCATCCAAGGCTGGGGGCTGGAGGATGTGGACCTTTTCAACAAGGTTGTCCAGGCAGGTTTGAAGACGTTTA
GGAGCCAGGAAGTAGGAGTAGTCCACGTCCACCATCCTGTCTTTTGTGATCCCAATCTTGACCCCAAACAGTACA
AAATGTGCTTGGGGTCCAAAGCATCGACCTATGGGTCCACACAGCAGCTGGCTGAGATGTGGCTGGAAAAAAATG
ATCCAAGTTACAGTAAAAGCAGCAATAATAATGGCTCAGTGAGGACAGCC**TAA**TGTCCAGCTTTGCTGGAAAAGA
CGTTTTTAATTATCTAATTTATTTTTCAAAAATTTTTTGTATGATCAGTTTTTGAAGTCCGTATACAAGGATATA
TTTTACAAGTGGTTTTCTTACATAGGACTCCTTTAAGATTGAGCTTTCTGAACAAGAAGGTGATCAGTGTTTGCC
TTTGAACACATCTTCTTGCTGAACATTATGTAGCAGACCTGCTTAACTTTGACTTGAAATGTACCTGATGAACAA
AACTTTTTTAAAAAAATGTTTTCTTTTGAGACCCTTTGCTCCAGTCCTATGGCAGAAAACGTGAACATTCCTGCA
AAGTATTATTGTAACAAAACACTGTAACTCTGGTAAATGTTCTGTTGTGATTGTTAACATTCCACAGATTCTACC
TTTTGTGTTTTGTTTTTTTTTTTTTACAATTGTTTTAAAGCCATTTCATGTTCCAGTTGTAAGATAAGGAAATGT
GATAATAGCTGTTTCATCATTGTCTTCAGGAGAGCTTTCCAGAGTTGATCATTTCCCCTCATGGTACTCTGCTCA
GCATGGCCACGTAGGTTTTTTGTTTGTTTTGTTTTGTTCTTTTTTTGAGACGGAGTCTCACTCTGTTACCCAGGC
TGGAATGCAGTGGCGCAATCTTGGCTCACTTTAACCTCCACTTCCCTGGTTCAAGCAATTCCCCTGCCTTTGCCT

FIGURE 6622B

CCCGAGTAGCTGGGATTACAGGCACACACCACCACGCCCAGCTAGTTTTTTTGTATTTTTAGTAGAGACGGGGTT
TCACCATGCAAGCCCAGCTGGCCACGTAGGTTTTAAAGCAAGGGGCGTGAAGAAGGCACAGTGAGGTATGTGGCT
GTTCTCGTGGTAGTTCATTCGGCCTAAATAGACCTGGCATTAAATTTCAAGAAGGATTTGGCATTTTCTCTTCTT
GACCCTTCTCTTTAAAGGGTAAAATATTAATGTTTAGAATGACAAAGATGAATTATTACAATAAATCTGATGTAC
ACAGACTGAAACACACACACATACACCCTAATCAAAACGTTGGGGAAAAATGTATTTGGTTTTGTTCCTTTCATC
CTGTCTGTGTTATGTGGGTGGAGATGGTTTTCATTCTTTCATTACTGTTTTGTTTTATCCTTTGTATCTGAAATA
CCTTTAATTTATTTAATATCTGTTGTTCAGAGCTCTGCCATTTCTTGAGTACCTGTTAGTTAGTATTATTTATGT
GTATCGGGAGTGTGTTTAGTCTGTTTTATTTGCAGTAAACCGATCTCCAAAGATTTCCTTTTGGAAACGCTTTTT
CCCCTCCTTAATTTTTATATTCCTTACTGTTTTACTAAATATTAAGTGTTCTTTGACAATTTTGGTGCTCATGTG
TTTTGGGGACAAAAGTGAAATGAATCTGTCATTATACCAGAAAGTTAAATTCTCAGATCAAATGTGCCTTAATAA
ATTTGTTTTCATTTAGATTTCAAACAGTGATAGACTTGCCATTTTAATACACGTCATTGGAGGGCTGCGTATTTG
TAAATAGCCTGATGCTCATTTGGAAAAATAAACCAGTGAACAATATTTTTCTATTGTACTTTTCAGAACCATTTT
GTCTCATTATTCCTGTTTTAGCTGAAGAATTGTATTACATTTGGAGAGTAAAAAACTTAAACACG

FIGURE 6623

MAARGRRAWLSVLLGLVLGFVLASRLVLPRASELKRAGPRRRASPEGCRSGQAAASQAGGARGDARGAQLWPPGS
DPDGGPRDRNFLFVGVMTAQKYLQTRAVAAYRTWSKTIPGKVQFFSSEGSDTSVPIPVVPLRGVDDSYPPQKKSF
MMLKYMHDHYLDKYEWFMRADDDVYIKGDRLENFLRSLNSSEPLFLGQTGLGTTEEMGKLALEPGENFCMGGPGV
IMSREVLRRMVPHIGKCLREMYTTHEDVEVGRCVRRFAGVQCVWSYEMQQLFYENYEQNKKGYIRDLHNSKIHQA
ITLHPNKNPPYQYRLHSYMLSRKISELRHRTIQLHREIVLMSKYSNTEIHKEDLQLGIPPSFMRFQPRQREEILE
WEFLTGKYLYSAVDGQPPRRGMDSAQREALDDIVMQVMEMINANAKTRGRIIDFKEIQYGYRRVNPMYGAEYILD
LLLLYKKHKGKKMTVPVRRHAYLQQTFSKIQFVEHEELDAQELAKRINQESGSLSFLSNSLKKLVPFQLPGSKSE
HKEPKDKKINILIPLSGRFDMFVRFMGNFEKTCLIPNQNVKLVVLLFNSDSNPDKAKQVELMTDYRIKYPKADMQ
ILPVSGEFSRALALEVGSSQFNNESLLFFCDVDLVFTTEFLQRCRANTVLGQQIYFPIIFSQYDPKIVYSGKVPS
DNHFAFTQKTGFWRNYGFGITCIYKGDLVRVGGFDVSIQGWGLEDVDLFNKVVQAGLKTFRSQEVGVVHVHHPVF
CDPNLDPKQYKMCLGSKASTYGSTQQLAEMWLEKNDPSYSKSSNNNGSVRTA

FIGURE 6624

GGCGGGCCGCTCCCACTTCGGCACGAGGGGCACGAGGTAAATCTTTTCTGCTTACTGAAAAGGAAGAGTCTGATG
ATTAGTTACTGATCCTCTTTGCATTTGTAAAGCTTTGGAGATATTGAATCATGTTACCATTTCTGTTTTTTTCCA
CCCTGTTTTCTTCCATATTTACTGAAGCTCAGAAGCAGTATTGGGTCTGCAACTCATCCGATGCAAGTATTTCAT
ACACCTACTGTGATAAAATGCAATACCCAATTTCAATTAATGTTAACCCCTGTATAGAATTGAAAGGATCCAAAG
GATTATTGCACATTTTCTACATTCCAAGGAGAGATTTAAAGCAATTATATTTCAATCTCTATATAACTGTCAACA
CCATGAATCTTCCAAAGCGCAAAGAAGTTATTTGCCGAGGATCTGATGACGATTACTCTTTTTGCAGAGCTCTGA
AGGGAGAGACTGTGAATACAACAATATCATTCTCCTTCAAGGGAATAAAATTTTCTAAGGGAAAATACAAATGTG
TTGTTGAAGCTATTTCTGGGAGCCCAGAAGAAATGCTCTTTTGCTTGGAGTTTGTCATCCTACACCAACCTAATT
CAAATTAGAATAAATTGAGTATTT

FIGURE 6625

MLPFLFFSTLFSSIFTEAQKQYWVCNSSDASISYTYCDKMQYPISINVNPCIELKGSKGLLHIFYIPRRDLKQLY
FNLYITVNTMNLPKRKEVICRGSDDDYSFCRALKGETVNTTISFSFKGIKFSKGKYKCVVEAISGSPEEMLFCLE
FVILHQPNSN

FIGURE 6626

TGGGGCTGGCACTATGGTCATGGCGGAGGGGACGGCAGTGCTGAGGCGGAACAGGCCGGGCACCAAGGCGCAGGA
TTTCTATAATTGGCCTGATGAATCCTTTGATGAAATGGACAGTACACTAGCTGTTCAACAGTATATTCAACAGAA
CATAAGAGCAGATTGCTCCAATATTGACAAAATTCTTGAACCACCTGAAGGCCAAGATGAAGGTGTGTGGAAGTA
TGAACATTTAAGGCAGTTCTGCCTTGAGCTAAATGGACTTGCTGTCAAACTTCAGAGTGAATGCCATCCAGATAC
TTGCACTCAAATGACAGCAACTGAACAATGGATTTTTCTTTGTGCAGCTCATAAAACTCCAAAAGAGTGTCCTGC
TATAGACTATACTAGACACACACTTGATGGTGCTGCATGTCCTCTGAATAGCAATAAATATTTTCCCAGCAGGGT
TAGCATAAAGGAATCATCTGTAGCGAAACTAGGATCAGTATGCCGTAGGATTTACAGAATATTTCACATGCTTAT
TTTCATCATCGGCAGATATTTGATGAATATGAAAACGAAACATTTTTGTGTCATCGGTTTACTAAGTTTGTGATG
AAATACAATTTGATGTCCAAGGATAACCTGATTGTACCAATTTTAGAAGAGGAAGTACAGAATTCAGTTTCTGGG
GAAAGTGAAGCATGAAGGGAATCATAGGAAAAATGTACTGATCATATAATTAACATTATGTACTGTATATATCAT
TTTAGACACATCAATCATGTATCCATATTATAGCTTCTTTGTTTAGTATAGGTTTTTGTATGCTGGGTTTGCCTT
TTAAAATGGGAAATACTTTTTAAGTTATTCATAAGCTGTATATTCACCAGTGTGGCACTCATGGTTTTTAAATAA
GATTAGTATTATCTGTTTATAATGCCTGTTAATAAAAGAATTTACAGTTTGGTAAAATTGCTGCTAAACAATCAT
TGGATCACAATCCTCATCAGACAAACCCATCTGTAAAAAAAAATGAGGGAGAGCTTGAGGTTTCACACAAGCCATT
TACTAAAGAGGTAGAAATGTTTTCTATTGGTTTTACCTTGAGTTTAGATATCCTAAAAAATTCTGTAGTACGTAG
TTTTGTCTTACCTGTTAACTTTCCCCAATTGAGATAAAAGTGTTTTAAAATTCTGTTTATAGTTTTTGATATGCA
TATATAATTATGTGTATATCTAAATACAAATGCAAATGAAGCATTAGTAATACTTAAATAATTTTACTGTGCTAC
ATAAAGTATAACATACTTGGAAAGGATTTACCGTTCTGCAACAACGGACTGGTACATACAGGATGATCACAATGG
TAAGGCACATAAATTATTTTCCCACTGGAAACCTGCCCTGTCCACCCCTTCTCATTTCCCTTAACCTTATCTTCA
AACTACTTTAGCTGAGAAGCTTTTCACCAGACTGAGTTAGTGGTGGCTTATACCTATTTATATTTGTATTAATTG
CTTACAGATTATACCTCATATTAGCAATTACATTACACTACAAGAAAATGTATTTGCATAGGCTCTTGCTTATCT
TTGTTTTGCAAAATTGTTCTACTTAGAAAACAGTCCTTAAAATAGTTTGACTCTTCCTGTTAGTAATATATTAAT
CTTTCATTTAACCAGCTAGGCAGCATTAAATAGAATTGAAGAAATACCATAGTATTTATTTTACACCCCCTCTCC
CACGAAGTTTATGTTTGGATTACATGCACGTGTGAGATTATTTGCAATAATTCATAGGTTCCAAGGGTGTTGATG
AATAGTCATACATTTTTTTGGACTTTGTTATAATTCATTGTGGTAAGAATGATTGAAATGCAGATTTAACAATCT
TATAATCTATTGAATGCCATTTTTGATAAAGCACTGGAGGTCTTATTGCCAAACTGATTGTAATGAGGCAGTAAG
GGTGAAAACATTGTACATGTTGTGAAGAAAGTATTTAAATCCAACTTTTGAACAGATTTAACAAACATGAGGAAC
TTTTTTATTTAGAAGGATAATTTTGAAATGAAGATGAAAATGTATTCATCTTAATTGTTTTTTCAAATTTAAGGG
AATAATTTATACCATCTTTTCAGACAAGAATGTACAGCAAAAATAAGGGGAACAGTAGTATACTGAGAGTGTGTG
TATGTATAATGTATGCCTTTCCAAGCTTGCCAGTCTTTTTGGCTTTGAACACTGCCCATCAGCTACAGTCATTAC
TGTTCCCCAACCCACAACTATCTTTTAAGAAGTCTTAGTTCACAGTGAAAGGAATGATGATTTTGAAATTATGGA
TTTATATTAATGGCACTATAAACCAATGGTAATGGTAATTTTTAAACTTGCTAAATATTGAGAAACTAAACTACT
AAGTTAATAAATTATATATAGCAGTGTAGCTGTTCTCTCTAGATGGTGTCTCACAATGGATTTCTGTTGCTTGAC
TATTTTCTTAGTGAATATTTATACTAAGGTAGTGACTGAGATTTGGTGATCTGGCTGAGTATTTTGAAACACATT
TTGAATAATATGGCTTAGTGTTAACGGGGACTTAAATATGATTTTTTTTTCTTACTCATTTCACCTTCCCTGTAC
TGTATGTTTGGAATTGATCATAAAACATCTCCAAAAGAAAATAAAAAAAAAAAAAAAAAAA

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FIGURE 6627

MVMAEGTAVLRRNRPGTKAQDFYNWPDESFDEMDSTLAVQQYIQQNIRADCSNIDKILEPPEGQDEGVWKYEHLR
QFCLELNGLAVKLQSECHPDTCTQMTATEQWIFLCAAHKTPKECPAIDYTRHTLDGAACPLNSNKYFPSRVSIKE
SSVAKLGSVCRRIYRIFHMLIFIIGRYLMNMKTKHFCVIGLLSL

FIGURE 6628

CGCAAGAATGCATACAAACTCCAGGGCTGCTCTCTCCTGGAGAGGGAGGGAGGGGATTTAAAAACCTGCAGCAAC
ATGGGGGAGGAGGCTGTTTGTCCTTCTCTCTCTGGGGAAGTAACTCGCTCAAACTGCCTTCCTTGCTGAGCTGCT
TCGCGTAGCTTTGAGGAAGGTCTAGTGAAATTGGTCTTTCCATTACATCTGGATGTACTACCAGAGAGTTCTGCT
GCTGTTGTTTTTTTTAGCTTTTCTTTCTTTGAGTCTTTAAAGGGCAATTGTCGACACTCTGCAAACATACCGATT
TGTTGTCTGCCCACTTTGGAGTCTTCAATCTGGGCAGTAACTATTTACCCTTTTTCCTGCTAGCCTGTCCCCCTC
TCTGGATTGAAGTCACCTGCTAAGACAATGGACTACCGACCAGACTCCCGGAAATC**ATG**TTGGTAGGATCCCAGT
CTTTTTCGCCTGGAGGGCCCAATGGGATCATTAGAAGCCAGTCCTTTGCGGGTTTCAGCGGCCTCCAGGAAAGGC
GATCCAGGTGTAACTCCTTCATTGAAAATTCCTCCGCTCTCAAGAAGCCTCAGGCCAAACTGAAGAAAATGCACA
ATTTAGGCCACAAAAACAACAATCCCCCCAAAGAGCCTCAGCCTAAAAGGGTGGAAGAAGTCTACAGGGCCTTGA
AAAATGGACTTGATGAATATCTGGAGGTTCACCAGACGGAGCTGGACAAGTTGACAGCTCAGTTAAAAGATATGA
AAAGAAACTCTCGCCTGGGTGTACTGTATGACCTAGACAAGCAAATTAAAACAATTGAAAGATACATGAGACGCC
TGGAGTTTCATATAAGTAAGGTAGATGAACTCTATGAAGCTTATTGTATCCAGCGACGCCTCCAGGATGGTGCCA
GCAAAATGAAGCAAGCCTTCGCAACATCCCCTGCCAGCAAAGCTGCCCGGGAGAGTCTGACAGAGATCAATCGGA
GCTTCAAGGAGTACACAGAGAATATGTGCACCATTGAAGTGGAGCTAGAGAATCTGCTGGGAGAATTCTCCATCA
AGATGAAAGGTCTGGCTGGCTTTGCACGCCTCTGTCCTGGAGATCAATATGAAATTTTCATGAAGTATGGCCGGC
AGCGGTGGAAACTGAAAGGCAAAATAGAAGTAAATGGCAAGCAGAGCTGGGATGGAGAAGAAACAGTTTTTCTGC
CCCTGATAGTTGGGTTCATCTCCATCAAGGTCACGGAGCTCAAAGGGCTAGCAACTCACATCCTGGTAGGTAGCG
TGACCTGTGAGACCAAAGAGCTGTTTGCAGCCCGACCTCAGGTAGTGGCTGTCGACATCAATGACCTTGGTACCA
TCAAACTGAACCTGGAAATCACCTGGTATCCATTTGACGTGGAGGACATGACCGCATCCTCAGGCGCTGGGAACA
AGGCAGCAGCCCTTCAGAGGAGAATGTCCATGTACAGCCAGGGTACCCCGGAAACGCCCACCTTCAAAGACCACT
CCTTCTTTTCAAATCTACCTGATGACATCTTTGAAAATGGAAAGGCAGCCGAGGAGAAAATGCCACTGTCGCTCA
GCTTCAGTGACCTGCCCAACGGGGACTGCGCCCTCACCTCCCACTCAACAGGCTCCCCTTCCAACTCAACAAATC
CAGAAATTACCATCACCCCTGCGGAGTTTAACCTCAGCAGCTTGGCCTCCCAGAATGAGGGTATGGATGACACCA
GCTCAGCATCTTCCAGGAACTCCCTGGGAGAAGGCCAAGAGCCAAAGTCACACCTGAAGGAGGAAGACCCAGAGG
AGCCCAGAAAACCTGCCTCGGCCCCATCTGAGGCTTGCCGCCGACAGTCCTCAGGTGCTGGGGCTGAGCACCTGT
TCCTTGAGAATGATGTTGCAGAAGCACTTCTGCAAGAGTCTGAGGAGGCCTCTGAGCTCAAGCCTGTGGAACTGG
ACACTTCGGAAGGAAACATCACAAAGCAGCTGGTCAAGAGGCTCACATCTGCAGAGGTGCCAATGGCCACAGACA
GGCTGCTCTCTGAGGGTTCTGTTGGTGGAGAATCTGAAGGCTGCAGATCCTTTCTAGATGGAAGCTTAGAGGATG
CTTTTAATGGGCTTTTACTTGCATTAGAACCACATAAAGAGCAGTATAAAGAGTTTCAGGATCTGAACCAAGAAG
TCATGAATTTGGATGATATTCTAAAAAAG**TAG**AGAAGATCCTCTAATGGATCCCAGTGTGCCCATCCCTCAACCT
CCTCAGTGATCAACTCATGGCCAATCTTGTTTCCTATTCTTCAACCTGCTGACTTCCCTCTGGATTCTTCTGCAA
CCAGTCCCAGATATTGTGCCATTTTATCCATGGTTGTACTTCTTTTTTGGATATAAAGATTTTTAAATGCATTTT
TTAAATGCTAACAAAAAATAAAAACTTGAAACAAAAAAAAAAAAAAAAAAA

FIGURE 6629

MLVGSQSFSPGGPNGIIRSQSFAGFSGLQERRSRCNSFIENSSALKKPQAKLKKMHNLGHKNNNPPKEPQPKRVE
EVYRALKNGLDEYLEVHQTELDKLTAQLKDMKRNSRLGVLYDLDKQIKTIERYMRRLEFHISKVDELYEAYCIQR
RLQDGASKMKQAFATSPASKAARESLTEINRSFKEYTENMCTIEVELENLLGEFSIKMKGLAGFARLCPGDQYEI
FMKYGRQRWKLKGKIEVNGKQSWDGEETVFLPLIVGFISIKVTELKGLATHILVGSVTCETKELFAARPQVVAVD
INDLGTIKLNLEITWYPFDVEDMTASSGAGNKAAALQRRMSMYSQGTPETPTFKDHSFFSNLPDDIFENGKAAEE
KMPLSLSFSDLPNGDCALTSHSTGSPSNSTNPEITITPAEFNLSSLASQNEGMDDTSSASSRNSLGEGQEPKSHL
KEEDPEEPRKPASAPSEACRRQSSGAGAEHLFLENDVAEALLQESEEASELKPVELDTSEGNITKQLVKRLTSAE
VPMATDRLLSEGSVGGESEGCRSFLDGSLEDAFNGLLLALEPHKEQYKEFQDLNQEVMNLDDILKK

FIGURE 6630

CGATGATGATTCAGTGGAATGGGCCCAAGACCAGCATTTCTGAGAAGGCTCGGGGGCTGGCTTTGACCTACAGCC
TCCGGGACAGGGAACGTGGTGGTGGTCGTGCACAGATTGGTGTGGTGGATGATGAGGCCAAAGCCCCGGACCTCA
TGCAGATCATGGAGGCTGTGCTGGGCTGCAGGGTGGGCAGCCTGCGTGCCGCCACGCCCAGCAAGGATATCAACC
AGCTGCAGAAGGCCAATGTTCGCCTGTACCATGTCTATGAGAAGGGCAAAGACCTGGTGGTCCTGGAGTTGGCGA
CCCCCCCACTGACCCAGGACCTGCTGCAGGAGGAGGACTTCTACATCCTGGACCAGGGTGGCTTCAAGATCTATG
TGTGGCAGGGACGCATGTCTAGCCTCCAGGAGAGAAAGGCTGCCTTCAGCCGGGCTGTGGGCTTCATCCAGGCCA
AGGGCTACCCGACCTACACCAACGTGGAGGTGGTGAACGACGGCGCCGAGTCGGCCGCGTTCAAGCAGCTCTTCC
GGACTTGGTCTGAGAAGCGGCGCAGGAACCAGAAGCTCGGCGGGAGGGATAAATCGATTCATGTAAAGCTGGACG
TGGGCAAGCTGCACACCCAGCCTAAGTTAGCGGCCCAGCTCAGGATGGTGGACGACGGCTCTGGGAAGGTGGAGG
TGTGGTGCATCCAGGACTTACACAGGCAGCCCGTGGACCCCAAGCGTCATGGACAGCTGTGTGCAGGCAACTGCT
ACCTTGTGCTCTACACATACCAGAGGCTGGGCCGTGTTCAGTACATCCTGTACCTATGGCAGGGCCACCAGGCCA
CTGCGGATGAGATTGAGGCCCTGAACAGCAACGCTGAGGAACTAGATGTCATGTATGGTGGCGTCCTAGTACAGG
AGCATGTGACCATGGGCAGCGAGCCCCCCCACTTCCTCGCCATCTTCCAGGGCCAGCTGGTGATCTTCCAGGAGA
GAGCTGGGCACCATGGAAAGGGGCAGTCAGCATCCACCACAAGGCTTTTCCAAGTGCAAGGCACTGACAGCCACA
ACACCAGGACCATGGAGGTGCCAGCCCGTGCCTCATCCCTCAACTCCAGTGACATCTTCTTGCTGGTCACAGCCA
GCGTCTGCTACCTCTGGTTTGGGAAGGGCTGTAATGGTGATCAGCGTGAGATGGCACGGGTGGTGGTCACTGTCA
TTTCCAGGAAGAATGAGGAAACGGTGCTGGAGGGTCAGGAGCCTCCCCACTTCTGGGAGGCCCTGGGAGGCCGGG
CCCCCTACCCCAGCAACAAGAGGCTCCCTGAGGAGGTCCCCAGCTTCCAGCCACGACTGTTTGAGTGCTCCAGCC
ACATGGGCTGCCTGGTCCTCGCAGAAGTGGGGTTCTTCAGCCAGGAGGACCTGGACAAGTATGACATCATGTTAC
TGGACACCTGGCAGGAGATCTTCCTGTGGCTTGGGGAAGCTGCAAGTGAGTGGAAGGAGGCGGTGGCCTGGGGCC
AGGAGTACCTGAAGACTCACCCAGCAGGGAGGAGCCCGGCCACACCCATCGTGCTGGTCAAGCAGGGCCATGAGC
CTCCCACCTTCATTGGATGGTTCTTCACTTGGGACCCCTACAAGTGGACTAGCCACCCGTCCCACAAGGAAGTGG
TGGATGGCAGCCCGGCAGCAGCATCAACCATCTCTGAGATAACAGCAGAAGTCAACAACTTGCGGCTATCCAGAT
GGCCGGGCAATGGCAGGGCAGGTGCCGTGGCCCTGCAGGCCCTCAAGGGCTCCCAGGACAGCTCAGAGAATGATC
TGGTGCGAAGCCCCAAGTCGGCTGGCAGCAGAACCAGCAGCTCCGTCAGCAGCACCAGCGCCACGATCAACGGGG
GCCTGCGCCGGGAACAACTGATGCACCAGGCTGTTGAGGACCTGCCAGAGGGCGTGGACCCTGCCCGCAGGGAGT
TCTATCTCTCAGACTCTGACTTCCAAGATATCTTTGGGAAATCCAAGGAGGAATTCTACAGCATGGCCACGTGGA
GGCAGCGGCAGGAGAAAAAGCAGCTGGGCTTCTTCTGAACCCAAGCCCTCTCGACTGCCCCTATCCCCTGGACCC
CAACATACCTACAATGCTGGGGAGGCCCTGCTTCCACTCCCCTCAGAGGCTTTTGGTCATCCTCTGCGTGTCAGT
AAAAGCAGGCAGCCCATA

FIGURE 6631

MMIQWNGPKTSISEKARGLALTYSLRDRERGGGRAQIGVVDDEAKAPDLMQIMEAVLGCRVGSLRAATPSKDINQ
LQKANVRLYHVYEKGKDLVVLELATPPLTQDLLQEEDFYILDQGGFKIYVWQGRMSSLQERKAAFSRAVGFIQAK
GYPTYTNVEVVNDGAESAAFKQLFRTWSEKRRRNQKLGGRDKSIHVKLDVGKLHTQPKLAAQLRMVDDGSGKVEV
WCIQDLHRQPVDPKRHGQLCAGNCYLVLYTYQRLGRVQYILYLWQGHQATADEIEALNSNAEELDVMYGGVLVQE
HVTMGSEPPHFLAIFQGQLVIFQERAGHHGKGQSASTTRLFQVQGTDSHNTRTMEVPARASSLNSSDIFLLVTAS
VCYLWFGKGCNGDQREMARVVVTVISRKNEETVLEGQEPPHFWEALGGRAPYPSNKRLPEEVPSFQPRLFECSSH
MGCLVLAEVGFFSQEDLDKYDIMLLDTWQEIFLWLGEAASEWKEAVAWGQEYLKTHPAGRSPATPIVLVKQGHEP
PTFIGWFFTWDPYKWTSHPSHKEVVDGSPAAASTISEITAEVNNLRLSRWPGNGRAGAVALQALKGSQDSSENDL
VRSPKSAGSRTSSSVSSTSATINGGLRREQLMHQAVEDLPEGVDPARREFYLSDSDFQDIFGKSKEEFYSMATWR
QRQEKKQLGFF

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FIGURE 6632

GTTCAGGTCCCGCGACCGCTACCCGCACCCTAAATCCCAGAGGTTGGCCCCCTGAGGTGTGAGTGAAATGAGCTT
TTGCTTTATTTTCCAAGTTTCTCTCTCACCTTCAGGGGCATTCTTCGGGGGTGCATCAGAGGGAGGGCAGAGCCT
GAGGATCTAAGCGAAGGCTTCCCCGGTGTAATTTCCTGGGCTGTTTGTGAGGAGAGATCGAATTCGCCTCCTGCT
CTCAGGCCTCTCTGCTCCTGTCTTTTGTTTGGATGCCGGCGCTGCTGCCTGTGGCCTCCCGCCTTTTGTTGCTAC
CCCGAGTCTTGCTGACCATGGCCTCTGGAAGCCCTCCGACCCAGCCCTCGCCGGCCTCGGATTCCGGCTCTGGCT
ACGTTCCGGGCTCGGTCTCTGCAGCCTTTGTTACTTGCCCCAACGAGAAGGTCGCCAAGGAGATCGCCAGGGCCG
TGGTGGAGAAGCGCCTAGCAGCCTGCGTCAACCTCATCCCTCAGATTACATCCATCTATGAGTGGAAAGGGAAGA
TCGAGGAAGACAGTGAGGTGCTGATGATGATTAAAACCCAAAGTTCCTTGGTCCCAGCTTTGACAGATTTTGTTC
GTTCTGTGCACCCTTACGAAGTGGCCGAGGTAATTGCATTGCCTGTGGAACAGGGGAACTTTCCGTACCTGCAGT
GGGTGCGCCAGGTCACAGAGTCAGTTTCTGACTCTATCACAGTCCTGCCATGATGAGCCCTGTTCCTGCTCATCA
TGAAGATCCCCGCGATACTTCAACGCCTTCTGACTTCCAGGTGATGACTGGGCCCCCAATAAATCCCGTCTTTGG
GTCTCTCTGCCAAAAAAAAAAAAAAA

FIGURE 6633

MPALLPVASRLLLLPRVLLTMASGSPPTQPSPASDSGSGYVPGSVSAAFVTCPNEKVAKEIARAVVEKRLAACVN
LIPQITSIYEWKGKIEEDSEVLMMIKTQSSLVPALTDFVRSVHPYEVAEVIALPVEQGNFPYLQWVRQVTESVSD
SITVLP

FIGURE 6634

GGAAAAGTGTGAGGGGCTCTTCACGTGGGGAAGGAACAGCAGGCGCGGAGGAGGGGGCAAGCGTGTGTGAGATTC
AGTGGTCCATGCGTGCGTTTGTCGTGTAAGGGTCATTCCTGGGGTTTGGAGTGGGGGAACAAATCAATGTGGCTG
TTTTTCCGTGGAAAGAATTCCCACTGCAGTGTCCCGGAGCCTGCGTGTGGTGGGCAAGCTCCTCAAATGGTATCT
CACAGGGAATAGGGGAGTCTTGAAAACGCAGCTTCGGCAGTAGGAAC**ATG**AACCTCTTACCTAAAAGTTCCAGGG
AGTTTGGCTCCGTTGACTATTGGGAGAAGTTCTTCCAGCAGCGAGGAAAGAAAGCTTTCGAGTGGTATGGAACCT
ACCTGGAACTGTGCGGGGTGCTACATAAATATATCAAGCCCAGGGAAAAGGTGCTGGTGATTGGGTGTGGCAACT
CAGAACTGAGTGAGCAACTGTATGATGTGGGCTATCGGGATATAGTGAACATCGACATCAGTGAGGTTGTCATCA
AGCAAATGAAGGAATGTAATGCCACCCGACGGCCCCAGATGAGCTTCTTGAAGATGGACATGACGCAGATGGAGT
TTCCTGATGCCTCGTTCCAGGTGGTGTTGGACAAGGGCACCCTGGATGCTGTCCTGACAGATGAGGAAGAGAAGA
CCTTACAACAGGTGGACAGGATGCTGGCTGAGGTTGGCCGTGTCCTGCAGGGCCGGGAGACCGAGTGGCTCTTTG
GCATGGATGAGGGCCGGAAACAGCTGGCGGCCAGTGCTGGCTTCAGGAGGTTGATTACAGTGGCCCTTCACCGAG
GTCAGCAGTATGAAAGCATGGACCACATCCAAGCTGAGCTGTCGGCTAGAGTCATGGAGCTGGCCCCAGCTGGGA
TGCCCACCCAGCAGCAGGTCCCCTTTCTGTCTGTGGGTGGGGACATTGGGGTCCGGACCGTTCAGCACCAAGACT
GCAGCCCCTTGAGCGGTGACTATGTCATTGAGGATGTGCAAGGGGATGACAAGCGATACTTCCGTCGACTGATCT
TCCTCAGCAACAGGAATGTGGTGCAGTCCGAAGCCAGGTTGCTGAAGGATGTGTCTCACAAAGCCCAGAAGAAGC
GGAAAAAGGACAGGAAGAAGCAGCGGCCTGCTGATGCGGAGGACCTCCCTGCAGCCCCGGGGCAGTCCATTGATA
AGAGTTACCTGTGTTGTGAACACCACAAAGCCATGATCGCTGGCCTTGCCCTGCTGAGAAACCCAGAGCTACTCC
TAGAGATCCCACTGGCATTGTTGGTGGTAGGCCTGGGCGGGGGCAGCCTCCCCCTCTTTGTCCACGATCATTTTC
CAAAGTCCTGCATTGATGCTGTGGAGATCGATCCCTCCATGTTGGAAGTGGCCACCCAGTGGTTTGGCTTCTCCC
AGAGTGACCGAATGAAGGTCCACATTGCAGATGGCCTGGACTATATCGCCAGCTTGGCAGGAGGAGGAGAAGCAC
GGCCTTGCTACGATGTCATAATGTTTGATGTTGACAGTAAGGACCCAACACTGGGAATGAGTTGTCCGCCCCCAG
CATTTGTGGAGCAATCTTTTCTACAGAAGGTTAAAAGCATCTTGACTCCTGAAGGTGTTTTTATTCTCAACCTTG
TGTGCCGAGACTTGGGGCTAAAAGACTCAGTGCTGGCTGGGCTCAAGGCAGTGTTCCCCCTCCTATATGTCCGGC
GAATTGAGGGTGAAGTGAATGAGATCCTGTTCTGTCAGCTGCACCCTGAGCAAAAACTTGCCACACCAGAGCTCC
TAGAAACAGCCCAGGCTTTGGAGCGGACCCTGAGGAAGCCTGGGAGGGGTTGGGATGACACGTATGTCTTGTCAG
ATATGCTCAAGACGGTGAAAATTGTG**TGA**CTGCTTAGGCCAAGCAGCCCTCCTGCCTAGACTGACCTTGGACTCC
CAGCCTGCCAGAGAATGAAGAAATACAACGCACAGTACTTTTGAAGCTTCGTATTTTTCTTGGTTTCACACTCAG
CTACATGTGACCTCCAGCTTGGTGAGGTTGCCTGAAGATTAGGGAAAATAAAAATGTCCTTCCCATCTTGTCCTC
TTCAGTACCACTTGGGTTGGTTTGTCTTTGCTTCCTACACCACGTCCTTGAGTGGAGTTCCCTGCTGAAGCCCCT
AGCACACACTGCATGCCTTAACAAGTGTGTGCAAGCCCCTCAGAACTCAAGACATCCAAATTTTATTGCGTCTCT
ACTTATACTGGTTTGCTTTTGATTTATTCCTCTATTAGTTCTATAGGAGTGATCTCAAGTGAGATAGCAGAGCAA
GATGCCAAAAGACCATAAATAGAGTAAGGTTTCTATAGATGTGAGACAGATTTGAGAGAGCATTTACTCTGTCTC
CCTGTGGATGAAACTGCTGCTGAAATGGTTCCAATTTTTAGGAATCTGCTTACCCACTTCATTATTTGACAGCTT
TCCTTGGTGACCCAAACCTTGTAGCCTAAGCCATTTGTCTTTTTCTCAGTGGAGGGAGTGTATGGACCTGGCCCC
ATGGCTTTGCATGTTAGAGACCTGGCAGACTAAAGTCTCTAGTGTTTGTTTGCTCACATTTGCTGAGTGACAGCT
ATGTGCCAGACTGCATAAAGGGTGGTGGCAGAAGTGAAAATGTTTAAGAATGACCAAAAACATTAGTAATGAAAG
TTAATGTGTTCCAGGCATTCTTCTAAGTGGTTTACATGCACTGTCTCATTTAATCTGAGATAAAGGATACTTAAG
CCCAAACTATATCTAAACCCAAATCTCACTTGGCTGGAAACATCAATCTTAACCATTTATTCAGAACCATTAAAC
CAATGATTCCAA

FIGURE 6635

MNLLPKSSREFGSVDYWEKFFQQRGKKAFEWYGTYLELCGVLHKYIKPREKVLVIGCGNSELSEQLYDVGYRDIV
NIDISEVVIKQMKECNATRRPQMSFLKMDMTQMEFPDASFQVVLDKGTLDAVLTDEEEKTLQQVDRMLAEVGRVL
QGRETEWLFGMDEGRKQLAASAGFRRLITVALHRGQQYESMDHIQAELSARVMELAPAGMPTQQQVPFLSVGGDI
GVRTVQHQDCSPLSGDYVIEDVQGDDKRYFRRLIFLSNRNVVQSEARLLKDVSHKAQKKRKKDRKKQRPADAEDL
PAAPGQSIDKSYLCCEHHKAMIAGLALLRNPELLLEIPLALLVVGLGGGSLPLFVHDHFPKSCIDAVEIDPSMLE
VATQWFGFSQSDRMKVHIADGLDYIASLAGGGEARPCYDVIMFDVDSKDPTLGMSCPPPAFVEQSFLQKVKSILT
PEGVFILNLVCRDLGLKDSVLAGLKAVFPLLYVRRIEGEVNEILFCQLHPEQKLATPELLETAQALERTLRKPGR
GWDDTYVLSDMLKTVKIV

FIGURE 6636

AAGTTTGCATTTTCCTCTGTTCTTGAGCCCAGCTTCTTCTCGTCTCCCACCCCAGCTTCCCGGCATTGGAAGAAG
GGACCGTCCTCTTCCTTGTCTTGGCCACCCAAATCCTGGTATCGAAAGGGTTGAACGGACCGGAAGTGTGCAGCA
GCGACGGGTCCCCAGCTAATCGACGCCGGAAGTAGCAATTACTAGACAAGCATTCCGCCGCCGGCTTCGCTATGG
CGGCAATTCCCCCAGATTCCTGGCAGCCACCCAACGTTTACTTGGAGACCAGCATGGGAATCATTGTGCTGGAGC
TGTACTGGAAGCATGCTCCAAAGACCTGTAAGAACTTTGCTGAGTTGGCTCGTCGAGGTTACTACAATGGCACAA
AATTCCACAGAATTATCAAAGACTTCATGATCCAAGGAGGTGACCCAACAGGGACAGGTCGAGGTGGTGCATCTA
TCTATGGCAAACAGTTTGAAGATGAACTTCATCCAGACTTGAAATTCACGGGGGCTGGAATTCTCGCAATGGCCA
ATGCGGGGCCAGATACCAATGGCAGCCAGTTCTTTGTGACCCTCGCCCCCACCCAGTGGCTTGACGGCAAACACA
CCATTTTTGGCCGAGTGTGTCAGGGCATAGGAATGGTGAATCGCGTGGGAATGGTAGAAACAAACTCCCAGGACC
GCCCTGTGGACGACGTGAAGATCATTAAGGCATACCCTTCTGGGTAGACTTGCTACCCTCTTGAGCAGCTCTTCT
GAGATGGCCCCAGTGAACCAGCTTCTAGATGACATAGAATGACATGTAATGCTAAATTTCATTTTGGCTTTGCAA
GTCATGAAGCTTAGGAGGCCTGGCATCTTGGGTGAGTTAGAGATGGAAGTACATTTTAATAGGATGCTTCTTTTC
TCTTCCCCCAGTGCCTAGGTTGCCAGAGCATTTGCACAAATGCCCCTGTTTATCAATAGGTGACTACTTACTACA
CATGAACCATAATGCTGCTTCTTGTGCATGTCTGCTCTGATATACGTCGAACAATGTAGCAGCCACTGTCATTTC
TCAGTGGTTTTGCCTAACCAAACTTCTTCCTAAGGAGATTTATATTCTGGCCTACACAGCAGTCCTTGATGGCTG
ACAGCCACAGAATTCCAAACCAAGTAGTGTCTGTCAGCCCTCTTAACTCTGTGCACGCCCTATTTCAGTCTTTTA
CATTTGTTCTTCTAGGGAATGTATGCATCTCTATATATATTTTCCCTCTCAAAACCAGAACATCAACAGTGCTGT
TTCTGACACTTCAGACATCCCACGCAAAGCCACATTGAATTTTTGCCAAATGAAAAACACATCCAACAATCAAGT
TTCTAAGAAGGTGTCAAGTGGGGAATAATAATAATGTATAATAATCAAGAAATTAGTTTATTAAAAGGAAGCAGA
AGCATTGACCATTTTTTCCCAGAGAAGAGGAGAAATCTGTAGTGAGCAAAGGACAGACCATGAATCCTCCTTGAG
AAGTAGTACTCTCAGAAAGGAGAAGCGCCACTCAAGTTCTTTTAACCCAAGACTTTAGAGAAATTAGGTCCAAGA
TTTTTATATGTTCAGTTGTTTATGTATAAAAATAACTTTCTGGATTTTGTGGGGAGGAGCAGGAGAGGAAGGAAG
TTAATACCTATGTAATACATAGAAACTTCCACAATAAAATGCCATTGATGGTTGAAAAAAAAAAAAAAAAAAA

FIGURE 6637

MAAIPPDSWQPPNVYLETSMGIIVLELYWKHAPKTCKNFAELARRGYYNGTKFHRIIKDFMIQGGDPTGTGRGGA
SIYGKQFEDELHPDLKFTGAGILAMANAGPDTNGSQFFVTLAPTQWLDGKHTIFGRVCQGIGMVNRVGMVETNSQ
DRPVDDVKIIKAYPSG

FIGURE 6638

CGCCTGGCTGTTTCCCGGCTTCATTTCTCCCGACTCAGCTTCCCACCCTGGGCTTTCCGAGGTGCTGTCGCCGCT
GTCCCCACCACTGCAGCCATGATCTCCTTAACGGACACGCAGAAAATTGGAATGGGATTAACAGGATTTGGAGTG
TTTTTCCTGTTCTTTGGAATGATTCTCTTTTTTGACAAAGCACTACTGGCTATTGGAAATGTTTTATTTGTAGCC
GGCTTGGCTTTTGTAATTGGTTTAGAAAGAACATTCAGATTCTTCTTCCAAAAACATAAAATGAAAGCTACAGGT
TTTTTTCTGGGTGGTGTATTTGTAGTCCTTATTGGTTGGCCTTTGATAGGCATGATCTTCGAAATTTATGGATTT
TTTCTCTTGTTCAGGGGCTTCTTTCCTGTCGTTGTTGGCTTTATTAGAAGAGTGCCAGTCCTTGGATCCCTCCTA
AATTTACCTGGAATTAGATCATTTGTAGATAAAGTTGGAGAAAGCAACAATATGGTATAACAACAAGTGAATTTG
AAGACTCATTTAAAATATTGTGTTATTTATAAAGTCATTTGAAGAATATTCAGCACAAAATTAAATTACATGAAA
TAGCTTGTAATGTTCTTTACAGGAGTTTAAAACGTATAGCCTACAAAGTACCAGCAGCAAATTAGCAAAGAAGCA
GTGAAAACAGGCTTCTACTCAAGTGAACTAAGAAGAAGTCAGCAAGCAAACTGAGAGAGGTGAAATCCATGTTAA
TGATGCTTAAGAAACTCTTGAAGGCTATTTGTGTTGTTTTTCCACAATGTGCGAAACTCAGCCATCCTTAGAGAA
CTGTGGTGCCTGTTTCTTTTCTTTTTATTTTGAAGGCTCAGGAGCATCCATAGGCATTTGCTTTTTAGAAGTGTC
CACTGCAATGGCAAAGATATTTCCAGTTGCACTGTATCTCTGGAAGTGATGCATGAATTCGATTGGATTGTGTCA
TTTTAAAGTATTAAAACCAAGGAAACCCCAATTTTGATGTATGGATTACTTTTTTTTGTAAACATGGTTAAAATA
AAACTTCTGTGGTTCTTCTGAATCTT

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FIGURE 6639

MISLTDTQKIGMGLTGFGVFFLFFGMILFFDKALLAIGNVLFVAGLAFVIGLERTFRFFFQKHKMKATGFFLGGV
FVVLIGWPLIGMIFEIYGFFLLFRGFFPVVVGFIRRVPVLGSLLNLPGIRSFVDKVGESNNMV

FIGURE 6640

AGCCGCCGCCTCGCCGCTTCCCCTCGTCGGAGCGGCCGCTCGTCCGCCCGGCTTGAGGCCCGCGGGGAGCGCGGC
GCAATTCGTCGGCCCGCGGGGGGGCGGCCTCCCGGCATCTTCGCGGCGACCAAGGACTACCAGGAAGGGGAGCGG
CTGGGATGGCGCGTCCGCGGCCCCGCGAGTACAAAGCGGGCGACCTGGTCTTCGCCAAGATGAAGGGCTACCCGC
ACTGGCCGGCCCGGATTGATGAACTCCCAGAGGGCGCTGTGAAGCCTCCAGCAAACAAGTATCCTATCTTCTTTT
TTGGCACCCATGAAACTGCATTTCTAGGTCCCAAAGACCTTTTTCCATATAAGGAGTACAAAGACAAGTTTGGAA
AGTCAAACAAACGGAAAGGATTTAACGAAGGATTGTGGGAAATAGAAAATAACCCAGGAGTAAAGTTTACTGGCT
ACCAGGCAATTCAGCAACAGAGCTCTTCAGAAACTGAGGGAGAAGGTGGAAATACTGCAGATGCAAGCAGTGAGG
AAGAAGGTGATAGAGTAGAAGAAGATGGAAAAGGCAAAAGAAAGAATGAAAAAGCAGGCTCAAAACGGAAAAAGT
CATATACTTCAAAGAAATCCTCTAAACAGTCCCGGAAATCTCCAGGAGATGAAGATGACAAAGACTGCAAAGAAG
AGGAAAACAAAAGCAGCTCTGAGGGTGGAGATGCGGGCAACGACACAAGAAACACAACTTCAGACTTGCAGAAAA
CCAGTGAAGGGACCTAACTACCATAATGAATGCTGCATATTAAGAGAAACCACAAGAAGGTTATATGTTTGGTTG
TCTAATATTCTTGGATTTGATATGAACCAACACATAGTCCTTGTTGTCATTGACAGAACCCCAGTTTGTATGTAC
ATTATTCATATTCCTCTCTGTTGTGTTTCGGGGGGAAAAGACATTTTAGCCTTTTTTAAAAGTTACTGATTTAAT
TTCATGTTATTTGGTTGCATGAAGTTGCCCTTAACCACTAAGGATTATCAAGATTTTTGCGCAGACTTATACATG
TCTAGGATCCTTTTATCAAGGCAGTTATGATCATCGTTTTCCTGCCTTGACCCCACCATCATCAAACACTCAGTT
AAATATAAATTAACATTTTTTAGATGACCACTCAACATAATGCTTAAGAATGGAATTTCCTCTCTGTGACAGAAC
CCAGGAATTAATTCCTAAATACATAACGTTGGTATATTGAAGACGAAATTAAAATTGTCCTTCAGTTTTGAGGCC
ATGTGTAAAGTTTAACCATATTGTAAAATATCTATTCCGTATTAGAAATAGCTAGTTGACAGCTTATACTTCTCA
AAATTCATATTGTTATGTACACAAACTAAGTTTCTATATGTGAAGTTAGTGAGTCTTTTTGTGTTACTCCAAAAT
AAAGGCAATGATTTATTTTTTTCCCAGTGCCAATACAATTTTGAGCTAAGCACTCAAGGTGGATACTTTACATTT
TAAAGCTGGAATCAGCAACAGCCCTATGGGAAACCAGACAAAGCATTGACTTTTAAATGTAGACTTTTAAAATAA
ACTGTTTTCTTTTGGAACTACAATTAGAATAGTTAATATTCATCCTTAAACCATTATTATGTGTACATTATTGTT
GCTATTGTGATAATAGAGAATTTTATTTATTTTTATGCCAGCTTATATTGTGAGAACACATTTAGTCAGTTTGGG
TTTTATCAATCCTGTTAATGCTTGTCCTTGGAACATCTTTCGCGTATTCACGGTTTGTAGTTGAAAAGTTTACTG
TAAAAAAATCAAAAACAAAAAAATGTATTGTTTTTACAGAATAAATTTATTGGGATGTGTACTGGGAGTAAGATT
TGAGGTTGTAAGCAAACTAAGTTAGTGTAATTTGGCTTCATATATGTAACGTGAGGTATTAATGTAATTCATATA
TTAAAGCAAAAATTGTTCGCAGC

FIGURE 6641

MARPRPREYKAGDLVFAKMKGYPHWPARIDELPEGAVKPPANKYPIFFFGTHETAFLGPKDLFPYKEYKDKFGKS
NKRKGFNEGLWEIENNPGVKFTGYQAIQQQSSSETEGEGGNTADASSEEEGDRVEEDGKGKRKNEKAGSKRKKSY
TSKKSSKQSRKSPGDEDDKDCKEEENKSSSEGGDAGNDTRNTTSDLQKTSEGT

FIGURE 6642

AGAAGGGAAGGCGCGAGTGAGGAAAGGAGGTACTGTAGATGCCCTCCAAATCCTTGGTTATGGAATATTTGGCTC
ATCCCAGTACACTCGGCTTGGCTGTTGGAGTTGCTTGTGGCATGTGCCTGGGCTGGAGCCTTCGAGTATGCTTTG
GGATGCTCCCCAAAAGCAAGACGAGCAAGACACACACAGATACTGAAAGTGAAGCAAGCATCTTGGGAGACAGCG
GGGAGTACAAGATGATTCTTGTGGTTCGAAATGACTTAAAGATGGGAAAAGGGAAAGTGGCTGCCCAGTGCTCTC
ATGCTGCTGTTTCAGCCTACAAGCAGATTCAAAGAAGAAATCCTGAAATGCTCAAACAATGGGAATACTGTGGCC
AGCCCAAGGTGGTGGTCAAAGCTCCTGATGAAGAAACCCTGATTGCATTATTGGCCCATGCAAAAATGCTGGGAC
TGACTGTAAGTTTAATTCAAGATGCTGGACGTACTCAGATTGCACCAGGCTCTCAAACTGTCCTAGGGATTGGGC
CAGGACCAGCAGACCTAATTGACAAAGTCACTGGTCACCTAAAACTTTACTAGGTGGACTTTGATATGACAACAA
CCCCTCCATCACAAGTGTTTGAAGCCTGTCAGATTCTAACAACAAAAGCTGAATTTCTTCACCCAACTTAAATGT
TCTTGAGATGAAAATAAAACCTATTCCCATGTTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6643

MPSKSLVMEYLAHPSTLGLAVGVACGMCLGWSLRVCFGMLPKSKTSKTHTDTESEASILGDSGEYKMILVVRNDL
KMGKGKVAAQCSHAAVSAYKQIQRRNPEMLKQWEYCGQPKVVVKAPDEETLIALLAHAKMLGLTVSLIQDAGRTQ
IAPGSQTVLGIGPGPADLIDKVTGHLKLY

FIGURE 6644

GACAGCAAATACTTCCGTAAAACAGACCATCAAGCTTTCCACTTAGAGCCCAGTGTGGCCCCAATACCTTTCCTT
GTCGCTCCTGCGTGCCAGTCCGCCTCCGCGTGGTCCGGCCGCTGCGCCACGCCCCCGCTCGCCCCGCCCCTGGAT
TTGCTCCCTCAAAGCTGAAGTGAGGCCGGGCTGAGGCTCTTACAGTGGTCCCTGCTGGCCCTTGGTGACGGGTCG
CCTCAGTTCCGACCCGGACCCGTACGCTGCTGCGCTGACGTGGCTCCCGGAAGTAGGGCTGGCGTAGGGCCGCCA
TGTTGCAGCAGGATAGTAATGATGACACTGAAGATGTTTCACTGTTTGATGCGGAAGAGGAGACGACTAATAGAC
CAAGAAAAGCCAAAATCAGACATCCAGTAGCATCGTTTTTCCACTTATTCTTTCGAGTCAGTGCAATCATCGTCT
ATCTTCTCTGTGAGTTGCTCAGCAGCAGCTTTATTACCTGTATGGTGACAATTATCTTGTTGTTGTCGTGTGACT
TTTGGGCAGTGAAGAATGTCACAGGTAGACTAATGGTTGGCCTACGTTGGTGGAATCACATTGATGAAGATGGAA
AGAGCCATTGGGTGTTTGAATCTAGAAAGGAGTCCTCTCAAGAGAATAAAACTGTGTCAGAGGCTGAATCAAGAA
TCTTTTGGTTGGGACTTATTGCCTGTCCAGTACTGTGGGTGATATTTGCCTTTAGTGCACTCTTCTCCTTCAGAG
TAAAGTGGTTGGCGGTGGTTATCATGGGTGTGGTGCTACAAGGTGCCAACCTGTATGGTTACATCAGGTGTAAGG
TGCGCAAGAAAAGCATTTAACCAGCATGGCTACTTCATATTTTGGAAAGCAGTTTTTAAGACAAAACACTGGAGA
TGATCAGACTTCCTGAATAGAGAAAGCTTATGTGCTTTGTTACATTGGGGAACAACTGAAGAGATTCTTGACTCA
ACCTTTTAGAGCTTAGTCCATGTTGCAACGAGGAGTGTTGGCTTTGTTTTTCCACTTAAAAACTTTATTTATAAA
AAGGAAAAGTAGTTTTCATATTAAGTTTTTATTTCCTTTCCAGCAGTTGGGGCTAGAAAGTATGTGTTGGCACTA
GAAACATTGTCAAGATTTGTTCTGTGGTGTAGGTATGCACATTCCATAGGTATGCACACGGCCATGTAATATCAG
TATATCCCAAGTTAATGAAAGTGTTCATTTACATAGGTAATGGAGACCTTTGCATTTTGATCCATAGAACATAGG
AGGATGTTCTTAGTCTGTCTCAAAGCTCTATATGTTTACATATTATTTCTGTAGGATTGTTTTCAGGAGAAAGTT
TTGCTTCTATGGGTAAGGAGTGAGGCACTTTGGGCTTATGTATAAGTTAGAAATAATTGTTAGTTTTTAATATGC
ACTTCGTGGGGAAATTTCTTAGACGTATGCAAGCAAGTGAAAACAATTAGGGCCAGTGGTATTAACTACTTTATA
AAATTTTATTTTTGTTTGTAAGAAGTCATCTACTTAAGGCCCAGTTAATATAAGTGGAATCATCATAGTTTAAGG
AATACCCAGAGATTGCTGCTGTTCTATTTATTTTACAGAAAGGGTAGCTAGATTGAAAGCTCTTCAGTGGACCTT
GAGCTAATAGATCTTTTACCACTAAAAGAGCATTATTCTCATGTCATAATGAGAATAATAATTTACATACTTGGC
ATAATAAATGCCTAAAAGACATTTTATTTTCTGAATCTATTTTTTTCTTGCTATAATGGGGATATTGTAAATTAT
GCATTTGTATTAATGGTATTTCTTAAAGCAATCTATGTAACTGTAAATTAAACCAATCTACAAACTATTGTAGGC
ATCTGTAAATTCTGTTGTAGGTATTATAAACTTTGTTGAAGTCTTAATCAGCAGATTATGTTGTGAATATATTTG
TACATTGTTAAAATAGTTTTTAAGATTATTTGTTTAATTGAATAAGTGTCTTATTGGAGTGATAGCTTTGAAGGT
GCAAAACTTTATATTTGTATAAAATTCTACTATTTACAAGGCAAA

FIGURE 6645

MLQQDSNDDTEDVSLFDAEEETTNRPRKAKIRHPVASFFHLFFRVSAIIVYLLCELLSSSFITCMVTIILLLSCD
FWAVKNVTGRLMVGLRWWNHIDEDGKSHWVFESRKESSQENKTVSEAESRIFWLGLIACPVLWVIFAFSALFSFR
VKWLAVVIMGVVLQGANLYGYIRCKVRKKSI

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FIGURE 6646

ACGAGGATCCGGTGTTCCAACCCAGGGGGAAAAATGCGGCCTTTGACTGAAGAGGAGACCCGTGTCATGTTTGAG
AAGATAGCGAAATACATTGGGGAGAATCTTCAACTGCTGGTGGACCGGCCCGATGGCACCTACTGTTTCCGTCTG
CACAACGACCGGGTGTACTATGTGAGTGAGAAGATTATGAAGCTGGCCGCCAATATTTCCGGGGACAAGCTGGTG
TCGCTGGGGACCTGCTTTGGAAAATTCACTAAAACCCACAAGTTTCGGTTGCACGTCACAGCTCTGGATTACCTT
GCACCTTATGCCAAGTATAAAGTTTGGATAAAGCCTGGTGCAGAGCAGTCCTTCCTGTATGGGAACCATGTGTTG
AAATCTGGTCTGGGTCGAATCACTGAAAATACTTCTCAGTACCAGGGCGTGGTGGTGTACTCCATGGCAGACATC
CCTTTGGGTTTTGGGGTGGCAGCCAAATCTACACAAGACTGCAGAAAAGTAGACCCCATGGCGATTGTGGTATTT
CATCAAGCAGACATTGGGGAATATGTGCGGCATGAAGAGACGTTGACTTAAAACGAAGCCATTCCAAGGACAGAC
GGCTGTATGGAAAGGCCGAGCTTTGTTTCCTGTGTTTGTGTGGACTCCACCATCATGTTGAATTTTGTCAACACT
CTGGCCTCTTCAGGGACTTCTTATTTACTGTACTCTCTATCACTGACAAATGCAGGCTGGATTCTTATTATATAC
AGAGATGGCTCAAAAATGGGGTTTCAGATCTTTGTGACGAAATAGAATACTGTTTCATATTTGAATCAGAGGGCT
TCTTGTTCTGAGAAATAGGTTCAAAATCATTGGAACCAGGAACAAGAATAGCTTATTGTTATCTGTGATAACACT
GTTTTCTAAACACAAGGATTTTCTTTTTTATTAATATGCAACATAGACATTGCCATAACAGAATAATAAACCACA
TGTGGGGTTTTAAAAATGAAATTTGGCTAATAGGAGCAATTCAGCTATTTTTCTATACAGTAATTGGTGTGTGGT
ATAGAAGAAAAACGGGTTCAAACCCCACTTCTGCCACCTACCAGCTATATGGCCTTGAATGAGTCATTCAGCTTT
AATAAGGTTCATTTTCTTCTGTTTAAAAAGACACAAAACTTGAAAATCAGCTTTGGCCATCTACCTGAGAATTAG
AAAGTCTGATTTTTGGAATTAGAAATCATGATTGTAGGCTGGGCACAGTGTCGCGCCTGTAATCCCAGCACTTTG
GGAGGCCAAGGCGGACGGATCACTTGAGGTTAGGAGTTTGAGACCAGCCTGGCCAACATGGTGAAACCCCATCTC
TACTAAAAAAAAA

7401/8433

FIGURE 6647

MRPLTEEETRVMFEKIAKYIGENLQLLVDRPDGTYCFRLHNDRVYYVSEKIMKLAANISGDKLVSLGTCFGKFTK
THKFRLHVTALDYLAPYAKYKVWIKPGAEQSFLYGNHVLKSGLGRITENTSQYQGVVVYSMADIPLGFGVAAKST
QDCRKVDPMAIVVFHQADIGEYVRHEETLT

FIGURE 6648

ATCTTCATCGAGCGCCATGGCCGCAGCCTGCGGGCCGGGAGCGGCCGGGTACTGCTTGCTCCTCGGCTTGCATTT
GTTTCTGCTGACCGCGGGCCCTGCCCTGGGCTGGAACGACCCTGACAGAATGTTGCTGCGGGATGTAAAAGCTCT
TACCCTCCACTATGACCGCTATACCACCTCCCGCAGCTGGGATCCCATCCCACAGTTGAAATGTGTTGGAGGCAC
AGCTGGTTGTGATTCTTATACCCCAAAAGTCATACAGTGTCAGAACAAAGGCTGGGATGGGTATGATGTACAGTG
GGAATGTAAGACGGACTTAGATATTGCATACAAATTTGGAAAAACTGTGGTGAGCTGTGAAGGCTATGAGTCCTC
TGAAGACCAGTATGTACTAAGAGGTTCTTGTGGCTTGGAGTATAATTTAGATTATACAGAACTTGGCCTGCAGAA
ACTGAAGGAGTCTGGAAAGCAGCACGGCTTTGCCTCTTTCTCTGATTATTATTATAAGTGGTCCTCGGCGGATTC
CTGTAACATGAGTGGATTGATTACCATCGTGGTACTCCTTGGGATCGCCTTTGTAGTCTATAAGCTGTTCCTGAG
TGACGGGCAGTATTCTCCTCCACCGTACTCTGAGTATCCTCCATTTTCCCACCGTTACCAGAGATTCACCAACTC
AGCAGGACCTCCTCCCCCAGGCTTTAAGTCTGAGTTCACAGGACCACAGAATACTGGCCATGGTGCAACTTCTGG
TTTTGGCAGTGCTTTTACAGGACAACAAGGATATGAAAATTCAGGACCAGGGTTCTGGACAGGCTTGGGAACTGG
TGGAATACTAGGATATTTGTTTGGCAGCAATAGAGCGGCAACACCCTTCTCAGACTCGTGGTACTACCCGTCCTA
TCCTCCCTCCTACCCTGGCACGTGGAATAGGGCTTACTCACCCCTTCATGGAGGCTCGGGCAGCTATTCGGTATG
TTCAAACTCAGACACGAAAACCAGAACTGCATCAGGATATGGTGGTACCAGGAGACGATAAAGTAGAAAGTTGGA
GTCAAACACTGGATGCAGAAATTTTGGATTTTTCATCACTTTCTCTTTAGAAAAAAAGTACTACCTGTTAACAAT
TGGGAAAAGGGGATATTCAAAAGTTCTGTGGTGTTATGTCCAGTGTAGCTTTTTGTATTCTATTATTTGAGGCTA
AAAGTTGATGTGTGACAAAATACTTATGTGTTGTATGTCAGTGTAACATGCAGATGTATATTGCAGTTTTTGAAA
GTGATCATTACTGTGGAATGCTAAAAATACATTAATTTCTAAAACCTGTGATGCCCTAAGAAGCATTAAGAATGA
AGGTGTTGTACTAATAGAAACTAAGTACAGAAATTTCAGTTTTAGGTGGTTGTAGCTGATGAGTTATTACCTCAT
AGAGACTATAATATTCTATTTGGTATTATATTATTTGATGTTTGCTGTTCTTCAAACATTTAAATCAAGCTTTGG
ACTAATTATGCTAATTTGTGAGTTCTGATCACTTTTGAGCTCTGAAGCTTTGAATCATTCAGTGGTGGAGATGGC
CTTCTGGTAACTGAATATTACCTTCTGTAGGAAAAGGTGGAAAATAAGCATCTAGAAGGTTGTTGTGAATGACTC
TGTGCTGGCAAAAATGCTTGAAACCTCTATATTTCTTTCGTTCATAAGAGGTAAAGGTCAAATTTTTCAACAAAA
GTCTTTTAATAACAAAAGCATGCAGTTCTCTGTGAAATCTCAAATATTGTTGTAATAGTCTGTTTCAATCTTAAA
AAGAATCAATAAAAACAAACAAGGGGAAAAAAAAAAAAA

FIGURE 6649

MAAACGPGAAGYCLLLGLHLFLLTAGPALGWNDPDRMLLRDVKALTLHYDRYTTSRSWDPIPQLKCVGGTAGCDS
YTPKVIQCQNKGWDGYDVQWECKTDLDIAYKFGKTVVSCEGYESSEDQYVLRGSCGLEYNLDYTELGLQKLKESG
KQHGFASFSDYYYKWSSADSCNMSGLITIVVLLGIAFVVYKLFLSDGQYSPPPYSEYPPFSHRYQRFTNSAGPPP
PGFKSEFTGPQNTGHGATSGFGSAFTGQQGYENSGPGFWTGLGTGGILGYLFGSNRAATPFSDSWYYPSYPPSYP
GTWNRAYSPLHGGSGSYSVCSNSDTKTRTASGYGGTRRR

FIGURE 6650

GGTGGTCCAGGAAAAGGCGCTCCGTC**ATG**GGGATCCAGACGAGCCCCGTCCTGCTGGCCTCCCTGGGGGTGGGGC
TGGTCACTCTGCTCGGCCTGGCTGTGGGCTCCTACTTGGTTCGGAGGTCCCGCCGGCCTCAGGTCACTCTCCTGG
ACCCCAATGAAAAGTACCTGCTACGACTGCTAGACAAGACGACTGTGAGCCACAACACCAAGAGGTTCCGCTTTG
CCCTGCCCACCGCCCACCACACTCTGGGGCTGCCTGTGGGCAAACATATCTACCTCTCCACCCGAATTGATGGCA
ACCTGGTCATCAGGCCATACACTCCTGTCACCAGTGATGAGGATCAAGGCTATGTGGATCTTGTCATCAAGGTCT
ACCTGAAGGGTGTGCACCCCAAATTTCCTGAGGGAGGGAAGATGTCTCAGTACCTGGATAGCCTGAAGGTTGGGC
ATGTGGTGGAGTTTCGGGGGCCAAGCGGGTTGCTCACTTACACTGGAAAAGGGCATTTTAACATTCAGCCCAACA
AGAAATCTCCACCAGAACCCCGAGTGGCGAAGAAACTGGGAATGATTGCCGGCGGGACAGGAATCACCCCAATGC
TACAGCTGATCCGGGCCATCCTGAAAGTCCCTGAAGATCCAACCCAGTGCTTTCTGCTTTTTGCCAACCAGACAG
AAAAGGATATCATCTTGCGGGAGGACTTAGAGGAACTGCAGGCCCGCTATCCCAATCGCTTTAAGCTCTGGTTCA
CTCTGGATCATCCCCCAAAAGATTGGGCCTACAGCAAGGGCTTTGTGACTGCCGACATGATCCGGGAACACCTGC
CCGCTCCAGGGGATGATGTGCTGGTACTGCTTTGTGGGCCACCCCCAATGGTGCAGCTGGCCTGCCATCCCAACT
TGGACAAACTGGGCTACTCACAAAAGATGCGATTCACCTAC**TGA**GCATCCTCCAGCTTCCCTGGTGCTGTTCGCT
GCAGTTGTTCCCCATCAGTACTCAAGCACTATAAGCCTTAGATTCCTTTCCTCAGAGTTTCAGGTTTTTTCAGTT
ACATCTAGAGCTGAAATCTGGATAGTACCTGCAGGAACAATATTCCTGTAGCCATGGAAGAGGCCCAAGGCTCAG
TCACTCCTTGGATGGCCTCCTAAATCTCCCCGTGGCAACAGGTCCAGGAGAGGCCCATGGAGCAGTCTCTTCCAT
GGAGTAAGAAGGAAGGGAGCATGTACGCTTGGTCCAAGATTGGCTAGTTCCTTGATAGCATCTTACTCTCACCTT
CTTTGTGTCTGTGATGAAAGGAACAGTCTGTGCAATGGGTTTTACTTAAACTTCACTGTTCAACCTATGAGCAAA
TCTGTATGTGTGAGTATAAGTTGAGCATAGCATACTTCCAGAGGTGGTCTTATGGAGATGGCAAGAAAGGAGGAA
ATGATTTCTTCAGATCTCAAAGGAGTCTGAAATATCATATTTCTGTGTGTGTCTCTCTCAGCCCCTGCCCAGGCT
AGAGGGAAACAGCTACTGATAATCGAAAACTGCTGTTTGTGGCAGGAACCCCTGGCTGTGCAAATAATACTGGCT
GAGGCCCCTGTGTGATATTGAAAAAAAA

FIGURE 6651

MGIQTSPVLLASLGVGLVTLLGLAVGSYLVRRSRRPQVTLLDPNEKYLLRLLDKTTVSHNTKRFRFALPTAHHTL
GLPVGKHIYLSTRIDGNLVIRPYTPVTSDEDQGYVDLVIKVYLKGVHPKFPEGGKMSQYLDSLKVGHVVEFRGPS
GLLTYTGKGHFNIQPNKKSPPEPRVAKKLGMIAGGTGITPMLQLIRAILKVPEDPTQCFLLFANQTEKDIILRED
LEELQARYPNRFKLWFTLDHPPKDWAYSKGFVTADMIREHLPAPGDDVLVLLCGPPPMVQLACHPNLDKLGYSQK
MRFTY

FIGURE 6652

GAATTCCGAGCTTTTTATTCCTAAGAGGAGAAAATCAGTAACGGGAGAAGCAGGAGGATGTCCAGAAGAAATTTC
ATCCCTTGCTCTCGCCCCTACTCTTTCTGGTGTTAGATCGAGCTACCCTCTAAAAGCAGTTTAGAGTGGTAAAAA
AAAAAAAAACACACCAAACGCTCGCAGCCACAAAAGGGATGAAATTTCTTCTGGACATCCTCCTGCTTCTCCCGT
TACTGATCGTCTGCTCCCTAGAGTCCTTCGTGAAGCTTTTTATTCCTAAGAGGAGAAAATCAGTCACCGGCGAAA
TCGTGCTGATTACAGGAGCTGGGCATGGAATTGGGAGACTGACTGCCTATGAATTTGCTAAACTTAAAAGCAAGC
TGGTTCTCTGGGATATAAATAAGCATGGACTGGAGGAAACAGCTGCCAAATGCAAGGGACTGGGTGCCAAGGTTC
ATACCTTTGTGGTAGACTGCAGCAACCGAGAAGATATTTACAGCTCTGCAAAGAAGGTGAAGGCAGAAATTGGAG
ATGTTAGTATTTTAGTAAATAATGCTGGTGTAGTCTATACATCAGATTTGTTTGCTACACAAGATCCTCAGATTG
AAAAGACTTTTGAAGTTAATGTACTTGCACATTTCTGGACTACAAAGGCATTTCTTCCTGCAATGACGAAGAATA
ACCATGGCCATATTGTCACTGTGGCTTCGGCAGCTGGACATGTCTCGGTCCCCTTCTTACTGGCTTACTGTTCAA
GCAAGTTTGCTGCTGTTGGATTTCATAAAACTTTGACAGATGAACTGGCTGCCTTACAAATAACTGGAGTCAAAA
CAACATGTCTGTGTCCTAATTTCGTAAACACTGGCTTCATCAAAAATCCAAGTACAAGTTTGGGACCCACTCTGG
AACCCGAGGAAGTGGTAAACAGGCTGATGCATGGGATTCTGACTGAGCAGAAGATGATTTTTATTCCATCTTCTA
TAGCTTTTTTAACAACATTGGAAAGGATCCTTCCTGAGCGTTTCCTGGCAGTTTTAAAACGAAAAATCAGTGTTA
AGTTTGATGCAGTTATTGGATATAAAATGAAAGCGCAATAAGCACCTAGTTTTCTGAAAACTGATTTACCAGGTT
TAGGTTGATGTCATCTAATAGTGCCAGAATTTTAATGTTTGAACTTCTGTTTTTTCTAATTATCCCCATTTCTTC
AATATCATTTTTGAGGCTTTGGCAGTCTTCATTTACTACCACTTGTTCTTTAGCCAAAAGCTGATTACATATGAT
ATAAACAGAGAAATACCTTTAGAGGTGACTTTAAGGAAAATGAAGAAAAAGAACCAAAATGACTTTATTAAAATA
ATTTCCAAGATTATTTGTGGCTCACCTGAAGGCTTTGCAAAATTTGTACCATAACCGTTTATTTAACATATATTT
TTATTTTTGATTGCACTTAAATTTTGTATAATTTGTGTTTCTTTTTCTGTTCTACATAAAATCAGAAACTTCAAG
CTCTCTAAATAAAATGAAGGACTATATCTAGTGGTATTTCACAATGAATATCATGAACTCTCAATGGGTAGGTTT
CATCCTACCCATTGCCACTCTGTTTCCTGAGAGATACCTCACATTCCAATGCCAAACATTTCTGCACAGGGAAGC
TAGAGGTGGATACACGTGTTGCAAGTATAAAAGCATCACTGGGGGGATTTAAGGAGAATTGAGAGAATGTACCCAC
AAATGGCAGCAATAATAAATGGATCACACTTAACG

FIGURE 6653

MKFLLDILLLLPLLIVCSLESFVKLFIPKRRKSVTGEIVLITGAGHGIGRLTAYEFAKLKSKLVLWDINKHGLEE
TAAKCKGLGAKVHTFVVDCSNREDIYSSAKKVKAEIGDVSILVNNAGVVYTSDLFATQDPQIEKTFEVNVLAHFW
TTKAFLPAMTKNNHGHIVTVASAAGHVSVPFLLAYCSSKFAAVGFHKTLTDELAALQITGVKTTCLCPNFVNTGF
IKNPSTSLGPTLEPEEVVNRLMHGILTEQKMIFIPSSIAFLTTLERILPERFLAVLKRKISVKFDAVIGYKMKAQ

FIGURE 6654

GCGAGGCGCCCGAAGCCGTCGCGGCGGGGACCATGTTGCTTCCGAACATCCTGCTCACCGGTACACCAGGGGTTG
GAAAAACCACACTAGGCAAAGAACTTGCGTCAAAATCAGGACTGAAATACATTAATGTGGGTGATTTAGCTCGAG
AAGAGCAATTGTATGATGGCTATGATGAAGAGTATGACTGTCCCATTTTAGATGAAGACAGAGTAGTTGATGAGT
TAGATAACCAAATGAGAGAAGGTGGAGTTATTGTTGATTACCATGGTTGTGATTTCTTCCCTGAACGCTGGTTTC
ATATAGTTTTTGTGCTGAGAACAGATACCAATGTATTGTACGAAAGACTTGAAACAAGGGGTTATAATGAGAAGA
AACTAACAGACAATATTCAGTGTGAGATTTTTCAAGTTCTTTATGAAGAAGCCACAGCATCCTACAAGGAAGAAA
TCGTGCATCAGCTGCCCAGTAATAAACCAGAAGAGCTAGAAAATAATGTAGATCAGATCTTGAAATGGATTGAGC
AGTGGATCAAAGATCATAACTCTTGACTTATAAGGCTAGCTACTTAATAATCACTCTTGTTGATATCTCTGCCGA
CATCATAGAAATTGTTCAAGTGTCAGTAACACTTTATTAAAATCATGTTGCAGAACCAGCAGGTGGATAGTATAT
AGGTTTATGCCTGTGTTTCTTTTTCTCCATGAGAAAGCTAAACATGAAATATAATGAATATAGTATTATTAAGGA
TTGAGACAAAAACTGTGATTTTAATACTTAAATTGCTAAAGAATAAATAAATCTGACAAAATGGGTGGATATCTT
TTAAGTTTATTACAGAAAAAAATGCAGATGATCTCTTAAAATAAAACTAAAGATAAAGCAAAAAAA

FIGURE 6655

MLLPNILLTGTPGVGKTTLGKELASKSGLKYINVGDLAREEQLYDGYDEEYDCPILDEDRVVDELDNQMREGGVI
VDYHGCDFFPERWFHIVFVLRTDTNVLYERLETRGYNEKKLTDNIQCEIFQVLYEEATASYKEEIVHQLPSNKPE
ELENNVDQILKWIEQWIKDHNS

FIGURE 6656

TCAGTGGGCGTCGCGCGAAGGCTAAGGGAGTGTGGCGGGCGGCTCCGGGAGCCAACATGCCTCGGTATGCGCAGC
TGGTCATGGGCCCCGCGGGCAGCGGGAAGAGCACCTACTGTGCCACCATGGTCCAGCACTGTGAAGCCCTCAACC
GGTCTGTCCAAGTTGTAAACCTGGATCCAGCAGCAGAACACTTCAACTACTCCGTGATGGCTGACATCCGGGAAC
TGATCGAGGTGGATGATGTAATGGAGGATGATTCTCTGCGATTCGGTCCCAACGGAGGATTGGTATTTTGCATGG
AGTACTTTGCCAATAATTTTGACTGGCTGGAGAACTGTCTTGGCCATGTAGAGGACGACTATATCCTTTTTGATT
GTCCAGGTCAGATTGAGTTGTACACTCACCTGCCTGTGATGAAACAGCTGGTCCAGCAGCTCGAGCAGTGGGAGT
TCCGAGTCTGTGGAGTTTTTCTTGTTGATTCTCAGTTCATGGTGGAGTCATTCAAGTTTATTTCTGGCATCTTGG
CAGCCCTGAGTGCCATGATCTCTCTAGAAATTCCGCAAGTCAACATCATGACAAAAATGGATCTGCTGAGTAAAA
AAGCAAAAAAGGAAATTGAGAAATTTTTAGATCCAGACATGTATTCTTTATTAGAAGATTCTACAAGTGACTTAA
GAAGCAAAAAATTCAAGAAACTGACTAAAGCTATATGTGGACTGATTGATGACTACAGCATGGTTCGATTTTTAC
CTTACGATCAGTCAGATGAAGAAAGCATGAACATTGCATTGCAGCATATTGATTTTGCCATTCAATATGGAGAAG
ACCTAGAATTTAAAGAACCAAAGGAACGTGAAGATGAGTCTTCCTCTATGTTTGACGAATATTTTCAAGAATGCC
AGGATGAATGAAGAGTTTACTAAAAGTAACCATCTAAAGAGCTTGTGGCCAAACCAGCAGAACATTCTTCTCTTC
AAAGGATGCAATAGTAGAAAGCTACTTATTTTAATGAAAAAAAGTAAAACTTCGTTCTTTATCAGCCTCATGCCT
GAATCAAATTTTTAATTATTCTGAAACTGCTGCTGTTTAAAGTGGAATCTTTTAGTATTATAACAGCATCACTTT
AGATTTTGTAAGTCAAAATTGAAATGAATGCACATAGATTTATATATAAATTAGCACCTGAGCTAAGGTTAAGGC
TGGTCTAAACTTATTTTCACTTTTTGTATTATTTTTGAGATGCAGGAATTACTGTAACAAAATATGTATGTCCGA
AGGGAAAAAGCTGCAAGGATATATATAAGACCACTGCTTATCTGTATCTTCCCATTTTCCTATATTGAAAATGTA
TATTATTTATATAACTTAAAAAGTAAAAATAACTATGTTTTGAGATATGTATGTGTATATATAAAAGAAACAAAG
GTTTTTAATGATTCTTGGACCTAGATAACAAGTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6657

MPRYAQLVMGPAGSGKSTYCATMVQHCEALNRSVQVVNLDPAAEHFNYSVMADIRELIEVDDVMEDDSLRFGPNG
GLVFCMEYFANNFDWLENCLGHVEDDYILFDCPGQIELYTHLPVMKQLVQQLEQWEFRVCGVFLVDSQFMVESFK
FISGILAALSAMISLEIPQVNIMTKMDLLSKKAKKEIEKFLDPDMYSLLEDSTSDLRSKKFKKLTKAICGLIDDY
SMVRFLPYDQSDEESMNIALQHIDFAIQYGEDLEFKEPKEREDESSSMFDEYFQECQDE

FIGURE 6658

GGCAGAAGAGGGGGCTAGCTAGCTGTCTCTGCGGACCAAGGAGACCCCCGCGCCCCCCCGGTGTGAGGCGGCCTC
ACAGGGCCGGGTGGGCTGGCGAGCCGACGCGGCGGCGGAGGAGGCTGTGAGGAGTGTGTGGAACAGGACCCGGGA
CAGAGGAACC**ATG**GCTCCGCAGAACCTGAGCACCTTTTGCCTGTTGCTGCTATACCTCATCGGGGCGGTGATTGC
CGGACGAGATTTCTATAAGATCTTGGGGGTGCCTCGAAGTGCCTCTATAAAGGATATTAAAAAGGCCTATAGGAA
ACTAGCCCTGCAGCTTCATCCCGACCGGAACCCTGATGATCCACAAGCCCAGGAGAAATTCCAGGATCTGGGTGC
TGCTTATGAGGTTCTGTCAGATAGTGAGAAACGGAAACAGTACGATACTTATGGTGAAGAAGGATTAAAAGATGG
TCATCAGAGCTCCCATGGAGACATTTTTTCACACTTCTTTGGGGATTTTGGTTTCATGTTTGGAGGAACCCCTCG
TCAGCAAGACAGAAATATTCCAAGAGGAAGTGATATTATTGTAGATCTAGAAGTCACTTTGGAAGAAGTATATGC
AGGAAATTTTGTGGAAGTAGTTAGAAACAAACCTGTGGCAAGGCAGGCTCCTGGCAAACGGAAGTGCAATTGTCG
GCAAGAGATGCGGACCACCCAGCTGGGCCCTGGGCGCTTCCAAATGACCCAGGAGGTGGTCTGCGACGAATGCCC
TAATGTCAAACTAGTGAATGAAGAACGAACGCTGGAAGTAGAAATAGAGCCTGGGGTGAGAGACGGCATGGAGTA
CCCCTTTATTGGAGAAGGTGAGCCTCACGTGGATGGGGAGCCTGGAGATTTACGGTTCCGAATCAAAGTTGTCAA
GCACCCAATATTTGAAAGGAGAGGAGATGATTTGTACACAAATGTGACAATCTCATTAGTTGAGTCACTGGTTGG
CTTTGAGATGGATATTACTCACTTGGATGGTCACAAGGTACATATTTCCCGGGATAAGATCACCAGGCCAGGAGC
GAAGCTATGGAAGAAAGGGGAAGGGCTCCCCAACTTTGACAACAACAATATCAAGGGCTCTTTGATAATCACTTT
TGATGTGGATTTTCCAAAAGAACAGTTAACAGAGGAAGCGAGAGAAGGTATCAAACAGCTACTGAAACAAGGGTC
AGTGCAGAAGGTATACAATGGACTGCAAGGATAT**TGA**GAGTGAATAAAATTGGACTTTGTTTAAAAAAAAAAAAA
AAAAA

FIGURE 6659

MAPQNLSTFCLLLLYLIGAVIAGRDFYKILGVPRSASIKDIKKAYRKLALQLHPDRNPDDPQAQEKFQDLGAAYE
VLSDSEKRKQYDTYGEEGLKDGHQSSHGDIFSHFFGDFGFMFGGTPRQQDRNIPRGSDIIVDLEVTLEEVYAGNF
VEVVRNKPVARQAPGKRKCNCRQEMRTTQLGPGRFQMTQEVVCDECPNVKLVNEERTLEVEIEPGVRDGMEYPFI
GEGEPHVDGEPGDLRFRIKVVKHPIFERRGDDLYTNVTISLVESLVGFEMDITHLDGHKVHISRDKITRPGAKLW
KKGEGLPNFDNNNIKGSLIITFDVDFPKEQLTEEAREGIKQLLKQGSVQKVYNGLQGY

FIGURE 6660

AGAGCGTGGAGCGCTGCGCGGCGCGGCGGCCGGGCCCTCGAGACGGGGACGGACACACCAGCCCCTCAGATACCA
CTTGGCCACTCCCGCTGAGGCCACTCCCACTGCGTGGCTGAAGCCTCGAGGTCACCAGGCGGAGGCGCGGAG**ATG**

CCCCTGCATCAGCTGGGGGACAAGCCGCTCACCTTCCCCAGCCCCAACTCAGCCATGGAAAACGGGCTTGACCAC
ACCCCACCCAGCAGGAGGGCATCCCCGGGCACACCCCTGAGCCCCGGCTCCCTCCGCTCCGCTGCCCATAGCCCC
CTGGACACCAGCAAGCAGCCCCTCTGCCAGCTCTGGGCCGAGAAGCATGGCGCCCGGGGGACCCATGAGGTGCGG
TACATCTCGGCCGGGCAGAGCGTGGCGTGCGGCTGGTGGGCCTTCGCACCGCCGTGCCTGCAGGTCCTCAACACG
CCCAAGGGCATCCTGTTCTTCCTGTGTGCGGCCGCATTCCTGCAGGGGATGACTGTGAATGGCTTCATCAACACA
GTCATCACCTCCCTGGAGCGCCGCTATGACCTGCACAGCTACCAGAGCGGGCTCATCGCCAGCTCCTACGACATT
GCCGCCTGCCTCTGCCTCACCTTCGTCAGCTACTTCGGGGGCTCAGGGCACAAGCCGCGCTGGCTGGGCTGGGGC
GTGCTGCTTATGGGCACGGGTTCGCTGGTGTTCGCGCTGCCCCACTTCACGGCTGGCCGCTATGAGGTGGAGTTG
GACGCGGGTGTCAGGACGTGCCCTGCCAACCCCGGCGCGGTGTGTGCGGACAGCACCTCGGGCCTGTCCCGCTAC
CAGCTGGTCTTCATGCTGGGCCAGTTCCTGCATGGCGTGGGTGCCACACCCCTCTACATGCTGGGCGTCCTCTTC
TTTGCCATAGCCTGCTTCTTATACAAGCCCCTGTCGGAGTCCCAGTTCAGCCTGAGTGCCTCAGAAGCTGCCACC
TTGTTTGGGTACCTGGTGGTGCCAGCGGGTGGTGGCGGCACCTTCCTGGGCGGCTTCTTTGTGAACAAGCTCAGG
CTCCGGGGCTCCGCGGTCATCAAGTTCTGCCTGTTCTGCACCGTTGTCAGCCTGCTGGGCATCCTCGTCTTCTCA
CTGCACTGCCCCAGTGTGCCCATGGCGGGCGTCACAGCCAGCTACGGCGGGAGCCTCCTGCCCGAAGGCCACCTG
AACCTAACGGCTCCCTGCAACGCTGCCTGCAGCTGCCAGCCAGAACACTACAGCCCTGTGTGCGGCTCGGACGGC
CTCATGTACTTCTCACTGTGCCACGCAGGGTGCCCTGCAGCCACGGAGACGAATGTGGACGGCCAGAAGGTGTAC
CGAGACTGTAGCTGTATCCCTCAGAATCTTTCCTCTGGTTTTGGCCATGCCACTGCAGGGAAATGCACTTCAACT
TGTCAGAGAAAGCCCCTCCTTCTGGTTTTCATATTCGTTGTAATTTTCTTTACATTCCTCAGCAGCATTCCTGCA
CTAACGGCAACTCTACGATGTGTCCGTGACCCTCAGAGATCCTTTGCCCTGGGAATCCAGTGGATTGTAGTTAGA
ATACTAGGGGGCATCCCGGGGCCCATCGCCTTCGGCTGGGTGATCGACAAGGCCTGTCTGCTGTGGCAGGACCAG
TGTGGCCAGCAGGGCTCCTGCTTGGTGTACCAGAATTCGGCCATGAGCCGCTACATACTCATCATGGGGCTCCTG
TACAAGGTGCTGGGCGTCCTCTTCTTTGCCATAGCCAGCTCCAGAGCAGCGTCTGACCACCGCCCGCGCCCACCC
GGCCACGGCGGGCACTCAGCATTTCCTGATGACAGAACAGTGCCGTTGGGTGATGCAATCACACGGGAACTTCTA
TTTGACCTGCAACCTTCTACT**TAA**CCTGCGGTTTAAAGTCGGCTGTGACCTCCTGTCCCCAGAGCTGTACGGCCC
TGCAGTGGGTGGGAGGAACTTGCATAAATATATATTTATGGACACACAGTTTGCATCAGAACGTGTTTATAGAAT
GTGTTTTATACCCGATCGTGTGTGGTGTGCGTGAGGACAAACTCCGCAGGGGCTGTGAATCCCACTGGGAGGGCG
GTGGGCCTGCAGCCCGAGGAAGGCTTGTGTGTCCTCAGTTAAAACTGTGCATATCGAAATATATTTTGTTATTT

FIGURE 6661

MPLHQLGDKPLTFPSPNSAMENGLDHTPPSRRASPGTPLSPGSLRSAAHSPLDTSKQPLCQLWAEKHGARGTHEV
RYISAGQSVACGWWAFAPPCLQVLNTPKGILFFLCAAAFLQGMTVNGFINTVITSLERRYDLHSYQSGLIASSYD
IAACLCLTFVSYFGGSGHKPRWLGWGVLLMGTGSLVFALPHFTAGRYEVELDAGVRTCPANPGAVCADSTSGLSR
YQLVFMLGQFLHGVGATPLYMLGVLFFAIACFLYKPLSESQFSLSASEAATLFGYLVVPAGGGGTFLGGFFVNKL
RLRGSAVIKFCLFCTVVSLLGILVFSLHCPSVPMAGVTASYGGSLLPEGHLNLTAPCNAACSCQPEHYSPVCGSD
GLMYFSLCHAGCPAATETNVDGQKVYRDCSCIPQNLSSGFGHATAGKCTSTCQRKPLLLVFIFVVIFFTFLSSIP
ALTATLRCVRDPQRSFALGIQWIVVRILGGIPGPIAFGWVIDKACLLWQDQCGQQGSCLVYQNSAMSRYILIMGL
LYKVLGVLFFAIASSRAASDHRPRPPGHGGHSAFPDDRTVPLGDAITRELLFDLQPST

FIGURE 6662

CAGATGTCCAGTTCCAGATGCCTGGACCCAGAGTGTGGGGGAAATATCTCTGGAGAAGCCCTCACTCCAAAGGCT
GTCCAGGCGCAATGTGGTGGCTGCTTCTCTGGGGAGTCCTCCAGGCTTGCCCAACCCGGGGCTCCGTCCTCTTGG
CCCAAGAGCTACCCCAGCAGCTGACATCCCCCGGGTACCCAGAGCCGTATGGCAAAGGCCAAGAGAGCAGCACGG
ACATCAAGGCTCCAGAGGGCTTTGCTGTGAGGCTCGTCTTCCAGGACTTCGACCTGGAGCCGTCCCAGGACTGTG
CAGGGGACTCTGTCACAATCTCATTCGTCGGTTCGGATCCAAGCCAGTTCTGTGGTCAGCAAGGCTCCCCTCTGG
GCAGGCCCCCTGGTCAGAGGGAGTTTGTATCCTCAGGGAGGAGTTTGCGGCTGACCTTCCGCACACAGCCTTCCT
CGGAGAACAAGACTGCCCACCTTCACAAGGGCTTTCTGGCCCTCTACCAAACCGTGGCTGTGAACTATAGTCAGC
CCATCAGCGAGGCCAGCAGGGGCTCTGAGGCCATCAACGCACCTGGAGACAACCCTGCCAAGGTCCAGAACCACT
GCCAGGAGCCCTATTATCAGGCCGCGGCAGCAGGGGCACTCACCTGTGCAACCCCAGGGACCTGGAAAGACAGAC
AGGATGGGGAGGAGGTTCTTCAGTGTATGCCTGTCTGCGGACGGCCAGTCACCCCCATTGCCCAGAATCAGACGA
CCCTCGGTTCTTCCAGAGCCAAGCTGGGCAACTTCCCCTGGCAAGCCTTCACCAGTATCCACGGCCGTGGGGGCG
GGGCCCTGCTGGGGGACAGATGGATCCTCACTGCTGCCCACACCGTCTACCCCAAGGACAGTGTTTCTCTCAGGA
AGAACCAGAGTGTGAATGTGTTCTTGGGCCACACAGCCATAGATGAGATGCTGAAACTGGGGAACCACCCTGTCC
ACCGTGTCGTTGTGCACCCCGACTACCGTCAGAATGAGTCCCATAACTTTAGCGGGGACATCGCCCTCCTGGAGC
TGCAGCACAGCATCCCCCTGGGCCCCAACGTCCTCCCGGTCTGTCTGCCCGATAATGAGACCCTCTACCGCAGCG
GCTTGTTGGGCTACGTCAGTGGGTTTGGCATGGAGATGGGCTGGCTAACTACTGAGCTGAAGTACTCGAGGCTGC
CTGTAGCTCCCAGGGAGGCCTGCAACGCCTGGCTCCAAAAGAGACAGAGACCCGAGGTGTTTTCTGACAATATGT
TCTGTGTTGGGGATGAGACGCAAAGGCACAGTGTCTGCCAGGGGGACAGTGGCAGCGTCTATGTGGTATGGGACA
ATCATGCCCATCACTGGGTGGCCACGGGCATTGTGTCCTGGGGCATAGGGTGTGGCGAAGGGTATGACTTCTACA
CCAAGGTGCTCAGCTATGTGGACTGGATCAAGGGAGTGATGAATGGCAAGAATTGACCCTGGGGGCTTGAACAGG
GACTGACCAGCACAGTGGAGGCCCCAGGCAACAGAGGGCCTGGAGTGAGGACTGAACACTGGGGTAGGGGTTGGG
GGTGGGGGGTTGGGGGAGGCAGGGAAATCCTATTCACATCACTGTTGCACCAAGCCACTGCAAGAGAAACCCCCA
CCCGGCAAGCCCGCCCCATCCCAGACAGGAAGCAGAGTCCCACAGACCGCTCCTCCTCACCCTCTACCTCCCTGT
GCTCATGCACTAGGCCCCGGGAAGCCTGTACATCTCAACAACTTTCGCCTTGAATGTCCTTAGAACCACCTTCCC
CTACTTCATCTGTTGACACAGCTTTTATACTCACCTGTGGAAGAGTCAGCTACTCACCCGCTATTAGAGTATGGA
GGAAGGGGTTTTCATTGCATTGCATTTCTGAAACATTCCTAAGACCCTTTAGTTGACCTTCAAATATTCAAGCTA
TTCTGCAGCTCCAAGATGCAATTATAGAAACAGCTCCTTTTTTATTTTATGTCCTCTATATGCCAGGTGCTTCAC
CTGTTATTTCACTTAATCCTCATACCATATTTGCAAAGGATGTGTTATTATCTATGTGTGACAAATGAGGAAACT
GAGGCTCAGGGGATAAAGGGACTTGCCCAAGTCCCACAGCTGGTGTGTGACTGCAGAGACTGTGCTCTTCCCAGT
GTGCTGCAATACTTCTCAACCCTCCTCTAACCTGCTGTGTCACCCGCTTTCCCTCCCAGCCCCCACATCCTTACC
ATTTTCCCTCCCTGGGAATTCCTGCTTCTGCGAAAATGGTATCCTCTAGCTCACACTTTCCTAATGGCCCCATCT
CCTGCAGAAGCCAGGTGAGCCCAGCACTGGACTGAAGTTCTTGCAGACACCCCACCTGTGCCCCTATCATCAGGG
GAACTGCTCCACCTGAGAGGACCAACTCTTTAATTTTTAGTAAAACCTGAAGGTGATGGGCCGGGCGCAGTGGCT
CACGCCTGTAATCCCAACACCTTAGGAGTCCGAGGTGGGTGGATCACGAGGTCAGGAGATCCAGCCCATCCTGGC
CAACATGGTGAAACCCCATCTCTACTAAAAATACAAAAATTAGCCGGGCGTGGTGACACGTGCCTGTAGTCCCAG
CTACTCGGGAGGCTGAGGCAGGAGAATCACTTGAACCTGGGAGGCGGAGGTTGCAGTGAGCTAAGATCACGCCAC
TGCACTCCAGCCTGCGGACAGACCAAGACTTCATCCCCCCCAAAAAAAAAAAGATTGGAGGTGATTTACAGTGAAA
GACACAAATAAAATACAACTGTTCAATGGAAATAGAAAATAAACACCATAAAAGAGAGAAGAGAGGTAATTTGTT
AGCATCAAGAGTCAAGTTGCTATATGGTCAAAGGTTAAATTTATCTCTAAAAAATGGCAGGATTCAAAGTTGTAC
ATACATGTGATTACTTCTGTTTTTTACACCCACATACAGTACAAAAGATTATTAAAAATATTCCCAAAAGGCAGG
TGCAATGATGCACACTTATACCCCCAGCCACTCAGGAGGCTGATGCAAGAGGATCGCTTGAGCCCAGGAGTTGAA
GTCCAGCCTAAGCAACATAGTGAAACCCCATCTCCAAAAATATAATAATAATTCTCTCAAAATACTAAACAGAGG
TGGTTTTATTGATAAGATTTTGGCTGTTTGGTTTTCCACTATTCTCTATTGGCTAAAATTTGTTTAATGAGCATG
AAATGTTTTTATTTTATTTTGCTTATTTTTATGATTGCAAAAAATGATATGAGTTTCTCCCTGCCAAGGCAAAAA
ATATATATATATACCTATAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6663

MPGPRVWGKYLWRSPHSKGCPGAMWWLLLWGVLQACPTRGSVLLAQELPQQLTSPGYPEPYGKGQESSTDIKAPE
GFAVRLVFQDFDLEPSQDCAGDSVTISFVGSDPSQFCGQQGSPLGRPPGQREFVSSGRSLRLTFRTQPSSENKTA
HLHKGFLALYQTVAVNYSQPISEASRGSEAINAPGDNPAKVQNHCQEPYYQAAAAGALTCATPGTWKDRQDGEEV
LQCMPVCGRPVTPIAQNQTTLGSSRAKLGNFPWQAFTSIHGRGGGALLGDRWILTAAHTVYPKDSVSLRKNQSVN
VFLGHTAIDEMLKLGNHPVHRVVVHPDYRQNESHNFSGDIALLELQHSIPLGPNVLPVCLPDNETLYRSGLLGYV
SGFGMEMGWLTTELKYSRLPVAPREACNAWLQKRQRPEVFSDNMFCVGDETQRHSVCQGDSGSVYVVWDNHAHHW
VATGIVSWGIGCGEGYDFYTKVLSYVDWIKGVMNGKN

FIGURE 6664

GCGCTCCCGGCCTCAGCATATTTTATTAATAGGAACTCTGGGGCCCAGTCTCATTTCTTCCTTACCACTTGTAAG
AGCCGCAGACGTTGGACTGTCCAACACCTGCTGTCATTCTTCTGTCTCCCTCATCCCTCTAAAGTGTCTGTTTCC
AGCTATCCTCATCTTCCATTCCAAATGATGGGTGCCCAGGCCCCATCCCCTGGCAGGGATTCAGACATCGAGGCC
CCAGCTGCGTCCTTTTCTCCATCCCTTGCCCTTGGCTTCCTTTCAAACCGTCCTTCAGCTTCCACTGGATAGGAA
CTATCTCCCAACCCTGCCAAAAATGGAAGATCTCCGTTTTCGTTTAGTCACAGGGTAGCCATCTTGCCCCTTCTC
ATGCACTGGGCCCTCCTCCACCAGCCGAGGTGGATGTCCGTCTTTTCTCTGTTGCAGAAACCCACCTTGTCCCAT
CCACATCAGGACATCCCAGCTGGAGTTCAACCTTCATCCCTTCTGTGGCAGTTAGGAGACTGAATCAAGGTCCAG
AGAAGGTGGAGGAATCCTGATACTGAGCGAAATCTTCCCAAGGCTGCAGACACCGACGGATTTGCTTTGGGAGCC
AGAGTAGCTGCCGCCACCAGAGTCCGGAGCC**ATG**AGCGGGTTTAATTTTGGAGGCACTGGGGCCCCTACAGGCGG
GTTCACGTTTGGCACTGCAAAGACGGCAACAACCACACCTGCTACAGGGTTTTCTTTCTCCACCTCTGGCACTGG
AGGGTTTAATTTTGGGGCTCCCTTCCAACCAGCCACAAGTACCCCTTCCACCGGCCTGTTCTCACTTGCCACCCA
GACTCCGGCCACACAGACGACAGGCTTCACTTTTGGAACAGCGACTCTTGCTTCGGGGGGAACTGGATTTTCTTT
GGGGATCGGTGCTTCAAAGCTCAACTTGAGCAACACAGCTGCCACCCCAGCCATGGCAAACCCCAGCGGCTTTGG
GCTGGGCAGCAGCAACCTCACTAATGCCATATCGAGCACCGTCACCTTCAGCCAGGGCACAGCACCCACCGGCTT
TGTGTTTGGCCCCTCCACCACCTCTGTGGCTCCAGCTACCACATCTGGAGGCTTCTCATTCACTGGTGGAAGCAC
GGCCCAACCCTCCGGTTTCAACATTGGCTCAGCAGGGAATTCAGCCCAGCCCACGGCACCTGCCACGTTGCCCTT
CACTCCAGCC**TAG**GCAACAGAGACTCTGTCTCAAAAAAAAAAAAAAAAAAAAAAAGAAACTCCCAGGAGACAGCA
GCCTAGTTTTCGAGTGTGAGCTTGGCTTGTGAAAGCTAACCATGCTAACCACCAAGGCAAAGCAGCACAGTGTGA
ATAGAACAGAGCGGGATCAAGAATTTCACAGAAGACAGGTCAGCTGAGGGGCCTGCACACACAGGGTGTTGAGGA
ACCACAGATGGGCGCCGAGAGGCCTGCCTTTTGCCTGGCCCAGGCTCACCCCCACCTTGGGCCTCACCTCCTCCA
GGAAGCCTTCCCAGCTACCCGAAGCTCAGGTGGCCTTCTTGCAGGTCCCCGTAGCACCCTGAGCCTGTACCTTGG
GTGGCACTTGTTATGCTATCCTGTGCTAGCCGTTTGTGCCTCGTCTCGCTGTTAGATTGTGAGTTCCCATGGGCA
GAGACCCACTGTCGTTCCCCGTGTGTCCCCAGCCCGGTCCCTGTCACATTTGTTAAATGAAAGAACAATGAAGCC
CAGTGTAACGTCAGTCCACAGAAATAGCCACAGCTTCCAGTGGTGGCCGTAGACTTGGCTCGGAACTTAGTGGCA
CCAGAGTAACTCTAGTCAGTTACAGTAAAATCCACTGTGTGTGGAAGGCAGAAGCTAGCGGTTGTATCCCAAGCA
TCTTTTGTATTTGTCTTTATACTTTGCTGAATTCTCTGAAATACCTATTACTGTATGTTGCTTTTCTAAATAAAT
GTATTGTGAAACCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6665

MSGFNFGGTGAPTGGFTFGTAKTATTTPATGFSFSTSGTGGFNFGAPFQPATSTPSTGLFSLATQTPATQTTGFT
FGTATLASGGTGFSLGIGASKLNLSNTAATPAMANPSGFGLGSSNLTNAISSTVTFSQGTAPTGFVFGPSTTSVA
PATTSGGFSFTGGSTAQPSGFNIGSAGNSAQPTAPATLPFTPA

FIGURE 6666

CAAGCATCTGTCTTCAAGCTTAGAGTCTCCCACGGGAGACAGACACATTAAACAGGCTAAATGGTGCAGTCTGGT
CAGTGCTATTTATAATTTAGGAACCTTACATATTATATCCCTACTCTAACCTGTTAATGTTCTATAGACTCCCCA
TCCCCAGGATGTCAACCTCAGTCCCTCAAGGCCATACCTGGACCCAACGGGTGAAGAAAGACGATGAGGAGGAGG
ACCCGCTGGACCAGCTGATCTCCCGCTCTGGCTGTGCTGCCTCCCACTTTGCAGTGCAGGAGTGCATGGCCCAGC
ACCAGGACTGGCGGCAATGCCAGCCACAGGTGCAGGCGTTCAAGGATTGCATGAGTGAACAGCAGGCGAGGCGGC
AAGAGGAGCTGCAGAGGAGGCAAGAACAAGCCGGTGCCCACCACTGAGACCCCAAACCACCTATCCCCAGTAGAT
GGCCCTGCCAAGACCAGCACCCAGCAAGATTATAGAGGAAGAAATCCTAAATGCTGGTGTGGGAGGTCTAAAACA
TGGGGAGAGTTTTTGGATCTGGAGTTGAGAGCCATGGGTTTGGACATGACTGGCACAAACAGCTGTCATATGTTC
ATGGTCAGATGTCATACATTCTCAGCTGTCTTGTTCCACCAGTATTTACCAGGAAAACAAAGAATGTGTTAAGGG
ATGCTCCCCCACCCCACATCTTAAGTCAGTGTGCCAAGTACTGAGATGATTTTAGGGACATTTTATTTTAAATTA
AATTTACAATCTAATGGTAAATTGAAAAAAAAAAAAAAAAA

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FIGURE 6667

MFYRLPIPRMSTSVPQGHTWTQRVKKDDEEEDPLDQLISRSGCAASHFAVQECMAQHQDWRQCQPQVQAFKDCMS
EQQARRQEELQRRQEQAGAHH

FIGURE 6668

GTCTCTTCCTCGCTCCCTCTCTTTCTCTCCTCCCTCTGCCTTCCCAGTGCATAAAGTCTCTGTCGCTCCCGGAAC
TTGTTGGCAATGCCTATTTTTTGGCTTTCCCCCGCGTTCTCTAAACTAACTATTTAAAGGTCTGCGGTCGCAAAT
GGTTTGACTAAACGTAGGATGGGACTTAAGTTGAACGGCAGATATATTTCACTGATCCTCGCGGTGCAAATAGCG
TATCTGGTGCAGGCCGTGAGAGCAGCGGGCAAGTGCGATGCGGTCTTCAAGGGCTTTTCGGACTGTTTGCTCAAG
CTGGGCGACAGCATGGCCAACTACCCGCAGGGCCTGGACGACAAGACGAACATCAAGACCGTGTGCACATACTGG
GAGGATTTCCACAGCTGCACGGTCACAGCCCTTACGGATTGCCAGGAAGGGGCGAAAGATATGTGGGATAAACTG
AGAAAAGAATCCAAAAACCTCAACATCCAAGGCAGCTTATTCGAACTCTGCGGCAGCGGCAACGGGGCGGCGGGG
TCCCTGCTCCCGGCGTTCCCGGTGCTCCTGGTGTCTCTCTCGGCAGCTTTAGCGACCTGGCTTTCCTTCTGAGCG
TGGGGCCAGCTCCCCCCGCGCGCCCACCCACACTCACTCCATGCTCCCGGAAATCGAGAGGAAGATCCATTAGTT
CTTTGGGGACGTTGTGATTCTCTGTGATGCTGAAAACACTCATATAGGATTGTGGGAAATCCTGATTCTCTTTTT
TATTTCGTTTGATTTCTTGTGTTTTATTTGCCAAATGTTACCAATCAGTGAGCAAGCAAGCACAGCCAAAATCGG
ACCTCAGCTTTAGTCCGTCTTCACACACAAATAAGAAAACGGCAAACCCACCCCATTTTTTAATTTTATTATTAT
TAATTTTTTTTGTTGGCAAAAGAATCTCAGGAACGGCCCTGGGCCACCTACTATATTAATCATGCTAGTAACATG
AAAAATGATGGGCTCCTCCTAATAGGAAGGCGAGGAGAGGAGAAGGCCAGGGGAATGAATTCAAGAGAGATGTCC
ACGGCCGAAACATACGGTGAATAATTCACGCTCACGTCGTTCTTCCACAGTATCTTGTTTTGATCATTTCCACTG
CACATTTCTCCTCAAGAAAAGCGAAAGGACAGACTGTTGGCTTTGTGTTTGGAGGATAGGAGGGAGAGAGGGAAG
GGGCTGAGGAAATCTCTGGGGTAAGAGTAAAGGCTTCCAGAAGACATGCTGCTATGGTCACTGAGGGGTTAGCTT
TATCTGCTGTTGTTGATGCATCCGTCCAAGTTCACTGCCTTTATTTTCCCTCCTCCCTCTTGTTTTAGCTGTTAC
ACACACAGTAATACCTGAATATCCAACGGTATAGATCACAAGGGGGGGATGTTAAATGTTAATCTAAAATATAGC
TAAAAAAAGATTTTGACATAAAAGAGCCTTGATTTTAAAAAAAAAAGAGAGAGAGATGTAATTTAAAAAGTTTAT
TATAAATTAAATTCAGCAAAAAAAGATTTGCTACAAAGTATAGAGAAGTATAAAATAAAAGTTATTGTTTGAAAA
AAAAAAAAAAAAA

FIGURE 6669

MGLKLNGRYISLILAVQIAYLVQAVRAAGKCDAVFKGFSDCLLKLGDSMANYPQGLDDKTNIKTVCTYWEDFHSC
TVTALTDCQEGAKDMWDKLRKESKNLNIQGSLFELCGSGNGAAGSLLPAFPVLLVSLSAALATWLSF

FIGURE 6670

TCAATTTTCCTTTTTCCGGAGGGGAGATGGATTCCCTGGAATGGAACTGGGCTCTGGTGTATGAGCTCAGTGGAG
AGCACCATGACGAAGAGTGGTCAGTGAAGACTTACCAGGAAGTAGCTCAGAAGTTTGTGGAAACTCACCCTGAGT
TTATTGGAATCAAAATCATTTATTCGGATCACAGATCCAAAGATGTGGCTGTCATCGCAGAATCCATCCGAATGG
CCATGGGGCTCCGAATCAAGTTCCCCACGGTGGTGGCAGGGTTTGACCTGGTGGGGCATGAGGACACTGGCCACT
CCTTGCATGACTACAAGGAAGCTCTGATGATCCCCGCCAAGGATGGCGTTAAGCTGCCTTACTTCTTCCACGCCG
GAGAAACAGACTGGCAGGGTACTTCCATAGACAGGAACATTCTGGATGCTCTGATGCTGAACACTACCAGAATCG
GCCATGGATTTGCTTTGAGCAAACACCCCGCAGTCAGGACTTACTCCTGGAAAAAGGACATCCCCATAGAAGTCT
GTCCCATCTCTAACCAGGTGCTGAAACTGGTGTCTGACTTGAGGAACCACCCTGTGGCCACTCTGATGGCCACTG
GGCACCCCATGGTGATCAGCTCTGATGACCCAGCTATGTTTGGTGCCAAAGGCTTGTCCTACGATTTCTATGAGG
TCTTCATGGGCATTGGGGGGATGAAGGCTGACCTGAGGACCCTCAAACAGCTGGCCATGAACTCTATCAAGTACA
GTACCCTGTTGGAGAGTGAGAAAAATACTTTCATGGAAATCTGGAAGAAGAGATGGGATAAGTTCATAGCAGATG
TGGCTACAAAGTGAGGAGAAGCTAGCCAGCCCTCTACAAGCTGTCTTCTTGCACACGCTGTCACTTCCTCTCACT
CGTTCTTGAATCAGCTCCATGTGCCCATGAAATCAATGGCCTCTGTATGGAGCGACCCTGTGAGAAGCACTTGGC
TGGCTGAGCAAATTCATCCTCTGGAAATATTCTCTCTCAGCCACAGTGACATTGACCCTCTTGGTTTTCTCCTCT
CTCTGGCCATTTCTTCCAGTTTCCCTATTTCAGAGTCTTCTCCTCTCTCTGATCTCTGTGCTGTTTCCTCAGGAC
TCAGTCCTGGGCTCTCTTCTATTCTGGTCTCTTTATTTTTTTATTTTTGTATTTTTTCGAGATGGAGTTTTGCTC
TTGTTGCCCAGGCTGGAGTACAATGGTGCGATCTCAGCTCAGTGCAACCTCCGCCACCCGGGTTCAGGCAATTCT
CATGCATCAGCCTCCCGAGTAGTTGGAATTATAGGCATGTGCCACCACACCCAGCTGATTTTTGCATTTTTAGTA
GAGACAGGTTTTCACCATGTTGGCGAGGCTGGTATCCAACTCTTGACCTCAGGTGATCCACTCGCCCCTTAGCTC
CCAAAGTACTGGAATTACAGGCGTTAGCCACCATGCCTGGCCTATTCTGGTCTCTTTAACTCTCTCCTCTTTATT
TCTCTTCTCTCTCTGTACACTTTTCCTGGGTGGTCTCATCCATTCCTTTGCTTTTTCATACCATTTATTTGTTAA
TGATTCCCACATTTATTTATGCACTTGGAGAGCTCACAGGAATCTCAGAAACTGATGAGGTACAATTCTGAACCC
TCAGTCTCTTCCCTTTAAACCTTTCTTTTTCTCTACTTTAATTTTTCTAAAGAGTGTCTTGCTATGTTGCCCAGG
CTGGTCTCCAACTCAAGTGATCCTCCTGCCGCAGTCTCCCGAAGTGCTGGGATTACTGACATGAGCCACCACACT
CAGCCCTTTAAACCTTTCCCTGGCCTTTCCCATAGCTGGTGAAGGACACCTCCATCCATTCCACCCAGTTGCTCA
AAGCAGAAATTTTCAGTGCAAGTCTTGATGCTGCGCCGTCCCCCACTCCCTACATCAGAACGCATCCCTCATCTG
GACTCCAGCGGTGGCTTCTTGATGCTGCGCGGTCCCCCACTCCCTACATCAGAATGCATCCCGCATCCAGACTCC
AGCGGTGGCGCTCTACCTGCACGCTGTTGCCAAGTCCAAGCTACCATACTCCTGCCTGAGCTATGACAACAGCCT
CCTCACTGATCTCCCCTTTCTTCCCTTTGCCTCCTCCAGCTCATTTTTCACAGTGTAGAATGACATTTTGTTTGT
TTGTTTTGTTTTGTTTGAGATGGAGTCTCGCTCTGTTGCCCAGGGTGGAGTGCAGCGGTGCGATCTCGGCTCACT
GCAACCTCCACCTCCCGGGTTCAAGCGGATTCTCGTGCCTCAGCCTCCTGAGTAGCTGGGATTACAGGCATGCAC
CACCATGCCCGGATAATTTTTGTATTTTTAGTAGAGATGGGGTTTCACTATGTTGGCCAGGCTGGTCTCGAACAC
CTGACCTCGTGGTCCACCCGCCTCGGCCTCCCAAAGCACTGGGATTACAGGCGTGAGCCACCCGGCCTGGCCTAG
AATGACTTTTAAAAGATCAAATTAAATCAGGTCACTCCTTTGCTTACAACGCAGTGCGTTTAGAGGTACACCCCA
TGTCTCCACAGGGCACACAGCATCCGATTTAATCTGGATCCATTCCGGCGCCTTCCTCTCCCAGTCACCCAGAGG
GCCCCAACCCCGGCGGCCCTTTCTTCCTCAGATGTCCTCGGCTCTATACCGTGCCTGGGTCTTTTCTCTTTCTCT
CTGCCTGGAACATTCCTTCTTTCCCCTTTTGTCTTGCCCACTCCTGTTTACCCTTCAAGTTTCAAGTTCATGTCA
CTGTCTCAGAGAGGTTTTCCTGTGCTCGCCCTGTTTCTCTCAGGAAGCCTTGCTCTTTTCCATCATGCCTCTAAT
CACAGCTTATAATCGGATATTTATTTCTGTGTCTACAGTCTTGCCCTGCCAGACTGTAAGCCCCATGTGGGCAGG
CGCTCATGATTGTTTCTGATTGTTTCACGCATGCTGCTAACCCAGAGCCTGGGCCCAAAGCTAGTTAGTACTCAA
TAAACAATGCATTGAATG

FIGURE 6671

MDSLEWNWALVYELSGEHHDEEWSVKTYQEVAQKFVETHPEFIGIKIIYSDHRSKDVAVIAESIRMAMGLRIKFP
TVVAGFDLVGHEDTGHSLHDYKEALMIPAKDGVKLPYFFHAGETDWQGTSIDRNILDALMLNTTRIGHGFALSKH
PAVRTYSWKKDIPIEVCPISNQVLKLVSDLRNHPVATLMATGHPMVISSDDPAMFGAKGLSYDFYEVFMGIGGMK
ADLRTLKQLAMNSIKYSTLLESEKNTFMEIWKKRWDKFIADVATK

FIGURE 6672

TGTACTTTTATTTTACACAGAAACACTGCCTTTTTATTTATATGTACTGTTTTATCTGGCCCCAGGTAGAAACTT
TTATCTATTCTGAGAAAACAAGCAAGTTCTGAGAGCCAGGGTTTTCCTACGTAGGATGAAAAGATTCTTCTGTGT
TTATAAAATATAAACAAAGATTCATGATTTATAAATGCCATTTATTTATTGATTCCTTTTTTCAAAATCCAAAAA
GAAATGATGTTGGAGAAGGGAAGTTGAACGAGCATAGTCCAAAAAGCTCCTGGGGCGTCCAGGCCGCGCCCTTTC
CCCGACGCCCACCCAACCCCAAGCCAGCCCGGCCGCTCCACCAGCATCACCTGCCTGTTAGGAGAAGCTGCATCC
AGAGGCAAACGGAGGCAAAGCTGGCTCACCTTCCGCACGCGGATTAATTTGCATCTGAAATAGGAAACAAGTGAA
AGCATATGGGTTAGATGTTGCCATGTGTTTTAGATGGTTTCTTGCAAGCATGCTTGTGAAAATGTGTTCTCGGAG
TGTGTATGCCAAGAGTGCACCCATGGTACCAATCATGAATCTTTGTTTCAGGTTCAGTATTATGTAGTTGTTCGT
TGGTTATACAAGTTCTTGGTCCCTCCAGAACCACCCCGGCCCCCTGCCCGTTCTTGAAATGTAGGCATCATGC**ATG**
TCAAACATGAGATGTGTGGACTGTGGCACTTGCCTGGGTCACACACGGAGGCATCCTACCCTTTTCTGGGGAAA
GACACTGCCTGGGCTGACCCCGGTGGCGGCCCCAGCACCTCAGCCTGCACAGTGTCCCCCAGGTTCCGAAGAAGA
TGCTCCAGCAACACAGCCTGGGCCCCAGCTCGCGGGACCCGACCCCCCGTGGGCTCCCGTGTTTTGTAGGAGACT
TGCCAGAGCCGGGCACATTGAGCTGTGCAACGCCGTGGGCTGCGTCCTTTGGTCCTGTCCCCGCAGCCCTGGCGG
GGGGCATGCGGTCGGGCAGGGGCTGGAGGGAGGCGGGGGCTGCCCTTGGGCCACCCCTCCTAGTTTGGGAGGAGC
AGATTTTTGCAATACCAAGTATAGCCTATGGCAGAAAAAATGTCTG**TAA**ATATGTTTTTAAAGGTGGATTTTGTT
TAAAAAATCTTAATGAATGAGTCTGTTGTGTGTCATGCCAGTGAGGGACGTCAGACTTGGCTCAGCTCGGGGAGC
CTTAGCCGCCCATGCACTGGGGACGCTCCGCTGCCGTGCCGCCTGCACTCCTCAGGGCAGCCTCCCCCGGCTCTA
CGGGGGCCGCGTGGTGCCATCCCCAGGGGGCATGACCAGATGCGTCCCAAGATGTTGATTTTTGCTGTGTTTTAT
AAAATAGAGTGTAGTTTACAGAAAAAGACTTTAAAAGTGATCTACATGAGGAACTGTAGATGATGTATTTTTTTC
ATCTTTTTTGTTAACTGATTTGCAATAAAAATGATACTGATGGTGAAAAAAAAAAAAAAAAA

FIGURE 6673

MSNMRCVDCGTCLGHTRRHPTLFWGKTLPGLTPVAAPAPQPAQCPPGSEEDAPATQPGPQLAGPDPPWAPVFCRR
LARAGHIELCNAVGCVLWSCPRSPGGGHAVGQGLEGGGGCPWATPPSLGGADFCNTKYSLWQKKCL

FIGURE 6674

ATACTTGTGCGGTTCCAAGTGTGGAGAAAGCGGCTCTGGGTCTAGATTGAGGGATACTCCCCCTTTCCACCATGG
GCAAGAAGGGCAAAGTTGGCAAGAGCCGACGAGACAAGTTTTATCACTTGGCGAAGGAGACGGGTTACCGTTCCC
GATCTGCTTTCAAGCTGATCCAGCTCAATCGCCGCTTTCAGTTCCTGCAGAAAGCCCGAGCCTTGCTGGACCTGT
GTGCTGCGCCAGGGGGATGGCTGCAGGTAGCTGCCAAGTTTATGCCTGTATCCAGCCTTATTGTGGGAGTGGACC
TGGTTCCAATCAAGCCTCTCCCCAATGTGGTGACTCTCCAGGAGGACATCACAACAGAACGTTGTAGGCAGGCCC
TGAGGAAGGAGCTGAAGACCTGGAAGGTTGATGTTGTGCTCAATGATGGGGCCCCCAACGTTGGGGCTAGCTGGG
TCCATGATGCTTACTCACAAGCCCATTTGACACTGATGGCTCTACGTTTGGCTTGTGACTTTTTGGCCCGTGGTG
GCAGCTTCATCACAAAGGTTTTCCGTTCTCGTGACTATCAGCCTCTGCTATGGATCTTTCAGCAGCTGTTCCGCC
GTGTCCAGGCCACCAAGCCCCAAGCCTCTCGCCATGAATCTGCAGAGATCTTTGTAGTCTGCCAAGGATTCCTGG
CCCCTGACAAGGTTGACAGTAAATTCTTTGACCCCAAATTTGCCTTTAAGGAGGTTGAAGTTCAGGCTAAGACCG
TTACTGAATTGGTTACTAAGAAGAAGCCAAAGGCTGAAGGCTATGCTGAGGGTGACCTCACTCTCTATCACCGTA
CCTCAGTCACTGACTTCCTCCGAGCTGCCAACCCTGTTGACTTCCTCTCCAAGGCCAGCGAAATCATGGTAGATG
ATGAAGAGTTGGCACAGCATCCAGCTACCACTGAGGACATACGGGTGTGCTGTCAGGACATCAGAGTGTTGGGGC
GCAAGGAGCTCAGGTCGCTACTAAACTGGAGAACAAAACTTCGGCGATATGTGGCCAAGAAGCTGAAAGAACAAG
CAAAGGCACTGGACATCAGCCTCAGCTCTGGAGAGGAAGATGAAGGTGATGAGGAGGACTCAACAGCTGGAACCA
CAAAGCAGCCCTCTAAGGAGGAGGAGGAAGAGGAGGAGGAGGAACAACTGAACCAGACCTTGGCAGAAATGAAGG
CCCAGGAGGTGGCGGAATTGAAGAGGAAGAAAAAGAAGCTGTTGCGTGAGCAGAGAAAGCAGCGGGAGCGTGTGG
AGCTGAAGATGGATCTGCCTGGGGTTTCCATTGCAGACGAGGGGGAGACTGGCATGTTCTCCTTGTGCACCATCC
GGGGTCACCAGTTATTAGAGGAAGTAACACAAGGGGATATGAGTGCAGCAGACACATTTCTGTCCGATCTGCCAA
GGGATGATATCTATGTGTCAGATGTTGAGGACGACGGTGATGACACATCTCTGGATAGTGACCTGGATCCAGAGG
AGCTGGCAGGAGTCAGGGGACATCAGGGTCTAAGGGACCAAAAGCGTATGCGACTTACTGAAGTGCAAGATGATA
AAGAGGAGGAGGAGGAGGAGAATCCACTGCTGGTACCACTGGAGGAAAAGGCAGTACTGCAGGAAGAACAAGCCA
ACCTGTGGTTCTCAAAGGGCAGCTTTGCTGGGATCGAGGACGATGCCGATGAGGCCCTGGAGATCAGTCAGGCCC
AGCTGTTATTTGAGAACCGGCGGAAGGGACGGCAGCAGCAGCAGAAGCAGCAGCTGCCACAGACACCCCCTTCCT
GTTTGAAGACTGAGATAATGTCTCCCCTGTACCAAGATGAAGCCCCTAAGGGAACAGAGGCTTCTTCGGGGACAG
AAGCTGCCACTGGCCTTGAAGGGGAAGAAAAGGATGGCATCTCAGACAGTGATAGCAGTACTAGCAGTGAGGAAG
AAGAGAGCTGGGAACCCCTCCGTGGTAAGAAGCGAAGCCGTGGGCCTAAGTCAGATGATGACGGGTTTGAGATAG
TGCCTATTGAGGACCCAGCGAAACATCGGATACTGGACCCCGAAGGCCTTGCTCTAGGTGCTGTTATTGCCTCTT
CCAAAAAGGCCAAGAGAGACCTCATAGATAACTCCTTCAACCGGTACACATTTAATGAGGATGAGGGGGAGCTTC
CGGAGTGGTTTGTGCAAGAGGAAAAGCAGCACCGGATACGACAGTTGCCTGTTGGTAAGAAGGAGGTGGAGCATT
ACCGGAAACGCTGGCGGGAAATCAATGCACGTCCCATCAAGAAGGTGGCTGAGGCTAAGGCTAGAAAGAAAAGGA
GGATGCTGAAGAGGCTGGAGCAGACCAGGAAGAAGGCAGAAGCCGTGGTGAACACAGTGGACATCTCAGAACGAG
AGAAAGTGGCACAGCTGCGAAGTCTCTACAAGAAGGCTGGGCTTGGCAAGGAGAAACGCCATGTCACCTACGTTG
TAGCCAAAAAAGGTGTGGGCCGCAAAGTGCGCCGGCCAGCTGGAGTCAGAGGTCATTTCAAGGTGGTGGACTCAA
GGATGAAGAAGGACCAAAGAGCACAGCAACGTAAGGAACAAAAGAAAAAACACAAACGGAAGTAAGCAGAGCTGC
CAGGCTCCCAGGAGAGCATGGGGACTAGGAGGAAGGGTGTGGCATGGCTCAGTCTGGCCCCCTTGATTACCGGCC
TAGCCCCTGCTCACATCACAGCTGTCTGAAGAACAGTGAGGTGGAGTGCCTAGAACTCCCGTGGTGGTCCTGAGC
AGAGAGGAGGATGTCCTCCTGCCTGCCTGAAGGTCTCCCATGAAAACACTGCTGAACTGTGTTGACACTCATGAC
CCTTTTTTTAAACCGTTAAAGGGAAGTTCGGTGTTGGAGCGATACTCAATGTAGTCAGTCTACACCTGGACGTGT
GGGCCACTTAAGCCCTCCCCACCCCCATCCTATTCCTAAATAAAACCAGGATAATGGAAAAAAAAAAAAAAAAA

FIGURE 6675

MGKKGKVGKSRRDKFYHLAKETGYRSRSAFKLIQLNRRFQFLQKARALLDLCAAPGGWLQVAAKFMPVSSLIVGV
DLVPIKPLPNVVTLQEDITTERCRQALRKELKTWKVDVVLNDGAPNVGASWVHDAYSQAHLTLMALRLACDFLAR
GGSFITKVFRSRDYQPLLWIFQQLFRRVQATKPQASRHESAEIFVVCQGFLAPDKVDSKFFDPKFAFKEVEVQAK
TVTELVTKKKPKAEGYAEGDLTLYHRTSVTDFLRAANPVDFLSKASEIMVDDEELAQHPATTEDIRVCCQDIRVL
GRKELRSLLNWRTKLRRYVAKKLKEQAKALDISLSSGEEDEGDEEDSTAGTTKQPSKEEEEEEEEEQLNQTLAEM
KAQEVAELKRKKKKLLREQRKQRERVELKMDLPGVSIADEGETGMFSLCTIRGHQLLEEVTQGDMSAADTFLSDL
PRDDIYVSDVEDDGDDTSLDSDLDPEELAGVRGHQGLRDQKRMRLTEVQDDKEEEEEENPLLVPLEEKAVLQEEQ
ANLWFSKGSFAGIEDDADEALEISQAQLLFENRRKGRQQQQKQQLPQTPPSCLKTEIMSPLYQDEAPKGTEASSG
TEAATGLEGEEKDGISDSDSSTSSEEEESWEPLRGKKRSRGPKSDDDGFEIVPIEDPAKHRILDPEGLALGAVIA
SSKKAKRDLIDNSFNRYTFNEDEGELPEWFVQEEKQHRIRQLPVGKKEVEHYRKRWREINARPIKKVAEAKARKK
RRMLKRLEQTRKKAEAVVNTVDISEREKVAQLRSLYKKAGLGKEKRHVTYVVAKKGVGRKVRRPAGVRGHFKVVD
SRMKKDQRAQQRKEQKKKHKRK

FIGURE 6676

AAAATTTGAAGACAAGATGGCACCTACTCTACAATTCTGATAAAAACAGAGGTCATCGAATGTGGGAACTACTG
TGGAGTACGCATCATTCACTCTTTGATTGCAGAGTTCTCACTGGAAGAATTGAAGAAAAGCTATCACCTGAATAA
AAGTCAAATTATGTTGGATATGCTAACTGAGAATTTGTTCTTCGATACTGGTATGGGAAAAAGTAAATTTTTGCA
AGATATGCACACACTCCTACTCACAAGACACCGCGATGAACATGAAGGTGAAACAGGAAATTGGTTTTCCCCATT
TATTGAAGCATTACATAAAGATGAAGGAAATGAAGCAGTTGAAGCTGTATTGCTTGAAAGTATCCATCGGTTCAA
CCCAAATGCATTCATTTGCCAAGCGTTGGCAAGACATTTCTACATTAAAAAGAAGGACTTTGGCAATGCTCTAAA
CTGGGCAAAACAAGCAAAAATCATAGAACCTGACAATTCTTATATCTCAGATACACTGGGTCAAGTCTACAAAAG
TAAAATAAGATGGTGGATAGAGGAAAACGGAGGAAACGGGAACATTTCAGTTGATGATCTAATTGCTCTTTTGGA
TTTAGCAGAACATGCCTCAAGTGCATTCAAAGAATCTCAACAGCAAAGTGAAGATAGAGAGTATGAAGTGAAGGA
AAGATTGTATCCGAAGTCAAAAAGGCGGTATGATACTTACAATATAGCTGGTTATCAAGGAGAGATAGAAGTTGG
GCTTTACACAATCCAAATTCTCCAGCTCATTCCTTTTTTTGATAATAAAAATGAGCTATCTAAAAGATATATGGT
CAATTTTGTATCAGGAAGTAGTGATATTCCAGGGGATCCAAACAATGAATATAAATTAGCCCTCAAAAACTATAT
TCCTTATTTAACTAAATTGAAATTTTCTTTGAAAAAGTCCTTTGATTTTTTTGATGAATACTTTGTCCTGCTAAA
ACCCAGGAACAATATTAAGCAAAATGAAGAGGCCAAAACTCGGAGAAAGGTGGCTGGATATTTTAAGAAATATGT
AGATATATTTTGTCTCTTAGAAGAATCACAAAACAACACAGGTCTTGGATCAAAGTTCAGTGAGCCACTTCAAGT
AGAGAGATGCAGGAGAAACCTAGTAGCTTTAAAAGCAGACAAGTTTTCTGGGCTCTTGGAATATCTTATCAAAAG
TCAAGAGGATGCTATAAGCACTATGAAATGTATAGTGAACGAATATACTTTTCTCTTAGAACAATGCACTGTCAA
AATCCAGTCAAAAGAAAAGCTAAATTTCATCTTGGCCAACATTATTCTCTCCTGTATCCAACCTACCTCCAGATT
AGTAAAGCCAGTTGAAAAACTAAAAGATCAGCTTCGAGAAGTCTTGCAACCAATAGGACTGACTTATCAGTTTTC
AGAACCGTATTTTCTAGCTTCCCTCTTATTCTGGCCAGAAAATCAACAACTAGATCAACATTCTGAACAAATGAA
AGAGTATGCTCAAGCACTAAAAAATTCTTTCAAGGGGCAATATAAACATATGCATCGTACAAAGCAACCAATTGC
ATATTTCTTTCTTGGAAAAGGTAAAAGACTGGAAAGACTTGTTCACAAAGGAAAAATTGACCAGTGCTTTAAGAA
GACACCAGATATTAATTCCTTGTGGCAGAGTGGAGATGTGTGGAAGGAGGAAAAAGTCCAAGAACTTTTGCTTCG
TTTACAAGGTCGAGCTGAAAACAATTGTTTATATATAGAATATGGAATCAATGAAAAAATCACAATACCCATCAC
TCCCGCTTTTTTAGGTCAACTTAGAAGTGGCAGAAGCATAGAGAAGGTGTCTTTTTACCTGGGATTTCCCATTGG
AGGCCCACTTGCTTATGACATTGAAATTGTTTAAGAGCCTGATATTCTTCCTCCAAGAATTTGATCTCAGTACCC
ATTTAATTTTTTTGGACTCAAGATCTATGCTTTAAACCGGCAAGGTTATAGATACAGCCTCTAGCTCTTCAGATC
TGTACATGCAGTATTTAATTTCCTCTTAAACATGTTATGAGTTCTACAAGGACAATAGTGAAAAAGGAAGGAGTG
AGATATATGAAAAGTAGCAAATATGTTCCTTGGTTTGGTTAACATCATTGATGACAAAATAATAAGGAGCTATGA
CTGGAGTCAGGAGAAGTTAGTGTAATAAGCTGGCTACACAGAACCCCACTACTTACCAGGCATGGATTGAAGAAG
ATTGTCTACTCAAATGGCATTTAGACATTAGAATGTCTGGGAAAATATTTCTCAAAGACAGCAAAAACCTCTCAA
ACTGAGGAGCAACATTTATTCTTACTAAGCAGATCATCAATGTATCATGTGCTTGGCACTCAAGGATCTTCCAAA
ACAGAGGACCAACCAGTCTTCTGAAGGTCATGCCCACAGAAGTCATCGGACCTTACCAAAGTAGGTTGGAGAATT
AGATTGCCTTTTCATGCAGTGAGATTCAGTTAAGCAAAAATGAAATTTGTCTCTATAGCTAATTAGCTTATCAAC
TCCCCTCCAAACAAACAATTAAAAAAAAAACATACAGACACTCAAATTCCACAAGCTAATGAACAAAAGGGACTC
TTGTGAGAAGACTAATGAGTCCCTCATCCAGAAGATGCCAATGTACTGGCAGATTAACATACAACCTATGTTTTG
AACAAAAACAACCAGCGATACGTAATCAAAATGTAATTTTCCCCTAATAAAATTATGGATATGGGCAGTCATCAA
TGGCTGCCAAAACCATTAAGTGGAAAGCTGATTAAAAAACAAAAATTTCTAATGGATTTATCAAACTGTCCCAAA
TCCTGATAAATATTAACATCACAGAGGAAGACCAGACATTATGGGCCTGGAAGTACTATAGGAGTGCACACATCA
CCCGTGACATGGTCTTGCCAAATAATTAAACCTGAATTTGATCAGGTCTCTGGATCTTATTTGCAATTCAAAAGA
AATTTTAAAAAAATCCTACTAACACCACCACAAATATGCAATCAGCAATATCCAGAAAGGGGAAATTCACAGGAC
AAAAACCTGGTTTTCTTTTTTGGTTTCTTCAACCAAAAAAGAAAGAAATTGCAAAGGACCAAAAAAATGTTGGGG
AATCTATACATTATAAGGGACTTAACAACTAAAGGGCAACATATAGACTTTAGATCCTAATTTGAGCAAAATCTA
AAATCAATTATTAGGCAATCAGAAAAATTTGAACACAGACTAGATATTTGAGGATATTAAGGTACTATATTATTG
AAGATTCCATGGTTATGTTTTTTAAAGAGTTCATGCCTTTTAGAGATACATACTAAAGTATTTGTAAATAAATGA
CATGATCTAGAAAAAAAAAAAAAAA

FIGURE 6677

MGTYSTILIKTEVIECGNYCGVRIIHSLIAEFSLEELKKSYHLNKSQIMLDMLTENLFFDTGMGKSKFLQDMHTL
LLTRHRDEHEGETGNWFSPFIEALHKDEGNEAVEAVLLESIHRFNPNAFICQALARHFYIKKKDFGNALNWAKQA
KIIEPDNSYISDTLGQVYKSKIRWWIEENGGNGNISVDDLIALLDLAEHASSAFKESQQQSEDREYEVKERLYPK
SKRRYDTYNIAGYQGEIEVGLYTIQILQLIPFFDNKNELSKRYMVNFVSGSSDIPGDPNNEYKLALKNYIPYLTK
LKFSLKKSFDFFDEYFVLLKPRNNIKQNEEAKTRRKVAGYFKKYVDIFCLLEESQNNTGLGSKFSEPLQVERCRR
NLVALKADKFSGLLEYLIKSQEDAISTMKCIVNEYTFLLEQCTVKIQSKEKLNFILANIILSCIQPTSRLVKPVE
KLKDQLREVLQPIGLTYQFSEPYFLASLLFWPENQQLDQHSEQMKEYAQALKNSFKGQYKHMHRTKQPIAYFFLG
KGKRLERLVHKGKIDQCFKKTPDINSLWQSGDVWKEEKVQELLLRLQGRAENNCLYIEYGINEKITIPITPAFLG
QLRSGRSIEKVSFYLGFPIGGPLAYDIEIV

FIGURE 6678

GGGATTTGTTATTGCGAATGATGTGGACAACAAGCGCTGCTACCTGCTCGTCCATCAAGCCAAGAGGCTGAGCAG
CCCCTGCATCATGGTGGTCAACCATGATGCCTCCAGCATACCCAGGCTCCAGATAGATGTGGACGGCAGGAAAGA
GATCCTCTTCTATGATCGAATTTTATGTGATGTCCCTTGCAGTGGAGACGGCACTATGAGAAAAAACATTGATGT
TTGGAAAAAGTGGACCACCTTAAATAGCTTGCAGCTACATGGCTTACAGCTGCGGATTGCAACACGCGGGGCTGA
ACAGCTGGCTGAAGGTGGAAGGGTGGTGTATTCCACGTGTTCACTAAACCCTATTGAGGATGAAGCAGTCATAGC
ATCTTTACTGGAAAAAAGTGAAGGTGCTTTGGAGCTTGCTGATGTGTCTAATGAACTGCCAGGGCTGAAGTGGAT
GCCTGGAATCACACAGTGGAAGGTAATGACGAAAGATGGGCAGTGGTTTACAGACTGGGACGCTGTTCCTCACAG
CAGACACACCCAGATCCGACCTACCATGTTCCCTCCGAAGGACCCAGAAAAGCTGCAGGCCATGCACCTGGAGCG
ATGCCTTAGGATATTACCCCATCATCAGAATACTGGAGGGTTTTTTGTGGCAGTATTGGTGAAAAAATCTTCAAT
GCCGTGGAATAAACGTCAGCCAAAGCTTCAGGGTAAATCTGCAGAGACCAGAGAAAGCACACAGCTGAGCCCTGC
AGATCTCACAGAAGGGAAACCCACAGATCCCTCTAAGCTGGAAAGTCCGTCATTCACAGGAACTGGTGACACAGA
AATAGCTCATGCAACTGAGGATTTAGAGAATAATGGCAGTAAGAAAGATGGCGTGTGTGGTCCTCCTCCATCAAA
GAAAATGAAGTTATTTGGATTTAAAGAAGATCCATTTGTATTTATTCCTGAAGATGACCCATTATTTCCACCTAT
TGAGAAATTTTATGCTTTGGATCCTTCATTCCCAAGGATGAATTTGTTAACTCGGACTACAGAAGGGAAGAAAAG
GCAGCTCTACATGGTTTCTAAGGAGTTGCGGAATGTGCTGCTGAATAACAGTGAGAAGATGAAGGTTATTAACAC
GGGGATCAAAGTCTGGTGTAGAAATAACAGCGGTGAAGAGTTTGACTGTGCTTTCCGGCTGGCACAGGAGGGAAT
ATATACATTGTATCCATTTATTAACTCAAGAATTATTACTGTATCAATGGAAGATGTTAAGATACTGTTGACCCA
GGAAAATCCCTTTTTTAGAAAACTCAGCAGTGAGACCTACAGTCAAGCAAAGGACCTGGCAAAGGGAAGCATCGT
GCTGAAGTATGAACCAGATTCTGCGAATCCAGACGCTCTACAGTGTCCCATCGTCTTATGCGGATGGCGGGGAAA
GGCCTCCATTCGAACTTTTGTGCCCAAGAATGAACGGCTTCACTATCTCAGGATGATGGGGCTGGAGGTATTGGG
AGAAAAGAAGAAGGAAGGGGTTATCCTCACAAATGAGAGTGCAGCCAGCACCGGACAGCCAGACAATGACGTGAC
TGAGGGACAGAGAGCAGGAGAGCCCAACAGCCCAGATGCAGAAGAGGCCAACAGTCCAGACGTGACAGCAGGCTG
TGACCCGGCGGGGGTCCATCCACCCCGGTGAGCAGGCCCAAGGCAGCGGGGGCCCACACCCCTCACACGCAAAAC
TGGCTTCTTCTGGTCACTGGTGTCTGAAACCAAATCCAGAGCAGCCTGTGGCCTGTAAAGCATATATTTCTAGTG
ACTGCAGACTGGTGGGATCATAGGAGCCTTCTGAATGACCAGGACTGCTTTCTTTGGAGCTGATGAAAATGTACT
CTTTTAGCGTGTTAGAAATCACTTGTTTTATTTTGTTTTCTTTGGCCAAGCTGGGTCTAGTGTTTCTTTTGCTGG
GAATAGACTTTCAAAAGTTGTACTTCTATCAAGAAACAAAACTGCCCTTGCAGAAATTTCAGGTCTTTTGTTAAG
CCTGTATTGGTCTTAAGGTGCAGTATTTTTTAAATTATTATTTATAGAAAGAATCTATAAATTCTTGGGGAAGTG
TGTTATAAGCTTTAATAATTACATTGAGCTGCACCTCAGTGGTGTGTCATTAACATGCAGTGGGGTTAATATCTG
AGGCCTCAGATGACTTTGTGCCTTTTGGAATAAAGGGTAAAATAAACTCTCCCAGAGTAAGAGCTGTATCGTGAA
TTGTCATACTAATTATTGAGGGGGACTTATGTGCTTTTATTGAATGGAGTGCTTTACAATTTTTATTTTTAAATG
GGGTTGGGATCCTTGGAATATTTCAATAAAATTGATAAAATATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6679

MVVNHDASSIPRLQIDVDGRKEILFYDRILCDVPCSGDGTMRKNIDVWKKWTTLNSLQLHGLQLRIATRGAEQLA
EGGRVVYSTCSLNPIEDEAVIASLLEKSEGALELADVSNELPGLKWMPGITQWKVMTKDGQWFTDWDAVPHSRHT
QIRPTMFPPKDPEKLQAMHLERCLRILPHHQNTGGFFVAVLVKKSSMPWNKRQPKLQGKSAETRESTQLSPADLT
EGKPTDPSKLESPSFTGTGDTEIAHATEDLENNGSKKDGVCGPPPSKKMKLFGFKEDPFVFIPEDDPLFPPIEKF
YALDPSFPRMNLLTRTTEGKKRQLYMVSKELRNVLLNNSEKMKVINTGIKVWCRNNSGEEFDCAFRLAQEGIYTL
YPFINSRIITVSMEDVKILLTQENPFFRKLSSETYSQAKDLAKGSIVLKYEPDSANPDALQCPIVLCGWRGKASI
RTFVPKNERLHYLRMMGLEVLGEKKKEGVILTNESAASTGQPDNDVTEGQRAGEPNSPDAEEANSPDVTAGCDPA
GVHPPR

7434/8433

FIGURE 6680

GAACCGCCCCGCGCTGGGAATTTGCGGCGGCCTCCGCCGGGGCAGCCGAGCTGAACCGGTCTCTTCCTCGGAAAG
GCAGGGCCGAGGGGCCTGCGGGGCAGCCATGGAGGCGACGCGGAGGCGGCAGCACCTGGGAGCGACGGGCGGCCC
AGGCGCGCAGCTGGGCGCCTCCTTCCTGCAGGCCAGGCATGGCTCTGTGAGCGCTGATGAGGCTGCCCGCACGGC
TCCCTTCCACCTCGACCTCTGGTTCTACTTCACACTGCAGAACTGGGTTCTGGACTTTGGGCGTCCCATTGCCAT
GCTGGTATTCCCTCTCGAGTGGTTTCCACTCAACAAGCCCAGTGTTGGGGACTACTTCCACATGGCCTACAACGT
CATCACGCCCTTTCTCTTGCTCAAGCTCATCGAGCGGTCCCCCCGCACCCTGCCACGCTCCATCACGTACGTGAG
CATCATCATCTTCATCATGGGTGCCAGCATCCACCTGGTGGGTGACTCTGTCAACCACCGCCTGCTCTTCAGTGG
CTACCAGCACCACCTGTCTGTCCGTGAGAACCCCATCATCAAGAATCTCAAGCCGGAGACGCTGATCGACTCCTT
TGAGCTGCTCTACTATTATGATGAGTACCTGGGTCACTGCATGTGGTACATCCCCTTCTTCCTCATCCTCTTCAT
GTACTTCAGCGGCTGCTTTACTGCCTCTAAAGCTGAGAGCTTGATTCCAGGGCCTGCCCTGCTCCTGGTGGCACC
CAGTGGCCTGTACTACTGGTACCTGGTCACCGAGGGCCAGATCTTCATCCTCTTCATCTTCACCTTCTTCGCCAT
GCTGGCCCTCGTCCTGCACCAGAAGCGCAAGCGCCTCTTCCTGGACAGCAACGGCCTCTTCCTCTTCTCCTCCTT
CGCACTGACCCTCTTGCTTGTGGCGCTCTGGGTCGCCTGGCTGTGGAATGACCCTGTTCTCAGGAAGAAGTACCC
GGGTGTCATCTACGTCCCTGAGCCCTGGGCTTTCTACACCCTTCACGTCAGCAGTCGGCACTGAGTCCCTGGCAC
CAGGCTCTGGCGCTCTGCTGGGTGGGAGGGTGGGCCATGGAGGGCATCTGAATACAGGAGTAGGGGGGGTGTGGG
TGTGTAACCAGAGACCGAGAGCATGAGTGGGGTGTGCCTCGTGTGCGTGGATTCGTGTGTGTGTGTGTGTCTTGT
ATATGTGTGCGCAGAGTGCATCATTTTCAGACTCTACTATTTCCGTCAAGTTTCTGTTTGATTTGGATCATCTCA
GGATCGGATTCTGTTTTAGAGTGTTTCTGGGCCAGGATCCGGGCCCCTGCCCTCCTCTGCACCTGACCACACTCC
CTACTCAGGGCTAGTCTGTTCTTCCCGGACATCTTCTGGTAGCCGTGCAGGAGAGGGCTGGGTGGGGCAGAGGCC
AGGAGGGGACCTGGTGTGTCACCTGCCCACCACCTGGCTCATCCCTCAGGCCCACCCTGACCCTACATTACATAG
GTTACGTCAGCCTACTGTGGCTGTTGAGCAAAGCATTTCTCCTTTCTGGGCCTCATTTGCACTAGATGGGCCTGT
GGTCCCAAAGTAGGTCAGTAGGTTGGGGTTGCTGACACCCCTTGGGTGCAGCTTTGGGACAGATGAGTGGCTCTG
TCCTGTCACTGCCCTCTCCCTGCCTGGGGGCTATGTGCACTCCAGACCCCTGCCCAGGCTCAGGCCCATGAGGTA
TGGAGACACCCTGGCCCCCAGGAGCTGGAGGCACCGCCCACTCCCCTGGCATTCCAGCTTTGCAGGTGACCCTCC
TCTACCCAAAGCTCTGTCCCCCTGCTCCCACTCCAGAAGAACTGCGGCACGTGCTTCGGGCAGCCTAGCCACAGG
CTTTGAGCGCCTGCATTCCTGGGGGCTGGAGGGTGGGGTGCCAAAGGCCCTGAGCAAAAGCCAGAGCTCCTCTCA
TCAAAGCCTTTACAAGGTACTGGGCCCAGAGGCTTTGCCTTGACAGAGTGGCCCAGGGTTTCAAGGGAGGAGGAA
CCTCCCCCTACCTAGGACCCTTCCTGTGGGGGGTCTACAGAGTCAGGGACAGAAGGGAAGGGACCCACAGGAAGT
CACAGTGGTGCCCAGGGATGTGTCAGCCCCCAGCCACGGGGACGCGGGATTCAAGAATGAAGTAAATACAGTCAC
AGCCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6681

MEATRRRQHLGATGGPGAQLGASFLQARHGSVSADEAARTAPFHLDLWFYFTLQNWVLDFGRPIAMLVFPLEWFP
LNKPSVGDYFHMAYNVITPFLLLKLIERSPRTLPRSITYVSIIIFIMGASIHLVGDSVNHRLLFSGYQHHLSVRE
NPIIKNLKPETLIDSFELLYYYDEYLGHCMWYIPFFLILFMYFSGCFTASKAESLIPGPALLLVAPSGLYYWYLV
TEGQIFILFIFTFFAMLALVLHQKRKRLFLDSNGLFLFSSFALTLLLVALWVAWLWNDPVLRKKYPGVIYVPEPW
AFYTLHVSSRH

FIGURE 6682

GGGGGGGCTGGCGGAAGAGGCACGTGCGCTGCTGAATGGAGCTGGTCGCTGGTTGCTACGAGCAGGTCCTCTTTG
GGTTCGCTGTACACCCGGAGCCCGAGGCTTGCGGCGACCACGAGCAATGGACTCTTGTGGCTGACTTCACTCACC
ATGCTCACACTGCCTCCTTGTCAGCAGTAGCTGTAAATAGTCGTTTTGTGGTCACTGGGAGCAAAGATGAAACAA
TTCACATTTATGACATGAAAAAGAAGATTGAGCATGGGGCTCTAGTGCATCACAGTGGTACAATAACTTGCCTGA
AATTCTATGGCAACAGGCATTTAATCAGTGGAGCGGAAGATGGACTCATCTGTATCTGGGATGCAAAGAAATGGG
AATGCCTGAAGTCAATTAAAGCTCACAAAGGACAGGTGACCTTCCTTTCTATTCACCCATCTGGCAAGTTGGCCC
TGTCGGTTGGTACAGATAAAACTTTAAGAACGTGGAATCTTGTAGAAGGAAGATCAGCATTCATAAAAAATATAA
AACAAAATGCTCACATAGTAGAATGGTCCCCAAGAGGAGAGCAGTATGTAGTTATCATACAGAATAAAATAGACA
TCTATCAGCTTGACACTGCATCCATTAGTGGCACCGTCACAAATGAAAAGAGAATTTCCTCTGTTAAATTTCTTT
CAGAGTCTGTCCTTGCAGTGGCTGGAGATGAAGAAGTTATAAGGTTTTTTGACTGTGATTCACTAGTGTGCCTCT
GCGAATTTAAAGCTCATGAAAACAGGGTAAAGGACATGTTCAGTTTTGAAATTCCAGAGCATCATGTTATTGTTT
CAGCATCGAGTGATGGTTTCATCAAAATGTGGAAGCTTGAGCAGGATAAGAAAGTTCCCCCATCTTTACTCTGTG
AAATAAACACTAATGCCAGGCTGACGTGTCTTGGAGTGTGGCTAGACAAAGTGGCAGACATGAAAGAAAGCCTTC
CTCCAGCTGCAGAGCCTTCTCCTGTAAGTAAAGAACAGTCCAAAATTGGCAAAAAGGAGCCTGGTGACACAGTGC
ACAAAGAAGAAAAGCGGTCAAAACCTAACACAAAGAAACGCGGTTTAACAGGTGACAGTAAGAAAGCAACAAAAG
AAAGTGGCCTGATATCAACCAAGAAGAGGAAAATGGTAGAAATGTTGGAAAAGAAGAGGAAAAAGAAGAAAATAA
AAACAATGCAGTGAATCACAGATGTCTCCTGAAAGAACTCTTTTAGATGAAATCATTCTACTCAAATGTACCTTA
ATTTTTTTTTTTTTTCCCTGAGTAAAAGCAAGAAATTTCTTCCTTTGGAAAAAATATATATATTAAAAAACCACT
TTTAGATGGTTTTTTTTAAAAAAAAAAAAAAAAAACTGGTAAAATTACTTTTGGCAGGCAGTGTTTTATGAATTAT
GTATCATGTTGATATATAATATGTTGATGTGTCATGTAATTTTTACTTTGTACAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAA

FIGURE 6683

MELVAGCYEQVLFGFAVHPEPEACGDHEQWTLVADFTHHAHTASLSAVAVNSRFVVTGSKDETIHIYDMKKKIEH
GALVHHSGTITCLKFYGNRHLISGAEDGLICIWDAKKWECLKSIKAHKGQVTFLSIHPSGKLALSVGTDKTLRTW
NLVEGRSAFIKNIKQNAHIVEWSPRGEQYVVIIQNKIDIYQLDTASISGTVTNEKRISSVKFLSESVLAVAGDEE
VIRFFDCDSLVCLCEFKAHENRVKDMFSFEIPEHHVIVSASSDGFIKMWKLEQDKKVPPSLLCEINTNARLTCLG
VWLDKVADMKESLPPAAEPSPVSKEQSKIGKKEPGDTVHKEEKRSKPNTKKRGLTGDSKKATKESGLISTKKRKM
VEMLEKKRKKKKIKTMQ

FIGURE 6684

GGGGATTTGGCTAGAAGGCTGGGCCGGCAGCGGTTGTGAGGAGTTAGCTCGCGGCATTGCAGGCTCTGAGAGGAG
GGGACCCGGTTCCCGGGTGAGTGTCCAGGCATGCCAGCGGAACGGCCCGCGGGCAGCGGCGGCTCGGAGGCTCCA
GCAATGGTTGAACAACTGGACACTGCTGTGATTACCCCGGCCATGCTAGAAGAGGAAGAACAGCTTGAAGCTGCT
GGACTAGAGAGAGAGCGGAAGATGCTGGAAAAGGCTCGCATGTCTTGGGATAGAGAGTCGACAGAAATTCGGTAC
CGTAGACTTCAACATTTGCTTGAAAAAAGCAATATCTACTCCAAATTTTTATTGACGAAAATGGAACAGCAACAA
TTAGAGGAACAGAAGAAGAAAGAAAAATTGGAGAGAAAAAAGGAGTCTTTAAAAGTTAAAAAGGGTAAAAATTCA
ATTGATGCAAGTGAAGAGAAGCCAGTTATGAGGAAAAAAAGAGGAAGAGAAGATGAATCATACAATATTTCAGAG
GTCATGTCAAAAGAGGAAATTTTGTCTGTGGCTAAAAAAAATAAAAAGGAGAATGAGGATGAAAACTCCTCCTCT
ACTAATCTCTGTGTGGAAGATCTTCAGAAAAATAAAGATTCGAATAGTATAATTAAAGATAGATTGTCTGAAACG
GTTAGGCAGAATACTAAATTCTTTTTTGACCCAGTCCGGAAGTGTAATGGTCAGCCAGTACCTTTTCAACAACCA
AAGCACTTCACTGGAGGAGTGATGCGATGGTACCAAGTAGAAGGCATGGAATGGCTTAGGATGCTTTGGGAAAAT
GGAATTAATGGCATTTTAGCAGATGAAATGGGATTGGGTAAGACAGTTCAGTGCATTGCTACTATTGCATTGATG
ATTCAGAGAGGAGTACCAGGACCTTTTCTTGTCTGTGGCCCTTTGTCTACACTTCCTAACTGGATGGCTGAATTC
AAAAGATTTACACCAGATATCCCTACAATGTTATATCATGGAACCCAGGAGGAACGTCAAAAATTGGTAAGAAAT
ATTTACAAACGGAAAGGGACTTTGCAGATTCATCCTGTGGTAATCACGTCATTTGAAATAGCCATGAGAGACCGA
AATGCGTTACAGCATTGCTATTGGAAATACTTAATAGTAGATGAAGGACACAGGATTAAGAATATGAAGTGCCGT
CTAATCAGGGAGTTAAAACGATTCAATGCTGATAACAAACTTCTTTTGACTGGTACTCCCTTGCAAAACAATTTA
TCAGAACTTTGGTCATTGCTAAACTTTTTGTTGCCAGATGTATTTGATGACTTGAAAAGCTTTGAGTCTTGGTTT
GACATCACTAGTCTTTCTGAAACTGCTGAAGATATTATTGCTAAAGAAAGAGAACAGAATGTATTGCATATGCTG
CACCAGATTTTAACACCTTTCTTATTGAGAAGACTGAAGTCTGATGTTGCTCTTGAAGTTCCTCCTAAACGAGAA
GTAGTCGTTTATGCTCCACTTTCAAAGAAGCAGGAGATCTTTTATACAGCCATTGTGAACCGTACAATTGCAAAC
ATGTTTGGATCCAGTGAGAAAGAAACAATTGAGTTAAGTCCTACTGGTCGACCAAAACGACGAACTAGAAAATCA
ATAAATTACAGCAAAATAGATGATTTCCCTAATGAATTGGAAAAACTGATCAGTCAAATACAGCCAGAGGTGGAC
CGAGAAAGAGCTGTTGTGGAAGTGAATATCCCTGTAGAATCTGAAGTTAATCTGAAGCTGCAGAATATAATGATG
CTACTTCGTAAATGTTGTAATCATCCATATTTGATTGAATATCCTATAGACCCTGTTACACAAGAATTTAAGATC
GATGAAGAATTGGTAACAAATTCTGGGAAGTTCTTGATTTTGGATCGAATGCTGCCAGAACTAAAAAAAAGAGGT
CACAAGGTGCTGCTTTTTTCACAAATGACAAGCATGTTGGACATTTTGATGGATTACTGCCATCTCAGAGATTTC
AACTTCAGCAGGCTTGATGGGTCCATGTCTTACTCAGAGAGAGAAAAAAACATGCACAGCTTCAACACGGATCCA
GAGGTGTTTATCTTCTTAGTGAGTACACGAGCTGGTGGCCTGGGCATTAATCTGACTGCAGCAGATACAGTTATC
ATTTATGATAGTGATTGGAACCCCCAGTCGGATCTTCAGGCCCAGGATAGATGTCATAGAATTGGTCAGACAAAG
CCAGTTGTTGTTTATCGCCTTGTTACAGCAAATACTATCGATCAGAAAATTGTGGAAAGAGCAGCTGCTAAAAGG
AAACTGGAAAAGTTGATCATCCATAAAAATCATTTCAAAGGTGGTCAGTCTGGATTAAATCTGTCTAAGAATTTC
TTAGATCCTAAGGAATTAATGGAATTATTAAAATCTAGAGATTATGAAAGGGAAATAAAAGGATCAAGAGAGAAG
GTCATTAGTGATAAAGATCTAGAGTTGTTGTTAGATCGAAGTGATCTTATTGATCAAATGAATGCTTCAGGACCA
ATTAAAGAGAAGATGGGGATATTCAAGATATTAGAAAATTCTGAAGATTCCAGTCCTGAATGTTTGTTTTAAAGT
GGAGCTCAAGAATAGCTTTTAAAAGTTCTTATTTACATCTAGTGATTTCCCTGTATTGGGTTTGAAATACTGATT
GTCCACTTCACCTTTTTTATTATATCAGTTGACATGTAACTAGTACCATGCGTACTTAAATAGATGGTAATTTTC
TGAGCCTTACCAAGAACAAAGAAGTATCCATATTAAGTTTAGATTTTCAGTTAATTTTTGAGACTGAGTAGTATT
CTTGGATACAGGCTGATGTGTACTTAACCACTTCCAGATTTATACAGTCTTCCTGTGGAAGTTTAGTAAATGTCT
TTTTCCCTCCTTTCTTCTAGTAATGCAGTTCATGGGCTTTAGGTACTTCAGTTATGAAGTAGGCTTTTCATGGGG
AGAGATTGGGATTATGCTTTCTGTTGTTTAAGAAACTGTTTGATTTTAGAGTCTATTTCTATGAGATAGTTTACC
AAATAAATGTTCCTTATAAGATGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAA

FIGURE 6685

MPAERPAGSGGSEAPAMVEQLDTAVITPAMLEEEEQLEAAGLERERKMLEKARMSWDRESTEIRYRRLQHLLEKS
NIYSKFLLTKMEQQQLEEQKKKEKLERKKESLKVKKGKNSIDASEEKPVMRKKRGREDESYNISEVMSKEEILSV
AKKNKKENEDENSSSTNLCVEDLQKNKDSNSIIKDRLSETVRQNTKFFFDPVRKCNGQPVPFQQPKHFTGGVMRW
YQVEGMEWLRMLWENGINGILADEMGLGKTVQCIATIALMIQRGVPGPFLVCGPLSTLPNWMAEFKRFTPDIPTM
LYHGTQEERQKLVRNIYKRKGTLQIHPVVITSFEIAMRDRNALQHCYWKYLIVDEGHRIKNMKCRLIRELKRFNA
DNKLLLTGTPLQNNLSELWSLLNFLLPDVFDDLKSFESWFDITSLSETAEDIIAKEREQNVLHMLHQILTPFLLR
RLKSDVALEVPPKREVVVYAPLSKKQEIFYTAIVNRTIANMFGSSEKETIELSPTGRPKRRTRKSINYSKIDDFP
NELEKLISQIQPEVDRERAVVEVNIPVESEVNLKLQNIMMLLRKCCNHPYLIEYPIDPVTQEFKIDEELVTNSGK
FLILDRMLPELKKRGHKVLLFSQMTSMLDILMDYCHLRDFNFSRLDGSMSYSEREKNMHSFNTDPEVFIFLVSTR
AGGLGINLTAADTVIIYDSDWNPQSDLQAQDRCHRIGQTKPVVVYRLVTANTIDQKIVERAAAKRKLEKLIIHKN
HFKGGQSGLNLSKNFLDPKELMELLKSRDYEREIKGSREKVISDKDLELLLDRSDLIDQMNASGPIKEKMGIFKI
LENSEDSSPECLF

FIGURE 6686

GAACACCAGCGAGCTGGTCTCCAGCGAGGTCTACCTGCTCAGTGCCTTGGCTGCTCTGCAGAAGGTTGTGGAGAC
TCTCCCGCACTTCATCAGCCCCTATCTGGAAGGCATTCTCTCCCAGGTGATTCATCTGGAGAAAATCACTAGTGA
AATGGGTTCTGCGTCACAGGCTAATATCCGTCTCACATCTCTTAAAAAGACACTGGCTACCACACTTGCACCCCG
AGTCCTGTTGCCCGCCATCAAAAAAACTTACAAGCAGATTGAGAAGAACTGGAAGAATCACATGGGTCCGTTTAT
GAGCATCTTGCAAGAGCATATTGGGGCGATGAAGAAGGAAGAGCTCACCTCCCATCAGTCTCAGCTAACCGCCTT
TTTCCTGGAGGCCCTGGACTTCCGAGCCCAGCACTCTGAGAACGATCTGGAGGAAGTTGGAAAAACGGAAAATTG
TATCATTGACTGTCTAGTAGCCATGGTTGTCAAACTTTCCGAGGTCACATTCAGGCCCCTGTTCTTCAAGCTGTT
TGATTGGGCTAAAACAGAAGATGCCCCAAAGGACAGGTTGTTGACATTTTACAACTTGGCAGATTGCATTGCTGA
AAAGCTGAAAGGGCTTTTTACTCTGTTTGCCGGCCACTTAGTGAAGCCTTTTGCTGACACCTTGGACCAGGTGAA
CATCTCCAAAACAGATGAAGCATTTTTTGACTCTGAAAATGACCCTGAAAAGTGCTGCTTGCTGTTGCAGTTTAT
TTTGAACTGTTTATACAAAATCTTCCTTTTTGATACCCAGCATTTTATAAGTAAAGAGAGAGCAGGAGCCTTGAT
GATGCCTCTGGTGGATCAGCTGGAAAACAGGCTTGGGGGAGAAGAGAAATTCCAGGAACGGGTGACAAAGCACCT
GATACCATGCATCGCACAGTTTTCAGTGGCCATGGCGGATGACTCTCTTTGGAAACCACTGAACTACCAGATTCT
GCTAAAGACGAGAGACTCCTCGCCTAAGGTTCGATTTGCTGCTTTGATTACTGTGTTAGCACTGGCTGAAAAACT
AAAGGAGAATTATATTGTCTTGCTACCAGAATCCATTCCTTTCTTAGCAGAGTTGATGGAAGATGAATGTGAAGA
AGTAGAACATCAGTGCCAAAAGACTATTCAGCAACTGGAAACTGTCCTGGGAGAGCCACTCCAGAGCTATTTCTA
AGACTTTCTGTGGTGTTTCATACTCTACTCAGAGTTCACACTCATATTTCATATTTTTATTTTTGGGTGTTGGGT
GCCATGTTACTTTTGGTGCCTTAATACACCTACTTGGATTACTTACAAATGTTTTATCACTTCGTTACAAAATCC
CCACCTGGCTTGTGCTGCCACATAAGCCTCTCCTGCCTATCGTATAGAGCTGCAGAAAGAGTAAATGATACACGG
TATTTTTAAAAAAAAAAAAAAA

FIGURE 6687

MGSASQANIRLTSLKKTLATTLAPRVLLPAIKKTYKQIEKNWKNHMGPFMSILQEHIGAMKKEELTSHQSQLTAF
FLEALDFRAQHSENDLEEVGKTENCIIDCLVAMVVKLSEVTFRPLFFKLFDWAKTEDAPKDRLLTFYNLADCIAE
KLKGLFTLFAGHLVKPFADTLDQVNISKTDEAFFDSENDPEKCCLLLQFILNCLYKIFLFDTQHFISKERAGALM
MPLVDQLENRLGGEEKFQERVTKHLIPCIAQFSVAMADDSLWKPLNYQILLKTRDSSPKVRFAALITVLALAEKL
KENYIVLLPESIPFLAELMEDECEEVEHQCQKTIQQLETVLGEPLQSYF

FIGURE 6688

GGCACGAGGCAGAGGGCGGTTCCTGGAGTTACAGCCGCGTTTGCGGGACGTGTCTGCGCGGCAGTCCTGGCCTGT
TGAGCTTGTCCAGACGAAGCCTCGCAGGGATGGGTTGGAGCCTGGGCCGGGCTTCGCTCAGGCAGCGTTTGAGGC
AGACCCAGCAGGGTCCTCCTGGGGCCTTCCTGCCTTTGAACTGCGGTGGCGGGCGGGCGCACGGTCTCCTGTACG
CCCTAGACTAGGGGCCGCCATCTCC**ATG**GCCACGGCCGTGAGCCGGCCCTGCGCCGGCAGGTCGCGGGACATACT
GTGGCGCGTTTTGGGCTGGAGGATAGTTGCAAGTATTGTTTGGTCAGTGCTATTTCTACCCATCTGCACCACAGT
ATTTATAATTTTCAGCAGGATTGATTTGTTTCATCCTATACAGTGGCTGTCTGATTCTTTCAGTGACCTGTATAG
TTCCTATGTAATCTTTTACTTCCTGCTGCTGTCAGTGGTAATAATAATAATAAGTATTTTCAATGTGGAGTTCTA
TGCAGTTGTGCCTTCTATTCCTTGCTCCAGACTAGCTCTGATAGGGAAGATCATTCATCCTCAGCAACTCATGCA
CTCATTTATTCATGCTGCAATGGGAATGGTGATGGCCTGGTGTGCTGCAGTGATAACCCAGGGCCAGTACAGCTT
TCTTGTGGTTCCCTGCACTGGTACTAACAGCTTTGATAGCCCTGCTGCGCAAACCTGCTTAAATGAATATCATCT
TTTTTTCCTACTGACTGGAGCATTTATGGGCTATAGCTATAGCCTCCTGTATTTTGTTAACAACATGAACTATCT
TCCATTTCCCATCATACAGCAATACAAGTTCTTGCGTTTTAGGAGATCTCTGCTCTTATTAGTTAAACACAGTTG
TGTGGAATCACTGTTCCTGGTTAGAAATTTCTGCATTTTATATTATTTTCTTGGCTATATTCCCAAAGCTTGGAT
TAGCACTGCTATGAACCTTCACATAGATGAGCAGGTTCATAGGCCACTTGACACAGTGAGTGGCCTCTTAAATCT
CTCGTTACTCTACCATGTCTGGCTGTGTGGTGTCTTTCTCCTGACGACTTGGTATGTCTCATGGATACTCTTCAA
AATCTATGCCACAGAGGCTCATGTGTTTCCTGTTCAACCACCATTTGCAGAAGGGTCAGATGAGTGCCTTCCAAA
AGTGTTAAATAGCAATCCTCCCCCCATCATAAAGTATTTAGCCTTGCAGGACCTGATGTTGCTTTCTCAATATTC
TCCTTCACGAAGACAAGAAGTTTTCAGCCTCAGCCAACCAGGTGGACATCCCCACAATTGGACAGCCATTTCAAG
GGAGTGTTTGAATCTTTTAAATGGTATGACTCAGAAACTGATTCTCTATCAAGAAGCTGCTGCTACGAATGGGAG
AGTGTCTTCATCTTACCCAGTGGAACCTAAGAAATTAAATTCTCCAGAAGAAACTGCTTTTCAGACACCAAAATC
TAGCCAGATGCCTCGGCCTTCAGTGCCACCATTAGTTAAAACATCACTGTTTTCTTCAAAATTATCTACACCTGA
TGTTGTGAGCCCATTTGGGACCCCATTTGGCTCTAGTGTAATGAATCGGATGGCTGGAATTTTTGATGTAAACAC
CTGCTATGGGTCACCGCAAAGTCCTCAGCTAATAAGAAGGGGGCCAAGATTGTGGACATCAGCTTCTGATCAGCA
AATGACTGAATTTTCTAATCCTTCTCCATCTACCTCTATTAGTGCTGAGGGTAAGACAATGAGACAACCCAGTGT
GATTTATTCATGGATTCAGAATAAACGTGAACAGATTAAGAATTTCTTGTCAAAACGGGTGCTGATAATGTATTT
TTTCAGTAAGCACCCAGAGGCCTCCATTCAGGCTGTTTTTTCAGATGCCCAAATGCATATTTGGGCATTAGAAGG
TCTGTCGCACTTAGTAGCAGCATCATTTACAGAGGATAGATTTGGAGTTGTCCAGACGACACTACCAGCTATCCT
TAATACTTTGTTGACACTGCAAGAGGCAGTCGACAAGTACTTTAAGCTTCCTCATGCTTCCAGTAAACCACCCCG
GATTTCAGGAAGCCTTGTGGACACTTCATATAAAACATTAAGATTTGCATTCAGAGCATCACTGAAAACTGCCAT
CTATCGAATAACTACTACATTTGGTGAACATCTGAATGCTGTGCAAGCATCTGCAGAACATCAGAAAAGACTTCA
ACAGTTCTTGGAGTTCAAAGAA**TAG**TTAAGTAATATAAACTGTGTTCATTACACTGCTGATACAACTACAGATGG
GACAGTAAATGTTCAGCATTCTTGGATCAGAAGAAAACGGACTAATTAGATGCTTCCTTTGTCGTGGTGGTTGCT
TTGAAAACTATACTTTAATGGGAGAAATCATGGAAAGAAATTCTCAACAGAATAACTGAAAACTGCCTTTTCTGT
ACCGATTGCTTTTTGTGTGTGTGGTATAATAAAATCTTTATTCAATTTTACAGAAAAAAAAAAAAAAAAAAAAA

FIGURE 6689

MATAVSRPCAGRSRDILWRVLGWRIVASIVWSVLFLPICTTVFIIFSRIDLFHPIQWLSDSFSDLYSSYVIFYFL
LLSVVIIIISIFNVEFYAVVPSIPCSRLALIGKIIHPQQLMHSFIHAAMGMVMAWCAAVITQGQYSFLVVPCTGT
NSFDSPAAQTCLNEYHLFFLLTGAFMGYSYSLLYFVNNMNYLPFPIIQQYKFLRFRRSLLLLVKHSCVESLFLVR
NFCILYYFLGYIPKAWISTAMNLHIDEQVHRPLDTVSGLLNLSLLYHVWLCGVFLLTTWYVSWILFKIYATEAHV
FPVQPPFAEGSDECLPKVLNSNPPPIIKYLALQDLMLLSQYSPSRRQEVFSLSQPGGHPHNWTAISRECLNLLNG
MTQKLILYQEAAATNGRVSSSYPVEPKKLNSPEETAFQTPKSSQMPRPSVPPLVKTSLFSSKLSTPDVVSPFGTP
FGSSVMNRMAGIFDVNTCYGSPQSPQLIRRGPRLWTSASDQQMTEFSNPSPSTSISAEGKTMRQPSVIYSWIQNK
REQIKNFLSKRVLIMYFFSKHPEASIQAVFSDAQMHIWALEGLSHLVAASFTEDRFGVVQTTLPAILNTLLTLQE
AVDKYFKLPHASSKPPRISGSLVDTSYKTLRFAFRASLKTAIYRITTTFGEHLNAVQASAEHQKRLQQFLEFKE

FIGURE 6690

AGCAGGTTTCGAATGCTCTTTACTTCCTTTGTGGAGCAAAAGAAAAAAGCAGGAGTATTTGAACAAATCACTAAG
ACTCATGGAACAATTATTGGCATTACTTCAGGGATTGTCTTGGTCCTTCTCATTATTTCTATTTTAGTACAAGTG
AAACAGCCTCGAAAAAAGGTCATGGCTTGCAAAACCGCTTTTAATAAAACCGGGTTCCAAGAAGTGTTTGATCCT
CCTCATTATGAACTGTTTTCACTAAGGGACAAAGAGATTTCTGCAGACCTGGCAGACTTGTCGGAAGAATTGGAC
AACTACCAGAGGATGCGGCGCTCCTCCACCGCCTCCCGCTGCATCCACGACCACCACTGTGGGTCGCAGGCCTCC
AGCGTCAAACAAAGCAGGACCAACCTCAGTTCCATGGAGCTTCCTCTCCGAAATGACTTTGCACAACCACAGCCA
ATGAAAACATTTAATAGCACCTTCAAGAAAAGTAGTTACACTTTCAAACAGGGACATGAGTGCCCTGAGCAGGCC
CTGGAAGACCGAGTAATGGAGGAGATTCCCTGTGAAATTTATGTCAGGGGGCGAGAAGATTCTGCACAAGCATCC
ATATCCATTGACTTCTAATCTTCTGCTAATGGTGATGTGAATTCTTAGGGTGTGTACGTACGCAGCCTCCAGGGC
ACCATACTGTTTCCAGCAGCCAACCCTTTTCTCCCATCACAACTACGAAGACCTTGATTTACCGTTAACCTATTG
TATGGTGATGTTTTTATTCTCTCAGGCAGTCTATATATGTTAAACCAATCAAGGAACTTACTCTATTCAGTGGAA
ACAATAATCATCTCTATTGCTTGGTGTCATTTATAGGAAGCACTGCCAGTTAAAGAGCATTAGAAGAGGTGGTTG
GATGGAGCCAGGCTCAGGCTGCCTCTTCGTTTTAGCAACAAGAAGACTGCTCTTGACTGATAACAGCTCTGTCAA
TATTTTGATGCCACAATAAACTTGATTTTTCTTTACATTCCTTTTATTTTTCCTTTCTCTAAATTTAATTTGTTT
TATAAGCCTATCGTTTTACCATTTCATTTTCTTACATAAGTACAAGTGGTTAATGTACCACATACTTCAGTATAG
GCATTTGTTCTTGAGTGTGTCAAAATACAGCTAGTTACTGTGCCAATTAAGACCCAGTTGTATTTCACCCATCTG
TTTCTTCTTGGCTAATCTCTGTACTTCTGCCTTTTAATTACTGGGCCCTTATTCCTTATTTTCTGTGAGAAATAA
TAGATGATATGATTTATTACCTTTCAATTATATTTTTCTCAGTTATACTAGAAAATTTCATAATCCTGGGATATA
TGTACCATTGTCAGCTATGACTAAAAATTTGAAAAAGATAAAAATTTCTAGCAAGCCTTTGAAGTTTACCAAGTA
TAGTCACATTCAGTGACAGCCCATTCATTCCAGTAAAGAATCATTTCATTCACTTTGGGAGAGGCCTATAATTAC
ATTTATTTGCAATGTTTCTCTTCGCTAGATTGTTACATAGCTCCCATTCTGTTGGTTTTGCTTACAGCATATGGT
AACCAAGGTTAGATGCCAGTTAAAATTCCTTAGAAATTGGATGAGCCTTGAGATTGCTTCTTAACTGGGACATGA
CATTTTTCTAGCTCTTATCAAGAATAACAACTTCCACTTTTTTTTAAACTGCACTTTTGACTTTTTTTATGGTAT
AAAAACAATAATTTATAAACATAAAAGCTCATTGTGTTTTTTAGACTTTTGATATTATTTGATACTGTACAAACT
TTATTAAATCAAGATGAAAGACCTACAGGACAGATTCCTTTCAGTGTTCACATCAGTGGCTTTGTATGCAAATAT
GCTGTGTTGGACCTGGACGCTATAACTTATTGTAAAGACCTTGGAAATGTGGACATAAGCTCTTTCTTTCCTTTT
GTTACTGTATTTAGTTTGTGATAAATTTTTCACTGTGTGATATTTATGCTCTAAATCACTACACAAATCCCATAT
TAAAATATACATTGTACCTGACCCTTTAATCATGTTATTTATGCCACCAAGGTTGTGGATCTTAAGGTATGTATG
GAAAGGAACTCATTTATCAAATTGTAAGTAATACAGACATGCCATTTAAAAGAGGTAAATTCTTGTTTTCTATAT
TTTGTTAGTAAATTCTCAATGAAATAAGTTGAAGTTTCACTGGATTTCATTAACTTTTAAATATTACATATATGT
GTTTTCTCAGATTAGTGAAAATTGTGACCTTAAATTTAATACACATATACTGCCTCAG

FIGURE 6691

MLFTSFVEQKKKAGVFEQITKTHGTIIGITSGIVLVLLIISILVQVKQPRKKVMACKTAFNKTGFQEVFDPPHYE
LFSLRDKEISADLADLSEELDNYQRMRRSSTASRCIHDHHCGSQASSVKQSRTNLSSMELPLRNDFAQPQPMKTF
NSTFKKSSYTFKQGHECPEQALEDRVMEEIPCEIYVRGREDSAQASISIDF

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FIGURE 6692

GAAATCTGTACGAACTATTCAGGCTGCTTTTAGAGGCATGAAAGTTAGACAAAAATTGAAAAATGTATCAGAGGA
AAAGATGGCAGCCATTGTTAACCAATCTGCACTCTGCTGTTACAGAAGCAAAACTCAGTATGAAGCTGTTCAAAG
TGAAGGTGTTATGATTCAAGAGTGGTATAAAGCTTCTGGCCTTGCTTGTTCACAGGAAGCAGAGTATCATTCTCA
AAGTAGGGCTGCAGTAACAATTCAAAAAGCTTTTTGTAGAATGGTCACAAGAAAACTGGAAACACAGAAATGTGC
TGCCCTACGGATTCAGTTCTTCCTTCAGATGGCTGTGTATCGGAGAAGATTTGTTCAGCAGAAAAGAGCTGCTAT
CACTTTACAGCATTATTTTAGGACGTGGCAAACCAGAAAACAGTTTTTACTATATAGAAAAGCAGCAGTGGTTTT
ACAAAATCACTACAGAGCATTTCTGTCTGCAAAACATCAAAGACAAGTCTATTTACAGATCAGAAGCAGTGTTAT
CATTATTCAAGCTAGAAGTAAAGGATTTATACAGAAACGGAAGTTTCAGGAAATTAAAAATAGCACCATAAAAAT
TCAGGCTATGTGGAGGAGATATAGAGCCAAGAAATATTTATGTAAAGTGAAAGCTGCCTGCAAGATTCAAGCCTG
GTATAGATGTTGGAGAGCACACAAAGAATATCTAGCTGTATTAAAAGCTGTTAAAATTATTCAAGGTTGCTTCTA
TACCAAACTAGAGAGAACACGGTTTTTGAATGTGAGAGCATCAGCAATTATCATTCAGAGAAAATGGAGAGCTAT
ACTTCCTGCAAAGATAGCTCATGAACACTTCTTAATGATAAAAAGACATCGAGCTGCTTGTTTGATCCAAGCACA
TTATAGAGGATATAAAGGAAGGCAGGTCTCTCTTCGGCAGAAATCTGCTGCTTTGATCATACAAAAATATATACG
AGCCAGGGAGGCTGGAAAGCATGAAAGGATAAAATATATTGAATTTAAAAAATCTACAGTTATCCTACAAGCACT
GGTGCGTGGTTGGCTAGTACGAAAAAGATTTTTAGAACAGAGAGCCAAAATTCGACTTCTTCACTTCACTGCAGC
TGCATATTATCACCTGAATGCTGTTAGAATTCAAAGAGCCTATAAACTTTACCTGGCTGTGAAGAATGCTAACAA
GCAGGTTAATTCAGTCATCTGTATTCAGAGATGGTTTCGAGCAAGATTACAAGAAAAGAGATTTATTCAGAAATA
TCATAGCATCAAAAAGATTGAGCATGAAGGTCAAGAATGTCTGAGCCAGCGAAATAGGGCTGCATCAGTAATACA
GAAAGCAGTGCGCCATTTTCTCCTCCGTAAAAAGCAGGAAAAATTCACTAGTGGAATCATTAAAATTCAGGCATT
ATGGAGAGGCTATTCTTGGAGGAAGAAAAATGATTGTACAAAAATTAAAGCTATACGACTAAGTCTTCAAGTTGT
TAATAGGGAGATTCGAGAAGAAAACAAACTCTACAAAAGAACTGCACTTGCACTTCATTACCTTTTGACATATAA
GCACCTTTCTGCCATTCTTGAGGCCTTAAAACACCTAGAGGTAGTTACTAGATTGTCTCCACTTTGTTGTGAGAA
CATGGCCCAGAGTGGAGCAATTTCTAAAATATTTGTTTTGATCCGAAGTTGTAATCGCAGTATTCCTTGTATGGA
AGTCATCAGATATGCTGTGCAAGTCTTGCTTAATGTATCTAAGTATGAGAAAACTACTTCAGCAGTTTATGATGT
AGAAAATTGTATAGATATACTATTGGAGCTTTTGCAGATATACCGAGAAAAGCCTGGTAATAAAGTTGCAGACAA
AGGCGGAAGCATTTTTACAAAAACTTGTTGTTTGTTGGCTATTTTACTGAAGACAACAAATAGAGCCTCTGATGT
ACGAAGTAGGTCCAAAGTTGTTGACCGTATTTACAGTCTCTACAAACTTACAGCTCATAAACATAAAATGAATAC
TGAAAGAATACTTTACAAGCAAAAGAAGAATTCTTCTATAAGCATTCCTTTTATCCCAGAAACACCTGTAAGGAC
CAGAATAGTTTCAAGACTTAAGCCAGATTGGGTTTTGAGAAGAGATAACATGGAAGAAATCACAAATCCCCTGCA
AGCTATTCAAATGGTGATGGATACGCTTGGCATTCCTTATTAGTAAATGTAAACATTTTCAGTATGTATAGTGTA
AAGAAATATTAAAGCCAATCATGAGTACGTAAAGTGATTTTTGCTCTCTGTGTACAACTTTTAAAATCTGACTTT
GTTTTAAAAAAACATAAACTGTTCATTACATTCTTCATTTTTATCATTTATAGTTTTATGCATGTAATAAACTAA
TATGTCATAAGATG

FIGURE 6693

MKVRQKLKNVSEEKMAAIVNQSALCCYRSKTQYEAVQSEGVMIQEWYKASGLACSQEAEYHSQSRAAVTIQKAFC
RMVTRKLETQKCAALRIQFFLQMAVYRRRFVQQKRAAITLQHYFRTWQTRKQFLLYRKAAVVLQNHYRAFLSAKH
QRQVYLQIRSSVIIIQARSKGFIQKRKFQEIKNSTIKIQAMWRRYRAKKYLCKVKAACKIQAWYRCWRAHKEYLA
VLKAVKIIQGCFYTKLERTRFLNVRASAIIIQRKWRAILPAKIAHEHFLMIKRHRAACLIQAHYRGYKGRQVSLR
QKSAALIIQKYIRAREAGKHERIKYIEFKKSTVILQALVRGWLVRKRFLEQRAKIRLLHFTAAAYYHLNAVRIQR
AYKLYLAVKNANKQVNSVICIQRWFRARLQEKRFIQKYHSIKKIEHEGQECLSQRNRAASVIQKAVRHFLLRKKQ
EKFTSGIIKIQALWRGYSWRKKNDCTKIKAIRLSLQVVNREIREENKLYKRTALALHYLLTYKHLSAILEALKHL
EVVTRLSPLCCENMAQSGAISKIFVLIRSCNRSIPCMEVIRYAVQVLLNVSKYEKTTSAVYDVENCIDILLELLQ
IYREKPGNKVADKGGSIFTKTCCLLAILLKTTNRASDVRSRSKVVDRIYSLYKLTAHKHKMNTERILYKQKKNSS
ISIPFIPETPVRTRIVSRLKPDWVLRRDNMEEITNPLQAIQMVMDTLGIPY

FIGURE 6694

AATAACCTGGAGCCGGCGGCGTAGGTTGGCTCTTTAGGGCTTCACCCCGAAGCTCCACCTTCGCTCCCGTCTTTC
TGGAAACACCGCTTTGATCTCGGCGGTGCGGGACAGGTACCTCCCGGCTGCTGCGGGTGCCCTGGATCCAGTCGG
CTGCACCAGGCGAGCGAGACCCTTCCCTGGTGGAGGCTCAGAGTTCCGGCAGGGTGCATCCGGCCTGTGTGTGGC
GCGAGGCAGGGAAGCCGGTACCCGGGTCCTGGCCCCAGCGCTGACGTTTTCTCTCCCCTTTCTTCTCTCTTCGCG
GTTGCGGCGTCGCAGACGCTAGTGTGAGCCCCCATGGCAGATACGACCCCGAGCGGCCCCCAAGGGGCGGGCGCT
GTGCAATTCATGATGACCAATAAACTGGACACGGCAATGTGGCTTTCTCGCTTGTTCACAGTTTACTGCTCTGCT
CTGTTTGTTCTGCCTCTTCTTGGGTTGCATGAAGCAGCAAGCTTTTACCAACGTGCTTTGCTGGCAAATGCTCTT
ACCAGTGCTCTGAGGCTGCATCAAAGATTACCACACTTCCAGTTAAGCAGAGCATTCCTGGCCCAGGCTTTGTTA
GAGGACAGCTGCCACTACCTGTTGTATTCACTCATCTTTGTAAATTCCTATCCAGTTACAATGAGTATCTTCCCA
GTCTTGTTATTCTCTTTGCTTCATGCTGCCACATATACGAAAAAGGTCCTTGACGCAAGGGGCTCAAATAGTTTA
CCTCTGCTGAGATCTGTCTTGGACAAATTAAGTGCTAATCAACAAAATATTCTGAAATTCATTGCTTGCAATGAA
ATATTCCTGATGCCTGCGACAGTTTTTATGCTTTTTAGTGGTCAAGGAAGTTTGCTCCAACCTTTTATATACTAT
AGATTTCTTACCCTTCGATATTCGTCTCGAAGAAACCCATATTGTCGGACCTTATTTAATGAACTGAGGATTGTT
GTTGAACACATAATAATGAAACCTGCTTGCCCACTGTTTGTGAGAAGACTTTGTCTCCAGAGCATTGCCTTTATA
AGCAGATTGGCACCAACAGTTCCATAGTTTAACATCTAGTTAAGCTACAAATATAGTATAAGCATTATTAGCAGC
TGGTACTTCTGCTAGGGGTTGTAAATTCCAGGTGTTACACTGACCTCAATCCAATTTACATAATTTACATAAATG
CATCTCGGTGGAAAAATAATCATTTTCTTGGCATGTTAAATCAAGCTTAAAAAGTTTTGAGAAAATTTTACTGTG
CTGTGTTGCTAATGGTTAAAGAAGTCTGTATCTAGTGATAAATATACCAGTTTTTTTAAAAAGATGCTGTTGTGC
CTATATCATGAAGTACATTAATTTCTCATGTAAAAAAAATAGCTCTAAAATTTGTTTCAACCTAATTGGTAACCT
GAGTTTATATCTGGCATGAATTCATTATGGTGATACACATATGTGAATTCAGTACATTTTGAGACAGTATTCTAC
CATTCAGTAATTTTGGTTAATGATTTTAACACTTCTCAGTGTATTTAATTTCAAATTGTTTTTTTAATTGGTTTT
ATGCTGCTTTGTTAGGACAGATGTGTTTTGAATGTACCATTATAAGAAGAATTCTATGTATCTTAAACTATGATC
TTCTAAAATTTTATTTCCGTAAGTACTTCTGTGGCCTTGAGTATTTTTTAAAAGGCTCAACTGTAAGCCTCTTAG
CCAGTTGGATAAATATTTGGGGTCACCTAGCCATTGAAAGCAGAAAGCAGTAGTGACACAGCTTTCCCTTCAAAG
AGCCATTGAGAAACATTTCTCAAACAGGAAATCCTTCTTTTACTAATGTGGACATATAGATTATTCGTATTATAG
TTTGTAGAACTACCTAGTTCAGAATCTTGACTGCCAGTTTTCTTGGTTTCTTAGGCTTGAATTTTCATAGACAAT
TGCAACAGTTTAGATGCCTTTTGAAAGGAATGTAATGAAGATTCAGCATCTGACTATATGTGTGTCTATCCTGAA
ATAATAATGGAGAGTATACTGTAGATTACATGTTTACCCATCAAATCTGACTTAAAAGGTTAAATGGAAGGTTTT
ATAGGTAAGGTAATTGATTGGGAATGGGGTAGGGGGAGGAGTTGTGGGGGAATAATGTGCATTTCAGTCTCAACG
CATAGATAAATTTAGGGGAATTGGATGCATTATTCAACTTTGATTTGGGTTGTAAAATGTGTTAAATCCTGTTCA
TTGAACTCCCATCAACTCTTATGAAATTCATGCTGATCTTCATTACCGTTGCATGATTGGAAATGTTTAAAACAT
TGTACAGTTTTAGTATAGAGAAATGTAATGGTTTTTGTGACCAGTTTCTGTCTGCATGTAATTTGGATTTCTCAA
ATACATTCATTAGTAATTTATCAGTAACATTAGTTTTATTTTTGTTCATCTCCTTATCTATAAAAAGGGGATATT
CTTAGGATAAATACATGAAAAATTATACTTGATAGCTTAACTATAATCAGCTATTTTTGTATTTTTGTAATATTT
GTCCACTAAGCTGGAGAAGCAGCCTCATACAGTTGATTTTGTGTATGTGGCTAGTCTTATTGTCACTATGTAAGT
AATCCAATGGTTTTAGAAACTAAACTTTCTAGAGCAATAAAATGACTATAATGTTAAGT

FIGURE 6695

MADTTPSGPQGAGAVQFMMTNKLDTAMWLSRLFTVYCSALFVLPLLGLHEAASFYQRALLANALTSALRLHQRLP
HFQLSRAFLAQALLEDSCHYLLYSLIFVNSYPVTMSIFPVLLFSLLHAATYTKKVLDARGSNSLPLLRSVLDKLS
ANQQNILKFIACNEIFLMPATVFMLFSGQGSLLQPFIYYRFLTLRYSSRRNPYCRTLFNELRIVVEHIIMKPACP
LFVRRLCLQSIAFISRLAPTVP

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FIGURE 6696

CAGAGTTTGGGCGCCAGGCGAGACGGCAGGGCTTAAAGTTCCGGGAATCAAAGATCAACTCCCACTGAGGACAAA
TGGACCTGTAATTCCGGGTGTGACGAGAGAACGAGATTTACCTTCCTGAATTAAAAAACAGGTCATTAAGCTTGG
GCCCTGACTTTTCTTTGTGAGAAGGTACAGAGATGGAAACCTTACAATCCGAGACTAAAACGAGGGTCCTTCCCT
CATGGCTGACAGCCCAGGTGGCTACAAAGAATGTGGCACCA**ATG**AAGGCCCCCAAGAGGATGAGAATGGCAGCAG
TGCCAGTGGCAGCAGCAAGACTCCCTGCGACAAGGACTGTGTACTGCATGAATGAGGCTGAGATAGTTGATGTTG
CTCTGGGAATCCTGATTGAGAGCCGCAAACAGGAAAAGGCCTGCGAGCAGCCGGCCCTGGCGGGGGCTGATAACC
CAGAGCACTCCCCTCCCTGCTCCGTGTCGCCTCACACAAGTTCTGGGAGCAGCAGTGAGGAAGAGGACAGTGGGA
AACAGGCACTGGCTCCAGGCCTCAGCCCTTCCCAGAGGCCGGGGGGTTCCAGCTCTGCCTGTAGCAGGAGCCCTG
AGGAGGAGGAGGAAGAGGATGTGCTGAAATACGTCCGGGAGATCTTTTTCAGC**TAG**GGCATAAACTGTGCACTGA
ACTGTCTGCCGAGAGCAGCTGGAGGACAGCTGAGCTTCCACTGGTGCTGCTGGGCCGCCCGCCTGTGGGAATGGG
GCTCTCTGTGCTCCTACCTTTGTGCCTTCTTGGGCCTGGCAGATTCACCTCAGGCCAGAAGCCCCTGGACACTCC
GGGCCTTGGGGCTGCCGTTCTGAGTGTGCGGAAGGCAGGACTCAAAATGAGATCCCATTTGACTCCCTCTGTATG
TACTGTGCCCTCTCCTGGCTCTTGAGGCTCTGGAGTCCCAATTGTCTGTGTTAGTCAGTGACCAGGTTCCAGGGA
AAATGATGTCATGTGGTGGTCCAACTTACTGGAACCAAAGAGACAGTACTTTGCAAAGAAAAGGATCACTGCCAG
GTGCACTGGAATTGCTACAGTTTAGTCCGCATGATCTCTCCTGAAGGAGGAAGCCTGTTTCAAAAATAGTTTCCA
TCATGAGTCTATCAATGAGCTCCCACCTCTCCAGCCAGCCTAGAAAGCAAACGAGCTGCCCACAGTTCTCTGCCC
TGTCTGGGAGGTTGAGGCCACAGTGTATAGACTGGTAAGCCAGACAGGCCTCCTCCCGCAAGCTGCTACCTTGCT
TTCACCTGTACCTTGGTCCCCGGGCAGCTAGCTATAAAGCAAGAGGGACAGGAGCCCAGAAGAGACACTGAGGAC
AAGAGATCACACCAGAGTACATGTCTCTGCCTCTGTTTTCAGTGTGGCTTTGGACAGGAATATATGAATAAATCA
CTGCCATACAGGTTTTCCAATACACAAGTGCTAGAAAATACACACAATTCCCCAATGAAAAAAAAAAAAAAAA

FIGURE 6697

MKAPKRMRMAAVPVAAARLPATRTVYCMNEAEIVDVALGILIESRKQEKACEQPALAGADNPEHSPPCSVSPHTS
SGSSSEEEDSGKQALAPGLSPSQRPGGSSSACSRSPEEEEEEDVLKYVREIFFS

FIGURE 6698

GAGCAATGATGTAGCCACCTCCTAACCTTCCCTTCTTGAACCCCCAGGTCCCCTCTTGCTGTTGGCTGCACATCA
GGAAGGCTGTGATGGGAATGAAGGTGAAAACTTGGAGATTTCACTTCAGTCATTGCTTCTGCCTGCAAGATCATC
CTTTAAAAGTAGAGAAGCTGCTCTGTGTGGTGGTTAACTCCAAGAGGCAGAACTCGTTCTAGAAGGAAATGGATG
CAAGCAGCTCCGGGGGCCCCAAACGCATGCTTCCTGTGATCTAGCCCAGGGAAGCCCTTCCGTGGGGGCCCCGGC
TTTGAGGGATGCCACCGGTTCTGGACGCATGGCTGATTCTGAATGATGATGGTTCGCCGGGGGCTGCTTGCGTGG
ATTTCCCGGGTGGTGGTTTTGCTGGTGCTCCTCTGCTGTGCTATCTCTGTCCTGTACATGTTGGCCTGCACCCCA
AAAGGTGACGAGGAGCAGCTGGCACTGCCCAGGGCCAACAGCCCCACGGGGAAGGAGGGGTACCAGGCCGTCCTT
CAGGAGTGGGAGGAGCAGCACCGCAACTACGTGAGCAGCCTGAAGCGGCAGATCGCACAGCTCAAGGAGGAGCTG
CAGGAGAGGAGTGAGCAGCTCAGGAATGGGCAGTACCAAGCCAGCGATGCTGCTGGCCTGGGTCTGGACAGGAGC
CCCCCAGAGAAAACCCAGGCCGACCTCCTGGCCTTCCTGCACTCGCAGGTGGACAAGGCAGAGGTGAATGCTGGC
GTCAAGCTGGCCACAGAGTATGCAGCAGTGCCTTTCGATAGCTTTACTCTACAGAAGGTGTACCAGCTGGAGACT
GGCCTTACCCGCCACCCCGAGGAGAAGCCTGTGAGGAAGGACAAGCGGGATGAGTTGGTGGAAGCCATTGAATCA
GCCTTGGAGACCCTGAACAATCCTGCAGAGAACAGCCCCAATCACCGTCCTTACACGGCCTCTGATTTCATAGAA
GGGATCTACCGAACAGAAAGGGACAAAGGGACATTGTATGAGCTCACCTTCAAAGGGGACCACAAACATGAATTC
AAACGGCTCATCTTATTTCGACCATTCGGCCCCATCATGAAAGTGAAAAATGAAAAGCTCAACATGGCCAACACG
CTTATCAATGTTATCGTGCCTCTAGCAAAAAGGGTGGACAAGTTCCGGCAGTTCATGCAGAATTTCAGGGAGATG
TGCATTGAGCAGGATGGGAGAGTCCATCTCACTGTTGTTTACTTTGGGAAAGAAGAAATAAATGAAGTCAAAGGA
ATACTTGAAAACACTTCCAAAGCTGCCAACTTCAGGAACTTTACCTTCATCCAGCTGAATGGAGAATTTTCTCGG
GGAAAGGGACTTGATGTTGGAGCCCGCTTCTGGAAGGGAAGCAACGTCCTTCTCTTTTTCTGTGATGTGGACATC
TACTTCACATCTGAATTCCTCAATACGTGTAGGCTGAATACACAGCCAGGGAAGAAGGTATTTTATCCAGTTCTT
TTCAGTCAGTACAATCCTGGCATAATATACGGCCACCATGATGCAGTCCCTCCCTTGGAACAGCAGCTGGTCATA
AAGAAGGAAACTGGATTTTGGAGAGACTTTGGATTTGGGATGACGTGTCAGTATCGGTCAGACTTCATCAATATA
GGTGGGTTTGATCTGGACATCAAAGGCTGGGGCGGAGAGGATGTGCACCTTTATCGCAAGTATCTCCACAGCAAC
CTCATAGTGGTACGGACGCCTGTGCGAGGACTCTTCCACCTCTGGCATGAGAAGCGCTGCATGGACGAGCTGACC
CCCGAGCAGTACAAGATGTGCATGCAGTCCAAGGCCATGAACGAGGCATCCCACGGCCAGCTGGGCATGCTGGTG
TTCAGGCACGAGATAGAGGCTCACCTTCGCAAACAGAAACAGAAGACAAGTAGCAAAAAAACATGAACTCCCAGA
GAAGGATTGTGGGAGACACTTTTTCTTTCCTTTTGCAATTACTGAAAGTGGCTGCAACAGAGAAAAGACTTCCAT
AAAGGACGACAAAAGAATTGGACTGATGGGTCAGAGATGAGAAAGCCTCCGATTTCTCTCTGTTGGGCTTTTTAC
AACAGAAATCAAAATCTCCGCTTTGCCTGCAAAAGTAACCCAGTTGCACCCTGTGAAGTGTCTGACAAAGGCAGA
ATGCTTGTGAGATTATAAGCCTAATGGTGTGGAGGTTTTGATGGTGTTTACAATACACTGAGACCTGTTGTTTTG
TGTGCTCATTGAAATATTCATGATTTAAGAGCAGTTTTGTAAAAAATTCATTAGCATGAAAGGCAAGCATATTTC
TCCTCATATGAATGAGCCTATCAGCAGGGCTCTAGTTTCTAGGAATGCTAAAATATCAGAAGGCAGGAGAGGAGA
TAGGCTTATTATGATACTAGTGAGTACATTAAGTAAAATAAAATGGACCAGAAAAGAAAAGAAACCATAAATATC
GTGTCATATTTTCCCCAAGATTAACCAAAAATAATCTGCTTATCTTTTTGGTTGTCCTTTTAACTGTCTCCGTTT
TTTTCTTTTATTTAAAAATGCACTTTTTTTCCCTTGTGAGTTATAGTCTGCTTATTTAATTACCACTTTGCAAGC
CTTACAAGAGAGCACAAGTTGGCCTACATTTTTATATTTTTTAAGAAGATACTTTGAGATGCATTATGAGAACTT
TCAGTTCAAAGCATCAAATTGATGCCATATCCAAGGACATGCCAAATGCTGATTCTGTCAGGCACTGAATGTCAG
GCATTGAGACATAGGGAAGGAATGGTTTGTACTAATACAGACGTACAGATACTTTCTCTGAAGAGTATTTTCGAA
GAGGAGCAACTGAACACTGGAGGAAAAGAAAATGACACTTTCTGCTTTACAGAAAAGGAAACTCATTCAGACTGG
TGATATCGTGATGTACCTAAAAGTCAGAAACCACATTTTCTCCTCAGAAGTAGGGACCGCTTTCTTACCTGTTTA
AATAAACCAAAGTATACCGTGTGAACCAAACAATCTCTTTTCAAAACAGGGTGCTCCTCCTGGCTTCTGGCTTCC
ATAAGAAGAAATGGAGAAAAATATATATATATATATATATATTGTGAAAGATCAATCCATCTGCCAGAATCTAGT
GGGATGGAAGTTTTTGCTACATGTTATCCACCCCAGGCCAGGTGGAAGTAACTGAATTATTTTTTAAATTAAGCA
GTTCTACTCGATCACCAAGATGCTTCTGAAAATTGCATTTTATTACCATTTCAAACTATTTTTTAAAAATAAATA
CAGTTAACATAGAGTGGTTTCTTCATTCATGTGAAAATTATTAGCCAGCACCAGATGCATGAGCTAATTATCTCT
TTGAGTCCTTGCTTCTGTTTGCTCACAGTAAGCTCATTGTTTAAAAGCTTC

FIGURE 6699

MMMVRRGLLAWISRVVVLLVLLCCAISVLYMLACTPKGDEEQLALPRANSPTGKEGYQAVLQEWEEQHRNYVSSL
KRQIAQLKEELQERSEQLRNGQYQASDAAGLGLDRSPPEKTQADLLAFLHSQVDKAEVNAGVKLATEYAAVPFDS
FTLQKVYQLETGLTRHPEEKPVRKDKRDELVEAIESALETLNNPAENSPNHRPYTASDFIEGIYRTERDKGTLYE
LTFKGDHKHEFKRLILFRPFGPIMKVKNEKLNMANTLINVIVPLAKRVDKFRQFMQNFREMCIEQDGRVHLTVVY
FGKEEINEVKGILENTSKAANFRNFTFIQLNGEFSRGKGLDVGARFWKGSNVLLFFCDVDIYFTSEFLNTCRLNT
QPGKKVFYPVLFSQYNPGIIYGHHDAVPPLEQQLVIKKETGFWRDFGFGMTCQYRSDFINIGGFDLDIKGWGGED
VHLYRKYLHSNLIVVRTPVRGLFHLWHEKRCMDELTPEQYKMCMQSKAMNEASHGQLGMLVFRHEIEAHLRKQKQ
KTSSKKT

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FIGURE 6700

CTGTGAGTGACACACGCTGAGTGGGGTGAAGGGAA**ATG**CTGGTGAATTTCATTTTGAGGTGTGGGTTGCTGTTAG
TCACTCTGTCTCTTGCCATTGCCAAGCACAAGCAATCTTCCTTCACCAAAAGTTGTTACCCAAGGGGAACATTGT
CCCAAGCTGTTGACGCTCTCTATATCAAAGCAGCATGGCTCAAAGCAACGATTCCAGAAGACCGCATAAAAAATA
TACGATTATTAAAAAAGAAAACAAAAAAGCAGTTTATGAAAAACTGTCAATTTCAAGAACAGCTTCTGTCCTTCT
TCATGGAAGACGTTTTTGGTCAACTGCAATTGCAAGGCTGCAAGAAAATACGCTTTGTGGAGGACTTTCATAGCC
TTAGGCAGAAATTGAGCCACTGTATTTCCTGTGCTTCATCAGCTAGAGAGATGAAATCCATTACCAGGATGAAAA
GAATATTTTATAGGATTGGAAACAAAGGAATCTACAAAGCCATCAGTGAACTGGATATTCTTCTTTCCTGGATTA
AAAAATTATTGGAAAGCAGTCAG**TAA**ACCAAAGCCAAGTACATTGATTTTACAGTTATTTTGAAATACAATAAGA
ACTGCTAGAAATATGTTTATAACAGTCTATTTCTTTTAAAAACTTTTTAACATAATACTGACGGCATGTTAGGTG
ATTCAGAATAGACAAGAAGGATTTAGTAAATTAACGTTTTGGATATAAGTTGTCACTAATTTGCACATTTTCTGT
GTTTTCAAATAATGTTTCCATTCTGAACATGTTTTGTCATTCACAAGTACATTGTGTCAACTTAATTTAAAGTAT
GTAACCTGAATTAACTCGTGTAATATTTGTGTGTGGAGTGGGATGTGGGGGGTGGAGGGGGAATGACAGATTTCT
GGAATGCAATGTAATGTTACTGAGACTTAAATAGATGTTATGTATATGATTGTCTGTTTAAGTGTTTGAAAATTG
TTAATTATGCCCAGTGTGAACTTAGTACTTAACACATTTTGATTTTAATTAAATAAATTGGGTTTCCTTCTC

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FIGURE 6701

MLVNFILRCGLLLVTLSLAIAKHKQSSFTKSCYPRGTLSQAVDALYIKAAWLKATIPEDRIKNIRLLKKKTKKQF
MKNCQFQEQLLSFFMEDVFGQLQLQGCKKIRFVEDFHSLRQKLSHCISCASSAREMKSITRMKRIFYRIGNKGIY
KAISELDILLSWIKKLLESSQ

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FIGURE 6702

GGCACGAGGGTACCGACCCGGCAGAAGCTCGGAGCTCTCGGGGTATCGAGGAGGCAGGCCCGCGGGCGCACGGGC
GAGCGGGCCGGGAGCCGGAGCGGCGGAGGAGCCGGCAGCAGCGGCGCGGCGGGCTCCAGGCGAGGCGGTCGACGC
TCCTGAAAACTTGCGCGCGCGCTCGCGCCACTGCGCCCGGAGCGATGAAGATGGTCGCGCCCTGGACGCGGTTCT
ACTCCAACAGCTGCTGCTTGTGCTGCCATGTCCGCACCGGCACCATCCTGCTCGGCGTCTGGTATCTGATCATCA
ATGCTGTGGTACTGTTGATTTTATTGAGTGCCCTGGCTGATCCGGATCAGTATAACTTTTCAAGTTCTGAACTGG
GAGGTGACTTTGAGTTCATGGATGATGCCAACATGTGCATTGCCATTGCGATTTCTCTTCTCATGATCCTGATAT
GTGCTATGGCTACTTACGGAGCGTACAAGCAACGCGCAGCCTGGATCATCCCATTCTTCTGTTACCAGATCTTTG
ACTTTGCCCTGAACATGTTGGTTGCAATCACTGTGCTTATTTATCCAAACTCCATTCAGGAATACATACGGCAAC
TGCCTCCTAATTTTCCCTACAGAGATGATGTCATGTCAGTGAATCCTACCTGTTTGGTCCTTATTATTCTTCTGT
TTATTAGCATTATCTTGACTTTTAAGGGTTACTTGATTAGCTGTGTTTGGAACTGCTACCGATACATCAATGGTA
GGAACTCCTCTGATGTCCTGGTTTATGTTACCAGCAATGACACTACGGTGCTGCTACCCCCGTATGATGATGCCA
CTGTGAATGGTGCTGCCAAGGAGCCACCGCCACCTTACGTGTCTGCCTAAGCCTTCAAGTGGGCGGAGCTGAGGG
CAGCAGCTTGACTTTGCAGACATCTGAGCAATAGTTCTGTTATTTCACTTTTGCCATGAGCCTCTCTGAGCTTGT
TTGTTGCTGAAATGCTACTTTTTAAAATTTAGATGTTAGATTGAAAACTGTAGTTTTCAACATATGCTTTGCTAG
AACACTGTGATAGATTAACTGTAGAATTCTTCCTGTACGATTGGGGATATAACGGGCTTCACTAACCTTCCCTAG
GCATTGAAACTTCCCCCAAATCTGATGGACCTAGAAGTCTGCTTTTGTACCTGCTGGGCCCCAAAGTTGGGCATT
TTTCTCTCTGTTCCCTCTCTTTTGAAAATGTAAAATAAAACCAAAAATAGACAACTTTTTCTTCAGCCATTCCAT
CATAGAGAACAAAACCTTATGGAAACAGGAATGTCAATTGTGTAATCATTGTTCTAATTAGGTAAATAGAAGTCC
TTATGTATGTGTTACAAGAATTTCCCCCACAACATCCTTTATGACTGAAGTTCAATGACAGTTTGTGTTTGGTGG
TAAAGGATTTTCTCCATGGCCTGAATTAAGACCATTAGAAAGCACCAGGCCGTGGGAGCAGTGACCATCTGCTGA
CTGTTCTTGTGGATCTTGTGTCCAGGGACATGGGGTGACATGCCTCGTATGTGTTAGAGGGTGGAATGGATGTGT
TTGGCGCTGCATGGGATCTGGTGCCCCTCTTCTCCTGGATTCACATCCCCACCCAGGGCCCGCTTTTACTAAGTG
TTCTGCCCTAGATTGGTTCAAGGAGGTCATCCAACTGACTTTATCAAGTGGAATTGGGATATATTTGATATACTT
CTGCCTAACAACATGGAAAAGGGTTTTCTTTTCCCTGCAAGCTACATCCTACTGCTTTGAACTTCCAAGTATGTC
TAGTCACCTTTTAAAATGTAAACATTTTCAGAAAAATGAGGATTGCCTTCCTTGTATGCGCTTTTTACCTTGACT
ACCTGAATTGCAAGGGATTTTTATATATTCATATGTTACAAAGTCAGCAACTCTCCTGTTGGTTCATTATTGAAT
GTGCTGTAAATTAAGTCGTTTGCAATTAAAACAAGGTTTGCCCACAAAAAAAAAAAAAAAAAA

FIGURE 6703

MKMVAPWTRFYSNSCCLCCHVRTGTILLGVWYLIINAVVLLILLSALADPDQYNFSSSELGGDFEFMDDANMCIA
IAISLLMILICAMATYGAYKQRAAWIIPFFCYQIFDFALNMLVAITVLIYPNSIQEYIRQLPPNFPYRDDVMSVN
PTCLVLIILLFISIILTFKGYLISCVWNCYRYINGRNSSDVLVYVTSNDTTVLLPPYDDATVNGAAKEPPPPYVS
A

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FIGURE 6704

GGAGTCGGTGCTTTAGTACGCCGCTGGCACCTTTACTCTCGCCGGCCGCGCGAACCCGTTTGAGCTCGGTATCCT
AGTGCACACGCCTTGCAAGCGACGGCGCCATGAGTCTGACTTCCAGTTCCAGCGTACGAGTTGAATGGATCGCAG
CAGTTACCATTGCTGCTGGGACAGCTGCAATTGGTTATCTAGCTTACAAAAGATTTTATGTTAAAGATCATCGAA
ATAAAGCTATGATAAACCTTCACATCCAGAAAGACAACCCCAAGATAGTACATGCTTTTGACATGGAGGATTTGG
GAGATAAAGCTGTGTACTGCCGTTGTTGGAGGTCCAAAAAGTTCCCATTCTGTGATGGGGCTCACACAAAACATA
ACGAAGAGACTGGAGACAATGTGGGCCCTCTGATCATCAAGAAAAAAGAAACTTAAATGGACACTTTTGATGCTG
CAAATCAGCTTGTCGTGAAGTTACCTGATTGTTTAATTAGAATGACTACCACCTCTGTCTGATTCACCTTCGCTG
GATTCTAAATGTGGTATATTGCAAACTGCAGCTTTCACATTTATGGCATTTGTCTTGTTGAAACATCGTGGTGCA
CATTTGTTTAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6705

MSLTSSSSVRVEWIAAVTIAAGTAAIGYLAYKRFYVKDHRNKAMINLHIQKDNPKIVHAFDMEDLGDKAVYCRCW
RSKKFPFCDGAHTKHNEETGDNVGPLIIKKKET

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FIGURE 6706

GCACGAGGCAGGCCGAAGTCCGCAGCCCCGGCTCGGCGCCCGCTGCTTGCACCTCCCGGATGGTGCTGACTGCTC
CCTAAGCGGCGGCGGCGGCGAGTCGTGAGGACGCGCCGCGGAGGCTGTTCGGGGTCGAGGCTTCCCGTCGCCGGC
ACTTCCTCTTGCGGCGCCCGTGCGCGGCCGGCCCGGCAGGCGGGATGAGCGGCCGCGGCTCCGGGAACGGCCGCG
CATCGGCGCCCCGGCTGCTTCTGCTCTTTCTGGTTCCGCTGCTGTGGGCCCCGGCTGCGGTCCGGGCCGGCCCAG
ATGAAGACCTTAGCCACCGGAACAAAGAACCGCCGGCGCCGGCCCAGCAGCTGCAGCCGCAGCCTGTGGCTGTGC
AGGGCCCCGAGCCGGCCCGGGTCGAGAAAATATTTACACCAGCAGCTCCAGTTCATACCAATAAAGAAGATCCTG
CTACCCAAACTAATTTGGGATTTATCCATGCATTTGTCGCTGCCATATCAGTTATTATTGTATCTGAATTGGGTG
ATAAGACATTTTTTATAGCAGCCATCATGGCAATGCGCTATAACCGCCTGACCGTGCTGGCTGGTGCAATGCTTG
CCTTGGGACTAATGACATGCTTGTCAGTTTTGTTTGGCTATGCCACCACAGTCATCCCCAGGGTCTATACATACT
ATGTTTCAACTGTATTATTTGCCATTTTTGGCATTAGAATGCTTCGGGAAGGCTTAAAGATGAGCCCTGATGAGG
GTCAAGAGGAACTGGAAGAAGTTCAAGCTGAATTAAAGAAGAAAGATGAAGAATTTCAACGAACCAAACTTTTAA
ATGGACCGGGAGATGTTGAAACGGGTACAAGCATAACAGTACCTCAGAAAAAGTGGTTGCATTTTATTTCACCCA
TTTTTGTTCAAGCTCTTACATTAACATTCTTAGCAGAATGGGGTGATCGCTCTCAACTAACTACAATTGTATTGG
CAGCTAGAGAGGACCCCTATGGTGTAGCCGTGGGTGGAACTGTGGGGCACTGCCTGTGCACGGGATTGGCAGTAA
TTGGAGGAAGAATGATAGCACAGAAAATCTCTGTCAGAACTGTGACAATCATAGGAGGCATCGTTTTTTTGGCGT
TTGCATTTTCTGCACTATTTATAAGCCCTGATTCTGGTTTTTAACGCTGTTTGTTCATCTATATTTAGTTTAAAA
TAGGTAGTATTATCTTTCTGTACATAGTGTACATTACAACTAAAAGTGATGGGAAAAATACTGTATTTTGTAGGC
ACTGGATTTTGTGAGTTTGACCCCTTATTATGTCTGGAGGATATAATCATTGGATTCCTATCTTGTGCCAAGGGA
GTTTTTAAAAGGAAACCCTGACTTTTTAAGTGTGGGGGTTTTTTCTTCTCTTCCCAACCTTAATTATGGTTTAAT
ATGGTCCTCATTTTTCTTTTGGTGCAGAACCGTTGTGCAGTGGGGTCTACCATGCAATTTTCTTTCAGCACTGAC
CCCTTTTTAAGGAATACAAATTTTCTCCTTCATCACTTAGGTGTTTTAAGATGTTTACCTTAAAGTTTTCTTGGG
GAAAGAATGAATTAATTTCTATTTCTTAAAACATTTCCCTGAGCCAGTAAACAGTAGTTTAATCATTGGTCTTTT
CAAAACTAGGTGTTTAAAAAAAGAGACATATATGATATTGCTGTTATATCAATAACATGGCACAACAAGAACTGT
CTGCCAGGTCATTCTTCCTCTTTTTTTTTTAATTGGGTAGGACACCCCATATAAAAACCATCCATATTTGGCCAT
GTGGGATTACCCAAATAAAAGAGGAATCCATGGATGGATTCAGAATTTTTTTAAATTTAATAAACCAACCAACCC
TTGGTTCCCATATTTAATTAAAAGGAGGGTTGCCCAGT

FIGURE 6707

MSGRGSGNGRASAPRLLLLFLVPLLWAPAAVRAGPDEDLSHRNKEPPAPAQQLQPQPVAVQGPEPARVEKIFTPA
APVHTNKEDPATQTNLGFIHAFVAAISVIIVSELGDKTFFIAAIMAMRYNRLTVLAGAMLALGLMTCLSVLFGYA
TTVIPRVYTYYVSTVLFAIFGIRMLREGLKMSPDEGQEELEEVQAELKKKDEEFQRTKLLNGPGDVETGTSITVP
QKKWLHFISPIFVQALTLTFLAEWGDRSQLTTIVLAAREDPYGVAVGGTVGHCLCTGLAVIGGRMIAQKISVRTV
TIIGGIVFLAFAFSALFISPDSGF

FIGURE 6708A

ATGACTACAAAACGAAGTTTGTTTGTGCGGTTGGTACCATGTCGCTGTCTACGAGGGGAAGAGGAGACCGTCACT
ACTCTTGATTATTCTCATTGCAGCTTAGAACAAGTTCCGAAAGAGATTTTTACTTTTGAAAAAACCTTGGAGGAA
CTCTATTTAGATGCTAATCAGATTGAAGAGCTTCCAAAGCAACTTTTTAACTGTCAGTCTTTACACAAACTGAGT
TTGCCAGACAATGATTTAACAACGTTACCAGCATCCATTGCAAACCTTATTAATCTCAGGGAACTGGATGTCAGC
AAGAATGGAATACAGGAGTTTCCAGAAAATATAAAAAATTGTAAAGTTTTGACAATTGTGGAGGCCAGTGTAAAC
CCTATTTCCAAGCTCCCTGATGGATTTTCTCAGCTGTTAAACCTAACCCAGTTGTATCTGAATGATGCTTTTCTT
GAGTTCTTGCCAGCAAATTTTGGCAGATTAACTAAACTCCAAATATTAGAGCTTAGAGAAAACCAGTTAAAAATG
TTGCCTAAAACTATGAATAGACTGACCCAGCTGGAAAGATTGGATTTGGGAAGTAACGAATTCACGGAAGTGCCT
GAAGTACTTGAGCAACTAAGTGGATTGAAAGAGTTTTGGATGGATGCTAATAGACTGACTTTTATTCCAGGGTTT
ATTGGTAGTTTGAAACAGCTCACATATTTGGATGTTTCTAAAAATAATATTGAAATGGTTGAAGAAGGAATTTCA
ACATGTGAAAACCTTCAAGACCTCCTATTATCAAGCAATTCACTTCAGCAGCTTCCTGAGACTATTGGTTCGTTG
AAGAATATAACAACGCTTAAAATAGATGAAAACCAGTTAATGTATCTGCCAGACTCTATAGGAGGGTTAATATCA
GTAGAAGAACTGGATTGTAGTTTCAATGAAGTTGAAGCTTTGCCTTCATCTATTGGGCAGCTTACTAACTTAAGA
ACTTTTGCTGCTGATCATAATTACTTACAGCAGTTGCCCCCAGAGATTGGAAGCTGGAAAAATATAACTGTGCTG
TTTCTCCATTCCAATAAACTTGAGACACTTCCAGAGGAAATGGGTGATATGCAAAAATTAAAAGTCATTAATTTA
AGTGATAATAGATTAAAGAATTTACCCTTTAGCTTTACAAAGCTACAGCAATTGACAGCTATGTGGCTCTCAGAT
AATCAGTCCAAACCCCTGATACCTCTTCAAAAAGAAACTGATTCAGAGACCCAGAAAATGGTGCTTACCAACTAC
ATGTTCCCTCAACAGCCAAGGACTGAGGATGTTATGTTTATATCAGATAATGAAAGTTTTAACCCTTCATTGTGG
GAGGAACAGAGGAAACAGCGGGCTCAAGTTGCATTTGAATGTGATGAAGACAAAGATGAAAGGGAGGCACCTCCC
AGGGAGGGAAATTTAAAAAGATATCCAACACCATACCCAGATGAGCTTAAGAATATGGTCAAAACTGTTCAAACC
ATTGTACATAGATTAAAAGATGAAGAGACCAATGAAGACTCAGGAAGAGATTTGAAACCACATGAAGATCAACAA
GATATAAATAAAGATGTGGGTGTGAAGACCTCAGAAAGTACTACTACAGTAAAAAGCAAAGTTGATGAAAGAGAA
AAATATATGATAGGAAACTCTGTACAGAAGATCAGTGAACCTGAAGCTGAGATTAGTCCTGGGAGTTTACCAGTG
ACTGCAAATATGAAAGCCTCTGAGAACTTGAAGCATATTGTTAACCATGATGATGTTTTTGAGGAATCTGAAGAA
CTTTCTTCTGATGAAGAGATGAAAATGGCGGAGATGCGACCACCATTAATTGAAACCTCTATTAACCAGCCAAAA
GTCGTAGCACTTAGTAATAACAAAAAAGATGATACAAAGGAAACAGATTCTTTATCAGATGAAGTTACACACAAT
AGCAATCAGAATAACAGCAATTGTTCTTCTCCATCTCGGATGTCTGATTCAGTTTCTCTTAATACTGATAGTAGT
CAAGACACCTCACTCTGCTCTCCAGTGAAACAAACTCATATTGATATTAATTCCAAAATCAGGCAAGAAGATGAA
AATTTTAACAGCCTTTTACAAAATGGAGATATTTTAAACAGTTCAACAGAGGAAAAGTTCAAAGCTCATGATAAA
AAAGATTTTAACTTACCTGAATATGATTTGAATGTTGAAGAGCGATTAGTTCTAATTGAGAAAAGTGTTGACTCA
ACAGCCACAGCTGATGACACTCACAAATTAGATCATATCAATATGAATCTTAATAAACTTATAACTAATGATACA
TTTCAACCAGAGATCATGGAAAGATCAAAAACACAGGATATTGTGCTTGGAACAAGCTTTTTAAGCATTAATTCT
AAAGAGGAAACTGAGCACTTGGAAAATGGAAACAAGTATCCTAATTTGGAATCCGTAAATAAGGTAAATGGACAT
TCTGAGGAAACTTCCCAGTCTCCTAATAGGACTGAACCACATGACAGTGATTGTTCTGTTGACTTAGGTATTTCC
AAAAGCACTGAAGATCTCTCCCCTCAGAAAAGTGGTCCAGTTGGATCTGTTGTGAAATCTCATAGCATAACTAAT
ATGGAGATTGGAGGGCTAAAAATCTATGATATTCTTAGTGATAATGGACCTCAGCAGCCAAGTACAACCGTTAAA
ATCACATCTGCTGTTGATGGAAAAAATATAGTCAGGAGCAAGTCTGCCACACTGTTGTATGATCAACCATTGCAG
GTATTTACTGGTTCTTCCTCATCTTCTGATTTAATATCAGGAACAAAGGCAATTTTCAAGTTTGATTCAAATCAT
AATCCCGAAGAGCCAAATATAATAAGAGGCCCCACAAGTGGCCCACAATCTGCACCTCAAATATATGGTCCTCCA
CAGTATAATATCCAATACAGTAGCAGTGCTGCAGTCAAAGACACTTTGTGGCACTCCAAACAAAATCCCCCAAATA
GACCATGCCAGTTTTCCTCCTCAGCTCCTTCCTAGATCAGAGAGCACAGAAAATCAAAGTTATGCTAAACATTCT
GCCAATATGAATTTCTCTAATCATAACAATGTTCGAGCTAATACTGCATACCATTTACATCAGAGACTTGGCCCA
GCAAGACATGGGGAAATGTGGGCCATCTCACCAAACGACCGACTTATTCCTGCAGTAACTCGAAGTACAATCCAG
CGACAAAGTAGTGTGTCCTCCACAGCCTCTGTAAATCTTGGTGATCCAGGCTCTACAAGGCGGGCTCAGATTCCT
GAAGGAGATTATTTATCATACAGAGAGTTCCACTCAGCGGGAAGAACTCCTCCAATGATGCCAGGATCACAGAGA
CCCCTTTCTGCACGAACATACAGCATAGATGGTCCAAATGCATCAAGACCTCAGAGTGCTCGACCCTCTATTAAT
GAAATACCAGAGAGAACTATGTCAGTTAGTGATTTCAATTATTCACGGACTAGTCCTTCAAAAAGACCAAATGCA
AGGGTTGGTTCTGAGCATTCTTTATTAGATCCTCCAGGAAAAAGTAAAGTTCCTCGTGACTGGAGAGAACAAGTA

FIGURE 6708B

CTTCGACATATTGAAGCCAAAAAGTTAGAAAAGATGCCTTTGAGTAATGGACAGATGGGCCAGCCTCTCAGGCCT
CAGGCAAATTATAGTCAAATACATCACCCCCCTCAGGCATCTGTGGCAAGGCATCCCTCTAGAGAACAACTAATT
GATTACTTGATGCTGAAAGTGGCCCACCAGCCTCCATATACACAGCCCCATTGTTCTCCTAGACAAGGCCATGAA
CTGGCAAAACAAGAGATTCGAGTGAGGGTTGAAAAGGATCCAGAACTTGGATTTAGCATATCAGGTGGTGTCGGG
GGTAGAGGAAACCCATTCAGACCTGATGATGATGGTATATTTGTAACAAGGGTACAACCTGAAGGACCAGCATCA
AAATTACTGCAGCCAGGTGATAAAATTATTCAGGCTAATGGCTACAGTTTTATAAATATTGAACATGGACAAGCA
GTGTCCTTGCTAAAAACTTTCCAGAATACAGTTGAACTCATCATTGTACGAGAAGTTTCCTCATAAGCACTGTGG
ACAAAAAAAAGCGGGGAAGACAGCAAGATTTATTGGAAGATACTTACAGGGGAAATTAATATTTTGACTATTTTTA
TATATAAAGAAGAACTCAAAAAATTATGTTCAAATTTGTACATTAATGAAATAATGGAACTTGTGGTTAGAGGGA
AAGAACCACTGTACAGAATATAAAGGAGACTGTTGAATTCATACCATATAAAACTTGTTAGGTTTTTAAACATAG
CAATCAAGGCTACAAAAACAAACCTGTGTTGTTTTTGTATAGATTGTAGGTTTATTTTTGGATTTCATATACATG
ACTGAACTGTGTGCAAGGCAATAGTTAGCCTTGATTTTAGCCCAGAGACAGATGGCAGAGCTATCTCTCTCATAG
CTTTTATGCCCTTATTTTTATTCAACTGGTATTAATGTTTTTCTCCTGAAACTACTTTTTTTGATGTGGGCAAGA
GATTTGAAGTGTTGGCTTTTGCTATGTGCATATTGAATTGAAGAGTGAGTAGGTGAAGGTGGTGCTGGTGGGTTC
ACTTTCCAAGGCCAGACTAAAACAGTTATTTTCTATAAAAATCTGGAAGCAAAGAATGGGGATGGGGAGAGCTAC
GTGGTAGTATGTTTTTATTAGGAGAATAATGCAATAAAATATGTAATGTCTTTTTTATAAAGCAAAAAAGACAAT
AATTGCATTTATGAGCTCGGCAGGATCTGTTCTTGTCATAGCCATTGACTATACATTTGCTACTGGTGATTCAGT
TTTTAATTTTTTAGTCACAGGAAATTTTTAACTCTACTGTAGATGCATGTCCATGCATTTTCTGTGTTATGGAAA
TCCACTGATTTTTTTTTTTTTTTCAAATGGTGGTACTTGCAATCTGTTTTATAATTAGTGCTCCATTTAAATCTA
ATTTATAATTTTTATTTTAAGCAGCAAATGAAACAAAAATGGCCAGTTTTAAGATTGTGTTGCCTGTAACACAAA
ATGTTACGAAGGTTTAGGAAAGCCTCTTTGATTTTTGTTTGGCCTTGCATTGCCTTGGTAAAGTAAAAGGAAACA
GTACACTTGGAGCTAGGAAACCAAAGCAAGCTTTGTGAAACTGGCACAGTGATAGAGAATTGCTGTGGAGAGTTA
TAGAGCAAAGGGATGGGTCCTTGAGGCCTGCCAGTGTGTAAAGGTGTTCAAATAAAGGGCTGTTTCTACAGGTAA
CATTAAATGTGAACTCAACACTTCCAGAGTCTTTAAAGGGTTTCTATGTGTATCAGTGTAATAGTGTTTTACCAC
CAACTGCCTTTCTTTGTTCCTAGTTACTGTAACAAATATTTGATGATAGAGGTTTATTAATTTTGTTTATCCAGA
CCATTAATTTTATTTGTTTTTGTTCTATGTAATCAAATAAAATTTGAGTAACATGTAATGGTAAGGATTAATGCA
TGGTTATTTGGACCAGAAAAAAGTGCCATAGAAGACCAATAACTGTTTAGTTGAGGCTAGTCTGGAACCTTTCAT
TAGAGCAATATTTGGTTATTGCACTTCATTTTTATTTACTAAGAAATGCAATTTGGGAATTTTTAATCTGTTATG
CTTTGTTTATCAACCTTGATTTTAATTAAGACTTTTATAAGACTAGCTTAAAACACCAACCAACATTATTTTTGC
AAAAGTGAGTTGGACTCACTTTCCATTCTTGCTAGTCAGAGTAAGTAGGCAGCACTTTTAAAAATATGTGAACTC
AAATATTGCACTTCTTTCAAGATGTTATCAATTGGTTATTGTACTGTATAGTTTTAATAATTTTGATTGAAACCC
TTTAACAACTCTTTGTAAATTTTAACTCATTTTAGTTGATTTTCAGTACTATTTACATAGGAATTGATTTTTATG
GATATAGTAGAAGAAATGTGCTGTATTTTGATAAAATTCACTTATTGTATGTGTGTTGTAATCT

FIGURE 6709

GCACGAGCG**ATG**TCGCTCGTGCTGCTAAGCCTGGCCGCGCTGTGCAGGAGCGCCGTACCCCGAGAGCCGACCGTT
CAATGTGGCTCTGAAACTGGGCCATCTCCAGAGTGGATGCTACAACATGATCTAATCCCCGGAGACTTGAGGGAC
CTCCGAGTAGAACCTGTTACAACTAGTGTTGCAACAGGGGACTATTCAATTTTGATGAATGTAAGCTGGGTACTC
CGGGCAGATGCCAGCATCCGCTTGTTGAAGGCCACCAAGATTTGTGTGACGGGCAAAAGCAACTTCCAGTCCTAC
AGCTGTGTGAGGTGCAATTACACAGAGGCCTTCCAGACTCAGACCAGACCCTCTGGTGGTAAATGGACATTTTCC
TACATCGGCTTCCCTGTAGAGCTGAACACAGTCTATTTCATTGGGGCCCATAATATTCCTAATGCAAATATGAAT
GAAGATGGCCCTTCCATGTCTGTGAATTTCACCTCACCAGGCTGCCTAGACCACATAATGAAATATAAAAAAAAG
TGTGTCAAGGCCGGAAGCCTGTGGGATCCGAACATCACTGCTTGTAAGAAGAATGAGGAGACAGTAGAAGTGAAC
TTCACAACCACTCCCCTGGGAAACAGATACATGGCTCTTATCCAACACAGCACTATCATCGGGTTTTCTCAGGTG
TTTGAGCCACACCAGAAGAAACAAACGCGAGCTTCAGTGGTGATTCCAGTGACTGGGGATAGTGAAGGTGCTACG
GTGCAGCTGACTCCATATTTTCCTACTTGTGGCAGCGACTGCATCCGACATAAAGGAACAGTTGTGCTCTGCCCA
CAAACAGGCGTCCCTTTCCCTCTGGATAACAACAAAAGCAAGCCGGGAGGCTGGCTGCCTCTCCTCCTGCTGTCT
CTGCTGGTGGCCACATGGGTGCTGGTGGCAGGGATCTATCTAATGTGGAGGCACGAAAGGATCAAGAAGACTTCC
TTTTCTACCACCACACTACTGCCCCCCATTAAGGTTCTTGTGGTTTACCCATCTGAAATATGTTTCCATCACACA
ATTTGTTACTTCACTGAATTTCTTCAAAACCATTGCAGAAGTGAGGTCATCCTTGAAAAGTGGCAGAAAAAGAAA
ATAGCAGAGATGGGTCCAGTGCAGTGGCTTGCCACTCAAAAGAAGGCAGCAGACAAAGTCGTCTTCCTTCTTTCC
AATGACGTCAACAGTGTGTGCGATGGTACCTGTGGCAAGAGCGAGGGCAGTCCCAGTGAGAACTCTCAAGACTCT
TCCCCTTGCCTT**TAA**CCTTTTCTGCAGTGATCTAAGAAGCCAGATTCATCTGCACAAATACGTGGTGGTCTACTT
TAGAGAGATTGATACAAAAGACGATTACAATGCTCTCAGTGTCTGCCCCAAGTACCACCTCATGAAGGATGCCAC
TGCTTTCTGTGCAGAACTTCTCCATGTCAAGTAGCAGGTGTCAGCAGGAAAAAGATCACAAGCCTGCCACGATGG
CTGCTGCTCCTTGTAGCCCACCCATGAGAAGCAAGAGACCTTAAAGGCTTCCTATCCCACCAATTACAGGGAAAA
AACGTGTGATGATCCTGAAGCTTACTATGCAGCCTACAAACAGCCTTAGTAATTAAAACATTTTATACCAATAAA
ATTTTCAAATATTGCTAACTAATGTAGCATTAACTAACGATTGGAAACTACATTTACAACTTCAAAGCTGTTTTA
TACATAGAAATCAATTACAGTTTTAATTGAAAACTATAACCATTTTGATAATGCAACAATAAAGCATCTTCAGCC
AAAAAAAAAAAAAAAA

FIGURE 6710

MSLVLLSLAALCRSAVPREPTVQCGSETGPSPEWMLQHDLIPGDLRDLRVEPVTTSVATGDYSILMNVSWVLRAD
ASIRLLKATKICVTGKSNFQSYSCVRCNYTEAFQTQTRPSGGKWTFSYIGFPVELNTVYFIGAHNIPNANMNEDG
PSMSVNFTSPGCLDHIMKYKKKCVKAGSLWDPNITACKKNEETVEVNFTTTPLGNRYMALIQHSTIIGFSQVFEP
HQKKQTRASVVIPVTGDSEGATVQLTPYFPTCGSDCIRHKGTVVLCPQTGVPFPLDNNKSKPGGWLPLLLLSLLV
ATWVLVAGIYLMWRHERIKKTSFSTTTLLPPIKVLVVYPSEICFHHTICYFTEFLQNHCRSEVILEKWQKKKIAE
MGPVQWLATQKKAADKVVFLLSNDVNSVCDGTCGKSEGSPSENSQDSSPCL

FIGURE 6711

CCGTGATGTGGCGCCTGCACAXTCCTTTCCCTTTCGGATTCCCGACGCTGTGGTTGCTGTAAGGGGTCCTCCCTG
CGCCACACGGCCGTCGCC**ATG**GTGAAGCTGAGCAAAGAGGCCAAGCAGAGACTACAGCAGCTCTTCAAGGGGAGC
CAGTTTGCCATTCGCTGGGGCTTTATCCCTCTTGTGATTTACCTGGGATTTAAGAGGGGTGCAGATCCCGGAATG
CCTGAACCAACTGTTTTGAGCCTACTTTGGGGA**TAA**AGGATTATTTGGTCTTCTGGATTTGGAGGCAATCAGCGG
ACAGCATGGAAGATGTGTGCTCTGGCTCGGATAAGAGATGGGACATCATTCAGTCACTAGTTGGATGGCACAAGG
CTCTTCACAGACGCATCTGTAGCAGAGTGGAACTTGTACTAACTTATGATAGAATGTATCAGAATAAATGTTTTT
AACAGTGTAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6712

MVKLSKEAKQRLQQLFKGSQFAIRWGFIPLVIYLGFKRGADPGMPEPTVLSLLWG

FIGURE 6713

CTAGTTCTAGATCCGGCGAGTAGCTGGCGGTCCCGGGTGCTGCTGGTTAGTGTGCTCTGAGGGAGGGTCCGAGCC
AGCCGCTGTTTTGCCGGAGGAGCCCCTCAGGCCGTAGTAAGCATTAATAATGTCTTTCATCTTTGAGTGGATCTA
CAATGGCTTCAGCAGTGTGCTCCAGTTCCTAGGACTGTACAAGAAATCTGGAAAACTTGTATTCTTAGGTTTGGA
TAATGCAGGCAAAACCACTCTTCTTCACATGCTCAAAGATGACAGATTGGGCCAACATGTTCCAACACTACATCC
GACATCAGAAGAGCTAACAATTGCTGGAATGACCTTTACAACTTTTGATCTTGGTGGGCACGAGCAAGCACGTCG
CGTTTGGAAAAATTATCTCCCAGCAATTAATGGGATTGTCTTTCTGGTGGACTGTGCAGATCATTCTCGCCTCGT
GGAATCCAAAGTTGAGCTTAATGCTTTAATGACTGATGAAACAATATCCAATGTGCCAATCCTTATCTTGGGTAA
CAAAATTGACAGAACAGATGCAATCAGTGAAGAAAAACTCCGTGAGATATTTGGGCTTTATGGACAGACCACAGG
AAAGGGGAATGTGACCCTGAAGGAGCTGAATGCTCGCCCCATGGAAGTGTTCATGTGCAGTGTGCTCAAGAGGCA
AGGTTACGGCGAGGGTTTCCGCTGGCTCTCCCAGTATATTGACTGATGTTTGGACGGTGAAAATAAAAGAGTTTT
ACTTCTCTGGACTGATCCTATTCACAGCTTCCTCATGAACTTTTCTAATAGAACAAGGAAAGCTCTCCAACCATG
TCTGGCGTTGAGAAGCCAAGAGTCTCTGTCAACTCTCTCATTGCCCAGTGGTGACATGTGCTCTTCTCCACACTG
TTGGGAGGTAATGCTGCCCCACGTGCTGGTGCAGGTCAGTATCCTGGGACTTGGAAGCTGGCAGGATTTGCCGGG
TAAAGCTGTATGCCATCATGGGGCACCTGAAAAGAAAAACACGTCTCACCACTGTGGTTGATTCAAAAGAAAGTG
ATTCTATTTTTTAAAGAAAGCGTTGTTAATGTAATTGGTATCCCTCCTAACTTTTTGAGTTCACAATTTACTTGG
TCCAGAGTTTTCTATTCTTTTTTTTTTTTAAACTAATGAATGACATTTAGATACTTCATAAAATTATGAACAGAT
ATGGAGGCCAGAGCTCATTTGGGTAAACTTACTCCTGCTGAGTTAGCAGGTTGGTGAGAGAAGCTCCCCTGAGCT
CACCTGTCTCTCTGACTGCCTTGGAGTAGGTGGCATAACCTTGTGCACAGAGAACTAGAAAAGGGGCAGAACCCC
GGCCTTGCAGTTGTGGCAGGTTTCCACTGTGGTAAGCTAGGTTCATTCCTCATCAAGGAATGTGTAGCAGATTGT
TCACTGTGGAGGAGTTAATTATAGAATGGGTTATTGTTGTTATTCTTACTCATGAAGTTACAGATTTTAGCCAGT
CTTTGCTTTTATACTTTTGTGAAATTTAATTTCTCTCTATAGCACCTTCCTTTTTCGTTTTCAGTTATCAAAAGT
GACTTTGACCTCATAAAAGAGTTGAGAACATCTCTCGTGTCACATACTGCAGGTGCATCAGTTACTTTTGCACAG
ATTCTGGGGGACATTTTTCTGAATAGGAAGACAGGACAAAGTTAACAGCTTAAGGGCTCTTAATTCTGTGAGTTG
AGGACTTAAAAGTATTGTAGCATTTGTTTGGATCCATGAAAAATGTATTCAGTGGGCTTTAAAATTTCCATTTGC
AGAATTTGGTCTCTCAGGCTGTTTGGGAGCTCTTTTTTTTACATTTTTTCTCCTTTGACACCTATTTTATTGGTG
TTTAAAGTAAAGGTTAACATCTGTAGCTTTTCCAGGTTTTTTTTTTTTTTTTTTGATATGAAATTGTCTTTCTC
CATTGCAGAAATAAGCTAGGGAAACACTAACCCAAAAACTTTCTGTAGAGCTGTTCCTTTGGAGGCAGCATCACT
TATTGGCAGTAAAGACTCAGTATAAAAGCACCAGCATCCCTACTTGGGTGATGGGGATTAATTTTATAGCATTCC
ATTTTCCTAGTGCCACATGTGAAATTGGATTTTGATGATCTTAATCTATATTCTACCCTTATAATAAAAGATCAA
AAGATATATCTCCTATGAACAGATTGGAGATAGGAGATGAAAAGTTGGGAGGATGTCTTTATTCTAATGTGAGGG
TAGGGAAAATGTGGATAACATTACTGGGGTGAAGGAGGCATTGTTCTTTAGTTGGAGTTCTCATTTTTATTCTCC
AGTACTGACTTGTGGGGAAAGCATACTTTTTCACTGCCAGGTACTGAATGCAGAGGCTCAGTGAAGTATATATGT
GGGAAGTGCATGCATTTCGTTTATTAGCAAACATAGCTGGATTAAGACAAAGTTGTTGGTTTGGAAAGGGGTTAA
AGCCTTAAGTGAACAAATCTAGCTAACAGTGAATGAACTAGGTAATATAACTTGCATATTTTTAATTTCCTTTGG
TTAAAGGTCCCCCATACTTCTCTGTTCGGAGACATGAGAAGTATGATTACTTCAGTGTTAGTTTTCTTAATTTTT
TTTTTCCCCTATTTGTCCCTTGTCACTTTGTTGCAAGCTAGAAATCTGTGGGTTATACATAGGGCAGCTCTTTGT
GAAAGTGGTTTATTCCACTGGAGAAAGGGGATTGAAAATCAGTTAGAACCAATGTATTTCTTGCCCCACGGAACA
CTATTCCTATAAGATAGCTGAAAGAAGCTGCTGTGAGGAGCTCAGCTCCAAACACAGGATCAGCACCTTGTATAG
GAATTCCCATGAATTATGACTTCTCATTCTGTTTTATCAGAGTGCATATATGTCCTACTTCAGGAAAAGTAAAAC
AGTCATTTACGAAAGAAAGTCAATCTGTATCCTAAGCATTTTAATAAAAAGTTAAAACAAAAAAAAAAAAAAAAA
AAA

FIGURE 6714

MSFIFEWIYNGFSSVLQFLGLYKKSGKLVFLGLDNAGKTTLLHMLKDDRLGQHVPTLHPTSEELTIAGMTFTTFD
LGGHEQARRVWKNYLPAINGIVFLVDCADHSRLVESKVELNALMTDETISNVPILILGNKIDRTDAISEEKLREI
FGLYGQTTGKGNVTLKELNARPMEVFMCSVLKRQGYGEGFRWLSQYID

FIGURE 6715

AGCGGCGCAAGCGGCGGCGGCCACTGCCACGTATTCCCGGCAGTGGTGGCGGGGGCGGCGGCGGCGCCCGCGGGC
AGGAATAACTCAAGTCACCTGTACTGGAAATCAGTTTGCTGAAATTAATCAACGATTCTTGAAGTTGAAGAAAAG
GAGGTTCCAGCCTTGGCAAGAGGAGTGTGGCCCTTCCTGGAATCCCTCTGGACACACCCTCCTAGCATCCTCTAG
GAAAGATGCGGCAGCTCAAAGGGAAGCCCAAGAAGGAGACCTCCAAGGACAAGAAGGAGCGGAAGCAAGCCATGC
AGGAGGCCCGGCAGCAGATCACTACAGTGGTGCTGCCCACGCTGGCCGTGGTCGTGCTCTTGATCGTGGTGTTTG
TGTACGTGGCCACGCGCCCCACCATCACCGAGTGAGCCCCGCAGCCGGCTGCGGACCCCATCGGCAGGGAGAGGA
AGGCGCGGGAGGGGGACGCAAACAAAAAAATGGCTTTCATATTCAGAGATGTTCATGTTGCTGAGCTGTAAGCAG
GAGCACCCTGTCTTCTCTGGTCTTTGACTTGATTAAAGTATCTCCGCTTTCTTGGGAGGGAATAGGGGATGTTTT
ATCAGTGAATGTGCCATACACCTTATGGTCCACTTCATGTGCCTTTCAGACTTCAAAGCGCGCGCGCATGTGTGT
GTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGCTTCTTTTTCTCTCCTAAAAATCGATAAGTAGCTCCACCTGA
AGAGGGATGGAACCTCTGGGTCAGGAAACAGCTGGAATCCACACTCACCTCATTCCCATTGTTTGGATCATGCTT
CTTTCCAACACGTGTTCACAATCTCCAAAGGGACTGTATTTCTTCTCTGTGCTTAATGTGATTTGAAATATGTTG
AATCAAAGTGAAATATTTATTTTTTGAATAAAGGAGATAATAGCCTTAAAAAA

FIGURE 6716

MRQLKGKPKKETSKDKKERKQAMQEARQQITTVVLPTLAVVVLLIVVFVYVATRPTITE

FIGURE 6717

GTGAAGAGAGGCGCGGCGTGACTGAGCTACGGTTCTGGCTGCGTCCTAGAGGCATCCGGGGCAGTAAAACCGCTG
CGATCGCGGAGGCGGCGGCCAGGCCGAGAGGCAGGCCGGGCAGGGGTGTCGGACGCAGGGCGCTGGGCCGGGTTT
CGGCTTCGGCCACAGCTTTTTTTCTCAAGGTGCAATGAAAGCCTTCCACACTTTCTGTGTTGTCCTTCTGGTGTT
TGGGAGTGTCTCTGAAGCCAAGTTTGATGATTTTGAGGATGAGGAGGACATAGTAGAGTATGATGATAATGACTT
CGCTGAATTTGAGGATGTCATGGAAGACTCTGTTACTGAATCTCCTCAACGGGTCATAATCACTGAAGATGATGA
AGATGAGACCACTGTGGAGTTGGAAGGGCAGGATGAAAACCAAGAAGGAGATTTTGAAGATGCAGATACCCAGGA
GGGAGATACTGAGAGTGAACCATATGATGATGAAGAATTTGAAGGTTATGAAGACAAACCAGATACTTCTTCTAG
CAAAAATAAAGACCCAATAACGATTGTTGATGTTCCTGCACACCTCCAGAACAGCTGGGAGAGTTATTATCTAGA
AATTTTGATGGTGACTGGTCTGCTTGCTTATATCATGAATTACATCATTGGGAAGAATAAAAACAGTCGCCTTGC
ACAGGCCTGGTTTAACACTCATAGGGAGCTTTTGGAGAGCAACTTTACTTTAGTGGGGGATGATGGAACTAACAA
AGAAGCCACAAGCACAGGAAAGTTGAACCAGGAGAATGAGCACATCTATAACCTGTGGTGTTCTGGTCGAGTGTG
CTGTGAGGGCATGCTTATCCAGCTGAGGTTCCTCAAGAGACAAGACTTACTGAATGTCCTGGCCCGGATGATGAG
GCCAGTGAGTGATCAAGTGCAAATAAAAGTAACCATGAATGATGAAGACATGGATACCTACGTATTTGCTGTTGG
CACACGGAAAGCCTTGGTGCGACTACAGAAAGAGATGCAGGATTTGAGTGAGTTTTGTAGTGATAAACCTAAGTC
TGGAGCAAAGTATGGACTGCCGGACTCTTTGGCCATCCTGTCAGAGATGGGAGAAGTCACAGACGGAATGATGGA
TACAAAGATGGTTCACTTTCTTACACACTATGCTGACAAGATTGAATCTGTTCATTTTTCAGACCAGTTCTCTGG
TCCAAAAATTATGCAAGAGGAAGGTCAGCCTTTAAAGCTACCTGACACTAAGAGGACACTGTTGTTTACATTTAA
TGTGCCTGGCTCAGGTAACACTTACCCAAAGGATATGGAGGCACTGCTACCCCTGATGAACATGGTGATTTATTC
TATTGATAAAGCCAAAAAGTTCCGACTCAACAGAGAAGGCAAACAAAAAGCAGATAAGAACCGTGCCCGAGTAGA
AGAGAACTTCTTGAAACTGACACATGTGCAAAGACAGGAAGCAGCACAGTCTCGGCGGGAGGAGAAAAAAAGAGC
AGAGAAGGAGCGAATCATGAATGAGGAAGATCCTGAGAAACAGCGCAGGCTGGAGGAGGCTGCATTGAGGCGTGC
AAAAAAGAAGTTGGAAAAGAAGCAAATGAAAATGAAACAAATCAAAGTGAAAGCCATGTAAAGCCATCCCAGAGA
TTTGAGTTCTGATGCCACCTGTAAGCTCTGAATTCACAGGAAACATGAAAAACGCCAGTCCATTTCTCAACCTTA
AATTTCAGACAGTCTTGGGCAACTGAGAAATCCTTATTTCATCATCTACTCTGTTTGGGGTTTGGGGTTTTACAG
AGATTGAAGATACCTGGAAAGGGCTCTGTTTCAAGAATTTTTTTTTCCAGATAATCAAATTATTTTGATTATTTT
ATAAAAGGAATGATCTATGAAATCTGTGTAGGTTTTAAATATTTTAAAAATTATAATACAAATCATCAGTGCTTT
TAGTACTTCAGTGTTTAAAGAAATACCATGAAATTTATAGGTAGATAACCAGATTGTTGCTTTTTGTTTAAACCA
AGCAGTTGAAATGGCTATAAAGACTGACTCTAAACCAAGATTCTGCAAATAATGATTGGAATTGCACAATAAACA
TTGCTTGATGTTTTCTTGTATGTCTACATTAAACTTGAGAAAAAGTAAAAATTAGAACACTGTATGTAGTAATGA
AATTTCAGGGACCCAGAACATAATGTAGTATATGTTTTTAGGTGGGAGATGCTGATAACAAAATTAATAGGAAGT
CTGTAGGCATTAGGATACTGACATGTACATGGAAAATTCTAGGGACAGGAGCATCATTTTTTCCTTACCTGATAC
CACGAACCAGTGACAACGTGAATGCTGTATTTTAAGTGGTTGTATGTTTATTTTCTTGAGTAACAAATGCATGAA
AAATTAATGCTTCACCTAGGTAAGATCATTGGTCTGTGTGAAATCACAAATGTTTTTTCCTTCTTGGTTGCTGCA
GCCTGGGTGGATGTTCATGGAGAAGCTCTGTTCTCTATATTATGGCTGTGTGCCGTTGCTTCTCCCTCTGCTTTT
ATCTTTTCCACAGTTGAGGCTGGGTATGTTCTTTCAAAGAAATGGCCATGAATATGTGTAAGTATACTTTTGAAA
ATGAGCTTTCCTAAACTATTGAGAGTTCTTTCCACCTCTTGCGGAACCAACTCTTGGAGGAGAGGCCCATGTATC
TGCACGAGCACTTAGCTTGTTCAGATCTCTGCATTTTATAAATGCTTCTTACCAAGAAAGCATTTTTAGGTCATT
GCTTGTACCAGGTAATTTTTGCCGGGGATGGGTAAGGGTTGGGTTTTCTGGTGGGAGTGGGGTGGTGGGTATTTT
TTGTTGATGCTTTAGTGCAGGCCTGTTCTGAGGCAATAACAAGTTGCTGTGAAAACAGCATGTGCTGCTGCCTTT
GTAACTGCATGGAAACTTTTCACATGGGTTTTTCTCCAAGTTAATACAGAAATATGTAAACTGAGAGATGCAAAT
GTAATATTTTTAACAGTTCATGAAGTTGTTATTAAAATAACTAACATAAAACTTAATTACTTTAATATTATATAA
TTATAGTAGTGGCCTTGTTTTACAAACCTTTAAATTACATTTTAGAAATCAAAGTTGATAGTCTTAGTTATCTTT
TGAGTAAGAAAAGCTTTCCTAAAGTCCCATACATTTGGACCATGGCAGCTAATTTTGTAACTTAAGCATTCATAT
GAACTACCTATGGACATCTATTAAAGTGATTGACAAAATCTCAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6718

MKAFHTFCVVLLVFGSVSEAKFDDFEDEEDIVEYDDNDFAEFEDVMEDSVTESPQRVIITEDDEDETTVELEGQD
ENQEGDFEDADTQEGDTESEPYDDEEFEGYEDKPDTSSSKNKDPITIVDVPAHLQNSWESYYLEILMVTGLLAYI
MNYIIGKNKNSRLAQAWFNTHRELLESNFTLVGDDGTNKEATSTGKLNQENEHIYNLWCSGRVCCEGMLIQLRFL
KRQDLLNVLARMMRPVSDQVQIKVTMNDEDMDTYVFAVGTRKALVRLQKEMQDLSEFCSDKPKSGAKYGLPDSLA
ILSEMGEVTDGMMDTKMVHFLTHYADKIESVHFSDQFSGPKIMQEEGQPLKLPDTKRTLLFTFNVPGSGNTYPKD
MEALLPLMNMVIYSIDKAKKFRLNREGKQKADKNRARVEENFLKLTHVQRQEAAQSRREEKKRAEKERIMNEEDP
EKQRRLEEAALRRAKKKLEKKQMKMKQIKVKAM

FIGURE 6719

AGGAGGCCTCGTGGAGGACACAGCAGCATGGGACAGTCAGGGAGGTCCCGGCACCAGAAGCGCGCCCGCGCCCAG
GCGCAGCTCCGCAACCTCGAGGCCTATGCCGCGAACCCGCACTCGTTCGTGTTCACGCGAGGCTGCACGGGTCGC
AACATCCGGCAGCTCAGCCTGGACGTGCGGCGGGTCATGGAGCCGCTCACTGCCAGCCGTCTGCAGGTTCGTAAG
AAGAACTCGCTGAAGGACTGCGTGGCAGTGGCTGGGCCCCTCGGGGTCACACACTTTCTGATCCTGAGCAAAACA
GAGACCAATGTCTACTTTAAGCTGATGCGCCTCCCAGGAGGCCCCACCTTGACCTTCCAGGTGAAGAAGTACTCG
CTGGTGCGTGATGTGGTCTCCTCACTGCGCCGGCACCGCATGCACGAGCAGCAGTTTGCCCACCCACCCCTCCTG
GTACTCAACAGCTTTGGCCCCCATGGTATGCATGTGAAGCTCATGGCCACCATGTTCCAGAACCTGTTCCCCTCC
ATCAACGTGCACAAGGTGAACCTGAACACCATCAAGCGCTGCCTCCTCATCGACTACAACCCCGACTCCCAGGAG
CTGGACTTCCGCCACTATAGCATCAAAGTTGTTCCTGTGGGCGCGAGTCGCGGGATGAAGAAGCTGCTCCAGGAG
AAGTTCCCCAACATGAGCCGCCTGCAGGACATCAGCGAGCTGCTGGCCACGGGCGCGGGGCTGTCGGAGAGCGAG
GCAGAGCCTGACGGCGACCACAACATCACAGAGCTGCCTCAGGCTGTCGCTGGCCGTGGCAACATGCGGGCCCAG
CAGAGTGCAGTGCGGCTCACCGAGATCGGCCCGCGGATGACACTGCAGCTCATCAAGGTCCAGGAGGGCGTCGGG
GAGGGCAAAGTGATGTTCCACAGTTTTGTGAGCAAGACGGAGGAGGAGCTGCAGGCCATCCTGGAAGCCAAGGAG
AAGAAGCTGCGGCTGAAGGCGCAGAGGCAGGCCCAGCAGGCCCAGAATGTGCAGCGCAAGCAGGAGCAGCGGGAG
GCCCACAGAAAGAAGAGCCTGGAGGGCATGAAGAAGGCACGGGTCGGGGGTAGTGATGAAGAGGCCTCTGGGATC
CCTTCAAGGACGGCGAGCCTGGAGTTGGGTGAGGACGATGATGAACAGGAAGATGATGACATCGAGTATTTCTGC
CAGGCGGTGGGCGAGGCGCCCAGTGAGGACCTGTTCCCCGAGGCCAAGCAGAAACGGCTTGCCAAGTCTCCAGGG
CGGAAGCGGAAGCGGTGGGAAATGGATCGAGGCAGGGGTCGCCTTTGTGACCAGAAGTTTCCCAAGACCAAGGAC
AAGTCCCAGGGAGCCCAGGCCAGGCGGGGGCCCAGAGGGGCTTCCCGGGATGGTGGGCGAGGCCGGGGCCGGGGC
CGCCCAGGGAAGAGAGTGGCCTGAGCCCAAGCCGCACCGGAGCAGCGGCTGGATTGAACGCCCCAGATTGGGGCC
CGAGATGTGGCCCTCGGTTTCCTTTCATAAAGGAGTTGTGTCCCCAGCCCTTCCACTCCAGTAAAGAACTGAATT
GGC

FIGURE 6720

MGQSGRSRHQKRARAQAQLRNLEAYAANPHSFVFTRGCTGRNIRQLSLDVRRVMEPLTASRLQVRKKNSLKDCVA
VAGPLGVTHFLILSKTETNVYFKLMRLPGGPTLTFQVKKYSLVRDVVSSLRRHRMHEQQFAHPPLLVLNSFGPHG
MHVKLMATMFQNLFPSINVHKVNLNTIKRCLLIDYNPDSQELDFRHYSIKVVPVGASRGMKKLLQEKFPNMSRLQ
DISELLATGAGLSESEAEPDGDHNITELPQAVAGRGNMRAQQSAVRLTEIGPRMTLQLIKVQEGVGEGKVMFHSF
VSKTEEELQAILEAKEKKLRLKAQRQAQQAQNVQRKQEQREAHRKKSLEGMKKARVGGSDEEASGIPSRTASLEL
GEDDDEQEDDDIEYFCQAVGEAPSEDLFPEAKQKRLAKSPGRKRKRWEMDRGRGRLCDQKFPKTKDKSQGAQARR
GPRGASRDGGRGRGRGRPGKRVA

FIGURE 6721

CAGTCTTGTTTCGGGTTCCGGCTGCGTTGGGCTTGCGTGCGGCTCGCTAAGACTATGGCGTCCGGGCCTCATTCG
ACAGCTACTGCTGCCGCAGCCGCCTCATCGGCCGCCCCAAGCGCGGGCGGCTCCAGCTCCGGGACGACGACCACG
ACGACGACCACGACGGGAGGGATCCTGATCGGCGATCGCCTGTACTCGGAAGTTTCACTTACCATCGACCACTCT
CTGATTCCGGAGGAGAGGCTCTCGCCCACCCCATCCATGCAGGATGGGCTCGACCTGCCCAGTGAGACGGACTTA
CGCATCCTGGGCTGCGAGCTCATCCAGGCCGCCGGCATTCTCCTCCGGCTGCCGCAGGTGGCGATGGCAACGGGG
CAGGTGTTGTTTCATCGTTTTTTCTACTCCAAATCTTTCGTCAAACACAGTTTCGAGATTGTTGCTATGGCTTGT
ATTAATCTTGCATCAAAAATCGAAGAAGCACCTAGAAGAATAAGAGATGTGATTAATGTATTCCACCACCTCCGC
CAGTTAAGAGGAAAAAGGACTCCAAGCCCCCTGATCCTTGATCAGAACTACATTAACACCAAAAATCAAGTTATC
AAAGCAGAGAGGAGGGTGCTAAAGGAGTTGGGATTTTGTGTTCATGTCAAGCATCCTCATAAGATCATTGTTATG
TATTTACAAGTCTTAGAATGTGAACGTAATCAAACCCTGGTTCAAACTGCCTGGAATTACATGAATGACAGTCTT
CGAACCAATGTGTTTGTTCGATTTCAACCAGAGACTATAGCATGTGCTTGCATCTACCTTGCAGCTAGAGCACTT
CAGATTCCGTTGCCAACTCGTCCCCATTGGTTTCTTCTTTTTGGTACTACAGAAGAGGAAATCCAGGAAATCTGC
ATAGAAACACTTAGGCTTTATACCAGAAAAAAGCCAAACTATGAATTACTGGAAAAAGAAGTAGAAAAAAGAAAA
GTAGCCTTACAAGAAGCCAAATTAAAAGCAAAGGGATTGAATCCGGATGGAACTCCAGCCCTTTCAACCCTGGGT
GGATTTTCTCCAGCCTCCAAGCCATCATCACCAAGAGAAGTAAAAGCTGAAGAGAAATCACCAATCTCCATTAAT
GTGAAGACAGTCAAAAAAGAACCTGAGGATAGACAACAGGCTTCCAAAAGCCCTTACAATGGTGTAAGAAAAGAC
AGCAAGAGAAGTAGAAATAGCAGAAGTGCAAGTCGATCGAGGTCAAGAACACGATCACGTTCTAGATCACATACT
CCAAGAAGACACTATAATAATAGGCGGAGTCGATCTGGAACATACAGCTCGAGATCAAGAAGCAGGTCCCGCAGT
CACAGTGAAAGCCCTCGAAGACATCATAATCATGGTTCTCCTCACCTTAAGGCCAAGCATACCAGAGATGATTTA
AAAAGTTCAAACAGACATGGTCATAAAAGGAAAAAATCTCGTTCTCGATCTCAGAGCAAGTCTCGGGATCACTCA
GATGCAGCCAAGAAACACAGGCATGAAAGGGGACATCATAGGGACAGGCGTGAACGATCTCGCTCCTTTGAGAGG
TCCCATAAAAGCAAGCACCATGGTGGCAGTCGCTCAGGACATGGCAGGCACAGGCGCTGACTTTGTCTTCCTTTG
AGCCTGCATCAGTTCTTGGTTTTGCCTATCTACCAGTGTGATGTATGGACTCAATCAAAAACATTAAACGCAAAA
CTGATTAGGATTTGATTTCTTGAAACCCTCTAGGTCTCTAGAACACTGAGGACAGTTTCTTTTGAAAAGAACTAT
GTTAATTTTTTTGCACATTAAAATGCCCTAGCAGTATCTAATTAAAAACCATGGTCAGGTTCAATTGTACTTTAT
TATAGTTGTGTATTGTTTATTGCTATAAGAACTGGAGCGTGAATTCTGTAAAAATGTATCTTATTTTTATACAGA
TAAAATTGCAGACACTGTTCTATTTAAGTGGTTATTTGTTTAAATGATGGTGAATACTTTCTTAACACTGGTTTG
TCTGCATGTGTAAAGATTTTTACAAGGAAATAAAATACAAATCTTGTTTTT

FIGURE 6722

MASGPHSTATAAAAASSAAPSAGGSSSGTTTTTTTTTGGILIGDRLYSEVSLTIDHSLIPEERLSPTPSMQDGLD
LPSETDLRILGCELIQAAGILLRLPQVAMATGQVLFHRFFYSKSFVKHSFEIVAMACINLASKIEEAPRRIRDVI
NVFHHLRQLRGKRTPSPLILDQNYINTKNQVIKAERRVLKELGFCVHVKHPHKIIVMYLQVLECERNQTLVQTAW
NYMNDSLRTNVFVRFQPETIACACIYLAARALQIPLPTRPHWFLLFGTTEEEIQEICIETLRLYTRKKPNYELLE
KEVEKRKVALQEAKLKAKGLNPDGTPALSTLGGFSPASKPSSPREVKAEEKSPISINVKTVKKEPEDRQQASKSP
YNGVRKDSKRSRNSRSASRSRSRTRSRSRSHTPRRHYNNRRSRSGTYSSRSRSRSRSHSESPRRHHNHGSPHLKA
KHTRDDLKSSNRHGHKRKKSRSRSQSKSRDHSDAAKKHRHERGHHRDRRERSRSFERSHKSKHHGGSRSGHGRHR
R

FIGURE 6723

GCGGCCGCAGCCTGAGCCAGGGCCCCCTCCCTCGTCAGGACCGGGGCAGCAAGCAGGCCGGGGGCAGGTCCGGGC
ACCCACC**ATG**CGAGGCGAGCTCTGGCTCCTGGTGCTGGTGCTCAGGGAGGCTGCCCGGGCGCTGAGCCCCCAGCC
CGGAGCAGGTCACGATGAGGGCCCAGGCTCTGGATGGGCTGCCAAAGGGACCGTGCGGGGCTGGAACCGGAGAGC
CCGAGAGAGCCCTGGGCATGTGTCAGAGCCGGACAGGACCCAGCTGAGCCAGGACCTGGGTGGGGGCACCCTGGC
CATGGACACGCTGCCAGATAACAGGACCAGGGTGGTGGAGGACAACCACAGCTATTATGTGTCCCGTCTCTATGG
CCCCAGCGAGCCCCACAGCCGGGAACTGTGGGTAGATGTGGCCGAGGCCAACCGGAGCCAAGTGAAGATCCACAC
AATACTCTCCAACACCCACCGGCAGGCTTCGAGAGTGGTCTTGTCCTTTGATTTCCCTTTCTACGGGCATCCTCT
GCGGCAGATCACCATAGCAACTGGAGGCTTCATCTTCATGGGGGACGTGATCCATCGGATGCTCACAGCTACTCA
GTATGTGGCGCCCCTGATGGCCAACTTCAACCCTGGCTACTCCGACAACTCCACAGTTGTTTACTTTGACAATGG
GACAGTCTTTGTGGTTCAGTGGGACCACGTTTATCTCCAAGGCTGGGAAGACAAGGGCAGTTTCACCTTCCAGGC
AGCTCTGCACCATGACGGCCGCATTGTCTTTGCCTATAAAGAGATCCCTATGTCTGTCCCGGAAATCAGCTCCTC
CCAGCATCCTGTCAAAACCGGCCTATCGGATGCCTTCATGATTCTCAATCCATCCCCGGATGTGCCAGAATCTCG
GCGAAGGAGCATCTTTGAATACCACCGCATAGAGCTGGACCCCAGCAAGGTCACCAGCATGTCGGCCGTGGAGTT
CACCCCATTGCCGACCTGCCTGCAGCATAGGAGCTGTGACGCCTGCATGTCCTCAGACCTGACCTTCAACTGCAG
CTGGTGCCATGTCCTCCAGAGATGCTCCAGTGGCTTTGACCGCTATCGCCAGGAGTGGATGGACTATGGCTGTGC
ACAGGAGGCAGAGGGCAGGATGTGCGAGGACTTCCAGGATGAGGACCACGACTCAGCCTCCCCTGACACTTCCTT
CAGCCCCTATGATGGAGACCTCACCACTACCTCCTCCTCCCTCTTCATCGACAGCCTCACCACAGAAGATGACAC
CAAGTTGAATCCCTATGCAGGAGGAGACGGCCTTCAGAACAACCTGTCCCCCAAGACAAAGGGCACTCCTGTGCA
CCTGGGCACCATCGTGGGCATCGTGCTGGCAGTCCTCCTCGTGGCGGCCATCATCCTGGCTGGAATTTACATCAA
TGGCCACCCCACATCCAATGCTGCGCTCTTCTTCATCGAGCGTAGACCTCACCACTGGCCAGCCATGAAGTTTCG
CAGCCACCCTGACCATTCCACCTATGCGGAGGTGGAGCCCTCGGGCCATGAGAAGGAGGGCTTCATGGAGGCTGA
GCAGTGC**TGA**GAACACCAAGTCTCCCCTTTGAAGACTTTGAGGCCACAGAAAAGACAGTTAAAGCAAAGAAGAGA
AGTGACTTTTCCTGGCCTCTCCCAGCATGCCCTGGGCTGAGATGAGATGGTGGTTTATGGCTCCAGAGCTGCTGT
TCGCTTCGTCAGCACACCCCGAATATTGAAGAGGGGGCCAAAAAACAACCACATGGATTTTTTATAGGAACAACA
ACCTAATCTCATCCTGTTTTGATGCAAGGGTTCTCTTCTGTGTCTTGTAACCATGAAACAGCAGAAGAACTAACA
TAACTAACTCCATTTTTGTTTAAGGGGCCTTTACCTATTCCTGCACCTAGGCTAGGATAACTTTAGAGCACTGAC
ATAAAACGCAAAAACAGGAATCATGCCGTTTGCAAAACTAACTCTGGGATTAAAGGGGAAGCATGTAAACAGCTA
ACTGTTTTTGTTAAAGATTTATAGGAATGAGGAGGTTTGGCTATTGTCACATGACAGACTGTTAGCCAAGGACAA
AGAAGTTCTGCAAACCTCCCCTGGACCCTTGCTGGTGTCCAGATGTCTGCGGTTGTCAGCCCCTTCCTTTCCCCC
GACCTAAACATAAAAGACAAGGCAAAGCCCGCATAATTTTAAGACGGTTCTTTAGGACATTAGTCCACCATCTTC
TTGGTTTGCTGGCTCTCCGAAATAAAGTCCCTTTCCTTGCTCCAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6724

MRGELWLLVLVLREAARALSPQPGAGHDEGPGSGWAAKGTVRGWNRRARESPGHVSEPDRTQLSQDLGGGTLAMD
TLPDNRTRVVEDNHSYYVSRLYGPSEPHSRELWVDVAEANRSQVKIHTILSNTHRQASRVVLSFDFPFYGHPLRQ
ITIATGGFIFMGDVIHRMLTATQYVAPLMANFNPGYSDNSTVVYFDNGTVFVVQWDHVYLQGWEDKGSFTFQAAL
HHDGRIVFAYKEIPMSVPEISSSQHPVKTGLSDAFMILNPSPDVPESRRRSIFEYHRIELDPSKVTSMSAVEFTP
LPTCLQHRSCDACMSSDLTFNCSWCHVLQRCSSGFDRYRQEWMDYGCAQEAEGRMCEDFQDEDHDSASPDTSFSP
YDGDLTTTSSSLFIDSLTTEDDTKLNPYAGGDGLQNNLSPKTKGTPVHLGTIVGIVLAVLLVAAIILAGIYINGH
PTSNAALFFIERRPHHWPAMKFRSHPDHSTYAEVEPSGHEKEGFMEAEQC

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FIGURE 6725

CCGGCGGGGTGGGGGACGTGTCGCGAGGCCGGGTGGCCTCGGTCGGTACCCTGGGCGCGGAGCAGCTGCCTCATT
AGTATTCGTACCCACGAGGCGGCGCAGCGGGCCCTCGGGGACAGCGAGCGTCGCGGCCATGGCTTATCACTCGGG
CTACGGAGCCCACGGCTCCAAGCACAGGGCCCGGGCAGCCCCGGATCCCCCTCCCCTCTTCGATGACACAAGCGG
TGGTTATTCCAGCCAGCCCGGGGGATACCCAGCCACAGGAGCAGACGTGGCCTTCAGTGTCAACCACTTGCTTGG
GGACCCAATGGCCAATGTGGCTATGGCCTATGGCAGCTCCATCGCATCCCATGGGAAGGACATGGTGCACAAGGA
GCTGCACCGTTTTGTGTCTGTGAGCAAACTCAAGTATTTTTTTGCTGTGGACACAGCCTACGTGGCCAAGAAGCT
AGGGCTGCTGGTCTTCCCCTACACACACCAGAACTGGGAAGTGCAGTACAGTCGTGATGCTCCTCTGCCCCCCCG
GCAAGACCTCAACGCCCCTGACCTCTATATCCCCACGATGGCCTTCATTACTTACGTGCTCCTGGCTGGGATGGC
ACTGGGCATTCAGAAAAGGTTCTCCCCGGAGGTGCTGGGCCTGTGTGCAAGCACAGCGCTGGTGTGGGTGGTGAT
GGAGGTGCTGGCCCTGCTCCTGGGCCTCTACCTGGCCACCGTGCGCAGTGACCTGAGCACCTTTCACCTGCTGGC
CTACAGTGGCTACAAATACGTGGGAATGATCCTCAGTGTGCTCACGGGGCTGCTGTTCGGCAGCGATGGCTACTA
CGTGGCGCTGGCCTGGACCTCATCGGCGCTCATGTACTTCATTGTGCGCTCTTTGCGGACAGCAGCCCTGGGCCC
CGACAGCATGGGGGGCCCCGTCCCCCGGCAGCGTCTCCAGCTCTACCTGACTCTGGGAGCTGCAGCCTTCCAGCC
CCTCATCATATACTGGCTGACTTTCCACCTGGTCCGGTGACCCCCTGGCCCCAGATGGCACTGAGTTTTTCATTC
ATTGAAGATTTGATTTCCTTGAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6726

MAYHSGYGAHGSKHRARAAPDPPPLFDDTSGGYSSQPGGYPATGADVAFSVNHLLGDPMANVAMAYGSSIASHGK
DMVHKELHRFVSVSKLKYFFAVDTAYVAKKLGLLVFPYTHQNWEVQYSRDAPLPPRQDLNAPDLYIPTMAFITYV
LLAGMALGIQKRFSPEVLGLCASTALVWVVMEVLALLLGLYLATVRSDLSTFHLLAYSGYKYVGMILSVLTGLLF
GSDGYYVALAWTSSALMYFIVRSLRTAALGPDSMGGPVPRQRLQLYLTLGAAAFQPLIIYWLTFHLVR

FIGURE 6727A

GAATTCAGCATGTTTAAAAATGAGATAAAATTATTTTAATAATGGAATGATCTGTTAGCTGTCATTACCATTTAC
TTTAAAGCAGAGGATATAGGACATGGGTCCTTTTTTTCTGATCACCTCCAATGAGATAAGAATCTATAAAGCTGG
TAGGAAAATGAGTCCGTGACCAAAATGCTTACTCAGCCACTATAGGAGATCAAAACATTTTATACTAAATCTGAA
CTCTACTAAGACAAAACAATTGTGTTCTTTGAAAAATATGTAGGGTTTAGAAAATTTCTGGGATTTGTCTGTAAA
ATACCCTCCGGGCTCTAATAGTGACGTTTTAGGGAAACACTTGCATCTCAAGGTGGAAAGGATAGAGGTGGTGTT
TTGTGGGCTCCTGTGGTGGTTAGGTCGTTCTCAGAAGACAGTACTGGAAATTAGATAATTGCTGATGTCATATTT
TTCACAATTAAAAAAAAGTCAGTATCCTGGGGGCTATAAAAGCAGCAGCTTCTACCTTCCCCGTCACAAGCAGAA
TCTTCAGAACAGGTAAGCGTTTCGGCAAACTTGGTACAATTGGTTAGTTTGATGAAATACTTCTTGACTAATTTT
GTTCCTTCACGTTGTCTTCGACCAGGTTCTCCTTCCCCAGTCACCAGTTGCTCGAGTTAGAATTGTCTGCAATGG
CCGCCCTGCAGAAATCTGTGAGCTCTTTCCTTATGGGGACCCTGGCCACCAGCTGCCTCCTTCTCTTGGCCCTCT
TGGTACAGGGAGGAGCAGCTGCGCCCATCAGCTCCCACTGCAGGCTTGACAAGTCCAACTTCCAGCAGCCCTATA
TCACCAACCGCACCTTCATGCTGGCTAAGGAGGTATACATCTCAATCCTGCTCTTTCTCGTTGGATCTACTTGGA
ATCCAAATAGTTCTTAAACTTTTCTTCAGAGCATCTCTAAGAGCTTTAGGAACCCACTGTTTATCCCTGAGGGTA
GATAAATTTTCTGTTTTTTCAGAGACTCTTTGGGAATCTGGCTTTTTTTTTTCTTGAACTTCTTCCTTCCATTT
TGGCCTTTATGATACATATGATGAATTTTTCCCAAAGAGCGGCCATTCAGTAATCCATCTGATGATTTTTTTTC
CTTTATGCCTCTGTGCATTGTTCTAAACTCATGCACACATCTGAATTCTGCTTTTAGTCTTTATGATGTTGCTCT
GGGGAGACGGGATGGGGCACATGTCTATGTATAAATTTTTTTTCTATTTGCTCAATGTCCAGACCCTTAGTCTTT
TCTTCTCTTCCAGGCTAGCTTGGCTGATAACAACACAGACGTTCGTCTCATTGGGGAGAAACTGTTCCACGGAGT
CAGTGTAAGCTACAGTTGTGACGAACAGGGCCGTGTGCCGTCCATGGGTACTTGGGGTGGTGGTGATGATGGTTT
AGGTCTTATCCCTTATGACCCTTTCTGTTTCCCTTCCACCTGCAGATGAGTGAGCGCTGCTATCTGATGAAGCAG
GTGCTGAACTTCACCCTTGAAGAAGTGCTGTTCCCTCAATCTGATAGGTTCCAGCCTTATATGCAGGAGGTGGTG
CCCTTCCTGGCCAGGCTCAGCAACAGGCTAAGCACATGTGTAAGTTCAGCTCTCAGCCTATGCCCACCTACCCCT
CCTTCCCTCCTTCCACAGAGACCCCCTTACCCCAACTCTCTCTCCTTCCCCCTACCCCTAAGCTAGCAGGAAGAA
GTGTCTTGGCAGCAGTGTTATCAGGAGTCATTTGGGATCATAGAGTATTTGCTTTTGCTTTGACTGAGTCACATC
TTGAGTTTATAGTGGTGAATGGGGTCTGGAACTTAAGTGTACAGAAGCCGCATTGGTTTGTCTTCGGAAAAAAGG
CAACTCAGGTTGCGTAAGATGAGAAAGGTGTTGGGAAAACATCTAGCTGTGGAAATGGATCCATTGAGTCTAAGT
TGTTGAGGGGAGGGGATGGCATGGAGAGAAATTAGAAGAGAAAGTGGGAAATGGGAAGGCTTAAAGTCGGTGGTG
GGTCGGCAGACTGTTGCCCTGTTGATGTCATGGGAAGCCACAAAATCGGAGGCGTGTGAACTTGATGCCGCTGAA
CATTTGAAACTATGAAAAAAAGTTTGAGTGGAGTGGGCCCAGTAAAAGGCCCTAGGACTTACTGAAGAGGGCTTA
ATTTTCACATGAGATGTTTTATGTACATTTCTTGTTCTAAGCATGCAATTTTCTGGAGATACGATTGAGGTTTTA
TTCCTTACAGAATTTGCATAAACTACTCCGCTCTTTCCACAAATGCAAACCTCAGTAGGATTTCCCAAAGATGAA
GAGAGGTCTCTTGTAAGGGAAGTGACTGGATTCTGGCGTCCAAGGGAATTCAAGAGCTCAGGAAATCTAGGTCAC
TGTTGAAATCTAGGTCATTGTGGGCAAAATTACTAAGAGCTTTAATTCCAGGTGAATTGTACTGTACCTCCATGG
GTGTGGAGGTTCATAAAGTTTCAGCACAACATTAAGATAGTTATGCTTGTTATTGTTTTATAGCATATTGAAGGT
GATGACCTGCATATCCAGAGGAATGTGCAAAAGCTGAAGGACACAGTGAAAAAGGTAGGACTGATAACTGTCAAT
GCTAAGTCATGCAATAGGAGAGACAAATGTTGTTTTTCTTTCCTTTCTTTCTTCCCATCACTTTGTGATTTTTCA
CTTGATTCTCCTACCACCAGGGCGATTACTTTGGTGTCTGTGTATGTAGATATATCTATATATCTAGATGTCAGT
TTCCAAATCTTGCAAATTGTAGAATTCTAGAACTGGTTGGGATCTTAGCTTGTCTAGTCACATAACCTCAGATTC
TGGGGATGGTCAGTGGCAGAGATAGGGCTAGAATGCAGGTCTCCTGAATCCCAAGCCAGCACTTTTCCCGGTGGT
GATACAGATTAGTTTTGGTACCATTAATTCTTAGGGAAATTTCAGATTCCTATTGACTCATGTAATCTGAAGAAG
TACTTGTTTAAAAACAGAAAAATGCCTATGGGCAAATTTATTTGAAGTCATTTTTGAAGTCATTAATGCATTGCT
TTGAAACTTGGAAGAATAAACTCAGAACAATGAGAAAAGAGCTGGACTTGCATATAGGGCTAATTTCTGGAGTAA
TAAACACTTATTTTGAATTATCATAATATCTATCAGATATTGATTATAGTTTAAAAGCAAGAGCAGACAACCCCG
ATCTCTTTTATACAGGTTCAAATAGAGTAAAAATATTAGTAAGAGATTTATTATAGTTAAATGGAAGTCTGAATT
GGTAAGCTTTTTTTTCTTCCTCTCTCCCATCAAGACCTTCCATTCTAGTTTCTTCCTTCACTCCCTCAACAAATC
CCTAGGGAGCATTTATCCATGGTGGGCTGGTGTACATTTCTATAGTGAATGATACCATCATGTGGCCTATTTGGT
GAAAAGAACAACAATGGAAGGCTTAGACTAACAATAGTGACTCACCCCAAAACCGGAGGAATGATTAGGAGCAGT
GAAAGTGACGCTCTTGCAAGCAGGTACAACTAAATACTCAGAAACATGAAGGCTCCAGTTGATGGAATTTTCAGT

FIGURE 6727B

AACAAGCTTAACCTTAATTCCCCCTTTTTCCCTCTTGACTTTTTAAAAAAGCGTTTCTTCCTGAGCATCATTTAA
TGAGTGTGACTGTTTCTTCCTTTGATAATTGAAGGCTTTGTAGTTTTAAATTGTGAAGCCCAGTTCTCTTGTTAT
AGAACTATTATCTAGACATGGAGGGCTGAATGTTAGCATGCCACAGACAAGGCATGCTTTACACATCTTGCTTAA
AAAATTACTGATTTCATCTTGCTTGTTGTCTTTAGAAAAGTGAAGTGTGAGAGAGGAGAATCTCATGGTGATCTG
TGTGATTTTCAAGACCTTTAATCCATTTTGAAAGAATCAATTTCATATTTGCAATGGGTTGCCATGTGGAAGAGT
GATTATGCTTTTTTGCTGGTAGCTTCAGAAAGCACAGGAGGGAGAGCAATGTTGTTCAGAGAAAGATCAACAGGA
GGAGAAACTGTCAGAGCTGTCTGAAATAGGGTGGTTTTGGGAGGCATTAATTCCCTCTCGTTGGGGGTAAAAGCA
GAACGCAGGTTGGTAGTAAAATGCATGACAGACAGTAGGGGACGATAAACTTTAAAATTCTTTATAGTCTTGGAG
TCTTTGAGATAGAAAAGAATATCTTTTTGGCCTTATGTCAAAAGAAGTATGGAAAGGTGAAAGGGCGGAAGAAAG
CAGGAAAAGGAAGAACCATGTATTATATAGAGGACAATGGTGACAAGGTTTTTCTTGAAATAATGCAAATATGAT
AGATTAGAGGAATTTCAGTAGGGAATGCTTTTCACTTGAATTTGGGTTTCCTCTTCGATTAAGTTTGGGATCCTC
ATCTGCATTTGACTTGGAGAGAGAAAGAATGAATGTTAGGACCTATATCTGGTTTTCTATTAACTAAAGCAAGTG
GAAAAGACTTATTTGGTATTTTTCCCACAAAAGTGAAAACTTTTCTTTTACTGTTTGTCAAAAAGGTGGAAATAG
AAAAAGCCTTAATGTATTGGTGAATACATGGTTCAAAGTCATTTGAGTAGAGATGTTTTAAATCAGGAGTGTCCA
ATCATTTGGCTTCCCTGGACCACCTTGAAAGAATTGTCTTGGTACACACATAAAATACAAGAACAATAGCTGATG
AGCTAAAAAAAGTCCATGCATAAATCTCATACTGTTTTAAGAAAGTTTATGAATTTCTGTTAGGGTGCATTCAAAG
CTGTCCTGGGCCATGTGCGGCCTGTGGGCTGCAGGTTGGACAAGCTCCTTATAAGTAATCTGTCATAGATAGTTT
TGGAGCTGCAAAACAGGCCAAGGCATAATGGGTGGCACTCGGGATCCCCCAGATCCCAGCCTCACTTCAGTCTCC
TTGCTCTGGTTAAGAAGGGGTGGTCAACTCTCTGCCCAGCTTTTAAACAGCTTCATTAGTGTGAGGTGCACCTGA
AATTGATGCCTGCTGGTGGCCTCTCAGTCCAGAGAGCCGTCATTTTAAGCTCTTTGGCAAATCATACAATACTAA
AGGGATATTACTATGAATGTTTTACAAATGCTTAAAACTCGGTTTCTGTCTCCATCAACCTAATCTTGCAATTTC
TAATTTGTTCACTTTAGAAAACATGGCATAAATGCTCAAATACTTTTGCATTCTTATTTTCACAGCTTGGAGAGA
GTGGAGAGATCAAAGCAATTGGAGAACTGGATTTGCTGTTTATGTCTCTGAGAAATGCCTGCATTTGACCAGAGC
AAAGCTGAAAAATGAATAACTAACCCCCTTTCCCTGCTAGAAATAACAATTAGATGCCCCAAAGCGATTTTT

FIGURE 6728

CGAGCGCCAGCGCGGGAACCGGGAAAAGGAAACCGTGTTGTGTACGTAAGATTCAGGAAACGAAACCAGGAGCCG
CGGGTGTTGGCGCAAAGGTTACTCCCAGACCCTTTTCCGGCTGACTTCTGAGAAGGTTGCGCAGCAGCTGTGCCC
GACAGTCTAGAGGCGCAGAAGAGGAAGCCATCGCCTGGCCCCGGCTCTCTGGACCTTGTCTCGCTCGGGAGCGGA
AACAGCGGCAGCCAGAGAACTGTTTTAATC**ATG**GACAAACAAAACTCACAGATGAATGCTTCTCACCCGGAAACA
AACTTGCCAGTTGGGTATCCTCCTCAGTATCCACCGACAGCATTCCAAGGACCTCCAGGATATAGTGGCTACCCT
GGGCCCCAGGTCAGCTACCCACCCCCACCAGCCGGCCATTCAGGTCCTGGCCCAGCTGGCTTTCCTGTCCCAAAT
CAGCCAGTGTATAATCAGCCAGTATATAATCAGCCAGTTGGAGCTGCAGGGGTACCATGGATGCCAGCGCCACAG
CCTCCATTAAACTGTCCACCTGGATTAGAATATTTAAGTCAGATAGATCAGATACTGATTCATCAGCAAATTGAA
CTTCTGGAAGTTTTAACAGGTTTTGAAACTAATAACAAATATGAAATTAAGAACAGCTTTGGACAGAGGGTTTAC
TTTGCAGCGGAAGATACTGATTGCTGTACCCGAAATTGCTGTGGGCCATCTAGACCTTTTACCTTGAGGATTATT
GATAATATGGGTCAAGAAGTCATAACTCTGGAGAGACCACTAAGATGTAGCAGCTGTTGTTGTCCCTGCTGCCTT
CAGGAGATAGAAATCCAAGCTCCTCCTGGTGTACCAATAGGTTATGTTATTCAGACTTGGCACCCATGTCTACCA
AAGTTTACAATTCAAAATGAGAAAAGAGAGGATGTACTAAAAATAAGTGGTCCATGTGTTGTGTGCAGCTGTTGT
GGAGATGTTGATTTTGAGATTAAATCTCTTGATGAACAGTGTGTGGTTGGCAAAATTTCCAAGCACTGGACTGGA
ATTTTGAGAGAGGCATTTACAGACGCTGATAACTTTGGAATCCAGTTCCCTTTAGACCTTGATGTTAAAATGAAA
GCTGTAATGATTGGTGCCTGTTTCCTCATTGACTTCATGTTTTTTGAAAGCACTGGCAGCCAGGAACAAAAATCA
GGAGTGTGG**TAG**TGGATTAGTGAAAGTCTCCTCAGGAAATCTGAAGTCTGTATATTGATTGAGACTATCTAAACT
CATACCTGTATGAATTAAGCTGTAAGGCCTGTAGCTCTGGTTGTATACTTTTGCTTTTCAAATTATAGTTTATCT
TCTGTATAACTGATTTATAAAGGTTTTTGTACATTTTTTAATACTCATTGTCAATTTGAGAAAAAGGACATATGA
GTTTTTGCATTTATTAATGAAACTTCCTTTGAAAAACTGCTTTGAATTATGATCTCTGATTCATTGTCCATTTTA
CTACCAAATATTAACTAAGGCCTTATTAATTTTTATATAAATTATATCTTGTCCTATTAAATCTAGTTACAATTT
ATTTCATGCATAAGAGCTAATGTTATTTTGCAAATGCCATATATTCAAAAAAGCTCAAAGATAATTTTCTTTACT
ATTATGTTCAAATAATATTCAATATGCATATTATCTTTAAAAAGTTAAATGTTTTTTTAATCTTCAAGAAATCAT
GCTACACTTAACTTCTCCTAGAAGCTAATCTATACCATAATATTTTCATATTCACAAGATATTAAATTACCAATT
TTCAAATTATTGTTAGTAAAGAACAAAATGATTCTCTCCCAAAGAAAGACACATTTTAAATACTCCTTCACTCTA
AAACTCTGGTATTATAACTTTTGAAAGTTAATATTTCTACATGAAATGTTTAGCTCTTACACTCTATCCTTCCTA
GAAAATGGTAATTGAGATTACTCAGATATTAATTAAATACAATATCATATATATATTCACAGAGTATAAACCTAA
ATAATGATCTATTAGATTCAAATATTTGAAATAAAAACTTGATTTTTTTGT

FIGURE 6729

MDKQNSQMNASHPETNLPVGYPPQYPPTAFQGPPGYSGYPGPQVSYPPPPAGHSGPGPAGFPVPNQPVYNQPVYN
QPVGAAGVPWMPAPQPPLNCPPGLEYLSQIDQILIHQQIELLEVLTGFETNNKYEIKNSFGQRVYFAAEDTDCCT
RNCCGPSRPFTLRIIDNMGQEVITLERPLRCSSCCCPCCLQEIEIQAPPGVPIGYVIQTWHPCLPKFTIQNEKRE
DVLKISGPCVVCSCCGDVDFEIKSLDEQCVVGKISKHWTGILREAFTDADNFGIQFPLDLDVKMKAVMIGACFLI
DFMFFESTGSQEQKSGVW

FIGURE 6730

GTGTGGGGAAGGTAGATGTCATTCAAGAACCAGGTTTGAGTGGCCGCTTCTTTGTCACCACTCTCCCAGCATTTT
TTCATGCAAAGGATGGGATATTCCGCCGTTATCGTGGCCCAGGAATCTTCGAAGACCTGCAGAATTATATCTTAG
AGAAGAAATGGCAATCAGTCGAGCCTCTGACTGGCTGGAAATCCCCGGCTTCTCTAACGATGTCTGGAATGGCTG
GTCTTTTTAGCATCTCTGGCAAGATATGGCATCTTCACAACTATTTCACAGTGACTCTTGGAATTCCTGCTTGGT
GTTCTTATGTCTTTTTCGTCATAGCCACCTTGGTTTTTGGCCTTTTTATGGGTCTGGTCTTGGTGGTAATATCAG
AATGTTTCTATGTGCCACTTCCAAGGCATTTATCTGAGCGTTCTGAGCAGAATCGGAGATCAGAGGAGGCTCATA
GAGCTGAACAGTTGCAGGATGCGGAGGAGGAAAAAGATGATTCAAATGAAGAAGAAAACAAAGACAGCCTTGTAG
ATGATGAAGAAGAGAAAGAAGATCTTGGCGATGAGGATGAAGCAGAGGAAGAAGAGGAGGAGGACAACTTGGCTG
CTGGTGTGGATGAGGAGAGAAGTGAGGCCAATGATCAGGGGCCCCCAGGAGAGGACGGTGTGACCCGGGAGGAAG
TAGAGCCTGAGGAGGCTGAAGAAGGCATCTCTGAGCAACCCTGCCCAGCTGACACAGAGGTGGTGGAAGACTCCT
TGAGGCAGCGTAAAAGTCAGCATGCTGACAAGGGACTGTAGATTTAATGATGCGTTTTCAAGAATACACACCAAA
ACAATATGTCAGCTTCCCTTTGGCCTGCAGTTTGTACCAAATCCTTAATTTTTCCTGAATGAGCAAGCTTCTCTT
AAAAGATGCTCTCTAGTCATTTGGTCTCATGGCAGTAAGCCTCATGTATACTAAGGAGAGTCTTCCAGGTGTGAC
AATCAGGATATAGAAAAACAAACGTAGTGTTGGGATCTGTTTGGAGACTGGGATGGGAACAAGTTCATTTACTTA
GGGGTCAGAGAGTCTCGACCAGAGGAGGCCATTCCCAGTCCTAATCAGCACCTTCCAGAGACAAGGCTGCAGGCC
CTGTGAAATGAAAGCCAAGCAGGAGCCTTGGCTCCTGAGCATCCCCAAAGTGTAACGTAGAAGCCTTGCATCCTT
TTCTTGTGTAAAGTATTTATTTTTGTCAAATTGCAGGAAACATCAGGCACCACAGTGCATGAAAAATCTTTCACA
GCTAGAAATTGAAAGGGCCTTGGGTATAGAGAGCAGCTCAGAAGTCATCCCAGCCCTCTGAATCTCCTGTGCTAT
GTTTTATTTCTTACCTTTAATTTTTCCAGCATTTCCACCATGGGCATTCAGGCTCTCCACACTCTTCACTATTAT
CTCTTGGTCAGAGGACTCCAATAACAGCCAGGTTTACATGAACTGTGTTTGTTCATTCTGACCTAAGGGGTTTAG
ATAATCAGTAACCATAACCCCTGAAGCTGTGACTGCCAAACATCTCAAATGAAATGTTGTGGCCATCAGAGACTC
AAAAGGAAGTAAGGATTTTACAAGACAGATTAAAAAAAAAATTGTTTTGTCCAAAATATAGTTGTTGTTGATTTTT
TTTTAAGTTTTCTAAGCAATATTTTTCAAGCCAGAAGTCCTCTAAGTCTTGCCAGTACAAGGTAGTCTTGTGAAG
AAAAGTTGAATACTGTTTTGTTTTCATCTCAAGGGGTTCCCTGGGTCTTGAACTACTTTAATAATAACTAAAAAA
CCACTTCTGATTTTCCTTCAGTGATGTGCTTTTGGTGAAAGAATTAATGAACTCCAGTACCTGAAAGTGAAAGAT
TTGATTTTGTTTCCATCTTCTGTAATCTTCCAAAGAATTATATCTTTGTAAATCTCTCAATACTCAATCTACTGT
AAGTACCCAGGGAGGCTAATTTCCTTAAAAAAAAAAAATCTATCCATCTACTTCTCTCTTACCTGATTTATGTGT
TAGAATAAATTCATGAAATTCGATTCCAAGCATA

FIGURE 6731

MSGMAGLFSISGKIWHLHNYFTVTLGIPAWCSYVFFVIATLVFGLFMGLVLVVISECFYVPLPRHLSERSEQNRR
SEEAHRAEQLQDAEEEKDDSNEEENKDSLVDDEEEKEDLGDEDEAEEEEEEDNLAAGVDEERSEANDQGPPGEDG
VTREEVEPEEAEEGISEQPCPADTEVVEDSLRQRKSQHADKGL

FIGURE 6732

GAATTCTTTAGTAGGGGCGGAGTCTGCTGCTGCCCTGCGCTGCCACCTCGGCTACACTGCCCTCCGCGACGACCC
CTGACCAGCCGGGGTCACGTCCGGGAGACGGGATCATGAAGCGCTCGGTAGCCGTCTGGCTCTTGGTCGGGCTCA
GCCTCGGTGTCCCCCAGTTCGGCAAAGGTGATATTTGTGATCCCAATCCATGTGAAAATGGAGGTATCTGTTTGC
CAGGATTGGCTGATGGTTCCTTTTCCTGTGAGTGTCCAGATGGCTTCACAGACCCCAACTGTTCTAGTGTTGTGG
AGGTTGCATCAGATGAAGAAGAACCAACTTCAGCAGGTCCCTGCACTCCTAATCCATGCCATAATGGAGGAACCT
GTGAAATAAGTGAAGCATACCGAGGGGATACATTCATAGGCTATGTTTGTAAATGTCCCCGAGGATTTAATGGGA
TTCACTGTCAGCACAACATAAATGAATGCGAAGTTGAGCCTTGCAAAAATGGTGGAATATGTACAGATCTTGTTG
CTAACTATTCCTGTGAGTGCCCAGGCGAATTTATGGGAAGAAATTGTCAATACAAATGCTCAGGCCCACTGGGAA
TTGAAGGTGGAATTATATCAAACCAGCAAATCACAGCTTCCTCTACTCACCGAGCTCTTTTTGGACTCCAAAAAT
GGTATCCCTACTATGCACGTCTTAATAAGAAGGGGCTTATAAATGCGTGGACAGCTGCAGAAAATGACAGATGGC
CGTGGATTCAGATAAATTTGCAAAGGAAAATGAGAGTTACTGGTGTGATTACCCAAGGAGCCAAGAGGATTGGAA
GCCCAGAGTATATAAAATCCTACAAAATTGCCTACAGTAATGATGGAAAGACTTGGGCAATGTACAAAGTGAAAG
GCACCAATGAAGACATGGTGTTTCGTGGAAACATTGATAACAACACTCCATATGCTAACTCTTTCACACCCCCCA
TAAAAGCTCAGTATGTAAGACTCTATCCCCAAGTTTGTCGAAGACATTGCACTTTGCGAATGGAACTTCTTGGCT
GTGAACTGTCGGGTTGTTCTGAGCCTCTGGGTATGAAATCAGGACATATACAAGACTATCAGATCACTGCCTCCA
GCATCTTCAGAACGCTCAACATGGACATGTTCACTTGGGAACCAAGGAAAGCTCGGCTGGACAAGCAAGGCAAAG
TGAATGCCTGGACCTCTGGCCACAATGACCAGTCACAATGGTTACAGGTGGATCTTCTTGTTCCAACCAAAGTGA
CTGGCATCATTACACAAGGAGCTAAAGATTTTGGTCATGTACAGTTTGTTGGCTCCTACAAACTGGCTTACAGCA
ATGATGGAGAACACTGGACTGTATACCAGGATGAAAAGCAAAGAAAAGATAAGGTTTTCCAGGGAAATTTTGACA
ATGACACTCACAGAAAAAATGTCATCGACCCTCCCATCTATGCACGACACATAAGAATCCTTCCTTGGTCCTGGT
ACGGGAGGATCACATTGCGGTCAGAGCTGCTGGGCTGCACAGAGGAGGAATGAGGGGAGGCTACATTTCACAACC
CTCTTCCCTATTTCCCTAAAAGTATCTCCATGGAATGAACTGTGCAAAATCTGTAGGAAACTGAATGGTTTTTTT
TTTTTTTTCATGAAAAAGTGCTCAAATTATGGTAGGCAACTAACGGTGTTTTTAAGGGGGCCGGAATTC

FIGURE 6733

MKRSVAVWLLVGLSLGVPQFGKGDICDPNPCENGGICLPGLADGSFSCECPDGFTDPNCSSVVEVASDEEEPTSA
GPCTPNPCHNGGTCEISEAYRGDTFIGYVCKCPRGFNGIHCQHNINECEVEPCKNGGICTDLVANYSCECPGEFM
GRNCQYKCSGPLGIEGGIISNQQITASSTHRALFGLQKWYPYYARLNKKGLINAWTAAENDRWPWIQINLQRKMR
VTGVITQGAKRIGSPEYIKSYKIAYSNDGKTWAMYKVKGTNEDMVFRGNIDNNTPYANSFTPPIKAQYVRLYPQV
CRRHCTLRMELLGCELSGCSEPLGMKSGHIQDYQITASSIFRTLNMDMFTWEPRKARLDKQGKVNAWTSGHNDQS
QWLQVDLLVPTKVTGIITQGAKDFGHVQFVGSYKLAYSNDGEHWTVYQDEKQRKDKVFQGNFDNDTHRKNVIDPP
IYARHIRILPWSWYGRITLRSELLGCTEEE

FIGURE 6734A

TCGGCGGGAAGCGGCGATCCTGCCACCGGGAGGTGTGGAAGAGCCGGGTAGATTCTGGCTACATTGGAGATTGGT
TGCTTTCTAAAACTGAAGGAGAAGCCCATGAAGAGATGGTGGATTCTCACTGAGTTTTGACTAGCGGAAGAAAAG
AGAGAGTTCAAGTGGATGGCCTTGAGGACTTGAAAAGCTGAGATATGATGATTTTGAAGTCATTTCACATCGAAG
CCATGATTTAAATATCGGCGTTAAGATTTCAACAAGAAAAACTTAAGCTTCCTTGGATTCCCACGTCAAAGGAAA
GTTTCAAGCTTTCAGAAGGAGTTCTCACTCGAAGATAAAGAACAGCTCGCTAACCACGAAAGAGGAATCGATGCT
CAGCTTTTAGTTGCACTTCCTAAAGTTGCAGAATTAAGACAAATCTTTGAACCAAAGAAGAAAGAATTCTTAGAA
ATGAAAAGAAAAGAAAGAATTGCCAGGCGCCTGGAAGGGATTGAAAATGACACTCAGCCCATCCTCTTGCAGAGC
TGCACAGGATTGGTGACTCACCGCCTGCTGGAGGAAGACACCCCTCGATACATGAGAGCCAGCGACCCTGCCAGC
CCCCACATCGGCCGATCAAATGAAGAGGAGGAAACTTCTGATTCTTCTCTAGAAAAGCAAACTCGATCCAAATAC
TGCACAGAAACCTCCGGTGTCCACGGTGACTCACCCTATGGTTCGGGTACCATGGACACCCACAGTCTGGAGTCC
AAAGCCGAAAGAATTGCAAGGTACAAAGCAGAAAGAAGGCGACAGCTGGCAGAGAAGTATGGGCTGACTCTGGAT
CCCGAGGCCGACTCCGAGTATTTATCCCGCTATACCAAGTCCAGGAAGGAGCCTGATGCTGTCGAGAAGCGGGGA
GGAAAAAGTGACAAACAGGAAGAGTCAAGCAGAGATGCGAGTTCTCTGTACCCCGGGACCGAGACGATGGGGCTC
AGGACCTGTGCCGGTGAATCCAAGGACTATGCCCTCCATGCGGGTGACGGCTCTTCCGACCCGGAGGTGCTGCTG
AACATAGAAAACCAAAGACGAGGTCAAGAGCTGAGTGCCACCCGGCAGGCCCATGACCTGTCCCCAGCAGCCGAG
AGTTCCTCGACCTTCTCTTTCTCTGGGCGAGACTCCTCCTTCACTGAAGTGCCACGGTCCCCCAAGCACGCCCAC
AGCTCCTCCCTGCAGCAGGCAGCCTCCCGGAGCCCCTCCTTTGGTGACCCACAGCTATCCCCTGAGGCCCGACCC
AGGTGCACTTCACATTCAGAAACGCCAACTGTCGATGATGAAGAAAAGGTGGATGAACGAGCCAAGCTGAGCGTC
GCCGCCAAGAGGTTGCTTTTCAGGGAGATGGAAAAATCTTTTGATGAACAAAATGTTCCAAAGCGACGCTCAAGA
AACACAGCTGTGGAGCAGAGGCTACGCCGTCTGCAGGACAGGTCCCTCACCCAGCCCATCACCACTGAAGAGGTG
GTCATCGCAGCCACATTGCAGGCCTCTGCTCACCAAAAGGCCTTAGCCAAGGACCAGACAAATGAGGGCAAAGAG
CTTGCTGAGCAAGGAGAACCTGATTCCTCCACTCTAAGCTTGGCCGAAAAGTTGGCCTTGTTTAACAAATTGTCC
CAGCCAGTCTCAAAAGCGATTTCTACCCGGAACAGAATAGACACGAGACAGAGGAGAATGAACGCTCGCTATCAA
ACTCAGCCAGTCACACTGGGAGAGGTGGAGCAGGTGCAGAGTGGAAAGCTCATTCCTTTCTCACCTGCCGTGAAC
ACATCAGTGTCTACCGTAGCATCCACGGTTGCTCCAATGTATGCCGGAGATCTTCGCACAAAGCCACCTCTTGAC
CACAATGCAAGTGCCACTGACTATAAGTTTTCTTCTTCAATAGAAAATTCGGACTCTCCAGTTAGAAGCATTCTG
AAATCGCAAGCTTGGCAGCCTTTGGTAGAGGGTAGCGAGAACAAGGGAATGTTGAGAGAATATGGAGAGACAGAA
AGCAAGAGAGCTTTGACAGGTCGAGACAGTGGGATGGAGAAGTATGGGTCCTTTGAGGAAGCAGAAGCATCCTAC
CCCATCCTGAACAGAGCCAGGGAAGGAGACAGCCATAAGGAATCTAAATATGCTGTTCCCAGAAGAGGAAGCCTG
GAACGGGCGAACCCTCCCATCACCCACCTCGGGGATGAACCGAAGGAATTTTCCATGGCTAAAATGAATGCACAA
GGAAACTTGGACTTGAGGGACAGGCTGCCCTTTGAAGAGAAGGTGGAGGTGGAGAATGTTATGAAAAGGAAGTTT
TCACTAAGAGCGGCAGAGTTCGGGGAGCCCACTTCCGAGCAGACGGGGACAGCTGCTGGGAAAACTATTGCTCAA
ACCACAGCCCCCGTGTCCTGGAAGCCCCAGGATTCTTCGGAACAGCCACAGGAGAAGCTCTGCAAGAATCCATGT
GCGATGTTTGCTGCTGGAGAGATCAAAACGCCGACAGGGGAGGGCCTTCTTGACTCACCCAGCAAAACCATGTCT
ATTAAAGAAAGATTGGCACTGTTGAAGAAAAGCGGGGAGGAAGATTGGAGAAACAGACTCAGCAGGAGGCAGGAG
GGCGGCAAGGCGCCGGCCAGCAGCCTGCACACCCAGGAAGCAGGGCGGTCCCTCATCAAGAAGCGGGTCACAGAA
AGTCGAGAGAGCCAAATGACGATTGAGGAGAGGAAGCAGCTCATCACTGTGAGAGAGGAGGCCTGGAAGACGAGA
GGCAGAGGAGCGGCCAACGACTCGACCCAGTTCACTGTGGCTGGCAGGATGGTGAAGAAAGGTTTGGCGTCACCT
ACTGCCATAACCCCAGTAGCCTCAGCCATTTGCGGTAAAACAAGAGGCACCACACCCGTTTCCAAACCCCTGGAA
GATATCGAAGCCAGACCAGATATGCAGTTAGAATCGGACCTGAAGTTGGACAGGCTGGAAACCTTTCTAAGAAGG
CTGAATAACAAAGTTGGCGGGATGCACGAAACGGTGCTCACTGTCACCGGCAAATCTGTGAAGGAGGTGATGAAG
CCAGATGATGATGAAACCTTTGCCAAATTTTACCGCAGCGTGGATTATAATATGCCAAGAAGTCCTGTGGAGATG
GATGAGGACTTCGATGTCATTTTCGATCCTTATGCACCCAAATTGACGTCTTCCGTGGCCGAGCACAAGCGGGCA
GTTAGGCCCAAGCGCCGGGTTCAGGCCTCCAAAAACCCCCTGAAAATGCTGGCGGCAAGAGAAGATCTCCTTCAG
GAATACACTGAGCAGAGATTAAACGTTGCCTTCATGGAGTCAAAGCGGATGAAAGTAGAAAAGATGTCTTCCAAC
TCCAACTTCTCAGAAGTCACCCTGGCGGGTTTAGCCAGTAAAGAAAACTTCAGCAACGTCAGCCTGCGGAGCGTC
AACCTGACGGAACAGAACTCTAACAACAGCGCCGTGCCCTACAAGAGGCTGATGCTGTTGCAGATTAAAGGAAGA
AGACATGTGCAGACCAGGCTGGTGGAACCTCGAGCTTCGGCGCTCAACAGTGGGGACTGCTTCCTCCTGCTCTCT

FIGURE 6734B

CCCCACTGCTGCTTCCTGTGGGTAGGAGAGTTTGCAAACGTCATAGAAAAGGCGAAGGCCTCAGAACTTGCAACT
TTAATTCAGACAAAGAGGGAACTTGGTTGTAGAGCTACTTATATCCAAACCATTGAAGAAGGAATTAATACACAC
ACTCATGCAGCCAAAGACTTCTGGAAGCTTCTGGGTGGCCAAACCAGTTACCAATCTGCTGGAGACCCAAAAGAA
GATGAACTCTATGAAGCAGCCATAATAGAAACTAACTGCATTTACCGTCTCATGGATGACAAACTTGTTCCTGAT
GACGACTACTGGGGGAAAATTCCGAAGTGCTCCCTTCTGCAACCCAAAGAGGTACTGGTGTTTGATTTTGGTAGT
GAAGTTTACGTATGGCATGGGAAAGAAGTCACATTAGCACAACGAAAAATAGCATTTCAGCTGGCAAAGCACTTA
TGGAATGGAACCTTTGACTATGAGAACTGTGACATCAATCCCCTGGATCCTGGAGAATGCAATCCGCTTATCCCC
AGAAAAGGACAGGGGCGGCCCGACTGGGCGATATTTGGGAGACTTACTGAACACAATGAGACGATTTTGTTCAAA
GAGAAGTTTCTGGATTGGACGGAACTGAAGAGATCGAATGAGAAGAACCCCGGGGAACTTGCCCAGCACAAGGAA
GACCCCAGGACTGATGTCAAGGCATACGATGTGACACGGATGGTGTCCATGCCCCAGACGACAGCAGGCACCATC
CTGGACGGAGTGAACGTCGGCCGTGGCTATGGCCTGGTGGAAGGACACGACAGGAGGCAGTTTGAGATCACCAGC
GTTTCCGTGGATGTCTGGCACATCCTGGAATTCGACTATAGCAGGCTCCCCAAACAAAGCATCGGGCAGTTCCAT
GAGGGGGATGCCTATGTGGTCAAGTGGAAGTTCATGGTGAGCACGGCAGTGGGAAGTCGCCAGAAGGGAGAGCAC
TCGGTGAGGGCAGCCGGCAAAGAGAAGTGCGTCTACTTCTTCTGGCAAGGCCGGCACTCCACCGTGAGTGAGAAG
GGCACGTCGGCGCTGATGACGGTGGAGCTGGACGAGGAAAGGGGGGCCCAGGTCCAGGTTCTCCAGGGAAAGGAG
CCCCCCTGTTTCCTGCAGTGTTTCCAGGGGGGGATGGTGGTGCACTCGGGGAGGCGGGAAGAGGAAGAAGAAAAT
GTGCAAAGTGAGTGGCGGCTGTACTGCGTGCGTGGAGAGGTGCCCGTGGAAGGGAATTTGCTGGAAGTGGCCTGT
CACTGTAGCAGCCTGAGGTCCAGAACTTCCATGGTGGTGCTTAACGTCAACAAGGCCCTCATCTACCTGTGGCAC
GGATGCAAAGCCCAGGCCCACACGAAGGAGGTCGGAAGGACCGCTGCGAACAAGATCAAGGAACAATGTCCCCTG
GAAGCAGGACTGCATAGTAGCAGCAAAGTCACAATACACGAGTGTGATGAAGGCTCCGAGCCACTCGGATTCTGG
GATGCCTTAGGAAGGAGAGACAGGAAAGCCTACGATTGCATGCTTCAAGATCCTGGAAGTTTTAACTTCGCGCCC
CGCCTGTTCATCCTCAGCAGCTCCTCTGGGGATTTTGCAGCCACAGAGTTTGTGTACCCTGCCCGAGCCCCCTCT
GTGGTCAGTTCCATGCCCTTCCTGCAGGAAGATCTGTACAGCGCGCCCCAGCCAGCACTTTTCCTTGTTGACAAT
CACCACGAGGTGTACCTCTGGCAAGGCTGGTGGCCCATCGAGAACAAGATCACTGGTTCCGCCCGCATCCGCTGG
GCCTCCGACCGGAAGAGTGCGATGGAGACTGTGCTCCAGTACTGCAAAGGAAAAAATCTCAAGAAACCAGCCCCC
AAGTCTTACCTTATCCACGCTGGTCTGGAGCCCCTGACATTCACCAATATGTTTCCCAGCTGGGAGCACAGAGAG
GACATCGCTGAGATCACAGAGATGGACACGGAAGTTTCCAATCAGATCACCCTCGTGGAAGACGTCTTAGCCAAG
CTCTGTAAAACCATTTACCCGCTGGCCGACCTCCTGGCCAGGCCACTCCCGGAGGGGGTCGATCCTCTGAAGCTT
GAGATCTATCTCACCGACGAAGACTTCGAGTTTGCACTAGACATGACGAGGGATGAATACAACGCCCTGCCCGCC
TGGAAGCAGGTGAACCTGAAGAAAGCAAAAGGCCTGTTC**TGA**GTGGGGAGACGCCAGAGGAGCCTCACGGTCACG
TCCAACAACACCACTGCACCAGGGAAATGGATATATATTTTTGGACTGGTGTTTTTCACAAAGTATTTTTCAATC
AGAGTTTTCAGAACCTGACATTGTTAAAGATACTGCTTGTCCCGGAGTTGTGTATTTTGTAAATGTTCAAGGGAA
CTGTTTGGAAACTTCTTTCCACCATTCAGGAGGTTATCAGAATTAATAAAAGTATCTGTTATGTGCACTTAAGCC
GCAGCTGCTATAGATAGCACTGCCTTCTTGTTCCAGCTAGGCAATGCCTTTTTTTTTTTTTTGAAGCAGTTCTC
TTTATAAAGTGTTATTTTGATAGTTTGTGGATTCTAAAATATATATATATTTATATAAACACCATATAAGTCAAA
TATGTATTTAACAAAGCAATATGTATTCATTCACTTTCAAGATTTGTTTTGGTGTCAAAATAACATGAAAAGGTA
GATGGAGTTGCTTCTGTTGAATTAGCTCTGCCACCAATATGTATCTTCATACACGTTTGGAAATGTTTCCTGCAG
CATTAGGTATGACTTGTTCTGAGTACTGCTTCCGGTGCTAAAATGAACAAAGAATTTGTACTTAATGGCATGGAC
TCTGGAGAATCTATGCGAATCAACCTTTCTACCTTAATATCTCCCCAAAAATGTATAGTGCCTTGTTTTTATGTA
CAGTTTATATACAGAAAAGTTTGCTCTGCATTTTTGATGATGGTTTGGAACATTATCTACAATTTTACTCTCAAA
TAGTCAAAATAAAAACATCTCAATTTCTAATACCGGTTGTAAACAAACAGTACACATGTCATTTTGTGATATAGG
ACTCCCAAATAAAAGTATCAGAATAAACACAACAATTAACTGGT

FIGURE 6735

MKRKERIARRLEGIENDTQPILLQSCTGLVTHRLLEEDTPRYMRASDPASPHIGRSNEEEETSDSSLEKQTRSKY
CTETSGVHGDSPYGSGTMDTHSLESKAERIARYKAERRRQLAEKYGLTLDPEADSEYLSRYTKSRKEPDAVEKRG
GKSDKQEESSRDASSLYPGTETMGLRTCAGESKDYALHAGDGSSDPEVLLNIENQRRGQELSATRQAHDLSPAAE
SSSTFSFSGRDSSFTEVPRSPKHAHSSSLQQAASRSPSFGDPQLSPEARPRCTSHSETPTVDDEEKVDERAKLSV
AAKRLLFREMEKSFDEQNVPKRRSRNTAVEQRLRRLQDRSLTQPITTEEVVIAATLQASAHQKALAKDQTNEGKE
LAEQGEPDSSTLSLAEKLALFNKLSQPVSKAISTRNRIDTRQRRMNARYQTQPVTLGEVEQVQSGKLIPFSPAVN
TSVSTVASTVAPMYAGDLRTKPPLDHNASATDYKFSSSIENSDSPVRSILKSQAWQPLVEGSENKGMLREYGETE
SKRALTGRDSGMEKYGSFEEAEASYPILNRAREGDSHKESKYAVPRRGSLERANPPITHLGDEPKEFSMAKMNAQ
GNLDLRDRLPFEEKVEVENVMKRKFSLRAAEFGEPTSEQTGTAAGKTIAQTTAPVSWKPQDSSEQPQEKLCKNPC
AMFAAGEIKTPTGEGLLDSPSKTMSIKERLALLKKSGEEDWRNRLSRRQEGGKAPASSLHTQEAGRSLIKKRVTE
SRESQMTIEERKQLITVREEAWKTRGRGAANDSTQFTVAGRMVKKGLASPTAITPVASAICGKTRGTTPVSKPLE
DIEARPDMQLESDLKLDRLETFLRRLNNKVGGMHETVLTVTGKSVKEVMKPDDDETFAKFYRSVDYNMPRSPVEM
DEDFDVIFDPYAPKLTSSVAEHKRAVRPKRRVQASKNPLKMLAAREDLLQEYTEQRLNVAFMESKRMKVEKMSSN
SNFSEVTLAGLASKENFSNVSLRSVNLTEQNSNNSAVPYKRLMLLQIKGRRHVQTRLVEPRASALNSGDCFLLLS
PHCCFLWVGEFANVIEKAKASELATLIQTKRELGCRATYIQTIEEGINTHTHAAKDFWKLLGGQTSYQSAGDPKE
DELYEAAIIETNCIYRLMDDKLVPDDDYWGKIPKCSLLQPKEVLVFDFGSEVYVWHGKEVTLAQRKIAFQLAKHL
WNGTFDYENCDINPLDPGECNPLIPRKGQGRPDWAIFGRLTEHNETILFKEKFLDWTELKRSNEKNPGELAQHKE
DPRTDVKAYDVTRMVSMPQTTAGTILDGVNVGRGYGLVEGHDRRQFEITSVSVDVWHILEFDYSRLPKQSIGQFH
EGDAYVVKWKFMVSTAVGSRQKGEHSVRAAGKEKCVYFFWQGRHSTVSEKGTSALMTVELDEERGAQVQVLQGKE
PPCFLQCFQGGMVVHSGRREEEEENVQSEWRLYCVRGEVPVEGNLLEVACHCSSLRSRTSMVVLNVNKALIYLWH
GCKAQAHTKEVGRTAANKIKEQCPLEAGLHSSSKVTIHECDEGSEPLGFWDALGRRDRKAYDCMLQDPGSFNFAP
RLFILSSSSGDFAATEFVYPARAPSVVSSMPFLQEDLYSAPQPALFLVDNHHEVYLWQGWWPIENKITGSARIRW
ASDRKSAMETVLQYCKGKNLKKPAPKSYLIHAGLEPLTFTNMFPSWEHREDIAEITEMDTEVSNQITLVEDVLAK
LCKTIYPLADLLARPLPEGVDPLKLEIYLTDEDFEFALDMTRDEYNALPAWKQVNLKKAKGLF

FIGURE 6736

CGGTAGAGTGATTTTCCCTCGGTGACTCAACTGGGACGTAGCAGGTCGGGCAGTCAAGCCAGGTGACCCCATGAG
CTGTCGCTGCATCTTTCTCATGAAGCACGGGGAACGGGTCGGATGGCCCGTGGGAGTCAGCATGCCGCGTGGCTG
GGCCGCCCCCTTGCTCCTGCTGCTGCTCCAGGGAGGCTGGGGCTGCCCCGACCTCGTCTGCTACACCGATTACCT
CCAGACGGTCATCTGCATCCTGGAAATGTGGAACCTCCACCCCAGCACGCTCACCCTTACCTGGCAAGACCAGTA
TGAAGAGCTGAAGGACGAGGCCACCTCCTGCAGCCTCCACAGGTCGGCCCACAATGCCACGCATGCCACCTACAC
CTGCCACATGGATGTATTCCACTTCATGGCCGACGACATTTTCAGTGTCAACATCACAGACCAGTCTGGCAACTA
CTCCCAGGAGTGTGGCAGCTTTCTCCTGGCTGAGAGCATCAAGCCGGCTCCCCCTTTCAACGTGACTGTGACCTT
CTCAGGACAGTATAATATCTCCTGGCGCTCAGATTACGAAGACCCTGCCTTCTACATGCTGAAGGGCAAGCTTCA
GTATGAGCTGCAGTACAGGAACCGGGGAGACCCCTGGGCTGTGAGTCCGAGGAGAAAGCTGATCTCAGTGGACTC
AAGAAGTGTCTCCCTCCTCCCCCTGGAGTTCCGCAAAGACTCGAGCTATGAGCTGCAGGTGCGGGCAGGGCCCAT
GCCTGGCTCCTCCTACCAGGGGACCTGGAGTGAATGGAGTGACCCGGTCATCTTTCAGACCCAGTCAGAGGAGTT
AAAGGAAGGCTGGAACCCTCACCTGCTGCTTCTCCTCCTGCTTGTCATAGTCTTCATTCCTGCCTTCTGGAGCCT
GAAGACCCATCCATTGTGGAGGCTATGGAAGAAGATATGGGCCGTCCCCAGCCCTGAGCGGTTCTTCATGCCCCT
GTACAAGGGCTGCAGCGGAGACTTCAAGAAATGGGTGGGTGCACCCTTCACTGGCTCCAGCCTGGAGCTGGGACC
CTGGAGCCCAGAGGTGCCCTCCACCCTGGAGGTGTACAGCTGCCACCCACCACGGAGCCCGGCCAAGAGGCTGCA
GCTCACGGAGCTACAAGAACCAGCAGAGCTGGTGGAGTCTGACGGTGTGCCCAAGCCCAGCTTCTGGCCGACAGC
CCAGAACTCGGGGGGCTCAGCTTACAGTGAGGAGAGGGATCGGCCATACGGCCTGGTGTCCATTGACACAGTGAC
TGTGCTAGATGCAGAGAGGCCATGCACCTGGCCCTGCAGCTGTGAGGATGACGGCTACCCAGCCCTGGACCTGGA
TGCTGGCCTGGAGCCCAGCCCAGGCCTAGAGGACCCACTCTTGGATGCAGGGACCACAGTCCTGTCCTGTGGCTG
TGTCTCAGCTGGCAGCCCTGGGCTAGGAGGGCCCCTGGGAAGCCTCCTGGACAGACTAAAGCCACCCCTTGCAGA
TGGGGAGGACTGGGCTGGGGGACTGCCCTGGGGTGGCCGGTCACCTGGAGGGGTCTCAGAGAGTGAGGCGGGCTC
ACCCCTGGCCGGCCTGGATATGGACACGTTTGACAGTGGCTTTGTGGGCTCTGACTGCAGCAGCCCTGTGGAGTG
TGACTTCACCAGCCCCGGGGACGAAGGACCCCCCCGGAGCTACCTCCGCCAGTGGGTGGTCATTCCTCCGCCACT
TTCGAGCCCTGGACCCCAGGCCAGCTAATGAGGCTGACTGGATGTCCAGAGCTGGGCAGGCCACTGGGCCCTGAG
CCAGAGACAAGGTCACCTGGGCTGTGATGTGAAGACACCTGCAGCCTTTGGTCTCCTGGATGGGCCTTTGAGCCT
GATGTTTACAGTGTCTGTGTGTGTGTGTGCATATGTGTGTGTGTGCATATGCATGTGTGTGTGTGTGTGTCTT
AGGTGCGCAGTGGCATGTCCACGTGTGTGTGTGATTGCACGTGCCTGTGGGCCTGGGATAATGCCCATGGTACTC
CATGCATTCACCTGCCCTGTGCATGTCTGGACTCACGGAGCTCACCCATGTGCACAAGTGTGCACAGTAAACGTG
TTTGTGGTCAACAGATGACAACAGCCGTCCTCCCTCCTAGGGTCTTGTGTTGCAAGTTGGTCCACAGCATCTCCG
GGGCTTTGTGGGATCAGGGCATTGCCTGTGACTGAGGCGGAGCCCAGCCCTCCAGCGTCTGCCTCCAGGAGCTGC
AAGAAGTCCATATTGTTCCTTATCACCTGCCAACAGGAAGCGAAAGGGGATGGAGTGAGCCCATGGTGACCTCGG
GAATGGCAATTTTTTGGGCGGCCCCTGGACGAAGGTCTGAATCCCGACTCTGATACCTTCTGGCTGTGCTACCTG
AGCCAAGTCGCCTCCCCTCTCTGGGCTAGAGTTTCCTTATCCAGACAGTGGGGAAGGCATGACACACCTGGGGGA
AATTGGCGATGTCACCCGTGTACGGTACGCAGCCCAGAGCAGACCCTCAATAAACGTCAGCTTCCTTCAAAAAAA
AAAAAAAAAAAAAAAAA

FIGURE 6737

MPRGWAAPLLLLLLQGGWGCPDLVCYTDYLQTVICILEMWNLHPSTLTLTWQDQYEELKDEATSCSLHRSAHNAT
HATYTCHMDVFHFMADDIFSVNITDQSGNYSQECGSFLLAESIKPAPPFNVTVTFSGQYNISWRSDYEDPAFYML
KGKLQYELQYRNRGDPWAVSPRRKLISVDSRSVSLLPLEFRKDSSYELQVRAGPMPGSSYQGTWSEWSDPVIFQT
QSEELKEGWNPHLLLLLLLVIVFIPAFWSLKTHPLWRLWKKIWAVPSPERFFMPLYKGCSGDFKKWVGAPFTGSS
LELGPWSPEVPSTLEVYSCHPPRSPAKRLQLTELQEPAELVESDGVPKPSFWPTAQNSGGSAYSEERDRPYGLVS
IDTVTVLDAERPCTWPCSCEDDGYPALDLDAGLEPSPGLEDPLLDAGTTVLSCGCVSAGSPGLGGPLGSLLDRLK
PPLADGEDWAGGLPWGGRSPGGVSESEAGSPLAGLDMDTFDSGFVGSDCSSPVECDFTSPGDEGPPRSYLRQWVV
IPPPLSSPGPQAS

FIGURE 6738

GTTGCCGCTGCGCACCTGGCTCAGGTGAGCTGCCCCGCCCCCGCCCGGCGCGAGCCCCAGGTCCTGGCAGCAGCC
CCTGACCTGTCCAGGTGCCCTGTCCAGCTGACTGCAAGGACAGAGAGGAGTCCTGCCCAGCTCTTGGATCAGTCT
GCTGGCCGAGGAGCCCGGTGGAGCCAGGGGTGACCCTGGAGCCCAGCCTGCCCCGAGGAGGCCCCGGCTCAGAGC
CATGCCAGGTGTCTGTGATAGGGCCCCTGACTTCCTCTCCCCGTCTGAAGACCAGGTGCTGAGGCCTGCCTTGGG
CAGCTCAGTGGCTCTGAACTGCACGGCTTGGGTAGTCTCTGGGCCCCACTGCTCCCTGCCTTCAGTCCAGTGGCT
GAAAGACGGGCTTCCATTGGGAATTGGGGGCCACTACAGCCTCCACGAGTACTCCTGGGTCAAGGCCAACCTGTC
AGAGGTGCTTGTGTCCAGTGTCCTGGGGGTCAACGTGACCAGCACTGAAGTCTATGGGGCCTTCACCTGCTCCAT
CCAGAACATCAGCTTCTCCTCCTTCACTCTTCAGAGAGCTGGCCCTACAAGCCACGTGGCTGCGGTGCTGGCCTC
CCTCCTGGTCCTGCTGGCCCTGCTGCTGGCCGCCCTGCTCTATGTCAAGTGCCGTCTCAACGTGCTGCTCTGGTA
CCAGGACGCGTATGGGGAGGTGGAGATAAACGACGGGAAGCTCTACGACGCCTACGTCTCCTACAGCGACTGCCC
CGAGGACCGCAAGTTCGTGAACTTCATCCTAAAGCCGCAGCTGGAGCGGCGTCGGGGCTACAAGCTCTTCCTGGA
CGACCGCGACCTCCTGCCGCGCGCTGAGCCCTCCGCCGACCTCTTGGTGAACCTGAGCCGCTGCCGACGCCTCAT
CGTGGTGCTTTCGGACGCCTTCCTGAGCCGGGCCTGGTGCAGCCACAGCTTCCGGGAGGGCCTGTGCCGGCTGCT
GGAGCTCACCCGCAGACCCATCTTCATCACCTTCGAGGGCCAGAGGCGCGACCCCGCGCACCCGGCGCTCCGCCT
GCTGCGCCAGCACCGCCACCTGGTGACCTTGCTGCTCTGGAGGCCCGGCTCCGTGACTCCTTCCTCCGATTTTTG
GAAAGAAGTGCAGCTGGCGCTGCCGCGGAAGGTGCGGTACAGGCCGGTGGAAGGAGACCCCCAGACGCAGCTGCA
GGACGACAAGGACCCCATGCTGATTCTTCGAGGCCGAGTCCCTGAGGGCCGGGCCCTGGACTCAGAGGTGGACCC
GGACCCTGAGGGCGACCTGGGTGTCCGGGGGCCTGTTTTTGGAGAGCCATCAGCTCCACCGCACACCAGTGGGGT
CTCGCTGGGAGAGAGCCGGAGCAGCGAAGTGGACGTCTCGGATCTCGGCTCGCGAAACTACAGTGCCCGCACAGA
CTTCTACTGCCTGGTGTCCAAGGATGATATGTAGCTCCCACCCCAGAGTGCAGGATCATAGGGACAGCGGGGGCC
AGGGCAGCGGCGTCGCTCCTCTGCTCAACAGGACCACAACCCCTGCCAGCAGCCCTGGGACCCTGCCAGCAGCCC
TGGGAAAAGGCTGTGGCCTCAGGGCGCCTCCCAGTGCCAGAAAATAAAGTCCTTTTGGATTCTGAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6739

MPGVCDRAPDFLSPSEDQVLRPALGSSVALNCTAWVVSGPHCSLPSVQWLKDGLPLGIGGHYSLHEYSWVKANLS
EVLVSSVLGVNVTSTEVYGAFTCSIQNISFSSFTLQRAGPTSHVAAVLASLLVLLALLLAALLYVKCRLNVLLWY
QDAYGEVEINDGKLYDAYVSYSDCPEDRKFVNFILKPQLERRRGYKLFLDDRDLLPRAEPSADLLVNLSRCRRLI
VVLSDAFLSRAWCSHSFREGLCRLLELTRRPIFITFEGQRRDPAHPALRLLRQHRHLVTLLLWRPGSVTPSSDFW
KEVQLALPRKVRYRPVEGDPQTQLQDDKDPMLILRGRVPEGRALDSEVDPDPEGDLGVRGPVFGEPSAPPHTSGV
SLGESRSSEVDVSDLGSRNYSARTDFYCLVSKDDM

FIGURE 6740

GCGAGATCCCTACCGCAGTAGCCGCCTCTGCCGCCGCGGAGCTTCCCGAACCTCTCAGCCGCCCGGAGCCGCTCC
CGGAGCCCGGCCGTAGAGGCTGCAATCGCAGCCGGGAGCCCGCAGCCCGCGCCCCGAGCCCGCCGCCGCCCTTCG
AGGGCGCCCCAGGCCGCGCC**ATG**GTGAAGGTGACGTTCAACTCCGCTCTGGCCCAGAAGGAGGCCAAGAAGGACG
AGCCCAAGAGCGGCGAGGAGGCGCTCATCATCCCCCCCGACGCCGTCGCGGTGGACTGCAAGGACCCAGATGATG
TGGTACCAGTTGGCCAAAGAAGAGCCTGGTGTTGGTGCATGTGCTTTGGACTAGCATTTATGCTTGCAGGTGTTA
TTCTAGGAGGAGCATACTTGTACAAATATTTTGCACTTCAACCAGATGACGTGTACTACTGTGGAATAAAGTACA
TCAAAGATGATGTCATCTTAAATGAGCCCTCTGCAGATGCCCCAGCTGCTCTCTACCAGACAATTGAAGAAAATA
TTAAAATCTTTGAAGAAGAAGAAGTTGAATTTATCAGTGTGCCTGTCCCAGAGTTTGCAGATAGTGATCCTGCCA
ACATTGTTCATGACTTTAACAAGAAACTTACAGCCTATTTAGATCTTAACCTGGATAAGTGCTATGTGATCCCTC
TGAACACTTCCATTGTTATGCCACCCAGAAACCTACTGGAGTTACTTATTAACATCAAGGCTGGAACCTATTTGC
CTCAGTCCTATCTGATTCATGAGCACATGGTTATTACTGATCGCATTGAAAACATTGATCACCTGGGTTTCTTTA
TTTATCGACTGTGTCATGACAAGGAAACTTACAAACTGCAACGCAGAGAAACTATTAAAGGTATTCAGAAACGTG
AAGCCAGCAATTGTTTCGCAATTCGGCATTTTGAAAACAAATTTGCCGTGGAAACTTTAATTTGTTTTAATTTGT
TCTTGAACAGTCAAGAAAAACATTAT**TGA**GGAAAATTAATATCACAGCATAACCCCACCCTTTACATTTTGTGCA
GTGATTATTTTTTAAAGTCTTCTTTCATGTAAGTAGCAAACAGGGCTTTACTATCTTTTCATCTCATTAATTCAA
TTAAAACCATTACCTTAAAATTTTTTTCTTTCGAAGTGTGGTGTCTTTTATATTTGAATTAGTAACTGTATGAAG
TCATAGATAATAGTACATGTCACCTTAGGTAGTAGGAAGAATTACAATTTCTTTAAATCATTTATCTGGATTTTT
ATGTTTTATTAGCATTTTCAAGAAGACGGATTATCTAGAGAATAATCATATATATGCATACGTAAAAATGGACCA
CAGTGACTTATTTGTAGTTGTTAGTTGCCCTGCTACCTAGTTTGTTAGTGCATTTGAGCACACATTTTAATTTTC
CTCTAATTAAAATGTGCAGTATTTTCAGTGTCAAATATATTTAACTATTTAGAGAATGATTTCCACCTTTATGTT
TTAATATCCTAGGCATCTGCTGTAATAATATTTTAGAAAATGTTTGGAATTTAAGAAATAACTTGTGTTACTAAT
TTGTATAACCCATATCTGTGCAATGGAATATAAATATCACAAAGTTGTTTAACTAGACTGCGTGTTGTTTTTCCC
GTATAATAAAACCAAAGAATAGTTTGGTTCTTCAAATCTTAAGAGAATCCACATAAAAGAAGAAACTATTTTTTA
AAAATTCACTTCTATATATACAATGAGTAAAATCACAGATTTTTTCTTTAAATAAAAATAAGTCATTTTAATAAC
TAAACCAGATTCTTTGTGGATACTATTAAAGTAACATTTAAGCCTCAACCTTG

FIGURE 6741

MVKVTFNSALAQKEAKKDEPKSGEEALIIPPDAVAVDCKDPDDVVPVGQRRAWCWCMCFGLAFMLAGVILGGAYL
YKYFALQPDDVYYCGIKYIKDDVILNEPSADAPAALYQTIEENIKIFEEEEVEFISVPVPEFADSDPANIVHDFN
KKLTAYLDLNLDKCYVIPLNTSIVMPPRNLLELLINIKAGTYLPQSYLIHEHMVITDRIENIDHLGFFIYRLCHD
KETYKLQRRETIKGIQKREASNCFAIRHFENKFAVETLICFNLFLNSQEKHY

FIGURE 6742

CCGGGGCG**ATG**TGGAGCGCGGGCCGCGGCGGGGCTGCCTGGCCGGTGCTGTTGGGGCTGCTGCTGGCGCTGTTAG
TGCCGGGCGGTGGTGCCGCCAAGACCGGTGCGGAGCTCGTGACCTGCGGGTCGGTGCTGAAGCTGCTCAATACGC
ACCACCGCGTGCGGCTGCACTCGCACGACATCAAATACGGATCCGGCAGCGGCCAGCAATCGGTGACCGGCGTAG
AGGCGTCGGACGACGCCAATAGCTACTGGCGGATCCGCGGCGGCTCGGAGGGCGGGTGCCCGCGCGGGTCCCCGG
TGCGCTGCGGGCAGGCGGTGAGGCTCACGCATGTGCTTACGGGCAAGAACCTGCACACGCACCACTTCCCGTCGC
CGCTGTCCAACAACCAGGAGGTGAGTGCCTTTGGGGAAGACGGCGAGGGCGACGACCTGGACCTATGGACAGTGC
GCTGCTCTGGACAGCACTGGGAGCGTGAGGCTGCTGTGCGCTTCCAGCATGTGGGCACCTCTGTGTTCCTGTCAG
TCACGGGTGAGCAGTATGGAAGCCCCATCCGTGGGCAGCATGAGGTCCACGGCATGCCCAGTGCCAACACGCACA
ATACGTGGAAGGCCATGGAAGGCATCTTCATCAAGCCTAGTGTGGAGCCCTCTGCAGGTCACGATGAACTC**TGA**G
TGTGTGGATGGATGGGTGGATGGAGGGTGGCAGGTGGGGCGTCTGCAGGGCCACTCTTGGCAGAGACTTTGGGTT
TGTAGGGGTCCTCAAGTGCCTTTGTGATTAAAGAATGTTGGTCTATG

FIGURE 6743

MWSAGRGGAAWPVLLGLLLALLVPGGGAAKTGAELVTCGSVLKLLNTHHRVRLHSHDIKYGSGSGQQSVTGVEAS
DDANSYWRIRGGSEGGCPRGSPVRCGQAVRLTHVLTGKNLHTHHFPSPLSNNQEVSAFGEDGEGDDLDLWTVRCS
GQHWEREAAVRFQHVGTSVFLSVTGEQYGSPIRGQHEVHGMPSANTHNTWKAMEGIFIKPSVEPSAGHDEL

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FIGURE 6744

CAAGGTTCCAGCCCTCCTCCCAAATCCCAGCCACCCCTCCCCCACCAGTTTCTCCCCTCTAGGGGATGGAGGCTG
AGAGACCCCAGGAAGAAGAGGATGGTGAGCAGGGCCCCCCTCAGGATGAGGAAGGCTGGCCCCCTCCAAACTCCA
CCACTCGGCCTTGGCGATCTGCTCCTCCATCCCCTCCTCCTCCAGGGACCCGCCACACAGCCCTGGGACCCCGCT
CGGCCTCCCTGCTCTCCCTGCAGACTGAACTCCTTCTGGACCTGGTGGCTGAAGCCCAGTCCCGCCGCCTGGAGG
AGCAGAGGGCCACCTTCTACACCCCCCAAAACCCCTCAAGCCTAGCCCCTGCCCCACTCCGTCCTCTCGAGGACA
GAGAACAGCTTTACAGCACTATCCTCAGTCACCAGTGCCAGCGGATGGAAGCCCAGCGGTCAGAGCCTCCCCTCC
CTCCAGGGGGGCAAGAGCTCCTGGAGTTGCTGCTGAGAGTTCAGGGTGGGGGTCGAATGGAGGAGCAAAGGTCCC
GGCCCCCCACACACACCTGCTGAGACTTGAGCCCCAACCAGCCCTTCCTTGCCACTGGTCTCAAAGCTGGGCAGC
CCATTGCATGCCCTCAACTCTTGCTTGGCAGGGGTACCAGAGACTGAAAGACACGGCACAAATCTCAATATTCAT
CTCCCACATCACCTTCCCTGGGAACTGGACAGGGTGAAAGTCCTCAAACTCTGGGAACAGGCGAGATGGAACAGG
GATTTAACTCCCCGCCCACAGGTCCATGGGAGCTTGAGGCAGTAAGGGGGATCCCAGGCACCCATCTCAAGGAGT
GGCTGGGAGTCTTTTCCCTAACTTGTGGGGACACCACCAGTTGTCAAGCTACTAGGCAGTAGGGTCTGAGGGCTC
AGGCCTCCACCTGAGAGGTTATAACCTGAGAGACAGCTCTACCCTTCCTCCCAGTAAGAAGGGAAGGTGGGTGGG
CACCTGAGAGATTAAGACTATTCTCCCAGTCCCACTACCAGCACCCCCGATCCCTGAGACTGAGGGGTTTACGGG
CTGTGAATGGACCTTCAGCCCTGCCCACCCTCCCTCCCCACTGCTGCTGAGTCTGTCTGATGTTTTGGTTGTGTG
AATAAATATAATTCCCCTCTGGAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6745

MEAERPQEEEDGEQGPPQDEEGWPPPNSTTRPWRSAPPSPPPPGTRHTALGPRSASLLSLQTELLLDLVAEAQSR
RLEEQRATFYTPQNPSSLAPAPLRPLEDREQLYSTILSHQCQRMEAQRSEPPLPPGGQELLELLLRVQGGGRMEE
QRSRPPTHTC

FIGURE 6746

GTTCTATTGAATGAGATTCTGGAGCAAGTAAAAGATAGGACATGTCTGAGAGCTTTGGAGAAAATCAAGATTCAG
TTAGAAAAAGGAAATAAAGAATTTGGTGACCAAGCTGAAGCAGCACAGGATGCCACCTTGACTACAACTACTTTC
CAAAATGAAGATGAAAAGAATAAAGAAGTATATATGACTCCACTCAGGGGTGTAAAAGCAACCCAAGCATCAAAG
TCTACTCAGCTAAAGACTAACAGAGGACAGAGAAAAGTGACAGTTTCAGCTAGGACGAACAGGAGGTGTCAGACT
GCTGAAGCCGACTCTGAAAGTGATCATGAAGTTCCAGAACCAGAATCAGAAATGAAGATGAGACTACCAAGACGA
GCCAAAACCGCAGCACTAGAAAAAAGTAAACTTAACCTTGCCCAATTTCTCAATGAAGATCTAAGTTAGGAAAGA
CGATGGAGGTGGAATCCTTTAAGATTATGTCCAGTTATTTGCTTTAATAAAGAAGAAGTTACCCTTGTCAAAATC
AAAAAAAAAAAAAAA

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FIGURE 6747

CGGAATTGGTGGGTTCTTGGTCTCACTGAGTTCTAGAATGAAGCTGCAGACCCTCGCAGTGAGTGTTACAGCTCT
TAAGGCTCTCTGACTGCCACCCCTGCCTGCCTGCCCGGCCCTGCACAACATGCAGCCCTCCGGCCTCGAGGGTCC
CGGCACGTTTGGTCGGTGGCCTCTGCTGAGTCTGCTGCTCCTGCTGCTGCTGCTCCAGCCTGTAACCTGTGCCTA
CACCACGCCAGGCCCCCCCAGAGCCCTCACCACGCTGGGCGCCCCCAGAGCCCACACCATGCCGGGCACCTACGC
TCCCTCGACCACACTCAGTAGTCCCAGCACCCAGGGCCTGCAAGAGCAGGCACGGGCCCTGATGCGGGACTTCCC
GCTCGTGGACGGCCACAACGACCTGCCCCTGGTCCTAAGGCAGGTTTACCAGAAAGGGCTACAGGATGTTAACCT
GCGCAATTTCAGCTACGGCCAGACCAGCCTGGACAGGCTTAGAGATGGCCTCGTGGGCGCCCAGTTCTGGTCAGC
CTATGTGCCATGCCAGACCCAGGACCGGGATGCCCTGCGCCTCACCCTGGAGCAGATTGACCTCATACGCCGCAT
GTGTGCCTCCTATTCTGAGCTGGAGCTTGTGACCTCGGCTAAAGCTCTGAACGACACTCAGAAATTGGCCTGCCT
CATCGGTGTAGAGGGTGGCCACTCGCTGGACAATAGCCTCTCCATCTTACGTACCTTCTACATGCTGGGAGTGCG
CTACCTGACGCTCACCCACACCTGCAACACACCCTGGGCAGAGAGCTCCGCTAAGGGCGTCCACTCCTTCTACAA
CAACATCAGCGGGCTGACTGACTTTGGTGAGAAGGTGGTGGCAGAAATGAACCGCCTGGGCATGATGGTAGACTT
ATCCCATGTCTCAGATGCTGTGGCACGGCGGGCCCTGGAAGTGTCACAGGCACCTGTGATCTTCTCCCACTCGGC
TGCCCGGGGTGTGTGCAACAGTGCTCGGAATGTTCCTGATGACATCCTGCAGCTTCTGAAGAAGAACGGTGGCGT
CGTGATGGTGTCTTTGTCCATGGGAGTAATACAGTGCAACCCATCAGCCAATGTGTCCACTGTGGCAGATCACTT
CGACCACATCAAGGCTGTCATTGGATCCAAGTTCATCGGGATTGGTGGAGATTATGATGGGGCCGGCAAATTCCC
TCAGGGGCTGGAAGACGTGTCCACATACCCGGTCCTGATAGAGGAGTTGCTGAGTCGTGGCTGGAGTGAGGAAGA
GCTTCAGGGTGTCCTTCGTGGAAACCTGCTGCGGGTCTTCAGACAAGTGGAAAAGGTACAGGAAGAAAACAAATG
GCAAAGCCCCTTGGAGGACAAGTTCCCGGATGAGCAGCTGAGCAGTTCCTGCCACTCCGACCTCTCACGTCTGCG
TCAGAGACAGAGTCTGACTTCAGGCCAGGAACTCACTGAGATTCCCATACACTGGACAGCCAAGTTACCAGCCAA
GTGGTCAGTCTCAGAGTCCTCCCCCCACATGGCCCCAGTCCTTGCAGTTGTGGCCACCTTCCCAGTCCTTATTCT
GTGGCTCTGATGACCCAGTTAGTCCTGCCAGATGTCACTGTAGCAAGCCACAGACACCCCACAAAGTTCCCCTGT
TGTGCAGGCACAAATATTTCTTGAAATAAATGTTTTGGACATAGAAAAAA

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FIGURE 6748

MQPSGLEGPGTFGRWPLLSLLLLLLLLQPVTCAYTTPGPPRALTTLGAPRAHTMPGTYAPSTTLSSPSTQGLQEQ
ARALMRDFPLVDGHNDLPLVLRQVYQKGLQDVNLRNFSYGQTSLDRLRDGLVGAQFWSAYVPCQTQDRDALRLTL
EQIDLIRRMCASYSELELVTSAKALNDTQKLACLIGVEGGHSLDNSLSILRTFYMLGVRYLTLTHTCNTPWAESS
AKGVHSFYNNISGLTDFGEKVVAEMNRLGMMVDLSHVSDAVARRALEVSQAPVIFSHSAARGVCNSARNVPDDIL
QLLKKNGGVVMVSLSMGVIQCNPSANVSTVADHFDHIKAVIGSKFIGIGGDYDGAGKFPQGLEDVSTYPVLIEEL
LSRGWSEEELQGVLRGNLLRVFRQVEKVQEENKWQSPLEDKFPDEQLSSSCHSDLSRLRQRQSLTSGQELTEIPI
HWTAKLPAKWSVSESSPHMAPVLAVVATFPVLILWL

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FIGURE 6749

CGGGAAAGGGCTGTGTTTATGGGAAGCCAGTAACACTGTGGCCTACTATCTCTTCCGTGGTGCCATCTACATTTT
TGGGACTCGGGAATTATGAGGTAGAGGTGGAGGCGGAGCCGGATGTCAGAGGTCCTGAAATAGTCACCATGGGGG
AAAATGATCCGCCTGCTGTTGAAGCCCCCTTCTCATTCCGATCGCTTTTTGGCCTTGATGATTTGAAAATAAGTC
CTGTTGCACCAGATGCAGATGCTGTTGCTGCACAGATCCTGTCACTGCTGCCATTTGAAGTTTTTTCCCAATCAT
CGTCATTGGGGATCATTGCATTGATATTAGCACTGGCCATTGGTCTGGGCATCCACTTCGACTGCTCAGGGAAGT
ACAGATGTCGCTCATCCTTTAAGTGTATCGAGCTGATAACTCGATGTGACGGAGTCTCGGATTGCAAAGACGGGG
AGGACGAGTACCGCTGTGTCCGGGTGGGTGGTCAGAATGCCGTGCTCCAGGTGTTCACAGCTGCTTCGTGGAAGA
CCATGTGCTCCGATGACTGGAAGGGTCACTACGCAAATGTTGCCTGTGCCCAACTGGGTTTCCCAAGCTATGTGA
GTTCAGATAACCTCAGAGTGAGCTCGCTGGAGGGGCAGTTCCGGGAGGAGTTTGTGTCCATCGATCACCTCTTGC
CAGATGACAAGGTGACTGCATTACACCACTCAGTATATGTGAGGGAGGGATGTGCCTCTGGCCACGTGGTTACCT
TGCAGTGCACAGCCTGTGGTCATAGAAGGGGCTACAGCTCACGCATCGTGGGTGGAAACATGTCCTTGCTCTCGC
AGTGGCCCTGGCAGGCCAGCCTTCAGTTCCAGGGCTACCACCTGTGCGGGGGCTCTGTCATCACGCCCCTGTGGA
TCATCACTGCTGCACACTGTGTTTATGACTTGTACCTCCCCAAGTCATGGACCATCCAGGTGGGTCTAGTTTCCC
TGTTGGACAATCCAGCCCCATCCCACTTGGTGGAGAAGATTGTTTACCACAGCAAGTACAAGCCAAAGAGGCTGG
GCAATGACATCGCCCTTATGAAGCTGGCCGGGCCACTCACGTTCAATGAAATGATCCAGCCTGTGTGCCTGCCCA
ACTCTGAAGAGAACTTCCCCGATGGAAAAGTGTGCTGGACGTCAGGATGGGGGGCCACAGAGGATGGAGGTGACG
CCTCCCCTGTCCTGAACCACGCGGCCGTCCCTTTGATTTCCAACAAAGATCTGCAACCACAGGGACGTGTACGGT
GGCATCATCTCCCCCTCCATGCTCTGCGCGGGCTACCTGACGGGTGGCGTTGGAACAGCTGCCAGGGGGACAGCG
GGGGGCCCCTGGTGTGTCAAGAGAGGAGGCTGTGGAAGTTAGTGGGAGCGACCAGCTTTGGCATCGGCTGCGCAG
ACGTGAACAAGCCTGGGGTGTACACCCGTGTCACCTCCTTCCTGGACTGGATCCACGAGCAGATGGAGAGAGACC
TAAAAACCTGAAGAGGAAGGGGACAAGTAGCCACCTGAGTTCCTGAGGTGATGAAGACAGCCCGATCCTCCCCTG
GACTCCCGTGTAGGAACCTGCACACGAGCAGACACCCTTGGAGCTCTGAGTTCCGGCACCAGTAGCGGGCCCGAA
AGAGGCACCCTTCCATCTGATTCCAGCACAACCTTCAAGCTGCTTTTTGTTTTTTGTTTTTTTGAGGTGGAGTCT
CGCTCTGTTGCCCAGGCTGGAGTGCAGTGGCGAAATACCCTGCTCACTGCAGCCTCCGCTTCCCTGGTTCAAGCG
ATTCTCTTGCCTCAGCTTCCCCAGTAGCTGGGACCACAGGTGCCCGCCACCACACCCAACTAATTTTTGTATTTT
TAGTAGAGACAGGGTTTCACCATGTTGGCCAGGCTGCTCTCAAACCCCTGACCTCAAATGATGTGCCTGCTTCAG
CCTCCCACAGTGCTGGGATTACAGGCATGGGCCACCACGCCTAGCCTCACGCTCCTTTCTGATCTTCACTAAGAA
CAAAAGAAGCAGCAACTTGCAAGGGCGGCCTTTCCCACTGGTCCATCTGGTTTTCTCTCCAGGGTCTTGCAAAAT
TCCTGACGAGATAAGCAGTTATGTGACCTCACGTGCAAAGCCACCAACAGCCACTCAGAAAAGACGCACCAGCCC
AGAAGTGCAGAACTGCAGTCACTGCACGTTTTCATCTTTAGGGACCAGAACCAAACCCACCCTTTCTACTTCCAA
GACTTATTTTCACATGTGGGGAGGTTAATCTAGGAATGACTCGTTTAAGGCCTATTTTCATGATTTCTTTGTAGC
ATTTGGTGCTTGACGTATTATTGTCCTTTGATTCCAAATAATATGTTTCCTTCCCTCAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAA

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FIGURE 6750

MGENDPPAVEAPFSFRSLFGLDDLKISPVAPDADAVAAQILSLLPFEVFSQSSSLGIIALILALAIGLGIHFDCS
GKYRCRSSFKCIELITRCDGVSDCKDGEDEYRCVRVGGQNAVLQVFTAASWKTMCSDDWKGHYANVACAQLGFPS
YVSSDNLRVSSLEGQFREEFVSIDHLLPDDKVTALHHSVYVREGCASGHVVTLQCTACGHRRGYSSRIVGGNMSL
LSQWPWQASLQFQGYHLCGGSVITPLWIITAAHCVYDLYLPKSWTIQVGLVSLLDNPAPSHLVEKIVYHSKYKPK
RLGNDIALMKLAGPLTFNEMIQPVCLPNSEENFPDGKVCWTSGWGATEDGGDASPVLNHAAVPLISNKDLQPQGR
VRWHHLPLHALRGLPDGWRWNSCQGDSGGPLVCQERRLWKLVGATSFGIGCADVNKPGVYTRVTSFLDWIHEQME
RDLKT

FIGURE 6751

CCACCCTGCGCTGTCCAGACTGAGGGGTCAGGCGGAGAGCCGGGCCGCGCCCTTCGGTCAGCTTCTCTCCCTTTC
ACCCGCGCCTCCTCGCGAGACCCGGGGCTGGGCCGTGCCCGTCGCCGCGCAGCAGGAAGGGAGCGGCTGCCACGG
AAAACGCCTGGCCGGACGCTTCCTTTCTCCTCACGACGGCCTCCACAGTCCGGAGCCCGGCGGAGCCCGGACCTG
GCGGGGAGAGCTGCCTCCACGGCCGGGCACCCAGACCCCACCGTCGCAGTCGCCACCACCTCAGTCCATCCTTGG
TACCGGCAATGGGCTTCGTATCCTCCAGTGCACTTGTAACTGACTTGGACACGGAATACTAAGAACTCACTTCTG
TCCTCATCCCAGTCGCGCCGGCGGTGACCATCTCGGCTCTTTTGGGCTTAACTGCCGCTCCTCTGGACTCTGTCT
GACTTTGGGGGCACC**ATG**GACCAAAGTGGGATGGAGATTCCTGTGACCCTCATCATTAAAGCACCGAATCAGAAA
TACAGTGACCAGACTATTAGCTGCTTCTTGAACTGGACCGTGGGGAAACTAAAAACGCATCTATCTAACGTTTAC
CCTAGCAAACCATTGACGAAGGATCAGAGATTGGTGTATTCGGGCAGACTGCTTCCCGATCATCTGCAGCTGAAA
GACATTCTCAGAAAACAAGATGAGTATCATATGGTTCATCTAGTATGTACTTCTCGGACTCCTCCCAGTTCTCCA
AAATCCAGCACCAATAGAGAAAGTCATGAAGCATTGACATCCAGCAGCAATTCTAGTTCAGATCATTCAGGATCA
ACAACTCCATCATCTGGTCAAGAAACCTTGTCTTTAGCTGTGGGTTCTTCCTCAGAAGGATTGAGGCAGCGTACC
CTTCCACAAGCACAAACTGACCAAGCACAGAGTCACCAGTTTCCATATGTAATGCAAGGAAATGTAGACAACCAA
TTTCCTGGGCAAGCTGCTCCACCTGGATTCCCAGTGTATCCCGCGTTTAGCCCACTGCAGATGCTATGGTGGCAA
CAGATGTATGCTCATCAGTATTATATGCAGTATCAAGCTGCAGTTTCAGCTCAGGCCACATCAAATGTCAACCCA
ACCCAGCCTACTACTTCACAGCCTCTAAATTTGGCACATGTTCCTGGAGAAGAACCCCCACCAGCTCCAAACCTA
GTGGCCCAAGAAAATCGACCCATGAATGAGAATGTTCAAATGAATGCACAGGGAGGTCCAGTACTAAATGAAGAA
GACTTCAATCGAGACTGGCTAGACTGGATGTACACGTTCTCACGAGCTGCGATTCTCCTTAGCATTGTATACTTC
TATTCTTCTTTTAGTCGGTTTATCATGGTAATGGGAGCCATGCTACTGGTTTATTTACACCAAGCTGGATGGTTT
CCTTTTAGGCAAGAAGGAGGTCATCAGCAGGCTCCCAACAATAATGCCGAAGTTAACAATGATGGGCAAAATGCA
AACAACTTGGAACTTGAAGAAATGGAGCGTCTTATGGATGATGGGCTTGAAGATGAGAGTGGAGAAGATGGAGGT
GAAGATGCCAGTGCAATTCAAAGGCCTGGATTAATGGCTTCAGCTTGGTCTTTCATCACCACCTTCTTTACTTCA
CTAATACCAGAGGGGCCTCCCCAGGTTGCCAAT**TGA**CCTGAAAAACTGTGCCAGCTACAAGGAGGGTCTGACTTC
AGGAAAGTGGTTTAAATAACAGTGCAATTTCAAAAAAATTTATAACTTTCTTTTGATCATCATGTACAGAGGTGT
TTTTTTTCTTTAGGCTTCTCATGCATATGAATATTTTAAGCACGAATGGACTACTAAATATCTGAGTTTTTTTTT
TTTTTTTTTAAAGATCCTAACAGAACATAGCGTAACAATATTGGTCTTCCAGGTGTTACTCATTTCAATTATGTG
TAGTATACCAGGACAGACCTATTTTCATGTCTTATTTCTTTAAAGAGCTGCTTCATTGGCCGGGCGCCATGGCTC
ACGTCTGTAATCCCAGCACTTTGGGAGGCCGAGGCGGGTGGGTTACTTGAGGTCAGGAGTTCGAGACCAGCCTGG
CAAACATGGCGAAACCCCATCTTAACTAAAAATACAAAAAAATTAGCCGGGTGTGGTGTCACGCGCCTGTAATCC
CAGCTACTTGGGGGGCTCAGGCAGGAGAATTGCCTGAACCCAGGAGGCGGAGGTTGCAGTGAGCTGAGATTGGGC
CACTGCACTCCACCCTGGGCGACAGAGTGAGACTCGGTCTCAGAAAAAAAAAAAAAAAAAA

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FIGURE 6752

MDQSGMEIPVTLIIKAPNQKYSDQTISCFLNWTVGKLKTHLSNVYPSKPLTKDQRLVYSGRLLPDHLQLKDILRK
QDEYHMVHLVCTSRTPPSSPKSSTNRESHEALTSSSNSSSDHSGSTTPSSGQETLSLAVGSSSEGLRQRTLPQAQ
TDQAQSHQFPYVMQGNVDNQFPGQAAPPGFPVYPAFSPLQMLWWQQMYAHQYYMQYQAAVSAQATSNVNPTQPTT
SQPLNLAHVPGEEPPPAPNLVAQENRPMNENVQMNAQGGPVLNEEDFNRDWLDWMYTFSRAAILLSIVYFYSSFS
RFIMVMGAMLLVYLHQAGWFPFRQEGGHQQAPNNNAEVNNDGQNANNLELEEMERLMDDGLEDESGEDGGEDASA
IQRPGLMASAWSFITTFFTSLIPEGPPQVAN

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FIGURE 6753

AGCGCCGCTGAATTCTAGGCAGAAAGAAAAGAGCTCCCAAATGCTATATCTATCAGGGGCTCTCAAGAACAATGG
AATATCATCCTGATTTAGAAAATTTGGATGAAGATGGATATACTCAATTACACTTCGACTCTCAAAGCAATACCA
GGATAGCTGTTGTTTCAGAGAAAGGATCGTGTGCTGCATCTCCTCCTTGGCGCCTCATTGCTGTAATTTTGGGAA
TCCTATGCTTGGTAATACTGGTGATAGCTGTGGTCCTGGGTACCATGGGGGTTCTTTCCAGCCCTTGTCCTCCTA
ATTGGATTATATATGAGAAGAGCTGTTATCTATTCAGCATGTCACTAAATTCCTGGGATGGAAGTAAAAGACAAT
GCTGGCAACTGGGCTCTAATCTCCTAAAGATAGACAGCTCAAATGAATTGGGATTTATAGTAAAACAAGTGTCTT
CCCAACCTGATAATTCATTTTGGATAGGCCTTTCTCGGCCCCAGACTGAGGTACCATGGCTCTGGGAGGATGGAT
CAACATTCTCTTCTAACTTATTTCAGATCAGAACCACAGCTACCCAAGAAAACCCATCTCCAAATTGTGTATGGA
TTCACGTGTCAGTCATTTATGACCAACTGTGTAGTGTGCCCTCATATAGTATTTGTGAGAAGAAGTTTTCAATGT
AAGAGGAAGGGTGGAGAAGGAGAGAGAAATATGTGAGGTAGTAAGGAGGACAGAAAACAGAACAGAAAAGAGTAA
CAGCTGAGGTCAAGATAAATGCAGAAAATGTTTAGAGAGCTTGGCCAACTGTAATCTTAACCAAGAAATTGAAGG
GAGAGGCTGTGATTTCTGTATTTGTCGACCTACAGGTAGGCTAGTATTATTTTTCTAGTTAGTAGATCCCTAGAC
ATGGAATCAGGGCAGCCAAGCTTGAGTTTTTATTTTTTATTTATTTATTTTTTTGAGATAGGGTCTCACTTTGTT
ACCCAGGCTGGAGTGCAGTGGCACAATCTCGACTCACTGCAGCTATCTCTCGCCTCAGCCCCTCAAGTAGCTGGG
ACTACAGGTGCATGCCACCATGCCAGGCTAATTTTTGGTGTTTTTTGTAGAGACTGGGTTTTGCCATGTTGACCA
AGCTGGTCTCTAACTCCTGGGCTTAAGTGATCTGCCCGCCTTGGCCTCCCAAAGTGCTGGGATTACAGATGTGAG
CCACCACACCTGGCCCCAAGCTTGAATTTTCATTCTGCCATTGACTTGGCATTTACCTTGGGTAAGCCATAAGCG
AATCTTAATTTCTGGCTCTATCAGAGTTGTTTCATGCTCAACAATGCCATTGGAGTGCACGGTGTGTTGCCACGA
TTTGACCCTCAACTTCTAGCAGTATATCAGTTATGAACTGAGGGTGAAATATATTTCTGAATAGCTAAATGAAGA
AATGGGAAAAAATCTTCACCACAGTCAGAGCAATTTTATTATTTTCATCAGTATGATCATAATTATGATTATCAT
CTTAGTAAAAAGCAGGAACTCCTACTTTTTCTTTATCAATTAAATAGCTCAGAGAGTACATCTGCCATATCTCTA
ATAGAATCTTTTTTTTTTTTTTTTTTTTTGAGACAGAGTTTCGCTCTTGTTGCCCAGGCTGGAGTGCAACGGCACG
ATCTCGGCTCACCGCAACCTCCGCCCCCTGGGTTCAAGCAATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGATT
ACAGTCAGGCACCACCACACCCGGCTAATTTTGTATTTTTTTAGTAGAGACAGGGTTTCTCCATGTCGGTCAGGG
TAGTCCCGAACTCCTGACCTCAAGTGATCTGCCTGCCTCGGCCTCCCAAGTGCTGGGATTACAGGCGTGAGCCAC
TGCACCCAGCCTAGAATCTTGTATAATATGTAATTGTAGGGAAACTGCTCTCATAGGAAAGTTTTCTGCTTTTTA
AATACAAAAATACCATAAAAATACATAAAATCTGATGATGAATATAAAAAGTAACCAACCTCATTGGAACAAGTA
TTAACATTTTGGAATATGTTTTATTAGTTTTGTGATGTACTGTTTTACAATTTTTACCATTTTTTTCCAGTAATT
ACCTGTAAAATGGTATTATTGGAATGAAACTATATTTCCTCATGTGCTGATTTGTCTTATTTTTTTCATACTTTC
CCACTGGTGCTATTTTTATTTCCAATGGATATTTCTGTATTACTAGGGAGGCATTTACAGTCCTCTAATGTTGAT
TAATATGTGAAAAGAAATTGTACCAATTTTACTAAATTATGCAGTTTAAAATGGATGATTTTATGTTATGTGGAT
TTCATTTCAATAAAAAAAAACTCTTATTA

FIGURE 6754

MEYHPDLENLDEDGYTQLHFDSQSNTRIAVVSEKGSCAASPPWRLIAVILGILCLVILVIAVVLGTMGVLSSPCP
PNWIIYEKSCYLFSMSLNSWDGSKRQCWQLGSNLLKIDSSNELGFIVKQVSSQPDNSFWIGLSRPQTEVPWLWED
GSTFSSNLFQIRTTATQENPSPNCVWIHVSVIYDQLCSVPSYSICEKKFSM

FIGURE 6755

ACTCTTGGACCCTAAAATCGTTTTTCTTAAGCAGCAAATTATCATCCTGATGGAACTATTCAAGTAAGCAATGGT
AGCCTTGCCTTTTACCCAGCACAGACGAATGTGTTTCCCAGACCTACTCAGCCATTTGTCAATAGCCGGGGATCT
GTTAGAGGATGTACTCGTGGTGGGAGATTAATAACCAATTCCTATCGGTCCCCTGGTGGTTATAAAGGTTTTGAT
ACTTATAGAGGACTCCCTTCAATTTCCAATGGAAATTATAGCCAGCTGCAGTTCCAAGCTAGAGAGTATTCTGGA
GCACCTTATTCCCAAAGGGATAATTTCCAGCAGTGTTATAAGCGAGGAGGGACATCTGGTGGTCCACGAGCAAAT
TCGAGAGCAGGGTGGAGTGATTCTTCTCAGGTGAGCAGCCCAGAAAGAGACAACGAAACCTTTAACAGTGGTGAC
TCTGGACAAGGAGACTCCCGTAGC**ATG**ACCCCTGTGGATGTGCCAGTGACAAATCCAGCAGCCACCATACTGCCA
GTACACGTCTACCCTCTGCCTCAGCAGATGCGAGTTGCCTTCTCAGCAGCCAGAACCTCTAATCTGGCCCCTGGA
ACTTTAGACCAACCTATTGTGTTTGATCTTCTTCTGAACAACTTAGGAGAAACTTTTGATCTTCAGCTTGGTAGA
TTTAATTGCCCAGTGAATGGCACTTACGTTTTCATTTTTCACATGCTAAAGCTGGCAGTGAATGTGCCACTGTAT
GTCAACCTCATGAAGAATGAAGAGGTCTTGGTATCAGCCTATGCCAATGATGGTGCTCCAGACCATGAAACTGCT
AGCAATCATGCAATTCTTCAGCTCTTCCAGGGAGACCAGATATGGTTACGTCTGCACAGGGGAGCAATTTATGGA
AGTAGCTGGAAATATTCTACGTTTTCAGGCTATCTTCTTTATCAAGAT**TGA**AAGTCAGTACAGTATTGACAATAA
AAGGATGGTGTTCTAATTAGTGGGATTGAAGGAAAAGTAGTCTTTGCCCTCATGACTGATTGGTTTAGGAAAATG
TTTTTGTTCCTAGAGGGAGGAGGTCCTTACTTTTTTGTTTTCCTTCCTGAGGTGAAAAATCAAGCTGAATGACAA
TTAGCACTAATCTGGCACTTTATAAATTGTGATGTAGCCTCGCTAGTCAAGCTGTGAATGTATATTGTTTGCACT
TAATCCTTAACTGTATTAACGTTCAGCTTACTAAACTGACTGCCTCAAGTCCAGGCAAGTTACAATGCCTTGTTG
TGCCTCAATAAAAAAGTTACATGCAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 6756

MTPVDVPVTNPAATILPVHVYPLPQQMRVAFSAARTSNLAPGTLDQPIVFDLLLNNLGETFDLQLGRFNCPVNGT
YVFIFHMLKLAVNVPLYVNLMKNEEVLVSAYANDGAPDHETASNHAILQLFQGDQIWLRLHRGAIYGSSWKYSTF
SGYLLYQD

FIGURE 6757

GGGGGCAGAGGGAGCGAGCGGGCGGCCGCCTAGGGTGCAAGAGCCGGGCGAGCAGAGTTGCGCTGCGGGCGTCCT
GGGAAGGGAGTTCCGGAGCCAACAGGGGGCTTCGCCTCTGGCCCAGCCCTTCCGGAGCCAACAGGGGACTTCGCC
TCTGGCCCAGCCCTCCCGCTGATCCCCCAGTCAGCGGTCCGCAAGCCTTGCCGCATCCACGAAACTTTGCCCATA
CTGCGGGCGTACACTTTGCACTTGAACTTACAACACCCGAGCAAGGACGCGACTCTCCCGACGCGGGGAGACTAT
TCTGCCCATTTGGGGACACTTCCCCGCCGCTGCCAGGACCCGGTTCTCTGGAAGGCTGTCCTTGAAGCTCCTTAG
ACGCTGGAGTTTTTTCGGGAAGTGGGAAAGCAGCCTCCCGCGACGATGCCCCTCAACGTTAGCTTCACCAACAGG
AACTATGACCTCGACTACGACTCGGTGCAGCCGTATTTCTACTGCGACGAGGAGGAGAACTTCTACCAGCAGCAG
CAGCAGAGCGAGCTGCAGCCCCCGGCGCCCAGCGAGGATATCTGGAAGAAATTCGAGCTGCTGCCCACCCCGCCC
CTGTCCCCTAGCCGCCGCTCCGGGCTCTGCTCGCCCTCCTACGTTGCGGTCACACCCTTCTCCCTTCGGGGAGAC
AACGACGGCGGTGGCGGGAGCTTCTCCACGGCCGACCAGCTGGAGATGGTGACCGAGCTGCTGGGAGGAGACATG
GTGAACCAGAGTTTCATCTGCGACCCGGACGACGAGACCTTCATCAAAAACATCATCATCCAGGACTGTATGTGG
AGCGGCTTCTCGGCCGCCGCCAAGCTCGTCTCAGAGAAGCTGGCCTCCTACCAGGCTGCGCGCAAAGACAGCGGC
AGCCCGAACCCCGCCCGCGGCCACAGCGTCTGCTCCACCTCCAGCTTGTACCTGCAGGATCTGAGCGCCGCCGCC
TCAGAGTGCATCGACCCCTCGGTGGTCTTCCCCTACCCTCTCAACGACAGCAGCTCGCCCAAGTCCTGCGCCTCG
CAAGACTCCAGCGCCTTCTCTCCGTCCTCGGATTCTCTGCTCTCCTCGACGGAGTCCTCCCCGCAGGGCAGCCCC
GAGCCCCTGGTGCTCCATGAGGAGACACCGCCCACCACCAGCAGCGACTCTGAGGAGGAACAAGAAGATGAGGAA
GAAATCGATGTTGTTTCTGTGGAAAAGAGGCAGGCTCCTGGCAAAAGGTCAGAGTCTGGATCACCTTCTGCTGGA
GGCCACAGCAAACCTCCTCACAGCCCACTGGTCCTCAAGAGGTGCCACGTCTCCACACATCAGCACAACTACGCA
GCGCCTCCCTCCACTCGGAAGGACTATCCTGCTGCCAAGAGGGTCAAGTTGGACAGTGTCAGAGTCCTGAGACAG
ATCAGCAACAACCGAAAATGCACCAGCCCCAGGTCCTCGGACACCGAGGAGAATGTCAAGAGGCGAACACACAAC
GTCTTGGAGCGCCAGAGGAGGAACGAGCTAAAACGGAGCTTTTTTGCCCTGCGTGACCAGATCCCGGAGTTGGAA
AACAATGAAAAGGCCCCCAAGGTAGTTATCCTTAAAAAAGCCACAGCATACATCCTGTCCGTCCAAGCAGAGGAG
CAAAAGCTCATTTCTGAAGAGGACTTGTTGCGGAAACGACGAGAACAGTTGAAACACAAACTTGAACAGCTACGG
AACTCTTGTGCGTAAGGAAAAGTAAGGAAAACGATTCCTTCTAACAGAAATGTCCTGAGCAATCACCTATGAACT
TGTTTCAAATGCATGATCAAATGCAACCTCACAACCTTGGCTGAGTCTTGAGACTGAAAGATTTAGCCATAATGT
AAACTGCCTCAAATTGGACTTTGGGCATAAAAGAACTTTTTATGCTTACCATCTTTTTTTTTTCTTTAACAGATT
TGTATTTAAGAATTGTTTTTAAAAAATTTTAAGATTTACACAATGTTTCTCTGTAAATATTGCCATTAAATGTAA
ATAACTTTAATAAAAACGTTTATAGCAGTTACACAGAATTTCAATCCTAGTATATAGTACCTAGTATTATAGGTA
CTATAAACCCTAATTTTTTTTATTTAAGTACATTTTGCTTTTTAAAGTTGATTT

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FIGURE 6758

CTGGTGGGCGTCAGGGGCAGGCAACAGAGTGGCGGCCGCTACGGCCCTGGAACGGGGCCATGGAGAAGCTGCGGC
GAGTCCTGAGCGGCCAGGACGACGAGGAGCAGGGCCTGACTGCGCAGGTCCTGGATGCCTCATCCCTTAGTTTCA
ACACCAGATTGAAATGGTTTGCCATCTGCTTCGTATGTGGCGTTTTCTTTTCTATTCTTGGAACTGGATTGCTGT
GGCTTCCGGGCGGCATAAAGCTTTTTGCAGTGTTTTATACCCTCGGCAATCTTGCTGCGTTAGCCAGTACATGCT
TTTTAATGGGACCTGTGAAGCAACTGAAGAAAATGTGTGAAGCAACAAGATTGCTTGCAACAATTGTTATGCTTT
TGTGTTTCATATTTACCCTGTGTGCTGCTCTTTGGTGGCATAAGAAAGGACTGGCTGTGTTATTCTGCATATTGC
AGTTCTTGTCAATGACCTGGTATAGCCTGTCGTACATCCCATATGCAAGGGATGCAGTTATTAAATGCTGTTCTT
CTCTCCTAAGTTGAAAATCAGAAACTTGTGGAAAAGAGCACTTGAATGTTGGTACTCTATGTTTGGTGAAGTTTG
CTTTTCCCCATAAAACACTCCAGGAACAACTGACGTGACAGTTGAAGACCGTXTTGTACTAAGTCTCATTTTGTA
TACTGGTAAAAACTACATGCTTGATTAAACCATTAAATGCTTGTAACTTTAAATTCATTATGTGTCATTAATATA
CTTTTCCAAAGATAAGATTTTTAATCACTGCCAGTTGTAAATTATTTTTAGCCAATTTTTAAATCTTTTCAAAGC
AGCTTTGAAATGTGAATATTTAAAGGTAGACCTGTGCTGCAAGATAATTAAACTTTTTTGCTTTTAAAAAATGTC
TGCATXTXTAAGATTTXTTTTACTTTAAATGTGAAACTTATTTXAAGCTAAAAATTGCTTATTATATGTAATAAA
AATAATATATAAATCTTTACAATTTTGAAATAAACCCATCCTTGGAAAAATAAAT

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FIGURE 6759

GGRQGQATEWRPLRPWNGAMEKLRRVLSGQDDEEQGLTAQVLDASSLSFNTRLKWFAICFVCGVFFSILGTGLLW
LPGGIKLFAVFYTLGNLAALASTCFLMGPVKQLKKMCEATRLLATIVMLLCFIFTLCAALWWHKKGLAVLFCILQ
FLSMTWYSLSYIPYARDAVIKCCSSLLS

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FIGURE 6760

ATGTGGGGGCGCACGGCGCGGCGGCGCTGCCCGCGGGAACTGCGGCGCGGCCGGGAGGCGCTGTTGGTGCTCCTG
GCGCTACTGGCGTTGGCCGGGCTGGGCTCGGTGCTGCGGGCGCAGCGTGGGGCCGGGGCCGGGGCTGCCGAGCCG
GGACCCCCGCGCACCCCGCGCCCCGGGCGGCGCGAGCCGGTCATGCCGCGGCCGCCGGTGCCGGCGAACGCGCTG
GGCGCGCGGGGCGAGGCGGTGCGGCTGCAGCTGCAGGGCGAGGAGCTGCGGCTGCAGGAGGAGAGCGTGCGGCTG
CACCAGATTAACATCTACCTCAGCGACCGCATCTCACTGCACCGCCGCCTGCCCGTGCGCTGGAACCCGCTGTGC
AAAGAGAAGAAATATGATTATGATAATTTGCCCAGGACATCTGTTATCATAGCATTTTATAATGAAGCCTGGTCA
ACTCTCCTTCGGACAGTTTACAGTGTCCTTGAGACATCCCCGGATATCCTGCTAGAAGAAGTGATCCTTGTAGAT
GACTACAGTGATAGAGAGCACCTGAAGGAGCGCTTGGCCAATGAGCTTTCGGGACTGCCCAAGGTGCGCCTGATC
CGCGCCAACAAGAGAGAGGGCCTGGTGCGAGCCCGGCTGCTGGGGGCGTCTGCGGCGAGGGGCGATGTTCTGACC
TTCCTGGACTGTCACTGTGAGTGCCACGAAGGGTGGCTGGAGCCGCTGCTGCAGAGGATCCATGAAGAGGAGTCG
GCAGTGGTGTGCCCGGTGATTGATGTGATCGACTGGAACACCTTCGAATACCTGGGGAACTCCGGGGAGCCCCAG
ATCGGCGGTTTCGACTGGAGGCTGGTGTTCACGTGGCACACAGTTCCTGAGAGGGAGAGGATACGGATGCAATCC
CCCGTCGATGTCATCAGGTCTCCAACAATGGCTGGTGGGCTGTTTGCTGTGAGTAAGAAATATTTTGAATATCTG
GGGTCTTATGATACAGGAATGGAAGTTTGGGGAGGAGAAAACCTCGAATTTTCCTTTAGGATCTGGCAGTGTGGT
GGGGTTCTGGAAACACACCCATGTTCCCATGTTGGCCATGTTTTCCCCAAGCAAGCTCCCTACTCCCGCAACAAG
GCTCTGGCCAACAGTGTTCGTGCAGCTGAAGTATGGATGGATGAATTTAAAGAGCTCTACTACCATCGCAACCCC
CGTGCCCGCTTGGAACCTTTTGGGGATGTGACAGAGAGGAAGCAGCTCCGGGACAAGCTCCAGTGTAAAGACTTC
AAGTGGTTCTTGGAGACTGTGTATCCAGAACTGCATGTGCCTGAGGACAGGCCTGGCTTCTTCGGGATGCTCCAG
AACAAAGGACTAACAGACTACTGCTTTGACTATAACCCTCCCGATGAAAACCAGATTGTGGGACACCAGGTCATT
CTGTACCTCTGTCATGGGATGGGCCAGAATCAGTTTTTCGAGTACACGTCCCAGAAAGAAATACGCTATAACACC
CACCAGCCTGAGGGCTGCATTGCTGTGGAAGCAGGAATGGATACCCTTATCATGCATCTCTGCGAAGAAACTGCC
CCAGAGAATCAGAAGTTCATCTTGCAGGAGGATGGATCTTTATTTCACGAACAGTCCAAGAAATGTGTCCAGGCT
GCGAGGAAGGAGTCGAGTGACAGTTTCGTTCCACTCTTACGAGACTGCACCAACTCGGATCATCAGAAATGGTTC
TTCAAAGAGCGCATGTTATGA

FIGURE 6761

MWGRTARRRCPRELRRGREALLVLLALLALAGLGSVLRAQRGAGAGAAEPGPPRTPRPGRREPVMPRPPVPANAL
GARGEAVRLQLQGEELRLQEESVRLHQINIYLSDRISLHRRLPVRWNPLCKEKKYDYDNLPRTSVIIAFYNEAWS
TLLRTVYSVLETSPDILLEEVILVDDYSDREHLKERLANELSGLPKVRLIRANKREGLVRARLLGASAARGDVLT
FLDCHCECHEGWLEPLLQRIHEEESAVVCPVIDVIDWNTFEYLGNSGEPQIGGFDWRLVFTWHTVPERERIRMQS
PVDVIRSPTMAGGLFAVSKKYFEYLGSYDTGMEVWGGENLEFSFRIWQCGGVLETHPCSHVGHVFPKQAPYSRNK
ALANSVRAAEVWMDEFKELYYHRNPRARLEPFGDVTERKQLRDKLQCKDFKWFLETVYPELHVPEDRPGFFGMLQ
NKGLTDYCFDYNPPDENQIVGHQVILYLCHGMGQNQFFEYTSQKEIRYNTHQPEGCIAVEAGMDTLIMHLCEETA
PENQKFILQEDGSLFHEQSKKCVQAARKESSDSFVPLLRDCTNSDHQKWFFKERML

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FIGURE 6762

AGTAGCAAGTGTGAAAGAATGGTTCAATTATGTTACAGCTACAAGGAATGAAGAGCTAAATCTGCTTCGTAATGT
TGATGCTAACAACACTGAGAATAGCACTACTGTGAAGAATTCTAGTTTGTTGAGTGGATTCAGAGGAGGTTCTAG
CTACAACCATGAAACAGAGACTATCTTTGCATTACCAAGGATGCAGCTTGACTTTAAATCCATTCATGTTCAAGA
ACCACAGGAGCCTTCATTACAGGATGCCAGCCTGAAGCCAAAAGTAGAATGTAGTGTGGTGACAGAGTTCACTGA
CCACATTTGTGTGACTATGGATGCTGAGCTCATCATGTTTCTTCATGATTTAGTATCAGCTTATCTTAAAGAAAA
AGAAAAAGCCATCTTTCCACCTCGGATTTTATCTACTCGACCAGGACAAAAAAGTCCAATTATTATACATGACGA
CAATTCCTCTGATAAAGATAGAGAAGATAGCATCACTTATACTACTGTGGACTGGAGAGATTTTATGTGCAATAC
ATGGCATCTAGAACCTACTCTTAGATTAATTTCTTGGACTGGAAGAAAGATTGATCCAGTAGGTGTTGATTATAT
TCTTCAAAAATTGGGCTTTCATCATGCTAGGACTACTATTCCTAAATGGCTTCAAAGAGGAGTCATGGATCCACT
GGACAAGGTTCTGTCAGTTCTTATCAAAAAGCTCGGTACTGCACTACAGGATGAAAAGGAAAAGAAAGGCAAAGA
CAAAGAAGAACACTAAAAAAAGTAATTTGATCTGTGAACAAATTATGATTGTGTCTGTTTTATTACACTGGAGTG
TTTTTTTAGTATAATAATTTGAAATATAACTTTAAAATAATTCTAAATTTGTGGCTATAATTAAAAGTTTGTAAG
TTAACCTGTTCTAGTTCCATCATTCTGTGTACAGTGAAGTATTGCATGATAATGTAAATTTTGTGAAAAACTAGA
TTAAAATATATAACTGCTTGTTATGGTTTATAATTATATAATGTGCAATACAATTCCTGCATCTTTAAAATGTCT
GCAGAATAACTGTGAATTTTTTTGTTATTGGATTGGCCGTAACTTTTAGAAAAAAATCTTGTTGATGATAATGTG
ATTTTGGGGAGGTCATTAATTGCTTTTTCTTTTTTAAATGTAGACTTATATAAATACCTGTTTGTATATAGCTTG
AGTAATTGTGATATGATTGTATACCACTAAAATATTGTTAACTATTATAATAAAGTCACAGTAATGGTTTAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAGAAAAAAAAAAAAAA

FIGURE 6763

GATAAACAACTTGATGCAGATGTTTCCCCCAAGCCCACTATTTTTCTTCCTTCAATTGCTGAAACAAAACTCCAG
AAGGCTGGAACATACCTTTGTCTTCTTGAGAAATTTTTCCCAGATATTATTAAGATACATTGGCAAGAAAAGAAG
AGCAACACGATTCTGGGATCCCAGGAGGGGAACACCATGAAGACTAACGACACATACATGAAATTTAGCTGGTTA
ACGGTGCCAGAAGAGTCACTGGACAAAGAACACAGATGTATCGTCAGACATGAGAATAATAAAAACGGAATTGAT
CAAGAAATTATCTTTCCTCCAATAAAGACAGATGTCACCACAGTGGATCCCAAATACAATTATTCAAAGGATGCA
AATGATGTCATCACAATGGATCCCAAAGACAATTGGTCAAAAGATGCAAATGATACACTACTGCTGCAGCTCACA
AACACCTCTGCATATTACATGTACCTCCTCCTGCTCCTCAAGAGTGTGGTCTATTTTGCCATCATCACCTGCTGT
CTGCTTGGAAGAACGGCTTTCTGCTGCAATGGAGAGAAATCATAACAGACGGTGGCACAAGGAGGCCATCTTTTC
CTCATCGGTTATTGTCCCTAGAAGCGTCTTCTGAGGATCTAGTTGGGCTTTCTTTCTGGGTTTGGGCCATTTCAG
TTCTCATGTGTGTACTATTCTATCTATTGTATAATGGTTTTCAAACCAGTGGGCACACAGAGAACCTCACTCTGT
AATAACAATGAGGAATAGCCATGGCGATCTCCAGCACCAATCTCTCCATGTTTTCCACAGCTCCTCCAGCCAACC
CAAATAGCGCCTGCTATAGTGTAGACAGCCTGCGGCTTCTAGCCTTGTCCCTCTCTTAGTGTTCTTTAATCAGAT
AACTGCCTGGAAGCCTTTCATTTTACACGCCCTGAAGCAGTCTTCTTTGCTAGTTGAATTATGTGGTGTGTTTTT
CCGTAATAAGCAAAATAAATTTAAAAAAATGAAAAGTT

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FIGURE 6764

ATGTTTATTGCAAGCAAATATGAAGAAATGTACCCTCCAGAAATTGGTGACTTTGCTTTTGTGACTGACAACACT
TATACTAAGCACCAAATCAGACAGATGGAAATGAAGATTCTAAGAGCTTTAAACTTTGGTCTGGGTCGGCCTCTA
CCTTTGCACTTCCTTCGGAGAGCATCTAAGATTGGAGAGGTTGATGTCGAGCAACATACTTTGGCCAAATACCTG
ATGGAACTAACTATGTTGGACTATGACATGGTGCACTTTCCTCCTTCTCAAATTGCAGCAGGAGCTTTTTGCTTG
GCACTGAAAATTCTGGATAATGGTGAATGGACACCAACT

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FIGURE 6765

GTGCTCACCCGGCCCGGTGCCACCCGGGTCCACAGGGATGCGAAGGAGCGGGACACC**ATG**AAGGAGGACGGCGGC
GCGGAGTTCTCGGCTCGCTCCAGGAAGAGGAAGGCAAACGTGACCGTTTTTTTGCAGGATCCAGATGAAGAAATG
GCCAAAATCGACAGGACGGCGAGGGACCAGTGTGGGAGCCAGCCTTGGGACAATAATGCAGTCTGTGCAGACCCC
TGCTCCCTGATCCCCACACCTGACAAAGAAGATGATGACCGGGTTTACCCAAACTCAACGTGCAAGCCTCGGATT
ATTGCACCATCCAGAGGCTCCCCGCTGCCTGTACTGAGCTGGGCAAATAGAGAGGAAGTCTGGAAAATCATGTTA
AACAAGGAAAAGACATACTTAAGGGATCAGCACTTTCTTGAGCAACACCCTCTTCTGCAGCCAAAAATGCGAGCA
ATTCTTCTGGATTGGTTAATGGAGGTGTGTGAAGTCTATAAACTTCACAGGGAGACCTTTTACTTGGCACAAGAT
TTCTTTGACCGGTATATGGCGACACAAGAAAATGTTGTAAAAACTCTTTTACAGCTTATTGGGATTTCATCTTTA
TTTATTGCAGCCAAACTTGAGGAAATCTATCCTCCAAAGTTGCACCAGTTTGCGTATGTGACAGATGGAGCTTGT
TCAGGAGATGAAATTCTCACCATGGAATTAATGATTATGAAGGCCCTTAAGTGGCGTTTAAGTCCCCTGACTATT
GTGTCCTGGCTGAATGTATACATGCAGGTTGCATATCTAAATGACTTACATGAAGTGCTACTGCCGCAGTATCCC
CAGCAAATCTTTATACAGATTGCAGAGCTGTTGGATCTCTGTGTCCTGGATGTTGACTGCCTTGAATTTCCTTAT
GGTATACTTGCTGCTTCGGCCTTGTATCATTTCTCGTCATCTGAATTGATGCAAAAGGTTTCAGGGTATCAGTGG
TGCGACATAGAGAACTGTGTCAAGTGGATGGTTCCATTTGCCATGGTTATAAGGGAGACGGGGAGCTCAAAACTG
AAGCACTTCAGGGGCGTCGCTGATGAAGATGCACACAACATACAGACCCACAGAGACAGCTTGGATTTGCTGGAC
AAAGCCCGAGCAAAGAAAGCCATGTTGTCTGAACAAAATAGGGCTTCTCCTCTCCCCAGTGGGCTCCTCACCCCG
CCACAGAGCGGTAAGAAGCAGAGCAGCGGGCCGGAAATGGCG**TGA**CCACCCCATCCTTCTCCACCAAAGACAGTT
GCGCGCCTGCTCCACGTTCTCTTCTGTCTGTTGCAGCGGAGGCGTGCGTTTGCTTTTACAGATATCTGAATGGAA
GAGTGTTTCTTCCACAACAGAAGTATTTCTGTGGATGGCATCAAACAGGGCAAAGTGTTTTTTATTGAATGCTTA
TAGGTTTTTTTTAAATAAGTGGGTCAAGTACACCAGCCACCTCCAGACACCAGTGCGTGCTCCCGATGCTGCTAT
GGAAGGTGCTACTTGACCTAAGGGACTCCCACAACAACAAAAGCTTGAAGCTGTGGAGGGCCACGGTGGCGTGGC
TCTCCTCGCAGGTGTTCTGGGCTCCGTTGTACCAAGTGGAGCAGGTGGTTGCGGGCAAGCGTTGTGCAGAGCCCA
TAGCCAGCTGGGCAGGGGGCTGCCCTCTCCACATTATCAGTTGACAGTGTACAATGCCTTTGATGAACTGTTTTG
TAAGTGCTGCTATATCTATCCATTTTTTAATAAAGATAATACTGTTTTTGAGACAAAAAAAA

FIGURE 6766

MKEDGGAEFSARSRKRKANVTVFLQDPDEEMAKIDRTARDQCGSQPWDNNAVCADPCSLIPTPDKEDDDRVYPNS
TCKPRIIAPSRGSPLPVLSWANREEVWKIMLNKEKTYLRDQHFLEQHPLLQPKMRAILLDWLMEVCEVYKLHRET
FYLAQDFFDRYMATQENVVKTLLQLIGISSLFIAAKLEEIYPPKLHQFAYVTDGACSGDEILTMELMIMKALKWR
LSPLTIVSWLNVYMQVAYLNDLHEVLLPQYPQQIFIQIAELLDLCVLDVDCLEFPYGILAASALYHFSSSELMQK
VSGYQWCDIENCVKWMVPFAMVIRETGSSKLKHFRGVADEDAHNIQTHRDSLDLLDKARAKKAMLSEQNRASPLP
SGLLTPPQSGKKQSSGPEMA

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FIGURE 6767

AAACCCCAGCTGGAACTCCGGCCACAGCCAGCATGCAGGGCGAAGAGAGCCTCCGGATCCTGGTGGAGCCCGAAG
GGGACAGCTTCCCGCTGATGGAGATCAGCACCTGTGAGACCGAGGCCTCCGAGCAGTGGGACTATGTCCTCGTGG
CCCAACGTCACACCCAGAGAGACCCCCGGCAGGCGCGGCAGCAACAGTTCCTGGAGGAGCTCAGGAGAAAGGGCT
TCCACATTAAGGTGATCCGGGACCAGAAACAGGTCTTCTTTGGGATCCGTGCTGACAACAGTGTCTTTGGCCTGT
ACCGCACTCTCCTCCTGGAGCCTGAGGGGCCTGCCCCCCACGCCGAGCTGGCCGCGCCGACCACCATCCCGGTCA
CCACGAGTCTCAGAATCCGAATCGTGAACTTCGTTGTCATGAACAACAAGACCTCGGCTGGTGAGACCTTCGAGG
ATCTGATGAAGGACGGGGTCTTTGAGGCCAGGTTCCCCCTGCACAAGGGGGAGGGACGCCTGAAGAAGACGTGGG
CGCGGTGGAGACACATGTTCCGGGAGCAGCCAGTTGATGAAATCAGGAACTACTTTGGGGAAAAGGTGGCCCTGT
ACTTCGTCTGGCTGGGCTGGTACACCTACATGCTGGTGCCGGCCGCCCTGACGGGCCTCTTAGTCTTTCTGAGCG
GATTCTCGCTGTTTGAGGCCAGCCAGATCAGCAAGGAGATCTGTGAGGCCCACGACATCCTCATGTGTCCCCTCG
GCGACCACAGCCGCAGGTACCAGCGGCTCTCGGAAACCTGCACTTTTGCCAAGCTCACCCACCTCTTTGACAATG
ATGGCACGGTGGTGTTCGCCATCTTCATGGCTCTCTGGGCCACGGTGTTCCTGGAGATCTGGAAGCGGCAGCGCG
CCCGCGTGGTCCTGCACTGGGACCTGTACGTGTGGGACGAGGAACAGGAGGAAATGGCACTTCAGCTCATTAACT
GCCCCGACTACAAGCTCCGGCCATACCAGCACTCCTACCTACGCAGCACCGTCATCCTCGTCCTGACCCTGCTCA
TGATCTGCCTCATGATCGGCATGGCCCACGTCCTGGTGGTCTACCGCGTCCTGGCCTCCGCGCTCTTCAGCAGCT
CGGCCGTGCCCTTCCTGGAGGAGCAGGTGACCACGGCCGTGGTGGTGACCGGGGCTCTGGTGCACTATGTGACCA
TCGTCATCATGACCAAGATCAACAGGCGCGTGGCCCTGAAGCTTTGTGACTTCGAGATGCCCAGGACCTTCTCGG
AGCGAGAGAGCAGGTTCACCATCCGCTTCTTCACACTGCAGTTCTTCACCCATTTCTCGTCTCTCATCTACATCG
CCTTCATCCTGGGCAGGATCAACGGCCACCCCGGGAAGTCCACGCGCCTGGCGGGCTTGTGGAAGCTGGAAGAGT
GCCACGCCAGCGGCTGCATGATGGACCTCTTCGTGCAGATGGCCATCATCATGGGCCTGAAGCAGACGCTCAGCA
ACTGCGTCGAGTACCTGGTCCCGTGGGTGACCCACAAGTGCCGCTCTCTGCGGGCCTCCGAGTCCGGGCACCTGC
CCCGGGACCCCGAGCTCAGGGACTGGCGGCGCAACTACCTTCTGAACCCGGTCAACACCTTCAGCCTGTTCGACG
AGTTCATGGAGATGATGATCCAGTACGGCTTCACCACCATCTTCGTGGCCGCCTTCCCGCTGGCGCCGCTGCTCG
CGCTCTTCAGCAACCTCGTGGAGATCCGCCTGGACGCCATCAAGATGGTCTGGTTGCAGCGGCGCCTGGTGCCGC
GCAAGGCCAAGGACATCGGGACCTGGCTGCAGGTGCTGGAGACCATCGGTGTGCTGGCGGTCATTGCCAATGGGA
TGGTCATTGCCTTCACATCTGAGTTCATCCCCCGAGTGGTCTACAAGTACCGCTATAGCCCATGCCTGAAAGAAG
GCAACTCTACTGTCGACTGCCTCAAGGGCTACGTCAACCACAGCCTGTCCGTCTTCCACACCAAGGACTTCCAGG
ACCCTGATGGGATTGAGGGCTCAGAAAACGTGACTCTGTGCAGATACAGGGACTACCGCAATCCCCCCGATTACA
ACTTCTCCGAGCAGTTCTGGTTCCTCCTGGCCATCCGCCTGGCCTTCGTCATCCTCTTTGAGCACGTGGCCTTGT
GCATCAAGCTCATCGCCGCCTGGTTCGTGCCCGACATCCCTCAGTCGGTGAAGAACAAGGTTCTGGAGGTGAAGT
ACCAGAGGCTGCGTGAGAAGATGTGGCATGGAAGGCAGAGGCTGGGTGGGGTGGGGGCAGGCTCTCGGCCCCCAA
TGCCTGCCCATCCCACCCCAGCATCCATCTTCAGTGCCAGGAGCACAGACGTGTAGGCCAGAGCCCGTCCAGAG
GCCACCAGGAGCTGAGACAGTGCCACCACCAGCACCTCCCACAAGCCCACCGCTGTGCGTGTTGAGGGGTGCTGT
GAGAAGGCTGTGCCCATGTGGGGCCGCAGGAATCCCCTGTATGTTCAGGGCTGTGAGCTGCCACCCTATTCCGCC
TGCTCCGTCTTTGTGGGGGCTCTCAGGCTTGGCACAGCCCTGACTTGAACTCTGGGTGACCCTGGGCACCCACAG
AACTGGGAGTGAGGGCTCCTCAGGCAGCCACAAGGCAGGAAAACTGGCGCAAATTTCCTGGGCCTCCCTCTGACT
TCTGGGCGCCAGATCCTGCCGTGCCCCCATCCTGGCTGTTGGGGGTGTCCTGAGCCCACCTCGCTGGCCTGTTCC
CTTCAGCCAACCCGTTTCTGCAGTAAAATTAAGCCTGTCAAAAAAAAAAAAAAAAA

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FIGURE 6768

MQGEESLRILVEPEGDSFPLMEISTCETEASEQWDYVLVAQRHTQRDPRQARQQQFLEELRRKGFHIKVIRDQKQ
VFFGIRADNSVFGLYRTLLLEPEGPAPHAELAAPTTIPVTTSLRIRIVNFVVMNNKTSAGETFEDLMKDGVFEAR
FPLHKGEGRLKKTWARWRHMFREQPVDEIRNYFGEKVALYFVWLGWYTYMLVPAALTGLLVFLSGFSLFEASQIS
KEICEAHDILMCPLGDHSRRYQRLSETCTFAKLTHLFDNDGTVVFAIFMALWATVFLEIWKRQRARVVLHWDLYV
WDEEQEEMALQLINCPDYKLRPYQHSYLRSTVILVLTLLMICLMIGMAHVLVVYRVLASALFSSSAVPFLEEQVT
TAVVVTGALVHYVTIVIMTKINRRVALKLCDFEMPRTFSERESRFTIRFFTLQFFTHFSSLIYIAFILGRINGHP
GKSTRLAGLWKLEECHASGCMMDLFVQMAIIMGLKQTLSNCVEYLVPWVTHKCRSLRASESGHLPRDPELRDWRR
NYLLNPVNTFSLFDEFMEMMIQYGFTTIFVAAFPLAPLLALFSNLVEIRLDAIKMVWLQRRLVPRKAKDIGTWLQ
VLETIGVLAVIANGMVIAFTSEFIPRVVYKYRYSPCLKEGNSTVDCLKGYVNHSLSVFHTKDFQDPDGIEGSENV
TLCRYRDYRNPPDYNFSEQFWFLLAIRLAFVILFEHVALCIKLIAAWFVPDIPQSVKNKVLEVKYQRLREKMWHG
RQRLGGVGAGSRPPMPAHPTPASIFSARSTDV

FIGURE 6769A

GGCCAGGTTATCAGGGGCTTCACTGTGAAACCTGCAAAGAGGGCTTTTACCTAAATTACACTTCTGGGCTCTGTC
AGCCATGTGACTGTAGTCCACATGGAGCTCTCAGCATACCGTGCAACAGTTCTGGGAAATGCCAGTGCAAAGTGG
GTGTCATTGGCTCTATATGTGACCGATGCCAAGATGGATATTATGGCTTTAGTAAGAATGGCTGCTTGCCCTGCC
AATGCAATAATCGGTCTGCCAGTTGCGATGCCCTCACAGGTGCTTGTTTAAACTGCCAGGAAAATAGCAAAGGAA
ATCACTGTGAAGAATGTAAAGAAGGATTTTATCAGAGTCCTGATGCCACTAAAGAATGTCTTCGCTGCCCTTGTT
CAGCAGTGACATCTACAGGCAGCTGCTCTATAAAATCGAGTGAATTGGAACCTGAATGTGACCAGTGTAAAGATG
GTTACATAGGCCCGAACTGCAATAAATGTGAAAATGGCTATTACAATTTTGACAGCATCTGTAGAAAGTGCCAAT
GTCACGGCCATGTGGACCCAGTTAAAACTCCAAAGATTTGTAAGCCCGAGAGTGGTGAGTGCATCAACTGCCTCC
ATAACACCACTGGGTTTTGGTGTGAGAACTGCCTAGAAGGTTATGTTCACGACCTCGAGGGAAATTGCATCAAGA
AAGAAGTTATTCTTCCAACACCTGAAGGTTCTACCATTTTGGTTTCCAATGCCTCTTTGACCACATCAGTGCCCA
CCCCTGTTATAAATAGTACTTTTACCCCTACAACCCTGCAGACTATCTTTTCAGTAAGCACTTCTGAAAACAGCA
CTTCAGCTTTAGCTGATGTATCATGGACCCAATTTAACATCATCATTTTGACAGTCATCATCATTGTTGTGGTGC
TGCTAATGGGATTTGTGGGGGCTGTATATATGTACCGCGAGTACCAAAACCGGAAACTCAATGCCCCCTTTTGGA
CCATCGAGCTGAAAGAAGACAATATCAGTTTCAGCAGCTACCATGACAGCATTCCCAATGCAGATGTTTCGGGAT
TGTTGGAAGATGATGGCAATGAAGTGGCTCCCAATGGGCAGCTGACCCTGACGACGCCCATACATAACTACAAAG
CCTAAGGAGCTAGAACTGTTCTGAATTGTTAAACCACAGTGCTTGCTAAGACAGAGTCAGCCCCTGGGCCAGACA
AAGCCTGGCTAGAGTTTGCTGAGAAAGCAAAGGCAAATAGTGCATCTGAAATTTTCAGGTACAAATTTGTAATGC
GCTTAGCCTATCTATTGCTCTTAGTTTTCCCATGAAGATCTGAAGCGTTCACTGTCATTAGGACTTGAAGTAAAG
TATATTTTTGTACCAAACCACATGGGAGTATGGAAAGGCTGAACCCCATAGTGCAGCCCAAAACCACTTTGACCT
CCAGATAGACTCCTGGGGAAGCATTCACCAAGCCAGTGGTAACAAGATGATGAATGTGGAGGGGGAAAAGACTGC
TGGAAGACTTCATCTCCATTCCTGAAACATTTTTTTTAAAACAGTGTCAGGGATTATATTCGTTTTACTATACAA
AAGGACATCATTGAGGAAAAGCTTGTTTCTAGGCTGTATCACAGTAAATAATCTTGATTGTTTCTAGAACAGGGG
TAGAAAAGTCCCAAGATCTTCAGAAGGGCTTGGTTTTTTCCTCCCAGGATTCTTGCTCAGTGATGAGTTGAAAGC
ACAGGATAAGCTTCTAAGGGAGGAAGGCAGCATTGGGGAGCAGGAGGCTGATGGTCCTCCTCAGGGTCTCAGTGT
AAATGATAAATTGTCTAAAAATAAGGAATATTCCTGCCTCTAGAGAAATAAGGTGTACATAGTTAATGTAGCATA
TCTGGTCGACGTTGTATTTGTATCTATTTGTAAAAAAAAAATCATGTCATATTTTATCATCTGGAATTTATTTGT
ACAGCAGTTAATGGTGTTGTAAAAAGAAAAATATGGGGATTGCTTAAAATACTGTAAAATAGATGGCAATATTGC
TAGAGCTGGGACTCTGGTGAGCATCCGTCATTTTTAGTCCTTCTTGAGGACATTGCTGAAATTTATAAGAGGTCG
AATGTTTCTTTCTTTCCTTTCTCAGTCTAAAAGTAGAGTTATATGCTCTTTGACTTACTATGATTCAAGCAATAG
ATTTTGAAGTCAGTAATCGTTAAGCTGGGACATAGGATGCATTCTCCAAAAACATTAATCTAATTAGACATTAGC
CACCCTATATATTTTACATAGATTAATATAAAACATATCCTCATTAAAAAATGTTTTTCTTGAATGTAAAAGATA
GTCTTCCAAAGGATAGAAATATTTTAGTTCCAAGAGAAAAGCCATCATATTACTTGGGATCTGTAGTTTTCATGC
CTATGAAATATTTATAATCCTCCCTCACCCCAAATAAAAAATCTCCTACATGTGAACATAGCCTGTCACTCATTT
GCCATGAGGTATGTGCCATCTCCCTGCAGTGCTATAGTTCTCCCATTGTCTTCCTGTCTGGTTAATGAGCAGCTT
TGTAGATGGGTGTGTCTAGTTAGTTCTTGCTTTTTGATGGAGTTTTTTCCTAGAGGCCAACTACTGTTGCTCTCG
TTTATTATGATATTGACATTTTGGGTTAAGCAAGGTGGGTGGGAAAGGTGGTCAGATGTTAAATATAACTTATTA
GGAGGAACAGTGAACTGTGAAGTGGTTAGAAAAAAAATAAAAACTTCTTATTAGATTAGACCTAGGAAATTCAAG
CTGACCCCTTTGCCTAACTTCCCTAGAGAAAAACCTAGAACTTGGTCATCCCTTTATAGGAGACCCCTAAGTTGT
TCTCAGGGTTTGGAGATGATGTTCTGGAGGGAGTACAAGCAAATAATCTACTTCTGGTAATCTGAGGGTGCTTTG
CGTATTTGGCCATTGCTCAGAAGAATAGAGGTTACATTATATTACATTATATGAAAATTATTTAGTTTTTCTATA
GCCCTTTGTAGTTTGCAAAGCACTTTTCCATATGTGTGTCCTCTCTTCCACACCATAGCCCCCTGAGGAAGTAAT
TGTTGTCCCCATTTTATAGATGAAAAGGCTGAGGCACAGAGGAGCTAAATATCTTGTTCAAGGCTATACAATGTG
TGTGATTATTAGGCTTGGAATCAGGGCCTCTAACTCTAAAGCACATGTTTTTTCAACTATATGCAGAAATTGCCT
AGCCATGGACACAAGAAAGCTGGGAGGAAGAGTTCTACTTGTGGATGTTTTTAATTTTTTTTAAATATCAGGAGC
AATCCAGGGCCATACAGCTATGAAGCACTTAGTGAAAAGAACACAAGAAGATTTACTAACTGAAGTTAGTATTAG
TGATTAGAAAACAAAACTGCCAGTTTGTGCTTCATTAAGGTGAACTCATCTCTCCAAGCAGGAAGGGAAAATTTG
CTTTCCCTAGCAGTTGCTGCATATGTGTGTACAGACTGCACAATTCTAAGAAATTGTGCAAAATGGCATACCTGT
CTTTCTCCCAGATACACCGCCCCCTGCCCCCCCCAAAAAAGGTCAGGATTAAAGGTGGTGAGAAGTGAACATTTA

FIGURE 6769B

TTAAACAGAAGTTAAACCAATAGAGAGAAAGGAGGTTTGTTGGAGTCTAAGAGGATTTTGACCATGTAGAAATTC
CTTGAAACAGACCTTAAAAGGTATTGAAAAATTGAATCACAAAGAAAGTTTACCTTTAAATACTTGTTAATGGCT
CCTAGATCATGGTTATAATTTTTCTCAATGGGAAAAAAAGTCTTAAAATTTGTTTTAAATAAGATCCTCTAATGT
CTCGAGCTTTTTGATTCTGGAAATAATTTGCTTTAAAATATAAATCAATCAGAAAGTGATCTACCACTGAAATCA
TTCTAGGAAACTAGCATGGGATGCACTGCACAATGTTCTTTCCTCTAAAGGCATGGGCCCCATAAACTGTGGCAT
CTGGCAGCAGGATGCCATCAGTCCTTTAGAAAGCCTAATTTTGGGCCGGGTGCGGTGGCTCACGCCTGTAATCCC
AGCACTTTGGGAGGCCGAGGCGGGTGGATCACAAGGTCAGGAGTTCGAGACCAGCCTGGTCAACATGGCGAAATC
CCGTCTCTACTAAAAACACAAAAATTAGCCGGGTGTACGTGCCTGTGGTCTCAGCTGCTTGGGAGGCTGAGGCAG
GAGAATCGCTTGAACCTGGGAGGCGGAGGTTACAGTGGGCCGAGATGGCGCCATTTCACTCCAGCCTGGGCGACA
GAGCAAGACTCTGTCTCAAAAAAAAGGAAGAAAAAGAAAGCCTAATATTGGGAGAATGTTTGTGTAAGGATTGGA
AATCTGTTTATTTTTAAATAAGATAGCACTGATGTGAATCTTGTTTGGAAATTACAGATACTGCCATTAAGCGAT
GCTTTTATCTTCATTAATTCATTTTGGTAAGCGCCTATGCATTTCTGATGGTTAGGTGCCCTAGGTAGTGTTAAG
TATGTCCGTGTCCTCCCTTACTCCCCTCTCGCTCCCTCTACCCTCTATCCCCTAGGGTTCTTTTATTAATGGAAT
TTCTCCAGTTATAGAGAAAAAAATGACATTTGAAAACTAAAGCTCATTTATATTAATACTAAGGTCCTGTGGGCC
TAGTGCGTTACTCTTCCCAGTGATACCTAGATTTTAAGAGTAGAGAACAGAGGAAACATGGGATGAGAGGAGAGA
GGTTTTTTAGACAACATTTGTAGACACCTCAAATTATATCACTGTTCTCTAGCGCCAATATTCCCAGGTAAATTG
ACCATTAAAGCAATACTCACTGACCTACTAGTTTATTTTGGTCAGCTGAGTACCATCAGGATATTTAACCCTTTA
AGTGCTGTTTTGGGAGTAGAAAACTAAAGCAACAATACTTCCTCTTGACAGCTTTGATTGGAATGGGGTTATTAG
ATCATTCACCTTGGTCCTACACTTTTTAGGATGCTTGGTGAACATAACACCACTTATAATGAACATCCCTGGTTC
CTATATTTTGGGCTATGTGGGTAGGAATTGTTACTTGTTGCTGCAGCAGCAGCCCTAGAAAGTAAGCCCAGGGCT
TCAGATCTAAGTTAGTCCAAAAGCTAAATGATTTAAAGTCAAGTTGTAATGCTAGGCATAAGCACTCTATAATAC
ATTAAATTATAGGCCGAGCAATTAGGGAATGTTTCTGAAACATTAAACTTGTATTTATGTCACTAAAATTCTAAC
ACAAACTTAAAAAATGTGTCTCATACATATGCTGTACTAGGCTTCATCATGCATTTCTAAATTTGTGTATGATTT
GAATATATGAAAGAATTTATACAAGAGTGTTATTTAAAATTATTAAAAATAAATGTATATAATTTGTACCTATTG
TAGATTTGTTGTTTACTTTTTTGTGTGGTCAGAGTTGTTTCATGTCTTCAAATACATGCCAAGGATCATTTACTT
TCAGCCCACTTCATAAAAATCTTTGAACTCTT

FIGURE 6770A

CGCCCAGCCTGCAGAGCTCGCGCCGCGGCAGCCCAGCCGCTCGGCCCCGCCGCGCTCGCAGAGGCCGCCATGGGC
ACCGCGCGCTGGCTCGCGCTGGGCAGCCTCTTCGCCCTGGCTGGGCTGCTGGAAGGCCGGCTCGTGGGCGAGGAG
GAAGCCGGCTTTGGCGAATGTGACAAGTTCTTCTACGCCGGGACCCCGCCTGCGGGGCTGGCGGCCGATTCCCAC
GTGAAGATCTGTCAGCGCGCGGAGGGTGCTGAGCGCTTCGCCACCCTCTACAGCACCCGGGACCGCATCCCCGTG
TACTCCGCGTTCCGCGCCCCGCGCCCTGCGCCCGGCGGCGCCGAGCAGCGATGGCTGGTGGAGCCGCAGATCGAT
GACCCCAACAGCAACCTTGAGGAGGCGATTAATGAGGCAGAGGCCATCACCTCTGTGAACAGCCTGGGAAGCAAG
CAAGCCTTGAATACAGATTACCTTGATTCTGATTACCAAAGAGGACAGCTTTACCCATTCTCCCTTAGCAGTGAT
GTCCAGGTGGCCACATTTACTCTCACAAATTCAGCCCCAATGACTCAGTCCTTCCAGGAACGGTGGTATGTGAAT
CTCCACAGCCTAATGGACCGGGCTTTGACCCCACAGTGTGGCAGTGGGGAAGACCTATATATCCTCACAGGCACA
GTGCCCTCAGACTACAGAGTTAAAGACAAAGTGGCAGTCCCTGAGTTTGTTTGGCTGGCAGCCTGTTGTGCTGTC
CCTGGAGGAGGCTGGGCCATGGGCTTTGTCAAGCACACCCGGGACAGTGACATCATAGAAGATGTGATGGTAAAA
GATCTTCAGAAACTGCTTCCATTTAACCCTCAGCTGTTTCAGAACAACTGTGGTGAAACTGAGCAAGACACAGAG
AAAATGAAAAAAATCCTGGAAGTGGTTAACCAAATCCAGGATGAAGAACGAATGGTACAATCTCAAAAGAGTTCT
AGTCCCCTTTCTAGCACCAGGAGCAAGAGGTCTACTCTGTTGCCTCCAGAGGCATCTGAGGGAAGTAGTAGCTTT
TTGGGAAAACTCATGGGCTTCATTGCTACCCCATTCATCAAGCTTTTTCAATTAATTTATTACCTTGTGGTAGCA
ATCCTGAAGAACATTGTCTATTTCCTGTGGTGTGTTACCAAGCAGGTGATTAATGGCATAGAAAGTTGCCTTTAC
CGCCTGGGCTCAGCCACCATCTCATACTTCATGGCCATTGGGGAAGAGTTGGTGAGCATTCCCTGGAAGGTGCTC
AAGGTCGTGGCCAAAGTCATCAGGGCTCTCCTCCGGATCCTTTGTTGTCTGCTGAAGGCCATTTGCCGAGTTCTG
AGCATCCCTGTCCGTGTCCTTGTGGATGTGGCCACTTTCCCTGTGTACACCATGGGCGCTATTCCAATTGTTTGC
AAGGACATTGCACTGGGCCTTGGTGGCACTGTCTCACTGCTCTTTGACACTGCTTTTGGTACCCTGGGTGGCCTA
TTTCAGGTGGTTTTTAGTGTCTGCAAGCGGATTGGCTACAAGGTTACTTTTGACAATTCTGGGGAGTTATAAACT
CAAAAAACTAATAGTATCCAGTCACAGTGAATTTGAAAGCTGGAATAGTTTGTCTTTACAATGGGTTTCTGTTCA
CTGTCAGTTATCATTATATTTTGGCCTTTGGTGGGGATGTCTGCTTGTTTTTGCAAAAGAAGATGGCAGAATTTA
GACTTGACAGAGGAGAAATGCTCAGGGTGAGATTAGGTGTAGTAATCTGCTGTTTACCTCCAGTTATATGTGCAA
ACTCCCAAGCCACTAATAACTTCAGTTATGCACTCTAACACAGACGACCACCTGAAATGCACTGGTATTTATTTC
TGATAATTAAAAATTACAGGGGAGGGAAGAACTAGAAAAAGAACAACTTTAGACCAAAGGTGTCTGAGAAAAGGA
GAAAGGGAGCTTGTTCTTCCCATTGCTCTTTGTGATTTAAGGCAAAACAGATTAAAAAAAAAATATGCAGCCAAT
TTCTTGGCATTTGCTTCTCTTTCTCCTCAACTCGACTGACCTTGGTGGAATGCAGATAATGCCTCTTTGTTGAAA
TAACTTTGTGGGAATGTACAATTTTCTATATCTCTTAGCTTTCCGTGGTTCTCAAGGATATGTACAGTTTTCATT
TTCCTCCAAAGTTGAATTTTGCTACATTTTTCTTTTAGGTAATGATAAGCATTTTTTAAAAAATCATTTTTAGGT
AATGGTAAGCATTTTATGCCAAATGTGGCATAACAGAGTTTGAATTGAAGGGCAAAGTTTTCTTTTCTTTTTTTT
TTTTTGGCCCCTTGAATGGTATAATACAGTCCTCTCCGGTGGAAAGAAGAGAAGAGAAGGTGGACAGCCCTGCTC
TTAGTAGGTGCTGCAGATCCAAGGACATCTTTTGTCCAGCTTGGATTAACTTGACGTGTATCCCTGCCTGACAAG
GTTGAACTGAAAGATCTATATGTTAAGCTAACATGAAAATTCATATTCTGCAACATAGTAGATTTTTCTAATGCA
TGAAATAAGTACCCAGCACAGTAAAAATACTCTGACTTATGTCCCTAAATGGTTGTTTTGATACAACTATATAGA
AAAGAGCCACAAAATAAAGATAAAAGTTATTGTGGCCATCTCTGAAAAAAATATATAAAATATTTAAGAAGAATT
ATATCTTAGGAAATTATTTTTACAGTGTGTTTGAGGCTACAAACATAACTCCCCCATTAATACAAATTAAATGTG
AGAGCTCATTCTCAAAATTTTTTTGATCAAGCACTTGTCATTTTAAATCTTGCACTAAAAAATGGTAACAAGAGG
GACCAAACTTTGCTTCCCACAATTGGGATGGAATCACCTGGATTTTTCTGAATGTTTTAAAGAATTGCTGAGAGG
TAGAAACAGCCAAGTATGAAATACTGATCTTGGGGCTACCGCCCAGGATCAATCAGAAAGTTATATGCAAAAATT
CGGGGTCCCAACAAGGAGAGAACAATATGTCAACCATTTGCATGGGGTCGATGGATGAGAAACATGAGCGTAGCA
AGAGTTACATTTTGCAGAAAAATAGCGGAGGCACACCCAGAGTAGAAGAGCAGCCAGCAAGCTGCCATCCTGATC
AATTTGTGATGCAAGGTTAGGGAGTATGAGCACCGCATGGGTCCATGCTAGGGAGATGTGCACCAGGCTTAGCTA
AGAAACTTAAAGCAGTATTTTACCAACTCTTGTCTTAGGGAGCATAAAGTTTGGATGTCCCTTTATTTCAGCAGT
GTGAAGGTAAATGGAAGGGTGAGGGTTTGACTTGGTACTGATTGGTCAAGAATCCTGCTGGATAAAGAAAAGGAA
TTTTAGAAGTGACCAGAGGGACAGTCCAGCCAAACTATTATTTGATAAGGAACCCAAGGCCCTGGGAGGCAACAG
GCTAGCCCTTAGTTTCATGGCTAGCTGAGAGCAGATTAGGAGCCAACGTTGTTTGCACATGTCCCATCACACCTG
AGATGTCAGACATGGGAAGTTCGTGCTATTATTCAGTTGCCTCTCTGGACCATGGCAAGATTTCCTCATTCATCA

7529/8433

FIGURE 6770B

AACAGACTCCAGGCCCTGACAAAGCAGTTGGATTTGGCATGTGTGATGAAAACAATTAGCCATCCATGTACAACA
TTATGCTTACTGCATCCCATGGAAACTTAATTCCCTCCTAGCACATATTTGCATACTGAAAGGTCCGAAAAGGGC
ATCCACGGCAGCTTGAGCCCCTTAGCACCATGTAAGGAGCACAGCATCCAAACGGCTTCTTGAGAACCATTGGGG
AATGTCTTTCTTTTTCACATCCAATTGTTTAGTGTCTATTTATTCTTGGGTGGCCAGTTTTGAAACCTAAAAAGG
GACAATAAAGCAAAAAGTATCAGTAAGGATAGGTGGCTGAGACCCACTGCCCTGAGCTACTAGTGTGGCTGTGCC
TGTGGGTCTCTAGAACCATCTGCATTGGACGTGAAGCCACAGCAGGTGGCTGGACTGCTGGCCTGTTCCTAATGA
GCTACGCTGGGCTTTGAGGTAGAGGTTGGGGTTTATGAACCCCAACTCTGGCTTAAAGATCTTGCTGTGGCTCTG
TTATGTTCTGAGGCCTTGGGATTAGCCTCTTCCTCATTACGGAGCTGATTTTCTAGTCTGTGGATCAGCTATGCC
TTTGGACACTTCTCTTTTCCATTGTGCCTTTTGAATGTTGTCTTCTCACTCAGCATCAGCACTTCGATCTAAATG
CAGACTAGGGAGTTGGGAGGAGGAACCAAAGTGAACCATCCTTCATTTATTCAGTCATTCGTTCATCTGTCAAAC
ACGTATTTGGACATCAAGGTTGCAGAGATGAACAATGCATGGATTTCATCTTTGAGGAGTTCAAAACCTAGTGGA
GAGAACACATGGTACAATCGTAACACATGAAGGACAAGTAAGTGCTGCAGTAAAGGTACTAATAACATGTTCCTT
GGAACAGAGGAAGAAAAACCACGAAACCATGGAAATTAGGGAAGCCTTTACAGAGGGTGTGACAAAACTCAATTT
GACATTTTCAAGCTATGTACAATGATGTGCACCTTGCAGATGCTCAATAAAGTAATTACTGAC

7530/8433

FIGURE 6771

GGCACGAGGGTCGCCTTGTGCGCTTGCGCGCGTCCAGGCGCTCCCGTGAGGCAGTGCGAGGCGCGCGGGGCACGG
AGGGCGGTGGCGGCGGGCTCCTGCGAGAAGCAAGCGGAACTTCCTGAGCGTGCTTAGGTGTCACAGCTGGGTGAC
CCTCCGAAGGAAGGTTTTGCCGCTGGCGCGTCTGGTGTATCGCGGCCTTGGGGCCGCGGATCCCTGGGGCTTGCC
GCTGCCTCTGGGGTTCGCGCGGCCCTGGCGTCGGGGCTGCCTCAGCGCTGGCTGAAGGCCGGCCCGAAGCACCCT
TAATTGTGGCCGCGCGCTTCCCTGCTGCTCCTGCTGTTCTCCGCGTCGCGGTGGTGGACTCTGGAGGTGGAGCCT
TGCCCGGCGAGACGTTGAGGAGGAATCATTATAGATTCTAAAAATATATTTTCCCTTCTCTGTGGACTTGGTATA
AAACGTAGCTTTTTTTCTGCTTGGATTTATTTTCTAAAAATCAACACCGTAAACCCATATCAGATACAACAAAAT
TGGGGTAGTTAAAACCATGAGTTGTGGAAATGAGTTTGTGGAAACATTAAAAAAAAATTGGTTATCCCAAAGCTG
ATAATCTTAATGGAGAAGACTTTGACTGGTTGTTTGAGGGCGTTGAAGATGAATCGTTTCTGAAGTGGTTTTGTG
GGAATGTGAATGAACAGAACGTGTTGTCTGAAAGAGAATTGGAAGCTTTTAGCATTCTTCAGAAATCAGGCAAGC
CTATTCTAGAAGGGGCGGCATTGGATGAAGCTCTTAAAACGTGTAAAACTTCTGATTTGAAGACACCTAGACTGG
ATGATAAAGAGCTGGAGAAATTAGAGGATGAGGTTCAAACTCTACTGAAATTAAAGAACCTAAAAATTCAGCGAC
GTAATAAATGTCAATTG**ATG**GCTTCAGTAACTAGCCACAAATCTCTGAGGTTAAATGCTAAAGAAGAAGAAGCCA
CTAAAAAGCTGAAGCAGAGTCAAGGAATTCTAAATGCAATGATCACTAAGATCAGTAATGAACTTCAGGCTCTTA
CTGATGAAGTTACACAATTGATGATGTTCTTCAGACATTCTAATTTAGGTCAAGGGACAAATCCACTGGTATTTT
TATCGCAATTTTCCTTGGAAAAATACCTAAGTCAGGAAGAGCAAAGCACAGCAGCATTAACTTTGTATACCAAAA
AACAGTTCTTTCAGGGTATACATGAAGTAGTTGAAAGTTCAAATGAAGACAATTTTCAACTTTTAGATATACAGA
CACCATCTATTTGTGATAATCAAGAAATCCTTGAGGAGAGACGACTAGAGATGGCTAGACTGCAGCTCGCATACA
TTTGTGCTCAACATCAGTTAATTCACTTAAAAGCAAGTAATTCGAGCATGAAGTCAAGTATAAAATGGGCAGAGG
AGAGTCTTCACAGCCTAACCAGCAAGGCTGTGGACAAAGAAAATTTGGATGCTAAAATTTCTAGCTTGACCAGTG
AGATTATGAAACTTGAAAAAGAGGTCACTCAAATAAAAGACAGAAGTTTACCTGCTGTGGTAAGAGAGAATGCCC
AGTTATTGAATATGCCAGTGGTAAAGGGAGATTTTGATCTGCAGATTGCTAAACAAGATTATTATACAGCAAGAC
AAGAGTTAGTTTTAAATCAATTAATAAAACAAAAGGCATCATTTGAACTTCTACAGTTATCATATGAAATTGAAT
TAAGAAAGCATCGGGACATATATCGTCAACTTGAAAATTTGGTTCAAGAACTTAGTCAAAGTAACATGATGCTCT
ACAAGCAATTAGAAATGTTAACAGATCCATCAGTTTCTCAACAGATAAATCCAAGGAATACCATTGATACTAAGG
ATTATTCTACTCATAGGCTTTACCAAGTTTTGGAGGGAGAGAATAAGAAAAAAGAATTGTTTCTAACTCATGGAA
ACCTTGAGGAAGTGGCTGAGAAATTGAAACAGAATATTTCTTTAGTACAAGATCAGTTGGCAGTATCTGCTCAAG
AACATTCTTTCTTTCTGTCCAAACGGAATAAGGATGTGGACATGCTTTGTGATACTTTGTATCAAGGAGGAAATC
AGCTTTTGCTTAGTGATCAGGAGTTAACAGAGCAGTTTCATAAAGTTGAATCTCAACTGAATAAGCTAAATCATC
TCCTCACTGATATTCTTGCTGATGTGAAGACAAAAAGAAAAACTTTGGCAAATAATAAATTACATCAAATGGAAA
GAGAATTCTATGTATATTTTTTAAAAGATGAAGATTATCTGAAAGATATTGTGGAGAATTTAGAAACTCAATCAA
AGATTAAGGCTGTTAGTCTTGAAGA**TGA**AAATTACTGAAAACTGAATCTTTATTACGTGTCCTCTTTTATTTAT
TAGAAGACTGTGTATAATAAACACTACTAAATTTTTAAAAAAAAAAAAAAAAAAAAA

FIGURE 6772

MASVTSHKSLRLNAKEEEATKKLKQSQGILNAMITKISNELQALTDEVTQLMMFFRHSNLGQGTNPLVFLSQFSL
EKYLSQEEQSTAALTLYTKKQFFQGIHEVVESSNEDNFQLLDIQTPSICDNQEILEERRLEMARLQLAYICAQHQ
LIHLKASNSSMKSSIKWAEESLHSLTSKAVDKENLDAKISSLTSEIMKLEKEVTQIKDRSLPAVVRENAQLLNMP
VVKGDFDLQIAKQDYYTARQELVLNQLIKQKASFELLQLSYEIELRKHRDIYRQLENLVQELSQSNMMLYKQLEM
LTDPSVSQQINPRNTIDTKDYSTHRLYQVLEGENKKKELFLTHGNLEEVAEKLKQNISLVQDQLAVSAQEHSFFL
SKRNKDVDMLCDTLYQGGNQLLLSDQELTEQFHKVESQLNKLNHLLTDILADVKTKRKTLANNKLHQMEREFYVY
FLKDEDYLKDIVENLETQSKIKAVSLED

FIGURE 6773

CCTGTCTCTCTTCGGGTCTCGGGCCCTTGGGCGCAGCGGGGCGCGCGCCATGGCGAAGGCGAAGAAGGTCGGGGC
GCGAAGGAAGGCCTCCGGGGCGCCGGCGGGAGCGCGAGGGGGCCCGGCGAAGGCCAACTCCAATCCGTTCGAGGT
GAAAGTTAACAGGCAGAAGTTCCAGATCCTGGGCCGGAAGACGCGCCACGACGTGGGACTGCCCGGGGTGTCTCG
CGCACGGGCCCTCAGGAAGCGTACACAGACTTTACTAAAAGAGTACAAAGAAAGGGATAAATCCAATGTATTCAG
AGATAAACGCTTCGGAGAATACAACAGCAACATGAGCCCCGAGGAGAAGATGATGAAGAGGTTTGCTCTGGAACA
GCAGCGACATCATGAGAAAAAAAGCATCTACAATCTAAATGAAGATGAAGAATTGACTCATTATGGCCAGTCTTT
GGCAGACATCGAGAAGCATAATGACATTGTGGACAGTGACAGCGATGCTGAGGATCGAGGAACGTTGTCTGCTGA
GCTGACTGCTGCCCACTTTGGAGGAGGCGGTGGGCTCCTTCACAAGAAGACTCAACAGGAAGGCGAGGAGCGGGA
GAAACCGAAGTCCCGGAAAGAGCTGATTGAAGAGCTCATTGCCAAGTCAAAACAAGAGAAGAGGGAGAGACAAGC
TCAACGAGAAGATGCCCTCGAGCTCACGGAGAAGCTAGACCAAGACTGGAAAGAAATTCAGACTCTCCTGTCCCA
CAAAACTCCCAAGTCAGAGAACAGAGACAAAAAGGAAAAACCCAAGCCCGATGCATATGACATGATGGTTCGCGA
GCTTGGCTTTGAAATGAAGGCGCAGCCCTCTAACAGGATGAAGACGGAGGCAGAATTGGCAAAGGAAGAGCAGGA
GCACCTCAGGAAGCTGGAGGCTGAGAGACTTCGAAGAATGCTTGGAAAGGATGAGGATGAAAATGTTAAGAAACC
AAAACATATGTCAGCAGATGATCTGAATGATGGCTTCGTGCTAGATAAAGATGACAGGCGTTTGCTTTCCTACAA
AGATGGAAAGATGAATGTCGAGGAAGATGTCCAGGAAGAGCAAAGCAAGGAAGCCAGTGACCCTGAGAGCAACGA
GGAAGAAGGTGACAGTTCAGGCGGGGAGGACACAGAGGAGAGCGACAGCCCAGATAGCCACTTGGACCTGGAATC
CAACGTGGAGAGTGAGGAAGAAAACGAGAAGCCAGCAAAAGAGCAGAGGCAGACTCCTGGGAAAGGGTTGATAAG
CGGCAAGGAAAGAGCTGGAAAAGCTACCAGAGACGAGCTGCCCTACACGTTCGCAGCCCCTGAATCCTATGAGGA
ACTGAGATCTCTGTTGTTAGGAAGATCGATGGAAGAGCAGCTTTTGGTGGTGGAGAGAATTCAGAAGTGCAACCA
CCCGAGTCTCGCAGAAGGAAACAAAGCAAAATTAGAAAAACTGTTTGGCTTTCTTTTGGAATACGTTGGCGATTT
GGCTACAGATGACCCACCAGACCTCACAGTCATTGATAAGTTGGTTGTGCACTTATATCATCTTTGCCAGATGTT
TCCTGAATCTGCAAGTGACGCTATCAAATTTGTTCTCCGAGATGCGATGCATGAGATGGAAGAAATGATTGAGAC
CAAAGGCCGGGCGGCATTGCCAGGGTTGGATGTGCTCATTTATTTGAAAATCACTGGGCTGCTATTTCCAACTTC
CGACTTCTGGCACCCAGTGGTGACCCCTGCCCTCGTGTGCCTCAGTCAGCTGCTCACCAAGTGCCCCATCCTGTC
CCTCCAGGACGTGGTGAAGGGCCTGTTCGTGTGCTGCCTGTTCCTGGAGTATGTGGCTTTGTCCCAGAGGTTTAT
ACCTGAGCTTATTAATTTTCTTCTTGGGATTCTTTACATAGCAACTCCAAACAAAGCAAGCCAAGGTTCCACTCT
GGTGCACCCTTTCAGAGCGCTTGGGAAGAACTCGGAACTGCTCGTGGTGTCTGCTAGAGAGGATGTGGCCACGTG
GCAGCAGAGCAGCCTCTCCCTCCGCTGGGCGAGTAGACTGAGGGCCCCAACTTCGACAGAGGCCAATCACATCCG
ACTGTCCTGCCTGGCTGTGGGCCTGGCCCTGCTGAAGCGCTGCGTGCTCATGTACGGGTCCCTGCCATCCTTCCA
CGCCATCATGGGGCCTCTCCAAGCCCTCCTCACGGATCACCTGGCGGACTGCAGCCACCCGCAGGAGCTCCAGGA
GCTGTGTCAGAGCACACTGACCGAAATGGAAAGCCAGAAGCAGCTCTGCCGGCCGCTGACCTGTGAGAAGAGCAA
GCCTGTCCCACTGAAGCTTTTCACACCCCGGCTGGTCAAAGTCCTCGAGTTTGGAAGAAAACAAGGCAGTAGTAA
GGAGGAACAGGAAAGGAAGAGGCTGATCCACAAACACAAGCGTGAATTTAAAGGGGCCGTTCGAGAAATCCGCAA
GGACAATCAGTTCCTGGCGAGGATGCAACTCTCAGAAATCATGGAACGGGATGCGGAAAGAAAGCGGAAAGTAAA
GCAGCTTTTTAACAGCCTGGCTACACAGGAAGGCGAATGGAAGGCTCTGAAGAGGAAAAAGTTCAAAAAATAAAT
TACATTTTATAAATAAGCTCCCCCCACCCGCTGCCTGCGGTTTTGTTTCTGTTAAAACGTCACCTGATGAAATAG
AATGAATCCTGAAATGCACCTCTGGGATCGGGAATGGTCTGTGTGTTATCAGCTGCGACTGGTTCACTGCGTCTG
GACAAGCCTCATGGGGACTGGGGATTCTGGCCAGTGTAATTTCTGTCAACCACGGACGTTTGCCTTCATGTGTAG
AATTTACTGTTGTTATGCAAATTATATTTTCAATTATAA

FIGURE 6774A

CGCCCCGGCGCGGGGCCCTGCGGTAGCCTCAGGCCCCTCCCCTGGACCCGCCGCAGAGCCAGTGCAGAATACAGA
AACTGCAGCCATGACCACGCACGTCACCCTGGAAGATGCCCTGTCCAACGTGGACCTGCTTGAAGAGCTTCCCCT
CCCCGACCAGCAGCCATGCATCGAGCCTCCACCTTCCTCCATCATGTACCAGGCTAACTTTGACACAAACTTTGA
GGACAGGAATGCATTTGTCACGGGCATTGCAAGGTACATTGAGCAGGCTACAGTCCACTCCAGCATGAATGAGAT
GCTGGAGGAAGGACATGAGTATGCGGTCATGCTGTACACCTGGCGCAGCTGTTCCCGGGCCATTCCCCAGGTGAA
ATGCAACGAGCAGCCCAACCGAGTAGAGATCTATGAGAAGACAGTAGAGGTGCTGGAGCCGGAGGTCACCAAGCT
CATGAAGTTCATGTATTTTCAGCGCAAGGCCATCGAGCGGTTCTGCAGCGAGGTGAAGCGGCTGTGCCATGCCGA
GCGCAGGAAGGACTTTGTCTCTGAGGCCTACCTCCTGACCCTTGGCAAGTTCATCAACATGTTTGCTGTCCTGGA
TGAGCTAAAGAACATGAAGTGCAGCGTCAAGAATGACCACTCTGCCTACAAGAGGGCAGCACAGTTCCTGCGGAA
GATGGCAGATCCCCAGTCTATCCAGGAGTCGCAGAACCTTTCCATGTTCCTGGCCAACCACAACAGGATCACCCA
GTGTCTCCACCAGCAACTTGAAGTGATCCCAGGCTATGAGGAGCTGCTGGCTGACATTGTCAACATCTGTGTGGA
TTACTACGAGAACAAGATGTACCTGACTCCCAGTGAGAAACATATGCTCCTCAAGGTGATGGGCTTTGGCCTCTA
CCTAATGGATGGAAATGTCAGTAACATTTACAAACTGGATGCCAAGAAGAGAATTAATCTTAGCAAAATTGATAA
ATTCTTTAAGCAGCTGCAGGTGGTGCCCCTTTTCGGCGACATGCAGATAGAGCTGGCCAGATACATTGAGACCAG
TGCTCACTATGAAGAGAACAAGTCCAAGTGGACGTGCACCCAGAGCAGCATCAGCCCCCAGTACAATATCTGCGA
GCAGATGGTTCAGATCCGGGATGACCACATCCGCTTCATCTCCGAGCTCGCTCGCTACAGCAACAGTGAGGTGGT
GACGGGCTCAGGGCTGGACAGCCAGAAGTCAGACGAGGAGTATCGCGAGCTCTTCGACCTAGCCCTGCGGGGTCT
GCAGCTTCTATCCAAGTGGAGCGCCCACGTCATGGAGGTGTACTCTTGGAAGCTGGTTCATCCCACAGACAAGTT
CTGCAACAAGGACTGTCCTGGCACCGCGGAGGAATATGAGAGAGCCACACGCTACAATTACACCAGTGAGGAAAA
ATTTGCCTTCGTTGAGGTGATCGCCATGATCAAAGGCCTGCAGGTGCTCATGGGCAGGATGGAGAGCGTCTTCAA
CCAGGCCATCAGGAACACCATCTACGCGGCATTGCAGGACTTCGCCCAGGTGACGCTGCGTGAGCCCCTGCGGCA
GGCGGTACGGAAGAAGAAGAATGTCCTCATCAGCGTCCTACAGGCAATTCGAAAGACCATCTGTGACTGGGAGGG
AGGGCGAGAGCCCCCTAATGACCCATGCTTGAGAGGGGAGAAGGACCCCAAAGGTGGATTTGATATCAAGGTGCC
CCGGCGTGCTGTGGGGCCATCCAGCACACAGCTGTACATGGTGCGGACCATGCTTGAATCACTCATTGCAGACAA
AAGCGGCTCCAAGAAGACCCTGAGGAGCAGCCTGGATGGACCCATTGTCCTCGCCATAGAGGACTTTCACAAACA
GTCCTTCTTCTTCACACATCTGCTCAACATCAGTGAAGCCCTGCAGCAGTGTTGTGACCTCTCCCAGCTCTGGTT
CCGAGAATTCTTCCTGGAGTTAACCATGGGCCGACGAATCCAGTTCCCCATCGAGATGTCCATGCCCTGGATTCT
AACGGACCATATCCTGGAAACCAAAGAACCTTCCATGATGGAGTATGTCCTCTACCCTCTGGATCTGTACAACGA
CAGCGCCTACTATGCTCTGACCAAGTTTAAAAAGCAGTTCCTGTACGATGAGATAGAAGCTGAGGTGAACCTGTG
TTTTGATCAGTTTGTCTACAAGCTGGCAGACCAGATCTTTGCTTACTACAAAGCCATGGCTGGCAGTGTCCTGTT
GGATAAACGTTTTCGAGCTGAGTGTAAGAATTATGGCGTCATCATTCCGTATCCACCGTCCAATCGCTATGAAAC
ACTGCTGAAGCAGAGACACGTCCAGCTGTTGGGTAGATCAATTGACTTGAACAGACTCATTACCCAGCGCATCTC
TGCCGCCATGTATAAATCCTTGGACCAAGCTATCAGCCGCTTTGAGAGTGAGGACCTGACCTCCATTGTGGAGCT
GGAGTGGCTGCTGGAGATTAACCGGCTCACGCATCGGCTGCTCTGTAAGCATATGACGCTGGACAGCTTCGATGC
CATGTTCCGAGAGGCCAATCACAATGTGTCCGCCCCCTATGGCCGTATCACCCTGCATGTCTTCTGGGAACTGAA
CTTTGACTTTCTCCCCAACTACTGCTACAATGGGTCCACTAACCGTTTTGTGCGGACTGCCATTCCTTTCACCCA
AGAACCACAACGAGACAAACCTGCCAACGTCCAGCCTTATTACCTCTATGGATCCAAGCCTCTCAACATTGCCTA
CAGCCACATCTACAGCTCCTACAGGAATTTCGTGGGGCCACCTCATTTCAAGACTATCTGCAGACTCCTGGGTTA
TCAGGGCATCGCTGTGGTCATGGAGGAACTGCTAAAGATTGTGAAGAGCTTGCTCCAAGGAACCATTCTCCAGTA
TGTGAAAACACTGATAGAGGTGATGCCCAAGATATGCCGCTTGCCCCGACATGAGTATGGCTCCCCAGGGATCCT
GGAGTTCTTCCACCACCAGCTGAAGGACATCATTGAGTACGCAGAGCTCAAAACAGACGTGTTCCAGAGCCTGAG
GGAAGTGGGCAATGCCATCCTCTTCTGCCTCCTCATAGAGCAAGCTCTGTCTCAGGAGGAGGTCTGCGATTTGCT
CCATGCCGCACCCTTCCAAAACATCTTGCCTAGAGTCTACATCAAAGAGGGGGAGCGCCTGGAGGTCCGGATGAA
ACGTCTGGAAGCCAAGTATGCCCCGCTCCACCTGGTCCCTCTGATCGAGCGGCTGGGGACCCCTCAGCAAATCGC
CATTGCTCGCGAGGGTGACCTCCTGACCAAGGAGCGGCTGTGCTGTGGCCTGTCCATGTTCGAGGTCATCCTGAC
CCGCATTCGGAGCTACCTGCAGGACCCCATCTGGCGGGGCCCACCGCCCACCAATGGCGTCATGCACGTCGATGA
GTGTGTGGAGTTCCACCGGCTGTGGAGCGCCATGCAGTTCGTGTACTGCATCCCTGTGGGAACCAACGAGTTCAC
AGCTGAGCAGTGTTTCGGCGATGGCTTGAACTGGGTTGGTTGCTCCATCATTGTCCTGCTGGGCCAGCAGCGTCG

FIGURE 6774B

CTTTGACCTGTTCGACTTCTGTTACCACCTGCTAAAAGTGCAGAGGCAGGACGGGAAGGATGAAATCATTAAGAA
TGTGCCCCTGAAGAAGATGGCCGACCGGATCAGGAAGTATCAGATCTTGAACAATGAGGTTTTTGCCATCCTGAA
CAAATACATGAAGTCCGTGGAGACAGACAGTTCCACTGTGGAGCATGTGCGCTGCTTCCAGCCACCCATCCACCA
GTCCTTGGCCACCACTTGCTAAGCAGAAGATCCTGCAGACCCTTATCTGGAGGAGGAAGAGAAGCAGGAGAGAGA
AAGCCACAGCCAGCCTGCCATAGGATCCAACTGGACAACGTGTGGGATGGACCTGGAAACAAGCACCTCCCCAAA
CACATCACCACTCCCTAGGGCGGGGCCTGTGCATGCTCTCCCATGACATCTCCATGCTGGTTTCTCCATAGCATA
AATG

FIGURE 6775A

AATTCTAAGGAAAACCTGGAAGCACAATGGGAGATGACAGTGAGTGGTTGAAACTGCCAGTTGATCAGAAATGTG
AACACAAGCTGTGGAAAGCAAGGTTAAGTGGGTATGAAGAGGCCCTGAAGATCTTCCAGAAAATAAAGGATGAAA
AGAGCCCAGAGTGGTCCAAATTTTTAGGATTGATCAAAAAATTTGTCACTGATTCCAATGCAGTGGTTCAATTGA
AAGGATTAGAAGCTGCACTTGTTTATGTTGAAAATGCCCATGTAGCAGGAAAAACCACAGGAGAAGTTGTGTCAG
GTGTTGTAAGTAAGGTGTTCAATCAACCTAAAGCTAAAGCCAAGGAGCTGGGCATAGAGATCTGTCTTATGTACA
TAGAGATTGAGAAAGGAGAGGCTGTTCAAGAAGAGCTCCTGAAAGGCTTGGACAATAAGAATCCCAAGATCATAG
TGGCCTGTATAGAGACACTGAGGAAAGCCTTAAGTGAATTTGGTTCCAAAATCATCTTGCTTAAGCCAATTATCA
AAGTGTTGCCAAAACTCTTTGAGTCTCGAGAGAAGGCTGTTCGAGATGAAGCCAAACTAATTGCTGTGGAGATTT
ACAGATGGATTCGGGATGCTCTGAGACCCCCATTACAAAATATAAACTCTGTTCAGTTGAAAGAACTAGAAGAAG
AATGGGTCAAACTGCCAACAAGTGCTCCTAGACCTACTCGATTTCTTCGTTCCCAACAAGAACTAGAAGCTAAAT
TGGAACAACAACAGTCTGCTGGTGGAGATGCTGAAGGAGGTGGTGATGATGGTGATGAGGTGCCACAAATAGATG
CTTATGAGCTTTTAGAAGCTGTAGAAATCCTTTCCAAACTTCCCAAAGACTTTTATGACAAAATTGAGGCAAAAA
AATGGCAAGAGAGAAAAGAGGCCCTGGAGTCTGTAGAAGTACTAATAAAAAACCCCAAACTGGAAGCTGGCGATT
ATGCAGATTTAGTAAAAGCATTAAAGAAGGTTGTTGGAAAGGACACCAATGTCATGTTGGTGGCTTTGGCAGCAA
AATGTCTTACTGGCCTGGCTGTTGGGCTAAGGAAGAAATTTGGACAATATGCAGGACATGTTGTGCCAACCATCT
TGGAGAAATTCAAAGAGAAGAAACCTCAAGTGGTACAAGCCCTGCAGGAGGCAATTGATGCAATCTTCCTTACTA
CCACACTACAGAACATCAGTGAGGATGTTTTAGCAGTAATGGATAATAAAAATCCAACCATCAAGCAGCAGACAT
CTCTTTTTATTGCAAGAAGTTTCCGCCACTGCACTGCTTCTACCCTGCCAAAGAGCTTGCTAAAGCCCTTTTGTG
CTGCACTACTTAAGCACATCAATGATTCTGCTCCTGAAGTCAGAGATGCCGCATTTGAAGCATTGGGTACTGCTT
TGAAGGTGGTTGGCGAGAAAGCAGTAAAACCATTCCTAGCTGATGTGGACAAACTCAAGCTTGATAAGATCAAAG
AATGTTCAGAAAAGGTAGAACTGATACATGGTAAGAAAGCTGGACTAGCTGCTGATAAGAAGGAATTCAAACCTC
TGCCTGGAAGGACTGCTGCTTCAGGGGCTGCAGGAGATAAGGACACAAAGGACATTTCTGCACCCAAACCAGGAC
CTCTAAAAAAGGCACCTGCTGCTAAGGCTGGTGGGCCACCAAAAAAGGGGAAACCAGCTGCACCAGGAGGCGCAG
GGAATACTGGAACCAAGAACAAGAAAGGACTGGAGACTAAAGAAATAGTGGAGCCTGAGCTCTCGATAGAAGTAT
GCGAAGAAAAAGCTTCAGCTGTTCTTCCCCCTACCTGTATACAGCTTCTTGACAGCAGTAACTGGAAAGAAAGGC
TGGCTTGTATGGAAGAGTTCCAGAAGGCTGTTGAGCTAATGGACCGAACTGAAATGCCATGCCAGGCATTAGTGA
GGATGCTAGCCAAGAAACCTGGATGGAAAGAAACTAATTTTCAGGTGATGCAAATGAAGCTTCATATAGTTGCTT
TGATTGCCCAGAAGGGAAATTTTTCCAAAACGTCAGCTCAGGTTGTATTAGATGGCCTTGTGGACAAGATTGGAG
ATGTGAAATGTGGGAACAATGCAAAAGAAGCTATGACAGCAATAGCCGAAGCCTGTATGTTACCATGGACTGCTG
AACAGGTTGTGTCAATGGCTTTCTCACAAAAGAATCCCAAAAATCAGTCAGAAACTCTGAATTGGCTATCAAATG
CCATAAAAGAATTTGGTTTTTCTGGGTTGAATGTCAAAGCTTTCATTAGCAATGTGAAGACAGCTCTTGCTGCAA
CAAACCCAGCTGTGAGGACTGCTGCCATAACCCTGCTTGGCGTGATGTATCTGTATGTTGGTCCCTCTTTGCGAA
TGTTCTTTGAGGATGAGAAGCCTGCCCTCCTATCCCAGATAGATGCAGAATTTGAGAAGATGCAGGGACAAAGTC
CACCTGCTCCAACCAGAGGAATTTCCAAGCATAGCACAAGTGGTACAGATGAAGGAGAAGATGGAGATGAACCAG
ATGACGGGAGCAATGATGTCGTTGATCTTTTGCCGAGGACGGAGATCAGTGATAAAATCACTTCAGAGTTGGTAT
CTAAGATTGGTGATAAGAATTGGAAGATTAGGAAAGAAGGCCTAGATGAAGTGGCAGGTATTATTAATGACGCAA
AATTTATCCAACCGAATATAGGTGAACTTCCAACTGCCTTGAAGGGTCGACTCAATGATTCAAATAAAATCTTGG
TACAGCAAACGCTGAATATCCTGCAACAACTGGCAGTAGCCATGGGCCCAAATATTAAGCAACATGTAAAAAATT
TAGGCATCCCTATCATCACAGTCCTTGGAGACAGCAAGAACAATGTTCGAGCTGCTGCCCTAGCGACTGTGAATG
CTTGGGCAGAACAGACTGGCATGAAGGAATGGCTGGAAGGAGAAGATCTTTCTGAAGAGCTCAAAAAGGAAAATC
CTTTCTTGAGGCAAGAGCTTCTGGGCTGGCTGGCTGAGAAACTACCTACTCTTCGTTCCACCCCTACAGACCTTA
TCCTTTGTGTTCCTCATCTCTACTCCTGCCTAGAAGATCGAAATGGAGATGTGCGAAAGAAGGCCCAAGATGCCT
TGCCATTCTTCATGATGCATTTAGGATATGAAAAAATGGCCAAGGCTACTGGGAAACTAAAGCCAACTTCTAAAG
ATCAGGTATTGGCCATGCTAGAGAAAGCCAAAGTTAACATGCCAGCCAAGCCTGCTCCACCCACTAAAGCAACTT
CTAAACCAATGGGAGGGTCCGCTCCAGCCAAATTCCAGCCTGCATCAGCACCTGCTGAAGATTGTATTTCCAGCA
GTACAGAACCCAAACCTGATCCAAAAAAGGCCAAAGCTCCAGGATTATCCTCTAAAGCAAAGAGTGCACAAGGGA
AGAAGATGCCAAGCAAAACCAGCTTAAAGGAGGATGAAGACAAATCCGGGCCTATTTTTATTGTTGTTCCAAATG
GAAAAGAGCAAAGGATGAAAGATGAAAAAGGATTGAAGGTGCTAAAGTGGAATTTTACTACCCCACGGGATGAAT

FIGURE 6775B

ACATTGAGCAACTAAAGACTCAAATGTCTAGCTGTGTGGCTAAATGGTTACAAGATGAGATGTTTCACTCAGACT
TTCAGCATCATAACAAAGCCCTTGCTGTTATGGTTGATCACTTGGAGAGTGAAAAAGAAGGAGTTATTGGTTGCC
TGGATCTTATCTTAAAGTGGCTTACCCTGAGGTTTTTTGACACCAATACAAGCGTCCTGATGAAAGCACTAGAAT
ATTTAAAATTGCTCTTCACCTTGCTAAGTGAAGAAGAATATCATCTTACTGAGAATGAAGCATCTTCCTTCATCC
CCTATCTTGTCGTCAAGGTTGGAGAACCAAAGGATGTCATTCGTAAAGATGTTCGTGCCATCCTGAACCGGATGT
GCCTTGTCTACCCAGCTAGCAAGATGTTTCCCTTTATCATGGAAGGAACCAAATCCAAAAACTCTAAGCAGAGAG
CAGAGTGCCTGGAAGAGCTGGGATGTCTGGTTGAGTCCTATGGCATGAATGTTTGCCAACCAACCCCAGGAAAAG
CCTTAAAGGAAATAGCTGTTCACATAGGAGACCGTGACAATGCTGTACGCAATGCTGCACTCAACACCATTGTAA
CGGTGTACAATGTACATGGGGATCAGGTGTTCAAACTGATTGGAAATCTTTCTGAAAAGGATATGAGCATGCTCG
AGGAGAGGATTAAGCGGTCAGCAAAGAGACCCTCTGCTGCACCAATAAAACAGGTGGAAGAGAAACCTCAGCGTG
CACAGAACATAAGCTCCAATGCCAACATGTTACGCAAGGGACCAGCTGAGGACATGTCTTCCAAACTCAACCAAG
CCCGAAGCATGAGTGGGCATCCTGAGGCAGCCCAGATGGTCCGCCGAGAATTCCAGCTGGATCTAGATGAGATTG
AGAATGACAATGGTACAGTCCGATGTGAAATGCCAGAACTTGTTCAGCACAAACTGGATGACATTTTTGAGCCAG
TCCTTATTCCTGAACCCAAGATCCGGGCTGTTTCTCCACACTTCGATGACATGCACAGTAATACAGCATCCACAA
TCAATTTCATTATCTCCCAAGTAGCCAGTGGTGACATCAACACAAGTATCCAAGCTCTGACACAGCTGTTTCAGA
TAGAGAGCCTTGCCCGGGAGGCCTCCACTGGAGTACTAAAAGACCTAATGCATGGCCTCATCACCTTAATGCTGG
ATTCTCGGATTGAAGATCTTGAGGAAGGACAACAGGTCATCCGCTCTGTGAACCTCTTGGTGGTGAAGGTTCTGG
AGAAGTCAGACCAGACCAACATCCTGAGTGCCCTACTTGTTTTGCTCCAAGACAGCCTGCTAGCAACAGCCAGTT
CTCCCAAATTCTCAGAGCTTGTTATGAAGTGTCTCTGGAGAATGGTTCGACTGTTGCCTGATACCATCAATAGCA
TTAACCTAGACAGAATTCTTCTGGATATCCACATTTTCATGAAGGTCTTCCCCAAAGAGAAACTGAAGCAATGCA
AAAGTGAATTTCCCATAAGGACCCTAAAGACCCTGCTACACACCTTATGCAAATTAAAAGGGCCCAAGATCCTGG
ACCACCTAACGATGATCGACAACAAAAACGAGTCTGAGCTGGAGGCCCATCTCTGCCGGATGATGAAGCACAGTA
TGGACCAGACTGGGAGCAAGTCTGATAAGGAAACAGCAAAGGGAGCATCTCGAATAGATGCAAAATCATCAAAGG
CCAAAGTGAATGATTTCTTAGCTGAGATTTTTAAGAAGATTGGCTCTAAAGAAAACACTAAAGAGGGACTAGCAG
AGTTATATGAATATAAGAAGAAATACTCAGATGCTGACATTGAACCATTTCTGAAAAATTCCTCACAGTTCTTCC
AGAGCTATGTCGAAAGAGGCCTTCGGGTGATTGAGATGGAGAGGGAGGGCAAAGGTCGTATTTCCACTTCAACAG
GCATCTCCCCTCAGATGGAAGTCACATGTGTGCCCACGCCCACAAGCACAGTGTCCTCCATAGGTAACACAAATG
GGGAAGAAGTGGGGCCATCTGTCTACTTGGAAAGGCTAAAGATCCTCCGACAGCGATGTGGTCTGGACAACACAA
AGCAAGATGACCGACCTCCTTTGACCTCTTTGCTCTCCAAACCAGCAGTTCCTACTGTCGCCTCTTCCACAGACA
TGCTCCACAGCAAACTCTCTCAGCTCCGGGAGTCACGGGAGCAGCACCAGCATTCAGACCTGGATTCTAACCAGA
CTCACTCTTCAGGAACTGTGACCTCCTCCTCCTCCACAGCTAACATAGACGACTTGAAAAAAAGACTGGAGAGAA
TAAAGAGCAGTCGCAAATGAAGCTGCCCCACTCCCCCGGCACCCTGCAGCTTTAGTTTACTAAACTAGAAGTCCT
CATAGTTTAAAATGGCCTCAGCAGGCCTAGTGTATACAAACTGGTTGTATGTATCATGCCGTGGAGCTAGGGGGA
GGGGTCATTGTGGCACAAGTATTTGTACATACTCTGCTTCTCTCTGTCAGCGTCCTGCTGCTCTAGAAGACTGTC
CGTGGATGAGTTTAGTGTACAGACTTGTAAACAGCTGCCCCCTCTCTGCTCAGTCTAGTTCCCAGGTCCTTTTCT
TTTCTTTTTAATTGCTCATTTGTAAAATTGTCCTAATCTTTCCTAGCTTTTTAATAGTTAATATTAGAAACTCTT
TAATAGTTTTCCTTTCAGTTTGTGAGCTCTTCTCTGTCGCCCTGAAGGGTCACTGTATTCTGTATGAATCCATGG
CATGATACAACTAATTTAAGAGTCTTTTATAAATAAAGTTTGCATTAACTAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6776

MGDDSEWLKLPVDQKCEHKLWKARLSGYEEALKIFQKIKDEKSPEWSKFLGLIKKFVTDSNAVVQLKGLEAALVY
VENAHVAGKTTGEVVSGVVSKVFNQPKAKAKELGIEICLMYIEIEKGEAVQEELLKGLDNKNPKIIVACIETLRK
ALSEFGSKIILLKPIIKVLPKLFESREKAVRDEAKLIAVEIYRWIRDALRPPLQNINSVQLKELEEEWVKLPTSA
PRPTRFLRSQQELEAKLEQQQSAGGDAEGGGDDGDEVPQIDAYELLEAVEILSKLPKDFYDKIEAKKWQERKEAL
ESVEVLIKNPKLEAGDYADLVKALKKVVGKDTNVMLVALAAKCLTGLAVGLRKKFGQYAGHVVPTILEKFKEKKP
QVVQALQEAIDAIFLTTTLQNISEDVLAVMDNKNPTIKQQTSLFIARSFRHCTASTLPKSLLKPFCAALLKHIND
SAPEVRDAAFEALGTALKVVGEKAVKPFLADVDKLKLDKIKECSEKVELIHGKKAGLAADKKEFKPLPGRTAASG
AAGDKDTKDISAPKPGPLKKAPAAKAGGPPKKGKPAAPGGAGNTGTKNKKGLETKEIVEPELSIEVCEEKASAVL
PPTCIQLLDSSNWKERLACMEEFQKAVELMDRTEMPCQALVRMLAKKPGWKETNFQVMQMKLHIVALIAQKGNFS
KTSAQVVLDGLVDKIGDVKCGNNAKEAMTAIAEACMLPWTAEQVVSMAFSQKNPKNQSETLNWLSNAIKEFGFSG
LNVKAFISNVKTALAATNPAVRTAAITLLGVMYLYVGPSLRMFFEDEKPALLSQIDAEFEKMQGQSPPAPTRGIS
KHSTSGTDEGEDGDEPDDGSNDVVDLLPRTEISDKITSELVSKIGDKNWKIRKEGLDEVAGIINDAKFIQPNIGE
LPTALKGRLNDSNKILVQQTLNILQQLAVAMGPNIKQHVKNLGIPIITVLGDSKNNVRAAALATVNAWAEQTGMK
EWLEGEDLSEELKKENPFLRQELLGWLAEKLPTLRSTPTDLILCVPHLYSCLEDRNGDVRKKAQDALPFFMMHLG
YEKMAKATGKLKPTSKDQVLAMLEKAKVNMPAKPAPPTKATSKPMGGSAPAKFQPASAPAEDCISSSTEPKPDPK
KAKAPGLSSKAKSAQGKKMPSKTSLKEDEDKSGPIFIVVPNGKEQRMKDEKGLKVLKWNFTTPRDEYIEQLKTQM
SSCVAKWLQDEMFHSDFQHHNKALAVMVDHLESEKEGVIGCLDLILKWLTLRFFDTNTSVLMKALEYLKLLFTLL
SEEEYHLTENEASSFIPYLVVKVGEPKDVIRKDVRAILNRMCLVYPASKMFPFIMEGTKSKNSKQRAECLEELGC
LVESYGMNVCQPTPGKALKEIAVHIGDRDNAVRNAALNTIVTVYNVHGDQVFKLIGNLSEKDMSMLEERIKRSAK
RPSAAPIKQVEEKPQRAQNISSNANMLRKGPAEDMSSKLNQARSMSGHPEAAQMVRREFQLDLDEIENDNGTVRC
EMPELVQHKLDDIFEPVLIPEPKIRAVSPHFDDMHSNTASTINFIISQVASGDINTSIQALTQLFQIESLAREAS
TGVLKDLMHGLITLMLDSRIEDLEEGQQVIRSVNLLVVKVLEKSDQTNILSALLVLLQDSLLATASSPKFSELVM
KCLWRMVRLLPDTINSINLDRILLDIHIFMKVFPKEKLKQCKSEFPIRTLKTLLHTLCKLKGPKILDHLTMIDNK
NESELEAHLCRMMKHSMDQTGSKSDKETAKGASRIDAKSSKAKVNDFLAEIFKKIGSKENTKEGLAELYEYKKKY
SDADIEPFLKNSSQFFQSYVERGLRVIEMEREGKGRISTSTGISPQMEVTCVPTPTSTVSSIGNTNGEEVGPSVY
LERLKILRQRCGLDNTKQDDRPPLTSLLSKPAVPTVASSTDMLHSKLSQLRESREQHQHSDLDSNQTHSSGTVTS
SSSTANIDDLKKRLERIKSSRK

FIGURE 6777A

GCGAACCCGCAGCGCTTACCGCGCGGCGCCGCACCATGGAGCCCGCCGTGTCGCTGGCCGTGTGCGCGCTGCTCT
TCCTGCTGTGGGTGCGCCTGAAGGGGCTGGAGTTCGTGCTCATCCACCAGCGCTGGGTGTTCGTGTGCCTCTTCC
TCCTGCCGCTCTCGCTTATCTTCGATATCTACTACTACGTGCGCGCCTGGGTGGTGTTCAAGCTCAGCAGCGCTC
CGCGCCTGCACGAGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGACCT
TCATGTGCACGGGGCGCCCTGGCTGGCTCACTGTCTCACTACGTGTCGGGAAGTACAAGAAGACACACAAAAACA
TCATGATCAACCTGATGGACATTCTGGAAGTGGACACCAAGAAACAGATTGTCCGTGTGGAGCCCTTGGTGACCA
TGGGCCAGGTGACTGCCCTGCTGACCTCCATTGGCTGGACTCTCCCCGTGTTGCCTGAGCTTGATGACCTCACAG
TGGGGGGCTTGATCATGGGCACAGGCATCGAGTCATCATCCCACAAGTACGGCCTGTTCCAACACATCTGCACTG
CTTACGAGCTGGTCCTGGCTGATGGCAGCTTTGTGCGATGCACTCCGTCCGAAAACTCAGACCTGTTCTATGCCG
TACCCTGGTCCTGTGGGACGCTGGGTTTCCTGGTGGCCGCTGAGATCCGCATCATCCCTGCCAAGAAGTACGTCA
AGCTGCGTTTCGAGCCAGTGCGGGGCCTGGAGGCTATCTGTGCCAAGTTCACCCACGAGTCCCAGCGGCAGGAGA
ACCACTTCGTGGAAGGGCTGCTCTACTCCCTGGATGAGGCTGTCATTATGACAGGGGTCATGACAGATGAGGCAG
AGCCCAGCAAGCTGAATAGCATTGGCAATTACTACAAGCCGTGGTTCTTTAAGCATGTGGAGAACTATCTGAAGA
CAAACCGAGAGGGCCTGGAGTACATTCCCTTGAGACACTACTACCACCGCCACACGCGCAGCATCTTCTGGGAGC
TCCAGGACATTATCCCCTTTGGCAACAACCCCATCTTCCGCTACCTCTTTGGCTGGATGGTGCCTCCCAAGATCT
CCCTCCTGAAGCTGACCCAGGGTGAGACCCTGCGCAAGCTGTACGAGCAGCACCACGTGGTGCAGGACATGCTGG
TGCCCATGAAGTGCCTGCAGCAGGCCCTGCACACCTTCCAAAACGACATCCACGTCTACCCCATCTGGCTGTGTC
CGTTCATCCTGCCCAGCCAGCCAGGCCTAGTGCACCCCAAAGGAAATGAGGCAGAGCTCTACATCGACATTGGAG
CATATGGGGAGCCGCGTGTGAAACACTTTGAAGCCAGGTCCTGCATGAGGCAGCTGGAGAAGTTTGTCCGCAGCG
TGCATGGCTTCCAGATGCTGTATGCCGACTGCTACATGAACCGGGAGGAGTTCTGGGAGATGTTTGATGGCTCCT
TGTACCACAAGCTGCGAGAGAAGCTGGGTTGCCAGGACGCCTTCCCCGAGGTGTACGACAAGATCTGCAAGGCCG
CCAGGCACTGAGCTGGAGCCCGCCTGGAGAGACAGACACGTGTGAGTGGTCAGGCATCTTCCCTTCACTCAAGCT
TGGCTGCTTTCCTAGATCCACACTTTCAAAGAGAAACCCCTCCAGAACTCCCACCCTGACAGCCCAACACCACCT
TCCTCCTGGCTTCCAGGGGGCAGCCCAGTGGAATGGAAAGAATGTGGGATTTGGAGTCAGACAAGCCTGAGTCCA
GTTCCCTGTTTAGAACTCATTAGCTGTGTGACTCTGGGTGAGTCCCTTAACCCCTCTGAGCCCGGGTCTCTTCAT
TAGTTGAAAGGGATAGTAATACCTACTTGCAGGTTGTTGTCATCTGAGTTGAGCACTGGTCACATTGAAGGTGCT
GGGTAAGTGGTAGCTCTTGTTGCTTCCCGTTCAGCGTCACATCTGCAGTGGAGCCTGAAAAGGCTCCACATTAGG
TCACCTGTGCACAGCCATGGCTGGAATGATGAAGGGGATACGCTGGAGTTGCCCTGCCATCGCCTCCATCAGCCA
GACGAGGTCCTCACAGGAGAAGGACAGCTCTTCCCCACCCTGGGATCTCAGGAGGGCAGCCACGGAGTGGGGAGG
CCCCAGATGCGCTGTGCCAAAGCCAGGTCCGAGGCCAAAGTTCTCCCTGCCATCCTTGGTGCCGTCCTGCCCCTT
CCTCCTTCATGCCTGGGCCTGCAGGCCCACCCCAGCCACCACTGAGTCCACTCGGAGTGCCCTGTGTTCCTGGAG
AAGGCATTCCAGGGTTGAATCTTGTCCCAGCCTCAGCCTGGGACACCTAGGTGGAGAGAGTGGTCTCCGCTCTGA
ATTGGATCCAGGGGACCTGGGCTCATTCTTCTTGGCTCACCAACCCTGCAGGCCTCATCTTTCCCAAAACCCACT
TTGTCTTGGTGGGAGTGGGTCCGCGCTGCTCTGCAGCAGGGGCTGGGGAGTGGACAGCATCAGGTGGGAAAGTGG
AGTCCACCCTCATGTTTCTGTAGGATTCTCACCGTGGGGCTGGAAGAAAAGAGCATCGACTTGATTTCTCCAACC
ACTCATCCCTCTTTTTCTTTCTTCCACCACTCCCCACCCCAGCTGTAGTTAATTTCAGTGCCTTACAAATCCTAA
GCTCAGAGAAAGTTCCATTTCCGTTCCAGAGGGAAGGGAACCTCCCTAGGTCCTTCCCTGGCTTGTTATAACGCA
AAGCTTGGTTGTTTATGCAACTCTATCTTAAGAACTGCCCAGCCTCAGCTGAAAACCCGAATCTGAGAAGGAATT
GCGTCATGTAAGGGAAGCTGGAATTAAGGGAGCTGAGCCAGTCATGGTTGTGGCGTGTGAGTCAGGAGACCTAGG
TTTCAGCCCCTCTCTACTGTCAGCGAGCTGTGCAACGTGGGCAAGTCATTGTCCTCTGAGCTGCAGTTTCCTCAT
CTGTCACATCGCTACAGACAAGACCTCCCTGGAACCCTTCTGATTGTCTTAGACACTGTGGTTGCAAAACCCACG
GAAAGCCTCATTTGTGTGGAAAGTCAGAGGAAAAATGATCCAGTGGACACTTGGGGATTATCTGTCATTCAAGAT
CCTTCCTTCAACCCCAAGGCCAGCTCCCATCTCATTTCCAGAAAGGCTCATACCTGGCTTGCAGGGAAGCATCTG
TCTTGTCATTCCAGGTGCCAGAATCCTCTCAGAGTCATTGAAGGGTGTTCACCCATCCCACCCAAGGCTTGGCAC
ACTGCCAGTGTCTTAGCAGGGTCTTGTGAGGGCTGGGGGCATCCAGGCACTCAGAAGGCAAAGGAACCACCCTAC
CCATTTGGCCTCTGGAGGGGGCAGAAGAAAGAAAGAAACCTCATCCTATATTTTACAAAGCATGTGAATTCTGGC
ATTAGCTCTCATAGGAGACCCATGTGCTTCCTTGCTCAGTGCAAAACTGATGATTCTACTTGCTGTAGATGAATG
GTTAACACGAGCTAGTTAAACAGTGCCATTGTTTTGCCAGTGAAGCCTCCAACCCTAAGCCACTGGGACGGTGGC

FIGURE 6777B

CAGAGATGCCAGCAGCCTCTGTCGCCCTTAGTCATATAACCAAAATCCAGACCTTATCCACAACCCGGGGCTTGG
AAAGGAAGGTATTTTGGAATCACACCCTCCGGTTATGTTGCTCCAGTAAAATCTTGCCTGGAAAGAGGCAGTCTT
CTTAGCATGGTGAGCTGAGTTCATGGCTTTTTTTTGTAGCCAGTCCTGTCCCTGGCCATCCATGTGATGGTTTTG
GATGGAGTTAAACTTGATGCCAGTGGGCAGTGCATGTGGAAAGTATCAGAGTAAGCCTCTCCCCTCCAGAGCCCT
GAGTTTCTTGGCTGCATGAAGGTTTTCTTTAGAATCAGAATTGTAGCCAGTTTCTTTGGCCAGAAGGATGAATAC
TTGGATATTACTGAAAGGGAGGGGTGGAGATGGGTGTGGCAGTGTATGGTGTGTGATTTTTATTTTCTTCTTTGG
TCATGGGGGCCAAGGAGAAAGGCATGAATCTTCCCTGTCAGGCTCTTACAGCCACAGGCACTGTGTCTACTGTCT
GGAAGACATGTCCCCGTGGCTGTGGGGCCGCTGCTTCTGTTTAAATAAAAGTGGCCTGGAAAAAAAAAAAAAAAA
AA

7540/8433

FIGURE 6778

MEPAVSLAVCALLFLLWVRLKGLEFVLIHQRWVFVCLFLLPLSLIFDIYYYVRAWVVFKLSSAPRLHEQRVRDIQ
KQVREWKEQGSKTFMCTGRPGWLTVSLRVGKYKKTHKNIMINLMDILEVDTKKQIVRVEPLVTMGQVTALLTSIG
WTLPVLPELDDLTVGGLIMGTGIESSSHKYGLFQHICTAYELVLADGSFVRCTPSENSDLFYAVPWSCGTLGFLV
AAEIRIIPAKKYVKLRFEPVRGLEAICAKFTHESQRQENHFVEGLLYSLDEAVIMTGVMTDEAEPSKLNSIGNYY
KPWFFKHVENYLKTNREGLEYIPLRHYYHRHTRSIFWELQDIIPFGNNPIFRYLFGWMVPPKISLLKLTQGETLR
KLYEQHHVVQDMLVPMKCLQQALHTFQNDIHVYPIWLCPFILPSQPGLVHPKGNEAELYIDIGAYGEPRVKHFEA
RSCMRQLEKFVRSVHGFQMLYADCYMNREEFWEMFDGSLYHKLREKLGCQDAFPEVYDKICKAARH

FIGURE 6779

CCGGGACTTTGCAGGCAGCGGCGGCCGGGGGCGGAGCGGGATCGAGCCCTCGCCGAGGCCTGCCGCCATGGGCCC
GCGCCGCCGCCGCCGCCTGTCACCCGGGCCGCGCGGGCCGTGAGCGTCATGGCCTTGGCCGGGGCCCCTGCGGGC
GGCCCATGCGCGCCGGCGCTGGAGGCCCTGCTCGGGGCCGGCGCGCTGCGGCTGCTCGACTCCTCGCAGATCGTC
ATCATCTCCGCCGCGCAGGACGCCAGCGCCCCGCCGGCTCCCACCGGCCCCGCGGCGCCCGCCGCCGGCCCCTGC
GACCCTGACCTGCTGCTCTTCGCCACACCGCAGGCGCCCCGGCCCACACCCAGTGCGCCGCGGCCCGCGCTCGGC
CGCCCGCCGGTGAAGCGGAGGCTGGACCTGGAAACTGACCATCAGTACCTGGCCGAGAGCAGTGGGCCAGCTCGG
GGCAGAGGCCGCCATCCAGGAAAAGGTGTGAAATCCCCGGGGGAGAAGTCACGCTATGAGACCTCACTGAATCTG
ACCACCAAGCGCTTCCTGGAGCTGCTGAGCCACTCGGCTGACGGTGTCGTCGACCTGAACTGGGCTGCCGAGGTG
CTGAAGGTGCAGAAGCGGCGCATCTATGACATCACCAACGTCCTTGAGGGCATCCAGCTCATTGCCAAGAAGTCC
AAGAACCACATCCAGTGGCTGGGCAGCCACACCACAGTGGGCGTCGGCGGACGGCTTGAGGGGTTGACCCAGGAC
CTCCGACAGCTGCAGGAGAGCGAGCAGCAGCTGGACCACCTGATGAATATCTGTACTACGCAGCTGCGCCTGCTC
TCCGAGGACACTGACAGCCAGCGCCTGGCCTACGTGACGTGTCAGGACCTTCGTAGCATTGCAGACCCTGCAGAG
CAGATGGTTATGGTGATCAAAGCCCCTCCTGAGACCCAGCTCCAAGCCGTGGACTCTTCGGAGAACTTTCAGATC
TCCCTTAAGAGCAAACAAGGCCCGATCGATGTTTTCCTGTGCCCTGAGGAGACCGTAGGTGGGATCAGCCCTGGG
AAGACCCCATCCCAGGAGGTCACTTCTGAGGAGGAGAACAGGGCCACTGACTCTGCCACCATAGTGTCACCACCA
CCATCATCTCCCCCCTCATCCCTCACCACAGATCCCAGCCAGTCTCTACTCAGCCTGGAGCAAGAACCGCTGTTG
TCCCGGATGGGCAGCCTGCGGGCTCCCGTGGACGAGGACCGCCTGTCCCCGCTGGTGGCGGCCGACTCGCTCCTG
GAGCATGTGCGGGAGGACTTCTCCGGCCTCCTCCCTGAGGAGTTCATCAGCCTTTCCCCACCCCACGAGGCCCTC
GACTACCACTTCGGCCTCGAGGAGGGCGAGGGCATCAGAGACCTCTTCGACTGTGACTTTGGGGACCTCACCCCC
CTGGATTTCTGACAGGGCTTGGAGGGACCAGGGTTTCCAGAGTAGCTCACCTTGTCTCTGCAGCCCTGGAGCCCC
CTGTCCCTGGCCGTCCTCCCAGCCTGTTTGGAAACATTTAATTTATACCCCTCTCCTCTGTCTCCAGAAGCTTCT
AGCTCTGGGGTCTGGCTACCGCTAGGAGGCTGAGCAAGCCAGGAAGGGAAGGAGTCTGTGTGGTGTGTATGTGCA
TGCAGCCTACACCCACACGTGTGTACCGGGGGTGAATGTGTGTGAGCATGTGTGTGTGCATGTACCGGGGAATGA
AGGTGAACATACACCTCTGTGTGTGCACTGCAGACACGCCCCAGTGTGTCCACATGTGTGTGCATGAGTCCATCT
CTGCGCGTGGGGGGGCTCTAACTGCACTTTCGGCCCTTTTGCTCGTGGGGTCCCACAAGGCCCAGGGCAGTGCCT
GCTCCCAGAATCTGGTGCTCTGACCAGGCCAGGTGGGGAGGCTTTGGCTGGCTGGGCGTGTAGGACGGTGAGAGC
ACTTCTGTCTTAAAGGTTTTTTCTGATTGAAGCTTTAATGGAGCGTTATTTATTTATCGAGGCCTCTTTGGTGAG
CCTGGGGAATCAGCAAAAGGGGAGGAGGGGTGTGGGGTTGATACCCCAACTCCCTCTACCCTTGAGCAAGGGCAG
GGGTCCCTGAGCTGTTCTTCTGCCCCATACTGAAGGAACTGAGGCCTGGGTGATTTATTTATTGGGAAAGTGAGG
GAGGGAGACAGACTGACTGACAGCCATGGGTGGTCAGATGGTGGGGTGGGCCCTCTCCAGGGGGCCAGTTCAGGG
CCCAGCTGCCCCCCAGGATGGATATGAGATGGGAGAGGTGAGTGGGGGACCTTCACTGATGTGGGCAGGAGGGGT
GGTGAAGGCCTCCCCCAGCCCAGACCCTGTGGTCCCTCCTGCAGTGTCTGAAGCGCCTGCCTCCCCACTGCTCTG
CCCCACCCTCCAATCTGCACTTTGATTTGCTTCCTAACAGCTCTGTTCCCTCCTGCTTTGGTTTTAATAAATATT
TTGATGACGTT

FIGURE 6780

MALAGAPAGGPCAPALEALLGAGALRLLDSSQIVIISAAQDASAPPAPTGPAAPAAGPCDPDLLLFATPQAPRPT
PSAPRPALGRPPVKRRLDLETDHQYLAESSGPARGRGRHPGKGVKSPGEKSRYETSLNLTTKRFLELLSHSADGV
VDLNWAAEVLKVQKRRIYDITNVLEGIQLIAKKSKNHIQWLGSHTTVGVGGRLEGLTQDLRQLQESEQQLDHLMN
ICTTQLRLLSEDTDSQRLAYVTCQDLRSIADPAEQMVMVIKAPPETQLQAVDSSENFQISLKSKQGPIDVFLCPE
ETVGGISPGKTPSQEVTSEEENRATDSATIVSPPPSSPPSSLTTDPSQSLLSLEQEPLLSRMGSLRAPVDEDRLS
PLVAADSLLEHVREDFSGLLPEEFISLSPPHEALDYHFGLEEGEGIRDLFDCDFGDLTPLDF

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FIGURE 6781

TCCCGGGTACACTCTCTGGAGCGGCGTCTGGAAGCTCTTGCTGCTGAATTTTCCTCCAACTGGCAGAAGGAGGCC
ATGCGGCTGGAACGTCTGGAGCTGCGGCAAGGGGCTCCTGGCCAGGGAGGTGGTGGTGGCCTGAGCCACGAGGAC
ACCCTGGCGCTGCTGGAGGGGCTAGTGAGCCGCCGTGAAGCTGCCCTGAAGGAGGATTTCCGCAGGGAAACTGCT
GCTCGCATCCAGGAAGAACTGTCTGCCCTGAGAGCAGAGCATCAGCAAGACTCAGAAGACCTCTTCAAGAAGATC
GTCCGGGCCTCCCAGGAGTCCGAGGCTCGCATCCAGCAGCTGAAGTCAGAGTGGCAAAGCATGACCCAGGAGTCC
TTCCAGGAGAGCTCTGTGAAGGAGCTGAGGCGGCTGGAGGACCAGCTGGCCGGCCTGCAGCAGGAGCTGGCGGCT
CTGGCACTGAAGCAGAGCTCGGTGGCGGAAGAAGTGGGCCTGCTGCCCCAGCAGATCCAGGCCGTGCGGGACGAC
GTGGAATCTCAGTTCCCGGCCTGGATCAGTCAGTTCCTTGCCCGAGGTGGAGGGGGCCGCGTGGGGCTCCTTCAG
AGAGAGGAGATGCAAGCTCAGCTGCGAGAGCTGGAGAGCAAGATCCTCACCCATGTGGCAGAGATGCAGGGCAAG
TCGGCCAGGGAAGCCGCGGCCTCCCTGAGCCTGACGCTGCAGAAAGAAGGTGTGATTGGAGTGACAGAGGAGCAG
GTGCACCACATCGTGAAGCAGGCCCTGCAGCGCTACAGTGAGGACCGCATCGGGCTGGCAGACTACGCCCTGGAG
TCAGGAGGGGCCAGCGTCATCAGCACCCGATGTTCTGAGACCTACGAGACCAAGACGGCCCTCCTCAGCCTCTTC
GGCATCCCCCTGTGGTACCACTCCCAGTCACCCCGAGTCATCCTCCAGCCAGATGTGCACCCAGGCAACTGCTGG
GCCTTCCAGGGGCCACAGGGCTTCGCCGTGGTCCGCCTCTCTGCCCCGCATCCGCCCCACAGCCGTTACCTTAGAG
CATGTGCCCAAGGCCTTGTCACCCAACAGCACTATCTCCAGTGCCCCCAAGGACTTCGCCATCTTTGGGTTTGAC
GAAGACCTGCAGCAGGAGGGGACACTCCTTGGCAAGTTCACTTACGATCAGGACGGCGAGCCTATTCAGACGTTT
CACTTTCAGGCCCCTACGATGGCCACGTACCAGGTGGTGGAGCTGCGGATCCTGACTAACTGGGGCCACCCCGAG
TACACCTGCATCTACCGCTTCAGAGTGCATGGGGAGCCCGCCCACTAG

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FIGURE 6782

CCNGAAACTGCTAAAGAACATGGCCTGNTTGACATGTANCATGAGTCACCTGACCCACAGCATATATGCTTATGA
CTAAACCCTCCACTCCTGATTCTCAAGAGTGTATCACCTGNCAGCANAATGAATAGTGGGATATTTTGGGCCATN
ANAAATGTGAAATTTTGCCTCTTTAATGTTAATTCAAAACTATATCAATGTTTTCTTGTTCCCACCTCTAACCCA
AGGAAAAAAAGAGAAAACATACTATGCANAGGAAGTTTAAACTTAAGNTTTCCTTAAGGGTCAGCCCAACAT

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FIGURE 6783

GGCACGAGGTTTTTTTACATTGGTCAGTACACAGGTCAGGAGCTCACGCCAGGGCCTTGAGGACAGGCTGACCCT
CCTCCCCGGGGTGGCGTGGGGCTGGGGCACCCTCCGACGGCAGAGCCTCCTTCAGAAAGTGCAGCTCAAGTCTTA
AAGACACCAAAACTGAGCCATGGGCACGCGCCGTCTCCGGGCCATGGCGTTCACTGCAGGGCGGGGGCGGCACCG
CTCCCCTGTGACTGCATCCCGCCTCCCTGGGGACCTGCCTGTGGCAGGAAGGAATGGGGGGCCCCAGCCCCAGGC
CGGGAAGGAGCCAGCGGCCGACAAAGCAGAAACACCCGCTGCTCCACGTAGCCCCTGCTCGCTGTCCTTGCTCTC
AGAAGTCCCGGTCCCATGTAGATAGAGGGGGGCGCATCTTACCAAAGCATTTCCTCCTGGAGGCTACGCCGCTGT
GCTCCCAGTCAGGCGGCTGGTAGGGAGCTTTGCCTGCCCCGGGGATACCCTCTGCCAGCCGCTGGAAGTGGGAAT
GCTGGCGACAGACTGTGTCCTCTTTCCCACCTTCATAGCAGGAATCACCCGGACCCGACTGGCTGGGCTTCGTGC
TAGCGAGGGTTCTGGGGGTGGGTCTTGGTGATCTTGTCCTATGGGGAGTCTGCAGTGGTCTCAGCCACATCCTAT
GTATTTTGGCTCTGGAGGAGCAAAGCTGTATCCTGGAGTTGGTCTGTGATTTGCCGACAGCCTTGCAGGCTGGGC
TCAGGGACAAAGTCCCCCCCAAAACCCGCAGGTCCTCATGTCCAGACGCTGCCCAGTCCTGTCCTGAAAACAGCA
CGCCCCAGGCCCACAGAACCCCCACCCTACATTTGCCTTGGGTGGAGCTGGGGGTGGTCCTAGGACTGCGGGTGC
CCTTAGCTGAAGGGGGTGGGGAGAAGCGTGGACTGGGCAGCCTGTGGGTAATTGGAGGTTCATTGAGAATTGAGT
CTTTGGAAACACTAAGAAAATCAAATTTTTAAAAGTTATTTATGGCCTGGGAAACAATTTGCATTTGTCCCCAAA
TACGCTTAGCTGTGTGCCGCTTAGAACGATGCGAAACCATCCCTCTGTGTAAGCCCGTGCCGTGTGACTCGAAGC
CTAGCGCCCTCCCTGCGAAGCATCAGACGCCACCCAGCCCTGGGGGGGAGGCCCACGCCTGCTGGACCAACGCGGG
TTCTGGGGTGCACAGCGCCAGGTTAACGCTGAAGCCTGCCCCGCTGAGCCCAGGAGCCGGGAGGCCTGCGGGCTG
ACCCAGAATCCGATCATGCACCTGTCCTCATGCCAGCGGCTTTGGCTGGGGTTGGTCTGAAGCCTGCACGCGGCA
GTTCTTTGTTAAAGATCTGAGGGACTCCTCAGTCCTGGGGCGTCGCCGCCTGCAGCCTCTTCCAAGCCCTGCGTC
CAGCGAGCGTCACAGCACAACCTGCAAAAACGGAGCTGGGCTGCAGCTGGGGCTGGCATGGACTTTCATTTCAGA
GATTCGGTTTTTAAGAAGATGCATGCCTAATGTGTTCTTTTTTTTTTCCAATGATTTGTAATATACATTTTATGA
CTGGAAACTTTTTTGTACAACACTCCAATAAACATTTTGATTTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAA

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FIGURE 6784

MAFTAGRGRHRSPVTASRLPGDLPVAGRNGGPQPQAGKEPAADKAETPAAPRSPCSLSLLSEVPVPCR

FIGURE 6785

CTTATTATGACTGAACAAGCAAGAAGATATCTGAGTACTTACACAGCTACCAGTAGTACTTCAAGAGCTCTCATA
CTGTAATTGTTATTAAAATTGATGATATGCCCCACTCCCTTACTGCAGTCTCTACTAAATTAGGTTGCAGTGAAA
TTTTTCTCAATTAGTTGTTTTTAAAGTTGTAAGATAGCCCTTTTAATACAGCATCTTTTTTCTATTCTATATAGT
AGGCAGAAAGCTAGTAAGTCACTTAAGGGGTAGATAGTTTCATAGTTTATTTTTTAAGAGATGAGATTTTTAAAA
ATTGTTTTTAAAGAACAAGATGGGAAAATAATAGAATGTTCATGGATTTCTAAAAGTAAATTCTCATATATTTTC
TTCACAAGATATATGTTGCTACTCTCTTGATGCTGCAGTTTTGTTATAGATAGGTGTATGAGTATATATGATTTC
TGAAATTAGTCTATGTATGGAAAGCACACATGATTTTATGAAGTACTTTTGCCCATGTGCTGATTTACTTAGGCT
ACCATTTACAAAGAAACACATTGAAAAGGAATTTAAAGGAAGGATAGAAAGTTGCACTACTAATTTTTTGTTTTT
TTTTTCAGAAGCAGTAAAATTAACTACAGTGTTAAATGTATTTATTTGAGCATAGTACTGAAAACAAAAAGCATT
CAAAAAAGAGTTTTTTCTTTATTAGTAAATAGTATTTTCTTAATCTCAGAGGAGCTGAGAGTTTTGTTGAATGTA
TTGTACAGTATGTAGGAGCAGGAGAACTTTGTAAATTGGAAAGAAGTCTGTTTTTATAATTTATTTTTATTTTTA
AAGCTT

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FIGURE 6786

LIMTEQARRYLSTYTATSSTSRALIL

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FIGURE 6787

GCTCGTGGGTTTTCCGTGAAGTCGCGGTGCAGCGGTGGGCGGCATGTCTGTGGCCGGTGGGGAGATTCGTGGGGA
CACGGGGGGAGAGGACACTGCTGCTCCCGGCCGGTTCAGCTTCAGCCCGGAGCCCACGCTCGAGGACATCCGCCG
CCTCCATGCTGAGTTTGCTGCGGAACGAGACTGGGAACAGTTCCATCAGCCTCGGAATCTCCTCCTGGCCTTGGT
TGGGGAAGTGGGGGAGCTGGCAGAACTCTTTCAGTGGAAAACCGATGGGGAACCTGGCCCCCAAGGCTGGTCCCC
CAGGGAACGGGCAGCCCTTCAAGAGGAGCTTAGTGACGTCCTCATCTACCTGGTGGCATTAGCAGCCCGCTGCCG
TGTGGATCTGCCGCTAGCAGTGCTCTCCAAAATGGACATCAACCGGCGACGCTACCCAGCCCATCTGGCCCGCAG
CTCTTCCCGCAAGTATACAGAATTGCCCCATGGGGCCATCTCTGAAGACCAGGCTGTGGGGCCTGCGGACATTCC
CTGTGACTCCACAGGCCAGACCTCAACCTAGAAAGATGGCCACAGGACTTGCAACTCAGGGTGGTGTCTGAAGAG
CAGAGAGTGGCCTGGCCCTGGAGCCTTTTTCTAGTCTTTTCAGAATAGATCATGGGCCTGAGGCCTCCACTTCTT
GAGGTCTGAGGCCCAGCAGCCTCTAGAAGGTAGCCTCCTGGTGTTTGTTCTCCCAGTAAAATGGTTTTGGGCGAT
AACTTCTAGATTATTCCTGGATGGCCAGGGAGGCTCTCTGTCTCAGCAGGTGATGACGGGGGTACCAGGGGTGCC
TCTGAGACCCATTCTCGTGTTTCCCTGTTGTACCTTTTGCCTGCAGGGCAGAGAGATCTGGTTTCTAGCAAATTC
CCAGTAGGATGTCATGTAAGTTCCTTCCCCCTCTTAGAGATTGAAGGCTGTAAGAGTCCAGATGGTGGAGCCAGG
CTGTCTGGGTTCAAATGCCATCTTTGACACTTGCAAGCTAAATGACATTACTCAAATTAATCGTTCTGCACTTCA
GCTTCCTTGTCTATCAAATAAAAAGAATAGTACCTGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAA

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FIGURE 6788

MSVAGGEIRGDTGGEDTAAPGRFSFSPEPTLEDIRRLHAEFAAERDWEQFHQPRNLLLALVGEVGELAELFQWKT
DGEPGPQGWSPRERAALQEELSDVLIYLVALAARCRVDLPLAVLSKMDINRRRYPAHLARSSSRKYTELPHGAIS
EDQAVGPADIPCDSTGQTST

FIGURE 6789

TTTTTTTTATTGAATAAAGCAGCTTTGAAGCTTATCAGGCACTGCCCAACAAAACAGTCCAAAAAAAATCTGTTA
TGAACTTTTTAACCTTGGGCTAACAGCCAAGTACTCTGTACAAGAAAAACTGTAAAATATTTCATAGTTTTAATT
CTGAAGCCATTTTTTTTTTTTACTGGCATCCTGTACATTTACTTTTAAAAAAGGATAACAAAAATGAATATTAAC
AAAAXTCCGGGACAACAATATCTTCAAGGCAACAAAAACTGGGGTGGGGAAGCTTATTCTGAAGGTACATTTAAA
ACTGAAATAACAACTTAATGAAA

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FIGURE 6790

GAATTCGGCACGAGGCCTCAGTCTTCCAGGGCGGCGGTGGGTGTCCGCTTCTCTCTGCTCTTCGACTGCACCGCA
CTCGCGCGTGACCCTGACTCCCCCTAGTCAGCTCAGCGGTGCTGCCATGGCGTGGCGGCGGCGCGAAGCCGGCGT
CGGGGCTCGCGGCGTGTTGGCTCTGGCGTTGCTCGCCCTGGCCCTGTGCGTGCCCGGGGCCCGGGGCCGGGCTCT
CGAGTGGTTCTCGGCCGTGGTAAACATCGAGTACGTGGACCCGCAGACCAACCTGACGGTGTGGAGCGTCTCGGA
GAGTGGCCGCTTCGGCGACAGCTCGCCCAAGGAGGGCGCGCATGGCCTGGTGGGCGTCCCGTGGGCGCCCGGCGG
AGACCTCGAGGGCTGCGCGCCCGACACGCGCTTCTTCGTGCCCGAGCCCGGCGGCCGAGGGGCCGCGCCCTGGGT
CGCCCTGGTGGCTCGTGGGGGCTGCACCTTCAAGGACAAGGTGCTGGTGGCGGCGCGGAGGAACGCCTCGGCCGT
CGTCCTCTACAATGAGGAGCGCTACGGGAACATCACCTTGCCCATGTCTCACGCGGGAACAGGAAATATAGTGGT
CATTATGATTAGCTATCCAAAAGGAAGAGAAATTTTGGAGCTGGTGCAAAAAGGAATTCCAGTAACGATGACCAT
AGGGGTTGGCACCCGGCATGTACAGGAGTTCATCAGCGGTCAGTCTGTGGTGTTTGTGGCCATTGCCTTCATCAC
CATGATGATTATCTCGTTAGCCTGGCTAATATTTTACTATATACAGCGTTTCCTATATACTGGCTCTCAGATTGG
AAGTCAGAGCCATAGAAAAGAAACTAAGAAAGTTATTGGCCAGCTTCTACTTCATACTGTAAAGCATGGAGAAAA
GGGAATTGATGTTGATGCTGAAAATTGTGCAGTGTGTATTGAAAATTTCAAAGTAAAGGATATTATTAGAATTCT
GCCATGCAAGCATATTTTTCATAGAATATGCATTGACCCATGGCTTTTGGATCACCGAACATGTCCAATGTGTAA
ACTTGATGTCATCAAAGCCCTAGGATATTGGGGAGAGCCTGGGGATGTACAGGAGATGCCTGCTCCAGAATCTCC
TCCTGGAAGGGATCCAGCTGCAAATTTGAGTCTAGCTTTACCAGATGATGACGGAAGTGATGACAGCAGTCCACC
ATCAGCCTCCCCTGCTGAATCTGAGCCACAGTGTGATCCCAGCTTTAAAGGAGATGCAGGAGAAAATACGGCATT
GCTAGAAGCCGGCAGGAGTGACTCTCGGCATGGAGGACCCATCTCCTAGCACACGTGCCCACTGAAGTGGCACCA
ACAGAAGTTTGGCTTGAACTAAAGGACATTTTATTTTTTTTACTTTAGCACATAATTTGTATATTTGAAAATAAT
GTATATTATTTTACCTATTAGATTCTGATTTGATATACAAAGGACTAAGATATTTTCTTCTTGAAGAGACTTTTC
GATTAGTCCTCATATATTTATCTACTAAAATAGAGTGTTTACCATGAACAGTGTGTTGCTTCAGACTATTACAAA
GACAACTGGGGCAGGTACTCTAATATAAAGGACAGGTGGTGTTTCTAAATAATTGGCTGCTATGGTTCTGTAAAA
ACCAGTTAATTCTATTTTTCAAGGTTTTTGGCAAAGCACATCAATGTTAGACTAGTTGAAGTGGAATTGTATAAT
TCAATTCGATAATTGATCTCATGGGCTTTCCCTGGAGGAAAGGTTTTTTTTGTTGTTTTTTTTTTAAGAACTTGA
AACTTGTAAACTGAGATGTCTGTAGCTTTTTTGCCCATCTGTAGTGTATGTGAAGATTTCAAAACCTGAGAGCAC
TTTTTCTTTGTTTAGAATTATGAGAAAGGCACTAGATGACTTTAGGATTTGCATTTTTCCCTTTATTGCCTCATT
TCTTGTGACGCCTTGTTGGGGAGGGAAATCTGTTTATTTTTTCCTACAAATAAAAAGCTAAGATTCTATATCGCA
AAAAAAAAAAAAAAAAAAAAAAAAATTCCTGCGGCCGC

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FIGURE 6791

MAWRRREAGVGARGVLALALLALALCVPGARGRALEWFSAVVNIEYVDPQTNLTVWSVSESGRFGDSSPKEGAHG
LVGVPWAPGGDLEGCAPDTRFFVPEPGGRGAAPWVALVARGGCTFKDKVLVAARRNASAVVLYNEERYGNITLPM
SHAGTGNIVVIMISYPKGREILELVQKGIPVTMTIGVGTRHVQEFISGQSVVFVAIAFITMMIISLAWLIFYYIQ
RFLYTGSQIGSQSHRKETKKVIGQLLLHTVKHGEKGIDVDAENCAVCIENFKVKDIIRILPCKHIFHRICIDPWL
LDHRTCPMCKLDVIKALGYWGEPGDVQEMPAPESPPGRDPAANLSLALPDDDGSDDSSPPSASPAESEPQCDPSF
KGDAGENTALLEAGRSDSRHGGPIS

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FIGURE 6792

CGCTCCGCCGACCGAAGAGGCTGGACATGACACCAGTGGCATATCACGGCCATGGGGTCTCAGCATTCCGCTGCT
GCTCGCCCCTCCTCCTGCAGGCGAAAGCAAGAAGATGACAGGGACGGTTTGCTGGCTGAACGAGAGCAGGAAGAA
GCCATTGCTCAGTTCCCATATGTGGAATTCACCGGGAGAGATAGCATCACCTGTCTCACGTGCCAGGGGACAGGC
TACATTCCAACAGAGCAAGTAAATGAGTTGGTGGCTTTGATCCCACACAGTGATCAGAGATTGCGCCCTCAGCGA
ACTAAGCAATATGTCCTCCTGTCCATCCTGCTTTGTCTCCTGGCATCTGGTTTGGTGGTTTTCTTCCTGTTTCCG
CATTCAGTCCTTGTGGATGATGACGGCATCAAAGTGGTGAAAGTCACATTTAATAAGCAAGACTCCCTTGTAATT
CTCACCATCATGGCCACCCTGAAAATCAGGAACTCCAACTTCTACACGGTGGCAGTGACCAGCCTGTCCAGCCAG
ATTCAGTACATGAACACAGTGGTCAGTACATATGTGACTACTAACGTCTCCCTTATTCCACCTCGGAGTGAGCAA
CTGGTGAATTTTACCGGGAAGGCCGAGATGGGAGGACCGTTTTCCTATGTGTACTTCTTCTGCACGGTACCTGAG
ATCCTGGTGCACAACATAGTGATCTTCATGCGAACTTCAGTGAAGATTTCATACATTGGCCTCATGACCCAGAGC
TCCTTGGAGACACATCACTATGTGGATTGTGGAGGAAATTCCACAGCTATTTAACAACTGCTATTGGTTCTTCCA
CACAGCGCCTGTAGAAGAGAGCACAGCATATGTTCCCAAGGCCTGAGTTCTGGACCTACCCCCACGTGGTGTAAG
CAGAGGAGGAATTGGTTCACTTAACTCCCAGCAAACATCCTCCTGCCACTTAGGAGGAAACACCTCCCTATGGTA
CCATTTATGTTTCTCAGAACCAGCAGAATCAGTGCCTAGCCTGTGCCCAGCAAATAGTTGGCACTCAATAAAGAT
TTGCAGAATTTAATACAGATCTTTTCAGCTGTTCTTAGGGCATTATAAATGGAAATCATAACGTGGTTCTAGGTT
ATCAAACCATGGAGTGATGTGGAGCTAGGATTGTGAGTGACCTGCAGGCCATTATCAGTGCCTCATCTGTGCAGA
AGTGGCAGCAGAGAGGGACCATCCAAATACCTAAGAGAAAACAGACCTAGTCAGGATATGAATTTGTTTCAGCTG
TTCCCAAAGGCCTGGGAGCTTTTTGAAAAGAAAGAAAAAAGTGTGTTGGCTTTTTTTTTTTTTAGAAAGTTAGA
ATTGTTTTTACCAAGAGTCTATGTGGGGCTTGATTCACCCTTCATCCATTGGCTGGAACATGGATTGGGGATTTG
ATAGAAAAATAAACCCTGCTTTTGATTCAAAAAAAAAAAAAAAAAAA

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FIGURE 6793

MGSQHSAAARPSSCRRKQEDDRDGLLAEREQEEAIAQFPYVEFTGRDSITCLTCQGTGYIPTEQVNELVALIPHS
DQRLRPQRTKQYVLLSILLCLLASGLVVFFLFPHSVLVDDDGIKVVKVTFNKQDSLVILTIMATLKIRNSNFYTV
AVTSLSSQIQYMNTVVSTYVTTNVSLIPPRSEQLVNFTGKAEMGGPFSYVYFFCTVPEILVHNIVIFMRTSVKIS
YIGLMTQSSLETHHYVDCGGNSTAI

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FIGURE 6794

AAAACTTCAGTCAGAGCCCAAGTGTATCTTGATGCACTCACCACCATCAGCCATGGCTGAACTTCCACCTTCTGC
CAACACATCTGTCTGTAGCACACTTTATTTTTATGGTATCGCCATTTTCCTGGGCAGCTTTGTACTCAGCCTCCT
TACCATTATGGTCTTACTTATCCGAGCCCAGACATTGTATAAGAAGTTTGTGAAGTCAACTGGCTTTCTGGGGAG
TGAACAGTGGGCAGTGATTCACATTGTGGACCAACGGGTGCGCTTCTACCCAGTGGCCTTCTTTTGCTGCTGGGG
CCCAGCTGTCATTCTAATGATCATAAAGCTGACTAAGCCACAGGACACCAAGCTTCACATGGCCCTTTATGTTCT
CCAGGCTCTAACGGCAACATCTCAGGGTCTACTCAACTGTGGAGTATATGGCTGGACGCAGCACAAATTCCACCA
ACTAAAGCAGGAGGCTCGGCGTGATGCAGATACCCAGACACCATTATTATGCTCACAGAAGAGATTCTATAGCAG
GGGCTTAAATTCACTGGAATCCACCCTGACTTTTCCTGCCAGTACTTCTACCATTTTTTGAAACTACAATACTGG
AACATCCAGGAACTGGAGTTATTCTACGCTAATGGATTGGAAAGAATGTTGGGAAAGGACATCTTAAATCTTTTT
CTAACTATGCCCCTAAACTGCAGAACTCAAAGGAAATATAG

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FIGURE 6795

GATATTGTAGACCTTTATTTTCTTTAAATCTCCTAATAAAAACATTAAACTTTCAAGAAGATTCCAAACTGACAT
TGCATAGACCAACTCCTTTCCAAAAATATCTCTGATATACTCTCCAACTCTCTCAATATATAGAATTTGAAGTCC
AGGAGCTGTGGGCACCTGGTGGGAATTCACTGAGCTCAAGGGGACAAGAGGGCTGAGGACAGGGCTCCCACATGG
GGACAAGGCCAGGCTTTCTGGCCTCTGGTTCCAGCCAGCATCAATTTGGTTGTGGCCAAATTCTCAGTCCAATCA
CCCTGGCCCAGG

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FIGURE 6796

GGGTATTTCATGTTATGCCCATTTATAGTTTACTGTGGATTGTTTGTATCCCTTACCTGCTTTCTATTGGGTTAT
GTGTGGATATATTGTTTTTATTTGTTCAGCATCTCCTTCCCCATCTTCTGGTAACACAACCTTTATTTATTTGTG
GGGAACCTATTCCCTGTGGCTTAGGTGAGCATGTGACCAGGCCTGGCCTCCTGAGTCCCACAGCTTCCTAGCCAC
AGTGATAAAAGAATGGGTATATAACTTAAGCCAGGCTAAGGAAAGCCCTTAACA

FIGURE 6797A

CGGGCCCTGGGGCTCGGGAGTCGGGGGCGGTGGGACAGTGCGGCTACTCTTGATCCTCTCCGGCTGCTTGGTCTA
CGGCACAGCTGAAACTGATGTAAATGTGGTCATGCTTCAGGAATCCCAAGTTTGTGAAAAGCGTGCCAGCCAACA
ATTCTGTTACACAAATGTGCTTATCCCAAAATGGCATGATATATGGACACGGATACAGATCCGAGTAAATAGTTC
CAGATTGGTTCGAGTCACCCAGGTGGAGAATGAGGAGAAACTGAAGGAGCTAGAGCAGTTTAGTATCTGGAACTT
TTTTTCCTCCTTTTTAAAAGAGAAATTGAATGACACCTATGTTAACGTGGGTCTATACAGCACAAAAACCTGCCT
CAAAGTTGAGATTATAGAGAAGGACACCAAGTACAGTGTCATTGTGATCCGGAGATTTGATCCCAAACTCTTTCT
TGTTTTCCTTCTTGGACTTATGCTATTTTTTTGTGGAGACTTGCTGAGCAGAAGTCAAATTTTCTACTACTCTAC
TGGGATGACTGTGGGAATTGTGGCCTCTCTGCTAATCATCATTTTTATACTATCTAAGTTTATGCCTAAGAAAAG
TCCCATTTACGTCATCCTGGTGGGAGGCTGGTCTTTTTCTCTGTACCTCATTCAACTAGTTTTTAAAAATTTACA
AGAGATCTGGAGGTGTTACTGGCAGTATCTTTTAAGTTATGTCCTCACAGTTGGATTCATGAGTTTTGCAGTATG
TTACAAGTATGGGCCCTTGGAGAATGAACGAAGTATCAACCTGCTGACCTGGACCTTGCAGCTGATGGGCCTGTG
TTTCATGTATTCTGGCATCCAGATACCACATATTGCCCTTGCCATTATCATCATTGCTCTTTGTACTAAGAACCT
GGAACACCCTATTCAGTGGCTGTACATCACCTGCAGAAAGGTGTGTAAGGGAGCAGAAAAGCCTGTTCCCCCTCG
TCTCCTGACAGAAGAAGAATATCGGATACAAGGAGAGGTAGAAACCCGAAAGGCTTTAGAGGAGCTCCGAGAATT
TTGTAACAGTCCAGACTGCTCTGCTTGGAAGACTGTTTCTCGAATCCAGTCTCCAAAAAGATTTGCTGACTTTGT
GGAAGGCTCTTCCCACCTCACGCCAAATGAAGTTTCTGTCCATGAGCAGGAGTATGGATTAGGGAGCATTATTGC
CCAGGATGAAATCTATGAGGAAGCATCCTCTGAGGAGGAGGACTCATATTCTCGGTGTCCTGCTATCACACAGAA
CAACTTTCTAACCTAGGTAGTGGTCAGTTATCTTTACGTGGACTGGCTTGGTGCCTTGGTCCATGTTGCATGTGT
TGTGCAATTGCTTTCAACCCTTTGAAACAGAGTGAGATAGATAGGGTAGAAATTCTCCTACTGAAATAAGAGGCC
TAAAAAGGCCTCCCTTTGGAAATGGGAGGTCTCTATGGGATCCCTGAGGAAGGAGAGTGGATAAAGTAGTGAATG
CTGGGTAGTTCACTTCCCATTGGTTAAGCTAACAGCCCACTTTTATGTTTCCAGAGAAATTGGATGGCCACAGCT
AGCATGGCATTCTAGCTCCTTCTTGAAAGTTGATTCAATCATGGCATTTCTGTCACTGGCTGGCTCTCCAAAGTA
AGAACTGTTGTTAAGTGCAGGAATGCTTTTAGACTATAGGCTGCAACTTCCAGAGAGAAATCCACAAATCTGAGC
CTCCTTCACTCCAGCTTTTATTTCAGTGACTTTAGAATAATTATTGATTTAACTGTTTTGGGAGGAAAATAGATT
TTTATTGTTTTGTTTTTTAAATGAATGTCTTTTAAAAAACATAACAAACTCATGTTCCAGAACCAGCAAGTGCTC
CAGAGTGACACACCCCCTAGGCCCCTACATATTTATTAATATGGATTATCCATTAAAGCCCCAGGAGCTGTTGTT
TTAAGCTTTGATTTAGTTCTCATACATATGATAGAAAGTCCTATTTGCCTTTAGGAACATGCCTGTAGGCTCTTC
TGCAGGTGAGATGTACTGGGCTTTTTATTATATTCAACTTTCAATTCCATCTTAAAAAACATTTGTATTCTTCTC
TTCCCATTCTTCCTTACCCTGCCTTTGCCCTTTCAGGAAGGGTCAGTTCCCTTACCTGTGAACTATGTATGTTCA
GAGTAGCATTATTCCTGCTAGCTAGGAGAAGTCATCTTGTTTAGGGGATTTGGATGCTTTTTATACGTTCTCCAT
TTTCCTGTCATTGGGTCATGTTATCTTTGAGTTGCTATGAAATCAGGAAACTGTCTCCTTTTCCTTTCCCTTCCT
TTGTCTACATGCTCTGTCCATTCCTTTCAGCCTTTTCTCACCACCCATACTCCCCCAAATCTGGGTAATTTTTAA
GCCTTGAAACTATGTAGTTTCTTGATACACAATTTGTAGTTATGCAGCAGCCACAATTTGCATTGCCAGGAAATA
GGCTCCAGGTTATCTTCATGCCTCTGGGTGCTCATTCAGCTGTCAAGTTTCCATGAACTTACACTTATTTATGAT
TGCGTTTCTGACCTGAGATGTATGCTGCCTGTTATTGCAGTAGCATTAGTTTCAGATTCTTTTGCCATTGCAAAG
TACCCCTTATAAACCAGCAATGTCATCTGTGAGGAAGCAAATTCTCAAGTGTCTGTCATTTACTTGGTTCTTTTT
CTTTGTGGTCTTCACCCTTATACCCTGGAAAAGTCTGTAATTACCTTAGCCAGGAAGATAGATGGTCATGGCAAG
CGCACAGCACCAGACTTACTGGCTCACCAAGATGATGGAAAAAGGCAGATGATTTTTTAAAAAGCCGTAATGACT
CCTTTAGACCAGCCATTTAGCGTGGTAATTTTGAAAGGCCTAGCTCCATTGCAGACTTCCAAAGGGTCAGCTCTG
AGACTGCCCTCCAGGTGGGCAGTTGATTATTTCCACCAGTGTTTTCCAGAGCCTTAAACTGTCCTAAGTGACAAC
TACCTCAGTTGGCAGGAAAGAGACATATAGTAGAAAGTGAAAAATGAGCAGTATTTGGGCAGATGCTATGGGTTA
CAGTTGAAGGGTAAAAGGAACTTTACATTGGGAAACCTTTATACCCTTGTGAATTATGTACATGGTAAAATGTTC
TCTCTCTACAAAGAACTATTAAAACTTCTGAAATATACTATTTTTTACCTTATTTATAGAAATTGAGACCTAGCA
TATTTAAGCATAAGTTTATTTTAAAAAATAATTCAACTCGTGCAAGTGGTCTCAGGATTCTCTGGAGATTTTGGT
GCCTCCCCTACTTAGGGAGGTGATAGCTTGCCTATAAGGGTGACTTTTCCTGATCATGTCTTTATTTCAATGAGA
AAGCACTGTGAAATTGTGAAAGATTCTCCTCTTTCTCTGTTTAATAAACCCCCATGAAATATAGTTTCCATCTCT
AGACCAGTTTTTTTTCCACCGTGTTTAGACTTGAGGTGAATAAAATCAAACTGTTTTTTACTCCCTATCTGGTAG
TTGGAGACCTGAGCTGTAGGCAGTGGAGATGGCAATTGGTTCTGCAGCCTGAGAGTTGCTCTCACACAGTGAAGG

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FIGURE 6797B

ACGGTGCTGCTCTGGTGTGCTGTGTGTCCTTGCCCTGCCTGCCTGTGGCTCTGCCCAGATGCTTCAGATCCTCTG
TGTTCCGGAGATTGCTTGACTTCAACCTTCTTTAGGAGCTGCTCTTGTCTCCCTCTTGGCCACTTAGTTTGCTGG
CTCAGTCACTACTTGAAGACCCCATTTAATTTTTCTCTGGCAGTTATAGCTCTTGTGATTTCAGTACAGTCTCAT
CTCTCAGACCAATCTCATCAAGAAGGATTGAAGGGATAACTATGAGGTAAGCTGGACATTGGAGCCGTGTTTGCT
GCCACGTCAGCGTCTTGCTGGGTGAATGTCAAGCCATAAATGGGCTCCAGGGCTCTGGATCTCATCAGCATTGGA
AATCTATTGCCTCTCATCAGTCTGACCAAATTATGTAGAGCATTAATGTAGAGACTCCCATTAATGGGAATACAA
GAGGCAGCTGGCATAAAACATTTCTTTCACTTTCCTTTCCCACTCAGATTGCTTCAAGAGACCAACAGAACACAG
GGATCAAAAACAAGGAAAATTTAGCAACTTCATTACCTTCTAATAAGTAATTCCTGTTAGCCACTGCATCCCACC
AAAACTAGTTTATTTTTCCCCTCAAATTCATGATTTTTACGTCTGTTACAAAGGGAATTTTGCTGATAGCTCTTT
GGGTCCCACTGTTCCATTTTATGCTAATAGATTCCATTCTAGGGCCCAGCCGTCTCTTGACTGATGGTGTTCCCT
TTAACCCTTGGCATGTATAATAGAATTTTGGTGAATGAAAGAACCCAAATAGGCCAGATAGTCCCCCCAGGCCCT
GATATCCATAAAAGGCTTGGGA**ATG**CATTATGTAATTGTCCTTAGTCTTTTTGTTGTTTTAGAAAAAAAAAACAA
GATGGGCTCAGATGGATGCCTACGTAAAAATGGTTCC**TAG**CTGTGTACTCATAACTTTTCTTTGAATTGAGTAGT
GAAAGGAAGGAGGAGGAAAGGAAATTAAATGTCCTTCTAGTATTCTCTGGACTCAAGTCTGACATATGAGATAAT
AACCTATATTGAAATGCCAAGAATTGTATCTGAAACAAGAGAACAGTTTGACACATTTATCATGCCTTCATATTA
CATATTAACTGAAACCAATTAATAAACATATGAAATATCCATTGCACAAGGCAAAGGCACCTAAACCTTTTGTTT
CTTTTTCTACATAGCAGAAATTGATTTTTTTTTTATTTTTTTAGGGGAACCTATATAATTATGACCCAGTGATGT
CTTTTGGTGACTTAAGCTTATGAATTCAGGTTACAATTGAGTTGATTCTAGATGGTTACTACCTTGAAAAGGATG
TTGGTGCCTTATGTGACACGAGCCAGAGCCTGCTGGGAATAAACAAAGCAGATTCATGCCAACACCAACTCGTAG
CTTTAGTGGCAGATGGGAGTGGTCACAGACTCCCAAAATGTGGGGCTTTGGATTTCCACACCATCCCACGTGTGT
GTCATCTTCCTCTTTCACACTCTTGATGATAATTTGAAAATGATGAAATCACCTCTGAATTTGCCTATAGCATGA
GCACATTCTTATGACAACATAACAAATAGTTCATAATGTGAATATTAGAAACTGTTACAGCCTGCAGTTACCATA
ATTTTCCATGTTTGTGGAATTGATATTGAAATAGCAGGGCTAAGGAATTACTGGCAAGTTTTAGCCTGTGGGTAA
TACCTTAGGGTTATTTAAATATTTGTAATTTTATTTAAATGTTCATGAATGTTTGAAAGGAACAAAATTATCAGG
GATGGCTCTTTGCCATGGGTCTTATTTTCACCCTCTTTTCTGTAAGAAAAAAGAACAATGTCTTAATGTATTTTT
AAAGTTTTTGGTATAGTTTCTAATTCCAATTTTAATAAAAGTTTTATAGAT

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FIGURE 6798

MHYVIVLSLFVVLEKKNKMGSDGCLRKNGS

FIGURE 6799

TATGCAGTTTCCATTTCCCAGTGAATTATGAGTGGAGGGCAACTTTTCTAACCAGATTGTCTTTTCAGAACAAAG
ACCTGGGAATTGAGGAAGAGTTTGGAAAGAGGGAGAGGCAAGGAAAGAGAGCTTTAAATTGAAAGGTTAATTTCC
TAAGAGGAACCTGGGCTGAATGACTACAGTGTTATACCCTCCAATCTTTGCAGGTGGGCATGGAACACTGCTTGT
ATCACTCTGTGCACGGTATAAATCCATATATCCACAAAAACACACATCCATCCATCAACATATACATGGTTTGGG
ATGAGCAGGTCAATAGTTTTGAGAGGGAGTTTGTTCCTTTTTTTTTTCTCATTATACTCTAAAATTGTTGNCAGT
TATCAAACAAACAAACAGAAAAATTGTTTGGAAAAACCTTGCATACNCCTTTNCTATCAAGNGCTTTAAAATATA
GACTAAATACACACATCCTGCCAGTTTTTTNTTACAGGGACAGTATCCTTACCTGCCATTTAATATTAGCCTCGT
ATTTTTNTCACGTATATTTACCTG

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FIGURE 6800

TGGTAGACCCAATGAAATCGAACCTCCACCCCCAGAGATGCCACCGTGGCAGAAGAGGCAAGATGGCCCCCAGCA
GCAAACAGGAGGCCGAGGAGGAGGGAGAGGTGGCTATGAACATTCCTCATACGGAGGACGAGGAGGTCATGAACA
AGGAGGCGGGAGAGGTGGACGTGGTGGCTATGACCATGGTGGCCGAGGGGGAGGAAGAGGAAATAAGCATCAAGG
AGGCTGGACAGATGGAGGGAGTGGTGGAGGAGGTGGCTACCAAGATGGTGGTTATCGAGATTCAGGTTTCCAGCC
AGGTGGCTATCATGGTGGCCACAGCAGTGGTGGCTATCAAGGCGGAGGTTATGGTGGCTTCCAAACATCTTCTTC
ATATACAGGAAGTGGATACCAGGGTGGTGGCTACCAGCAGGACAATAGATACCAAGATGGCGGGCACCATGGTGA
TCGTGGTGGTGGTCGTGGTGGGCGAGGTGGTCGTGGAGGCCGAGGTGGTCGTGCAGGCCAGGGAGGAGGCTGGGG
AGGAAGAGGGAGCCAGAATTATCACCAAGGGGGTCAATTTGAACAGCATTTCCAGCATGGAGGTTATCAGTATAA
TCATTCTGGATTTGGACAGGGAAGACATTACACTAGTTGAGGCTACCGAACCTTACATTTTGCTAGAGCTCAAGT
AATAGAAACTTAGTTTCAGAATCCTGAATTCAGCACTTATTTTGAATTAATGTGAGACCACAGGTGGCAGGCAGA
TTCCTGCTTGGCATAAGCATTTGTAGGTCTTCATTCAATTCTGTTAGATTTTTTTATTGGACTTACATAATGCCG
TTTATTTGAGAAACACATAACATCTCTCCTTTCTATGAAAAATTTTTTAAAAGGTGGTTAAAATTGCCTTTAATT
GCCCAGTAGACTAATTCCACAGTCAGAACATGCAAACTTTTTTGAAGAAATTACTTGAATAAGTAGTTTTCATGT
TTTCAATATGCAGTTTTGAAAATGAGGATTCACCTAGACTTTTTTAGATTTACTACTAGGAAACCTTCCTCATAT
GAATAACCATTTATATGTGTTTTGCTTAAAGTATTCCAATGCCTATTTTCCAAGCACAGTTCTGCCCCCCGGTTG
ACTTTTATGCCACGTGTGCTTCATGATGGAACTTTTAGGTCAGTTCCTATTAAATGAGCTCTTCTGCAGATAGCA
CATTCAGTAGCCTTATTTTGTTGATGGAATACTGTATCATATGCTCAACTCTGAAAACCTTGAACACGGCCAAAA
TCCATAAAGATTATAAAAGCAAACTAAGTTGTGAAGCTATAGTACATGTAGGCATTTAGTTAAGTATAGCAATTC
AAACTGACCTGCATCCATCCAAAACAAATTCCTCCTTCAACCTTATTTTTACTTGAAATTTGCTAGAAGAAATAG
CAAACCGAAATTTGTTTTATGCATGAGTTAATACCACTGGCTCAGCAAATACAAGTTAGTTTGCTTTAAGAACAG
GTAACTTTTTTTGTAATGGAAGAAATGCACTACAAAGTTAAGACAGATTTTTGCTAAGTGCAGGAGGCCCTTTAT
TATTGCTGCAGAAAACAAAAGCCTGGCTGAGTTGATGTTTTACATTCTCCCTTACTGAAATCTACATGACATGAT
GCTTCTTGCTGGGTTTTTGTACATGTAAACATTGTCAAGCTGTGAAAGAAAATGGCTGGAGGTGTGCTTTGTGTG
AAAGGTGAGCAATAAAGTATCTGTTAAGTTCT

FIGURE 6801

MKSNLHPQRCHRGRRGKMAPSSKQEAEEEGEVAMNIPHTEDEEVMNKEAGEVDVVAMTMVAEGEEEEISIKEAGQ
MEGVVEEVATKMVVIEIQVSSQVAIMVATAVVAIKAEVMVASKHLLHIQEVDTRVVATSRTIDTKMAGTMVIVVV
VVVGEVVVEAEVVVQAREEAGEEEGARIITKGVNLNSISSMEVISIIILDLDREDITLVEATEPYILLELK

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FIGURE 6802

GCGGCTGTCCAGTCGTAGCCCGGCCGCCCGCGCCTGTCCGGTCCGGTCCGGCCACGGAGGCAGCGCAGCGGCGGG
ACTCCGAGCCTACCCCGCCGAGTGAGCTGCGCCGCACCGTGCCGTCCCACCCGGCACCCACCAGTCCG**ATG**GGGC
CGCAGCGGCGGCTGTCCCCTGCCGGGGCCGCCCTACTCTGGGGCTTCCTGCTCCAGCTGACAGCCGCTCAGGAAG
CAATCTTGCATGCGTCTGGAAATGGCACAACCAAGGACTACTGCATGCTTTATAACCCTTATTGGACAGCTCTTC
CAAGTACCCTAGAAAATGCAACTTCCATTAGTTTGATGAATCTGACTTCCACACCACTATGCAACCTTTCTGATA
TTCCTCCTGTTGGCATAAAGAGCAAAGCAGTTGTGGTTCCATGGGGAAGCTGCCATTTTCTTGAAAAAGCCAGAA
TTGCACAGAAAGGAGGTGCTGAAGCAATGTTAGTTGTCAATAACAGTGTCCTATTTCCTCCCTCAGGTAACAGAT
CTGAATTTCCTGATGTGAAAATACTGATTGCATTTATAAGCTACAAAGACTTTAGAGATATGAACCAGACTCTAG
GAGATAACATTACTGTGAAAATGTATTCTCCATCGTGGCCTAACTTTGATTATACTATGGTGGTTATTTTTGTAA
TTGCGGTGTTCACTGTGGCATTAGGTGGATACTGGAGTGGACTAGTTGAATTGGAAAACTTGAAAGCAGTGACAA
CTGAAGATAGAGAAATGAGGAAAAAGAAGGAAGAATATTTAACTTTTAGTCCTCTTACAGTTGTAATATTTGTGG
TCATCTGCTGTGTTATGATGGTCTTACTTTATTTCTTCTACAAATGGTTGGTTTATGTTATGATAGCAATTTTCT
GCATAGCATCAGCAATGAGTCTGTACAACTGTCTTGCTGCACTAATTCATAAGATACCATATGGACAATGCACGA
TTGCATGTCGTGGCAAAAACATGGAAGTGAGACTTATTTTTCTCTCTGGACTGTGCATAGCAGTAGCTGTTGTTT
GGGCTGTGTTTCGAAATGAAGACAGGTGGGCTTGGATTTTACAGGATATCTTGGGGATTGCTTTCTGTCTGAATT
TAATTAAAACACTGAAGTTGCCCAACTTCAAGTCATGTGTGATACTTCTAGGCCTTCTCCTCCTCTATGATGTAT
TTTTTGTTTTCATAACACCATTCATCACAAAGAATGGTGAGAGTATCATGGTTGAACTCGCAGCTGGACCTTTTG
GAAATAATGAAAAGTTGCCAGTAGTCATCAGAGTACCAAAACTGATCTATTTCTCAGTAATGAGTGTGTGCCTCA
TGCCTGTTTCAATATTGGGTTTTGGAGACATTATTGTACCAGGCCTGTTGATTGCATACTGTAGAAGATTTGATG
TTCAGACTGGTTCTTCTTACATATACTATGTTTCGTCTACAGTTGCCTATGCTATTGGCATGATACTTACATTTG
TTGTTCTGGTGCTGATGAAAAAGGGGCAACCTGCTCTCCTCTATTTAGTACCTTGCACACTTATTACTGCCTCAG
TTGTTGCCTGGAGACGTAAGGAAATGAAAAAGTTCTGGAAAGGTAACAGCTATCAGATGATGGACCATTTGGATT
GTGCAACAAATGAAGAAAACCCTGTGATATCTGGTGAACAGATTGTCCAGCAA**TAA**TATTATGTGGAACTGCTAT
AATGTGTCATTGATTTTCTACAAATAGACTTCGACTTTTTAAATTGACTTTTGAATTGACAATCTGAAAGAGTCT
TCAATGATATGCTTGCAAAAATATATTTTTATGAGCTGGTACTGACAGTTACATCATAAATAACTAAAACGCTTT
GCTTTTAATGTTAAAGTTGTGCCTTCACATTAAATAAAACATATGGTCTGTGTAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 6803

MGPQRRLSPAGAALLWGFLLQLTAAQEAILHASGNGTTKDYCMLYNPYWTALPSTLENATSISLMNLTSTPLCNL
SDIPPVGIKSKAVVVPWGSCHFLEKARIAQKGGAEAMLVVNNSVLFPPSGNRSEFPDVKILIAFISYKDFRDMNQ
TLGDNITVKMYSPSWPNFDYTMVVIFVIAVFTVALGGYWSGLVELENLKAVTTEDREMRKKKEEYLTFSPLTVVI
FVVICCVMMVLLYFFYKWLVYVMIAIFCIASAMSLYNCLAALIHKIPYGQCTIACRGKNMEVRLIFLSGLCIAVA
VVWAVFRNEDRWAWILQDILGIAFCLNLIKTLKLPNFKSCVILLGLLLLYDVFFVFITPFITKNGESIMVELAAG
PFGNNEKLPVVIRVPKLIYFSVMSVCLMPVSILGFGDIIVPGLLIAYCRRFDVQTGSSYIYYVSSTVAYAIGMIL
TFVVLVLMKKGQPALLYLVPCTLITASVVAWRRKEMKKFWKGNSYQMMDHLDCATNEENPVISGEQIVQQ

FIGURE 6804

GAACACAAACATGCAGTCTGTAGCAGATGGTAATAGGCTGAYATATTACACTTGTTGATGTAAATCTGATAGGTT
TCTTTCTCTCCAAGGACAGCTTTTTAAATATTTAACAGTATCAATAATTTTTCAGTTTCTGTGAGAATTTTATAA
TTTATAATTTGCAGACTTAATGTATAATCTATTTTGTCCTAACAATTACAAATATATTTTTTATTTCAGATTRTA
TATATTCCTACCAGATGGAGATAATTACAGCTTTAAAAATTTTTATTTTTTCATTTTATTTCACACATTGACATT
AAATTTTTATGGACACATAATAACTGTACATATATATGGGGTAGAATGTGATGTTTTAATACATGTACTCAATGT
GTAATGATCAAATCAGGGTAATTTGCATAATGATTTTTCTGTAGGGAGAAAATTCAAAATCTACTCTTCTGGCTA
TTTTCAAATATATAATATGTTATTGTTAACTATACTCATCCTACTATGCAATAGGACACCAGAACTTATTCCTGG
GTTCTACATCCGT**TAA**GGCAACCAAGGATTGGAAATATTGGAAAAAAAAAATTGCGTCTGTACTGAACATGTACAG
ACTTTTTTCTTGTCCTTATTCCTTACACAATATAGTACAATAACTATTTGCATGACATTTACATCGGATATTATG
AGTGATCTAGAGTTGATATGAAGTATATGGGAGGATGTGCAAAGGTGATGTGCAAATACTATGTCATTTTATATC
AGGGACTTGAGTATCCTTTGTTAYCCTCAGGAGATCCTGAAACYAGTCCCCCATGGATACTGAGGGCTGACTGTA
TAGTCCTATCCTCACGGAACTTTCATTCTAATGRGGGAAGACTGACTATAAACAAAATATATGTAATAGGTGGTG
GTAAGTACCGTGGAGAAGTAACAAATGGGGCAAAGTGAGTTATACAGCTCCATYCTTAGAAACCTTGGAGTACTT
TTCTTAGTTTATACTCGTGGTGGTTTCCTTTTGTCTCCTTTATTACATGGGACTCTGACATGTGCCCATAGCTAG
GGTGGCAGTAGGATCTACCCGAAAAGCGTCCTGCTGATACAGGACCAAAGCATCCTGTTGTTCTCGAGCCTATAA
AAAGAGCTAATGGTCTTGCTTCTCTTAACTGTGGCCTCCTACACTGTGTTTTGGATGATTGGTGATGTCTTGGAT
ATTCTGTTTCTTTGGAACTTTGAATATACAACACTTTACTAGGGAATTAGCAATGGAAGCAGAGCAAAGATGTAC
AGAGGAAACAATGCRTAACTCTGATGGAATTGAAGTCATGAGGCAGCAGAGAGCTTAAATTASAGCTTTAAAAAT
TTTTATTTTTTAGAGGGAATTTAMTTGGGAGTAACAGCAGTAATAGTTAACGGAGCCAGAATGCTTGAGTCATAT
AATTGCAAAGCAGAGTTGGGAGCAACAGATGCTAAAGAGTAGTTGCTGTAGTTCCTCTTTGGGTCGTAGGAGCAG
TTGTCATRTTMCTATAYAGCTACTGCATGAAGAAGAGTTCTTAGTGAGGCCTGGGTGAACAGCTCTTCTTAGTAT
TCTGTGTGACCCCATTYGACCTTTTAACAAATCCCTAAGTAAATAAATAGCCCCTMAGGWAAACTAAGTTTTTCT
CTGCTGTTTTTTTGCTTGAGAGAGCTATAACTGTAATAGACTTATATTTCTGAACATTTTAGTGCTTGCCAATAT
TTGGTAATATTTATGTTTCCTATATTTGTAATGAACATTCTTCTTCMGGTACATTTYTTGTTAAATTATTGTTTS
ATGSATAAAAGTTCACCTTTTATTGTATAAAATTGACTCAGATTAATTTATACACATTGACAATGGGTAAATAGA
GTTTTTCAGATTATTAAAAGCTGAAGGATGCCCATGTAAGCAAAAAAAAAAAAAAAAAAACTCGA

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FIGURE 6805

IYSSGYFQIYNMLLLTILILLCNRTPELIPGFYIR

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FIGURE 6806

GCGGAAGAGGTGGGCTGGTGGAGGCGGGGTCGAGATGGCGGCGCCTTTGAGGATTCAGAGCGACTGGGCGCAAGC
CCTCAGGAAGGATGAAGGGGAGGCCTGGCTGAGCTGTCATCCCCCAGGGAAACCATCTTTGTATGGCAGCCTGAC
TTGTCAAGGAATTGGCCTAGATGGCATCCCAGAGGTTACAGCTTCAGAAGGATTTACTGTGAATGAAATAAACAA
GAAAAGCATTCATATTTCATGTCCAAAGGAAAATGCATCTTCTAAGTTTTTGGCACCATATACTACTTTTTCCAG
AATTCATACAAAGAGTATAACATGCCTGGACATTTCCAGCAGAGGAGGTCTTGGTGTGTCTTCTAGTACTGACGG
GACCATGAAAATCTGGCAGGCTTCCAATGGAGAACTCAGGAGAGTATTGGAAGGACATGTGTTTGATGTGAATTG
TTGCAGGTTTTTCCCATCAGGCCTTGTGGTCCTGAGTGGGGGAATGGATGCCCAGCTGAAGATATGGTCAGCTGA
AGATGCTAGCTGCGTGGTGACCTTCAAAGGTCACAAAGGAGGTATCCTGGATACAGCCATCGTTGATCGGGGGAG
GAATGTGGTGTCTGCTTCTCGAGATGGGACAGCACGACTTTGGGATTGTGGGCGCTCAGCCTGCTTGGGAGTCCT
TGCAGATTGTGGTTCTTCTATCAATGGAGTGGCGGTGGGTGCTGCTGACAACTCCATAAACCTTGGCTCCCCTGA
GCAGATGCCCAGTGAACGGGAGGTTGGAACAGAGGCCAAAATGCTGCTCTTGGCCCGGGAAGATAAGAAACTTCA
GTGCTTGGGACTACAGAGCAGGCAGCTGGTGTTCCTCTTTATTGGCTCAGACGCTTTCAACTGCTGTACTTTTCT
CTCTGGCTTCTTGCTATTGGCTGGGACTCAAGATGGAAACATTTATCAGCTGGATGTGAGGAGTCCAAGGGCTCC
GGTACAAGTCATCCACAGATCAGGAGCACCAGTTCTATCCCTGCTAAGTGTCAGAGATGGATTCATTGCTAGCCA
AGGTGATGGAAGCTGTTTTATTGTCCAGCAAGACTTAGACTATGTCACTGAGCTCACTGGGGCTGACTGTGACCC
TGTGTACAAGGTAGCCACATGGGAGAAGCAGATCTACACATGCTGTCGAGACGGTCTTGTACGACGCTACCAGCT
TTCTGACCTCTGACTTCTTGGAAAGAGCAGTCCCGGTTAGTGAAAAGGTTTGACCCTGATCAACAATGAGCAGAA
ACATCATCAGTCCTTCCCAAGGACCATGGCGTTTAATGTCTTGGGCACCCCTTGGAAATCACAGAAAGTCAGCTG
TACTGGCCGTGTGGAACTCTCATCCCAAGACCTACTTTGAACTGAGTAAGAAGGTCATTGTGCCCACTGCATTTG
TTCCAACTTCTCCTTGTATAAACTCACCCCAGCAACACAGGGCAAGGATATAGATGCTTTTAGTTTGTTCTTAAA
CCAGTTTTGTTAAATGTTTACAAGGACCTCAGTACTAAAGCCTGTTCTCTGGAGGAAATAAAGAAAATATGTTTG
GAGGTGCCTG

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FIGURE 6807

MAAPLRIQSDWAQALRKDEGEAWLSCHPPGKPSLYGSLTCQGIGLDGIPEVTASEGFTVNEINKKSIHISCPKEN
ASSKFLAPYTTFSRIHTKSITCLDISSRGGLGVSSSTDGTMKIWQASNGELRRVLEGHVFDVNCCRFFPSGLVVL
SGGMDAQLKIWSAEDASCVVTFKGHKGGILDTAIVDRGRNVVSASRDGTARLWDCGRSACLGVLADCGSSINGVA
VGAADNSINLGSPEQMPSEREVGTEAKMLLLAREDKKLQCLGLQSRQLVFLFIGSDAFNCCTFLSGFLLLAGTQD
GNIYQLDVRSPRAPVQVIHRSGAPVLSLLSVRDGFIASQGDGSCFIVQQDLDYVTELTGADCDPVYKVATWEKQI
YTCCRDGLVRRYQLSDL

FIGURE 6808A

CGTCATGGCCGTCAGCACCGCGTTCCCGTCCTCTTCCGCTTGGCCCCAGAAAGTTTCGGTTCTGCCCGGCGGTGG
ACCCACGAGCGCGTGCCACCATGGAGTCTGACCACTGCTGAGCAGACAGCCACCGAGGGCCGAAATTCTGAGCCT
TCCTCTGGACCCAGGCAGGAGACATACAGACAAGAAAGGCAAACTCACCATGGCCTCCACCAATGCAGAGAGCCA
GCTCCAGAGAATCATCCGAGACTTGCAAGATGCTGTGACAGAACTAAGCAAAGAATTTCAGGAAGCAGGGGAACC
CATCACGGATGACAGCACCAGCTTGCATAAATTTTCTTATAAACTTGAGTATCTCCTGCAATTTGATCAGAAAGA
GAAGGCCACCCTCCTGGGCAACAAGAAGGACTACTGGGATTACTTCTGTGCCTGCCTGGCCAAGGTGAAAGGAGC
CAATGATGGGATCCGATTTGTCAAGTCTATCTCAGAGCTCCGAACATCCTTGGGGAAAGGAAGAGCATTTATTCG
CTACTCCTTGGTGCACCAGAGGTTGGCAGACACCTTACAGCAGTGCTTCATGAACACCAAAGTGACCAGTGACTG
GTACTATGCAAGAAGCCCCTTTCTGCAGCCAAAGCTGAGCTCGGACATTGTGGGCCAACTCTATGAGCTGACTGA
GGTTCAGTTTGACCTGGCGTCGAGGGGCTTTGACTTGGATGCTGCCTGGCCAACATTTGCCAGGAGGACGCTGAC
CACTGGCTCTTCTGCTTACCTGTGGAAACCCCCTAGCCGCAGCTCCAGCATGAGCAGCTTGGTGAGCAGCTACCT
GCAGACTCAAGAGATGGTGTCCAACTTTGACCTGAACAGCCCCCTAAACAACGAGGCATTGGAGGGCTTTGATGA
GATGCGACTAGAGCTGGACCAGTTGGAGGTGCGGGAGAAGCAGCTACAGGAGCGCATGCAGCAGCTGGACAGAGA
GAACCAGGAGCTGAGGGCAGCTGTCAGCCAGCAAGGGGAGCAACTGCAGACAGAGAGGGAGAGGGGGCGCACTGC
AGCGGAGGACAACGTTCGCCTCACTTGCTTGGTAGCTGAGCTCCAGAAGCAGTGGGAGGTCACCCAGGCCACCCA
GAACACTGTGAAGGAGCTGCAGACATGCCTGCAGGCCCTGGAGCTAGGAGCAGCAGAGAAGGAGGAGGACTACCA
CACAGCCCTGCGGCGGCTGGAGTCCATGCTGCAGCCCTTGGCACAGGAGCTTGAGGCCACACGGGACTCACTGGA
CAAGAAAAACCAGCATTTAGCCAGCTTCCCAGGCTGGCTAGCCATGGCTCAGCAGAAGGCAGATTCGGCATCAGA
CACAAAGGGCCGGCAAGAACCTATTCCCAGTGATGCGGCCCAGGAGATGCAGGAGCTAGGGGAGAAGCTTCAAGC
CCTAGAAAGGGAGAGAACCAAGGTCGAGGAGGTCAACAGACAGCAGAGTGCCCAACTGGAACAGCTGGTCAAGGA
GCTTCAGCTGAAAGAGGATGCCCGGGCCAGCCTGGAGCGCCTGGTGAAGGAGATGGCCCCACTCCAGGAGGAGTT
GTCTGGGAAGGGACAGGAGGCAGACCAGCTCTGGCGACGGCTGCAGGAGTTGCTGGCCCACACGAGCTCCTGGGA
GGAGGAGCTAGCAGAGTTGAGGCGGGAGAAAAAACAGCAACAGGAGGAGAAGGAGCTGCTGGAGCAGGAGGTCAG
GTCTCTGACCCGGCAGCTGCAGTTCCTGGAGACCCAGCTGGCACAGGTGAGCCAACATGTGAGTGACCTGGAGGA
GCAGAAGAAGCAGCTCATTCAGGACAAAGACCACCTCAGCCAGCAGGTGGGTATGCTCGAGCGGCTTGCTGGGCC
GCCTGGCCCAGAACTGCCAGTGGCAGGTGAGAAGAATGAGGCCCTGGTCCCTGTGAACTCCAGTCTGCAAGAGGC
CTGGGGGAAGCCAGAGGAGGAGCAGAGGGGCCTGCAGGAGGCACAGTTAGACGATACCAAGGTGCAAGAGGGCAG
CCAGGAGGAAGAGCTCCGGCAGGCCAACAGGGAGCTGGAGAAGGAGCTACAGAATGTGGTCGGGCGTAACCAGCT
CCTGGAGGGCAAGCTGCAAGCCCTGCAGGCCGATTACCAGGCTTTGCAGCAGCGGGAATCAGCCATCCAGGGCTC
CTTGGCCTCCCTGGAGGCCGAGCAGGCCAGCATCCGGCACTTGGGTGACCAGATGGAGGCGAGCTTGCTGGCTGT
AAGGAAGGCCAAGGAGGCCATGAAAGCCCAGATGGCAGAGAAGGAGGCCATTCTACAGAGCAAGGAGGGCGAGTG
TCAGCAGCTGCGGGAGGAGGTGGAGCAGTGCCAGCAACTGGCAGAAGCCCGGCACAGAGAGCTTAGGGCTCTCGA
GAGCCAGTGCCAGCAGCAGACCCAGCTGATTGAGGTCCTCACAGCAGAGAAAGGCCAACAGGGAGTTGGCCCACC
CACTGACAATGAAGCCCGTGAGCTGGCTGCCCAGCTAGCCCTGTCTCAGGCGCAGCTGGAAGTCCATCAGGGGGA
GGTCCAACGGCTGCAGGCTCAGGTGGTGGACCTCCAGGCCAAGATGCGGGCAGCCCTGGATGACCAGGACAAGGT
GCAGAGCCAGCTAAGCATGGCTGAGGCCGTCCTGAGGGAGCACAAAACCCTTGTGCAGCAGCTGAAGGAGCAGAA
TGAAGCCCTTAACAGAGCCCATGTCCAGGAGCTGCTGCAATGCTCGGAGCGTGAAGGGGCACTGCAGGAGGAGAG
GGCCGATGAGGCCCAGCAGAGGGAGGAGGAGCTGCGGGCCCTGCAGGAGGAGCTGTCCCAGGCCAAATGCAGCTC
CGAGGAAGCACAGCTGGAGCACGCTGAGCTGCAAGAGCAGCTGCACCGGGCCAACACAGACACAGCTGAGCTGGG
CATCCAGGTTTGCGCACTGACCGTGGAAAAGGAGCGAGTGGAGGAGGCACTGGCCTGTGCTGTCCAGGAGCTCCA
GGACGCCAAAGAGGCAGCCTCAAGGGAGCGAGAGGGCCTGGAGCGCCAAGTAGCTGGGCTGCAGCAAGAGAAGGA
GAGCTTGCAGGAGAAGCTGAAGGCGGCCAAGGCAGCAGCCGGCTCACTGCCTGGCCTGCAGGCCCAGCTCGCCCA
GGCAGAGCAGCGGGCCCAGAGCCTCCAAGAGGCTGCACACCAGGAGCTCAACACCCTCAAGTTCCAGCTGAGTGC
TGAAATCATGGACTACCAGAGCAGACTTAAGAATGCTGGTGAAGAGTGCAAGAGCCTCAGGGGCCAGCTTGAGGA
GCAAGGCCGGCAGCTGCAGGCTGCTGAGGAAGCTGTGGAGAAGCTGAAGGCCACCCAAGCAGACATGGGAGAGAA
GCTGAGCTGCACTAGCAACCATCTTGCAGAGTGCCAGGCGGCCATGCTGAGGAAGGACAAGGAGGGGGCTGCCCT
GCGTGAAGACCTAGAAAGGACCCAGAAGGAACTCGAAAAAGCCACAACAAAAATCCAAGAGTATTACAACAAACT
CTGCCAGGAGGTGACAAATCGTGAGAGGAATGACCAGAAGATGCTTGCTGACCTGGATGACCTCAACAGAACCAA

FIGURE 6808B

GAAGTATCTCGAGGAGCGGCTGATAGAGCTGCTCAGGGACAAGGATGCTCTCTGGCAGAAGTCAGATGCCCTGGA
ATTCCAGCAGAAGCTCAGTGCTGAGGAGAGATGGCTCGGAGACACAGAGGCAAACCACTGCCTCGACTGTAAGCG
GGAGTTCAGCTGGATGGTGCGGCGGCACCACTGCAGGATATGTGGCCGCATCTTCTGTTACTACTGCTGCAACAA
CTACGTCCTGAGCAAGCACGGTGGCAAAAAGGAGCGCTGCTGCCGAGCCTGTTTCCAGAAGCTCAGTGAAGGCCC
TGGCTCCCCTGATAGCAGTGGCTCAGGCACTAGCCAGGGAGAGCCCAGCCCTGCACTGTCACCAGCCTCACCTGG
GCCCCAGGCCACAGGAGGCCAAGGAGCAAATACAGACTACAGGCCACCGGACGACGCTGTGTTTGATATCATCAC
AGATGAGGAATTGTGCCAGATACAGGAGTCCGGCTCCTCTTTGCCTGAAACACCCACTGAAACTGATTCTCTTGA
CCCAAATGCGGCTGAACAGGATACTACATCAACCTCGCTAACGCCTGAGGACACTGAAGACATGCCCGTGGGGCA
GGATTCGGAAATCTGCCTGCTGAAGTCTGGAGAACTGATGATCAAAGTACCCCTCACAGTGGATGAGATCGCCAG
CTTCGGGGAGGGTAGCAGGGAGCTGTTTGTGAGGTCCAGCACCTACAGCCTGATCCCCATCACTGTGCCCGAGGC
AGCCCTCACCATCAGCTGGGTCTTCTCCTCTGACCCCAAGAGCATCTCCTTCAGTGTGGTCTTCCAGGAGGCCGA
GGACACACCGCTGGATCAGTGTAAGGTCCTCATTCCCACGACCCGATGCAACTCCCACAAGGAGAACATCCAGGG
CCAGCTCAAGGTTCGCACACCCGGCATCTACATGCTCATCTTCGACAATACCTTCTCAAGGTTTGTCTCTAAAAA
GGTATTTTATCACTTGACGGTTGATCGGCCTGTGATCTACGATGGAAGTGATTTCCTGTAGCTTCAGCACCTCAG
TAACTTCACTTCATCCACAGGAAACACTGCTCTTCCTCACCTGTCACATAAAGCATTTTTTTAAAAAGTCAGCTG
CTCCAAAATCATCAACTCAGCCCCTGGGCTGCCCCTCAGAGGCGGTGTCTGGGGAGGACTTTGTGCTCAGCACTC
TGCACCGGCCACTCTTAGCCCCCGAGGCGTTGAAGGGCTCAGGCAATGTTTCCATTAAGTAGAGACTCAGCTGTT
GTCACACCCAAAGGGATGCTCTGCCAAAGGTTTAAACACCCAGGAGACCATCAGCCTCTCCTGGGAGCACAGTTG
ACTACAGGCCTCTTGTGGAGAGTTTCACGGGCAGGGGTGATTCCAACTTCTGCCTGTGGAGAGATTTTCTGCCCT
GCCCCACCAGGGCCCTGCATGTTGGAGACTGAGCTGGGTGCACTGGCCATACCCTGTGAATCCTCGGGCTGTGAC
GCCCTCAGGTACTCCTGGGAAAAGGAGGTACACAGCCATCATGCGAGTCGGTGCCAGGGGACCCCCCGGAGATCC
TGACCAGCTCCTCCAGTCATGCTCTTGTCCCTCACTGCCCCAGTAAGCTGGAGGCTGCTCCAGAACTCAGCAGTG
TTGGAGGGGCCTCTAAGCTGCACTCTCTTTCTGGCCCTTTTGTCTGGCTGATTCTGTCCTCAAATAAAGCCCTTC
ACTCAGCCAGACCTCTCCACAGCTCAAAGCATTGCCCTAAGAATCAGAAGTAAAGATAATCCAAGAGCAAAACCC
ACTGTACTTGGGGCCTGCAATGGCTGTGTGTACACTACATCTAATGCCCAAATGCCAGCCAGTGTGGATGTTGTG
ACCACAGAGCAGGATTGTGCATTGGCTTTAGAGCTACTCCTCAGCTGATGGCCCACTTTTGTTTATATAAATAAG
AGCTTCTGCCCCACCTGCAGACATGTTTACTAATGATCATAGCCAGGATTAGAACCACTTTCAAACATTGGGGCC
TTCTTAACAAAAGTCTTTGATAACTTAAGAACCAAAGTAACAGAGTAAACAGAGGCATGATGGATCCCTGGGCCC
CACTCCCCTCCTGACAGGTTCCCCAACAGCCCATTTGCCCACTTCCCACTGCTCAGCCCACACCAGACCTCCAGG
AGACATCCCCCCTTGAGGCAGAGAGATCCTGTTCCCTATTCCCAGACAAGAATTATTTAATCTTCCCTGTTCTCT
GTGGTCCTTTTCTTCCCCAACAACAGATAGCTCACCTTGGACAGCTCTTCGTCCCTTGTTCATGGAACCAGCTGC
CTGCAGTCAGGCCCCAGGTTCTTCCATGGGTGAACAGAGCATCTGACAAAAGGTCCCAGTTTGGCCAGGGGTGAG
GGAGAGAGCACCAGACAGGCTATCCGAGAATCTGAGAGCTGGGCCCGGCAATTCCTCCAGCTACCCTTGTGACCT
AAGTCCAGTCACACATTTCCCAAAGTTTCTCTTTGTCATAACCCTGGTCTGGCTGGTTTTGAGGGCTTGAGAATG
GGTCAGGGACTCCAGGCCAAGTCCAACAGAGACCCCAAACCCACCACACACCAGCAGCCACAACCTCACCACCAA
CAAAGAGGACTTTTGTGGGGCCACAAGTAAGAGGTCATTTCTGGAATGGACTCAGACCTTTAAACAGGAGAGTTG
AGCACTTCCAGTCAGTTTTTAAGCAAGGCATGGGGAACAGGGAATAGAACCTTTCAAAGAGGTTGCCCAGAGAAA
AGCTGGGCCTCTTGCATTCGGCTTCCTTGGAGCAGCCTCTTCTGGCAGAAAGCCATCAGGTGCTCAATCATCTTC
TCCTGGCCAAGGCTCTGACCATGCTTAGTACTGGAATAGAGGTGGCCAGGCCCCCAGCGACTCTTCTTGGCCTGA
TGTTTGTCCTCACAGGCATGCCACGTGGCCTGAGATGATTCAGAACAAATCATGCTAACTTTGAATCCATCCAGC
CACTTGCAAATGATAATCAGAAGTCAGCTTGTTCACTGTTAGAAAGAAACTAACAAAAGAGAACCCAGAGCAATC
TAGAATCTTTGAGTGCTTGGCTTTCCAAGGATACTGCGGAGACTCTGGCCAAGCTGATGACCTTCTGAAGTGTCA
CTGGCACCATATGCAACAAGAACCACCATTCACTGAGTAGCTAATGGGTTTGGGGCCTGGGACATTCCATCTGAG
GTCCTTCCTGAACATGTCACTCCACAGCAGAGGACCGGTTGCAGCTTACCCAGAACCACTCCTCCAGGAGAGCTG
GATGTTTTGCGTGCAACACCTTGAGCACTGACTGCTATTGTTCAAAAAAAGCCTTTGCTGCATTCGGAGGACTGC
CCCGTGCCCTGAGGTGACTTCCTAACTATGTGGTTTCATTAGCGAATTTATTTTTTGGGCTGGGTGGACATTTGT
ATTTTGTTAGGTTGCTGTTTAAGCTCAAGTTTGCTGTGCTCTCTGCAGCTACAAAACATCTTGGCATATTTAAGA
GTGGCTTTTATAAATAGCTTTATTCTGATATTAATCAGATTCCCAACTTTACTGAGAATTAAGGACTGGGGTACT

FIGURE 6808C

TTAAAGAAATGCAAATAGCAATTGAAGAACCACTGCTGCAGGTGGTAGCCCTGGCTAGACTGAATTACACTAGAA
ATCAGCCAGAAGGAAGCGTCCTTGGGATCCCAGATCACTCTTTTTTTTTTTTTTTTTAAAAGGGGCAGCCCCTT
GATGGCTCATCTCTCTGAATAACAGTTACGTCTTCATATCGATACCAGATGCCTTCTTCATCATGCCACTGAAGC
CACTCACCACCTTCAAGAACATGCCAACCTCTGTCAGATTCACTTACCCACAAACAAGGAGGCACGTTTGGCACA
AAGTGTTGTCCTCCAGGTCCAAGTGGACTCTACAGAGTGCTTGACCTCAACACACTGGATTCCAGGTGGACTGGA
CCAAGAGCAGGCAAAGACACGGGAACTGAAAAACTCCACAGGGTTTGGAGAATAGAAATGAAAAGCCACGTCATA
TAACTCAAGAATAAATGGTGTTTTGGAAATTTTAAAATTATCATCGAAGGTGGTGAAACTATTTCAGGCCCAAAT
GAAAGGAAATCGCCAGTTGGGGATGAAATCACAGAGCCTGTGTTTTATGATATGGTTGGATGTCCACTGATGAAA
TTTTAAAGGAGTTTCATTTTTAAAAGTGCGCATGATTCTACATATGAGAATTCTTTAGGCCAAGAAACTGTCCTT
GGCTCAGAGGTGTTGGGAATTAAAGCAGAGAGAAGCCATTCGTGATGCTTAGAACCAAGGATGGTCATGTACACA
AAGACCATCGAGACGGCCATTCTTGTTTACAAAACACTTACCAAGAAAGCACTTTGTAGGGGAACTTTAGTAAGT
TCTTCTCATTTCATTATGTTTCTTCCAAGGAAACAGGAGAGACTGAATTAATAATTCTCTCTTTCCTCTTAAGCA
CTTTTAAAATAATAAAGTACATCTTGAAATTTGGGGAGGCATCTCTGATTTAAAAAAAGAAAAAGGCTGCTTGAT
GTATGTTATGCAGAGACACTCTGCCTCTGGTGGCTGCAGAGCAATACCCAAGCCTCATTTGGAAGGCTCAACATT
TGGAATTGCACTTTAATTGATTAATCCTCAATTCATGTGGCCTTACGGGATGGTGGGTCTGGGACCCCAATTCAT
TCTTATCTGCCAAAGAATTATCTAGAAGCACATCAAATACCAGCACCCCACCTGCACAATGGGGGTGGAAAACTT
TTGTATCCCTAAGCATATTATTTTATAGTGTCTGCCATGCCATGTGGAAATACTTTATTTTTAACCTCAGGATTT
AAATAAAGTAAACACTATGACATTT

FIGURE 6809

MASTNAESQLQRIIRDLQDAVTELSKEFQEAGEPITDDSTSLHKFSYKLEYLLQFDQKEKATLLGNKKDYWDYFC
ACLAKVKGANDGIRFVKSISELRTSLGKGRAFIRYSLVHQRLADTLQQCFMNTKVTSDWYYARSPFLQPKLSSDI
VGQLYELTEVQFDLASRGFDLDAAWPTFARRTLTTGSSAYLWKPPSRSSSMSSLVSSYLQTQEMVSNFDLNSPLN
NEALEGFDEMRLELDQLEVREKQLQERMQQLDRENQELRAAVSQQGEQLQTERERGRTAAEDNVRLTCLVAELQK
QWEVTQATQNTVKELQTCLQALELGAAEKEEDYHTALRRLESMLQPLAQELEATRDSLDKKNQHLASFPGWLAMA
QQKADSASDTKGRQEPIPSDAAQEMQELGEKLQALERERTKVEEVNRQQSAQLEQLVKELQLKEDARASLERLVK
EMAPLQEELSGKGQEADQLWRRLQELLAHTSSWEEELAELRREKKQQQEEKELLEQEVRSLTRQLQFLETQLAQV
SQHVSDLEEQKKQLIQDKDHLSQQVGMLERLAGPPGPELPVAGEKNEALVPVNSSLQEAWGKPEEEQRGLQEAQL
DDTKVQEGSQEEELRQANRELEKELQNVVGRNQLLEGKLQALQADYQALQQRESAIQGSLASLEAEQASIRHLGD
QMEASLLAVRKAKEAMKAQMAEKEAILQSKEGECQQLREEVEQCQQLAEARHRELRALESQCQQQTQLIEVLTAE
KGQQGVGPPTDNEARELAAQLALSQAQLEVHQGEVQRLQAQVVDLQAKMRAALDDQDKVQSQLSMAEAVLREHKT
LVQQLKEQNEALNRAHVQELLQCSEREGALQEERADEAQQREEELRALQEELSQAKCSSEEAQLEHAELQEQLHR
ANTDTAELGIQVCALTVEKERVEEALACAVQELQDAKEAASREREGLERQVAGLQQEKESLQEKLKAAKAAAGSL
PGLQAQLAQAEQRAQSLQEAAHQELNTLKFQLSAEIMDYQSRLKNAGEECKSLRGQLEEQGRQLQAAEEAVEKLK
ATQADMGEKLSCTSNHLAECQAAMLRKDKEGAALREDLERTQKELEKATTKIQEYYNKLCQEVTNRERNDQKMLA
DLDDLNRTKKYLEERLIELLRDKDALWQKSDALEFQQKLSAEERWLGDTEANHCLDCKREFSWMVRRHHCRICGR
IFCYYCCNNYVLSKHGGKKERCCRACFQKLSEGPGSPDSSGSGTSQGEPSPALSPASPGPQATGGQGANTDYRPP
DDAVFDIITDEELCQIQESGSSLPETPTETDSLDPNAAEQDTTSTSLTPEDTEDMPVGQDSEICLLKSGELMIKV
PLTVDEIASFGEGSRELFVRSSTYSLIPITVPEAALTISWVFSSDPKSISFSVVFQEAEDTPLDQCKVLIPTTRC
NSHKENIQGQLKVRTPGIYMLIFDNTFSRFVSKKVFYHLTVDRPVIYDGSDFL

FIGURE 6810

ACTTTCCTGCCCCTTCCCCGGCCAAGCCCAACTCCGGATCTCGCTCTCCACCGGATCTCACCCGCCACACCCGGA
CAGGCGGCTGGAGGAGGCGGGCGTCTAAAATTCTGGGAAGCAGAACCTGGCCGGAGCCACTAGACAGAGCCGGGC
CTAGCCCAGAGACATGGAGAGTTGCTACAACCCAGGTCTGGATGGTATTATTGAATATGATGATTTCAAATTGAA
CTCCTCCATTGTGGAACCCAAGGAGCCAGCCCCAGAAACAGCTGATGGCCCCTACCTGGTGATCGTGGAACAGCC
TAAGCAGAGAGGCTTCCGATTTCGATATGGCTGTGAAGGCCCCTCCCATGGAGGACTGCCCGGTGCCTCCAGTGA
GAAGGGCCGAAAGACCTATCCCACTGTCAAGATCTGTAACTACGAGGGACCAGCCAAGATCGAGGTGGACCTGGT
AACACACAGTGACCCACCTCGTGCTCATGCCCACAGTCTGGTGGGCAAGCAATGCTCGGAGCTGGGGATCTGCGC
CGTTTCTGTGGGGCCCAAGGACATGACTGCCCAATTTAACAACCTGGGTGTCCTGCATGTGACTAAGAAGAACAT
GATGGGGACTATGATACAAAAACTTCAGAGGCAGCGGCTCCGCTCTAGGCCCCAGGGCCTTACGGAGGCCGAGCA
GCGGGAGCTGGAGCAAGAGGCCAAAGAACTGAAGAAGGTGATGGATCTGAGTATAGTGCGGCTGCGCTTCTCTGC
CTTCCTTAGAGCCAGTGATGGCTCCTTCTCCCTGCCCCTGAAGCCAGTCACCTCCCAGCCCATCCATGATAGCAA
ATCTCCGGGGGGCATCAAACCTGAAGATTTCTCGAATGGACAAGACAGCAGGCTCTGTGCGGGGTGGAGATGAAGT
TTATCTGCTTTGTGACAAGGTGCAGAAAGATGACATTGAGGTTCGGTTCTATGAGGATGATGAGAATGGATGGCA
GGCCTTTGGGGACTTCTCTCCCACAGATGTGCATAAACAGTATGCCATTGTGTTCCGGACACCCCCCTATCACAA
GATGAAGATTGAGCGGCCTGTAACAGTGTTTCTGCAACTGAAACGCAAGCGAGGAGGGGACGTGTCTGATTCCAA
ACAGTTCACCTATTACCCTCTGGTGGAAGACAAGGAAGAGGTGCAGCGGAAGCGGAGGAAGGCCTTGCCCACCTT
CTCCCAGCCCTTCGGGGGTGGCTCCCACATGGGTGGAGGCTCTGGGGGTGCAGCCGGGGGCTACGGAGGAGCTGG
AGGAGGTGAGGGGGTACTGATGGAGGGAGGGGTAAAGGTAAGAGAAGCTGTGGAGGAAAAAAATCTGGGGGAGGC
CGGGCGTGGCTTGCACGCCTGTAATCCAGCCTTTGGGAGGCCAAGGCAGGCAGTTACCTGAGATCAGGAGTTCAA
GACCAGCTTGGCCAACAGCGTGAAACCTCGTCTCTACTAAAAATACAAACATTAGCTGGGCATGGTGGCAGGCGC
CTGTAATCCCAGCTACTCGGGAGGCTGAGGCAGGAGAATCGCTTGAACCCTGGGAGACAAGAGGTTGCAGTAAGC
TGAGATCACACCACTGCACTCCAGGCTGGGCAATAAGAGCGAAACTCCGTCTCAAAAAAAAAAAAAAAAAAAAAA
GGCACAGTTTATTAATACCTATTATGGGAAAGTCACTTTGGTTGGCATTGAAAATTACATCATCTTTAAAGCAGT
ATTTGTCCCCAGATGGACTCATCACTAGCAAAGACTAGGTTCATTGGAAGGCATAGGGTGAGAGAATGGGAAGAT
GRAGTGGAGGCGGGTTGTTAAAGTGCTGTCAGTGAGTGATTTTGTCTACTTGAATAATGGTCCATGTTTGGGGGC
ATATTGTGTTTCATAAGAAGTGAAAGGTATTTGCAAAGTAAGCTACAAATGACCCATAAATCTGTTAACAACAGT
CCTTAATATGCAAAGATGAAAAACAAGCATTACTGCTACCCAAAGGGAACTGGTGCTTGGTGATGTGCAGATGGG
GCTGTTGGTTAAGAGAGCTATTACAGGTTTTCTCTCTTAGGTTTCATAGGAGGTAGTTACTGAGATGAGATTGTT
TTATCTTTTTGAATACAGATCTCTTGTCTTGAGTTAGTTCTGAGGATGGGAGTAATAAAGGAGTTTTTTGTTTTT
TTGTTTGTTTGTTTGTTTTGGCTCCTTAGTAATACTCCTCTGACATTTATTTCTATTATTCTTCAAAGAAAGGAA
ACCAACTGAAATGTTTGCTTTAACAAACATTTTAATAAGTTCTCTGGGTTTTTTTTTCCCCTTTTAAAAAAATTA
GCATATACCATAGCAATAAAAGAACTAATGTTAACTATTGTATGCTACAACTTAAGTGATTTTTCTAAAGAAGCA
CAATGTCATTGRAAGTATTATTGAAAAGGATCATAGTCACATTGAATTTGTGAAGGCCAAAGAAATTGAAGGGAG
TGATATTTTCATTTTATGATATTCACATATTTAGTAAATTTTGTGTACAAGAATACCAGGCAGAGTGTTTTACCC
ATGGAAACAGGTTTCAGATTACTTTGTTTTTACTGTTAGAGTCTCAAGTTTAGAAATGCTAACACTTAAATCAGT
TTTTTTCTCACTATACTTGAAGATTGTTAATATTTTGATATCTTCCTAGCTTGATGGAATTTAAACATATCTTCA
GATCTGTGACAGTGACAGCCAATAGGACTGATAATATTAGCTTCAAACCAATAATATCCAGGGTTAAAATAAAAA
TCATAGTGAAAGTACGATTGTAAAATTATGCTATATTAACTTTTAAGTCTGTAATAACTTGACATCAAAATGTTA
TGTAATTACCATAAATAATGGCTAGCGAGAACATCTTTGGAAATTCTCAAATTACCTTTCTTACTACACTGTTTG
CAGAATGAATGTAGAAATGATCCTGTTAGCTTTCTGAATGTTCTGTGGTTGAATGTGTTTTTGCTTAAATAAAGC
TTTTGGTATTTGTTTAAATWACAAAAAAAAAAAAAAAAAAAAAAACTCGA

FIGURE 6811

MESCYNPGLDGIIEYDDFKLNSSIVEPKEPAPETADGPYLVIVEQPKQRGFRFRYGCEGPSHGGLPGASSEKGRK
TYPTVKICNYEGPAKIEVDLVTHSDPPRAHAHSLVGKQCSELGICAVSVGPKDMTAQFNNLGVLHVTKKNMMGTM
IQKLQRQRLRSRPQGLTEAEQRELEQEAKELKKVMDLSIVRLRFSAFLRASDGSFSLPLKPVTSQPIHDSKSPGA
SNLKISRMDKTAGSVRGGDEVYLLCDKVQKDDIEVRFYEDDENGWQAFGDFSPTDVHKQYAIVFRTPPYHKMKIE
RPVTVFLQLKRKRGGDVSDSKQFTYYPLVEDKEEVQRKRRKALPTFSQPFGGGSHMGGGSGGAAGGYGGAGGGEG
VLMEGGVKVREAVEEKNLGEAGRGLHACNPAFGRPRQAVT

FIGURE 6812

ATGGGCTCCAGGCTGCTCTGTTGGGTGCTGCTTTGTCTCCTGGGAGCAGGCCCAGTAAAGGCTGGAGTCACTCAA
ACTCCAAGATATCTGATCAAAACGAGAGGACAGCAAGTGACACTGAGCTGCTCCCCTATCTCTGGGCATAGGAGT
GTATCCTGGTACCAACAGACCCCAGGACAGGGCCTTCAGTTCCTCTTTGAATACTTCAGTGAGACACAGAGAAAC
AAAGGAAACTTCCCTGGTCGATTCTCAGGGCGCCAGTTCTCTAACTCTCGCTCTGAGATGAATGTGAGCACCTTG
GAGCTGGGGGGACTCGGCCCTTTATCTTTGCGCCAGCAGCTTCGACCAGGAGCAGTACTTCGGGCCGGGCACCAGG
CTCACGGTCACAGAGGACCTGAAAAACGTGTTCCCACCCGAGGTCGCTGTGTTTGAGCCATCAGAAGCAGAGATC
TCCCACACCCAAAAGGCCACACTGGTGTGCCTGGCCACAGGCTTCTACCCCGACCACGTGGAGCTGAGCTGGTGG
GTGAATGGGAAGGAGGTGCACAGTGGGGTCAGCACAGACCCGCAGCCCCTCAAGGAGCAGCCCGCCCTCAATGAC
TCCAGATACTGCCTGAGCAGCCGCCTGAGGGTCTCGGCCACCTTCTGGCAGAACCCCCGCAACCACTTCCGCTGT
CAAGTCCAGTTCTACGGGCTCTCGGAGAATGACGAGTGGACCCAGGATAGGGCCAAACCTGTCACCCAGATCGTC
AGCGCCGAGGCCTGGGGTAGAGCAGACTGTGGCTTCACCTCCGGGTCTTACCAGCAAGGGGTCCTGTCTGCCACC
ATCCTCTATGAGATCTTGCTAGGGAAGGCCACCCTGTATGCCGTGCTGGTC

FIGURE 6813

GTCTGGGGGCACTGAAGGTCTCTTGGCTGAAAAATTGGAGGCTTTGATCACTCAGCATCGAGCCAAACAGGCAGC
TACCATGAGTGAAGTGGAGTGGAGAGGGAGAACGGTTCCAGTGAAGATTGACAAAGTGCGCATTTTCTTATTAGG
ACTGGCTGATAACGAAGCAGCTATTGTCCAGGCTGAAAGCGAAGAAACTAAGGAGCGCCTGTTTGAATCAATGCT
CAGCGAGTGTCGGGACGCCATCCAGGTGGTTCGGGAGGAGCTCAAGCCAGATCAGAAACAGAGAGATTATATCCT
TGAAGGAGAGCCAGGGAAGGTGTCTAATCTTCAATACTTGCATAGCTACCTGACTTACATCAAGCTATCAACGGC
AATCAAGCGTAATGAGAACATGGCCAAAGGTCTGCAGAGGGCTCTGCTGCAGCAGCAGCCAGAGGATGACAGCAA
GCGCTCACCCCGGCCCCAGGACCTGATCCGACTCTATGACATCATCTTACAGAATCTGGTGGAATTGCTCCAGCT
TCCTGGTTTAGAGGAAGACAAAGCCTTCCAGAAAGAGATAGGCCTCAAGACTCTGGTGTTCAAAGCTTACAGGTG
TTTTTTCATTGCTCAGTCCTATGTGCTGGTGAAGAAGTGGAGCGAAGCCCTTGTCCTGTATGACAGAGTCCTGAA
ATATGCAAATGAAGTAAATTCTGATGCTGGCGCCTTCAAGAACAGCCTAAAGGACCTGCCTGATGTGCAAGAGCT
CATCACTCAAGTGCGGTCAGAGAAGTGCTCCCTGCAGGCCGCAGCCATCCTTGATGCAAACGACGCTCATCAAAC
AGAGACCTCCTCCTCCCAAGTCAAGGACAATAAGCCTCTGGTTGAACGGTTTGAGACATTCTGCCTGGACCCTTC
CCTTGTCACCAAGCAAGCCAACCTTGTGCACTTCCCACCAGGCTTCCAGCCCATTCCCTGCAAGCCTTTGTTCTT
TGACCTGGCCCTCAACCATGTGGCTTTCCCACCCCTTGAGGACAAGTTGGAACAGAAGACCAAGAGTGGCCTCAC
TGGATACATCAAGGGCATCTTTGGATTCAGGAGCTAACCAGGCTCTTCCTCGGGGGCGGGGGAGATTCTGACTCT
TAATCTGTATTGTGAGAAAATCCCAGCAAGTTCCATGATATTAAATCCAGGTCTGCATTGGCCCGGGGCAAGAGT
TTAACATCTTCGGCCCTGCATTCCTACATCTTGTGTCTGTACACGTTCTTAAGCAGCGTGTCAGGAGAGCACCCT
GTTGTCTTCTGGTAAATGTGTGCAGGGTCATCCTGTCTCCTGTACCTCCTGGGAAGGGGGCCGCTGCTGTCTGGT
GCCCTGTGATTCTTAGAGGGACAAGTGGCGTTCAGCCACCCGAGATTGAGCAATAACAGGTCTGTGATGCCCTTA
GATGTCCGGGGCTGCACGCGCGCTACACTGACTGGCTCAGCGTGTGCCTACCCTACGCCGGCAGGCGCGGGTAAC
CCGTTGAACCCCATTCGTGATGGGGATCGGGGATTGCAATTATTCCCCATGAACGAGGAATTCCCAGTAAGTGCG
GGTCATAAGCTTGCGTTGATTAAGTCCCTGCCCTTTGTACACACCGCCCGTCGCTACTACCGATTGGATGGTTTA
GTGAGGCCCTCGGATCGGCCCCGCCGGGGTCGGCGCTGTGATTGATTGCCTTTGGTCAGTAATGCGTTCAGGAGT
CCACACCAGGCACAGATGGGGCCTTGAAACGCTTTGTCATGCTTCTTCAGTACCATGGATTTGAAATGAACTCAT
CCTTGCTGTGAGCATCCAGGAGCCCTTGAGAAGTTTATCTATGACTATGAAACTGGCAACGTCACCCCAGAATTA
CGGTCAGCCTTATTCCCCTTCACCTCCCAGTGAACGCTAAGAAGTTTCAGACAAGCAGAGAGCTCTATTTTTAGA
AGAAATATGTTACACTCAGAAATGATGAAACCAAATCTTATATTAAAAGGCAAAGATG

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FIGURE 6814

MSEVEWRGRTVPVKIDKVRIFLLGLADNEAAIVQAESEETKERLFESMLSECRDAIQVVREELKPDQKQRDYILE
GEPGKVSNLQYLHSYLTYIKLSTAIKRNENMAKGLQRALLQQQPEDDSKRSPRPQDLIRLYDIILQNLVELLQLP
GLEEDKAFQKEIGLKTLVFKAYRCFFIAQSYVLVKKWSEALVLYDRVLKYANEVNSDAGAFKNSLKDLPDVQELI
TQVRSEKCSLQAAAILDANDAHQTETSSSQVKDNKPLVERFETFCLDPSLVTKQANLVHFPPGFQPIPCKPLFFD
LALNHVAFPPLEDKLEQKTKSGLTGYIKGIFGFRS

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FIGURE 6815

CCACGCGTCCGGTATTTTTGTCAATGACGCCACTGAAAGGGATCAAGTCCGTGATTTTACCTCAGGTTTTCCTCT
GTGCCTACATGGCAGCGTTCAACAGCATCAATGGAAACAGAAGTTACACTTGTAAGCCACTAGAAAGATCATTAC
TAATGGCGGGAGCCGTTGCTTCTTCAACTTTCTTAGGAGTAATCCCTCAGTTTGTCCAGATGAAGTATGGCCTGA
CTGGCCCTTGGATTAAAAGACTCTTACCTGTGATCTTCCTCGTGCAAGCCAGTGGAATGAATGTCTACATGTCCC
GAAGTCTTGAATCCATTAAGGGGATTGCGGTCATGGACAAGGAAGGCAATGTCCTGGGTCATTCCAGAATTGCTG
GGACAAAGGCTGTTAGAGAAACGCTAGCATCCAGAATAGTGCTGTTTGGGACCTCAGCTCTGATTCCTGAAGTCT
TCACCTACTTTTTTAAAAGGACCCAGTATTTCAGGAAAAACCCAGGGTCATTGTGGATTTTGAAACTGTCTTGTA
CTGTCCTGGCAATGGGACTGATGGTGCCATTTTCTTTTAGTATATTTCCACAGATTGGACAGATACAGTACTGTA
GTCTTGAAGAGAAAATTCAGTCTCCAACAGAAGAAACAGAAATCTTTTATCACAGAGGGGTGTAGGCGTGAGTTT
TAGGTGAATTTATGTGGTTCCTGCTTGAAAACCTTCCCCTCTCCAGGTTCGGTTTAGAGAACTTTGCCACAGGTC
TTCTGGGGTTTTTAAGGCTGGCTGGAGAAGACAGTGGGAGGGTGCCCCCGTCTGACACCCCTGGGGTTGCTGAGG
GGACGGTTGGAGTGGGGATCGGCCTGCGAAAGGATACTGTGAAATCACTAATTAACTAATAAACCTGTCTCAAGT
TGAGGATTTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 6816

TRPVFLSMTPLKGIKSVILPQVFLCAYMAAFNSINGNRSYTCKPLERSLLMAGAVASSTFLGVIPQFVQMKYGLT
GPWIKRLLPVIFLVQASGMNVYMSRSLESIKGIAVMDKEGNVLGHSRIAGTKAVRETLASRIVLFGTSALIPEVF
TYFFKRTQYFRKNPGSLWILKLSCTVLAMGLMVPFSFSIFPQIGQIQYCSLEEKIQSPTEETEIFYHRGV

FIGURE 6817

CCACGCGTCCGAGACATTTAAACTAGATTCCCAGTCCTCTCCTTCAAAAGCTTGGTCTTTGTTTTTCCTATAGGG
AAAAAAGTCAAAATAAGTTCCAAAAACTATCCTCAAAGTAGTATTGTGCTTGTAGTAAATGAAGGTTGGATGGATG
GGATACTGACAATGGTGGCAGGCATTTCAAGCCTTTTAAATTAGTACTTTTTGTCGTCTTGCTTATTAAAATTTT
GTTAATTTTAGCAAAGACCAATTGTTGTGATAAACTGGTGTTTTTTGGATGCTTCAAGCACACGTTAACCAATTT
TTTAATTCCCCTTTTGGTTCCTCCCATTGTTCTAAAATAGGACTTTCATATTATTAAAACCTCAAAAGATGATCC
ACCCAGGATGAACAAAGATCACCAAGGGGAAAGAAAACATTTTTTATCTTTACAGAAAACATGTTAAGATTATAT
ATAGATGTATTCTTTACATTGGATATTGTATTAGAGTCCTCCTTACAAGAAATGAAATAGTTTTTAGCACTCTTA
GCATTAGAGTTCCTAGATTGGTGTTGATAGCTACAGTTTTAAAATGTATAACCTGAAAATGAAGGTTAATTTTGC
ATTGTAAGAGCACATTTGATCTATGTAAAAAGTGTCCATTTGGTGTATTTTTTTAAAAAAGAGAAAGCACTTTCA
TATTAAGTAGCATGTGTATGAATTTAGATTTTCATATTTGTTGTGTCTGTATTCAGTGAAGTAAATTGAGCATTT
AAATGTTTGTTGATGGCAACATTAACTATTAAATTAAAGCACCTTATACTCTGCTGCTTAACTTGCTTGTAATTG
CACCTTTGTTACCTGCACATTTTCATATAGAATATTGTTGTAACATTGCTTCATGTGGGTCTGGATGGAAGATTA
GTGGGCCTACAGGATCATTTATTTATATTGTTTATATTACAATAATATATTGTAGATCAGTTGTAAGTTCATTTC
TTTACAAATAAAAGCCTCTTCCATTTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 6818

MDTDNGGRHFKPFKLVLFVVLLIKILLILAKTNCCDKLVFFGCFKHTLTNFLIPLLVPPIVLK

FIGURE 6819

GGGATCCTTTCTGGAATGGAGGTCTTATGAGCTGCTATTGAACACGGCAGAGCCTGTTGGTGACCTGCACACAGG
AGCCCTCCAGTCAGTACTGATTGAATTACTCAAGGCTGCCTCTCTGCAAAGTTGAGCAGCATTTCCATTTCCCAA
ACCGGCTCTGATTTCCCAGCTGGAGCGAGGGGAAACACCCTGGTGCTCGGTTCCTCGGGGAGCTCTGGATGGAGA
GGCCCCAAGGGGCATCTCCTCAGCACCTGAGACTTTTACCTTTACCCAGAAAGGAATAAAAGAGGTCAGATGATG
ACAGCTGTGTCCTTAACAACCAGGCCCCAGGAATCAGTGGCTTTTGAGGACGTGGCTGTGTACTTCACTACGAAG
GAATGGGCCATCATGGTGCCTGCCGAGAGGGCCTTGTACAGGGATGTGATGCTGGAGAACTATGAGGCTGTGGCC
TTTGTAGTGCCACCCACTTCCAAACCAGCTTTGGTCTCTCATCTGGAGCAAGGGAAAGAGTCCTGTTTCACCCAG
CCACAGGGAGTCCTAAGCAGGAATGACTGGAGAGCAGGCTGGATAGGATACTTGGAACTAAGAAGATATACTTAC
TTAGCTAAAGCAGTGTTACGTAGAATAGTATCAAAAATTTTTCGAAATCGTCAATGCTGGGAAGACAGGAGAAAA
GCTTAATTCTTGACATTTAAATACCAGTTTTCCAAGTAAGGAGTTGATGTAAGAGCCACCTTAAACGATGTCAAA
TACACATTTTCTTTTTCTGTAGACTGGTAGATTTAATGTTTTTCATTCATTAAAATAACTCATTTTGATGTACAA
AAAAAAAAAAAAAAAAAAAAAAAAACTCGAGACTAGTTCCTTACCTCGACTCTTAGCTTGTCGGGGACGGTAACC
GGGACCCGGTGTCTGCTCCTGTCGCCTTCGCCTCCTAATCCCTAGCCACT**ATG**CGTGAGTGCATCTCCATCCACG
TTGGCCAGGCTGGTGTCCAGATTGGCAATGCCTGCTGGGAGCTCTACTGCCTGGAACACGGCATCCAGCCCGATG
GCCAGATGCCAAGTGACAAGACCATTGGGGGAGGAGATGACTCCTTCAACACCTTCTTCAGTGAGACGGGCGCTG
GCAAGCACGTGCCCCGGGCTGTGTTTGTAGACTTGGAACCCACAGTCATTGATGAAGTTCGCACTGGCACCTACC
GCCAGCTCTTCCACCCTGAGCAGCTCATCACAGGCAAGGAAGATGCTGCCAATAACTATGCCCGAGGGCACTACA
CCATTGGCAAGGAGATCATTGACCTTGTGTTGGACCGAATTCGCAAGCTGGCTGACCAGTGCACCGGTCTTCAGG
GCTTCTTGGTTTTCCACAGCTTTGGTGGGGGAACTGGTTCTGGGTTCACCTCCCTGCTCATGGAACGTCTCTCAG
TTGATTATGGCAAGAAATCCAAGCTGGAGTTCTCCATTTACCCGGCACCCCAGGTTTCCACAGCTGTAGTTGAGC
CCTACAACTCCATCCTCACCACCCACACCACCCTGGAGCACTCTGATTGTGCCTTCATGGTAGACAATGAGGCCA
TCTATGACATCTGTCGTAGAAACCTCGATATCGAGCGCCCAACCTACACTAACCTTAACCGCCTTATTAGCCAGA
TTGTGTCCTCCATCACTGCTTCCCTGAGATTTGATGGAGCCCTGAATGTTGACCTGACAGAATTCCAGACCAACC
TGGTGCCCTACCCCCGCATCCACTTCCCTCTGGCCACATATGCCCCTGTCATCTCTGCTGAGAAAGCCTACCATG
AACAGCTTTCTGTAGCAGAGATCACCAATGCTTGCTTTGAGCCAGCCAACCAGATGGTGAAATGTGACCCTCGCC
ATGGTAAATACATGGCTTGCTGCCTGTTGTACCGTGGTGACGTGGTTCCCAAAGATGTCAATGCTGCCATTGCCA
CCATCAAAACCAAGCGCAGCATCCAGTTTGTGGATTGGTGCCCCACTGGCTTCAAGGTTGGCATCAACTACCAGC
CTCCCACTGTGGTGCCTGGTGGAGACCTGGCCAAGGTACAGAGAGCTGTGTGCATGCTGAGCAACACCACAGCCA
TTGCTGAGGCCTGGGCTCGCCTGGACCACAAGTTTGACCTGATGTATGCCAAGCGTGCCTTTGTTCACTGGTACG
TGGGTGAGGGGATGGAGGAAGGCGAGTTTTCAGAGGCCCGTGAAGATATGGCTGCCCTTGAGAAGGATTATGAGG
AGGTTGGTGTGGATTCTGTTGAAGGAGAGGGTGAGGAAGAAGGAGAGGAATAC**TAA**TTATCCATTCCTTTTGGCC
CTGCAGCATGTCATGCTCCCAGAATTTCAGCTTCAGCTTAACTGACAGATGTTAAAGCTTTCTGGTTAGATTGTT
TTCACTTGGTGATCATGTCTTTTCCATGTGTACCTGTAATATTTTTCCATCATATCTCAAAGTAAAGTCATTAAC
ATCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6820

MRECISIHVGQAGVQIGNACWELYCLEHGIQPDGQMPSDKTIGGGDDSFNTFFSETGAGKHVPRAVFVDLEPTVI
DEVRTGTYRQLFHPEQLITGKEDAANNYARGHYTIGKEIIDLVLDRIRKLADQCTGLQGFLVFHSFGGGTGSGFT
SLLMERLSVDYGKKSKLEFSIYPAPQVSTAVVEPYNSILTTHTTLEHSDCAFMVDNEAIYDICRRNLDIERPTYT
NLNRLISQIVSSITASLRFDGALNVDLTEFQTNLVPYPRIHFPLATYAPVISAEKAYHEQLSVAEITNACFEPAN
QMVKCDPRHGKYMACCLLYRGDVVPKDVNAAIATIKTKRSIQFVDWCPTGFKVGINYQPPTVVPGGDLAKVQRAV
CMLSNTTAIAEAWARLDHKFDLMYAKRAFVHWYVGEGMEEGEFSEAREDMAALEKDYEEVGVDSVEGEGEEEGEE
Y

FIGURE 6821

AAAAAAAAAAAAGAGGGAGGTGGCGGCAGCGGCTAGCGGACTCGAGTCTCAACCGGGCTGAGGCGGACACTTCTG
TGGAGCGAAGCAGTGGGAGCATCGAGCACTAGAGGCGGCACCGGGATCCCCGGCTCCGGGGAGGGGGGCGCCGGA
CCGGGAGGAGGGGAGGGGGCG**ATG**CTGGAAGCCATGGCGGAGCCCAGTCCCGAAGATCCACCTCCGACCCTTAAG
CCAGAGACTCAGCCACCAGAGAAACGGCGGAGAACAATTGAGGATTTCAACAAATTCTGCAGTTTTGTTTTGGCA
TATGCTGGTTACATTCCCCCTAGCAAAGAGGAAAGTGACTGGCCAGCCTCTGGCTCCAGCTCTCCATTGCGAGGA
GAGAGTGCGGCCGACAGTGATGGCTGGGACTCGGCCCCCTCAGATCTTCGAACCATCCAGACTTTTGTTAAGAAA
GCAAAGTCATCCAAGAGAAGGGCAGCTCAAGCAGGTCCCACCCAGCCAGGACCCCCAAGGTCCACTTTCTCTCGT
CTGCAGGCCCCCGACAGTGCTACCTTGCTTGAGAAGATGAAGCTCAAGGACTCTCTCTTTGATCTGGATGGGCCC
AAAGTGGCATCTCCTTTGTCCCCCACATCCCTGACACATACCTCCCGGCCCCCTGCTGCTCTTACCCCCGTGCCC
CTTTCCCAGGGGGACCTCTCCCATCCTCCTCGAAAGAAGGACCGAAAGAACCGAAAGTTGGGGCCAGGAGCTGGG
GCTGGCTTTGGGGTGCTTCGGAGGCCTCGGCCAACTCCTGGGGATGGGGAAAAGAGATCTCGAATCAAGAAGAGC
AAGAAGCGGAAGTTAAAAAAGGCAGAACGGGGGGATAGACTCCCACCTCCTGGGCCTCCCCAGGCACCCCCAGTG
ATACAGACTCTGAAGAGGAGGAGGAAGAGGAGGAAGAGGAAGAAGAAGAAGAGATGGCAACAGTGG**TAG**GGGGTG
AAGCCCCAGTCCCTGTGCTGCCAACACCCCCTGAGGCTCCTAGGCCCCCTGCCACAGTGCACCCTGAAGGAGTCC
CTCCTGCTGACAGTGAAAGCAAGGAGGTGGGCAGCACTGAAACAAGCCAAGATGGAGATGCCAGCTCCAGTGAAG
GCGAGATGCGGGTCATGGACGAGGACATCATGGTAGAATCAGGTGATGACTCATGGGATCTGATCACATGTTACT
GTCGAAAGCCCTTTGCAGGGCGGCCCATGATTGAGTGCAGCCTGTGTGGGACGTGGATCCACCTCTCCTGTGCTA
AGATTAAGAAGACCAACGTCCCCGACTTCTTTTATTGCCAGAAATGCAAGGAACTGAGGCCAGATGCCCGGCGGT
TAGGGGGGCCCCCCAAATCTGGAGAGCCCTGATGGCACCAACTTTAGCCTGGAACTTCCAAATGACAACATGATT
TGGGAACTGAGCCTCAGGGTCCTCAGCCTATCCCCTGGAGCTTGGATACTGTCTGCACTTCAAGGCAGGAATTCT
CAAGGGAGACTTGTTTGAAAATGAGTGTCTCACTTTCCCACCCTATCCTTCCTCCCCACTCTGTGGACTTGAAAT
TGAATCCATTACGGTTGGGGATGGGAGGCTGTCTGTGTCCCGACACATAATCTCTGTCTCTTGGACCTGCCACCA
TCACTTTCTGGGTCAGGATTGGAATTGGGATGGAATGGGACAGTTGTCTATAAAACTCTAGTGTAAATATTAGCA
CTCCCCTCCCTCATCTTTTCTTCTATTTCACTCCCCATTTATTTTCTTCTACACCGGTTGTATTTTTAATTTTGG
ACTTCCCCTATTGGGCATGGCAGCTCAAAGGTGGAGTACTAGAGCCTGGCCAAGTGAGGAAGGAAAGCAGAAAGG
TGACGATTCTCACTCACCTCTTTTGTTTTTAATAATATCGGCCGCTGTTTGTACAGACAGCCTGCGTGTTGTAAA
TAAAGCAGGGTGGGCTCTTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6822

MLEAMAEPSPEDPPPTLKPETQPPEKRRRTIEDFNKFCSFVLAYAGYIPPSKEESDWPASGSSSPLRGESAADSD
GWDSAPSDLRTIQTFVKKAKSSKRRAAQAGPTQPGPPRSTFSRLQAPDSATLLEKMKLKDSLFDLDGPKVASPLS
PTSLTHTSRPPAALTPVPLSQGDLSHPPRKKDRKNRKLGPGAGAGFGVLRRPRPTPGDGEKRSRIKKSKKRKLKK
AERGDRLPPPGPPQAPPVIQTLKRRRKRRKRKKKKRWQQW

FIGURE 6823A

GACCGCGGCTGCAGGAACGGAGGCGGAAGGGGCCCTGCGGCGACGACGTCGTCGACGGGGGTGGCCGTGGGAGCT
GAGCACGGAGAAGACTCCCTCTCTCGGAAGCCGGATCCCGAGCCGGGCAGGATGGATCACCACCAGCCGGGGACT
GGGCGCTACCAGGTGCTTCTTAATGAAGAGGATAACTCAGAATCATCGGCTATAGAGCAGCCACCTACTTCAAAC
CCAGCACCGCAGATTGTGCAGGCTGTGTCTTCAGCACCAGCACTTGAAACTGACTCTTCCCCTCCACCATATAGT
AGTATTACTGTGGAAGTACCTACAACTTCAGATACAGAAGTTTACGGTGAGTTTTATCCCGTGCCACCTCCCTAT
AGCGTTGCTACCTCTCTTCCTACATACGATGAAGCTGAGAAGGCTAAAGCTGCTGCAATGGCAGCTGCAGCAGCA
GAAACATCTCAAAGAATTCAGGAGGAAGAGTGTCCACCAAGAGATGACTTCAGTGATGCAGACCAGCTCAGAGTG
GGGAATGATGGCATTTTCATGCTGGCATTTTTCATGGCATTTATTTTCAACTGGCTTGGATTTTGTTTATCCTTC
TGTATCACCAATACCATAGCTGGAAGGTATGGTGCTATCTGCGGATTTGGCCTTTCCTTGATCAAATGGATCCTT
ATTGTCAGGTTTTCTGATTATTTTACTGGATATTTCAATGGACAGTATTGGCTTTGGTGGATATTTCTTGTACTT
GGCCTGCTCCTTTTCTTCAGAGGATTTGTTAATTATCTAAAAGTCAGAAACATGTCTGAAAGTATGGCAGCTGCT
CATAGAACAAGGTATTTCTTCTTATTGTAGAGACTGCATCAACCCGACATTCCTTTCTTATACCAATGTGAAATT
TCCAGATCATCTGTAAACCTACAACTTTAATAGAAGACTACTAATAACAGAAGACAAATTAGTGAAGAAAAGACG
GAGTTTCGAAATTGAATGGCAGGGTGGTTTTTGCTTACAAGCCATTTCTGTTCATTCTTTAAGTATCTATATTTC
ATTTGTTTTGCACATATGCATATGTGCCCATTTAAGATATTTGCATATACTTGATAGAAACCATAAAGTTGTAGC
AGTTAAGTCCAGTCACATTTGGTTAATCAGTGTTTGATATAATTGAAAGAGTTGAGTGGATAAACAGTCTTCCAG
CTTGTAAATGCCATTGACTTCTGACCTGACATTTAGTATAATAAAAATGAAATTCTTAACCATGTCAAATGATTT
AGTTTCTGGCTCTTAGACTCATCTGGCAGTTCTACACATGAAACATCTTTTGTTATATAAGGTGTATTGAAACCT
GCAGTGCTGATTATTAGAAAGGATTTGTCGGATTTTTGAACATGATATTTACATTATTATTTAGGAAAACTCTTC
CTGTAAATAACCATGCATAACTTACTTTCTGCAATGTTTTCTTAGAAATTGTGTCCAGATAGCTTTCACTAATTT
TAAATTAAGTGAACTAAATATATATGTGTATATGTATACACATATATATACACACACACATATATATATTTAGAA
ACGTGAGTGTTAAAGATAGAATTTGTTTTAGGACAAATTTTAAGAAAATGTGGGAATACCAAATGTCCTTTATAA
GAAAAATAAATTTTGTTTTAAGGGACATACCAGTTTTAGGGATTTTCAGATGGGAAGCTGCATTTTTAGGATTGC
CCATCTTAAGAGATCTTGCAGGAAGAGATTGTATTAGATATTATATTTATTTCATTTAAGATAATTTTCAAAGTT
AATTTTCTAAATAAGATAATTCTCATTTGTGTTTGTCTTTTAAAAGGCCAATAAAATATCTTTCAGTATCATTGT
AATAATTTTTTAGAGTTTAATTTGTAAAGCTTAGCAAATAAAATCTTGTACTATGAATAGCTTCTTGCTTTATGA
CTTTAGGATTAACTTGTAAAAAACATATCCTGAACTGAGATATGCAAAATACTCATTTTCAAGTTATGGAAATGT
GTTTGTGGCATATAGGACTGTGGGGTCTGTGTGTGTAGTGAGAGTGTGTAGCCACTATTATAACTGGAATTTAAT
TTACATTCATAAACTACTATATTTCCCATCTTGCAAATCATTTTATGTCTCATCTGTTTTTCCTTTCGGTTATAT
CTTTGGTTTTGAATACCAACATTTAAAATGATGGTATTTTATCTTTTAAACTTAAAAATTATTTAATACAGCTAT
ATGGACCTTATAAAATTGATTTCTTATTTATTATTAGACATTACTACTAAAAGGTACATCTAACTATTCAGGGAC
ATTTTTCCATTTCCAAAAAATAAAATTTATTATGCTTTATAACCTCTTCTGTATTTTCTAATTTTTTCATTGTCT
TTGATAAATAAAACAGTTTTGTTTTGCTAATATAGCCTATTTTTTGTTTTGTCTCATTCAGTTTACTTTCCTGCG
TAGAATTTTTATTGTTATATTAAAATTTTTATTGTTGTATTAAAGTACCTGTGTTACACCCCTTGAAGTAAGACA
GTAGCATGGGGTAAAGAAAAAATATTTAGTTTAGTTGCCTAATTTGGAAGTTAATTAAAATTAAACTGTACTAAT
AACATATTCAAACTCATGCTGGATCTCTTTCATATTAATTTCTTATAGACCTGTACTTTATTCTTTCAATAATTT
TTAAATGAAATTAAGCTTTGCTACATGGTAATTAAATAATTACTAGGAAGCTTAGCTATCAAACATCGACTTACT
AAAATTTCATTTTAGCTTTTATGGTATATGTGCTTGTTTTCTGAATATGGATACATGTTACTTTTGATCCAGCAT
CAAAACTTCACTTTTTGTTTTGACTTTTCCCCCCAAATCTGTAAGGTTCAAGTATACATATTACTGAATCCTCTA
TAATTGGCATAATTCAATGGTAGCCTTAAATCTCATCATGTAAGCAGGGGAATCAGAATGTTATTTTCAAGAACT
TAATGTTCCCTTCAGATATATAAAATCCTGCATACTTCATTTCCTGTGAGCTTGAACAGCTGCTGTTGTGTTTTG
GGGATGCTTGATCATCTTTGCACTCTGCCTTAAAGATTGAAAAATCAAAACTCTTGTTAGGGTATCTAAACATTT
TTGAGTGTGAACTGGGGATTGGAAGTTAATACAAAAAAATTTCAAATTATTTCTATTGTAAATGAATAAGCTAGT
CATGGCTAGGATAATCCATTTTCATGTATTTATGCAATAAACTGAATTTTAAGGCAAAAACAACACTTTTCTATA
TAGTGTATGCAGGACAGATTTTAGAAACTTAGATTAAAATACAAATCCCATTACATTTGGTTAAAATGAATCTCT
GCTTAATGGAAAAAATACTAATCTTTAGCCTATTTTGAGTCTATAAGATATATTTCATTTTAGACATGCCTTCTA
AGTTGTTCACAGATTTTTACCTGCTAAAACAATATTATTTCCAGTAAAACCTCTCCTAACAGGAAAAGTGGAGTT
CAAAATATCCAATTGGAGAAAAATTCAGAGTTCCTTCATTAAATATAATTTTTTTCATCTAGTATGTACTATTTC

FIGURE 6823B

AAGAAGTGCAAAAAGTAATGATAGTGAATGTGATACCATACTTAACTAAGGTAATATATATCCTTAGTTTGCTCA
AAAGAGTCCTGGTTATTCCTGTTTTCTCAGCTTAATAGTGCCTCATCGTACTCTCAAAAGTGTTCTAATTTGGAG
GATAAGTTATATGATCATCCTGTGTATAATTGTAGACTGTACCAAGAAGCAACTACCTTAGCTCCACTGCCCTTT
GAGGGATGGAACTGGGGTAAGGGCAGGAGCCAGTTATTATTGCCACAGTGTTTTCTAATGAACCATTTGGCCTGT
AGAAGAGGAATAGTATTTTTTTTAATAGTTGTATTTGAATGATTCCAGCTTATCGTAAATACTAAACTGAATGGC
TTTTATATTTTTAACTGCTGTTAAATGTTATTTTAGCATTTATTAGTTGTTTATTATTTAATTCTTCAAATAGTC
ATATGAAAACATATATTTGATAAAGGTCAATTGTTAGATGATAATGTGCCATTCATTATCATAGGAATGTCCTTG
CCCATATATAAAACATGCTGGCATGTATTTTACTTGTTAATAAAGTTGTATAGATGTGGAAGTGTGAACCTGTGA
TGCATCCTTTTCAAAATCAGTTTAAGATTCGCATATTATCATGACTGTGACCTCACTAAACTGTTTATGTGACAA
ACCTTTCAAGATTGGAGATGAAAACAACACTTGTGAAATTAGGTTGGGGTTGCAACATCTTTTAACTTCTCAGTT
ATTTGTATGTCAGGAAACAGATTGTGGTTTAATTTTAATAAACAAAATATCATCTTTTTGAAAAT

FIGURE 6824

GTTTAGCCTCTGCATATCAACAATATAATGCAGATCAAGTATAATGCTCAATATTAGTGACATGAGTATCACTAA
ATTACATAGAACCCTGATGGGGTTTCCTGTGTCGTAATCCATTAAATCGGTGGCCAGTGCTTGCTGCCGTGGTTT
AGTGATTGGGTGTTAGAAATAAAAACTCAGGTCTATTTCTTACCAGTCAGTAACAATTTTTAGAGAATGTACTTG
GTATATAATATATGGACTTCAGGAACTTTATTGGGGTGGGGGGTTAATTTTGCCTTTCACTTAATGATTTTGGAC
AGGTTTTAGAGAGCCAGGATGTTGGTCTGGGCCTTTATTTGGTTTTGGCTTTAGCTGATAATGTTTTAGTGATGT
CAGCTAGTGCAGTTCTCAAATGGCTGCCTATTAGGGAAAGAATTCAGAGGATTTGACTGCTCCTAATCATCTGTC
ATTGCTGCTAGATAATGATTGGCAATTTTTAAGACTCAACTGGAAATCTCAACAGTTGCTGGTAAACCATTAACC
ATAAAAACGTTGCTTTTGAACACCAGTGCTGAAAAAAATATTTTTTCTTTCTTTTTTCTGAGAGTGAAAAGGGCT
TGGACTTAAGAATAGGACAATGTGGAAAATGGGGGGAAAAATGCAAAACGATATAGTATCCCTTATGGATGGTAC
ATGTGCAACAGGGAACTCTTACTTCATATACCCTTTGCAGTAATCATTCAGGGAGGAAGAAAAACCTGGAACTTG
AATTGAAGGCTGATCTCTTGTTTTGTGCACTGTGGCCCTGCCAGGCATATAGTGAAGGTGAATGTCTTCTCCCTC
AGAAAAAAATTGGTTCCTTGCTGTCCCAGTAAGGCATAGCTTTTCCAGCCCTAATTTTAAAACTCAGTGAGGACT
TAGATGGGAAAAGAATGAGGTAAAGTACAAAGGATTGCATGGACAACAACTGACAGACAGTTGTGTACTGTGGGA
AGGGGAGTTGGGCACTCTTGGAGGACTCCTGCTGAAGGTGGTCAGCCATGTCGCATGACAAGTGGAAGACATACT
TGAATGGGGAGCAGGGTATGTGCTTTCATATGAAAGAAGAGCTGATGTTAAAACTCATTTGGTGAGGTCAATGTT
GTCACATACTTTCACATAAGGGATAGTATA

7591/8433

FIGURE 6825

LASAYQQYNADQV

FIGURE 6826

CTCGGCGCGCGCTTGGGGCGAGGCTCGGCGGGCGCGGACGCGCAGCATGGCGGTGGAGGACGAGGGGCTCCGGGT
CTTCCAGAGCGTGAAGATCAAGATCGGTGAAGCCAAAAACCTTCCCTCTTACCCGGGGCCGAGCAAGATGAGGGA
TTGCTACTGCACGGTGAACCTGGACCAGGAGGAGGTTTTCAGGACCAAAATTGTGGAAAAGTCACTCTGCCCGTT
TTACGGAGAAGACTTTTACTGTGAAATTCCTCGGAGCTTTCGTCACCTGTCCTTCTACATTTTCGATAGAGACGT
TTTCCGGAGGGATTCCATCATAGGGAAGGTGGCCATCCAGAAGGAGGACTTGCAGAAGTACCACAACAGGGACAC
CTGGTTCCAGCTGCAGCACGTGGACGCTGACTCGGAAGTGCAGGGCAAAGTGCACCTGGAGCTGCGGCTGAGCGA
GGTCATCACAGACACTGGGGTCGTCTGCCACAAGCTCGCCACACGCATCGTCGAGTGCCAGGGCCTCCCCATCGT
GAATGGGCAATGTGACCCCTACGCCACCGTGACGCTGGCAGGACCCTTCAGATCAGAAGCAAAGAAGACGAAAGT
GAAGAGGAAGACCAACAATCCCCAGTTCGATGAAGTGTTTTATTTTGAGGTGACCCGGCCCTGTAGCTACAGCAA
GAAGTCCCACTTTGACTTTGAGGAGGAAGACGTGGACAAGCTCGAAATCAGAGTTGACCTCTGGAATGCCAGTAA
CCTGAAGTTTGGAGATGAATTCCTGGGAGAACTAAGGATCCCGTTGAAAGTCCTGCGGCAGTCCAGCTCCTACGA
GGCGTGGTACTTCCTCCAGCCCCGGGACAATGGTAGCAAGAGCCTAAAGCCAGACGACCTGGGCTCCCTGCGGCT
GAACGTGGTATACACGGAAGACCACGTGTTTTCTTCTGACTATTACAGCCCTCTGCGGGACCTGCTGTTGAAGTC
TGCGGATGTGGAGCCCGTGTCAGCGTCTGCGGCCCACATCCTGGGCGAGGTTTGCCGGGAGAAGCAGGAGGCGGC
CGTCCCGCTGGTGCGGCTCTTCCTACACTATGGCAGGGTGGTGCCATTCATCAGTGCCATCGCCAGCGCGGAGGT
GAAGCGGACCCAGGACCCCAACACCATCTTCCGAGGAAACTCACTGGCGTCCAAGTGCATTGACGAGACCATGAA
GCTGGCGGGGATGCATTACCTGCATGTCACCCTGAAGCCCGCCATCGAGGAGATATGCCAGAGCCACAAACCCTG
TGAAATCGACCCTGTGAAGTTGAAAGACGGAGAAAACCTTGAAAACAACATGGAGAACCTACGGCAGTATGTGGA
CCGCGTCTTCCACGCCATCACCGAGTCTGGGGTGAGCTGCCCGACCGTCATGTGTGACATCTTCTTCTCCCTCCG
GGAGGCGGCGGCCAAGCGCTTCCAGGATGACCCGGACGTCAGGTACACTGCAGTGAGCAGCTTCATCTTCCTGAG
GTTCTTTGCGCCCGCCATTCTCTCCCCCAACCTCTTCCAGCTCACGCCGCACCACACGGACCCCCAGACGTCCAG
GACGCTGACATTGATCTCCAAGACCGTTCAGACCCTCGGCAGCCTGTCCAAGTCCAAATCTGCGAGTTTTAAGGA
GTCCTACATGGCTACATTTTATGAATTCTTCAATGAGCAGAAATATGCTGATGCGGTGAAGAACTTCTTGGATCT
GATTTCGTCCTCGGGGAGAAGAGACCCCAAGAGTGTTGAGCAGCCCATCGTGCTTAAAGAAGGGTTCATGATCAA
GAGGGCCCAAGGACGGAAGCGCTTTGGGATGAAGAATTTTAAGAAGAGATGGTTTCGTTTGACCAACCATGAATT
TACCTACCACAAAAGCAAAGGGGACCAGCCTCTCTACAGCATTCCCATCGAGAACATCCTGGCAGTGGAGAAGCT
GGAGGAGGAGTCTTTCAAAATGAAAAACATGTTCCAGGTCATCCAGCCAGAGCGTGCGCTGTACATCCAGGCCAA
CAACTGCGTGGAGGCCAAGGACTGGATCGACATTCTCACCAAAGTGAGCCAGTGCAACCAGAAGCGCCTCACCGT
CTACCACCCGTCCGCCTACCTGAGCGGCCACTGGCTGTGCTGTAGGGCGCCATCCGACTCGGCTCCGGGCTGCTC
GCCCTGCACTGGCGGCCTCCCAGCCAACATCCAGCTGGACATTGATGGGGACCGTGAGACGGAGCGTATCTACTC
CCTCTTCAACTTGTACATGAGCAAGCTGGAGAAGATGCAGGAGGCCTGTGGGAGCAAATCTGTGTATGACGGCCC
GGAGCAGGAGGAGTATTCGACGTTCGTCATTGACGACCCCCAGGAGACCTACAAGACGCTAAAGCAAGTCATCCG
CTGGGTTGGGGCTTTGGAGCAGGAGCACGCCCAGTATAAGAGGGACAAGTTCAAGAAGACGAAATATGGAAGCCA
GGAGCACCCCATCGGAGACAAGAGCTTCCAGAACTACATCCGGCAGCAGTCCGAGACCTCCACTCATTCCATTTAA
AAGTCTGCGGGACGCGCCCGCGGCCGCTTCCCTTTAGTGAGGGTTAATGCTTCGAGCAGACATGATAAGATACAT
TGATGAGTTTGGACAAACCACAACTAGAATGCAGTGAAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGC
TTTATTTGTAACCATTATAAGCTGCAATAAACAAGTTAACAACAACAATTGCATTCATTTTATGTTTCAGGTTCA
AGGGGAGATGTGGGAGGTTTTTAAAGCAAAGTAAAACAAAGTAAAACCTCTACAAATGTGGT

FIGURE 6827

MAVEDEGLRVFQSVKIKIGEAKNLPSYPGPSKMRDCYCTVNLDQEEVFRTKIVEKSLCPFYGEDFYCEIPRSFRH
LSFYIFDRDVFRRDSIIGKVAIQKEDLQKYHNRDTWFQLQHVDADSEVQGKVHLELRLSEVITDTGVVCHKLATR
IVECQGLPIVNGQCDPYATVTLAGPFRSEAKKTKVKRKTNNPQFDEVFYFEVTRPCSYSKKSHFDFEEEDVDKLE
IRVDLWNASNLKFGDEFLGELRIPLKVLRQSSSYEAWYFLQPRDNGSKSLKPDDLGSLRLNVVYTEDHVFSSDYY
SPLRDLLLKSADVEPVSASAAHILGEVCREKQEAAVPLVRLFLHYGRVVPFISAIASAEVKRTQDPNTIFRGNSL
ASKCIDETMKLAGMHYLHVTLKPAIEEICQSHKPCEIDPVKLKDGENLENNMENLRQYVDRVFHAITESGVSCPT
VMCDIFFSLREAAAKRFQDDPDVRYTAVSSFIFLRFFAPAILSPNLFQLTPHHTDPQTSRTLTLISKTVQTLGSL
SKSKSASFKESYMATFYEFFNEQKYADAVKNFLDLISSSGRRDPKSVEQPIVLKEGFMIKRAQGRKRFGMKNFKK
RWFRLTNHEFTYHKSKGDQPLYSIPIENILAVEKLEEESFKMKNMFQVIQPERALYIQANNCVEAKDWIDILTKV
SQCNQKRLTVYHPSAYLSGHWLCCRAPSDSAPGCSPCTGGLPANIQLDIDGDRETERIYSLFNLYMSKLEKMQEA
CGSKSVYDGPEQEEYSTFVIDDPQETYKTLKQVIRWVGALEQEHAQYKRDKFKKTKYGSQEHPIGDKSFQNYIRQ
QSETSTHSI

FIGURE 6828A

CGCGCCCCGGATGGATGTGCCCGGCCCGGTGTCTCGGCGGGCGGCGGCGGCGGCGGCCACTGTGCTCCTGCGGAC
CGCTCGGGTCCGTCGCGAATGCTGGTTCTTGCCGACCGCGCTGCTCTGCGCCTACGGCTTCTTCGCCAGCCTCAG
GCCGTCCGAGCCCTTCCTGACCCCGTACCTGCTGGGGCCGGACAAGAACCTGACCGAGAGGGAGGTCTTCAATGA
AATTTATCCAGTATGGACTTACTCTTACCTGGTGCTACTGTTTCCTGTGTTCCTTGCCACAGACTACCTCCGTTA
TAAACCTGTTGTTCTACTGCAGGGGCTCAGCCTTATTGTTACATGGTTTATGCTGCTCTATGCCCAGGGACTGCT
GGCCATTCAATTTCTAGAATTTTTTTATGGCATCGCCACAGCCACTGAAATTGCCTATTACTCTTATATCTACAG
TGTGGTGGACCTGGGCATGTACCAGAAAGTCACAAGTTACTGTCGAAGTGCCACTTTGGTGGGCTTTACAGTGGG
CTCTGTCCTAGGGCAAATCCTTGTCTCAGTGGCAGGCTGGTCGCTGTTCAGCCTGAATGTCATCTCTCTTACCTG
TGTTTCAGTGGCTTTTGCTGTGGCCTGGTTTTTACCTATGCCACAGAAGAGCCTCTTCTTTCACCACATTCCTTC
TACCTGCCAGAGAGTGAATGGCATCAAGGTACAAAATGGTGGCATTGTTACTGACACCCCAGCTTCTAACCACCT
TCCTGGCTGGGAGGACATTGAGTCAAAAATCCCTCTAAATATGGAGGAGCCTCCCGTGGAGGAACCGGAACCCAA
GCCAGACCGTCTCCTTGTATTGAAAGTACTATGGAATGATTTCCTGATGTGCTACTCCTCTCGCCCTCTTCTCTG
CTGGTCTGTGTGGTGGGCCCTCTCTACCTGTGGCTATTTTCAAGTTGTGAACTACACACAGGGCCTGTGGGAGAA
AGTGATGCCTTCTCGCTATGCTGCTATCTATAATGGTGGCGTGGAGGCCGTTTCAACCTTACTGGGTGCTGTTGC
TGTGTTTGCAGTTGGTTATATAAAAATATCCTGGTCAACTTGGGGAGAAATGACATTATCTCTCTTTTCTCTCCT
GATTGCTGCTGCAGTGTATATCATGGACACTGTGGGTAACATTTGGGTGTGCTATGCATCCTATGTTGTCTTCAG
AATCATCTACATGTTACTCATCACGATAGCAACTTTTCAAATTGCTGCAAACCTCAGCATGGAACGCTATGCCCT
AGTATTTGGTGTAAATACCTTCATTGCCCTGGCACTGCAGACGCTGCTCACTCTAATTGTGGTAGATGCCAGTGG
CCTTGGATTAGAAATTACCACTCAGTTTTTGATCTATGCCAGTTATTTTGCACTCATCGCTGTGGTTTTCCTGGC
CAGTGGTGCAGTCAGTGTTATGAAGAAATGTAGAAAGCTGGAAGATCCACAATCAAGTTCTCAAGTAACCACTTC
ATAATATACTGCTGAAGGGCTTCTTCTTATAGCAAGAACTCTGCACAGCAACTGCCTGGATGTGTTTGATTTTTT
AAAGCGTAGACATATATTTATGAATGTGCATTTCTTGACTTCACAGCAGCCACTTGACTAATACCTTGTGTTCCG
GGAATAACATGATACTATTCAGAGGAGCCAGAAGTAAAGTTTATTTCATGGATTATTTATGAGAGCTAATTTAAG
GATGACTTTTTTTCTGATTCAAAAGTGAACTTGATTTTAAAAACCAGTCAAGAGCAATCAAAGCAGCACATGGTG
TTGTATACTTCATTAGCAAGTGAGTTTGGTGTTTTATAGGTCACATATGTCTGTATCTACTTAGCCAGATGCTTG
GCCTGGTGGGACCAGGGCTCCACAGAGGCCACAAAATGTTGCAAGTCATGATGGATGGAAATATGTTCTAACAGC
ATCTGCCTCTATTCAATTTAATTCTTATTTCTGTGTTACTCATGTACATTGGTCTTTCTACATAGTTATTCTATC
ACTGGCAATATTTGTTCTGGTTTAGTGTTCTGTATTTTAAGGTGTACGTATCATTTCTAATTTTAAGTTATTTTA
AAAAAATTCATCATATGAATGTTCTTGGTTCCCATTGTGACGATTATTTATTTCTGTAAAATTTGTTTAGAAGTA
CGTTTTTGCATTATTCATATGCTTCCCAGAGAAGCTCATTTAGTTAGAAAATAAGGCAAGTTTTGAAGCCTGCTA
AATGAAGAGACTTAAGAAAGCTTAAGGTACGCTTGCTTGTCTTTAAATCTTCAATATGAAGGACTATTAATTCCA
AGATTAAAAGTTCATATATAGGCTAAAGATGTAACTAGGCCATTTGTATTTGTATTCCCTTTTATTTCCAAAATA
AAATGAAAAATCTTTTTTTAATAATTTCATCCCTATTTATAGTTTTTATATTAATTTGTTTTTCTTATCCAAGTA
AAGATGTCAATAGGAATTGCATTAGTCCAAGGCCTTTTTCATAAACTGAGCCTCTTTTCAATTATTTCAATGGGA
CAGGAACTAGGATAGATGTGATTCCTGCATTTTTTTACCTTAAATCTGCCTTTGTTTCTAAAGGTAGATCATCTT
GAATATTTGCTTAAAATTGCTAGTGATTTCATTACCAAGTTACTTGAAAAAATGTTCTATATGCATTTAATTCTG
AAATCAGTCTACCAAGGGGCTGCTAGTATATGTCAGACATGAAAACTATTTTAAAGCTGACTTTGTTGCCTTATC
TTGAAAAGAATCTAGATAGGTGCTTTTAACTGGGGTATTAACTTTTTTAGAATGACACAGCTGAACAGTGTTAAT
AATAGTGTGTCAAGATTGCAAAGTCGACATACTCATTTGGTTTAAGCAGGAATCCTAGAAGCAAATGGATGGGGA
TAAGAATAGGTCATTTTCTATTCACCATCCTTTACTATTAAGGGAAAGGAAAAGAACACTAGCTAAGGAAGGGAA
AGGGAAGTGATATCATAAAAGTAGCAACCTTCATTTTACATTCTGTCTGTTTTTCTTTTTTTGCTTTGTTTTGTT
TGTGCTAATTTGGGAATTGTGTACTCCGAAACAAGTAGAAAAGTGCTGTTTGAGGGATTTTATTAAATCTTTTTT
TAATGGAATGTGGTACAAATTGTTCATGTTACCAAAGCAATATTTCCCTGGAATTTAATTCAAAGTTTGTGGCAT
ACAACCTGAGCCTTTTCTTATATAAGACAAGAATATGTTCACATCTTGGTATGTGGCCATATTTATAGAATGCTG
AACTCAATGTGCAAGTTGTACTGTATGCAGTTTTGTAAATAAGTGAAAATAATTTGTTGTACTTTTTATTCAATT
CTGTATAGATTATAAAATTATTTTTATTAAATAAATATTTTACAGTATATTTTCTCTTTTTAATCAAAATTGTTT
TAAATTTATCTTCTATTTCAGTAGGAGCTTTAGATTATATCTTTAAATATTTTAATAATTTATCCTAGGACAAAT
TTCATATTAAGTCTTCCCCTGGTCTAACTTGCCTAGTTAACCTTTTGTTATCTTTTTAATTATTCCATTGCTTTG

FIGURE 6828B

TGATTTTTACCTTTGACTCTTCCCCCTTATTTCAGATGTTTTCCCCCTTTTTTTTGGCACCCCGTTGCACTGTTT
TTTTTTTTTTTTTTGGTTTTCATGTTGGCACTGCTCTTATCTCTTTTTAAAGCATTCTTCCTTAAAAAAAAAAAA
AGACACTCTCTTTGATGTTAACTGAATTTTTACAATAAAGGAAATTAAAGCAAGAGCAGAAAATACCACCTTGTT
CTGAAACTTCATAGCCTCTTTGTTCCACCTCAAATTATTCTGATACCCAGGGAGGAATCTTCTTGCCATGAGTTG
AGAATCATTTGTCCATTATATCCCAGAAACCTAATCAGTATTTTCTTACAGTATCCAAATGAGTACCATTTTTTA
ATATACCATTTCAAAATCTACTTAAGGCATTGATTTCGCTGCTTATCACCAAAGTCCTGGAAATTTTTCATGCAA
AAATAAATTTTTTTTTTTTGAGACAGTCTTGCACTGTTGCCCAGGCTGCAGTGCAGTGGCAATCTCGGCTCACTG
C

FIGURE 6829

AATTTAAAATTTGTTTAATGCACTGGAAATAAAATTGGACATATTTCACTGTTTAAAAAATCAGAAACAAAACAA
AGCAAAACCATGAGGGAAAAAAACAGCAAATAAGCAACAGGGGAAAAAAGCTATGAAAAAAATATATTTGTACTG
AATACACATACAAACTACATCCCACATGAAAGATTAATATCATCAAGTAAGAAAAATACATAGTTTAAACTACAA
TGCTGAAAATATAAAAGGAACCTGGTAGTTCAATGGGGATGGAGAAAACAGAGCATTCCTCTGAGAGCAGAGATC
TTGTCATTATTGCAATTAATGCCCAAACAGGTTAAATGTGGAAGAAAGTATGGAGGAAATAACCCCAGCCTTCCT
CATACCACTGGATTTCCACATCACCTTTTAACTTATGCTTGAGCTCCCTTTTGAGAAAAAATATTTAAAAACAAA
TTGGCTATGTAACAAATTTGTGTGTGTGTGTGTATATATNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNGC
TTGAGAAAGTGGTTTTTCAAGATGTATGTGTACAGTACACACATGGACACGCTTCAGTCCTCTGACTTCCCATGT
GCTACCTCATGTGTTTCTCTTCTCATGAGGATTTGCAATGGATAGTTGTACAACCTGGGGACTGTCAGTGACTCA
TTGGTATCAGCATATGCTAAAGAAGCTCTTGAATCCAATCTTGAAACCTGATCTCCCTTCGTCAACATTCCCCAA
TACCAAACTGGCCCGTTTACCCATACAAATGCACAGTAAAGGGAAGAACAGCGGTATTTTTCCTAGCCAACTGAC
TCTATCATTTGTTTAATGTTTGCTGGTTTTTTTCTGGTTTTGTTTTGTTTTAGAGCAGGGGTGGGAGTGGCTGTA
ACTTCACAATCCTAATACAGTAAATGTTTTGCATCTTCCATGTTTTATGCAAAAACAGACATTTAAATCAATAAA
TAATTGTGCCCTAGACTGAAGGTTAATGTTTAGGAGAGGAAAAAAATTGTTGGAATTTTTTCTACATTTTTTTGT
GAAGAATCTTTTTTGGAAAGGAAGGATACATATTTTTGTTGTGTAATATTTTCTATTTTTGAATGCATTTTATTG
GTACAAGACTGTTTTTTTGGTGAAGACATTATTTAAAAAAACAGTCTTGTACCAATAGTCGAC

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FIGURE 6830

MDSCTTWGLSVTHWYQHMLKKLLNPILKPDLPSSTFPNTKLARLPIQMHSKGKNSGIFPSQLTLSFV

FIGURE 6831

GTGCCTAACAGAGGTGTCCTCTGACTTTTCTTCTGCAAGCTCCATGTTTTCACATCTTCCCTTTGACTGTGTCCT
GCTGCTGCTGCTGCTACTACTTACAAGGTCCTCAGAAGTGGAATACAGAGCGGAGGTCGGTCAGAATGCCTATCT
GCCCTGCTTCTACACCCCAGCCGCCCCAGGGAACCTCGTGCCCGTCTGCTGGGGCAAAGGAGCCTGTCCTGTGTT
TGAATGTGGCAACGTGGTGCTCAGGACTGATGAAAGGGATGTGAATTATTGGACATCCAGATACTGGCTAAATGG
GGATTTCCGCAAAGGAGATGTGTCCCTGACCATAGAGAATGTGACTCTAGCAGACAGTGGGATCTACTGCTGCCG
GATCCAAATCCCAGGCATAATGAATGATGAAAAATTTAACCTGAAGTTGGTCATCAAACCAGCCAAGGTCACCCC
TGCACCGACTCTGCAGAGAGACTTCACTGCAGCCTTTCCAAGGATGCTTACCACCAGGGGACATGGCCCAGCAGA
GACACAGACACTGGGGAGCCTCCCTGATATAAATCTAACACAAATATCCACATTGGCCAATGAGTTACGGGACTC
TAGATTGGCCAATGACTTACGGGACTCTGGAGCAACCATCAGAATAGGCATCTACATCGGAGCAGGGATCTGTGC
TGGGCTGGCTCTGGCTCTTATCTTCGGCGCTTTAATTTTCAAATGGTATTCTCATAGCAAAGAGAAGATACAGAA
TTTAAGCCTCATCTCTTTGGCCAACCTCCCTCCCTCAGGATTGGCAAATGCAGTAGCAGAGGGAATTCGCTCAGA
AGAAAACATCTATACCATTGAAGAGAACGTATATGAAGTGGAGGAGCCCAATGAGTATTATTGCTATGTCAGCAG
CAGGCAGCAACCCTCACAACCTTTGGGTTGTCGCTTTGCAATGCCATAGATCCAACCACCTTATTTTTGAGCTTG
GTGTTTTGTCTTTTTCAGAAACTATGAGCTGTGTCACCTGACTGGTTTTGGAGGTTCTGTCCACTGCTATGGAGC
AGAGTTTTCCCATTTTCAGAAGATAATGACTCACATGGGAATTGAACTGGGACCTGCACTGAACTTAAACAGGCA
TGTCATTGCCTCTGTATTTAAGCCAACAGAGTTACCCAACCCAGAGACTGTTAATCATGGATGTTAGAGCTCAAA
CGGGCTTTTATATACACTAGGAATTCTTGACGTGGGGTCTCTGGAGCTCCAGGAAATTCGGGCACATCATATGTC
CATGAAACTTCAGATAAACTAGGGAAAACTGGGTGCTGAGGTGAAAGCATAACTTTTTTGGCACAGAAAGTCTAA
AGGGGCCACTGATTTTCAAAGAGATCTGTGATCCCTTTTTGTTTTTTGTTTTTGAGATGTGGCAGGAGCTCCCAG
GGAAAAAGGAAGTGCATTTGATTGGTGTGTATTGGCCAAGTTTTGCTTGTTGTGTGCTTGAAAGAAAATATCTCT
GACCAACTTCTGTATTCGTGGACCAAACTGAAGCTATATTTTTCACAGAAGAAGAAGCAGTGACGGGGACACAAA
TTCTGTTGCCTGGTGGAAAGAAGGCAAAGGCCTTCAGCAATCTATATTACCAGCGCTGGATCCTTTGACAGAGAG
TGGTCCCTAAACTTAAATTTCAAGACGGTATAGGCTTGATCTGTCTTGCTTATTGTTGCCCCCTGCGCCTAGCAC
AATTCTGACACACAATTGGAACTTACTAAAAATTTTTTTTTACTGTT

FIGURE 6832

MFSHLPFDCVLLLLLLLLTRSSEVEYRAEVGQNAYLPCFYTPAAPGNLVPVCWGKGACPVFECGNVVLRTDERDV
NYWTSRYWLNGDFRKGDVSLTIENVTLADSGIYCCRIQIPGIMNDEKFNLKLVIKPAKVTPAPTLQRDFTAAFPR
MLTTRGHGPAETQTLGSLPDINLTQISTLANELRDSRLANDLRDSGATIRIGIYIGAGICAGLALALIFGALIFK
WYSHSKEKIQNLSLISLANLPPSGLANAVAEGIRSEENIYTIEENVYEVEEPNEYYCYVSSRQQPSQPLGCRFAM
P

FIGURE 6833

GAATTCGGCACGAGTTTTTTTTTTCTGCAGTTGTGTGTATGTGTGTTTGTGTGAAGAAAAACAGACTCTGTCCAG
GTAGAAATGGTGAGGAGGGGGAAGAGAATTACATTTCCAGGGTCAGAAACTTGGCAACAGTTTTCCTAKAGTGAC
TCAGACACACCACAGTAACAACTCTCGCTGCAATTTTATTTTAATTTGAGAAATAAAGATTTCCTCCAAGCCACA
TGAGGACTCTGGCACCCACCCACAAAGCAAGACCTGTATTTATAAGCCGAGGGTGCAGGGAGCTXAACTGCGGGA
CCCGTCAGGGCCCCGTGGACCCATCCCCGTCCCCACCCCCCCCTCCACCGYTGGGGCCCATCAGTGTGTGTTGGG
GGGGATGCTTGGGCAGCTGGGGGGTGAGGGAGACAACAAACCTYGGGGAAYTGGGAGCCAGAGCTGCGGCCTGACC
TGACGCCTTTTGATGCTCACGGGAAATTTXTGCCCAGGATXTCAGCCCCAGGCTGGTTGTTTCTACAAATCTCTC
TCAAATGTATTATTTTGGTGACAAAAATGAAGGAGCTTTGTAAATTTTTTTAAAATTATGAATXCATATCAAGTA
GTTGTTTACATTTCTTGAAAAAATAGGAACTCGGGCAGCAGAATCAGATTGGCAGAATCTTTAGACTACACAGGC
AATAATCAAGTCTGCTGTTTTGXCCTTTCGTAGTAGAAGTGGTTGTAGTGTTTAGATATCTGTTTGGTCTTGCTT
CTTGTATTGCATTTTTTTCAATAAACAACAACAAAAAGAAAAAAAAAAAAAAAAAAAAAAAAAGATCTTTAATTAA

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FIGURE 6834

MRTLAPTHKARPVFISRGCRELNCGTRQGPVDPSPSPPPPPPLGPISVCWGGCLGSWGVRETTNLGELGARAAA

FIGURE 6835

ACGAAGACACCAGACCCTGTGGAGCCTGTGGTGACCACCGAAGGXCAGTTCGGGTGCAGCAGGGCTCGAGCCCAG
AAAACTATCCTCTAAGACCAGACGTGACAAGGAGAAGCAGAGCTGTAAGAGCTGTGGTGAGACCTTCAACTCCAT
CACCAAGAGGAGGCATCACTGCAAGCTGTGTGGGGCGGTCATCTGTGGGAAGTGCTCCGAGTTCAAGGCCGAGAA
CAGCCGGCAGAGCCTGTCTGCAGAGATTGTTTCCTGACACAGCCAGTGGCCCCTGAGAGCACAGAGAAGACACCC
ACTGCAGACCCCCAGCCCAGCCTGCTCTGCGGCCCCCTGCGGCTGTYAGAGAGCGGTGAGACCTGGAGCGAGGTG
TGGGCCGCCATCCCCATGTCAGATCCCCAGGTGCTGCACCTGCAGGKAGGCAGCCAGGACGGCCGGCTGCCCCGC
ACCATCCCTCTCCCCAGCTGCAAACTGAGTGTGCCGGACCCTGAGGAGAGGCTGGACTCGGGGCATGTGTGGAAG
CTGCAGTGGGCCAAGCAGTCCTGGTACCTGAGCGCCTCCTCCGCAGAGCTGCAGCAGCAGTGGCTGGAAACCCTA
AGCACTGCTGCCCATGGGGACACGGCCCAGGACAGCCCGGGGGCCCTGCAGCTTCAGGTCCCTATGGGCGCAGTG
CTCCGTGAGCTGAGTCTCCCACTGCCCTGCACACCACCACATTGGACCTGTGCTGTCCTGGGAGGTGGTGTTGGA
GGCCCCATGAAGAGCGCCCTGGACTTGCTTGAGGGTGGGCCAACAGCCCAGAGYTCAGGACATTTGGCTTTGGGG
GGAAGGAAAYTGAGGCCCAGAGAGGGGCAACCAYTGGCCAAGGGTCACCCAGCAAGTTTTGGYTAAGAGCCTGGC
CTCCAGCCCCAGCAGTKTGGCCCAGAGCAGGGGCCGAYTGCCAAAGTAACCATCATCCATATGGGCCGTGTGGTG
ATGCTGGCCCGGAAGGCAGAAAGAGGCAGCATGGGCACTGCCAGGGACAGCCACATCCTGCTGGTCTGCAGCGTG
GTCCACCCCGCCTCTGCCCAGCCTGTCTACACCGTGTGAGCTGAATCGTGACTTGCTTCCCACCTCCTTTCTCTG
TCCTCTCCTGAGGTTCTGCCTGCAGCCCCCAGGAGGTGGGCCTGCCCCATCCTAGCTGGACTCATGGTTCCTAAA
TAACCACGCTCAGAAGCTCTGCTAGGACTTACCCCAGCCACTGAGTGGCAGGCGCATGAGATTTGTGGCTGTTCC
TGATGCTAGTGGCACACAGTGCTTATCTGCATAAATAAACACTGGSCACCAAAAAAAAAAAAAAAAAAAAAAC

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FIGURE 6836

MLARKAERGSMGTARDSHILLVCSVVHPASAQPVYTV

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FIGURE 6837

CAGTATTTCCCTCAGTACTGTAAGCAAAAGTGGTATGTTTTTCTTTCTTTATGTCTACTCTGTCCTCTGTGGCCT
TCTGGTGTACCCCTCTCTTCCTAGCCATTCAGTCTCTCTAGTCACCTCCCTAGTAGCTAGTGCTCTCTAAGTTTT
TATTTAATTAGAACAACTCCATTTCCATTTCAAGGTAGGTCAATGGGGGGAAAAGCCTCATGATTTAAACTGAAG
TTAACAACACAGCTTTTAAAATGAAAACTCATACTCCAACTTCTAAAGTATATTTGAGCTGATTTGTTTCCAAAA
CAAAGATATGCTGTACCTAAAACTGCTAAAACAAAAATATAAAGACAAGGACTAGGTGATTAAGGGGAGAGAAAA
ATCATYTCTTTTCCAGGAAACCTTTGCTAAAATAAGCAAAACTTGAXTCTATGCTTCATGGAAACTGACACAAAG
AAAAGAAACTGATGGATTGCACAGGCCTTGTTATAGAAATAGATCTATAAAAAGATCTGTCCACAGGAAATATAC
ACCTTCTCCTGGTTCTGAACTTCAATGGGGATTTGTCACCTAGGTCTCCATCTATAGGAATACCTTCACATACCT
ATCTATTCATGCACATATTCTGAAAACAGGTACATACAAAATTACAACAAAGGAAAAAAATTCTATTGAACACTT
AAAAATAGAAACAGGCCAGGCACGGTGGCTCATGCTGTAATCCCAACAATTTGGGAGGCTGAGGCTGGTGGATCA
CCTGAGGTCAGGAGTGTGAGACCAGCTTGGCCAACATGGTGAAACCCCGTCACTACTAAAAATACAAAAAAAATT
AGCCTGTGTGGTGGCACACTCXTACAATCCXGGCTGACTCGGGAAAX

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FIGURE 6838

MFFFLYVYSVLCGLLVYPSLPSHSVSLVTSLVASAL

FIGURE 6839

CCGCTGGGCGTAGCTGCGACTCGGCGGAGTCCCGGCGGCGCGTCCTTGTTCTAACCCGGCGCGCCATGACCGTCG
CGCGGCCGAGCGTGCCCGCGGCGCTGCCCCTCCTCGGGGAGCTGCCCCGGCTGCTGCTGCTGGTGCTGTTGTGCC
TGCCGGCCGTGTGGGGTGACTGTGGCCTTCCCCCAGATGTACCTAATGCCCAGCCAGCTTTGGAAGGCCGTACAA
GTTTTCCCGAGGATACTGTAATAACGTACAAATGTGAAGAAAGCTTTGTGAAAATTCCTGGCGAGAAGGACTCAG
TGATCTGCCTTAAGGGCAGTCAATGGTCAGATATTGAAGAGTTCTGCAATCGTAGCTGCGAGGTGCCAACAAGGC
TAAATTCTGCATCCCTCAAACAGCCTTATATCACTCAGAATTATTTTCCAGTCGGTACTGTTGTGGAATATGAGT
GCCGTCCAGGTTACAGAAGAGAACCTTCTCTATCACCAAAACTAACTTGCCTTCAGAATTTAAAATGGTCCACAG
CAGTCGAATTTTGTAAAAAGAAATCATGCCCTAATCCGGGAGAAATACGAAATGGTCAGATTGATGTACCAGGTG
GCATATTATTTGGTGCAACCATCTCCTTCTCATGTAACACAGGGTACAAATTATTTGGCTCGACTTCTAGTTTTT
GTCTTATTTCAGGCAGCTCTGTCCAGTGGAGTGACCCGTTGCCAGAGTGCAGAGAAATTTATTGTCCAGCACCAC
CACAAATTGACAATGGAATAATTCAAGGGGAACGTGACCATTATGGATATAGACAGTCTGTAACGTATGCATGTA
ATAAAGGATTCACCATGATTGGAGAGCACTCTATTTATTGTACTGTGAATAATGATGAAGGAGAGTGGAGTGGCC
CACCACCTGAATGCAGAGGAAAATCTCTAACTTCCAAGGTCCCACCAACAGTTCAGAAACCTACCACAGTAAATG
TTCCAACTACAGAAGTCTCACCAACTTCTCAGAAAACCACCACAAAAACCACCACACCAAATGCTCAAGCAACAC
GGAGTACACCTGTTTCCAGGACAACCAAGCATTTTCATGAAACAACCCCAAATAAAGGAAGTGGAACCACTTCAG
GTACTACCCGTCTTCTATCTGGGCACACGTGTTTCACGTTGACAGGTTTGCTTGGGACGCTAGTAACCATGGGCT
TGCTGACTTAGCCAAAGAAGAGTTAAGAAGAAAATACACACAAGTATACAGACTGTTCCTAGTTTCTTAGACTTA
TCTGCATATTGGATAAAATAAATGCAATTGTGCTCTTCATTTAGGATGCTTTCATTGTCTTTAAGATGTGTTAGG
AATGTCAACAGAGCAAGGAGAAAAAAGGCAGTCCTGGAATCACATTCTTAGCACACCTACACCTCTTGAAAATAG
AACAACTTGCAGAATTGAGAGTGATTCCTTTCCTAAAAGTGTAAGAAAGCATAGAGATTTGTTCGTATTTAGAAT
GGGATCACGAGGAAAAGAGAAGGAAAGTGATTTTTTTCCACAAGATCTGTAATGTTATTTCCACTTATAAAGGAA
ATAAAAAATGAAAAACATTATTTGGATATCAAAAGCAAATAAAAACCCAATTCAGTCTCTTCTAAGCAAAATTGC
TAAAGAGAGATGAACCACATTATAAAGTAATCTTTGGCTGTAAGGCATTTTCATCTTTCCTTCGGGTTGGCAAAA
TATTTTAAAGGTAAAACATGCTGGTGAACCAGGGGTGTTGATGGTGATAAGGGAGGAATATAGAATGAAAGACTG
AATCTTCCTTTGTTGCACAAATAGAGTTTGGAAAAAGCCTGTGAAAGGTGTCTTCTTTGACTTAATGTCTTTAAA
AGTATCCAGAGATACTACAATATTAACATAAGAAAAGATTATATATTATTTCTGAATCGAGATGTCCATAGTCAA
ATTTGTAAATCTTATTCTTTTGTAATATTTATTTATATTTATTTATGACAGTGAACATTCTGATTTTACATGTAA
AACAAGAAAAGTTGAAGAAGATATGTGAAGAAAAATGTATTTTTCCTAAATAGAAATAAATGATCCCATTTTTTG
GT

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FIGURE 6840

MTVARPSVPAALPLLGELPRLLLLVLLCLPAVWGDCGLPPDVPNAQPALEGRTSFPEDTVITYKCEESFVKIPGE
KDSVICLKGSQWSDIEEFCNRSCEVPTRLNSASLKQPYITQNYFPVGTVVEYECRPGYRREPSLSPKLTCLQNLK
WSTAVEFCKKKSCPNPGEIRNGQIDVPGGILFGATISFSCNTGYKLFGSTSSFCLISGSSVQWSDPLPECREIYC
PAPPQIDNGIIQGERDHYGYRQSVTYACNKGFTMIGEHSIYCTVNNDEGEWSGPPPECRGKSLTSKVPPTVQKPT
TVNVPTTEVSPTSQKTTTKTTTPNAQATRSTPVSRTTKHFHETTPNKGSGTTSGTTRLLSGHTCFTLTGLLGTLV
TMGLLT

FIGURE 6841

GCACAGGGGAAGAAGAAGTGATATCAGTGCATTTTAGTAATATTGGCATTCATATAAGATTGGTATCGCTTTATT
AATGTGGAATGTACAGGCAGTAAAACAGGTTATTTAATTAGTTGAAATTATCTAAAATAGATCTTAAGAGTTCAC
TTAGAACACTTTTCTGGACTGCCTTTCAAAGTAGATAACATCAGACACAGTGATAACATAATAACTCATTCAAAA
CTAAATTGTACATCACCTATGATATCAACATTTTGTATTCACTGAAGGAAATTATATTTGAAAGTGTTTGCCTGT
ACATTATTTGACAAAGTTGTGGGGATT

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FIGURE 6842

TGEEEVISVHFSNIGIHIRLVSLY

FIGURE 6843

TTTTTTTTTTTTTTTCATAAAACAGAACAAGATTATATTTCAATATACAACTTCTGTATAACCAAAAAATAAAA
CACCATAGTAAAATGAATGAGAAAAAACATATTTGCAATTCTAGACAAAATGTTAACATGTTTAATCATAAATGA
ACTCTTCAGAAATCAGTACAAAGAGACTAACATTACAAGGGAAGTGAAAATAAAAGGAACAGAGGAAAATGGAAT
AGCACAAATGAGTTATAAGGCTATATGAAGATGATGTAGTTAACATTAATAGCTGATAAAGCAATTTCATTATAA
ATTATATTATCGATCCTTACAAATATTGATTATCTGATGTTTGTACAGCTTTAGGAAATAAAGAATACTCAAATA
CTGTGGAACTTACTAGAGTCATGGGGAGTTTACTC

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FIGURE 6844

GGCATTCATTTCCTCCTACGGTGGATGCGGACGCCGGGAGGAGGAGAGCCCCAGAGAGAGGAGCTGGGAGCGGAG
GCGCAGAGAACACGTAGCGACTCCGAAGATCAGCCCCAATGAACATGTCAGTGTTGACTTTACAAGAATATGAAT
TCGAAAAGCAGTTCAACGAGAATGAAGCCATCCAATGGATGCAGGAAAACTGGAAGAAATCTTTCCTGTTTTCTG
CTCTGTATGCTGCCTTTATATTCGGTGGTCGGCACCTAATGAATAAACGAGCAAAGTTTGAACTGAGGAAGCCAT
TAGTGCTCTGGTCTCTGACCCTTGCAGTCTTCAGTATATTCGGTGCTCTTCGAACTGGTGCTTATATGGTGTACA
TTTTGATGACCAAAGGCCTGAAGCAGTCAGTTTGTGACCAGGGTTTTTACAATGGACCTGTCAGCAAATTCTGGG
CTTATGCATTTGTGCTAAGCAAAGCACCCGAACTAGGAGATACAATATTCATTATTCTGAGGAAGCAGAAGCTGA
TCTTCCTGCACTGGTATCACCACATCACTGTGCTCCTGTACTCTTGGTACTCCTACAAAGACATGGTTGCCGGGG
GAGGTTGGTTCATGACTATGAACTATGGCGTGCACGCCGTGATGTACTCTTACTATGCCTTGCGGGCGGCAGGTT
TCCGAGTCTCCCGGAAGTTTGCCATGTTCATCACCTTGTCCCAGATCACTCAGATGCTGATGGGCTGTGTGGTTA
ACTACCTGGTCTTCTGCTGGATGCAGCATGACCAGTGTCACTCTCACTTTCAGAACATCTTCTGGTCCTCACTCA
TGTACCTCAGCTACCTTGTGCTCTTCTGCCATTTCTTCTTTGAGGCCTACATCGGCAAAATGAGGAAAACAACGA
AAGCTGAATAGTGTTGGAACTGAGGAGGAAGCCATAGCTCAGGGTCATCAAGAAAAATAATAGACAAAAGAAAAT
GGCACAAGGAATCACACGTGGTGCAGCTAAAACAAAACAAAACATGAGCAAACACAAAACCCAAGGCAGCTTAGG
GATAATTAGGTTGATTTAACCCAGTAAGTTTATGATCCTTTTAGGGTGAGGACTCACTGAGTGCACCTCCATCTC
CAAGCACTGCTGCTGGAAGACCCCATTCCCTCTTTATCTATCAACTCTAGGACAAGGGAGAACAAAAGCAAGCCA
GAAGCAGAGGAGACTAATCAAAGGCAAACAAAGGCTATTAACACATAGGAAAAAATGTATTTACTAAGTGTCACA
TTTCTCTAAGATGAAAGATTTTTACTCTAGAAACTGTGCGAGCACAACACACACAATCCTTTCTAACTTTATGGA
CACTAAACTGGAGCCAATAGAAAAGACAAAAATGAAAGAGACACAGGGTGTATATCTAGAACGATAATGCTTTTG
CAGAAACTAAAGCCTTTTTAAGAAATGCCAGCTGCTGTAGACCCCATGAGAAAAGATGTCTTAATCATCCTTATG
AAAACAGATGTAAACAACTATATTTCAACTAACTTCATCTTCACTGCATAGCCTCAGGCTAGTGAGTTTGCCAAA
ACCAAAGGGGGTGAATACTTCCCCAAGATTCTTCCTGGGAGGATGGAAACAGTGCAGCCCAGGTCCCATGGGGGC
AGCTCCATCCCAGAGCATTTCTGATAGTTGAACTGTAATTTCTACTCTTAAGTGAGATATGAAGCATTATCCTTT
TGTTCAGTTGCCCCGGGCTTTTGAACAGAAGAGTAAATACAGAATTGAAAAAGATAAACACTCAACCAAACAATG
TGAAAACGGGTTCTGTAGTATTTGTAAAAAGGCCCGGCCCAGGACCACTGTGAGCTGGAAAAGGGAGAAAGGCAG
TGGGAAAAGAGGTGAGCCGAAGATCAATTCGACAGACAGATGGTGTGTATGCCCCTCCCTGTTTGACTTCACACA
CACTCATAACTTTCCAAATGAAACCCCACAGTATAGCGCATATTTTCGATATTTTTGTGAATTCCAAAAGGAAAT
CACAGGGCTGTTCGAAATATTGGGGGAACACTGTGTTTCTGCATCATCTGCATTTGCTCCCCAAGCAATGTAGAG
GTGTTTAAAGGGCCCTCTGCTGGCTGAGTGGCAATACTACAACAAACTTCAAGGCAAGTTTGGCTGAAAACAGTT
GACAACAAAGGGCCCCCATACACTTATCCCTCAAATTTTAAGTGATATGAAATACTTGTCATGTCTTTGGCCAAA
TCAGAAGATATTCATCCTGCTTCAAGTCAGCTTCAGAAATGTTTTAAAAGGGACTTTAGCTCTGGAACTCAAAAT
CAATTTATTAAGAGCCATATTCTTTAAAAAAAAAAAGCTGGATAATATTCTCTGTAATATTTCAGTCCTTTACAA
GCCAAATACATGTGTCAATGTTTCTAGTATTTCAAAGAAGCAATTATGTAAAGTTGTTCAATGTGACATAATAGT
ATTATAATTGGTTAAGTAGCTTAATGATTAGGCAAACTAGATGAAAAGATTAGGGGCTTCCACACTGCATAGATT
ACACGCACATAGCCACGCATACACACACAGACACACAGATGTGGGGTACACTGAACTTCAAAGCCCAAATGAATA
GAAACACATTTTCTGGCTAGCAGAAAAAAACAAAACAAAACTGTTGTTTCTCTTTCTTGCTTTGAGAGTGTACAG
TAAAAGGGATTTTTTCGAATTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6845

MNMSVLTLQEYEFEKQFNENEAIQWMQENWKKSFLFSALYAAFIFGGRHLMNKRAKFELRKPLVLWSLTLAVFSI
FGALRTGAYMVYILMTKGLKQSVCDQGFYNGPVSKFWAYAFVLSKAPELGDTIFIILRKQKLIFLHWYHHITVLL
YSWYSYKDMVAGGGWFMTMNYGVHAVMYSYYALRAAGFRVSRKFAMFITLSQITQMLMGCVVNYLVFCWMQHDQC
HSHFQNIFWSSLMYLSYLVLFCHFFFEAYIGKMRKTTKAE

FIGURE 6846A

AAAATACTTGCCCTTTGGAAAAAAATCATTCTGGCGTCCACATTCAGACTGGTTTAGAGGAGAGTAATACTGAAG
ACATGCCCCCCCGAATCAAGGTAGCAATTGCGGAGATGAAAAGAAATGAGTCCAAAAGATGCTTAAATGTGACCA
TTGAACAGGATTTGACTCATTGGATATGAGGCCATGGAGCAGTGTCTGGCTAGGTGGATGGATGTTGGTGCTGTT
TAGTTAAATAGGAAACTGGAAGAGAAGCAGGCTTGCAAGAATGGTAATATTTTGGACGTGTAACTTGTCTGGCAA
GATGTTGAAGAGGTAAAGGAGGCAGCACAGCATCATGGGCCTTGGAGGCAGAAGCCGCTTTGATTTACTCAGAAC
ACCAAATCAGTCTCCATTTTCTTGACTCAGACTACACCCAAGAGATTGCTTCCTTCCCTGTGCTTCCTGGCCACT
TGCTACTCTAGCTAGGAAGATCTGCCTCCCTTAGCTGAAGTCTAAGATGTGTAGCTTATTGATGCCTCTCCTCTT
CTTGTTCTGCTGTTGCTGAATATAATGGGGATGCCAGGGCAGACATACCATTCAACTTGAATCTTCCTTACCCAC
TTTGTATAGTCTTACATGTCATTGATACCTTGTTTTCTGGTACGCCTAAAAGGAGTAGAACTTCAAGTGGTATTT
AAAAGCTTTAAGAAAAGTCAAATTTTTACTTTTTTCTTCCCATCTGAGGCATGGATTTATTTTCTTTTTAAAGAA
ATCCAAATTTTTAAAAGAAGGGATCTTATTTTTAAAACGAAGATCGATAATATCTACTATGTACTAAATGTCATT
CTTTAAAAGTTGTTCCCTCATAATTTAGTAAATTACTTCCTTTTTTAAAAAAAGGAAAGAAAGAGTGTTTGTCTT
ACAGGCTAACATCACAAACAATAAGTTTCTTCTCATCCATCTCCATTTATAAACTAGTGTGACTGTCTTCTGAGC
ACAGTATTAAACCTGGACAGGGAGAGGGAGGGTGTTAGAGAATGAGAGGGAAAGAGAGAGAATACCTACATATAA
GGTGACCCTAAAGAAAAGCCTTTCACCCTTCGGAAGATCTTTTCATTTTCATTTTTCTTTTTTCAAACACCAACT
TGTACCAGAGGGAAGATCTTTTTTTAAAAGCGTTTCACTAAAATTTGTAAGGAAATAATGAGCTAGATAAAATAT
TACAGTGTTTATTTAATGAATTTACTCATATTTAAAATAATATCTAAAAAGAGTAATTTAGGAATATTGAGGCAA
TGAGACTTGAAGGTTATAAATAGTGGCAGTGAGAAAAGGAATATTATAGATAAGCTGTTGAAAAGAAAAGATGCT
AAGTTTTCTAGTGCTTCCTTCTGTTTCCAAGGGATTATAGAAATCGGAGTTTGTTTGACCTGTTTCACAGGCATC
TCCTTTGTGGACTCATTGTGTCTCTTCCTTAGGCTAATAGTCACCATTTATCATGGACGGTTGTCATGAGTGTTG
AAGCACACTTAACCTGCTTCGTCAGAGGGTACTTGGCATCACCGGTGCACAGCTGGTGTCCTAGCAGGAGACTAA
CTAGCTGACACACCGTGCTTTGTTAGCCTAATAATCTTATTTGTTAAAACTTGCCATTTGTTGGATTTTTCTATT
TTACCCCATTATAAACTTCTTATTGAGATCAGATGACTTCTGAATAGCATTTGCTGTATTTTTCCAAGGTAAAGA
ATATCTTTTTCAGATTTTTCTTTCTTTCTTTA**ATG**TCAGAAATAGAAGAAATCTTTTCTACCGACCTTGTGCCAG
GAGATGTCATGGTCATTCCATTAAATGGGACAATAATGCCTTGTGATGCTGTGCTTATTAATGGTACCTGCATTG
TAAACGAAAGCATGTTAACAGGAGAAAGTGTTCCAGTGACAAAGACTAATTTGCCAAATCCTTCAGTGGATGTGA
AAGGAATAGGAGATCAATTATATAATCCGGAAACACATAAACGACATACTTTGTTTTGTGGGACAACTGTTATTC
AGACTCGTTTCTACACTGGAGAACTCGTCAAAGCCATAGTTGTTAGAACAGGATTTAGTACTTCCAAAGGACAGC
TTGTTCGTTCCATATTGTATCCCAAACCAACTGATTTTAAACTCTACAGAGATGCCTACTTGTTTCTACTATGTC
TTGTGGCAGTTGCTGGCATTGGGTTTATCTACACTATTATTAATAGCATTTTAAATGAGGTACAAGTTGGGGTCA
TAATTATCGAGTCTCTTGATATTATCACAATTACTGTGCCCCCTGCACTTCCTGCTGCAATGACTGCTGGTATTG
TGTATGCTCAGAGAAGACTGAAAAAAATCGGTATTTTCTGTATCAGTCCTCAAAGAATAAATATTTGTGGACAGC
TCAATCTTGTTTGCTTTGACAAGACTGGAACTCTAACTGAAGATGGTTTAGATCTTTGGGGGATTCAACGAGTGG
AAAATGCACGATTTCTTTCACCAGAAGAAAATGTGTGCAATGAGATGTTGGTAAAATCCCAGTTTGTTGCTTGTA
TGGCTACTTGTCATTCACTTACAAAAATTGAAGGAGTGCTCTCTGGTGATCCACTTGATCTGAAAATGTTTGAGG
CTATTGGATGGATTCTGGAAGAAGCAACTGAAGAAGAAACAGCACTTCATAATCGAATTATGCCCACAGTGGTTC
GTCCTCCCAAACAACTGCTTCCTGAATCTACCCCTGCAGGAAACCAAGAAATGGAGCTGTTTGAACTTCCAGCTA
CTTATGAGATAGGAATTGTTCGCCAGTTCCCATTTTCTTCTGCTTTGCAACGTATGAGTGTGGTTGCCAGGGTGC
TGGGGGATAGGAAAATGGACGCCTACATGAAAGGAGCGCCCGAGGCCATTGCCGGTCTCTGTAAACCTGAAACAG
TTCCTGTCGATTTTCAAAACGTTTTGGAAGACTTCACTAAACAGGGCTTCCGTGTGATTGCTCTTGCACACAGAA
AATTGGAGTCAAAACTGACATGGCATAAAGTACAGAATATTAGCAGAGATGCAATTGAGAACAACATGGATTTTA
TGGGATTAATTATAATGCAGAACAAATTAAAGCAAGAACCCCCTGCAGTACTTGAAGATTTGCATAAAGCCAACA
TTCGCACCGTCATGGTCACAGGTGACAGTATGTTGACTGCTGTCTCTGTGGCCAGAGATTGTGGAATGATTCTAC
CTCAGGATAAAGTGATTATTGCTGAAGCATTACCTCCAAAGGATGGGAAAGTTGCCAAAATAAATTGGCATTATG
CAGACTCCCTCACGCAGTGCAGTCATCCATCAGCAATTGACCCAGAGGCTATTCCGGTTAAATTGGTCCATGATA
GCTTAGAGGATCTTCAAATGACTCGTTATCATTTTGCAATGAATGGAAAATCATTCTCAGTGATACTGGAGCATT
TTCAAGACCTTGTTCCTAAGTTGATGTTGCATGGCACCGTGTTTGCCCGTATGGCACCTGATCAGAAGACACAGT
TGATAGAAGCATTGCAAAATGTTGATTATTTTGTTGGGATGTGTGGTGATGGCGCAAATGATTGTGGTGCTTTGA

FIGURE 6846B

AGAGGGCACACGGAGGCATTTCCTTATCGGAGCTCGAAGCTTCAGTGGCATCTCCCTTTACCTCTAAGACTCCTA
GTATTTCCTGTGTGCCAAACCTTATCAGGGAAGGCCGTGCTGCTTTAATAACTTCCTCCTGTGAATTAGCACTAT
TTTCTATAGTTACTTATTCTCTGGATCATTTTATAATTTCCATATTAATTTCAAGTATGCTCGTGTTATTCTTCA
GTGATTTCCACAATTGTGCATTTTATTCTTTGGTTTAAGTACTGAAGCATATAATGAAAGTAATTGCTAAGTAGC
AGCTTAAAAATTCAATTATCCGATTGTATTTAACATCTTTAAGAGCATGATCATAAAGAGCTATTTTTGACACCC
CCCCCCCACTTTTTTAACATTTAGAGTTAGTAAGGGTTTTATATCTCTTCTGTCCATATTGTTTTCAAAGGAATG
AGGTGTTTAGGTGGCTGGAAAAGCATTTGTAGGAAGTTAGATTTGAATATAGACAAGGTGGGTTATTCACGTTGA
GAATGTTATTTGAAGAATGCCTGTGAAGCCAGGTGTGGGTTCTACTCAGTGCCATAGATAGACTGAGTCTTCTCT
CGTAGGTTACCATTACATAGTAATTTTGATTCTGAATTTCACATTAAATTATTTGAGTTTATACAGACCTAAATT
TTAAAATCTGTACATATATTATTTTGATGTATTAAGATGAATATTGCTGATTTAAATTTTATTTATGCACATACT
TAAAGGACAGAAATGTCTGGGAAAGTAATTGTTAAATAATGATATGTAACTTTTTAACTTTTTAAATAAATAACA
AGATTTTTAATGTGTGTCTCCCTCAGGGTTGTTTAAAGTTTTTTTTCTCCCTCAAGTATAAATAGTGGTAACTAT
ATGTTTTGTATCTTCTAGCACCAACTGCTGTAAAGCAATGCTGCAAATAATGCTTGAATACAAGTGGCTAAGCCA
ACAACAGAATAAATACTTTTATAGTAGTTTTATAATCCTGAAATTCGAAAGCTTTCCCAATTGCACTTGCATCTA
AACAAAACTGTTGCAGTTTTTACTCTATTTATTTTGTTCCCCATGTTTATGAAAGTCCTGCACAGTTTCAAAGGC
ATGGTAAATAATATATCAATGTTTATGTAGTCTGTTACAGAAACAGCTATAGATAACATTATCCAGTGAAGAGCA
AAATTCAAGCTTTAGAAAATATTCATGCATGCAATTTTGACATATCTAAAAATAGGTTTTTGTATATTTATGGTG
GGAGGTGGTTGGGAACTTTTAACAAAATGGGGTGTTAATTTTTGTACAGTCTGTGGGCATTTACACATTTTTAAT
GTATTAAAATTTGGTAATTATGTGTACATTAAATTAATAAAAGTTACTTCTAGTTATGATTTGTGAATTCCCTAA
GACCTTGGATTTTTTTAAGTAACTTTATATCAGAAATGATACTGCATCTTTATATTTTTAAAATTGTATTGCTGC
TCAAGAATGGTACCCTCTTGTCAAAAAGGCATACATTCATAATTGTACATTCAGCATTGTAAATAATCTTATGAA
ACCTTTTTTGATTGAAGCTATTCAAAATAAAAATTTTAATGAATGAAATAA

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FIGURE 6847

MSEIEEIFSTDLVPGDVMVIPLNGTIMPCDAVLINGTCIVNESMLTGESVPVTKTNLPNPSVDVKGIGDQLYNPE
THKRHTLFCGTTVIQTRFYTGELVKAIVVRTGFSTSKGQLVRSILYPKPTDFKLYRDAYLFLLCLVAVAGIGFIY
TIINSILNEVQVGVIIIESLDIITITVPPALPAAMTAGIVYAQRRLKKIGIFCISPQRINICGQLNLVCFDKTGT
LTEDGLDLWGIQRVENARFLSPEENVCNEMLVKSQFVACMATCHSLTKIEGVLSGDPLDLKMFEAIGWILEEATE
EETALHNRIMPTVVRPPKQLLPESTPAGNQEMELFELPATYEIGIVRQFPFSSALQRMSVVARVLGDRKMDAYMK
GAPEAIAGLCKPETVPVDFQNVLEDFTKQGFRVIALAHRKLESKLTWHKVQNISRDAIENNMDFMGLIIMQNKLK
QEPPAVLEDLHKANIRTVMVTGDSMLTAVSVARDCGMILPQDKVIIAEALPPKDGKVAKINWHYADSLTQCSHPS
AIDPEAIPVKLVHDSLEDLQMTRYHFAMNGKSFSVILEHFQDLVPKLMLHGTVFARMAPDQKTQLIEALQNVDYF
VGMCGDGANDCGALKRAHGGISLSELEASVASPFTSKTPSISCVPNLIREGRAALITSSCELALFSIVTYSLDHF
IISILISSMLVLFFSDFHNCAFYSLV

FIGURE 6848

GGTCGTCTCGGGTGAGGAGGTCGCGCCGGAAGTGGCTCTAGCCGTGGCGCTTCGGCGTAGTAAGGAGCCTGCAAC
AGAGTTTTGTTGTTTAGGGGGCGCGGCACCGCACCGCTCCCTTCACCTTGCAGCAGCCATGGCGAAAGGCAGAGT
CGCCGAACGATCGCAGTTGGGCGCTCACCACACGACCCCCGTGGGGGACGGGGCAGCGGGGACGCGGGGTCTCGC
GGCGCCTGGCAGCAGAGACCACCAGAAGGAAAAATCCTGGGTAGAAGCTGGATCAGCAAGAATGTCACTCCTTAT
ATTGGTGTCCATTTTCTTATCTGCAGCTTTTGTTATGTTTTTGGTATATAAAAATTTTCCTCAGCTTAGTGAAGA
AGAAAGAGTGAATATGAAGGTTCCCAGAGATATGGATGATGCCAAGGCTCTAGGAAAAGTTTTATCCAAATACAA
GGACACCTTTTATGTTCAAGTACTTGTAGCTTATTTTGCTACATATATTTTCTTGCAAACATTTGCTATTCCAGG
CTCTATATTTCTCAGTATACTCTCAGGGTTTCTTTATCCCTTTCCACTAGCCTTATTTCTTGTTTGTTTGTGTTC
TGGACTTGGTGCCTCTTTCTGTTATATGCTTTCCTATTTAGTTGGGAGACCAGTTGTATACAAATACCTAACAGA
GAAAGCAGTAAAATGGTCACAGCAGGTTGAACGTCATAGAGAACATCTCATTAACTACATTATATTTTTGAGAAT
AACACCATTTCTGCCTAATTGGTTTATTAATATCACATCTCCTGTGATAAACGTGCCATTGAAAGTTTTTTTTAT
TGGTACTTTTCTAGGTGTTGCACCTCCTTCTTTTGTAGCCATTAAGGCAGGAACAACACTGTATCAACTTACAAC
AGCAGGAGAAGCTGTTTCCTGGAACTCAATATTTATTCTGATGATCTTGGCTGTTCTTTCTATTCTGCCAGCCAT
CTTCCAAAAAAAACTAAAGCAGAAATTTGAGTAAAATAATCATCTGATTTTTAGTTTTGCTGTCATCACCATCT
CAGGATTAACAGATGCATCCATTTATGTTTTAAAATCACCTCTTCAGTAATTAAACAAGGAATTTGTAAAATAAA
ATTTCCTATCAGATAGTTAAAGTAATACATTTAAGTGACAAGGGGAGAAGAAAGTAAAAATGGAAATTGGTATAC
TGTGAAAAGTGCTATCAATAGTTAAGGTAGACATCTTAGACATCTTATAAATTATTATACCAAGGGTAGCTGTAG
ATAATAGTAGTGTGGTAGGAAATTGTTGATCCAGCTAATTCATTCAATTTAATTGAATATTTTTTATCTTTAATA
ACTAAAATAGATATTTTTAAATTCTAGATTTTTTAAAGTAGTGTTGCAGGTTTTGTTAATGTTAGGCTTTTTTCA
GAGCATAAACTGGAAAACTTAAAAAGAGATTTACATTTTCTTCCTCTTTTTTTTTTTTTTTTTCTGTTTTGAG
ACGGAGTCTAGCTCTGCCGCCCAGGCTGGAGTGCAGTGGCGCGATCTCCGCTCATTGCAAGCTCCACCTCCTGGG
TTCACGCCATTCTCCTGTCTCAGCCTCCTGAGTAGCTGGGACTACAGGCGCCCGCCACCATGCCCAGCTAATTTT
TTTGTATTTTTAGTAGAGACGGGGTTTCACCGTGTTAGCCAGGATGGTCTCGATCTCCTGACCTCGTGATCTGCC
CGCCTTGGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACCGCGCCTGGCCCATTTTCTTCCTCTTTTGAGG
TAATGGATTTGTTTGGAGATGGCATGTTAGTAGACGACTGAATATGGAAAGGATATCGAGTTATCTATTTTGTTA
ATTTTATTTTTGTTTTTTATCATCTAGATTTTTATCATGGATTAGTCTGAAATTTAAAGTTCTGGCCAGTCGGTT
TTCTTTCATCTTGTAGTTTTTACAGTATTTCCACTGTGCATATGCAAAATGGGTATTACATAACTGTATCATATT
TGGTATTGATAATTTTTTTTTTTTTTGAGACGGAGTCTTGCTGTTGCCCAGGCTGGAGTGGAGTGCGTGGTGTGA
TCTCGGCTCACTGCAAACTCCGCCTCCTGGGTTCAAGCGATTCTCCTGGCCCAGCCTCCTGAGTAGCTGGGATTA
CAGGTGTGTGCCACCATGCCCAGCTAATTTTTGTGTTTTTAGTAGAGACGGGGTTTCACCATGTTGGCCGGGCTG
GTCTTGAACTCCTGACCTCAGGCTATATGCCCACTTCCACCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACT
GTGCCCAGCCTGGTATTGATAATTTATATTCAGATAATTTGTTATGGCTCTTTAATATCCCACAAGGGGCTCTAA
AAAGCAAACATTCAAGAGTATGTAGTTTTTAGACATTAAGTTAATTATTTTAAACAGTGACAGCAAAACACAAGT
GATTAAATATAGTTTATTTGTTCCAATGACTAAATTTTACCTCATTTATTAATCTGGTCATTAAGGAATATATTT
AATAATATTATGTAATTATTCTTTTTATGCATGATACACCTAGAAAAATGCCTTTTGTTTCTATTGATGGCTTTG
TTGTTTGGAGCTACTTTTGATTACTTATTGCAGTTTCCCAATTTAGTCTTTACTTTATCTAACTCACAAAGTAAA
ATTAACTGATCACATGGCAACTACTGTATTTAAATAGTTCTGGAAAAATGAAAGTGCTTTTTGCTGCTTGGTAAA
TGGGTAATGCCCTTGATTCCTTGACTGTAGGACATAGCTGATCTAAAGTACTCTGTCAGTTTTACCTTCACCCAT
GACTGTCATTAGTTGTCAAAGTTGAAAAGTACTTTAGCTGTGAGAAATCCTTGTATGTTTTTATTATAAGAGGTA
TAATCATCCTCAAAGCCTGTTTTTATTACATGATGTGGACTGATTATTTTTTCTATCACAGTGTTAACAGATGGA
TTTTATTGTAAATACAAAGAAAACATATTGATTATTGTAGTATTCTTATGTCACCTGGCCTTTTGCGTGAGGATT
ATTTATTATTTCTAGCAAGGCTTTCTTCCTTTCTTATTGCCCAGAGACTGACTGATACATCTTTTGTTATTTTTA
CACATAAATTAAACATAGCCTTTTTGGACAAATTCACTAAATATTAATGTATAAAATGTAATTGAGTAAATTTTT
ATCAGAATTTTAAAAATAAAAGAGCTTAGACTCAGTAGGAACTC

FIGURE 6849

VVSGEEVAPEVALAVALRRSKEPATEFCCLGGAAPHRSLHLAAAMAKGRVAERSQLGAHHTTPVGDGAAGTRGLA
APGSRDHQKEKSWVEAGSARMSLLILVSIFLSAAFVMFLVYKNFPQLSEEERVNMKVPRDMDDAKALGKVLSKYK
DTFYVQVLVAYFATYIFLQTFAIPGSIFLSILSGFLYPFPLALFLVCLCSGLGASFCYMLSYLVGRPVVYKYLTE
KAVKWSQQVERHREHLINYIIFLRITPFLPNWFINITSPVINVPLKVFFIGTFLGVAPPSFVAIKAGTTLYQLTT
AGEAVSWNSIFILMILAVLSILPAIFQKKLKQKFE

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FIGURE 6850

CTTCAGTCTCAGTTCTGAAAATAGATCATCATGGTGGCACCAAAGAGTCACACAGATGACTGGGCTCCTGGGCCT
TTCTCCAGTAAGCCACAGAGGAGTCAGCTGCAAATATTCTCTTCTGTTCTACAGACCTCTCTCCTCTTCCTGCTC
ATGGGACTAAGAGCCTCTGGAAAGGACTCAGCCCCAACAGTGGTGTCAGGGATCCTAGGGGGTTCCGTGACTCTC
CCCCTAAACATCTCAGTAGACACAGAGATTGAGAACGTCATCTGGATTGGTCCCAAAAATGCTCTTGCTTTCGCA
CGTCCCAAAGAAAATGTAACCATTATGGTCAAAAGCTACCTGGGCCGACTAGACATCACCAAGTGGAGTTACTCC
CTGTGCATCAGCAATCTGACTCTGAATGATGCAGGATCCTACAAAGCCCAGATAAACCAAAGGAATTTTGAAGTC
ACCACTGAGGAGGAATTCACCCTGTTCGTCTATGAGCAGCTGCAGGAGCCCCAAGTCACCATGAAGTCTGTGAAG
GTGTCTGAGAACTTCTGTAACATCACTCTAATGTGCTCCGTGAAGGGGGCAGAGAAAAGTGTTCTGTACAGCTGG
ACCCCAAGGGAACCCCATGCTTCTGAGTCCAATGGAGGCTCCATTCTTACCGTCTCCCGAACACCATGTGACCCA
GACCTGCCATACATCTGCACAGCCCAGAACCCCGTCAGCCAGAGAAGCTCCCTCCCTGTCCATGTTGGGCAGTTC
TGTACAGATCCAGGAGCCTCCAGAGGAGGAACAACGGGGGAGACTGTGGTAGGGGTCCTGGGAGAGCCAGTCACC
CTGCCACTTGCACTCCCAGCCTGCCGGGACACAGAGAAGGTTGTCTGGTTGTTTAACACATCCATCATTAGCAAA
GAGAGGGAAGAAGCAGCAACGGCAGATCCACTCATTAAATCCAGGGATCCTTACAAGAACAGGGTGTGGGTCTCC
AGCCAGGACTGCTCCCTGAAGATCAGCCAGCTGAAGATAGAGGACGCCGGCCCCTACCATGCCTACGTGTGCTCA
GAGGCCTCCAGCGTCACCAGCATGACACATGTCACCCTGCTCATCTACCGCAGGCTGAGGAAGCCCAAAATCACG
TGGAGCCTCAGGCACAGTGAGGATGGCATCTGCAGGATCAGCCTGACCTGCTCCGTGGAGGACGGGGGAAACACT
GTCATGTACACATGGACCCCGCTGCAGAAGGAAGCTGTTGTGTCCCAAGGGGAATCACACCTCAATGTCTCATGG
AGAAGCAGTGAAAATCACCCCAACCTCACATGCACAGCCAGCAACCCTGTCAGCAGGAGTTCCCACCAGTTTCTT
TCTGAGAACATCTGTTCAGGACCTGAGAGAAACACAAAGCTTTGGATTGGGTTGTTCCTGATGGTTTGCCTTCTG
TGCGTTGGGATCTTCAGCTGGTGCATTTGGAAGCGAAAAGGACGGTGTTCAGTCCCAGCCTTCTGTTCCAGCCAA
GCTCAGGCCCCAGCGGATACACCAGAACCCACAGCTGGCCACACGCTATACTCTGTGCTCTCCCAAGGATATGAG
AAGCTGGACACTCCCCTCAGGCCTGCCAGGCAACAGCCTACACCCACCTCAGACAGCAGCTCTGACAGCAACCTC
ACAACTGAGGAGGATGAGGACAGGCCTGAGGTGCACAAGCCCATCAGTGGAAGATATGAGGTGTTTGACCAGGTC
ACTCAGGAGGGCGCTGGACATGACCCAGCCCCTGAGGGCCAAGCAGACTATGATCCCGTCACTCCATATGTCACG
GAAGTTGAGTCTGTGGTTGGAGAGAACACCGTGTATGCACAAGTGTTCAACTTACAGGGAAAGACCCCAGTTTCT
CAGAAGGAAGAGAGCTCAGCCACAATCTACTGCTCCATACGGAAACCTCAGGTGGTGCCACCACCACAACAGAAT
GATCTTGAGATTCCTGAAAGTCCTACCTATGAAAATTTCACCTGAAAGGAAAAGCAGCTGCTGCCTCTCTCCTGG
GACCGTGGGGTTGGAAAGTCAGCTGGACCTCATGGGGCCTGGGGCTCGCTGACAGAAGCACCTCAGAATTTCCTT
CAGTGCCTCAGAGATGCCTGGATGTGGCCCCTCCCCCTCCTTCTCACCCTTAAGGACTCCCAAACCCATTAATAG
TTCAGACACAGGCTCCTTCTTGGAGCCTATGGGCTTCAGATGTCTTTGCCCCATTTGTCACCTCGCACACTTATA
GCGTTTCCTCCTCGAAATTCTACCAAGACTGGTCAAATGTTGCTGAGGGGCCTGGACCAGCTGTCCTTTACACCA
CCTTCTCAACACTGCTGAAAAGAACCCCAAGAGAATTGTCACACATGACACAAGATGTACATAATATCATGCTCA
CGCCTGGAGTGTTATTTAAAATAAAAGGCAGGAAATAAAAAAAAAAAA

FIGURE 6851

MVAPKSHTDDWAPGPFSSKPQRSQLQIFSSVLQTSLLFLLMGLRASGKDSAPTVVSGILGGSVTLPLNISVDTEI
ENVIWIGPKNALAFARPKENVTIMVKSYLGRLDITKWSYSLCISNLTLNDAGSYKAQINQRNFEVTTEEEFTLFV
YEQLQEPQVTMKSVKVSENFCNITLMCSVKGAEKSVLYSWTPREPHASESNGGSILTVSRTPCDPDLPYICTAQN
PVSQRSSLPVHVGQFCTDPGASRGGTTGETVVGVLGEPVTLPLALPACRDTEKVVWLFNTSIISKEREEAATADP
LIKSRDPYKNRVWVSSQDCSLKISQLKIEDAGPYHAYVCSEASSVTSMTHVTLLIYRRLRKPKITWSLRHSEDGI
CRISLTCSVEDGGNTVMYTWTPLQKEAVVSQGESHLNVSWRSSENHPNLTCTASNPVSRSSHQFLSENICSGPER
NTKLWIGLFLMVCLLCVGIFSWCIWKRKGRCSVPAFCSSQAEAPADTPEPTAGHTLYSVLSQGYEKLDTPLRPAR
QQPTPTSDSSSDSNLTTEEDEDRPEVHKPISGRYEVFDQVTQEGAGHDPAPEGQADYDPVTPYVTEVESVVGENT
VYAQVFNLQGKTPVSQKEESSATIYCSIRKPQVVPPPQQNDLEIPESPTYENFT

FIGURE 6852

GCCCAGACCTATGGATTGAAAGCGTGTGCTTTACCCATCTGCTGTCTTGCTCCATCTGAGACCAGAGCCAAGATC
TGCCCAGGACTGGAATGCTTTCCCGAGTGGCTTGAGTTGGAGCCTGGGACTAGGAGCAGCCTTATTGAGGTACAA
TTCATGTGCTTGTGGGTTTGGATGGCACAATCTGTGTCTGGGCTAAGGAAAGCAGACTTGGCACCAACATTAACC
CTGACAGATCCAGGCATCTATTCCAGGAACTGGAAGCCAAGCGCAACAGGTGCTTGGAGGTCATCATGATCAGCC
CAGACCCCAGGCCCTCCCCTGGCTTGGCCCGGTGGGCTGAGAGCTATGAGGCCAAGTGTGAGCGCAGGCAAGAGA
TCCGTGAAAGCCGCCGCTGCCGTCCCAATGTGACCACTTGCCGCCAGGTGGGGAAGACGCTGAGGATCCAACAGA
GAGAGCAGCTCCAGAGAGCTCGACTGCAGCAGTTCTTCAGGAGGAGGAACCTGGAGCTAGAGGAGAAGGGCAAAG
CGCAGCATCCCCAGGCCAGGGAGCAAGGGCCCTCCAGGCGGCCAGGACAGGTGACAGGCACCAGCTCTGAAGTCT
TTCCAGCCCAGCATCCTCCTCCCTCAGGCATCTGCAGGGATCTGTCTGACCACCTCTCCTCACAGGCTGGGGGCC
TTCCTCCACAGGACACTCCCATCAAGAAGCCACCCAAACACCACCGTGGTACTCAGACAAAGGCAGAAGGACCAA
CAATTAAGAACGATGCCAGTCAGCAAACCAATTACGGAGTTGCAGTTCTGGATAAGGAAATCATCCAGCTTTCTG
ATTACCTCAAAGAGGCCCTACAAAGGGAGCTGGTCCTAAAACAGAAAATGGTGATTCTCCAAGACCTACTGTCCA
CTCTGATTCAGGCCTCTGACAGCTCTTGGAAGGGACAGCTTAATGAAGACAAACTGAAGGGGAAACTGAGATCCT
TAGAAAACCAGCTATACACCTGTACCCAGAAATACTCCCCTTGGGGAATGAAAAAAGTACTACTGGAGATGGAAG
ACCAGAAAAACAGCTATGAGCAGAAGGCCAAGGAGTCACTGCAGAAAGTGCTGGAGGAGAAAATGAATGCAGAGC
AGCAACTACAGAGCACACAGCGATCCCTGGCCCTGGCAGAGCAGAAGTGTGAAGAGTGGAGGAGCCAGTATGAGG
CTCTGAAGGAGGACTGGAGGACCCTTGGGACCCAGCACAGGGAGCTGGAGAGCCAACTCCACGTGCTTCAGTCCA
AACTGCAGGGAGCAGATAGCAGGGACTTACAGATGAACCAGGCCCTGCGATTTTTGGAAAATGAGCACCAGCAAC
TGCAGGCCAAGATTGAATGCCTGCAAGGGGACAGAGACCTGTGCAGCTTGGATACCCAGGACCTACAAGATCAAC
TAAAAAGGTCAGAGGCAGAGAAACTCACCCTGGTGACCAGAGTACAGCAGTTGCAGGGTTTGCTTCAAAATCAAT
CCTTACAGCTTCAAGAACAGGAGAAACTCTTAACAAAGAAAGATCAGGCTTTGCCCGTGTGGAGTCCAAAGTCCT
TCCCTAACGAAGTGGAGCCTGAGGGTACAGGGAAGGAGAAAGACTGGGATCTCAGAGACCAGCTGCAAAAGAAGA
CTTTGCAGCTCCAGGCCAAGGAAAAGGAGTGCAGAGAACTGCATTCAGAATTAGACAACCTCAGTGACGAGTATC
TCTCCTGCCTGCGTAAGCTGCAGCACTGTCGAGAAGAGCTGAACCAGAGCCAGCAGCTGCCTCCCAGAAGGCAAT
GTGGGCGATGGCTCCCAGTGCTGATGGTGGTGATTGCTGCAGCACTGGCAGTGTTCCTGGCCAATAAAGACAACC
TGATGATCTGAATAATTTGTGACAACTGCCTTGGGTGAAAATCAGAAGCAAGCAACTCAGCGAAAAACTCAGAAG
GTTTGGGTACATTACAGCTTGGGTTTTCCAACTGACTTAGGATTTCTGACTTTTTATTAATTTCTTAACCTACTG
TAAATAAACTTCACCTGACCAGATTGTTCCTCA

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FIGURE 6853

MISPDPRPSPGLARWAESYEAKCERRQEIRESRRCRPNVTTCRQVGKTLRIQQREQLQRARLQQFFRRRNLELEE
KGKAQHPQAREQGPSRRPGQVTGTSSEVFPAQHPPPSGICRDLSDHLSSQAGGLPPQDTPIKKPPKHHRGTQTKA
EGPTIKNDASQQTNYGVAVLDKEIIQLSDYLKEALQRELVLKQKMVILQDLLSTLIQASDSSWKGQLNEDKLKGK
LRSLENQLYTCTQKYSPWGMKKVLLEMEDQKNSYEQKAKESLQKVLEEKMNAEQQLQSTQRSLALAEQKCEEWRS
QYEALKEDWRTLGTQHRELESQLHVLQSKLQGADSRDLQMNQALRFLENEHQQLQAKIECLQGDRDLCSLDTQDL
QDQLKRSEAEKLTLVTRVQQLQGLLQNQSLQLQEQEKLLTKKDQALPVWSPKSFPNEVEPEGTGKEKDWDLRDQL
QKKTLQLQAKEKECRELHSELDNLSDEYLSCLRKLQHCREELNQSQQLPPRRQCGRWLPVLMVVIAAALAVFLAN
KDNLMI

FIGURE 6854

CTGGGGTTGTGGTTGAGGCCGGGTCTCCGCTCCTGTGCCCGGGAAGATGGTGCTAGGTGGTTGCCCGGTTAGTTA
CTTACTTCTGTGCGGCCAGGCGGCTTTGCTGCTGGGGAATTTACTTCTGCTGCATTGTGTGTCTCGGAGCCACTC
GCAAAATGCGACCGCTGAGCCTGAGCTCACATCCGCTGGCGCCGCCCAGCCGGAGGGCCCCGGGGGTGCTGCGAG
CTGGGAATATGGCGACCCCCACTCTCCGGTCATCCTCTGCTCTTACCTAATCACGCCATTTTTTAACATCTCTTT
TTGATCAAACAAGAAAAGGCATTTGGGAAATGCAAAGAGGACTGAGAATACTTTGGCTTAAATTTTGCCCCCAGA
ATCTTGTTGTTTGCCTACTGAAGAGATGAAACCATGGCAGAAGTAGAATCCTTATAGAAACAGGACCAGAAACAC
CTCCCTTCTCCAACAAAAGGTTCATTTTGGTGGCTGTCCGTTTGACCTGCTGTGCTTCAGTTTAATTGGCTTGGA
AAGGGGTCAGCAGGGTGAAACCGAACCCCAGAAAACTTGATGAAGAAATGTCTTTTGCCCGTTTTGATTACGTGC
ATGCAAACAGCGATTTGCAAAGACCGTATGATGATGATCATGATCTTACTGGTGAATTACAGACCTGATGAATTT
ATAGAATGTGAAGACCCAGTGGATCATGTTGGAAATGCAACTGCATCCCAGGAACTTGGTTATGGTTGTCTCAAG
TTCGGCGGTCAGGCCTACAGCGACGTGGAACACACTTCAGTCCAGTGCCATGCCTTAGATGGAATTGAGTGTGCC
AGTCCTAGGACCTTTCTACGAGAAAATAAACCTTGTATAAAGTATACCGGACACTACTTCATAACCACTTTACTC
TACTCCTTCTTCCTGGGATGTTTTGGTGTGGATCGATTCTGTTTGGGACACACTGGCACTGCAGTAGGGAAGCTG
TTGACGCTTGGAGGACTTGGGATTTGGTGGTTTGTTGACCTTATTTTGCTAATTACTGGAGGGCTGATGCCAAGT
GATGGCAGCAACTGGTGCACTGTTTACTAAAAAGAGCTGCCATCATGGCCCAGGGAGGCGGGTGAAAGCTCCGTC
TTCTGAATTCATCTCTACAGGCTCAAAACTCCTCTTTGATATCAGACCTGATGTTATTTTCCTTCTTTTGGAGGG
CATTTGTTTGGTTAAGAAGGCTTCTTTGGACTTTGGAATTTCAACCCAGATTTTACCTTGCAGACGGAATGACAA
GCAAAAAGTGTTGTGGGGAATCAAATTTGTTCCTTTCCTCATGCACAAAACATAAAGGATAGTGGCGAGTTTACA
AGCTGTGGATGGGTTTCCATAGTCTTCCTTTCTGTACATTGCTATATCTTCAGTCCTTTGGAGCAAGTGGACCTA
ACAAGTTGAGCAAAATGAATATTTGGATCCATGTTCCTCTTGTGACCCTGAGTCTTCATGCAAGGAGATCTGAAG
CTGAACAATGAAAATCTTCAGCAGAAATAGAAATGGCCGTGGATTGTAATACACACTGAAATTCTGACTTTCTGA
ATTTAAATGTAGAATAAATTTTACCAACTTGGAAAAAAAAAAAAAAAAAAAA

FIGURE 6855

MVLGGCPVSYLLLCGQAALLLGNLLLLHCVSRSHSQNATAEPELTSAGAAQPEGPGGAASWEYGDPHSPVILCSY
LPDEFIECEDPVDHVGNATASQELGYGCLKFGGQAYSDVEHTSVQCHALDGIECASPRTFLRENKPCIKYTGHYF
ITTLLYSFFLGCFGVDRFCLGHTGTAVGKLLTLGGLGIWWFVDLILLITGGLMPSDGSNWCTVY

FIGURE 6856

GGCACGAGGCCTGGGCGGGCCCTGCGTCAGGTTGCAGTTTCACTTTTAGCTCTGGGCACCTCCAGCTCCTGCTCG
CCGGACGGCTCCCAGGGAGAGCAGACGCGCCAGACGCGCCACCCTCGGGGCGCCGACGGTCACGGAGC**ATG**GGGT
CGGCCTTTGAGCGGGTAGTCCGGAGAGTGGTCCAGGAGCTGGACCATGGTGGGGAGTTCATCCCTGTGACCAGCC
TGCAGAGCTCCACTGGCTTCCAGCCCTACTGCCTGGTGGTTAGGAAGCCCTCAAGCTCATGGTTCTGGAAACCCC
GTTATAAGTGTGTCAACCTGTCTATCAAGGACATCCTGGAGCCGGATGCCGCGGAACCAGACGTGCAGCGTGGCA
GGAGCTTCCACTTCTACGATGCCATGGATGGGCAGATACAGGGCAGCGTGGAGCTGGCAGCCCCAGGACAGGCAA
AGATCGCAGGCGGGGCCGCGGTGTCTGACAGCTCCAGCACCTCAATGAATGTGTACTCGCTGAGTGTGGACCCTA
ACACCTGGCAGACTCTGCTCCATGAGAGGCACCTGCGGCAGCCAGAACACAAAGTCCTGCAGCAGCTGCGCAGCC
GCGGGGACAACGTGTACGTGGTGACTGAGGTGCTACAGACACAGAAGGAGGTGGAAGTCACGCGCACCCACAAGC
GGGAGGGCTCGGGCCGGTTTTCCCTGCCCGGAGCCACGTGCTTGCAGGGTGAGGGCCAGGGCCATCTGAGCCAGA
AGAAGACGGTCACCATCCCCTCAGGCAGCACCCTCGCATTCCGGGTGGCCCAGCTGGTTATTGACTCTGACTTGG
ACGTCCTTCTCTTCCCGGATAAGAAGCAGAGGACCTTCCAGCCACCCGCGACAGGCCACAAGCGTTCCACGAGCG
AAGGCGCCTGGCCACAGCTGCCCTCTGGCCTCTCCATGATGAGGTGCCTCCACAACTTCCTGACAGATGGGGTCC
CTGCGGAGGGGGCGTTCACTGAAGACTTCCAGGGCCTACGGGCAGAGGTGGAGACCATCTCCAAGGAACTGGAGC
TTTTGGACAGAGAGCTGTGCCAGCTGCTGCTGGAGGGCCTGGAGGGGGTGCTGCGGGACCAGCTGGCCCTGCGAG
CCTTGGAGGAGGCGCTGGAGCAGGGCCAGAGCCTTGGGCCGGTGGAGCCCCTGGACGGTCCAGCAGGTGCTGTCC
TGGAGTGCCTGGTGTTGTCCTCCGGAATGCTGGTGCCGGAACTCGCTATCCCTGTTGTCTACCTGCTGGGGGCAC
TGACCATGCTGAGTGAAACGCAGCACAAGCTGCTGGCGGAGGCGCTGGAGTCGCAGACCCTGTTGGGGCCGCTCG
AGCTGGTGGGCAGCCTCTTGGAGCAGAGTGCCCCGTGGCAGGAGCGCAGCACCATGTCCCTGCCCCCCGGGCTCC
TGGGGAACAGCTGGGGCGAAGGAGCACCGGCCTGGGTCTTGCTGGACGAGTGTGGCCTAGAGCTGGGGGAGGACA
CTCCCCACGTGTGCTGGGAGCCGCAGGCCCAGGGCCGCATGTGTGCACTCTACGCCTCCCTGGCACTGCTATCAG
GACTGAGCCAGGAGCCCCAC**TAG**CCTGTGCCCGGGCATGGCCTGGCAGCTCTCCAGCAGGGCAGAGTGTTTGCCC
ACCAGCTGCTAGCCCTAGGAAGGCCAGGAGCCCAGTAGCCATGTGGCCAGTCTACCATGGGGCCCAGGAGTTGGG
GAAACACAATAAAGGTGGCATACGAAGGAAAAAAAAAAAAAAAAAAAAACCAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6857

MGSAFERVVRRVVQELDHGGEFIPVTSLQSSTGFQPYCLVVRKPSSSWFWKPRYKCVNLSIKDILEPDAAEPDVQ
RGRSFHFYDAMDGQIQGSVELAAPGQAKIAGGAAVSDSSSTSMNVYSLSVDPNTWQTLLHERHLRQPEHKVLQQL
RSRGDNVYVVTEVLQTQKEVEVTRTHKREGSGRFSLPGATCLQGEGQGHLSQKKTVTIPSGSTLAFRVAQLVIDS
DLDVLLFPDKKQRTFQPPATGHKRSTSEGAWPQLPSGLSMMRCLHNFLTDGVPAEGAFTEDFQGLRAEVETISKE
LELLDRELCQLLLEGLEGVLRDQLALRALEEALEQGQSLGPVEPLDGPAGAVLECLVLSSGMLVPELAIPVVYLL
GALTMLSETQHKLLAEALESQTLLGPLELVGSLLEQSAPWQERSTMSLPPGLLGNSWGEGAPAWVLLDECGLELG
EDTPHVCWEPQAQGRMCALYASLALLSGLSQEPH

7626/8433

FIGURE 6858

TCGGGCCACGCCAGATCTCAGGATGATGGGGCGCAGCCCTGGGTTTGCCATGCAGCACATCGTGGGTGTGCCCCA
CGTACTGGTTCGGAGGGGCCTCCTTGGAAGGGACCTCTTC**ATG**ACCAGGACTCTCTGCAGCCCAGGCCCAAGCCA
GCCCGGAGAGAAAAGACCTGAGGAGGTGGCCCTGGGGCTGCACCACCGCCTCCCAGCACTGGGAAGAGCCCTGGG
GCACAGCATTCAGCAACGAGCGACCTCCACAGCCAAGACTTGGTGGGACAGATATGAAGAGTTTGTTGGACTCAA
CGAGGTTCGAGAGGCCCAGGGAAAGGTGACAGAGGCTGAGAAAGTGTTCATGGTGGCTCGAGGGCTTGTCCGAGA
GGCTCGGGAGGACTTGGAAGTTCACCAGGCCAAGCTGAAGGAGGTGAGGGACCGCTTGGACCGTGTCTCCAGGGA
GGACAGTCAGTACTTGGAACTGGCTACTCTCGAGCACAGGATGCTGCAGGAGGAGAAGAGGCTTCGCACAGCCTA
TCTGCGTGCAGAAGACTCTGAGCGAGAGAAGTTCTCCCTCTTCTCTGCAGCTGTGCGGGAAAGTCATGAGAAGGA
GCGCACAAGGGCTGAGAGGACCAAGAACTGGTCCCTCATTGGCTCAGTCCTGGGGGCCCTGATTGGTGTGGCTGG
CTCCACCTATGTGAACCGTGTGCGACTACAGGAGCTGAAGGCTTTACTCCTGGAGGCGCAGAAGGGGCCTGTGAG
TCTCCAAGAGGCCATTCGAGAACAGGCGTCTAGCTACTCCCGCCAGCAGAGGGACCTCCACAATCTCATGGTGGA
CTTGAGGGGCCTGGTACATGCTGCTGGGCCAGGGCAGGACTCTGGGTCACAGGCAGGTAGTCCCCCGACCAGAGA
CAGAGATGTAGATGTCCTTTCAGCTGCCTTGAAAGAGCAGCTTAGTCATTCCAGGCAAGTCCATTCATGTCTAGA
AGGCTTACGAGAGCAGCTTGATGGCCTAGAAAAGACTTGTAGCCAAATGGCTGGGGTGGTTCAGCTTGTAAAGTC
TGCAGCACACCCAGGCCTGGTGGAACCAGCAGACGGGGCTATGCCCAGCTTCTTGCTGGAGCAGGGGAGCATGAT
CTTGGCACTGTCAGACACGGAGCAGAGACTAGAAGCCCAAGTCAACAGGAACACCATCTATAGCACCCTGGTCAC
CTGTGTGACATTTGTGGCCACACTGCCTGTGCTCTACATGCTATTCAAAGCCAGC**TAA**CCCCTGGCCCCTCCTCC
AGAGGGTCTGAGGCAATAGCTGTGAATGTGGATTTAAGTAGAGAATCGTAGCAATGAAGCGAGCCTTTGGGGGCA
TGTACAACCTCAATCTGAAGGAGCAGTATCTGTGTGGCTCACCAGCAGGCATGCTTCGCTTTGTAGACAAGGTTC
ATTTACATTAATTATCAAAACTTTGTGCTAATGTCCAATTAAAATATCCTGAGTTTTATTATTTAAAAAAAAAAA
AAAA

FIGURE 6859

MTRTLCSPGPSQPGEKRPEEVALGLHHRLPALGRALGHSIQQRATSTAKTWWDRYEEFVGLNEVREAQGKVTEAE
KVFMVARGLVREAREDLEVHQAKLKEVRDRLDRVSREDSQYLELATLEHRMLQEEKRLRTAYLRAEDSEREKFSL
FSAAVRESHEKERTRAERTKNWSLIGSVLGALIGVAGSTYVNRVRLQELKALLLEAQKGPVSLQEAIREQASSYS
RQQRDLHNLMVDLRGLVHAAGPGQDSGSQAGSPPTRDRDVDVLSAALKEQLSHSRQVHSCLEGLREQLDGLEKTC
SQMAGVVQLVKSAAHPGLVEPADGAMPSFLLEQGSMILALSDTEQRLEAQVNRNTIYSTLVTCVTFVATLPVLYM
LFKAS

FIGURE 6860

AGCACTTTCATTGGACGAGCCAATCATTTCTTCACTGTAACTGACCCCAGGAACATTCTGTTAACCAACGAACAA
CTCGAGAGTGCGAGAAAAATAGTACATGATTACAGGCAAGGAATTGTTCCTCCTGGTCTTACAGAAAATGAATTG
TGGAGAGCAAAGTACATCTATGATTCAGCTTTTCATCCTGACACTGGTGAGAAGATGATTTTGATAGGAAGAATG
TCAGCCCAGGTTCCCATGAACATGACCATCACAGGTTGTATGATGACGTTTTACAGGACTACGCCGGCTGTGCTG
TTCTGGCAGTGGATTAACCAGTCCTTCAATGCCGTCGTCAATTACACCAACAGAAGTGGAGACGCACCCCTCACT
GTCAATGAGTTGGGAACAGCTTACGTTTCTGCAACAACTGGTGCCGTAGCAACAGCTCTAGGACTCAATGCATTG
ACCAAGCATGTCTCACCACTGATAGGACGTTTTGTTCCCTTTGCTGCCGTAGCTGCTGCTAATTGCATTAATATT
CCATTAATGAGGCAAAGGGAACTCAAAGTTGGCATTCCCGTCACGGATGAGAATGGGAACCGCTTGGGGGAGTCG
GCGAACGCTGCGAAACAAGCCATCACGCAAGTTGTCGTGTCCAGGATTCTCATGGCAGCCCCTGGCATGGCCATC
CCTCCATTCATTATGAACACTTTGGAAAAGAAAGCCTTTTTGAAGAGGTTCCCATGGATGAGTGCACCCATTCAA
GTTGGGTTAGTTGGCTTCTGTTTGGTGTTTGCTACACCCCTGTGTTGTGCCCTGTTTCCTCAGAAAAGTTCCATG
TCTGTGACAAGCTTGGAGGCCGAGTTGCAAGCTAAGATCCAAGAGAGCCATCCTGAATTGCGACGCGTGTACTTC
AATAAGGGATTGTAAAGCAGGGAGGAAACCTCTGCAGCTCATTCTGCCACTGCAAAGCTGGTGTAGCCATGCTGG
TGAGAAAAATCCTGTTCAACCTGGGTTCTCCCAGTTACGGAAACCTTTTAAAGATCCACATTAGCCTTTTAGAAT
AAAGCTGCTACTTTAACAGAGCACCTGGCGTGGGCCAAGTGCCTGATACTCCCTTACACTGAATCATGTTATGAT
TTATAGAAATACCTTTCCTGTAGCTTTTATAGTCATTGTTTTTCAAAGACGATATACCAGCCCTCACCCAGGTTT
TAAAAAAGCACTGGTAGGCATAGAATAGGTGCTCAGTATATGGTCAGTAAATGTTCTATTGATTATCAATCAGTG
AAAAAAGAAATCTGTTTAAAATACTGAATTTTCATCTCACTCCCATTGCAAATCAAGGAGATCTCAGCAGTGAAC
TGGGAAAATACAAAAGCTCTGGGCTAATCTATAAAAACTTACCCTGAAATATTAAGGGCAGTTTGCTTCTAGTTT
GGGGATTGCGCTAGCCCAATGAAGGTGATGAAGCTTTTGGATTTGGAGGGTAAAAGCTCCTTCACACCCCTTCCA
AAAGTCAGTCACAGACCACTGCAACATGCCTTCCCTGCTGGATCATTATATACATTCAGATTGTGAGTGGATTGC
CTTGGTTGACTTTTAATTTATTGTTTTTTGTTCTTATAAAGATGATAATCTTACCTTGCAGTTATTGACTTTATA
TTCAATTATTTACATCAAATAATGAAATAACTGAAATGTACAAATGTCAAATTTTGGAAGTATATTCAATACCAA
TGCTGTATGAGTGGGCTGAATCCAGTTCATTGTTTTTTTTTTGGTAAGAAGTGAGACTACAGTTCCAGCTACCTA
CATGTCTTTTCTTGTCATCCTTATAGATCTCTTTGGCTTTCAGAAAGATACAGTGATAATGTGTGTATGAATCAG
TCACAATGAATTTTACTTGAATATTGTATGTTGCATTCCACTTCATTTGAAAATAATGAAACCATGTACCACTGT
TTACATCATCTGTAGTGATTTCATAGATAATATATTTAATATGACAGATTATGTTTCAACTCTGTAGATGTTTAA
CGTCATAGACAGTTGGCCCTCTGTATCCGTGAGCTCTATATCTGTGAATTCAACCAAGTTTGGATGGAAAATTTT
TTTTTTTTTTTTTTTTTTGAGACGGAGTCTCGCTCTGTCACCCAGGCTGGAGTGCAGTGGCGTAGTCTCGGCTCA
CTGCAAGCTCCGCCTCCTGGGTTCACGCCGTTCTCCTGCCTCAGCCTCTCTGAGAAGCTGGGACTACAGGCGCCC
GCCACCACGCCCGGCTAATTTTTTTGTATTTTTAGTAGAGACGGGGTTTCACTGTGGTCTCGATCTCCTGACCTC
GTGATCCGCCCGCCTTGGCCTCCCAAGGTGCTGGGATTACAAGCGTGAGCCACCGCACCCGGCCTGAAAATATTT
TCTAAAAAGATAAAAAATATACATAACGATGAAAAATAATACAAATTTAAAAACCAATACAGTATAACAACTATT
TACATAGTGCTTACATTGTATTAGGTGTTATAAGCAATCTAGAGATGATTTAGCAAGTATACAGGAGGATGTGCC
TAGGTTATATGCAAATACTGTGCCATTTTATATCAGGAACTTGAGCATCTGCAGATATTGGTATCGGAGGGCGGT
CCTGGAACCAAGCATCCACGGATACTGAGGGGTGACATTTCATGAAGTGTAGATCATTGTATTCAGAGATTGTAA
ATGAAAAAAATATAGAAACTATTTAGTTTTGGTAGATTTTTTTTCTGACAATGTGACCAGACTGAATTTCCTCAT
AAAGAAAAAATGGCGTGCCTTGTGTCTGTGTTTCTCTTTTCTCTGAAAGGATTAATAGATCTGAAGCTTTGGGCC
ACTTAGAGCCTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6861

MILIGRMSAQVPMNMTITGCMMTFYRTTPAVLFWQWINQSFNAVVNYTNRSGDAPLTVNELGTAYVSATTGAVAT
ALGLNALTKHVSPLIGRFVPFAAVAAANCINIPLMRQRELKVGIPVTDENGNRLGESANAAKQAITQVVVSRILM
AAPGMAIPPFIMNTLEKKAFLKRFPWMSAPIQVGLVGFCLVFATPLCCALFPQKSSMSVTSLEAELQAKIQESHP
ELRRVYFNKGL

FIGURE 6862

GGAATTGGACTCTTGAGACTGAACGTTTTTCCATCATTTTCACAAATCAGGGATACTCGTCCCAATTGGCAGGGC
CCACCCCAAGACTGCCGGCCCCTAGAGCCCTGGCCAGGGCCCAGGTCTGGGAGCTGCCACTGGGAGGCCTGTTGT
GAGTGGTGGTACTGGAGCTCAGGGTGCCCCCAGTTCCTCTTCCGGCCCAGGTGGTCTTCACCAGGCCTACAGCAG
GGGGTTGAGGGCAAGCACCCCCTTCCTGAGGATGAGGTTTCCGTAGAGGGCCGTCTCCCCCGTTGCCACAACAGC
AAAAGCCTTCTTAGCCCGTTCATAAAACTCAAACCTCTCTATCTTTGCCAGGGCTCTCACACAGCCGGCCCTGCG
TAGGATGGACTCGTACTCCGTCCACA

FIGURE 6863

GTTGGGCGAGATGAAGCTACACTGTGAGGTGGAGGTGATCAGCCGGCACTTGCCCGCCTTGGGGCTTAGGAACCG
GGGCAAGGTCGTCCGATCCGTGTTGAGCCTCTGTCAGCAGACTTCCAGGAGTCAGCCGCCGGTCCGAGCCTTCCT
GCTCATCTCCACCCTGAAGGACAAGCGCGGGACCCGCTATGAGCTAAGGGAGAACATTGAGCAATTCTTCACCAA
ATTTGTAGATGAGGGGAAAGCCACTGTTCGGTTAAAGGAGCCTCCTGTGGATATCTGTCTAAGTAAGGCCATTTC
CAGCAGTTTAAAAGGTTTCCTTTCAGCTATGAGACTGGCTCATAGAGGCTGTAATGTTGATACACCAGTTTCAAC
GCTCACACCAGTGAAGACTTCAGAATTTGAAAACTTTAAAACTAAAATGGTTATCACATCCAAAAAAGACTATCC
TCTAAGTAAGAATTTTCCATATTCCTTGGAACATCTTCAGACTTCTTACTGTGGGCTTGTCCGAGTTGATATGCG
TATGCTTTGCTTAAAAAGCCTTAGGAAATTAGACTTGAGTCACAACCATATAAAAAAGCTTCCAGCTACAATTGG
AGACCTCATACACCTTCAAGAACTTAACCTGAATGACAATCACTTGGAGTCATTTAGTGTAGCCTTGTGTCATTC
TACGCTCCAGAAGTCACTTCGGAGTTTGGACCTCAGCAAGAACAAAATCAAGGCACTCCCTGTGCAGTTTTGCCA
GCTCCAGGAACTTAAGAATTTAAAACTTGACGATAATGAATTGATTCAATTTCCTTGCAAGATAGGACAACTAAT
AAACCTTCGCTTTTTGTCAGCAGCTCGAAATAAGCTTCCATTTTTGCCTAGTGAATTTAGAAATTTATCCCTTGA
ATACTTGGATCTTTTTGGAAATACTTTTGAACAACCAAAAGTCCTTCCAGTAATAAAGCTGCAAGCACCATTAAC
TTTATTGGAATCTTCTGCACGAACCATATTACATAATAGGATCCCATATGGCTCTCATATCATTCCATTCCATCT
CTGCCAAGATTTGGATACCGCAAAAATTTGTGTTTGTGGAAGATTCTGTCTGAACTCTTTCATTCAAGGAACTAC
TACCATGAATCTGCATTCTGTTGCCCACACTGTGGTCTTAGTAGATAATTTGGGTGGTACTGAAGCACCTATTAT
CTCTTATTTCTGTTCTCTAGGCTGTTATGTTAATTCCTCTGATATGTTAAAGTAATGGGTGAGACCAGAAAAAGA
AATTTCAATAACAGATCAGTTTGGGGTGCATGTATGATTTTGCAGCGTCAAATTGGAGTAAGGGAAGATTTCTGT
ATACTTGCTGGAGAGGAGGAATGTGTATAGTTACTCATTTAGATGACTCCAAACTTTTATTAAAACCAATTTTAG
TTTTAAAAAAAAAAAAAAAA

FIGURE 6864

MKLHCEVEVISRHLPALGLRNRGKVVRSVLSLCQQTSRSQPPVRAFLLISTLKDKRGTRYELRENIEQFFTKFVD
EGKATVRLKEPPVDICLSKAISSSLKGFLSAMRLAHRGCNVDTPVSTLTPVKTSEFENFKTKMVITSKKDYPLSK
NFPYSLEHLQTSYCGLVRVDMRMLCLKSLRKLDLSHNHIKKLPATIGDLIHLQELNLNDNHLESFSVALCHSTLQ
KSLRSLDLSKNKIKALPVQFCQLQELKNLKLDDNELIQFPCKIGQLINLRFLSAARNKLPFLPSEFRNLSLEYLD
LFGNTFEQPKVLPVIKLQAPLTLLESSARTILHNRIPYGSHIIPFHLCQDLDTAKICVCGRFCLNSFIQGTTTMN
LHSVAHTVVLVDNLGGTEAPIISYFCSLGCYVNSSDMLK

FIGURE 6865A

CCCATTTTCCTCTCCGCCCTGGCGCACCCAGCCTCAGCCCTGCTTCCTGTGGACGTCAGGCAGTGATGCTCTTGC
CCTCAGGCCTAGATAAAGGTAGGGTAGGCAAGGCCCAGCCACTGAGCTCACAGAAGGCAGCACCAGGCATCCAGA
CTGGCGGGGGCACAAGGTATGGTGCCCAGCATACAACACTGCTTTGTACATGGCTATGAAGGAAATGTTTGTGAA
ATTTAACTGAATTTTTTTAAAAGATTAGGCAATGGACAGTAGATATCTCCAGCTCCAGCTTTACCTGCCCTCTTG
TTCTCTCCTCCAAGGTAGCGGGGACTCATCTCTGGAGAAGGAGTTCCTCGGGGCCCCAGTGGGGCCCTCGGTGAG
CACCCCCAACAGCCAGCACTCTTCTCCTAGCCGCTCACTCAGTGCCAACTCCATCAAGGTGGAGATGTACAGCGA
TGAGGAGTCAAGCAGACTGCTGGGGCCAGATGAGCGGCTCCTGGAAAAGGACGACAGCGTGATTGTGGAAGATTC
ATTGTCTGAGCCCCTGGGCTACTGTGATGGGAGTGGGCCAGAGCCTCACTCCCCTGGGGGCATCCGGCTGCCCAA
TGGCAAGCTCAAGTGTGACGTCTGCGGCATGGTCTGTATTGGACCCAACGTGCTCATGGTGCACAAGCGCAGTCA
CACTGGTGAAAGGCCCTTCCATTGCAACCAGTGTGGTGCCTCCTTCACCCAGAAGGGGAACCTGCTGCGCCACAT
CAAGCTGCACTCTGGGGAGAAGCCCTTTAAATGTCCCTTCTGCAACTATGCCTGCCGCCGGCGTGATGCACTCAC
TGGTCACCTCCGCACACACTCAGTCTCCTCTCCCACAGTGGGCAAGCCCTACAAGTGTAACTACTGTGGCCGGAG
CTACAAACAGCAGAGTACCCTGGAGGAGCACAAGGAGCGGTGCCATAACTACCTACAGAGTCTCAGCACTGAAGC
CCAAGCTTTGGCTGGCCAACCAGGTGACGAAATACGTGACCTGGAGATGGTGCCAGACTCCATGCTGCACTCATC
CTCTGAGCGGCCAACTTTCATCGATCGTCTGGCCAATAGCCTCACCAAACGCAAGCGTTCCACACCCCAGAAGTT
TGTAGGCGAAAAGCAGATGCGCTTCAGCCTCTCAGACCTCCCCTATGATGTGAACTCGGGTGGCTATGAAAAGGA
TGTGGAGTTGGTGGCACACCACAGCCTAGAGCCTGGCTTTGGAAGTTCCCTGGCCTTTGTGGGTGCAGAGCATCT
GCGTCCCCTCCGCCTTCCACCCACCAATTGCATCTCAGAACTCACGCCTGTCATCAGCTCTGTCTACACCCAGAT
GCAGCCCCTCCCTGGTCGACTGGAGCTTCCAGGATCCCGAGAAGCAGGTGAGGGACCTGAGGACCTGGCTGATGG
AGGTCCCCTCCTCTACCGGCCCCGAGGCCCCCTGACTGACCCTGGGGCATCCCCCAGCAATGGCTGCCAGGACTC
CACAGACACAGAAAGCAACCACGAAGATCGGGTTGCGGGGGTGGTATCCCTCCCTCAGGGTCCCCCACCCCAGCC
ACCTCCCACCATTGTGGTGGGCCGGCACAGTCCTGCCTACGCCAAAGAGGACCCCAAGCCACAGGAGGGGTTATT
GCGGGGCACCCCAGGCCCCTCCAAGGAAGTGCTTCGGGTGGTGGGCGAGAGTGGTGAGCCTGTGAAGGCCTTCAA
GTGTGAGCACTGCCGTATCCTCTTCCTGGACCACGTCATGTTCACTATCCACATGGGCTGCCATGGCTTCAGAGA
CCCTTTTGAGTGCAACATCTGTGGTTATCACAGCCAGGACCGGTACGAATTCTCTTCCCACATTGTCCGGGGGGA
GCATAAGGTGGGCTAGCAACCTCTCCCTCTCTCCTCAGTCCACCACTCCACTGCCCTGACTACAGGCATTGATCC
CTGTCCCCACCATTTCCCAAGGAGTTTTGCTTTGTAGCCCTCACTACTGGCCACCTGACCTCACACCTGACCCTG
ACCCCTCCTCACCTATTCTCTTCCTCTATCCTGACCGATGTAAGCATTGTGATGAAACAGATCTTTTGCTTATGT
TTTTCCTTTTTATCTTCTCTCATCCCAGCATACTGAGTTATTTATTAATTAGTTGATTTATTTTGCCTTTTTAA
ATTTTAACTTATATCAGTCACTTGCCACTCCCCCACCCTCCTGTCCACAACTCCTTTCCACTTTAGGCCAATTTT
TCTCTCTTAGATCTTCCAGCAGCCCCAGGGGTAGGAAGCTCCTCTTAGTACTAAGAGACTTCAAGCTTCTTGCTT
TAAGTCCTCACCCTTTACATTATCTAATTCTTCAGTTTTGATGCTGATACCTGCCCCCGGCCCTACCTTAGCTCT
GTGGCATTATATCTCCTCTCTGGGACTCTTCAACCTGGTACTCCATACCTCTTGTGCCCTCTCACTTTAGGCAGC
TTGCACTATTCTTGAATGAATGAAGAATTATTTCCTCATTTGGAAGTAGGAGGGACTGAAGAAATTCTCCCCAGG
CACTGTGGGACTGAGAGTCCTATTCCCCTAGTAATAGGTCATATTCCCCTAGTAATATGAGTTCTCAAAGCCTAC
ATTCAGGATCTCCCTCTAGGATGTGATAGATCTGGTCCCTCTCCTTGAACTACCCCTCCACACGCTCTAGTCCCT
TCAACCTACCGGTCTATTAAGTGGTGGCTTTTCTCTCCTTGGAGTGCCCCAATTTTATATTCTCAGGGGCCAAGG
CTAGGTCTGCAACCCTCTGTCTCTGACAGATTGGGAGCCACAGGTGCCTAATTGGGAACCAGGGCATGGGAAAGG
AGTGGGTCAAAATTCTTCTCTTTCTCCTCCACCTCTCAAACTTCTTCACTATAGTGACCTTCCTAGGCTCTCAGG
GGCTCCTTCAGTCCCCATCCTATGAGAAACTAGTGGGTTGCTGCCTGATGACAAGGGGTTGTTTCAGCCCCTCAG
TCATGCTGCCTTCTGCTGCTCCCTCCCAGCAGGATTCACCCTCTCATTCCCGGGCTCCTGGGCCCTGTTCTTAGG
ATCAGTGGCAGGGAGAAACGGGTATCTCTTTTCTCTCTTCTAATTTTCAGTATAACCAAAAATTATCCCAGCATG
AGCACGGGCACGTGCCCTTCACCCCATTCCACCCTTGTTCCAGCAAGACTGGGATGGGTACAACTGAACTGGGGT
CTTCCTTTACTACCCCCTTCTACACTCAGCTCCCAGACACAGGGTAGGAGGGGGGACTGCTGGCTACTGCAGAGA
CCCTTGGCTATTTGAGTAACCTAGGATTAGTGAGAAGGGGCAGAAGGAGATACAACTCCACTGCAAGTGGAGGTT
TCTTTCTACAAGAGTTTTCTGCCCAAGGCCACAGCCATCCCACTCTCTGCTTCCTTGAGATTCAAACCAAAGGCT
GTTTTTCTATGTTTAAAGAAAAAAAAAAGTAAAAACCAAACACAACACCTCACAAGTTGTAACTCTTGGTCCTTC
TCTCTCTCCTTTTCTCTTCCCTTCCTTCCCCTTCCATCTTTCTTTCCACATGTCCTTTCCTTATTGGCTCTTTTA

FIGURE 6865B

CCTCCTACTTTTCTCACTCCCTATCAGGGATATTTTGGGGGGGGATGGTAAAGGGTGGGCTAAGGAACAGACCCT
GGGATTAGGGCCTTAAGGGCTCTGAGAGGAGTCTACCTTGCCTTCTTATGGGAAGGGAGACCCTAAAAAACTTTC
TCCTCTTTGTCCTCCTTTTTCTCCCCCACTCTGAGGTTTCCCCAAGAGAACCAGATTGGCAGGGAGAAGCATTGT
GGGGCAATTGTTCCTCCTTGACAATGTAGCAATAAATAGATGCTGCCAAGGGCAGAAAATGGGGAGGTTAGCTCA
GAGCAGAGTAGTCTCTAGAGAAAGGAAGAATCCTCAACGGCACCCTGGGGTGCTAGCTCCTTTTTAGAATGTCAG
CAGAGCTGAGATTAATATCTGGGCTTTTCCTGAACTATTCTGGTTATTGAGCCCTTCCTGTTAGACCTACCGCCT
CCCACCTCTTCTGTGTCTGCTGTGTATTTGGTGACACTTCATAAGGACTAGTCCCTTCTGGGGTATCAGAGCCTT
AGGGTGCCCCCATCCCCTTCCCCAGTCAACTGTGGCACCTGTAACCTCCCGGAACATGAAGGACTATGCTCTGAG
GCTATACTCTGTGCCCATGAGAGCAGAGACTGGAAGGGCAAGACCAGGTGCTAAGGAGGGGAGAGGGGGCATCCT
GTCTCTCTCCAGACCATCACTGCACTTTAACCAGGGTCTTAGGTACAAAATCCTACTTTTCAGAGCCTTCCAGCT
CTGGAACCTCAAACATCCTCATGCTCTCTCCCAGCTCCTTTTGCAT

FIGURE 6866

GAGGCTCCGTTGCCTGCTCCCGGAGGGAGACGCGCTGCCGAGGAGAACCCAGCGGGAGAACATTTCAGGATAGGA
ATAGGCCAAGTGCTGAGAAGATGAGTCTTAGGATTGATGTGGATACAAACTTTCCTGAGTGTGTTGTAGATGCAG
GAAAAGTCACCCTTGGGACTCAGCAGAGGCAGGAGATGGACCCTCGCCTGCGGGAGAAACAGAATGAAATCATCC
TGCGAGCAGTATGTGCTCTGCTGAATTCTGGTGGGGGCATAATCAAGGCTGAGATTGAGAACAAAGGCTACAATT
ATGAACGTCATGGAGTAGGATTGGATGTGCCTCCAATTTTCAGAAGCCATTTAGATAAGATGCAGAAGGAAAACC
ACTTTTTGATTTTTGTGAAATCATGGAACACAGAGGCTGGTGTGCCACTTGCTACCTTATGCTCCAATTTGTACC
ACAGAGAGAGAACATCCACCGATGTCATGGATTCTCAGGAAGCTCTGGCATTCCTCAAATGCAGGACTCAGACTC
CAACGAATATTAATGTTTCCAATTCATTAGGTCCACAGGCAGCTCAGGGTAGTGTACAATATGAAGGTAACATAA
ATGTGTCAGCTGCTGCTTTATTTGATAGAAAGCGGCTTCAGTATCTGGAAAAACTCAACCTTCCTGAGTCCACAC
ATGTTGAATTTGTAATGTTCTCGACAGACGTGTCACACTGTGTTAAAGACAGACTTCCGAAGTGTGTTTCTGCAT
TTGCAAATACTGAAGGAGGATATGTATTTTTTGGTGTGCATGATGAGACTTGTCAAGTGATTGGATGTGAAAAAG
AGAAAATAGACCTTACGAGCTTGAGGGCTTCTATTGATGGCTGTATTAAGAAGCTACCTGTCCATCATTTCTGCA
CACAGAGGCCTGAGATAAAATATGTCCTTAACTTCCTTGAAGTGCATGATAAGGGGGCCCTCCGTGGATATGTCT
GTGCAATCAAGGTGGAGAAATTCTGCTGTGCGGTGTTTGCCAAAGTGCCTAGTTCCTGGCAGGTGAAGGACAACC
GTGTGAGACAATTGCCCACAAGAGAATGGACTGCTTGGATGATGGAAGCTGACCCAGGTTAGGGAGCAATATCCA
CAATGGTTGTAATGTTTGCTGGCAGCAAGGCAGGGCGGGTCAGAGAGGAAAGAGGGATATGGTATTCCTTGGAAT
CTGGGGAAAGAGATTTACTCTCTGAAAAAAAAAAAAAAAAAACAAAAAAAAAAAAAAAAAA

FIGURE 6867

MSLRIDVDTNFPECVVDAGKVTLGTQQRQEMDPRLREKQNEIILRAVCALLNSGGGIIKAEIENKGYNYERHGVG
LDVPPIFRSHLDKMQKENHFLIFVKSWNTEAGVPLATLCSNLYHRERTSTDVMDSQEALAFLKCRTQTPTNINVS
NSLGPQAAQGSVQYEGNINVSAAALFDRKRLQYLEKLNLPESTHVEFVMFSTDVSHCVKDRLPKCVSAFANTEGG
YVFFGVHDETCQVIGCEKEKIDLTSLRASIDGCIKKLPVHHFCTQRPEIKYVLNFLEVHDKGALRGYVCAIKVEK
FCCAVFAKVPSSWQVKDNRVRQLPTREWTAWMMEADPG

FIGURE 6868

GCTCAGGCGGCGGGCGCGGCTAGGATGGCGAAGAGCAACGGAGAGAATGGGCCGCGCGCGCCCGCGGCCGGGGAA
AGCCTGTCGGGAACCCGGGAGAGCCTGGCCCAGGGCCCCGACGCCGCAACCACCGACGAACTCAGCTCTCTCGGG
TCTGACTCGGAGGCCAACGGCTTCGCCGAGCGCCGCATCGACAAGTTCGGCTTCATCGTGGGCTCGCAGGGCGCC
GAGGGCGCGCTGGAGGAAGTACCCCTGGAGGTGCTGAGGCAGAGGGAGTCCAAGTGGCTGGACATGCTCAACAAC
TGGGACAAATGGATGGCCAAGAAGCACAAAAAGATTCGTCTGCGGTGCCAAAAGGGCATCCCGCCTTCTCTGCGG
GGCCGTGCTTGGCAGTACCTGTCAGGAGGCAAGGTGAAGTTACAGCAGAACCCTGGAAAGTTTGACGAGCTGGAC
ATGTCCCCTGGGGACCCCAAGTGGCTGGACGTGATTGAGCGTGACCTGCACCGGCAGTTCCCATTCCATGAGATG
TTTGTGTCCCGGGGGGGCCACGGCCAGCAGGACCTATTCCGTGTGCTGAAGGCCTACACGCTGTACCGGCCCGAG
GAGGGCTACTGCCAGGCCCAGGCGCCCATTGCCGCTGTCTTGCTCATGCATATGCCTGCTGAGCAAGCCTTCTGG
TGCCTGGTACAGATCTGTGAGAAGTACCTGCCCGGCTACTACAGCGAGAAACTGGAGGCGATCCAGCTGGACGGG
GAGATCCTTTTCTCGCTGTTGCAGAAGGTGTCGCCGGTGGCCCACAAGCACCTCAGCCGTCAGAAGATCGACCCG
CTCCTCTATATGACAGAATGGTTCATGTGCGCCTTCTCCCGAACCTTGCCCTGGAGCTCTGTGCTGCGTGTCTGG
GACATGTTCTTCTGTGAAGGGGTCAAGATCATCTTCCGGGTGGGGCTGGTGCTGCTGAAGCACGCGCTGGGCTCC
CCTGAGAAGGTCAAAGCCTGCCAGGGCCAGTACGAGACCATCGAGCGACTGCGGAGCCTCAGCCCCAAGATCATG
CAGGAGGCCTTTCTGGTCCAGGAGGTAGTGGAGTTGCCCGTGACAGAGCGCCAGATTGAGCGCGAACACCTCATT
CAGCTGCGGCGCTGGCAGGAGACCCGGGGTGAGCTGCAGTGCCGCTCCCCGCCCAGGCTGCATGGTGCCAAGGCT
ATCTTGGATGCAGAACCTGGTCCCCGGCCTGCCCTACAACCTTCACCATCCATCCGCCTGCCCCTAGATGCCCCC
CTCCCTGGCTCCAAAGCCAAGCCCAAGCCACCCAAGCAGGCCCAGAAGGAGCAGCGGAAACAGATGAAGGGGAGA
GGGCAGCTGGAGAAGCCCCCAGCCCCAAATCAAGCCATGGTGGTGGCCGCTGCAGGAGATGCATGTCCCCCACAG
CATGTGCCCCCGAAGGACTCAGCCCCCAAGGACTCAGCCCCTCAGGATTTGGCTCCCCAGGTCTCAGCCCACCAC
CGCTCCCAGGAGAGCTTGACGTCCCAAGAGAGTGAGGACACCTACTTGTAACCCTGGCAGCTAAGGCCTCCAGGG
CGGGGTCTCCATATAACTACACGGTTCATGAACTGACATTCCACATCCTGCCCACCCTCTGAGGGCCAAGCTGCC
TGGCCACTGGGCTGGGCTGGAGTCTGGCTGGTCCAACACAGATTCTGCCTGGTCCAACACAGATTCTGCCTGAGC
CTCCTTATTTATTTTCTTTACAGTGGCACTCAGGCTGGCCCAGCCAGGGCAGGCAGAAGCTAGGGCCTGGGGGGT
GGGGCCTCCTTCAGCCCCCTCCTCCTGGGGGATGCTCCCCAGGGTTAGGGTGCTGGTGTGAGGGGAAAGGGTGGG
GTGTTCTTTGTGTAAAATAGAAACATGGTTTTGTACAGAAATAAACAGCCTTGTATAGAGAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAA

FIGURE 6869

MAKSNGENGPRAPAAGESLSGTRESLAQGPDAATTDELSSLGSDSEANGFAERRIDKFGFIVGSQGAEGALEEVP
LEVLRQRESKWLDMLNNWDKWMAKKHKKIRLRCQKGIPPSLRGRAWQYLSGGKVKLQQNPGKFDELDMSPGDPKW
LDVIERDLHRQFPFHEMFVSRGGHGQQDLFRVLKAYTLYRPEEGYCQAQAPIAAVLLMHMPAEQAFWCLVQICEK
YLPGYYSEKLEAIQLDGEILFSLLQKVSPVAHKHLSRQKIDPLLYMTEWFMCAFSRTLPWSSVLRVWDMFFCEGV
KIIFRVGLVLLKHALGSPEKVKACQGQYETIERLRSLSPKIMQEAFLVQEVVELPVTERQIEREHLIQLRRWQET
RGELQCRSPPRLHGAKAILDAEPGPRPALQPSPSIRLPLDAPLPGSKAKPKPPKQAQKEQRKQMKGRGQLEKPPA
PNQAMVVAAAGDACPPQHVPPKDSAPKDSAPQDLAPQVSAHHRSQESLTSQESEDTYL

FIGURE 6870

TGAGAGCTCCAGGCGCACATCCGCAGTCAGCCACGTCGCGCGCGCCTCCAGGAGCAAGGATGGAGAGGCTGGTGA
TCAGGATGCCCTTCTGTCATCTGTCTACCTACAGCCTGGTTTGGGTCATGGCAGCAGTGGTGCTGTGCACAGCAC
AAGTGCAAGTGGTGACCCAGGATGAAAGAGAGCAGCTGTACACACCTGCTTCCTTAAAATGCTCTCTGCAAAATG
CCCAGGAAGCCCTCATTGTGACATGGCAGAAAAAGAAAGCTGTAAGCCCAGAAAACATGGTCACCTTCAGCGAGA
ACCATGGGGTGGTGATCCAGCCTGCCTATAAGGACAAGATAAACATTACCCAGCTGGGACTCCAAAACTCAACCA
TCACCTTCTGGAATATCACCCTGGAGGATGAAGGGTGTTACATGTGTCTCTTCAATACCTTTGGTTTTGGGAAGA
TCTCAGGAACGGCCTGCCTCACCGTCTATGTACAGCCCATAGTATCCCTTCACTACAAATTCTCTGAAGACCACC
TAAATATCACTTGCTCTGCCACTGCCCGCCCAGCCCCCATGGTCTTCTGGAAGGTCCCTCGGTCAGGGATTGAAA
ATAGTACAGTGACTCTGTCTCACCCAAATGGGACCACGTCTGTTACCAGCATCCTCCATATCAAAGACCCTAAGA
ATCAGGTGGGGAAGGAGGTGATCTGCCAGGTGCTGCACCTGGGGACTGTGACCGACTTTAAGCAAACCGTCAACA
AAGGCTATTGGTTTTCAGTTCCGCTATTGCTAAGCATTGTTTCCCTGGTAATTCTTCTCGTCCTAATCTCAATCT
TACTGTACTGGAAACGTCACCGGAATCAGGACCGAGAGCCCTAAATAAGTCACACAGCACCCTGAAAGTGATTCC
CTGGTCTACTTGAATTTGACACAAGAGAAAAGCAGGAGGAAAAGGGGCCATTCTCCAAAGGACCTGAAAGAGCAA
AAGAGGTGGGAGCGAAAGCCTTAAGGATCCCACGACTTTTTACTGCCATCTGAGCTACTCAGTGTTTGAATCCCA
AGAGGAAGTCAGTTTACCTCTCAGGTCTGTTGTAGGACTTGATTTTGTAAAGCAATGCCATGTTATGTGGTTGAA
AGGGCACTGGACTTAGTTAGTATCAGGAGCACTGAGCTCACAGACTGACTTGGGCTCCTACTGGTGGGGACCTCT
GTTAGTCACTTTACCTCATCCAAAGTATAAAGGAATTGGACCAAATAATTTACCACATAGCTCTAAAACTTAATT
TAAAATGTAATTCCAGAAAAAAAAAAGGGAATAAGCAAAGGGGGAAGAATTGAAAGAGAGAGAGAAGAAAGAATAC
AGAGAGCTTACCTTTTGCCTTTCTGTTGATGTTACATCTCTTCTTCCTATGTTCTTAGGTCTATGAGTCTGTTTC
CCCATCATTTGGTATCTAGTCCAGTTCCTGCTTACTGCTTTGCTAATAGCTGGCCTTGCTAGAATCCTTGGTTTC
ACTGCTGTTCTTCATGTGCTTCTATGAGATTTACTCCAACACAAATAGGACTGAATTTATTGTGAAGTAACATTG
GCAATCTTAACTTATTCATTTAACTTATTTTTATAGCTAGATAAATATTGTTAGTCTTAGACAATAGCTCACATT
TTTTGAGAAGCATGCCCTCCCTGTCCATTTGTCTTATAACATGACCCAGCCCTATTTTACGTCATTCTAAATTCA
GCCTCATATAATGAAAATACATTATGAAAACAGATGTTTAGGAGATTTCCTGTATAGCAGTCAGCCAATTCATAT
GCTTTGTCTCTGCTGGCTTCTTTTTCCATGCGTTAACTTTTCCCAATAGCAGAGGAGGCAAATATGAGCATACAA
TCCCTTTGTTCTAAAGATATTGTTCCAGCTAGTGGAATGATGTTGAATCTTTAATAACCATAATTAGTTGCTTTT
TCAGTATCTTCTGCTTTGTCTGTGTCTATCCAGTGGCCTAGGAATTAAAGTGTAAGTTGTTTTCGCTGTTAAATT
GGATATTTATATATATATATATAGCAAGATTTTCATGTGTTATTTAATTCTGTATTGTTTCTTATATTTGTAGTA
AAATATTGAACAATTAAAAAAAAAAAAAAAAGAAAAAAAAAAAAAA

FIGURE 6871

MERLVIRMPFCHLSTYSLVWVMAAVVLCTAQVQVVTQDEREQLYTPASLKCSLQNAQEALIVTWQKKKAVSPENM
VTFSENHGVVIQPAYKDKINITQLGLQNSTITFWNITLEDEGCYMCLFNTFGFGKISGTACLTVYVQPIVSLHYK
FSEDHLNITCSATARPAPMVFWKVPRSGIENSTVTLSHPNGTTSVTSILHIKDPKNQVGKEVICQVLHLGTVTDF
KQTVNKGYWFSVPLLLSIVSLVILLVLISILLYWKRHRNQDREP

FIGURE 6872

GTTTTAAAATAGTAAACAAAAAATCCAGAACAGTAATACTTGTATAACAAGTTACACTATCTTACGTTTAAGAAG
GTTCACTGGAAGCATGTATTCAATAACTGACTTTTTATGTAGAATAATGCATTTTATATATTTAAAGTAGATTGT
GGTATCTAGGTACAAGAGGACATTAAGGAGATGAGAATTTATAGTACCCCAGCACTTTAATCTCTGAGAAAGCTT
TAGCCTAAAACTACCGTATACTAATTGCCAATGGCCTTATCAXGAXGACAATTATGAACCCTAAAAXTAAGTATC
AAATACTTATGTGCTGGAACTCCATGGAAACTGCACACTCTCCTCTTAAACCTATTCACCATTTTATGGCACAGT
TTTAACAGACTCAGTTACTTACCCCTTAGGGACTGGTTGGTTAAA

FIGURE 6873

TTTAGTATCTAACTCACATTTATTAAAAATTGAAGATTACAGAAAAGCATAAGATTGGCATCATTAAACAAGCTT
AATTAACTTACCTTTGACTAATAAATGAAAATATTTAATAACACTAAAGGAATTTTGAGAATAAGTTCTATTCCA
ACCTTAGAAATTAAAAATAAAAGCAAAGCAGCTATTCTCCAAAGGAGAAAGCAACCACAGATCTCCCTCTAGTGG
CAAAAGATAAAGTTGCTGCTGAAAAGCTGAATTGCTCCTCCATACATAGAACTGCTCAGACATTTCTTCTATAAA
ATTCTAACTTAAGATTCTAAATCAATATATAAGGAAAATAGATCTATTTTTTGTCAAAAAAAATTAGACCTACTG
CCCAGTAATAGCATGGATTAAAAAAATTAG

FIGURE 6874

GGCACGAGGGTTCCGCTGTCTCGGGAACCGTCGTATCCCTCGGTCCGGCGGCGGCGGCGGCGGCGGCGGTAGCGG
AGGAGACGGTTTCAGGCCTCCGGTGCGGCTGCAATGCTGAGCTCCCGGGCCGAGGCGGCGATGACCGCGGCCGAC
AGGGCCATCCAGCGCTTCCTGCGGACCGGGGCGGCCGTCAGATATAAAGTCATGAAGAACTGGGGAGTTATAGGT
GGAATTGCTGCTGCTCTTGCAGCAGGAATATATGTTATTTGGGGTCCCATTACAGAAAGAAAGAAGCGTAGAAAA
GGGCTTGTGCCTGGCCTTGTTAATTTAGGGAACACCTGCTTCATGAACTCCCTGCTACAAGGCCTGTCTGCCTGT
CCTGCTTTCATCAGGTGGCTGGAAGAGTTCACCTCCCAGTACTCCAGGGATCAGAAGGAGCCCCCCTCACACCAG
TATTTATCCTTAACACTCTTGCACCTTCTGAAAGCCTTGTCCTGCCAAGAAGTTACTGATGATGAGGTCTTAGAT
GCAAGCTGCTTGTTGGATGTCTTAAGAATGTACAGATGGCAGATCTCATCATTTGAAGAACAGGATGCTCACGAA
TTATTCCATGTCATTACCTCGTCATTGGAAGATGAGCGAGACCGCCAGCCTCGGGTCACACATTTGTTTGATGTG
CATTCCCTGGAGCAGCAGTCAGAAATAACTCCCAAACAAATTACCTGCCGCACAAGAGGGTCACCTCACCCCACA
TCCAATCACTGGAAGTCTCAACATCCTTTTCATGGAAGACTCACTAGTAATATGGTCTGCAAACACTGTGAACAC
CAGAGTCCTGTTCGATTTGATACCTTTGATAGCCTTTCACTAAGTATTCCAGCCGCCACATGGGGTCACCCATTG
ACCCTGGACCACTGCCTTCACCACTTCATCTCATCAGAATCAGTGCGGGATGTTGTGTGTGACAACTGTACAAAG
ATTGAAGCCAAGGGAACGTTGAACGGGGAAAAGGTGGAACACCAGAGGACCACTTTTGTTAAACAGTTAAAACTA
GGGAAGCTCCCTCAGTGTCTCTGCATCCACCTACAGCGGCTGAGCTGGTCCAGCCACGGCACGCCTCTGAAGCGG
CATGAGCACGTGCAGTTCAATGAGTTCCTGATGATGGACATTTACAAGTACCACCTCCTTGGACATAAACCTAGT
CAACACAACCCTAAACTGAACAAGAACCCAGGGCCTACACTGGAGCTGCAGGATGGGCCGGGAGCCCCCACACCA
GTTCTGAATCAGCCAGGGGCCCCCAAAACACAGATTTTTATGAATGGCGCCTGCTCCCCATCTTTATTGCCAACG
CTGTCAGCGCCGATGCCCTTCCCTCTCCCAGTTGTTCCCGACTACAGCTCCTCCACATACCTCTTCCGGCTGATG
GCAGTTGTCGTCCACCATGGAGACATGCACTCTGGACACTTTGTCACTTACCGACGGTCCCCACCTTCTGCCAGG
AACCCTCTCTCAACTAGCAATCAGTGGCTGTGGGTCTCCGATGACACTGTCCGCAAGGCCAGCCTGCAGGAGGTC
CTGTCCTCCAGCGCCTACCTGCTGTTCTACGAGCGCGTCCTTTCCAGGATGCAGCACCAGAGCCAGGAGTGCAAG
TCTGAAGAATGACTGTGCCCTCCTGCAAGGCTAGAGCTGATGGCACTGTCTGCACTGTCCAGGAAAAAAGTAAAA
CTGTACTGTTGCGTGTGCAAGCGGCCCCACTAGAGCCTTCCAGCCTTCTGGTGTGTTCTAAGAGCAGGCTCCACC
TGGGAGCCAGCCCCAGTTCACACCAAACCAGGCTCCCTGAACAGTCCTGTTCATGTGTGTAGGTGGTTCTGTTGT
GTTAAGAAAGCATTCATTATGTCCGGAGTGTCTTTTTACTCATCTGATACAGGTAATTAAAAGAACTCAGATTCT
TGAAGCCACCGTTTTCATATTGTAATGTTAGGTGTTCTCAGAGGGGAGGTACCTTTGTCTAATCAACGTTTCCAC
TTAGATCTTTTATTTTTAATAAGCAGGCCCATAAAAATTGTTGACAAGAATTAATGAAATTATTAAAGGCAACAA
TTTAGAAGAAAAAAAAAAAAAAAAA

FIGURE 6875

MTAADRAIQRFLRTGAAVRYKVMKNWGVIGGIAAALAAGIYVIWGPITERKKRRKGLVPGLVNLGNTCFMNSLLQ
GLSACPAFIRWLEEFTSQYSRDQKEPPSHQYLSLTLLHLLKALSCQEVTDDEVLDASCLLDVLRMYRWQISSFEE
QDAHELFHVITSSLEDERDRQPRVTHLFDVHSLEQQSEITPKQITCRTRGSPHPTSNHWKSQHPFHGRLTSNMVC
KHCEHQSPVRFDTFDSLSLSIPAATWGHPLTLDHCLHHFISSESVRDVVCDNCTKIEAKGTLNGEKVEHQRTTFV
KQLKLGKLPQCLCIHLQRLSWSSHGTPLKRHEHVQFNEFLMMDIYKYHLLGHKPSQHNPKLNKNPGPTLELQDGP
GAPTPVLNQPGAPKTQIFMNGACSPSLLPTLSAPMPFPLPVVPDYSSSTYLFRLMAVVVHHGDMHSGHFVTYRRS
PPSARNPLSTSNQWLWVSDDTVRKASLQEVLSSSAYLLFYERVLSRMQHQSQECKSEE

FIGURE 6876

AAGTATTGTTTTATTGCTGCAGCACTCCTTACTCTCTTTTGGGTTTGGTCTTCACGGTTTCTTTTGTTGCCTTGG
GTGTTCTCACACTCTGCAAGTTTTACTTGCAGGGTTATCGAGCTTTCATGAATGATCCTGCCATGAATCGGGGCA
TGACAGAAGGAGTAACGCTGTTAATCCTGGCAGTGCAGACTGGGCTGATAGAACTGCAGGTTGTTCATCGGGCAT
TCTTGCTCAGTATTATCCTTTTCATTGTCGTAGCTTCTATCCTACAGTCTATGTTAGAAATTGCAGATCCTATTG
TTTTGGCACTGGGAGCATCTAGAGACAAGAGCTTGTGGAAACACTTCCGTGCTGTAAGCCTTTGTTTATTTTTAT
TGGTATTCCCTGCTTATATGGCTTATATGATTTGCCAGTTTTTCCACATGGATTTTTGGCTTCTTATCATTATTT
CCAGCAGCATTCTTACCTCTCTTCAAGTTCTGGGAACACATTTTATTTATGTCTTATTTATGGTTGAGGAATTC

FIGURE 6877

AAGGGGTTCCAGTACTTCTCTACCCTGGAAGAAGCAGAGAAGCACCTGAGGCAGGAGCCAGGGACCCAGCCCTAC
AACATCAGAGAAGACTCCATTCTGGACCAAAAGGTTGCCCTGCTCAAGGCATAATGGGGCCACCCGTGGGCATCC
ACAGTTTGCAGGGTGTTCCGGAAGGTTCTTGTCACTGTGATTGGATGCTGGATGCCGCCTGATAGACATGCTGGC
CTGGCTGAGAAACCCCTGAGCAGGTAACCCAGGGAAGAGAAGGAAGCCAGGCCTGGAGGTCCACGGCAGTGGGAG
TGGGGCTCACTGGCTTCCTGTGGGATGACTGGAAAATGACCTCGCTGCTGTTCCCTGGCATGACCCTCTTTGGAA
GAGTGGTTTGGAGAGAGCCTTCTAGAATGACAGACTGTGAGAGGAAGCAGGGGCAGGGGTTTCCAGCCCGGGCTG
TGCGAGGCATCCTGGGGCTGGCAGCACCTTCCCGGCTCACCAGTGCCACCTGCGGGGGAGGGACGGGGCAGGCAG
GAGTCTGGGAGGCGGGTCCGCTCCTCTTGTCTGCGGCATCTGTGCTCTCCGAGAGAAAACCAAGGTGTGTCAAAT
GACGTCAAGTCTCTATTTAAAAATAATTTTGTGTTTTCTAAATGGAAAAAGTGATAGCTTTGGTGATTTTGTAAA
AGTCATAAATGCTTATTGTAAAAAATACAGGAAACCACCCCTCACCCTGTCCACTTGGGTGATCATTCCAGACCC
CTCCCCAAACATGCATATGTACCTGTCCGTCAGTGTGTGGATGTATGTTTACAGTTCTACATAAATGGGATCATT
TTATACATGGTGCTCTGGAACCCACATTTTTCATGCAGTCATTTGCAGTGAATTATTTATTGTGATAATAAATAG
CATTAGAATACAAAAAAAAAAAAAAA

FIGURE 6878

CACTCATTAAGAACAGAGGAGGCTGCCTGTTACTCCTGGTGTTGCATCCCTCCAGACACTCTGCTGTTTCCTGCC
TAGGCGTGGCTGCAGCCATGGCTAGGAAAGCGCTGCCACCCACCCACCTGGGCCAGAGCTGGTTCTGCTCCTGCT
GCAGGGACACTGAGCTGGCTATCTCGGCGCTTCGGGCAAGAACTGCAACAGGCTCTCCTGGGTCCTGCAGGTGTA
CAGCCGGGCCCCTGCCTTGTGCCTCAGCTCTCGAGAGCTGCTGCTGCCGGGTGACCTGATCCAACCTGATAAGGT
GCCATCTTCAGCTACCACTGCAAGGCCCTGAGGGCAACAGCAGCACGGCACTGCCCACCCGGCTGCTGATGGCCT
GGTGCCAGCTGGGAGTCCTCCCGGCACTTCGAGGCCACTGAGCCACCCTTCCAGCCCCAGCCCACCATGGACAGG
GGTATCCAGCTTCCTCCTCAACCTCGTCCTCTGCCCCTGAGCCAGTGACGCCCAAGGACATGCCTGTTACCCAGG
TCCTGTACCAGCACTAGCTGGTCAAGGGC**ATG**ACAGTGCTGGAGGCCGTCTTGGAGATCCAGGCCATCACTGGCA
GCAGGCTGCTCTCCATGGTGCCAGGGCCCGCCAGGCCACCAGGCTCATGCTGGGACCCAACCCAGTGCACAAGGA
CTTGGCTGCTGAGCCACACACCCAGGAGAAGGTGGATAAGTGGGCTACCAAGGGCTTCCTGCAGGCTAGGGGAGG
AGCCACCCCCGCTTCCCTATTGTGACCAGGCCTATGGGGAGGAGCTGTCCATACGCCACCGTGAGACCTGGGCCT
GGCTCTCAAGGACAGACACCGCCTGGCCTGGTGCTCCAGGGGTGAAGCAGGCCAGAATCCTGGGGGAGCTGCTCC
TGGTT**TGA**GCTGCATTCAGGAAGTGCGGGACATGGTAGGGGAGGCAAAAAGCCTTGGGCACTACCCTCCCTGTGG
AGCTGTTCGGTGTCCGTCGAGCTAGCCACACCCTGACACCATGTTCAAGGGTACCGGAAGAGAAGGGTGTCTGCC
CCCAACCTCCCCTGTGGGTGTCACTGGCCAGATGTCATGAGGGAAGCAGGCCTTGTGAGTGGACACTGACCATGA
GTCCCTGGGGGGAGTGATCCCCCAGGCATCGTGTGCCATGTTGCACTTCTGCCCAGGCAGCAGGGTGGGTGGGTA
CCATGGGTGCCCACCCCTCCACCACATGGGGCCCCAAAGCACTGCAGGCCAAGCAGGGCAACCCCACACCCTTGA
CATAAAAGCATCTTGAAGCTTTTAAAAAAAAAAAAAAAAAA

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FIGURE 6879

MTVLEAVLEIQAITGSRLLSMVPGPARPPGSCWDPTQCTRTWLLSHTPRRRWISGLPRASCRLGEEPPPLPYCDQ
AYGEELSIRHRETWAWLSRTDTAWPGAPGVKQARILGELLLV

FIGURE 6880

GGCACGAGCCTGGCACATAGAAGGTGCCCATTAATTGGATGAACGAATGGGGGAGTTAGAGTCAGTACTAGAAAA
AGCATGGGATTATACTTTTAAGAGGCCAAATGAAAATTTGGGGAATAGCCATTTTCCAGGAATTTAAAAGGAGCC
ATTTTTTAAATGTCAATAATAATTTATTGGTTATTATTTTTTAAGCACTTATTATGGGTGCTTATTATAGGCATG
GTAAAAGCACTTCATCCACATTATTTAAATCTCAGAATCTATGAGTTTGGTGAGATCACTGCAGTTTTACAGAGG
AAAAAACAGGGCAGAGAGAACGGTAATTTCCTCAAGTTCTCACTCTTGTCACTTAATAGATCTAGAATTCCAACC
CAGATCTGATGGTGAAGTCAGTATAAGCTTCCTGGAGAAAGGAGTAGAGTTAAGGTGGGGGATGGGGCTTGAAGA
CTTGATAGGATTAGGGTTGGGAGTGTCAACTCGGAGATCCACAGTCAGGCGGAAGGAACCCACAAAGGCAGGAAT
GCACACAGCATGCTCAGAGGAGATGGAACCTGAAAATAGAGAGAATTAGCAAGTAGTGCCCATTGGATGGAGTAA
AGAGCCATACCTAGAAGGTTATCACTGGGTAACCATGATAAGAGTTTTGGCCTGGTGCTGTGGCTCACGCCTGTA
ATCCCAGCACTTTGGGAGGCCAAGGCAGGAGGATCACCTGAGGTCAGGAGTTCGAGACCAGCCTGGCCAACATGA
TGAAACCCCATCTGTACTAAAACTACGAAAATTATCTGGGTGTGGCGGCAGGCACCTGTAATCCCACCTACTCGG
AGGTGACGCAGGGGGAATTGCTTGAACCGGGGAGGCAGAGGTGGCAGTGAGCCACGATGGTGCCACTGCACTCTA
GCCTGGGCGACAGAGCGAGATCCGTCTCAAAAAAAAAAAAAAAAA

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FIGURE 6881

MSIIIYWLLFFKHLLWVLIIGMVKALHPHYLNLRIYEFGEITAVLQRKKQGRENGNFLKFSLLSLNRSRIPTQIO
WOSQYKLPGERSRVKVGDGAORLDRIRVGSVNSEIHSQAEGTHKGRNAHSMLRGDGTOKORE

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FIGURE 6882

CTTACAAGGTACAGTCCTCTGCTCAGGGGGGCCAGGAGGGTCTTATAGGCATCATTCACCAGGGTCGAATGCTTC
TCTGAGAAGTCCTTTTCAGTCTGAGACCTCTGGCTGAAGAAATCTGGGTGGACAAGACGCTGCAGTTGCTGGTAC
CTGTGCTGGAGCTTCGCTGTATCAACTCTGAAGGAACGGTTGCAGTCCATAAGGCTGAAGTAGTCTCGAGTGGGG
TCAGGTGCCTGCAGCGCTCGGCACTGTGGGCAGAAGAACCTGTCCTCCCGCCCGGGGCCCCATGGGCCGCCGCAG
TTCCAACAGCGGGGATAATTGCTTCCCGCCTGCGACGCAGCATCGCAGCTTAGCGGTCTCCTTCTGGGAACCCCT
GTCGGCCAAAACCCCCACACCCGGAGCAAAGCCCCGGCTCTCCCCCGCCACATCTGGCCGGCGGCCTATCTAGCC
GTGGTCACTCGTGGGGAAAAGCAAAGAGAGCGTCTAACCAGACTAATGTTGCTGATTGGCTGGGGAGTCGAGGGG
GCGGGATCACCCGAGGGGAACCCGGGTTCTAAGTTCCGCTCTCCCTTCTAAACTACAACTCCCAGGAGGCATTGA
GGCGGCGCCTGACGGCCACATCTGCTGCTCCTCATTGGTCCGGCGGCAGGGGAGGGGGTTTTGATTGGCTGAGGG
TGGAGTTTGTATCTGCAGGTTTAGCGCCACTCTGCTGGCTGAGGCTGCGGAGAGTGTGCGGCTCCAGGTGGGCTC
ACGCGGTCGTG**ATG**TCTCGGGAGTCGGATGTTGAGGCTCAGCAGTCTCATGGCAGCAGTGCCTGTTCACAGCCCC
ATGGCAGCGTTACCCAGTCCCAAGGCTCCTCCTCACAGTCCCAGGGCATATCCAGCTCCTCTACCAGCACGATGC
CAAACTCCAGCCAGTCCTCTCACTCCAGCTCTGGGACACTGAGCTCCTTAGAGACAGTGTCCACTCAGGAACTCT
ATTCTATTCCTGAGGACCAAGAACCTGAGGACCAAGAACCTGAGGAGCCTACCCCTGCCCCCTGGGCTCGATTAT
GGGCCCTTCAGGATGGATTTGCCAATCTTGAATGTGTGAATGACAACTACTGGTTTGGGAGGGACAAAAGCTGTG
AATATTGCTTTGATGAACCACTGCTGAAAAGAACAGATAAATACCGAACATACAGCAAGAAACACTTTCGGATTT
TCAGGGAAGTGGGTCCTAAAAACTCTTACATTGCATACATAGAAGATCACAGTGGCAATGGAACCTTTGTAAATA
CAGAGCTTGTAGGGAAAGGAAAACGCCGTCCTTTGAATAACAATTCTGAAATTGCACTGTCACTAAGCAGAAATA
AAGTTTTTGTCTTTTTTGATCTGACTGTAGATGATCAGTCAGTTTATCCTAAGGCATTAAGAGATGAATACATCA
TGTCAAAAACTCTTGGAAGTGGTGCCTGTGGAGAGGTAAAGCTGGCTTTCGAGAGGAAAACATGTAAGAAAGTAG
CCATAAAGATCATCAGCAAAAGGAAGTTTGCTATTGGTTCAGCAAGAGAGGCAGACCCAGCTCTCAATGTTGAAA
CAGAAATAGAAATTTTGAAAAAGCTAAATCATCCTTGCATCATCAAGATTAAAAACTTTTTTGATGCAGAAGATT
ATTATATTGTTTTGGAATTGATGGAAGGGGGAGAGCTGTTTGACAAAGTGGTGGGGAATAAACGCCTGAAAGAAG
CTACCTGCAAGCTCTATTTTTACCAGATGCTCTTGGCTGTGCAGTACCTTCATGAAAACGGTATTATACACCGTG
ACTTAAAGCCAGAGAATGTTTTACTGTCATCTCAAGAAGAGGACTGTCTTATAAAGATTACTGATTTTGGGCACT
CCAAGATTTTGGGAGAGACCTCTCTCATGAGAACCTTATGTGGAACCCCCACCTACTTGGCGCCTGAAGTTCTTG
TTTCTGTTGGGACTGCTGGGTATAACCGTGCTGTGGACTGCTGGAGTTTAGGAGTTATTCTTTTTATCTGCCTTA
GTGGGTATCCACCTTTCTCTGAGCATAGGACTCAAGTGTCACTGAAGGATCAGATCACCAGTGGAAAATACAACT
TCATTCCTGAAGTCTGGGCAGAAGTCTCAGAGAAAGCTCTGGACCTTGTCAAGAAGTTGTTGGTAGTGGATCCAA
AGGCACGTTTTACGACAGAAGAAGCCTTAAGACACCCGTGGCTTCAGGATGAAGACATGAAGAGAAAGTTTCAAG
ATCTTCTGTCTGAGGAAAATGAATCCACAGCTCTACCCCAGGTTCTAGCCCAGCCTTCTACTAGTCGAAAGCGGC
CCCGTGAAGGGGAAGCCGAGGGTGCCGAGACCACAAAGCGCCCAGCTGTGTGTGCTGCTGTGTTG**TGA**ACTCCGT
GGTTTGAACACGAAAGAAATGTACCTTCTTTCACTCTGTCATCTTTCTTTTCTTTGAGTCTGTTTTTTTATAGTT
TGTATTTTAATTATGGGAATAATTGCTTTTTCACAGTCACTGATGTACAATTAAAAACCTGATGGAACCTGG

FIGURE 6883

MSRESDVEAQQSHGSSACSQPHGSVTQSQGSSSQSQGISSSSTSTMPNSSQSSHSSSGTLSSLETVSTQELYSIP
EDQEPEDQEPEEPTPAPWARLWALQDGFANLECVNDNYWFGRDKSCEYCFDEPLLKRTDKYRTYSKKHFRIFREV
GPKNSYIAYIEDHSGNGTFVNTELVGKGKRRPLNNNSEIALSLSRNKVFVFFDLTVDDQSVYPKALRDEYIMSKT
LGSGACGEVKLAFERKTCKKVAIKIISKRKFAIGSAREADPALNVETEIEILKKLNHPCIIKIKNFFDAEDYYIV
LELMEGGELFDKVVGNKRLKEATCKLYFYQMLLAVQYLHENGIIHRDLKPENVLLSSQEEDCLIKITDFGHSKIL
GETSLMRTLCGTPTYLAPEVLVSVGTAGYNRAVDCWSLGVILFICLSGYPPFSEHRTQVSLKDQITSGKYNFIPE
VWAEVSEKALDLVKKLLVVDPKARFTTEEALRHPWLQDEDMKRKFQDLLSEENESTALPQVLAQPSTSRKRPREG
EAEGAETTKRPAVCAAVL

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FIGURE 6884

AGAACAGACGTTTGAACAGAGCAGGCTTCTGAGGTCTCCAAAATGCCTGTCCCAGCCTCCTGGCCCCATCCTCCT
GGTCCTTTCCTGCTTCTGACTCTACTGCTGGGACTTACAGAAGTGGCAGGTGAGGAGGAGCTACAGATGATTCAG
CCTGAGAAGCTCCTGTTGGTCACAGTTGGAAAGACAGCCACTCTGCACTGCACTGTGACCTCCCTGCTTCCCGTG
GGACCCGTCCTGTGGTTCAGAGGAGTTGGACCAGGCCGAGAATTAATCTACAATCAAAAAGAAGGCCACTTCCCC
AGGGTAACAACAGTTTCAGACCTCACAAAGAGAAACAACATGGACTTTTCCATCCGCATCAGTAGCATCACCCCA
GCAGATGTCGGCACATACTACTGTGTGAAGTTTCGAAAAGGGAGCCCTGAGAACGTGGAGTTTAAGTCTGGACCA
GGCACTGAGATGGCTTTGGGTGGCCCGGCATCATCTCTTACTGCGCTGCTCCTCATAGCTGTCCTCCTGGGCCCC
ATCTATGTCCCCTGGAAGCAGAAGACCTGACTCTCCTTCCTTCCTCCCCTGCCACGTGGGACCCTCATCTCTGCT
GCCTCCTTCCTTTCCTGAGAGGCTCAGCTTGAGAGAATGAGCCAGTGAGAAGCTTCTCTAGACTTGGCTCCAAAC
ATCTCCCCTCCCAAGACATCTGCCTGCCCACAGGCTCCTGTTGCTCCTTCACACAGACCTGGATGCCCCAGAGCA
AGGTCTTCATTCATGGTCCTGAGCAGGGGCCATGGGATTGGGCTCTGGGCACTGACTTAACGGCACCTCCCTAGA
AGGCGAGAAACATGCCAAATCTAAACACACCAGGACTCCCATCCATCGCCTTGAGACTGACCGTAAACCACAGAC
GCTCTCCAGGTTCTCAAGAGTTATCCTGCCTTCCAGATTCCTGCCTATCCCAACTCCCCAGCCTTGTTGAGGTTC
TCTATTGCCTCTTGAATACAAATGCACTCCCAAAGTGGTTTTAAGAAAATAAAAAGATTATCCTTCCAA

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FIGURE 6885

MIQPEKLLLVTVGKTATLHCTVTSLLPVGPVLWFRGVGPGRELIYNQKEGHFPRVTTVSDLTKRNNMDFSIRISS
ITPADVGTYYCVKFRKGSPENVEFKSGPGTEMALGGPASSLTALLLIAVLLGPIYVPWKQKT

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FIGURE 6886

GTTCCCAATCAGTTTCCAGCCAACACCAGGGTGTCCTAGTCCGCAGAGGTGTGGGGGACACACTCCATAATCTCT
ACTTTTCTTTTTGTGCAGCTGAGTCATGGAGCTTTCAGCCCCAGCACATGGCTCCTCCTTAACTGCGTCTGCTCA
ACCTCCCTCAGCCCTGTGAACAGCATCCCCGCACACAGACGCAGAGCAGGACTCTCTCTGCTGCCACTTCACCTT
CCTGAGAGAGGACCAGCGGCCAGAGCCTCAGTGACTGCCACCCTGGAGGACAGGGCACAACAACCGTTTCTGAAG
AGAATGGGAGGATTCCAGAGGGGCAAATATGGAACTATGGCTGAAGGTAGATCAGAAGATAACTTGTCTGCAACA
CCACCGGCATTGAGGATTATCCTAGTGGGCAAAACAGGCTGCGGGAAAAGTGCCACAGGGAACAGCATCCTTGGC
CAGCCCGTGTTTGAGTCCAAGCTGAGGGCCCAGTCAGTGACCAGGACGTGCCAGGTGAAAACAGGAACATGGAAC
GGGAGGAAAGTCCTGGTGGTTGACACGCCCTCCATCTTTGAGTCACAGGCCGATACCCAAGAGCTGTACAAGAAC
ATCGGGGACTGCTACCTGCTCTCTGCCCCGGGGCCCCACGTCCTGCTTCTGGTGATCCAGCTGGGGCGTTTCACT
GCTCAGGACACAGTGGCCATCAGGAAGGTGAAAGAGGTCTTTGGGACAGGGGCCATGAGACATGTGGTCATCCTC
TTCACCCACAAAGAGGACTTAGGGGGCCAGGCCCTGGATGACTATGTAGCAAACACGGACAACTGCAGCCTGGAA
GACCTGGTGCGGGAGTGTGAGAGAAGGTACTGTGCCTTCAACAACTGGGGCTCTGTGGAGGAGCAGAGGCAGCAG
CAGGCAGAGCTCCTGGCTGTGATTGAGAGGCTGGGGAGGGAGCGAGAGGGCTCCTTCCACAGCAATGACCTCTTC
TTGGATGCCCAGCTGCTCCAAAGAACTGGAGCTGGGGCCTGCCAGGAAGACTACAGGCAGTACCAGGCCAAAGTG
GAATGGCAGGTGGAGAAGCACAAGCAAGAGCTGAGGGAGAACGAGAGTAACTGGGCATACAAGGCGCTCCTCAGA
GTCAAACACTTGATGCTTTTGCATTATGAGATTTTTGTTTTTCTATTGTTGTGCAGCATACTTTTTTTCATTATT
TTTCTGTTCATCTTTCATTACATTTAAATCTCTGGACCCTGGAGCACTTCTAATGTATCACCCCATGGAGTCATT
GTTCTAATAATCACCAATTCAGACTCAGATCCTCGTGGTCTATGGAGCATGCTGCTTGCTGTCTGTGCAGCTCCC
ATTTCCCCTTCTTCCTGATAGACTTGGAGCTGTGTGCCTCCACTCCAAGGCTGCCTGCCTGCTGTAAACACTATT
CCACTCTGTCTGCCAACAACTGCTTCAGGAATGGGCCTGAGATCCCATGCAGGTCCCTGAGAAGTGAGTAAAAGT
CCGCAGAGGTGGGGATGGAAGATCTCTCCTTAGATAGAACCTGTCTTCCTCCCTGGCATTGTGGGGTCTGGGCGT
GACACTGGGACTCTCAGCAGCTTTGTGCTGCCAACCTGAGATTGAAGGCAGTGCCTCAGAGCAGCACAGAGAGTT
GGGGCCCCCTGAGCCCTGAGCCACCAGCCCTGCAGCCTGCCCTATCTCCGCATTTCCAGTTGTATTAGCCAATAG
ATTTCCTACTTATTTAAGCTATTTGAGCTCCGGGTCTCTTCTACCTGCATTCTAAAACATTCAAAGTAATAAAAA
TTTCTCCACATT

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FIGURE 6887

MGGFQRGKYGTMAEGRSEDNLSATPPALRIILVGKTGCGKSATGNSILGQPVFESKLRAQSVTRTCQVKTGTWNG
RKVLVVDTPSIFESQADTQELYKNIGDCYLLSAPGPHVLLLVIQLGRFTAQDTVAIRKVKEVFGTGAMRHVVILF
THKEDLGGQALDDYVANTDNCSLEDLVRECERRYCAFNNWGSVEEQRQQQAELLAVIERLGREREGSFHSNDLFL
DAQLLQRTGAGACQEDYRQYQAKVEWQVEKHKQELRENESNWAYKALLRVKHLMLLHYEIFVFLLLCSILFFIIF
LFIFHYI

FIGURE 6888A

GTGGGATAAAGGAATGAGGTTCAGAAAGGGGCAGGGAGTTGCCCGCAGCCGCACCGCACGTCTTCAGCCCGACCG
TTGTCCTGACCTCTCTGTCCCGTCCCCTGCCCAGTCTCACCATGGCCTTCTGGACACAGCTGATGCTGCTGCTCT
GGAAGAATTTCATGTATCGCCGGAGACAGCCGGTCCAGCTCCTGGTCGAATTGCTGTGGCCTCTCTTCCTCTTCT
TCATCCTGGTGGCTGTTCGCCACTCCCACCCGCCCCTGGAGCACCATGAATGCCACTTCCCAAACAAGCCACTGC
CATCGGCGGGCACCGTGCCCTGGCTCCAGGGTCTCATCTGTAATGTGAACAACACCTGCTTTCCGCAGCTGACAC
CGGGCGAGGAGCCCGGGCGCCTGAGCAACTTCAACGACTCCCTGGTCTCCCGGCTGCTAGCCGATGCCCGCACTG
TGCTGGGAGGGGCCAGTGCCCACAGGACGCTGGCTGGCCTAGGGAAGCTGATCGCCACGCTGAGGGCTGCACGCA
GCACGGCCCAGCCTCAACCAACCAAGCAGTCTCCACTGGAACCACCCATGCTGGATGTCGCGGAGCTGCTGACGT
CACTGCTGCGCACGGAATCCCTGGGGTTGGCACTGGGCCAAGCCCAGGAGCCCTTGCACAGCTTGTTGGAGGCCG
CTGAGGACCTGGCCCAGGAGCTCCTGGCGCTGCGCAGCCTGGTGGAGCTTCGGGCACTGCTGCAGAGACCCCGAG
GGACCAGCGGCCCCCTGGAGTTGCTGTCAGAGGCCCTCTGCAGTGTCAGGGGACCTAGCAGCACAGTGGGCCCCT
CCCTCAACTGGTACGAGGCTAGTGACCTGATGGAGCTGGTGGGGCAGGAGCCAGAATCCGCCCTGCCAGACAGCA
GCCTGAGCCCCGCCTGCTCGGAGCTGATTGGAGCCCTGGACAGCCACCCGCTGTCCCGCCTGCTCTGGAGACGCC
TGAAGCCTCTGATCCTCGGGAAGCTACTCTTTGCACCAGATACACCTTTTACCCGGAAGCTCATGGCCCAGGTCA
ACCGGACCTTCGAGGAGCTCACCCTGCTGAGGGATGTCCGGGAGGTGTGGGAGATGCTGGGACCCCGGATCTTCA
CCTTCATGAACGACAGTTCCAATGTGGCCATGCTGCAGCGGCTCCTGCAGATGCAGGATGAAGGAAGAAGGCAGC
CCAGACCTGGAGGCCGGGACCACATGGAGGCCCTGCGATCCTTTCTGGACCCTGGGAGCGGTGGCTACAGCTGGC
AGGACGCACACGCTGATGTGGGGCACCTGGTGGGCACGCTGGGCCGAGTGACGGAGTGCCTGTCCTTGGACAAGC
TGGAGGCGGCACCCTCAGAGGCAGCCCTGGTGTCGCGGGCCCTGCAACTGCTCGCGGAACATCGATTCTGGGCCG
GCGTCGTCTTCTTGGGACCTGAGGACTCTTCAGACCCCACAGAGCACCCAACCCCAGACCTGGGCCCCGGCCACG
TGCGCATCAAAATCCGCATGGACATTGACGTGGTCACGAGGACCAATAAGATCAGGGACAGGTTTTGGGACCCTG
GCCCAGCCGCGGACCCCCTGACCGACCTGCGCTACGTGTGGGGCGGCTTCGTGTACCTGCAAGACCTGGTGGAGC
GTGCAGCCGTCCGCGTGCTCAGCGGCGCCAACCCCCGGGCCGGCCTCTACCTGCAGCAGATGCCCTATCCGTGCT
ATGTGGACGACGTGTTCCTGCGTGTGCTGAGCCGGTCGCTGCCGCTCTTCCTGACGCTGGCCTGGATCTACTCCG
TGACACTGACAGTGAAGGCCGTGGTGCGGGAGAAGGAGACGCGGCTGCGGGACACCATGCGCGCCATGGGGCTCA
GCCGCGCGGTGCTCTGGCTAGGCTGGTTCCTCAGCTGCCTCGGGCCCTTCCTGCTCAGCGCCGCACTGCTGGTTC
TGGTGCTCAAGCTGGGAGACATCCTCCCCTACAGCCACCCGGGCGTGGTCTTCCTGTTCTTGGCAGCCTTCGCGG
TGGCCACGGTGACCCAGAGCTTCCTGCTCAGCGCCTTCTTCTCCCGCGCCAACCTGGCTGCGGCCTGCGGCGGCC
TGGCCTACTTCTCCCTCTACCTGCCCTACGTGCTGTGTGTGGCTTGGCGGGACCGGCTGCCCGCGGGTGGCCGCG
TGGCCGCGAGCCTGCTGTCGCCCGTGGCCTTCGGCTTCGGCTGCGAGAGCCTGGCTCTGCTGGAGGAGCAGGGCG
AGGGCGCGCAGTGGCACAACGTGGGCACCCGGCCTACGGCAGACGTCTTCAGCCTGGCCCAGGTCTCTGGCCTTC
TGCTGCTGGACGCGGCGCTCTACGGCCTCGCCACCTGGTACCTGGAAGCTGTGTGCCCAGGCCAGTACGGGATCC
CTGAACCATGGAATTTTCCTTTTCGGAGGAGCTACTGGTGCGGACCTCGGCCCCCCAAGAGTCCAGCCCCTTGCC
CCACCCCGCTGGACCCAAAGGTGCTGGTAGAAGAGGCACCGCCCGGCCTGAGTCCTGGCGTCTCCGTTCGCAGCC
TGGAGAAGCGCTTTCCTGGAAGCCCGCAGCCAGCCCTGCGGGGGCTCAGCCTGGACTTCTACCAGGGCCACATCA
CCGCCTTCCTGGGCCACAACGGGGCCGGCAAGACCACCACCCTGTCCATCTTGAGTGGCCTCTTCCCACCCAGTG
GTGGCTCTGCCTTCATCCTGGGCCACGACGTCCGCTCCAGCATGGCCGCCATCCGGCCCCACCTGGGCGTCTGTC
CTCAGTACAACGTGCTGTTTGACATGCTGACCGTGGACGAGCACGTCTGGTTCTATGGGCGGCTGAAGGGTCTGA
GTGCCGCTGTAGTGGGCCCCGAGCAGGACCGTCTGCTGCAGGATGTGGGGCTGGTCTCCAAGCAGAGTGTGCAGA
CTCGCCACCTCTCTGGTGGGATGCAACGGAAGCTGTCCGTGGCCATTGCCTTTGTGGGCGGCTCCCAAGTTGTTA
TCCTGGACGAGCCTACGGCTGGCGTGGATCCTGCTTCCCGCCGCGGTATTTGGGAGCTGCTGCTCAAATACCGAG
AAGGTCGCACGCTGATCCTCTCCACCCACCACCTGGATGAGGCAGAGCTGCTGGGAGACCGTGTGGCTGTGGTGG
CAGGTGGCCGCTTGTGCTGCTGTGGCTCCCCACTCTTCCTGCGCCGTCACCTGGGCTCCGGCTACTACCTGACGC
TGGTGAAGGCCCGCCTGCCCCTGACCACCAATGAGAAGGCTGACACTGACATGGAGGGCAGTGTGGACACCAGGC
AGGAAAAGAAGAATGGCAGCCAGGGCAGCAGAGTCGGCACTCCTCAGCTGCTGGCCCTGGTACAGCACTGGGTGC
CCGGGGCACGGCTGGTGGAGGAGCTGCCACACGAGCTGGTGCTGGTGCTGCCCTACACGGGTGCCCATGACGGCA
GCTTCGCCACACTCTTCCGAGAGCTAGACACGCGGCTGGCGGAGCTGAGGCTCACTGGCTACGGGATCTCCGACA
CCAGCCTCGAGGAGATCTTCCTGAAGGTGGTGGAGGAGTGTGCTGCGGACACAGATATGGAGGATGGCAGCTGCG

FIGURE 6888B

GGCAGCACCTATGCACAGGCATTGCTGGCCTAGACGTAACCCTGCGGCTCAAGATGCCGCCACAGGAGACAGCGC
TGGAGAACGGGGAACCAGCTGGGTCAGCCCCAGAGACTGACCAGGGCTCTGGGCCAGACGCCGTGGGCCGGGTAC
AGGGCTGGGCACTGACCCGCCAGCAGCTCCAGGCCCTGCTTCTCAAGCGCTTTCTGCTTGCCCGCCGCAGCCGCC
GCGGCCTGTTCGCCCAGATCGTGCTGCCTGCCCTCTTTGTGGGCCTGGCCCTCGTGTTCAGCCTCATCGTGCCTC
CTTTCGGGCACTACCCGGCTCTGCGGCTCAGTCCCACCATGTACGGTGCTCAGGTGTCCTTCTTCAGTGAGGACG
CCCCAGGGGACCCTGGACGTGCCCGGCTGCTCGAGGCGCTGCTGCAGGAGGCAGGACTGGAGGAGCCCCCAGTGC
AGCATAGCTCCCACAGGTTCTCGGCACCAGAAGTTCCTGCTGAAGTGGCCAAGGTCTTGGCCAGTGGCAACTGGA
CCCCAGAGTCTCCATCCCCAGCCTGCCAGTGTAGCCAGCCCGGTGCCCGGCGCCTGCTGCCCGACTGCCCGGCTG
CAGCTGGTGGTCCCCCTCCGCCCCAGGCAGTGACCGGCTCTGGGGAAGTGGTTCAGAACCTGACAGGCCGGAACC
TGTCTGACTTCCTGGTCAAGACCTACCCGCGCCTGGTGCGCCAGGGCCTGAAGACTAAGAAGTGGGTGAATGAGG
TCAGGTACGGAGGCTTCTCGCTGGGGGGCCGAGACCCAGGCCTGCCCTCGGGCCAAGAGTTGGGCCGCTCAGTGG
AGGAGTTGTGGGCGCTGCTGAGTCCCCTGCCTGGCGGGGCCCTCGACCGTGTCCTGAAAAACCTCACAGCCTGGG
CTCACAGCCTGGACGCTCAGGACAGTCTCAAGATCTGGTTCAACAACAAAGGCTGGCACTCCATGGTGGCCTTTG
TCAACCGAGCCAGCAACGCAATCCTCCGTGCTCACCTGCCCCCAGGCCGGGCCCGCCACGCCCACAGCATCACCA
CACTCAACCACCCCTTGAACCTCACCAAGGAGCAGCTGTTTGAGGCTGCATTGATGGCCTCCTCGGTGGACGTCC
TCGTCTCCATCTGTGTGGTCTTTGCCATGTCCTTTGTCCCGGCCAGCTTCACTCTTGTCCTCATTGAGGAGCGAG
TCACCCGAGCCAAGCACCTGCAGCTCATGGGGGGCCTGTCCCCCACCCTCTACTGGCTTGGCAACTTTCTCTGGG
ACATGTGTAACTACTTGGTGCCAGCATGCATCGTGGTGCTCATCTTTCTGGCCTTCCAGCAGAGGGCATATGTGG
CCCCTGCCAACCTGCCTGCTCTCCTGCTGTTGCTACTACTGTATGGCTGGTCGATCACACCGCTCATGTACCCAG
CCTCCTTCTTCTTCTCCGTGCCCAGCACAGCCTATGTGGTGCTCACCTGCATAAACCTCTTTATTGGCATCAATG
GAAGCATGGCCACCTTTGTGCTTGAGCTCTTCTCTGATCAGAAGCTGCAGGAGGTGAGCCGGATCTTGAAACAGG
TCTTCCTTATCTTCCCCCACTTCTGCTTGGGCCGGGGGCTTATTGACATGGTGCGGAACCAGGCCATGGCTGATG
CCTTTGAGCGCTTGGGAGACAGGCAGTTCCAGTCACCCCTGCGCTGGGAGGTGGTCGGCAAGAACCTCTTGGCCA
TGGTGATACAGGGGCCCCTCTTCCTTCTCTTCACACTACTGCTGCAGCACCGAAGCCAACTCCTGCCACAGCCCA
GGGTGAGGTCTCTGCCACTCCTGGGAGAGGAGGACGAGGATGTAGCCCGTGAACGGGAGCGGGTGGTCCAAGGAG
CCACCCAGGGGGATGTGTTGGTGCTGAGGAACTTGACCAAGGTATACCGTGGGCAGAGGATGCCAGCTGTTGACC
GCTTGTGCCTGGGGATTCCCCCTGGTGAGTGTTTTGGGCTGCTGGGTGTGAATGGAGCAGGGAAGACGTCCACGT
TTCGCATGGTGACGGGGGACACATTGGCCAGCAGGGGCGAGGCTGTGCTGGCAGGCCACAGCGTGGCCCGGGAAC
CCAGTGCTGCGCACCTCAGCATGGGATACTGCCCTCAATCCGATGCCATCTTTGAGCTGCTGACGGGCCGCGAGC
ACCTGGAGCTGCTTGCGCGCCTGCGCGGTGTCCCGGAGGCCCAGGTTGCCCAGACCGCTGGCTCGGGCCTGGCGC
GTCTGGGACTCTCATGGTACGCAGACCGGCCTGCAGGCACCTACAGCGGAGGGAACAAACGCAAGCTGGCGACGG
CCCTGGCGCTGGTTGGGGACCCAGCCGTGGTGTTTCTGGACGAGCCGACCACAGGCATGGACCCCAGCGCGCGGC
GCTTCCTTTGGAACAGCCTTTTGGCCGTGGTGCGGGAGGGCCGTTCAGTGATGCTCACCTCCCATAGCATGGAGG
AGTGTGAAGCGCTCTGCTCGCGCCTAGCCATCATGGTGAATGGGCGGTTCCGCTGCCTGGGCAGCCCGCAACATC
TCAAGGGCAGATTCGCGGCGGGTCACACACTGACCCTGCGGGTGCCCGCCGCAAGGTCCCAGCCGGCAGCGGCCT
TCGTGGCGGCCGAGTTCCCTGGGTCGGAGCTGCGCGAGGCACATGGAGGCCGCCTGCGCTTCCAGCTGCCGCCGG
GAGGGCGCTGCGCCCTGGCGCGCGTCTTTGGAGAGCTGGCGGTGCACGGCGCAGAGCACGGCGTGGAGGACTTTT
CCGTGAGCCAGACGATGCTGGAGGAGGTATTCTTGTACTTCTCCAAGGACCAGGGGAAGGACGAGGACACCGAAG
AGCAGAAGGAGGCAGGAGTGGGAGTGGACCCCGCGCCAGGCCTGCAGCACCCCAAACGCGTCAGCCAGTTCCTCG
ATGACCCTAGCACTGCCGAGACTGTGCTCTGAGCCTCCCTCCCCTGCGGGGCCGCGGGGAGGCCCTGGGAATGGC
AAGGGCAAGGTAGAGTGCCTAGGAGCCCTGGACTCAGGCTGGCAGAGGGGCTGGTGCCCTGGAGAAAATAAAGAG
AAGGCTGGAGAGAAGCCGTGGTGGTGAAA

FIGURE 6889

MVCLGTGQSAGPLVSVQNHCPPCGLSPQESLGLALGQAQEPLHSLLEAAEDLAQELLALRSLVELRALLQRPRGT
SGPLELLSEALCSVRGPSSTVGPSLNWYEASDLMELVGQEPESALPDSSLSPACSELIGALDSHPLSRLLWRRLK
PLILGKLLFAPDTPFTRKLMAQVNRTFEELTLLRDVREVWEMLGPRIFTFMNDSSNVAMLQRLLQMQDEGRRQPR
PGGRDHMEALRSFLDPGSGGYSWQDAHADVGHLVGTLGRVTECLSLDKLEAAPSEAALVSRALQLLAEHRFWAGV
VFLGPEDSSDPTEHPTPDLGPGHVRIKIRMDIDVVTRTNKIRDRFWDPGPAADPLTDLRYVWGGFVYLQDLVERA
AVRVLSGANPRAGLYLQQMPYPCYVDDVFLRVLSRSLPLFLTLAWIYSVTLTVKAVVREKETRLRDTMRAMGLSR
AVLWLGWFLSCLGPFLLSAALLVLVLKLGDILPYSHPGVVFLFLAAFAVATVTQSFLLSAFFSRANLAAACGGLA
YFSLYLPYVLCVAWRDRLPAGGRVAASLLSPVAFGFGCESLALLEEQGEGAQWHNVGTRPTADVFSLAQVSGLLL
LDAALYGLATWYLEAVCPGQYGIPEPWNFPFRRSYWCGPRPPKSPAPCPTPLDPKVLVEEAPPGLSPGVSVRSLE
KRFPGSPQPALRGLSLDFYQGHITAFLGHNGAGKTTTLSILSGLFPPSGGSAFILGHDVRSSMAAIRPHLGVCPQ
YNVLFDMLTVDEHVWFYGRLKGLSAAVVGPEQDRLLQDVGLVSKQSVQTRHLSGGMQRKLSVAIAFVGGSQVVIL
DEPTAGVDPASRRGIWELLLKYREGRTLILSTHHLDEAELLGDRVAVVAGGRLCCCGSPLFLRRHLGSGYYLTLV
KARLPLTTNEKADTDMEGSVDTRQEKKNGSQGSRVGTPQLLALVQHWVPGARLVEELPHELVLVLPYTGAHDGSF
ATLFRELDTRLAELRLTGYGISDTSLEEIFLKVVEECAADTDMEDGSCGQHLCTGIAGLDVTLRLKMPPQETALE
NGEPAGSAPETDQGSGPDAVGRVQGWALTRQQLQALLLKRFLLARRSRRGLFAQIVLPALFVGLALVFSLIVPPF
GHYPALRLSPTMYGAQVSFFSEDAPGDPGRARLLEALLQEAGLEEPPVQHSSHRFSAPEVPAEVAKVLASGNWTP
ESPSPACQCSQPGARRLLPDCPAAAGGPPPPQAVTGSGEVVQNLTGRNLSDFLVKTYPRLVRQGLKTKKWVNEVR
YGGFSLGGRDPGLPSGQELGRSVEELWALLSPLPGGALDRVLKNLTAWAHSLDAQDSLKIWFNNKGWHSMVAFVN
RASNAILRAHLPPGRARHAHSITTLNHPLNLTKEQLFEAALMASSVDVLVSICVVFAMSFVPASFTLVLIEERVT
RAKHLQLMGGLSPTLYWLGNFLWDMCNYLVPACIVVLIFLAFQQRAYVAPANLPALLLLLLLYGWSITPLMYPAS
FFFSVPSTAYVVLTCINLFIGINGSMATFVLELFSDQKLQEVSRILKQVFLIFPHFCLGRGLIDMVRNQAMADAF
ERLGDRQFQSPLRWEVVGKNLLAMVIQGPLFLLFTLLLQHRSQLLPQPRVRSLPLLGEEDEDVARERERVVQGAT
QGDVLVLRNLTKVYRGQRMPAVDRLCLGIPPGECFGLLGVNGAGKTSTFRMVTGDTLASRGEAVLAGHSVAREPS
AAHLSMGYCPQSDAIFELLTGREHLELLARLRGVPEAQVAQTAGSGLARLGLSWYADRPAGTYSGGNKRKLATAL
ALVGDPAVVFLDEPTTGMDPSARRFLWNSLLAVVREGRSVMLTSHSMEECEALCSRLAIMVNGRFRCLGSPQHLK
GRFAAGHTLTLRVPAARSQPAAAFVAAEFPGSELREAHGGRLRFQLPPGGRCALARVFGELAVHGAEHGVEDFSV
SQTMLEEVFLYFSKDQGKDEDTEEQKEAGVGVDPAPGLQHPKRVSQFLDDPSTAETVL

FIGURE 6890

ATGTCCAAGGCCTTGGCTTTCCTCTCATTTCCAGCGTATATGAGCAAGACACAGTGCTATCATACATCCCCCTGC
AGCTTTAAAAAGCAGCAGAAGCAAGCACTTCTAGCCAGACCCTCAAGCACCATCACTTACCTAACTGACAGCCCA
AAGCCAGCATTATGTGTAACTCTGGCAGGACTAATCCCCTTCGTTGCTCCACCACTGGTCATGCTGATGACAAAA
ACTTATATTCCCATATTAGCTTTTACTCAGATGGCTTATGGAGCCAGTTTCCTATCTTTCTTGGGTGGGATCAGA
TGGGGTTTTGCTCTACCAGAAGGTAGTCCAGCCAAACCAGACTACCTTAATTTAGCTAGCAGTGCAGCTCCTCTT
TTCTTTTCATGGTTTGCCTTCCTTATTTCTGAAAGACTTAGTGAAGCCATAGTCACAGTAATAATGGGTATGGGA
GTAGCATTCCACCTTGAACTTTTTCTCTTACCACATTATCCCAACTGGTTTAAAGCCCTGAGGATAGTAGTCACT
TTATTGGCCACTTTTTCATTTATAATCACTTTAGTAGTTAAAAGTAGTTTTCCAGAAAAAGGACATAAGAGACCT
GGTCAAGTATAA

FIGURE 6891

MSKALAFLSFPAYMSKTQCYHTSPCSFKKQQKQALLARPSSTITYLTDSPKPALCVTLAGLIPFVAPPLVMLMTK
TYIPILAFTQMAYGASFLSFLGGIRWGFALPEGSPAKPDYLNLASSAAPLFFSWFAFLISERLSEAIVTVIMGMG
VAFHLELFLLPHYPNWFKALRIVVTLLATFSFIITLVVKSSFPEKGHKRPGQV

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FIGURE 6892

ATTTCATGTTATACTTAATAAAACAAAACATACCTGTATACACACACATTCACTCACATTGAAGATGCAAGATGA
AGAAAGATACATGACATTGAATGTACAGTCAAAGAAAAGGAGTTCTGCCCAAACATCTCAACTTACATTTAAAGA
TTATTCAGTGACGTTGCACTGGTATAAAATCTTACTGGGAATATCTGGAACCGTGAATGGTATTCTCACTTTGAC
TTTGATCTCCTTGATCCTGTTGGATTCTTCATAAAGGGACCAGCTAAAGAAAACAGCTGTGCTGCCATTAAGGAA
AGCAAAATTTTCTCTGAAACCTGCAGCAGTGTTTTCAAATGGATTTGTCAGTATTAGAGTTTGACAAAATTCACA
GTGAAATAATCAATGATCACTATTTTTGGCCTATTAGTTTCTAATATTAATCTCCAGGTGTAAGATTTTAAAGTG
CAATTAAATGCCAAAATCTCTTCTCCCTTCTCCCTCCATCATCGACACTGGTCTAGCCTCAGAGTAACCCCTGTT
AACAAACTAAAATGTACACTTCAAAATTTTTACGTGATAGTATAAACCAATGTGACTTCATGTGATCATATCCAG
GATTTTTATTCGTCGCTTATTTTATGCCAAATGTGATCAAATTATGCCTGTTTTTCTGTATCTTGCGTTTTAAAT
TCTTAATAAGGTCCTAAACAAAATTTCTTATATTTCTAATGGTTGAATTATAATGTGGGTTTATACATTTTTTAC
CCTTTTGTCAAAGAGAATTAACTTTGTTTCCAGGCTTTTGCTACTCTTCACTCAGCTACAATAAACATCCTGAAT
GTTTTCTTAAAAAA

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FIGURE 6893

MQDEERYMTLNVQSKKRSSAQTSQLTFKDYSVTLHWYKILLGISGTVNGILTLTLISLILLDSS

FIGURE 6894

GGCACGAGTAGGGGTGGCGGGTCAGTGCTGCTCGGGGGCTTCTCCATCCAGGTCCCTGGAGTTCCTGGTCCCTGG
AGCTCCGCACTTGGCGCGCAACCTGCGTGAGGCAGCGCGACTCTGGCGACTGGCCGGCCATGCCTTCCCGGGCTG
AGGACTATGAAGTGTTGTACACCATTGGCACAGGCTCCTACGGCCGCTGCCAGAAGATCCGGAGGAAGAGTGATG
GCAAGATATTAGTTTGGAAAGAACTTGACTATGGCTCCATGACAGAAGCTGAGAAACAGATGCTTGTTTCTGAAG
TGAATTTGCTTCGTGAACTGAAACATCCAAACATCGTTCGTTACTATGATCGGATTATTGACCGGACCAATACAA
CACTGTACATTGTAATGGAATATTGTGAAGGAGGGGATCTGGCTAGTGTAATTACAAAGGGAACCAAGGAAAGGC
AATACTTAGATGAAGAGTTTGTTCTTCGAGTGATGACTCAGTTGACTCTGGCCCTGAAGGAATGCCACAGACGAA
GTGATGGTGGTCATACCGTATTGCATCGGGATCTTAAACCAGCCAATGTTTTCCTGGATGGCAAGCAAAACGTCA
AGCTTGGAGACTTTGGGCTAGCTAGAATATTAAACCATGACACGAGTTTTGCAAAAACATTTGTTGGCACACCTT
ATTACATGTCTCCTGAACAAATGAATCGCATGTCCTACAATGAGAAATCAGATATCTGGTCATTGGGCTGCTTGC
TGTATGAGTTATGTGCATTAATGCCTCCATTTACAGCTTTTAGCCAGAAAGAACTCGCTGGGAAAATCAGAGAAG
GCAAATTCAGGCGAATTCCATACCGTTACTCTGATGAATTGAATGAAATTATTACGAGGATGTTAAACTTAAAGG
ATTACCATCGACCTTCTGTTGAAGAAATTCTTGAGAACCCTTTAATAGCAGATTTGGTTGCAGACGAGCAAAGAA
GAAATCTTGAGAGAAGAGGGCGACAATTAGGAGAGCCAGAAAAATCGCAGGATTCCAGCCCTGTATTGAGTGAGC
TGAAACTGAAGGAAATTCAGTTACAGGAGCGAGAGCGAGCTCTCAAAGCAAGAGAAGAAAGATTGGAGCAGAAAG
AACAGGAGCTTTGTGTTCGTGAGAGACTAGCAGAGGACAAACTGGCTAGAGCAGAAAATCTGTTGAAGAACTACA
GCTTGCTAAAGGAACGGAAGTTCCTGTCTCTGGCAAGTAATCCAGAACTTCTTAATCTTCCATCCTCAGTAATTA
AGAAGAAAGTTCATTTCAGTGGGGAAAGTAAAGAGAACATCATGAGGAGTGAGAATTCTGAGAGTCAGCTCACAT
CTAAGTCCAAGTGCAAGGACCTGAAGAAAAGGCTTCACGCTGCCCAGCTGCGGGCTCAAGCCCTGTCAGATATTG
AGAAAAATTACCAACTGAAAAGCAGACAGATCCTGGGCATGCGCTAGCCAGGTAGAGAGACACAGAGCTGTGTAC
AGGATGTAATATTACCAACCTTTAAAGACTGATATTCAAATGCTGTAGTGTTGAATACTTGGCCCCATGAGCCAT
GCCTTTCTGTATAGTACACATGATATTTCGGAATTGGTTTTACTGTTCTTCAGCAACTATTGTACAAAATGTTCA
CATTTAATTTTTCTTTCTTCTTTTAAGAACATATTATAAAAAGAATACTTTCTTGGTTGGGCTTTTAATCCTGTG
TGTGATTACTAGTAGGAACATGAGATGTGACATTCTAAATCTTGGGAGAAAAAATAATATTAGGAAAAAAATATT
TATGCAGGAAGAGTAGCACTCACTGAATAGTTTTAAATGACTGAGTGGTATGCTTACAATTGTCATGTCTAGATT
TAAATTTTAAGTCTGAGATTTTAAATGTTTTTGAGCTTAGAAAACCCAGTTAGATGCAATTTGGTCATTAATACC
ATGACATCTTGCTTATAAATATTCCATTGCTCTGTAGTTCAAATCTGTTAGCTTTGTGAAAATTCATCACTGTGA
TGTTTGTATTCTTTTTTTTTTTCTGTTTAACAGAATATGAGCTGTCTGTCATTTACCTACTTCTTTCCCACTAAA
TAAAAGAATTCTTCAGTTA

FIGURE 6895

MPSRAEDYEVLYTIGTGSYGRCQKIRRKSDGKILVWKELDYGSMTEAEKQMLVSEVNLLRELKHPNIVRYYDRII
DRTNTTLYIVMEYCEGGDLASVITKGTKERQYLDEEFVLRVMTQLTLALKECHRRSDGGHTVLHRDLKPANVFLD
GKQNVKLGDFGLARILNHDTSFAKTFVGTPYYMSPEQMNRMSYNEKSDIWSLGCLLYELCALMPPFTAFSQKELA
GKIREGKFRRIPYRYSDELNEIITRMLNLKDYHRPSVEEILENPLIADLVADEQRRNLERRGRQLGEPEKSQDSS
PVLSELKLKEIQLQERERALKAREERLEQKEQELCVRERLAEDKLARAENLLKNYSLLKERKFLSLASNPELLNL
PSSVIKKKVHFSGESKENIMRSENSESQLTSKSKCKDLKKRLHAAQLRAQALSDIEKNYQLKSRQILGMR

FIGURE 6896A

GAATTCGGCACGAGGTCACCCGGATAGGTAAAGGAAAACATGCCTGCCACACGGAAGCCAATGAGATATGGGCAT
ACAGAGGGACACACGGAGGTCTGTTTTGATGATTCTGGGAGTTTTATTGTGACTTGTGGAAGTGATGGTGATGTG
AGGATTTGGGAAGACTTGGATGATGATGATCCTAAGTTCATTAATGTTGGAGAAAAGGCATATTCATGTGCTTTG
AAGAGTGGAAAACTGGTCACTGCAGTTTCTAATAATACTATTCAAGTCCACACATTTCCTGAAGGAGTTCCAGAT
GGTATATTGACTCGCTTCACTACAAATGCAAACCATGTGGTCTTTAATGGGGATGGTACTAAAATTGCTGCTGGA
TCTAGTGATTTTCTAGTCAAAATTGTGGATGTGATGGATAGCAGCCAACAGAAAACATTTCGAGGACATGATGCC
CCTGTTTTAAGTCTTTCCTTTGATCCTAAGGACATCTTTCTGGCATCAGCTAGTTGTGATGGATCTGTCAGAGTG
TGGCAAATTTCAGATCAGACATGTGCTATTAGTTGGCCACTGCTACAAAAATGCAACGATGTGATAAATGCAAAA
TCAATCTGCAGACTTGCTTGGCAGCCAAAAAGTGGGAAGTTACTGGCAATTCCTGTGGAAAAATCTGTTAAGCTA
TATAGAAGAGAATCTTGGAGTCATCAATTTGATCTTTCAGATAATTTCATCTCTCAGACCCTCAATATAGTAACC
TGGTCTCCCTGTGGGCAATATTTAGCTGCAGGTAGTATTAATGGTCTAATCATAGTTTGGAATGTGGAAACCAAA
GACTGCATGGAAAGGGTGAAACATGAGAAAGGTTATGCAATTTGTGGTCTGGCATGGCATCCTACTTGTGGTCGA
ATATCGTATACTGATGCGGAAGGAAATCTAGGGCTTCTAGAGAATGTTTGTGACCCCAGTGGAAAGACATCAAGC
AGTAAGGTATCTAGCAGAGTGGAAAAGGATTATAATGATCTTTTTGATGGAGATGATATGAGTAATGCTGGTGAT
TTTCTAAATGACAATGCAGTTGAGATCCCTTCTTTTTCAAAAGGGATTATAAATGATGATGAGGATGATGAAGAC
CTCATGATGGCTTCAGGTCGTCCTAGACAGCGAAGTCACATCCTAGAAGATGATGAAAACTCAGTTGATATTTCA
ATGCTAAAAACTGGTTCTAGTCTTCTCAAAGAGGAGGAGGAAGATGGTCAAGAAGGCAGCATTCACAATCTACCA
CTTGTAACATCCCAAAGGCCATTTTATGATGGACCCATGCCAACTCCCCGGCAAAAGCCATTTCAGTCAGGTTCT
ACACCGTTGCATCTCACTCACAGATTCATGGTGTGGAACTCTATTGGAATTATTCGCTGCTATAATGATGAGCAA
GACAATGCCATAGATGTGGAGTTCCATGATACCTCCATACACCATGCAACACACTTATCAAACACTTTGAATTAT
ACAATAGCAGATCTTTCCCACGAAGCTATTTTGTTGGCATGTGAAAGCACTGATGAACTAGCAAGCAAGCTTCAC
TGCCTGCACTTTAGTTCTTGGGATTCAAGCAAAGAGTGGATAATAGACTTGCCTCAGAATGAGGATATTGAAGCC
ATATGTCTCGGTCAAGGATGGGCTGCTGCCGCTACTAGTGCCCTGCTTCTTCGATTGTTTACTATTGGAGGGGTT
CAAAAAGAGGTATTCAGCCTTGCTGGACCTGTGGTGTCAATGGCAGGACATGGAGAACAGCTTTTCATTGTTTAT
CACAGAGGTACAGGATTTGATGGGGATCAGTGCCTTGGAGTTCAACTGCTAGAGCTGGGGAAAAAGAAAAAACAA
ATTTTGCATGGTGACCCTCTTCCTCTTACAAGGAAATCCTACCTTGCATGGATTGGGTTTTCAGCTGAAGGTACC
CCTTGTTACGTGGATTCAGAAGGAATTGTTCGAATGCTTAACAGAGGACTTGGTAATACGTGGACTCCTATATGT
AATACAAGAGAGCACTGCAAAGGAAAATCTGATCACTACTGGGTGGTTGGTATCCATGAAAATCCCCAGCAACTA
AGGTGCATTCCTTGTAAAGGTTCTCGGTTTCCCCCAACCCTTCCACGCCCTGCTGTTGCTATATTATCCTTTAAG
CTTCCTTACTGTCAGATTGCAACAGAGAAAGGACAAATGGAGGAGCAATTTTGGCGTTCAGTTATATTTCACAAC
CACCTTGATTATTTAGCTAAAAATGGTTATGAATATGAAGAGAGCACTAAAAATCAAGCAACAAAAGAGCAACAG
GAACTTTTAATGAAAATGCTTGCGCTTTCTTGTAAACTGGAGCGAGAATTCCGTTGTGTGGAACTTGCTGATCTA
ATGACTCAAAATGCTGTGAATTTAGCCATTAAATATGCTTCTCGCTCTCGGAAATTAATACTGGCTCAAAAACTA
AGTGAACTGGCTGTAGAGAAGGCAGCCGAATTGACAGCAACCCAGGTGGAAGAGGAAGAAGAAGAAGAAGATTTC
AGAAAAAAGCTGAATGCTGGTTACAGCAATACTGCTACAGAGTGGAGCCAACCAAGGTTCAGAAATCAAGTTGAA
GAAGATGCTGAGGACAGTGGAGAAGCTGATGATGAAGAAAAACCAGAAATACATAAGCCTGGACAGAACTCGTTT
TCCAAAAGTACAAATTCCTCTGATGTTTCAGCTAAGTCAGGTGCAGTTACCTTTAGCAGCCAAGGACGAGTAAAT
CCCTTTAAGGTATCAGCCAGTTCCAAAGAACCAGCCATGTCAATGAATTCAGCACGTTCAACTAATATTTTAGAC
AATATGGGCAAATCATCCAAGAAATCCACTGCACTTAGTCGAACTACAAATAATGAAAAGTCTCCCATTATAAAG
CCTCTGATTCCAAAGCCGAAGCCTAAGCAGGCATCTGCAGCATCCTATTTCCAGAAAAGAAATTCTCAAACTAAT
AAAACTGAGGAAGTGAAAGAAGAAAATCTTAAAAATGTATTATCTGAAACCCCAGCTATATGTCCTCCTCAAAAC
ACTGAAAACCAAAGGCCAAAGACCGGGTTCCAGATGTGGTTAGAAGAAAATAGAAGTAATATTTTGTCTGACAAT
CCTGACTTTTCAGATGAAGCAGACATAATAAAAGAAGGAATGATTCGATTTAGAGTATTGTCAACTGAAGAAAGA
AAGGTGTGGGCTAACAAAGCCAAAGGAGAAACGGCAAGTGAAGGAACTGAAGCAAAGAAGCGAAAACGTGTGGTT
GATGAAAGTGATGAAACAGAAAACCAGGAAGAAAAAGCAAAAGAGAACCTGAATTTGTCTAAAAAGCAGAAACCT
TTAGATTTTTCTACAAATCAGAAACTATCAGCTTTTGCATTTAAGCAGGAGTAAAGGAAGAAAGTGACCCTAGGG
AAGTAATGGATTTTTTTTACTCATCTTTGAATATAGACTCGAGTCTTTGGGAAACTCATTATATATATATTTTTT
AAAGAGTTTGAAGCAACTGTTTGTCTTTATAAGATAATGTAGTAATTATATTGGTGTAGGTAACAGGACATATGT

FIGURE 6896B

AAAAACTATCATCTTTGCAGATTACTCTGCCTCCAAATGCAGGGCCTTTCAGAGATGCATTGTGATTGTAATTAC
TGAGTTGAAGCTCCAACCAATTTGAATTTGTTTCTTAACCTTGAAAAATCATTAAAGCCAAGGTATTAAAACCTT
TGTGCATTAATACCTTCTAGGGGTTTGGTTCATTTGGTTTTTGTCATGTGCAAGGAAGGACAATAGTCCTCTTTC
CAAGTGTGTTAGCATAGACTTCTCTATATGTTTCTACTAGACCTAGGGGATGACGTCTTTTAATAATACTGGCCC
TAAACATGTAAATAATCTTGTAGGTGAGACTTTTTCTTTTGTGTTTCGGAAATTTCCTATGTGGCTTTCAGTTGT
CTGTTTGTATAGCCTGGATTTTTTTGAGGTAAATGAAACTTTCTCATTTGTAAAAAAAAAAAAAAAAAACTCGAG

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FIGURE 6897

MPATRKPMRYGHTEGHTEVCFDDSGSFIVTCGSDGDVRIWEDLDDDDPKFINVGEKAYSCALKSGKLVTAVSNNT
IQVHTFPEGVPDGILTRFTTNANHVVFNGDGTKIAAGSSDFLVKIVDVMDSSQQKTFRGHDAPVLSLSFDPKDIF
LASASCDGSVRVWQISDQTCAISWPLLQKCNDVINAKSICRLAWQPKSGKLLAIPVEKSVKLYRRESWSHQFDLS
DNFISQTLNIVTWSPCGQYLAAGSINGLIIVWNVETKDCMERVKHEKGYAICGLAWHPTCGRISYTDAEGNLGLL
ENVCDPSGKTSSSKVSSRVEKDYNDLFDGDDMSNAGDFLNDNAVEIPSFSKGIINDDEDDEDLMMASGRPRQRSH
ILEDDENSVDISMLKTGSSLLKEEEEDGQEGSIHNLPLVTSQRPFYDGPMPTPRQKPFQSGSTPLHLTHRFMVWN
SIGIIRCYNDEQDNAIDVEFHDTSIHHATHLSNTLNYTIADLSHEAILLACESTDELASKLHCLHFSSWDSSKEW
IIDLPQNEDIEAICLGQGWAAAATSALLLRLFTIGGVQKEVFSLAGPVVSMAGHGEQLFIVYHRGTGFDGDQCLG
VQLLELGKKKKQILHGDPLPLTRKSYLAWIGFSAEGTPCYVDSEGIVRMLNRGLGNTWTPICNTREHCKGKSDHY
WVVGIHENPQQLRCIPCKGSRFPPTLPRPAVAILSFKLPYCQIATEKGQMEEQFWRSVIFHNHLDYLAKNGYEYE
ESTKNQATKEQQELLMKMLALSCKLEREFRCVELADLMTQNAVNLAIKYASRSRKLILAQKLSELAVEKAAELTA
TQVEEEEEEEDFRKKLNAGYSNTATEWSQPRFRNQVEEDAEDSGEADDEEKPEIHKPGQNSFSKSTNSSDVSAKS
GAVTFSSQGRVNPFKVSASSKEPAMSMNSARSTNILDNMGKSSKKSTALSRTTNNEKSPIIKPLIPKPKPKQASA
ASYFQKRNSQTNKTEEVKEENLKNVLSETPAICPPQNTENQRPKTGFQMWLEENRSNILSDNPDFSDEADIIKEG
MIRFRVLSTEERKVWANKAKGETASEGTEAKKRKRVVDESDETENQEEKAKENLNLSKKQKPLDFSTNQKLSAFA
FKQE

FIGURE 6898

ATGGAAGGATCCGAGCCTGTGGCCGCCCATCAGGGGGAAGAGGCGTCCTGTTCTTCCTGGGGGACTGGCAGCACA
AATAAAAATTTGCCCATTATGTCAACAGCATCTGTGGAAATCGATGATGCATTGTATAGTCGACAGAGGTACGTT
CTTGGAGACACAGCAATGCAGAAGATGGCCAAGTCCCATGTTTTCTTAAGTGGGATGGGTGGTCTTGGTTTGGAA
ATTGCAAAGAATCTTGTTCTTGCAGGGATTAAGGCAGTTACAATTCATGATACAGAAAAATGCCAAGCATGGGAT
CTAGGAACCAACTTCTTTCTCAGTGAAGATGATGTTGTTAATAAGAGAAACAGGGCTGAAGCTGTACTTAAACAT
ATTGCAGAACTAAATCCATACGTTCATGTCACATCATCTTCTGTTCCTTTCAATGAGACCACAGATCTCTCCTTT
TTAGATAAATACCAGTGTGTAGTATTGACTGAGATGAAACTTCCATTGCAGAAGAAGATCAATGACTTTTGCCGT
TCTCAGTGCCCTCCAATTAAGTTTATCAGTGCAGATGTACATGGAATTTGGTCAAGGTTATTTTGTGATTTCGGT
GATGAATTTGAAGTTTTAGATACAACAGGAGAAGAACCAAAAGAAATTTTCATTTCAAACATAACGCAAGCAAAT
CCTGGCATTGTTACTTGCCTTGAAAATCATCCTCACAAACTGGAGACAGGACAATTCCTAACATTTCGAGAAATT
AATGGAATGACAGGTTTAAATGGATCTATACAACAAATAACGGTGATATCGCCATTTTCTTTTAGTATTGGTGAC
ACCACAGAACTGGAACCATATTTACATGGAGGCATAGCTGTCCAAGTTAAGACTCCTAAAACAGTTTTTTTTGAA
TCACTGGAGAGGCAGTTAAAACATCCAAAGTGCCTTATTGTGGATTTTAGCAACCCTGAGGCACCTTTAGAGATT
CACACAGCTATGCTTGCCTTGGACCAGTTTCAGGAGAAATACAGTCGCAAGCCAAATGTTGGATGCCAACAAGAT
TCAGAAGAACTGTTGAAACTAGCAACATCTATAAGTGAAACCTTGGAAGAGAAGCCTGATGTAAATGCTGACATT
GTGCATTGGCTCTCTTGGACTGCCCAAGGCTTTTTATCTCCACTTGCTGCAGCAGTAGGAGGTGTTGCCAGCCAA
GAAGTATTGAAAGCTGTAACAGGAAAATTTTCTCCTTTGTGCCAGTGGTTATATCTTGAAGCAGCAGATATTGTT
GAATCACTAGGCAAACCTGAATGTGAAGAATTTCTCCCACGAGGAGATAGATATGATGCCTTAAGAGCTTGCATT
GGAGACACTTTGTGTCAGAAACTGCAAAATTTAAACATCTTCTTAGTAGGGTGTGGAGCCATAGGCTGTGAAATG
TTGAAAAATTTTGCTTTACTTGGTGTTGGCACAAGCAAAGAGAAAGGAATGATTACAGTTACAGATCCTGACTTG
ATAGAGAAATCCAACTTAAATAGACAGTTCCTATTTCGTCCTCATCACATACAGAAACCTAAAAGCTACACTGCT
GCTGATGCTACTCTGAAAATAAATTCTCAAATAAAGATAGATGCACACCTGAACAAAGTATGTCCAACCACTGAG
ACCATTTACAATGATGAGTTCTATACTAAACAAGATGTAATTATTACAGCATTAGATAATGTGGAAGCCAGGAGA
TACGTAGACAGTCGTTGCTTAGCAAATCTAAGGCCTCTTTTAGATTCTGGAACAATGGGCACTAAGGGACACACT
GAAGTTATTGTACCGCATTTGACTGAGTCTTACAATAGTCATCGGGATCCCCCAGAAGAGGAAATACCATTTTGT
ACTCTAAAATCCTTTCCAGCTGCTATTGAACATACCATACAGTGGGCAAGAGATAAGTTTGAAAGTTCCTTTTCC
CACAAACCTTCATTGTTTAACAAATTTTGGCAAACCTATTCATCTGCAGAAGAAGTCTTACAGAAGATACAGAGT
GGACACAGTTTAGAAGGCTGTTTTCAAGTTATAAAGTTACTTAGCAGAAGACCTAGAAATTGGTCCCAGTGTGTA
GAATTAGCAAGATTAAAGTTTGAAAAATATTTTAACCATAAGGCTCTTCAGCTTCTTCACTGTTTCCCTCTGGAC
ATACGATTAAAAGATGGCAGTTTATTTTGGCAGTCACCAAAGAGGCCACCCTCTCCAATAAAATTTGATTTAAAT
GAGCCTTTGCACCTCAGTTTCCTTCAGAATGCTGCAAAACTATATGCTACAGTATATTGTATTCCATTTGCAGAA
GAGGACTTATCAGCAGATGCCCTCTTGAATATTCTTTCAGAAGTAAAGATTCAGGAATTCAAGCCTTCCAATAAG
GTTGTTCAAACAGATGAAACTGCAAGGAAACCAGACCATGTTCCTATTAGCAGTGAAGATGAGAGGAATGCAATT
TTCCAACTAGAAAAGGCTATTTTATCTAATGAAGCCACCAAAAGTGACCTTCAGATGGCAGTGCTTTCATTTGAA
AAAGATGATGATCATAATGGACACATAGATTTCATCACAGCTGCATCAAATCTTCGTGCCAAAATGTACAGCATT
GAACCAGCTGACCGTTTCAAAACAAAGCGCATAGCTGGTAAAATTATACCTGCTATAGCAACAACCACTGCTACA
GTTTCTGGCTTGGTTGCCTTGGAGATGATCAAAGTAACTGGTGGCTATCCATTTGAAGTTTACAAAAATTGTTTT
CTTAACTTAGCCATTCCAATTGTAGTATTTACAGAGACAACTGAAGTAAGGAAAACTAAAATCAGAAATGGAATA
TCATTTACAATTTGGGATCGATGGACCGTACATGGAAAAGAAGATTTCACCCTCTTGGATTTCATAAATGCAGTC
AAAGAGAAGTATGGAATTGAGCCAACAATGGTGGTACAGGGAGTCAAAATGCTTTATGTTCCTGTAATGCCTGGT
CATGCAAAAAGATTGAAGTTAACAATGCATAAACTTGTAAAACCTACTACTGAAAAGAAATATGTGGATCTTACT
GTGTCATTTGCTCCAGACATTGATGGAGATGAAGATTTGCCGGGACCTCCAGTAAGATACTACTTCAGTCATGAC
ACTGATTAA

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FIGURE 6899

MEGSEPVAAHQGEEASCSSWGTGSTNKNLPIMSTASVEIDDALYSRQRYVLGDTAMQKMAKSHVFLSGMGGLGLE
IAKNLVLAGIKAVTIHDTEKCQAWDLGTNFFLSEDDVVNKRNRAEAVLKHIAELNPYVHVTSSSVPFNETTDLSF
LDKYQCVVLTEMKLPLQKKINDFCRSQCPPIKFISADVHGIWSRLFCDFGDEFEVLDTTGEEPKEIFISNITQAN
PGIVTCLENHPHKLETGQFLTFREINGMTGLNGSIQQITVISPFSFSIGDTTELEPYLHGGIAVQVKTPKTVFFE
SLERQLKHPKCLIVDFSNPEAPLEIHTAMLALDQFQEKYSRKPNVGCQQDSEELLKLATSISETLEEKPDVNADI
VHWLSWTAQGFLSPLAAAVGGVASQEVLKAVTGKFSPLCQWLYLEAADIVESLGKPECEEFLPRGDRYDALRACI
GDTLCQKLQNLNIFLVGCGAIGCEMLKNFALLGVGTSKEKGMITVTDPDLIEKSNLNRQFLFRPHHIQKPKSYTA
ADATLKINSQIKIDAHLNKVCPTTETIYNDEFYTKQDVIITALDNVEARRYVDSRCLANLRPLLDSGTMGTKGHT
EVIVPHLTESYNSHRDPPEEEIPFCTLKSFPAAIEHTIQWARDKFESSFSHKPSLFNKFWQTYSSAEEVLQKIQS
GHSLEGCFQVIKLLSRRPRNWSQCVELARLKFEKYFNHKALQLLHCFPLDIRLKDGSLFWQSPKRPPSPIKFDLN
EPLHLSFLQNAAKLYATVYCIPFAEEDLSADALLNILSEVKIQEFKPSNKVVQTDETARKPDHVPISSEDERNAI
FQLEKAILSNEATKSDLQMAVLSFEKDDDHNGHIDFITAASNLRAKMYSIEPADRFKTKRIAGKIIPAIATTTAT
VSGLVALEMIKVTGGYPFEVYKNCFLNLAIPIVVFTETTEVRKTKIRNGISFTIWDRWTVHGKEDFTLLDFINAV
KEKYGIEPTMVVQGVKMLYVPVMPGHAKRLKLTMHKLVKPTTEKKYVDLTVSFAPDIDGDEDLPGPPVRYYFSHD
TD

FIGURE 6900

GGGGCAGCGCAGGGCAGACGGCGGCAGGAGAAGCAAGATGAATGCAGGCTCAGATCCTGTGGTCATCGTCTCGGC
GGCGCGGACCATCATAGGTTCCTTCAATGGTGCCTTAGCTGCTGTTCCTGTCCAGGACCTGGGCTCCACTGTCAT
CAAAGAAGTCTTGAAGAGGGCCACTGTGGCTCCGGAAGATGTGTCTGAGGTCATCTTTGGACATGTCTTGGCAGC
AGGCTGTGGGCAGAATCCTGTTAGACAAGCCAGTGTGGGTGCAGGAATTCCCTACTCTGTTCCAGCATGGAGCTG
CCAGATGATCTGTGGGTCAGGCCTAAAAGCTGTGTGCCTTGCAGTCCAGTCAATAGGGATAGGAGACTCCAGCAT
TGTGGTTGCAGGAGGCATGGAAAATATGAGCAAGGCTCCTCACTTGGCTTACTTGAGAACAGGAGTAAAGATAGG
TGAGATGCCACTGACTGACAGTATACTCTGTGATGGTCTTACAGATGCATTTCACAACTGTCATATGGGTATTAC
AGCTGAAAATGTAGCCACAAAATGGCAAGTGAGTAGAGAAGATCAGGACAAGGTTGCAGTTCTGTCCCAGAACAG
GACAGAGAATGCACAGAAAGCTGGCCATTTTGACAAAGAGATTGTACCAGTTTTGGTGTCAACTAGAAAAGGTCT
TATTGAAGTTAAAACAGATGAGTTTCCTCGCCATGGGAGCAACATAGAAGCCATGTCCAAGCTAAAGCCTTACTT
TCTTACTGATGGAACGGGAACAGTCACCCCAGCCAATGCTTCAGGAATAAATGATGGTGCTGCAGCTGTTGCTCT
TATGAAGAAGTCAGAAGCTGATAAACGTGGGCTTACACCTTTAGCACGGATAGTTTCCTGGTCCCAAGTGGGTGT
GGAGCCTTCCATTATGGGAATAGGACCAATTCCAGCCATAAAGCAAGCTGTTACAAAAGCAGGTTGGTCACTGGA
AGATGTTGACATATTTGAAATCAATGAAGCCTTTGCAGCTGTCTCTGCTGCAATAGTTAAAGAACTTGGATTAAA
CCCAGAGAAGGTCAATATTGAAGGAGGGGCTATAGCCTTGGGCCACCCTCTTGGAGCATCTGGCTGTCGAATTCT
TGTGACCCTGTTACACACACTGGAGAGAATGGGCAGAAGTCGTGGTGTTGCAGCCCTGTGCATTGGGGGTGGGAT
GGGAATAGCAATGTGTGTTCAGAGAGAATGACAATGTGTGTTCAGAGAGAATGAATTGCTTAAACTTTGAACAAC
CTCAATTTCTTTTTAAACTAATAAAGTACTAGGTTGCAATATGTGAAATCAGAGGACCAAAGTACAGATGGAAAC
CATTTCCTACATCACAAAAACCCAAGTTTACAGCTTGTACTTTACTTTAATGTGTAATACTCAACTCACGGTACA
AGACAATTGCATTTAACATTGTTATAAATAAAAGGAACATCAGATCAATCATTAAAAAAAAAAAA

FIGURE 6901

MNAGSDPVVIVSAARTIIGSFNGALAAVPVQDLGSTVIKEVLKRATVAPEDVSEVIFGHVLAAGCGQNPVRQASV
GAGIPYSVPAWSCQMICGSGLKAVCLAVQSIGIGDSSIVVAGGMENMSKAPHLAYLRTGVKIGEMPLTDSILCDG
LTDAFHNCHMGITAENVATKWQVSREDQDKVAVLSQNRTENAQKAGHFDKEIVPVLVSTRKGLIEVKTDEFPRHG
SNIEAMSKLKPYFLTDGTGTVTPANASGINDGAAAVALMKKSEADKRGLTPLARIVSWSQVGVEPSIMGIGPIPA
IKQAVTKAGWSLEDVDIFEINEAFAAVSAAIVKELGLNPEKVNIEGGAIALGHPLGASGCRILVTLLHTLERMGR
SRGVAALCIGGGMGIAMCVQRE

FIGURE 6902

CAGTGCCAGGCTGGAGGCGGCAGCGGTTGGAGGCTTCGCCCGGCTTTGCAGCGGGGACTTCGGCGGCGGCGCCTC
AGGCACCTCGGCCCGGACACG**ATG**AGGCGAGTGGTACGACAGAGCAAGTTTCGGCATGTATTTGGGCAAGCGGTG
AAAAATGACCAGTGCTATGATGACATCCGGGTTTCTCGTGTGACCTGGGATAGTTCCTTTTGTGCTGTCAATCCC
AGATTTGTTGCCATAATCATAGAGGCAAGTGGGGGAGGAGCGTTCCTTGTCCTCCCTCTGCACAAGACTGGTCGA
ATTGACAAATCTTACCCTACAGTATGTGGCCACACAGGACCAGTGCTGGACATAGACTGGTGCCCACATAACGAT
CAGGTCATTGCCAGCGGTTCAGAGGACTGCACGGTCATGGTATGGCAGATCCCAGAAAATGGACTCACCCTTTCC
CTGACTGAACCTGTGGTGATTTTGGAAGGCCACTCAAAGAGAGTCGGCATCGTGGCTTGGCATCCAACGGCCCGC
AATGTGCTTCTTAGTGCAGGCTGTGATAATGCCATTATCATCTGGAATGTGGGAACAGGGGAAGCCCTTATAAAC
TTGGACGATATGCATTCAGACATGATTTACAATGTGAGCTGGAACCGGAATGGCAGTCTGATCTGCACAGCTTCC
AAAGACAAGAAAGTGAGAGTCATTGATCCCAGGAAACAAGAGATTGTTGCTGAGAAGGAGAAAGCACATGAAGGA
GCAAGACCCATGAGAGCCATCTTCCTGGCCGATGGCAATGTCTTCACCACTGGGTTCAGCCGCATGAGCGAGCGG
CAGCTGGCTCTCTGGAATCCGAAAAATATGCAGGAACCAATTGCTCTTCATGAGATGGACACTAGCAATGGGGTG
TTGCTGCCTTTCTATGACCCTGACACCAGCATCATTTACTTATGTGGAAAGGGTGACAGCAGTATTCGCTATTTT
GAGATCACGGATGAATCCCCGTACGTCCACTACCTCAACACATTCAGCAGCAAGGAGCCTCAGAGAGGGATGGGT
TACATGCCCAAGAGGGGACTTGATGTTAACAAATGTGAGATTGCCAGATTCTTCAAACTTCATGAGAGAAAGTGT
GAACCTATTATTATGACTGTTCCCAGGAAGTCTGACCTTTTCCAAGATGACCTGTATCCTGACACAGCGGGGCCA
GAGGCCGCGCTGGAGGCAGAAGAGTGGTTCGAAGGCAAGAATGCAGACCCAATCCTCATCTCCTTGAAGCACGGG
TACATTCCAGGCAAAAACAGGGATCTCAAGGTGGTCAAGAAGAACATTCTGGATAGCAAGCCCACTGCAAACAAG
AAGTGCGACCTGATCAGCATCCCCAAGAAAACCACAGACACGGCCAGTGTGCAAAATGAAGCCAAGTTGGATGAG
ATTTTAAAAGAGATCAAATCTATAAAAGACACAATCTGCAATCAAGATGAGCGTATTTCCAAGTTAGAACAGCAG
ATGGCAAAGATAGCAGCC**TGA**AGGTCCCACCCCCACCCCTACAGAAAAAATGGGAGCAAGAACTTGTGCTTGGGA
GCTGGTTATTGGTGTGGTCCTAGGGAGGGCGGAAAGGGAGGCACTGCCATTTGGAGACATTCCATTTCAGATTTG
TCAACCAGCGATAGGCCACATTCCAGTAAGAACTCAATTTGTCTCCCAAATTTGCAGAAACAAAACGTGATTTAA
AAGCTGAGCTTTTTATCAGAAAGCTTTTTTGATGTTTTAAGTGTTATGTGACTTGTTGAACTTTTTAAAAAGTGC
TACTTTTAAAATCCCAGATACTCTGAATTTTAGAAAACAAACTAATTCTGATTGTGTCGTGCCCAAGTACCCTTT
TTTTTTTAATGAATAGGGACCAATGCCACATTGCTTTTTATATTTCTTTCTTTTTTAATGTTGCCAAAACCAAAA
GTAGCTTTGTTTTCCTTTGTATTTTGCTACTTTGCAGTATTTGTGTGTGTGGTTTTTTTTCCTTAATTTGAAAGG
GACAGCACTGTGTATGTTTATAAACTAAATGAAGATAAGATATTATTTTGTATAAACATTCATCTGAGAACAATC
AAAGCAGTAGCCACATGGTGCTGGCTCCTTTGCAGCACAAACCTGGTCATTTTGATGACTGTACAACAGGAAGAC
TTGAAAAATCACGTGGATTCATATTACCACCGCTCTCATTTCATGGAGTCTTCTGATCAAAAAAGCTCACGTCGT
ATTTCTTCTTTTCCTTTCTCTTTTCTAGAAATTGGGTGTTTGTACCAGAATGGAATTTTGCTTCTCGGTTATCCT
GTGCTTCAGATGATTATAATCTAACCC

FIGURE 6903

MRRVVRQSKFRHVFGQAVKNDQCYDDIRVSRVTWDSSFCAVNPRFVAIIIEASGGGAFLVLPLHKTGRIDKSYPT
VCGHTGPVLDIDWCPHNDQVIASGSEDCTVMVWQIPENGLTLSLTEPVVILEGHSKRVGIVAWHPTARNVLLSAG
CDNAIIIWNVGTGEALINLDDMHSDMIYNVSWNRNGSLICTASKDKKVRVIDPRKQEIVAEKEKAHEGARPMRAI
FLADGNVFTTGFSRMSERQLALWNPKNMQEPIALHEMDTSNGVLLPFYDPDTSIIYLCGKGDSSIRYFEITDESP
YVHYLNTFSSKEPQRGMGYMPKRGLDVNKCEIARFFKLHERKCEPIIMTVPRKSDLFQDDLYPDTAGPEAALEAE
EWFEGKNADPILISLKHGYIPGKNRDLKVVKKNILDSKPTANKKCDLISIPKKTTDTASVQNEAKLDEILKEIKS
IKDTICNQDERISKLEQQMAKIAA

FIGURE 6904A

GGCACGAGTGGCGGAAAGGCTGCGGCCCCGCGCCAGAGGGCCGGTGGCTCCTCCGGGCTTCTGAGGACCCGCAGG
GAGCGGGCCTCATCATTTCTGTCTCCTGTTTCTCCACTTCCTTCTCTATTGGTTGGTCCACTGATGTATGGACTT
GCACATGATGAACTGTGAACTTCTAGCCACATGTAGTGCCCTTGGGTACTTGGAGGGAGACACTTACCATAAGGA
ACCAGATTGCTTAGAGAGCGTGAAGGATCTGATCCGCTATTTGAGGCATGAGGATGAGACACGAGATGTGCGGCA
GCAGCTGGGGGCAGCCCAGATCCTACAGAGCGACCTTCTGCCCATCCTCACCCAGCACCACCAGGACAAGCCTCT
CTTTGATGCTGTTATCAGACTGATGGTGAACTTGACACAACCAGCCTTGCTCTGTTTTGGCAATCTGCCTAAGGA
GCCCAGCTTTCGGCACCATTTTTTGCAGGTGCTAACTTATTTGCAGGCCTACAAAGAGGCCTTTGCCAGTGAGAA
GGCTTTTGGAGTCCTCAGTGAAACCTTGTATGAGCTGCTGCAGCTGGGCTGGGAGGAACGGCAGGAGGAAGACAA
CTTGCTGATTGAACGGATCCTACTGCTGGTCAGAAATATTCTCCATGTCCCAGCTGACCTTGATCAGGAGAAGAA
GATTGATGATGACGCCAGTGCCCATGACCAGCTCCTCTGGGCGATTCACCTCAGCGGCCTGGATGACCTGCTCCT
CTTTCTGGCCAGCTCGTCTGCTGAGGAGCAATGGAGCCTACATGTGCTAGAGATTGTCTCCCTTATGTTTCGTGA
CCAGAACCCCGAGCAGCTGGCGGGAGTAGGGCAGGGACGCTTAGCTCAGGAGCGGAGTGCAGATTTTGCAGAACT
GGAGGTATTGCGCCAGCGAGAGATGGCAGAAAAGAAGACTCGAGCCCTCCAGCGAGGCAACAGGCATTCTCGATT
TGGGGGCTCCTATATTGTCCAGGGGTTGAAATCCATTGGGGAGAGGGACCTCATCTTTCACAAAGGCCTTCACAA
CCTACGAAACTACAGTTCAGATTTGGGAAAGCAGCCGAAAAAGGTGCCTAAACGTCGCCAGGCCGCCCGAGAGCT
GTCCATTCAGCGCCGTTCTGCCCTCAATGTGAGGCTCTTCCTCAGAGACTTCTGCTCTGAGTTCCTGGAGAACTG
TTACAACCGGCTCATGGGATCAGTAAAGGATCACCTGCTTCGGGAGAAAGCTCAGCAGCATGATGAGACCTATTA
TATGTGGGCCTTGGCTTTCTTCATGGCCTTCAACCGAGCTGCCTCCTTCCGGCCAGGCCTGGTTTCTGAGACCCT
CAGTGTCCGTACCTTCCACTTCATTGAGCAGAACCTCACCAACTACTATGAGATGATGCTGACTGACCGCAAGGA
AGCTGCCTCCTGGGCACGCCGGATGCACTTGGCTCTGAAGGCCTATCAGGAGCTGCTGGCAACAGTGAATGAGAT
GGACTTATCTCCAGATGAGGCTGTGAGGGAGAGCAGCCGCATCATCAAGAACAATATTTTCTATGTGATGGAGTA
CCGAGAACTATTCCTGGCACTTTTTCGAAAGTTTGATGAGAGATGCCAGCCCCGCTCTTTCCTTCGTGACCTGGT
GGAGACCACCCACCTCTTCCTCAAAATGTTGGAGCGATTCTGTCGGAGCCGTGGGAACCTGGTGGTGCAGAACAA
ACAAAAGAAGAGAAGGAAGAAGAAGAAGAAGGTCCTAGACCAGGCCATTGTTTCTGGTAATGTCCCATCTAGCCC
AGAAGAAGTGGAGGCTGTGTGGCCAGCCCTGGCTGAGCAGCTACAGTGCTGTGCCCAGAATTCTGAGCTCAGCAT
GGACTCCGTGGTTCCCTTTGATGCGGCCTCAGAGGTGCCAGTGGAGGAGCAGCGGGCAGAAGCTATGGTACGGAT
CCAAGACTGTCTCCTGGCTGGCCAGGCCCCACAGGCCCTGACTCTCCTGAGGTCTGCTCGGGAGGTGTGGCCTGA
AGGAGATGTGTTTGGCTCTCAAGACATTTCTCCAGAGGAAGAGATCCAGTTGCTGAAACAAATCCTCTCTGCTCC
ACTTCCCCGGCAGCAGGGCCCAGAGGAACGTGGGGCAGAGGAAGAAGAAGAGGAGGAGGAGGAGGAAGAGGAGGA
GTTGCAAGTGGTCCAGGTGTCGGAGAAAGAATTTAATTTTCTGGACTACCTGAAACGCTTTGCATGTTCAACTGT
CGTTCGAGCCTATGTGCTGCTACTAAGGAGCTACCAGCAGAATAGTGCCCACACTAACCATTGCATTGTGAAGAT
GCTGCACCGGCTGGCCCATGACCTCAAAATGGAAGCCCTACTTTTTCAGCTGTCAGTCTTCTGCCTCTTCAATCG
TCTGCTTAGTGACCCTGCTGCTGGAGCCTACAAAGAGCTAGTGACTTTTGCCAAATACATCCTGGGCAAATTTTT
TGCACTGGCTGCAGTCAACCAAAAAGCCTTTGTGGAGCTGTTGTTCTGGAAGAACACAGCTGTGGTTCGAGAGAT
GACTGAGGGCTATGGCTCCCTGGATGACAGGTCTTCCAGTCGCAGAGCACCTACATGGAGCCCCGAAGAAGAGGC
TCATCTTCAGGAGCTGTACCTCGCCAATAAGGACGTGGAAGGGCAGGATGTGGTGGAAGCCATCTTGGCCCACCT
GAATACTGTTCCTCGAACACGCAAGCAGATCATCCACCATCTGGTACAGATGGGACTGGCTGACAGTGTCAAGGA
CTTCCAAAGGAAAGGAACCCATATTGTACTGTGGACGGGGGATCAGGAGTTGGAGCTGCAGCGGCTTTTTGAGGA
ATTCCGGGACTCAGATGATGTCCTGGGTCATATCATGAAGAATATCACAGCCAAACGCTCACGGGCCCGAATAGT
GGATAAACTCTTGGCTCTGGGGCTGGTGGCTGAGCGGCGGGAGCTGTACAAGAAACGGCAGAAAAAGTTGGCATC
CTCCATCTTGCCAAATGGAGCGGAGTCCCTGAAAGATTTTTGCCAGGAAGATCTGGAAGAAGAGGAAAACCTGCC
TGAGGAAGACAGCGAAGAGGAAGAAGAAGGGGGCTCAGAAGCAGAACAAGTCCAGGGTAGCTTAGTCCTTTCAAA
TGAAAACCTTGGTCAAAGCCTGCATCAGGAAGGCTTTTCTATCCCGCTCCTATGGCTCCAGAACTGCCTGATCCG
AGCAGCTGATGATCGGGAAGAGGATGGCTGCTCCCAGGCCGTTCCATTGGTGCCACTCACAGAGGAAAATGAGGA
AGCCATGGAAAACGAACAGTTTCAGCAGCTGTTGCGCAAGCTAGGGGTTCGGCCCCCTGCCTCTGGGCAGGAAAC
CTTCTGGCGAATTCCAGCCAAGCTGAGTCCTACCCAGCTCCGGAGGGCAGCAGCTTCTTTGAGTCAACCAGAGGA
GGAACAGAAGCTGCAGCCAGAGCTGCAGCCTAAAGTCCCTGGAGAGCAAGGCTCTGATGAGGAGCACTGTAAAGA
GCACCGAGCACAAGCCCTGAGGGCCCTCTTGCTAGCCCACAAGAAGAAAGCGGGCCTGGCATCCCCAGAGGAGGA

FIGURE 6904B

AGACGCTGTTGGTAAAGAGCCGCTGAAGGCAGCACCCAAGAAACGACAATTGCTGGACAGCGACGAGGAACAGGA
AGAAGATGAGGGCAGGAACAGAGCACCAGAGTTGGGAGCTCCAGGAATCCAAAAGAAGAAACGATACCAGATTGA
GGATGATGAGGATGACTGAAGAGCTAAGAAGCCTAGGGGTAGAGATAGACACGTTTTTAGATGGTGCATTCAAGT
CAGAGTTGGAAGGGTCATACAGGACCCAGAAGCTCCTCTTACTGGACAGAGCAGTAGAATCCCAGGCTCTTTCAC
GGATTTAGGCTGAGAAACTTCAGCAGCAGTATTGGACTTCTCTGCTGTCAGTCTTTGTTTCTCCCAGTTTTTATC
GGTATGCCCCAGCAGCTCTCTGGAGATTTAGTTCTCTTCTTCTAGGAACCATTTCTTTTGGTTATTGGAGCTCCT
TAGCAAATAAGAGGAGTGAGTGAAATAGAGAAAGCACCCCGGACCCCTTTTATTGGTCTGTTCCTTTGGCTTTCT
CTTGGAGGTGGGTCGCAGCACCAGATGGGGAGCTTTATGACATGACAGGCGGGAGTTTTGTACCACTTTTAGAAG
ATACCAGATGCCTCTGTCCTCATTTTGTTTCCTATGATCATCCTCTAGATACCAGATAGAGGCCCATTCCTGCAT
TTGAGATAGGGTTGGAATATAGTACTCTAGATGATGAATGTGTTTGCTTTGTGTTTGGTATTAAACATGTAAGAT
TAGAAGTTCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6905

MDLHMMNCELLATCSALGYLEGDTYHKEPDCLESVKDLIRYLRHEDETRDVRQQLGAAQILQSDLLPILTQHHQD
KPLFDAVIRLMVNLTQPALLCFGNLPKEPSFRHHFLQVLTYLQAYKEAFASEKAFGVLSETLYELLQLGWEERQE
EDNLLIERILLLVRNILHVPADLDQEKKIDDDASAHDQLLWAIHLSGLDDLLLFLASSSAEEQWSLHVLEIVSLM
FRDQNPEQLAGVGQGRLAQERSADFAELEVLRQREMAEKKTRALQRGNRHSRFGGSYIVQGLKSIGERDLIFHKG
LHNLRNYSSDLGKQPKKVPKRRQAARELSIQRRSALNVRLFLRDFCSEFLENCYNRLMGSVKDHLLREKAQQHDE
TYYMWALAFFMAFNRAASFRPGLVSETLSVRTFHFIEQNLTNYYEMMLTDRKEAASWARRMHLALKAYQELLATV
NEMDLSPDEAVRESSRIIKNNIFYVMEYRELFLALFRKFDERCQPRSFLRDLVETTHLFLKMLERFCRSRGNLVV
QNKQKKRRKKKKKVLDQAIVSGNVPSSPEEVEAVWPALAEQLQCCAQNSELSMDSVVPFDAASEVPVEEQRAEAM
VRIQDCLLAGQAPQALTLLRSAREVWPEGDVFGSQDISPEEEIQLLKQILSAPLPRQQGPEERGAEEEEEEEEEE
EEELQVVQVSEKEFNFLDYLKRFACSTVVRAYVLLLRSYQQNSAHTNHCIVKMLHRLAHDLKMEALLFQLSVFCL
FNRLLSDPAAGAYKELVTFAKYILGKFFALAAVNQKAFVELLFWKNTAVVREMTEGYGSLDDRSSSRRAPTWSPE
EEAHLQELYLANKDVEGQDVVEAILAHLNTVPRTRKQIIHHLVQMGLADSVKDFQRKGTHIVLWTGDQELELQRL
FEEFRDSDDVLGHIMKNITAKRSRARIVDKLLALGLVAERRELYKKRQKKLASSILPNGAESLKDFCQEDLEEEE
NLPEEDSEEEEEGGSEAEQVQGSLVLSNENLGQSLHQEGFSIPLLWLQNCLIRAADDREEDGCSQAVPLVPLTEE
NEEAMENEQFQQLLRKLGVRPPASGQETFWRIPAKLSPTQLRRAAASLSQPEEEQKLQPELQPKVPGEQGSDEEH
CKEHRAQALRALLLAHKKKAGLASPEEEDAVGKEPLKAAPKKRQLLDSDEEQEEDEGRNRAPELGAPGIQKKKRY
QIEDDEDD

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FIGURE 6906

TTCCTCAGAAACGAGCAAACCTGAAAGCTACTCTCTCAGCTTCAGAGGGAAAAA**ATG**GTTGTAGATTTCTGGACT
TGGGAGCAGACATTTCAAGAACTAATCCAAGAGGCAAAACCCCGGGCCACATGGACGCTGAAGTTGGATGGCAAC
CTTCAGCTAGACTGCCTGGCTCAAGGGTGGAAGCAATACCAACAGAGAGCATTTGGCTGGTTCCGGTGTTCCTCC
TGCCAGCGAAGTTGGGCTTCCGCCAAGTTGCAGATTCTGTGCCACACGTACTGGGAGCACTGGACATCCCAGGGT
CAGGTGCGTATGAGGCTCTTTGGCCAAAGGTGCCAGAAGTGCTCCTGGTCCCAATATGAGATGCCTGAGTTCTCC
TCGGATAGCACCATGAGGATTCTGAGCAACCTGGTGCAGCATATACTGAAGAAATACTATGGAAATGGCATGAGG
AAGTCTCCAGAAATGCCAGTAATCCTGGAAGTGTCCCTGGAAGGATCCCATGACACAGCCAATTGTGAGGCATGC
ACTTTGGGCATATGTGGACAGGGCTTAAAAAGCTACATGACAAAGCCGTCCAAATCCCTACTCCCCCACCTAAAG
ACTGGGAATTCCTCACCTGGAATTGGTGCTGTGTACCTCGCAAACCAAGCCAAGAACCAGTCAGATGAGGCAAAA
GAGGCTAAGGGGAGTGGGTATGAGAAATTAGGGCCCAGTCGAGACCCAGATCCACTGAACATCTGTGTCTTTATT
TTGCTGCTTGTATTTATTGTAGTCAAATGCTTTACATCAGAA**TGA**TGAAAATAGGCTTGCCACTTTCTCTTATTT
TAATTCCATGGTAGTCAATGAACTGGCTGCCACTTTAATATAACTGAAAATTCATTTTGAGACCAAGCAGGATCA
AGTTTGTAGAATAAACACTGGTTTCCTAGCTATCCTCTGAAAACAGTATGAAACATGACCAAGTACATAATGGAT
TTAGTAATAAATATTGTCGAATTGCTAAAAAAAAAAAAA

FIGURE 6907

MVVDFWTWEQTFQELIQEAKPRATWTLKLDGNLQLDCLAQGWKQYQQRAFGWFRCSSCQRSWASAKLQILCHTYW
EHWTSQGQVRMRLFGQRCQKCSWSQYEMPEFSSDSTMRILSNLVQHILKKYYGNGMRKSPEMPVILEVSLEGSHD
TANCEACTLGICGQGLKSYMTKPSKSLLPHLKTGNSSPGIGAVYLANQAKNQSDEAKEAKGSGYEKLGPSRDPDP
LNICVFILLLVFIVVKCFTSE

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FIGURE 6908

GGGGCATTTTGTGCCTGCCTAGCTATCCAGACAGAGCAGCTACCCTCAGCTCTAGCTGATACTACAGACAGTACA
ACAGATCAAGAAGTATGGCAGTGACAACTCGTTTGACACGGTTGCACGAAAAGATCCTGCAAAATCATTTTGGAG
GGAAGCGGCTTAGCCTTCTCTATAAGGGTAGTGTCCATGGATTCCGTAATGGAGTTTTGCTTGACAGATGTTGTA
ATCAAGGGCCTACTCTAACAGTGATTTATAGTGAAGATCATATTATTGGAGCATATGCGGAAGAGAGTTACCAGG
AAGGAAAGTATGCTTCCATCATCCTTTTTGCACTTCAAGATACTAAAATTTCAGAATGGAAACTAGGACTATGTA
CACCAGAAACACTGTTTTGTTGTGATGTTACAAAATATAACTCCCCAACTAATTTCCAGATAGATGGAAGAAATA
GAAAAGTGATTATGGACTTAAAGACAATGGAAAATCTTGGACTTGCTCAAAATTGTACTATCTCTATTCAGGATT
ATGAAGTTTTTCGATGCGAAGATTCACTGGATGAAAGAAAGATAAAAGGGGTCATTGAGCTCAGGAAGAGCTTAC
TGTCTGCCTTGAGAACTTATGAACCATATGGATCCCTGGTTCAACAAATACGAATTCTGCTGCTGGGTCCAATTG
GAGCTGGGAAGTCCAGCTTTTTCAACTCAGTGAGGTCTGTTTTCCAAGGGCATGTAACGCATCAGGCTTTGGTGG
GCACTAATACAACTGGGATATCTGAGAAGTATAGGACATACTCTATTAGAGACGGGAAAGATGGCAAATACCTGC
CGTTTATTCTGTGTGACTCACTGGGGCTGAGTGAGAAAGAAGGCGGCCTGTGCAGGGATGACATATTCTATATCT
TGAACGGTAACATTCGTGATAGATACCAGTTTAATCCCATGGAATCAATCAAATTAAATCATCATGACTACATTG
ATTCCCCATCGCTGAAGGACAGAATTCATTGTGTGGCATTTGTATTTGATGCCAGCTCTATTCAATACTTCTCCT
CTCAGATGATAGTAAAGATCAAAAGAATTCGAAGGGAGTTGGTAAACGCTGGTGTGGTACATGTGGCTTTGCTCA
CTCATGTGGATAGCATGGATTTGATTACAAAAGGTGACCTTATAGAAATAGAGAGATGTGAGCCTGTGAGGTCCA
AGCTAGAGGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACATCTCGGTGGTTAGCAATTATTCCTCTGAGT
GGGAGCTGGACCCTGTAAAGGATGTTCTAATTCTTTCTGCTCTGAGACGAATGCTATGGGCTGCAGATGACTTCT
TAGAGGATTTGCCTTTTGAGCAAATAGGGAATCTAAGGGAGGAAATTATCAACTGTGCACAAGGAAAAAAATAGA
TATGTGAAAGGTTCACGTAAATTTCCTCACATCACAGAAGATTAAAATTCAGAAAGGAGAAAACACAGACCAAAG
AGAAGTATCTAAGACCAAAGGGATGTGTTTTATTAATGTCTAGGATGAAGAAATGCATAGAACATTGTAGTACTT
GTAAATAACTAGAAATAACATGATTTAGTCATAATTGTGAAAAATAGTAATAATTTTTCTTGGATTTATGTTCTG
TATCTGTGAAAAAATAAATTTCTTATAAAACTCGGAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6909

MAVTTRLTRLHEKILQNHFGGKRLSLLYKGSVHGFRNGVLLDRCCNQGPTLTVIYSEDHIIGAYAEESYQEGKYA
SIILFALQDTKISEWKLGLCTPETLFCCDVTKYNSPTNFQIDGRNRKVIMDLKTMENLGLAQNCTISIQDYEVFR
CEDSLDERKIKGVIELRKSLLSALRTYEPYGSLVQQIRILLLGPIGAGKSSFFNSVRSVFQGHVTHQALVGTNTT
GISEKYRTYSIRDGKDGKYLPFILCDSLGLSEKEGGLCRDDIFYILNGNIRDRYQFNPMESIKLNHHDYIDSPSL
KDRIHCVAFVFDASSIQYFSSQMIVKIKRIRRELVNAGVVHVALLTHVDSMDLITKGDLIEIERCEPVRSKLEEV
QRKLGFALSDISVVSNYSSEWELDPVKDVLILSALRRMLWAADDFLEDLPFEQIGNLREEIINCAQGKK

FIGURE 6910

AGCTGAGGTGTGAGCAGCTGCCGAAGTCAGTTCCTTGTGGAGCCGGAGCTGGGCGCGGATTCGCCGAGGCACCGA
GGCACTCAGAGGAGGTGAGAGAGCGGCGGCAGACAACAGGGGACCCCGGGCCGGCGGCCCAGAGCCGAGCCAAGC
GTGCCCGCGTGTGTCCCTGCGTGTCCGCGAGGATGCGTGTTCGCGGGTGTGTGCTGCGTTCACAGGTGTTTCTGC
GGCAGGCGCC**ATG**TCAGAACCGGCTGGGGATGTCCGTCAGAACCCATGCGGCAGCAAGGCCTGCCGCCGCCTCTT
CGGCCCAGTGGACAGCGAGCAGCTGAGCCGCGACTGTGATGCGCTAATGGCGGGCTGCATCCAGGAGGCCCGTGA
GCGATGGAACTTCGACTTTGTCACCGAGACACCACTGGAGGGTGACTTCGCCTGGGAGCGTGTGCGGGGCCTTGG
CCTGCCCAAGCTCTACCTTCCCACGGGGCCCCGGCGAGGCCGGGATGAGTTGGGAGGAGGCAGGCGGCCTGGCAC
CTCACCTGCTCTGCTGCAGGGGACAGCAGAGGAAGACCATGTGGACCTGTCACTGTCTTGTACCCTTGTGCCTCG
CTCAGGGGAGCAGGCTGAAGGGTCCCCAGGTGGACCTGGAGACTCTCAGGGTCGAAAACGGCGGCAGACCAGCAT
GACAGATTTCTACCACTCCAAACGCCGGCTGATCTTCTCCAAGAGGAAGCCC**TAA**TCCGCCCACAGGAAGCCTGC
AGTCCTGGAAGCGCGAGGGCCTCAAAGGCCCGCTCTACATCTTCTGCCTTAGTCTCAGTTTGTGTGTCTTAATTA
TTATTTGTGTTTTAATTTAAACACCTCCTCATGTACATACCCTGGCCGCCCCCTGCCCCCCAGCCTCTGGCATTA
GAATTATTTAAACAAAAACTAGGCGGTTGAATGAGAGGTTCCTAAGAGTGCTGGGCATTTTTATTTTATGAAATA
CTATTTAAAGCCTCCTCATCCCGTGTTCTCCTTTTCCTCTCTCCCGGAGGTTGGGTGGGCCGGCTTCATGCCAGC
TACTTCCTCCTCCCCACTTGTCCGCTGGGTGGTACCCTCTGGAGGGGTGTGGCTCCTTCCCATCGCTGTCACAGG
CGGTTATGAAATTCACCCCCTTTCCTGGACACTCAGACCTGAATTCTTTTTCATTTGAGAAGTAAACAGATGGCA
CTTTGAAGGGGCCTCACCGAGTGGGGGCATCATCAAAAACTTTGGAGTCCCCTCACCTCCTCTAAGGTTGGGCAG
GGTGACCCTGAAGTGAGCACAGCCTAGGGCTGAGCTGGGGACCTGGTACCCTCCTGGCTCTTGATACCCCCCTCT
GTCTTGTGAAGGCAGGGGGAAGGTGGGGTCCTGGAGCAGACCACCCCGCCTGCCCTCATGGCCCCTCTGACCTGC
ACTGGGGAGCCCGTCTCAGTGTTGAGCCTTTTCCCTCTTTGGCTCCCCTGTACCTTTTGAGGAGCCCCAGCTACC
CTTCTTCTCCAGCTGGGCTCTGCAATTCCCCTCTGCTGCTGTCCCTCCCCCTTGTCCTTTCCCTTCAGTACCCTC
TCAGCTCCAGGTGGCTCTGAGGTGCCTGTCCCACCCCCACCCCCAGCTCAATGGACTGGAAGGGGAAGGGACACA
CAAGAAGAAGGGCACCCTAGTTCTACCTCAGGCAGCTCAAGCAGCGACCGCCCCCTCCTCTAGCTGTGGGGGTGA
GGGTCCCATGTGGTGGCACAGGCCCCCTTGAGTGGGGTTATCTCTGTGTTAGGGGTATATGATGGGGGAGTAGAT
CTTTCTAGGAGGGAGACACTGGCCCCTCAAATCGTCCAGCGACCTTCCTCATCCACCCCATCCCTCCCCAGTTCA
TTGCACTTTGATTAGCAGCGGAACAAGGAGTCAGACATTTTAAGATGGTGGCAGTAGAGGCTATGGACAGGGCAT
GCCACGTGGGCTCATATGGGGCTGGGAGTAGTTGTCTTTCCTGGCACTAACGTTGAGCCCCTGGAGGCACTGAAG
TGCTTAGTGTACTTGGAGTATTGGGGTCTGACCCCAAACACCTTCCAGCTCCTGTAACATACTGGCCTGGACTGT
TTTCTCTCGGCTCCCCATGTGTCCTGGTTCCCGTTTCTCCACCTAGACTGTAAACCTCTCGAGGGCAGGGACCAC
ACCCTGTACTGTTCTGTGTCTTTCACAGCTCCTCCCACAATGCTGAATATACAGCAGGTGCTCAATAAATGATTC
TTAGTGACTTTAAAAAAAAAAAAAAAAAAA

FIGURE 6911

MSEPAGDVRQNPCGSKACRRLFGPVDSEQLSRDCDALMAGCIQEARERWNFDFVTETPLEGDFAWERVRGLGLPK
LYLPTGPRRGRDELGGGRRPGTSPALLQGTAEEDHVDLSLSCTLVPRSGEQAEGSPGGPGDSQGRKRRQTSMTDF
YHSKRRLIFSKRKP

FIGURE 6912

AGAGCGATCATGTCGCACAAACAAATTTACTATTCGGACAAATACGACGACGAGGAGTTTGAGTATCGACATGTC
ATGCTGCCCAAGGACATAGCCAAGCTGGTCCCTAAAACCCATCTGATGTCTGAATCTGAATGGAGGAATCTTGGC
GTTCAGCAGAGTCAGGGATGGGTCCATTATATGATCCATGAACCAGAACCTCACATCTTGCTGTTCCGGCGCCCA
CTACCCAAGAAACCAAAGAAATGAAGCTGGCAAGCTACTTTTCAGCCTCAAGCTTTACACAGCTGTCCTTACTTC
CTAACATCTTTCTGATAACATTATTATGTTGCCTTCTTGTTTCTCACTTTGATATTTAAAAGATGTTCAATACAC
TGTTTGAATGTGCTGGTAACTGCTTTGCTTCTTGAGTAGAGCCACCACCACCATAGCCCAGCCAGATGAGTGCTC
TGTGGACCCACAGCCTAAGCTGAGTGTGACCCCAGAAGCCACGATGTGCTCTGTATCCAGAACACACTTGGCAGA
TGGAGGAAGCATCTGAGTTTGAGACCATGGCTGTTACAGGGATCATGTAAACTTGCTGTTTTTGTTTTTTCTGCC
GGGTGTTGTATGTGTGGTGACTTGCGGATTTATGTTTCAGTGTACTGGAAACTTTCCATTTTATTCAAGAAATCT
GTTCATGTTAAAAGCCTTGATTAAAGAGGAAGTTTTTATAAT

FIGURE 6913

MSHKQIYYSDKYDDEEFEYRHVMLPKDIAKLVPKTHLMSESEWRNLGVQQSQGWVHYMIHEPEPHILLFRRPLPK
KPKK

FIGURE 6914

GGGGGGGGGGGGCACTTGGCTTCAAAGCTGGCTCTTGGAAATTGAGCGGAGACGAGCGGCTTGTTGTAGCTGCCG
TGCGGCCGCCGCGGAATAATAAGCCGGGATCTACCATACCATTGACTAACTATGGAAGATTATACCAAAATAGAG
AAAATTGGAGAAGGTACCTATGGAGTTGTGTATAAGGGTAGACACAAAACTACAGGTCAAGTGGTAGCCATGAAA
AAAATCAGACTAGAAAGTGAAGAGGAAGGGGTTCCTAGTACTGCAATTCGGGAAATTTCTCTATTAAAGGAACTT
CGTCATCCAAATATAGTCAGTCTTCAGGATGTGCTTATGCAGGATTCCAGGTTATATCTCATCTTTGAGTTTCTT
TCCATGGATCTGAAGAAATACTTGGATTCTATCCCTCCTGGTCAGTACATGGATTCTTCACTTGTTAAGAGTTAT
TTATACCAAATCCTACAGGGGATTGTGTTTTGTCACTCTAGAAGAGTTCTTCACAGAGACTTAAAACCTCAAAAT
CTCTTGATTGATGACAAAGGAACAATTAAACTGGCTGATTTTGGCCTTGCCAGAGCTTTTGGAATACCTATCAGA
GTATATACACATGAGGTAGTAACACTCTGGTACAGATCTCCAGAAGTATTGCTGGGGTCAGCTCGTTACTCAACT
CCAGTTGACATTTGGAGTATAGGCACCATATTTGCTGAACTAGCAACTAAGAAACCACTTTTCCATGGGGATTCA
GAAATTGATCAACTCTTCAGGATTTTCAGAGCTTTGGGCACTCCCAATAATGAAGTGTGGCCAGAAGTGGAATCT
TTACAGGACTATAAGAATACATTTCCCAAATGGAAACCAGGAAGCCTAGCATCCCATGTCAAAAACTTGGATGAA
AATGGCTTGGATTTGCTCTCGAAAATGTTAATCTATGATCCAGCCAAACGAATTTCTGGCAAAATGGCACTGAAT
CATCCATATTTTAATGATTTGGACAATCAGATTAAGAAGATGTAGCTTTCTGACAAAAAGTTTCCATATGTTATG

FIGURE 6915

MEDYTKIEKIGEGTYGVVYKGRHKTTGQVVAMKKIRLESEEEGVPSTAIREISLLKELRHPNIVSLQDVLMQDSR
LYLIFEFLSMDLKKYLDSIPPGQYMDSSLVKSYLYQILQGIVFCHSRRVLHRDLKPQNLLIDDKGTIKLADFGLA
RAFGIPIRVYTHEVVTLWYRSPEVLLGSARYSTPVDIWSIGTIFAELATKKPLFHGDSEIDQLFRIFRALGTPNN
EVWPEVESLQDYKNTFPKWKPGSLASHVKNLDENGLDLLSKMLIYDPAKRISGKMALNHPYFNDLDNQIKKM

FIGURE 6916

ATGGCTACTCTGATCTATGTTGATAAGGAAAACGAAGAACCAGGCATCCTTGTGGCTACAAAGGATGGGCTGAAG
CTGGGGTCTGGACCTTCAATCAAAGCCTTAGATGGGAGATCTCAAGTTTCAATATCATGTTTTGGCAAAACATTC
GATGCTCCCACATCCTTACCTAAAGCTACCAGAAAGGCTTTGGGAACTGTCAACAGAGCTACAGAAAAGTCAGTA
AAGACCAATGGACCCCTCAAACAAAAACAGCCAAGCTTTTCTGCCAAAAAGATGACTGAGAAGACTGTTAAAGCA
AAAAACTCTGTTCCTGCCTCAGATGATGGCTATCCAGAAATAGAAAAATTATTTCCCTTCAATCCTCTAGGCTTC
GAGAGTTTTGACCTGCCTGAAGAGCACCAGATTGCACATCTCCCCTTGAGTGAAGTGCCTCTCATGATACTTGAT
GAGGAGAGAGAGCTTGAAAAGCTGTTTCAGCTGGGCCCCCCTTCACCTTTGAAGATGCCCTCTCCACCATGGAAA
TCCAATCTGTTGCAGTCTCCTTTAAGCATTCTGTTGACCCTGGATGTTGAATTGCCACCTGTTTGCTGTGACATA
GATATTTAA

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FIGURE 6917

MATLIYVDKENEEPGILVATKDGLKLGSGPSIKALDGRSQVSISCFGKTFDAPTSLPKATRKALGTVNRATEKSV
KTNGPLKQKQPSFSAKKMTEKTVKAKNSVPASDDGYPEIEKLFPFNPLGFESFDLPEEHQIAHLPLSEVPLMILD
EERELEKLFQLGPPSPLKMPSPPWKSNLLQSPLSILLTLDVELPPVCCDIDI

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FIGURE 6918A

CCAGGGTGATGCTGAAGATGATGACCTTCTTCCAAGGCCTCTAGAGCCATCAGCCTGTGCCAGGCACCCTCGACT
TGCCTAGAGGCCCCCAAAAGTTGCAGTCCACATCAGAGGCAGAGTCAGAGGCCTCCATGTCGGAGGCCTCCTCTG
AGGACCTGGTGCCACCCCTGGAGGCTGGGGCAGCCCCATATAGGGAGGAGGAAGAGGCGGCGAAGAAGAAGAAGG
AGAAGAAGAAGAAGTCCAAAGGCCTGGCCAATGTGTTCTGCGTCTTCACCAAAGGGAAGAAGAAGAAGGGTCAGC
CCAGCTCAGCGGAGCCCGAGGACGCAGCCGGGTCCAGGCAGGGGCTGGATGGCCCGCCCCCCACAGTGGAGGAGC
TGAAGGCGGCGCTGGAGCGCGGGCAGCTGGAGGCGGCGCGGCCGCTGCTGGCGCTGGAGCGGGAGCTGGCGGCGG
CGGCGGCGGCGGGCGGTGTGAGCGAGGAGGAGCTGGTGCGGCGCCAGAGCAAGGTGGAGGCGCTGTACGAGCTGC
TGCGCGACCAGGTGCTGGGCGTGCTGCGGCGGCCGCTGGAGGCGCCGCCCGAGCGGCTGCGCCAGGCGCTGGCCG
TGGTGGCGGAGCAGGAGCGCGAGGACCGCCAGGCGGCGGCGGCGGGGCCGGGGACCTCGGGGCTGGCGGCCACGC
GCCCGCGGCGCTGGCTGCAGCTGTGGCGGCGCGGCGTGGCGGAGGCGGCCGAGGAGCGCATGGGCCAGCGGCCGG
CCGCGGGCGCCGAGGTCCCCGAGAGCGTCTTTCTGCACTTGGGCCGCACCATGAAGGAGGACCTGGAGGCCGTGG
TGGAGCGGCTGAAGCCGCTGTTCCCCGCCGAGTTCGGCGTCGTGGCGGCCTACGCCGAGAGCTACCACCAGCACT
TCGCGGCCCACCTGGCCGCCGTGGCGCAGTTCGAGCTGTGCGAGCGCGACACCTACATGCTGCTGCTCTGGGTGG
AGAACCTCTACCCCAATGACATCATCAACAGCCCCAAGCTGGTGGGTGAGCTGCAGGGTATGGGGCTCGGGAGCC
TCCTGCCCCCCAGGCAGATCCGACTGCTGGAGGCCACATTCCTGTCCAGTGAGGCGGCCAATGTGAGGGAGTTGA
TGGACCGAGCTCTGGAGCTAGAGGCACGGCGCTGGGCTGAGGATGTGCCTCCCCAGAGGCTGGACGGCCACTGCC
ACAGCGAGCTGGCCATCGACATCATCCAGATCACCTCCCAGGCCCAGGCCAAGGCCGAGAGCATCACGCTGGACT
TGGGCTCACAGATAAAGCGGGTGCTGCTGGTGGAGCTGCCTGCGTTCCTGAGGAGCTACCAGCGCGCCTTTAATG
AATTTCTGGAGAGAGGCAAGCAGCTGACGAATTACAGGGCCAATGTTATTGCCAACATCAACAACTGCCTGTCCT
TCCGGATGTCCATGGAGCAGAATTGGCAGGTACCCCAGGACACCCTGAGCCTCCTGCTGGGCCCCCTGGGTGAGC
TCAAGAGCCACGGCTTTGACACCCTGCTCCAGAACCTGCATGAGGACCTGAAGCCACTGTTCAAGAGGTTCACGC
ACACCCGCTGGGCGGCCCCTGTGGAGACCCTGGAAAACATCATCGCCACTGTAGACACGAGGCTGCCTGAGTTCT
CAGAGCTGCAGGGCTGTTTCCGGGAGGAGCTCATGGAGGCCTTGCACCTGCACCTGGTGAAGGAGTACATCATCC
AACTCAGCAAGGGGCGCCTGGTCCTCAAGACGGCCGAGCAGCAGCAGCAGCTGGCTGGGTACATCCTGGCCAATG
CTGACACCATCCAGCACTTCTGCACCCAGCACGGCTCCCCGGCGACCTGGCTGCAGCCTGCTCTCCCTACGCTGG
CCGAGATCATTCGCCTGCAGGACCCCAGTGCCATCAAGATTGAGGTGGCCACTTATGCCACCTGCTACCCTGACT
TCAGCAAAGGCCACCTGAGCGCTATCCTGGCCATCAAGGGGAACCTATCCAACAGTGAGGTCAAGCGCATCCGGA
GCATCTTGGACGTCAGCATGGGGGCGCAGGAGCCCTCCCGGCCCCTATTTTCCCTTATAAAGGTTGGTTAGCTTT
TCCTGTGGCCTGACCTGCCTGTGAGTGCCCAGCAAGCCTTGGGCACACCCCGCTGGGAGCTGTTAAGAGCAGCGC
TGGTTCTCGGTTCCTCCCGGGTCTCCTGTGCTCTGATGCTACTTCTGCCTAGCCCTGGCGGAGGTGCAGGCCCTG
TCAGCTGGAACTGGACAGACCTTGGTTTGTTTACATGTCCGATGGGGGCAGGAGCTCCCATCCTGGGCAGCCAAC
CAGGCAACACCAAGGACTCTTTGTAAACGATAGCTGATCGTGTGCACGCAAGGAAAGAACCAGGAGGGAGAGTGC
AGCCAGGCTCAGGGATCCCCGGACACCTCTGTCCAGAGCCCCTCCACAGTCGGCCTCATGACTGTCCTCCTCGTG
GGTGGGGCCGAGGGCCCTCTTCAGCTCTCTGGAGACAGGGGCCGAGCCTCACCCATCTGCCCTCTGCAGCCCAGG
GCCGCCGTGAGCGGGATTCAGCAATGGTGGAATGGAAGACAGAACTGGAAGAGAAAGAAGGAAAAGATGAGCTCT
CGTCTGGCAGGGGCTTTTAGGGTCCTGTGGCGAGCTGTGAGCACCGCCAGCGTTAGACGTCACATCCAGGTGGCC
CCACGGCCCCTACAGGCTGGCCCTGCAATGGGGCCCTGAGCCCTCCCTCTTCATCCCCCAAGGCCTCAACTAGAG
GGTGGTCCCCCGAGGGCTTGGTGTCTACTACCGAAGGGCCCAAGACCTCCTGGGTCCTCTCAGGCTCCCCCTTCC
CCAAGGCAGGGACAGGCCCTGGGGGTGCCACCGTGGGCCCTGCCACCCAGAAGTCTGGCTGAGGTCTGGGCAGGG
GCAGGGCAAGCTTGACCTCTCACTGTTGACCCTTTGGCCTCTGTATTTGTTTCCTATTGCCGTGACAGGTTTCCA
CAAACTTCGTGGATCAAAACGAGGTCTTCCAGTTCTGCGGGTCAGAAGGCTGACCTGGGGCTCAAATCTGGGTGT
CGGCAGTCCTGCACTCCTTCTGGAGGCTCTAGGGGAGAATTCATTTCTGGCCTTTTCATTTTTAGAGGCTGACCG
TAATTCTTGACTTCAGGCTCCTCCATCTTCAGAGCCAGCTGTGGGTAGTTGAATCTTTTTCCCGTCACCTCATTG
AGGCCTCCCCTCTCCTGCCTCCCTCCACCACTTTTTTTTTTTTTTTTTTGAGACAGGGTCTTGCTGTGTTGCCCA
GGCTGGAGTGCAGTGGCCTGGTCATGGCATCAAGGCTCACTGCAGCCTGGACCTCCTGGTTCAAGTGATCCTCTT
GTCTCAGTCCCCTGAGACAATCCCCCACGCCCAGCTACATATTTTTGTGGATACAGGGTCTCATTCTGTTGCCTA
GGCTTGTCTGGAACTCCTGGGCTCAAGGGATCTTGTAGCCTTAGCCTCCTAAAGTGCTGGGATTATAGGCATGAG
TCACTCGTACCCGGCCTGCTCTACCGCTTTTAAGGACGCTTATGATCACATTGCGCCTACCCAGAGAACCCAGGT

FIGURE 6918B

CGTCTTTCTATTTTCAGGTCAGCTGATTAGCCACCTTAGTTCCATCTGCAACTTTAGTTCCCACTGGCTGTGTAA
CCTAACATAGTCACAGGCTCTGGGGACTGTCACGTGGACATCTTTGGGAGGCCGTTATTCTGCCCACCGCACCCT
CCGTTCATCCCCTGCCCTGCCGGGCACCTCGCTCTACCCCAGGAAAATGTGAGCTCGTTTTCCTGCTCGGCATGT
GCTCCCCCTAAGGCTCTGCTCCTCCCTGGGCCTGAAAGTTCCTTCTCAGCCTGAGAGGGGGCCCTTCGATCTCAG
GCATGACTCAGCCCGGCTGATGCCTCTGCAGTGCTGAGTCAGGATTTGGGGCCGGCTCTCTTGGGTCTGTCCCCT
TTTCCCAGGTACTGCCTTACAAAGCTGTGGCCAGGAAGTGGCCGGTATAAAGGATGCCCAAGGTCTTTGTACGTG
TGTAGGAGTTAGCGTGTTTGATATTGTTAATATAATAATAATTATTTTTTAGAGTACTGCTTTTGTATGTATGTT
GAACAGGATCCAGGTTTTTATAGCTTGATATAAAACAGAATTCAAAAGTGAAAAA

FIGURE 6919

MSEASSEDLVPPLEAGAAPYREEEEAAKKKKEKKKKSKGLANVFCVFTKGKKKKGQPSSAEPEDAAGSRQGLDGP
PPTVEELKAALERGQLEAARPLLALERELAAAAAAGGVSEEELVRRQSKVEALYELLRDQVLGVLRRPLEAPPER
LRQALAVVAEQEREDRQAAAAGPGTSGLAATRPRRWLQLWRRGVAEAAEERMGQRPAAGAEVPESVFLHLGRTMK
EDLEAVVERLKPLFPAEFGVVAAYAESYHQHFAAHLAAVAQFELCERDTYMLLLWVENLYPNDIINSPKLVGELQ
GMGLGSLLPPRQIRLLEATFLSSEAANVRELMDRALELEARRWAEDVPPQRLDGHCHSELAIDIIQITSQAQAKA
ESITLDLGSQIKRVLLVELPAFLRSYQRAFNEFLERGKQLTNYRANVIANINNCLSFRMSMEQNWQVPQDTLSLL
LGPLGELKSHGFDTLLQNLHEDLKPLFKRFTHTRWAAPVETLENIIATVDTRLPEFSELQGCFREELMEALHLHL
VKEYIIQLSKGRLVLKTAEQQQQLAGYILANADTIQHFCTQHGSPATWLQPALPTLAEIIRLQDPSAIKIEVATY
ATCYPDFSKGHLSAILAIKGNLSNSEVKRIRSILDVSMGAQEPSRPLFSLIKVG

FIGURE 6920

CCCCAAATCTGCAGATGTGAATCCCAAGTACCAGTGTGATCTGGTGTCTAAAAACGGGAATGATGTATATCGCTA
TCCCAGTCCACTTCATGCTGTGGCTGTGCAGAGCCCAATGTTTCTCCTTTGTCTGACGGGCAACCCTCTGAGGGA
AGAGGACAGGCTTGGAAACCATGCCAGTGACATTTGCGGTGGATCTGAGCTAGATGCCGTCAAAACAGACAGTTC
CTTACCGTCCCCAAGCAGTCTGTGGTCTGCTTCCCATCCTTCATCCAGCAAGAAAATGGATGGCTACATTCTGAG
CCTGGTCCAGAAAAAAACACACCCTGTAAGGACCAACAAACCAAGAACCAGCGTGAACGCTGACCCCACGAAAGG
GCTTCTGAGGAACGGGAGCGTTTGTGTCAGAGCCCCGGGCGGTGTCTCACAGGGCAACAGTGTGAACCTTAAGAA
TTCGAAACAGGCGTGTCTGCCCTCTGGCGGGATACCTTCTCTGAACAATGGGACATTCTCCCCACCGAAGCAGTG
GTCGAAAGAATCAAAGGCCGAACAAGCCGAAAGCAAGAGGGTGCCCCTGCCAGAGGGCTGCCCCTCAGGCGCTGC
CTCCGACCTTCAGAGTAAGCACCTGCCAAAAACGGCCAAGCCAGCCTCGCAAGAACATGTTCGGTGTTCCGCCAT
TGGGACAGGGGAGTCCCCTAAGGAAAGCGCTCAGCTCTCAGGGGCCTCTCCAAAAGAGAGTCCTAGCAGAGGCCC
TGCCCCGCCGCAGGAGAACAAAGTTGTACAGCCCCTGAAAAAGATGTCACAGAAAAACAGCCTGCAGGGCGTCCC
CCCGGCCACTCCTCCCCTGCTGTCTACAGCTTTCCCCGTGGAAGAGAGGCCTGCCTTGGATTTCAAGAGCGAGGG
CTCTTCCCAAAGCCTGGAGGAAGCGCACCTGGTCAAGGCCCAGTTTATCCCGGGGCAGCAGCCCAGTGTCAGGCT
CCACCGGGGCCACAGGAACATGGGCGTCGTGAAGAACTCCAGCCTGAAGCACCGCGGCCCAGCCCTCCAGGGGCT
GGAGAACGGCTTGCCCACCGTCAGGGAGAAAACGCGGGCCGGGAGCAAGAAGTGTCGCTTCCCAGATGACTTGGA
TACAAATAAGAAACTCAAGAAAGCCTCCTCCAAGGGGAGGAAGAGTGGGGGCGGGCCCGAGGCTGGTGTTCCCGG
CAGGCCCGCGGGCGGGGGCCACAGGGCGGGGAGCAGGGCGCATGGCCACGGACGGGAGGCGGTGGTGGCCAAACC
TAAGCACAAGCGAACTGACTACCGGCGGTGGAAGTCCTCGGCCGAGATTTCCTACGAAGAGGCCCTGAGGAGGGC
CCGGCGCGGTCGCCGGGAGAATGTGGGGCTGTACCCCGCGCCTGTGCCTCTGCCCTACGCCAGCCCCTACGCCTA
CGTGGCTAGCGACTCCGAGTACTCGGCCGAGTGCGAGTCCCTGTTCCACTCCACCGTGGTGGACACCAGTGAGGA
CGAGCAGAGCAATTACACCACCAACTGCTTCGGGGACAGCGAGTCGAGTGTGAGCGAGGGCGAGTTCGTGGGGGA
GAGCACAACCACCAGCGACTCTGAAGAAAGCGGGGGCTTAATTTGGTCCCAGTTTGTCCAGACTCTGCCCATTCA
AACGGTAACGGCCCCAGACCTTCACAACCACCCCGCAAAAACCTTTGTCAAAATTAAGGCCTCACATAACCTCAA
GAAGAAGATCCTCCGCTTTCGGTCTGGCTCTTTGAAACTGATGACGACGGTTTGAGTGACATCATTGGTGTAGAA
AGTTTGTGTGTTTTTTTTCTTCTCCCTAGTTGCCAAAATTAAAAAGGTGGTGTTTTCATTTTTGTATAATACTT
TAATGGAATGCTTTTTAAAAAAATATAAAACCAAGGTAAATTATTGTTTCATCTTCACGTATGGATGCTAGTGCC
TTTAATGGAAGGTAAAGAATGTTTTGCTAGTTAGAAGTACATATTGAGGTTTTAATGGTGGTGATAGTGAGTTTT
GTGGCACCAGCTGTTTTTTATTTTAAACTTTCTGAGCATCCGGCAAGGTACAGGTTTTGATGTTCAAGTTTTATT
GGGATAAGATCTTTTGATCCCAAGGTCAGGTGGATGGAATTTTTGGATTTATATTTGTTCCTTGAGTCTTCAGGG
CAGTGTCTCCATGAGGGTTTTCCTGTTGAGGGGCACCACATACAATAGTGTGAAGTAGGTATGAGGGGCAGTCAT
TGTATTCTATAGTTTTTTTATGTAGTCTACATTTCTCAGATGTATCCCCATTCGGTTTTATTCTCAGAACTGTTA
CTAGACTCATGACTTGGAGGCCAAACCTTAAATCCAGAGATAGCAGCCTCGATAGGGACCTTAAAAGGATTCACA
AAAACTTTTGCCACACTTGGTGCCTAGGCCCTGTTCCTAATAACCCCTTCTAGGGCCGTTTATCCAACATTTAGA
TGCCTTCTTTTCCCTCCCTAATTTGTAGCCAGTCCAACCTTTCATTCCTTGGAGGATTTAGTTTTGGGATAAAAT
TTTGGTCCTTGGGCACAGAGACATTCACTATTAATGAAGTAACCCTTGGGCATGACTCCAATCCCAGAATTGCTC
ACTGAGCGCTATGCCACCGAAGCGTTGACCTGAACATATTAGTGCAATCCAGTCCAGATTGGACCTTTGATCCTA
TGTGGAAGGGCTGTTTTTTAAGAAAAAATTTTTGGTAAACAGTATTGTGTAAAATTGCTTTTTGTATACCAATAT
ATGCATGTTTTGTGCATGAGTAGTACTTGTGTTGATACTCCTGTTGATGTTAAATTACTATATAATATAAACAGT
ATGTGTTTTTATATATCATTGTGTAAATTTAATATAACATATGCAGTAATAAACCATTTGTTTTACTGCTGTTAA
GTTTGTTATTTGGGTATAAAACCAGATGTTTACACCTGTAAAAAAAAAAAAAAAAA

FIGURE 6921

MFLLCLTGNPLREEDRLGNHASDICGGSELDAVKTDSSLPSPSSLWSASHPSSSKKMDGYILSLVQKKTHPVRTN
KPRTSVNADPTKGLLRNGSVCVRAPGGVSQGNSVNLKNSKQACLPSGGIPSLNNGTFSPPKQWSKESKAEQAESK
RVPLPEGCPSGAASDLQSKHLPKTAKPASQEHVRCSAIGTGESPKESAQLSGASPKESPSRGPAPPQENKVVQPL
KKMSQKNSLQGVPPATPPLLSTAFPVEERPALDFKSEGSSQSLEEAHLVKAQFIPGQQPSVRLHRGHRNMGVVKN
SSLKHRGPALQGLENGLPTVREKTRAGSKKCRFPDDLDTNKKLKKASSKGRKSGGGPEAGVPGRPAGGGHRAGSR
AHGHGREAVVAKPKHKRTDYRRWKSSAEISYEEALRRARRGRRENVGLYPAPVPLPYASPYAYVASDSEYSAECE
SLFHSTVVDTSEDEQSNYTTNCFGDSESSVSEGEFVGESTTTSDSEESGGLIWSQFVQTLPIQTVTAPDLHNHPA
KTFVKIKASHNLKKKILRFRSGSLKLMTTV

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FIGURE 6922

AGATTCGCGGCCGCGTCGACGGTGCGCCCACCGGTCCCGCCGGGCGCCCGCGGGACGCGCCGCCAGGGCCCTCTC
CGCCGGGGGCTCGGCGCTCGCCCACCTCTTCCAAATTTAACCATTACCTAAATCCGAAGGGAAATGAGCAAACCT
CTCGGATTGGGTGTCAAGGTCTCCTCCGGGCTGGGGCTGAGCAAGCCCTCGGAGTGACCGTGGGTGACAGCGGCT
CCAGGGACTCTTGGGGCGCAGTGGGGAAAGTGCCGGACCACC**ATG**CCGCGCTCATTTCTCGTCAAAAGCAAGAAG
GCTCACAGCTACCACCAGCCGCGCTCCCCAGGACCAGACTATTCCCTCCGTTTAGAGAATGTACCGGCGCCTAGC
CGAGCAGACAGCACTTCAAATGCAGGCGGGGCGAAAGCGGAGCCCCGGGACCGTTTGTCCCCCGAATCGCAGCTG
ACCGAAGCCCCAGACAGAGCCTCCGCATCCCCCAGACAGCTGCGAAGCAGCGTCTGCGAACGGAGCTCGGAGTTT
GAGGACTTCTGGAGGCCCCCGTCACCCTCCGCGTCTCCAGCCTCGGAGAAGTCAATGTGCCCATCGCTGGACGAA
GCCCAGCCCTTCCCCCTGCCTTTCAAACCGTACTCATGGAGCGGCCTGGCGGGTTCTGACCTGCGGCACCTGGTG
CAGAGCTACCGACCGTGTGGGGCCCTGGAGCGTGGCGCTGGCCTGGGCCTCTTCTGTGAACCCGCCCCGGAGCCT
GGCCACCCGGCCGCGCTGTACGGCCCGAAGCGGGCTGCCGGCGGCGCGGGGGCCGGGGCGCCAGGGAACTGCATC
GCAGGGGCCGGTGCCACCGCTGGCCCTGGCCTAGGGCTCTACGGCGACTTCGGGTCTGCGGCAGCCGGGCTGTAT
GAAAAGCCCACGGCAGCGGCGGGCTTGCTGTACCCCGAGCGTGGCCACCGGCTGCACGCAAACAAAGGCGCTGGC
GTCAAGGTGGAGTCGGAGCTGCTGTGCACCCGCCTGCTGCTGGGCGGCGGCTCCTACAAGTGCATCAAGTGCAGC
AAGGTGTTTTCCACGCCGCACGGGCTCGAGGTGCACGTGCGCAGGTCCCACAGCGGTACCAGACCCTTTGCCTGC
GAGATGTGCGGCAAGACCTTCGGGCACGCGGTGAGCCTGGAGCAGCACAAAGCCGTGCACTCGCAGGAACGGAGC
TTTGACTGTAAGATCTGTGGGAAGAGCTTCAAGAGGTCATCCACACTGTCCACACACCTGCTTATCCACTCAGAC
ACTCGGCCCTACCCCTGTCAGTACTGTGGCAAGAGGTTCCACCAGAAGTCAGACATGAAGAAACACACTTTCATC
CACACTGGTGAGAAGCTTCACAAGTGCCAGGTGTGCGGCAAGGCATTCAGCCAGAGCTCCAACCTCATCACCCAC
AGCCGCAAACACACAGGCTTCAAGCCCTTCGGCTGCGACCTCTGTGGGAAGGGTTTCCAGAGGAAGGTGGACCTC
CGAAGGCACCGGGAGACGCAGCATGGGCTCAAA**TGA**GCACCCTGGCTGGCTGCAAGCAGCAGCTACACAACACTA
CAGAGGGCAGCCTCCCTGCTTGCCACCACTCTGCTCCCTGCTTGCCTCCACTCCCTTCTGACTTTCCAGACCCCA
GGTCCAGTCTGCAGATCCTACCAGGTTGCTCCTCCTTCGCCTTACCTCCTGGAGCTGCCAGAAGAAATGAGGTAC
CTTTTCAAAGTGCAGCCGAGAGTGAGAACCAAGTGACTCCCTAGGCTTCGGACACAAATAGGCTCCTCTACACCT
GAAGACAAAGGCAAAGTCAAATGGGGACCAGAATAAATCTTAGACCCCACAGTCCTTCCCATTTCCAGCCTTAAT
CTACAGACAGGAATGCCCTTCAGGTTTCTTCCTTCCCCCTTCTTGACCTACCCCAGATATTTGTGTGGAAGAGGA
GGAATCACCATTTACAAGGTGGACAAATGCTAATATTTTTATCTAGAAAGAAGAGTGAGTGTTAACTTTTATTTT
TTTCCTTCTGGGGGGTCTGTTGACTCCTTTCTTTTGGGTGCTGCCTATAAATCTTGGAGGAATCATTTCTCCTCC
TCAAAAACTGATTCAGAAACTGACTTGGGGAAGGAATTTAATACTTTGAAGTCATGAGATGCACCATCGAGGCTA
CCCCCAAGAAGAAGCAGAAGAGAAGTTGGTAATGAGAGGGGATTAGAGGTCCTCCCTTCAGTAGGGCTGTGAAAA
CCTCATCACTGGAGGTAAAAGCACAAGCAATGCCTGTGGACAAGATGTCATTCATTCACTCAGCAAATGTTCATG
GATCACCGGCTACCAAGTACCAGGCACCATGTTAGGTATTGGGGAAGAGAGACTGAAGTCACAACCCCTGACTGC
TCCTCAAAAGCTAACGGTTGCACCTCCAAGTGGCTGGGTCTGTTCTTACTCTTGGAGGGAATTCTGAGAAGACAG
CACAGAATTGTAAACCTTCCCTTTTGACCCTTTTGGATTTTATCAGGTGTAAACAAAAAGCTGAACAGTTACTTC
AAAGATATGTGTGTATATTCAGTTTTTTATTGTTAAGCTGATATTTTAAAGATTTCTGAGCTAGCAGGCATGTGG
GAAGGAAGGCTCTGTCTTCAACTCTTTGACCCTCCATGTGTACCATAGAGGGGGGAAAGGTGGTATTTTCACTTT
GATGAGGTTGGTAAATGTTTTTAGATCTTCTGGTAAGCATTATGTTTGTTAATACATATTTATTAGAGTGATGTT
TTAAGTTAATAAAGTATTAAGAGTAAAAAAAAAA

FIGURE 6923

MPRSFLVKSKKAHSYHQPRSPGPDYSLRLENVPAPSRADSTSNAGGAKAEPRDRLSPESQLTEAPDRASASPRQL
RSSVCERSSEFEDFWRPPSPSASPASEKSMCPSLDEAQPFPLPFKPYSWSGLAGSDLRHLVQSYRPCGALERGAG
LGLFCEPAPEPGHPAALYGPKRAAGGAGAGAPGNCIAGAGATAGPGLGLYGDFGSAAAGLYEKPTAAAGLLYPER
GHRLHANKGAGVKVESELLCTRLLLGGGSYKCIKCSKVFSTPHGLEVHVRRSHSGTRPFACEMCGKTFGHAVSLE
QHKAVHSQERSFDCKICGKSFKRSSTLSTHLLIHSDTRPYPCQYCGKRFHQKSDMKKHTFIHTGEKLHKCQVCGK
AFSQSSNLITHSRKHTGFKPFGCDLCGKGFQRKVDLRRHRETQHGLK

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FIGURE 6924

GGGGAGCCAATTAGAGCTCCAGTTGTCACTCCTACCCACACTGGGCCTGGGGGTGAAGGGAAGTGTTTATTAGGG
GTACATGTGAAGCCGTCCAGAAGTGTCAGAGTCTTTGTAGCTTTGAAAGTCACCTAGGTTATTTGGGCATGCTCT
CCTGAGTCCTCTGCTAGTTAAGCTCTCTGAAAAGAAGGTGGCAGACCCGGTTTGCTGATCGCCCCAGGGATCAGG
AGGCTGATCCCAAAGTTGTCAGATGGAGAGTAAATACAAGGAGATACTCTTGCTAACAGGCCTGGATAACATCAC
TGATGAGGAACTGGATAGGTTTAAGTTCTTTCTTTCAGACGAGTTTAATATTGCCACAGGCAAACTACATACTGC
AAACAGAATACAAGTAGCTACCTTGATGATTCAAAATGCTGGGGCGGTGTCTGCAGTGATGAAGACCATTCGTAT
TTTTCAGAAGTTGAATTATATGCTTTTGGCAAAACGTCTTCAGGAGGAGAAGGAGAAAGTTGATAAGCAATACAA
ATCGGTAACAAAACCAAAGCCACTAAGTCAAGCTGAAATGAGTCCTGCTGCATCTGCAGCCATCAGAAATGATGT
CGCAAAGCAACGTGCTGCACCAAAAGTCTCTCCTCATGTTAAGCCTGAACAGAAACAGATGGTGGCCCAGCAGGA
ATCTATCAGAGAAGGGTTTCAGAAGCGCTGTTTGCCAGTTATGGTACTGAAAGCAAAGAAGCCCTTCACGTTTGA
GACCCAAGAAGGCAAGCAGGAGATGTTTCATGCTACAGTGGCTACAGAAAAGGAATTCTTCTTTGTAAAAGTTTT
TAATACACTGCTGAAAGATAAATTCATTCCAAAGAGAATAATTATAATAGCAAGATATTATCGGCACAGTGGTTT
CTTAGAGGTAAATAGCGCCTCACGTGTGTTAGATGCTGAATCTGACCAAAAGGTTAATGTCCCGCTGAACATTAT
CAGAAAAGCTGGTGAAACCCCGAAGATCAACACGCTTCAAACTCAGCCCCTTGGAACAATTGTGAATGGTTTGTT
TGTAGTCCAGAAGGTAACAGAAAAGAAGAAAAACATATTATTTGACCTAAGTGACAACACTGGGAAAATGGAAGT
ACTGGGGGGTTAGAAACGAGGACACAATGAAATGTAAGGAAGGAGATAAGGTTCGACTTACATTCTTCACACTGTC
AAAAAATGGAGAAAAACTACAGCTGACATCTGGAGTTCATAGCACCATAAAGGTTATTAAGGCCAAAAAAAAAAA
ACATAGAGAAGTAAAAAGGACCAATTCAAGCCAACTGGTCTAAGCAGCATTTAATTGAAGAATATGTGATACAGT
CTCTTCAATCAGATTGTAAGTTACCTGAAAGCTGCAGTTCACAGGCTCCTCTCTCCACCAAATTAGGATAGAATA
ATTGCTGGATAAACAAATTCAGAATATCAACAGATGATCACAATAAACATCTGTTTCTCATTCAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAA

FIGURE 6925

MESKYKEILLLTGLDNITDEELDRFKFFLSDEFNIATGKLHTANRIQVATLMIQNAGAVSAVMKTIRIFQKLNYM
LLAKRLQEEKEKVDKQYKSVTKPKPLSQAEMSPAASAAIRNDVAKQRAAPKVSPHVKPEQKQMVAQQESIREGFQ
KRCLPVMVLKAKKPFTFETQEGKQEMFHATVATEKEFFFVKVFNTLLKDKFIPKRIIIIARYYRHSGFLEVNSAS
RVLDAESDQKVNVPLNIIRKAGETPKINTLQTQPLGTIVNGLFVVQKVTEKKKNILFDLSDNTGKMEVLGVRNED
TMKCKEGDKVRLTFFTLSKNGEKLQLTSGVHSTIKVIKAKKKKHREVKRTNSSQLV

FIGURE 6926

ACCCCATCCCCCACTCCTATACCGGTCCTCCATTTTGGTGCCTGCAAAGCTCTGGGAAAGAATCCCGGGAAACGA
AAAATGGTGGGTTTGGGGGAAGGGAGGTAAGGGGAGAAAGCTGGAGGGAGGGGCTTTAATTGGAGGCCCCGTAGA
GGACGCGCGGAACTTCTAAGGTGGGAAAAAACGAAATTAAAAAATCCTTTGATATCAGGGCTCTGAATCCTGCTG
GTCAGAGCACCAAGCATTCAGTCTCTCTCCTTGCCTTTGTCTTACTTGTGTTCAAAGAAAAACAACCAGAAAAAA
AAAATCTCATCATGGCAAATATTCACCAGGAAAACGAAGAGATGGAGCAGCCTATGCAGAATGGAGAGGAAGACC
GCCCTTTGGGAGGAGGTGAAGGCCACCAGCCTGCAGGAAATCGACGGGGACAGGCTCGCCGACTTGCCCCTAATT
TTCGATGGGCCATACCCAATAGGCAGATCAATGATGGGATGGGTGGAGATGGAGATGATATGGAAATATTCATGG
AGGAGATGAGAGAAATCAGAAGAAAACTTAGGGAGCTGCAGTTGAGGAATTGTCTGCGTATCCTTATGGGGGAGC
TCTCTAATCACCATGACCATCATGATGAATTTTGCCTTATGCCTTGACTCCTGCCATTTATCATGAGATTAATAC
TGTGATTCCCGCTGTTTTCTTTTTCCTTGCATTTTCCTAATATGCCTTTACTGATCCGTTTGCTGTGAACCCTAT
GTTATTTCCATGTGTCAAGTGGGTCTTGTGTTGCCAGCTTCTATTTGAAGATTGCCTTTGCACTCAGTGTAAGTT
TCTGTCAGCAGTAGTTTCACCCATTTGCATGGAAAAATTTAAAGCTAATAAAGCAATTTAAAAAGC

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FIGURE 6927

MANIHQENEEMEQPMQNGEEDRPLGGGEGHQPAGNRRGQARRLAPNFRWAIPNRQINDGMGGDGDDMEIFMEEMR
EIRRKLRELQLRNCLRILMGELSNHHDHHDEFCLMP

FIGURE 6928A

CCACGCGTCCGCCCGGCGCTAAGCCGGGAGACAAGATCCGATCTACTGAGAGCTGCGAGGTACTGCCCTGGATGT
GGTGGAGCTGGGCTGGGACCTCCGGGCTGCTGGTCTGTGAGCCTGGCTTTGAAAATTGGTTACTGGGTCTCCTCT
CAAGAAATCTCAAGATATTAAAGTTACTGCTGTTAAAAAGTGCACGAGCATAGCTGTGTCTCGGAAATGGTTGGC
TTTGGGCAGTTCAGGAGGAGGACTCCATCTCATTCAGAAAGAAGGCTGGAAGCACAGGCTTTTTCTTTCACACAG
GGAAGGTGCAATTTCTCAAGTCGCCTGTTGTTTACATGATGATGATTATGTTGCTGTAGCTACCAGTCAAGGTCT
TGTGGTTGTTTGGGAATTAAATCAAGAGCGTCGTGGGAAACCGGAACAA**ATG**TATGTGTCTTCAGAACACAAAGG
CCGAAGAGTCACAGCTCTCTGCTGGGATACAGCTATTCTTAGAGTTTTTGTAGGTGATCATGCTGGGAAGGTTTC
TGCTATCAAACTCAATACTTCTAAACAAGCAAAGGCAGCTGCTGCTTTTGTGATGTTTCCTGTTCAGACAATCAC
AACTGTTGACTCCTGTGTTGTACAGTTAGATTATTTGGATGGAAGGCTACTTATATCTTCACTTACTCGATCCTT
CTTGTGTGACACTGAGAGAGAAAAGTTTTGGAAAATTGGAAACAAGGAAAGAGATGGAGAATATGGAGCTTGTTT
CTTTCCTGGAAGATGTTCTGGGGGCCAGCAACCTCTGATATATTGTGCTCGCCCAGGCTCTAGGATGTGGGAAGT
GAACTTTGATGGAGAAGTTATAAGTACACATCAGTTCAAGAAACTCCTCTCGTTGCCACCTCTCCCTGTGATTAC
TCTAAGATCAGAACCTCAGTATGATCATACAGCTGGATCCTCCCAGTCTTTGTCTTTCCCCAAACTCTTACATCT
TAGTGAGCATTGTGTGCTGACTTGGACAGAAAGAGGAATTTATATTTTCATTCCTCAGAATGTTCAAGTTCTTCT
TTGGAGTGAAGTCAAAGATATTCAGGATGTGGCTGTCTGTAGGAATGAATTGTTCTGTTTGCACCTAAATGGGAA
AGTCTCACATCTCTCCCTGATATCTGTGGAGCGCTGTGTGGAACGCCTGCTAAGAAGAGGCCTATGGAACTTGGC
TGCTCGTACATGCTGTCTTTTCCAAAATTCTGTCATTGCCAGCAGAGCAAGAAAAACTTTGACTGCAGATAAATT
GGAGCATTTGAAATCTCAGCTGGACCATGGCACCTACAATGATCTAATTTCTCAACTGGAAGAATTGATCTTAAA
ATTTGAACCTTTGGATTCAGCTTGTAGCAGTAGAAGAAGCTCCATTTCATCACATGAAAGTTTCAGCATCTTGGA
CTCTGGTATTTATCGTATCATTAGTAGTAGAAGAGGCAGTCAGTCAGATGAAGACTCTTGCTCCCTTCACAGCCA
AACCCTCTCAGAAGATGAGAGATTTAAAGAATTCACCTCACAGCAGGAAGAGGACCTGCCAGATCAGTGTTGTGG
CTCACACGGAAATGAAGACAATGTTTCTCATGCTCCAGTGATGTTTGAGACAGATAAGAATGAAACTTTTCTCCC
GTTCGGCATTCCATTACCATTTCGTTCTCCATCTCCTCTTGTGTCTCTTCAGGCTGTCAAAGAAAGTGTTTCTAG
CTTTGTGCGTAAAACTACTGAGAAGATTGGCACCCTTCACACGAGCCCTGATCTGAAAGTGAGACCAGAGCTCAG
GGGTGATGAGCAATCATGTGAAGAGGATGTGAGTTCAGATACCTGCCCAAAGGAGGAAGACACTGAGGAGGAAAA
AGAGGTAACTAGTCCACCTCCAGAAGAAGACAGGTTCCAGGAGCTTAAAGTAGCAACAGCAGAAGCAATGACCAA
GCTACAGGACCCTCTGGTTTTATTTGAATCCGAGTCTCTGAGAATGGTTTTACAGGAGTGGCTTTCACATTTAGA
AAAAACATTTGCCATGAAGGACTTTTCAGGTGTTTCAGATACTGACAACTCATCCATGAAATTGAACCAGGATGT
GCTATTAGTTAATGAATCAAAAAAGGGAATATTAGATGAAGATAATGAAAAAGAAAAAAGGGACTCTTTAGGCAA
TGAAGAATCTGTTGATAAAACAGCATGTGAATGTGTAAGGAGTCCAAGGGAGTCTTTGGATGACCTGTTTCAAAT
ATGTTCTCCATGCGCCATTGCAAGTGGTCTTCGGAACGACCTGGCTGAATTGACAACATTATGTTTGGAGTTGAA
TGTATTGAATTCTAAGATCAAAAGCACCAGTGGACATGTGGACCACACTTTGCAACAGTACTCTCCTGAAATTCT
GGCTTGCCAGTTCCTGAAGAAGTACTTTTTTCTCCTGAACTTGAAAAGAGCGAAGGAGAGTATCAAGCTTAGTTA
CAGTAATAGCCCTTCTGTTTGGGATACTTTTATTGAAGGATTGAAAGAAATGGCAAGTTCCAATCCTGTGTATAT
GGAGATGGAAAAAGGAGATCTACCAACAAGGTTAAAGTTACTAGATGACGAGGTTCCTTTTGATAGTCCGTTGTT
GGTTGTTTATGCTACCCGGTTGTATGAAAAGTTTGGGGAGTCTGCTCTTCGATCCTTAATCAAGTTCTTTCCATC
CATTTTGCCATCGGATATCATACAACTTTGTCATCATCATCCTGCTGAGTTTTTGGCCTATTTAGACAGTCTGGT
GAAATCAAGGCCTGAAGATCAGCGGTCATCTTTTCTTGAGTCCCTTCTGCAACCAGAGTCTTTAAGGTTGGATTG
GCTGCTTTTGGCAGTGTCCCTTGATGCTCCACCAAGCACCAGCACAATGGATGATGAAGGTTATCCCAGGCCTCA
TTCACACTTGCTTTCCTGGGGTTACAGTCAGCTGATCCTTCATCTAATTAAACTTCCTGCAGATTTTATAACCAA
AGAGAAAATGACAGACATCTGCAGGTCTTGTGGTTTCTGGCCTGGATATCTAATTCTCTGTTTGGAGCTGGAGAG
AAGAAGAGAGGCCTTCACCAATATTGTGTATCTGAATGATATGAGCCTGATGAAAGGGGACAATGGTTGGATCCC
AGAGACCGTGGAGGAATGGAAGCTTCTCCTTCATCTCATACAGAGCAAGAGCACGAGGCCAGCCCCCCAGGAGTC
ACTAAATGGGAGCCTCAGTGATGGGCCTTCCCCCATCAATGTGGAGAATGTGGCACTTCTGTTAGCTAAGGCCAT
GGGCCCAGATCGGGCTTGGTCACTGCTACAGGAATGTGGTCTGGCCCTTGAGTTGTCAGAGAAGTTTACCAGAAC
CTGCGATATCCTGAGGATTGCTGAGAAAAGGCAGAGGGCCTTGATACAAAGCATGCTTGAAAAATGCGATCGGTT
TCTCTGGTCCCAGCAGGCC**TAG**TGGGAGAAGATTCAGCAGGATGTCATGACATTTTGAGAAAAACTAAATCATGC
TCCTGAACCTTCTGAACGCATTTGTTATTGAAGGAAAGACACCACCCCCAAATCCTGCCATCTTATTGGGGCTAC

FIGURE 6928B

TTTTGTCAGTGTCTGTACCCTTGGCATCGGCATCTGTGACTCTTTATCCATGACCTCAGTGTTTCTTAACCAAAG
TTGTACTCAGCATTTCTTAACCAAAGTTGAATTTTGAAAAGAGTCAGTCCTTGTTTGCTGGAATTAGAATGTTAA
TGTCCTAGTATTATTCCGAACTACAGTATTAACTGCTTGTTGCTAGTGGATTAGACAGATTCTTTTCTTACTGTG
GCTTCCATGTTGGGAGCAGAAGCTTTTCATCCTGGTCACATGAAGACAGATGGTATTATTGACTGGAGTTGAATT
ATTTTTATATCTTGTCTGGCACAATATGGAAATTAATGAAATAAGACGGTGTATAATGGAATTAACACCCAAAAT
AAGTAGAACACTGAAGATTTGAATTTGATATTTAAGTAAAATGGGACTGGGTGCAGTGGCTCAGGCCTGTAATCC
CAACCCTTTGGAAGGTAAAGACGGGAGGATCACTTGAGGCCAGGAGTTCAAGACCAGCCTGGGCAACATAGTGAG
AATGCATCTCTACAAAAAATAAAAAAAATTAGCTAGGCATAGTACCTGAGGCCAGGAGGTCCAGGCCGCAATGAG
ATGTGTTTGTGCCATTGCACACCAGTCTGGGTGACAGAGAAAGACCCTGTCTCAAAAACAAATTAAATAAAATAT
CTTCATATATAAATTAAGCTAATTAAAAATATTTTTCCCTGTATTTATTTAATATTTTCTAATCTGAACCCATAT
ACAGCTGACTAATTCATTCTTAGAAATGTGTTATCTGTAATCTTTCCTAAACAGAGTAGCCCACAAGAATCATGC
ACTTTTTAAAATTATTTCTAAGAAGCCATAACAAAGCTGTGTACTAATAAAGACTGCAGCAAGCACTTGTGTTAT
TTAAATTATGTAAGTAGATTGTCATTTGTCAGGCTCCTGTACATTTACATAGCATGTTATATTAATAATAAATGT
AAAATATGACTAAAGTTTTCATTGGAAAAAAAAAAAAAA

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FIGURE 6929

MYVSSEHKGRRVTALCWDTAILRVFVGDHAGKVSAIKLNTSKQAKAAAAFVMFPVQTITTVDSCVVQLDYLDGRL
LISSLTRSFLCDTEREKFWKIGNKERDGEYGACFFPGRCSGGQQPLIYCARPGSRMWEVNFDGEVISTHQFKKLL
SLPPLPVITLRSEPQYDHTAGSSQSLSFPKLLHLSEHCVLTWTERGIYIFIPQNVQVLLWSEVKDIQDVAVCRNE
LFCLHLNGKVSHLSLISVERCVERLLRRGLWNLAARTCCLFQNSVIASRARKTLTADKLEHLKSQLDHGTYNDLI
SQLEELILKFEPLDSACSSRRSSISSHESFSILDSGIYRIISSRRGSQSDEDSCSLHSQTLSEDERFKEFTSQQE
EDLPDQCCGSHGNEDNVSHAPVMFETDKNETFLPFGIPLPFRSPSPLVSLQAVKESVSSFVRKTTEKIGTLHTSP
DLKVRPELRGDEQSCEEDVSSDTCPKEEDTEEEKEVTSPPPEEDRFQELKVATAEAMTKLQDPLVLFESESLRMV
LQEWLSHLEKTFAMKDFSGVSDTDNSSMKLNQDVLLVNESKKGILDEDNEKEKRDSLGNEESVDKTACECVRSPR
ESLDDLFQICSPCAIASGLRNDLAELTTLCLELNVLNSKIKSTSGHVDHTLQQYSPEILACQFLKKYFFLLNLKR
AKESIKLSYSNSPSVWDTFIEGLKEMASSNPVYMEMEKGDLPTRLKLLDDEVPFDSPLLVVYATRLYEKFGESAL
RSLIKFFPSILPSDIIQLCHHHPAEFLAYLDSLVKSRPEDQRSSFLESLLQPESLRLDWLLLAVSLDAPPSTSTM
DDEGYPRPHSHLLSWGYSQLILHLIKLPADFITKEKMTDICRSCGFWPGYLILCLELERRREAFTNIVYLNDMSL
MKGDNGWIPETVEEWKLLLHLIQSKSTRPAPQESLNGSLSDGPSPINVENVALLLAKAMGPDRAWSLLQECGLAL
ELSEKFTRTCDILRIAEKRQRALIQSMLEKCDRFLWSQQA

FIGURE 6930

GGCTTCTGGTTCGGCCCACCTCTGAAGGTTCCAGAATCGATAGTGAATTCGTGGTTCCAAGTTTGGAGCTTTTAG
CTGCCAGCCCTGGCCCATCATGTAGCTGCAGCACAGCCTTCCCTAACGTTGCAACTGGGGGAAAAATCACTTTCC
AGTCTGTTTTGCAAGGTGTGCATTTCCATCTTGATTCCCTGAAAGTCCATCTGCTGCATCGGTCAAGAGAAACTC
CACTTGCATGAAGATTGCACGCCTGCAGCTTGCATCTTTGTTGCAAAACTAGCTACAGAAGAGAAGCAAGGCAAA
GTCTTTTGTGCTCCCCTCCCCCATCAAAGGAAAGGGGAAAATGTCTCAGTCGAAAGGCAAGAAGCGAAACCCTGG
CCTTAAAATTCCAAAAGAAGCATTTGAACAACCTCAGACCAGTTCCACACCACCTCGAGATTTAGACTCCAAGGC
TTGCATTTCTATTGGAAATCAGAACTTTGAGGTGAAGGCAGATGACCTGGAGCCTATAATGGAACTGGGACGAGG
TGCGTACGGGGTGGTGGAGAAGATGCGGCACGTGCCCAGCGGGCAGATCATGGCAGTGAAGCGGATCCGAGCCAC
AGTAAATAGCCAGGAACAGAAACGGCTACTGATGGATTTGGATATTTCCATGAGGACGGTGGACTGTCCATTCAC
TGTCACCTTTTATGGCGCACTGTTTCGGGAGGGTGATGTGTGGATCTGCATGGAGCTCATGGATACATCACTAGA
TAAATTCTACAAACAAGTTATTGATAAAGGCCAGACAATTCCAGAGGACATCTTAGGGAAAATAGCAGTTTCTAT
TGTAAAAGCATTAGAACATTTACATAGTAAGCTGTCTGTCATTCACAGAGACGTCAAGCCTTCTAATGTACTCAT
CAATGCTCTCGGTCAAGTGAAGATGTGCGATTTTGGAATCAGTGGCTACTTGGTGGACTCTGTTGCTAAAACAAT
TGATGCAGGTTGCAAACCATACATGGCCCCTGAAAGAATAAACCCAGAGCTCAACCAGAAGGGATACAGTGTGAA
GTCTGACATTTGGAGTCTGGGCATCACGATGATTGAGTTGGCCATCCTTCGATTTCCCTATGATTCATGGGGAAC
TCCATTTCAGCAGCTCAAACAGGTGGTAGAGGAGCCATCGCCACAACTCCCAGCAGACAAGTTCTCTGCAGAGTT
TGTTGACTTTACCTCACAGTGCTTAAAGAAGAATTCCAAAGAACGGCCTACATACCCAGAGCTAATGCAACATCC
ATTTTTCACCCTACATGAATCCAAAGGAACAGATGTGGCATCTTTTGTAAAACTGATTCTTGGAGACTAAAAAGC
AGTGGACTTAATCGGTTGACCCTACTGTGGATTGGTGGGTTTCGGGGTGAAGCAAGTTCACTACAGCATCAATAG
AAAGTCATCTTTGAGATAATTTAACCCTGCCTCTCAGAGGGTTTTCTCTCCCAATTTTCTTTTTACTCCCCCTCT
TAAGGGGGCCTTGGAATCTATAGTATAGAATGAACTGTCTAGATGGATGAATTATGATAAAGGCTTAGGACTTCA
AAAGGTGATTAAATATTTAATGATGTGTCATATGAGTCCTCAAGCTTCTCAGACTTCTCTTATTCTTTACAAAAT
GAATGCATTGGCCCTGACAAAAAGGTGCTACGGTAGTGATGAAATTATAAGTAGATTTGTAGTTTGTCCCATTTA
TTATTTTAATATTTATGTTTAAGTGCTTGGTTGAAAAGATTCCATTTTATACAAGAAGGGAGATTCAAAAAAAAA
ATATAAGGTTGGGTTAGCAATATTTATAGGGCTTTTATTTTTTAAGTTCAATTGTGTCTGTGGTCCAGAAGAAAT
TATTTAATATGCATCTTTGAGAATATTATAAAAATATCAAAAAGGAGCTCTTCTTGTGAAATGTCTGTTCCAGCT
GTTGTGACTGCTGCCATTTTTGGAAACATCTGCCCAATCCTGGGTGATCACCACATCTTTTAGGGGAAGTGACAA
GATGCTCTGGTCATACTCTTTTTCCCAACTTTGGAAAACATAAAAATCACTCATATAACAGCTCAAAGAGTAAAA
CATTTGGTTCTTCTGACACTTGTGGTATAGTATTAGTGGAAAGTGATTTGTAATATGATTTTATATCCACCTACC
TATTCATCTACCTGTGTGTATGTGTGTGTTTGTGTGTCTATTTGGCAATTCACAAGTCCTGCCAAGTGGTTTCTA
TGAGCATCTCTGTTTGGTAAGGAGGACAATTGTCAGTTTTGAGGGGGACATGTGTTAAATCACAGAAAAAAATGG
TGCCTTCTTCTGCGTTTGTCCCTCCTGCCATGTGTAAGTTGTAAGGATTGCCTTTGTAGTTAATGTACTCTTTGG
CTTTGTTTGTTTGTTTTCTTCTTCAGTGAAGCAGCCTTACTATTCATAGAAGGGCTAGAATAGGAGAAAATGAAA
GGTAGTGAGTAATTCTTTGATAAGATGAGGAAATAATGGGAAAGGTTGAATTAATTCCTGGGCATGGACTACCAG
ATGACCACAAGTTGCGTTGAGGCCGCATCTTTCTTCAGCAGCGTGCAATAGCTGGCTCCTCTATAGGAGATGAGC
TTCATTGGGAGTTCCTAGCAAGTTGACTAAACAGCAAAAGTTCTTTCTCGTGGGTAAATATACCCACAGGTTCTA
TGATTTGTAGCTCTAGGTTTCTTGATGATCAAGGAGTGAAGTAATTGACAGGGAAAATATAGACCTATGATAAAT
AACCAGGAAGCATTGCTTTTGGACAAGGAAGAACAGAGGGTTTTGATTTTAAAAAGAAGAAAAAAAAACCTTATT
TTTTCTTTCTTGGCCTCAAGTTCAATATGGAGAGGATTGCTTCCCTGAATCCTCTCTTCCTTCCCCTTTTAGAG

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FIGURE 6931

MELGRGAYGVVEKMRHVPSGQIMAVKRIRATVNSQEQKRLLMDLDISMRTVDCPFTVTFYGALFREGDMWICMEL
MDTSLDKFYKQVIDKGQTIPEDILGKIAVSIVKALEHLHSKLSVIHRDVKPSNVLINALGQVKMCDFGISGYLVD
SVAKTIDAGCKPYMAPERINPELNQKGYSVKSDIWSLGITMIELAILRFPYDSWGTPFQQLKQVVEEPSPQLPAD
KFSAEFVDFTSQCLKKNSKERPTYPELMQHPFFTLHESKGTDVASFVKLILGD

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FIGURE 6932

GGGCGTGGTTCGAGAGCGCGCAGAGTCCAGACTGGCGGCAGGGCCCGAGGGGCCGACCCGCAGCGTCCCTGGTCT
CTCCAGCCCTCACTCGGAACCGCACTGACAATACCCTCCCCTCCCTTGGGCTGGACCCCTCTCTACAGCTAGGAG
CCA**ATG**GCAGAAGACAAAACCAAACCGAGTGAGTTGGACCAAGGGAAGTATGATGCTGATGACAACGTGAAGATC
ATCTGCCTGGGAGACAGCGCAGTGGGCAAATCCAAACTCATGGAGAGATTTCTCATGGATGGCTTTCAGCCACAG
CAGCTGTCCACGTACGCCCTGACCCTGTACAAGCACACAGCCACGGTAGATGGAAGGACCATCCTTGTGGACTTT
TGGGACACGGCAGGCCAGGAGCGGTTCCAGAGCATGCATGCCTCCTACTACCACAAGGCCCACGCCTGCATCATG
GTGTTTGATGTACAGAGGAAAGTCACCTATAGGAACCTGAGCACCTGGTATACAGAGCTTCGGGAGTTCAGGCCA
GAGATCCCATGCATCGTGGTGGCCAATAAAATTGATGACATAAACGTGACCCAAAAAAGCTTCAATTTTGCCAAG
AAGTTCTCCCTGCCCCTGTATTTCGTCTCGGCTGCTGATGGTACCAATGTTGTGAAGCTCTTCAATGATGCAATT
CGATTAGCTGTGTCTTACAAACAGAACTCCCAGGACTTCATGGATGAGATTTTTCAGGAGCTCGAGAACTTCAGC
TTGGAGCAGGAAGAGGAGGACGTGCCAGACCAGGAACAGAGCAGCAGCATCGAGACCCCATCAGAGGAGGCGGCC
TCTCCCCACAGC**TGA**GGGGCTGGGGCTAGGGGTGGGTGGAGCCCTTTTAAAATACCCTTCCCTTCAACAACTCTC
CAGCTCTGAATGGAGAAACTCTCTAGGCCATCCCCTCTTCTACCTCCTGCAACCCACCCATCCTATTAGCCTCCC
ACATTCTAGGCCCGTGATACAGGGATGAGGTCAGCACCAGCAAACTCTGGACTGGTGGAAGAATTCCCCACCAGA
TCTCCTTGAAGCAGAAGTAGGGATCAGCATCATTAACACCTTCCCCACCCCCTCCCCGCAGGCAGACAGTGAAGA
GAATCAGAAAACATGATTATGTGTCACTTTAATACAGGAAATTTAGGTGTTTTTTGGTGTTTTTGTTTTTGTTTT
TGTTTTTGTTTTCTTTCCAAAGCTCACCTCGGGGACAATTCCTTGGGCTTCTCCTGAGGTAATGATTTACCCCCC
CACCCACAGCTGAGTCTGTGAGGCCCCATCCTTTCCCTACGTTTTCTCCCATCTTTTTTCCTCTTCAGTCTCCCA
GTCATCTGGTTTGTTTGTTTCTTTGTTCGTTCTGAGACGGAGTCTCGCTCTGTCGCCAGGCTGGAGTGCAGTGGC
GCAGTCTCGGCTCGCTGCAACCTCTGACTCCCTGGTTCAAACGATTCTCCTGCCTCAGCCTCCCGAGTGGCTGGC
ATCACCACGCCCAGCTAATTTTTGTATTTTTAGTAGAGACGGGGTTTCACCATGTTGCCCAGGATGGTCTCGATC
TCCTCACCTCGTGATCCGCCCGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACCGCGCCCGGCCC
CAATCATCTGTTTTTAAACAATCGTTTTTGAGCAGATAGCTATTCATTCCAGATTTTCGTGTACCCATTCTGTTT
CAGGAGCTCTTCTAGGTAAAGCTGAGATCACAGGAACAGCAGGTGACAGGCCTAGCTATAGTTAGGAATACACAA
GCCGTAAAATCGAGTCCTTACAGCCATACCACAAGGTACGTCCATTTGGACTACAAGAAGAGCTTCCTTTAAAGT
TCCTATTTCAGCATAAAGAGGCTGTCCTTTTTTTTTGAGGAATAGTTTGGACCTTGTGCCTCCTGTGGGAGGCTG
AGGACTGCAAGAGGAGAGCTAGCAGATATGCCTGTTCACCCCTCTCTGGTACTTGTGGCTTGCTAGTATGTTTTT
ATGATAATCTCGGGCATTGTTTGCATTGTGTTTATTAATAGGGTTTTGTTTTTATTGTTTCCTTTTTTACAGTAA
AGGCTGAATTACAT

FIGURE 6933

MAEDKTKPSELDQGKYDADDNVKIICLGDSAVGKSKLMERFLMDGFQPQQLSTYALTLYKHTATVDGRTILVDFW
DTAGQERFQSMHASYYHKAHACIMVFDVQRKVTYRNLSTWYTELREFRPEIPCIVVANKIDDINVTQKSFNFAKK
FSLPLYFVSAADGTNVVKLFNDAIRLAVSYKQNSQDFMDEIFQELENFSLEQEEEDVPDQEQSSSIETPSEEAAS
PHS

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FIGURE 6934

GGCACCGATTCGGGGCCTGCCCGGACTTCGCCGCACGCTGCAGAACCTCGCCCAGCGCCCACC**ATG**CCCCGGCAG
CTCAGCGCGGCGGCCGCGCTCTTCGCGTCCCTGGCCGTAATTTTGCACGATGGCAGTCAAATGAGAGCAAAAGCA
TTTCCAGAAACCAGAGATTATTCTCAACCTACTGCAGCAGCAACAGTACAGGACATAAAAAAACCTGTCCAGCAA
CCAGCTAAGCAAGCACCTCACCAAACTTTAGCAGCAAGATTCATGGATGGTCATATCACCTTTCAAACAGCGGCC
ACAGTAAAAATTCCAACAACTACCCCAGCAACTACAAAAAACACTGCAACCACCAGCCCAATTACCTACACCCTG
GTCACAACCCAGGCCACACCCAACAACTCACACACAGCTCCTCCAGTTACTGAAGTTACAGTCGGCCCTAGCTTA
GCCCCTTATTCACTGCCACCCACCATCACCCCACCAGCTCATACAGCTGGAACCAGTTCATCAACCGTCAGCCAC
ACAACTGGGAACACCACTCAACCCAGTAACCAGACCACCCTTCCAGCAACTTTATCGATAGCACTGCACAAAAGC
ACAACCGGTCAGAAGCCTGATCAACCCACCCATGCCCCAGGAACAACGGCAGCTGCCCACAATACCACCCGCACA
GCTGCACCTGCCTCCACGGTTCCTGGGCCCACCCTTGCACCTCAGCCATCGTCAGTCAAGACTGGAATTTATCAG
GTTCTAAACGGAAGCAGACTCTGTATAAAAGCAGAGATGGGGATACAGCTGATTGTTCAAGACAAGGAGTCGGTT
TTTTCACCTCGGAGATACTTCAACATCGACCCCAACGCAACGCAAGCCTCTGGGAACTGTGGCACCCGAAAATCC
AACCTTCTGTTGAATTTTCAGGGCGGATTTGTGAATCTCACATTTACCAAGGATGAAGAATCATATTATATCAGT
GAAGTGGGAGCCTATTTGACCGTCTCAGATCCAGAGACAGTTTACCAAGGAATCAAACATGCGGTGGTGATGTTC
CAGACAGCAGTCGGGCATTCCTTCAAGTGCGTGAGTGAACAGAGCCTCCAGTTGTCAGCCCACCTGCAGGTGAAA
ACAACCGATGTCCAACTTCAAGCCTTTGATTTTGAAGATGACCACTTTGGAAATGTGGATGAGTGCTCGTCTGAC
TACACAATTGTGCTTCCTGTGATTGGGGCCATCGTGGTTGGTCTCTGCCTTATGGGTATGGGTGTCTATAAAATC
CGCCTAAGGTGTCAATCATCTGGATACCAGAGAATC**TAA**TTGTTGCCCGGGGGGGAATGAAAATAATGGAATTTAG
AGAACTCTTTCATCCCTTCCAGGATGGATGTTGGGAAATTCCCTCAGAGTGTGGGTCCTTCAAACAATGTAAACC
ACCATCTTCTATTCAAATGAAGTGAGTCATGTGTGATTTAAGTTCAGGCAGCACATCAATTTCTAAATACTTTTT
GTTTATTTTATGAAAGATATAGTGAGCTGTTTATTTTCTAGTTTCCTTTAGAATATTTTAGCCACTCAAAGTCAA
CATTTGAGATATGTTGAATTAACATAATATATGTAAAGTAGAATAAGCCTTCAAATTATAAACCAAGGGTCAATT
GTAACTAATACTACTGTGTGTGCATTGAAGATTTTATTTTACCCTTGATCTTAACAAAGCCTTTGCTTTGTTATC
AAATGGACTTTCAGTGCTTTTACTATCTGTGTTTTATGGTTTCATGTAACATACATATTCCTGGTGTAGCACTTA
ACTCCTTTTCCACTTTAAATTTGTTTTTGTTTTTTGAGACGGAGTTTCACTCTTGTCACCCAGGCTGGAGTACAG
TGGCACGATCTCGGCTTATGGCAACCTCCGCCTCCCGGGTTCAAGTGATTCTCCTGCTTCAGCTTCCCGAGTAGC
TGGGATTACAGGCACACACTACCACGCCTGGCTAATTTTTGTATTTTTATTATAGACGGGTTTCACCATGTTGGC
CAGACTGGTCTTGAACTCTTGACCTCAGGTGATCCACCCACCTCAGCCTCCCAAAGTGCTGGGATTACAGGCATG
AGCCATTGCGCCCGGCCTTAAATGTTTTTTTTAATCATCAAAAAGAACAACATATCTCAGGTTGTCTAAGTGTTT
TTATGTAAAACCAACAAAAAGAACAAATCAGCTTATATTTTTTATCTTGATGACTCCTGCTCCAGAATTGCTAGA
CTAAGAATTAGGTGGCTACAGATGGTAGAACTAAACAATAAGCAAGAGACAATAATAATGGCCCTTAATTATTAA
CAAAGTGCCAGAGTCTAGGCTAAGCACTTTATCTATATCTCATTTCATTCTCACAACTTATAAGTGAATGAGTAA
ACTGAGACTTAAGGGAACTGAATCACTTAAATGTCACCTGGCTAACTGATGGCAGAGCCAGAGCTTGAATTCATG
TTGGTCTGACATCAAGGTCTTTGGTCTTCTCCCTACACCAAGTTACCTACAAGAACAATGACACCACACTCTGCC
TGAAGGCTCACACCTCATACCAGCATACGCTCACCTTACAGGGAAATGGGTTTATCCAGGATCATGAGACATTAG
GGTAGATGAAAGGAGAGCTTTGCAGATAACAAAATAGCCTATCCTTAATAAATCCTCCACTCTCTGGAAGGAGAC
TGAGGGGCTTTGTAAAACATTAGTCAGTTGCTCATTTTTATGGGATTGCTTAGCTGGGCTGTAAAGATGAAGGCA
TCAAATAAACTCAAAGTATTTTTAAATTTTTTTGATAATAGAGAAACTTCGCTAACCAACTGTTCTTTCTTGAGT
GTATAGCCCCATCTTGTGGTAACTTGCTGCTTCTGCACTTCATATCCATATTTCCTATTGTTCACTTTATTCTGT
AGAGCAGCCTGCCAAGAATTTTATTTCTGCTGTTTTTTTTGCTGCTAAAGAAAGGAACTAAGTCAGGATGTTAAC
AGAAAAGTCCACATAACCCTAGAATTCTTAGTCAAGGAATAATTCAAGTCAGCCTAGAGACCATGTTGACTTTCC
TCATGTGTTTCCTTATGACTCAGTAAGTTGGCAAGGTCCTGACTTTAGTCTTAATAAAACATTGAATTGTAGTAA
AGGTTTTTGCAATAAAAACTTACTTTGG

FIGURE 6935

MPRQLSAAAALFASLAVILHDGSQMRAKAFPETRDYSQPTAAATVQDIKKPVQQPAKQAPHQTLAARFMDGHITF
QTAATVKIPTTTPATTKNTATTSPITYTLVTTQATPNNSHTAPPVTEVTVGPSLAPYSLPPTITPPAHTAGTSSS
TVSHTTGNTTQPSNQTTLPATLSIALHKSTTGQKPDQPTHAPGTTAAAHNTTRTAAPASTVPGPTLAPQPSSVKT
GIYQVLNGSRLCIKAEMGIQLIVQDKESVFSPRRYFNIDPNATQASGNCGTRKSNLLLNFQGGFVNLTFTKDEES
YYISEVGAYLTVSDPETVYQGIKHAVVMFQTAVGHSFKCVSEQSLQLSAHLQVKTTDVQLQAFDFEDDHFGNVDE
CSSDYTIVLPVIGAIVVGLCLMGMGVYKIRLRCQSSGYQRI

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FIGURE 6936

TTTTCAGTGCCTCTTCTGTCACAATCGTAGACACGGTCACACTCCAGTATCTGGGAAAACACAGAGATCGCTATG
GGTTGCAGCGC**ATG**TGGGGCTCCCTGGGCTGGGGCCTGGCGATGCTGTCTGTGGGCATCGGGATCGACTACACCC
ACATCGAAGTGCTCATCGATGGAAAGGGGTGTAAGCCCCCCGAGTACAGGAATTACCAGATCGTCTTCATCGTCT
TCGGCGTTCTCATGACCATGGCCTTGATCGTTGCCACTCAGTTCCGGTTCCGCTACAACCATTTCAAAAACGATG
ATTCTAAAGGGAAAGAGGTGGAGATCCCGCAGGTGGAAAGGAACAACTCTACAGAGTCCTCTGAGGAGACACCAA
CCACCACAAGCCACTCGCAGGCCTTCAACTTTTGGGACTTAATCAAGCTGCTCTGCAGCGTGCAGTATGGCTCAG
TGCTGTTTGTGGCTTGGTTCATGGGTTTTGGATATGGCTTCGTGTTCACCTTTCTCTACTGGCATTTGGAAGACC
TCAATGGAACTACAACCCTCTTTGGGGTCTGTTCAGTCCTGAGTCATGTGTCTGAGCTGACAGCATATTTTTTTA
GTCACAAGCTTATTGAATTGATCGGCCACATCAGGGTTCTGTACATTGGCCTGGCCTGCAATACGGCTCGCTATA
TTTATATTTCCTACCTGGAGAATGCCTGGACTGTTCTCCCCATGGAAGTTCTTCAAGGAGTGACACACGCGGCCA
TCTGGGCAGCATGCATTTCTTACCTCAGTGCAGCCGTTCCCCCTGAGCTGAGGACATCTGCTCAGGGCATCCTGC
AGGGCCTTCACCTGGGTTTGGGAAGAGGATGTGGTGCCATGATCGGAGGCGTGTTAGTCAATTATTTTGGGGCTG
CTGCAACCTTCCGAGGAATTGGCATGGCCTGCTTGGTGATCCTACTGCTCTTTGCCCTGATCCAGTGGCTGGCAG
TGCCAGATGAGGAAGAAGACAAGACAATGTTGGCAGAAAGAATTCCTGTTCCCTCCAGTCCCGTTCCTATAGCAA
CCATCGACTTGGTACAGCAACAGACAGAAGATGTCATGCCACGCATTGAGCCCAGACTTCCACCCAAGAAAACTA
AGCACCAGGAAGAACAGGAAGATGTGAACAAACCAGCCTGGGGAGTCAGCTCTTCTCCCTGGGTGACCTTTGTCT
ATGCACTCTACCAAATTAAAGAGATGATGCAACTCACAAGAGACAACCGTGCTTCTGAGATACAGCCTTTACAGG
GGACCAATGGGAATAGGGAAAATTCTCCTGCTGGTAGAGCCCAGCCTGTCCCATGTGAGACTCACTCTGACCCAT
CTAGAAACCAGCCATCCCCTGACGCAGCAGCATCTCAGACGCAGACCAGCCCCGCTCACCCCAGTGTGGACCCGT
GCACAGAGGAGAGTGAAGAGCAGCAGGCTCAGCTGGCCGCGGGAGGACAC**TGA**GGGCATCCTGCTCATCTCACAC
CCTGCATGGAATCAGGCTCCTCAGCCAGGACACAGGGTGAGGCCCCCCAGCCAGGATATGCCTCCCCTGGAGGAG
CACAGCACTGCATATGCTTCTAAATATCTAAACTCATTAACATGGAAACACACACACAGGAGCTACAGTACATAT
TGGCAGAAAAAGGTAAACTTTCGTAATCTCATTGGAATTACAACAGGGAAATGGAGTTCAATGAGGACTTTCAGT
TCTTTGCTTGGTTAGGTTAAGGATGATAGAATTTCTCTGCCAGTGCAGTAAGAGTTGAAACCGGCAGTTACACTA
AGTAAGTGGAGGGAATGAAAGTGTTTCGAGGTGAATGTGGATATAATTTCCCTCTTCTGATTATTTATTCTTATT
TGGTTCCTAACACAAACTGGGAAGAGATAGAATTCATCTATACTTTCTTTTTTCTTGGAGAGAACCGTTTAAAAA
ATTACAAGATATATTTAAAAAGTAACCAGATAAAAGTAGCACATGTGCTTTTGTTAAAAATAAAGTTAAAAGTTA
AAGTTAAAAAATGAAGTTAAAAGTTTCATCAGAAACTTTACATATCTTTAGCAAATATATTTTTATATGTGTATG
GCATATAATGGAAATAATTCTTTGAGCAACAGAAGCTATTATTAACTACTGCAAGCTAAGCCGAGCTTAAAAATG
CCTTTTGTTTTAAATGGGCTTTGAGAAAAAAAAAAAAAAAAA

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FIGURE 6937

MWGSLGWGLAMLSVGIGIDYTHIEVLIDGKGCKPPEYRNYQIVFIVFGVLMTMALIVATQFRFRYNHFKNDDSKG
KEVEIPQVERNNSTESSEETPTTTSHSQAFNFWDLIKLLCSVQYGSVLFVAWFMGFGYGFVFTFLYWHLEDLNGT
TTLFGVCSVLSHVSELTAYFFSHKLIELIGHIRVLYIGLACNTARYIYISYLENAWTVLPMEVLQGVTHAAIWAA
CISYLSAAVPPELRTSAQGILQGLHLGLGRGCGAMIGGVLVNYFGAAATFRGIGMACLVILLLFALIQWLAVPDE
EEDKTMLAERIPVPSSPVPIATIDLVQQQTEDVMPRIEPRLPPKKTKHQEEQEDVNKPAWGVSSSPWVTFVYALY
QIKEMMQLTRDNRASEIQPLQGTNGNRENSPAGRAQPVPCETHSDPSRNQPSPDAAASQTQTSPAHPSVDPCTEE
SEEQQAQLAAGGH

FIGURE 6938A

CCAGTGCAGGACGCGCTGACAGCTCGAGTGAGCGGACTGCCCAGGACTTCGGAACTAGACGAGTTCTGTAGAAAT
CCTGTCAAAGAATATGAAGAAAAACAGAGAAAGATTCTGCAATAGAGAGAGAGAATTTGTATATAAATTTAAAGT
AGGAAGTCAGTGCTTAGAACTGAGAGTGCCACTCAAATTTCCTGTTCAAGAGAATGCCAGTCATTTGCATGGACG
TCTGATGCTGCTGCACAGTTTACCGTGCTTTATAGAAAAAGACTTAAAAGAAGCTCTGACTCAGTTTATAGAAGA
AGAATCCCTCAGCGATTATGATAGAGATGCTGAAGCATCCCTGGCAGCTGTGAAATCAGGTGAAGTAGATTTACA
TCAGCTGGCGAGTACATGGGCCAAAGCTTATGCTGAGACCACGTTAGAGCATGCAAGGCCTGAAGAACCCAGCTG
GGATGAAGATTTTGCAGATGTGTACCATGACTTAATTCATTCTCCTGCCTCTGAAACTCTCTTAAATTTGGAACA
TAATTACTTTGTTAGTATCTCAGAACTGATTGGTGAAAGAGATGTGGAGCTGAAAAAATTACGAGAGAGACAAGG
TATTGAAATGGAAAAAGTCATGCAGGAATTGGGAAAATCACTGACAGATCAAGATGTAAATTCACTGGCTGCTCA
GCATTTTGAATCCCAGCAAGACCTAGAAAATAAATGGTCGAATGAATTAAAACAATCAACTGCCATCCAAAAACA
AGAGTATCAAGAATGGGTAATAAAACTTCACCAAGACCTAAAAAACCCCAACAACAGCTCCCTTAGTGAGGAAAT
TAAAGTTCAGCCAAGTCAGTTCAGAGAATCTGTAGAAGCAATTGGAAGGATTTATGAGGAACAGAGAAAGTTAGA
AGAAAGTTTTACCATTCACTTAGGAGCCCAGTTGAAGACCATGCATAATTTGAGATTGCTGAGAGCAGATATGCT
GGACTTCTGTAAGCATAAAAGAAATCATCGAAGTGGTGTGAAACTTCATCGGCTCCAAACAGCTCTGTCACTTTA
TTCTACATCTCTCTGTGGCCTGGTTTTACTAGTAGATAATCGAATTAATTCATATAGTGGTATTAAAAGAGATTT
TGCCACAGTTTGCCAAGAATGCACTGACTTCCATTTCCCCCGAATTGAAGAGCAATTAGAAGTTGTCCAACAGGT
GGTACTTTATGCTAGAACCCAGCGCAGGAGTAAATTGAAAGAATCACTTGATTCTGGAAACCAAAATGGAGGAAA
TGATGATAAGACTAAGAATGCTGAGAGGAACTATTTAAATGTTTTACCTGGGGAATTTTATATTACACGGCATTC
TAATCTCTCAGAAATCCATGTTGCTTTCCATCTCTGTGTGGATGACCATGTGAAATCGGGAAACATCACTGCTCG
TGATCCTGCCATTATGGGACTCCGAAATATACTCAAAGTTTGCTGTACCCATGACATCACAACAATAAGCATTCC
TCTCTTGCTGGTACATGATATGTCAGAGGAAATGACTATACCCTGGTGCTTAAGGAGAGCGGAACTTGTGTTCAA
GTGTGTCAAAGGTTTCATGATGGAAATGGCTTCATGGGATGGAGGAATTTCTAGGACAGTGCAATTTCTAGTACC
ACAGAGTATTTCTGAAGAAATGTTTTATCAACTTAGTAACATGCTTCCCCAGATCTTCCGAGTATCATCAACACT
CACTCTGACATCCAAGCACTAAACCCTTATAGATTGACATGCTGGCAGAAGATGATTGTTAAACTCTCCAGGAAC
TTGTGCTATGCTGGGAATCTGTCAAGCAAAAGATGCCCAGAAAGAGAACTTGCAGCTCAATCCACAAATCAAGAT
ACATGTGTGTGAAACCATTCCAAAAATTTATATACTGCACAAACTGGTGATCAACCCCTAACTTAAACACTTAAA
GTCTCTTTATGAATTTCTCTTTTTTTCTTCTCTGTGTTACCTGTGAATATTAGTAATCTAAAACTTTTTATTTAT
CACACATGGACACTTGGGAAAGGAAACTTGATTATATTTACATGGAGGCATTTGACTTTTTCAAGAGGCTTGACT
CGTCTCAGGTGCAATCCTTAATTAAACATACAAACAAAATTTTCCTTTTACTTTCTTTGCCAAAACAAAATGTAA
AAGCACTGAAATATACATTGCAAGTACAAATTTCCTGTGAAAATCTTTTTATAGAAACACAAATGTATAAGACAA
ATGTGCTTGTTCTTTTAAATTCTCCTGTTTCAGAATCTCTTTTTAATCTACTCCTAAGGATGTACAAGTTAGAGT
CAGAAGACGTTTTAGATTTTTTCCCTCTCTCTCATCCTCCCGCTGTGCCCTTGCACTTGCATATTAATAACATTT
CATGGACTGGGAAATAGTGTTCTTTTTTGCAAGCTTGATGTCAAGTTAGTCTAAACCAGCACCTGGCAGTATTTT
AGTGCTCATCAACATTGTGACAATCACACAAGGAAGATCATTTCTACATTTCTGTCCTCCCTGCGTTCTCAGCTT
GCTTAACCATTCCTCTACCTCTTGCATTTTTTTGCGGATAAATGTATCCCCATTTCTGCTTCTCTGTTTCCCCTC
CTTTTCCATTGTTTTTCCTTATGGTACTACTTTCTCAGGTGCTACATATCATATATTTGTCCCATCTATAACATA
TTTAAATGCTATAAGTAGTAACTCCATTAAACAAAGGCATTTACAAAAGCACACAGGTGTTTAGAAAAGCAATAG
TTTCATCAATTCCAAGTTATGTGGATATTGTAACTGGCCACAAGAATGAAATGGAGGGCATTTGGTGTCATAAGA
TGGCATGTCTTGATGACAAGAAACAAAACGCCCTTCATTAATATGCCTCAGTGTAATAACTATTATAGAAACTGT
TGGCAAGCAGAGTGCTTTCCTATAACAGAATGTGTCTTAATTTTCTACTCGAGGGAAAGGTTTGTCCAGGTAACA
ACACTAAAGACAACCCTAAGAACACCCACTCCAGCAGTATGTCCATTAGACACTAAAACTCTCCAAATTATTTGT
CAGGGAGCCTGGCGATTCTGCCAAGAAGGCAGGTGTTTTGCCCTTAGAGCCTATACAGTTCTCTTGGAGAAATTG
TCTTTCAGGCACCACTGTTAATCACTGAGACTGATTCTAATGCAAAGCAGGGAAGACAGAGGCAGAAACCAGGAG
AGTGGTAGATCAGTGCAGCCCAGATATCGGAATGGAGGAGCAAAGTTTCATTCACGGATGTTTGTTGAATGCTGC
TGCCCAACTCTTCCTTTGTCACCTCTAGGCTATTCCACTAAGTTACTTATAAACTGGTGGCTTTAACTGAGGGCT
GTGTAAAGGTACTATTTGGCATGTGAAGTCAGGATAAATTTATCGAATGTCCGTTTTCCACATGCAACTGTGTTA
CAGAAGTAGTAAAATTGGAAGAATCATGTTTATGGTGTTACCACTGATGGAAACACACAAACACCAAGCTAATAA
TAAATATATAACTTAAAAAGCTAATTATATGCACTGAAATGGTGGGAATTTTAGTGATGCAGTAATTGAGGAGTC

FIGURE 6938B

TGGAGTTTTGTATTTGGACCAAGAATTATGAGATGAGGATCTTTTTCTGAGTGTTCTAAAGGGCTTCTTGAGGGG
GAGTGGTTTAAAGCACTTCATGAATGATGTGAAGAAGGTACCTTGGGCTGAGACAGCATTCTAGGTACAGATGGC
ACTCTGTTCAACCAACTGTGGATGGAAAATATTCTGAAAAAAAATACAATAAAAATTTTAAAAATACAAAAAAAA
AAAAA

FIGURE 6939

MKKNRERFCNREREFVYKFKVGSQCLELRVPLKFPVQENASHLHGRLMLLHSLPCFIEKDLKEALTQFIEEESLS
DYDRDAEASLAAVKSGEVDLHQLASTWAKAYAETTLEHARPEEPSWDEDFADVYHDLIHSPASETLLNLEHNYFV
SISELIGERDVELKKLRERQGIEMEKVMQELGKSLTDQDVNSLAAQHFESQQDLENKWSNELKQSTAIQKQEYQE
WVIKLHQDLKNPNNSSLSEEIKVQPSQFRESVEAIGRIYEEQRKLEESFTIHLGAQLKTMHNLRLLRADMLDFCK
HKRNHRSGVKLHRLQTALSLYSTSLCGLVLLVDNRINSYSGIKRDFATVCQECTDFHFPRIEEQLEVVQQVVLYA
RTQRRSKLKESLDSGNQNGGNDDKTKNAERNYLNVLPGEFYITRHSNLSEIHVAFHLCVDDHVKSGNITARDPAI
MGLRNILKVCCTHDITTISIPLLLVHDMSEEMTIPWCLRRAELVFKCVKGFMMEMASWDGGISRTVQFLVPQSIS
EEMFYQLSNMLPQIFRVSSTLTLTSKH

FIGURE 6940A

GCCTTTTCCCTCCGGCTCGGGAGCGTCTCGCTTGCGCCCCGGGCCCGCGGCGCCCGCGCGGCTGCGAGCCTCGGG
TGGCCGCGTGCCGGCTCCAGGAAGCCGGAGAGGGCGCGGCGGCCAGGATGGCGCGGCACGGGCCGTGCGGCTAGA
CGGGAGCCGAGGGAACCGCCGGCTCGCGCCCTCCGTTCTTTCCCGGAGCCGGCTTCACGCAGGGCCGGGAACGGC
CGTGCCTCTGGGATCCGCCTTCGCTGACGCCGGGCACCTACCTGGACGCGAGCGAGCGAG**ATG**CCCAACCCCAAA
AACAGCAAAGGCGGCCGCAAAAACAAGCGCGCCAACAGCAGCGGCGACGAGCAGGAAAATGGAGCCGGGGCCCTG
GCAGCGGCGGGCGCGGCGGGAGCGGCGGCCGGGGGGGCCCTGGCGGCGGCGGCCGGTTGCGGGGCGGCGGCGGCG
GGCGCGCCGGGCGCCGGAGGCGCGGCGGGCGCCGGAGGCGCGGGGACTGGCGCCGCGAACGCTGCGGCCGCCGCG
GGGGCTGCGGCCGCGGGCGATGCCAAAAACGAAGCCCCATGTGCCACTCCCCTGATCTGCAGCTTCGGTAGGCCG
GTGGACCTGGAGAAGGACGACTACCAGAAGGTGGTGTGCAACAACGAGCACTGCCCCTGCAGCACCTGGATGCAC
CTGCAGTGCTTCTACGAGTGGGAGAGCAGCATCCTCGTCCAGTTCAACTGCATCGGCCGCGCGCGCAGCTGGAAC
GAGAAGCAATGCCGCCAGAACATGTGGACAAAGAAGGGCTACGACCTGGCCTTCCGCTTCTGCTCTTGCCGCTGT
GGCCAGGGCCACTTGAAGAAGGACACAGACTGGTATCAGGTGAAGCGGATGCAGGACGAGAAAAAGAAGAAGTCT
GGCTCCGAGAAGAACACAGGGAGGCCTCCTGGTGAGGCGGCGGAGGAGGCAAAAAAGTGCAGGCCCCCAAATAAG
CCCCAGAAAGGCCCAAGCCACGACCTCCCCCGCCGGCATTCCATGGACCGGCAGAACTCCCAGGAGAAGGCAGTG
GGTGCCGCAGCCTACGGTGCCCGTTCCCCCGGTGGCTCCCCGGGCCAGTCCCCACCCACGGGCTACTCCATCCTC
TCTCCTGCCCACTTCAGCGGCCCCCGCTCCTCCAGATACCTCGGGGAGTTCTTAAAGAACGCCATCCATCTGGAG
CCTCACAAGAAGGCCATGGCTGGGGGCCATGTGTTCAGAAATGCCCACTTTGATTACAGCCCTGCGGGGTTGGCA
GTTCACAGGGGGGGACACTTCGACACCCCCGTGCAGTTCCTTCGGCGGCTGGACCTCTCCGAACTCCTCACTCAC
ATCCCCAGGCATAAGCTGAACACTTTCCACGTGCGCATGGAAGACGATGCCCAAGTGGGCCAGGGGGAAGACTTG
CGGAAGTTCATTCTGGCCGCGCTCAGTGCCAGCCACAGAAACGTGGTAAACTGTGCCCTGTGCCACCGGGCGCTC
CCGGTGTTCGAACAGTTCCCACTGGTGGATGGAACTTTGTTCCTAAGCCCGTCGAGACATGATGAGATCGAATAT
GATGTTCCTTGTCACCTTCAAGGGAGACTCATGCATCTGTATGCCGTGTGCGTGGACTGCCTGGAAGGGGTTCAC
AAGATCATCTGCATCAAGTGTAAGTCACGGTGGGATGGCAGCTGGCACCAGCTGGGCACTATGTACACCTACGAC
ATCCTGGCTGCCTCTCCATGTTGTCAGGCCCGCCTGAACTGTAAGCACTGTGGGAAGCCGGTGATCGACGTGAGG
ATCGGGATGCAGTACTTCTCCGAATATAGCAACGTCCAGCAGTGTCCACACTGTGGGAACCTGGACTACCACTTC
GTGAAGCCATTTTCCTCCTTCAAAGTTCTCGAAGCTTAT**TGA**TGAAAGCTTTGCTTTAGTAATAGCTATTTTATT
GATATTATTACTTTATTACATATCTTTTATAGGGAAACATTCTGTGACATTAATTTCCTTTCTAATTTAAAGGAG
AGTTACTTTGTTGTATGTGTGCCACTAAAATAGGGGCTGCCCTTGCCCTGTCTTGATTCCCGAGTGTTAATCTGT
GGTTTTGACCAGAGCCCAGATGGGTAATCCTGTGCATTTGGGTTGGGGTTCACTCTTACCAAGAATCTTTGATGC
AGCTTTAAGATGGTGGGGAGGATGGGGTGAATTTAGGAAAGGAATTTGTGGTTATAAACTAAGAGCTTGATAGGA
GTTGGAAGGAAACTCTTACTAAAATGTTAACTTTCTAAAAACCTTCTTTTAGATCTTCCTTGGGCCTTTGGAAAA
ATATGTGACAAGTGAATGTAAGTCTGTGCCTGGAGAGCTAATAGTGCATTAGTCTATCTCAGCCTAGTGTTCTGC
AGCACACATGGGCAGGCAGTTTACTCACACTGACAGGTGACCTGAAAGTGGCACAAGTGCTGTTTCTATCACTAT
TGTAATTTGCCAGTTCATTTTTCATGCTGAAAGTAATATCCAAATTGTAAGACATATGAAAGATATTAGTGTTGC
AAATATGTTTAGGTAAACTGACCTATAACAGAATATGTGAAATGAATTTGGAAATAATGCAAGAAGGCAGAACTC
AATCATTTAAATTGTGTCTTTGAAGTTGGTAATATAGCTTTTAAGGAGAACCCATGAATAACCTGATTTGGGCAG
TGATGATTTATTACAGGTTGCACTGTTGAAGTGTCATTTGGTGTCAGGTTCTTCTCACAGGTAAATCTTTCAGCC
ACAGAATCTAACTGGTGAGCTTCAGAACCAATAATTGCCACATTTATTGTCCTCAAAATTGCTTATGGCCATGTT
TAACCAATTAATTCTGAGTTTCCAAAATCAAAGATTTGACCTTAAGAGGGAAGGGAAAAAAGTGTGAAAGGATGA
TGAAGAAAATAATTTTACTATTTCTTTTAAAAGTATGTTTTGGAAAATCAATGATTTTAATGCATAGCAGTATGT
TTGAAAAATAGACCATTCTAAAAAGCCCATGATACCTTACTGTTGATGAAAAAGGATGATCATATATATAGAACT
TGATTAGTCAGAGCATTGGGCATTCCAAAATACAGCCTTTGGTTCAGTAGATTTTAATGCTTTAAATAGACTGAC
GTCGCATACCCTTATAGAATTGGAATATGATTTCTCAAAAATTAATTTGATAATTTCATGTATGATGTGCATATA
TGCTAAAAGAATGCAGAAAATCATTTTATGAATAGCCAAATTTGGGGTTGATGTGAACATTTTATGTTACTCATT
TGGTTTATACTTTTTTTTTTTTTTTTTAACTGTGTGGTTTTTCTTTTCAGAAGTATTTAGGCAATATTGCACGT
GAGTTTCAGTTCTTTTTTTCTTTTTTTTGAGATGGAGTCTCACTCTTGTCACCCAGGCTGGAGTGCAGTAGTGCG
ATCTCAGCTCACTGCAACCTCTGCCTCCTGGATTCAAGCGATTCTCCTGTCCCAGCCTCCCAGGTAGCTGGGACT
ATAGGCACGTGCCACCACACCCGGCTAATTTTTTGTATTTTTAGTAGAGACAGCGTTTCACCATGTTAGCTAGGA

FIGURE 6940B

TGGTCTAGATCTCCTGACCTTGTGATCTGCCTGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGTCACT
GCGCCTGGCCAAGTTTCAGTTCTATATGAAGTATTTGATGTTTTGTTTGAAACAATACAGCATTAAAGAACCAAT
GTTATTCACTAATATCATTCATCTTTCAGTTTGGATGATTTGGTTTGCTGCATCTAGGTCGGTGTTTGATCATCT
GAAAAAACATTTCAGTGGGAAGAAATGCATAAAATGCCTATAAGAAGTAGAAAGTCATTGAACTGACAGTGTTTG
ATGCAACTAAAAGAGGATTGTAAGCATAGCTTTCTGCAAACTTGTCTTTAATGCACAAAGCTGTAGTGGTGAATT
AACTATCTCCTTATTGATTCTCTCCTGTACCCAGATGCAAAAAGTGCTAAGTTTCTCTTGTCCTCGTAATACCAT
TTGGATTTTATTTCTGAATTTAAATAGTAAAATATTTATGATGCTGATCTTTAACCCACCTAAAATTTTATAGTG
AAACCTGCTTTATATTGTTGTTCTGAAGCTTACAATTGACCTATACATTGCATTCAGCAAGCTCCTGAATTTAGA
ACTGCCGTCAGTGTAGTGTATGCTGTGTTCCATGTTGCCTTTTTAGATGGCTTTCTACCCCCTGAACAATAAATA
GGATGAGGTTTTACTGTAATTGGGTAAAGTTTACTCTTGGACATTATTTCGATGCTAAAGTAAGGATTCTGTGGA
TGTTACTTAAAGAGAAAAGCATAAGAGCATGAAGCATATCTGGGAATATCTTTTGCCTTTAAGACGATTCATTCT
TGTCTAGAGGGAAAATCTGGCTGATTTGGGAATAAAATATAATCGAATATTCAACACCATGAAGATAAATCTTAT
TTTGGAAATCTACTGACCTTAATACCCCAAGCTTGCCCTGAATACTTTGATTGGAATTGGAATATATCAAAAAAG
GTTAGTATTTTTGTTGTAGTTAGGATACTAAAAGGATATTAGTTACCCAAGAGATCCAATTTGTTTTTCTGATGA
ATAGTGTTCAGTAAAATGAAGCAGTCTTAAGAGTGACTAATAATTTCAAAGTGATTTTTCGTCTATTCTTAATAT
TTTTTAATTATTTATTTTTAAGAGTTTTATACCTTGAGCAGATACAATGATCTGCTTTAGTGAGAGGACAATTTC
TGATTGATTGTTTTCTCTTCAGGCCATCTCACCTCTTCATTCTCTTGTTACATTTGAAGCAGTTGATATAATGGG
TTTATACTTTAAAAGATAGACATGGTGCCATGAAGTTGGGGAGTTGGGTGAATTATCCCATTCTAGTTACAGAGG
AGCTTTCCTTAAATGCCCTTTAACTTCTAGGTTTTGTTCAAGAAGTTCATTTTCTGAGTAAAAGTTATTTTCATA
TATGTTGGGGGAAAATTAACTCATCTAAAAAGAATCTTATTAGGTATTTGAACTCTAAAACTAACAGATAAGACA
GATATGTACCTTATTAGAGCACCAGAACTAATTTGCTAAGTCTTTTGTTTAGTCCTGCAAGACTGATGCTTAATA
CACAGTCTGTTCTCCTGTGTCTAGGTCAGGAACTCCAGTTTGCTTTTCTGTTTTGTGTCCTGGTAGCAGCTGTTG
AGTAACTTTCATTGGAGGTTGGGAAGGAAGTGAGGAGAAAGTGTTCTTGTTTAGTGTTTTATTTCCTATAATAGG
ATGCTGCCTAACCCAGTTCATCTCTATGTCCTGTTCACTGAATATTCCGGGTAATTGAAAGAAAATATAATGGAT
GGGCTCCATTAAAACCAGCTCAAAAATAAATTCTTGTCAGTAAAGATTTCTTGTCAAGATGTCTTGGATTGCACT
TTTGTTGAGGAAAGACAGTGTAAATAGTTAAAGAATGTTGATAAAATTGAAACATTTGGTTGTGGAATTGTGTGT
GGTTTTAGAGGGTTTCTGTTTGTGAAATGTATGTATTAAAAATAATAAAATTCCAGAAACTAAAAAAAAAAAAAA
AAAAAAAAA

FIGURE 6941

MPNPKNSKGGRKNKRANSSGDEQENGAGALAAAGAAGAAAGGALAAAAGCGAAAAGAPGAGGAAGAGGAGTGAAN
AAAAAGAAAAGDAKNEAPCATPLICSFGRPVDLEKDDYQKVVCNNEHCPCSTWMHLQCFYEWESSILVQFNCIGR
ARSWNEKQCRQNMWTKKGYDLAFRFCSCRCGQGHLKKDTDWYQVKRMQDEKKKKSGSEKNTGRPPGEAAEEAKKC
RPPNKPQKGPSHDLPRRHSMDRQNSQEKAVGAAAYGARSPGGSPGQSPPTGYSILSPAHFSGPRSSRYLGEFLKN
AIHLEPHKKAMAGGHVFRNAHFDYSPAGLAVHRGGHFDTPVQFLRRLDLSELLTHIPRHKLNTFHVRMEDDAQVG
QGEDLRKFILAALSASHRNVVNCALCHRALPVFEQFPLVDGTLFLSPSRHDEIEYDVPCHLQGRLMHLYAVCVDC
LEGVHKIICIKCKSRWDGSWHQLGTMYTYDILAASPCCQARLNCKHCGKPVIDVRIGMQYFSEYSNVQQCPHCGN
LDYHFVKPFSSFKVLEAY

FIGURE 6942A

GCCCGAAACCCGGAAGTGAGCGGCGGCAGCTGCGAGGCTCGGAGAAACAGGCGCCGCGGGCTCCGCGCCCGGCCG
GACCCGGGCCCGAGATCATGATGCTGCCGCCACCGCCGCCACCACGGAGCGAGAAGCCCAGATAGACGCCCCGGC
GGCCCCGGGTCCTGGAGTCCCGCCGCCTGCTGCCCGGCCGAGGACCCCACCCCGCCTGCCGCCCG**ATG**CTTGCAG
TGGGGCCCGCCATGGACAGGGATTACCCGCAGCATGAACCCCCGCCGGCGGGCAGCCTCCTGTACAGCCCGCCGC
CCCTGCAGAGCGCCATGCTGCACTGCCCCTACTGGAACACCTTCTCGCTGCCGCCATACCCTGCCTTCTCCAGCG
ACAGCCGCCCGTTCATGAGCTCCGCCTCCTTCCTCGGCAGCCAGCCCTGCCCAGACACCAGCTATGCCCCCGTGG
CCACCGCCTCCAGCTTGCCACCAAAGACCTGCGACTTTGCTCAGGACTCCTCCTATTTTGAGGACTTCTCCAACA
TCTCCATCTTCTCCTCGTCCGTGGACTCCCTGTCGGACATCGTGGACACGCCCGACTTCCTGCCGGCTGACAGCC
TCAACCAGGTGTCCACCATCTGGGACGATAACCCTGCCCCCTCCACCCACGATAAGCTGTTCCAGCTCAGCAGGC
CGTTTGCAGGCTTCGAGGACTTTCTGCCCTCCCACAGCACCCCGCTTCTCGTCAGCTACCAGGAGCAGAGTGTGC
AGAGCCAGCCAGAGGAGGAGGACGAGGCTGAGGAGGAGGAGGCGGAGGAGCTGGGGCACACAGAGACCTACGCCG
ACTACGTGCCGTCCAAGTCCAAGATCGGGAAGCAGCACCCAGACCGCGTGGTGGAGACCAGCACACTGTCCAGCG
TCCCACCCCCAGACATCACCTACACCCTGGCCCTGCCCTCGGACAGCGGGGCCCTGTCTGCCCTGCAGCTAGAGG
CCATCACCTACGCCTGCCAGCAACACGAGGTCCTGCTCCCCAGCGGGCAGCGCGCGGGCTTTCTCATCGGCGATG
GGGCCGGCGTGGGCAAAGGCCGGACGGTGGCCGGAGTCATCCTGGAGAACCACCTGCGCGGCCGGAAGAAAGCAT
TGTGGTTCAGCGTCTCCAACGACCTCAAGTACGATGCGGAGCGCGACCTGCGGGACATCGAAGCCACGGGCATCG
CGGTGCACGCGCTCAGCAAGATCAAGTACGGTGACACCACTACCTCAGAGGGCGTCCTCTTCGCCACCTACTCCG
CCCTGATTGGGGAGAGCCAGGCCGGTGGCCAGCACCGCACTCGCCTCCGGCAGATCCTGGACTGGTGTGGGGAGG
CCTTTGAGGGCGTCATCGTGTTCGACGAGTGTCACAAAGCCAAGAATGCCGGCTCCACCAAGATGGGCAAGGCCG
TGCTAGACCTGCAGAACAAGCTGCCCCTGGCCCGCGTGGTCTACGCCAGCGCCACAGGTGCCTCTGAGCCTCGGA
ACATGATCTACATGAGCCGCTTGGGTATCTGGGGCGAGGGCACACCCTTCCGGAACTTTGAGGAGTTCCTGCACG
CCATCGAGAAGAGGGGCGTTGGCGCCATGGAGATCGTGGCCATGGACATGAAGGTCAGCGGCATGTACATCGCAC
GCCAGCTCAGCTTCTCCGGCGTCACCTTCCGCATCGAGGAGATCCCGCTGGCCCCAGCCTTCGAGTGCGTCTACA
ACCGCGCAGCCCTGCTGTGGGCCGAGGCCCTGAACGTGTTCCAGCAGGCGGCCGACTGGATCGGCCTGGAGTCGC
GCAAGTCCCTGTGGGGCCAGTTCTGGTCGGCACACCAGCGCTTCTTCAAGTATCTGTGCATCGCAGCCAAGGTGC
GCCGGCTGGTGGAGCTGGCCCGAGAGGAGCTGGCGCGAGACAAGTGCGTGGTCATCGGGCTGCAGTCCACGGGCG
AGGCGCGCACGCGGGAGGTGCTGGGGGAGAACGATGGGCACCTCAACTGCTTCGTCTCGGCCGCTGAAGGCGTGT
TCCTGTCGCTAATTCAGAAGCACTTTCCGTCCACCAAGAGAAAGCGGGACAGAGGAGCGGGCAGCAAGCGGAAAC
GGCGACCTCGGGGACGCGGGGCCAAAGCCCCCCGGCTGGCGTGCGAGACAGCGGGCGTCATCCGCATCAGTGACG
ACAGCAGCACGGAGTCGGACCCTGGCCTGGACAGCGACTTCAACTCCTCCCCCGAGTCCCTGGTGGATGACGACG
TTGTCATCGTTGATGCAGTCGGGCTCCCCAGTGACGACCGGGGATCCCTGTGCCTCCTGCAGAGAGACCCGCATG
GCCCCGGGGTCCTGGAGCGGGTGGAGCGGCTGAAGCAGGATCTGCTGGACAAAGTGCGCCGGCTGGGCCGGGAAC
TGCCAGTCAACACCCTGGACGAGCTCATCGACCAGCTGGGCGGCCCCCAGCGGGTGGCGGAGATGACCGGCAGGA
AAGGCCGCGTGGTGTCCAGGCCCGACGGGACGGTGGCCTTCGAGTCGCGGGCAGAGCAGGGTCTGTCCATCGACC
ACGTGAACCTCAGGGAGAAGCAGCGCTTCATGAGCGGCGAGAAGCTCGTGGCCATCATCTCGGAGGCCTCCAGCT
CGGGTGTCTCCCTCCAAGCCGACCGCCGTGTCCAGAACCAGCGGCGCCGCGTGCACATGACCTTGGAGCTGCCGT
GGAGCGCCGACCGCGCCATCCAGCAGTTCGGCCGCACCCACCGGTCCAACCAGGTCTCCGCGCCAGAGTATGTCT
TCCTCATCTCGGAGCTGGCCGGGGAGCGCCGGTTCGCCTCCATCGTGGCCAAGCGCCTGGAGAGTCTGGGGGCCC
TGACCCACGGAGACCGCCGCGCCACGGAGTCCCGTGACCTCAGCAAGTACAACTTTGAGAACAAGTATGGCACCC
GGGCCCTGCACTGTGTCCTCACCACCATCCTGAGCCAGACTGAGAACAAAGTGCCTGTGCCCCAGGGATACCCTG
GAGGGGTCCCCACCTTCTTCCGGGACATGAAGCAGGGCCTGCTGTCTGTGGGCATTGGTGGCCGGGAGTCCCGGA
ATGGCTGCCTGGACGTGGAGAAGGACTGTTCCATCACCAAGTTCCTGAACCGCATCCTGGGGCTGGAGGTGCACA
AGCAGAATGCCCTGTTCCAGTACTTCTCAGACACCTTCGACCACCTCATCGAGATGGACAAGCGGGAGGGCAAAT
ACGACATGGGCATCCTGGACCTTGCTCCCGGTATCGAGGAGATCTACGAGGAGAGCCAGCAGGTGTTCCTGGCTC
CCGGGCACCCGCAGGACGGGCAGGTGGTCTTCTACAAGATCAGCGTGGACCGCGGCCTGAAGTGGGAGGACGCCT
TTGCCAAGTCGCTGGCGCTGACGGGCCCCTATGACGGCTTCTACCTCTCCTACAAGGTCCGCGGTAACAAGCCCA
GCTGCCTGCTGGCGGAGCAGAACCGCGGCCAGTTCTTCACGGTGTACAAGCCCAACATCGGCCGGCAGAGCCAGC
TGGAGGCCCTGGACAGCCTCCGCCGCAAGTTCCACCGGGTCACCGCGGAGGAGGCCAAGGAGCCCTGGGAGAGTG

FIGURE 6942B

GCTACGCTTTGTCGCTGACGCACTGCAGCCACAGCGCCTGGAACCGGCACTGCCGGCTGGCGCAGGAGGGTAAGG
ACTGCCTGCAGGGGCTGCGGCTGCGGCACCACTACATGCTGTGCGGCGCGCTGCTGCGCGTGTGGGGCCGCATCG
CCGCCGTCATGGCCGACGTCAGCAGCAGCAGCTACCTGCAGATCGTGCGGCTGAAGACCAAGGACAGGAAGAAGC
AAGTGGGCATCAAGATCCCCGAGGGCTGCGTGCGCCGGGTGCTGCAGGAGCTGCGGCTGATGGATGCGGACGTGA
AGCGCAGGCAGGCGCCCGCCCTGGGCTGCCCCGCCCCGCCCGCCCCGCGCCCGCTGGCGCTGCCTTGCGGCCCCG
GAGAGGTGCTGGACCTCACCTACAGCCCCCCGGCCGAGGCCTTCCCGCCGCCCCCCGCACTTCTCTTTCCCGGCGC
CGCTGTCCCTGGACGCCGGCCCCGGCGTCGTGCCGCTGGGCACCCCCGACGCCCAGGCCGACCCTGCGGCCCTCG
CGCACCAGGGCTGCGACATCAACTTCAAGGAGGTGCTGGAGGACATGCTGCGCTCGCTGCACGCGGGGCCGCCCT
CCGAGGGCGCGCTGGGGGAGGGCGCGGGGGCGGGGGGCGCGGCGGGCGGTGGTCCCGAGCGGCAGAGCGTGATCC
AGTTCAGCCCACCCTTCCCCGGCGCCCAGGCTCCTCTCTGACACGCCTTTAGGCGAAACATGCCCCAAGACACAG
GGACCGTTTCTCCCCTAGGAGCAGCGGTGGGGAGCAGGGCCAAGGTCCCCTGACCACTGCTCAGAGGAGCCCTAG
GCCCTGGCCGCAGTGCCTTCAGCGCCCGACCCGGGCCCCCACCTGGTCAGCCCTGGCGGGGCCCACTCAGGACAG
CTGGGGGCCGGGGCGTGGCAGGGCCCTCTCTGTGCCTCTCCTCCTAAGTAGGAAGGGGCTCCGGGTGGCTGCTCT
GGGACTGGGCACCCACAAGGGCTCAGTGGGCCCAAACCCTTGAAATCCGTGAAACCGGGTGGTCCCAAGAGCTAG
AAACTCAGGAAACCCCAGGTGCTCAGGGCCCCGCGTCTCGGGGGCTCCGTGGGGCAGACCCCTGCTAATATATGC
AATTCTCCCTCCCCCAGCCCTTCCCTGACCCCTAAGTTATTGCCCGCTCACCTCTCCCAGGCCCCAGGCCGCGGA
GCTGGCAGGGTGGCGCCTGCGGTTTCTATGTATTTATAGCAAGTTCTGATGTACATATGTAAAGGACTTTTTTAA
AT

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FIGURE 6943

MLAVGPAMDRDYPQHEPPPAGSLLYSPPPLQSAMLHCPYWNTFSLPPYPAFSSDSRPFMSSASFLGSQPCPDTSY
APVATASSLPPKTCDFAQDSSYFEDFSNISIFSSSVDSLSDIVDTPDFLPADSLNQVSTIWDDNPAPSTHDKLFQ
LSRPFAGFEDFLPSHSTPLLVSYQEQSVQSQPEEEDEAEEEEAEELGHTETYADYVPSKSKIGKQHPDRVVETST
LSSVPPPDITYTLALPSDSGALSALQLEAITYACQQHEVLLPSGQRAGFLIGDGAGVGKGRTVAGVILENHLRGR
KKALWFSVSNDLKYDAERDLRDIEATGIAVHALSKIKYGDTTTSEGVLFATYSALIGESQAGGQHRTRLRQILDW
CGEAFEGVIVFDECHKAKNAGSTKMGKAVLDLQNKLPLARVVYASATGASEPRNMIYMSRLGIWGEGTPFRNFEE
FLHAIEKRGVGAMEIVAMDMKVSGMYIARQLSFSGVTFRIEEIPLAPAFECVYNRAALLWAEALNVFQQAADWIG
LESRKSLWGQFWSAHQRFFKYLCIAAKVRRLVELAREELARDKCVVIGLQSTGEARTREVLGENDGHLNCFVSAA
EGVFLSLIQKHFPSTKRKRDRGAGSKRKRRPRGRGAKAPRLACETAGVIRISDDSSTESDPGLDSDFNSSPESLV
DDDVVIVDAVGLPSDDRGSLCLLQRDPHGPGVLERVERLKQDLLDKVRRLGRELPVNTLDELIDQLGGPQRVAEM
TGRKGRVVSRPDGTVAFESRAEQGLSIDHVNLREKQRFMSGEKLVAIISEASSSGVSLQADRRVQNQRRRVHMTL
ELPWSADRAIQQFGRTHRSNQVSAPEYVFLISELAGERRFASIVAKRLESLGALTHGDRRATESRDLSKYNFENK
YGTRALHCVLTTILSQTENKVPVPQGYPGGVPTFFRDMKQGLLSVGIGGRESRNGCLDVEKDCSITKFLNRILGL
EVHKQNALFQYFSDTFDHLIEMDKREGKYDMGILDLAPGIEEIYEESQQVFLAPGHPQDGQVVFYKISVDRGLKW
EDAFAKSLALTGPYDGFYLSYKVRGNKPSCLLAEQNRGQFFTVYKPNIGRQSQLEALDSLRRKFHRVTAEEAKEP
WESGYALSLTHCSHSAWNRHCRLAQEGKDCLQGLRLRHHYMLCGALLRVWGRIAAVMADVSSSSYLQIVRLKTKD
RKKQVGIKIPEGCVRRVLQELRLMDADVKRRQAPALGCPAPPAPRPLALPCGPGEVLDLTYSPPAEAFPPPPHFS
FPAPLSLDAGPGVVPLGTPDAQADPAALAHQGCDINFKEVLEDMLRSLHAGPPSEGALGEGAGAGGAAGGGPERQ
SVIQFSPPFPGAQAPL

FIGURE 6944

CTTCGGTCCTGCTGTAGTGCCTTCTGCGCCAGGCCCGGTTCAATCAGCGGCCACAACTGTCTAGGGCTCAGACAC
CACCAGCCAATGAGGGAGGGCACGTGGAGCCGCGTCTGGGCTCGCGGCTCCTGACCAATGGGGAAGTGGCATGTG
GGAGGGCGCCGGGGTTCCCCCCGCCAATGGGGAGCTACGGCGCGCGGCCGGGACTTGGAGGCGGTGCGGCGCGGC
GGGTGCGGTTCAGTCGGTCGGCGGCGGCAGCGGAGGAGGAGGAGGAGGAGGAGGATGAGGAGGATGAGGAGGATG
TGGGCCACGCAGGGGCTGGCGGTGCGCGTGGCTCTGAGCGTGCTGCCGGGCAGCCGGGCGCTGCGGCCGGGCGAC
TGCGAAGTTTGTATTTCTTATCTGGGAAGATTTTACCAGGACCTCAAAGACAGAGATGTCACATTCTCACCAGCC
ACTATTGAAAACGAACTTATAAAGTTCTGCCGGGAAGCAAGAGGCAAAGAGAATCGGTTGTGCTACTATATCGGG
GCCACAGATGATGCAGCCACCAAAATCATCAATGAGGTATCAAAGCCTCTGGCCCACCACATCCCTGTGGAGAAG
ATCTGTGAGAAGCTTAAGAAGAAGGACAGCCAGATATGTGAGCTTAAGTATGACAAGCAGATCGACCTGAGCACA
GTGGACCTGAAGAAGCTCCGAGTTAAAGAGCTGAAGAAGATTCTGGATGACTGGGGGGAGACATGCAAAGGCTGT
GCAGAAAAGTCTGACTACATCCGGAAGATAAATGAACTGATGCCTAAATATGCCCCCAAGGCAGCCAGTGCACCG
ACCGATTTGTAGTCTGCTCAATCTCTGTTGCACCTGAGGGGGAAAAAACAGTTCAACTGCTTACTCCCAAAACAG
CCTTTTTGTAATTTATTTTTTAAGTGGGCTCCTGACAATACTGTATCAGATGTGAAGCCTGGAGCTTTCCTGATG
ATGCTGGCCCTACAGTACCCCCATGAGGGGATTCCCTTCCTTCTGTTGCTGGTGTACTCTAGGACTTCAAAGTGT
GTCTGGGATTTTTTTATTAAAGAAAAAAAATTTCTAGCTGTCAAAAAAAAAAA

FIGURE 6945

MGKWHVGGRRGSPRQWGATARGRDLEAVRRGGCGSVGRRRQRRRRRRRRMRRMRRMWATQGLAVRVALSVLPGSR
ALRPGDCEVCISYLGRFYQDLKDRDVTFSPATIENELIKFCREARGKENRLCYYIGATDDAATKIINEVSKPLAH
HIPVEKICEKLKKKDSQICELKYDKQIDLSTVDLKKLRVKELKKILDDWGETCKGCAEKSDYIRKINELMPKYAP
KAASAPTDL

FIGURE 6946

CCATGGCGGCGCGGCGGCGACGGAGCACCGGCGGCGGCAGGGCGAGAGCATTAAATGAAAGCAAAAGAGTTAATA
ATGGCAACACGGCTCCAGAAGACTCTTCCCCTGCCAAGAAAACTCGTAGATGCCAGAGACAGGAGTCGAAAAAGA
TGCCTGTGGCTGGAGGAAAAGCTAATAAGGACAGGACAGAAGACAAGCAAGATGAATCTGTGAAGGCCTTGCTGT
TAAAGGGCAAAGCTCCTGTGGACCCAGAGTGTACAGCCAAGGTGGGGAAGGCTCATGTGTATTGTGAAGGAAATG
ATGTCTATGATGTCATGCTAAATCAGACCAATCTCCAGTTCAACAACAACAAGTACTATCTGATTCAGCTATTAG
AAGATGATGCCCAGAGGAACTTCAGTGTTTGGATGAGATGGGGCCGAGTTGGGAAAATGGGACAGCACAGCCTGG
TGGCTTGTTCAGGCAATCTCAACAAGGCCAAGGAAATCTTTCAGAAGAAATTCCTTGACAAAACGAAAAACAATT
GGGAAGATCGAGAAAAGTTTGAGAAGGTGCCTGGAAAATATGATATGCTACAGATGGACTATGCCACCAATACTC
AGGATGAAGAGGAAACAAAGAAAGAGGAATCTCTTAAATCTCCCTTGAAGCCAGAGTCACAGCTAGATCTTCGGG
TACAGGAGTTAATAAAGTTGATCTGTAATGTTCAGGCCATGGAAGAAATGATGATGGAAATGAAGTATAATACCA
AGAAAGCCCCACTTGGGAAGCTGACAGTGGCACAAATCAAGGCAGGTTACCAGTCTCTTAAGAAGATTGAGGATT
GTATTCGGGCTGGCCAGCATGGACGAGCTCTCATGGAAGCATGCAATGAATTCTACACCAGGATTCCGCATGACT
TTGGACTCCGTACTCCTCCACTAATCCGGACACAGAAGGAACTGTCAGAAAAAATACAATTACTAGAGGCTTTGG
GAGACATTGAAATTGCTATTAAGCTGGTGAAAACAGAGCTACAAAGCCCAGAACACCCATTGGACCAACACTATA
GAAACCTACATTGTGCCTTGCGCCCCCTTGACCATGAAAGTTACGAGTTCAAAGTGATTTCCCAGTACCTACAAT
CTACCCATGCTCCCACACACAGCGACTATACCATGACCTTGCTGGATTTGTTTGAAGTGGAGAAGGATGGTGAGA
AAGAAGCCTTCAGAGAGGACCTTCATAACAGGATGCTTCTATGGCATGGTTCCAGGATGAGTAACTGGGTGGGAA
TCTTGAGCCATGGGCTTCGAATTGCCCCACCTGAAGCTCCCATCACAGGTTACATGTTTGGGAAAGGAATCTACT
TTGCTGACATGTCTTCCAAGAGTGCCAATTACTGCTTTGCCTCTCGCCTAAAGAATACAGGACTGCTGCTCTTAT
CAGAGGTAGCTCTAGGTCAGTGTAATGAACTACTAGAGGCCAATCCTAAGGCCGAAGGATTGCTTCAAGGTAAAC
ATAGCACCAAGGGGCTGGGCAAGATGGCTCCCAGTTCTGCCCACTTCGTCACCCTGAATGGGAGTACAGTGCCAT
TAGGACCAGCAAGTGACACAGGAATTCTGAATCCAGATGGTTATACCCTCAACTACAATGAATATATTGTATATA
ACCCCAACCAGGTCCGTATGCGGTACCTTTTAAAGGTTCAGTTTAATTTCCTTCAGCTGTGGTGAATGTTGATAT
TAAATAAACCAGAGATCTGATCTTCAAGCAAGAAAATAAGCAGTGTTGTACTTGTGAATTTTGTGATATTTTATG
TAATAAAAACTGTACAGGTCTAAAAAAAAAAAAAAAAAAAAA

FIGURE 6947

MAARRRRSTGGGRARALNESKRVNNGNTAPEDSSPAKKTRRCQRQESKKMPVAGGKANKDRTEDKQDESVKALLL
KGKAPVDPECTAKVGKAHVYCEGNDVYDVMLNQTNLQFNNNKYYLIQLLEDDAQRNFSVWMRWGRVGKMGQHSLV
ACSGNLNKAKEIFQKKFLDKTKNNWEDREKFEKVPGKYDMLQMDYATNTQDEEETKKEESLKSPLKPESQLDLRV
QELIKLICNVQAMEEMMMEMKYNTKKAPLGKLTVAQIKAGYQSLKKIEDCIRAGQHGRALMEACNEFYTRIPHDF
GLRTPPLIRTQKELSEKIQLLEALGDIEIAIKLVKTELQSPEHPLDQHYRNLHCALRPLDHESYEFKVISQYLQS
THAPTHSDYTMTLLDLFEVEKDGEKEAFREDLHNRMLLWHGSRMSNWVGILSHGLRIAPPEAPITGYMFGKGIYF
ADMSSKSANYCFASRLKNTGLLLLSEVALGQCNELLEANPKAEGLLQGKHSTKGLGKMAPSSAHFVTLNGSTVPL
GPASDTGILNPDGYTLNYNEYIVYNPNQVRMRYLLKVQFNFLQLW

FIGURE 6948

GTGGCCTCGAGGTGGTGGCAGGGCCGCCCCCTGCAGTCCGGAGACGAACGCACGGACCGGGCCTCCGGAGGCAGG
TTCGGCTGGAAGGAACCGCTCTCGCTTCGTCCTACACTTGCGCAAATGTCTCCGAGCTTACTCACATAGCATATT
GGTATATCAAAATGAAATGCAAGGAACCAAAAATAACATAATTGAAGGCAGTAAAAGTGAAATTAAATAGGAAGA
TCATCAGTCAAGGAAGACCCACTGGAGAGGACAGAAAATGAAGCAGTGTTTTATCATGTGTATTTCAGCAGGTCT
TCTTGAAATTTAACTAAAAATATGACTGCTCTCTCTTCAGAGAACTGCTCTTTTCAGTACCAGTTACGTCAAACA
AACCAGCCCCTAGACGTTAACTATCTGCTATTCTTGATCATACTTGGGAAAATATTATTAAATATCCTTACACTA
GGAATGAGAAGAAAAAACACCTGTCAAAATTTTATGGAATATTTTTGCATTTCACTAGCATTCGTTGATCTTTTA
CTTTTGGTAAACATTTCCATTATATTGTATTTCAGGGATTTTGTACTTTTAAGCATTAGGTTCACTAAATACCAC
ATCTGCCTATTTACTCAAATTATTTCCTTTACTTATGGCTTTTTGCATTATCCAGTTTTCCTGACAGCTTGTATA
GATTATTGCCTGAATTTCTCTAAAACAACCAAGCTTTCATTTAAGTGTCAAAAATTATTTTATTTCTTTACAGTA
ATTTTAATTTGGATTTCAGTCCTTGCTTATGTTTTGGGAGACCCAGCCATCTACCAAAGCCTGAAGGCACAGAAT
GCTTATTCTCGTCACTGTCCTTTCTATGTCAGCATTCAGAGTTACTGGCTGTCATTTTTCATGGTGATGATTTTA
TTTGTAGCTTTCATAACCTGTTGGGAAGAAGTTACTACTTTGGTACAGGCTATCAGGATAACTTCCTATATGAAT
GAAACTATCTTATATTTTCCTTTTTCATCCCACTCCAGTTATACTGTGAGATCTAAAAAAATATTCTTATCCAAG
CTCATTGTCTGTTTTCTCAGTACCTGGTTACCATTTGTACTACTTCAGGTAATCATTGTTTTACTTAAAGTTCAG
ATTCCAGCATATATTGAGATGAATATTCCCTGGTTATACTTTGTCAATAGTTTTCTCATTGCTACAGTGTATTGG
TTTAATTGTCACAAGCTTAATTTAAAAGACATTGGATTACCTTTGGATCCATTTGTCAACTGGAAGTGCTGCTTC
ATTCCACTTACAATTCCTAATCTTGAGCAAATTGAAAAGCCTATATCAATAATGATTTGTTAATATTATTAATTA
AAAGTTACAGCTGTCATAAGATCATAATTTTATGAACAGAAAGAACTCAGGACATATTAAAAAATAAACTGAACT
AAAACAACTTTTGCCCCCTGACTGATAGCATTTCAGAATGTGTCTTTTGAAGGGCTATACCAGTTATTAAATAGT
GTTTTATTTTAAAAACAAAATAATTCCAAGAAGTTTTTATAGTTATTCAGGGACACTATATTACAAATATTACTT
TGTTATTAACACAAAAAGTGATAAGAGTTAACATTTGGCTATACTGATGTTTGTGTTACTCAAAAAAACTACTGG
ATGCAAACTGTTATGTAAATCTGAGATTTCACTGACAACTTTAAGATATCAACCTAAACATTTTTATTAAATGTT
CAAATGTAAGCAAGAAAAAAAAAA

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FIGURE 6949

MTALSSENCSFQYQLRQTNQPLDVNYLLFLIILGKILLNILTLGMRRKNTCQNFMEYFCISLAFVDLLLLVNISI
ILYFRDFVLLSIRFTKYHICLFTQIISFTYGFLHYPVFLTACIDYCLNFSKTTKLSFKCQKLFYFFTVILIWISV
LAYVLGDPAIYQSLKAQNAYSRHCPFYVSIQSYWLSFFMVMILFVAFITCWEEVTTLVQAIRITSYMNETILYFP
FSSHSSYTVRSKKIFLSKLIVCFLSTWLPFVLLQVIIVLLKVQIPAYIEMNIPWLYFVNSFLIATVYWFNCHKLN
LKDIGLPLDPFVNWKCCFIPLTIPNLEQIEKPISIMIC

FIGURE 6950A

GCGAGAGGAGTCGGGATCTGCGCTGCAGCCACCGCCGCGGTTGATACTACTTTGACCTTCCGAGTGCAGTGAGGC
ATACATCACAATTTGGAATTATGCATTGGTTTATCAATTTACTTGTTTATTGTCACCCTGCTGCCCAGATATGAC
TTCATGAGGACAGTGATGTGTGTTCTGAAATTGTGAACCATGAGTCTAGTACTTAATGATCTGCTTATCTGCTGC
CGTCAACTAGAACATGATAGAGCTACAGAACGAAAGAAAGAAGTTGAGAAATTTAAGCGCCTGATTCGAGATCCT
GAAACAATTAAACATCTAGATCGGCATTCAGATTCCAAACAAGGAAAATATTTGAATTGGGATGCTGTTTTTAGA
TTTTTACAGAAATATATTCAGAAAGAAACAGAATGTCTGAGAATAGCAAAACCAAATGTATCAGCCTCAACACAA
GCCTCCAGGCAGAAAAAGATGCAGGAAATCAGTAGTTTGGTCAAATACTTCATCAAATGTGCAAACAGAAGAGCA
CCTAGGCTAAAATGTCAAGAACTCTTAAATTATATCATGGATACAGTGAAAGATTCATCTAATGGTGCTATTTAC
GGAGCTGATTGTAGCAACATACTACTCAAAGACATTCTTTCTGTGAGAAAATACTGGTGTGAAATATCTCAGCAA
CAGTGGTTAGAATTGTTCTCTGTGTACTTCAGGCTCTATCTGAAACCTTCACAAGATGTTCATAGAGTTTTAGTG
GCTAGAATAATTCATGCTGTTACCAAAGGATGCTGTTCTCAGACTGACGGATTAAATTCCAAATTTTTGGACTTT
TTTTCCAAGGCTATTCAGTGTGCGAGACAAGAAAAGAGCTCTTCAGGTCTAAATCATATCTTAGCAGCTCTTACT
ATCTTCCTCAAGACTTTGGCTGTCAACTTTCGAATTCGAGTGTGTGAATTAGGAGATGAAATTCTTCCCACTTTG
CTTTATATTTGGACTCAACATAGGCTTAATGATTCTTTAAAAGAAGTCATTATTGAATTATTTCAACTGCAAATT
TATATCCATCATCCGAAAGGAGCCAAAACCCAAGAAAAAGGTGCTTATGAATCAACAAAATGGAGAAGTATTTTA
TACAACTTATATGATCTGCTAGTGAATGAGATAAGTCATATAGGAAGTAGAGGAAAGTATTCTTCAGGATTTCGT
AATATTGCCGTCAAAGAAAATTTGATTGAATTGATGGCAGATATCTGTCACCAGGTTTTTAATGAAGATACCAGA
TCCTTGGAGATTTCTCAATCTTACACTACTACACAAAGAGAATCTAGTGATTACAGTGTCCCTTGCAAAAGGAAG
AAAATAGAACTAGGCTGGGAAGTAATAAAAGATCACCTTCAGAAGTCACAGAATGATTTTGATCTTGTGCCTTGG
CTACAGATTGCAACCCAATTAATATCAAAGTATCCTGCAAGTTTACCTAACTGTGAGCTGTCTCCATTACTGATG
ATACTATCTCAGCTTCTACCCCAACAGCGACATGGGGAACGTACACCATATGTGTTACGATGCCTTACGGAAGTT
GCATTGTGTCAAGACAAGAGGTCAAACCTAGAAAGCTCACAAAAGTCAGATTTATTAAAACTCTGGAATAAAATT
TGGTGTATTACCTTTCGTGGTATAAGTTCTGAGCAAATACAAGCTGAAAACTTTGGCTTACTTGGAGCCATAATT
CAGGGTAGTTTAGTTGAGGTTGACAGAGAATTCTGGAAGTTATTTACTGGGTCAGCCTGCAGACCTTCATGTCCT
GCAGTATGCTGTTTGACTTTGGCACTGACCACCAGTATAGTTCCAGGAGCGGTAAAAATGGGAATAGAGCAAAAT
ATGTGTGAAGTAAATAGAAGCTTTTCTTTAAAGGAATCAATAATGAAATGGCTCTTATTCTATCAGTTAGAGGGT
GACTTAGAAAATAGCACAGAAGTGCCTCCAATTCTTCACAGTAATTTTCCTCATCTTGTACTGGAGAAAATTCTT
GTGAGTCTCACTATGAAAAACTGTAAAGCTGCAATGAATTTTTTCCAAAGCGTGCCAGAATGTGAACACCACCAA
AAAGATAAAGAAGAACTTTCATTCTCAGAAGTAGAAGAACTATTTCTTCAGACAACTTTTGACAAGATGGACTTT
TTAACCATTGTGAGAGAATGTGGTATAGAAAAGCACCAGTCCAGTATTGGCTTCTCTGTCCACCAGAATCTCAAG
GAATCACTGGATCGCTGTCTTCTGGGATTATCAGAACAGCTTCTGAATAATTACTCATCTGAGATTACAAATTCA
GAAACTCTTGTCCGGTGTTCACGTCTTTTGGTGGGTGTCCTTGGCTGCTACTGTTACATGGGTGTAATAGCTGAA
GAGGAAGCATATAAGTCAGAATTATTCCAGAAAGCCAACTCTCTAATGCAATGTGCAGGAGAAAGTATCACTCTG
TTTAAAAATAAGACAAATGAGGAATTCAGAATTGGTTCCTTGAGAAATATGATGCAGCTATGTACACGTTGCTTG
AGCAACTGTACCAAGAAGAGTCCAAATAAGATTGCATCTGGCTTTTTCCTGCGATTGTTAACATCAAAGCTAATG
AATGACATTGCAGATATTTGTAAAAGTTTAGCATCCTTCATCAAAAAGCCATTTGACCGTGGAGAAGTAGAATCA
ATGGAAGATGATACTAATGGAAATCTAATGGAGGTGGAGGATCAGTCATCCATGAATCTATTTAACGATTACCCT
GATAGTAGTGTTAGTGATGCAAACGAACCTGGAGAGAGCCAAAGTACCATAGGTGCCATTAATCCTTTAGCTGAA
GAATATCTGTCAAAGCAAGATCTACTTTTCTTAGACATGCTCAAGTTCTTGTGTTTGTGTGTAACTACTGCTCAG
ACCAATACTGTGTCCTTTAGGGCAGCTGATATTCGGAGGAAATTGTTAATGTTAATTGATTCTAGCACGCTAGAA
CCTACCAAATCCCTCCACCTGCATATGTATCTAATGCTTTTAAAGGAGCTTCCTGGAGAAGAGTACCCCTTGCCA
ATGGAAGATGTTCTTGAACTTCTGAAACCACTATCCAATGTGTGTTCTTTGTATCGTCGTGACCAAGATGTTTGT
AAAACTATTTTAAACCATGTCCTTCATGTAGTGAAAAACCTAGGTCAAAGCAATATGGACTCTGAGAACACAAGG
GATGCTCAAGGACAGTTTCTTACAGTAATTGGAGCATTTTGGCATCTAACAAAGGAGAGGAAATATATATTCTCT
GTAAGAATGGCCCTAGTAAATTGCCTTAAAACTTTGCTTGAGGCTGATCCTTATTCAAAATGGGCCATTCTTAAT
GTAATGGGAAAAGACTTTCCTGTAAATGAAGTATTTACACAATTTCTTGCTGACAATCATCACCAAGTTCGCATG
TTGGCTGCAGAGTCAATCAATAGATTGTTCCAGGACACGAAGGGAGATTCTTCCAGGTTACTGAAAGCACTTCCT
TTGAAGCTTCAGCAAACAGCTTTTGAAAATGCATACTTGAAAGCTCAGGAAGGAATGAGAGAAATGTCCCATAGT

FIGURE 6950B

GCTGAGAACCCTGAAACTTTGGATGAAATTTATAATAGAAAATCTGTTTTACTGACGTTGATAGCTGTGGTTTTA
TCCTGTAGCCCTATCTGCGAAAAACAGGCTTTGTTTGCCCTGTGTAAATCTGTGAAAGAGAATGGATTAGAACCT
CACCTTGTGAAAAAGGTTTTAGAGAAAGTTTCTGAAACTTTTGGATATAGACGTTTAGAAGACTTTATGGCATCT
CATTTAGATTATCTGGTTTTGGAATGGCTAAATCTTCAAGATACTGAATACAACTTATCTTCTTTTCCTTTTATT
TTATTAAACTACACAAATATTGAGGATTTCTATAGATCTTGTTATAAGGTTTTGATTCCACATCTGGTGATTAGA
AGTCATTTTGATGAGGTGAAGTCCATTGCTAATCAGATTCAAGAGGACTGGAAAAGTCTTCTAACAGACTGCTTT
CCAAAGATTCTTGTAAATATTCTTCCTTATTTTGCCTATGAGGGTACCAGAGACAGTGGGATGGCACAGCAAAGA
GAGACTGCTACCAAGGTCTATGATATGCTTAAAAGTGAAAACTTATTGGGAAAACAGATTGATCACTTATTCATT
AGTAATTTACCAGAGATTGTGGTGGAGTTATTGATGACGTTACATGAGCCAGCAAATTCTAGTGCCAGTCAGAGC
ACTGACCTCTGTGACTTTTCAGGGGATTTGGATCCTGCTCCTAATCCACCTCATTTTCCATCGCATGTGATTAAA
GCAACATTTGCCTATATCAGCAATTGTCATAAAACCAAGTTAAAAAGCATTTTAGAAATTCTTTCCAAAAGCCCT
GATTCCTATCAGAAAATTCTTCTTGCCATATGTGAGCAAGCAGCTGAAACAAATAATGTTTATAAGAAGCACAGA
ATTCTTAAAATATATCACCTGTTTGTTAGTTTATTACTGAAAGATATAAAAAGTGGCTTAGGAGGAGCTTGGGCC
TTTGTTCTTCGAGACGTTATTTATACTTTGATTCACTATATCAACCAAAGGCCTTCTTGTATCATGGATGTGTCA
TTACGTAGCTTCTCCCTTTGTTGTGACTTATTAAGTCAGGTTTGCCAGACAGCCGTGACTTACTGTAAGGATGCT
CTAGAAAACCATCTTCATGTTATTGTTGGTACACTTATACCCCTTGTGTATGAGCAGGTGGAGGTTCAGAAACAG
GTATTGGACTTGTTGAAATACTTAGTGATAGATAACAAGGATAATGAAAACCTCTATATCACGATTAAGCTTTTA
GATCCTTTTCCTGACCATGTTGTTTTTAAGGATTTGCGTATTACTCAGCAAAAAATCAAATACAGTAGAGGACCC
TTTTCACTCTTGGAGGAAATTAACCATTTTCTCTCAGTAAGTGTTTATGATGCACTTCCATTGACAAGACTTGAA
GGACTAAAGGATCTTCGAAGACAACTGGAACTACATAAAGATCAGATGGTGGACATTATGAGAGCTTCTCAGGAT
AATCCGCAAGATGGGATTATGGTGAAACTAGTTGTCAATTTGTTGCAGTTATCCAAGATGGCAATAAACCACACT
GGTGAAAAAGAAGTTCTAGAGGCTGTTGGAAGCTGCTTGGGAGAAGTGGGTCCTATAGATTTCTCTACCATAGCT
ATACAACATAGTAAAGATGCATCTTATACCAAGGCCCTTAAGTTATTTGAAGATAAAGAACTTCAGTGGACCTTC
ATAATGCTGACCTACCTGAATAACACACTGGTAGAAGATTGTGTCAAAGTTCGATCAGCAGCTGTTACCTGTTTG
AAAAACATTTTAGCCACAAAGACTGGACATAGTTTCTGGGAGATTTATAAGATGACAACAGATCCAATGCTGGCC
TATCTACAGCCTTTTAGAACATCAAGAAAAAAGTTTTTAGAAGTACCCAGATTTGACAAAGAAAACCCTTTTGAA
GGCCTGGATGATATAAATCTGTGGATTCCTCTAAGTGAAAATCATGACATTTGGATAAAGACACTGACTTGTGCT
TTTTTGGACAGTGGAGGCACAAAATGTGAAATTCTTCAATTATTAAAGCCAATGTGTGAAGTGAAAACTGACTTT
TGTCAGACTGTACTTCCATACTTGATTCATGATATTTTACTCCAAGATACAAATGAATCATGGAGAAATCTGCTT
TCTACACATGTTCAGGGATTTTTCACCAGCTGTCTTCGACACTTCTCGCAAACGAGCCGATCCACAACCCCTGCA
AACTTGGATTCAGAGTCAGAGCACTTTTTCCGATGCTGTTTGGATAAAAAATCACAAAGAACAATGCTTGCTGTT
GTGGACTACATGAGAAGACAAAAGAGACCTTCTTCAGGAACAATTTTTAATGATGCTTTCTGGCTGGATTTAAAT
TATCTAGAAGTTGCCAAGGTAGCTCAGTCTTGTGCTGCTCACTTTACAGCTTTACTCTATGCAGAAATCTATGCA
GATAAGAAAAGTATGGATGATCAAGAGAAAAGAAGTCTTGCATTTGAAGAAGGAAGCCAGAGTACAACTATTTCT
AGCTTGAGTGAAAAAAGTAAAGAAGAAACTGGAATAAGTTTACAGGATCTTCTCTTAGAAATCTACAGAAGTATA
GGGGAGCCAGATAGTTTGTATGGCTGTGGTGGAGGGAAGATGTTACAACCCATTACTAGACTACGAACATATGAA
CACGAAGCAATGTGGGGCAAAGCCCTAGTAACATATGACCTCGAAACAGCAATCCCCTCATCAACACGCCAGGCA
GGAATCATTCAGGCCTTGCAGAATTTGGGACTCTGCCATATTCTTTCCGTCTATTTAAAAGGATTGGATTATGAA
AATAAAGACTGGTGTCCTGAACTAGAAGAACTTCATTACCAAGCAGCATGGAGGAATATGCAGTGGGACCATTGC
ACTTCCGTCAGCAAAGAAGTAGAAGGAACCAGTTACCATGAATCATTGTACAATGCTCTACAATCTCTAAGAGAC
AGAGAATTCTCTACATTTTATGAAAGTCTCAAATATGCCAGAGTAAAAGAAGTGGAAGAGATGTGTAAGCGCAGC
CTTGAGTCTGTGTATTCGCTCTATCCCACACTTAGCAGGTTGCAGGCCATTGGAGAGCTGGAAAGCATTGGGGAG
CTTTTCTCAAGATCAGTCACACATAGACAACTCTCTGAAGTATATATTAAGTGGCAGAAACACTCCCAGCTTCTC
AAGGACAGTGATTTTAGTTTTCAGGAGCCTATCATGGCTCTACGCACAGTCATTTTGGAGATCCTGATGGAAAAG
GAAATGGACAACTCACAAAGAGAATGTATTAAGGACATTCTCACCAAACACCTTGTAGAACTCTCTATACTGGCC
AGAACTTTCAAGAACACTCAGCTCCCTGAAAGGGCAATATTTCAAATTAAACAGTACAATTCAGTTAGCTGTGGA
GTCTCTGAGTGGCAGCTGGAAGAAGCACAAGTATTCTGGGCAAAAAAGGAGCAGAGTCTTGCCCTGAGTATTCTC
AAGCAAATGATCAAGAAGTTGGATGCCAGCTGTGCAGCGAACAATCCCAGCCTAAAACTTACATACACAGAATGT

FIGURE 6950C

CTGAGGGTTTGTGGCAACTGGTTAGCAGAAACGTGCTTAGAAAATCCTGCGGTCATCATGCAGACCTATCTAGAA
AAGGCAGTAGAAGTTGCTGGAAATTATGATGGAGAAAGTAGTGATGAGCTAAGAAATGGAAAAATGAAGGCATTT
CTCTCATTAGCCCGGTTTTCAGATACTCAATACCAAAGAATTGAAAACTACATGAAATCATCGGAATTTGAAAAC
AAGCAAGCTCTCCTGAAAAGAGCCAAAGAGGAAGTAGGTCTCCTTAGGGAACATAAAATTCAGACAAACAGATAC
ACAGTAAAGGTTCAGCGAGAGCTGGAGTTGGATGAATTAGCCCTGCGTGCACTGAAAGAGGATCGTAAACGCTTC
TTATGTAAAGCAGTTGAAAATTATATCAACTGCTTATTAAGTGGAGAAGAACATGATATGTGGGTATTCCGGCTT
TGTTCCCTCTGGCTTGAAAATTCTGGAGTTTCTGAAGTCAATGGCATGATGAAGAGAGACGGAATGAAGATTCCA
ACATATAAATTTTTGCCTCTTATGTACCAATTGGCTGCTAGAATGGGGACCAAGATGATGGGAGGCCTAGGATTT
CATGAAGTCCTCAATAATCTAATCTCTAGAATTTCAATGGATCACCCCCATCACACTTTGTTTATTATACTGGCC
TTAGCAAATGCAAACAGAGATGAATTTCTGACTAAACCAGAGGTAGCCAGAAGAAGCAGAATAACTAAAAATGTG
CCTAAACAAAGCTCTCAGCTTGATGAGGATCGAACAGAGGCTGCAAATAGAATAATATGTACTATCAGAAGTAGG
AGACCTCAGATGGTCAGAAGTGTTGAGGCACTTTGTGATGCTTATATTATATTAGCAAACTTAGATGCCACTCAG
TGGAAGACTCAGAGAAAAGGCATAAATATTCCAGCAGACCAGCCAATTACTAAACTTAAGAATTTAGAAGATGTT
GTTGTCCCTACTATGGAAATTAAGGTGGACCACACAGGAGAATATGGAAATCTGGTGACTATACAGTCATTTAAA
GCAGAATTTCGCTTAGCAGGAGGTGTAAATTTACCAAAAATAATAGATTGTGTAGGTTCCGATGGCAAGGAGAGG
AGACAGCTTGTTAAGGGCCGTGATGACCTGAGACAAGATGCTGTCATGCAACAGGTCTTCCAGATGTGTAATACA
TTACTGCAGAGAAACACGGAAACTAGGAAGAGGAAATTAACTATCTGTACTTATAAGGTGGTTCCCCTCTCTCAG
CGAAGTGGTGTTCTTGAATGGTGCACAGGAACTGTCCCCATTGGTGAATTTCTTGTTAACAATGAAGATGGTGCT
CATAAAAGATACAGGCCAAATGATTTCAGTGCCTTTCAGTGCCAAAAGAAAATGATGGAGGTGCAAAAAAAGTCT
TTTGAAGAGAAATATGAAGTCTTCATGGATGTTTGCCAAAATTTTCAACCAGTTTTCCGTTACTTCTGCATGGAA
AAATTCTTGGATCCAGCTATTTGGTTTGAGAAGCGATTGGCTTATACGCGCAGTGTAGCTACTTCTTCTATTGTT
GGTTACATACTTGGACTTGGTGATAGACATGTACAGAATATCTTGATAAATGAGCAGTCAGCAGAACTTGTACAT
ATAGATCTAGGTGTTGCTTTTGAACAGGGCAAAATCCTTCCTACTCCTGAGACAGTTCCTTTTAGACTCACCAGA
GATATTGTGGATGGCATGGGCATTACGGGTGTTGAAGGTGTCTTCAGAAGATGCTGTGAGAAAACCATGGAAGTG
ATGAGAAACTCTCAGGAAACTCTGTTAACCATTGTAGAGGTCCTTCTATATGATCCACTCTTTGACTGGACCATG
AATCCTTTGAAAGCTTTGTATTTACAGCAGAGGCCGGAAGATGAAACTGAGCTTCACCCTACTCTGAATGCAGAT
GACCAAGAATGCAAACGAAATCTCAGTGATATTGACCAGAGTTTCGACAAAGTAGCTGAACGTGTCTTAATGAGA
CTACAAGAGAAACTGAAAGGAGTGGAAGAAGGCACTGTGCTCAGTGTTGGTGGACAGGTGAATTTGCTCATACAG
CAGGCCATAGACCCCAAAAATCTCAGCCGACTTTTCCCAGGATGGAAAGCTTGGGTG**TGA**TCTTCAGTATATGAA
TTACCCTTTC

FIGURE 6951

MSLVLNDLLICCRQLEHDRATERKKEVEKFKRLIRDPETIKHLDRHSDSKQGKYLNWDAVFRFLQKYIQKETECL
RIAKPNVSASTQASRQKKMQEISSLVKYFIKCANRRAPRLKCQELLNYIMDTVKDSSNGAIYGADCSNILLKDIL
SVRKYWCEISQQQWLELFSVYFRLYLKPSQDVHRVLVARIIHAVTKGCCSQTDGLNSKFLDFFSKAIQCARQEKS
SSGLNHILAALTIFLKTLAVNFRIRVCELGDEILPTLLYIWTQHRLNDSLKEVIIELFQLQIYIHHPKGAKTQEK
GAYESTKWRSILYNLYDLLVNEISHIGSRGKYSSGFRNIAVKENLIELMADICHQVFNEDTRSLEISQSYTTTQR
ESSDYSVPCKRKKIELGWEVIKDHLQKSQNDFDLVPWLQIATQLISKYPASLPNCELSPLLMILSQLLPQQRHGE
RTPYVLRCLTEVALCQDKRSNLESSQKSDLLKLWNKIWCITFRGISSEQIQAENFGLLGAIIQGSLVEVDREFWK
LFTGSACRPSCPAVCCLTLALTTSIVPGAVKMGIEQNMCEVNRSFSLKESIMKWLLFYQLEGDLENSTEVPPILH
SNFPHLVLEKILVSLTMKNCKAAMNFFQSVPECEHHQKDKEELSFSEVEELFLQTTFDKMDFLTIVRECGIEKHQ
SSIGFSVHQNLKESLDRCLLGLSEQLLNNYSSEITNSETLVRCSRLLVGVLGCYCYMGVIAEEEAYKSELFQKAN
SLMQCAGESITLFKNKTNEEFRIGSLRNMMQLCTRCLSNCTKKSPNKIASGFFLRLLTSKLMNDIADICKSLASF
IKKPFDRGEVESMEDDTNGNLMEVEDQSSMNLFNDYPDSSVSDANEPGESQSTIGAINPLAEEYLSKQDLLFLDM
LKFLCLCVTTAQTNTVSFRAADIRRKLLMLIDSSTLEPTKSLHLHMYLMLLKELPGEEYPLPMEDVLELLKPLSN
VCSLYRRDQDVCKTILNHVLHVVKNLGQSNMDSENTRDAQGQFLTVIGAFWHLTKERKYIFSVRMALVNCLKTLL
EADPYSKWAILNVMGKDFPVNEVFTQFLADNHHQVRMLAAESINRLFQDTKGDSSRLLKALPLKLQQTAFENAYL
KAQEGMREMSHSAENPETLDEIYNRKSVLLTLIAVVLSCSPICEKQALFALCKSVKENGLEPHLVKKVLEKVSET
FGYRRLEDFMASHLDYLVLEWLNLQDTEYNLSSFPFILLNYTNIEDFYRSCYKVLIPHLVIRSHFDEVKSIANQI
QEDWKSLLTDCFPKILVNILPYFAYEGTRDSGMAQQRETATKVYDMLKSENLLGKQIDHLFISNLPEIVVELLMT
LHEPANSSASQSTDLCDFSGDLDPAPNPPHFPSHVIKATFAYISNCHKTKLKSILEILSKSPDSYQKILLAICEQ
AAETNNVYKKHRILKIYHLFVSLLLKDIKSGLGGAWAFVLRDVIYTLIHYINQRPSCIMDVSLRSFSLCCDLLSQ
VCQTAVTYCKDALENHLHVIVGTLIPLVYEQVEVQKQVLDLLKYLVIDNKDNENLYITIKLLDPFPDHVVFKDLR
ITQQKIKYSRGPFSLLEEINHFLSVSVYDALPLTRLEGLKDLRRQLELHKDQMVDIMRASQDNPQDGIMVKLVVN
LLQLSKMAINHTGEKEVLEAVGSCLGEVGPIDFSTIAIQHSKDASYTKALKLFEDKELQWTFIMLTYLNNTLVED
CVKVRSAAVTCLKNILATKTGHSFWEIYKMTTDPMLAYLQPFRTSRKKFLEVPRFDKENPFEGLDDINLWIPLSE
NHDIWIKTLTCAFLDSGGTKCEILQLLKPMCEVKTDFCQTVLPYLIHDILLQDTNESWRNLLSTHVQGFFTSCLR
HFSQTSRSTTPANLDSESEHFFRCCLDKKSQRTMLAVVDYMRRQKRPSSGTIFNDAFWLDLNYLEVAKVAQSCAA
HFTALLYAEIYADKKSMDDQEKRSLAFEEGSQSTTISSLSEKSKEETGISLQDLLLEIYRSIGEPDSLYGCGGGK
MLQPITRLRTYEHEAMWGKALVTYDLETAIPSSTRQAGIIQALQNLGLCHILSVYLKGLDYENKDWCPELEELHY
QAAWRNMQWDHCTSVSKEVEGTSYHESLYNALQSLRDREFSTFYESLKYARVKEVEEMCKRSLESVYSLYPTLSR
LQAIGELESIGELFSRSVTHRQLSEVYIKWQKHSQLLKDSDFSFQEPIMALRTVILEILMEKEMDNSQRECIKDI
LTKHLVELSILARTFKNTQLPERAIFQIKQYNSVSCGVSEWQLEEAQVFWAKKEQSLALSILKQMIKKLDASCAA
NNPSLKLTYTECLRVCGNWLAETCLENPAVIMQTYLEKAVEVAGNYDGESSDELRNGKMKAFLSLARFSDTQYQR
IENYMKSSEFENKQALLKRAKEEVGLLREHKIQTNRYTVKVQRELELDELALRALKEDRKRFLCKAVENYINCLL
SGEEHDMWVFRLCSLWLENSGVSEVNGMMKRDGMKIPTYKFLPLMYQLAARMGTKMMGGLGFHEVLNNLISRISM
DHPHHTLFIILALANANRDEFLTKPEVARRSRITKNVPKQSSQLDEDRTEAANRIICTIRSRRPQMVRSVEALCD
AYIILANLDATQWKTQRKGINIPADQPITKLKNLEDVVVPTMEIKVDHTGEYGNLVTIQSFKAEFRLAGGVNLPK
IIDCVGSDGKERRQLVKGRDDLRQDAVMQQVFQMCNTLLQRNTETRKRKLTICTYKVVPLSQRSGVLEWCTGTVP
IGEFLVNNEDGAHKRYRPNDFSAFQCQKKMMEVQKKSFEEKYEVFMDVCQNFQPVFRYFCMEKFLDPAIWFEKRL
AYTRSVATSSIVGYILGLGDRHVQNILINEQSAELVHIDLGVAFEQGKILPTPETVPFRLTRDIVDGMGITGVEG
VFRRCCEKTMEVMRNSQETLLTIVEVLLYDPLFDWTMNPLKALYLQQRPEDETELHPTLNADDQECKRNLSDIDQ
SFDKVAERVLMRLQEKLKGVEEGTVLSVGGQVNLLIQQAIDPKNLSRLFPGWKAWV

FIGURE 6952

GGCACGAGGCAGGCGCTGACGAGGAGCCCGGCTGAGGGAGGATGCGCCGCTGACGCCTGCGGGAGCCGCGCGCCT
GGGGCGGGAGGATGCTCCAGAGGGGCCTCTGGCCGTGGCGCACGCGGCTGCTGCCGACCCCTGGCACCTGGCGCC
CAGCGCGCCCGTGGCCGCTGCCGCCTCCGCCCCAGGTTTTGCGTGTGAAGCTGTGTGGAAATGTGAAATACTACC
AGTCACACCATTATAGTACCGTGGTGCCACCTGATGAAATAACAGTTATTTATAGACATGGCCTTCCCTTGGTAA
CACTTACCTTGCCATCTAGAAAAGAACGTTGTCAATTCGTAGTCAAACCA**ATG**TTGTCAACAGTTGGTTCATTCC
TTCAGGACCTACAAAATGAAGATAAGGGTATCAAAACTGCAGCCATCTTCACAGCAGATGGCAACATGATTTCAG
CTTCTACCTTGATGGATATTTTGCTAATGAATGATTTTAAACTTGTCATTAATAAAATAGCATATGATGTGCAGT
GTCCAAAGAGAGAAAAACCAAGTAATGAGCACACTGCTGAGATGGAACACATGAAATCCTTGGTTCACAGACTAT
TTACAATCTTGCATTTAGAAGAGTCTCAGAAAAAGAGAGAGCACCATTTACTGGAGAAAATTGACCACCTGAAGG
AACAGCTGCAGCCCCTTGAACAGGTGAAAGCTGGAATAGAAGCTCATTCGGAAGCCAAAACCAGTGGACTCCTGT
GGGCTGGATTGGCACTGCTGTCCATTCAGGGTGGGGCACTGGCCTGGCTCACGTGGTGGGTGTACTCCTGGGATA
TCATGGAGCCAGTTACATACTTCATCACATTTGCAAATTCTATGGTCTTTTTTGCATACTTTATAGTCACTCGAC
AGGATTATACTTACTCAGCTGTTAAGAGTAGGCAATTTCTTCAGTTCTTCCACAAGAAATCAAAGCAACAGCACT
TTGATGTGCAGCAATACAACAAGTTAAAAGAAGACCTTGCTAAGGCTAAAGAATCCCTGAAACAGGCGCGTCATT
CTCTCTGTTTGCAAATGCAAGTAGAAGAACTCAATGAAAAGAAT**TAA**TCTTACAGTTTTAAATGTCGTCAGATTT
TCCATTATGTATTGATTTTGCAACTTAGGATGTTTTTGAGTCCCATGGTTCATTTTGATTGTTTAATCTTTGTTA
TTAAATTCTTGTAAAACAGAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6953

MLSTVGSFLQDLQNEDKGIKTAAIFTADGNMISASTLMDILLMNDFKLVINKIAYDVQCPKREKPSNEHTAEMEH
MKSLVHRLFTILHLEESQKKREHHLLEKIDHLKEQLQPLEQVKAGIEAHSEAKTSGLLWAGLALLSIQGGALAWL
TWWVYSWDIMEPVTYFITFANSMVFFAYFIVTRQDYTYSAVKSRQFLQFFHKKSKQQHFDVQQYNKLKEDLAKAK
ESLKQARHSLCLQMQVEELNEKN

FIGURE 6954

ATTTGGAGGAAAGTGGAGAAATTAAAGATATGTTACTTGAGTGCTTCATAAATATTAATTATATCAAGAAAGAAG
AGGGAAGAAGATTTCTTAGTTGTCTCTTCAACTGGAATATCAACTTCATCAAAATGATCCACGGGACCATTAAAA
ACCAGTTACAGGGATTACAAAAGTCTTTGATGGTATACATTGCAGAAATTTATTTCAGAGCTTGGAAAAAGGCTT
CAGGGAAAATACTGGAGGCGATTGAAAATGATTGCATCCAGGACTTCATGTTCCACGGGATACACCTTCCGAGGA
GGTCTCCAGTGCATTCCAAAGTGCGGGAGGTTCTGAGTTACTTTCACCATCAAAAGAAAGTTCGGCAGGGAGTGG
AAGAGATGCTTTATAGATTATATAAGCCCATCCTTTGGAGAGGATTAAAGGCCAGAAACTCTGAAGTTCGATCAA
ATGCTGCATTGTTGTTTGTTGAAGCATTTCCTATTAGGGATCCAAACCTTCATGCTATTGAAATGGATAGTAAAA
TCCAGAAACAGTTTGAAGAGCTCTATAGCCTTTTAGAAGATCCTTACCCGATGGTCCGTTCCACAGGGATCCTTG
GTGTTTGTAAAATAACTTCTAAGTACTGGGAAATGATGCCCCCGACCATTCTTATTGACCTCCTGAAGAAGGTGA
CTGGGGAACTGGCATTTGACACGAGCTCAGCTGATGTTCGTTGTTCTGTCTTTAAGTGTCTGCCAATGATTTTGG
ACAACAAACTGAGCCACCCATTGTTAGAGCAGCTCCTTCCAGCTCTCAGATACAGTCTCCACGACAATTCGGAGA
AAGTGAGGGTAGCTTTTGTGGACATGCTGTTGAAGATCAAAGCTGTGAGGGCTGCTAAGTTTTGGAAAATATGTC
CCATGGAGCACATTCTGGTTCGTCTGGAAACTGATTCTCGACCTGTGTCTCGGCGCCTGGTGAGCCTCATCTTTA
ATTCTTTCCTGCCTGTGAATCAGCCGGAGGAGGTCTGGTGCGAGCGCTGTGTCACCCTGGTGCAGATGAACCACG
CCGCTGCCAGGAGGTTCTATCAGTACGCCCACGAACACACCGCCTGCACCAACATAGCAAAGCTGATTCACGTTA
TTCGTCATTGCTTAAATGCCTGTATCCAGAGGGCAGTGAGAGAGCCTCCAGAGGACGAGGAGGAAGAGGACGGAA
GGGAGAAGGAGAATGTGACTGTTCTGGACAAAACACTGTCAGTAAACGATGTTGCATGCATGGCAGGTTTACTAG
AAATCATTGTGATTCTCTGGAAAAGTATTGACAGAAGTATGGAAAATAATAAAGAGGCCAAACTTTACACGATTA
ACAAGTTTGCCTCTGTGCTTCCAGAGTATCTGAAAGTATTTAAGGATGATCGCTGCAAGATCCCTTTATTCATGC
TAATGTCCTTTATGCCGGCCTCTGCTGTCCCCCCATTCAGCTGTGGTGTGATTTCCACGCTGAGAAGCCGGGAGG
AGGGCGCTGTGGACAAGAGCTACTGCACTTTGTTGGATTGCCTCTGCTCCTGGGGGCAGGTGGGGCACATTCTGG
AGCTTGTTGACAACTGGCTGCCCACAGAGCATGCCCAGGCCAAGAGCAACACAGCTTCTAAAGGTAGGGTGCAGA
TCCATGACACACGCCCAGTCAAACCTGAATTGGCATTGGTCTACATTGAGTATCTGCTGACTCATCCAAAGAACC
GCGAGTGCTTGCTCTCTGCTCCTCGGAAGAAACTTAACCATCTTTTGAAAGCCCTTGAAACGTCAAAGGCAGATC
TGGAGTCACTTCTGCAGACACCGGGTGGGAAGCCTCGTGGCTTCAGTGAAGCAGCTGCCCCGCGAGCCTTTGGTC
TCCACTGTCGCCTGAGCATCCATCTTCAGCACAAGTTCTGCTCAGAAGGAAAGGTGTATTTGTCCATGTTGGAAG
ACACTGGCTTTTGGTTAGAAAGCAAAATTTTATCTTTTATTCAAGATCAAGAAGAAGACTACCTGAAGCTTCATA
GGGTCATTTATCAGCAAATTATCCAGACCTACCTGACTGTGTGTAAAGATGTTGTTATGGTAGGCCTTGGTGACC
ATCAGTTTCAGATGCAACTCTTACAGCGGAGTCTTGGAATCATGCAAACAGTGAAGGGATTTTTTTATGTTTCAT
TACTTCTTGACATTCTGAAAGAGATAACTGGAAGTTCCTTGATTCAGAAAACAGATTCAGATGAAGAAGTTGCAA
TGCTGTTGGACACAGTCCAGAAAGTATTTCAGAAAATGTTGGAATGTATTGCACGGAGCTTCAGGAAGCAGCCGG
AAGAAGGCCTGCGGGTTTCTGACGTAGAAGAGCTTACCCCTCCAGAGCATCTTTCTGATCTTCCACCATTTTCAA
GGTGTTTAATAGGAATAATAATAAAGTCTTCGAATGTGGTCAGGTCATTTTTGGATGAATTAAAGGCATGTGTGG
CTTCTAATGATATTGAAGGCATTGTGTGCCTCACGGCTGCTGTGCATATTATCCTGGTTATTAATGCAGGTAAAC
ATAAAAGCTCAAAAGTGAGGGAGGTTGCAGCCACTGTTCACAGAAAACTAAAGACATTCATGGAAATTACTTTGG
AAGAGGATAGCATTGAAAGATTTCTCTATGAATCATCATCAAGAACTCTGGGAGAACTTTTGAATTCATAACCAA
GCCAACATCTCCAGACATGTAAAAATAGGGAAAAGTGATTCAAATTGAAATGCCTGTGTATTTTCCTATTGTTTT
TAATGTTAATAACCCATATAATAGGGAAAGGGTGGGATTTTTTTGTGGGAATGTGGGAAGGTGGGGGTTATGGAG
GAGATAACTCAAAACTTCTTCAATTTTGCCTAGTGCCTGCGTAAATAATATATTTAATATAAAGGACTCCAGGTA
TAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6955

MLLECFININYIKKEEGRRFLSCLFNWNINFIKMIHGTIKNQLQGLQKSLMVYIAEIYFRAWKKASGKILEAIEN
DCIQDFMFHGIHLPRRSPVHSKVREVLSYFHHQKKVRQGVEEMLYRLYKPILWRGLKARNSEVRSNAALLFVEAF
PIRDPNLHAIEMDSKIQKQFEELYSLLEDPYPMVRSTGILGVCKITSKYWEMMPPTILIDLLKKVTGELAFDTSS
ADVRCSVFKCLPMILDNKLSHPLLEQLLPALRYSLHDNSEKVRVAFVDMLLKIKAVRAAKFWKICPMEHILVRLE
TDSRPVSRRLVSLIFNSFLPVNQPEEVWCERCVTLVQMNHAAARRFYQYAHEHTACTNIAKLIHVIRHCLNACIQ
RAVREPPEDEEEEDGREKENVTVLDKTLSVNDVACMAGLLEIIVILWKSIDRSMENNKEAKLYTINKFASVLPEY
LKVFKDDRCKIPLFMLMSFMPASAVPPFSCGVISTLRSREEGAVDKSYCTLLDCLCSWGQVGHILELVDNWLPTE
HAQAKSNTASKGRVQIHDTRPVKPELALVYIEYLLTHPKNRECLLSAPRKKLNHLLKALETSKADLESLLQTPGG
KPRGFSEAAAPRAFGLHCRLSIHLQHKFCSEGKVYLSMLEDTGFWLESKILSFIQDQEEDYLKLHRVIYQQIIQT
YLTVCKDVVMVGLGDHQFQMQLLQRSLGIMQTVKGFFYVSLLLDILKEITGSSLIQKTDSDEEVAMLLDTVQKVF
QKMLECIARSFRKQPEEGLRVSDVEELTPPEHLSDLPPFSRCLIGIIIKSSNVVRSFLDELKACVASNDIEGIVC
LTAAVHIILVINAGKHKSSKVREVAATVHRKLKTFMEITLEEDSIERFLYESSSRTLGELLNS

FIGURE 6956

GGCGGCGGCAGCGGGTTCGGTTGCGCGTGGCGCACGGGGTGGGAGCGGAGCCCAGGCCGGGAGCAGGCGCCGCCG
CCAGCGACC**ATG**GGGAACGTGTTGGCTGCCAGCTCGCCGCCCGCAGGGCCGCCACCGCCGCCTGCGCCGGCCCTC
GTGGGGCTGCCGCCACCTCCGCCCTCGCCGCCGGGCTTCACGCTGCCGCCGCTGGGAGGCAGCCTGGGCGCCGGC
ACCAGTACGAGTCGAAGTTCGGAACGGACCCCCGGGGCTGCAACCGCCAGCGCCTCAGGGGCCGCCGAGGATGGG
GCCTGCGGCTGCCTGCCCAACCCGGGCACATTCGAGGAGTGCCACCGGAAGTGCAAGGAGCTGTTTCCCATTCAG
ATGGAGGGTGTCAAGCTCACAGTCAACAAAGGGTTGAGTAACCATTTTCAGGTCAACCACACAGTAGCCCTCAGC
ACAATCGGGGAGTCCAACTACCACTTCGGGGTCACATATGTGGGGACAAAGCAGCTGAGTCCCACAGAGGCGTTC
CCTGTACTGGTGGGTGACATGGACAACAGTGGCAGTCTCAACGCTCAGGTCATTCACCAGCTGGGCCCCGGTCTC
AGGTCCAAGATGGCCATCCAGACCCAGCAGTCGAAGTTTGTGAACTGGCAGGTGGACGGGGAGTATCGGGGCTCT
GACTTCACAGCAGCCGTCACCCTGGGGAACCCAGACGTCCTCGTGGGTTCAGGAATCCTCGTAGCCCACTACCTC
CAGAGCATCACGCCTTGCCTGGCCCTGGGTGGAGAGCTGGTCTACCACCGGCGGCCTGGAGAGGAGGGCACTGTC
ATGTCTCTAGCTGGGAAATACACATTGAACAACTGGTTGGCAACGGTAACGTTGGGCCAGGCGGGCATGCACGCA
ACATACTACCACAAAGCCAGTGACCAGCTGCAGGTGGGTGTGGAGTTTGAGGCCAGCACAAGGATGCAGGACACC
AGCGTCTCCTTCGGGTACCAGCTGGACCTGCCCAAGGCCAACCTCCTCTTCAAAGGCTCTGTGGATAGCAACTGG
ATCGTGGGTGCCACGCTGGAGAAGAAGCTCCCACCCCTGCCCCTGACACTGGCCCTTGGGGCCTTCCTGAATCAC
CGCAAGAACAAGTTTCAGTGTGGCTTTGGCCTCACCATCGGC**TGA**GCCCTCCTGGCCCCCGCCTTCCACGCCCTT
CCGATTCCACCTCCACCTCCACCTCCCCCTGCCACAGAGGGGAGACCTGAGCCCCCCTCCCTTCCCTCCCCCCTT
GGGGGTCGGGGGGGGACATTGGAAAGGAGGGACCCCGCCACCCCAGCAGCTGAGGAGGGGATTCTGGAACTGAAT
GGCGCTTCGGGATTCTGAGTAGCAGGGGCAGCATGCCCAGTGGGCCTGGGGTCCCGGGAGGGATTCCGGAATTGA
GGGGCACGCAGGATTCTGAGCACCAGGGGCAGAGGCGGCCAGACAACCTCAGGGAGGAGTGTCCTGGCGTCCCCA
TCCTCCAAAGGGCCTGGGCCCGCCCCGAGGGGGCAGCGAGAGGAGCTTCCCCATCCCCGGTCAGTCCACCCTGCC
CCGTCCACTTTCCCATCTCCTCGGTATAAATCATGTTTATAAGTTATGGAAGAACCGGGACATTTTACAGAAAAA
AAACAAAAAACAACAAAAAATATACGTGGGAAAAAAAAAAAAAAAAAAA

FIGURE 6957

MGNVLAASSPPAGPPPPPAPALVGLPPPPPSPPGFTLPPLGGSLGAGTSTSRSSERTPGAATASASGAAEDGACG
CLPNPGTFEECHRKCKELFPIQMEGVKLTVNKGLSNHFQVNHTVALSTIGESNYHFGVTYVGTKQLSPTEAFPVL
VGDMDNSGSLNAQVIHQLGPGLRSKMAIQTQQSKFVNWQVDGEYRGSDFTAAVTLGNPDVLVGSGILVAHYLQSI
TPCLALGGELVYHRRPGEEGTVMSLAGKYTLNNWLATVTLGQAGMHATYYHKASDQLQVGVEFEASTRMQDTSVS
FGYQLDLPKANLLFKGSVDSNWIVGATLEKKLPPLPLTLALGAFLNHRKNKFQCGFGLTIG

FIGURE 6958A

CGGCGCGGGTGTTGAGAGCGGTGTGGTAGGTGTTGTAGCCGCTATGGTGAAGTTCGCTTTGTAGCGGCCCCGGCT
AGAGAGTTGGCCTGTTCCCTGCCTTTGTGACCCGGAGGAGCTTTTGGGGGTGCGTCAAGCCCCTGGCCTGAGGCA
GCGAACTGGTTTGTGGCCTGTTTGATTCCTGTCAGAGGTTTGCTGACCCAAGACAGTATCGAAAATGCATATTAA
GTCAATTATTCTAGAGGGATTCAAGTCCTATGCTCAGAGGACCGAAGTCAATGGTTTTGACCCCCTCTTCAATGC
TATCACTGGCTTAAATGGTAGTGGGAAATCCAACATATTGGACTCCATCTGCTTTTTACTGGGCATCTCCAACCT
GTCTCAGGTTCGGGCTTCTAATTTACAAGATTTAGTTTACAAAAATGGGCAGGCTGGTATTACCAAAGCCTCTGT
GTCAATCACTTTTGATAATTCTGACAAAAAGCAAAGTCCTTTAGGATTTGAGGTTCATGATGAAATCACAGTAAC
AAGGCAGGTGGTTATTGGTGGTAGAAATAAATATTTAATCAATGGAGTCAATGCCAACAACACCAGAGTACAGGA
TCTCTTCTGTTCTGTTGGCCTTAATGTTAACAACCCTCACTTTCTCATCATGCAGGGCCGAATTACAAAAGTATT
GAATATGAAACCACCAGAGATTTTATCCATGATAGAAGAAGCAGCTGGAACCAGGATGTATGAATACAAAAAAAT
AGCTGCACAGAAAACTATAGAAAAAAAGGAGGCTAAGCTGAAAGAAATTAAGACGATACTTGAAGAAGAGATTAC
TCCAACCATTCAAAAATTAAAAGAGGAAAGATCGTCCTACTTGGAGTACCAAAAAGTAATGAGAGAAATAGAACA
TTTGAGTCGTTTATATATTGCTTATCAGTTTTTGCTGGCTGAAGATACCAAAGTACGCTCAGCTGAGGAATTAAA
AGAAATGCAAGATAAAGTTATAAAGCTTCAGGAAGAATTGTCTGAGAATGATAAAAAAATAAAAGCACTTAATCA
TGAAATAGAAGAATTGGAAAAAAGAAAAGATAAGGAAACTGGAGTTATACTTCGATCTTTAGAAGATGCTCTTGC
AGAGGCTCAGCGAGTTAATACTAAATCTCAAAGCGCATTTGATCTCAAGAAGAAAAATCTGGCATGTGAGGAAAG
CAAACGCAAAGAGCTGGAAAAAAATATGGTTGAGGACTCAAAAACTTTAGCAGCAAAGGAAAAAGAGGTTAAAAA
GATAACAGATGGACTGCATGCCCTTCAAGAAGCAAGTAATAAAGATGCTGAAGCTCTGGCAGCTGCACAGCAGCA
CTTCAATGCTGTTTCCGCTGGCCTGTCCAGTAATGAAGATGGAGCAGAAGCAACTCTTGCTGGTCAAATGATGGC
CTGTAAAAATGATATAAGTAAAGCTCAGACAGAAGCCAAACAGGCTCAGATGAAGTTGAAGCATGCTCAACAGGA
ATTAAAGAATAAACAAGCTGAAGTTAAGAAGATGGATAGTGGCTACAGGAAGGATCAAGAAGCTCTAGAAGCTGT
AAAAAGACTTAAAGAAAAACTTGAAGCTGAAATGAAAAAGCTAAATTATGAAGAAAATAAAGAGGAAAGCCTTTT
GGAAAAGCGCAGGCAGCTGTCTCGTGATATTGGTAGATTGAAAGAAACATATGAAGCTCTATTAGCCAGATTTCC
CAATCTTCGATTTGCATACAAGGATCCAGAGAAGAACTGGAATAGAAATTGTGTGAAAGGACTTGTGGCTTCTCT
GATTAGTGTGAAAGACACTTCTGCAACCACAGCTTTAGAATTAGTGGCTGGAGAACGACTCTACAATGTTGTAGT
AGACACAGAAGTTACTGGTAAAAAGCTACTAGAAAGGGGGGAACTGAAACGTCGATACACTATAATTCCACTCAA
TAAAATTTCAGCCAGATGTATTGCACCAGAAACTCTGAGAGTTGCTCAGAATCTTGTTGGCCCTGACAACGTTCA
TGTGGCTCTTTCCTTGGTTGAATATAAACCAGAACTTCAGAAAGCAATGGAGTTTGTCTTTGGAACAACATTTGT
TTGTGACAATATGGATAATGCCAAAAAAGTGGCCTTTGATAAGAGGATAATGACTAGAACTGTAACTCTCGGAGG
TGATGTGTTTGATCCTCATGGGACATTGAGTGGAGGTGCTCGATCCCAGGCAGCTTCCATTTTAACCAAGTTTCA
AGAACTCAAAGATGTTCAGGATGAACTGAGAATCAAAGAGAATGAGCTGCGGGCTCTAGAAGAGGAATTAGCAGG
TCTTAAAAACACTGCTGAAAAGTATCGCCAACTAAAACAGCAGTGGGAGATGAAAACTGAAGAGGCAGATTTATT
ACAAACCAAGCTCCAGCAAAGCTCATATCACAAGCAACAAGAAGAATTAGATGCCCTTAAAAAAACCATTGAGGA
AAGTGAGGAGACTTTGAAAAACACTAAAGAAATCCAAAGAAAAGCAGAAGAAAAATATGAAGTATTGGAAAATAA
AATGAAAAATGCAGAAGCTGAAAGAGAGCGAGAACTGAAAGATGCTCAGAAAAAACTGGATTGTGCCAAAACAAA
GGCAGATGCATCTAGCAAGAAGATGAAAGAAAAACAACAGGAAGTTGAAGCTATCACTCTGGAACTGGAAGAGCT
CAAGAGAGAGCATACATCTTACAAACAACAGCTTGAAGCTGTAAATGAAGCTATCAAATCCTATGAAAGTCAGAT
TGAAGTAATGGCAGCTGAGGTGGCTAAAAATAAGGAGTCAGTAAATAAAGCTCAAGAAGAGGTGACCAAGCAAAA
AGAGGTGATAACAGCCCAAGACACTGTAATTAAGCTAAATATGCAGAAGTGGCAAAACACAAGGAGCAAAACAAT
GATTCTCAGCCTTAAAATTAAGGAATTAGACCACCACATCAGCAAACATAAACGGGAGGCTGAAGATGGTGCTGC
AAAGGTATCCAAAATGTTGAAAGATTATGACTGGATTAATGCAGAGAGACACCTCTTTGGCCAACCCAATAGTGC
CTATGATTTCAAAACTAACAACCCTAAAGAAGCTGGTCAGAGACTTCAGAAGTTGCAAGAAATGAAGGAGAAACT
AGGAAGAAATGTCAATATGAGAGCTATGAATGTATTGACAGAAGCTGAAGAGCGATGCAATGACTTGATGAAGAA
GAAGAGAATTGTAGAAAATGACAAATCCAAAATTCTTACAACTATAGAAGACCTTGACCAGAAGAAAAACCAAGC
CCTAAATATTGCATGGCAAAAGGTGAACAAGGACTTTGGGTCTATTTTTTCTACTCTTTTGCCTGGTGCTAATGC
TATGCTTGCACCACCAGAGGGTCAAACTGTTTTGGATGGTCTGGAGTTCAAGGTTGCCTTAGGAAATACCTGGAA
AGAAAACCTAACTGAACTTAGTGGTGGTCAGAGGTCTTTAGTGGCCTTGTCATTAATACTGTCCATGCTTCTCTT
CAAACCTGCTCCAATTTATATCCTTGATGAGGTAGATGCAGCCTTGGATCTTTCTCATACCCAAAACATTGGACA

FIGURE 6958B

GATGCTGCGTACTCATTTCACACATTCTCAGTTCATTGTGGTGTCACTAAAAGAAGGTATGTTCAACAATGCAAA
CGTTCTTTTCAAAACCAAGTTTGTGGATGGTGTTTCTACAGTAGCCAGATTTACTCAATGTCAAAATGGAAAGAT
TTCAAAGGAAGCAAAATCCAAGGCAAAACCACCCAAAGGAGCACATGTGGAAGTT**TAA**ACTACAAAGTTATTTCT
TCATCTTGACCTGTTTTTTTAAATGTAAACTTTTAAGGACTTGAGATAACTAATTTGTTTATATACAAAAATTAA
TGTTACTGTGTTACTTAACCCATGTTTTCTCTTTATATAATCACTTATCGCTTACAAATGAGCATATATTCCTCA
TCTCTTAACTAGTCTAATTATGGTCCAATTATTGTGGTTGTGATTTTATGCATATCCATCAAAATGTTTTTTTTC
TTATGCGGGTCTTTTATATATTAGGGATCCTGAGATACCCGATTCTATATGTAAAAGCTAATATACAAAAAAGCA
GATTAAATTACATGATAAATGTAGCTGAAAAAAAAAAAAAA

FIGURE 6959

MHIKSIILEGFKSYAQRTEVNGFDPLFNAITGLNGSGKSNILDSICFLLGISNLSQVRASNLQDLVYKNGQAGIT
KASVSITFDNSDKKQSPLGFEVHDEITVTRQVVIGGRNKYLINGVNANNTRVQDLFCSVGLNVNNPHFLIMQGRI
TKVLNMKPPEILSMIEEAAGTRMYEYKKIAAQKTIEKKEAKLKEIKTILEEEITPTIQKLKEERSSYLEYQKVMR
EIEHLSRLYIAYQFLLAEDTKVRSAEELKEMQDKVIKLQEELSENDKKIKALNHEIEELEKRKDKETGVILRSLE
DALAEAQRVNTKSQSAFDLKKKNLACEESKRKELEKNMVEDSKTLAAKEKEVKKITDGLHALQEASNKDAEALAA
AQQHFNAVSAGLSSNEDGAEATLAGQMMACKNDISKAQTEAKQAQMKLKHAQQELKNKQAEVKKMDSGYRKDQEA
LEAVKRLKEKLEAEMKKLNYEENKEESLLEKRRQLSRDIGRLKETYEALLARFPNLRFAYKDPEKNWNRNCVKGL
VASLISVKDTSATTALELVAGERLYNVVVDTEVTGKKLLERGELKRRYTIIPLNKISARCIAPETLRVAQNLVGP
DNVHVALSLVEYKPELQKAMEFVFGTTFVCDNMDNAKKVAFDKRIMTRTVTLGGDVFDPHGTLSGGARSQAASIL
TKFQELKDVQDELRIKENELRALEEELAGLKNTAEKYRQLKQQWEMKTEEADLLQTKLQQSSYHKQQEELDALKK
TIEESEETLKNTKEIQRKAEEKYEVLENKMKNAEAERERELKDAQKKLDCAKTKADASSKKMKEKQQEVEAITLE
LEELKREHTSYKQQLEAVNEAIKSYESQIEVMAAEVAKNKESVNKAQEEVTKQKEVITAQDTVIKLNMQKWQNTR
SKTMILSLKIKELDHHISKHKREAEDGAAKVSKMLKDYDWINAERHLFGQPNSAYDFKTNNPKEAGQRLQKLQEM
KEKLGRNVNMRAMNVLTEAEERCNDLMKKKRIVENDKSKILTTIEDLDQKKNQALNIAWQKVNKDFGSIFSTLLP
GANAMLAPPEGQTVLDGLEFKVALGNTWKENLTELSGGQRSLVALSLILSMLLFKPAPIYILDEVDAALDLSHTQ
NIGQMLRTHFTHSQFIVVSLKEGMFNNANVLFKTKFVDGVSTVARFTQCQNGKISKEAKSKAKPPKGAHVEV

7740/8433

FIGURE 6960

ATGGCGGCGGCCGTAGCGGCTCCACTCGCCGCCGGGGGGTGAGGAGGCGGCAGCCACGACCTCCGTGCCCGGGTCT
CCAGGTCTGCCGGGGAGACGCAGTGCAGAGCGGGCCCTAGAGGACGCCGTGGCCACCGGGACCCTGAACCTGTCT
AACCGGCGCTTGAAGCACTTCCCCCGGGGCGCGGCCCGTAGCTACGACCTGTCAGACATCACCCAGGCTGACCTG
TCCCGGAACCGGTTTCCCGAGGTGCCCGAGGCGGCGTGCCAGCTGGTGTCCCTGGAGGGCCTGAGCCTCTACCAC
AATTGCCTGAGATGCCTGAACCCAGCCTTGGGGAATCTCACAGCCCTCACCTACCTCAACCTCAGCCGAAACCAG
CTGTCGCTGCTGCCACCCTACATCTGCCAGCTGCCCCTGAGGGTCCTCATCGTCAGCAACAACAAGCTGGGAGCC
CTGCCCCCTGACATCGGCACCCTGGGAAGCCTGCGACAGCTTGACGTGAGCAGCAACGAGCTCCAATCCCTGCCC
TCGGAACTGTGTGGCCTCTCTTCCCTGCGGGACCTCAATGTCCGGAGGAACCAGCTCAGTACGCTGCCCGAAGAG
CTGGGGGGACCTCCCTCTGGTCCGCCTGGATTTCTCCTGTAACCGCGTCTCCCGAATCCCAGTCTCCTTCTGCCGC
CTGAGGCACCTGCAGGTCATTCTGCTGGACAGCAACCCTCTGCAGAGTCCACCTGCCCAGGTCTGCCTGAAGGGG
AAACTTCACATCTTCAAGTATTTGTCCACAGAGGCCGGGCAGCGTGGGTCGGCCCTGGGGGACCTGGCCCCTTCT
CGGCCCCCGAGTTTCAGTCCCTGCCCTGCAGAGGATCTATTTCCGGGACATCGGTACGATGGTGGGCTGGACTCA
GGCTTCCACAGCGTTGATAGTGGCAGCAAGAGGTGGTCTGGAAATGAGTCAACAGATGAATTTTCAGAGCTGTCA
TTCCGGATCTCAGAGCTGGCCCGGGAGCCCCGGGGGCCCAGAGAACGCAAGGAGGATGGCTCAGCGGACGGAGAC
CCTGTGCAGATTGACTTCATCGACAGCCATGTCCCCGGGGAGGATGAAGAGCGAGGCACTGTGGAGGAGCAGCGA
CCACCCGAATTAAGCCCTGGGGCAGGGGACAGGGAGAGGGCACCAAACAGCAGGCGGGAGGAGCCGGCAGGGGAG
GAGCGGCGGCGCCCGGACACCTTGCAGCTGTGGCAGGAGCGGGAACGGCGGCAGCAGCAGCAGAGCGGGGCGTGG
GGGGCCCCGAGGAAGGATAGCCTCTTGAAGCCAGGGCTCAGGGCTGTTGTGGGAGGGGCCGCCGCCGTGTCCACT
CAAGCCATGCACAACGGCTCGCCTAAGTCCAGTGCCTCCCAAGCAGGGGGCTGCAGCGGGGCAGGGAGCCCCGCC
CCTGCCCCTGCCTCCCAAGAGCCCCTTCCCATAGCTGGACCAGCGACAGCACCTGCTCCACGGCCACTTGGCTCC
ATTCAGAGACCAAACAGCTTCCTCTTCCGTTCCTCCTCTCAGAGTGGCTCAGGCCCTTCCTCACCAGACTCTGTC
CTGAGACCTCGGCGGTACCCCCAGGTTCCAGATGAGAAGGACTTAATGACTCAGCTGCGCCAGGTCCTTGAGTCC
CGGCTGCAGCGGCCCCTGCCTGAGGACCTGGCCGAGGCTCTGGCCAGTGGGGTCATCCTGTGCCAGCTGGCCAAC
CAGCTACGGCCGCGCTCCGTGCCCTTCATCCATGTGCCCTCCCCTGCTGTGCCAAAACTCAGTGCCCTCAAGGCT
CGGAAGAATGTGGAGAGTTTTCTAGAAGCCTGTCGAAAAATGGGGGTGCCTGAGGCTGACCTGTGCTCGCCCTCG
GATCTCCTCCAGGGCACTGCCCGGGGGCTGCGGACCGCGCTGGAGGCCGTGAAGCGGGTGGGGGGCAAGGCCCTA
CCGCCCCTCTGGCCCCCCTCTGGTCTGGGCGGCTTCGTCGTCTTCTACGTGGTCCTCATGCTGCTGCTCTATGTC
ACCTACACTCGGCTCCTGGATCCCCGTTCCCCCCAGGTGGCCTGGGAGGTGGCCCCCTCGAGGATGACTCCACTA
GCGCCCTGGGACCCCAAGTATGAAGCCAAAGCAGGACCTCGGCCGGTGTGGGTGAGTTGGGGGCAAACCTGTGGG
ACTGGCTGGGGTGCTCAGGGAGCTGTGCGGTGGCCTGAGGCTCCAGTGCTCTGTCCTCCTCACCCTAGGGGGCCA
ACTGTAGCTCAGGAGCCTCGTTCTCAGGCCGGACGCTGTGTCACCCCTCATTCTGGCCGCTGTATGAAGCAGCCT
CGGGCAGGGGTCTCAGGCCCGTGGCCCCTGCCACAGGGCACTGGAATGGACAGCAGGCGCCCCCAGATGCAGGGT
TCCCGGTGGTGTGCTGTGAAGATGTCTTCCTCTCGGACCCTCTGCTGCCCCGGGGGCAGCGTGTTCCCCTGTACC
TGTCCAAGGCCCCCCAGCAGATGATGGGCTCCCTGAAACTGCTGCCGCCGCCCCCCATCATGTCTGCCAGGGTGC
TCCCCCGCCCATCACCCTCCCGGGGCCCCTCCACTGCCTGGCTCAGCGGGCCGGAGCTGATCGCTCTCACTGGCC
TGCTGCAGATGAGCCAGGGGGAGCCTAGGCCCAGCTCCTCCGCGGTTGGCCCCCCAGACCATACCTCTGACCCAC
CCAGCCCCTGTGGTAGCCCCAGCAGTTCTCAGGGTGCTGACCTCTCTCTCCCACAGACCCCAGACACCCATTGTC
CATAGCCTTCTCAGGGCAGAGTGGGCTGGTTGTGTTGACAATAAAACAGTGTTGGTTTGCA

FIGURE 6961

MAAAVAAPLAAGGEEAAATTSVPGSPGLPGRRSAERALEDAVATGTLNLSNRRLKHFPRGAARSYDLSDITQADL
SRNRFPEVPEAACQLVSLEGLSLYHNCLRCLNPALGNLTALTYLNLSRNQLSLLPPYICQLPLRVLIVSNNKLGA
LPPDIGTLGSLRQLDVSSNELQSLPSELCGLSSLRDLNVRRNQLSTLPEELGDLPLVRLDFSCNRVSRIPVSFCR
LRHLQVILLDSNPLQSPPAQVCLKGKLHIFKYLSTEAGQRGSALGDLAPSRPPSFSPCPAEDLFPGHRYDGGLDS
GFHSVDSGSKRWSGNESTDEFSELSFRISELAREPRGPRERKEDGSADGDPVQIDFIDSHVPGEDEERGTVEEQR
PPELSPGAGDRERAPNSRREEPAGEERRRPDTLQLWQERERRQQQQSGAWGAPRKDSLLKPGLRAVVGGAAAVST
QAMHNGSPKSSASQAGGCSGAGSPAPAPASQEPLPIAGPATAPAPRPLGSIQRPNSFLFRSSSQSGSGPSSPDSV
LRPRRYPQVPDEKDLMTQLRQVLESRLQRPLPEDLAEALASGVILCQLANQLRPRSVPFIHVPSPAVPKLSALKA
RKNVESFLEACRKMGVPEADLCSPSDLLQGTARGLRTALEAVKRVGGKALPPLWPPSGLGGFVVFYVVLMLLLYV
TYTRLLDPRSPQVAWEVAPSRMTPLAPWDPKYEAKAGPRPVWVSWGQTCGTGWGAQGAVRWPEAPVLCPPHPRGP
TVAQEPRSQAGRCVTPHSGRCMKQPRAGVSGPWPLPQGTGMDSRRPQMQGSRWCAVKMSSSRTLCCPGGSVFPCT
CPRPPSR

FIGURE 6962A

CTGCAGTGTGGTTATATAAGAGAATGTCTTTTCTTAGGAGAGACACCGTGAAACAGAGGAAAAAGGACATGATTC
TGAAACTTTCTCTTAAAGTAACATATTAAAATCACACATATGTACACGCGTGCATATGTATACATATATATGTAT
AGAGAAAGCAATAGCAAATGTGGCAAAATGTTAAGATTTGGCAAATCTGGATAAAGATTTGCAATTCTGCTGCAT
TTGAAATTATTTAAAAATAAAAAACTTGAGTTTTTGGAGAAACAGGCATAAGAAACCTTTTGTTTCCATATTTGC
GGCTTCTATACAGTCTTTTATGATGCAATTAAAAAAAAACTAAACTAAAAAATATAACACAAATCTTCCCTCCCA
TAGTAGCCAGAAACCCCCGCCGAGTACTTTGGGTGTCATAATAGGAAAAAAATGCAAAGCAATATGTTTTTCTAT
AAAGATTACTTATTTACTAATTAGAATTTTTTTATTTTCATGAAGATCAACAACAAAGTTTTTAAAATAATGACT
TAGAGAATCATTTTGTGGTATTTGTTTAAGGCTGTCGCCCAGGAAAACGCCCAAGGACCATGCACGCTTCAACCC
TATGGAAACACGAACGGCCCAGGGAACCGCCCCTTCGCGCTGCTTGACGGGATCTGGAGTCCTCCCGTTCCGCCC
CGCCAGGCGCTCAGGGACCGCCCGGCXGCTCCCTCACCGCCCGGCCGCTCCCTCATCTCGXGATGCCATCCTCTT
TTTTTTTTTTTCTTTCCCCCCTCCCACTCGCCCCCAAGCCCTGTGACTCCCTCCCCTCCCAACGTGTTTTTCAA
ATCCACCAATGGGCACACAGCTTAGGCTCGAACCAGCCAATCGGAATGCGGAGTCACCGGGAAATTTAAATCGCG
CCGGCCGGCTGCACGAGCCACACGGTCTTTGAGCTGAGTCGAGGTGGACCCTTTGAACGCAGTCGCCCTACAGCC
GCTGATTCCCCCCGCATCGCCTCCCGTGGAAGCCCAGGCCCGCTTCGCAGGTACAGACTCAGGCGGCGGCCCGGC
CCGAGCGCTAACGGCTTGCCCGTGGGCGGCGTTCGCCTTTTGGGTTGGGGGAGGGAGGCCCCGGGTCCACGCCGA
GCCTGGCTCTGCCTCCCGCGTTGACTAGGCCTCGGGGGCGACGTTCATTGACCAGGCGGCTGAGTTTCGCGGGGT
CTGCGGGTTTAGGGCGCCGACGCTCTGCAAACGGCAGCGGAXGCCTTAACGCXTCXCGGCCGGGAGAATCGGAGC
GAGCCAGGCTTGAGGGCGAATGTCCCGGGAGGACTTGTGGCGGCCCTGGTTTCGCCTCCTCCTTTCTCGTTGCAT
CTTCCCCGGCGTGGGGGCAGGGGCTGGGGGTGGCAGTTGGGAGCACCGTCTCTGACACCTAGGCCCCGGGGGTGG
CTCTGCCACCAAGTCGTAGGCGAGCGTAATGAAAGCAAAGATAGCAAATTGTAAGGAGGGCTTTGACTTTTGTCA
TCTTCTGAATGACGCACAGCTGATGTCATCCTAATTAAGCGCATTCACTCCTAGTCTCTGGAAATGCAAATCAAA
TATGCGAGATGCGGCACTGCATTTTTAATGTTGACCATAATGTAATGATGAAGCAAATTTTTATTTAATTTTCGA
GTCTGCACCTATTTTGGCCAAGTAAAGACAGTAAAATAGGGAGAGCCTCCCTGAGGATCTGAATTTATTGCCCTG
GCACATAATTTTTAGCTGTAAGTTGACTTGGTTCCCCTACTTTGTCTTGAATTAACTATTAGGGACTCTGGAGTA
TCGAACTAGGCTGTCAGAAACGGTGGATACATGTGGCTAGTCCAAATTGAAATACGCTGTAAGCTTAAAGTACAC
AAAAGATTTCAAAGATGGAGTATGGAAAAAGAATGTAGAAGATGTCAGTTATTTTATATATTGATAACACGTTGA
AATACTATTTGGATATGTTGGGTTAAGTAAAATACATTATTAAAATTAGTTTCACTTGTTTCTTTTCTCCTTTTT
AAAAATATGGCTACTAGGAAGTTTCAATTTATATAGCTTGCATTCTATTTCTGATGGAGAGCCCTCTCCAAGAAG
TCTCAGCCCTTCAGATGGAAGGGGGACACTTCCCCTTTGGGTAAAGCTATTTCATAGTGCCGAAAACATGATGAT
CCCCCCTCTAGTATACAGGTGTGGATTCAGTAGATGCTTGATAATTCAGTTCTTATTTGGTACTATTATTGACAA
AGGAAAATGATAAAGGAAATATTTTTCTCTTCCCCCATCTTTTAGCTTTCTCCCTTTGTCTCATAACCATGTCCA
CCAACGAGAATGCTAATACACCAGCTGCCCGTCTTCACAGATTCAAGAACAAGGGAAAAGACAGTACAGTGAGTA
CCTTCTGTTGCTTTCCTGTGGTGGTATTTAAATGGGAAGACATTTGGAAAGGGGTGAAAACTGAGGTATTTAAAA
AAAAAATGCCCTCACTTAGCAACAAAAACTGGTGTGATAGGTGAAACGGCATGTTATCTTTTCTCAAGGAAATGA
GGCGTCGCAGAATAGAGGTCAATGTGGAGCTGAGGAAAGCTAAGAAGGATGACCAGATGCTGAAGAGGAGAAATG
TAAGCTCATTTCCTGATGATGCTACTTCTCCGCTGCAGGAAAACCGCAACAACCAGGTAAAAAATGTATTTTAGT
TTATGAGTTACGTGAAATCCAGAAAATCAGTAGGGACTTTTCTTAGAAATTCAAGTAAACTTAACATTTCTAGTC
TTAACGGTTTTAACTATCTGTGAACATCTTTTTCTCTGTTTGCAATTAGTAATTGTCTTCTTTCCTGCCTTCTGT
AATCCACTGAAGCTGATTTAGGATCTTCCTTTAGCTCTGACCTTCCTTCAGACTTCCCTGCATTTCTAGCTACTA
GCTGGGTACCTTGGCCTGACCAGTGTGTCCAGAGCCAGCCAGTTTCTGGTTTATTTCTTCTTTTTTTTTTTTTCC
CCCGAGATGGAGTCTTGCTCTGTTGCTCAGGCTGGAGTGCAGCAGCACAATCAGCTCACTGCAACCTCTGCCTCA
TGGGTTCAAGCAATTCTCCTGCCACAGCCTCCTGAGTAGCTGGGATTATGGGTGCGCATCACCACGCTTGGCTAG
TTTTTGTATTTTTTTGTTTTTGTTTCTTTGAGACAGAGTTTTGCTCTGTCGCCCAGGCTAGCGTGCAGTGGTGCG
ATCTCCGCTCACTGCAAGCTCCATCTCCCGGGTTCACGCCATTCTCCTGCCTCAGCCTCCTAAGTAGCTGGGACT
ACAGGCGCCCGCACCCTGTCTGGCTAATTTTTTGTATTTTTAGTAGAGACGGTGTTTCAACATGTTAGCCAGGAT
GGTCTCGATCTCCTGACCTCGTGATCCACCCGCCTCAGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACTG
CCCGGCCTGTTTTTGTATTTTTAGTAGAGGCGGGGTTTCACCATGTTGGCCAGGCTAGTCTTGAACTCATGACCT
CGTGATATGCCTGCCTTGGTCTCCAGAAGTGCTGGGATTACAAGCGTGAGCCACCAGGCCCTTCCCGTTTTTGGT

FIGURE 6962B

TTATTTCTGCCTTTTTTGGTATTCTCTATGTTTTTGTATTTGTCACCAGCTTTGTTCAGGACTTTCCTTCTGAAA
TATTTACAGTAGCCTCCTAATTTATCATATCCTTCTTTATGCCATATACTATTTTCCTGAAATTTTTCCTGAAGT
ACTGCTTTAGACCTGTGTTTTCGCTCCTTAAAATCCATACTCCAAATTGCTTGAACCTGGGAGGTGGAGGTTGCA
GTGAGCCAAGATCATGCCATTGCACTCCAGCCTGTGCAACAAGAGTGAAATCCGTCTCAAAAAAAAAAAGAAAAG
AAAATCCTCAGAACGTTGCCTATGACTTCATGTCTTTCTCCCTCAAAGTATATCTGAATGCAAGTGATTGAGACT
AACGTAXAAATAATCTTCAGTCTGCTCTGATTCTTGATTTTTGAGACAAGGTCTTGTATGGCGACAGGCAAACAC
CACCATGCCTGGATATTTTTTTTTTTTTTTTTTTTTGTTGGGAGGTCTCACTGTGTTGCTCAGGCTGGTCTCACC
TGAGCTCAAGCCATCCTCCCTCCTGAGCCTCCCAAAGTGCTAGGCTTACAGGTGTGAGCCACCATGCCTGTCCTT
CTCGTTCATTTTTTAAAATTGTTCAAAGCTGCCTTTTTTAGCGACAAAACACTTGGATACTCCATAACTTGAGAC
TCCAGTGAGTCCATGACAACAAGTTTGGAAACTGTTCTACATATAAAATAATGAATATTTAACAGGCAAAATTAA
ATGTAGGGCTAAATATTTAGTAGCTGGCTATAAGCCTAACGATGTTTACACTTGCCTTCACAAGTAAGTGTGGAT
TTTATTGTTTGTATTTAATCTTAATGATAATGTGCAAACTTTCACTTTTCTTCTAGGGCACTGTAAATTGGTCTG
TTGATGACATTGTCAAAGGCATAAATAGCAGCAATGTGGAAAATCAGCTCCAAGCTACTCAAGCTGCCAGGTAAG
TCTTGTCTGCGATAGCATGGGTAGCCTAAGAAATTTGTGTTTTTAGATTTTTTTTTGGGGGGGTGGGGCAGGAAG
GGACAGACAGATAGTACAAGGAAAGATTAGGCCAGCCAGCCATAAGCCAAATAGTATTTTTTATTTATTAATTTT
TTTGAGAGGGGAGGCCTTGCTATTTTGCCCAGGCTGGCCTGGAATGCCTGGGTTCAAGCAGTCCTCTGACCTCAG
CCTCCTGAAGTGCTGGGATCACAGGTGTGTGCCATTGCACCTGCCCATAAAGTTTTTACCAAAGTAATGTTTCAA
GTCACTGGCAGGGGAAGGAAGAAATAAATAGTAAGTGGGATTGAGACATGCATTTAGAATGATATATCCATTTAG
GAGATAAGTATAATTTGACCTTTACCTCCCACTATACGTGGATATTTATGATATAATAGAAAGGATTAATAAGTT
CTATAGCTTGACAGTGTGCAGAAGAAAAATTTCAATGGTAAATTATCATTAAAAAGTTCTAGGCTGGGCGCTGTG
GCTCATGCCTGTAATCCCAGCACTTTGGGAGGCCAAGGGGTCGGTTACTTGAGCCCAGGAGTTTGAGACCAGCCT
GGGCAACATGGTGAGAGCCAGTTTCTACAAAAGAAATTATTAGCTGGGTGTGGTGGCACATGCCTGTAATCTCAC
GTGTTTGGGAGGCTCAGGCACAATAATCACTTGAACCCAGCAGGCGGAGGTTGCAGTGAGCTGAGATCTTGCCAC
TGCATTCCAGCATGGCGACAGAGCAAGACTCTGTCTCAAAAAATAAATAAATAAAATAACTTGGGTGTGGCGGTG
CACACTTGTCGTCCCAGCTACTAAGGAGGCTGAGGTGGGAGGATCACTTGAGCCCAGGAGGTCGAGXCTGCAGTG
AGCTGTGATCGTGGCACTGCACTCTAGCCTGAGTGGAGTGAGATCCTATTTCAAAAAAACAAAATGTGCTTAACC
ACAACTATCAGAACAAATTCAGTGAGAGTATAACCCTGTCAGAATGTGAAAAGTTTTTTTAAAAAGTGACAAGAT
CTGGAGTAGATTTCTGCAGGGATGGAAAGGAGGGTAATCTACATTAATTTCTGGAAAAATGGTAGTTAATTATAC
CGCATACATAGCACCATACAAGTAATCTGTTCAGCTTCTCTTAGGTTCCAGAATGTCTCAGCATTTAGTGATTTA
CTTAAAAGGTTGTCTGAAGTTCTAAACTCTTGAATTGCATTTTATATTGGTTTTTACACAAACTCCTTTTGTTAA
TCACTGTCAACTTTTATTTGTCTTTTTGTTCCCCTTTAGGAAACTACTTTCCAGAGAAAAACAGCCCCCCATAGA
CAACATAATCCGGGCTGGTTTGATTCCGAAATTTGTGTCCTTCTTGGGCAGAACTGATTGTAGTCCCATTCAGTT
TGAATCTGCTTGGGCACTCACTAACATTGCTTCTGGGACATCAGAACAAACCAAGGCTGTGGTAGATGGAGGTGC
CATCCCAGCATTCATTTCTCTGTTGGCATCTCCCCATGCTCACATCAGTGAACAAGCTGTCTGGGCTCTAGGAAA
CATTGCAGGTACTTGGACTTGAAGTTCTTTTGACTGAATGTATCTAATCGTAATTAGTTGGAAGAAAGGCCTTGT
TATAAGTAATAGTGACTTTGTCAAGTTTTGAGCTTGCTTTCAAGCCCTTATTAGGAATGAAAGTGTCGTCTTTAC
AAAGGCAGCAGAGGGCCATCTAAGTAAGTTTGGGAGTTTTTGCTGGTGCATTCAGTCACTGAAAATTGATGGTGT
TGGACAAGGTAATAAAATTAATCTTGCCTCGGCCGGGCATGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAG
GCAGAGGCGGGTGGATCATGAGGTCAGGAGATTGAGACCATCCTGGCTAACACAGTGAAACCCCACCTCTACTAA
AAATACAAAAAATTAGCCGGGCGTGGTGGCGGGCGCCTGAGGCTGAGGCAGGAGAATGGCTTGAACCCAGGAGGC
GGAGCTTGCAGTGAGCCGAGATCGCGCCACTGCACTCCAGCCTGGGCGACAGAGAGAAACTCCGTCTCAAAAAAA
AAAAAAAAAAATTAATCTTGCCTTTTTTTTCAGGTGATGGCTCAGTGTTCCGAGACTTGGTTATTAAGTACGGTG
CAGTTGACCCACTGTTGGCTCTCCTTGCAGTTCCTGATATGTCATCTTTAGCAGTAAGTTACTAACATGAGTAAA
GTTACTCACTTCTTCATTCTAATTTCCCCCATCTTCTCAAAAGACAGAACCTCTCATTGCCTATTTTTTTTCCCC
CAGTGTGGCTACTTACGTAATCTTACCTGGACACTTTCTAATCTTTGCCGCAACAAGAATCCTGCACCCCCGATA
GATGCTGTTGAGCAGATTCTTCCTACCTTAGTTCGGCTCCTGCATCATGATGATCCAGAAGTGTTAGCAGATACC
TGCTGGGCTATTTCCTACCTTACTGATGGTCCAAATGAACGAATTGGCATGGTGGTGAAAACAGGAGTTGTGCCC
CAACTTGTGAAGCTTCTAGGAGCTTCTGAATTGCCAATTGTGGTAAGTTATTTACTTGTAGATTAGGACATAAGT

FIGURE 6962C

ATAAGAAGCATGATCAGGGCTGGGCGTGGTAGTGGTGGCTCACACCTGTGTAATCCCAGCACTTTGGGAGACCAA
GGCAGGTGGATCACCTGAGGTCAGGAGTTCAAGACCAGCCTGGCCAACATTGTGAAAGCCCATCTCTACTAAAAA
TACAAAGAAATTATCTGGACATGGTGGCACGTGTCTGTAATCTCAACTACTCGGGAGGCTAAGGCAGGAGAATTG
CTTGAATCTGGGAGGCAGAGGCTGCAGTGACCCGAAATCGTGCCATTATACTCCAGTCTCTCAAAAAAAAAAAAA
AGCATAATCAGTTGATAGTAATATTGAAATATTGCCTATTTCAGGCCATGATGGGCCTCTTGTTAAAACTTTTAG
GGTATAGAATTTCTAAAGTGCTGGGGAAAAAATAACCAGCATCAACATATTTTTTTTTTTCAGACTCCTGCCCT
AAGAGCCATAGGGAATATTGTCACTGGTACAGATGAACAGACTCAGGTTGTGATTGATGCAGGAGCACTCGCCGT
CTTTCCCAGCCTGCTCACCAACCCCAAAACTAACATTCAGAAGGAAGCTACGTGGACAATGTCAAACATCACAGC
CGGCCGCCAGGACCAGATACAGCAAGTTGTGAATCATGGATTAGTCCCATTCCTTGTCAGTGTTCTCTCTAAGGT
AACGAAGTCTTAGGATTTAATCAAGTCATTTTTAGTATTTATAGAAAGCTGTGCTTGATAAGCTTCTTCACGTGC
AAGAATCTTGGGTTCTACTAGGAGTCCTTTGCTGAACAATACCCAGTAACCCCTTTTACTTAAGGTTGGATAGAA
CCTTGGTACTTTCAGTCATTGTTTTTGTGAAAAAGTACTCTTGGAATCTTATTTGTGCAACTGTTCTGAAATAAA
ACCATTTCCTTATGTTTAATAGGCAGATTTTAAGACACAAAAGGAAGCTGTGTGGGCCGTGACCAACTATACCAG
TGGTGGAACAGTTGAACAGATTGTGTACCTTGTTCACTGTGGCATAATAGAACCGTTGATGAACCTCTTAACTGC
AAAAGATACCAAGATTATTCTGGTTATCCTGGATGCCATTTCAAATATCTTTCAGGTAAGTCCTATCAAGGTGGC
TTTGTTTGAATTTGGACTTGATAATAATCAGTTTACTATTTAGACTTGGGGGAGGGCAGCTGTAAGTXTACTCAC
TAGTAAGCCACAGAATCAGAAAGCCTGTTTATGTGGCCACCCCTTTGATTAAAAATGAGGCAGGCATTATAAAAG
ATACAAAAGAGACGACAAGTGGATGGTGTGACCTGAATCGGAGTCAGGCGCTTATGTGGACTCATCACACCTGTT
TACTTGGTTGATTTAATTTCCCAATTTCATACCGATTTTTGGTGACATTAAATTTGAATGACTTGGCCAGGCACG
GTGGCTCATGCCTGTAATCACAGCACTTTGGAAGTCCGAGGTGGGTGGATCACCTGAGGTCAAGAGTTCGAGACC
AGCCTGGCCAACATGGCGAAACCCTGTCTCTGCTAAAAATGCAAGAATTAGCCATGTGTGGTGGTGGGCGCCTAT
AATCCCAGCTACTCAGAAGGCTGAGGCAGGAGAATCGCTTGAACCCGGGAAGCGGAAGTTGCAGTGAGCCAAGTT
TGTGTTATTGCACTCCAGCTTGGGCAAGAGTGAAACTGTCTTAAAAAAAAAAAAAAAAAAAGTTGAGCCTTCAAT
AATGGATGCTAGCGTATCTGTTACTGTGTATAAATAATTTGTCAGTATGTGGCCAGTATTTCTTCTTCCCCTCAT
CTAATCCCCTAAGTTATTTTGAAGCAAATCTGTTTTTTTCATCTATAGATATTTATGTATCTCTTTAAGGTTGAA
AATTTAAAGGAAAACTAACCTACATACCATTCCATATGTCCAGTAAATCCTTAATACCAACACACATTCTGTTTG
GGGACGTTTAGTTTAGCACTCCATAGGCCATCTTTGCCCTTAGACACCTTGACTACACCTTGTGATGACATAGGA
TGCTTTACGAAACAATACACCCCTGTTCCCATAGCAGACCAGTTGAACTGGAATGTAGTGTTGTTTTAAAAGTTG
CCCGCATGATTTTGATACATAGAAAAGGTTGGGAGCTACTACTGATTGTAAGATCTTTGGCTCCAGTTGAAGTAG
TGCTAAAAGCAGGTACAGATCCAATCACATTGAGTGTCAACAAAATATAAAATGGACATAAAACTATGATAGGCT
TGATGAAGGAATTGTTAGGTGCTTATTTCTGCCTGACGTATCAATATTCAAATTATTGATGTTTTCTTCATTAAA
ATAAAACCAGAGTATATGCCAGTAAACTTGGATTTTTTTTTTTTTAGGCTGCTGAGAAACTAGGTGAAACTGAG
AAACTTAGTATAATGATTGAAGAATGTGGAGGCTTAGACAAAATTGAAGCTCTACAAAACCATGAAAATGAGTCT
GTGTATAAGGCTTCGTTAAGCTTAATTGAGAAGTATTTCTCTGTAGAGGTGAGTAATGGATGGTAATATTAATAA
CAACTTGGAAACATAAAGTCAAGGCCATAAGCCTTTTTTTCCCTTTTAAAAATAAGTGTCATATCTTTGTTAAAT
ATAGTAAAATATCAGTGTGCATGGGACATAATGTACTTATTTGCCCCTCTAGTTTGGCTTGATGGTAATAAAATC
TTTTTAAACTGAGATTTTAAAAGTCACCAGATTAGTTTCAAATGAACAACCTTGAGAATCTTAGAATATCTTGAG
GGTAAGTTAACGGGTGTCATTGTAGGAGGTGATAGAGAAGTAGGCCAAACTCATCACCATGCTCTGGGCCTAATA
CAGTCTTTTCCTATTGAAAAGTGACGGTTGGGGAAGAAAAAAATCTCGGCCTGTTTGTGTTACTGTAGTAGCTAG
CATTTATGAATTGGCAAAGTTTCAGAGACCCTCCCTCCTCTATGTCAAATACTATAATATCATACAGGATTAAAG
GTGTAATATGCAGATCAAGACCTAGAGATTAAATACAGACTTCAGGTAGGCTGCTGCTTGGAATACTTATATCAT
TTTTATACTTATTTTTTAATATATTTCCAGGAAGAGGAAGATCAAAACGTTGTACCAGAAACTACCTCTGAAGGC
TACACTTTCCAAGTTCAGGATGGGGCTCCTGGGACCTTTAACTTTTAGATCATGTAGCTGAGACATAAATTTGTT
GTGTACTACGTTTGGTATTTTGTCTTATTGTTTCTCTACTAAGAACTCTTTCTTAAATGTGGTTTGTTACTGTAG
CACTTTTTACACTGAAACTATACTTGAACAGTTCCAACTGTACATACATACTGTATGAAGCTTGTCCTCTGACTA
GGTTTCTAATTTCTATGTGGAATTTCCTATCTTGCAGCATCCTGTAAATAAACATTCAAGTCCACCCTTTTCTTG
ACTTCACCATGCCTATGTGTTGCTTTCTAATXTGGGGCCTXTAATGTTGCTAGTGAAAGGTAACCTGTCCAAACT
GATGGGATTAACCAXAGGTAGTCCTGGCTGCAGTTTTT

FIGURE 6963

CCTCCGCTCAGTCCGGGAGCGCACGTGGGCCGCGGCGCTCCGACCTCCGCTTTCCCACCGCCCGCAGCTGAAGCA
CATCCCGCAGCCCGGCGCGGACTCCGATCGCCGCAGTTGCCCTCTGGCGCC**ATG**TCGCAGAACGGAGCGCCCGGG
ATGCAGGAGGAGAGCCTGCAGGGCTCCTGGGTAGAACTGCACTTCAGCAATAATGGGAACGGGGGCAGCGTTCCA
GCCTCGGTTTCTATTTATAATGGAGACATGGAAAAAATACTGCTGGACGCACAGCATGAGTCTGGACGGAGTAGC
TCCAAGAGCTCTCACTGTGACAGCCCACCTCGCTCGCAGACACCACAAGATACCAACAGGGCTTCTGAAACAGAT
ACCCATAGCATTGGAGAGAAAAACAGCTCACAGTCTGAGGAAGATGATATTGAAAGAAGGAAAGAAGTTGAAAGC
ATCTTGAAGAAAAACTCAGATTGGATATGGGATTGGTCAAGTCGGCCGGAAAATATTCCCCCCAAGGAGTTCCTC
TTTAAACACCCGAAGCGCACGGCCACCCTCAGCATGAGGAACACGAGCGTCATGAAGAAAGGGGGCATATTCTCT
GCAGAATTTCTGAAAGTTTTCCTTCCATCTCTGCTGCTCTCTCATTTGCTGGCCATCGGATTGGGGATCTATATT
GGAAGGCGTCTGACAACCTCCACCAGCACCTTT**TGA**TGAAGAACTGGAGTCTGACTTGGTTCGTTAGTGGATTAC
TTCTGAGCTTGCAACATAGCTCACTGAAGAGCTGTTAGATCCTGGGGTGGCCACGTCACTTGTGTTTATTTGTTC
TGTAAATGCTGCGTTCCTAATTTAGTAAAATAAAAGAATAGACACTAAAATCATGTTGATCTATAATTACACCTA
TGGGATCAATAAGCATGTCAGACTGATTAATGTCTACTGTGAAAATTTGGTAGTAAATTTTCATTTGATATTAGA
TATAAATATCTGAATATAAATAATTTTAATATACTAGTCATGATGTGTGTTGTATTTTAAAAATTATCTGCAACC
TTAATTCAGCTGAAGTACTTTATATTTCAAAAGAATGAATAACATTGATAATAAAATCGCTACTTTAAGGGGTTT
GTCCAAAATAAATATTGTGGCCTTATATATCACACTATTGTAGAAAGTATTATTTAATTTAAATGGATGCAGGTT
GTCTACTAAAGAAAGATTATATATAACTATGCTAATTGTTCATAATCAACAGAAACCAAGATAGAGCTACAAACT
CAGCTGTACAGTTCGTACACTAAACTCTTCTTGCTTTTGCATTATAAGGAATTAAGTCTCCGATTATTAGGTGAT
CACCCTGGATGATCAGTTTTCTGCTGAAGGCACCTACTCAGTATCTTTTCCTCTTTATCACTCTGCATTGGTGAA
TTTAATCCTCTCCTTTGTGTTCAACTTTTGTGTGCTTTTAAAATCAGCTTTATTCTAAGCAAATCTGTGTCTACT
TTAAAAAACTGGAAATGGAAAAAAAAATAAATCTT

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FIGURE 6964

MSQNGAPGMQEESLQGSWVELHFSNNGNGGSVPASVSIYNGDMEKILLDAQHESGRSSSKSSHCDSPPRSQTPQD
TNRASETDTHSIGEKNSSQSEEDDIERRKEVESILKKNSDWIWDWSSRPENIPPKEFLFKHPKRTATLSMRNTSV
MKKGGIFSAEFLKVFLPSLLLSHLLAIGLGIYIGRRLTTSTSTF

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FIGURE 6965

TTTTTAAAAGTTAAAAAAAGACATATCAAACATGCAAATACTTGAATCCAGCAGGCCAATAGTGAAATGTGAACA
CTTTCTAATTCTACACTTCCAGGTTGACATCAGTACACAGAAACAGGCTCTAGGAAAAATTTCTAAGTTCATAGC
CTACGTGTGTGTATGTGTGCGTGTTGAAACAGAAGTGTGTGTGTGTGTGCATGTGTGGCGCGTGCTCCTGCACGG
CGTGCAGTTTTCTGTGTTTGTGTGTTTGAAAGCGTGTGAGGATTTAACTGTGGGTTTTCCCTTGTATTCAGTATA
CGCTTTTTTTTTTGGCGCATTGGTCAAACGGTTGTTATTATTAGCTTCTAACTTTGCACTGAGTGTCCTCGCCCT
TCCTTTAGCTAATCCTATACATTACAGAGAATTCCTAGGACAGGGCTGGCGACAATTCATGTGTAAATGTTTACT
CAAGGACTCTGTGACTGCGTTTAAAAAGTACAGTGTATATCTCTGGAGAAATAACATGTATACCTACCTTTAGCA
GCTTTTTATTGTGGACTAATGCAAGAAAATTATTACCAGAGTATTGCACCATTTTTCCATTTGGAATATAAAGTT
AAAGAGAAAAAAAAAAAAAAAAAAAAACTGTTGTTGAACTGTGGCCATAGATACTTGTAAAGAATGGATGGTTCCG
TGGAAGGAACAGAAACAAGCACTTGGGCGTGGGTTGTGACTGCTTTTGGGGGAGCCTGGGGTTTGGGCTCCCACC
TGTTTACAGACCTTTTTTTCTCCTTCAGACTTTAAAATTTTAAAAATTTAAAAAGGAATTAAAAAAAAAAAAAGA
CTTCCGTCGTAAAGAAACCTATTTTCAGAATGCAGATGCGTTCCTTCAGAGCTCTGAGACGGGACAGTGTTGTTC
CCTCGGCCATCGTCGTGGACTCTGTCGATTGCTTTCGCCCCTTCGTCAAGGTGACAGGCGTTGTGGCCACTGTCT
TGCACATGCCGGACGCGCTTTCAGGAAAGCCAGGGCTCCCGAGGGCAGCTCCACACCATTTCATGTATTTTTAAA
CCCAACTCCTAGCACTGAAGATGTTATTTAAAAAAAAAAAAAACAAAACAAAACAAAAAAATGAAAAAAAAGAAA
AAGAGGAAAAAAAAAACACAAAGAAGAAAAATACCTAATCTCTAATGTGTAGCAGTTACATATTTACCAAATAATG
GACTCAAAAGAAATAGATGTTTGAAGAGTGCTTTATATATTAAAAATTGCTTTATGTTTTAAAAATGATCAATGT
TTTGATTGTTTTGCAAGGAAGAAAGACAATGGAATAACATACCTTCAAGTATGTTTTAAAAAATATATATATGAA
CATTGTGCTCCCTGCCTGCTTGATCAGGAAACTTGTGCATTACATTTTTTTAATTAGCTTTTTAATGGTTTTATC
AAAACAAAAAAAATACAAAAAAAAAAAAAAA

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FIGURE 6966

MQILESSRPIVKCEHFLILHFQVDISTQKQALGKISKFIAYVCVCVRVETEVCVCVHVWRVLLHGVQFSVFVCLK
ACEDLTVGFPLYSVYAFFFGALVKRLLLLASNFALSVLALPLANPIHYREFLGQGWRQFMCKCLLKDSVTAFKKY
SVYLWRNNMYTYL

FIGURE 6967

CAATTTGAGTTTCCATTTCTCGGATTTGGGAACTGGTATAAGCATTGTCTGTGATGTAAACAAAGTCTTCAATAT
TTGGAGAAAACATCTCCTCATACTTGAGAGCACAAGAGGAAGAGAGAGACCCTCACTGCTGGGGAGTCCCTGCCA
CACTCAGTCCCCCACCACACTGAATCGGAATTCCGAGAGGGAAGAGGAGGCGCGAGA**ATG**GAGGTGGAGGCCGTC
TGTGGTGGCGCGGGCGAGGTGGAGGCCCAGGACTCTGACCCTGCCCCTGCCTTCAGCAAGGCCCCCGGCAGCGCC
GGCCACTACGAACTGCCGTGGGTTGAAAAATATAGGCCAGTAAAGCTGAATGAAATTGTCGGGAATGAAGACACC
GTGAGCAGGCTAGAGGTCTTTGCAAGGGAAGGAAATGTGCCCAACATCATCATTGCGGGCCCTCCAGGAACCGGC
AAGACCACAAGCATTCTGTGCTTGGCCCGGGCCCTGCTGGGCCCAGCACTCAAAGATGCCATGTTGGAACTCAAT
GCTTCAAATGACAGGGGCATTGACGTTGTGAGGAATAAAATTAAAATGTTTGCTCAACAAAAAGTCACTCTTCCC
AAAGGCCGACATAAGATCATCATTCTGGATGAAGCAGACAGCATGACCGACGGAGCCCAGCAAGCCTTGAGGAGA
ACCATGGAAATCTACTCTAAAACCACTCGCTTCGCCCTTGCTTGTAATGCTTCGGATAAGATCATCGAGCCCATT
CAGTCCCGCTGTGCAGTCCTCCGGTACACAAAGCTGACCGACGCCCAGATCCTCACCAGGCTGATGAATGTTATC
GAGAAGGAGAGGGTACCCTACACTGATGACGGCCTAGAAGCCATCATCTTCACGGCCCAGGGAGACATGAGGCAG
GCGCTGAACAACCTGCAGTCCACCTTCTCAGGATTTGGCTTCATTAACAGTGAGAACGTGTTCAAGGTCTGTGAC
GAGCCCCACCCACTGCTGGTAAAGGAGATGATCCAGCACTGTGTGAATGCCAACATTGACGAAGCCTACAAGATT
CTTGCTCACTTGTGGCATCTGGGCTACTCACCAGAAGATATCATTGGCAACATCTTTCGAGTGTGTAAAACTTTC
CAAATGGCAGAATACCTGAAACTGGAGTTTATCAAGGAAATTGGATACACTCACATGAAAATAGCGGAAGGAGTG
AACTCTCTTTTGCAGATGGCAGGCCTCCTGGCAAGGCTGTGTCAGAAGACAATGGCCCCGGTGGCCAGT**TAG**AGC
AGAGACTTCACTGACTGACTTACAGGTGCCCTATTCTGAGGTACAGGAGCCGCGGCTTTCTGATGGGGGAAAATG
CGCCTTAGGCTGAGCCAACATGACTGTCCCCCAAACTCCAGTGGCTGGCCAGGCGCGGTAGTCACGCCTGTAATC
CCAACACTTTGGGAGGCCGAGGCAGGTGGATCACCTGAGGTCAGAAGTTCAAGACCAGCCTGGCCAACATGGGGA
AACCCTGTCTTTACTAAAAATATAAAAATTAGCTGGGTGTGGTGGCGGGCACCTGTAATCCCAGCTACTCGGGAG
GCTGTGGCAGGCGAAATCGCTTGAACCCAGGAGGAGGAGGTGGAGGTTGCAGTGAGCCAAGATCACACCATTGCA
CTCCAGCCTGGGCGACAGAGACTCCATCTGGGGAAAAAAATTAAATAAATAAACTCCCG

FIGURE 6968

MEVEAVCGGAGEVEAQDSDPAPAFSKAPGSAGHYELPWVEKYRPVKLNEIVGNEDTVSRLEVFAREGNVPNIIIA
GPPGTGKTTSILCLARALLGPALKDAMLELNASNDRGIDVVRNKIKMFAQQKVTLPKGRHKIIILDEADSMTDGA
QQALRRTMEIYSKTTRFALACNASDKIIEPIQSRCAVLRYTKLTDAQILTRLMNVIEKERVPYTDDGLEAIIFTA
QGDMRQALNNLQSTFSGFGFINSENVFKVCDEPHPLLVKEMIQHCVNANIDEAYKILAHLWHLGYSPEDIIGNIF
RVCKTFQMAEYLKLEFIKEIGYTHMKIAEGVNSLLQMAGLLARLCQKTMAPVAS

FIGURE 6969

CTCTGCCGAGCCTCCTTAAAACTCTGCCGTTAAAATGGGGGCGGGTTTTTCAACTCAAAAAGCGCTCAATTTTTT
TCTTTTCAAAAAAAGCTGATGAGGTCGGAAAAAAGGGAGAAGAAACCGGCACCCTCTCTGAGAGGCAACAGAAGC
AGCAATTGTTTCAGCGAAAAAAGCAGCAAGGGAGGGAGTGAAGGAAAAAAGCAAAAAAGGGGGCGACACGCAAGT
GCCTGTAGGGGTGAAAGGAGCAGGGACCGGCGATCTAGGGGGGGATCAGCTACAAAAGAAACTGTCACTGGGAGC
GGTGCGGCCAAGGAGGAAGCAGTGCTGCCAGGCTCTGCTCCAGGGCACAGCTGGCTGGCGGCTGCCCTGTCCGCA
GCAAAGGGGCACAGGCCGGGGACCGCGAGAGGTGGCAAAGTGGCACCGGGCGCCGAGGCTGCTGAGCGCTCGCCG
AGACGGCGACCGGACTGGCTGCCCCGGAACTGCGGCGACTCTCCCTACTCAGAACTTGGCCTACGTTTCCCAGGA
CTCTCCCCATCTCCAGAGGCCCCCACAAAACCGGGAAAGGAAGGAAAGGACAGCGGCGGCAGCAGCTCAATGAGT
GCCTACAGCAGAAAGCCTGAACGAGCTCGGTCGTAGGCGGGAAGTTCCCGGGGGGGCTGCCCAGTGCAGCCGCAA
TGCTGCCGCGAGCTGCCCCAGCAGTCCGGGCTCCGTAGACGCTTTCCGCATCACTCTCCTTCCTCGGGCTGCCGG
GAGTCCCGGGACCTGGCGGGGCCGGCATGACGGGCTTCTCGGGGGCCCGCCGCACGCCCGGCAGCCTCCGGAGAC
GCGCGCCGAGCCCGGCTCCCACGGCCTCTGAGGCTCGGCGGGGCTGCGGCTGCCTGGCGGGCGGGCTCCGGAGCT
TTCCTGAGCGGCATTAGCCCACGGCTTGGCCCGGACGCGACCAAAGGCTCTTCTGGAGAAGCCCAGAGCACTGGG
CAATCGTTACGACCTGTAACTTGAGGGCCACCGAACTGCTACTCCCGTTCGCCTTTGGCGATCATCTTTTAACCC
TCCGGAGCACGTCAGCATCCAGCCACCGCGGCGCTCTCCCAGCAGCGGAGGACCCAGGACTATCCCTTCGGCGAG
ACGGATGGAAACCGAGCCCCCTGGAGGACCTGCCCCTGCAGTTCTGCCTCACACGGCTCAAGTCACCACCGTGAA
CAAGGGACCCTAAAGAATGGCCGAGCCTTGGGGGAACGAGTTGGCGTCCGCAGCTGCCAGGGGGGACCTAGAGCA
ACTTACTAGTTTGTTGCAAAATAATGTAAACGTCAATGCACAAAATGGATTTGGAAGGACTGCGCTGCAGGTTAT
GAAACTTGGAAATCCCGAGATTGCCAGGAGACTGCTACTTAGAGGTGCTAATCCCGATTTGAAAGACCGAACTGG
TTTCGCTGTCATTCATGATGCGGCCAGAGCAGGTTTCCTGGACACTTTACAGACTTTGCTGGAGTTTCAAGCTGA
TGTTAACATCGAGGATAATGAAGGGAACCTGCCCTTGCACTTGGCTGCCAAAGAAGGCCACCTCCGGGTGGTGGA
GTTCCTGGTGAAGCACACGGCCAGCAATGTGGGGCATCGGAACCATAAGGGGGACACCGCCTGTGATTTGGCCAG
GCTCTATGGGAGGAATGAGGTTGTTAGCCTGATGCAGGCAAACGGGGCTGGGGGAGCCACAAATCTTCAATAAAC
GTGGGGAGGGCTCCCCCACGTTGCCTCTACTTTATCAATTAACTGAGTAGCTCTCCTGACTTTTAATGTCATTTG
TTAAAATACAGTTCTGTCATATGTTAAGCAGCTAAATTTTCTGAAACTGCATAAGTGAAAATCTTACAACAGGCT
TATGAATATATTTAAGCAACATCTTTTTAACCTGCAAAATCTGTTCTAACATGTAATTGCAGATAACTTTGACTT
TCTTCTGAATATTTTATCTTTCCTTGGCTTTTCCCTTGCTTCCCCTTTTGCCAATCTCAACACCCAAGTTGAAGA
CTTTGTTTTTAAAATGGTTTGTCCTGATGCTTTTGTCTAATTAAAACACTTTCAAAACAGGAAAAAAAAAAAAAA
AAAA

FIGURE 6970

MAEPWGNELASAAARGDLEQLTSLLQNNVNVNAQNGFGRTALQVMKLGNPEIARRLLLRGANPDLKDRTGFAVIH
DAARAGFLDTLQTLLEFQADVNIEDNEGNLPLHLAAKEGHLRVVEFLVKHTASNVGHRNHKGDTACDLARLYGRN
EVVSLMQANGAGGATNLQ

FIGURE 6971

CCGCCTCCGAGTGCCTTGCGCGGACCTGAGCTGGAGATGCTGGCCGGGCTACCGACGTCAGACCCCGGGCGCCTC
ATCACGGACCCGCGCAGCGGCCGCACCTACCTCAAAGGCCGCTTGTTGGGCAAGGGGGGCTTCGCCCGCTGCTAC
GAGGCCACTGACACAGAGACTGGCAGCGCCTACGCTGTCAAAGTCATCCCGCAGAGCCGCGTCGCCAAGCCGCAT
CAGCGCGAGAAGATCCTAAATGAGATTGAGCTGCACCGAGACCTGCAGCACCGCCACATCGTGCGTTTTTCGCAC
CACTTTGAGGACGCTGACAACATCTACATTTTCTTGGAGCTCTGCAGCCGAAAGTCCCTGGCCCACATCTGGAAG
GCCCGGCACACCCTGTTGGAGCCAGAAGTGCGCTACTACCTGCGGCAGATCCTTTCTGGCCTCAAGTACTTGCAC
CAGCGCGGCATCTTGCACCGGGACCTCAAGTTGGGAAATTTTTTCATCACTGAGAACATGGAACTGAAGGTGGGG
GATTTTGGGCTGGCAGCCCGGTTGGAGCCTCCGGAGCAGAGGAAGAAGACCATCTGTGGCACCCCCAACTATGTG
GCTCCAGAAGTGCTGCTGAGACAGGGCCACGGCCCTGAAGCGGATGTATGGTCACTGGGCTGTGTCATGTACACG
CTGCTCTGCGGGAGCCCTCCCTTTGAGACGGCTGACCTGAAGGAGACGTACCGCTGCATCAAGCAGGTTCACTAC
ACGCTGCCTGCCAGCCTCTCACTGCCTGCCCGGCAGCTCCTGGCCGCCATCCTTCGGGCCTCACCCCGAGACCGC
CCCTCTATTGACCAGATCCTGCGCCATGACTTCTTTACCAAGGGCTACACCCCCGATCGACTCCCTATCAGCAGC
TGCGTGACAGTCCCAGACCTGACACCCCCCAACCCAGCTAGGAGTCTGTTTGCCAAAGTTACCAAGAGCCTCTTT
GGCAGAAAGAAGAAGAGTAAGAATCATGCCCAGGAGAGGGATGAGGTCTCCGGTTTGGTGAGCGGCCTCATGCGC
ACATCCGTTGGCCATCAGGATGCCAGGCCAGAGGCTCCAGCAGCTTCTGGCCCAGCCCCTGTCAGCCTGGTAGAG
ACAGCACCTGAAGACAGCTCACCCCGTGGGACACTGGCAAGCAGTGGAGATGGATTTGAAGAAGGTCTGACTGTG
GCCACAGTAGTGGAGTCAGCCCTTTGTGCTCTGAGAAATTGTATAGCTTTCATGCCCCCAGCGGAACAGAACCCG
GCCCCCCTGGCCCAGCCAGAGCCTCTGGTGTGGGTCAGCAAGTGGGTTGACTACTCCAATAAGTTCGGCTTTGGG
TATCAACTGTCCAGCCGCCGTGTGGCTGTGCTCTTCAACGATGGCACACATATGGCCCTGTCGGCCAACAGAAAG
ACTGTGCACTACAATCCCACCAGCACAAAGCACTTCTCCTTCTCCGTGGGTGCTGTGCCCCGGGCCCTGCAGCCT
CAGCTGGGTATCCTGCGGTACTTCGCCTCCTACATGGAGCAGCACCTCATGAAGGGTGGAGATCTGCCCAGTGTG
GAAGAGGTAGAGGTACCTGCTCCGCCCTTGCTGCTGCAGTGGGTCAAGACGGATCAGGCTCTCCTCATGCTGTTT
AGTGATGGCACTGTCCAGGTGAACTTCTACGGGGACCACACCAAGCTGATTCTCAGTGGCTGGGAGCCCCTCCTT
GTGACTTTTGTGGCCCGAAATCGTAGTGCTTGTACTTACCTCGCTTCCCACCTTCGGCAGCTGGGCTGCTCTCCA
GACCTGCGGCAGCGACTCCGCTATGCTCTGCGCCTGCTCCGGGACCGCAGCCCAGCTTAGGACCCAAGCCCTGAA
GGCCTGAGGCCTGTGCCTGTCAGGCTCTGGCCCTTGCCTTTGTGGCCTTCCCCCTTCCTTTGGTGCCTCACTGGG
GGCTTTGGGCCGAATCCCCCAGGGAATCAGGGACCAGCTTTACTGGAGTTGGGGGCGGCTTGTCTTCGCTGGCTC
CTACCCCATCTCCAAGATAAGCCTGAGCCTTAGCTCCCAGCTAGGGGGCGTTATTTATGGACCACTTTTATTTAT
TGTCAGACACTTATTTATTGGGATGTGAGCCCCAGGGGGCCTCCTCCTAGGATAATAAACAATTTTGCA

FIGURE 6972

MLAGLPTSDPGRLITDPRSGRTYLKGRLLGKGGFARCYEATDTETGSAYAVKVIPQSRVAKPHQREKILNEIELH
RDLQHRHIVRFSHHFEDADNIYIFLELCSRKSLAHIWKARHTLLEPEVRYYLRQILSGLKYLHQRGILHRDLKLG
NFFITENMELKVGDFGLAARLEPPEQRKKTICGTPNYVAPEVLLRQGHGPEADVWSLGCVMYTLLCGSPPFETAD
LKETYRCIKQVHYTLPASLSLPARQLLAAILRASPRDRPSIDQILRHDFFTKGYTPDRLPISSCVTVPDLTPPNP
ARSLFAKVTKSLFGRKKKSKNHAQERDEVSGLVSGLMRTSVGHQDARPEAPAASGPAPVSLVETAPEDSSPRGTL
ASSGDGFEEGLTVATVVESALCALRNCIAFMPPAEQNPAPLAQPEPLVWVSKWVDYSNKFGFGYQLSSRRVAVLF
NDGTHMALSANRKTVHYNPTSTKHFSFSVGAVPRALQPQLGILRYFASYMEQHLMKGGDLPSVEEVEVPAPPLLL
QWVKTDQALLMLFSDGTVQVNFYGDHTKLILSGWEPLLVTFVARNRSACTYLASHLRQLGCSPDLRQRLRYALRL
LRDRSPA

FIGURE 6973

CACAAACTGGGAGGAAAACTGAGACCTCCTGGTACCCGCCGCCGGGCCTTTTAGAAACTCCCACAAGCTCTGCCT
TCCCTCCCTGGTCCTCTTCAGACCCCCTCTTAGTTCTTCGCGGCTAACGGCTCGCGCTCGGGGCCGGGTGTGGAG
CTGGAACAGAGGGCTGGCAAGGCGCGCATCGGACCGAGGGTGGAGCCGCTGAGCACAGAACCGGAAACTTAGAGA
CAAAGTTCGGAGCCCCGCCCCCGCCGCGCGCCGCTGAGTTGTCTGGCCCCGCCGACCCACGGCCCACGACCCACC
GACCCACGAATCGGCCCGGCCGTCGCGTGCACC**ATG**TCTGGCTCCTCCAGCGTCGCCGCTATGAAGAAAGTGGTT
CAACAGCTCCGGCTGGAGGCCGGACTCAACCGCGTAAAAGTTTCCCAGGCAGCTGCAGACTTGAAACAGTTCTGT
CTGCAGAATGCTCAACATGACCCTCTGCTGACTGGAGTATCTTCAAGTACAAATCCCTTCAGACCCCAGAAAGTC
TGTTCCTTTTTG**TAG**TAAAATGAATCTTTCAAAGGTTTCCCAAACCACTCCTTATGATCCAGTGATATTCAAGAG
AGCTACATTTGAAGCCTGTACAAAAGCTTATCCCTGTAACACATGTGCCATAATATACAAACTTCTACTTTCGTC
AGTCCTTAACATCTACCTCTCTG

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FIGURE 6974

MSGSSSVAAMKKVVQQLRLEAGLNRVKVSQAAADLKQFCLQNAQHDPLLTGVSSSTNPFRPQKVCSFL

FIGURE 6975

AAAACAGCCGGGGCTCCAGCGGGAGAACGATAATGCAAAGTGCTATGTTCTTGGCTGTTCAACACGACTGCAGAC
CCATGGACAAGAGCGCAGGCAGTGGCCACAAGAGCGAGGAGAAGCGAGAAAAGATGAAACGGACCCTTTTAAAAG
ATTGGAAGACCCGTTTGAGCTACTTCTTACAAAATTCCTCTACTCCTGGGAAGCCCAAAACCGGCAAAAAAAGCA
AACAGCAAGCTTTCATCAAGCCTTCTCCTGAGGAAGCACAGCTGTGGTCAGAAGCATTTGACGAGCTGCTAGCCA
GCAAATATGGTCTTGCTGCATTCAGGGCTTTTTTAAAGTCGGAATTCTGTGAAGAAAATATTGAATTCTGGCTGG
CCTGTGAAGACTTCAAAAAAACCAAATCACCCCAAAAGCTGTCCTCAAAAGCAAGGAAAATATATACTGACTTCA
TAGAAAAGGAAGCTCCAAAAGAGATAAACATAGATTTTCAAACCAAAACTCTGATTGCCCAGAATATACAAGAAG
CTACAAGTGGCTGCTTTACAACTGCCCAGAAAAGGGTATACAGCTTGATGGAGAACAACTCTTATCCTCGTTTCT
TGGAGTCAGAATTCTACCAGGACTTGTGTAAAAAGCCACAAATCACCACAGAGCCTCATGCTACATGAAATGTAA
AAGGGAGCCCAGAAATGGAGGACATTTCATTCTTTTTCCTGAGGGGAAGGACTGTGACCTGCCATAAAGACTGAC
CTTGAATTCAGCCTGGGTGTTCAGGAAACATCACTCAGAACTATTGATTCAAAGTTGGGTAGTGAATCAGGAAGC
CAGTAACTGACTAGGAGAAGCTGGTATCAGAACAGCTTCCCTCACTGTGTACAGAACGCAAGAAGGGAATAGGTG
GTCTGAACGTGGTGTCTCACTCTGAAAAGCAGGAATGTAAGATGATGAAAGAGACAATGTAATACTGTTGGTCCA
AAAGCATTTAAAATCAATAGATCTGGGATTATGTGGCCTTAGGTAGCTGGTTGTACATCTTTCCCTAAATCGATC
CATGTTACCACATAGTAGTTTTAGTTTAGGATTCAGTAACAGTGAAGTGTTTACTATGTGCAAGGGTATTGAAGT
TCTTATGACCACAGATCATCAGTACTGTTGTCTCATGTAATGCTAAAACTGAAATGGTCCGTGTTTGCATTGTTA
AAAATGATGTGTGAAATAGAATGAGTGCTATGGTGTTGAAAACTGCAGTGTCCGTTATGAGTGCCAAAAATCTGT
CTTGAAGGCAGCTACACTTTGAAGTGGTCTTTGAATACTTTTAATAAATTTATTTTGATAAATAATATTG

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FIGURE 6976

MQSAMFLAVQHDCRPMDKSAGSGHKSEEKREKMKRTLLKDWKTRLSYFLQNSSTPGKPKTGKKSKQQAFIKPSPE
EAQLWSEAFDELLASKYGLAAFRAFLKSEFCEENIEFWLACEDFKKTKSPQKLSSKARKIYTDFIEKEAPKEINI
DFQTKTLIAQNIQEATSGCFTTAQKRVYSLMENNSYPRFLESEFYQDLCKKPQITTEPHAT

FIGURE 6977

GGCACGAGCCCAGCGCCGCCGCCATGTCCTCCGGGGCTAGCGCGAGCGCCCTGCAGCGCTTGGTAGAGCAGCTCA
AGTTGGAGGCTGGCGTGGAGAGGATCAAGGTCTCTCAGGCAGCTGCAGAGCTTCAACAGTACTGTATGCAGAATG
CCTGCAAGGATGCCCTGCTGGTGGGTGTTCCAGCTGGAAGTAACCCCTTCCGGGAGCCTAGATCCTGTGCTTTAC
TCTGAAGACTCTAGGAGAGAAGTTTGCTGAGGAATGCCTTCAAGCACAAAGTGATGAATGACTGCCTTCAAGTCT
CAAGAAAACACTTTTCCCTAACTTTTAGAGATATTTCAGCCCTTTCCTGTGGCCTGGTCCTATAGCCAAAATCAC
AGATATTCATGAGTTTCTACTTGAGTGAGAAAACTGGGTGAAGGAATAGAATTTTAAATAGTAATAACTGCTTGT
TTTTTGTGTGCAAGTACTTTTATACATAAGATAAACAAAAACCTTACCACCAAACATACCAAAATGCACCTCTTT
CATAAGTGAGTTACTAAGATTTCTATACCTGGAATATCATGTATGTTTCATTTACTGGATGTTTACATTTTAGGA
AGGAAAATAGTTTTGTTTATTTAAACAACTGAATACTTATAAACTGTTGTTCCTGGAAGTTATTTATTCCATAAA
AAATTTGTTCTTTTCTCATGAATTTATAATTCCTAAATGAAGACCAGAAAGTACAAATTGCTGGGAGGAAGAATA
GGCTTTATTAATCAACTGATGTCTTGATTTTTCTAAATGGGAAGATTGCTTTATTTTTAACACTAATTATGGGAG
CAGATTCTTACCAAACTTCTTTGGAAAAGTTAATGTTATGATGTGCATTAGGCTGCCCCATCGTGTATATAAATG
AAGGCAGATTTGATTTTTGTATTCTTACGTTTACTCTGCTTTGTAGTTGTGGCTGTACTTAAAGCAATACAGAAT
TTCATATATTTAAAAATGTTTAAAATGTGACCCACAGAACATTGTAAATGATTAAAAACTAACATGAAAATATTA
CAACCTAAAAGAATTCTTAACTTCACAAGTGTTTTACTTCGACGATGTGCCTTTGATTTAATTTGGGACACTTTT
TTAGAAGGATACATTATTCGTGTTTGCAACGGTCTTTGAAGAGCTTGGAAATAAAATTTCTGCTTAATT

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FIGURE 6978

MSSGASASALQRLVEQLKLEAGVERIKVSQAAAELQQYCMQNACKDALLVGVPAGSNPFREPRSCALL

FIGURE 6979

CAGCTTCCCTGTGGTTTCCCGAGGCTTCCTTGCTTCCCGCTCTGCGAGGAGCCTTTCATCCGAAGGCGGGACGATG
CCGGATAATCGGCAGCCGAGGAACCGGCAGCCGAGGATCCGCTCCGGGAACGAGCCTCGTTCCGCGCCCGCCAT
GGAACCGGATGGTCGCGGTGCCTGGGCCCACAGTCGCGCCGCGCTCGACCGCCTGGAGAAGCTGCTGCGCTGCTC
GCGTTGTACTAACATTCTGAGAGAGCCTGTGTGTTTAGGAGGATGTGAGCACATCTTCTGTAGTAATTGTGTAAG
TGACTGCATTGGAACTGGATGTCCAGTGTGTTACACCCCGGCCTGGATACAAGACTTGAAGATAAATAGACAACT
GGACAGCATGATTCAACTTTGTAGTAAGCTTCGAAATTTGCTACATGACAATGAGCTGTCAGATTTGAAAGAAGA
TAAACCTAGGAAAAGTTTGTTTAATGATGCAGGAAACAAGAAGAATTCAATTAAAATGTGGTTTAGCCCTCGAAG
TAAGAAAGTCAGATATGTTGTGAGTAAAGCTTCAGTGCAAACCCAGCCTGCAATAAAAAAAGATGCAAGTGCTCA
GCAAGACTCATATGAATTTGTTTCCCCAAGTCCTCCTGCAGATGTTTCTGAGAGGGCTAAAAAGGCTTCTGCAAG
ATCTGGAAAAAAGCAAAAAAAGAAAACTTTAGCTGAAATCAACCAAAAATGGAATTTAGAGGCAGAAAAAGAAGA
TGGTGAATTTGACTCCAAAGAGGAATCTAAGCAAAAGCTGGTATCCTTCTGTAGCCAACCATCTGTTATCTCCAG
TCCTCAGATAAATGGTGAAATAGACTTACTAGCAAGTGGCTCCTTGACAGAATCTGAATGTTTTGGAAGTTTAAC
TGAAGTCTCTTTACCATTGGCTGAGCAAATAGAGTCTCCAGACACTAAGAGCAGGAATGAAGTAGTGACTCCTGA
GAAGGTCTGCAAAAATTATCTTACATCTAAGAAATCTTTGCCATTAGAAAATAATGGAAAACGTGGCCATCACAA
TAGACTTTCCAGTCCCATTTCTAAGAGATGTAGAACCAGCATTCTGAGCACCAGTGGAGATTTTGTTAAGCAAAC
CGTGCCCTCAGAAAATATACCATTGCCTGAATGTTCTTCACCACCTTCATGCAAACGTAAAGTTGGTGGTACATC
AGGGAGGAAAAACAGTAACATGTCCGATGAATTCATTAGTCTTTCACCAGGTACACCACCTTCTACATTAAGTAG
TTCAAGTTACAGGCAAGTGATGTCTAGTCCCTCAGCAATGAAGCTGTTGCCCAATATGGCTGTGAAAAGAAATCA
TAGAGGAGAGACTTTGCTCCATATTGCTTCTATTAAGGGCGACATACCTTCTGTTGAATACCTTTTACAAAATGG
AAGTGATCCAAATGTTAAAGACCATGCTGGATGGACACCATTGCATGAAGCTTGCAATCATGGGCACCTGAAGGT
AGTGGAATTATTGCTCCAGCATAAGGCATTGGTGAACACCACCGGGTATCAAAATGACTCACCACTTCACGATGC
AGCCAAGAATGGGCACGTGGATATAGTCAAGCTGTTACTTTCCTATGGAGCCTCCAGAAATGCTGTTAATATATT
TGGTCTGCGGCCTGTCGATTATACAGATGATGAAAGTATGAAATCGCTATTGCTGCTACCAGAGAAGAATGAATC
ATCCTCAGCTAGCCACTGCTCAGTAATGAACACTGGGCAGCGTAGGGATGGACCTCTTGTACTTATAGGCAGTGG
GCTGTCTTCAGAACAACAGAAAATGCTCAGTGAGCTTGCAGTAATTCTTAAGGCTAAAAAATATACTGAGTTTGA
CAGTACAGTAACTCATGTTGTTGTTCCTGGTGATGCAGTTCAAAGTACCTTGAAGTGTATGCTTGGGATTCTCAA
TGGATGCTGGATTCTAAAATTTGAATGGGTAAAAGCATGTCTACGAAGAAAAGTATGTGAACAGGAAGAAAAGTA
TGAAATTCCTGAAGGTCCACGCAGAAGCAGGCTCAACAGAGAACAGCTGTTGCCAAAGCTGTTTGATGGATGCTA
CTTCTATTTGTGGGGAACCTTCAAACACCATCCAAAGGACAACCTTATTAAGCTCGTCACTGCAGGTGGGGGCCA
GATCCTCAGTAGAAAGCCCAAGCCAGACAGTGACGTGACTCAGACCATCAATACAGTCGCATACCATGCGAGACC
CGATTCTGATCAGCGCTTCTGCACACAGTATATCATCTATGAAGATTTGTGTAATTATCACCCAGAGAGGGTTCG
GCAGGGCAAAGTCTGGAAGGCTCCTTCGAGCTGGTTTATAGACTGTGTGATGTCCTTTGAGTTGCTTCCTCTTGA
CAGCTGAATATTATACCAGATGAACATTTCAAATTGAATTTGCACGGTTTGTGAGAGCCCAGTCATTGTACTGTT
TTTAATGTTCACATTTTTACAAATAGGTAGAGTCATTCATATTTGTCTTTGAATC

FIGURE 6980

MPDNRQPRNRQPRIRSGNEPRSAPAMEPDGRGAWAHSRAALDRLEKLLRCSRCTNILREPVCLGGCEHIFCSNCV
SDCIGTGCPVCYTPAWIQDLKINRQLDSMIQLCSKLRNLLHDNELSDLKEDKPRKSLFNDAGNKKNSIKMWFSPR
SKKVRYVVSKASVQTQPAIKKDASAQQDSYEFVSPSPPADVSERAKKASARSGKKQKKKTLAEINQKWNLEAEKE
DGEFDSKEESKQKLVSFCSQPSVISSPQINGEIDLLASGSLTESECFGSLTEVSLPLAEQIESPDTKSRNEVVTP
EKVCKNYLTSKKSLPLENNGKRGHHNRLSSPISKRCRTSILSTSGDFVKQTVPSENIPLPECSSPPSCKRKVGGT
SGRKNSNMSDEFISLSPGTPPSTLSSSSYRQVMSSPSAMKLLPNMAVKRNHRGETLLHIASIKGDIPSVEYLLQN
GSDPNVKDHAGWTPLHEACNHGHLKVVELLLQHKALVNTTGYQNDSPLHDAAKNGHVDIVKLLLSYGASRNAVNI
FGLRPVDYTDDESMKSLLLLPEKNESSSASHCSVMNTGQRRDGPLVLIGSGLSSEQQKMLSELAVILKAKKYTEF
DSTVTHVVVPGDAVQSTLKCMLGILNGCWILKFEWVKACLRRKVCEQEEKYEIPEGPRRSRLNREQLLPKLFDGC
YFYLWGTFKHHPKDNLIKLVTAGGGQILSRKPKPDSDVTQTINTVAYHARPDSDQRFCTQYIIYEDLCNYHPERV
RQGKVWKAPSSWFIDCVMSFELLPLDS

FIGURE 6981

GGCACCCAGGGTCCGGCCTGCGCCTTCCCGCCAGGCCTGGACACTGGTTCAACACCTGTGACTTCATGTGTGCGC
GCCGGCCACACCTGCAGTCACACCTGTAGCCCCCTCTGCCAAGAGATCCATACCGAGGCAGCGTCGGTGGCTACA
AGCCCTCAGTCCACACCTGTGGACACCTGTGACACCTGGCCACACGACCTGTGGCCGCGGCCTGGCGTCTGCTGC
GACAGGAGCCCTTACCTCCCCTGTTATAACACCTGACCGCCACCTAACTGCCCCTGCAGAAGGAGCAATGGCCTT
GGCTCCTGAGAGGGCAGCCCCACGCGTGCTGTTCGGAGAGTGGCTCCTTGGAGAGATCAGCAGCGGCTGCTATGA
GGGGCTGCAGTGGCTGGACGAGGCCCGCACCTGTTTCCGCGTGCCCTGGAAGCACTTCGCGCGCAAGGACCTGAG
CGAGGCCGACGCGCGCATCTTCAAGGCCTGGGCTGTGGCCCGCGGCAGGTGGCCGCCTAGCAGCAGGGGAGGTGG
CCCGCCCCCCGAGGCTGAGACTGCGGAGCGCGCCGGCTGGAAAACCAACTTCCGCTGCGCACTGCGCAGCACGCG
TCGCTTCGTGATGCTGCGGGATAACTCGGGGGACCCGGCCGACCCGCACAAGGTGTACGCGCTCAGCCGGGAGCT
GTGCTGGCGAGAAGGCCCAGGCACGGACCAGACTGAGGCAGAGGCCCCCGCAGCTGTCCCACCACCACAGGGTGG
GCCCCCAGGGCCATTCTTGGCACACACACATGCTGGACTCCAAGCCCCAGGCCCCCTCCCTGCCCCAGCTGGTGA
CAAGGGGGACCTCCTGCTCCAGGCAGTGCAACAGAGCTGCCTGGCAGACCATCTGCTGACAGCGTCATGGGGGGC
AGATCCAGTCCCAACCAAGGCTCCTGGAGAGGGACAAGAAGGGCTTCCCCTGACTGGGGCCTGTGCTGGAGGCGA
GGCCGCGGCCCCAGAGTCCCCGCACCAGGCAGAGCCGTACCTGTCACCCTCCCCAAGCGCCTGCACCGCGGTGCA
AGAGCCCAGCCCAGGGGCGCTGGACGTGACCATCATGTACAAGGGCCGCACGGTGCTGCAGAAGGTGGTGGGACA
CCCGAGCTGCACGTTCCTATACGGCCCCCCAGACCCAGCTGTCCGGGCCACAGACCCCCAGCAGGTAGCATTCCC
CAGCCCTGCCGAGCTCCCGGACCAGAAGCAGCTGCGCTACACGGAGGAACTGCTGCGGCACGTGGCCCCTGGGTT
GCACCTGGAGCTTCGGGGGCCACAGCTGTGGGCCCGGCGCATGGGCAAGTGCAAGGTGTACTGGGAGGTGGGCGG
ACCCCCAGGCTCCGCCAGCCCCTCCACCCCAGCCTGCCTGCTGCCTCGGAACTGTGACACCCCCATCTTCGACTT
CAGAGTCTTCTTCCAAGAGCTGGTGGAATTCCGGGCACGGCAGCGCCGTGGCTCCCCACGCTATACCATCTACCT
GGGCTTCGGGCAGGACCTGTCAGCTGGGAGGCCCAAGGAGAAGAGCCTGGTCCTGGTGAAGCTGGAACCCTGGCT
GTGCCGAGTGCACCTAGAGGGCACGCAGCGTGAGGGTGTGTCTTCCCTGGATAGCAGCAGCCTCAGCCTCTGCCT
GTCCAGCGCCAACAGCCTCTATGACGACATCGAGTGCTTCCTTATGGAGCTGGAGCAGCCCGCCTAGAACCCAGT
CTAATGAGAACTCCAGAAAGCTGGAGCAGCCCACCTAGAGCTGGCCGCGGCCGCCCAGTCTAATAAAAAGAACTC
CAGAACAAAAAAAAAA

FIGURE 6982

MALAPERAAPRVLFGEWLLGEISSGCYEGLQWLDEARTCFRVPWKHFARKDLSEADARIFKAWAVARGRWPPSSR
GGGPPPEAETAERAGWKTNFRCALRSTRRFVMLRDNSGDPADPHKVYALSRELCWREGPGTDQTEAEAPAAVPPP
QAQGSLLGSCTGGQ

FIGURE 6983

CGGAGACGGGACAGCCCTGTCCCACTCACTCTTTCCCCTGCTGCTCCTGCCGGCAGCTCAGCTGGAACC**ATG**GGA
GGCCGCGTCTTTCTCGTCTTTCTCGCATTCTGTGTCTGGCTGACTCTGCCGGGAGCTGAAACCCAGGACTCCAGG
GGCTGTGCCCGGTGGTGCCCTCAGGACTCCTCGTGTGTCAATGCCACCGCCTGTCGCTGCAATCCAGGGTTCAGC
TCTTTTTCTGAGATCATCACCACCCCCATGGAGACTTGTGACGACATCAACGAGTGTGCAACACTGTCGAAAGTG
TCATGCGGAAAATTCTCGGACTGCTGGAACACAGAGGGGAGCTACGACTGCGTGTGCAGCCCAGGATATGAGCCT
GTTTCTGGGGCAAAAACATTCAAGAATGAGAGCGAGAACACGTGTCAAGATGTGGACGAATGTCAGCAGAACCCA
AGGCTCTGTAAAAGCTACGGCACCTGCGTCAACACCCTCGGCAGCTACACGTGCCAGTGCCTGCCTGGCTTCAAG
CTCAAACCTGAGGACCCGAAGCTCTGCACAGATGTGAATGAATGCACCTCCGGACAAAACCCATGCCACAGCTCC
ACCCACTGCCTCAACAACGTGGGCAGCTATCAGTGCCGCTGCCGCCCGGGCTGGCAACCGATTCCGGGGTCCCCC
AATGGCCCAAACAATACCGTCTGTGAAGATGTGGACGAGTGCAGCTCCGGGCAGCATCAGTGTGACAGCTCCACC
GTCTGCTTCAACACCGTGGGTTCATACAGCTGCCGCTGCCGCCCAGGCTGGAAGCCCAGACACGGAATCCCGAAT
AACCAAAAGGACACTGTCTGTGAAGATATGACTTTCTCCACCTGGACCCCGCCCCCTGGAGTCCACAGCCAGACG
CTTTCCCGATTCTTCGACAAAGTCCAGGACCTGGGCAGAGACTACAAGCCAGGCTTGGCCAATAACACCATCCAG
AGCATCTTACAGGCGCTGGATGAGCTGCTGGAGGCCCCTGGGGACCTGGAGACCCTGCCCCGCTTACAGCAGCAC
TGTGTGGCCAGTCACCTGCTGGATGGCCTAGAGGATGTCCTCAGAGGCCTGAGCAAGAACCTTTCCAATGGGCTG
TTGAACTTCAGTTATCCTGCAGGCACAGAATTGTCCCTGGAGGTGCAGAAGCAAGTAGACAGGAGTGTCACCTTG
AGACAGAATCAGGCAGTGATGCAGCTCGACTGGAATCAGGCACAGAAATCTGGTGACCCAGGCCCTTCTGTGGTG
GGCCTTGTCTCCATTCCAGGGATGGGCAAGTTGCTGGCTGAGGCCCCTCTGGTCCTGGAACCTGAGAAGCAGATG
CTTCTGCATGAGACACACCAGGGCTTGCTGCAGGACGGCTCCCCCATCCTGCTCTCAGATGTGATCTCTGCCTTT
CTGAGCAACAACGACACCCAAAACCTCAGCTCCCCAGTTACCTTCACCTTCTCCCACCGTTCAGTGATCCCGAGA
CAGAAGGTGCTCTGTGTCTTCTGGGAGCATGGCCAGAATGGATGTGGTCACTGGGCCACCACAGGCTGCAGCACA
ATAGGCACCAGAGACACCAGCACCATCTGCCGTTGCACCCACCTGAGCAGCTTTGCCGTCCTCATGGCCCACTAC
GATGTGCAGGAGGAGGATCCCGTGCTGACTGTCATCACCTACATGGGGCTGAGCGTCTCTCTGCTGTGCCTCCTC
CTGGCGGCCCTCACTTTTCTCCTGTGTAAAGCCATCCAGAACACCAGCACCTCACTGCATCTGCAGCTCTCGCTC
TGCCTCTTCCTGGCCCACCTCCTCTTCCTCGTGGCAATTGATCAAACCGGACACAAGGTGCTGTGCTCCATCATC
GCCGGTACCTTGCACTATCTCTACCTGGCCACCTTCACCTGGATGCTGCTGGAGGCCCTGTACCTCTTCCTCACT
GCACGGAACCTGACGGTGGTCAACTACTCAAGCATCAACAGATTCATGAAGAAGCTCATGTTCCCTGTGGGCTAC
GGAGTCCCAGCTGTGACAGTGGCCATTTCTGCAGCCTCCAGGCCTCACCTTTATGGAACACCTTCCCGCTGCTGG
CTCCAACCAGAAAAGGGATTTATATGGGGCTTCCTTGGACCTGTCTGCGCCATCTTCTCTGTGAATTTAGTTCTC
TTTCTGGTGACTCTCTGGATTTTGAAAAACAGACTCTCCTCCCTCAATAGTGAAGTGTCCACCCTCCGGAACACA
AGGATGCTGGCATTTAAAGCGACAGCTCAGCTGTTCATCCTGGGCTGCACGTGGTGTCTGGGCATCTTGCAGGTG
GGTCCGGCTGCCCGGGTCATGGCCTACCTCTTCACCATCATCAACAGCCTGCAGGGTGTCTTCATCTTCCTGGTG
TACTGCCTCCTCAGCCAGCAGGTCCGGGAGCAATATGGGAAATGGTCCAAAGGGATCAGGAAATTGAAAACTGAG
TCTGAGATGCACACACTCTCCAGCAGTGCTAAGGCTGACACCTCCAAACCCAGCACGGTTAAC**TAG**AAAAATCTT
CTGAATAAGATCTTCCCTCTTTGCCGGTGGAAAATCTGAACAATCTTTGAGCCATCTAGAGGGGAAAGAAAAGAC
TTTGTTCTGTGTGTTTCAAGAAATTCACCATGTCAGCAATATGAAGGATGTTATGGAAGGCGTGCTTGGCATTCA
ATTCCTGCAGAAACCGGAAATCTTCCATGCCCTGCAATGTGCTCATCAAACTCTCAGCATATGGACGGCCAGCTG
TGGCCCATATCTTGGTCACTCTGAAGCACAATATTTATGAAGCTATAGAACGTTAAGACCTCTTTCACAGCCTCT
CCTTCCTACAAAGACTCCTCCAAATCTTAAAATGAAGCAGGAAAACAAGCCTAAGAGGACTTTCATACCGACAAC
ATCTGAAAGGACTAGAATGTTCACACCACGATCTGGATTTCTTAATTTTTTGTTTTTGTTTTTGTTGTTCTCTAG
TTCTACGGGTTTGATTATTTAGTCATGTGAAAAATATTGATTACTCACACATAGATCAAGAGAGACACGGCTCCT
GCCTTCATGGAGCTTTTAGGGGAAAATGAAGTGGCTCTTGCAGCTAGAGTTGACTCAGAAGCCGAAATTCCTAGA
AATCAGGTTTCTACTGCTAGGCAATTGAAGTATAAACTATTTTATAAACACTGTCTTCTTTCATCTTCAC

FIGURE 6984

MGGRVFLVFLAFCVWLTLPGAETQDSRGCARWCPQDSSCVNATACRCNPGFSSFSEIITTPMETCDDINECATLS
KVSCGKFSDCWNTEGSYDCVCSPGYEPVSGAKTFKNESENTCQDVDECQQNPRLCKSYGTCVNTLGSYTCQCLPG
FKLKPEDPKLCTDVNECTSGQNPCHSSTHCLNNVGSYQCRCRPGWQPIPGSPNGPNNTVCEDVDECSSGQHQCDS
STVCFNTVGSYSCRCRPGWKPRHGIPNNQKDTVCEDMTFSTWTPPPGVHSQTLSRFFDKVQDLGRDYKPGLANNT
IQSILQALDELLEAPGDLETLPRLQQHCVASHLLDGLEDVLRGLSKNLSNGLLNFSYPAGTELSLEVQKQVDRSV
TLRQNQAVMQLDWNQAQKSGDPGPSVVGLVSIPGMGKLLAEAPLVLEPEKQMLLHETHQGLLQDGSPILLSDVIS
AFLSNNDTQNLSSPVTFTFSHRSVIPRQKVLCVFWEHGQNGCGHWATTGCSTIGTRDTSTICRCTHLSSFAVLMA
HYDVQEEDPVLTVITYMGLSVSLLCLLLAALTFLLCKAIQNTSTSLHLQLSLCLFLAHLLFLVAIDQTGHKVLCS
IIAGTLHYLYLATFTWMLLEALYLFLTARNLTVVNYSSINRFMKKLMFPVGYGVPAVTVAISAASRPHLYGTPSR
CWLQPEKGFIWGFLGPVCAIFSVNLVLFLVTLWILKNRLSSLNSEVSTLRNTRMLAFKATAQLFILGCTWCLGIL
QVGPAARVMAYLFTIINSLQGVFIFLVYCLLSQQVREQYGKWSKGIRKLKTESEMHTLSSSAKADTSKPSTVN

FIGURE 6985

ACTTCCATAGCAATCCTATGTGAGGAGTTTCCCCACGAGTTAGGAGACTTTGTGATCCTACTCAATGCAGGGATG
AGCACTCGACAAGCCTTGCTATTCAACTTCCTTTCTGCATGTTCCTGCTATGTTGGGCTAGCTTTTGGCATTTTG
GTGGGCAACAATTTCGCTCCAAATATTATATTTGCACTTGCTGGAGGCATGTTCCTCTATATTTCTCTGGCAGAT
ATGTTTCCAGAGATGAATGATATGCTGAGAGAAAAGGTAACTGGAAGAAAAACCGATTTCACCTTCTTCATGATT
CAGAATGCTGGAATGTTAACTGGATTCACAGCCATTCTACTCATTACCTTGTATGCAGGAGAAATCGAATTGGAG
TAATAGAAAATGGAAGATGGTGTTGTTAATAAAGGCATTTAATAGATAAAAACATCTCCAAAAAGGATTTTGAAG
CTGATCCTATTTAGTTAAAAAGATAATTTTGCTTTCAACTGTAGGTCCAGAAAACTAATTATTGGCATCAGTCTG
TGAAATAGTCCATTATTTGTTGTTAAAAATGCTTCAAAAGGTTTTCAGTGTCAGTCTGAGATGCCTGGTATATAG
GAGCCTTTGGGAAATACTTATTTTTCAGTATTCCATGCATATTAGATATCACCATGAAGCAAGAGACATGCATTC
TATAATCATGTAGACACTCAGACTCAGGGGAAAATACAAGTTATATCCTGAAAGCCTTTAAAACTCTATGGTAGG
ATCAAAGATTCAAATGGTTTCAGAGAGGTTTTATTTCAATTAATTTGTTCTAGTGCTTTCAAGAGCAAGT

FIGURE 6986

TTCAGCCCGGCAGAGTCGCACTAGGAGTTGCAGCGGCCGCAGCCCCGGGAGCTTCCCGCTCGCGGAGACCCAGAC
GGCTGCAGGAGCCCGGGCAGCCTCGGGGTCAGCGGCACCATGAACGTCTCGGGCTGCCCAGGGGCCGGGAACGCG
AGCCAGGCGGGCGGCGGGGGAGGCTGGCACCCCGAGGCGGTCATCGTGCCCCTGCTCTTCGCGCTCATCTTCCTC
GTGGGCACCGTGGGCAACACGCTGGTGCTGGCGGTGCTGCTGCGCGGCGGCCAGGCGGTCAGCACTACCAACCTG
TTCATCCTTAACCTGGGCGTGGCCGACCTGTGTTTCATCCTGTGCTGCGTGCCCTTCCAGGCCACCATCTACACC
CTGGACGGCTGGGTGTTCGGCTCGCTGCTGTGCAAGGCGGTGCACTTCCTCATCTTCCTCACCATGCACGCCAGC
AGCTTCACGCTGGCCGCCGTCTCCCTGGACAGGTGAGCCAGCGCCTTGGCCTCCCTGGGAGATGGGCATCCACGC
GGGGGATGGAGCGGGAGGCGGGACTGGGGACCAAGAAGGGACGCGCAGAGTGGGACAGGACACTAAGAAGGCAGT
GGAAGACAAGCGGGCGCGGAGGAGGAAAAAGAGGAATAAGAATGGGGGACCGTGGTGTCCCTCGGTTAGATGCGT
CCTGGGGCCTGGAAGCCTGGAGAATGTGGCTCTCCAGCGCCGCCCGTGCCTGACAACGCGCAGCGTTTCCCAGTA
CGACGCGTTTGTGCGCGTTCATCTCGCTTGAGCTTAATGCCCTCCGTGAGGGTGGGATAGGACAAAGTGCCCAAT
ATACAGAAGAGTTGAGTTCCTAAGTAACTCGCTCAGAGTCGCCAGCCAGGGATCGGGTGCGTGAAGTGACCGTCT
GTCTCCTGCAGCCAACTTCAGGCGCCTCCACTGCGCTCGCCTCCAAGCCACGGTTTGGTTGGTTGGTGCAGCTGG
CTCAGGTCCAGGCTGTGGATCTTGGGTCCTTTGCAAGGATCCACTCCGGAGTCCCAGCGAGCGTGCCTAAAGGTC
CCTAGCTCAGTCCCAGCCCACTCTGCCTCTCGCCTCCAAACAAAACAAAACAAAATAAAATCCAAAACAAGTCGG
GGCCGGGAGAGGAGCGTGCCCTGGGGTTCTTCCTCCCCAGCCAGAGGAGAGCGAGAGACGCACATTCGGGAGAGC
GCGGGACTCAGGTGGAGCTTGAAAGGACACTGGGATGGTTCCTGGGGAGGAAATCCGGGTATTTCCCCTCTCCAT
CCTCTGGAAAAACAGAGAGGCGAGGCCAGACTGCCCCCACACCTCCTGTAGCCACTGAGCGCGAAGTGCGTTGGT
TCCGAGCGCGCTGGTGGGATCCACAAAGCTCGCATTCTCTCAGGAATCCCCTGAGAAATTAACTGTCCCTTGCCC
AACATGTCTTCTCCAGGCTGTCTGCTAGAGCCTCAGGCGCCTCCGCCCTCCCTCCCGCGGCACCGTCACCAGTGG
GTAGTCACAGCCTCCCGGAGCCCATAGCCGGTTCTCCAACCTTTAGTCTTCAGTGGCTTTGGGGTGCCCTCTCAG
TGGAGACTGTGGTTGCAGTCCCCGGGGGCAGCGGGAGAATGGCTTGAAGGCACACCTTTCCTGCTGCCGGGCCCG
CCCCATTTCCAGGCTCCGCTGAGTGTCTGGGACACGCTGGGAGGCCCCCACCTCCGCCCTCACGCCGAGCCTCAC
CCCCACCTCCTCTGTGTGCGGTGTAACCATGCGCTAAGGACCTTCCTCGAGAGCAGCCTTGGGACCGAGGTGCAG
GGGTCGCGGCCCTCCAGCATGAATGTGCCCGCTCAGCCGACGTCTCCCTTCCCGGTCTGACCGCAGGTATCTGGC
CATCCGCTACCCGCTGCACTCCCGCGAGCTGCGCACGCCTCGAAACGCGCTGGCAGCCATCGGGCTCATCTGGGG
GCTGTCGCTGCTCTTCTCCGGGCCCTACCTGAGCTACTACCGCCAGTCGCAGCTGGCCAACCTGACCGTGTGCCA
TCCCGCGTGGAGCGCCCCTCGCCGCCGCGCCATGGACATCTGCACCTTCGTCTTCAGCTACCTGCTTCCTGTGCT
GGTTCTCGGCCTGACCTACGCGCGCACCTTGCGCTACCTCTGGCGCGCCGTCGACCCGGTGGCCGCGGGCTCGGG
TGCCCGGCGCGCCAAGCGCAAGGTGACACGCATGATCCTCATCGTGGCCGCGCTCTTCTGCCTCTGCTGGATGCC
CCACCACGCGCTCATCCTCTGCGTGTGGTTCGGCCAGTTCCCGCTCACGCGCGCCACTTATGCGCTTCGCATCCT
CTCGCACCTGGTCTCCTACGCCAACTCCTGCGTCAACCCCATCGTTTACGCGCTGGTCTCCAAGCACTTCCGCAA
AGGCTTCCGCACGATCTGCGCGGGCCTGCTGGGCCGTGCCCCAGGCCGAGCCTCGGGCCGTGTGTGCGCTGCCGC
GCGGGGCACCCACAGTGGCAGCGTGTTGGAGCGCGAGTCCAGCGACCTGTTGCACATGAGCGAGGCGGCGGGGGC
CCTTCGTCCCTGCCCCGGCGCTTCCCAGCCATGCATCCTCGAGCCCTGTCCTGGCCCGTCCTGGCAGGGCCCAAA
GGCAGGCGACAGCATCCTGACGGTTGATGTGGCCTGAAAGCACTTAGCGGGCGCGCTGGGATGTCACAGAGTTGG
AGTCATTGTTGGGGGACCGTGGGGAGAGCTTTGCCTGTTAATAAAACGCACAAACCATTTCACACACAGTGACAG
CGCTGTTTCGCGTTTCTCATTGTCTTGAGATTCTGGGAGGAAGCCTCTGGGGCTTCACAGAGGGGCTCCCTAGGG
GTAAGTGCAGGACCCTTTGCAGAGCTACCAGGAAAGAGGGCTGATCACACCTCAGGCAGCCGGGTTACAATCCGC
ATAAAAATCTGAGTCTGGGGAGCGTGCGACAGAGGCAGGCAGATTGTTTAAGGCGTTCGATAAAGTCGGTTGATG
ACAGACACAGATGTGTGTTCCCAGCCGCATTACTTC

FIGURE 6987A

GTTTTGTTCGCTTGGAAATCTCCCTTTCTGCTTGCTCTTCTGTTTGCGGTATCTACTTGAAATCTTACCGAAGTG
ATGTATATTCTTGAAACTTCTGTGGGTTTCTAAGTGACACTTGAGCATGCTCCAGTAGCTAGAGCCGGTTTTGTT
CGCCAGCAGATGGCCTGATTCGACCTCTCCAAAAATAGACATTTTAACTCTCTGAACTCCTGTTTAAGGAAGGAT
GTAATTCGCTTTGCTCTCTCCTCATTTTCAAGGTTCAAAGGGAAGCTGCGAGGATTCCAAGGTCCCACCGCCCTC
ACAGCCAATGAGGGGCCTGGGAGGGAGGAGCTTGGTGCAGCTTGAGCTTCTGAGAGAATCATTCCCGGTAGATGC
AGCGGAGTCTGAGCTCTGCTGCATCTGTCACAGCAGAACAAAATTAAAAACACAACAGTGGAAGAGAAACGCTGC
AGACTATGGGACGCTGTAGGACTTTCTAAAACATTTGCTGGGGATTTCTGTGAAGCATGATCTTTTAAAACGAAT
TCTTTTGGAAGCCGGTTTGGGTAACTGGGAAA**ATG**ACACATATGCTAAATGCAGCAGCTGATCGAGTGAAATGGA
CCAGATCGAGTGCTGCTAAGAGGGCTGCCTGCCTGGTGGCTGCGGCATATGCTCTGAAAACCCTCTATCCCATCA
TTGGCAAGCGTTTAAAGCAATCTGGCCACGGGAAGAAAAAAGCAGCAGCTTACCCTGCTGCAGAGAACACAGAAA
TACTGCATTGCACCGAGACCATTTGTGAAAAACCTTCGCCTGGAGTGAATGCAGATTTCTTCAAACAGCTACTAG
AACTTCGGAAAATTTTGTTTCCAAAACTTGTGACCACTGAAACAGGGTGGCTCTGCCTGCACTCAGTGGCTCTAA
TCTCAAGAACCTTTCTTTCTATCTATGTGGCTGGTCTGGATGGAAAAATCGTGAAAAGCATTGTGGAAAAGAAGC
CTCGGACTTTCATCATCAAATTAATCAAGTGGCTTATGATTGCCATCCCTGCTACCTTCGTCAACAGTGCAATAA
GGTACCTGGAATGCAAATTGGCTTTGGCCTTCAGAACTCGCCTAGTAGACCACGCCTATGAAACCTATTTTACAA
ATCAGACTTATTATAAAGTGATCAATATGGATGGGAGGCTGGCAAACCCTGACCAATCTCTTACGGAGGATATTA
TGATGTTCTCCCAATCTGTGGCTCACTTGTATTCCAATCTGACCAAACCTATTTTAGATGTAATGCTGACCTCCT
ATACACTCATTCAAACTGCTACATCCAGAGGAGCAAGCCCAATTGGGCCCACCCTACTAGCAGGACTTGTGGTGT
ATGCCACTGCTAAAGTGTTAAAAGCCTGTTCTCCCAAATTTGGCAAACTGGTGGCAGAGGAAGCACATAGAAAAG
GCTATTTGCGGTATGTGCACTCGAGAATTATAGCCAATGTAGAAGAAATTGCCTTTTACAGAGGACATAAGGTAG
AAATGAAACAACTTCAGAAAAGTTACAAAGCTTTAGCAGATCAGATGAACCTCATTTTATCCAAACGTTTGTGGT
ACATCATGATAGAACAGTTCCTGATGAAGTATGTTTGGAGCAGCAGTGGACTAATTATGGTGGCTATACCTATTA
TCACTGCAACTGGCTTTGCAGATGGTGAGGATGGCCAAAAGCAAGTTATGGTTAGTGAACGGACAGAAGCCTTTA
CCACTGCTCGAAATTTACTGGCCTCTGGAGCTGATGCTATTGAAAGGATTATGTCTTCATACAAAGAGGTCACTG
AATTAGCAGGCTACACTGCTCGAGTGTACAATATGTTTTGGGTCTTTGATGAAGTAAAAAGAGGCATTTATAAGA
GAACTGCTGTCATTCAAGAATCTGAAAGCCATAGCAAGAATGGAGCTAAGGTAGAATTACCTCTCAGTGACACAT
TGGCAATTAAAGGAAAAGTTATTGATGTGGATCACGGAATTATTTGTGAAAATGTTCCCATAATTACACCAGCAG
GAGAAGTGGTGGCTTCCAGGCTAAACTTCAAAGTAGAAGAAGGAATGCATCTTTTGATAACTGGTCCCAATGGTT
GTGGGAAAAGTTCTCTCTTCAGAATTCTAAGTGGGCTCTGGCCTGTGTATGAAGGAGTCCTCTATAAACCACCTC
CTCAACATATGTTTTATATTCCACAAAGGCCATATATGTCTCTTGGAAGTCTTCGGGATCAAGTCATTTACCCTG
ATTCAGTGGATGATATGCATGATAAAGGTTATACAGACCAAGATCTGGAACGTATCCTACACAATGTCCATCTCT
ATCACATAGTTCAAAGAGAAGGAGGATGGGATGCTGTTATGGACTGGAAAGATGTCCTGTCAGGAGGGGAAAAGC
AAAGAATGGGCATGGCTCGTATGTTTTATCATAAACCAAAATATGCCTTGCTGGATGAATGTACCAGTGCTGTCA
GCATTGATGTCGAAGGAAAGATATTTCAGGCTGCAAAAGGGGCTGGAATTTCCTTACTGTCTATAACACACAGAC
CTTCTCTTTGGAAATACCACACACATTTATTACAGTTTGATGGTGAAGGAGGTTGGCGCTTTGAACAATTGGATA
CTGCTATCCGTTTGACATTGAGTGAAGAAAAACAAAAGCTAGAATCTCAGCTAGCTGGAATTCCCAAAATGCAGC
AGAGACTCAATGAACTATGTAAAATTTTGGGAGAAGACTCAGTGCTGAAAACAATTAAAAATGAAGATGAGACAT
CT**TAA**TTTGTTTTGACATATTTTAAAAAGTTAATTATTAGATAAAGGCTCAAAGACATTCTGTTATACTGCATGA
AGTATGTTAAGCTAAGCACAGAGAAAAAAAGGCAGCAAGACATGTTTTATAAGATTTTAGCATTAAGGAAGTATA
TGATCTGACTTTTCAGAAGAAAATAAACAAATGCATTATGTAAGGTCAGTCATTATGACTTATACTAATTCCTAG
TGAAGGCCTAATGCACTTGTAAAACAGGATTTTCTAGGTGAATTCCTGATGAATACCAGATTTACTATGTATATG
TGGTGTGTCTGAAGTTCTTAACAAACATGGGCAATATTCTGGAAATGAAACAAGTTATAACTGAGCACCATTTGG
GTTGATACCAAGTGCATAAGATTCAAACTTTGAGTGACATTTAGTCCATTTATGGTTGATATTAGGTTTAATACC
TAGAATTCAAATTGATTATTGCTAGTGGCCAACTAAACCTGTACAAAATAGCTGACAGTTTTATAACTAATTTCA
ATATAAAAATTGTTTTAATGGCATTTGTTGAAAGAAAAAAGCATGGCTAAAATGTATCAAATGCCATATTTTTAA
ATTTTGGACTTTAAGCATCTTAATGAGGGCATATAACAAATTAATTTTAGTACAATCTTAAATATTTTTAATAAA
TCCTTTCATTTTAAAAAGAGAATTGCCAATACAGAAAAGGAGTATCCAAACAATGTCTCAACCTGATAATTTCCT
TAGCAGAATTACCTATTGCAACTTCTGTTCAGAAATACACAGCTTGTTTTTTTGCCCAAGGATGAGTCTACATTT

FIGURE 6987B

TAAGAACTGCAATGGTATAAAGGAACTTAAGGATTCTGAGAATCATAGTAATAACATACATTGGAATAGTACTTT
ATAATTTACAATCCCCATTTACATCATTTCACCTTAATGTTGAGGACAATGTTTTGAAACAAATACTATTTTTCC
TACTTTGCTTTTGAGAAAATTGACACTCAGACTTGCCCTAATCATGCACTTTACTTAAGGAAAGATCGAGAAATC
AAATGAAGTTCTCCTGACTCTCTGGTTTAGTGCTCTTTTGTTATTATCCTTTAAATCAAACTGGGCTATAATAGC
AATAAAAGTTAGACGAAGTGTAGAAAATAAAATAAATTTCATAATGTTAAAAAAAAAAAAAAAAAAAAA

FIGURE 6988

MTHMLNAAADRVKWTRSSAAKRAACLVAAAYALKTLYPIIGKRLKQSGHGKKKAAAYPAAENTEILHCTETICEK
PSPGVNADFFKQLLELRKILFPKLVTTETGWLCLHSVALISRTFLSIYVAGLDGKIVKSIVEKKPRTFIIKLIKW
LMIAIPATFVNSAIRYLECKLALAFRTRLVDHAYETYFTNQTYYKVINMDGRLANPDQSLTEDIMMFSQSVAHLY
SNLTKPILDVMLTSYTLIQTATSRGASPIGPTLLAGLVVYATAKVLKACSPKFGKLVAEEAHRKGYLRYVHSRII
ANVEEIAFYRGHKVEMKQLQKSYKALADQMNLILSKRLWYIMIEQFLMKYVWSSSGLIMVAIPIITATGFADGED
GQKQVMVSERTEAFTTARNLLASGADAIERIMSSYKEVTELAGYTARVYNMFWVFDEVKRGIYKRTAVIQESESH
SKNGAKVELPLSDTLAIKGKVIDVDHGIICENVPIITPAGEVVASRLNFKVEEGMHLLITGPNGCGKSSLFRILS
GLWPVYEGVLYKPPPQHMFYIPQRPYMSLGSLRDQVIYPDSVDDMHDKGYTDQDLERILHNVHLYHIVQREGGWD
AVMDWKDVLSGGEKQRMGMARMFYHKPKYALLDECTSAVSIDVEGKIFQAAKGAGISLLSITHRPSLWKYHTHLL
QFDGEGGWRFEQLDTAIRLTLSEEKQKLESQLAGIPKMQQRLNELCKILGEDSVLKTIKNEDETS

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FIGURE 6989

CGGACAGAGGTTCCGGGAACCAGCCGGGCCGGGGCGGGGCGGGGCGAGGGAGAGGGGCGGCCGCGCGGATCACTG
AGGCTGTGGCGGCACTGCGCCCGGCGCTCGCGTCCGTCCGCCCGTCCGCCCGCCCAGCCATGACTGCGCCGGTCC
CCGCGCCGCGGATCCTGTTGCCGTTGCTGTTGCTGCTGCTGCTAACGCCGCCTCCGGGTGCACGTGGTGAGGTGT
GTATGGCTTCCCGTGGACTCAGCCTCTTCCCCGAGTCCTGTCCAGATTTCTGCTGTGGTACCTGTGATGACCAAT
ACTGCTGCTCTGACGTGCTGAAGAAATTTGTGTGGAGCGAGGAAAGGTGTGCTGTGCCTGAGGCCAGCGTGCCTG
CCAGTGTAGAGCCGGTGGAGCAGCTGGGCTCGGCGCTGAGGTTTCGCCCTGGCTACAACGACCCCATGTCAGGGT
TCGGAGCGACCTTGGCCGTTGGCCTGACCATCTTTGTGCTGTCTGTCGTCACTATCATCATCTGCTTCACCTGCT
CCTGCTGCTGCCTTTACAAGACGTGCCGCCGACCACGTCCGGTTGTCACCACCACCACATCCACCACTGTGGTGC
ATGCCCCTTATCCTCAGCCTCCAAGTGTGCCGCCCAGCTACCCTGGACCAAGCTACCAGGGCTACCACACCATGC
CGCCTCAGCCAGGGATGCCAGCAGCACCCTACCCAATGCAGTACCCACCACCTTACCCAGCCCAGCCCATGGGCC
CACCGGCCTACCACGAGACCCTGGCTGGAGGAGCAGCCGCGCCCTACCCCGCCAGCCAGCCTCCTTACAACCCGG
CCTACATGGATGCCCCGAAGGCGGCCCTCTGAGCATTCCCTGGCCTCTCTGGCTGCCACTTGGTTATGTTGTGTG
TGTGCGTGAGTGGTGTGCAGGCGCGGTTCCTTACGCCCCATGTGTGCTGTGTGTGTCCAGGCACGGTTCCTTACG
CCCCATGTGTGCTGTGTGTGTCCTGCCTGTATATGTGGCTTCCTCTGATGCTGACAAGGTGGGGAACAATCCTTG
CCAGAGTGGGCTGGGACCAGACTTTGTTCTCTTCCTCACCTGAAATTATGCTTCCTAAAATCTCAAGCCAAACTC
AAAGAATGGGGTGGTGGGGGGCACCCTGTGAGGTGGCCCCTGAGAGGTGGGGGCCTCTCCAGGGCACATCTGGAG
TTCTTCTCCAGCTTACCCTAGGGTGACCAAGTAGGGCCTGTCACACCAGGGTGGCGCAGCTTTCTGTGTGATGCA
GATGTGTCCTGGTTTCGGCAGCGTAGCCAGCTGCTGCTTGAGGCCATGGCTCGTCCCCGGAGTTGGGGGTACCCG
TTGCAGAGCCAGGGACATGATGCAGGCGAAGCTTGGGATCTGGCCAAGTTGGACTTTGATCCTTTGGGCAGATGT
CCCATTGCTCCCTGGAGCCTGTCATGCCTGTTGGGGATCAGGCAGCCTCCTGATGCCAGAACACCTCAGGCAGAG
CCCTACTCAGCTGTACCTGTCTGCCTGGACTGTCCCCTGTCCCCGCATCTCCCCTGGGACCAGCTGGAGGGCCAC
ATGCACACACAGCCTAGCTGCCCCCAGGGAGCTCTGCTGCCCTTGCTGGCCCTGCCCTTCCCACAGGTGAGCAGG
GCTCCTGTCCACCAGCACACTCAGTTCTCTTCCCTGCAGTGTTTTCATTTTATTTTAGCCAAACATTTTGCCTGT
TTTCTGTTTCAAACATGATAGTTGATATGAGACTGAAACCCCTGGGTTGTGGAGGGAAATTGGCTCAGAGATGGA
CAACCTGGCAACTGTGAGTCCCTGCTTCCCGACACCAGCCTCATGGAATATGCAACAACTCCTGTACCCCAGTCC
ACGGTGTTCTGGCAGCAGGGACACCTGGGCCAATGGGCCATCTGGACCAAAGGTGGGGTGTGGGGCCCTGGATGG
CAGCTCTGGCCCAGACATGAATACCTCGTGTTCCTCCTCCCTCTATTACTGTTTCACCAGAGCTGTCTTAGCTCA
AATCTGTTGTGTTTCTGAGTCTAGGGTCTGTACACTTGTTTATAATAAATGCAATCGTTTGGAGCTGCTGCCCCC
TTTCTTCCTGGCCTCGGCTGCTGGAATTGGAATCAGGCTGTACTCTTTCCATCCATTTGGGCTTCT

FIGURE 6990

MTAPVPAPRILLPLLLLLLLTPPPGARGEVCMASRGLSLFPESCPDFCCGTCDDQYCCSDVLKKFVWSEERCAVP
EASVPASVEPVEQLGSALRFRPGYNDPMSGFGATLAVGLTIFVLSVVTIIICFTCSCCCLYKTCRRPRPVVTTTT
STTVVHAPYPQPPSVPPSYPGPSYQGYHTMPPQPGMPAAPYPMQYPPPYPAQPMGPPAYHETLAGGAAAPYPASQ
PPYNPAYMDAPKAAL

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FIGURE 6991

AGAAGGGAAGGTAGACATCAGGTTCTCCCTGGAGACTTTTCGTTTTCATTTACGCTGCGGAAACTGACGTTTTTG
CCTAACACCCCATGTAATGTAAACGTATAGGCTTGAGTACGTGTCCGGCCGCATGTGTAGTGAACCCTAAAGCTT
TCCTAATTGTAGTTAGCATCGTCCCTAAGCGGAACGATTTTCCGTGAACATGATTTGTACTTTTCTACGAGCCGT
ACAGTATACGGAGAAGCTGCACAGGTCCTCGGCAAAGCGATTGCTTTTGCCATACATCGTGCTTAACAAAGCGTA
CTTGAAGACTGAGCCCAGTTTGAGATGTGGGCTTCAATATCAAAAGAAAACGCTGCGACCTAGATGTATTCTTGG
AGTCACCCAGAAAACCATCTGGACGCAGGGACCGAGCCCCCGAAAAGCAAAGGAGGATGGCAGCAAACAAGTGTC
TGTGCACAGGAGTCAGAGAGGGGGAACCGCCGTCCCAACATCACAAAAAGTGAAAGAAGCCGGAAGAGATTTTAC
CTATTTAATAGTGGTGCTTTTTGGAATCAGCATTACAGGTGGCTTGTTTTACACGATTTTCAAAGAACTTTTTTC
TTCATCCAGTCCTAGCAAGATATATGGGAGAGCCTTAGAAAAATGCAGATCACATCCTGAGGTGATCGGTGTCTT
TGGTGAGTCTGTTAAAGGCTATGGGGAGGTGACAAGGCGGGGTCGCCGGCAGCATGTCAGGTTCACTGAATATGT
AAAAGATGGGCTGAAACACACGTGTGTGAAATTCTACATTGAGGGCTCTGAGCCAGGGAAGCAAGGAACGGTGTA
TGCGCAAGTGAAAGAGAACCCAGGAAGTGGTGAATATGATTTTCGATATATATTTGTAGAAATTGAATCTTATCC
TAGAAGAACTATTATCATTGAAGATAATCGATCCCAAGATGATTAATAATCAAGCAAGCAGGTTTCTGATGGATG
TTGAATGGCGTGGACTCGCTACTCCGTTCTTCACAGCTGCCTTCCAGAATGTGTTCAAAAGAAAGACAAGAAGGA
GTGTATGGCTTATAAAGTGAATCTAATACAGTATTTGTTGCATTTAAACAAACTAGACATTTTCTTACGGAAAAA
TTATGAAATACAGCATATTTTATGTTCTCCCATTGACTCAATCATGACAATATTTCTGCTTTAACACCATCTTTC
GTGATTAGAAATGTTTGTTATTGGAAATGTTACACCATGTAAATAAAGGAAATAGATTTTAGTATTGTATTCATT
TTATATTATAGAACTGCATAATGTCTGCAGAATAAAATTAAAACTAACAAATAAAAAAAAAAAAAAAA

FIGURE 6992

MICTFLRAVQYTEKLHRSSAKRLLLPYIVLNKAYLKTEPSLRCGLQYQKKTLRPRCILGVTQKTIWTQGPSPRKA
KEDGSKQVSVHRSQRGGTAVPTSQKVKEAGRDFTYLIVVLFGISITGGLFYTIFKELFSSSSPSKIYGRALEKCR
SHPEVIGVFGESVKGYGEVTRRGRRQHVRFTEYVKDGLKHTCVKFYIEGSEPGKQGTVYAQVKENPGSGEYDFRY
IFVEIESYPRRTIIIEDNRSQDD

FIGURE 6993

GGCTCTTTTAAATGACCCCAGGCGTCGTGTATTGAATCCTAGACTCACGTCCGTCTCGCCGGCGCCCGAGCCAGT
CCGCGCGCACCGCGTCTGCGTCCCCGAAAGCCCCGCCCGCAAGGGCTGCCCTGCCTACCTGGTCTCCGACGTGCT
CGTCTGGAGGGCGGTGCGAGGGGCCGAGCCGACGAGATGTTCTTGCTGCCTCTTCCGGCTGCGGGGCGAGTAGTC
GTCCGACGTCTGGCCGTAGTACGTTCTGGGAGCCGGAGTCTCTCCACCGCAGACATGACGAAGGGCCTTGTTTTA
GGAATCTATTCCAAAGAAAAAGAAGATGATGTGCCACAGTTCACAAGTGCAGGAGAGAATTTTGATAAATTGTTA
GCTGGAAAGCTGAGAGAGACTTTGAACATATCTGGACCACCTCTGAAGGCAGGGAAGACTCGAACCTTTTATGGT
CTGCATCAGGACTTCCCCAGCGTGGTGCTAGTTGGCCTCGGCAAAAAGGCAGCTGGAATCGACGAACAGGAAAAC
TGGCATGAAGGCAAAGAAAACATCAGAGCTGCTGTTGCAGCGGGGTGCAGGCAGATTCAAGACCTGGAGCTCTCG
TCTGTGGAGGTGGATCCCTGTGGAGACGCTCAGGCTGCTGCGGAGGGAGCGGTGCTTGGTCTCTATGAATACGAT
GACCTAAAGCAAAAAAAGAAGATGGCTGTGTCGGCAAAGCTCTATGGAAGTGGGGATCAGGAGGCCTGGCAGAAA
GGAGTCCTGTTTGCTTCTGGGCAGAACTTGGCACGCCAATTGATGGAGACGCCAGCCAATGAGATGACGCCAACC
AGATTTGCCGAAATTATTGAGAAGAATCTCAAAAGTGCTAGTAGTAAAACCGAGGTCCATATCAGACCCAAGTCT
TGGATTGAGGAACAGGCAATGGGATCATTCCTCAGTGTGGCCAAAGGATCTGACGAGCCCCCAGTCTTCTTGGAA
ATTCACTACAAAGGCAGCCCCAATGCAAACGAACCACCCCTGGTGTTTGTTGGGAAAGGAATTACCTTTGACAGT
GGTGGTATCTCCATCAAGGCTTCTGCAAATATGGACCTCATGAGGGCTGACATGGGAGGAGCTGCAACTATATGC
TCAGCCATCGTGTCTGCTGCAAAGTTAAATTTGCCCATTAATATTATAGGTCTGGCCCCTCTTTGTGAAAATATG
CCCAGCGGCAAGGCCAACAAGCCGGGGGATGTTGTTAGAGCCAAAAACGGGAAGACCATCCAGGTTGATAACACT
GATGCTGAGGGGAGGCTCATACTGGCTGATGCGCTCTGTTACGCACACACGTTTAACCCGAAGGTCATCCTCAAT
GCCGCCACCTTAACAGGTGCCATGGATGTAGCTTTGGGATCAGGTGCCACTGGGGTCTTTACCAATTCATCCTGG
CTCTGGAACAAACTCTTCGAGGCCAGCATTGAAACAGGGGACCGTGTCTGGAGGATGCCTCTCTTCGAACATTAT
ACAAGACAGGTTGTAGATTGCCAGCTTGCTGATGTTAACAACATTGGAAAATACAGATCTGCAGGAGCATGTACA
GCTGCAGCATTCCTGAAAGAATTCGTAACTCATCCTAAGTGGGCACATTTAGACATAGCAGGCGTGATGACCAAC
AAAGATGAAGTTCCCTATCTACGGAAAGGCATGACTGGGAGGCCCACAAGGACTCTCATTGAGTTCTTACTTCGT
TTCAGTCAAGACAATGCTTAGTTCAGATACTCAAAAATGTCTTCACTCTGTCTTAAATTGGACAGTTGAACTTAA
AAGGTTTTTGAATAAATGGATGAAAATCTTTTAACGGAGACAAAGGATGGTATTTAAAAATGTAGAACACAATGA
AATTTGTATGCCTTGATTTTTTTTTCATTTCACACAAAGATTTATAAAGGTAAAGTTAATATCTTACTTGATAAG
GATTTTTAAGATACTCTATAAATGATTAAAATTTTTAGAACTTCCTAATCACTTTTCAGAGTATATGTTTTTCAT
TGAGAAGCAAAATTGTAACTCAGATTTGTGATGCTAGGAACATGAGCAAACTGAAAATTACTATGCACTTGTCAG
AAACAATAAATGCAACTTGTTGTGAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6994

MFLLPLPAAGRVVVRRLAVVRSGSRSLSTADMTKGLVLGIYSKEKEDDVPQFTSAGENFDKLLAGKLRETLNISG
PPLKAGKTRTFYGLHQDFPSVVLVGLGKKAAGIDEQENWHEGKENIRAAVAAGCRQIQDLELSSVEVDPCGDAQA
AAEGAVLGLYEYDDLKQKKKMAVSAKLYGSGDQEAWQKGVLFASGQNLARQLMETPANEMTPTRFAEIIEKNLKS
ASSKTEVHIRPKSWIEEQAMGSFLSVAKGSDEPPVFLEIHYKGSPNANEPPLVFVGKGITFDSGGISIKASANMD
LMRADMGGAATICSAIVSAAKLNLPINIIGLAPLCENMPSGKANKPGDVVRAKNGKTIQVDNTDAEGRLILADAL
CYAHTFNPKVILNAATLTGAMDVALGSGATGVFTNSSWLWNKLFEASIETGDRVWRMPLFEHYTRQVVDCQLADV
NNIGKYRSAGACTAAAFLKEFVTHPKWAHLDIAGVMTNKDEVPYLRKGMTGRPTRTLIEFLLRFSQDNA

FIGURE 6995A

GCTAGTGGAAGTTACTGCCGCGCCACCGAGTCCGGACCGGAGACTTTGGGGCCTAACTAGTGAATGGTAGTGTCT
AGAAAGGGTATGTCCCTTCAAGAGAGAGGTGCCAATGTCCAACCGGCCTAATAACAATCCAGGGGGGTCACTGCG
ACGTTCACAGAGGAACACTGCCGGGGCCCAACCACAAGACGACTCAATAGGAGGAAGAAGCTGCAGTTCATCATC
TGCTGTGATAGTTCCACAACCAGAGGATCCAGACAGAGCCAATACTTCAGAAAGACAAAAAACGGGGCAGGTGCC
TAAGAAAGACAATTCTCGAGGAGTGAAGCGCAGTGCTAGTCCAGACTACAACAGGACCAATTCTCCTAGCTCTGC
AAAAAAACCAAAAGCACTTCAGCATACTGAATCTCCCTCAGAAACAAATAAGCCACATAGTAAGTCAAAGAAGAG
ACATTTAGACCAGGAGCAACAACTGAAATCTGCACAATCACCATCAACAAGCAAGGCTCATACCAGGAAGAGTGG
GGCCACTGGCGGTTCACGGAGTCAGAAAAGAAAAAGGACAGAGAGTTCTTGTGTAAAGAGTGGCTCCGGGTCTGA
ATCAACTGGTGCAGAAGAGAGATCTGCGAAACCTACCAAGCTGGCTTCAAAATCAGCCACCTCAGCCAAAGCTGG
GTGTAGCACCATCACTGATTCTTCTTCTGCTGCCTCTACTTCCTCCTCGTCTTCTGCTGTAGCCTCGGCCTCCTC
CACTGTACCACCAGGTGCCAGAGTGAAACAAGGAAAAGATCAGAACAAGGCCAGGCGTTCCCGTTCAGCGTCCAG
TCCCAGCCCCAGAAGAAGTAGCAGGGAAAAGGAACAGAGTAAAACTGGTGGCTCTTCAAAATTTGATTGGGCTGC
TCGTTTCAGCCCTAAAGTTAGCCTTCCTAAAACAAAACTGTCTCTTCCAGGGTCTTCTAAGTCAGAGACATCAAA
ACCTGGACCTTCTGGATTACAGGCCAAATTAGCAAGTTTAAGAAAATCTACGAAGAAACGCAGTGAGTCTCCACC
TGCTGAGCTCCCCAGTTTGAGGCGGAGCACACGCCAAAAGACCACGGGCTCCTGTGCTAGTACCAGTCGGCGAGG
CTCTGGCCTGGGCAAAAGAGGAGCAGCTGAAGCTCGTCGACAGGAGAAAATGGCAGACCCTGAAAGCAACCAGGA
GGCAGTAAATTCTTCAGCTGCTCGGACAGATGAAGCTCCCCAAGGAGCTGCAGGGGCTGTTGGCATGACCACCTC
TGGGGAGAGTGAATCAGATGATTCCGAGATGGGACGTTTGCAAGCTTTGTTAGAGGCAAGGGGTCTTCCCCCTCA
CCTATTTGGTCCTCTTGGTCCTCGGATGTCACAGCTTTTCCATAGAACAATTGGAAGTGGAGCTAGTTCTAAGGC
CCAGCAGCTACTACAAGGATTGCAAGCCAGTGATGAAAGTCAACAGCTTCAGGCAGTTATTGAGATGTGTCAGTT
ACTGGTCATGGGAAATGAGGAGACACTGGGAGGGTTTCCTGTCAAGAGTGTTGTTCCAGCTTTGATTACGTTACT
TCAGATGGAGCACAATTTTGATATTATGAACCATGCTTGTCGAGCCTTAACATACATGATGGAAGCACTTCCTCG
ATCTTCTGCTGTTGTAGTAGATGCTATTCCTGTCTTTTTAGAAAAGCTGCAAGTTATTCAGTGTATTGATGTGGC
AGAGCAGGCCTTGACTGCCTTGGAGATGTTGTCACGGAGACATAGTAAAGCCATTCTACAGGCGGGTGGTTTGGC
AGACTGCTTGCTGTACCTAGAATTCTTCAGCATAAATGCCCAAAGAAATGCATTAGCAATTGCAGCTAATTGCTG
CCAGAGTATCACGCCAGATGAATTTCATTTTGTGGCAGATTCACTCCCATTGCTAACCCAAAGGCTAACACATCA
GGATAAAAAGTCAGTAGAAAGCACTTGCCTTTGTTTTGCACGCCTAGTGGACAACTTCCAGCATGAGGAGAATTT
ACTCCAGCAGGTTGCTTCCAAAGATCTGCTTACAAATGTTCAACAGCTGTTGGTAGTGACTCCACCCATTTTAAG
TTCTGGGATGTTTATAATGGTGGTTCGCATGTTTTCTCTGATGTGTTCCAACTGTCCAACTTTAGCTGTTCAACT
TATGAAACAAAACATTGCAGAAACGCTTCACTTTCTCCTGTGTGGTGCCTCCAATGGAAGTTGTCAGGAACAGAT
TGATCTTGTTCCACGAAGCCCTCAAGAGTTGTATGAACTGACATCTCTGATTTGTGAACTTATGCCATGTTTACC
AAAAGAAGGCATTTTTGCAGTTGATACCATGTTGAAGAAGGGAAATGCACAGAACACAGATGGTGCGATATGGCA
GTGGCGTGATGATCGGGGCCTCTGGCATCCATATAACAGGATTGACAGCCGGATCATTGAGCAAATCAATGAGGA
CACGGGAACAGCACGTGCCATTCAGAGAAAACCTAACCCGTTAGCCAATAGTAACACTAGTGGATATTCAGAGTC
AAAGAAGGATGATGCTCGAGCACAGCTTATGAAAGAGGATCCGGAACTGGCTAAGTCTTTTATTAAGACATTATT
TGGTGTTCTTTATGAAGTGTATAGTTCCTCAGCAGGACCTGCGGTCAGACATAAGTGCCTTAGAGCAATTCTTAG
GATAATTTATTTTGCGGATGCTGAACTTCTGAAGGATGTTCTGAAAAATCATGCTGTTTCAAGTCACATTGCTTC
CATGCTGTCAAGCCAAGACCTGAAGATAGTAGTGGGAGCACTTCAGATGGCAGAAATTTTAATGCAGAAGTTACC
TGATATTTTTAGTGTTTACTTCAGAAGAGAAGGTGTAATGCATCAAGTAAAACACTTAGCAGAATCAGAGTCTTT
GTTGACAAGTCCACCAAAGGCATGTACGAATGGATCGGGATCCATGGGATCCACAACTTCAGTCAGCAGTGGGAC
AGCCACAGCTGCCACTCATGCTGCAGCTGACTTGGGATCACCCAGCTTGCAGCACAGCAGGGATGATTCTTTAGA
TCTCAGCCCTCAAGGTCGATTAAGTGATGTTCTAAAGAGAAAACGACTGCCAAAACGAGGGCCAAGAAGGCCAAA
GTACTCACCTCCAAGAGATGATGACAAAGTAGACAATCAAGCTAAAAGCCCCACCACTACTCAGTCACCTAAATC
TTCTTTCCTGGCAAGCTTGAATCCAAAAACATGGGGAAGGTTAAGTACACAGTCCAACAGCAACAACATTGAGCC
AGCACGGACTGCGGGAGGTAGTGGCCTTGCCAGGGCTGCCTCAAAGGATACCATCTCCAATAATAGAGAAAAAAT
TAAAGGTTGGATTAAGGAGCAGGCACATAAATTTGTAGAACGTTATTTCAGTTCTGAGAATATGGATGGAAGCAA
CCCTGCATTGAATGTCCTTCAGAGACTTTGTGCTGCAACCGAACAACTCAACCTCCAGGTGGATGGTGGAGCTGA
GTGCCTTGTAGAAATCCGTAGCATAGTCTCAGAGTCAGATGTTTCATCATTTGAAATCCAACATAGTGGATTTGT

FIGURE 6995B

GAAGCAGCTGTTGCTTTATTTGACATCTAAAAGTGAAAAGGATGCTGTGAGCAGAGAGATCAGATTAAAGCGATT
TCTTCATGTATTTTTTTCTTCTCCACTTCCTGGAGAAGAGCCCATTGGAAGAGTGGAACCAGTGGGTAATGCACC
TTTGTTGGCATTAGTTCACAAGATGAACAACTGCCTCAGCCAGATGGAACAATTTCCAGTCAAAGTACATGATTT
CCCTAGTGGAAATGGGACAGGAGGCAGCTTTTCTCTCAACAGAGGATCACAGGCTTTAAAATTTTTCAACACACA
TCAATTAAAATGCCAGTTACAAAGGCATCCAGACTGTGCAAATGTGAAGCAGTGGAAGGGTGGACCTGTCAAGAT
TGACCCTCTGGCTTTGGTACAAGCCATCGAGAGATACCTTGTAGTTAGAGGGTATGGAAGAGTAAGAGAAGATGA
TGAAGACAGCGATGACGATGGATCAGATGAGGAAATAGATGAGTCTCTGGCTGCTCAGTTCCTAAATTCAGGAAA
TGTAAGACACAGGCTGCAGTTTTATATTGGAGAACATTTGCTGCCGTATAACATGACTGTGTATCAGGCAGTACG
GCAGTTTAGTATACAGGCTGAAGATGAAAGAGAATCCACAGATGATGAGAGCAATCCTCTAGGCAGAGCTGGTAT
TTGGACAAAGACTCATACAATATGGTATAAACCTGTGAGAGAGGATGAAGAAAGTAATAAAGATTGTGTTGGTGG
TAAAAGAGGAAGAGCCCAAACAGCTCCAACGAAAACTTCCCCTAGAAATGCAAAAAAGCATGATGAGTTATGGCA
CGATGGAGTGTGCCCATCAGTATCAAATCCTTTAGAAGTTTACCTCATTCCCACACCACCTGAAAATATAACATT
TGAAGACCCGTCATTAGATGTGATCCTTCTTTTAAGAGTTTTACATGCTATCAGTCGATACTGGTATTACTTGTA
TGATAATGCAATGTGCAAGGAAATTATTCCAACTAGTGAATTTATTAACAGTAAGTTAACAGCAAAAGCAAATAG
GCAACTTCAAGATCCTTTAGTAATCATGACAGGAAACATCCCAACATGGCTTACTGAGCTAGGAAAAACCTGCCC
ATTTTTCTTTCCTTTTGATACCCGGCAAATGCTTTTTTATGTAACTGCATTTGATCGGGACCGAGCAATGCAAAG
ATTACTTGATACCAACCCAGAAATCAACCAGTCTGATTCTCAAGATAGCAGAGTTGCACCTAGATTGGATAGAAA
AAAACGTACTGTGAACCGAGAGGAGCTGCTGAAACAGGCGGAGTCTGTGATGCAGGACCTCGGCAGCTCACGGGC
CATGTTAGAAATCCAGTATGAAAATGAGGTTGGTACAGGTCTTGGGCCTACACTGGAGTTTTATGCGCTTGTATC
TCAGGAACTACAGAGAGCTGACTTGGGTCTTTGGAGAGGTGAAGAAGTAACTCTTAGCAATCCAAAAGGGAGCCA
AGAAGGGACCAAGTATATTCAAAACCTCCAGGGCCTGTTTGCGCTTCCCTTTGGTAGGACAGCAAAGCCAGCTCA
TATCGCAAAGGTTAAGATGAAGTTTCGCTTCTTAGGAAAATTAATGGCCAAGGCTATCATGGATTTCAGATTGGT
GGACCTTCCCCTTGGCTTACCCTTTTATAAATGGATGCTACGGCAAGAAACTTCACTGACATCACACGATTTGTT
TGACATCGACCCAGTTGTAGCCAGATCAGTTTATCACCTAGAAGACATTGTCAGACAGAAGAAAAGACTTGAACA
AGATAAATCCCAGACCAAAGAGAGTCTACAGTATGCATTAGAAACCTTGACTATGAATGGCTGCTCAGTTGAAGA
TCTAGGACTGGATTTCACTCTGCCAGGGTTTCCCAATATCGAACTGAAGAAAGGAGGGAAGGATATACCAGTCAC
TATCCACAATTTAGAGGAGTATCTAAGACTGGTTATATTCTGGGCACTAAATGAAGGCGTTTCTAGGCAATTTGA
TTCGTTCAGAGATGGATTTGAATCAGTCTTCCCACTCAGTCATCTTCAGTACTTCTACCCGGAGGAACTGGATCA
GCTCCTTTGTGGCAGTAAAGCAGACACTTGGGATGCAAAGACACTGATGGAATGCTGTAGGCCTGATCATGGTTA
TACTCATGACAGTCGGGCTGTGAAGTTTTTGTTTGAGATTCTCAGTAGTTTTGATAATGAGCAGCAGAGGTTATT
TCTCCAGTTTGTGACTGGTAGCCCAAGATTGCCTGTTGGAGGATTCCGGAGTTTGAATCCACCTTTGACAATTGT
CCGAAAGACGTTTGAATCAACAGAAAACCCAGATGACTTCTTGCCCTCTGTAATGACTTGTGTGAACTATCTTAA
GTTGCCGGACTATTCAAGCATTGAGATAATGCGTGAAAAACTGTTGATAGCAGCAAGAGAAGGGCAGCAGTCGTT
CCATCTTTCC**TGA**TTATAGCAAGAAATGCAGTGTCTGCCTGTTACAGCAAAAGAAACAAATCATGATTTCTTTTC
TAATGTTATCACCTGAGTCAAGGAAACATGTTACGCCTTCTTGTTGTAGGAAAAACGGCTTGCAGATTATAAAGA
GACATTTGGTTGATATTCATTAATGGCCCCATGGACTTAAAGTGATCAGGCCCTAAAACGTTGTTGTGATGAGGT
TTCTTTAGCAAGTTCTTGTTTAAATTATCATTTATTTGATGAGTGAAGTTTTTAACATGCTTTGCTGTGTGAAAT
TTAAAAAAGGGATGTTTTTCCAGGCTGGAACAATAAATGTGGCTGTGCAGTTT

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FIGURE 6996

MSNRPNNNPGGSLRRSQRNTAGAQPQDDSIGGRSCSSSSAVIVPQPEDPDRANTSERQKTGQVPKKDNSRGVKRS
ASPDYNRTNSPSSAKKPKALQHTESPSETNKPHSKSKKRHLDQEQQLKSAQSPSTSKAHTRKSGATGGSRSQKRK
RTESSCVKSGSGSESTGAEERSAKPTKLASKSATSAKAGCSTITDSSSAASTSSSSSAVASASSTVPPGARVKQG
KDQNKARRSRSASSPSPRRSSREKEQSKTGGSSKFDWAARFSPKVSLPKTKLSLPGSSKSETSKPGPSGLQAKLA
SLRKSTKKRSESPPAELPSLRRSTRQKTTGSCASTSRRGSGLGKRGAAEARRQEKMADPESNQEAVNSSAARTDE
APQGAAGAVGMTTSGESESDDSEMGRLQALLEARGLPPHLFGPLGPRMSQLFHRTIGSGASSKAQQLLQGLQASD
ESQQLQAVIEMCQLLVMGNEETLGGFPVKSVVPALITLLQMEHNFDIMNHACRALTYMMEALPRSSAVVVDAIPV
FLEKLQVIQCIDVAEQALTALEMLSRRHSKAILQAGGLADCLLYLEFFSINAQRNALAIAANCCQSITPDEFHFV
ADSLPLLTQRLTHQDKKSVESTCLCFARLVDNFQHEENLLQQVASKDLLTNVQQLLVVTPPILSSGMFIMVVRMF
SLMCSNCPTLAVQLMKQNIAETLHFLLCGASNGSCQEQIDLVPRSPQELYELTSLICELMPCLPKEGIFAVDTML
KKGNAQNTDGAIWQWRDDRGLWHPYNRIDSRIIEQINEDTGTARAIQRKPNPLANSNTSGYSESKKDDARAQLMK
EDPELAKSFIKTLFGVLYEVYSSSAGPAVRHKCLRAILRIIYFADAELLKDVLKNHAVSSHIASMLSSQDLKIVV
GALQMAEILMQKLPDIFSVYFRREGVMHQVKHLAESESLLTSPPKACTNGSGSMGSTTSVSSGTATAATHAAADL
GSPSLQHSRDDSLDLSPQGRLSDVLKRKRLPKRGPRRPKYSPPRDDDKVDNQAKSPTTTQSPKSSFLASLNPKTW
GRLSTQSNSNNIEPARTAGGSGLARAASKDTISNNREKIKGWIKEQAHKFVERYFSSENMDGSNPALNVLQRLCA
ATEQLNLQVDGGAECLVEIRSIVSESDVSSFEIQHSGFVKQLLLYLTSKSEKDAVSREIRLKRFLHVFFSSPLPG
EEPIGRVEPVGNAPLLALVHKMNNCLSQMEQFPVKVHDFPSGNGTGGSFSLNRGSQALKFFNTHQLKCQLQRHPD
CANVKQWKGGPVKIDPLALVQAIERYLVVRGYGRVREDDEDSDDDGSDEEIDESLAAQFLNSGNVRHRLQFYIGE
HLLPYNMTVYQAVRQFSIQAEDERESTDDESNPLGRAGIWTKTHTIWYKPVREDEESNKDCVGGKRGRAQTAPTK
TSPRNAKKHDELWHDGVCPSVSNPLEVYLIPTPPENITFEDPSLDVILLLRVLHAISRYWYYLYDNAMCKEIIPT
SEFINSKLTAKANRQLQDPLVIMTGNIPTWLTELGKTCPFFFPFDTRQMLFYVTAFDRDRAMQRLLDTNPEINQS
DSQDSRVAPRLDRKKRTVNREELLKQAESVMQDLGSSRAMLEIQYENEVGTGLGPTLEFYALVSQELQRADLGLW
RGEEVTLSNPKGSQEGTKYIQNLQGLFALPFGRTAKPAHIAKVKMKFRFLGKLMAKAIMDFRLVDLPLGLPFYKW
MLRQETSLTSHDLFDIDPVVARSVYHLEDIVRQKKRLEQDKSQTKESLQYALETLTMNGCSVEDLGLDFTLPGFP
NIELKKGGKDIPVTIHNLEEYLRLVIFWALNEGVSRQFDSFRDGFESVFPLSHLQYFYPEELDQLLCGSKADTWD
AKTLMECCRPDHGYTHDSRAVKFLFEILSSFDNEQQRLFLQFVTGSPRLPVGGFRSLNPPLTIVRKTFESTENPD
DFLPSVMTCVNYLKLPDYSSIEIMREKLLIAAREGQQSFHLS

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FIGURE 6997

CTCGATGTAGAGGGGTTGGTAGCAGACAGGTGGTTACATTAGAATAGTCACACAAACTGTTCAGTGTTGCAGGAA
CCTTTTCTTGGGGGTGGGGGAGTTTCCCTTTTCTAAAAATGCAATGCACTAAAACTATTTTAAGAATGTAGTTAA
TTCTGCTTATTCATAAAGTGGGCATCTTCTGTGTTTTAGGTGTAATATCGAAGTCCTGGCTTTTCTCGTTTTCTC
ACTTGCTCTCTTGTTCTCTGTTTTTTTAAACCAATTTTACTTTATGAATATATTCATGACATTTGTAATAAATGT
CTTGAGAAAGAATTTGTTTCATGGCTTCATGGTCATCACTCAAGCTCCCGTAAGGATATTACCGTCTCAGGAAAG
GATCAGGACTCCATGTCACAGTCCTGCCATCTTACTTTCCTCTTGTCGAGTTCTGAGTGGAAATAACTGCATTAT
GGCTGCTTTAACCTCAGTCATCAAAAGAAACTTGCTGTTTTTTAGGCTTGATCTTTTTCCTTTGTGGTTAATTTT
CCTGTATATTGTGAAAATGGGGGATTTTCCCTCTGCTCCCACCCACCTAAACACAGCAGCCATTTGTACCTGTTT
GCTTCCCATCCCACTTGGCACCCACTCTGACCTCTTGTCAGTTTCCTGTTCCTGGTTCCATCTTTTTGAAAAAGG
CCCTCCTTTGAGCTACAAACATCTGGTAAGACAAGTACATCCACTCATGAATGCAGACACAGCAGCTGGTGGTTT
TGTGTATACCTGTAAAGACAAGCTGAGAGGCTTACTTTTTGGGGAAGTAAAAGAAGATGGAAATGGATGTTTCAT
TTGTATGAGTTTGGAGCAGTGCTGAAGGCCAAAGCCGCCTACTGGTTTGTAGTTAACCTAGAGAAGGTTGAAAAA
TTAATCCTACCTTTAAAGGGATTTGAGGTAGGCTGGATTCCATCGCCACAGGACTTTAGTTAGAATTAAATTCCT
GCTTGTAATTTATATCCATGTTTAGGCTTTTCATAAGATGAAACATGCCACAGTGAACACACTCGTGTACATATC
AAGAGAAGAAGGAAAGGCACAGGTGGAGAACAGTAAAAGGTGGGCAGATGTCTTTGAAGAAATGCTCAATGTCTG
ATGCTAAGTGGGAGAAGGCAGAGAACAAAGGATGTGGCATAATGGTCTTAACATTATCCAAAGACTTGAAGCTCC
ATGTCTGTAAGTCAAATGTTACACAAAAAAAAATGCAAATGGTGTTTCATTGGAATTACCAAGTGCTTAGAACTT
GCTGGCTTTCCCATAGGTGGTAAAGGGGTCTGAGCTCACACCGAGTTGTGCTTGGCTTGCTTGTGCAGCTCCAGG
CACCCGGTGGGCACTCTGGTGGTGTTTGTGGTGAACTGAATTGAATCCATTGTTGGGCTTAAGTTACTGAAATTG
GAACACCCTTTGTCCTTCTCGGCGGGGGCTTCCTGGTCTGTGCTTTACTTGGCTTTTTTCCTTCCCGTCTTAGCC
TCACCCCCTTGTCAACCAGATTGAGTTGCTATAGCTTGATGCAGGGACCCAGTGAAGTTTCTCCGTTAAAGATTG
GGAGTCGTCGAAATGTTTAGATTCTTTTAGGAAAGGAATTATTTTCCCCCCTTTTACAGGGTAGTAACTTCTCCA
CAGAAGTGCCAATATGGCAAAATTACACAAGAAAACAGTATTGCAATGACACCATTACATAAGGAACATTGAACT
GTTAGAGGAGTGCTCTTCCAAACAAAACAAAAATGTCTCTAGGTTTAGTCAGAGCTTTCACAAGTAATAACCTTT
CTGTATTAAAATCAGAGTAACCCTTTCTGTATTGAGTGCAGTGTTTTTTACTCTTTTCTCATGCACATGTTACGT
TGGAGAAAATGTTTACAAAAATGGTTTTGTTACACTAATGCGCACCACATATTTATGGTATATTTTAAGTGACTT
TTTATGGGTTATTTAGGTTTTCGTCTTAGTTGTAGCACACTTACCCTAATTTTGCCAATTATTAATTTGCTAAAT
AGTAATACAAATGACAACTGCATTAAATTTACTAATTATAAAAGCTGCAAGCAGACTGGTGGCAAGTACACAGCC
CTTTTTTTTGCAGTGCTAACTTGTCTACTGTGTATTATGAAAATTACTGTTGTCCCCCCCACCCTTTTTTCCTTAA
ATAAAGTAAAAATGACACCCTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 6998

MNIFMTFVINVLRKNLFHGFMVITQAPVRILPSQERIRTPCHSPAILLSSCRVLSGNNCIMAALTSVIKRNLLFF
RLDLFPLWLIFLYIVKMGDFPSAPTHLNTAAICTCLLPIPLGTHSDLLSVSCSWFHLFEKGPPLSYKHLVRQVHP
LMNADTAAGGFVYTCKDKLRGLLFGEVKEDGNGCFICMSLEQC

FIGURE 6999A

ATCAATCAAAGGTGTTCCTTGATGATCTCCCTGAGGATTTTAGTGATGCTTTAGATGAATATAACATGAAAATTA
TGGAGGACTTTACCACTTTCCTACGAATTGTTTCCAAACTGGCTGATATGAATCAGGAATATCAACTCCCATTGT
CAAAAATCAAATTCACAGGTAAAGAATGTGAAGACTCTCAACTCGTATCTCATTTGATGAGCTGCAAGGAAGGAA
GAGTAGCAATTTCACCATTTGTTTGTCTGTCTGGGAACTTTGATGATGATTTGCTTCGACTAGAAACTCCAAACC
ATGTTACTCTAGGCACAATCGGTGTCAATCGCTCTCAGGCTCCAGTGCTGTTGTCACAGAAATTTGATAACCGAG
GAAGGAAAATGTCGCTTAATGCCTATGCACTGGATTTCTACAAACATGGTTCCTTGATAGGATTAGTCCAGGATA
ACAGGATGAATGAAGGAGATGCTTATTATTTGTTGAAGGATTTTGCACTCACCATTAAATCTATCAGGTGTGTTA
TATATTTAAATATTGATTTTAGATTTTTTAATAATTTATTTATAATTTGAAAAATGTTGAGCTGTTACTATAAGC
CAGGTACATGAAGGTGCCATTAAGCTTCTTCTGTGCTATGCATTTCAACTCCCCAAAGGCTCTGCAGAATGTCTG
TTCAACACGTGTTGTATTATTTCTATAACAGAATTAATTCCAATGTCTAGTTGAGATGAAGTTTCATCCAGACTA
GAGTCTCAGCCCCAGGCATCATGCACTGACAGGCAGCAATATTCAAAAGCTTCATTGACTCCTCGATCCTGGTAT
TCTCAATTGCCACAAGCAGTGTATGTCAAAGACATGGGACACGATATTTCAGAGGGCTCCTTAGGGTTCCATCCG
GTCTCTAGTTTATATTCACTTACATACTTTGAATTTTGTGTTTTCTCTGATGTTTTCTCCAGGCTCCGTCTGACT
CTGATCTTTCATATTGGCCTCCTATTTTCACCTTTAACAAAACCTAGTGGGGTCCCAAGCAACACCAAACTTTAT
GTGGGTACCCCATTCTTAGGCTTCATTGACCATCTACTGTTGCTTAGTTGCATGTCCATCTTTCTTTTTCTTTTC
TTTTTTTTTTGAGACAGAATTTTGCCCTTGTTGCCCAGGCTGGAGTGCAATGGTATGATCTCGGCTCACCACAAC
CTCTGCCTCCTGGGTTCAAGCAGTTCTCCTGCCTCAATCTCCTGAGTAGCTGGGATTACAGGCATGTGTCACCAT
GCCCGGCTAATATTGTATTTTTAGTAGCGAGGGGGTTTCTCCATGTTGGTTAGTGTGGTCTCGAACTCCTGACCT
CAGGTGATCTGCCTGCCTTGCCCTCCCAAAGTGCTGCGGTTACAGGCATTAGCTGCCGCTCCTGGCCTAAATGTC
CATCTTTCTAAAGCCTTCAATCTGCATGCAACTCAATACTTTATAGGTGTTGCTTCGTCCTATCCCTTTTTATAT
ATTTAATTTGCCACAACTCTCTCCATTATTAGGTTCTTGCTAATCAAGTCTCTTTTTATATCTTGGATCTGAGCA
GAATCGGCCTGTTTGGACTTTTTATAACAGAGTAAAACTTTTGGGAGCAGAAGGAAACTGCTTTGTCCACTTGGA
ATATCTCTAGATAGGGTATTCCTTGAGTGGCTCATAGTTACTGAAGTTATTATCTCCAGAGCAGCCCAAGAAACT
CCACAGACTTGGAAGCTGTCTCAAAAACTTGGGCAAGGAAATCAATCAATCAATCATTCACACATTCATCCAAGA
AGTATTGAAGCATTGTTGGTATGAGACACACTTCCTAAGCATTTGAGCTATAAAGGTTCATAATTTTTTTTTTTT
TTTTGGAGACGGAGAGTCACGCTCTGTCACCCAGGCTGGAGTGAAGTGTTGCGATCTCGGCTCACTGCAACCTCA
CCTCCCAGGTTCAAGCAATTCTCCTGCCTAAGCCTCCCAGGTAGCTGGGACTACAGGTGTATACCACCATGCCTG
GCTAATTTTTTTTTTTTTTTTGGTATTTTAGTACAGATGGGATTTCACCATGCTGCCCAGGCTGGTCTCAAAATT
CCTGAGCTCAGGCAATCCACCCGCCTTGGCCTCCCAAAGTGCTAGGATTACAGGCAAGAACCACTGCGCCTGGCC
AAAGGATCATTAAATTGATATACCTGCTTTAAAAAAATTCTTACATGTGTAGTGAAAGAAGCTGACTTATAGACC
TTACAAACATGGTCAGAGCTATGATGGCAGATAAGGGAATGACTAATGTGACTTGCATTCAAAGAAAGAGTCTCA
AATGAGGTAATTTTTTGACTAAGCCTTAAATTATGGGGAAGAAGAAATAGTATTTTCAAAGTACAGAAATGAGAA
AGGGCCTGATGTGTCAGGGATAGACTCCAAGCTCACTATGTCAACATGGAGATTATGGGCATTTGACAGAGATGG
GGGAAGATGCTGGGTTGTTGTAAGAGACTTTAAATGGAATTTGGATCTATATCAGGAAAGGTCTTTATGTTAACA
TTAAGAAGTTTGGGCTTCATCTTTTGAGCAACGTGTAGACAGTGCATAAGCCTGAGGGGAGCATGAGCATGCGGA
TTATATATGTGGCAGAAATATGTAGGTGCAAAGGCTGTAACAGTCATGCAGGTGAAAATGAGTGAAGGTCTGAAT
TAAGGGAATTGAAATATGATGCAGAAGAGTGATCAGAAAAATATTTACGAGGTAAAATTCAAGAAATTGGTAAAA
AAATTTATGCAGTTGGTAAAGATGACCAAAGTTCCTATTTTTGTTAAGGATGTATAGGAAACAAGGATGAGCATG
ACATTTGGGGATGAGAATGAAAAATAGTGAGCTAGAATTTATACACATCACATTATATCTGGGAGATATCAATCA
GGAGGAAATGTTCAGTAGTCACAATGATAAGTCTGTAACTCAGAAGGAAATTTGGTGTTGTAGAGACAGAACTGA
TCAATTTTTGTGGTAGGTCAGTGATGACACTCGAAAATAACTGGAACTCTAGTGGAAACAAGGTAGGGGCAAATA
ATAAAAGGCTGATAAGATGTCAGATCATGACAGTTTTCAGCCCTTGATCAGTCCAGCTGTACTGTTCATTCTTGG
ATTTCTTCTCTCCTTTTTTGTTACCTGTACATTAGTTTCTTAATGCTGCTGCAACAAATTACCACAAACCTAGTG
GCTTAAACCAACACAAATTTATTATTTTACAATTCTGGAGGTCAGAAGTCCAAAATGTGTCTTCTTGGGCTCAAT
CCAGTTGTCAGCAGGGCTGCATTTCTTTGTAAAGGCTCTTAAGGGACAATCTACTTTTATTGCCTTTTCCAACTT
TTAGAGGCTGCCGGCATTCCTTGGCTTGTGGCTCCCTTTCATCTCCAAAGCCAGCAATGGTTCGTAGACTCACAC
TGCATCATTCTGACTCTCTCCTGCCTCACTCTTCCACTTACAGGGACCTTTGAGATCACACTGAACCTGCCCAGA
TAATCCAGGATTATTTTCCTATCTCAAGGTCAGCTGATTCGCAACTTTAATTCGCACTGCAGCCATAATTCATTC

FIGURE 6999B

CCCTTTGCCATGTAACCTGACCTATTCATCGGTTTCTGGGGAATATATGATATGGACATCTTTGCAGGGCCATTA
TTCTGCTTACCATATCTTGTTGTCCTTATCTTTTTACACATCTAGGTAAAGAAAGCAATATTTTCCTCTTCGTAG
ATGTAGCTGCCTGTGGGTTTCAGTATACACTGGACACTAGCATAAATAACACAAAATGACTCCACAAGAGATATG
TAGAGGAAAGAAAAGGAATTTGCGTTGCACTTTTGAAGGGAGAAGGGATCAAGTTATGTGGAATTTGATGGCTTT
TCAGACTCTCTTGGTAATAGTCATGGAGAAGAATTGCATGGGGTTGTTTTGTTATCTTTTCTTAAATTTTTTATA
CAAGATTTTTTAGGAGAAATATGTTTCTTATCATTATTCCTCATATTTTGCTAACATAATTTCATCATCTGATGG
GATTTCCTTACTTCTGCCTAACCAAGGAAAGCCTTTCTTATAATATTCAATCTCACTAAAGTGGATCCTATATTT
TTTTCCCCATTTCCAGTGTTTCCTTGCGTGAGCTATGTGAAAATGAAGACGACAACGTTGTCTTAGCCTTTGAAC
AACTGAGTACAACTTTTTGGGAAAAGTTAAACAAAGTCTAAAAACAAAGTCTATGCAAACCACTTAAAAATAATT
CCATAGTAGTTTTTCAGGTCACGTTTTTGATTCTTATGCTTCTTGCCAGAAATACATTATGATAAAGTGGAAATA
CATTACGATGAAGTGGAAAGAGCAAACACTTTGGAATCAAACAGAGTTGCAATCAAACCTGCCATGTTCTGTCAT
GAATACTCACAAATTATTTAGTATACTGAATCTTGGTTTCTTTTTATAACTGAGTAATAATGGTTACATCTCAGG
TAGTTTGAGGATTGACTAAAAAAATGCGAGAATGTTGTATGTGACTGAATAACAATTTTTACTCTGCGAAGCCAA
AGTAAATATAATATTATCAGTAACTTTATCCCCAGTGTCAGTATTTATAAAATGTTTATTAAGGCTAGAAAAAAT
GAATACAATATCCTGAAGGTGAAATATATTCTCTTCAATTAGCATAAATATGATTTACATAAGTTAGCTATACAG
CTATTGAGATAGTACTTTCTAGTAAACTTAAACTACTTTTTAAACATACATTTTGTGATGATTTAACAAAAATAT
AGAGAATGATTTGCTTTATTGTAATTGTATATAAGTGACTGGAAAAGCACAAAGAAATAAAGTGGGTTCGATCTG
TTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAG

FIGURE 7000

AAGTCTCAGAGGCTGGAGAGCAGAGCACCAAGATCGTTCTGGCAGGAACAGCCAGTGGGAGGTTCCAGCTGAGCG
CTCCCCAGAGGTGAGCTGATCCCCAGCCACAGCACACAGGACCAGGCTGCGAGAACAGCATCATCAGCATCATGC
TATTACAATCCCAAACCATGGGGGTTTCTCACAGCTTTACACCAAAGGGCATCACTATCCCTCAAAGAGAGAAAC
CTGGACACATGTACCAAAACGAAGATTACCTGCAGAACGGGCTGCCAACAGAAACCACCGTTCTTGGGACTGTCC
AGATCCTGTGTTGCCTGTTGATTTCAAGTCTGGGGGCCATCTTGGTTTTTGCTCCCTACCCCTCCCACTTCAATC
CAGCAATTTCCACCACTTTGATGTCTGGGTACCCATTTTTAGGAGCTCTGTGTTTTGGCATTACTGGATCCCTCT
CAATTATCTCTGGAAAACAATCAACTAAGCCCTTTGACCTGAGCAGCTTGACCTCAAATGCAGTGAGTTCTGTTA
CTGCAGGAGCAGGCCTCTTCCTCCTTGCTGACAGCATGGTAGCCCTGAGGACTGCCTCTCAACATTGTGGCTCAG
AAATGGATTATCTATCCTCATTGCCTTATTCGGAGTACTATTATCCAATATATGAAATCAAAGATTGTCTCCTGA
CCAGTGTCAGTTTAACAGGTGTCCTAGTGGTGATGCTCATCTTCACTGTGCTGGAGCTCTTATTAGCTGCATACA
GTTCTGTCTTTTGGTGGAAACAGCTCTACTCCAACAACCCTGGGAGTTCATTTTCCTCGACCCAGTCACAAGATC
ATATCCAACAGGTCAAAAAGAGTTCTTCACGGTCTTGGATATAAGTAACTCTTGGCCTCAGAGGAAGGAAAAGCA
ACTCAACACTCATGGTCAAGTGTGATTAGACTTTCCTGAAATCTCTGCCATTTTAGATACTGTGAAACAAACTAA
AAAAAAAAAAGCTTTTGTTTTGTATTTGTTTACTATGAGTCGTTATTTAATTTCTCTTGAAAATAATTTCCTCAA
AGCCCAAGTCAATAAATGTTATCAGCCAGTCTTCCAAAATGGTCATAAACTTTATAAACTGCTTTGGGTAAACTG
AGCAGAAGGTGATACACAGAAGGGAAAATGTGCACTCATGCTAGTGTGAATTTGGTAAGTCGCGTGACTCTGCAG
GCTGTTTCTGTATTATTTTCACACTCATATTGCTTAAATATTACATATTAGGGATTG

FIGURE 7001

MLLQSQTMGVSHSFTPKGITIPQREKPGHMYQNEDYLQNGLPTETTVLGTVQILCCLLISSLGAILVFAPYPSHF
NPAISTTLMSGYPFLGALCFGITGSLSIISGKQSTKPFDLSSLTSNAVSSVTAGAGLFLLADSMVALRTASQHCG
SEMDYLSSLPYSEYYYPIYEIKDCLLTSVSLTGVLVVMLIFTVLELLLAAYSSVFWWKQLYSNNPGSSFSSTQSQ
DHIQQVKKSSSRSWI

FIGURE 7002A

GGCACGAGCTGTAGGAGCAGGGGCCTAGCAAGCGCCCAGCGGAGCGACCCCTGCCTGGCCGTGGCTAGCATGGCC
CCTACGCTGTTCCAGAAGCTCTTCAGCAAGAGGACCGGGCTGGGCGCGCCCGGCCGCGACGCCCGGGACCCAGAT
TGCGGGTTCAGTTGGCCTTTACCAGAGTTTGATCCAAGCCAGATTCGACTGATTGTATATCAAGACTGTGAAAGA
CGAGGGAGAAATGTTTTGTTTGACTCCAGTGTTAAGAGAAGAAATGAGGACATATCAGTATCGGACTTAAATACT
ATTTATTCTTATCTTCATGGAATGGAAATATTATCAAATCTCAGGGAACATCAGCTTAGATTAATGTCTGCAAGA
GCACGCTATGAGAGATACAGTGGCAATCAGGTTCTCTTTTGTTCAGAAACGATTGCCAGATGTTGGTATATCCTA
CTTTCTGGATCTGTGCTTGTGAAAGGCTCCATGGTCTTGCCTCCTTGCAGTTTTGGTAAGCAGTTTGGAGGAAAA
AGAGGATGTGATTGTCTTGTATTAGAGCCTTCAGAAATGATTGTGGTAGAGAATGCCAAAGATAATGAAGATAGT
ATTCTACAAAGAGAAATTCCTGCCAGACAATCCCGAAGAAGATTTCGGAAAATTAACTATAAAGGAGAGCGCCAA
ACCATTACTGATGATGTGGAGGTTAACAGCTATCTTTCTCTTCCAGCTGATCTTACCAAGATGCATCTCACAGAA
AACCCTCATCCACAGGTGACTCATGTGTCTTCTAGTCAGTCTGGTTGTAGCATTGCCAGTGACTCTGGAAGCAGC
AGTTTATCTGATATCTATCAGGCTACGGAGAGTGAGGTAGGAGATGTAGATTTGACACGTCTTCCAGAAGGACCT
GTTGATTCTGAGGATGACGAAGAGGAAGATGAAGAGATTGATCGAACAGATCCATTGCAGGGGCGAGATCTTGTT
CGAGAATGTCTTGAAAAAGAACCTGCAGACAAAACTGATGATGACATTGAACAATTGCTGGAGTTTATGCACCAG
CTCCCTGCATTTGCAAACATGACCATGTCTGTAAGGAGAGAACTCTGCTCAGTGATGATTTTTGAAGTGGTAGAG
CAGGCTGGAGCTATTATTCTTGAAGATGGGCAAGAGCTTGACTCATGGTATGTTATTTTAAACGGCACTGTGGAA
ATCAGTCATCCAGATGGAAAAGTTGAAAATTTGTTTATGGGAAATAGTTTTGGAATTACTCCCACTCTGGATAAG
CAGTACATGCATGGAATTGTCAGGACTAAAGTAGATGATTGTCAGTTTGTCTGCATAGCCCAGCAAGATTATTGG
AGAATTTTAAACCATGTGGAAAAAAATACCCATAAAGTTGAGGAAGAGGGAGAAATTGTTATGGTACATGAGCAT
CGGGAACTAGACCGGAGTGGAACCAGGAAAGGACACATTGTGATCAAGGCAACACCTGAGCGTCTCATAATGCAT
TTAATAGAAGAACATTCCATCGTGGATCCAACTTATATAGAAGATTTTCTATTAACTTACAGGACATTTCTTGAA
AGTCCTTTGGATGTTGGGATCAAACTATTGGAATGGTTTAAGATCGACAGCTTAAGAGATAAGGTGACACGGATT
GTATTATTATGGGTAAATAATCATTTTAATGATTTTGAAGGTGACCCTGCTATGACTCGATTTCTAGAGGAATTT
GAAAAAAATCTGGAAGATACAAAGATGAATGGTCATCTCCGGTTATTGAATATTGCCTGTGCTGCAAAGGCTAAG
TGGAGACAGGTTGTGCTGCAAAAGGCTTCCCGCGAGTCCCCTCTACAATTCAGCCTTAATGGAGGGAGTGAGAAG
GGATTTGGTATTTTTGTTGAAGGAGTAGAACCTGGTAGCAAAGCTGCTGATTCAGGACTGAAACGTGGTGATCAG
ATTATGGAAGTAAATGGACAAAACTTTGAGAATATTACATTTATGAAAGCCGTTGAAATTTTGAGGAATAATACT
CATCTTGCACTTACTGTGAAGACCAACATTTTTGTGTTCAAAGAGTTACTTTTTAGGACTGAACAAGAGAAATCT
GGTGTTCCTCATATTCCCAAAATTGCTGAAAAAAAAAGTAATCGCCATTCTATCCAGCATGTGCCAGGAGATATT
GAACAGACATCACAGGAGAAAGGAAGTAAGAAAGTTAAAGCAAATACTGTTTCAGGTGGAAGAAACAAAATCAGG
AAGATTTTGGATAAAACACGATTTAGTATCTTGCCTCCAAAGCTATTTAGTGATGGAGGCCTAAGCCAATCACAA
GATGACAGCATTGTGGGAACAAGGCACTGTAGGCATAGTCTGGCTATAATGCCCATCCCTGGAACACTCTCATCC
AGCAGCCCTGATCTCCTGCAGCCTACCACCAGTATGTTGGATTTTTCCAATCCTTCAGATATCCCTGATCAAGTT
ATAAGAGTTTTCAAAGTGGATCAGCAAAGTTGCTACATTATCATCAGTAAAGACACCACAGCTAAAGAAGTAGTT
TTTCATGCTGTTCATGAATTTGGTTTGACCGGTGCATCCGACACATATTCTCTCTGTGAAGTTTCTGTTACTCCT
GAGGGTGTCATAAAACAGAGAAGACTTCCAGATCAGTTCTCCAAATTAGCTGATAGAATTCAACTCAATGGAAGG
TATTACTTAAAAAATAACATGGAAACAGAAACCTTATGTTCAGATGAAGATGCTCAAGAACTAGTTAAGGAAAGC
CAGCTATCCATGCTGCAGCTCAGTACCATTGAGGTGGCCACCCAGCTGTCAATGAGGGACTTTGATTTGTTTCGT
AATATTGAACCGACTGAGTACATCGATGACCTTTTTAAGTTAAATTCCAAAACAGGAAATACTCATTTGAAGAGG
TTTGAGGACATTGTAAACCAAGAGACATTCTGGGTTGCCTCAGAAATTTTAACTGAAGCAAATCAGCTCAAACGA
ATGAAGATTATTAAGCATTTTATTAAAATTGCACTTCATTGTCGAGAATGTAAGAACTTCAATTCCATGTTTGCA
ATAATAAGTGGCTTGAACCTGGCATCTGTAGCAAGACTCAGAGGAACTTGGGAAAAGTTACCAAGCAAATACGAG
AAACATCTTCAAGATCTACAAGACATTTTTGATCCATCTAGAAACATGGCAAAGTATAGAAATATTCTTAGTAGT
CAAAGTATGCAGCCTCCAATTATTCCACTCTTCCCTGTTGTCAAGAAAGATATGACATTTCTACATGAAGGAAAT
GACTCCAAAGTAGATGGTTTAGTAAACTTTGAGAAGTTAAGAATGATTTCCAAGGAAATCCGCCAAGTTGTTCGA
ATGACTTCTGCTAACATGGACCCAGCTATGATGTTTCGACAGAGGTCACTGAGTCAAGGAAGCACAAATTCAAAC
ATGCTGGATGTTCAGGGAGGTGCTCACAAAAAAAGGGCACGCCGCAGCTCTCTGCTTAATGCCAAGAAGCTATAT
GAGGATGCCCAAATGGCAAGGAAGGTGAAGCAGTATCTTTCCAGTCTCGATGTAGAGACAGATGAGGAGAAGTTC

FIGURE 7002B

CAGATGATGTCATTACAGTGGGAGCCTGCATATGGTACCTTGACCAAGAATTTAAGTGAGAAAAGATCAGCCAAG
ATCATCTGAAATGTCTCCAGTGCCTATGAGGTCAGCTGGCCAAACAACTAAAGCCCACTTGCATCAACCCCACAG
AGTAAGCCAGGTGCTTCAGGTGCCAGCTGTTAATTTGCACCCCATCAGGAAGAAGGGACAAACAAAAGACCCTGC
ACTGAATACAAGTTTACCTCAGAAAGTTTTAGGAACAACTGAAGAAATAAGTGGTAAGAAGCATACAGAAGACAC
TATTTCTGTGGCGTCATCTTTACATTCTAGTCCTCCTGCATCTCCTCAAGGCTCCCCTCACAAAGGTTACACACT
TATTCCATCAGCTAAATCTGACAACTTGTCTGACTCCAGCCATAGTGAGATTTCTTCACGGTCCAGCATCGTGAG
CAATTGTTCTGTTGACTCCATGTCTGCAGCTCTACAGGATGAACGGTGTTCCTCTCAGGCCCTGGCAGTCCCTGA
ATCCACTGGGGCATTGGAAAAGACAGAGCACGCTTCAGGGATAGGAGATCATAGTCAACATGGCCCTGGGTGGAC
ACTCTTGAAGCCATCTCTAATCAAGTGTTTAGCTGTCTCATCGTCTGTGAGCAATGAAGAGATTTCTCAAGAGCA
TATCATTATAGAAGCAGCTGACAGTGGTCGTGGAAGTTGGACTTCGTGTTCAAGCAGCTCCCATGACAACTTCCA
AAGCCTTCCAAACCCAAAAAGCTGGGATTTTTTGAACTCTTACAGACATACCCATTTGGATGACCCCATTGCTGA
AGTTGAACCCACTGACTCTGAGCCCTATTCCTGTTCTAAAAGCTGCTCTAGAACTTGTGGGCAGTGTAAAGGAAG
CCTAGAGAGAAAGAGTTGGACCTCCTCCAGTTCTCTGTCTGACACGTATGAACCAAACTATGGGACAGTTAAACG
GAGAGTATTGGAGAGCACCCCAGCTGAGTCATCTGAAGGCTTGGACCCCAAGGATGCCACTGACCCAGTTTATAA
AACTGTCACTTCAAGTACAGAAAAGGGCTTGATTGTGTACTGTGTCACCTCACCCAAGAAGGACGATAGGTATAG
GGAGCCACCTCCCACTCCTCCAGGATATTTGGGGATTTCTTTAGCGGACCTAAAGGAAGGACCCCACACACACCT
AAAACCTCCAGATTATAGTGTGGCAGTGCAGAGGTCAAAGATGATGCATAACAGCCTCTCTAGACTGCCACCAGC
TTCTCTCAGTAGCAACCTCGTGGCCTGTGTTCCATCGAAGATTGTAACTCAGCCTCAGAGGCATAATTTGCAGCC
ATTCCATCCTAAACTAGGAGATGTGACTGATGCAGATAGCGAAGCAGATGAAAATGAACAAGTTTCAGCAGTCTA
GCCTTTGGATGACCTATTTGAAAACCACTGAAAGTCGTGGAGGAATGGGCAAGAACCACCTCATGATTCTGCAGG
CCATTGCTAACGAACAGCTCATTGCTACAACCAGTCCAGAGGTTTTATTCCCTCTACTCCGAGCAATGAAATAGA
CCTGAGTTATGCTTCCTTTCATTTAATTTCTGCAGATAAATAGTTTCCTGAGCAATGGATGCTATGCCTGGATAC
CAGTCTCCACTTTGCACGCCGGAACTGCCTTGGGACCACAGTTACAGAAAAAATGTAAACTCAGAGTGATCCTTG
TGTATATTGCTATAGATTTTTCTTTAACAAGCTATTTTAAAGATAATGGCATTATTATTTCCAAGCCATAGCTTG
GGCTGAAGGACAAATTGAAATTGTCTGCCAATACCAAGGATATTCTTGTATATTTGAAAAATAACTTATTATTTG
AATTGTTGTGGTTTTGTTTGTATTTGAGAGCTCTTGTTAGCTGATATTCATGTTTGAGGTCATAAAATTGTCTCT
GGTCTGACCAAACAGAAGTCATCTTTACAGAGGTGATATGCTTGATCTACACAGAGATGTGACTTGATCTGTAGC
ACCAATGCAATGTAGGTCTCAGTTTGAGAGAAATAGGAAGCCCTTTGCAGTTGAGGTGTTAGGAACCTGCTGGTC
ATGGTGTGGAAGGCCAAATGAAGCTGCCACAGGGTTTCTTGTCAGTCCTTTGGGAAATGGGAGGGAGTAGTTTGG
GGAGGAGGGTGGGAACCCTAATTTCCACAGAATGAAATTTTGATGTTAAATGACATGTATACAAATTCTTCCTTA
AGTGAAAGTTATGCTGCATCGAATTGTAACTGAAAGTATAGATCCAACAAATAGAGACTGGGTTCTAGAGAGTTC
TGGTCTATAGAAACCCAAAACTAAAATCTCTCATAACTCAAGTATGGAATACTTTTTTTAAAGAAATTCTTATCA
TGGGTGTTGTAATAATGAAGACGAATTTGACTTTATGCAGTGTTTTGCAGCATGCCTCCCCCACATCTCATAGCA
CCAGGTTGTGTCTGACCTGACATACCCTGCAGCTCTCAGCTGGCTGCAGTAACATTTTGTGGGAGAAAGAGGAGC
TGGAGTTACAGAAATGATTGTCTCTTGGTTCTCAGTTTTTAGCCCTTGAGAGGACATACTTTTCCAGCCTCATGG
GTATGGCACTCTTAATTAAAATTTCAGTGACTGTTTACTGGATGAGGCAGATTTTTCACATTTTTGCAAATTAAA
TATATTTTATATATATTAAGTTTAATTTTTTCAGTTTTTTTAATGTAAAAGCAAGTGAAATTTTAATAAACTTCT
GTAATTACCAAAAAAAAAAAAAAAAA

FIGURE 7003

MAPTLFQKLFSKRTGLGAPGRDARDPDCGFSWPLPEFDPSQIRLIVYQDCERRGRNVLFDSSVKRRNEDISVSDL
NTIYSYLHGMEILSNLREHQLRLMSARARYERYSGNQVLFCSETIARCWYILLSGSVLVKGSMVLPPCSFGKQFG
GKRGCDCLVLEPSEMIVVENAKDNEDSILQREIPARQSRRRFRKINYKGERQTITDDVEVNSYLSLPADLTKMHL
TENPHPQVTHVSSSQSGCSIASDSGSSSLSDIYQATESEVGDVDLTRLPEGPVDSEDDEEEDEEIDRTDPLQGRD
LVRECLEKEPADKTDDDIEQLLEFMHQLPAFANMTMSVRRELCSVMIFEVVEQAGAIILEDGQELDSWYVILNGT
VEISHPDGKVENLFMGNSFGITPTLDKQYMHGIVRTKVDDCQFVCIAQQDYWRILNHVEKNTHKVEEEGEIVMVH
EHRELDRSGTRKGHIVIKATPERLIMHLIEEHSIVDPTYIEDFLLTYRTFLESPLDVGIKLLEWFKIDSLRDKVT
RIVLLWVNNHFNDFEGDPAMTRFLEEFEKNLEDTKMNGHLRLLNIACAAKAKWRQVVLQKASRESPLQFSLNGGS
EKGFGIFVEGVEPGSKAADSGLKRGDQIMEVNGQNFENITFMKAVEILRNNTHLALTVKTNIFVFKELLFRTEQE
KSGVPHIPKIAEKKSNRHSIQHVPGDIEQTSQEKGSKKVKANTVSGGRNKIRKILDKTRFSILPPKLFSDGGLSQ
SQDDSIVGTRHCRHSLAIMPIPGTLSSSSPDLLQPTTSMLDFSNPSDIPDQVIRVFKVDQQSCYIIISKDTTAKE
VVFHAVHEFGLTGASDTYSLCEVSVTPEGVIKQRRLPDQFSKLADRIQLNGRYYLKNNMETETLCSDEDAQELVK
ESQLSMLQLSTIEVATQLSMRDFDLFRNIEPTEYIDDLFKLNSKTGNTHLKRFEDIVNQETFWVASEILTEANQL
KRMKIIKHFIKIALHCRECKNFNSMFAIISGLNLASVARLRGTWEKLPSKYEKHLQDLQDIFDPSRNMAKYRNIL
SSQSMQPPIIPLFPVVKKDMTFLHEGNDSKVDGLVNFEKLRMISKEIRQVVRMTSANMDPAMMFRQRSLSQGSTN
SNMLDVQGGAHKKRARRSSLLNAKKLYEDAQMARKVKQYLSSLDVETDEEKFQMMSLQWEPAYGTLTKNLSEKRS
AKII

FIGURE 7004

AGTCACCTCTTCTCAACCCTTTACCTGGGCAGATCATTTGAAAGCACAGGAAGAAGCTCAAGGTCTTGTCCAGCA
TTGTAGGGCAACAGAAGTTACTTTGCCTAAAAGTATACAGAGCCTTATCTATTGGCTCCACCCTGCTTTGTCTTG
GCTACCACTGTTCCCTCGTATTGGAGCTGATAGAAAA**ATG**GCTGGAAAGACAAGTCCTTGGTCAAATGATGCAAC
CCTGCAGCATGTTTTAATGAGTGACTGGTCTGTGAGCTTTACTTCTCTATATAATTTGCTGAAGACAAAACTTTG
CCCCTATTTCTACGTTTGTACCTATCAGTTTACTGTCCTGTTCCGAGCAGCAGGATTAGCTGGAAGTGACTTAAT
CACAGCTCTCATATCTCCAACAACTCGAGGTTTAAGAGAAGCTATGAGAAATGAAGGTATTGAATTTTCTCTGCC
TTTAATAAAAGAAAGTGGCCATAAGAAGGAGACAGCATCTGGAACAAGCTTGGGATATGGGGAGGAGCAAGCCAT
CAGTGATGAGGATGAAGAGGAAAGTTTTTCCTGGCTGGAAGAGATGGGTGTGCAAGATAAAATTAAAAAGCCAGA
CATACTTTCTATCAAGCTGCGTAAAGAGAAACATGAAGTACAAATGGATCACAGACCTGAATCTGTTGTGTTGGT
AAAAGGAATCAACACCTTTACATTGCTCAATTTTTTGATTAACTCTAAGAGTTTAGTTGCTACCTCAGGTCCACA
GGCAGGACTTCCTCCAACCCTCTTGTCCCCTGTTGCTTTCCGAGGTGCCACAATGCAAATGCTTAAGGCACGGAG
TGTGAATGTGAAGACACAAGCTCTTTCTGGATACAGAGACCAATTTAGTTTGGAGATTACAGGTCCTATCATGCC
TCATTCTCTGCATTCACTGACCATGCTGCTCAAATCTTCACAGAGTGGATCTTTCTCTGCAGTACTGTATCCACA
CGAGCCAACTGCTGTATTTAACATCTGCCTGCAAATGGACAAAGTACTTGATATGGAGGTTGTTCATAAGGAGCT
TACTAACTGTGGTTTGCACCCTAACACTCTGGAGCAACTTAGTCAAATACCGTTACTTGGGAAATCATCTTTACG
GAATGTGGTGCTGAGAGACTACATTTATAATTGGAGATCC**TGA**ACACCAAAATCTCCATCAAAGCAGACACAGGA
TGTTTGCCTGCAGGGGGGAGAAATACCCAGTTTTAAATTATTTCCACCAACTTCTGCAACAAATAATGAATTCAA
GGTGGGATTAGGGTAAGAGGAAATTCAAAAACGTGCTCTCACCTGACAGATCTTTCATTGCAGCAGAGAAGTTCC
CAGACCTCTTGTGCTCTTTCTCCTACTGCAACAAGACCTTTAAAAAAAAAATTGTTCACTAAATAAATTTCAAAGC
ACCACTTTAAAACAAAGATCCCTCTGTAGGAGTCTGAACCTCAAAATGTATGCCTTCAAATAAAATCAGCAGATT
CCTAGT

FIGURE 7005

MAGKTSPWSNDATLQHVLMSDWSVSFTSLYNLLKTKLCPYFYVCTYQFTVLFRAAGLAGSDLITALISPTTRGLR
EAMRNEGIEFSLPLIKESGHKKETASGTSLGYGEEQAISDEDEEESFSWLEEMGVQDKIKKPDILSIKLRKEKHE
VQMDHRPESVVLVKGINTFTLLNFLINSKSLVATSGPQAGLPPTLLSPVAFRGATMQMLKARSVNVKTQALSGYR
DQFSLEITGPIMPHSLHSLTMLLKSSQSGSFSAVLYPHEPTAVFNICLQMDKVLDMEVVHKELTNCGLHPNTLEQ
LSQIPLLGKSSLRNVVLRDYIYNWRS

FIGURE 7006

GCGCGCAGCTGGTTCCCGCTCTGCAGCGCAACGCCTGAGGCAGTGGGCGCGCTCAGTCCCGGGACCAGGCGTTCT
CTCCTCTCGCCTCTGGGCCTGGGACCCGCAAAGCGGCG**ATG**GAGCGGAGGTCGCGGAGGAAGTCGCGGCGCAACG
GGCGCTCGACCGCGGGCAAGGCCGCCGCGACCCAGCCCGCGAAGTCTCCGGGCGCACAGCTCTGGCTCTTTCCCA
GCGCCGCGGGCCTCCACCGCGCGCTGCTCCGGAGGGTGGAGGTGACGCGCCAACTCTGCTGCTCGCCGGGGCGCC
TCGCGGTCTTGGAACGCGGCGGGGCGGGCGTCCAGGTTCACCAGCTGCTCGCCGGGAGCGGCGGCGCCCGGACGC
CGAAATGCATTAAATTAGGAAAAAACATGAAGATACATTCCGTGGACCAAGGAGCAGAGCACATGCTGATTCTCT
CATCAGATGGAAAACCATTTGAGTATGACAACTATAGCATGAAACATCTAAGGTTTGAAAGCATTTTACAAGAAA
AAAAAATAATTCAGATCACATGTGGAGATTACCATTCTCTTGCACTCTCAAAAGGCGGTGAGCTTTTTGCCTGGG
GACAGAACCTGCATGGGCAGCTTGGAGTTGGAAGGAAATTTCCCTCAACCACCACACCACAGATTGTGGAGCACC
TCGCAGGAGTACCCTTGGCTCAGATTTCTGCCGGAGAAGCCCACAGCATGGCCTTATCCATGTCTGGCAACATTT
ATTCATGGGGAAAAAATGAATGTGGACAACTAGGCCTGGGCCACACTGAGAGTAAAGATGATCCATCCCTTATTG
AAGGACTAGACAATCAGAAAGTTGAATTTGTCGCTTGTGGTGGCTCTCACAGTGCCCTACTCACACAGGATGGGC
TGCTGTTTACTTTCGGTGCTGGAAAACATGGGCAACTTGGTCATAATTCAACACAGAATGAGCTAAGACCCTGTT
TGGTGGCTGAGCTTGTTGGGTATAGAGTGACTCAGATAGCATGTGGAAGGTGGCACACACTTGCCTATGTTTCTG
ATTTGGGAAAGGTCTTTTCCTTTGGTTCTGGAAAAGATGGACAACTGGGAAATGGTGGAACACGTGACCAGCTGA
TGCCGCTTCCAGTGAAAGTATCATCAAGTGAAGAACTCAAACTTGAAAGCCATACCTCAGAAAAGGAGTTAATAA
TGATTGCTGGAGGGAATCAAAGCATTTTGCTCTGGATAAAGAAAGAGAATTCATATGTTAATCTGAAGAGGACAA
TTCCTACTCTGAATGAAGGGACTGTAAAGAGATGGATTGCTGATGTGGAGACTAAACGGTGGCAGAGCACAAAAA
GGGAAATCCAAGAGATATTTTCATCTCCTGCTTGTCTAACTGGAAGTTTTTTAAGGAAAAGAAGAACTACAGAAA
TGATGCCTGTTTATTTGGACTTAAATAAAGCAAGAAACATCTTCAGGGAGTTAACCCAAAAGGACTGGATTACTA
ACATGATAACCACCTGCCTCAAAGATAATCTGCTCAAAAGACTTCCATTTCATTCTCCACCCCAAGAAGCTTTAG
AAATTTTCTTCCTTCTCCCAGAATGTCCTGTGATGCATATTTCCAACAACTGGGAGAGCCTTGTGGTTCCATTTG
CAAAGGTTGTTTGTAAAATGAGTGACCAGTCTTCACTGGTTCTGGAAGAGTATTGGGCAACTCTGCAAGAATCCA
CTTTCAGCAAACTGGTCCAGATGTTTAAAACAGCCGTCATATGCCAGTTGGATTACTGGGATGAAAGTGCTGAGG
AGAATGGTAATGTTCAAGCTCTCCTAGAAATGTTGAAGAAGCTGCACAGGGTAAACCAGGTGAAATGTCAACTAC
CTGAAAGTATTTTCCAAGTAGACGAACTCTTGCACCGTCTCAATTTTTTTGTAGAAGTATGCAGAAGGTACTTGT
GGAAAATGACTGTGGACGCTTCAGAAAATGTACAATGCTGCGTCATATTCAGTCACTTTCCATTTATCTTTAATA
ATCTGTCGAAAATTAAACTACTACATACAGACACACTTTTAAAAATAGAGAGTAAAAAACATAAAGCTTATCTTA
GGTCGGCAGCAATTGAGGAAGAAAGAGAGTCTGAATTCGCTTTGAGGCCCACGTTTGATCTAACAGTCAGAAGGA
ATCACTTGATTGAGGATGTTTTGAATCAGCTAAGTCAATTTGAGAATGAAGACCTGAGGAAAGAGTTATGGGTTT
CATTTAGTGGAGAAATTGGGTATGACCTCGGAGGAGTCAAGAAAGAGTTCTTCTACTGTCTGTTTGCAGAGATGA
TCCAGCCGGAATATGGGATGTTCATGTATCCTGAAGGGGCTTCCTGCATGTGGTTTCCTGTCAAGCCTAAATTTG
AGAAGAAAAGATACTTCTTTTTTGGGGTTCTATGTGGACTTTCCCTGTTCAATTGCAATGTTGCCAACCTCCCTT
TCCCACTGGCACTGTTTAAGAAACTTTTGGACCAAATGCCATCATTGGAAGACTTGAAAGAACTCAGTCCTGATT
TGGGAAAGAATTTGCAAACACTTCTGGATGATGAAGGTGATAACTTTGAGGAAGTATTTTACATCCATTTTAATG
TGCACTGGGACAGAAACGACACAAACTTAATTCCTAATGGAAGTAGCATAACTGTCAACCAGACTAACAAGAGAG
ACTATGTTTCTAAGTATATCAATTACATTTTCAACGACTCTGTAAAGGCGGTTTATGAAGAATTTCGGAGAGGAT
TTTATAAAATGTGCGACGAAGACATTATCAAATTATTCCACCCCGAAGAACTGAAGGATGTGATTGTTGGAAATA
CAGATTATGATTGGAAAACATTTGAAAAGAATGCACGTTATGAACCAGGATATAACAGTTCACATCCCACCATAG
TGATGTTTTGGAAGGCTTTCCACAAATTGACTCTGGAAGAAAAGAAAAAATTCCTTGTATTTCTTACAGGAACTG
ACAGACTACAAATGAAAGATTTAAATAATATGAAAATAACATTTTGCTGTCCTGAAAGTTGGAATGAAAGAGACC
CTATAAGAGCACTGACATGTTTCAGTGTCCTCTTCCTCCCTAAATATTCTACAATGGAAACAGTTGAAGAAGCGC
TTCAAGAAGCCATCAACAACAACAGAGGATTTGGC**TGA**CCAGCTTGCTTGTCCAACAGCCTTATTTTGTTGTTGT
TATCGTTGTTGTTGTTGTTGTTGTTGTTTCTCTACTTTGTTTTGTTTTAGGCTTTTAGCAGCCTGAAGCCAT
GGTTTTTCATTTCTGTCTCTAGTGATAAGCAGGAAAGAGGGATGAAGAAGAGGGTTTACTGGCCGGTTAGAACCC
GTGACTGTATTCTCTCCCTTGGATACCCCTATGCCTACATCATATTCCTTACCTCTTTTGGGAAATATTTTTCAA
AAATAAAATAACCGAAAAACTAAAAAAAGAAAAAAAAAAAAAAAAAAAAAA

FIGURE 7007

MERRSRRKSRRNGRSTAGKAAATQPAKSPGAQLWLFPSAAGLHRALLRRVEVTRQLCCSPGRLAVLERGGAGVQV
HQLLAGSGGARTPKCIKLGKNMKIHSVDQGAEHMLILSSDGKPFEYDNYSMKHLRFESILQEKKIIQITCGDYHS
LALSKGGELFAWGQNLHGQLGVGRKFPSTTTPQIVEHLAGVPLAQISAGEAHSMALSMSGNIYSWGKNECGQLGL
GHTESKDDPSLIEGLDNQKVEFVACGGSHSALLTQDGLLFTFGAGKHGQLGHNSTQNELRPCLVAELVGYRVTQI
ACGRWHTLAYVSDLGKVFSFGSGKDGQLGNGGTRDQLMPLPVKVSSSEELKLESHTSEKELIMIAGGNQSILLWI
KKENSYVNLKRTIPTLNEGTVKRWIADVETKRWQSTKREIQEIFSSPACLTGSFLRKRRTTEMMPVYLDLNKARN
IFRELTQKDWITNMITTCLKDNLLKRLPFHSPPQEALEIFFLLPECPVMHISNNWESLVVPFAKVVCKMSDQSSL
VLEEYWATLQESTFSKLVQMFKTAVICQLDYWDESAEENGNVQALLEMLKKLHRVNQVKCQLPESIFQVDELLHR
LNFFVEVCRRYLWKMTVDASENVQCCVIFSHFPFIFNNLSKIKLLHTDTLLKIESKKHKAYLRSAAIEEERESEF
ALRPTFDLTVRRNHLIEDVLNQLSQFENEDLRKELWVSFSGEIGYDLGGVKKEFFYCLFAEMIQPEYGMFMYPEG
ASCMWFPVKPKFEKKRYFFFGVLCGLSLFNCNVANLPFPLALFKKLLDQMPSLEDLKELSPDLGKNLQTLLDDEG
DNFEEVFYIHFNVHWDRNDTNLIPNGSSITVNQTNKRDYVSKYINYIFNDSVKAVYEEFRRGFYKMCDEDIIKLF
HPEELKDVIVGNTDYDWKTFEKNARYEPGYNSSHPTIVMFWKAFHKLTLEEKKKFLVFLTGTDRLQMKDLNNMKI
TFCCPESWNERDPIRALTCFSVLFLPKYSTMETVEEALQEAINNNRGFG

FIGURE 7008

GACACCCAGGTCCCCAGCGATGTCTCCACCACCGCTGCTGCAACCCCTGCTGCTGCTGCTGCCTCTGCTGAATGT
GGAGCCTTCCGGGGCCACACTGATCCGCATCCCTCTTCATCGAGTCCAACCTGGACGCAGGACCCTGAACCTACT
GAGGGGATGGAGAGAACCAGCAGAGCTCCCCAAGTTGGGGGCCCCATCCCCTGGGGACAAGCCCATCTTCGTACC
TCTCTCGAACTACAGGGATGTGCAGTATTTTGGGGAAATTGGGCTGGGAACGCCTCCACAAAACTTCACTGTTGC
CTTTGACACTGGCTCCTCCAATCTCTGGGTCCCGTCCAGGAGATGCCACTTCTTCAGTGTGCCCTGCTGGTTACA
CCACCGATTTGATCCCAAAGCCTCTAGCTCCTTCCAGGCCAATGGGACCAAGTTTGCCATTCAATATGGAACTGG
GCGGGTAGATGGAATCCTGAGCGAGGACAAGCTGACTATTGGTGGAATCAAGGGTGCATCAGTGATTTTCGGGGA
GGCTCTCTGGGAGCCCAGCCTGGTCTTCGCTTTTGCCCATTTTGATGGGATATTGGGCCTCGGTTTTCCCATTCT
GTCTGTGGAAGGAGTTCGGCCCCCGATGGATGTACTGGTGGAGCAGGGGCTATTGGATAAGCCTGTCTTCTCCTT
TTACCTCAACAGGGACCCTGAAGAGCCTGATGGAGGAGAGCTGGTCCTGGGGGGCTCGGACCCGGCACACTACAT
CCCACCCCTCACCTTCGTGCCAGTCACGGTCCCCGCCTACTGGCAGATCCACATGGAGCGTGTGAAGGTGGGCCC
AGGGCTGACTCTCTGTGCCAAGGGCTGTGCTGCCATCCTGGATACGGGCACGTCCCTCATCACAGGACCCACTGA
GGAGATCCGGGCCCTGCATGCAGCCATTGGGGGAATCCCCTTGCTGGCTGGGGAGTACATCATCCTGTGCTCGGA
AATCCCAAAGCTCCCCGCAGTCTCCTTCCTTCTTGGGGGGGTCTGGTTTAACCTCACGGCCCATGATTACGTCAT
CCAGACTACTCGAAATGGCGTCCGCCTCTGCTTGTCCGGTTTCCAGGCCCTGGATGTCCCTCCGCCTGCAGGGCC
CTTCTGGATCCTCGGTGACGTCTTCTTGGGGACGTATGTGGCCGTCTTCGACCGCGGGGACATGAAGAGCAGCGC
CCGGGTGGGCCTGGCGCGCGCTCGCACTCGCGGAGCGGACCTCGGATGGGGAGAGACTGCGCAGGCGCAGTTCCC
CGGGTGACGCCCAAGTGAAGCGCATGCGCAGCGGGTGGTCGCGGAGGTCCTGCTACCCAGTAAAAATCCACTATT
TCCATTGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 7009

MSPPPLLQPLLLLLPLLNVEPSGATLIRIPLHRVQPGRRTLNLLRGWREPAELPKLGAPSPGDKPIFVPLSNYRD
VQYFGEIGLGTPPQNFTVAFDTGSSNLWVPSRRCHFFSVPCWLHHRFDPKASSSFQANGTKFAIQYGTGRVDGIL
SEDKLTIGGIKGASVIFGEALWEPSLVFAFAHFDGILGLGFPILSVEGVRPPMDVLVEQGLLDKPVFSFYLNRDP
EEPDGGELVLGGSDPAHYIPPLTFVPVTVPAYWQIHMERVKVGPGLTLCAKGCAAILDTGTSLITGPTEEIRALH
AAIGGIPLLAGEYIILCSEIPKLPAVSFLLGGVWFNLTAHDYVIQTTRNGVRLCLSGFQALDVPPPAGPFWILGD
VFLGTYVAVFDRGDMKSSARVGLARARTRGADLGWGETAQAQFPG

FIGURE 7010

AAGAATGTCTCAGGAGGAAGCATGACAGAGATGTTTGTCCAGTTAAAACTGGGAGATCAGAGGTATAAAAGTAAG
GATGGCATTTTGGACATTGAAGTGTGGGGAAAGGACAACAAAAAGCATGAGGAACGTCTGGGCACGTGTAAAGT
GGATATCTCGGCACTCCCTCTGAAGCAAGCCAACTGCCTGGAGCTGCCACTGGACAGCTGTCTGGGGGCTCTCCT
TATGTTGGTCACACTTACACCCTGTGCGGGGGTCTCCGTCTCTGATCTGTGTGTCTGCCCCTTAGCAGACCTCAG
CGAAAGAAAGCAGATTACCCAGCGATATTGCTTACAGAACTCCCTGAAAGATGTGAAAGACGTCGGCATTCTACA
AGTGAAGGTTTTAAAGGCAGCAGATCTCTTAGCGGCAGATTTCTCAGGGAAGAGTGACCCATTTTGCTTGTTGGA
GTTAGGCAATGACCGACTTCAGACGCATACCGTCTACAAAAACCTCAACCCTGAATGGAACAAAGTTTTTACATT
TCCCATTAAAGATATCCATGATGTTTTGGAAGTGACAGTGTTTGATGAAGATGGAGATAAACCCCCAGATTTTCT
TGGAAAAGTTGCCATTCCCTTGCTGTCCATTAGAGATGGACAACCGAATTGTTATGTACTAAAGAATAAAGATTT
AGAACAAGCTTTTAAAGGAGTTATTTACTTAGAGATGGACCTTATATATAATCCGGTGAAAGCAAGTATTAGGAC
TTTTACTCCCCGGGAAAAGCGCTTTGTTGAAGACAGCCGCAAGCTGTCCAAAAAGATCTTATCAAGAGATGTGGA
CCGTGTGAAAAGAATCACTATGGCAATATGGAATACAATGCAGTTCCTTAAAAGCTGCTTCCAGTGGGAATCCAC
ATTAAGAAGTACAATAGCATTCGCGGTATTTTTGATCACTGTCTGGAATTTTGAACTATATATGATCCCCTTGGC
ATTGTTGCTGATCTTTGTCTACAATTTCATCAGACCTGTGAAAGGCAAGGTCAGCAGCATCCAGGACAGCCAGGA
GAGCACAGACATAGATGACGAGGAGGATGAAGATGACAAGGAATCTGAGAAAAAGGGGTTGATTGAAAGAATCTA
TATGGTACAGGATATTGTTTCAACTGTTCAAAACGTCTTGGAGGAAATAGCTTCTTTTGGAGAAAGGATTAAGAA
CACATTTAACTGGACGGTCCCCTTCCTTTCATCTCTGGCCTGTTTGATTCTGGCAGCAGCCACCATCATTTTGTA
TTTCATTCCACTGCGGTACATCATTTTAATCTGGGGCATAAATAAATTTACTAAGAAGCTTCGAAATCCCTATTC
CATCGACAATAATGAGCTACTAGACTTCCTCTCTAGGGTACCGTCTGATGTTCAAAAGGTGCAGTATGCAGAATT
GAAACTCTGCAGCAGCCACAGCCCCCTGCGGAAGAAGCGCAGCGCTCTCTAGGGCACACACCGACTTTGGACAGC
AGCACCCAATATTGTGTTTGGTTGAGTAGACCAATGTTATGGCTGTTTCAGTGGTACCCAAGGTGTCCTTCTGAA
ATGCATGCCCTGTGGCACCCTCTGTATACTTCCTCCTCCTTCACGTGCACAGACATACACACATGTGCACACACC
CTCATGCATGGGTGTCCTAGTTGCGTAGAGGGTCAGCCCAGCGAAAAGCAACAACCCCAAGACTGTGAAAGACTA
ACATCCATTCTGAAATAGGAGATAACAAGGCTGCCATGGATCTGAACACCACCTTCCTTGAGAACAGCCAGGAGC
CCACTTGGATTCAAGAGTGACTTTGAACTTGTTTTCACACCTCCAACAGACTCTCATTAAGATTCAGTTATTTCC
GCTCCCCAGCCCCACACTCCTTTCAGATTATCGTTCATGGGCGTAAGTCTCTTCTCAGAGTTAACAAGTCTTTGG
TAGTCATCCTCTGTCCAAATATTGTATATTATTAAAAGGCATTTTTAATAATTACCAGAATTAGCTCAAACCTTT
AGGGATCTTTCAGCCATGATTATTAAGGATATGTATGTGAATTTTTGGGAAACCTCTCGGTGCTGGATGCCAGCC
TACAGCAGGGTCCATTGCTGGCAATGGATGGCCCAGGAAGGTCCCTAGAGATCACTCACTTGAAAAATGAGGGTC
CCATGAAAGTATTTGGTTGCCTTCTGATGCCACTTCTTCTCACTTTACTTTTTGCTTATTTTCAAAATATTATAA
AATGTCAACATATAATTTCAGAAAGGCAGGTGGGGGTAGGGGAGAAATGAATGAATAAATTCTCTAGGTATCTAG
AAAGATAAGAAACTGAAGACCGAGAGACTAATAAGGCTGCTTACCTAATTATTATAATCATTTCATTTGCCTGAA
TGTTTTAAGCAGGAAGTAGAAATACTTTGGCTGCCCAAATGTATCTTTTGTTCCTCTTAGAAGTAAAATAAGCTA
CATACAATAAAAATTTATTTCAGAACCCCATTTCTAGAAAATACCACCCCAGAGTCCTCATTTGATAGCATCTGT
CTCCTGCAGACCTCATCATTCCACAGTATTTCCCTGCCATGTAAAAATCCTGACTTTGTGCGTATATAAAATGTA
TGCAATTAAGTCTGTTTAAATGATATTTAAGTTTTAAAGACTGTATTTTGTTGACACATACTTTGTGCAGTTTTT
ATGTATGTATGTATTATAAAAAAAGTTAAGGTTAAAAAC

FIGURE 7011

MGILDIEVWGKDNKKHEERLGTCKVDISALPLKQANCLELPLDSCLGALLMLVTLTPCAGVSVSDLCVCPLADLS
ERKQITQRYCLQNSLKDVKDVGILQVKVLKAADLLAADFSGKSDPFCLLELGNDRLQTHTVYKNLNPEWNKVFTF
PIKDIHDVLEVTVFDEDGDKPPDFLGKVAIPLLSIRDGQPNCYVLKNKDLEQAFKGVIYLEMDLIYNPVKASIRT
FTPREKRFVEDSRKLSKKILSRDVDRVKRITMAIWNTMQFLKSCFQWESTLRSTIAFAVFLITVWNFELYMIPLA
LLLIFVYNFIRPVKGKVSSIQDSQESTDIDDEEDEDDKESEKKGLIERIYMVQDIVSTVQNVLEEIASFGERIKN
TFNWTVPFLSSLACLILAAATIILYFIPLRYIILIWGINKFTKKLRNPYSIDNNELLDFLSRVPSDVQKVQYAEL
KLCSSHSPLRKKRSAL

FIGURE 7012

GCCCCTTTCTTTCTCCTCGTCGGCCCGAGAGCAGGAACACGATAACGAAGGAGGCCCAACTTCATTCAATAAGGA
GCCTGACGGATTTATCCCAGACGGTAGAACAAAAGGAAGAATATTGATGGATTTTAAACCAGAGTTTTTAAAGAG
CTTGAGAATACGGGGAAATTAATTTGTTCTCCTACACACATAGATAGGGTAAGGTTGTTTCTGATGCAGCTGAGA
AAAATGCAGACCGTCAAAAAGGAGCAGGCGTCTCTTGATGCCAGTAGCAATGTGGACAAGATGATGGTCCTTAAT
TCTGCTTTAACGGAAGTGTCAGAAGACTCCACAACAGGTGAGGACGTGCTTCTCAGTGAAGGAAGTGTGGGGAAG
AACAAATCTTCTGCATGTCGGAGGAAACGGGAATTCATTCCTGATGAAAAGAAAGATGCTATGTATTGGGAAAAA
AGGCGGAAAAATAATGAAGCTGCCAAAAGATCTCGTGAGAAGCGTCGACTGAATGACCTGGTTTTAGAGAACAAA
CTAATTGCACTGGGAGAAGAAAACGCCACTTTAAAAGCTGAGCTGCTTTCACTAAAATTAAAGTTTGGTTTAATT
AGCTCCACAGCATATGCTCAAGAGATTCAGAAACTCAGTAATTCTACAGCTGTGTACTTTCAAGATTACCAGACT
TCCAAATCCAATGTGAGTTCATTTGTGGACGAGCACGAACCCTCGATGGTGTCAAGTAGTTGTATTTCTGTCATT
AAACACTCTCCACAAAGCTCGCTGTCCGATGTTTCAGAAGTGTCCTCAGTAGAACACACGCAGGAGAGCTCTGTG
CAGGGAAGCTGCAGAAGTCCTGAAAACAAGTTCCAGATTATCAAGCAAGAGCCGATGGAATTAGAGAGCTACACA
AGGGAGCCAAGAGATGACCGAGGCTCTTACACAGCGTCCATCTATCAAAACTATATGGGGAATTCTTTCTCTGGG
TACTCACACTCTCCCCCACTACTGCAAGTCAACCGATCCTCCAGCAACTCCCCGGGAACGTCGGAAACTGATGAT
GGTGTGGTAGGAAAGTCATCTGATGGAGAAGACGAGCAACAGGTCCCCAAGGGCCCCATCCATTCTCCAGTTGAA
CTCAAGCATGTGCATGCAACTGTGGTTAAAGTTCCAGAAGTGAATTCCTCTGCCTTGCCACACAAGCTCCGGATC
AAAGCCAAAGCCATGCAGATCAAAGTAGAAGCCTTTGATAATGAATTTGAGGCCACGCAAAAACTTTCCTCACCT
ATTGACATGACATCTAAAAGACATTTCGAACTCGAAAAGCATAGTGCCCCAAGTATGGTACATTCTTCTCTTACT
CCTTTCTCAGTGCAAGTGACTAACATTCAAGATTGGTCTCTCAAATCGGAGCACTGGCATCAAAAAGAACTGAGT
GGCAAAACTCAGAATAGTTTCAAAACTGGAGTTGTTGAAATGAAAGACAGTGGCTACAAAGTTTCTGACCCAGAG
AACTTGTATTTGAAGCAGGGGATAGCAAACTTATCTGCAGAGGTTGTCTCACTCAAGAGACTTATAGCCACACAA
CCAATCTCTGCTTCAGACTCTGGGTAAATTACTACTGAGTAAGAGCTGGGCATTTAGAAAGATGTCATTTGCAAT
AGAGCAGTCCATTTTGTATTATGCTGAATTTTCACTGGACCTGTGATGTCATTTCACTGTGATGTGCACATGTTG
TCTGTTTGGTGTCTTTTTGTGCACAGATTATGATGAAGATTAGATTGTGTTATCACTCTGCCTGTGTATAGTCAG
ATAGTCCATGCGAAGGCTGTATATATTGAACATTATTTTTGTTGTTCTATTATAAAGTGTGTAAGTTACCAGTTT
CAATAAAGGATTGGTGACAAACACAGAAAAAAAAAAAAAAAAAAAA

FIGURE 7013

MQLRKMQTVKKEQASLDASSNVDKMMVLNSALTEVSEDSTTGEDVLLSEGSVGKNKSSACRRKREFIPDEKKDAM
YWEKRRKNNEAAKRSREKRRLNDLVLENKLIALGEENATLKAELLSLKLKFGLISSTAYAQEIQKLSNSTAVYFQ
DYQTSKSNVSSFVDEHEPSMVSSSCISVIKHSPQSSLSDVSEVSSVEHTQESSVQGSCRSPENKFQIIKQEPMEL
ESYTREPRDDRGSYTASIYQNYMGNSFSGYSHSPPLLQVNRSSSNSPGTSETDDGVVGKSSDGEDEQQVPKGPIH
SPVELKHVHATVVKVPEVNSSALPHKLRIKAKAMQIKVEAFDNEFEATQKLSSPIDMTSKRHFELEKHSAPSMVH
SSLTPFSVQVTNIQDWSLKSEHWHQKELSGKTQNSFKTGVVEMKDSGYKVSDPENLYLKQGIANLSAEVVSLKRL
IATQPISASDSG

7800/8433

FIGURE 7014

GGCACAGGGCGAGGTTTTATACACCTGAAAGAAGAGAATGTCAAGACGAAGTAGCCGTTTACAAGCTAAGCAGCA
GCCCCAGCCCAGCCAGACGGAATCCCCCCAAGAAGCCCAGATAATCCAGGCCAAGAAGAGGAAAACTACCCAGGA
TGTCAAAAAAAGAAGAGAGGAGGTCACCAAGAAACATCAGTATGAAATTAGGAATTGTTGGCCACCTGTATTATC
TGGGGGGATCAGTCCTTGCATTATCATTGAAACACCTCACAAAGAAATAGGAACAAGTGATTTCTCCAGATTTAC
AAATTACAGATTTAAAAATCTTTTTATTAATCCTTCACCTTTGCCTGATTTAAGCTGGGGATGTTCAAAAGAAGT
CTGGCTAAACATGTTAAAAAAGGAGAGCAGATATGTTCATGACAAACATTTTGAAGTTCTGCATTCTGACTTGGA
ACCACAGATGAGGTCCATACTTCTAGACTGGCTTTTAGAGGTATGTGAAGTATACACACTTCATAGGGAAACATT
TTATCTTGCACAAGACTTTTTTGATAGATTTATGTTGACACAAAAGGATATAAATAAAAATATGCTTCAACTCAT
TGGAATTACCTCATTATTCATTGCTTCCAAACTTGAGGAAATCTATGCTCCTAAACTCCAAGAGTTTGCTTACGT
CACTGATGGTGCTTGCAGTGAAGAGGATATCTTAAGGATGGAACTCATTATATTAAAGGCTTTAAAATGGGAACT
TTGTCCTGTAACAATCATCTCCTGGCTAAATCTCTTTCTCCAAGTTGATGCTCTTAAAGATGCTCCTAAAGTTCT
TCTACCTCAGTATTCTCAGGAAACATTCATTCAAATAGCTCAGCTTTTAGATCTGTGTATTCTAGCCATTGATTC
ATTAGAGTTCCAGTACAGAATACTGACTGCTGCTGCCTTGTGCCATTTTACCTCCATTGAAGTGGTTAAGAAAGC
CTCAGGTTTGGAGTGGGACAGTATTTCAGAATGTGTAGATTGGATGGTACCTTTTGTCAATGTAGTAAAAAGTAC
TAGTCCAGTGAAGCTGAAGACTTTTAAGAAGATTCCTATGGAAGACAGACATAATATCCAGACACATACAAACTA
TTTGGCTATGCTGGAGGAAGTAAATTACATAAACACCTTCAGAAAAGGGGGACAGTTGTCACCAGTGTGCAATGG
AGGCATTATGACACCACCGAAGAGCACTGAAAAACCACCAGGAAAACACTAAAGAAGATAACTAAGCAAACAAGT
TGGAATTCACCAAGATTGGGTAGAACTGGTATCACTGAACTACTAAAGTTTTACAGAAAGTAGTGCTGTGATTGA
TTGCCCTAGCCAATTCACAAGTTACACTGCCATTCTGATTTTAAAACTTACAATTGGCACTAAAGAATACATTTA
ATTATTTCCTATGTTAGCTGTTAAAGAAACAGCAGGACTTGTTTACAAAGATGTCTTCATTCCCAAGGTTACTGG
ATAGAAGCCAACCACAGTCTATACCATAGCAATGTTTTTCCTTTAATCCAGTGTTACTGTGTTTATCTTGATAAA
CTAGGAATTTTGTCACTGGAGTTTTGGACTGGATAAGTGCTACCTTAAAGGGTATACTAAGTGATACAGTACTTT
GAATCTAGTTGTTAGATTCTCAAAATTCCTACACTCTTGACTAGTGCAATTTGGTTCTTGAAAATTAAATTTAAA
CTTGTTTACAAAGGTTTAGTTTTGTAATAAGGTGACTAATTTATCTATAGCTGCTATAGCAAGCTATTATAAAAC
TTGAATTTCTACAAATGGTGAAATTTAATGTTTTTTAAACTAGTTTATTTGCCTTGCCATAACACATTTTTTAAC
TAATAAGGCTTAGATGAACATGGTGTTCAACCTGTGCTCTAAACAGTGGGAGTACCAAAGAAATTATAAACAAGA
TAAATGCTGTGGCTCCTTCCTAACTGGGGCTTTCTTGACATGTAGGTTGCTTGGTAATAACCTTTTTGTATATCA
CAATTTGGGTGAAAAACTTAAGTACCCTTTCAAACTATTTATATGAGGAAGTCACTTTACTACTCTAAGATATCC
CTAAGGAATTTTTTTTTTTAATTTAGTGTGACTAAGGCTTTATTTATGTTTGTGAAACTGTTAAGGTCCTTTCTA
AATTCCTCCATTGTGAGATAAGGACAGTGTCAAAGTGATAAAGCTTAACACTTGACCTAAACTTCTATTTTCTTA
AGGAAGAAGAGTATTAAATATATACTGACTCCTAGAAATCTATTTATTAAAAAAAGACATGAAAACTTGCTGTAC
ATAGGCTAGCTATTTCTAAATATTTTAAATTAGCTTTTCTAAAAAAAAAATCCAGCCTCATAAAGTAGATTAGAA
AACTAGATTGCTAGTTTATTTTGTTATCAGATATGTGAATCTCTTCTCCCTTTGAAGAAACTATACATTTATTGT
TACGGTATGAAGTCTTCTGTATAGTTTGTTTTTAAACTAATATTTGTTTCAGTATTTTGTCTGAAAAGAAAACAC
CACTAATTGTGTACATATGTATTATATAAACTTAACCTTTTAATACTGTTTATTTTTAGCCCATTGTTTAAAAAA
TAAAAGTTAAAAAAATTTAAAAA

FIGURE 7015

MSRRSSRLQAKQQPQPSQTESPQEAQIIQAKKRKTTQDVKKRREEVTKKHQYEIRNCWPPVLSGGISPCIIIETP
HKEIGTSDFSRFTNYRFKNLFINPSPLPDLSWGCSKEVWLNMLKKESRYVHDKHFEVLHSDLEPQMRSILLDWLL
EVCEVYTLHRETFYLAQDFFDRFMLTQKDINKNMLQLIGITSLFIASKLEEIYAPKLQEFAYVTDGACSEEDILR
MELIILKALKWELCPVTIISWLNLFLQVDALKDAPKVLLPQYSQETFIQIAQLLDLCILAIDSLEFQYRILTAAA
LCHFTSIEVVKKASGLEWDSISECVDWMVPFVNVVKSTSPVKLKTFKKIPMEDRHNIQTHTNYLAMLEEVNYINT
FRKGGQLSPVCNGGIMTPPKSTEKPPGKH

FIGURE 7016

GATCTCTTGGAGACGGCGACCCAGGCATCTGGGGAGCCACAGAAGTCGTACTCCCTTAAACCCTGCTTTGCTCCC
CCTGTGGATGTAACCCCTTAGCTGGCATTTTGCATCTCAATTGGCTTGTGATGGAGGCGTCTTTGGGGATTCAGA
TGGATGAGCCAATGGCTTTTTCTCCCCAGCGTGACCGGTTTCAGGCTGAAGGCTCTTTAAAAAAAAACGAGCAGA
ATTTTAAACTTGCAGGTGTTAAAAAAGATATTGAGAAGCTTTATGAAGCTGTACCACAGCTTAGTAATGTGTTTA
AGATTGAGGACAAAATTGGAGAAGGCACTTTCAGCTCTGTTTATTTGGCCACAGCACAGTTACAAGTAGGACCTG
AAGAGAAAATTGCTCTAAAACACTTGATTCCAACAAGTCATCCTATAAGAATTGCAGCTGAACTTCAGTGCCTAA
CAGTGGCTGGGGGGCAAGATAATGTCATGGGAGTTAAATACTGCTTTAGGAAGAATGATCATGTAGTTATTGCTA
TGCCATATCTGGAGCATGAGTCGTTTTTGGACATTCTGAATTCTCTTTCCTTTCAAGAAGTACGGGAATATATGC
TTAATCTGTTCAAAGCTTTGAAACGCATTCATCAGTTTGGTATTGTTCACCGTGATGTTAAGCCCAGCAATTTTT
TATATAATAGGCGCCTGAAAAAGTATGCCTTGGTAGACTTTGGTTTGGCCCAAGGAACCCATGATACGAAAATAG
AGCTTCTTAAATTTGTCCAGTCTGAAGCTCAGCAGGAAAGGTGTTCACAAAACAAATCCCACATAATCACAGGAA
ACAAGATTCCACTGAGTGGCCCAGTACCTAAGGAGCTGGATCAGCAGTCCACCACAAAAGCTTCTGTTAAAAGAC
CCTACACAAATGCACAAATTCAGATTAAACAAGGAAAAGACGGAAAGGAGGGATCTGTAGGCCTTTCTGTCCAGC
GCTCTGTTTTTGGAGAAAGAAATTTCAATATACACAGCTCCATTTCACATGAGAGCCCTGCAGTGAAACTCATGA
AGCAGTCAAAGACTGTGGATGTACTGTCTAGAAAGTTAGCAACAAAAAAGAAGGCTATTTCTACGAAAGTTATGA
ATAGTGCTGTGATGAGGAAAACTGCCAGTTCTTGCCCAGCTAGCCTGACCTGTGACTGCTATGCAACAGATAAAG
TTTGTAGTATTTGCCTTTCAAGGCGTCAGCAGGTTGCCCCTAGGGCAGGTACACCAGGATTCAGAGCACCAGAGG
TCTTGACAAAGTGCCCCAATCAAACTACAGCAATTGACATGTGGTCTGCAGGTGTCATATTTCTTTCTTTGCTTA
GTGGACGATATCCATTTTATAAAGCAAGTGATGATTTAACTGCTTTGGCCCAAATTATGACAATTAGGGGATCCA
GAGAAACTATCCAAGCTGCTAAAACTTTTGGGAAATCAATATTATGTAGCAAAGAAGTTCCAGCACAAGACTTGA
GAAAACTCTGTGAGAGACTCAGGGGTATGGATTCTAGCACTCCCAAGTTAACAAGTGATATACAAGGGCATGCTT
CTCATCAACCAGCTATTTCAGAGAAGACTGACCATAAAGCTTCTTGCCTCGTTCAAACACCTCCAGGACAATACT
CAGGGAATTCATTTAAAAAGGGGGATAGTAATAGCTGTGAGCATTGTTTTGATGAGTATAATACCAATTTAGAAG
GCTGGAATGAGGTACCTGATGAAGCTTATGACCTGCTTGATAAACTTCTAGATCTAAATCCAGCTTCAAGAATAA
CAGCAGAAGAAGCTTTGTTGCATCCATTTTTTAAAGATATGAGCTTGTGATAATGGATCTTCATTTAATGTTTAC
TGTTATGAGGTAGAATAAAAAAGAATACTTTGTAATAGCCACAAGTTCTTGTTTAGAGACCAGAGCAGGATTAAT
AATTTATTTTAACATTTTAGTGTTTGGTGGCACATTCTAAAATATAGATTAAGAATACTTAAAATGCCTGGGATA
GTTCTTGGGACTAACAACATGATCTTCTTTGAGTTAAACCTACCTAAGTAGATTTTAGGTGGGTTCCTATTAGGT
CAGATTTTTAGCTTCCCTAATTACCTTTCACTGACATACAGAAAAAGGAGCAGTTTTAGTTTTAATTAATTAAAA
TTAACAGATGTGATGAGGATTAAATGAATCAAAAGACTTAATTTGTAGATTCTTTTAGAGTTATGAGCTAGGTAT
AGTTTGGGGAAACTCAACCTGGTGCTGGTGCTCTTAACAATTTTGTAAATAAAGAAGATAATTTCCTTTTCTAGA
GGTACATATTAGGCCTTTTATGAACACTAAAACAATGAGGAAATGTTGGTCATGGGGCAAAGTATCACTTAAAAT
TGAATTCATCCATTTTTAAAAAACACTTCATGAAAGCATTCTGGTGTGAATTGCCATTTTTTTCTTACTGGCTTC
TCAATTTTCTTCCTTCTCTGCCCCTACCTAAAACATTCTCCTCGGAAATTACATGGTGCTGACCACAAAGTTTCT
GGATGTTTTATTAAATATTGTACGTGTTTACAGTTGGGAATTTAAAATAATACATACACTGGTTGATAAAGGGAA
GCTGCAGGACCAAGGTGAAGATTGATAGTCCAAATGCTTTTCTTTTTTGAGTTGTATATTTTTTCACACCATCTT
AGATATAATTAGGTAGCTGCTGAAAGGAAAAGTGAATACAGAATTGACGGTATTATTGGAGATTTTTCCTCTGCG
TAGAGCCATCCAGATCTCTGTATCCTGTTTTGACTAAGTCTTAGGTGGGTTGGGAAGACAGATAATGAAGTAGGC
AAAGAGAAAAGGACCCAAGATAGAGGTTTATATTCAGAAATGGTATATATCAATGACAGCATATCAAACTTCCTA
TGGGAAAAAGTCTGGTGGGTGGTCAGCTGACAGATTTCCCATTTAGTAGTCATAGAATACAGAAATAGTTTAGGG
ACATGTATTCATTTTGTTATTTTGAGCATTGATAGGTCAGTATATCTACCTAATCTGTTTGGTAAGTATAGGATA
TATAAACCATTACCATTGATCTGTCTTATGCCATAATCTTAAAAAAAAATTGAATGCTCTTGAATTTGTATATTC
AATAAAGTTATCCTTTTATAAAAAAAAA

FIGURE 7017

MEASLGIQMDEPMAFSPQRDRFQAEGSLKKNEQNFKLAGVKKDIEKLYEAVPQLSNVFKIEDKIGEGTFSSVYLA
TAQLQVGPEEKIALKHLIPTSHPIRIAAELQCLTVAGGQDNVMGVKYCFRKNDHVVIAMPYLEHESFLDILNSLS
FQEVREYMLNLFKALKRIHQFGIVHRDVKPSNFLYNRRLKKYALVDFGLAQGTHDTKIELLKFVQSEAQQERCSQ
NKSHIITGNKIPLSGPVPKELDQQSTTKASVKRPYTNAQIQIKQGKDGKEGSVGLSVQRSVFGERNFNIHSSISH
ESPAVKLMKQSKTVDVLSRKLATKKKAISTKVMNSAVMRKTASSCPASLTCDCYATDKVCSICLSRRQQVAPRAG
TPGFRAPEVLTKCPNQTTAIDMWSAGVIFLSLLSGRYPFYKASDDLTALAQIMTIRGSRETIQAAKTFGKSILCS
KEVPAQDLRKLCERLRGMDSSTPKLTSDIQGHASHQPAISEKTDHKASCLVQTPPGQYSGNSFKKGDSNSCEHCF
DEYNTNLEGWNEVPDEAYDLLDKLLDLNPASRITAEEALLHPFFKDMSL

FIGURE 7018

GAATTCGGCACGAGGCAAGGACCCCTCCCCCTGCGGGCGCTCCCATGGCACAGTTCGCGTTCGAGAGTGACCTGC
ACTCGCTGCTTCAGCTGGATGCACCCATCCCCAATGCACCCCCTGCGCGCTGGCAGCGCAAAGCCAAGGAAGCCG
CAGGCCCGGCCCCCTCACCCATGCGGGCCGCCAACCGATCCCACAGCGCCGGCAGGACTCCGGGCCGAACTCCTG
GCAAATCCAGTTCCAAGGTTCAGACCACTCCTAGCAAACCTGGCGGTGACCGCTATATCCCCCATCGCAGTGCTG
CCCAGATGGAGGTGGCCAGCTTCCTCCTGAGCAAGGAGAACCAGCCTGAAAACAGCCAGACGCCCACCAAGAAGG
AACATCAGAAAGCCTGGGCTTTGAACCTGAACGGTTTTGATGTAGAGGAAGCCAAGATCCTTCGGCTCAGTGGAA
AACCACAAAATGCGCCAGAGGGTTATCAGAACAGACTGAAAGTACTCTACAGCCAAAAGGCCACTCCTGGCTCCA
GCCGGAAGACCTGCCGTTACATTCCTTCCCTGCCAGACCGTATCCTGGATGCGCCTGAAATCCGAAATGACTATT
ACCTGAACCTTGTGGATTGGAGTTCTGGGAATGTACTGGCCGTGGCACTGGACAACAGTGTGTACCTGTGGAGTG
CAAGCTCTGGTGACATCCTGCAGCTTTTGCAAATGGAGCAGCCTGGGGAATATATATCCTCTGTGGCCTGGATCA
AAGAGGGCAACTACTTGGCTGTGGGCACCAGCAGTGCTGAGGTGCAGCTATGGGATGTGCAGCAGCAGAAACGGC
TTCGAAATATGACCAGTCACTCTGCCCGAGTGGGCTCCCTAAGCTGGAACAGCTATATCCTGTCCAGTGGTTCAC
GTTCTGGCCACATCCACCACCATGATGTTCGGGTAGCAGAACACCATGTGGCCACACTGAGTGGCCACAGCCAGG
AAGTGTGTGGGCTGCGCTGGGCCCCAGATGGACGACATTTGGCCAGTGGTGGTAATGATAACTTGGTCAATGTGT
GGCCTAGTGCTCCTGGAGAGGGTGGCTGGGTTCCTCTGCAGACATTCACCCAGCATCAAGGGGCTGTCAAGGCCG
TAGCATGGTGTCCCTGGCAGTCCAATGTCCTGGCAACAGGAGGGGGCACCAGTGATCGACACATTCGCATCTGGA
ATGTGTGCTCTGGGGCCTGTCTGAGTGCCGTGGATGCCCATTCCCAGGTGTGCTCCATCCTCTGGTCTCCCCATT
ACAAGGAGCTCATCTCAGGCCATGGCTTTGCACAGAACCAGCTAGTTATTTGGAAGTACCCAACCATGGCCAAGG
TGGCTGAACTCAAAGGTCACACATCCCGGGTCCTGAGTCTGACCATGAGCCCAGATGGGGCCACAGTGGCATCCG
CAGCAGCAGATGAGACCCTGAGGCTATGGCGCTGTTTTGAGTTGGACCCTGCGCGGCGGCGGGAGCGGGAGAAGG
CCAGTGCAGCCAAAAGCAGCCTCATCCACCAAGGCATCCGCTGAAGACCAACCCATCACCTCAGTTGTTTTTTAT
TTTTCTAATAAAGTCATGTCTCCCTTCATGTTTTTTTTT

FIGURE 7019

MAQFAFESDLHSLLQLDAPIPNAPPARWQRKAKEAAGPAPSPMRAANRSHSAGRTPGRTPGKSSSKVQTTPSKPG
GDRYIPHRSAAQMEVASFLLSKENQPENSQTPTKKEHQKAWALNLNGFDVEEAKILRLSGKPQNAPEGYQNRLKV
LYSQKATPGSSRKTCRYIPSLPDRILDAPEIRNDYYLNLVDWSSGNVLAVALDNSVYLWSASSGDILQLLQMEQP
GEYISSVAWIKEGNYLAVGTSSAEVQLWDVQQQKRLRNMTSHSARVGSLSWNSYILSSGSRSGHIHHHDVRVAEH
HVATLSGHSQEVCGLRWAPDGRHLASGGNDNLVNVWPSAPGEGGWVPLQTFTQHQGAVKAVAWCPWQSNVLATGG
GTSDRHIRIWNVCSGACLSAVDAHSQVCSILWSPHYKELISGHGFAQNQLVIWKYPTMAKVAELKGHTSRVLSLT
MSPDGATVASAAADETLRLWRCFELDPARRREREKASAAKSSLIHQGIR

FIGURE 7020

CCAGAAACAGACCTGGGAGTGGAACAGCAGCAGTTAGGAGAGGACCCTGCTGGGGTCCAGGAGCCCGCCTGCCTG
GCTGCCCAACCAGCTCCAACACTGCTGGAGGCCTCCATTCTCTGTTCAGGGGAAGGCCCACTGGTTAGCTCAGAG
ATGGCTTCTGCGTGCTTTCTCCCTTCCGTCCTAGAGAACACATATTTTCTGTTTCCTCCCTTGCCTTCTCCCACT
TGGACCTGCTCAGAGCCCTGTGTACTCTGGTGTGTGGCCTCTCTCCCCTCTCTCTTTTCCTCCTTCTGGATTCTT
TCCTATCTTCATCCACAATCTCTACCCTTTATCTTGCCGTTACTCTACCCCGAGACTGCCTTCTGCCCTGGGTCC
CACCAAATAGATCCTGTCCTTCCCTTAGTGAAAATGAGGCCACCTCTTGGGGAACAGAAGACGCCCCAGTGAAAA
CAGAGTGCAAACCTGGCCTGGCATGGGAGCCTCCTTCTGGCCAATCAGGCAGGCCAGAGAACAGCAGCGGAGGGC
CCTGTCTTTCAGGCAGACCTCATGGCTGAGTGAGCCTCCCCTGGGCCCAGCACCCCACCTCAGCATGGTCCAAGC
CCATGGGGGGCGCTCCAGAGCACAGCCGTTGACCTTGTCTTTGGGGGCAGCCATGACCCAGCCTCCGCCTGAAAA
AACGCCAGCCAAGAAGCATGTGCGACTGCAGGAGAGGCGGGGCTCCAATGTGGCTCTGATGCTGGACGTTCGGTC
CCTGGGGGCCGTAGAACCCATCTGCTCTGTGAACACACCCCGGGAGGTCACCCTACACTTTCTGCGCACTGCTGG
ACACCCCCTTACCCGCTGGGCCCTTCAGCGCCAGCCACCCAGCCCCAAGCAACTGGAAGAAGAATTCTTGAAGAT
CCCTTCAAACTTTGTCAGCCCCGAAGACCTGGACATCCCTGGCCACGCCTCCAAGGACCGATACAAGACCATCTT
GCCAAATCCCCAGAGCCGTGTCTGTCTAGGCCGGGCACAGAGCCAGGAGGACGGAGATTACATCAATGCCAACTA
CATCCGAGGCTATGACGGGAAGGAGAAGGTCTACATTGCCACCCAGGGCCCCATGCCCAACACTGTGTCGGACTT
CTGGGAGATGGTGTGGCAAGAGGAAGTGTCCCTCATTGTCATGCTCACTCAGCTCCGAGAGGGCAAGGAGAAATG
TGTCCACTACTGGCCCACAGAAGAGGAAACCTATGGACCCTTCCAGATCCGCATCCAGGACATGAAAGAGTGCCC
AGAATACACTGTGCGGCAGCTCACCATCCAGTACCAGGAAGAGCGCCGGTCAGTAAAGCACATCCTCTTTTCGGC
CTGGCCAGACCATCAGACACCAGAATCAGCTGGGCCCCTGCTGCGCCTAGTGGCAGAGGTGGAGGAGAGCCCGGA
GACAGCCGCCCACCCCGGGCCTATCGTAGTCCACTGCAGTGCAGGGATTGGCCGGACGGGCTGCTTCATCGCCAC
GCGAATTGGCTGTCAACAGCTGAAAGCCCGAGGAGAAGTGGACATTCTGGGTATTGTGTGCCAACTGCGGCTAGA
CAGAGGGGGGATGATCCAGACGGCAGAGCAGTACCAGTTCCTGCACCACACTTTGGCCCTGTATGCAGGCCAGCT
GCCTGAGGAACCCAGCCCCTGACCCCTGCCACCCTCCGGTGGCCCAGGTGCCTACCTCCCTCAAGCCTGGGAAGG
TGGGTCTGGGGAAAGTGGGCCGAGTGATCTGGGGGTACCCCTTGGGTTGGTGTGGGGAAGGAGTGCCTCCTTAGT
GGTGCTTGCAGTCACAGGAAGCAGCAGCAGTAAGGACAAGGGGCCGGATTCCAGGTCTTCAACACTGGCCACTCC
TCTGCTTCCTCTGTTGGCCCCAGATGGACAGTAAGGGGAACCTCCAATGTCTCTCTGAACTTAAAGACAGGAGCT
GGCATTTATGACAGACAAAGAAAGAAGCCCAGGTGTCCTGGTGTTCTCTGAGACACTCTTTGTGAGCTTCAGTTT
CCTGTTCTATAACATGAACATAAGTGCTTAGCTGCCATGAGGGAAAAGTAATGAGAGAAGTTTCTAGAAGCCACT
CCAGCCACTCCTTCCTGGGGCTGACAAAAGGGTGATTCCAAGATCATCCTTCACCCGAGGTCCTGCCCAAGCACA
GGCCAGATGCAAGAATGGGGAAAAGTCTGGTCCTGATCTCCAAGTCTCAACATCCTATCAGTGACTCTGCTCCCT
GACCACACATCGGAAGGGCTGGATGACCCCAATCAAAAGAAAGAACAAGGACTCTGGTTACCCTTGCCTCCACCC
ATGTGTCATAAGAGTAGGCTACAGAGGTGACCAGGCCTGGCAGTTGAAATCTCTGGAAGAGGGAACATGTGGGGA
CTACTCAGAGGCAAAGAGGAGCTGCTCCTGCCTCCATGGTTGCTGGCCACTCCCACCAACTACTCTTAGGGAGGC
TAAGCAGTCTCTGTTTTGCTTCCATGGCTCAAATAATACCCTGGGTATGCAGGACCCACTATACCTTGCATTTGC
TGAGTACACCTAGAGAGCTTGGCTGTTTCCAAAAACAATCAGGGTCATAACCATCCATGCAGACATGGAGGCTCG
GCTGAACCAGGACTCCTCACTGTCTACCTGAGAGAATGAGCACCCCTCATCCATCTCAGCATCAACACAATTTCC
AGGGGACCTCAGGTCTACCTCAGGACTGAACGCCACACCTCAGGATTCCTCCTCCTTGAATCTGAGACTGGCTGC
CCATTCTGAGATGGGGATGAAGGTAAGATGCCGCATCACCAGGCACGCCGCCCCTGACAGCTGCCTTGATACCAG
CTCTCTGTGGAAACCCCCGAGGAGTTGGATCTGGAGAACAGCTGGGCCTCCTCACTCAGGACTTCTCTCCTGAAG
AACACGCAGTGCTAAAACTGAGGATGATTTCCCTAATGCTTCTGCTTGGCCTTATGGAGGAGCTGCTCCTTCCTT
ACAGCCTTGGGGATGGACTTGCCCACACCTCCACCTCCCCTGAGCCCTGTGAGAGGCACGACTGTCTATGCCAAT
GAGGCTCGGTGGGGGGCTCTCAAGTGCCTGATCCTGCCCTGGGCTCAGAGCCAGCCCAGAGGGAAGCAACTGCAC
AGCCCCACAGGCCCTCCCTGGCACTGTCCCCCCAACCCCATCTCAGAGCTCAGAGGGTACAAGCTCCAGAACAGT
AACCAAGTGGGAAAATAAAGACTTCTTGGATGACTGAC

FIGURE 7021

MVQAHGGRSRAQPLTLSLGAAMTQPPPEKTPAKKHVRLQERRGSNVALMLDVRSLGAVEPICSVNTPREVTLHFL
RTAGHPLTRWALQRQPPSPKQLEEEFLKIPSNFVSPEDLDIPGHASKDRYKTILPNPQSRVCLGRAQSQEDGDYI
NANYIRGYDGKEKVYIATQGPMPNTVSDFWEMVWQEEVSLIVMLTQLREGKEKCVHYWPTEEETYGPFQIRIQDM
KECPEYTVRQLTIQYQEERRSVKHILFSAWPDHQTPESAGPLLRLVAEVEESPETAAHPGPIVVHCSAGIGRTGC
FIATRIGCQQLKARGEVDILGIVCQLRLDRGGMIQTAEQYQFLHHTLALYAGQLPEEPSP

FIGURE 7022

GGGGCTACCGCGCCTTTGCTTCCTGGCGCACGCGGAGCCTCCTGGAGCCTGCCACCATCCTGCCTACTACGTGCT
GCCCTGCGCCCGCAGCCATGTGCCGCACCCTGGCCGCCTTCCCCACCACCTGCCTGGAGAGAGCCAAAGAGTTCA
AGACACGTCTGGGGATCTTTCTTCACAAATCAGAGCTGGGCTGCGATACTGGGAGTACTGGCAAGTCCGAGTGGG
GCAGTAAACACAGCAAAGAGAATAGAAACTTCTCAGAAGATGTGCTGGGGTGGAGAGAGTCGTTCGACCTGCTGC
TGAGCAGTAAAAATGGAGTGGCTGCCTTCCACGCTTTCCTGAAGACAGAGTTCAGTGAGGAGAACCTGGAGTTCT
GGCTGGCCTGTGAGGAGTTCAAGAAGATCCGATCAGCTACCAAGCTGGCCTCCAGGGCACACCAGATCTTTGAGG
AGTTCATTTGCAGTGAGGCCCCTAAAGAGGTCAACATTGACCATGAGACCCGCGAGCTGACGAGGATGAACCTGC
AGACTGCCACAGCCACATGCTTTGATGCGGCTCAGGGGAAGACACGTACCCTGATGGAGAAGGACTCCTACCCAC
GCTTCCTGAAGTCGCCTGCTTACCGGGACCTGGCTGCCCAAGCCTCAGCCGCCTCTGCCACTCTGTCCAGCTGCA
GCCTGGACGAGCCCTCACACACCTGAGTCTCCACGGCAGTGAGGAAGCCAGCCGGGAAGAGAGGTTGAGTCACCC
ATCCCCGAGGTGGCTGCCCCTGTGTGGGAGGCAGGTTCTGCAAAGCAAGTGCAAGAGGACAAAAAAAAAAAAAAA
AAAAAAAAAAATGCGCTCCAGCAGCCTGTTTGGGAAGCAGCAGTCTCTCCTTCAGATACTGTGGGACTCATGCTG
GAGAGGAGCCGCCCACTTCCAGGACCTGTGAATAAGGGCTAATGATGAGGGTTGGTGGGGCTCTCTGTGGGGCAA
AAAGGTGGTATGGGGGTTAGCACTGGCTCTCGTTCTCACCGGAGAAGGAAGTGTTCTAGTGTGGTTTAGGAAACA
TGTGGATAAAGGGAACCATGAAAATGAGAGGAGGAAAGACATCCAGATCAGCTGTTTTGCCTGTTGCTCAGTTGA
CTCTGATTGCATCCTGTTTTCCTAATTCCCAGACTGTTCTGGGCACGGAAGGGACCCTGGATGTGGAGTCTTCCC
CTTTGGCCCTCCTCACTGGCCTCTGGGCTAGCCCAGAGTCCCTTAGCTTGTACCTCGTAACACTCCTGTGTGTCT
GTCCAGCCTTGCAGTCATGTCAAGGCCAGCAAGCTGATGTGACTCTTGCCCCATGCGAGATATTTATACCTCAAA
CACTGGCCTGTGAGCCCTTTCCAAGTCAGTGGAGAGCCCTGAAAGGAGGCTCACTTGAATCCAGCTCAGTGCTCT
GGGTGGCCCCCTGCAGGTGGCCCCTGACCCTGCGTTGCAGCAGGGTCCACCTGTGAGCAGGCCCGCCCTGGGGCC
TCTTCCTGGATGTGCCCTCTCTGAGTTCTGTGCTGTCTCTTGGAGGCAGGGCCCAGGAGAACAAAGTGTGGAGGC
CTCGGGGAGTGGCTTTTCCAGCTCTCATGCCCCGCAGTGTGGAACAAGGCAGAAAAGGATCCTAGGAAATAAGTC
TCTTGGCGGTCCCTGAGAGTCCTGCTGAAATCCAGCCAGTGTTTTTTGTGGTATGAGAACAGGCAAAAAGAGATG
CCCCGAGATAGAAGGGGAGCCTTGTGTTTCTTTCCTGCAGACGTGAGATGAACACTGGAGTGGGCAGAGGTGGCM
CAGGACCATGGCACCCTTAGAGTGCAGAAGCTGGGGGGGAGAGGCTGCTTCGAAGGGCAGGACTGGGGATACCTGC
CTGTCACCTCAGGGCATCACTGAACAAACATTTCCTGATGGSAACTCCTGCGGCAGAGCCCAGGCTGGGGAAGTG
AACTACCCAGGGCAGCCCCTTTGTGGCCCAGGATAATCAACACTGTTCTCTCTGTACCATGAGCTCCTCCAGGAG
ATTATTTAAGTGTATTGTATCATTGGTTTTCTGTGATTGTCATAACATTGTTTTTGTTATTGTTGGTGCTGTTGT
TATTTATTATTGTAATTTCAGTTTGCCTCTACTGGAGAATCTCAGCAGGGGTTTCAGCCTGACTGTCTCCCTTTC
TCTACCAGACTCTACCTCTGAATGTGCTGGGAACCTCTTGGAGCCTGTCAGGAACTCCTCACTGTTTAAATATTT
ATTTATTGTGACAAATGGAGCTGGTTTCCTAGATATGAATGATGTTTGCAATCCCCATTTTCCTGTTTCAGCATG
TTATATTCTTATAAAATAAAAGCAAAAGTCAAATATGAAAAAAAAAAAAAAAAAAAAA

FIGURE 7023

MCRTLAAFPTTCLERAKEFKTRLGIFLHKSELGCDTGSTGKSEWGSKHSKENRNFSEDVLGWRESFDLLLLSSKNG
VAAFHAFLKTEFSEENLEFWLACEEFKKIRSATKLASRAHQIFEEFICSEAPKEVNIDHETRELTRMNLQTATAT
CFDAAQGKTRTLMEKDSYPRFLKSPAYRDLAAQASAASATLSSCSLDEPSHT

FIGURE 7024

GTCCAGGTTCCGCCCCGGAGCCGACTTCCTCCTGGTCGGCGGCTGCAGCGGGGTGAGCGGCGGCAGCGGCCGGGG
ATCCTGGAGCCATGGGGCGCGCGCGCGACGCCATCCTGGATGCGCTGGAGAACCTGACCGCCGAGGAGCTCAAGA
AGTTCAAGCTGAAGCTGCTGTCGGTGCCGCTGCGCGAGGGCTACGGGCGCATCCCGCGGGGCGCGCTGCTGTCCA
TGGACGCCTTGGACCTCACCGACAAGCTGGTCAGCTTCTACCTGGAGACCTACGGCGCCGAGCTCACCGCTAACG
TGCTGCGCGACATGGGCCTGCAGGAGATGGCCGGGCAGCTGCAGGCGGCCACGCACCAGGGCTCTGGAGCCGCGC
CAGCTGGGATCCAGGCCCCTCCTCAGTCGGCAGCCAAGCCAGGCCTGCACTTTATAGACCAGCACCGGGCTGCGC
TTATCGCGAGGGTCACAAACGTTGAGTGGCTGCTGGATGCTCTGTACGGGAAGGTCCTGACGGATGAGCAGTACC
AGGCAGTGCGGGCCGAGCCCACCAACCCAAGCAAGATGCGGAAGCTCTTCAGTTTCACACCAGCCTGGAACTGGA
CCTGCAAGGACTTGCTCCTCCAGGCCCTAAGGGAGTCCCAGTCCTACCTGGTGGAGGACCTGGAGCGGAGCTGAG
GCTCCTTCCCAGCAACACTCCGGTCAGCCCCTGGCAATCCCACCAAATCATCCTGAATCTGATCTTTTTATACAC
AATATACGAAAAGCCAGCTTGAAAAAAAAAAA

FIGURE 7025

MGRARDAILDALENLTAEELKKFKLKLLSVPLREGYGRIPRGALLSMDALDLTDKLVSFYLETYGAELTANVLRD
MGLQEMAGQLQAATHQGSGAAPAGIQAPPQSAAKPGLHFIDQHRAALIARVTNVEWLLDALYGKVLTDEQYQAVR
AEPTNPSKMRKLFSFTPAWNWTCKDLLLQALRESQSYLVEDLERS

FIGURE 7026

CGCCTCTTCACGGCACTGGGATCCGCATCTGCCTGGGATCATCAAGCCCTAGAAGCTGGGTTTCTTTAAATTAGG
GCTGCCGTTTTCTGTTTCTCCCTGGGCTGCGGAAAGCCAGAAGATTTTATCTAGCTTATACAAGGCTGCTGGTGT
TCCCTCTTTTTTTCCACGAGGGTGTTTTTGGCTGCAATTGCATGAAATCCCAATGGTGTAGACCAGTGGCGATGG
ATCTAGGAGTTTACCAACTGAGACATTTTTCAATTTCTTTCTTGTCATCCTTGCTGGGGACTGAAAACGCTTCTG
TGAGACTTGATAATAGCTCCTCTGGTGCAAGTGTGGTAGCTATTGACAACAAAATCGAGCAAGCTATGGATCTAG
TGAAAAGCCATTTGATGTATGCGGTCAGAGAAGAAGTGGAGGTCCTCAAAGAGCAAATCAAAGAACTAATAGAGA
AAAATTCCCAGCTGGAGCAGGAGAACAATCTGCTGAAGACACTGGCCAGTCCTGAGCAGCTTGCCCAGTTTCAGG
CCCAGCTGCAGACTGGCTCCCCCCCTGCCACCACCCAGCCACAGGGCACCACACAGCCCCCCGCCCAGCCAGCAT
CGCAGGGCTCAGGACCAACCGCATAGCTGCCTATGCCCCCGCAGAACTGGCTGCTGCGTGTGAACTGAACAGACG
GAGAAGATGTGCTAGGGAGAATCTGCCTCCACAGTCACCCATTTCATTGCTCGCTGCGAAAGAGACGTGAGACTG
ACATATGCCATTATCTCTTTTCCAGTATTAAACACTCATATGCTTATGGCTTGGAGAAATTTCTTAGTTGGGTGA
ATTAAAGGTTAATCCGAGAATTAGCATGGATATACCGGGACCTCATGCAGCTTGGCAGATATCTGAGAAATGGTT
TAATTCATGCTCAGGAGCTGTGTGCCTTTCCATCCCTTCCGGCTCCCTACCCCTCACTTCCAAGGGTTCTCTCTC
CTGCTTGCGCTTAGTGTCCTACATGGGGTTGTGAAGCGATGGAGCTCCTCACTGGACTCGCCTCTCTCCTCTCCT
CCCCCCAGGAGGAACTTGAAAGGAGGGTAAAAAGACTAAAATGAGGGGGAACAGAGTTCACTGTACAAATTTGAC
AACTGTCACCAAAATTCATAAAAAACAATAGTACTGTGCCTCTTTCTTCTCAAACAATGGATGACACAAAACTAT
GAGAGTGACAAAATGGTGACAGGTAGCTGGGACCTAGGCTATCTTACCATGAAGGTTGTTTTGCTTATTGTATAT
TTGTGTATGTAGTGTAACTATTTTGTACAATAGAGGACTGTAACTACTATTTAGGTTGTACAGATTGAAATTTAG
TTGTTTCATTGGCTGTCTGAGGAGGTGTGGACTTTTATATATAGATCTACATAAAAACTGCTACATGACAAAAAC
CACACCTAAACCCCTTTTAAGAATTTGGCACAGTTACTCACTTTGTGTAATCTGAAATCTAGCTGCTGAATACGC
TGAAGTAAATCCTTGTTCACTGAAGTCTTTCAATTGAGCTGGTTGAATACTTTGAAAAATGCTCAGTTCTAACTA
ATGAAATGGATTTCCCAGTAGGGGTTTCTGCATATCACCTGTATAGTAGTTATATGCATATGTTTCTGTGCATGT
TCTCTACACAATTGTAAGGTGTCACTGTATTTAACTGTTGCACTTGTCAACTTTCAATAAAGCATATAAATGTTG

FIGURE 7027

MKSQWCRPVAMDLGVYQLRHFSISFLSSLLGTENASVRLDNSSSGASVVAIDNKIEQAMDLVKSHLMYAVREEVE
VLKEQIKELIEKNSQLEQENNLLKTLASPEQLAQFQAQLQTGSPPATTQPQGTTQPPAQPASQGSGPTA

FIGURE 7028

ACTCCGCCTTCCACGTGCACCCACTGCCTCTTCCCTTCTCGCTTGGGAACTCTAGTCTCGCCTCGGGTTGCAATG

GACCCCAACTGCTCCTGTGCCGCTGGTGTCTCCTGCACCTGCGCCAGCTCCTGCAAGTGCAAAGAGTGCAAATGC
ACCTCCTGCAAGAAGAGCTGCTGCTCCTGCTGCCCTGTGGGCTGTGCCAAGTGTGCCCAAGGCTGCATCTGCAAA
GGGGCATCGGAGAAGTGCAGCTGCTGCGCCTGATGTCGGGACAGCCCTGCTCCCAAGTACAAATAGAGTGACCCG
TAAAATCTAGGATTTTTTGTTTTTTGCTACAATCTTGACCCCTTTGCTACATTCCCTTTTTTCTGTGAAATATGT
GAATAATAATTAAACACTTAG

FIGURE 7029

MDPNCSCAAGVSCTCASSCKCKECKCTSCKKSCCSCCPVGCAKCAQGCICKGASEKCSCCA

FIGURE 7030A

CGAGCGCGGCGCCCTTGAGCTGCACCGCGGCGCAGGTTTGCGAGCCGACTTGTCAGCCGGCCAAGAAAAGGAAGC
TCCGTCCCTTCCCGCTCACCCGGCTTCCCCACCCCTTGTACTCTAAACTCTGCAGAGGGCGAGCGGCGCGGCCAC
GGAGGCGCCGAGGAGGAGCGAGCCGCCGCCGGGCAGCGGCGTGCCCTCGGGGGAGAGGGCGCCGGAGAGGAGGCG
GCGGCGCGGCGGCGAGGGCGCGGCGCGCGATGGCAGCTGCTTAGCCCGGCGGGCGCGGAGCAGCCCCGAGCTGTG
GCTGGCCAGGCGGTGCGGCTGGGCGGGGGACGCCGCCGCCGTTGCTGCCCGGCCCGGAGAG**ATG**AGCACGGAGGC
GGACGAGGGCATCACTTTCTCTGTGCCACCCTTCGCCCCCTCGGGCTTCTGCACCATCCCCGAGGGCGGCATCTG
CAGGAGGGGAGGAGCGGCGGCGGTGGGCGAGGGCGAGGAGCACCAGCTGCCACCGCCGCCGCCGGGCAGCTTCTG
GAACGTGGAGAGCGCCGCTGCCCCTGGCATCGGTTGTCCGGCGGCCACCTCCTCGAGCAGTGCCACCCGAGGCCG
GGGCAGCTCTGTTGGCGGGGGCAGCCGACGGACCACGGTGGCATATGTGATCAACGAAGCGAGCCAAGGGCAACT
GGTGGTGGCCGAGAGCGAGGCCCTGCAGAGCTTGCGGGAGGCGTGCGAGACAGTGGGCGCCACCCTGGAAACCCT
GCATTTTGGGAAACTCGACTTTGGAGAAACCACCGTGCTGGACCGCTTTTACAATGCAGATATTGCGGTGGTGGA
GATGAGCGATGCCTTCCGGCAGCCGTCCTTGTTTTACCACCTTGGGGTGAGAGAAAGTTTCAGCATGGCCAACAA
CATCATCCTCTACTGTGATACTAACTCGGACTCTCTGCAGTCACTGAAGGAAATAATTTGCCAGAAGAATACTAT
GTGCACTGGGAACTACACCTTTGTTCCTTACATGATAACTCCACATAACAAAGTCTACTGCTGTGACAGCAGCTT
CATGAAGGGGTTGACAGAGCTCATGCAACCGAACTTCGAGCTGCTTCTTGGACCCATCTGCTTACCTCTTGTGGA
TCGTTTTATTCAACTTTTGAAGGTGGCACAAGCAAGTTCTAGCCAGTACTTCCGGGAATCTATACTCAATGACAT
CAGGAAAGCTCGTAATTTATACACTGGTAAAGAATTGGCAGCTGAGTTGGCAAGAATTCGGCAGCGAGTAGATAA
TATCGAAGTCTTGACAGCAGATATTGTCATAAATCTGTTACTTTCCTACAGAGATATCCAGGACTATGATTCTAT
TGTGAAGCTGGTAGAGACTTTAGAAAAACTGCCAACCTTTGATTTGGCCTCCCATCACCATGTGAAGTTTCATTA
TGCATTTGCACTGAATAGGAGAAATCTCCCTGGTGACAGAGCAAAAGCTCTTGATATTATGATTCCCATGGTGCA
AAGCGAAGGACAAGTTGCTTCAGATATGTATTGCCTAGTTGGTCGAATCTACAAAGATATGTTTTTGGACTCTAA
TTTCACGGACACTGAAAGCAGAGACCATGGAGCTTCTTGGTTCAAAAAGGCATTTGAATCTGAGCCAACACTACA
GTCAGGAATTAATTATGCGGTCCTCCTCCTGGCAGCTGGACACCAGTTTGAATCTTCCTTTGAGCTCCGGAAAGT
TGGGGTGAAGCTAAGTAGTCTTCTTGGTAAAAAGGGAAACTTGGAAAAACTCCAGAGCTACTGGGAAGTTGGATT
TTTTCTGGGGGCCAGCGTCCTAGCCAATGACCACATGAGAGTCATTCAAGCATCTGAAAAGCTTTTTAAACTGAA
GACACCAGCATGGTACCTCAAGTCTATTGTAGAGACAATTTTAATATATAAGCATTTTGTGAAACTGACCACAGA
ACAGCCTGTGGCCAAGCAAGAACTTGTGGACTTTTGGATGGATTTCCTGGTCGAGGCCACAAAGACAGATGTTAC
TGTGGTTAGGTTTCCAGTATTAATATTAGAACCAACCAAAATCTATCAACCTTCTTATTTGTCTATCAACAATGA
AGTTGAGGAAAAGACAATCTCTATTTGGCACGTGCTTCCTGATGACAAGAAAGGTATACATGAGTGGAATTTTAG
TGCCTCTTCTGTCAGGGGAGTGAGTATTTCTAAATTTGAAGAAAGATGCTGCTTTCTTTATGTGCTTCACAATTC
TGATGATTTCCAAATCTATTTCTGTACAGAACTTCATTGTAAAAAGTTTTTTGAGATGGTGAACACCATTACCGA
AGAGAAGGGGAGAAGCACAGAGGAAGGAGACTGTGAAAGTGACTTGCTGGAGTATGACTATGAATATGATGAAAA
TGGTGACAGAGTCGTTTTAGGAAAAGGCACTTATGGGATAGTCTACGCAGGTCGGGACTTGAGCAACCAAGTCAG
AATTGCTATTAAGGAAATCCCAGAGAGAGACAGCAGATACTCTCAGCCCCTGCATGAAGAAATAGCATTGCATAA
ACACCTGAAGCACAAAAATATTGTCCAGTATCTGGGCTCTTTCAGTGAGAATGGTTTCATTAAAATCTTCATGGA
GCAGGTCCCTGGAGGAAGTCTTTCTGCTCTCCTTCGTTCCAAATGGGGTCCATTAAAAGACAATGAGCAAACAAT
TGGCTTTTATACAAAGCAAATACTGGAAGGATTAAAATATCTCCATGACAATCAGATAGTTCACCGGGACATAAA
GGGTGACAATGTGTTGATTAATACCTACAGTGGTGTTCTCAAGATCTCTGACTTCGGAACATCAAAGAGGCTTGC
TGGCATAAACCCCTGTACTGAAACTTTTACTGGTACCCTCCAGTATATGGCACCAGAAATAATAGATAAAGGACC
AAGAGGCTACGGAAAAGCAGCAGACATCTGGTCTCTGGGCTGTACAATCATTGAAATGGCCACAGGAAAACCCCC
ATTTTATGAACTGGGAGAACCACAAGCAGCTATGTTCAAGGTGGGAATGTTTAAAGTCCACCCTGAGATCCCAGA
GTCCATGTCTGCAGAGGCCAAGGCATTCATACTGAAATGTTTTGAACCAGATCCTGACAAGAGAGCCTGTGCTAA
CGACTTGCTTGTTGATGAGTTTTTAAAAGTTTCAAGCAAAAAGAAAAAGACACAACCTAAGCTTTCAGCTCTTTC
AGCTGGATCAAATGAATATCTCAGGAGTATATCCTTGCCGGTACCTGTGCTGGTGGAGGACACCAGCAGCAGCAG
TGAGTACGGCTCAGTTTCACCCGACACGGAGTTGAAAGTGGACCCCTTCTCTTTCAAAACAAGAGCCAAGTCCTG
CGGAGAAAGAGATGTCAAGGGAATTCGGACACTCTTTTTGGGCATTCCAGATGAGAATTTTGAAGATCACAGTGC
TCCTCCTTCCCCTGAAGAAAAAGATTCTGGATTCTTCATGCTGAGGAAGGACAGTGAGAGGCGAGCTACCCTTCA
CAGGATCCTGACGGAAGACCAAGACAAAATTGTGAGAAACCTAATGGAATCTTTAGCTCAGGGGGCTGAAGAACC

FIGURE 7030B

GAAACTAAAATGGGAACACATCACAACCCTCATTGCAAGCCTCAGAGAATTTGTGAGATCCACTGACCGAAAAAT
CATAGCCACCACACTGTCAAAGCTGAAACTGGAGCTGGACTTCGACAGCCATGGCATTAGCCAAGTCCAGGTGGT
ACTCTTTGGTTTTCAAGATGCTGTCAATAAAGTTCTTCGGAATCATAACATCAAGCCGCACTGGATGTTTGCCTT
AGACAGTATCATTCGGAAGGCGGTACAGACAGCCATTACCATCCTGGTTCCAGAACTAAGGCCACATTTCAGCCT
TGCATCTGAGAGTGATACTGCTGATCAAGAAGACTTGGATGTAGAAGATGACCATGAGGAACAGCCTTCAAATCA
AACTGTCCGAAGACCTCAGGCTGTCATTGAAGATGCTGTGGCTACCTCAGGCGTGAGCACGCTCAGTTCTACTGT
GTCTCATGATTCCCAGAGTGCTCACCGGTCACTGAATGTACAGCTTGGAAGGATGAAAATAGAAACCAATAGATT
ACTGGAAGAATTGGTTCGGAAAGAGAAAGAATTACAAGCACTCCTTCATCGAGCTATTGAAGAAAAAGACCAAGA
AATTAAACACCTGAAGCTTAAGTCCCAACCCATAGAAATTCCTGAATTGCCTGTATTTCATCTAAATTCTTCTGG
CACAAATACTGAAGATTCTGAACTTACCGACTGGCTGAGAGTGAATGGAGCTGATGAAGACACTATAAGCCGGTT
TTTGGCTGAAGATTATACACTATTGGATGTTCTCTACTATGTTACACGTGATGACTTAAAATGCTTGAGACTAAG
GGGAGGGATGCTGTGCACACTGTGGAAGGCTATCATTGACTTTCGAAACAAACAGACTTGACTGTTGCTCAATCT
AATCTTCGATGGAAATTCTAAAAATTAATACAGAGCTGATCTTCTTGGGGGTGGGAAAATCGAAGGGAGAGGAGA
AAGGCGCTGCACTTTAAATCCAGTATTTGTTTACTCATGTTAAAAAAAAAAAAAAACAGACAAAACACACTGAAAT
TTCCTAACTACATCTATTTCTATAATTTTTAAGGACTCTTCATAAGGACTCTTAAAATAATCCTGAACATTAGAA
CCCTAATGTTCAGGAAGATTTTAATCTAAGCATTTTTATGGAAATATTTTTAATGCAGCAGCTATTGCACTTCAG
CCAAATGTTTATTTCACACAAAACGGATGTAACATTTCATGTGATCGTGCACCACTGGAACAAAACCAAAATGTG
ACCATAACTGTTTAGGCTTCTGTGTGTTTGTAATATGCTCTAATAATCTGAGTAGAAATGCGTAATTTCAATTAC
TGTATAAAGTTTATGTTTTTTTAAGTGTGCAGAATCTGAGAGCAATGGTTTTTACTTCTCTGTGTTAATTGTAAT
ATTGACTCTATTTTGTAACTTAAGTTTCTGACCTGTCGTACATTTGTTTGAGTCGTTTATGTACTACTGAACTGT
ACCAGTTGCACATGCTTGAACTGTAGTAATGTTAGCTTGTTCTAAAGCTATCCATTGTGTCATATTTACTCTAAA
AATTAAAGAGACTCTCAACAAAAAAAAAAAAAAAAAAAA

FIGURE 7031

MSTEADEGITFSVPPFAPSGFCTIPEGGICRRGGAAAVGEGEEHQLPPPPPGSFWNVESAAAPGIGCPAATSSSS
ATRGRGSSVGGGSRRTTVAYVINEASQGQLVVAESEALQSLREACETVGATLETLHFGKLDFGETTVLDRFYNAD
IAVVEMSDAFRQPSLFYHLGVRESFSMANNIILYCDTNSDSLQSLKEIICQKNTMCTGNYTFVPYMITPHNKVYC
CDSSFMKGLTELMQPNFELLLGPICLPLVDRFIQLLKVAQASSSQYFRESILNDIRKARNLYTGKELAAELARIR
QRVDNIEVLTADIVINLLLSYRDIQDYDSIVKLVETLEKLPTFDLASHHHVKFHYAFALNRRNLPGDRAKALDIM
IPMVQSEGQVASDMYCLVGRIYKDMFLDSNFTDTESRDHGASWFKKAFESEPTLQSGINYAVLLLAAGHQFESSF
ELRKVGVKLSSLLGKKGNLEKLQSYWEVGFFLGASVLANDHMRVIQASEKLFKLKTPAWYLKSIVETILIYKHFV
KLTTEQPVAKQELVDFWMDFLVEATKTDVTVVRFPVLILEPTKIYQPSYLSINNEVEEKTISIWHVLPDDKKGIH
EWNFSASSVRGVSISKFEERCCFLYVLHNSDDFQIYFCTELHCKKFFEMVNTITEEKGRSTEEGDCESDLLEYDY
EYDENGDRVVLGKGTYGIVYAGRDLSNQVRIAIKEIPERDSRYSQPLHEEIALHKHLKHKNIVQYLGSFSENGFI
KIFMEQVPGGSLSALLRSKWGPLKDNEQTIGFYTKQILEGLKYLHDNQIVHRDIKGDNVLINTYSGVLKISDFGT
SKRLAGINPCTETFTGTLQYMAPEIIDKGPRGYGKAADIWSLGCTIIEMATGKPPFYELGEPQAAMFKVGMFKVH
PEIPESMSAEAKAFILKCFEPDPDKRACANDLLVDEFLKVSSKKKKTQPKLSALSAGSNEYLRSISLPVPVLVED
TSSSSEYGSVSPDTELKVDPFSFKTRAKSCGERDVKGIRTLFLGIPDENFEDHSAPPSPEEKDSGFFMLRKDSER
RATLHRILTEDQDKIVRNLMESLAQGAEEPKLKWEHITTLIASLREFVRSTDRKIIATTLSKLKLELDFDSHGIS
QVQVVLFGFQDAVNKVLRNHNIKPHWMFALDSIIRKAVQTAITILVPELRPHFSLASESDTADQEDLDVEDDHEE
QPSNQTVRRPQAVIEDAVATSGVSTLSSTVSHDSQSAHRSLNVQLGRMKIETNRLLEELVRKEKELQALLHRAIE
EKDQEIKHLKLKSQPIEIPELPVFHLNSSGTNTEDSELTDWLRVNGADEDTISRFLAEDYTLLDVLYYVTRDDLK
CLRLRGGMLCTLWKAIIDFRNKQT

FIGURE 7032

GGCACGAGGGTGTACGGCCAACGCCAAGTAGGGGATTGCGTTCCCTCCAGTCGCAGAGTTTCCCTCTTGTCGCCC
AGGCTGGAGTGAAGTGGCACGATCTCGGCTTACTGCAAGCTCCGCCTCCCGGGTTCACGCCATTCTCCTGCCTCA
GCCTCCCGAGTAGCTGGGACTACAGACCCTATCAGATTTGGATATGTCCTTCATATTTGATTGGATTTACAGTGG
TTTCAGCAGTGTGCTACAGTTTTTAGGATTATATAAGAAAACTGGTAAACTGGTATTTCTTGGATTGGATAATGC
AGGAAAAACAACATTGCTACACATGCTAAAAGATGACAGACTTGGACAACATGTCCCAACATTACATCCCACTTC
CGAAGAACTGACCATTGCTGGCATGACGTTTACAACTTTTGATCTGGGTGGACATGTTCAAGCTCGAAGAGTGTG
GAAAAACTACCTTCCTGCTATCAATGGCATTGTATTTCTGGTGGATTGTGCAGACCACGAAAGGCTGTTAGAGTC
AAAAGAAGAACTTGATTCACTAATGACAGATGAAACCATTGCTAATGTGCCTATACTGATTCTTGGGAATAAGAT
CGACAGACCTGAAGCCATCAGTGAAGAGAGGTTGCGAGAGATGTTTGGTTTATATGGTCAGACAACAGGAAAGGG
GAGTATATCTCTGAAAGAACTGAATGCCCGACCCTTAGAAGTTTTCATGTGTAGTGTGCTCAAAAGACAAGGTTA
CGGAGAAGGCTTCCGCTGGATGGCACAGTACATTGATTAACACAAACTCACATTGGTTCCAGGTCTCAACGTTCA
GGCTTACTCAGAGATTTGATTGCTCAACATGCATAACTTGAATTCAATAGACTTTTGCTGGTTATAAAACAGATG
TTTTTTAGATTATTAATATTAAATCAACTTAATTTGAAAAAAAAAAAAAAAAAAAA

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FIGURE 7033

MSFIFDWIYSGFSSVLQFLGLYKKTGKLVFLGLDNAGKTTLLHMLKDDRLGQHVPTLHPTSEELTIAGMTFTTFD
LGGHVQARRVWKNYLPAINGIVFLVDCADHERLLESKEELDSLMTDETIANVPILILGNKIDRPEAISEERLREM
FGLYGQTTGKGSISLKELNARPLEVFMCSVLKRQGYGEGFRWMAQYID

FIGURE 7034

GGGGGAAGTTGCTGGCTGACTGGGCTTGCGAGGAAACCGCCTCGGAGCTGCAGCGAAGGCCAAGGAATCACTGAA
GATCGGCGAGGGAGGACAGGGGGTTCATCATGGGTGGCTTTTTCTCAAGTATATTTTCCAGTCTGTTTGGAACTC
GGGAAATGAGAATTTTAATTTTGGGATTAGATGGAGCAGGAAAAACCACAATTTTGTACAGATTACAAGTGGGAG
AAGTTGTTACTACTATACCTACCATTGGATTTAATGTAGAGACGGTGACGTACAAAAACCTTAAATTCCAAGTCT
GGGATTTAGGAGGACAGACAAGTATCAGGCCATACTGGAGATGTTACTATTCAAACACAGATGCAGTCATTTATG
TAGTAGACAGTTGTGACCGAGACCGAATTGGCATTTCCAAATCAGAGTTAGTTGCCATGTTGGAGGAAGAAGAGC
TGAGAAAAGCCATTTTAGTGGTGTTTGCAAATAAACAGGACATGGAACAGGCCATGACTTCCTCAGAGATGGCAA
ATTCACTTGGGTTACCTGCCTTGAAGGACCGAAAATGGCAGATATTCAAAACGTCAGCAACCAAAGGCACCGGCC
TTGATGAGGCAATGGAATGGTTAGTTGAAACATTAAAAAGCAGACAGTAATTCAGTCCATTCTTCTCCCCTGAAA
TGAAGACTACATCACCTCTCTCCCTTTGGAAACAGTCAAGTGTACTTCACACTACTAGATGTTAAAACTATATGA
TTATTGGCATATACTGACTGACTGCAATATTTGTAGTAAATAGGGAAAATAAGTATTTAGTTGGAGGGATAATTT
GATCGAATCACCTGAATGTTCTATGTAATGTAAAATATTCTTTTCTTGCTTTCTTGTGTTAAGGTATATATTCTA
TTTGTATGGAATTCTTATTCAAATACAGTTGTATTAAAGAGTATACTCCTATTGGATGAAAAAAACCT

FIGURE 7035

MGGFFSSIFSSLFGTREMRILILGLDGAGKTTILYRLQVGEVVTTIPTIGFNVETVTYKNLKFQVWDLGGQTSIR
PYWRCYYSNTDAVIYVVDSCDRDRIGISKSELVAMLEEEELRKAILVVFANKQDMEQAMTSSEMANSLGLPALKD
RKWQIFKTSATKGTGLDEAMEWLVETLKSRQ

FIGURE 7036

CGCCCAAAGCCAGCGAAGCACGGGCCCAACCGGGCCATGTCGGGGGAGCCTGAGCTCATTGAGCTGCGGGAGCTG
GCACCCGCTGGGCGCGCTGGGAAGGGCCGCACCCGGCTGGAGCGTGCCAACGCGCTGCGCATCGCGCGGGGCACC
GCGTGCAACCCCACACGGCAGCTGGTCCCTGGCCGTGGCCACCGCTTCCAGCCCGCGGGGCCCGCCACGCACACG
TGGTGCGACCTCTGTGGCGACTTCATCTGGGGCGTCGTGCGCAAAGGCCTGCAGTGCGCGCAACAAGGACGGTTC
TTACACAGGCTTCATCAAGGTTCAGCTGAAGCTGGTGCGCCCTGTCTCTGTGCCCTCCAGCAAGAAGCCACCCTC
CTTGCAGGATGCCCGGCGGGGCCCAGGACGGGGCACAAGTGTCAGGCGCCGCACTTCCTTTTACCTGCCCAAGGA
TGCTGTCAAGCACCTGCATGTGCTGTCACGCACAAGGGCACGTGAAGTCATTGAGGCCCTGCTGCGAAAGTTCTT
GGTGGTGGATGACCCCCGCAAGTTTGCACTCTTTGAGCGCGCTGAGCGTCACGGCCAAGTGTACTTGCGGAAGCT
GTTGGATGATGACGAGCCCCTGCGGCTGCGGCTCCTGGCAGGGCCCAGTGACAAGGCCCTGAGCTTTGTCCTGAA
GGAAAATGACTCTGGGGAGGTGAACTGGGACGCCTTCAGCATGCCTGAACTACATAACTTCCTACGTATCCTGCA
GCGGGAGGAGGAGGAGCACCTCCGCCAGATCCTGCAGAAGTACTCCTATTGCCGCCAGAAGATCCAAGAGGCCCT
GCACGCCTGCCCCCTTGGGTGACCTCTTGTACCCCCAGGTGGAAGGCAGACAGCAGGCAGCGCCAAGTGCGTGCC
GTGTGAGTGTGACAGGGCCAGTGGGGCCTGTGGAATGAGTGTGCATGGAGGCCCTCCTGTGCTGGGGGAATGAGC
CCAGAGAACAGCGAAGTAGCTTGCTCCCTGTGTCCACCTATGGGTGTAGCCAGGTATGGCTCTGCACCCCTCTGC
CCTCATTACTGGGCCTTAGTGGGCCAGGGCTGCCCTGAGAAGCTGCTCCAGGCCTGCAGCAGGAGTGGTGCAGAC
AGAAGTCTCCTCAATTTTTGTCTCAGAAGTGAAAATCTTGGAGACCCTGCAAACAGAACAGGGTCATGTTTGCAG
GGGTGACGGCCCTCATCTATGAGGAAAGGTTTTGGATCTTGAATGTGGTCTCAGGATATCCTTATCAGAGCTAAG
GGTGGGTGCTCAGAATAAGGCAGGCATTGAGGAAGAGTCTTGGTTTCTCTCTACAGTGCCAACTCCTCACACACC
CTGAGGTCAGGGAGTGCTGGCTCACAGTACAGCATGTGCCTTAATGCTTCATATGAGGAGGATGTCCCTGGGCCA
GGGTCTGTGTGAATGTGGGCACTGGCCCAGGTTCATACCTTATTTGCTAATCAAAGCCAGGGTCTCTCCCTCAGG
TGTTTTTTATGAAGTGCGTGAATGTATGTAATGTGTGGTGGCCTCAGCTGAATGCCTCCTGTGGGGAAAGGGGTT
GGGGTGACAGTCATCATCAGGCCTGGGGCTGAGAGAATTGGCTCAATAAAGATTTCAAGATCCAAAAAAAAAAAA

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FIGURE 7037

MSGEPELIELRELAPAGRAGKGRTRLERANALRIARGTACNPTRQLVPGRGHRFQPAGPATHTWCDLCGDFIWGV
VRKGLQCAQQGRFLHRLHQGSAEAGAPCLCALQQEATLLAGCPAGPRTGHKCQAPHFLLPAQGCCQAPACAVTHK
GT

FIGURE 7038

GGGGACTCAAGGCTGGCCTGGCTCAAGTGAACAGCACGTCCAGGAGGCGACCTCGTCCGCGGGTTTGCATTCTGG
GGTGGACGAGCTGGGGGTTCGGTCCGAGCCCGGTGGGAGGCTCCCGGAGCGCAGCCTGGGCCCAGCCCACCCCGC
GCCGGCGGCC**ATG**GCAGGCACCCTGGACCTGGACAAGGGCTGCACGGTGGAGGAGCTGCTCCGCGGGTGCATCGA
AGCCTTCGATGACTCCGGGAAGGTGCGGGACCCGCAGCTGGTGCGCATGTTCCTCATGATGCACCCCTGGTACAT
CCCCTCCTCTCAGCTGGCGGCCAAGCTGCTCCACATCTACCAACAATCCCGGAAGGACAACTCCAATTCCCTGCA
GGTGAAAACGTGCCACCTGGTCAGGTACTGGATCTCCGCCTTCCCAGCGGAGTTTGACTTGAACCCGGAGTTGGC
TGAGCAGATCAAGGAGCTGAAGGCTCTGCTAGACCAAGAAGGGAACCGACGGCACAGCAGCCTAATCGACATAGA
CAGCGTCCCTACCTACAAGTGGAAGCGGCAGGTGACTCAGCGGAACCCTGTGGGACAGAAAAAGCGCAAGATGTC
CCTGTTGTTTGACCACCTGGAGCCCATGGAGCTGGCGGAGCATCTCACCTACTTGGAGTATCGCTCCTTCTGCAA
GATCCTGTTTCAGGACTATCACAGTTTCGTGACTCATGGCTGCACTGTGGACAACCCCGTCCTGGAGCGGTTCAT
CTCCCTCTTCAACAGCGTCTCACAGTGGGTGCAGCTCATGATCCTCAGCAAACCCACAGCCCCGCAGCGGGCCCT
GGTCATCACACACTTTGTCCACGTGGCGGAGAAGCTGCTACAGCTGCAGAACTTCAACACGCTGATGGCAGTGGT
CGGGGGCCTGAGCCACAGCTCCATCTCCCGCCTCAAGGAGACCCACAGCCACGTTAGCCCTGAGACCATCAAGCT
CTGGGAGGGTCTCACGGAACTAGTGACGGCGACAGGCAACTATGGCAACTACCGGCGTCGGCTGGCAGCCTGTGT
GGGCTTCCGCTTCCCGATCCTGGGTGTGCACCTCAAGGACCTGGTGGCCCTGCAGCTGGCACTGCCTGACTGGCT
GGACCCAGCCCGGACCCGGCTCAACGGGGCCAAGATGAAGCAGCTCTTTAGCATCCTGGAGGAGCTGGCCATGGT
GACCAGCCTGCGGCCACCAGTACAGGCCAACCCCGACCTGCTGAGCCTGCTCACGGTGTCTCTGGATCAGTATCA
GACGGAGGATGAGCTGTACCAGCTGTCCCTGCAGCGGGAGCCGCGCTCCAAGTCTTCGCCAACCAGCCCCACGAG
TTGCACCCCACCACCCCGGCCCCCGGTATTGGAGGAGTGGACCTCGGCTGCCAAACCCAAGCTGGATCAGGCCCT
CGTGGTGGAGCACATCGAGAAGATGGTGGAGTCTGTGTTCCGGAACTTTGACGTCGATGGGGATGGCCACATCTC
ACAGGAAGAATTCCAGATCATCCGTGGGAACTTCCCTTACCTCAGCGCCTTTGGGGACCTCGACCAGAACCAGGA
TGGCTGCATCAGCAGGGAGGAGATGGTTTCCTATTTCCTGCGCTCCAGCTCTGTGTTGGGGGGGCGCATGGGCTT
CGTACACAACTTCCAGGAGAGCAACTCCTTGCGCCCCGTCGCCTGCCGCCACTGCAAAGCCCTGATCCTGGGCAT
CTACAAGCAGGGCCTCAAATGCCGAGCCTGTGGAGTGAACTGCCACAAGCAGTGCAAGGATCGCCTGTCAGTTGA
GTGTCGGCGCAGGGCCCAGAGTGTGAGCCTGGAGGGGTCTGCACCCTCACCCTCACCCATGCACAGCCACCATCA
CCGCGCCTTCAGCTTCTCTCTGCCCCGCCCTGGCAGGCGAGGCTCCAGGCCTCCAGAGATCCGTGAGGAGGAGGT
ACAGACGGTGGAGGATGGGGTGTTTGACATCCACTTG**TAA**TAGATGCTGTGGTTGGATCAAGGACTCATTCCTGC
CTTGGAGAAAATACTTCAACCAGAGCAGGGAGCCTGGGGGTGTCGGGGCAGGAGGCTGGGGATGGGGGTGGGATA
TGAGGGTGGCATGCAGCTGAGGGCAGGGCCAGGGCTGGTGTCCCTAAGGTTGTACAGACTCTTGTGAATATTTGT
ATTTTCCAGATGGAATAAAAAGGCCCGTGTAATTAACCTTCAAAAAAAAAAAAAAAAAAAA

FIGURE 7039

MAGTLDLDKGCTVEELLRGCIEAFDDSGKVRDPQLVRMFLMMHPWYIPSSQLAAKLLHIYQQSRKDNSNSLQVKT
CHLVRYWISAFPAEFDLNPELAEQIKELKALLDQEGNRRHSSLIDIDSVPTYKWKRQVTQRNPVGQKKRKMSLLF
DHLEPMELAEHLTYLEYRSFCKILFQDYHSFVTHGCTVDNPVLERFISLFNSVSQWVQLMILSKPTAPQRALVIT
HFVHVAEKLLQLQNFNTLMAVVGGLSHSSISRLKETHSHVSPETIKLWEGLTELVTATGNYGNYRRRLAACVGFR
FPILGVHLKDLVALQLALPDWLDPARTRLNGAKMKQLFSILEELAMVTSLRPPVQANPDLLSLLTVSLDQYQTED
ELYQLSLQREPRSKSSPTSPTSCTPPPRPPVLEEWTSAAKPKLDQALVVEHIEKMVESVFRNFDVDGDGHISQEE
FQIIRGNFPYLSAFGDLDQNQDGCISREEMVSYFLRSSSVLGGRMGFVHNFQESNSLRPVACRHCKALILGIYKQ
GLKCRACGVNCHKQCKDRLSVECRRRAQSVSLEGSAPSPSPMHSHHHRAFSFSLPRPGRRGSRPPEIREEEVQTV
EDGVFDIHL

FIGURE 7040

CCCCCCCGAGCGCCGCTCCGGCTGCACCGCGCTCGCTCCGAGTTTCAGGCTCGTGCTAAGCTAGCGCCGTCGTCG
TCTCCCTTCAGTCGCCATC**ATG**ATTATCTACCGGGACCTCATCAGCCACGATGAGATGTTCTCCGACATCTACAA
GATCCGGGAGATCGCGGACGGGTTGTGCCTGGAGGTGGAGGGGAAGATGGTCAGTAGGACAGAAGGTAACATTGA
TGACTCGCTCATTGGTGGAAATGCCTCCGCTGAAGGCCCCGAGGGCGAAGGTACCGAAAGCACAGTAATCACTGG
TGTCGATATTGTCATGAACCATCACCTGCAGGAAACAAGTTTCACAAAAGAAGCCTACAAGAAGTACATCAAAGA
TTACATGAAATCAATCAAAGGGAAACTTGAAGAACAGAGACCAGAAAGAGTAAAACCTTTTATGACAGGGGCTGC
AGAACAAATCAAGCACATCCTTGCTAATTTCAAAAACTACCAGTTCTTTATTGGTGAAAACATGAATCCAGATGG
CATGGTTGCTCTATTGGACTACCGTGAGGATGGTGTGACCCCATATATGATTTTCTTTAAGGATGGTTTAGAAAT
GGAAAAATGT**TAA**CAAATGTGGCAATTATTTTGGATCTATCACCTGTCATCATAACTGGCTTCTGCTTGTCATCC
ACACAACACCAGGACTTAAGACAAATGGGACTGATGTCATCTTGAGCTCTTCATTTATTTTGACTGTGATTTATT
TGGAGTGGAGGCATTGTTTTTAAGAAAAACATGTCATGTAGGTTGTCTAAAAATAAAATGCATTTAAACTCATTT
GAGAG

FIGURE 7041

MIIYRDLISHDEMFSDIYKIREIADGLCLEVEGKMVSRTEGNIDDSLIGGNASAEGPEGEGTESTVITGVDIVMN
HHLQETSFTKEAYKKYIKDYMKSIKGKLEEQRPERVKPFMTGAAEQIKHILANFKNYQFFIGENMNPDGMVALLD
YREDGVTPYMIFFKDGLEMEKC

FIGURE 7042

AGAGGCTTCCCTGGCTGGTGCCTGAGCCCGGCGTCCCTCGCCCCCCGCCCTCCCCGCATCCCTCTCCTCCCTCGC
GCCTGGCCCTGTGGCTCTTCCTCCCTCCCTCCTTCCCCCCCCCCCCCACCCCTCGCCCGCTGCCTCCCTCGGCCCA
GCCAGCTGTGCCGGCGTTTGTTGGCTGCCCTGCGCCCGGCCCTCCAGCCAGCCTTCTGCCGGCCCCGCCGCG**ATG**

GAGGTGCCCCAGCCGGAGCCCGCGCCAGGCTCGGCTCTCAGTCCAGCAGGCGTGTGCGGTGGCGCCCAGCGTCCG
GGCCACCTCCCGGGCCTCCTGCTGGGATCTCATGGCCTCCTGGGGTCCCCGGTGCGGGCGGCCGCTTCCTCGCCG
GTCACCACCCTCACCCAGACCATGCACGACCTCGCCGGGCTCGGCAGCGAAACCCCAAAGAGTCAGGTAGGGACC
CTGCTCTTCCGCAGCCGCAGCCGCCTGACGCACCTATCCCTGTCTCGACGGGCATCCGAATCCTCCCTGTCGTCT
GAATCCTCCGAATCTTCTGATGCAGGTCTCTGCATGGATTCCCCCAGCCCTATGGACCCCCACATGGCGGAGCAG
ACGTTTGAACAGGCCATCCAGGCAGCCAGCCGGATCATTCGAAACGAGCAGTTTGCCATCAGACGCTTCCAGTCT
ATGCCGGTGAGGCTGCTGGGCCACAGCCCCGTGCTTCGGAACATCACCAACTCCCAGGCGCCCGACGGCCGGAGG
AAGAGCGAGGCGGGCAGTGGAGCTGCCAGCAGCTCTGGGGAAGACAAGGAGAATGATGGATTTGTCTTCAAGATG
CCATGGAAGCCCACACATCCCAGCTCCACCCATGCTCTGGCAGAGTGGGCCAGCCGCAGGGAAGCCTTTGCCCAG
AGACCCAGCTCGGCCCCCGACCTGATGTGTCTCAGTCCTGACCGGAAGATGGAAGTGGAGGAGCTCAGCCCCCTG
GCCCTAGGTCGCTTCTCTCTGACCCCTGCAGAGGGGGATACTGAGGAAGATGATGGATTTGTGGACATCCTAGAG
AGTGACTTAAAGGATGATGATGCAGTTCCCCCAGGCATGGAGAGTCTCATTAGTGCCCCACTGGTCAAGACCTTG
GAAAAGGAAGAGGAAAAGGACCTCGTCATGTACAGCAAGTGCCAGCGGCTCTTCCGCTCTCCGTCCATGCCCTGC
AGCGTGATCCGGCCCATCCTCAAGAGGCTGGAGCGGCCCCAGGACAGGGACACGCCCGTGCAGAATAAGCGGAGG
CGGAGCGTGACCCCTCCTGAGGAGCAGCAGGAGGCTGAGGAACCTAAAGCCCGCGTCCTCCGCTCAAAATCACTG
TGTCACGATGAGATCGAGAACCTCCTGGACAGTGACCACCGAGAGCTGATTGGAGATTACTCTAAGGCCTTCCTC
CTACAGACAGTAGACGGAAAGCACCAAGACCTCAAGTACATCTCACCAGAAACGATGGTGGCCCTATTGACGGGC
AAGTTCAGCAACATCGTGGATAAGTTTGTGATTGTAGACTGCAGATACCCCTATGAATATGAAGGCGGGCACATC
AAGACTGCGGTGAACTTGCCCCTGGAACGCGACGCCGAGAGCTTCCTACTGAAGAGCCCCATCGCGCCCTGTAGC
CTGGACAAGAGAGTCATCCTCATTTTCCACTGTGAATTCTCATCTGAGCGTGGGCCCCGCATGTGCCGTTTCATC
AGGGAACGAGACCGTGCTGTCAACGACTACCCCAGCCTCTACTACCCTGAGATGTATATCCTGAAAGGCGGCTAC
AAGGAGTTCTTCCCTCAGCACCCGAACTTCTGTGAACCCCAGGACTACCGGCCCATGAACCACGAGGCCTTCAAG
GATGAGCTAAAGACCTTCCGCCTCAAGACTCGCAGCTGGGCTGGGGAGCGGAGCCGGCGGGAGCTCTGTAGCCGG
CTGCAGGACCAGTGAGGGGCCTGCGCCAGTCCTGCTACCTCCCTTGCCTTTCGAGGCCTGAAGCCAGCTGCCCTA
TGGGCCTGCCGGGCTGAGGGCCTGCTGGAGGCCTCAGGTGCTGTCCATGGGAAAGATGGTGTGGTGTCCTGCCTG
TCTGCCCCAGCCCAGATTCCCCTGTGTCATCCCATCATTTTCCATATCCTGGTGCCCCCCACCCCTGGAAGAGCC
CAGTCTGTTGAGTTAGTTAAGTTGGGTTAATACCAGCTTAAAGGCAGTATTTTGTGTCCTCCAGGAGCTTCTTGT
TTCCTTGTTAGGGTTAACCCTTCATCTTCCTGTGTCCTGAAACGCTCCTTTGTGTGTGTGTCAGCTGAGGCTGGG
GAGAGCCGTGGTCCCTGAGGATGGGTCAGAGCTAAACTCCTTCCTGGCCTGAGAGTCAGCTCTCTGCCCTGTGTA
CTTCCCGGGCCAGGGCTGCCCCTAATCTCTGTAGGAACCGTGGTATGTCTGCCATGTTGCCCCTTTCTCTTTTCC
CCTTTCCTGTCCCACCATACGAGCACCTCCAGCCTGAACAGAAGCTCTTACTCTTTCCTATTTCAGTGTTACCTG
TGTGCTTGGTCTGTTTGACTTTACGCCCATCTCAGGACACTTCCGTAGACTGTTTAGGTTCCCCTGTCAAATATC
AGTTACCCACTCGGTCCCAGTTTTGTTGCCCCAGAAAGGGATGTTATTATCCTTGGGGGCTCCCAGGGCAAGGGT
TAAGGCCTGAATCATGAGCCTGCTGGAAGCCCAGCCCCTACTGCTGTGAACCCTGGGGCCTGACTGCTCAGAACT
TGCTGCTGTCTTGTTGCGGATGGATGGAAGGTTGGATGGATGGGTGGATGGCCGTGGATGGCCGTGGATGCGCAG
TGCCTTGCATACCCAAACCAGGTGGGAGCGTTTTGTTGAGCATGACACCTGCAGCAGGAATATATGTGTGCCTAT
TTGTGTGGACAAAAATATTTACACTTAGGGTTTGGAGCTATTCAAGAGGAAATGTCACAGAAGCAGCTAAACCAA
GGACTGAGCACCCTCTGGATTCTGAATCTCAAGATGGGGGCAGGGCTGTGCTTGAAGGCCCTGCTGAGTCATCTG
TTAGGGCCTTGGTTCAATAAAGCACTGAGCAAGTTGAGAAAAAAAAAAAAAAAAAAA

FIGURE 7043

MEVPQPEPAPGSALSPAGVCGGAQRPGHLPGLLLGSHGLLGSPVRAAASSPVTTLTQTMHDLAGLGSRSRLTHLS
LSRRASESSLSSESSESSDAGLCMDSPSPMDPHMAEQTFEQAIQAASRIIRNEQFAIRRFQSMPVRLLGHSPVLR
NITNSQAPDGRRKSEAGSGAASSSGEDKENVRFWKAGVGALREEEGACWGGSLACEDPPLPSWLQDGFVFKMPWK
PTHPSSTHALAEWASRREAFAQRPSSAPDLMCLSPDRKMEVEELSPLALGRFSLTPAEGDTEEDDGFVDILESDL
KDDDAVPPGMESLISAPLVKTLEKEEEKDLVMYSKCQRLFRSPSMPCSVIRPILKRLERPQDRDTPVQNKRRRSV
TPPEEQQEAEEPKARVLRSKSLCHDEIENLLDSDHRELIGDYSKAFLLQTVDGKHQDLKYISPETMVALLTGKFS
NIVDKFVIVDCRYPYEYEGGHIKTAVNLPLERDAESFLLKSPIAPCSLDKRVILIFHCEFSSERGPRMCRFIRER
DRAVNDYPSLYYPEMYILKGGYKEFFPQHPNFCEPQDYRPMNHEAFKDELKTFRLKTRSWAGERSRRELCSRLQD
Q

FIGURE 7044

ACAGTAAGCACCAGGAGTCCATGAAGAAGATGGCTCCTGCCATGGAATCCCCTACTCTACTGTGTGTAGCCTTAC
TGTTCTTCGCTCCAGATGGCGTGTTAGCAGTCCCTCAGAAACCTAAGGTCTCCTTGAACCCTCCATGGAATAGAA
TATTTAAAGGAGAGAATGTGACTCTTACATGTAATGGGAACAATTTCTTTGAAGTCAGTTCCACCAAATGGTTCC
ACAATGGCAGCCTTTCAGAAGAGACAAATTCAAGTTTGAATATTGTGAATGCCAAATTTGAAGACAGTGGAGAAT
ACAAATGTCAGCACCAACAAGTTAATGAGAGTGAACCTGTGTACCTGGAAGTCTTCAGTGACTGGCTGCTCCTTC
AGGCCTCTGCTGAGGTGGTGATGGAGGGCCAGCCCCTCTTCCTCAGGTGCCATGGTTGGAGGAACTGGGATGTGT
ACAAGGTGATCTATTATAAGGATGGTGAAGCTCTCAAGTACTGGTATGAGAACCACAACATCTCCATTACAAATG
CCACAGTTGAAGACAGTGGAACCTACTACTGTACGGGCAAAGTGTGGCAGCTGGACTATGAGTCTGAGCCCCTCA
ACATTACTGTAATAAAAGCTCCGCGTGAGAAGTACTGGCTACAATTTTTTATCCCATTGTTGGTGGTGATTCTGT
TTGCTGTGGACACAGGATTATTTATCTCAACTCAGCAGCAGGTCACATTTCTCTTGAAGATTAAGAGAACCAGGA
AAGGCTTCAGACTTCTGAACCCACATCCTAAGCCAAACCCCAAAAACAACTGATATAATTACTCAAGAAATATTT
GCAACATTAGTTTTTTTCCAGCATCAGCAATTGCTACTCAATTGTCAAACACAGCTTGCAATATACATAGAAACG
TCTGTGCTCAAGGATTTATAGAAATGCTTCATTAAACTGAGTGAAACTGGTTAAGTGGCATGTAATAGTAAGTGC
TCAATTAACATTGGTTGAATAAATGAGAGAATGAATAGATTCATTTATTAGCATTTGTAAAAGAGATGTTCAATT
TCAATAAAATAAATATAAAACCAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 7045

MAPAMESPTLLCVALLFFAPDGVLAVPQKPKVSLNPPWNRIFKGENVTLTCNGNNFFEVSSTKWFHNGSLSEETN
SSLNIVNAKFEDSGEYKCQHQQVNESEPVYLEVFSDWLLLQASAEVVMEGQPLFLRCHGWRNWDVYKVIYYKDGE
ALKYWYENHNISITNATVEDSGTYYCTGKVWQLDYESEPLNITVIKAPREKYWLQFFIPLLVVILFAVDTGLFIS
TQQQVTFLLKIKRTRKGFRLLNPHPKPNPKNN

FIGURE 7046

AGCCGAGGGCTGCACAAAGACCTTCCTGGCCTGCCCCAGACAGAGCTGAGGACCCCTGGCCGTGGGCTTGGGCCT
CGGCTTCACAGG**ATG**GGGCTGCCAGTGTCCTGGGCCCCTCCTGCCCTCTGGGTTCTAGGGTGCTGCGCCCTGCTC
CTCTCGCTGTGGGCGCTGTGCACAGCCTGCCGCAGGCCCGAGGACGCTGTAGCCCCCAGGAAGAGGGCGCGGAGG
CAGCGGGCGAGGCTGCAGGGCAGTGCGACGGCGGCGGAAGCGTCCCTACTGAGGCGGACCCACCTCTGCTCCCTC
AGCAAGTCGGACACCAGACTGCACGAGCTGCACCGGGGCCCGCGCAGCAGCAGGGCCCTGCGGCCTGCCAGCATG
GATCTCCTGCGCCCACACTGGCTGGAGGTGTCCAGGGACATCACCGGACCGCAGGCAGCCCCCTCTGCCTTCCCA
CACCAGGAGCTGCCCCGGGCTCTGCCGGCAGCTGCAGCCACCGCAGGGTGCGCTGGCCTCGAGGCCACCTATTCC
AACGTGGGGCTGGCGGCCCTTCCCGGGGTCAGCCTGGCGGCCAGCCCTGTGGTGGCCGAGTATGCCCGCGTCCAG
AAGCGCAAAGGGACCCATCGCAGTCCCCAAGAGCCACAGCAGGGGAAGACTGAGGTGACCCCGGCCGCTCAGGTG
GACGTCCTGTACTCCAGGGTCTGCAAGCCTAAAAGGAGGGACCCAGGACCCACCACAGACCCGCTGGACCCCAAG
GGCCAGGGAGCGATTCTGGCCCTGGCGGGTGACCTGGCCTACCAGACCCTCCCGCTCAGGGCCCTGGATGTGGGC
AGCGGCCCCCTGGAAAACGTGTATGAGAGCATCCGGGAGCTGGGGGACCCTGCTGGCAGGAGCAGCACGTGCGGG
GCTGGGACGCCCCCTGCTTCCAGCTGCCCCAGCCTAGGGAGGGGCTGGAGACCCCTCCCTGCCTCCCTGCCC**TGA**

ACACTCAAGGACCTGTGCTCCTTCCTCCAGAGTGAGGCCCGTCCCCCGCCCCGCCCCGCCTCACAGCTGACAGCG
CCAGTCCCAGGTCCCCGGGCTGCCAGCCCGTGAGGTCCGTGAGGTCCTGGCCGCTCTGACAGCCGCGGCCTCCCC
GGGCTCCAGAGAAGGCCCGCGTCTAAATAAAGCGCCAGCGCAGGATGAAAGCGAAAAAAAAAAAAAAAAAA

FIGURE 7047

MGLPVSWAPPALWVLGCCALLLSLWALCTACRRPEDAVAPRKRARRQRARLQGSATAAEASLLRRTHLCSLSKSD
TRLHELHRGPRSSRALRPASMDLLRPHWLEVSRDITGPQAAPSAFPHQELPRALPAAAATAGCAGLEATYSNVGL
AALPGVSLAASPVVAEYARVQKRKGTHRSPQEPQQGKTEVTPAAQVDVLYSRVCKPKRRDPGPTTDPLDPKGQGA
ILALAGDLAYQTLPLRALDVGSGPLENVYESIRELGDPAGRSSTCGAGTPPASSCPSLGRGWRPLPASLP

FIGURE 7048

CACCTCGCGGCCGTAGGCTAACGTGGAAGTCGGACCAGCCGGCCGGCGGAAGAACCTAGAGCGCGCTGCCTGGCG
AGTCAGGCGCGCGGGGCGGCGTTGGTGGTCTTCGCGGCGTAACTCGGCCTTTCCTGGGAGGGAGTGATGGGGCGC
ACCGGGGCCGGGGAGCGGGCGCCAGTGTAGCCCGCGCGGCGCCTGGCCCGGAGCGCGGCGGCTGCGGCGGCGGCG
GCGGCGGGCGCTGGAGGCCTGTGAGAGCCGCAGCCCGGAGCGCCCGGCTTCCCACGCC**ATG**GCCCCCATGGGCAT
CCGCCTTTCCCCACTGGGGGTGGCAGTGTTTTGTCTGCTGGGGCTCGGCGTGCTCTACCACCTCTACTCGGGCTT
CTTGGCCGGCCGCTTCAGCCTCTTCGGCCTGGGCGGCGAGCCTGGCGGCGGCGCGGCGGGGCCCGCGGCCGCGGC
CGATGGGGGCACCGTGGACTTGCGCGAGATGCTGGCTGTGTCAGTGCTGGCCGCAGTCCGCGGCGGCGACGAGGT
GAGGCGCGTCCGCGAGAGCAACGTCCTCCACGAGAAGTCCAAGGGGAAGACGCGCGAGGGAGCCGAGGACAAGAT
GACCAGCGGCGACGTGCTGTCCAACCGCAAGATGTTCTACCTGCTCAAGACCGCCTTCCCCAGCGTCCAGATTAA
TACTGAGGAACACGTGGATGCAGCTGATCAGGAGGTTATCTTGTGGGATCATAAGATTCCTGAGGATATCCTAAA
GGAAGTAACTACTCCTAAAGAGGTACCAGCAGAAAGTGTTACTGTCTGGATTGACCCACTTGATGCTACACAGGA
ATATACAGAGGATCTTCGAAAGTACGTCACTACTATGGTGTGTGTGGCTGTAAATGGTAAACCCATGCTAGGAGT
TATACATAAGCCATTTTCCGAATATACAGCTTGGGCAATGGTAGATGGTGGTTCAAATGTGAAAGCCCGCTCTTC
CTACAATGAGAAGACCCCAAGGATCGTTGTGTCTCGTTCCCATTCAGGGATGGTCAAACAGGTCGCTCTTCAGAC
TTTTGGAAACCAGACTACAATTATCCCAGCTGGTGGTGCTGGTTATAAAGTTTTAGCACTTTTGGATGTGCCTGA
TAAGAGTCAAGAAAAAGCTGATTTATACATCCATGTGACATACATCAAAAAGTGGGATATATGTGCTGGTAATGC
CATCTTAAAAGCCCTAGGGGGGCATATGACTACCCTGAGTGGTGAAGAAATCAGTTACACTGGTTCAGACGGCAT
TGAAGGGGGACTCCTTGCTAGCATCAGAATGAACCACCAGGCCCTGGTCAGAAAACTCCCAGATCTAGAAAAGAC
AGGACATAAA**TGA**GCATAACTGATTACAGGGTACAGTTCTTCACAGCTGAAATGGTTAGCCTGAGATGCTGGAAG
CTTCAAAGGATTGGTGGAGACTATGCATGGTTAAGGCCATCCCGAACTTTTTAAAGTATTTATGAAGCATCAGAG
ACTTATTTTCCCTGTAATAGAATGCAAAATCAGGGAAAATGGGTTGCTTTGTGTCTCAAGTATTGTCTTTATTTT
TGAGACTATTTTCATACAGTTGTCATACACAAGGCGCATATATATATTTGTGAATTAAAATCTGTAGCTGAGTCT
AAAAAAAAAAAAAAAAAA

FIGURE 7049

MAPMGIRLSPLGVAVFCLLGLGVLYHLYSGFLAGRFSLFGLGGEPGGGAAGPAAAADGGTVDLREMLAVSVLAAV
RGGDEVRRVRESNVLHEKSKGKTREGAEDKMTSGDVLSNRKMFYLLKTAFPSVQINTEEHVDAADQEVILWDHKI
PEDILKEVTTPKEVPAESVTVWIDPLDATQEYTEDLRKYVTTMVCVAVNGKPMLGVIHKPFSEYTAWAMVDGGSN
VKARSSYNEKTPRIVVSRSHSGMVKQVALQTFGNQTTIIPAGGAGYKVLALLDVPDKSQEKADLYIHVTYIKKWD
ICAGNAILKALGGHMTTLSGEEISYTGSDGIEGGLLASIRMNHQALVRKLPDLEKTGHK

FIGURE 7050A

GGGAACTCCTTCCTCAGCCTCTCGTCAGCGCCGCTTCTCCTGGTTTCTCTTGCAGATGCTGCTGCTAGGGGTGGT
GGGAGCAGCCGTGGGACGCGTGGCCGGGAGCGGGGGTGACAGCCTGGGATTCCGGGGGCTTCTCTTCCTTGTCCT
CCTCCTCTCCTCTCTATTCCCAGTGTGGCCGTGGCTGACACTAAAGACTTTGTAGCCATCAACCCGAGTGCAGTT
TCGATGGAAA**ATG**AAGGTTGCACGTTTTCAAAAAATACCTAATGGTGAAAATGAGACAATGATTCCTGTATTGAC
ATCAAAAAAAGCAAGTGAATTACCAGTCAGTGAAGTTGCAAGCATTCTCCAAGCTGATCTTCAGAATGGTCTAAA
CAAATGTGAAGTTAGTCATAGGCGAGCCTTTCATGGCTGGAATAAGTTTGATATTAGTGAAGATGAGCCACTGTG
GAAGAAGTATATTTCTCAGTTTAAAAATCCCCTTATTATGCTGCTTCTGGCTTCTGCAGTCATCAGTGTTTTAAT
GCATCAGTTTGATGATGCCGTCAGTATCACTGTGGCAATACTTATCGTTGTTACAGTTGCCTTTGTTCAGGAATA
TCGTTCAGAAAAATCTCTTGAAGAATTGAGTAAACTTGTGCCACCAGAATGCCATTGTGTGCGTGAAGGAAAATT
GGAGCATACACTTGCCCGAGACTTGGTTCCAGGTGATACAGTTTGCCTTTCTGTTGGGGATAGAGTTCCTGCTGA
CTTACGCTTGTTTGAGGCTGTGGATCTTTCCATTGATGAGTCCAGCTTGACAGGTGAGACAACGCCTTGTTCTAA
GGTGACAGCTCCTCAGCCAGCTGCAACTAATGGAGATCTTGCATCGAGAAGTAACATTGCCTTTATGGGAACACT
GGTCAGATGTGGCAAAGCAAAGGGTGTTGTCATTGGAACAGGAGAAAATTCTGAATTTGGGGAGGTTTTTAAAAT
GATGCAAGCAGAAGAGGCACCAAAAACCCCTCTGCAGAAGAGCATGGACCTCTTAGGAAAACAACTTTCCTTTTA
CTCCTTTGGTATAATAGGAATCATCATGTTGGTTGGCTGGTTACTGGGAAAAGATATCCTGGAAATGTTTACTAT
TAGTGTAAGTTTGGCTGTAGCAGCAATTCCTGAAGGTCTCCCCATTGTGGTCACAGTGACGCTAGCTCTTGGTGT
TATGAGAATGGTGAAGAAAAGGGCCATTGTGAAAAAGCTGCCTATTGTTGAAACTCTGGGCTGCTGTAATGTGAT
TTGTTCAGATAAAACTGGAACACTGACGAAGAATGAAATGACTGTTACTCACATATTTACTTCAGATGGTCTGCA
TACTGAGGTTACTGGAGTTGGCTATAATCAATTTGGGGAAGTGATTGTTGATGGTGATGTTGTTCATGGATTCTA
TAACCCAGCTGTTAGCAGAATTGTTGAGGCGGGCTGTGTGTGCAATGATGCTGTAATTAGAAACAATACTCTAAT
GGGGAAGCCAACAGAAGGGGCCTTAATTGCTCTTGCAATGAAGATGGGTCTTGATGGACTTCAACAAGACTACAT
CAGAAAAGCTGAATACCCTTTTAGCTCTGAGCAAAAGTGGATGGCTGTTAAGTGTGTACACCGAACACAGCAGGA
CAGACCAGAGATTTGTTTTATGAAAGGTGCTTACGAACAAGTAATTAAGTACTGTACTACATACCAGAGCAAAGG
GCAGACCTTGACACTTACTCAGCAGCAGAGAGATGTGTACCAACAAGAGAAGGCACGCATGGGCTCAGCGGGACT
CAGAGTTCTTGCTTTGGCTTCTGGTCCTGAACTGGGACAGCTGACATTTCTTGGCTTGGTGGGAATCATTGATCC
ACCTAGAACTGGTGTGAAAGAAGCTGTTACAACACTCATTGCCTCAGGAGTATCAATAAAAATGATTACTGGAGA
TTCACAGGAGACTGCAGTTGCAATCGCCAGTCGTCTGGGATTGTATTCCAAAACTTCCCAGTCAGTCTCAGGAGA
AGAAATAGATGCAATGGATGTTCAGCAGCTTTCACAAATAGTACCAAAGGTTGCAGTATTTTACAGAGCTAGCCC
AAGGCACAAGATGAAAATTATTAAGTCGCTACAGAAGAACGGTTCAGTTGTAGCCATGACAGGAGATGGAGTAAA
TGATGCAGTTGCTCTGAAGGCTGCAGACATTGGAGTTGCGATGGGCCAGACTGGTACAGATGTTTGCAAAGAGGC
AGCAGACATGATCCTAGTGGATGATGATTTTCAAACCATAATGTCTGCAATCGAAGAGGGTAAAGGGATTTATAA
TAACATTAAAAATTTCGTTAGATTCCAGCTGAGCACGAGTATAGCAGCATTAACTTTAATCTCATTGGCTACATT
AATGAACTTTCCTAATCCTCTCAATGCCATGCAGATTTTGTGGATCAATATTATTATGGATGGACCCCCAGCTCA
GAGCCTTGGAGTAGAACCAGTGGATAAAGATGTCATTCGTAAACCTCCTCGCAACTGGAAAGACAGCATTTTGAC
TAAAAACTTGATACTTAAAATACTTGTTTCATCAATAATCATTGTTTGTGGGACTTTGTTTGTCTTCTGGCGTGA
GCTACGAGACAATGTGATTACACCTCGAGACACAACAATGACCTTCACATGCTTTGTGTTTTTTGACATGTTCAA
TGCACTAAGTTCCAGATCCCAGACCAAGTCTGTGTTTGAGATTGGACTCTGCAGTAATAGAATGTTTTGCTATGC
AGTTCTTGGATCCATCATGGGACAATTACTAGTTATTTACTTTCCTCCGCTTCAGAAGGTTTTTCAGACTGAGAG
CCTAAGCATACTGGATCTGTTGTTTCTTTTGGGTCTCACCTCATCAGTGTGCATAGTGGCAGAAATTATAAAGAA
GGTTGAAAGGAGCAGGGAAAAGATCCAGAAGCATGTTAGTTCGACATCATCATCTTTTCTTGAAGTA**TGA**TGCAT
ATTGCATTATTTTATTTGCAAACTAGGAATTGCAGTCTGAGGATCATTTAGAAGGGCAAGTTCAAGAGGATATGA
AGATTTGAGAACTTTTTAACTATTCATTGACTAAAAATGAACATTAATGTTAAAGACTTAAGACTTTAACCTGCT
GGCAGTCCCAAATGAAATTATGCAACTTTGATATCATATTCCTTGATTTAAATTGGCTTTTGTGATTGAGTGAAA
CTTTATAAAGCATATGGTCAGTTATTTAATTAAAAAGGCAAAACCTGAACCACCTTCTGCACTTAAAGAAGTCTA
ACAGTACAAATACACTATCTATCTTAGATAGATATATTTTTTTTTATTTTTAAATATTGTACTATTTATGGTGGT
GGGGCTTTCTTACTAATACACAAATAAATTTAATCATTTCAAAGGCATTCTATTTGGTTTAGAAGTTGATTCCCA
GGAGTGCCATATTTCAGCTACTGTATTTCCTTTTTCTTGTAATGTAAGCAGCTCAGATACCATGTGCTATCATTT
TTGTATCAAGTTTTTTGCACAGGATGTGACCACTGTCAGATCACTGTTCTTTTCTTTCTTTTTGTGATTGAAAAG

FIGURE 7050B

CCTATACTACAATTTGAAGTAAATTTTTGTTTTTCTT

FIGURE 7051

MKVARFQKIPNGENETMIPVLTSKKASELPVSEVASILQADLQNGLNKCEVSHRRAFHGWNKFDISEDEPLWKKY
ISQFKNPLIMLLLASAVISVLMHQFDDAVSITVAILIVVTVAFVQEYRSEKSLEELSKLVPPECHCVREGKLEHT
LARDLVPGDTVCLSVGDRVPADLRLFEAVDLSIDESSLTGETTPCSKVTAPQPAATNGDLASRSNIAFMGTLVRC
GKAKGVVIGTGENSEFGEVFKMMQAEEAPKTPLQKSMDLLGKQLSFYSFGIIGIIMLVGWLLGKDILEMFTISVS
LAVAAIPEGLPIVVTVTLALGVMRMVKKRAIVKKLPIVETLGCCNVICSDKTGTLTKNEMTVTHIFTSDGLHTEV
TGVGYNQFGEVIVDGDVVHGFYNPAVSRIVEAGCVCNDAVIRNNTLMGKPTEGALIALAMKMGLDGLQQDYIRKA
EYPFSSEQKWMAVKCVHRTQQDRPEICFMKGAYEQVIKYCTTYQSKGQTLTLTQQQRDVYQQEKARMGSAGLRVL
ALASGPELGQLTFLGLVGIIDPPRTGVKEAVTTLIASGVSIKMITGDSQETAVAIASRLGLYSKTSQSVSGEEID
AMDVQQLSQIVPKVAVFYRASPRHKMKIIKSLQKNGSVVAMTGDGVNDAVALKAADIGVAMGQTGTDVCKEAADM
ILVDDDFQTIMSAIEEGKGIYNNIKNFVRFQLSTSIAALTLISLATLMNFPNPLNAMQILWINIIMDGPPAQSLG
VEPVDKDVIRKPPRNWKDSILTKNLILKILVSSIIIVCGTLFVFWRELRDNVITPRDTTMTFTCFVFFDMFNALS
SRSQTKSVFEIGLCSNRMFCYAVLGSIMGQLLVIYFPPLQKVFQTESLSILDLLFLLGLTSSVCIVAEIIKKVER
SREKIQKHVSSTSSSFLEV

FIGURE 7052

TGAATAGCCCGACAGTTCTGAACTGGAACATGGGCATTGGGTTCTAAAGGACTAACATAAAATCTGTGAATTAAA
AAAGCTCAATGCATTGTCTTGTGGAGGATGAATAAATGTGATCACTGAGACAGCCACTTGGTTTTTGGCTCTTTC
AGAGAGGTCTCAGGTTCTTTCCATGCAGACTCCTCAGATCTGAACACAGTTTAGTGCTTTACATGCTGTGCTCTT
TGAAGAGATTTCAACAAGAATATTGTATGTTAAAGCATCAGAGATGGTAATCTACAGCTCACCTCTGAAAGCAAA
TATAAGCTGGGAAAAAAGTTTTGATGAAATTCTTGAAGTTCATGGTGATCAGTGCAATTGACCTTCTCCCTCACT
CCTGCCAGTTGAAAATGGATTTTTAAATTATACTGTAGCTGATGAAACTCCTGATTTTGTAGTTAATTTATTAAG
TCTGGGATGTAGAACTTCAAGAAGTAAGAGCTAAGTTCTAAGTTCATGTTTGTAAATTAATACTTCATTTGGTGC
TGGTCTATTTTGATTTTGGGGGGTAATCAGCATTATTCTTCAGAAGGGGACCTGTTTTCTTCAAGGGAAGAAACA
CTCTTATTCCCAAACTACAGAATAATGTGTTAAACATGCTAAATAGTTCTATCAGGAAAACAAATCACTGTATTT
ATCTCCGCAGGCTATTTGTTCAGAGAGGCCTTTTGTTTAAATATAAATGTTTAAATATAAATGTTTGTCTGGATT
GGCTATAACATGTCTTTCAGCATTAGGCTTTTAAGAAACACAGGGTTTTGTATTCTTTACTAAAGATATCAGAGC
TCTTAATGTTGCTTAGATGAGGGTGACTGTCAAGTACAAGCAAGACTGGGACCTTAGAAATCATTGTAGAAACAC
AGTTTTGAAAGATTTTTACCATGTCTCTAAGCCAACTTTAATTGCTTAAAAGACATTTTTATTTAGTTGAAAAAT
CTAGTTTTTTTTGTAAACTGTACCAAATCTGTATATGTTGTAATAAAACTTATGCTAGTTTATTGGAAGTGTTCA
AGAAATAAAAATCAACTTGTGTACTGATAAAATACTCTAGCCTGGGCCAGAGAAGATAATGTTCTTTAATGTTGT
CAGGAAACCCTGGCTTGCTTGCCGAGCCTAATGAAAGGGAAAGTCAGCTTTCAGAGCCAGTGAAGGAGCCACGTG
AATGGCCCTAGAACTGTGCCTAGTTCCTGTGGCCAGGAGGTTGGTGACTGAAACATTCACACAGGGCTCTTGGAT
GGACCCACGAACGCTCTTAGCTTTCTCAGGGGGTCAGCAGAGTTATTGAATCTTAATTTTTTTTAATGTACAAGT
TTTGTATAAATAATAAAGAACTCCTTATTTTGTATTACATCTAATGCTTAAGTGTTGCTCTTGGAAAGCTGATGA
TGTCTCTTGTAGAGATGACTCTGAAAAACATTCCAGGAAACCATGGCAGCATGGAGAGCCTCTTAGTGATTGTGT
CTGCATTGTTATTGTGGAAGATTTACCTTTTCTGTTGTACGTAAAGCTTAAATTACTTTTGTTGTGACTTTTTAG
CCAGTGACTTTTTCTGAGCTTTTCATGGAAGTGGCAGTGAAAAATATGTTGAGTGTTCAAAAAAGTGACTGTAAT
TAATATCTTGCTGGATTAATGTTTTGTACAATTACTAAATTGTATACATTTTGTTATAGAATACTTTTTTCTAGT
TTCAGTAAATAATGAAAAGGAAGTTAATACCA

FIGURE 7053

GGCACGAGGGCGGGTGGGAAGCCGTGTCTCGCAGTCGTGGACTCGTGCAGCTGGGGCGTCCGCAGCCGCTCGTCA
CCCGCGTGATGCTGTTTCTGGCGTTGGGCAGCCCGTGGGCGGTCGAACTGCCTCTCTGCGGAAGGAGGACTGCAT
TGTGTGCGGCCGCCGCGCTCCGAGGTCCCCGGGCCTCTGTCTCCCGGGCGTCCTCCAGCAGCGGGCCTTCGGGGC
CGGTAGCCGGCTGGAGTACGGGGCCTTCGGGAGCCGCGCGCCTTCTCCGGCGTCCGGGTCGAGCGCAGATCCCTG
TTTATTGGGAAGGATATGTTCGATTCTTAAATACGCCATCTGACAAATCAGAAGATGGAAGGCTAATTTATACTG
GCAATATGGCCCGAGCAGTGTTTGGTGTGAAATGTTTCTCTTATTCTACGAGTCTGATTGGCCTTACATTTCTGC
CATACATTTTTACACAAAATAATGCTATTTCTGAAAGTGTGCCTCTGCCTATTCAAATCATATTCTATGGCATCA
TGGGAAGCTTTACGGTGATCACCCCAGTGCTGCTTCACTTTATTACAAAAGGCTATGTCATTCGATTGTACCATG
AGGCCACAACAGACACTTATAAAGCCATTACCTACAATGCTATGCTTGCAGAAACGAGTACAGTGTTTCACCAGA
ATGATGTGAAGATTCCAGATGCTAAACATGTATTTACCACATTTTATGCTAAAACAAAATCACTGTTAGTTAATC
CAGTGCTCTTTCCAAACCGTGAAGACTATATCCATCTAATGGGTTATGACAAAGAAGAATTTATTTTGTATATGG
AAGAAACCAGTGAAGAGAAACGGCATAAAGATGACAAATGAGCCTATTTGTTAGTGTTCGTGCTCAAATGTGATT
TACGTTTTAATGTATAATAATAAAATTGCCTTTTGCATTCCGTTAGTGACTGATTGTTAAAAATAATTTGAAATT
ATCAAAGCTTTTAATTTCCAGAGAATGATGTTTGTTTATAATAAAACAAGCTATGTTTGAAAACCAAAATGTAGT
ATCTACCATTCGTGTTTTAGAAAGGTATGTGAATAAATATGTTCATGCTAGTATAAGAGTTCTGTGTTACTGTGG
TTGACTCTAAACTGGGGATCTGATGTCAGTAGCAAATGGGAGAGTTGCTTTATTCTTTGTGTATGGATTTTTCTA
AGTGTATAAATATTTTCCGACATTAAAAGACATTTTCTCTTTGAGGAAGACACAGTCATAGGTGGTGCGGAGCTG
TGGTCCACCTGCTCCTGCTCCTGACTCACTGCTCTTTGCTGTTGCCTGAGGACCAAGTCTGTCAGGAAGCTGGCT
AGGAAGCCTTGCAGCAGCCATGGCTTTTAAACATACCAGAAAAACACCCGTGGAGTCAGAGGTGGCAATTCACCG
AATTCATATCACTCTAACGAGTTGCAACGTAAAATCCCTGGATAAGGTGTGTGCTGACTTGATCTGAGGAGCAAA
GGAAAAGAATCAGTGAAAGGACCAGTTTGAATGCCTACCAAGACTTTGAGAATCACTACAAGAAAAACTTACGGT
GAAGGTTCTAAGGCATGGGATCGTTTCCAGATGAGAATCCACAAGCGACTCATTGACTTGCGCAGTCCTCAGATA
GTTAAGCAGATTACTTCCATCAGTATTGAGCCAGGAGTTGAGATGGAAGTCACCATTGCAAATGCTTAAGTCAAC
TGTTTTCATAAATTGATTACCAGTTGTTAAAAAATTTTCAAAAAACCGCAAAATTTCAAGAAATTCACAAATTAT
GGGAGCAGTTTTAAGTCTTCTTTGGTTCAGAACACAGGTTTTTGCCTAACCCCTGGCATGATTGCCCATAAGAAC
ATACATGTACAGTTGAACTGGTGGTTAGCTATACGGGAAATGGTAAGTAGTGTTGTCTTCAGTATCTTAATTTGT
TTCTGCAACTGTGCACTCCTCCCTTGGTGGCACCCTATGGGTGTAGGAAAACCACTGTTATTAAACAGGTGAAAA
ATAAAAAATTTTTCAAAAAAAAAAAAAAAAAAA

FIGURE 7054

MARAVFGVKCFSYSTSLIGLTFLPYIFTQNNAISESVPLPIQIIFYGIMGSFTVITPVLLHFITKGYVIRLYHEA
TTDTYKAITYNAMLAETSTVFHQNDVKIPDAKHVFTTFYAKTKSLLVNPVLFPNREDYIHLMGYDKEEFILYMEE
TSEEKRHKDDK

7843/8433

FIGURE 7055

CAGGGCTGGGCGGCGGCGGCGGCGGCGGTCATGGAACGCCAAGAGGAGTCTCTGTCCGCGCGGCCGGCCCTGGAG
ACCGAGGGGCTGCGCTTCCTGCACACCACGGTGGGCTCCCTGCTGGCCACCTATGGCTGGTACATCGTCTTCAGC
TGCATCCTTCTCTACGTGGTCTTTCAGAAGCTTTCCGCCCGGCTAAGAGCCTTGAGGCAGAGGCAGCTGGACCGA
GCTGCGGCTGCTGTGGAACCTGATGTTGTTGTTAAACGACAAGAAGCTTTAGCAGCTGCTCGACTGAAAATGCAA
GAAGAACTAAATGCGCAAGTTGAAAAGCATAAGGAAAAACTGAAACAACTTGAAGAAGAAAAAAGGAGACAGAAG
ATTGAAATGTGGGACAGCATGCAAGAAGGAAAAAGTTACAAAGGAAATGCAAAGAAGCCCCAGGAGGAAGACAGT
CCTGGGCCTTCCACTTCATCTGTCCTGAAACGGAAATCGGACAGAAAGCCTTTGCGGGGAGGAGGTTATAACCCG
TTGTCTGGTGAAGGAGGCGGACTTGCTCCTGGAGACCTGGACGCAGAGGCCCGTCATCTGGCGGATGAGGCTAAG
AATCTTGTTAGTGTCACTTTTGACATTAGCAAGATGAACCCTTAACCCTCGATTCAATTGCCTTACGCACGCTTT
TCACAGTGACTAGCCAAGGGGAGGTGGGGTTGATTTCTGTTCCTAACTACACCTGCATATGTCAGGGCTCCAGTC
AGCAAAAGGTATAGATGTTGCCTCTAGGCATGAGGTCATTGGTCACATTCTACTTGGAGACAGTGATTGCATTCA
TTGATTTCATGGTTAATTGCTAGTTGGTAGGTAAAGGCCTCTAGATGATTAGCAATCTTGATAAAAGAGGCCTAG
TAATGTTCTTTTGAGGTTAGAAATCCTTGCTGCTAGGACAGTCTCTGTGACAGGTTGCGTTGAATGATGTCTTCC
TTATCAATGGTGAGCCCACCAGTGAGGATTACTGATGTGGACAGTTGATGGGGTTTGTTTCTGTATATTTATTTT
TATGTACAGAACTTTGTAAAAACGAAACTATTTAAAAAACAAGAATAACATTTTTAGCATCTTTATTCAAGGAGA
TTTATGGACTTCAATTTGTCTATCAAACATTAAATAGCTTTTTATTACAACCTCCAAAAAAAAAAAAAAAAAAAA
AAAAAAAAA

FIGURE 7056

MERQEESLSARPALETEGLRFLHTTVGSLLATYGWYIVFSCILLYVVFQKLSARLRALRQRQLDRAAAAVEPDVV
VKRQEALAAARLKMQEELNAQVEKHKEKLKQLEEEKRRQKIEMWDSMQEGKSYKGNAKKPQEEDSPGPSTSSVLK
RKSDRKPLRGGGYNPLSGEGGGLAPGDLDAEARHLADEAKNLVSVTFDISKMNP

FIGURE 7057

GGCACGAGAAGTTAAGCTGAAGACCGAAGCAAGAGCTGGTTCAGGTGGCAGCCACAGCAGCCTCAGGGACCTCAG
CAACTATGGCCTCCTGCCCAGACTCTGATAATAGCTGGGTGCTTGCTGGCTCCGAGAGCCTGCCAGTGGAGACAC
TGGGCCCGGCATCCAGGATGGACCCAGAATCTGAGAGAGCCCTGCAGGCCCCTCACAGCCCCTCCAAGACAGATG
GGAAAGAATTAGCTGGGACCATGGATGGAGAAGGGACGCTCTTCCAGACTGAAAGCCCTCAGTCTGGCAGCATTC
TAACAGAGGAGACTGAGGTCAAGGGCACCCTGGAAGGTGATGTTTGTGGTGTGGAGCCTCCTGGCCCAGGAGACA
CAGTAGTCCAGGGAGACCTGCAGGAGACCACCGTGGTGACAGGCCTGGGACCAGACACACAGGACCTGGAAGGCC
AGAGCCCTCCACAGAGCCTGCCTTCAACCCCCAAAGCAGCTTGGATCAGGGAGGAGGGCCGCTGCTCCAGCAGTG
ACGATGACACCGACGTGGACATGGAGGGTCTGCGGAGACGGCGGGGCCGGGAGGCCGGCCCACCTCAGCCCATGG
TGCCCCTGGCTGTGGAGAACCAGGCTGGGGGTGAGGGTGCAGGCGGGGAGCTGGGCATCTCCCTCAACATGTGCC
TCCTTGGGGCCCTGGTTCTGCTTGGCCTGGGGGTCCTCCTCTTCTCAGGTGGCCTCTCAGAGTCTGAGACTGGGC
CCATGGAGGAAGTGGAGCGGCAGGTCCTCCCAGACCCCGAGGTGCTGGAAGCTGTGGGGGACAGGCAGGATGGGC
TAAGGGAACAGCTGCAGGCCCCAGTGCCTCCTGACAGTGTCCCCAGCCTGCAAAACATGGGTCTTCTGCTGGACA
AGCTGGCCAAGGAGAACCAGGACATCCGGCTGCTGCAGGCCCAGCTGCAGGCCCAAAAGGAAGAGCTTCAGAGCC
TGATGCACCAGCCCAAAGGGCTAGAGGAGGAGAATGCCCAGCTCCGGGGGGCTCTGCAGCAGGGCGAAGCCTTCC
AGCGGGCTCTGGAGTCAGAGCTGCAGCAGCTGCGGGCCCGGCTCCAGGGGCTGGAGGCCGACTGTGTCCGGGGCC
CAGATGGGGTGTGCCTCAGTGGGGATAGAGGCCCACAGGGTGACAAGGCCATCAGGGAGCAAGGCCCCAGGGAGC
AGGAGCCAGAACTCAGCTTCCTGAAGCAGAAGGAACAGCTGGAGGCTGAGGCACAGGCATTAAGGCAAGAGTTAG
AGAGGCAGCGACGGCTGCTGGGGTCTGTACAGCAGGATCTGGAGAGGAGCTTGCAGGATGCCAGCCGCGGGGACC
CAGCTCATGCTGGCTTGGCTGAGCTGGGCCACAGATTGGCCCAGAAACTGCAGGGCCTGGAGAACTGGGGCCAGG
ACCCTGGGGTCTCTGCCAATGCCTCAAAGGCCTGGCACCAGAAGTCCCACTTCCAGAATTCTAGGGAGTGGAGTG
GAAAGGAAAAGTGGTGGGATGGGCAGAGAGACCGGAAGGCTGAGCACTGGAAACATAAGAAGGAAGAATCTGGCC
GGGAAAGGAAGAAGAACTGGGGAGGTCAGGAGGACAGGGAGCCAGCAGGAAGGTGGAAGGAGGGCAGGCCAAGGG
TGGAGGAGTCGGGGAGCAAGAAGGAGGGCAAGCGACAGGGCCCGAAGGAACCCCCAAGGAAAAGTGGTAGCTTCC
ACTCCTCTGGAGAAAAGCAGAAGCAACCTCGGTGGAGGGAAGGGACTAAGGACAGCCATGACCCCCTGCCATCCT
GGGCAGAGCTGTTGAGGCCCAAGTACCGGGCACCCCAGGGCTGCTCAGGTGTGGACGAGTGTCCCCGGCAGGAGG
GCTTGACTTTCTTTGGCACAGAGCTAGCCCCAGTGCGGCAACAGGAGCTGGCCTCTCTGCTAAGAACATACTTGG
CACGGCTGCCCTGGGCTGGGCAGCTGACCAAGGAGCTACCCCTCTCACCTGCTTTCTTTGGTGAGGATGGCATCT
TCCGTCATGACCGCCTCCGATTCCGGGATTTTGTGGATGCCCTGGAGGACAGCTTGGAGGAGGTGGCTGTGCAAC
AGACAGGTGATGATGATGAAGTAGATGACTTTGAGGACTTCATCTTCAGCCACTTCTTTGGAGACAAAGCACTGA
AGAAGAGGTCAGGGAAGAAGGACAAGCACTCACAGAGCCCAAGAGCTGCGGGGCCCAGGGAGGGGCACAGCCATA
GCCACCACCACCACCACCGGGGCTGACACCCTGCCCCACAGGGAATGGCCTTGGCCTTGGCCTGGCCCAGCCCAA
GAACCCAGCGTTATCTAACTGCTGGAGG

FIGURE 7058

MASCPDSDNSWVLAGSESLPVETLGPASRMDPESERALQAPHSPSKTDGKELAGTMDGEGTLFQTESPQSGSILT
EETEVKGTLEGDVCGVEPPGPGDTVVQGDLQETTVVTGLGPDTQDLEGQSPPQSLPSTPKAAWIREEGRCSSSDD
DTDVDMEGLRRRRGREAGPPQPMVPLAVENQAGGEGAGGELGISLNMCLLGALVLLGLGVLLFSGGLSESETGPM
EEVERQVLPDPEVLEAVGDRQDGLREQLQAPVPPDSVPSLQNMGLLLDKLAKENQDIRLLQAQLQAQKEELQSLM
HQPKGLEEENAQLRGALQQGEAFQRALESELQQLRARLQGLEADCVRGPDGVCLSGDRGPQGDKAIREQGPREQE
PELSFLKQKEQLEAEAQALRQELERQRRLLGSVQQDLERSLQDASRGDPAHAGLAELGHRLAQKLQGLENWGQDP
GVSANASKAWHQKSHFQNSREWSGKEKWWDGQRDRKAEHWKHKKEESGRERKKNWGGQEDREPAGRWKEGRPRVE
ESGSKKEGKRQGPKEPPRKSGSFHSSGEKQKQPRWREGTKDSHDPLPSWAELLRPKYRAPQGCSGVDECPRQEGL
TFFGTELAPVRQQELASLLRTYLARLPWAGQLTKELPLSPAFFGEDGIFRHDRLRFRDFVDALEDSLEEVAVQQT
GDDDEVDDFEDFIFSHFFGDKALKKRSGKKDKHSQSPRAAGPREGHSHSHHHHHRG

FIGURE 7059

CCCCCATGTGACAGTGACGGGGTCCCCGCTCCAGGAGACGCTCGAGTCTGCGTCCCGGCCCTCAGCACTGTCCAC
TGTTTCGGTGCCAGCAGAGACCAGCAGGCCCGGGACAGTTGGTGTTTGGCCGTGCCGCTGTCTAACTTGGTGTGC
AGAGTGAATTGCCGCTGCCGGAGCGGAGAGAGGCGGAGCGGCCAGGAGAGAGGGGATTTCTGTCAGCGCCGGCCT
CGGGAGCTCGGAGACATGAACGGCTTCACGCCTGACGAGATGAGCCGCGGCGGGGATGCGGCCGCCGCAGTGGCC
GCAGTGGTCGCTGCCGCGGCCGCCGCCGCCTCGGCGGGGAACGGGACCGGCGCGGGCACCGGGGCTGAGGTGCCG
GGCGCGGGGGCGGTCTCAGCGGCTGGGCCCCCGGGGGCGGCCGGGCCGGGCCCCGGGCAACTGTGCTGCCTGCGG
GAGGATGGTGAGCGGTGCGGCCGGGCGGCAGGCAACGCCAGCTTCAGCAAGAGGATCCAGAAGAGCATCTCCCAG
AAGAAGGTGAAGATCGAGCTGGATAAGAGCGCAAGGCATCTTTACATATGTGATTATCATAAAAACTTAATTCAG
AGTGTTCGAAACAGAAGAAAGAGAAAAGGGAGTGATGATGATGGAGGTGATTCACCTGTTCAAGATATTGATACC
CCAGAGGTTGATTTATACCAATTACAAGTAAATACACTTAGGAGATACAAAAGACACTTCAAGCTACCAACCAGA
CCAGGACTTAATAAAGCACAACTTGTTGAGATAGTTGGTTGCCACTTTAGGTCTATTCCAGTGAATGAAAAAGAC
ACCTTAACATATTTCATCTACTCAGTGAAGAATGACAAGAACAAATCAGATCTCAAGGTTGATAGTGGTGTTCAC
TAGGAGACGTGGAATTGAGACTAATAACTTGGATGTTAACACTGTTTACTGTTTTTTCACATGTAGAAATGTTCT
TTGTGTATTTTTTCTACAGAGGATTTTCTCTGATTTTATTTTCTTTGTTTCTGACTCTAATAATTAGTTGGAAAC
TCATATAAAATGAGCTTTCCTAAATTAAATCTATTTTAAATAAAGGTTATTACTATTAAAAAAAAAAAAAAAAAA

FIGURE 7060

MNGFTPDEMSRGGDAAAAVAAVVAAAAAAASAGNGTGAGTGAEVPGAGAVSAAGPPGAAGPGPGQLCCLREDGER
CGRAAGNASFSKRIQKSISQKKVKIELDKSARHLYICDYHKNLIQSVRNRRKRKGSDDDGGDSPVQDIDTPEVDL
YQLQVNTLRRYKRHFKLPTRPGLNKAQLVEIVGCHFRSIPVNEKDTLTYFIYSVKNDKNKSDLKVDSGVH

FIGURE 7061A

GGCCGGGACCCGCAGAGCCGAGCCGACCCTTCTCTCCCGGGCTGCGGCAGGGCAGGGCGGGGAGCTCCGCGCACC
AACAGAGCCGGTTCTCAGGGCGCTTTGCTCCTTGTTTTTCCCCGGTTCTGTTTTCTCCCCTTCTCCGGAAGGCT
TGTCAAGGGGTAGGAGAAAGAGACGCAAACACAAAAGTGGAAAACAGTTAATGACCAGCCACGGGCGTCCCTGCT
GTGAGCTCTGGCCGCTGCCTTCCAGGGCTCCCGAGCCACACGCTGGGCGTGCTGGCTGAGGGAACATGGCTTGTT
GGCCTCAGCTGAGGTTGCTGCTGTGGAAGAACCTCACTTTCAGAAGAAGACAAACATGTCAGCTGTTACTGGAAG
TGGCCTGGCCTCTATTTATCTTCCTGATCCTGATCTCTGTTCGGCTGAGCTACCCACCCTATGAACAACATGAAT
GCCATTTTCCAAATAAAGCCATGCCCTCTGCAGGAACACTTCCTTGGGTTCAGGGGATTATCTGTAATGCCAACA
ACCCCTGTTTCCGTTACCCGACTCCTGGGGAGGCTCCCGGAGTTGTTGGAAACTTTAACAAATCCATTGTGGCTC
GCCTGTTCTCAGATGCTCGGAGGCTTCTTTTATACAGCCAGAAAGACACCAGCATGAAGGACATGCGCAAAGTTC
TGAGAACATTACAGCAGATCAAGAAATCCAGCTCAAACTTGAAGCTTCAAGATTTCCTGGTGGACAATGAAACCT
TCTCTGGGTTCCTATATCACAACCTCTCTCTCCCAAAGTCTACTGTGGACAAGATGCTGAGGGCTGATGTCATTC
TCCACAAGGTATTTTTGCAAGGCTACCAGTTACATTTGACAAGTCTGTGCAATGGATCAAAATCAGAAGAGATGA
TTCAACTTGGTGACCAAGAAGTTTCTGAGCTTTGTGGCCTACCAAAGGAGAAACTGGCTGCAGCAGAGCGAGTAC
TTCGTTCCAACATGGACATCCTGAAGCCAATCCTGAGAACACTAAACTCTACATCTCCCTTCCCGAGCAAGGAGC
TGGCTGAAGCCACAAAAACATTGCTGCATAGTCTTGGGACTCTGGCCCAGGAGCTGTTCAGCATGAGAAGCTGGA
GTGACATGCGACAGGAGGTGATGTTTCTGACCAATGTGAACAGCTCCAGCTCCTCCACCCAAATCTACCAGGCTG
TGTCTCGTATTGTCTGCGGGCATCCCGAGGGAGGGGGGCTGAAGATCAAGTCTCTCAACTGGTATGAGGACAACA
ACTACAAAGCCCTCTTTGGAGGCAATGGCACTGAGGAAGATGCTGAAACCTTCTATGACAACTCTACAACTCCTT
ACTGCAATGATTTGATGAAGAATTTGGAGTCTAGTCCTCTTTCCCGCATTATCTGGAAAGCTCTGAAGCCGCTGC
TCGTTGGGAAGATCCTGTATACACCTGACACTCCAGCCACAAGGCAGGTCATGGCTGAGGTGAACAAGACCTTCC
AGGAACTGGCTGTGTTCCATGATCTGGAAGGCATGTGGGAGGAACTCAGCCCCAAGATCTGGACCTTCATGGAGA
ACAGCCAAGAAATGGACCTTGTCCGGATGCTGTTGGACAGCAGGGACAATGACCACTTTTGGGAACAGCAGTTGG
ATGGCTTAGATTGGACAGCCCAAGACATCGTGGCGTTTTTGGCCAAGCACCCAGAGGATGTCCAGTCCAGTAATG
GTTCTGTGTACACCTGGAGAGAAGCTTTCAACGAGACTAACCAGGCAATCCGGACCATATCTCGCTTCATGGAGT
GTGTCAACCTGAACAAGCTAGAACCCATAGCAACAGAAGTCTGGCTCATCAACAAGTCCATGGAGCTGCTGGATG
AGAGGAAGTTCTGGGCTGGTATTGTGTTCACTGGAATTACTCCAGGCAGCATTGAGCTGCCCCATCATGTCAAGT
ACAAGATCCGAATGGACATTGACAATGTGGAGAGGACAAATAAAATCAAGGATGGGTACTGGGACCCTGGTCCTC
GAGCTGACCCCTTTGAGGACATGCGGTACGTCTGGGGGGGCTTCGCCTACTTGCAGGATGTGGTGGAGCAGGCAA
TCATCAGGGTGCTGACGGGCACCGAGAAGAAAACTGGTGTCTATATGCAACAGATGCCCTATCCCTGTTACGTTG
ATGACATCTTTCTGCGGGTGATGAGCCGGTCAATGCCCCTCTTCATGACGCTGGCCTGGATTTACTCAGTGGCTG
TGATCATCAAGGGCATCGTGTATGAGAAGGAGGCACGGCTGAAAGAGACCATGCGGATCATGGGCCTGGACAACA
GCATACTCTGGTTTAGCTGGTTCATTAGTAGCCTCATTCCTCTTCTTGTGAGCGCTGGCCTGCTAGTGGTCATCC
TGAAGTTAGGAAACCTGCTGCCCTACAGTGATCCCAGCGTGGTGTTTGTCTTCCTGTCCGTGTTTGCTGTGGTGA
CAATCCTGCAGTGCTTCCTGATTAGCACACTCTTCTCCAGAGCCAACCTGGCAGCAGCCTGTGGGGGCATCATCT
ACTTCACGCTGTACCTGCCCTACGTCCTGTGTGTGGCATGGCAGGACTACGTGGGCTTCACACTCAAGATCTTCG
CTAGCCTGCTGTCTCCTGTGGCTTTTGGGTTTGGCTGTGAGTACTTTGCCCTTTTTGAGGAGCAGGGCATTGGAG
TGCAGTGGGACAACCTGTTTGAGAGTCCTGTGGAGGAAGATGGCTTCAATCTCACCACTTCGATCTCCATGATGC
TGTTTGACACCTTCCTCTATGGGGTGATGACCTGGTACATTGAGGCTGTCTTTCCAGGCCAGTACGGAATTCCCA
GGCCCTGGTATTTTCCTTGCACCAAGTCCTACTGGTTTGGCGAGGAAAGTGATGAGAAGAGCCACCCTGGTTCCA
ACCAGAAGAGAATGTCAGAAATCTGCATGGAGGAGGAACCCACCCACTTGAAGCTGGGCGTGTCCATTCAGAACC
TGGTAAAAGTCTACCGAGATGGGATGAAGGTGGCTGTCGATGGCCTGGCACTGAATTTTTATGAGGGCCAGATCA
CCTCCTTCCTGGGCCACAATGGAGCGGGGAAGACGACCACCATGTCAATCCTGACCGGGTTGTTCCCCCCGACCT
CGGGCACCGCCTACATCCTGGGAAAAGACATTCGCTCTGAGATGAGCACCATCCGGCAGAACCTGGGGGTCTGTC
CCCAGCATAACGTGCTGTTTGACATGCTGACTGTCGAAGAACACATCTGGTTCTATGCCCGCTTGAAAGGGCTCT
CTGAGAAGCACGTGAAGGCGGAGATGGAGCAGATGGCCCTGGATGTTGGTTTGCCATCAAGCAAGCTGAAAAGCA
AAACAAGCCAGCTGTCAGGTGGAATGCAGAGAAAGCTATCTGTGGCCTTGGCCTTTGTCGGGGGATCTAAGGTTG
TCATTCTGGATGAACCCACAGCTGGTGTGGACCCTTACTCCCGCAGGGGAATATGGGAGCTGCTGCTGAAATACC
GACAAGGCCGCACCATTATTCTCTCTACACACCACATGGATGAAGCGGACGTCCTGGGGGACAGGATTGCCATCA

FIGURE 7061B

TCTCCCATGGGAAGCTGTGCTGTGTGGGCTCCTCCCTGTTTCTGAAGAACCAGCTGGGAACAGGCTACTACCTGA
CCTTGGTCAAGAAAGATGTGGAATCCTCCCTCAGTTCCTGCAGAAACAGTAGTAGCACTGTGTCATACCTGAAAA
AGGAGGACAGTGTTTCTCAGAGCAGTTCTGATGCTGGCCTGGGCAGCGACCATGAGAGTGACACGCTGACCATCG
ATGTCTCTGCTATCTCCAACCTCATCAGGAAGCATGTGTCTGAAGCCCGGCTGGTGGAAGACATAGGGCATGAGC
TGACCTATGTGCTGCCATATGAAGCTGCTAAGGAGGGAGCCTTTGTGGAACTCTTTCATGAGATTGATGACCGGC
TCTCAGACCTGGGCATTTCTAGTTATGGCATCTCAGAGACGACCCTGGAAGAAATATTCCTCAAGGTGGCCGAAG
AGAGTGGGGTGGATGCTGAGACCTCAGATGGTACCTTGCCAGCAAGACGAAACAGGCGGGCCTTCGGGGACAAGC
AGAGCTGTCTTCGCCCGTTCACTGAAGATGATGCTGCTGATCCAAATGATTCTGACATAGACCCAGAATCCAGAG
AGACAGACTTGCTCAGTGGGATGGATGGCAAAGGGTCCTACCAGGTGAAAGGCTGGAAACTTACACAGCAACAGT
TTGTGGCCCTTTTGTGGAAGAGACTGCTAATTGCCAGACGGAGTCGGAAAGGATTTTTTGCTCAGATTGTCTTGC
CAGCTGTGTTTGTCTGCATTGCCCTTGTGTTCAGCCTGATCGTGCCACCCTTTGGCAAGTACCCCAGCCTGGAAC
TTCAGCCCTGGATGTACAACGAACAGTACACATTTGTCAGCAATGATGCTCCTGAGGACACGGGAACCCTGGAAC
TCTTAAACGCCCTCACCAAAGACCCTGGCTTCGGGACCCGCTGTATGGAAGGAAACCCAATCCCAGACACGCCCT
GCCAGGCAGGGGAGGAAGAGTGGACCACTGCCCCAGTTCCCCAGACCATCATGGACCTCTTCCAGAATGGGAACT
GGACAATGCAGAACCCTTCACCTGCATGCCAGTGTAGCAGCGACAAAATCAAGAAGATGCTGCCTGTGTGTCCCC
CAGGGGCAGGGGGGCTGCCTCCTCCACAAAGAAAACAAAACACTGCAGATATCCTTCAGGACCTGACAGGAAGAA
ACATTTCGGATTATCTGGTGAAGACGTATGTGCAGATCATAGCCAAAAGCTTAAAGAACAAGATCTGGGTGAATG
AGTTTAGGTATGGCGGCTTTTCCCTGGGTGTCAGTAATACTCAAGCACTTCCTCCGAGTCAAGAAGTTAATGATG
CCATCAAACAAATGAAGAAACACCTAAAGCTGGCCAAGGACAGTTCTGCAGATCGATTTCTCAACAGCTTGGGAA
GATTTATGACAGGACTGGACACCAGAAATAATGTCAAGGTGTGGTTCAATAACAAGGGCTGGCATGCAATCAGCT
CTTTCCTGAATGTCATCAACAATGCCATTCTCCGGGCCAACCTGCAAAAGGGAGAGAACCCTAGCCATTATGGAA
TTACTGCTTTCAATCATCCCCTGAATCTCACCAAGCAGCAGCTCTCAGAGGTGGCTCTGATGACCACATCAGTGG
ATGTCCTTGTGTCCATCTGTGTCATCTTTGCAATGTCCTTCGTCCCAGCCAGCTTTGTCGTATTCCTGATCCAGG
AGCGGGTCAGCAAAGCAAAACACCTGCAGTTCATCAGTGGAGTGAAGCCTGTCATCTACTGGCTCTCTAATTTTG
TCTGGGATATGTGCAATTACGTTGTCCCTGCCACACTGGTCATTATCATCTTCATCTGCTTCCAGCAGAAGTCCT
ATGTGTCCTCCACCAATCTGCCTGTGCTAGCCCTTCTACTTTTGCTGTATGGGTGGTCAATCACACCTCTCATGT
ACCCAGCCTCCTTTGTGTTCAAGATCCCCAGCACAGCCTATGTGGTGCTCACCAGCGTGAACCTCTTCATTGGCA
TTAATGGCAGCGTGGCCACCTTTGTGCTGGAGCTGTTCACCGACAATAAGCTGAATAATATCAATGATATCCTGA
AGTCCGTGTTCTTGATCTTCCCACATTTTTGCCTGGGACGAGGGCTCATCGACATGGTGAAAAACCAGGCAATGG
CTGATGCCCTGGAAAGGTTTGGGGAGAATCGCTTTGTGTCACCATTATCTTGGGACTTGGTGGGACGAAACCTCT
TCGCCATGGCCGTGGAAGGGGTGGTGTTCTTCCTCATTACTGTTCTGATCCAGTACAGATTCTTCATCAGGCCCA
GACCTGTAAATGCAAAGCTATCTCCTCTGAATGATGAAGATGAAGATGTGAGGCGGGAAAGACAGAGAATTCTTG
ATGGTGGAGGCCAGAATGACATCTTAGAAATCAAGGAGTTGACGAAGATATATAGAAGGAAGCGGAAGCCTGCTG
TTGACAGGATTTGCGTGGGCATTCCTCCTGGTGAGTGCTTTGGGCTCCTGGGAGTTAATGGGGCTGGAAAATCAT
CAACTTTCAAGATGTTAACAGGAGATACCACTGTTACCAGAGGAGATGCTTTCCTTAACAAAAATAGTATCTTAT
CAAACATCCATGAAGTACATCAGAACATGGGCTACTGCCCTCAGTTTGATGCCATCACAGAGCTGTTGACTGGGA
GAGAACACGTGGAGTTCTTTGCCCTTTTGAGAGGAGTCCCAGAGAAAGAAGTTGGCAAGGTTGGTGAGTGGGCGA
TTCGGAAACTGGGCCTCGTGAAGTATGGAGAAAAATATGCTGGTAACTATAGTGGAGGCAACAAACGCAAGCTCT
CTACAGCCATGGCTTTGATCGGCGGGCCTCCTGTGGTGTTTCTGGATGAACCCACCACAGGCATGGATCCCAAAG
CCCGGCGGTTCTTGTGGAATTGTGCCCTAAGTGTTGTCAAGGAGGGGAGATCAGTAGTGCTTACATCTCATAGTA
TGGAAGAATGTGAAGCTCTTTGCACTAGGATGGCAATCATGGTCAATGGAAGGTTCAGGTGCCTTGGCAGTGTCC
AGCATCTAAAAAATAGGTTTGGAGATGGTTATACAATAGTTGTACGAATAGCAGGGTCCAACCCGGACCTGAAGC
CTGTCCAGGATTTCTTTGGACTTGCATTTCCTGGAAGTGTTCTAAAAGAGAAACACCGGAACATGCTACAATACC
AGCTTCCATCTTCATTATCTTCTCTGGCCAGGATATTCAGCATCCTCTCCCAGAGCAAAAAGCGACTCCACATAG
AAGACTACTCTGTTTCTCAGACAACACTTGACCAAGTATTTGTGAACTTTGCCAAGGACCAAAGTGATGATGACC
ACTTAAAAGACCTCTCATTACACAAAAACCAGACAGTAGTGGACGTTGCAGTTCTCACATCTTTTCTACAGGATG
AGAAAGTGAAAGAAAGCTATGTA<u>TGA</u>AGAATCCTGTTCATACGGGGTGGCTGAAAGTAAAGAGGAACTAGACTTT
CCTTTGCACCATGTGAAGTGTTGTGGAGAAAAGAGCCAGAAGTTGATGTGGGAAGAAGTAAACTGGATACTGTAC

FIGURE 7061C

TGATACTATTCAATGCAATGCAATTCAATGCAATGAAAACAAAATTCCATTACAGGGGCAGTGCCTTTGTAGCCT
ATGTCTTGTATGGCTCTCAAGTGAAAGACTTGAATTTAGTTTTTTACCTATACCTATGTGAAACTCTATTATGGA
ACCCAATGGACATATGGGTTTGAACTCACACTTTTTTTTTTTTTTGTTCCTGTGTATTCTCATTGGGGTTGCAA
CAATAATTCATCAAGTAATCATGGCCAGCGATTATTGATCAAAATCAAAAGGTAATGCACATCCTCATTCACTAA
GCCATGCCATGCCCAGGAGACTGGTTTCCCGGTGACACATCCATTGCTGGCAATGAGTGTGCCAGAGTTATTAGT
GCCAAGTTTTTCAGAAAGTTTGAAGCACCATGGTGTGTCATGCTCACTTTTGTGAAAGCTGCTCTGCTCAGAGTC
TATCAACATTGAATATCAGTTGACAGAATGGTGCCATGCGTGGCTAACATCCTGCTTTGATTCCCTCTGATAAGC
TGTTCTGGTGGCAGTAACATGCAACAAAAATGTGGGTGTCTCTAGGCACGGGAAACTTGGTTCCATTGTTATATT
GTCCTATGCTTCGAGCCATGGGTCTACAGGGTCATCCTTATGAGACTCTTAAATATACTTAGATCCTGGTAAGAG
GCAAAGAATCAACAGCCAAACTGCTGGGGCTGCAAGCTGCTGAAGCCAGGGCATGGGATTAAAGAGATTGTGCGT
TCAAACCTAGGGAAGCCTGTGCCCATTTGTCCTGACTGTCTGCTAACATGGTACACTGCATCTCAAGATGTTTAT
CTGACACAAGTGTATTATTTCTGGCTTTTTGAATTAATCTAGAAAATGAAAAGATGGAGTTGTATTTTGACAAAA
ATGTTTGTACTTTTTAATGTTATTTGGAATTTTAAGTTCTATCAGTGACTTCTGAATCCTTAGAATGGCCTCTTT
GTAGAACCCTGTGGTATAGAGGAGTATGGCCACTGCCCCACTATTTTTATTTTCTTATGTAAGTTTGCATATCAG
TCATGACTAGTGCCTAGAAAGCAATGTGATGGTCAGGATCTCATGACATTATATTTGAGTTTCTTTCAGATCATT
TAGGATACTCTTAATCTCACTTCATCAATCAAATATTTTTTGAGTGTATGCTGTAGCTGAAAGAGTATGTACGTA
CGTATAAGACTAGAGAGATATTAAGTCTCAGTACACTTCCTGTGCCATGTTATTCAGCTCACTGGTTTACAAATA
TAGGTTGTCTTGTGGTTGTAGGAGCCCACTGTAACAATATTGGGCAGCCTTTTTTTTTTTTTTTAATTGCAACA
ATGCAAAAGCCAAGAAAGTATAAGGGTCACAAGTTTAAACAATGAATTCTTCAACAGGGAAAACAGCTAGCTTGA
AAACTTGCTGAAAAACACAACTTGTGTTTATGGCATTTAGTACCTTCAAATAATTGGCTTTGCAGATATTGGATA
CCCCATTAAATCTGACAGTCTCAAATTTTTCATCTCTTCAATCACTAGTCAAGAAAAATATAAAAACAACAAATA
CTTCCATATGGAGCATTTTTCAGAGTTTTCTAACCCAGTCTTATTTTTCTAGTCAGTAAACATTTGTAAAAATAC
TGTTTCACTAATACTTACTGTTAACTGTCTTGAGAGAAAAGAAAAATATGAGAGAACTATTGTTTGGGGAAGTTC
AAGTGATCTTTCAATATCATTACTAACTTCTTCCACTTTTTCCAAAATTTGAATATTAACGCTAAAGGTGTAAGA
CTTCAGATTTCAAATTAATCTTTCTATATTTTTTAAATTTACAGAATATTATATAACCCACTGCTGAAAAAGAAA
AAAATGATTGTTTTAGAAGTTAAAGTCAATATTGATTTTAAATATAAGTAATGAAGGCATATTTCCAATAACTAG
TGATATGGCATCGTTGCAATTTACAGTATCTTCAAAAATACAGAATTTATAGAATAATTTCTCCTCATTTAATAT
TTTTCAAAATCAAAGTTATGGTTTCCTCATTTTACTAAAATCGTATTCTAATTCTTCATTATAGTAAATCTATGA
GCAACTCCTTACTTCGGTTCCTCTGATTTCAAGGCCATATTTTAAAAAATCAAAAGGCACTGTGAACTATTTTGA
AGAAAACACGACATTTTAATACAGATTGAAAGGACCTCTTCTGAAGCTAGAAACAATCTATAGTTATACATCTTC
ATTAATACTGTGTTACCTTTTAAAATAGTAATTTTTTACATTTTCCTGTGTAAACCTAATTGTGGTAGAAATTTT
TACCAACTCTATACTCAATCAAGCAAAATTTCTGTATATTCCCTGTGGAATGTACCTATGTGAGTTTCAGAAATT
CTCAAAATACGTGTTCAAAAATTTCTGCTTTTGCATCTTTGGGACACCTCAGAAAACTTATTAACAACTGTGAAT
ATGAGAAATACAGAAGAAAATAATAAGCCCTCTATACATAAATGCCCAGCACAATTCATTGTTAAAAAACAACCA
AACCTCACACTACTGTATTTCATTATCTGTACTGAAAGCAAATGCTTTGTGACTATTAAATGTTGCACATCATTC
ATTCACTGTATAGTAATCATTGACTAAAGCCATTTGCTGTGTTTTCTTCTTGTGGXTGXATATATCAGGTAAAAT
ATTTTCCAAAGAGCCATGTGTCATGTAATACTGAACCCTTTGATATTGAGACATTAATTTGGACCCTTGGTATTA
TCTACTAGAATAATGTAATACTGXAGAAATATTGCTCTAATTCTTTCAAAATGGTGCATCCCCCTTAAAAXGTTC
TATTTCCATAAGGATTTAGCTTGCTTATCCCTTCTTATACCCTAAGATGAAGCTGTTTTTGTGCTCTTTGTTCAT
CATTGGCCCTCATTCCAAGCACTTTACGCTGTCTGTAATGGGATCTATTTTTGCACTGGAATATCTGAGAATTGC
AAAACTAGACAAAAGTTTCACAACAGATTTCTAAGTTAAATCATTTTCATTAAAAGGAAAAAAGAAAAAAAATTT
TGTATGTCAATAACTTTATATGAAGTATTAAAATGCATATTTCTATGTTGTAATATAATGAGTCACAAAATAAAG
CTGTGACAGTTCTGTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAA

FIGURE 7062

MACWPQLRLLLWKNLTFRRRQTCQLLLEVAWPLFIFLILISVRLSYPPYEQHECHFPNKAMPSAGTLPWVQGIIC
NANNPCFRYPTPGEAPGVVGNFNKSIVARLFSDARRLLLYSQKDTSMKDMRKVLRTLQQIKKSSSNLKLQDFLVD
NETFSGFLYHNLSLPKSTVDKMLRADVILHKVFLQGYQLHLTSLCNGSKSEEMIQLGDQEVSELCGLPKEKLAAA
ERVLRSNMDILKPILRTLNSTSPFPSKELAEATKTLLHSLGTLAQELFSMRSWSDMRQEVMFLTNVNSSSSSTQI
YQAVSRIVCGHPEGGGLKIKSLNWYEDNNYKALFGGNGTEEDAETFYDNSTTPYCNDLMKNLESSPLSRIIWKAL
KPLLVGKILYTPDTPATRQVMAEVNKTFQELAVFHDLEGMWEELSPKIWTFMENSQEMDLVRMLLDSRDNDHFWE
QQLDGLDWTAQDIVAFLAKHPEDVQSSNGSVYTWREAFNETNQAIRTISRFMECVNLNKLEPIATEVWLINKSME
LLDERKFWAGIVFTGITPGSIELPHHVKYKIRMDIDNVERTNKIKDGYWDPGPRADPFEDMRYVWGGFAYLQDVV
EQAIIRVLTGTEKKTGVYMQQMPYPCYVDDIFLRVMSRSMPLFMTLAWIYSVAVIIKGIVYEKEARLKETMRIMG
LDNSILWFSWFISSLIPLLVSAGLLVVILKLGNLLPYSDPSVVFVFLSVFAVVTILQCFLISTLFSRANLAAACG
GIIYFTLYLPYVLCVAWQDYVGFTLKIFASLLSPVAFGFGCEYFALFEEQGIGVQWDNLFESPVEEDGFNLTTSI
SMMLFDTFLYGVMTWYIEAVFPGQYGIPRPWYFPCTKSYWFGEESDEKSHPGSNQKRMSEICMEEEPTHLKLGVS
IQNLVKVYRDGMKVAVDGLALNFYEGQITSFLGHNGAGKTTTMSILTGLFPPTSGTAYILGKDIRSEMSTIRQNL
GVCPQHNVLFDMLTVEEHIWFYARLKGLSEKHVKAEMEQMALDVGLPSSKLKSKTSQLSGGMQRKLSVALAFVGG
SKVVILDEPTAGVDPYSRRGIWELLLKYRQGRTIILSTHHMDEADVLGDRIAIISHGKLCCVGSSLFLKNQLGTG
YYLTLVKKDVESSLSSCRNSSSTVSYLKKEDSVSQSSSDAGLGSDHESDTLTIDVSAISNLIRKHVSEARLVEDI
GHELTYVLPYEAAKEGAFVELFHEIDDRLSDLGISSYGISETTLEEIFLKVAEESGVDAETSDGTLPARRNRRAF
GDKQSCLRPFTEDDAADPNDSDIDPESRETDLLSGMDGKGSYQVKGWKLTQQQFVALLWKRLLIARRSRKGFFAQ
IVLPAVFVCIALVFSLIVPPFGKYPSLELQPWMYNEQYTFVSNDAPEDTGTLELLNALTKDPGFGTRCMEGNPIP
DTPCQAGEEEWTTAPVPQTIMDLFQNGNWTMQNPSPACQCSSDKIKKMLPVCPPGAGGLPPPQRKQNTADILQDL
TGRNISDYLVKTYVQIIAKSLKNKIWVNEFRYGGFSLGVSNTQALPPSQEVNDAIKQMKKHLKLAKDSSADRFLN
SLGRFMTGLDTRNNVKVWFNNKGWHAISSFLNVINNAILRANLQKGENPSHYGITAFNHPLNLTKQQLSEVALMT
TSVDVLVSICVIFAMSFVPASFVVFLIQERVSKAKHLQFISGVKPVIYWLSNFVWDMCNYVVPATLVIIIFICFQ
QKSYVSSTNLPVLALLLLLYGWSITPLMYPASFVFKIPSTAYVVLTSVNLFIGINGSVATFVLELFTDNKLNNIN
DILKSVFLIFPHFCLGRGLIDMVKNQAMADALERFGENRFVSPLSWDLVGRNLFAMAVEGVVFFLITVLIQYRFF
IRPRPVNAKLSPLNDEDEDVRRERQRILDGGGQNDILEIKELTKIYRRKRKPAVDRICVGIPPGECFGLLGVNGA
GKSSTFKMLTGDTTVTRGDAFLNKNSILSNIHEVHQNMGYCPQFDAITELLTGREHVEFFALLRGVPEKEVGKVG
EWAIRKLGLVKYGEKYAGNYSGGNKRKLSTAMALIGGPPVVFLDEPTTGMDPKARRFLWNCALSVVKEGRSVVLT
SHSMEECEALCTRMAIMVNGRFRCLGSVQHLKNRFGDGYTIVVRIAGSNPDLKPVQDFFGLAFPGSVLKEKHRNM
LQYQLPSSLSSLARIFSILSQSKKRLHIEDYSVSQTTLDQVFVNFAKDQSDDDHLKDLSLHKNQTVVDVAVLTSF
LQDEKVKESYV

FIGURE 7063

AAAATGGTGGTGTTCGGGTATGAGGGCTGGGACTAAGCCAAGGGATTCAGGTGTGGTGCCGGTGGGAACTGAGGA
AGCGCCCAAGGAAATGAAACACGATTTCCAAAATGAACTTAATCTTTCATGAGAAACTGAGGATAGAGATGTCAA
TAAGCAGCCACTGTTTCCACCTCCCCACCTGAAGAGCTAGGAGGACAACTATCAAACTACCACTAAGCCAAGGGA
TTCAGGTGTGGTGCCTGTGGGATCTGAGGAAGCGCCCAAGGTTTTCAAGATGGCAGCATCTATGCATGGTCAGCC
CAGTCCTTCTCTAGAAGATGCAAAACTCAGAAGACCAATGGTCATAGAAATCTAGGACTAAGCCAAGGGATTCAG
GTGTGGTGCCGGTGGGATCTGAGGAAGCGCCCAAGGACACAAAATATATATCAA**ATG**GCGACATTTGGAACAACA
GCTGGTTTCTCTGGAATATTCTCAAACTTCCTGTTCAGACGCTGCTTCAAGGTTAAACATGATGCTTTGAAGACA
TATGCATCATTGGCTACACTTCCATTTTTGTCTACTGTTGTTACTGACAAGCTTTTTGTAATTGATGCTTTGTAT
TCAGATAATATAAGCAAGGAAAACTGTGTTTTCAGAAGCTCACTGATTGGCATAGTTTGTGGTGTTTTCTATCCC
AGTTCTTTGGCTTTTACTAAAAATGGACGCCTGGCAACCAAGTATCATACCGTTCCACTGCCACCAAAAGGAAGG
GTTTTAATCCATTGGATGACGCTTTGTCAAACACAAATGAAATTAATTGCGATTCCTCTAGTCTTTCAGATTATG
TTTGGAATATTAAATGGCTATACCATTATGCAAGTATTTGAAAGAGACACT**TGA**GAAAACTATACATGAAGAGTA
ACCAAAAAAAATGAATGGTTGCTAACTTAGCAAAATGAAGTTTCTATAAAGAGGACTCAGGCATTGCTGAAAGAGT
TAAAAGTAACTGTGAACAAATAATTTGTTCTGTGCCTTTTGCCTGGTATATAGCAAATACTCAAAAAGTATTCAA
TAATTCAATCAATAAATATAAGTTTCATCTTACACGTAAGATACAAAAAAA

FIGURE 7064

MATFGTTAGFSGIFSNFLFRRCFKVKHDALKTYASLATLPFLSTVVTDKLFVIDALYSDNISKENCVFRSSLIGI
VCGVFYPSSLAFTKNGRLATKYHTVPLPPKGRVLIHWMTLCQTQMKLIAIPLVFQIMFGILNGYTIMQVFERDT

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FIGURE 7065

CCACCTCTCCAGCCACTCATCTCTGCCCAGCTGCTGCCCTCCCCAGGAGGCCTCCATGGCTTCACCTACCTCCAC
CAACCCAGCGCATGCCCACTTTGAGAGCTTCCTGCAGGCCCAGCTGTGCCAGGACGTGCTGAGCAGCTTCCAGGA
GCTGTGTGGGGCCCTGGGGCTGGAACCCGGTGGGGGGCTGCCCCAGTACCACAAGATCAAGGACCAGCTCAACTA
CTGGAGCGCCAAGTCACTGTGGACCAAGCTGGACAAGCGAGCAGGCCAGCCTGTCTACCAGCAGGGCCGGGCCTG
CACCAGCACCAAGTGCCTGGTGGTGGGTGCTGGACCTTGCGGGCTGCGGGTCGCTGTGGAGCTGGCGCTGCTGGG
GGCCCGAGTGGTGCTGGTGGAAAAGCGCACCAAGTTCTCTCGCCACAACGTGCTCCACCTCTGGCCCTTCACCAT
CCACGACCTGCGGGCACTCGGTGCTAAGAAGTTCTACGGGCGCTTCTGCACCGGCACCCTGGACCACATCAGCAT
CAGGCAGCTCCAGCTGCTTCTGCTGAAGGTAGCATTGCTGCTGGGGGTGGAAATTCACTGGGGTGTCACTTTCAC
TGGCCTCCAGCCCCCTCCTAGGAAGGGGAGTGGCTGGCGTGCCCAGCTCCAACCCAACCCCCCTGCCCAGCTGGC
CAACTATGAATTTGACGTCCTTATCTCGGCTGCAGGAGGTAAATTCGTCCCTGAAGGCTTCAAAGTTCGAGAAAT
GCGAGGCAAACTGGCCATTGGCATCACAGCCAACTTTGTGAATGGACGCACCGTGGAGGAGACACAGGTGCCGGA
GATCAGTGGTGTAGCCAGGATCTACAACCAGAGCTTCTTCCAGAGCCTTCTCAAAGCCACAGGCATTGATCTGGA
GAACATTGTGTACTACAAGGACGACACCCACTACTTTGTGATGACAGCCAAGAAGCAGTGCCTGCTGCGGCTGGG
GGTGCTGCGCCAGGACTGGCCAGACACCAATCGGCTGCTGGGCAGTGCCAATGTGGTGCCCGAGGCTCTGCAGCG
CTTTACCCGGGCAGCTGCTGACTTTGCCACCCATGGCAAGCTCGGGAAACTAGAGTTTGCCCAGGATGCCCATGG
GCAGCCTGATGTCTCTGCCTTTGACTTCACGAGCATGATGCGGGCAGAGAGTTCTGCTCGTGTGCAAGAGAAGCA
TGGCGCCCGCCTGCTGCTGGGACTGGTGGGGGACTGCCTGGTGGAGCCCTTCTGGCCCCTGGGCACTGGAGTGGC
ACGGGGCTTCCTGGCAGCCTTTGATGCAGCCTGGATGGTGAAGCGGTGGGCAGAGGGCGCTGAGTCCCTAGAGGT
GTTGGCTGAGCGTGAGAGCCTGTACCAGCTTCTGTCACAGACATCCCCAGAAAACATGCATCGCAATGTGGCCCA
GTATGGGCTGGACCCAGCCACCCGCTACCCCAACCTGAACCTCCGGGCAGTGACCCCCAATCAGGTACGAGACCT
GTATGATGTGCTAGCCAAGGAGCCTGTGCAGAGGAACAACGACAAGACAGATACAGGGATGCCAGCCACCGGGTC
GGCAGGCACCCAGGAGGAGCTGCTACGCTGGTGCCAGGAGCAGACAGCTGGGTACCCGGGAGTCCACGTCTCCGA
TTTGTCTTCCTCCTGGGCTGATGGGCTAGCTCTGTGTGCCCTGGTGTACCGGCTGCAGCCTGGCCTGCTGGAACC
CTCAGAGCTGCAGGGGCTGGGAGCTCTGGAAGCAACTGCTTGGGCACTAAAGGTGGCAGAGAATGAGCTGGGCAT
CACACCGGTGGTGTCTGCACAGGCCGTGGTAGCAGGGAGTGACCCACTGGGCCTCATTGCCTACCTCAGCCACTT
CCACAGTGCCTTCAAGAGCATGGCCCACAGCCCAGGCCCTGTCAGCCAGGCCTCCCCAGGGACCTCCAGTGCTGT
ATTATTCCTTAGTAAACTTCAGAGGACCCTGCAGCGATCCCGGGCCAAGGAAAATGCAGAGGATGCTGGTGGCAA
GAAGCTGCGCTTGGAGATGGAGGCCGAGACCCCAAGTACTGAGGTGCCACCTGACCCAGAGCCTGGTGTACCCCT
GACACCCCCATCCCAACACCAGGAGGCCGGTGCTGGGGACCTGTGTGCACTTTGTGGGGAACACCTCTATGTCCT
GGAACGCCTCTGTGTCAACGGCCATTTCTTCCACCGGAGCTGCTTCCGCTGCCATACCTGTGAGGCCACACTGTG
GCCAGGTGGCTACGAGCAGCACCCAGGAGATGGACATTTCTACTGCCTCCAGCACCTGCCCCAGACAGACCACAA
AGCGGAAGGCAGCGATAGAGGCCCTGAGAGTCCGGAGCTCCCCACACCAAGTGAGAATAGCATGCCACCAGGCCT
CTCAACTCCCACAGCCTCGCAGGAGGGGGCCGGTCCTGTTCCAGATCCCAGCCAGCCCACCCGTCGGCAGATCCG
CCTCTCCAGCCCGGAGCGCCAGCGGTTGTCCTCCCTTAACCTTACCCCTGACCCGGAAATGGAGCCTCCACCCAA
GCCTCCCCGCAGCTGCTCCGCCTTGGCCCGCCACGCCCTGGAGAGCAGCTTTGTGGGCTGGGGCCTGCCAGTCCA
GAGCCCTCAAGCTCTTGTGGCCATGGAGAAGGAGGAAAAAGAGAGTCCCTTCTCCAGTGAAGAGGAAGAAGAAGA
TGTGCCTTTGGACTCAGATGTGGAACAGGCCCTGCAGACCTTTGCCAAGACCTCAGGCACCATGAATAACTACCC
AACATGGCGTCGGACTCTGCTGCGCCGTGCGAAGGAGGAGGAGATGAAGAGGTTCTGCAAGGCCCAGACCATCCA
ACGGCGACTAAATGAGATTGAGGCTGCCTTGAGGGAGCTAGAGGCCGAGGGCGTGAAGCTGGAGCTGGCCTTGAG
GCGCCAGAGCAGTTCCCCAGAACAGCAAAAGAAACTATGGGTAGGACAGCTGCTACAGCTCGTTGACAAGAACAA
CAGCCTGGTGGCTGAGGAGGCCGAGCTCATGATCACGGTGCAGGAATTGAATCTGGAGGAGAAACAGTGGCAGCT
GGACCAGGAGCTACGAGGCTACATGAACCGGGAAGAAAACCTAAAGACAGCTGCTGATCGGCAGGCTGAGGACCA
GGTCCTGAGGAAGCTGGTGGATTTGGTCAACCAGAGAGATGCCCTCATCCGCTTCCAGGAGGAGCGCAGGCTCAG
CGAGCTGGCCTTGGGGACAGGGGCCCAGGGCTAGACGAGGGTGGGCCGTCTGCTTTCGTTCCCACAAAGAAAGCA
CCTCACCCCAGCACAGTGCCACCCCTGTTCATCTGGGCTGCCTGGCAGAGAGCCTTGCTGTTTACAATTAAAATG
TTTCTGCCAC

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FIGURE 7066

MASPTSTNPAHAHFESFLQAQLCQDVLSSFQELCGALGLEPGGGLPQYHKIKDQLNYWSAKSLWTKLDKRAGQPV
YQQGRACTSTKCLVVGAGPCGLRVAVELALLGARVVLVEKRTKFSRHNVLHLWPFTIHDLRALGAKKFYGRFCTG
TLDHISIRQLQLLLLKVALLLGVEIHWGVTFTGLQPPPRKGSGWRAQLQPNPPAQLANYEFDVLISAAGGKFVPE
GFKVREMRGKLAIGITANFVNGRTVEETQVPEISGVARIYNQSFFQSLLKATGIDLENIVYYKDDTHYFVMTAKK
QCLLRLGVLRQDWPDTNRLLGSANVVPEALQRFTRAAADFATHGKLGKLEFAQDAHGQPDVSAFDFTSMMRAESS
ARVQEKHGARLLLGLVGDCLVEPFWPLGTGVARGFLAAFDAAWMVKRWAEGAESLEVLAERESLYQLLSQTSPEN
MHRNVAQYGLDPATRYPNLNLRAVTPNQVRDLYDVLAKEPVQRNNDKTDTGMPATGSAGTQEELLRWCQEQTAGY
PGVHVSDLSSSWADGLALCALVYRLQPGLLEPSELQGLGALEATAWALKVAENELGITPVVSAQAVVAGSDPLGL
IAYLSHFHSAFKSMAHSPGPVSQASPGTSSAVLFLSKLQRTLQRSRAKENAEDAGGKKLRLEMEAETPSTEVPPD
PEPGVPLTPPSQHQEAGAGDLCALCGEHLYVLERLCVNGHFFHRSCFRCHTCEATLWPGGYEQHPGDGHFYCLQH
LPQTDHKAEGSDRGPESPELPTPSENSMPPGLSTPTASQEGAGPVPDPSQPTRRQIRLSSPERQRLSSLNLTPDP
EMEPPPKPPRSCSALARHALESSFVGWGLPVQSPQALVAMEKEEKESPFSSEEEEEDVPLDSDVEQALQTFAKTS
GTMNNYPTWRRTLLRRAKEEEMKRFCKAQTIQRRLNEIEAALRELEAEGVKLELALRRQSSSPEQQKKLWVGQLL
QLVDKNNSLVAEEAELMITVQELNLEEKQWQLDQELRGYMNREENLKTAADRQAEDQVLRKLVDLVNQRDALIRF
QEERRLSELALGTGAQG

FIGURE 7067

GCGGCCGCGTCGACTGTGACACTGCCAGCAGCGCGCAGAGGGAGGGATGGGGGCGGGTATCGGCGTAGGGGCCCT
CGGAAAGAACGGATATTGCTGTGACACCGCGGGGACGCTCTGAAGGGACGAGTGTCGGTGTGGCACCGGTGCACG
CTGAAGGAGCCGGCGGAACCGGGTGGCC**ATG**GGGATGTGGGCATCGCTGGACGCTTTGTGGGAGATGCCGGCCAA
GAAGCGTATCTTCGGGGCCGTGCTGCTCTTTTCCTGGACAGTGTATCTTTGGGAGACCTTCCTAGCACAGCGGCA
GAGAAGGATATATAAAACAACAACTCATGTACCACCGGAGTTAGGACAGATCATGGATTCTGAAACATTTGAGAA
ATCTCGACTCTATCAACTGGATAAAAGCACTTTCAGCTTCTGGTCAGGACTCTATTCAGAGACTGAAGGCACTCT
TATTCTTCTCTTTGGAGGAATACCTTATCTCTGGAGACTTTCTGGACGGTTCTGTGGTTATGCTGGCTTTGGACC
AGAATATGAGATCACTCAGTCCCTGGTGTTTCTGCTGTTGGCTACACTTTTCAGTGCATTGACTGGTTTGCCATG
GAGTCTTTATAATACTTTTGTGATAGAAGAAAAACATGGCTTCAATCAACAGACTTTGGGGTTCTTCATGAAAGA
TGCAATCAAGAAATTTGTTGTGACTCAGTGTATTTTGTTGCCTGTGTCTTCACTTCTACTTTACATTATTAAAAT
TGGGGGTGACTATTTTTTTATTTATGCCTGGCTGTTCACATTAGTTGTGTCTCTGGTTCTTGTCACAATCTATGC
TGATTATATTGCCCCTTTATTTGACAAATTCACACCTCTGCCTGAGGGAAAGCTTAAAGAAGAAATTGAAGTAAT
GGCAAAGAGTATTGACTTTCCTTTGACGAAGGTGTATGTTGTGGAAGGATCTAAACGCTCTTCCCACAGCAATGC
TTATTTTTATGGCTTCTTCAAGAACAAGCGAATAGTTTTGTTTGACACTCTACTAGAAGAGTACTCTGTACTAAA
CAAAGACATCCAGGAGGATTCTGGCATGGAACCCCGCAATGAGGAAGAAGGGAACAGTGAAGAAATAAAAGCTAA
AGTTAAAAATAAGAAACAAGGATGTAAAAATGAGGAGGTACTCGCTGTACTAGGCCATGAACTGGGGCACTGGAA
GTTGGGACATACAGTCAAAAATATCATTATTAGCCAGATGAATTCTTTCCTGTGTTTTTTTTTATTTGCTGTATT
AATTGGTCGAAAGGAGCTTTTTGCTGCATTTGGTTTTTATGATAGCCAACCCACTCTTATTGGACTATTGATCAT
CTTCCAGTTTATTTTTTCACCTTACAATGAGGTTCTTTCTTTTTGCCTAACAGTCCTAAGCCGCAGATTTGAGTT
TCAAGCTGATGCATTTGCCAAGAAACTTGGGAAGGCTAAAGACTTATATTCTGCTTTAATCAAACTTAACAAAGA
TAACTTGGGATTCCCTGTTTCTGACTGGTTGTTCTCAATGTGGCATTATTCTCATCCTCCACTGCTAGAGAGACT
TCAAGCTTTGAAAACTATGAAGCAACAC**TGA**GATGTCCAGGATCTGTGACTGAAGACATTTCTGATTATTTCTGT
CCTGGCAGCATGTTCCAGCTCTTGATGTTTTTAAACTTTTTTTAGAAGAAAAATTAAGTACAGAAAAGCCCAGAT
TTAAATACATTTAATATGTCATTTTAAAAATGATTTTAATAATTCATTTCTTAAAACACTGAATGAATTTTGAAG
CTTAATGTTTTTAAAGGCATAGTTTTATCTTTGACATCTAATTTACCATCAAGTTGTAAAATTATTTGGAAAAAT
ACAGAACTCGTTTTATTTGTATACTTATATGGAATCTGCATGTGAGGTGTTTGAGGGCATATGTTTGAAAGAGGG
AGCATCACCACAGGAATCCTTTCTGTGAGGTGGAAACAGTGGTCCTGAATCATTGTGCTCACACCTAACTTGAAA
TCTGGTCTTACTTTCATGCTGTTATGATTTCACCTGGTGAATCAGTGTTTTAAATAAGAAAGGTAATAGTTGGTA
AGGCCAATGTTATTTAAATGAAAGTAGTTAGAAAAATGCTCTCCTATTCTACCAAATTTTTAATTTCTTTCTTCC
CTTTCTTGCTACACAGTGATCAAGAGTTTCTCATAGTGCTTTGAAGTTAGAAATTATGTATAGGATATTTTAAAT
CATTGAGTTTTGTGGGGTTTTTTTGTTTGTTTGTTTCTTTTGTTTTTTGGAAAATCCGTGTCTTTATCTTTTTTT
CCCACGTGGTAGATATGATCCCATTGGAGGTAAATTGTAGCTTCTTCTCATTCATGCAGTAAATAATACATCCTT
TCACTCAGCAGAGATGGCCATATTAAACACGTTTTGCTATGTTAAAAGTGGCAGAACAGGAAAGACGAATTAAAA
ATAACATTTTTTAAGCGACATAAGGATGAAATACTGATGAATCTCTGTGACATTACAGGGAAAAAAATATAGTTT
TCTATCTCTTTCAAGGGCAGAAGAGTTTTCATTTTTATTTTTGTAATTTATCTGTAAGTCATAAATATTACTTAA
TCAGGCCTGATTCTACTTTTGAAAATTACAGTTCTTGAAATGCAGATAATGTTTACTTTGAAAACAAATGTCATG
AATGATTTCCAGTTTTTAAAGCTATATGTTTCACTGCTTCATATCTCTGTCCACTTTCTGAATGAGAACTTATTT
TGTGCCTAGAGCTCTCACTCACTGATAATGCTTATTACCTTCTGGGCATTTATTCCAAAGTGGGATCAACTGTAC
GCCTTTGGTATCTGACCATAAAGTCTTTTGCTCCGCTGACATTTGGGTGATGTCTTCACATGGAAATATAATAAA
AATAAAAATCTAGTTTAAAAAAAAAAAAAAAAAAAAA

FIGURE 7068

MGMWASLDALWEMPAKKRIFGAVLLFSWTVYLWETFLAQRQRRIYKTTTHVPPELGQIMDSETFEKSRLYQLDKS
TFSFWSGLYSETEGTLILLFGGIPYLWRLSGRFCGYAGFGPEYEITQSLVFLLLATLFSALTGLPWSLYNTFVIE
EKHGFNQQTLGFFMKDAIKKFVVTQCILLPVSSLLLYIIKIGGDYFFIYAWLFTLVVSLVLVTIYADYIAPLFDK
FTPLPEGKLKEEIEVMAKSIDFPLTKVYVVEGSKRSSHSNAYFYGFFKNKRIVLFDTLLEEYSVLNKDIQEDSGM
EPRNEEEGNSEEIKAKVKNKKQGCKNEEVLAVLGHELGHWKLGHTVKNIIISQMNSFLCFFLFAVLIGRKELFAA
FGFYDSQPTLIGLLIIFQFIFSPYNEVLSFCLTVLSRRFEFQADAFAKKLGKAKDLYSALIKLNKDNLGFPVSDW
LFSMWHYSHPPLLERLQALKTMKQH

FIGURE 7069

GAAGCTCTCCTGTTTGACGAAAGTATGTCTCAGGAAGGTGCGGTCCCAGCTAGCGCGGTTCCCCTGGAAGAATTA
AGTAGCTGGCCAGAGGAGCTATGCCGCCGGGAACTGCCGTCCGTCCTGCCCCGACTCCTCTCATTGTCTCAACAT
TCTGAAAGTTGGATTGAGCATATTCACTGTGAAATTATTCGATGACATGATGTATGAATTAACCAGTCAAGCCAG
AGGACTGTCAAGCCAAAATTTGGAAATCCAGACCACTCTAAGGAATATTTTACAAACAATGGTGCAGCTCTTAGG
AGCTCTCACAGGATGTGTTCAGCATATCTGTGCCACACAGGAATCCATCATTTTGGAAAATATTCAGAGTCTCCC
CTCCTCAGTCCTTCATATAATTAAAAGCACATTTGTGCATTGTAAGTTTCAGACCTTCTCCAGGCTCTTTTCAAG
GAGGCCTATTCTCTTCAAAAGCAGTTA**ATG**GAACTGCTGGACATGGTTTGCATGGACCCTTTAGTAGATGACAAT
GATGATATTTTGAATATGGTAATAGTTATTCATTCTTTATTGGATATCTGCTCTGTTATTTCCAGTATGGACCAT
GCATTTCATGCCAATACTTGGAAGTTTATAATTAAGCAGAGCCTTAAGCACCAGTCCATAATAAAAAGCCAGTTG
AAACACAAAGATATAATTACTAGCTTGTGTGAAGACATTCTTTTCTCCTTCCATTCTTGTTTACAGTTAGCTGAG
CAGATGACACAGTCAGATGCACAGGATAATGCTGACTACAGATTATTTCAGAAAACACTCAAATTGTGTCGTTTT
TTTGCCAACTCCCTTTTGCACTACGCTAAGGAATTTCTTCCTTTCCTCTCTGATTCTTGCTGTACTTTGCACCAA
CTGTATCTTCAGATACACAGCAAGTTTCCTCCAAGCCTTTATGCTACCAGGATTTCTAAAGCACACCAAGAGGAA
ATAGCAGGTGCTTTCCTAGTGACACTGGATCCACTTATCAGTCAGCTGCTCACATTTCAGCCTTTCATGCAGGTG
GTTTTGGACAGTAAATTAGACCTGCCATGTGAACTGCAGTTTCCACAATGTCTTCTTCTGGTTGTTGTCATGGAT
AAGCTGCCATCTCAGCCTAAGGAAGTGCAAACCCTGTGGTGCACAGACAGCCAGGTCTCAGAAACGACAACCAGG
ATATCTCTACTCAAAGCCGTTTTCTACAGTTTTGAGCAGTGTTCTGGTGAACTCTCTCTACCTGTTCATTTACAG
GGATTAAAGAGTAAGGGGAAAGCTGAGGTGGCTGTCACCTTGTATCAGCATGTTTGTGTTCATCTGTGTACATTT
ATTACTTCCTTTCATCCCTCACTGTTTGCTGAACTGGATGCTGCTCTGCTGAATGCTGTACTTAGTGCTAATATG
ATCACCTCTTTGTTAGCTATGGATGCATGGTGCTTCCTTGCTCGATATGGGACTGCTGAACTGTGTGCACACCAT
GTCACCATAGTGGCTCATCTGATAAAGTCATGCCCTGGAGAATGTTATCAACTCATCAACCTATCAATACTGTTG
AAGCGTCTCTTTTTCTTCATGGCACCACCCCATCAGCTGGAGTTTATCCAGAAATTTTCCCCAAAAGAAGCAGAA
AATCTGCCTCTGTGGCAACATATTTCCTTCCAGGCGTTACCTCCTGAGCTTAGGGAACAAACTGTCCATGAGGTC
ACCACAGTAGGCACTGCAGAATGCAGGAAATGGCTGAGCAGGAGTCGTACTTTGGGAGAACTAGAATCTCTGAAC
ACAGTACTGTCTGCTTTGCTTGCAGTATGTAATTCTGCTGGTGAAGCTTTGGATACAGGAAAACAAACTGCAATT
ATCGAAGTTGTGAGTCAGCTTTGGGCTTTTTTAAACATTAAACAGGTAGCAGATCAACCTTATGTTCAACAGACA
TTCAGCCTTTTACTTCCACTGTTGGGATTTTTCATTCAAACTCTAGATCCTAAACTGATACTTCAGGCAGTAACT
TTGCAGACCTTGCTACTTAAATTAGAGCTTCCTGACTATGTTCGTTTGGCAATGTTGGATTTTGTATCTTCTTTA
GGAAAACTTTTTATACCTGAAGCTATCCAGGACAGAATTCTGCCCAACCTGTCCTGTATGTTTGCCTTACTGCTA
GCTGACAGGAGTTGGCTGCTAGAACAACATACCTTGGAGGCGTTTACTCAGTTCGCTGAGGGAACAAATCATGAA
GAGATAGTTCCACAGTGTCTCAGTTCTGAAGAAACTAAGAACAAAGTTGTATCCTTTCTGGAGAAGACTGGGTTT
GTAGATGAAACTGAAGCTGCCAAAGTGGAACGTGTGAAACAGGAAAAAGGTATTTTCTGGGAACCCTTTGCTAAT
GTGACTGTAGAAGAAGCAAAGAGGTCATCTTTACAGCCTTATGCAAAAAGAGCTCGTCAGGAGTTCCCCTGGGAA
GAAGAGTACAGGTCAGCGCTGCATACAATAGCAGGGGCTTTGGAAGCAACTGAGTCACTACTCCAAAAGGGTCCT
GCTCCAGCCTGGCTTTCAATGGAAATGGAGGCGCTCCAAGAAAGGATGGATAAGCTAAAACGTTACATACATACT
CTAGGG**TGA**AACTTATCACTAGGCAGAACTGGGTTTGATGCTTTGTCAACTGAAAATACTTATGTCTGTACATTT
TCTAACAGATATAAAACAAATTTTGTAAAGTT

FIGURE 7070

MELLDMVCMDPLVDDNDDILNMVIVIHSLLDICSVISSMDHAFHANTWKFIIKQSLKHQSIIKSQLKHKDIITSL
CEDILFSFHSCLQLAEQMTQSDAQDNADYRLFQKTLKLCRFFANSLLHYAKEFLPFLSDSCCTLHQLYLQIHSKF
PPSLYATRISKAHQEEIAGAFLVTLDPLISQLLTFQPFMQVVLDSKLDLPCELQFPQCLLLVVVMDKLPSQPKEV
QTLWCTDSQVSETTTRISLLKAVFYSFEQCSGELSLPVHLQGLKSKGKAEVAVTLYQHVCVHLCTFITSFHPSLF
AELDAALLNAVLSANMITSLLAMDAWCFLARYGTAELCAHHVTIVAHLIKSCPGECYQLINLSILLKRLFFFMAP
PHQLEFIQKFSPKEAENLPLWQHISFQALPPELREQTVHEVTTVGTAECRKWLSRSRTLGELESLNTVLSALLAV
CNSAGEALDTGKQTAIIEVVSQLWAFLNIKQVADQPYVQQTFSLLLPLLGFFIQTLDPKLILQAVTLQTLLLKLE
LPDYVRLAMLDFVSSLGKLFIPEAIQDRILPNLSCMFALLLADRSWLLEQHTLEAFTQFAEGTNHEEIVPQCLSS
EETKNKVVSFLEKTGFVDETEAAKVERVKQEKGIFWEPFANVTVEEAKRSSLQPYAKRARQEFPWEEEYRSALHT
IAGALEATESLLQKGPAPAWLSMEMEALQERMDKLKRYIHTLG

FIGURE 7071

GTCGCGCCATTTTGCCGGGGTTTGAATGTGAGGCGGAGCGGCGGCAGGAGCGGATAGTGCCAGCTACGGTCCGCG
GCTGGGGTTCCCTCCTCCGTTTCTGTATCCCCACGAGATCCTATAGCAATGGAACTCAGCGATGCAAATCTGCAA
ACACTAACAGAATATTTAAAGAAAACACTTGATCCTGATCCTGCCATCCGACGTCCAGCTGAGAAATTTCTTGAA
TCTGTTGAAGGAAATCAGAATTATCCACTGTTGCTTTTGACATTACTGGAGAAGTCCCAGGATAATGTTATCAAA
GTATGTGCTTCAGTAACATTCAAAAACTATATTAAAAGGAACTGGAGAATTGTTGAAGATGAACCAAACAAAATT
TGTGAAGCCGATCGAGTGGCCATTAAAGCCAACATAGTGCACTTGATGCTTAGCAGCCCAGAGCAAATTCAGAAG
CAGTTAAGTGATGCAATTAGCATTATTGGCAGAGAAGATTTTCCACAGAAATGGCCTGACTTGCTGACAGAAATG
GTGAATCGCTTTCAGAGTGGAGATTTCCATGTTATTAATGGAGTCCTCCGTACAGCACATTCATTATTTAAAAGA
TACCGTCATGAATTTAAGTCAAACGAGTTATGGACTGAAATTAAGCTTGTTCTGGATGCCTTTGCTTTGCCTTTG
ACTAATCTTTTTAAGGCCACTATTGAACTCTGCAGTACCCATGCAAATGATGCCTCTGCCCTGAGGATTCTGTTT
TCTTCCCTGATCCTGATCTCAAAATTGTTCTATAGTTTAAACTTTCAGGATCTCCCTGAATTTTGGGAAGGTAAT
ATGGAAACTTGGATGAATAATTTCCATACTCTCTTAACATTGGATAATAAGCTTTTACAAACTGATGATGAAGAG
GAAGCCGGCTTATTGGAGCTCTTAAAATCCCAGATTTGTGATAATGCCGCACTCTATGCACAAAAGTACGATGAA
GAATTCCAGCGATACCTGCCTCGTTTTGTTACAGCCATCTGGAATTTACTAGTTACAACGGGTCAAGAGGTTAAA
TATGATTTGTTGGTAAGTAATGCAATTCAATTTCTGGCTTCAGTTTGTGAGAGACCTCATTATAAGAATCTATTT
GAGGACCAGAACACGCTGACAAGTATCTGTGAAAAGGTTATTGTGCCTAACATGGAATTTAGAGCTGCTGATGAA
GAAGCATTTGAAGATAATTCTGAGGAGTACATAAGGAGAGATTTGGAAGGATCTGATATTGATACTAGACGCAGG
GCTGCTTGTGATCTGGTACGAGGATTATGCAAGTTTTTTGAGGGACCTGTGACAGGAATCTTCTCTGGTTATGTT
AATTCCATGCTGCAGGAATACGCAAAAAATCCATCTGTCAACTGGAAACACAAAGATGCAGCCATCTACCTAGTG
ACATCTTTGGCATCAAAAGCCCAAACACAGAAGCATGGAATTACACAAGCAAATGAACTTGTAAACCTAACTGAG
TTCTTTGTGAATCACATCCTCCCTGATTTAAAATCAGCTAATGTGAATGAATTTCCTGTCCTTAAAGCTGACGGT
ATCAAATATATTATGATTTTTAGAAATCAAGTGCCAAAAGAACATCTTTTAGTCTCGATTCCTCTCTTGATTAAT
CATCTTCAAGCTGGAAGTATTGTTGTTCATACTTACGCAGCTCATGCTCTTGAACGGCTCTTTACTATGCGAGGG
CCTAACAATGCCACTCTCTTTACAGCTGCAGAAATCGCACCGTTTGTTGAGATTCTGCTAACAAACCTTTTCAAA
GCTCTCACACTTCCTGGCTCTTCAGAAAATGAATATATTATGAAAGCTATCATGAGAAGTTTTTCTCTCCTACAA
GAAGCCATAATCCCCTACATCCCTACTCTCATCACTCAGCTTACACAGAAGCTATTAGCTGTTAGTAAGAACCCA
AGCAAACCTCACTTTAATCACTACATGTTTGAAGCAATATGTTTATCCATAAGAATAACTTGCAAAGCTAACCCT
GCTGCTGTTGTAAATTTTGAGGAGGCTTTGTTTTTGGTGTTTACTGAAATCTTACAAAATGATGTGCAAGAATTT
ATTCCATACGTCTTTCAAGTGATGTCTTTGCTTCTGGAAACACACAAAAATGACATCCCGTCTTCCTATATGGCC
TTATTTCCTCATCTCCTTCAGCCAGTGCTTTGGGAAAGAACAGGAAATATTCCTGCTCTAGTGAGGCTTCTTCAA
GCATTCTTAGAACGCGGTTCAAACACAATAGCAAGTGCTGCAGCTGACAAAATTCCTGGGTTACTAGGTGTCTTT
CAGAAGCTGATTGCATCCAAAGCAAATGACCACCAAGGTTTTTATCTTCTAAACAGTATAATAGAGCACATGCCT
CCTGAATCAGTTGACCAATATAGGAAACAAATCTTCATTCTGCTATTCCAGAGACTTCAGAATTCCAAAACAACC
AAGTTTATCAAGAGTTTTTTAGTCTTTATTAATTTGTATTGCATAAAATATGGGGCACTAGCACTACAAGAAATA
TTTGATGGTATACAACCAAAAATGTTTGGAATGGTTTTGGAAAAAATTATTATTCCTGAAATTCAGAAGGTATCT
GGAAATGTAGAGAAAAAGATCTGTGCGGTTGGCATAACCAACTTACTAACAGAATGTCCCCCAATGATGGACACT
GAGTATACCAAACTGTGGACTCCATTATTACAGTCTTTGATTGGTCTTTTTGAGTTACCCGAAGATGATACCATT
CCTGATGAGGAACATTTTATTGACATAGAAGATACACCAGGATATCAGACTGCCTTCTCACAGTTGGCATTTGCT
GGGAAAAAAGAGCATGATCCTGTAGGTCAAATGGTGAATAACCCCAAAATTCACCTGGCACAGTCACTTCACATG
TTGTCTACCGCCTGTCCAGGAAGGGTTCCATCAATGGTGAGCACCAGCCTGAATGCAGAAGCGCTCCAGTATCTC
CAAGGGTACCTTCAGGCAGCCAGTGTGACACTGCTTTAAACTGCATTTTTCTAATGGGCTAAACCCAGATGGTTT
CCTAGGAAATCACAGGCTTCTGAGCACAGCTGCATTAAAACAAAGGAAGTTTTCCTTTTGAACTTGTCACGA

FIGURE 7072

MELSDANLQTLTEYLKKTLDPDPAIRRPAEKFLESVEGNQNYPLLLLTLLEKSQDNVIKVCASVTFKNYIKRNWR
IVEDEPNKICEADRVAIKANIVHLMLSSPEQIQKQLSDAISIIGREDFPQKWPDLLTEMVNRFQSGDFHVINGVL
RTAHSLFKRYRHEFKSNELWTEIKLVLDAFALPLTNLFKATIELCSTHANDASALRILFSSLILISKLFYSLNFQ
DLPEFWEGNMETWMNNFHTLLTLDNKLLQTDDEEEAGLLELLKSQICDNAALYAQKYDEEFQRYLPRFVTAIWNL
LVTTGQEVKYDLLVSNAIQFLASVCERPHYKNLFEDQNTLTSICEKVIVPNMEFRAADEEAFEDNSEEYIRRDLE
GSDIDTRRRAACDLVRGLCKFFEGPVTGIFSGYVNSMLQEYAKNPSVNWKHKDAAIYLVTSLASKAQTQKHGITQ
ANELVNLTEFFVNHILPDLKSANVNEFPVLKADGIKYIMIFRNQVPKEHLLVSIPLLINHLQAGSIVVHTYAAHA
LERLFTMRGPNNATLFTAAEIAPFVEILLTNLFKALTLPGSSENEYIMKAIMRSFSLLQEAIIPYIPTLITQLTQ
KLLAVSKNPSKPHFNHYMFEAICLSIRITCKANPAAVVNFEEALFLVFTEILQNDVQEFIPYVFQVMSLLLETHK
NDIPSSYMALFPHLLQPVLWERTGNIPALVRLLQAFLERGSNTIASAAADKIPGLLGVFQKLIASKANDHQGFYL
LNSIIEHMPPESVDQYRKQIFILLFQRLQNSKTTKFIKSFLVFINLYCIKYGALALQEIFDGIQPKMFGMVLEKI
IIPEIQKVSGNVEKKICAVGITNLLTECPPMMDTEYTKLWTPLLQSLIGLFELPEDDTIPDEEHFIDIEDTPGYQ
TAFSQLAFAGKKEHDPVGQMVNNPKIHLAQSLHMLSTACPGRVPSMVSTSLNAEALQYLQGYLQAASVTLL

FIGURE 7073A

ATGATGAGCTTCGGCGGCGCGGACGCGCTGCTGGGCGCCCCGTTCGCGCCGCTGCATGGCGGCGGCAGCCTCCAC
TACGCGCTAGCCCGAAAGGGTGGCGCAGGCGGGACGCGCTCCGCCGCTGGCTCCTCCAGCGGCTTCCACTCGTGG
ACACGGACGTCCGTGAGCTCCGTGTCCGCCTCGCCCAGCCGCTTCCGTGGCGCAGGCGCCGCCTCAAGCACCGAC
TCGCTGGACACGCTGAGCAACGGGCCGGAGGGCTGCATGGTGGCGGTGGCCACCTCACGCAGTGAGAAGGAGCAG
CTGCAGGCGCTGAACGACCGCTTCGCCGGGTACATCGACAAGGTGCGGCAGCTGGAGGCGCACAACCGCAGCCTG
GAGGGCGAGGCTGCGGCGCTGCGGCAGCAGCAGGCGGGCCGCTCCGCTATGGGCGAGCTGTACGAGCGCGAGGTC
CGCGAGATGCGCGGCGCGGTGCTGCGCCTGGGCGCGGCGCGCGGTCAGCTACGCCTGGAGCAGGAGCACCTGCTC
GAGGACATCGCGCACGTGCGCCAGCGCCTAGACGACGAGGCCCGGCAGCGAGAGGAGGCCGAGGCGGCGGCCCGC
GCGCTGGCGCGCTTCGCGCAGGAGGCCGAGGCGGCGCGCGTGGACCTGCAGAAGAAGGCGCAGGCGCTGCAGGAG
GAGTGCGGCTACCTGCGGCGCCACCACCAGGAAGAGGTGGGCGAGCTGCTCGGCCAGATCCAGGGCTCCGGCGCC
GCGCAGGCGCAGATGCAGGCCGAGACGCGCGACGCCCTGAAGTGCGACGTGACGTCGGCGCTGCGCGAGATTCGC
GCGCAGCTTGAAGGCCACGCGGTGCAGAGCACGCTGCAGTCCGAGGAGTGGTTCCGAGTGAGGCTGGACCGACTG
TCGGAGGCAGCCAAGGTGAACACAGACGCTATGCGCTCAGCGCAGGAGGAGATAACTGAGTACCGGCGTCAGCTG
CAGGCCAGGACCACAGAGCTGGAGGCACTGAAAAGCACCAAGGACTCACTGGAGAGGCAGCGCTCTGAGCTGGAG
GACCGTCATCAGGCCGACATTGCCTCCTACCAGGAAGCCATTCAGCAGCTGGACGCTGAGCTGAGGAACACCAAG
TGGGAGATGGCCGCCCAGCTGCGAGAATACCAGGACCTGCTCAATGTCAAGATGGCTCTGGATATAGAGATAGCC
GCTTACAGAAAACTCCTGGAAGGTGAAGAGTGTCGGATTGGCTTTGGCCCAATTCCTTTCTCGCTTCCAGAAGGA
CTCCCCAAAATTCCCTCTGTGTCCACTCACATAAAGGTGAAAAGCGAAGAGAAGATCAAAGTGGTGGAGAAGTCT
GAGAAAGAAACTGTGATTGTGGAGGAACAGACAGAGGAGACCCAAGTGACTGAAGAAGTGACTGAAGAAGAGGAG
AAAGAGGCCAAAGAGGAGGAGGGCAAGGAGGAAGAAGGGGGTGAAGAAGAGGAGGCAGAAGGGGGAGAAGAAGAA
ACAAAGTCTCCCCCAGCAGAAGAGGCTGCATCCCCAGAGAAGGAAGCCAAGTCACCAGTAAAGGAAGAGGCAAAG
TCACCGGCTGAGGCCAAGTCCCCAGAGAAGGAGGAAGCAAAATCCCCAGCCGAAGTCAAGTCCCCTGAGAAGGCC
AAGTCTCCAGCAAAGGAAGAGGCAAAGTCACCGCCTGAGGCCAAGTCCCCAGAGAAGGAGGAAGCAAAATCTCCA
GCTGAGGTCAAGTCCCCCGAGAAGGCCAAGTCCCCAGCAAAGGAAGAGGCAAAGTCACCGGCTGAGGCCAAGTCT
CCAGAGAAGGCCAAGTCCCCAGTGAAGGAAGAAGCAAAGTCACCGGCTGAGGCCAAGTCCCCAGTGAAGGAAGAA
GCAAAATCTCCAGCTGAGGTCAAGTCCCCGGAAAAGGCCAAGTCTCCAACGAAGGAGGAAGCAAAGTCCCCTGAG
AAGGCCAAGTCCCCTGAGAAGGCCAAGTCCCCAGAGAAGGAAGAGGCCAAGTCCCCTGAGAAGGCCAAGTCCCCA
GTGAAGGCAGAAGCAAAGTCCCCTGAGAAGGCCAAGTCCCCAGTGAAGGCAGAAGCAAAGTCCCCTGAGAAGGCC
AAGTCCCCAGTGAAGGAAGAAGCAAAGTCCCCTGAGAAGGCCAAGTCCCCAGTGAAGGAAGAAGCAAAGTCCCCT
GAGAAGGCCAAGTCCCCAGTGAAGGAAGAAGCAAAGACCCCCGAGAAGGCCAAGTCCCCAGTGAAGGAAGAAGCC
AAGTCCCCAGAGAAGGCCAAGTCCCCAGAGAAGGCCAAGACTCTTGATGTGAAGTCTCCAGAAGCCAAGACTCCA
GCGAAGGAGGAAGCAAGGTCCCCTGCAGACAAATTCCCTGAAAAGGCCAAAAGCCCTGTCAAGGAGGAGGTCAAG
TCCCCAGAGAAGGCGAAATCTCCCCTGAAGGAGGATGCCAAGGCCCCTGAGAAGGAGATCCCAAAAAAGGAAGAG
GTGAAGTCCCCAGTGAAGGAGGAGGAGAAGCCCCAGGAGGTGAAAGTCAAAGAGCCCCCAAAGAAGGCAGAGGAA
GAGAAAGCCCCTGCCACACCAAAAACAGAGGAGAAGAAGGACAGCAAGAAAGAGGAGGCACCCAAGAAGGAGGCT
CCAAAGCCCAAGGTGGAGGAGAAGAAGGAACCTGCTGTCGAAAAGCCCAAAGAATCCAAAGTTGAAGCCAAGAAG
GAAGAGGCTGAAGATAAGAAAAAAGTCCCCACCCCAGAGAAGGAGGCTCCTGCCAAGGTGGAGGTGAAGGAAGAC
GCTAAACCCAAAGAAAAGACAGAGGTGGCCAAGAAGGAACCAGATGATGCCAAGGCCAAGGAACCCAGCAAACCA
GCAGAGAAGAAGGAGGCAGCACCGGAGAAAAAAGACACCAAGGAGGAGAAGGCCAAGAAGCCTGAGGAGAAACCC
AAGACAGAGGCCAAAGCCAAGGAAGATGACAAGACCCTCTCAAAAGAGCCTAGCAAGCCTAAGGCAGAAAAGGCT
GAAAAATCCTCCAGCACAGACCAAAAAGACAGCAAGCCTCCAGAGAAGGCCACAGAAGACAAGGCCGCCAAGGGG
AAGTAAGGCAGGGAGAAAGGAACATCCGGAACAGCCAAAGAAACTCAGAAGAGTCCCGGAGCTCAAGGATCAGAG
TAACACAATTTTCACTTTTTCTGTCTTTATGTAAGAAGAAACTGCTTAGATGACGGGGCCTCCTTCTTCAAACAG
GAATTTCTGTTAGCAATATGTTAGCAAGAGAGGGCACTCCCAGGCCCCTGCCCCCATGCCCTCCCCAGGCGATGG
ACAATTATGATAGCTTATGTAGCTGAATGTGATACATGCCGAATGCCACACGTAAACACTTGACTATAAAAACTG
CCCCCCTCCTTTCCAAATAAGTGCATTTATTGCCTCTATGTGCAACTGACAGATGACCGCAATAATGAATGAGCA
GTTAGAAATACATTATGCTTGAGATGTCTTAACCTATTCCCAAATGCCTTCTGTTTTCCAAAGGAGTGGTCAAGC
CCTTGCCCAGAGCTCTCTATTCTGGAAGAGCGGTCCAGGTGGGGCCGGGCACTGGCCACTGAATTATGCCAGGGC

FIGURE 7073B

GCACTTTCCACTGGAGTTCACTTTCAATTGCTTCTGTGCAATAAAACCAAGTGCTTATAAAATGAAAAAAAAAAA
AAAAATGCTGTTATTCTCTTTCCCTGGGAAGGCTGGGGGCAGGGCAGGGGAGGTCTGGATGTGACACCCCAGACT
GCATGGGACTGAGCAAGCATCAGT

FIGURE 7074

MMSFGGADALLGAPFAPLHGGGSLHYALARKGGAGGTRSAAGSSSGFHSWTRTSVSSVSASPSRFRGAGAASSTD
SLDTLSNGPEGCMVAVATSRSEKEQLQALNDRFAGYIDKVRQLEAHNRSLEGEAAALRQQQAGRSAMGELYEREV
REMRGAVLRLGAARGQLRLEQEHLLEDIAHVRQRLDDEARQREEAEAAARALARFAQEAEAARVDLQKKAQALQE
ECGYLRRHHQEEVGELLGQIQGSGAAQAQMQAETRDALKCDVTSALREIRAQLEGHAVQSTLQSEEWFRVRLDRL
SEAAKVNTDAMRSAQEEITEYRRQLQARTTELEALKSTKDSLERQRSELEDRHQADIASYQEAIQQLDAELRNTK
WEMAAQLREYQDLLNVKMALDIEIAAYRKLLEGEECRIGFGPIPFSLPEGLPKIPSVSTHIKVKSEEKIKVVEKS
EKETVIVEEQTEETQVTEEVTEEEEKEAKEEEGKEEEGGEEEEAEGGEEETKSPPAEEAASPEKEAKSPVKEEAK
SPAEAKSPEKEEAKSPAEVKSPEKAKSPAKEEAKSPPEAKSPEKEEAKSPAEVKSPEKAKSPAKEEAKSPAEAKS
PEKAKSPVKEEAKSPAEAKSPVKEEAKSPAEVKSPEKAKSPTKEEAKSPEKAKSPEKAKSPEKEEAKSPEKAKSP
VKAEAKSPEKAKSPVKAEAKSPEKAKSPVKEEAKSPEKAKSPVKEEAKSPEKAKSPVKEEAKTPEKAKSPVKEEA
KSPEKAKSPEKAKTLDVKSPEAKTPAKEEARSPADKFPEKAKSPVKEEVKSPEKAKSPLKEDAKAPEKEIPKKEE
VKSPVKEEEKPQEVKVKEPPKKAEEEKAPATPKTEEKKDSKKEEAPKKEAPKPKVEEKKEPAVEKPKESKVEAKK
EEAEDKKKVPTPEKEAPAKVEVKEDAKPKEKTEVAKKEPDDAKAKEPSKPAEKKEAAPEKKDTKEEKAKKPEEKP
KTEAKAKEDDKTLSKEPSKPKAEKAEKSSSTDQKDSKPPEKATEDKAAKGK

FIGURE 7075

GCCGGCATTCATTTAAGGCCTAAGGATGAAGGCGAGAAGAAATAAAAAACAGATCCCAAGCTTTCGCAAGTTAAT
AAAAACTAGTAAAGTCAAACTTGAAAACAAGCTAAAAAATAAGCAGTTTAAACAACAAAGCACTCTCAAGAAGTA
CCGAAAAGAACAGAGGAAACTAAGGCAAGCTGTGAAAGATGCTGTGTCTAAGAAACCCATTCCATTGGAGAACCC
AAAGGAAAAGCGACCAGGTAAAAGGATTGAGAGGGAAGAAGAGGAAGAAGAAGAAGCCCTTCCTTTAGATATGAT
GGATGAAGATGACTTACAGTTAATGAAGGATTTAGGACAAAGAGTATCTTTTCTAACAAGAGATCTTTCTTCTAG
TGAGCCTGTTCATGCGAAGAAACGGAAGCATGAACGCATTATAGATAAATATGAAAAAATACCAAGAACTCTGCA
AACTGCACCAGAGAAGGAACTGATTCATTTACTTCCTATCAAAGATAAAAGTGGTATAATCCCACAGACTAGGGA
GAAGCCAGTTACTGATAGTAACAAAGATGAAGAGGATCAAGAAGAAGAGAGGGAACTTGAGGAAGAGATCATTGA
AGATCCTATTCAAGAGCTGACCATAGAAGAACATTTGATTGAGAGAAAGAAGAAATTACAGGAGAAGAAGATGCA
TATTGCAGCCTTGGCATCTGCCATATTATCAGATCCAGAAAATAATATTAAAAAATTGAAAGAATTACGTTCTAT
GTTGATGGAACAAGATCCTGATGTGGCTGTTACTGTTCGAAAGCTGGTAATTGTTTCTCTGATGGAGTTATTTAA
AGATATTACTCCTTCATATAAAATCCGGCCCCTCACAGAAGCAGAAAAATCTACTAAGACCCGAAAAGAAACCCA
GAAGTTAAGAGAATTTGAAGAAGGCCTGGTTAGCCAATACAAGTTTTATTTGGAAAATCTGGAACAAATGGTTAA
AGATTGGAAGCAGAGGAAGCTGAAGAAAAGTAATGTAGTTTCCTTAAAGGCATACAAAGGACTGGCAGAAGTCGC
TGTGAAGAGCTTGTGTGAGCTGTTGGTGGCACTACCTCATTTTAACTTTCACAACAACATCATCGTATTGATTGT
CCCTCTCATGAATGACATGTCAAAATTGATATCTGAAATGTGTTGTGAAGCTGTGAAGAAACTCTTTAAGCAAGA
TAAATTAGGCCAGGCTTCTCTTGGTGTAATTAAAGTGATTTCTGGTTTTGTGAAGGGCAGAAATTACGAAGTTAG
GCCAGAGATGTTAAAAACATTTTTATGCCTAAGAATCAAGGAAGTAGAAGTGAAAAAAGATACAGAAGACATTAA
TAAACCAAAAAAATTTATGACTTTCAAAGAAAAGAGAAAATCTCTATCAAGAATGCAGAGAAAGTGGAAGAAAGC
AGAAGAGAAACTAGAGCGAGAGCTTCGAGAGGCAGAAGCTTCAGAGAGTACTGAGAAAAAACTTAAACTGCACAC
AGAGACTCTGAATATTGTGTTTGTAACCTACTTCAGAATATTGAAGAAGGCCCAGAGGTCACCTCTCCTGCCAGC
AGTTCTAGAAGGTCTTGCCAAGTTTGCTCACCTTATAAATGTGGAATTTTTTGATGATCTGTTAGTAGTTCTTCA
TACTCTCATTGAGTCTGGTGACCTAAGCTATCAAGAAAGTCTTCACTGTGTCCAGACTGCTTTTCATATTCTTTC
TGGACAAGGTGATGTTCTGAATATTGATCCATTGAAATTCTACACACATCTCTACAAAACACTGTTCAAATTACA
TGCAGGTGCTACCAATGAAGGTGTTGAGATTGTACTCCAGTGCCTTGATGTCATGCTAACTAAGCGCAGAAAGCA
AGTTTCTCAGCAGCGAGCTCTTGCCTTCATCAAACGCCTTTGTACCCTTGCTCTTCATGTTCTTCCAAATTCAAG
TATTGGCATTTTAGCAACTACCAGAATATTAATGCATACTTTCCCCAAAACAGATCTACTGCTTGACAGTGAATC
TCAGGGAAGTGGAGTTTTCCTTCCTGAACTGGATGAGCCTGAGTACTGCAATGCTCAGAACACTGCTCTGTGGGA
ACTGCATGCTCTGCGGAGGCATTATCATCCCATAGTGCAGAGATTTGCAGCCCACCTGATCGCTGGAGCACCTTC
TGAAGGCTCTGGAGCACTCAAACCAGAGTTGAGTCGAAGATCTGCTACTGAACTTTTTGAGGCATATAGCATGGC
AGAAATGACATTCAATCCTCCTGTTGAATCTTCAAACCCCAAAATAAAGGGTAAATTTTTACAAGGGGATTCATT
TTTGAATGAAGATTTAAATCAGCTAATCAAAAGATACTCCAGTGAAGTTGCTACTGAATCGCCTCTGGATTTCAC
GAAATATTTGAAAACATCACTACACTAGTAGAGGAATGAAGTCAGTGGAC

FIGURE 7076

MKARRNKKQIPSFRKLIKTSKVKLENKLKNKQFKQQSTLKKYRKEQRKLRQAVKDAVSKKPIPLENPKEKRPGKR
IEREEEEEEEALPLDMMDEDDLQLMKDLGQRVSFLTRDLSSSEPVHAKKRKHERIIDKYEKIPRTLQTAPEKELI
HLLPIKDKSGIIPQTREKPVTDSNKDEEDQEEERELEEEIIEDPIQELTIEEHLIERKKKLQEKKMHIAALASAI
LSDPENNIKKLKELRSMLMEQDPDVAVTVRKLVIVSLMELFKDITPSYKIRPLTEAEKSTKTRKETQKLREFEEG
LVSQYKFYLENLEQMVKDWKQRKLKKSNVVSLKAYKGLAEVAVKSLCELLVALPHFNFHNNIIVLIVPLMNDMSK
LISEMCCEAVKKLFKQDKLGQASLGVIKVISGFVKGRNYEVRPEMLKTFLCLRIKEVEVKKDTEDINKPKKFMTF
KEKRKSLSRMQRKWKKAEEKLERELREAEASESTEKKLKLHTETLNIVFVTYFRILKKAQRSPLLPAVLEGLAKF
AHLINVEFFDDLLVVLHTLIESGDLSYQESLHCVQTAFHILSGQGDVLNIDPLKFYTHLYKTLFKLHAGATNEGV
EIVLQCLDVMLTKRRKQVSQQRALAFIKRLCTLALHVLPNSSIGILATTRILMHTFPKTDLLLDSESQGSGVFLP
ELDEPEYCNAQNTALWELHALRRHYHPIVQRFAAHLIAGAPSEGSGALKPELSRRSATELFEAYSMAEMTFNPPV
ESSNPKIKGKFLQGDSFLNEDLNQLIKRYSSEVATESPLDFTKYLKTSLH

FIGURE 7077

ATGTCGCTCGAGTGGCTGGTGGCCTGGAGCTGGTCGCTGGATGGCCTGAGGGACTGCATCGCCACCGGCATCCAG
TCCGTGCGGGACTGCGACACCACCGCTGTCATCACTGTGGCCTGCCTCCTGGTCCTCTTCGTGTGGTACTGTTAT
CACGTGGGCAGGGAGCAGCCCCGGCCCTACGTCTCCGTCAACTCCCTCATGCAGGCTGCCGATGCCAACGGGCTG
CAGAATGGCTACGTGTACTGCCAGTCCCCTGAGTGCGTGCGCTGCACCCACAACGAGGGCCTCAACCAGAAGCTG
TACCACAACCTGCAGGAGTACGCCAAGCGCTACTCCTGGTCCGGCATGGGCCGCATCCACAAGGGCATCCGCGAG
CAGGGCCGGTACCTCAACAGCCGGCCCTCCATCCAGAAGCCCGAGGTCTTCTTCCTGCCCGACCTGCCCACCACG
CCCTATTTCTCCCGGGACGCACAGAAACATGATGTGGAAGTGCTGGAACGGAACTTCCAGACCATCCTGTGTGAG
TTTGAGACCCTCTACAAAGCTTTCTCAAACTGCAGCCTCCCGCAAGGATGGAAAATGAACAGCACCCCCAGCGGG
GAGTGGTTCACCTTTTACTTGGTCAATCAGGGGGTTTGTGTTCCCAGGAACTGTAGGAAGTGCCCACGGACGTAC
CGCTTGCTCGGAAGCCTTCGGACCTGTATTGGGAACAATGTTTTTGGGAACGCGTGCATCTCTGTGCTGAGCCCT
GGGACTGTGATAACGGAGCACTATGGACCCACCAACATCCGCATCCGATGCCATTTAGGTCTGAAAACTCCAAAT
GGCTGTGAGCTGGTGGTGGGGGGAGAGCCCCAGTGCTGGGCAGAAGGGCGCTGCCTTCTCTTTGATGACTCTTTC
CTGCATGCTGCGTTCCATGAAGGTTCAGCAGAGGATGGCCCACGGGTGGTTTTCATGGTGGATTTGTGGCATCCA
AACGTCGCAGCGGCCGAACGGCAGGCTCTTGATTTCATCTTTGCTCCGGGACGATGA

FIGURE 7078

MSLEWLVAWSWSLDGLRDCIATGIQSVRDCDTTAVITVACLLVLFVWYCYHVGREQPRPYVSVNSLMQAADANGL
QNGYVYCQSPECVRCTHNEGLNQKLYHNLQEYAKRYSWSGMGRIHKGIREQGRYLNSRPSIQKPEVFFLPDLPTT
PYFSRDAQKHDVEVLERNFQTILCEFETLYKAFSNCSLPQGWKMNSTPSGEWFTFYLVNQGVCVPRNCRKCPRTY
RLLGSLRTCIGNNVFGNACISVLSPGTVITEHYGPTNIRIRCHLGLKTPNGCELVVGGEPQCWAEGRCLLFDDSF
LHAAFHEGSAEDGPRVVFMVDLWHPNVAAAERQALDFIFAPGR

FIGURE 7079

GTCGACTACCAGAAAATACTTTCAACATAAATGAACTCTCCAACTTATTAAACTTTTATATAGATAGAGGAAGAC
AGCTCTTTCGGGATAACCACCTGATACCTGCAGAAACCCCCAGTCCTGTTATTTTCAGTGATTTTCCATTTATCT
TTAATTCGCTATCCAAAATTAAATTATTGCAAGCTGATTCACATATAAAGATGCAGATGTCAGAAAAGAAAGCAT
ACATGCTTATGCATGAAACAATTCTGCAAAAAAAGGATGAATTTCCTCCATCACCCAGATTTATACTTAGAGTCA
GACGAAGTCGCCTGGTTAAAGATGCTCTGCGTCAATTAAGTCAAGCTGAAGCTACTGACTTCTGCAAAGTATTAG
TGGTTGAATTTATTAATGAAATTTGTCCTGAGTCTGGAGGGGTTAGTTCAGAGTTCTTCCACTGTATGTTTGAAG
AGATGACCAAGCCAGAATATGGAATGTTCATGTATCCTGAAATGTGTTCCTGCATGTGGTTTCCTGCCAAGCCTA
AACCTGAGAAGAAAAGATATTTCCTCTTTGGAATGCTGTGTGGACTCTCCTTATTCAATTTAAATGTTGCTAACC
TTCCTTTCCCACTGGCTCTGTATAAAAAACTTCTGGACCAAAAGCCATCATTGGAAGATTTAAAAGAACTCAGTC
CTCGGTTGGGGAAGAGTTTGCAAGAAGTTCTAGATGATGCTGCTGATGACATTGGAGATGCGCTCTGCATACGCT
TTTCTATACACTGGGACCAAAATGATGTTGACTTAATTCCAAATGGGATCTCCATACCTGTGGACCAAACCAACA
AGAGAGACTATGTTTCTAAGTATATTGATTACATTTTCAACGTCTCTGTAAAAGCAGTTTATGAGGAATTTCAGA
GAGGATTTTATAGAGTCTGTGAGAAGGAGATACTTAGACATTTCTACCCTGAAGAACTAATGACAGCAATCATTG
GAAATACTGATTATGACTGGAAACAGTTTGAACAGAATTCAAAGTATGAGCAAGGATACCAAAAATCACATCCTA
CTATACAGTTGTTTTGGAAGGCTTTCCACAAGCTAACCTTGGATGAAAAGAAAAAATTCCTCTTTTTCCTTACAG
GACGTGATAGGCTGCATGCAAGAGGCATACAGAAAATGGAAATAGTATTTCGCTGTCCTGAAACTTTCAGTGAAA
GAGATCACCCAACATCAATAACTTGTCATAATATTCTCTCCCTCCCTAAGTATTCTACAATGGAAAGAATGGAGG
AAGCACTCCAAGTAGCCATCAACAACAACAGAGGATTTGTCTCACCCATGCTCACACAGTCATAATCACCTCTGA
GAGACTCAGGGTGGGCTTTCTCACACTTGGATCCTTCTGTTCTTCCTTACACCTAAATAATACAAGAGATTAATG
AATAGTGGTTAGAAGTAGTTGAGGGAGAGATTGGGGGAATGGGGAGATGATGATGATGGTCAAAGGGTGCAAAAT
CTCACACAAGACTGAGGCAGGAGAATAGGGTACAGAGATAGGGATCTAAGGATGACTTGGACACACTCCCTGGCA
CTGAAGAGTCTGAACACTGGCCTGTGATTGGTCCATTCCAGGACCTTCATTTGCATAAGGTATCAAACCACATCA
GCCTCTGATTGGCCATGGGCCAGACCTGCACTCTGGCCAATGATTGGTTCATTCCAGGACATTCATTTGCATAAG
GAGTCAAACCACACCAGTCTTGGATTGGCTGTGAGCCAATTCACCTCAGTCTCTAATTGGCTGTGAGTCAGTCTT
TCATTTACATAGGGTGTAACCATCAAGAAACCTCTACAGGGTACTTAAGCCCCAGAAGATTTTGCTACCAGGGCT
CTTGAGCCACTTGCTCTAGCCCACTCCCACCCTGTGGAATGTACTTTCACTTTTGCTGCTTCACTGCCTTGTGCT
CCAATAAATCCACTCCTTCACCACCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 7080

MQMSEKKAYMLMHETILQKKDEFPPSPRFILRVRRSRLVKDALRQLSQAEATDFCKVLVVEFINEICPESGGVSS
EFFHCMFEEMTKPEYGMFMYPEMCSCMWFPAKPKPEKKRYFLFGMLCGLSLFNLNVANLPFPLALYKKLLDQKPS
LEDLKELSPRLGKSLQEVLDDAADDIGDALCIRFSIHWDQNDVDLIPNGISIPVDQTNKRDYVSKYIDYIFNVSV
KAVYEEFQRGFYRVCEKEILRHFYPEELMTAIIGNTDYDWKQFEQNSKYEQGYQKSHPTIQLFWKAFHKLTLDEK
KKFLFFLTGRDRLHARGIQKMEIVFRCPETFSERDHPTSITCHNILSLPKYSTMERMEEALQVAINNNRGFVSPM
LTQS

FIGURE 7081

CCAGATCTCAGAGGAGCCTGGCTAAGCAAAACCCTGCAGAACGGCTGCCTAATTTACAGCAACCATGAGTACAAA
TGGTGATGATCATCAGGTCAAGGATAGTCTGGAGCAATTGAGATGTCACTTTACATGGGAGTTATCCATTGATGA
CGATGAAATGCCTGATTTAGAAAACAGAGTCTTGGATCAGATTGAATTCCTAGACACCAAATACAGTGTGGGAAT
ACACAACCTACTAGCCTATGTGAAACACCTGAAAGGCCAGAATGAGGAAGCCCTGAAGAGCTTAAAAGAAGCTGA
AAACTTAATGCAGGAAGAACATGACAACCAAGCAAATGTGAGGAGTCTGGTGACCTGGGGCAACTTTGCCTGGAT
GTATTACCACATGGGCAGACTGGCAGAAGCCCAGACTTACCTGGACAAGGTGGAGAACATTTGCAAGAAGCTTTC
AAATCCCTTCCGCTATAGAATGGAGTGTCCAGAAATAGACTGTGAGGAAGGATGGGCCTTGCTGAAGTGTGGAGG
AAAGAATTATGAACGGGCCAAGGCCTGCTTTGAAAAGGTGCTTGAAGTGGACCCTGAAAACCCTGAATCCAGCGC
TGGGTATGCGATCTCTGCCTATCGCCTGGATGGCTTTAAATTAGCCACAAAAAATCACAAGCCATTTTCTTTGCT
TCCCCTAAGGCAGGCTGTCCGCTTAAATCCAGACAATGGATATATTAAGGTTCTCCTTGCCCTGAAGCTTCAGGA
TGAAGGACAGGAAGCTGAAGGAGAAAAGTACATTGAAGAAGCTCTAGCCAACATGTCCTCACAGACCTATGTCTT
TCGATATGCAGCCAAGTTTTACCGAAGAAAAGGCTCTGTGGATAAAGCTCTTGAGTTATTAAAAAAGGCCTTGCA
GGAAACACCCACTTCTGTCTTACTGCATCACCAGATAGGGCTTTGCTACAAGGCACAAATGATCCAAATCAAGGA
GGCTACAAAAGGGCAGCCTAGAGGGCAGAACAGAGAAAAGCTAGACAAAATGATAAGATCAGCCATATTTCATTT
TGAATCTGCAGTGGAAAAAAAGCCCACATTTGAGGTGGCTCATCTAGACCTGGCAAGAATGTATATAGAAGCAGG
CAATCACAGAAAAGCTGAAGAGAATTTTCAAAAATTGTTATGCATGAAACCAGTGGTAGAAGAAACAATGCAAGA
CATACATTTCTACTATGGTCGGTTTCAGGAATTTCAAAAGAAATCTGACGTCAATGCAATTATCCATTATTTAAA
AGCTATAAAAATAGAACAGGCATCATTAACAAGGGATAAAAGTATCAATTCTTTGAAGAAATTGGTTTTAAGGAA
ACTTCGGAGAAAGGCATTAGATCTGGAAAGCTTGAGCCTCCTTGGGTTCGTCTACAAATTGGAAGGAAATATGAA
TGAAGCCCTGGAGTACTATGAGCGGGCCCTGAGACTGGCTGCTGACTTTGAGAACTCTGTGAGACAAGGTCCTTA
GGCACCCAGATATCAGCCACTTTCACATTTCATTTCATTTTATGCTAACATTTACTAATCATCTTTTCTGCTTAC
TGTTTTCAGAAACATTATAATTCACTGTAATGATGTAATTCTTGAATAATAAATCTGACAAAATATT

FIGURE 7082

MSTNGDDHQVKDSLEQLRCHFTWELSIDDDEMPDLENRVLDQIEFLDTKYSVGIHNLLAYVKHLKGQNEEALKSL
KEAENLMQEEHDNQANVRSLVTWGNFAWMYYHMGRLAEAQTYLDKVENICKKLSNPFRYRMECPEIDCEEGWALL
KCGGKNYERAKACFEKVLEVDPENPESSAGYAISAYRLDGFKLATKNHKPFSLLPLRQAVRLNPDNGYIKVLLAL
KLQDEGQEAEGEKYIEEALANMSSQTYVFRYAAKFYRRKGSVDKALELLKKALQETPTSVLLHHQIGLCYKAQMI
QIKEATKGQPRGQNREKLDKMIRSAIFHFESAVEKKPTFEVAHLDLARMYIEAGNHRKAEENFQKLLCMKPVVEE
TMQDIHFYYGRFQEFQKKSDVNAIIHYLKAIKIEQASLTRDKSINSLKKLVLRKLRRKALDLESLSLLGFVYKLE
GNMNEALEYYERALRLAADFENSVRQGP

FIGURE 7083A

CTGGCGCGCGCACGCGCACGCGCACGCCCACCGCGCGGCTTCCCCCGCTCCCCGGTGCTGAGGAGAGAGCGATCC
GAGGGACTGCGCCGCCCGGACGGCCTGCAGAGCGCTGCCATC**ATG**AGTGAAATTCGTAAGGACACCTTGAAGGCC
ATTCTGTTGGAGTTAGAATGTCATTTTACATGGAATTTACTTAAGGAAGACATTGATCTGTTTGAGGTAGAAGAT
ACAATTGGGCAACAGCTTGAATTTCTTACCACAAAATCTAGACTTGCTCTTTATAACCTATTGGCCTATGTGAAA
CACCTAAAAGGCCAAAATAAAGACGCCCTTGAGTGCTTGGAACAAGCAGAAGAAATAATCCAGCAAGAACACTCA
GACAAAGAAGAAGTACGAAGCCTGGTCACTTGGGGAAACTATGCCTGGGTGTATTATCACATGGACCAGCTTGAA
GAAGCTCAGAAGTATACAGGTAAGATAGGGAATGTCTGTAAGAAATTGTCCAGTCCTTCTAACTACAAGTTGGAG
TGTCCTGAGACTGACTGTGAGAAAGGCTGGGCACTCTTGAAATTTGGAGGAAAGTATTATCAAAAGGCTAAAGCG
GCTTTTGAGAAGGCTCTGGAAGTGGAGCCTGACAATCCAGAATTTAACATCGGCTATGCTATCACAGTGTATCGG
CTGGATGATTCTGATAGAGAAGGGTCTGTAAAGAGCTTTTCTCTGGGGCCTTTGAGAAAGGCTGTTACCCTGAAC
CCAGATAACAGCTATATTAAGGTTTTTCTGGCACTGAAGCTTCAAGATGTACATGCAGAAGCTGAAGGGGAAAAG
TATATTGAAGAAATCCTGGACCAAATATCATCCCAGCCTTACGTCCTTCGTTATGCAGCCAAGTTCTATAGGAGA
AAAAATTCCTGGAACAAAGCTCTCGAACTTTTAAAAAAGGCCTTGGAGGTGACACCAACTTCTTCTTTCCTGCAT
CACCAGATGGGACTTTGCTACAGGGCACAAATGATCCAAATCAAGAAGGCCACACACAACAGACCTAAAGGAAAG
GATAAACTAAAGGTTGATGAGCTGATTTCATCTGCTATATTTCATTTCAAAGCAGCCATGGAACGAGACTCTATG
TTTGCATTTGCCTACACAGACCTGGCCAACATGTATGCTGAAGGAGGCCAGTATAGCAATGCTGAGGACATTTTC
CGGAAAGCTCTTCGTCTGGAGAACATAACCGATGATCACAAACATCAGATCCATTACCACTATGGCCGCTTTCAG
GAATTTCACCGTAAATCAGAAAATACTGCCATCCATCATTATTTAGAAGCCTTAAAGGTCAAAGACAGATCACCC
CTTCGCACCAAACTGACAAGTGCTCTGAAGAAATTGTCTACCAAGAGACTTTGTCACAATGCTTTAGATGTGCAG
AGTTTAAGTGCCCTAGGGTTTGTTTACAAGCTGGAAGGAGAAAAGAGGCAAGCTGCTGAGTACTATGAGAAGGCA
CAAAAGATAGATCCAGAAAATGCAGAATTCCTGACTGCTCTCTGTGAGCTCCGACTTTCCATT**TAA**ATACATACT
CTAGGAAATTAGCTCTAAGTTTTTCCCTTCATTTTGGGTTCTCCTGTTTGTTTTTTTTTTATTATTTTAATCCCT
TGTTTATTATAGAGCTAATATTTATTGAATAGTTATTGTGTACCAAGCATTGTGCTAAATACTTTATATGCATTA
TGATGAATCTTGTGCGGTTTTCTTTCTTTTTTTCTTTTTAATTAAAATACTATAATCCATTGAGAAATAGCAATA
TTCTAGCTATTGTAACTTCTAAAAATGGTATGGCCATTAGATCTGTGCTTTTTATCTCTGCTCTTTGAATTTCTC
ATATTATATAGTAAATATATTCCTACGTAAACCTTTGATACCTAGATCAGGAATACTCTTCCAGGAGTACAAAAT
TACATTATTGATAGTTAAGCTCTTAATTGTGTAGCTTGCAAAAGACAGCACTTTTTAGTTACAGATGTTTTGACT
TTGATGAGGATATTTAGCTATCAATCTAATAGTCACCTAAAATATCTTTTTTGTTGGAAAAAAGTTTATAATAAA
AAAGTTTGTCATCTCTAGTGACTTCAATAAAGAAAAAACTAGAAGAGGAGAAAAAGGATTTCCTCAAATTTTAAA
TATGTAACTTCAGGGATTCAATCCCCAAATGTTTATTAAGTAGCTAGAAATAATTATGTGGAAAAAAATGAATAA
TGGAAAATAGTGAGTCTCAAATTGTTTTTTTTTAACTAAAATCTGCAATGAATCTAGATGCAATTAATTTTATTC
CTTCCAACTAAAATTACAATATTTTTAGGTTAAAATTATTGAGATATAAAGCAGCCATTGGGAAATTGGGAGAAA
TGATAAACAAATGGAAAAAGAAGATGTCCCTAACCTACACCCATAGATTACCAAGGTTTCAGTGTACTAGTTTTG
AATCTGTTCTGAATGGAGTTTTTATACCCTCAATTTCTGGCCTTTGGCTATTTTAGCATTTCAAAGTGACTTCTA
TGAAGCTTTTTTTTTAATGTGAAATTTTCAGAATGTTGTTTTTTTCATGTAGATACTCCAGGAAGAGTTAAGCAC
TGCTTTCAGTTTTAATATCCACCTTGAGGGGTCGCTGCTTGAGGGCTCTTATCCCAGGGGACTTTTTAATTCGGA
TGTTACTTAATGTGGCTTCTCTAATGTAGTTTCTTTGATTACCGACTACACAATTATGTACCATCACAGTATTAG
TGGAAAAGTACCATGTGATTTAATTCTCCATTCCTCCAATGTAACTCTTAAAATTATTATGTATGTGTATGTGTT
TTACTTTTTGTTTTTTTATCATCTTTAAAATTTCTATTATGGTTTGATTATTATAAAAATAATGAATTCTCACTGT
AAATTTCAAAAAAAAAATTACAAAAGTATGTGAATTTAAAAATGAGAGCAGTCCCCTCACCCTACCACAGTTCCA
CACCCTCAAGGTAAACTTATAACTTATAATTTGATATGTAAACTTCCAGATCTTTTTTCTATGCGTAATCAGACA
TACATATATACTGCAGTGTATCTCACGTATTAATTTTTAAAAATCTTTTGTTTTACTTAATTCTGTTTTTATTAT
TATTATTATTTTGTTTGATCTATTAAGGAAGAACAAGGAAGGGAATGATCTTTACTCAAGAATTTCAGAAAGTCA
GCACTGAAGTCCTGACCTATCAGTAGACACATTTGTCCCTTTCAGATATTTTAGGATATTCTAGCAAAGCAGGCC
ATTTCTCCCACCTGAAAGTACATAACTTCTATCACTTGCCACATAATTAAAAGAACTCACATTAAGCGGTTACTC
AGACAGTTAATCATAGAAAAGATTATTTGCTTCATCAGTTCATAGAAAAGATTATTTGCTTCATCAGTTAACTTG
TTTTTATAAATCAGGGCCTGTGTTCATACACAGAAGGGGCCTGAGATTTCTGCACTTTAAACAAGCTCCTCCTAG
GTGAGGATGCTGTGGCTGTTCTAATTACATTTTGAGTAGTAAGGTCTACAGCATTGTTCCTCAAACTTGGCTACG

FIGURE 7083B

TATTGGAATCACCTAAAAAGTTAAAACAAAACATGGATGTCTGGGTCCCGCCCCATAGAGAATGACTTAATTGGC
ATGGGGTGCAGTCCAGGCATCATGATTTTTAGATTTCCCAGTTGGAACTTGTGCAGCAAAGTTTGGGAGCTACTG
ATGGACATGTGAAAAGTAAGTATAAATGGAATAAAATTAATTAGGCTAATAGGCTTAACCCAGGAAATCCTAAGT
TCCTTGAATATCCAGTTTGCATTTGGGACTCCTCATCATATACTTGGTATATAATACTCTAATAAAAGCTGCCTG
AGTTGA

FIGURE 7084

MSEIRKDTLKAILLELECHFTWNLLKEDIDLFEVEDTIGQQLEFLTTKSRLALYNLLAYVKHLKGQNKDALECLE
QAEEIIQQEHSDKEEVRSLVTWGNYAWVYYHMDQLEEAQKYTGKIGNVCKKLSSPSNYKLECPETDCEKGWALLK
FGGKYYQKAKAAFEKALEVEPDNPEFNIGYAITVYRLDDSDREGSVKSFSLGPLRKAVTLNPDNSYIKVFLALKL
QDVHAEAEGEKYIEEILDQISSQPYVLRYAAKFYRRKNSWNKALELLKKALEVTPTSSFLHHQMGLCYRAQMIQI
KKATHNRPKGKDKLKVDELISSAIFHFKAAMERDSMFAFAYTDLANMYAEGGQYSNAEDIFRKALRLENITDDHK
HQIHYHYGRFQEFHRKSENTAIHHYLEALKVKDRSPLRTKLTSALKKLSTKRLCHNALDVQSLSALGFVYKLEGE
KRQAAEYYEKAQKIDPENAEFLTALCELRLSI

FIGURE 7085

CGGCTGAGAGGCAGCGAACTCATCTTTGCCAGTACAGGAGCTTGTGCCGTGGCCCACAGCCCACAGCCCACAGCC
ATGGGCTGGGACCTGACGGTGAAGATGCTGGCGGGCAACGAATTCCAGGTGTCCCTGAGCAGCTCCATGTCGGTG
TCAGAGCTGAAGGCGCAGATCACCCAGAAGATTGGCGTGCACGCCTTCCAGCAGCGTCTGGCTGTCCACCCGAGC
GGTGTGGCGCTGCAGGACAGGGTCCCCCTTGCCAGCCAGGGCCTGGGCCCTGGCAGCACGGTCCTGCTGGTGGTG
GACAAATGCGACGAACCTCTGAGCATCCTGGTGAGGAATAACAAGGGCCGCAGCAGCACCTACGAGGTCCGGCTG
ACGCAGACCGTGGCCCACCTGAAGCAGCAAGTGAGCGGGCTGGAGGGTGTGCAGGACGACCTGTTCTGGCTGACC
TTCGAGGGGAAGCCCCTGGAGGACCAGCTCCCGCTGGGGGAGTACGGCCTCAAGCCCCTGAGCACCGTGTTCATG
AATCTGCGCCTGCGGGGAGGCGGCACAGAGCCTGGCGGGCGGAGCTAAGGGCCTCCACCAGCATCCGAGCAGGAT
CAAGGGCCGGAAATAAAGGCTGTTGTAAGAGAAT

FIGURE 7086

MGWDLTVKMLAGNEFQVSLSSSMSVSELKAQITQKIGVHAFQQRLAVHPSGVALQDRVPLASQGLGPGSTVLLVV
DKCDEPLSILVRNNKGRSSTYEVRLTQTVAHLKQQVSGLEGVQDDLFWLTFEGKPLEDQLPLGEYGLKPLSTVFM
NLRLRGGGTEPGGRS

FIGURE 7087

GGGTCCCCAAGGAAC**ATG**GCTGGGAGCCGTGAGGTGGTGGCCATGGACTGCGAGATGGTGGGGCTGGGGCCCCAC
CGGGAGAGTGGCCTGGCTCGTTGCAGCCTCGTGAACGTCCACGGTGCTGTGCTGTACGACAAGTTCATCCGGCCT
GAGGGAGAGATCACCGATTACAGAACCCGGGTCAGCGGGGTCACCCCTCAGCACATGGTGGGGGCCACACCATTT
GCCGTGGCCAGGCTAGAGATCCTGCAGCTCCTGAAAGGCAAGCTGGTGGTGGGTCATGACCTGAAGCACGACTTC
CAGGCACTGAAAGAGGACATGAGCGGCTACACAATCTACGACACGTCCACTGACAGGCTGTTGTGGCGTGAGGCC
AAGCTGGACCACTGCAGGCGTGTCTCCCTGCGGGTGCTGAGTGAGCGCCTCCTGCACAAGAGCATCCAGAACAGC
CTGCTTGGACACAGCTCGGTGGAAGATGCGAGGGCAACGATGGAGCTCTATCAAATCTCCCAGAGAATCCGAGCC
CGCCGAGGGCTGCCCCGCCTGGCTGTGTCAGAC**TGA**AGCCCCATCCAGCCCGTTCCGCAGGGACTAGAGGCTTTC
GGCTTTTTGGGACAGCAACTACCTTGCTTTTGGAAAATACATTTTTAATAGTAAAGTGGCTCTATATTTTCTCTA
CGCC

FIGURE 7088

MAGSREVVAMDCEMVGLGPHRESGLARCSLVNVHGAVLYDKFIRPEGEITDYRTRVSGVTPQHMVGATPFAVARL
EILQLLKGKLVVGHDLKHDFQALKEDMSGYTIYDTSTDRLLWREAKLDHCRRVSLRVLSERLLHKSIQNSLLGHS
SVEDARATMELYQISQRIRARRGLPRLAVSD

FIGURE 7089

CGAAGAGGATCCGGAGCAGCTGCTGCCAGCCCGCGGGCACTGAAGTCCTCCCGGCTGCCGCTCGAGTAGCCACGG
GCGCGATCGGGACCAGAAGTCTCCTCCTCCATGATCACTTTGGAAGCCGGGGGAAGACTTTGCCCTGCCCTGAGA
GCTGGTCTGCGTTTCCCAGGCGCGGCGGCGGCGGAGCAGCAGCTGCAGCAGCCGAGTCCAAATAGGAGCGGCCAC
AGCCAGGGGCGTGTGCGCCCCGCGCGGAGCGAGCTCGGGTTCCCCTCGGAATGTCCCCGGGGCGCCCGGCGCGCT
GACCCCGAAGCCGCCTCCGCCTTCGGCGCCTGCTGCCTCCCTCGGCCAGGCTTGTTGTTCGGGACTGTGAGCTTC
CTGGCTCCTGGGCAGTGGGGAAGCCCCCGGGGGCGAGTGACCTCAGCTGGCCACGACCCAGCCCTCCCCCGTGCG
TATCTCGCTTAAG**ATG**GCAGCGGAGTCAGGGGAACTAATCGGGGCTTGTGAGTTCATGAAAGATCGGTTATATTT
TGCTACTTTAAGGAATAGACCAAAAAGCACAGTAAATACCCACTATTTCTCCATCGATGAGGAGCTGGTCTATGA
AAATTTCTATGCAGATTTTGGACCGCTGAACTTGGCAATGGTGTACAGATATTGCTGCAAACTAAACAAGAAACT
AAAATCATACAGTTTGTCAAGAAAGAAAATAGTGCACTACACCTGTTTTGACCAACGGAAAAGAGCAAATGCAGC
ATTTTTGATAGGTGCCTATGCAGTAATCTATTTAAAGAAGACACCAGAAGAAGCCTACAGAGCACTCCTGTCTGG
CTCAAACCCCCCCTATCTTCCATTCAGGGATGCTTCCTTTGGAAATTGCACTTACAATCTCACCATTCTCGACTG
TTTGCAGGGAATCAGAAAGGGATTACAACATGGATTTTTTGACTTTGAGACATTTGATGTGGATGAATATGAACA
TTATGAGCGAGTTGAAAATGGTGACTTCAACTGGATTGTTCCAGGAAAATTTTTAGCATTTAGTGGACCACATCC
TAAAAGCAAAATTGAGAATGGTTATCCTCTTCACGCCCCTGAAGCCTACTTTCCTTATTTCAAAAAGCATAATGT
GACTGCAGTTGTGAGGCTAAACAAAAAGATTTATGAGGCAAAGCGCTTCACAGACGCTGGCTTCGAGCACTATGA
CCTCTTCTTCATAGATGGCAGCACACCCAGTGACAACATCGTGCGAAGGTTCCTGAACATCTGTGAGAACACCGA
AGGGGCCATCGCCGTTCACTGCAAAGCTGGTCTTGGAAGAACAGGGACATTGATAGCCTGTTATGTAATGAAACA
CTACAGGTTTACACATGCTGAAATAATTGCTTGGATTAGAATATGCCGGCCAGGCTCTATTATAGGACCCCAGCA
GCACTTCCTGGAAGAAAAACAAGCATCGTTGTGGGTCCAAGGAGACATTTTCCGATCCAAACTGAAAAATCGACC
ATCCAGTGAAGGAAGTATTAATAAAATTCTTTCTGGCCTAGATGATATGTCTATTGGTGGAAATCTTTCAAAAAC
ACAAAACATGGAACGATTTGGAGAGGATAACTTAGAAGATGATGATGTGGAAATGAAAAATGGTATAACCCAGGG
AGACAAACTACGTGCCTTAAAAAGTCAGAGACAGCCACGTACCTCACCATCCTGTGCATTTAGGTCAGATGATAC
AAAAGGACATCCAAGAGCAGTGTCCCAGCCTTTCAGATTAAGTTCATCCCTGCAAGGATCTGCAGTTACTTTGAA
GACATCAAAAATGGCACTGTCCCCTTCAGCAACGGCCAAGAGGATCAACAGAACTTCTTTGTCTTCGGGTGCCAC
TGTAAGAAGCTTTTCCATAAACTCCCGGCTAGCCAGTTCTCTAGGGAACTTGAATGCTGCAACAGATGATCCAGA
GAACAAAAAGACCTCCTCATCCTCTAAGGCAGGCTTCACAGCCAGCCCGTTTACCAACCTCTTGAATGGCAGCTC
CCAGCCAACTACCAGAAATTACCCTGAGCTCAACAATAATCAGTACAACAGAAGCAGCAACAGCAACGGGGGCAA
CCTGAACAGCCCCCCAGGCCCCCACAGCGCCAAGACAGAGGAGCACACCACCATCCTCCGACCCTCCTACACCGG
GCTTTCTTCTTCTTCAGCGAGATTCCTGAGCCGTTCTATCCCTGTAAGTGCGCAGACACCACCTCCTGGTCCTCA
GAACCCTGAATGCAACTTCTGTGCCTTGCCTTCCCAGCCGAGGCTGCCACCAAAGAAATTTAATAGTGCCAAGGA
AGCCTTC**TGA**GCGATGCCTTCCCTCTGTGCTGTGAAACTGTCTATGCACTACATTCTGCTAGCTCCTCTTCAAGT
AAACGCCAAGTCACAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 7090

MAAESGELIGACEFMKDRLYFATLRNRPKSTVNTHYFSIDEELVYENFYADFGPLNLAMVYRYCCKLNKKLKSYS
LSRKKIVHYTCFDQRKRANAAFLIGAYAVIYLKKTPEEAYRALLSGSNPPYLPFRDASFGNCTYNLTILDCLQGI
RKGLQHGFFDFETFDVDEYEHYERVENGDFNWIVPGKFLAFSGPHPKSKIENGYPLHAPEAYFPYFKKHNVTAVV
RLNKKIYEAKRFTDAGFEHYDLFFIDGSTPSDNIVRRFLNICENTEGAIAVHCKAGLGRTGTLIACYVMKHYRFT
HAEIIAWIRICRPGSIIGPQQHFLEEKQASLWVQGDIFRSKLKNRPSSEGSINKILSGLDDMSIGGNLSKTQNME
RFGEDNLEDDDVEMKNGITQGDKLRALKSQRQPRTSPSCAFRSDDTKGHPRAVSQPFRLSSSLQGSAVTLKTSKM
ALSPSATAKRINRTSLSSGATVRSFSINSRLASSLGNLNAATDDPENKKTSSSSKAGFTASPFTNLLNGSSQPTT
RNYPELNNNQYNRSSNSNGGNLNSPPGPHSAKTEEHTTILRPSYTGLSSSSARFLSRSIPVSAQTPPPGPQNPEC
NFCALPSQPRLPPKKFNSAKEAF

FIGURE 7091

AGTCTCCGGCGAGTTGTTGCCTGGGCTGGACGTGGTTTTGTCTGCTGCGCCCGCTCTTCGCGCTCTCGTTTCATT
TTCTGCAGCGCGCCACGAGG**ATG**GCCCACAAGCAGATCTACTACTCGGACAAGTACTTCGACGAACACTACGAGT
ACCGGCATGTTATGTTACCCAGAGAACTTTCCAAACAAGTACCTAAAACTCATCTGATGTCTGAAGAGGAGTGGA
GGAGACTTGGTGTCCAACAGAGTCTAGGCTGGGTTCATTACATGATTCATGAGCCAGAACCACATATTCTTCTCT
TTAGACGACCTCTTCCAAAAGATCAACAAAAA**TGA**AGTTTATCTGGGGATCGTCAAATCTTTTTCAAATTTAATG
TATATGTGTATATAAGGTAGTATTCAGTGAATACTTGAGAAATGTACAAATCTTTCATCCATACCTGTGCATGAG
CTGTATTCTTCACAGCAACAGAGCTCAGTTAAATGCAACTGCAAGTAGGTTACTGTAAGATGTTTAAGATAAAAG
TTCTTCCAGTCAGTTTTTCTCTTAAGTGCCTGTTTGAGTTTACTGAAACAGTTTACTTTTGTTCAATAAAGTTTG
TATGTTGCATTTAAAAAAAAAAAAAA

FIGURE 7092

MAHKQIYYSDKYFDEHYEYRHVMLPRELSKQVPKTHLMSEEEWRRLGVQQSLGWVHYMIHEPEPHILLFRRPLPK
DQQK

FIGURE 7093A

CCTGCGTGTCCCTCTGCGCTCCGACTGGTGCGACTTCTCCCTGCGCTAGCGAGGCAGGGTTTTGGCCTCGCCTCT
CGCGAGATCGCCTCCTGTTGCTGCCGCCGCCGCTCCTGGCCACTGACTGGCGGCGCCTGCGCAGCCGCCATGTTC
GGTTGCTATGCTGCGGCCTAGGAGAGGGGGTGTGCTTGAGGGAGGAGGAAGAGATAGAGGAGGAGGAGGGGGAGG
AAGAGGAGGTGGAGAAGGAGGGGGGTGACTGAGCTCCTCTTGCACTCTCACACACAAACGCTGCCCAGGATTACC
CGCCAGCTCACGCCGCGCAGTGCGCTTTTCCGCTCCTCGCGCCCCACCACCAACATTGTTCTCTCAGGACTCCTG
GGTCCCAGGGGTCGGAATTGGGCCTGAGCGGGAGAGGAAAGAGACTTGGCTTTGGCCGCGGGGTCGGAGGATTGG
GGCCAGGCCCCCTCCCCCACGCACTTTTGGGGGTGTGGATTATCTCATCCCTGCAGGGAGGTAGGAGAGGTCGCC
GGCTGCCCGCCTCCCTGCCACCTCCCCAGCGGCGCCGGCCCGCGGCTGCCCAGCAGCATGAGGTGGTGCTGGCGG
CTCCGGGTCGTGGCGCGACCGCTGCGGCGGCGGCTGCTCGGGGGGCGCTGAGGTAGCCCCCCGGAGCGGCACGGA
GGACGCGCTTCTCCTCTGCGCGCCGGGGCCTCGAGGCTTTTTTTCTCCAGCCGAGAGGACGCGGCTGTGATATAC
GAAGACTTTGTGTGGACAGTA**ATG**ACCTCACGTTTCCGATTGCCTGCTGGCAGAACCTACAATGTACGAGCATCA
GAGTTGGCCCGAGACAGACAGCATACTGAAGTGGTTTGCAACATCCTTCTTCTGGATAACACTGTACAAGCTTTC
AAAGTCAATAAACATGATCAGGGGCAAGTCTTGTTGGATGTCGTCTTCAAGCATCTAGATTTGACTGAGCAGGAC
TATTTTGGTTTACAGTTGGCTGATGATTCCACAGATAACCCAAGGTGGCTGGATCCAAACAAACCAATAAGGAAG
CAGCTAAAGAGAGGATCTCCTTACAGTTTGAACTTTAGAGTCAAATTTTTTGTAAGTGACCCCAACAAGTTACAA
GAAGAATATACAAGGTACCAGTATTTTTTGCAAATTAAACAAGACATTCTTACTGGAAGATTACCCTGTCCTTCT
AATACTGCTGCCCTTTTAGCTTCATTTGCTGTTCAGTCTGAACTTGGAGACTACGATCAGTCAGAGAACTTGTCA
GGCTACCTCTCAGATTATTCTTTCATTCCTAATCAACCTCAAGATTTTGAAAAAGAAATTGCAAAATTACATCAG
CAACACATAGGCTTATCTCCTGCAGAAGCAGAATTTAATTACCTAAACACAGCACGTACCTTAGAACTCTATGGA
GTTGAATTCCACTATGCAAGGGATCAGAGTAACAATGAAATTATGATTGGAGTGATGTCAGGAGGAATTCTGATT
TATAAGAACAGGGTACGAATGAATACCTTTCCATGGTTGAAGATTGTAAAAATTTCTTTTAAGTGCAAACAGTTT
TTTATTCAACTTAGAAAAGAATTGCATGAATCTAGAGAAACATTATTGGGATTTAATATGGTGAATTACAGAGCA
TGTAAAAATTTGTGGAAAGCATGTGTAGAACATCACACATTCTTCCGTTTGGACAGACCACTTCCACCTCAAAAG
AATTTTTTTGCACATTATTTTACATTAGGTTCAAAATTCCGGTACTGTGGGAGAACTGAAGTCCAATCAGTTCAG
TATGGCAAAGAAAAGGCAAATAAAGACAGGGTATTTGCAAGATCCCCAAGTAAGCCCTTGGCACGGAAATTAATG
GATTGGGAAGTAGTAAGCAGAAATTCAATATCTGATGACAGGTTAGAAACACAAAGTCTTCCATCACGATCTCCA
CCGGGAACTCCTAATCATCGAAATTCTACATTCACGCAGGAAGGAACCCGGTTACGACCATCTTCAGTTGGTCAT
TTGGTAGACCATATGGTTCATACTTCCCCAAGCGAAGTGTTTGTAAATCAGAGATCTCCGTCATCAACACAAGCT
AATAGCATTGTTCTGGAATCATCACCATCACAAGAGACCCCTGGAGATGGGAAGCCTCCAGCTTTACCACCCAAA
CAGTCAAAGAAAAACAGTTGGAACCAAATTCATTATTCACATTCGCAACAAGATCTAGAAAGTCATATTAATGAA
ACATTTGATATTCCATCTTCTCCTGAAAAACCCACTCCTAATGGTGGTATTCCACATGATAATCTTGTCCTAATC
AGAATGAAACCTGATGAAAATGGGAGGTTTGGATTCAATGTAAAGGGAGGATATGATCAGAAGATGCCTGTGATT
GTGTCTCGAGTAGCACCAGGAACACCTGCTGACCTCTGTGTCCCTAGACTGAATGAAGGGGACCAAGTTGTACTG
ATCAATGGTCGGGACATTGCAGAACACACTCATGATCAGGTTGTGCTGTTTATTAAAGCTAGTTGTGAGAGACAT
TCTGGGGAACTCATGCTTCTAGTTCGACCTAATGCTGTATATGATGTAGTGGAAGAAAAGCTAGAAAATGAGCCA
GATTTCCAGTATATTCCTGAGAAAGCCCCACTAGATAGTGTGCATCAGGATGACCATTCCCTGCGGGAGTCAATG
ATCCAGCTAGCTGAGGGGCTTATCACTGGAACAGTCCTGACACAGTTTGATCAACTGTATCGGAAAAAACCTGGA
ATGACAATGTCCTGTGCCAAATTACCTCAGAATATTTCCAAAAATAGATACAGAGATATTTCGCCTTATGATGCC
ACACGGGTCATTTTAAAAGGTAATGAAGACTACATCAATGCGAACTATATAAATATGGAAATTCCTTCTTCCAGC
ATTATAAATCAGTACATTGCTTGTCAAGGGCCATTACCACACACTTGTACAGATTTTTGGCAGATGACTTGGGAA
CAAGGCTCCTCTATGGTTGTAATGTTGACCACACAAGTTGAACGTGGCAGAGTTAAATGTCACCAATATTGGCCA
GAACCCACAGGCAGTTCATCTTATGGATGCTACCAAGTTACCTGCCACTCTGAAGAAGGAAACACTGCCTATATC
TTCAGGAAGATGACCCTATTTAACCAAGAGAAAAATGAAAGTCGTCCACTCACTCAGATCCAGTACATAGCCTGG
CCTGACCATGGAGTCCCTGATGATTCGAGTGACTTTCTAGATTTTGTTTGTCATGTACGAAACAAGAGGGCTGGC
AAGGAAGAACCCGTTGTTGTCCATTGCAGTGCTGGAATCGGAAGAACTGGGGTTCTTATTACTATGGAAACAGCC
ATGTGTCTCATTGAATGCAATCAGCCAGTTTATCCACTAGATATTGTAAGAACAATGAGAGATCAGCGAGCCATG
ATGATCCAAACACCTAGTCAATACAGATTTGTATGTGAAGCTATTTTGAAAGTTTATGAAGAAGGCTTTGTTAAA
CCCTTAACAACATCAACAAATAAA**TAA**GAAAGCAAAAAGATCTGGGATATGTGTTGGAAAACTGCTTTCCCTTAT

FIGURE 7093B

GTTCACTGTGCCATAATGCTGCTCGCAGGAAATGGCATTTTACAAAAAAAAAAATGAAGAACTCAAAAAAACTTTG
AAAACTTCAGCACTGTTGCACTTTATGTTTTAAAAAATGTCACTCTTTCAAAATCTATAACTCATGTATTTGAAG
ACTGTTTCATGCTTTGCTCCGAACAAATAGTAAATAACTGAGTATGTTCAGGGTAATTTATGAAATTTTGTGGTG
GTGCCATGCAATCCCCTTTTGGTAGAATTGCCACAAACAAGGCTCAAAATTCTCATCATCTCTGTTATACACCTG
TATCATGAAAGCAAAAAGAAGTAAACATCAGGAGTCAGCTCTGAAAAAAAAAAAAAAAAAAAA

FIGURE 7094

MTSRFRLPAGRTYNVRASELARDRQHTEVVCNILLLDNTVQAFKVNKHDQGQVLLDVVFKHLDLTEQDYFGLQLA
DDSTDNPRWLDPNKPIRKQLKRGSPYSLNFRVKFFVSDPNKLQEEYTRYQYFLQIKQDILTGRLPCPSNTAALLA
SFAVQSELGDYDQSENLSGYLSDYSFIPNQPQDFEKEIAKLHQQHIGLSPAEAEFNYLNTARTLELYGVEFHYAR
DQSNNEIMIGVMSGGILIYKNRVRMNTFPWLKIVKISFKCKQFFIQLRKELHESRETLLGFNMVNYRACKNLWKA
CVEHHTFFRLDRPLPPQKNFFAHYFTLGSKFRYCGRTEVQSVQYGKEKANKDRVFARSPSKPLARKLMDWEVVSR
NSISDDRLETQSLPSRSPPGTPNHRNSTFTQEGTRLRPSSVGHLVDHMVHTSPSEVFVNQRSPSSTQANSIVLES
SPSQETPGDGKPPALPPKQSKKNSWNQIHYSHSQQDLESHINETFDIPSSPEKPTPNGGIPHDNLVLIRMKPDEN
GRFGFNVKGGYDQKMPVIVSRVAPGTPADLCVPRLNEGDQVVLINGRDIAEHTHDQVVLFIKASCERHSGELMLL
VRPNAVYDVVEEKLENEPDFQYIPEKAPLDSVHQDDHSLRESMIQLAEGLITGTVLTQFDQLYRKKPGMTMSCAK
LPQNISKNRYRDISPYDATRVILKGNEDYINANYINMEIPSSSIINQYIACQGPLPHTCTDFWQMTWEQGSSMVV
MLTTQVERGRVKCHQYWPEPTGSSSYGCYQVTCHSEEGNTAYIFRKMTLFNQEKNESRPLTQIQYIAWPDHGVPD
DSSDFLDFVCHVRNKRAGKEEPVVVHCSAGIGRTGVLITMETAMCLIECNQPVYPLDIVRTMRDQRAMMIQTPSQ
YRFVCEAILKVYEEGFVKPLTTSTNK

FIGURE 7095

TGTTCCCAGCACTCAAGCCTTGCCACCGCCGAGCCGGGCTTCCTGGGTGTTTCAGGCAAGGAAGTCTAGGTCCCT
GGGGGGTGACCCCCAAGGAAAAGGCAGCCTCCCTGCGCACCCGGTTGCCCGGAGCCCTCTCCAGGGCCGGCTGGG
CTGGGGGTTGCCCTGGCCAGCAGGGGCCCGGGGGCGATGCCACCCGGTGCCGACTGAGGCCACCGCACC**ATG**GCC
CGCTCGCTGACCTGGCGCTGCTGCCCCTGGTGCCTGACGGAGGATGAGAAGGCCGCCGCCCGGGTGGACCAGGAG
ATCAACAGGATCCTCTTGGAGCAGAAGAAGCAGGACCGCGGGGAGCTGAAGCTGCTGCTTTTGGGCCCAGGCGAG
AGCGGGAAGAGCACCTTCATCAAGCAGATGCGGATCATCCACGGCGCCGGCTACTCGGAGGAGGAGCGCAAGGGC
TTCCGGCCCCTGGTCTACCAGAACATCTTCGTGTCCATGCGGGCCATGATCGAGGCCATGGAGCGGCTGCAGATT
CCATTCAGCAGGCCCGAGAGCAAGCACCACGCTAGCCTGGTCATGAGCCAGGACCCCTATAAAGTGACCACGTTT
GAGAAGCGCTACGCTGCGGCCATGCAGTGGCTGTGGAGGGATGCCGGCATCCGGGCCTGCTATGAGCGTCGGCGG
GAATTCCACCTGCTCGATTCAGCCGTGTACTACCTGTCCCACCTGGAGCGCATCACCGAGGAGGGCTACGTCCCC
ACAGCTCAGGACGTGCTCCGCAGCCGCATGCCCACCACTGGCATCAACGAGTACTGCTTCTCCGTGCAGAAAACC
AACCTGCGGATCGTGGACGTCGGGGGCCAGAAGTCAGAGCGTAAGAAATGGATCCATTGTTTCGAGAACGTGATC
GCCCTCATCTACCTGGCCTCACTGAGTGAATACGACCAGTGCCTGGAGGAGAACAACCAGGAGAACCGCATGAAG
GAGAGCCTCGCATTGTTTGGGACTATCCTGGAACTACCCTGGTTCAAAAGCACATCCGTCATCCTCTTTCTCAAC
AAAACCGACATCCTGGAGGAGAAAATCCCCACCTCCCACCTGGCTACCTATTTCCCCAGTTTCCAGGGCCCTAAG
CAGGATGCTGAGGCAGCCAAGAGGTTCATCCTGGACATGTACACGAGGATGTACACCGGGTGCGTGGACGGCCCC
GAGGGCAGCAAGAAGGGCGCACGATCCCGACGCCTTTTCAGCCACTACACATGTGCCACAGACACACAGAACATC
CGCAAGGTCTTCAAGGACGTGCGGGACTCGGTGCTCGCCCGCTACCTGGACGAGATCAACCTGCTG**TGA**CCCAGG
CCCCACCTGGGGCAGGCGGCACCGGCGGGCGGGTGGGAGGTGGGAGTGGCTGCAGGGACCCTAGTGTCCTGGTCT
ATCTCTCCAGCCTCGGCCCACACGCAAGGGAGTCGGGGGACGGCCCGCTGCTGGCCGCTCTCTTCTCTGCCTCTC
ACCAGGACAGCCGCCCCCCAGGGTACTCCTGCCCTTGCTTGACTCAGTTTCCCTCCTTTGAAAGGGAAGGAGCAA
AACGGCCATTTGGGATGCCAGGGTGGATGAAAAGGTGAAGAAATCAGGGGATTGAGACTTGGGTGGGTGGGCATC
TCTCAGGAGCCCCATCTCCGGGCGTGTCACCTCCTGGGCAGGGTTCTGGGACCCTCTGTGGGTGACGCACACCCT
GGGATGGGGCTAGTAGAGCCTTCAGGCGCCTTCGGGCGTGGACTCTGGCGCACTCTAGTGGACAGGAGAAGGAAC
GCCTTCCAGGAACCTGTGGACTAGGGGTGCAGGGACTTCCCTTTGCAAGGGGTAACAGACCGCTGGAAAACACTG
TCACTTTCAGAGCTCGGTGGCTCACAGCGTGTCCTGCCCCGGTTTGCGGACGAGAGAAATCGCGGCCCACAAGCA
TCCCCCATCCCTTGCAGGCTGGGGGCTGGGCATGCTGCATCTTAACCTTTTGTATTTATTCCCTCACCTTCTGCA
GGGCTCCGTGCGGGCTGAAATTAAAGATTTCTTAG

FIGURE 7096

MARSLTWRCCPWCLTEDEKAAARVDQEINRILLEQKKQDRGELKLLLLGPGESGKSTFIKQMRIIHGAGYSEEER
KGFRPLVYQNIFVSMRAMIEAMERLQIPFSRPESKHHASLVMSQDPYKVTTFEKRYAAAMQWLWRDAGIRACYER
RREFHLLDSAVYYLSHLERITEEGYVPTAQDVLRSRMPTTGINEYCFSVQKTNLRIVDVGGQKSERKKWIHCFEN
VIALIYLASLSEYDQCLEENNQENRMKESLALFGTILELPWFKSTSVILFLNKTDILEEKIPTSHLATYFPSFQG
PKQDAEAAKRFILDMYTRMYTGCVDGPEGSKKGARSRRLFSHYTCATDTQNIRKVFKDVRDSVLARYLDEINLL

FIGURE 7097

GAGAGGGCACGGGGAAAAGGTGGCTCTGGCCGGGGTGGCTCGGTTTCCTGGGGCTATGTAACTGAGCTCGTCGAC
TTAGGGGTCCTTCTTCGCTGCCCTCGCCGCGTGCTAGCAGGGAGTTTCCGCTCGGGAGAGAGACTGTCCTCACGC
CCGCTGCGCCTCCTCGACGGCAGAGCAGGCTTGCTCGCCCGTGGGAGCGTCCCGGCCGAGAAGCCCTGAGGGGGG
AGGGGAGGCCATTTTGTCCCGACCGACTCCCCGGAACCGGGCGGAGCGGCTGGGAGAGGCTGCGGAGCCGCGGTC
GCCGCCCTCGGAGGCACTGGACGCCGCCACTGTCGGGGCTTCCTCAAAGCTGTTCGTAGGTCGCCCGCGCCGTCT
CGAGCCTTTTTCCCACGCTTCCCCGGTCCTCCGGCCTGAGAACGCCCGAGTGAGGAGTTGGCCGTAGTGAGAGGG
ACCGATCCCTTGGGGCCGCCGGCGGCGAGAGCCCGAGCCGCTCCTCCCA**ATG**GCGAAGAAGACGTACGACCTGCT
TTTCAAGCTGCTCCTGATCGGGGATTCCGGAGTGGGGAAGACCTGCGTCCTTTTTCGTTTTTCGGATGATGCCTT
CAATACTACCTTTATTTCCACCATAGGAATAGACTTCAAGATCAAAACAGTTGAATTACAAGGAAAGAAGATCAA
GCTACAGATATGGGATACAGCAGGCCAGGAGCGATTTCACACCATCACAACCTCCTACTACAGAGGCGCAATGGG
TATCATGCTAGTATATGACATCACCAATGGTAAAAGTTTTGAAAACATCAGCAAATGGCTTAGAAACATAGATGA
GCATGCCAATGAAGATGTGGAAAGAATGTTACTAGGAAACAAGTGTGATATGGACGACAAAAGAGTTGTACCTAA
AGGAAAAGGAGAACAGATTGCAAGGGAGCATGGTATTAGGTTTTTTGAGACTAGTGCAAAAGCAAATATAAACAT
CGAAAAGGCGTTCCTCACGTTAGCTGAAGATATCCTTCGAAAGACCCCTGTAAAAGAGCCCAACAGTGAAAATGT
AGATATCAGCAGTGGAGGAGGCGTGACAGGCTGGAAGAGCAAATGCTGC**TGA**GCATTCTCCTGTTCCATCAGTTG
CCATCCACTACCCCGTTTTCTCTTCTTGCTGCAAAATAAACCACTCTGTCCATTTTTAACTCTAAACAGATATTT
TTGTTTCTCATCTTAACTATCCAAGCCACCTATTTTATTTGTTCTTTCATCTGTGACTGCTTGCTGACTTTATCA
TAATTTTCTTCAAACAAAAAAATGTATAGAAAAATCATGTCTGTGACTTCATTTTTAAATGTACTTGCTCAGCTC
AACTGCATTTCAGTTGTATTATAGTCCAGTTCTTATCAACATTAAAACCTATAGCAATCATTTCAAATCTATTCT
GCAAATTGTATAAGAATAAAGTTAGAATTAACAATTTTATTTTGTACAACAGTGGAATTTTCTGTCATGGATAAT
GTGCTTGAGTCCCTATAATCTATAGACATGTGATAGCAAAAGAAACAAACAAAAGCCAGGAAAACACTCATTTTC
GCCTTGAATATGTAAATGGGATTAATATTGTCCTGTGCCTTATGTGGAAAGGAACTTCTTTGGTTTTCCTTTTTT
GTTCTGGTGGAAGCATGTGCAGGAGACATATCATCCAAACATAAACCATTAAAATGTTTGTGGTTTGCTTGGCTG
TAATTTTCAAAGTAGTTAATTGAGGACAAAGGGTAATGCAGAAGTGATAGCTTTGGTTTGCTGAGTCTTGTTTTA
AGTGGCCTTGATATTTAAAACTATTCCTGCCACCATTTCTTCTCCTTGGCCACTTCTTCCTTGCGTCTCCCTGCA
TGCTGCTTTATTTGCTTCTCCCTCCCCAACCACCTCATGGTATATTTAAGAGTGAAAGGGACAAACTAGTAGGTT
TGTCAAGTTTAATATAAAGCACTGATGTAACTTGCTAGGTAAACGGAAAGATAAGTTCTAACTGCCTACTATCCA
ATGTCAGTTAATTGGTGTCTTCCCCCCTCATTTGCTCTCTTCCCTAAAATGTGTCCCAGATGCCTTCATTTGCTG
TTTTACTTCTATGTTCTGCTTTTCCTCCTCTCTTTGTTCCCTTCCTGTCTATCCATTGAGTTTATGAAATGGAAG
AGTTAACTGCATGCACTAGTGTTTGGAGGGTGTTGTGGTTTGTCTTTCTAATTAGGTGTATAGCCTATTCACTTT
CCTAGAATAAATCTCTTAACCTAAATTTGAGTAGTCTGCATTTTGGCAACTCCTCTAGCAGCTTGGTAGCCTAGT
ACAGGTTGTTTTTTTAAAAAAGGAAAAGCAGGAAGGAGGAGTGAATTTTATTAACATGTTTGCCAAATGTATTGA
GATTTGGCCTCTGAAGAACACTTTTTCAGTGTTAAGTTTCTTTACCTTAAGATTCAGAAATACTTTAGAATATTA
TTAATTTTAAGTCCTGTCTTTACATCCTTTTGGAAAACTTGTATTACCATGAGTTTGGAAAAAGGACAACAAAAG
GCTTTTCATGTAAAGATAAGATCTTTAGCTATCTCTAACCCTGTCCTTTTTTCACTGCATTTTTTCTAGTTTTGC
TTCATTGCTTATCATTAGGATAGGGTAAGTGAAGTTTGCTATGCTGCTAGCATCCTAAGATGATACCTTTGTTGA
AAGAATTGTGAATAGCATGATTCATTTCTAGCAGAGGCTGAGTTTAGGACAGCAGCTTCCATTGAGAAGTCTTTC
TGTGTCGTGAATAGCATTTTAATGACCTCTTGGCTCACATAAGCAAACAACATAGGGACGTATCTGCTATGAAAA
TCCACAAATTTTTCAGATAGTGCCCTAAAAACAATTTTATATACCTCACTGGTTGTTATTCTTAGGTTATTCCCA
CACTTGACTTTATCATTGTTTACTACTAGTAAAAAGCAGCATTGCCGAATAATCCCTAATTTTCCACTAAAAATA
TAATGAAATGATGTTAAGCTTTTTGAAAAGTTTAGGTAAACCTACTGTTGTTAGATTAATGTATTTGTTGCTTCC
CTTTATCTGGAATGTGGCATTAGCTTTTTTATTTTAACCCTCTTTAATTCTTATTCAATTCCATGACTTAAGGTT
GGAGAGCTAAACACTGGGATTTTTGGATAACAGACTGACAGTTTTGCATAATTATAATCGGCATTGTACATAGAA
AGGATATGGCTACCTTTTGTTAAATCTGCACTTTCTAAATATCAAAAAAGGGAAATGAAGTATAAATCAATTTTT
GTATAATCTGTTTGAAACATGAGTTTTATTTGCTTAATATTAGGGCTTTGCCCCTTTTCTGTAAGTCTCTTGGGA
TCCTGTGTAGAAGCTGTTCTCATTAAACACCAAACAGTTAAGTCCATTCTCTGGTACTAGCTACAAATTCGGTTT
CATATTCTACTTAACAATTTAAATAAACTGAAATATTTCTAGATGGTCTACTTCTGTTCATATAAAAACAAAACT
TGATTTCC

FIGURE 7098

MAKKTYDLLFKLLLIGDSGVGKTCVLFRFSDDAFNTTFISTIGIDFKIKTVELQGKKIKLQIWDTAGQERFHTIT
TSYYRGAMGIMLVYDITNGKSFENISKWLRNIDEHANEDVERMLLGNKCDMDDKRVVPKGKGEQIAREHGIRFFE
TSAKANINIEKAFLTLAEDILRKTPVKEPNSENVDISSGGGVTGWKSKCC

FIGURE 7099

CCACACTTCCCGCCTCCCTAAAACGCACACCCCGCTAGCCATGGGCAGCCGCGACCACCTGTTCAAAGTGCTGGT
GGTGGGGGACGCCGCAGTGGGCAAGACGTCGCTGGTGCAGCGATATTCCCAGGACAGCTTCAGCAAACACTACAA
GTCCACGGTGGGAGTGGATTTTGCTCTGAAGGTTCTCCAGTGGTCTGACTACGAGATAGTGCGGCTTCAGCTGTG
GGATATTGCAGGGCAGGAGCGCTTCACCTCTATGACACGATTGTATTATCGGGATGCCTCTGCCTGTGTTATTAT
GTTTGACGTTACCAATGCCACTACCTTCAGCAACAGCCAGAGGTGGAAACAGGACCTAGACAGCAAGCTCACACT
ACCCAATGGAGAGCCGGTGCCCTGCCTGCTCTTGGCCAACAAGTGTGATCTGTCCCCTTGGGCAGTGAGCCGGGA
CCAGATTGACCGGTTCAGTAAAGAGAACGGTTTCACAGGTTGGACAGAAACATCAGTCAAGGAGAACAAAAATAT
TAATGAGGCTATGAGAGTCCTCATTGAAAAGATGATGAGAAATTCCACAGAAGATATCATGTCTTTGTCCACCCA
AGGGGACTACATCAATCTACAAACCAAGTCCTCCAGCTGGTCCTGCTGCTAGTAGTGTTTGGCTTATTTTCCATC
CCAGTTCTGGGAGGTCTTTTAAGTCTCTTCCCTTTGGTTGCCCACCTGACCATTTTATTAAGTACATTTGAATTG
TCTCCTGACTACTGTCCAGTAAGGAGGCCCATTGTCACTTAGAAAAGACACCTGGAACCCATGTGCATTTCTGCA
TCTCCTGGATTAGCCTTTCACATGTTGCTGACTCACATTAGTGCCAGTTAGTGCCTTCGGTGTAAGATCTTCTCA
TCAGCCCTCAATTTGTGATCCGGAATTTTGTGAGAAGGATTAGAAATCAGCACCTGCGTTTTAGAGATCATAATT
CTCACCTACTTCTGAGCTTATTTTTCCATTTGATATTCATTGATATCATGACTTCCAATTGAGAGGAAAATGAGA
TCAAATGTCATTTCCCAAATTTCTTGTAGGCCGTTGTTTCAGATTCTTTCTGTCTTGGAATGTAAACATCTGATT
CTGGAATGCAGAAGGAGGGGTCTGGGCATCTGTGGATTTTTGGCTACTAGAAGTGTCCCAGAAGTCACTGTATTT
TTGAAACTTCTAACGTCATAATTAAGTTTCTCTTGTCTTGGCATCAAGAATAGTCAAGTTTTTTGGCCGGGCATG
GTGGCTCATGCCTGTAATCCCAGCACTTGGGGAGGCCAAGGCAGGCGGATCACATGAGGCCAGGAATTCGAGACC
AACCTGGTCAGCATGGCAAAACCCCGTCTCTACTAAAAGTACAAAAATTAGCCAGGCGTGATGGCACGTGTCTGT
AATCCCAGCTACTCTGGAGACTGAGGTGGGAGAATCGCTTGAGACTGGGAGGCAGAGGTTGCAGTGAACCGAGAT
CATGCCACCGCACTTCAGCCTGGGTGACAGAGAAGGACTCCGTCTCAAAAAAAAAAAGAAAAAAGAATAGTCATTT
TTAAACTACCTATCTCATGCAATGAAAGCATTTTCTTCCACAAAGAGCTTAATCCTCATGATAGGATTGCCTAGT
GTCTCCCATTTGCAGGTTTCTGGGTTGATGTCTTAATGCATAATACTGCAAGTGACATCAGCTGGCTGTGATGCT
TCGAAATAGGTCTGCTCCTCACAGCTTTGGGAATCTGAATGGAAGAAGAAAAGAGAGAAGTTAACAACCTCCACT
GGGGCAACTTTGTGAACATGTAGGCACTTAGTCATAGGAAACATATTATGTGCAGGTCCTAGCCTGGGGTAGGAA
AGTAGATAGACAGAAAATCATTAGGTAATTTAAGTACTAAATTGGGCAGGGCTTTTTAGTATCAAATCACTACTA
GACCGTTTAATTTGTTAAATTATCTCTAGGATGGTGATTTATAACCTACCCAAAGTTATCGATATTCTTACTAAA
CTCTGAGGCCTGAAGTTCTGTGATAGACCTTAAATAAGTGTCCTAAGTCAGTGGTTCCCAAATCTGGCTGGTCGG
GAATACCTGGGAAGTTTGTTAAAATTTTTTAAAAATGTTTTAAGATTTTTGGGTCCTGAGCCAGGCGTGGTGGCT
CACACCTGTAATCCCAGCACTTTGGGAGGCTGAGGCAGGTGGATCGCCTGAGGTCAGGAGTTCAAGATCAACCTG
GCCAACATACTGAAACCCCGTCTCTACTAAAAATAAGAAAAATTAGCTGGGCGTGGTGGCGGGCACCTGTAATCC
CAGCTACTTGGGAGGCTGAGGCAGGAGAATCACTTGAACCTGGGAGTTAGAGGTTGCAGTGAGCTGAGATCACAC
CATTGCGCTTCAGCCTGGGCAACAAGAGTGAAACTCCATCTCC

FIGURE 7100

MGSRDHLFKVLVVGDAAVGKTSLVQRYSQDSFSKHYKSTVGVDFALKVLQWSDYEIVRLQLWDIAGQERFTSMTR
LYYRDASACVIMFDVTNATTFSNSQRWKQDLDSKLTLPNGEPVPCLLLANKCDLSPWAVSRDQIDRFSKENGFTG
WTETSVKENKNINEAMRVLIEKMMRNSTEDIMSLSTQGDYINLQTKSSSWSCC

FIGURE 7101

CCCTCCCCTGCCTGCATTCCCGGGACGGACCCGAGGGAAGAAGCCTCAGGAGGAGGGTGTGGGCCGAGGCGCGGC
GGCGGCTGGAGCAGCGCGGTAGGGTCCTTCGCCAGAGCATCCGGTCCGAGGGCGCACACAGGCAGAAGGCTCGGG
GCTCGTCCACTCTCCTCCCTCTCTCCTCCTCTCCCTGGCTTTGTGTTGGTGCCTCCGAGCTGCAAGGAGGGTGCG
CTGGAGGAGGAGGAGGGGGGCCCGGAGTGAGAGGCACCCCCTTCACGCGCGCGCGCGCACACGGTGCCGGCGCAC
GCACACACGGGCGGACACACACACACGCGCGCACACACACACGCACAGAGCTCGCTCGCCTCGAGCGCACGAACG
TGGACGTTCTCTTTGTGTGGAGCCCTCAAGGGGGGTTGGGGCCCCGGTTCGGTCCGGGGGAG**ATG**GCGCAGCCCA
TCCTGGGCCATGGGAGCCTGCAGCCCGCCTCGGCCGCTGGCCTGGCGTCCCTGGAGCTCGACTCGTCGCTGGACC
AGTACGTGCAGATTCGCATCTTCAAAATAATCGTGATTGGGGACTCCAACGTGGGCAAGACCTGCCTGACCTTCC
GCTTCTGCGGGGGTACCTTCCCAGACAAGACTGAAGCCACCATCGGCGTGGACTTCAGGGAGAAGACCGTGGAAA
TCGAGGGCGAGAAGATCAAGGTTCAGGTGTGGGACACAGCAGGTCAGGAACGTTTCCGCAAAAGCATGGTCGAGC
ATTACTACCGCAACGTACATGCCGTGGTCTTCGTCTATGACGTCACCAAGATGACATCTTTCACCAACCTCAAAA
TGTGGATCCAAGAATGCAATGGGCATGCTGTGCCCCCACTAGTCCCCAAAGTGCTTGTGGGCAACAAGTGTGACT
TGAGGGAACAGATCCAGGTGCCCTCCAACTTAGCCCTGAAATTTGCTGATGCCCACAACATGCTCTTGTTTGAGA
CATCGGCCAAGGACCCCAAAGAGAGCCAGAACGTGGAGTCGATTTTCATGTGCTTGGCTTGCCGATTGAAGGCCC
AGAAATCCCTGCTGTATCGTGATGCTGAGAGGCAGCAGGGGAAGGTGCAGAAACTGGAGTTCCCACAGGAAGCTA
ACAGTAAAACTTCCTGTCCTTGT**TGA**AACCAAACGATATAAATACAAGATAAATTATCACTGGAGTTTTTTCTTT
CCCTTTTTTCTGTGCCTGCATAATGCTGACACCTGCTTGTTTCCATACAAATTGATATCAAAATAAAATTTGTAT
AGATTATC

FIGURE 7102

MAQPILGHGSLQPASAAGLASLELDSSLDQYVQIRIFKIIVIGDSNVGKTCLTFRFCGGTFPDKTEATIGVDFRE
KTVEIEGEKIKVQVWDTAGQERFRKSMVEHYYRNVHAVVFVYDVTKMTSFTNLKMWIQECNGHAVPPLVPKVLVG
NKCDLREQIQVPSNLALKFADAHNMLLFETSAKDPKESQNVESIFMCLACRLKAQKSLLYRDAERQQGKVQKLEF
PQEANSKTSCPC

FIGURE 7103

GCCACCCAGCTGAGAGGAGAGGCGCCCCCGGGGACGCACTGAGATTATGAGGCTCTGGCCTCCACTGGCCACTCA
CTCGTGACCCTTTCCACCACGGCGGAGCCTTCCAAGCCTACCTCCTGCCGTGTGGTGATCTACCTGCAGCGGGAG
ATGTCGGGGGACACCTGCCTGTGCCCAGCCTCAGGGGCCAAGCCCAAGCTCAGTGGCTTCAAGGGAGGAGGGTTG
GGCAACAAGTATGTCCAGCTCAACGTGGGCGGCTCTCTGTACTACACCACTGTGCGGGCCCTGACCCGCCACGAC
ACCATGCTCAAGGCCATGTTCAGTGGGCGCATGGAGGTGCTGACCGACAAAGAAGGCTGGATCCTCATAGACCGT
TGTGGAAAGCACTTTGGCACCATTTTGAATTACCTCCGAGATGACACCATCACCCTCCCTCAGAACCGGCAAGAA
ATCAAGGAATTGATGGCTGAAGCAAAGTATTACCTCATCCAGGGGCTGGTGAATATGTGCCAGAGTGCCCTGCAG
GACAAGAAGGACTCCTACCAGCCTGTGTGCAACATCCCCATCATCACATCCCTAAAGGAGGAGGAGCGGCTCATC
GAATCCTCCACCAAGCCCGTGGTGAAGCTGCTGTACAACAGAAGCAACAACAAGTATTCCTACACCAGCAACTCT
GACGACCACCTGCTGAAAAACATCGAGCTGTTTGACAAGCTCTCCCTGCGCTTCAACGGCCGCGTGCTCTTCATC
AAGGATGTCATTGGTGACGAGATCTGCTGCTGGTCCTTTTATGGCCAGGGCCGTAAGCTGGCAGAGGTGTGCTGT
ACCTCCATCGTGTATGCCACGGAGAAGAAGCAGACCAAGGTGGAATTCCCAGAGGCCCGAATCTATGAGGAGACA
CTCAACGTCCTACTCTATGAGACTCCCCGCGTCCCCGACAACTCCTTGTTGGAGGCCACAAGCCGTAGCCGCAGC
CAGGCTTCCCCCAGTGAAGATGAGGAGACCTTTGAACTGCGGGACCGTGTCCGCCGCATCCACGTCAAGCGCTAC
AGCACTTACGATGACCGGCAGCTCGGCCACCAGTCTACCCATCGCGACTGACCAGACCCTCAGGGAGTCAGGGCA
CGGGAGGCCCTATCTCCCATCCTGTGGAACCCGCCCCATTGGCCACCCCATGCTGCTGCTGCCTGGGTCTCTGCT
CTAGCACCCAGAGGCATGACAGGCCCTGCTCAGAGGTCAGAGGGTCTGGGCAGAGGAGGGACCACATTCCCCTGC
CTTGCCCCTGAGCACTTCTGGAGACTGCGTCCTGTCCTATCTGCTCACCATCACCCTTCCTGCCCGACGGAGCTG
CTTCTGCTCCCTGGGGCATATGGACTGACCCACCTCCTGCTGAGAACCTTCCCCTAGGCCCTGTGCAGAAGGCTA
CTGCCCCTTAGGCCTCAGCTGGGGGAAAGGCAGTTCTGGTGCTGTAGAGGCCCTGGTGCAGAAAGTGGGACGTCT
TTTTTCCTAAGGTGTTTAAGCACAGGCTTGATAAGTTTGGTTTTTAAAAAATAATCTAGGAAATGAATAATTCTA
AATCTAGTAATGAGGAAACTGAGCATTTCTTTTGCCCTCCAGGGTGCCAAGACCCTACATATGACAGAACCCTTG
GCCCTTCTCCATGCCTGTGGGATCTGTTTCTTTAAAGCACTTTGTACTGTTATTCAGGAGGTTGATAATCTCCTT
GACCCATGTCTTTCTACCCTAATCCCCACTTCCCTGCAGAATCAATCTGAGGGAGGGGATAAAGAGGAAGCAATA
AAAAAAAAACATCCGACAGAGCAGCTCTGGCTTTGCAGCCTGGCCAGCAGCTCAGAGTGCACCGAGGAGGGAAGG
ATGGCTAAGCTGGGACCGGCAGTCCTCACAGGGTGCCTGTGAGAAAGGACATTTTACCCCCACATCATAGTCACA
TCACTGACTCCTAGGTCTAGCACGACTGCTCTTTGTGATTCTCTTGAGTACCCTTGGCTTCCAGCCATGCTGTCC
TCACATACGGTAAAGCCAAAGAGCTGTCACATGGGCCAGAAACATGAGCCACGGCAGGAAGACCGTGGAGCCCGT
GGGCACTGCATGGTGTTGGCTGGCATGCCCATCAGCTGAGGACAGCAAACTCCCAGCAGCCCCTACAGAGGTGGC
ACATGCTTGGCCACACATCTACTCCCTGCCCACACCATCTATGCTCTTGGTTGGTGCTGGCTGGGATGGCGGTTC
TGCCCAGTGGTGTCTCTGAGCGCGGGATGACAGGAGCAACCGAAGCACCCTGAAGGCCTTCACTCCTTGTTGGGT
AACTCAGCCATGGAGATGCCAAGCACTAGCCAGGAGGTGAGTTCCTCTTTAGGGCTTTGGTTTTCATTCCTTTTT
GTTTGGCTTGGCCAAACCAGAATTCAGCTTATCTGAATTATTTTCCAAAGGAATGCTGTCAGGGAGGGACTGTTC
TGCCAGCCTAACAAAGCAACGTAGCCACGTATAGTACCCACTTTCTGCTCTTTGGAGAGAACACAGGTTATCAAG
TTCATCTCTCTTGACTACTCTTATGATAGCTGATGCCACAGAGCCTATGGGCAAATGCCAGACCCAGGGTTAGAC
ACAAGGACCTGAAGTGACATGACGGCGGGACAGGGGAAATGTGACTTTCTAATTAGGCATTTTATGTTAGTCACA
GTCTTGAATGTATAAACAGCACTAAGACTCTCAGGTCAGGTACCTTGGTGATCAGCTACTAGTTCTTCCAGCCCT
CATTGAGGTAACAAGATAAAGACAAATCCACTTCTTTGGCCAAATTCAGGCTTTGGCTTTATGACTTTCCCACAG
AGACTGGAATGCGTCAGCCTGAGACCACTGGCCTATTTTCTCAGCTGCCCTCTTGAGGTCCTTTAACACTCAAAT
TCCCAGCTCCCCACTGAGGTGTTGTGATGCTTGCCTTTTGACCTCCCCATCCCCTTTAGTCCCTGCTTACTACTT
TGACATTCACATCCTCAGTGTCTCAGTCTTTTTTGCCGAGAAAGCACAGTAGTCTGGGACTGGGCATTTATCTTC
TCTGACTGAAAATCTCTCCTTGGTCTTAAGGAAAATACTAACATTGAACTCACTGACATGATCTTAGCTTCTTTA
ATCAGACTTTGTGACTTAAAAGTTTGGGGGTTTTCTTTGAAAGTTTCCAGCCCTATTCAGAAAGCAACTCTTGGC
TGTGTGCATTTTTCAACTCCAAGCAGCCCAGGGGTAAGTAAACAAAGTATGGATGAAGGTCAGATTTTCTTGTCA
GTTTCTGAGAAACCTGGCAGCCTGCTGTTAACAACACAGGCCAGTATTGGGTTTTATTGAATTTGGTATGTGACC
AAGGTCGGCCTAAAGGATGGCGCAGGTCCTGGGCAGGAAAGAATTTTTCCTTTATCACATAACTGTAATATTTGG
TTGCTCAGCATAAGTGATGGAAGCAAACACTAATTTCTAATAAAATTGTGTTAAACTC

FIGURE 7104

MSGDTCLCPASGAKPKLSGFKGGGLGNKYVQLNVGGSLYYTTVRALTRHDTMLKAMFSGRMEVLTDKEGWILIDR
CGKHFGTILNYLRDDTITLPQNRQEIKELMAEAKYYLIQGLVNMCQSALQDKKDSYQPVCNIPIITSLKEEERLI
ESSTKPVVKLLYNRSNNKYSYTSNSDDHLLKNIELFDKLSLRFNGRVLFIKDVIGDEICCWSFYGQGRKLAEVCC
TSIVYATEKKQTKVEFPEARIYEETLNVLLYETPRVPDNSLLEATSRSRSQASPSEDEETFELRDRVRRIHVKRY
STYDDRQLGHQSTHRD

FIGURE 7105

GCTGTTGAGAAGCTACCCGCGGGGTTGTAGACCTCGGACCTC**ATG**GCAGAGATAATTCAGGAACGCATAGAAGAT
CGGCTCCCGGAATTGGAACAGCTGGAGCGCATTGGACTGTTCAGTCATGCGGAGATTAAGGCTATCATTAAGAAG
GCTTCCGATCTAGAGTACAAAATCCAGAGAAGAACCCTTTTCAAGGAAGACTTTATCAATTATGTTCAATATGAA
ATTAATCTTTTGGAGCTGATCCGGAGAAGAAGAACACGCATTGGATATTCATTTAAGAAGGATGAGATTGAGAAT
TCTATTGTACACCGGGTACAAGGTGTTTTCCAGCGTGCCTCAGCAAAATGGAAAGACGATGTTCAACTTTGGCTC
TCCTATGTGGCTTTTTGTAAGAAGTGGGCTACTAAAACTCGACTTAGCAAGGTATTCTCTGCCATGTTGGCGATT
CATTCCAACAAACCAGCTTTGTGGATTATGGCAGCCAAATGGGAAATGGAAGATCGATTGTCTTCAGAAAGCGCA
AGGCAACTATTTCTTCGCGCACTGCGCTTTCATCCAGAGTGCCCAAAACTTTATAAAGAATACTTTAGGATGGAG
CTGATGCATGCTGAAAAACTGAGGAAGGAGAAGGAAGAATTTGAAAAAGCCAGTATGGATGTGGAGAATCCTGAT
TATTCTGAAGAAATCCTTAAGGGCGAGTTGGCATGGATCATCTACAAAAATTCTGTAAGCATAATTAAAGGTGCA
GAATTTCACGTGTCACTGCTTTCGATTGCACAGCTATTTGACTTTGCCAAAGATCTACAAAAAGAGATTTATGAT
GACCTTCAGGCTCTACACACAGATGATCCTCTCACTTGGGATTATGTGGCAAGGCGAGAATTAGAGATTGAGTCA
CAGACAGAAGAGCAGCCTACAACGAAACAAGCCAAAGCAGTGGAGGTCGGCCGGAAGGAGGAGAGGTGCTGTGCT
GTGTATGAAGAGGCAGTGAAGACTCTGCCAACAGAGGCCATGTGGAAGTGTTACATCACCTTTTGCTTGGAAAGA
TTTACTAAGAAGTCAAATAGTGGGTTCCTTAGAGGGAAGAGGTTGGAAAGAACCATGACTGTATTCAGGAAGGCA
CATGAACTGAAGCTTCTGTCAGAATGCCAATACAAGCAGTTGAGTGTTTCGTTGCTGTGTTATAACTTCCTGAGG
GAAGCTCTGGAAGTGGCAGTAGCTGGAACTGAATTGTTTAGAGACTCTGGGACAATGTGGCAGCTGAAGCTGCAG
GTGCTGATCGAGTCAAAGAGCCCTGACATAGCCATGCTTTTTGAAGAAGCCTTTGTGCACCTGAAACCCCAGGTT
TGTCTGCCATTGTGGATTTCCTGGGCAGAGTGGAGTGAAGGTGCCAAAAGCCAAGAAGACACTGAGGCAGTCTTT
AAGAAAGCTCTCTTAGCTGTCATAGGTGCCGACTCAGTAACCCTGAAGAATAAGTACCTGGATTGGGCTTATCGA
AGTGGTGGCTACAAAAAGGCCAGAGCTGTGTTTAAAAGTTTACAGGAGAGCCGACCATTTTCAGTTGACTTTTTC
AGGAAAATGATTCAGTTTGAAAAGGAGCAAGAATCCTGCAATATGGCGAACATAAGAGAATATTATGAGAGAGCT
TTGAGAGAGTTTGGATCCGCAGATTCTGATCTTTGGATGGATTATATGAAAGAAGAATTGAACCACCCCCTTGGT
AGACCTGAGAACTGTGGACAGATCTACTGGCGAGCGATGAAAATGTTGCAGGGAGAGTCAGCAGAGGCATTTGTA
GCTAAACATGCTATGCATCAGACTGGCCATTTA**TGA**AGATGAAGAATACCGTCCGCTTTGTGAAATAGTATTGCA
AGCCAGCCCCGTGGGCAAATTTGTATTGAGTCCATCTGTAATTTGCTCAGTGATGGCAGACAAGATGGCTGTCTG
GTTTTGAGACACACACTTTAATTTTATGTTAACTTGTTAAATCTTTTTAAAAATTAAAAAATTTTTATGATTGAA
AAAAAAA

FIGURE 7106

MAEIIQERIEDRLPELEQLERIGLFSHAEIKAIIKKASDLEYKIQRRTLFKEDFINYVQYEINLLELIRRRRTRI
GYSFKKDEIENSIVHRVQGVFQRASAKWKDDVQLWLSYVAFCKKWATKTRLSKVFSAMLAIHSNKPALWIMAAKW
EMEDRLSSESARQLFLRALRFHPECPKLYKEYFRMELMHAEKLRKEKEEFEKASMDVENPDYSEEILKGELAWII
YKNSVSIIKGAEFHVSLLSIAQLFDFAKDLQKEIYDDLQALHTDDPLTWDYVARRELEIESQTEEQPTTKQAKAV
EVGRKEERCCAVYEEAVKTLPTEAMWKCYITFCLERFTKKSNSGFLRGKRLERTMTVFRKAHELKLLSECQYKQL
SVSLLCYNFLREALEVAVAGTELFRDSGTMWQLKLQVLIESKSPDIAMLFEEAFVHLKPQVCLPLWISWAEWSEG
AKSQEDTEAVFKKALLAVIGADSVTLKNKYLDWAYRSGGYKKARAVFKSLQESRPFSVDFFRKMIQFEKEQESCN
MANIREYYERALREFGSADSDLWMDYMKEELNHPLGRPENCGQIYWRAMKMLQGESAEAFVAKHAMHQTGHL

FIGURE 7107

GCGCGCCGGCCTGAGAGCCCTGTGGACAACCTCGTCATTGTCAGGCACAGAGCGGTAGACCCTGCTTCTCTAAGT
GGGCAGCGGACAGCGGCACGCACATTTCACCTGTCCCGCAGACAACAGCACCATCTGCTTGGGAGAACCCTCTCC
CTTCTCTGAGAAAGAAAGATGTCGAATGGGTATTCCACAGACGAGAATTTCCGCTATCTCATCTCGTGCTTCAGG
GCCAGGGTGAAAATGTACATCCAGGTGGAGCCTGTGCTGGACTACCTGACCTTTCTGCCTGCAGAGGTGAAGGAG
CAGATTCAGAGGACAGTCGCCACCTCCGGGAACATGCAGGCAGTTGAACTGCTGCTGAGCACCTTGGAGAAGGGA
GTCTGGCACCTTGGTTGGACTCGGGAATTCGTGGAGGCCCTCCGGAGAACCGGCAGCCCTCTGGCCGCCCGCTAC
ATGAACCCTGAGCTCACGGACTTGCCCTCTCCATCGTTTGAGAACGCTCATGATGAATATCTCCAACTGCTGAAC
CTCCTTCAGCCCACTCTGGTGGACAAGCTTCTAGTTAGAGACGTCTTGGATAAGTGCATGGAGGAGGAACTGTTG
ACAATTGAAGACAGAAACCGGATTGCTGCTGCAGAAAACAATGGAAATGAATCAGGTGTAAGAGAGCTACTAAAA
AGGATTGTGCAGAAAGAAAACTGGTTCTCTGCATTTCTGAATGTTCTTCGTCAAACAGGAAACAATGAACTTGTC
CAAGAGTTAACAGGCTCTGATTGCTCAGAAAGCAATGCAGAGATTGAGAATTTATCACAAGTTGATGGTCCTCAA
GTGGAAGAGCAACTTCTTTCAACCACAGTTCAGCCAAATCTGGAGAAGGAGGTCTGGGGCATGGAGAATAACTCA
TCAGAATCATCTTTTGCAGATTCTTCTGTAGTTTCAGAATCAGACACAAGTTTGGCAGAAGGAAGTGTCAGCTGC
TTAGATGAAAGTCTTGGACATAACAGCAACATGGGCAGTGATTCAGGCACCATGGGAAGTGATTCAGATGAAGAG
AATGTGGCAGCAAGAGCATCCCCGGAGCCAGAACTCCAGCTCAGGCCTTACCAAATGGAAGTTGCCCAGCCAGCC
TTGGAAGGGAAGAATATCATCATCTGCCTCCCTACAGGGAGTGGAAAAACCAGAGTGGCTGTTTACATTGCCAAG
GATCACTTAGACAAGAAGAAAAAAGCATCTGAGCCTGGAAAAGTTATAGTTCTTGTCAATAAGGTACTGCTAGTT
GAACAGCTCTTCCGCAAGGAGTTCCAACCATTTTTGAAGAAATGGTATCGTGTTATTGGATTAAGTGGTGATACC
CAACTGAAAATATCATTTCCAGAAGTTGTCAAGTCCTGTGATATTATTATCAGTACAGCTCAAATCCTTGAAAAC
TCCCTCTTAAACTTGGAAAATGGAGAAGATGCTGGTGTTCAATTGTCAGACTTTTCCCTCATTATCATTGATGAA
TGTCATCACACCAACAAAGAAGCAGTGTATAATAACATCATGAGGCATTATTTGATGCAGAAGTTGAAAAACAAT
AGACTCAAGAAAGAAAACAAACCAGTGATTCCCCTTCCTCAGATACTGGGACTAACAGCTTCACCTGGTGTTGGA
GGGGCCACGAAGCAAGCCAAAGCTGAAGAACACATTTTAAAACTATGTGCCAATCTTGATGCATTTACTATTAAA
ACTGTTAAAGAAAACCTTGATCAACTGAAAAACCAAATACAGGAGCCATGCAAGAAGTTTGCCATTGCAGATGCA
ACCAGAGAAGATCCATTTAAAGAGAAACTTCTAGAAATAATGACAAGGATTCAAACTTATTGTCAAATGAGTCCA
ATGTCAGATTTTGGAACTCAACCCTATGAACAATGGGCCATTCAAATGGAAAAAAAAGCTGCAAAAAAAGGAAAT
CGCAAAGAACGTGTTTGTGCAGAACATTTGAGGAAGTACAATGAGGCCCTACAAATTAATGACACAATTCGAATG
ATAGATGCGTATACTCATCTTGAAACTTTCTATAATGAAGAGAAAGATAAGAAGTTTGCAGTCATAGAAGATGAT
AGTGATGAGGGTGGTGATGATGAGTATTGTGATGGTGATGAAGATGAGGATGATTTAAAGAAACCTTTGAAACTG
GATGAAACAGATAGATTTCTCATGACTTTATTTTTTGAAAACAATAAAATGTTGAAAAGGCTGGCTGAAAACCCA
GAATATGAAAATGAAAAGCTGACCAAATTAAGAAATACCATAATGGAGCAATATACTAGGACTGAGGAATCAGCA
CGAGGAATAATCTTTACAAAAACACGACAGAGTGCATATGCGCTTTCCCAGTGGATTACTGAAAATGAAAAATTT
GCTGAAGTAGGAGTCAAAGCCCACCATCTGATTGGAGCTGGACACAGCAGTGAGTTCAAACCCATGACACAGAAT
GAACAAAAAGAAGTCATTAGTAAATTTCGCACTGGAAAAATCAATCTGCTTATCGCTACCACAGTGGCAGAAGAA
GGTCTGGATATTAAAGAATGTAACATTGTTATCCGTTATGGTCTCGTCACCAATGAAATAGCCATGGTCCAGGCC
CGTGGTCGAGCCAGAGCTGATGAGAGCACCTACGTCCTGGTTGCTCACAGTGGTTCAGGAGTTATCGAACATGAG
ACAGTTAATGATTTCCGAGAGAAGATGATGTATAAAGCTATACATTGTGTTCAAAATATGAAACCAGAGGAGTAT
GCTCATAAGATTTTGGAATTACAGATGCAAAGTATAATGGAAAAGAAAATGAAAACCAAGAGAAATATTGCCAAG
CATTACAAGAATAACCCATCACTAATAACTTTCCTTTGCAAAAACTGCAGTGTGCTAGCCTGTTCTGGGGAAGAT
ATCCATGTAATTGAGAAAATGCATCACGTCAATATGACCCCAGAATTCAAGGAACTTTACATTGTAAGAGAAAAC
AAAGCACTGCAAAAGAAGTGTGCCGACTATCAAATAAATGGTGAAATCATCTGCAAATGTGGCCAGGCTTGGGGA
ACAATGATGGTGCACAAAGGCTTAGATTTGCCTTGTCTCAAAATAAGGAATTTTGTAGTGGTTTTCAAAAATAAT
TCAACAAAGAAACAATACAAAAAGTGGGTAGAATTACCTATCACATTTCCCAATCTTGACTATTCAGAATGCTGT
TTATTTAGTGATGAGGATTAGCACTTGATTGAAGATTCTTTTAAAATACTATCAGTTAAACATTTAATATGATTA
TGATTAATGTATTCATTATGCTACAGAACTGACATAAGAATCAATAAAATGATTGTTTTACTCTGAAAAAAAAAA
AAAAA

FIGURE 7108

MSNGYSTDENFRYLISCFRARVKMYIQVEPVLDYLTFLPAEVKEQIQRTVATSGNMQAVELLLSTLEKGVWHLGW
TREFVEALRRTGSPLAARYMNPELTDLPSPSFENAHDEYLQLLNLLQPTLVDKLLVRDVLDKCMEEELLTIEDRN
RIAAAENNGNESGVRELLKRIVQKENWFSAFLNVLRQTGNNELVQELTGSDCSESNAEIENLSQVDGPQVEEQLL
STTVQPNLEKEVWGMENNSSESSFADSSVVSESDTSLAEGSVSCLDESLGHNSNMGSDSGTMGSDSDEENVAARA
SPEPELQLRPYQMEVAQPALEGKNIIICLPTGSGKTRVAVYIAKDHLDKKKKASEPGKVIVLVNKVLLVEQLFRK
EFQPFLKKWYRVIGLSGDTQLKISFPEVVKSCDIIISTAQILENSLLNLENGEDAGVQLSDFSLIIIDECHHTNK
EAVYNNIMRHYLMQKLKNNRLKKENKPVIPLPQILGLTASPGVGGATKQAKAEEHILKLCANLDAFTIKTVKENL
DQLKNQIQEPCKKFAIADATREDPFKEKLLEIMTRIQTYCQMSPMSDFGTQPYEQWAIQMEKKAAKKGNRKERVC
AEHLRKYNEALQINDTIRMIDAYTHLETFYNEEKDKKFAVIEDDSDEGGDDEYCDGDEDEDDLKKPLKLDETDRF
LMTLFFENNKMLKRLAENPEYENEKLTKLRNTIMEQYTRTEESARGIIFTKTRQSAYALSQWITENEKFAEVGVK
AHHLIGAGHSSEFKPMTQNEQKEVISKFRTGKINLLIATTVAEEGLDIKECNIVIRYGLVTNEIAMVQARGRARA
DESTYVLVAHSGSGVIEHETVNDFREKMMYKAIHCVQNMKPEEYAHKILELQMQSIMEKKMKTKRNIAKHYKNNP
SLITFLCKNCSVLACSGEDIHVIEKMHHVNMTPEFKELYIVRENKALQKKCADYQINGEIICKCGQAWGTMMVHK
GLDLPCLKIRNFVVVFKNNSTKKQYKKWVELPITFPNLDYSECCLFSDED

FIGURE 7109A

CATGGCGGCGACTGCGGCAAAGCGAGAGCCTCGGAGACGCCGCTGCCGCCAGCACAGCCGGAGATCTGAGCCGAC
ACTGGGGGCAGTCCGCGAGCCCCGCACTCTCTCGATGAGTCGGAGAAGTCCCGTTGTATCAGAGTAAGATGGACG
GTAGCTTTGATTGTGATTGTGGTGAGCTGGAGCCACCTGATCACTAACAAAAGACATCTTCTGTTAACCAACAGC
CGCCAGGCTTCCTGTTGAAATAAATATATAGCAACAAAGGAAAAAAAGAAGCAAAACGGAAATAGTGCTTACCAG
CACCTTAGAATGATGCTGCTCAGGACCAGTCCAACACTGAATGTATCTGCACTGTGAGGAGAATGTTCATAGAAG
CCTGTTGTGTGCATATTTATTCACTTTTTGTTAAATGTTAAATCGTTTAGCACGGTAATCTGAGTGCACAGTATG
TCATTTCATTCCGTTTGAGTTTCTTGTTTTCGTTAAATGTCTGCAGAGTTGCTGCCCCTTTCTTGAACTATGAGT
ACTGCAATCTTTTTAATTCTCAATATGAATAGAGCTTTTTGAGCTTTAAATCTAAGGGGAACTCGACAGGCCTGT
TTGGCATATGCAATGAACATCAAGAAACCATCTTGCTGTGGAAGCATAATTATTTTTCTTCTCCCTTTTTGAAAG
ATCTTTCCTTTTGATGCCAGTTTTCTTCCTTGTTTACACAAGTTCAATTTGAAAGGAAAAGGCAATAGTAAGGGT
TTCAAA**ATG**GCAGAGAAATTTGAAAGTCTCATGAACATTCATGGTTTTGATCTGGGTTCTAGGTATATGGACTTA
AAACCATTGGGTTGTGGAGGCAATGGCTTGGTTTTTTCTGCTGTAGACAATGACTGTGACAAAAGAGTAGCCATC
AAGAAAATTGTCCTTACTGATCCCCAGAGTGTCAAACATGCTCTACGTGAAATCAAAATTATTAGAAGACTTGAC
CATGATAACATTGTGAAAGTGTTTGAGATTCTTGGTCCCAGTGGAAGCCAATTAACAGACGATGTGGGCTCTCTT
ACGGAACTGAACAGTGTTTACATTGTTCAGGAGTACATGGAGACAGACTTGGCTAATGTGCTGGAGCAGGGCCCT
TTACTGGAAGAGCATGCCAGGCTTTTCATGTATCAGCTGCTACGGGGGCTCAAGTATATTCACTCTGCAAATGTA
CTGCACAGAGATCTCAAACCAGCTAATCTTTTCATTAATACGGAAGACTTGGTGCTGAAGATAGGTGACTTTGGT
CTTGCACGGATCATGGATCCTCATTATTCCCATAAGGGTCATCTTTCTGAAGGATTGGTTACTAAATGGTACAGA
TCTCCACGTCTTTTACTTTCTCCTAATAATTATACTAAAGCCATTGACATGTGGGCTGCAGGCTGCATCTTTGCT
GAAATGCTGACTGGTAAAACCCTTTTTGCAGGTGCACATGAACTTGAACAGATGCAGCTGATTTTAGAATCTATT
CCTGTTGTACATGAGGAAGATCGTCAGGAGCTTCTCAGCGTAATTCCAGTTTACATTAGAAATGACATGACTGAG
CCACACAAACCTTTAACTCAGCTGCTTCCAGGAATTAGTCGAGAAGCACTGGATTTCCTGGAACAAATTTTGACA
TTTAGCCCCATGGATCGGTTAACAGCAGAAGAAGCACTCTCCCATCCTTACATGAGCATATATTCTTTTCCAATG
GATGAGCCAATTTCAAGCCATCCTTTTCATATTGAAGATGAAGTTGATGATATTTTGCTTATGGATGAAACTCAC
AGTCACATTTATAACTGGGAAAGGTATCATGATTGTCAGTTTTCAGAGCATGATTGGCCTGTACATAACAACTTT
GATATTGATGAAGTTCAGCTTGATCCAAGAGCTCTGTCCGATGTCACTGATGAAGAAGAAGTACAAGTTGATCCC
CGAAAATATTTGGATGGAGATCGGGAAAAGTATCTGGAGGATCCTGCTTTTGATACCAATTACTCTACTGAGCCT
TGTTGGCAATACTCAGATCATCATGAAAACAAATATTGTGATCTGGAGTGTAGCCATACTTGTAACTACAAAACG
AGGTCATCATCATATTTAGATAACTTAGTTTGGAGAGAGAGTGAAGTTAACCATTACTATGAACCCAAGCTTATT
ATAGATCTTTCCAATTGGAAAGAACAAAGCAAAGAAAAATCTGATAAGAAAGGCAAATCAAAATGTGAAAGGAAT
GGATTGGTTAAAGCCCAGATAGCGCTAGAGGAAGCATCACAGCAACTGGCTGGAAAAGAAAGGGAAAAGAATCAG
GGATTTGATTTTGATTCCTTTATTGCAGGAACTATTCAGCTTAGTTCCCAGCATGAGCCTACTGATGTTGTTGAT
AAATTAAATGACTTGAATAGCTCAGTGTCCCAACTAGAATTGAAAAGTTTGATATCAAAGTCAGTAAGCCAAGAA
AAACAGGAAAAAGGAATGGCAAATCTGGCTCAATTAGAAGCCTTGTACCAGTCTTCTTGGGACAGCCAGTTTGTG
AGTGGTGGGGAGGACTGTTTTTTCATAAATCAGTTTTGTGAGGTAAGGAAGGATGAACAAGTTGAGAAGGAAAAC
ACTTACACTAGTTACTTGGACAAGTTCTTTAGCAGGAAAGAAGATACTGAAATGCTAGAAACTGAGCCAGTAGAG
GATGGGAAGCTTGGGGAGAGAGGACATGAGGAAGGATTTCTGAACAACAGTGGGGAGTTCCTCTTTAACAAGCAG
CTCGAGTCCATAGGCATCCCACAGTTTCACAGTCCAGTTGGGTCACCACTTAAGTCAATACAGGCCACATTAACA
CCTTCTGCTATGAAATCTTCCCCTCAAATTCCTCATCAAACATACAGCAGCATTCTGAAACATCTGAAC**TAA**AAC
ACTCAGCAGACATTTATCTTTGTATTCTTCATGAAATGTGTTTTGTCTTTTTTTATTACTAGTGTTTAAGTCATT
TTTTACTTGAATCAGATGGTGTCATTTAGTAAGGATTTTATGAGTTCTTGTTTTTTAAAATCCAGACTTTCTTTT
TCTACATGTGAGATAGTTTTCATTTTAACTGGCATGTCATTTGCACACAAAAATAAAGACTAGAGCAAAATAATG
CAACGCAGGAGGAGAAAAGAAATGCACTAAGACAAGAACATTCTCTCATAGAACATTGATCTGTTTTACAGGAAA
CAAACCTTGCCTTGAAATTTACACAGTGAGACTGTACATAATTGCATGAAAATAGCTATTTTTTTCCTAAGACAT
TTTTCATTCATGAATATTTTCAAGTTTTTCATACTGTACACATTTCTTAAAACACATGATACCAGCAGCAACTGA
AAATGAATGCCGAATTTGGTACACATGTGTTATCTACCTCAAGGTAACAAGAGTATGTGGCAAAACATATACCAC
CCATAGTGCTTCACAAAATGCACTTCTATTTAGCCAGCGTTTATTGTAGTAAACTATTCTTAATAAAACTCACTC
ACTGTTTATAAATGTTCTGGTATGCATTCTTTATAGTGAAGTGTTAATACATCACATCTTATTTATTTTAGCAAA

FIGURE 7109B

TCAGTATATTTTCTGTATTTAATTATAAAAAATTAACTTAGTTTTTAAAATTTATTTGCAAATATACTTTTTCCA
TTTGGCACTATGGTTTGTTGCCTACCTAGCTGCATCTATAATGTCAGCTTATCCTAAGGCTGTCCACGTACTTAA
TTTACTTAAGTGTTCATTTTAAGTAACGTGCTCACTGTGTATAGGAATTTGTATTTTGGAGGTGCTTGATCTATC
TACAAAGAAAAATTAATTAGGAATTACTTTATTATAAAATGCTCCTAGAAGTCTTAATTGTGTTTATTTTTTAAA
AAAACAAATGTTAGACTTGTGTGCATGGAAGTAATTAAGGTACATCATTATTGTAGTTTGAAAGTTGTACATGAT
AAGACATTTTGTTTTTACTGTATGTTTTTACTGAATGATCTATTCCCCATCCCAAGGCAAGCATGAATAAAATTA
GGTTAAACGTAGCATGTGGCATCGCAGTCTCTTAGAATTTGTTTCATCTATTTTATTTTATTGAATACTGTCTGT
ATCTTTGGTTATCCTGTTTGAAGAAAAAGGACAAATAAAACATGGCCAGCAAATACAAAAAAAAAAAA

FIGURE 7110

MAEKFESLMNIHGFDLGSRYMDLKPLGCGGNGLVFSAVDNDCDKRVAIKKIVLTDPQSVKHALREIKIIRRLDHD
NIVKVFEILGPSGSQLTDDVGSLTELNSVYIVQEYMETDLANVLEQGPLLEEHARLFMYQLLRGLKYIHSANVLH
RDLKPANLFINTEDLVLKIGDFGLARIMDPHYSHKGHLSEGLVTKWYRSPRLLLSPNNYTKAIDMWAAGCIFAEM
LTGKTLFAGAHELEQMQLILESIPVVHEEDRQELLSVIPVYIRNDMTEPHKPLTQLLPGISREALDFLEQILTFS
PMDRLTAEEALSHPYMSIYSFPMDEPISSHPFHIEDEVDDILLMDETHSHIYNWERYHDCQFSEHDWPVHNNFDI
DEVQLDPRALSDVTDEEEVQVDPRKYLDGDREKYLEDPAFDTNYSTEPCWQYSDHHENKYCDLECSHTCNYKTRS
SSYLDNLVWRESEVNHYYEPKLIIDLSNWKEQSKEKSDKKGKSKCERNGLVKAQIALEEASQQLAGKEREKNQGF
DFDSFIAGTIQLSSQHEPTDVVDKLNDLNSSVSQLELKSLISKSVSQEKQEKGMANLAQLEALYQSSWDSQFVSG
GEDCFFINQFCEVRKDEQVEKENTYTSYLDKFFSRKEDTEMLETEPVEDGKLGERGHEEGFLNNSGEFLFNKQLE
SIGIPQFHSPVGSPLKSIQATLTPSAMKSSPQIPHQTYSSILKHLN

FIGURE 7111

TAAAGGGGGGTGCCAGACCAGGTGCGTCTGCCGCTGGATTGTGATAGGAAGCAGAGTGTTCGTGTGAAAGATGGA
TACTATGATGCTGAATGTGCGGAATCTGTTTGAGCAGCTTGTGCGCCGGGTGGAGATTCTCAGTGAAGGAAATGA
AGTCCAATTTATCCAGTTGGCGAAGGACTTTGAGGATTTCCGTAAAAAGTGGCAGAGGACTGACCATGAGCTGGG
GAAATACAAGGATCTTTTGATGAAAGCAGAGACTGAGCGAAGTGCTCTGGATGTTAAGCTGAAGCATGCACGTAA
TCAGGTGGATGTAGAGATCAAACGGAGACAGAGAGCTGAGGCTGACTGCGAAAAGCTGGAACGACAGATTCAGCT
GATTCGAGAGATGCTCATGTGTGACACATCTGGCAGCATTCAACTAAGCGAGGAGCAAAAATCAGCTCTGGCTTT
TCTCAACAGAGGCCAACCATCCAGCAGCAATGCTGGGAACAAAAGACTATCAACCATTGATGAATCTGGTTCCAT
TTTATCAGATATCAGCTTTGACAAGACTGATGAATCACTGGATTGGGACTCTTCTTTGGTGAAGACTTTCAAACT
GAAGAAGAGAGAAAAGAGGCGCTCTACTAGCCGACAGTTTGTTGATGGTCCCCCTGGACCTGTAAAGAAAACTCG
TTCCATTGGCTCTGCAGTAGACCAGGGGAATGAATCCATAGTTGCAAAAACTACAGTGACTGTTCCCAATGATGG
CGGGCCCATCGAAGCTGTGTCCACTATTGAGACTGTGCCATATTGGACCAGGAGCCGAAGGAAAACAGGTACTTT
ACAACCTTGGAACAGTGACTCCACCCTGAACAGCAGGCAGCTGGAGCCAAGAACTGAGACAGACAGTGTGGGCAC
GCCACAGAGTAATGGAGGGATGCGCCTGCATGACTTTGTTTCTAAGACGGTTATTAAACCTGAATCCTGTGTTCC
ATGTGGAAAGCGGATAAAATTTGGCAAATTATCTCTGAAGTGTCGAGACTGTCGTGTGGTCTCTCATCCAGAATG
TCGGGACCGCTGTCCCCTTCCCTGCATTCCTACCCTGATAGGAACACCTGTCAAGATTGGAGAGGGAATGCTGGC
AGACTTTGTGTCCCAGACTTCTCCAATGATCCCCTCCATTGTTGTGCATTGTGTAAATGAGATTGAGCAAAGAGG
TCTGACTGAGACAGGCCTGTATAGGATCTCTGGCTGTGACCGCACAGTAAAAGAGCTGAAAGAGAAATTCCTCAG
AGTGAAAACTGTACCCCTCCTCAGCAAAGTGGATGATATCCATGCTATCTGTAGCCTTCTAAAAGACTTTCTTCG
AAACCTCAAAGAACCTCTTCTGACCTTTCGCCTTAACAGAGCCTTTATGGAAGCAGCAGAAATCACAGATGAAGA
CAACAGCATAGCTGCCATGTACCAAGCTGTTGGTGAACTGCCCCAGGCCAACAGGGACACATTAGCTTTCCTCAT
GATTCACTTGCAGAGAGTGGCTCAGAGTCCACATACTAAAATGGATGTTGCCAATCTGGCTAAAGTCTTTGGCCC
TACAATAGTGGCCCATGCTGTGCCCAATCCAGACCCAGTGACAATGTCACAGGACATCAAGCGTCAACCCAAGGT
GGTTGAGCGCCTGCTTTCCTTGCCTCTGGAGTATTGGAGTCAGTTCATGATGGTGGAGCAAGAGAACATTGACCC
CCTACATGTCATTGAAAACTCAAATGCCTTTTCAACACCACAGACACCAGATATTAAAGTGAGTTTACTGGGACC
TGTGACCACTCCTGAACATCAGCTTCTCAAGACTCCTTCATCTAGTTCCCTGTCACAGAGAGTCCGTTCCACCCT
CACCAAGAACACTCCTAGATTTGGGAGCAAAAGCAAGTCTGCCACTAACCTAGGACGACAAGGCAACTTTTTTGC
TTCTCCAATGCTCAAGTGAAGTCACATCTGCCTGTTACTTCCCAGCATTGACTGACTATAAGAAAGGACACATCT
GTACTCTGCTCTGCAGCCTCCTGTACTCATTACTACTTTTAGCATTCTCCAGGCTTTTACTCAAGTTTAATTGTG
CATGAGGGTTTTATTAAAACTATATATATCTCCCCTTCCTTCTCCTCAAGTCACATAATATCAGCACTTTGTGCT
GGTCATTGTTGGGAGCTTTTAGATGAGACATCTTTCCAGGGGTAGAAGGGTTAGTATGGAATTGGTTGTGATTCT
TTTTGGGGAAGGGGGTTATTGTTCCTTTGGCTTAAAGCCAAATGCTGCTCATAGAATGATCTTTCTCTAGTTTCA
TTTAGAACTGATTTCCGTGAGACAATGACAGAAACCCTACCTATCTGATAAGATTAGCTTGTCTCAGGGTGGGAA
GTGGGAGGGCAGGGCAAAGAAAGGATTAGACCAGAGGATTTAGGATGCCTCCTTCTAAGAACCAGAAGTTCTCAT
TCCCCATTATGAACTGAGCTATAATATGGAGCTTTCATAAAAATGGGATGCATTGAGGACAGAACTAGTGATGGG
AGTATGCGTAGCTTTGATTTGGATGATTAGGTCTTTAATAGTGTTGAGTGGCACAACCTTGTAAATGTGAAAGTA
CAACTCGTATTTATCTCTGATGTGCCGCTGGCTGAACTTTGGGTTCATTTGGGGTCAAAGCCAGTTTTTCTTTTA
AAATTGAATTCATTCTGATGCTTGGCCCCCATACCCCCAACCTTGTCCAGTGGAGCCCAACTTCTAAAGGTCAAT
ATATCATCCTTTGGCATCCCAACTACCAATAAAGAGTAGGCTATAAGGGAAGATTGTCAATATTTTGTGGTAAGA
AAAGCTACAGTCATTTTTTCTTTGCACTTTGGATGCTGAAATTTTTCCCATGGAACATAGCCACATCTAGATAGA
TGTGAGCTTTTTCTTCTGTTAAAATTATTCTTAATGTCTGTAAAAACGATTTTCTTCTGTAGAATGTTTGACTTC
GTATTGACCCTTATCTGTAAAACACCTATTTGGGATAATATTTGGCTTTA

FIGURE 7112

MDTMMLNVRNLFEQLVRRVEILSEGNEVQFIQLAKDFEDFRKKWQRTDHELGKYKDLLMKAETERSALDVKLKHA
RNQVDVEIKRRQRAEADCEKLERQIQLIREMLMCDTSGSIQLSEEQKSALAFLNRGQPSSSNAGNKRLSTIDESG
SILSDISFDKTDESLDWDSSLVKTFKLKKREKRRSTSRQFVDGPPGPVKKTRSIGSAVDQGNESIVAKTTVTVPN
DGGPIEAVSTIETVPYWTRSRRKTGTLQPWNSDSTLNSRQLEPRTETDSVGTPQSNGGMRLHDFVSKTVIKPESC
VPCGKRIKFGKLSLKCRDCRVVSHPECRDRCPLPCIPTLIGTPVKIGEGMLADFVSQTSPMIPSIVVHCVNEIEQ
RGLTETGLYRISGCDRTVKELKEKFLRVKTVPLLSKVDDIHAICSLLKDFLRNLKEPLLTFRLNRAFMEAAEITD
EDNSIAAMYQAVGELPQANRDTLAFLMIHLQRVAQSPHTKMDVANLAKVFGPTIVAHAVPNPDPVTMSQDIKRQP
KVVERLLSLPLEYWSQFMMVEQENIDPLHVIENSNAFSTPQTPDIKVSLLGPVTTPEHQLLKTPSSSSLSQRVRS
TLTKNTPRFGSKSKSATNLGRQGNFFASPMLK

FIGURE 7113

GCCCGCCCGCGCCCCGACCAGCCCGGCCTCGGGCAGCCACTCACCGGTGTCCCCGTCCGCGTCCTTCCTCCCCGG
GTCCCGGCCATGGCGCTGAGTGAACCCATCCTGCCGTCCTTCTCCACTTTCGCCAGCCCGTGCCGCGAGCGCGGC
CTGCAGGAGCGCTGGCCGCGCGCCGAACCCGAGTCCGGCGGCACCGACGACGACCTCAACAGCGTGCTGGACTTC
ATCCTGTCCATGGGGCTGGATGGCCTGGGCGCCGAGGCCGCCCCGGAGCCGCCGCCGCCGCCCCCGCCGCCTGCG
TTCTATTACCCCGAACCCGGCGCGCCCCCGCCCTACAGCGCCCCCGCGGGTGGCCTGGTGTCTGAGCTGCTGCGA
CCCGAGCTGGATGCGCCGCTGGGGCCCGCACTGCACGGCCGCTTTCTGCTGGCGCCGCCCGGCCGCCTGGTCAAG
GCCGAGCCCCCTGAAGCGGACGGCGGCGGCGGCTACGGCTGCGCCCCCGGGCTGACCCGTGGACCGCGCGGCCTC
AAGCGCGAGGGCGCCCCGGGCCCGGCGGCTTCGTGCATGCGAGGTCCCGGGGGCCGCCCCCCGCCGCCGCCCGAC
ACACCGCCGCTCAGCCCCGACGGCCCCGCGCGCCTGCCCGCGCCCGGTCCGCGCGCCTCCTTCCCGCCGCCTTTC
GGTGGCCCTGGTTTCGGCGCGCCCGGGCCCGGCCTGCATTACGCGCCGCCTGCGCCCCCAGCCTTCGGTCTCTTC
GACGACGCGGCCGCCGCCGCGGCAGCCCTGGGCCTGGCGCCCCCCGCCGCCCGCGGTCTCCTCACGCCGCCTGCG
TCCCCGCTGGAGCTGCTGGAGGCCAAGCCAAAGCGCGGCCGCCGCTCTTGGCCCCGCAAACGCACCGCCACTCAC
ACCTGCAGCTACGCGGGCTGCGGCAAGACCTACACCAAGAGTTCGCATCTGAAGGCGCATCTGCGCACGCACACA
GGTGAGAAGCCCTACCACTGCAACTGGGACGGCTGCGGCTGGAAGTTTGCGCGCTCAGACGAGCTCACGCGCCAC
TACCGAAAGCACACGGGCCACCGGCCATTCCAGTGCCATCTGTGCGATCGTGCCTTTTCGCGCTCCGATCACCTG
GCGCTGCACATGAAACGGCACATGTAGCCGGGACGCCCCCGCCCACCTGCGGCGGGCCGTGGCGGGTCCCACGCG
CCGGGCGCGGCCCCCTCCCAAACTGTGACTGGTATTTATTGGACCCAGAGAACCGGGCCGGGCACAGCGTGGCTA
CAGAGGGTCTCCCTCGATGACGACGACGACGACGCCACCACCCCAGCCCCCGTCTGTGACTGAAGGCCCGGTGGG
AAAAGACCACGATCCTCCTTGACGAGTTTTGTTTTTCAAAATGGTGCAATAATTTAAGTGGCATCTTCTCTCCCA
CCGGGTCTACACTAGAGGATCGAGGCTTGTGATGCCTTGTGAGAAATAAGGGCCTTAATTTGTACTGTCTGCGGC
ATTTTTTATAATATTGTATATAGTGACTGACAAATATTGTATTACTGTACATAGAGAGACAGGTGGGCATTTTTG
GGCTACCTGGTTCGTTTTTATAAGATTTTGCTGGGTTGGTTTTTTTTTTAATTAAAAAGTTTTGCATCTTTT

FIGURE 7114

MALSEPILPSFSTFASPCRERGLQERWPRAEPESGGTDDDLNSVLDFILSMGLDGLGAEAAPEPPPPPPPPAFYY
PEPGAPPPYSAPAGGLVSELLRPELDAPLGPALHGRFLLAPPGRLVKAEPPEADGGGGYGCAPGLTRGPRGLKRE
GAPGPAASCMRGPGGRPPPPPDTPPLSPDGPARLPAPGPRASFPPPFGGPGFGAPGPGLHYAPPAPPAFGLFDDA
AAAAAALGLAPPAARGLLTPPASPLELLEAKPKRGRRSWPRKRTATHTCSYAGCGKTYTKSSHLKAHLRTHTGEK
PYHCNWDGCGWKFARSDELTRHYRKHTGHRPFQCHLCDRAFSRSDHLALHMKRHM

FIGURE 7115

ATGTGGTGGAGAGTTCTCAGCTTGCTGGCATGGTTCCCCTTGCAAGAGGCCTCTCTGACTAACCACACAGAAACC
ATCACCGTGGAGGAAGGCCAGACGCTCACTCTAAAGTGTGTCACTTCTCTGAGGAAGAACTCCTCCCTCCAGTGG
CTGACCCCCTCAGGGTTCACCATTTTTTTAAATGAGTATCCTGCTTTAAAAAATTCCAAATACCAGCTTCTTCAT
CACTCGGCCAATCAGCTCTCCATCACTGTGCCTAACGTAACCCTGCAAGATGAAGGCGTGTACAAGTGCTTACAT
TACAGCGACTCTGTAAGCACAAAGGAAGTGAAAGTGATTGTGCTGGCAACTCCTTTCAAGCCAATCCTGGAAGCT
TCAGTTATCAGAAAGCAAAATGGAGAAGAACATGTTGTACTCATGTGCTCCACCATGAGAAGCAAGCCCCCTCCG
CAGATAACCTGGCTACTTGGGAATAGCATGGAAGTGTCCGGTGGAACGCTCCATGAATTTGAAACTGATGGGAAG
AAATGTAATACTACCAGCACTCTCATAATCCACACTTATGGCAAAAATTCAACGGTGGACTGCATTATCCGACAC
AGAGGCCTGCAAGGGAGAAAACTAGTAGCACCCTTCCGGTTTGAAGATTTGGTTACTGATGAAGAGACAGCTTCA
GATGCTCTGGAGAGAAACTCTCTATCCTCTCAAGACCCACAGCAGCCCACCAGTACTGTCTCAGTAACGGAAGAT
TCTAGTACATCGGAGATTGACAAGGAAGAGAAAGAACAAACCACTCAAGATCCTGACTTGACCACCGAAGCAAAT
CCTCAGTATTTAGGACTGGCAAGAAAGAAAAGTGGCATCCTGCTGCTCACGCTGGTGTCCTTCCTCATTTTCATA
CTCTTCATCATAGTCCAGCTCTTCATCATGAAGCTGAGGAAAGCACATGTGATATGGAAGAGAGAAAACGAAGTT
TCAGAACACACACTAGAAAGTTACAGATCAAGGTCAAATAATGAAGAAACATCATCTGAAGAGAAAAATGGCCAA
TCTTCCCACCCTATGCGTTGCATGAACTACATCACAAAGTTGTACTCAGAAGCAAAAACAAAGAGGAAGGAAAAT
GTACAACATTCAAAATTAGAAGAAAAGCACATCCAAGTACCAGAGAGTATTGTGTAGTGCTCTCTGCAATGGAAC
ATGTGATTTCAGGGTTGCCGCAGTGTCACCTCAGTGGACCAGCCTGGGGGAAGGAGCTTAATTGCTGAGACATTA
ATAATGACCTCTTAGTGCAATGCAAGATGGTGTCCTCGGATAATGATCTGCCCCGGAGCTAGGGCAGCAACATGA
GGACCAAACCATGCACATAAAGCTTGTAGTTTAAAAAAGAAAAGCAAAAAAATAATTATGCCTGACACTACTTCA
GAGCAGGAGGATTCTACGAAGCCTTGGGGATCAGGGTCAGTGTGAGCAGCTAACATCCTACCTCAAATGGAACAG
GATTTTTTGATGCTTTGCTCTAATGGAACTGTTTTAAAAATTTTTTTTTCTTTTTAATATTTTCTTCTGGTCACA
AAATAAAGAAATTTGGGATGCAAAGTACCTAAAGATCTCTGATCCTAAGAAGTTACTTCTGGCCAGGCGCGGTGG
CTCATGCCTGTAATCCTAGCACTTTGGGAGGCTGAGGTAGGCAGATCACTTGAGGTCAGGAGTTGGAGACCAGCC
TGGCCAACATAGTGAAACCCCGTCTCTACTAAAAATGCAAAAATTAGCCAGGCGTAGTGGTGCGCACCTGTAGTC
TCAGATACTTGGGAGGCTGAGGGTGGAGAATCGCTTGAACCTGGGAGGTGGAGATTGCAGTGAGTCAAGATCTCA
CCACTGAACTCCAGCCTGGGCGACAGAGGGAGACTCTGTCTCAAAAAAAAAGAAGTTACTTCCAAGACAGACTTT
TAACATGTAACCAGCACAAAGCAATGTCAGGGAGGAGTGATACATGACAATAAATGAGTCAGATGAGCAAGAAGG
CCCCAGAACCCATGCCCCAAGGCACAAAGAGGAGCTCAGGGTAGGCCCAAAGATTCGAATTCCTTAGATTACTAA
ATCACATGAGCGGACCTTGTCTGTCAGATAAGATTTTTACCTGGAAATTCCATGACCAATACATGTGCAAAAGAA
AATGATGGGTTGAATTTACTGATTATTGACCTAATGGATGGCTTTTTAAAATGTTTTAATAAAAAGCAGAATAGA
TGTTTGTTTTTCTAGTGGTTATACCAAGCTATACTTCCTGTTTTCACGTGTGAAAGTAACATGGGACATGCCTTT
CTTTTCCGATCAGTTTATTTAAGCTATACAGCAAACTTTGGCATTTATGTGGAGCATTTCTCATTGTTGGAATCT
GAATAAACCAATTACAAAATAAAAA

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FIGURE 7116

MWWRVLSLLAWFPLQEASLTNHTETITVEEGQTLTLKCVTSLRKNSSLQWLTPSGFTIFLNEYPALKNSKYQLLH
HSANQLSITVPNVTLQDEGVYKCLHYSDSVSTKEVKVIVLATPFKPILEASVIRKQNGEEHVVLMCSTMRSKPPP
QITWLLGNSMEVSGGTLHEFETDGKKCNTTSTLIIHTYGKNSTVDCIIRHRGLQGRKLVAPFRFEDLVTDEETAS
DALERNSLSSQDPQQPTSTVSVTEDSSTSEIDKEEKEQTTQDPDLTTEANPQYLGLARKKSGILLLTLVSFLIFI
LFIIVQLFIMKLRKAHVIWKRENEVSEHTLESYRSRSNNEETSSEEKNGQSSHPMRCMNYITKLYSEAKTKRKEN
VQHSKLEEKHIQVPESIV

FIGURE 7117

AATACGACTACACCTGCTCCGGAGCCCGCGGCGGTACCTGCAGCGGAGGAGCTCTGTCTTCCCCTTCATCTCACG
CGAGCCCGGCGTCCCGCCGCGTGCGCCCCGGCGCAGCCCGCCAGTCCGCCCGGAGCCCGCCCAGTCGCCGCGCTG
CACGCCCGGGGTGAACCCTCTGCCCTCGCTGGGACAGAGGGCCCCGCAGCCGTC**ATG**CTTTCCGCCATCTACACA
GTCCTGGCGGGACTGCTGTTCCTGCCGCTCCTGGTGAACCTCTGCTGCCCATACTTCTTCCAGGACATAGGCTAC
TTCTTGAAGGTGGCCGCCGTGGGCCGGAGGGTGCGCAGCTACGGGCAGCGGCGGCCGGCGCGCACCATCCTGCGG
GCGTTCCTGGAGAAAGCGCGCCAGACGCCACACAAGCCTTTTCTGCTCTTCCGCGACGAGACTCTCACCTACGCG
CAGGTGGACCGGCGCAGCAATCAAGTGGCCCGGGCGCTGCACGACCACCTCGGCCTGCGCCAGGGAGACTGCGTG
GCGCTCCTTATGGGTAACGAGCCGGCCTACGTGTGGCTGTGGCTGGGGCTGGTGAAGCTGGGCTGTGCCATGGCG
TGCCTCAATTACAACATCCGCGCGAAGTCCCTGCTGCACTGCTTCCAGTGCTGCGGGGCGAAGGTGCTGCTGGTG
TCGCCAGAACTACAAGCAGCTGTCGAAGAGATACTGCCAAGCCTTAAAAAAGATGATGTGTCCATCTATTATGTG
AGCAGAACTTCTAACACAGATGGGATTGACTCTTTCCTGGACAAAGTGGATGAAGTATCAACTGAACCTATCCCA
GAGTCATGGAGGTCTGAAGTCACTTTTTCCACTCCTGCCTTATACATTTATACTTCTGGAACCACAGGTCTTCCA
AAAGCAGCCATGATCACTCATCAGCGCATATGGTATGGAACTGGCCTCACTTTTGTAAGCGGATTGAAGGCAGAT
GATGTCATCTATATCACTCTGCCCTTTTACCACAGTGCTGCACTACTGATTGGCATTCACGGATGTATTGTGGCT
GGTGCTACTCTTGCCTTGCGGACTAAATTTTCAGCCAGCCAGTTTTGGGATGACTGCAGAAAATACAACGTCACT
GTCATTCAGTATATCGGTGAACTGCTTCGGTATTTATGCAACTCACCACAGAAACCAAATGACCGTGATCATAAA
GTGAGACTGGCACTGGGAAATGGCTTACGAGGAGATGTGTGGAGACAATTTGTCAAGAGATTTGGGGACATATGC
ATCTATGAGTTCTATGCTGCCACTGAAGGCAATATTGGATTTATGAATTATGCGAGAAAAGTTGGTGCTGTTGGA
AGAGTAAACTACCTACAGAAAAAAATCATAACTTATGACCTGATTAAATATGATGTGGAGAAAGATGAACCTGTC
CGTGATGAAAATGGATATTGCGTCAGAGTTCCCAAAGGTGAAGTTGGACTTCTGGTTTGCAAAATCACACAACTT
ACACCATTTAATGGCTATGCTGGAGCAAAGGCTCAGACAGAGAAGAAAAAACTGAGAGATGTCTTTAAGAAAGGA
GACCTCTATTTCAACAGTGGAGATCTCTTAATGGTTGACCATGAAAATTTCATCTATTTCCACGACAGAGTTGGA
GATACATTCCGGTGGAAAGGGGAAAATGTGGCCACCACTGAAGTTGCTGATACAGTTGGACTGGTTGATTTTGTC
CAAGAAGTAAATGTTTATGGAGTGCATGTGCCAGATCATGAGGGTCGCATTGGCATGGCCTCCATCAAAATGAAA
GAAAACCATGAATTTGATGGAAAGAAACTCTTTCAGCACATTGCTGATTACCTACCTAGTTATGCAAGGCCCCGG
TTTCTAAGAATACAGGACACCATTGAGATCACTGGAACTTTTAAACACCGCAAAATGACCCTGGTGGAGGAGGGC
TTTAACCCTGCTGTCATCAAAGATGCCTTGTATTTCTTGGATGACACAGCAAAAATGTATGTGCCTATGACTGAG
GACATCTATAATGCCATAAGTGCTAAAACCCTGAAACTC**TGA**ATATTCCCAGGAGGATAACTCAACATTTCCAGA
AAGAAACTGAATGGACAGCCACTTGATATAATCCAACTTTAATTTGATTGAAGATTGTGAGGAAATTTTGTAGGA
AATTTGCATACCCGTAAAGGGAGACTTTTTTAAATAACAGTTGAGTCTTTGCAAGTAAAAAGATTTAGAGATTAT
TATTTTTCAGTGTGCACCTACTGTTTGTATTTGCAAACTGAGCTTGTTGGAGGGAAGGCATTATTTTTTAAAATA
CTTAGTAAATTAAATGAAC

FIGURE 7118

MLSAIYTVLAGLLFLPLLVNLCCPYFFQDIGYFLKVAAVGRRVRSYGQRRPARTILRAFLEKARQTPHKPFLLFR
DETLTYAQVDRRSNQVARALHDHLGLRQGDCVALLMGNEPAYVWLWLGLVKLGCAMACLNYNIRAKSLLHCFQCC
GAKVLLVSPELQAAVEEILPSLKKDDVSIYYVSRTSNTDGIDSFLDKVDEVSTEPIPESWRSEVTFSTPALYIYT
SGTTGLPKAAMITHQRIWYGTGLTFVSGLKADDVIYITLPFYHSAALLIGIHGCIVAGATLALRTKFSASQFWDD
CRKYNVTVIQYIGELLRYLCNSPQKPNDRDHKVRLALGNGLRGDVWRQFVKRFGDICIYEFYAATEGNIGFMNYA
RKVGAVGRVNYLQKKIITYDLIKYDVEKDEPVRDENGYCVRVPKGEVGLLVCKITQLTPFNGYAGAKAQTEKKKL
RDVFKKGDLYFNSGDLLMVDHENFIYFHDRVGDTFRWKGENVATTEVADTVGLVDFVQEVNVYGVHVPDHEGRIG
MASIKMKENHEFDGKKLFQHIADYLPSYARPRFLRIQDTIEITGTFKHRKMTLVEEGFNPAVIKDALYFLDDTAK
MYVPMTEDIYNAISAKTLKL

FIGURE 7119

GTGACCGGAGCGAGAAACCCCGCCTCGGCACCCTGACGCAGCGCAGGACCCACCCCGTGCGTGACGCCAGCGTCA
GGCCAGCCCCGGC**ATG**CTCTGCGGCCGCCCGCGGTCCAGCTCCGACAACAGGAATTTTCTCCGAGAGCGGGCCGG
GCTCAGTTCAGCTGCTGTCCAGACCCGGATCGGCAACAGTGCCGCCTCCAGACGTTCTCCTGCCGCTCGCCCGCC
CGTCCCAGCGCCCCCAGCCCTCCCGCGAGGGCGCCCCGGGACGGAAGGATCCACCAGTCTGTCGGCGCCCGCCGT
TCTCGTGGTCGCCGTCGCCGTCGTCGTGGTGGTAGTCTCCGCCGTCGCCTGGGCCATGGCCAATTACATCCACGT
CCCTCCCGGCTCCCCGGAGGTGCCCAAGCTGAACGTCACCGTTCAGGATCAGGAGGAGCATCGCTGCCGGGAGGG
GGCCCTGAGCCTCCTGCAACACCTGCGGCCTCACTGGGACCCCCAGGAGGTGACCCTGCAGCTCTTCACAGATGG
AATCACAAATAAACTTATTGGCTGTTACGTGGGAAACACCATGGAGGATGTAGTCCTGGTGAGAATTTATGGCAA
TAAGACTGAGTTATTAGTCGATCGAGATGAGGAAGTAAAGAGTTTTCGAGTGTTGCAGGCTCATGGGTGTGCACC
ACAACTCTACTGTACCTTCAATAATGGACTATGCTATGAATTTATACAAGGAGAAGCACTGGATCCAAAGCATGT
CTGCAACCCAGCCATTTTCAGGCTAATAGCTCGTCAGCTTGCTAAAATCCATGCTATTCATGCACACAATGGCTG
GATCCCCAAATCTAATCTTTGGCTAAAGATGGGAAAGTATTTCTCTCTCATTCCCACAGGATTTGCAGATGAAGA
CATTAATAAAAGGTTCCTAAGTGATATCCCAAGCTCTCAGATTCTCCAGGAAGAGATGACTTGGATGAAGGAGAT
TCTTTCCAACCTGGGCTCACCTGTTGTGCTTTGCCATAATGACCTATTGTGTAAGAATATAATCTACAATGAGAA
ACAAGGTGATGTACAGTTCATTGATTATGAATATTCTGGATACAACTACCTGGCATATGATATTGGAAATCATTT
CAATGAATTTGCAGGTGTGAGTGATGTAGACTATAGTCTGTATCCAGATAGAGAACTACAGAGTCAGTGGCTGCG
TGCTTACCTTGAAGCCTACAAAGAATTTAAGGGCTTTGGGACTGAAGTTACTGAAAAGGAGGTAGAAATACTCTT
CATTCAAGTCAATCAGTTTGCATTGGCTTCTCATTTCTTTTGGGGATTGTGGGCTTTGATTCAAGCCAAATACTC
CACTATTGAGTTTGATTTCCTTGGGTATGCAATTGTTCGTTTTAACCAGTACTTTAAAATGAAGCCTGAGGTTAC
TGCATTAAAAGTGCCTGAG**TAA**AGAAGAGATTTAATTATTCTCCAGTAGCTGAGCAATGCTTGTGAATCTTTTCT
TAAGAAATCCCAAAAAGCCAATATTAGTTAAAATTCTGTTGTTTAATTTGGTTATCTTGCTTTATAAATTATGCC
TCTAAACAATCAAATCTATTTTTGAAATAGACTGAATGATGTCAAGAAATATACCTACTGCTATCCGTATGTGGT
GGATTAGAAATGTGTTAAATCTGCAAAAGGTATAAAGATGTCAGTTTAATTTCTTTGATAATTTAACCTATGTTG
TATGTGAATTATTTATTATAAACTTAGCACGATTCTGTGACTGTTTTTCTCTGTTTCACGTTCGTTGAGTGTAAG
CAATGAAAATGTCCCAAATAAGTTTTTTAAGTTTTACTTTAATAAGATTAATTTCAGTAAACATTCTAGTTGTTC
AGTGTAACCTTTTTATCTTGATGCATTGTAAGTAAAATGAATCATTTACTCTTGAAATGCCAGTCATTGACTGAT
GTAGATAATTTAGGATTTTCATATAAAAATAGCTGTTTAGGAAGGTGAAATACATTCACTGTCTCTGTTGGTGGT
ACATCTTGTTGAATTCAATATTAGAAAGTATTTCTTTTTGGGGTAATATAACTTAGAATTAAATCCCTGTTTCTC
TATGTAGTCTGGCAGTATAAATATAAATATTTACCATATAATCTTGGAATAAGTATTAGTTAATGTTACCAAAAT
CTGTATTAAATAATGTTTTCAAATGCTAAAAAAAAAAAAAAAAAA

FIGURE 7120

MLCGRPRSSSDNRNFLRERAGLSSAAVQTRIGNSAASRRSPAARPPVPAPPALPRGRPGTEGSTSLSAPAVLVVA
VAVVVVVVSAVAWAMANYIHVPPGSPEVPKLNVTVQDQEEHRCREGALSLLQHLRPHWDPQEVTLQLFTDGITNK
LIGCYVGNTMEDVVLVRIYGNKTELLVDRDEEVKSFRVLQAHGCAPQLYCTFNNGLCYEFIQGEALDPKHVCNPA
IFRLIARQLAKIHAIHAHNGWIPKSNLWLKMGKYFSLIPTGFADEDINKRFLSDIPSSQILQEEMTWMKEILSNL
GSPVVLCHNDLLCKNIIYNEKQGDVQFIDYEYSGYNYLAYDIGNHFNEFAGVSDVDYSLYPDRELQSQWLRAYLE
AYKEFKGFGTEVTEKEVEILFIQVNQFALASHFFWGLWALIQAKYSTIEFDFLGYAIVRFNQYFKMKPEVTALKV
PE

FIGURE 7121A

GGGGGAGGGAAACGGAGCAGTAACAAGTATCCCAGAGGGTGCTGCTGAGGCGACGATGGCCGAGGGGCCCGAGGA
AGCCCGAGGCCACCCTCCCGGGCAGGACGATGGCGGGGGGGACCACGAGCCCGTCCCTTCCCTGAGAGGCCCTCC
TACCACCGCCGTCCCATGCCCCCGCGACGACCCCCAGGCCGAACCCCAGGCCCCGGGCCGGCCCACAGCCCCGGG
CCTCGCGGCTGCCGCCGCAGCCGACAAATTGGAGCCGCCGCGCGAGCTCAGGAAGCGCGGGGAGGCGGCCTCCGG
CTCCGGTGCAGAGCTGCAGGAGCAGGCGGGCTGCGAGGCGCCCGAAGCCGCGGCGCCACGAGAGAGACCAGCTCG
GCTGAGCGCCCGCGAGTACTCCCGGCAAGTGCACGAGTGGCTGTGGCAGTCCTACTGCGGCTACCTCACCTGGCA
CAGCGGCCTGGCCGCCTTCCCAGCCTACTGCAGCCCCCAGCCCTCCCCGCAAAGCTTCCCTTCGGGCGGCGCTGC
AGTCCCCCAGGCCGCGGCGCCGCCGCCCCCGCAGCTGGGCTATTACAACCCCTTCTACTTCCTGAGCCCCGGGGC
CGCGGGGCCTGACCCGCGGACAGCTGCCGGCATCAGCACCCCTGCTCCAGTCGCGGGCCTGGGACCCCGGGCTCC
TCACGTGCAGGCGTCGGTCCGGGCCACTCCAGTGACGAGGGTAGGATCCGCAGCCCCTTCGCGAAGCCCGAGCGA
GACCGGGCGACAGGCAGGCAGAGAATATGTTATTCCATCCTTGGCCCACAGATTTATGGCAGAGATGGTGGATTT
CTTTATTCTCTTCTTTATAAAAGCAACCATTGTCTTAAGCATTATGCACCTCAGTGGGATAAAGGATATCTCTAA
GTTTGCTATGCATTATATAATAGAAGAAATAGATGAAGACACATCAATGGAAGACTTGCAGAAAATGATGGTTGT
GGCACTTATATACAGATTATTAGTTTGTTTCTATGAGATAATTTGCATTTGGGGAGCAGGTGGAGCTACCCCAGG
GAAGTTCCTGCTGGGGCTTCGAGTTGTGACATGTGATACATCAGTGCTTATTGCACCAAGTCGGGTTTTAGTGAT
TCCTTCCTCAAATGTTAGCATTACAACGTCCACTATCCGAGCTTTGATCAAGAATTTTTCAATTGCTTCTTTTTT
CCCTGCTTTCATCACACTGCTGTTTTTTCAGCATAATCGAACAGCTTATGACATTGTAGCAGGAACCATTGTGGT
AAAAAGAAATGGGGTCAGATGAATGCCCCCCCAAAACCCTGATTTCCACACACTAAGACTAAATTATGTATCAAGGC
CATCAGTATCCCTGGGTTACACTAATTGATGATTTAGAAATTAAAGCAGTCACTCCAGTGTGATGCAGGTGACTA
CTCTGAAAGTATTGATTATACTTGAATGCCAAAGAACTTGTCCAGAAGAAAAACCTGTTAAATTCAAGTATTAAA
ATTTTTAGATCAAAAAGGCAAATGATTTTATAAACAATGGACAATATATACTTTCTTAAGATCTAAGGTACTTTC
TTAAGATCTAAGAATTTGCTGAAAGCATTTTCAGCTTTGAAATCTCCAAATGAAACTTTAAAATTTATTTTGGTT
TATCCCAAAATAATGGAAAATGTCCAGTTGTGTTTTGTAAACACCTATGTAACTCATCTTTTAGTTTACACTTCC
TGGGGAAATTGTCTTTGGTGTTTAGAGGAGGGAATGAGAACACAAATTGGATAATCCACTGTCTCCCATCCCAGG
AGGTGGTGAGTTGGCTACAAGAGAAAGGGACAAGTGAGGCAGGCCTAGCAGTTCCCTTACCTGAAGTTTTCAAAT
CCATACTGCAGTTCCCTCTCGTAATGATGTAACTTTACAACTATTCTTAATGCTTGAACATGTATTTAGGGGCAA
GTTTCTCATGATGATGAAAAAGTATCAAGTCATATTGCTATGTTAATTGGTTTTTTTTTTTAAAAGGTAAGTTAG
TGATTACTGTTAATGGTGGGGGAGTAAGTTTTCACTGTAAATTGAACTTATAATTTATGTGCAAGTGTTTTCAGT
GCCCTGAATCAAACTATAAATGTGGGGAGAAATCACCTCCATCAAACAGTTGCATATTTACTGTAAAAGTATTCC
CAGTATGTGTGCAGCATGAAGAAAGTATTAGTGCTTCTCAGTGTTCTCAGTGTAAATTCTATTTATATACAGCAT
ATTCACATACTACTTTCCTTATATTTTATATAGTTCTATGACTGTTGAAACATCAAGGAGTTAAAAAAATCTTAA
TATTTCATGATTAACTCTAAGTACTATTAATAGCTTGCGAAATATTAGCAATTTTCCCATTATGGACTATCTCTC
TAAAGCAAGAGAGACTAGCATTCCCAGACATCATTCTAGGGTCTTTAAGCTCATTTTGGGTCTGCTAAAGTTTGG
GGGGAAATGTTACGCAAAGTGATACTGTGTATGTTGCCATTTTGCTTTATTCTTCTGTTGAAGCAAAATTGTGGG
GTTTTATTATGTGTGTGTGCTTTTCCTAGATGTCCCAGTTAGCTGTGCTGAGATATACCTGTACTATTTATGGTT
TAAGTTTTGATTCTTAGGTATTTTCTCCAGCTCTGACATTGTTTTCCAAAGACACACTAAACTGCATTGCACAGT
TCAAAATTTGATTACTTAAGGGATCAATCTAGGTGGTGTTCTTGGTCTTAAATTTAACAGCAAACACAGCACATA
TCTATTATCACTATATTAATTTTCAAAGGTTTTTCTGTGACGTTTAAAACTGTGACAACAGATATTCACATTTGA
TTATAGAAACTTAATGTCTATTAATAATTTTAGTACAAAATTTCATAAACCGTGTTTTTCAAAATAAGTTTATGT
CAAATCCAGCTTCCCAGAAACACTAATAATTAAGTACATCAATGTACTAAATAAATCATTCAGTTGCACCCATGG
GGAAGATTGTGTTACTGCCCTTCACAGTGAAAAAAAGAAAAATCTTTCATTTTTAAAATTAGGAGATGTTACGTA
ACTTGGCACTTTAGTAGTGTATACACTAGCATTAGTTTATACACCACTTTTGCCGCTGGGGATTCAAGTTGAAAT
GTCCCTCAATCATATAGGTCTGGAATACATCTTTCATTCATAATTTCTGCTCAGATAATTGAATAGTTTGCCATC
GAGATTATTTTCATTTATACTATAAAACAAAAGCAAACTAGTCCAGTTTAATTTTTTGTACTTAGAATATTGCAC
ATTTTCTATATATGAGTTATTCAGATTAGTATCTATGTAGGTTCAGTCAGATCCAACCATGGATTCGAGGTATTA
TACTGTATAACCCTACAAAATACATAGAAGTATTATTTGCCTTCATAATAGAACCCAAGAGTCTGTTTCAATTTA
TGAATTCAGTATTTGCACCGAGATTTTGATTCCCAAAGTTTGGAAAAAAATGACAAAACAACGAGGGAAGAAGGA
ACCAGACCTTAGTGCCACATATTTTTCTCTTGGGGTTGTAAGGTAGTCTCCTGCTTTCCAGAACACTTTATTATA

FIGURE 7121B

TTTCACTTATAGACCTGATTTTCTGTGTCAAAGTATAATTCTCATGCTGAAGCTGTAGCCTAAAAAGCCAAAAGA
AAGTTGTCTTCATTGTACAAACATATTCATCACTTTAACAATAAGGGAACAAAATTTAGTATTCAAGCTGAGTGA
GAATACTGGTTCAATGGACATGTCCCTAAGATAAACCAGAATTGGCAGTTAATTTAGGCGTCTAGAAAATCTCAG
TTCCCACCAGTAAAATTATCCTGAGTAGCTAATGCACCTTGAGAAAAATCTGGCATACTGAATAAGTAACATTAA
CTTGGGAGCCAAGAGCTGGGTAAGCCTTACCTTTAGACTACTCTGTGACTACAGAAATAAAGCCAGCACTTTTGG
AACTAATAAGCCTTCACTTGTCAGTATCATAAAGAGTATTGCCCAACTGAACTTTGCTCCCACTGGTTTAATAGT
TACTTATTTCTGCCTAAGCACTCACCTTCCGATTTTACCCAAGTATATATATAGGATAGAAAAAAATGCATTATA
TTTGAGAGCTCACTTCGCCCGAATTACAAAATGAGTGTTTTTAGATTCAAGTGACGGTAAAAGGATTTGTTCCCT
TCAGTGACTTGAGTGTTTTAGTTATGCATAAGTATTTCTAGCAAAGGAAGGGTAGAAAGGAATTGAAAATTAATT
TACACTAGTTGCTACTTGGGAATAAAGGGCTTTTTGAGGGGGGTATGGATATTAAATGTTTTCGTTATATACTTA
TCCCTATTAAAACAGGCAGTTGTTTCTTTGAATATGCCTAAATAACAGTATTCTTAAAATCTGACAGACAAGTAA
CATGTCAATTACTTGATATTCCTTGTCTCCAGTACCACAGGCCACTCTTGACATCCCATGTTTGCCTGGATAAAG
TTCCTCATTTCAAACAGTATACATACTTCTTTGCAGTTCATTATAGTAAGGCTTAACCTGTAAACAGTATCTGAT
GGCCCACCTATAAATAAAATTCAGCATTCTATTTTTAATAATTTGTATGCCACCAATTTGTATTATTTGTCTCAA
TAAATACTTAGTCATCGATGCAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 7122

MAEGPEEARGHPPGQDDGGGDHEPVPSLRGPPTTAVPCPRDDPQAEPQAPGRPTAPGLAAAAAADKLEPPRELRK
RGEAASGSGAELQEQAGCEAPEAAAPRERPARLSAREYSRQVHEWLWQSYCGYLTWHSGLAAFPAYCSPQPSPQS
FPSGGAAVPQAAAPPPPQLGYYNPFYFLSPGAAGPDPRTAAGISTPAPVAGLGPRAPHVQASVRATPVTRVGSAA
PSRSPSETGRQAGREYVIPSLAHRFMAEMVDFFILFFIKATIVLSIMHLSGIKDISKFAMHYIIEEIDEDTSMED
LQKMMVVALIYRLLVCFYEIICIWGAGGATPGKFLLGLRVVTCDTSVLIAPSRVLVIPSSNVSITTSTIRALIKN
FSIASFFPAFITLLFFQHNRTAYDIVAGTIVVKRNGVR

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FIGURE 7123

GAATTCGGCACGAGCTCTTCTCCCCTGATTCAAGACTCCTCTGCTTTGGACTGAAGCACTGCAGGAGTTTGTGAC
CAAGAACTTCAAGAGTCAAGACAGAAGGAAGCCAAGGGAGCAGTGCAATGGATTTCTCAGTAAAGGTAGACATAG
AGAAGGAGGTGACCTGCCCCATCTGCCTGGAGCTCCTGACAGAACCTCTGAGCCTAGATTGTGGCCACAGCTTCT
GCCAAGCCTGCATCACTGCAAAGATCAAGGAGTCAGTGATCATCTCAAGAGGGGAAAGCAGCTGTCCTGTGTGTC
AGACCAGATTCCAGCCTGGGAACCTCCGACCTAATCGGCATCTGGCCAACATAGTTGAGAGAGTCAAAGAGGTCA
AGATGAGCCCACAGGAGGGGCAGAAGAGAGATGTCTGTGAGCACCATGGAAAAAAACTCCAGATCTTCTGTAAGG
AGGATGGAAAAGTCATTTGCTGGGTTTGTGAACTGTCTCAGGAACACCAAGGTCACCAAACATTCCGCATAAACG
AGGTGGTCAAGGAATGTCAGGAAAAGCTGCAGGTAGCCCTGCAGAGGCTGATAAAGGAGGATCAAGAGGCTGAGA
AGCTGGAAGATGACATCAGACAAGAGAGAACCGCCTGGAAGATCGAGAGACAGAAGATTCTGAAAGGGTTCAATG
AAATGAGAGTCATCTTGGACAATGAGGAGCAGAGAGAGCTGCAAAAGCTGGAGGAAGGTGAGGTGAATGTGCTGG
ACAACCTGGCAGCAGCTACAGACCAGCTGGTCCAGCAGAGGCAGGATGCCAGCACGCTCATCTCAGATCTCCAGC
GGAGGTTGACGGGATCGTCAGTAGAGATGCTGCAGGATGTGATTGACGTCATGAAAAGGAGTGAAAGCTGGACAT
TGAAGAAGCCAAAATCTGTTTCCAAGAAACTAAAGAGTGTATTCCGAGTACCAGATCTGAGTGGGATGCTGCAAG
TTCTTAAAGAGCTGACAGATGTCCAGTACTACTGGGTGGACGTGATGCTGAATCCAGGCAGTGCCACTTCGAATG
TTGCTATTTCTGTGGATCAGAGACAAGTGAAAACTGTACGCACCTGCACATTTAAGAATTCAAATCCATGTGATT
TTTCTGCTTTTGGTGTCTTCGGCTGCCAATATTTCTCTTCGGGGAAATATTACTGGGAAGTAGATGTGTCTGGAA
AGATTGCCTGGATCCTGGGCGTACACAGTAAAATAAGTAGTCTGAATAAAAGGAAGAGCTCTGGGTTTGCTTTTG
ATCCAAGTGTAAATTATTCAAAAGTTTACTCCAGATATAGACCTCAATATGGCTACTGGGTTATAGGATTACAGA
ATACATGTGAATATAATGCTTTTGAGGACTCCTCCTCTTCTGATCCCAAGGTTTTGACTCTCTTTATGGCTGTGC
TCCCTGTCGTATTGGGGTTTTCCTAGACTATGAGGCAGGCATTGTCTCATTTTTCAATGTCACAAACCACGGAGC
ACTCATCTACAAGTTCTCTGGATGTCGCTTTTCTCGACCTGCTTATCCGTATTTCAATCCTTGGAACTGCCTAGT
CCCCATGACTGTGTGCCCACCGAGCTCCTGAGTGTTCTCATTCCTTTACCCACTTCTGCATAGTAGCCCTTGTGC
TGAGACTCAGATTCTGCACCTGAGTTCATCTCTACTGAGACCATCTCTTCCTTTCTTTCCCCTTCTTTTACTTAG
AATGTCTTTGTATTCATTTGCTAGGGCTTCCATAGCAAAGCATCATAGATTGCTGATTTAAACTGTAATTGTATT
GCCGTACTGTGGGCTGGAAATCCCAAATCTAGATTCCAGCAGAGTTGGTTCTTTCTGAGGTCTGCAAGGAAGGGC
TCTGTTCCATGCCTCTCTCCTTGGCTTGTAGAAGGCATCTTGTCCCTATGACTCTTCACATTGTCTTTATGTACA
TCTCTGTGCCCAAGTTTTCCCTTTTTATTAAGACACCAGTCATACTGGCTCAGGGCCCACCGCTAATGCCTTAAT
GAAATCATTTTAACATTATATTCTCTACAAAGACCTTATTTCCAAATAAGATAATATTTGGAGGTATTGGGAATA
AAATTTGAGGAAGGCACGATTTCACTCATAACAATCTTACCCTTTCTTGCAAGAGATGCTTGTACATTATTTTCC
TAATACCTTGGTTTCACTAGTAGTAAACATTATTATTTTTTTTATATTTGCAAAGGAAACATATCTAATCCTTCC
TATAGAAAGAACAGTATTGCTGTAATTCCTTTTCTTTTCTTCCTCATTTCCTCTGCCCCTTAAAAGATTGAAGAA
AGAGAAACTTGTCAACTCATATCCACGTTATCTAGCAAAAGTCATAAGAATCTATCACTAAGTAATGTATCCTTC
AGAATGTGTTGGTTTACCAGTGACACCCCATATTCATCACAAAATTAAAGCAAGAAGTCCATAGTAATTTATTTG
CTAATAGTGGATTTTTAATGCTCAGAGTTTCTGAGGTCAAATTTTATCTTTTCACTTACAAGCTCTATGATCTTA
AATAATTTACTTAATGTATTTTGGTGTATTTTCCTCAAATTAATATTGGTGTTCAAGACTATATCTAATTCCTCT
GATCACTTTGAGAAACAAACTTTTATTAAATGTAAGGCACTTTTCTATGAATTTTAAATATAAAAATAAATATTG
TTCTGATTATTACTGAAAAGATGTCAGCCATTTCAATGTCTTGGGAAACAATTTTTTGTTTTTGTTCTGTTTTCT
TTTTGCTTCAATAAAACAATAGCTGGCTCTAAAAAAAAAA

FIGURE 7124

MDFSVKVDIEKEVTCPICLELLTEPLSLDCGHSFCQACITAKIKESVIISRGESSCPVCQTRFQPGNLRPNRHLA
NIVERVKEVKMSPQEGQKRDVCEHHGKKLQIFCKEDGKVICWVCELSQEHQGHQTFRINEVVKECQEKLQVALQR
LIKEDQEAEKLEDDIRQERTAWKIERQKILKGFNEMRVILDNEEQRELQKLEEGEVNVLDNLAAATDQLVQQRQD
ASTLISDLQRRLTGSSVEMLQDVIDVMKRSESWTLKKPKSVSKKLKSVFRVPDLSGMLQVLKELTDVQYYWVDVM
LNPGSATSNVAISVDQRQVKTVRTCTFKNSNPCDFSAFGVFGCQYFSSGKYYWEVDVSGKIAWILGVHSKISSLN
KRKSSGFAFDPSVNYSKVYSRYRPQYGYWVIGLQNTCEYNAFEDSSSSDPKVLTLFMAVLPVVLGFS

FIGURE 7125

TTTTTTTTTTCCTGTGTCAGCAAGATCAGTCTTCATGAAATCCTGCTAAATTCCCTGTGAAATATAATAAGCTTA
AGACATTTTAGAGAACCAAATGCTGTTTATGATACAGTTTAGTAGAGTTGTAATATATTTCAGCACAGAATTTTA
GAATACTATGGGGGCTGATTTTCAATTTTGTAAGAGAAATTATGAGCATAGTTTATATAGTCTTTTATTTGTAAT
TGTTTACGTGATTTCAGAAGTAATATGCTTAAGTTATTCTAATGTTTTTAAAGCTAGAGAGTCTGAAAAGAGGGA
AGAAGAAAGAAAAGTGTTTAAATTGATCTCTTTTGAATTTAAAATGCATATTAAGTATAACTAGAACATAAAATG
AAGAATTTAAATTCTCATCTTATTCCTAGAATTATACCTATAATATGTATCATTACTTATAACAATTCATATTTT
AATTTTGCATGGCACATAATCTCTTCTGTGAGTTGGATTTTTAGGTGGTGGGAATTTAAGCATAAATTCTCATAA
CTTTCTTGGGGTCAATTTAATATTAATAAGTGTAGTAAGTAATAATACCCAGCTTGAGACCTCATGTACTTGTTG
CATTTGGATTTAAAGCTCATTTCCTATAGAAGAGCTGTAGAAATCAGTCATGTAGTTTCATAAACTCCTTCATGC
TTGTTAATAATTTTCAAGAATCTTAAAATAAATTACAGGAATATTGTTATGAAGTAGTAGAAGCAGTATGGTATA
GGGGAGAAAGTGATTGTAGTTGGGATCTGAGGATAGTCTTTACTTTGCTATTAACTAGCTGTGTGACCTTGGGCA
AGTTGCTTATCTCTGCTTCAGTTCCATAAACTAAGAATTACAGAGCTGAACCGGATCTTGGAAGCAATCTAGTAC
AAACCTCTCATTTTACAGATGAGGAAGCAGATAATTTGCACAGGCTTTCACTGTAAGACAGTTGGGCCCAAAATT
CAGTTTTCTGACTCTCAGGTTGGTTTTTTTTTCCATTATACTTTACAGCCTCTTTTCATCTGTAAAATGAGAGC
ATTGGATTAGAGGCTCTCAAAGGTCTCTTCCAGCTCAAAAATATTGTCATTCCTGTGACATTAGTCGTAATATAA
TTTATTAGGGGAAAGTTTGTAGCTTTTATTTATTGGTGAAAGAAATGTTTCTTGAAGAGGCAGTATAACCTTTGC
AAGGTTATATTTTGTTTTTTTAAGAGAATATCATCAGGCGAGGTGCTATGTCTCAGGCCTGTAATCCCAGCTTTG
GGAGACCAAGGCAAGAGGATTGCTTGAGTCCAGGAGTTTGAGACTAGCCTGATCC

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FIGURE 7126

MGADFQFCKRNYEHSLYSLLFVIVYVISEVICLSYSNVFKARESEKREEERKVFKLISFEFKMHIKYN

FIGURE 7127

ATGCAGTTAGGGGAGCAGCTCTTGGTGAGCTCAGTGAACCTGCCTGGCGCGCACTTCTACCCGCTGGAGAGTGCG
CGAGGCGGCAGCGGCGGGAGCGCTGGCCACCTCCCCAGCGCGGCCCCCTCTCCTCAGAAGTTGGACTTAGACAAA
GCGTCCAAGAAGTTTTCCGGCAGTCTCTCCTGCGAGGCGGTGAGCGGGGAGCCCGCAGCCGCCAGCGCAGGGGCC
CCCGCGGCCATGCTTAGTGACACCGACGCCGGGGACGCATTTGCCAGCGCTGCGGCAGTGGCCAAGCCGGGGCCC
CCGGACGGCCGCAAGGGCTCCCCCTGCGGGGAGGAGGAGCTGCCCTCCGCCGCTGCAGCCGCCGCCGCCGCCGCC
GCCGCGGCTGCGGCCACTGCGCGCTACTCCATGGACAGCCTGAGCTCCGAGCGGTACTACCTCCAGTCCCCCGGT
CCTCAGGGGTCGGAGCTGGCTGCGCCCTGCTCACTCTTCCCGTACCAGGCGGCGGCTGGGGCGCCCCACGGACCT
GTGTACCCGGCTCCTAACGGGGCGCGCTACCCCTACGGCTCCATGCTGCCCCCCGGCGGCTTCCCCGCGGCTGTG
TGCCCACCCGGGAGGGCGCAGTTCGGCCCAGGAGCCGGTGCGGGCAGTGGCGCGGGCGGTAGCAGCGGCGGGGGC
GGCGGCCCGGGCACCTATCAGTACAGCCAGGGGGCTCCGCTCTACGGGCCGTACCCTGGAGCCGCAGCGGCGGGA
TCTTGCGGAGGACTGGGGGGCCTGGGGGTTCCAGGTTCTGGCTTCCGTGCCCACGTCTACCTGTGCAACCGGCCT
CTGTGGCTCAAATTCCACCGCCACCAAACTGAGATGATCATTACGAAACAGGGCAGGCGCATGTTTCCTTTCTTG
AGCTTCAACATAAACGGACTCAATCCCACTGCCCACTACAATGTGTTCGTAGAGGTGGTGCTGGCGGACCCCAAC
CACTGGCGCTTCCAGGGGGGCAAATGGGTGACCTGTGGCAAAGCCGACAATAACATGCAGGGCAACAAAATGTAT
GTTCACCCAGAGTCTCCTAATACTGGTTCCCACTGGATGAGACAGGAGATTTCATTCGGGAAATTAAAACTCACC
AATAACAAAGGCGCAAATAACAACAACACCCAGATGATAGTCTTACAATCCTTACACAAATACCAACCCCGACTG
CATATTGTTGAAGTTACAGAGGATGGCGTGGAGGACTTGAATGAGCCCTCAAAGACCCAGACTTTTACCTTCTCA
GAAACGCAATTCATTGCAGTGACTGCCTACCAAAACACCGATATTACTCAACTAAAGATTGATCATAACCCCTTT
GCAAAAGGCTTCAGAGACAACTATGATTCATCCCATCAGATTGTCCCTGGAGGTCGGTACGGCGTTCAATCCTTC
TTCCCGGAGCCCTTTGTCAACACTTTACCTCAAGCCCGCTATTATAATGGCGAGAGAACCGTGCCACAGACCAAC
GGCCTCCTTTCACCCCAACAGAGCGAAGAGGTGGCCAACCCTCCCCAGCGGTGGCTTGTCACGCCTGTCCAGCAA
CCTGGGACCAACAAACTAGACATCAGTTCCTATGAATCTGAATATACTTCTAGCACATTGCTCCCATATGGCATT
AAATCCTTGCCCCTTCAGACATCCCATGCCCTGGGGTATTACCCAGACCCAACCTTTCCTGCAATGGCAGGGTGG
GGAGGTCGAGGTTCTTACCAGAGGAAGATGGCAGCTGGACTACCATGGACCTCCAGAACAAGCCCCACTGTGTTC
TCTGAAGATCAGCTCTCCAAGGAGAAAGTGAAAGAGGAAATTGGCTCTTCTTGGATAGAGACACCCCCTTCCATC
AAATCTCTAGATTCCAATGATTCAGGAGTATACACCAGTGCTTGTAAGCGAAGGCGGCTGTCTCCTAGCAACTCC
AGTAATGAAAATTCACCCTCCATAAAGTGTGAGGACATTAATGCTGAAGAGTATAGTAAAGACACCTCAAAAGGC
ATGGGAGGGTATTATGCTTTTTACACAACTCCCTAAAGAGTTATTTTAACCTCAAAAATTAGCTAACTTTTTGCA
GATGGACTTGGTGGTGTTTTTTGTTGTCTTCTTTGCCTAGGTTGCCAAAAAGATGTTTGCCTTCCACCTTGATGC
ATCCTGTTTTGTGCAATTCTCTAAAAGAAGGTGCCAAAGCTTTTTGATTGCTGCAGGTAACTGAAACAAACCTAG
CATTTTTAAAAAATAAGATTAATGGAAGACTTTAAGGTATTTTAAAATTCGAAGGGTATCCAAGGTTCTGTATTT
ATTTATTGGGGAGACACTAACCCTTCAAAGAAGCAGGCTGTGAACATTGGGTGCCCAGTGCTATCAGATGAGTTA
AAACCTTTGATTCTCATTTCTATTTGTAAATTCTTAAGCAAATAGAAGCCGAGTGTTAAGGTGTTTTGCTTCTGA
AAGAGGGCTGTGCCTTCCGTTTCAGAAGGAGACATTTTGCTGTTACATTCTGCCAGGGGCAAAAGATACTAGGCC
CAGGAGTCAAGAAAAGCTTTTGTGAAAGTGATAGTTTCACCTGACTTTGATTCCTTAACCCCCGGCTTTTGGAAC
AAGCCATGTTTGCCCTAGTCCAGGATTGCCTCACTTGAGACTTGCTAGGCCTCTGCTGTGTGCTGGGGTGGCCAG
TGGGACTCAGGAGAGAGCAAGCTAAGGAGTCACCAAAAAAAAAAAAAAAAAAAAA

FIGURE 7128

MQLGEQLLVSSVNLPGAHFYPLESARGGSGGSAGHLPSAAPSPQKLDLDKASKKFSGSLSCEAVSGEPAAASAGA
PAAMLSDTDAGDAFASAAAVAKPGPPDGRKGSPCGEEELPSAAAAAAAAAAAAAAATARYSMDSLSSERYYLQSPG
PQGSELAAPCSLFPYQAAAGAPHGPVYPAPNGARYPYGSMLPPGGFPAAVCPPGRAQFGPGAGAGSGAGGSSGGG
GGPGTYQYSQGAPLYGPYPGAAAAGSCGGLGGLGVPGSGFRAHVYLCNRPLWLKFHRHQTEMIITKQGRRMFPFL
SFNINGLNPTAHYNVFVEVVLADPNHWRFQGGKWVTCGKADNNMQGNKMYVHPESPNTGSHWMRQEISFGKLKLT
NNKGANNNNTQMIVLQSLHKYQPRLHIVEVTEDGVEDLNEPSKTQTFTFSETQFIAVTAYQNTDITQLKIDHNPF
AKGFRDNYDSSHQIVPGGRYGVQSFFPEPFVNTLPQARYYNGERTVPQTNGLLSPQQSEEVANPPQRWLVTPVQQ
PGTNKLDISSYESEYTSSTLLPYGIKSLPLQTSHALGYYPDPTFPAMAGWGGRGSYQRKMAAGLPWTSRTSPTVF
SEDQLSKEKVKEEIGSSWIETPPSIKSLDSNDSGVYTSACKRRRLSPSNSSNENSPSIKCEDINAEEYSKDTSKG
MGGYYAFYTTP

FIGURE 7129

ACTTTCCCCTCTCCGTCTCCTGCGGGCGCAATGGAGGAGGAGGATGAGGAAGCGCGGGCGCTCCTGGCAGGCGGC
CCTGACGAGGCCGACAGAGGTGCCCCGGCCGCCCCTGGAGCCCTGCCGGCCCTCTGCGACCCCAGTCGCCTGGCG
CACCGGCTTTTGGTGCTGTTACTGATGTGCTTCCTTGGCTTTGGCAGCTATTTTTGCTATGATAATCCTGCTGCC
CTTCAGACTCAAGTTAAACGAGATATGCAAGTGAATACCACGAAATTCATGCTGCTGTATGCCTGGTATTCTTGG
CCCAATGTAGTTTTGTGTTTCTTTGGTGGCTTTTTGATAGACCGAGTATTTGGAATACGATGGGGCACAATCATT
TTTAGCTGCTTTGTTTGCATTGGACAGGTTGTTTTTGCCCTGGGTGGAATATTTAATGCTTTTTGGCTGATGGAA
TTTGGAAGATTTGTATTTGGGATTGGTGGCGAGTCCTTAGCAGTTGCCCAGAATACATATGCTGTGAGCTGGTTT
AAAGGCAAAGAATTAAACCTGGTGTTTGGACTTCAACTTAGCATGGCTAGAATTGGAAGTACAGTAAACATGAAC
CTCATGGGATGGCTGTATTCTAAGATTGAAGCTTTGTTAGGTTCTGCTGGTCACACAACCCTCGGGATCACACTT
ATGATTGGGGGTGTAACGTGTATTCTTTCACTAATCTGTGCCTTGGCTCTTGCCTACTTGGATCAGAGAGCAGAG
AGAATCCTTCATAAAGAACAAGGAAAAACAGGTGAAGTTATTAAATTAACTGATGTAAAGGACTTCTCCTTACCC
CTGTGGCTTATATTTATCATCTGTGTCTGCTATTATGTTGCTGTGTTCCCTTTTATTGGACTTGGGAAAGTTTTC
TTTACAGAGAAATTTGGATTTTCTTCCCAGGCAGCAAGTGCAATTAACAGTGTTGTATATGTCATATCAGCTCCC
ATGTCCCCGGTGTTTGGGCTCCTGGTGGATAAAACAGGGAAGAACATCATCTGGGTTCTTTGCGCAGTAGCAGCC
ACTCTTGTGTCCCACATGATGCTGGCCTTTACGATGTGGAACCCTTGGATTGCTATGTGTCTTCTGGGACTCTCC
TACTCATTGCTTGCCTGTGCATTGTGGCCAATGGTGGCATTTGTAGTTCCTGAACATCAGCTGGGAACTGCATAT
GGCTTCATGCAGTCCATTCAGAATCTTGGGTTGGCCATCATTTCCATCATTGCTGGTATGATACTGGATTCTCGG
GGGTATTTGTTTTTGGAAGTGTTCTTCATTGCCTGTGTTTCTTTGTCACTTTTATCTGTGGTCTTACTCTATTTG
GTGAATCGTGCCCAGGGTGGGAACCTAAATTATTCTGCAAGACAAAGGGAAGAAATAAAATTTTCCCATACTGAA
TGAGAAGTTAAAATGAATGTGTCATGAGAATGGGCTTAACACATCGTTGGTTTGAAAACTTCCATTTTTAAAAAT
TTAGAGTTTAGTCATTAGAAAAAATAATGGACTGGAAAGTTATATTTATATCCAAATATACCTATTTCAAAGTGT
ATTTGTGAGGCCTGTTTTAGCCTGTGTCTTTTGTATTGTGTGTTGCTAAAGAATTCTACTTTTAGTAGGCTAATC
AACAATGAAAGGGTTAGAAAATTGCTGTGGAACATCCAGGTGAACTTCAGGAAAGACAGTGAAAAATGGAAAACG
TTGGAGCTTCTGTTGAGATAATCTTCATTAGGTATATATCTTAGGGATACAGCCTTTTCTTTATCTTATAGCAGG
AAAAAAAAACTTTTGAGGGAAATAGAAGGGCTGCGTTACACAAAATAAACAATGGCATTGTCATAGGCCTTCCTT
TTACTAGTAGGGCATAATGCTAGGGAATATGTGAAGATGTTTTTATGAAGTCTCTTTCTGATCACGAACAATAGC
TTGCGCTCTACTCTGTAGTTATGTGGATTGCCGAGCAATGACCCTTTTCAATTTCTTATTTCTGTGTTACTGAGG
ACCCTAATCACTTAGGGATGTAATTTTATAGTATAAACTTTCTGTACAGTTTTTCTTATAGTCTAATAAGTAAAA
AGTGTCCTTCAAATTATGATAATTGCCTATGTACATGGATAAATTAAAACACTGCACACGG

FIGURE 7130

MEEEDEEARALLAGGPDEADRGAPAAPGALPALCDPSRLAHRLLVLLLMCFLGFGSYFCYDNPAALQTQVKRDMQ
VNTTKFMLLYAWYSWPNVVLCFFGGFLIDRVFGIRWGTIIFSCFVCIGQVVFALGGIFNAFWLMEFGRFVFGIGG
ESLAVAQNTYAVSWFKGKELNLVFGLQLSMARIGSTVNMNLMGWLYSKIEALLGSAGHTTLGITLMIGGVTCILS
LICALALAYLDQRAERILHKEQGKTGEVIKLTDVKDFSLPLWLIFIICVCYYVAVFPFIGLGKVFFTEKFGFSSQ
AASAINSVVYVISAPMSPVFGLLVDKTGKNIIWVLCAVAATLVSHMMLAFTMWNPWIAMCLLGLSYSLLACALWP
MVAFVVPEHQLGTAYGFMQSIQNLGLAIISIIAGMILDSRGYLFLEVFFIACVSLSLLSVVLLYLVNRAQGGNLN
YSARQREEIKFSHTE

FIGURE 7131

ACTTACTGCGGGACGGCCTTGGAGAGTACTCGGGTTCGTGAACTTCCCGGAGGCGCAATGAGCTGCATTAACCTG
CCCACTGTGCTGCCCGGCTCCCCCAGCAAGACCCGGGGGCAGATCCAGGTGATTCTCGGGCCGATGTTCTCAGGA
AAAAGCACAGAGTTGATGAGACGCGTCCGTCGCTTCCAGATTGCTCAGTACAAGTGCCTGGTGATCAAGTATGCC
AAAGACACTCGCTACAGCAGCAGCTTCTGCACACATGACCGGAACACCATGGAGGCGCTGCCCGCCTGCCTGCTC
CGAGACGTGGCCCAGGAGGCCCTGGGCGTGGCTGTCATAGGCATCGACGAGGGGCAGTTTTTCCCTGACATCATG
GAGTTCTGCGAGGCCATGGCCAACGCCGGGAAGACCGTAATTGTGGCTGCACTGGATGGGACCTTCCAGAGGAAG
CCATTTGGGGCCATCCTGAACCTGGTGCCGCTGGCCGAGAGCGTGGTGAAGCTGACGGCGGTGTGCATGGAGTGC
TTCCGGGAAGCCGCCTATACCAAGAGGCTCGGCACAGAGAAGGAGGTCGAGGTGATTGGGGGAGCAGACAAGTAC
CACTCCGTGTGTCGGCTCTGCTACTTCAAGAAGGCCTCAGGCCAGCCTGCCGGGCCGGACAACAAAGAGAACTGC
CCAGTGCCAGGAAAGCCAGGGGAAGCCGTGGCTGCCAGGAAGCTCTTTGCCCCACAGCAGATTCTGCAATGCAGC
CCTGCCAACTGAGGGACCTGCAAGGGCCGCCCGCTCCCTTCCTGCCACTGCCGCCTACTGGACGCTGCCCTGCAT
GCTGCCCAGCCACTCCAGGAGGAAGTCGGGAGGCGTGGAGGGTGACCACACCTTGGCCTTCTGGGAACTCTCCTT
TGTGTGGCTGCCCCACCTGCCGCATGCTCCCTCCTCTCCTACCCACTGGTCTGCTTAAAGCTTCCCTCTCAGCTG
CTGGGACGATCGCCCAGGCTGGAGCTGGCCCCGCTTGGTGGCCTGGGATCTGGCACACTCCCTCTCCTTGGGGTG
AGGGACAGAGCCCCACGCTGTTGACATCAGCCTGCTTCTTCCCCTCTGCGGCTTTCACTGCTGAGTTTCTGTTCT
CCCTGGGAAGCCTGTGCCAGCACCTTTGAGCCTTGGCCCACACTGAGGCTTAGGCCTCTCTGCCTGGGATGGGCT
CCCACCCTCCCCTGAGGATGGCCTGGATTCACGCCCTCTTGTTTCCTTTTGGGCTCAAAGCCCTTCCTACCTCTG
GTGATGGTTTCCACAGGAACAACAGCATCTTTCACCAAGATGGGTGGCACCAACCTTGCTGGGACTTGGATCCCA
GGGGCTTATCTCTTCAAGTGTGGAGAGGGCAGGGTCCACGCCTCTGCTGTAGCTTATGAAATTAACTAATT

FIGURE 7132

MSCINLPTVLPGSPSKTRGQIQVILGPMFSGKSTELMRRVRRFQIAQYKCLVIKYAKDTRYSSSFCTHDRNTMEA
LPACLLRDVAQEALGVAVIGIDEGQFFPDIMEFCEAMANAGKTVIVAALDGTFQRKPFGAILNLVPLAESVVKLT
AVCMECFREAAYTKRLGTEKEVEVIGGADKYHSVCRLCYFKKASGQPAGPDNKENCPVPGKPGEAVAARKLFAPQ
QILQCSPAN

FIGURE 7133

GTGAGCCGTCTACGAAGCCCGGGCTTGGCCTGGGCGACACTGAGCGGCTTTAACCGGCGGCGTCCAGCCGGCTCC
GCCAGCGCTGCCGCCGCCCTCGAGGCTCCCTCTGACTGAAGGCGCGCTGAGCATCGCGGCATTAGGGGCTCCTGG
TCCCTCAAACATCCAGGGAAGCCATTTTCAGGGACTAGGTACTGACCCCCGCGAGCCGCCACAGCCACAGCCCGC
GCTCCGGGCCGAACGCCCGAGCTCAAGAGCTCCCGAGCTTCCGTCGGGCGGCGGCCTCACAGCTGGGGGCCCTGA
GGCGGAAGGCGCAGCCGCTCAGCTGCGGACCGGGGGCGTGGCGAGGGCGCACAGGTTCTGTTTTTCGCCGGCCCG
GGGCCGCTTTCGGTTTCGTTTCCCGCCGGCGTCTCCACCCTGCGAGAGCCGCCCGCCAGCCAGCGTCCGCCGCCG
TCCGCGTCGCGCCACCCGCGGTCCGACGGGAGCAGGCCCAGCGGCC**ATG**GCCCAGGCCGGCGTCGTCGGTGAGGT
CACCCAGGTGCTGTGCGCGGCCGGGGGCGCCCTGGAGTTGCCCGAGCTGCGGCGCCGCTTGCGGATGGGCTTGAG
CGCCGACGCGCTGGAGCGGCTGCTGCGGCAGCGTGGGCGCTTCGTGGTGGCGGTGCGGGCGGGCGGCGCAGCCGC
GGCCCCGGAGCGCGTGGTGCTGGCCGCCTCGCCGCTGCGCCTGTGTCGCGCGCACCAGGGCTCCAAGCCGGGCTG
CGTGGGGCTCTGCGCGCAGCTCCACCTCTGCAGGTTCATGGTCTACGGCGCCTGCAAGTTCCTGAGAGCCGGGAA
GAACTGTAGGAATAGTCACAGCTTGACAACCGAACACAACCTGAGTGTGCTGAGAACTCATGGCGTTGACCACCT
GAGCTATAATGAGCTATGCCAACTCTTGTTTCAGAACGACCCCTGGCTTTTGCCAGAAATTTGCCAACATTACAA
CAAAGGAGATGGACCCCACGGCTCTTGTGCCTTTCAAAAGCAGTGCATCAAGCTCCATATCTGCCAGTATTTTTT
ACAGGGGGAATGCAAGTTTGGCACTAGCTGTAAGAGATCCCATGATTTCTCTAATTCTGAGAATCTGGAAAAATT
GGAGAAGTTGGGTATGAGCTCAGACCTGGTGAGCAGGCTGCCTACCATTTATAGAAATGCACATGACATCAAGAA
TAAGAGCTCTGCCCCCAGCAGAGTGCCTCCTCTTTTTGTCCCACAGGGGACTTCTGAAAGAAAAGACAGTTCAGG
TTCTGTGTCCCCAAACACTCTTAGCCAGGAGGAGGGTGATCAGATCTGTTTGTACCATATCCGGAAAAGTTGTAG
CTTTCAAGATAAGTGCCATAGAGTTCATTTCCATTTGCCGTATCGATGGCAATTCTTGGATAGAGGCAAATGGGA
GGATTTGGACAACATGGAACTTATTGAAGAGGCATATTGCAATCCCAAAATAGAAAGGATCCTGTGCTCTGAGTC
AGCCAGTACCTTTCACTCTCATTGTCTGAACTTTAACGCCATGACTTACGGTGCTACCCAGGCTCGCCGCCTCTC
CACGGCCTCCTCTGTCACCAAACCTCCACACTTCATCCTCACCACTGACTGGATTTGGTACTGGAGTGATGAGTT
TGGTTCTTGGCAGGAATATGGAAGACAGGGCACGGTGCACCCTGTGACCACTGTCAGCAGTAGCGACGTGGAGAA
GGCCTACCTGGCCTACTGTACACCGGGGTCTGACGGCCAGGCAGCCACCTTGAAGTTCCAGGCCGGAAAGCACAA
CTACGAGTTAGATTTCAAAGCCTTCGTTCAGAAAAACCTGGTCTATGGCACAACTAAAAAGGTTTGCCGCAGACC
CAAATACGTGTCTCCCCAGGATGTGACGACCATGCAAACCTGCAATACCAAGTTTCCAGGCCCGAAGAGCATCCC
AGACTATTGGGACTCCTCTGCCCTGCCAGACCCAGGCTTTCAGAAGATCACCCTTAGTTCTTCCTCGGAAGAGTA
TCAGAAGGTCTGGAACCTCTTTAACCGCACGCTGCCTTTTTACTTTGTTCAGAAGATTGAGCGAGTACAGAACCT
GGCCCTCTGGGAAGTCTACCAGTGGCAAAAAGGACAGATGCAGAAGCAGAACGGAGGGAAGGCCGTGGACGAGCG
GCAGCTGTTCCACGGCACCAGCGCCATTTTTGTGGACGCCATCTGCCAGCAGAACTTTGACTGGCGGGTCTGTGG
TGTTCATGGCACTTCCTACGGCAAGGGGAGCTACTTTGCCCGAGATGCTGCATATTCCCACCACTACAGCAAATC
CGACACGCAGACCCACACGATGTTCCTGGCCCGGGTGCTGGTGGGCGAGTTCGTCAGGGGCAATGCCTCCTTTGT
CCGTCCACCGGCCAAGGAGGGCTGGAGCAACGCCTTCTATGATAGCTGCGTGAACAGTGTGTCCGACCCCTCCAT
CTTTGTGATCTTTGAGAAACACCAGGTCTACCCAGAGTATGTCATCCAGTACACCACCTCCTCCAAGCCCTCGGT
CACACCCTCCATCCTGCTGGCCTTGGGCTCCCTGTTCAGCAGCCGACAG**TGA**GTGCACAGGAGTGTTCCAGGCCT
TTCACCTGCTCTGCCTTGAAATGGCTATTTGGGCCTTTCCTTTTCTTTTTAAACAGAAACTTTTAATGAACTGTT
CTCTTAACATTGACCTCTCAATGAAGTTATGTTCTTAATCTCTTGCTAATAATGATTTTTACTTTTAAGTCACTT
TTGGGTTCACTAGTGGACTAACCAGAAGTGATTGTAGTTGAGTCCAGTTTTGCTTTTTAATAATGTGTTGAAGTT
TTAGTTTTTACTCTTTGTTGACTTTGCTGCTTATTGGCACCAGGGACAGAGTTTCTAGATACAATTTTATGGATT
GGTTTTAATTTTTATGAGTTTGTCTCTGCAGTGATTCGGTTTCTCAGAGTCTCATGGCATCATAGTTTTTCCAGA
ATGACACAGTAGCCACCGGTGGATGACAGCCCACGGGCGGCACAGTCACTTCTGCCTGTTGCTCTGACACCAACC
CAGGCAGCTCTGCTGTGGCTTCTCCTGGGCTCTGGCATTAGTTGGTCTGTGTCACATTGTCAGAACAGGTGGCTG
CTGTGTGGTGCCATCGAGTCCCTGCTGGTTCCCCTTGTCCTGGGAGGGTCACCCATTGCCCAAGGAAGTGCATCC
ACCTGGCAGGTGACCTGGAGGAGTAGCTTCCCCGAGGACCCCCAGGCTTGGCCTGTGATTGCGCAAACCCACATT
TCCTAAGCACACTGGACACCCTTCGAGTGTGGGTTTTAACATCCCTGTGAGATTGAATACTTGTGCCACACATGT
CACAAAAGAGTATGGAAATAAAAGAAAATTTATCCGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAA

FIGURE 7134

MAQAGVVGEVTQVLCAAGGALELPELRRRLRMGLSADALERLLRQRGRFVVAVRAGGAAAAPERVVLAASPLRLC
RAHQGSKPGCVGLCAQLHLCRFMVYGACKFLRAGKNCRNSHSLTTEHNLSVLRTHGVDHLSYNELCQLLFQNDPW
LLPEICQHYNKGDGPHGSCAFQKQCIKLHICQYFLQGECKFGTSCKRSHDFSNSENLEKLEKLGMSSDLVSRLPT
IYRNAHDIKNKSSAPSRVPPLFVPQGTSERKDSSGSVSPNTLSQEEGDQICLYHIRKSCSFQDKCHRVHFHLPYR
WQFLDRGKWEDLDNMELIEEAYCNPKIERILCSESASTFHSHCLNFNAMTYGATQARRLSTASSVTKPPHFILTT
DWIWYWSDEFGSWQEYGRQGTVHPVTTVSSSDVEKAYLAYCTPGSDGQAATLKFQAGKHNYELDFKAFVQKNLVY
GTTKKVCRRPKYVSPQDVTTMQTCNTKFPGPKSIPDYWDSSALPDPGFQKITLSSSSEEYQKVWNLFNRTLPFYF
VQKIERVQNLALWEVYQWQKGQMQKQNGGKAVDERQLFHGTSAIFVDAICQQNFDWRVCGVHGTSYGKGSYFARD
AAYSHHYSKSDTQTHTMFLARVLVGEFVRGNASFVRPPAKEGWSNAFYDSCVNSVSDPSIFVIFEKHQVYPEYVI
QYTTSSKPSVTPSILLALGSLFSSRQ

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FIGURE 7135

GGCACGAGGAAGGAGAGTCCTTGCACCCGTGAGCGTCAGGATGAGGAAATGACAGGAGGAAGACGTGGGTTTGGG
TTAGTGGCTGCTGGCGTTTTGGCCCTTGGTGTTTCTGGAGCCTCCAGGGATCTAGGGGAGCCTGGGCTGCGTGCA
TGTCGATAAGCAGAGCTGTTCTTGGGGAGAAGGAGGGAGGTCTCGGGAGTGTAGCACCATGCCAACCAGCCCTGC
GCGAAGACAGAGTGAGCCACGCCCGGATGGCAGGGCATGTTTCTGTTTTGGTGTCTCACTTTCCTCCCAGCGTGA
CTTATTTGGGGATTCCTCAGGGCCTACTGGAATGTGACTGCCCACTGCCCAGCTGCCTCGGGTACAAGTCCTGGC
CCTATGTCCCAGCTGTCAGGGGCTCAGGGAATCCTACCCAGCCACCTGTCCTGGGATGGAGTGTCAGCATCCACC
CCTTGGTTGTCATCGAGGCCGCCCTCCCAGTCCTGGGTGAAGATATTTGGGCCACCAGGGCTCCCTTGGCCCCTT
CACGTAGGAAATAGACACGTGCTTTTTAATGCAGGACACTTTGAGTGTTACAAAATCTGTAGACCTGGCAGTAGG
GTCATGATGTTGGGAAGGGTGTAGTGCCCTAGGTTGGTGACAGAAGGGACAGACACTTGTGCACAGGTGTCTTTG
GTGATGGGGTTTTTTTTTTTATAACTTAGTAAAAAAAAAAAAATGTATGTGGAATTCTGTCTCTTGGTAAAGCTC
AAAGCCAGGCTAGCCTGAGGTGGCGCAGGGCTCTCCTTCCTGTCCCTTCGATCTCCTTGAGAATTAAGAGCTGGC
AGCTGCTGATGGTGTTTCCCAACCCCCCTCACTTCCCAAGACAACCCCCAGCTTCAGGTCCTCATGGGGAGGGGA
GGGCACGTTCTTGATACATGGGAACTTCGCTCAGGAGGGCCTCCCCTTCCCCTCTCCCTCAGAGTTTTCACTGCC
GTCTCGTCTTTAGAAAGCTGTTTGAATTCCCCCCGCCCCCAGTTTGGACCGTGTAGATATAACTGGATATACGGA
TTTTTCTCTTTGTGCAGGCTTCTTATGCCGTTGGTATACAGGGCAGGAAAGAGAGGAATAAAGGGAGAGAGCAGT
GTGGAAACCACGGTGGTTTTGCTTTGTTCTTACTAGGTTTTGGTGCCACCTTCCCTGCCTGCGCTTGTGCCCCCT
CTCCTCCTTGGCACTGGCGGCCTCCTTGCCTCCCTTCCACCAGTGCTGCCATCCCGTGCCTGTCGTGTTGGTTCT
TCACACGTGCTCTGTTCTCGGGGTTGTTCCATTCATGCCTTCTTGGAGGGTGAGGGTGGCTTGGGAACCGACCCA
GTGATCATGCCTACTTTCTTCTTTGTATCTCCCTCCTTCCCAGCCCACCCGGGCAGCAGACTCTGATGGAAGGAA
GGTGCCGTAGGTGGGCTTTTAGAAACTAACGGGACTGGTTTTCAAAGCAGTTATCTTGGGAAACTGTTTATTCCA
GCGATGTGACTTTTTTCAGAATATTTCTTGGAATCATATTCAGAGTCTGGGGCTGTGTGTTGAGCAGCCTTAAGG
ATGCTAGACACTCATTTAGTGCCCAGGGAGTCCAGCGAATGACGTCTGTGGCCAAGCGAGGTCTCAGGTGCAAAG
CAAAAGGACCATTTAAAGTAAAATAGCTTGGATTCAATCATGTGACTTTTAAATTGGCTCAGAAAGCAATTTTGT
AATTTCAGAGAGTGTTTTGAGCCATGGCCACGTTGTCATTGTGAGTCTATAGCTTGACTCCTTGGAGAACAATAT
TCATTTGGTTGTGGAGACTGATTTGCTGGGAGAAATCTGTCCTGTTACTTTCTGGTCATCCCAGGTTCTGACTTT
TACCAGGGGCAAAAAAAAAAAAAAAAA

FIGURE 7136

MSISRAVLGEKEGGLGSVAPCQPALREDRVSHARMAGHVSVLVSHFPPSVTYLGIPQGLLECDCPLPSCLGYKSW
PYVPAVRGSGNPTQPPVLGWSVSIHPLVVIEAALPVLGEDIWATRAPLAPSRRK

FIGURE 7137

AAACCCAAAGCGGCCGCCGTAGGCGAAGGTGAAGATGGCTGCCTCTGCCTTTGCTGGTGCAGTGAGAGCAGCTTC
AGGAATCCTACGGCCCCTGAATATTTTGGCATCTTCAACCTACCGCAACTGTGTCAAGAATGCCTCTCTTATTTC
TGCATTGTCCACTGGACGTTTTAGTCATATTCAGACACCAGTTGTTTCCTCCACTCCCAGACTTACCACATCTGA
GAGAAACCTGACATGTGGGCATACCTCAGTGATCCTTAATAGAATGGCCCCCGTGCTTCCAAGTGTCCTGAAGCT
GCCAGTCAGATCTCTAACATACTTCAGTGCAAGAAAAGGCAAGAGAAAGACCGTGAAAGCTGTCATCGATAGGTT
TCTTCGACTTCATTGTGGCCTTTGGGTGAGGAGAAAGGCTGGCTATAAGAAAAAATTATGGAAAAAGACACCTGC
AAGGAAGAAGCGATTGAGGGAATTTGTATTCTGCAATAAAACCCAGAGTAAACTCTTAGATAAAATGACGACGTC
CTTCTGGAAGAGGCGAAACTGGTACGTTGATGATCCTTATCAGAAGTATCATGATCGAACAAACCTGAAAGTATA
GATCAGAAGTTTCACTTGTTTCTCAGTTATTGGATATGTATCTTTGTGTACATATCTTTGCAAAAATGGATAAGT
ACAAAACTTGATGTAAATTGTACCAATGAATACGTAAACATACAGTGACAACATTAAACTTAGAAAAGTTTTAAA
ACTTAATGGATCAGACTTTGCCAGATTTGGTTAGGGAAACAGAAATTTAGAATGGTGCATTATTTTTAACAAATG
GTATTGGCTTAACTAGTTGTTTCAGTTATGCTCTTTTAGTTGCAAGGAATCTCAAGTGGGACAAACATAAAAAGA
CTCAAAAGCTACAAGTTAGCTCAAGCAATGTGACATTATTTCAAGGATATGTGCCAGGGAATTCAGGAACCACCT
CACCAACCCCATCTCCCACTCAGAAATCACCTCCCAGCCTCAGGAAGAGTAGAAATTGGGTGGTGCTCCTCAGCA
GGGGAAGGTGGATGTTTAGGCTTGGGCTCTGCATGCATGTGACTTGCTTCTTTTTGCATTGTTAACTCCATTCTC
TCTATTCACCAACTTCTCTACACAGCTTTTGCATACTTACAGTTTCTGTTCCTTTGTAATAACTTTAACTTGCAC
CTTTGAGGTTCTTTTCTACATGATGACCTTCAGCTCCTGCTGCTAGTCTCCAATTGCCAAGGGAATTTAACTGGG
CCAGACTACCTTTTTATACTAGGTCTGGTTGGGTCATTGTCTAGAGTAGGGATTGGCTGTCCTTAAGTCAGGAGC
CCGCTTTGTATTAGCAGGTTTGCATGCAGCAAAAAAACAGTTATGTGAGCAGTTTCACTTGGAGGTTCACATGGG
GTGGCAGCACACTTAACATCTAACACACCAGGTTCATTGTGTTCATAACACTTGTCATTTACTGTAACAACATTT
TTTCATAGGAGAGTAAATAGCCCTTCAGCATGCTCATTCATGAAACAGAAGAGGCTGTACAAGTGAAGACAAGGG
CTTTTTATGCAAGTTTTGAAAGATAGGTATTTATTTTTTCTAGAGACAGGAGTTTTGCTCTGTTGCCCAGGCTGG
AGTGCAGTGGTGCAATCATAGCTCATTGAAGCCTCGCACTCCTGGGCTCAAGTGGTCCTCCTGCCTCAGCTTACT
GAGTAAGGATATGTATTTCTTAAAAGTTAGTTTATCCACTTCAGATTTCATGTTTTCATTTGTAAGGATAAACTT
TTCCCACAAATTTTCAACAATCATTGTAGAAACTAAGGGGGAGAAAGTAATCTCAGTTGTTTTAGAAACGAAAAA
GTTAAGCATTGTTTACTTGAAGTGGGCAGGGAAGCAGCACTGAGTAAAGTTCAATTGAGTGGTTACAGTCTAGGG
CAGTGGTTCCCAACTCTCCGATCAGAATCATCTGGGAAGCATTTTCAAACAGCAAAGTACTTTGAAAACCATTAT
TAAATAGAATTATGCATGAATTACTGTTTCAGATCCTTTAATGTGGTAGTTGGTAATAATAAGATGAAATTCCTC
TGTTGTTAGTAAAATTATGAAATTGAAGTTCTGCAGCATGTCAGGCCAGGATTATTAGGGAGATTCCTCGAAACT
AGTGTGTGTTTATTAAAAGGAGAAAGGATAACAATAGAATGTTCTAAAACCAGAAGTCCAAGTGCGTGTCTACTT
ATGGGACCAATAAATAAAGAACAGACATTTGATTTGAGGTGAGGTAAAAGCCTGAAACATGGAATGGCATTCTGT
TTTGATGGATTTTCATTTCTTCGCACTTCTGAGACGGCAAAGCCAACCACTTAGAAGCCTTCCACATCTTTGTCA
CCTGCCTGGCTCCTGCTCTCTGATGTACCTCTGGGTAGTGAGATGGAAATGGTGCCTGCAGAAGTTGGGGAGAAG
GATACTTTTGCACAGCCTCCATGATGTCTTTATTGCAAATATGGATGACAAGGGTCTCTGTTACAGGGGCCTCAG
AGCACCTTCGTTTCTCCTCTAGACCAGGGACAGGTGTAGAGATAAGGACTGGCAACCAGAGCCTCAGCATCCAAA
GATGGACTGAAGTGGGATGGCTGACAGGCACATAACTTACGGGAAAGGGAATTTCATACATACGATTTTTGTTTT
GTGGGTAGGAGGGCTTATCATCAACACTGATTTTATAATCTGACAATAAATGTCTTTCATTAAAGAGTTTACCTA
AATGAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 7138

MAASAFAGAVRAASGILRPLNILASSTYRNCVKNASLISALSTGRFSHIQTPVVSSTPRLTTSERNLTCGHTSVI
LNRMAPVLPSVLKLPVRSLTYFSARKGKRKTVKAVIDRFLRLHCGLWVRRKAGYKKKLWKKTPARKKRLREFVFC
NKTQSKLLDKMTTSFWKRRN

FIGURE 7139

TTTTTTTTTTGAGATGGAGTTTTCGCTCTTGTTGCCCAGGCTGGAGTGCAATGGCGCAATCTCAGCTCACCGCA
ACCTCCGCCTCCCGGGTTCAAGCGATTCTCCTGCCTCAGCCTCCCCAGTAGCTGGGATTACAGGCATGTGCACCC
ACGCTCGGCTAATTTTGTATTTTTTTTTAGTAGAGATGGAGTTTCTCCATGTTGGTCAGGCTGGTCTCGAACTCC
CGACCTCAGATGATCCCTCCGTCTCGGCCTCCCAAAGTGCTAGATACAGGACTGGCCACCATGCCCGGCTCTGCC
TGGCTAATTTTTGTGGTAGAAACAGGGTTTCACTGATGTGCCCAAGCTGGTCTCCTGAGCTCAAGCAGTCCACCT
GCCTCAGCCTCCCAAAGTGCTGGGATTACAGGCGTGCAGCCGTGCCTGGCCTTTTTATTTTATTTTTTTTAAGAC
ACAGGTGTCCCACTCTTACCCAGGATGAAGTGCAGTGGTGTGATCACAGCTCACTGCAGCCTTCAACTCCTGAGA
TCAAGCATCCTCCTGCCTCAGCCTCCCAAGTAGCTGGGACCAAAGACATGCACCACTACACCTGGCTAATTTTTA
TTTTTATTTTTAATTTTTTGAGACAGAGTCTCAACTCTGTCACCCAGGCTGGAGTGCAGTGGCGCAATCTTGGCT
CACTGCAACCTCTGCCTCCCGGGTTCAAGTTATTCTCCTGCCCCAGCCTCCTGAGTAGCTGGGACTACAGGCGCC
CACCACGCCTAGCTAATTTTTTTGTATTTTTAGTAGAGATGGGGTTCACCATGTTCGCCAGGTTGATCTTGATCT
CTGGACCTTGTGATCTGCCTGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACCACGCCCGGCTTA
TTTTTAATTTTTGTTTGTTTGAAATGGAATCTCACTCTGTTACCCAGGCTGGAGTGCAATGGCCAAATCTCGGCT
CACTGCAACCTCTGCCTCCCGGGCTCAAGCGATTCTCCTGTCTCAGCCTCCCAAGCAGCTGGGATTACGGGCACC
TGCCACCACACCCCGCTAATTTTTGTATTTTCATTAGAGGCGGGGTTTCACCATATTTGTCAGGCTGGTCTCAAA
CTCCTGACCTCAGGTGACCCACCTGCCTCAGCCTTCCAAAGTGCTGGGATTACAGGCGTGAGCCACCTCACCCAG
CCGGCTAATTTAGATAAAAAAATATGTAGCAATGGGGGGTCTTGCTATGTTGCCCAGGCTGGTCTCAAACTTCTG
GCTTCATGCAATCCTTCCAAATGAGCCACAACACCCAGCCAGTCACATTTTTTAAACAGTTACATCTTTATTTTA
GTATACTAGAAAGTAATACAATAAACATGTCAAACCTGCAAATTCAGTAGTAACAGAGTTCTTTTATAACTTTTA
AACAAAGCTTTAGAGCA

FIGURE 7140

MEFSLLLPRLECNGAISAHRNLRLPGSSDSPASASPVAGITGMCTHARLILYFFLVEMEFLHVGQAGLELPTSDD
PSVSASQSARYRTGHHARLCLANFCGRNRVSLMCPSWSPELKQSTCLSLPKCWDYRRAAVPGLFILFFLRHRCPT
LTQDEVQWCDHSSLQPSTPEIKHPPASASQVAGTKDMHHYTWLIFIFIFNFLRQSLNSVTQAGVQWRNLGSLQPL
PPGFKLFSCPSLLSSWDYRRPPRLANFFVFLVEMGFTMFARLILISGPCDLPASASQSAGITGVSHHARLIFNFC
LFEMESHSVTQAGVQWPNLGSLQPLPPGLKRFSCLSLPSSWDYGHLPPHPANFCIFIRGGVSPYLSGWSQTPDLR

FIGURE 7141A

AGATCTCTTGAGGTCAGGAGTTCAAAACTAGCCTAGTCAACATGGAGTTTTCTAAAAGTACAAACAAATTAGCCA
GGTGTGGTGGCAGGTGGCTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATTGCTGGAACCCAGGAGGCT
GAGGTTGCAGTGAGCAAAGATTGCACCACTGTGCTCCAACCTGGGCAAAAGAGCAAGACTCCATCTCAAATAAAT
ACATAAAATAAAATGCATCATTTCTCTCAACAGCAAAAGCCTTATTTTTTCATCCTTTAAATATGTTACTTTCAT
AGTAGGATAAGATGGTACCTTGTCTGAGAGGCTAAGACCCCCAGGCCACTTGAGAATTTGAGAGCTTTTAGAACT
TGATGAGCATAGCTGACTGGATACTTCGTGTCAGCACTGCTTGTGGTAATTACAGGATCTGTGGATCACAAGGCT
CACAACTTGTATCACAAGTTCTACAAGAAAATTGGCTAACACATATTTGGCTCTGTTAATCATTTGCTGAGTTTA
TATCTTGTCCCACCAAATGTATTTTTTGAAATGCCATTACATGAAAAAGTTTCACTATTCCAATTATCTGTGTTT
ACCAACTTGTGGAGTAAGAGTGGCTGACTGAATATGTTGCTTTTTAACTACACTATTATATACATTGGCCAAGCT
TTCTATATTTTCTTAGAATTTAAGATTTTAAAGTCTTTACTTTTTTAAATCATTTATTTGTAAAGGGACATATTT
CTCAAGTGTGCTAGTTTTCCTTGATTTTAATGGATTAAAATGTGTCGTAGGTGAGCCATTTTCTTCCAAATGACG
AAGAGTTTTTGTTCCTTTGAAAGTCTGGCCCAGGATTTTGTTTGTTTTTGTTTTTTTAAAGTTCTTATTTTACTT
ACAGAGTTAAGAAAGTTGAATAACTATACAACCAGTCTCTAAATAGAAGTTCTAATAAATCCTAAGATGTTGCAG
GGCACTGAAAGAGGACAAAATTTGATCCCTAAAGCCCTCTCCAATCTCATACTCGGTGAAAATAACAAACAAAAG
GCTTCAGTGTTAGTGGAAAACTGAGTTCTTAAAAAGCAGGTAAAGGTCCTGTTTGGTCCTTCTCCAGAGCTGAGG
AGAAAGGGTTTTCAGATTATAAATAACAGAGGTGCCCTTGTATGGCACAGAATTGCGATAAGACTTTACTTCTTA
GGGGCTTAAATAATGAAGTCAGTAAAAGAGGACTGAAAACGAACATAAAGAAGAGCTTTAGCTTTGACGCAAAGA
ATTACATCAGTGCTTGACAAAACCGAGGATCCTTAATTTCTAAAAACGCTTTCTTTAAGCACTTCCTAACCTTTC
ATTATCTGAGACAACATATCAAGTGAGCAGCAGTACAAAGGATGCATGTGATTTCGAAATGCCACAATTGAGCCA
ACTGCAGATGCACGCGTACGTAGTATGAGAGGTGTGATCAAAAAAAGAATATAGGGAGCATAGGGCTTCGTCTGC
ATCAAAAGATACTCTCCCCATCTTCTATAGCCTTAAGTTTTGCGAAGGTAAGTTTCTCCCCGCTTGAAAGCGCCC
CCAGGGACAAGAATTCATCTTGACCAAGCCTAAGGGCGTGGTATGCAAGGTGTTGAGTCACCGGGTACAGCGGTC
TTGCGACATAAATATTATTTGATGACGAAGGTACTCGGGGCCCAGGTGCCAAGGTAAACCACTGGCAAAGATGAC
CGCGGTTAAGGCAGTAGAAAGCAGGCTCGACACTGAGACGCGGCTCCAGCCCTAGAAGGATTGCATTTTACGATT
CAGGCAAACTTCGAGTCTCCTCATGTGACATGTGTGCACTCCTGGACCGTTTTAATTATGAGAAACGTGGTTTGC
AGCATGATTCCTTCCAGTCGATAAATCGGAATCTCTCTCGCTCCCACCCCTTCTTAACTTCAGGCTTCCTGCATC
CCGGAGCACTCCCGGCAGCCCCTTCCCTCCCCCGCCCCGGGGATGCTCCGACTCGGCGCTTAGCCATTCATCAAC
CGGTTCACACCGGCGGCGGCCGCCGCGGAGTGACGTCCGGAGGGGGCGGGCCTCCGCCCCCGCCTGTCGGCTCCT
GGCCCGCGGTTCCAGACCGCGATTGGTGGCTGGAGGGTTGCACGTCGCGCCGGCTATAAAGGGGAGGGCTTGTGA
CGCAAGGGCGCCTCGGCGCGTGTATTGGCTCCTTCGGCTGCGGGCCGGCTCGCCTACGCGCTCTGCTCCGAGCCG
CTCACTGCATGGTAGAGTCTGGTGCCCCCGCCGCCGCCTGCATCGCCGCCACCGCCGCTCCGCCACGACCACCGC
CGCCTCCTTGTCCTGCAGCCACCGCCACCGCCTGTGTCGCCGCCGCTCGGGACCGGCTGTATGATTAGGCCACAA
TCTTCAATGAGTAAACATATTCCTGTGAGTAGCCGTCGCATCGTCGCCTCTCGGGCTGGGAATCCACGACCGGCC
CCCCATCCCCGCTGTCGCCTTTGTTCGGAGCCCGGCGTCTCCTCCAGGTTGCCCCGGGTGGGAGCGGGCGGGTTA
TGGCCCTGTGGCCGGCCGATTGCGGCCGGCTGTGCGGAGGCAGATGCCGGGCCCCTCGGGGCTGCGGGGTGGCGG
TTGGCCGCCGGAGGCACCGGCTTTTGAGTCCCTCCCGAGCCCGGAGCGACGGGGGCGGCGCGGTCCGGCTTCTGC
GGCGGCCGGGGGCAGTTTCGGCTTCCGCAGCGGGCCGGGTGGGTGGCACAAAAGCCGCTTTGTGACCGCCGCCTC
CGCCCTTGGCCCTTTGGTCTGGCGCGACCCGTCCGGGCATGGCAGGCTCCGCGGCGTCCCGGGGCCTCTTTGTTC
GACCGGAGGAGAGTGGCTGCACTGGGAGCGGGAGACGTGGCCCGGGGTGGGGCGAGGACTGCGCGTGTCACTGCG
GAACCGGATACGGGGAGGGCGCGGCGGTGGCGGGTTCACTCCAGATCCGGGCGGGCGTGGGGTAGGCCGGACATC
CAGGCACGTGTGGTAACGATCTGGTTCCAGAGCTTCTCGGAGCTCTGTGGCGTAATATGTTGTTGCCTCCTGTTG
GTTTGTGGCAGCAGTAGCCAACCAGAGACGGAATTCTGAGGGTTTTTTATCTTCTGTCCGCGGAGCCCCCTACCA
GTCCACGAGTATTAAGTTATTTACACTACGATTGGAACTGTTGACCTGCCCGACATCTAGATCCTGAGGCAGTGC
TTCCTGTTACTCAGTCAGTTGAAAACTAGAAAACTAAATCATTCCCAAGAGTGAGCAGGATTTTACACATGCTTT
CTTAGGTGCCCTAAGACCTAAATAGATGTGGAACAGACTATACAACGAATTGTTTGTGACAAAGGAGTTACACAC
ATTAATTGGCTCGACTCTGCAGCATAATAATGATTTAAGCTTCTGCACAGAGATTACTCTTTCCTCCTCTCCCTT
CTTGTATATGATTGTGATTCATATAGCCCGATTGGAGCTCTGTGGTGTAATATGTTGTTGCCTCCTGTTGGTATA
ATGCAACTGATAGGTGGGAGGGAAAAAAATCCCCATTATGGATAGTTTTTCCTGTGGGTAGGAGATTGGGAATGG

FIGURE 7141B

AGGAGTGTCTTGGGCGGAACAGAAATCTATCGGTGGCCACCACTGCTTTAACAGACGAGTCCCCCCATCCACTAG
GTGGCTCCACTCAGTAAAAATAACCATTTCAGGAAGGGAATTCTTAATATAGTTCTTTCTCTGCTTCCTGATGAA
AGTGCTTACTTACATGAAGGGATATGGCCAGACTAGGTTGTAGCCGACAGGAGTTTTAGCTATTAAATATGGAAA
TAGTGGTGTGAAATACTGCCTCAAATTAGCTTTTAATTGAAAAAAAGGTAATACCTAGAAATTAGAATACTGTGA
TGATCATTAGAAGCTTTTAAAGATCATTGTATGTCATTGGGAAAGTGTCAGAATACACTTTTTATTCTACGGAGG
TTGTATTTAGAATTTGGGGTGAAAGTATAATGAAATTATTTTCAGATTACTACAATCTGTATTCACTGTAACTGT
GATGGCTTTGTAATTTAGACACTTAATTTTTTAACCCAGCTGACCAACTAGGTGAAGTAACCTCTGAGGGCTTGT
TTGAACAAACTTGTGATAATGAAAGTTACCTTTTTTTATGGGACCTTTTGATAAATGATTGTTAATGCTAGTTGTA
TGTTTTACCAGAAAAGTAGACTGGGTTTTTGACTTGATGTTTTCTGCAGCAATCATCATAAGAATTATTCTTCAA
AATTTAGCAAAGTTCTAGAAACTATAACTAGCATGGGACTATTTAAAGGTGTAAAATGGAAATGGGAGCAGATCG
TTTGAATTTTAATTTTAAGACTTCAAATGCTTAAATTTAAGCATGGAAACTAATGGAACCTTTTGTTAAAACACT
TTGGTAATGAGAGTACACATGAAGTGCTTGAGGCAGTGACTATGAATTACTGCTCTTGTTAACCTGTTATTAATA
CTTCCCTTAGTGCCCTCTTTACTCCCGAGTACACAAGTACCTTATAAACTATTTGGAAGAAGACTGATTATTAAC
ATCAGTGTCTTCCATGTACATATTTTAAAAATATGCTGTGACTATTGGTTTAATGTTTGATATTGGCATAAAAAT
GGTTTAGTTCTTAAGGGGGAACTTAGAGAAAATATAAATACATCCATATTTGTTTATATTTATTGGTTACAGTAG
TTACCTTGCTTTTGAGACCTGCCACTTCCACCTTCAACATCCCTTTGTCCGCCTTCTCTGAATTTGGATTTCCAG
TTTGGAGTTGTCTATGTGAAATTTGGGTTTTAAAATACAAAAGAACATTATTAAAATTATGAATATTTTCTTTAC
AGTTATAAATGAGAGTTGTTTCCTTTTTAGATTCATAAGCATACATTCTTATGATATTTCACATAACAAGTTGAT
TTTCAGAGACTCATTTTCCTCGTCTTCAGTTTAATGGGAATGATAACAGATTGTTAAGGATAAAGTGAGATTCTA
AATATAGGACTTAAATCAGTCTAAGAAAAGGATATAAAAGCATAAAGTTGGAAAAGAACTTAGATGTTTCAGTTT
ATGAGTTAAGTAAATTATGCAAGACTAATAACTTCAGAGTTATCTGGAGTTTGTATTAATGTGTAAAAATGTTTX
TGXTAGTTGGAAAAATCAACATAAAGTGTATGTAATTACAATGTAAAGAAAACAACTATCGAAAGGGATAATTAT
TAGAATCATATAATTATATATTATATATAGATAGTATATATACAGAGAATATAACTAGATAGAATATATATGAAT
ATATATATGAATTTCACAAAAATGTAACAATGGGTTGGTTTTTTTTTCTGAGGAATCTTGGTAATAGATCATGGA
TTTCAGTTTAATCTATCTGXCTGCTTGTTTTATGCTGATTGATTTAATCTGTACTCACCCCTTGAGTTTTGCAAT
TCAAGTAAAAGTCGATGAAGCGGCTCAGGCCCTGCTTTAGAAAAATAGTTGTGTACTTAAATAGTGTAAAACCCT
AATGTATTTCTTTTGAATTGGAAAATAACTTATTCTCTCTTTCTGTACTTTTTCTTTTAAACAGCAATTCTGTGG
TGTTCTTGGTCACACATTTATGGAGTTTCTGAAGGGCAGTGGAGATTACTGCCAGGCACAGCACGACCTCTATGC
AGACAAGTGAACTGTAGAAACTGATTACTGCTCCACCAAGAAGCCCCCATAAGAGTGGTTATCCTGGACACAGAA
GTGTTGAAATCCACAGAGCATTTTACAAGAGTTCTGACCTGGATGGGGTAAACCTCAGTGCACTTCTTTTCTGTT
GGCCTCAGTATTACTGGATTGAAGAATTGCTGCTTCTTGTTAGGAGGTTCATTTCACTTATCATTACTTACAACT
TCATACTCAAAGCACTGAGAATTTCAAGTGGAGTATATTGAAGTAGACTTCAGTTTCTTTGGATCATTTCTGTAT
TCAATTTTTTTAATTATTTCATAACCCTATTGAGTGTTTTTTAACTAAATTAACATGGCTCGAATGAACCGCCCA
GCTCCTGTGGAAGTCACATACAAGAACATGAGATTTCTTATTACACACAATCCAACCAATGCGACCTTAAACAAA
TTTATAGAGGTAAGATTTGATATGTTTTAGTAGCTTAAATTGATTGCAATATAATAGTGGGACTTATAGCTAACA
AAATAAAAACTACTTTGGAAAAAATGAGATGATATACCTACAATTCCAGTTCCCAGAAATAAATGTCAATGTTTT
CTATAGGTTAGAGGTATATTTGTACATTTTGAGAAGGGCATGTGCTTGAGTTAATAGTTATTGTACCTGAGTTTG
CTTGAATTGGTATGTGGACAGTAAAACAGTATAGCTCTTACTTATTCTTGTAAGAAATTTACATGGGAAAGGTTG
CCATTTATGGATTTTTTATATATCTGCTTAACCTAATGACTAATGCCATAAACCAGTTTGGTTTTTCTTGAACCC
CATCTGATGCTTAGAATCCAATTTTTAACTACAAATTCTGTTCCTTCCTAATGGTAGCTATGTAGCCAAAACTCT
ACCTGCTCTTTTTACTAGGAGAAAGGAATTGAATGCTGAATAATATATCGGGATGTGCACATGTTTTATTTTATA
AATACCTAACAGTTGTTAAGAAATAGCAAATAGGCCTCTCAGAACATAATGGAAATACTTTTTTTTCCTTTTTTT
GAGATGGAGTCTCGTTCTGTCACCCAGGCTGGAGTGCAGTGGCATGATCTCAGCCCACTGCAACCTCTGCCTCCC
GGGTTCAAGCAATTCTCCTGCCTCAGCCTCCCAAGTAGCTGAGACTACAGGCGTACGCCACCTTGCCCAGCTAAT
TTTTGTATTTTTAGATGTAGTTTCACCATATTGGCCAGGCTGGTCTCGAACTCCTGACCTCAGGTGAGCCACCAC
GCCTGGCTGGGAAATACTTGAATGGTACTTTAATTTTTATTACTATATATTATATATACACTAATATATACTATA
TAGTGTATATAATAGTATATTATATTAGTAATATGTAATTAGTAATAATGCATTTTGAAGCCTGTAGTTTTAAAT
GGTATGTGGGCTTTTTTACTGTAGTTAAGACTTCATTCAATGTATTTTAAATCAGTAAAGTTTAAGGAGTGAGTA

FIGURE 7141C

TAATTGAGTGAAGTCAGATTACCCGATGAGTTATAAATAATGCCTTTAGTTACATTAACCTTTGTCTGCATTGCT
GCTAGCCCCTTTTGGTTAATGTTTCATCCCAATCCGGTATTACCATGACTAGTAAACAACTTCAGTGTATGAAGG
GGGCACACAATTTAAACAAAAGAAGGAAAACTTTTCCAGTTTATTAAAAATATGTATGGTATTTAATATTCACTT
TTCTTTTTATATTCTAGCATTGTCACTTAAACCAAAATTTGCTTTTGTGTTAAACATAAATGGATTCTAGCATTC
TTTAAATGATCTTCTGTTAACCAGCATACTTACTGATCAGAGATGATCAGAATATAAAATGTTGAGTTATAGTGA
TGTGGTTAAACATTAAGATTTTTTTAATGTACGTTTTATCCAGGAACTTAAGAAGTATGGAGTTACCACAATAGT
AAGAGTATGTGAAGCAACTTATGACACTACTCTTGTGGAGAAAGAAGGTATCCATGTTCTTGTAAGTATTTAACA
GTTCTTATGGGTTTATGGTGCTGTGCTACAAAAGTTTATTCAAATAGTAAATTCAAATAAATATCTATTTAAGTC
ATAAATAGACCTCAAAAAGCTAAAAACAAATATTATATTATTGTGCAGAATCTTAATTTCTAAATGGAGGTGAAA
AGCTAAGCAAGGATTTGAAGTTGTGAAACATTTTTGTAAAGATTGAGCATTTAGTCACATTTGGTAGACAACAGG
GTTTAATAAGAATTGAGTAAACAATTAAATGAGAATGCTTTGTGAAAACATTTCCATGTTAGAAATTTAGAATTA
TTGCTACAGTGTTTATATTAATGATCTAAAATGTTTAAATATTCTTCTGACTTAGGATTGGCCTTTTGATGATGG
TGCACCACCATCCAACCAGATTGTTGATGACTGGTTAAGTCTTGTGAAAATTAAGTTTCGTGAAGAACCTGGTTG
TTGTATTGCTGTTCATTGCGTTGCAGGCCTTGGGAGGTAAATGAATTTATCAATTTGATTCTAGGTAAAAATCTA
TTGATAATGAAAATACAGAAACTTGAAAAATTCTTATAATTTTTTAATATAAAGTCAACATTTGTCATAGGTATT
ACTTAAATAGGAAGGGTGGTAGATAATACTTCTGAGTTGGGGAATGTTTGGAGAAATAAATTTACAAAGATCTGA
TTTTGAAAAAACTATTTATCAAAATTCTTACCTCACCAGAGCTCCAGTACTTGTTGCCCTAGCATTAATTGAAGG
TGGAATGAAATACGAAGATGCAGTACAATTCATAAGACAGTAAGTAATGGATTCTCTTTTCATTTGTACTCTCTT
TCATTTCCTTGTTGAGTGTCAGTGAGTTTAATAGTCTAATAGCCCATTTAATCATTATGATTATTTTTTGAGATA
GTATTAAAACCAGGAAATCAAGATCTTACATTCTTTTTTGCATTTCATGCAGTTGCTCATATTACTAAGATTCTA
ATCCAACAAGAGTTTTTGAATTATTGTTTTGCTTTAAATACTTGATTGAATATGTTGGTTTATTTTGTATTTTTA
TTGAGGTATAATTAAGATACATTTAAAGATACAATAAAATGCACAGGTCTCCAAAGGAGACCAGTTGACAATAAC
AGCCAAATTAACCATCCAATACAACACATAGAATATTTTGAGTGCTGTAGAACATGCCTTTGTGGCTTTTGTAGT
CATCTTCCCTGCTACCAGAGGCAACTTCTGACTTCACTATAAATTAGTTTTGTCTTTTCGTGGACTTACGTGTAA
ATGGATTTGTGAGTCGACTGTTGTAACCAATACTCAAACGAAGATATAAAGAAAATTAACTTTTTATGATTTTTT
CCATTTACACTGATGTGCCTGTTCATATTCCTTTCTGCATCAGGTCACAGCCTAATTATCCCAAAGATAAATTTC
CACAAGAGAGGTGATGGTTGTCTATAAGACACTAAATATTACTGTAGGGGGCTTTTGCCGTGTTTCAAAATTTTT
TTTTTTTCCTCCCAGAAAGCGGCGTGGAGCTTTTAACAGCAAGCAACTTCTGTATTTGGAGAAGTATCGTCCTAA
AATGCGGCTGCGTTTCAAAGATTCCAACGGTCATAGAAACAACTGTTGCATTCAATAAAATTGGGGTGCCTAATG
CTACTGGAAGTGGAACTTGAGATAGGGCCTAATTTGTTATACATATTAGCCAACATGTTGGCTTAGTAAGTCTAA
TGAAGCTTCCATAGGAGTATTGAAAGGCAGTTTTACCAGGCCTCAAGCTAGACAGATTTGGCAACCTCTGTATTT
GGGTTACAGTCAACCTATTTGGATACTTGGCAAAAGATTCTTGCTGTCAGCATATAAAATGTGCTTGTCATTTGT
ATCAATTGACCTTTCCCCAAATCATGCAGTATTGAGTTATGACTTGTTAAATCTATTCCCATGCCAGAATCTTAT
CAATACATAAGAAATTTAGGAAGATTAGGTGCCAAAATACCCAGCACAATACTTGTATATTTTTAGTACCATACA
GAAGTAAAATCCCAGGAACTATGAACACTAGACCTTATGTGGTTTATTCCTTCAGTCATTTCAAACATTGAAAGT
AGGGCCTACATGGTTATTTGGCTGCTCACTTTATGTTTACATCTCCCACATTCATACCAATATACGTCAGGTTTG
GTTAACCATTGATTTTTTTTTTTTTTTACCAAGTCTTACAGTGATTATTTTACGTGTTTCCATGTATCTCACTTT
GTGCTGTATTAAAAAAACCTCCATTTXGAAAATCTACGTTGTACAGAAGCACATGTCTTTAATGTCTTCAGACAA
AAAAGCCTTACATTAATTTAATGTTTGCACTCTGAGGTGCAACTTAACAGGGAGGGCCTGAGAAAAGAATGGGAG
GGGGCTATTAATTATTTTTAGCAAAATGTTGCCTTTGTCTTGTGCAAACATGTAGAATATGCTCTTTAATTTAGT
AAAATATTTTTTTAAAAGGTAGAGATGCTTTGTTATTGTAATCATAAACTTCCTGAAATTCTTGTAATTTTTTTC
CCATACTTATCAGAAGTGTGTTTACCAACTTATTCTTGTTTGAAAGTGTGATTTTTTTTTTCCTTCCCAACCTCT
CTTGCAAAAAAAGAAATGGGTTTCTGCTAATGAATTGAGCAGACATCTAATATTTTATATGCCTTTTGGAGCTGG
GTAACTTAATATTTGGATACTTGACAATTTGTTTTATTATGTAATTGATAAAATGGTGATGTGTATTAATGTTAG
TTCAACCATATATTTATACTGTCTGGGGATGTGTGGTTATAGTTCTGTGGGAGAAATAATTTTGTCAGTGTTCAC
CAGCTTGTAAAAACTTAGTGCGAGAGCTGAAACATCTAAATAAATAATGACATGCATTTATCATCATTGAGATTG
GTTTGCTTAAAATTAACTTATTTTGTAGAAGACAAAATGAATTGCACTTCACTTAATGTGTGTCCTCATCTTTTT
ACAAATAAATGAAGGATTATAAATGATGTCAGCATTTTAGTAAACTTATAGACAAAATTTGTTAGGGTCATTCAT

FIGURE 7141D

GAAAACTTTAATACTAAAAGCACTTTCCATTATATACTTTTTAAAGGTCTAGATAATTTTGAACCAATTTATTAT
TGTGTACTGAGGAGAAATAATGTATAGTAGAGGACAGCCTTGGTTTGTAAAGCTCAGCTCCACTAGTTCATGGTT
TGGTGCAACTTCTGAGCCTCAGTTCTCTCCTTTGCAAATTAATAATTACATACCTGCCTAGATTTCGGAAATTAA
TCTAAATATTAGTATCTGGCTACATGATGGCCATGTCAAGT

FIGURE 7142

ATGGCGGAGCTGATCCAGAAGAAGCTACAGGGAGAAGTGGAGAAATATCAACAGCTACAGAAGGACTTAAGTAAA
TCCATGTCGGGGAGGCAGAAACTTGAAGCACAACTAACAGAAAATAATATCGTGAAAGAGGAACTGGCCCTGCTG
GATGGGTCCAACGTGGTCTTTAAACTTCTGGGTCCGGTGCTAGTCAAACAGGAGCTGGGGGGAGGCTCGGGCCACA
GTAGGGAAGAGGCTGGACTATATCACAGCTGAAATTAAGCGATACGAATCCCAGCTTCGGGATCTTGAGCGGCAG
TCAGAGCAACAGAGGGAGACCCTTGCTCAGCTGCAGCAGGAGTTCCAGCGGGCCCAGGCAGCAAAGGCAGGGGCT
CCTGGCAAGGCCTGA

FIGURE 7143

MAELIQKKLQGEVEKYQQLQKDLSKSMSGRQKLEAQLTENNIVKEELALLDGSNVVFKLLGPVLVKQELGEARAT
VGKRLDYITAEIKRYESQLRDLERQSEQQRETLAQLQQEFQRAQAAKAGAPGKA

FIGURE 7144

GCTGAAGTGAAAACGAGACCAAGGTCTAGCTCTACTGTTGGTACTTATGAGATCCAGTCCTGGCAACATGGAGAG
GATTGTCATCTGTCTGATGGTCATCTTCTTGGGGACACTGGTCCACAAATCAAGCTCCCAAGGTCAAGATCGCCA
CATGATTAGAATGCGTCAACTTATAGATATTGTTGATCAGCTGAAAAATTATGTGAATGACTTGGTCCCTGAATT
TCTGCCAGCTCCAGAAGATGTAGAGACAAACTGTGAGTGGTCAGCTTTTTCCTGTTTTCAGAAGGCCCAACTAAA
GTCAGCAAATACAGGAAACAATGAAAGGATAATCAATGTATCAATTAAAAAGCTGAAGAGGAAACCACCTTCCAC
AAATGCAGGGAGAAGACAGAAACACAGACTAACATGCCCTTCATGTGATTCTTATGAGAAAAAACCACCCAAAGA
ATTCCTAGAAAGATTCAAATCACTTCTCCAAAAGATGATTCATCAGCATCTGTCCTCTAGAACACACGGAAGTGA
AGATTCCTGAGGATCTAACTTGCAGTTGGACACTATGTTACATACTCTAATATAGTAGTGAAAGTCATTTCTTTG
TATTCCAAGTGGAGGAGCCCTATTAAATTATATAAAGAAATA

FIGURE 7145

MRSSPGNMERIVICLMVIFLGTLVHKSSSQGQDRHMIRMRQLIDIVDQLKNYVNDLVPEFLPAPEDVETNCEWSA
FSCFQKAQLKSANTGNNERIINVSIKKLKRKPPSTNAGRRQKHRLTCPSCDSYEKKPPKEFLERFKSLLQKMIHQ
HLSSRTHGSEDS

FIGURE 7146

CTGAAGAACAAATCAGCCTGGTCACCAGCTTTTCGGAACAGCAGAGACACAGAGGGCAGTCATGAGTGAGGTCAC
CAAGAATTCCCTGGAGAAAATCCTTCCACAGCTGAAATGCCATTTCACCTGGAACTTATTCAAGGAAGACAGTGT
CTCAAGGGATCTAGAAGATAGAGTGTGTAACCAGATTGAATTTTTAAACACTGAGTTCAAAGCTACAATGTACAA
CTTGTTGGCCTACATAAAACACCTAGATGGTAACAACGAGGCAGCCCTGGAATGCTTACGGCAAGCTGAAGAGTT
AATCCAGCAAGAACATGCTGACCAAGCAGAAATCAGAAGTCTAGTCACTTGGGGAAACTACGCCTGGGTCTACTA
TCACTTGGGCAGACTCTCAGATGCTCAGATTTATGTAGATAAGGTGAAACAAACCTGCAAGAAATTTTCAAATCC
ATACAGTATTGAGTATTCTGAACTTGACTGTGAGGAAGGGTGGACACAACTGAAGTGTGGAAGAAATGAAAGGGC
GAAGGTGTGTTTTGAGAAGGCTCTGGAAGAAAAGCCCAACAACCCAGAATTCTCCTCTGGACTGGCAATTGCGAT
GTACCATCTGGATAATCACCCAGAGAAACAGTTCTCTACTGATGTTTTGAAGCAGGCCATTGAGCTGAGTCCTGA
TAACCAATACGTCAAGGTTCTCTTGGGCCTGAAACTGCAGAAGATGAATAAAGAAGCTGAAGGAGAGCAGTTTGT
TGAAGAAGCCTTGGAAAAGTCTCCTTGCCAAACAGATGTCCTCCGCAGTGCAGCCAAATTTTACAGAAGAAAAGG
TGACCTAGACAAAGCTATTGAACTGTTTCAACGGGTGTTGGAATCCACACCAAACAATGGCTACCTCTATCACCA
GATTGGGTGCTGCTACAAGGCAAAAGTAAGACAAATGCAGAATACAGGAGAATCTGAAGCTAGTGGAAATAAAGA
GATGATTGAAGCACTAAAGCAATATGCTATGGACTATTCGAATAAAGCTCTTGAGAAGGGACTGAATCCTCTGAA
TGCATACTCCGATCTCGCTGAGTTCCTGGAGACGGAATGTTATCAGACACCATTCAATAAGGAAGTCCCTGATGC
TGAAAAGCAACAACAATCCCATCAGCGCTACTGCAACCTTCAGAAATATAATGGGAAGTCTGAAGACACTGCTGT
GCAACATGGTTTAGAGGGTTTGTCCATAAGCAAAAAATCAACTGACAAGGAAGAGATCAAAGACCAACCACAGAA
TGTATCTGAAAATCTGCTTCCACAAAATGCACCAAATTATTGGTATCTTCAAGGATTAATTCATAAGCAGAATGG
AGATCTGCTGCAAGCCAAATGTTATGAGAAGGAACTGGGCCGCCTGCTAAGGGATGCCCCTTCAGGCATAGGCAG
TATTTTCCTGTCAGCATCTGAGCTTGAGGATGGTAGTGAGGAAATGGGCCAGGGCGCAGTCAGCTCCAGTCCCAG
AGAGCTCCTCTCTAACTCAGAGCAACTGAACTGAGACAGAGGAGGAAAACAGAGCATCAGAAGCCTGCAGTGGTG
GTTGTGACGGGTAGGAGGATAGGAAGACAGGGGGCCCAACCTGGGATTGCTGAGCAGGGAAGCTTTGCATGTTGC
TCTAAGGTACATTTTTAAAGAGTTGTTTTTTGGCCGGGCGCAGTGCTCATGCCTGTAATCCCAGAACTTTGGGAG
GCCGAGGTGGGCGGATCACGAGGTCTGGAGTTTGAGACCATCCTGGCTAACACAGTGAAATCCCGTCTCTACTAA
AAATACAAAAAATTAGCCAGGCGTGGTGGCTGGCACCTGTAGTCCCAGCTACTTGGGAGGCTGAGGCAGGAGAAT
GGCGTGAACCTGGAAGGAAGAGGTTGCAGAGAGCCAAGATTGCG

FIGURE 7147

MSEVTKNSLEKILPQLKCHFTWNLFKEDSVSRDLEDRVCNQIEFLNTEFKATMYNLLAYIKHLDGNNEAALECLR
QAEELIQQEHADQAEIRSLVTWGNYAWVYYHLGRLSDAQIYVDKVKQTCKKFSNPYSIEYSELDCEEGWTQLKCG
RNERAKVCFEKALEEKPNNPEFSSGLAIAMYHLDNHPEKQFSTDVLKQAIELSPDNQYVKVLLGLKLQKMNKEAE
GEQFVEEALEKSPCQTDVLRSAAKFYRRKGDLDKAIELFQRVLESTPNNGYLYHQIGCCYKAKVRQMQNTGESEA
SGNKEMIEALKQYAMDYSNKALEKGLNPLNAYSDLAEFLETECYQTPFNKEVPDAEKQQQSHQRYCNLQKYNGKS
EDTAVQHGLEGLSISKKSTDKEEIKDQPQNVSENLLPQNAPNYWYLQGLIHKQNGDLLQAKCYEKELGRLLRDAP
SGIGSIFLSASELEDGSEEMGQGAVSSSPRELLSNSEQLN

FIGURE 7148

GGGAATAGCAGAATAGGAGCAAGCCAGCACTAGTCAGCTAACTAAGTGACTCAACCAAGGCCTTTTTTCCTTGTT
ATCTTTGCAGATACTTCATTTTCTTAGCGTTTCTGGAGATTACAACATCCTGCGGTTCCGTTTCTGGGAACTTTA
CTGATTTATCTCCCCCCTCACACAAATAAGCATTGATTCCTGCATTTCTGAAGATCTCAAGATCTGGACTACTGT
TGAAAAAATTTCCAGTGAGGCTCACTTATGTCTGTAAAG**ATG**GGAAAAAAATACAAGAACATTGTTCTACTAAAA
GGATTAGAGGTCATCAATGATTATCATTTTAGAATGGTTAAGTCCTTACTGAGCAACGATTTAAAACTTAATTTA
AAAATGAGAGAAGAGTATGACAAAATTCAGATTGCTGACTTGATGGAAGAAAAGTTCCGAGGTGATGCTGGTTTG
GGCAAACTAATAAAAATTTTCGAAGATATACCAACGCTTGAAGACCTGGCTGAAACTCTTAAAAAAGAAAAGTTA
AAAGTAAAAGGACCAGCCCTATCAAGAAAGAGGAAGAAGGAAGTGCATGCTACTTCACCTGCACCCTCCACAAGC
AGCACTGTCAAAACTGAAGGAGCAGAGGCAACTCCTGGAGCTCAGAAAAGAAAAAAATCAACCAAAGAAAAGGCT
GGACCCAAAGGGAGTAAGGTGTCCGAGGAACAGACTCAGCCTCCCTCTCCTGCAGGAGCCGGCATGTCCACAGCC
ATGGGCCGTTCCCCATCTCCCAAGACCTCATTGTCAGCTCCACCCAACAGTTCTTCAACTGAGAACCCGAAAACA
GTGGCCAAATGTCAGGTAACTCCCAGAAGAAATGTTCTCCAAAAACGCCCAGTGATAGTGAAGGTACTGAGTACA
ACAAAGCCATTTGAATATGAGACCCCAGAAATGGAGAAAAAAATAATGTTTCATGCTACAGTGGCTACACAGACA
CAGTTCTTCCATGTGAAGGTTTTAAACACCAGCTTGAAGGAGAAATTCAATGGAAAGAAAATCATCATCATATCA
GATTATTTGGAATATGATAGTCTCCTAGAGGTCAATGAAGAATCTACTGTATCTGAAGCTGGTCCTAACCAAACG
TTTGAGGTTCCAAATAAAATCATCAACAGAGCAAAGGAAACTCTGAAGATTGATATTCTTCACAAACAAGCTTCA
GGAAATATTGTATATGGGGTATTTATGCTACATAAGAAAACAGTAAATCAGAAGACCACAATCTACGAAATTCAG
GATGATAGAGGAAAAATGGATGTAGTGGGGACAGGACAATGTCACAATATCCCCTGTGAAGAAGGAGATAAGCTC
CAGCTTTTCTGCTTTCGACTTAGAAAAAAGAACCAGATGTCAAAACTGATTTCAGAAATGCATAGTTTTATCCAG
ATAAAGAAAAAAACAAACCCGAGAAACAATGACCCCAAGAGCATGAAGCTACCCCAGGAACAGCGTCAGCTTCCA
TATCCTTCAGAGGCCAGCACAACCTTCCCTGAGAGCCATCTTCGGACTCCTCAGATGCCACCAACAACTCCATCC
AGCAGTTTCTTCACCAAGAAAAGTGAAGACACAATCTCCAAAATGAATGACTTCATGAGGATGCAGATACTGAAG
GAAGGGAGTCATTTTCCAGGACCGTTCATGACCAGCATAGGCCCAGCTGAGAGCCATCCCCACACTCCTCAGATG
CCTCCATCAACACCAAGCAGCAGTTTCTTAACCACGTTGAAACCAAGACTGAAGACTGAACCTGAAGAAGTTTCC
ATAGAAGACAGTGCCCAGAGTGACCTCAAAGAAGTGATGGTGCTGAACGCAACAGAATCATTTGTATATGAGCCC
AAAGAGCAGAAGAAAATGTTTCATGCCACAGTGGCAACTGAGAATGAAGTCTTCCGAGTGAAGGTTTTTAATATT
GACCTAAAGGAGAAGTTCACCCCAAAGAAGATCATTGCCATAGCAAATTATGTTTGCCGCAATGGGTTCCTGGAG
GTATATCCTTTCACACTTGTGGCTGATGTGAATGCTGACCGAAACATGGAGATCCCAAAAGGATTGATTAGAAGT
GCCAGCGTAACTCCTAAAATCAATCAGCTTTGCTCACAAACTAAAGGAAGTTTTGTGAATGGGGTGTTTGAGGTA
CATAAGAAAAATGTAAGGGGTGAATTCACTTATTATGAAATACAAGATAATACAGGGAAGATGGAAGTGGTGGTG
CATGGACGACTGAACACAATCAACTGTGAGGAAGGAGATAAACTGAAACTCACCAGCTTTGAATTGGCACCGAAA
AGTGGGAATACCGGGGAGTTGAGATCTGTAATTCATAGTCACATCAAGGTCATCAAGACCAGGAAAAACAAGAAA
GACATACTCAATCCTGATTCAAGTATGGAAACTTCACCAGACTTTTTCTTC**TAA**AATCTGGATGTCATTGACGAT
AATGTTTATGGAGATAAGGTCTAAGTCCCTAAAAAAATGTACATATACCTGGTTGAAATACAACACTATACATAC
ACACCACCATATATACTAGCTGTTAATCCTATGGAATGGGGGTATTGGGAGTGCTTTTTTAATTTTTCATAGTTT
TTTTTTAATAAAATGGCATATTTTGCATCTACAACTTCTATAATAAGAAAAAATAAATAAACATTATCTTTTTTG
TGAAAAAAA

FIGURE 7149

MGKKYKNIVLLKGLEVINDYHFRMVKSLLSNDLKLNLKMREEYDKIQIADLMEEKFRGDAGLGKLIKIFEDIPTL
EDLAETLKKEKLKVKGPALSRKRKKEVHATSPAPSTSSTVKTEGAEATPGAQKRKKSTKEKAGPKGSKVSEEQTQ
PPSPAGAGMSTAMGRSPSPKTSLSAPPNSSSTENPKTVAKCQVTPRRNVLQKRPVIVKVLSTTKPFEYETPEMEK
KIMFHATVATQTQFFHVKVLNTSLKEKFNGKKIIIISDYLEYDSLLEVNEESTVSEAGPNQTFEVPNKIINRAKE
TLKIDILHKQASGNIVYGVFMLHKKTVNQKTTIYEIQDDRGKMDVVGTGQCHNIPCEEGDKLQLFCFRLRKKNQM
SKLISEMHSFIQIKKKTNPRNNDPKSMKLPQEQRQLPYPSEASTTFPESHLRTPQMPPTTPSSSFFTKKSEDTIS
KMNDFMRMQILKEGSHFPGPFMTSIGPAESHPHTPQMPPSTPSSSFLTTLKPRLKTEPEEVSIEDSAQSDLKEVM
VLNATESFVYEPKEQKKMFHATVATENEVFRVKVFNIDLKEKFTPKKIIAIANYVCRNGFLEVYPFTLVADVNAD
RNMEIPKGLIRSASVTPKINQLCSQTKGSFVNGVFEVHKKNVRGEFTYYEIQDNTGKMEVVVHGRLNTINCEEGD
KLKLTSFELAPKSGNTGELRSVIHSHIKVIKTRKNKKDILNPDSSMETSPDFFF

FIGURE 7150A

CGCTCGATCTTGGGACCCACCGCTGCCCTCAGCTCCGAGTCCAGGGCGAGTGCAGAGCACAGCGGGCGGAGGACC
CCGGGCGCGGGCGCGGACGGCACGCGGGGCATGAACCTGGAGGGCGGCGGCCGAGGCGGAGAGTTCGGCATGAGC
GCGGTGAGCTGCGGCAACGGGAAGCTCCGCCAGTGGCTGATCGACCAGATCGACAGCGGCAAGTACCCCGGGCTG
GTGTGGGAGAACGAGGAGAAGAGCATCTTCCGCATCCCCTGGAAGCACGCGGGCAAGCAGGACTACAACCGCGAG
GAGGACGCCGCGCTCTTCAAGGCTTGGGCACTGTTTAAAGGAAAGTTCCGAGAAGGCATCGACAAGCCGGACCCT
CCCACCTGGAAGACGCGCCTGCGGTGCGCTTTGAACAAGAGCAATGACTTTGAGGAACTGGTTGAGCGGAGCCAG
CTGGACATCTCAGACCCGTACAAAGTGTACAGGATTGTTCCTGAGGGAGCCAAAAAAGGAGCCAAGCAGCTCACC
CTGGAGGACCCGCAGATGTCCATGAGCCACCCCTACACCATGACAACGCCTTACCCTTCGCTCCCAGCCCAGCAG
GTTCACAACTACATGATGCCACCCCTCGACCGAAGCTGGAGGGACTACGTCCCGGATCAGCCACACCCGGAAATC
CCGTACCAATGTCCCATGACGTTTGGACCCCGCGGCCACCACTGGCAAGGCCCAGCTTGTGAAAATGGTTGCCAG
GTGACAGGAACCTTTTATGCTTGTGCCCCACCTGAGTCCCAGGCTCCCGGAGTCCCCACAGAGCCAAGCATAAGG
TCTGCCGAAGCCTTGGCGTTCTCAGACTGCCGGCTGCACATCTGCCTGTACTACCGGGAAATCCTCGTGAAGGAG
CTGACCACGTCCAGCCCCGAGGGCTGCCGGATCTCCCATGGACATACGTATGACGCCAGCAACCTGGACCAGGTC
CTGTTCCCCTACCCAGAGGACAATGGCCACAGGAAAAACATTGAGAACCTGCTGAGCCACCTGGAGAGGGGCGTG
GTCCTCTGGATGGCCCCCGACGGGCTCTATGCGAAAAGACTGTGCCAGAGCACGATCTACTGGGACGGGCCCCTG
GCGCTGTGCAACGACCGGCCCAACAAACTGGAGAGAGACCAGACCTGCAAGCTCTTTGACACACAGCAGTTCTTG
TCAGAGCTGCAAGCGTTTGCTCACCACGGCCGCTCCCTGCCAAGATTCCAGGTGACTCTATGCTTTGGAGAGGAG
TTTCCAGACCCTCAGAGGCAAAGAAAGCTCATCACAGCTCACGTAGAACCTCTGCTAGCCAGACAACTATATTAT
TTTGCTCAACAAAACAGTGGACATTTCCTGAGGGGCTACGATTTACCAGAACACATCAGCAATCCAGAAGATTAC
CACAGATCTATCCGCCATTCCTCTATTCAAGAATGAAAAATGTCAAGATGAGTGGTTTTCTTTTTCCTTTTTTTT
TTTTTTTTTTTTGATACGGAGATACGGGGTCTTGCTCTGTCTCCCAGGCTGGAGTGCAGTGACACAATCTCAGCT
CACTGTGACCTCCGCCTCCTGGGTTCAAGAGACTCTCCTGCCTCAGCCTCCCTGGTAGCTGGGATTACAGGTGTG
AGCCACTGCACCCACCCAAGACAAGTGATTTTCATTGTAAATATTTGACTTTAGTGAAAGCGTCCAATTGACTGC
CCTCTTACTGTTTTGAGGAACTCAGAAGTGGAGATTTCAGTTCAGCGGTTGAGGAGAATTGCGGCGAGACAAGCA
TGGAAAATCAGTGACATCTGATTGGCAGATGAGCTTATTTCAAAAGGAAGGGTGGCTTTGCATTTTCTTGTGTTC
TGTAGACTGCCATCATTGATGATCACTGTGAAAATTGACCAAGTGATGTGTTTACATTTACTGAAATGCGCTCTT
TAATTTGTTGTAGATTAGGTCTTGCTGGAAGACAGAGAAAACTTGCCTTTCAGTATTGACACTGACTAGAGTGAT
GACTGCTTGTAGGTATGTCTGTGCCATTTCTCAGGGAAGTAAGATGTAAATTGAAGAAGCCTCACACGTAAAAGA
AATGTATTAATGTATGTAGGAGCTGCAGTTCTTGTGGAAGACACTTGCTGAGTGAAGGAAATGAATCTTTGACTG
AAGCCGTGCCTGTAGCCTTGGGGAGGCCCATCCCCCACCTGCCAGCGGTTTCCTGGTGTGGGTCCCTCTGCCCCA
CCCTCCTTCCCATTGGCTTTCTCTCCTTGGCCTTTCCTGGAAGCCAGTTAGTAAACTTCCTATTTTCTTGAGTCA
AAAAACATGAGCGCTACTCTTGGATGGGACATTTTTGTCTGTCCTACAATCTAGTAATGTCTAAGTAATGGTTAA
GTTTTCTTGTTTCTGCATCTTTTTGACCCTCATTCTTTAGAGATGCTAAAATTCTTCGCATAAAGAAGAAGAAAT
TAAGGAACATAAATCTTAATACTTGAACTGTTGCCCTTCTGTCCAAGTACTTAACTATCTGTTCCCTTCCTCTGT
GCCACGCTCCTCTGTTTGTTTGGCTGTCCAGCGATCAGCCATGGCGACACTAAAGGAGGAGGAGCCGGGGACTCC
CAGGCTGGAGAGCACTGCCAGGACCCACCACTGGAAGCAGGATGGAGCTGACTACGGAACTGCACACTCAGTGGG
CTGTTTCTGCTTATTTCATCTGTTCTATGCTTCCTCGTGCCAATTATAGTTTGACAGGGCCTTAAAATTACTTGG
CTTTTTCCAAATGCTTCTATTTATAGAAATCCCAAAGACCTCCACTTGCTTAAGTATACCTATCACTTACATTTT
TGTGGTTTTGAGAAAGTACAGCAGTAGACTGGGGCGTCACCTCCAGGCCGTTTCTCATACTACAGGATATTTACT
ATTACTCCCAGGATTCAGCAGAAGATTGCGTTAGCTCTCAAATGTGTGTTCCTGCTTTTCTAATGGATATTTTAA
ATTCATTCAACAAGCACCTAGTAAGTGCCTGCTGTATCCCTACATTACACAGTTCAGCCTTTATCAAGCTTAGTG
AGCAGTGAGCACTGAAACATTATTTTTTAATGTTTAAAAAGTTTCTAATATTAAAGTCAGAATATTAATACAATT
AATATTAATATTAACTACAGAAAAGACAAACAGTAGAGAACAGCAAAAAAATAAAAAGGATCTCCTTTTTTCCCA
GCCCAAATTCTCCTCTCTAAAAGTGTCCACAAGAAGGGGTGTTTATTCTTCCAACACATTTCACTTTTCTGTAAA
TATACATAAACTTAAAAAGAAAACCTCATGGAGTCATCTTGCACACACTTTTCATGCAGTGCTCTTTGTAGCTAA
ACAGTGAAGATTTACCTCGTTCTGCTCAGAGGCCTTGCTGTGGAGCTCCACTGCCATGTACCCAGTAGGGTTTGA
CATTTCATTAGCCATGCAACATGGATATGTATTGGGCAGCAGACTGTGTTTCGTGAACTGCAGTGATGTATACAT
CTTATAGATGCAAAGTATTTTGGGGTATATTATCCTAAGGGAAGATAAAGATGATATTAAGAACTGCTGTTTCAC

FIGURE 7150B

GGGGCCCTTACCTGTGACCCTCTTTGCTGAAGAATATTTAACCCCACACAGCACTTCAAAGAAGCTGTCTTGGAA
GTCTGTCTCAGGAGCACCCTGTCTTCTTAATTCTCCAAGCGGATGCTCCATTTCAATTGCTTTGTGACTTCTTCT
TCTTTGTTTTTTTAAATATTATGCTGCTTTAACAGTGGAGCTGAATTTTCTGGAAAATGCTTCTTGGCTGGGGCC
ACTACCTCCTTTCCTATCTTTACATCTATGTGTATGTTGACTTTTTAAAATTCTGAGTGATCCAGGGTATGACCT
AGGGAATGAACTAGCTATGGAAATAACTCAGGGTTAGGAATCCTAGCACTTGTCTCAGGACTCTGAAAAGGAACG
GCTTCCTCATTCCTTGTCTTGATAAAGTGGAATTGGCAAACTAGAATTTAGTTTGTACTCAGTGGACAGTGCTGT
TGAAGATTTGAGGACTTGTTAAAGAGCACTGGGTCATATGGAAAAAATGTATGTGTCTCCCCAGGTGCATTTTCT
TGGTTTATGTCTTGTTCTTGAGATTTTGTATATTTAGGAAAACCTCAAGCAGTAATTAATATCTCCTGGAACACT
ATAGAGAACCAAGTGACCGACTCATTTACAACTGAAACCTAGGAAGCCCCTGAGTCCTGAGCGAAAACAGGAGAG
TTAGTCGCCCTACAGAAAACCCAGCTAGACTATTGGGTATGAACTAAAAAGAGACTGTGCCATGGTGAGAAAAAT
GTAAAATCCTACAGTGGAATGAGCAGCCCTTACAGTGTTGTTACCACCAAGGGCAGGTAGGTATTAGTGTTTGAA
AAAGCTGGTCTTTGAGCGAGGGCATAAATACAGCTAGCCCCAGGGGTGGAACAACTGTGGGAGTCTTGGGTACTC
GCACCTCTTGGCTTTGTTGATGCTCCGCCAGGAAGGCCACTTGTGTGTGCGTGTCAGTTACTTTTTTAGTAACAA
TTCAGATCCAGTGTAAACTTCCGTTCATTGCTCTCCAGTCACATGCCCCCACTTCCCCACAGGTGAAAGTTTTTC
TGAAGTGTTGGGATTGGTTAAGGTCTTTATTTGTATTACGTATCTCCCCAAGTCCTCTGTGGCCAGCTGCATCTG
TCTGAATGGTGCGTGAAGGCTCTCAGACCTTACACACCATTTTGTAAGTTATGTTTTACATGCCCCGTTTTTGAG
ACTGATCTCGATGCAGGTGGATCTCCTTGAGATCCTGATAGCCTGTTACAGGAATGAAGTAAAGGTCAGTTTTTT
TTGTATTGATTTTCACAGCTTTGAGGAACATGCATAAGAAATGTAGCTGAAGTAGAGGGGACGTGAGAGAAGGGC
CAGGCCGGCAGGCCAACCCTCCTCCAATGGAAATTCCCGTGTTGCTTCAAACTGAGACAGATGGGACTTAACAGG
CAATGGGGTCCACTTCCCCCTCTTCAGCATCCCCCGTACC

FIGURE 7151

MNLEGGGRGGEFGMSAVSCGNGKLRQWLIDQIDSGKYPGLVWENEEKSIFRIPWKHAGKQDYNREEDAALFKAWA
LFKGKFREGIDKPDPPTWKTRLRCALNKSNDFEELVERSQLDISDPYKVYRIVPEGAKKGAKQLTLEDPQMSMSH
PYTMTTPYPSLPAQQVHNYMMPPLDRSWRDYVPDQPHPEIPYQCPMTFGPRGHHWQGPACENGCQVTGTFYACAP
PESQAPGVPTEPSIRSAEALAFSDCRLHICLYYREILVKELTTSSPEGCRISHGHTYDASNLDQVLFPYPEDNGH
RKNIENLLSHLERGVVLWMAPDGLYAKRLCQSTIYWDGPLALCNDRPNKLERDQTCKLFDTQQFLSELQAFAHHG
RSLPRFQVTLCFGEEFPDPQRQRKLITAHVEPLLARQLYYFAQQNSGHFLRGYDLPEHISNPEDYHRSIRHSSIQ
E

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FIGURE 7152

ATGGATGGGGGAACCGGGCGGCGAGACGGCGGCAGGACGGCGGCAGGATGTGTGACCGGAATGGTGGTCGGCGGC
TTCGACAGTGGCTGATCGAGCAGATTGACAGTAGCATGTATCCAGGACTGATTTGGGAGAATGAGGAGAAGAGCA
TGTTCCGGATCCCTTGGAAACACGCTGGCAAGCAAGATTATAATCAGGAAGTGGATGCCTCCATTTTTAAGGCCT
GGGCAGTTTTTAAAGGGAAGTTTAAAGAAGGGGACAAAGCTGAACCAGCCACTTGGAAGACGAGGTTACGCTGTG
CTTTGAATAAGAGCCCAGATTTTGAGGAAGTGACGGACCGGTCCCAACTGGACATTTCCGAGCCATACAAAGTTT
ACCGAATTGTTCCTGAGGAAGAGCAAAAATGCAAACTAGGCGTGGCAACTGCTGGCTGCGTGAATGAAGTTACAG
AGATGGAGTGCGGTCGCTCTGAAATCGACGAGCTGATCAAGGAGCCTTCTGTGGACGATTACATGGGGATGATCA
AAAGGAGCCCTTCCCCGCCGGAGGCCTGTCGGAGTCAGCTCCTTCCAGACTGGTGGGCGCAGCAGCCCAGCACAG
GCGTGCCGCTGGTGACGGGGTACACCACCTACGACGCGCACCATTCAGCATTCTCCCAGATGGTGATCAGCTTCT
ACTATGGGGGCAAGCTGGTGGGCCAGGCCACCACCACCTGCCCCGAGGGCTGCCGCCTGTCCCTGAGCCAGCCTG
GGCTGCCCGGCACCAAGCTGTATGGGCCCGAGGGCCTGGAGCTGGTGCGCTTCCCGCCGGCCGACGCCATCCCCA
GCGAGCGACAGAGGCAGGTGACGCGGAAGCTGTTCGGGCACCTGGAGCGCGGGGTGCTGCTGCACAGCAGCCGGC
AGGGCGTGTTCGTCAAGCGGCTGTGCCAGGGCCGCGTGTTCTGCAGCGGCAACGCCGTGGTGTGCAAAGGCAGGC
CCAACAAGCTGGAGCGTGATGAGGTGGTCCAGGTCTTCGACACCAGCCAGTTCTTCCGAGAGCTGCAGCAGTTCT
ATAACAGCCAGGGCCGGCTTCCTGACGGCAGGGTGGTGCTGTGCTTTGGGGAAGAGTTTCCGGATATGGCCCCCT
TGCGCTCCAAACTCATTCTCGTGCAGATTGAGCAGCTGTATGTCCGGCAACTGGCAGAAGAGGCTGGGAAGAGCT
GTGGAGCCGGCTCTGTGATGCAGGCCCCCGAGGAGCCGCCGCCAGACCAGGTCTTCCGGATGTTTCCAGATATTT
GTGCCTCACACCAGAGATCATTTTTCAGAGAAAACCAACAGATCACCGTCTAAGTGCGTCGCTTGGGCGCCCCAC
CCCGTCTGCGTCCTGCATCCATCTCCCTGTTACAGTGGCCCGCATCATGATTAAAGAATGTGGATCCCTCTGTCT
GGGGTGGGATGCCTTACTTTGCACTTAATTTAATAAGGGCATTCTCGGAGGAGTAGACGTTTAATACGAAGTGGC
GCATAGCCCTGCCGAGATGTCGGTGATGGCCTGATGCG

FIGURE 7153

MCDRNGGRRLRQWLIEQIDSSMYPGLIWENEEKSMFRIPWKHAGKQDYNQEVDASIFKAWAVFKGKFKEGDKAEP
ATWKTRLRCALNKSPDFEEVTDRSQLDISEPYKVYRIVPEEEQKCKLGVATAGCVNEVTEMECGRSEIDELIKEP
SVDDYMGMIKRSPSPPEACRSQLLPDWWAQQPSTGVPLVTGYTTYDAHHSAFSQMVISFYYGGKLVGQATTTCPE
GCRLSLSQPGLPGTKLYGPEGLELVRFPPADAIPSERQRQVTRKLFGHLERGVLLHSSRQGVFVKRLCQGRVFCS
GNAVVCKGRPNKLERDEVVQVFDTSQFFRELQQFYNSQGRLPDGRVVLCFGEEFPDMAPLRSKLILVQIEQLYVR
QLAEEAGKSCGAGSVMQAPEEPPPDQVFRMFPDICASHQRSFFRENQQITV

FIGURE 7154

CTTGCCTTCCCCGTCCCTCATGGCGCTGCTCCGACGCCCGACGGTGTCCAGTGATTTGGAGAATATTGACACAGG
AGTTAATTCTAAAGTTAAGAGTCATGTGACTATTAGGCGAACTGTTTTAGAAGAAATTGGAAATAGAGTTACAAC
CAGAGCAGCACAAGTAGCTAAGAAAGCTCAGAACACCAAAGTTCCAGTTCAACCCACCAAAACAACAAATGTCAA
CAAACAACTGAAACCTACTGCTTCTGTCAAACCAGTACAGATGGAAAAGTTGGCTCCAAAGGGTCCTTCTCCCAC
ACCTGAGGATGTCTCCATGAAGGAAGAGAATCTCTGCCAAGCTTTTTCTGATGCCTTGCTCTGCAAAATCGAGGA
CATTGATAACGAAGATTGGGAGAACCCTCAGCTCTGCAGTGACTACGTTAAGGATATCTATCAGTATCTCAGGCA
GCTGGAGGTTTTGCAGTCCATAAACCCACATTTCTTAGATGGAAGAGATATAAATGGACGCATGCGTGCCATCCT
AGTGGATTGGCTGGTACAAGTCCACTCCAAGTTTAGGCTTCTGCAGGAGACTCTGTACATGTGCGTTGGCATTAT
GGATCGATTTTTACAGGTTCAGCCAGTTTCCCGGAAGAAGCTTCAATTAGTTGGGATTACTGCTCTGCTCTTGGC
TTCCAAGTATGAGGAGATGTTTTCTCCAAATATTGAAGACTTTGTTTACATCACAGACAATGCTTATACCAGTTC
CCAAATCCGAGAAATGGAAACTCTAATTTTGAAAGAATTGAAATTTGAGTTGGGTCGACCCTTGCCACTACACTT
CTTAAGGCGAGCATCAAAAGCCGGGGAGGTTGATGTTGAACAGCACACTTTAGCCAAGTATTTGATGGAGCTGAC
TCTCATCGACTATGATATGGTGCATTATCATCCTTCTAAGGTAGCAGCAGCTGCTTCCTGCTTGTCTCAGAAGGT
TCTAGGACAAGGAAAATGGAACTTAAAGCAGCAGTATTACACAGGATACACAGAGAATGAAGTATTGGAAGTCAT
GCAGCACATGGCCAAGAATGTGGTGAAAGTAAATGAAAACTTAACTAAATTCATCGCCATCAAGAATAAGTATGC
AAGCAGCAAACTCCTGAAGATCAGCATGATCCCTCAGCTGAACTCAAAAGCCGTCAAAGACCTTGCCTCCCCACT
GATAGGAAGGTCCTAGGCTGCCGTGGGCCCTGGGGATGTGTGCTTCATTGTGCCCTTTTTCTTATTGGTTTAGAA
CTCTTGATTTTGTACATAGTCCTCTGGTCTATCTCATGAAACCTCTTCTCAGACCAGTTTTCTAAACATATATTG
AGGAAAAATAAAGCGATTGGTTTTTCTTAAGGTAAAAAAAAAAAAAAAAA

FIGURE 7155

MALLRRPTVSSDLENIDTGVNSKVKSHVTIRRTVLEEIGNRVTTRAAQVAKKAQNTKVPVQPTKTTNVNKQLKPT
ASVKPVQMEKLAPKGPSPTPEDVSMKEENLCQAFSDALLCKIEDIDNEDWENPQLCSDYVKDIYQYLRQLEVLQS
INPHFLDGRDINGRMRAILVDWLVQVHSKFRLLQETLYMCVGIMDRFLQVQPVSRKKLQLVGITALLLASKYEEM
FSPNIEDFVYITDNAYTSSQIREMETLILKELKFELGRPLPLHFLRRASKAGEVDVEQHTLAKYLMELTLIDYDM
VHYHPSKVAAAASCLSQKVLGQGKWNLKQQYYTGYTENEVLEVMQHMAKNVVKVNENLTKFIAIKNKYASSKLLK
ISMIPQLNSKAVKDLASPLIGRS

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FIGURE 7156

GAATTCCGGGGAGGCCTGGGGTCTGTGAGGCAGCGGAGCTGGGTGAAGGCTGCGGGTTCCGGCGAGGCCTGAGCT
GTGCTGTCGTCATGCCTCAAACCCGATCCCAGGCACAGGCTACAATCAGTTTTCCAAAAAGGAAGCTGTCTCGGG
CATTGAACAAAGCTAAAAACTCCAGTGATGCCAAACTAGAACCAACAAATGTCCAAACCGTAACCTGTTCTCCTC
GTGTAAAAGCCCTGCCTCTCAGCCCCAGGAAACGTCTGGGCGATGACAACCTATGCAACACTCCCCATTTACCTC
CTTGTTCTCCACCAAAGCAAGGCAAGAAAGAGAATGGTCCCCCTCACTCACATACACTTAAGGGACGAAGATTGG
TATTTGACAATCAGCTGACAATTAAGTCTCCTAGCAAAAGAGAACTAGCCAAAGTTCACCAAAACAAAATACTTT
CTTCAGTTAGAAAAAGTCAAGAGATCACAACAAATTCTGAGCAGAGATGTCCACTGAAGAAAGAATCTGCATGTG
TGAGACTATTCAAGCAAGAAGGCACTTGCTACCAGCAAGCAAAGCTGGTCCTGAACACAGCTGTCCCAGATCGGC
TGCCTGCCAGGGAAAGGGAGATGGATGTCATCAGGAATTTCTTGAGGGAACACATCTGTGGGAAAAAAGCTGGAA
GCCTTTACCTTTCTGGTGCTCCTGGAACTGGAAAAACTGCCTGCTTAAGCCGGATTCTGCAAGACCTCAAGAAGG
AACTGAAAGGCTTTAAAACTATCATGCTGAATTGCATGTCCTTGAGGACTGCCCAGGCTGTATTCCCAGCTATTG
CTCAGGAGATTTGTCAGGAAGAGGTATCCAGGCCAGCTGGGAAGGACATGATGAGGAAATTGGAAAAACATATGA
CTGCAGAGAAGGGCCCCATGATTGTGTTGGTATTGGACGAGATGGATCAACTGGACAGCAAAGGCCAGGATGTAT
TGTACACGCTATTTGAATGGCCATGGCTAAGCAATTCTCACTTGGTGCTGATTGGTATTGCTAATACCCTGGATC
TCACAGATAGAATTCTACCTAGGCTTCAAGCTAGAGAAAAATGTAAGCCACAGCTGTTGAACTTCCCACCTTATA
CCAGAAATCAGATAGTCACTATTTTGCAAGATCGACTTAATCAGGTATCTAGAGATCAGGTTCTGGACAATGCTG
CAGTTCAATTCTGTGCCCGCAAAGTCTCTGCTGTTTCAGGAGATGTTCGCAAAGCACTGGATGTTTGCAGGAGAG
CTATTGAAATTGTAGAGTCAGATGTCAAAAGCCAGACTATTCTCAAACCACTGTCTGAATGTAAATCACCTTCTG
AGCCTCTGATTCCCAAGAGGGTTGGTCTTATTCACATATCCCAAGTCATCTCAGAAGTTGATGGTAACAGGATGA
CCTTGAGCCAAGAAGGAGCACAAGATTCCTTCCCTCTTCAGCAGAAGATCTTGGTTTGCTCTTTGATGCTCTTGA
TCAGGCAGTTGAAAATCAAAGAGGTCACTCTGGGGAAGTTATATGAAGCCTACAGTAAAGTCTGTCGCAAACAGC
AGGTGGCGGCTGTGGACCAGTCAGAGTGTTTGTCACTTTCAGGGCTCTTGGAAGCCAGGGGCATTTTAGGATTAA
AGAGAAACAAGGAAACCCGTTTGACAAAGGTGTTTTTCAAGATTGAAGAGAAAGAAATAGAACATGCTCTGAAAG
ATAAAGCTTTAATTGGAAATATCTTAGCTACTGGATTGCCTTAAATTCTTCTCTTACACCCCACCCGAAAGTATT
CAGCTGGGCATTTAGAGAGCTACAGTCTTCATTTTAGTGCTTTACACATTCGGGCCTGAAAACAAATATGACCTT
TTTTACTTGAXGGCCAATGGXATTTTAATCTATAGGATTCTTTTAATATTAGXCACAGXAATTAATATCTTTGGG
GGTCTTTACTTATTTTTACCCCXTTAAAAAGTGACCGGGGTAGGACCCCTTTTTTAATTXCCATTTCACTA

FIGURE 7157

MPQTRSQAQATISFPKRKLSRALNKAKNSSDAKLEPTNVQTVTCSPRVKALPLSPRKRLGDDNLCNTPHLPPCSP
PKQGKKENGPPHSHTLKGRRLVFDNQLTIKSPSKRELAKVHQNKILSSVRKSQEITTNSEQRCPLKKESACVRLF
KQEGTCYQQAKLVLNTAVPDRLPAREREMDVIRNFLREHICGKKAGSLYLSGAPGTGKTACLSRILQDLKKELKG
FKTIMLNCMSLRTAQAVFPAIAQEICQEEVSRPAGKDMMRKLEKHMTAEKGPMIVLVLDEMDQLDSKGQDVLYTL
FEWPWLSNSHLVLIGIANTLDLTDRILPRLQAREKCKPQLLNFPPYTRNQIVTILQDRLNQVSRDQVLDNAAVQF
CARKVSAVSGDVRKALDVCRRAIEIVESDVKSQTILKPLSECKSPSEPLIPKRVGLIHISQVISEVDGNRMTLSQ
EGAQDSFPLQQKILVCSLMLLIRQLKIKEVTLGKLYEAYSKVCRKQQVAAVDQSECLSLSGLLEARGILGLKRNK
ETRLTKVFFKIEEKEIEHALKDKALIGNILATGLP

FIGURE 7158

CTCCGCTGCTGTCGCCAGGAGTCACTTCACGAGAAGCCAGGTCACAACCGTCGGCCCTTGTCTGGAAAAGTAAAA
GTGGATCCTGCCACGTTCGGAGCTCCCTGGCGCCTCGCCCGGCTGGAGCTAGAGAACTCGTCCTGTGGCGGCCCC
CGGCGTGGGGCGGGACAGCGGCCCCCTGGAGGGGGCAGTCCCGGGAGAACCTGCGGCGGCCGGAGCGGTAAAAAT
AAGTGACTAAAGAAGCAGACCTGGGAATCACCTAAC**ATG**TCGAGGAGGAGATTTGATTGCCGAAGTATTTCAGGC
CTACTAACTACAACTCCTCAAATTCCAATAAAAATGGAAAACTTTAATAATTTCTATATACTTACATCTAAAGAG
CTAGGGAGAGGAAAATTTGCTGTGGTTAGACAATGTATATCAAAATCTACTGGCCAAGAATATGCTGCAAAATTT
CTAAAAAAGAGAAGAAGAGGACAGGATTGTCGGGCAGAAATTTTACACGAGATTGCTGTGCTTGAATTGGCAAAG
TCTTGTCCCCGTGTTATTAATCTTCATGAGGTCTATGAAAATACAAGTGAAATCATTTTGATATTGGAATATGCT
GCAGGTGGAGAAATTTTCAGCCTGTGTTTACCTGAGTTGGCTGAAATGGTTTCTGAAAATGATGTTATCAGACTC
ATTAAACAAATACTTGAAGGAGTTTATTATCTACATCAGAATAACATTGTACACCTTGATTTAAAGCCACAGAAT
ATATTACTGAGCAGCATATACCCTCTCGGGGACATTAAAATAGTAGATTTTGGAATGTCTCGAAAAATAGGGCAT
GCGTGTGAACTTCGGGAAATCATGGGAACACCAGAATATTTAGCTCCAGAAATCCTGAACTATGATCCCATTACC
ACAGCAACAGATATGTGGAATATTGGTATAATAGCATATATGTTGTTAACTCACACATCACCATTTGTGGGAGAA
GATAATCAAGAAACATACCTCAATATTTCTCAAGTTAATGTAGATTATTCGGAAGAAACTTTTTCATCAGTTTCA
CAGCTGGCCACAGACTTTATTCAGAGCCTTTTAGTAAAAAATCCAGAGAAAAGACCAACAGCAGAGATATGCCTT
TCTCATTCTTGGCTACAGCAGTGGGACTTTGAAAACTTGTTTCACCCTGAAGAAACTTCCAGTTCCTCTCAAACT
CAGGATCATTCTGTAAGGTCCTCTGAAGACAAGACTTCTAAATCCTCCTGTAATGGAACCTGTGGTGATAGAGAA
GACAAAGAGAATATCCCAGAGGATAGCAGCATGGTTTCCAAAAGATTTCGTTTCGATGACTCATTACCCAATCCC
CATGAACTTGTTTCAGATTTGCTCTGT**TAG**CACTTTTTTCTTTGACTCATTTGGACTGAATTTGAAATTTTATAT
CCACTCCAGTGAGATTATGATTTGTAGCTTCATATATGACATGTTTATATTGTAAATGCACTTTTCCATGGAATA
ATTTAGGGAAGTGTTTTAATGTTAAATTACTAGTTGCTAGCATGTTATGATTTCATATCCTGAGATAGCTCTGCA
GATAAGAAAATATTTAAATATATGACAAAAAGTAAAATTGTACATGTGAAAG

FIGURE 7159

MSRRRFDCRSISGLLTTTPQIPIKMENFNNFYILTSKELGRGKFAVVRQCISKSTGQEYAAKFLKKRRRGQDCRA
EILHEIAVLELAKSCPRVINLHEVYENTSEIILILEYAAGGEIFSLCLPELAEMVSENDVIRLIKQILEGVYYLH
QNNIVHLDLKPQNILLSSIYPLGDIKIVDFGMSRKIGHACELREIMGTPEYLAPEILNYDPITTATDMWNIGIIA
YMLLTHTSPFVGEDNQETYLNISQVNVDYSEETFSSVSQLATDFIQSLLVKNPEKRPTAEICLSHSWLQQWDFEN
LFHPEETSSSSQTQDHSVRSSEDKTSKSSCNGTCGDREDKENIPEDSSMVSKRFRFDDSLPNPHELVSDLLC

FIGURE 7160

GGATCCGCGTGCTAAAGAAAAATCGCCGTTAAAGCAGTTTTCTTTTTCACTGTCTTTTTCTTTTCGCGGGGAACC
CAGCTGTTCCTGCGAGGGCCACCTCCTCAGGAAGACCCCGCAGCTCTCCCGCGGCGCTTCTGCAGGAGGCAGCGA
CAGTTTCGAGAACCCGGGCCTTCCCCTCCCAGTGCCTCCGGGGGTTCGCGTTTCAGGCGCTCGTGTTTTCCGGGA
AGGGCAGGCGCGCTGGGCCTTGGGGAGCTGCGCTCGGCGGGCGGACCGGGGGATC**ATG**GAAGCTGATAAAGATGA
CACACAACAAATTCTTAAGGAGCATTCGCCAGATGAATTTATAAAAGATGAACAAAATAAGGGACTAATTGATGA
AATTACAAAGAAAAATATTCAGCTAAAGAAGGAGATCCAAAAGCTTGAAACGGAGTTACAAGAGGCTACCAAAGA
ATTCCAGATTAAAGAGGATATTCCTGAAACAAAGATGAAATTCTTATCAGTTGAAACTCCTGAGAATGACAGCCA
GTTGTCAAATATCTCCTGTTCGTTTCAAGTGAGCTCGAAAGTTCCTTATGAGATACAAAAAGGACAAGCACTTAT
CACCTTTGAAAAAGAAGAAGTTGCTCAAAATGTGGTAAGCATGAGTAAACATCATGTACAGATAAAAGATGTAAA
TCTGGAGGTTACGGCCAAGCCAGTTCCATTAAATTCAGGAGTCAGATTCCAGGTTTATGTAGAAGTTTCTAAAAT
GAAAATCAATGTTACTGAAATTCCTGACACACTGCGTGAAGATCAAATGAGAGACAAACTAGAGCTGAGCTTTTC
AAAGTTCCGAAATGGAGGCGGAGAGGTGGACCGCGTGGACTATGACAGACAGTCCGGGAGTGCAGTCATCACGTT
TGTGGAGATTGGAGTGGCTGACAAGATTTTGAAAAAGAAAGAATACCCTCTTTATATAAATCAAACCTGCCATAG
AGTTACTGTTTCTCCATACACAGAAATACACTTGAAAAAGTATCAGATATTTTCAGGAACATCTAAGAGGACAGT
GCTTCTGACAGGAATGGAAGGCATTCAAATGGATGAAGAAATTGTGGAGGATTTAATTAACATTCACTTTCAACG
GGCAAAGAATGGAGGTGGAGAAGTAGATGTGGTCAAGTGTTCTCTAGGTCAACCTCACATAGCATACTTTGAAGA
A**TAG**ACTTAACAGAATCATGAAAACTATAGCTTTTTAACCCGGATTACTGTAAATGTTTGACAAGAATGAATATG
CTTTTCCTTAAAAAATGAAAACTTTAATTTTTACCATCCATTTATGTTTAGATACAAAACTTATTTCCATGTTTC
TGAATCTTCTTTGTTTCAAATGGTGCTGCATGTTTTCAACTACAATAAGTGCACTGTAATAAAAAGTTTTGTTTA
T

FIGURE 7161

MEADKDDTQQILKEHSPDEFIKDEQNKGLIDEITKKNIQLKKEIQKLETELQEATKEFQIKEDIPETKMKFLSVE
TPENDSQLSNISCSFQVSSKVPYEIQKGQALITFEKEEVAQNVVSMSKHHVQIKDVNLEVTAKPVPLNSGVRFQV
YVEVSKMKINVTEIPDTLREDQMRDKLELSFSKFRNGGGEVDRVDYDRQSGSAVITFVEIGVADKILKKKEYPLY
INQTCHRVTVSPYTEIHLKKYQIFSGTSKRTVLLTGMEGIQMDEEIVEDLINIHFQRAKNGGGEVDVVKCSLGQP
HIAYFEE

FIGURE 7162

CGGCCGCGTAGCCCGCGCGCGGAGCGTACCCTGCTGCGGCCGTTGGCCGTTAGCGCGGCTTCGGCGGTTGTCTTG
GAGAAGCAAGATGGCGGCGACGGCGGCCGCAGTGGTGGCCGAGGAGGACACGGAGCTGCGGGACCTGCTGGTGCA
GACGCTGGAGAACAGCGGGGTCCTGAACCGCATCAAGGCTGAACTCCGAGCAGCTGTGTTTTTAGCACTAGAGGA
GCAAGAAAAAGTAGAGAACAAAACTCCTTTAGTTAATGAGAGCCTGAAAAAGTTTTTAAATACCAAAGACGGTCG
TTTAGTGGCTAGTCTTGTTGCAGAATTTCTTCAGTTTTTTAACCTTGACTTTACTTTGGCTGTTTTTCAACCTGA
AACTAGCACACTGCAAGGTCTCGAAGGTCGAGAGAATTTAGCCCGAGATTTAGGTATAATTGAAGCAGAAGGTAC
TGTGGGTGGACCCTTATTATTAGAAGTGATCAGGCGCTGTCAACAGAAAGAAAAAGGGCCAACCACTGGGGAAGG
TGCACTTGATCTATCTGATGTACATTCTCCACCAAAGTCACCAGAGGGAAAAACAAGTGCACAGACAACACCAAG
TAAGATACCAAGGTATAAAGGACAAGGTAAGAAGAAGACAAGCGGGCAGAAGGCTGGTGACAAGAAGGCCAATGA
TGAGGCCAATCAGAGTGATACAAGTGTCTCCTTGTCAGAACCCAAGAGCAAAAGCAGCCTTCACTTACTGTCCCA
TGAAACAAAAATTGGATCTTTTCTAAGCAACAGAACTTTAGATGGCAAAGACAAAGCTGGCCTTTGTCCAGATGA
AGATGATATGGAAGGAGATTCTTTCTTTGATGATCCCATTCCTAAGCCAGAGAAAACTTACGGTTTGAGGAAGGA
ACCTAGGAAGCAAGCAGGAAGTCTGGCCTCGCTCTCGGATGCACCCCCCTTAAAAAGTGGACTCAGCTCCCTGGC
GGGAGCCCCTTCTTTAAAAGACTCTGAGAGTAAAAGGGGAAATACAGTTTTGAAAGATCTGAAATTGATCAGTGA
TAAAATTGGATCACTTGGATTAGGAACTGGAGAAGATGATGACTATGTTGATGATTTTAATAGTACCAGCCATCG
CTCAGAGAAAAGTGAGATAAGTATTGGTGAAGAGATAGAAGAAGACCTTTCTGTGGAAATAGATGACATCAATAC
CAGTGATAAGCTTGATGACCTCACACAAGATCTGACTGTATCCCAGCTCAGTGATGTTGCGGATTATCTGGAAGA
TGTTGCATAGACACGAAGAAGGAAGTATTCTAATTAACAAGGACAGAGGACTGACCGGTTCCATTTTTTTTTTTT
TCCAGACAATCACTCAGCTGGAATGTCTGCTCTCTATTGGTGCCTTGCATTTCAAAAACACTGCAGATATTTTTT
AAAAGTAATTTTCATTTTACTAAACAAAATACTTCCTATTTGAGCCCATGTGTGGAAGATTTAATATTCTTAATT
TAACTGTACATTTCTTTATGGAAATTGATTATCTACACTCAGTTTCATTACAGGGAAGGAACCCATGAAAACATC
AGTGTTAAGAGCATGATGAAAGGTGTCAATAAAGCCGTAGGATCGCGC

FIGURE 7163

MAATAAAVVAEEDTELRDLLVQTLENSGVLNRIKAELRAAVFLALEEQEKVENKTPLVNESLKKFLNTKDGRLVA
SLVAEFLQFFNLDFTLAVFQPETSTLQGLEGRENLARDLGIIEAEGTVGGPLLLEVIRRCQQKEKGPTTGEGALD
LSDVHSPPKSPEGKTSAQTTPSKIPRYKGQGKKKTSGQKAGDKKANDEANQSDTSVSLSEPKSKSSLHLLSHETK
IGSFLSNRTLDGKDKAGLCPDEDDMEGDSFFDDPIPKPEKTYGLRKEPRKQAGSLASLSDAPPLKSGLSSLAGAP
SLKDSESKRGNTVLKDLKLISDKIGSLGLGTGEDDDYVDDFNSTSHRSEKSEISIGEEIEEDLSVEIDDINTSDK
LDDLTQDLTVSQLSDVADYLEDVA

FIGURE 7164

TGACAAGATGGCGGCAGGAGGCAGTGGCGTTGGTGGGAAGCGCAGCTCGAAAAGCGATGCCGATTCTGGTTTCCT
GGGGCTGCGGCCCACTTCGGTGGACCCAGCGCTGAGGCGAAGGCGGCGAGGCCCAAGAAATAAGAAGCGGGGCTG
GCGGCGGCTTGCTCAGGAGCCGCTGGGGCTGGAGGTTGACCAGTTCCTGGAAGACGTGCGGCTACAGGAGCGCAC
GAGCGGTGGCTTGTTGTCAGAGGCCCCAAATGAAAAACTCTTCTTCGTGGACACTGGCTCCAAGGAAAAAGGGCT
GACAAAGAAGAGAACCAAAGTCCAGAAGAAGTCACTGCTTCTCAAGAAACCCCTTCGGGTTGACCTCATCCTCGA
GAACACATCCAAAGTCCCTGCCCCCAAAGACGTCCTCGCCCACCAGGTCCCCAACGCCAAGAAGCTCAGGCGGAA
GGAGCAGCTATGGGAGAAGCTGGCCAAGCAGGGCGAGCTGCCCCGGGAGGTGCGCAGGGCCCAGGCCCGGCTCCT
CAACCCTTCTGCAACAAGGGCCAAGCCCGGGCCCCAGGACACCGTAGAGCGGCCCTTCTACGACCTCTGGGCCTC
AGACAACCCCCTGGACAGGCCGTTGGTTGGCCAGGATGAGTTTTTCCTGGAGCAGACCAAGAAGAAAGGAGTGAA
GCGGCCAGCACGCCTGCACACCAAGCCGTCCCAGGCGCCCGCCGTGGAGGTGGCGCCTGCCGGAGCTTCCTACAA
TCCATCCTTTGAAGACCACCAGACCCTGCTCTCAGCGGCCCACGAGGTGGAGTTGCAGCGGCAGAAGGAGGCGGA
GAAGCTGGAGCGGCAGCTGGCCCTGCCCGCCACGGAGCAGGCCGCCACCCAGGAGTCCACATTCCAGGAGCTGTG
CGAGGGGCTGCTGGAGGAGTCGGATGGTGAGGGGGAGCCAGGCCAGGGCGAGGGGCCGGAGGCTGGGGATGCCGA
GGTCTGTCCCACGCCCGCCCGCCTGGCCACCACAGAGAAGAAGACGGAGCAGCAGCGGCGGCGGGAGAAGGCTGT
GCACAGGCTGCGGGTACAGCAGGCCGCGTTGCGGGCCGCCCGGCTCCGGCACCAGGAGCTGTTCCGGCTGCGCGG
GATCAAGGCCCAGGTGGCCCTGAGGCTGGCGGAGCTGGCGCGGCGGCGGAGGCGGCGGCAGGCGCGGCGGGAGGC
TGAGGCTGACAAGCCCCGAAGGCTGGGACGGCTCAAGTACCAGGCACCTGACATCGACGTGCAGCTGAGCTCGGA
GCTGACAGACTCGCTCAGGACCCTGAAGCCCGAGGGCAACATCCTTCGAGACCGGTTCAAGAGCTTCCAGAGGAG
GAATATGATCGAGCCTCGAGAGAGAGCCAAGTTCAAACGCAAGTACAAGGTGAAGCTGGTGGAGAAGCGGGCGTT
CCGTGAGATCCAGTTGTAGCTGCCATCAGATGCCGGAGACTCGCCCTTCAATAAAAAATCTCTTCTAGCTGAAAA
AAAAAAAAAAAAAAAA

FIGURE 7165

MAAGGSGVGGKRSSKSDADSGFLGLRPTSVDPALRRRRRGPRNKKRGWRRLAQEPLGLEVDQFLEDVRLQERTSG
GLLSEAPNEKLFFVDTGSKEKGLTKKRTKVQKKSLLLKKPLRVDLILENTSKVPAPKDVLAHQVPNAKKLRRKEQ
LWEKLAKQGELPREVRRAQARLLNPSATRAKPGPQDTVERPFYDLWASDNPLDRPLVGQDEFFLEQTKKKGVKRP
ARLHTKPSQAPAVEVAPAGASYNPSFEDHQTLLSAAHEVELQRQKEAEKLERQLALPATEQAATQESTFQELCEG
LLEESDGEGEPGQGEGPEAGDAEVCPTPARLATTEKKTEQQRRREKAVHRLRVQQAALRAARLRHQELFRLRGIK
AQVALRLAELARRRRRRQARREAEADKPRRLGRLKYQAPDIDVQLSSELTDSLRTLKPEGNILRDRFKSFQRRNM
IEPRERAKFKRKYKVKLVEKRAFREIQL

FIGURE 7166

GATGAATGCGGCTGTTAAGACCTGCAATAATCCAGAATGGCTACTCTGATCTATGTTGATAAGGAAAATGGAGAA
CCAGGCACCCGTGTGGTTGCTAAGGATGGGCTGAAGCTGGGGTCTGGACCTTCAATCAAAGCCTTAGATGGGAGA
TCTCAAGTTTCAACACCACGTTTTGGCAAAACGTTCGATGCCCCACCAGCCTTACCTAAAGCTACTAGAAAGGCT
TTGGGAACTGTCAACAGAGCTACAGAAAAGTCTGTAAAGACCAAGGGACCCCTCAAACAAAAACAGCCAAGCTTT
TCTGCCAAAAAGATGACTGAGAAGACTGTTAAAGCAAAAAGCTCTGTTCCTGCCTCAGATGATGCCTATCCAGAA
ATAGAAAAATTCTTTCCCTTCAATCCTCTAGACTTTGAGAGTTTTGACCTGCCTGAAGAGCACCAGATTGCGCAC
CTCCCCTTGAGTGGAGTGCCTCTCATGATCCTTGACGAGGAGAGAGAGCTTGAAAAGCTGTTTCAGCTGGGCCCC
CCTTCACCTGTGAAGATGCCCTCTCCACCATGGGAATCCAATCTGTTGCAGTCTCCTTCAAGCATTCTGTCGACC
CTGGATGTTGAATTGCCACCTGTTTGCTGTGACATAGATATTTAAATTTCTTAGTGCTTCAGAGTTTGTGTGTAT
TTGTATTAATAAAGCATTCTTCAACAGAAAAAAAAAAAAAAAA

FIGURE 7167

MATLIYVDKENGEPGTRVVAKDGLKLGSGPSIKALDGRSQVSTPRFGKTFDAPPALPKATRKALGTVNRATEKSV
KTKGPLKQKQPSFSAKKMTEKTVKAKSSVPASDDAYPEIEKFFPFNPLDFESFDLPEEHQIAHLPLSGVPLMILD
EERELEKLFQLGPPSPVKMPSPPWESNLLQSPSSILSTLDVELPPVCCDIDI

FIGURE 7168

CAGCGGCAGTGGTGCTTTCCCGAATCTCAGAATGCCTGTTAAAAGATCACTGAAGTTGGATGGTCTGTTAGAAGA
AAATTCATTTGATCCTTCAAAAATCACAAGGAAGAAAAGTGTTATAACTTATTCTCCAACAACTGGAACTTGTCA
AATGAGTCTATTTGCTTCTCCCACAAGTTCTGAAGAGCAAAAGCACAGAAATGGACTATCAAATGAAAAGAGAAA
AAAATTGAATCACCCCAGTTTAACTGAAAGCAAAGAATCTACAACAAAAGACAATGATGAATTCATGATGTTGCT
ATCAAAAGTTGAGAAATTGTCAGAAGAAATCATGGAGATAATGCAAAATTTAAGTAGTATACAGGCTTTGGAGGG
CAGTAGAGAGCTTGAAAATCTCATTGGAATCTCCTGTGCATCACATTTCTTAAAAAGAGAAATGCAGAAAACCAA
AGAACTAATGACAAAAGTGAATAAACAAAAACTGTTTGAAAAGAGTACAGGACTTCCTCACAAAGCATCACGTCA
TCTTGACAGCTATGAATTCCTTAAAGCCATTTTAAACTGAGGCATTAAGAAGAAATGCACTCACCATGAGCACCA
ACTTCTGCATCTGCCTGATCATATTTAAAGGAACAGAGAAATATTTGTAATTAATCTGCCCAGTAAATACCAGCT
CGTAGCAGTTGGCAGGTGCATGTCTAGATAAAATTTCTTGCAGCTAATTTAAACTTTCTACACGCACCAGTAGAT
AATCTCAATGTAAATAATACATTTCTTCTTGGCTCTTTAATGTAAGCCAACATGGAGAGGAAGATCTTGACTTAT
ATTCTGTACCACATACACTTCTGTGGACTTTTAGCATTTGTGGGTAGACTTAATGGCCTTCGTGGCC

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FIGURE 7169

MPVKRSLKLDGLLEENSFDPSKITRKKSVITYSPTTGTCQMSLFASPTSSEEQKHRNGLSNEKRKKLNHPSLTES
KESTTKDNDEFMMLLSKVEKLSEEIMEIMQNLSSIQALEGSRELENLIGISCASHFLKREMQKTKELMTKVNKQK
LFEKSTGLPHKASRHLDSYEFLKAILN

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FIGURE 7170

CCCGCGTGCATACGGTTGCCGGCATGGCACATTACAACTTCAAGAAAATTACGGTGGTGCCGTCCGCCAAGGACT
TCATAGACCTCACGTTGTCGAAGACTCAACGAAAGACTCCAACCGTTATTCATAAACATTACCAAATACATCGCA
TTAGACATTTTTACATGAGAAAAGTCAAATTTACTCAACAGAATTACCATGATAGACTTTCACAAATTCTAACAG
ATTTCCCCAAATTGGATGATATTCATCCGTTCTATGCTGATTTGATGAATATTCTCTACGACAAGGATCATTACA
AGTTGGCTCTGGGGCAAATAAATATTGCCAAAAATTTAGTGGACAATGTTGCTAAAGATTATGTGCGACTGATGA
AGTATGGCGACTCTCTCTACCGCTGCAAACAGCTGAAGCGTGCGGCCCTGGGACGGATGTGCACAGTGATCAAGA
GGCAGAAGCAGAGTTTGGAGTATTTGGAGCAAGTGCGTCAGCATTTATCCCGTTTGCCAACCATTGATCCGAATA
CCAGGACCCTGCTTTTGTGTGGGTACCCAAATGTTGGGAAGTCCAGCTTCATCAACAAGGTGACGAGAGCAGACG
TGGATGTCCAGCCCTATGCGTTCACAACCAAGTCTCTGTTTGTTGGGCACATGGATTATAAGTATCTACGTTGGC
AGGTTGTAGACACTCCTGGGATCCTGGACCACCCTCTGGAGGATAGGAACACCATCGAGATGCAGGCCATCACTG
CCCTGGCCCACCTCCGTGCTGCGGTCCTGTATGTGATGGATTTGTCTGAGCAGTGTGGGCATGGGCTGAGGGAGC
AGCTAGAACTCTTCCAGAACATCAGACCTCTCTTCATCAACAAGCCTCTCATAGTTGTAGCCAACAAATGTGATG
TGAAGAGAATAGCTGAACTTTCTGAAGATGATCAGAAAATATTTACAGATTTGCAGTCTGAAGGATTCCCTGTAA
TAGAGACCAGCACCCTGACTGAGGAAGGTGTTATTAAAGTTAAAACAGAGGCTTGCGATAGGCTTTTGGCTCATC
GAGTGGAAACCAAAATGAAGGGAAATAAAGTGAATGAGGTGCTGAATAGACTGCACCTGGCTATCCCAACCAGGA
GGGACGATAAGGAGAGGCCCCCTTTCATCCCTGAAGGAGTGGTGGCTCGCAGGAAGAGGATGGAAACTGAGGAGT
CCAGGAAGAAGAGGGAACGAGATCTTGAGCTGGAAATGGGAGATGATTATATTTTGGATCTTCAGAAGTACTGGG
ATTTAATGAATTTGTCTGAAAAACATGATAAGATACCAGAAATCTGGGAAGGCCATAATATAGCTGATTATATTG
ATCCAGCCATCATGAAGAAATTGGAAGAATTAGAAAAAGAAGAAGAGCTGAGAACAGCTGCTGGAGAGTATGACA
GTGTATCTGAGAGTGAAGACGAAGAGATGCTGGAAATCCGACAGCTGGCAAAGCAAATTCGAGAGAAAAAGAAGT
TGAAAATTCTGGAGTCCAAAGAAAAGAATACACAGGGACCCAGGATGCCGCGAACTGCTAAGAAGGTTCAGAGGA
CAGTTTTGGAGAAGGAGATGCGTAGTCTTGGTGTTGACATGGACGATAAAGACGATGCCCATTACGCAGTCCAGG
CAAGAAGATCCCGGAGCATCACTAGGAAAAGAAAGCGGGAAGACTCTGCTCCCCCGTCCTCTGTGGCCCGGAGTG
GGAGTTGCTCTCGAACTCCACGTGACGTTTCTGGTCTTAGGGATGTCAAGATGGTGAAGAAAGCCAAGACTATGA
AGAATGCTCAGAAGAAGATGAATCGGTTGGGGAAGAAAGGGGAGGCGGATAGACACGTGTTTGATATGAAGCCCA
AGCACTTGCTGTCTGGGAAGAGGAAAGCTGGTAAAAAGGACAGGAGATAGTATCCGTTTGGTTGGCGTGGCTTCG
CTAGAGTGTTGCTGTTTATTTCCTGGTTTGGTACAGTATGGTTTCATGAAATTGGAGCTCTGTACAAACTGAAAA
AGACAAAATAAGTAAAGCACTTGTTGCTTTGCTGAAAACTATGGTTAACCCTATATAGGTGTGGGAAATTTTTGT
CACTGCATAATATTACAAATATTTTGAGTAGACAGTGTTTCCACATTTAATGGAGTATCAGTTGCTTCAGATTTT
CAGAACTGGGAAGATTTACTGGTGTAACTGGGTTGTTTTTGATGGAGAAAAACCTTATTTTCTTTTGTAAGAGCT
GGGAGCAAACACGTTTATGAGTGTGTCGGAATCCCGTGCTTAAAATACGCTCTTAAATTATTTTCTAGTCTTATT
TTACAATGTCTCATTGTAGTCTGTCTTCAACTATTTTATCCAAAATAAACCTCCAGAAGAAACTAAAAAAAAAAA
AAAAAAAAAAAAA

FIGURE 7171

MAHYNFKKITVVPSAKDFIDLTLSKTQRKTPTVIHKHYQIHRIRHFYMRKVKFTQQNYHDRLSQILTDFPKLDDI
HPFYADLMNILYDKDHYKLALGQINIAKNLVDNVAKDYVRLMKYGDSLYRCKQLKRAALGRMCTVIKRQKQSLEY
LEQVRQHLSRLPTIDPNTRTLLLCGYPNVGKSSFINKVTRADVDVQPYAFTTKSLFVGHMDYKYLRWQVVDTPGI
LDHPLEDRNTIEMQAITALAHLRAAVLYVMDLSEQCGHGLREQLELFQNIRPLFINKPLIVVANKCDVKRIAELS
EDDQKIFTDLQSEGFPVIETSTLTEEGVIKVKTEACDRLLAHRVETKMKGNKVNEVLNRLHLAIPTRRDDKERPP
FIPEGVVARRKRMETEESRKKRERDLELEMGDDYILDLQKYWDLMNLSEKHDKIPEIWEGHNIADYIDPAIMKKL
EELEKEEELRTAAGEYDSVSESEDEEMLEIRQLAKQIREKKKLKILESKEKNTQGPRMPRTAKKVQRTVLEKEMR
SLGVDMDDKDDAHYAVQARRSRSITRKRKREDSAPPSSVARSGSCSRTPRDVSGLRDVKMVKKAKTMKNAQKKMN
RLGKKGEADRHVFDMKPKHLLSGKRKAGKKDRR

FIGURE 7172

CGCAGCCAGGAGCCATGGGCAACATCTCCTCTAACATCTCGGCCTTCCAGTCCCTGCATATCGTCATGTTGGGCT
TGGACTCGGCCGGCAAGACCACGGTGCTCTACCGGCTCAAGTTCAACGAGTTCGTGAACACGGTGCCCACCATCG
GCTTCAACACCGAGAAGATCAAGCTGAGCAACGGCACGGCCAAGGGCATCAGCTGCCACTTCTGGGACGTGGGCG
GCCAGGAGAAGCTGCGGCCGCTGTGGAAGTCCTACAGCCGCTGCACGGACGGCATCATCTACGTGGTGGACTCGG
TGGACGTGGACCGGCTGGAGGAGGCCAAGACGGAGCTGCACAAGGTGACCAAGTTCGCCGAGAACCAGGGCACGC
CGCTGCTGGTCATCGCCAACAAGCAGGACCTGCCCAAGTCGCTGCCGGTGGCAGAGATTGAGAAGCAGCTGGCGC
TGCACGAGCTTATCCCGGCCACCACCTATCACGTCCAGCCGGCGTGCGCCATCATCGGCGAGGGCCTCACCGAGG
GCATGGACAAGCTCTATGAGATGATCCTGAAACGCAGGAAGTCCCTCAAGCAGAAGAAGAAGCGGTAATGCGCCC
GGAGCGACCGGGGAGCGAGCGAGTG

FIGURE 7173

MGNISSNISAFQSLHIVMLGLDSAGKTTVLYRLKFNEFVNTVPTIGFNTEKIKLSNGTAKGISCHFWDVGGQEKL
RPLWKSYSRCTDGIIYVVDSVDVDRLEEAKTELHKVTKFAENQGTPLLVIANKQDLPKSLPVAEIEKQLALHELI
PATTYHVQPACAIIGEGLTEGMDKLYEMILKRRKSLKQKKKR

FIGURE 7174

GGGACTCGGCGGAGGATGGGCTTGCTCTCAATTTTGCGCAAGTTGAAAAGTGCACCAGACCAGGAGGTGAGAATA
CTTCTCCTGGGCTTGGATAATGCTGGCAAGACCACTCTTCTGAAGCAGCTTGCATCTGAAGACATCAGCCACATC
ACACCTACACAGGGTTTCAACATCAAAAGTGTACAATCACAAGGTTTTAAACTGAATGTATGGGACATTGGTGGA
CAGAGGAAAATCAGACCATACTGGAAGAATTATTTTGAAAATACCGATATTCTTATATATGTAATCGACAGTGCA
GACAGAAAAAGATTTGAAGAGACGGGTCAGGAACTAGCGGAATTACTGGAGGAAGAAAAACTAAGTTGTGTGCCA
GTGCTCATCTTTGCTAATAAGCAGGATTTGCTCACAGCAGCCCCTGCCTCTGAAATTGCAGAAGGACTGAACCTG
CATACCATCCGCGACCGAGTCTGGCAGATCCAGTCTTGCTCAGCTCTCACAGGAGAGGGCGTTCAGGATGGCATG
AACTGGGTCTGCAAAAATGTCAATGCAAAGAAGAAATAAAATCTAGACGAATGGAGATGCAGGAGCTGCGGGAGC
CGAATTCGGGCCTTAAAAACACTAATTTGCTGCTTTCTGACCAAATGTTTTTCATCTGTGTACACTCCAGCTGTT
TGAAGAGAGGGAACAACACGGTTTAGAAAGAATCCCCATTCCAGCAGTAGATTTAACTGATCTCTGAGGTTCAGT
ATCATTTTTCAAATAAAGGAATTATATTATTTCCTCTGCATAATTGAAATAGTATTAAATGTCTAAAGCACATGA
TTAGAAAATGAGATCTTTTAAATGAGCAAGAGATTGCATTGCAGTTTAGACAATTCCAGTGGGCTTTTTTTTTCG

FIGURE 7175

MGLLSILRKLKSAPDQEVRILLLGLDNAGKTTLLKQLASEDISHITPTQGFNIKSVQSQGFKLNVWDIGGQRKIR
PYWKNYFENTDILIYVIDSADRKRFEETGQELAELLEEEKLSCVPVLIFANKQDLLTAAPASEIAEGLNLHTIRD
RVWQIQSCSALTGEGVQDGMNWVCKNVNAKKK

FIGURE 7176

GGCACGAGCCAGGGTTTCCTCTTCAAGTAGGTCTAAAACATTTTTTTTCTCATTGACTTCCTTCCTGTTCTAACT
GCCAGTACTCAGAAGTCAGAGTTGAGAGACAGAGGCACCCCGGACAGAGACGTGAAGCACTGAATAAATAGATCA
GAATGACTGAAAAAGCCCCAGAGCCACATGTGGAGGAGGATGACGATGATGAGCTGGACAGCAAGCTCAATTATA
AGCCTCCACCACAGAAGTCCCTGAAAGAGCTGCAGGAAATGGACAAAGATGATGAGAGTCTAATTAAGTACAAGA
AAACGCTGCTGGGAGATGGTCCTGTGGTGACAGATCCGAAAGCCCCCAATGTCGTTGTCACCCGGCTCACCCTGG
TTTGTGAGAGTGCCCCGGGACCAATCACCATGGACCTTACTGGAGATCTGGAAGCCCTCAAAAAGGAAACCATTG
TGTTAAAGGAAGGTTCTGAATATAGAGTCAAAATTCACTTCAAAGTGAACAGGGATATTGTGTCAGGCCTGAAAT
ACGTTCAGCACACCTACAGGACTGGGGTGAAAGTGGATAAAGCAACATTTATGGTTGGCAGCTATGGACCTCGGC
CTGAGGAGTATGAGTTCCTCACTCCAGTTGAGGAGGCTCCCAAGGGCATGCTGGCCCGAGGCACGTACCACAACA
AGTCCTTCTTCACCGACGATGACAAGCAAGACCACCTCAGCTGGGAGTGGAACCTGTCGATTAAGAAGGAGTGGA
CAGAATGAATGCATCCACCCCGTTCCCCACCCTTGCCACCTGGAAGAATTCTCTCAGGCGTGTTCAGCACCCTGT
CCCTCCTCCCTGTCCACAGCTGGGTCCCTCTTCAACACTGCCACATTTCCTTATTGATCGATCTTTTCCCACCCT
GTCACTCAACGTGGTCCCTAGAACAAGAGGCTTAAAACCGGGCTTTCACCCAACCTGCTCCCTCTGATCCTCCAT
CAGGGCCAGATCTTCCACGTCTCCATCTCAGTACACAATCATTTAATATTTCCCTGTCTTACCCCTATTCAAGCA
ACTAGAGGCCAGAAAATGGGCAAATTATCACTAACAGGTCTTTGACTCAGGTTCCAGTAGTTCATTCTAATGCCT
AGATTCTTTTGTGGTTGTTGCTGGCCCAATGAGTCCCTAGTCACATCCCCTGCCAGAGGGAGTTCTTCTTTTGTG
AGAGACACTGTAAACGACACAAGAGAACAAGAATAAAACAATAACTGTG

FIGURE 7177

MTEKAPEPHVEEDDDDELDSKLNYKPPPQKSLKELQEMDKDDESLIKYKKTLLGDGPVVTDPKAPNVVVTRLTLV
CESAPGPITMDLTGDLEALKKETIVLKEGSEYRVKIHFKVNRDIVSGLKYVQHTYRTGVKVDKATFMVGSYGPRP
EEYEFLTPVEEAPKGMLARGTYHNKSFFTDDDKQDHLSWEWNLSIKKEWTE

FIGURE 7178

GAATTCGGGCGGGGTTTGTACTATCCTCGGTGCTGTGGTGCAGAGCTAGTTCCTCTCCAGCTCAGCCGCGTAGGT
TTGGACATATTTACTCTTTTCCCCCCAGGTTGAATTGACCAAAGCAATGGTGATGGAGAAGCCTAGTCCCCTGCT
GGTCGGGCGGGAATTTGTGAGACAGTATTACACACTGCTGAACCAGGCCCCAGACATGCTGCATAGATTTTATGG
AAAGAACTCTTCTTATGTCCATGGGGGGATTGGATTCAAATGGAAAGCCAGCAGATGCAGTCTACGGACAGAAAGA
AATCCACAGGAAAGTGATGTCACAAAACTTCACCAACTGCCACACCAAGATTCGCCATGTTGATGCTCATGCCAC
GCTAAATGATGGTGTGGTAGTCCAGGTGATGGGGCTTCTCTCTAACAACAACCAGGCTTTGAGGAGATTCATGCA
AACGTTTGTCCTTGCTCCTGAGGGGTCTGTTGCAAATAAATTCTATGTTCACAATGATATCTTCAGATACCAAGA
TGAGGTCTTTGGTGGGTTTGTCACTGAGCCTCAGGAGGAGTCTGAAGAAGAAGTAGAGGAACCTGAAGAAAGACA
GCAAACACCTGAGGTGGTACCTGATGATTCTGGAACTTTCTATGATCAGGCAGTTGTCAGTAATGACATGGAAGA
ACATTTAGAGGAGCCTGTTGCTGAACCAGAGCCTGATCCTGAACCAGAACCAGAACAAGAACCTGTATCTGAAAT
CCAAGAGGAAAAGCCTGAGCCAGTATTAGAAGAAACTGCCCCTGAGGATGCTCAGAAGAGTTCTTCTCCAGCACC
TGCAGACATAGCTCAGACAGTACAGGAAGACTTGAGGACATTTTCTTGGGCATCTGTGACCAGTAAGAATCTTCC
ACCCAGTGGAGCTGTTCCAGTTACTGGGATACCACCTCATGTTGTTAAAGTACCAGCTTCACAGCCCCGTCCAGA
GTCTAAGCCTGAATCTCAGATTCCACCACAAAGACCTCAGCGGGATCAAAGAGTGCGAGAACAACGAATAAATAT
TCCTCCCCAAAGGGGACCCAGACCAATCCGTGAGGCTGGTGAGCAAGGTGACATTGAACCCCGAAGAATGGTGAG
ACACCCTGACAGTCACCAACTCTTCATTGGCAACCTGCCTCATGAAGTGGACAAATCAGAGCTTAAAGATTTCTT
TCAAAGTTATGGAAACGTGGTGGAGTTGCGCATTAACAGTGGTGGGAAATTACCCAATTTTGGTTTTGTTGTGTT
TGATGATTCTGAGCCTGTTCAGAAAGTCCTTAGCAACAGGCCCATCATGTTCAGAGGTGAGGTCCGTCTGAATGT
CGAAGAGAAGAAGACTCGAGCTGCCAGGGAAGGCGACCGACGAGATAATCGCCTTCGGGGACCTGGAGGCCCTCG
AGGTGGGCTGGGTGGTGGAATGAGAGGCCCTCCCCGTGGAGGCATGGTGCAGAAACCAGGATTTGGAGTGGGAAG
GGGGCTTGCGCCACGGCAGTAATCTTCATGGATCTTCATGCAGCCATACAAACCCTGGTTCCAACAGAATGGTGA
ATTTTCGACAGCCTTTGGTATCTTGGAGTATGACCCCAGTCTGTTATAAACTGCTTAAGTTTGTATAATTTTACT
TTTTTTGTGTGTTAATGGTGTGTGCTCCCTCTCCCTCTCTTCCCTTTCCTGACCTTTAGTCTTTCACTTCCAATT
TTGTGGAATGATATTTTAGGAATAACGGACTTTTACCCGAATTC

FIGURE 7179

MVMEKPSPLLVGREFVRQYYTLLNQAPDMLHRFYGKNSSYVHGGLDSNGKPADAVYGQKEIHRKVMSQNFTNCHT
KIRHVDAHATLNDGVVVQVMGLLSNNNQALRRFMQTFVLAPEGSVANKFYVHNDIFRYQDEVFGGFVTEPQEESE
EEVEEPEERQQTPEVVPDDSGTFYDQAVVSNDMEEHLEEPVAEPEPDPEPEPEQEPVSEIQEEKPEPVLEETAPE
DAQKSSSPAPADIAQTVQEDLRTFSWASVTSKNLPPSGAVPVTGIPPHVVKVPASQPRPESKPESQIPPQRPQRD
QRVREQRINIPPQRGPRPIREAGEQGDIEPRRMVRHPDSHQLFIGNLPHEVDKSELKDFFQSYGNVVELRINSGG
KLPNFGFVVFDDSEPVQKVLSNRPIMFRGEVRLNVEEKKTRAAREGDRRDNRLRGPGGPRGGLGGGMRGPPRGGM
VQKPGFGVGRGLAPRQ

FIGURE 7180

CGAGGTTCGGGTCGTGGGGCGGAGGGAAGAGCGGGCGGGCGGGAGGCGCCGGCGCCAGACGCGGAGGGAAGGAGC
TACGAGTAGCCGCCGAGAGGCCGCGGAGCCAGCGACGACCGACCCAGCCGAGCCGCCGCCGCCGCGCCCCCA
TGGCGGCCGCCAAGGACACTCATGAGGACCATGATACTTCCACTGAGAATACAGACGAGTCCAACCATGACCCTC
AGTTTGAGCCAATAGTTTCTCTTCCTGAGCAAGAAATTAAAACACTGGAAGAAGATGAAGAGGAACTTTTTAAAA
TGCGGGCAAAACTGTTCCGATTTGCCTCTGAGAACGATCTCCCAGAATGGAAGGAGCGAGGCACTGGTGACGTCA
AGCTCCTGAAGCACAAGGAGAAAGGGGCCATCCGCCTCCTCATGCGGAGGGACAAGACCCTGAAGATCTGTGCCA
ACCACTACATCACGCCGATGATGGAGCTGAAGCCCAACGCAGGTAGCGACCGTGCCTGGGTCTGGAACACCCACG
CTGACTTCGCCGACGAGTGCCCCAAGCCAGAGCTGCTGGCCATCCGCTTCCTGAATGCTGAGAATGCACAGAAAT
TCAAAACAAAGTTTGAAGAATGCAGGAAAGAGATCGAAGAGAGAGAAAAGAAAGCAGGATCAGGCAAAAATGATC
ATGCCGAAAAAGTGGCGGAAAAGCTAGAAGCTCTCTCGGTGAAGGAGGAGACCAAGGAGGATGCTGAGGAGAAGC
AATAAATCGTCTTATTTTATTTTCTTTTCCTCTCTTTCCTTTCCTTTTTTTAAAAAATTTTACCCTGCCCCTCTT
TTTCGGTTTGTTTTTATTCTTTCATTTTTACAAGGGACGTTATATAAAGAACTGAACTC

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FIGURE 7181

MAAAKDTHEDHDTSTENTDESNHDPQFEPIVSLPEQEIKTLEEDEEELFKMRAKLFRFASENDLPEWKERGTGDV
KLLKHKEKGAIRLLMRRDKTLKICANHYITPMMELKPNAGSDRAWVWNTHADFADECPKPELLAIRFLNAENAQK
FKTKFEECRKEIEEREKKAGSGKNDHAEKVAEKLEALSVKEETKEDAEEKQ

FIGURE 7182A

GCTACTTCTACAAAGACCTCACCCCAGAAGCCAAGATCCCCTGGTCAAGAGAAGCTGGCCTGATTATGTGGAGGA
GAATCGAGGACATTTAATTGAGATCAGAGACTTATTTGGCCCAGGCCTGGATACCCAAGAACCTCGCATAGTCAT
ACTGCAGGGGGCTGCTGGAATTGGGAAGTCAACACTGGCCAGGCAGGTGAAGGAAGCCTGGGGGAGAGGCCAGCT
GTATGGGGACCGCTTCCAGCATGTCTTCTACTTCAGCTGCAGAGAGCTGGCCCAGTCCAAGGTGGTGAGTCTCGC
TGAGCTCATCGGAAAAGATGGGACAGCCACTCCGGCTCCCATTAGACAGATCCTGTCTAGGCCAGAGCGGCTGCT
CTTCATCCTCGATGGTGTAGATGAGCCAGGATGGGTCTTGCAGGAGCCGAGTTCTGAGCTCTGTCTGCACTGGAG
CCAGCCACAGCCGGCGGATGCACTGCTGGGCAGTTTGCTGGGGAAAACTATACTTCCCGAGGCATCCTTCCTGAT
CACGGCTCGGACCACAGCTCTGCAGAACCTCATTCCTTCTTTGGAGCAGGCACGTTGGGTAGAGGTCCTGGGGTT
CTCTGAGTCCAGCAGGAAGGAATATTTCTACAGATATTTCACAGATGAAAGGCAAGCAATTAGAGCCTTTAGGTT
GGTCAAATCAAACAAAGAGCTCTGGGCCCTGTGTCTTGTGCCCTGGGTGTCCTGGCTGGCCTGCACTTGCCTGAT
GCAGCAGATGAAGCGGAAGGAAAAACTCACACTGACTTCCAAGACCACCACAACCCTCTGTCTACATTACCTTGC
CCAGGCTCTCCAAGCTCAGCCATTGGGACCCCAGCTCAGAGACCTCTGCTCTCTGGCTGCTGAGGGCATCTGGCA
AAAAAAGACCCTTTTCAGTCCAGATGACCTCAGGAAGCATGGGTTAGATGGGGCCATCATCTCCACCTTCTTGAA
GATGGGTATTCTTCAAGAGCACCCCATCCCTCTGAGCTACAGCTTCATTCACCTCTGTTTCCAAGAGTTCTTTGC
AGCAATGTCCTATGTCTTGGAGGATGAGAAGGGGAGAGGTAAACATTCTAATTGCATCATAGATTTGGAAAAGAC
GCTAGAAGCATATGGAATACATGGCCTGTTTGGGGCATCAACCACACGTTTCCTATTGGGCCTGTTAAGTGATGA
GGGGGAGAGAGAGATGGAGAACATCTTTCACTGCCGGCTGTCTCAGGGGAGGAACCTGATGCAGTGGGTCCCGTC
CCTGCAGCTGCTGCTGCAGCCACACTCTCTGGAGTCCCTCCACTGCTTGTACGAGACTCGGAACAAAACGTTCCT
GACACAAGTGATGGCCCATTTCGAAGAAATGGGCATGTGTGTAGAAACAGACATGGAGCTCTTAGTGTGCACTTT
CTGCATTAAATTCAGCCGCCACGTGAAGAAGCTTCAGCTGATTGAGGGCAGGCAGCACAGATCAACATGGAGCCC
CACCATGGTAGTCCTGTTCAGGTGGGTCCCAGTCACAGATGCCTATTGGCAGATTCTCTTCTCCGTCCTCAAGGT
CACCAGAAACCTGAAGGAGCTGGACCTAAGTGGAAACTCGCTGAGCCACTCTGCAGTGAAGAGTCTTTGTAAGAC
CCTGAGACGCCCTCGCTGCCTCCTGGAGACCCTGCGGTTGGCTGGCTGTGGCCTCACAGCTGAGGACTGCAAGGA
CCTTGCCTTTGGGCTGAGAGCCAACCAGACCCTGACCGAGCTGGACCTGAGCTTCAATGTGCTCACGGATGCTGG
AGCCAAACACCTTTGCCAGAGACTGAGACAGCCGAGCTGCAAGCTACAGCGACTGCAGCTGGTCAGCTGTGGCCT
CACGTCTGACTGCTGCCAGGACCTGGCCTCTGTGCTTAGTGCCAGCCCCAGCCTGAAGGAGCTAGACCTGCAGCA
GAACAACCTGGATGACGTTGGCGTGCGACTGCTCTGTGAGGGGCTCAGGCATCCTGCCTGCAAACTCATACGCCT
GGGGCTGGACCAGACAACTCTGAGTGATGAGATGAGGCAGGAACTGAGGGCCCTGGAGCAGGAGAAACCTCAGCT
GCTCATCTTCAGCAGACGGAAACCAAGTGTGATGACCCCTACTGAGGGCCTGGATACGGGAGAGATGAGTAATAG
CACATCCTCACTCAAGCGGCAGAGACTCGGATCAGAGAGGGCGGCTTCCCATGTTGCTCAGGCTAATCTCAAACT
CCTGGACGTGAGCAAGATCTTCCCAATTGCTGAGATTGCAGAGGAAAGCTCCCCAGAGGTAGTACCGGTGGAACT
CTTGTGCGTGCCTTCTCCTGCCTCTCAAGGGGACCTGCATACGAAGCCTTTGGGGACTGACGATGACTTCTGGGG
CCCCACGGGGCCTGTGGCTACTGAGGTAGTTGACAAAGAAAAGAACTTGTACCGAGTTCACTTCCCTGTAGCTGG
CTCCTACCGCTGGCCCAACACGGGTCTCTGCTTTGTGATGAGAGAAGCGGTGACCGTTGAGATTGAATTCTGTGT
GTGGGACCAGTTCCTGGGTGAGATCAACCCACAGCACAGCTGGATGGTGGCAGGGCCTCTGCTGGACATCAAGGC
TGAGCCTGGAGCTGTGGAAGCTGTGCACCTCCCTCACTTTGTGGCTCTCCAAGGGGGCCATGTGGACACATCCCT
GTTCCAAGTGGCCCACTTTAAAGAGGAGGGGATGCTCCTGGAGAAGCCAGCCAGGGTGGAGCTGCATCACATAGT
TCTGGAAAACCCCAGCTTCTCCCCCTTGGGAGTCCTCCTGAAAATGATCCATAATGCCCTGCGCTTCATTCCCGT
CACCTCTGTGGTGTTGCTTTACCACCGCGTCCATCCTGAGGAAGTCACCTTCCACCTCTACCTGATCCCAAGTGA
CTGCTCCATTCGGAAGGCCATAGATGATCTAGAAATGAAATTCCAGTTTGTGCGAATCCACAAGCCACCCCCGCT
GACCCCACTTTATATGGGCTGTCGTTACACTGTGTCTGGGTCTGGTTCAGGGATGCTGGAAATACTCCCCAAGGA
ACTGGAGCTCTGCTATCGAAGCCCTGGAGAAGACCAGCTGTTCTCGGAGTTCTACGTTGGCCACTTGGGATCAGG
GATCAGGCTGCAAGTGAAAGACAAGAAAGATGAGACTCTGGTGTGGGAGGCCTTGGTGAAACCAGGAGATCTCAT
GCCTGCAACTACTCTGATCCCTCCAGCCCGCATAGCCGTACCTTCACCTCTGGATGCCCCGCAGTTGCTGCACTT
TGTGGACCAGTATCGAGAGCAGCTGATAGCCCGAGTGACATCGGTGGAGGTTGTCTTGGACAAACTGCATGGACA
GGTGCTGAGCCAGGAGCAGTACGAGAGGGTGCTGGCTGAGAACACGAGGCCCAGCCAGATGCGGAAGCTGTTCAG
CTTGAGCCAGTCCTGGGACCGGAAGTGCAAAGATGGACTCTACCAAGCCCTGAAGGAGACCCATCCTCACCTCAT
TATGGAACTCTGGGAGAAGGGCAGCAAAAAGGGACTCCTGCCACTCAGCAGCTGAAGTATCAACACCAGCCCTTG

FIGURE 7182B

ACCCTTGAGTCCTGGCTTTGGCTGACCCTTCTTTGGGTCTCAGTTTCTTTCTCTGCAAACAAGTTGCCATCTGGT
TTGCCTTCCAGCACTAAAGTAATGGAACTTTGATGATGCCTTTGCTGGGCATTATGTGTCCATGCCAGGGATGCC
ACAGGGGGCCCCAGTCCAGGTGGCCTAACAGCATCTCAGGGAATGTCCATCTGGAGCTGGCAAGACCCCTGCAGA
CCTCATAGAGCCTCATCTGGTGGCCACAGCAGCCAAGCCTAGAGCCCTCCGGATCCCATCCAGGCGCAAAGAGGA
ATAGGAGGGACATGGAACCATTTGCCTCTGGCTGTGTCACAGGGTGAGCCCCAAAATTGGGGTTCAGCGTGGGAG
GCCACGTGGATTCTTGGCTTTGTACAGGAAGATCTACAAGAGCAAGCCAACAGAGTAAAGTGGAAGGAAGTTTAT
TCAGAAAATAAAGGAGTATCACAGCTCTTTTAAAAAAAAAAAAAAAAAAAAAAAAGAAAAAAAAAAAAAAAAA

FIGURE 7183

CCCGTCCGGGTTAGGCGGCTGTAGCGGAGCTCGAAAAGAGTGGCGCAGGGTCGCGCGGCCCCGCCTCCTTCCCCG
CCCAGCGAAGCTCTCTGACCACCCCTCTTTTCTAGAGTTCTGCCTCGCTTCCCGGCGCGGTCGCAGCCCTCAGCC
CACTTAGGATA**ATG**GCGACAGCTGAGGTACTGAACATTGGTAAAAAATTATATGAGGGTAAAACAAAAGAAGTCT
ACGAATTGTTAGACAGTCCAGGAAAAGTCCTCCTGCAGTCCAAGGACCAGATTACAGCAGGAAATGCAGCTAGAA
AAAACCACCTGGAAGGAAAAGCTGCAATCTCAAATAAAATCACCAGTTGTATTTTTCAGTTATTACAGGAAGCAG
GTATTAAAACTGCCTTCACCAGAAAATGTGGGGAGACAGCTTTCATTGCACCGCAGTGTGAAATGATTCCAATTG
AATGGGTTTGCAGAAGAATAGCAACTGGTTCTTTTCTCAAAAGAAATCCTGGTGTCAAGGAAGGATATAAGTTTT
ACCCACCTAAAGTGGAGTTGTTTTTCAAGGATGATGCCAATAATGACCCACAGTGGTCTGAGGAACAGCTGATTG
CTGCAAAATTTTGCTTTGCTGGACTTCTTATAGGCCAGACTGAAGTGGATATCATGAGTCATGCTACACAGGCTA
TATTTGAAATACTGGAGAAATCCTGGTTGCCCCAGAATTGTACACTGGTTGATATGAAGATTGAATTTGGTGTTG
ATGTAACCACCAAAGAAATTGTTCTTGCTGATGTTATTGACAATGATTCCTGGAGACTCTGGCCATCAGGAGATC
GAAGCCAACAGAAAGACAAACAGTCTTATCGGGACCTCAAAGAAGTAACTCCTGAAGGGCTCCAAATGGTAAAGA
AAAACTTTGAGTGGGTTGCAGAGAGAGTAGAGTTGCTTTTGAAATCAGAAAGTCAGTGCAGGGTTGTAGTGTTGA
TGGGCTCTACTTCTGATCTTGGTCACTGTGAAAAAATCAAGAAGGCCTGTGGAAATTTTGGCATTCCATGTGAAC
TTCGAGTAACATCTGCGCATAAAGGACCAGATGAAACTCTGAGGATTAAAGCTGAGTATGAAGGGGATGGCATTC
CTACTGTATTTGTGGCAGTGGCAGGCAGAAGTAATGGTTTGGGACCAGTGATGTCTGGGAACACTGCATATCCAG
TTATCAGCTGTCCTCCCCTCACACCAGACTGGGGAGTTCAGGATGTGTGGTCTTCTCTTCGACTACCCAGTGGTC
TTGGCTGTTCAACCGTACTTTCTCCAGAAGGATCAGCTCAATTTGCTGCTCAGATATTTGGGTTAAGCAACCATT
TGGTATGGAGCAAACTGCGAGCAAGCATTTTGAACACATGGATTTCCTTGAAGCAGGCTGACAAGAAAATCAGAG
AATGTAATTTA**TAA**GAAAGAATGCCATTGAATTTTTTAGGGGAAAAACTACAAATTTCTAATTTAGCTGAAGGAA
AATCAAGCAAGATGAAAAGGTAATTTTAAATTAGAGAACACAAATAAAATGTATTAGTGAATAAAAAAAAAAAAA
AAAAA

FIGURE 7184

MATAEVLNIGKKLYEGKTKEVYELLDSPGKVLLQSKDQITAGNAARKNHLEGKAAISNKITSCIFQLLQEAGIKT
AFTRKCGETAFIAPQCEMIPIEWVCRRIATGSFLKRNPGVKEGYKFYPPKVELFFKDDANNDPQWSEEQLIAAKF
CFAGLLIGQTEVDIMSHATQAIFEILEKSWLPQNCTLVDMKIEFGVDVTTKEIVLADVIDNDSWRLWPSGDRSQQ
KDKQSYRDLKEVTPEGLQMVKKNFEWVAERVELLLKSESQCRVVVLMGSTSDLGHCEKIKKACGNFGIPCELRVT
SAHKGPDETLRIKAEYEGDGIPTVFVAVAGRSNGLGPVMSGNTAYPVISCPPLTPDWGVQDVWSSLRLPSGLGCS
TVLSPEGSAQFAAQIFGLSNHLVWSKLRASILNTWISLKQADKKIRECNL

FIGURE 7185

CGGTGCTAGCGACACGGGAGTGGCAAACGCATCCTCTTGCCGTTCCCGGTGTTTGGGCCTTGCCTGTGACGGTGG
GAAAAGAAA**ATG**GCCTTGCTGTGCTACAACCGGGGCTGCGGTCAGCGCTTCGATCCTGAGACCAATTCCGACGAT
GCTTGCACATACCACCCAGGTGTTCCGGTCTTTCACGATGCATTAAAGGGTTGGTCTTGCTGTAAGAGAAGAACA
ACTGATTTTTCTGATTTCTTAAGCATTGTAGGCTGTACAAAAGGTAGACATAATAGTGAGAAGCCACCTGAGCCA
GTCAAACCTGAAGTCAAGACTACTGAGAAGAAGGAGCTATGTGAATTAAAACCCAAATTTCAGGAACACATCATT
CAAGCCCCTAAGCCAGTAGAAGCAATAAAAAGACCAAGCCCAGATGAACCAATGACAAATTTGGAATTAAAAATA
TCTGCCTCCCTAAAACAAGCACTTGATAAACTTAAACTGTCATCAGGGAATGAAGAAAATAAGAAAGAAGAAGAC
AATGATGAAATTAAGATTGGGACCTCATGTAAGAATGGAGGGTGTTCAAAGACATACCAGGGTCTAGAGAGTCTA
GAAGAAGTCTGTGTATATCATTCTGGAGTACCTATTTTCCATGAGGGGATGAAATACTGGAGCTGTTGTAGAAGA
AAAACTTCTGATTTTAATACATTCTTAGCCCAAGAGGGCTGTACAAAAGGGAAACACATGTGGACTAAAAAAGAT
GCTGGGAAAAAAGTTGTTCCATGTAGACATGACTTGCATCAGACTGGAGGTGAAGTTACCATTTCAGTATATGCT
AAAAACTCACTTCCAGAACTTAGCCGAGTAGAAGCAAATAGCACATTGTTAAATGTCATTATTGTATTTGAAGGA
GAGAAGGAATTTGATCAAAATGTGAAATTATGGGGTGTGATTGATGTAAAGCGAAGTTATGTAACTATGACTGCA
ACAAAGATTGAAATCACTATGAGAAAAGCTGAACCGATGCAGTGGGCAAGCCTTGAACTGCCTGCAGCTAAAAAG
CAGGAAAAACAAAAAGATGACACAACAGAT**TGA**GTGGGAGATGGAAGGAAGGCTATTACATTATTTCCGAATTTT
TAATACTGTGTGAAGTGGTGGCTTGCTGCTGTAATCTTTTGTTTTGTTGTTGTGTTACTGAATGTGGCATTTCAG
GGTTAACATTAGGTTCTTAAAAGCCAAAGTCAGTTTGTCTTTTTGTGCCTCTCATCTTTCTTTTGTGTTATGTAA
GATTGATTATTCATTTCTCCCTACTGGTAGGAACCATAGTTGTGTCCTATACTTGAAGAGGCTGGAAAGTAGCCC
ATAACCATAATTGCAGTATTTCTTTGTATTTCTCTGTTAAGCAAAGAAATATTAAGGAACATTTTTTTTATGTTT
TTGTATTATTCCATAATTAGTAAAGCAAGATGAAATGTCAAATTTTAATCAGTTTTTTCATGGATTTGTGTTCTT
ACAGTACTTGAAAATATTTAAGGAAGAGATGAAGCTCTGCAGTTTTTTCTATGTGGGATGATTACTTTTTTAAGG
AGGATTAATTCTGAGGTAGTATAGTAACTAAAGGGGAATATATGAATTGTTTAACAAATTAGAATTTGTTTACAA
CTACTTGAATTTTTAAATTATGTCAAAACTTACATTACTTGCCAAGCAGTATGATGTTATAGGAAACATAAATAA
GATTACAGAGGTATCAATTTGGTTAAAATTCACCATTTTATAAGACTAAGCAATAATCTTAACAACCTCTTTCCT
GAATATTTAAATGTGTTTGTATGGTGTTATGACTAATTGTTACTGATTTAGAGACTAAGCCCTCTTAAAACCTTT
AGTTAAATATAAAAAGAAATTATATATATCTTGCCTCCCTGATGGAAAACTATATAAAATTGTAGACTTAAAAGG
TTTGTGGAAATACATTAGGATATCAGAAAACTAAATATATGGAGTTGCTTTATGACTATTACATGTTAAATAAAA
ATAGCTTAATTGTTAAAAAAAAAAAAAAAAAA

FIGURE 7186

MALLCYNRGCGQRFDPETNSDDACTYHPGVPVFHDALKGWSCCKRRTTDFSDFLSIVGCTKGRHNSEKPPEPVKP
EVKTTEKKELCELKPKFQEHIIQAPKPVEAIKRPSPDEPMTNLELKISASLKQALDKLKLSSGNEENKKEEDNDE
IKIGTSCKNGGCSKTYQGLESLEEVCVYHSGVPIFHEGMKYWSCCRRKTSDFNTFLAQEGCTKGKHMWTKKDAGK
KVVPCRHDLHQTGGEVTISVYAKNSLPELSRVEANSTLLNVIIVFEGEKEFDQNVKLWGVIDVKRSYVTMTATKI
EITMRKAEPMQWASLELPAAKKQEKQKDDTTD

FIGURE 7187A

GGCCGCGAGTGCATCTTCCACGAACCTAATTCATCTCTCCAGCAAAGGACACATCTCTCCAGCAAAGGACACCTC
TCTCCAGCAAAGGACACCTGCAGAGATGTCCCCAGTCCTTCACTTCTATGTTCGTCCCTCTGGCCATGAGGGGGC
AGCCTCTGGACACACTCGGAGGAAACTGCAAGGGAAACTGCCAGAGCTGCAGGGCGTCGAGACTGAACTGTGCTA
CAACGTGAACTGGACAGCTGAGGCCCTCCCCAGTGCTGAGGAGACAAAGAAGCTGATGTGGCTGTTTGGTTGCCC
CTTACTGCTGGATGATGTTGCTCGGGAGTCCTGGCTCCTTCCTGGCTCCAATGACCTGCTGCTGGAGGTCGGGCC
CAGGCTGAACTTCTCCACCCCAACATCCACCAACATCGTGTCAGTGTGCCGCGCCACTGGGCTGGGGCCTGTGGA
TCGTGTGGAGACCACCCGGCGCTACCGGCTCTCGTTTGCCCACCCCCCGTCAGCTGAGGTGGAAGCCATTGCTCT
GGCTACCCTGCACGACCGGATGACAGAGCAGCACTTCCCCCATCCCATCCAGAGTTTCTCCCCTGAGAGCATGCC
GGAACCCCTCAATGGCCCTATCAATATACTGGGTGAGGGCCGGCTTGCGCTGGAGAAGGCCAACCAGGAGCTTGG
TCTGGCTTTAGACTCTTGGGACCTAGACTTCTACACCAAGCGCTTCCAGGAGCTACAGCGGAACCCGAGCACTGT
GGAGGCCTTTGACTTGGCGCAGTCCAATAGCGAGCACAGCCGACACTGGTTCTTCAAGGGCCAGCTCCACGTGGA
TGGGCAGAAGCTGGTGCACTCACTGTTTGAGTCCATCATGAGCACCCAGGAATCCTCGAACCCCAACAACGTCCT
CAAATTCTGTGATAACAGCAGTGCAATCCAGGGAAAGGAAGTCCGATTCCTACGGCCTGAGGACCCCACACGGCC
AAGCCGCTTCCAGCAACAGCAAGGGCTGAGACATGTTGTCTTCACAGCAGAGACTCACAACTTTCCCACAGGAGT
ATGCCCCTTTAGTGGTGCAACCACTGGCACAGGGGGCCGGATTCGAGATGTCCAGTGCACAGGCCGCGGGGCCCA
CGTGGTGGCTGGCACTGCCGGCTATTGCTTTGGAAATCTGCATATTCCAGGTTACAATCTGCCCTGGGAGGATCT
AAGCTTCCAGTATCCTGGGAATTTTGCCCGGCCCCTGGAGGTTGCCATTGAAGCCAGTAATGGAGCTTCTGACTA
TGGCAACAAGTTTGGGGAACCAGTGCTGGCTGGCTTCGCCCGCTCCTTGGGCCTCCAGCTCCCAGACGGCCAGCG
GCGTGAGTGGATCAAGCCCATCATGTTTAGTGGGGGCATTGGGTCCATGGAAGCTGACCACATAAGCAAGGAGGC
CCCAGAGCCAGGCATGGAAGTTGTAAAGGTTGGAGGTCCCGTCTACAGGATTGGAGTTGGAGGTGGAGCTGCTTC
ATCTGTGCAGGTGCAGGGAGATAACACCAGTGACCTGGACTTTGGGGCTGTGCAGCGAGGAGACCCGGAGATGGA
ACAGAAGATGAACCGTGTGATCAGGGCTTGTGTGGAGGCCCCCAAGGGAAACCCCATCTGCAGCCTTCATGATCA
GGGCGCTGGTGGCAATGGCAATGTCCTAAAAGAGCTGAGTGACCCAGCTGGAGCCATCATTTACACCAGCCGCTT
CCAGCTTGGGGACCCAACCCTGAATGCCCTGGAAATCTGGGGGGCTGAGTACCAGGAATCAAATGCTCTTCTGCT
GAGGTCCCCCAACCGGGACTTCCTGACTCATGTCAGTGCCCGTGAACGTTGCCCGGCTTGCTTCGTGGGCACCAT
CACTGGAGACCGGAGAATAGTGCTGGTGGACGATCGGGAGTGTCCTGTCAGAAGAAATGGCCAGGGGGATGCCCC
CCCGACACCCCCGCCAACCCCTGTGGACCTGGAGCTCGAATGGGTGCTGGGCAAGATGCCTCGGAAGGAGTTCTT
CCTGCAGAGGAAGCCCCCCATGCTGCAGCCTCTGGCCTTGCCCCCAGGGCTGAGCGTGCACCAGGCTCTGGAGAG
GGTTCTGAGGCTGCCCGCCGTGGCCAGCAAGCGCTACCTCACCAATAAGGTGGACCGCTCCGTGGGAGGCCTGGT
GGCCCAGCAGCAGTGCGTGGGGCCCCTGCAAACTCCTCTGGCAGATGTAGCGGTTGTGGCACTGAGCCATGAGGA
GCTCATAGGGGCTGCCACAGCCTTGGGAGAACAGCCAGTCAAGAGCCTGCTGGACCCAAAAGTCGCCGCCCGGCT
GGCCGTGGCCGAAGCCCTCACCAACCTGGTGTTTGCTCTGGTCACTGACCTCCGGGATGTGAAGTGTAGCGGGAA
CTGGATGTGGGCAGCCAAGCTCCCAGGGGAGGGCGCAGCTTTGGCGGATGCCTGTGAGGCTATGGTGGCAGTGAT
GGCAGCCCTGGGTGTGGCAGTGGATGGTGGCAAGGACTCCCTCAGCATGGCTGCTCGGGTTGGCACTGAGACCGT
GCGGGCTCCTGGGTCACTGGTCATCTCAGCCTATGCCGTCTGCCCAGACATCACAGCCACTGTGACCCCAGACCT
CAAGCATCCTGAAGGGAGAGGCCATCTGCTCTATGTGGCTCTGAGCCCTGGGCAGCACCGGCTCGGGGGCACAGC
TCTGGCCCAGTGCTTCTCCCAGCTTGGGGAACACCCTCCAGACCTGGACCTTCCTGAGAACTTGGTGCGGGCCTT
CAGCATCACTCAGGGGCTGCTGAAAGACCGCCTCCTCTGCTCAGGCCACGATGTCAGTGACGGAGGCCTCGTCAC
ATGCCTGCTGGAGATGGCCTTTGCTGGAAATTGCGGGCTACAGGTGGATGTGCCTGTCCCCAGGGTTGATGTCCT
GTCTGTGCTGTTCGCTGAGGAGCCAGGCCTCGTGCTGGAGGTGCAGGAGCCAGACCTGGCCCAGGTGCTGAAGCG
TTACCGGGATGCTGGCCTCCATTGCCTGGAGCTGGGCCACACAGGCGAGGCCGGGCCCCACGCCATGGTCCGGGT
GTCAGTGAACGGGGCTGTGGTTCTGGAGGAGCCTGTTGGGGAGCTGCGAGCCCTCTGGGAGGAGACGAGTTTCCA
GCTGGACCGGCTACAGGCAGAGCCTCGCTGTGTGGCAGAGGAGGAACGGGGCCTGAGGGAGCGGATGGGGCCCAG
CTATTGCCTGCCCCCCACCTTTCCCAAAGCCTCCGTGCCCCGTGAGCCTGGTGGTCCCAGCCCCCGAGTCGCCAT
CTTGCGAGAGGAGGGCAGTAATGGAGACCGGGAGATGGCCGATGCCTTCCACTTAGCTGGGTTTGAGGTATGGGA
CGTGACCATGCAGGACCTCTGCTCTGGGGCAATTGGGCTGGACACTTTCCGTGGCGTGGCCTTCGTGGGCGGCTT
CAGCTATGCAGATGTCCTGGGCTCTGCCAAAGGGTGGGCAGCTGCTGTGACCTTTCATCCCAGGGCTGGGGCTGA
GCTGAGGCGCTTCCGGAAGCGGCCAGACACCTTCAGCCTGGGCGTGTGTAATGGCTGTCAACTGCTGGCTCTGCT

FIGURE 7187B

CGGCTGGGTGGGAGGCGACCCCAATGAGGATGCTGCAGAGATGGGCCCTGACTCCCAGCCAGCCCGGCCAGGCCT
TCTGCTACGCCACAACCTGTCTGGGCGCTACGAGTCTCGCTGGGCCAGCGTGCGTGTGGGGCCTGGGCCAGCCCT
GATGCTGCGAGGGATGGAGGGCGCCGTGCTGCCCGTGTGGAGTGCGCACGGGGAAGGTTACGTAGCATTTTCTTC
TCCGGAACTCCAAGCTCAGATTGAGGCCAGGGGCTTGGCTCCACTGCACTGGGCTGATGATGACGGGAACCCCAC
AGAGCAGTACCCTCTGAATCCCAATGGGTCCCCAGGGGGCGTGGCTGGCATCTGCTCCTGTGATGGCCGCCACCT
GGCTGTCATGCCTCACCCTGAGCGGGCCGTTAGGCCTTGGCAGTGGGCATGGCGACCCCCTCCATTTGATACTCT
GACCACCTCCCCCTGGCTCCAGCTCTCTATCAATGCCCGAAACTGGACCCTGGAAGGGAGCTGCTGACTGGCCAC
AGGGGCTCACCTGGGCCCCATGGCTTTTCACCTAAGTGGGTCCTGCCCCCTCCCCCATGACCTTCAGGAGCACCC
CATATTATTTCCAAAAATATCTTGGACAGACAAGGACCAAAATGCCAAAATCTCAGCGGACTCGATGATCTGCCT
GCTGATGTTCCTTCTGTGGCTGTGTCTATTTTCAGTTCTGCTCTAACATGGCATGCCCTTTCTCAGCCCAGGAAA
CAGCATGTGGTTCAGAGAAAAGAGCGACAAGGAAAAGTTAGGACTCCTGAGGTCCGAACAGGGGCTTCTGTTGCC
CACTTCACAACACCCAGTGATCACCGGTGTGCAATTGCCTCCTTGGCTCTGAGGGATGTTTTGCGCTCCCTTTTC
TCATCATTGGGGTTAGCGGGTGCAGACAAATTCAGCAATAGTATGCAGATCAGCCCCTCACCACCTCATTGTTCT
CATCTGGAACTGAAACTTTCTGGATTTCTCTTGAAGTGCTACACTGCACTGAATGTAAGGAATTGTTGCTTGTGG
AAGTTTCTCAGCGTTTCTGGCTGTCTTAGGGCTGGCCTCAGAACCCAGCATTCCTGTTATTTGCTTCTAAATTAG
CAGCTCTCTTTTTTTTTTTTTTTTTGAGGCAGTCTCACTCTGTCACCCAGGCTGGAGTGCAGTGGCGTGATCTCG
GCCCACTGCAACCTCTGCCTCCTGGGTTCAAGCAATTTTCCTGCCTCAGCCTCCCGAGTAGCTGGGAGTACAGGC
ACACACCACCACACCCAGCTAATTTTTGTATTTTTAGTAGAGATAGGGTTTCACCGTGTCTCCCAGGCTGGTCTC
AAACTCCTAACCTCAAGTGATTCGCCTGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGTGGGAGCCACTACAGC
TGGCCCAGCAGCTCTGTTTCTGATAGAGGTGGTTGGGGCTCTCATCCCTAGATCCTAACCCTTTAGTATGCTGGA
ATTCTACTCTTCACTTACTGCATTGACTGTTGTTGATTAGTTATTATTGCAAAGCACTGCCACCGGCCTCAGGGA
GTTTATGTGTAATAGAATTAAAAATAATAGCTGTGTATAACACTTAGCTCAAGCCACGCATGTGTGAGGCATTTG
GTATGTATCTGAATTAATTCTCACTAAAATTCAGCAAAGGACTTGATAGCCTCTCCCCGCCTTTTCAATAAAGGA
TGAATGAAGGTTG

FIGURE 7188

TTTTTGCTCTGGGTCCTCTGGGATGGCGCCTGGCTGTGGCCGCGTGGTCTCTCACGCAGGGGCGCCGGGCGGGGA
ACGCGGCCACCCTGAGTCTGGTGAGTCGACTGCGGCGGCCTGTGTCCGAAGTGTCCGGGGCCGTGAACAAGGGCA
GCGGCTGGCCTCAGCTGXCGTTTCCCACGTTTGGAAACGGGGAGCTTCGTCGATTTGTGTTTACATCATCGACTA
TGCCAGGGAGTTCTCCAGATAAGCCTGGTTTTATTTTCGTCAGTGAAAAAGGCCTTAACCGTATAAACTGACTTT
ATGCTTGCCCTGCCCCCGTATAAAATAACTTAAAAGCAGCGTGCCCGGTTACAGCTGTTTCCCACGTGCGGTGCT
CGTCGGGAGTGATCACCTACCCTACAGGTGGAAGATGGATGCCTGAAGTGTAGACTGCTGCTAGCTGAATACCAT
CTGGGAGCATAAAGGTGACCTGAAGGATGTCCTTGGTGAGGATTTTGAAAATTTGATCTTCACAAGAGTTGCCTG
GATCATTTGAAATTTCTGGGAGTCTGAGGAGTACTGACATAATTACCTGCTGGAGTCTGTAAATACACATTTAAG
ACAGTGAGGATGTGAATAAA

FIGURE 7189

CGCTCTAGCCTGTAATACCAGCTACTCAGGAGGCTGAGGCAGGAGAATGGCTTGAACCCAGGAGGTGGAGGTTGC
AGAGAGCCGAGATGATGCCACTGCACTCCAGCCTGGGTGACAGAGCAAGACTCTGTATAAAAAAATAAAAAATAA
AGTGGATGAGTTAGAATTGGGTTTCTATCCTTTATTTTTATAAAATGGATCAAGGTTTTAACATGTCTGAATAAA
ATTTGCCATGGACAGCTGCCCAACCTTGACCTGCTCAATCTCTTCCAGACCTTCTGCCAGAAAGTGGGCCTGCTG
TGCACGCTTCAGGGTAAGCTGCAGCCCCAGGACTGGACATTGTTGGACGAACTGCTGCAGGGCCTGCAAACACTG
CTGCTCATGATTTTGTGGCAGGCTTCCCGTGGCCTCTTCCTGCACTACCATGTGGAGGCCCTAACCCTGCGTCGC
ATCAGTAGCTTCCGCCAGTACAAGTATGACCTGGTGGCAGCGGGCAAGGCTTTGGAGGGCATGTTCTGCAAGCTC
AACCACCTCCTGGAACACCCGCACCAGCTGTTCTTCCTCTACCTGCTCCCCACTCTGTCCCGCTTCGTCTCCATC
GGCCTCTACATGCCCGCCACCAGCTTCTTGCTCCTGGTCCTTGGTTTCAAGGCTCTGCAACTGTGGATGCAGCTG
CATGAGGCCGGAGTGGGCCTTGAGGAGCTCAGGGGGGTCCCTGACCCTAGTGTCCCCCCTCCCCCAGCACAGGAT
GGTAAGCACACAGGTCCCAGACAGGGGCTGGATGGCTCTGAAGCTGGTAGCCCTGATCTACCTAGTACTGCAGCT
GGGCTGCATCGCCCTCACCAACTTCTGACTGGACTTCCTGCTGGCCGCCACTGTGGTGCTGCCGCTGTGCTCGCC
GAGCCTTTGGGCCCTGGACCCTCTGTGCTGCCCTGCTGGTGTTGACAAGCCCGGCAGCCACGCTCCTTGGCAGCC
CATTCCTGTGGCGGGAGCTGCAGGAGGCACCACTGTCACTGGCCAAGGGCTGGCAGCTCTTCCTGGCAGCACTGG
CCCAGGGTGCGCTGGAGCACCACACCTAAGGCGCCCTGCTCTTCCCACTGCTGTCCCTGGGCCTCTGCCCTTGCT
GACTACTTTTCTGGAATGTGCTCTTCTGGAAGTGAGATCTGCCTGTCCGGGGCACCAGGCTGGGACAGAGACTCC
CCAAGGACCCCATTCTGCCTCCTTCTGGGGAAATAAACAAGTGCCTGTTTCAGCTGCTTTAAAAAAAAATAGAAA
AAAAAAATGCCCTGGAAAATACTGTGTTAGCAAAAAGATTTAAAGACTGGTATAATTCTGATTTAAATGTTTTAT
TTAGCACAAAATCAAACATTGCATAGGAACAAAATTTTCTGAGACAAAATGGCTGGGTTTAAATGGGTTTAAATG
TCTAAAAAATACTTAGCTAACAGTGTGGTTAAATTTTTACTTATTTTATTTATTTTTGAGATGGAGTTTCATTCT
TGTTGCCCAGGCTGGAGTGCAGTGGTGCGATCTCAGCTCACCGCAACCTCCACCTCCAAGGTTCAAGTGATTTTC
CTGTCTCAGCCTCCTGAGTAGCTGGGATTAGAGGCGCACACCACCACACCCAGCTAATTTTTGTATTTTCAGTAG
AGATGGGGTTCGCCATGTTGACCAGGCTGGCCTCGAACTCCTGACCTCAGGTGATCCACCATTCTCAGCCTCCCG
AAGTGCTGGAATTACAGGCGTGGGCCACTGCCCCCGGTCAAGTGTTTTTCTTTTTTTCTTTTGAGATGGAGTCTC
ACTCTGTTGCCCAGGCTGGAGTGCAGTGGCACGATCGAGGGTCACTGCAACCTCCGCCTCCTGGGCTTAAGCAAT
TCTCCTGCCTCAGCCTCCTGAGTAGCTTGGAATACGGGCACCCACCACCCCACCTGGCTAATTTTTTGTATTTTT
AGTAGAGATGGGXTTCACCATGTTGGCCAAGCTTGTCTTGAACTCCTGACCTCAAGTGTATCGAGTCGA

FIGURE 7190

QLPNLDLLNLFQTFCQKVGLLCTLQGKLQPQDWTLLDELLQGLQTLLLMILWQASRGLFLHYHVEALTLRRISSF
RQYKYDLVAAGKALEGMFCKLNHLLEHPHQLFFLYLLPTLSRFVSIGLYMPATSFLLLVLGFKALQLWMQLHEAG
VGLEELRGVPDPSVPPPPAQDGKHTGPRQGLDGSEAGSPDLPSTAAGLHRPHQLLTGLPAGRHCGAAAVLAEPLG
PGPSVLPCWC

FIGURE 7191A

AGTTATTCTTCATCCTAGCATTTCTGTTCGACTAGCAGCAGCTTGGTGTTTACACTGCATTGCCGTGGCATTACC
CTCCTACCTAACACCACTCTTGGATCGTTGCCTTGAACGGCTTACTGGACATAAGTCTTCACCTGAAGCAGTGAC
TGGCTTCAGTTTTGCTGTAGCAGCTTTGTTGGGAGCAGTAAAACATTGTCCTTTAGGAATTCCTCATGGAAAAGG
CAAGATTATTATGACATTAGCAGAGGATTTGCTGTGTTCTGCTGCTCAAAACAGTCGCCTTTCAGCTCAGCGCAC
ACAAGCTGGATGGTTGCTGATTTCTGCTCTGATGACATTAGGTCCTGCAGTTGTTAGCCATCACCTTGCTCGAGT
TCTGCTGTTGTGGAAGTGTGTCTTTCCAGCATCTCCTAAAGATCTAGAAACAGAAAAGAGCCGAGGAGATTCGTT
TACATGGCAGGTGACCCTGGAAGGACGAGCTGGTGCACTGTGTGCTATCAAGAGCTTTGTTTCCCACTGTGGTGA
TCTTCTTACTGAGGAAGTAACTCAGCGTCTTCTTCCACCACTTCCTTGTGCTGTGGATTTGCTAACTCAGCTTTC
TTCAATACTAAAAATGTATGGAAGTCCTTTGAAAACACCGTCAGTGGTTTATAGACAAAGACTTTATGAACTGTT
GATTTTATTACCTCCTGAGACCTATGAAGGAAACCTCTGTGCTATCCTCAGAGAGCTGGCTGCTGACTTGACTGC
CCCTGATATTCAGGTGGCAGCATCTACATTTTTACTTCCACCCCTCTGTCATCAGGATGATCTTTTGATACTAAG
TCCTTTCCTACAAGAGACTGACCATAGATTTATTGAAGAACAGCTCCTGCTTGGTAATGGTGTTGCTTGCGGAAG
TCTTGAATATGACCCTTATTCGATTTATGAGAAAGATGTAGAGGGAGATTCAGTGCCTAAGCCCTTACCTCCAGC
ACTATCAGTTATTAGTTCTGCATCCAAGCTCTTTGGGGTTGTATGCGCTCATGTGGGAGAAACTCAAAGGCTTCT
TATACTGGAACAGCTTTTGGACAGTATAAAGCACACAAAAGGAGCTCGTCAGCAAGTGGTTCAGTTACATGTTGT
TTCTTCAGTTTCTAGTTTCTTGAAGTACGTGGCTGGCTCCAAGGGATGTTTAGGTCCAGAAGAAATGAAAAGATT
TGCCTTAACATTAGTTATGGGAGCCCTAGAAAGCCCCAACCCCTTGCTGAGATGTGCAGCTGCAGAGTCATGGGC
TAGATTAGCCCAAATGGTAGATGATGGAGCTTTTACTGCTGGATTAGCTCAAGTTAGCTTTGACAAATTGAAATC
AGCAAGGGATGTGGTTACCAGAACAGGACACTCATTGGCCTTGGGGTCCCTACATAGGTATTTAGGAGGAATAAG
TTCTTCTCAACACCTAAATTCTTGTATTGGAATCCTTTATACTTTGGCGCAGGACAGCACTTCTCCTGATGTGCA
GACCTGGGCATTACATTCTCTATCATTGATCATTGATTCTGCTGGCCCACTCTATTATGTGCATGTGGAACCTAC
CCTTTCTCTTATTATAATGTTGTTGTTAAATGTGCCTCCTACTCATGCTGAAGTTCACCAAAGCCTTGGTCGCTG
TTTGAATGCCCTTATTACCACGTTAGGTCCAGAGCTACAAGGTAACAGTACTTCAATTTCTACCTTAAGGACTTC
CTGTCTACTGGGTTGTGCAGTAATGCAAGATAACCCAGACTGCCTTGTTCAAGCTCAGGCCATCTCTTGCCTTCA
GCAGCTTCATATGTTTGCTCCACGACATGTCAACTTGTCTAGCCTGGTTAGCTGCCTCTGTGTGAATCTTTGTAG
CCCCTACTTGTTACTGAGAAGAGCAGTACTGGCTTGCTTACGTCAGCTTGTACAAAGAGAAGCAGCTGAAGTTTC
AGAACATGCTGTTATGCTTGCTAAGGATAGCAGAGAAGAGTTGACTCCAGATGCTAACATCAGAGAAGTTGGCCT
TGAGGGGGCATTGTTGATCTTACTAGACAAGGAGACAGATGAGAGATTATGCCATGATATCAAAGAGACTTTAAA
TTATATGCTTACATCTATGGCAGTGGAAAAACTCTCCCTGTGGTTAAAGCTTTGTAAAGATGTACTTGCTGCATC
AGCTGATTTTACAGCTGTAACTTGTGTGGATACAATGCAAGAAGAAGAAGGAGATAAAGGGGATGATGCCTCAGT
CCTGACCACCAGACGTGATGAAAAATCCCATCCTTTTACCAATCCCCGATGGGCTACTAGAGTCTTTGCTGCTGA
ATGTGTCTGTAGGATAATTAACCAATGTGAGAATGCTAACAGTGCACATTTTGACATTGCTTTAGCACAAGAAAT
GAAAAAAAGAGATTCAAGAAATGACTTTTTGGTACTGCATCTTGCTGACTTAATTCGCATGGCTTTTATGGCTGC
CACAGATCACAGTGACCAGCTCCGTCTTTCTGGCCTTGAAATGCTGTTAGTTGTTATTCGGCGATTTGCAACTGT
TCCAGAACCAGAGTTTCCAGGTCATGTGATTCTGGAACAGTATCAAGCCAATGTAGGAGCAGCGCTTAGACCAGC
CTTCACTTCAGAGACACCACCTGATGTCACTGCCAAAGCATGTCAGGTTTGCAGTGCCTGGATAGCAAGTGGAGT
TGTAAGTGACCTTAATGATCTCCGAAGAGTTCATCAGTTGCTTGTTTCATCGTTAACTAAAATACAGGCTGGAAA
AGAAGCTCTAAGTCACTTATATAATGAAAGTGCTTCTACCATGGAGATCTTAGCTGTGCTTAAAGCCTGGGCAGA
GGTCTACATAATTGCTGTGCAAAGACATAAAAACCACAGACAACCTTTGAAGACTACCACCTGTTTAGAAGACGG
TATCAGAAATGGATCATGTTCATCAGATGGACTGCTTGACTTAGTCTATGCAGATCTTGGCACACTAAGCAGACT
CTGGCTTGCTGCACTTCAGGATTTTGCTCTTTTAACTTTGCCTTCAGAATTTGCCTCCCAACTTCCTGCTGAAGG
TGGTGCTTTCTACACAGCAGAGACTAGTGAAAATGCAAAATTGCATTATTACAACTCCTGGGCACTTATCCTCCA
TGCTACAGCATTGTGGCTTACAAGCACGGGTTTTGTTGTTGCTGACCCAGATGAAGGAGCATCTAATCTCTCCAG
GCCTGTAACACCAACTTCCATGTGTCAGGGTTCATCATCTGGGGCTACCATAAAGTCCCCTGAGGATGTCTACAC
TGATAGATTCCATCTTATTTTAGGAATCAGCGTGGAATTTCTATGTTCCTTACGTTCAGATGCAACCATGGAAAG
CATAACTGCTTGTTTACATGCATTGCAAGCACTTCTAGATGTACCTTGGCCCAGATCAAAAATTGGCAGTGATCA
GGACTTGGGTATAGAATTGCTGAATGTTCTACATCGAGTAATTTTAACCAGAGAATCACCTTCCATTCAGTTGGC
TTCACTTGAAGTGGTAAGGCAGATTATCTGTGCTGCTCAAGAACATGTGAAGGAAAAAAGACGAAGTGCAGAAGT

FIGURE 7191B

TGATGATGGGGCTGCTGAAAAGGAAACTCTGCCAGAGTTTGGAGAGGGAAAGGACACCGGAGGACTTGTGCCTGG
AAAGTCTTTGGTCTTTGCAACACTGGAATTGTGTGTATGCATTCTAGTTAGACAGCTCCCAGAATTAAACCCTAA
ATTGACAGGTAGCCCAGGAGTAAAAGCTACGAAGCCACAGATACTATTAGAAGATGGAAGTAGATTGGTTTCAGC
TGCATTGGTTATCCTTTCCGAACTTCCTGCAGTGTGCTCTCCTGAAGGAAGCATCTCAATTCTCCCTACTATATT
GTACCTCACAATCGGGGTCCTCAGAGAGACTGCTGTGAAGTTACCTGGGGGGCCAGTTATCTTCGACAGTTGCAGC
TTCCCTACAGGCTTTAAAAGGAATATTATCTTCTCCCATGGCCCGGGCAGAAAAGAGCCGTACTGCTTGGACTGA
CCTTCTCCGAAGTGCCTTAACAACAATTCTTGACTGTTGGGATCCAGTTGATGAAACACACCAAGAACTTGATGA
AGTCAGTCTACTTACTGCTATCACAGTGTTTATTTTGTCTACCAGTCCAGAAGTAACTACCATCCCATGCCTTCA
GAAGCGCTGTATTGATAAATTTAAAGCTACTCTTGAGATAAAAGATCCTGTGGTACAAATCAAGACCTACCAGCT
CCTACATTCCATCTTTCAGTATCCAAATCCAGCTGTTTCCTACCCATACATTTACTCTTTAGCATCCTGTATCAT
GGAAAAACTGCAGGAAATAGACAAGAGAAAACCTGAAAACACTGCTGAGCTTGAGATCTTCCAAGAAGGCATAAA
GGTCTTAGAAACACTGGTTACTGTTGCTGAAGAACACCATCGCGCTCAGCTGGTGGCCTGTCTTTTGCCCATCCT
CATTTCCTTCCTTTTGGATGAAAATTCTCTGGGATCAGCAACTTCCATAATGAGAAATTTACATGACTTTGCTCT
ACAAAATCTCATGCAAATTGGACCTCAGTATTCATCTGTTTTTAAAAGTTTAGTGGCTTCTTCTCCAGCCCTAAA
AGCCCGCCTTGAGGCTGCTATAAAGGGCAATCAGGAAAGTGTCAAAGTCAAGATACCAACATCTAAATATACTAA
GAGTCCTGGAAAAAACTCAAGCATCCAATTAAAGACCAGTTTCCTCTGATTTTTTTTTTGGAATAGTAAGCACCT
TAATATAATAAATACTTGATCATTGCCTTTGGTGACAAAAGGGACATTGTAGACACAAGTGCCCTTAGAGGTCTA
GTTGATTGTTTTACCTTAAATAGCTGTGACTCTTCAAAGTAACAGCATACTTAACATTTTTGTGTGTGTGCGTGG
GGTTTGTGTTTTGTTTTGTTTTGTTTTTCTATTTAAAAAGACAATGGAGCTAACTTGCCAGGAATTTTAAGAAAG
TGCTAAAGAACTAAACTTACTAAACAATCCACTGCTTTAAAAATGAAATGAATTTCTTCTAACAGTCCATACATA
TGTGGTATACTTAATACTGTGACAGATATAAATATGACTCTAGTGTAAATTATCTGCACTAATATTGTATCCCAA
TTGCTGATTTAAAATTCTGCTTTGGCCCGGCACAGTGGCTCATCCCTGTAATTCCAGCACTTTGGAAGGCCAAGG
CGGGCGGATCACGAGGTCGGGAGTTTGAGACCAGCCTGACCAACATGGTGAAACCCCGTCTCTACTAAAAATACA
AAAATTAGCCGGGTGTGGTGGCACACACCTGTAATCCCAGCTACTCAGGAGGCCGAGGCAGGAAAATCGCTTGAA
CCTGGCAGGCAGAGGTTGCAGTGAGCCAAGATTGTGCCACTGCACTCCAGCCTGGGCGACAGAGTGAGACTCCAT
CT

FIGURE 7192

VILHPSISVRLAAAWCLHCIAVALPSYLTPLLDRCLERLTGHKSSPEAVTGFSFAVAALLGAVKHCPLGIPHGKG
KIIMTLAEDLLCSAAQNSRLSAQRTQAGWLLISALMTLGPAVVSHHLARVLLLWKCVFPASPKDLETEKSRGDSF
TWQVTLEGRAGALCAIKSFVSHCGDLLTEEVTQRLLPPLPCAVDLLTQLSSILKMYGSPLKTPSVVYRQRLYELL
ILLPPETYEGNLCAILRELAADLTAPDIQVAASTFLLPPLCHQDDLLILSPFLQETDHRFIEEQLLLGNGVACGS
LEYDPYSIYEKDVEGDSVPKPLPPALSVISSASKLFGVVCAHVGETQRLLILEQLLDSIKHTKGARQQVVQLHVV
SSVSSFLKYVAGSKGCLGPEEMKRFALTLVMGALESPNPLLRCAAAESWARLAQMVDDGAFTAGLAQVSFDKLKS
ARDVVTRTGHSLALGSLHRYLGGISSSQHLNSCIGILYTLAQDSTSPDVQTWALHSLSLIIDSAGPLYYVHVEPT
LSLIIMLLLNVPPTHAEVHQSLGRCLNALITTLGPELQGNSTSISTLRTSCLLGCAVMQDNPDCLVQAQAISCLQ
QLHMFAPRHVNLSSLVSCLCVNLCSPYLLLRRAVLACLRQLVQREAAEVSEHAVMLAKDSREELTPDANIREVGL
EGALLILLDKETDERLCHDIKETLNYMLTSMAVEKLSLWLKLCKDVLAASADFTAVTCVDTMQEEEGDKGDDASV
LTTRRDEKSHPFTNPRWATRVFAAECVCRIINQCENANSAHFDIALAQEMKKRDSRNDFLVLHLADLIRMAFMAA
TDHSDQLRLSGLEMLLVVIRRFATVPEPEFPGHVILEQYQANVGAALRPAFTSETPPDVTAKACQVCSAWIASGV
VSDLNDLRRVHQLLVSSLTKIQAGKEALSHLYNESASTMEILAVLKAWAEVYIIAVQRHKNHRQPLKTTTCLEDG
IRNGSCSSDGLLDLVYADLGTLSRLWLAALQDFALLTLPSEFASQLPAEGGAFYTAETSENAKLHYYNSWALILH
ATALWLTSTGFVVADPDEGASNLSRPVTPTSMCQGSSSGATIKSPEDVYTDRFHLILGISVEFLCSLRSDATMES
ITACLHALQALLDVPWPRSKIGSDQDLGIELLNVLHRVILTRESPSIQLASLEVVRQIICAAQEHVKEKRRSAEV
DDGAAEKETLPEFGEGKDTGGLVPGKSLVFATLELCVCILVRQLPELNPKLTGSPGVKATKPQILLEDGSRLVSA
ALVILSELPAVCSPEGSISILPTILYLTIGVLRETAVKLPGGQLSSTVAASLQALKGILSSPMARAEKSRTAWTD
LLRSALTTILDCWDPVDETHQELDEVSLLTAITVFILSTSPEVTTIPCLQKRCIDKFKATLEIKDPVVQIKTYQL
LHSIFQYPNPAVSYPYIYSLASCIMEKLQEIDKRKPENTAELEIFQEGIKVLETLVTVAEEHHRAQLVACLLPIL
ISFLLDENSLGSATSIMRNLHDFALQNLMQIGPQYSSVFKSLVASSPALKARLEAAIKGNQESVKVKIPTSKYTK
SPGKNSSIQLKTSFL

FIGURE 7193A

CCCAGGCCGGCTCTGGCCTCCTGACCCAGACAGCGCAGGGCGCGAGGGATCGCGCGGCCGAGCCCGGGTCGCGCC
GCTCCCAGCATCGGGGCCGCTAGCCAAGAGTTCGAGGCCTTCCCGATCCGGATGTGATGAAAAAGAGCAACAGAG
GGAGAAGTGTTTCAGGATTGTAGGAGTGGAAGAGGGGAAAGAGAGGCAGAGAGGGGGAAGGCCCCCTCGCAGGGG
AGCCGGCTGGAGTGAGCTGGCTGGAAAGAGGGGGCGGAGTGCGCGGAGTCAGAGCCGCCACCGCTGCCGCAGTTG
CCGCCACTGCGGCGTCTGGGCTGAGCCGGAGGGAGGCGGGAGGACGCGCAGGGGCGGCCGCCGCCGTCGTCAGGC
CACCGGGGCGAAAATGCGGCCGCTGCCGGAGGCTCGCTAACTTTCCGGGGCGGAAGAGGAGGAGGAGGAGGAGGA
AGGGGCTTGGAGCGACTACGGGGGGATGCGGAGAAGCAGTCAGTTCCCTGCACCCAGCACCTCACAGCCCTTCCT
CCGTGCGCCCTGCCGGGCGGCGAGCTAGGCGGCAGCGGCGCGGCGCGGGCTCGGCGGAGCGGCCCATGTCCGGCG
CGGGCGAAGCCCTCGCTCCCGGGCCCGTGGGGCCGCAGCGCGTGGCCGAGGCGGGCGGCGGCCAGCTGGGCTCCA
CAGCCCAGGGAAAATGTGATAAAGACAATACTGAGAAAGATATAACTCAAGCTACCAATAGCCACTTCACACATG
GAGAGATGCAAGACCAGTCCATTTGGGGAAATCCTTCGGATGGTGAACTCATTAGAACCCAACCTCAGCGCTTGC
CTCAGCTTCAGACTTCAGCACAGGTGCCAAGTGGTGAGGAAATAGGCAAGATAAAGAACGGCCACACAGGTCTGA
GCAATGGAAATGGAATTCACCACGGGGCCAAACACGGATCCGCAGATAATCGCAAACTTTCAGCACCTGTTTCTC
AAAAAATGCATAGAAAAATTCAGTCCAGCTTGTCTGTAAACAGCGATATCAGTAAGAAGAGCAAAGTAAATGCTG
TCTTTTCCCAAAAGACAGGCTCTTCACCTGAAGATTGTTGTGTCCACTGTATCCTGGCTTGCTTGTTCTGCGAAT
TCCTGACCCTTTGCAACATTGTCCTGGGACAAGCGTCATGTGGCATCTGCACCTCAGAAGCCTGCTGCTGTTGCT
GTGGTGACGAGATGGGGGATGATTGTAACTGCCCTTGTGATATGGACTGTGGCATCATGGATGCCTGTTGTGAAT
CATCAGACTGCTTGGAAATCTGTATGGAATGCTGTGGAATTTGTTTTCCTTCATAAATATTTATCTTTTGTTTGT
GTTAAAACTGGAGAGTGTTTAAAAATTTCCTTTTGGGGGGAAGAAAAGCACATTGTAAGATTCTCATGAAACAAC
ATGGAATTTGCACTGTTAACTCATTATTGTAAGTAATCTCTGAAAGCCTTTTTACTTTAACCAAATCTACATGGT
TTAATATGTGAAATTTTAACTACTTTAACTAGTTTTATAAATTTCTTAATATGTTACAATAACTTAGGGACATTT
TGACACCCCCCTTCCCAAATGTTAAATGCCTTCTCCTTTTTACCGATATTTCTGTTTCTTTTAACCGTTCTCAGG
AGCACTTTGCTCCAAATATATTATTTTTCAGTGTGTATTTAAACGAGGCAGTTTATTTTGATATGTATCTATTCA
TGATTGAAAGGAAGCAGTCTTGGCCAGGCACGGTGGCTTACACCTGTAACCCTGGCATTTTGGGAGGCCAAGGTG
GGCAGATTGCCTGAGCTCAGGAGTTCGAGACCAGCCAGGGCAACATGGTGAAACCCCATCTCTACTAAAATACAA
AAAGTTAGCTGGGCTTGGCGGTGTGCGCCTGTAGTCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATTGCTTGAA
CCCGAGAGGCGGAAGTTGCAGTGAGCCGAGATTGTGCCACTGAACTCCAACCTGCACTCCAGCCTGGGCAACAGA
GCGAGACTCCATCTCTAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAACAAACCAGTCTT
TATTTTAAAAGAAACTTTAGGAAACAAACCCACATAATAGTTGGGAACCAGTGTTGATCTCTCTCCCTTACCTTC
TCCACTTGTTCAACAGACTCTGAATGCCGACTGTGTGGACTCTCTTCCTCAGACTGTGGGGACAGATACAATTCC
ACTCCTGTCCACAGGAACATGAGATTTAGCAGACTAAGGAGATCTGTAAAGAATGAACCATACCACAAGGCATAC
TGAAGTGAGGATTATAAGAGAAATAAACTCAAAATGCTGTTGGAATATGCAGAGAATTGCTACCAGAATATTCAG
TAAGGTTTCAGGGAGAATGTGGCATTTGAGGACTCTCTTAGAATGAGTGATTCACCTGCTATTTAAATGAATTAT
TTAGATTTTTGACAAAGATTTAGGTGGACACCCTAAACTGTGTGTGCCTTTAACCAGTTAAAAGAACAGTGCCTT
CAGCATACTTTTTTATTAGTTGTAGGAATACAGCTTTTTGAAAAAGCTATAAAGTTTAAATTAACTAAAAATATG
CATTTTCTTACACATAATTTAAATGTTATCATACTTTTTTGATGAAAACATAATGCCTTAGTAAAATAGCTCTAT
TTAATAAAGAAGATTGAGTACTCTGACACATTTCATTTAAATTAGGAAATTTTTAATATTAAAATCCCAGTGTTC
TGAGTTATTGAAAGGCTTTCTTTTATTTTGAGAGCTTTAGGTCTTTTTGGGATGAGAACATTTTAGTTGTTTAGT
TTGTTTCTTAAGCAGTGCTATTTTTTGTAAACACAGATAAATGGAAACCATTCTTTTCAATGCAGAAGAAATCTA
GATATCCCCTACTGTGACCAAATTTCTGTATTACGATTTTATGTTAAATTAAACTAATATGGCAGGTTATAATGA
TCCTTAAGTGTAAAGAAATCAGTCAATTACAAGAGTAATTGTATAGTTATTGAGACCTATAGTGTGTGGCTTAGA
TGAAAGGGAGAGTAAATTTTCATACCATGCTCTCTCCTACTCAGTTTGATCTCTCTAAAATTGTAGTTTGGTTTG
ATTTAATATAATTCTTAGTAGAAATTTTGAAAGTATGCTTTGGGATTAATAATTATTTTTAATTTTTCTGGCTGA
ATATCAAATTGATAGTAACAACAGAAGCATAATTTTAGGAAGGCTTTCGCAAACCTAGCCTTTTAAGAGAGGTTT
TTAACCTGAAGCATGAGAATATATCACCTGTGGTTTTTCCTTTGAGATGAAACGTAGTTTCTAGTTATATCATTA
CTTAAAGGGCTTAAAAAGAAAAAACTTAGCAAACTTTTGAATCTTTCTTTTATTGCTATTTACACATACATACAC
ACATACAAAACCTTTAAATTTTGGGATCTGAATATAATTCTGGTAAACAGCTGTCTTCATTTTTCTCCTCTAAAG
AACTTAATTCATTTGTTACATAAAATATAAGGAAATCTTTATACTATTTTACAGTAACCACAATCTAAATATTTA

FIGURE 7193B

CATATACCCAAAATTAACTTATGCTCATATATTAGGATGTGAGAATATCATCTGTTTATGGACACATGAAACCTC
CTAATGACCTGGAATTGTTAGAATATTTGACTTTTTATATGCAAAGTTTTTCAACCAAGTGGTTTGTCTAATATT
TAAACATGTACTGGCACAATTTGTGATGAAAATATTAGCACATTTGCAATAATGTTTCTCCATAACAGAGAATGT
TAATGGATACCAGAATTTTATTTTTGTATTTATGTTCATAGTACTTTTCCTCTTGTCTACTCCAGACAGTTATTC
CATAAAGCATTTGTATAATTAAAAGGAAAACAGAAAAAGGAAAAGTAGGCAAATGTGAAAATAGTTTCAATATAT
CTTATGATTTCTTAATGTAAAATGTTTTGTTGAAGTATATGGCTATCATGACTAAGTGCTAGAATTTATAGTTAC
AGGCGGTGTCCTTTTAAATGTGGAAAGGCTTTTAAAATATTTTAAAACTGGACCTGTATTATCCTGAATACACTA
TTTTGAAAATTTTTAAGAAAAAAAAAA

FIGURE 7194

VRGVRAATAAAVAATAASGLSRREAGGRAGAAAAVVRPPGRKCGRCRRLANFPGRKRRRRRRKGLGATTGGCGEA
VSSLHPAPHSPSSVRPAGRRARRQRRGAGSAERPMSGAGEALAPGPVGPQRVAEAGGGQLGSTAQGKCDKDNTEK
DITQATNSHFTHGEMQDQSIWGNPSDGELIRTQPQRLPQLQTSAQVPSGEEIGKIKNGHTGLSNGNGIHHGAKHG
SADNRKLSAPVSQKMHRKIQSSLSVNSDISKKSKVNAVFSQKTGSSPEDCCVHCILACLFCEFLTLCNIVLGQAS
CGICTSEACCCCCGDEMGDDCNCPCDMDCGIMDACCESSDCLEICMECCGICFPS

FIGURE 7195

CAGGAGTGCGCCGCGTCCGTTCACCGCGGCCTCAGATGAATGCGGCTGTTAAGACCTGCAATAATCCAGAATGGC
TACTCTGATCTTTGTTGATAAGGAAAATGAAGAACCAGGCACCCGTGTGGTTGCTAAGGATGGGCTGAAGCTGGG
GTCTGGACCTTCAATCAAAGCCTTAGATGGGAGATCTCAAGTTTCAACACCACGTTTTGGCAAAACGTTCGGTGC
CCCAGCCTTACCTAAAGCTAGCAGAAAGGCTTTGGGAACTGTCAACAGAGTTACAGAAAAGCCTGTTAAGTCCAA
GGGACCCCTCCAATCAAAACAGCCCACGCTTTGTGCCAAAAAGATAACTGAGAAGAGTGTTAAGTCAAAAGGCTC
TGTTCCTGCCTCAGATGATGCCTATCCAGAAATAGAAAAATTCTTTCCCTTCAATCCTCTAGACTTTGAGAGTTT
TGACCTGCCTGAAGAGCACCAGATTGCGCACCTCCCCTTGAGTGGAGTGCCTCTCATGATCCTTGACGAGGAGAG
AGAGCTTGAAAAGCTGTTTCAGCTGGGCCCCCCTTCACCTGTGAAGATGCCCTTTCCACCATGGGAATCCGATCT
GTTGCAGTCTCCTTCAAGCATTCTGTCGACCCTGGATGTTGAATTGCCACCTGTTTGGTGTGAAATAGATATTTA
AATTTTTTAGTGCTTCAGAGTTTGTGTGTATTTGTATTAATAAAGCATTCTTTAACTG

FIGURE 7196

MATLIFVDKENEEPGTRVVAKDGLKLGSGPSIKALDGRSQVSTPRFGKTFGAPALPKASRKALGTVNRVTEKPVK
SKGPLQSKQPTLCAKKITEKSVKSKGSVPASDDAYPEIEKFFPFNPLDFESFDLPEEHQIAHLPLSGVPLMILDE
ERELEKLFQLGPPSPVKMPFPPWESDLLQSPSSILSTLDVELPPVWCEIDI

FIGURE 7197A

TTTTAAGATCCATGAGATGATCAGACAAGAAATTTTGGAGCAGGTCCTCAACAGGGTTGTTACCAGAGCATCTTC
TCCCATCAGTCATTTCTTAGACCTGCTTTCAAATATCGTCATGTATGCACCCTTAGTTCTTCAAAGTTGTTCTTC
TAAAGTCACAGAAGCTTTTGACTATTTGTCCTTTCTGCCCCTTCAGACTGTACAAAGGCTGCTTAAGGCAGTGCA
GCCCCTTCTCAAAGTCAGCATGTCAATGAGAGACTGCTTGATACTTGTCCTTCGGAAAGCTATGTTTGCCAAGTA
TGTAGCATCTTTTTCTATCATAGGAAGACGTTGTCTTCTAATGTTGGAGCTAAAGTTATCTCTGCCATCTCCTAG
TACCACCTGTTCACAGTGATCATGAGAATTCCTAGCCCCGCAGAGCAATTTCATCAAATAAGGCATTTTGCTAAG
TGCTTTATGTGCTTTTTTCATTTAGTCTTCAGAGCAACCCTATGAAGTAAGAATTATTGCAATTCCCATTTTACA
GATAAGAAAAGTTAGGCTTAGAGAAGATGAGTGACTTTCCAAAAGTAAAACAGTAGTTGGTGGTGGAGCAAGGAT
TCAAAGTCAGGTCTAACATCAGAGCTTGTGATGTCAAGTACTTTGCTCTACTACATTAGAATAATCTTCAGGGTA
ATGTTCTAGTGTCAAATACTCTGAAACCTGAGCTGGCAGCAGTTCCAAAGGGGAAAGTACCTTAGTCAAGAAGAT
TATACTTAAGAATCTCATTTTAGTGAACATCTGAATTATGATCTAGAGGCTAGTAGATCAAATTAATTGTTGAGG
GGAATGAGTTTTATTTGTAGCTTAGCCAGTCCCTCCTAACATCTCTTCCTTTATTTCTTAGTATATAAGCTAGAG
ATGATCTTGCCATCTCCTAAAAATATAAGACAGTAATATGTGAAAAGCATTTGGTACTTTGAGGATAAGATGCCC
AATTAATATCACATTGGCCATATTATAATATATTCATGGGTGTCCAGAGGAACAACTAAGCCATATGCTATTATC
TTTGTTCTAGAATTAAAAGTTTTTGTTACTCCTCACCCAAAGGCATAGCGAATAGACTGAGATATTACGTTGTAA
CATCTTTAACATGAATTAATCATTGCGCCTCAGTGAGAAGACAAGTGTGACATTTTCTGGATGGACAGTTTACAT
GGCATCAAATATTACATTATCCTATGATGAAAGAGAGCATATGAAGGGAAGCACTCCTTCAAACATGGCAAAATC
AGCAATTTCTTACATTTGAGTAACCAGCCAATTTTACAGTCTCTCAGCAGTCTTCTTATTCCTCACATAGACTTG
AGAGCAGGATAGAAGGAAGTAGAGTATCATGAGTTAAGTATTGAAAAAAGTCAGTTGAATTTCTGTACTATAAAT
TGCTTTGAACAGCTGATACCTTATTTTGAGTACATAAATTCACTTTGTTTTGCTCTACGCTTCATTGTTTATACA
TATGCCTTCTCTGTATGCAACTAGCTGGATTTTTCTGACCCAGAAGCATATTCCTGTGAAATAGTACTGTTTGTT
AACTTCTCTATTTCTGAGCTAGCCAGCTTGATGCCCGAAAATCTGCAGTTGCTGGGTTTTTGCTGCTCCTGAAGA
ACTTTAAAGTTTTAGGCAGCCTGTCATCCTCTCAGTGCAGTCAGTCTCTCAGTGTCAGTCAGGTTCATGTGGATG
TTCACAGCCATTACAATTCTGTCGCCAATGAAACTTTTTGCCTTGAGATCATGGATAGTTTGAGGAGATGCTTAA
GCCAGCAAGCTGATGTTCGACTCATGCTTTATGAGGGGTTTTATGATGTTCTTCGAAGGAACTCTCAGCTGGCTA
ATTCAGTCATGCAAACTCTGCTCTCACAGTTAAAACAGTTCTATGAGCCAAAACCTGATCTGCTGCCTCCTCTGA
AATTAGAAGCTTGTATTCTGACCCAAGGAGATAAGATCTCTCTACAAGAACCACTGGATTATCTGCTGTGTTGTA
TTCAGCATTGTTTGGCCTGGTATAAGAATACAGTCATACCCTTACAGCAGGGAGAGGAGGAAGAGGAGGAGGAAG
AGGCATTCTACGAAGACCTAGATGATATATTGGAGTCCATTACTAATAGAATGATTAAGAGTGAGCTGGAAGACT
TTGAACTGGATAAATCAGCAGATTTTTCTCAGAGCACCAGTATTGGCATAAAAAATAATATCTCTGCTTTTCTTG
TGATGGGAGTTTGTGAGGTTTTAATAGAATACAATTTCTCCATAAGTAGTTTCAGTAAGAATAGGTTTGAGGACA
TTCTGAGCTTATTTATGTGTTACAAAAAACTCTCTGACATTCTTAATGAAAAAGCGGGTAAAGCCAAAACTAAAA
TGGCCAACAAGACAAGTGATAGTCTTTTGTCCATGAAATTTGTGTCCAGTCTTCTCACTGCTCTTTTCAGGGATA
GTATCCAAAGCCACCAAGAAAGCCTTTCTGTTCTCAGGTCCAGCAATGAGTTTATGCGCTATGCAGTGAATGTAG
CTCTGCAGAAAGTACAGCAGCTAAAGGAAACAGGGCATGTGAGTGGCCCTGATGGCCAAAACCCAGAAAAGATCT
TTCAGAACCTCTGTGACTTAACTCGAGTCTTGCTATGGAGATACACTTCAATTCCTACTTCAGTGGAAGAGTCGG
GAAAGAAAGAGAAAGGAAAGAGCATCTCACTGCTGTGCTTGGAGGGTTTACAGAAAATATTCAGTGCTGTGCAAC
AGTTCTATCAGCCCAAGATTCAGCAGTTTCTCAGAGCTCTGGATGTCACAGATAAGGAAGGAGAAGAGAGAGAAG
ATGCAGATGTCAGTGTCACTCAGAGAACAGCATTCCAGATCCGGCAATTTCAGAGGTCCTTGTTGAATTTACTTA
GCAGTCAAGAGGAAGATTTTAATAGCAAAGAAGCCCTCCTGCTAGTCACGGTTCTTACCAGTTTGTCCAAGTTAC
TGGAGCCCTCCTCTCCTCAGTTTGTGCAGATGTTATCCTGGACATCAAAGATTTGCAAGGAAAACAGCCGGGAGG
ATGCCTTGTTTTGCAAGAGCTTGATGAACTTGCTCTTCAGCCTGCATGTTTCGTATAAGAGTCCTGTCATTCTGC
TGCGTGACTTGTCCCAGGATATCCACGGGCATCTGGGAGATATAGACCAGGATGTAGAGGTGGAGAAAACAAACC
ACTTTGCAATAGTGAATTTGAGAACGGCTGCCCCCACTGTCTGTTTACTTGTTCTGAGTCAGGCCGAGAAGGTTC
TAGAAGAAGTGGACTGGCTAATCACCAAGCTTAAGGGACAAGTGAGCCAAGAAACCTTATCAGAAGAGGCCTCTT
CTCAGGCAACCCTACCAAATCAGCCTGTTGAGAAAGCTATCATCATGCAACTGGGAACTCTGCTTACATTTTTCC
ACGAGCTGGTGCAGACAGCTCTGCCATCAGGCAGCTGTGTGGACACCTTGTTAAAGGACTTGTGCAAAATGTACA
CCACACTTACAGCCCTTGTCAGATATTATCTCCAGGTGTGTCAGAGCTCCGGAGGAATTCCAAAAAATATGGAAA

FIGURE 7197B

AGCTGGTGAAGCTGTCTGGTTCTCATCTGACCCCCCTGTGTTATTCTTTCATTTCTTACGTACAGAATAAGAGTA
AGAGCCTGAACTATACGGGAGAGAAAAAGGAGAAACCTGCTGCCGTTGCCACAGCCATGGCCAGAGTTCTTCGGG
AAACCAAGCCAATCCCTAACCTCATCTTTGCCATAGAACAGTATGAAAAATTTCTCATCCACCTTTCTAAGAAGT
CCAAGGTGAACCTGATGCAGCACATGAAGCTCAGCACCTCACGAGACTTCAAGATCAAAGGAAACATCCTAGACA
TGGTTCTTCGAGAGGATGGCGAAGATGAAAATGAAGAGGGCACTGCATCAGAGCATGGGGGACAGAACAAAGAAC
CAGCCAAGAAGAAAAGGAAAAAATAAATGAAATGCCTGAGTTAATGTGAACTTTGGGGCTTCTGCTTCATTTTTA
CCCAACAAGCAACAATGCCCCTTGTCCTGTAGTCCACACCGATGTTGGCATCTTGGTTCTGAACCCACTGAATTC
AACTGCACCTTCAGTTAGAAGGAATCTTCTTGGCAGGTCCTGCTACTGAAAAATGGCTGGCCTTAGGCAAGCCCT
TTTGCAAAAAGCACAGCTGAAAGCCTGAGTTTGGGAGCCTGCACCCACCCCGATGAAGCTCCACGGGAGCAAATA
CAGAGCCTCCAGGCAGTGCTATGGTCCAGGCTGGCTTCGTTTTTCCAAGGAGCCTTTGGTGAGTTCAATTATCTG
GTAAATATCCAGCGCTTCACCTGAAAGATAGTGCAAATTGGTTAGGATGCCACCTCAAGAACTGTAACTGAGAGC
TCAGAAGTGAGCAAAGGAGCTTAATGCTAAGGTCAAAAGGAGAGTGAAAGGTTGAGAACAATTGCCACGAACGGT
AATGTTACATGTTAGGAGGGTCTGTTTTCTTTTTATATAAGTGTGTCTTAGATATATTTTAAATAGAAAATAAGC
TTTCTGATTTACTTGTTTGGTATTTAAAGCACAGTTTGTTTTTCTGTCACCTATAGAGTGCAAGAATGCACTCTA
TAGAATAAATTCTCTTTAAAC

FIGURE 7198

CCGGATCTCTCCGACACGGTCCGCTACACACAGCTCGTGAGGAAGAAGCAGAAGGCCCAGCACCGCTGCATGCGG
CGGGTTGGCCGCACTGGCTCCCGGCGCTCCGGCTATGCCTTCTCCCATCAGGAGGGCTTCGGGGAGCTCATCATG
TCTGGCAAGAACATGCGGCTGAGCTCTCTCGCGCTCTCCAGCTTCACCACCCGCTCCAGCTCCAGCTGGATTGAG
AGCCTGCGCAGGAAGAAGAGTGACAGTGCCAGTAGCCCCAGTGGCGGTGCCGACAAGCCCCTCAAGGGCTGAAGG
CCGAGGATGGATGCCCTGTGCCAGTGACCAGAGCACCCAGGGCTGGCCAGTCACTGAGGGAACAGCGTCTCGGAA
CTGCTGGTCCTCATTCCTTGCTTCCCGTCCCCCCGGTAGACTCTGTCCTGCTGGTCCCACCACACATGGCTGGGA
CATCTGTTCCCAGCTGTAGGCCCTTCCACCAGCTGGGGAGCTAGAGGGAGCAGGCCCAAGGGCAGAGCAGAGGCT
GAGGCACGGGGAGCCAGCCCCACTCGGGGACCAGAAGTGGAACCAAAAACAAGAAAAAACTGTGAGAGATTGTGT
CTGCCCCTGCCCTGCCTGGGACCCACAGGGAGACTATAATCTCCTTATTTTTTTACTCCTACTCCCCAGAGGGGC
CCTAGTGCCTCTGTTCCTGAATTACATAAGAATGTACCATGCCGGGAAGCCAGAGACCTGCAGGGGCCTCGGCCC
CTCACATCGTGTATGTCTCTCCTTGATTTGTGTTGTGTCCAGTTTGGTTTTGTCTTTTTTTATTTGGCAAGTGGA
GGAGGCTTTTATGTGACTTTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAGG

FIGURE 7199

CCTACTCCACGAACTGATGCGCCCACCCCAGGCAGTAACTCTACTCCCGGATTGAGGCCTGTACCTGGAAAACCA
CCAGGAGTTGACCCTTTGGCCTCAAGCCTAAGGACCCCAATGGCAGTACCTTGTCCATATCCAACTCCATTTGGG
ATTGTGCCCCATGCTGGAATGAACGGAGAGCTGACCAGCCCCGGAGCGGCCTACGCTGGGCTCCACAACATCTCC
CCTCAGATGAGCGCAGCTGCTGCCGCCGCCGCTGCTGCTGCTGCCTATGGGAGATCACCAGTGGTGGGATTTGAT
CCACACCATCACATGCGTGTGCCAGCAATACCTCCAAACCTGACAGGCATTCCAGGAGGAAAACCAGCATACTCC
TTCCATGTTAGCGCAGATGGTCAGATGCAGCCTGTCCCTTTTCCACCCGACCCCCTCATCGGACCTGGAATCCCC
CGGCATGCTCGCCAGATCAACACCCTCAACCACGGGGAGGTGGTGTGCGCGGTGACCATCAGCAACCCCACGAGA
CACGTGTACACGGGTGGGAAGGGCGCGGTCAAGGTCTGGGACATCAGCCACCCAGGCAATAAGAGTCCTGTCTCC
CAGCTCGACTGTCTGAACAGGGATAACTACATCCGTTCCTGCAGATTGCTCCCTGATGGTCGCACCCTAATTGTT
GGAGGGGAAGCCAGTACTTTGTCCATTTGGGACCTGGCGGCTCCAACCCCACGCATCAAGGCAGAGCTGACATCC
TCGGCCCCCGCCTGCTATGCCCTGGCCATCAGCCCCGATTCCAAGGTCTGCTTCTCATGCTGCAGCGACGGCAAC
ATCGCTGTGTGGGATCTGCACAACCAGACCTTGGTGAGGCAATTCCAGGGCCACACAGATGGAGCCAGCTGTATT
GACATTTCTAATGATGGCACCAAGCTCTGGACAGGTGGTTTGGACAACACGGTCAGGTCCTGGGACCTGCGGGAG
GGGCGGCAGCTGCAGCAGCACGACTTCACCTCCCAGATCTTTTCTCTGGGCTACTGCCCAACTGGAGAGTGGCTT
GCAGTGGGGATGGAGAACAGCAATGTGGAAGTTTTGCATGTCACCAAGCCAGACAAATACCAACTACATCTTCAT
GAGAGCTGTGTGCTGTCGCTCAAGTTTGCCCATTGTGGCAAATGGTTTGTAAGCACTGGAAAGGACAACCTTCTG
AATGCCTGGAGAACGCCTTACGGGGCCAGTATATTCCAGTCCAAAGAATCCTCATCGGTGCTTAGCTGTGACATC
TCCGTGGACGACAAATACATTGTCACTGGCTCTGGGGATAAGAAGGCCACAGTTTATGAAGTTATTTATTAAAGA
CAAATCTTCATGCAGACTGGACTTCTCCTCCTGGTAGCACTTTGCTCTGTCATCCTTTTTGTTCACCCCCATCCC
CGCATCTAAAACCAAGGA

FIGURE 7200

PTPRTDAPTPGSNSTPGLRPVPGKPPGVDPLASSLRTPMAVPCPYPTPFGIVPHAGMNGELTSPGAAYAGLHNIS
PQMSAAAAAAAAAAAYGRSPVVGFDPHHHMRVPAIPPNLTGIPGGKPAYSFHVSADGQMQPVPFPPDPLIGPGIP
RHARQINTLNHGEVVCAVTISNPTRHVYTGGKGAVKVWDISHPGNKSPVSQLDCLNRDNYIRSCRLLPDGRTLIV
GGEASTLSIWDLAAPTPRIKAELTSSAPACYALAISPDSKVCFSCCSDGNIAVWDLHNQTLVRQFQGHTDGASCI
DISNDGTKLWTGGLDNTVRSWDLREGRQLQQHDFTSQIFSLGYCPTGEWLAVGMENSNVEVLHVTKPDKYQLHLH
ESCVLSLKFAHCGKWFVSTGKDNLLNAWRTPYGASIFQSKESSSVLSCDISVDDKYIVTGSGDKKATVYEVIY

FIGURE 7201A

ATAGTCACCAGAAGCTGGAAGAGTCAAAGGACACATTCTCCCCTCAAGCCCCAGTGGGAGCACGGCCCAGCTGGA
TTTTGGACTTCTGGCCTCCAGAACTAGACAGGGCCTCACGGTGTCACCCAGGGTGGAATACAGTGGTGTGATCAT
AGCTCACTGCAGCCTGGAATTCCTGGGCTCAAGCAACCCTGCCACCTCAGCCTTCCAAGTAGCTAGGACTACAGA
ACATCCATGATAGCAGTCTTCTGTAAATCGAACTTTTCAAGAATTCTCTGAAGGAACCAAGTAGGATATTCTTAC
ATCATGACTTAATGTGAATGCAAGAACAAGAAATAGGTTTTATCTCTAAATATAATGAAGGGCTGTGTGTAAACA
CTGACCCTGTCTCAATTCTAACAAGCATTTTAGACATGAGTTTACATCGGCAAATGGGTTCAGATCGAGATCTTC
AGTCCTCTGCTTCATCTGTGAGCTTGCCTTCAGTCAAAAAGGCACCCAAAAAAAGAAGAATTTCAATAGGCTCCC
TGTTTCGGAGGAAAAAAGATAACAAACGTAAATCAAGGGAGCTAAATGGCGGGGTGGATGGAATTGCAAGTATTG
AAAGTATACATTCTGAAATGTGTACTGATAAGAACTCCATTTTCTCTACAAATACCTCTTCTGACAATGGATTAA
CTTCCATCAGCAAACAAATTGGAGACTTCATAGAGTGCCCTTTGTGCCTTTTGCGGCATTCTAAAGACAGATTTC
CTGATATAATGACTTGTCATCACAGATCTTGTGTGGATTGCTTACGACAATATTTAAGGATAGAAATCTCTGAAA
GCAGAGTTAATATTAGTTGCCCAGAATGTACTGAGCGGTTTAATCCCCATGATATTCGCTTGATATTAAGTGATG
ATGTCTTGATGGAAAAATACGAAGAATTTATGCTTAGACGGTGGCTTGTTGCAGATCCTGATTGTAGGTGGTGTC
CAGCTCCAGACTGTGGATATGCTGTGATAGCATTTGGATGTGCCAGCTGTCCAAAATTAACTTGTGGGCGAGAGG
GCTGTGGAACAGAGTTTTGCTACCACTGTAAACAGATTTGGCACCCCAACCAGACCTGTGATGCTGCTCGACAAG
AGAGAGCCCAGAGCTTACGTTTGAGAACTATACGTTCTTCATCCATTAGTTATAGTCAAGAGTCTGGAGCAGCAG
CTGATGATATAAAGCCATGTCCACGATGTGCTGCTTATATAATAAAGATGAATGATGGGAGCTGCAATCACATGA
CATGTGCTGTTTGTGGTTGTGAGTTTTGTTGGTTGTGTATGAAAGAAATCTCAGATTTGCATTATCTAAGTCCAT
CAGGATGTACTTTTTGGGGGAAGAAACCCTGGAGCCGAAAGAAGAAAATATTGTGGCAACTGGGAACACTGGTTG
GTGCTCCTGTCGGAATCGCTTTAATAGCTGGCATTGCTATTCCTGCAATGATTATTGGCATTCCTGTGTATGTGG
GCCGCAAGATTCACAATCGCTATGAAGGCAAGGATGTTTCAAAGCACAAACGGAATTTGGCCATAGCAGGTGGTG
TAACGTTGTCTGTAATCGTGTCTCCAGTAGTAGCTGCAGTGACTGTAGGTATCGGTGTTCCTATTATGTTAGCTT
ATGTCTATGGCGTAGTTCCAATTTCTCTTTGTCGAAGCGGAGGTTGTGGAGTCTCAGCAGGCAATGGAAAAGGAG
TTAGGATTGAATTTGATGATGAAAATGATATAAATGTTGGTGGAACTAACACAGCTGTAGACACAACATCAGTAG
CAGAAGCAAGACACAACCCAAGCATAGGGGAGGGAAGTGTTGGTGGGCTGACTGGCAGTTTGAGTGCAAGTGGAA
GCCACATGGATCGAATAGGAGCCATCCGAGACAACCTGAGTGAAACGGCCAGCACCATGGCACTAGCTGGAGCCA
GTATAACGGGGAGTCTGTCAGGAAGTGCCATGGTAAACTGTTTTAACAGGTTGGAAGTACAAGCAGATGTACAGA
AAGAACGGTACAGTCTAAGTGGAGAATCTGGCACAGTCAGCTTGGGAACAGTTAGTGATAATGCCAGCACCAAAG
CAATGGCAGGATCCATTCTGAATTCCTACATCCCATTGGACAAAGAAGGCAACAGTATGGAGGTGCAAGTAGATA
TTGAGTCAAAGCCATCCAAATTCAGGCACAACAGTGGAAGCAGTAGTGTGGATGATGGCAGTGCCACCCGAAGTT
ATGCTGGCGGTTCATCCAGTGGCTTGCCTGAAGGTAAATCTAGTGCCACCAAGTGGTCCAAAGAAGCAACAGCAG
GGAAAAAATCAAAAAGTGGTAAACTGAGGAAAAAGGGTAACATGAAGATAAATGAGACGAGAGAGGACATGGATG
CACAGTTGTTAGAACAACAAAGCACGAACTCAAGTGAATTTGAGGCTCCATCCCTCAGTGACAGTATGCCTTCTG
TAGCAGATTCTCACTCTAGTCATTTTTCTGAATTTAGTTGTTCTGACCTAGAAAGCATGAAAACTTCTTGTAGTC
ATGGTTCCAGTGATTATCACACCCGCTTTGCTACTGTTAACATTCTTCCTGAGGTAGAAAATGACCGTCTGGAAA
ATTCCCCACATCAGTGTAGCATTTCTGTGGTTACCCAAACTGCTTCCTGTTCAGAAGTTTCACAGTTGAATCATA
TTGCTGAAGAACATGGTAACAATGGAATAAAACCTAATGTTGATTTATATTTTGGCGATGCACTAAAAGAAACAA
ATAACAACCACTCACATCAGACAATGGAATTAAAAGTTGCAATTCAGACTGAAATTTAGGCCCATAAATGCTGCA
GAATAATTACCACTGTACAACCGTGTTTGGAGCTGGTTGAACTACATGTGACTACTTAAGTTTCAGGTTACCAGC
AAAAGCCGGGTTTCATTATCATAATGCAGATACATTTTCTGTGTTCAGCAAGGCATTGTGTGTCATGTGGATCTT
AGTTACCAAACTATGAAGTGAAGGCTTTAAAAGTGCATTATTTTAAGGATAATAAATTTGAAGAGCAAAGCATGT
TTTGTGTGTTTGCCACAAAACATTGCTTGAAGCACATACTTAGATAGAAATTGGTCTTAATTTATATAATCAATA
TAAAATACTAATGCAATTCTACAGCATTCAAATGAAGAAAACTTGAGGCTTTAGGGATAAGTGGTTAGTGATATT
TTATTGAAACCACTAAAGAGATAAGTTTAAAAGAACTGCATAGGTTACTCTCAGTATATGATACTCTGTAACATT
TCTATTTATATCGGCATAAATTTCATTTTTTTTCTTCATATGCAATGTGGTTATATAAAGCTTAATGCAGCTCAT
TTGCTACCATTTGGATACTTAGACACTTTGAGCAAGATTGTGGCAGTTTTTGCACAACTTTGAAATAGAAATACC
TGGTACTCTATCTTGTTTATTGTTGATGCCATCTTAGAGGAAAAAATGTAAAGGTAAGTAATTAAGCATATGACA
GCAACAAATAAGATACATAAAACTACAAAATAAAGTCCCATTAGGTTATAAGTATTACAAAAAATCCACCTTTCT

FIGURE 7201B

CTAAGGGGAAGTTTGTACCCCATTGATTCTTGGTGCCTTTGGGATCGACTGGGTTTTAATGGCCTAGTTATTTGA
GGATTTTGCTGTGTTGTTTTCCATGTCTTCTCTGGTCACCTTGGATTATATATAAAAATACAGGAAATAGATAAA
CATGAATGTGATTAATAATGCTGAAAAAGTATTAGCCTACCAAAGACACACTCAGGCTTTAGTGAATAACTTTAC
ATAACCTCAGTTTTTAACACATGCATATCTTCTCCAACCATGAAATCAAAGCACGGTGCAGAACTTGTACCAAGT
ACAAAAGGTCCATGTATGATTAGCATTATTTTCTTTTGCTTTTGTTTATGGACAATGTTCAGCTGACATAAGCAG
AAGTTGGCCAAAATACTGCCTGTACTGTTAATTTCCTGTATAATTCACTTAAATAAAAGCAGGTTAACCTCAATG
ATAGCAGTTAAAATGTTCTATCTTATGTATTTCTTTTAAGTATTACCATTATGGTGCTACTGAGCGTTTTCTTTT
GGTAAAAAGAAAAATGCCATGGGCTGCAGTCTTCTTCCATCACTTTTCCCTACCAGGTCCATTAATATGCTTATA
ACACTAGTGCCAGTTATTTTATTTGATAATGCTTATGGTATTTGTATATTTGTTTGCATTCCAATTTTGTTTAAT
AATGAGTGTGTAAACTGCATACGTTAAATAAATGTAAATACTAATGTACTGCTGCAAAAAAAAAAAAAAAAAAA
AAAAAAA

FIGURE 7202

MQEQEIGFISKYNEGLCVNTDPVSILTSILDMSLHRQMGSDRDLQSSASSVSLPSVKKAPKKRRISIGSLFRRKK
DNKRKSRELNGGVDGIASIESIHSEMCTDKNSIFSTNTSSDNGLTSISKQIGDFIECPLCLLRHSKDRFPDIMTC
HHRSCVDCLRQYLRIEISESRVNISCPECTERFNPHDIRLILSDDVLMEKYEEFMLRRWLVADPDCRWCPAPDCG
YAVIAFGCASCPKLTCGREGCGTEFCYHCKQIWHPNQTCDAARQERAQSLRLRTIRSSSISYSQESGAAADDIKP
CPRCAAYIIKMNDGSCNHMTCAVCGCEFCWLCMKEISDLHYLSPSGCTFWGKKPWSRKKKILWQLGTLVGAPVGI
ALIAGIAIPAMIIGIPVYVGRKIHNRYEGKDVSKHKRNLAIAGGVTLSVIVSPVVAAVTVGIGVPIMLAYVYGVV
PISLCRSGGCGVSAGNGKGVRIEFDDENDINVGGTNTAVDTTSVAEARHNPSIGEGSVGGLTGSLSASGSHMDRI
GAIRDNLSETASTMALAGASITGSLSGSAMVNCFNRLEVQADVQKERYSLSGESGTVSLGTVSDNASTKAMAGSI
LNSYIPLDKEGNSMEVQVDIESKPSKFRHNSGSSSVDDGSATRSYAGGSSSGLPEGKSSATKWSKEATAGKKSKS
GKLRKKGNMKINETREDMDAQLLEQQSTNSSEFEAPSLSDSMPSVADSHSSHFSEFSCSDLESMKTSCSHGSSDY
HTRFATVNILPEVENDRLENSPHQCSISVVTQTASCSEVSQLNHIAEEHGNNGIKPNVDLYFGDALKETNNNHSH
QTMELKVAIQTEI

FIGURE 7203

CGCATGATGGCTGCGGTGCCGCCGGGCCTGGAGCCGTGGAACCGTGTGAGAATCCCTAAGGCGGGGAACCGCAGC
GCAGTGACAGTGCAGAACCCCGGCGCGGCCCTTGACCTTTGCATTGCAGCTGTAATTAAAGAATGCCATCTCGTC
ATACTGTCGCTGAAGAGCCAAACCTTAGATGCAGAAACAGATGTGTTATGTGCAGTCCTTTACAGCAATCACAAC
AGAATGGGCCGCCACAAACCCCATTTGGCCCTCAAACAGGTTGAGCAATGTTTAAAGCGTTTGAAAAACATGAAT
TTGGAGGGCTCAATTCAAGACCTGTTTGAGTTGTTTTCTTCCAATGAAAATCAGCCCTTAACTACCAAAGTATGT
GTTGTCCCCAGTCAGCCAGTGGTGGAGTTGGTGTTGATGAAGGTTTTGGGAGCCTGCAAGTTGTTGCTCCGCTTG
TTGGACTGCTGCTGCAAAACTTTTCTTTTGACTGTGAAACATCTAGGTTTGCAAGAGTTCATTATTTTAAACCTT
GTGATGGTTGGGCTGGTGAGCAGGTTATGGGTTCTCTATAAAGGTGTCTTAAAAAGGTTGATTTTGTTATATGAG
CCTTTGTTTGGATTGCTTCAAGAGGTCGCTAGGATTCAACCAATGCCTTACTTCAAAGATTTTACCTTTCCTTCT
GATATCACTGAATTTTTAGGACAGCCATATTTTGAAGCCTTTAAGAAAAAAATGCCTATAGCTTTTGCAGCTAAA
GGAATAAATAAATTGCTAAATAAACTGTTTTTAATAAATGAGCAGTCACCAAGAGCCAGTGAAGAAACCTTGCTT
GGAATTTCAAAAAAAGCTAAACAAATGAAGATCAATGTACAGAATAATGTGGATCTTGGACAGCCAGTAAAGAAT
AAGAGAGTCTTCAAAGAAGAGTCATCAGAATTTGATGTGAGGGCTTTCTGCAACCAGCTGAAACACAAAGCTACT
CAGGAGACCAGTTTTGATTTTAAATGTTCTCAATCCAGACTAAAGACAACCAAGTATTCTTCTCAGAAAGTGATA
GGAACTCCTCATGCCAAAAGTTTTGTGCAAAGATTCCGAGAGGCTGAGTCCTTCACACAACTTTCTGAAGAAATC
CAGATGGCAGTTGTATGGTGCAGGAGCAAAAAACTCAAGGCTCAGGCCATTTTTCTGGGTAACAAACTTCTTAAA
AGCAACCGGCTTAAACATCTGGAAGCTCAAGGTACTAGTTTGCCAAAGAAACTAGAGTGCATAAAAACGTCTATT
TGCAACCACCTTCTTCGTGGCTCAGGTATCAAAACTTCAAAGCATCATCTGAGACAGAGAAGATCACAGAATAAA
TTTTTACGGAGACAAAGGAAACCACAGAGAAAGTTGCAGTCGACTCTTTTAAGGGAAATTCAGCAGTTCTCTCAA
GGGACTCGGAAGAGTGCTACAGATACCAGTGCTAAGTGGAGACTCCCACACTGTACTGTGCATAGAACTGATCTC
TACCCTAACAGTAAGCAGCTCTTGAATAGTGGAGTTTCAATGCCTGTCATACAAACTAAGGAGAAAATGATTCAT
GAAAATCTTAGAGGCATCCATGAAAATGAAACTGATTCGTGGACGGTGATGCAAATAAATAAAAACAGTACATCA
GGAACCATTAAGGAGACAGATGACATTGATGATATTTTTGCTTTAATGGGAGTT**TAG**ATGTTCGTTCATATGTGA
GACTTTTAAGTGATTAACAAGGCTAGTTCAGTGTTCTAAGTAGAACTGCTAAGATCTGGAAGTACCACCTGGACT
CACAGAGGAGCTGCTTTAGTGCAGCATTGCACAGGAGTTTTCAGTTCAGTCTACATTTAAAGTAGCATTGTGTCA
TTTCATCAACAAGTATTTCTTTTTTGGCTTCAACTACATGTCAGGTGTTAATATGAAAAATCTGCCACAGCCTAC
CCTTGAGAAGCAGATGTAATTCCTTGAGTGAGGCTAGTAAGTCTCTGAAAAACTGAATAATTTTATGACTTACTA
GGCAATTTAATAATCGTTTGCAAAAACCATTGTGTCTTGAGGTAAATGAGGAGCGGGGGTGGGAGATAGCAAGGA
AACACCTGAAAGGTCAATTTGGTCTTATTGGCTCCATTATACATAGGTCCGCCTCTGAATACTAAAGTTTGTAGC
TCCTGACATTTATGTTTTCTTGTTTATATGTTGGAATTGATCAACAAGGTTTGCCACTGCTTGTATTACCAGGGA
CTGGTTACAACCATTATTTCTCTTCATTTGCTTGGCTTATCTCATATTAAAGTGAGTTTGGAGTTCTCCAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAG

FIGURE 7204

RMMAAVPPGLEPWNRVRIPKAGNRSAVTVQNPGAALDLCIAAVIKECHLVILSLKSQTLDAETDVLCAVLYSNHN
RMGRHKPHLALKQVEQCLKRLKNMNLEGSIQDLFELFSSNENQPLTTKVCVVPSQPVVELVLMKVLGACKLLLRL
LDCCCKTFLLTVKHLGLQEFIILNLVMVGLVSRLWVLYKGVLKRLILLYEPLFGLLQEVARIQPMPYFKDFTFPS
DITEFLGQPYFEAFKKKMPIAFAAKGINKLLNKLFLINEQSPRASEETLLGISKKAKQMKINVQNNVDLGQPVKN
KRVFKEESSEFDVRAFCNQLKHKATQETSFDFKCSQSRLKTTKYSSQKVIGTPHAKSFVQRFREAESFTQLSEEI
QMAVVWCRSKKLKAQAIFLGNKLLKSNRLKHLEAQGTSLPKKLECIKTSICNHLLRGSGIKTSKHHLRQRRSQNK
FLRRQRKPQRKLQSTLLREIQQFSQGTRKSATDTSAKWRLPHCTVHRTDLYPNSKQLLNSGVSMPVIQTKEKMIH
ENLRGIHENETDSWTVMQINKNSTSGTIKETDDIDDIFALMGV

FIGURE 7205

GGCTCTGGGCATCACCAGCGGCCCCAGGGAAAAAGAAAGAAATGGAAACAGCATGAAATCCACCCCTGCGCCTG
CCGAGAGGCCCCTGCCCAACCCGGAGGGACTGGATAGCGACTTCCTTGCCGTGCTAAGTGACTACCCGTCTCCTG
ACATCAGCCCCCCGATATTCCGCCGAGGGGAGAAACTGCGTGTGATTTCTGATGAAGGGGGCTGGTGGAAAGCTA
TTTCTCTTAGCACTGGTCGAGAGAGTTACATCCCTGGAATATGTGTGGCCAGAGTTTACCATGGCTGGCTGTTTG
AGGGCCTGGGCAGAGACAAGGCCGAGGAGCTGCTGCAGCTGCCAGACACAAAGGTCGGCTCCTTCATGATCAGAG
AGAGTGAGACCAAGAAAGGGTTTTACTCACTGTCGGTGAGACACAGGCAGGTAAAGCATTACCGCATTTTCCGTC
TGCCGAACAACTGGTACTACATTTCCCCGAGGCTCACCTTCCAGTGCCTGGAGGACCTGGTGAACCACTATTCTG
AGGTGGCTGATGGCCTGTGCTGTGTGCTCACCACGCCCTGCCTGACACAAAGCACGGCTGCCCCAGCAGTGAGGG
CCTCCAGCTCACCTGTCACCTTGCGTCAGAAGACTGTGGACTGGAGGAGAGTGTCCAGACTGCAGGAGGACCCCG
AGGGAACAGAGAACCCGCTTGGGGTAGACGAGTCCCTTTTCAGCTATGGCCTTCGAGAGAGCATTGCCTCTTACC
TGTCCCTGACCAGTGAGGACAACACCTCCTTTGATCGAAAGAAGAAAAGCATCTCCCTGATGTATGGTGGCAGCA
AGAGAAAGAGCTCATTCTTCTCATCACCACCTTACTTTGAGGACTAGCCAAGAACAGACACAATGGTTCATGCCC
AAAAGGAACAGAAGTTCCAACTATTGCCTGGGATCTTGCGAAAAGCGAGGTTCCCTGATCCCTGGGAGCCTCACG
TATTTTAGAAGCCAAGAGAAGCCACATGGAGACTCAAATTCGCATCTTCTCTATCCACATCATGACCAAAGGAAC
CCCTCCCTGGTGTCTGATCAGGGCTGTGGCATCACAAAACATTGGATCATGACATGTCGGGCGATGCTTGGAAAA
GCCCAGCATGTATGTATGCACACATTGTGTGTGTGGGAAGGACAAAGCCACTCTCACAAGAAAGGGCACCAGGAC
TGCTCTCCAAGGAACTGGACCTGTCCAGACAGTTACACTCCAAGGTCATTGGAGAGAACTTCTGTATGGGCAAGC
CTGAGAGGGAGAGGAAACAAAAGCTGTGTCCTGGCAGAAGGTCTGGGTTTGCAGATGGGTGCCCTGAATGGAACT
ACTTTAACTAATCCATAGGGACTTCTGGTATGCTTTCCTCTCTTTTTAAAGGAACTTCGTGACACTAAACATTAG
CCCAAAGGACTTCTTAGCCTTCAATTGGGAGATACCTTTGGTCTGCTCCTGCACCAAAGCCATATGGGTGGAAGT
CAGTTGGCCTCCCTGGTTCTGCAGAGGGCCAGAAGAATGAGAGAGAGGAAGACTGCTGGCAGGGAAATCGAGGAG
GCGAGACTAGAACTGCACCAGCTTCCCTGATGTCTGCAGCCATGGCTTTGCAGCGCAAACAGAACTTCTCTGGGA
TGCTGGGATTCTTGCCTGTATGAATGCATCAAGTATTCATTTATTGCCCGAATAGGCATTGCATTAAGTCCTCTG
TTAGGTGTCAGGCAAGCCAAAAAAAAAAAAAAAGATGCTAAGTCCTAACCCCCAACAGAAGTGTTCACAGTGTAGA
CGGGAAAAAATGTATAAACAAATGTGTAAAAAGAGAAATCAGCTCATGGCTTAGGATGGAATTAGAGACAGGTGA
GGGACACTCAGGAGCTCATTTTCCAGCTGCTCTTCAGAGTGGAAGGGCTGGCTGGATCGGGTAGGTAAGAATAGC
TGGATTTTTTAGAAAAGAAATGGATACAGTCTAAAGAATTAACTCACCCGGTACTTTATTCTAAGAAGGGTCTGG
CATCCATATGAGGAAAAATGCTCAGCTCCAGGAAAGATGGGGAGTCCAAGTGGATTAATGATGTCATGCATAATT
TTAAGAGACAAGGGAGAAAACACAATGTATAGCCAGAGAAGGAGAAGCTCCCATCCAAATCCTACTAGGAAGAGA
GTGGGCTGCAGATGAATCTGTGACTCATGTTTCCCTGTTTCAAAGGGATCCTGGGGAAGGAGGGGAACATGCTTG
CAGTATCTCTCCCTGTCTGTCTGCTCACATAAGCATTCCGTCCATCTAAGCTCATCGTGCTACTGGTATGTGTAT
GTGCAGTTACACAGTTTCCTGTATCATAAATCCTAGTGTGTTTATACAAGGAGACATCTGTGGTTTCCCCAACCG
TTCCAAAAGGCTATTTCAAAGGAACCAGCCCACGTATGAGAAATGAATGTAACACTGTGGACATTGACTTCCCGC
ATAAGGCAGGGTGACCCCCTGAACTCCAGATGTTTGCACAGTATCTTATGTGTTGTTTTCCGTTGTGACGAATGT
GATTGGAACATTTGGGGAGCACCCAGAGGGATTTTTCAGTGGGAAGCATTACACTTTGCTAAATCATGTATTTAT
TCCTGATTAAAACAAACCTAATAAATATTTAACCCTTGGC

FIGURE 7206

MGNSMKSTPAPAERPLPNPEGLDSDFLAVLSDYPSPDISPPIFRRGEKLRVISDEGGWWKAISLSTGRESYIPGI
CVARVYHGWLFEGLGRDKAEELLQLPDTKVGSFMIRESETKKGFYSLSVRHRQVKHYRIFRLPNNWYYISPRLTF
QCLEDLVNHYSEVADGLCCVLTTPCLTQSTAAPAVRASSSPVTLRQKTVDWRRVSRLQEDPEGTENPLGVDESLF
SYGLRESIASYLSLTSEDNTSFDRKKKSISLMYGGSKRKSSFFSSPPYFED

FIGURE 7207

GGAAAAGTGGTCCTGGAGCTGGAGCGCTTCCTGCCCCAGCCCTTCACCGGCGAGATCCGCGGCATGTGTGACTTC
ATGAACCTCAGCCTGGCGGACTGCCTTCTGGTCAACCTGGCCTACGAGTCCTCCGTGTTCTGCACCAGTATTGTG
GCTCAAGACTCCAGAGGCCACATTTACCATGGTCGGAATTTGGATTATGCTTTTGGGAATGTCTTACGCAAGCTG
ACAGTGGATGTGCAATTCTTAAAGAATGGGCAGATTGCATTCACAGGAACTACTTTTATTGGCTATGTAGGATTA
TGGACTGGCCAGAGCCCACACAAGTTTACAGTTTCTGGTGATGAACGAGATAAAGGCTGGTGGTGGGAGAATGCT
ATCGCTGCCCTGTTTCGGAGACACATTCCCGTCAGCTGGCTGATCCGCGCTACCCTGAGTGAGTCGGAAAACTTC
GAAGCAGCTGTTGGCAAGTTGGCCAAGTCTCCCCTTATTGCTGATGTTTATTACATTCTTGGTGGCACGTCCCCC
CGGGAGGGGGTGGTCATCACGAGGAACAGAGATGGCCCAGCAGACATTTGGCCTCTAGATCCTTTGAATGGAGCG
TGGTTCCGAGTTGAGACAAATTACGACCACTGGAAGCCAGCACCCAAGGAAGATGACCGGAGAACATCTGCCATC
AAGGCCCTTAATGCTACAGGACAAGCAAACCTCAGCCTGGAGGCACTTTTCCAGTGAGCAAGAAGAACCCATCAG
GTGATTGTCAGGCCTCTGAGCCCAAGCTAAGCCATCATATGCCCTGTGACCTGCACGTATACATCCAGATGGCCT
GAAGCAACTGAAGATCCACAAAAGAAGAGAAAATAGCCAGTTCCTGCCTTAACTGATGACATTTCACCATTGTGA
TTTGTTCCTGCCCCACCCTAACTGATCAATTGACTTTGTGACAAGACACCCTCCCCACCCTTGCAATAATGTACT
TTGTGATATTCCCCCGCCCTTGTGAATGTACTTTGTACGATACACCCTCCCCACCCTTGAGAAGGTACTTTGTAA
TATCCTCTCCGCCCTTGAGAATGTACTTTGTAAGATCCACTTCCTGCCTGCAAAAAATTGCTCCGAACTCCACCG
TCTATCCCAAACCTATAAGAACTAATGATAATCCTACCACCCTTTGCTGACTCCTTTTTTGGACTCAGCCCACGT
TGCGACCCAGGTGATTAAAAAGCTTTATTGCTC

FIGURE 7208

GKVVLELERFLPQPFTGEIRGMCDFMNLSLADCLLVNLAYESSVFCTSIVAQDSRGHIYHGRNLDYAFGNVLRKL
TVDVQFLKNGQIAFTGTTFIGYVGLWTGQSPHKFTVSGDERDKGWWWENAIAALFRRHIPVSWLIRATLSESENF
EAAVGKLAKSPLIADVYYILGGTSPREGVVITRNRDGPADIWPLDPLNGAWFRVETNYDHWKPAPKEDDRRTSAI
KALNATGQANLSLEALFQ

FIGURE 7209

GGAGTCTGCGGTCGTTCCCTCGGCTGTGGACCGGGCGGCACGCACGCGGTGCAGGGTAACATGGCGGATGCGGAA
GTAATTATTTTGCCAAAGAAACATAAGAAGAAAAAGGAGCGGAAGTCATTGCCAGAAGAAGATGTAGCCGAAATA
CAACACGCTGAAGAATTTCTTATCAAACCTGAATCCAAAGTTGCTAAGTTGGACACGTCTCAGTGGCCCCTTTTG
CTAAAGAATTTTGATAAGCTGAATGTAAGGACAACACACTATACACCTCTTGCATGTGGTTCAAATCCTCTGAAG
AGAGAGATTGGGGACTATATCAGGACAGGTTTCATTAATCTTGACAAGCCCTCTAACCCCTCTTCCCATGAGGTG
GTAGCCTGGATTCGACGGATACTTCGGGTGGAGAAGACAGGGCACAGTGGTACTCTGGATCCCAAGGTGACTGGT
TGTTTAATCGTGTGCATAGAACGAGCCACTCGCTTGGTGAAGTCACAACAGAGTGCAGGCAAAGAGTATGTGGGG
ATTGTCCGGCTGCACAATGCTATTGAAGGGGGGACCCAGCTTTCTAGGGCCCTAGAAACTCTGACAGGTGCCTTA
TTCCAGCGACCCCCACTTATTGCTGCAGTAAAGAGGCAGCTCCGAGTGAGGACCATCTACGAGAGCAAAATGATT
GAATACGATCCTGAAAGAAGATTAGGAATCTTTTGGGTGAGTTGTGAGGCTGGCACCTACATTCGGACATTATGT
GTGCACCTTGGTTTGTTATTGGGAGTTGGTGGTCAGATGCAGGAGCTTCGGAGGGTTCGTTCTGGAGTCATGAGT
GAAAAGGACCACATGGTGACAATGCATGATGTGCTTGATGCTCAGTGGCTGTATGATAACCACAAGGATGAGAGT
TACCTGCGGCGAGTTGTTTACCCTTTGGAAAAGCTGTTGACATCTCATAAACGGCTGGTTATGAAAGACAGTGCA
GTAAATGCCATCTGCTATGGGGCCAAGATTATGCTTCCAGGTGTTCTTCGATATGAGGACGGCATTGAGGTCAAT
CAGGAGATTGTGGTTATCACCACCAAAGGAGAAGCAATCTGCATGGCTATTGCATTAATGACCACAGCGGTCATC
TCTACCTGCGACCATGGTATAGTAGCCAAGATCAAGAGAGTGATCATGGAGAGAGACACTTACCCTCGGAAGTGG
GGTTTAGGTCCAAAGGCAAGTCAGAAGAAGCTGATGATCAAGCAGGGCCTTCTGGACAAGCATGGGAAGCCCACA
GACAGCACACCTGCCACCTGGAAGCAGGAGTATGTTGACTACAGTGAGTCTGCCAAAAAAGAGGTGGTTGCTGAA
GTGGTAAAAGCCCCGCAGGTAGTTGCCGAAGCAGCAAAAACTGCGAAGCGGAAGCGAGAGAGTGAGAGTGAAAGT
GACGAGACTCCTCCAGCAGCTCCTCAGTTGATCAAGAAGGAAAAGAAGAAGAGTAAGAAGGACAAGAAGGCCAAA
GCTGGTCTGGAGAGCGGGGCCGAGCCTGGAGATGGGGACAGTGATACCACCAAGAAGAAGAAGAAGAAGAAGAAA
GCAAAAGAGGTAGAATTGGTTTCTGAGTAGTGAAGGCCACTTGAAGCTGGAGGAGAAACTAAAGCCTTATTGAGA
AAACATGTTATAGATCCTTTTGTTGCTGAGAGAGTGGAACATAGGTCCTAGACAGGGTGAAGAGTTCTGGCACAT
TTTAGCTGCTACTTTGAGACCTCGGTGATGTTACCTGGTGTGGTCATCCCATCTTGTCCTGTTTTAAGGATATGG
GTGGTGAAAGATGAAAGAGGCAGAGTTTATCCCAATGACTTCTCTGTTTGAGTTGGGAAGCCTCACCTTCAGACC
CAGTAACTGTCCGCAGCTGTCTGCTAGTGGTTGTCTTAACATCGTAGTCCTAGTTTGCATTTTTTAAATCCCCTC
TGTTTAAAAGGTTTGTAAAACAAAAACAAAAAACTAAGTCTGCTCAGTGAAATGCTGTAGAACCCTAAATAAGTG
GTAGAAGAGTGTCACTGAATTTTGTCTCTGAATTCAGTATAACTGAGTTTTGTCCATGCTGGTGTCTGGGTTATA
GGCCTGATGGGCCTGGTAGTTTTCCATCTTGTTCTGGCCTAGAGGTCAGTCCTTTGCACTTCCTCAAAGCTTGTG
TACAGTGCTCACCTAAATCCATCTGACTACTTGTTCCTGTGCCCTCTTGTTTTAGGCCTCGTTTACTTTTAAAAA
ATGAAATTGTTCATTGCTGGGAGAAGAATGTTGTAATTTTTACTTATTAAAGTCAACTTGTTAAGTTTTTTATGT
ATTCCTGTTGGGTTTTCTTGTTGATCTCATGCTAGCAGAGCAAAAATTGTAAAATATTTTGATTAAAAATCTAGG
GACCTTTATGTCCTATTTGAAA

FIGURE 7210

MADAEVIILPKKHKKKKERKSLPEEDVAEIQHAEEFLIKPESKVAKLDTSQWPLLLKNFDKLNVRTTHYTPLACG
SNPLKREIGDYIRTGFINLDKPSNPSSHEVVAWIRRILRVEKTGHSGTLDPKVTGCLIVCIERATRLVKSQQSAG
KEYVGIVRLHNAIEGGTQLSRALETLTGALFQRPPLIAAVKRQLRVRTIYESKMIEYDPERRLGIFWVSCEAGTY
IRTLCVHLGLLLGVGGQMQELRRVRSGVMSEKDHMVTMHDVLDAQWLYDNHKDESYLRRVVYPLEKLLTSHKRLV
MKDSAVNAICYGAKIMLPGVLRYEDGIEVNQEIVVITTKGEAICMAIALMTTAVISTCDHGIVAKIKRVIMERDT
YPRKWGLGPKASQKKLMIKQGLLDKHGKPTDSTPATWKQEYVDYSESAKKEVVAEVVKAPQVVAEAAKTAKRKRE
SESESDETPPAAPQLIKKEKKKSKKDKKAKAGLESGAEPGDGDSDTTKKKKKKKKAKEVELVSE

FIGURE 7211

GGCACGAGGCGGTAGCCCAGTCGAGATGGAGGAAGATGCGACCGGCAGACGGCATTCGCTGGGAACGACGGATAG
ACTGGGGGCTGCGGCCTAGAGGTCCGGGCTTGGAGTTCGCCTCAGACGCGGTGGAGCCGCCGGAGTCTGAGAAGG
TCTTCAGGCACC**ATG**GAGGACAAACGCAACATCCAGATCATCGAGTGGGAACACCTGGACAAGAAGAAGTTCTAC
GTGTTTGGTGTGGCAATGACAATGATGATCCGTGTCAGTGTCTACCCATTCACCCTCATCCGCACCCGGTTGCAA
GTTCAGAAGGGGAAGAGCCTCTACCATGGGACCTTCGATGCCTTCATCAAGATCCTGCGAGCAGATGGTATCACT
GGCCTCTACCGAGGGTTCCTGGTCAATACCTTCACCCTCATCTCTGGCCAGTGTTATGTCACCACTTATGAGCTC
ACCCGGAAGTTTGTAGCTGACTACAGCCAGAGTAACACAGTCAAATCACTGGTGGCTGGTGGCTCAGCCTCCCTT
GTGGCCCAGAGCATCACAGTGCCCATTGATGTAGTCTCCCAGCACCTGATGATGCAACGCAAGGGTGAGAAAATG
GGCCGCTTTCAGGTGCGGGGGAACCCAGAGGGACAAGGGGTAGTTGCCTTTGGCCAAACCAAGGACATCATCAGG
CAGATCCTGCAGGCTGATGGACTTCGCGGCTTCTATCGAGGCTATGTGGCTTCACTGCTTACCTATATCCCAAAC
AGTGCTGTCTGGTGGCCCTTCTATCACTTCTATGCAGAGCAGCTCTCCTACCTGTGTCCTAAGGAGTGCCCTCAC
ATTGTCTTTCAAGCTGTCTCGGGGCCCCTGGCTGCAGCCACTGCCTCCATCCTCACCAATCCCATGGATGTCATA
CGAACCCGTGTGCAGGTTGAGGGCAAGAACTCCATCATCCTGACCTTCAGACAGCTGATGGCAGAAGAAGGGCCT
TGGGGCCTCATGAAGGGCCTCTCGGCCAGAATCATCTCAGCCACACCTTCCACCATTGTCATTGTGGTGGGCTAT
GAGAGCCTCAAGAAACTCAGCCTCCGACCTGAGCTGGTGGACTCGAGACACTGG**TAA**CCAGTGGTGGGGAGAGAA
GCCTGCTGTTTTCCACACTACCGTGGGTCAGGGGCAGAGTGGAGAGGACAGCACCCTCTCCAGGTGCTCCCACCA
CACACCCAGCCCTGCCCTGGGCCAAGTGGCCTATCTGGGATAGGGATAGAGACTTTGAACTGCTCTTGCTGAAGA
GGCTCCACGCCTGGATCCCTTGCCCCCACTATTTAAAATTCTCTTCTGAGCTGGGCTCCCTCACTCAGTCCCTGT
ATTTGATACTGGCCTAAAGACCCCACCCCCCACCCTGCCAGCCCTTCTTCTGGCTTCCCCTTCCATCTGTGTCCC
TGAGACCCTGAGAAGAGCTGTACATAGAGCTTGCTTACTACCACTGGTTCTTCCTCTTGGGCTTTCAGCCCAGAC
TCCAAGCAGCTGCTATCAACCCTCTCTCCCTTCATCTCTTAGCCTTGCTTATTTTTATTTTGGGACCGAGCTGCC
CACTAGATGACTCTGCTTTTCCCTGCATTTGGGGCTAAGGTGCCAGGTACTTATTTGCACAGGGAGCAGGAGCAG
CAAAAAATCTCTGGTTCTCCAGAGCACTCGTCCTCTCTTTGGAGGGGTTATTAGGTTGGGAGAAATGTTGATACT
TTTGTTTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTTTTAACATCTGTGAACCAGGC
TATTAGTCCTGCTAAAGCGCCAATCCTGCTGTCAGAGCTCACCCCCTTCCTAAGACAGGTAGAAAAATGTAATGT
AGCTTTTTCCACAAGCCACTTCCCTGTCCCTTCAGTCTCAGGAGCCCTAGGAGAGTCTAAGCTGGGGCATCCCCT
GGCCCAGAGGACTCCCGTGGTGGGCACAGTTCTAAGTGGATCAGGCTGTCTTGGGTGCACTGGACTTGGAGCACT
ACCTTGAGAAGTCAGGTTGAGAAAGTAGTTGATCTAGAAGGCAACAAGTGGGCATGTGTTCCCCAGCACATTACC
CAGGCCAGCAGAGCCAAACCTAGGAGAGGGCAGTGGGTAGATTCTCTGCCCCAGGCAGCCATGACATACACATAA
ATACCCCAATCACTCAGACTTACGGCAACAAGTGTTGTCTCACTATGGTGATCTCTAAGATCCACATCACTGGAT
GCGTAGTCATCCCAGTCATGGTACCCTGTGGAGGAATGCTGGAAGAACATAAAGAGCAGTTCAGAAAGTCACCCA
ATACCAGGACCACTGCATTTACCAGCCTGATACTGCCAAGATTATCTGATGCTCTCCTCAGGAGCTAGGAGAGGA
GTGCTCCTTCCTCCCTACCGCTACTCTCCCCAAGCCTGTGTTGCAGGTAGAGAGGTGCAGCAAATAGAGAAGGCA
TGTCAAACCCTGCATTTCTACCTGAGACGTGTGACCTGGATGATCCTCCAAACCCTATTGGTCCCACCCCCTGGG
AAAGGCCATGGTGCCAGTTTGAAAGGTGCTAGCTACCTGAAGCCTTGATATTTCTTCATGGCTGCCGCACATTCT
TCCACCTTGGCCAGAACAGGTTCTGAAAACCACTTCTCTACCTTCACCACCACCACTGCCCATCTTGATCTCTTT
GAGGGTTTTCCCATTTCACTTGATCTTATTTTTGTTTATCCCTTCCTGCACTTTGTCAAGAGAGTCCTCCAGTTT
CTATCCAGGAATGTTCACATCCAAAGGGTTGGACCCACGGATCATTCTGAATCTTCCTGCCCCTCCTCACTGCTT
AACCCTGAGAACCACAAATATAATGGAAGCAGTTCCCCCCACCCTCACCCCATCTCTTTAAGCTCATCCTAGCAA
GACCTCTAGAGACCCTAGAGACTCGACTTTAGTCCTTCCCCGCCATGGCACAGTGGGGAAGGTGTCAATGGGGAG
TGTCACGGACAGGAGGTAGGATCCTGCCGCTCGCGTCTTAGTGTTTCTCCCTCAAGACTTTCCTTCTGTTTTGTT
GTCTTGTGCAGTATTTTACAGCCCCTCTTGTGTTTTTCTTTATTTCTCGTACACACACGCAGTTTTAAGGGTGAT
GTGTGTATAATTAAAAGGACCCTTGGCCCATACTTTCCTAATTCTTTAGGGACTGGGATTGGGTTTGACTGAAAT
ATGTTTTGGTGGGGATGGGACGGTGGACTTCCATTCTCCCTAAACTGGAGTTTTGGTCGGTAATCAAAACTAAAA
GAAACCTCTGGGAGACTGGAAACCTGATTGGAGCACTGAGGAACAAGGGAATGAAAAGGCAGACTCTCTGAACGT
TTGATGAAATGGACTCTTGTGAAAATTAACAGTGAATATTCACTGTTGCACTGTACGAAGTCTCTGAAATGTAAT
TAAAAGTTTTTATTGAGCCCCCGAAAAAAAAAAAAAAAAAAAAA

FIGURE 7212

MEDKRNIQIIEWEHLDKKKFYVFGVAMTMMIRVSVYPFTLIRTRLQVQKGKSLYHGTFDAFIKILRADGITGLYR
GFLVNTFTLISGQCYVTTYELTRKFVADYSQSNTVKSLVAGGSASLVAQSITVPIDVVSQHLMMQRKGEKMGRFQ
VRGNPEGQGVVAFGQTKDIIRQILQADGLRGFYRGYVASLLTYIPNSAVWWPFYHFYAEQLSYLCPKECPHIVFQ
AVSGPLAAATASILTNPMDVIRTRVQVEGKNSIILTFRQLMAEEGPWGLMKGLSARIISATPSTIVIVVGYESLK
KLSLRPELVDSRHW

FIGURE 7213

GAGGCCTGAGGCGGCGGCGCGAGGCAGTATGGTTTGAAGTGGTGAACATGGATTTTTCTCGGCTTCACATGTACA
GTCCTCCCCAGTGTGTGCCGGAGAACACGGGCTACACGTATGCGCTCAGTTCCAGCTATTCTTCAGATGCTCTGG
ATTTTGAGACGGAGCACAAATTGGACCCTGTATTTGATTCTCCACGGATGTCCCGCCGTAGTTTGCGCCTGGCCA
CGACAGCATGCACCCTGGGGGGATGGTGAGGCTGTGGGTGCCGACAGCGGCACCAGCAGCGCTGTCTCCCTGAAGA
ACCGAGCGGCCAGAACAACAAAACAGCGCAGAAGCACAAACAAATCAGCTTTTAGTATCAACCACGTGTCAAGGC
AGGTCACGTCCTCTGGCGTCAGCTACGGCGGCACTGTCAGCCTGCAGGATGCTGTGACTCGACGGCCTCCTGTAT
TGGACGAGTCTTGGATTCGTGAACAGACCACAGTGGACCACTTCTGGGGTCTTGATGATGATGGTGATCTTAAAG
GTGGAAATAAAGCTGCCATTCAGGGAAACGGGGATGTGGGAGCCGCCGCCGCCACCGCGCACAACGGCTTCTCCT
GCAGCAACTGCAGCATGCTGTCCGAGCGCAAGGACGTGCTCACGGCGCACCCCGCGGCCCCCGGGCCCGTGTCGA
GAGTTTATTCTAGGGACAGGAATCAAAAATGCGGTGCGTCTTTCTACGTGAATAGGATTTTGTGGCTGGCCAGAT
ACACTGCATCATCTTTTTCATCATTTTTAGTTCAACTTTTTCAAGTGGTTTTAATGAAGCTCAGTTATGAATCAG
AAAATTACAAATTGAAAACTCATGAATCAAAAGATTGTGAATCCGAAAGCTATAAGTCAAAAAGCCATGAATCAA
AAGCTCATGCCAGTTACTATGGGAGAATGAATGTGAGAGAGGTTCTCAGAGAGGATGGCCACCTCAGTGTAAATG
GGGAAGCGCTGTGTAAGTATGGCTTCGTTTTCCTGTGGGCGTCGGTCGTGGAGTTGGTCCCACACGCTGTCATGT
TGGGTACTAGCAGTAGAGAATGAACGGCCCGTGTGACATGGTGGTCCTCACTGATGACGACGGGCTGTTGGAGCT
GCTGCTTAAGCCCTCACCACAGAAGCTCATAGCCACCAGATCGCATTTGCTTTGATTGTTGACTGTCTCGTGTGT
AATTGAGTTTCCCAGTTTCTACAGACTGCCATTGCTATGCACGGCTGAGATGGACAGAGTTTGCTTGTGAATCCG
CCACACTCACTGCCTGTCACCACACCTGCAGGCGACGACTGTAAGGGCAAGAGACACCTCGACGCGCACACAGCC
GCCCACTCGCAGTCGCCACGGCTGCCCGGTCGGGCAGGGACCCTCTGGCACATCTGGGCATGTGCAGGTTGTCTC
TCGCCCCGTCTCCGTCTCATCTCGCCCTGTCACCATGCTATTTGTGTCTTGTGTGGTTTGTGCTTGGAATTCAAG
TGCTTTAAAGTCTTGCTGTAAAAACTGACAGGAATAGTATTAACTTTGGTTTAAAACAGGGTGAATCTCTCTCGA
AAAGCTCCCTTGTAAATATTTTTTGGAAGCGGAGTCTCACTCTGTTGCCCAGGCTGGAGTGCAGTGGTGCAATCT
TGGCTCACTGCAGCCTCCACCTCCAGAGTTCAAGCAATTCTCCTGCCACAGCCTCCTGAGTAGCTGGGACTACAG
GCGCACACCACCACACCCAGATAATTTTTTTGTATTTTTAGTAGAGACAGGGTTTCACTGTGTTGGCCAGGACGG
TCTCGATTTCCTGACCTAGTGATCTGCCTGCCTCGGCCTCCCAAAGTGCTGTTGGCATCTTAAAAAAAAAGTTAG
TTTCAAAAATAATTGTCTCACCTGCTAATGAATAAACATAAAGCCATTGATTTTTCTTTTAAATTCTCATAAGCC
ATATTTCTTTGCATGTCAACCATGTTGTAATTACATAGTTGCAGGAATTCACAAGCAGGTGTTAAGTCACTGTGA
GGAGACAGCCACCCACAGTGAGAACTGGAACAAAACTTACTTTGGGAGGCTGAGGCGGGTGGATCACTTGAGGCC
GGGAGTTCAAGACCAGCCTGGCCAATGTAGCAAAACCCTGTCTCTTAAATT

FIGURE 7214

MDFSRLHMYSPPQCVPENTGYTYALSSSYSSDALDFETEHKLDPVFDSPRMSRRSLRLATTACTLGDGEAVGADS
GTSSAVSLKNRAARTTKQRRSTNKSAFSINHVSRQVTSSGVSYGGTVSLQDAVTRRPPVLDESWIREQTTVDHFW
GLDDDGDLKGGNKAAIQGNGDVGAAAATAHNGFSCSNCSMLSERKDVLTAHPAAPGPVSRVYSRDRNQKCGASFY
VNRILWLARYTASSFSSFLVQLFQVVLMKLSYESENYKLKTHESKDCESESYKSKSHESKAHASYYGRMNVREVL
REDGHLSVNGEALCKYGFVFLWASVVELVPHAVMLGTSSRE

FIGURE 7215A

ACTTGAACCCAGGAGGTGGAGGTTGCAGTGAGCGGAGATTGTGCCACTGCACTTGGACCTGGCTGACACAGCAAG
ACTATGTTTAAAAAAAAAGAGAGAGAAAAAAAAACAAGAAGGAAGAGCAATGGCGACACTGGATCGCAAAGTGCC
CAGTCCGGAGGCGTTTCTGGGCAAACCCTGGTCCTCCTGGATCGACGCCGCCAAATTACACTGCTCCGACAATGT
AGATTTAGAAGAGGCTGGAAAAGAGGGTGGAAAAAGCAGGGAGGTTATGAGGCTTAATAAAGAAGATATGCACTT
ATTTGGCCATTACCCAGCACATGACGACTTCTATCTCGTAGTGTGCAGTGCCTGTAACCAGGTCGTCAAGCCACA
GGTTTTCCAGTCGCACTGCGAGAGAAGACACGGTTCAATGTGTAGACCTTCTCCCTCTCCAGTGTCTCCAGCCTC
CAATCCCAGGACATCACTAGTACAGGTGAAAACAAAAGCCTGTCTCAGCGGCCATCACTCTGCCAGCAGCACCTC
AAAGCCATTCAAAACGCCCAAAGACAATCTACTTACCTCCAGCAGCAAACAGCACACAGTCTTTCCTGCGAAAGG
ATCAAGGGATAAACCATGTGTTCCAGTTCCTGTAGTCAGTTTAGAGAAAATTCCTAACCTAGTGAAGGCAGATGG
TGCCAATGTCAAAATGAACTCCACAACCACTACTGCAGTTTCTGCCTCCTCCACCTCGTCCTCTGCCGTCTCCAC
CCCTCCTTTAATTAAGCCTGTCCTGATGTCCAAGTCAGTGCCACCTTCACCAGAGAAGATCTTAAATGGCAAAGG
AATTCTGCCAACCACCATAGACAAGAAACACCAAAATGGCACCAAAAACAGCAACAAGCCTTACAGGAGACTTTC
AGAGAGAGAATTTGACCCAAATAAACACTGTGGAGTATTGGATCCCGAGACAAAGAAACCTTGCACAAGATCCCT
CACCTGCAAGACACATTCGCTAAGCCATCGGAGGGCAGTCCCAGGCCGGAAAAAGCAATTTGACCTCCTCCTGGC
AGAACACAAAGCAAAGTCCCGGGAAAAAGAAGTTAAAGATAAAGAGCATCTCCTGACTTCCACGAGGGAAATACT
TCCAAGCCAATCCGGGCCGGCACAGGATTCTCTGCTAGGGTCTTCAGGGAGCTCTGGGCCAGAACCAAAAGTTGC
ATCCCCTGCAAAATCCAGACCACCCAACTCTGTACTTCCTAGACCATCATCTGCAAATAGCATAAGCAGCAGCAC
ATCTTCAAATCATAGCGGCCACACTCCAGAGCCCCCACTCCCACCGGTTGGAGGTGACCTCGCCAGCCGACTGTC
CAGTGATGAAGGGGAGATGGACGGAGCCGACGAATCCGAGAAGCTAGACTGTCAGTTCTCCACGCACCACCCCAG
ACCTCTGGCGTTTTGCTCATTTGGGAGTCGCCTCATGGGACGAGGGTACTATGTGTTTGATAGAAGATGGGATCG
TTTTCGATTCGCACTAAACTCCATGGTAGAAAAACACCTGAATTCACAGATGTGGAAGAAGATCCCTCCTGCGGC
AGATAGCCCCCTGCCCTCGCCAGCAGCCCACATCACCACCCCCGTTCCAGCATCCGTTTTGCAGCCTTTCAGCAA
CCCCAGTGCTGTGTATCTTCCTTCAGCTCCCATCAGCTCGAGGCTCACCTCTTCTTACATAATGACATCAGCCAT
GCTCTCAAACGCAGCTTTCGTGACATCGCCGGACCCGAGCGCCCTCATGTCCCACACCACAGCTTTCCCTCATGT
GGCCGCAACCCTCAGCATCATGGACTCAACCTTCAAGGCCCCATCCGCCGTGTCCCCGATACCAGCCGTCATCCC
TTCCCCATCCCACAAGCCATCCAAAACCAAAACCAGCAAATCCTCAAAAGTCAAAGACCTGTCCACCCGTAGCGA
CGAGTCTCCAAGTAACAAAAAAAGGAAGCCACAGTCTTCGACTTCCTCCTCCTCCTCCTCCTCCTCTTCCTT
GCAGACATCCCTCTCGTCTCCACTGTCAGGGCCTCACAAAAAGAACTGTGTTTTGAATGCCAGTTCTGCTTTGAA
CTCCTATCAGGCGGCCCCTCCCTATAACAGCCTGTCTGTGCACAACTCAAACAATGGGGTGAGCCCACTCAGTGC
CAAACTGGAGCCCTCAGGACGGACCTCGCTGCCCGGCGGCCCCGCGGACATAGTGAGACAGGTGGGCGCGGTGGG
AGGCAGCAGTGACTCCTGTCCCCTCTCTGTGCCCTCCCTTGCGCTCCACGCAGGGGACCTCTCTCTGGCCTCACA
CAATGCTGTGTCTTCTCTGCCCCTCTCTTTTGACAAATCAGAAGGAAAAAAGCGTAAGAACTCGAGTTCTAGTAG
CAAAGCCTGTAAAATCACTAAAATGCCTGGTATGAATAGCGTTCACAAAAAGAACCCGCCCAGCCTTCTCGCACC
GGTGCCCGATCCCGTTAACAGCACCTCCTCTCGGCAGGTTGGGAAAAATAGCAGCCTAGCTTTGTCACAATCCAG
TCCTTCAAGTATATCCAGCCCAGGACACAGCCGACAGAACACAAACAGAACGGGCAGGATAAGGACTCTTCCATA
ACAAGACTATGAAGCCACTTCCACATCAATTCCAGGCCACCTAATCCCATCCGAGGAGGCCATGGGGAGGAGGAG
GGAGGGGAGTGGGCTGGGGGGAGAGTCTGTTTTCTGTGCACTCCCTGTGACTCTGGCCTTTCTTCTTCTTTTTTT
AATTGACCAATTTTTAGTTAAAAAGGCAAAAGAAGGTGAATTTGAGATTTACAGAAAACAGTTCCAGTGTTTGGT
TTCCGCTGTCTTTCCTTTCATTTGCCATGTTTTTACATTCTTCCAAATTTGGGGTCACTCCCCTAGCTCCTGATG
CTGCTACTGTACCATCCTTTTGCTCCAGCCATGAGAGCAGACATTGCAGAATGTTGGTTCCAGGTTGGCATGCTC
TGAAGCTCTTGAACTGTAGCACAGGCAGAGCCCTTTTTCTTCCTGTCATCTCCACCCGATTCCTTCCATCCCTAC
GTCTACCACTCTCTGGGTCCTCACTGGTCTTCAAAGGACCTGGCTCTCATAGGATCCCCTCAGGATTGTGTGCAG
GGAGAGGGGGCTTTGCTGGGGAGGAGCTGGGAGTGGAGAGTTGGAGGGTGGGTGGGGTTCCCTCATCCAGTTTCC
ACAGCCCACCATGGCTGGAGCCAAATGCTAGAAGCGAGATTGAGAACAGTGGCCGTTTAGTGATGTGGTTTACCT
AATACCACTGTCCAGCTGTGCAGCTCAGAAAGGATAAACCAGTCAGGGACAGGGGCCAGAACAGGTTTGGGAAGG
TGGCAGCAAGCAGAGCATGGTGGGTAGGAGATGATCCCTAAAAAAACTGGAGACTGTGGTGGTCTGAGCTGGTCA
GGAATCTGCAGAATCCCTTCCAGGAATCAGTGTGCCAGTGCCCACAGCAGGGTGAGCTAGGAGGGAGAAATCCCA
GGAAAAAGGTCGTGAGAACCCAGAAAGCCACTCCATGAGGAGGCACGGTGACCACAGCTGCTAAAGGTTCTTAGG

FIGURE 7215B

CTGCCTTCCTGGGCTAGGAAGAGCCCCCCAGGGAGAGCTTCCACAAAAGGGTATGTGTCAAACCTTTTGTCAGAA
TAAATAATAGCATTTCCCACCCACCCCCATGCCCTGGGCCACAGGGACTTGGTGGGATCAGCACACCCATGGATC
AGCTTTTGCTGTCTTAGAGACAGCCATCCCCATGAAGGAATGGTAAGGACAGCCACTGCTCAGTGAAGAACAGCC
ATTTGGAAGAGCCACGCTGGAGCCCTGCAGCCATAGAACTATTCACACTGGAGTTTTAAAAGAAACAGCAATACC
ATAAGCTCTAGTAGGGAATCATAATCAGGAAAGGAATTCACAACATAAAATAGGTGTTCTGTGCTATTAATCATG
TAACTTTGTATATGATGTATAGCAAAGATACTGGGAGGTTTTGTTTCATCCTTAAATCAGAAATGAATGCTAGTT
TCATAGCTGGGCAGAACCCTCATCCCCACCCCAAAGTTTTCCTTTTCTTTCCCATTCCCCCAACCCAAAGATCAG
ACTACTGTTAAGTTTCACCACACAATTGGAATTGCAAAGACGGGAGGCAAATGGAGTGATTTTCATCAATGGAAT
TGCACTGACAGTGAGTGTTTCTTATAGGATTACTAAATTTTTTAATATAAAATGATTTGTTTAAAAATCAGGAGT
TGATATTAAGTACCAGGACATTAGTTCGGATGATTTCATTTTTATTTCTACAGTGTTAAAAGTGCACTTATATGC
TGGTTTATTTACGTCTTGGGAAAAGAGACTGCAAATTGAAGGGATGATTGTTACTTTTTCTTTTTTTAAAAAAAA
AAGGTTAAGGAGATTTTAAGACTTATAAATGTTTAAGAAATTATAAACAAGGTTAGACCCTTTGAAAAAAAGTTT
AGAAGATATTCTTAAAGTAAATTTTTATAGTGTTAATTTTGTAATAATTTATGTTTTACTATATTACAGAGCTAA
CTGACCAGAATAGTTTCAGAAACAATATGAAACTTAGGAAAGTTTAAGCAATGTTTATATTTTTAAAATGTTCTT
TGAATTATGTTTTTATTGTACATTTCTTCAGACTGAAAAGTATGTACATATCTTTGTTATTTTTGCACAATTTTG
TCTTGTTCGGTTTCAGAGGTCTGTTGTTTTTTATAATTTATTTTGAGTTGTAAAACTTGCAGGAGTAAAAACAAA
AAACAAAATCTCCACAACAAAATAACCCTCTGATTTATAAACTCTTATAGTCAAAGAGGGAAAACAAAGGTTGAG
AGATTAAGTGGCTGCTTCTGAGAAATAATGTCTCAAGGACTAAAGGAGCAATTCAATAGGTTTAGACATTGTAGC
TCTCTACATCTTGAATTGGAAGCTGGAATAAAGAGCCCCCACCCCCCCCCCACCCTCATCGAATGCTGCTTACTT
TGTCAAAAGACTGGCTATGACCAAGGTGAGGATATTTCTGGAAAACTGGGCAAAAAGGGAAAGCCCACAGTATTC
TTCCTTGGCAGTCAACCACAGGTTTACTTTACAATGATGTATTAAAAACTTGCAGCTTGAAAAATGGAATGCAAA
TAAAAGGTTCTCTTTGGGTTTGTCTTAATGGAGTTAAACTGGAGCAGCCTATAAAACATTTTTAGGGTGATGTCC
TCTGGGTCCTTCTGTTCTGCACACCCACTCAGTCTTCTCTCCCAGCCCCTTGACTGCACACACCCCTCTTTGCCT
GAAGATCTCCTGACTTGTCGCCAGCCATAGAGGCTCGAAAGCTCTGGTTGTGAAGCATAACGCAATGCATAGACC
TGTCAGCCAT

FIGURE 7216A

CGAGATGGTGAGTCTTCTGTGGTCCCTCCCCCACAAGGCCCAAGTCCCTGGGCAGAGAGTGGGCCCAGAGGACAG
CAGGCAGCACCTAGGACCTAAGCCTGGGAGTTGCCCCCTGCAGACAGCTTAGACCCACGACCAGCTCCCCCACCC
CCACCCTGCGGCTGCATCCTGGGAGGTGGGCACTCTTAGTGCCCTGTGACATTCATTCATTCCATGGCCCCTCAG
GGAGCTCACCTTCTAGGAGACGGCACAGAGGCTCTGGCCCTGGCAAACTGGGATTCGAGCCCAGGCATGAGGCCC
AGTCCTCTGCCGTCTGGGCCACAGCACACCATCTCCCAACAACCAAGAGATTCTCTTCGTCCCAGCCTCATCAGC
CCCCAGGGGATGGGAGAGGGCAGGCACCAGGCAACAAGGTCCAAAGAGACCTCACGACTTGCTCAAGGTGGCCGA
GCCTGTCCCCTGGAGGACAGACTCAGCTGCCAGGCCTGTCCAGGCCTGGGGACTGCAAAGAACAAGAATTCCATT
CACACGAAGCCTCCCAGCAGCCCCATATTGGGGGGGCGCCAGCCTCAGAGAGGGGAGGGACGTTAGGTTTCATCC
AAAGAAAGCATTTCCGTGACTCAAAATATCTGCAGGGGGGATACTGTCTAGCCTCCTAATGTTTAGCCCAGGGCT
GGGCACACAGTAGGGCTTCAAGACCTACGTGGGGATGACAGTGGAATCACATTTAGGTGTCAGCACACTCCATGC
CGGGTCATGAGACAGAAATAAGCCACCTCAGAGTGATGGCTGGGTTCGTTCATTCATCTACTCTTCAGTCAACAA
ACACTTACTGAGAAGTGGCTGTGTGCCAGGCACGCTTTAGGTGCTGGGGTTGCCTCCATGAACAAAACAAGCAGA
AAACTCTGCTGCTGTGAAGCAAGCTAAGGCGGAGCCCAGCATGGCAGGGGCGGGAGGGGCTGGCTGGCAAGACAT
TGCTTCCTGCCCTCCCCCCAGGGGCACCACACAGAACAGTTTACAAAGCACTCCCACGGTTGCGTTCCCATTAAC
AAGCCTTCGCCCCCAACACAAGCCTTTCCTCTCCTAGTCCCCGGGACGGTGTCAGCCCTGAACATAGCCCAGGCT
GGGAGAGTGGGGGGCTTACACCCTTGGGTGACTTAATGTGCCCACTGGCCCACCCTGCCCAAGACCTACCACTTC
TGCCCTCTCAGCTCTCCCTGGATCCATCGGGTCCCGAGTGGGATTGCCCACTGGGCTCCAAGGACCTGGAGGAAG
AGGGCCCCTGGGGAGGGGGCTCTGGCCTGCCGCCCACAGGCTGCTTCCCTGGCTCCTGGCGCCAGGACGTGGGCC
TGGACTGCAAGGGATCCCCCGAGGGGGCCGAGGCCCGGGCTTGGACTGTCTACTACTACAGCCTCCTGCAGAGCT
GTCTGCAGCAAGCTGGCCTTCCGGAGACTCAGGACCGCGGCCAGGTGCCCCGCACAGGCTGTCCTGGGGCGGAGG
TGACCTTGTGCGTTCTGGGCTCCCCCAGCACCTTTCTGCCTGTGCTGCTGGAGGGTGGGGTCCAGAGCCCGGGAA
ACATGCTCCTTTGCCTGTCCCCTGCTTGGCTGATGAAGGTGCCAGCACCCGGGCAGCCGGGTGAGGCAGCCCTGC
TAGTCTCCAAGGCTGTGAGCTTCCACCCTGGGGGCCTGACATTCCTGGATGACTTTGTCCCCCCGCGCCGTGCCA
CCTACTTTTTGGCAGGCCTGGGCCTGGGGCCTGGCCGGGGCCGAGAGGCAGCAGAACTCGCCCGTGACCTGACCT
GCCCCACAGGAGCTTCGGCTGAGCTGGCCCGGCTGCTGGAGGACCGGCTGCTGACAAGGCAGTTGCTGGCCCAGC
AGGGTGGTGTGGCTGTGCCAGCAACCCTGGCTTTCACCTACAAGCCGCCGGGGCTGCTGCGGGGAGGGGATGCCA
GCCTAGGGCTACGGCTGGTGGAGCTGAGTGGCAAAGAGGGCCAGGAGACGCTGGTGAAAGAGGAAGTGGAGGCTT
TTCTGCGCTCCGAGGCCCTGGGTGATATCCTGCAGGTAGCTGTGAAGCTCAGTGGCTGGCGCTGGCGGGGGCGGC
AGGCATGGCGTCTGCACCCGCGGGCAGAGCTGGGTGCAGTGGTGGACACAGTGCTGGCGCTGCTGGAGAAGCTGG
AGGAGGAGGAGAGTGTCCTGGTGGAGGCTGTGTACCCACCTGCCCAGCTGCCCTGCTCAGATGGTCCTTCACCCG
GCCCCGGCCTGGCCGTGCGAATCTGTGCTGTGGTGTGTCGGACACAGGGTGATAGGCCACTGCTGAGCAAGGTGG
TGTGCGGCGTGGGCCGCGGGGACCGCCCTCTACGGCACCACAACTCCCTGCCGAGGACGCTGGAGGTGGCGCTGG
CCCAGTGCGGCCTGGGCGAGGAGGCGCAGGTGGCGGCTGTGCGGCAGCGCGTCAAGGCGGCGGCCGAGGCCGCGC
TGGCCGCCGTGCTGGCTCTGGAGGCCGGCCTGAGTGCCGAGCAGCGCGGCGGGCGCCGGGCGCACACGGACTTCC
TGGGCGTGGATTTCGCGCTGACAGCGGCCGGCGGCGTGCTGACCCCAGTGGCCCTGGAGCTGAACGGCGGCCTGT
GTCTGGAGGCGTGCGGCGCGCTGGAGGGGCTGTGGGCCGCGCCGCGGCTGGGGCCGGCGGCCGACGAGGCGGTGG
CGGCGCCGCTGGTGGAGACCATGCTTCGGCGGTCGGCGCGCTGCCTCATGGAGGGAAAACAGCTGCTGGTGGTCG
GCGCTGGCGGCGTCAGCAAGAAGTTCGTGTGGGAGGCGGCGCGCGACTACGGGCTCCAGCTGCACCTCGTGGAGT
CAGACCCCAACCACTTTGCATCCCAGTTGGTACAGACCTTCATCCACTTTGACATGACAGAGCACCGGAGGGATG
AGGAGAACGCACGGCTGCTGGCAGAGTTGGTGCGGGCTCGCGGCCTCAAGCTAGATGGCTGCTTCTCCTACTGGG
ATGACTGCCTGGTGCTCACAGCCCTGCTCTGCCAGGAGCTAGGTCTGCCCTGCAGCTCCCCAGCTGCCATGCGCC
TGGCTAAGCAGAAGAGCCTCACCCAGCTGCACCTGTTGCACCACCATGGCCCACCCTGGCCTGCGCCCTCCCTCC
ATGCTGTGCCCTGCTGCCCACTGGAGAGTGAGGCTGATGTGGAGAGGGCCGTGCACCAGGTACCCCTGCCAGGTG
TCATGAAGCTGGAGTTCGGGGCAGGTGCAGTGGGTGTCCGGCTGGTAGAGGATGCGCCACAGTGCCATGAGCACT
TTTCCCGGATTACCCGAGACTTGCAGGGCGAGGCCGACCACCCAGGCATTGGGCTGGGCTGGGGCAATGCCATGC
TGCTGATGGAGTTTGTGGAGGGCACCGAGCACGACGTGGACCTGGTGTTGTTTGGTGGGCGGTTGCTGGCTGCCT
TTGTCTCCGACAATGGCCCTACGAGGCTGCCTGGCTTCACTGAGACGGCGGCCTGCATGCCCACCGGGCTGGCAC
CAGAGCAGGAGGCACAGATGGTTCAGGCAGCCTTCCGCTGTTGCCTGGGCTGCGGGTTGCTCGATGGAGTCTTCA

FIGURE 7216B

ACGTGGAGCTCAAGCTGACCGGGGCTGGGCCTCGGCTTATCGAGATCAACCCCCGCATGGGTGGCTTCTACCTGC
GTGATTGGATCCTGGAGCTCTATGGTGTTGACCTGCTGCTGGCTGCTGTTATGGTGGCCTGTGGCTTGCGTCCTG
CCCTGCCCACCCGCCCACGTGCTCGTGGCCATCTGGTGGGCGTCATGTGCCTTGTGTCCCAGCACCTGCAGGCCC
TGAGTTCCACCGCCAGCCGTGAGACCCTGCAGGCCCTGCACGACCGTGGACTGCTACGCCTCAATCTGCTGGAGG
AGGCCCTGGTGCCTGGCGAGTATGAGGAGCCCTACTGCAGTGTGGCCTGTGCCGGACCCAGCCCCACCGAGGCCC
GTCTCCGCCTGCTGGGCCTCTGCCAGGGCCTGGGCATCGATGGGCCCAGCTACCCTGTTGCCCACTTCCTGTCTC
ACTTCAAATAGCACTGGGGTCAGGGGGCAGGGAAGCAGTGCTGGGTGGAGGCACTGTGGTGCCCTCTGCTCCCTG
GAGCTCTTCCTGCTTCTCTCCCCATCACCATGCCCCAGCCCCAGCCTGGCCCGCTGCAATGCCTAGGTCTGTTCC
AGAGCAGCAGGGCAATTTAGACACCAAGGCATCCTGGACTCAAGGGCCTCTTGCCCTCCCGAAGGCCCCAGTCCA
GCCTACAGCTTCCCCAGCATTCTAGCCTTGGAGAAATGACAATGGCCACACACACACACACACACACACACACAC
ACCTCTGACGCCAGCTCCCCAGGTGGGAGTGGGCCCAAACCCAGCCCCTCCTGTCCACCTCTCCAGGTCTCACTC
TCTTCCTGCCATCTACAAGAGGAGAGGACCTGGCTGGGCCCCAAGCCTTGGACAAATCCTGGGAAAACCTGAGAC
TAGAACCCTTGTCTTCCTCTTACCCAAATTCTAGGATAGCTCTGAAGCCTGCTGGAAACTTGGTGGCATCCAACC
TGCCTCATTCGGCCTGACCGGTAGAGGCAGGTGGCCTGTGGACAGAAGTAATCCTCTTTCTGCTCACCCCAGGCA
GACACAACTGCCTATGTTCCCCCGATGAGAGGAAACAGGCTGAGAGAAGAAAAATGACTGCTCCAGGATTATACC
ACAGTGGAGAGCGGGTCACAGGACATGATGCAGGGTCCAGGTTTCTGTTTTGATCAAGTCTTACATGCCCATTCA
GCTTCTAGGCCCCCCTCACCTCCCTGCCCTCATTCACAAGTGGCCCTGAGACACGTGAACACCTCCCTCCTATGC
ATCACAAACCTTCTCCACCGAGCTTTGGTGCTTTGGCCTCTGGCACACCTAACTAGCATTGGCAGAGGAGAGTCT
ACACTCTCTTCCTCATTCAGGGAAGATGCTTTAAGAAATCCTGCCTCTGTGCAGCAGAGGAGCTGGAGGCAGCTC
CCCAGGCATCCCTCCCCAAATAAAGGCTTATGTACTGGTG

FIGURE 7217A

AATTCGGCACGAGGGGGGGCAGCAGCGGACGCCGCTAACGGCCTCCCTCGGCGCTGACAGGCTGGGCCGGCGCCC
GGCTCGCTTGGGTGTTCGCGTCGCCACTTCGGCTTCTCGGCCGGTCGGGCCCCTCGGCCCGGGCTTGCGGCGCGC
GTCGGGGCTGAGGGCTGCTGCGGCGCAGGGAGAGGCCTGGTCCTCGCTGCCGAGGGATGTGAGTGGGAGCTGAGC
CCACACTGGAGGGCCCCCGAGGGCCCAGCCTGGAGGTCGTTCAGAGCCGTGCCCGCCCCGGGGCTTCGCAGACCT
TGACCCGCCGGGTAGGAGCCGCCCCTGCGGGCTCGAGGGCGCGCTCTGGTCGCCCGATCTGTGTAGCCGGTTTCA
GAAGCAGGCAACAGGAACAAGATGTGAACTGTTTCTCTTCTGCAGAAAAAGAGGCTCTTCCTCCTCCTCCCGCGA
CGGCAAATGTTCTGAAAAAGACTCTGC**ATG**GGAATGGCCTGCCTTACGATGACAGAAATGGAGGGAACATCCACC
TCTTCTATATATCAGAATGGTGATATTTCTGGAAATGCCAATTCTATGAAGCAAATAGATCCAGTTCTTCAGGTG
TATCTTTACCATTCCCTTGGGAAATCTGAGGCAGATTATCTGACCTTTCCATCTGGGGAGTATGTTGCAGAAGAA
ATCTGTATTGCTGCTTCTAAAGCTTGTGGTATCACACCTGTGTATCATAATATGTTTGCTTTAATGAGTGAAACA
GAAAGGATCTGGTATCCACCCAACCATGTCTTCCATATAGATGAGTCAACCAGGCATAATGTACTCTACAGAATA
AGATTTTACTTTCCTCGTTGGTATTGCAGTGGCAGCAACAGAGCCTATCGGCATGGAATATCTCGAGGTGCTGAA
GCTCCTCTTCTTGATGACTTTGTCATGTCTTACCTCTTTGCTCAGTGGCGGCATGATTTTGTGCACGGATGGATA
AAAGTACCTGTGACTCATGAAACACAGGAAGAATGTCTTGGGATGGCAGTGTTAGATATGATGAGAATAGCCAAA
GAAAACGATCAAACCCCACTGGCCATCTATAACTCTATCAGCTACAAGACATTCTTACCAAAATGTATTCGAGCA
AAGATCCAAGACTATCATATTTTGACAAGGAAGCGAATAAGGTACAGATTTCGCAGATTTATTCAGCAATTCAGC
CAATGCAAAGCCACTGCCAGAAACTTGAAACTTAAGTATCTTATAAATCTGGAAACTCTGCAGTCTGCCTTCTAC
ACAGAGAAATTTGAAGTAAAAGAACCTGGAAGTGGTCCTTCAGGTGAGGAGATTTTTGCAACCATTATAATAACT
GGAAACGGTGGAATTCAGTGGTCAAGAGGGAAACATAAAGAAAGTGAGACACTGACAGAACAGGATTTACAGTTA
TATTGCGATTTTTCTAATATTATTGATGTCAGTATTAAGCAAGCAAACCAAGAGGGTTCAAATGAAAGCCGAGTT
GTAACTATCCATAAGCAAGATGGTAAAAATCTGGAAATTGAACTTAGCTCATTAAGGGAAGCTTTGTCTTTCGTG
TCATTAATTGATGGATATTATAGATTAACTGCAGATGCACATCATTACCTCTGTAAAGAAGTAGCACCTCCAGCC
GTGCTTGAAAATATACAAAGCAACTGTCATGGCCCAATTTCGATGGATTTTGCCATTAGTAAACTGAAGAAAGCA
GGTAATCAGACTGGACTGTATGTACTTCGATGCAGTCCTAAGGACTTTAATAAATATTTTTTGACTTTTGCTGTC
GAGCGAGAAAATGTCATTGAATATAAACACTGTTTGATTACAAAAAATGAGAATGAAGAGTACAACCTCAGTGGG
ACAAAGAAGAACTTCAGCAGTCTTAAAGATCTTTTGAATTGTTACCAGATGGAAACTGTTCGCTCAGACAATATA
ATTTTCCAGTTTACTAAATGCTGTCCCCCAAAGCCAAAAGATAAATCAAACCTTCTAGTCTTCAGAACGAATGGT
GTTTCTGATGTACCAACCTCACCAACATTACAGAGGCCTACTCATATGAACCAAATGGTGTTTCACAAAATCAGA
AATGAAGATTTGATATTTAATGAAAGCCTTGGCCAAGGCACTTTTACAAAGATTTTTAAAGGCGTACGAAGAGAA
GTAGGAGACTACGGTCAACTGCATGAAACAGAAGTTCTTTTAAAAGTTCTGGATAAAGCACACAGAAACTATTCA
GAGTCTTTCTTTGAAGCAGCAAGTATGATGAGCAAGCTTTCTCACAAGCATTTGGTTTTAAATTATGGAGTATGT
GTCTGTGGAGACGAGAATATTCTGGTTCAGGAGTTTGTAAAATTTGGATCACTAGATACATATCTGAAAAAGAAT
AAAAATTGTATAAATATATTATGGAAACTTGAAGTTGCTAAACAGTTGGCATGGGCCATGCATTTTCTAGAAGAA
AACACCCTTATTCATGGGAATGTATGTGCCAAAAATATTCTGCTTATCAGAGAAGAAGACAGGAAGACAGGAAAT
CCTCCTTTCATCAAACTTAGTGATCCTGGCATTAGTATTACAGTTTTGCCAAAGGACATTCTTCAGGAGAGAATA
CCATGGGTACCACCTGAATGCATTGAAAATCCTAAAAATTTAAATTTGGCAACAGACAAATGGAGTTTTGGTACC
ACTTTGTGGGAAATCTGCAGTGGAGGAGATAAACCTCTAAGTGCTCTGGATTCTCAAAGAAAGCTACAATTTTAT
GAAGATAGGCATCAGCTTCCTGCACCAAAGTGGGCAGAATTAGCAAACCTTATAAATAATTGTATGGATTATGAA
CCAGATTTCAGGCCTTCTTTCAGAGCCATCATACGAGATCTTAACAGTTTGTTTACTCCAGATTATGAACTATTA
ACAGAAAATGACATGTTACCAAATATGAGGATAGGTGCCCTGGGGTTTTCTGGTGCCTTTGAAGACCGGGATCCT
ACACAGTTTGAAGAGAGACATTTGAAATTTCTACAGCAACTTGGCAAGGGTAATTTTGGGAGTGTGGAGATGTGC
CGGTATGACCCTCTACAGGACAACACTGGGGAGGTGGTCGCTGTAAAAAAGCTTCAGCATAGTACTGAAGAGCAC
CTAAGAGACTTTGAAAGGGAAATTGAAATCCTGAAATCCCTACAGCATGACAACATTGTAAAGTACAAGGGAGTG
TGCTACAGTGCTGGTCGGCGTAATCTAAAATTAATTATGGAATATTTACCATATGGAAGTTTACGAGACTATCTT
CAAAAACATAAAGAACGGATAGATCACATAAAACTTCTGCAGTACACATCTCAGATATGCAAGGGTATGGAGTAT
CTTGGTACAAAAAGGTATATCCACAGGGATCTGGCAACGAGAAATATATTGGTGGAGAACGAGAACAGAGTTAAA
ATTGGAGATTTTGGGTTAACCAAAGTCTTGCCACAAGACAAAGAATACTATAAAGTAAAAGAACCTGGTGAAAGT
CCCATATTCTGGTATGCTCCAGAATCACTGACAGAGAGCAAGTTTTCTGTGGCCTCAGATGTTTGGAGCTTTGGA

FIGURE 7217B

GTGGTTCTGTATGAACTTTTCACATACATTGAGAAGAGTAAAAGTCCACCAGCGGAATTTATGCGTATGATTGGC
AATGACAAACAAGGACAGATGATCGTGTTCCATTTGATAGAACTTTTGAAGAATAATGGAAGATTACCAAGACCA
GATGGATGCCCAGATGAGATCTATATGATCATGACAGAATGCTGGAACAATAATGTAAATCAACGCCCCTCCTTT
AGGGATCTAGCTCTTCGAGTGGATCAAATAAGGGATAACATGGCTGGATGAAGAAATGACCTTCATTCTGAGAC
CAAAGTAGATTTACAGAACAAAGTTTTATATTTCACATTGCTGTGGACTATTATTACATATATCATTATTATATA
AATCATGATGCTAGCCAGCAAAGATGTGAAAATATCTGCTCAAAACTTTCAAAGTTTAGTAAGTTTTTCTTCATG
AGGCCACCAGTAAAAGACATTAATGAGAATTCCTTAGCAAGGATTTTGTAAGAAGTTTCTTAAACATTGTCAGTT
AACATCACTCTTGTCTGGCAAAAGAAAAAAAATAGACTTTTTCAACTCAGCTTTTTGAGACCTGAAAAAATTATT
ATGTAAATTTTGCAATGTTAAAGATGCACAGAATATGTATGTATAGTTTTTACCACAGTGGATGTATAATACCTT
GGCATCTTGTGTGATGTTTTACACACATGAGGGCTGGTGTTCATTAATACTGTTTTCTAATTTTTCCATAGTTAA
TCTATAATTAATTACTTCACTATACAAACAAATTAAGATGTTCAGATAATTGAATAAGTACCTTTGTGTCCTTGT
TCATTTATATCGCTGGCCAGCATTATAAGCAGGTGTATACTTTTAGCTTGTAGTTCCATGTACTGTAAATATTTT
TCACATAAAGGGAACAAATGTCTAGTTTTATTTGTATAGGAAATTTCCCTGACCCTAAATAATACATTTTGAAAT
GAAACAAGCTTACAAAGATATAATCTATTTTATTATGGTTTCCCTTGTATCTATTTGTGGTGAATGTGTTTTTTA
AATGGAACTATCTCCAAATTTTTCTAAGACTACTATGAACAGTTTTCTTTTAAAATTTTGAGATTAAGAATGCCA
GGAATATTGTCATCCTTTGAGCTGCTGACTGCCAATAACATTCTTCGATCTCTGGGATTTATGCTCATGAACTAA
ATTTAAGCTTAAGCCATAAAATAGATTAGATTGTTTTTTAAAAATGGATAGCTCATTAAGAAGTGCAGCAGGTTA
AGAATTTTTTCCTAAAGACTGTATATTTGAGGGGTTTCAGAATTTTGCATTGCAGTCATAGAAGAGATTTATTTC
CTTTTTAGAGGGGAAATGAGGTAAATAAGTAAAAAAGTATGCTTGTTAATTTTATTCAAGAATGCCAGTAGAAAA
TTCATAACGTGTATCTTTAAGAAAAATGAGCATACATCTTAAATCTTTTCAATTAAGGTCGACGCGGCCGCGGTC
GACGCGGCCGCGAATTC

FIGURE 7218

MGMACLTMTEMEGTSTSSIYQNGDISGNANSMKQIDPVLQVYLYHSLGKSEADYLTFPSGEYVAEEICIAASKAC
GITPVYHNMFALMSETERIWYPPNHVFHIDESTRHNVLYRIRFYFPRWYCSGSNRAYRHGISRGAEAPLLDDFVM
SYLFAQWRHDFVHGWIKVPVTHETQEECLGMAVLDMMRIAKENDQTPLAIYNSISYKTFLPKCIRAKIQDYHILT
RKRIRYRFRRFIQQFSQCKATARNLKLKYLINLETLQSAFYTEKFEVKEPGSGPSGEEIFATIIITGNGGIQWSR
GKHKESETLTEQDLQLYCDFSNIIDVSIKQANQEGSNESRVVTIHKQDGKNLEIELSSLREALSFVSLIDGYYRL
TADAHHYLCKEVAPPAVLENIQSNCHGPISMDFAISKLKKAGNQTGLYVLRCSPKDFNKYFLTFAVERENVIEYK
HCLITKNENEEYNLSGTKKNFSSLKDLLNCYQMETVRSDNIIFQFTKCCPPKPKDKSNLLVFRTNGVSDVPTSPT
LQRPTHMNQMVFHKIRNEDLIFNESLGQGTFTKIFKGVRREVGDYGQLHETEVLLKVLDKAHRNYSESFFEAASM
MSKLSHKHLVLNYGVCVCGDENILVQEFVKFGSLDTYLKKNKNCINILWKLEVAKQLAWAMHFLEENTLIHGNVC
AKNILLIREEDRKTGNPPFIKLSDPGISITVLPKDILQERIPWVPPECIENPKNLNLATDKWSFGTTLWEICSGG
DKPLSALDSQRKLQFYEDRHQLPAPKWAELANLINNCMDYEPDFRPSFRAIIRDLNSLFTPDYELLTENDMLPNM
RIGALGFSGAFEDRDPTQFEERHLKFLQQLGKGNFGSVEMCRYDPLQDNTGEVVAVKKLQHSTEEHLRDFEREIE
ILKSLQHDNIVKYKGVCYSAGRRNLKLIMEYLPYGSLRDYLQKHKERIDHIKLLQYTSQICKGMEYLGTKRYIHR
DLATRNILVENENRVKIGDFGLTKVLPQDKEYYKVKEPGESPIFWYAPESLTESKFSVASDVWSFGVVLYELFTY
IEKSKSPPAEFMRMIGNDKQGQMIVFHLIELLKNNGRLPRPDGCPDEIYMIMTECWNNNVNQRPSFRDLALRVDQ
IRDNMAG

FIGURE 7219

GGCGGAGAGGGCCGGCCGCCGGCACATTCCTGTGGAGGCCGCAGCGGGTGCGGCGCCGACGGGAGGAGCAGCGAG
CGAGCGACGAACGCCGAGCCGAGCCTCCCGCCGTCGCCATGGGCCAGAACGACCTGATGGGCACGGCCGAGGACT
TCGCCGACCAGTTCCTCCGTGTCACAAAGCAGTACCTGCCCCACGTGGCGCGCCTCTGTCTGATCAGCACCTTCC
TGGAGGACGGCATCCGTATGTGGTTCCAGTGGAGCGAGCAGCGCGACTACATCGACACCACCTGGAACTGCGGCT
ACCTGCTGGCCTCGTCCTTCGTCTTCCTCAACTTGCTGGGACAGCTGACTGGCTGCGTCCTGGTGTTGAGCAGGA
ACTTCGTGCAGTACGCCTGCTTCGGGCTCTTTGGAATCATAGCTCTGCAGACGATTGCCTACAGCATTTTATGGG
ACTTGAAGTTTTTGATGAGGAACCTGGCCCTGGGAGGAGGCCTGTTGCTGCTCCTAGCAGAATCCCGTTCTGAAG
GGAAGAGCATGTTTGCGGGCGTCCCCACCATGCGTGAGAGCTCCCCCAAACAGTACCTGCCTGGCTAAGACCCGT
GGCCGTCAAGGACTGGTTCGGGGTGGATTCAACAAAACTGCCAGCTTTTATGTATCCTCTTCCCTTCCCCTCCCT
TGGTAAAGGCACAGATGTTTTGAGAACTTTATTTGCAGAGACACCTGAGAATCGATGGCTCAGTCTGCTCTGGAG
CCACAGTCTGGCGTCTGACCCTTCAGTGCAGGCCAGCCTGGCAGCTGGAAGCCTCCCCCACGCCGAGGCTTTGGA
GTGAACAGCCCGCTTGGCTGTGGCATCTCAGTCCTATTTTTGAGTTTTTTTGTGGGGGTACAGGAGGGGGCCTTC
AAGCTGTACTGTGAGCAGACGCATTGGTATTATCATTCAAAGCAGTCTCCCTCTTATTTGTAAGTTTACATTTTT
AGCGGAAACTACTAAATTATTTTGGGTGGTTCAGCCAAACCTCAAAACAGTTAATCTCCCTGGTTTAAAATCACA
CCAGTGGCTTTGATGTTGTTTCTGCCCCGCATTGTATTTTATAGGAATACTGAAAACATTTAGGGACACCCAAAG
AATGATGCAGTATTAAAGGGGTGGTAGAAGCTGCTGTTTATGATAAAAGTCATCGGTCAGAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAA

FIGURE 7220

MGQNDLMGTAEDFADQFLRVTKQYLPHVARLCLISTFLEDGIRMWFQWSEQRDYIDTTWNCGYLLASSFVFLNLL
GQLTGCVLVLSRNFVQYACFGLFGIIALQTIAYSILWDLKFLMRNLALGGGLLLLLAESRSEGKSMFAGVPTMRE
SSPKQYLPG

FIGURE 7221

AGCACTCGGTCCCAGCCGATAAATCTGGGGCAGCGCGCGGTAGGAGCTGCGGGCGGCCAGGCCCCTTCCTGCGTC
CGCACCTGGCCCCGCGCGCCCCTCTCGGGCGTCCGGCTTCCGGCGTCCTGGCGGCTCGGGTGGCGGCGGTTCGGG
CGGCCGCCTGGCTGCTCCTCGGGGCGGCGACCGGGCTCACGCGCGGGCCCGCCGCGGCCTTCACCGCCGCGCGCT
CTGACGCCGGCATAAGGGCC**ATG**TGTTCTGAAATTATTTTGAGGCAAGAAGTTTTGAAAGATGGTTTCCACAGAG
ACCTTTTAATCAAAGTGAAGTTTGGGGAAAGCATTGAGGACTTGCACACCTGCCGTCTCTTAATTAAACAGGACA
TTCCTGCAGGACTTTATGTGGATCCGTATGAGTTGGCTTCATTACGAGAGAGAAACATAACAGAGGCAGTGATGG
TTTCAGAAAATTTTGATATAGAGGCCCCTAACTATTTGTCCAAGGAGTCTGAAGTTCTCATTTATGCCAGACGAG
ATTCACAGTGCATTGACTGTTTTCAAGCCTTTTTGCCTGTGCACTGCCGCTATCATCGGCCGCACAGTGAAGATG
GAGAAGCCTCGATTGTGGTCAATAACCCAGATTTGTTGATGTTTTGTGACCAAGCTGGCTCCAGAAGAATGATCA
GATTCCGGTTTGATTCCTTTGACAAAACTATAGAGTTCCCGATTTTGAAATGCTGGGCTCACTCAGAAGTGGCAG
CCCCTTGTGCTTTGGAGAATGAGGATATCTGCCAATGGAACAAGATGAAGTATAAATCAGTATATAAGAATGTGA
TTCTACAAGTTCCAGTGGGACTGACTGTACATACCTCTCTAGTATGTTCTGTGACTCTGCTCATTACAATCCTGT
GCTCTAAAAAAAAAAAAAAAA

FIGURE 7222

MCSEIILRQEVLKDGFHRDLLIKVKFGESIEDLHTCRLLIKQDIPAGLYVDPYELASLRERNITEAVMVSENFDI
EAPNYLSKESEVLIYARRDSQCIDCFQAFLPVHCRYHRPHSEDGEASIVVNNPDLLMFCDQAGSRRMIRFRFDSF
DKTIEFPILKCWAHSEVAAPCALENEDICQWNKMKYKSVYKNVILQVPVGLTVHTSLVCSVTLLITILCSKKKKK

FIGURE 7223

CTTGAACGCCTGACCTCGTATCCACCCGCCTCAGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACCACGCC
CAGCCCATAATTTATTGATTTTTTAAAATTTGTCCAGCCTTCTATTACCACGTCGAATCCATTAGCTACAGCCAT
CCCATGAGAAGCTGAGTGGATTCAGCCCCACCTCCTGCTCACAGACCCTGTCCGAGCACCTCATTTGTCCCAACA
GCATTACTGCAGGACCCCCAGGACGTTGGACTGCCAGCTCCCTGGGTCTCCTCCTCTCTGGGGCAGATCCTCAGT
CCTCCCTTGACTTCACGACTGTGGCCAGATCATGTGTGGACTGTCCCTCTCTTTGGGTCTCCAGAGCGCTTGCAT
CAAACACCCCTAACTCAGAAGTGTGCAGCCACACTGGGACTCAGAACCCAACAACAGGGACAGAAGACTCACGCC
CTTGGGGTGCCCGGTCTCGTGGCATCAGGCATGACTTCCAGCTCCTGCGCCTTCCCCAGCAACTGCTGACTGGGG
ACCCAGACCGGGAGCTGAGCGACGGGCCTGGCGAGCGAAGCTCGGGGTCTCACTCAGGCACCAGCCCCTCCTTGC
CCCAGGCTTGAGTGACTCACAGCCCTATTCAGGCAGGAGCTGCTCTTCTGGGGTATCGCGATCCACTTAAGGATG
AGGCAGACTTGGTGACAAGCTGGTCTGAGCAGCGCTTCCAGAGCCAGAACTGAGCCCAGTGAGAGCGCACCCTGG
AGCAGCCTGGATTCCTGGGGGTGTCCCCGGCAGCCACACACAGCC**ATG**CACTACCCAACTGCACTCCTCTTCCTCA
TCCTGGCCAATGGGGCCCAGGCCTTTCGCATCTGCGCCTTCAATGCCCAGCGGCTGACACTGGCCAAGGTGGCCA
GGGAGCAGGTGATGGACACCTTAGTTCGGATACTGGCTCGCTGTGACATCATGGTGCTGCAGGAGGTGGTAGACT
CTTCCGGCAGCGCCATCCCCCTCCTGCTTCGAGAACTCAATCGATTTGATGGCTCTGGGCCCTACAGCACCCTGA
GCAGCCCCCAGCTGGGGCGCAGCACCTACATGGAGACGTATGTGTACTTCTATCGGTCACACAAAACACAGGTCC
TGAGTTCCTACGTGTACAACGATGAGGATGACGTCTTTGCCCGGGAGCCATTTGTGGCCCAGTTCTCTTTGCCCA
GCAATGTCCTTCCCAGCCTGGTGTTGGTCCCGCTGCACACCACTCCTAAGGCCGTAGAGAAGGAGCTGAACGCCC
TCTACGATGTGTTTCTGGAGGTCTCCCAGCACTGGCAGAGCAAGGACGTGATCCTGCTTGGGGACTTCAATGCTG
ACTGCGCTTCACTGACCAAAAAGCGCCTGGACAAGCTGGAGCTGCGGACTGAGCCAGGCTTCCACTGGGTGATTG
CCGATGGGGAGGACACCACAGTGCGGGCCAGCACCCACTGCACCTATGACCGCGTCGTGCTGCACGGGGAGCGCT
GCCGGAGTCTGCTGCACACTGCGGCTGCCTTTGACTTCCCCACGAGCTTCCAGCTCACCGAGGAGGAGGCCCTCA
ACATCAGTGACCACTACCCCGTGGAGGTGGAGCTGAAGCTGAGCCAGGCGCACAGCGTCCAGCCTCTCAGCCTCA
CTGTTCTGTTGCTGCTATCACTCCTGTCCCCTCAGCTGTGCCCTGCTGCC**TGA**GCGTCCCCCTACCCCCCCAGGG
CCTGCTGCCTTTTGGGACTTAAACCCCAGCCTCCCCCGTCCATCCAGCCCTGGGGCTGGGGGGCTTCAACTATAG
TTGCCCTGTGACTGTAGTCCACCCCTGCCTGCCTTGTTTGATTTGGCTCTTGTTCTTTGGTTGGGCTTGTGCCTA
GATTAGGAGAGGAAGCCAGGGGCCCTGCACTCATGCCACCTGCCAGGTAGTGTAGTATCAGGAGTGGAGACAAAG
TGGGCTCTGGGTTGGGGTAGGGGAAGGGAGGGTTCAGAAAGAGGAATGAAGATGTTGTATGACAAGAAGGAAAGT
TACTGAGAACAAAAACCCAGATTGGTGAGATAGGACACTTGTGCAGCAGATATGCCAATGGGCCATGTTTATTGT
GGATGGGTAAGAATCACCAGGAAACCATTAAGCCCCAATAGCTACAAGGAGGGTGGTTAATCTGCTATATCAAAC
TCCTTCCCTGAAACCAGCAAACACCGGGAAACATTTTGGCTCATTATAATCCGGTGAACAATGCAGTCAGGCCTG
TTATAACCGCTGAGCAGCCACACTCGCACCTCCTGGGTGCTGTAGTCTGTGTTGGTACAGGCTTCTGCATGCCTG
GTAAAGTCCAGCCAAGGCTGGTCAAGGCAACATCTCCACACAGAAAATCTGCACCAGTTATGTAAGCTAAAAAGC
TGTGTGAACCCAGGTGTCCCGGAAAGGGGCTGCAGGACACAGCAAAATGCCAGCAGCGTGCCGGACCCCTCCCTT
CCATCCTCCTCTCCAAAGAACAGAGGTCAGGAAAAACACTGGCTGGGACGCTAGAAGGGTCATGTGTTAACTATA
ATCACATTTATGGTTTGGAACCATCACCCCAAGGTAAAAAAAAAAATAAAAGGTATGTTTGGCAAAATAAAATAA
AGGTAATTAAAAACCTAAAAAAAAAAAAAAAAAAA

FIGURE 7224

MHYPTALLFLILANGAQAFRICAFNAQRLTLAKVAREQVMDTLVRILARCDIMVLQEVVDSSGSAIPLLLRELNR
FDGSGPYSTLSSPQLGRSTYMETYVYFYRSHKTQVLSSYVYNDEDDVFAREPFVAQFSLPSNVLPSLVLVPLHTT
PKAVEKELNALYDVFLEVSQHWQSKDVILLGDFNADCASLTKKRLDKLELRTEPGFHWVIADGEDTTVRASTHCT
YDRVVLHGERCRSLLHTAAAFDFPTSFQLTEEEALNISDHYPVEVELKLSQAHSVQPLSLTVLLLLSLLSPQLCP
AA

FIGURE 7225

GAAAGAAAAGAAATTAATTCAGATGATGTGACATTACTAAATTGTATACATATTTATAAATGTGTATTTCAGCTG
TCTCATCAGCCCTCCCCTCCATTTATTCCTATTTTTCTGTAGTTAAGAATACTGTAAAAATGTGACTATTCCTTA
ATATCAGAAAAGAATGCACAGGCTGAGTCTTCCGGTCAAAAGTTAAATACTGATGGAATCAAGTATTTTGTATGA
AGTTCTCATTTGTTATCTCTAACGCTATTTTGTGTTTTGCATATAGTATTATAGTATGTGTATATCACTTTTTGT
ATAGAGTAAGCAATTGAATAATTTGTTAGTAAAAATAATACCACATTGACTGATACTGCTATAGACATAGCTTGA
GTTTTATGTCTCCTTTTTGCTCATTTTCTAAGACTTAGGAGAAAGAATAAATCTAAAATGACCATTAAAACATTC
TCCATTTCAGCTTGCTGTGTAACTTAGGAAGTATAAAACTATACTTCTCTTTATCTGCATGTAAGTTTGCTGTTA
AAATGTGAATTTCTAAATGTGTATTTGGAATTATTTCCGTAGTTTATTTCTGCAAACTATGTAAATTTGTTATAT
GTGTGAGTATGTGTACATATGTATATTTTAGAGTAATATAAAATTAAAGGGAACAATCTTGCATAGCTCTTTCAC
CAGTTTTAAATTATTGATACGTTATTTTTAAGGACTCTTGACAAACTAGGGGCAATTTTCTTATAGTGGAGACCC
AGTGATTATCAGCAGATGAGGAAATAGGTTAAAAATTGCTATATGGCAATTTGTATATAAAGTAATAGGATGTGA
GAAAAATACTGAATCTTAAGAATGACATGGAATTCTGTGGCAGAAACAAAAGAAAAAGTTGATGTAGTATATACC
TTCAACTGTGTTTTGAGTTGACTTTTTTTTTTTTCTTTAAGCTTTGGGTAAAAATGTATGAGGAGGGAGAGGGCC
CAATATAAATATTTACATCTTCTTACCTTTTTGGAAATGGAAGAAGATAAATCTTGAGTTTTTCTGCCTATATTA
ATCAGGAATTGCCCTTTGAAAAAAGTGCTAAATAAATATTTTGATTTTTTTTTTCAAGGGAAGTTAGGTGAAAGA
AGGAAAAACATCACAGGAAAGACTGTTAACATTCTGTTTGTTGTCTGAGAGGTGAGGAACCAAAGGGAGGCAACT
AAAGCGGGAAACCATCTTGCTTTTTCTAATCAGTTCTTGGAACAGAAATGTGGAAGCTACCTTTAGGAACATGGA
GAATTTCCAAACCAACAGGCAAAGGAAAACTAACGCACCTGGCCAGATCTTTGTATGTCTTAAGTGTTTCAAAGT
TATAAGCATTTTTCTGGGGGGATGTCCATTTTGGAGGGATCCATTTTGATCCTTTGTACTCTATAATGTGAACTT
TCCCCTGTTCCAACACTTAAAAGAGAATTATTAGCACATAATCTNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
TTTTATTTTTTTTAGGATTTTGGTAGAGAATGAGTAGGCCTACTCATCAATATCAAACAGGACATTTAGTTTCTT
TCCTTAGAACAGACATAAATTTAATTTCATGGTAATATGATAATAAGAAAATGCTTCTATTTTTCTTTAGCACCT
CCATGGTTCTCATATACCCATGTCTGTAAAAAGTGACATGAGAATTTTGTTGGGTTACATTTTATTGTATTTATT
AGATTCGCTTATATAGATGACTTAGGCAGAAATAAAGTCATGTCTTTAGAAGGTGAACAAGCCAACTTGTGATGG
CCTGCCTTTTGCTTTTGGCAGTTGGGATGAGAACAATTGACTCTCCCATTGGTTGTTAGATAGTTGAAATGGTGC
GTTGGTGGTCATACTTAGTGTTCTAGGCTGTGAAATCATGGAGTTCTTCCACTTCCAAGAATGACTCATTTGCTG
TTGGATTCTAGTACAGAATTTAGCAGCCTGATGTGTCCCCAAACTGATTTAATTTCTACTGAAGTGCCCTTGTGT
ACATTTGTTTTGTAATTTACCAAAGTACTACCTGAGTGTATAATGACTCCTGCAGTGAGTTAATGTAATTGCTGC
TTTGACCATTGTTTTAAATCTGTGTACTAGAGTAACTGTGAGCAGAATGAAATCACATTATCTCAGTGTTCAAAA
TATCATTCTAATAAAGTACATGCATTAAACAATTTTAAAAAAAATCTATGTCGGGTGCGGAGAAAGAGGTAATGA
AATGGC

FIGURE 7226

ERKEINSDDVTLLNCIHIYKCVFQLSHQPSPPFIPIFL

FIGURE 7227

AAACACTTTGTCCTCCAAAAGGAAGACAGACTTCACGTCATTCATCTGTTCAATACTCTTCCGAACAACAGGAAA
TTTTGCCAGCTAATGATTCTCTTGCTTACAGTGACTCAGCTGGTAGCTTTTTAAAAGAAGTAGACCGAGACATAG
AACAAATAGTAAAGTGTACAGACAATAAGAGAGAGAACCTCAATGAGGTAGTATCGGCCTTAACAGCACAACAAA
TGCGTTTTGAACCTGATAACAAAAACACTCAACGTAAAGACCCCTATTATGGAGCAGACTGGGGAATAGGGTGGT
GGACAGCTGTAGTGATAATGTTGATAGTAGGTATAATAACACCAGTGTTTTATTTGTTGTATTATGAAATTTTAG
CTAAGGTGGATGTTAGTCATCATTCAACAGTGGACTCTTCACATTTACATTCAAAAATCACACCCCCATCACAGC
AGAGAGAAATGGAAAATGGAATTGTGCCAACTAAAGGAATACATTTCAGCCAACAAGATGATCATAAACTGTATA
GTCAAGATTCTCAGTCACCTGCTGCTCAACAGGAAACATAGCAATTAGCTCATAATCAAATGTTAGTGGTCAGGT
CACATGTGCATCTGGAATGTGGTGAATCAGTTATATCCAATAATAGCTTCAAAGGCAGAATTTAGAGAGATTGAG
GATGCTTTTGTTTTTAACAAAAGGGTTTCACACTTTGAAAATTTTTTGAGCAACTAGTTGTTGATGTTGAGAGCA
GTTGATCCATAAATCTGGTGTGTGAATGTTTCAAGCAGAAATTAATTTAAATGTGTGTTTAGGAAGTACTTAACT
TGGAAGATGTATCATTTTTCTTAAAATGCATGTTTAAATTTTATTTTTTTAAGTAATTTTTAAAAAGTTTATTAA
TGTTAAATTTATGATGCAGAATGATAGCATCAGATGTCTGCAGCTGAAAAAAATTTACTACTATGAACCCCCAAA
ATATTCAGTTGCAAGAAAATTTGATTCTAAAATTATTCATGGTAGGATACGTAACACACCCCTTCAAAACTTTTA
AAAAATACATTTAGCACATGTGCTATGAAAGCATACGTACAAAGAGAAAGGGGAAAGTGATTTATAATTCCTACA
ACAGAGGCCAAGAAATAGATTAAAATATTTTCAAGACCCCAAAATAATGTATTATGGTTGGGAAGTCAGTAGAAC
ACTGGAATAGGTGAAGACCTGACAGTAATTTTTGTCTTAAGAATGCTTTCTTTAGGACAGACCCTTTAACCTCAC
CTCTGTGCATCTGTTTTTAAAATGATTATATTTGCCTCTGATATTTGAAAGCACTTTTGTAGTTTTGATGATGAA
AAATATATTAAACGTGCATATTACCATTATTTAGGAAATAATTCCTTATATACTGTGATAAATCATTGCTGTTAC
ATACAGTAACATGCCTTAATTACATTTAATGCCTTACTGCTTTATGTAAGTAAATCCAAGTTTCAGAATTAAAAA
TAAGCATTATTTCATATGGTCCAATCAGATTCGTTACATAGGCTATATAAATTTGTCTCCATTTTCACCATCAAG
CACAAATAATTGGGTCAAAACTGCCTTTGAGGTCTGTTGAAGAAAATGGTTCATTAAGCAAAAAAGAGTAGAGGT
ATTTTATATTAGCAGTAACAGACAAATTATTTAGTAATCCCTTAACCTCTGTTTTTCAAAGAGAAAATATCCAAT
TTAGACTTTTTTCCTGATCTCTATATATAGCATCAAGTTGGGAAACAAAGGCCAAAGGTGTATAGATTGCTTGAA
AGGGGGTGGTAGTGCCTCTTTTTAAGATCTGTTGAGTCGGCTACAGTCTGGCTAAGTAAGAAGCATTTGCATACT
GATTCCATCATTTAATCTTTAAAAGTATGTGTTTTAAAAATGTAACCAGAATGATTCTTCAATAGAAATGAGATT
TGGTGGAGTCTGGATTGCCTGTTTTGTATATAATATATACTTAAGATATATAATACCACCTCATTTTCTGGGCAT
TATTTCCTAATTGTTGATGTTTCAGGCTTTTGATAAGTCATTTTATATATTTCAAATTTAACTCAGAATAAGTAA
ATATTTATGGCAAATGCAGTTTTATGTACTTTCAGGAGAAGACCATCAGGAAAAGACAGGACAAAGAAGTCAAAC
ATTAAAGCCCTTGCAAATATTAGAGGACCTTAGACAATTACCAAAAAGTGTTTAATAGGGAAGTTGCAAATGATT
CTCTTAGTAAATTAAACATTTAAAAAGTAGTTTTAATGTGCCTTGGGCATCTTGAAAAGAAGAGTGTGATATAAT
TTATGCTTAGTGTTAACTGGTCATTTTACATTGTATTTATTAAGTCTGCTGAAAAATGAGGTTTTAAGGAAGAAA
ATGCAGATTATTTTAGGGTAAACAGGCCAGGTGTCCTTTGAAGAACTTTGTTTACATCAAATTGATGAAATTACA
GTGATTCCTTACTTTTTTTGCTAGTTGTACTTTGAAATTGTTATGGGTTCGATTTCCAAAATATGTAACTTATTT
TTTAAAGGAATAAGGTGTGCTGTGTATTTGTTGATTAAAAATCATTTGTCTTGCAGAGTATCCTTTTTTGAAGGA
AATATACATCCTTATAACACATCAGGTAGTTTTCTTTTTTCTGTATTTAAATTATATATTTGAATTAATTGAATA
TAATTTGAGTTACATATAATTCTATATAAAGGTTACATATTGAATTATGGTTCTAATCTGTTTAGGAAAGAAATG
AATTTTCTAAGCATTTAATACATTTGGAATAATTTTAGTTTCTAAAAAGTACTAATGTAAGTTAAGTTTATATCA
AATGCAAATTACCTTGTATAACTAACAAGCACAGTTATTGTTTAACATTATGGATTTTAATTGTGTTGACACCCT
TCTTTGAATTTGTTGCTTTACATGTGTGTCTGTGTGTGTGTCTGCATGTGTGCACGCATGTACTTGTATGCAATG
TAAAAGTAACAGCAGAATCATTGCATTTGGTTTACTTAAAATTTTGGAGTTAGCAAGTAAACAAAAAGCTGATAG
TTTTATGAAGTCTCGGTTAAAATAAAATTTCTTTGCTATCTCAAAAAAAAAAAAAAAAAAAAAA

FIGURE 7228A

CGAAGCGGGTCCTGCCCCGCTGTCAGCTGCGGCCCCCGGCGCCGGGCGGGGGTGGCCGCGACCATTGGCGGAGAG
GCGAAAGGGGCGGGGCCGCCGCCAGCCGCTGCGGGCAAGGCTGAACAGGCGGAGGTGGGCAGCCGGCCAGGGAAG
CACGGTCCAGGCGGCTACATTCGGCCCGGCCATGGCAGCGGCGCCCCTGAAAGTGTGCATCGTGGGCTCGGGGAA
CTGGGGTTCAGCTGTTGCAAAAATAATTGGTAATAACGTCAAGAAACTTCAGAAATTTGCCTCCACAGTCAAGAT
GTGGGTCTTTGAAGAAACAGTGAATGGCAGAAAACTGACAGACATCATAAATAATGACCATGAAAATGTAAAATA
TCTTCCTGGACACAAGCTGCCAGAAAATGTGGTTGCCATGTCAAATCTTAGCGAGGCTGTGCAGGATGCAGACCT
GCTGGTGTTTGTCATTCCCCACCAGTTCATTCACAGAATCTGTGATGAGATCACTGGGAGAGTGCCCAAGAAAGC
GCTGGGAATCACCCTCATCAAGGGCATAGACGAGGGCCCCGAGGGGCTGAAACTCATTTCTGACATCATCCGTGA
GAAGATGGGTATTGACATCAGTGTGCTGATGGGAGCCAACATTGCCAATGAGGTGGCTGCAGAGAAGTTCTGTGA
GACCACCATCGGCAGCAAAGTAATGGAGAACGGCCTTCTCTTCAAAGAACTTCTGCAGACTCCAAATTTTCGAAT
TACGGTGGTTGATGATGCAGACACTGTTGAACTCTGTGGTGCGCTTAAGAACATCGTAGCTGTGGGAGCTGGGTT
CTGCGACGGCCTCCGCTGTGGAGACAACACCAAAGCGGCCGTCATCCGCCTGGGACTCATGGAAATGATTGCTTT
TGCCAGGATCTTCTGCAAAGGCCAAGTGTCTACAGCCACCTTCCTAGAGAGCTGCGGGGTGGCCGACCTGATCAC
CACCTGTTACGGAGGGCGGAACCGCAGGGTGGCCGAGGCCTTCGCCAGAACTGGGAAGACCATTGAAGAGTTGGA
GAAGGAGATGCTGAATGGGCAAAAGCTCCAAGGACCGCAGACTTCTGCTGAAGTGTACCGCATCCTCAAACAGAA
GGGACTACTGGACAAGTTTCCATTGTTTACTGCAGTGTATCAGATCTGCTACGAAAGCAGACCAGTTCAAGAGAT
GTTGTCTTGTCTTCAGAGCCATCCAGAGCATACATAAAGTGAATCATGCAACGTGTTGGGGGAAGTTCTGCCTTT
CTGATCAATCTTTTGGGTTCACGTGGAAACCAGGACTTGGCAACATGATGTTTGACTGTAATCTCATCACGGATA
TGTATGAATTTTTACAGGTTCGTTTTTGAATTGTGAGAGGCAGTTCATTAGCAAAGATGTACTGGGCAGTAACTA
AACACACATGCAAACATGTGAATGGTGGTTTATTCCTCATTCTGTGGATGTTTCTATGAGCCAAAATTTGATGTC
TTTTTTTCAAAATTGCTTATGAAATTTCCACACAATCGTAGCTTATAAGATTGGAACGATCTCAGCCAAATATTT
TAGGTGTAATTCATATGTATTTGAGTGGAGGATTTTTTTTCTCATTTTTCTAGTGTTAAATTTTAACCAGCATTA
ACATGGTAGAGTGGAGGAGTGAGTGTGTTCAAAGATCAACATATTTAACTTTTAAACACTATCTCAAAGCCAGCA
TAATTAACTACTTTGATTGTGGGCTGACCTTTGTTTTTTTAACAATCAGGCATTTTTAATTAGATAATCCACTCA
TGTATTTCCCCCTCACTGCAGTTGTCTGCATTTTTAGCCTCTTTTCTCTTCGTTAGTTGTCAGAATATGCCTTTG
TCAAGGCTCAGAGGTAACAAGACAGAAAATTCATCTGGGATTTTCCTGCTGTGGCTGGCACATTCTTCTGATTAA
CAGACACTTGTATGATGCTTTAGGCTAGTTAGTGCATTTTTTAGCAAACATTTATCTTAAACATCACAGATCCAC
TGGGGGGTGCAAGGGGCTACTGTTAGTCCTCTTGTTAGATGCAGTCACTCCTCCTGGTCACCTAGTGAGCAGGGA
CAGAGCCAGGAGTCAAGTGCAGTGCCAAGGTGCATGACCCTCTGAGAAGTCACTGGGCTGATTTGACCTCCGACT
CATTGGTTGTGTAAATGCCATGTGCAGCCTTTCCTGAGGCCATAGGAGGGCTTCCTGCAGCTGAGATCTATGCAG
GCCATCCTCTCAACAGGTGCCACTCCAAGGGCGGTCCTCGGTGCAGCAGCATCAGCTTCACTTGTGGGGGGGTGG
GGGAAGGGGCGGTCTCAGAAATGCAGGTTCCCAGGTCCCACCCTGGACTTCTGAAGGGGTGTGGCATCTGTGTTT
CTGATGCTTACTACAATATGTGAACCACTACTTTAGAAAATCTGCTTTAACTTGGTATTCCTCTAATTGTGTTCC
CTAGGAAATGACTGTCCCAAGAGCCAGTGATTATTCCAGGTGTTCCCTGGAAAGGTCAAGTGAGTCTGGGAAACA
CTATGTCTGTACACCTCTTGAAGGTGTCGAATGTATGTTTATACATCAGTGGAACCCATTTTTCTAGCCTAGCAA
GTCCCAAACACATTACACTGAAGAGATTTTGGTGAGGAAACTTGCTGGAGTTTTCAGGGAACACTGTTCTAGGCT
TAGGTGACCTTAGGATCACTCAAGTAGACCCTTCACTCCCTGCGAGAAATTAGGATGAATAACTACCTGTGGCAT
TGTTGGTTCTGAACTTTTACAGTTCAGGCCTGCTGTGAATCTTTGATGAAGCTTTAAGGTGACACTGTTGTACAA
GATGTCAGCTTTGCTGAAACGCACATTACCTGGAATAAGTGCTTTAATTGTAGAATTAGAATGGGATTTACTGTA
CTGTTTTAAATGAGATTGGCTTCAGAATCCATTACAGTTACCTTACATAGCACTTGATACGTGTTAAATGAACAT
ATGAATGTAATTTATATATTCCTAGAATTTAAGTTACTTTGTGAGATTTGGGCCTGTCCCTCAATGCCAGTTTAG
GATTTCTTTTTTTCTATACCTTGAAATGATTATAAAATAGATTTTCATGGGAATTTTAAAAACTCTATCCAAAAC
ATTTTTGGAGCATTTTAAAGCCCCATACACAGAAGTATACGAAAGCACACAAAACACTCCAAGTTTCAGCAGTTT
TAGCGCCACCATTAACCCACTTTGCTTGTCTCATGAAAAATCTTTGTTAAAGTTTGTACACAGGTAACAAAAAGT
TACTTTAAAAGATATATAAAGGGCTGTAAGCTAATTGTGGTGTCTAGTAAGTAGCATAATGAGATGTGAGGAGTT
GGAACTTTGCGTGTTTTGCGTATTTTCATCTGCATTCAGCTTCTTACTCTGGGTTTGTACTCGAGTGTTATTTCT
TTACAAATGCCCTTGTAATTACCACTCTGAAGTCTGCTGACTGTGTCTCTTGAACATACTTAGGATATTCTGCAC
ATTATGGAAAAAGGTAAATTTTAGAAGTTTCTGCTCTACTAACTGTAGATATTTATGACTCTGCGAGTTATCTAT

FIGURE 7228B

TTTTATAACCACCTGTGGTCCATTGTTCATTTTAATTCACATTTCTTATGAAGTATGGTAACAGGGAGGGAGACA
CCTAGATTAGCAGCTCAATTTGTACTACTTCAGCCAATCTGTGAATGTAAAAACTACACTGTTGCCTTGCTAGGA
TCCACCCTCCTATAATATGGAACAAATATCTGAATGAAATCCACCCTAGGAGACGGAGTCAAACTAAACTTGTGG
TTTTTCATTTAACTTTTGACTACAGCATGGCCCCATGGCATCCACACCAAGAGGGTGTTGTGATGAGGTGCCGGT
GTGCAAAGGGAACTTTAGTTTTTCCACTGGTTCTTATCTGCTAGCCTTTTACATACATGTGTACTATATTTGTTT
ATAGACTGTAGGTGGATATATAATTTAAAAGCTTGATTTAATAAACATTTAACCCCCTAAACTTGGGG

FIGURE 7229

GAGTTGGCAGGATGGCAGAGGGCAAGGCAGGCGGCGCGGCCGGCCTCTTCGCCAAGCAGGTGCAGAAGAAGTTTA
GCAGGGCCCAGGAGAAGGTGCTGCAGAAATTGGGGAAAGCTGTAGAAACCAAAGATGAACGATTTGAACAAAGCG
CTAGCAACTTCTACCAACAACAGGCAGAAGGCCACAAGCTGTACAAGGACCTGAAGAACTTCCTTAGTGCAGTCA
AAGTGATGCATGAAAGTTCAAAAAGAGTGTCAGAAACCCTGCAGGAGATCTACAGCAGCGAGTGGGACGGTCATG
AGGAGCTGAAGGCCATCGTATGGAATAATGATCTCCTTTGGGAAGACTACGAGGAGAAACTGGCTGACCAGGCTG
TAAGGACCATGGAAATCTATGTTGCCCAGTTCAGTGAAATTAAGGAGAGAATTGCCAAGCGGGGTCGGAAACTCG
TGGACTATGACAGTGCCCGACACCACCTGGAGGCAGTGCAGAATGCCAAGAAAGATGAGGCCAAGACTGCCAAGG
CAGAGGAAGAGTTCAACAAAGCCCAGACTGTGTTTGAAGATCTGAACCAAGAACTACTAGAGGAGCTGCCTATTC
TTTATAATAGTCGTATTGGCTGCTATGTGACCATCTTCCAAAACATTTCCAACTTGAGGGATGTCTTCTACAGGG
AAATGAGCAAGCTGAACCACAATCTCTACGAGGTGATGAGCAAACTGGAGAAGCAACATTCCAATAAAGTCTTTG
TGGTGAAGGGACTGTCAAGCAGCAGCAGGCGCTCTTTAGTCATTTCTCCCCCAGTTCGAACAGCTACAGTCTCCA
GTCCTCTTACCTCACCTACTAGTCCCTCTACACTTTCCTTGAAGAGTGAGAGTGAATCTGTCTCAGCAACTGAAG
ATCTGGCACCTGATGCAGCCCAAGGGGAAGACAATTCTGAGATCAAGGAGCTCTTAGAAGAGGAGGAAATAGAGA
AGGAAGGATCTGAAGCAAGCTCCTCTGAGGAAGATGAGCCTCTACCAGCCTGCAATGGCCCCGCCCAGGCCCAGC
CCTCTCCTACCACTGAGAGGGCCAAGTCCCAGGAGGAAGTTCTCCCCAGCTCCACAACTCCATCACCAGGCGGAG
CCCTGAGCCCTTCAGGGCAGCCTTCATCATCTGCCACAGAAGTAGTCCTCCGAACCCGCACCGCAAGTGAAGGAT
CTGAACAACCAAAGAAGAGAGCCTCTATCCAGAGGACCTCAGCACCCCCTAGTAGGCCTCCTCCACCCAGAGCCA
CTGCAAGCCCCAGGCCCTCCTCAGGGAACATACCTTCCAGCCCTACAGCCTCTGGAGGGGGTTCACCCACCAGCC
CTAGGGCCTCCTTGGGGACTGGGACTGCAAGTCCTAGGACCTCCCTAGAGGTCTCTCCTAATCCAGAACCACCAG
AGAAGCCAGTAAGAACTCCTGAGGCCAAAGAAAATGAAAACATCCACAATCAGAACCCTGAAGAACTTTGTACTT
CCCCCACCTTAATGACATCTCAGGTTGCTTCAGAGCCTGGAGAGGCAAAGAAGATGGAAGACAAGGAAAAGGATA
ATAAGCTTATCTCAGCTGACTCCTCGGAGGGCCAAGACCAGCTTCAAGTCTCCATGGTACCAGAAAACAACAACC
TCACAGCACCTGAACCTCAAGAAGAGGTATCCACAAGTGAAAATCCACAACTCTGAAGAGAAACTACCAAGACTC
CTCCTGCCCCAAACCTCGCCAGAGAAGCTCTTCAACCAGAGGGTATAGGTCAGAGGGATATAAGAGCCAGCATCC
ATCCCTGGGTTCTCAGTAGGAATGCTGGTGCTGTCTAAAGACCTGGCATTAATGGAGGCGGAGGAGCAGCCTTAC
GGGAGGGATGGAGGGAGGCAGGCTGGGGAGAAGAGAACATTAGACTCAGGGAATATTTAATTCTGGTTTTAGCAT
TATTAGAATAAGACTTTATACATTAACTAAAGTGGAGCTTTAATCACTATAAAAAGCAAAAGTATXTATAGACAC
AGACACTTGCCTATACAGAGACATAACCACACACACTCAGAGGATAGTGAACAAATCTGTCTTTGACTTACGACC
CATTTTGCAAGACTTAAAGCCGAAAGAACACATTTTCAGATTGTTAAATAAAGTCTGATTCTGACTAAAAAAAAA
AAAAA

FIGURE 7230

MAEGKAGGAAGLFAKQVQKKFSRAQEKVLQKLGKAVETKDERFEQSASNFYQQQAEGHKLYKDLKNFLSAVKVMH
ESSKRVSETLQEIYSSEWDGHEELKAIVWNNDLLWEDYEEKLADQAVRTMEIYVAQFSEIKERIAKRGRKLVDYD
SARHHLEAVQNAKKDEAKTAKAEEEFNKAQTVFEDLNQELLEELPILYNSRIGCYVTIFQNISNLRDVFYREMSK
LNHNLYEVMSKLEKQHSNKVFVVKGLSSSSRRSLVISPPVRTATVSSPLTSPTSPSTLSLKSESESVSATEDLAP
DAAQGEDNSEIKELLEEEEIEKEGSEASSSEEDEPLPACNGPAQAQPSPTTERAKSQEEVLPSSTTPSPGGALSP
SGQPSSSATEVVLRTRTASEGSEQPKKRASIQRTSAPPSRPPPPRATASPRPSSGNIPSSPTASGGGSPTSPRAS
LGTGTASPRTSLEVSPNPEPPEKPVRTPEAKENENIHNQNPEELCTSPTLMTSQVASEPGEAKKMEDKEKDNKLI
SADSSEGQDQLQVSMVPENNNLTAPEPQEEVSTSENPQL

FIGURE 7231A

TGAGTTTGAGTCAAGCTCCGAGTCCTCGCCCTCATCCTCGGAGGATGAGGAGGAGGTAGTGGCCAGGGAAGAGGA
GGAAGAAGAGGAGGAGGAGGAGATGGTGGCCGAGGAAAGCATGGCTTCTGCAGGCCCTGAGGACTTTGAGCAGGA
CGGGGAGGAAGCGGCTCTGGCCCCGGGGGCACCTGCAGTGGACTCGTTGGGCATGGAAGAGGAGGTGGACATCGA
GACTGAGGCTGTGGCCCCTGAGGAGCGGCCCTCCATGCTGGACGAGCCCCCCTTGCCTGTGGGTGTTGAAGAGCC
AGCGGACTCCAGGGAGCCGCCTGAGGAACCAGGCCTGAGCCAGGAAGGGGCCATGTTGCTGTCTCCAGAGCCCCC
TGCCAAGGAGGTGGAGGCTCGACCCCCATTGTCCCCTGAGCGAGCTCCAGAACATGACCTGGAAGTGGAGCCGGA
GCCCCCTATGATGCTCCCCTTGCCGCTGCAACCACCATTGCCGCCCCCACGACCACCCCGGCCACCCAGCCCACC
GCCGGAGCCTGAGACCACAGATGCCTCACACCCATCTGTCCCTCCGGAGCCCCTTGCCGAGGACCACCCCCCGCA
TACTCCAGGCCTCTGTGGCAGCCTGGCCAAGTCGCAGAGCACAGAGACGGTGCCAGCCACACCAGGCGGGGAGCC
CCCGCTATCAGGGGGCAGCAGTGGCCTGTCCCTGAGCTCTCCGCAAGTGCCCGGCAGCCCCTTCTCCTACCCAGC
CCCGTCCCCTAGCTTGAGCAGTGGGGGCCTCCCTCGGACACCTGGCCGGGACTTCAGCTTCACACCCACCTTCTC
CGAGCCCAGCGGGCCCTTGCTCCTGCCCGTCTGCCCACTCCCCACTGGCCGACGCGATGAACGCTCCGGGCCCCT
GGCCTCCCCGGTGCTCCTGGAGACGGGCCTGCCCCTCCCTCTGCCCCTTCCCCTGCCCTTGCCCTTGGCATTGCC
CGCCGTCTTGCGGGCCCAGGCTCGTGCGCCCACCCCGCTGCCACCCCTGCTGCCCGCCCCCCTGGCCTCTTGCCC
TCCCCCAATGAAGAGGAAGCCGGGCCGGCCCCGGCGATCCCCACCATCTATGCTCTCCTTGGATGGGCCCTTGGT
CCGACCACCAGCAGGGGCCGCCCTTGGAAGGGAACTCCTGCTCCTGCCGGGCCAGCCACAGACCCCCGTCTTCCC
CAGCACCCATGACCCCCGGACGGTGACCCTGGACTTCCGGAACGCGGGGATCCCAGCCCCTCCACCACCCCTTCC
CCCCCAGCCACCCCCACCCCCACCTCCCCCACCTGTAGAGCCCACCAAGCTGCCCTTTAAGGAGCTAGACAACCA
GTGGCCCTCCGAGGCCATTCCTCCGGGCCCCCGTGGGCGCGATGAGGTCACTGAGGAATACATGGAGTTGGCCAA
GAGCCGGGGGCCGTGGCGCCGGCCACCTAAGAAGCGCCATGAGGACCTGGTGCCACCTGCAGGCTCGCCCGAACT
CTCGCCACCCCAGCCCCTCTTCCGGCCCCGCTCGGAGTTTGAGGAGATGACCATCCTGTATGACATCTGGAACGG
TGGCATCGATGAGGAGGACATCCGCTTCCTGTGTGTCACCTACGAGCGACTGCTACAGCAGGACAATGGCATGGA
CTGGCTTAACGACACGCTCTGGGTCTACCATCCCTCCACCAGCCTCTCTTCAGCTAAGAAGAAGAAACGGGACGA
TGGCATCCGCGAGCACGTGACGGGCTGTGCCCGCAGTGAGGGCTTCTACACCATCGACAAGAAGGACAAGCTCAG
ATACCTCAACAGCAGCCGTGCCAGCACCGATGAGCCCCCCGCAGACACCCAGGGCATGAGCATCCCAGCACAGCC
CCACGCCTCCACCCGGGCAGGCTCGGAGCGGCGTTCGGAGCAGCGCCGCCTGCTGTCCTCCTTCACTGGCAGCTG
TGACAGTGACCTGCTCAAGTTCAACCAGCTCAAGTTCCGGAAGAAAAAGCTCAAGTTCTGCAAGAGCCACATTCA
CGACTGGGGCTTGTTCGCCATGGAGCCCATCGCGGCTGACGAGATGGTCATCGAGTACGTGGGCCAGAATATCCG
TCAGGTGATCGCAGACATGCGGGAGAAGCGTTATGAGGACGAGGGCATCGGGAGCAGCTACATGTTCCGGGTGGA
CCATGACACCATCATCGACGCCACCAAGTGCGGCAACTTCGCGCGCTTCATCAACCACAGCTGCAACCCCAACTG
CTATGCCAAGGTGATCACGGTGGAGTCACAGAAGAAGATAGTCATCTACTCGAAGCAGCACATTAACGTCAATGA
GGAGATTACCTATGACTATAAGTTCCCCATCGAGGACGTCAAGATCCCCTGCCTCTGTGGCTCCGAGAACTGCCG
GGGGACCCTCAAC**TAG**GCCCCGGCACCAGACTCAAAGGATGTCAGCCGTAGCCCTGGGACTCCCGAGCGTGGAGC
CCCTGGCCCCGGGGCCCGGCCCCCCGCGCCCGCCCCCATTTCAGGTGCTGTCCTCTACCCAGCGGCCATTCAGGG
CCTGGCGCCCCACACTACCCCCTGGAGCCCCTGGCTCCGGCCCCTCCGCGGGAAAGGGCTTCTCTGTCGTTCAGC
CCACGTCTCTCTCATTTTAACAAACGCCCCTTTCAGGATTTCTGTTTAACTCCAGCATCAGCTTCTCTCTCTCCG
TCTCTCCTCCCCTCTCTCTCTTCTCTGTCTCTTCTCTCTCCCACCATCACCCTCGGCCTCTTCCTGTGAATGCTG
CTACGTTGTTTTGTCTTCTCTATTTTTTTCCTCGTTGTGAGAAAAGACATTTAACCGTTGAAATGTGAAGGTGGA
ATCAGAGAGGGGCCCCGCGGGGGTCTGCAGAGGCCTCAGTGTGGCTGTGCGTGGCCCGTGTCCTGGAAGCCACCC
GGACCTGGACGCAGGGCCAGGTGCTGTGGGAAGGATGGAGGCCCCCACGGCCTTGACCTCAGAACACTACGCCCT
GAAAGCGCCCCTCACTGCCCGTGGGCACAGTGAGGAGACCCCACACCTTTCCCCACCCGAGCTGCAGCCTGTTCC
TTCCCCAGAGGCCTGGGGCACCACTGACCCGGTGGACCCTGATGGAGCTAAGCTGTCCCAGGCAGGGGTCTCCGC
TCTGGGCTTTCCCTGCCACCTCACACCCCAGCACCCCCTAAACCTTGGGTTCAATGTTTACTTTCTCATTCGGAT
GCCAGCAACGCGGGAGCCTCTCGGAGGCCCCAGTGCAGGTGAGGGGCGCTGAGAACGCGGGCAGCCACTCTCTTC
TGCCCTTGCCTTCGCCCTGGGTGGGACAGGGCTCCCAAGGGCAGGCGGGTCCCCCAGTCCCGCCATTACGGGTTG
TCAGACCGTCTGCGTGTGGCATTTTTTGGCTTATAAGCTTCACCCACTCACCCCCAACCCACACCCCACATCCCC
CTACCGGCAGCCCCTCAACCTAAGAAGGCCAGAGCATATTTATTTTCGGAGGGAGCAGATTACTTCTCCCAGAGA
AAGGAAAATCTTGGAAAAGATTTAAAAACACAAATCTAAGCCTTGACGGTTTTTTTTTCCCTTTTGACCCCCTTC

FIGURE 7231B

CCATCTCTTCAGAATTTATTCCCATGGCTTTTTTTTTCTTGTGCGTGTATAAAATCAAAAGGAAGGGGAAAAAG
GTTTTTGAAGTTCAGAACCAACTTCTGTATATAGAGGCTGCCGCAAAGGACTTTCTCTTGGGAACATTGTTTCTT
GTAGAAACATGCGGGAAGACATTTTTTGCTCATTTCTTTGTACTTCCAAAAAAAAAAGGAAAAAAAAGACAAAAGC
AAGTCCCCCCGTACCCCAGAAAGCAGAGGAGGCGTGTAAATAATTTCTGGAAAGTGACTGTTGTGACCCGGAGTC
CTCATCAAGATGAGCGCGCTCCATGAGGGAGCTGCTCCCACCCTGCGGACGCAGGCGGCCGGAGCCTCTGGTATC
TCAGCTTGTGTCAAGCTTGTTATCATGTAAATTCTGTACAAAGAATTGTTATTTTTCTCTTTTTTGTTGTTGGTG
GTTTTGTTGTGTGTTTTTTGTTGTTTTTTTTTTTTATTCCTTTCCCCCAGGCCCTCTCTATTTGAGACTGTGCCCG
CCGGTTTCAAGATCAAGGAAATTGGTGGCAACAAGACACAGATGGGGTACCTGGGCACAGCGGCGAACTTCTCTT
CCGTTTGCGGTTTTCTGCCTAATTGTGCAACTGAGGAAATAATTTATTTTTCACATGAGGAAATGCGTAGCTTGT
AGAGACGGCTGATTCAAGTTACATGTACAGCCTCCAAAGGGCTGTCTCCATTCTGTCCCCTTCCCATAAAAGAAG
TGGGGGTGTTCGAGAAGACCAGGGAAGGGACCCTTGCCTCACCCCTCCCCCTGGCCTCACCTTGCTCCCAGCCAT
CGTGCCCAGTGTTAACCTCGGCTGGCCTTCACTAAGGGGACTAGACCTCCCTCTCCCCAGGAGCCCCAGCCCCAG
AGTGGTTTGCAATAACCAAGATATGTGTCGAGTCATTTTTCTTTCAACTCCCTCATTTTTCATTGAACAAATCTC
TGCTTTTCAAGAGTTGGGGGTTTCTGCTATTTTTTGCTTTCTCTCCCTCCCCCTGCAAAGATGAGAACCAATGAG
TTTTAGGGATGTTTGTGCGGGTAGACTCCATCATCCATATGTAACTTGTTTTGAAGAGAAGTGTTTCCGTTGTGT
GTCTTGATGTAAATATTTGTTCATATTTTTGTGAATTCAATACTATGTACCATTGTATTATAGTAACTTTTATAA
AGCAAACCATAAATATACTGACTTTTCTTACAG

FIGURE 7232

EFESSSESSPSSSEDEEEVVAREEEEEEEEEEMVAEESMASAGPEDFEQDGEEAALAPGAPAVDSLGMEEEVDIE
TEAVAPEERPSMLDEPPLPVGVEEPADSREPPEEPGLSQEGAMLLSPEPPAKEVEARPPLSPERAPEHDLEVEPE
PPMMLPLPLQPPLPPPRPPRPPSPPPEPETTDASHPSVPPEPLAEDHPPHTPGLCGSLAKSQSTETVPATPGGEP
PLSGGSSGLSLSSPQVPGSPFSYPAPSPSLSSGGLPRTPGRDFSFTPTFSEPSGPLLLPVCPLPTGRRDERSGPL
ASPVLLETGLPLPLPLPLPLPLALPAVLRAQARAPTPLPPLLPAPLASCPPPMKRKPGRPRRSPPSMLSLDGPLV
RPPAGAALGRELLLLPGQPQTPVFPSTHDPRTVTLDFRNAGIPAPPPPLPPQPPPPPPPPPVEPTKLPFKELDNQ
WPSEAIPPGPRGRDEVTEEYMELAKSRGPWRRPPKKRHEDLVPPAGSPELSPPQPLFRPRSEFEEMTILYDIWNG
GIDEEDIRFLCVTYERLLQQDNGMDWLNDTLWVYHPSTSLSSAKKKKRDDGIREHVTGCARSEGFYTIDKKDKLR
YLNSSRASTDEPPADTQGMSIPAQPHASTRAGSERRSEQRRLLSSFTGSCDSDLLKFNQLKFRKKKLKFCKSHIH
DWGLFAMEPIAADEMVIEYVGQNIRQVIADMREKRYEDEGIGSSYMFRVDHDTIIDATKCGNFARFINHSCNPNC
YAKVITVESQKKIVIYSKQHINVNEEITYDYKFPIEDVKIPCLCGSENCRGTLN

FIGURE 7233

GAGGTATTCAAGAATGCCCAGCCCCCTATACGGGATGCCACAGATCTGAGAGAAAACATGCAGAATGCGGTGGTG
TCATTCAAGGAGCTGTGTGGCCTCTCCTCTGTGGCCAATCTCATGCAGTGCATGTTGGCGGTGTCTCCCCGCTTT
CTGGGGCCCGATAACACACCCCTAGTGGTCCTAAATCTCAGCGAGCAGTACCCCACAATGGAGCTGCAGGGAATT
GTGCCGGAGGTTCTGAAGAAGATCGTAACAACTTATGACATGATGATTCAGTCCCTCAAGGCGTTGATTGAAAAT
GCAGATGCTGTATATGAAAAGATCGTACATTGTCAGAAGGCAGCCATGGAATTCCATGAACACTTGCACAGCATA
GGCACCAAGGAAGGTTTGAAGGAAAGAAAACTACAAAAAGCAGTGGAGAGCTTTACCTGGAATATTACCATCTTA
AAGGGACAAGCAGATCTTTTGAAATATGCTAAGAATGAGACATTGGAGAACCTGAAACAAATCCATTTTGCTGCT
GTTTCATGTGGACTGAATAAACCAGGCACCGAAAATGCTGATGTCCAGAAGCCACGCCGGAGCTTGGAAGTCATA
CCCGAAAAAGCAAACGATGAAACTGGAGAATGAGGAAACTTACAATAAACCATTATGGAGTTTATAACTCTAGGA
CCAATTGTAGTCAGATGGGACATTTGCTTTGCACTCACTAATGAGAATAATATTCGGGATTTTAAAGCACAACTG
GAATAGCTAATTACAGTCTATTAAAACTGTGAATGTATGTAGCAATCCTGCGTGTGAAGGCAAATAAACTCTTTA
ACAGGCAATTATATTGCTGGCCAAAATATGCTATATTTGTATACAAAGACATTCTAACTCAGTTCCAGTATGAAG
AAAGATTATTCACTCTAGCTCCACTGAGAAACATTTTCCTAAGTGAAAACAATTTCTTAAGATGGAAATGGATTG
GATTGTCAAATTATTATTTATTGGAGAAAAAAACCTGATCTACACATTTTTACTTATATGGGGTTGCCAGAGTCT
CTGGGTTCTAGATGATTTTGGTGGCATGCTTGCTGAGCCATAATTACTAAAGAGAATGTAAGTGGACGGGTTCCC
TGAATCCCCGGGGTCCTTGGAGAGCCATCGAGGAGAATGTGCAATTGGACTGAAGCTCCCTGGCTGAAGATACAT
GCCGAGTCAGCACATGGGTAGAGATGATGTAAAAGCAGCCAATCTGGAAACAATACATTGTAAATAGTTTTTCAT
TGTATGAAGTAGTGTTCACATTAAAAAGATGTTTTATGATAAAAAAAAAA

FIGURE 7234A

CCCATTCCTTGCCCAGTTACACAGCACTACTGGACCTCAGTCACAACAACCTGAGCCGCCTGCGGGCCGAGTGGA
CCCCCACGCGCCTGACCCAACTGCACTCCCTGCTGCTGAGCCACAACCACCTGAACTTCATCTCCTCTGAGGCCT
TTTCCCCGGTACCCAACCTGCGCTACCTGGACCTCTCCTCCAACCAGCTGCGTACACTGGATGAGTTCCTGTTCA
GTGACCTGCAAGTACTGGAGGTGCTGCTGCTCTACAATAACCACATCATGGCGGTGGACCGGTGCGCCTTCGATG
ACATGGCCCAGCTGCAGAAACTCTACTTGAGCCAGAACCAGATCTCTCGCTTCCCTCTGGAACTGGTCAAGGAAG
GAGCCAAGCTACCCAAACTAACGCTCCTGGATCTCTCTTCTAACAAGCTGAAGAACTTGCCATTGCCTGACCTGC
AGAAGCTGCCGGCCTGGATCAAGAATGGGCTGTACCTACATAACAACCCCCTGAACTGCGACTGTGAGCTCTACC
AGCTGTTTTCACACTGGCAGTATCGGCAGCTGAGCTCCGTGATGGACTTTCAAGAGGATCTGTACTGCATGAACT
CCAAGAAGCTGCACAATGTCTTCAACCTGAGTTTCCTCAACTGTGGCGAGTACAAGGAGCGTGCCTGGGAGGCCC
ACCTGGGTGACACCTTGATCATCAAGTGTGACACCAAGCAGCAAGGGATGACCAAGGTGTGGGTGACACCAAGTA
ATGAACGGGTGCTAGATGAGGTGACCAATGGCACAGTGAGTGTGTCTAAGGATGGCAGTCTTCTTTTCCAGCAGG
TGCAGGTCGAGGACGGTGGTGTGTATACCTGCTATGCCATGGGAGAGACTTTCAATGAGACACTGTCTGTGGAAT
TGAAAGTGCACAATTTCACCTTGCACGGACACCATGACACCCTCAACACAGCCTATACCACCCTAGTGGGCTGTA
TCCTTAGTGTGGTCCTGGTCCTCATATACCTATACCTCACCCCTTGCCGCTGCTGGTGCCGGGGTGTAGAGAAGC
CTTCCAGCCATCAAGGAGACAGCCTCAGCTCTTCCATGCTTAGTACCACACCCAACCATGATCCTATGGCTGGTG
GGGACAAAGATGATGGTTTTGACCGGCGGGTGGCTTTCCTGGAACCTGCTGGACCTGGGCAGGGTCAAAACGGCA
AGCTCAAGCCAGGCAACACCCTGCCAGTGCCTGAGGCCACAGGCAAGGGCCAACGGAGGATGTCGGATCCAGAAT
CAGTCAGCTCGGTCTTCTCTGATACGCCCATTGTGGTGTGAGCAGGATGGGTTGGTGGGGAGATTCTGCCCCAGG
AGAGGTAATGCACCCCTGAAGGATATGAGGGGATGGAAGAGAGGGCTGGCTGCCCAAGGGAATGGATTCCTCCTG
ACCTCAAGGGAATTGGTCCCAGGTACAACAGAGAGCAAGACCCCAAACAGGGCGTGGCTGCCACGATTTTCAAAT
GGGGGTATATTAATCCTCAGGCAAATGCTACACCCGTACCCAAAGCCCTGCCAATTCTCAGTGTGGTAGAGGAAG
AGAAGCATGTCTGAGTTGGATGGGAATGAGGAAGGAGTGAGGGGAAGAACAGATTCCCTAAACTTTCATGAGGTC
ATCCCTAGCTCCTTAAGAGAAAAACATTTAGAAAAAAAAATTTTTTCTATCTCTGCCCACCCACACCTGTGATGT
TGTGTGTGTTGGGGGAGCTTCCACAGGAGCCACACTGGGGAAAAGCTGTAGTATCTTCTTTGTTTAGCAAGTCAA
ACTTCACAGCTGGGGAAGTTGAAAACCTTTGGAAAATGAGTCAGGAAAAGGCTGAGACCTCAATCGGTAACAATT
CCCCAAAGCTGTTGTAAGACTTTGCATTAAAGCCTTTCTTTTTCCTGATGTGCCCTGGGTGGATGGATCTTTGCA
GGAGCCTGGCCTGCTGCCTTTTAGTTACAACAGCAATGTGGGATGTGGTATCTGTGCCTTGTCCTGGGACCAATG
GCACAGAGGGTTATAGCATGAACTGAAGGGTCCATGTCACAGCATAGGTGCCAGCACGAAACTTGTAGATGGGGG
GTGAATTCCAGATAGGCTAATTCCCTGGTTGGTGAAACCCTTGGTTAGTATTTGATTCCCAGCATCTGTGTGTCA
GGCCAGAGTGGGGGCTGCTGAAGGCAGAGCTTTTATGGATGCCTGCCACAGACGTGGTACATGGGCCCACTTCAC
GATAGAAGGATGAAGGTAAATCAGCCTCTATTATGTAGCATCCAGCTGGACCTAGCTGATTCTCAATGTATGCCA
TCTCTTCATCCAGTCTCCTTATCAAGCTCAGGTGGGATTCTGAATTTTCCCTAATATGCTGCTCTGTAAAGGGAG
GAGTCCAAGAAAGCCTGGCCCCAGCTGGCTTAGAGTAGGCTTGGCGATAGTGAAAATCCAGTATATATCTCCTCT
GTGTGGACAAGGTTGCCTTGCTCCTCTCAGAGATACCACCTCTGCTGCAAAGTCAAAGCATGGGGTTTTGACATC
AGAAGGGTTGGAATTGGGTGGTCTCTACCCCAGAATGGCAATTTGGAGTGCAGCTTCAAGTTCTGCCCTCTCCAC
AGATTCCAGGCAATCCTGAAGCAGAGATAATCAGTAGTACTAAACTTTCAGAAGGGGAGTTCTGCCACCCCATTC
CTCCATCGAGAGGTCTTTGCAGTTGTGGTTGTGAGGCCAGAGGAACTTAAGAAGAATGAGCTCAACATTCCATTC
CATCCAAGGTTGCAGAATACTTTGAGTATGGAGATGACCGATCCCTTTAACCTTTCCCTTTGACTATACTGCATG
CCCTGTGAGTGGCTGCTCTGAGCTTTGGCGGGGGATGAGCAGGGTGAAGGTGAAAATGTTCTCTGATGTTGGTTT
TTCTTAGTGTCTCTTCTCTCCCACGTTTCTAGTCCATTGGAAGTTCTCCAGATCCTCTAGATTTCTGACCTCTTT
TTACATTCTAAGAGGTGTCATTTACCTGTGGGTGAGGGGCTTGGAGGGCCTGACTATTAAGCTTCCTATTATGAT
TGGGGAAGGGGACTCAACATCTTCCCCTTGTCTGGTCCTGGGAACTCAAGACTGCTGTCCATCCTTTATTAGTAA
CCTAGTTTTGTTGAGAGAGAGGTGCAGCATTTCCCTCAAGTACCTGCATGCTCATAGGTATGCATGCTTATAGGT
ATGCATGCACACCAGCACCTTGACTTCCACCAGGACAGTGAATCTGTAGTCCCCATTAATGATACTCTCAGAATG
GTCTCCACCAATGTGCACAACTTCATGCACACAATTGTATTCCTCTTTAGGAGAGACAGTGACCATGCCAGGCTC
TTCAAATACACACTCCTGTATTTTCATTTCTGAACTCCCTGAAGCTTCACCCACATCTCCATGGCACTGAATCAC
TTTTCTGCCCAGGCTGGAGTTAGAAGAACCATGGGTTGAAGGCCTTGGGAGAAGAGGTGGTAAGGAGCTACCTGG
TTCTTTGGACTCCTCAGAAACCTCCCGTGAAGACTATATATATGAGCAATATATGAGCAATTAAGATAGAACTAG

FIGURE 7234B

GTCATTGAAGGACTCAGAAGGAAACTGGCAAGGGGCTAAGTAGCTGTGAGCTGCTCTTCCTGTTAACTGTCCTCA
GGAGAGAAAAGTTGTCTTGATTTATTCCAGAGACTCCTGAGAATTTTGTTACTGGAGCTATAGGAACTAGGACTC
CCTCCTCAGACTCATCAGGAAATCTGGGAAAATCTCATCTCCATGCTGCAGTCTCCCCGCTTGGCACCATCTAGG
GCTCTGAAGATCTTTAAAGTGAGCGTTAAATGAAGCAGGCCTTCTGGGGCATCGTGATGGAGCTCCTGAGGACTG
GGAGGGCCGTTTTCTTCATAATTCCTACCCAGTTTAGGGAATGAGAAAAGGCCCTGTGGCTCTTAAGTCTCCTGA
CTATATCCACTAGTTTGGCCTTGAGTTTGAGACACCTGGTAGATGTACCTGGCTGCCCTACCAAGAGATTTGATT
TGTTTCTTCCCGTGGTTTCAGGTGATAGAACCCAAAGGTAGCTTTTTAATTGGAGAATTGAATAATCAGCATATG
TAAGCGCACTAGAACCCTGTGTTGAAAACTGCCAGGTGTGGGTATAAGAAAAGGCCGAGAGATCACCACCTCCTC
TTACCCTACCCCACACCCATAAACCAGACATGTCTCCCAGGAAGCAGGTGTCCCTGGACACAGAGGATGACAGGG
CTCTACAATCTGTGTAATTATTATTATTATTATTATTTTGTATTTATGGGGCCCAAGAAAGGGGCCAGGAGAGGG
TACACCCCAGCTGGGGAGAGCAAAGCAGATGGATCCAGTTTTCTGTGTGTTCTTACCTCTGTACTTCCTCGTAGC
TCTGCTGACAAAGCAAGCAGGCCTCCCGTGTCCAAGACCCCATTCCTCCCACTTGTGTACACCTAGGCTGGCAAA
TCTTGGAGCCTCTGGGCTCTGAAAACTAGACAATGATCATTAAACCTGGCTTGAGTCTCTGTTCTGGC

FIGURE 7235

HSLPSYTALLDLSHNNLSRLRAEWTPTRLTQLHSLLLSHNHLNFISSEAFSPVPNLRYLDLSSNQLRTLDEFLFS
DLQVLEVLLLYNNHIMAVDRCAFDDMAQLQKLYLSQNQISRFPLELVKEGAKLPKLTLLDLSSNKLKNLPLPDLQ
KLPAWIKNGLYLHNNPLNCDCELYQLFSHWQYRQLSSVMDFQEDLYCMNSKKLHNVFNLSFLNCGEYKERAWEAH
LGDTLIIKCDTKQQGMTKVWVTPSNERVLDEVTNGTVSVSKDGSLLFQQVQVEDGGVYTCYAMGETFNETLSVEL
KVHNFTLHGHHDTLNTAYTTLVGCILSVVLVLIYLYLTPCRCWCRGVEKPSSHQGDSLSSSMLSTTPNHDPMAGG
DKDDGFDRRVAFLEPAGPGQGQNGKLKPGNTLPVPEATGKGQRRMSDPESVSSVFSDTPIVV

FIGURE 7236A

CAGGTGTGCAGAACGGCTCAACAACTTGAAGACCTCACCAGAAGCTGTCAGTGGATATAGTTTTGCAATGGCTGC
TTTGTTAGGTGGAGTACATCAGTGTCCTTTGGGCATTCCTCATGCCAAAGGAAAGATGGTAGTTAGTATTGCTGA
AGATCTTTTACGAACTGCTGCCCAAAATAGCAGGCTATCTTTACAGCGCACCCAAGCTGGCTGGCTTTTACTTGG
AGCACTTATGACTTTAGGACCATCTGTCGTTCGTTACCATCTGCCCAAGATGTTGTTATTGTGGCGAAATGTTTT
CCCACGTTCCTTAAAGGAATTGGAAGCTGAGAAGGCCCGAGGCGATTCTTTTACCTGGCAGGTAACTTTGGAAGG
TCGTGCTGGAGCTCTATGTGCCATGAGGAGCTTCGTTGCACATTGTCCTGAGCTACTAACTGAAGATGTGATTCG
AAAATTGATGACCCCTATTGAATGTGCCATGACTATGATGTCACACATTCCATCTGTAATGAAAGCCCATGGAGC
TCATCTGAAAGCTAGTGCTGCAATGGTCCGTTTAAGACTTTATGATATCTTGGCTTTGTTACCTCCAAAAACTTA
TGAAGGATCTTTTAATGCACTTCTTAGAGAACTGGTAGCGGAATTCACTTTGACTGACAACTCAGCCAACACAAC
TACTTCCCTCCTCAGATCCCTCTGCCATTATGATGATAGTGTTCTTCTTGGTTCTTGGCTTCAGGAAACTGATCA
TAAATCAATTGAAGACCAGCTCCAGCCAAACAGTGCCTCTGGAAGTGGGGCTCTGGAGCATGATCCTTCCTCTAT
TTATTTACGCATACCTGCTGGAGAAGCAGTACCTGGTCCCCTCCCTCTCGGAGTCTCAGTCATTGATGCTTCTGT
GGCCCTTTTTGGTGTAGTGTTTCCTCATGTTTCTTATAAACACCGATTACAAATGTTGGATCACTTTGCTGAATG
TGTTAAACAAGCTAAAGGTGTCCGCCAGCAGGCTGTGCAGCTTAACATATTTACTGCTGTTCTTAGTGCACTAAA
GGGCTTAGCTGAAAACAAAAGTACTTTAGGACCTGAGGAAGTTCGTAAATCTGCCCTGACACTGGTTATGGGTCC
TCTGGACAACCCAAACCCCATCTTACGTTGTGCAGCGGGGGAAGCTCTTGGAAGAATGGCTCAGGTGGTTGGAGA
AGCAACTTTTATTGCTAGAATGGCCCAATATAGCTTTGACAAGTTGAAATCGGCTCGAGATGTTGTATCTAGGAC
TGGTCATTCATTGGCTCTTGGTTGTTTGCATCGTTATGTTGGTGGAATAGGCTCAGGACAACATCTGAAGACCAG
TGTCAGCATTTTATTGGCTCTAGCACAAGATGGGACATCCCCTGAAGTCCAGACTTGGTCTCTTCATTCACTTGC
TTTGATAGTGGATTCTAGTGGTCCGATGTATCGTGGCTATGTGGAACCAACATTATCTCTAGTTCTTACCTTGCT
GTTGACAGTTCCGCCTTCACATACAGAAGTTCATCAGTGTTTGGGTCGATGCTTGGGTGCTATAATAACTACTGT
TGGCCCTGAACTACAAGGGAATGGAGCAACAACTTCTACAATTCGTTCCTCTTGTTTGGTGGGTTGTGCAATAAC
ACAAGACCATTCAGATTCTCTTGTTCAGGCAGCTGCCATATCTTGCCTTCAGCAGCTTCACATGTTTGCACCACG
ACATGTCAATCTATCTAGCCTTGTTCCTAGCCTTTGTGTTCACTTATGTAGTTCCCATTTGTTACTTCGACGAGC
AGCTGTGGCATGTCTTCGGCAACTTGCACAAAGAGAAGCAGCGGAAGTATGTGAATATGCCATGAGCCTGGCAAA
AAATACAGGGGACAAAGAGAGCAGTAGTGCCAATGTCAGTCCTTTTGCCCCTGGGGTTAGTTCTCGAACTGATAT
CCATTGCCGGCACCAAGGTGTTAATATAACAGAAACTGGTCTTGAGGGACTTCTTTTTGGAATGCTAGACCGGGA
GACAGATCGAAAATTATGTTCTGATATTCATGACACTTTGGGACATATGCTTTCTTCGCTGGCAGTAGAAAAACT
TTCTCATTGGCTAATGCTTTGTAAAGATGTCCTGGCAGCTTCTAGTGATATGAGTACTGCAACTCTCTTAAGTAG
TGGAAAAGATGAAGAAGCTGAAAAGAAAGATGAGATGGATGATGATACCATGTTTACCACGTTAGGTGAAGAAGA
TAAATCAAAGCCCTTTGTGGCCCCTCGCTGGGCCACTCGAGTATTTGCTGCCGATTGCCTGTGTCGAATCATCAA
TTTGTGTGAGAATGCAGACCAGGCTCACTTTGATCTTGCCTTGGCACGTTCTGCTAAACTTCGAAACCCTACAAA
TGACCTCTTGGTACTTCATCTCTCTGACCTCATTCGCATGGCATTCATGGCTGCAACTGATCATAGCAACCAGCT
GCGAATGGCTGGGCTCCAGGCGCTTGAAGACATTATCAAGAAGTTTGCGTCTGTGCCTGAGCCAGAATTTCCAGG
TCATGTGATACTGGAGCAGTATCAGGCTAATGTGGGAGCTGCTCTAAGACCAGCCTTTTCACAAGATACACCATC
AGATATAATAGCGAAAGCTTGCCAGGTATGTAGTACATGGATAGGAAGTGGAGTTGTCAGTGATCTCAATGATCT
CCGTCGAGTACACAATCTTCTTGTTTCTTCTCTGGACAAAGTTCAGGCTGGAAAAGGATCTTCCAGCCAGCTGTA
CCGAGAGAGTGCCACGACCATGGAAAAACTGGCTGTTCTCAAAGCTTGGGCAGAGGTATATGTGGTCGCTATGAA
TATTAAAAAGGAAGCAGAGTCAAAACCAAAAAGAGCAATTAAAAATACTGACGATGATGATGACGACTGTGGTAC
CATCGATGAACTGCCACCAGATAGTTTAATAACACTGGTACAACCTGAACTACCAACACTCAGTCGCCTGTGGTT
AGCAGCATTAAAAGATTATGCACTCTTGACTTTACCAGCCGAATTTTCTAGTCAGCTTCCTCCAGATGGTGGAGC
ATTTTATACCCCTGAAACTATTGATACAGCTAGACTTCACTATCGGAATTCCTGGGCCCCAATTCTCCATGCGGT
GGCACTTTGGTTAAATAGCACAGGATTTACGTGCTCAGAGTCTACAGAAGCAGCAGCAATATCTGGTTTACAAAA
ACGTTCTACATCTGTCAATTTAAACCAGGCATCAGGAGCAGTGGGTAGTGCTAAATCTTTGCCAGAAATTAACAA
AGACAGAATGCATCTGATTTTAGGTGTGAGTATACAGTTTCTTTGTTCCCCTAGACCTGAGGAGCCCATTGAACA
TGTTACAGCATGCCTGCAGGCCTTACATACCTTGCTAGACTCCCCTTATGCTCGAGTCCATATTGCAGAAGATCA
GCTGATAGGTGTTGAGTTGCTGAGTGTTTTGCACCGCCTTCTATTGACCTGGAATCCATCATCTGTCCAGCTGTT
GGTTACTGGAGTTGTACAACAGATAGTAAGAGCTGCTCAGGATTATTTGCAAGAGAAAAGAAACACTCTAAATGA

FIGURE 7236B

AGATGATATGGAAAAAGAGGCCTGTACCGTATTGGGAGAAGGAGGTGACAGCGGTGGTCTCATTCCTGGAAAATC
TCTTGTGTTTGCAACTATGGAGCTGCTGATGTTCATTTTAGTACGGCATATGCCACATCTCAGTACCAAGGTGTC
AGACTCTCCAAGTCACATAGCCACTAAAACTCGACTATCAGAAGAAAGTGCTCGTTTGGTGGCAGCCACAGTTAC
CATACTCTCTGATTTACCATCCCTTTGTTCACCCGCTGGATGTATGACAATCCTGCCCACAATTCTGTTCTTAAT
TGCAAGAATATTGAAAGACACAGCAATAAAGTCTGCAGATAATCAGGTTCCTCCACCAGTCAGTGCAGCTCTTCA
AGGGATTAAAAGTATTGTGACACTTTCAATGGCCAAAACTGAGGCTGGCGTTCAAAAACAGTGGACAGCTCTGAT
TCGTAGCACGCTTGCTTGCATCCTGGAATATTCTCAACCAGAAGACTCTGTACCTACACCTGATGAAGTAAGCAT
GCTAACAGCAATTGCACTCTTCCTGTGGTCTGCTAGTAATGAAATAATAGGAGTCCAGTCATTACAGAATGGCTG
CATGAACAGATTTAAAAATGCATTAAATTCATGCGACCCATGGGTTCAAGCCAAATGTTACCAGCTTCTCCTCTC
AGTCTTCCAGCATTCCAATCGTGCCCTTTCAACTCCTTATATTCATTCATTAGCTCCAATAGTGGTTGAAAAGCT
AAAAGCTGTTGAAAGAAACAGACCAGCCAGTAACATAGAGCTTTTAGCGGTTCAAGAAGGAATAAAAGTTCTTGA
AACACTGGTTGCTCTTGGTGAAGAACAAAACAGAGTCCAGCTACTTGCTCTTTTAGTTCCCACTTTGATATCTTA
CCTGCTGGATGAAAATTCTTTTGCCTCAGCAAGTTCAGCTTCCAAAGATCTTCATGAGTTTGCACTCCAGAATTT
AATGCATATTGGACCTCTGTATCCACATGCTTTCAAGACAGTAATGGGGGCTGCTCCTGAGTTGAAAGTGCGTCT
AGAAACTGCCGTTCGAGCAAGCCAAGCGAGCAAAGCTAAAGCGGCTGCCAGACAACCAGCCCCCGCCATACATTC
TGCACCAACAATTAAGCTAAAAACAAGTTTTTTTTAATTTGTAATTTCATTTATTTGTATTTATGTTGTCAACTA
GCCCCTAATTAGTGATGGCCACTGTATCATTCCAGGCTACCTATGGGTTCTGTTTTATTTGTATATTGGTATTAT
AGTGCTTCCAAGTAGGTTAAGTGAAATAATGCTCACACCATTTATTGATTTTTAAGGAGTGATTTTTTTTATCAT
GTGGTGAATATGTTTTCATTTTCCTCCTAATAATGTTTCTCTTTTGTTAACTTATTTATTTTTCAAACACTGAGC
CATAGTCTTAAATTTAAATGCTAAAAACAATTGTATCATGTAGTCGGGCAGCCTATTGATACTGTCAGGGGAAAA
AAATGGGTCAGAACTCAGCATCTGTCATGAAAAAAATCAATTGAAAAACAAGCAGATTTTAAATTTTGAAGTAAT
CAAAATAATGGAAAGTGTCTGTTTTGTGGTGTATATACTATGAATAAAATCACAGCATTTTCTAAGC

FIGURE 7237

RCAERLNNLKTSPEAVSGYSFAMAALLGGVHQCPLGIPHAKGKMVVSIAEDLLRTAAQNSRLSLQRTQAGWLLLG
ALMTLGPSVVRYHLPKMLLLWRNVFPRSLKELEAEKARGDSFTWQVTLEGRAGALCAMRSFVAHCPELLTEDVIR
KLMTPIECAMTMMSHIPSVMKAHGAHLKASAAMVRLRLYDILALLPPKTYEGSFNALLRELVAEFTLTDNSANTT
TSLLRSLCHYDDSVLLGSWLQETDHKSIEDQLQPNSASGSGALEHDPSSIYLRIPAGEAVPGPLPLGVSVIDASV
ALFGVVFPHVSYKHRLQMLDHFAECVKQAKGVRQQAVQLNIFTAVLSALKGLAENKSTLGPEEVRKSALTLVMGP
LDNPNPILRCAAGEALGRMAQVVGEATFIARMAQYSFDKLKSARDVVSRTGHSLALGCLHRYVGGIGSGQHLKTS
VSILLALAQDGTSPEVQTWSLHSLALIVDSSGPMYRGYVEPTLSLVLTLLLTVPPSHTEVHQCLGRCLGAIITTV
GPELQGNGATTSTIRSSCLVGCAITQDHSDSLVQAAAISCLQQLHMFAPRHVNLSSLVPSLCVHLCSSHLLLRRA
AVACLRQLAQREAAEVCEYAMSLAKNTGDKESSSANVSPFAPGVSSRTDIHCRHQGVNITETGLEGLLFGMLDRE
TDRKLCSDIHDTLGHMLSSLAVEKLSHWLMLCKDVLAASSDMSTATLLSSGKDEEAEKKDEMDDDTMFTTLGEED
KSKPFVAPRWATRVFAADCLCRIINLCENADQAHFDLALARSAKLRNPTNDLLVLHLSDLIRMAFMAATDHSNQL
RMAGLQALEDIIKKFASVPEPEFPGHVILEQYQANVGAALRPAFSQDTPSDIIAKACQVCSTWIGSGVVSDLNDL
RRVHNLLVSSLDKVQAGKGSSSQLYRESATTMEKLAVLKAWAEVYVVAMNIKKEAESKPKRAIKNTDDDDDDCGT
IDELPPDSLITLVQPELPTLSRLWLAALKDYALLTLPAEFSSQLPPDGGAFYTPETIDTARLHYRNSWAPILHAV
ALWLNSTGFTCSESTEAAAISGLQKRSTSVNLNQASGAVGSAKSLPEINKDRMHLILGVSIQFLCSPRPEEPIEH
VTACLQALHTLLDSPYARVHIAEDQLIGVELLSVLHRLLLTWNPSSVQLLVTGVVQQIVRAAQDYLQEKRNTLNE
DDMEKEACTVLGEGGDSGGLIPGKSLVFATMELLMFILVRHMPHLSTKVSDSPSHIATKTRLSEESARLVAATVT
ILSDLPSLCSPAGCMTILPTILFLIARILKDTAIKSADNQVPPPVSAALQGIKSIVTLSMAKTEAGVQKQWTALI
RSTLACILEYSQPEDSVPTPDEVSMLTAIALFLWSASNEIIGVQSLQNGCMNRFKNALNSCDPWVQAKCYQLLLS
VFQHSNRALSTPYIHSLAPIVVEKLKAVERNRPASNIELLAVQEGIKVLETLVALGEEQNRVQLLALLVPTLISY
LLDENSFASASSASKDLHEFALQNLMHIGPLYPHAFKTVMGAAPELKVRLETAVRASQASKAKAAARQPAPAIHS
APTIKLKTSFF

FIGURE 7238A

CACTAGAATGTGAAGGATCTTCGCGGTTCTGGGTGCCCAGAAAGGCGGCGACGCGGCGGATGACAACATTAGGCC
GCGACGCGCTCCTGGCCAGGCGGCGGCTGTAGTGTTAGCTTTGGACGCCGCAGTAGCCGCTGCCGGTAGCAAGCC
GACTGAGGGAAGGTGGGGGTCCGCCCGGGCTGGTGGACCTCGGGGCCGAAAGTTCCCGCCCCGCTCGGGGGCTGA
GCCGGCAGTGCCTCCGCGGCCGCTGGGCAGCGCCCTTCGTCCAGGCTCGCGCCCCAGCTGCCGCCGACGACAGCG
GCCGAGAGAAGTTGGGGTCTGACTAGACGCTTACGGGGCCTCGGACCCCGGCGCCGCGGCGACCTCGGAGGAACC
GGCTCCTTGCGTCCCGCCTCCCTGGGAGCTCCGCACGGGATTTGCAGATTTACAGAATGGCTGCACATTAATGGA
AAGAGAAGCATAAACCTATCTTCTTTCATT**ATG**GAGGGAGGTTTGGCAGATGGAGAACCTGATCGAACTTCGCTT
CTTGGTGATAGCAAAGATGTCCTTGGGCCATCAACTGTTGTAGCAAACAGTGACGAATCTCAGCTTCTGACACCA
GGAAAGATGAGTCAGCGCCAAGGAAAAGAAGCTTATCCAACGCCAACCAAAGATTTGCATCAGCCATCTCTTAGT
CCAGCAAGTCCTCATAGCCAGGGTTTTGAAAGAGGGAAGGAAGATATTTCTCAAAATAAAGATGAATCTTCACTT
TCTATGTCAAAGAGCAAGTCTGAATCTAAACTTTATAATGGCTCAGAGAAGGACAGTTCAACTTCAAGCAAACTC
ACAAAAAAAGAATCTCTTAAGGTACAAAAGAAAAATTACCGAGAAGAAAAGAAAAGAGCCACAAAGGAGCTGCTC
AGTACAATCACAGATCCTTCTGTTATTGTTATGGCTGATTGGTTAAAGATTCGTGGTACTCTAAAGAGCTGGACC
AAGTTATGGTGTGTGTTGAAACCTGGGGTGCTACTGATCTATAAAACCCAAAAAAATGGTCAGTGGGTAGGAACA
GTTCTTCTGAATGCCTGTGAAATCATTGAACGTCCATCAAAAAAGGATGGCTTTTGTTTCAAACTTTTCCATCCT
TTGGAGCAATCTATTTGGGCAGTGAAGGGTCCAAAAGGTGAAGCGGTTGGATCCATTACTCAACCCTTACCTAGC
AGTTATTTGATCATCCGAGCTACTTCAGAGTCAGATGGAAGGTGCTGGATGGATGCTTTGGAGTTGGCTTTGAAA
TGTTCTAGTCTTCTTAAACGTACAATGATCAGAGAAGGAAAGGAACATGACCTGAGCGTTTCATCAGATAGCACA
CATGTGACTTTCTATGGCTTACTACGTGCTAACAATCTCCACAGTGGTGATAACTTCCAGTTAAATGATAGTGAA
ATTGAACGACAACATTTTAAGGACCAAGATATGTATTCTGATAAATCTGATAAAGAAAATGATCAAGAACATGAT
GAGTCTGATAATGAGGTGATGGGGAAAAGTGAAGAAAGTGACACAGATACATCAGAAAGACAAGATGACTCATAT
ATCGAACCTGAGCCTGTTGAGCCTTTAAAGGAGACTACCTACACTGAACAGAGCCATGAAGAACTTGGAGAGGCA
GGTGAGGCTTCTCAAACAGAAACTGTATCTGAAGAAAACAAAAGCCTTATCTGGACACTATTGAAACAAGTCCGT
CCTGGCATGGACCTATCCAAGGTGGTTCTGCCTACATTTATTTTGGAACCCCGTTCTTTCCTGGATAAACTTTCA
GATTACTACTATCATGCAGATTTCCTATCTGAGGCAGCTCTTGAAGAAAATCCTTATTTCCGTTTGAAGAAAGTA
GTGAAATGGTATTTGTCAGGATTCTATAAAAAGCCAAAGGGACTGAAGAAACCTTATAATCCTATACTTGGCGAG
ACTTTCCGTTGTTTATGGATTCATCCCAGAACAAACAGCAAAACTTTTTATATTGCTGAACAGGTGTCCCATCAT
CCACCAATATCTGCCTTTTATGTTAGTAATCGAAAAGATGGATTTTGCCTTAGCGGTAGTATCCTGGCTAAGTCT
AAGTTTTATGGAAACTCATTATCTGCAATATTAGAGGGAGAAGCACGGTTAACTTTCTTGAATAGAGGTGAAGAT
TATGTAATGACAATGCCATACGCTCATTGTAAAGGAATTCTTTATGGTACAATGACACTGGAGCTTGGTGGAACA
GTCAATATTACATGTCAAAAAACTGGATACAGTGCAATACTTGAATTTAAACTAAAGCCATTCCTAGGGAGTAGT
GACTGTGTTAATCAAATATCAGGGAAACTTAAACTGGGAAAAGAAGTCCTAGCTACTTTGGAAGGTCATTGGGAT
AGTGAAGTTTTTATTACTGATAAAAAGACTGATAATTCAGAGGTTTTCTGGAATCCAACACCTGACATTAAGCAA
TGGAGATTAATAAGGCACACTGTAAAATTTGAAGAACAGGGAGATTTTGAATCAGAGAAACTCTGGCAACGGGTA
ACTCGAGCCATAAATGCCAAAGACCAAACTGAAGCTACCCAAGAGAAGTATGTTTTGGAAGAAGCTCAAAGACAA
GCTGCCAGGGATCGGAAAACAAAAAATGAAGAGTGGTCTTGCAAATTATTTGAACTTGATCCACTCACAGGAGAA
TGGCATTACAAGTTTGCAGATACCCGACCATGGGACCCACTTAATGATATGATACAGTTTGAAAAAGATGGTGTT
ATTCAGACCAAAGTGAAACATCGTACTCCAATGGTTAGCGTCCCCAAAATGAAACATAAGCCAACCAGGCAACAG
AAGAAAGTAGCAAAAGGCTATTCCTCCCCAGAACCTGACATTCAAGACTCCTCTGGAAGTGAAGCTCAATCAGTA
AAACCAAGTACAAGAAGAAAGAAAGGAATAGAACTGGGAGACATTCAGAGTTCCATCGAATCTATAAAACAAACA
CAGGAAGAAATTAAAAGAAATATTATGGCTCTTCGAAATCATTTAGTTTCAAGCACACCGGCCACGGATTATTTT
CTGCAACAAAAAGACTACTTCATCATTTTCCTCCTGATTTTGCTTCAAGTCATAATAAACTTCATGTTCAAG**TAG**

AAGTTCTCTACCATTGAATCAGTGAACTAGAAAGATCTGATTTGGCCTGGGACCAGTGTTCAAGTTGGTTTGGTC
TTTATTAAAAATCACAATATTCCGAAAACAAAAAAACCTAGGAGATAAATGTAGAGGTATTGACTTTTCGTATCT
TTTATCTTCACACTGAAACAAGAGCTATCCTATTTGATTATTAAAGTGAGCTATGTGTTAAGTGCCAGGACATTT
CTAGCTTTTGTGAGAATGTGTCTACATATGAGTATAATAAACCCACATGTATACACAATTGTCTCTTATGTACTC
CTACCTGACAGTAGTCTTTGTATTCTATAGTATGTTCTGAGATATAATGTTAACATTGTTCATAACAAAAAATGC
TATCAATCTTATAAATATATGTAATCTATTTTCTTCATAAAACAGGCACAAAAGTTTTATCAGTAAGGAATTACA

FIGURE 7238B

GATTGAGAAATGATGGAATAATAGACATAATTAATTCAATACACTACTGTTAAAATCATTTGCAAAGCACTCAGC
TCAATTATCTTCTTAGAAAGAAAGAAAAAGTATGAATGGTCAAAATGAATACATCGAGAGAGATAAATGGCAAAT
TGCTTTTTTAAAAGTTTACATAAGTTTTTTTTAACCCCTAGAATTTAATATTTGTAGATGCAGGTAAATATATAT
ACTTACGTGTATATCAGTATAAAAACACTGGTGTGCAATTAATTGGATTGATTATAATACCACCTTAAGCACTTG
CTGAAAAAAGTGTGGTCAAAATTGATTGCTGTCCTTTTGTCTTATTTTTGTTTTTCTTAAGTCAGCTGGTTCATA
ACATAGGCCAAATTCTAGAGATGTTTATAGAGCATTTGAAGTGCTGATAATTTATGTTTTTTCATTATGAAAACT
TATTTTAGCTTTAGACTCCAGTGTGTTCAGTGAATAAGTAGAATATAAAAAAATATAACCAGTATTTTACTTCAA
AAGCCAAAAAAGAGGCAATAAGAAAAGACACTTTGTGGTGGCCTTTATGTGTGCATTAAAATTGGTTTCTGTAAAA
CGTGTAATAAGTTGAGTATCTACGAAGAGTATCAAGTTCTGAAGTTTAATTTTTTTATTATCCTCCTCTCTTCTT
AGTAACTTCTTTCTGTGGCAAAACCACAATTCTTTAAGATTCCTATTGTTCAGGCTAAGGCAAATTTTTTTGTTT
GTTTCTTCAGTTTAATATTTTGATTTTGTGTTTTTACGTAAATATTTATATTCCTTGAAAGCAATTTTTGCCAAG
GTAGTTCAGTTTAGGAATATGTTGTTCTAAAATATGTCTTAGAATCCTGAAAGCATAGATTTTGAAATGTTTTTT
TAATGAAAATGAAGGTCAGAGAGAATAATTGCCCTGACCACATTTGCCTTTCAGTAGGAGGAGGCTGTGAAATAG
TAAAATTATAATCGTTTATGCCATGATAAATACAAGATTGGTAAATAAATACATTGATTGGTAAATTATGAGAAT
CAAAATGATAAAAAGAGCCTGCTTTTTTCCCTAACCAATATAGCTATCTTAAGTATCCTTAGGTTTCTGTGAAGA
ACCATTTCCCATGTTTTCTTGGCAAAATAATGCTGTATTCCATATGTACATGTGAAATGATGTTTTAAATTGATA
AAAGCTTAAATAAGATCTACCTATACCCAGTATTTTCATGATATTAGAACAAATGGGTTTTTGGTTATATTTTAT
ATTTGTCAATATAATTTTTGTATTCACATTCTGTTACACTCTGCCTATTCATTGATATATGATATTCTGTAAATA
TTGTACAATTTGATCTTTTTTATGGTTTAAATTAGTTAATTACATACAAATTGATTGGCTTATCACAAAAATCAT
TTCATCAGTAAACCTTGTTAACATTTTGTACTGGTGACCCACCTCTTAGGACTTTGGTCTTATCCACGTGTATGT
TGTTTTCATTTGGTCCAAATAATATTTTATTTGTATGGGTATCTTCTAAGACTAAATAGGTAGTTGTGTTCTTTA
TTTTTAAAATTTCTTTTTAGAGCAAATGTTATGGGTTCTTACCCAAAGAGTCAAAAACTATTTCTTAAGAAAGAG
CAGAGTTATTCATGACTGTTCTTTATACACTAAAAGCATGCATCTAATCTAATAGTCCTCTTATTATGCTTTTAG
TTGTATGAGTCTCTTTCTATGAACTGAACACAAAACTCAGGAATTGGTGGCTTAATTTTAGATCAGTGCTTGTAC
TAGGCTTAGTTATATGAATCTTTATAACACATAATTACTAACTTTGTAGCCATATATGTAATTGACTTTGAATGT
TATTTACCTGAAATTAATCTTCCTTCACACATGGACCGTAAACGGTTCCCAGTTGTCTGAGAGCCTCATGAGGGT
TTCTAGGATTTATGACCTTATGACCAGTTTTTTTCATTTACCAAGATTTTATTTTCCTACATGAAAATTTAATTG
AGTAATAATTATTCACATGTGCATTTTCTTTTTAGCTGTTAAATGTACTATGCCATCATCCACCATTTAGTAAAA
TGTAGCTGGCCCAGGACATGTAAAAAAAAAAAAAAAACAACAACAATAAATAGGGCATGTGAAATGTTAAGTTAC
AGCAATAGATATTTTATTTGTATTTCATGTTAGTACTTTTTTGTTTTATATCACTTATAAAGGTACAGTGTACTC
TTTGTCACAGCTCAGTTGGTAACCGCATTCCATTGAAAAGTTGGCCTTGTAAAATACAACTCTCATTTAATATTC
ATGCTTTTGTGCCTTTAAGAAAATATTTTTTGTCATTTTTTGTGTTACAGAACTATAATGTGATTCAAGGTGTTT
ATAGGCTTGTCATAAAAGGGTCATTTCTGTGTGTTACTTTCTTTTTATATAGCTATAGTATATTTAAACAATAAT
ACTATCTTTTATAGGGGTTTGTCTATTTACCTATTCTTTACTCAGACATTGATGTAGACTTGTCAGATTATTCTG
AGTATTGTTAACAGTGCCTTTTCGATGGAATCACACTTTTTGGCTGTCACCTTGTGCCATATACACACAAAATTT
TGTGGAAGGCAGTTTTAACTTTCTGAAGAATATCTGTCAAAATTTAAGAAAACAAATGTATAAAATTCCATTTTT
TCCAGTGTTTAGCATTTCTAGTAAGCAGTGAGGTTGTTTGACATACAGTGATGATGGCATTATTGATAAGCCATA
CATGAGACTGCAGATTATATTGAATCATATTAAATGTACAGAAATAAAATATTAGATTTATATCAAATTTTCCAA
TTTGAACCAGTGGGGAAAATCCCACAGAAATCAGTAAGTTTACATTTCAATTTCTATCTTATTTGACTAAGTGGA
AAGAGATTCTTTAAAATGTATAACCTGCCATTATGTAATTTGGTTTCATTTTATTCTACCTGTTGTGTGAGTTTA
GTATATTTAATTTACTTTTTGTTACTCTTTACATACTGTTTATTTTTGTTAGTTTTTAATTGAAGATGGACTGTT
GAAATTGTATAGGACCAGTGTCTTATTAATATGATTAATATATTTAGAAGAGCCACGTGAAACCCATGACAAAAT
GAATGTGAATATTCTTTCTAAAAATTTAGAAAATGTTATCTTTTTGCATTTATTATGTAAAACTGTTTTACAGTA
TCAAAATTTTTCACTTAAAGAAAAAAAATGCCATGAAACATTTGAACTGATGAGCCACAGAACTTCAGTTGAAAT
TTTTTTCACTTTTTAGCATGCTAAATATACATCTGAGTTTAAATGTTCTGTTTAATGGCCATTCATAAATTCAAG
CACTACCACTGGTCAGTTTTGTGTGATAGAATAAAAATATGTTACCTGCAGTGTAAGTACAGCACACTGTCAAAT
TCTTTTCCTTAAGGTGCACAGTAAATGTACAGATAGTTATAGGCCACTGTTTTGTAATGTAGTACATTTCTAATC
TATTATTCCTAACCTATTATAACTGTTTGCAGAAAGAAAAGAATTTTTCTAATAATCTGTAAAATTATGCTAACT

FIGURE 7238C

TCTACAAGTAGGCTTCTAAATAAAATTTTTAAAAAGAGC

FIGURE 7239

MEGGLADGEPDRTSLLGDSKDVLGPSTVVANSDESQLLTPGKMSQRQGKEAYPTPTKDLHQPSLSPASPHSQGFE
RGKEDISQNKDESSLSMSKSKSESKLYNGSEKDSSTSSKLTKKESLKVQKKNYREEKKRATKELLSTITDPSVIV
MADWLKIRGTLKSWTKLWCVLKPGVLLIYKTQKNGQWVGTVLLNACEIIERPSKKDGFCFKLFHPLEQSIWAVKG
PKGEAVGSITQPLPSSYLIIRATSESDGRCWMDALELALKCSSLLKRTMIREGKEHDLSVSSDSTHVTFYGLLRA
NNLHSGDNFQLNDSEIERQHFKDQDMYSDKSDKENDQEHDESDNEVMGKSEESDTDTSERQDDSYIEPEPVEPLK
ETTYTEQSHEELGEAGEASQTETVSEENKSLIWTLLKQVRPGMDLSKVVLPTFILEPRSFLDKLSDYYYHADFLS
EAALEENPYFRLKKVVKWYLSGFYKKPKGLKKPYNPILGETFRCLWIHPRTNSKTFYIAEQVSHHPPISAFYVSN
RKDGFCLSGSILAKSKFYGNSLSAILEGEARLTFLNRGEDYVMTMPYAHCKGILYGTMTLELGGTVNITCQKTGY
SAILEFKLKPFLGSSDCVNQISGKLKLGKEVLATLEGHWDSEVFITDKKTDNSEVFWNPTPDIKQWRLIRHTVKF
EEQGDFESEKLWQRVTRAINAKDQTEATQEKYVLEEAQRQAARDRKTKNEEWSCKLFELDPLTGEWHYKFADTRP
WDPLNDMIQFEKDGVIQTKVKHRTPMVSVPKMKHKPTRQQKKVAKGYSSPEPDIQDSSGSEAQSVKPSTRRKKGI
ELGDIQSSIESIKQTQEEIKRNIMALRNHLVSSTPATDYFLQQKDYFIIFLLILLQVIINFMFK

FIGURE 7240

GCATGCCGGCAACCGCGTCTGCAGGGGTGCCGGCGACCGTGTCAGAAAAGCAAGAGTTTTACCAGCTTCTGAAGA
ACCTGATCAATCCAAGCTGTATGGTGCGGAGGCAAGCAGAGGAAATCTATGAAAATATCCCAGGTCTGTGTAAGA
CTACCTTCCTCTTAGATGCCGTCAGAAATAGAAGAGCAGGTTATGAGGTGAGACAAATGGCTGCCGCACTGCTAC
GACGGCTTTTGTCCTCTGGGTTTGAGGAGGTTTATCCAAATCTGCCTGCTGATGTTCAGAGAGATGTCAAGATTG
AACTGATTCTGGCTGTTAAGTTAGAAACACATGCTAGCATGAGGAAAAAACTTTGTGATATTTTTGCAGTGCTGG
CCAGGAATTTGATAGATGAGGATGGCACTAACCACTGGCCGGAAGGTCTGAAGTTTCTTATTGATTCAATCTACT
CCAAAAATGTGGTTCTATGGGAAGTTGCACTTCACGTTTTCTGGCACTTTCCTGGGATTTTTGGGACCCAAGAGC
GGCATGATTTGGATATCATCAAACGGTTGTTGGACCAGTGTATTCAAGATCAAGAACATCCAGCAATCAGGACGT
TATCCGCTAGAGCTGCAGCTGCATTTGTACTTGCTAATGAGAATAATATTGCTCTTTTCAAAGACTTTGCAGACT
TGCTTCCTGGAATCTTACAGGCTGTGAATGACTCATGCTACCAGGATGATGATTCAGTGCTAGAATCCCTTGTTG
AGATTGCAGATACCGTACCTAAGTACTTGGGTCCTTATTTAGAAGATACTCTACAGTTGAGTTTGAAGTTATGTG
GAGACTCTAGGCTTAGTAATCTGCAGCGCCAGCTGGCCCTCGAAGTTATAGTGACCTTGTCTGAAACTGCCACTC
CGATGTTGAAAAAACATACAAATATTATTGCACAGGCAGTTCCTCATATATTAGCAATGATGGTTGATCTACAAG
ATGATGAGGACTGGGTAAATGCTGATGAAATGGAAGAAGATGATTTTGACAGCAATGCAGTTGCTGCGGAGAGTG
CACTAGACAGACTGGCTTGTGGGCTTGGTGGAAAAGTTGTTTTACCAATGACCAAGGAGCATATCATGCAGATGC
TTCAGAGCCCTGACTGGAAGTATCGACATGCTGGATTAATGGCCTTATCTGCCATTGGAGAAGGATGCCATCAAC
AAATGGAATCAATTCTAGATGAAACAGTTAACTCCGTTTTGCTTTTTCTTCAGGATCCTCATCCAAGGGTGAGGG
CTGCAGCCTGTACTACACTTGGACAGATGGCTACAGATTTTGCACCTAATTTCCAAAAGAAATTTCATGAAACAG
TGATTGCAGCTCTGTTACGTACCATGGAAAATCAAGGTAATCAGCGTGTGCAATCACATGCAGCTTCTGCTCTTA
TTATTTTTATTGAAGACTGCCCTAAATCATTGCTAGTTCTATATGTGGATAGTATGGTGAAAAATCTACATTCCG
TCTTGGTGATTAAACTTCAAGAGTTGATTCGGAATGGAACTAAGTTGGCTTTGGAACAACTTGTGACAACCATTG
CATCAGTTGCAGATACAATAGAAGAAAAATTTGTCCCATATTATGATATATTCATGCCCTCACTAAAGCACATTG
TTGAGCTTGCTGTTCAGAAGGAACTCAAGCTTCTGAGAGGAAAAACTATCGAGTGCATTAGCCATATTGGTCTTG
CTGTTGGGAAGGAAAAATTTATGCAAGATGCATCAAATGTGATGCAGCTGTTGTTGAAGACACAATCAGACTTAA
ATAATATGGAAGATGATGACCCTCAGACCTCTTACATGGTTTCAGCATGGGCTAGAATGTGTAAAATTCTTGGAA
AAGATTTTCAACAGTACCTTCCACTGGTTATCGAGCCTCTTATTAAGACTGCTTCAGCTAAACCTGATGTTGCTC
TCTTAGACACACAGGATGTGGAAAATATGAGTGACGATGATGGCTGGCAATTTGTAAATCTTGGAGACCAGCAGA
GTTTTGGAATTAAAACTTCAGGACTTGAAGCAAAAGCAACTGCTTGCCAAATGTTGGTTTACTATGCTAAGGAGT
TAAGGGAAGGGTTTGTGGAATATACAGAACAAGTTGTGAAGCTGATGGTTCCTTTACTGAAATTTTATTTCCATG
ACAATGTTCGAGTGGCAGCAGCAGAGTCCATGCCTTTTCTCCTGGAATGTGCAAGAATTCGTGGCCCAGAGTATC
TTGCACAGATGTGGCAATTCATATGTGACCCCTTAATCAAGGCTATTGGTACTGAACCAGATACAGATGTGCTCT
CAGAAATAATGAATTCTTTTGCAAAGTCCATTGAAGTTATGGGAGATGGTTGCCTTAATGATGAACACTTGGAAG
AACTGGGAGGAATACTGAAAGCAAAACTTGAAGGGCACTTTAAAAACCAAGAATTGAGACAGGTGAAAAGACAGG
AAGAAAACTATGATCAACAGGTTGAGATGTCTCTGCAAGATGAGGATGAATGTGATGTTTATATTCTGACCAAAG
TATCAGATATTTTGCACTCATTATTTAGTACTTATAAGGAAAAGATTTTACCATGGTTTGAACAACTACTTCCAT
TAATTGTAAATCTAATTTGTTCAAGTAGGCCATGGCCAGACAGACAGTGGGGATTGTGCATATTTGATGACATCA
TAGAGCACTGCAGTCCAACTTCATTTAAATATGTAGAATATTTTCGGTGGCCAATGCTACTAAATATGCGAGATA
ACAACCCTGAAGTCAGGCAAGCTGCTGCTTATGGCCTGGGTGTCATGGCACAGTTTGGTGGAGATGATTATCGTT
CTTTATGTTCAGAAGCTGTTCCACTGCTGGTAAAAGTTATTAAGTGTGCAAATTCCAAAACCAAAAAAAATGTCA
TTGCTACAGAGAACTGTATCTCAGCAATAGGGAAGATTTTGAAGTTTAAGCCTAACTGTGTAAATGTAGATGAAG
TTCTTCCACACTGGTTATCATGGCTTCCACTGCATGAAGATAAAGAGGAAGCTATTCAGACTTTGAGTTTTCTCT
GTGACCTAATTGAAAGTAACCACCCAGTTGTAATTGGTCCAAATAATTCCAATCTTCCCAAAATAATCAGTATAA
TTGCAGAAGGAAAAATTAATGAGACTATTAACTATGAGGATCCTTGTGCCAAACGCCTAGCTAATGTCGTGCGTC
AGGTACAGACTTCTGAAGATTTATGGTTGGAATGTGTATCACAACTTGATGATGAACAGCAGGAAGCCTTACAGG
AGTTGCTAAATTTTGCTAG

FIGURE 7241

MPATASAGVPATVSEKQEFYQLLKNLINPSCMVRRQAEEIYENIPGLCKTTFLLDAVRNRRAGYEVRQMAAALLR
RLLSSGFEEVYPNLPADVQRDVKIELILAVKLETHASMRKKLCDIFAVLARNLIDEDGTNHWPEGLKFLIDSIYS
KNVVLWEVALHVFWHFPGIFGTQERHDLDIIKRLLDQCIQDQEHPAIRTLSARAAAAFVLANENNIALFKDFADL
LPGILQAVNDSCYQDDDSVLESLVEIADTVPKYLGPYLEDTLQLSLKLCGDSRLSNLQRQLALEVIVTLSETATP
MLKKHTNIIAQAVPHILAMMVDLQDDEDWVNADEMEEDDFDSNAVAAESALDRLACGLGGKVVLPMTKEHIMQML
QSPDWKYRHAGLMALSAIGEGCHQQMESILDETVNSVLLFLQDPHPRVRAAACTTLGQMATDFAPNFQKKFHETV
IAALLRTMENQGNQRVQSHAASALIIFIEDCPKSLLVLYVDSMVKNLHSVLVIKLQELIRNGTKLALEQLVTTIA
SVADTIEEKFVPYYDIFMPSLKHIVELAVQKELKLLRGKTIECISHIGLAVGKEKFMQDASNVMQLLLKTQSDLN
NMEDDDPQTSYMVSAWARMCKILGKDFQQYLPLVIEPLIKTASAKPDVALLDTQDVENMSDDDGWQFVNLGDQQS
FGIKTSGLEAKATACQMLVYYAKELREGFVEYTEQVVKLMVPLLKFYFHDNVRVAAAESMPFLLECARIRGPEYL
AQMWQFICDPLIKAIGTEPDTDVLSEIMNSFAKSIEVMGDGCLNDEHLEELGGILKAKLEGHFKNQELRQVKRQE
ENYDQQVEMSLQDEDECDVYILTKVSDILHSLFSTYKEKILPWFEQLLPLIVNLICSSRPWPDRQWGLCIFDDII
EHCSPTSFKYVEYFRWPMLLNMRDNNPEVRQAAAYGLGVMAQFGGDDYRSLCSEAVPLLVKVIKCANSKTKKNVI
ATENCISAIGKILKFKPNCVNVDEVLPHWLSWLPLHEDKEEAIQTLSFLCDLIESNHPVVIGPNNSNLPKIISII
AEGKINETINYEDPCAKRLANVVRQVQTSEDLWLECVSQLDDEQQEALQELLNFA.

FIGURE 7242

GTGAAAAACAAAAGTAGATGTACTTCTGTAAATCAGATAAATGCTTGGAATTTGATTGTCTACCCAATCAACAGT
TTTCCCTCTTTGCTCTGGAAATATTTGTACTCATATAGCATATTTCAAAATGTXGTCATTCXTAAGGCCTCTTAA
ATAGACACTATTTTTTGTGTCTGGCAGATGAGTAGTCAGGATTGAGATGAACACATAAGTCTTGGAAATTAATAA
ATTATAACATAAGAT

FIGURE 7243

CATAACACAGCCAGCTTTTTGCTAGCCAGACCAAACTCAAAGAGCAATGGCTGTACTTCTGAAATAGCAACACTT
TGTCCTAGCTGAGATTTGGTAATAAGATTTTTTTTTTAAGTTTTTAAAXGAAGCTCAGTGGTTGAAAGTCTGCTT
AACTGAAACAGTAACATCCATGATGTGTGTTTTGTGCATGTTTGTATTTGAAAGGCCTTCATGTTTTTGTTTCTT
GTTTGTTTTTCTCTCCTAAGACCTTGTCTTTTTTTTGTAGCAAAAGTTTTTTTTTTTTTTTCCTTTTACTTCTCA
GTTGACTGAATTCTGTTTTCACCGGATTTTTTGACTAAAATAGCTATTGCAACAGAGGCTACTCTTGGGTTAAGG
AAGAATGTAGTTTCGTTTTATGTTTAATATCGCTCAAAGAAAAATAAAAGCATCTCCCTCTAACACCACCAGACT
TTTCCTCTCTGTACCTTATCATGTAAATTTTGCTATTTGATTTTCACCTGGGTTGTTTCCTTTAATGTGCAAAAA
TTTAAGGCTATTTAGCTGACAACTGCCTAGGGTTGTAAAACAGGTTATCAAGAATCTGAAAGTCTAAGATAGG

FIGURE 7244

GGCACGAGGCCCTCGCCGCGGAGCCGCGCGGAGCGGAGCCGGCGAGCTAACCCGAGCCAGCCGGCGGGCGTCCCG
GAGGCGGTGGCGCAGGGAGGGGCCCGACGCTCGCACGTGGCCCCGGCGGCCGCCATGGCGGACAGCGGCACCGCG
GGGGGCGCGGCGTTGGCGGCCCCGGCCCCCGGGCCGGGCAGTGGCGGCCCAGGACCACGCGTCTACTTTCAGAGC
CCCCCCGGGGCCGCAGGAGAGGGCCCGGGCGGGGCGGACGATGAGGGCCCAGTGAGGCGCCAAGGGAAGGTCACC
GTCAAGTATGACCGCAAGGAGCTACGGAAGCGCCTCAACCTAGAGGAGTGGATCCTGGAGCAGCTCACGCGCCTC
TACGACTGCCAGGAAGAGGAGATCCCAGAACTGGAGATTGACGTGGATGAGCTCCTGGACATGGAGAGTGACGAT
GCCCGGGCTGCCAGGGTCAAGGAGCTGCTGGTTGACTGTTACAAACCCACAGAGGCCTTCATTTCTGGCCTGCTG
GACAAGATCCGGGGCATGCAGAAGCTGAGCACACCCCAGAAGAAGTGAGGGTCCCCGACCCAGGAGAACGGTGGC
TCCCACAGGACAATCGCTGCCCCCCAACCTCGTAGCAACAGCAATACCGGGGGACCCTGCGGCCAGGCCTGGTGC
CATGAGCAGGGCTCCTCGTGCCCCTGGCCCAGGGGTCTCTTCCCCTGCCCCCTCAGTTTTCCACTTTTGGGGTTT
TTTATTGTTATTAAACTGATGGGACTTTTTGTGTTTTTATATTGACTCTGCGGCGCGGGCCCTTTAATAAAGCTA
GGATACGCCTTTGGTGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 7245

MADSGTAGGAALAAPAPGPGSGGPGPRVYFQSPPGAAGEGPGGADDEGPVRRQGKVTVKYDRKELRKRLNLEEWI
LEQLTRLYDCQEEEIPELEIDVDELLDMESDDARAARVKELLVDCYKPTEAFISGLLDKIRGMQKLSTPQKK

FIGURE 7246

GGCACGAGGCTGAGGTGTATTTCGGGTCTTGCTGGGGCTGAGAGAGACCACAGCCCTTTGGGGGGTACAAACAAG
AGTTCAGTTGCTGTGAATTCTGCCACTGTGCCCAGCTCTGAAGCCTCAGCTCTTGCCAAACAGACCCGAGACCCA
TGTCAGCCCCACTGGATGCCGCCCTCCACGCCCTTCAGGAGGAGCAGGCCAGACTCAAGATGAGGCTGTGGGACC
TGCAGCAGCTGAGAAAGGAGCTCGGGGACTCCCCCAAAGACAAGGTCCCATTTTCAGTGCCCAAGATCCCCCTGG
TATTCCGAGGACACACCCAGCAGGACCCGGAAGTGCCTAAGTCTTTAGTTTCCAATTTGCGGATCCACTGCCCTC
TGCTTGCGGGCTCTGCTCTGATCACCTTTGATGACCCCAAAGTGGCTGAGCAGGTGCTGCAACAAAAGGAGCACA
CGATCAACATGGAGGAGTGCCGGCTGCGGGTGCAGGTCCAGCCCTTGGAGCTGCCCATGGTCACCACCATCCAGG
TGATGGTGTCCAGCCAGTTGAGTGGCCGGAGGGTGTTGGTCACTGGATTTCCTGCCAGCCTCAGGCTGAGTGAGG
AGGAGCTGCTGGACAAGCTAGAGATCTTCTTTGGCAAGACTAGGAACGGAGGTGGCGATGTGGACGTTCGGGAGC
TACTGCCAGGGAGTGTCATGCTGGGGTTTGCTAGGGATGGAGTGGCTCAGCGTCTGTGCCAAATCGGCCAGTTCA
CAGTGCCACTGGGTGGGCAGCAAGTCCCTCTGAGAGTCTCTCCGTATGTGAATGGGGAGATCCAGAAGGCTGAGA
TCAGGTCGCAGCCAGTTCCCCGCTCGGTACTGGTGCTCAACATTCCTGATATCTTGGATGGCCCGGAGCTGCATG
ACGTCCTGGAGATCCACTTCCAGAAGCCCACCCGCGGGGGCGGGGAGGTAGAGGCCCTGACAGTCGTACCCCAAG
GACAGCAGGGCCTAGCAGTCTTCACCTCTGAGTCAGGCTAGGGCCTCCCCTTCTCATCCTCCCCACCCCCCGC
CAAGGTTCTCACACTGGCCTGGGCTTGGGTGCCCATATAGGAGGTCTGTATGTTCACCAACAGTGCGGAGGGGTC
ACACATTGCAAAACACTGCCCAGAACAGTAAAAAGAGCCTGCATGCCAAAAAAAAAAAAAAAAAA

FIGURE 7247

MSAPLDAALHALQEEQARLKMRLWDLQQLRKELGDSPKDKVPFSVPKIPLVFRGHTQQDPEVPKSLVSNLRIHCP
LLAGSALITFDDPKVAEQVLQQKEHTINMEECRLRVQVQPLELPMVTTIQVMVSSQLSGRRVLVTGFPASLRLSE
EELLDKLEIFFGKTRNGGGDVDVRELLPGSVMLGFARDGVAQRLCQIGQFTVPLGGQQVPLRVSPYVNGEIQKAE
IRSQPVPRSVLVLNIPDILDGPELHDVLEIHFQKPTRGGGEVEALTVVPQGQQGLAVFTSESG

FIGURE 7248

CCCAAACCCACTCCACCTTACTACCAGACAACCTTAGCCAAACCATTTACCCAAATAAAGTATAGGCGATAGAAA
TTGAAACCTGGCGCAATAGATATAGTACCGCAAGGGAAAGATGAAAAATTATAACCAAGCATAATATAGCAAGGA
CTAACCCCTATACCTTCTGCATAATGAATTAACTAGAAATAACTTTGCAAGGAGAGCCAAAGCTAAGACCCCCGA
AACCAGACGAGCTACCTAAGAACAGCTAAAAGAGCACACCCGTCTATGTAGCAAAATAGTGGGAAGATTTATAGG
TAGAGGCGACAAACCTACCGAGCCTGGTGATAGCTGGTTGTCCAAGATAGAATCTTAGTTCAACTTTAAATTTGC
CCACAGAACCCTCTAAATCCCCTTGTAAATTTAACTGTTAGTCCAAAGAGGAACAGCTCTTTGGACACTAGGAAA
AAACCTTGTAGAGAGAGTAAAAAATTTAACACCCATAGTAGGCCTAAAAGCAGCCACCAATTAAGAAAGCGTTCA
AGCTCAACACCCACTACCTAAAAAATCCCAAACATATAACTGAACTCCTCACACCCAATTGGACCAATCTATCAC
CCTATAGAAGAACTAATGTTAGTATAAGTAACATGAAAACATTCTCCTCCGCATAAGCCTGCGTCAGATTAAAAC
ACTGAACTGACAATTAACAGCCCAATATCTACAATTAACCAACAAGTCATTATTACCCTCACTGTCAACCCAACA
CAGGCATGCTCATAAGGAAAGGTTAAAAAAAGTAAAAGGAACTCGGCAAATCTTACCCCGCCTGTTTACCAAAAA
CATCACCTCTAGCATCACCAGTATTAGAGGCACCGCCTGCCCAGTGACACATGTTTAACGGCCGCGGTACCCTAA
CCGTGCAAAGGTAGCATAATCACTTGTTCCTTAATTAGGGACCTGTATGA**ATG**GCTCCACGAGGGTTCAGCTGTC
TCTTACTTTTAACCAGTGAAATTGACCTGCCCGTGAAGAGGCGGGCA**TAA**CACAGCAAGACGAGAAGACCCTATG
GAGCTTTAATTTATTAATGCAAACAGTACCTAACAAACCCACAGGTCCTAAACTACCAAACCTGCATTAAAAATT
TCGGTTGGGGCGACCTCGGAGCAGAACCCAACCTCCGAGCAGTACATGCTAAGACTTCACCAGTCAAAGCGAACT
ACTATACTCAATTGATCCAATAACTTGACCAACGGAACAAGTTACCCTAGGGATAACAGCGCAATCCTATTCTAG
AGTCCATATCAACAATAGGGTTTACGACCTCGATGTTGGATCAGGACATCCCAATGGTGCAGCCGCTATTAAAGG
TTCGTTTGTTCAACGATTAAAGTCCTACGTGATCTGAGTTCAGACCGGAGTAATCCAGGTCGGTTTCTATCTACT
TCAAATTCCTCCCTGTACGAAAGGACAAGAGAAATAAGGCCTACTTCACAAAGCGCCTTCCCCCGTAAATGATAT
CATCTCAACTTAGTATTATACCCACACCCACCCAAGAACAGGGTTTGTTAAGAAAAAAAAAAAAAAA

FIGURE 7249

MAPRGFSCLLLLTSEIDLPVKRRA

FIGURE 7250A

CACAAGGCTTATCAGATTGACCCAACATTAAGAAAGCATCGAGAACAGTTGGTCATTGAAGTTGGACGAAAACTA
GACAAAGCTCAGATGATTCGTTTTGAGGAGCGAACTGGATATTTTTCCTCAACTGATTTGGGTAGAACTGCCAGC
CATTACTATATTAAATACAACACCATTGAGACCTTTAATGAACTCTTTGATGCTCACAAAACAGAAGGTGATATC
TTTGCCATAGTCTCCAAAGCTGAAGAATTTGATCAAATTAAGGTCAGAGAAGAGGAAATAGAGGAGTTAGATACC
TTATTAAGCAATTTTTGTGAACTCTCCACTCCTGGAGGTGTAGAGAATAGTTATGGGAAAATAAACATCTTACTT
CAAACTTATATCAGCCGAGGAGAAATGGACAGTTTCTCCCTTATATCAGATTCTGCATATGTTGCACAGAATGCA
GCTAGAATTGTCCGTGCTCTTTTTGAAATTGCTCTGAGGAAACGTTGGCCTACCATGACCTACAGGCTCCTGAAT
CTTAGTAAAGTCATTGACAAGAGGCTTTGGGGTTGGGCTAGCCCTTTGAGACAATTTTCAATCCTACCACCACAC
ATCCTAACAAGATTAGAAGAAAAAAAGCTTACTGTGGATAAGCTGAAAGACATGAGGAAAGATGAAATAGGTCAC
ATTTTACATCATGTGAATATTGGACTGAAGGTCAAACAATGTGTTCATCAGATTCCTTCTGTTATGATGGAAGCA
TTCATTCAGCCTATCACAAGGACTGTCCTCCGAGTGACACTCAGCATCTATGCTGATTTCACTTGGAATGATCAG
GTACATGGGACAGTAGGAGAACCTTGGTGGATTTGGGTAGAAGATCCTACAAATGATCATATTTATCATTCAGAG
TATTTTCTAGCTCTAAAAAAACAAGTCATTAGTAAAGAAGCCCAACTACTGGTATTTACAATCCCTATTTTTGAG
CCTTTGCCTTCCCAATACTACATCCGAGCAGTGTCTGATAGATGGTTGGGTGCTGAGGCAGTATGTATTATCAAC
TTTCAACATCTAATTCTACCAGAGAGACATCCTCCTCATACAGAATTACTGGATCTTCAGCCTTTACCAATCACA
GCTTTGGGATGTAAAGCATATGAAGCCCTGTACAACTTCAGCCACTTTAACCCTGTACAGACACAAATATTTCAT
ACATTGTATCACACGGATTCTAATGTCCTACTTGGAGCACCTACTGGATCGGGAAAGACTGTTGCAGCTGAATTA
GCCATTTTCAGAGTCTTCAACAAATACCCTACTTCAAAGGCGGTATATATTGCACCCCTAAAAGCCCTAGTACGT
GAAAGAATGGATGATTGGAAAGTTAGAATAGAAGAAAAACTTGGTAAAAAAGTTATTGAACTAACAGGGGATGTG
ACTCCTGATATGAAATCCATTGCCAAGGCTGACCTTATCGTCACTACGCCAGAGAAGTGGGATGGAGTCAGCAGA
AGCTGGCAAAATAGGAACTATGTTCAGCAAGTCACTATTCTCATCATAGATGAGATCCATCTGCTTGGGGAGGAA
AGAGGCCCTGTTCTAGAGGTCATTGTATCTCGAACAAATTTTATCTCATCACACACAGAAAAGCCTGTTAGAATA
GTTGGACTATCTACTGCATTAGCTAATGCCAGAGACCTTGCTGATTGGCTCAATATTAAGCAGATGGGCTTGTTT
AACTTCCGACCATCAGTACGCCCAGTTCCACTGGAAGTTCACATTCAAGGCTTTCCAGGTCAACATTACTGTCCT
CGTATGGCTAGTATGAACAAGCCTGCATTTCAGGCAATTAGAAGCCATTCTCCAGCCAAACCTGTTTTGATATTT
GTCTCATCAAGACGTCAAACTCGTCTTACTGCTTTGGAATTGATCGCCTTCCTGGCTACTGAAGAAGATCCAAAG
CAGTGGTTAAACATGGATGAAAGAGAGATGGAGAACATCATTGCAACAGTAAGAGATTCCAACCTCAAGCTGACC
CTTGCTTTCGGGATAGGAATGCATCATGCTGGACTACATGAGAGGGACCGAAAAACAGTAGAGGAACTATTTGTA
AACTGTAAAGTTCAGGTTCTTATTGCTACAAGCACATTAGCCTGGGGTGTAAACTTTCCAGCTCATTTAGTAATT
ATTAAGGGAACAGAATACTATGATGGAAAAACAAGACGTTATGTGGATTTTCCCATTACAGATGTCCTCCAGATG
ATGGGGCGTGCTGGGAGGCCGCAGTTCGATGACCAAGGCAAAGCTGTAATTCTAGTTCATGACATAAAGAAAGAC
TTTTATAAAAAATTTCTTTATGAACCTTTCCCAGTAGAATCAAGTTTATTAGGAGTGCTCTCTGACCACTTAAAT
GCAGAGATTGCTGGTGGTACAATTACATCTAAGCAAGATGCATTGGATTATATCACCTGGACTTACTTTTTCCGA
CGTCTTATCATGAATCCCAGCTATTACAATTTGGGTGATGTGAGCCATGATTCTGTGAACAAGTTTCTGTCCCAT
CTGATTGAGAAGTCCCTGATTGAATTGGAACTTTCCTACTGTATTGAAATTGGAGAGGATAATCGCAGCATTGAA
CCTCTAACTTATGGCCGAATTGCCTCCTATTACTATTTGAAGCATCAAACAGTTAAAATGTTCAAGGACCGCTTG
AAGCCTGAATGCAGTACTGAAGAACTGCTTTCAATTCTAAGTGATGCAGAAGAATATACAGATTTGCCAGTGAGA
CACAATGAAGATCATATGAATAGTGAACTGGCAAAATGTCTTCCCATTGAATCAAATCCTCATTCATTTGACAGC
CCTCACACCAAAGCACATCTCCTGCTACAGGCACATCTCAGCCGAGCCATGCTACCCTGCCCAGATTATGACACT
GATACCAAAACAGTCTTGGACCAAGCTCTCAGAGTATGTCAGGCAATGCTGGACGTGGCTGCAAACCAGGGCTGG
CTGGTGACTGTCCTGAATATCACCAACCTGATTCAGATGGTGATCCAGGGTCGGTGGTTAAAGGACTCTTCTCTT
CTTACACTACCAAACATAGAAAACCATCATCTTCACCTTTTCAAGAAATGGAAGCCGATTATGAAGGGCCCACAT
GCTAGGGGTCGGACCTCCATCGAGTGCCTTCCTGAACTGATCCATGCCTGTGGAGGGAAAGACCATGTATTTAGC
TCCATGGTAGAAAGTGAGCTACATGCTGCAAAAACGAAACAGGCATGGAATTTCTTATCTCACTTGCCAGTGATA
AATGTTGGCATAAGTGTTAAAGGCTCGTGGGATGACTTAGTTGAAGGACATAATGAACTCTCTGTCTCAACTCTG
ACTGCAGACAAACGAGATGACAACAAATGGATCAAATTGCATGCTGACCAAGAGTATGTGCTTCAAGTGAGCTTG
CAGAGAGTCCACTTTGGGTTCCACAAGGGAAAGCCAGAGAGCTGTGCAGTTACTCCTCGATTTCCCAAATCAAAA
GACGAAGGATGGTTTTTGATATTAGGAGAAGTGGATAAGAGAGAACTTATTGCTTTGAAAAGAGTAGGATATATT

FIGURE 7250B

CGAAATCATCATGTTGCTTCCCTTTCTTTTTATACCCCTGAAATACCTGGAAGGTATATCTACACATTATATTTC
ATGAGCGACTGCTACCTTGGCCTGGACCAGCAGTATGACAATCTATCTCAACGTTACACAAGCGAGTCTTTCTGC
ACAGGTCAACACCAAGGTCTCTGATTCCCTGACTGACCTGGCATTAAAGTAACTTGACCTGAACAATCCATTTGA
AAGGAGTGGCTAAGAATTCTCTCTGTTCAGTCATCTAGACAAATCGAATTACTTGATGTTTGCCTTGAAAGAATC
AACTTCTAACCTCAACCATCCAGGAAATTGACAGTGGCTGCAGTATTGACTCCAGTGACATAAAGTTAACCACAG
TGGCCTTTTAACAAATGTTGCCTTTTATAATGTTATCTTTATGAGTTTCTTGATATGTAAGATGAAAAAGCATTT
AGAATAATCTTTTAATTTGTGTATATTTGGGATGATATTTAGGAGCTATCAATCAAATTTTACATCTCACAATGT
ACTGTTTACATGGATATTGGCTGCTTTTTTTAAGGAAAACCACATTGAGATGTGACAAGTGTTAGGACTTGTCAC
AGATTTCTAACTCTGCCGCATAAACTATAAATCTGTAAGGTGGTACACAGCGTGTCTTGTTAGCAAAATTTATAC
TTTGATATGATCACATGTAGAAGTAGCTTCAAGAATTTCTTGTAGTCATAAATGTTTAATAATATATGATGTAAA
ATTATATTATGGAGCCTAATGATGATAACAAAGAAAACAATATACTGATCTTAGAAAATGTAGACATGGTTAACT
GGGAAATAAAATATAGAGTGGCACTTCAAGACAAAAAAAAAAAAA

FIGURE 7251

GGCCGCGCGTCCCAGAGAGCCAGCCCCGGCCGCCGTCGCGGGGAAGTGCCGCCTGGTGGGGTCACGGCGCCTGAA
GCCCACGTGCGCCGCCGAGCCCGAGGTGGCCTCGAGCGCGGCGGCTGACAGCACAGCCCGCCTGAGCTGCCTCCC
GCGCTCCTCCCCGAGGAAAGGATTTTGATTTCAAAGAAAGGAAGGAAGGAAGGACAACTCCCAGCTTCCCCGTCC
CGCCCTCCCCGCTCCGAGGGCCGCGCCAGGCCATGCCCAAGAAGGCGGCGGCGGCGGCGAACCAGCAGAAGGGAC
TTTCCTGGCAGCCCGGCGACGAGGAGCGCGGACAGTGAGTTTGCTCTGCCCCGGTTCATGGTTCCTGCAAGCCCT
CTAGGAGGCCGAAAGCTGCAGCCCCTCCCCTTGCCCCGAAGAGCCTTCCGCGTTCTCTCGCCCTCGGGCCCACCC
CGCGCCGCCCGGGCTCCCGCCGCCGCAGCCCAGTGCCCTCTGCCCGCGGCGGTGGATGGCATGATGGTGCGGGGA
AGGCACCGCGGCCTTGGCCAGCTGAGTCGCGACGGCCGCCGGGGCGGCGGCAGTGGCCGCGGCAGCGGCGGTGGT
AGCGGGCTCCCCAGCGGCATGCCAGTGCCCCCCGGGCGCGATGGCTAGCGGCAGCGCCGGGAAGCCCACTGGCGA
GGCGGCTTCTCCGGCTCCTGCGAGCGCCATCGGCGGGGCCAGCTCGCAGCCGCGGAAGAGGCTGGTATCCGTCTG
CGACCACTGCAAGGGCAAGATGCAGCTGGTGGCTGACCTGCTGCTGCTGTCGAGCGAGGCGCGGCCCGTGCTCTT
CGAGGGCCCCGCCTCCTCTGGTGCCGGCGCCGAGTCCTTCGAGCAGTGCCGGGACACCATCATCGCGCGCACCAA
GGGGCTCTCCATCCTCACCCACGACGTGCAGAGCCAGCTCAACATGGGCCGCTTCGGGGAGGCGGGGGACAGCCT
GGTGGAGCTGGGCGACCTGGTGGTGTCGCTGACCGAGTGCTCGGCCCACGCGGCCTATCTGGCCGCTGTGGCCAC
GCCGGGCGCCCAGCCCGCGCAGCCGGGCCTGGTGGACCGCTACCGCGTGACGCGATGCCGCCACGAGGTGGAGCA
GGGTTGCGCCGTGCTGCGCGCCACGCCGCTGGCCGACATGACGCCGCAGCTGCTGCTGGAGGTGTCGCAGGGCCT
GTCGCGCAACCTCAAGTTCCTGACGGACGCGTGCGCCCTGGCCAGTGACAAGTCACGGGACCGCTTTTCGCGGGA
GCAGTTCAAGCTGGGCGTCAAGTGCATGAGCACCAGCGCGTCGGCGCTGCTGGCCTGCGTGCGCGAGGTGAAGGT
GGCGCCCAGTGAGCTGGCGCGCAGCCGCTGTGCGCTCTTCAGCGGGCCCCTGGTGCAGGCAGTGAGCGCCCTGGT
AGGCTTCGCCACCGAGCCGCAGTTCCTGGGTCGCGCGGCAGCTGTGAGCGCCGAGGGCAAGGCGGTGCAGACCGC
CATCCTGGGCGGCGCCATGAGCGTGGTGTCGGCCTGCGTGCTCCTGACCCAGTGCCTCAGGGATCTGGCGCAGCA
CCCCGACGGGGGCGCCAAGATGTCGGACCACAGGGAGAGGCTGAGGAACTCGGCCTGCGCCGTGTCTGAAGGCTG
CACCCTGCTATCTCAGGCTTTAAGGGAGAGGTCTTCGCCCAGGACTTTACCGCCAGTGAATTCCAATTCTGTGAA
TTAGCACCCCACCCCCATACCCCTTCTTCCACCCCCAGACTAAAGGAAGATACTTACTCTCTGCCCCTCTCCATT
TATACCAAAGAAATCATAGGTGAAACCCCCTACCCTCCCCAACGTTAAATGCTCGAGAGGAATCTTCCACAAGGC
AGGGCCATGCACGCAACCTGCACACGCACTTGGAGGGCCCAGGTGTCTCTCCACCAGCCCCCATGCAGTAGGGAC
TGGAAGATATGTCATCTGCTGGTTGTGTTATCACTCCCACCCCCTACCCCAGCCCGTCTTCCGGAATTTCTCAAC
TAAATTTCATTATTGGGCAGGAAGGAGGTCATGGGTTCATTTCATTTTTGTTTTTTGTGTTTTTAATTAAAAGAA
AGGTTACCTCAGTTTTCACTCCTTAGACATGGATGTAGCTACCTTTTTTTGTATGTCTTTTTTTTTTTAAGCAAT
CGTGTTGAATTAGGAGTATACTTGGTGAGGAAAGAGTATGAATTTGCCATGTGATTTGCAAATGGGGGGAAGCTA
CTGTGAGCGTGTGTTTTTTTAATTTACACTATAGAGTGATTTTTTTTCCCCCAACGTCAAGTTTTTACCTTGCAT
GTACTGGAGTATTTATTTCATCTATTAAAATGTTATGTTTCTCAGAAAAAAACCTCGTGGCGAATTCTTGGCCTC
GAGGGCCAAAT

FIGURE 7252

MASGSAGKPTGEAASPAPASAIGGASSQPRKRLVSVCDHCKGKMQLVADLLLLSSEARPVLFEGPASSGAGAESF
EQCRDTIIARTKGLSILTHDVQSQLNMGRFGEAGDSLVELGDLVVSLTECSAHAAYLAAVATPGAQPAQPGLVDR
YRVTRCRHEVEQGCAVLRATPLADMTPQLLLEVSQGLSRNLKFLTDACALASDKSRDRFSREQFKLGVKCMSTSA
SALLACVREVKVAPSELARSRCALFSGPLVQAVSALVGFATEPQFLGRAAAVSAEGKAVQTAILGGAMSVVSACV
LLTQCLRDLAQHPDGGAKMSDHRERLRNSACAVSEGCTLLSQALRERSSPRTLPPVNSNSVN

FIGURE 7253

ATCGAATCCATACCCGAATTTCAACTTTAACATCTCTCATCAAGGAGACTATGCAGTGCTTGCTGCTGAACCTGA
GCTGCAAGTTGGAATTGATATAATGAAGACTAGTTTTCCAGGTCGTGGTTCAATTCCAGAATTCTTTCATATTAT
GAAAAGAAAGTTTACCAACAAAGAATGGGAAACAATCAGAAGCTTTAAGGATGAGTGGACTCAGCTGGATATGTT
TTATAGGAATTGGGCACTTAAGGAAAGCTTCATAAAAGCCATTGGTGTTGGACTAGGATTTGAATTGCAGCGGCT
TGAATTTGATCTATCTCCATTAAACTTGGATATAGGCCAAGTTTATAAAGAAACACGTTTATTCCTGGATGGAGA
GGAAGAAAAAGAATGGGCATTTGAGGAAAGCAAAATAGATGAGCACCATTTTGTTGCAGTTGCTCTTAGGAAACC
CGACGGATCTAGACATCAGGATGTTCCATCTCAGGATGATTCCAAACCAACCCAGAGGCAATTTACTATTCTCAA
CTTTAATGATTTAATGTCATCTGCCGTTCCCATGACACCTGAAGATCCTTCATTTTGGGACTGTTTTTGCTTCAC
AGAAGAAATTCCAATACGAAATGGTACAAAGTCATGATGATTCCCTGAGTAACAAAGGGAAATGAAAACTGTTTG
TGATCTTCCGTATTCACTGAAAAATAAATGCTTGTTTAGTATCAAATTTTATTTCACGAAAGTTTTTTAAAGAAC
AGAAACTTTTCCAATTAAAAAAAAAAAGCAGACTTCTGGTTCAAGATAGCTCACTGGAATACATGTTTACCTCTT
TCTTTCCTAAATTGCATTGAATTGATAGGAAGGATGGCGGAATCTTAAAGTGATACATGCTAACTGTAGAAAAAA
ATAGAAAATGCACATAAGCAAAAGGAAACATTTAAATGCTATCTTTCAAAGATAACTACTCTTAAAACCTTGAGT
ATCTTTTCAGACCTTTTTCTTGGCAAATGAATCCATATTGACATATTTGATTTTTTTTAAAAACATGGAAACGTA
CTGTTTTGTAAATTCTTTTTAACTGCACATCTACTGTTCATAAATATACCTCTGTAACATAACTTTTTGTGGTTC
TAATGTACTCTGTTGTATAGCTAATACAAGTTAGGATGCTTTTGGCCAGAGGTAACAGTGTCCAAATATAATTGG
CCTAAGTAACCTAGGAAATTGTTTGACATAACACAGGGTTCAGGGGTGTCATTAAAGACACACTTTTTTTGCCTT
GACCTCAGTTGGTTTGTTTTGCCTTAGGCTATTCCACCTCTCGATCACAAGAGCTGCTGCTATAACTTCCAGTTT
TACATCTTTGTAAAATTGTATCTCAAAGGCAGAAAAGGCCATTTCGTCTCTCATTTGTTTTATCCATGAGGAAGA
TTTTTAACAAAAGCCTCCAGAAGATTTCCCCTCAGTTTCCATTGACTTAGATCAGGTTACAGAGAAAGGCAATGT
CTGACATTTTTGGTCTCTGTTAGAAGTAGACTCTGTTGAAAAGAAAGAAGCTAAGCTAGGTGTGGAGAATGGAAT
TGGAAGCCCACTGCCTTCCCATAAGAAAGGTTTACCATAATTTACTTACTTTTTTCTGTGTTAGACATTTTGATT
ATCTGCAGTTTATTACTACAAGCAGTGGCAGAGTGAATGTCCTTGTACATTTTGAGTTACATGCTTAATTATGTC
CTTGAGAAAGTTTCTAATAGTGGAATGATTGGTTTGACTGGTTCATAGGGCTTTAATTATACAATTTACCCCTCT
AATTAGTACTATATGTATGTGACTTCCCTCCCCCTGCCAGAATACTCCTTGGTCAATTGTAGGTATTCTTTTTGG
TTTAATTTTTGCCAATGTAATTAAAAAATGGTATGTCATTTTTAAAATTTGTATTTCTTTCATTACAAATAAGAT
TGTTATGTCAGTATTGTTATTGGCTTTTCGTATTCCTCTTAACGTGATCCGTCTGTTCATTGTTTTTACCTGTTT
TCGTTTTAGCAAGTAGTACTTAATTTAAAGTGTGAACTTAATATATAAGATGCCAGGACCATCATATTGATGACA
AAAATCTATTATGTGGTTGTAGTGCATGTCTTGGAGTTAAACTCTTAAGTATCAAGAAGTAAAATAATTTCATTG
TTTCTGTTACTAACATTAAAAGTGTGCAAATTGTATAAAATTAGGTACTTCGATTAGTAAAAGAAAAAAATTTGA
ATGTTTTTTTTTTTATTTTATTAAGCATGCCCAGTTATGCCAAGCATAGTAAATAAAGGTCAAGTAGCATTTATA
ATAGAGGAAGTATTGTTATCCCTAGCATGAGTGTAATGGTGATATGAAAAACTTTGTCTTGTCATTATAATAATA
AAAAAATGAACATTTATTATGAAAAAAAAAAAAAAAAAA

FIGURE 7254

GCTGTCATGGCGGGTGTGCTGAAGAAGACCACTGGCCTTGTGGGATTGGCTGTGTGCAATACTCCTCACGAGGTA
TGTACCTTTGTTCTTTCTTCGTTCTTGAATTCCCAAGGAAGACTAAATTCCTGTCACTTTGCTTATTGCAGGGTT
AACGGGATACAGATGTTTCAAGCCCTTAATTACAAGCCGCGTGAGCTCTTGAGACACGGGCGCTGTCCACCTACT
TCGTTGATCCGATGTCACATTTTTATTTATTTTCGCCATGACCTCTTTATTAAGCCAGTTTTCTTGTTGACTTTT
TCCTTGACATTTTCATGGCTTCACTTGTGCTTGCTTCTGTCAGCGCCATCTCAAATTTATATCTCCGTTTTCCAT
CTTTTCTCCTTGCCTTACCGTTTCTGCTTAGGTGCGTTGGATTACATATATTTAGGCTTACTAAAGGTACTGCCC
CCTTTTCCTTCTGTTAGGTCTTTTCCATCTGTATTCACGAATGTTTTCATCAAAAAAACCCACAAAATTTTTTTT
ATTCTTCTTGTCCCTTCTATAATCACACCATTTCTTTGCTTCACTTTACAGATAACTCAAAAGAGTTATCTCTAT
TTTCTCCAATTTCTTTCTTATTCACCCTTGAATGCACTCAGTCACCCTTGGCGTTTTTCAAGTTCACCAATTATC
TCCATGCTGCCAAATCCAATGGTCAGCTCATATTTCTCACCTTCATTGACCTAATAGCAGCGTTTTTTTGACACA
TTTGACACTTTTTCCATCACGCTCTTTTCAAGTTCACCAGTTATCTCCATGTTGCCAAATCCAATGGTCAGCTTA
TGTTTCTCACCTTCATTGACCTAATAGCAGCGTTTTTTTTTTTTGACACATTTGACACTTTTTCCATCATGCGC
TTTCTTTACTGGGCTTCAGGACTCCCCCAGTCTCCTGATTTTTTCCCCCTACTCTTTGGCTTTCTCTTTTTCTGG
TTATTTCTCTTATGCCCACTTTTAAAATTTGAGTTAGTCAGGATTTAGTTCTTGGACCTTTTCTTTTGGACCTGT
ACTCTGTCACCAAGAGAGAGCAAATCCAAATAGAGAACGGTTTTAAATACCACCTATACACTGACAACAGATTTC
CATGTAAAGCACTGACCTCTTCCTTTATAAAAGTCCTGAATATTTAATTGCTTAGTGGGCATCTCTATTTGTATG
TGTCAGACAAGGCAACCCAAACTTAACATGTCCAAAATGGGGTTCCTGATCTTCTGCCTAAAACCTGCTCTTCTC
TCAGTCTTGCTCATCTCAATTAATGGCAGCTCAATTATTTTGACTCAGGTCAGAAACTTGAAATCATCTTTGATT
CCTTCCTTTCTCTTACACTCCACATTTGTTATTTCAGTAAACCCTCTAGGTTCCACCTTCAAAATATATCTTGAT
TTTGACAACATCTCACTACCTCCTCTGCTACTACCCTCTTCCTCAGTCACCATCATCACTGATGTGGATAATTGC
ATTCACTTCTTAACTGCCTCTCAATGCTTGTCACAGCCTCCATTTGGTCTTTTTTTCCAGCCAGGCTACTAGAGT
TAGTCTGTTAAAATATGAGGTAGGTCAGATCTCTCCTTTCCTTAAAACTAATGGCTTTCCATCTCACTCTAAATA
AAGACAAGTTTCTTACTGTGACCCTCTGGTTCACTATTCTACTGATTTATTTTGTTATGTCTCTACTAGAATGTA
GGTTTCATGAAGGCAGGAATTTGTGATTGTTTCACTGCTAGAACTCTGTCACATAGTATGTGCTCAGTAAATAGT
GTTAGTTGAATGAGTGTCTTGCACTTCCTATGATTTCATAATAACTTTATTGTCATTGATGTAAAGAACTGAACT
CATGGTTTTTCCCTTCTAAATATATTTCTTCCTCTGTGGGCTGTATTTTTCTTGATAGTTTCAGATCTTTCTACT
CCCTAGGCTGGGAATTTGGACATCATAGTTGGTATTTCTCTTATACTTGTACTCTCATATTCATTCCAATGATGA
TTTTTATTTTTATTTTTTTTGCTGATCCTTTTCTATAACAGCTCTCCAGTCTGACTTCTGTTTACTATTTCTATT
GTTACTACCATAGTTCAGGTCCTTGTTCTTGTTTAGAGAATTGCAACAACCTCCTTACTGGCCTTTCTGCCTTGT
TTCTCCTTCAGTCCTTTTAACTCACTACAATGAAGCTAATTTTCCTAATCTAATCATATGATTTTCCTAAATCTT
TTAATTGTCCACAGGATAAAGCCCGAATGCTTTAACTTGGAATGCAGAACCACTTATAATGTGACATTTTCTCTA
ACTTTATCTCCTATGCATTTCCTTATGTGTCCTGTACAGCAGTATATTCCAAAATCCCCAGTGGATGTCTGAAAA
CCACATATAGTACCAAACTGTATATATGCTATGTTTTGTTTCATACATACCTATAATAAAGTTTAATTTATGAAT
TAGGCACAATAAGAGATAAGCAGGCTGGACGTGCTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCTGAGGC
GGGTGGATTGCTTTAGCCCAGGAGTTTAAGACCAGCCTGGCCAACATGGCAAAACCCCGTCTCTATAAAAAATGT
GGAAATTAATCAGGTGTGGTGGTGTGCACCTAGTCCCAGCTACTCGGGAGGCAGAGGCAGCAGGATTGCTTGAGC
CCCAGAGGTTGAGGCTGCAGTGAGCTGTGATGATGCCATTACACTCTAGCCTGGGTGATGGAGTGAGACCCTGTC
TCAAAAAAG

FIGURE 7255

MAGVLKKTTGLVGLAVCNTPHEVCTFVLSSFLNSQGRLNSCHFAYCRVNGIQMFQALNYKPRELLRHGRCPPTSL
IRCHIFIYFRHDLFIKPVFLLTFSLTFSWLHLCLLLSAPSQIYISVFHLFSLPYRFCLGALDYIYLGLLKVLPPF
PSVRSFPSVFTNVFIKKTHKIFFILLVPSIITPFLCFTLQITQKSYLYFLQFLSYSPLNALSHPWRFSSSPIISM
LPNPMVSSYFSPSLT

FIGURE 7256

AGTCGCTCCTAACGCTCCCTGGCCCGGCCGGGGCCGCGCAGTTAGGGCATCTGAGGCGGGGAGAAGCGGCGGGGA
GACGCCGGCTGCCAGCATGTCGCTGCCTCCGGAGAAAGCCTCCGAGCTGAAGCAGCTCATCCACCAGCAGCTGAG
CAAGATGGATGTCCATGGTAGAATAAGAGAAATCCTTGCTGAGACTATACGGGAAGAATTGGCACCTGATCAACA
GCATTTATCAACAGAAGATTTGATCAAAGCCCTTAGACGTCGAGGAATCATTGACGATGTGATGAAAGAACTTAA
TTTTGTTACTGACAGTGTTGAGCAAGAACTCCCTTCCTCTCCAAAACAACCTATTTGTTTTGATAGACAATCGAC
ATTAAAAAAAACTAATATTGATCCAACACGGAGGTATCTTTACCTTCAGGTTTTGGGTGGAAAAGCTTTCTTGGA
ACATCTGCAAGAACCTGAGCCTTTACCTGGACAAGTTTGTTCAACGTTTACTTTATGTTTACATTATCGAAACCA
ACGTTTTCGTTCTAAACCTGTTCCATGTGCCTGTGAACCAGATTTTCATGATGGCTTTTTACTTGAAGTACACAG
AGAAAGCTTGGGTGATGGAACTAGAATGGCTGATTCAACAACAATGTTATCAATAAGTGATCCAATTCATATGGT
GCTAATCAAAACAGACATATTTGGTGAGACGACTTTAGTAGCATCATATTTTCTGGAATGGCGATCGGTTTTGGG
CTCAGAAAATGGAGTGACCAGTCTGACTGTGGAACTTATGGGTGTAGGCACAGAATCAAAAGTTTCTGTGGGAAT
TTTAAATATAAAACTTGAAATGTATCCACCACTCAATCAAACGTTATCTCAAGAAGTAGTGAACACACAGCTTGC
TTTGGAACGTCAGAAAACTGCAGAGAAAGAGCGATTATTTCTTGTATATGCTAAGCAGTGGTGGAGAGAATATTT
GCAAATTCGACCCTCACACAACTCACGACTGGTTAAGATTTTTGCACAGGATGAAAGTGGGATAAATAGACCAGT
CTGTTCCTATGTTAAACCACTTCGAGCTGGACGGCTTCTTGATACTCCAAGGCAAGCAGCAAGATTTGTTAATGT
CCTTGGTTATGAACGAGCCCCTGTTATTGGAGGAGGAGGTAAACAGGAGCAGTGGTGCACTCTGCTGGCCTTTCT
CTGTAGAAACAAGGGTGACTGTGAAGATCACGCTAACCTTCTGTGCAGCCTTCTTCTTGGATATGGATTAGAAGC
CTTTGTTTGTGTTGGGACCAAGGCAAAAGGAGTACCTCATGCATGGGTTATGACTTGTGGAACTGATGGGGCCAT
CACTTTTTGGGAGAGTTTAACAGGACACAGGTACATCCATAAACCTACCAATCCTGATGAACCTCCAGTTGCTGA
ACAGCCCAAACCACTGTACCCATATCGAACAATTGGTTGTGTTTTCAACCATCAGATGTTCCTGGGAAATTGTCA
ACCCTCTGATGCAGTAGAAACCTGTGTATTTGATTTGAACGATGAATCCAAATGGAAACCCATGAGTGAGGAAGC
AATTAAATCTGTGTGTGCTCCTGGAGCTACAACATCCCTTCCTCCCTTTCCACCTCTGTGTGCATCCACAATTGA
CGCGTCAGTAACAAGTAATGAAATTGAAATGCAGCTGAGGCTCCTGGTGTCAGAACACAGGAAGGATCTTGGCCT
CACTACTGTTTGGGAAGACCAGCTCTCCTACCTTTTATCACCAGCTTTGGCTTCTTATGAATTTGAGCGTACAAC
AAGTATATCAGCAGGCAATGAAGAATTTCAAGATGCCATAAGAAGGGCTGTACCTGATGGTCACACATTTAAAGG
GTTCCCAATACATTTTGTGTATAGAAATGCAGGACGTGCATTTGCCACATGTCTTCGATCTCCTTTCTGTGAAGA
AATAATCTGTTGCCGTGGAGACCAAGTGCGACTGGCAGTTCGTGTCCGAGTATTTACTTACCCTGAATCTGCATG
TGCTGTTTGGATCATGTTTGCTTGTAAATATCGCTCGGTATTATAGGCCAATATTTATATAAGATTTATACCTG
TGTTTAATTGGAATTTTACACATTGTACATTACTTAGCTATTTAGAGGTTTGTTATTTTAAAATCACAATCTGGC
TTGAATGGCATACTTCAATTTTGTATATACTTGACTGGTAATGTTTAAAAAAAATCATGCATTCCTTTAAAAATT
AAGGCTGAAAAACTTGTATAAATCTCCCTGGAATTTAGTATAAATTAAGTGTATATTCTATTTTAATAAATGCTA
CTTTGTTTACAGTT

FIGURE 7257

MSLPPEKASELKQLIHQQLSKMDVHGRIREILAETIREELAPDQQHLSTEDLIKALRRRGIIDDVMKELNFVTDS
VEQELPSSPKQPICFDRQSTLKKTNIDPTRRYLYLQVLGGKAFLEHLQEPEPLPGQVCSTFTLCLHYRNQRFRSK
PVPCACEPDFHDGFLLEVHRESLGDGTRMADSTTMLSISDPIHMVLIKTDIFGETTLVASYFLEWRSVLGSENGV
TSLTVELMGVGTESKVSVGILNIKLEMYPPLNQTLSQEVVNTQLALERQKTAEKERLFLVYAKQWWREYLQIRPS
HNSRLVKIFAQDESGINRPVCSYVKPLRAGRLLDTPRQAARFVNVLGYERAPVIGGGGKQEQWCTLLAFLCRNKG
DCEDHANLLCSLLLGYGLEAFVCVGTKAKGVPHAWVMTCGTDGAITFWESLTGHRYIHKPTNPDEPPVAEQPKPL
YPYRTIGCVFNHQMFLGNCQPSDAVETCVFDLNDESKWKPMSEEAIKSVCAPGATTSLPPFPPLCASTIDASVTS
NEIEMQLRLLVSEHRKDLGLTTVWEDQLSYLLSPALASYEFERTTSISAGNEEFQDAIRRAVPDGHTFKGFPIHF
VYRNAGRAFATCLRSPFCEEIICCRGDQVRLAVRVRVFTYPESACAVWIMFACKYRSVL

FIGURE 7258

ATGAGGTGAACTGCATTAACCTAAAGTGCTGCAGAGATAAACTTAAAGCAGGAAGCAACATACCATGAATGTACT
GCAAGGGAACACATTTGTGTCATGTGAAGAGACATGACAAAAACAGCCCTCCTTAAATTATTTGTGGCAATAGTG
ATCACATTCATTTTAATTTTGCCGGAATATTTCAAGACACCGAAAGAAAGAACATTGGAGCTATCATGTCTGGAA
GTGTGTTTGCAATCTAATTTTACCTATTCACTCTCCTCCTTAAATTTTTCTTTTGTGACTTTTCTGCAACCAGTA
AGGGAAACTCAGATTATCATGAGAATCTTTCTAAATCCCTCCAATTTTCGTAACTTCACCAGGACTTGCCAAGAC
ATCACAGGTGAATTTAAAATGTGCTCCTCGTGTTTGGTTTGTGAGTCTAAAGGAAACATGGATTTTATTTCTCAG
GAACAAACATCAAAAGTTCTTATCAGGAGAGGATCAATGGAAGTGAAAGCAAATGATTTTCATTCACCTTGTCAG
CACTTTAACTTCAGTGTAGCTCCTCTGGTTGACCACTTGGAGGAATATAACACTACCTGTCATCTAAAAAACCAC
ACTGGAAGATCAACAATCATGGAGGATGAGCCAAGCAAGGAGAAATCGATAAACTACACTTGTAGAATCATGGAA
TACCCGAATGATTGTATACACATTTCTTTGCACCTGGAGATGGATATAAAAAATATCACTTGTTCCATGAAGATC
ACTTGGTATATTTTAGTTCTATTAGTTTTTATATTTTTGATCATCCTCACTATCCGCAAAATACTTGAAGGCCAG
AGAAGAGTGCAAAAGTGGCAGAGTCATAGAGACAAACCTACATCTGTTCTCTTAAGAGGAAGTGATTCGGAGAAA
CTGAGAGCATTGAATGTGCAGGTTCTTTCAGCAGAGACCACGCAGAGGCTGCCTTTGGATCAAGTCCAGGAAGTG
CTTCCCCCAATTCCAGAACTATAAGTTACTTCCACAGTGCATCAGTGAGATCAATATACACGAATATCCCCGGGC
AAGTTGGACCGAGCCCTTTGAAGAATACTCAGAAGTTTATTTTGTGAATGAGTAGACTGGAAAATGTTTGTGTCC
AGCTGAGGATGCACAGTTGGAAAGCAGGAGGAATGCTGACTGGTTGATGAAAACTAGCTTAAGAGCATTCATTCG
CTCCATGAGATCAAGGGAACAAGAGTGTTTGCAAGAAGCCATTATGAGTCATGGAAAAAAAGATGATGAAACCCA
TGGAAACAGCAAGAGAATTCCCACTCTCTCTCTTCTTAAAAAAAATCTATCATTATACAGCACAGAGTGGAGCCA
AGTTTTTAATTTTGAGGAACCAAAAACAGGATCAAATATGAAAACCCTTTCTTTTATTGGGCCACATTGTAGATG
CTGATTTGATAATTGTTTCCTATGCAGATAGATTATTTTTATTTCACAGATTATTTAAAAGGGAAGAGGGCCTGG
TTGTTTATTTATATGTTTGTTTGCATTTATGAATCTTGCTGCCTTTTAGCACCAGGATGTTTTTAAAAAAATTCA
AAGAGGCCAGGCGCAGTGGCTCATGCCTGTAATCCCAGCACTTTGGGATTCTGAGGTGGGAGGATCATGAGGTCA
AGGGATCGAGACCATCCTGGCCAACATGGTGAAACCCTGTCTCTACTAAAAACACAAAAATTAGCTGGGTGTGGT
GGTGCGCGCCTGTAGTCCCAGCTCCTCAGGAGGCTGAGGCAGGAGAATCACTTGAACCTGGCAGGCAGAGTTTGC
AGTGAACCAAGATCACGCCACTGCATTACAGCCTGGTGCAGAGCAAGACTCTGTCTCAAAAAAAAAAAAAAAAAA
AAAAA

FIGURE 7259

MTKTALLKLFVAIVITFILILPEYFKTPKERTLELSCLEVCLQSNFTYSLSSLNFSFVTFLQPVRETQIIMRIFL
NPSNFRNFTRTCQDITGEFKMCSSCLVCESKGNMDFISQEQTSKVLIRRGSMEVKANDFHSPCQHFNFSVAPLVD
HLEEYNTTCHLKNHTGRSTIMEDEPSKEKSINYTCRIMEYPNDCIHISLHLEMDIKNITCSMKITWYILVLLVFI
FLIILTIRKILEGQRRVQKWQSHRDKPTSVLLRGSDSEKLRALNVQVLSAETTQRLPLDQVQEVLPPIPEL

FIGURE 7260A

GCATATCTTGAGTAGAACTTAACATATCTTGAATGGGATATTTTTTTCTTTTATTCTTATGAGTGGTCTCACACA
GGACCAAACAGCAGGCCAGCATAGCACCACGTGATCTGAGCTTGTTTTTACTCTCTCCTTTTTCATAAACAGAGT
CCCAGATTAATGCCAGTAGTTGATTTTGGGTCTTTGGGGTAGTGAAGCTTGTGGATTTGACTTCTCTGATTCCTT
TTGCTGACCTTGAGTGGATTGTATCTTTCACTGTTAATTATAATAATTTAAAAATTGAGTTCTACTTACTGGACA
TGAATCTCTGCACTTGAAAGTTAACATATTAAAAGCATATTTTTTTTCTTCCTTGGTTTTCTTGTTCATGTGGAT
AACCCAGAGAATGCCTGAATCTAAGGTGCCATCCTCTGAGAATCATCGCCCAGAAATGTGCTCTAGCTGCAATGT
TCCTCTTCCCATTGGAGATAGCAGCTCCTTCTCTGGGAGTTGTTCCAGCAGTCCAGAAAGGATAGTTTCTCAAAC
TTCCTCTGTTGAGAACCCATTGGAGAACCAGAAAAATGATCAAAATAATTCAGATACTAAGATCTCTGAGACAGA
GACCCTTAAATCATCACAGAATTTTCAGACTCTGCCTTCATCTCCACTTCTGGTCCCCCAAGAATCTTTGGCCTC
TTCTGAGGTCAAAGAGAATTTACGTATAGATTCTTCTTCAGCTTCACAGCATGGACGGGATGCCATCCTCTATCT
CCAGACACAAGTAGCTGAAATGTCCCGAGTGATACGTGATCTGCAGTCCAGGAGCTGTTTTAGATTTCATCATTC
TAGGCCAAGTGAGAACTCCTCAGTTCCTTGGGACATCTCCACCTCTAAAGAGGAAAATTTATCCACAGTTGAAGA
AGAAACTGATTACAAATCACCATCAGCTGATGACAAAGGGCAGCCATCTGACCCCAGCCAATCTAGTTTCACAGG
TCTTTTGAAGAGAATGGAACAAAGAGGTGTTATAAAAAGGGTGACATTACAATCTGAAGCGGAGTCATGTGAAGG
GAAACCTGATTGTGTGACTTCTAAAAAACGTTTGGTTCCTCCATTGCATCCTCTTCTGAGAATTGCCACCACTGA
GGTTTTTAAAGACCCTGCTGATTGCCATCCTTCTTCCTTCATGGGACACAGGGTATATCCTGTGGCCAAGGACAC
CTCTCCTTTCCAACCAAACCCACCAGCTGAAGGCCCCATTGTAGAAGCATTAGAACACAGCAAAAGAGGAAACAC
AACATCCCCTCTAGATTCTACCTCAAAAGAAATGGAGGTCATGGGTTGTAGGTTTTACCACGCTGCCTCCATTGC
AGCCCGAGCTGCTAGCTACATGGCCTATATGACTCAATATCAGCGTAAACTCTGGGAAGACATGGAAGATCTGGT
TCATGACCCAGAATTTGATCGTGGAAAAGCAAGATGCATAATATCTGATGGTATGGATGCAGGCCTTTGGCAACT
TTGTACTACTAGGGACATAATGGACTCTGTAGTCAGAGTTATGGCCATGGCCATAGACTATAGACGGCAGGCCTG
GCTTCGACTTACATCTCTCACTAAGAAAACCCAGGAGAAGATCTCCCACTTGCCCTTTGATGGTACTTCCCTTTT
TGGACAAGATGTGAAAGCTGTTGTTGCAGAAGACAACAATATAAAAGAAAATGACTATAAAGATCACAAATACTA
TAATCAGCATCGATACTTTTATAGTCATGATCAGAAAGCACATTATCACAATAGAGGATACTCCAAAGGGGATTG
GTACAAACCTCGAAACCACCCCTATAGATATAGAAAGAAGGGAGACTCTCCAGAACGCCATGGGTACAAGAATTA
ATAACCTGTTTAATGTTCAGCAGAGTAGTCATTCAAGATCCTAACTATTTTACTTGTTCCTCCTTGTACAAATAG
GATCTACAGGTAGGAGATCATCTCAAAAACTGGATGCATGTCTGGAATGATCACAGCTGACATTTGAATTCTAGA
CTTTTGAAATGAAGTATATAATAAAGAAACTCATGACTTGGCCAAGTGAGCAGTGGAGACTTTCTTGAAAGGGTT
GGACAAATGTTTATCCTTTATTTCTGGTCCAAAAATAAGTGTGGAGGAGGACCACTCAGGAATCTGAATCCTCTT
GTGATTAAAGAAAAATATAAAGATGTGTTCCTCAGGAAAATCTTATTTGTAAACTGAGGACTAGCAGATTTTGAA
TCTAGAAATAATACTAGATGTCTGTTTACTAAGACCAGAGGTAAATCCTTAACTTTTAGGTTATCAGTGCTTCCT
TGTTCAGGCTTCAGTTTGACAGATCTTCACAAAATGACACATCTGTTAAAATGTCTTTATGTCAAGATGGTCAAC
TCACCAAGAGTCCGTACTACTATCAAGCTCTGTGAGACTTCAGAATCAGCCATGAAGCTTTGTGTCAACTGGAAT
TCAAATCAAATTTTGCCAAATCCAGTTTGCTTCCCCTTGGAATGGCTAGATGTCGCAGGTCTATTATGGACACCA
ACTGGAAAAAGACTTCTACCTGTAACATCTCTGTAGAAATTGCACAGTAACTATCTTCATCAAGACTTTGATGGC
CACCATACCATCACTACTCATAAAGCTACATGTGAGAGAATTGTTTGTTGTTATCAATCCTAATAGTCTTTGACC
TATCAAGCTCTCGTATCAAGCTGTAAGACTGAGTCATGGTAGTCTCTCACTGTAAGCTGGGCCTTTCACCAAGAT
GGCCTTCTTAAACAACCTACCTTCTAAACATTTAATTCTTTTGAGCTTGATAGTGCATCACACTCTAAATACAAA
AAAGATACGCACATCAGTGCCCTGGAAATAAAGGATGTTACACGATCCAGGCATGCAAATCTGAACTCCTAAGAC
CAAGAATTCCAAACATGCCTGACAATCTTGTCCCCTTATTGTAATAAAGAGGGATACCATCAGTCTAGATTTTAT
TGAGAATCCTTAAGATTTAAAGCATAGCTGTGGATGTGGTGAAGAGAACAAGCCACACAGCTCTGTTTCTGGATA
TCTAAGTGATGATATCCATTAATGATTTGAAAGGCTGAAATCAAGATTTAAGTGATACGCTCTTGGTTAATTGGT
TACTTAATTTAGTCAGATTCTTAGTGTAAGAGACAGCTTATCTTTTTGCTCCCAATTGGTCCCATTAATAGTTTT
TCACCATACTGGAACTGGCAGCAGATACCTCAATTATATGTCCCACAGTATCTTCTCTTTAGACTCAAGGTAGTG
GATGTATGGTATATCAGCCCTTAGATCCATGTCTTCACAGCATGACATCAGGAATGGAGAATATGTCAAATTTGA
GGGGTCTGAATACATCACCTAGTATTATTTGCTTGGCAGCCAAAAACAGTTGTTTTTATTGACAGACTTAATTCT
GTAACTTCTGCGTTTTTTCATCTGCTTGATCAAGGCATTTTGGATGTACTGCTAATGGAATATGGCACTGTTTTA
CGGTTTATGTGGCTTCTGTTCTTGCCACAGTTGTTGCACAGTGGTAATTGATGTTTTCTCTGGTGCCACACTTTT

FIGURE 7260B

TAATAATCTATTGGAAGCTCATTCCTCCTCCCCCATCATAACCATATTCAGCACCCATTTTTAAATCTACTTTTC
TTCCTTATTTGTGCTACAGAGGTTGATGGCGTAAATTTTCCTACTTGGAAGAAATTACTTTATCAGTTAATTTCA
GGGTACTGTATTGATCTTGTTTGTCCTATTTGTAGATTAAACTTGAACTAGTCTTAATAAAGGGGATATTGTTTT
GCAAATTTAGCCCAGTCATATCAAGAGTTAATATTTATCTTATTTTTCTGTATTTTACTCAAAATTTTATTTCCA
CTTCTGTAGAAATAGGTCCATGCCAGTGTTCTCTACAAAGTGTCTTTCAAACTAAACTCTAGAAGAATATCGATT
ACCTGAACAGAAACAAAGGCCTAAGAAATCATACATTTTTGTAGCTTATGTGTATTGCACCAATCAAGCAATCCC
ATGTGCTCTTGATATTGGCACTGTAGTTTTATCTTAGAGGACTTGCCACTGGAGAACTCAGTGGTGAGAGACCTT
GGAAATGTTTTATGTGGCTGCACATAAGTGTTTCTGACTAGCTAAGGCTACTTCAGACTTTTCACTTTCCATTTG
TCCCCTTTTCCTTCCCTGAATTAGATGCTATGTCATAAACTTGGTGGTTTTTGAAATACTCTTATTTCAAACCTT
AAACTAAACCGAAATAAGTTATGCCTGAGAATGCGTTTGTCTGAAACGATTTTGGCACTTCCCTTTAATATGCTT
CCCCTTCCCTTTGCCTTTTAAATTGTGGTT

FIGURE 7261

CCCACGCGTCCGGTTTTGAACCCAATGTATTGCTTATTTGAGTATGCGGGCAAGAACAACTATTGTCTGCAGATA
AATCCAGCATCAACCATTAATCCAGACCATCTTTCATACTTCTGTTTCATTGGTCGTTTTATTGCCATGGCACTA
TTTCATGGAAAGTTTATCGATACTGGTTTCTCTTTACCATTCTACAAGCGTATGTTAAGTAAAAAACTTACTATT
AAGGATTTGGAATCTATTGATACTGAATTTTATAACTCCCTTATCTGGATAAGAGATAACAACATTGAAGAATGT
GGCTTAGAAATGTACTTTTCTGTTGACATGGAGATTTTGGGAAAAGTTACTTCACATGACCTGAAGTTGGGAGGT
TCCAATATTCTGGTGACTGAGGAGAACAAAGATGAATATATTGGTTTAATGACAGAATGGCGTTTTTCTCGAGGA
GTACAAGAACAGACCAAAGCTTTCCTTGATGGTTTTAATGAAGTTGTTCCTCTTCAGTGGCTACAGTACTTCGAT
GAAAAAGAATTAGAGGTTATGTTGTGTGGCATGCAGGAGGTTGACTTGGCAGATTGGCAGAGAAATACTGTTTAT
CGACATTATACAAGAAACAGCAAGCAAATCATTTGGTTTTGGCAGTTTGTGAAAGAGACAGACAATGAAGTAAGA
ATGCGACTATTGCAGTTCGTCACTGGAACCTGCCGTTTACCTCTAGGAGGATTTGCTGAGCTCATGGGAAGTAAT
GGGCCTCAAAAGTTTTGCATTGAAAAAGTTGGCAAAGACACTTGGTTACCAAGAAGCCATACATGTTTTAATCGC
TTGGATCTACCACCATATAAGAGTTATGAACAACTAAAGGAAAAACTTCTTTTTGCAATAGAAGAGACAGAGGGA
TTTGGACAAGAATGAATGTGGCTTCTTATTTTGGAGGAGCTCTTGCATTTAAATACCCCAGCCAAGAAAAATTGC
ACAGATAGTGTATATAAGCTGTTCATTCTGTACAGTGAATTTTCCGAACCTCTCAAAGTATGTTTTCCGTTCTTC
CACAGAAATATGCAAACAGTTCATCCTTTTCTACTTTATTTATTGTTCCCTTGAAATGACTGACCAGGAAAAAGA
TCATCCTTAAATTTTGAAGCAAGTGAGAGACTTTATTAAAAATACATATATATCTATATAAACATATATGATAGT
GGCTCTAGTTTTATAGAGCTCCAAGTGTATTAAACATGACAGCCATTCATTCATAAAGATCTGGATTTGCTTTAC
CTTGTTAATATTATCTAGGGGAAAAAGTGCAAATTGCTCCATGTTCTTCTCTCCCTTATGTAACATCTCCTGAGG
GTGTTTAGTTGCATGGCTGTTCAGAAAGGTATTAAGGGCTTAGGCCAAATCTTACTTTGAGTATGTTAAAAAAAA
AAAAAAA

FIGURE 7262

GGCTTTTCCTCTCCTTTACCCACATGTTAGTCCAGCAGAGGGGGAAAGCATTGGCCCCAGGCCAAAATCATAAAC
GCTTTCAATTAACTAATAATAATTGCTGGCATGTTGCCATTAAATATTCTTGTCTCATTATCTCTGGTTGCTTTA
TCAAACCCATAGGTCACTGAAGCCCACTTTTGAGACAAAGACTATTTCTCCCCCAAAAGTCAAGGGAAATATAAA
AAATGAAATTAGTGATTAAGAATAGAAGTCAATTAATACAATCATTTTGTCTTAATTATTTAAAGTCCAGTTTTT
TCCCTCCAGCAAACCTGAAAATACACTATCCTCCAGCTATCAGAATTATATTGAGATCTACTCACATTTATGATG
ATGTTCAGAGATTCTCATTGGGAAGGAAAAGGCACACGCTGCGGCGGTCTTGCATGACTCTGTTGTTGTGGAAAT
TCAATTTGTTCATTGTGTTTTGGGCTCTCTGGGTGGTCAGGGCTGGGCTCTGGGTCCTTGGCAATTCCTCAGGTT
CCCAGCACTCCAAAGCCAAGCTCACCTCCTCATCACACACCCTACAGGAGAAGCATTAGGGTGTCCGACTACGTG
GGTTTCATAGCTGTGGAAAAGCCAAAGGGGAGACTCCTGAAGAAAGGCGGTGAAGACTGTGAAGAGCGGGTCAGG
AAGATGAGCACAGCACTGCTACTCCTGTGGGCACAGGGACAGCATGTCTCCAGCCAGCGCCACCTTGTTTAATAC
ATGGGAACTCACTGAAATTCATTCTGTATTTTGCCCGCAAAGTTTTAAAGCTTTCATCCACAGTCAGGAATTAAA
CTTATACCAATGAGAGCCTCACACATTCAAGGATGTACTAAGCACTACAGGCCTCACAGAAACAGAGATCCCATC
TTGGAGTTTTCAGTACCACATGGGAGATAAAGGGTTTTGAACATGAAATGACAAAAACAACAGCAAGAAGAAAAT
TCTTGTCCTTTTTCATTACTATCAGACTCAAATAAATGTCTTGGCTCTTACATTACATTCATTCTTCAACCATTG
TGGTCTGGCTTCCACTTCCTTCACTTCACCAACATGGCTCTGCCAAAGGAAGCCCGTGATCTCTAGGCCATCACT
TTAATTGATCTTTCTACAACATTTATCCTGGTTGTTAAGCCCTCCTTACAACATTCTTCTCTCTTTGTTTTTATA
GCTCCATCTCTCCTGCTTCTTTAACTTGATAATGCATACTTGATTTTTCTATTTGTTATTTCATAAACCAATTAA
TACACAGATAAAATGACTGTATATCAAACCATGTTTGTATAGAAAAAATGGATTTTGGATGCCTCTCATATGTAA
TTAGTTCTATTAAACATATTAATTGTATTGTTTAATTTGTCAGGTTTTTGACAGAATTTTGTTTACAAGTAATAA
AAATTTTATCTCCAATTTTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 7263

MKLVIKNRSQLIQSFCLNYLKSSFFPPANLKIHYPPAIRIILRSTHIYDDVQRFSLGRKRHTLRRSCMTLLLWKF
NLFIVFWALWVVRAGLWVLGNSSGSQHSKAKLTSSSHTLQEKH

FIGURE 7264

TAATTTAAACCAGTGTTTGTGCGGTTCTGATTCATCTGCTGTGGTTCCCGAAGCTTGAGATCTAAGGAGTACAGG
GTCTTTTGTGATGACAATATGACTAATAGTAAAGGAAGATCTATTACCGATAAAACAAGTGGTGGTCCAAGTAGT
GGAGGAGGTTTTGTAGATTGGACTTTACGTTTAAACACAATTCAATCCGACAAGTTTTTAAATTTACTCTTGAGT
ATGGTTCCAGTGATTTACCAGAAAAACCAAGAAGACAGGCACAAAAAAGCAAACGGCATTTGGCAAGATGGATAT
CAACTGCAGTACAGACTTTTAGTAATAGATCTGAGCAACAC**ATG**GAGTATCACAGTTTCTCAGAGCAGTCTTTTC
ATGCCAATAATGGGCACGCATCATCAAGCTGCAGCCAAAAGTATGATGACTATGCCAATTGTAATTACTGTGATG
GAAGGGAGACTTCAGAAACCACTGCCATGTTACAAGATGAAGATATATCTAGTGATGGTGATGAAGATGCTATTG
TAGAAGTGACCCCAAAATTACCAAAGGAATCCAGTGGCATCATGGCATTGCAAATACTTGTGCCCTTTTTGCTAG
CTGGTTTTGGAACAGTTTCAGCTGGCATGGTACTGGATATAGTACAGCACTGGGAGGTGTTCAGAAAAGTTACAG
AAGTTTTCATTTTAGTCCCTGCACTTCTTGGTCTCAAAGGGAACTTGGAAATGACATTGGCATCCAGATTATCCA
CTGCAGTAAATATTGGGAAGATGGATTCACCCATTGAAAAGTGGAACCTAATAATTGGCAACTTGGCTTTAAAGC
AGGTTCAGGCAACAGTAGTGGGTTTTCTAGCAGCTGTGGCAGCAATTATATTGGGCTGGATTCCAGAAGGAAAAT
ATTACCTTGATCATTCCATACTTCTGTGCTCTAGCAGTGTGGCAACTGCCTTCATTGCATCTCTTCTGCAGGGAA
TAATAATGGTTGGGGTTATCGTTGGTTCAAAGAAGACTGGTATAAATCCTGATAATGTTGCTACACCCATTGCTG
CTAGTTTTGGCGACCTTATAACTCTTGCCATATTGGCTTGGATAAGTCAGGGCTTATACTCCTGTCTTGAGACCT
ATTACTACATTTCTCCATTAGTTGGTGTATTTTTCTTGGCTCTAACCCCTATTTGGATTATAATAGCTGCCAAAC
ATCCAGCCACAAGAACAGTTCTCCACTCAGGCTGGGAGCCTGTCATAACAGCTATGGTTATAAGTAGCATTGGGG
GCCTTATTCTGGACACAACTGTATCAGACCCAAACTTGGTTGGGATTGTTGTTTACACGCCAGTTATTAATGGTA
TTGGTGGTAATTTGGTGGCCATTCAGGCTAGCAGGATTTCTACCTACCTCCATTTACATAGCATTCCAGGAGAAT
TGCCTGATGAACCCAAAGGTTGTTACTACCCATTTAGAACTTTCTTTGGTCCAGGAGTAAATAATAAGTCTGCTC
AAGTTCTACTGCTTTTAGTGATTCCTGGACATTTAATTTTCCTCTACACTATTCATTTGATGAAAAGTGGTCATA
CTTCTTTAACTATAATCTTCATAGTAGTGTATTTATTTGGCGCTGTGTTACAGGTATTTACCTTGCTGTGGATTG
CTGACTGGATGGTCCATCACTTCTGGAGGAAAGGAAAGGACCCGGATAGTTTCTCCATCCCCTACCTAACAGCAT
TGGGTGATCTGCTCGGGACAGCTCTGTTAGCCTTAAGTTTTCATTTTCTTTGGCTTATTGGAGATCGAGATGGAG
ATGTTGGAGAC**TAA**TAAATTCTACAAACTGCTCTCAAGTTACCAAGGAAGAAAATACACGACAACCACTTATGGC
TCTTTTTCAAAACTCTTAAATCAGTAGTTTGACTTTTGCCAGGGTAATCTTCAGTTGGCCCTGATTCAATTAAAT
GGCCTTAATTTTTTTTTAAGGAATTTGTGTCAAAACCAGAATGAAGAGTATTCGTGCTGCTTTTCATAGAATAAA
TGATAATTTGACATAGACATAGATATAAGTTCCAGCTCTGAAATTAATTAGGAAAGAATATAGGATGTTTACAGT
GAATAATTTTAAAACCACAAACATAGCAGAAATGTACTTTATTATTAAATTTGTAATGCAGGATTAGAAGAAGCA
GAGCTCTAGTTTAGCCTTTCTTGTCTCACAGATGTGCTGTATCCCAGGCATACTATAAAACGAAGAGTGCCCAAC
CAAGCTTTGAATCGTATTAACAATGCCCACCTCTATGCTAGCTGAGGATAAATTTACCAGTTGCTCATATTTAAA
CTGACCTAAATATGTTTTGCTGAGCATAAGATAAACTCACTTTTACCTCC

FIGURE 7265

MEYHSFSEQSFHANNGHASSSCSQKYDDYANCNYCDGRETSETTAMLQDEDISSDGDEDAIVEVTPKLPKESSGI
MALQILVPFLLAGFGTVSAGMVLDIVQHWEVFRKVTEVFILVPALLGLKGNLEMTLASRLSTAVNIGKMDSPIEK
WNLIIGNLALKQVQATVVGFLAAVAAIILGWIPEGKYYLDHSILLCSSSVATAFIASLLQGIIMVGVIVGSKKTG
INPDNVATPIAASFGDLITLAILAWISQGLYSCLETYYYISPLVGVFFLALTPIWIIIAAKHPATRTVLHSGWEP
VITAMVISSIGGLILDTTVSDPNLVGIVVYTPVINGIGGNLVAIQASRISTYLHLHSIPGELPDEPKGCYYPFRT
FFGPGVNNKSAQVLLLLVIPGHLIFLYTIHLMKSGHTSLTIIFIVVYLFGAVLQVFTLLWIADWMVHHFWRKGKD
PDSFSIPYLTALGDLLGTALLALSFHFLWLIGDRDGDVGD

FIGURE 7266

CATCACCCTTTTTAACATTGTTTACACATCACTGCCTGTTTTAGCCATGGGGATTTTTGACCAGGATGTGAGTGA
CCAGAACAGCGTGGACTGTCCCCAGCTCTACAAACCAGGACAGCTGAATCTGCTTTTTAACAAGCGTAAATTTTC
CATTTGCGTGTTGCATGGAATCTACACCTCATTAGTCCTTTTCTTCATCCCCTATGGGGCCTTTTACAACGTGGC
TGGAGAAGATGGGCAACATATTGCTGACTACCAGTCCTCTGCAGTTACATGGCCACATCTTTGGTCATTGTGGTC
AGTGTGCAGATAGCCTTGGATACCAGTTACTGGACTTTCATTAATCACGTCTTCATCTGGGGGAGCATTGCCATT
TATTTCTCCATTTTATTTACAATGCACAGTAATGGCATCTTTGGCATCTTCCCAAACCAGTTTCCATTTGTTGGT
AATGCACGACATTCCCTGACCCAGAAGTGCATCTGGCTTGTAATTCTCTTAACAACAGTGGCTTCAGTTATGCCA
GTGGTGGCATTCAGATTTTTGAAGGTGGATTTATACCCAACCCTGAGTGATCAGATCCGCCGGTGGCAGAAGGCT
CAAAAGAAGGCAAGGCCTCCAAGTAGCCGAAGGCCTCGGACCCGCAGGTCAAGCTCAAGAAGGTCTGGATATGCT
TTTGCTCACCAAGAAGGCTATGGAGAGCTTATCACATCTGGAAAAAATATGCGAGCTAAAAATCCACCCCCAACA
TCAGGGCTGGAAAAGACACATTATAATAGCACTAGCTGGATTGAAAATTTATGTAAGAAAACCACAGACACCGTG
AGCAGCTTTAGCCAGGATAAAACAGTGAAACTGTGAGTCAATATGAATTTAAACCACGTAGTTATCTTTTCACTT
CAGGTGGAGCTGAAATTCTGCTGGCTCCAGAGTTTGAGATTTGAGGCAAGAGGTGGGGCAGGCAGATTGCCTCAC
TTAACTTAAATCTGCGGCAGACAACTGCCAGTGCCCATCAAACAGGAGTGTGCGCTATGGAAAACCAGGCCAGAG
GGTCACTGTCTGGTTTGTGATTTGGTGGACAAAACACTCGCTGTTACAAGTACAGATTTTTTTTTTTTTAAATC
AACCTAGATACCAATTGACCTGAACTTTAGAATCTTATTTATGGAGAAAAACTTGTAAAGCTGCATATTCACTGA
ATGGATCCTCAGGCGGATAAAAGGGTGCATTTTAAAGGTATATATCCAAGCTGAAAAGCATGCCTATTGACAGAT
AAACATGTATCTGTAAGATCAGCCTTTCCCAAGGTATACTTTTAAAATTTAAAGCGTGTACTGTGTTGCTTTCAG
ACTGAGTTGCATGTCACTCTTTAGTCTTGATATCTACCTGTCTGTTCAGCCAGGACAACAAATGGCTTCCAAGCC
TGAAGAATACAAAAGTGTGCTTGTGTTTCTCATTTTTATACCAGTCTAGGGACAAAGGAGACTGAACATCTTTGC
AGCAGGATAGGCTGGTAATTTGATCAAATTTATTCAAAAAGCTCTCAGTCTGTGTCATGTAAGGACATGCTTATG
AAATGTGAGAGAGGCTCGCCACTAAGTATTCTAAATACTTTTCAATGGCTTTTCTAACAACCTCAGTAGTAATTT
GCTGAGCATCATCCAGACCATTAATAGAATCAGCAAAGCACTGGAATTTCACACTTTAATGATAATATTCCACAT
AGTCTATGGGCAAATATTTTCAACATTTCCAATTTTTAAAGCTTCAGAATTGAAGCCAAACAAATTAATAAATAA
TTGTTTTAATTACTATTTAAAAACTCAGGTTTAGATTGTTTAAAATTAGTTGCTTTTGATACTCAGCTGTCATGT
TTATAATTCAAACATGTAGTAAACATATGTAGGTAAGGTTGTTTTTTTGGAGATGTTGCAGCTCAAATTTCAGTC
CACATATGAATCATCAGTGTATTTTCCATAAAGTGATTCGGGCATATTTGTGTGAAAACCTCAGTTCTGTCACTT
CTTACCTCTATAAACTTGGACGATAATGAAAAAAAAAAAAAAAAA

FIGURE 7267

MATSLVIVVSVQIALDTSYWTFINHVFIWGSIAIYFSILFTMHSNGIFGIFPNQFPFVGNARHSLTQKCIWLVIL
LTTVASVMPVVAFRFLKVDLYPTLSDQIRRWQKAQKKARPPSSRRPRTRRSSSRRSGYAFAHQEGYGELITSGKN
MRAKNPPPTSGLEKTHYNSTSWIENLCKKTTDTVSSFSQDKTVKL

FIGURE 7268

GAGCGCCTTCCCGTTCCCGGTGACCGTGTCGCTGTGCCACATCCTGGCTCTGTGCGCTGGGCTCCCGCCGCTGCT
GCGCGCCTGGCGCGTGCCCCCCGCGCCGCCCGTCTCGGGCCCCGGACCCAGTCCGCATCCGTCGTCCGGCCCGCT
GCTGCCGCCGCGCTTCTACCCGCGCTACGTGCTACCGCTCGCCTTCGGCAAGTACTTCGCGTCCGTGTCAGCGCA
CGTCAGCATCTGGAAGGTGCCCGTGTCCTATGCACACACCGTCAAGGCCACC**ATG**CCCATCTGGGTGGTCCTCCT
GTCCCGGATCATTATGAAGGAGAAGCAGAGCACCAAGGTATACTTGTCACTCATCCCCATCATCAGCGGTGTCCT
GCTGGCCACCGTCACCGAGTTGTCTTTTGACATGTGGGGACTCGTCAGCGCCCTCGCCGCCACGCTGTGCTTCTC
GCTTCAGAACATTTTCTCCAAAAAGGTCTTGCGAGATTCACGGATCCACCATCTCCGGCTGCTCAACATCCTGGG
CTGCCACGCCGTCTTCTTTATGATCCCCACCTGGGTTCTGGTGGACCTCTCGGCTTTCCTGGTCAGCAGCGACTT
GGTGAGTTGTACAGCACCAAGAACACGCCATTTTCTTGGC**TAG**TTCCAGAATAGGTGCTTTGTTGAGGAGCTGTA
GCTGCATGTTAACATTGTGGTATCTTTTGGGCACCTGACAGCCAGCGCTTTCAGCAGTCAGTCCTCTGTAATGCC
TCACGGTGACGATGCACGCCATCGAGGAAGTGGGTTTCCTGTGTATTTCCTTCTCTGGTGTGCTTGATCCCAGGT
GCTGATAGCTGCTGTGTGTGCGCCAGTAGCGTCAAGGAAGAGAAGGTGACTCTTTCACCTCCTGACAGTATAGTC
CAGATAGCACATTGACTTTTTATTTTTACTCATTTTTTATTTTAAATGTTTATTTTTTAGAGACAGAACCTCGCT
CTGTTGCCAGGGCTGGAGTGCAGTGGCACAATCATGGCTCACTGCGGCCTTGACCTCAATCCGGGGCTCAAGCGA
TCCTCCCACAGCCTCCCGAGTAACTGGGACTGCAGGCGAATACCACCATGCCTGGCTAATTTTTTTTTGTTTGAT
TTTTGTTTTTTTACTGTTTTTGGAGAGACAGGGTCTCGCTATGTTGCCCAGGCTGGTCCTGAACTCCTGGCGTTA
AGAGATCTGCCTTGGCCTCCCAAAGTGCTGGGATTACAGATGTGAGCCACTGTGCCTTGCCAGCCCTGGAACTTT
GAAAACTATGCACTGGCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAGCCGGGCGCAGTGGCTCACGCCTGTAATCC
CAGCACTCTGGGAGGCCAAGGCGGGCGGATCACGAGGTCAGGAGTTTGAGACCAGCCTGGCCAATATGGTGACAC
CCTGTTTCTCCCAAAAATACAAAAATTAGCCAGGCATGGTGGCTCGCGCCTGTAGTCCCAGCTACTTGGGAGGCT
GAGGCAGAAGAATTGCTTGAACCCAGGATGTGGCGGTTGCAGTGAGCCGAGATGGTGCCACTGCACTCCAGCCTG
GGTGACAGAGGGAGACTCCGTGTCAAAAAAAAAAAGAAAAAAACGTGCGCTGCCTGGGTGTGGTGGCTTACGCCT
ATAATCCCAGCACTTTGGGAGGCCAAGGTGTGTGAATCATTCGAGGTCAGGAGTTCGAGACCAGCCTGACCAATA
TGGTGAAATCCTGTCTCTACTAAAAATACAAAATTAGCCAGGCGTGGTGGTGCACGCCTGTAATCCCAGCCACTT
GGGAGGCTGAGGTGGGAGAATCGCTTGAACCCAGAAGGCAGAGTTTGCAGTGAGCCGAGATCGCACCACTGCACT
CCAGCCTGGGCAACAAGTGTGAAGCTCCGTCTC

FIGURE 7269

MPIWVVLLSRIIMKEKQSTKVYLSLIPIISGVLLATVTELSFDMWGLVSALAATLCFSLQNIFSKKVLRDSRIHH
LRLLNILGCHAVFFMIPTWVLVDLSAFLVSSDLVSCTAPRTRHFLG

FIGURE 7270

TCTCTCTGTCACCTCACCCTTCCCTGTGCCACATGGGCCCTCTCTCTCCTGCCAGGACGCTGCGGCTCTGGGGAC
CTCGGAGCCTGGGGGTGGCTCTGGGAGTCTTCATGACCATTGGCTTTGCACTCCAGCTCTTGGGAGGGCCCTTCC
AGAGGAGGCTACCTGGGCTACAGCTCCGACAGCCCTCGGCCCCATCCCTACGACCAGCCCTTCCGTCCTGCCCAC
CCCGGCAGCGACTGGTGTTCCTGAAGACACATAAATCCGGGAGCAGCTCTGTGCTGAGCCTGCTTCACCGCTATG
GGGACCAGCACGGGCTGCGCTTCGCCCTCCCTGCCCGCTACCAGTTTGGCTACCCAAAGCTCTTCCAGGCCTCTA
GGGTAAAAGGCTACCGCCCACAGGGTGGAGGCACCCAGCTCCCCTTCCACATCCTCTGTCACCACTTGAGGTTCA
ACCTGAAAGAGGTACTTCAGGTCATGCCTTCTGACAGCTTCTTTTTTTCCATTGTCCGAGACCCAGCGGCTCTGG
CTCGCTCTGCCTTCTCCTACTATAAATCCACCTCATCAGCCTTCCGCAAGTCACCATCTTTGGCTGCCTTCCTGG
CCAATCCTCGAGGCTTCTACAGGCCTGGGGCCCGTGGGGACCACTACGCTCGCAACTTACTATGGTTTGACTTTG
GCCTGCCCTTTCCCCCAGAGAAGAGGGCCAAGAGAGGGAATATTCATCCCCCCAGAGACCCCAACCCCCCACAGC
TGCAGGTCTTGCCTTCTGGTGCTGGCCCTCGAGCCCAAACCCTCAATCCCAATGCCCTCATCCATCCTGTTTCCA
CTGTTACTGATCATCGCAGCCAGATATCAAGCCCTGCCTCTTTCGATTTGGGGTCTTCATCCTTCATCCAGTGGG
GTCTGGCATGGCTGGACTCTGTCTTTGACCTGGTCATGGTGGCTGAGTACTTCGATGAGTCATTGGTTCTGCTGG
CAGATGCCCTGTGCTGGGGTCTAGATGACGTGGTGGGCTTCATGCACAATGCCCAGGCTGGACATAAGCAGGGCC
TCAGCACTGTCAGCAACAGTGGACTGACTGCGGAGGACCGGCAGCTGACTGCACGGGCCCGAGCCTGGAACAACC
TGGACTGGGCTCTCTATGTCCACTTCAACCGCAGTCTCTGGGCACGGATAGAGAAATACGGCCAGGGCCGGCTGC
AGACAGCTGTGGCCGAGCTCCGGGCTCGCCGAGAGGCCCTAGCGAAACATTGTCTGGTAGGGGGTGAGGCTTCTG
ACCCCAAATACATCACTGATCGCCGGTTCCGCCCCTTCCAGTTTGGGTCAGCTAAGGTTTTGGGCTATATACTTC
GGAGAGGATTGAGCCCCCAAGACCAAGAGGAATGTGAGCGCCTAGCTACCCCTGAGCTCCAGTACAAGGACAAGC
TGGATGCCAAGCAGTTCCCCCCTACCGTCTCACTGCCCCTCAAGACTTCAAGGCCACTCTCCCCATAAACATCAG
ACTACAGATTTAGGTGGAAGAGCAGCCATGTTTGAAGGGCACATGTGATGAGTGGGGGGCAGCAAGATGCCATTT
CTGCATCTCCCAGAAGGGATGAGTCTTTGTCCCGATGCAAGCCCCCTCTTCGCTGGGCTCCCAGCAGTGCTTCCC
TCCTCCACCCTCCACTCATTTTGTTCTTTCCCCCCAACTTTTTTTTTTTTTGAAACGGAGTCTTGCTCTGTCCCC
CAGGCTGGAGTGCAGTGGCATGATCTCGGCTCACTGCAACCTCTGCCTCCCAGGTTCAAGCGATTCTCCTGCCTC
AGCCTCCAGAGTAGCTAGGATTACAGATACGTGCCACCATACCCGGCTAATTTTTATATTTTTAGAGACAGGGAT
TCAACATGTTGGTTAGGCTGGTCTTGAACTCCTCACCTCAGGTGATCCACATGACTCTGCCTCCCAAAGTGCTGC
CATTACAGGCGTGAGCCACTAGGCCTGACCTCCCCTTCCCCTTTCCTGCCCCAAGGCAGATCCACATCACCGAAG
CTCCCTAGAGGGGCAAAAGATGGAGTGAGCCACAGGAAGTTTGGGGCGTGGTGAGTTGGAATGATACGTCCATTT
CTCTATGAAATATTTGCTACTAGACTGTTCATTTCTCTCTGACATGTTTGTTGAATGAATAAATAATTTGAAACT
T

FIGURE 7271

MGPLSPARTLRLWGPRSLGVALGVFMTIGFALQLLGGPFQRRLPGLQLRQPSAPSLRPALPSCPPRQRLVFLKTH
KSGSSSVLSLLHRYGDQHGLRFALPARYQFGYPKLFQASRVKGYRPQGGGTQLPFHILCHHLRFNLKEVLQVMPS
DSFFFSIVRDPAALARSAFSYYKSTSSAFRKSPSLAAFLANPRGFYRPGARGDHYARNLLWFDFGLPFPPEKRAK
RGNIHPPRDPNPPQLQVLPSGAGPRAQTLNPNALIHPVSTVTDHRSQISSPASFDLGSSSFIQWGLAWLDSVFDL
VMVAEYFDESLVLLADALCWGLDDVVGFMHNAQAGHKQGLSTVSNSGLTAEDRQLTARARAWNNLDWALYVHFNR
SLWARIEKYGQGRLQTAVAELRARREALAKHCLVGGEASDPKYITDRRFRPFQFGSAKVLGYILRRGLSPQDQEE
CERLATPELQYKDKLDAKQFPPTVSLPLKTSRPLSP

FIGURE 7272

ATGCTGGGGGAGGGGCTGGCGGCCTCGACGGCAGCTGCGGAACTAGGCCGAGGGACAAAGGCTAAGTTTTTCCAT
GGTTTGGACTGGATATCGGTGGAACTCTGGTCAAGCTGGTATATTTTGAACCCAAAGACATCACTGCTGAAGAAG
AAGAGGAAGAAGTGGAAAGTCTTAAAAGCATTCGGAAGTACCTGACCTCCAATGTGGCTTATGGGTCTACAGGCA
TTCGGGACGTGCACCTCGAGCTGAAGGACCTGACTCTGTGTGGACGCAAAGGCAAACTGCACTTTATACGCTTTC
CCACTCATGACATGCCTGCTTTTATTCAAATGGGCAGAGATAAAAACTTCTCGAGTCTCCACACTGTCTTTTGTG
CCACTGGAGGTGGAGCGTACAAATTTGAGCAGGATTTTCTCACAATAGGTGATCTTCAGCTTTGCAAACTGGATG
AACTAGATTGCTTGATCAAAGGAATTTTATACATTGACTCAGTCGGATTCAATGGACGGTCACAGTGCTATTACT
TTGAAAACCCTGCTGATTCTGAAAAGTGTCAGAAGTTACCATTTGATTTGAAAAATCCGTATCCTCTGCTTCTGG
TGAACATTGGCTCAGGGGTTAGCATCTTAGCAGTATATTCCAAAGATAATTACAAACGGGTCACAGGTACTAGTC
TTGGAGGAGGAACTTTTTTTGGTCTCTGCTGTCTTCTTACTGGCTGTACCACTTTTGAAGAAGCTCTTGAAATGG
CATCTCGTGGAGATAGCACCAAAGTGGATAAACTAGTACGAGATATTTATGGAGGGGACTATGAGGGGTTTGGAC
TGCCAGGCTGGGCTGTGGCTTCAAGCTTTGGAAACAAGATGAGCAAGGAGAAGCGAGAGGCTGTCAGTAAAGAGG
ACCTGGCCAGAGCGACTTTGATCACCATCACCAACAACATTGGCTCAATAGCAAGAATGTGTGCCCTTAATGAAA
ACATTAACCAGGTGGTATTTGTTGGAAATTTCTTGAGAATTAATACGATCGCCATGCGGCTTTTGGCATATGCTT
TGGATTATTGGTCCAAGGGGCAGTTGAAAGCACTCTTTTCGGAACACGAGGGTTATTTTGGAGCTGTTGGAGCAC
TCCTTGAGCTGTTGAAGATCCCGTGATCATTACCTGGGGAGGGGTTCCTGAAACCTTCCACAATGGGATCTGTGG
ACTTTCATTTTTTTAAGAGACTTACTCAATTTCATGACTGTACTACCTGAAACAAAGTGAGAAAGGACAGGTGTA
TTTTTCTAAGTCATCAAGATAAATCCTTAAGAATTCAGTCTAAATTGGCAACCAGGAAGGAAAAATATATTAAAA
ACAACAAAAAAGTGGCACATGTCCAGGCAGTGTGAGGATTTGCTGTATATAAGTTGCCTGCTTTGTATTTTTGAA
ATCTCTGCATCACTCATTGGAAGTGCTTCTGAAGAGAGCTGCTCTGTGTTCAGTTGACTGGTTTTGTGTCCTGTT
TGAACTTGCTGAATGTAAGGCAGGCTACTATGCGTTATAATCTAATCACAATTTGTCAATATGGTCTTGGCAATC
ATCTGTGCATTACTCTGGTTTGCAATAAGCCTGTGTGTGAACTTACTGTAAAACATGTTTTATTTCAAGGTTCTG
CGAAATTAATTGGGCAGGTTAATTGTGTACCTGAAACTTAACAAGCAGTTTTTGGAAGGGC

FIGURE 7273

MPAFIQMGRDKNFSSLHTVFCATGGGAYKFEQDFLTIGDLQLCKLDELDCLIKGILYIDSVGFNGRSQCYYFENP
ADSEKCQKLPFDLKNPYPLLLVNIGSGVSILAVYSKDNYKRVTGTSLGGGTFFGLCCLLTGCTTFEEALEMASRG
DSTKVDKLVRDIYGGDYEGFGLPGWAVASSFGNKMSKEKREAVSKEDLARATLITITNNIGSIARMCALNENINQ
VVFVGNFLRINTIAMRLLAYALDYWSKGQLKALFSEHEGYFGAVGALLELLKIP

FIGURE 7274

GCTTCCATGACTAACTTGGTCAAGATGGGCTTTCCTTCTAAAACAGACAGCCCTAGCTGTGAATATTCTCGGTTT
GATTTTGATAGCGATGAGGACTTCAATGCTTTCTTCAACTCCTCCCGAGCACAACAAGGAGAGGTGATGAGGTTG
GCATGTCGTTTGGATCCCAAAACTAGCTTCCAGATGGCTGGGGAGTGGCTAAAGTATCAACTATCAACTTTTCTT
GATGCTGGTTCTGTGAATTCTTGTTCTGCAGTTGGAACTGGAGAAGGAAGCCTCTGTTCCGTCTTCTCACCTTCA
TTCGTGCAGTGGGAAGCCATGACTCTTTTTTTGGAAAGTGTTATCACCCAGATGTTTCGAACACTAAATAGAGAA
GAAATTCCTGTTAATGATGGAATAGAGCTATTGCAGATGGTTCTGAACTTTGATACCAAGGATCCCCTCATCCTG
TCCTGCGTCCTTACTAATGTCTCTGCACTCTTTCCATTTGTCACCTACAGACCAGAGTTCCTGCCCCAGGTCTTC
TCTAAGCTATTTTCATCTGTCACTTTTGAAACTGTTGAAGAAAGTAAGGCCCCCAGAACCCGGGCAGTGAGGAAT
GTGAGGAGGCATGCTTGTTCCTCCATCATCAAGATGTGTCGTGACTACCCCCAGCTTGTGCTGCCCAATTTTGAC
ATGCTTTATAACCATGTGAAGCAACTCCTCTCCAATGAGCTACTCCTGACACAAATGGAGAAGTGTGCCCTCATG
GAAGCCCTGGTTCTCATTAGCAACCAATTTAAGAACTACGAGCGTCAGAAGGTGTTCCTAGAGGAGCTGATGGCA
CCAGTGGCCAGCATCTGGCTTTCTCAAGACATGCACAGAGTGCTGTCAGATGTTGATGCTTTCATTGCGTATGTG
GGTACAGATCAGAAGAGCTGTGACCCAGGCCTGGAGGATCCGTGTGGCTTAAACCGTGCACGAATGAGCTTTTGT
GTATACAGCATTCTGGGTGTGGTGAAACGAACTTGCTGGCCCACTGACCTAGAAGAGGCCAAAGCTGGGGGATTT
GTGGTGGGTTATACATCCAGTGGAAATCCAATCTTCCGTAACCCCTGCACAGAGCAGATTCTGAAACTTCTTGAC
AATTTGCTTGCGCTTATAAGAACCCACAATACATTATATGCACCAGAAATGCTAGCCAAAATGGCAGAGCCTTTC
ACCAAGGCTCTGGATATGCTTGACGCGGAAAAATCTGCTATATTAGGATTACCTCAACCTCTCTTGGAACTCAAT
GACTCTCCTGTCTTCAAAACCGTCTTGGAAGGAATGCAGCGTTTCTTCTCTACCCTCTATGAAAACTGTTTTCAT
ATCCCAGGGAAGGCAGGCCCTTCCATGCAGCAAGACTTCTATACTGTGGAGGACCTTGCTACCCAGCTTCTCAGC
TCAGCCTTTGTCAACTTGAACAATATTCCTGACTACCGACTCAGACCCATGCTTCGGGTCTTTGTAAAGCCTCTG
GTGCTCTTCTGTCCCCCAGAGCACTATGAAGCCCTGGTATCCCCCATCCTCGGACCTCTTTTCACCTACCTCCAT
ATGAGGCTTTCTCAGAAATGGCAAGTTATCAACCAAAGGAGCCTGCTGTGTGGAGAAGATGAGGCTGCAGATGAA
AACCCAGAGTCTCAAGAGATGCTGGAGGAGCAACTGGTGAGGATGTTAACCCGAGAAGTCATGGACCTAATCACG
GTTTGCTGTGTTTCAAAGAAGGGTGCTGACCACAGTAGTGCTCCCCCAGCAGATGGAGACGATGAAGAAATGATG
GCCACAGAGGTCACCCCCTCAGCTATGGCAGAGCTTACAGACCTGTTGTCCATCCAGTCCACTGACAAGAGGGTT
TCCCCGAGAGCCGAAGTGGACTGAAGCTACAGTTTTTAGCTGGTGCGGGCCACAGGCAGGGTCAGATTGAGAAGA
AGCAAAGCTGGGGAAGCAGAAGTTGGGAGTCTTGTGTTGCTCCCTCTTCCTGTGTGGTGCTCTGGGTTTCTGTGG
ATCGTGAAGGCGATCTCAAGAGTGTTTCCCTCCAAACCTGATAGCTGCCTATTCCTGTCTGGTTGGGGCTGTGGA
GGATGTAGTTGTATTTATTGCATTGTAATATTTTTAACATCCTGTGACTTCATGCTAGAAATTTTCTATTGTTTA
TAGAAACTTTTTGTAGAAACATTAACTCTAAAGCACATCTGCATGTCAGTAAAAATCTCAGTTTCGTAC

FIGURE 7275

MTNLVKMGFPSKTDSPSCEYSRFDFDSDEDFNAFFNSSRAQQGEVMRLACRLDPKTSFQMAGEWLKYQLSTFLDA
GSVNSCSAVGTGEGSLCSVFSPSFVQWEAMTLFLESVITQMFRTLNREEIPVNDGIELLQMVLNFDTKDPLILSC
VLTNVSALFPFVTYRPEFLPQVFSKLFSSVTFETVEESKAPRTRAVRNVRRHACSSIIKMCRDYPQLVLPNFDML
YNHVKQLLSNELLLTQMEKCALMEALVLISNQFKNYERQKVFLEELMAPVASIWLSQDMHRVLSDVDAFIAYVGT
DQKSCDPGLEDPCGLNRARMSFCVYSILGVVKRTCWPTDLEEAKAGGFVVGYTSSGNPIFRNPCTEQILKLLDNL
LALIRTHNTLYAPEMLAKMAEPFTKALDMLDAEKSAILGLPQPLLELNDSPVFKTVLEGMQRFFSTLYENCFHIP
GKAGPSMQQDFYTVEDLATQLLSSAFVNLNNIPDYRLRPMLRVFVKPLVLFCPPEHYEALVSPILGPLFTYLHMR
LSQKWQVINQRSLLCGEDEAADENPESQEMLEEQLVRMLTREVMDLITVCCVSKKGADHSSAPPADGDDEEMMAT
EVTPSAMAELTDLLSIQSTDKRVSPRAEVD

FIGURE 7276

CTAAAGTGGAGCCCAGCGGCGGGTGTGAGAGTCCGTAAGGAGCAGCTTCCAGGATCCTGAGATCCGGAGCAGCCG
GGGTCGGAGCGGCTCCTCAAGAGTTACTGATCTATGAAATGGCAGAGAATGGAAAAAATTGTGACCAGAGACGTG
TAGCAATGAACAAGGAACATCATAATGGAAATTTCACAGACCCCTCTTCAGTGAATGAAAAGAAGAGGAGGGAGC
GGGAAGAAAGGCAGAATATTGTCCTGTGGAGACAGCCGCTCATTACCTTGCAGTATTTTTCTCTGGAAATCCTTG
TAATCTTGAAGGAATGGACCTCAAAATTATGGCATCGTCAAAGCATTGTGGTGTCTTTTTTACTGCTGCTTGCTG
TGCTTATAGCTACGTATTATGTTGAAGGAGTGCATCAACAGTATGTGCAACGTATAGAGAAACAGTTTCTTTTGT
ATGCCTACTGGATAGGCTTAGGAATTTTGTCTTCTGTTGGGCTTGGAACAGGGCTGCACACCTTTCTGCTTTATC
TGGGTCCACATATAGCCTCAGTTACATTAGCTGCTTATGAATGCAATTCAGTTAATTTTCCCGAACCACCCTATC
CTGATCAGATTATTTGTCCAGATGAAGAGGGCACTGAAGGAACCATTTCTTTGTGGAGTATCATCTCAAAAGTTA
GGATTGAAGCCTGCATGTGGGGTATCGGTACAGCAATCGGAGAGCTGCCTCCATATTTCATGGCCAGAGCAGCTC
GCCTCTCAGGTGCTGAACCAGATGATGAAGAGTATCAGGAATTTGAAGAGATGCTGGAACATGCAGAGTCTGCAC
AAGACTTTGCCTCCCGGGCCAAACTGGCAGTTCAAAAACTAGTACAGAAAGTTGGATTTTTTGGAATTTTGGCCT
GTGCTTCAATTCCAAATCCTTTATTTGATCTGGCTGGAATAACGTGTGGACACTTTCTGGTACCTTTTTGGACCT
TCTTTGGTGCAACCCTAATTGGAAAAGCAATAATAAAAATGCATATCCAGAAAATTTTTGTTATAATAACATTCA
GCAAGCACATAGTGGAGCAAATGGTGGCTTTCATTGGTGCTGTCCCCGGCATAGGTCCATCTCTGCAGAAGCCAT
TTCAGGAGTACCTGGAGGCTCAACGGCAGAAGCTTCACCACAAAAGCGAAATGGGCACACCACAGGGAGAAAACT
GGTTGTCCTGGATGTTTGAAAAGTTGGTCGTTGTCATGGTGTGTTACTTCATCCTATCTATCATTAACTCCATGG
CACAAAGTTATGCCAAACGAATCCAGCAGCGGTTGAACTCAGAGGAGAAAACTAAATAAGTAGAGAAAGTTTTAA
ACTGCAGAAATTGGAGTGGATGGGTTCTGCCTTAAATTGGGAGGACTCCAAGCCGGGAAGGAAAATTCCCTTTTC
CAACCTGTATCAATTTTTACAACTTTTTTCCTGAAAGCAGTTTAGTCCATACTTTGCACTGACATACTTTTTCCT
TCTGTGCTAAGGTAAGGTATCCACCCTCGATGCAATCCACCTTGTGTTTTCTTAGGGTGGAATGTGATGTTCAGC
AGCAAACTTGCAACAGACTGGCCTTCTGTTTGTTACTTTCAAAAGGCCCACATGATACAATTAGAGAATTCCCAC
CGCACAAAAAAAGTTCCTAAGTATGTTAAATATGTCAAGCTTTTTAGGCTTGTCACAAATGATTGCTTTGTTTTC
CTAAGTCATCAAAATGTATATAAATTATCTAGATTGGATAACAGTCTTGCATGTTTATCATGTTACAATTTAATA
TTCCATCCTGCCCAACCCTTCCTCTCCCATCCTCAAAAAAGGGCCATTTTATGATGCATTGCACACCCTCTGGGG
AAATTGATCTTTAAATTTTGAGACAGTATAAGGAAAATCTGGTTGGTGTCTTACAAGTGAGCTGACACCATTTTT
TATTCTGTGTATTTAGAATGAAGTCTTGAAAAAAACTTTATAAAGACATCTTTAATCATTCCAAAATTGTGTCCG
TTTTCTTGAGCGTTTTGATTTTTTACTTTTAGCTTATACCAGCTGAATGGCAGCCTTGCCTAATCCACCTACAAC
AAGAATTTCTTAAGCTTTCTTTTATTTGCATGAGAGAGCCACTACCAAGGCATGTTTTGTTATGCTGAAACTGGG
CTGCTGCATACTGCTAAATGGCACCTCTGGGATTGGCCTACCTGGGGATTTCTTGGTTTGTGAAAACAGGAGAGG
AGAAATATCTCATACAAGTGAAAGGATACTGGAGAGAGAAATTACCCATTTCTAAAAAAAAACCACACTCTGTCG
TATCTGTGTTAATGTTTTCTAGCATGTACTCTGGTTTCAACAGACACAAATTTATATGTTAACCCAGTTTTCTTG
CCGTTCTGTAAGTGTTTTATTCTTAGTGTGATTTTTTTCCATTGGGATGTTTTTGATTGAACTTGTTCATTTTGT
TTTGCTTGGGAGGAAAATAAACAATTTTACTTTTTTCCTTAAAAAAAAAAAAAAA

FIGURE 7277

MAENGKNCDQRRVAMNKEHHNGNFTDPSSVNEKKRREREERQNIVLWRQPLITLQYFSLEILVILKEWTSKLWHR
QSIVVSFLLLLAVLIATYYVEGVHQQYVQRIEKQFLLYAYWIGLGILSSVGLGTGLHTFLLYLGPHIASVTLAAY
ECNSVNFPEPPYPDQIICPDEEGTEGTISLWSIISKVRIEACMWGIGTAIGELPPYFMARAARLSGAEPDDEEYQ
EFEEMLEHAESAQDFASRAKLAVQKLVQKVGFFGILACASIPNPLFDLAGITCGHFLVPFWTFFGATLIGKAIIK
MHIQKIFVIITFSKHIVEQMVAFIGAVPGIGPSLQKPFQEYLEAQRQKLHHKSEMGTPQGENWLSWMFEKLVVVM
VCYFILSIINSMAQSYAKRIQQRLNSEEKTK

FIGURE 7278

ACAAACTACTCCCTGAGATCCTACAATCCGCTTCATTTCTAACTGCTAATGGGGCCTTGTATATGGCTTTCTTTT
GCATTTTAAGGAAGATACTTGGAAAATTCTACTCATGGACTCCTGGCTTTGGTGCCGCTCTGCCAGCATCTTATG
TGGCCATTCTCATTGAAAGAAAAAGCAGGAGAGGGCTGCTCACAATTTATATGGCCAACTTGGTCCTTTTGTTTT
GCATCACAGCTGCCATGTACATGTTCTTTTTCAGGTGCAAGGATGGCTTGAAAGGATTTACATTTTCTGCACTTA
GGTTCATTGTAGGGAAGGAAGAAATTCCCACACATTCTTTTTCACCAGAGGCAGCATATGCAAAAGTGGAACAAA
AGAGAGAGCAACATGAGGAAAAACCCAGAAGAATGAATATGATTGGTCTAGTCAGGAAATTTGTGGATTCAATAT
GCAAACATGGACCAAGGCATAGATGTTGCAAACATTATGAAGATAATTGCATCTCTTATTGCATTAAAGGTTTCA
TCAGAATGTTTAGCGTGGGGTACTTGATCCAGTGCTGCCTCCGAATCCCTTCTGCATTTAGGCATCTGTTTACAC
AGCCATCTCGGCTACTTTCTCTCTTCTACAATAAAGAAAACTTCCAGCTTGGAGCTTTTCTTGGCTCTTTTGTTA
GTATATACAAGGGTACTAGTTGCTTCCTGCGCTGGATCAGAAACTTAGATGATGAACTACATGCTATTATAGCTG
GATTTTTGGCAGGTACATCAATGATGTTTTATAAAAGCACAACAATTTCCATGTATTTAGCGTCCAAATTGGTAG
AGACAATGTATTTCAAAGGCATTGAAGCAGGGAAGGTTCCCTATTTTCCTCATGCAGATACTATCATCTATTCCA
TCTCTACAGCAATTTGCTTCCAGGCAGCTGTCATGGAAGTTCAGACTTTGAGACCATCTTACTGGAAGTTCCTTT
TAAGACTCACCAAGGGCAAATTTGCTGTCATGAACCGAAAAGTCCTTGATGTTTTTGGTACTGGTGCATCTAAAC
ACTTTCAGGATTTCATCCCCAGGTTGGATCCAAGATACACAACTGTAACACCAGAGTTGCCCACAGAGTTTTCCTG
AAGATGACTGTAACTTATTAATGTGACTAAATGTTTCATCTTGAAGAGTTAATTATGTTGAACACAAAGGAGGG
GGCCCAAGCTCGAACTTCAGTGTTATTTCAGTTAGAGATACTCTTTTCATTTGTTTTGTTTTTCTTATGAATCAG
AAATTCAGAAGCTTTTTAGGAAGATGTTGCTTAATAATTAAGCTTCCTCCATAGCCAGAATAAGATTCTGGATCA
CTGTAGTGACTGACATTATATATTATTGATCAAATTATGTCCACAAGCAATATTATATAATCTACGTAGAAGTGT
AATAACAAACAAGAGTACACTTAAAATTACTTTAAAAGATGTCTTTAGTTCATTCCAATATAATTCTTGATTAAA
ATTAGGATTATTTCTACATTTTAGGATTTACAAAGGATCACGGGTACATGGGTTTGGTCTATATATTTTTTTAAA
GTTTTGAATTGGTATCTGTAGTAGTGGAATGTTATAGATTTGAAGTAACTCTCCACGGACAGTGCTGCTTTCGTG
TAGAGCAATTTAATTGGAGAAGTGGCCATTCTTACTTCAGGGATGCAAAGATGGGTCTCATACCATTTGGATAAA
TGTCGTGGTATCCATGCTTTTTTTCAACTAATAACATCATCTCTCTTCATGACCAGTTAATTGGGCTATTTGGCA
GCCCAGTGAACCTATGTACTAATGGCAAGTTAGGGGCAAATGGAAATGGACACATCCGTTAAAGTTGAAATGTAT
GTTTTAATCTTTCACAGAAGTATTACACTTGAATATTTAAAAACAAAACTTTTAAACTTCCTATAGGTTTATGAT
GTTTGTTTTCATTTATATGGACATAATCCTTCATAGCTCAGTTTATATGCCATTGTTGTATTAGAAGGGATCAAA
ATCCTATGGAACAAAGTAGTCTTGGCAAGTTGGCAGTTTGTGTCCTCTCAGCTGTTTAACTTATGTAATGGATGT
TTTGCACCTGAAAACACTATAAAAATCCAGTGGTTGTTTAAAAAGTCCATTTGTCACTAATTCCATTCAGGTTCT
CCAACCTTCTTCTTGAATATCATTGTCACCATTTATACTGTTAGAATAAAGAGGTGACACCATAAAGTCCTGCTG
ATAATGAGAGTAGTTCAGGACAGCTGTGATTGAAATATGGTCGCTATTTACAGTTTTTCAGGGAAAAGTTATACT
TTTCTATGTTAATAAAGAGCTGAAGTGGTCTACAGTTAATGTGACATGTAGGGATGATGATATTTTTAAAATACA
TTTTGTTGCTAAAAAGTTGTTAGGCCAGTGCAAATTATGCAGTAGAACTTGTGTTGCAAAAGGAATTATAACCCA
TACTTTAAAAATGCTTAATCCCTCATATTCAATTTCATCAAGCCTTGTATACTTCTGCTTAAATGTAATTCAATC
CTTGGTTGTTATGGCAAACAGAAACCCAACAAAAAGACAGACTCTGGTACTATGGTAACAGAGCCACTTTATCAT
TTGGTCAAAATTTGACATTATGATTAGCTTTGTAGAACTGACCTGTTTATTTGGCAATGCTGTTAAAGGATCATT
TCGGTTTCAGACTTCAAAGTTGATTAATAAATTTAATCTTAACTTTTTATTCACTGGAATCAAAACGATGGTTGG
TACTGTGTTTACTGTTTAAAATGAAGTACTAAAGCCCTGAGAACTGCACCTCATTTTCTTTATCCAGAAATTGTG
CTTATATATTTTCCTGTCAGGTTTAAAAAGATGTTTTAATTCATAAATTATTGTTTTCATTGACATTAAAGGACT
GTGATATTGAAAAAAAAAAAAAAAAAA

FIGURE 7279

MAFFCILRKILGKFYSWTPGFGAALPASYVAILIERKSRRGLLTIYMANLVLLFCITAAMYMFFFRCKDGLKGFT
FSALRFIVGKEEIPTHSFSPEAAYAKVEQKREQHEEKPRRMNMIGLVRKFVDSICKHGPRHRCCKHYEDNCISYC
IKGFIRMFSVGYLIQCCLRIPSAFRHLFTQPSRLLSLFYNKENFQLGAFLGSFVSIYKGTSCFLRWIRNLDDELH
AIIAGFLAGTSMMFYKSTTISMYLASKLVETMYFKGIEAGKVPYFPHADTIIYSISTAICFQAAVMEVQTLRPSY
WKFLLRLTKGKFAVMNRKVLDVFGTGASKHFQDFIPRLDPRYTTVTPELPTEFS

FIGURE 7280

ATTACAAAGGTTGCTTAACTTCTAATTATTTGATCACTGAGGAAAATCCAGAAAGCTACACAACACTGAAGGGGT
GAAATAAAAGTCCAGCGATCCAGCGAAAGAAAAGAGAAGTGACAGAAACAACTTTACCTGGACTGAAGATAAAAG
CACAGACAAGAGAACAATGCCCTGGACATGGCTCCAGAGATCCACATGACAGGCCCAATGTGCCTCATTGAGAAC
ACTAATGGGGAACTGGTGGCGAATCCAGAAGCTCTGAAAATCCTGTCTGCCATTACACAGCCTGTGGTGGTGGTG
GCAATTGTGGGCCTCTACCGCACAGGAAAATCCTACCTGATGAACAAGCTAGCTGGGAAGAATAAGGGCTTCTCT
CTGGGCTCCACAGTGAAATCTCACACCAAAGGAATCTGGATGTGGTGTGTGCCTCACCCCAAAAAGCCAGAACAC
ACCTTAGTCCTGCTTGACACTGAGGGCCTGGGAGATGTAAAGAAGGGTGACAACCAGAATGACTCCTGGATCTTC
ACCCTGGCCGTCCTCCTGAGCAGCACTCTCGTGTACAATAGCATGGGAACCATCAACCAGCAGGCTATGGACCAA
CTGTAGTATCCTTTTGTGACCCAGAACAGCACCAAGGTCAGAGGGGACACCTGTATTCATAAACCAGCTGCCTGA
CTGTGAATCCTGATGAATCAAGCTCAAAAGGAGAAAACAAAAAATA**ATG**CAAGTACAGAGGGGAGATCCCATCTA
TGTGACAGAGCTGACACATCGAATCCGATCAAAATCCTCACCTGATGAGAATGAGAATGAGGATTCAGCTGACTT
TGTGAGCTTCTTCCCAGATTTTGTGTGGACACTGAGAGATTTCTCCCTGGACTTGGAAGCAGATGGACAACCCCT
CACACCAGATGAGTACCTGGAGTATTCCCTGAAGCTAACGCAAGGTACCAGTCAAAAAGATAAAAATTTTAATCT
GCCCCGACTCTGTATCCGGAAGTTCTTCCCAAAGAAAAAATGTTTTGTCTTCGATCTGCCCATTCACCGCAGGAA
GCTTGCCCAGCTTGAGAAACTACAAGATGAAGAGCTGGACCCTGAATTTGTGCAACAAGTAGCAGACTTCTGTTC
CTACATCTTTAGCAATTCCAAAACTAAAACTCTTTCAGGAGGCATCAAGGTCAATGGGCCTCGTCTAGAGAGCCT
AGTGCTGACCTATATCAAAGCTATCAGCAGAGGGGATCTGCCCTGCATGGAGAACGCAGTCCTGGCCTTGGCCCA
GATAGAGAACTCAGCCGCAGTGCAAAAGGCTATTGCCCACTATGACCAGCAGATGGGCCAGAAGGTGCAGCTGCC
CGCAGAAACCCTCCAGGAGCTGCTGGACCTGCACAGGGTTAGTGAGAGGGAGGCCACTGAAGTCTATATGAAGAA
CTCTTTCAAGGATGTGGACCATCTGTTTCAAAAGAAATTAGCGGCCCAGCTAGACAAAAAGCGGGATGACTTTTG
TAAACAGAATCAAGAAGCATCATCAGATCGTTGCTCAGCTTTACTTCAGGTCATTTTCAGTCCTCTAGAAGAAGA
AGTGAAGGCGGGAATTTATTCGAAACCAGGGGGCTATTGTCTCTTTATTCAGAAGCTACAAGACCTGGAGAAAAA
GTACTATGAGGAACCAAGGAAGGGGATACAGGCTGAAGAGATTCTGCAGACATACTTGAAATCCAAGGAGTCTGT
GACCGATGCAATTCTACAGACAGACCAGATTCTCACAGAAAAGGAAAAGGAGATTGAAGTGGAATGTGTAAAAGC
TGAATCTGCACAGGCTTCAGCAAAAATGGTGGAGGAAATGCAAATAAAGTATCAGCAGATGATGGAAGAGAAAGA
GAAGAGTTATCAAGAACATGTGAAACAATTGACTGAGAAGATGGAGAGGGAGAGGGCCCAGTTGCTGGAAGAGCA
AGAGAAGACCCTCACTAGTAAACTTCAGGAACAGGCCCGAGTACTAAAGGAGAGATGCCAAGGTGAAAGTACCCA
ACTTCAAAATGAGATACAAAAGCTACAGAAGACCCTG

FIGURE 7281

MQVQRGDPIYVTELTHRIRSKSSPDENENEDSADFVSFFPDFVWTLRDFSLDLEADGQPLTPDEYLEYSLKLTQG
TSQKDKNFNLPRLCIRKFFPKKKCFVFDLPIHRRKLAQLEKLQDEELDPEFVQQVADFCSYIFSNSKTKTLSGGI
KVNGPRLESLVLTYIKAISRGDLPCMENAVLALAQIENSAAVQKAIAHYDQQMGQKVQLPAETLQELLDLHRVSE
REATEVYMKNSFKDVDHLFQKKLAAQLDKKRDDFCKQNQEASSDRCSALLQVIFSPLEEEVKAGIYSKPGGYCLF
IQKLQDLEKKYYEEPRKGIQAEEILQTYLKSKESVTDAILQTDQILTEKEKEIEVECVKAESAQASAKMVEEMQI
KYQQMMEEKEKSYQEHVKQLTEKMERERAQLLEEQEKTLTSKLQEQARVLKERCQGESTQLQNEIQKLQKT

FIGURE 7282

ATGGATCTAAAGACAGCAGTATTTAACGCAGCTCGGGATGGCAAACTCCGGCTTCTCACCAAATTGTTGGCAAGC
AAATCCAAAGAGGAGGTTTCCTCCTTGATCTCTGAAAAAACAAATGGGGCCACGCCACTCTTGATGGCCGCCAGG
TATGGGCACCTTGACATGGTGGAATTCCTCCTAGAGCAATGCAGTGCCTCCATAGAAGTTGGGGGCTCCGTCAAT
TTTGATGGCGAAACCATTGAGGGGGCTCCCCCTTTATGGGCCGCTTCTGCAGCAGGACATCTGAAGGTGGTCCAG
TCCTTGTTAAATCATGGAGCATCTGTCAACAACACGACTTTAACCAATTCAACTCCTCTTCGAGCTGCGTGTTTC
GATGGCCATTTGGAAATAGTGAAGTACCTTGTAGAACACAAAGCTGATTTGGAAGTGTCAAACCGACATGGGCAT
ACGTGCTTGATGATTTCATGTTACAAAGGACATAAAGAGATTGCTCAGTATTTACTTGAAAAGGGGGCAGATGTT
AATAGAAAAAGTGTCAAAGGTAATACTGCATTGCATGATTGTGCAGAATCTGGAAGTTTGGACATCATGAAGATG
CTTCTTATGTATTGTGCCAAGATGGAAAAGGATGGTTATGGAATGACTCCCCTTCTCTCAGCAAGTGTGACTGGT
CACACAAATATTGTGGATTTTCTGACACACCATGCACAGACCAGCAAGACAGAACGTATTAATGCTCTAGAGCTT
CTGGGAGCTACATTTGTAGACAAAAAAAGAGATCTGCTTGGGGCTTTGAAATACTGGAAAAAGGCAATGAACATG
AGGTACAGTGATAGGACTAATATTATTAGTAAACCAGTGCCACAGACACTAATAATGGCTTATGATTATGCCAAG
GAAGTGAACAGTGCAGAAGAGCTAGAAGGTCTTATTGCTGATCCTGATGAGATGAGAATGCAGGCACTATTAATC
AGAGAACGTATTCTTGGTCCTTCTCATCCTGATACCTCTTACTATATTAGATATAGAGGCGCTGTCTATGCAGAC
TCTGGAAATTTCAAACGATGCATCAACCTATGGAAGTATGCTTTGGATATGCAGCAGAGCAATTTGGATCCTTTA
AGCCCAATGACCGCCAGCAGCTTATTATCTTTTGCAGAACTATTCTCCTTTATGCTACAGGATAGGGCTAAAGGC
CTGCTGGGTACTACTGTTACATTTGATGATCTTATGGGCATACTTTGCAAAAGCGTCCTTGAAATAGAGCGAGCT
ATCAAACAAACTCAGTGTCCAGCTGACCCATTACAGTTAAATAAGGCCCTTTCTATTATTTTGCACTTAATTTGC
TTGTTAGAGAAAGTTCCTTGTACTCTAGAACAAGACCATTTCAAAAAGCAGACTATATACAGGTTTCTTAAGCTG
CATCCAAGGGGAAAGAATAACTTCAGCCCTCTTCATCTGGCTGTGGACAAGAATACTACATGTGTAGGGCGGTAC
CCTGTTTGTAAATTTCCATCTCTACAAGTTACTGCAATACTGATAGAATGTGGTGCTGATGTGAACGTCAGAGAC
TCGGATGACAACAGTCCCCTGCATATCGCTGCTCTTAACAACCATCCAGACATCATGAATCTCCTTATTAAATCA
GGTGCACATTTTGATGCCACAAACTTGCACAAACAAACTGCTAGTGAYTTGCTGGATGAGAAGGAAATAGCTAAA
AATTTAATCCAGCCTATAAATCATACCACATTGCAGTGTCTTGCTGCTCGTGTCATAGTGAATCATAGAATATAT
TATAAAGGGCATATCCCAGAAAAGCTAGAGACTTTTGTTTCCCTTCATAGATGA

FIGURE 7283

MDLKTAVFNAARDGKLRLLTKLLASKSKEEVSSLISEKTNGATPLLMAARYGHLDMVEFLLEQCSASIEVGGSVN
FDGETIEGAPPLWAASAAGHLKVVQSLLNHGASVNNTTLTNSTPLRAACFDGHLEIVKYLVEHKADLEVSNRHGH
TCLMISCYKGHKEIAQYLLEKGADVNRKSVKGNTALHDCAESGSLDIMKMLLMYCAKMEKDGYGMTPLLSASVTG
HTNIVDFLTHHAQTSKTERINALELLGATFVDKKRDLLGALKYWKKAMNMRYSDRTNIISKPVPQTLIMAYDYAK
EVNSAEELEGLIADPDEMRMQALLIRERILGPSHPDTSYYIRYRGAVYADSGNFKRCINLWKYALDMQQSNLDPL
SPMTASSLLSFAELFSFMLQDRAKGLLGTTVTFDDLMGILCKSVLEIERAIKQTQCPADPLQLNKALSIILHLIC
LLEKVPCTLEQDHFKKQTIYRFLKLHPRGKNNFSPLHLAVDKNTTCVGRYPVCKFPSLQVTAILIECGADVNVRD
SDDNSPLHIAALNNHPDIMNLLIKSGAHFDATNLHKQTASDLLDEKEIAKNLIQPINHTTLQCLAARVIVNHRIY
YKGHIPEKLETFVSLHR

FIGURE 7284

GATAAAATTCTCAATTCAGAGAAATCATCTGATGTTTCTATAGTCACXTTTGCCAGCTCAAAAGAAAACAATACC
CCTATGTAGTTGTGGAAGTTTATGCTAATATTGTGTAACXCATATTAAACCTAAATGTTTCTGCCTAACCCTGTT
GGTATAAAGATATTTTGAGCAGACTGTAAAACAAGAAAAAAAAAATCATGCATTTCTTAGCAAAATTGCCTAGTA
TGTTAATTTGCTCAAAATACAATGTTTGATTTTATGCACTTTGTCGCTATTAACATCCTTTXTTTCATGTAGATT
TCAATAATTGAGTAATTTTAGAAGCATTATTTTAGGAATATATAGTTGTCACAGTAAATATCTTGTTTTTTCTAT
GTACATTGTACAAATTTTTCATTCCTTTTGCTCTTTGTGGTTGGATCTAACACTAACTGTATTGTTTTGTTACAT
CAAATAAACATCTTCTGGGACCAGG

FIGURE 7285

CAGTGGCTGGTAGGCAGTGGCTGGGAGGCAGCGGCCCAATTAGTGTCGTGCGGCCCGTGGCGAGGCGAGGTCCGG
GGAGCGAGCGAGCAAGCAAGGCGGGAGGGGTGGCCGGAGCTGCGGCGGCTGGCACAGGAGGAGGAGCCCGGGCGG
GCGAGGGGCGGCCGGAGAGCGCCAGGGCCTGAGCTGCCGGAGCGGCGCCTGTGAGTGAGTGCAGAAAGCAGGCGC
CCGCGCGCTAGCCGTGGCAGGAGCAGCCCGCACGCCGCGCTCTCTCCCTGGGCGACCTGCAGTTTGCAATATGAC
TTTGGAGGAATTCTCGGCTGGAGAGCAGAAGACCGAAAGGATGGATAAGGTGGGGGATGCCCTGGAGGAAGTGCT
CAGCAAAGCCCTGAGTCAGCGCACGATCACTGTCGGGGTGTACGAAGCGGCCAAGCTGCTCAACGTCGACCCCGA
TAACGTGGTGTTGTGCCTGCTGGCGGCGGACGAGGACGACGACAGAGATGTGGCTCTGCAGATCCACTTCACCCT
GATCCAGGCGTTTTGCTGCGAGAACGACATCAACATCCTGCGCGTCAGCAACCCGGGCCGGCTGGCGGAGCTCCT
GCTCTTGGAGACCGACGCTGGCCCCGCGGCGAGCGAGGGCGCCGAGCAGCCCCCGGACCTGCACTGCGTGCTGGT
GACGAATCCACATTCATCTCAATGGAAGGATCCTGCCTTAAGTCAACTTATTTGTTTTTGCCGGGAAAGTCGCTA
CATGGATCAATGGGTTCCAGTGATTAATCTCCCTGAACGGTGATGGCATCTGAATGAAAATAACTGAACCAAATT
GCACTGAAGTTTTTGAAATACCTTTGTAGTTACTCAAGCAGTTACTCCCTACACTGATGCAAGGATTACAGAAAC
TGATGCCAAGGGGCTGAGTGAGTTCAACTACATGTTCTGGGGGCCCGGAGATAGATGACTTTGCAGATGGAAAGA
GGTGAAAATGAAGAAGGAAGCTGTGTTGAAACAGAAAAATAAGTCAAAAGGAACAAAAATTACAAAGAACCATGC
AGGAAGGAAAACTATGTATTAATTTAGAATGGTTGAGTTACATTAAAATAAACCAAATATGTTAAAGTTTAAGTG
TGCAGCCATAGTTTGGGTATTTTTGGTTTATATGCCCTCAAGTAAAAGAAAAGCCGAAAGGGTTAATCATATTTG
AAAACCATATTTTATTGTATTTTGATGAGATATTAAATTCTCAAAGTTTTATTATAAATTCTACTAAGTTATTTT
ATGACATGAAAAGTTATTTATGCTATAAATTTTTTGAAACACAATACCTACAATAAACTGGTATGAATAATTGCA
TCATT

FIGURE 7286

MTLEEFSAGEQKTERMDKVGDALEEVLSKALSQRTITVGVYEAAKLLNVDPDNVVLCLLAADEDDDRDVALQIHF
TLIQAFCCENDINILRVSNPGRLAELLLLETDAGPAASEGAEQPPDLHCVLVTNPHSSQWKDPALSQLICFCRES
RYMDQWVPVINLPER

FIGURE 7287A

CGGCGCAGGCGGCGGCGTCCGAGGAGATTTAATCCAGAGACTGACTTCACTATAGAACCCACAGTTGTATCAATG
GTTGGGGAAAGATAGTGGCAACAGGCAAAGGAGAAACAGCTCTGACATACAAAGAAAATGAGTATGCTAAAGCCA
AGTGGGCTTAAGGCCCCCACCAAGATCCTGAAGCCTGGAAGCACAGCTCTGAAGACACCTACGGCTGTTGTAGCT
CCAGTAGAAAAAACCATATCCAGTGAAAAAGCATCAAGCACTCCATCATCTGAGACTCAGGAGGAATTTGTGGAT
GACTTTCGAGTTGGGGAGCGAGTTTGGGTGAATGGAAATAAGCCTGGATTTATCCAGTTTCTTGGAGAAACCCAG
TTTGCACCAGGCCAGTGGGCTGGAATTGTTTTAGATGAACCCATAGGCAAGAACGATGGTTCGGTGGCAGGAGTT
CGGTATTTCCAGTGTGAACCTTTAAAGGGCATATTTACCCGACCTTCAAAGTTAACAAGGAAGGTGCAAGCAGAA
GATGAAGCTAATGGCCTGCAGACAACGCCCGCCTCCCGAGCTACTTCACCGCTGTGCACTTCTACGGCCAGCATG
GTGTCTTCCTCCCCCTCCACCCCTTCAAACATCCCTCAGAAACCATCACAGCCAGCAGCAAAGGAACCTTCAGCT
ACGCCTCCGATCAGCAACCTTACAAAAACTGCCAGTGAATCTATCTCCAACCTTTCAGAGGCTGGCTCAATCAAG
AAAGGAGAAAGAGAGCTCAAAATCGGAGACAGAGTATTGGTTGGTGGCACTAAGGCTGGTGTAGTCCGGTTTCTT
GGGGAGACCGACTTTGCCAAGGGGGAGTGGTGTGGCGTGGAGTTAGATGAGCCACTTGGGAAGAATGATGGCGCT
GTTGCTGGAACAAGGTATTTTCAGTGTCAACCCAAATATGGCTTGTTCGCTCCTGTCCACAAAGTTACCAAGATT
GGCTTCCCTTCCACTACACCAGCCAAAGCCAAGGCCAACGCAGTGAGGCGAGTGATGGCGACCACGTCCGCCAGC
CTGAAGCGCAGCCCTTCTGCCTCTTCCCTCAGCTCCATGAGCTCAGTGGCCTCCTCTGTGAGCAGCAGGCCCAGT
CGGACAGGACTATTGACTGAAACCTCCTCCCGTTACGCCAGGAAGATCTCCGGTACCACTGCCCTCCAGGAGGCC
CTGAAGGAGAAGCAGCAGCACATTGAGCAGCTGCTGGCGGAACGGGATCTGGAGAGGGCGGAGGTGGCCAAGGCC
ACGAGCCACGTGGGGGAGATAGAGCAGGAGCTAGCTCTGGCCCGGGACGGACATGACCAGCATGTCCTGGAATTG
GAAGCCAAAATGGACCAGCTGCGAACAATGGTGGAAGCTGCTGACAGGGAGAAGGTGGAGCTTCTCAACCAGCTT
GAAGAGGAGAAAAGGAAGGTTGAGGACCTTCAGTTCCGGGTTGAAGAAGAATCAATTACCAAAGGTGATCTTGAG
ACGCAGACCAAACTGGAGCATGCCCGCATTAAGGAGCTTGAACAGAGCCTGCTCTTTGAAAAGACCAAAGCTGAC
AAACTCCAGAGGGAGTTAGAAGACACTAGGGTGGCTACAGTTTCAGAAAAGTCACGTATAATGGAACTGGAGAAA
GACCTAGCATTGAGAGTACAGGAAGTAGCTGAGCTCCGAAGAAGGCTAGAGTCCAATAAGCCTGCTGGGGATGTG
GACATGTCACTTTCCCTTTTGCAAGAGATAAGCTCTTTGCAAGAAAAGTTAGAAGTCACCCGTACTGACCACCAG
AGAGAAATAACTTCTCTGAAGGAGCATTTTGGAGCCCGGGAAGAAACTCATCAGAAGGAGATAAAGGCTCTGTAT
ACCGCCACGGAAAAGCTTTCCAAAGAGAACGAGTCATTGAAAAGCAAGCTGGAGCATGCCAACAAAGAGAACTCA
GATGTGATAGCTCTATGGAAGTCCAAACTGGAGACTGCCATCGCATCCCACCAGCAGGCGATGGAAGAACTGAAG
GTATCTTTCAGCAAAGGGCTTGGAACAGAGACGGCAGAATTTGCTGAACTAAAAACACAAATAGAGAAAATGAGA
CTAGATTACCAACACGAAATAGAAAATTTGCAGAATCAACAAGACTCTGAACGGGCTGCCCATGCTAAAGAGATG
GAAGCCTTGAGGGCTAAACTGATGAAAGTTATTAAAGAAAAGGAAAACAGTCTGGAAGCCATCAGGTCGAAACTG
GACAAAGCAGAAGACCAGCATCTCGTAGAAATGGAAGACACGTTAAACAAATTACAGGAAGCTGAAATAAAGGTA
AAGGAGCTAGAGGTACTGCAAGCCAAATGCAATGAACAAACCAAGGTTATTGATAATTTTACATCACAGCTCAAG
GCTACTGAAGAAAAGCTCTTGGATCTTGATGCACTTCGGAAAGCCAGTTCCGAAGGTAAATCGGAAATGAAGAAA
CTTAGACAGCAGCTTGAGGCAGCTGAGAAACAGATTAAACATTTAGAGATTGAAAAGAATGCTGAAAGTAGCAAG
GCTAGTAGCATTACCAGAGAGCTCCAGGGGAGAGAGCTAAAGCTTACTAACCTTCAGGAAAATTTGAGTGAAGTC
AGTCAAGTGAAAGAGACTTTGGAAAAAGAACTTCAGATTTTGAAAGAAAAGTTTGCTGAAGCTTCAGAGGAGGCA
GTCTCTGTTCAGAGAAGTATGCAAGAAACTGTAAATAAGTTACACCAAAAGGAGGAACAGTTTAACATGCTGTCT
TCTGACTTGGAGAAGCTGAGAGAAAACTTAGCAGATATGGAGGCAAAATTTAGAGAGAAAGATGAGAGAGAAGAG
CAGCTGATAAAGGCAAAGGAAAAACTGGAAAATGACATTGCAGAAATAATGAAGATGTCAGGAGATAACTCTTCT
CAGCTGACAAAAATGAACGATGAATTACGTCTGAAAGAAAGAGATGTAGAAGAATTACAGCTAAAACTTACAAAG
GCTAATGAAAATGCAAGTTTTCTGCAAAAAAGTATTGAGGACATGACTGTCAAAGCTGAACAGAGCCAGCAAGAA
GCAGCTAAAAAGCATGAGGAAGAAAAGAAAGAATTGGAGAGGAAATTGTCGGACCTGGAAAAGAAAATGGAAACA
AGCCACAACCAGTGTCAGGAGCTGAAAGCCAGGTATGAGAGAGCCACTTCTGAGACAAAAACCAAGCATGAAGAA
ATCCTACAGAACCTCCAGAAGACGCTGCTGGACACAGAGGACAAGCTGAAGGGCGCACGGGAGGAGAACAGTGGC
TTGCTGCAGGAGCTGGAGGAGCTGAGAAAGCAAGCCGACAAAGCCAAAGCTGCTCAAACAGCGGAAGATGCCATG
CAGATAATGGAACAGATGACCAAAGAGAAGACTGAGACTCTGGCCTCCTTGGAGGACACCAAGCAAACAAATGCA
AAACTACAGAATGAATTGGACACACTTAAAGAAAACAACTTGAAAAATGTGGAAGAGCTGAACAAATCAAAAGAA
CTCCTGACTGTAGAGAATCAAAAAATGGAAGAATTTAGGAAAGAAATAGAAACCCTAAAGCAGGCAGCAGCTCAG

FIGURE 7287B

AAGTCCCAGCAGCTTTCAGCGTTGCAAGAAGAGAACGTTAAACTTGCTGAGGAGCTGGGGAGAAGCAGGGACGAA
GTCACAAGTCATCAAAAGCTGGAAGAAGAAAGATCTGTGCTCAATAATCAGTTGTTAGAAATGAAAAAAAGAGAA
TCCAAGTTCATAAAAGACGCAGATGAAGAGAAAGCTTCCTTGCAGAAATCCATCAGTATAACTAGTGCCTTACTC
ACAGAAAAGGATGCCGAGCTGGAGAAACTGAGAAATGAGGTCACAGTGCTCAGGGGAGAAAACGCCTCTGCCAAG
TCCTTGCATTCAGTTGTTCAGACTCTAGAGTCTGATAAGGTGAAGCTCGAGCTCAAGGTAAAGAACTTGGAGCTT
CAACTCAAAGAAAACAAGAGGCAGCTCAGCAGCTCCTCAGGTAATACAGACACTCAGGCAGACGAGGATGAAAGA
GCCCAGGAGAGTCAGATTGATTTCCTAAATTCAGTAATAGTGGACCTTCAAAGGAAGAATCAAGACCTCAAGATG
AAGGTGGAGATGATGTCAGAAGCAGCCCTGAATGGGAACGGGGATGACCTAAACAATTATGACAGTGATGATCAG
GAGAAACAGTCCAAGAAGAAACCTCGCCTCTTCTGTGACATTTGTGACTGCTTTGATCTCCACGACACAGAGGAT
TGTCCTACCCAGGCACAGATGTCAGAGGACCCTCCCCATTCCACACACCATGGCAGTCGGGGTGAGGAACGCCCA
TACTGTGAAATCTGTGAGATGTTTGGACACTGGGCCACCAACTGCAATGACGACGAAACCTTCTGAGATGAAGCCTC
CAGTGGAGAACTGGGCTTGCTCAGACGCACTCGCATTGACACAACGTAACACCAGCATTGTGTGTGCAGACTTCA
GGAGAACTCATGTTATTTTTTAACCCCGTCAACAAATCTAGGAAAATATTTTGATCTTCAACAAATTGCCCTTTA
GTCTCCCCGTATGAGTTAGAATAATAAATATTTAGTAGGTGAGTTTTCACCTCGAATTTTGTTTTCTTGATTTTT
ACGTTTGAAGACATTGCACCAGATGCCATTACATTTATTGGCCCCCCGACCTTGTAGAAAAACCCCTACCCTCAC
AATACCTTATTTAAGTAACTTTAAATTATGCCGTTACTTTTCATATTTGCACCTAAGATATTTCCAGGCTGCATT
TGTATATTTAGATTTTTTGGTTAAGCTTTGACACTGGAATGAGTTGAAAAAATGTGCCATTTTGCATTTTCATCT
ACTCATTTAAAGTATTTTATTCTTATTCAAAGAAATATCTGAGCTCTTTGCACTACCTGTTATCAGTAGTGCCTT
TACTTCAGGCTTGATAATACTTAGGTGTGATTATAAAATCATGAAGCAGGTAAAGGGAGGGGCAAGCCCCAAACT
GCTGTGGGGACATTTTATAATCTATATGCTGCACCCACTTAATCTACTGTGGTGTTTTGTTTATTAGTTTTGCAT
AATTTCAGCTTCTATATATTGTATGTATATATTTTTTAAAAATCTATATTTTGGGAAAAAAACATACACAATGTG
TCTTTCTTTTTGGACATTTACCTTTTTGAAAAAGAAAACACTTAAAATGATCATTAGGACATAACAGACTAGGCC
AGACATAGCATCTTGTGGCTTTGCAACCATTTTCATTTGTTTGTTTTCCTTTTATTTCTTCACCAGATTTAAATA
AAAGGAGGAATTTTCTCCAATTTTTTTTTCCTTCTCTGGCAGGTATCCCCAGCAGTCAATTAACAATAAGCCAGT
ATAAAACACCTAAATAACCAATCTACAATCTCCCTTCACAAGTTTTTTTACTGTTTTTAGATGAATGTACGATGA
GAAATTCAACGTTAATAATTCTGGATTTTCTTATCACAAAAAAGAAAATGAAGGACCTCAAAGCACCTGAACAGT
TTATCGACCAGTTTGAATCTATTTATCTTCATTTGAATGTCTTCTAGATATGTAAAAAGTCATAAAATGTATCTT
CCATGCTACATGTACAATAAGAACTTCTATAATTGTATATATGCCTTTGATGTATTTTCCCCTCAAGATTATCAA
CTGTGTGTTCGACAGTGAATATTCAATCTGGTACCAGTTGAAATTTTTGGTTATAAATGTAATACGAATTGTTTC
ACAAACAGAAAACATGTAAAGCAGTATTAAAATTTGGCCAAACAAGTGTTCTGTATCTACTTTTAATAAATGGTT
ATTCTTT

FIGURE 7288

MSMLKPSGLKAPTKILKPGSTALKTPTAVVAPVEKTISSEKASSTPSSETQEEFVDDFRVGERVWVNGNKPGFIQ
FLGETQFAPGQWAGIVLDEPIGKNDGSVAGVRYFQCEPLKGIFTRPSKLTRKVQAEDEANGLQTTPASRATSPLC
TSTASMVSSSPSTPSNIPQKPSQPAAKEPSATPPISNLTKTASESISNLSEAGSIKKGERELKIGDRVLVGGTKA
GVVRFLGETDFAKGEWCGVELDEPLGKNDGAVAGTRYFQCQPKYGLFAPVHKVTKIGFPSTTPAKAKANAVRRVM
ATTSASLKRSPSASSLSSMSSVASSVSSRPSRTGLLTETSSRYARKISGTTALQEALKEKQQHIEQLLAERDLER
AEVAKATSHVGEIEQELALARDGHDQHVLELEAKMDQLRTMVEAADREKVELLNQLEEEKRKVEDLQFRVEEESI
TKGDLETQTKLEHARIKELEQSLLFEKTKADKLQRELEDTRVATVSEKSRIMELEKDLALRVQEVAELRRRLESN
KPAGDVDMSLSLLQEISSLQEKLEVTRTDHQREITSLKEHFGAREETHQKEIKALYTATEKLSKENESLKSKLEH
ANKENSDVIALWKSKLETAIASHQQAMEELKVSFSKGLGTETAEFAELKTQIEKMRLDYQHEIENLQNQQDSERA
AHAKEMEALRAKLMKVIKEKENSLEAIRSKLDKAEDQHLVEMEDTLNKLQEAEIKVKELEVLQAKCNEQTKVIDN
FTSQLKATEEKLLDLDALRKASSEGKSEMKKLRQQLEAAEKQIKHLEIEKNAESSKASSITRELQGRELKLTNLQ
ENLSEVSQVKETLEKELQILKEKFAEASEEAVSVQRSMQETVNKLHQKEEQFNMLSSDLEKLRENLADMEAKFRE
KDEREEQLIKAKEKLENDIAEIMKMSGDNSSQLTKMNDELRLKERDVEELQLKLTKANENASFLQKSIEDMTVKA
EQSQQEAAKKHEEEKKELERKLSDLEKKMETSHNQCQELKARYERATSETKTKHEEILQNLQKTLLDTEDKLKGA
REENSGLLQELEELRKQADKAKAAQTAEDAMQIMEQMTKEKTETLASLEDTKQTNAKLQNELDTLKENNLKNVEE
LNKSKELLTVENQKMEEFRKEIETLKQAAAQKSQQLSALQEENVKLAEELGRSRDEVTSHQKLEEERSVLNNQLL
EMKKRESKFIKDADEEKASLQKSISITSALLTEKDAELEKLRNEVTVLRGENASAKSLHSVVQTLESDKVKLELK
VKNLELQLKENKRQLSSSSGNTDTQADEDERAQESQIDFLNSVIVDLQRKNQDLKMKVEMMSEAALNGNGDDLNN
YDSDDQEKQSKKKPRLFCDICDCFDLHDTEDCPTQAQMSEDPPHSTHHGSRGEERPYCEICEMFGHWATNCNDDE
TF

FIGURE 7289

GAGCCTGACTTCAGCGCTCCCACTCTCGGCCGACACCCCTCATGGCCAACCGTTACACCATGGATCTGACTGCCA
TCTACGAGAGCCTCCTGTCGCTGAGCCCTGACGTGCCCGTGCCATCCGACCATGGAGGGACTGAGTCCAGCCCAG
GCTGGGGCTCCTCGGGACCCTGGAGCCTGAGCCCCTCCGACTCCAGCCCGTCTGGGGTCACCTCCCGCCTGCCTG
GCCGCTCCACCAGCCTAGTGGAGGGCCGCAGCTGTGGCTGGGTGCCCCCACCCCCTGGCTTCGCACCGCTGGCTC
CCCGCCTGGGCCCTGAGCTGTCACCCTCACCCACTTCGCCCACTGCAACCTCCACCACCCCCTCGCGCTACAAGA
CTGAGCTATGTCGGACCTTCTCAGAGAGTGGGCGCTGCCGCTACGGGGCCAAGTGCCAGTTTGCCCATGGCCTGG
GCGAGCTGCGCCAGGCCAATCGCCACCCCAAATACAAGACGGAACTCTGTCACAAGTTCTACCTCCAGGGCCGCT
GCCCCTACGGCTCTCGCTGCCACTTCATCCACAACCCTAGCGAAGACCTGGCGGCCCCGGGCCACCCTCCTGTGC
TTCGCCAGAGCATCAGCTTCTCCGGCCTGCCCTCTGGCCGCCGGACCTCACCACCACCACCAGGCCTGGCCGGCC
CTTCCCTGTCCTCCAGCTCCTTCTCGCCCTCCAGCTCCCCACCACCACCTGGGGACCTTCCACTGTCACCCTCTG
CCTTCTCTGCTGCCCCTGGCACCCCCCTGGCTCGAAGAGACCCCACCCCAGTCTGTTGCCCCTCCTGCCGAAGGG
CCACTCCTATCAGCGTCTGGGGGCCCTTGGGTGGCCTGGTTCGGACCCCCTCTGTACAGTCCCTGGGATCCGACC
CTGATGAATATGCCAGCAGCGGCAGCAGCCTGGGGGGCTCTGACTCTCCCGTCTTCGAGGCGGGAGTTTTTGCAC
CACCCCAGCCCGTGGCAGCCCCCCGGCGACTCCCCATCTTCAATCGCATCTCTGTTTCTGAGTGACAAAGTGACT
GCCCGGTCAGATCAGCTGGATCTCAGCGGGGAGCCACGTCTCTTGCACTGTGGTCTCTGCATGGACCCCAGGGCT
GTGGGGACTTGGGGGACAGTAATCAAGTAATCCCCTTTTCCAGAATGCATTAACCCACTCCCCTGACCTCACGCT
GGGGCAGGTCCCCAAGTGTGCAAGCTCAGTATTCATGATGGTGGGGGATGGAGTGTCTTCCGAGGTTCTTGGGGG
AAAAAAAATTGTAGCATATTTAAGGGAGGCAATGAACCCTCTCCCCCACCTCTTCCCTGCCCAAATCTGTCTCCT
AGAATCTTATGTGCTGTGAATAATAGGCCTTCACTGCCCCTCCAGTTTTTATAGACCTGAGGTTCCAGTGTCTCC
TGGTAACTGGAACCTCTCCTGAGGGGGAATCCTGGTGCTCAAATTACCCTCCAAAAGCAAGTAGCCAAAGCCGTT
GCCAAACCCCACCCATAAATCAATGGGCCCTTTATTTATGACGACTTTATTTATTCTAATATGATTTTATAGTAT
TTATATATATTGGGTCGTCTGCTTCCCTTGTATTTTTCTTCCTTTTTTTGTAATATTGAAAACGACGATATAATT
ATTATAAGTAGACTATAATATATTTAGTAATATATATTATTACCTTAAAAGTCTATTTTTGTGTTTTGGGCATTT
TTAAATAAACAATCTGAGTGT

FIGURE 7290

MDLTAIYESLLSLSPDVPVPSDHGGTESSPGWGSSGPWSLSPSDSSPSGVTSRLPGRSTSLVEGRSCGWVPPPPG
FAPLAPRLGPELSPSPTSPTATSTTPSRYKTELCRTFSESGRCRYGAKCQFAHGLGELRQANRHPKYKTELCHKF
YLQGRCPYGSRCHFIHNPSEDLAAPGHPPVLRQSISFSGLPSGRRTSPPPPGLAGPSLSSSSFSPSSSPPPPGDL
PLSPSAFSAAPGTPLARRDPTPVCCPSCRRATPISVWGPLGGLVRTPSVQSLGSDPDEYASSGSSLGGSDSPVFE
AGVFAPPQPVAAPRRLPIFNRISVSE

FIGURE 7291

GTTTGAGCAGCATTGTTAGAGCCTGTGGAAAACACTTTACAACTGTGTAACTGTCTTCATCTTTACAGAGGAATA
GTCTACAAGGAAGACTTGTAACCTGGAGAAGAGACCTGTCATTTACTACATCCTTTATAGTGATGCTACAGGACG
AAGAGGAATGGATAAAAACATTGGCGAGCAACTCAATAAAGCGTATGAAGCCTTCCGGCAGGCATGCATGGATAG
AGATTCTGCAGTAAAAGAATTACAGCAAAAGACTGAGAACTATGAGCAGAGAATACGTGAACAACAGGAACAGCT
GTCACTTCAACAGACTATTATTGACAAGCTAAAATCTCAGTTACTTCTTGTGAATTCCACTCAAGATAACAATTA
TGGCTGTGTTCCTCTGCTTGAAGACAGTGAAACAAGAAAGAATAATTTGACTCTTGATCAGCCACAAGATAAAGT
GATTTCAGGAATAGCAAGAGAAAAACTACCAAAGGTAAGAAGACAAGAGGTTTCTTCTCCTAGAAAAGAAACTTC
AGCAAGGAGTCTTGGCAGTCCTTTGCTCCATGAAAGGGGTAATATAGAGAAGACTTTCTGGGATCTGAAAGAAGA
ATTTCATAAAATATGCATGCTAGCAAAAGCACAGAAAGACCACTTAAGCAAACTTAATATACCAGACACTGCAAC
TGAAACACAGTGCTCTGTGCCTATACAGTGTACGGATAAAACAGATAAACAAGAAGCGCTGTTTAAGCCTCAGGC
TAAAGATGATATAAATAGAGGTGCACCATCCATCACATCTGTCACACCAAGAGGACTGTGCAGAGATGAGGAAGA
CACCTCTTTTGAATCACTTTCTAAATTCAATGTCAAGTTTCCACCTATGGACAATGACTCAACTTTCTTACATAG
CACTCCAGAGAGACCCGGCATCCTTAGTCCTGCCACGTCTGAGGCAGTGTGCCAAGAGAAATTTAATATGGAGTT
CAGAGACAACCCAGGGAACTTTGTTAAAACAGAAGAAACTTTATTTGAAATTCAGGGAATTGACCCCATAGCTTC
AGCTATACAAAACCCTAAAACAACTGACAAAACAAAGCCCTCAAATCTCGTAAACACTTGTATCAGGACAACTCT
GGATAGAGCTGCGTGTTTGCCACCTGGAGACCATAATGCATTATATGTAAATAGCTTCCCACTTCTGGACCCATC
TGATGCACCTTTTCCCTCACTCGATTCCCCGGGAAAAGCAATCCGAGGACCACAGCAGCCCATTTGGAAGCCCTT
TCCTAATCAAGACAGTGACTCGGTGGTACTAAGTGGCACAGACTCAGAACTGCATATACCTCGAGTATGTGAATT
CTGTCAAGCAGTTTTCCCACCATCCATTACATCCAGGGGGGATTTCCTTCGGCATCTTAATTCACACTTCAATGG
AGAGACTTAAGACACATTTGAAAACAGACATATCAAGTTCTATGTGATGATTTTGGGTTTTTAATACTATAAATA
CTTGATTGTAAACTAAATTCAAGATCATTTATTGGAAAATCTAGTTTCACAGCTATTTG

FIGURE 7292

MDKNIGEQLNKAYEAFRQACMDRDSAVKELQQKTENYEQRIREQQEQLSLQQTIIDKLKSQLLLVNSTQDNNYGC
VPLLEDSETRKNNLTLDQPQDKVISGIAREKLPKVRRQEVSSPRKETSARSLGSPLLHERGNIEKTFWDLKEEFH
KICMLAKAQKDHLSKLNIPDTATETQCSVPIQCTDKTDKQEALFKPQAKDDINRGAPSITSVTPRGLCRDEEDTS
FESLSKFNVKFPPMDNDSTFLHSTPERPGILSPATSEAVCQEKFNMEFRDNPGNFVKTEETLFEIQGIDPIASAI
QNPKTTDKTKPSNLVNTCIRTTLDRAACLPPGDHNALYVNSFPLLDPSDAPFPSLDSPGKAIRGPQQPIWKPFPN
QDSDSVVLSGTDSELHIPRVCEFCQAVFPPSITSRGDFLRHLNSHFNGET

FIGURE 7293

GGGGAGCCGAGGCGAGCGCGAGCGAGGTCCAGCACCATGTGCTAGGTCACTCCCAGCGCGAGGCCACACCTGGGC
CGTCGGAGCAGCCCCTCCTCACTTCAGGGGTCACCCTCCCCAGCACCCATTGCCCCACCATGGCTGGGGACCGGC
TCCCGAGGAAGGTGATGGATGCCAAGAAGCTGGCCAGCCTGCTGCGGGGCGGGCCTGGGGGGCCGCTGGTCATCG
ACAGCCGCTCCTTCGTGGAGTACAACAGCTGGCATGTGCTCAGCTCCGTCAACATCTGCTGCTCCAAGCTGGTGA
AGCGGCGGCTGCAGCAGGGCAAGGTGACCATTGCGGAGCTCATCCAGCCGGCTGCACGCAGCCAGGTGGAGGCTA
CGGAGCCACAGGACGTGGTGGTCTATGACCAGAGCACGCGGGACGCCAGCGTGCTGGCCGCAGACAGCTTCCTCT
CCATCCTGCTGAGCAAGCTGGACGGCTGCTTCGACAGCGTGGCCATCCTCACTGGGGGCTTCGCCACCTTCTCCT
CCTGCTTCCCCGGCCTCTGCGAGGGCAAGCCTGCTGCCCTGCTACCCATGAGCCTCTCCCAGCCCTGCCTGCCTG
TGCCCAGCGTGGGCCTGACCCGCATCCTGCCTCACCTCTACCTGGGCTCGCAGAAGGACGTCCTAAACAAGGATC
TGATGACGCAAAATGGAATAAGCTACGTCCTCAACGCCAGCAACTCCTGCCCCAAGCCTGACTTCATCTGCGAGA
GCCGCTTCATGCGGGTCCCCATCAACGACAACTACTGTGAAAAACTGCTGCCCTGGCTGGACAAGTCCATCGAGT
TCATCGATAAAGCCAAGCTCTCCAGCTGCCAAGTCATCGTCCACTGTCTGGCTGGCATCTCCCGCTCTGCCACCA
TCGCCATCGCCTACATCATGAAGACCATGGGCATGTCCTCCGACGACGCCTACAGGTTCGTGAAGGACAGGCGCC
CGTCCATCTCGCCCAACTTCAACTTCCTGGGCCAGCTGCTGGAGTACGAGCGCACGCTGAAGCTGCTGGCCGCCC
TGCAGGGCGACCCGGGCACCCCCTCAGGGACGCCGGAGCCTCCGCCCAGTCCTGCCGCCGGGGCCCCGCTGCCAC
GGCTGCCACCACCTACCTCAGAGAGCGCTGCCACAGGGAATGCGGCTGCCAGGGAGGGCGGCCTGAGCGCGGGCG
GGGAGCCCCCCGCGCCCCCCACGCCCCCGGCGACCAGCGCACTGCAGCAGGGCCTGCGCGGCCTGCACCTCTCCT
CGGACCGCCTGCAGGACACTAACCGCCTCAAGCGCTCCTTCTCCCTGGACATCAAGTCTGCCTACGCCCCTAGCA
GGCGGCCCGACGGCCCCGGGCCCCCCGACCCCGGCGAGGCCCCGAAGCTCTGCAAGCTGGACAGCCCGTCGGGGG
CCGCGCTGGGCCTGTCCTCGCCCAGCCCGGACAGCCCGGACGCCGCGCCTGAGGCGCGCCCACGGCCCCGCCGGC
GGCCCCGGCCCCCCGCCGGCTCCCCCGCGCGCTCCCCCGCGCACAGCCTCGGCCTGAACTTCGGCGATGCGGCCC
GGCAGACTCCGCGGCACGGCCTCTCGGCCCTGTCGGCGCCCGGGCTGCCCGGCCCTGGCCAGCCGGCCGGCCCCG
GGGCCTGGGCACCGCCGCTTGACTCCCCAGGCACGCCGTCGCCCGACGGGCCCTGGTGCTTCAGCCCCGAGGGCG
CACAGGGGGCGGGCGGGGTGCTGTTTGCGCCCTTCGGCCGGGCGGGCGCCCCGGGACCAGGCGGCGGCAGCGACC
TGCGGCGGCGGGAGGCAGCGAGGGCTGAGCCCCGGGACGCGCGGACCGGCTGGCCCGAGGAGCCGGCCCCGGAGA
CGCAGTTCAAGCGCCGCAGCTGCCAGATGGAGTTCGAGGAGGGCATGGTGGAGGGGCGCGCGCGCGGCGAGGAGC
TGGCCGCCCTGGGCAAGCAGGCGAGCTTCTCGGGCAGCGTGGAGGTCATCGAGGTGTCCTGACCCCTCCGCTGCC
CTCGGCCCCGCCGCCCGCAGCCAGGCCCGTTATAAATGTATATTATATATAATGCAAAGAAAGGTAAATGGTTTT
ACTGGGATTTTTATCGAGAAGTAAATATTTCGATTTTTTATTTATTTAAGCTGTTCATTCTGGCAATGATTTGGC
AACAGTGCGGGTGGTCCTCGAGCTCTATTTTTACTGTCTGGTATTTAAACTGAAACATACGTTTCTAAGCAATAC
GAGGCCACCTTCAGTCGCAAGCTGGGTGCCAGGCCTGGGGCCCTCCCAGTTCCCCCGCCCCAGGAAACACTGCTG
ACCTTTGCAAAGGCTGCCGAGCTTTCGTGCACTTTTTACATAACAAAAAGGG

FIGURE 7294

MAGDRLPRKVMDAKKLASLLRGGPGGPLVIDSRSFVEYNSWHVLSSVNICCSKLVKRRLQQGKVTIAELIQPAAR
SQVEATEPQDVVVYDQSTRDASVLAADSFLSILLSKLDGCFDSVAILTGGFATFSSCFPGLCEGKPAALLPMSLS
QPCLPVPSVGLTRILPHLYLGSQKDVLNKDLMTQNGISYVLNASNSCPKPDFICESRFMRVPINDNYCEKLLPWL
DKSIEFIDKAKLSSCQVIVHCLAGISRSATIAIAYIMKTMGMSSDDAYRFVKDRRPSISPNFNFLGQLLEYERTL
KLLAALQGDPGTPSGTPEPPPSPAAGAPLPRLPPPTSESAATGNAAAREGGLSAGGEPPAPPTPPATSALQQGLR
GLHLSSDRLQDTNRLKRSFSLDIKSAYAPSRRPDGPGPPDPGEAPKLCKLDSPSGAALGLSSPSPDSPDAAPEAR
PRPRRRPRPPAGSPARSPAHSLGLNFGDAARQTPRHGLSALSAPGLPGPGQPAGPGAWAPPLDSPGTPSPDGPWC
FSPEGAQGAGGVLFAPFGRAGAPGPGGGSDLRRREAARAEPRDARTGWPEEPAPETQFKRRSCQMEFEEGMVEGR
ARGEELAALGKQASFSGSVEVIEVS

FIGURE 7295

AGGTGGAGCCTTTTTTGCTCACGGCAGCAAGTTCCCTTCTCCTTTCTCTCCCCCGGCGGCGTGTGCATTGGCTCT
TCAAGCTGCCTGTGCTGCTCCGTGGAGTGAAAAAGGCAGGGTGTGCTCGCAGACTGTGCTATAAACTGCAATTTC
TATTTGGGGTCCTCACGGAGAAGAACACCAGGAAAGACAGACAGGACCAGTGCCATGGGCCAGCTTTGCTGCTTT
CCTTTCTCAAGAGATGAAGGAAAAATCAGTGAAAAGAACGGAGGGGAGCCCGATGACGCTGAACTAGTAAGGCTC
AGTAAGAGGCTGGTGGAGAACGCGGTGCTCAAGGCTGTCCAGCAGTATCTGGAGGAAACACAGAATAAAAACAAG
CCGGGGGGAGGGGAGCTCTGTGAAAACCGAAGCAGCTGATCAGAATGGCAATGACAATGAGAACAACAGGAAATGA

GCCCGGAACGCAGGCCCCCATGTCTCTGTGCAAAGCCTCCCTGCTTCCCTCTGCTGAGTCTAGGGACTGACTTGC
AGCGTGCTGTTTAAGTTAAGTTTCTCTGGTGCAATCTGTGAAGATTGCCTAATACTTTTCATGATCGATGTGTTC
GCATTGCTGAAACACAACAGAAGAAAAATGGAGTGCTGGGACTGGCAGAGGAAATTAATTGATGAAAGAAGAATG
GCCCAAGTTTCATTCGCCCTCAGCCACGCACAAGGGAAAGGGAACTTTGGGTTATGCCTCCTGGACGCAAATTAA
AGGCCGAGAAAGAGGCCTTGCCATCAATGGAATACTGCCATTTATATTGCTTAGCAGGGCATTTGACTACTTTAT
CTGAGGCCAGAACTCTCACACACAGCTATCAAGTGCTAAGTTTAAAATAATCACTGTTGGAATTGTCATCTGTAC
AATTAGTCCATAATGTTTCATGTTTGTCCTAAGTGTGCTGTTGCTATGCAGTGTGATCTTTATTTATAGTAAATT
ATGTTTCATGTAAATGATATATTTTTGGTGAAATGCAACCTTTTCTATAAAATGTGGGCAACATTTTAAAGTTTT
TTTAAAATCCTATTTTGATAAGTCAGTATGCCATATTTAATGAAATGTTATTATATAATTTTTTTTTCTTAGGCA
AGAAACCTATTGGAATTCGAGACTTAATTAATGAAGCTTTGCATCGAGAAACGATGGGTCTGAAGTCCAAAGTGA
AACAGATAAAGGAACTTTTATTAAAGCCTGAGACTCAGGCCAGAATTAGGAGGGAGCTTTTTGAAGGAAGACTTA
TTAACAACAGTAATTCAGCAAATGACGTTGATTTCAGCACAACTTTGACATAAGCTCTACATTGCGATTGTGACA
ACATAGCTTATGAAATCTTTTCAGCTTATTAAGTAGCTCTTTGGTAAACACCAAAGAAGTTTCTGATAGTGTCTG
CACAACAGCAAACCAACATTTGGTGAGGAATTAGCAATTTCTTGCCAAAGAAAATTGATTCTGCCCAATTATTTT
TTGAGCTACACTTGTGTTTTAGAATATCTGTTTCTGTAATATTGAGAGTTATTTTATAGAAATGATTTCTTAATT
AGCTGTTGTGAGATATTTCTCGGGTCCTTGCAGAAAAAAACATACAGACTGTGAACAAATCATTCACAAACAGAA
TAAAACAGAGCCAACAACAGTATTTTAAGGGTCACTTGCCTCCTGTTGACACAATTGTTGCTAAATCAAAAGAAG
CGTTGTCCAGGTGTGTCTACATCTAGTGTTACTTTTAATGAGAATTTGAATGTTTATTGAACAATAGTACTTGAA
TGAACATTTATAAATGTAATTATTGCGATCACTGGTTAAGAATGTTTTATATATCCTTATAATATTTTTCACTGA
TCAAAATGTTGTTCTGCTTTTTCATTTCTTAAGGAATACATGTTTGGGATTTTTATTTTTTACGTGTCCGAAGAT
AAGCTCCAGGTCTTATCGTATCCCTTGCCATCTGAACTTGTTTGCACTGCTTCTGTTTGAAAGAGCATCTTGAAA
AACTTCCCCGGTATGATGATTGTTGGTAACAACTTTTTCTATAGTCATTGATGGAGTAGATCATGATGGAGGGGA
AATCACTGGAGATCAAATATGTAAAATCATTTCAAATATAAAATCCAGTTTACTCATGGATTTTAGCTATTTTTT
CACTGGGTAAATTATACTACATTTATTTACAAATGAGTTTATGCATTTTCATGGCTCTTAATAAACATATTGTTT
TCCCTTGAAAAAAAAAAAAAAAAAAAAAA

FIGURE 7296

MGQLCCFPFSRDEGKISEKNGGEPDDAELVRLSKRLVENAVLKAVQQYLEETQNKNKPGEGSSVKTEAADQNGND
NENNRK

FIGURE 7297

GGATCGAGGGGACTCTGACCACAGCCTGTGGCTGGGAAGGGAGACAGAGGCGGCGGCGGCTCAGGGGAAACGAGG
CTGCAGTGGTGGTAGTAGGAAGATGTCGGGCGAGGACGAGCAACAGGAGCAAACTATCGCTGAGGACCTGGTCGT
GACCAAGTATAAGATGGGGGGCGACATCGCCAACAGGGTACTTCGGTCCTTGGTGGAAGCATCTAGCTCAGGTGT
GTCGGTACTCAGCCTGTGTGAGAAAGGTGATGCCATGATTATGGAAGAAACAGGGAAAATCTTCAAGAAAGAAAA
GGAAATGAAGAAAGGTATTGCTTTTCCCACCAGCATTTCGGTAAATAACTGTGTATGTCACTTCTCCCCTTTGAA
GAGCGACCAGGATTATATTCTCAAGGAAGGTGACTTGGTAAAAATTGACCTTGGGGTCCATGTGGATGGCTTCAT
CGCTAATGTAGCTCACACTTTTGTGGTTGATGTAGCTCAGGGGACCCAAGTAACAGGGAGGAAAGCAGATGTTAT
TAAGGCAGCTCACCTTTGTGCTGAAGCTGCCCTACGCCTGGTCAAACCTGGAAATCAGAACACACAAGTGACAGA
AGCCTGGAACAAAGTTGCCCACTCATTTAACTGCACGCCAATAGAAGGTATGCTGTCACACCAGTTGAAGCAGCA
TGTCATCGATGGAGAAAAAACCATTATCCAGAATCCCACAGACCAGCAGAAGAAGGACCATGAAAAAGCTGAATT
TGAGGTACATGAAGTATATGCTGTGGATGTTCTCGTCAGCTCAGGAGAGGGCAAGGCCAAGGATGCAGGACAGAG
AACCACTATTTACAAACGAGACCCCTCTAAACAGTATGGACTGAAAATGAAAACTTCACGTGCCTTCTTCAGTGA
GGTGGAAAGGCGTTTTGATGCCATGCCGTTTACTTTAAGAGCATTTGAAGATGAGAAGAAGGCTCGGATGGGTGT
GGTGGAGTGCGCCAAACATGAACTGCTGCAACCATTTAATGTTCTCTATGAGAAGGAGGGTGAATTTGTTGCCCA
GTTTAAATTTACAGTTCTGCTCATGCCCAATGGCCCCATGCGGATAACCAGTGGTCCCTTCGAGCCTGACCTCTA
CAAGTCTGAGATGGAGGTCCAGGATGCAGAGCTAAAGGCCCTCCTCCAGAGTTCTGCAAGTCGAAAAACCCAGAA
AAAGAAAAAAAAGAAGGCCTCCAAGACTGCAGAGAATCCCACCAGTGGGGAAACATTAGAAGAAAATGAAGCTGG
GGACTGAGGTGCGTCCCATCTCCCCAGCTTGCTGCTCCTGCCTCATCCCCTTCCCACCAAACCCCAGACTCTGTG
AAGTGCAGTTCTTCTCCACCTAGGACCGCCAGCAGAGCGGGGGGATCTCCCTGCCCCCACCCCAGTTCCCCAACC
CACTCCCTTCCAACAACAACCAGCTCCAACTGACTCTGGTCTTGGGAGGTGAGGCTTCCCAACCACGGAAGACTA
CTTTAAACGAAAAAAAGAAATTGAATAATAAAATCAGGAGTCAAAATTCATCGTCTTCAAGGCCCCTCTTTCTAG
CCTTTTCTACTACTCTCTGCTTGGTCAAGGTTTGTGCCCCACTACAGAACAGGGCTAAATTAGCCACCACCACTG
AAAACTCAGCCGAATTTTTTTATACCACTCTGACGTCAGCATTTTTT

FIGURE 7298

MSGEDEQQEQTIAEDLVVTKYKMGGDIANRVLRSLVEASSSGVSVLSLCEKGDAMIMEETGKIFKKEKEMKKGIA
FPTSISVNNCVCHFSPLKSDQDYILKEGDLVKIDLGVHVDGFIANVAHTFVVDVAQGTQVTGRKADVIKAAHLCA
EAALRLVKPGNQNTQVTEAWNKVAHSFNCTPIEGMLSHQLKQHVIDGEKTIIQNPTDQQKKDHEKAEFEVHEVYA
VDVLVSSGEGKAKDAGQRTTIYKRDPSKQYGLKMKTSRAFFSEVERRFDAMPFTLRAFEDEKKARMGVVECAKHE
LLQPFNVLYEKEGEFVAQFKFTVLLMPNGPMRITSGPFEPDLYKSEMEVQDAELKALLQSSASRKTQKKKKKKAS
KTAENPTSGETLEENEAGD

FIGURE 7299

CCGCGGAGTTACGGGAAAGTTGGTCCGAGTTCCCAGAGTTTCCCTCTGTGGTGCCCTAGGCTTCGGCCCGGTGCC
CCGGCTCCTTTCCTCCTTTCGGCCTTCGCCGTCCACCAGGTCCCTCTCTCTGTCCCGGCCGCCATGGAGCAGCCG
CCGGCGCCTAAGAGTAAACTAAAAAAGCTGAGTGAAGACAGTTTGACTAAGCAGCCTGAAGAAGTTTTTGATGTA
TTAGAGAAGCTTGGAGAAGGGTCTTATGGAAGTGTATTTAAAGCAATACACAAGGAATCCGGTCAAGTTGTCGCA
ATTAAACAAGTACCTGTTGAATCAGATCTTCAGGAAATAATCAAAGAAATTTCCATAATGCAGCAATGTGACAGC
CCATATGTTGTAAAGTACTATGGCAGTTATTTTAAGAATACAGACCTCTGGATTGTTATGGAGTACTGTGGCGCT
GGCTCTGTCTCAGACATAATTAGATTACGAAACAAGACATTAATAGAAGATGAAATTGCAACCATTCTTAAATCT
ACATTGAAAGGACTAGAATATTTGCACTTTATGAGAAAAATACACAGAGATATAAAAGCTGGAAATATTCTCCTC
AATACAGAAGGACATGCAAAATTGGCAGATTTTGGAGTGGCTGGTCAGTTAACAGATACAATGGCAAAACGCAAT
ACTGTAATAGGAACTCCATTTTGGATGGCTCCTGAGGTGATTCAAGAAATAGGCTATAACTGTGTGGCCGACATC
TGGTCCCTTGGCATTACTTCTATAGAAATGGCTGAAGGAAAACCTCCTTATGCTGATATACATCCAATGAGGGCT
ATTTTTATGATTCCCACAAATCCACCACCAACATTCAGAAAGCCAGAACTTTGGTCCGATGATTTCACCGATTTT
GTTAAAAAGTGTTTGGTGAAGAATCCTGAGCAGAGAGCTACTGCAACACAACTTTTACAGCATCCTTTTATCAAG
AATGCCAAACCTGTATCAATATTAAGAGACCTGATCACAGAAGCTATGGAGATCAAAGCTAAAAGACATGACGAA
CAGCAACGAGAATTGGAAGAGGAAGAAGAAAATTCGGATGAAGATGAGCTGGATTCCCACACCATGGTGAAGACT
AGTGTGGGAGAGTGTGGCACCATGCGGGCCACAAGCACGATGAGTGAAGGGGCCCAGACCATGATTGAACATAAT
AGCACGATGTTGGAATCCGACTTGGGGACCATGGTGATAAACAGTGAGGATGAGGAAGAAGAAGATGGAACTATG
AAAAGAAATGCAACCTCACCACAAGTACAAAGACCATCTTTCATGGACTACTTTGATAAGCAAGACTTCAAGAAT
AAGAGTCACGAAAACTGTAATCAGAACATGCATGAACCCTTCCCTATGTCCAAAAACGTTTTTCCTGATAACTGG
AAAGTTCCTCAAGATGGAGACTTTGACTTTTTGAAAAATCTAAGTTTAGAAGAACTACAGATGCGGTTAAAAGCA
CTGGACCCCATGATGGAACGGGAGATAGAAGAACTTCGTCAGAGATACACTGCGAAAAGACAGCCCATTCTGGAT
GCGATGGATGCAAAGAAAAGAAGGCAGCAAAACTTTTGAGTCTAATTTCCTCTCTGTTTTTAACTATTCTGGAGA
CCAAGAAACCACTAGGAATTGAAGGAATATTTGGATATTTTTAATCCTAAGATTTTGCCCTACAATTAGGCAGAG
GTCAAAAAGTGACAATGGTACATGCCCAGGTAAATTCCCAAAAGGCAGAATTGACAGTTGTATCTGCTGTGCATT
CACTCTAAGATGAGGAGAACAAAAGAAGTGTATTCTCTTGTTCTGTCAGCTGCATACCAGTAATAAAACTGTTAT
GAAATGGATTTTCAAGGTCTCTAAACCTTGAAAATCCAAAGGCTATTGTTGCATTGTACAGCACTGAAAGGGCTT
TATGTTACAATATTCTTTATTCCTATCTAGTATACTAGGCTATTTATTGTCCCCTTAGGTAAACTTATTTATTTA
TGCTATTTTGGCTTTGTTTCATTTTTTAAGGACAAGATCAGGATAGCTTTGGTGAAGGTAGGGTCATATTAATAT
GATGATAATGTGCAACCAATTTATACTTTCTGCAGGGAGCTATGGGGTACATTCCTTGATTTCCAGGATAGTTTT
TCAAATAGGAAAGCAATAATGGCAGTAGTTCTCAAATGGGCTAGGCCTTTTTTATATTGAAGCAATAATTCCATT
TTTACCCTTTGAAATTTTGTTTTTTTGATTTTTGATGTTTGGTACAAATAGAACTATATATATTTAGGTAAAATA
GATCTATCGTGTTTAAAACCAAAGAAATCAATGGAACCCTTGCACAAAAAAGTGTGATAAATATTTTTAAATAAA
AACTTAATACAAATGTAATTTGTTAATATTGTTTCATGTTTTATGTGTAGATCTAATAGCTGAACTGATTCAAAC
TGTAATAAGCTCATCAATTTCATTTCTATGAAAATGTGCTCTGTTGTCACAGGATGTTTCTGTTGATTTTATTCA
TTTCCTGGGAATTGGTAAACATCATGTTCCTGATGATAACCCAGTAGCAAAAACATTTGTACTGAGTGGTACAAG
CCTTGGGGACTGAAAAAAAAAAAAGATTAAAACCATTAAAAAGAAACTCATTTTTACGCTGAATGAACATTTATA
TGATTGCATTGGGACCAGTCATTTCCTAAGCTACATATGGCCATCTTGACAGTGTTTTTTCTTTTGTGTGTTTAA
TTATTATGTGTAAATCATAAAGACAAATAAATTTCACTGTGCCAC

FIGURE 7300

MEQPPAPKSKLKKLSEDSLTKQPEEVFDVLEKLGEGSYGSVFKAIHKESGQVVAIKQVPVESDLQEIIKEISIMQ
QCDSPYVVKYYGSYFKNTDLWIVMEYCGAGSVSDIIRLRNKTLIEDEIATILKSTLKGLEYLHFMRKIHRDIKAG
NILLNTEGHAKLADFGVAGQLTDTMAKRNTVIGTPFWMAPEVIQEIGYNCVADIWSLGITSIEMAEGKPPYADIH
PMRAIFMIPTNPPPTFRKPELWSDDFTDFVKKCLVKNPEQRATATQLLQHPFIKNAKPVSILRDLITEAMEIKAK
RHDEQQRELEEEEENSDEDELDSHTMVKTSVGECGTMRATSTMSEGAQTMIEHNSTMLESDLGTMVINSEDEEEE
DGTMKRNATSPQVQRPSFMDYFDKQDFKNKSHENCNQNMHEPFPMSKNVFPDNWKVPQDGDFDFLKNLSLEELQM
RLKALDPMMEREIEELRQRYTAKRQPILDAMDAKKRRQQNF

FIGURE 7301A

AGCGCCCGCCGCGTCCGGGGCCGGCTGGTGCGCGAGACGCCGCCGAGAGTTGTGAAGGGCGCGGGTGGGGGGCGC
TGCCGGCCTCGTGGGTACGTTCGTGCCGCGTCTGTCCCAGAGCTGGGGCCGCAGGAGCGGAGGCAAGAGGGGCAC
TATGGCAGACAAAGTTAGGAGGCAGAGGCCGAGGAGGCGAGTCTGTTGGGCCTTGGTGGCTGTGCTCTTGGCAGA
CCTGTTGGCACTGAGTGATACACTGGCAGTGATGTCTGTGGACCTGGGCAGTGAGTCCATGAAGGTGGCCATTGT
CAAACCTGGAGTGCCCATGGAAATTGTCTTGAATAAGGAATCTCGGAGGAAAACACCGGTGATCGTGACCCTGAA
AGAAAATGAAAGATTCTTTGGAGACAGTGCAGCAAGCATGGCGATTAAGAATCCAAAGGCTACGCTACGTTACTT
CCAGCACCTCCTGGGGAAGCAGGCAGATAACCCCCATGTAGCTCTTTACCAGGCCCGCTTCCCGGAGCACGAGCT
GACTTTCGACCCACAGAGGCAGACTGTGCACTTTCAGATCAGCTCGCAGCTGCAGTTCTCACCTGAGGAAGTGTT
GGGCATGGTTCTCAATTATTCTCGTTCTCTAGCTGAAGATTTTGCAGAGCAGCCCATCAAGGATGCAGTGATCAC
CGTGCCAGTCTTCTTCAACCAGGCCGAGCGCCGAGCTGTGCTGCAGGCTGCTCGTATGGCTGGCCTCAAAGTGCT
GCAGCTCATCAATGACAACACCGCCACTGCCCTCAGCTATGGTGTCTTCCGCCGGAAAGATATTAACACCACTGC
CCAGAATATCATGTTCTATGACATGGGCTCAGGCAGCACCGTATGCACCATTGTGACCTACCAGATGGTGAAGAC
TAAGGAAGCTGGGATGCAGCCACAGCTGCAGATCCGGGGAGTAGGATTTGACCGTACCCTGGGGGGCCTGGAGAT
GGAGCTCCGGCTTCGAGAACGCCTGGCTGGGCTTTTCAATGAGCAGCGCAAGGGTCAGAGAGCAAAGGATGTGCG
GGAGAACCCGCGTGCCATGGCCAAGCTGCTGCGTGAGGCTAATCGGCTCAAAACCGTCCTCAGTGCCAACGCTGA
CCACATGGCACAGATTGAAGGCCTGATGGATGATGTGGACTTCAAGGCAAAAGTGACTCGTGTGGAATTTGAGGA
GTTGTGTGCAGACTTGTTTGAGCGGGTGCCTGGGCCTGTACAGCAGGCCCTCCAGAGTGCCGAAATGAGTCTGGA
TGAGATTGAGCAGGTGATCCTGGTGGGTGGGGCCACTCGGGTCCCCAGAGTTCAGGAGGTGCTGCTGAAGGCCGT
GGGCAAGGAGGAGCTGGGGAAGAACATCAATGCAGATGAAGCAGCCGCCATGGGGGCAGTGTACCAGGCAGCTGC
GCTCAGCAAAGCCTTTAAAGTGAAGCCATTTGTCGTCCGAGATGCAGTGGTCTACCCCATCCTGGTGGAGTTCAC
GAGGGAGGTGGAGGAGGAGCCTGGGATTCACAGCCTGAAGCACAATAAACGGGTACTCTTCTCTCGGATGGGGCC
CTACCCTCAACGCAAAGTCATCACCTTTAACCGCTACAGCCATGATTTCAACTTCCACATCAACTACGGCGACCT
GGGCTTCCTGGGGCCTGAAGATCTTCGGGTATTTGGCTCCCAGAATCTGACCACAGTGAAGCTAAAAGGGGTGGG
TGACAGCTTCAAGAAGTATCCTGACTACGAGTCCAAGGGCATCAAGGCTCACTTCAACCTGGATGAGAGTGGCGT
GCTCAGTCTAGACAGGGTGGAGTCTGTATTTGAGACACTGGTAGAGGACAGCGCAGAAGAGGAATCTACTCTCAC
CAAACTTGGCAACACCATTTCCAGCCTGTTTGGAGGCGGTACCACACCAGATGCCAAGGAGAATGGTACTGATAC
TGTCCAGGAGGAAGAGGAGAGCCCTGCAGAGGGGAGCAAGGACGAGCCTGGGGAGCAGGTGGAGCTCAAGGAGGA
AGCTGAGGCCCCAGTGGAGGATGGCTCTCAGCCCCCACCCCCTGAACCTAAGGGAGATGCAACCCCTGAGGGAGA
AAAGGCCACAGAAAAAGAAAATGGGGACAAGTCTGAGGCCCAGAAACCAAGTGAGAAGGCAGAGGCAGGGCCTGA
GGGCGTCGCTCCAGCCCCAGAGGGAGAGAAGAAGCAGAAGCCCGCCAGGAAGCGGCGAATGGTAGAGGAGATCGG
GGTGGAGCTGGTTGTTCTGGACCTGCCTGACTTGCCAGAGGATAAGCTGGCTCAGTCGGTGCAGAAACTTCAGGA
CTTGACACTCCGAGACCTGGAGAAGCAGGAACGGGAAAAAGCTGCCAACAGCTTGGAAGCGTTCATATTTGAGAC
CCAGGACAAGCTGTACCAGCCCGAGTACCAGGAAGTGTCCACAGAGGAGCAGCGTGAGGAGATCTCTGGGAAGCT
CAGCGCCGCATCCACCTGGCTGGAGGATGAGGGTGTTGGAGCCACCACAGTGATGTTGAAGGAGAAGCTGGCTGA
GCTGAGGAAGCTGTGCCAAGGGCTGTTTTTTCGGGTAGAGGAGCGCAAGAAGTGGCCCGAACGGCTGTCTGCCCT
CGATAATCTCCTCAACCATTCCAGCATGTTCCTCAAGGGGGCCCGGCTCATCCCAGAGATGGACCAGATCTTCAC
TGAGGTGGAGATGACAACGTTAGAGAAAGTCATCAATGAGACCTGGGCCTGGAAGAATGCAACTCTGGCCGAGCA
GGCTAAGCTGCCCGCCACAGAGAAGCCTGTGTTGCTCTCAAAAGACATTGAAGCTAAGATGATGGCCCTGGACCG
AGAGGTGCAGTATCTGCTCAATAAGGCCAAGTTTACCAAGCCCCGGCCCCGGCCTAAGGACAAGAATGGGACCCG
GGCAGAGCCACCCCTCAATGCCAGTGCCAGTGACCAGGGGGAGAAGGTCATCCCTCCAGCAGGCCAGACTGAAGA
TGCAGAGCCCATTTCAGAACCTGAGAAAGTAGAGACTGGATCCGAGCCAGGAGACACTGAGCCTTTGGAGTTAGG
AGGTCCTGGAGCAGAACCTGAACAGAAAGAACAATCGACAGGACAGAAGCGGCCTTTGAAGAACGACGAACTATA
ACCCCCACCTCTGTTTTCCCCATTCATCTCCACCCCCTTCCCCCACCACTTCTATTTATTTAACATCGAGGGTTG
GGGGAGGGGTTGGTCCTGCCCTCGGCTGGAGTTCCTTTCTCACCCCTGTGATTTGGAGGTGTGGAGAAGGGGAAG
GGAGGGACAGCTCACTGGTTCCTTCTGCAGTACCTCTGTGGTTAAAAATGGAAACTGTTCTCCTCCCCAGCCCCA
CTCCCTGTTCCCTACCCATATAGGCCCTAAATTTGGGAAAAATCACTATTAATTTCTGAATCCTTTGCCTGTGGG
TAGGAAGAGAATGGCTGCCAGTGGCTGATGGGTCCCGGTGATGGGAAGGGTATCAGGTTGCTGGGGAGTTTCCAC
TCTTCTCTGGTGATTGTTCCTTCCCTCCCTTCCTCTCCCACCATGCGATGAGCATCCTTTCAGGCCAGTGTCTGC

FIGURE 7301B

AGAGCCTCAGTTACCAGGTTTGGTTTCTGAGTGCCTATCTGTGCTCTTTCCTCCCTCTGCGGGCTTCTCTTGCTC
TGAGCCTCCCTTCCCCATTCCCATGCAGCTCCTTTCCCCCTGGGTTTCCTTGGCTTCCTGCAGCAAATTGGGCAG
TTCTCTGCCCCTTGCCTAAAAGCCTGTACCTCTGGATTGGCGGAAGTAAATCTGGAAGGATTCTCACTCGTATTT
CCCACCCCTAGTGGCCAGAGGAGGGAGGGGCACAGTGAAGAAGGGAGCCCACCACCTCTCCGAAGAGGAAAGCCA
CGTAGAGTGGTTGGCATGGGGTGCCAGCATCGTGCAAGCTCTGTCATAATCTGCATCTTCCCAGCAGCCTGGTAC
CCCAGGTTCCTGTAACTCCCTGCCTCCTCCTCTCTTCTGCTGTTCTGCTCCTCCCAGACAGAGCCTTTCCCTCAC
CCCCTGACCCCCTGGGCTGACCAAAATGTGCTTTCTACTGTGAGTCCCTATCCCAAGATCCTGGGGAAAGGAGAG
ACCATGGTGTGAATGTAGAGATGCCACCTCCCTCTCTCTGAGGCAGGCCTGTGGATGAAGGAGGAGGGTCAGGGC
TGGCCTTCCTCTGTGCATCACTCTGCTAGGTTGGGGGCCCCCGACCCACCATACCTACGCCTAGGGAGCCCGTCC
TCCAGTATTCCGTCTGTAGCAGGAGCTAGGGCTGCTGCCTCAGCTCCAAGACAAGAATGAACCTGGCTGTGTCAG
TCATTTTGTCTTTTCCTTTTTTTTTTTTTGCCACATTGGCAGAGATGGGACCTAAGGGTCCCACCCCTCACCCCA
CCCCCACCTCTTCTGTATGTTTGAATTCTTTCAGTAGCTGTTGATGCTGGTTGGACAGGTTTGAGTCAAATTGTA
CTTTGCTCCATTGTTAATTGAGAAACTGTTTCAATAAAATATTCTTTTCTAC

FIGURE 7302

MADKVRRQRPRRRVCWALVAVLLADLLALSDTLAVMSVDLGSESMKVAIVKPGVPMEIVLNKESRRKTPVIVTLK
ENERFFGDSAASMAIKNPKATLRYFQHLLGKQADNPHVALYQARFPEHELTFDPQRQTVHFQISSQLQFSPEEVL
GMVLNYSRSLAEDFAEQPIKDAVITVPVFFNQAERRAVLQAARMAGLKVLQLINDNTATALSYGVFRRKDINTTA
QNIMFYDMGSGSTVCTIVTYQMVKTKEAGMQPQLQIRGVGFDRTLGGLEMELRLRERLAGLFNEQRKGQRAKDVR
ENPRAMAKLLREANRLKTVLSANADHMAQIEGLMDDVDFKAKVTRVEFEELCADLFERVPGPVQQALQSAEMSLD
EIEQVILVGGATRVPRVQEVLLKAVGKEELGKNINADEAAAMGAVYQAAALSKAFKVKPFVVRDAVVYPILVEFT
REVEEEPGIHSLKHNKRVLFSRMGPYPQRKVITFNRYSHDFNFHINYGDLGFLGPEDLRVFGSQNLTTVKLKGVG
DSFKKYPDYESKGIKAHFNLDESGVLSLDRVESVFETLVEDSAEEESTLTKLGNTISSLFGGGTTPDAKENGTDT
VQEEEESPAEGSKDEPGEQVELKEEAEAPVEDGSQPPPPEPKGDATPEGEKATEKENGDKSEAQKPSEKAEAGPE
GVAPAPEGEKKQKPARKRRMVEEIGVELVVLDLPDLPEDKLAQSVQKLQDLTLRDLEKQEREKAANSLEAFIFET
QDKLYQPEYQEVSTEEQREEISGKLSAASTWLEDEGVGATTVMLKEKLAELRKLCQGLFFRVEERKKWPERLSAL
DNLLNHSSMFLKGARLIPEMDQIFTEVEMTTLEKVINETWAWKNATLAEQAKLPATEKPVLLSKDIEAKMMALDR
EVQYLLNKAKFTKPRPRPKDKNGTRAEPPLNASASDQGEKVIPPAGQTEDAEPISEPEKVETGSEPGDTEPLELG
GPGAEPEQKEQSTGQKRPLKNDEL

FIGURE 7303

GTTTTACGCTGCCGCCGGCATCCGCTCGGACGCGGCCACGTTGTCTTGCGCGCTTTGCCCGCCTGGCCCTGGGAC
TCTGACCCTCGGCTACCCTTTCCTGCCCCACTAGCGTGGCCGCGAGCCTCGGTGAGCCGGCCGTATTCCCGCTCT
CGCTTAGGGGGCACAGGCGCAGGCATCGGCCCGGCCACTCCAAGCCTTCGGTGCGCGGGCGCGTCTGGGATACGG
GCCCGGGAGGCGCCGCCCTCCGTCCGCCCGGTGCCTCTCAGGAACAGCGAACCGGAGAGAGCGCCGGAGAGTTGG
GCTCAGTGCGGAGCTCGGCGCCGGGGCCCATGCCCGTGCGCCCCCGCAGGCCGGCGCC**ATG**GCCTCCGGGAGTGT
GGCCGAGTGCCTGCAGCAGGAGACCACCTGCCCCGTGTGCCTGCAGTACTTCGCAGAGCCCATGATGCTCGACTG
CGGCCATAACATCTGTTGCGCGTGCCTCGCCCGCTGCTGGGGCACGGCAGAGACTAACGTGTCGTGCCCGCAGTG
CCGGGAGACCTTCCCGCAGAGGCACATGCGGCCCAACCGGCACCTGGCCAACGTGACCCAACTGGTAAAGCAGCT
GCGCACCGAGCGGCCGTCGGGGCCCGGCGGCGAGATGGGCGTGTGCGAGAAGCACCGCGAGCCCCTGAAGCTGTA
CTGCGAGGAGGACCAGATGCCCATCTGCGTGGTGTGCGACCGCTCCCGCGAGCACCGCGGCCACAGCGTGCTGCC
GCTCGAGGAGGCGGTGGAGGGCTTCAAGGAGCAAATCCAGAACCAGCTCGACCATTTAAAAAGAGTGAAAGATTT
AAAGAAGAGACGTCGGGCCCAGGGGGAACAGGCACGAGCTGAACTCTTGAGCCTAACCCAGATGGAGAGGGAGAA
GATTGTTTGGGAGTTTGAGCAGCTGTATCACTCCTTAAAGGAGCATGAGTATCGCCTCCTGGCCCGCCTTGAGGA
GCTAGACTTGGCCATCTACAATAGCATCAATGGTGCCATCACCCAGTTCTCTTGCAACATCTCCCACCTCAGCAG
CCTGATCGCTCAGCTAGAAGAGAAGCAGCAGCAGCCCACCAGGGAGCTCCTGCAGGACATTGGGGACACATTGAG
CAGGGCTGAAAGAATCAGGATTCCTGAACCTTGGATCACACCTCCAGATTTGCAAGAGAAAATCCACATTTTTGC
CCAAAAATGTCTATTCTTGACGGAGAGTCTAAAGCAGTTCACAGAAAAAATGCAGTCAGATATGGAGAAAATCCA
AGAATTAAGAGAGGCTCAGTTATACTCAGTGGACGTGACTCTGGACCCAGACACGGCCTACCCCAGCCTGATCCT
CTCTGATAATCTGCGGCAAGTGCGGTACAGTTACCTCCAACAGGACCTGCCTGACAACCCCGAGAGGTTCAATCT
GTTTCCCTGTGTCTTGGGCTCTCCATGCTTCATCGCCGGGAGACATTATTGGGAGGTAGAGGTGGGAGATAAAGC
CAAGTGGACCATAGGTGTCTGTGAAGACTCAGTGTGCAGAAAAGGTGGAGTAACCTCAGCCCCCCAGAATGGATT
CTGGGCAGTGTCTTTGTGGTATGGGAAAGAATATTGGGCTCTTACCTCCCCAATGACTGCCCTACCCCTGCGGAC
CCCGCTCCAGCGGGTGGGGATTTTCTTGGACTATGATGCTGGTGAGGTCTCCTTCTACAACGTGACAGAGAGGTG
TCACACCTTCACTTTCTCTCATGCTACCTTTTGTGGGCCTGTCCGGCCCTACTTCAGTCTGAGTTACTCGGGAGG
GAAAAGTGCAGCTCCTCTGATCATCTGCCCCATGAGTGGGATAGATGGGTTTTCTGGCCATGTTGGGAATCATGG
TCATTCCATGGAGACCTCCCCT**TGA**GGAGGTGAATTCAGGCCAAAAGGGCTGTTGGCTGTAATCCTACGCCAGGC
ACAAGGCATCTTGTTGCCTTGCCACGTCCTGTCACAGCTGGGTATCCTTACCATGTTCCACGCCCTTGCAGTGGG
AGACAGGATGTCCATGTTCTCTACCATCCTTTTCCTTCCCATGCAGATTGTGAAATGTAATGAGATGTATCAAGA
CATCCTAGAAATAAAAACCAGATGTCCACCTCCAGTGTTTCATACTTTCTGGTTTTACACATCGCTGGAGGGATA
AAGAGTATGGATAATCTTTGGATTTGGAGAGCCGTTCAAGATACTTCCAGCTTCTTGGCTCAGCCTGGCTTCCTC
TGGTTCAGCCCCACATAATGATTATGGCTATTTGCTGTCATTTCTGGGCTAGGGCTCCTTTCTAACAACCTAGAC
TGGAATAAGGCCCTGTCAGCATGGCTCCCTTTATCCCAGTTTTCCGTCTGGGAACAGTACCTCTGCCCCTGATTC
CCAATGTGCCATAGTTTTATTAACTCCATTAAAGAAGCCTGTATGTGTTTTGGTTAGTTACAGTTATTTTACAAT
AATGGTGGGTAATGGCCCCACCTCTGTTATGAGATAATGTTCTAATCAATGTCTCTGCCTTTGTATCTTTTCTGA
GGGCTTTGTCTGTTCTCTTCATTCTAATGAAAGGTGTATTCTAGTGCTGGGTGCATATCATCCAGGATAATATTC
TGCCCAACTCCATCCTCTGTTACTAGATCCCTTACCAGTCACATTTGTGGACTGGTGGCCAGTCGTATACCATCC
CTGGAAGGATTCTGGGACAATATTCCAGGGATTCATTGACTTCTTGGCTCCTTTTCTCCATTTCCTTTGGGGGAA
GGGGGAATTGACCATGCTTAAGTGCATCCTATCAAGGGGCAGCTCCGTCCCCATGGCCATTGGATCATGAGACAC
TCGAAGTCAGAAGGCTGGGGCAGATCACTTCAAGCAAGCCCCCATGATGGTTCTCAGTCCTGCTTCTCTGTGGGT
ACGTGCCCCTCTGTTTAAAAATAAACTGAATATGGATGTTTAAAAAAAAAAAAAAAAAA

FIGURE 7304

MASGSVAECLQQETTCPVCLQYFAEPMMLDCGHNICCACLARCWGTAETNVSCPQCRETFPQRHMRPNRHLANVT
QLVKQLRTERPSGPGGEMGVCEKHREPLKLYCEEDQMPICVVCDRSREHRGHSVLPLEEAVEGFKEQIQNQLDHL
KRVKDLKKRRRAQGEQARAELLSLTQMEREKIVWEFEQLYHSLKEHEYRLLARLEELDLAIYNSINGAITQFSCN
ISHLSSLIAQLEEKQQQPTRELLQDIGDTLSRAERIRIPEPWITPPDLQEKIHIFAQKCLFLTESLKQFTEKMQS
DMEKIQELREAQLYSVDVTLDPDTAYPSLILSDNLRQVRYSYLQQDLPDNPERFNLFPCVLGSPCFIAGRHYWEV
EVGDKAKWTIGVCEDSVCRKGGVTSAPQNGFWAVSLWYGKEYWALTSPMTALPLRTPLQRVGIFLDYDAGEVSFY
NVTERCHTFTFSHATFCGPVRPYFSLSYSGGKSAAPLIICPMSGIDGFSGHVGNHGHSMETSP

FIGURE 7305

GATGCCTCTCCATCAACAATCGCAAAGGGAAACTTATCTTCTTTTATGAATGGAGCGTCAAACTAAACTGGACAG
GTACTTCTAAGTCAGGAGTACAATACAAAGGACATGTGGAGATCCCCAATTTGTCTGATGAAAACAGCGTGGATG
AAGTGGAGATTAGTGTGAGCCTTGCCAAAGATGAGCCTGACACAAATCTCGTGGCCTTAATGAAGGAAGAAGGGG
TGAAACTTCTAAGAGAAGCAATGGGAATTTACATCAGCACCCTCAAAACAGAGTTCACCCAGGGCATGATCTTAC
CTACAATGAATGGAGAGTCAGTAGACCCAGTGGGGCAGCCAGCACTGAAAACTGAGGAGCGCAAGGCTAAGCCTG
CTCCTTCAAAAACCCAGGCCAGACCTGTTGGAGTCAAAATCCCCACTTGTAAGATCACTCTTAAGGAAACCTTCC
TGACGTCACCAGAGGAGCTCTATAGAGTGTTTACCACCCAAGAGCTGGTGCAGGCCTTTACCCATGCTCCTGCAA
CATTAGAAGCAGACAGAGGTGGAAAGTTCCACATGGTAGATGGCAACGTCTCTGGGGAATTTACTGATCTGGTCC
CTGAGAAACATATTGTGATGAAGTGGAGGTTTAAATCTTGGCCAGAGGGACACTTTGCCACCATCACCTTGACCT
TCATCGACAAGAACGGAGAGACTGAGCTGTGCATGGAAGGTCGAGGCATCCCTGCTCCTGAGGAAGAGCGGACAC
GACAGGGCTGGCAGCGGTACTACTTTGAGGGCATTAAACAGACCTTTGGCTATGGCGCACGCTTATTTTAGGGCC
AGCGGCAGGGGACTCCAGCCTGCTGGACACTTCAGTCCAGCTCTCTCCTGACTGGGGCTTGCGACTCACAGGATT
GCATCGTCCCAGCTGCTAACTTGGGGCCGGGGCCCCTCCCTTCCACATATACCTTGGGTTTGTGCATGTTTTCTG
CTGGGTGGGTTCAGAGGGCAATTTCTCTTTTATGTGTACATATGCTAAATAAACATAATTTAAAAAACAAAAAAA
AAAAAAAAAAAAAAAAAAAAAA

FIGURE 7306

CAGAGGGCACCGCCCAGGCCTCGGAAGGTGTCAGGGAGAACTTTCCGTGGTTTCAGCGTCGTCGCCTGGAGCGGC
GGTTTAGAGAGCCGAGCCTGATGGGCGCCAAGGCCGGCTGGCTGCTTGGAGCGCTGCCTCGAAGGGACTGCGTAA
GGAAGCTAATCCGGAGAACCCAGGCCAGAGCCTGAAATATGGCGACCTGCATCGGGGAGAAGATCGAGGATTTTA
AAGTTGGAAATCTGCTTGGTAAAGGATCATTTGCTGGTGTCTACAGAGCTGAGTCCATTCACAGTGGTTTGGAAG
TTGCAATCAAAATGATAGATAAGAAAGCCATGTACAAAGCAGGAATGGTACAGAGAGTCCAAAATGAGGTGAAAA
TACATTGCCAATTGAAACATCCTTCTATCTTGGAGCTTTATAACTATTTTGAAGATAGCAATTATGTGTATCTGG
TATTAGAAATGTGCCATAATGGAGAAATGAACAGGTATCTAAAGAATAGAGTGAAACCCTTCTCAGAAAATGAAG
CTCGACACTTCATGCACCAGATCATCACAGGGATGTTGTATCTTCATTCTCATGGTATACTACACCGGGACCTCA
CACTTTCTAACCTCCTACTGACTCGTAATATGAACATCAAGATTGCTGATTTTGGGCTGGCAACTCAACTGAAAA
TGCCACATGAAAAGCACTATACATTATGTGGAACTCCTAACTACATTTCACCAGAAATTGCCACTCGAAGTGCAC
ATGGCCTTGAATCTGATGTTTGGTCCCTGGGCTGTATGTTTTATACATTACTTATCGGGAGACCACCCTTCGACA
CTGACACAGTCAAGAACACATTAAATAAAGTAGTATTGGCAGATTATGAAATGCCAACTTTTTTGTCAATAGAGG
CCAAGGACCTTATTCACCAGTTACTTCGTAGAAATCCAGCAGATCGTTTAAGTCTGTCTTCAGTATTGGACCATC
CTTTTATGTCCCGAAATTCTTCAACAAAAAGTAAAGATTTAGGAACTGTGGAAGACTCAATTGATAGTGGGCATG
CCACAATTTCTACTGCAATTACAGCTTCTTCCAGTACCAGTATAAGTGGTAGTTTATTTGACAAAAGAAGACTTT
TGATTGGTCAGCCACTCCCAAATAAAATGACTGTATTTCCAAAGAATAAAAGTTCAACTGATTTTTCTTCTTCAG
GAGATGGAAACAGTTTTTATACTCAGTGGGGAAATCAAGAAACCAGTAATAGTGGAAGGGGAAGAGTAATTCAAG
ATGCAGAAGAAAGGCCACATTCTCGATACCTTCGTAGAGCTTATTCCTCTGATAGATCTGGCACTTCTAATAGAC
AGTCTCAAGCAAAAACATATACAATGGAACGATGTCACTCAGCAGAAATGCTTTCAGTGTCCAAAAGATCAGGAG
GAGGTGAAAATGAAGAGAGGTACTCACCCACAGACAACAATGCCAACATTTTTAACTTCTTTAAAGAAAAGACAT
CCAGTAGTTCTGGATCTTTTGAAAGACCTGATAACAATCAAGCACTCTCCAATCATCTTTGTCCAGGAAAAACTC
CTTTTCCATTTGCAGACCCGACACCTCAGACTGAAACCGTACAACAGTGGTTTGGGAATCTGCAAATAAATGCTC
ATTTAAGAAAAACTACTGAATATGACAGCATCAGCCCAAACCGGGACTTCCAGGGCCATCCAGATTTGCAGAAGG
ACACATCAAAAAATGCCTGGACTGATACAAAAGTCAAAAAGAACTCTGATGCTTCTGATAATGCACATTCTGTAA
AACAGCAAAATACCATGAAATATATGACTGCACTTCACAGTAAACCTGAGATAATCCAACAAGAATGTGTTTTTG
GCTCAGATCCTCTTTCTGAACAGAGCAAGACTAGGGGTATGGAGCCACCATGGGGTTATCAGAATCGTACATTAA
GAAGCATTACATCTCCGTTGGTTGCTCACAGGTTAAAACCAATCAGACAGAAAACCAAAAAGGCTGTGGTGAGCA
TACTTGATTCAGAGGAGGTGTGTGTGGAGCTTGTAAAGGAGTATGCATCTCAAGAATATGTGAAAGAAGTTCTTC
AGATATCTAGTGATGGAAATACGATCACTATTTATTATCCAAATGGTGGTAGAGGTTTTCCTCTTGCTGATAGAC
CACCCTCACCTACTGACAACATCAGTAGGTACAGCTTTGACAATTTACCAGAAAAATACTGGCGAAAATATCAAT
ATGCTTCCAGGTTTGTACAGCTTCTAAGATCTAAATCTCCCAAAATCACTTATTTTACAAGATATGCTAAATGCA
TTTTGATGGAGAATTCTCCTGGTGCTGATTTTGAGGTTTGGTTTTATGATGGGGTAAAAATACACAAAACAGAAG
ATTTCATTCAGGTGATTGAAAAGACAGGGAAGTCTTACACTTTAAAAAGTGAAAGTGAAGTTAATAGCTTGAAAG
AGGAGATAAAAATGTATATGGACCATGCTAATGAGGGTCATCGTATTTGTTTAGCACTGGAATCCATAATTTCAG
AAGAGGAAAGGAAAACTAGGAGTGCTCCCTTTTTCCCAATAATCATAGGAAGAAAACCTGGTAGTACTAGTTCAC
CTAAGGCCTTATCACCTCCTCCTTCTGTGGATTCAAATTACCCAACGAGAGATAGAGCATCTTTCAACAGAATGG
TCATGCATAGTGATGCTTCTCCAACACAGGCACCAATCCTTAATCCCTCTATGGTTACAAATGAAGGACTTGGTC
TTACAACTACAGCTTCTGGAACAGACATCTCTTCTAATAGTCTAAAAGATTGTCTTCCTAAATCAGCACAACTTT
TGAAATCTGTTTTTGTGAAAAATGTTGGTTGGGCTACACAGTTAACTAGTGGAGCTGTGTGGGTTCAGTTTAATG
ATGGGTCCCAGTTGGTTGTGCAGGCAGGAGTGTCTTCTATCAGTTATACCTCACCAAATGGTCAAACAACTAGGT
ATGGAGAAAATGAAAAATTACCAGACTACATCAAACAGAAATTACAGTGTCTGTCTTCCATCCTTTTGATGTTTT
CTAATCCGACTCCTAATTTTCATTGATTAAAACTCCTTTCAGACATATAAGTTTAATAAATAACTTTTTTGTTGA
CTTTCAAGTAAAGTGATTTTTTTTAATTTAACATAAAGTCTTCAGAAAGCCTTTCTATGAAAGAATTTTAACCTA
TAATGTAAACCATGTATCTGAGATAACAAAGCAGAATGAAACTTGAGTCACTTACTAAATATAGTGGATATAAAA
TAGAACACCTGACTTTGCTCTTAGACCATAA

FIGURE 7307

MATCIGEKIEDFKVGNLLGKGSFAGVYRAESIHSGLEVAIKMIDKKAMYKAGMVQRVQNEVKIHCQLKHPSILEL
YNYFEDSNYVYLVLEMCHNGEMNRYLKNRVKPFSENEARHFMHQIITGMLYLHSHGILHRDLTLSNLLLTRNMNI
KIADFGLATQLKMPHEKHYTLCGTPNYISPEIATRSAHGLESDVWSLGCMFYTLLIGRPPFDTDTVKNTLNKVVL
ADYEMPTFLSIEAKDLIHQLLRRNPADRLSLSSVLDHPFMSRNSSTKSKDLGTVEDSIDSGHATISTAITASSST
SISGSLFDKRRLLIGQPLPNKMTVFPKNKSSTDFSSSGDGNSFYTQWGNQETSNSGRGRVIQDAEERPHSRYLRR
AYSSDRSGTSNRQSQAKTYTMERCHSAEMLSVSKRSGGGENEERYSPTDNNANIFNFFKEKTSSSSGSFERPDNN
QALSNHLCPGKTPFPFADPTPQTETVQQWFGNLQINAHLRKTTEYDSISPNRDFQGHPDLQKDTSKNAWTDTKVK
KNSDASDNAHSVKQQNTMKYMTALHSKPEIIQQECVFGSDPLSEQSKTRGMEPPWGYQNRTLRSITSPLVAHRLK
PIRQKTKKAVVSILDSEEVCVELVKEYASQEYVKEVLQISSDGNTITIYYPNGGRGFPLADRPPSPTDNISRYSF
DNLPEKYWRKYQYASRFVQLLRSKSPKITYFTRYAKCILMENSPGADFEVWFYDGVKIHKTEDFIQVIEKTGKSY
TLKSESEVNSLKEEIKMYMDHANEGHRICLALESIISEEERKTRSAPFFPIIIGRKPGSTSSPKALSPPPSVDSN
YPTRDRASFNRMVMHSDASPTQAPILNPSMVTNEGLGLTTTASGTDISSNSLKDCLPKSAQLLKSVFVKNVGWAT
QLTSGAVWVQFNDGSQLVVQAGVSSISYTSPNGQTTRYGENEKLPDYIKQKLQCLSSILLMFSNPTPNFH

FIGURE 7308

GAATTCGGCACGAGCGAGTCGCGACGTCGTCGGCAAGCGGCCGCCTTCCACGTAACGCGCGCCGGCGGGGGAGGG
CGTTGGCGCGGAGCCGACGGGAACGTCCGCGCTGCGGAGCAGGGCAGGGAAGCCGGGAGGCGGGCCCGGCCCGAG
CTTGTCCTTGTCGCGCAGGTACTCCGAGCACT**ATG**TCGTCCCCGGCGTCGACCCCGAGCCGCCGCGGCAGCCGGC
GTGGAAGGGCCACCCCCGCCCAGACGCCTCGGAGTGAGGATGCCAGGTCATCTCCCTCTCAGAGACGTAGAGGCG
AGGATTCCACCTCCACGGGGGAGTTGCAGCCGATGCCAACCTCGCCTGGAGTGGACCTGCAGAGCACTGCTGCGC
AGGACGTGCTGTTTTCCAGCCCTCCCCAAATGCATTCTTCAGCTATCCCTCTTGACTTTGATGTTAGTTCACCAC
TGACATACGGCACTCCCAGCTCTCGGGTAGAGGGAACCCCAAGAAGTGGTGTTAGGGGCACACCTGTGAGACAGA
GGCCTGACCTGGGCTCTGCACAGAAGGGCCTGCAAGTGGATCTGCAGTCTGACGGGGCAGCAGCAGAAGATATAG
TGGCAAGTGAGCAGTCTCTAGGCCAAAAACTTGTGATCTGGGGAACAGATGTAAATGTGGCAGCATGCAAAGAAA
ACTTTCAGAGATTTCTTCAGCGTTTTATTGACCCTCTGGCTAAAGAAGAAGAAAATGTTGGCATAGATATTACTG
AACCTCTATACATGCAACGACTTGGGGAGATTAATGTTATTGGTGAGCAATTTTTAAATGTGAACTGTGAACACA
TCAAATCATTTGACAAAAATTTGTACAGACAACTCATCTCTTACCCACAGGAAGTTATTCCAACTTTTGACATGG
CTGTCAATGAAATCTTCTTTGACCGTTACCCTGACTCAATCTTAGAACATCAGATTCAAGTAAGACCATTCAACG
CATTGAAGACTAAGAATATGAGAAACCTGAATCCAGAAGACATTGACCAGCTCATCACCATCAGCGGCATGGTGA
TCAGGACATCCCAGCTGATTCCCGAGATGCAGGAGGCCTTCTTCCAGTGCCAAGTGTGTGCCCACACGACCCGGG
TGGAGATGGACCGCGGCCGCATTGCAGAGCCCAGTGTGTGCGGGCGCTGCCACACCACCCACAGCATGGCACTCA
TCCACAACCGCTCCCTCTTCTCTGACAAGCAGATGATCAAGCTTCAGGAGTCTCCGGAAGACATGCCTGCAGGGC
AGACACCACACACAGTTATCCTGTTTGCTCACAATGATCTCGTTGACAAGGTCCAGCCTGGGGACAGAGTGAATG
TTACAGGCATCTATCGAGCTGTGCCTATTCGAGTCAATCCAAGAGTGAGTAATGTGAAGTCTGTCTACAAAACCC
ACATTGATGTCATTCATTATCGGAAAACGGATGCAAAACGTCTGCATGGCCTTGATGAAGAAGCAGAACAGAAAC
TTTTTTCAGAGAAACGTGTGGAATTGCTTAAGGAACTTTCCAGGAAACCAGACATTTATGAGAGGCTTGCTTCAG
CCTTGGCTCCAAGCATTTATGAACATGAAGATATAAAGAAGGGAATTTTGCTTCAGCTCTTTGGCGGGACAAGGA
AGGATTTTAGTCACACTGGAAGGGGCAAATTTCGGGCTGAGATCAACATCTTGCTGTGTGGCGACCCTGGTACCA
GCAAGTCCCAGCTGCTGCAGTACGTGTACAACCTCGTCCCCAGGGGCCAGTACACGTCTGGGAAGGGCTCCAGTG
CAGTTGGCCTCACTGCGTACGTAATGAAAGACCCTGAGACAAGGCAGCTGGTCCTGCAGACAGGTGCTCTTGTCC
TGAGTGACAACGGCATCTGCTGTATCGATGAGTTCGACAAGATGAATGAAAGTACAAGATCGGTATTGCATGAAG
TCATGGAACAGCAGACTCTGTCCATTGCAAAGGCTGGGATCATCTGTCAGCTCAATGCGCGCACCTCTGTCCTGG
CAGCAGCAAATCCCATTGAGTCTCAGTGGAATCCTAAAAAAACAACCATTGAAAACATCCAGCTGCCTCATACTT
TATTATCAAGGTTTGATTTGATCTTCCTCATGCTGGACCCTCAGGACGAAGCCTATGACAGGCGTCTGGCTCACC
ACCTGGTCGCACTGTACTACCAGAGCGAGGAGCAGGCAGAGGAGGAGCTCCTGGACATGGCGGTGCTAAAGGACT
ACATTGCCTACGCGCACAGCACCATCATGCCGCGGCTAAGTGAGGAAGCCAGCCAGGCTCTCATCGAGGCTTATG
TAGACATGAGGAAGATTGGCAGTAGCCGGGGAATGGTTTCTGCATACCCTCGACAGCTAGAGTCATTAATCCGCT
TAGCAGAAGCCCATGCTAAAGTAAGATTGTCTAACAAAGTTGAAGCCATTGATGTGGAAGAGGCCAAACGCCTCC
ATCGGGAAGCTCTGAAGCAGTCTGCAACTGATCCCCGGACTGGCATCGTGGACATATCTATTCTTACTACGGGGA
TGAGTGCCACCTCTCGTAAACGGAAAGAAGAATTAGCTGAAGCATTGAAAAAGCTTATTTTATCTAAGGGCAAAA
CACCAGCTCTAAAATACCAGCAACTTTTTGAAGATATTCGGGGACAATCTGACATAGCAATTACTAAAGATATGT
TTGAAGAAGCACTGCGTGCCCTGGCAGATGATGATTTCCTGACAGTGACTGGGAAGACCGTGCGCTTGCTC**TGA**A
GCCTTGTGAGCAAGGAAGGCTCCCTGCATGTCATGCAATTCTGCACGCCACATGGGTGTGGTCATGCAATCATCA
GTTGGCCGCCATCAGTGTAAATAGAGCTTAAAGTCATGGTTTGGCTGCATAAAAAATTTTCTAACTTGGGTTCAA
TATTTGTAGTGAAGTATCTGTTTTCATTTTTTTCACGTTATAAATAAAAATACTATGCTGGCCGGGCGCGGTGGC
TCACACCTGTAATCCCAGCACTTTGGGAGGCCAATGTGGGTGGATCATGAGGTCAGGAGTTCAAGACCAGCCTAG
CCAAGATGGTGAAACCCCGTCTCTAGTAAAGATAACAAAAAATTAGCTGGGCTTGATGGCATGCGCCTGTAATCC
CAGCTACTCGGGAGGTTGAGGCAGGAGATCGCTTAAACCCAGGCGGCAGAGGTTGCAGTGAGCCAAGATCGCGCC
ACTGCACTCCAGCCTCAGCAATAGAGTGAGACTGTCTCAAAAAAAAAA

FIGURE 7309

MSSPASTPSRRGSRRGRATPAQTPRSEDARSSPSQRRRGEDSTSTGELQPMPTSPGVDLQSTAAQDVLFSSPPQM
HSSAIPLDFDVSSPLTYGTPSSRVEGTPRSGVRGTPVRQRPDLGSAQKGLQVDLQSDGAAAEDIVASEQSLGQKL
VIWGTDVNVAACKENFQRFLQRFIDPLAKEEENVGIDITEPLYMQRLGEINVIGEQFLNVNCEHIKSFDKNLYRQ
LISYPQEVIPTFDMAVNEIFFDRYPDSILEHQIQVRPFNALKTKNMRNLNPEDIDQLITISGMVIRTSQLIPEMQ
EAFFQCQVCAHTTRVEMDRGRIAEPSVCGRCHTTHSMALIHNRSLFSDKQMIKLQESPEDMPAGQTPHTVILFAH
NDLVDKVQPGDRVNVTGIYRAVPIRVNPRVSNVKSVYKTHIDVIHYRKTDAKRLHGLDEEAEQKLFSEKRVELLK
ELSRKPDIYERLASALAPSIYEHEDIKKGILLQLFGGTRKDFSHTGRGKFRAEINILLCGDPGTSKSQLLQYVYN
LVPRGQYTSGKGSSAVGLTAYVMKDPETRQLVLQTGALVLSDNGICCIDEFDKMNESTRSVLHEVMEQQTLSIAK
AGIICQLNARTSVLAAANPIESQWNPKKTTIENIQLPHTLLSRFDLIFLMLDPQDEAYDRRLAHHLVALYYQSEE
QAEEELLDMAVLKDYIAYAHSTIMPRLSEEASQALIEAYVDMRKIGSSRGMVSAYPRQLESLIRLAEAHAKVRLS
NKVEAIDVEEAKRLHREALKQSATDPRTGIVDISILTTGMSATSRKRKEELAEALKKLILSKGKTPALKYQQLFE
DIRGQSDIAITKDMFEEALRALADDDFLTVTGKTVRLL

FIGURE 7310

ACGGAAGTGTAGGTTACGGTCTGAGACATCACCGCCAAGCTGGGCATCGGGGAGATGGCCGAGACTGACCCCAAG
ACCGTGCAGGACCTCACCTCGGTGGTGCAGACACTCCTGCAGCAGATGCAAGATAAATTTCAGACCATGTCTGAC
CAGATCATTGGGAGAATTGATGATATGAGTAGTCGCATTGATGATCTGGAAAAGAATATCGCGGACCTCATGACA
CAGGCTGGGGTGGAAGAACTGGAAAGTGAAAACAAGATACCTGCCACGCAAAAGAGTTGAAGGTTGCTAATAATT
TATACTGGAATCTGGCATTTTTCCAAGCCAAGAGAAGATCGAATGGCTTTTTGCAGCTAACTACTATGTGTAGAC
AGGTTTTATATTATAAAGTATGCATTCTTATCACCTAGTATATAGTTAGTTTGTAGAGTGATTTCCCCCCAGTTT
CTTGAACATGGTATCTTCACATCTTGGACCTTGGTCAGTTGTGCTATTCATTATTAAACACTAAAACTTTGGCGG
TTCTTGCATAAAAAAAAAAAAA

FIGURE 7311

MAETDPKTVQDLTSVVQTLLQQMQDKFQTMSDQIIGRIDDMSSRIDDLEKNIADLMTQAGVEELESENKIPATQK
S

FIGURE 7312

CTCTTGTCAGCTGTCTTTCAGAAGACCTGGTGGGGXAAGTCCGTGGGCATCATGTTGACCGAGCTGGAGAAAGCC
TTGAACTCTATCATCGACGTCTACCACAAGTACTCCCTGATAAAGGGGAATTTCCATGCCGTCTACAGGGATGAC
CTGAAGAAATTGCTAGAGACCGAGTGTCCTCAGTATATCAGGAAAAAGGGTGCAGACGTCTGGTTCAAAGAGTTG
GATATCAACACTGATGGTGCAGTTAACTTCCAGGAGTTCCTCATTCTGGTGATAAAGATGGGCTGGCAGCCCACA
AAAAAAGCCATGAAGAAAGCCACAAAGAGTAGCTGAGTTACTGCCCAGAGGCTGGGCCCCTGACATGTACCTGCA
GAATAATAAAGTCATCAATACCTCAAAAAAAAAAAAAAAAAAAAA

FIGURE 7313

MLTELEKALNSIIDVYHKYSLIKGNFHAVYRDDLKKLLETECPQYIRKKGADVWFKELDINTDGAVNFQEFLILV
IKMGWQPTKKAMKKATKSS

FIGURE 7314

GCGGCAGCGGCTCTTATAGTGCAACC**ATG**GCAGACTATTCAACAGTGCCTCCCCCCTCTTCTGGCTCAGCTGGTG
GCGGTGGTGGCGGCGGTGGTGGTGGAGGAGTTAACGACGCTTTCAAAGATGCACTGCAGAGAGCCCGGCAGATTG
CAGCAAAAATTGGAGGTGATGCAGGGACATCACTGAATTCAAATGACTATGGTTATGGGGGACAAAAAAGACCTT
TAGAAGATGGAGATCAACCAGATGCTAAGAAAGTTGCTCCTCAAAATGACTCTTTTGGAACACAGTTACCACCGA
TGCATCAGCAGCAAAGCAGATCTGTAATGACAGAAGAATACAAAGTTCCAGATGGAATGGTTGGATTCATAATTG
GCAGAGGAGGTGAACAGATCTCACGCATACAACAGGAATCTGGATGCAAAATACAGATAGCTCCTGACAGTGGTG
GCCTTCCAGAAAGGTCCTGTATGTTAACTGGAACACCTGAATCTGTCCAGTCAGCAAAACGGTTACTGGACCAGA
TTGTTGAAAAAGGAAGACCAGCTCCTGGCTTCCATCATGGCGATGGACCGGGAAATGCAGTTCAAGAAATCATGA
TTCCAGCTAGCAAGGCAGGATTAGTCATTGGAAAAGGGGGAGAAACTATTAAACAGCTTCAGGAACGGGCTGGAG
TTAAAATGGTTATGATTCAAGACGGGCCGCAGAACACTGGTGCTGACAAACCTCTTAGGATTACAGGAGACCCAT
ATAAAGTTCAACAAGCCAAGGAAATGGTGTTAGAGTTAATTCGTGATCAAGGCGGTTTCAGAGAAGTTCGGAATG
AGTATGGGTCAAGAATAGGAGGAAATGAAGGGATAGATGTCCCCATTCCAAGATTTGCTGTTGGCATTGTAATAG
GAAGAAATGGAGAGATGATCAAAAAAATACAAAATGATGCTGGTGTTCGCATTCAGTTTAAGCCAGATGATGGGA
CAACACCCGAAAGGATAGCACAAATAACAGGACCTCCAGACCGATGTCAACATGCTGCAGAAATTATTACAGACC
TTCTTCGAAGTGTTCAGGCTGGTAATCCTGGTGGACCTGGACCTGGTGGTCGAGGAAGAGGTAGAGGTCAAGGCA
ACTGGAACATGGGACCACCTGGTGGACTACAGGAATTTAATTTTATTGTGCCAACTGGGAAAACTGGATTAATAA
TAGGAAAAGGAGGTGAAACCATAAAAAGCATAAGCCAGCAGTCTGGTGCAAGAATAGAACTTCAGAGAAATCCTC
CACCAAATGCAGATCCTAATATGAAGTTATTTACAATTCGTGGCACTCCACAACAGATAGACTATGCTCGGCAAC
TCATAGAAGAAAAGATTGGTGGCCCAGTAAATCCTTTAGGGCCACCTGTACCCCATGGGCCCCATGGTGTCCCAG
GCCCCCATGGACCTCCTGGGCCTCCAGGGCCTGGAACTCCAATGGGACCATACAACCCTGCACCTTATAATCCTG
GACCACCAGGCCCGGCTCCTCATGGTCCTCCAGCCCCATATGCTCCCCAGGGATGGGGAAATGCATATCCACACT
GGCAGCAGCAGGCTCCTCCTGATCCAGCTAAGGCAGGAACGGATCCAAATTCAGCAGCTTGGGCTGCTTATTACG
CTCACTATTATCAACAGCAAGCACAGCCACCACCAGCAGCCCCTGCAGGTGCACCAACTACAACTCAAACTAATG
GACAAGGAGATCAGCAGAATCCAGCCCCAGCTGGACAGGTTGATTATACCAAGGCTTGGGAAGAGTACTACAAGA
AAATGGGTCAGGCAGTTCCTGCTCCGACTGGGGCTCCTCCAGGTGGTCAGCCAGATTATAGTGCAGCCTGGGCTG
AGTATTATAGACAACAAGCAGCCTATTATGCCCAGACAAGTCCCCAGGGAATGCCACAGCATCCTCCAGCACCTC
AGGGCCAA**TAA**TAAGAAGTGGACAATACAGTATTTGCTTCATTGTGTGGGGGAAAAAAACCTTTGTTAAATATAT
GGATGCAGACGACTTGATGAAGATCTTAATTTTGTTTTTGGTTTAAAATAGTGTTTCCTTTTTTTTTTTTTTTTT
TTTGAAAATGTACAAAATATCTATCACTACTGATAGGAGGTTAATATTTCTGTGTAGAAATGAAAATTGGTTTGT
TTTTAGTATTTAGTGTAGATGTACACATTCCAGCAAATGTATTTGCAATTATGTGGTTGATGCTTTGTGATATAA
ATGTACTTTTTCAATGTATACTTTCACTTTCCAAATGCCTGTTTTGTGCTTTACAATAAATGATATGAAACCTCA

FIGURE 7315

MADYSTVPPPSSGSAGGGGGGGGGGGVNDAFKDALQRARQIAAKIGGDAGTSLNSNDYGYGGQKRPLEDGDQPDA
KKVAPQNDSFGTQLPPMHQQQSRSVMTEEYKVPDGMVGFIIGRGGEQISRIQQESGCKIQIAPDSGGLPERSCML
TGTPESVQSAKRLLDQIVEKGRPAPGFHHGDGPGNAVQEIMIPASKAGLVIGKGGETIKQLQERAGVKMVMIQDG
PQNTGADKPLRITGDPYKVQQAKEMVLELIRDQGGFREVRNEYGSRIGGNEGIDVPIPRFAVGIVIGRNGEMIKK
IQNDAGVRIQFKPDDGTTPERIAQITGPPDRCQHAAEIITDLLRSVQAGNPGGPGPGGRGRGRGQGNWNMGPPGG
LQEFNFIVPTGKTGLIIGKGGETIKSISQQSGARIELQRNPPPNADPNMKLFTIRGTPQQIDYARQLIEEKIGGP
VNPLGPPVPHGPHGVPGPHGPPGPPGPGTPMGPYNPAPYNPGPPGPAPHGPPAPYAPQGWGNAYPHWQQQAPPDP
AKAGTDPNSAAWAAYYAHYYQQQAQPPPAAPAGAPTTTQTNGQGDQQNPAPAGQVDYTKAWEEYYKKMGQAVPAP
TGAPPGGQPDYSAAWAEYYRQQAAYYAQTSPQGMPQHPPAPQGQ

FIGURE 7316

CGCTGGCCAATCGGTTGAGAGCTGAGCTGGACTTGGCGGTGGGAGCCGGAGCCTGCTTGTTGCAGCTGTGGGTGA
GGACGGCTCTAGCTAGTTCCCTTTTAGACTATGGCGACATACCTGGAGTTCATCCAGCAGAATGAAGAACGGGAT
GGTGTGCGTTTTAGTTGGAACGTGTGGCCTTCCAGCCGGCTGGAGGCTACAAGAATGGTTGTACCCCTGGCTTGT
CTCCTTACTCCTTTGAAAGAACGTCCAGACCTACCTCCTGTACAATATGAACCTGTGCTTTGCAGCAGGCCAACT
TGTAAAGCTGTTCTCAACCCACTTTGTCAGGTTGATTATCGAGCAAAACTTTGGGCCTGTAATTTCTGTTTTCAA
AGAAATCAGTTTCCTCCAGCTTATGGAGGCATATCTGAGGTGAATCAACCTGCCGAATTGATGCCCCAGTTTTCT
ACAATTGAGTACGTGATACAGCGAGGTGCTCAGTCCCCTCTGATCTTTCTCTATGTGGTTGACACATGCCTGGAG
GAAGATGACCTTCAAGCACTCAAAGAGTCCCTGCAGATGTCCCTGAGTCTTCTTCCTCCAGATGCTCTGGTGGGT
CTGATCACATTTGGAAGGATGGTGCAGGTTCATGAGCTAAGCTGTGAAGGAATCTCCAAAAGTTATGTCTTCCGA
GGGACCAAGGATTTAACTGCAAAGCAAATACAGGATATGTTGGGCCTGACCAAGCCAGCCATGCCCATGCAGCAA
GCACGACCTGCACAACCACAGGAGCACCCTTTTGCTTCAAGCAGATTTCTGCAGCCTGTTCACAAGATTGATATG
AACCTCACTGATCTTCTTGGGGAGCTACAGAGGGACCCATGGCCAGTAACTCAGGGGAAGAGACCTTTGCGATCC
ACTGGTGTGGCTTTGTCCATTGCTGTTGGCTTGCTGGAGGGCACTTTTCCAAACACAGGAGCCAGGATCATGCTG
TTTACTGGAGGTCCCCCTACCCAAGGGCCTGGCATGGTGGTTGGAGATGAATTAAAGATTCCTATTCGTTCTTGG
CATGATATTGAGAAAGATAATGCACGATTCATGAAAAAGGCAACCAAGCACTATGAGATGCTTGCTAATCGAACA
GCTGCAAATGGTCACTGCATTGATATTTATGCTTGTGCCCTTGATCAAACTGGACTTTTGGAGATGAAGTGTTGT
GCAAATCTTACTGGAGGCTACATGGTAATGGGAGATTCTTTCAACACTTCTCTCTTCAAGCAGACATTCCAAAGA
ATCTTTACTAAAGATTTTAATGGAGATTTCCGAATGGCATTTGGTGCTACTTTGGACGTAAAGACCTCTCGGGAA
CTGAAGATTGCAGGAGCCATTGGTCCATGCGTATCTCTGAATGTGAAAGGACCGTGTGTGTCAGAAAATGAGCTT
GGTGTTGGTGGCACGAGTCAGTGGAAAATCTGTGGCCTAGATCCTACATCTACACTTGGCATCTATTTTGAAGTT
GTCAATCAGCACAACACCCCGATCCCCCAAGGAGGCAGAGGAGCCATCCAGTTTGTCACGCATTATCAGCAGTCC
AGCACCCAGAGACGCATCCGCGTGACCACCATCGCCCGAAATTGGGCAGATGTACAGAGTCAGCTCAGGCACATA
GAAGCAGCATTTGACCAGGAGGCTGCGGCAGTGTTGATGGCACGGCTTGGGGTGTTCCGAGCGGAGTCAGAGGAG
GGGCCCGATGTGCTCCGGTGGCTGGACCGACAACTCATCCGACTGTGTCAAAAGTTTGGACAGTATAACAAAGAA
GACCCCACTTCTTTTAGGTTATCAGATTCCTTTTCTCTATATCCTCAGTTTATGTTCCATCTGAGAAGATCTCCA
TTTCTTCAAGTGTTTAACAACAGTCCTGATGAGTCGTCATATTACAGACATCATTTTGCCCGGCAGGACCTGACC
CAGTCCCTCATCATGATCCAGCCCATTCTCTACTCTTACTCCTTTCATGGGCCACCAGAGCCAGTACTCTTGGAT
AGCAGCAGCATTCTAGCTGACAGAATTTTGCTGATGGATACTTTCTTTCAAATTGTCATTTATCTTGGTGAGACC
ATAGCCCAGTGGCGTAAAGCTGGCTACCAGGACATGCCCGAGTATGAAAACTTCAAGCACCTTCTGCAGGCACCA
CTGGATGATGCTCAAGAAATTCTGCAAGCACGCTTCCCGATGCCACGTTACATCAACACGGAGCATGGAGGCAGT
CAGGCTCGATTCCTTTTGTCCAAAGTGAACCCATCTCAGACACACAATAACCTGTATGCTTGGGGACAGGAAACT
GGAGCACCCATCCTAACTGATGATGTTAGCCTGCAGGTGTTCATGGACCATTTGAAGAAGCTGGCTGTCTCCAGT
GCCTGTTAAGCTGAGGATACAACCAGGAAATGCAACGGTGTCAGATTGTG

FIGURE 7317

MATYLEFIQQNEERDGVRFSWNVWPSSRLEATRMVVPLACLLTPLKERPDLPPVQYEPVLCSRPTCKAVLNPLCQ
VDYRAKLWACNFCFQRNQFPPAYGGISEVNQPAELMPQFSTIEYVIQRGAQSPLIFLYVVDTCLEEDDLQALKES
LQMSLSLLPPDALVGLITFGRMVQVHELSCEGISKSYVFRGTKDLTAKQIQDMLGLTKPAMPMQQARPAQPQEHP
FASSRFLQPVHKIDMNLTDLLGELQRDPWPVTQGKRPLRSTGVALSIAVGLLEGTFPNTGARIMLFTGGPPTQGP
GMVVGDELKIPIRSWHDIEKDNARFMKKATKHYEMLANRTAANGHCIDIYACALDQTGLLEMKCCANLTGGYMVM
GDSFNTSLFKQTFQRIFTKDFNGDFRMAFGATLDVKTSRELKIAGAIGPCVSLNVKGPCVSENELGVGGTSQWKI
CGLDPTSTLGIYFEVVNQHNTPIPQGGRGAIQFVTHYQQSSTQRRIRVTTIARNWADVQSQLRHIEAAFDQEAAA
VLMARLGVFRAESEEGPDVLRWLDRQLIRLCQKFGQYNKEDPTSFRLSDSFSLYPQFMFHLRRSPFLQVFNNSPD
ESSYYRHHFARQDLTQSLIMIQPILYSYSFHGPPEPVLLDSSSILADRILLMDTFFQIVIYLGETIAQWRKAGYQ
DMPEYENFKHLLQAPLDDAQEILQARFPMPRYINTEHGGSQARFLLSKVNPSQTHNNLYAWGQETGAPILTDDVS
LQVFMDHLKKLAVSSAC

FIGURE 7318

CAAGAGAGAGAGAGGTGCAAGCCCCAAAGCGAGCGACATGTCCCTTTGGGGAGCAGTCCCTCTGCACCCCAGA
GTGAGGAGGACGCAGGGGTCAGAGGTGGCTACAGGGCAGGCAGAGGAGGCACCTGTAGGGGGTGGTGGGCTGGTG
GCCCAGGAGAAGTCAGGAAGGGAGCCCAGCTGGTGACAAGAGAGCCCAGAGGTGCCTGGGGCTGAGTGTGAGAGC
CCGGAAGATTTCAGCC**ATG**CCTCACAGCTCCGACAGCAGTGACTCCAGCTTCAGCCGCTCTCCTCCCCCTGGCAA
ACAGGACTCATCTGATGATGTGAGAAGAGTTCAGAGGAGGGAGAAAAATCGTATTGCCGCCCAGAAGAGCCGACA
GAGGCAGACACAGAAGGCCGACACCCTGCACCTGGAGAGCGAAGACCTGGAGAAACAGAACGCGGCTCTACGCAA
GGAGATCAAGCAGCTCACAGAGGAACTGAAGTACTTCACGTCGGTGCTGAACAGCCACGAGCCCCTGTGCTCGGT
GCTGGCCGCCAGCACGCCCTCGCCCCCCGAGGTGGTGTACAGCGCCCACGCATTCCACCAACCTCATGTCAGCTC
CCCGCGCTTCCAGCCC**TGA**GCTTCCGATGCGGGGAGAGCAGAGCCTCGGGAGGGGCACACAGACTGTGGCAGAGC
TGCGCCCATCCCGCAGAGGCCCCTGTCCACCTGGAGACCCGGAGACAGAGGCCTGGACAAGGAGTGAACACGGGA
ACTGTCACGACTGGAAGGGCGTGAGGCCTCCCAGCAGTGCCGCAGCGTTTCGAGGGGCGTGTGCTGGACCCCACC
ACTGTGGGTTGCAGGCCCAATGCAGAAGAGTATTAAGAAAGATGCTCAAGTCCCATGGCACAGAGCAAGGCGGGC
AGGGAACGGTTATTTTTCTAAATAAATGCTTTAAAAGA

FIGURE 7319

MPHSSDSSDSSFSRSPPPGKQDSSDDVRRVQRREKNRIAAQKSRQRQTQKADTLHLESEDLEKQNAALRKEIKQL
TEELKYFTSVLNSHEPLCSVLAASTPSPPEVVYSAHAFHQPHVSSPRFQP

FIGURE 7320

CTGGTCCCGAGCACGAGCTGTGAGGGGATTCACTTGTGTGCGGAACTCCTCGGAACCATGGCGTCCCTTTCCCTT
GCACCTGTTAACATCTTTAAGGCAGGAGCTGATGAAGAGAGAGCAGAGACAGCTCGTCTGACTTCTTTTATTGGT
GCCATCGCCATTGGAGACTTGGTAAAGAGCACCTTGGGACCCAAAGGCATGGACAAAATTCTTCTAAGCAGTGGA
CGAGATGCCTCTCTTATGGTAACCAATGATGGTGCCACTATTCTAAAAAACATTGGTGTTGACAATCCAGCAGCT
AAAGTTTTAGTTGATATGTCAAGGGTTCAAGATGATGAAGTTGGTGATGGCACTACCTCTGTTACCGTTTTAGCA
GCAGAATTATTAAGGGAAGCAGAATCTTTAATTGCAAAAAAGATTCATCCACAGACCATCATAGCGGGTTGGAGA
GAAGCCACGAAGGCTGCAAGAGAGGCGCTGTTGAGTTCTGCAGTTGATCATGGTTCCGATGAAGTTAAATTCCGT
CAAGATTTAATGAATATTGCGGGCACAACATTATCCTCAAAACTTCTTACTCATCACAAAGACCACTTTACAAAG
TTAGCTGTAGAAGCAGTTCTCAGACTGAAAGGCTCTGGCAACCTGGAGGCAATTCATATTATCAAGAAGCTAGGA
GGAAGTTTGGCAGATTCCTATTTAGATGAAGGCTTCCTGTTGGATAAAAAAATTGGAGTAAATCAACCAAAACGA
ATTGAAAATGCTAAAATTCTTATTGCAAATACTGGTATGGATACAGACAAAATAAAGATATTTGGTTCCCGGGTA
AGAGTTGACTCTACAGCAAAGGTTGCAGAAATAGAACATGCGGAAAAGGAAAAAATGAAGGAGAAAGTTGAACGT
ATTCTTAAGCATGGAATAAATTGCTTTATTAACAGGCAATTAATTTATAATTATCCTGAACAGCTCTTTGGTGCT
GCTGGTGTCATGGCTATTGAGCATGCAGATTTTGCAGGTGTGGAACGCCTAGCTCTTGTCACAGGTGGTGAAATT
GCCTCTACCTTTGATCACCCAGAACTGGTGAAGCTTGGAAGTTGCAAACTTATCGAGGAAGTCATGATTGGAGAA
GACAAACTCATTCACTTTTCTGGGGTTGCCCTTGGTGAGGCTTGTACCATTGTTTTGCGTGGTGCCACTCAACAA
ATTTTAGATGAAGCAGAAAGATCATTGCATGATGCTCTTTGTGTTCTTGCGCAAACTGTAAAGGACTCTAGAACA
GTTTATGGAGGAGGCTGTTCTGAGATGTTGATGGCTCATGCTGTGACACAGCTTGCCAATAGAACACCAGGCAAA
GAAGCTGTTGCAATGGAGTCTTATGCTAAAGCACTGAGAATGTTGCCAACCATCATAGCTGACAATGCAGGCTAT
GACAGTGCAGACCTGGTGGCACAGCTCAGGGCTGCTCACAGTGAAGGCAATACCACTGCTGGATTGGATATGAGG
GAAGGCACCATTGGAGATATGGCTATCCTGGGTATAACAGAAAGTTTTCAAGTGAAGCGACAGGTTCTTCTGAGT
GCAGCTGAAGCAGCAGAGGTGATTCTGCGTGTGGACAACATCATCAAAGCGGCACCCAGGAAACGTGTCCCTGAT
CACCACCCCTGTTAAGCATTCCCACGTGCTGTCGATCTTTGGACCAGTTTCTAGCAAAGTTGTGTTTGAAAGATA
CTCTATTAAAGAAGACTGTGGAATCTGTTTATCGGTGCCCATTATATCCTTAAGTTTGGATATTTAGCTGACCTT
CGCTTTAACATAGGTCTAATTTATTTGCCGTGTCATTTTCCATACAAATCAGTTGATTTAAAGGAGTTCATTTCG
CATACTGGGCATTAAAATAAAAATTTGAACAATGAAAGGAAAAAAAGGAGAAAAAAAAAA

FIGURE 7321

MASLSLAPVNIFKAGADEERAETARLTSFIGAIAIGDLVKSTLGPKGMDKILLSSGRDASLMVTNDGATILKNIG
VDNPAAKVLVDMSRVQDDEVGDGTTSVTVLAAELLREAESLIAKKIHPQTIIAGWREATKAAREALLSSAVDHGS
DEVKFRQDLMNIAGTTLSSKLLTHHKDHFTKLAVEAVLRLKGSGNLEAIHIIKKLGGSLADSYLDEGFLLDKKIG
VNQPKRIENAKILIANTGMDTDKIKIFGSRVRVDSTAKVAEIEHAEKEKMKEKVERILKHGINCFINRQLIYNYP
EQLFGAAGVMAIEHADFAGVERLALVTGGEIASTFDHPELVKLGSCKLIEEVMIGEDKLIHFSGVALGEACTIVL
RGATQQILDEAERSLHDALCVLAQTVKDSRTVYGGGCSEMLMAHAVTQLANRTPGKEAVAMESYAKALRMLPTII
ADNAGYDSADLVAQLRAAHSEGNTTAGLDMREGTIGDMAILGITESFQVKRQVLLSAAEAAEVILRVDNIIKAAP
RKRVPDHHPC

FIGURE 7322

CGCGTGAACTGCTTCCTGCAGGCTGGCC**ATG**GCGCTTCACGTTCCCAAGGCTCCGGGCTTTGCCCAGATGCTCAA
GGAGGGAGCGAAACACTTTTCAGGATTAGAAGAGGCTGTGTATAGAAACATACAAGCTTGCAAGGAGCTTGCCCA
AACCACTCGTACAGCATATGGACCAAAAGGAATGAACAAAATGGTTATCAACCACTTGGAGAAGTTGTTTGTGAC
AAACGATGCAGCAACTATTTTAAGAGAACTAGAAGTACAGCATCCTGCTGCAAAAATGATTGTAATGGCTTCTCA
TATGCAAGAGCAAGAAGTTGGAGATGGCACAAACTTTGTTCTGGTATTTGCTGGAGCTCTCCTGGAATTAGCTGA
AGAACTTCTGAGGATTGGCCTGTCAGTTTCAGAGGTCATAGAAGGTTATGAAATAGCCTGCAGAAAAGCTCATGA
GATTCTTCCTAATTTGGTATGTTGTTCTGCAAAAAACCTTCGAGATATTGATGAAGTCTCATCTCTACTTCGTAC
CTCCATAATGAGTAAACAATATGGTAATGAAGTATTTCTGGCCAAGCTTATTGCTCAGGCATGCGTATCTATTTT
TCCTGATTCCGGCCATTTCAATGTTGATAACATCAGAGTTTGTAAAATTCTGGGCTCTGGTATCAGTTCCTCTTC
AGTATTGCATGGCATGGTTTTTAAGAAGGAAACCGAAGGTGATGTAACATCTGTCAAAGATGCAAAAATAGCAGT
GTACTCTTGTCCTTTTGATGGCATGATAACAGAAACTAAGGGAACAGTGTTGATAAAGACTGCTGAAGAATTGAT
GAATTTTAGTAAGGGAGAAGAAAACCTCATGGATGCACAAGTCAAAGCTATTGCTGATACTGGTGCAAATGTCGT
AGTAACAGGTGGCAAAGTGGCAGACATGGCTCTTCATTATGCAAATAAATATAATATCATGTTAGTGAGGCTAAA
CTCAAAATGGGATCTCCGAAGACTTTGTAAAACTGTTGGTGCTACAGCTCTTCCTAGATTGACACCTCCTGTCCT
TGAAGAAATGGGACACTGTGACAGTGTTTACCTCTCAGAAGTTGGAGATACTCAGGTGGTGGTTTTTAAGCATGA
AAAGGAAGATGGCGCCATTTCTACCATAGTACTTCGAGGCTCTACAGACAATCTGATGGATGACATAGAAAGGGT
AGTAGACGATGGTGTTAATACTTTCAAAGTTCTTACAAGGGATAAACGTCTTGTACCCGGAGGTGGAGCAACAGA
AATTGAATTAGCCAAACAGATCACATCATATGGAGAGACATGTCCTGGACTTGAACAGTATGCTATTAAGAAGTT
TGCTGAGGCATTTGAAGCTATTCCCCGCGCACTGGCAGAAAACTCTGGAGTTAAGGCCAATGAAGTAATCTCTAA
ACTTTATGCAGTACATCAAGAAGGAAATAAAAACGTTGGATTAGATATTGAGGCTGAAGTCCCTGCTGTAAAGGA
CATGCTGGAAGCTGGTATTCTAGATACTTACCTGGGAAAATATTGGGCTATCAAACTCGCTACTAATGCTGCAGT
CACTGTACTTAGAGTGGATCAGATCATCATGGCAAAACCAGCTGGTGGGCCCAAGCCTCCAAGTGGGAAGAAAGA
CTGGGATGATGACCAAAATGAT**TGA**AATTGGCTTAATTTTTACTGTAGGTGAAGGCTGTATTTGTAGTAGTACTC
AAGAATCACCTGATGTTTTCTTATTCTCCTTAAATTAAGAGTTATTTTGTGTTTGTATTCTTGGCTGGATGTTAT
AATAAACATATTGTTACTGTC

FIGURE 7323

MALHVPKAPGFAQMLKEGAKHFSGLEEAVYRNIQACKELAQTTRTAYGPKGMNKMVINHLEKLFVTNDAATILRE
LEVQHPAAKMIVMASHMQEQEVGDGTNFVLVFAGALLELAEELLRIGLSVSEVIEGYEIACRKAHEILPNLVCCS
AKNLRDIDEVSSLLRTSIMSKQYGNEVFLAKLIAQACVSIFPDSGHFNVDNIRVCKILGSGISSSSVLHGMVFKK
ETEGDVTSVKDAKIAVYSCPFDGMITETKGTVLIKTAEELMNFSKGEENLMDAQVKAIADTGANVVVTGGKVADM
ALHYANKYNIMLVRLNSKWDLRRLCKTVGATALPRLTPPVLEEMGHCDSVYLSEVGDTQVVVFKHEKEDGAISTI
VLRGSTDNLMDDIERVVDDGVNTFKVLTRDKRLVPGGGATEIELAKQITSYGETCPGLEQYAIKKFAEAFEAIPR
ALAENSGVKANEVISKLYAVHQEGNKNVGLDIEAEVPAVKDMLEAGILDTYLGKYWAIKLATNAAVTVLRVDQII
MAKPAGGPKPPSGKKDWDDDQND

FIGURE 7324A

GAGGAAGTGGGACCTCCCCTTTTGGGTCGGTAGTTCAGCGCCGGCGCCGGTGTGCGAGCCGCGGCAGAGTGAGGC
AGGCAACCCGAGGTGCGGAGCGACCTGCGGAGGCTGAGCCCCGCTTTCTCCCAGGGTTTCTTATCAGCCAGCCGC
CGCTGTCCCCGGGGGAGTAGGAGGCTCCTGACAGGCCGCGGCTGTCTGTGTGTCCTTCTGAGTGTCAGAGGAACG
GCCAGACCCCGCGGGCCGGAGCAGAACGCGGCCAGGGCAGAAAGCGGCGGCAGGAGAAGCAGGCAGGGGGCCGGA
GGACGCAGACCGAGACCCGAGGCGGAGGCGGACCGCGAGCCGGCCATGTCGGTGGTGGGGTTGGACGTGGGCTCG
CAGAGCTGCTACATCGCGGTAGCCCGGGCCGGGGGCATCGAGACCATCGCCAATGAGTTCAGCGACCGGTGCACC
CCGTCAGTCATATCATTTGGATCAAAAAATAGAACAATCGGAGTTGCAGCCAAAAATCAGCAAATCACTCATGCA
AACAATACGGTGTCTAACTTCAAAAGATTTCATGGCCGAGCATTCAACGACCCCTTCATTCAAAAGGAGAAGGAA
AACTTGAGTTACGATTTGGTTCCATTGAAAAATGGTGGAGTTGGAATAAAGGTAATGTACATGGGTGAAGAACAT
CTATTTAGTGTGGAGCAGATAACAGCCATGTTGTTGACTAAGCTGAAGGAAACTGCTGAAAACAGCCTCAAGAAA
CCAGTAACAGATTGTGTTATTTCAGTCCCCTCCTTCTTTACAGATGCTGAGAGGCGATCTGTGTTAGATGCTGCA
CAGATTGTTGGCCTAAACTGTTTAAGACTTATGAATGACATGACAGCTGTTGCTTTGAATTACGGAATTTATAAG
CAGGATCTCCCAAGCCTGGATGAGAAACCTCGGATAGTGGTTTTTGTTGATATGGGACATTCAGCTTTTCAAGTG
TCTGCTTGTGCTTTTAACAAGGGAAAATTGAAGGTACTGGGAACAGCTTTTGATCCTTTCTTAGGAGGAAAAAAC
TTCGATGAAAAGTTAGTGGAACATTTCTGTGCAGAATTTAAAACTAAGTACAAGTTGGATGCAAAATCCAAAATA
CGAGCACTCCTACGTCTGTATCAGGAATGTGAAAAACTGAAAAAGCTAATGAGCTCTAACAGCACAGACCTTCCA
CTGAATATCGAATGCTTTATGAATGATAAAGATGTTTCCGGAAAGATGAACAGGTCACAATTTGAAGAACTCTGT
GCTGAACTTCTGCAAAAGATAGAAGTACCCCTTTATTCACTGTTGGAACAAACTCATCTCAAAGTAGAAGATGTG
AGTGCAGTTGAGATTGTTGGAGGCGCTACACGAATTCCAGCTGTGAAGGAAAGAATTGCCAAATTCTTTGGAAAA
GATATTAGCACAACACTCAATGCAGATGAAGCAGTAGCCAGAGGATGTGCATTACAGTGTGCAATACTTTCCCCG
GCATTTAAAGTTAGAGAATTTTCCGTCACAGATGCAGTTCCTTTTCCAATATCTCTGATCTGGAACCATGATTCA
GAAGATACTGAAGGTGTTCATGAAGTCTTTAGTCGAAACCATGCTGCTCCTTTCTCCAAAGTTCTCACCTTTCTG
AGAAGGGGGCCTTTTGAGCTAGAAGCTTTCTATTCTGATCCCCAAGGAGTTCCATATCCAGAAGCAAAAATAGGC
CGCTTTGTAGTTCAGAATGTTTCTGCACAGAAAGATGGAGAAAAATCTAGAGTAAAAGTCAAAGTGCGAGTCAAC
ACCCATGGCATTTTCACCATCTCTACGGCATCTATGGTGGAGAAAGTCCCAACTGAGGAGAATGAAATGTCTTCT
GAAGCTGACATGGAGTGTCTGAATCAGAGACCACCAGAAAACCCAGACACTGATAAAAATGTCCAGCAAGACAAC
AGTGAAGCTGGAACACAGCCCCAGGTACAAACTGATGCTCAACAAACCTCACAGTCTCCCCCTTCACCTGAACTT
ACCTCAGAAGAAAACAAAATCCCAGATGCTGACAAAGCAAATGAAAAAAAAGTTGACCAGCCTCCAGAAGCTAAA
AAGCCCAAAATAAAGGTGGTGAATGTTGAGCTGCCTATTGAAGCCAACTTGGTCTGGCAGTTAGGGAAAGACCTT
CTTAACATGTATATTGAGACAGAGGGTAAGATGATAATGCAAGATAAATTGGAAAAAGAAAGGAATGATGCTAAA
AATGCAGTTGAGGAATATGTGTATGAGTTCAGAGACAAGCTGTGTGGACCATATGAAAAATTTATATGTGAGCAG
GATCATCAAAATTTTTTGAGACTCCTCACAGAAACTGAAGACTGGCTGTATGAAGAAGGAGAGGACCAAGCTAAA
CAAGCATATGTTGACAAGTTGGAAGAATTAATGAAAATTGGCACTCCAGTTAAAGTTCGGTTTCAGGAAGCTGAA
GAACGGCCAAAAATGTTTGAAGAACTAGGACAGAGGCTGCAGCATTATGCCAAGATAGCAGCTGACTTCAGAAAT
AAGGATGAGAAATACAACCATATTGATGAGTCTGAAATGAAAAAAGTGGAGAAGTCTGTTAATGAAGTGATGGAA
TGGATGAATAATGTCATGAATGCTCAGGCTAAAAAGAGTCTTGATCAGGATCCAGTTGTACGTGCTCAGGAAATT
AAAACAAAAATCAAGGAATTGAACAACACATGTGAACCCGTTGTAACACAACCGAAACCAAAAATTGAATCACCC
AAACTGGAAAGAACTCCAAATGGCCCAAATATTGATAAAAAGGAAGAAGATTTAGAAGACAAAAACAATTTTGGT
GCTGAACCTCCACATCAGAATGGTGAATGTTACCCTAATGAGAAAAATTCTGTTAATATGGACTTGGACTAGATA
ACCTTAAATTGGCCTATTCCTTCAATTAATAAAATATTTTTGCCATAGTATGTGACTCTACATAACATACTGAAA
CTATTTATATTTTCTTTTTTAAGGATATTTAGAAATTTTGTGTATTATATGGAAAAAGAAAAAAAGCTTAAGTCT
GTAGTCTTTATGATCCTAAAAGGGAAAATTGCCTTGGTAACTTTCAGATTCCTGTGGAATTGTGAATTCATACTA
AGCTTTCTGTGCAGTCTCACCATTTGCATCACTGAGGATGAAACTGACTTTTGTCTTTTGGAGAAAAAAAACTGT
ACTGTTGTTCAAGAGGGCTGTGATTAAAATCTTTAAGCATTTGTTCCTGCCAAGGTAGTTTTCTTGCATTTTGCT
CTCCATTCAGCATGTGTGTGGGTGTGGATGTTTATAAACAAGACTAAGTCTGACTTCATAAGGGCTTTCTAAAAC
CATTTCTGTCCAAGAGAAAATGACTTTTTGCTTTGATATTAAAAATTCAATGAGTAAAACAAAAGCTAGTCAAAT
GTGTTAGCAGCATGCAGAACAAAAACTTTAAACTTTCTCTCTCACTATACAGTATATTGTCAATGTGAAAGTGTG
GAATGGAAGAAATGTCGATCCTGTTGTAACTGATTGTGAACACTTTTATGAGCTTTAAAATAAAGTTCATCTTAT

FIGURE 7324B

GGTGTCATTTCT

FIGURE 7325

MSVVGLDVGSQSCYIAVARAGGIETIANEFSDRCTPSVISFGSKNRTIGVAAKNQQITHANNTVSNFKRFHGRAF
NDPFIQKEKENLSYDLVPLKNGGVGIKVMYMGEEHLFSVEQITAMLLTKLKETAENSLKKPVTDCVISVPSFFTD
AERRSVLDAAQIVGLNCLRLMNDMTAVALNYGIYKQDLPSLDEKPRIVVFVDMGHSAFQVSACAFNKGKLKVLGT
AFDPFLGGKNFDEKLVEHFCAEFKTKYKLDAKSKIRALLRLYQECEKLKKLMSSNSTDLPLNIECFMNDKDVSGK
MNRSQFEELCAELLQKIEVPLYSLLEQTHLKVEDVSAVEIVGGATRIPAVKERIAKFFGKDISTTLNADEAVARG
CALQCAILSPAFKVREFSVTDAVPFPISLIWNHDSEDTEGVHEVFSRNHAAPFSKVLTFLRRGPFELEAFYSDPQ
GVPYPEAKIGRFVVQNVSAQKDGEKSRVKVKVRVNTHGIFTISTASMVEKVPTEENEMSSEADMECLNQRPPENP
DTDKNVQQDNSEAGTQPQVQTDAQQTSQSPPSPELTSEENKIPDADKANEKKVDQPPEAKKPKIKVVNVELPIEA
NLVWQLGKDLLNMYIETEGKMIMQDKLEKERNDAKNAVEEYVYEFRDKLCGPYEKFICEQDHQNFLRLLTETEDW
LYEEGEDQAKQAYVDKLEELMKIGTPVKVRFQEAEERPKMFEELGQRLQHYAKIAADFRNKDEKYNHIDESEMKK
VEKSVNEVMEWMNNVMNAQAKKSLDQDPVVRAQEIKTKIKELNNTCEPVVTQPKPKIESPKLERTPNGPNIDKKE
EDLEDKNNFGAEPPHQNGECYPNEKNSVNMDLD

FIGURE 7326

GGCACGAGGCTTCGGCGGACATGGCTCCCAGCGTGCCAGCGGCAGAACCCGAGTATCCTAAAGGCATCCGGGCCG
TGCTGCTGGGGCCTCCCGGGGCCGGTAAAGGGACCCAGGCACCCAGATTGGCTGAAAACTTCTGTGTCTGCCATT
TAGCTACTGGGGACATGCTGAGGGCCATGGTGGCTTCTGGCTCAGAGCTAGGAAAAAAGCTGAAGGCAACTATGG
ATGCTGGGAAACTGGTGAGTGATGAAATGGTAGTGGAGCTCATTGAGAAGAATTTGGAGACCCCCTTGTGCAAAA
ATGGTTTTCTTCTGGATGGCTTCCCTCGGACTGTGAGGCAGGCAGAAATGCTCGATGACCTCATGGAGAAGAGGA
AAGAGAAGCTTGATTCTGTGATTGAATTCAGCATCCCAGACTCTCTGCTGATCCGAAGAATCACAGGAAGGCTGA
TTCACCCCAAGAGTGGCCGTTCCTACCACGAGGAGTTCAACCCTCCAAAAGAGCCCATGAAAGATGACATCACCG
GGGAACCCTTGATCCGTCGATCAGATGATAATGAAAAGGCCTTGAAAATCCGCCTGCAAGCCTACCACACTCAAA
CCACCCCACTCATAGAGTACTACAGGAAACGGGGGATCCACTCCGCCATCGATGCATCCCAGACCCCCGATGTCG
TGTTCGCAAGCATCCTAGCAGCCTTCTCCAAAGCCACATGTAAAGACTTGGTTATGTTTATCTAATGTTGGGTCC
AAGAAGGAATTTCTTTCCATCCCTGTGAGGCAATGGGTGGGAATGATAGGACAGGCAAAGAGAAGCTTCCTCAGG
CTAGCAAAAATATCATTTGATGTATTGATTAAAAAAGCACTTGCTTGATGTAAAAAAAAAAAAAAAAAA

FIGURE 7327

MAPSVPAAEPEYPKGIRAVLLGPPGAGKGTQAPRLAENFCVCHLATGDMLRAMVASGSELGKKLKATMDAGKLVS
DEMVVELIEKNLETPLCKNGFLLDGFPRTVRQAEMLDDLMEKRKEKLDSVIEFSIPDSLLIRRITGRLIHPKSGR
SYHEEFNPPKEPMKDDITGEPLIRRSDDNEKALKIRLQAYHTQTTPLIEYYRKRGIHSAIDASQTPDVVFASILA
AFSKATCKDLVMFI

FIGURE 7328

TTGGCGGGCGGAAGCGGCCACAACCCGGCGATCGAAAAGATTCTTAGGAACGCCGTACCAGCCGCGTCTCTCAGG
ACAGCAGGCCCCTGTCCTTCTGTCGGGCGCCGCTCAGCCGTGCCCTCCGCCCCTCAGGTTCTTTTTCTAATTCCA
AATAAACTTGCAAGAGGACTATGAAAGATTATGATGAACTTCTCAAATATTATGAATTACATGAAACTATTGGGA
CAGGTGGCTTTGCAAAGGTCAAACTTGCCTGCCATATCCTTACTGGAGAGATGGTAGCTATAAAAATCATGGATA
AAAACACACTAGGGAGTGATTTGCCCCGGATCAAAACGGAGATTGAGGCCTTGAAGAACCTGAGACATCAGCATA
TATGTCAACTCTACCATGTGCTAGAGACAGCCAACAAAATATTCATGGTTCTTGAGTACTGCCCTGGAGGAGAGC
TGTTTGACTATATAATTTCCCAGGATCGCCTGTCAGAAGAGGAGACCCGGGTTGTCTTCCGTCAGATAGTATCTG
CTGTTGCTTATGTGCACAGCCAGGGCTATGCTCACAGGGACCTCAAGCCAGAAAATTTGCTGTTTGATGAATATC
ATAAATTAAAGCTGATTGACTTTGGTCTCTGTGCAAAACCCAAGGGTAACAAGGATTACCATCTACAGACATGCT
GTGGGAGTCTGGCTTATGCAGCACCTGAGTTAATACAAGGCAAATCATATCTTGGATCAGAGGCAGATGTTTGGA
GCATGGGCATACTGTTATATGTTCTTATGTGTGGATTTCTACCATTTGATGATGATAATGTAATGGCTTTATACA
AGAAGATTATGAGAGGAAAATATGATGTTCCCAAGTGGCTCTCTCCCAGTAGCATTCTGCTTCTTCAACAAATGC
TGCAGGTGGACCCAAAGAAACGGATTTCTATGAAAAATCTATTGAACCATCCCTGGATCATGCAAGATTACAACT
ATCCTGTTGAGTGGCAAAGCAAGAATCCTTTTATTCACCTCGATGATGATTGCGTAACAGAACTTTCTGTACATC
ACAGAAACAACAGGCAAACAATGGAGGATTTAATTTCACTGTGGCAGTATGATCACCTCACGGCTACCTATCTTC
TGCTTCTAGCCAAGAAGGCTCGGGGAAAACCAGTTCGTTTAAGGCTTTCTTCTTTCTCCTGTGGACAAGCCAGTG
CTACCCCATTCACAGACATCAAGTCAAATAATTGGAGTCTGGAAGATGTGACCGCAAGTGATAAAAATTATGTGG
CGGGATTAATAGACTATGATTGGTGTGAAGATGATTTATCAACAGGTGCTGCTACTCCCCGAACATCACAGTTTA
CCAAGTACTGGACAGAATCAAATGGGGTGGAATCTAAATCATTAACTCCAGCCTTATGCAGAACACCTGCAAATA
AATTAAAGAACAAAGAAAATGTATATACTCCTAAGTCTGCTGTAAAGAATGAAGAGTACTTTATGTTTCCTGAGC
CAAAGACTCCAGTTAATAAGAACCAGCATAAGAGAGAAATACTCACTACGCCAAATCGTTACACTACACCCTCAA
AAGCTAGAAACCAGTGCCTGAAAGAAACTCCAATTAAAATACCAGTAAATTCAACAGGAACAGACAAGTTAATGA
CAGGTGTCATTAGCCCTGAGAGGCGGTGCCGCTCAGTGGAATTGGATCTCAACCAAGCACATATGGAGGAGACTC
CAAAAAGAAAGGGAGCCAAAGTGTTTGGGAGCCTTGAAAGGGGGTTGGATAAGGTTATCACTGTGCTCACCAGGA
GCAAAAGGAAGGGTTCTGCCAGAGACGGGCCCAGAAGACTAAAGCTTCACTATAATGTGACTACAACTAGATTAG
TGAATCCAGATCAACTGTTGAATGAAATAATGTCTATTCTTCCAAAGAAGCATGTTGACTTTGTACAAAAGGGTT
ATACACTGAAGTGTCAAACACAGTCAGATTTTGGGAAAGTGACAATGCAATTTGAATTAGAAGTGTGCCAGCTTC
AAAAACCCGATGTGGTGGGTATCAGGAGGCAGCGGCTTAAGGGCGATGCCTGGGTTTACAAAAGATTAGTGGAAG
ACATCCTATCTAGCTGCAAGGTATAATTGATGGATTCTTCCATCCTGCCGGATGAGTGTGGGTGTGATACAGCCT
ACATAAAGACTGTTATGATCGCTTTGATTTTAAAGTTCATTGGAACTACCAACTTGTTTCTAAAGAGCTATCTTA
AGACCAATATCTCTTTGTTTTTAAACAAAAGATATTATTTTGTGTATGAATCTAAATCAAGCCCATCTGTCATTA
TGTTACTGTCTTTTTTAATCATGTGGTTTTGTATATTAATAATTGTTGACTTTCTTAGATTCACTTCCATATGTG
AATGTAAGCTCTTAACTATGTCTCTTTGTAATGTGTAATTTCTTTCTGAAATAAAACCATTTGTGAATAT

FIGURE 7329

MKDYDELLKYYELHETIGTGGFAKVKLACHILTGEMVAIKIMDKNTLGSDLPRIKTEIEALKNLRHQHICQLYHV
LETANKIFMVLEYCPGGELFDYIISQDRLSEEETRVVFRQIVSAVAYVHSQGYAHRDLKPENLLFDEYHKLKLID
FGLCAKPKGNKDYHLQTCCGSLAYAAPELIQGKSYLGSEADVWSMGILLYVLMCGFLPFDDDNVMALYKKIMRGK
YDVPKWLSPSSILLLQQMLQVDPKKRISMKNLLNHPWIMQDYNYPVEWQSKNPFIHLDDDCVTELSVHHRNNRQT
MEDLISLWQYDHLTATYLLLLAKKARGKPVRLRLSSFSCGQASATPFTDIKSNNWSLEDVTASDKNYVAGLIDYD
WCEDDLSTGAATPRTSQFTKYWTESNGVESKSLTPALCRTPANKLKNKENVYTPKSAVKNEEYFMFPEPKTPVNK
NQHKREILTTPNRYTTPSKARNQCLKETPIKIPVNSTGTDKLMTGVISPERRCRSVELDLNQAHMEETPKRKGAK
VFGSLERGLDKVITVLTRSKRKGSARDGPRRLKLHYNVTTTRLVNPDQLLNEIMSILPKKHVDFVQKGYTLKCQT
QSDFGKVTMQFELEVCQLQKPDVVGIRRQRLKGDAWVYKRLVEDILSSCKV

FIGURE 7330A

GTTTTGTAACTCAACTGGCCTGCTTCCTGGCCAACCAGCAGAACAAATACAAATATGAAGAGTGCAAAGACCTCA
TAAAATCTATGCTGAGGAATGAGCGACAGTTCAAGGAGGAGAAGCTTGCAGAGCAGCTCAAGCAAGCTGAGGAGC
TCAGGCAATATAAAGTCCTGGTTCACTCTCAGGAACGAGAGCTGACCCAGTTAAGGGAGAAGTTACGGGAAGGGA
GAGATGCCTCCCGCTCATTGAATCAGCATCTCCAGGCCCTCCTCACTCCGGATAAGCCAGACAAGTCCCAGGGGC
AGGACCTCCAAGAACAGCTGGCTGAGGGGTGTAGACTGGCACAGCAACTTTTCCAGAAGCTCAGCCCAGAAAATG
ACGAAGATGAGGATGAAGATGTTCAAGTTGAGGAGGCTGAGAAAGTACTGGAATCATCTGCCCCCAGGGAGGTGC
AGAAGGCTGAAGAAAGCAAAGTCCCTGAGGACTCACTGGAGGAATGTGCCATCACTTGTTCAAATAGCCACAGCC
CTTGTGACTCCAACCAGCCTCACAAGAACATCAACATCACCTTTGAGGAAGACAAAGTCAACTCAACTCTGGTTG
TAGACAGAGAATCCTCTCATGATGAATGTCAGGATGCTGTAAACATTCTCCCAGTCCCTGGCCCCACCTCTTCTG
CCACAAACGTCAGCATGGTGGTATCAGCCGGCCCTTTGTCCAGCGAGAAGGCAGAGATGAACATTCTAGAAATCA
ACGAGAAATTGCATCCCCAGCTGGCAGAGAAGAAACAGCAGTTCAGAAACCTCAAAGAGAAATGTTTTGTAACTC
AACTGGCCTGCTTCCTGGCCAACCAGCAGAACAAATACAAAAATGAAGAGTGCAAAGACCTCATAAAATCTATGC
TGAGGAATGAGCGACAGTTCAAGGAGGAGAAGCTTGCAGAGCAGCTCAAGCAAGCTGAGGAGCTCAGGCAATATA
AAGTCCTGGTTCACTCTCAGGAACGAGAGCTGACCCAGTTAAGGGAGAAGTTACGGGAAGGGAGAGATGCCTCCT
GCTCATTGAATCAGCATCTCCAGGCCCTCCTCACTCCGGATGAGCCAGACAAGTCCCAGGGGCAGGACCTCCAAG
AACAGCTGGCTGAGGGGTGTAGACTGGCACAGCACCTTGTCCAAAAGCTCAGCCCAGAAAATGACAACGATGACG
ATGAAGATGTTCAAGTTGAGGTGGCTGAGAAAGTGCAGAAATCGTCTGCCCCCAGGGAGATGCCGAAGGCTGAAG
AAAAGGAAGTCCCTGAGGACTCACTGGAGGAATGTGCCATCACTTGTTCAAATAGCCATGGCCCTTATGACTCCA
ACCAGCCACATAGGAAAACCAAAATCACATTTGAGGAAGACAAAGTCGACTCAACTCTCATTGGCTCATCCTCTC
ATGTTGAATGGGAGGATGCTGTACACATTATCCCAGAAAATGAAAGTGATGATGAGGAAGAGGAAGAAAAAGGGC
CAGTGTCTCCCAGGAATCTGCAGGAGTCTGAAGAGGAGGAAGTCCCCCAGGAGTCCTGGGATGAAGGTTATTCGA
CTCTCTCAATTCCTCCTGAAATGTTGGCCTCGTACCAGTCTTACAGCGGCACATTTCACTCATTAGAGGAACAGC
AAGTCTGCATGGCTGTTGACATAGGCGGACATCGGTGGGATCAAGTGAAAAAGGAGGACCAAGAGGCAACAGGTC
CCAGGCTCAGCAGGGAGCTGCTGGATGAGAAAGGGCCTGAAGTCTTGCAGGACTCACTGGATAGATGTTATTCAA
CTCCTTCAGGTTATCTTGAACTGACTGACTCATGCCAGCCCTACAGAAGTGCCTTTTACATATTGGAGCAACAGC
GTGTTGGCTGGGCTCTTGACATGGATGAAATTGAAAAGTACCAAGAAGTGGAAGAAGACCAAGACCCATCATGCC
CCAGGCTCAGCAGGGAGCTGCTGGATGAGAAAGAGCCTGAAGTCTTGCAGGACTCACTGGATAGATGTTATTCGA
CTCCTTCAGGTTATCTTGAACTGCCTGACTTAGGCCAGCCCTACAGAAGTGCTGTTTACTCATTGGAGGAACAGT
ACCTTGGCTTGGCTCTTGACGTGGACAGAATTAAAAAGGACCAAGAAGAGGAAGAAGACCAAGGCCCACCATGCC
CCAGGCTCAGCAGGGAGCTGCTGGAGGCAGTAGAGCCTGAAGTCTTGCAGGACTCACTGGATAGATGTTATTCAA
CTCCTTCCAGTTGTCTTGAACAGCCTGACTCCTGCCTGCCCTATGGAAGTTCCTTTTATGCATTGGAGGAAAAAC
ATGTTGGCTTTTCTCTTGACGTGGGAGAAATTGAAAAGAAGGGGAAGGGGAAGAAAAGAAGGGGAAGAAGATCAA
CGAAGAAAAGAAGGAGAAGGGGAAGAAAAGAAGGGGAAGAAGATCAAAACCCACCATGCCCCAGGCTCAGCGGTG
TGCTGATGGAAGTGGAAGAGCCTGAAGTCTTACAGGACTCACTGGATAGATGTTATTCGACTCCGTCAATGTTCT
TTGAACTACCTGACTCATTCCAGCACTACAGAAGTGTGTTTTACTCATTTGAGGAACAGCACATCAGCTTCGCCC
TTGACGTGGACAATAGGTTTCTTACTTTGATGGGAAGAAGTCTCCACCTGGTCTTCCAGATGGGAGTCATATTCC
CACAA**TAA**GCAGCCCTTACTAAGCCGAGAGATGTCATTCCTGCAGGCAGGACCTATAGGCACGTGAAGATTTGAA
TGAAACTATAGTTCCATTTGGAAGCCCAGACATAGGATGGGTCAGTGGGCATGGCTCTATTCCTATTCTCAGACC
ATGCCAGTGGCAACCTGTGCTCAGTCTGAAGACAATGGACCCAAGTTAGGTGTGACACGTTCACATAACTGTGCA
GCACATGCCGGGAGTGATCAGTCAGACATTTTAATTTGAACCACGTATCTCTGGGTAGCTACAAAGTTCCTCAGG
GATTTCATTTTGCAGGCATGTCTCTGAGCTTCTATACCTGCTCAAGGTCAGTGTCATCTTTGTGTTTAGCTCATC
CAAAGGTGTTACCCTGGTTTCAATGAACCTAACCTCATTCTTTGTATCTTCAGTGTTGAATTGTTTTAGCTGATC
CATCTTTAACGCAGGAGGGATCCTTGGCTGAGGATTGTATTTCAGAACCACCAACTGCTCTTGACAATTGTTAAC
CCGCTAGGCTCCTTTGGTTAGAGAAGCCACAGTCCTTCAGCCTCCAATTGGTGTCAGTACTTAGGAAGACCACAG
CTAGATGGACAAACAGCATTGGGAGACCTTAGCCCTGCTCCTCTCGATTCCATCCTGTAGAGAACAGGAGTCAGG
AGCCGCTGGCAGGAGACAGCATGTCACCCAGGACTCTGCCGGTGCAGAATATGAACAACGCCATGTTCTTGCAGA
AAACGCTTAGCCTGAGTTTCATAGGAGGTAATCACCAGACAACTGCAGAATGTAGAACACTGAGCAGGACAACTG
ACCTGTCTCCTTCACATAGTCCATATCACCACAAATCACACAACAAAAAGGAGAAGAGATATTTTGGGTTCAAAA

FIGURE 7330B

AAAGTAAAAAGATAATATAGCTGCATTTCTTTAGTTATTTTGAACCCCAAATATTTCCTCATCTTTTTGTTGTTG
TCATTGATGGTGGTGACATGGACTTGTTTATAGAGGACAGGTCAGCTGTCTGGCTCAGTGATCTACATTCTGAAG
TTGTCTGAAAATGTCTTCATGATTAAATTCAGCCTAAACGTTTTGCCGGGAACACTGCAGAGACAATGCTGTGAG
TTTCCAACCTTAGCCCATCTGCGGGCAGAGAAGGTCTAGTTTGTCCATCAGCATTATCATGATATCAGGACTGGT
TACTTGGTTAAGGAGGGGTCTAGGAGATCTGTCCCTTTTAGAGACACCTTACTTATAATGAAGTATTTGGGAGGG
TGGTTTTCAAAAGTAGAAATGTCCTGTATTCCGATGATCATCCTGTAAACATTTTATCATTTATTAATCATCCCT
GCCTGTGTCTATTATTATATTCATATCTCTACGCTGGAAACTTTCTGCCTCAATGTTTACTGTGCCTTTGTTTTT
GCTAGTTTGTGTTGTTGAAAAAAAAAACATTCTCTGCCTGAGTTTTAATTTTTGTCCAAAGTTATTTTAATCTAT
ACAATTAAAAGCTTTTGCCTCTAGATCGCGGGCGGCCGC

FIGURE 7331

FVTQLACFLANQQNKYKYEECKDLIKSMLRNERQFKEEKLAEQLKQAEELRQYKVLVHSQERELTQLREKLREGR
DASRSLNQHLQALLTPDKPDKSQGQDLQEQLAEGCRLAQQLFQKLSPENDEDEDEDVQVEEAEKVLESSAPREVQ
KAEESKVPEDSLEECAITCSNSHSPCDSNQPHKNINITFEEDKVNSTLVVDRESSHDECQDAVNILPVPGPTSSA
TNVSMVVSAGPLSSEKAEMNILEINEKLHPQLAEKKQQFRNLKEKCFVTQLACFLANQQNKYKNEECKDLIKSML
RNERQFKEEKLAEQLKQAEELRQYKVLVHSQERELTQLREKLREGRDASCSLNQHLQALLTPDEPDKSQGQDLQE
QLAEGCRLAQHLVQKLSPENDNDDDEDVQVEVAEKVQKSSAPREMPKAEEKEVPEDSLEECAITCSNSHGPYDSN
QPHRKTKITFEEDKVDSTLIGSSSHVEWEDAVHIIPENESDDEEEEEKGPVSPRNLQESEEEEVPQESWDEGYST
LSIPPEMLASYQSYSGTFHSLEEQQVCMAVDIGGHRWDQVKKEDQEATGPRLSRELLDEKGPEVLQDSLDRCYST
PSGYLELTDSCQPYRSAFYILEQQRVGWALDMDEIEKYQEVEEDQDPSCPRLSRELLDEKEPEVLQDSLDRCYST
PSGYLELPDLGQPYRSAVYSLEEQYLGLALDVDRIKKDQEEEEDQGPPCPRLSRELLEAVEPEVLQDSLDRCYST
PSSCLEQPDSCLPYGSSFYALEEKHVGFSLDVGEIEKKGKGKKRRGRRSTKKRRRRGRKEGEEDQNPPCPRLSGV
LMEVEEPEVLQDSLDRCYSTPSMFFELPDSFQHYRSVFYSFEEQHISFALDVDNRFLTLMGRSLHLVFQMGVIFP
Q

FIGURE 7332

CGTGTCAGTGGTGGACCTGACCTGCTCCTGGCCCCTTGGCTGGCCGGGCTGTTTCTGGCCATGGGTCGCTCCCGC
CGGACAGGCGCGCACCGAGCGCACTCTCTAGCCCGGCAGATGAAGGCGAAGCGGCGGCGGCCGGACTTGGATGAG
ATTCACCGCGAGCTGCGGCCTCAGGGATCCGCACGACCCCAGCCCGACCCAAACGCCGAGTTCGACCCCGACCTG
CCAGGGGGCGGTCTGCACCGCTGTCTGGCCTGCGCGAGGTACTTCATCGATTCCACCAACCTGAAGACCCACTTC
CGATCCAAAGACCACAAGAAAAGGCTGAAGCAGCTGAGCGTCGAGCCCTACAGTCAGGAAGAGGCGGAGAGGGCA
GCGGGTATGGGATCCTATGTGCCCCCCAGGCGGCTGGCAGTGCCCACGGAAGTGTCCACTGAGGTCCCTGAGATG
GATACCTCTACCTGACATGGCCTGAAGATGCAGGGCAGAGGAATTGCCCATGGACAGTGACGCAAGGACTAGGCT
GGGAGGGAGCGTGCCAACCCCTTTTGCCTCTGGGTTTGGGGAGCGGAGGGCCTCTTCTTGGTGCCCTGCCCCCAA
TAAAGGAACTGGACAAAGAGAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 7333

MKAKRRRPDLDEIHRELRPQGSARPQPDPNAEFDPDLPGGGLHRCLACARYFIDSTNLKTHFRSKDHKKRLKQLS
VEPYSQEEAERAAGMGSYVPPRRLAVPTEVSTEVPEMDTST

FIGURE 7334

GCGGCCGGCGGCGTCTCCTCCCGGGACGCTGAGGGGCCCGAGGAGACCGTGAGGCTCTGGCCTGCAGCTCGCGCC
GCCATGGACGCTGCCGAGGTCGAATTCCTCGCCGAGAAGGAGCTGGTTACCATTATCCCCAACTTCAGTCTGGAC
AAGATCTACCTCATCGGGGGGGACCTGGGGCCTTTTAACCCTGGTTTACCCGTGGAAGTGCCCCTGTGGCTGGCG
ATTAACCTGAAACAAAGACAGAAATGTCGCCTGCTCCCTCCAGAGTGGATGGATGTAGAAAAGTTGGAGAAGATG
AGGGATCATGAACGAAAGGAAGAAACTTTTACCCCAATGCCCAGCCCTTACTACATGGAACTTACGAAGCTCCTG
TTAAATCATGCTTCAGACAACATCCCGAAGGCAGACGAAATCCGGACCCTGGTCAAGGATATGTGGGACACTCGT
ATAGCCAAACTCCGAGTGTCTGCTGACAGCTTTGTGAGACAGCAGGAGGCACATGCCAAGCTGGATAACTTGACC
TTGATGGAGATCAACACCAGCGGGACTTTCCTCACACAAGCGCTCAACCACATGTACAAACTCCGCACGAACCTC
CAGCCTCTGGAGAGTACTCAGTCTCAGGACTTCTAGAGAAAGGCCTGGTGCAGGCGGCTTGCTGGGGGATGTGAG
CGCTCAGGATGTGATGAGGTACTCGTGGTTCTGGAGCTCTAGAAACACTTCTGATGCATGAAAAATGTGTGATGG
TGCAAGGAATGGATTCAGGATGTTGTTGGAGAAACAAGTTTGTGATTAGTCCTTAAAACTTAGCTCCCTGGGACA
TTCTTCAATTCCACATCTGTTTCTAGAAACCAGCCCTTTTTCCCCCCACTTTTGAGAAATAAAAAAGCCTTAGGT
AAATAAGTCATTCTCCCTAGCAGAGCCACTTGGGTCTCCTGCATGGAAGCCGTCACACTTGGGCAGGTGTTCAGT
GACTGGTAGGTGTAGATACAGCAGGAGTGGCCATGTGGTCCACGGCTTTTTACCCCTTCTTGATCCTGATTTCTT
GGGCTGAATTTAGACTCTCTCACAGAGGTGGCTCACAGAGAAGGATGGCAGATGGTGCAGCCAACAATGCTGACC
GGTGCTTATCCTCTAAGCCCTGATCCACAATAAAAATGGACCCAACTCAAAAAAAAA

FIGURE 7335

MDAAEVEFLAEKELVTIIPNFSLDKIYLIGGDLGPFNPGLPVEVPLWLAINLKQRQKCRLLPPEWMDVEKLEKMR
DHERKEETFTPMPSPYYMELTKLLLNHASDNIPKADEIRTLVKDMWDTRIAKLRVSADSFVRQQEAHAKLDNLTL
MEINTSGTFLTQALNHMYKLRTNLQPLESTQSQDF

FIGURE 7336

GGCACGAGGCTCAGCTTCCCCAGGAGCAAGACCTCTGAGCCCGCCAAGCGCGGCCGCACGGCCCTCGGCAGCGATGGCACTGAAGGACTACGCGCTAGAGAAGGAAAAGGTTAAGAAGTTCTTACAAGAGTTCTACCAGGATGATGAACTCGGGAAGAAGCAGTTCAAGTATGGGAACCAGTTGGTTCGGCTGGCTCATCGGGAACAGGTGGCTCTGTATGTGGACCTGGACGACGTAGCCGAGGATGACCCCGAGTTGGTGGACTCAATTTGTGAGAATGCCAGGCGCTACGCGAAGCTCTTTGCTGATGCCGTACAAGAGCTGCTGCCTCAGTACAAGGAGAGGGAAGTGGTAAATAAAGATGTCCTGGACGTTTACATTGAGCATCGGCTAATGATGGAGCAGCGGAGTCGGGACCCTGGGATGGTCCGAAGCCCCCAGAACCAGTACCCTGCTGAACTCATGCGCAGATTTGAGCTGTATTTTCAAGGCCCTAGCAGCAGCAAGCCTCGTGTGATCCGGGAAGTGCGGGCTGACTCTGTGGGGAAGTTGGTAACTGTGCGTGGAATCGTCACTCGTGTCTCTGAAGTCAAACCCAAGATGGTGGTGGCCACTTACACTTGTGACCAGTGTGGGGCAGAGACCTACCAGCCGATCCAGTCTCCCACTTTCATGCCTCTGATCATGTGCCCAAGCCAGGAGTGCCAAACCAACCGCTCAGGAGGGCGGCTGTATCTGCAGACACGGGGCTCCAGATTCATCAAATTCCAGGAGATGAAGATGCAAGAACATAGTGATCAGGTGCCTGTGGGAAATATCCCTCGTAGTATCACGGTGCTGGTAGAAGGAGAGAACACAAGGATTGCCCAGCCTGGAGACCACGTCAGCGTCACTGGTATTTTCTTGCCAATCCTGCGCACTGGGTTCCGACAGGTGGTACAGGGTTTACTCTCAGAAACCTACCTGGAAGCCCATCGGATTGTGAAGATGAACAAGAGTGAGGATGATGAGTCTGGGGCTGGAGAGCTCACCAGGGAGGAGCTGAGGCAAATTGCAGATGTGATATTTGCCACCGTCCGTGAACTGGTCTCAGGGGGCCGAAGTGTCCGGTTCTCTGAGGCAGAGCAGCGCTGTGTATCTCGTGGCTTCACACCCGCCCAGTTCCAGGCGGCTCTGGATGAATATGAGGAGCTCAATGTCTGGCAGGTCAATGCTTCCCGGACACGGATCACTTTTGTCTGATTCCAGCCTGCTTGCAACCCTGGGGTCCTCTTGTTCCCTGCTGGCCTGCCCCTTGGGAAGGGGCAGTGATGCCTTTGAGGGGAAGGAGGAGCCCCTCTTTCTCCCATGCTGCACTTACTCCTTTTGCTAATAAAAGTGTTTGTAGATTGTCAAAA

FIGURE 7337

MALKDYALEKEKVKKFLQEFYQDDELGKKQFKYGNQLVRLAHREQVALYVDLDDVAEDDPELVDSICENARRYAK
LFADAVQELLPQYKEREVVNKDVLDVYIEHRLMMEQRSRDPGMVRSPQNQYPAELMRRFELYFQGPSSSKPRVIR
EVRADSVGKLVTVRGIVTRVSEVKPKMVVATYTCDQCGAETYQPIQSPTFMPLIMCPSQECQTNRSGGRLYLQTR
GSRFIKFQEMKMQEHSDQVPVGNIPRSITVLVEGENTRIAQPGDHVSVTGIFLPILRTGFRQVVQGLLSETYLEA
HRIVKMNKSEDDESGAGELTREELRQIADVIFATVRELVSGGRSVRFSEAEQRCVSRGFTPAQFQAALDEYEELN
VWQVNASRTRITFV

FIGURE 7338A

ATCATGGCGGATGGCCCCAGGTGTAAGCGCAGAAAGCAGGCGAACCCGCGGCGCAATAACGTTACAAATTATAAT
ACTGTGGTAGAAACAAATTCAGATTCAGATGATGAAGACAAACTGCATATTGTGGAAGAAGAAAGTGTTACAGAT
GCAGCTGACTGTGAAGGTGTACCAGAGGATGACCTGCCAACAGACCAGACAGTGTTACCAGGGAGGAGCAGTGAA
AGAGAAGGGAATGCTAAGAACTGCTGGGAGGATGACAGAAAGGAAGGGCAAGAAATCCTGGGGCCTGAAGCTCAG
GCAGATGAAGCAGGATGTACAGTAAAAGATGATGAATGCGAGTCAGATGCAGAAAATGAGCAAAACCATGATCCT
AATGTTGAAGAGTTTCTACAACAACAAGACACTGCTGTCATTTTTCCTGAGGCACCTGAAGAGGACCAGAGGCAG
GGCACACCAGAAGCCAGTGGTCATGATGAAAATGGAACACCAGATGCATTTTCACAATTACTCACCTGTCCATAT
TGTGATAGAGGCTATAAACGCTTTACCTCTCTGAAAGAACACATTAAATATCGTCATGAAAAGAATGAAGATAAC
TTTAGTTGCTCCCTGTGCAGTTACACCTTTGCATACAGAACCCAACTTGAACGTCACATGACATCACATAAATCA
GGAAGAGATCAAAGACATGTGACGCAGTCTGGGTGTAATCGTAAATTCAAATGCACTGAGTGTGGAAAAGCTTTC
AAATACAAACATCACCTAAAAGAGCACTTAAGAATTCACAGTGGAGAGAAGCCATATGAATGCCCAAACTGCAAG
AAACGCTTTTCCCATTCTGGCTCCTATAGCTCACACATAAGCAGTAAGAAATGTATCAGCTTGATACCTGTGAAT
GGGCGACCAAGAACAGGACTCAAGACATCTCAGTGTTCTTCACCGTCTCTTTCAGCATCACCAGGCAGTCCCACA
CGACCACAGATACGGCAAAAGATAGAGAATAAACCCCTTCAAGAACAACTTTCTGTTAACCAAATTAAAACTGAA
CCTGTGGATTATGAATTCAAACCCATAGTGGTTGCTTCAGGAATCAACTGTTCAACCCCTTTACAAAATGGGGTT
TTCACTGGTGGTGGCCCATTACAGGCAACCAGTTCTCCTCAGGGCATGGTGCAAGCTGTTGTTCTGCCAACAGTT
GGTTTGGTGTCTCCCATAAGTATCAATTTAAGTGATATTCAGAATGTACTTAAAGTGGCGGTAGATGGTAATGTA
ATAAGGCAAGTGTTGGAGAATAATCAAGCCAATCTTGCATCCAAAGAACAAGAAACAATCAATGCTTCACCCATA
CAACAAGGTGGCCATTCTGTTATTTCAGCCATCAGTCTTCCTTTGGTTGATCAAGATGGAACAACCAAAATTATC
ATCAACTACAGTCTTGAGCAGCCTAGCCAACTTCAAGTTGTTCCTCAAAATTTAAAAAAAGAAAATCCAGTCGCT
ACAAACAGTTGTAAAAGTGAAAAGTTACCAGAAGATCTTACTGTTAAGTCTGAGAAGGACAAAAGCTTTGAAGGG
GGGGTGAATGATAGCACTTGTCTTCTGTGTGATGATTGTCCAGGAGATATTAATGCACTTCCAGAATTAAAGCAC
TATGACCTAAAGCAGCCTACTCAGCCTCCTCCACTCCCTGCAGCAGAAGCTGAGAAGCCTGAGTCCTCTGTTTCA
TCAGCTACTGGAGATGGCAATTTGTCTCCTAGTCAGCCACCTTTAAAGAACCTCTTGTCTCTCCTAAAAGCATAT
TATGCTTTGAATGCACAACCAAGTGCAGAAGAGCTCTCAAAAATTGCTGATTCAGTAAACCTACCACTGGATGTA
GTAAAAAAGTGGTTTGAAAAGATGCAAGCTGGACAGATTTCAGTGCAGTCTTCTGAACCATCTTCTCCTGAACCA
GGCAAAGTAAATATCCCTGCCAAGAACAATGATCAGCCTCAATCTGCAAATGCAAATGAACCCCAGGACAGCACA
GTAAATCTACAAAGTCCTTTGAAGATGACTAACTCCCCAGTTTTACCAGTGGGATCAACCACCAATGGTTCCAGA
AGTAGTACACCATCCCCATCACCTCTAAACCTTTCCTCATCCAGAAATACACAGGGTTACTTGTACACAGCTGAG
GGTGCACAAGAAGAGCCACAAGTAGAACCTCTTGATCTTTCACTACCAAAGCAACAGGGAGAATTATTAGAAAGG
TCAACTATCACTAGTGTTTACCAGAACAGTGTTTATTCTGTCCAGGAAGAACCCTTGAACTTGTCTTGCGCAAAA
AAGGAGCCACAAAAGGACAGTTGTGTTACAGACTCAGAACCAGTTGTAAATGTAATCCCACCAAGTGCCAACCCC
ATAAATATCGCTATACCTACAGTCACTGCCCAGTTACCCACAATCGTGGCCATTGCTGACCAGAACAGTGTTCCA
TGCTTAAGAGCGCTAGCTGCCAATAAGCAAACGATTCTGATTCCCCAGGTGGCATACACCTACTCAACTACGGTC
AGCCCTGCAGTCCAAGAACCACCCTTGAAAGTGATCCAGCCAAATGGAAATCAGGATGAAAGACAAGATACTAGC
TCAGAAGGAGTATCAAATGTAGAGGATCAGAATGACTCTGATTCTACACCGCCCAAAAAGAAAATGCGGAAGACA
GAAAATGGAATGTATGCTTGTGATTTGTGTGACAAGATATTCCAAAAGAGTAGTTCATTATTGAGACATAAATAT
GAACACACAGGTAAAAGACCTCATGAGTGTGGAATCTGTAAAAAGGCATTTAAACACAAACATCATTTGATTGAA
CACATGCGATTACATTCTGGAGAAAAGCCCTATCAATGTGACAAATGTGGAAAGCGCTTCTCACACTCTGGGTCT
TATTCTCAACACATGAATCATCGCTACTCCTACTGTAAGAGAGAAGCGGAAGAACGTGACAGCACAGAGCAGGAA
GAGGCAGGGCCTGAAATCCTCTCGAATGAGCACGTGGGTGCCAGGGCGTCTCCCTCACAGGGCGACTCGGACGAG
AGAGAGAGTTTGACAAGGGAAGAGGATGAAGACAGTGAAAAAGAGGAAGAGGAGGAGGATAAAGAGATGGAAGAA
TTGCAGGAAGAAAAAGAATGTGAAAAACCACAAGGGGATGAGGAAGAGGAGGAGGAGGAGGAAGAAGTGGAAGAA
GAAGAGGTAGAAGAGGCAGAGAATGAGGGAGAAGAAGCAAAAACTGAAGGTCTGATGAAGGATGACAGGGCTGAA
AGTCAAGCAAGCAGCTTAGGACAAAAAGTAGGCGAGAGTAGTGAGCAAGTGTCTGAAGAAAAGACAAATGAAGCC
TAATCGTTTTTCTAGAAGGAAAATAAATTCTAATTGATAATGAATTTCGTTCAATATTATCCTTGCTTTTCATGG
AAACACAGTAACCTGTATGCTGTGATTCCTGTTCACTACTGTGTGTGTGTGCGCGTGCATTGATTACTATCCATT
TCTTTAGTCAACGCTCTCCACTTCCTGATTTCTGCTTTAAGGAAAACTGTGAACTTTCTGCTTCATGTATCAGTT

FIGURE 7338B

TTAAAGCATCCCAGGCAAAGATCATCTACAGATTCTAGGAATTCTCTCCCCTGAAATCAAAACCTGGAGACTTTT
TTTTCTTATTTTAGTTGAGAAGTTCATAAACTGCTCAAGGATTAGTTTTCCAGGACTCTGCGGAGGAACGGCAGG
AAGAACCTCAGAGAGGGCAGAGGTGACTTCAAAGTGCTGGGGACTCCGTCCTGAGGGTCACTTGGCCCTGAGCCC
CTGCGTGCCCTTGCGGAAGCCCAGAAGCTTCTTCCTGCTGCACCTCCCGTTTCCGCTGCTGCTGACGTTTATGCA
TTTCATGATGGGGTCCAACAAGAACACCTGACTTGGGTGAAGTTGTGCAATATTGGAGGCTGACTGTAGGGCTGG
GCAGCTGGGAGACAGGCTCATGGCTCATGGCTCATGGCTCAGGGCGGTGCCTGCCCTGGGCCGGGACCCCCCTCC
CCACCCCCCACCTAGGCTTTTTGGGTTTTGTTCAAGGAAGGTAAAGTGAGAGGTTTAGGTCAGTGTTTTTAAGTT
TTTGTTTTTTTTTTTAAAGCAAATCCTGTATATGTATCTACATGGGAGATAGGTAGACACTACTTATTTGTTACAT
TTTGTACTATACGTTTGTGTTCCAGGTTTCAGCTTCCCTCGCTCCTGTTGTTAAGAAGCGTCCCTGTCAGCACAG
GTGTGCATTGAGGAAGGGGCCCCAGGGCCTTCGCTCCCTCAGCACTGGGGTGGAGGCGGCAGGAAGGGGCGGCCC
TTACCTGGCAGGTCTGGGCGCACCTTTAGCAGGTGGACTCCGTGGGGCTCCACCAGCCAGAAGCCTCTGGAAGGC
AACGAAGGCAATGCTGCTCCCTGAGTCCAGTCCCCGCCCCCAAACCCAGCCCAGGTGCCTTCAGCTACTTCGGCT
TCTTAAACCCTGCAGTGTTAAACAGAGGCATTGAGAAAGGGGAAAGGCGGGTATTTTTAAAAGCCAAAGATTGAC
CCAAGTTACTTGAGGGTAGGGAGGCGGGCCCAGTGCAGGAGGCTGCATCCCTGGCCTGCTGGTGCCCACCGGGGG
CTGTGCCTGTGCCGGGCCGCAGGAAGCTGGCTGCCCCCATTCCTGCTGCTGCTGCTGCTGCTGCTCTGTGGCTGT
TTCAAAGACTGGGCGAAAGGCTGTCCGGAGGGCAGACCAGGTGCCTTGCCGCAGAGAAAACACCAAAGTCTCCTG
TTCGCTCATAAAGAAGTTTTTGGGATGGGAGAGAATCCAGACCATCTTGGGGCAGCCAGGCCCTTGCCTTCATTT
TTACAGAGGTAGCACAACTGATTCCAACACAAAACCCCTTCCCCTTTTTAAAATGATTTCTGTTCTAATGCCATA
GATCAAAGGCCTCAGAAACCATTGTGTGTTTCCTCTTTGAAGCAATGACAAGCACTTTACTTTCACGGTGGTTTT
TGTTTTTTCTTATTGCTGTGGAACCTCTTTTGGAGGACGTTAAAGGCGTGTTTTACTTGTTTTTTTAAGAGTGTG
TGATGTGTGTTTTGTAGATTTCTTGACAGTGCTGTAATACAGACGGCAATGCAATAGCCTATTTAAAGAACTACG
TGATCTGATTGAGATGTACATAGTTTTTTTTTTACCATAACTGAATTATTTTATCTCTTATGTTATCATGAGAA
ATGTATGCCAAATGATTAGTTGATGTATGTTTTTTAATTTAATATTTAAATAAAATATTTGGAAGG

FIGURE 7339

MADGPRCKRRKQANPRRNNVTNYNTVVETNSDSDDEDKLHIVEEESVTDAADCEGVPEDDLPTDQTVLPGRSSER
EGNAKNCWEDDRKEGQEILGPEAQADEAGCTVKDDECESDAENEQNHDPNVEEFLQQQDTAVIFPEAPEEDQRQG
TPEASGHDENGTPDAFSQLLTCPYCDRGYKRFTSLKEHIKYRHEKNEDNFSCSLCSYTFAYRTQLERHMTSHKSG
RDQRHVTQSGCNRKFKCTECGKAFKYKHHLKEHLRIHSGEKPYECPNCKKRFSHSGSYSSHISSKKCISLIPVNG
RPRTGLKTSQCSSPSLSASPGSPTRPQIRQKIENKPLQEQLSVNQIKTEPVDYEFKPIVVASGINCSTPLQNGVF
TGGGPLQATSSPQGMVQAVVLPTVGLVSPISINLSDIQNVLKVAVDGNVIRQVLENNQANLASKEQETINASPIQ
QGGHSVISAISLPLVDQDGTTKIIINYSLEQPSQLQVVPQNLKKENPVATNSCKSEKLPEDLTVKSEKDKSFEGG
VNDSTCLLCDDCPGDINALPELKHYDLKQPTQPPPLPAAEAEKPESSVSSATGDGNLSPSQPPLKNLLSLLKAYY
ALNAQPSAEELSKIADSVNLPLDVVKKWFEKMQAGQISVQSSEPSSPEPGKVNIPAKNNDQPQSANANEPQDSTV
NLQSPLKMTNSPVLPVGSTTNGSRSSTPSPSPLNLSSSRNTQGYLYTAEGAQEEPQVEPLDLSLPKQQGELLERS
TITSVYQNSVYSVQEEPLNLSCAKKEPQKDSCVTDSEPVVNVIPPSANPINIAIPTVTAQLPTIVAIADQNSVPC
LRALAANKQTILIPQVAYTYSTTVSPAVQEPPLKVIQPNGNQDERQDTSSEGVSNVEDQNDSDSTPPKKKMRKTE
NGMYACDLCDKIFQKSSSLLRHKYEHTGKRPHECGICKKAFKHKHHLIEHMRLHSGEKPYQCDKCGKRFSHSGSY
SQHMNHRYSYCKREAEERDSTEQEEAGPEILSNEHVGARASPSQGDSDERESLTREEDEDSEKEEEEEDKEMEEL
QEEKECEKPQGDEEEEEEEEEVEEEEVEEAENEGEEAKTEGLMKDDRAESQASSLGQKVGESSEQVSEEKTNEA

FIGURE 7340

CAGTTGCTTCAGCGTCCCGGTGTGGCTGTGCCGTTGGTCCTGTGCGGTCACTTAGCCAAGATGCCTGAGGAAACC
CAGACCCAAGACCAACCGATGGAGGAGGAGGAGGTTGAGACGTTCGCCTTTCAGGCAGAAATTGCCCAGTTGATG
TCATTGATCATCAATACTTTCTACTCGAACAAAGAGATCTTTCTGAGAGAGCTCATTTCAAATTCATCAGATGCA
TTGGACAAAATCCGGTATGAAAGCTTGACAGATCCCAGTAAATTAGACTCTGGGAAAGAGCTGCATATTAACCTT
ATACCGAACAAACAAGATCGAACTCTCACTATTGTGGATACTGGAATTGGAATGACCAAGGCTGACTTGATCAAT
AACCTTGGTACTATCGCCAAGTCTGGGACCAAAGCGTTCATGGAAGCTTTGCAGGCTGGTGCAGATATCTCTATG
ATTGGCCAGTTCGGTGTTGGTTTTTATTCTGCTTATTTGGTTGCTGAGAAAGTAACTGTGATCACCAAACATAAC
GATGATGAGCAGTACGCTTGGGAGTCCTCAGCAGGGGGATCATTCACAGTGAGGACAGACACAGGTGAACCTATG
GGTCGTGGAACAAAAGTTATCCTACACCTGAAAGAAGACCAAACTGAGTACTTGGAGGAACGAAGAATAAAGGAG
ATTGTGAAGAAACATTCTCAGTTTATTGGATATCCCATTACTCTTTTTGTGGAGAAGGAACGTGATAAAGAAGTA
AGCGATGATGAGGCTGAAGAAAAGGAAGACAAAGAAGAAGAAAAAGAAAAAGAAGAGAAAGAGTCGGAAGACAAA
CCTGAAATTGAAGATGTTGGTTCTGATGAGGAAGAAGAAAAGAAGGATGGTGACAAGAAGAAGAAGAAGAAGATT
AAGGAAAAGTACATCGATCAAGAAGAGCTCAACAAAACAAAGCCCATCTGGACCAGAAATCCCGACGATATTACT
AATGAGGAGTACGGAGAATTCTATAAGAGCTTGACCAATGACTGGGAAGATCACTTGGCAGTGAAGCATTTTTCA
GTTGAAGGACAGTTGGAATTCAGAGCCCTTCTATTTGTCCCACGACGTGCTCCTTTTGATCTGTTTGAAAACAGA
AAGAAAAAGAACAACATCAAATTGTATGTACGCAGAGTTTTCATCATGGATAACTGTGAGGAGCTAATCCCTGAA
TATCTGAACTTCATTAGAGGGGTGGTAGACTCGGAGGATCTCCCTCTAAACATATCCCGTGAGATGTTGCAACAA
AGCAAAATTTTGAAAGTTATCAGGAAGAATTTGGTCAAAAAATGCTTAGAACTCTTTACTGAACTGGCGGAAGAT
AAAGAGAACTACAAGAAATTCTATGAGCAGTTCTCTAAAAACATAAAGCTTGGAATACACGAAGACTCTCAAAAT
CGGAAGAAGCTTTCAGAGCTGTTAAGGTACTACACATCTGCCTCTGGTGATGAGATGGTTTCTCTCAAGGACTAC
TGCACCAGAATGAAGGAGAACCAGAAACATATCTATTATATCACAGGTGAGACCAAGGACCAGGTAGCTAACTCA
GCCTTTGTGGAACGTCTTCGGAAACATGGCTTAGAAGTGATCTATATGATTGAGCCCATTGATGAGTACTGTGTC
CAACAGCTGAAGGAATTTGAGGGGAAGACTTTAGTGTCAGTCACCAAAGAAGGCCTGGAACTTCCAGAGGATGAA
GAAGAGAAAAAGAAGCAGGAAGAGAAAAAAACAAAGTTTGAGAACCTCTGCAAAATCATGAAAGACATATTGGAG
AAAAAAGTTGAAAAGGTGGTTGTGTCAAACCGATTGGTGACATCTCCATGCTGTATTGTCACAAGCACATATGGC
TGGACAGCAAACATGGAGAGAATCATGAAAGCTCAAGCCCTAAGAGACAACTCAACAATGGGTTACATGGCAGCA
AAGAAACACCTGGAGATAAACCCTGACCATTCCATTATTGAGACCTTAAGGCAAAAGGCAGAGGCTGATAAGAAC
GACAAGTCTGTGAAGGATCTGGTCATCTTGCTTTATGAAACTGCGCTCCTGTCTTCTGGCTTCAGTCTGGAAGAT
CCCCAGACACATGCTAACAGGATCTACAGGATGATCAAACTTGGTCTGGGTATTGATGAAGATGACCCTACTGCT
GATGATACCAGTGCTGCTGTAACTGAAGAAATGCCACCCCTTGAAGGAGATGACGACACATCACGCATGGAAGAA
GTAGACTAA

FIGURE 7341

MPEETQTQDQPMEEEEVETFAFQAEIAQLMSLIINTFYSNKEIFLRELISNSSDALDKIRYESLTDPSKLDSGKE
LHINLIPNKQDRTLTIVDTGIGMTKADLINNLGTIAKSGTKAFMEALQAGADISMIGQFGVGFYSAYLVAEKVTV
ITKHNDDEQYAWESSAGGSFTVRTDTGEPMGRGTKVILHLKEDQTEYLEERRIKEIVKKHSQFIGYPITLFVEKE
RDKEVSDDEAEEKEDKEEEKEKEEKESEDKPEIEDVGSDEEEEKKDGDKKKKKKIKEKYIDQEELNKTKPIWTRN
PDDITNEEYGEFYKSLTNDWEDHLAVKHFSVEGQLEFRALLFVPRRAPFDLFENRKKKNNIKLYVRRVFIMDNCE
ELIPEYLNFIRGVVDSEDLPLNISREMLQQSKILKVIRKNLVKKCLELFTELAEDKENYKKFYEQFSKNIKLGIH
EDSQNRKKLSELLRYYTSASGDEMVSLKDYCTRMKENQKHIYYITGETKDQVANSAFVERLRKHGLEVIYMIEPI
DEYCVQQLKEFEGKTLVSVTKEGLELPEDEEEKKKQEEKKTKFENLCKIMKDILEKKVEKVVVSNRLVTSPCCIV
TSTYGWTANMERIMKAQALRDNSTMGYMAAKKHLEINPDHSIIETLRQKAEADKNDKSVKDLVILLYETALLSSG
FSLEDPQTHANRIYRMIKLGLGIDEDDPTADDTSAAVTEEMPPLEGDDDTSRMEEVD

FIGURE 7342

AGGAAATGGTTTCTGGAAAACGTTAGTAAGGTCAGTTTTTAAACACTGAATCCAAGGTTGTCTTCTGGAATATCC
AAATTGGTTATGACCAGAATGTGATTCATTATACTAAGCTAAAGGAATAGATTAAAGAATTAGCAACAGTGGCCG
GGTGCAGTGGCTCATGCCTGTAACCCCAGCACTTTGGGGGAGGCCCAGGTGGGTGGATCATTTGAGGTCAGGAGT
TTGAGACCAGCCTGGCCAACATGGTGAAACCTAAAAATACAAAAATTAGCCAGGTGTGGTGGCAGGTGCTTGTAA
TCCCAGCTGCTTGGGAGGCTGAAGCAGGAGAATTGCTTGAACCCGGAGGCAGGGGTTGCAGTGAGCCAAGATCAC
ACCATTGCACTCCAGCCTGGGTGGCAGAGTGAGACTCTGTCTCAAAAATTAAAAAGCAACAGTGTATATGCAATA
GTTGCAAGATGTAAGATCACCCAAAGAGTATGCAGAGGGAAATGAGGGACAGAACCCAGAAATATTAATACCCAG
GGAGTGAACAGGAGGAGGACCCCAAGAAGTTACTGAGTCAGATTTTTCCCACTCATCCAGGTGAAAGTTTAGGTC
AATAATGTGAAATACCAGAGGGATTAAATGTCTACAGAAATAAAACCATGTCTCACATTAAGACAAACAAGTAGG
TTGGAGGGATATTTTGAAAGGCAAGGTGATATTAAACTTTATTCTGAAAGTAGTTTGTTAGAGAAAGAGGCATGA
TAAGAGTTGCAGTTAACTGATTGGAAACTATGCAGCAGATGAAACTGGAATAAAGGAAACTCATCAGGAAATGAT
TATAGTAATAAGGGCCAGAAATAAGGGCTTGCTTGCCTGAACTAAAAACAAAGAGGATACAAAGGTTCTAGAAAT
ATTTCAAAGGAATTAGCTTTAATTCAGCAATACTCATTGAGAATCACCTATGCACCTGGCTCTGAAGATGAAGTG
CTGAGTAAACTTAGACATGGACCCTGCTATCATGGAGATGGCAGATTATTGGTCAGAATGCTCTTACCTGTCATT
GTAGCAATTTTGTTAGATCCTTAATACCTCTGAATTGCTAATAAACTTGTTTTGGCTGAAAAAATAGTCCTGTGA
ATTTTACCATGCAGTTAAATAAGAAACTAAAAGCAAACCTAAATACCACCAAAAAGGTTAGTAGTCTGTTATATG
CATTAGCCTTAATCTAAGGAAATATTTTATTATAGGTCTCCTTGAAGAAAATGATATTTTCAGGAATGCTCAAGC
AGGTGTTCTCATCAGCACTAATAGTCATCCAATCTTAAGGAAAAACAGAATATTTGATGGATTTGCCGCAGGTAT
TGAAATTACAAATCACGCAACTGCAACACTAGAAGGCAATCAGATTTTTAACAACCGGTTTGGAGGCTTATTTTT
AGCATCTGGTGTTAATGTGACA**ATG**AAAGATAACAAAATAATGAACAATCAAGATGCCATAGAAAAGGCTGTTAG
TAGAGGCCAATGTTTATATAAAATATCAAGTTATACCAGCTATCCCATGCATGATTTCTACAGATGTCATACTTG
TAACACCACAGATCGAAATGCCATATGTGTGAACTGCATTAAGAAGTGCCATCAGGGACATGATGTAGAGTTTAT
TAGACATGATAGGTATGTAGCACACTTGCTTGATATATTACCCAATTACTTTCCCCCTCACTTTTCTAATATTTG
GGTTTCATTTTGCTTTAGGTTTTTCTGTGACTGTGGTGCTGGAACACTGTCTAATCCTTGTACATTAGCTGGTGA
GCCTACACATGATACAGATACACTATATGACTCTGCTCCACCTATAGAATCTAATACATTGCAGCACAAC**TGA**AT
TCCTTCCCTAAAGAAAAAGTCCTGCCATTGTAACATCATAACTTAAAACACTTTTTTGGAAGAAGATTTAAAATA
TTTGCCCATGCTACAGGAAGAGACTGTATTAAAAATGGATACACAAGGTCAGTTGACACTATGAAGCTCAAGCTA
CCAAAAAGAAAGTGGCAATATATTGACTCAGGATCTCAAAGCTGGGTGTTTTAGCATTACTGTGTAAAGACTTGA
AGGGACAGAAGTGAAGAAAATAAGCTGCAATTTTGTACAGATACCAACTTCTGAAAAGCTGGTGTTTTTACAACT
AGCATTGAATGCAGTCCAATTTGCAGTAGTAATCTTCAATAGACAAGCAGCTTTGTTGCTGCCTTTATGGACATG
GGTACCAATTGCTTTTGTAATATGGTAAAAATGTGAGCTAGCACTTCTGCGTTCCTTTTGATTTTTTTTTTTTAA
CATGTATTCAGATTGAGAAATATGATTTTAATGCCTTAATCTCATGTAGTTTGTTTTTAATTTCAAGCAAAATCT
TACTGTACTTGAATGTGCCCTGTTTTGTTAGCACACCTAGACTTGCTGTAACTGTACTCATGTCCCAGTATGTAC
GTTCTTTCTATGAAAGAGAAAACACTAATCTTAAATTATATCCAGCAATGTTTCTGGTATCCTTTAAGAAAAGTT
AAGACTATTATTTCCTTCCCTTCCCTGTGCAGCATTCAAAAATCACCCCTAGAAAAAGTGAGTGTTTTAATGAGA
CTTCCTAGGAAGGGATGCACTGTAAAACAAAAGTATTCTTGTAACTCAGTTTTGTGAAAGGTAAAAAACTACTAT
GTTTTAAGTACACTTTAGAAAGTCTCTTCAAAACAAACAGTCCTGTATTTGAACTCTGTTCATAGTTTTTTTTTG
AACAGTTTAGACAAAACTGTTGGAAATTAAACCAATTTCCTGCATTAAGCTGAGACAAGTATATAAACAGCCCTA
TACAGTTTCATAGCTTTTCCTCCCCCATTTATGTGTATTGGTGACAGTGGGTATAAAACAGCCTGAAAGTGTATG
CATGTACCATAACATTTAGACTTAATATATTGTGGAGTATTCAATAACCATTATGTAGAAGGTAGATAAGAATTA
AAAGGGTTTAATTTCCTAGAAAGAAAATGGAAAAATGGTCATTTTTAAAAAATAAAGTTTATTAGATCATAATGT
TGTCTGAATTTACCACCTTTGTCAGAAGTCAACTCAAAGCTTCCAATGTAGTCAGTCTATAATTCCTTAATCAAA
GTCAGCAATTTATGGACAGCTTCAGCATTTACAGTTGACCTTTCACTAGCCAGGCAAACTTCCCTTAAAATTAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 7343

MKDNKIMNNQDAIEKAVSRGQCLYKISSYTSYPMHDFYRCHTCNTTDRNAICVNCIKKCHQGHDVEFIRHDRYVA
HLLDILPNYFPPHFSNIWVSFCFRFFCDCGAGTLSNPCTLAGEPTHDTDTLYDSAPPIESNTLQHN

FIGURE 7344

CGGTAACTACCCCGGCTGCGCACAGCTCGGCGCTCCTTCCCGCTCCCTCACACACCGCCTCAGCCCGCACCGGCA
GTAGAAGATGGTGAAAGAAACAACTTACTACGATGTTTTGGGGGTCAAACCCAATGCTACTCAGGAAGAATTGAA
AAAGGCTTATAGGAAACTGGCCTTGAAGTACCATCCTGATAAGAACCCAAATGAAGGAGAGAAGTTTAAACAGAT
TTCTCAAGCTTACGAAGTTCTCTCTGATGCAAAGAAAAGGGAATTATATGACAAAGGAGGAGAACAGGCAATTAA
AGAGGGTGGAGCAGGTGGCGGTTTTGGCTCCCCCATGGACATCTTTGATATGTTTTTTGGAGGAGGAGGAAGGAT
GCAGAGAGAAAGGAGAGGTAAAAATGTTGTACATCAGCTCTCAGTAACCCTAGAAGACTTATATAATGGTGCAAC
AAGAAAACTGGCTCTGCAAAAGAATGTGATTTGTGACAAATGTGAAGGTAGAGGAGGTAAGAAAGGAGCAGTAGA
GTGCTGTCCCAATTGCCGAGGTACTGGAATGCAAATAAGAATTCATCAGATAGGACCTGGAATGGTTCAGCAAAT
TCAGTCTGTGTGCATGGAGTGCCAGGGCCATGGGGAGCGGATCAGTCCTAAAGATAGATGTAAAAGCTGCAACGG
AAGGAAGATAGTTCGAGAGAAGAAAATTTTAGAAGTTCATATTGACAAAGGCATGAAAGATGGCCAGAAGATAAC
ATTCCATGGTGAAGGAGACCAAGAACCAGGACTGGAGCCAGGCGATATTATCATTGTGTTAGATCAGAAGGACCA
TGCTGTTTTTACTCGACGAGGAGAAGACCTTTTCATGTGTATGGACATACAGCTCGTTGAAGCACTGTGTGGCTT
CCAGAAGCCAATATCTACTCTTGACAACCGAACCATCGTCATCACCTCTCATCCAGGTCAGATTGTCAAGCATGG
AGATATCAAGTGTGTACTAAATGAAGGCATGCCAATTTATCGTAGACCATATGAAAAGGGTCGCCTAATCATCGA
ATTTAAGGTAAACTTTCCTGAGAATGGCTTTCTCTCTCCTGATAAACTGTCTTTGCTGGAAAAACTCCTACCCGA
GAGGAAGGAAGTGGAAGAGACTGATGAGATGGACCAAGTAGAACTGGTGGACTTTGATCCAAATCAGGAAAGACG
GCGCCACTACAATGGAGAAGCATATGAGGATGATGAACATCATCCCAGAGGTGGTGTTCAGTGTCAGACCTCTTA
ATGGCCAGTGAATAACACTCACTGCTGGCATTTAATGTGCAGTAGTGAATGAGTGAAGGACTGTAATCATAATAT
GCTCACTACTTGCTCTTGTTTTTGTTTTAATAAACTATAGTAGTGTTATAAAAAGTTAAATGAAGAATAAACGCA
AATATAAAAGCTC

FIGURE 7345

MVKETTYYDVLGVKPNATQEELKKAYRKLALKYHPDKNPNEGEKFKQISQAYEVLSDAKKRELYDKGGEQAIKEG
GAGGGFGSPMDIFDMFFGGGGRMQRERRGKNVVHQLSVTLEDLYNGATRKLALQKNVICDKCEGRGGKKGAVECC
PNCRGTGMQIRIHQIGPGMVQQIQSVCMECQGHGERISPKDRCKSCNGRKIVREKKILEVHIDKGMKDGQKITFH
GEGDQEPGLEPGDIIIVLDQKDHAVFTRRGEDLFMCMDIQLVEALCGFQKPISTLDNRTIVITSHPGQIVKHGDI
KCVLNEGMPIYRRPYEKGRLIIEFKVNFPENGFLSPDKLSLLEKLLPERKEVEETDEMDQVELVDFDPNQERRRH
YNGEAYEDDEHHPRGGVQCQTS

FIGURE 7346

GCCGCGTGCAGAGGTGCTCAAGCCTCCTCGCGGTCCGCAGTCAGTGCCGCCGCGCCCGGCCTCCCGCACGCCCCG
CAGGTAGCGCCCCCGCCCGCGGCCCAGAGTGCGCTCGCGCCGGCACCAGCTCCCGGATAAACGGCGCGCCGCGCG
GAGATGACAGCCGAGGAGATGAAGGCGACCGAGAGCGGGGCGCAGTCGGCGCCGCTGCCCATGGAGGGAGTGGAC
ATCAGCCCCAAACAGGACGAAGGCGTGCTGAAGGTCATCAAGAGAGAGGGCACAGGTACAGAGATGCCCATGATT
GGGGACCGAGTCTTTGTCCACTACACTGGCTGGCTATTAGATGGCACAAAGTTTGACTCCAGTCTGGATCGCAAG
GACAAATTCTCCTTTGACCTGGGAAAAGGGGAGGTCATCAAGGCTTGGGACATTGCCATAGCCACCATGAAGGTG
GGGGAGGTGTGCCACATCACCTGCAAACCAGAATATGCCTACGGTTCAGCAGGCAGTCCTCCAAAGATTCCCCCC
AATGCCACGCTTGTATTTGAGGTGGAGTTGTTTGAGTTTAAGGGAGAAGATCTGACGGAAGAGGAAGATGGCGGA
ATCATTCGCAGAATACAGACTCGCGGTGAAGGCTATGCTAAGCCCAATGAGGGTGCTATCGTGGAGGTTGCACTG
GAAGGGTACTACAAGGACAAGCTCTTTGACCAGCGGGAGCTCCGCTTTGAGATTGGCGAGGGGGAGAACCTGGAT
CTGCCTTATGGTCTGGAGAGGGCCATTCAGCGCATGGAGAAAGGAGAACATTCCATCGTGTACCTCAAGCCCAGC
TATGCTTTTGGCAGTGTTGGGAAGGAAAAGTTCCAAATCCCACCAAATGCTGAGCTGAAATATGAATTACACCTC
AAGAGTTTTGAAAAGGCCAAGGAGTCTTGGGAGATGAATTCAGAAGAGAAGCTGGAACAGAGCACCATAGTGAAA
GAGCGGGGCACTGTGTACTTCAAGGAAGGTAAATACAAGCAAGCTTTACTACAGTATAAGAAGATCGTGTCTTGG
CTGGAATATGAGTCTAGTTTTTCCAATGAGGAAGCACAGAAAGCACAGGCCCTTCGACTGGCCTCTCACCTCAAC
CTGGCCATGTGTCATCTGAAACTACAGGCCTTCTCTGCTGCCATTGAAAGCTGTAACAAGGCCCTAGAACTGGAC
AGCAACAACGAGAAGGGCCTCTTCCGCCGGGGAGAGGCCCACCTGGCCGTGAATGACTTTGAACTGGCACGGGCT
GATTTCCAGAAGGTCCTGCAGCTCTACCCCAACAACAAAGCCGCCAAGACCCAGCTGGCTGTGTGCCAGCAGCGG
ATCCGAAGGCAGCTTGCCCGGGAGAAGAAGCTCTATGCCAATATGTTTGAGAGGCTGGCTGAGGAGGAGAACAAG
GCCAAGGCAGAGGCTTCCTCAGGAGACCATCCCACTGACACAGAGATGAAGGAGGAGCAGAAGAGCAACACGGCA
GGGAGCCAGTCTCAGGTGGAGACAGAAGCATAGCCCCTCTCCACCAGCCCTACTCCTGCGGCTGCCTGCCCCCCA
GTCTCCCCACTCCACCCTGTTAGTTTTGTAAAAACTGAAGAATTTTGAGTGAATTAGACCTTTATTTTTCTATCT
GGTTGGATGGTGGCTTTAGGGGAAGGGGGAAAGGTGTAGGCTGGGGGATTGAGGTGGGGAATCATTTTAGCTGGT
GTCAGCCCCTCTTCCCTTCCTCCATTGCACATGAACATATGTCCATCCATATATATTCATCAGAATGTTAATTTA
TTTTGCTCCCTCTGTTAGGTCCATTTTCTAAGGGTAGAAGAGGCAAGTGGTAGGGATGAGGTCTGATAAGAACCC
AGGGTGGAGAGGGAGACTCCTGGGCAGCCGTTTTCCTCATCCTTTCCCTCTCCCAGTCCATTTCCAAATGTGGCC
TCCATGTGGGTGCTAGGGACATGGGAAAAACCACTGCTATGCCATTTCTTCTCTCTGTTCCCTTCCTCACCCCCG
ACGGTGTGGCTGATGATGTCTTCTGGTGTCATGGTGACCACCCCCTGTTCCCTGTTCTGGTATTTCCCCTGTCAG
TTTCCCCTCTCGGCCAGGTTGTGTCCCAAAATCCCCTCAGCCTCTTCTCTGCACGTTGCTGAAGGTCCAGGCTTG
CCTCAAGTTCCATGCTTGAGCAATAAAGTGGAAACAATAAAAAAAAAAAAAAAAAAAAA

FIGURE 7347

MTAEEMKATESGAQSAPLPMEGVDISPKQDEGVLKVIKREGTGTEMPMIGDRVFVHYTGWLLDGTKFDSSLDRKD
KFSFDLGKGEVIKAWDIAIATMKVGEVCHITCKPEYAYGSAGSPPKIPPNATLVFEVELFEFKGEDLTEEEDGGI
IRRIQTRGEGYAKPNEGAIVEVALEGYYKDKLFDQRELRFEIGEGENLDLPYGLERAIQRMEKGEHSIVYLKPSY
AFGSVGKEKFQIPPNAELKYELHLKSFEKAKESWEMNSEEKLEQSTIVKERGTVYFKEGKYKQALLQYKKIVSWL
EYESSFSNEEAQKAQALRLASHLNLAMCHLKLQAFSAAIESCNKALELDSNNEKGLFRRGEAHLAVNDFELARAD
FQKVLQLYPNNKAAKTQLAVCQQRIRRQLAREKKLYANMFERLAEEENKAKAEASSGDHPTDTEMKEEQKSNTAG
SQSQVETEA

FIGURE 7348

CTGCAGGAACCAATACCCATAGGCTATTTGTATAAATGGGCCATGGGGCCTCCCAGCTGGAGGCTGGCTGGTGCC
ACGAGGGTCCCACAGGCATGGGTGTCCTTCCTATATCACATGGCCTTCACTGAGACTGGTATATGGATTGCACCT
ATCAGAGACCAAGGACAGGACCTCCCTGGAAATCTCTGAGGACCTGGCCTGTGATCCAGTTGCTGCCTTGTCCTC
TTCCTGCTATGTCATGGCTTATCTTCTTTCACCCATTCATTCATTCATTCATTCATTCAGCAGTATTAGTCAATG
TCTCTTGATATGCCTGGCACCTGCTAGATGGTCCCCGAGTTTACCATTAGTGGAAAAGACATTTAAGAAATTCAC
CAAGGGCTCTATGAGAGGCCATACACGGTGGACCTGACTAGGGTGTGGCTTCCCTGAGGAGCTGAAGTTGCCCAG
AGGCCCAGAGAAGGGGAGCTGAGCACGTTTGAACCACTGAACCTGCTCTGGACCTCGCCTCCTTCCTTCGGTGCC
TCCCAGCATCCTATCCTCTTTAAAGAGCAGGGGTTCAGGGAAGTTCCCTGGATGGTGATTCGCAGGGGCAGCTCC
CCTCTCACCTGCCGCATGACTACCCCGCCCCATCTCAAACACACAAGCTCACGCATGCGGGACTGGAGCCCTTGA
GGACATGTGGCCCAAAGACAGGAGGTACAGGGGCTCAGTGCGTGCAGTGGAATGAACTGGGCTTCATCTCTGGAA
GGGTAAGGGGCCATCTTCCGGGTTCACCGCCGCATCCCCACCCCCGGCACAGCGCCTCCTGGCGACTAACATCGG
TGACTTAGTGAAAGGACTAAGAAAGACCCGAGGCGAGGCCGGAACAGGCCGATTTCTAGCCGCCAAGTGGAGAAC
AGGTTGGAGCGGTGCGCCGGGCTTAGCGGCGGTTGCTGGAGGAACGGGCGGAGTCGCCCAGGGTCCTGCCCTGCG
GGGGTCGAGCCGAGGCAGGCGGTGACTTCCCCACTCGGGGCGGAGCCGCAGCCTCGCGGGGGCGGGGCCTGGCGC
CGGCGGTGGCGTCACAAAAGGCGGGACCACAGTGGTGTCCGAGAAGTCAGGCACGTAGCTCAGCGGCGGCCGCGG
CGCGTGCGTCTGTGCCTCTGCGCGGGTCTCCTGGTCCTTCTGCCATCATGCCGATGTTCATCGTAAACACCAACG
TGCCCCGCGCCTCCGTGCCGGACGGGTTCCTCTCCGAGCTCACCCAGCAGCTGGCGCAGGCCACCGGCAAGCCCC
CCCAGGTTTGCCGGGAGGGGACAGGAAGAGGGGGGTGCCCACCGGACGAGGGGTTCCGCGCTGGGAGCTGGGGAG
GCGACTCCTGAACGGAGCTGGGGGGCGGGGCGGGGGGAGGACGGTGGCTCGGGCCCGAAGTGGACGTTCGGGGCC
CGACGAGGTCGCTGGGGCGGGCTGACCGCGCCCTTTCCTCGCAGTACATCGCGGTGCACGTGGTCCCGGACCAGC
TCATGGCCTTCGGCGGCTCCAGCGAGCCGTGCGCGCTCTGCAGCCTGCACAGCATCGGCAAGATCGGCGGCGCGC
AGAACCGCTCCTACAGCAAGCTGCTGTGCGGCCTGCTGGCCGAGCGCCTGCGCATCAGCCCGGACAGGTACGCGG
AGTCGCGGAGGGGCGGGGGAGGGGCGGCGGCGCGCGGCCAGGCCCGGGACTGAGCCACCCGCTGAGTCCGGCCTC
CTCCCCCCGCAGGGTCTACATCAACTATTACGACATGAACGCGGCCAATGTGGGCTGGAACAACTCCACCTTCGC
CTAAGAGCCGCAGGGACCCACGCTGTCTGCGCTGGCTCCACCCGGGAACCCGCCGCACGCTGTGTTCTAGGCCCG
CCCACCCCAACCTTCTGGTGGGGAGAAATAAACGGTTTAGAGACTAGGAGTGCCTCGGGGTTCCTTGGCTTGCGG
GAGGAATTGGTGCAGAGCCGGGACATTGGGGAGCGAGGTCGGGAAACGGTGTTGGGGGCGGGGGTCAGGGCCGGG
TTGCTCTCCTCGAACCTGCTGTTCGGGAGCCCTTTTGTCCAGCCTGTCCCTCCTACGCTCCTAACAGAGGAGCCC
CAGTGTCTTTCCATTCTATGGCGTACGAAGGGATGAGGAGAAGTTGGCACTCTGCCCTGGGCTGCAG

FIGURE 7349

GCCCCTGCCCGGCTCCCGGCGGCCCCAGCTGTCACCGGCCCCCCCAGGATGCAATGGCGCAGCCCCCCCGGCTGA
GCCGCTCTGGTGCCTCCTCACTTTGGGACCCAGCTTCTCCTGCTCCCACCTCTGGCCCCAGGCCTCGGCTTTGGG
AGGGTCAAGATGTGCTGGCCAGATGGACTGATGGGCTGCTATACTTGGGTACCATCAAAAAGGTGGACAGTGCTA
GGGAGGTGTGTCTGGTCCAGTTTGAGGATGATTCGCAGTTTCTGGTTCTATGGAAAGACATTAGCCCTGCTGCCC
TCCCTGGAGAGGAACTCCTCTGTTGTGTCTGTCGCTCTGAGACTGTGGTCCCTGGGAACCGGCTGGTCAGCTGTG
AGAAGTGTCGCCATGCTTATCACCAGGACTGCCATGTTCCCAGGGCTCCAGCCCCTGGAGAGGGAGAGGGCACAT
CCTGGGTATGCCGCCAGTGTGTCTTTGCGATCGCCACCAAGAGGGGAGGTGCCCTGAAGAAGGGCCCCTATGCCC
GGGCCATGCTGGGTATGAAGCTTTCTCTGCCATATGGACTGAAGGGGCTGGACTGGGATGCTGGACATCTGAGCA
ACCGACAGCAGAGTTACTGTTACTGTGGTGGCCCTGGGGAGTGGAACCTGAAAATGCTGCAGTGCCGGAGCTGCC
TGCAGTGGTTCCATGAGGCCTGCACCCAGTGTCTGAGCAAGCCCCTCCTCTATGGGGACAGGTTCTATGAATTTG
AATGCTGTGTGTGTCGCGGGGGCCCTGAGAAAGTCCGGAGACTACAGCTTCGCTGGGTGGATGTGGCCCATCTTG
TCCTGTATCACCTCAGTGTTTGCTGTAAGAAGAAATACTTTGATTTTGATCGTGAGATCCTCCCCTTCACTTCTG
AGAATTGGGACAGTTTGCTCCTGGGGGAGCTTTCAGACACCCCCAAAGGAGAACGTTCTTCCAAGCTCCTCTCTG
CTCTTAACAGCCACAAGGACCGTTTCATTTCAGGGAGAGAGATTAAGAAGAGGAAATGTTTGTTTGGTCTCCATG
CTCGGATGCCTCCCCCTGTGGAGCCCCCTACTGGAGATGGAGCACTCACCAGGGCAGGGCCCTGGGGGAGGGGTC
TCACGTCCCCTGGGGAAGCGCCGGAGGCCGGAGCCAGAGCCCCTGAGGAGGAGGCAGAAGGGGAAAGTGGAGGAG
CTGGGGCCACCCTCAGCAGTGCGCAATCAGCCCGAGCCCCAGGAGCAGAGGGAGCGGGCTCATCTGCAGAGGGCA
CTGCAGCAGCCCCATCCGGATGTTTGCTTCCTTCCACCCTTCTGCCAGCACCGCAGGGACCTCTGGGGACAGTGG
ACCCCCAGACAGGTCACCCCTGGAACTTCACATTGGTTTCCCCACAGACATCCCTAAAAGTGCCCCCCACTCGATT
GACTGCCTCATCTTCCTCAGTTTCATCCCCATCCCCAGGTCTTCCTAGACGCTCAGCACCCCCTTCTCCCCTGTG
CCGTAGTTTGTCTCCTGGGACTGGGGGAGGAGTCCGAGGTGGGGTTGGTTACCTGTCCCGAGGGGACCCTGTCCG
GGTCCTTGCTCGGAGAGTACGGCCTGATGGCTCTGTGCAGTACCTGGTTGAGTGGGGAGGAGGGGGCATCTTCTG
AACAGCCTGCCTCTGCCCAGCTCCCCATTCACACACACCGGCACTTTCATACCCTGACCTCTGACCTCACCTACA
GCTGGGATGTACCTGGAGAGATAGGGGGTAGTTCTCCCTACTGCCCAGGCTGGAATCCAAGAGTGGGGAGTGGGG
AAGAGGCCCTCTTCTCTACCCTCCTTCATGATTCCTGACCCCTCCCATCCTTCCCATTTCCTTTGATGTTATTTT
GTTACAGCTTTTTAAATATTTTTTAAAATTATTTAACCCCTGGGGGCAGAGACTGAGGAGGGAGGATGATAAGGG
ATCCCGGACTCTGTATGATTGAAATAAAGAGAAATAAACAAAAAAAAAAAAAAAAAAA

FIGURE 7350

MAQPPRLSRSGASSLWDPASPAPTSGPRPRLWEGQDVLARWTDGLLYLGTIKKVDSAREVCLVQFEDDSQFLVLW
KDISPAALPGEELLCCVCRSETVVPGNRLVSCEKCRHAYHQDCHVPRAPAPGEGEGTSWVCRQCVFAIATKRGGA
LKKGPYARAMLGMKLSLPYGLKGLDWDAGHLSNRQQSYCYCGGPGEWNLKMLQCRSCLQWFHEACTQCLSKPLLY
GDRFYEFECCVCRGGPEKVRRLQLRWVDVAHLVLYHLSVCCKKKYFDFDREILPFTSENWDSLLLGELSDTPKGE
RSSKLLSALNSHKDRFISGREIKKRKCLFGLHARMPPPVEPPTGDGALTRAGPWGRGLTSPGEAPEAGARAPEEE
AEGESGGAGATLSSAQSARAPGAEGAGSSAEGTAAAPSGCLLPSTLLPAPQGPLGTVDPQTGHPWNFTLVSPQTS
LKVPPTR

FIGURE 7351

CTTCCAGCTGGTGGGAGTTGACGACGTGGTGCTGGGCGTTGGGACCCTACTTTATCTAGTTCGGGAAGTTGGGTT
GTGGGGTCATACCTGTCTGTCTGCTCCCAGCTTTCTTGGGTTTCTTCCGACGGCGTGGGGCCTCGCTAAGGAATT
CCCGGCCCCTCAGGGCCACGGCTTTAGCGGTGTCTTTTGCGAGTTCTTCGTAAGTACATCTTAAAGCTGTCAAGA
TGGTTCTAGCAGACCTTGGAAGAAAAATAACATCAGCATTACGCTCATTGAGCAATGCCACCATTATCAATGAAG
AGGTATTGAATGCTATGCTAAAAGAAGTCTGTACCGCTTTGTTGGAAGCAGATGTTAATATTAAACTAGTGAAGC
AACTAAGAGAAAATGTTAAGTCTGCTATTGATCTTGAAGAGATGGCATCTGGTCTTAACAAAAGAAAAATGATTC
AGCATGCTGTATTTAAAGAACTTGTGAAGCTTGTAGACCCTGGAGTTAAGGCATGGACACCCACTAAAGGAAAAC
AAAATGTGATTATGTTTGTTGGATTGCAAGGGAGTGGTAAAACAACAACATGTTCAAAGCTAGCATATTATTACC
AGAGGAAAGGTTGGAAGACCTGTTTAATATGTGCAGACACATTCAGAGCAGGGGCTTTTGACCAACTAAAACAGA
ATGCTACCAAAGCAAGAATTCCATTTTATGGAAGCTATACAGAAATGGATCCTGTCATCATTGCTTCTGAAGGAG
TAGAGAAATTTAAAAATGAAAATTTTGAAATTATTATTGTTGATACAAGTGGCCGCCACAAACAAGAAGACTCTT
TGTTTGAAGAAATGCTTCAAGTTGCTAATGCTATACAACCTGATAACATTGTTTATGTGATGGATGCCTCCATTG
GGCAGGCTTGTGAAGCCCAGGCTAAGGCTTTTAAAGATAAAGTAGATGTAGCCTCAGTAATAGTGACAAAACTTG
ATGGCCATGCAAAAGGAGGTGGTGCACTCAGTGCAGTCGCTGCCACAAAAAGTCCGATTATTTTCATTGGTACAG
GGGAACATATAGATGACTTTGAACCTTTCAAAACACAGCCTTTTATTAGCAAACTTCTTGGTATGGGCGACATTG
AAGGACTGATAGATAAAGTCAACGAGTTGAAGTTGGATGACAATGAAGCACTTATAGAGAAGTTGAAACATGGTC
AGTTTACGTTGCGAGACATGTATGAGCAATTTCAAAATATCATGAAAATGGGCCCCTTCAGTCAGATCTTGGGGA
TGATCCCTGGTTTTGGGACAGATTTTATGAGCAAAGGAAATGAACAGGAGTCAATGGCAAGGCTAAAGAAATTAA
TGACAATAATGGATAGTATGAATGATCAAGAACTAGACAGTACGGATGGTGCCAAAGTTTTTAGTAAACAACCAG
GAAGAATCCAAAGAGTAGCAAGAGGATCGGGTGTATCAACAAGAGATGTTCAAGAACTTTTGACACAATATACCA
AGTTTGCACAGATGGTAAAAAAGATGGGAGGTATCAAAGGACTTTTCAAAGGTGGCGACATGTCTAAGAATGTGA
GCCAGTCACAGATGGCAAAATTGAACCAACAAATGGCCAAAATGATGGATCCTAGGGTTCTTCATCACATGGGTG
GTATGGCAGGACTTCAGTCAATGATGAGGCAGTTTCAACAGGGTGCTGCTGGCAACATGAAAGGCATGATGGGAT
TCAATAATATGTAAAGAAAATGCCTTAATATAAACTGACTCAGTTGAATACCTAATTTGCTGAGACCTCAGCGTT
TCCCTTCTTTTTGCGAATTGGGGGGAAAGTGTATTTTTCTTGCTTATCATGCACTCTTTCCTTTTCTTCTCGCCC
GCTTTTCCCCTCCTTTTCTTTTTCCTTCCTTCTTTCCTCCCTTTAATATAAGGGAGAAATACATGGTTTTTGTGG
AAATCATTATATGTTTGCTTTAGATTTTCTTCTGTTTTCACCATCATAACACTTAAGTTAAATCATGATGTAAAA
TTTTAGTACTTAAAGGTTTTTAATTATCTCGAAGGCCAAGCATTGCATTTGTAAACAGTCCTGGTCAGTAGTTAA
ATAATGTTTCAATTAAAGTGCTGTAAAATAAACTTCAAAGTGGTTATAAAAAAAAAAAAAAAAA

FIGURE 7352

MVLADLGRKITSALRSLSNATIINEEVLNAMLKEVCTALLEADVNIKLVKQLRENVKSAIDLEEMASGLNKRKMI
QHAVFKELVKLVDPGVKAWTPTKGKQNVIMFVGLQGSGKTTTCSKLAYYYQRKGWKTCLICADTFRAGAFDQLKQ
NATKARIPFYGSYTEMDPVIIASEGVEKFKNENFEIIIVDTSGRHKQEDSLFEEMLQVANAIQPDNIVYVMDASI
GQACEAQAKAFKDKVDVASVIVTKLDGHAKGGGALSAVAATKSPIIFIGTGEHIDDFEPFKTQPFISKLLGMGDI
EGLIDKVNELKLDDNEALIEKLKHGQFTLRDMYEQFQNIMKMGPFSQILGMIPGFGTDFMSKGNEQESMARLKKL
MTIMDSMNDQELDSTDGAKVFSKQPGRIQRVARGSGVSTRDVQELLTQYTKFAQMVKKMGGIKGLFKGGDMSKNV
SQSQMAKLNQQMAKMMDPRVLHHMGGMAGLQSMMRQFQQGAAGNMKGMMGFNNM

FIGURE 7353A

AAAATTGCGTTTGAGTTTGCCGCGAGCCGGGCCAATCGGTTTTGCCAACGCATGCCCACGTGCTGGCGAACAAAT
GTAAACACGGAGATCGTGTGCCGGGCACTTGGTTTCGTGGTGGGCAACTGTGCTGCTGTTTCTTTTGGCCGCGGA
CAAGGTCGGCAGAGGTGGACCCCTGCTTGGGAGAGCTCTTCTCGCTGTGCTGACACCCGCCCCTAACAGTCACCC
ACCCCGGGGAAATAATGGGGCTCGGAGGCCTCCTCCCAGCCAGTGTCCAGCCTAAGCACATCGGCTCCCGCAGTT
CAGAAAGGTCCCGAGGCCCGAGTCACCATTTCCGGCTCAGACCTCGACCCGGAACGTGGCTGCCCACTGCCACGC
CCACTACGCCCCAGTGGCTCGCCCCAGGGGACGAGGGGCAAGAAGCGGCCTCCGAGGGCAGCGGCCGAAGGCCAT
TCGGTCCCTGGCTCTTCCCAGCTCGCAGAGACCCGGAAGCGCTGCCCGGCCGCCTGCCCCTCTTCAGATCCCCCA
GCACCGGAGGAGCAGCGAGGGGGCTGCGTCCAGGCCGGCTTTCGGGTCGGCTTAGGCGAATCCAGCTCTCTTTTG
CCCCTCCCAGAAGGCCCAGCCCCGTCCGGGCGGTGTTCGGGCGGCGCCGGGCCGGGCCCCCCGCCGCCCCAGGCT
CGCTCATAGGCCCGGAACACCACAGCCCGCCCAGACTTGGCTGGCGCCGAGCCGGGGGTGGAGCCAGCGGGTTCC
CGCCAAAATCGCGTAGCTGGTCCTTCCCCCGCGGGCTACGTCGCGCCCTCCTTTTTTTTTCAAACCCGGAGCTGC
ACTGGGATTGGTGGACTGGGCACTCACGTGGTTAACGGTCGCGGGAAGCCGCGGAGCCCGAACCTGAGACTGGAC
CTGAGGAGACCTCAGCCTCGGTGCTCGGGCCGCCCCGCCTCTGCCGGAAAGTCCGCGCCGCCGCTGCCGCCACCG
TCCGCAGCCCGAGCGCCCCGGAGCCGCAGGCCGCCGCCGCGCAGAGACGCCGCGGCTGCGACTAGGCGCGCCCAG
CCGCACGTGGCGGACCCGCCCCCAGGCCCGCAGTGTCCTGGACCCCGCAGGCCTCCGCTCTCCTGTCCTCGGCCC
CGTCCCCAGGGCCGCG**ATG**AGCTTCCTGAGCCGACAGCAGCCGCCGCCACCCCGCCGCGCCGGGGCGGCCTGCAC
CTTGCGGCAGAAGCTGATCTTCTCGCCCTGCAGCGACTGTGAGGAGGAGGAAGAAGAGGAGGAGGAGGAGGGCAG
CGGCCACAGCACCGGGGAGGACTCGGCCTTTCAAGAGCCCGACTCGCCGCTGCCGCCCGCGCGGAGCCCCACGGA
GCCCGGGCCCGAGCGCCGCCGCTCGCCCGGGCCGGCCCCCGGGAGCCCCGGCGAGCTGGAGGAGGACCTGTTGCT
GCCCGGCGCCTGCCCGGGCGCGGACGAGGCGGGCGGTGGGGCGGAGGGCGACTCGTGGGAGGAGGAGGGCTTCGG
CTCCTCGTCGCCGGTCAAGTCGCCGGCGGCCCCCTACTTCCTGGGTAGCTCTTTCTCGCCGGTGCGCTGCGGCGG
CCCAGGAGATGCGTCGCCGCGGGGTTGCGGGGCGCGCCGGGCGGGCGAAGGCCGCCGCTCGCCGCGGCCGGACCA
CCCGGGCACCCCGCCACACAAGACCTTCCGCAAGCTGCGACTCTTCGACACCCCGCACACGCCCAAGAGTTTGCT
CTCCAAAGCTCGGGGAATTGATTCCAGCTCTGTTAAACTCCGGGGTAGTTCTCTCTTCATGGATACAGAAAAATC
AGGAAAAAGGGAATTTGATGTGCGACAGACTCCTCAAGTGAATATTAATCCTTTTACTCCGGATTCTTTGTTGCT
TCATTCCTCAGGACAGTGTCGTCGTAGAAAGAGAACGTATTGGAATGATTCCTGTGGTGAAGACATGGAAGCCAG
TGATTATGAGCTTGAAGATGAAACAAGACCTGCTAAGAGAATTACAATTACTGAAAGCAATATGAAGTCCCGGTA
TACAACAGAATTTCATGAGCTAGAGAAAATCGGCTCTGGAGAATTTGGTTCTGTATTTAAGTGTGTGAAGAGGCT
GGATGGATGCATTTATGCCATTAAGCGATCAAAAAAGCCATTGGCGGGCTCTGTTGATGAGCAGAACGCTTTGAG
AGAAGTATATGCTCATGCAGTGCTTGGACAGCATTCTCATGTAGTTCGATATTTCTCTGCGTGGGCAGAAGATGA
TCATATGCTTATACAGAATGAATATTGTAATGGTGGAAGTTTAGCTGATGCTATAAGTGAAAACTACAGAATCAT
GAGTTACTTTAAAGAAGCAGAGTTGAAGGATCTCCTTTTGCAAGTTGGCCGAGGCTTGAGGTATATTCATTCAAT
GTCTTTGGTTCACATGGATATAAAACCTAGTAATATTTTCATATCTCGAACCTCAATCCCAAATGCTGCCTCTGA
AGAAGGAGACGAAGATGATTGGGCATCCAACAAAGTTATGTTTAAAATAGGTGATCTTGGGCATGTAACAAGGAT
CTCCAGTCCACAAGTTGAAGAGGGCGATAGTCGTTTTCTTGCAAATGAAGTTTTACAGGAGAATTATACCCATCT
ACCAAAAGCAGATATTTTTGCGCTTGCCCTCACAGTGGTATGTGCTGCTGGTGCTGAACCTCTTCCGAGAAATGG
AGATCAATGGCATGAAATCAGACAGGGTAGATTACCTCGGATACCACAAGTGCTTTCCCAAGAATTTACAGAGTT
GCTAAAAGTTATGATTCATCCAGATCCAGAGAGAAGACCTTCAGCAATGGCACTGGTAAAGCATTCAGTATTGCT
GTCCGCTTCTAGAAAGAGTGCAGAACAATTACGAATAGAATTGAATGCCGAAAAGTTCAAAAATTCACTTTTACA
AAAAGAACTCAAGAAAGCACAGATGGCAAAAGCTGCAGCTGAGGAAAGAGCACTCTTCACTGACCGGATGGCCAC
TAGGTCCACCACCCAGAGTAATAGAACATCTCGACTTATTGGAAAGAAAATGAACCGCTCTGTCAGCCTTACTAT
ATAC**TGA**GCTACTCCTTTCCCACCTCCCCCTGAACACTGTGACAAGAGGAAGCTAGGTTGAAATCACTGATAGAA
TCCAGTTTGCAATTACTTTCTCGATTGGTGTCAGTAGTTTTACTGATTAGGACTTTTATTGTGAATTACAGTTGA
AAGCTGTATTTTGATGATTGCTATGTCAGGCTTTCATCTAATCTTACCAGTCTGTCTTCTGTAGGATGTGTCACT
GTTGGATGTTACACCAGCCTTTCCAGGGTTAACCACTGTGGTGGTGTGCTGCTTATAGTTTGCTGTTGCATTGTA
ATAAAAGGTGTCTTTCCCTGTAGTGACCTGTAAAAAGTACTCAAGGGCTTTATTACAGACATACCCTCCCTTTGA
AAAGGGACATGCTAAAAGACTCATTACTACTCAGCCTTCAATGTACCTGTGTGTCCATCTTATATTTCTTTTTTT
TTTTTAATTGTGAATTAGACTTGTATATCCCACTGGGAGCACTTTGTAGGCATTGCATGAACCATGGGATGATGA

FIGURE 7353B

TTCTGTGGAGGTATTGCCTTGTGAATTTGCTGCTATTTTAGTTTTGTCTTTGCTGTAAACTTGTAGCATTAAACA
ATCATTGTTGTTAATAGGTCTTCTTTTTGAAACAATTATGTGAAATGTATAGCTGCTTTTGATGAAAAGCAGCTA
TTTGCCTTTTTTTTTTTTCCTTTGAACTTTGAAGCTAGTGCATTGGAAAAATGCACCCTTTCCCTCCTTTGGAAT
GCTGTATTAATGTAGTATAATAATTACTGGTTTTGTAACTTGTTCTGGTAATGTCCTTCCCGGACTCTTTTTAAA
TGTCTCCCCCTAAGTTTTATACTTGATTGTATTATTAGTCTGTTTTTAAATGTTTTGCCCGGTTTTTCTCTTCAA
TATTTGTGTATATAAACCGATCTTCGTGATACTGTACATAGCTGTTTGAAATGCCAGAATGACTTCTGACATTCC
AAGTTTTTCACAAAATATATTTTATCTGTGATTAGCCATTTGACTAATAATACTGGCTAACAGATGTTGAAAAAA
ATTGTCTGTTTGTTTTCTCATTAATTTTGGTCTAAAACATGTTTGCACTTGTCTTTGACTTGTGTTTTATTAACA
TTGATTGGCATATTAAAAGTCACTCTGAGCTT

FIGURE 7354

MSFLSRQQPPPPRRAGAACTLRQKLIFSPCSDCEEEEEEEEEEGSGHSTGEDSAFQEPDSPLPPARSPTEPGPER
RRSPGPAPGSPGELEEDLLLPGACPGADEAGGGAEGDSWEEEGFGSSSPVKSPAAPYFLGSSFSPVRCGGPGDAS
PRGCGARRAGEGRRSPRPDHPGTPPHKTFRKLRLFDTPHTPKSLLSKARGIDSSSVKLRGSSLFMDTEKSGKREF
DVRQTPQVNINPFTPDSLLLHSSGQCRRRKRTYWNDSCGEDMEASDYELEDETRPAKRITITESNMKSRYTTEFH
ELEKIGSGEFGSVFKCVKRLDGCIYAIKRSKKPLAGSVDEQNALREVYAHAVLGQHSHVVRYFSAWAEDDHMLIQ
NEYCNGGSLADAISENYRIMSYFKEAELKDLLLQVGRGLRYIHSMSLVHMDIKPSNIFISRTSIPNAASEEGDED
DWASNKVMFKIGDLGHVTRISSPQVEEGDSRFLANEVLQENYTHLPKADIFALALTVVCAAGAEPLPRNGDQWHE
IRQGRLPRIPQVLSQEFTELLKVMIHPDPERRPSAMALVKHSVLLSASRKSAEQLRIELNAEKFKNSLLQKELKK
AQMAKAAAEERALFTDRMATRSTTQSNRTSRLIGKKMNRSVSLTIY

FIGURE 7355A

CAGGTCTCGACTTCACTGCTCTGTGTCCTCTGCTCCAGGAGGCCCAGCCTGTGTGGCCCTGTGACCTGCAGGTAT
TGGAAGAGCCACAGCTAAGATGCCAGGAACCCCTGGAAGCCTAGAAATGGGACTGTTGACATTTAGGGATGTGGC
CATAGAATTCTCTCCGGAGGAGTGGCAATGTCTGGACACTGCACAGCAGAATTTATATAGGAATGTGATGTTAGA
GAACTACAGAAACCTGGCCTTCCTGGGTATTGCTCTCTCTAAGCCAGACCTGATTACTTATCTGGAGCAAGGAAA
AGAGCCCTGGAATATGAAGCAACATGAGATGGTGGATGAACCCACAGGTATATGTCCTCATTTTCCTCAAGACTT
TTGGCCAGAGCAGAGCATGGAAGATTCTTTTCAAAAAGTATTACTGAGAAAATATGAAAAATGTGGACATGAGAA
TTTACAGTTAAGAAAAGGTTGTAAAAGTGTGGATGAGTGTAAGGTGCACAAAGAAGGTTATAATAAACTTAACCA
GTGTCTCACAACTGCCCAGAGCAAAGTATTTCAATGTGGGAAATATTTGAAAGTCTTCTATAAATTTTTAAATTC
AAACAGACATACGATAAGACATACCGGAAAGAAATGCTTCAAATGTAAAAAATGTGTCAAGTCATTTTGCATCCG
TTTACACAAAACCCAACATAAATGCGTTTATATTACAGAGAAGTCCTGTAAATGTAAAGAATGTGAAAAAACCTT
TCATTGGTCCTCAACCCTTACTAATCATAAGGAAATTCATACTGAAGATAAACCCTACAAATGTGAAGAATGTGG
CAAAGCTTTTAAGCAGCTCTCAACCCTTACTACACATAAAATAATCTGTGCTAAAGAGAAAATCTACAAGTGTGA
AGAATGTGGCAAAGCATTTCTATGGTCCTCAACCCTAACTAGACATAAGAGGATACACACTGGAGAGAAACCCTA
CAAATGTGAAGAATGTGGCAAAGCTTTTAGCCATTCTTCAACCCTTGCTAAACATAAGAGAATTCATACTGGAGA
GAAACCCTACAAATGTGAAGAATGTGGCAAAGCTTTTAGCCATTCTTCAGCCCTTGCTAAACATAAGAGAATTCA
TACTGGAGAGAAACCCTACAAATGTAAAGAATGTGGCAAAGCTTTTAGCAATTCCTCAACCCTTGCTAATCATAA
GATAACTCATACTGAAGAGAAACCCTACAAATGTAAAGAATGTGACAAAACTTTTAAGCGACTCTCAACCCTTAC
TAAACATAAAATAATACATGCTGGAGAGAAACTCTACAAATGTGAAGAATGTGGCAAAGCTTTTAATCGATCTTC
AAATCTTACTATACATAAGTTTATTCATACTGGAGAGAAACCTTACAAGTGTGAAGAATGTGGCAAAGCATTTAA
CTGGTCCTCAAGCCTTACTAAACATAAAAGATTTCATACTAGAGAGAAACCCTTCAAATGTAAAGAATGTGGCAA
AGGATTTATATGGTCTTCAACCCTAACTAGACATAAGAGGATACACACTGGAGAGAAGCCCTACAAATGTGAAGA
ATGTGGCAAAGCTTTTAGGCAATCCTCAACCCTTACTAAACATAAGATAATTCATACTGGAGAGAAACCCTACAA
ATTTGAAGAATGTGGCAAAGCTTTTAGACAATCCTTAACCCTTAATAAACATAAGATAATTCATAGTAGAGAGAA
ACCCTACAAATGTAAAGAATGTGGCAAAGCTTTTAAGCAATTCTCAACCCTTACTACACATAAAATAATTCATGC
TGGAAAGAAACTCTACAAATGTGAAGAATGTGGCAAAGCTTTTAATCATTCCTCAAGTCTTTCTACACATAAGAT
AATTCATACTGGAGAGAAGTCTTACAAGTGTGAAGAATGTGGCAAAGCATTTCTATGGTCCTCAACCCTAAGAAG
ACATAAGAGGATACACACTGGAGAGAAACCCTACAAATGTGAAGAATGTGGCAAAGCTTTTAGCCATTCTTCAGC
CCTTGCTAAACATAAGAGAATTCATACTGGAGAGAAACCCTACAAATGTAAAGAATGTGGCAAAGCTTTTAGCAA
TTCCTCAACCCTTGCTAATCATAAGATAACTCATACTGAAGAGAAACCCTACAAATGTAAAGAATGTGACAAAAC
TTTTAAGCGACTCTCAACCCTTACTAAACATAAAATAATACATGCTGGAGAGAAACTCTACAAATGTGAAGAATG
TGGCAAAGCTTTTAATCGATCTTCAAATCTTACTATACATAAGTTTATTCATACTGGAGAGAAACCTTACAAGTG
TGAAGAATGTGGCAAAGCATTTAACTGGTCCTCAAGCCTTACTAAACATAAAAGAATTCATACTAGAGAGAAACC
CTTCAAATGTAAAGAATGTGGCAAAGCATTTATATGGTCTTCAACCCTAACTAGACATAAGAGGATACACACTGG
AGAGAAGCCCTACAAATGTGAAGAATGTGGCAAAGCTTTTAGCCGTTCCTCAACCCTTACTAAGCATAAGACAAT
TCATACTGGAGAGAAACCCTACAAATGTAAAGAATGTGGCAAAGCTTTTAAGCACTCCTCAGCCCTTGCTAAACA
TAAAATAATACATGCTGGAGAGAAACTCTACAAATGTGAGGAATGTGGCAAAGCTTTTAATCAATCTTCAAATCT
TACGACACATAAGATAATTCATACTAAAGAGAAACCTTCCAAGAGTGAAGAATGTGACAAAGCATTTATCTGGTC
CTCAACCCTTACTGAACATAAGAGAATTCATACCAGAGAGAAACCCTACAAATGTGAAGAATGTGGCAAAGCATT
TAGCCAGCCTTCACACCTTACTACACATAAGAGGATGCACACTGGAGAGAAACCCTACAAATGTGAAGAATGTGG
CAAAGCTTTTAGCCAATCCTCAACCCTTACTACACATAAGATAATTCATACTGGAGAGAAACCCTACAAATGTGA
AGAATGTGGCAAAGCTTTTAGGAAATCTTCAACTCTTACTGAACATAAGATAATTCATACTGGAGAGAAACCCTA
CAAATGTGAAGAATGTGGCAAAGCATTTAGCCAATCCTCAACCCTAACTAGACATACGAGGATGCACACTGGAGA
GAAACCATACAAATGTGAAGAATGTGGGAAAGCTTTTAATCGATCCTCAAAGCTTACTACACATAAGATAATTCA
TACTGGAGAGAAACCTTACAAGTGTGAAGAATGTGGCAAAGCATTTATATCATCCTCAACCCTAAATGGACATAA
GAGAATTCATACTAGAGAGAAACCCTACAAATGTGAAGAATGTGGCAAAGCATTTAGCCAATCTTCAACCCTAAC
TAGACATAAGAGGTTGCACACCGGAGAGAAACCCTACAAATGTGGAGAATGTGGCAAAGCCTTTAAAGAGTCCTC
AGCTCTTACTAAACATAAGATAATTCACACTGGAGAGAAACCCTACAAATGTGAAAAATGTTGCAAAGCCTTTAA
CCAGTCTTCAATCCTTACTAACCATAAGAAAATTCATACTATCACACCTGTAATCCCACTACTTTGGGAGGCCGA

FIGURE 7355B

GGCGGGCGGATCACGAGGTCAGGAGATGGAGACCATCCTGGCTAACACAGTGAAACCCCTTCTCTACTAAAAAAAT
ACAAAAAACTAGCCGGGCGTGGTGGCGGGCGCCTGTAGTCCCAGCTATGCGAGAGGCTGAGGCAGGAGAATGGCG
TGAACCCGGGAGGCGGAGCTTGCAGTGAGCCGAGATCACGCCACTGCACTCAAGCCTGGGCGACAGAGCGAGACT
CCGTCTCAAAAAAA

FIGURE 7356

MPGTPGSLEMGLLTFRDVAIEFSPEEWQCLDTAQQNLYRNVMLENYRNLAFLGIALSKPDLITYLEQGKEPWNMK
QHEMVDEPTGICPHFPQDFWPEQSMEDSFQKVLLRKYEKCGHENLQLRKGCKSVDECKVHKEGYNKLNQCLTTAQ
SKVFQCGKYLKVFYKFLNSNRHTIRHTGKKCFKCKKCVKSFCIRLHKTQHKCVYITEKSCKCKECEKTFHWSSTL
TNHKEIHTEDKPYKCEECGKAFKQLSTLTTHKIICAKEKIYKCEECGKAFLWSSTLTRHKRIHTGEKPYKCEECG
KAFSHSSTLAKHKRIHTGEKPYKCEECGKAFSHSSALAKHKRIHTGEKPYKCKECGKAFSNSSTLANHKITHTEE
KPYKCKECDKTFKRLSTLTKHKIIHAGEKLYKCEECGKAFNRSSNLTIHKFIHTGEKPYKCEECGKAFNWSSSLT
KHKRFHTREKPFKCKECGKGFIWSSTLTRHKRIHTGEKPYKCEECGKAFRQSSTLTKHKIIHTGEKPYKFEECGK
AFRQSLTLNKHKIIHSREKPYKCKECGKAFKQFSTLTTHKIIHAGKKLYKCEECGKAFNHSSSLSTHKIIHTGEK
SYKCEECGKAFLWSSTLRRHKRIHTGEKPYKCEECGKAFSHSSALAKHKRIHTGEKPYKCKECGKAFSNSSTLAN
HKITHTEEKPYKCKECDKTFKRLSTLTKHKIIHAGEKLYKCEECGKAFNRSSNLTIHKFIHTGEKPYKCEECGKA
FNWSSSLTKHKRIHTREKPFKCKECGKAFIWSSTLTRHKRIHTGEKPYKCEECGKAFSRSSTLTKHKTIHTGEKP
YKCKECGKAFKHSSALAKHKIIHAGEKLYKCEECGKAFNQSSNLTTHKIIHTKEKPSKSEECDKAFIWSSTLTEH
KRIHTREKPYKCEECGKAFSQPSHLTTHKRMHTGEKPYKCEECGKAFSQSSTLTTHKIIHTGEKPYKCEECGKAF
RKSSTLTEHKIIHTGEKPYKCEECGKAFSQSSTLTRHTRMHTGEKPYKCEECGKAFNRSSKLTTHKIIHTGEKPY
KCEECGKAFISSSTLNGHKRIHTREKPYKCEECGKAFSQSSTLTRHKRLHTGEKPYKCGECGKAFKESSALTKHK
IIHTGEKPYKCEKCCKAFNQSSILTNHKKIHTITPVIPLLWEAEAGGSRGQEMETILANTVKPLLY

FIGURE 7357A

AGCGGTTCAAGCTCTACGTTCGTGACATCAAACCTCCTGTTGGGCCATTTCCGAGAACTCCCATCAGTTTCTGTA
TAGTGTAAAAGTTTCAGAGGCGGACACGAGAGAGCTGCGGCTGGGACAAGGAGCACCCGCGTGCAGGTGCGACCC
TGCAGGATGCTGGCAGCGGCGTGGCCAGGGGCGCCCGTGTTCTGAGGGCCTGAGGGCCAGCCCCTCCACCCGCGC
CATGGCCTCCGCGCCCTGGCTGGACGGCTGACGGGAGCAGGGACCGCCGCCGCCCAGGTGCCACACCCAGGTACC
GCCCGCCCGCTGCGAGAGCCGGGCAGGTGGGCCGCGGATGCTCCCAGAGGCCGGCCCAGCAGAGCGATGGACTTG
GACAGGCTAAGATGGAAGTGACCTGAGCCTCGCCCGGCGGCTTCCTCGACGGGACAGCGCAAGAGTTGGAGCACA
GGCTTGTCCGGGGAGCAGTATGCCGGAAGCTGGTTTTCAGGCCACAAATGCTTTCACAGAGTGCAAATTCACCTG
CACCAGTGGTAAATGCTTGTATCTTGGTTCGCTGGTCTGTAACCAACAGAACGACTGTGGGGACAACAGTGACGA
AGAGAACTGTCTCCTGGTGACCGAGCACCCGCCTCCGGGCATCTTCAACTCGGAGCTGGAGTTCGCCCAAATCAT
CATCATCGTCGTGGTGGTCACGGTGATGGTGGTGGTCATCGTCTGCCTGCTGAACCACTACAAAGTCTCCACGCG
GTCCTTCATCAACCGCCCGAACCAGAGCCGGAGGCGGGAGGACGGGCTGCCGCAGATCATGCATGCCCCGCGGTC
CAGGGACAGGTTCACAGCGCCGTCCTTCATCCAGAGGGATCGCTTCAGCCGCTTCCAGCCCACCTACCCCTATGT
GCAGCACGAGATTGATCTTCCTCCCACCATCTCCCTGTCCGACGGTGAAGAGCCACCTCCTTACCAGGGGCCCTG
CACCCTGCAGCTCCGGGACCCTGAACAGCAGATGGAACTCAACCGAGAGTCCGTGAGGGCCCCACCCAACCGAAC
CATATTTGACAGTGATTTAATAGACATTGCTATGTATAGCGGGGGTCCATGCCCACCCAGCAGCAACTCGGGCAT
CAGTGCAAGCACCTGCAGCAGTAACGGGAGGATGGAGGGGCCACCCCCCACATACAGCGAGGTGATGGGCCACCA
CCCAGGCGCCTCTTTCCTCCATCACCAGCGCAGCAACGCACACAGGGGCAGCAGACTGCAGTTTCAGCAGAACAA
TGCAGAGAGCACAATAGTACCCATCAAAGGCAAAGATAGGAAGCCTGGGAACCTGGTCTGATTCCTTCCAACGTG
CACTTCAGCTGGAGAAAGAAACCAAGAAGGGAAGCGGCCGCTGGGCCCCTCCTGCGCACAGTGTTGTTCAGTTTC
ACATGGTACAAATAAGTAAAACCAAATGAGCAAACACGGTCTTTGTTTCTGATTCCTTTTAGGGGAATTGCATGC
AAACTAGACTGAAATGATACAAACTTCCATCTGGTCTGACCGCAAACAGTGTTTATTTGGGGACAGGGGTTGGGA
TGGGGGTGTGGGCAGGGGAAAACAGAGAACGGGATGCTTTGAAGATACCATGAAATAAAACCCACAGAGGTATTT
GATGTATTTAATTGTGAAAGGAGACTTTGCAGATAAATGAGGCCAGAATGGCATGTTTTATAATTAACTGAATAA
AGAAGGAAGCATTATTATATATTATTGTGGGGAAGAACCAGCCAGTTCGCTTTTTCTCCTAAGGTGTGGACTTTT
ATTTTGTTTTAAAAATATGAATCAAAATTCCTGTGTTGTGTGCCAAGGTATAAAGTGGAGAAGTTAGATGAGTGC
AAGGAGCTCCTTTGTGTTGTGATGATGTGTTTTAAAAGTTGCACTATCTTAATGTTGAAAATATTTACAAGGGAA
CTGTTTTACGTGAAGTTCTGTATGTTGTCTTTTCACCTGTGGATTGTAATCAGGCCCAAGGAATATCCTGGAGTG
GTCCCCAGAAGCATCCAAGAAAAGATATTTGGGGACGTAGCCTAACATTTTACCAACTTACGTAAATCAAAAAAG
TCATTATTGTTGCAGGAGTTTGCATCAAATAGCAGTGCATCGCTGAAGCTTTTGGAGACTTTTGGATGGAAGATA
AGATAGGGAAGATTAAGTTCCAGCATTTCTGACTTGTTATTTTGAGTTACTCTGCTACTCTTAGGCTGCATAGTT
TATGAGAAAATGAACACATGCATTTATGGATCCAGTATCATGCAGTGCTGCCCTCATCCTCCAGCAGTGCAATTT
CTTCAGTAATTTAGATTTTTTTCACTATAGCATGAAATATATTCAAATACATACCTTATTTTATGCAATAAATTG
TTTAAAATGCAAGGTGGTTATTCTGCATACTGTTGAAATATGTGACTCCTCAGTATATTCCCATTGCCTCTCCCC
CTTTCCTCGACAGCTTAGTTCAGTTCTGCAGGGCTGCTCAGTTCACAGGAGGCTCCCAGCAGCCACCCCACATCC
AGCCTACACAGAACTTTCGTGTGGGAGTGGTGTGGGTGGTGGTTTTCTTATGCTTTGGAAGCCCCTAGAAATAAT
GACGGAAGAATGCCATGTTGCTGATCGTGGTAATAAGCCATTGTGGGTTATTGTATGTCACTAGTATTAGCATAG
CATTCTTAAAGGAATGCAGTGTTCAAAACCTACCCAAATTCCCCGCAGGATTTTACCAAACCCTTCCCCAGGCCA
GTTTTGTACTGAAGGCAAGAACTGGACAGTCAGAGAACAGTGGAGGGGGCAAGTGACTGAAGAGCACCGGGTAAA
AAGCACAACATGCAGTTAAAATGCAAACTAGAAAACTAATTTTAAATATTGTTAGTTTTAATATTTCCTGATATT
TACAAATATTCATTCTTATATACAATGAAAAAAATAACTTTCTTCTGCAGATGTAAGCACTGGCTTTTATAAGAG
CAGCAGCCAACACGTTTAGCAGACACTGCGCGTGGAGAAGGGCTTATCTGCAGTACACTCTGCCATGTGGAGGGT
GGGCCTCTGTGGCCTCTTCACATAACAAGATGAGCTGGAATGATGATTCCATGACTCCCACCTATGCAGCCTTAA
AGCCAAATCCGCGTGTGTGTGTTTGTGTCTGTCTGTGGGTCTCGAAGGTGATCCGTCGGTGCGGTGGCTCTGTGC
TGTAACTGGAGAGACTGTTCCAAACCCCAAGAGTTGTCTGATCCTAGTCTGTTCCCTTCTGCTTCTTACCTCTGT
AGATAGGTCACTGGTTTTTGTTTGTTTGTTTTGAGGATTGGAATTTCCATTACATTCATCCTTTGCACACAGTAA
CATCCACAGAACTAGTCCAACTCTTAAAAGGAGAGAGGAAAAACACAGGCACCAGTTGTCAGCTCATGCTTACAA
CCTGTGTGGAAGTATATACAGTTGAGAGTCACAGTGGAGGTTCTGAGACTGGATTCAGTCTTGTTCCAGTGACAG
TTGGAAGGCCTCTGCTGGAGAGACACCAGCTCTCAGGGCAGAGATTGGCTTGGGGCCAGAAGGACCCTCCCCAAC

FIGURE 7357B

CCTGGAGACACCCTGAAGGTTCACTGGCTCTCCAGATTAGCCTCTCTTCCTCTGTCAGGCAAAGATGAGGAGCCC
GTGTTCCCATCGGGCCCTGCTGGCAGGGACTTGCAGTGGATTCTTGGTCAGGTGTGCCCACAGATGCGGAGGCGA
GGTGAGTGATTCCATCATTTCAGTTCTCACCTGCAGTTTTGGTGAAGCAGGAGATGCACCCCACAGCTCTAGCTC
TCAAATGGCTTCACAGTCCTTACTTCTCTACCTGCCTCAAGAAGGGGCTCAGAGCAGAGACTTGTGAATTCCTTA
GTAACTGTGAGTATATGAATGTGTTGCACATGTCCACAGTATTGGCGAGATAATTACATAATTCAGATACCTTTA
ATCATCTTTCAAGAAAGAGGCTCCTCCCATTCAACCACCCTAGAGAACTGCCTTTGTTAAATAGTTATTTAAAGA
CTCATACATATCAAACCATGACTTTGAAAGGTCTTCGAGGCTGGGGCTCTGTAATGAATTAGTTTAAAAGCCAAG
GTCATAACATGAATTGATGGTCAATTTCCCTTCAGCAGAAGGAAAAGGTGATTTAGATCAGTAGCTCTTTTGAAG
GTTGTGGCTGACCTGTTCATACCGTGTCGCCTCATGGCTAGTGTGGCGTTGAAAGAGTAGCGACTGGGAAGATAC
AACTTACACAGTGGGGCCTATTGTTCTTTCAAGAACCCTTTTTTTAGCTTATAGAACCCATGGGTCCAGTTTAGT
AACGAGTGATTTAGGCAATCAATGATAGGTTTATAATCTTAGATTATTCCAGCAAAGTGTGGATTGCATTGTTAG
GAAGAACATTTGGTGGGAATGAACACTCCTGGGCATACCGCTGACTTTTGTCCCTTGTTCCCGGTGTAGGAGACC
CAAGGCATCTTGAATCCCATCTATAAGAACACAATCTTCCAGCATACGTTTGCTTTTTCAGAAACTCTAGCATTC
TCTTTAAATACTGACGCAATCCTTAATGGAAAAGAGATTTCATGAAGCAAATTATGTATTTCAATAGTTCTTCTA
TTTTTAGTGTCCAAAATTTACTAATACAGAAGCTTGACAAGCATGTCCTCACCCTCCCCACCACATAAACACATG
GACACACACCCAAGCCACAAGAAATCCCAAGAGAGCAGAAGCGAATTTTTAAAAGATTTATCGTGAGGACTGCAT
TTCCATTCACTAATTTTGGCTCAAACTTATGAGGCAGGAAATAGGGGCCAACAGTAAATGGGGGAGGCCTCCTGA
CACCAGCAGAGGAATTTTGTACCCAGGCGAGGACTTCTTGAACTTCTGCGTATCTCCGTTTGATCTCTTTCACCT
TTATTTCATCTTCATAAGAATGAGAAAGGCTCAAAAGGAAGCACTTTTAGAAATCTTCTCTGACCTAGAAGAATC
CATCCAAATCCCTGCCTTCCTCTCTGAACCAACAGTTCCCTTCTCTGACAGGGGGCCATCCTCTATCTTCCATCC
AGCGGCTCTTCCTTTTAGGAAGGCTCTGGTGCAGAGCACTTCAAATATGTCCTCAGGCCAGATACTGATTGCTAG
TAGAGAGACACCCGGCACCCAGTCCGAAGCCCTCCCTCAAAGGACCGGCTTATGGCGTTGGTCACTGGCAGGCTC
AGAGACATTCTACTGTGGGCGCAGGGAGCCCGGCCCCCCATGCAGCCATGACTGGATGCGCCCCCATCTCGGGGG
CTTGCTGCACTGCTTGTTTATTGAATTTTGCTACTTAGAATGGCAACATTAACTTTGTGTACCATTCATTTTTTA
AAAATTTTCCAAAGCTCGGCAGTGTATGAAAGAAAAAACTGGGAAAGATACTTGGTTTCTGTTAACTTTTGTGTT
GCTTGCTTAAGTGATTAAAGCCAGTGCTTGGAGCCAAGCCTTCATGCCACGAACATGCTCCACAGCCTGCCCTTT
GCTCTCCTGCTCACACTGACCAAGAATGCCGCGTGCTTGGCCTACTGAGGTGAAAGGACAATTGAATGACAGGTG
GGCAAAGGGAGAACTTCCCCTTCTTGGTGCGAGGAAAGTCACAAATTTAAAAATGTTGCTTCCAGCCCAGATCCT
AAATGCTAGTTCTCAGCAGCTGCGTGGCTTACCGTTCGCCATTTCCACCACCGCCAGCTGCCAGCACCGCTACAG
ATCACAGAGATGTGAACAGACAATGGAAAGCACTCTTAGCCTTGCAGTGGTCTACATTTTTTAGGAACCAATATT
TCAGCATTCTTTATTACCCGGCACGCTGTGTCCTTTGCAGAGTTCAAGTTTATGTTACTGCCAGGGTCAGACAGT
CATTTGCTGCTGCTGCTGCTGCTGCTGCTTCTCGAACTGGATGCATTAGGAAGCTGCTGTCTGAGTGTAGGA
ATGTCTTGCTAAGAAAGCAATGTCTTCCTTCATCCTTTTCTTTCTTCCCTCTGCGTGTCCTTGTTTTTGTGTAAT
GCGGGAGAGGGTTAGAGCTATAGAGATTATATATACACTATCCGTGCACATTATATATATGTAGATATACCCCTA
TCATGTCAGAGATCTGCATGTCAGTTTTTCAGCAACTAAGGTGCCTCATGTTCTGAGTTCAGCAGATATAGGAAC
CAAGCCGCCCCCTCCTGCACTTGATGCTCCCACCTTTGTTGTGCCTCACTTAAAATGGTGCTTTTTTCAGTTGTC
TGTCTTTTCTTATGTTTTTATTTGTAAGGTGCTGTATATAAGTTGAATATATTATGCACATATCCTACCCAATGG
GTAGAACAAAAAGTTGTTAATACTGTAATATAATGTATAGATGATACCAATTTTAACAGAAATGGCATAGAATTT
GTGAATGCCTATGTGCTTTGTCCTCTTTTGTAAGGAAATTTGCAAATGGATGCATACAGATTAAAGTCTATGTAG
TTTATTTTCCTATTAAATATCAATATTATAACACAAGAGAAAGAAGTGTGAACAAACAAGCAACAGTTTATGACC
AGCGTATATATAGCAATGGAAAGTTGCATCTTTGCTGTGAAAACACTTTAAAGAAAATACTTTTTAAAAAATCCC
ACAGCTTTTTGGTTGCCACTAGACGCTTCTTATTTTAATCATTTTAGTAATGCTCAGCTGGACCAGTGTTAGTTA
TATTTGAGTCAGAAAAATGTTGTTTTTCAACTTGCTTTATAATCTCCTGCATCTATCTCCTGCTGTAGCATCAYG
AAGGTGTCAGGCAACAGTGAAAAGTGCACATTTTTGTTGTTGCAGAAACTGTGTCAGAGGAATAAGTAAATCAGC
CTGCAGCAGAAGACTTTGTTCAGCTCCAGAGGCATCTGTGACCGTCTGTGTCCAAGTCTCTCTGTGCCTTTTTCT
TTTACAAACTGAAGCTGTGGAGCCAATGAAGTAACAGTAGAGATTGTAGGGAAAGAATACCTCAGGAAAAACAAA
TACACTTACAAGAAGACCCTGTTCTTAGAAAATGTGTTTAGTTATGGGTTAGCACTAGAAGAGACTTGGCTGTCA
GCCAGCCAAGTGAAGGACCTCTCATCCATTCCCATTCATGTCCCATCATAATACGGACMCAAAAAGCAAACTCGG

FIGURE 7357C

TTTTGCCATCAGTTAGAAATTACGTTTTGGATTGTATATTGTTACATCTCTCTTCCAGCTTAGTTTTTAGTGTCT
GATTGTGACCTCTGCATTTATCTTCAAATACCCTAATTTTAAAACAAAAGAACAAGAAAAGTTTATAACACCATG
TTCACTAAAACCACGGTTGAATCTTGGGTGTGGGCATCCTTTCGAGTGTTGTCCATAAGAGCAGTTCGTGGAATT
TTGCCCATCTGACCCATATTATCAGCTTATTCTGCCACCAGAGTAGAGTCTAATAAATTCCAAAGTTTTTATTTG
CTCCATGGTGTATGTTCTGACTTTGAAAATGTCAGATTCTATAATCATACCCCTAACATCCAGGAGACAAATGAC
AGATTATCTTTAAACTGAAATTGACTCTACAATGCAACCCTTAATGCTGAATGGATTAAAAAAGTCAGCCCTTTT
AGTATCTGTTTGAAAGGGCCGTAAAAAGTTGACACTTTTGTTGTTGTGGATCCTGCGTGTCTAGACCCACGTGTT
GTTTCCATCGTATACTGTAGGGTGCACCCCTTGGGATTCATCATTAAGAACTGAGGCTCACTGTTGTCAGAAACA
AAGCTCCCACCCCCCAGGTTCAACCTTGTGGGAGAACTGTTGAGCATGAGAATGTTCTAGACTCAGAGGTACTAA
AATTTGTTACCACATCATTGCTTCCTTTCTACAGGACGAATTGAGGCTTAAACTTTACTGTTAATGATACTGGTT
CATTTTAATGTGCTTGTTGGTATGTTGCTATTTTTCATTTCATAGCTTTCAAAAATCATGCTAATTGTATACTTG
TCTAGTTTAAGGCTATTTTAAAATATGTACAATACTATTCACAGCATTTAGTTCGTTTAATTTTTATTATAAAGC
AATCTACTAAAAAAGTACAACTGTATTTGAACTTTTCAATAGTTGTTTGTGAGCTATGATAATCAAAAGTCATTA
AAGTCTTTTTTAACAAACATTCGTGCTTACTTTTCAACATAATTCCCAGTTATATACAGAAAAAGATTTCCACCT
GTCACGTATCTGCCTCTTTTACCTGAGCAATGGTGTAGTTCTTAGACCTAAGGTCTGTAATTGCAATACTTTTAA
AGAAAGATGTTGCTCTAAGTGCTGTTTGTTAGTTATGAAATCAGATTTTTCTGCTTGTTCTTAATGCTGTGGTCA
AACCATAGCACAAAATCATTAAAAATAATCAGCGGCATAC

FIGURE 7358

MPEAGFQATNAFTECKFTCTSGKCLYLGSLVCNQQNDCGDNSDEENCLLVTEHPPPGIFNSELEFAQIIIIVVVV
TVMVVVIVCLLNHYKVSTRSFINRPNQSRRREDGLPQIMHAPRSRDRFTAPSFIQRDRFSRFQPTYPYVQHEIDL
PPTISLSDGEEPPPYQGPCTLQLRDPEQQMELNRESVRAPPNRTIFDSDLIDIAMYSGGPCPPSSNSGISASTCS
SNGRMEGPPPTYSEVMGHHPGASFLHHQRSNAHRGSRLQFQQNNAESTIVPIKGKDRKPGNLV

FIGURE 7359

GGCACGAGGCTGCGGCCGCCAGCTCCCGCGACCGCCTCTCCTGCCCCTCGCCGGTACCTCAGCAAGGTGCCACTA
GAAGCGCCAGGCTGGGGCCGCCTCTGAGCGCCCCGCGGGGGCCATGGATGGTGAAACAGCAGAGGAGCAGGGGGG
CCCTGTGCCCCCGCCAGTTGCACCCGGCGGACCCGGCTTGGGCGGTGCTCCGGGGGGGCGGCGGGAGCCCAAGAA
GTACGCAGTGACCGACGACTACCAGTTGTCCAAGCAGGTGCTGGGCCTGGGTGTGAACGGCAAAGTGCTGGAGTG
CTTCCATCGGCGCACTGGACAGAAGTGTGCCCTGAAGCTCCTGTATGACAGCCCCAAGGCCCGGCAGGAGGTAGA
CCATCACTGGCAGGCTTCTGGCGGCCCCCATATTGTCTGCATCCTGGATGTGTATGAGAACATGCACCATGGCAA
GCGCTGTCTCCTCATCATCATGGAATGCATGGAAGGTGGTGAGTTGTTCAGCAGGATTCAGGAGCGTGGCGACCA
GGCTTTCACTGAGAGAGAAGCTGCAGAGATAATGCGGGATATTGGCACTGCCATCCAGTTTCTGCACAGCCATAA
CATTGCCCACCGAGATGTCAAGCCTGAAAACCTACTCTACACATCTAAGGAGAAAGACGCAGTGCTTAAGCTCAC
CGATTTTGGCTTTGCTAAGGAGACCACCCAAAATGCCCTGCAGACACCCTGCTATACTCCCTATTATGTGGCCCC
TGAGGTCCTGGGTCCAGAGAAGTATGACAAGTCATGTGACATGTGGTCCCTGGGTGTCATCATGTACATCCTCCT
TTGTGGCTTCCCACCCTTCTACTCCAACACGGGCCAGGCCATCTCCCCGGGGATGAAGAGGAGGATTCGCCTGGG
CCAGTACGGCTTCCCCAATCCTGAGTGGTCAGAAGTCTCTGAGGATGCCAAGCAGCTGATCCGCCTCCTGTTGAA
GACAGACCCCACAGAGAGGCTGACCATCACTCAGTTCATGAACCACCCCTGGATCAACCAATCGATGGTAGTGCC
ACAGACCCCACTCCACACGGCCCGAGTGCTGCAGGAGGACAAAGACCACTGGGACGAAGTCAAGGAGGAGATGAC
CAGTGCCTTGGCCACTATGCGGGTAGACTACGACCAGGTGAAGATCAAGGACCTGAAGACCTCTAACAACCGGCT
CCTCAACAAGAGGAGAAAAAAGCAGGCAGGCAGCTCCTCTGCCTCACAGGGCTGCAACAACCAGTAGCTCATGGG
GCCTTGGAGGAGCCTGGCCTCTCAGCCTGCATAACAGACTGAAATGTGCTCAGGCCCTGGCCAGGAGGGCCCAGG
GTCATTCTTTTAACAAAAGGATTATTTTGTTGTGTTTTAATTTGTCACTCGGAACTTCAGGATGGAGGACCCTGA
CCCTAAGCCTCCTTCAGATCTCTGGCCCAGGCTCAAGCCCTAGAGATGGGCAGGGCCTAGGGGCTGGGAGCTGCC
TGCTGCCATAGCAGCACCTTTAGCTAGGTTGGCCCGAGTGAGGCCTCTGTGCTGTCCTGCCCTGGTGCATGGCCT
TAGCTTTCTAGGCCACTGGGAGTTGTGGCTGGGCTTCCCATCTTCCACAGAGACATCTCCCTGTGGGATGGGCAG
ATGGGCCTGGCCTTGAGAAAGGCATTGGCCATTGGTTGCCATGGTGACCAGGGACCACGTTGCTGCCTGTGAATG
CTGAGTGAGCGAGTAAGGGAGGAGGGGCGATTGAGGGTTCACCTCTGCCTTGGGGAGGCTGATTTCTCACACACT
GGCTGGCCCTCTCATTCTCACTCCTCCTTGGGCCCTGAGGCTGCTGGATCCGGTCTGCCTGCCTCCCTGTGCAGT
CCAGCCCTGCCTTGCTGCAGCCCCAGCCCAGATGGCACTCAGCGCTCTCCCCTGAGGGAGTCCCTGGGCCTAGCC
ATCCCCTCACTATTCCCGACCCAAAGGGTGACTTTTCATCTGAACTTAAGGTGGGAGATATTTTTAACTTTTTTC
CACTTTGGAAAATGTCACTGTGACAAAAGCCAGCATACTTTCCCTGCACCCATCTGCTCACCAGATCTCAGGCAG
GAAAGCCCCTCTCTGTTGAAGTCAGGGGCTATCTTTTGGTATACTTGTGTGAAAGTGGCTGGTTGGGAGCAGAGC
TAAGTGGCTTCCCATTAACCTGAGGTCTCTTTCTTTACTCTGGGTCAGACCTGAGGTTGGGGAAGGCGACTGAGC
CATGCTCAGAATGTCTGGTCCTGGCTTGGGCCTGAGTAGGGCAGAGAGGGCCTTTCATGGCTGATCAGAGCTTAC
CAGCCCCACCCCACCATGGTAGCCTTAGGGTGCTGAGTGCCTGATACTGCCTGACAAGTGCCTGACACGCAGCCT
AGTTCCTTCCTGGCCCCTCTCTCACTGGCTGGGAAACCCTAGACCATGTCAGATAGGACAACACTGCTGGGTTTT
ACATCCAGATAGTAATAAACACCATTTCATCATT

FIGURE 7360

MDGETAEEQGGPVPPPVAPGGPGLGGAPGGRREPKKYAVTDDYQLSKQVLGLGVNGKVLECFHRRTGQKCALKLL
YDSPKARQEVDHHWQASGGPHIVCILDVYENMHHGKRCLLIIMECMEGGELFSRIQERGDQAFTEREAAEIMRDI
GTAIQFLHSHNIAHRDVKPENLLYTSKEKDAVLKLTDFGFAKETTQNALQTPCYTPYYVAPEVLGPEKYDKSCDM
WSLGVIMYILLCGFPPFYSNTGQAISPGMKRRIRLGQYGFPNPEWSEVSEDAKQLIRLLLKTDPTERLTITQFMN
HPWINQSMVVPQTPLHTARVLQEDKDHWDEVKEEMTSALATMRVDYDQVKIKDLKTSNNRLLNKRRKKQAGSSSA
SQGCNNQ

FIGURE 7361A

GGGAAGCGCGCCGCGCACCTCATGGTTCCGGGGACAGTTAGGGCGGCGGATGGAGGTCAGCGGTGGTGCTCGCTG
CGGTTTGGAATCACTTGCTAGGAGTCTTGTCTCTCTGCCACCCAGGACATCATGGCAGCTCACCTGGTAAAGCGA
TGCACGTGCCTCCTGAGAGAAGCTGCTCGTCAGGCCCCTGCCATGGCTCCAGTTGGCCGACTGAGACTTGCCTGG
GTAGCCCATAAGACTCTGACTTCCTCAGCCACCTCACCCATTTCCCACCTCCCAGGTTCCTTGATGGAGCCGGTG
GAGAAGGAACGAGCATCTACTCCCTACATAGAGAAGCAGGTGGACCACCTCATCAAGAAGGCCACAAGGCCAGAG
GAGCTCCTGGAGCTACTTGGTGGCAGTCACGACTTGGACAGCAATCAAGCAGCAATGGTACTTATCCGGCTCTCT
CACTTGCTGTCTGAGAAGCCAGAAGATAAAGGCTTGCTCATACAGGATGCCCACTTTCATCAACTTCTCTGTCTG
CTCAACAGTCAGATTGCCTCGGTCTGGCATGGTACCCTCTCGAAGCTGCTGGGAAGCCTGTATGCTCTGGGCATC
CCCAAGGCCTCCAAGGAGCTGCAGTCGGTGGAGCAGGAGGTCCGCTGGCGCATGCGGAAGCTCAAGTACAAGCAC
CTGGCCTTCCTGGCAGAGTCCTGTGCCACCCTCTCACAGGAGCAGCACTCGCAGGAGCTGCTGGCTGAGCTGCTC
ACACACCTGGAAAGGCGTTGGACAGAAATTGAAGATTCCCACACATTAGTGACCGTCATGATGAAGGTGGGACAC
CTCTCGGAGCCACTAATGAACCGCCTGGAAGACAAGCACGTCCTGAACAGAGCGCAGGACATCACCCTGCCCCAC
CTGTGCAGCGTACTTCTGGCTTTTGCGCGTCTGAACTTCCATCCAGACCAAGAGGATCAGTTCTTCAGCCTGGTA
CATGAGAAGCTGGGGTCAGAGCTGCCAGGCCTGGAGCCAGCCCTGCAGGTGGACCTGGTGTGGGCCCTGTGTGTG
CTGCAGCAGGCACGGGAAGCAGAGCTGCAAGCCGTCCTCCACCCTGAATTTCACATCCAATTTCTAGGGGGCAAG
TCTCAGAAGGATCAGAACACCTTCCAGAAGCTGCTCCACATCAACGCCACTGCCCTGCTGGAGTACCCCGAGTAC
TCGGGTCCCCTTCTGCCTGCCTCGGCTGTGGCCCCTGGGCCCTCAGCCCTTGACAGGAAGGTGACCCCCCTGCAA
AAGGAGCTGCAGGAGACGCTGAAGGGGCTGCTGGGGAGCGCCGACAAGGGCAGCCTCGAGGTGGCCACGCAGTAT
GGCTGGGTGCTGGATGCTGAGGTGCTGCTGGACAGTGACGGCGAGTTTCTGCCCGTAAGGGACTTTGTGGCACCT
CACCTTGCCCAGCCAACTGGGAGCCAGTCACCACCTCCAGGGTCTAAGAGGCTAGCGTTCTTGCGGTGGGAGTTC
CCCAACTTCAACAGCCGAAGCAAGGACTTGCTGGGTCGCTTTGTTCTGGCCCGGCGACACATAGTGGCTGCAGGC
TTCCTGATAGTGGACGTCCCATTCTATGAGTGGCTGGAACTCAAGTCTGAATGGCAGAAAGGCGCCTACCTCAAG
GACAAGATGCGCAAAGCGGTGGCTGAGGAGCTGGCCAAGTGACTTGTGCCAGCAGCATGGACTGCGTGCCTCTCC
GCCGGAGGTCTAGCTGTGGGCGGCCAAGAAGGGTCACCCTTGAGGACAAACCTCTGTGCAGGACCTTGGCCAGAG
TGGGGAGGGTGGCCAGCCACTCTGAGGGACAGAACGTCCTCTTGTGTATAATAAACCTTTAATTTTGGTGTTGGA
CCCCTGGGGCCTTCCCAGGCTTGGTCACCCTCTGCACTGTCAGCACTTGTCTGTCTGCTTTGTTGAGCAGGGCGT
GGTTCTCCAGTCTGCCCTGTGCACTCCCCCGCCACGCCCAGCCCAAGAGGGCTGCTTTAGGGACAGACCTGGGTT
GTTACCTGCCTGTCTCTCCCAGCTTCTTCCCTCCATGAGTGCTTATTCACATATGCCGGCCTCTTGCGTAGGGGT
CTGTATCAGCCCCAGCAGGCAGGTGGAGTCCTAGAATTCTGAACCTCCAGAGCAGAGGAGCTTCCCAGGGAAGCT
GATTGGAGATTCAGTGCATGGCTGGGGGTTCTGATGGAGCTGTGGCTACTGAACCACAGCCATCCTGGGAGGCTT
TCTCCCATCAGTTGTCTCACACTTAGCTGAGTGAAAGGCACCCTGACAGCATGTGGTGACAGGTGATGTGAGGGC
TGGGTGAGCACTTGGGAGGCGCTGGCTCTGGGAGAGGAGAAGATCCCACTTGGCTGACACCACGGCACCAAGAGC
CAAACTCCATCGTTGTCTTCACCACCCTGACCAGAGCCTTGTGCTGTCATCTAGGAACTGGCTGCCCAAACAGGA
CCCTGGCAGCCTCCCTGCTGCTGCGGGGATTACCAGGTGCTGGGAGGCAACAAGCTTTCTACCTTCCAGCCTCTC
CTTAGAGACACCTATTGGCAGAACCTGACTAAATAGCAGTCAGGGAACTGGGTTGCCTCCAGCCATACAGAACAG
AGAGTAGGACAGTGGGGTGGAGCTGAGATGGAGAGGCCCACAGCCCTCAGCACTGTAGGCTCCCAACCCTAGGCT
GTTTCCCCAAAAAGAAAAAGTCTAGTCACTGCTCTGATGCTTGGCCACTCACCCAAGCATTGGGGTAGTTTGTGC
TGGCTTCACTGGGCACCATCAGGCACACCCAGCCTGTAGTTTTTGTTTTATATTACCTAAGTCGGCCAGGTGTGG
TGGGATCACGCCTGTAATCCCAGCACTTAGGGAGGCTGGGGCGGGCGAATCGCCTGAGGCCAGGAATTCAAGACC
AACCTGGCCAACATTGTGAAACCCTGTCTCTACTAAAAATATAAAAATTAGTCGGGCATGATGACAGGCACCTGT
AATCCCAGCTACTCAGGAGGCTGAGGCAGGTGAATCACTTGAACCCGGGAGGTGGAGGCTGCAGTGAGTTAAGAT
TGTGCCACTGCACTCCAGCCTGGGTAACAGAGCAAGACTCTGTCTCAAAAAATATATATGTGTGTGTGTGTGTGT
GTATATATATGTACATGTGTATATAAGTATATATGTGTGTATATATGTATATATACACGTATATACACACACACC
CCTAAGTCATGATTTTGGAGCAATTGTAAGTGGTGTAGTGCTTAATTTTGGCATTCACACATTGATTGTTAGCAT
ATAGAAATGGGATTGATTTTTATGTGATCTTGCTAAACTTTATGCATTTTTAAAATTCCTTTGGATTTCCTATGT
AGATATTTATGTCCTGAAAACAGGAATGTATTTATCCTTTCAAATCAATATGCTTTTTATTTTGTTATTTATGAC
CACTTCATTAAAATATAATTCACATGCCATACACTTCACCCATTTAAAATGTATAATTAGGCCAGGTGTGGTGGC
TCACGTCTGTAATCCCAGCAGTTTGGGAGGCCAAGGCCCTCAGATCTTGAGCCCAGGAGTTCAAGACCACCCTGG

FIGURE 7361B

GCAACAGGCAAAACCCTGTCTCTATTTTTTAAAATACAAGAATTAGCCGCAGTGGCACGCACCTGTCGTCCCAGC
AACCCAGGAGGCTGAGGTAGGAGGATCACTTAAGCCTGGGAAGTCAAGCCTGCAGTGAACCATGATAGCACCACT
GCAGTCCAGCCTGGGCGACAGAGTGAGACCCCATCTCGAAAACAAAAAATGTATAATTCAGTGGTTTTTAGTCTCT
TTGCAGATACATGCAACCATCACCACAATTTGCACATTTTCTAAGCCTCATATACTGATGTGATATTTTGGTGTT
TTGTGACTGGCTTCATTTACTTAGCATATTGTTTTCATGTTTCATTCATGTCGCATGTATGAGTATTCATTCCTT
TATTTGGCTGAATAATATTCCATTATAGTTTGTGCCACATTTTGTTTATCCATTCATCCATTGATGGACATGTGG
ATTGTTTCCACCTTCTGGATAATATGAACTGATACAGTTTGGATATTTTGTCCCCTCCAAATCTCATGAAATAGG
ATCACCAGTGTTGGAGAATGGGGCCTGTTAGGAAGTGTTTGGATCATAGGAACATCTGTCATAAATGGCTTGGTG
CCATCCTTGTAATGAGTGAGTTCTTGCTCTATATTAGTTCACTTGAAAGCTGGTTGTTGGGAACTCCTGCCCTAT
CTGTTCTGCCCTCTCTCGTCATGTGACATGCCTGCTCCTTGTTCACCTTCTGTCATGAGTAAAAGCTTCCTAAGG
CCTTCCCAGGAGCCAAGCAGATGTCAGTACCATGCTTGTACAGCCTGCAGAACTGTGAGCCAAATAAACTTCTTT
ATAAATT

FIGURE 7362

MAAHLVKRCTCLLREAARQAPAMAPVGRLRLAWVAHKTLTSSATSPISHLPGSLMEPVEKERASTPYIEKQVDHL
IKKATRPEELLELLGGSHDLDSNQAAMVLIRLSHLLSEKPEDKGLLIQDAHFHQLLCLLNSQIASVWHGTLSKLL
GSLYALGIPKASKELQSVEQEVRWRMRKLKYKHLAFLAESCATLSQEQHSQELLAELLTHLERRWTEIEDSHTLV
TVMMKVGHLSEPLMNRLEDKHVLNRAQDITLPHLCSVLLAFARLNFHPDQEDQFFSLVHEKLGSELPGLEPALQV
DLVWALCVLQQAREAELQAVLHPEFHIQFLGGKSQKDQNTFQKLLHINATALLEYPEYSGPLLPASAVAPGPSAL
DRKVTPLQKELQETLKGLLGSADKGSLEVATQYGWVLDAEVLLDSDGEFLPVRDFVAPHLAQPTGSQSPPPGSKR
LAFLRWEFPNFNSRSKDLLGRFVLARRHIVAAGFLIVDVPFYEWLELKSEWQKGAYLKDKMRKAVAEELAK

FIGURE 7363

GGGGATTTTGGGCGCCGACCAGACGCGGCATTTTCGGAAAATAGCGCCCTGTGCAGCTGAAGCGCTTTGTGTGTA
GCGGGGCCGCGTCAGCCCGGCCGGGTACGAGGCGCCTCGGGTCCCCGCACCACCTCCTGCTGCCTTCCCGTCGCC
GCTCCCGAAGCTTTTCCAGATGTCCCTGGTAGATTTGGGAAAGAAGCTTTTAGAAGCGGCACGAGCAGGTCAAGA
TGATGAAGTTCGTATTTTGATGGCAAATGGAGCTCCCTTTACTACAGACTGGCTGGGAACTTCTCCACTTCATCT
AGCAGCACAGTATGGTCATTATTCCACCACAGAGGTACTGCTGCGAGCTGGTGTGAGCAGAGATGCCAGAACCAA
AGTGGACCGAACACCATTACATATGGCAGCTTCTGAGGGCCATGCCAGCATAGTAGAGGTTTTACTTAAGCATGG
TGCTGATGTCAATGCAAAGGACATGTTAAAGATGACAGCTCTCCATTGGGCCACAGAACACAATCATCAAGAGGT
GGTGGAACTTTTAATCAAATATGGTGCTGATGTACACACGCAAAGTAAATTTTGTAAAACTGCATTTGATATTTC
AATAGACAATGGAAATGAAGATTTAGCAGAGATATTACAGATTGCTATGCAGAACCAAATCAACACAAACCCAGA
GAGTCCTGACACTGTGACAATACATGCTGCAACACCACAGTTTATCATTGGACCTGGAGGGGTGGTGAACCTAAC
AGGTCTGGTATCTTCAGAAAATTCATCCAAGGCAACAGATGAAACGGGTGTATCTGCTGTTCAGTTTGGAAACTC
TTCTACATCAGTATTAGCTACATTAGCTGCCTTAGCTGAAGCATCTGCTCCATTGTCCAATTCTTCAGAAACTCC
AGTAGTGGCCACAGAAGAAGTAGTTACTGCAGAATCTGTGGATGGTGCCATTCAGCAAGTAGTTAGTTCAGGGGG
TCAGCAAGTCATCACAATAGTTACAGATGGAATTCAGCTTGGAAATTTGCACTCTATTCCAACCAGTGGAATTGG
TCAGCCCATCATTGTGACCATGCCAGATGGACAACAAGTATTAACAGTACCAGCAACAGACATTGCTGAAGAAAC
TGTTATAAGTGAAGAACCACCAGCTAAGAGACAATGTATCGAAATAATTGAAAACCGGGTGGAATCTGCAGAAAT
AGAAGAGAGAGAAGCTCTTCAGAAACAGCTGGATGAAGCAAATCGAGAAGCACAAAAATATCGACAGCAGCTCCT
AAAGAAAGAACAGGAAGCAGAGGCCTACAGACAGAAGTTGGAAGCTATGACTCGTCTTCAGACTAATAAAGAAGC
TGTTTAATTGAAATGAACATGTAGTTTGATTTTACTTTTGGTCAAGAAAGAATACAATCTTGAACTGTACACAAC
AAAGGTACAGCCATGGGAATACAGAATGATAGAAGAGACTACAGATGGATAATTGGACTTAAGCCATGAGCTCTG
AGTTCTTGTAACATAAAACTTTACTTTAGAAGTTGTGAAATGTATTTAAAACTGAATTCTGTAAATAGTTTTTTT
TTTTTTACAGTTCCAAATGAGTTGATAAAGATTGTTGAAGAGATCCAAAACCAGAATAAGCCACTGTTTTTGTGA
ATTCTTTTTGATTTTAGTACAAACCTTAATTTCTCAGAAACGGAACAGTTTTAAGGGTGATCGTTGTTGGTTAGG
CCAAATGTTGTGTAATAATTATGGTGGACTGATGCTGGAATTACTCCTGTAGGTATAAACCTCTGTATGAAGAGA
AGATTTCTCCCAGGAAATCTTTGTACAGCTTTAAGTTGTGTCAGATTCTCTGAAAACATTTTTTAGAAAGCAAAA
TTTTTATATTTGTTCAATTTCAGCTATACCCAAGTAGATTTACATGTATATGAAGCAAATATTTTTAAAAATTTC
TGTTTGTACATATTCTGCATGTTTTATAATTTCAAAATGCATCACTTACATAGGTATTTCTCCCACAGAAATGAT
GAAAGTGACCAGAAAAAAACAAAAACAAAACCCCTTTACTCTGTAGGTCATTGAAACGAAGTAAGCTGGCAGCTG
GTTTTATTGGAATGACAGTGTTCTCGGAAGGAGCAGCCTACAAGATAACTTGAATTTGCCAATTCTGCAAAATCT
GTGCTTTTTTGAAAATTTAAGAGTGGGGACGTGAAACTGTATTCTGTGCCTTCCATCATGATTTCCACATGAAAG
CACTTTAAGGCACTGATTTTAAGATAATGTTTTTGGAAAACCCAATGCATATGGGTTTCTGAAATATTTTATGGA
CTTATTTCTCCCCAGGAAACGATTCTTACGGAAAAAAATTGCTTTTGTATGTAGAACAGGAACTTTTTGTATTAC
AGTGATGCAATAGACATGTCTAATGTAACTTCTACTTTTCCTTTTGAAAGCTCAGTGTCTGTGCTATGACTTGCT
CTCATCACAATATTGTTGAATTCCACAATGTATGGACATTAAACACTGGCAGACTGTTCACTTTTTCTTTTTTTT
TTTTTGGTAAAATATTACTTCAAACCCCTTTTTCTTGCTTTATTTTTCAGTGTTTTATTGCTTTATGAACTGTTT
AACCCTGAAATCCCTCTAGGTTATCTATACTGTATAAAAAAGCAATTACCCTTAAAACTGTACTCTGGCCTACTT
TTCTATTTTGCAATTAAATATCTTTTT

FIGURE 7364

MSLVDLGKKLLEAARAGQDDEVRILMANGAPFTTDWLGTSPLHLAAQYGHYSTTEVLLRAGVSRDARTKVDRTPL
HMAASEGHASIVEVLLKHGADVNAKDMLKMTALHWATEHNHQEVVELLIKYGADVHTQSKFCKTAFDISIDNGNE
DLAEILQIAMQNQINTNPESPDTVTIHAATPQFIIGPGGVVNLTGLVSSENSSKATDETGVSAVQFGNSSTSVLA
TLAALAEASAPLSNSSETPVVATEEVVTAESVDGAIQQVVSSGGQQVITIVTDGIQLGNLHSIPTSGIGQPIIVT
MPDGQQVLTVPATDIAEETVISEEPPAKRQCIEIIENRVESAEIEEREALQKQLDEANREAQKYRQQLLKKEQEA
EAYRQKLEAMTRLQTNKEAV

FIGURE 7365A

TTCGCCGTTTGAATTGCTGCGGGCCCGGGCCCTCACCTCACCTGAGGTCCGGCCGCCCAGGGGTGCGCTATGCCG
TCGGGAGGTGACCAGTCGCCACCGCCCCCGCCTCCCCCTCCGGCGGCGGCAGCCTCGGATGAGGAGGAGGAGGAC
GACGGCGAGGCGGAAGACGCCGCGCCGTCTGCCGAGTCGCCCACCCCTCAGATCCAGCAGCGGTTCGACGAGCTG
TGCAGCCGCCTCAACATGGACGAGGCGGCGCGGCCCGAGGCCTGGGACAGCTACCGCAGCATGAGCGAAAGCTAC
ACGCTGGAGGGAAATGATCTTCATTGGTTAGCATGTGCCTTATATGTGGCTTGCAGAAAATCTGTTCCAACTGTA
AGCAAAGGGACAGTGGAAGGAAACTATGTATCTTTAACTAGAATCCTGAAATGTTCAGAGCAGAGCTTAATCGAA
TTTTTTAATAAGATGAAGAAGTGGGAAGACATGGCAAATCTACCCCCACATTTCAGAGAACGTACTGAGAGATTA
GAAAGAAACTTCACTGTTTCTGCTGTAATTTTTAAGAAATATGAACCCATTTTTCAGGACATCTTTAAATACCCT
CAAGAGGAGCAACCTCGTCAGCAGCGAGGAAGGAAACAGCGGCGACAGCCCTGTACTGTGTCTGAAATTTTCCAT
TTTTGTTGGGTGCTTTTTATATATGCAAAAGGTAATTTCCCCATGATTAGTGATGATTTGGTCAATTCTTATCAC
CTGCTGCTGTGTGCTTTGGACTTAGTTTATGGAAATGCACTTCAGTGTTCTAATCGTAAAGAACTTGTGAACCCT
AATTTTAAAGGCTTATCTGAAGATTTTCATGCTAAAGATTCTAAACCTTCCTCTGACCCCCCTTGTATCATTGAG
AAACTGTGTTCCTTACATGATGGCCTAGTTTTGGAAGCAAAGGGGATAAAGGAACATTTCTGGAAACCCTATATT
AGGAAACTTTATGAAAAAAAGCTCCTTAAGGGAAAAGAAGAAAATCTCACTGGGTTTCTAGAACCTGGGAACTTT
GGAGAGAGTTTTAAAGCCATCAATAAGGCCTATGAGGAGTATGTTTTATCTGTTGGGAATTTAGATGAGCGGATA
TTTCTTGGAGAGGATGCTGAGGAGGAAATTGGGACTCTCTCAAGGTGTCTGAACGCTGGTTCAGGAACAGAGACT
GCTGAAAGGGTGCAGATGAAAAACATCTTACAGCAGCATTTTGACAAGTCCAAAGCACTTAGAATCTCCACACCA
CTAACTGGTGTTAGGTACATTAAGGAGAATAGCCCTTGTGTGACTCCAGTTTCTACAGCTACGCATAGCTTGAGT
CGTCTTCACACCATGCTGACAGGCCTCAGGAATGCACCAAGTGAGAAACTGGAACAGATTCTCAGGACATGTTCC
AGAGATCCAACCCAGGCTATTGCTAACAGACTGAAAGAAATGTTTGAAATATATTCTCAGCATTTCCAGCCAGAC
GAGGATTTCAGTAATTGTGCTAAAGAAATTGCCAGCAAACATTTTCGTTTTGCGGAGATGCTTTACTATAAAGTA
TTAGAATCTGTTATTGAGCAGGAACAAAAAAGACTAGGAGACATGGATTTATCTGGTATTCTGGAACAAGATGCA
TTCCACAGATCTCTCTTGGCCTGCTGCCTTGAGGTCGTCACTTTTTCTTATAAGCCTCCTGGGAATTTTCCATTT
ATTACTGAAATATTTGATGTGCCTCTTTATCATTTTTATAAGGTGATAGAAGTATTCATTAGAGCAGAAGATGGC
CTTTGTAGAGAGGTGGTAAAACACCTTAATCAGATTGAAGAACAGATCTTAGATCATTTGGCATGGAAACCAGAG
TCTCCACTCTGGGAAAAAATTAGAGACAATGAAAACAGAGTTCCTACATGTGAAGAGGTCATGCCACCTCAGAAC
CTGGAAAGGGCAGATGAAATTTGCATTGCTGGCTCCCCTTTGACTCCCAGAAGGGTGACTGAAGTTCGTGCTGAT
ACTGGAGGACTTGGAAGGAGCATAACATCTCCAACCACATTATACGATAGGTACAGCTCCCCACCAGCCAGCACT
ACCAGAAGGCGGCTATTTGTTGAGAATGATAGCCCCTCTGATGGAGGGACGCCTGGGCGCATGCCCCCACAGCCC
CTAGTCAATGCTGTCCCTGTGCAGAATGTATCTGGGGAGACTGTTTCTGTCACACCAGTTCCTGGACAGACTTTG
GTCACCATGGCAACCGCCACTGTCACAGCCAACAATGGGCAAACGGTAACCATTCCTGTGCAAGGTATTGCCAAT
GAAAATGGAGGGATAACATTCTTCCCTGTCCAAGTCAATGTTGGGGGGCAGGCACAAGCTGTGACAGGCTCCATC
CAGCCCCTCAGTGCTCAGGCCCTGGCTGGAAGTCTGAGCTCTCAACAGGTGACAGGAACAACTTTGCAAGTCCCT
GGTCAAGTGGCCATTCAACAGATTTCCCCAGGTGGCCAACAGCAGAAGCAAGGCCAGTCTGTAACCAGCAGTAGT
AATAGACCCAGGAAGACCAGCTCTTTATCGCTTTTCTTTAGAAAGGTATACCATTTAGCAGCTGTCCGCCTTCGG
GATCTCTGTGCCAAACTAGATATTTCAGATGAATTGAGGAAAAAAATCTGGACCTGCTTTGAATTCTCCATAATT
CAGTGTCCTGAACTTATGATGGACAGACATCTGGACCAGTTATTAATGTGTGCCATTTATGTGATGGCAAAGGTC
ACAAAAGAAGATAAGTCCTTCCAGAACATTATGCGTTGTTATAGGACTCAGCCGCAGGCCCGGAGCCAGGTGTAT
AGAAGTGTTTTGATAAAAGGGAAAAGAAAAAGAAGAAATTCTGGCAGCAGTGATAGCAGAAGCCATCAGAATTCT
CCAACAGAACTAAACAAAGATAGAACCAGTAGAGACTCCAGTCCAGTTATGAGGTCAAGCAGCACCTTGCCAGTT
CCACAGCCCAGCAGTGCTCCTCCCACACCTACTCGCCTCACAGGTGCCAACAGTGACATGGAAGAAGAGGAGAGG
GGAGACCTCATTCAGTTCTACAACAACATCTACATCAAACAGATTAAGACATTTGCCATGAAGTACTCACAGGCA
AATATGGATGCTCCTCCACTCTCTCCCTATCCATTTGTAAGAACAGGCTCCCCTCGCCGAATACAGTTGTCTCAA
AATCATCCTGTCTACATTTCCCCACATAAAAATGAAACAATGCTTTCTCCTCGAGAAAAGATTTTCTATTACTTC
AGCAACAGTCCTTCAAAGAGACTGAGAGAAATTAATAGTATGATACGCACAGGAGAAACTCCTACTAAAAAGAGA
GGAATTCTTTTGGAAGATGGAAGTGAATCACCTGCAAAAAGAATTTGCCCAGAAAATCATTCTGCCTTATTACGC
CGTCTCCAAGATGTAGCTAATGACCGTGGTTCCCACTGAGGTTAGTCTCTTGTATTAAACTCTTCACAAAATCTG
TTTAGCAGCAGCCTTTAATGCATCTAGATTATGGAGCTTTTTTCCTTAATCCAGCTGATGAGTTACAGCCTGTTA

FIGURE 7365B

GTAACATGAGGGGACATTTTGGTGAGAAATGGGACTTAACTCCTTCCAGTGTCCTTAGAACATTTTAATTCATCC
CAACTGTCTTTTTTTCCCTACCACTCAGTGATTACTGTCAAGGCTGCTTACAATCCAAACTTGGGTTTTTGGCTC
TGGCAAAGCTTTTAGAAATACTGCAAGAAATGATGTGTACCCAACGTGAGCATAGGAGGCTTCTGTTGACGTCTC
CAACAGAAGAACTGTGTTTCAAGTTCAATCCTACCTGTTTTGTGGTCAGCTGTAGTCCTCATAAAAAGCAAAACA
AAAATTAGGTATTTTGTCCTAAAACACCTGGTAGGAGTGTGTGATTTTTTGCATTCCTGACAAAGGAGAGCACAC
CCAGGTTTGGAGGTCCTAGGTCATTAGCCCTCGTCTCCCGTTCCCTTTGTGCACATCTTCCCTCTCCCCATTCGG
TGTGGTGCAGTGTGAAAAGTCCTTGATTGTTCGGGTGTGCAATGTCTGAGTGAACCTGTATAAGTGGAGGCACTT
TAGGGCTGTAAAATGCATGATTTTGTAACCCAGATTTTGCTGTATATTTGTGATAGCACTTTCTACAATGTGAAC
TTTATTAAATACAAAACTTCCAGGCTAAACATCCAATATTTTCTTTAATGCTTTTATATTTTTTTAAAATGTTAA
AACCCCTATAGCCACCTTTTGGGAATGTTTTAAATTCTCCAGTTTTTTGTTATATAGGGATCAACCAGCTAAGAA
AAGATTTTAAGTCAAGTTGAATTGAGGGGATTAATATGAAAACTTATGACCTCTTCCTTTAGGAGGGAGTTATCT
AAAAGAAATGTCTATTAAGGTGATATATTTAAAAATATTTTTGGGTGTTCCTGGCAGTTTAAAAAAATTGGTTGG
AGAATTTAGGTTTTTATTAGTACCATAGTACCATTTATACAAATTAGAAAATGTTATTTAACAGCTGAATTATCT
ATACATATCTTTATTAATCACTATTGTTCCAGCAGTTTTCAAGTCAAATTAATAATCTTATTAGGGAGAAAATTC
AATTGTAAATTGAATCAGTATAAACAAAGTTACTAGGTAACTTCATATTGCTGAGAGAAATATGGAACTTACATT
GTTCAATTAGAATAGTGTTCTCCCCAAATATTTATAAAACTTCTCAAGATACTGCTACGTGTAATTTTATATGAA
GATAAGTGTATTTTTCAATAAAGCATTTATAAATTAAAAAAAAAAAAAAAAAA

FIGURE 7366

MPSGGDQSPPPPPPPPAAAASDEEEEDDGEAEDAAPSAESPTPQIQQRFDELCSRLNMDEAARPEAWDSYRSMSE
SYTLEGNDLHWLACALYVACRKSVPTVSKGTVEGNYVSLTRILKCSEQSLIEFFNKMKKWEDMANLPPHFRERTE
RLERNFTVSAVIFKKYEPIFQDIFKYPQEEQPRQQRGRKQRRQPCTVSEIFHFCWVLFIYAKGNFPMISDDLVNS
YHLLLCALDLVYGNALQCSNRKELVNPNFKGLSEDFHAKDSKPSSDPPCIIEKLCSLHDGLVLEAKGIKEHFWKP
YIRKLYEKKLLKGKEENLTGFLEPGNFGESFKAINKAYEEYVLSVGNLDERIFLGEDAEEEIGTLSRCLNAGSGT
ETAERVQMKNILQQHFDKSKALRISTPLTGVRYIKENSPCVTPVSTATHSLSRLHTMLTGLRNAPSEKLEQILRT
CSRDPTQAIANRLKEMFEIYSQHFQPDEDFSNCAKEIASKHFRFAEMLYYKVLESVIEQEQKRLGDMDLSGILEQ
DAFHRSLLACCLEVVTFSYKPPGNFPFITEIFDVPLYHFYKVIEVFIRAEDGLCREVVKHLNQIEEQILDHLAWK
PESPLWEKIRDNENRVPTCEEVMPPQNLERADEICIAGSPLTPRRVTEVRADTGGLGRSITSPTTLYDRYSSPPA
STTRRRLFVENDSPSDGGTPGRMPPQPLVNAVPVQNVSGETVSVTPVPGQTLVTMATATVTANNGQTVTIPVQGI
ANENGGITFFPVQVNVGGQAQAVTGSIQPLSAQALAGSLSSQQVTGTTLQVPGQVAIQQISPGGQQQKQGQSVTS
SSNRPRKTSSLSLFFRKVYHLAAVRLRDLCAKLDISDELRKKIWTCFEFSIIQCPELMMDRHLDQLLMCAIYVMA
KVTKEDKSFQNIMRCYRTQPQARSQVYRSVLIKGKRKRRNSGSSDSRSHQNSPTELNKDRTSRDSSPVMRSSSTL
PVPQPSSAPPTPTRLTGANSDMEEEERGDLIQFYNNIYIKQIKTFAMKYSQANMDAPPLSPYPFVRTGSPRRIQL
SQNHPVYISPHKNETMLSPREKIFYYFSNSPSKRLREINSMIRTGETPTKKRGILLEDGSESPAKRICPENHSAL
LRRLQDVANDRGSH

FIGURE 7367

GGGGAGTTGAAACCTAATTTTGTGGCGTAGCAGCTATGCAGCTTGAAATCCAAGTAGCACTAAATTTTATTATTT
CGTATTTGTACAATAAGCTTCCCAGGAGACGTGTCAACATTTTTGGTGAAGAACTTGAAAGACTTCTTAAGAAGA
AATATGAAGGGCACTGGTATCCTGAAAAGCCATACAAAGGATCGGGGTTTAGATGTATACACATAGGGGAGAAAG
TGGACCCAGTGATTGAACAAGCATCCAAAGAGAGTGGTTTGGACATTGATGATGTTCGTGGCAATCTGCCACAGG
ATCTTAGTGTTTGGATCGACCCATTTGAGGTTTCTTACCAAATTGGTGAAAAGGGACCAGTGAAGGTGCTTTACG
TGGATGATAATAATGAAAATGGATGTGAGTTGGATAAGGAGATCAAAAACAGCTTTAACCCAGAGGCCCAGGTTT
TTATGCCCATAAGTGACCCAGCCTCATCAGTGTCCAGCTCTCCATCGCCTCCTTTTGGTCACTCTGCTGCTGTAA
GCCCTACCTTCATGCCCCGGTCCACTCAGCCTTTAACCTTTACCACTGCCACTTTTGCTGCCACCAAGTTCGGCT
CTACCAAAATGAAGAATAGTGGCCGTAGCAACAAGGTTGCACGTACTTCTCCCATCAACCTCGGCTTGAATGTGA
ATGACCTCTTGAAGCAGAAAGCCATCTCTTCCTCAATGCACTCTCTGTATGGGCTTGGCTTGGGTAGCCAGCAGC
AGCCACAGCAACAGCAGCAGCCAGCCCAGCCGCCACCGCCACCACCACCACCACAGCAGCAACAACAGCAGAAAA
CCTCTGCTCTTTCTCCTAATGCCAAGGAATTTATTTTTCCTAATATGCAGGGTCAAGGTAGTAGTACCAATGGAA
TGTTCCCAGGTGACAGCCCCCTTAACCTCAGTCCTCTCCAGTACAGTAATGCCTTTGATGTGTTTGCAGCCTATG
GAGGCCTCAATGAGAAGTCTTTTGTAGATGGCTTGAATTTTAGCTTAAATAACATGCAGTATTCTAACCAGCAAT
TCCAGCCTGTTATGGCTAACTAAAAAAAAAGAAAATGTATCGTACAAGTTAAAATGCACGGGCCCAAGGGGGATTT
TTTTTTTCACCTCCTTGAGAATTTTTTTTTTTAAGCTTATAGTAAGGATACATTCAAGCTTGGTTAAAAAAATAA
TAATAAAACATGCATCATTTTTCATTTGCCAACCAAGCACAAAGTTATTTTATACTGACTGTATATTTTAAAGTA
TACTCTCAGATATGGCCTCTTACAGTATTTAAGATATAGCAAGGACATGGCTGATTTTTTTTTATAAAAATTGGC
ACTAATAAGTGGGTTTATTGGTCTTTTCTAATTGTATAATTTAATTTAGTACAAAGTTTGTAAAATATCAGAGGA
TATATATATATTGTTTCTACGACATGGTATTGCATTTATATCTTTTTACTACAGTGATCTGTGACAGCAGCAGCT
TCATGTTGTATTTTTTTTACTGAAATTGTAAAATATCCATCTTAAAGACATCAACTATTCTAAAAATTGTGTACA
GGATATTCCTTTAGTGGTGGAATTAAAATGTACGAATACTTGCTTTTTCAAAAAAATGTATTTTCTGTTAAAAGT
TTAAAGATTTTTGCTATATATTATGGAAGAAAAATGTAATCGTAAATATTAATTTTGTACCTATATTGTGCAATA
CTTGAAAAAAACGGTATAAAAGTATTTTGAGTCAGTGTCTTACATGTTAAGAGGGACTGAAATAGTTTATATTAA
GTTTGTATTAAAATTCTTTAAAATTAAAAA

FIGURE 7368

MQLEIQVALNFIISYLYNKLPRRRVNIFGEELERLLKKKYEGHWYPEKPYKGSGFRCIHIGEKVDPVIEQASKES
GLDIDDVRGNLPQDLSVWIDPFEVSYQIGEKGPVKVLYVDDNNENGCELDKEIKNSFNPEAQVFMPISDPASSVS
SSPSPPFGHSAAVSPTFMPRSTQPLTFTTATFAATKFGSTKMKNSGRSNKVARTSPINLGLNVNDLLKQKAISSS
MHSLYGLGLGSQQQPQQQQQPAQPPPPPPPPQQQQQQKTSALSPNAKEFIFPNMQGQGSSTNGMFPGDSPLNLSP
LQYSNAFDVFAAYGGLNEKSFVDGLNFSLNNMQYSNQQFQPVMAN

FIGURE 7369

CCCAAAATGGCGGCAGCGATGGATGTGGATACCCCGAGCGGCACCAACAGCGGCGCGGGCAAGAAGCGCTTTGAA
GTGAAAAAGTGGAATGCAGTAGCCCTCTGGGCCTGGGATATTGTGGTTGATAACTGTGCCATCTGCAGGAACCAC
ATTATGGATCTTTGCATAGAATGTCAAGCTAACCAGGCGTCCGCTACTTCAGAAGAGTGTACTGTCGCATGGGGA
GTCTGTAACCATGCTTTTCACTTCCACTGCATCTCTCGCTGGCTCAAAACACGACAGGTGTGTCCATTGGACAAC
AGAGAGTGGGAATTCCAAAAGTATGGGCACTAGGAAAAGACTTCTTCCATCAAGCTTAATTGTTTTGTTATTCAT
TTAATTGACTTTCCCTGCTGTTACCTAATTACAAATTGGATGGAACTGTGTTTTTTTCTGCTTTGTTTTTTCAGT
TTGCTGTTTCTGTAGCCATATTGTATTCTGTGTCAAATAAAGTCCAGTTGGATTCTGG

FIGURE 7370

MAAAMDVDTPSGTNSGAGKKRFEVKKWNAVALWAWDIVVDNCAICRNHIMDLCIECQANQASATSEECTVAWGVC
NHAFHFHCISRWLKTRQVCPLDNREWEFQKYGH

FIGURE 7371

GAGAGGAGACACCGCCGCAGTTGCCGGTACATCGGGGATTTCTGGCTCTTTCCTCTTCGCCTTAAATTCGGGTGT
CTTTTATGAATAATCAAAAGCAGCAAAAGCCAACGCTATCAGGCCAGCGTTTTAAAACTAGAAAAAGAGATGAAA
AAGAGAGGTTTGACCCTACTCAGTTTCAAGACTGTATTATTCAAGGCTTAACTGAAACCGGTACTGATTTGGAAG
CAGTAGCTAAGTTTCTTGATGCTTCTGGAGCAAAACTTGATTACCGTCGATATGCAGAAACACTCTTTGACATTC
TGGTGGCTGGTGGAATGCTGGCCCCAGGTGGTACACTGGCAGATGACATGATGCGTACAGATGTCTGCGTGTTTG
CAGCCCAAGAAGATCTAGAGACCATGCAAGCATTTGCTCAGGTTTTTAACAAGTTAATCAGGCGCTACAAATACC
TGGAGAAAGGTTTTGAAGATGAAGTAAAAAAGCTGCTGCTGTTCTTGAAGGGTTTTTCAGAGTCGGAGAGGAACA
AGCTAGCTATGTTGACTGGTGTTCTTCTGGCTAATGGAACACTTAATGCATCCATTCTTAATAGCCTTTATAATG
AAAATTTGGTTAAAGAAGGAGTTTCAGCAGCTTTTGCTGTGAAGCTCTTTAAATCATGGATAAATGAAAAAGATA
TCAATGCAGTAGCTGCAAGTCTTCGGAAAGTCAGCATGGATAACAGACTGATGGAACTCTTTCCTGCCAATAAGC
AAAGTGTTGAACACTTCACAAAATATTTTACTGAGGCAGGCTTGAAAGAGCTTTCAGAATATGTTCGGAATCAGC
AAACCATCGGAGCTCGTAAGGAGCTCCAGAAAGAACTTCAAGAACAGATGTCCCGTGGTGATCCATTTAAGGATA
TAATTTTATATGTCAAGGAGGAGATGAAAAAAAACAACATCCCAGAGCCAGTTGTCATCGGAATAGTCTGGTCAA
GTGTAATGAGCACTGTGGAATGGAACAAAAAAGAGGAGCTTGTAGCAGAGCAAGCCATCAAGCACTTGAAGCAAT
ACAGCCCTCTACTTGCTGCCTTTACTACTCAAGGTCAGTCTGAGCTGACTCTGTTACTGAAGATTCAGGAGTATT
GCTATGACAACATTCATTTCATGAAAGCCTTCCAGAAAATAGTGGTGCTTTTTTATAAAGCTGAAGTCCTGAGCG
AGGAGCCCATTTTGAAGTGGTATAAAGATGCACATGTTGCAAAGGGGAAGAGTGTTTTCCTTGAGCAAATGAAAA
AGTTTGTAGAATGGCTCAAAAATGCTGAAGAAGAATCTGAATCTGAAGCTGAAGAAGGTGACTGAATTTTGAAAC
TACACCCTCAGTAAAGCAAACAGGAGTTGTAGATAAAATGTCATGTCTCATGTGTCCTGGTTCTTACATCTTCCT
ACCTCCCTGTATCAAGCATGATATAAGGGCTTTCATGGCAAATTTTATTTTAACTGTTTCTATGGTTGCTGGAAA
TGTTGGGTTTAGTTTCTAAAACCATGTTTTAAGTAGCTACAGGAGCTATAGATTTGAATCTAATGTTGCATTAGT
CTTTTCAGTTATCTTCTACCTCCTGTATTTTCTACTGTAATAATGTAATTTAAGGCCTTCCACAATGAACAGTTC
ACTTTATTCCCTGGGTTTTCTATAAACAGTTTTAAGGATATGATTTGGTTAAAAAATAATTTGTTATAAAAATTC
TGTTTGCAAATTAAACTGGAAAAGTATCCAGAGTCTCAAAAGGCAATGATTTGTGAGATAATATGGCATGCCCGG
AGCCCTGCTCATCAATGAAAAACCCATATGTAATAATCGAATTCATTTAACATGAATCTTGAGTACGTGGACCAT
TGCTTGCATGTTAACTTTTTGTTTTGTTTTGTTTTGTTTTGTTTTGCATTTTTAACTCCAGATATCCTAAAGCTC
AATTGTTTGGTCTCTGGTTTTCATCCTTAGAGAAGCCATGGAGAACAGACTTGAAAAGTTTAGGAAATCATAATG
TGGCAGAGGTGGTGGGAAGAAGAAAGTTGAGCTTTTTCCCCTTGAGAAACTTCTGCATTTAGTTTCTATCTTTCC
AGGCAAAACAAATGGGTATTCTTTTCATACAACCATTTTCAAATGAACCTTAGAAAAGTCTTAACATTTAAGGTA
TTTTATGCACAGAATACACTTAGATTGATAGGAAAGAACTCGTAATGGAGTTTGAGTAAAGAAAATGACTGATGT
ACTAAACCCAGTAAAAATTGTTGAAAATGTTAAAGGTCAGCATGTTCTAATTGGGAATCTAGATATAGCTTAGAT
TTCCTATTGGCTTAGAGTATTTGCTATAACAAATGAAGTGCAATGACAATTATATATTCCTACTCGGTCATACTG
GACTGGCTTCGTTCTCTTAATATACTCAGTAATGACTCAAGCCTCTGGCTATTAACATACCCTAGTTGCCGTTTT
TTAATTGCCATGAGCCAAATACTTCTTGGTATACAATTGATCCATTTATTTTAATGGCTGCCTTTTCATTTTCAT
CTTTTCTTGCTGCTACCCATCTATGTATGTAGTCATTGGGGGGAAAATGTAGCCACATTTTTTATGGGAAGACTT
TGTGTTAAAAGTGAACATTTTGAAGGTTTTTAACTGGTGAAACTAGCCTGGAATAATGCCACCAGAGACTGAGTG
GAAATCGCCCCTTTTGAAGGTGCCATTCTTATGAGCCAAAAGTTTGTCATTTAAAAGTTCATTTTGAGGGAATAA
CATGTAATATAATTTGAAATAAAGGTATAGTAACCTTAAAAAGAACATTATAACTGATTGTTGTGAATGGGGTGA
ATTTGTTAAAATGAGTAACTTTGATAAAGTTTTTCATGCACAGGCAAAATGTATTCACTAGATTTCTACGTAGTG
ATCTGCTTTTACTTTGTAATTTGTAGTTCTCAAAAGACTTTTTTTTAAAAAAATAAAGTCCATACTTACACTT

FIGURE 7372

MNNQKQQKPTLSGQRFKTRKRDEKERFDPTQFQDCIIQGLTETGTDLEAVAKFLDASGAKLDYRRYAETLFDILV
AGGMLAPGGTLADDMMRTDVCVFAAQEDLETMQAFAQVFNKLIRRYKYLEKGFEDEVKKLLLFLKGFSESERNKL
AMLTGVLLANGTLNASILNSLYNENLVKEGVSAAFAVKLFKSWINEKDINAVAASLRKVSMDNRLMELFPANKQS
VEHFTKYFTEAGLKELSEYVRNQQTIGARKELQKELQEQMSRGDPFKDIILYVKEEMKKNNIPEPVVIGIVWSSV
MSTVEWNKKEELVAEQAIKHLKQYSPLLAAFTTQGQSELTLLLKIQEYCYDNIHFMKAFQKIVVLFYKAEVLSEE
PILKWYKDAHVAKGKSVFLEQMKKFVEWLKNAEEESESEAEEGD

FIGURE 7373

CTCCGAACAGGAAGAGGACGAAAAAAATAACCGTCCGCGACGCCGAGACAAACCGGACCCGCAACCACCATGAAC
AGCAAAGGTCAATATCCAACACAGCCAACCTACCCTGTGCAGCCTCCTGGGAATCCAGTATACCCTCAGACCTTG
CATCTTCCTCAGGCTCCACCCTATACCGATGCTCCACCTGCCTACTCAGAGCTCTATCGTCCGAGCTTTGTGCAC
CCAGGGGCTGCCACAGTCCCCACCATGTCAGCCGCATTTCCTGGAGCCTCTCTGTATCTTCCCATGGCCCAGTCT
GTGGCTGTTGGGCCTTTAGGTTCCACAATCCCCATGGCTTATTATCCAGTCGGTCCCATCTATCCACCTGGCTCC
ACAGTGCTGGTGGAAGGAGGGTATGATGCAGGTGCCAGATTTGGAGCTGGGGCTACTGCTGGCAACATTCCTCCT
CCACCTCCTGGATGCCCTCCCAATGCTGCTCAGCTTGCAGTCATGCAGGGAGCCAACGTCCTCGTAACTCAGCGG
AAGGGGAACTTCTTCATGGGTGGTTCAGATGGTGGCTACACCATCTGGTGAGGAACCAAGGCCACCTCTGTGCCG
GGAAAGACATCACATACCTTCAGCACTTCTCACAATGTAACTGCTTTAGTCATATTAACCTGAAGTTGCAGTTTA
GACACATGTTGTTGGGGTGTCTTTCTGGTGCCCAAACTTTCAGGCACTTTTCAAATTTAATAAGGAACCATGTAA
TGGTAGCAGTACCTCCCTAAAGCATTTTGAGGTAGGGGAGGTATCCATTCATAAAATGAATGTGGGTGAAGCCGC
CCTAAGGATTTTCCTTTAATTTCTCTGGAGTAATACTGTACCATACTGGTCTTTGCTTTTAGTAATAAAACATCA
AATTAGGTTTGGAGGGAACTTTGATCTTCCTAAGAATTAAAGTTGCCAAATTATTCTGATTGGTCTTTAATCTCC
TTTAAGTCTTTGATATATATTACTTGTTATAAATGGAACGCATTAGTTGTCTGCCTTTTCCTTTCCATCCCTTGC
CCCACCCATCCCATCTCCAACCCTAGTCTTCCATTTCCTCCCGCCAGTCTCCATTGAATCAATGGTGCAGGACAG
AAAGCCAGTCAGACTAATTTCCTTCTTTCCTCGCACTTCTCCCCACTCGTCATCTTTTAACTAGTGTTTCACAAG
GATCCTCTGAAACCCTCTCTGTGCCCCAAGTACAGATGCCATTACTTCTGCTTTCGTATCTCCTCAGGCAAAAGT
GGAGGGTGCCTTATGGGCCCTCCTCATAGGTTGTCTCTGCATACACGAACCTAACCCAAATTTGCTTTGGTGCCA
GAAAAACTGAGCTATGTTTGAACAAAGATGTCGTGCAAACTGTACTGTGAACAACAGTTGGTTTAAAATATGAGG
GGCAAGGAGGAGGATGCATTTCAAAAGCTTGATTGATGTGTTCAGAGCTAAATTAAGAGGAGTTTTCAGATCAAA
AACTGGTTACCATTTTTTGTCAGAGTGTCTGATGCGGCCACTCATTCGGCTCCCCAGAATTCCTAGACTGGGTTA
ATAGGGTCATATTGTGAATGTCTCACTACAAAATGACTTGAGTCCAGTGAAATCTCATTAGGGTTTAAGAATATT
TCAGGGATCCTTAATGTTTTGATTTTTGTTTTCTGAAATTGGATTTTATTTTATTTTATCTTATAATTTCAGTTC
ATCTAAATTGTGTGTTCTGTACATGTGATGTTTGACTGTACCATTGACTGTTATGGAAGTTCAGCGTTGTATGTC
TCTCTCTACACTGTGGTGCACTTAACTTGTGGAATTTTTATACTAAAAATGTAGAATAAAGACTATTTTGAAGAT
TTGAATAAAGTGATGAAGTTGC

FIGURE 7374

MNSKGQYPTQPTYPVQPPGNPVYPQTLHLPQAPPYTDAPPAYSELYRPSFVHPGAATVPTMSAAFPGASLYLPMA
QSVAVGPLGSTIPMAYYPVGPIYPPGSTVLVEGGYDAGARFGAGATAGNIPPPPPGCPPNAAQLAVMQGANVLVT
QRKGNFFMGGSDGGYTIW

FIGURE 7375

GGCACGAGTGGCGGCAGAGGCAGTGCGGATCCGGCGTTCTCCACTGATCTTTTCCAAGGCTGTACAGAC**ATG**GCG
GCGGCTTTTCGGAAGGCGGCTAAGTCCCGGCAGCGGGAACACAGAGAGCGAAGCGAGCCTGGCTTTCGAAAACAT
CTGGGCCTGCTGGAGAAAAAGAAAGATTACAAACTTCGTGCAGATGACTACCGTAAAAAACAAGAATACCTCAAA
GCTCTTCGGAAGAAGGCTCTTGAAAAAAATCCAGATGAATTCTACTACAAAATGACTCGGGTTAAACTCCAGGAT
GGAGTACATATTATTAAGGAGACTAAGGAAGAAGTAACCCCAGAACAACTAAAGCTGATGAGAACTCAGGACGTC
AAATATATAGAAATGAAGAGGGTTGCAGAAGCTAAGAAAATCGAAAGACTAAAATCAGAGCTCCATCTGCTGGAT
TTCCAGGGGAAGCAACAGAACAAGCATGTGTTCTTTTTTGACACCAAAAAGGAAGTTGAACAGTTTGATGTCGCA
ACTCACCTGCAAACAGCCCCGGAGCTAGTCGACAGAGTCTTTAATAGGCCCAGGATAGAGACCTTGCAGAAAGAA
AAAGTGAAAGGAGTTACCAATCAGACTGGACTTAAGCGAATAGCTAAAGAAAGGCAAAAGCAGTATAACTGCCTG
ACACAGCGGATTGAACGAGAGAAGAAATTGTTCGTTATTGCTCAGAAAATTCAAACACGCAAAGATCTTATGGAT
AAAACTCAGAAAGTGAAGGTGAAGAAAGAAACGGTGAACTCCCCAGCTATTTATAAATTTCAGAGTCGTCGAAAA
CGT**TGA**CGTGTTATAGATAAGCCTTGTCATTCTGTATCAAAAATCTGTTGTCGTTTTCTAGTAACTTCAAATTCC
ATTACTCCAAATGGCATGGTTTTCCGGTTTGTAACCATAACTAAATTGTCAGTCTGACATTTAATGTCTTTCTAT
GGACAACATTAAATCTCCCTCCCTTCTGTAATTGTTTTTGGATTGTGAAA

FIGURE 7376

MAAAFRKAAKSRQREHRERSEPGFRKHLGLLEKKKDYKLRADDYRKKQEYLKALRKKALEKNPDEFYYKMTRVKL
QDGVHIIKETKEEVTPEQLKLMRTQDVKYIEMKRVAEAKKIERLKSELHLLDFQGKQQNKHVFFFDTKKEVEQFD
VATHLQTAPELVDRVFNRPRIETLQKEKVKGVTNQTGLKRIAKERQKQYNCLTQRIEREKKLFVIAQKIQTRKDL
MDKTQKVKVKKETVNSPAIYKFQSRRKR

FIGURE 7377

ATTCCGGTTGTTGCACCATGGCGTCCATGGGGACCCTCGCCTTCGATGAATATGGGCGCCCTTTCCTCATCATCA
AGGATCAGGACCGCAAGTCCCGTCTTATGGGACTTGAGGCCCTCAAGTCTCATATAATGGCAGCAAAGGCTGTAG
CAAATACAATGAGAACATCACTTGGACCAAATGGGCTTGATAAGATGATGGTGGATAAGGATGGAGATGTGACTG
TAACTAATGATGGGGCCACCATCTTAAGCATGATGGATGTTGATCATCAGATTGCCAAGCTGATGGTGGAACTGT
CCAAGTCTCAGGATGATGAAATTGGAGATGGAACCACAGGAGTGGTTGTCCTGGCTGGTGCCTTGTTAGAAGAAG
CGGAGCAATTGCTAGACCGAGGCATTCACCCAATCAGAATAGCCGATGGCTATGAGCAGGCTGCTCGTGTTGCTA
TTGAACACCTGGACAAGATCAGCGATAGCGTCCTTGTTGACATAAAGGACACCGAACCCCTGATTCAGACAGCAA
AAACCACGCTGGGCTCCAAAGTGGTCAACAGTTGTCACCGACAGATGGCTGAGATTGCTGTGAATGCCGTCCTCA
CTGTAGCAGATATGGAGCGGAGAGACGTTGACTTTGAGCTTATCAAAGTAGAAGGCAAAGTGGGCGGCAGGCTGG
AGGACACTAAACTGATTAAGGGCGTGATTGTGGACAAGGATTTCAGTCACCCACAGATGCCAAAAAAAGTGGAAG
ATGCGAAGATTGCAATTCTCACATGTCCATTTGAACCACCCAAACCAAAAACAAAGCATAAGCTGGATGTGACCT
CTGTCGAAGATTATAAAGCCCTTCAGAAATACGAAAAGGAGAAATTTGAAGAGATGATTCAACAAATTAAAGAGA
CTGGTGCTAACCTAGCAATTTGTCAGTGGGGCTTTGATGATGAAGCAAATCACTTACTTCTTCAGAACAACTTGC
CTGCGGTTCGCTGGGTAGGAGGACCTGAAATTGAGCTGATTGCCATCGCAACAGGAGGGCGGATCGTCCCCAGGT
TCTCAGAGCTCACAGCCGAGAAGCTGGGCTTTGCTGGTCTTGTACAGGAGATCTCATTTGGGACAACTAAGGATA
AAATGCTGGTCATCGAGCAGTGTAAGAACTCCAGAGCTGTAACCATTTTTATTAGAGGAGGAAATAAGATGATCA
TTGAGGAGGCGAAACGATCCCTTCACGATGCTTTGTGTGTCATCCGGAACCTCATCCGCGATAATCGTGTGGTGT
ATGGAGGAGGGGCTGCTGAGATATCCTGTGCCCTGGCAGTTAGCCAAGAGGCGGATAAGTGCCCCACCTTAGAAC
AGTATGCCATGAGAGCGTTTGCCGACGCACTGGAGGTCATCCCCATGGCCCTCTCTGAAAACAGTGGCATGAATC
CCATCCAGACTATGACCGAAGTCCGAGCCAGACAGGTGAAGGAGATGAACCCTGCTCTTGGCATCGACTGTTTGC
ACAAGGGGACAAATGATATGAAGCAACAGCATGTCATAGAAACCTTGATTGGCAAAAAGCAACAGATATCTCTTG
CAACACAAATGGTTAGAATGATTTTGAAGATTGATGACATTCGTAAGCCTGGAGAATCTGAAGAATGAAGACATT
GAGAAAACTATGTAGCAAGATCCACTTCTGTGATTAAGTAAATGGATGTCTCGTGATGCATCTACAGTTATTTAT
TGTTACATCCTTTTCCAGACACTGTAGATGCTATAATAAAAATAGCTGTTTGGTAACCATAGTTTCACTTGTTCA
AAGCTGTGTAATCGTGGGGGTACCATCTCAACTGCTTTTGTATTCATTGTATTAAAAGAATCTGTTTAAACAACC
TTTATCTTCTCTTCGGGTTTAAGAAACGTTTATTGTAACAGTAATTAAATGCTGCCTTAATTG

FIGURE 7378A

AAGTACTGACTGTTCAAAGCTCAGGCAAACCATGCAGATCCACGTGTTGTTGGAGGAGGCGCTCCCTTCAGGAGA
CCACAGAGGGGGAGTGACTGTGGCTGACCATGTGGGCAGAGGGGCTGGCGGGCTGGCCCCTGCGAGAGGCGGACT
CAGGGCTGCTGGATGCTCCGTCCTTGGCCGCTTTGATCTGGAGCCACGTGTCACCCAGAGCTTTGGCAAAGTGGT
CGTCCACGGAGCCCGTGATGGACACGGAGTTGGGTGCCGGCTCGGGCTCCTTGTAATTCTTGCCCAGGCTCCTGC
GGAAATGCTCCTCCACCACGGGGTCACAGGTGGTGGCAGCGCTCGGTGGCCTCCGGTAGCTGGCAGGCCCGGGCG
CGGCCTCGTGCCGAATTCGGCACGAGGGGGTTTCGGCGGCCGGGAGGGAGTTGTCGGCGCCGCGGCCGCTGCGGA
CGGACGCTCGCCTGCCGGCTGAGGAAAAAGAAGCAACTAACAAAACACTGTGATAATAAGGATTATTCAGTATGC
AGTTTGCAGGATATCCATGACGACATTGAAAATGAATTTTTTGTATTCACCAGATATTCTTATATGAGAAGATCT
ATTTTAAACAGTCTAAATATTTTTTCTTCTGTTGGACCAGC**ATG**GCAGGATTTAAGCGAGGGTATGATGGAAAGA
TTGCTGGATTATATGATCTGGATAAAACCTTGGGTCGAGGCCATTTTGCCGTGGTTAAACTTGCCAGGCATGTCT
TTACGGGTGAAAAGGTGGCAGTAAAAGTTATTGACAAGACAAAACTGGACACTCTAGCTACTGGTCATCTTTTCC
AGGAAGTGAGATGCATGAAACTAGTGCAGCATCCTAACATCGTCCGCCTTTATGAAGTTATTGACACCCAGACCA
AACTATATCTTATTCTAGAACTTGGGGATGAAGGAGATATGTTTGATTATATAATGAAACATGAGGAGGGTCTTA
ATGAAGACTTGCCCAAGAAGTATTTTGCTCAGATAGTTCATGCTATATCTTATTGCCATAAACTCCATGTGGTTC
ACAGAGACTTAAAACCAGAGAATGTAGTCTTCTTTGAAAAACAAGGTCTTGTAAAGTTGACAGACTTTGGGTTCA
GCAACAAATTTCAACCAGGGAAGAAGCTCACTACAAGCTGTGGATCTCTTGCATATTCCGCTCCAGAAATTCTGC
TTGGTGATGAGTATGATGCACCTGCAGTAGATATTTGGAGTCTGGGAGTGATCCTTTTCATGTTGGTGTGTGGGC
AGCCGCCCTTTCAAGAAGCCAATGACAGTGAAACACTGACAATGATCATGGATTGCAAATATACAGTACCATCCC
ATGTGTCTAAAGAGTGTAAAGACCTAATCACACGGATGCTACAGAGAGATCCCAAGAGAAGGGCTTCTTTAGAAG
AGATTGAAAATCATCCTTGGCTTCAGGGAGTGGACCCTTCACCAGCTACAAAGTATAACATTCCCCTTGTGTCAT
ACAAAAATCTCTCGGAAGAGGAGCACAACAGCATCATTCAGCGCATGGTGCTTGGGGACATAGCGGATCGAGACG
CCATTGTAGAAGCCCTGGAAACCAACAGGTATAACCATATCACAGCCACATACTTCCTGCTGGCTGAAAGGATCC
TGAGAGAAAAGCAAGAGAAAGAAATACAGACCAGATCTGCAAGCCCGAGCAATATCAAGGCCCAGTTTAGGCAGT
CATGGCCAACCAAAATTGATGTACCCCAGGACCTTGAGGATGACCTCACGGCCACTCCTTTGTCCCACGCGACTG
TCCCTCAGTCTCCTGCTCGGGCTGCTGACAGTGTCCTCAATGGCCACAGGAGCAAAGGCCTGTGTGACTCAGCTA
AGAAAGATGACCTCCCTGAGTTGGCTGGACCAGCACTCTCTACGGTGCCACCCGCAAGCTTAAAACCCACAGCCA
GTGGGCGGAAGTGTCTGTTCAGGGTGGAAGAAGATGAAGAGGAAGATGAGGAGGACAAGAAACCCATGTCCCTCT
CAACACAAGTGGTTTTGCGCCGGAAGCCATCTGTAACCAACCGCCTGACATCCAGGAAGAGTGCGCCCGTCCTCA
ACCAGATCTTTGAGGAAGGGGAATCTGATGATGAGTTTGACATGGATGAGAATCTGCCTCCCAAGTTGAGCAGGT
TAAAGATGAATATAGCTTCTCCAGGTACAGTTCACAAACGCTACCACCGGAGGAAAAGTCAGGGCCGGGGCTCCA
GCTGCAGTAGTTCGGAGACCAGTGATGATGATTCTGAAAGCCGGCGGCGGCTCGATAAAGATAGCGGGTTCACCT
ACTCCTGGCACCGACGGGATAGCAGCGAGGGGCCCCCTGGCAGTGAGGGGGATGGCGGGGGCCAGAGCAAGCCGA
GCAATGCCAGTGGAGGGGTGGACAAGGCCAGCCCCAGTGAGAACAATGCTGGTGGGGGCAGTCCCTCCAGCGGCT
CGGGTGGCAACCCCACCAATACATCGGGTACCACACGCCGCTGTGCCGGCCCCAGCAACTCCATGCAGCTGGCCT
CTCGCAGTGCTGGGGAGCTCGTTGAGAGCCTCAAACTCATGAGCCTCTGCCTCGGCTCCCAGCTTCATGGGAGCA
CCAAGTACATTATTGATCCACAGAATGGCTTGTCATTTTCCAGTGTGAAAGTCCAAGAGAAATCTACGTGGAAAA
TGTGCATTAGCTCCACAGGGAATGCAGGGCAGGTCCCTGCAGTGGGCGGCATAAAGTTTTTCTCTGACCACATGG
CAGATACCACCACTGAATTGGAACGGATAAAGAGCAAGAACCTGAAAAATAACGTGCTGCAGCTACCTCTGTGCG
AAAAGACCATCTCTGTGAACATCCAGCGGAACCCTAAGGAGGGGCTGCTGTGCGCATCCAGCCCAGCCAGCTGTT
GCCATGTCATC**TGA**CTGTGGCCCCATCTGGCCGCTAGCACGCTTCCTGCTCAGAGCAGTGAAGACCGGCTCACTT
CACTGTTCCATTTGGTTTTACTATTTTAAAGTGGGCGTTAGGAGCAATTATTTATTACCTTTCCATTTGTTCGCC
TGATGATGTGACAATGCATGGTCTTTGTGCATGCTGCTAGACACTTTTCTTTCCCAGCCGAAAAGCCTATTATGT
AATTTTTACATTCATAATTTTAATGTGGATGATCAGGATTAAATCAAGATATATATCTGGAACCTCTTATAAATG
GAGCACTTAGAAATTTGTTGTTCTGCACTTAACCTAGAGAGAGAAAAAATGCTTTTCTTTGTGAAAAATCTGAAT
TCCTGTCCTGACCTTCTGTGATGTGGAAACCCTAGGCTCTGAGACACACTCTCTGGTGTCTGAGACAGAACCAAA
GCAATAACGTTGTGATGCCCACAGGCCTGGAGCCAGCTAGCGACCTTGTGCCGCCCAGCTGTCCATGGCCCGTGC
AGAGCAGAGGACAGTGAGTGTCTGCACTGAGAACCTTAAACCACAGTTGAACATACCCACACCTGTTTGTCTTAA
GCTATAGTGTAAAAACAAAGTTTGGGCTCTGAAAATTTAACTGAAAAAGATTTCCTTGTTTTTGTAATAGGTGAG

FIGURE 7378B

ATAAAGTACTTAGATTTATAAGGCAGCTTCCCCTGTAGTGATAAATTACAAGCAGACAATCTTATTTTGTAATGT
GATGAAGTGATGATGTCTTAACTCTACTTAGAGAGTGTATGTCTGTCTAACAGAACAAAAAGATGCTCTGTGTAA
ATTCCTTCCTGTAGGGCACACTGCAGGATTTCCATGTAGATAGAAGAACTATAGGGCCTAGTACAGAAGGTGCAC
ACAAATGTTGGCAAAGTCAAACCCCATGAATTAAAACCTACTGGAATTTGGTTTTTAGGAGTTTGGTAATTAGAT
TATCTCTTTTGTTATTTTCATTCAGTTATATCCTTTGGCTCAGCTAGCTTTGAAATTGGCTGATGAAAAAATATA
CATAAAAGGGTAAAATTCACACATACAGCAAACAAAAATGCACAAAGCCTGCTTCGTAACTTTTTTTTCTGGAAT
TGTTTTTCACTTTGCCTTTTTCTGCCAAAACAATAATCAAAGAACTCTTGCTTTAACCTATTCCTGTACAAAGAC
TGTTTTTGACCAGATAATCATCTGTTGTGGCATTCTATCTTGTAGGACACTGTATATTGCAAATTGCTGATTATG
GAAGGGGCCAGTTGCTGTTTTTTCATGCAGTGCCCTGGGAGTCTTAAAAGCAGTGCTTAGCAACATTGGTGATAG
CATGTGGCTGGGACCCAGGGCCCTTCCCCACTCTTCAGCCCCGAGTCATGTGTCTGAGGTGACGGACTGAGACGC
ATCTGGTCCTGTAATTCAGAGAGTGGGCACATCACCAAAGAACTGCATTGCTGTGGTCACTGTTTCTTCAAGTAC
ACACTGACTCTGCTACTTTAGGATAAATATATTTTACTCAGAACTCTGAATTTCACAGTATACTTACTAAACTAA
GTAAAAATGATACTTAAAATACTTATTTTACTTTCTAGACCTAGGCTAGATGTTTTAAGCTACAGCTCTAGTTCA
TTGTGATATTTATAATTTGAAAGCTATGAGAATAGATGTGTGGGTGAAGCCATAGAACATATTTGCTTGAAATTC
TTGAGCAGGGATCTTATAAAGGGCCAGAAATAAGATGTGTGGTTCACATAGATAGTGAGCGTAACATCTGTATTA
AACATAGGAGAGAAGTTTATAAAGGGCATTGGCAATAAACTCTTTGTTGCAGCTGTTTTCCAAGCAGTGTAAATA
CTTTTTCCTGTGATTATGTATAGCCTTGGAATGGCACCTTTTAACTAACCCATATGTGTTTGGTTTCAATGGTTT
TTTATATTCAGATGTATATATGGTGCTCACTTTAGGATCAGCAGTGTTGACCATTTATGCTGCATAGCTGTATTA
TAGCCTTATTAGTTGTGTGGTTGACCCTTGGGGTATACAAATGTCAGTCTGAGTGGTGTCTTACTCCTTTGTTTA
TAAGTGAATGATTGTGCATGTTTTGTATGTCATAGTATGTCGTCACATAAAAGGGAGGGAGCGAAAAACCATTAC
ATTAAGATAATATTGGACCAAACTACTTACTTGCTCTAAACAGTTACTTGTACCCCTTAACCTGTCTTCAAAAGT
TGCATATAGTTACAGTAGTGTATAAATTAAATATTGTGGAAAAACAGTCTTGTATTTTTCTGTATGTGTGTATAT
ATATATAATTATGTACTTCTGGCAATTCTATCTGTATTTAAAGATGTGACAATCTTGACACCAATTTTAAGAATA
GCTGTGAGACCGAATTAAAGATAATCCCTACCAAGTGAAAATTGATGTGTGTTAAGAGGGTACAGAATTATCAAC
TGATTTGGTCAGTTGCTTCCAATGCTGGTTGATTTCCCTCATTGTGTAAACATTGACAGGTATGTGACAAATGGG
AAAAAAAATCCAAATAATAAAGTGACATATTGGTGTTCAGCAAT

FIGURE 7379

MAGFKRGYDGKIAGLYDLDKTLGRGHFAVVKLARHVFTGEKVAVKVIDKTKLDTLATGHLFQEVRCMKLVQHPNI
VRLYEVIDTQTKLYLILELGDEGDMFDYIMKHEEGLNEDLPKKYFAQIVHAISYCHKLHVVHRDLKPENVVFFEK
QGLVKLTDFGFSNKFQPGKKLTTSCGSLAYSAPEILLGDEYDAPAVDIWSLGVILFMLVCGQPPFQEANDSETLT
MIMDCKYTVPSHVSKECKDLITRMLQRDPKRRASLEEIENHPWLQGVDPSPATKYNIPLVSYKNLSEEEHNSIIQ
RMVLGDIADRDAIVEALETNRYNHITATYFLLAERILREKQEKEIQTRSASPSNIKAQFRQSWPTKIDVPQDLED
DLTATPLSHATVPQSPARAADSVLNGHRSKGLCDSAKKDDLPELAGPALSTVPPASLKPTASGRKCLFRVEEDEE
EDEEDKKPMSLSTQVVLRRKPSVTNRLTSRKSAPVLNQIFEEGESDDEFDMDENLPPKLSRLKMNIASPGTVHKR
YHRRKSQGRGSSCSSSETSDDDSESRRRLDKDSGFTYSWHRRDSSEGPPGSEGDGGGQSKPSNASGGVDKASPSE
NNAGGGSPSSGSGGNPTNTSGTTRRCAGPSNSMQLASRSAGELVESLKLMSLCLGSQLHGSTKYIIDPQNGLSFS
SVKVQEKSTWKMCISSTGNAGQVPAVGGIKFFSDHMADTTTELERIKSKNLKNNVLQLPLCEKTISVNIQRNPKE
GLLCASSPASCCHVI

FIGURE 7380

AGCCGGCCCC**ATG**TCGGTGGTGGGCATAGACCTGGGCTTCCAGAGCTGCTACGTCGCTGTGGCCCGCGCCGGCGG
CATCGAGACTATCGCTAATGAGTATAGCGACCGCTGCACTCCGGCTTGCATTTCTTTTGGTCCTAAGAATCGTTC
AATTGGAGCAGCAGCTAAAAGCCAGGTAATTTCTAATGCAAAGAACACAGTCCAAGGATTTAAAAGATTCCATGG
CCGAGCATTCTCTGATCCATTTGTGGAGGCAGAAAAATCTAACCTTGCATATGATATTGTGCAGTTGCCTACAGG
ATTAACAGGTATAAAGGTGACATATATGGAGGAAGAGCGAAATTTTACCACTGAGCAAGTGACTGCCATGCTTTT
GTCCAAACTGAAGGAGACAGCCGAAAGTGTTCTTAAGAAGCCTGTAGTTGACTGTGTTGTTTCGGTTCCTTGTTT
CTATACTGATGCAGAAAGACGATCAGTGATGGATGCAACACAGATTGCTGGTCTTAATTGCTTGCGATTAATGAA
TGAAACCACTGCAGTTGCTCTTGCATATGGAATCTATAAGCAGGATCTTCCTGCCTTAGAAGAGAAACCAAGAAA
TGTAGTTTTTGTAGACATGGGCCACTCTGCTTATCAAGTTTCTGTATGTGCATTTAATAGAGGAAAACTGAAAGT
TCTGGCCACTGCATTTGACACGACATTGGGAGGTAGAAAATTTGATGAAGTGTTAGTAAATCACTTCTGTGAAGA
ATTTGGGAAGAAATACAAGCTAGACATTAAGTCCAAAATCCGTGCATTATTACGACTCTCTCAGGAGTGTGAGAA
ACTCAAGAAATTGATGAGTGCAAATGCTTCAGATCTCCCTTTGAGCATTGAATGTTTTATGAATGATGTTGATGT
ATCTGGAACTATGAATAGAGGCAAATTTCTGGAGATGTGCAATGATCTCTTAGCTAGAGTGGAGCCACCACTTCG
TAGTGTTTTGGAACAAACCAAGTTAAAGAAAGAAGATATTTATGCAGTGGAGATAGTTGGTGGTGCTACACGAAT
CCCTGCGGTAAAAGAGAAGATCAGCAAATTTTTCGGTAAAGAACTTAGTACAACATTAAATGCTGATGAAGCTGT
CACTCGAGGCTGTGCATTGCAGTGTGCCATCTTATCGCCTGCTTTCAAAGTCAGAGAATTTTCTATCACTGATGT
AGTACCATATCCAATATCTCTGAGATGGAATTCTCCAGCTGAAGAAGGGTCAAGTGACTGTGAAGTCTTTTCCAA
AAATCATGCTGCTCCTTTCTCTAAAGTTCTTACATTTTATAGAAAGGAACCTTTCACTCTTGAGGCCTACTACAG
CTCTCCTTCAGGATTTGCCCTATCCAGATCTCAGTTTTCAGTTCAGAAAGTACTCCTCAGTCTGATGGCTCCAGT
TCAAAAG**TGA**AAGTCAAAGTTCGAGTAAATGTCCATGGCATTTTCAGTGTGTCCAGTGCATCTTTAGTGGAGGTT
CACAAGTCTGAGGAAAATGAGGAGCCAATGGAAACAGATCAGAATGCAAAGGAGGAAGAGAAAGATGCAAGTGGA
CCAGGAGGAACCACATGTTGAAGAGCAAACAGCAGCAGACACCAGCAGAAAATAAGGCAGAGTCTGAAGAAATGG
AGACCTCTCAAGCTGGATCCAAGGATAAAAAGATGGACCAACCACCCCAAGCCAAGAAGGCAAAAGTGAAGACCA
GTACTGTGGACCTGCCAATCGAGAATCAGCTATTATGGCAGATAGACAGAGAGATGCTTCAACTTGTACATTGAA
AATGAGGGTAAGATGATCATGCAGGATAAACTGGAGAAGGACGGAATGATGCTAAGAACGCAGTGGAGGAATATG
TGTATGAAATGAGAGACAAGCTTAGTGGTGAATATGAGAAGTTTGTGAGTGAAGATGATCGTAACAGTTTTACTT
TGAAACTGGAAGATACTGAAAATTGGTTGTATGAGGATGGAGAAGACCAGCCAAAGCAAGTTTATGTTGATAAGT
TGGCTGAATTAAAAAATCTAGGTCAACCTATTAAGATACGTTTCCAGGAATCTGAAGAACGACCAAAATTATTTG
AAGAACTAGGGAAACAGATCCAACAGTATATGAAAATAATCAGCTCTTTCAAAAACAAGGAGGACCAGTATGATC
ATTTGGATGCTGCTGACATGACAAAGGTAAAAAAAAAAAAAAAAAA

FIGURE 7381

MSVVGIDLGFQSCYVAVARAGGIETIANEYSDRCTPACISFGPKNRSIGAAAKSQVISNAKNTVQGFKRFHGRAF
SDPFVEAEKSNLAYDIVQLPTGLTGIKVTYMEEERNFTTEQVTAMLLSKLKETAESVLKKPVVDCVVSVPCFYTD
AERRSVMDATQIAGLNCLRLMNETTAVALAYGIYKQDLPALEEKPRNVVFVDMGHSAYQVSVCAFNRGKLKVLAT
AFDTTLGGRKFDEVLVNHFCEEFGKKYKLDIKSKIRALLRLSQECEKLKKLMSANASDLPLSIECFMNDVDVSGT
MNRGKFLEMCNDLLARVEPPLRSVLEQTKLKKEDIYAVEIVGGATRIPAVKEKISKFFGKELSTTLNADEAVTRG
CALQCAILSPAFKVREFSITDVVPYPISLRWNSPAEEGSSDCEVFSKNHAAPFSKVLTFYRKEPFTLEAYYSSPS
GFALSRSQFSVQKVLLSLMAPVQK

FIGURE 7382A

ATCTTTGTTTGGGTCTCCCATACTGCGTATAGATGAATGGGTCAGGATATCTGGAACAAAATATGGAGGTGAAGG
GTGAGATCGGGAAACAAAGGGTATGGCCCCCTAGTTCCCAAAGGGAGCAGGGAGATGGGAATAGAATTGAAGGTA
GGTTTTAGGCTACTTGGGAGGAGGAATATTTAGGTAATTGTGGAGACTTTCTCCTGTGTGATGAAGGCGGCAGAC
ACTGTGATCCTGTGGGCAAGAAGTAAAAATGACCAGCTGAGGATTTCTTTTCCTCCAGGACTGTGTTGGGGTGAC
AGGATGCCTGATAAGGATGACATTCGGCTGCTGCCGTCAGCATTGGGTGTGAAGAAGAGAAAACGAGGACCCAAG
AAGCAGAAGGAGAACAAGCCAGGAAAACCCCGAAAACGCAAGAAGCGTGACAGTGAGGAGGAATTTGGTTCTGAG
CGAGATGAGTACCGGGAGAAGTCAGAGAGTGGGGGCAGTGAATATGGAACCGGACCGGGTCGGAAACGAAGAAGG
AAGCACCGAGAAAAAAAGGAGAAGAAGACAAAGCGGCGGAAAAAGGGGGAGGGAGATGGGGGGCAAAAGCAAGTG
GAACAGAAGTCATCAGCAACTCTGCTTCTGACCTGGGGCCTGGAGGATGTGGAGCATGTGTTCTCTGAGGAGGAT
TACCACACGCTCACCAACTACAAAGCCTTCAGCCAGTTCATGAGGCCCCTAATTGCTAAGAAGAATCCTAAGATC
CCAATGTCTAAGATGATGACCATCCTTGGGGCCAAATGGAGAGAGTTCAGTGCCAACAACCCCTTCAAGGGGTCA
GCAGCTGCTGTGGCGGCGGCAGCGGCAGCAGCAGCAGCAGCTGTAGCTGAGCAGGTGTCAGCTGCTGTCTCGTCG
GCCACCCCCATAGCACCCTCCGGACCCCCCGCCCTTCCACCACCCCCTGCTGCTGATATCCAGCCCCCACCCATC
CGAAGAGCCAAAACCAAAGAGGGCAAAGGTCCAGGCCATAAGAGGCGGAGTAAGAGCCCCCGAGTGCCTGATGGA
CGCAAGAAGCTTCGGGGAAAGAAAATGGCACCACTCAAAATAAAACTAGGGCTTCTGGGTGGCAAGAGGAAGAAA
GGAGGCTCGTATGTTTTTCAGAGCGACGAAGGTCCTGAACCAGAGGCTGAGGAATCAGACCTGGACAGTGGCAGT
GTCCACAGTGCCTCAGGCCGGCCTGATGGCCCTGTCCGCACCAAGAAACTAAAGAGAGGCCGGCCAGGAAGGAAG
AAGAAGAAGGTCCTGGGCTGTCCTGCAGTGGCCGGGGAGGAGGAGGTTGATGGCTACGAGACGGATCACCAGGAT
TACTGTGAGGTGTGCCAGCAGGGTGGGGAAATTATTCTGTGTGACACCTGCCCTCGTGCCTACCACCTCGTCTGC
CTTGATCCTGAGCTTGACCGGGCTCCAGAGGGCAAATGGAGCTGCCCTCACTGTGAGAAGGAGGGGGTCCAGTGG
GAGGCCAAGGAGGAAGAAGAAGAATACGAAGAGGAGGGAGAGGAAGAAGGGGAGAAGGAGGAGGAGGATGATCAC
ATGGAGTACTGCCGCGTATGCAAGGACGGCGGGGAGCTCCTGTGCTGTGACGCGTGCATCTCCTCCTACCACATT
CATTGTCTAAACCCTCCCCTGCCTGACATTCCCAATGGTGAATGGCTGTGTCCCCGATGCACATGCCCCGTGCTG
AAGGGTCGAGTGCAGAAGATCCTACATTGGCGGTGGGGGGAGCCACCTGTAGCAGTGCCAGCCCCTCAACAGGCA
GATGGAAATCCAGATGTCCCACCCCCCCCGTCCTCTTCAAGGCAGATCAGAGCGAGAGTTCTTTGTCAAGTGGGTA
GGACTATCCTACTGGCACTGCTCCTGGGCCAAGGAGCTTCAGCTGGAAATCTTCCATTTGGTTATGTATCGAAAC
TACCAGCGGAAGAATGACATGGATGAGCCCCCACCCCTGGACTATGGCTCCGGCGAGGATGATGGGAAGAGCGAC
AAGCGTAAAGTGAAAGACCCGCACTATGCTGAGATGGAGGAGAAGTACTATCGTTTTGGCATCAAGCCAGAGTGG
ATGACCGTCCACCGCATCATCAACCACAGTGTGGATAAAAAGGGGAATTACCACTATCTAGTAAAATGGAGGGAC
TTACCATATGACCAGTCCACGTGGGAGGAAGATGAAATGAATATCCCTGAATACGAAGAACATAAGCAAAGCTAC
TGGAGACACCGAGAACTAATTATGGGGGAAGACCCTGCCCAGCCCCGCAAGTATAAGAAGAAGAAGAAGGAGCTA
CAGGGTGATGGGCCTCCCAGTTCTCCCACTAATGATCCTACCGTGAAATATGAGACTCAGCCACGGTTTATCACA
GCCACTGGAGGCACCCTGCACATGTATCAGTTGGAAGGGCTGAACTGGCTACGCTTCTCCTGGGCCCAGGGCACT
GACACCATTCTAGCTGATGAGATGGGGCTAGGCAAGACCATACAAACCATCGTCTTCCTCTACTCACTCTACAAG
GAGGGCCACACAAAAGGTCCCTTCCTGGTGAGTGCCCCACTCTCTACCATCATTAACTGGGAGCGGGAGTTCCAG
ATGTGGGCACCCAAATTCTATGTGGTGACATACACGGGTGACAAGGACAGCCGGGCCATCATTCGTGAGAATGAA
TTCTCCTTTGAGGACAATGCCATCAAAGGGGGCAAGAAAGCTTTTAAGATGAAAAGGGAGGCACAGGTGAAGTTC
CATGTTCTCCTGACATCGTATGAGCTGATCACCATTGATCAGGCAGCACTTGGTTCCATCCGCTGGGCCTGTCTT
GTGGTAGATGAGGCCCATCGACTCAAGAACAACCAGTCCAAGTTTTTCAGGGTTCTCAATGGTTACAAGATAGAT
CATAAGTTGCTGCTGACAGGAACCCCATTGCAGAATAATCTGGAGGAGCTCTTCCATCTCCTGAACTTCCTCACC
CCAGAGAGATTTAACAACTTGGAGGGCTTCCTGGAGGAGTTTGCTGACATATCCAAAGAGGACCAGATCAAGAAA
CTGCATGATTTGCTGGGGCCACACATGCTGCGGAGACTCAAGGCAGATGTCTTTAAGAACATGCCAGCCAAGACA
GAGCTCATCGTTCGGGTGGAGCTAAGCCCCATGCAGAAGAAATACTACAAATACATCCTGACTCGAAATTTTGAG
GCCTTGAATTCACGAGGTGGTGGGAACCAGGTGTCGCTGCTTAATATCATGATGGATCTTAAGAAGTGCTGCAAC
CATCCATACCTTTTTCCCGTGGCTGCTATGGAGTCCCCCAAACTCCCCAGTGGGGCTTATGAGGGTGGGGCACTT
ATTAAGTCGTCTGGGAAGCTCATGCTGCTCCAGAAGATGCTGCGAAAGCTGAAGGAGCAAGGACACCGAGTGCTC
ATCTTCTCGCAGATGACCAAAATGTTAGACTTGCTTGAGGACTTCTTAGACTATGAAGGCTACAAGTATGAGCGC
ATCGATGGTGGTATCACGGGTGCCCTGAGGCAGGAGGCCATCGATCGGTTTAATGCTCCTGGGGCCCAACAATTC

FIGURE 7382B

TGCTTCCTCCTGTCCACCCGAGCTGGGGGCCTGGGCATCAATCTGGCCACTGCTGACACTGTCATCATCTTTGAT
TCTGACTGGAACCCCCATAATGACATCCAGGCCTTTAGCCGGGCTCATCGGATTGGCCAGGCCAACAAAGTGATG
ATTTACCGGTTTGTGACTCGCGCGTCAGTGGAAGAGCGAATCACACAAGTGGCCAAGAGAAAGATGATGCTGACA
CACCTGGTTGTGCGGCCTGGGCTGGGCTCCAAGGCAGGCTCCATGTCCAAGCAGGAGCTTGACGACATTCTCAAA
TTTGGCACTGAAGAGCTATTCAAGGATGAAAACGAGGGGGAGAACAAGGAGGAGGACAGCAGTGTGATTCATTAT
GACAATGAGGCCATCGCTCGGCTGTTGGACCGGAACCAGGATGCAACTGAGGACACTGACGTGCAGAACATGAAT
GAGTATCTCAGCTCCTTCAAGGTGGCACAGTACGTCGTGCGGGAAGAAGACAAGATTGAGGAAATTGAGCGAGAG
ATCATCAAGCAGGAGGAGAATGTGGACCCTGACTACTGGGAGAAGCTGCTGAGGCATCACTATGAGCAACAGCAG
GAAGACCTAGCCCGGAATCTAGGCAAGGGCAAGCGGGTTCGCAAGCAAGTTAACTACAATGATGCTGCTCAGGAA
GACCAAGACAACCAGTCAGAGTACTCGGTGGGTTCAGAGGAGGAGGATGAAGACTTCGATGAACGTCCTGAAGGG
CGTAGACAGTCAAAGAGGCAGCTCCGGAATGAGAAAGATAAGCCACTGCCTCCACTGCTGGCCCGAGTCGGGGGC
AACATTGAGGTGCTGGGCTTCAACACCCGTCAGCGGAAGGCTTTCCTCAATGCTGTGATGCGCTGGGGGATGCCA
CCACAGGATGCCTTCACCACACAGTGGCTGGTGCGGGACCTGAGGGGCAAGACTGAGAAGGAGTTTAAGGCCTAT
GTGTCTTTGTTCATGCGCCATCTGTGTGAGCCTGGGGCAGACGGCTCTGAAACCTTTGCCGATGGGGTCCCTCGG
GAGGGACTGAGTCGCCAGCAGGTGTTGACCCGCATTGGAGTCATGTCTCTCGTCAAAAAGAAGGTGCAGGAGTTT
GAGCACATCAATGGGCGTTGGTCAATGCCGGAACTGATGCCTGACCCCAGCGCCGATTCTAAGCGCTCCTCCAGA
GCCTCCTCTCCTACCAAAACGTCTCCCACCACTCCTGAGGCTTCTGCTACCAACAGTCCCTGCACCTCTAAACCT
GCTACTCCAGCTCCAAGTGAGAAAGGAGAAGGCATAAGGACACCTCTTGAGAAGGAGGAAGCTGAAAACCAGGAG
GAAAAGCCAGAGAAGAACAGCAGAATTGGGGAGAAGATGGAGACAGAGGCTGATGCCCCCAGCCCAGCCCCATCA
CTTGGGGAGCGGCTGGAGCCAAGGAAGATTCCTCTAGAGGATGAGGTGCCAGGGGTGCCTGGAGAGATGGAGCCT
GAACCTGGGTACCGTGGGGACAGAGAGAAGTCAGAAGATGTAAAAGGTGACCGGGAGCTTCGACCAGGGCCTCGA
GATGAGCCACGGTCCAATGGGCGACGAGAGGAAAAGACAGAGAAGCCCCGGTTCATGTTCAATATCGCCGATGGT
GGCTTCACAGAGCTTCACACACTGTGGCAGAATGAGGAACGGGCAGCTATTTCCTCGGGGAAACTCAATGAGATC
TGGCACAGAAGACATGACTATTGGCTTCTGGCTGGGATTGTCCTCCATGGCTATGCACGGTGGCAGGACATCCAG
AATGATGCTCAATTTGCCATTATCAACGAGCCATTTAAAACTGAAGCCAATAAGGGGAACTTTCTGGAGATGAAA
AATAAGTTCCTGGCCCGGAGGTTCAAGCTCCTGGAGCAGGCGCTGGTGATTGAGGAGCAGCTGCGGCGGGCGGCC
TACCTGAACCTGTCGCAGGAGCCGGCGCACCCCGCCATGGCCCTCCACGCCCGCTTCGCCGAGGCCGAGTGCCTG
GCCGAGAGCCACCAGCACCTCTCCAAGGAGTCGCTGGCGGGGAACAAGCCGGCCAACGCCGTCCTGCACAAGGTT
CTGAACCAGCTGGAGGAGTTGCTGAGCGACATGAAGGCGGACGTGACCCGCCTGCCAGCCACGCTGTCCCGAATA
CCCCCCATCGCAGCCCGCCTTCAGATGTCCGAGCGCAGCATCCTCAGCCGGCTGGCCAGCAAGGGCACGGAGCCT
CACCCCACACCGGCCTACCCGCCGGGTCCCTACGCTACACCTCCGGGGTACGGGGCGGCCTTCAGCGCCGCACCC
GTAGGGGCCCTGGCCGCCGCAGGCGCCAATTACAGCCAGATGCCTGCAGGGTCCTTCATCACAGCCGCCACCAAC
GGCCCAATTCACCGATTTTTTAAAAAAGTTCCAGAAATCCAGTGACGAATGTGGTATACAAAAAAATATATAAAT
TCTTTCAACTTAGAATAATTAAGTCATAAAATACATAGGGTACAAATACCACATTCCGTTCTAAAATGATATCTT
AGGATCATCAAAAGAAAAAGAGGATTTGGATTATGCAAAAAATGATTCCTATATATATAATCAATTATCTAACTG
ACATTTTTGCAAATCTACCACAACTTCGCCTTTTATTGCATATGCTAAACAAGCAGATGCTAAGTCTGTAAACTG
TGAATTAACCTCCTTTTTAATTAATTGTTCG

FIGURE 7383

MKAADTVILWARSKNDQLRISFPPGLCWGDRMPDKDDIRLLPSALGVKKRKRGPKKQKENKPGKPRKRKKRDSEE
EFGSERDEYREKSESGGSEYGTGPGRKRRRKHREKKEKKTKRRKKGEGDGGQKQVEQKSSATLLLTWGLEDVEHV
FSEEDYHTLTNYKAFSQFMRPLIAKKNPKIPMSKMMTILGAKWREFSANNPFKGSAAAVAAAAAAAAAAVAEQVS
AAVSSATPIAPSGPPALPPPPAADIQPPPIRRAKTKEGKGPGHKRRSKSPRVPDGRKKLRGKKMAPLKIKLGLLG
GKRKKGGSYVFQSDEGPEPEAEESDLDSGSVHSASGRPDGPVRTKKLKRGRPGRKKKKVLGCPAVAGEEEVDGYE
TDHQDYCEVCQQGGEIILCDTCPRAYHLVCLDPELDRAPEGKWSCPHCEKEGVQWEAKEEEEEYEEEGEEEGEKE
EEDDHMEYCRVCKDGGELLCCDACISSYHIHCLNPPLPDIPNGEWLCPRCTCPVLKGRVQKILHWRWGEPPVAVP
APQQADGNPDVPPPRPLQGRSEREFFVKWVGLSYWHCSWAKELQLEIFHLVMYRNYQRKNDMDEPPPLDYGSGED
DGKSDKRKVKDPHYAEMEEKYYRFGIKPEWMTVHRIINHSVDKKGNYHYLVKWRDLPYDQSTWEEDEMNIPEYEE
HKQSYWRHRELIMGEDPAQPRKYKKKKKELQGDGPPSSPTNDPTVKYETQPRFITATGGTLHMYQLEGLNWLRFS
WAQGTDTILADEMGLGKTIQTIVFLYSLYKEGHTKGPFLVSAPLSTIINWEREFQMWAPKFYVVTYTGDKDSRAI
IRENEFSFEDNAIKGGKKAFKMKREAQVKFHVLLTSYELITIDQAALGSIRWACLVVDEAHRLKNNQSKFFRVLN
GYKIDHKLLLTGTPLQNNLEELFHLLNFLTPERFNNLEGFLEEFADISKEDQIKKLHDLLGPHMLRRLKADVFKN
MPAKTELIVRVELSPMQKKYYKYILTRNFEALNSRGGGNQVSLLNIMMDLKKCCNHPYLFPVAAMESPKLPSGAY
EGGALIKSSGKLMLLQKMLRKLKEQGHRVLIFSQMTKMLDLLEDFLDYEGYKYERIDGGITGALRQEAIDRFNAP
GAQQFCFLLSTRAGGLGINLATADTVIIFDSDWNPHNDIQAFSRAHRIGQANKVMIYRFVTRASVEERITQVAKR
KMMLTHLVVRPGLGSKAGSMSKQELDDILKFGTEELFKDENEGENKEEDSSVIHYDNEAIARLLDRNQDATEDTD
VQNMNEYLSSFKVAQYVVREEDKIEEIEREIIKQEENVDPDYWEKLLRHHYEQQQEDLARNLGKGKRVRKQVNYN
DAAQEDQDNQSEYSVGSEEEDEDFDERPEGRRQSKRQLRNEKDKPLPPLLARVGGNIEVLGFNTRQRKAFLNAVM
RWGMPPQDAFTTQWLVRDLRGKTEKEFKAYVSLFMRHLCEPGADGSETFADGVPREGLSRQQVLTRIGVMSLVKK
KVQEFEHINGRWSMPELMPDPSADSKRSSRASSPTKTSPTTPEASATNSPCTSKPATPAPSEKGEGIRTPLEKEE
AENQEEKPEKNSRIGEKMETEADAPSPAPSLGERLEPRKIPLEDEVPGVPGEMEPEPGYRGDREKSEDVKGDREL
RPGPRDEPRSNGRREEKTEKPRFMFNIADGGFTELHTLWQNEERAAISSGKLNEIWHRRHDYWLLAGIVLHGYAR
WQDIQNDAQFAIINEPFKTEANKGNFLEMKNKFLARRFKLLEQALVIEEQLRRAAYLNLSQEPAHPAMALHARFA
EAECLAESHQHLSKESLAGNKPANAVLHKVLNQLEELLSDMKADVTRLPATLSRIPPIAARLQMSERSILSRLAS
KGTEPHPTPAYPPGPYATPPGYGAAFSAAPVGALAAAGANYSQMPAGSFITAATNGPIHRFFKKVPEIQ

FIGURE 7384

TCCCAGCCTTCCCATCCCCCCACCGAAAGCAAATCATTCAACGACCCCCGACCCTCCGACGGCAGGAGCCCCCCG
ACCTCCCAGGCGGACCGCCCTTCCCTCCCCGCGCGGGTTCCGGGCCCGGCGAGAGGGCGCGACGACAGCCGAGGC
CATGGAGGTGACGGCGGACCAGCCGCGCTGGGTGAGCCACCACCACCCCGCCGTGCTCAACGGGCAGCACCCGGA
CACGCACCACCCGGGCCTCAGCCACTCCTACATGGACGCGGCGCAGTACCCGCTGCCGGAGGAGGTGGATGTGCT
TTTTAACATCGACGGTCAAGGCAACCACGTCCCGCCCTACTACGGAAACTCGGTCAGGGCCACGGTGCAGAGGTA
CCCTCCGACCCACCACGGGAGCCAGGTGTGCCGCCCGCCTCTGCTTCATGGATCCCTACCCTGGCTGGACGGCGG
CAAAGCCCTGGGCAGCCACCACACCGCCTCCCCCTGGAATCTCAGCCCCTTCTCCAAGACGTCCATCCACCACGG
CTCCCCGGGGCCCCTCTCCGTCTACCCCCCGGCCTCGTCCTCCTCCTTGTCGGGGGGCCACGCCAGCCCGCACCT
CTTCACCTTCCCGCCCACCCCGCCGAAGGACGTCTCCCCGGACCCATCGCTGTCCACCCCAGGCTCGGCCGGCTC
GGCCCGGCAGGACGAGAAAGAGTGCCTCAAGTACCAGGTGCCCCTGCCCGACAGCATGAAGCTGGAGTCGTCCCA
CTCCCGTGGCAGCATGACCGCCCTGGGTGGAGCCTCCTCGTCGACCCACCACCCCATCACCACCTACCCGCCCTA
CGTGCCCGAGTACAGCTCCGGACTCTTCCCCCCCAGCAGCCTGCTGGGCGGCTCCCCCACCGGCTTCGGATGCAA
GTCCAGGCCCAAGGCCCGGTCCAGCACAGGCAGGGAGTGTGTGAACTGTGGGGCAACCTCGACCCCACTGTGGCG
GCGAGATGGCACGGGACACTACCTGTGCAACGCCTGCGGGCTCTATCACAAAATGAACGGACAGAACCGGCCCCT
CATTAAGCCCAAGCGAAGGCTGTCTGCAGCCAGGAGAGCAGGGACGTCCTGTGCGAACTGTCAGACCACCACAAC
CACACTCTGGAGGAGGAATGCCAATGGGGACCCTGTCTGCAATGCCTGTGGGCTCTACTACAAGCTTCACAATAT
TAACAGACCCCTGACTATGAAGAAGGAAGGCATCCAGACCAGAAACCGAAAAATGTCTAGCAAATCCAAAAAGTG
CAAAAAAGTGCATGACTCACTGGAGGACTTCCCCAAGAACAGCTCGTTTAACCCGGCCGCCCTCTCCAGACACAT
GTCCTCCCTGAGCCACATCTCGCCCTTCAGCCACTCCAGCCACATGCTGACCACGCCCACGCCGATGCACCCGCC
ATCCAGCCTGTCCTTTGGACCACACCACCCCTCCAGCATGGTCACCGCCATGGGTTAGAGCCCTGCTCGATGCTC
ACAGGGCCCCCAGCGAGAGTCCCTGCAGTCCCTTTCGACTTGCATTTTTGCAGGAGCAGTATCATGAAGCCTAAA
CGCGATGGATATATGTTTTTGAAGGCAGAAAGCAAAATTATGTTTGCCACTTTGCAAAGGAGCTCACTGTGGTGT
CTGTGTTCCAACCACTGAATCTGGACCCCATCTGTGAATAAGCCATTCTGACTCATATCCCCTATTTAACAGGGT
CTCTAGTGCTGTGAAAAAAAAAAATCCTGAACATTGCATATAACTTATATTGTAAGAAATACTGTACAATGACTT
TATTGCATCTGGGTAGCTGTAAGGCATGAAGGATGCCAAGAAGTTTAAGGAATATGGGAGAAATAGTGTGGAAAT
TAAGAAGAAACTAGGTCTGATATTCAAATGGACAAACTGCCAGTTTTGTTTCCTTTCACTGGCCACAGTTGTTTG
ATGCATTAAAAGAAAATAAAAAAAAGAAAAAAGAGAAAAGAAAAAAAAAGAAAAAAGTTGTAGGCGAATCATTTG
TTCAAAGCTGTTGGCCCTCTGCAAAGGAAATACCAGTTCTGGGCAATCAGTGTTACCGTTCACCAGTTGCCATTG
AGGGTTTCAGAGAGCCTTTTTCTAGGCCTACATGCTTTGTGAACAAGTCCCTGTAATTGTTGTTTGTATGTATAA
TTCAAAGCACCAAAATAAGAAAAGATGTAGATTTATTTCATCATATTATACAGACCGAACTGTTGTATAAATTTA
TTTACTGCTAGTCTTAAGAACTGCTTTCTTTCGTTTGTTTGTTTCAATATTTTCCTTCTCTCTCAATTTTCGGTT
GAATAAACTAGATTACATTCAGTTGGCAAAAAAAAAAAAA

FIGURE 7385

MEVTADQPRWVSHHHPAVLNGQHPDTHHPGLSHSYMDAAQYPLPEEVDVLFNIDGQGNHVPPYYGNSVRATVQRY
PPTHHGSQVCRPPLLHGSLPWLDGGKALGSHHTASPWNLSPFSKTSIHHGSPGPLSVYPPASSSSLSGGHASPHL
FTFPPTPPKDVSPDPSLSTPGSAGSARQDEKECLKYQVPLPDSMKLESSHSRGSMTALGGASSSTHHPITTYPPY
VPEYSSGLFPPSSLLGGSPTGFGCKSRPKARSSTGRECVNCGATSTPLWRRDGTGHYLCNACGLYHKMNGQNRPL
IKPKRRLSAARRAGTSCANCQTTTTTLWRRNANGDPVCNACGLYYKLHNINRPLTMKKEGIQTRNRKMSSKSKKC
KKVHDSLEDFPKNSSFNPAALSRHMSSLSHISPFSHSSHMLTTPTPMHPPSSLSFGPHHPSSMVTAMG

FIGURE 7386

AATTCGCTCGGCTTTGACAGAGTGCAAGACGATGACTTGCAAAATGTCGCAGCTGGAACGCAACATAGAGACCAT
CATCAACACCTTCCACCAATACTCTGTGAAGCTGGGGCACCCAGACACCCTGAACCAGGGGGAATTCAAAGAGCT
GGTGCGAAAAGATCTGCAAAATTTTCTCAAGAAGGAGAATAAGAATGAAAAGGTCATAGAACACATCATGGAGGA
CCTGGACACAAATGCAGACAAGCAGCTGAGCTTCGAGGAGTTCATCATGCTGATGGCGAGGCTAACCTGGGCCTC
CCACGAGAAGATGCACGAGGGTGACGAGGGCCCTGGCCACCACCATAAGCCAGGCCTCGGGGAGGGCACCCCCTA
AGACCACAGTGGCCAAGATCACAGTGGCCACGGCCATGGCCACAGTCATGGTGGCCACGGCCACAGGCCACTAAT
CAGGAGGCCAGGCCACCCTGCCTCTACCCAACCAGGGCCCCGGGGCCTGTTATGTCAAACTGTCTTGGCTGTGGG
GCTAGGGGCTGGGGCCAAATAAAGTCTCTTCCTCCAAGCT

FIGURE 7387

MTCKMSQLERNIETIINTFHQYSVKLGHPDTLNQGEFKELVRKDLQNFLKKENKNEKVIEHIMEDLDTNADKQLS
FEEFIMLMARLTWASHEKMHEGDEGPGHHHKPGLGEGTP

FIGURE 7388A

GGCACGAGGCTGCGCCTCGGGGGTCGGCGTCCAGGCTCGGAGCGCGGCACGGAGACGGCGGCAGCGCTGGACTAG
GTGGCAGGCCCTGCATC**ATG**GAAACTCTTTCTAATGCAAGTGGTACTTTTGCCATACGCCTTTTAAAGATACTGT
GTCAAGATAACCCTTCGCACAACGTGTTCTGTTCTCCTGTGAGCATCTCCTCTGCCCTGGCCATGGTTCTCCTAG
GGGCAAAGGGAAACACCGCAACCCAGATGGCCCAGGCACTGTCTTTAAACACAGAGGAAGACATTCATCGGGCTT
TCCAGTCGCTTCTCACTGAAGTGAACAAGGCTGGCACACAGTACCTGCTGAGAACGGCCAACAGGCTCTTTGGAG
AGAAAACTTGTCAGTTCCTCTCAACGTTTAAGGAATCCTGTCTTCAATTCTACCATGCTGAGCTGAAGGAGCTTT
CCTTTATCAGAGCTGCAGAAGAGTCCAGGAAACACATCAACACCTGGGTCTCAAAAAAGACCGAAGGTAAAATTG
AAGAGTTGTTGCCGGGTAGCTCAATTGATGCAGAAACCAGGCTGGTTCTTGTCAATGCCATCTACTTCAAAGGAA
AGTGGAATGAACCGTTTGACGAAACATACACAAGGGAAATGCCCTTTAAAATAAACCAGGAGGAGCAAAGGCCAG
TGCAGATGATGTATCAGGAGGCCACGTTTAAGCTCGCCCACGTGGGCGAGGTGCGCGCGCAGCTGCTGGAGCTGC
CCTACGCCAGGAAGGAGCTGAGCCTGCTGGTGCTGCTGCCTGACGACGGCGTGGAGCTCAGCACGGTGGAAAAAA
GTCTCACTTTTGAGAAACTCACAGCCTGGACCAAGCCAGACTGTATGAAGAGTACTGAGGTTGAAGTTCTCCTTC
CAAAATTTAAACTACAAGAGGATTATGACATGGAATCTGTGCTTCGGCATTTGGGAATTGTTGATGCCTTCCAAC
AGGGCAAGGCTGACTTGTCGGCAATGTCAGCGGAGAGAGACCTGTGTCTGTCCAAGTTCGTGCACAAGAGTTTTG
TGGAGGTGAATGAAGAAGGCACCGAGGCAGCGGCAGCGTCGAGCTGCTTTGTAGTTGCAGAGTGCTGCATGGAAT
CTGGCCCCAGGTTCTGTGCTGACCACCCTTTCCTTTTCTTCATCAGGCACAACAGAGCCAACAGCATTCTGTTCT
GTGGCAGGTTCTCATCGCCA**TAA**AGGGTGCACTTACCGTGCACTCGGCCATTTCCCTCTTCCTGTGTCCCCAGAT
CCCCACTACAGCTCCAAGAGGATGGGCCTAGAAAGCCAAGTGCAAAGATGAGGGCAGATTCCTTACCTGTCTGCC
CTCATGATTTGCCAGCATGAATTCATGATGCTCCACACTCGCTTATGCTACTTAATCAGAATCTTGAGAAAATAG
ACCATAATGATTCCCTGTTGTATTAAAATTGCAGTCCAAATCCCATAGGATGGCAAGCAAAGTTCTTCTAGAATT
CCACATGCAATTCACTCTGGCGACCCTGTGCTTTCCTGACACTGCGAATACATTCCTTAACCCGCTGCCTCAGTG
GTAATAAATGGTGCTAGATATTGCTACTATTTTATAGATTTCCTGGTGCTTAGCCTTATAAAAAAGGTTGTAAAA
TGTACATTTATATTTTATCTTTTTTTTTTTTTTTTTCTGAGACGCAGTCTGGCTCTCTGTCGCCCAGGCTGGAG
TGCAGTGGCTCGATCTCTGCTCACTGCAAGCTCCGCCTCCCGGGTTCACGCCATTCTCCTGCCTCAGCCTCCCGA
GTAGCTGGGACTACAGGCGCCCGCCACCACGCCCGGCTAATTTTTTGTATTTTTAGTAGAGACGGGGTTTCACCG
TGTTAGCCAGGATGGTGTCGATCTCCTGACCTCGTGATCCACCCGCCTCGGCCTCCCAAAGTGCTGGGATTACAG
GCTTGAGCCACCGCGCCCGGCTATATTTTATCTTTTATCTTTTTCTTTGACATTTACCAATCACCAAGCATGCAC
CAAACACTGCTTTAGGCACTGGGGACACAAAGGGGACAGAGCCATCCTCCTTTGACACCTGGTCTTCAGTTCTGT
GCCCAACGTATATAGTTTTGACAATGACCAGGTTGGACTGTTTAATGTCTTTCAACTTACCACGTAATCCTCTTG
TAGGGATCACATCTTTCTTTATGATATTGTATTTCTCTACCTCTAACAGTAAAAATTCCATTCAACCCTTAAAGC
TCACTTCAAATTCTTCTTTGAGAAGTTTTTCCTTTCTCCGCAACCAGATGTACATATTTGAACTCTCTTTGTACT
TGGAGGGCACTTCTTTCGTGGTAGTTCTTTTATTTTTATTAATCTCTGTATCCTTAGATAGTCCTCCAACAACCA
AAGGTTGGGACTCTGTCTTACATATCTGGGTGCCCCTCATAGTGCAGTAATAAGTAAGTTGATTATATACGAGCT
ATGTAACTTATATTTTTTAATGGTTGGATATCACTGAGTTTTTTTTTTTAAGAATTTTTTTATTGAGGTAAACTT
CACATAACATAAAATTAACTATTTTAAAGTGAGAAGTTCAGTGCCACTTAGTATTGTTAACAATGTTGCATAACC
ACCACCTTTATTTAAAGTTCCAAAAAAAAATGTTCTCCTCTAAAAGGAAACCCCATCCCATTAAGCAGATACTCTC
CATTCCTTCCTTCCTCCAGCCCCCAGCAACCACCAATCTGCTTTCTGTCTCTATGGTTTTATCTATTCTTGCTAT
TTTATATAAATCGAATTGTATGAGACCTTTTGTGTCTGGCTTCTTTCACTTAGTACAAGTTTTTGAGATTTATTT
ACATAGTAGCATGTATCAACACTTCATTTTTATGGCCAAATAAAATTGTATTATGTGTTTATAGCACAATTTATT
TATCCACTCATTCATTGATGGACTTTGGGTTGTTTCTGACTTTTGGCTATTGGGAATAGTGCTGCTATGAATGTT
TGTGTACCTGTATTTGTTTGAATGCCTATTTTGCATTCTCTTGGGTATATATCTAGGAGTGGAACTGCTGGGTCA
TATGTTAATTCTATGTTTAGCTTTTTGAGGAACAGACAAACTGTTTTCCACAGCAGTTGAACCATTCCACATTCC
CACCAGCAATGTATGAGAATTCCAATTTCTGTCCACTTCCTCACCAACACTTATTATTTTCCTTTTCCTTTTTTT
AAAAAAAATAAGTTATGGCCATCTTAGTGGGTGTGAAGTGGTATCTCATTGTGTTTTTTATTTGCATTTCCTATG
TAATGAGCTAGAAACTAAAGTACAAACTAGATGGGACATCCAGTCCCTTTGATAGATAATGCTGAGTAAAAAATG
AGATGAAAGACATTTGTTTGTTTTTAGAACATGAGTGACAGTTTGTTAAAAAGCTTTAGAGGAGGAATGAAAACA
AAGTGAAGTACACTTAGAAAAGGGCCAAGTGGACATCTTGGATGTCAAGTGCCTAGTTCAGTATCTTTTTTTTTT
TTTTTTTTTTTTTTGAGACAGTGCCTCACTCTGTCACCCAGGCTGGAGTGTAGTGGCATGATCTGGGCTCACTGC

FIGURE 7388B

AACCTCCTCCTCCTGGATTCAAGCAATTCTCTTGCTTCAGCCTCCCAAGTAGCTGAGACTACAAGCACCCACCAC
CACACCCGGCTAATTTTGTATTTTTCAGTAGAGACGGGGTTTCGCCACATTGGCCGTGTTGGTCTTGAACTCCTG
GCCTCAAGCAATCCGCCTACCTCAGCCTCCCAAAGTGCTAGGATTACAGGCATAAGCCACTGAGCCCAGCCCTAG
TTCAGTATCTTTTATGTAAATTATAAACATCTGCAACATTATGTATCATATGCAGATACTTATTGCATTTCTTTT
ATTAGTGGTGAAAGTGTTCTATGCATTTATTGGCTCTTGAATTTCCTCATCTATGAATTGTCATTCACACACCTA
CTTTTCTGCTTCGTTTTTACATATGTCTTTGCCTATTAAAGATATTATCCCTCTGTTTTATATTTTCTCTCATTC
TTGTATTGCCTTTTAAATTTTGTTATGATGTTTCATTAATAAACAGTGTTTTGTTTTCCTCTATAAAAAAAAAAA
AAAAA

FIGURE 7389

METLSNASGTFAIRLLKILCQDNPSHNVFCSPVSISSALAMVLLGAKGNTATQMAQALSLNTEEDIHRAFQSLLT
EVNKAGTQYLLRTANRLFGEKTCQFLSTFKESCLQFYHAELKELSFIRAAEESRKHINTWVSKKTEGKIEELLPG
SSIDAETRLVLVNAIYFKGKWNEPFDETYTREMPFKINQEEQRPVQMMYQEATFKLAHVGEVRAQLLELPYARKE
LSLLVLLPDDGVELSTVEKSLTFEKLTAWTKPDCMKSTEVEVLLPKFKLQEDYDMESVLRHLGIVDAFQQGKADL
SAMSAERDLCLSKFVHKSFVEVNEEGTEAAAASSCFVVAECCMESGPRFCADHPFLFFIRHNRANSILFCGRFSS
P

FIGURE 7390

ATTGCTGGCCTAGGTGAAACTGACGGTCTCCATTAGAAACATGGCTGCGACCAGTCTAGTGGGTATTTGTAGAAG
AGCCTCAGCGTTCCTGAAGGCAGCTTGTTCCCTAGTAAATCCCAAGGACGCTGCTCACTCGGGTTGCAGGTCTTC
TCTTAGTTTGTTGCCTAAGAGTACACCAAATGTGACATCCTTTCACCAATATAGATTACTTCATACCACATTGTC
AAGGAAAGGACTAGAAGAATTTTTTGATGACCCAAAAAACTGGGGGCAAGAAAAAGTAAAATCTGGAGCAGCATG
GACCTGTCAGCAACTAAGGAACAAAAGTAATGAAGATTTACACAAACTTTGGTATGTCTTACTGAAAGAAAGAAA
CATGCTTCTAACCCTAGAGCAGGAGGCCAAGCGGCAGAGATTGCCAATGCCAAGTCCAGAGCGGTTAGATAAGGT
AGTAGATTCCATGGATGCATTAGATAAAGTTGTCCAGGAAAGAGAAGATGCCCTAAGGCTTCTTCAGACTGGTCA
AGAAAGAGCTAGACCTGGTGCTTGGAGAAGAGACATCTTTGGAAGAATCATCTGGCACAAGTTCAAGCAGTGGGT
TATACCTTGGCACCTAAATAAAAGATACAATAGGAAACGATTCTTTGCCTTGCCTTATGTGGACCATTTTCTCAG
ACTGGAACGTGAGAAACGAGCCCGCATCAAAGCACGGAAGGAAAATTTAGAGAGAAAGAAAGCAAAAATTCTTTT
AAAAAAGTTTCCACATCTTGCTGAAGCCCAAAAGTCAAGTCTTGTCTAAGATGTCTGAACTATTAAATTTACCAT
TTTGTTTTTCTTGAATAGTCTGTGTACAGGAGTAAATATGTTAAGTGGTTTATAAAGAAATTCTGTTTTTAGTCA
AGTGACTTTACTAATCAGTTGTTCTAAGTGTGAATATGGCATGCTAATTAGCTAATTTGGTAGAAGCTAATTTGC
TTCTAAAAATCAGGTATAAAGTTCAGATGAGATTCCCACTTTATAAATTCTGACATTTAAGCAGGCTTTAAATGT
CACCTGCTACCTTAGAGTGTGAAGGTGATGGTAACTGCCACAGCAAAGGCAATACCGTAGTTTTTGAATTTGAAT
AATAGTTTTACCTCTGTTGTTAATAGGCTATGAAGAGGATGTGGGTATTGCTGTTAATAAACGGAGGACTTTGAT
TCAAAATAATGAGAAATACATTTAGTCCTTAAAGTAGTAATCACAGTGCACAACAGTCCAAAATATATTTCTGGA
ATGGCTAATTTTTATTTAATTCTGTAAGCCTAAGGTAAAAAGCATAGGCAGTAACTTTTACTAGTCAATAAAAAG
CAGTTCTACCAATCCACTGGTAATTAATACACTAAACAGAGTTGGAAAGCATTTTACTGAAAGCAAAATATTTAG
AGAAAATAGACATTTATACAAAATTATAAAATGCTTGTAATAAGAATAAGTGCATTTCAAGGAAAGCACAAACTT
AATTTATAGAGCCAGTTAAAGCTTTAAAAAATTTAAGTGGAAATTGAAATATGCAAAAATGTATAAACATTCTAC
AAAAGATGGTCATTCTTTTCCTGAGTATACTAAAGCTATGAAACGTAAGGTGACAAAAGGAAGGTAGAAGCTTGG
GAACTCTTTCTCAAGGGCATTTTCTTTCTACACACTGCTTCCCTCCTTCTTCATATTCTTGCTTGGAAATCCACA
TCCCAACACTTGTGGTGACAACATGACTGACTCCTAACATTGTGTTTCCTGATAACCCCTTCACATTGGAAGGGT
CAAATAATCCTTCTGGAATCTTTAGCCGCTCTGCACCAAAATCACAATTGTAGCCATTGGGGAATTCATAATGAA
CAGTTGGCATCTGTGCAGCCACTTGTTCATCATAAGTTGAATCTGACACTTGAAGTACCGAAGCTTGAAAATCCT
GGATAACACAATTACACATATAATTGTGCCAAGACCTCGTAACCTGAGGCAACTTCTCTTTTCTTTTCCAGTTTG
CTGGAGATCCTTCACGAACAGCTTCTTTTGATGCAATCATATATGGAGGAACCAATTCAATATTCATTTCTTGGA
AGAGTTCTCTGCACTGCATAGTAATAAAGTCTCCAGCAAGAGGGGATTTCACAATGCCTTGTTGAAGGACATAGC
CATCGTGGACTGGAATTGCAGTGGTATGAGTGGCTCCACTGTCCAAAATCAGCCCAGTAGAACGACCATTAGCAA
ATGCTGTCAAAACTGCAGTTTTGCAAAGGAAGAAGGCAGGGATGTTGTAGTGTTCAAACATTAACTCTGTCAGTT
TCTCTCTCTTTGCTCTAGTATTCCACGGTGCCTCTGACATGAGAACAGGATGGAGACTGGCTTCTGATTTGACAT
GCATTTTGTAGGTATGATCCAAAATAGCTTGGAAACTATCCCAGTCTTCAACCATCCCATTTTTTAGAGGTGAAA
TGGCCTCCATATTCTCCCTCGGAACACGCAGAGCATTAGTATCTATGTAGTAGGTGGGACCGCCTTGTTTGCCTT
TATCGCCATCTATTTCCATTAATGTGCTTCCGTCATCTCTTTCTACCACCATACCAATAGCTGTAGGAAAATCCA
CCTTGGGGCAGTCCTCACCAGCATAACCAGCTCTCACAGTATAGGATCCAATGTCAAAAACAAGGGCTCCAACTT
CATCTCCCCCGTACCACGCCGCCGCTCATGGCTGCTGCCGGCGCGACTCCTACCCTAAGGGCTAACTGGCGAAGT
GACTGCAGTGGCCGCGACTGCGAGTCTCGAGGAGCGATAGCCCCTGACTCCCTTAACTTCCACCGCCACCCACCT
CAGGCAACAAAGCGG

FIGURE 7391

MAATSLVGICRRASAFLKAACSLVNPKDAAHSGCRSSLSLLPKSTPNVTSFHQYRLLHTTLSRKGLEEFFDDPKN
WGQEKVKSGAAWTCQQLRNKSNEDLHKLWYVLLKERNMLLTLEQEAKRQRLPMPSPERLDKVVDSMDALDKVVQE
REDALRLLQTGQERARPGAWRRDIFGRIIWHKFKQWVIPWHLNKRYNRKRFFALPYVDHFLRLEREKRARIKARK
ENLERKKAKILLKKFPHLAEAQKSSLV

FIGURE 7392

TTTGGGGCTGAGTTTAATAAGCGAGCGAGCGAGCAAGCGAGCGCGGGGGGAAAAAGGCAGAGAATGTCCGCCATC
TACCCTCCGCTCCTGGGCGCGCTCTCATTCATAGCAGCCTCTTCATGAATTACAGCTGAGGGGGGGCGGAGGAGG
GGGGGGTACCACACAACACCCCAGCAAACCTCCGGGCCCCCAGGC**ATG**GCTAGCTCGTGTTCCGTGCAGGTGAAG
CTGGAGCTGGGGCACCGCGCCCAGGTGAGGAAAAAACCCACCGTGGAGGGCTTCACCCACGACTGGATGGTGTTC
GTACGCGGTCCGGAGCACAGTAACATACAGCACTTTGTGGAGAAAGTCGTCTTCCACTTGCACGAAAGCTTTCCT
AGGCCAAAAAGAGTGTGCAAAGATCCACCTTACAAAGTAGAAGAATCTGGGTATGCTGGTTTCATTTTGCCAATT
GAAGTTTATTTTAAAAACAAGGAAGAACCTAGGAAAGTCCGCTTTGATTATGACTTATTCCTGCATCTTGAAGGC
CATCCACCAGTGAATCACCTCCGCTGTGAAAAGCTAACTTTCAACAACCCCACAGAGGACTTTAGGAGAAAGTTG
CTGAAGGCAGGAGGGGACCCTAATAGGAGTATTCATACCAGCAGCAGCAGCAGCAGCAGCAGTAGCAGCAGCAGC
AGCAGCAGCAGCAGCAGCAGTAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGTAGCAGCAGCAGTAGCAGCAGC
AGCAGCAGCAGTAGTACCAGTTTTTCAAAGCCTCACAAATTAATGAAGGAGCACAAGGAAAAACCTTCTAAAGAC
TCCAGAGAACATAAAAGTGCCTTCAAAGAACCTTCCAGGGATCACAACAAATCTTCCAAAGAATCCTCTAAGAAA
CCCAAAGAAAATAAACCACTGAAAGAAGAGAAAATAGTTCCTAAGATGGCCTTCAAGGAACCTAAACCCATGTCA
AAAGAGCCAAAACCAGATAGTAACTTACTCACCATCACCAGTGGACAAGATAAGAAGGCTCCTAGTAAAAGGCCG
CCCATTTCAGATTCTGAAGAACTCTCAGCCAAAAAAAGGAAAAAGAGTAGCTCAGAGGCTTTATTTAAAAGTTTT
TCTAGCGCACCACCACTGATACTCACTTGTTCTGCTGACAAAAAACAGATAAAAGATAAATCTCATGTCAAGATG
GGAAAGGTCAAAATTGAAAGTGAGACATCAGAGAAGAAGAAATCAACGTTACCGCCATTTGATGATATTGTGGAT
CCCAATGATTCAGATGTGGAGGAGAATATATCCTCTAAATCTGATTCTGAACAACCCAGTCCTGCCAGCTCCAGC
TCCAGCTCCAGCTCCAGCTTCACACCATCCCAGACCAGGCAACAAGGTCCTTTGAGGTCTATAATGAAAGATCTG
CATTCTGATGACAATGAGGAGGAATCAGATGAAGTGGAGGATAACGACAATGACTCTGAAATGGAGAGGCCTGTA
AATAGAGGAGGCAGCCGAAGTCGCAGAGTTAGCTTAAGTGATGGCAGCGATAGTGAAAGCAGTTCTGCTTCTTCA
CCCCTACATCACGAACCTCCACCACCCTTACTAAAAACCAACAACAACCAGATTCTTGAAGTGAAAAGTCCAATA
AAGCAAAGCAAATCAGATAAGCAAATAAAGAATGGTGAATGTGACAAGGCATACCTAGATGAACTGGTAGAGCTT
CACAGAAGGTTAATGACATTGAGAGAAAGACACATTCTGCAGCAGATCGTGAACCTTATAGAAGAAACTGGACAC
TTTCATATCACAAACACAACATTTGATTTTGATCTTTGCTCGCTGGACAAAACCACAGTCCGTAAACTACAGAGT
TACCTGGAAACATCTGGAACATCC**TGA**GGATATAACAACTGGATGCATCAAGAACTATTGTGTTTTTTTTTTTTG
GTTTTTTTTTTTTTTGGTTGTGATTTTTTGTTCTTGTTGTTTATATGAAAACACTCAAAATGATGCAACCAAAAG
GGAAAAAATAAAAATCAAACAACCTTCAGCTTTATTTTTCTTTAAAGCCAGTCATCATCTCTTGATAAAGGAGAG
GTTAAAGCAAACCAGCCTCAGCGGACCACTCTTCTCTCCAAGGAAATCCCCGGGAAGAGTTAGCCTGGATAGCCT
TGAAAACAAACAAATCAAACACAACACAAGAAAACTCAAAGAATGTGTATGGTATCATGTATCTCTCTGTGGTGG
TTCATTCCACAGGACGAATGCATATTCAACACACTGCCTTATTACATAACTGATCTATTTATTATCGCATACAGA
TATTCTAAGTCGTTGAGGGAATGACACCATCAGACATTATAAGTACTTGGTCCCGTGGATGCTCTTTCAATGCAG
CACCCTTGCCATCCCAAGCCCAGTGACCTTACTCGTATACCGTGCCACTTTCCACCAACTTTTTCCAAGTCCTTT
AACTCGTTGCAGTCTGTATTTTCCACCTTTTGTTTTTCCAGTTCCAGGACACAGATTATCAACTGGGGGGACCAA
ATAGCCACCTTGATTTTCTTCTTTGTGGTCTTTTTCCTGAAAGTTGGGGCCCAGTCCTTGGCTGTATCCATGTAA
TGATCTTGGACCATGGTAGAAAATGCACCAAATAGGATCATATGAATTGCTGTCTAGCCTTAGTCAATAAACTTG
TAGGACTTTTAAACAAAAGTGTACCTGTAAATGTCCTGAATCCAGCATTGTTGAGCTGTCATCAACATTCTTGTG
TCTGTTTTACTGTTACAATATTAGGTGAATATGGAAGTAAAGGCATTCCACAGGATCATCATTTAAAAAAAAAGA
ATTCTGGTCCTGTTTTCTAAAAAAAAAAAACTGTTGTAGAAATTCTTAATTTGGATCTATTTATTAGTCAGAGTT
TCAGCTTTCTTCAGCTGCCAGTGTGTTACTCATCTTTATCCTAAAAATCTGGAATCAGAGATTTTTGTTTGTTCA
CATATGATTCTCTTAGACACTTTTATATTTGAAAAAATTAAAATCTTTCTTTGGGGAAAAATTCTTGGTTATTCT
GCCATAACAGATTATGTATTAACTTGTAGATTCAGTGGTTCAATACCTGTTTAGTTGCTTGCTAATATTTCCAGA
AGGATTTCTTGTATTGGTGAAAGACGGTTGGGGATGGGGGGATTTTTTTGTTCTTGTTGTACCCTTGTTTTGAAA
CTAGAAATCTGTCCTGTGGCATGCAAAAGAAAGCAAATTATTTTTAAAAGAAAAAAACCAAAGTACTTTTGGTGT
CATTATTCCATCTTCTCCATAAGTGGAGAAATGAAAAGTAAGAACAGCTCATCTTCAAAGTTTTTACTAGAAATT
C

FIGURE 7393

MASSCSVQVKLELGHRAQVRKKPTVEGFTHDWMVFVRGPEHSNIQHFVEKVVFHLHESFPRPKRVCKDPPYKVEE
SGYAGFILPIEVYFKNKEEPRKVRFDYDLFLHLEGHPPVNHLRCEKLTFNNPTEDFRRKLLKAGGDPNRSIHTSS
SSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSTSFSKPHKLMKEHKEKPSKDSREHKSAFKEPSRDH
NKSSKESSKKPKENKPLKEEKIVPKMAFKEPKPMSKEPKPDSNLLTITSGQDKKAPSKRPPISDSEELSAKKRKK
SSSEALFKSFSSAPPLILTCSADKKQIKDKSHVKMGKVKIESETSEKKKSTLPPFDDIVDPNDSDVEENISSKSD
SEQPSPASSSSSSSSFTPSQTRQQGPLRSIMKDLHSDDNEEESDEVEDNDNDSEMERPVNRGGSRSRRVSLSDG
SDSESSSASSPLHHEPPPPLLKTNNNQILEVKSPIKQSKSDKQIKNGECDKAYLDELVELHRRLMTLRERHILQQ
IVNLIEETGHFHITNTTFDFDLCSLDKTTVRKLQSYLETSGTS

FIGURE 7394

GGGCCACCCTTAGCAGCGGTCGCGGTCGGTGCCGAAGCGGTGTTCCCCGCCTTAGCCGCTGCGCCTCCCAAGAGA
GCGGCCGGTGGGCCCTCGTCCTGTCAGTGGCGTCGGAGGCCGGCCTGCGGTGGCCGCGCCCTTCTGGTGCTCGGA
CACCGCTGAGGAGCCGGGGCCGGGCACGGCTGGCTGACGGCTCCGGGCAGCTAAGGCTGCCCGAGGAGAAGGCGG
CGGCCGCGGCGTAGGCGCACGTCCGGCGGGCTCCTGGAGCCTGGAGGAGGCCGAGGGGACC**ATG**TCCGGGAGGCG
CTTCCACCTCTCCACCACCGACCGCGTCATCAAAGCTGTCCCCTTTCCTCCAACCCAACGGCTTACTTTCAAGGA
AGTATTTGAGAATGGGAAACCTAAAGTTGATGTTTTAAAAAACCATTTGGTAAAGGAAGGACGACTGGAAGAGGA
AGTAGCCTTAAAGATAATCAATGATGGGGCTGCCATCCTGAGGCAAGAGAAGACTATGATAGAAGTAGATGCTCC
AATCACAGTATGTGGTGATATTCATGGACAATTCTTTGACCTAATGAAGTTATTTGAAGTTGGAGGATCACCTAG
TAACACACGCTACCTCTTTCTGGGTGACTATGTGGACAGAGGCTATTTCAGTATAGAGTGTGTGCTGTATTTATG
GAGTTTAAAGATTAATCATCCCAAAACATTGTTTCTGCTTCGGGGAAATCATGAATGCAGGCATCTTACAGACTA
TTTCACCTTCAAACAGGAATGTCGAATCAAATATTCGGAACAGGTGTATGATGCCTGTATGGAGACATTTGACTG
TCTTCCTCTTGCTGCCCTCTTAAACCAGCAGTTTCTCTGTGTACATGGAGGAATGTCACCTGAAATTACTTCTTT
AGATGACATTAGGAAATTAGACAGGTTTACGGAACCTCCCGCCTTTGGACCTGTGTGTGACCTGCTTTGGTCTGA
TCCCTCAGAGGATTATGGCAATGAGAAGACCTTGGAGCACTATACCCACAACACTGTCCGAGGGTGCTCTTATTT
CTACAGTTACCCTGCAGTTTGTGAATTTTTGCAGAACAATAATTTACTATCAATTATCAGAGCCCATGAAGCCCA
AGATGCTGGGTATCGAATGTACAGGAAGAGCCAAGCCACAGGCTTTCCATCACTTATTACAATTTTCTCTGCCCC
CAATTACCTAGATGTCTATAACAATAAAGCTGCTGTGTTGAAATATGAAAACAATGTCATGAATATCAGGCAGTT
TAACTGTTCTCCACACCCCTACTGGCTTCCAAACTTTATGGATGTTTTCACATGGTCTTTGCCTTTTGTTGGGGA
AAAAGTCACAGAGATGCTGGTAAATGTGCTCAACATATGCTCTGATGACGAACTGATTTCTGATGATGAAGCAGA
AGGAAGCACTACAGTTCGTAAGGAGATCATCAGGAATAAGATCAGAGCCATTGGGAAGATGGCACGGGTCTTTTC
AATTCTTCGGCAAGAAAGTGAGAGTGTGCTGACTCTCAAGGGCCTGACTCCCACAGGCACACTCCCTCTGGGCGT
CCTCTCAGGAGGCAAGCAGACTATCGAGACAGCCATCAGAGGGTTCTCGCTTCAGCACAAGATCCGGAGTTTTGA
AGAAGCGCGAGGTCTGGACCGAATTAATGAGCGAATGCCACCCCGAAAGGATAGCATATACCCTGGTGGGCCAAT
GAAATCTGTAACCTCAGCACACTCACATGCTGCGCACAGGAGCGACCAAGGGAAGAAAGCCCATTCA**TGA**CTTAG
AGTCCTGCCGTGCTCAGGTGGATCTAAAACTCAAGAACAAATTCTATTTATTTATTATTGGAAAATGAAAAGCAA
CTCAAAACAACTTCAACCTGGAGGTGCATTTATAATTCAGTCTGCATTTATTCTGTAAAAAGGTGACTGTTTTAT
AAATTCTTTTAATTTATGTTCAATATATATAAAAAGTGCATCTGTTTTGTTTTTCCCTTTTTTCTCCATAATTTT
AAGAAATGAATCTGATTGTTGTCAACACATTTGTGAAGTCTTGTGCTATAAAGGGGAACTTCCCCTAATAAAAGG
GCCTTGGAAACCTCAAACCTGGGTTTCTGACCCC

FIGURE 7395

MSGRRFHLSTTDRVIKAVPFPPTQRLTFKEVFENGKPKVDVLKNHLVKEGRLEEEVALKIINDGAAILRQEKTMI
EVDAPITVCGDIHGQFFDLMKLFEVGGSPSNTRYLFLGDYVDRGYFSIECVLYLWSLKINHPKTLFLLRGNHECR
HLTDYFTFKQECRIKYSEQVYDACMETFDCLPLAALLNQQFLCVHGGMSPEITSLDDIRKLDRFTEPPAFGPVCD
LLWSDPSEDYGNEKTLEHYTHNTVRGCSYFYSYPAVCEFLQNNNLLSIIRAHEAQDAGYRMYRKSQATGFPSLIT
IFSAPNYLDVYNNKAAVLKYENNVMNIRQFNCSPHPYWLPNFMDVFTWSLPFVGEKVTEMLVNVLNICSDDELIS
DDEAEGSTTVRKEIIRNKIRAIGKMARVFSILRQESESVLTLKGLTPTGTLPLGVLSGGKQTIETAIRGFSLQHK
IRSFEEARGLDRINERMPPRKDSIYPGGPMKSVTSAHSHAAHRSDQGKKAHS

FIGURE 7396

AGCGCTGCGGGCCCTCCTCGGCTCTCGGCGGGACCGGCGGTGACACCGGAGCTCGCCGTGCGCTCCCGGCCGCTC
TCGCCTCCTCTATTGGCCCAGGAAGCCCACCCAGCCCCGCCACGCAGAGCCCAGAAGGAAAGAAAGCCTCATGCC
TGAGCCGAGGGGAGCACC**ATG**GATCTGACAAAAATGGGCATGATCCAGCTGCAGAACCCTAGCCACCCCACGGGG
CTACTGTGCAAGGCCAACCAGATGCGGCTGGCCGGGACTTTGTGCGATGTGGTCATCATGGTGGACAGCCAGGAG
TTCCACGCCCACCGGACGGTGCTGGCCTGCACCAGCAAGATGTTTGAGATCCTCTTCCACCGCAATAGTCAACAC
TATACTTTGGACTTCCTCTCGCCAAAGACCTTCCAGCAGATTCTGGAGTATGCATATACAGCCACGCTGCAAGCC
AAGGCGGAGGACCTGGATGACCTGCTGTATGCGGCCGAGATCCTGGAGATCGAGTACCTGGAGGAACAGTGCCTG
AAGATGCTGGAGACCATCCAGGCCTCAGACGACAATGACACGGAGGCCACCATGGCCGATGGCGGGGCCGAGGAA
GAAGAGGACCGCAAGGCTCGGTACCTCAAGAACATCTTCATCTCGAAGCATTCCAGCGAGGAGAGTGGGTATGCC
AGTGTGGCTGGACAGAGCCTCCCTGGGCCCATGGTGGACCAGAGCCCTTCAGTCTCCACTTCATTTGGTCTTTCA
GCCATGAGTCCCACCAAGGCTGCAGTGGACAGTTTGATGACCATAGGACAGTCTCTCCTGCAGGGAACTCTTCAG
CCACCTGCAGGGCCCGAGGAGCCAACTCTGGCTGGGGGTGGGCGGCACCCTGGGGTGGCTGAGGTGAAGACGGAG
ATGATGCAGGTGGATGAGGTGCCCAGCCAGGACAGCCCTGGGGCAGCCGAGTCCAGCATCTCAGGAGGGATGGGG
GACAAGGTTGAGGAAAGAGGCAAAGAGGGGCCTGGGACCCCGACTCGAAGCAGCGTCATCACCAGTGCTAGGGAG
CTACACTATGGGCGAGAGGAGAGTGCCGAGCAGGTGCCACCCCCAGCTGAGGCTGGCCAGGCCCCCACTGGCCGA
CCTGAGCACCCAGCACCCCCGCCTGAGAAGCATCTGGGCATCTACTCCGTGTTGCCCAACCACAAGGCTGACGCT
GTATTGAGCATGCCGTCTTCCGTGACCTCTGGCCTCCACGTGCAGCCTGCCCTGGCTGTCTCCATGGACTTCAGC
ACCTATGGGGGGCTGCTGCCCCAGGGCTTCATCCAGAGGGAGCTGTTCAGCAAGCTGGGGGAGCTGGCTGTGGGC
ATGAAGTCAGAGAGCCGGACCATCGGAGAGCAGTGCAGCGTGTGTGGGGTCGAGCTTCCTGATAACGAGGCTGTG
GAGCAGCACAGGAAGCTGCACAGTGGGATGAAGACGTACGGGTGCGAGCTCTGCGGGAAGCGGTTCCTGGATAGT
TTGCGGCTGAGAATGCACTTACTGGCTCATTCAGCGGGTGCCAAAGCCTTTGTCTGTGATCAGTGCGGTGCACAG
TTTTCGAAGGAGGATGCCCTGGAGACACACAGGCAGACCCATACTGGCACTGACATGGCCGTCTTCTGTCTGCTG
TGTGGGAAGCGCTTCCAGGCGCAGAGCGCACTGCAGCAGCACATGGAGGTCCACGCGGGCGTGCGCAGCTACATC
TGCAGTGAGTGCAACCGCACCTTCCCCAGCCACACGGCTCTCAAACGCCACCTGCGCTCACATACAGGCGACCAC
CCCTACGAGTGTGAGTTCTGTGGCAGCTGCTTCCGGGATGAGAGCACACTCAAGAGCCACAAACGCATCCACACG
GGTGAGAAACCCTACGAGTGCAATGGCTGTGGCAAGAAGTTCAGCCTCAAGCATCAGCTGGAGACGCACTATAGG
GTGCACACAGGTGAGAAGCCCTTTGAGTGTAAGCTCTGCCACCAGCGCTCCCGGGACTACTCGGCCATGATCAAG
CACCTGAGAACGCACAACGGCGCCTCGCCCTACCAGTGCACCATCTGCACAGAGTACTGCCCCAGCCTCTCCTCC
ATGCAGAAGCACATGAAGGGCCACAAGCCCGAGGAGATCCCGCCCGACTGGAGGATAGAGAAGACGTACCTCTAC
CTGTGCTATGTG**TGA**AGGGAGGCCCGCGGCGGTGGAGCCGAGCGGGGAGCCAGGAAAGAAGAGTTGGAGTGAGAT
GAAGGAAGGACTATGACAAATAAAAAAAAAAAAAAA

FIGURE 7397

MDLTKMGMIQLQNPSHPTGLLCKANQMRLAGTLCDVVIMVDSQEFHAHRTVLACTSKMFEILFHRNSQHYTLDFL
SPKTFQQILEYAYTATLQAKAEDLDDLLYAAEILEIEYLEEQCLKMLETIQASDDNDTEATMADGGAEEEEDRKA
RYLKNIFISKHSSEESGYASVAGQSLPGPMVDQSPSVSTSFGLSAMSPTKAAVDSLMTIGQSLLQGTLQPPAGPE
EPTLAGGGRHPGVAEVKTEMMQVDEVPSQDSPGAAESSISGGMGDKVEERGKEGPGTPTRSSVITSARELHYGRE
ESAEQVPPPAEAGQAPTGRPEHPAPPPEKHLGIYSVLPNHKADAVLSMPSSVTSGLHVQPALAVSMDFSTYGGLL
PQGFIQRELFSKLGELAVGMKSESRTIGEQCSVCGVELPDNEAVEQHRKLHSGMKTYGCELCGKRFLDSLRLRMH
LLAHSAGAKAFVCDQCGAQFSKEDALETHRQTHTGTDMAVFCLLCGKRFQAQSALQQHMEVHAGVRSYICSECNR
TFPSHTALKRHLRSHTGDHPYECEFCGSCFRDESTLKSHKRIHTGEKPYECNGCGKKFSLKHQLETHYRVHTGEK
PFECKLCHQRSRDYSAMIKHLRTHNGASPYQCTICTEYCPSLSSMQKHMKGHKPEEIPPDWRIEKTYLYLCYV

FIGURE 7398

GTGGTGAGTGTGTGTCGGTCGCACGGCGTGTGTCTCCGGCCGCGGGTTCCGCCTCCTCCCCTGCCGCCGCTGCTC
ACGGTGTAAGTCAATGTGAAGCAGCAGCTCCAGCCCCGGGATAAACATGGCGACGTCTCTGCATGAGGGACCCAC
GAACCAGCTGGATCTGCTCATCCGGGCCGTGGAAGCATCAGTTCACAGCAGTAATGCACACTGTACAGATAAGAC
AATTGAAGCTGCTGAAGCCCTGCTTCATATGGAATCTCCTACCTGCTTGAGGGATTCAAGAAGTCCTGTGGAAGT
GTTTGTTCCTCCTTGTGTATCAACTCCAGAATTCATCCATGCTGCTATGAGGCCAGATGTCATTACAGAAACTGT
AGTGGAGGTGTCAACTGAAGAGTCTGAACCCATGGATACCTCTCCTATTCCAACATCACCAGATAGCCATGAACC
AATGAAAAAGAAAAAAGTTGGCCGTAAACCAAAGACCCAGCAATCACCAATTTCCAATGGGTCTCCTGAGTTAGG
TATAAAGAAGAAACCAAGAGAAGGAAAAGGAAACACAACCTATTTGTGGGAGTTTCTTTTAGATCTACTTCAAGA
TAAAAATACTTGTCCCAGGTATATTAAATGGACTCAGAGAGAAAAAGGCATATTCAAGCTGGTGGATTCAAAGGC
TGTCTCTAAGCTTTGGGGAAAGCATAAGAACAAACCAGACATGAACTATGAAACCATGGGACGAGCTTTGAGATA
CTACTACCAAAGGGGAATTCTTGCAAAGGTTGAAGGACAGAGGCTTGTATATCAGTTCAAGGATATGCCGAAAAA
CATAGTGGTCATAGATGATGACAAAAGTGAAACCTGTAATGAAGATTTAGCAGGAACTACTGATGAAAAATCATT
AGAACGAGTGTCACTGTCTGCAGAAAGTCTCCTGAAAGCAGCATCCTCTGTTCGCAGTGGAAAAAATTCATCCCC
TATAAACTGCTCCAGAGCAGAGAAGGGTGTAGCTAGAGTTGTGAATATCACTTCCCCTGGGCACGATGCTTCATC
CAGGTCTCCTACTACCACTGCATCTGTGTCAGCAACAGCAGCTCCAAGGACAGTTCGTGTGGCAATGCAGGTACC
TGTTGTAATGACATCATTGGGTCAGAAAATTTCAACTGTGGCAGTTCAGTCAGTTAATGCAGGTGCACCATTAAT
AACCAGCACTAGTCCAACAACAGCGACCTCTCCAAAGGTAGTCATTCAGACAATCCCTACTGTGATGCCAGCTTC
TACTGAAAATGGAGACAAAATCACCATGCAGCCTGCCAAAATTATTACCATCCCAGCTACACAGCTTGCACAGTG
TCAACTGCAGACAAAGTCAAATCTGACTGGATCAGGAAGCATTAACATTGTTGGAACCCCATTGGCTGTGAGAGC
ACTTACCCCTGTTTCAATAGCCCATGGTACACCTGTAATGAGACTATCAATGCCTACTCAGCAGGCATCTGGCCA
GACTCCTCCTCGAGTTATCAGTGCAGTCATAAAGGGGCCAGAGGTTAAATCGGAAGCAGTGGCAAAAAAGCAAGA
ACATGATGTGAAAACTTTGCAGCTAGTAGAAGAAAAACCAGCAGATGGAAATAAGACAGTGACCCACGTAGTGGT
TGTCAGTGCGCCTTCAGCTATTGCCCTTCCTGTAACTATGAAAACAGAAGGACTAGTGACATGTGAGAAATAAAA
TAGCAGCTCCACCATGGACTTCAGGCTGTTAGTGGCAGTACTGACATAAACATTTGCAAGGGAAGTCATCAAGAA
AAGTCCAAAGAAGACTTTAAAACATTTTTAATGCATATACAAAAACAATCAGACTTACTGGAAATAAATTACCTA
TCCCATGTTTCAGTGGGAAATGAACTACATATTGAGATGCTGACAGAAAACTGCCTCTTACAGTAGGAAACAACT
GAACCCATCAATAAGAAAAAGGATCGAAAGGGACCAAGCAGCTCACTACGATATCAAGTTACACTAAGACTTGGA
ACACTAACATTCTGTAAGAGGTTATATAGTTTTTCAGTGGGAGGGGTTGGGATGGGTAATCTCATTGTTACATAT
AGCAATTTTTGATGCATTTTATATGCATACCAGCAATTATTACTGTGTTCGCACAGTTCTCACTTAACTGGTGCT
ATGTGAAGACTCTGCTAATATAGGTATTTTAGAATGTGAATTGAAGAATGGATCCCAAAAACTTCAGAAAGAGGA
TAGCAAAAAAAGATCTAGTGCGATTTTATATATATATATATATATATATACATACATATATATATATCATATAGC
TTAAGCTGATTTAAAACAAAGGCCTTAGACTAATTTTCGATTTTCTTTCTTGAAATAAGCTAATGGCTTGTTTGT
GTAAAGCTTTTTTATTAAAAGAAAAATTTTAAAAATCTTGTACCTAGCACAGTATTGTTATAGAATATACATGTA
ACATTTTATATGGTAGTTTAAGTCTGTCAGTTTCTTAATTGTGGACAAATTAACAGTTGGCTCTGGCCTTTTGCT
GTAACATGCCTGTGTCACTCACTTAGCCTTGGCATTTGTGCAGACATACCATTTTCAGTTCTGCTGTCACTTGGA
AGTTCAGGCTCAGCATGAATTTTTGGCAGGTAGCTCTAATACCTGGAGTTTTCTTTGTTTTTTTTTCTTTTTTTT
AGTTGAAGTTTATGAGGGAAATACCAGTGTTCAGTTTTGAACTATAATAGTTTGTATATTCAACATTTGAAGTAT
ATTCTATTTTGTTGTACTCTTGTTTCAAAGTGTATTCAAGTAGGTTTTCTGAAATATAGAAATGAAATTTATCTT
CTGTTTTGGTCTCTGGTGATATTTTAAACAATATTTAAAAGTCAGTATAGAAGTGTTTTAGTTAGGAAGTGATAA
AACATCTCTCTTCTCCTTCCCAACTACTGCATGAAGAAATTCTACTTCCATTATATTAATATTTGGGC

FIGURE 7399

MATSLHEGPTNQLDLLIRAVEASVHSSNAHCTDKTIEAAEALLHMESPTCLRDSRSPVEVFVPPCVSTPEFIHAA
MRPDVITETVVEVSTEESEPMDTSPIPTSPDSHEPMKKKKVGRKPKTQQSPISNGSPELGIKKKPREGKGNTTYL
WEFLLDLLQDKNTCPRYIKWTQREKGIFKLVDSKAVSKLWGKHKNKPDMNYETMGRALRYYYQRGILAKVEGQRL
VYQFKDMPKNIVVIDDDKSETCNEDLAGTTDEKSLERVSLSAESLLKAASSVRSGKNSSPINCSRAEKGVARVVN
ITSPGHDASSRSPTTTASVSATAAPRTVRVAMQVPVVMTSLGQKISTVAVQSVNAGAPLITSTSPTTATSPKVVI
QTIPTVMPASTENGDKITMQPAKIITIPATQLAQCQLQTKSNLTGSGSINIVGTPLAVRALTPVSIAHGTPVMRL
SMPTQQASGQTPPRVISAVIKGPEVKSEAVAKKQEHDVKTLQLVEEKPADGNKTVTHVVVVSAPSAIALPVTMKT
EGLVTCEK

FIGURE 7400

CCGCATCCACTGTGGATTATAATTGCAACATGACGCTGGAAGAGCTCGTGGCGTGCGACAACGCGGCGCAGAAGA
TGCAGACGGTGACCGCCGCGGTGGAGGAGCTTTTGGTGGCCGCTCAGCGCCAGGATCGCCTCACAGTGGGGGTGT
ACGAGTCGGCCAAGTTGATGAATGTGGACCCAGACAGCGTGGTCCTCTGCCTCTTGGCCATTGACGAGGAGGAGG
AGGATGACATCGCCCTGCAAATCCACTTCACGCTCATCCAGTCCTTCTGCTGTGACAACGACATCAACATCGTGC
GGGTGTCGGGCAATGCGCGCCTGGCGCAGCTCCTGGGAGAGCCGGCCGAGACCCAGGGCACCACCGAGGCCCGAG
ACCTCCACTGTCTTCCCTTCCTACAGAACCCTCACACGGACGCCTGGAAGAGCCACGGCTTGGTGGAGGTGGCCA
GCTACTGCGAAGAAAGCCGGGGCAACAACCAGTGGGTCCCCTACATCTCTCTTCAGGAACGCTGAGGCCCTTCCC
AGCAGCAGAATCTGTTGAGTTGCTGCCAACAAACAAAAAATACAATAAATATTTGAACCCCCTCCCCCCCAGCAC
AACCCCCCCAAAACAACCCAACCCACGAGGACCATCGGGGGCAGGTCGTTGGAGACTGAAGAGAAAGAGAGAGAG
GAGAAGGGAGTGAGGGGCCGCTGCCGCCTTCCCCATCACGGAGGGTCCAGACTGTCCACTCGGGGGTGGAGTGAG
ACTGACTGCAAGCCCCACCCTCCTTGAGACTGGAGCTGAGCGTCTGCATACGAGAGACTTGGTTGAAACTTGGTT
GGTCCTTGTCTGCACCCTCGACAAGACCACACTTTGGGACTTGGGAGCTGGGGCTGAAGTTGCTCTGTACCCATG
AACTCCCAGTTTGCGAATTAATAAGAGACAATCTATTTTGTTACTTGCACTTGTTATTCGAACCACTGAGAGCGA
GATGGGAAGCATAGATATCTATATTTTTATTTCTACTATGAGGGCCTTGTAATAAATTTCTAAAGCCTCAAAAAA

FIGURE 7401

MTLEELVACDNAAQKMQTVTAAVEELLVAAQRQDRLTVGVYESAKLMNVDPDSVVLCLLAIDEEEEDDIALQIHF
TLIQSFCCDNDINIVRVSGNARLAQLLGEPAETQGTTEARDLHCLPFLQNPHTDAWKSHGLVEVASYCEESRGNN
QWVPYISLQER

FIGURE 7402

AGTCTTGGCGGAGGTGACCAAAGCCACGTAATGTCCGTAGTTCGCTCATCCGTCCATGCCAGATGGATTGTGGGG
AAGGTGATTGGGACAAAAATGCAAAAGACTGCTAAAGTGAGAGTGACCAGGCTTGTTCTGGATCCCTATTTATTA
AAGTATTTTAATAAGCGGAAAACCTACTTTGCTCACGATGCCCTTCAGCAGTGCACAGTTGGGGATATTGTGCTT
CTCAGAGCTTTACCTGTTCCACGAGCAAAGCATGTGAAACATGAACTGGCTGAGATCGTTTTCAAAGTTGGAAAA
GTCATAGATCCAGTGACAGGAAAGCCCTGTGCTGGAACTACCTACCTGGAGAGTCCGTTGAGTTCGGAAACCACC
CAGCTAAGCAAAAATCTGGAAGAACTCAATATCTCTTCAGCACAGTGAAGCGGGAGTGGAAGAAGGATCTAAAGG
GAAAAACTGACATGTTTATGTTATGGAAAAAGAAATTTTTCTAAGTTTCATCACAAACTGTGTCCAGTTTCTCTG
TGGTGTTTATGAAATAGCTAAAAGCAAATGAAGTAAAGGGCATACTATGGTTTTTCACAAAAAAAAAAAAAAAAA

FIGURE 7403

MSVVRSSVHARWIVGKVIGTKMQKTAKVRVTRLVLDPYLLKYFNKRKTYFAHDALQQCTVGDIVLLRALPVPRAK
HVKHELAEIVFKVGKVIDPVTGKPCAGTTYLESPLSSETTQLSKNLEELNISSAQ

FIGURE 7404A

GTCGGCCGTCCCCTTTAATTTTTAAATACACGGTCCCCTCTTTTCTCTGGGGGGGGCAAGCAAGAAATCAAAGAA
GGAGGAGACAAGCCGTCAATTTTCTCCAAAACAAACCCCACCGGGCAATTTGGTCTCGGGGTAGGGGGAGACGGG
GTGATTGCAAATTATTCCAGGACGAGATCCAGTTCTCCAGCGGGAAAGGGGCAAAGGAACGCCGCGCGTTGGAAG
GGCCAGGGTACGCAGCTCCCCTTGCAGCGCCCGCAGGACCCCCGCAAGCTCGTGCCGGCGAAATCGGAGACCGCC
GATCTGTCCTCGTTCTCTCCTGCACGTCTGGCTGCATTCGGAGGAAGACCTGGGGCGCGAGCGAGCGGCGACAGC
ATGAGCCTGTGCTGACCTCCGCGCGGCGGGCCGAGCCCAGGGCTTTGTCGCGGTACCTGCGCCCAGCCCGCGCCG
CAACTCTGTGCCCAGCTTTTGCAATCTTTTGTTGCAGCGCTGACCGCACCAAGTTAAATGCTCCCTTGCAATTTT
TCTTTTTTTTGTTTGTTTGTTTAATTTTTGGAGAGCTCGCGATCTTGGAAAAGCCTCAGACGCCATCTACAGTTA
AAACGTAGGTAACTGCCCTCTCCCGCACCCCCCCCTTACACGCCCCCCACCCTTTCCACCAAAAAAAGGGGGTGC
AGCGCGGATTCTGGCTGCCGTGCGTCGCCAGCCGGTAGACCCGTGCTTGTTTCCTTTCTCTTTTTGTTTGGCTTC
TAACGCGTTGGGACTGAGTCGCCGCCGTGAGCTCCCCGAAGACTGCACAAACTACCGCGGGCTCCTCCGCCCCGT
CTGCGATTCGGAAGCCGGCCTGGGGGTCGCGTCGGGAGCCCTGCGCTGCAGCTCCGCACCTTAGCAGCCCGGGTA
CTCATCCAGATCCACGCCGGGGACACACACACAGAGTAACTAAAAGTGCGGCGATTCTGCACATCGCCGACTGCT
TTGGGGTAACAAAAAGACCCGAGTTGCCTGCCGACCGAGGACCCCCGGGAGCCGGGCTCGGAGCAGACGAGGTAT
CCGGCGGCGCCCATTTGGGGGCTTCTAACTCTTTCTCCACGCAGCCCCTCTTCTGTCCCCTCCCCTCTCGCTCCC
TTTTAAAATCAGTGGCACCGAGGCGCCTGCAGCCGCACTCGCCAGCGACTCATCTCTCCAGCGGGTTTTTTTTTG
TTTGTCGTGTGCGATCCTCACACTC**ATG**AACATACACAGGTCTACCCCCATCACAATAGCGAGATATGGGAGATC
GCGGAACAAAACCCAGGATTTCGAAGAGTTGTCGTCTATAAGGTCCGCGGAGCCCAGCCAGAGTTTCAGCCCGAA
CCTCGGCTCCCCGAGCCCGCCCGAGACTCCGAACTTGTCGCATTGCGTTTCTTGTATCGGGAAATACTTATTGTT
GGAACCTCTGGAGGGAGACCACGTTTTTCGTGCCGTGCATCTGCACAGCGGAGAGGAGCTGGTGTGCAAGGTGTT
TGATATCAGCTGCTACCAGGAATCCCTGGCACCGTGCTTTTGCCTGTCTGCTCATAGTAACATCAACCAAATCAC
TGAAATTATCCTGGGTGAGACCAAAGCCTATGTGTTCTTTGAGCGAAGCTATGGGGACATGCATTCCTTCGTCCG
CACCTGCAAGAAGCTGAGAGAGGAGGAGGCAGCCAGACTGTTCTACCAGATTGCCTCGGCAGTGGCCCACTGCCA
TGACGGGGGGCTGGTGCTGCGGGACCTCAAGCTGCGGAAATTCATCTTTAAGGACGAAGAGAGGACTCGGGTCAA
GCTGGAAAGCCTGGAAGACGCCTACATTCTGCGGGGAGATGATGATTCCCTCTCCGACAAGCATGGCTGCCCGGC
TTACGTAAGCCCAGAGATCTTGAACACCAGTGGCAGCTACTCGGGCAAAGCAGCCGACGTGTGGAGCCTGGGGGT
GATGCTGTACACCATGTTGGTGGGGCGGTACCCTTTCCATGACATTGAACCCAGCTCCCTCTTCAGCAAGATCCG
GCGTGGCCAGTTCAACATTCCAGAGACTCTGTCGCCCAAGGCCAAGTGCCTCATCCGAAGCATTCTGCGTCGGGA
GCCCTCAGAGCGGCTGACCTCGCAGGAAATTCTGGACCATCCTTGGTTTTCTACAGATTTTAGCGTCTCGAATTC
AGCATATGGTGCTAAGGAAGTGTCTGACCAGCTGGTGCCGGACGTCAACATGGAAGAGAACTTGGACCCTTTCTT
TAAC**TGA**GCTCATGCCCCACGGAGACTTAGCAGGTTCCAGGAGTGAGCGAGGGCAGCGGAAAGGAGTTCTTCCGG
GGGACACGAATTGCCTGGCTGAGTAGCAAGAAAGACACACTCTTAAGTTTCTTGGTTCAGAGCAGGAAAACCTTC
AAGGAGCTGACTGACCACGTAGCATGGGGGCAAGAGGCGTGGGATGGGGATTGGGGTGAGATGGATGGGAGCCCG
CTGGAGCTTGTCTTCCCTAACATAGCCTGGGAGACCACCCCTTGCCACTTGGGCCACTTCCGCCTACCCCACTTT
TCATTTTGTTCCAAAATAGTTGCAGATCCTGACAGAATCAAAACTCTCTGCCTCAAACACACATCCTGGCATCGC
ACTGTTAGCATTTAACTTCTTGTTAGGATTCAGGGAAGGAACAGTTGGCCAAGAATTTTTTTTCTTTTAAACAAG
CCAACCACCTAGCTGGTAATTAATGAGGTTCACTTAAAAAAAAAATTCGGTGCACACAGACTGACATGAAACCTG
GGTGCTACAGTAAAAGAAAACAAAAGTCCAGTTTGTGTCTCTTAATCGCTCACTTCAACTCATTTCTTCTAAATA
AACTATTTAATATCCTGGTCAGGAAATGACATGTTAATGCTTTGCTCCCTGAAGGGGGAAAAAATCTGTCCTTTA
ACAAGCTATTCTGTTTTGTGTCAATTGGGTCCGTGGCAAGGAAGCTATTAGGAAGTCAAACGGTCCAGGATGCAT
TACCTGCTAATCCTTAGGTTTAAAGGGGGAAAGAAAAGGGAAGAAGAAAGGAAAAGAGAAATCCAACTCCTTTTT
CATGTTTTGCTTTTGAACAATGAGGGTTTGTGTGACAGGCATTCCTCTTTGCTGAGATGATAGCAATGGCCTGAG
ATTTTAGCAAGCTCCTGGAGTCTGATGCTTTTGCAGTACTCTGATCGCAACTAAACATTTGTCTTTGTTTTATTA
GAAACTAGTGAAACAAAGCAGGTTGTCCCACATGTATAAAATACAGGGCAGCTATTTAGTTTTCTTTACAGAGAA
TGATCCTTTTAAGGCTTGTAAGGCCCTCTGGTTTGGACAAAAACCCTCAGTAGAGACAAGCGGGAAGGATAATTA
GCTGAAAGCTATGATGATATAAATAAAAACAGCTCTCTATCCCAATACGCACCTTTGTATTTTCAAGAACTCTTC
TATTTATTAAGGAAAATGTCACATTGTGATGTATTAAGCCAGTACTTCAATTACGGGTTGACTTGGGATGACATA
TTACATGCTGTAGTTAACATTTATAATTCTTTTTCCTTGTTTGAGTATTTCTGTCTCTGAAATAACCTTTTACTT

FIGURE 7404B

GGCTTTTCTAGATAGCTTTATTTGATTTCGAGTGGCAAAATGTTTTTTATTACGGCTTTTCTATTGCTGTATGAT
ACAGAACTCTTTTGGCATAAATATTTGTGTTCCCAGTACCTCACTTGTTCGGATTTGACTGCCTGTATATGTTTT
GTGAAATGGTCCTGTTTTTGGGTAGGTGACACGTGGACTCTAGTATGTAAATGTTACTTGAATCTGTGCTTCATA
ATAGTGTGTGGCATGTATGTGCAGACTCTTGGATGCTTTATGCCTGCGCACCAGGAGCCCTGTCCTCACGTTCCC
AGGAGGGCGGCTTCACCCTTCGTAACCAGGAGACAAGGCGGCCATGGATTTGCCCTTGATTCTATTTTGCTAATG
GAAGATAGAAAGGAGAGAAGGTTTTTTTTTTTTTTAACATTCTGAAGATGGTGCTGTGTCAAGAAGGACCTTTT
TTTTCCCCTCTCCCCTATTTTTTAAGTACCTTGGAGGAGGAGAGGTTGGTGACATGCATGGTGGGGATCTATGGC
CTCTGGTGCTTTGTCCTGTATTTGGTTTAATGTTTTTGTCCTAATCTCTTCAATCAATAAAATTGTGCGTATTTA
ACTAAAAAAAAAAAAAAAAAA

FIGURE 7405

MNIHRSTPITIARYGRSRNKTQDFEELSSIRSAEPSQSFSPNLGSPSPPETPNLSHCVSCIGKYLLLEPLEGDHV
FRAVHLHSGEELVCKVFDISCYQESLAPCFCLSAHSNINQITEIILGETKAYVFFERSYGDMHSFVRTCKKLREE
EAARLFYQIASAVAHCHDGGLVLRDLKLRKFIFKDEERTRVKLESLEDAYILRGDDDSLSDKHGCPAYVSPEILN
TSGSYSGKAADVWSLGVMLYTMLVGRYPFHDIEPSSLFSKIRRGQFNIPETLSPKAKCLIRSILRREPSERLTSQ
EILDHPWFSTDFSVSNSAYGAKEVSDQLVPDVNMEENLDPFFN

FIGURE 7406

GACACTGCGCGCGCCTCCAGGCACCGGCGTTAGCGGGTCGCCGACCCGCAATCCCCGCCGCGGCTGCTTGCCTAC
CGGAGTGTGCGCCGGCACCTGCCGCCGGAGACATGTTGCAAAAACCGAGGAACCGGGGCCGCTCTGGCGGCCAGG
CCGAGAGGGACAGAGACTGGAGCCATAGCGGAAACCCCGGGGCTTCGCGGGCCGGGGAAGACGCCCGGGTTCTCA
GAGACGGCTTTGCCGAGGAGGCCCCGAGCACGTCCCGCGGGCCGGGCGGCTCGCAGGGGTCGCAGGGCCCCTCGC
CTCAGGGCGCCCGCCGGGCCCAGGCCGCCCCCGCCGTGGGGCCCAGGAGCCAGAAGCAGCTGGAGCTGAAAGTGT
CCGAGCTGGTGCAGTTCTTGCTGATTAAAGACCAGAAGAAGATTCCGATCAAGCGGGCCGACATACTGAAGCACG
TCATCGGGGACTACAAGGACATCTTCCCCGACCTCTTCAAACGGGCCGCCGAGCGCCTCCAGTACGTCTTCGGGT
ATAAGCTGGTGGAACTTGAACCCAAGAGCAACACTTACATCCTCATCAACACCCTGGAGCCTGTGGAGGAGGATG
CCGAGATGAGGGGTGACCAAGGCACGCCCACTACGGGCCTCCTGATGATCGTCTTAGGGCTCATCTTTATGAAGG
GCAACACCATCAAGGAAACTGAAGCCTGGGACTTTCTGCGGCGCTTAGGGGTCTACCCCACCAAGAAGCATTTAA
TTTTCGGAGATCCAAAGAAACTCATTACTGAGGACTTTGTGCGACAGCGTTACCTGGAATACCGGCGGATACCCC
ACACCGACCCCGTCGACTACGAATTCCAGTGGGGCCCGCGAACCAACCTGGAAACCAGCAAGATGAAAGTTCTTA
AGTTTGTGGCCAAGGTCCATAATCAAGACCCCAAGGACTGGCCAGCGCAGTACTGTGAGGCTTTGGCAGATGAGG
AGAACAGGGCCAGACCTCAGCCTAGTGGCCCAGCTCCATCCTCT**TGA**AAGGTGGATTCAGAGGGACCCCCGGGAC
AAGGGTCTGAGACCCAAAGGCACAGTTTAGAGGATTGGGGGAAGGGAGAACGAACCCAGGGAGCATATTGCTGTA
AACGCTTCAATGTGTGTAGCTTTAGGATGTGTTTGCAAAGTTTTGTTTTTTTAATGTTGTGTTATTTTGCTCCAG
ATTTTCATCTATAAACAAAGGAGCATTTGTTTTGATTTTACTCTTTTTGGTATAAAAAATTTTGCTAGCTTAGTA
AAACGAATTGGAAAACTTGACTATGATCTGGAACAGATAATGCAAGAAGGAACACATAAGTAAGTTGCTTTGGTG
CCAAGAAAATAAAAAAGCTATTATCAGGTCTCCTAACTACCCCAGTTTGTAAGGAAAAATAAAAGTTTTTATAAA
ATTAAAAAAAAATAATTGCCTATATCCTTATTATGTTAACCTATTTTATTTTTCTATATTTCGTACATATATAAGT
ATTATTCATGGTTCCAAGCAATGAGTGTAATGTATTTTCTCCCAATAGTAATTGTTTATATTCATAATTATTCAG
CTCTGCTGCTAAACACGTAGTTCCACTTCGTTTTTTTCTTCTTGCTACTGTAGTTATTACAATAAATACTGTATT
TTTGAAGCACTT

FIGURE 7407

HCARLQAPALAGRRPAIPAAAACLPECAPAPAAGDMLQKPRNRGRSGGQAERDRDWSHSGNPGASRAGEDARVLR
DGFAEEAPSTSRGPGGSQGSQGPSPQGARRAQAAPAVGPRSQKQLELKVSELVQFLLIKDQKKIPIKRADILKHV
IGDYKDIFPDLFKRAAERLQYVFGYKLVELEPKSNTYILINTLEPVEEDAEMRGDQGTPTTGLLMIVLGLIFMKG
NTIKETEAWDFLRRLGVYPTKKHLIFGDPKKLITEDFVRQRYLEYRRIPHTDPVDYEFQWGPRTNLETSKMKVLK
FVAKVHNQDPKDWPAQYCEALADEENRARPQPSGPAPSS

FIGURE 7408

GTGGAGGCCGCCAGTCGCGGCGATCTTCTCCTCGCTTCTGGAGTGTTATCGTCACCATGTCCCTAATGGTCTCGG
CTGGCCGGGGCCTGGGGGCCGTGTGGTCCCCAACCCACGTGCAGGTGACGGTGCTGCAGGCGCGGGGCCTGCGGG
CCAAGGGCCCCGGGGGCACGAGCGACGCGTACGCGGTGATCCAGGTGGGCAAGGAGAAGTACGCCACCTCCGTGT
CGGAGCGCAGCCTGGGCGCGCCCGTGTGGCGCGAGGAGGCCACCTTCGAGCTGCCATCGCTGCTGTCCTCCGGAC
CCGCGGCCGCCGCCACCCTGCAGCTCACCGTGCTGCACCGCGCGCTGCTCGGCCTCGACAAGTTCCTGGGCCGCG
CCGAGGTGGACCTGCGGGATCTGCACTCCAGCCTGGGCAAGAGTTTTTTTAAGACTCTTAAAAAAAGAGCCTGGG
CAATTTTTTTAAGACTCTGTCTTAAAAAAAACTAAAAAAGAAAAAAAGAAGCCCCTTCACTCTACAGGGGACAGGA
GACCATGGATTGGACCCCAAAGGGATTGAACTGCATCTGCATGTCTGTCCTTTGAACACTTTCTCTCCCTGCCCA
AAAGGAAACCCAAATTATTTGTGGGATACTGGGGAAATTGTAGTGAAGGGCTTAATGTAGTTAATAAAAGTTAAA
AGTCAGTAGAAAACAGGTGCCTCAGCCTTCAAATGGTTGCTTTTTTTCCATTTTCCCTCATGAATAGACTCACCA
GCATTTTACCCCCTTGTTATAAAACTGTGCAGAGCAAGAAGATGATACTTATTTTTGAATTTGTATTTTTAAAAC
TAGATTTATAGACTTTTTTTTTTTTTAACTAGGGCACTTGCTTCCTTCTTAGCTAAAAGCACCAGCTGAGATTTT
TCAGGTAATTTTGTTGTTACTCACTTAAGACTGGAATTAGAATGTTTCTGGTATTTCTCATTTTTTTCCCTGGCT
ATGATAGAATCTCATCTAATCTTGACATCTCTCCTAGGGGAAGAATATCACAGGCTAATAGCGTGGTTGGGGGTG
AAGATGATAGCAGTTATTAAATCAGGAATCTCTTTTATGTATGTCCTTGTTACATTGAGGTTAAGAGACAAAATC
ATTGGCAGTGCAATCTCTTTCCAGGATTTCGTTTGCTGTGGCATTGGTTATATCAGAGCACTTTAATCTGAAGGA
TGATACTGTAACTTGATTTATCTAATTAGCTTTTAATTATCTACAGCTATTTTATTTTATTTAATTCTCTCCTAC
AGTACTGGGACCACTGTAAACTTCTCAGATGACTTGTATTTTTGTAGTGCTATGAAATTTATTTACATACTTATA
AAGAAAACTGTATGTTCACTTGAAAAAAAAAAAAAAAAA

FIGURE 7409

MSLMVSAGRGLGAVWSPTHVQVTVLQARGLRAKGPGGTSDAYAVIQVGKEKYATSVSERSLGAPVWREEATFELP
SLLSSGPAAAATLQLTVLHRALLGLDKFLGRAEVDLRDLHSSLGKSFFKTLKKRAWAIFLRLCLKKN

FIGURE 7410A

CTCTGGCTTTCTGTTTTCTACTAACAGGATTTGGTCACTGGTTCTTCATCTTTTGTCTGTTGCACGCATCCCGCC
CTCCCCACTTGCTTCCCCACTCCTTGGATCCAGCCCTGTGGGCATTCACGTCAGTTCTCTGACCCCGCCGTGAGC
CCCGCTCCGGGTCCCCGGGCGGGCTTGGCACGGAGGCGGTAACTATGGAGAATATGGCGGAGGAGGAGCTGCTGC
CCCTGGAGAAGGAGGAGGTGGAGGTGGCCCAGGTCCAGGTCCCGACCCCGGCCCGGGACTCGGCTGGGGTCCCAG
CTCCGGCCCCGGATTCGGCTCTGGACTCGGCTCCGACTCCGGCCTCGGCTCCAGCCCCAGCCCCTGCCCTGGCCC
AGGCTCCGGCCCTGTCCCCGTCCCTAGCCTCTGCCCCTGAGGAGGCTAAAAGCAAGAGACACATCTCAATTCAAA
GGCAGCTTGCTGATCTAGAGAATTTAGCTTTTGTAACTGATGGAAATTTTGACTCTGCCAGCTCATTGAACTCAG
ATAATCTTGATGCAGGCAACAGACAGGCTTGTCCATTGTGCCCTAAGGAAAAATTCAGAGCTTGTAATAGCCATA
AGCTTCGTCGTCACCTCCAGAATTTACACTGGAAAGTCTCAGTTGAATTTGAAGGTTACAGGATGTGCATCTGTC
ACTTACCTTGTCGACCAGTGAAACCAAACATTATTGGAGAACAGATAACCAGTAAAATGGGAGCCCATTATCATT
GTATCATTTGTTCAGCAACAATCACCAGAAGAACTGATATGCTAGGACATGTTAGGCGCCACATGAATAAAGGAG
AGACTAAATCTAGTTATATTGCAGCTTCCACTGCTAAACCACCTAAGGAAATTTTGAAAGAGGCAGACACGGATG
TACAAGTTTGTCCCAACTATTCTATACCTCAGAAAACAGATTCCTATTTTAACCCCAAAATGAAACTAAATCGGC
AGCTAATATTCTGTACATTGGCTGCTTTGGCTGAGGAACGAAAACCTTTGGAATGTCTAGATGCTTTTGGAGCCA
CTGGGATAATGGGATTACAGTGGGCAAAACATCTTGGAAATGCAGTCAAAGTTACAATCAATGACTTGAATGAAA
ATTCTGTGACACTGATTCAGGAAAACTGCCATTTAAACAAATTGAAAGTGGTGGTGGACAGTAAGGAAAAGGAAA
AGAGTGATGATATTCTTGAAGAAGGAGAGAAAAATCTTGGTAATATTAAGGTGACCAAAATGGATGCCAATGTAC
TGATGCATTTGAGATCTTTTGATTTCATACATCTAGACCCTTTTGGAACATCAGTGAATTATCTAGATTCTGCAT
TCAGAAATATAAGAAACCTTGGCATAGTGTCAGTGACTTCTACAGATATCAGTTCTTTATATGCCAAGGCACAGC
ATGTTGCCCGGCGTCACTACGGATGTAACATTGTCCGAACTGAATATTACAAGGAACTAGCAGCCAGAATTGTTG
TAGCTGCAGTGGCAAGAGCTGCAGCCCGATGCAACAAAGGCATAGAAGTACTGTTTGCAGTGGCTCTGGAACATT
TTGTGTTGGTAGTTGTGAGAGTTTTGAGGGGACCTACTTCAGCAGATGAAACAGCCAAGAAGATTCAATACCTGA
TCCATTGTCAGTGGTGTGAAGAGAGAATTTTTCAGAAGGATGGTAATATGGTAGAAGAAAACCCATATAGACAGC
TGCCTTGTAACTGTCATGGAAGCATGCCTGGAAAGACAGCAATAGAACTTGGACCTCTGTGGTCAAGTTCCCTTT
TCAATACTGGATTCCTCAAAAGAATGCTATTTGAATCTCTTCACCATGGTTTGGATGACATTCAGACCCTAATAA
AGACATTAATCTTTGAATCAGAGTGTACGCCTCAAAGTCAGTTTTCAATTCATGCATCTTCAAATGTCAACAAGC
AAGAAGAAAATGGTGTATTTATTAAAACTACAGATGACACCACAACAGATAATTACATTGCACAAGGAAAGAGAA
AAAGTAATGAAATGATCACAAATTTAGGCAAGAAGCAAAAGACTGATGTCAGTACTGAACATCCTCCCTTTTATT
ACAACATTCACAGACACAGCATTAAAGGAATGAATATGCCAAAGTTAAAAAAGTTTTTGTGCTATTTATCTCAAG
CAGGCTTTCGAGTAAGCCGAACTCATTTTGACCCAATGGGTGTACGCACAGATGCACCTCTGATGCAGTTTAAAT
CTATCCTTTTAAAGTACAGCACCCCCACCTACACTGGAGGACAGTCAGAAAGCCATGTCCAGTCAGCATCTGAAG
ATACAGTAACTGAAAGAGTTGAAATGTCAGTGAATGACAAAGCAGAAGCAAGTGGCTGCAGAAGATGGTAAACGT
AGAGAAGAATTGGTTCTCAGGTGTCTGTATAGATGGCCTAATAGTTCTCTATACCMACTGTAGTTCTTTTTCTGT
TCTTTCAATTCAGTAGAGTAAAAATAAAAAACAGTGTCATTTTCATTCAGAAMTGAGCAGTTCTACTTAGCTGGT
TTGGAGCTTGCTTTCCAGTTTTTTTGTTTTAAGGCAXACTTAAAATTTTAATGGACACATTTCATATGAAGCCAA
GTCTCACTGAGATCACCCTACTGCTTAATAATTCAGAAAATTTTCACATGCAAAGTGTTTGGAATTTTATGTATG
TTATGAAAGCCATCTTTTACAATTCTTAATCACATCTCTGCCTAAACTGATTCATGATGTTTATGTTTTCCTGTT
TGTAGTGYACAAAATGAAGCTGAAGGCTCACATGTTAAAATGACCCTGAATAGAATAGGAAGAACAGTGTTCTTA
CAGGTCATAATGTATTTCACAATTAAAAAACTAAAATATGTACCCATTTTTAAGAAATCAYACTTCTCTCCACAT
TGATCTTTTCATTTCTTACTAGCTTTTAAGAAATTAAATACTTGCCTGAGATAGAAATACTTTATTTTTGTAACT
TTAAGGTCTAAATGACTAAACTTCAAAGTAAGATTTTGTCAGAATAAATTGAGACCATTAATCYAATATAATACT
TGTTCATGAGCACTGAAATCCTGAAGAGGAGAGATTTGGTTATAAATTAAAAAGGTTGGGTGATCTTAAGTGCCT
CAGTTAATGCACGTACAGTATTCATTTGGTTGGTTGTACTACCTCTCAGAAGTAAAATTTGTCACCTTATGGAAT
GAGAGTTTTTGGGTTTGGGGGTTGTTTTTTTGTTGTTGCTTGGTTTGGTATTTTTGGTTTTGTGTGTATTTGTAT
AAATTTTCTGTATAATTAGCCCAGGCTGATGTAACTATAAAAATTAGTTGAAAAAAAAAATATTGTTTCCTTAAT
GGAATTCTCACTTCATTTGAATATAAGATTTTGGATGAAAGGATTTGGTATAAAGTTTGGGTTTTTGTCTCAAGG
ATTTGATCCATATTTATCCCTAAATATTTCTTAAGGXATGTAXCTTTTTATAACCATTAAGTGGGGGGAAGGGGG
TGGAGGGGGTGGTAATAATTATAACTGAAAGGTTTAAATATACTACCTAAGAAAAAAGTACTTCTGTGACATATA

FIGURE 7410B

CAAAAAAATCTAGTGGATAGGCATTAGATGAATAGAGAATATTAATTTTGCAGAAATGAAGGAAAATCTCTTCGT
GCTAGTACAGCGTATTCCCAAGAGAGTTTATTTTCCTTTCTCCAATTAATGTGGTCATAAATTTCGGTAAAATCA
AGAAATAGGTGAAGTGCAAGCTAGTTTCTATAATGACCATTAAAAAAATTCTGCTGTGTAATTCTTGCCAGTTAA
AATTATAACTTGCAAATGAGCAGAATAAATGAGGTTTTTTTCAATTAAAAATTACTATAAATCCAGGAGGCAAAC
TATTTTAGCACTCAGATTATCTGATTTAATACATATTATTGRATTATCAGTCTCAAATTTTGCTAAATGCTTATC
MGCMTGRAATATGTTGATCAGTGATGAGTTGGGCTTAATGCAAAGATCCTAATTTAATAAAGAAACCTGTAAATT
ACTGTTAMMWAAAAWATATGTGTATATTAATTTCACATATAAAGGTAGATTTTTCAAAGAAAAATTTGGTAGGCG
GTAGTTTAGAACTCTGATCAGGTACTACATCAACCAAAAGAGGAAATACTTTAAAAATTCCTTTTAGCAACCTGA
GCAATCTTATTCTCGTAACAATAGTAGTAATTTGGGACATTGCAAATGTTTATCATGTTGTAAAGTAGCATCAGT
TGTATCCTTTCATTAAAACTTGATAAACAAAAGAAMRARWWAARRAAACCA

FIGURE 7411

MENMAEEELLPLEKEEVEVAQVQVPTPARDSAGVPAPAPDSALDSAPTPASAPAPAPALAQAPALSPSLASAPEE
AKSKRHISIQRQLADLENLAFVTDGNFDSASSLNSDNLDAGNRQACPLCPKEKFRACNSHKLRRHLQNLHWKVSV
EFEGYRMCICHLPCRPVKPNIIGEQITSKMGAHYHCIICSATITRRTDMLGHVRRHMNKGETKSSYIAASTAKPP
KEILKEADTDVQVCPNYSIPQKTDSYFNPKMKLNRQLIFCTLAALAEERKPLECLDAFGATGIMGLQWAKHLGNA
VKVTINDLNENSVTLIQENCHLNKLKVVVDSKEKEKSDDILEEGEKNLGNIKVTKMDANVLMHLRSFDFIHLDPF
GTSVNYLDSAFRNIRNLGIVSVTSTDISSLYAKAQHVARRHYGCNIVRTEYYKELAARIVVAAVARAAARCNKGI
EVLFAVALEHFVLVVVRVLRGPTSADETAKKIQYLIHCQWCEERIFQKDGNMVEENPYRQLPCNCHGSMPGKTAI
ELGPLWSSSLFNTGFLKRMLFESLHHGLDDIQTLIKTLIFESECTPQSQFSIHASSNVNKQEENGVFIKTTDDTT
TDNYIAQGKRKSNEMITNLGKKQKTDVSTEHPPFYYNIHRHSIKGMNMPKLKKFLCYLSQAGFRVSRTHFDPMGV
RTDAPLMQFKSILLKYSTPTYTGGQSESHVQSASEDTVTERVEMSVNDKAEASGCRRW

FIGURE 7412

GTCCCGAGCAAAAACAAGTGTTTGCAAACCCAAGTCCAACCCAGAAATCCCCCGTGCAGCCTGTAGAGGACCTAG
CTGGGAACTTATGGGAGAAGTTACGTGAAAAAATCAGGTCTTTTGTGGCATATTCTATCGCAATCGATGAGATCA
CGGATATAAATAATACCACCCAGTTGGCCATATTCATCCGTGGTGTCGATGAGAATTTCGATGTGTCCGAAGAAC
TTCTGGACACGGTGCCC**ATG**ACGGGTACAAAATCTGGCAACGAGATCTTTTTGCGTGTTGAGAAGAGCCTGAAAA
AGTTCTGTATCAACTGGTCGAGATTAGTAAGCGTGGCCTCCACTGGCACCCCAGCGATGGTGGATGCCAATAACG
GGCTTGTCACAAAACTGAAGTCCAGGGTGGCGACGTTCTGCAAGGGTGCGGAACTGAAGTCCATCTGTTGTATAA
TTCATCCGGAATCACTCTGTGCTCAGAAGTTGAAGATGGACCACGTCATGGACGTGGTAGTGAAGTCCGTGAACT
GGATATGCTCCCGGGGACTGAACCACAGCGAGTTCACAACCTTGCTCTATGAGCTGGACAGCCAGTATGGTAGCC
TCCTGTACTACACGGAGATTAAGTGGCTCAGTCGCGGGCTCGTGCTAAAGAGATTTTTCGAATCCTTGGAAGAAA
TCGACTCCTTCATGTCATCCAGAGGGAAACCCCTGCCTCAACTGAGCTCCATAGATTGGATCCGAGACCTGGCCT
TCTTGGTTGACATGACGATGCATCTGAACGCTTTGAACATCTCTCTCCAAGGACACTCCCAAATCGTCACGCAGA
TGTATGACCTGATCCGGGCGTTCCTAGCAAAACTGTGCCTCTGGGAGACTCATTTGACGAGGAATAATCTGGCCC
ACTTTCCCACCCTGAAATTGGTTTCCAGAAATGAAAGCGATGGCCTGAACTACATTCCCAAAATCGCGGAACTCA
AGACCGAATTCCAGAAAAGGCTGTCTGATTTCAAACTCTACGAAAGCGAACTGACTCTGTTCAGCTCCCCGTTCT
CCACGAAGATCGACAGTGTGCACGAGGAGCTCCAGATGGAGGTTATCGACCTGCAATGCAACACGGTCCTGAAGA
CGAAATACGACAAGGTGGGAATACCAGAATTCTACAAGTACCTCTGGGGTAGCTACCCGAAATACAAGCACCATT
GCGCAAAGATTCTTTCCATGTTCGGGAGCACCTACATCTGCGAACAGCTGTTCTCCATTATGAAACTGAGCAAAA
CAAAATACTGCTCCCAGTTAAAGGATTCCCAGTGGGATTCTGTACTCCACATCGCAACG**TGA**TGGAGAGAAAACT
CCTGGCAGGGCCCTATGGTGGGAAAGGCTGGAGTCTTCTAGTCCCAAGGGATTGGGAGATGACAAAATGAATTTT
TTTTTTCTTTTTTGAGATGGAGTCTTGCTCTGTCGCCCAGGTTGGAGTGCAGTGGCGTGATCTCGGCTTACTGCA
ACTTCCAGCTCCTGGGTTCGAACGATTCTCCTGCCTCAGCCTCCCGAGCAGCTGGGACTACAGGCATGGTGGCAC
ATGCCTGTAATCCTAGCTACTCAGGAGGCTGAAGCATAAGAATCGCTTGAACCTGGGAGGCGGAGGTTGCAGTGA
GCAGAGATTGCACCACTGCACTTCAGCCTGAATGACAGAGAGAGACTCTGTCTCAAAAAAAAAAAAAAAAAAAAA
AAAAAAA

FIGURE 7413

MTGTKSGNEIFLRVEKSLKKFCINWSRLVSVASTGTPAMVDANNGLVTKLKSRVATFCKGAELKSICCIIHPESL
CAQKLKMDHVMDVVVKSVNWICSRGLNHSEFTTLLYELDSQYGSLLYYTEIKWLSRGLVLKRFFESLEEIDSFMS
SRGKPLPQLSSIDWIRDLAFLVDMTMHLNALNISLQGHSQIVTQMYDLIRAFLAKLCLWETHLTRNNLAHFPTLK
LVSRNESDGLNYIPKIAELKTEFQKRLSDFKLYESELTLFSSPFSTKIDSVHEELQMEVIDLQCNTVLKTKYDKV
GIPEFYKYLWGSYPKYKHHCAKILSMFGSTYICEQLFSIMKLSKTKYCSQLKDSQWDSVLHIAT

FIGURE 7414

CGCTGTTGTTAGTCACCGCGGAGCCGCCGAAACCTGCAGGAGTCTACTATGCAACTGCATACTGGATGCCTGCTG
AAAAGACAGTACAAGTCAAAAATGTAATGGACAAGAATGGGGACGCCTATGGCTTTTACAATAACTCTGTGAAAA
CCACAGGCTGGGGCATCCTGGAGATCAGAGCTGGCTATGGCTCTCAAACCCTGAGCAATGAGATCATCATGTTTG
TGGCTGGCTTTTTGGAGGGTTACCTCACTGCCCCACACATGAATGACCACTACACAAACCTCTACCCACAGCTGA
TCACGAAACCTTCCATCATGGATAAAGTGCAGGATTTTATGGAGAAGCAAGATAAGTGGACCCGGAAAAATATCA
AAGAATACAAGACTGATTCATTTTGGAGACATACAGGCTATGTGATGGCACAAATAGATGGCCTCTATGTAGGAG
CAAAGAAGAGGGCTATATTAGAAGGGACAAAGCCAATGACCCTGTTCCAGATTCAGTTCCTGAATAGTGTTGGAG
ATCTATTGGATCTGATTCCCTCACTCTCTCCCACAAAAAACGGCAGCCTAAAGGTTTTTAAGAGATGGGACATGG
GACATTGCTCCGCTCTTATCAAGGTTCTTCCTGGATTTGAGAACGTCCTTTTTGCTCACTCAAGCTGGTACACGT
ATGCAGCCATGCTCAGGATATATAAACACTGGGACTTCAACATCATAGATAAAGATACCAGCAGTAGTCGCCTCT
CTTTCAGCAGTTACCCAGGGTTTTTGGAGTCTCTGGATGATTTTTACATTCTTAGCAGTGGATTGATATTGCTGC
AGACCACAAACAGTGTGTTTAATAAAACCCTGCTAAAGCAGGTAATACCCGAGACTCTCCTGTCCTGGCAAAGAG
TCCGTGTGGCCAATATGATGGCAGATAGTGGCAAGAGGTGGGCAGACATCTTTTCAAAATACAACTCTGGCACCT
ATAACAATCAATACATGGTTCTGGACCTGAAGAAAGTAAAGCTGAACCACAGTCTTGACAAAGGCACTCTGTACA
TTGTGGAGCAAATTCCTACATATGTAGAATATTCTGAACAAACTGATGTTCTACGGAAAGGATATTGGCCCTCCT
ACAATGTTCCTTTCCATGAAAAAATCTACAACTGGAGTGGCTATCCACTGTTAGTTCAGAAGCTGGGCTTGGACT
ACTCTTATGATTTAGCTCCACGAGCCAAAATTTTCCGGCGTGACCAAGGGAAAGTGACTGATACGGCATCCATGA
AATATATCATGCGATACAACAATTATAAGAAGGATCCTTACAGTAGAGGTGACCCCTGTAATACCATCTGCTGCC
GTGAGGACCTGAACTCACCTAACCCAAGTCCTGGAGGTTGTTATGACACAAAGGTGGCAGATATCTACCTAGCAT
CTCAGTACACATCCTATGCCATAAGTGGTCCCACAGTACAAGGTGGCCTCCCTGTTTTTCGCTGGGACCGTTTCA
ACAAAACTCTACATCAGGGCATGCCAGAGGTCTACAACTTTGATTTTATTACCATGAAACCAATTTTGAAACTTG
ATATAAAATGAAGGAGGGAGATGACGGACTAGAAGACTGTAAATAAGATACCAAAGGCACTATTTTAGCTATGTT
TTTCCCATCAGAATTATGCAATAAAATATATTAATTTGTCAAAAAAAAAAAAAAAAA

FIGURE 7415

MPAEKTVQVKNVMDKNGDAYGFYNNSVKTTGWGILEIRAGYGSQTLSNEIIMFVAGFLEGYLTAPHMNDHYTNLY
PQLITKPSIMDKVQDFMEKQDKWTRKNIKEYKTDSFWRHTGYVMAQIDGLYVGAKKRAILEGTKPMTLFQIQFLN
SVGDLLDLIPSLSPTKNGSLKVFKRWDMGHCSALIKVLPGFENVLFAHSSWYTYAAMLRIYKHWDFNIIDKDTSS
SRLSFSSYPGFLESLDDFYILSSGLILLQTTNSVFNKTLLKQVIPETLLSWQRVRVANMMADSGKRWADIFSKYN
SGTYNNQYMVLDLKKVKLNHSLDKGTLYIVEQIPTYVEYSEQTDVLRKGYWPSYNVPFHEKIYNWSGYPLLVQKL
GLDYSYDLAPRAKIFRRDQGKVTDTASMKYIMRYNNYKKDPYSRGDPCNTICCREDLNSPNPSPGGCYDTKVADI
YLASQYTSYAISGPTVQGGLPVFRWDRFNKTLHQGMPEVYNFDFITMKPILKLDIK

FIGURE 7416

GAATTCGGCACGAGCTAGAGCAAGCGCGGCCCCGCGGCCCGGAGCCATGCTGAGGAGCTGCGCCGCGCGCCTCCG
CACGCTGGGGGCTCTGTGCCGGCCGCCAGTAGGCCGGCGCCTGCCGGGAAGCGAGCCGCGACCCGAGCTGAGGTC
ATTTTCTTCTGAGGAAGTCATTCTTAAGGACTGTTCTGTCCCCAACCCCAGCTGGAACAAGGACCTAAGACTGCT
CTTTGACCAGTTTATGAAGAAATGTGAAGATGGCTCCTGGAAACGTTTGCCTTCATATAAACGTACACCTACTGA
ATGGATTCAAGACTTCAAAACCCATTTTCTTGACCCAAAGCTTATGAAAGAAGAACAAATGTCACAGGCCCAGCT
CTTCACCAGAAGCTTTGATGATGGCCTGGGCTTTGAATACGTGATGTTCTACAATGACATTGAGAAAAGGATGGT
TTGCTTATTTCAAGGAGGCCCTTACCTGGAAGGACCACCTGGATTCATTCATGGAGGTGCCATTGCAACCATGAT
TGATGCTACTGTTGGTATGTGTGCAATGATGGCTGGGGGAATCGTCATGACTGCCAATCTCAACATCAATTATAA
AAGACCTATCCCTCTTTGTTCTGTTGTTATGATAAATAGCCAACTTGATAAAGTTGAAGGAAGGAAATTTTTTGT
TTCCTGTAATGTTCAGAGTGTTGATGAGAAGACCCTATACTCAGAGGCGACAAGCTTATTTATAAAGCTGAATCC
TGCTAAAAGTCTGACATAAAGAGCTGCTGGTGAACTCCATCTCATTCTCGCCCCTCCAGAAGAAGCAGTTGTCCC
CCAAATACTCTGCTCCCTCACTGCTGAATCCCTGTAGGGAGAAGCCTGCCAACAGTGACCTTCCGAAACAGCCTT
CTGAATACAAAGAGGATTCAGTTTCCATCTTCTCAACTTTTTAACACAGAAACACTTCCTGCGAGCATATCGACA
ACTCTCGGGCCAGGCGCTGTGGCTCACACCTGTAATCCCAGCACTTTAGGAGGCCGAGGCAGGCGGATTGCCTGA
GCTCAGGAGTTCAAGATCAGTCTGGGCAACACGATGAAACTCCGTCTCTACTAAAATACAAAAAATTATCCAGGC
ATGGTGGCGTACGCCTGTAGTCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATTGCTTGAACCCAGGAGGAAGAG
GTTGCAGTGAGCCAAGATCATGCCACATCACTCCAACCTGGGCAACAGAACAAGAACCCATCTCAAACAAAACAA
CAAACAAAAAAAAAAAAAAAAACTCGAGA

FIGURE 7417

MLRSCAARLRTLGALCRPPVGRRLPGSEPRPELRSFSSEEVILKDCSVPNPSWNKDLRLLFDQFMKKCEDGSWKR
LPSYKRTPTEWIQDFKTHFLDPKLMKEEQMSQAQLFTRSFDDGLGFEYVMFYNDIEKRMVCLFQGGPYLEGPPGF
IHGGAIATMIDATVGMCAMMAGGIVMTANLNINYKRPIPLCSVVMINSQLDKVEGRKFFVSCNVQSVDEKTLYSE
ATSLFIKLNPAKSLT

FIGURE 7418A

GATAGGACGAAGAAACCGAAGGGAAAGCTCAGGGCCGCCAACTTCCAGCTGCAGCGGCGACTTTCAGTTTCATTT
CCACGGACCCTCCTGCCTGGGCCGCAGCCGCCGCCGCGATGCCCAGTAAGTTCAGCTGCCGGCAGCTCCGGGAGG
CGGGCCAGTGTTTCGAGAGTTTCCTGGTCGTTCGGGGACTGGACATGGAGACAGATCGCGAGCGGCTGCGGACCA
TTTATAACCGCGACTTCAAGATCAGTCTTGCCTCCAGCAAATCCATCCTCCAATCCTGATGCCAGAGTGATCTGA
AATGCAAATATGATCTTGCCACTCCCCTGCTTAAAACCCACCAACCGCAGTGGTTCTGTAACCACAGTGTAGCCT
CTGACGTGGGCTGAAAGCACAAAGCCAGGCTATTTGATCTCTGGAGAAGGATCCTTTCCCTTCCTGCTTGGGTTC
CACCTGCACCCTATGACTTCGGGTGGAAACTGCTGTCTGATCAGCCACCTTGCCCACACACTTGGACATCTGTAC
TGTCTCTGATCCCTTCTCTCCTCACCAACAGGCTGGACCCCACATCCACCCCTCTGAATCAAATCATTCCGCTTC
CCCTTAGCCTCAGCTCTTTCTTCTGGGTTGTTTGTATTTTCTTTTCTGTCCCAAACAGTTTCCCCCACAAAAAGA
ACTTTATGTCTTTCTCTGTCTTCCCTCAGTCCTTCCAGTCAGCAGCCTGTGATTGGGCTTTTCCCCTCAGAAACG
AACAATCCAGAACCCACTGTTTAAAACAACTGTATTTTGCCTTGGGAAGTCCCATTGCCTTCCCTGAAAACATTA
AACATTCCTCCGATCCCCAGCCTGAGTCTCTCTGTCTCTGGGCCCCATCCTGCTCCACAGCAGGGCTGGTGTGTC
CAGCACAGAGTGACCCTCCGATGCCCTTTCCCACCCGCCGCCCTGCCTCCCTCGAGCCCTGCCTTCCCTCACTTC
CCAGTCTCCTCTGCTTCTGGCAGCTTTGGGACCCCCGCCCCTGGCTTCTCCTCCATGCTGTATGGAATGAAGATT
GCAAATCTGGCCTACGTCACCAAGACTCGGGTCAGGTTCTTCAGACTCGACCGCTGGGCCGACGTGCGGTTCCCA
GAAAAGAGGAGAATGAAGCTGGGGTCAGATATCAGCAAACACCACAAGTCACTGCTAGCCAAGATCTTTTATGAC
AGGGCTGAGTATCTTCATGGGAAACATGGTGTGGATGTGGAAGTCCAGGGGCCCCATGAAGCCCGAGATGGGCAG
CTCCTTATCCGCCTGGATTTGAACCGCAAAGAGGTGCTGACCCTGAGGCTTCGGAATGGCGGAACCCAGTCTGTT
ACCCTCACTCACCTCTTCCCACTCTGCCGGACACCCCAGTTTGCTTTCTACAATGAAGACCAGGAGTTGCCCTGT
CCACTGGGCCCCGGTGAATGCTATGAACTCCATGTCCATTGTAAGACCAGCTTTGTGGGCTACTTCCCAGCCACA
GTGCTCTGGGAGCTGCTGGGACCTGGGGAGTCGGGTTCAGAAGGAGCCGGCACATTCTACATTGCCCGCTTCTTG
GCTGCCGTCGCCCACAGCCCCCTGGCTGCACAGCTGAAGCCCATGACTCCCTTCAAGCGGACCCGGATCACCGGA
AACCCTGTGGTGACCAATCGGATAGAGGAAGGAGAGAGACCTGACCGCGCTAAGGGCTATGACCTGGAGTTAAGT
ATGGCGCTGGGGACATACTACCCACCTCCCCGCCTCAGGCAGCTGCTCCCCATGCTTCTTCAGGGAACAAGTATC
TTCACTGCCCCTAAGGAGATCGCAGAGATCAAGGCCCAGCTGGAGACAGCCCTGAAGTGGAGGAACTATGAGGTG
AAGCTGCGGCTGCTGCTGCACCTGGAGGAACTGCAGATGGAGCATGATATCCGGCACTATGACCTGGAGTCGGTG
CCCATGACCTGGGACCCTGTGGACCAGAACCCCAGGCTGCTCACGCTGGAGGTTCCTGGAGTGACTGAGAGCCGC
CCCTCAGTGCTACGGGGCGACCACCTGTTTGCCCTTTTGTCCTCGGAGACACACCAGGAGGACCCCATCACATAT
AAGGGCTTTGTGCACAAGGTGGAATTGGACCGTGTCAAGCTGAGCTTTTCCATGAGCCTCCTGAGCCGCTTTGTG
GATGGGCTGACCTTCAAGGTGAACTTTACCTTCAACCGCCAGCCGCTGCGAGTCCAGCACCGTGCCCTGGAGCTG
ACAGGGCGCTGGCTGCTGTGGCCCATGCTCTTTCCTGTGGCACCTCGGGACGTCCCGCTGCTGCCCTCAGATGTG
AAACTCAAGCTGTACGACCGGAGTCTGGAGTCAAACCCAGAGCAGCTGCAGGCCATGAGGCACATTGTTACGGGC
ACCACCCGTCCAGCCCCCTACATCATCTTTGGGCCTCCAGGCACCGGCAAGACTGTCACGTTAGTGGAGGCAATT
AAGCAGGTGGTGAAGCACTTGCCCAAAGCCCACATCTTGGCCTGCGCTCCATCCAACTCAGGGGCTGACCTACTC
TGTCAAAGGCTCCGGGTCCACCTTCCTAGCTCCATCTACCGCCTCCTGGCCCCCAGCAGGGACATCCGCATGGTA
CCTGAGGACATCAAGCCCTGCTGCAACTGGGACGCAAAGAAGGGGGAGTATGTATTTCCCGCCAAGAAGAAGCTG
CAGGAATACCGGGTCTTAATTACCACCCTCATCACTGCCGGCAGGTTGGTCTCGGCCCAGTTTCCCATTGATCAC
TTCACACACATCTTCATCGATGAGGCTGGCCACTGCATGGAGCCTGAGAGTCTGGTAGCTATAGCAGGGCTGATG
GAAGTAAAGGAAACAGGTGATCCAGGAGGGCAGCTGGTGCTGGCAGGAGACCCTCGGCAGCTGGGGCCTGTGCTG
CGTTCCCCACTGACCCAGAAGCATGGACTGGGATACTCACTGCTGGAGCGGCTGCTCACCTACAACTCCCTGTAC
AAGAAGGGCCCTGATGGCTATGACCCCCAGTTCATAACCAAGCTGCTCCGCAACTACAGGTCTCATCCCACCATC
CTGGACATTCCTAACCAGCTCTATTATGAAGGGGAGCTGCAGGCCTGTGCTGATGTCGTGGATCGAGAACGCTTC
TGCCGCTGGGCGGGCCTACCTCGACAGGGCTTTCCCATCATCTTTCACGGCGTAATGGGCAAAGATGAGCGTGAA
GGCAACAGCCCATCCTTCTTCAACCCTGAAGAGGCTGCCACAGTGACTTCCTACCTGAAGCTGCTCCTGGCCCCC
TCCTCCAAGAAGGGCAAAGCTCGCCTGAGCCCTCGAAGTGTGGGCGTCATCTCCCCGTACCGGAAACAGGTGGAG
AAAATCCGTTACTGCATCACCAAACTTGACAGGGAGCTTCGAGGACTGGATGACATCAAGGACTTGAAGGTGGGT
TCAGTAGAAGAATTCCAAGGCCAAGAACGAAGCGTCATCCTCATCTCCACCGTGCGAAGCAGCCAGAGCTTTGTG
CAGCTGGATCTGGACTTTAATCTGGGTTTCCTTAAGAACCCCAAGAGGTTCAATGTAGCTGTGACCCGGGCCAAG

FIGURE 7418B

GCCCTGCTCATCATCGTGGGGAACCCCCTTCTCCTGGGCCATGACCCTGACTGGAAAGTATTCCTGGAGTTCTGT
AAAGAAAACGGAGGGTATACCGGGTGTCCCTTCCCTGCCAAACTGGACCTGCAACAGGGACAGAATTTACTGCAA
GGTCTGAGCAAGCTCAGCCCCTCTACCTCAGGGCCCCACAGCCATGACTACCTCCCCCAGGAGCGGGAGGGTGAA
GGGGGCCTGTCTCTGCAAGTGGAGCCAGAGTGGAGGAATGAGCTCTGAAGACACAGCACCCAGCCTTCTCGCACC
AGCCAAGCCTTAACTGCCTGCCTGACCCTGAACCAGAACCCAGCTGAACTGCCCCTCCAAGGGACAGGAAGGCTG
GGGGAGGGAGTTTACAACCCAAGCCATTCCACCCCCTCCCCTGCTGGGGAGAATGACACATCAAGCTGCTAACAA
TTGGGGGAAGGGGAAGGAAGAAAACTCTGAAAACAAAATCTTGTTCTATG

FIGURE 7419

TTCGAATGAATGGGAAGACACGGTTGATGCAGTGGAGAGACATGTTTGACATTGCAGTTAAATGGAGAAGGATTG
CTGACCCAGACCAGCCCGTGCTGTGGTTAGATCAAATGCCAGCACGAAGTCTTAGCAGAGGTTTTAACAACCACA
TTAATTTAATCAGGGGTCAGGTGATCAACATGAGATACCTAGAATATTTTGAGAAAATACTTCATTTTATTAAAG
ACAGAATTCTTGTTTATCATGGAGCTAATAATCCTAAAGGATTGCTGGAAGTTCGGGAAGCCCTGGAAAAGGTAC
ACAAAGTAGAAGACCTTCTTCCGATTATGAAGCAGTTTAATACTAAAACGAAGGATGGGTTCACCGTGAACACAA
AAGTTCCCAGCCTTAAAGACCAAGGGAAGGAATATGATGGATTCACAATCACGATTACAGGAGACAAAGTTGGCA
ATATATTATTTTCTGTGGAAACTCAAACCACGGAAGAAAGGACACAATTATATCATGCTGAAATAGATGCACTTT
ATAAAGATTTGACAGCAAAAGGAAAAGTATTGATTCTTTCATCAGAATTTGGGGAGGCTGATGCTGTCTGCAACT
TAATCTTATCCTTAGTTTATTACTTTTATAATTTAATGCCACTCTCTCGAGGATCCAGTGTAATTGCTTACTCGG
TCATCGTGGGAGCACTGATGGCAAGTGGAAAAGAAGTAGCAGGAAAAATTCCCAAAGGGAAGTTAGTCGACTTTG
AAGCTATGACAGCCCCTGGTTCAGAGGCCTTTAGCAAAGTCGCCAAAAGCTGGATGAACTTGAAAAGTATTTCAC
CTTCTTATAAGACTCTTCCATCAGTTTCAGAAACGTTTCCAACGTTAAGATCGATGATTGAGGTGCTAAACACAG
ACTCTTCTCCACGTTGTCTTAAGAAACTCTAGTTCTGCTGCTGTATTTATACAAGTAAAGGGCCGGACCTCTTGC
TTCTTAAGTTATTTCTTAAAACATGGAATTATAAAGAAATTAGGTCCTCTATTACTTTTGATACCAATTTTTATA
GGAATTGAATACTTGAAATCATTTTCTTTACTTTTCTGAACCATAATGAAAATCATGAAAGAGGCTTTCGGGGGG
AAAAAGCTACTTGACTTGGAGGGAAAGCGTATGTATTAGCCGGCAGCCTGTTGGTTCCCACTTATAAAGTCATAT
AACTCCTTCCTTACAGTAAAAAAAATTTTCCTCAACAACTAAAATATAATACTGAAGATGAACAAAAACAAAACC
AAATAGGAGTGTTTGTATTCCTTTAGAGATCTGGATATTTTTCAAAGACTTGCTTTTTACGCACATTGTGATAGA
GCATCTTTTGTTGACTCACGTAACCTCCATGTGTGGGTCCTTTGTTTTATTAGAACCATGGAAGAAGGTTCCTGG
GCCATCAGTATGTGTTGCAGAGCTCACAGCCAGGAACACTTATTTTGAACAATGCAGACAGTACTTGCCAGAGTC
CCAAATGCTGAATTATTGAACCATGTTTTTTTTTCCTTTGTTGAAAAAAATAAACCAGGGTGATTTCTATAAATC
ACCAGTTTTTGGCATTGAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 7420

MNGKTRLMQWRDMFDIAVKWRRIADPDQPVLWLDQMPARSLSRGFNNHINLIRGQVINMRYLEYFEKILHFIKDR
ILVYHGANNPKGLLEVREALEKVHKVEDLLPIMKQFNTKTKDGFTVNTKVPSLKDQGKEYDGFTITITGDKVGNI
LFSVETQTTEERTQLYHAEIDALYKDLTAKGKVLILSSEFGEADAVCNLILSLVYYFYNLMPLSRGSSVIAYSVI
VGALMASGKEVAGKIPKGKLVDFEAMTAPGSEAFSKVAKSWMNLKSISPSYKTLPSVSETFPTLRSMIEVLNTDS
SPRCLKKL

FIGURE 7421

ATAAGAGGTTGGGCTTTGGATAGATAGACAGACTCCTGGGTCCGGTCAACCGTCAAAATGTCCAAAGAACCTCTC
ATTCTCTGGCTGATGATTGAGTTTTGGTGGCTTTACCTGACACCAGTCACTTCAGAGACTGTTGTGACGGAGGTT
TTGGGTCACCGGGTGACTTTGCCCTGTCTGTACTCATCCTGGTCTCACAACAGCAACAGCATGTGCTGGGGGAAA
GACCAGTGCCCCTACTCCGGTTGCAAGGAGGCGCTCATCCGCACTGATGGAATGAGGGTGACCTCAAGAAAGTCA
GCAAAATATAGACTTCAGGGGACTATCCCGAGAGGTGATGTCTCCTTGACCATCTTAAACCCCAGTGAAAGTGAC
AGCGGTGTGTACTGCTGCCGCATAGAAGTGCCTGGCTGGTTCAACGATGTAAAGATAAACGTGCGCCTGAATCTA
CAGAGAGCCTCAACAACCACGCACAGAACAGCAACCACCACCACACGCAGAACAACAACAACAAGCCCCACCACC
ACCCGACAAATGACAACAACCCCAGCTGCACTTCCAACAACAGTCGTGACCACACCCGATCTCACAACCGGAACA
CCACTCCAGATGACAACCATTGCCGTCTTCACAACAGCAAACACGTGCCTTTCACTAACCCCAAGCACCCTTCCG
GAGGAAGCCACAGGTCTTCTGACTCCCGAGCCTTCTAAGGAAGGGCCCATCCTCACTGCAGAATCAGAAACTGTC
CTCCCCAGTGATTCCTGGAGTAGTGCTGAGTCTACTTCTGCTGACACTGTCCTGCTGACATCCAAAGAGTCCAAA
GTTTGGGATCTCCCATCAACATCCCACGTGTCAATGTGGAAAACGAGTGATTCTGTGTCTTCTCCTCAGCCTGGA
GCATCTGATACAGCAGTTCCTGAGCAGAACAAAACAACAAAAACAGGACAGATGGATGGAATACCCATGTCAATG
AAGAATGAAATGCCCATCTCCCAACTACTGATGATCATCGCCCCCTCCTTGGGATTTGTGCTCTTCGCATTGTTT
GTGGCGTTTCTCCTGAGAGGGAAACTCATGGAAACCTATTGTTCGCAGAAACACACAAGGCTAGACTACATTGGA
GATAGTAAAAATGTCCTCAATGACGTGCAGCATGGAAGGGAAGACGAAGACGGCCTTTTTACCCTCTAACAACGC
AGTAGCATGTTAGATTGAGGATGGGGGCATGACACTCCAGTGTCAAAATAAGTCTTAGTAGATTTCCTTGTTTCA
TAAAAAAGACTCACTTAAAAAAAAAAAAAAA

FIGURE 7422

MSKEPLILWLMIEFWWLYLTPVTSETVVTEVLGHRVTLPCLYSSWSHNSNSMCWGKDQCPYSGCKEALIRTDGMR
VTSRKSAKYRLQGTIPRGDVSLTILNPSESDSGVYCCRIEVPGWFNDVKINVRLNLQRASTTTHRTATTTTRRTT
TTSPTTTRQMTTTPAALPTTVVTTPDLTTGTPLQMTTIAVFTTANTCLSLTPSTLPEEATGLLTPEPSKEGPILT
AESETVLPSDSWSSAESTSADTVLLTSKESKVWDLPSTSHVSMWKTSDSVSSPQPGASDTAVPEQNKTTKTGQMD
GIPMSMKNEMPISQLLMIIAPSLGFVLFALFVAFLLRGKLMETYCSQKHTRLDYIGDSKNVLNDVQHGREDEDGL
FTL

FIGURE 7423

AGCCATATGGGGGATACGCCAGCAACAGACGCCGGCCGCCAAGATCTGCATCCCTAGGCCACGCTAAGACCCTGG
GGAAGAGCGCAGGAGCCCGGGAGAAGGGCTGGAAGGAGGGGACTGGACGTGCGGAGAATTCCCCCCTAAAAGGCA
GAAGCCCCCGCCCCCACCCTCGAGCTCCGCTCGGGCAGAGCGCCTGCCTGCCTGCCGCTGCTGCGGGCGCCCACC
TCGCCCAGCC**ATG**CCAGGCCCGGCCACCGACGCGGGGAAGATCCCTTTCTGCGACGCCAAGGAAGAAATCCGTGC
CGGGCTCGAAAGCTCTGAGGGCGGCGGCGGCCCGGAGAGGCCAGGCGCGCGCGGGCAGCGGCAGAACATCGTCTG
GAGGAATGTCGTCCTGATGAGCTTGCTCCACTTGGGGGCCGTGTACTCCCTGGTGCTCATCCCCAAAGCCAAGCC
ACTCACTCTGCTCTGGGCCTACTTCTGCCTCCTCCTGGCCGCTCTGGGTGTGACAGCTGGTGCCCATCGCTTGTG
GAGCCACAGGTCCTACCGGGCCAAGCTGCCTCTGAGGATATTTCTGGCTGTCGCCAACTCCATGGCTTTCCAGAA
TGACATCTTCGAGCGGTCCAGGGACCACCGAGCCCACCACAAGTACTCAGAGACGGATGCTGACCCCCACAATGC
CCGCCGGGGCTTCTTCTTCTCCCATATTGGGTGGCTGTTTGTTCGCAAGCATCGAGATGTTATTGAGAAGGGGAG
AAAGCTTGACGTCACTGACCTGCTTGCTGATCCTGTGGTCCGGATCCAGAGAAATACACAGCACATCCAGAAAGA
AGGAAGAGCTCTCAATCAAGAGGCAGCGTGTGAGATGCTTCGTGAGTGGCATCAAGGGCATATATTGAAAGTCAC
CCTTCCCGGATTACACATTTTAGCTTTGTTACATACTCATTGTAACCACTCCGAAAAGTGCTGCTTGATGCTGCG
TGCTCTTTCTGTGTCCCTGGAGGTATTC**TGA**AGGTCAGAAGAGAGATATACAACAGCGAGGCTTGGTGATAACGT
ATAGAATAACAGACGGGGACTCCACACCCAGGCCTTTTTTAACGGTGTGAAGCATAGACAGAGCTGCAGTCTGTG
CTAACATTAGGTTATTTATTGATTCAATCAGTTGACACAAGGAGGCAGCTACGGGGAGGTAAAATATGGTCCTAA
AATCAAAAAGATTTCAGTTTTGTCATTCTGTCTCTGAGATTCTATTTCCACATCTAGAGCAGGGTAATAATGATA
CCTACCTTACAAAATTATTGGGAGAATACATTAGTTAATATATGTGAAAGTATGGAGGAGATGTGCAATAAATAT
TTGTGTTATTAACTACACATACAGCACTCTATAGGAGATATTCCATTTATAAAAACTTTAGGTTCTAAAAACCTG
TACACGTTGATTATTTTTGTAAGTCAAAAGTGATTAAGAGGAGTTTAAGCTATCATTTCCAGATGTATTTCTATA
AATAAAAACATAAGTATATTCAGTTGATTTGGGGTGGAGAGTTCCATAGATGTCTGTTAGGTCCGCTTGGTCCAG
AGCTGAGTTCAAGTCCTGAATATCCTTGTTAATTTTCTGTCTTGTTGATCTGTCTAATATTGACAGTGGGGTATT
AAAGTCTCCCACTATTATTATATGGGAGTCTAAGTCTCCTTGTAGGTCTCTAAGAACTTGCTTTATGAATCTGGG
TGCTCCTGTATTAGGTGCATACATATTTAGGATAGTTAGCTCTTCTTGCTGCATTGATCCCATTACCATTATATA
ATGCCCTTCTTTGTCTTTTTTGATCTTTGTTGGTTTAAAGTCTGTTTTATTAGAGACTAGGATTGCAACCCCTGC
TATTTTTTTTTTTTTTTTTGCTTGATAAATATTCCTGTATCCCTTTATTTTGAGCCTATATGTGTCTTTGCACGT
GAGGTGGGTCTCCTGAATACAGCACACCGATGGGTTTTGACTCTAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 7424

MPGPATDAGKIPFCDAKEEIRAGLESSEGGGGPERPGARGQRQNIVWRNVVLMSLLHLGAVYSLVLIPKAKPLTL
LWAYFCLLLAALGVTAGAHRLWSHRSYRAKLPLRIFLAVANSMAFQNDIFERSRDHRAHHKYSETDADPHNARRG
FFFSHIGWLFVRKHRDVIEKGRKLDVTDLLADPVVRIQRNTQHIQKEGRALNQEAACEMLREWHQGHILKVTLPG
LHILALLHTHCNHSEKCCLMLRALSVSLEVF

FIGURE 7425

AGACAAAGGGCTGGTCCAGTGGCTGTTTATGAGGCAGCGCTAGGAGAGCTCTGATCCAGACTCTCCCTGCAGTGA
AAGGGAGGGAGCCCTTCATGAAGTATTGACTGCTTGAGCAGGAATTGCTTCACCAGCACCTAACTGAGTGCCTCT
CGAGCTCACATCGGTTTTCCCTCATGAGGCCACTTGGAGTCTTGCTGAGGGACTTGGTTCTATTAGGGAAGGTGA
GTTTGGGGATGGTGAGCAGGGAGGGCCTGGGGACATTGTGGCTAATGGGGCTTTTCTCCTCTTGGCTTAGATTCC
GGCAGAGTTCCTCTATCTCGTCTTGTTGCTGATTAAAGGTGCCCCTGTCTCCAGTTTTTCTCCATCTCCTGGGAC
GTAGCAGGAAATCAGCATCATGGTTGGGTTCAAGGCCACAGATGTGCCCCCTACTGCCACTGTGAAGTTTCTTGG
GGCTGGCACAGCTGCCTGCATCGCAGATCTCATCACCTTTCCTCTGGATACTGCTAAAGTCCGGTTACAGGTGAG
GGGATGAAGCCTGGGAGTCTTGATGGTGTCTACTCTGTTCCCTCCCCAAAGACACAGACCCCTCAAGGGCCAGTG
TTTGGAGCATCGAGATGACTGGAGGTGGGAAGGGCAACATGCTTATCCCTGTAGCTACCCTGTCTTGGCCTTGCA
GATCCAAGGAGAAAGTCAGGGGCCAGTGCGCGCTACAGTCAGCGCCCAGTACCGCGGTGTGATGGGCACCATTCT
GACCATGGTGCGTACTGAGGGCCCCCGAAGCCTCTACAATGGGCTGGTTGCCGGCCTGCAGCGCCAAATGAGCTT
TGCCTCTGTCCGCATCGGCCTGTATGATTCTGTCAAACAGTTCTACACCAAGGGCTCTGAGCGTGAGTATGGAGC
AAGGGTGTAGGCCCCTTGGCCCTTTTTTCTCAGTGATGATTGATCTTAGTTCATTCAGCCATATAGTTTTTTAGG
CCCCACGATCCCTAGGAAGATCAGGGGAACAGAXAACTGGAAGGGGCCCTGGTCCTCCACATAGTTCCTAAGCAC
CTGGGCXXTACCAGGCTCTGAGCAGGGCGTCATCCCATCACAGTCTTCAACACCACCTTGGGAGTAXGTAGTATC
ATCCCAGTGTTATAGAAAGAAGAAXACTGAXGTGGGAAGGCGXTGGGTATAGTGGGG

FIGURE 7426

GGTCGACCCACGCGTCCGAAACTTAAAAAAATGTGGCCAGGCATAGTAGCTCATGCCTGTAATCCTAGCAATTTG
GGAGGCCGAGGCCGGAGGATCCCTTGAATCCAGGAGTTCGAGACCAGCCTGGGCAACAAACTGAGACCCTCATCT
CCATATATTAAAAAAATAAAAAATAAATAATTGTTTTTTTAAACCACACAAAAAATGTATAAACATGTATCCCCT
GTACTGCAAAATCTTGCTCTCATTCCTATTCCTTCTGCTCTCTTCCAACCATACCTATGTAGCTAACCACATTTA
TTCATTCTGGCTCATTCTTTATATGTTTCTTCTTGCAAATATAAGCAAACTGTATATATTTAATATTCTTACTTA
CAGAAAATGTAGTATATATACTCCTTTGCACCTTGTATTTTTGTTTGTTTACTTAAGAATATATTCCAGAAATCA
TTCTACATTAGTTCATAGGCATCTTTTTGACTATTATTATGGCCAGTTTCTTAAATGGCTGCATAGTACTCTGTT
GTATGGTTGGATCTTGCTTTAGTCGACCTTCTGTAAATGGGAATTATTATGGAGATGTAGCTTTAGAGTAAATTC
CTAGAAGAATGATTGCTGGTCAAAGAGTAAATGCATATGTAGTTTTATTAGATGTTGTCAAATTTCCTTCCATAT
GAGCAGCACACAATCACTTTTAAAAGGCACTTTTTTGGCCGGGCGTGGTGCTCACGCCTGTAATCCCAGCACTTT
GGGAGGCCAGGGCAGGAGGATCATGAGGTCAGGAGATGGAGACTATTCTGGCTAACAGGGTGAAACCCTGTCTCT
ACTAAAAAATACAAAAAATTAGCCGGGCGTGTTGGCGCATGCCTGTAGTCCCAGCTACTCAGGAGGCTGAGGCAG
GAGAATTGCTTGAACCTGGGAGGCAGAGGTTGCAGTGAGCTGAGATCGCACCACTACGCGCCAGCCTGGGCAATA
GAGCGAGATTCGTCTCAAAAAAAAAAAAAAAGGGCGGCC

FIGURE 7427

MYPLYCKILLSFLFLLLSSNHTYVANHIYSFWLILYMFLLANISKLYIFNILTYRKCSIYTPLHLVFLFVYLRIY
SRNHSTLVHRHLFDYYYGQFLKWLHSTLLYGWILL

FIGURE 7428

CAATGGTAGATACCTTTTCAGGGGGATAGAAGCCTTTCTTACTACCACTGAAAAGGCACACACCATTGCCTCTAC
CTTCCTCACACACATCATCCTTTGATTCAGCCTCCCCTCATCTATACAACTGGACAATTGACCAGCATTTATCTC
CCAAGTCACTCAACAGGTTTCTAAGTCTTTAAACATCATATGGGTTTTTCACATTCTCTATCACCCCCAATCCTC
GGGTAAATTTGAACAGGCGAATGCCCTCTTAAAACAACAGTTAACCAAACTTTCCCTAGAGATCAAAATGAAAAC
TGAATATCACTTCTTCCCTTGGCCCTTATGTGCCTCAGGGCCCTCCCCCGAAAACCTCTAAATCTAAGTCCTTTT
GAACTTTTGTATGGACGTTCTTTCGTCCTACAGAACTTTGCTCCATCCCCTCCCTTACAGGACACCTGGCCAGCA
CTGCACCTCACTCAACACTTAGTCCGACAGTACACTGACACTCACCTCCCCAAACCTGAGGATTCTTCCCAATTC
ACTTTCTTACCCTTACAGCCAGGAGACTGGGTCTGGGTAGCACACCCCTCCTCCCCTTTCCAACAAAATGGAAGG
GTCCCTATCAGGTTATATTCACCATCCCCGCTGCTGCAAAGTTAACATCCTTTCCCTATTGTATACACCATTCCA
AATTTAAAAAGGCACCCGGCCCACACCCCGAAGTCTCCTCACCCCGGAAATATTCTTCCTTTCCCACAGGACCAA
CCTCGCTGTGCCTAACAAGAATTCCAGAAGTCACCCATCCGAAAGGCACTGGCCC**ATG**ACACTCTCCACTTCCAA
TCTTAAATCTTTTACTTCATACCTTGTCTCAGATCTCTCCTGGTACCCCTTCCCCACGCCCTTAGATAATCCATC
TCAATTCCTCATGCTAATTGAGGAGCTATGGCTGCAAGGCACCTTCCAGGATTTCACACCTACACAAATCTCCTT
TTTCTCCTTTTGCCTTCTCTGCTTATGGGATATTCTGAGTCCCCACCCCCAATCACTGACAGCTGGGCCCCCTTC
ATCAGCCTCACACACCACGTAT**TAA**GTCAGTCACAATCTCCCCTCTCCTCTAACTGCTGGATTGTCTTTCTA

FIGURE 7429

MTLSTSNLKSFTSYLVSDLSWYPFPTPLDNPSQFLMLIEELWLQGTFQDFTPTQISFFSFCLLCLWDILSPHPQS
LTAGPPSSASHTTY

FIGURE 7430A

CAAGGATATTTCAGCTAAGTCATAACATTAAAAATGTGGTGCTTCGACCCAGTGGAGCGAAACAAAGCCGCCTAA
TGTTAACTCTGCAAGATAACAGCTTCTTGTCTATTGACAAAGTACCAAGTAAGGATGCAGAGGAAATGAGGTTGT
TTCTAGATGCAGTCCATCAAAACAGACTTCCTGCAGCCATGAAACCGTCTCAGGGGTCTGGTAGTTTTGGAGCCA
TTCTGGGCAGCAGGACCTCACAGAAGGAAACCAGCAGGCAGCTTTCTTACTCAGACAATCAGGCTTCTGCAAAAA
GAGGAAGTTTGGAAACTAAAGATGATATTCCATTTCGAAAAGTTCTTGGTAATCCGGGTAGAGGATCGATTAAGA
CTGTAGCAGGAAGTGGAATAGCTCGGACGATTCCTTCTTTGACATCTACTTCAACACCTCTTAGATCAGGGTTGC
TAGAAAATCGTACTGAAAAGAGGAAAAGAATGATATCAACTGGCTCAGAATTGAATGAAGATTACCCTAAGGAAA
ATGATTCATCATCGAACAACAAGGCCATGACAGATCCCTCCAGAAAGTATTTAACCAGCAGTAGAGAAAAGCAGC
TGAGTTTGAAACAGTCAGAAGAGAATAGGACATCAGGGCTTTTACCTTTACAGTCATCATCCTTTTATGGTAGCA
GAGCTGGATCCAAGGAACACTCTTCTGGTGGCACTAACTTAGACAGGACTAATGTTTCAAGCCAGACTCCCTCTG
CCAAAAGAAGTTTGGGATTTCTTCCTCAGCCAGTTCCTCTTTCTGTTAAAAAACTGAGGTGTAACCAGGATTACA
CTGGCTGGAATAAACCAAGAGTGCCCCTTTCCTCTCACCAACAGCAGCAACTGCAGGGCTTCTCCAATTTGGGAA
ATACCTGCTATATGAATGCTATTCTACAATCTCTATTTTCACTCCAGTCATTTGCAAATGACTTGCTTAAACAAG
GTATCCCATGGAAGAAAATTCCACTCAATGCACTTATCAGACGCTTTGCACACTTGCTTGTTAAAAAAGATATCT
GTAATTCAGAGACCAAAAAGGATTTACTCAAGAAGGTTAAAAATGCCATTTCAGCTACAGCAGAGAGATTCTCTG
GTTATATGCAGAATGATGCTCATGAATTTTTAAGTCAGTGTTTGGACCAGCTGAAAGAAGATATGGAAAAATTAA
ATAAAACTTGGAAGACTGAACCTGTTTCTGGAGAAGAAAATTCACCAGATATTTCAGCTACCAGAGCATACACTT
GCCCTGTTATTACTAATTTGGAGTTTGAGGTTCAGCACTCCATCATTTGTAAAGCATGTGGAGAGATTATCCCCA
AAAGAGAACAGTTTAATGACCTCTCTATTGACCTTCCTCGTAGGAAAAAACCACTCCCTCCTCGTTCAATTCAAG
ATTCTCTTGATCTTTTCTTTAGGGCCGAAGAACTGGAGTATTCTTGTGAGAAGTGTGGTGGGAAGTGTGCTCTTG
TCAGGCACAAATTTAACAGGCTTCCTAGGGTCCTCATTCTCCATTTGAAACGATATAGCTTCAATGTGGCTCTCT
CGCTTAACAATAAGATTGGGCAGCAAGTCATCATTCCAAGATACCTGACCCTGTCATCTCATTGCACTGAAAATA
CAAAACCACCTTTTACCCTTGGTTGGAGTGCACATATGGCAATTTCTAGACCATTGAAAGCCTCTCAAATGGTGA
ATTCCTGCATCACCAGCCCTTCTACACCTTCAAAGAAATTCACCTTCAAATCCAAGAGCTCCTTGGCTTTATGCC
TTGATTCAGACAGTGAGGATGAGCTAAAACGTTCTGTGGCCCTCAGCCAGAGACTTTGTGAAATGTTAGGCAACG
AACAGCAGCAGGAAGACCTGGAAAAAGATTCAAAATTATGCCCAATAGAGCCTGACAAGTCTGAATTGGAAAACT
CAGGATTTGACAGAATGAGCGAAGAAGAGCTTCTAGCAGCTGTCTTGGAGATAAGTAAGAGAGATGCTTCACCAT
CTCTGAGTCATGAAGATGATGATAAGCCAACTAGCAGCCCAGATACCGGATTTGCAGAAGATGATATTCAAGAAA
TGCCAGAAAATCCAGACACTATGGAAACTGAGAAGCCCAAAACAATCACAGAGCTGGATCCTGCCAGTTTTACTG
AGATAACTAAAGACTGTGATGAGAATAAAGAAAACAAAACTCCAGAAGGATCTCAGGGAGAAGTTGATTGGCTCC
AGCAGTATGATATGGAGCGTGAAAGGGAAGAGCAAGAGCTTCAGCAGGCACTGGCTCAGAGCCTTCAAGAGCAAG
AGGCTTGGGAACAGAAAGAAGATGATGACCTCAAAAGAGCTACCGAGTTAAGTCTTCAAGAGTTTAACAACTCCT
TTGTGGATGCATTGGGTTCTGATGAGGACTCTGGAAATGAGGATGTTTTTGATATGGAGTACACAGAAGCTGAAG
CTGAGGAACTGAAAAGAAATGCTGAGACAGGAAATCTGCCTCATTCGTACCGGCTCATCAGTGTTGTCAGTCACA
TTGGTAGCACTTCTTCTTCAGGTCATTACATTAGTGATGTATATGACATTAAGAAGCAAGCGTGGTTTACTTACA
ATGACCTGGAGGTATCAAAAATCCAAGAGGCTGCCGTGCAGAGTGATCGAGATCGGAGTGGCTACATCTTCTTTT
ATATGCACAAGGAGATCTTTGATGAGCTGCTGGAAACAGAAAAGAACTCTCAGTCACTTAGCACGGAAGTGGGGA
AGACTACCCGTCAGGCCTCG**TGA**GGAACAAACTCCTGGGTTGGCAGCATGCACTGCATATTTGTTACTGCTGCCC
ACCTCACCTTTCCTCTGCTGAAGGAGAATTTGGAATTCTACTTGATGCGGGAGCAACAAACAGCTCAGGGCCAAA
CCAAAAGACAAAAATTGGAGTAACGTAGAATGCTCCATGCTATTTTATGGAAACTTTGGTCTCACATCCGTAGCT
GATTATCCTCTTTTTCTCCTATGAGTGGCACTTCTTTTGTCTTAGGAATACATGTTGTAAATATATATCTGTGTA
TGTGTGTATACACACACACAGACACACACACACACACACGGGATGAATGGAGCCTTAAAGAGTTAGGATGAGCCA
CCAGAATATGCCTGCTCAAAATTAATAGCACAGCAGTTTGGAGAAGAAATGAAGGTGTCAAAGAGTCCATTCACC
TGAGAAATGTGTGAAGACATACTTATCAGTTGGCTTTTAGCTTTTATGTTCCTTGAGTAGTTTCACTCAAGTCTG
TAACCTTTTGTGTTTCCTTATTAGTAAAATTCACTGGAAAGCCAGCTCTTCATGTTACACTAATGACAGTTTGTT
CTCTTTGCAAGAGAGGGGCATTACTGTCACCTGACTTGAGGAGCTGTTTTGTTGTTGTTGTTGTCTGCAAATTTC
ATGAATTTGTGATGTCTTTGCTGTTTACATGCAGTCCCAAGAAATGGATTGTTGGTGCTTTGGAATATGTTACAG
TCCCACATTTGATATTTCTTATATACTTTGTTTTCTCTAAGGAGATTTCTTCACACAGTATGTTCATCATATATC

FIGURE 7430B

ATCATCATTATTATGGTGGTAAAGATAGAATCTTTTTTCTTTTTTGTCATTCTGCCATGGAGCAGCATTACCCTA
ATGGATTGCAACCAAAACTTTAAACAAGTAGAAAGATAATATTTCTCCAATTGGGACTCCCCAGCAGGAATACTT
AGGGATAAGGAAGAATGCTAGCATCTCTGTCTCTCAAACATAGGGAGGATAAGAAGAGTGTTCTTCTGGTAAAGC
TAAAATTCTGGACCACTGAAGCTAAAAGCCCTATTGCAAGTATGAAATTAAGTACTTGAGCTATAGGACAAACCT
TGGGCATTTAACCATTTACTGTCTGGCTTTGCCCTTAAAATAGGGTTGCAATTAAAATGTGATTGGCTTAGGTAA
TCCCAAAAACTAACAAATAACAAAGGTGCATAATTTATTTATCTACTTTTTAGGTGCTCTGAGTTGAGGCAAAGT
AGAGCGGCAACATTAAGTGCTATGCTAGTCACTTAGCTGACGTAACCAGCTTGGTTAAGCAGCTTATGAAACCAT
ATAAAGAATTCTTTTGAGGATGGAATTCTGTCCACAAAATAATTTTGTGAGCCCAGATATCATTAGGATCACACA
GAGTTAAATATAGAAAAATGAAACCATCATTATATTCTTTCGTGTTTTTTCTTTTATTATAAACAAGGGGATTAT
TCTTTAGTTCTCAGAGGTAGGGACAAAACCACATCAGGTTTTCAGAAGGAAAAAACATTTAAAAACCCACCATCA
CATGAGAGAATCACTTGAACCCAGGAGGCAGAGGTTGCAGTGAGCTGAGATCGCATCATTGCACTGCAGTCTGAG
TGACAGAGTGAGACTCCATCTCATT

FIGURE 7431

RIFQLSHNIKNVVLRPSGAKQSRLMLTLQDNSFLSIDKVPSKDAEEMRLFLDAVHQNRLPAAMKPSQGSGSFGAI
LGSRTSQKETSRQLSYSDNQASAKRGSLETKDDIPFRKVLGNPGRGSIKTVAGSGIARTIPSLTSTSTPLRSGLL
ENRTEKRKRMISTGSELNEDYPKENDSSSNNKAMTDPSRKYLTSSREKQLSLKQSEENRTSGLLPLQSSSFYGSR
AGSKEHSSGGTNLDRTNVSSQTPSAKRSLGFLPQPVPLSVKKLRCNQDYTGWNKPRVPLSSHQQQQLQGFSNLGN
TCYMNAILQSLFSLQSFANDLLKQGIPWKKIPLNALIRRFAHLLVKKDICNSETKKDLLKKVKNAISATAERFSG
YMQNDAHEFLSQCLDQLKEDMEKLNKTWKTEPVSGEENSPDISATRAYTCPVITNLEFEVQHSIICKACGEIIPK
REQFNDLSIDLPRRKKPLPPRSIQDSLDLFFRAEELEYSCEKCGGKCALVRHKFNRLPRVLILHLKRYSFNVALS
LNNKIGQQVIIPRYLTLSSHCTENTKPPFTLGWSAHMAISRPLKASQMVNSCITSPSTPSKKFTFKSKSSLALCL
DSDSEDELKRSVALSQRLCEMLGNEQQQEDLEKDSKLCPIEPDKSELENSGFDRMSEEELLAAVLEISKRDASPS
LSHEDDDKPTSSPDTGFAEDDIQEMPENPDTMETEKPKTITELDPASFTEITKDCDENKENKTPEGSQGEVDWLQ
QYDMERENEEQELQQALAQSLQEQEAWEQKEDDDLKRATELSLQEFNNSFVDALGSDEDSGNEDVFDMEYTEAEA
EELKRNAETGNLPHSYRLISVVSHIGSTSSSGHYISDVYDIKKQAWFTYNDLEVSKIQEAAVQSDRDRSGYIFFY
MHKEIFDELLETEKNSQSLSTEVGKTTRQAS

FIGURE 7432

CCGCTCTGAGGACTGGAGGGACCAGCCGCCCACAGAGCCCCGAGCCCGTGGTCCCGGCGAGAAGAGGCACGCGCG
GCACAGGCCGGCCTCCGCTTCCCGGGAAGACGGCGCACTCCTGGCCCTGGGTTCTTGCTGCTGCCCACCCTCTGC
TCCCTGGGATGGGCCCCGAGGCGAGCAGCTTCAGCACAGGCCTGGCCCTGCTCCAGGTGCAGGAAGGAGGATAAG
GCCGGGCCGAGAGGCGGCACACCTGGACCATCCCATGGGCCTCCGCCCGCGCCGCCCCGAGGATGAGTGGTGATG
TCCTCTAGCCACCCCTAGCAGCGTCGGCTCTCCCTGGACGTGCGGCCGCGGACTGGGACTTGGCTTTCTCCGGAT
AAGCGGCGGCACCGGCGTCAGCG**ATG**ACCGTGCAGAGACTCGTGGCCGCGGCCGTGCTGGTGGCCCTGGTCTCAC
TCATCCTCAACAACGTGGCGGCCTTCACCTCCAACTGGGTGTGCCAGACGCTGGAGGATGGGCGCAGGCGCAGCG
TGGGGCTGTGGAGGTCCTGCTGGCTGGTGGACAGGACCCGGGGAGGGCCGAGCCCTGGGGCCAGAGCCGGCCAGG
TGGACGCACATGACTGTGAGGCGCTGGGCTGGGGCTCCGAGGCAGCCGGCTTCCAGGAGTCCCGAGGCACCGTCA
AACTGCAGTTCGACATGATGCGCGCCTGCAACCTGGTGGCCACGGCCGCGCTCACCGCAGGCCAGCTCACCTTCC
TCCTGGGGCTGGTGGGCCTGCCCCTGCTGTCACCCGACGCCCCGTGCTGGGAGGAGGCCATGGCCGCTGCATTCC
AACTGGCGAGTTTTGTCCTGGTCATCGGGCTCGTGACTTTCTACAGAATTGGCCCATACACCAACCTGTCCTGGT
CCTGCTACCTGAACATTGGCGCCTGCCTTCTGGCCACGCTGGCGGCAGCCATGCTCATCTGGAACATTCTCCACA
AGAGGGAGGACTGCATGGCCCCCCGGGTGATTGTCATCAGCCGCTCCCTGACAGCGCGCTTTCGCCGTGGGCTGG
ACAATGACTACGTGGAGTCACCATGC**TGA**GTCGCCCTTCTCAGCGCTCCATCGACGCACACCTGCTATCGTGGAA
CAGCCTAGAAACCAAGGGACTCCACCACCAAGTCACTTCCCCTGCTCGTGCAGAGGCACGGGATGAGTCTGGGTG
ACCTCTGCGCCATGAGTGCGAGACACGTGTGCGTTTACTGTTATGTCGGTCATATGTCTGTACGTGTCGTGGGCC
AACCTCGTTCTGCCTCCAGCTTTCCTGGTTAGCGCAACGCGGCTCCACGACCACACGCACTTCAGGGTGGAAGCT
GGAAGCTGAGACACAGGTTAGGTGGCGCGAGGCTGCCCTGCGCTCCGCTTTGCTTTGGGATTAATTTATTCTGCA
TCTGCTGAGAGGGGCACCCCAGCCATATCTTACACTTTGGTAAAGCAGAAAACCAGGAAAATTTTCTTAAAATAT
CCACAATATTCCTTGAGTGAGTCAGAATCTATAGCCGGTTAGTGATGGTTTCAGACAGAATCGTGTTCGTGTCTG
TTTTGCTCGATTCCTTTCCTAAGTTAAATAAATGCAAGCCTCTGAAAAAAAAAAAAAAAAAAAAAA

FIGURE 7433

MTVQRLVAAAVLVALVSLILNNVAAFTSNWVCQTLEDGRRRSVGLWRSCWLVDRTRGGPSPGARAGQVDAHDCEA
LGWGSEAAGFQESRGTVKLQFDMMRACNLVATAALTAGQLTFLLGLVGLPLLSPDAPCWEEAMAAAFQLASFVLV
IGLVTFYRIGPYTNLSWSCYLNIGACLLATLAAAMLIWNILHKREDCMAPRVIVISRSLTARFRRGLDNDYVESP
C

FIGURE 7434A

AGCCAAGCCCAGCAGAGTGGCCCCACTGGCCAGCCGAGCCAGCCCCCAGGCACAGCCACCACGCCACTGGAGGGT
GACGGCCTCTCCGCGCCCACCGAGGTTGGCGACAGCCCCCTGCAGGCCCAGGCTTTGGGAGAGGCAGGAGTGGCC
ACAGGAAGTGAGGCTCAGAGCAGCCCGCAATTCCAGGACCACACGGAAGGGGAGGACCAGGACGCTTCCATCCCC
TCTGGGGGCAGAGGCCTGTCCCAGGAGGGGACCGGTCCCCCCACCTCTGCTGGTGAAGGCCATTCTAGGACTGAA
GATGCTGCCCAGGAGCTCCTGTTGCCTGAGTCAAAAGGAGGCAGCTCTGAGCCCGGGACAGAACTGCAGACCACC
GAGCAACAGGCAGGGGCCTCAGCCTCTATGGCAGTTGATGCTGTAGCTGAGCCAGCCAATGCAGTTAAAGGGGCC
GGGAAGGAAATGAAAGAGAAGACCCAGAGAATGAAACAGCCACCAGCAACCACTCCTCCTTTCAAAACACACTGC
CAGGAAGCTGAGACCAAGACCAAGGACGAGATGGCTGCTGCTGAAGAAAAAGTCGGTAAGAATGAACAAGGGGAG
CCTGAAGACCTCAAGAAGCCAGAGGGGAAGAACAGAAGTGCAGCTGCTGTGAAAAACGAGAAGGAGCAAAAAAAC
CAGGAAGCAGATGTCCAGGAAGTGAAGGCAAGCACGCTGAGCCCGGGTGGAGGAGTCACCGTGTTCTTCCACGCC
ATCATCTCTCTTCATTTCCCATTCAATCCTGACCTCCATAAAGTCTTCATCAGAGGAGGAGAAGAATTTGGGGAG
TCAAAATGGGACAGCAATATCTGTGAGCTGCACTACACCAGAGACTTGGGTCATGACCGCGTTCTTGTTGAAGGC
ATTGTCTGCATTTCCAAGAAGCACCTAGATAAATACATTCCTTACAAGTACGTCATTTATAATGGGGAATCTTTT
GAGTATGAGTTCATTTACAAGCACCAGCAGAAGAAGGGCGAGTACGTCAACCGCTGTCTGTTCATAAAATCTTCA
CTTCTGGGCTCAGGAGACTGGCATCAGTACTATGACATAGTTTATATGAAGCCTCATGGGAGACTCCAGAAAGTC
ATGAACCACATCACAGACGGGCCGAGGAAGGACCTGGTGAAGGGGAAGCAGATTGCCGCTGCGCTCATGCTGGAC
AGCACCTTCAGCATCCTGCAGACCTGGGACACCATCAACCTGAACAGCTTCTTCACCCAGTTCGAGCAGTTTTGC
TTTGTCCTGCAACAGCCTATGATTTATGAAGGACAGGCACAGCTGTGGACCGATTTGCAGTACAGGGAGAAAGAG
GTGAAGAGATACCTGTGGCAACATCTGAAAAAACACGTGGTACCATTGCCGGACGGAAAAAGCACGGACTTTTTG
CCTGTGGACTGCCCAGTGAGGAGTAAACTGAAAACAGGCCTGATTGTCCTTTTTGTAGTGGAAAAAATTGAGCTT
TTATTAGAAGGCAGCCTGGACTGGTTGTGTCACCTCCTAACCTCAGATGCCAGCTCACCAGATGAGTTTCACCGT
GACCTAAGCCACATCCTTGGGATACCTCAGAGCTGGCGGCTGTACCTGGTGAACCTGTGCCAAAGATGCATGGAC
ACAAGGACGTACACCTGGCTGGGCGCCCTGCCTGTCCTGCACTGCTGTATGGAGCTGGCCCCGCGGCACAAGGAT
GCCTGGAGACAGCCTGAGGACACCTGGGCCGCTCTGGAGGGACTCTCCTTCTCACCGTTCCGGGAACAAATGCTA
GATACGAGTTCCCTACTTCAGTTTATGAGAGAGAAGCAGCATTTGCTGAGCATAGACGAGCCTCTCTTCCGGTCC
TGGTTTAGTCTGCTACCTCTGAGTCACCTGGTTATGTATATGGAAAACTTCATTGAGCACCTGGGTCGTTTTCCT
GCTCATATCCTGGACTGTCTTTCAGGGATTTACTACCGGCTTCCGGGACTTGAGCAAGTCTTGAATACGCAGGAT
GTTCAGGATGTTCAGAACGTTCAGAACATTTTAGAAATGCTGTTGCGACTCCTGGACACTTACCGGGACAAGATT
CCCGAGGAGGCCTTGTCACCATCCTACCTGACTGTGTGTCTGAAACTGCATGAAGCCATCTGCAGCAGCACAAAG
CTACTTAAGTTTTACGAGCTGCCAGCCTTATCTGCCGAGATTGTCTGCAGAATGATTAGACTTCTATCTCTGGTG
GATTCTGCAGGACAGAGAGATGAAACTGGAAATAATTCAGTCCAAACAGTCTTCCAAGGGACCCTTGCTGCTACG
AAAAGGTGGCTCCGAGAAGTTTTTACAAAGAACATGCTCACATCTTCAGGTGCCTCATTCACATACGTCAAGGAA
ATTGAGGTCTGGAGGCGGCTGGTGGAAATCCAATTCCCCGCGGAGCATGGCTGGAAGGAGTCGTTGCTGGGAGAC
ATGGAATGGAGGCTCACAAAGGAGGAACCCCTCTCCCAGATCACTGCCTACTGCAATAGTTGCTGGGACACCAAA
GGCTTAGAGGACAGTGTGGCCAAGACCTTCGAGAAATGCATCATTGAAGCCGTGAGCTCAGCCTGCCAGTCTCAG
ACCAGTATCCTTCAGGGGTTCTCTTACTCTGATTTGCGGAAATTTGGCATCGTCTTGTCTGCTGTGATCACTAAG
TCCTGGCCTAGGACCGCGGACAACTTCGATGACATTTTAAAGCATCTGCTCACGTTGGCAGATGTCAAGCACGTC
TTCAGATTGTGTGGAACCGACGAGAAAATACTAGCAAATGTCACAGAGGATGCCAAGAGGCTGATAGCTGTTGCC
GACTCTGTGTTGACGAAAGTTGTTGGTGACCTCCTAAGTGGCACGATTTTAGTTGGACAACTGGAGCTGATTATA
AAGCACAAGAATCAGTTTCTTGACATCTGGCAACTGAGGGAAAAAAGTCTTTCACCCCAGGATGAAAAATGTGCT
GTGGAGGAAGCACTGGATTGGAGAAGGGAGGAACTGTTACTTCTAAAGAAAGAGAAAAGATGTGTTGATAGTCTC
CTGAAGATGTGTGGGAACGTGAAACATCTGATACAAGTGGACTTTGGAGTGCTTGCAGTAAGACACTCACAAGAC
CTCAGCAGTAAAAGATTAAATGACACCATGACAGTGAGACTGTCCACCTCCTCGAACTCGCAGAGGGCAACGCAT
TACCACCTGAGCTCCCAGGTCCAAGAAATGGCTGGGAAGATAGACTTGCTCAGAGACAGCCACATCTTCCAGCTC
TTCTGGCGGGAAGCCGCAGAGCCGCTGAGTGAGCCTAAGGAGGACCAGGAAGCCGCAGAGTTGCTGAGTGAGCCC
GAAGAAGAATCAGAAAGGCACATCCTTGAGCTTCAAGAGGTGTATGACTATTTGTATCAGCCTTCTTACAGAAAG
TTCATTAAGTTGCACCAGGATCTAAAGTCAGGAGAGGTCACCCTTGCAGAGATTGATGTCATCTTCAAGGACTTT
GTGAATAAATACACGGACCTGGATTCAGAACTTAAGATCATGTGCACCGTGGACCACCAGGGCCAAAGAGATTGG

FIGURE 7434B

ATCAAGGACCGAGTGGAACAGATCAAGGAATACCATCACCTGCACCAGGCTGTCCACGCAGCCAAGGTCATCTTG
CAGGTCAAAGAGAGCCTGGGACTGAACGGTGACTTCAGTGTTCTCAACACTTTACTAAATTTTACTGATAACTTC
GACGACTTTCGCCGTGAAACACTGGACCAGATCAACCAGGAGCTCATCCAGGCCAAAAAGCTGCTCCAGGACATC
AGCGAGGCCCGGTGCAAGGGGCTGCAGGCTCTGTCCCTGAGAAAGGAGTTCATCTGCTGGGTCCGGGAGGCTCTT
GGAGGCATCAATGAGCTGAAGGTGTTTGTGGACCTGGCCTCCATCTCAGCGGGGGAGAATGACATTGATGTGGAC
CGGGTGGCCTGCTTCCATGACGCTGTGCAGGGCTACGCATCCCTGCTATTTAAGCTGGACCCCAGCGTGGACTTC
AGTGCATTCATGAAGCATCTGAAAAAGCTGTGGAAGGCTCTGGATAAGGACCAGTACCTGCCCAGGAAACTGGTG
AGTCTTATTCTGTCTCTAATGCAGATTTTGTTGAATAGAGCATTGCTTAGCAACGTTAGGGCAGTGACTGTGGAA
ATGGTGGCACACCTGTGTGGTAGGTTTGTACACAGCCGTTTTCAATGATATTTAAAAAGCTTTTCTTCATAAATG
GAAATTCACCATCTTGTTACCTAGAAAGCAGGATACAAAATTACATGACACATAGTAATCTCTAAGGTGCAAAAC
ACACGTGGAAAAAAGACAGAAGGGAAATATGCTGAAACGTTGCCAGGAGTTTTCTCTGAATGGTTGTAATTGTCA
TTTTATTCTGTTACTTTTTGTTATTTTCTATAATTGATAGAATTTTTTATCAGAAAAAAGTAAACATTTAAAATT
AGCCAGGCATGGTGGTGTGCGCCTGTAATCCCAGCTACTCTGGAGGCTGAGACAGAATTGCTTGAACCCGGGAGG
CAGAGATAGCAGTGAACTGAGATCACACCACTGTACTCCAGCCTGAGTGACAAAGTGAGACTCTGTCTC

FIGURE 7435

GGGCTTCGTGTTCCTGGGTGCTGACCGTGCACTCCCCGCCGCCCGAGGACTTAGAGCTCTGGAAGTAGCTCTCCA
GCTTCCTTCGTACTCGGGGGCCGGACTTGTACACCCGCACGAGGAGCGGGGACGGCGGGCGCAGAAGTGGGCCAC
CATATCTGGAAACTACAGTCTATGCTTTGAAGCGCAAAAGGGAATAAACATTTAAAGACTCCCCCGGGGACCTGG
AGG**ATG**GACTTTTCCATGGTGGCCGGAGCAGCAGCTTACAATGAAAAATCAGGTAGGATTACCTCGCTCTCACTC
TTGTTTCAGAAAGTCTTTGCTCAGATCTTTCCTCAGTGGAGAAAGGGGAATACAGAAGAATGTCTCCCCTACAAG
TGCTCAGAGACTGGTGCTCTTGGAGAAAACTATAGTTGGCAAATTCCCATTAACCACAATGACTTCAAAATTTTA
AAAAATAATGAGCGTCAGCTGTGTGAAGTCCTCCAGAATAAGTTTGGCTGTATCTCTACCCTGGTCTCTCCAGTT
CAGGAAGGCAACAGCAAATCTCTGCAAGTGTTCAGAAAAATGCTGACTCCTAGGATAGAGTTATCAGTCTGGAAA
GATGACCTCACCACACATGCTGTTGATGCTGTGGTGAATGCAGCCAATGAAGATCTTCTGCATGGGGGAGGCCTG
GCCCTGGCCCTGGTAAAAGCTGGTGGATTTGAAATCCAAGAAGAGAGCAAACAGTTTGTTGCCAGATATGGTAAA
GTGTCAGCTGGTGAGATAGCTGTCACGGGAGCAGGGAGGCTTCCCTGCAAACAGATCATCCATGCTGTTGGGCCT
CGGTGGATGGAATGGGATAAACAGGGATGTACTGGAAAGCTGCAGAGGGCCATTGTAAGTATTCTGAATTATGTC
ATCTATAAAAATACTCACATTAAGACAGTAGCAATTCCAGCCTTGAGCTCTGGGATTTTTCAGTTCCCTCTGAAT
TTGTGTACAAAGACTATTGTAGAGACTATCCGGGTTAGTTTGCAAGGGAAGCCAATGATGAGTAATTTGAAAGAA
ATTCACCTGGTGAGCAATGAGGACCCTACTGTTGCTGCCTTTAAAGCTGCTTCAGAATTCATCCTAGGGAAGAGT
GAGCTGGGACAAGAAACCACCCCTTCTTTCAATGCAATGGTCGTGAACAACCTGACCCTCCAGATTGTCCAGGGC
CACATTGAATGGCAGACGGCAGATGTAATTGTTAATTCTGTAAACCCACATGATATTACAGTTGGACCTGTGGCA
AAGTCAATTCTACAACAAGCAGGAGTTGAAATGAAATCGGAATTTCTTGCCACAAAGGCTAAACAGTTTCAACGG
TCCCAGTTGGTACTGGTCACAAAAGGATTTAACTTGTTCTGTAAATATATATACCATGTACTGTGGCATTCAGAA
TTTCCTAAACCTCAGATATTAAAACATGCAATGAAGGAGTGTTTGGAAAAATGCATTGAGCAAAATATAACTTCC
ATTTCCTTTCCTGCCCTTGGGACTGGAAACATGGAAATAAAGAAGGAAACAGCAGCAGAGATTTTGTTTGATGAA
GTTTTAACATTTGCCAAAGACCATGTAAAACACCAGTTAACTGTAAAATTTGTGATCTTTCCAACAGATTTGGAG
ATATATAAGGCTTTCAGTTCTGAAATGGCAAAGAGGTCCAAGATGCTGAGTTTGAACAATTACAGTGTCCCCCAG
TCAACCAGAGAGGAGAAAAGAGAAAATGGGCTTGAAGCTAGATCTCCTGCCATCAATCTGATGGGATTCAACGTG
GAAGAGATGTGTGAGGCCCACGCATGGATCCAAAGAATCCTGAGTCTCCAGAACCACCACATCATTGAGAATAAT
CATATTCTGTACCTTGGGAGAAAGGAACATGACATTTTGTCTCAGCTTCAGAAAACTTCAAGTGTCTCCATCACA
GAAATTATCAGCCCAGGAAGGACAGAGTTAGAGATTGAAGGAGCCCGGGCTGACCTCATTGAGGTGGTTATGAAC
ATTGAAGATATGCTTTGTAAAGTACAGGAGGAAATGGCAAGGAAAAAGGAGCGAGGCCTTTGGCGCTCGTTAGGA
CAGTGGACTATTCAGCAACAAAAAACCCAAGACGAAATGAAAGAAAATATCATATTTCTGAAATGTCCTGTGCCT
CCAACTCAAGAGCTTCTAGATCAAAAGAAACAGTTTGAAAAATGTGGTTTGCAGGTTCTAAAGGTGGAGAAGATA
GACAATGAGGTCCTTATGGCTGCCTTTCAAAGAAAGAAGAAAATGATGGAAGAAAAACTGCACAGGCAACCTGTG
AGCCATAGGCTGTTTCAGCAAGTCCCATACCAGTTCTGCAATGTGGTATGCAGAGTTGGCTTTCAAAGAATGTAC
TCGACACCTTGCGATCCAAAATACGGAGCTGGCATATACTTCACCAAGAACCTCAAAAACCTGGCAGAGAAGGCC
AAGAAAATCTCTGCTGCAGATAAGCTGATCTATGTGTTTGAGGCTGAAGTACTCACAGGCTTCTTCTGCCAGGGA
CATCCGTTAAATATTGTTCCCCCACCACTGAGTCCTGGAGCTATAGATGGTCATGACAGTGTGGTTGACAATGTC
TCCAGCCCTGAAACCTTTGTTATTTTTAGTGGCATGCAGGCTATACCTCAGTATTTGTGGACATGCACCCAGGAA
TATGTACAGTCACAAGATTACTCATCAGGACCAATGAGACCCTTTGCACAGCATCCTTGGAGGGGATTCGCAAGT
GGCAGCCCTGTTGAT**TAA**TCTCTACATCATTTTAACAGCTGGTATGGCCTTACCTTGGGTGAACTAACCAAATAA
TGACCATCGATGGCTCAAAGAGTGGCTTGAATATATCCCATGGGTTATCTGTATGGACTGACTGGGTTATTGAAA
GGACTAGCCACATACTAGCATCTTAGTGCCTTTATCTGTCTTTATGTCTTGGGGTTGGGGTAGGTAGATACCAAA
TGAAACACTTTCAGGACCTTCCTTCCTCTTGCAGTTGTTCTTTAATCTCCTTTACTAGAGGAGATAAATATTTTG
CATATAATGAAGAAATTTTTCTAGTATATAACGCAGGCCTTTTATTTTCTAAAATGATGATAGTATAAAAATGTT
AGGATAACAGAATGATTTTAGATTTTCCAGAGAATATTATAAAGTGCTTTAGGTATGAAAATAAATCATCTTTGT
CTGATTAAAAAAAAAAAA

FIGURE 7436

MDFSMVAGAAAYNEKSGRITSLSLLFQKVFAQIFPQWRKGNTEECLPYKCSETGALGENYSWQIPINHNDFKILK
NNERQLCEVLQNKFGCISTLVSPVQEGNSKSLQVFRKMLTPRIELSVWKDDLTTHAVDAVVNAANEDLLHGGGLA
LALVKAGGFEIQEESKQFVARYGKVSAGEIAVTGAGRLPCKQIIHAVGPRWMEWDKQGCTGKLQRAIVSILNYVI
YKNTHIKTVAIPALSSGIFQFPLNLCTKTIVETIRVSLQGKPMMSNLKEIHLVSNEDPTVAAFKAASEFILGKSE
LGQETTPSFNAMVVNNLTLQIVQGHIEWQTADVIVNSVNPHDITVGPVAKSILQQAGVEMKSEFLATKAKQFQRS
QLVLVTKGFNLFCKYIYHVLWHSEFPKPQILKHAMKECLEKCIEQNITSISFPALGTGNMEIKKETAAEILFDEV
LTFAKDHVKHQLTVKFVIFPTDLEIYKAFSSEMAKRSKMLSLNNYSVPQSTREEKRENGLEARSPAINLMGFNVE
EMCEAHAWIQRILSLQNHHIIENNHILYLGRKEHDILSQLQKTSSVSITEIISPGRTELEIEGARADLIEVVMNI
EDMLCKVQEEMARKKERGLWRSLGQWTIQQQKTQDEMKENIIFLKCPVPPTQELLDQKKQFEKCGLQVLKVEKID
NEVLMAAFQRKKKMMEEKLHRQPVSHRLFQQVPYQFCNVVCRVGFQRMYSTPCDPKYGAGIYFTKNLKNLAEKAK
KISAADKLIYVFEAEVLTGFFCQGHPLNIVPPPLSPGAIDGHDSVVDNVSSPETFVIFSGMQAIPQYLWTCTQEY
VQSQDYSSGPMRPFAQHPWRGFASGSPVD

FIGURE 7437

GGCTCCGGGGGTGGCGGTCGGACAGTGTCTAGCACGCTCAGTCCGGGCTTGGGGCCCCGCGGCGGAGAAGGAGGT
AGAGGGGGCGGCGGCGGCGGCGGCGGTGGTGGCGGCACCATGTTTCTTCACTCAGTTAATCTCTGGAACCTGGCG
TTTTATGTCTTCATGGTCTTTCTGGCAACCCTGGGGCTGTGGGATGTCTTCTTCGGCTTCGAGGAGAATAAGTGC
AGTATGAGCTACATGTTTGAGTACCCGGAGTATCAGAAAATAGAACTTCCAAAGAAACTGGCAAAACGCTATCCC
GCATATGAGTTGTATCTTTATGGAGAGGGATCCTATGCTGAAGAACACAAAATTCTCCCTTTGACGGGTATTCCA
GTTCTCTTTCTTCCTGGTAATGCTGGAAGTTATAAGCAAGTTCGTTCTATTGGCTCCATTGCACTTAGAAAAGCA
GAGGACATTGACTTCAAGTACCACTTTGACTTCTTTAGTGTGAACTTCAATGAAGAACTGGTGGCTTTGTATGGT
GGAAGTCTTCAGAAGCAGACCAAGTTTGTACATGAATGTATTAAAACAATTCTCAAACTCTATAAGGGTCAAGAA
TTTGCTCCAAAAAGTGTGGCAATAATTGGTCATTCTATGGGTGGCCTTGTTGCAAGAGCATTGCTTACACTGAAA
AATTTTAAGCATGATCTGATAAATCTTCTTATTACACAAGCCACACCTCATGTTGCTCCTGTGATGCCATTAGAT
CGTTTCATTACAGATTTTTATACGACTGTAAACAACTATTGGATTCTAAATGCTCGACACATAAATTTAACCACA
CTTTCTGTAGCTGGAGGATTCCGGGATTACCAAGTTCGTTCAGGATTGACTTTTCTACCAAAATTAAGCCATCAT
ACCAGTGCCTTATCTGTTGTGAGTTCAGCAGTGCCTAAGACCTGGGTCTCAACAGACCACCTCTCCATTGTGTGG
TGTAAACAATTGCAGTTGACTACAGTTCGAGCATTCTTTGATCTTATTGGTGCTGATACTAAACAAATAACTCAA
AATTCCAAGAAGAAACTGTCAGTTTTGTATCACCACTTTATAAGACACCCATCAAAACATTTTGAGGAAAATCCA
GCTATAATTTCTGACTTAACAGGGACATCTATGTGGGTTCTAGTAAAAGTGTCCAAATGGACCTATGTAGCTTAC
AACGAATCTGAGAAGATATATTTTACATTTCCTCTTGAAAATCATAGAAAAATCTACACTCATGTCTATTGTCAG
AGCACTATGCTGGATACAAATAGTTGGATTTTTGCTTGCATAAACAGCACTTCTATGTGCCTGCAAGGGGTTGAT
TTATCATGGAAAGCTGAACTGCTGCCAACAATTAAGTATCTGACATTAAGACTTCAAGACTATCCATCTTTGTCT
CATCTTGTTGTTTATGTACCATCTGTTCGTGGAAGTAAGTTTGTTGTAGATTGTGAATTCTTTAAAAAAGAGAAA
AGATACATACAGCTTCCTGTAACTCATCTTTTTTCCTTTGGATTGTCTTCAAGGAAAGTGGTGTTAAATACAAAT
GGCCTATACTACAATCTAGAGCTTCTGAACTTTGGACAGATATACCAAGCTTTTAAAATCAACGTGGTAAGCAAG
TGCTCAGCAGTCAAAGAAGAAATAACCAGTATCTATAGACTTCATATTCCTTGGTCTTATGAAGATTCACTAACC
ATTGCACAGGCTCCATCTTCCACAGAAATTTCTCTGAAACTCCATATTGCTCAACCAGAAAACAATACCCATGTG
GCATTATTTAAAATGTACACGTCATCAGACTGTCGGTACGAGGTGACAGTTAAGACTTCCTTTTCACAAATACTT
GGACAGGTTGTTGCTTAGAATATGCTACCATGTTGGATAAAGAAGCCAAACCATACAAAGTTGATCCTTTTGTAA
TTATCATTAAGTTTCTGTTGGGGTAAGTTTTATTATCTGTGATAATGATTTTAATTGTGTTTTACATGTAACATT
ATATTTGGTTCCATAATGCAATATAAATTTTCATACAGATTTGGCAGTTGACTTGTTTCATTAAATGAGGTTTTT
TTTTTTCTCTTAGGCAAAGGTCTAATAAGTATATCAATGTCTACTTCAATAGTATCATTTCAAAAGTAATTATTC
ACTTTATGTATATCAGTCTAAACTTAGACTGCCTTTAATGTTTGTAAATAGGTGTATATGGTCCATGATCTGTGA
GTATCCTAGATTCAAACGCAAATCATTACAGGGTATTGATGAAACAGTGCCTCTCTGATCACTTTTAAAAGTATA
TTTTAGACCTCTCTACCCTAGTTAACATTCCATTCTTAATTTAGTCACATTTTCAGATTTTTGGTTAAGCATCAA
TATGTAGATCTTTTTTTCCATCATTACAACTAACTTGGCTTTCT

FIGURE 7438

MFLHSVNLWNLAFYVFMVFLATLGLWDVFFGFEENKCSMSYMFEYPEYQKIELPKKLAKRYPAYELYLYGEGSYA
EEHKILPLTGIPVLFLPGNAGSYKQVRSIGSIALRKAEDIDFKYHFDFFSVNFNEELVALYGGSLQKQTKFVHEC
IKTILKLYKGQEFAPKSVAIIGHSMGGLVARALLTLKNFKHDLINLLITQATPHVAPVMPLDRFITDFYTTVNNY
WILNARHINLTTLSVAGGFRDYQVRSGLTFLPKLSHHTSALSVVSSAVPKTWVSTDHLSIVWCKQLQLTTVRAFF
DLIGADTKQITQNSKKKLSVLYHHFIRHPSKHFEENPAIISDLTGTSMWVLVKVSKWTYVAYNESEKIYFTFPLE
NHRKIYTHVYCQSTMLDTNSWIFACINSTSMCLQGVDLSWKAELLPTIKYLTLRLQDYPSLSHLVVYVPSVRGSK
FVVDCEFFKKEKRYIQLPVTHLFSFGLSSRKVVLNTNGLYYNLELLNFGQIYQAFKINVVSKCSAVKEEITSIYR
LHIPWSYEDSLTIAQAPSSTEISLKLHIAQPENNTHVALFKMYTSSDCRYEVTVKTSFSQILGQVVA

FIGURE 7439

AAAAAGGAACTGGGATCGCGCCGCGGCGGTTCCTGTCCTTACAGTTGCGCTGCCCAGGGACCGATGTTGCGCGAG
GAAAATGCGGGACGCCCAGGTCGGTGCTCGGCCCAGACTTATGCCCGTGTTTTCACAGCCCACACTCGTGCCCGA
AGCCCCTTACCCCGCCCCGGGCTGTGGTCTGTGGGCTGTGGGACGAGCTGCGGCGCGGGCCATTTCTGAGCAGTG
GAGGTTTCAAGTAATCCACTAACAACCAGTTCCAAATTCTGTCATCAAATCCTGTGCTGCTGTTCCTCGTGGTAA
TAGATGCATATTATTTCTTTTATTTAAAAGAAATGAATGTGACTAGTATTGCATTAAGAGCTGGAACTTGGCTTT
TAGCTGCATGGCATGTTAAAGTACCTCCGATGTGGCTGGAAGCTTGTATTAACTGGATTCAAGAAGAAAATAATA
ATGTTAACTTGAGTCAGGCCCAAATGAATAAACAAGTGTTTGAGCAGTGGCTCCTTACTGATCTGAGGGATTTGG
AGCATCCTCTTTTACCCGATGGCATTTTAGAAATTCCAAAAGGAGAATTAAATGGATTTTATGCTCTGCAGATTA
ATTCCTTGGTTGATGTAAGTCAGCCTGCATACTCCCAGATACAGAAGTTGAGAGGAAAGAATACAACAAATGATC
TAGTTACAGCTGAAGCACAAGTAACCCCAAAACCTTGGGAAGCAAAGCCTTCACGAATGTTGATGCTGCAGCTAA
CTGATGGAATCGTACAAATACAGGGAATGGAATATCAGCCTATTCCAATTCTTCATAGTGATCTTCCTCCAGGTA
CAAAAATTTTGATTTATGGAAATATATCTTTCCGTCTTGGTGTTCTCTTATTGAAACCAGAAAACGTGAAAGTGT
TAGGAGGTGAAGTAGATGCTCTTTTAGAAGAATATGCCCAAGAAAAAGTACTTGCAAGATTAATAGGGGAACCTG
ATCTTGTAGTTTCAGTCATACCAAACAATTCTAACGAAAACATTCCCAGAGTTACAGATGTTCTAGATCCTGCAT
TAGGTCCTTCTGATGAAGAACTCTTGGCAAGTCTTGATGAAAATGATGAGCTTACAACAAATAATGACACTTCCT
CAGAACGATGTTTCACCACAGGTAGTTCCTCAAATACCATTCCCACAAGACAGTCAAGTTTTGAGCCAGAATTTG
TTATTTCTCCAAGACCAAAAGAGGAACCATCAAACCTATCTATACATGTAATGGATGGAGAATTAGATGACTTTT
CACTGGAGGAGGCCTTGCTTTTAGAAGAAACTGTCCAGAAAGAACAGATGGAAACTAAGGAATTGCAACCATTGA
CTTTTAACAGAAATGCCGATCGAAGTATAGAGAGATTTTCACATAATCCTAATACTACGAATAACTTTTCTTTGA
CTTGCAAAAATGGAAACAATAATTGGAGTGAAAAAAATGTATCTGAACAAATGACTAATGAAGACAAATCATTTG
GTTGTCCATCTGTTAGAGACCAAAACAGGAGTATTTTTTCAGTTCATTGTAATGTACCCTTAGCCCATGATTTTA
CAAATAAAGAAAAGAACTTAGAGACAGATAATAAAATAAAACAAACCAGCAGTTCAGATAGCCATTCCTTAAATA
ATAAAATATTAAATAGAGAGGTGGTCAACTATGTACAGAAAAGGAGTTCACAAATTTCTAATGAAAATGATTGTA
ATTTACAGAGTTGTTCTTTAAGATCATCAGAGAATAGCATTAATCTTTCTATTGCCATGGATTTGTATTCTCCAC
CCTTTGTCTATTTGTCTGTTCTAATGGCCAGCAAACCAAAGGAAGTTACAACAGTGAAAGTGAAAGCATTTATTG
TAACCTTAACTGGAAATCTCTCAAGTTCTGGTGGTATTTGGAGTATAACTGCAAAGGTGTCTGATGGTACTGCAT
ATCTAGATGTAGACTTTGTGGATGAAATACTTACTAGCTTGATAGGGTTCTCAGTACCAGAAATGAAACAGTCAA
AAAAGGATCCTCTTCAATACCAAAAGTTCCTGGAAGGGTTGCAGAAATGTCAAAGAGATCTAATAGATTTGTGCT
GTCTAATGACTATTTCATTTAATCCTTCCTTGTCTAAAGCAATGGTACTGGCATTACAAGATGTTAATATGGAAC
ACCTTGAGAATCTAAAGAAGCGGTTAAATAAATAATTAAACTAAAATAGTATTAGGAACAATTAAAAACAACAAG
GAAATATTTAGAATTTGTTCACAATTTTACTTATGATACTTTGTGTAAAAAGGAAAAATGAAATTTCATAGCTTA
TTTCAGTTTAATTTTAAAGTGTTTAATCATGTTTGTTATATGTGGAGCTTTTGAAAATAAGTTAATCTTTTTTTT
TTTTTTTAATGTCAGGGTATTGCTCTGTTGCCCAGGCTAGAGTGCAGTGGCATGATCATAGGTTATTGCATCAAC
CTCTTGAGCTCAAGCGATCCTCCTGCCTTAGCCTCTTGAGTTGCTGGGACTATAGGCATGTACCACCATGCCCAG
CTAATTTATAATTACTATTATTGTTTTGTAGGGACAGAGTTTTGCTATGTTGCCCAGATTGGTCTCAAACTCCTG
GCCTCTCACTCCTGCCGTCATGGCCTCCAAAGTTTAATTTTTTTAAAAGTAACTGTTAGATGGAGGAATATGGTG
ACCCACTATTGTTGAGAAATTTGTTTTCCACTTGTCACGTCACATAAGATGATTGCTAAAATATTGTACTGGTGT
TCGGTGGTGAGTCATATTTTTGAAAGTTAATAATTATAAATAGGTAATTTCCTTCTAATATGTTGGTACTGTCTA
TGGCCATACCACCCTGAACATGCCTGAGCTTGTCATAATATGTTGAGTACCCAAAAGATTTGTTTATATTGTTAA
TCTTAGGGAAAAAAAATTAAAATCCAGTAGATCAGAACATCAGGCTTTCAGATACAAATTGATTTACTGGTTTTT
ATTTTGCTGATTATAATATTTGGTATATTTAAGGTAATCTAGTTAACTAGATGCTATTTCATAGATTATATTGAA
TGATTTAAAACTTTATTTTCAAGGATAGTTTATTTTAAATGGCATATTGAAAACATCATTATTAAGATCCAGTAG
GTAGGACATTTATTGGATTAAAATGAAGCATTTATCTATGTCTTTAGGTGTCATTGTTCCCTTTCTGAATTAGCT
GTACATATAAGCCTTCCTTTGGTTTTAAGTACTGATTTTTTTTTAAAAAAAGAGGGACTGTTTACCATTCTTCCA
CTGTGCTGTTATAAAGTTGTATTTGAAAGGTAATGTTGTTTTTATTAATCTTTTGTCTTAAAATAATTTAAAGTG
CTTTGAATTTTAAAACATTAAACAAATCCTTAAATAAC

FIGURE 7440

MNVTSIALRAGTWLLAAWHVKVPPMWLEACINWIQEENNNVNLSQAQMNKQVFEQWLLTDLRDLEHPLLPDGILE
IPKGELNGFYALQINSLVDVSQPAYSQIQKLRGKNTTNDLVTAEAQVTPKPWEAKPSRMLMLQLTDGIVQIQGME
YQPIPILHSDLPPGTKILIYGNISFRLGVLLLKPENVKVLGGEVDALLEEYAQEKVLARLIGEPDLVVSVIPNNS
NENIPRVTDVLDPALGPSDEELLASLDENDELTTNNDTSSERCFTTGSSSNTIPTRQSSFEPEFVISPRPKEEPS
NLSIHVMDGELDDFSLEEALLLEETVQKEQMETKELQPLTFNRNADRSIERFSHNPNTTNNFSLTCKNGNNNWSE
KNVSEQMTNEDKSFGCPSVRDQNRSIFSVHCNVPLAHDFTNKEKNLETDNKIKQTSSSDSHSLNNKILNREVVNY
VQKRSSQISNENDCNLQSCSLRSSENSINLSIAMDLYSPPFVYLSVLMASKPKEVTTVKVKAFIVTLTGNLSSSG
GIWSITAKVSDGTAYLDVDFVDEILTSLIGFSVPEMKQSKKDPLQYQKFLEGLQKCQRDLIDLCCLMTISFNPSL
SKAMVLALQDVNMEHLENLKKRLNK

FIGURE 7441

AGCCGGCCGCTAAGAAGCCGAAAGATGTCCAGGTCGGGCGCGGCGGCTGAGAAGGCGGACTCCAGACAGCGACCC
CAGATGAAGGTAAATGAATATAAAGAAAATCAAAACATCGCTTATGTGTCTCTGAGACCAGCACAGACTACAGTT
TTAATAAAAACAGCTAAGGTCTATCTTGCCCCCTTTTCACTCAGTAATTACCAGCTAGACCAGCTTATGTGCCCC
AAATCCCTATCAGAAAAGAATTCTAACAATGAAGTGGCGTGTAAGAAGACTAAAATAAAGAAAACTTGCAGAAGG
ATTATACCTCCAAAGATGAAAAACACATCTTCCAAGGCAGAATCCACGCTGCAAAATTCATCCTCAGCTGTTCAT
ACTGAAAGTAACAAGCTACAACCCAAGAGAACGGCAGATGCGATGAATCTCAGTGTTGATGTGGAAAGTAGTCAG
GATGGAGACAGTGATGAAGATACCACACCAGCCCTGGATTTTTCGGGATTGTCACCCTACGAAAGGAAGAGACTG
AAGAACATATCAGAAAACGCAGACTTTTTTGCTTCTCTTCAGTTGTCTGAGTCTGCTGCAAGACTCCGTGAAATG
ATAGAGAAGAGACAGCCTCCTAAATCCAAAAGAAAGAAGCCTAAGAGAGAAAATGGGATTGGATGTAGAAGGTCA
ATGCGATTACTAAAAGTTGATCCTTCGGGAGTTTCATTACCAGCAGCTCCAACACCGCCGACATTAGTAGCAGAT
GAAACTCCTTTGTTACCTCCTGGGCCTTTAGAAATGACTTCTGAAAATCAAGAAGACAACAATGAACGATTTAAA
GGATTTCTGCACACATGGGCAGGAATGAGCAAGCCAAGTAGTAAGAACACTGAGAAGGGATTATCTAGCATTAAA
AGCTACAAAGCCAATTTAAATGGCATGGTCATTAGTGAAGATACCGTTTACAAAGTTACCACAGGCCCAATATTC
TCTATGGCTCTCCATCCATCAGAAACTAGAACTTTGGTAGCAGTTGGGGCCAAATTTGGGCAAGTTGGACTTTGT
GATTTGACCCAGCAACCTAAAGAAGATGGAGTTTATGTTTTTCACCCCCATAGTCAGCCAGTTAGCTGTCTTTAC
TTCTCACCCGCCAATCCGGCCCACATACTGTCACTGAGCTATGATGGCACGTTACGCTGTGGGGATTTTTCCAGG
GCTATTTTTGAAGAGGTGTATAGAAATGAAAGAAGTAGCTTTTCCTCCTTCGACTTCTTGGCAGAAGATGCCTCC
ACTTTAATAGTAGGACACTGGGATGGAAATATGTCACTGGTGGATAGACGGACACCTGGAACTTCTTATGAGAAA
CTTACCAGTTCTTCTATGGGAAAAATAAGAACTGTTCATGTCCACCCAGTGCATAGACAGTATTTTATCACTGCC
GGATTGAGGGATACTCATATTTATGATGCAAGGCGATTGAATTCCAGGAGAAGTCAGCCTTTGATTTCTTTGACT
GAACATACAAAGAGCATTGCTTCCGCCTATTTTTCACCTCTTACTGGTAACAGAGTGGTGACCACATGTGCTGAT
TGTAATCTGAGAATTTTTGACAGCAGCTGTATATCTTCTAAGATTCCGCTCCTCACCACCATCAGGCACAACACT
TTCACTGGGCGATGGCTGACCAGGTTCCAAGCCATGTGGGATCCTAAACAAGAAGACTGTGTCATAGTTGGCAGC
ATGGCCCATCCACGACGGGTAGAAATCTTCCATGAGACAGGAAAGAGGGTGCATTCGTTTGGTGGAGAATACCTT
GTCTCTGTGTGTTCCATCAATGCCATGCACCCAACTCGGTATATTTTGGCTGGAGGTAATTCCAGCGGGAAGATA
CATGTTTTTATGAATGAAAAAAGCTGCTGAGTTTTTGGTTTAGGAACATCAATTTGTTCAAATTGACCACTGTCT
AAGGAGCCTAGTAATCGGCGTGCCTTAGTGTGTTTATGTGGTAATGTGTTACATTTAGCAATTATAACATTGTTT
TATTAATAAGACTATAAGAAGAGTGTACTTTTAGTAAGGGAGAAGTCTTGGAGGGTTGCTTCTGCAGGACGGGGA
GGGAATTTGAGGGGAGGCTGAGGTGCCGTCAGGACTTTTTTTTTTTTTTTTTTTGAGATGGAGTTTTGCTCTT
GTTGCCCAGGCTGGAGTGCAATAGCGCGATCTTGGCTCACCGCAACCTCCGCCTCCCAGGTTCAAGCGATTCTCC
TGCCTCAGACTCCTAAGTAGCTGGGATTACAGGCACCTGCCACCACGCCTGGCTATTTTTTTGTATTTTTAGTAG
AGATGGGGTTTCATCATGTTGGCCAGGCTGGTCTCGAGCTCCTGACCTCAGGTGATCTGCCCGCCTCGGCCTCCA
AAAGTGCTGGAATTACAGGCGTGAGCCACCATGCCTGGCCATCAGAACTTGTAATCAAGACAGTATGTTGAGAAA
TTCTAACATTATAAATTACAAAGCTTTGACTATTAAAGTTTTTGTGATCT

FIGURE 7442

MSRSGAAAEKADSRQRPQMKVNEYKENQNIAYVSLRPAQTTVLIKTAKVYLAPFSLSNYQLDQLMCPKSLSEKNS
NNEVACKKTKIKKTCRRIIPPKMKNTSSKAESTLQNSSSAVHTESNKLQPKRTADAMNLSVDVESSQDGDSDEDT
TPALDFSGLSPYERKRLKNISENADFFASLQLSESAARLREMIEKRQPPKSKRKKPKRENGIGCRRSMRLLKVDP
SGVSLPAAPTPPTLVADETPLLPPGPLEMTSENQEDNNERFKGFLHTWAGMSKPSSKNTEKGLSSIKSYKANLNG
MVISEDTVYKVTTGPIFSMALHPSETRTLVAVGAKFGQVGLCDLTQQPKEDGVYVFHPHSQPVSCLYFSPANPAH
ILSLSYDGTLRCGDFSRAIFEEVYRNERSSFSSFDFLAEDASTLIVGHWDGNMSLVDRRTPGTSYEKLTSSSMGK
IRTVHVHPVHRQYFITAGLRDTHIYDARRLNSRRSQPLISLTEHTKSIASAYFSPLTGNRVVTTCADCNLRIFDS
SCISSKIPLLTTIRHNTFTGRWLTRFQAMWDPKQEDCVIVGSMAHPRRVEIFHETGKRVHSFGGEYLVSVCSINA
MHPTRYILAGGNSSGKIHVFMNEKSC

FIGURE 7443

ATGAGAATGTCCTTGGCTCAGAGAGTACTACTCACCTGGCTTTTCACACTACTCTTCTTGATCATGTTGGTGTTG
AAACTGGATGAGAAAGCACCTTGGAACTGGTTCCTCATATTCATTCCAGTCTGGATATTTGATACTATCCTTCTT
GTCCTGCTGATTGTGAAAATGGCTGGGCGGTGTAAGTCTGGCTTTGACCCTCGACATGGATCACACAATATTAAA
AAAAAAGCCTGGTACCTCATTGCAATGTTACTTAAATTAGCCTTCTGCCTCGCACTCTGTGCTAAACTGGAACAG
TTTACTACCATGAATCTATCCTATGTCTTCATTCCTTTATGGGCCTTGCTGGCTGGGGCTTTAACAGAACTCGGA
TATAATGTCTTTTTTGTGAGAGACTGA

FIGURE 7444

MRMSLAQRVLLTWLFTLLFLIMLVLKLDEKAPWNWFLIFIPVWIFDTILLVLLIVKMAGRCKSGFDPRHGSHNIK
KKAWYLIAMLLKLAFCLALCAKLEQFTTMNLSYVFIPLWALLAGALTELGYNVFFVRD

FIGURE 7445

AGAAACGGCAGTGGCAGCAGCGTCCGGAGCAGCCGCAGCCTTCTGGAAGCTCCAGGCGGTCTTTCTGCCGAGCCT
CGGTCCCGGCCCCCATCCTCCCCGCCCCATCGGTTGTTGTCTGGGCGGATTTAAACAGTCAAGTAAAATCAAGCT
GGGTAATC**ATG**GCAGAAGGTGGATTTGATCCCTGTGAATGTGTTTGCTCTCATGAACATGCAATGAGAAGACTGA
TCAATCTGTTACGGCAGTCCCAGTCCTACTGCACAGACACAGAGTGTCTTCAGGAATTACCGGGACCCTCTGGTG
ATAATGGCATCAGTGTTACAATGATCTTGGTAGCCTGGATGGTTATTGCATTGATCTTGTTCTTACTGAGACCTC
CTAATCTAAGAGGATCCAGCCTACCTGGAAAGCCAACCAGTCCTCATAATGGACAAGATCCACCAGCTCCTCCTG
TGGAC**TAA**CTTTGTGATATGGGAAGTGAAAATAGTTAACACCTTGCACGACCAAACGAACGAAGATGACCAGAGT
ACTCTTAACCCCATTAGAACTGTTTTTCCTTTTGTATCTGCAATATGGGATGGTATTGTTTTCATGAGCTTCTAG
AAATTTCACTTGCAAGTTTATTTTTGCTTCCTGTGTTACTGCCATTCCTATTTACAGTATATTTGAGTGAATGAT
TATATTTTTAAAAAGTTACATGGGGCTTTTTTGGTTGTCCTAAACTTACAAACATTCCACTCATTCTGTTTGTAA
CTGTGATTATAATTTTTGTGATAATTTCTGGCCTGATTGAAGGAAATTTGAGAGGTCTGCATTTATATATTTTAA
ATAGATTTGATAGGTTTTTAAATTGCTTTTTTTCATAAGGTATTTATAAAGTTATTTGGGGTTGTCTGGGATTGT
GTGAAAGAAAATTAGAACCACGCTGTATTTACATTTACCTTGGTAGTTTATTTGTGGATGGCAGTTTTCTGTAGT
TTTGGGGACTGTGGTAGCTCTTGGATTGTTTTGCAAATTACAGCTGAAATCTGTGTCATGGATTAAACTGGCTTA
TGTGGCTAGAATAGGAAGAGAGAAAAAATGAAATGGTTGTTTACTAATTTTATACTCCCATTAAAAATCTCTAAT
GTTAAGAAAACCTTAAATAAACATGATTGATCAATATGGCAGATGATTTACAGTCCATTATATGACATTTGTAAG
CCACTCAACACTAGCCTTACAAGGTTCATGAAAGGAGGAAAACATTAATTCTTTCTGCCTTTGCTGATATAATCC
ACATAGTAATAATTTAAGCTATAATTTATTTTTAAAATGAGTGCCTCTTGGGAAGCTTCTTTTCTGTTCTAACAG
TTCCCTGTTAAAATGAAAATCTTAGGCCAGTGCAGTGGCTCACACCTGTAATCTCAGCACTTTGGGAGGCTGAGG
TGGGTGGATCACTTGAGGTCAGGAGTTCGAGACCAGCCTGGCCAACATGGTGAAACCCTGTCTCTACTAAAAATA
CAGAAAAATTAGCCAGGGTTGGTGCATGTGCCTGTAATCCCAGCTACTCAGGAGGCCAAAGCAGGAGAATTGCTT
GAACCCGGGAGGTGGAGGTTGCAGTGAACCAAGATCGCACCACTGCATTCCAGCCTAAGCAATAGAGCGAGACTC
CCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 7446

MAEGGFDPCECVCSHEHAMRRLINLLRQSQSYCTDTECLQELPGPSGDNGISVTMILVAWMVIALILFLLRPPNL
RGSSLPGKPTSPHNGQDPPAPPVD

FIGURE 7447A

TCGAAAACTACGGGCGGCGACGGCTTCTCGGAAGTAATTTAAGTGCACAAGACATTGGTCAAAATGGTTTCCAAA
AGAAGACTGTCAAAATCTGAGGATAAAGAGAGCCTGACAGAAGATGCCTCCAAAACCAGGAAGCAACCACTTTCC
AAAAAGACAAAGAAATCTCATATTGCTAATGAAGTTGAAGAAAATGACAGCATCTTTGTAAAGCTTCTTAAGATA
TCAGGAATTATTCTTAAAACGGGAGAGAGTCAGAATCAACTAGCTGTGGATCAAATAGCTTTCCAAAAGAAGCTC
TTTCAGACCCTGAGGAGACACCCTTCCTATCCCAAAATAATAGAAGAATTTGTTAGTGGCCTGGAGTCTTACATT
GAGGATGAAGACAGTTTCAGGAACTGCCTTTTGTCTTGTGAGCGTCTGCAGGATGAGGAAGCCAGTATGGGTGCA
TCTTATTCTAAGAGTCTCATCAAACTGCTTCTGGGGATTGACATACTGCAGCCTGCCATTATCAAAACCTTATTT
GAGAAGTTGCCAGAATATTTTTTTGAAAACAAGAACAGTGATGAAATCAACATACCTCGACTCATTGTCAGTCAA
CTAAAATGGCTTGACAGAGTTGTGGATGGCAAGGACCTCACCACCAAGATCATGCAGCTGATCAGTATTGCTCCA
GAGAACCTGCAGCATGACATCATCACCAGCCTACCTGAGATCCTAGGGGATTCCCAGCACGCTGATGTGGGGAAA
GAACTCAGTGACCTACTGATAGAGAATACTTCACTCACTGTCCCAATCCTGGATGTCCTTTCAAGCCTCCGACTT
GACCCAAACTTCCTATTGAAGGTTCGCCAGTTGGTGATGGATAAGTTGTCGTCTATTAGATTGGAGGATTTACCT
GTGATAATAAAGTTCATTCTTCATTCCGTAACAGCCATGGATACACTTGAGGTAATTTCTGAGCTTCGGGAGAAG
TTGGATCTGCAGCATTGTGTTTTGCCATCACGGTTACAGGCTTCCCAAGTAAAGTTGAAAAGTAAAGGACGAGCA
AGTTCCTCAGGAAATCAAGAAAGCAGCGGTCAGAGCTGTATTATTCTCCTCTTTGATGTAATAAAGTCAGCTATT
AGATATGAGAAAACCATTTCAGAAGCCTGGATTAAGGCAATTGAAAACACTGCCTCAGTATCTGAACACAAGGTG
TTTGACCTGGTGATGCTTTTCATCATCTATAGCACCAATACTCAGACAAAGAAGTACATTGACAGGGTGCTAAGA
AATAAGATTCGATCAGGCTGCATTCAAGAACAGCTGCTCCAGAGTACATTCTCTGTTCATTACTTAGTTCTTAAG
GATATGTGTTCATCCATTCTGTCGCTGGCTCAGAGTTTGCTTCACTCTCTAGACCAGAGTATAATTTCATTTGGC
AGTCTCCTATACAAATATGCATTTAAGTTTTTTGACACGTACTGCCAGCAGGAAGTGGTTGGTGCCTTAGTGACC
CATATCTGCAGTGGGAATGAAGCTGAAGTTGATACTGCCTTAGATGTCCTTCTAGAGTTGGTAGTGTTAAACCCA
TCTGCTATGATGATGAATGCTGTCTTTGTAAAGGGCATTTTAGATTATCTGGATAACATATCCCCTCAGCAAATA
CGAAAACTCTTCTATGTTCTCAGCACACTGGCATTTAGCAAACAGAATGAAGCCAGCAGCCACATCCAGGATGAC
ATGCACTTGGTGATAAGAAAGCAGCTCTCTAGCACCGTATTCAAGTACAAGCTCATTGGGATTATTGGTGCTGTG
ACCATGGCTGGCATCATGGCGGCAGACAGAAGTGAATCACCTAGTTTGACCCAAGAGAGAGCCAACCTGAGCGAT
GAGCAGTGCACACAGGTGACCTCCTTGTTGCAGTTGGTTCATTCCTGCAGTGAGCAGTCTCCTCAGGCCTCTGCA
CTTTACTATGATGAATTTGCCAACCTGATCCAACATGAAAAGCTGGATCCAAAAGCCCTGGAATGGGTTGGGCAT
ACCATCTGTAATGATTTCCAGGATGCCTTCGTAGTGGACTCCTGTGTTGTTCCGGAAGGTGACTTTCCATTTCCT
GTGAAAGCACTGTACGGACTGGAAGAATACGACACTCAGGATGGGATTGCCATAAACCTCCTGCCGCTGCTGTTT
TCTCAGGACTTTGCAAAAGATGGGGGTCCGGTGACCTCACAGGAATCAGGCCAAAAATTGGTGTCTCCGCTGTGC
CTGGCTCCGTATTTCCGGTTACTGAGACTTTGTGTGGAGAGACAGCATAACGGAAACTTGGAGGAGATTGATGGT
CTACTAGATTGTCCTATATTCCTAACTGACCTGGAGCCTGGAGAGAAGTTGGAGTCCATGTCTGCTAAAGAGCGT
TCATTCATGTGTTCTCTCATATTTCTTACTCTCAACTGGTTCCGAGAGATTGTAAATGCCTTCTGCCAGGAAACA
TCACCTGAGATGAAGGGGAAGGTGCTCACTCGGTTAAAGCACATTGTAGAATTGCAAATAATCCTGGAAAAGTAC
TTGGCAGTCACCCCAGACTATGTCCCTCCTCTTGGAAACTTTGATGTGGAAACTTTAGATATAACACCTCATACT
GTTACTGCTATTTCAGCAAAAATCAGAAAGAAAGGAAAAATAGAAAGGAAACAAAAAACAGATGGCAGCAAGACA
TCCTCCTCTGACACACTTTCAGAAGAGAAAAATTCAGAATGTGACCCTACGCCATCTCATAGAGGCCAGCTAAAC
AAGGAGTTCACAGGGAAGGAAGAAAAGACATCATTGTTACTACATAATTCCCATGCTTTTTTCCGAGAGCTGGAC
ATTGAGGTCTTCTCTATTCTACATTGTGGACTTGTGACGAAGTTCATCTTAGATACTGAAATGCACACTGAAGCT
ACAGAAGTTGTGCAACTTGGGCCCCCTGAGCTGCTTTTCTTGCTGGAAGATCTCTCCCAGAAGCTGGAGAGTATG
CTGACACCTCCTATTGCCAGGAGAGTCCCCCTTTCTCAAGAACAAAGGAAGCCGGAATATTGGATTCTCACATCTC
CAACAGAGATCTGCCCAAGAAATTGTTCATTGTGTTTTTCAACTGCTGACCCCAATGTGTAACCACCTGGAGAAC
ATTCACAACTATTTTCAGTGTTTAGCTGCTGAGAATCACGGTGTAGTTGATGGACCAGGAGTGAAAGTTCAGGAG
TACCACATAATGTCTTCCTGCTATCAGAGGCTGCTGCAGATTTTTCATGGGCTTTTTGCTTGGAGTGGATTTTCT
CAACCTGAAAATCAGAATTTACTGTATTCAGCCCTCCATGTCCTTAGTAGCCGACTGAAACAGGGAGAACACAGC
CAGCCTTTGGAGGAACTACTCAGCCAGAGCGTCCATTACTTGCAGAATTTCCATCAAAGCATTCCCAGTTTCCAG
TGTGCTCTTTATCTCATCAGACTTTTGATGGTTATTTTGGAGAAATCAACAGCTTCTGCTCAGAACAAAGAAAAA
ATTGCTTCCCTTGCCAGACAATTCCTCTGTCGGGTGTGGCCAAGTGGGGATAAAGAGAAGAGCAACATCTCTAAT

FIGURE 7447B

GACCAGCTCCATGCTCTGCTCTGTATCTACCTGGAGCACACAGAGAGCATTCTGAAGGCCATAGAGGAGATTGCT
GGTGTTGGTGTCCCAGAACTGATCAACTCTCCTAAAGATGCATCTTCCTCCACATTCCCTACACTGACCAGGCAT
ACTTTTGTTGTTTTCTTCCGTGTGATGATGGCTGAACTAGAGAAGACGGTGAAAAAAATTGAGCCTGGCACAGCA
GCAGACTCGCAGCAGATTCATGAAGAGAAACTCCTCTACTGGAACATGGCTGTTCGAGACTTCAGTATCCTCATC
AACTTGATAAAGGTATTTGATAGTCATCCTGTTCTGCATGTATGTTTGAAGTATGGGCGTCTCTTTGTGGAAGCA
TTTCTGAAGCAATGTATGCCGCTCCTAGACTTCAGTTTTAGAAAACACCGGGAAGATGTTCTGAGCTTACTGGAA
ACCTTCCAGTTGGACACAAGGCTGCTTCATCACCTGTGTGGGCATTCCAAGATTCACCAGGACACGAGACTCACC
CAACATGTGCCTCTGCTCAAAAAGACCCTGGAACTTTTAGTTTGCAGAGTCAAAGCTATGCTCACTCTCAACAAT
TGTAGAGAGGCTTTCTGGCTGGGCAATCTAAAAAACCGGGACTTGCAGGGTGAAGAGATTAAGTCCCAAAATTCC
CAGGAGAGCACAGCAGATGAGAGTGAGGATGACATGTCATCCCAGGCCTCCAAGAGCAAAGCCACTGAGGTATCT
CTACAAAACCCACCAGAGTCTGGCACTGATGGTTGCATTTTGTTAATTGTTCTAAGTTGGTGGAGCAGAACTTTG
CCTACTTATGTTTATTGTCAAATGCTTCTATGCCCATTTCCATTCCCTCCATAACAGCTTCTGTGCTTATATAAT
TTTTGGGACCCAGAAGAAACAACGACACAATCTTAGAATCACTCCTGAGTATCTCGAGTTGTGGCATTTGTTATA
GAGTTGACAATTTTCTGCATTATAGCCTCTCATTTTCCATGAATTCATATCTGAAACCATTTTAGAAGGGAGAAG
TCATCGAAGTATTTTCTGAGTGTTGAGAAGAATGAGTTAAACCATTTAAACACATTTGAAACATACAAAAATAGA
AATGTGAAAGCATTTGGTGAAAGCCAAAGCACAGAGTCAGAAGCTGCCACCTTAGAGAACTGAAATAAAAATAGA
AGTTCTTACGCTTTTTTGTGGTACAGATGCTTTCGACAATTTAAAGAAAGCTAAATAAAAATGTAGACATGGCTG
GCGCAGTGGCTCATGCTTGTAATCCTAGCACTTTTTGAGGCCAAGGTAGGAGGATTGCTTGAGTCCGGGAGCTCA
AGGCAAAGCTGCACAACATAACAAGACCCTATCTCCACAAAAAAAAATGAAAAATAAACCTGGGTGCGGTGGCTCA
CACCTGTAATCCCAGCACTTTGGGAGGCCGATGTGGGCAGATCACAAGGTCAGGAGTTCAAGACCAGCCTGGCCA
ACATAGTGAAACCCCATCTCTACTGAAAATACAAAAATTAGCTGGGTGTGGTGGCACGTGCCTGTTATCTCAGCT
ACTTGGGAAGCTGA

FIGURE 7448

MVSKRRLSKSEDKESLTEDASKTRKQPLSKKTKKSHIANEVEENDSIFVKLLKISGIILKTGESQNQLAVDQIAF
QKKLFQTLRRHPSYPKIIEEFVSGLESYIEDEDSFRNCLLSCERLQDEEASMGASYSKSLIKLLLGIDILQPAII
KTLFEKLPEYFFENKNSDEINIPRLIVSQLKWLDRVVDGKDLTTKIMQLISIAPENLQHDIITSLPEILGDSQHA
DVGKELSDLLIENTSLTVPILDVLSSLRLDPNFLLKVRQLVMDKLSSIRLEDLPVIIKFILHSVTAMDTLEVISE
LREKLDLQHCVLPSRLQASQVKLKSKGRASSSGNQESSGQSCIILLFDVIKSAIRYEKTISEAWIKAIENTASVS
EHKVFDLVMLFIIYSTNTQTKKYIDRVLRNKIRSGCIQEQLLQSTFSVHYLVLKDMCSSILSLAQSLLHSLDQSI
ISFGSLLYKYAFKFFDTYCQQEVVGALVTHICSGNEAEVDTALDVLLELVVLNPSAMMMNAVFVKGILDYLDNIS
PQQIRKLFYVLSTLAFSKQNEASSHIQDDMHLVIRKQLSSTVFKYKLIGIIGAVTMAGIMAADRSESPSLTQERA
NLSDEQCTQVTSLLQLVHSCSEQSPQASALYYDEFANLIQHEKLDPKALEWVGHTICNDFQDAFVVDSCVVPEGD
FPFPVKALYGLEEYDTQDGIAINLLPLLFSQDFAKDGGPVTSQESGQKLVSPLCLAPYFRLLRLCVERQHNGNLE
EIDGLLDCPIFLTDLEPGEKLESMSAKERSFMCSLIFLTLNWFREIVNAFCQETSPEMKGKVLTRLKHIVELQII
LEKYLAVTPDYVPPLGNFDVETLDITPHTVTAISAKIRKKGKIERKQKTDGSKTSSSDTLSEEKNSECDPTPSHR
GQLNKEFTGKEEKTSLLLHNSHAFFRELDIEVFSILHCGLVTKFILDTEMHTEATEVVQLGPPELLFLLEDLSQK
LESMLTPPIARRVPFLKNKGSRNIGFSHLQQRSAQEIVHCVFQLLTPMCNHLENIHNYFQCLAAENHGVVDGPGV
KVQEYHIMSSCYQRLLQIFHGLFAWSGFSQPENQNLLYSALHVLSSRLKQGEHSQPLEELLSQSVHYLQNFHQSI
PSFQCALYLIRLLMVILEKSTASAQNKEKIASLARQFLCRVWPSGDKEKSNISNDQLHALLCIYLEHTESILKAI
EEIAGVGVPELINSPKDASSSTFPTLTRHTFVVFFRVMMAELEKTVKKIEPGTAADSQQIHEEKLLYWNMAVRDF
SILINLIKVFDSHPVLHVCLKYGRLFVEAFLKQCMPLLDFSFRKHREDVLSLLETFQLDTRLLHHLCGHSKIHQD
TRLTQHVPLLKKTLELLVCRVKAMLTLNNCREAFWLGNLKNRDLQGEEIKSQNSQESTADESEDDMSSQASKSKA
TEVSLQNPPESGTDGCILLIVLSWWSRTLPTYVYCQMLLCPFPFPP

FIGURE 7449

GGTTTTCCTTCGGAATGCGATTTCATCACTGTGTCTAGGGGAGGGAGTGTTTTTTTTAGAAAGGGAGGGACTAAC
GCTTGGTAGTTACAGTAATTAGAGAGAATTATACTTTAGCAGCAATGAGATTACTTCATCTGCCTTATATTTGAG
AGCTAATTTGTACAAGTAGCTCCTGGGGCTGTGAAGGGCTTGCCAAGAGTAAAAGGTTCAAGGAGTGAAATAGTT
AATGAGATTCGTGATAGAAATGGGAAT**ATG**ATTGTCCACAAAAGGGAACATCTTCCTTTTGGAGGGTGTTTTTTA
GTATATCAACTAGTATTGTTTGCCTTTCAGCCTAAAATCCTTCCTCTTAAAGATTGTGCTTGCTTGGCTGGATTT
TTGCTGATGCTGTTTAATTTTAAGCTCTTTTCCACATGGAGCTATTCCAGCTCATTTTTAAAAATTTATTTAATG
CTTCCAAAAAATATCCTGAGTTATTACTGGCCTTTCTTCCTTACTGTATACCCGGTGCCTGGCAAAAAG**TAG**GTG
CTCAACAAAGAGAGGAAGGCAGGGAGGGGAAAGGTGAGCGAGAATGAGAGGGCGTCACTCTTCAGACATTTGGGG
AATGCGATGATAAGGCCTCAGTAAGATCTGCCTGGATTCAGGTTTCTCATGTGTAATTTTTTGACTTTTTTCCTC
ACCTTAAGCACGGGCTACAATCATTAGAGATTGTACCTTCTTACACTTTCCTGATTGTTGTTGACGAAATAGGCC
ATTTAGAAAAACAGTTAGCTATTGTGGCAGCGAAATAGTTTCATTCCTATTGGCAAGTGTAAAATGAACCTTTTC
TGCATGTAAGAAGGATCCTGCTAGAGTTTCGCTCCCAACACTGCTATAGGCCTGGCACAAAAATGGAATAAATAT
AAAGCCCTATTCAGAAAATATGTTACATCACAGGAACTGTAAAATGGGGGGATCTTTTATACCTCCTTTGTTGTT
CCTGAGCAAATTANNNNNNNNNNNNNNNNNNNNNTAATAGGTGACATTAAGCACCTACAGTATACCATGTACTTC
ACAGGTAGTAACTCATTCAGTCCTCACAGCCACCTTCTGAGTTAGGTGTTATTGTTATTCCTACTTTGACAGATG
TGGGAACAGAGCCCCTCCTCCCCACACAGCCCCTTTTATGTAACTTGACTAAGATCAAGCAGTTAGTAAATGGTA
GAAAGAATATTTGAATCTACCTAGTGAGTCTCTAGTGCATGCTTTTGTCCGGTATCCTGGAAAGCCTCCCACAAA
AAGCTAATCTTTGCCCCATTCAAAACATGCACCCTGAAGAAGCTGTTTGTACAGGATTGGGTTTATTCTGTTATT
AAGACAAAGGCA

FIGURE 7450

MIVHKREHLPFGGCFLVYQLVLFAFQPKILPLKDCACLAGFLLMLFNFKLFSTWSYSSSFLKIYLMLPKNILSYY
WPFFLTVYPVPGKK

FIGURE 7451

GCGCGCCGCTTTCTGTTGCCGGGCGCAATGGCGGATACGCTGGAGTCCTCGCTGGAGGACCCACTGCGGAGCTTT
GTGCGAGTTTTGGAGAAGCGGGATGGTACAGTGCTACGACTACAGCAGTATAGCTCCGGTGGCGTGGGTTGCGTT
GTGTGGGACGCTGCCATTGTCCTTTCTAAATACCTGGAAACGCCCGAGTTTTCTGGCGACGGGGCCCACGCGCTG
AGCCGGCGGTCGGTGCTGGAGCTGGGTTCGGGCACCGGGGCCGTGGGGCTCATGGCTGCTACCCTCGGGGCTGAT
GTTGTAGTCACCGATCTTGAGGAATTGCAAGACTTGCTGAAGATGAATATTAATATGAACAAGCATCTTGTCACT
GGTTCTGTTCAAGCCAAGGGGGGAAGAAATAGAAGGCTTTCCTTCTCCACCCGACTTCATACTGATGGCCGACTG
CATATACTATGAAGAGTCTTTGGAGCCATTGCTGAAAACTCTAAAAGATATCAGCGGATTTGAAACTTGTATTAT
ATGTTGTTATGAACAACGAACAATGGGGAAAAATTCAGAAATTGAGAAAAAATATTTTGAGCTCCTTCAGCTAGA
TTTTGACTTTGAAAAAATTCCTTTGGAAAAACGTGATGAAGAGTATCGAAGTGAAGATATTCATATTATATACAT
CAGAAAGAAAAAATCGAAATTTCCATCGTGAAGCCTTTAATCATCTTACCCAAGGCTCTAACAACCTGGGTAAAC
TAAAGATGTGAATAGAGCATGTGAATACAGCATGGGAAGATTGTGTTCACAGATTTTTTTTTCCGGCACGTCCTT
AGAGATCCGATGTATAGATGATGACCACCAGGGGCTGTCTGCAATACGAAAAATTCCTGCTTGCCTGCCTGCCTG
CCAATGGCCCTGAATCCAGCTTAGGTTACTTAGTTCAGCATCAAGTTCTTCTTAAATGTTGGGAATCAGTTATTC
AAATAAAAATTGGTATTGAGGCGAGGCTGAAATCTGCCAAAAACAGCCAACATGATTTGACTGGACCTTTTACAG
GAAGCTAGAGATAAATTTCTGAAGAGAACTATCTGCTATTATATAATAATGTTTTAAATTCAAACTAGTAAATTT
TAGTTTGTCTTCAGAGTTTAAAAGGTTTTCATTTTGTACATAATTATACAATATTTATCATTTGTATTTTCCACT
TCATTTCTTTTAAAATATCTTTAATACTGAAATGTTCTTTTAATTTTAAAAAGAACTGAGATATTGTCTTGTATA
CTTATATTGGCCAAAGTTTTCTTTTCCTCCACCATACATGTCTATGTGATTTAATCAGTAAATTGTACTGTAATG
AGTTGCTAAGAAGACAAATCAGAAGATTGGAGGAACAAAAGATATCTTTACAGATTTTTCATTTGAGCATGGAGT
GAGAATAGAAAGACCAGTTTCAGGCTTATGCACTTACGTGGCTCATGCACTTTATGTATATGTTCCAGGAAAATC
TGGCTTAAAAATACTGGTATTGTTTACATGAAGCAGTGAAAGGTTTTTGAATAACTACAAATGTAGTTCTATATG
TATATACCAAATGAATTTCTGTTCTGTGTCTCTCTGTTTTATGTTATGAAGCCATTCGCTCATATACAATAATCT
GTCAAGGACTTTAATCATACTTGTTCCAAAGAGTAGTAACCGGATGGAATTCTGGTATTTACAGGCATTGGTGCT
AGATGGTACATTTTATGTGTTAAAATAAACATTGTTTTTGAG

FIGURE 7452

MADTLESSLEDPLRSFVRVLEKRDGTVLRLQQYSSGGVGCVVWDAAIVLSKYLETPEFSGDGAHALSRRSVLELG
SGTGAVGLMAATLGADVVVTDLEELQDLLKMNINMNKHLVTGSVQAKGGRNRRLSFSTRLHTDGRLHIL

FIGURE 7453A

CGAGAAGCAGCGCTCGGGCGAGCGAGGACCGAGGCCGGCGCGGGCGGGCGCGGCCTTTGTCTCCTCCTCCCGCGC
GCTCCGCGGCTGCACCGGCCCCATGAGCCCGCGGCTCCCCGTCGCCCGGGCCGTCCGTAGCCCCTGACCTGACCT
GTCCTCGCCATGGCCGAGGCCGCCTCCGGCGCCGGGGGCACGTCCCTGGAGGGCGAGCGTGGCAAGAGGCCCCCG
CCGGAGGGCGAGCCTGCAGCCCCGGCGTCCGGAGTTCTGGATAAGCTTTTCGGAAAGCGGCTCCTGCAGGCTGGT
CGCTACCTGGTGTCCCACAAGGCGTGGATGAAGACGGTGCCTACAGAGAACTGCGACGTGCTGATGACCTTCCCA
GACACGACCGATGACCACACGCTGCTATGGCTGCTGAACCACATCCGCGTGGGCATTCCCGAGCTCATCGTGCAA
GTCCGCCACCACCGCCACACGCGTGCCTACGCCTTCTTTGTCACCGCCACGTATGAGAGCCTACTCCGAGGGGCC
GACGAGCTGGGTCTGCGCAAAGCAGTGAAGGCCGAGTTTGGCGGGGGCACCCGCGGCTTCTCCTGCGAGGAGGAC
TTTATCTATGAGAATGTGGAGAGCGAGCTACGCTTCTTCACCTCCCAGGAACGCCAGAGCATCATCCGCTTCTGG
CTGCAGAATTTGCGTGCCAAGCAGGGAGAAGCACTCCACAACGTGCGCTTCCTGGAGGACCAGCCAATCATCCCG
GAGCTGGCAGCACGTGGGATCATCCAGCAGGTGTTCCCTGTCCACGAGCAGCGTATTCTGAACCGCCTCATGAAG
TCATGGGTGCAGGCCGTGTGTGAAAACCAGCCTCTAGATGACATCTGTGATTACTTTGGTGTGAAAATTGCCATG
TACTTCGCCTGGCTGGGCTTCTACACGTCGGCTATGGTATACCCAGCTGTCTTCGGGTCTGTCCTGTACACATTC
ACAGAGGCTGATCAGACAAGCCGGGATGTTTCCTGCGTGGTCTTTGCCCTCTTCAACGTGATCTGGTCGACGCTG
TTCCTAGAGGAATGGAAGCGGAGAGGGGCTGAGCTGGCATATAAGTGGGGGACGCTGGACTCACCTGGGGAAGCC
GTGGAGGAGCCACGCCCCCAGTTCAGGGGCGTGCGACGTATCAGCCCCATCACGCGGGCCGAGGAGTTCTACTAC
CCGCCCTGGAAGCGGCTGCTCTTCCAGCTGCTTGTGAGCCTCCCCCTGTGCCTGGCGTGCCTCGTCTGTGTCTTC
TTGCTCATGCTTGGCTGCTTCCAGCTGCAGGAGCTGGTGCTGAGCGTGAAGGGGTTGCCCCGTCTCGCCCGATTC
CTGCCTAAGGTCATGCTGGCCCTGCTTGTCAGTGTGAGTGCCGAGGGCTACAAGAAGCTAGCCATCTGGCTCAAT
GACATGGAAAATTACCGGCTGGAGAGCGCCTATGAGAAGCACCTCATCATCAAAGTTGTCCTGTTCCAGTTTGTC
AACTCGTACCTGAGCCTCTTCTACATCGGTTTCTACCTCAAGGACATGGAGCGCTTGAAAGAGATGCTGGCCACG
CTGCTGATCACCCGCCAGTTCCTCCAGAACGTGCGCGAGGTCCTGCAGCCGCACCTGTACCGGCGCCTGGGCCGC
GGCGAGCTGGGCCTGCGGGCCGTCTGGGAGCTGGCCCGAGCCCTGCTTGGCCTCCTGAGCCTCCGGCGCCCTGCG
CCCCGCCGCCTCGAACCCCAGGCGGATGAGGGCGGGGGCGGCGGCAGCGGGGGCGGGGGCCGCAGGTGCCTCAGC
GGGGGCTGCGGGGCGCCGGAGGAGGAGGAGGAGGCGGCGCTGGTGGAGCGGCGGCGGGCGGGGGAAGGCGGGGAG
GAGGGGGACGGGCCTCCAGGGGGCAAGGAGGAGGACGAGGACGACGAGGAGGAGGAGGACGAGGAGGAAGAGGAG
GACGAGGAGGAGGGCGAGGAAGGGGGCCTCCTGGACTGCGGGCTCCGGCTGAAGAAGGTCAGCTTCGCTGAGCGC
GGCGCGGGGCGGCGTCGGCCCGGCCCAAGCCCGGAGGCCCTCCTGGAGGAAGGGAGCCCCACTATGGTGGAGAAG
GGGCTGGAGCCGGGAGTGTTCACCCTGGCCGAGGAGGACGACGAGGCGGAGGGGGCTCCCGGCAGCCCTGAACGG
GAGCCCCCGGCCATCTTGTTCCGCCGGGCCGGGGGCGAGGGCCGAGACCAGGGGCCCGACGGGGGCCCGGACCCG
GAACCCGGCTCCAACAGCGATTCGACCCGTAGGCAGAGACGGCAGAACCGGTCGTCTTGGATTGACCCGCCGGAG
GAGGAACACTCGCCCCAGCTCACCCAGGCAGAGCTGGAGAGCTGTATGAAGAAGTACGAGGACACGTTCCAGGAC
TACCAGGAGATGTTCGTGCAGTTCGGCTACGTCGTGCTCTTCTCGTCCGCCTTCCCCCTGGCGGCGCTGTGCGCC
CTGGTCAACAACCTCATTGAGATCCGCAGCGACGCCTTCAAGCTGTGCACCGGGCTGCAGCGGCCCTTCGGCCAG
CGCGTGGAAAGCATCGGCCAGTGGCAGAAGGTGATGGAGGCCATGGGTGTCCTAGCGATTGTGGTCAACTGCTAC
TTAATCGGCCAGTGCGGGCAGCTGCAGCGCCTCTTCCCCTGGCTGAGCCCGGAGGCAGCCATCGTGTCGGTGGTA
GTGCTCGAGCACTTCGCTCTGCTCCTCAAGTACCTCATCCACGTGGCCATCCCCGATATCCCGGGCTGGGTGGCC
GAGGAAATGGCCAAGCTGGAGTACCAGCGCCGCGAGGCCTTTAAGAGACACGAGCGCCAGGCCCAGCATCGCTAC
CAGCAGCAGCAGCGCAGGCGGCGGGAGGAGGAGGAGCGACAGCGCCATGCAGAGCACCATGCCCGGCGGGAGCAT
GATTCTGGTGGCCGAGAGGAGGCGAGGGCCGAGGGCTCTGGGCTGGACCCTGCCACCTCCTCCGAGAAGGCCTCT
GCCAAGGCCAAGGGCAGCACTGCGGGTGGCCACGGGCCTGAACGGCCCAAGCGCCCAGGGTCCCTGCTGGCACCC
AACAACGTCATGAAGTTGAAGCAGATCATCCCACTGCAGGGCAAATTCCTCTCGTCGGGGGCCACATCCTCACTG
GCTGCTGCAGGGGCCGGAGCCACCACCCGGCCTCCCCCTGCCCAGTCACCCACAGGCAGCGACACCCGCCTGCCT
GCCTTCCTCAGCTTCAAGTTCCTCAAGTCACCCGAGACCCGGCGGGACTCTGAGCGCAGCCACTCACCGCCCAAA
GCCTTCCATGCTGGCAAGCTCTTCCCCTTTGGTGGCACCCGGGCTGAGCCTGGGTCCAACGGGGCGGGCGGGCAG
GCCCGGCCAGATGGGACCCCCAGCAGTGGCAGCAGCCGGGTTCAGAGGAGTGGGCCGGTGGACGAGGCCCTGGCT
GAGGAGCTGGAAGCCCCCCGGCCCGAAGAGGAAGGCTCAGGGACAGCGCTGGCCCCCGTGGGCGCCCCTGCCCTC
CGCACCCGCCGCAGCCGGAGCCCCGCGCCGCCGCCGCCAATGCCGCTGCCCCGGCCCCCGACACCGCCCGCCGGC

FIGURE 7453B

TGCTGGCAGTGGGACGGGCCCTGGGGCTGCGGGGGCGAGGGTGCCGCCCCCCGCCAGGCCCTGGCCGCTGCCGAG
TGCCCACCCTGTGCCATGGCCGGGCCCCCACCCGCCCCCCAGCCCCTGCCGGGAGACGCCAGCTTTTACAGCCTC
CCGCCCCCACCGCTACCGCCCACCTCGGATCCCCTCGAGACCCCAGCGCCCTCCCCTAGCCCCAGCCCCAGCCCC
CAGGCCGTGTGCTGGCCCAGCGGCTGGCATTAGCTCTACCCGCCCTGCCTTCTCTTCTCATATGCAATATCAGTC
ATTCACAGGGGCGGCCGGTCTCCAAAATGCAAAATGCGCTTCAGCCCCCGAGGGCCCCCAGTATTGGTCGGTGCC
CCCCATCTGCCGTTTTCCTTTCCAAACGAAAGGAAACCCACAAATCCAACAGAAAACACACACACACACACACAC
ACACACACACACAGAACAGGCGATTATTTATTTGTTTTTAATTTATTTTGTCATATTTTTGTAAAACGGCAGAAA
TGCAATAAAAACTATATTTCAACAG

FIGURE 7454

ENQPLDDICDYFGVKIAMYFAWLGFYTSAMVYPAVFGSVLYTFTEADQTSRDVSCVVFALFNVIWSTLFLEEWKR
RGAELAYKWGTLDSPGEAVEEPRPQFRGVRRISPITRAEEFYYPPWKRLLFQLLVSLPLCLACLVCVFLLMLGCF
QLQELVLSVKGLPRLARFLPKVMLALLVSVSAEGYKKLAIWLNDMENYRLESAYEKHLIIKVVLFQFVNSYLSLF
YIGFYLKDMERLKELLLVLSLSQSLERQLQAVLVPLAALRFRLLLLSLRGLLLAARAKMLATLLITRQFLQNVRE
VLQPHLYRRLGRGELGLRAVWELARALLGLLSLRRPAPRRLEPQADEGGGGGSGGGGRRCLSGGCGAPEEEEEAA
LVERRRAGEGGEEGDGPPGGKEEDEDDEEEEDEEEEEDEEEGEEGGLLDCGLRLKKVSFAERGAGRRRPGPSPEA
LLEEGSPTMVEKGLEPGVFTLAEEDDEAEGAPGSPEREPPAILFRRAGGEGRDQGPDGGPDPEPGSNSDSTRRQR
RQNRSSWIDPPEEEHSPQLTQAELESCMKKYEDTFQDYQEMFVQFGYVVLFSSAFPLAALCALVNNLIEIRSDAF
KLCTGLQRPFGQRVESIGQWQKVMEAMGVLAIVVNCYLIGQCGQLQRLFPWLSPEAAIVSVVVLEHFALLLKYLI
HVAIPDIPGWVAEEMAKLEYQRREAFKRHERQAQHRYQQQQRRRREEEERQRHAEHHARREHDSGGREEARAEGS
GLDPATSSEKASAKAKGSTAGGHGPERPKRPGSLLAPNNVMKLKQIIPLQGKFLSSGATSSLAAAGAGATTRPPP
AQSPTGSDTRLPAFLSFKFLKSPETRRDSERSHSPPKAFHAGKLFPFGGTRAEPGSNGAGGQARPDGTPSSGSSR
VQRSGPVDEALAEELEAPRPEEEGSGHKL

FIGURE 7455

ATGGAGAAGTTTCGGGCGGTGCTGGACCTGCACGTCAAGCACCACAGCGCCTTGGGCTACGGCCTGGTGACCCTG
CTGACGGCGGGCGGGGAGCGCATCTTCTCCGCCGTGGCATTCCAGTGCCCGTGCAGCGCCGCCTGGAACCTGCCC
TACGGCCTGGTCTTCTTGCTGGTGCCGGCGCTCGCGCTCTTCCTCCTGGGCTACGTGCTGAGCGCACGCACGTGG
CGCCTGCTCACCGGATGCTGCTCCAGCGCCCGCGCGAGTTGCGGATCGGCGCTGCGCGGCTCCCTGGTGTGCACG
CAAATCAGCGCGGCCGCCGCGCTCGCGCCCCTCACCTGGGTGGCCGTGGCGCTGCTCGGGGGCGCCTTTTACGAG
TGCGCGGCCACCGGGAGCGCGGCCTTCGCGCAGCGCCTGTGCCTCGGCCGCAACCGCAGCTGCGCCGCGGAGCTG
CCGCTGGTGCCGTGCAACCAGGCCAAGGCGTCGGACGTGCAGGACCTCCTGAAGGATCTGAAGGCTCAGTCGCAG
GTGTTGGGCTGGATCTTGATAGCAGTTGTTATCATCATTCTTCTGATTTTTACATCTGTCACCCGATGCCTATCT
CCAGTTAGTTTTCTGCAGCTGAAATTCTGGAAAATCTATTTGGAACAGGAGCAGCAGATCCTTAAAAGTAAAGCC
ACAGAGCATGCAACTGAATTGGCAAAAGAGAATATTAAATGTTTCTTTGAGGGCTCGCATCCAAAAGAATATAAC
ACTCCAAGGCATGAAAAGAGGTGGCAGCAAATTTCATCACTGTATACTTTCAATCCGAAGGGCCAGTACTACAGC
ATGTTGCACAAATATGTCAACAGAAAAGAGAAGACTCACAGTATCAGGTCTACTGAAGGAGATACGGTGATTCCT
GTTCTTGGCTTTGTAGATTCATCTGGTATAAACAGCACTCCTGAGTTATGACCTTTTGAATGAGTAGAAAAAAAA
ATTGTTTTGAATTATTGCTTTATTAAAAAATAAACATTGGTTAAAAAAGAAAAA

FIGURE 7456

MEKFRAVLDLHVKHHSALGYGLVTLLTAGGERIFSAVAFQCPCSAAWNLPYGLVFLLVPALALFLLGYVLSARTW
RLLTGCCSSARASCGSALRGSLVCTQISAAAALAPLTWVAVALLGGAFYECAATGSAAFAQRLCLGRNRSCAAEL
PLVPCNQAKASDVQDLLKDLKAQSQVLGWILIAVVIIILLIFTSVTRCLSPVSFLQLKFWKIYLEQEQQILKSKA
TEHATELAKENIKCFFEGSHPKEYNTPRHEKRWQQISSLYTFNPKGQYYSMLHKYVNRKEKTHSIRSTEGDTVIP
VLGFVDSSGINSTPEL

FIGURE 7457

GGCGGGGCTGGGCGCAGGCAGTCTCCCGCCGCCGCCGCCGCTGCCGGACGCGCAGAGCGAGGGGCGGCTGGACCG
ACGGCTGCCGGGCCGAGCGCACAGAGTCGCGGCGCAGGGGGCGTCCCCGGCCGGGACGCGGGTCGCGTCGTTGTC
CTCCGCGAGCGTCCGGATTGCAGGCTGTCTGTCCCCAGACCCCAGAGCACGTCCGGCACCACC**ATG**ACTGGGCTG
TTGAAGAGGAAATTTGACCAGCTGGATGAGGACAACTCCTCGGTCTCCTCCTCCTCCTCTTCCTCTGGGTGCCAG
TCTCGCTCCTGCTCCCCAAGCTCTTCTGTCTCCCGTGCCTGGGACTCAGAGGAGGAAGGCCCCTGGGATCAGATG
CCCCTGCCTGACCGTGACTTCTGCGGCCCCAGAAGTTTCACCCCCCTGTCTATCCTGAAGCGAGCTCGCCGGGAG
CGCCCAGGCCGTGTAGCCTTTGATGGGATCACCGTCTTCTACTTCCCCCGCTGCCAGGGCTTCACCAGTGTGCCC
AGCCGTGGTGGCTGTACTCTGGGTATGGCCCTTCGCCACAGTGCTTGCCGTCGCTTCTCTTTGGCTGAGTTTGCG
CAGGAGCAAGCCCGTGCACGGCACGAGAAGCTCCGCCAGCGCTTGAAAGAGGAGAAGTTGGAGATGCTGCAGTGG
AAGCTTTCGGCAGCTGGGGTACCCCAGGCAGAGGCAGGGCTGCCACCTGTGGTGGATGCCATTGATGACGCCTCT
GTGGAGGAGGACTTGGCAGTCGCTGTGGCAGGTGGCCGGTTGGAAGAAGTGAGCTTCCTACAGCCCTACCCAGCC
CGGCGACGTCGAGCTCTGCTGAGGGCTTCAGGTGTGCGAAGGATCGATCGGGAGGAGAAGCGGGAGCTGCAGGCA
CTGCGCCAATCCCGGGAGGATTGTGGCTGTCACTGCGATAGGATCTGCGACCCTGAGACCTGCAGCTGCAGCCTG
GCAGGCATCAAGTGCCAGATGGACCACACAGCATTCCCCTGTGGCTGCTGCAGGGAGGGCTGTGAGAACCCCATG
GGCCGTGTGGAATTTAATCAGGCAAGAGTTCAGACCCATTTCATCCACACACTCACCCGCCTGCAGTTGGAACAG
GAGGCTGAGAGCTTTAGGGAGCTGGAGGCCCCTGCCCAGGGCAGCCCACCCAGCCCTGGTGAGGAGGCCCTGGTC
CCTACTTTCCCACTGGCCAAGCCCCCCATGAACAATGAGCTGGGAGACAACAGCTGCAGCAGCGACATGACTGAT
TCTTCCACAGCATCTTCATCAGCATCGGGCACTAGTGAGGCTCCTGACTGCCCCACCCACCCAGGCCTGCCTGGC
CCTGGCTTCCAGCCTGGCGTTGATGATGACAGCCTGGCACGCATCTTGAGTTTCAGTGACTCTGACTTCGGTGGG
GAGGAGGAGGAAGAGGAGGAAGGGAGTGTGGGGAACCTGGACAACCTCAGCTGCTTCCATCCAGCTGACATCTTT
GGTACTAGTGACCCTGGTGGCCTGGCCAGCTGGACCCACAGCTATTCTGGCTGTAGCTTCACATCAGGCATCCTG
GATGAGAATGCCAACCTGGATGCCAGCTGCTTCCTAAATGGTGGCCTTGAAGGGTCAAGGGAAGGCAGCCTTCCT
GGCACCTCAGTGCCACCCAGCATGGACGCTGGCCGGAGTAGCTCAGTGGATCTCAGCTTGTCTTCTTGTGACTCC
TTTGAGTTACTCCAGGCTCTGCCAGATTATAGTCTGGGGCCTCACTACACATCACAGAAGGTGTCTGACAGCCTG
GACAACATCGAGGCACCTCACTTCCCCCTGCCTGGCCTGTCTCCACCTGGGGATGCCAGCAGTTGCTTCCTGGAG
TCCCTCATGGGCTTCTCCGAGCCAGCCGCCGAAGCCCTAGATCCCTTTATTGACAGCCAGTTTGAGGACACTGTC
CCAGCATCTCTAATGGAGCCTGTGCCGGTG**TGA**GGACCAGGATGTCTTTTCCCAGCCCCAAGAGACCTGTTGCTG
CTTTCTTGTAATTATGGGGCTCCCCAGAGTCTGCGTAACAGTCTCCCACTGGCTGGCTCACCCACAGGTGCCATG
TGCACACTCCTGGTTTTCAAACAATTCTCTGGATTTATTTATTTGTTTTAACTTTTCTGTGCTGAAGAGAGGACT
AGGGGGAGGGGGCTTCCCCTTTCAGCTGCCCGGCCCCCCACACCCACAGCTTGCTCTTCTATCTCCACAACGTGA
GCCTGGAAGAGGAGAAAATGTGGCTCCTCTGGAGCTTGGCAGACCACTTTTCGGTCTTTGCGTGATGTTCCTTAG
CCCAAAGACGGTGAGACAGGGCTGAAATCAGGTGGCTTCTGCCACCCTGAGCCCTAGACCCATGGGTGGCTAAAT
CCACTGGACTGTGAAGACTATAATTTATTTCCATAATTTATTTGGAGATTGAGGAGGCTTTGGTTGCACTTCTTT
GGCTGGTGGGTAATGCCAGGGGTGGGGTGGGCACAGGCCCTCAAGAGCCCCTTTTGCCTTGTAGTCCTACACCTT
GCCCTGCCTGGGCTTTGGTGCAGACTAGGTGTGGATTTGAGCTCTGTGATCTATGTCTGCTGCCTGGCTCCTAGA
TGGCTCTGCGGGCAGGTGCTGGCCAAGGACATCATCTAGGCAGGGGGAGAGCCTGGGCTGAACAGCTGTGACCAA
AACTCCCTTCTGCCCCACCCTGCCCCCTCCACTTCCTGCCCTCTGTTCCATCTTCCCCCTTCCCAAAGGCCACAG
CCTTTATTCCAGGCCCAGGGATGTAGGAGGGGGAAGGAGGAAACAGGAAGCCCAGAGAGGGCAAAGGGCCTACCT
CGGGGCGCGAACCATGCCCCAGACTATTATCTCAGGGCTTTCTGGGCACTGCACTTCAGCGTGGCCCACCTGCCC
ATGCCCTGAGGCCAGTTGGCGAGGGGTGGCTCCTGAGGGTTTTTATACCCTTTGTTTGCTAATGTTTAATTTTGC
ATCATAATTTCTACATTGTCCCTGAGTGTCAGAACTATAATTTATTCCATTTCTCTCTGTGTCTGTGCCAAGAAA
CGCAGGCTCTGGGCCTGCCCCTTGCCCAGGAGGCCTTGCCAGCCTGTGTGCTTGTGGGAACACCTTGTACCTGAG
CTTACAGGTACCAATAAAGAGGCTTTATTTTTAAAAAAAAAAAAAAAAAAAAA

FIGURE 7458

MTGLLKRKFDQLDEDNSSVSSSSSSSGCQSRSCSPSSSVSRAWDSEEEGPWDQMPLPDRDFCGPRSFTPLSILKR
ARRERPGRVAFDGITVFYFPRCQGFTSVPSRGGCTLGMALRHSACRRFSLAEFAQEQARARHEKLRQRLKEEKLE
MLQWKLSAAGVPQAEAGLPPVVDAIDDASVEEDLAVAVAGGRLEEVSFLQPYPARRRRALLRASGVRRIDREEKR
ELQALRQSREDCGCHCDRICDPETCSCSLAGIKCQMDHTAFPCGCCREGCENPMGRVEFNQARVQTHFIHTLTRL
QLEQEAESFRELEAPAQGSPPSPGEEALVPTFPLAKPPMNNELGDNSCSSDMTDSSTASSSASGTSEAPDCPTHP
GLPGPGFQPGVDDDSLARILSFSDSDFGGEEEEEEEGSVGNLDNLSCFHPADIFGTSDPGGLASWTHSYSGCSFT
SGILDENANLDASCFLNGGLEGSREGSLPGTSVPPSMDAGRSSSVDLSLSSCDSFELLQALPDYSLGPHYTSQKV
SDSLDNIEAPHFPLPGLSPPGDASSCFLESLMGFSEPAAEALDPFIDSQFEDTVPASLMEPVPV

FIGURE 7459

GGCACGAGGCAACTTTTCCCTCCCATCTCCACCAACATCAGAGAAGACAGCATCGTGAAGCTTCTGTGGCAGCCT
CCTAAGGAAGGGGCTGCCAATCTGTAGTTGGCAGATGCTATAGGAATTGCTTACAAATGTCGTCTTTAAGAAAAA
TGTTCTTATATTTTTCCTATGGGCAAAATGAAGGCTTGGGTGCTCATCTAAAGCTCAGCCAACTCCTGAAGCACT
CTCTCAGAGCATACTGCTGCTGTAATGGGCTGGCTTAATTATCGGCAGAGTGCTTGAAAAGGCTTTGCAGACCTC
CCCTGCCCCCAAGACTGGGTGACTTTATATGTACTTCATTCAAGGGTAAATCAGGAGACGTTCTCCATTTATCTC
TTCGTCCTTCCTGCCTGGAAAGTGATAGCACTAAATATTCCCAGCAGATGGGTAGTGTTCTCAAAGGAATCACCC
TTTCCCTACCTTCAGACTCTATTCTTTACCCTTCCATTGCTCCAGTGCTGATGGAGGCCAAAGACAACCCCAGGG
TTTTCATAGGAAATTCACTGGAATTGTGCGCAATTGTCTTTGTAGTCCTTTTGCCTTTTTTTTTTTTAAATATTA
TGTTGTCAATAGCATTTGTTTGGGTATTTGTTTTAGANGCCTCACTCTAAGTTATTACCGTCCCCTTCATTGGTT
TCAAAGACATGTGGNGATATAGNTTTTAAAAATAACTATTTTGGTATAGATCATAATATGCATAAAACTGT

FIGURE 7460

GGAGTTCAAGATCATCCTGGGCAGCAAAGTCATACACTCTTGAGGGAAGAGAGAGACCTTCTCATATTGTTTTAT
ATTGTTTTATACTCAGTACCTGTTTTAAGAAAAAAACAAGGAAGTGAAATCAAAGACAGGCAGCCTGGCACCAGG
CCTGAAACCAGCCCTGGGCCTGCCTGGCCTAAAGCTAGTAGTTAAAAATCAACTTACGACTTAGAACCTGATGTT
ATCCGTAGATTCCAAGCATTGTATAAAAAAATTGTGAAACTCCCTGTTGTGTTCTGTACCAGTGCATGAAACCCC
TGTCACATATCCCCTAGATTGCTCAATCAATCACGACCCTTTCATGTGAAATCTTTAGTGTTGTGAGCCCTTAAA
AGGGACAGAAATTGTGCACTTGAGGAGCTCAGATTTTAAGGCTGTAGCTTGCCGATGCTCCCAGCTGAATAAAGC
CCTTCCTTCTAC

FIGURE 7461

GVQDHPGQQSHTLLREERDLLILFYIVLYSVPVLRKKQGSEIKDRQPGTRPETSPGPAWPKASS

FIGURE 7462

ATGTGGGTGCTTACACCTGCTGCTTTTGCTGGGAAGCTCTTGAGTGTGTTCAGGCAACCTCTGAGCTCTCTGTGG
AGGAGCCTGGTCCCGCTGTTCTGCTGGCTGAGGGCAACCTTCTGGCTGCTAGCTACCAAGAGGAGAAAGCAGCAG
CTGGTCCTGAGAGGGCCAGATGAGACCAAAGAGGAGGAAGAGGACCCTCCTCTGCCCACCACCCCAACCAGCGTC
AACTATCACTTCACTCGCCAGTGCAACTACAAATGCGGCTTCTGTTTCCACACAGCCAAAACATCCTTTGTGCTG
CCCCTTGAGGAAGCAAAGAGAGGATTGCTTTTGCTTAAGGAAGCTGGTATGGAGAAGATCAACTTTTCAGGTGGA
GAGCCATTTCTTCAAGACCGGGGAGAATACCTGGGCAAGTTGGTGAGGTTCTGCAAAGTAGAGTTGCGGCTGCCC
AGCGTGAGCATCGTGAGCAATGGAAGCCTGATCCGGGAGAGGTGGTTCCAGAATTATGGTGAGTATTTGGACATT
CTCGCTATCTCCTGTGACAGCTTTGACGAGGAAGTCAATGTCCTTATTGGCCGTGGCCAAGGAAAGAAGAACCAT
GTGGAAAACCTTCAAAAGCTGAGGAGGTGGTGTAGGGATTATAGAGTCGCTTTCAAGATAAATTCTGTCATTAAT
CGTTTCAACGTGGAAGAGGACATGACGGAACAGATCAAAGCACTAAACCCTGTCCGCTGGAAAGTGTTCCAGTGC
CTCTTAATTGAGGGTGAGAATTGTGGAGAAGATGCTCTAAGAGAAGCAGAAAGATTTGTTATTGGTGATGAAGAA
TTTGAAAGATTCTTGGAGCGCCACAAAGAAGTGTCCTGCTTGGTGCCTGAATCTAACCAGAAGATGAAAGACTCC
TACCTTATTCTGGATGAATATATGCGCTTTCTGAACTGTAGAAAGGGACGGAAGGACCCTTCCAAGTCCATCCTG
GATGTTGGTGTAGAAGAAGCTATAAAATTCAGTGGATTTGATGAAAAGATGTTTCTGAAGCGAGGAGGAAAATAC
ATATGGAGTAAGGCTGATCTGAAGCTGGATTGGTAG

FIGURE 7463

MWVLTPAAFAGKLLSVFRQPLSSLWRSLVPLFCWLRATFWLLATKRRKQQLVLRGPDETKEEEEDPPLPTTPTSV
NYHFTRQCNYKCGFCFHTAKTSFVLPLEEAKRGLLLLKEAGMEKINFSGGEPFLQDRGEYLGKLVRFCKVELRLP
SVSIVSNGSLIRERWFQNYGEYLDILAISCDSFDEEVNVLIGRGQGKKNHVENLQKLRRWCRDYRVAFKINSVIN
RFNVEEDMTEQIKALNPVRWKVFQCLLIEGENCGEDALREAERFVIGDEEFERFLERHKEVSCLVPESNQKMKDS
YLILDEYMRFLNCRKGRKDPSKSILDVGVEEAIKFSGFDEKMFLKRGGKYIWSKADLKLDW

FIGURE 7464

AGTGCCTGCCGCCCACGGCCGCAGGAGTCGGGCTTCGGTCGCACCAGAGACAGCGGACTTTCCTCCGATGGTTGC
AGCAGAGGGATCATGACGGGGAAAAAGTCCTCCCGGGAGAAACGGCGCAAACGTAGCAGTCAGGAGGCGGCTGCA
GCGCTCGCGGCCCCGGACATCGTACCCGCGTTGGCCGGCGGCAGCAGTGGAAGCACTAGCGGCTGCGGGAGCGCC
GGGGGCTGCGGGAGCGTCAGCTGCTGTGGGAACGCCAATTTTAGTGGAAGTGTCACCGGCGGTGGGAGCGGCGGC
AGCTGTTGGGGCGGGAGCAGCGTGGAGCGCAGCGAGCGCCGGAAGCGGAGGAGTACCGACTCTTCCAGCGTCTCG
GGCTCCTTGCAGCAGGAAACTAAATATATTTTGCCAACTTTGGAAAAAGAATTATTCTTGGCAGAGCACAGTGAC
CTTGAAGAAGGTGGACTGGACCTGACTGTGTCATTGAAACCAGTTAGTTTCTATATATCAGACAAAAAAGAAATG
CTTCAGCAGTGCTTCTGTATTATAGGAGAGAAAAAGTTACAGAAGATGCTTCCTGATGTGTTAAAGAACTGTTCA
ATAGAAGAAATTAAAAAACTATGCCAGGAACAGTTAGAGCTCCTGTCTGAAAAAAAAATTTTGAAGATTCTTGAG
GGTGACAATGGAATGGACTCTGATATGGAAGAGGAAGCAGATGATGGTTCTAAGATGGGATCTGATTTAGTCAGT
CAGCAAGACATCTGTATAGATTCTGCTTCATCCGTGAGAGAGAATAAGCAACCTGAAGGTTTGGAATTAAAACAA
GGAAAAGGGGAAGATAGTGATGTACTCAGTATAAATGCAGATGCTTATGACAGCGACATAGAAGGCCCATGCAAC
GAAGAAGCAGCTGCTCCCGAGGCACCAGAAAATACAGTCCAAAGTGAAGCTGGTCAGATAGATGACCTGGAGAAA
GACATTGAGAAAAGTGTGAATGAGATTCTAGGACTGGCAGAGTCTAGCCCAAACGAACCCAAAGCAGCCACCCTG
GCTGTTCCTCCACCAGAAGATGTTCAACCTTCTGCACAGCAACTGGAGCTGCTAGAACTTGAGATGAGGGCAAGA
GCGATTAAAGCCCTAATGAAAGCTGGTGATATAAAAAAGCCAGCCTAGGTATTTAACTTGATTTTGAATTTTAGG
TATGTTTGAACAAAGCCACATCATTTAATTTTGTATCTAAAATTTATTTGGGGTCTTATATGTTATTTCTCATGT
AACCCTTATTAGGACTCATTTTAGCCCTAAATTACCTGTGGCTGTTTCTTTTTATTTTTTTGACTACTTTTATAT
TATAAATGTGTGTTACTGTCTTATGAATTCATGGCAATATAGTTGGATAGCCTGGATACTTTGTTAGATGAGTAT
TTAGCTGTGTCTGCAAATCTTAAAAGCCATTAGCAAAGAGTCGTGGTATTTTTTCTTTATTTTAAATGTTTGG
GCACCAAACCTAAAAGCAAAAGATTGACGAAGCATGTTTCTCTTAAGGCTACTTGTATTTTACAATACAATATTA
AATTATTTAATTTGAGAAATTTAGTTTTGCTTATATGCACTTTTTAAATATATACTATTTTGAAGATTCCTTATG
TAAATGCAAATTTCCTAGTTAAAACCGAATAACAGAGATCTGAAATGACTGAGAAAAACTTTTTTATTAAAGGAA
GGAATTAATTTAAGGCAATTTTTAACTATGTAGAACTAATTGCCCATGTTTAATTATAGCAGACACGCCATTCTA
ACAGGTATTTGATACCATTGGATGCATTATTCTAGGTTTTTTCTTTAATAAAAATGGAACAAGTTTTCATTTACA
TTCCAAGCTGTCAGGAAATGAAGAATATTTTATTATCTAGGATTTTATCTGATGTAGTTGCTTAAAGATCTGATG
TGCTATAATTCCATGAATCAGAAATAATAAAATGCTATCATTCTGGATCTGAAGACTTTTGATACTTTTTCAAAA
GCAAAATTAATTTCAGGAACCTTTGATAAGTTGTTGTTATAATTAATCTAATTTTGTATAGTTTTTGTAAATAAA
TTACCATCCTTCCACAATTAGGGATGCTTTTATCCCCCCATCACTAATTGCAGTTGTTTGATACCAAAATAAATT
TACGTAGAGATCCTTAACTTAAAATAAATTAATTTTTTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AG

FIGURE 7465

MTGKKSSREKRRKRSSQEAAAALAAPDIVPALAGGSSGSTSGCGSAGGCGSVSCCGNANFSGSVTGGGSGGSCWG
GSSVERSERRKRRSTDSSSVSGSLQQETKYILPTLEKELFLAEHSDLEEGGLDLTVSLKPVSFYISDKKEMLQQC
FCIIGEKKLQKMLPDVLKNCSIEEIKKLCQEQLELLSEKKILKILEGDNGMDSDMEEEADDGSKMGSDLVSQQDI
CIDSASSVRENKQPEGLELKQGKGEDSDVLSINADAYDSDIEGPCNEEAAAPEAPENTVQSEAGQIDDLEKDIEK
SVNEILGLAESSPNEPKAATLAVPPPEDVQPSAQQLELLELEMRARAIKALMKAGDIKKPA

FIGURE 7466

CTTGATGATTGGGTTAGATCTGGGGCGTACATATATATATTTTGTTGTTTTGTTGTTTGTTTGCAAGACTATTTT
ATAGGCCTATTTTTTATCAGAAGACATATAATATCTTTTTTTTTTGAGTGTTCAGCCATTGAGCCATTGGTGATC
ATTACCTAGATCCATTAATTCATTAGGGGTTACAAATAGTGCCATTCCACCTGGATTCATTTATTTGTTGAAATA
CTTCTGTGAGGAGAAACTTGACTTCATCTGTTTGGTTGATTCTTTCTCTTTATTACTGGTTTTCAGAATAAAGAG
TTGGTTATCTAGCATTCTCCAAAGATGACCAATTTTTTTTTAATGTCAGAAACTGCAGCCTTTAAACTAGTTACT
ATTTTTTAATCCATTGCAGTTACCATTCTTATTGATGCTTAAATTGTTACATCTTTGGCCAGTGCAAGCCTTTTC
AAGTTGGCTCCCAAGTCCCTTTGAGACAGTCTGGTTATTAGTCTTTGATGGCTTCCTTACTAACCATCCTTACTA
GGTGGTATGGCAGTAGGTTCCAGGGGTTGTTCTGTATGGATTAACTTATTCTCACAAGAACCCTGTGAAATAATA
CTTTTGTTATCCCCATTTTATGGGTGAAGAGAGGAACCTGAGAGATTGTGACTTACCTGTATACCTCTCTAGAAG
AAGTACAGGGATGTAAATTCAACTACTCATTCTAGTGCTCTTTTCACTTTTCCAATCTGATGCCTCTTAAAATTA
CTTCTGTTTCATTTTTTTAAGTAACTTGATTGACTAGCTAAAATTCATCCTACTCAGTCATTGAAGATTAGTTAT
TAACTTATTAAACATGAATTTCAAGGATTGCCTAACAGTAGGATGAAGATAATAGAATAGTATTCTCAGAATTAT
TCTTTCAAGTATTCCAGTCATTCGTCTTTTCTACAATCCTGCAAAAATACAAAGTTTGATGAAATATTTAAGTAG
TTAAGGAAAGAACAGCAAAAGTGAAGTGTTTCCTTTGTTTCTTGAAATAAAGTCTCTCCAACTATGAGTAACTGT
AGTTACATTTGGTTTTTTTAGGAAAATGGGAATTTGAATCTGGTGCTATTTTAAAATTGAAAGGGGCTCATTTTG
TTATGTAATATCCATTTATTGTATATATCGTATGTCAGGCATTGGGTGTACAAGGTTGAAGACCACAATCCTTGC
TCATAGTCAAGGAGATTCTAGGGTATCCACGCAGAGGAAATAACATGGCATGGTTTATGGCAGAGTATAATGCCT
TTGGGACCAGTATAACTAGATCAGTGCAGTTTTTTTAATGCATAAATGACCTCAGGGTCAGTGGTGAGAGTTGGA
GAGATAGATATGAATTGGATTATTAGCGTGCCTTATATGTTTTACTAAGGAGCTGTCCTTTAAGCAATTCTAAAC
TGTTGTAGGATTAAGTAGACAGGAAAATAATCAGATTTTTAGAAGTATCTCTTAGAGAAATACAAAGATAGATTA
TAGGTGGGTTGGAATGGAGGCAGAGATCTGGTGAAGCTGTTGCCAAAATCTGAGCAAGATATAGTGAAGACCTGA
ATTAAGGCAGTGACAGTTAAGAATGGAGAGAAAAACAGGATGTGAATTTGAGAGAGATTTAACTTGTAGAATCAA
TAAAAGCGAATGACTGGATAAAGGTATCTTGGGCTTCTGGGTGGCGTAACTGGAGGATCCCTTGCTCTTCACTAA
GATCCAGAATACTAAAGCAAGAGCAGATGTTTGTGGGTAGATAATGAGTTTGAGGTGTCCCTTGGGTAGTTGTAT
ATATTTATGAAAGCCATCAGAACGTAAGTAGTATTTAAAGTGGTAGATATGGATGATGTAATTTAGGAGACCTGA
TTCCAGAGTAAGAGGAGAGTACTAGAACAAAACTCTTAGAAACACTAACACTTAAATGCTGCCATCTCCTATCCC
CAAGCCAAGTAGGATTTTGACCATAAATTAGCGAGCAGCATTGTTAGGACCACTGCTTGTCCTATCTCAGTATAG
AGATGCCCGTCCATGTATCCATGTATTCCTCTTACTTATTAGCTCCCTTTTACTAATCACAGCTATTCCTATCTC
AGTTGGCAATACCTGTGAATCAAGGGGAAAAGTCACATTTGACTTTGTGACAACCGCCAGAAGTCCTTTCCAAGC
CAAAGCATGGATTATTGAGGATCCTTCAGAAGACTGTTGGATCTTTCGACAACTGATACTTTCTGCTCTGTTAGC
TCTTTCTGTCTTCACTACTCTAACTAGCTTAGATTCCATGGCCTTCCATTTCTATATCTCTTGCCAATATGCTAA
ACTTCCTTGTTTTTGTGTCACATTTGCCTGAAAAAACCCCAAGCCTTTGTAAGCCCAACTGTCTGTGTAGATATT
GCTTGAGAAAGATCACACATTATGGAAGAGGGGATAATACCTCTCTAAATTCTTGATCACCAACCTCAGGTCTCA
ATGTTGCCTGGTAATCCTGTGAAATTTCTACTTTCAACTTATTCTCCCGCTTTCTATAGCAGTAATTTTAAACCT
TTATTCTCTTCAAATCTCAAATTTATCTGTTCTTACTTTTAGCAGATGGCCTTGACTGCTACTTCCAAGACAAAA
AAGGGCTGAGCGCAGTGGCTCACATCTGTAATCCCAGCACTTTGGGAGGCTGAGGTGGGCGGATCACCTGAGGTC
AGAGACCAGCCTGGCCAACATGGTGAAACCCATCTCCACTAAAAATACAAAAATTAGATGGGCGTGGTAGTGCAC
ACCTGTAGTCCCAGTTACTCGGGAGGCTGAGACATGAGAATTGCTTGAACCCCATAGGCAGAGGTTGCAGTGAGC
TGAGATCGCACCACTGGACTCCAGCCTGGGTGACAGAGCAAGACTCTGTCTC

FIGURE 7467A

TTCTGCTTATCATGGTTACCAACAAAATGACTGCTGCCTTTAGAAACCCTAGTGGGAAACAGGTGGCGACAGACA
AAGTTGCAGAAAAGCTGAGCTCTACTCTCTCATGGGTGAAGAACACAGTATCGCATACAGTCAGTCAGATGGCCA
GTCAGGTGGCAAGTCCATCTACTTCATTACATACCACATCCTCATCTACCACACTATCAACACCAGCCCTTTCAC
CATCTTCCCCATCACAGTTGAGTCCAGACGTCTTAGAACTCCTGGCTAAACTGGAAGAACAGAATATATTGTTAG
AAACGGATAGTAAGTCTTTAAGATCTGTAAATGGGTCAAGAAGAAACAGTGGCTCTTCTCTTGTGTCGAGTTCAT
CAGCCTCTAGCAACCTCAGTCACCTTGAAGAAGATTCTTGGATTCTTTGGGGAAGAATTGTTAATGAATGGGAAG
ATGTACGCAAAAAGAAGGAAAAGCAAGTTAAGGAACTTGTTCATAAAGGGATACCCCATCACTTTAGAGCAATAG
TTTGGCAACTTTTATGCAGTGCACAAAGTATGCCAATTAAGGATCAGTATTCAGAACTCCTGAAAATGACCTCGC
CTTGTGAAAAATTGATCCGAAGGGACATTGCTAGAACTTACCCTGAACACAACTTTTTTAAGGAAAAAGATAGCC
TTGGACAGGAGGTTTTATTTAATGTAATGAAGGCTTACTCTTTAGTAGATCGTGAGGTTGGTTACTGTCAAGGAA
GTGCTTTTATAGTTGGATTGTTGCTTATGCAGATGCCAGAAGAAGAAGCTTTCTGTGTATTTGTTAAATTAATGC
AAGATTATAGACTTCGTGAACTTTTTAAACCAAGTATGGCAGAATTGGGCCTTTGTATGTACCAGTTTGAATGTA
TGATACAGGAGCATCTTCCAGAGCTCTTTGTACATTTTCAATCTCAGAGTTTTCATACCTCAATGTATGCATCAT
CCTGGTTTCTGACTATCTTTCTTACAACTTTTCCACTACCAGTTGCAACAAGGATATTTGATATCTTTATGTCTG
AGGGTTTAGAAATAGTGTTTCGTGTAGGATTAGCACTTCTTCAGATGAATCAGGCAGAACTGATGCAACTTGACA
TGGAAGGGATGTTACAGCACTTTCAAAAGGTCATTCCACATCAGTTTGATGGTGTCCCAGACAAGCTAATCCAAG
CAGCTTACCAAGTCCAATACAATTCAAAAAAAATGAAAAAGCTTGAAAAGGAATACACTACAATAAAAACGAAAG
AAATGGAAGAGCAAGTTGAAATTAAAAGGTTACGCACAGAAAATAGACTTTTAAAACAGCGCATCGAGACATTAG
AAAAACATAAATGCAGTTCCAACTACAACGAAGATTTTGTGCTACAGCTAGAGAAGGAATTGGTCCAAGCCCGAC
TGAGTGAAGCTGAGTCTCAGTGTGCATTAAAAGAGATGCAGGATAAAGTCTTGGATATAGAGAAGAGGAATAACT
CCCTTCCTGATGAGAATAATATTGCAAGGCTTCAGGAAGAACTCATTGCTGTGAAACTTAGAGAAGCAGAAGCCA
TTATGGGTTTGAAAGAACTTAGACAGCAAGTCAAGGATTTAGAGGAACACTGGCAGCGCCACTTAGCTCGTACTA
CTGGGAGATGGAAAGACCCACCCAAGAAAAATGCTATGAATGAGTTACAGGATGAACTGATGACCATTCGACTTA
GAGAAGCTGAAACACAAGCAGAAATAAGAGAAATAAAACAAAGGATGATGGAAATGGAAACACAGAACCAGATCA
ATAGTAACCATCTTCGAAGAGCAGAACAAGAGGTGATTAGCCTACAGGAGAAAGTGCAGTATCTTTCTGCACAGA
ACAAAGGACTCCTTACTCAATTAAGTGAAGCAAAGCGTAAACAAGCAGAGATTGAATGCAAGAATAAGGAAGAAG
TGATGGCTGTGAGGCTTCGGGAAGCAGATAGCATAGCTGCTGTGGCTGAACTACGACAACACATTGCTGAGCTTG
AAATCCAGAAAGAAGAAGGAAAGCTTCAAGGACAGCTTAACAAGTCTGATTCTAACCAGTATATTGGGGAACTGA
AAGATCAGATAGCAGAGCTGAATCATGAGCTCAGGTGCCTAAAAGGCCAGAAGGGCTTCTCAGGCCAACCTCCTT
TTGATGGAATCCACATTGTCAACCATTTAATAGGAGATGATGAATCATTCCATTCCTCCGATGAAGATTTTATAG
ATAATTCCTTACAGGAAACTGGTGTTGGTTTTCCTTTGCACGGAAAATCTGGCTCGATGTCTTTGGACCCCGCAG
TGGCAGATGGTAGTGAGAGCGAAACAGAAGACAGTGTGCTGGAGACCAGAGAGAGCAACCAAGTGGTTCAAAAGG
AGCGGCCCCCGAGAAGAAGAGAGTCGTATTCAACCACTGTCTGACCATCACTGTGACCTAGACTATGGATTTATT
TAAGGGATCAGTTATCATATGATTAGGGCTTTTTGGAAATAATTTGTTTTCATATGTATATATATATATATATAT
ATATATTTTACAGTCTTATCTGCCTTTTTATCTTTGCCAAATCTTTACCACTGATTTACCATTGCCATAAAGTAG
ACTGGTATATGGTTAATGTGTAAAACAAGGTTCTAACAGTATTACTGAATATTAATGTTTCTTGTTTAGAAAATG
CAACTATATCTATATGTGGGAACCATTTCTGAAGTTCAAAACTATGGAAAATTGAATTTTCTTCAAACAAAACTG
CTCTTGTGCAATATTTTATGCTCAGTGAGCAAATTGTGTATTTATGTTTATCAATTTGTTCCCCAGGTGGCTGTC
TACAAACATTTGACCAAAACATACATTTGAATTACCTTGGGTTTTTTTTTATTGGTGTTTTTTTTTTAAGACAGA
GATTCAGTTTGTCACCCAGGCTGGAGTGCTGTGGTGTGATTTTAGTTCACTGCAACTTCCGCTTCCCAGGTTCAA
GCAATTTTCCTGCTTCAGCTTCCCGAGTACCTGGGACTATATGTGCGCACCACCACGCCTGGCTAATTTTTTGTA
TTTTTAGTAGAGATGGGGTTTCACCATGTTGGCTGGGCTGGTCTCGAACTCCTAACCTCAAGTGATCCACCCGCC
TCAGCCTCCCAAAGTGCTGGGATTACAGGTGTGAGCCACTGCACCCAGCCTACCTTGTCTGTTTGTGTCTGGGAG
GTTTTTTTTTTCTATTTTTATTTTTTCATGAAAATTATTGGTGGGCCACTGAAAGTCCCCACACACAAAGCCTTT
ATTCTATATAATTTTATAAACACAAATTCATGATTATCTGTTTTGAGAGTTTTAAGTTTTGTTTTAATGTTTAAC
TTTTATGTGCATATGATGCTTTCCATGTGTTGGTTACTAGAGTAGTAGGTTAACTACAGACATACTGTTTTGTTT
GTACATATTTATAAATCTGTACCACCTAACATTGAACATCATTTTATATGAAGAACATACATGTTGCAAAATGAC
TGCTTTCAGCATCTAACAGGACTTCTGTAAATAATAGGTTAAAAGTTAAAAATAAAACACTAATGTTTTAAGAGC

FIGURE 7467B

TTTAGTATTTTGCTTAGCATTCAATACTAGCAGATTCATAACTGATGCCTGTTCAAAAACACTGTTGGTGGAATC
TTTTATTTCATGTGTATGTAACTACTAAATTTTTCATGACTGAAGAGGTTATAGCACATATTAGTTAGTGCTAAT
ATTCTACTGAATATAATTTAAGCAATGGGCTAAGGTCCAAGAAACATAGCAATTATATCTACAAATAATCTATTA
ACATGATCTTCAGAATCTCTAGTTTTTGTTCTATAGATAAAGCCATAAGAATCCTTTCCTACCAGTTTTTCCTAT
ATCATTTAGATATTATTTCCTAGAAAACAGGATGCCTGTCACTGATAAGTTAGAGAAAACACCCAAATTATACTT
GCACTATGGAAAGACGACATGGATTTGTTGTCTGGGTACTTTCTACTCTCATTTTTGTTAGCCTATGAAAAAAAA
AAACATTTTGTTAACCTATGGAAAAAGCCTTGGAAGAGAAAAGTAGAATTCAGTATGTATGGAGGCACAGTTTTG
CACAGTATGTTGCATGCGGCAAAAAAAAAAATATGAAATAGAGTAGAAGAGATAAAAGTAGTTTTCTGTCAAAAA
CTAGGAGTTAAGCCTTCAGGTACGTTGTGGACTAGGCTTTCCAGCAAGGTTTTTGTAGCTATTTGCTTGCCTGAG
AAATGAAATTGAAAACATACCCCTGCGTGTCTGTCCTTAACACCAGGCTAAATTCTGGTGGTTAAATAACTTACC
TGTGGTTACAAGCTAGTAAGTAGCAGAGCCAAGATTTTTTTTAATATAGAGACAGGTGTCTCACTGTGTTGTCCA
GGCTGGTCTTGAACTCCTGGCCTCAAGTGGTCCTCCTGCCTCAGCCTCCCAAAGTGTGGGGATTACAGGTGCGAG
CTACTGCTCCCAGCAAGAGCCAAGATTTTAACCTAGATCTCCCTAACACCAAAGCTTTTGAAAGGGTTTCAGCTG
AAGAATTTCTTCAATTCTTCTGTTTTGTTTTTATTTTTGTTTTTTGAGATGAAGTCTCACTGCACTCAGGCTGGA
GTGCAGTGGTACGATCTTGGCTCACTGCAACTTCCACTTCCCGGGTTCAAGCGATTCTCCTGCCTCAGCTCCCAA
GTAGCTGGGACTACAGGTGCACGCCACCACAACTGGCTAATTTTTGTATTTTTAGTAGAGATGGGGTTTCGCTAT
GTTGGCCAGGCTGATCTCAAACTTCTGACCTCAGGTGATCCACCCACTTTGACCTCCCAAAGTGCTGGGATTACT
AGACGTAAGCCACCACACCTGGCAATTCCCTGCTTTTTTGACAACATAATTTAAATGAATTTGATTTAAATGTTT
CCTGAATATATATACAGATAGATAGATGAGTATCAACACTTACAAGCTCTACACAGTCTGTGAGTGTAGATACTA
CTTACTTGTAGGATTGTCTTGTGCTTTGGGGATTTTTGTTCGGAGTTCTATACTATCAGCCCAGAAAGCTATCAA
TGTCCAAGTGAAGTGAGATGATGCATGCCACATTATTGCTTTGACCTTCACATCAAGAAATCTGAATGATCTGGA
CCAGGGTCAGCAAAGTGCAGCCTACAAGTTATTGCAGTCAGCTGCCAGTTTTTACTTTTTTAAATAGTTGGGAAA
AAAATTCCAAAGACTGATATTTTGTGTCACATGAAAATTATATGAAATTCAAATTGCAGTGTCCATAAGTAAAGT
TTTATTGGGGCACACCCATGCTCACCCTTTTAAATATTGTGTATGGCCGCTTTGTGCTACAGTAGCAGAGTTGAG
TCATTGCAAGGGAGACCATATGGCCCAGGTAGCCTAAATATTTATCTGATCCTTTACAGAAAAAGTTTGCTAACC
CTTGATAACAGATACTCTAAAATGCAGGTTTTTCTTCTTCAGTTTAGCTCAGTGGTAGGTCAATTGTTTGCTTTT
GCTATTAAGCTTATGATTTGGAAACGTAAAATTTTCATGGTGGATCTTATAATCAGAACTATTCAAAAGGGAAAA
CATGCCAGCCATTTTATATGATGAAGTCTCTTATTCCATAGAAAACTGTAGAAAGGTATCTGTATCTTTGGAGAA
GGAGAAAGAAAGGAAAGAACTCCAGAATCCCATCACTGTTCTTTAAAGCATGCATCACAGACCTTTAAGAGTATG
CTTTATTGAGTAAAGGTTATAGTTTGACTTTAAGATAAGAAATTTTCTAGAATCATGTTTGAATTCTAAACGTTG
ATATTCTTAAGTACCATTTCTGATTAGGAATTAGGTGTTAAAAGAATCATGGTAAGGAAACCTTAATCCGTTGAA
ACTCTTGTAATTTGGACAACAAAAAACTAGAAATAACACTCTTTTCTTTGAAGATCTGATTCAAATACACCTTAG
AAGAGTTTAAAATCTCCCAGGCCTTTAGGATGCAATAGGATATTATGCCTTGGTTTGACTCCTTTTCATTCAAAT
TAATGTAAGTATGTTGTTCAAGACTTTGAAGCATTGAACAATGTTCTCGACGAATTTTATTTAATTACTGACATT
TTGTGATATTTGAATGTTATTAAGTTAAACACTTAGAGTTGAGTATATTCAGGGGAGAAAAGTGAATGAAATGAC
TCATAATAAGAAAGCTTGCTCCCTTGGGACAGTTACCTTCCTGGTGTCATTGCCATCCTGGGTTGACAAGCTGAG
AGTAGAGGATACAAGTGATGTGAATAAAATGGAAATTGCATTGAGTTAATGAAACATACACTTTTAGATCAAGAT
AACATTCAACAGCCTTTTTAGAAATTGCACACTCCTATAGTCCCACTTACTCAAGGAGGTGGGGGCAGGGAGGAT
CACTGGAGTACAGGAGTTTGGGGCTGTAGTGTGTAATGATCAACACCTGTGAAAGAATAACCACTGCACTCCAAC
CTGGGCAACATGGCAAGACCCTGTCTCTTTAAAAAAAAAAAAAAATCCTGGGAAAAGAAGTCAAAGATGTAATTT
TACACAATTTCTGCCCCCACCGTCTTTTTTGTTTGTTTGTTTGTTTGTTTGTTTTTTGGCTAGATACTAGGTATT
CAGTGTTTGCTGAGATGACAGGTTTCTACTAATCAGCCAGTTATTTGGGAAGGAGAAAAACTTTTTCTCAATTCT
GAACATGATGCAGCTTGTTAACTCTCCAGATAGTGCCTTTGATTGAAAATAAGGTCTACACCTTTTTAAGTATAT
TATTTCTGACATCGTAAGAAATAATTTAGTTCCTTATTCTCATTTATCTTTTATATAATGTACTGTAATATTCAG
GTTTAAAGTAAAATAAGTATATGGAATTATATTTTGGTAAAACTGTTTCATGACCAGCTTGATTAATGTATATTA
ACATACCAGACATTGACAGCGAACATTTCATGAAATCAGTTATTTACTTACTAAAACAATGAGTTTTAGCTTGAA
AGTTACTGCTGCTCTATTATTAACAAAACTAAGTTTTAAAAATTAATTTTAATTCTACTGAAGTTTAATTTCTGG
TTAAAGGTATAGTGGATGCTATTTATGATCCAAGTTTTTACATCACATCCATTGATCTGCCTATCCCTTCTTTTT

FIGURE 7467C

ACTCCAAAGAGGAGATGATAGAATAATACATTCAGTATACTACCAAGAAGCAAAGTTATAATGTGTTTCATTTTG
CTATTGGAATTTTTTATTGTAACATTGTATGATAACCTGAAATGTTTACTTGTGCCTTTTCTTTAAACAATTAAA
GTTTTCCATTTTATAAGAAACAAAAAAAAAAAA

FIGURE 7468

MVTNKMTAAFRNPSGKQVATDKVAEKLSSTLSWVKNTVSHTVSQMASQVASPSTSLHTTSSSTTLSTPALSPSSP
SQLSPDVLELLAKLEEQNILLETDSKSLRSVNGSRRNSGSSLVSSSSASSNLSHLEEDSWILWGRIVNEWEDVRK
KKEKQVKELVHKGIPHHFRAIVWQLLCSAQSMPIKDQYSELLKMTSPCEKLIRRDIARTYPEHNFFKEKDSLGQE
VLFNVMKAYSLVDREVGYCQGSAFIVGLLLMQMPEEEAFCVFVKLMQDYRLRELFKPSMAELGLCMYQFECMIQE
HLPELFVHFQSQSFHTSMYASSWFLTIFLTTFPLPVATRIFDIFMSEGLEIVFRVGLALLQMNQAELMQLDMEGM
LQHFQKVIPHQFDGVPDKLIQAAYQVQYNSKKMKKLEKEYTTIKTKEMEEQVEIKRLRTENRLLKQRIETLEKHK
CSSNYNEDFVLQLEKELVQARLSEAESQCALKEMQDKVLDIEKRNNSLPDENNIARLQEELIAVKLREAEAIMGL
KELRQQVKDLEEHWQRHLARTTGRWKDPPKKNAMNELQDELMTIRLREAETQAEIREIKQRMMEMETQNQINSNH
LRRAEQEVISLQEKVQYLSAQNKGLLTQLSEAKRKQAEIECKNKEEVMAVRLREADSIAAVAELRQHIAELEIQK
EEGKLQGQLNKSDSNQYIGELKDQIAELNHELRCLKGQKGFSGQPPFDGIHIVNHLIGDDESFHSSDEDFIDNSL
QETGVGFPLHGKSGSMSLDPAVADGSESETEDSVLETRESNQVVQKERPPRRRESYSTTV

FIGURE 7469

CCTCTCCTTAGCTGAGCAGAGGAAGGGAAGGAGTGTGGCTATGAGAATATGATTTATGCCATTTTCTGTTTTTAA
ATCTAGAAGATCTTCTAAGCACAAATACAGCTACAATGAAATATTTTACAGACAAAATGTTAATAGACCATATTC
TTTGAATTAAATTTGTTTTTAATTTTCTCTACACATTTTTTTTTTCCTGGAGTCTCTTAGCTCTAAATATATCAA
TCAGATTTATATTTTTTTTTACCTGATTCAGATGTCTTACATTTTTATATTAAATGAACCTTAAGCATGATTCTT
TTGGTAAGCCAGTATGAATGCCAGTGGTTGGGGGGCGGGGGGGGGAGTCAGTTGACATAAGATTTAGTCCTAATA
AGGACTCTGTATTCACTTGATTATTCTGACCCTTCCTAAGGGAGGGAGGTGGATTAGATACCACTGGAGGCCCAT
TCTGTATTCCTAATCCAGTCTCAGCACTTTATTCATACAAAATAATCAAAATAGGTTTTCTACACCAAATGCTAC
CCAGGCAGTGCTCTATAATTTATTTGCACACCTGTATGTGTGGTGCCATGTTAGCCACTAAATCTGAACTTTTAC
CCTGCTTTCATCATGGATTTTTTTGTGTAACCTGAAACAAGTCACCAATGCTCACTGTGCCTGGTTCCTCATTTG
CAACAAGAGGATAATTCCGACCTACCTCTGAAAAATGTGTAGATTAAATGAGTTTTTAAAGCACTTTAGAAAATA
TAAGGGAGAAAATGATTTCTTAAGATATCACTGCCTAATATAGACAGGTATATTTGAAAGCTAAATACAGGTTAA
TGCTTTTGATAATGTATTGTTCCTGTTGCAAATTTAAGCATTATATATTAGGAGACTAAACATTGAAAACTTTCA
CTGATTTTTAAATTGGAGTAATAGCCTAAATAAGTGTAAATAATCTTTATCAAAATTTAGTGTTTATCTACAAAG
ATGCGAATCAGTCAAGGGGAAATGTGTATGCAATGTGTGTGTATATGATGTATGCGAACATATGTGATTTTGGGG
TACTAAAGCACAAAAAAATCCCCCATAAAATAAACCTTCCTGAAAAGACTGATCATAAACTTTTTCACTCCAAGC
AGATGTGAATCAAGATGTTAGGTTTATGGTGAGTTAGCTTTGAGGTGTGTTGCCCTAATACTAGCCAGCGTTGTT
GTAGCCATATTCCCTGCTGCTGCACGCCGAATTGAAAATCCATCTCTTACCTCTTCTCTATGAAGCAAGCCAGGT
ATGTCTTGCTTAAGTATTTCTTCTCCATGAATGGCCTTAACATTATTTTGTATTCACGTGTACTGTTTAACTGAG
GGTCTCAAAGCACTTTAAACTGTTGTGTTCTATTTCCACTCGTCTGGCCTGCCTCATTTTTCTAGGCCCTTTTGT
AAGCTGTAATTTTTTATTACCACTCATGTTCTTTCTACACTGACACTATTCATTAAGAACATCAAGCTTCATCTC
TGCTTACAGAATCTCACCTTATTGAGTGGGTTCCACTTTATTTTTCATTTGTTATCTACATTTTGAAGGGTTTAT
GTGCAAAGTGAAAACAAATTTTGAAAAATAAGACAAATCCATTCTCTTCTTCAATTCAGTCTAATATGCATTGTA
GTGTCTTTTAATCAGTCTTATCCTCTAAGTCAACTTCATTTTCCTCTTTGTGAATACCCATAGCAATATGTAAGA
TTTTATTGAAGTTTCCTGTGATAACTGAGGAACACTTTGCTATGCCTCACTGCCCAATAGGGTGGGTCATCAATT
AGGAGAAATCCCAAATTATAAAAGCCAACATATGCCGTGACCTACGTAGGAAAAGATGTATTTGTGCATCTTCTT
TCTGGGTAGTTAAAAATTACTCCCTCTTTTCTCTAGCATTTTGACATTTCAGACTCAATGCTCTGATCTCTAGGG
AGTGTGATTATTCAAACTAATGAGAGGACAAGAAGACACAGTTTTAGAATCTACTGCTGCTAAAGCACATTAAAA
ACAAATCCTGGTTTTTAATGTATGCATAGTTTCATATTTAATGAATATGCTTTCATTAAATAGGGAGGTAGATTT
GAAAAAACTGTTATAAAGAAATGTGCCTTTTGGGGAATGAATACTTTTGTTCATGTCTAGCCCACTGGGAATTTT
GTTTTCACCTTATACTGAGTCCTTTTTCTAATGTAAAAATATTTCTTCCAAGTTTGATTTCTGTATCAGGGTAAC
ATTGAGAACACACATATTTCTGTTTGAGGATTTGTGACTTCCTATGGAAACAGTCTTGCATCTATGTATTTACAA
ATGAAATTTAAAGTATTCTTAAAGCTTTGCCTTAAATACTGCTTGCATACTGATTTACTTAATGCTAAGCATGGC
AGGGGTTATAAATTTAAATACTATAAGACCTGGCTGAATCCCAGATGTATCAATAAATTGTTATAGTAGCTTATG
GAAAATGCTATTAAAGATAAATTTTCATACATTGTATTTTTAGTCAAGTAAAATATGGATGAAAATTAATAAAGT
ACTGTCAAGGGAAAAAATATGTATAACCTTGTAAGTGATTTTTCTCCCCTTTATTAAAAAAAGATTATACAATTT
GGGCTCATATTAAAAAATTCAAACAGTAGAACAGTGTGTACGTAGAAGGCATTCCCCACTCCCACTCCAGGAGTT
TGGGTATCATTCTAGAAGTGTTCTGTCAATACATAAGCATTTTTCATTCAAAGNNNNNNNNNNNNNNNNGGGAT
CCCATATTCTATAATTTTTGTGTTTTAAAAAACCACCATATTTCATAGATATCTTTCCACTTAAGCACATTCGGA
GCTCCATCATTTTTTTTTTTTTTGGAGA

FIGURE 7470

LSLAEQRKGRSVAMRI

FIGURE 7471

CTAGATCCGGGGAAGGGTTTTGCAGAAGTACCCAGAACTGTGTCCAAGGTTTCCTCAGATTTGGGCTGTTCCGCA
GCGGCAGGTCCCGGGAACCAAGGCAACAGACATCTTCCTAGGCTCGCGAGAGCGCCCCCTTGTCCCACGGCTGCT
GGGGCCCCCCCAGTAGCCATGGCTCCGGTGTCCGGCTCACGCAGCCCGGATAGGGAGGCCTCGGGCTCGGGGGGAA
GACGTCGCAGTTCGTCGAAGAGTCCGAAGCCCAGCAAATCTGCCCGCTCCCCGCGGGGCCGCCGCTCTCGCTCGC
ACTCTTGCTCTCGGTCCGGGGACCGGAATGGACTCGCCCATCAGCTGGGTGGCCTCAGCCAAGGCTCCCGAAACC
AGTCCTACCGCTCACGCTCGCGGTCGCGTTCTAGAGAGCGGCCCTCTGCGCCCCGGGGCATCCCCTTCGCTTCTG
CCTCCTCGTCAGTCTATTACGGCAGCTACTCGCGCCCCTACGGGAGCGACAAGCCTTGGCCTAGCCTCCTCGACA
AGGAGAGGGAGGAGAGCCTGCGGCAGAAGAGATTAAGTGAGAGAGAGAGAATTGGAGAATTGGGAGCTCCTGAAG
TATGGGGACTTTCTCCAAAGAATCCTGAACCAGATTCTGATGAACATACACCAGTGGAGGATGAAGAGCCAAAGA
AAAGCACTACTTCAGCTTCTACTTCAGAAGAAGAAAAAAAGAAGAAGTCTAGCCGTTCAAAAGAAAGGTCCAAGA
AAAGGAGAAAGAAAAAATCATCGAAAAGAAAACATAAGAAGTATTCTGAAGATAGCGACAGTGACTCTGATTCTG
AAACAGACTCCAGTGATGAAGATAACAAAAGGAGAGCAAAGAAAGCCAAGAAAAAGGAAAAGAAGAAGAAACACA
GATCGAAGAAATATAAGAAAAAGAGGTCTAAGAAGAGCAGAAAAGAGTCCAGTGATTCAAGCTCTAAAGAATCCC
AAGAAGAGTTTCTGGAAAATCCCTGGAAGGATCGAACAAAGGCTGAAGAACCATCAGATTTAATTGGCCCAGAGG
CTCCAAAAACACTTACCTCTCAAGATGATAAACCTTTGAACTATGGCCATGCTCTGTTACCTGGTGAAGGTGCAG
CTATGGCTGAATATGTAAAAGCTGGAAAACGTATCCCACGAAGAGGTGAAATTGGCTTGACAAGTGAAGAAATTG
CATCATTTGAATGCTCAGGTTATGTAATGAGTGGTAGCAGGCATCGCCGAATGGAGGCTGTGCGACTGCGAAAAG
AGAACCAGATCTACAGTGCTGATGAGAAGAGAGCCCTTGCATCCTTTAACCAAGAAGAGAGACGAAAGAGAGAGA
ACAAGATTCTGGCCAGTTTTCGAGAAATGGTTTACAGAAAGACCAAAGGGAAGGATGACAAATAAAGATTTTCTG
ATTGTCCAGAAGACATTTTTAACAACAAAAAAGAAAGTCTGGGTTCCACACATACATAGAAAAAGATTATTATGT
TCTGAGAAAGCTTTACAGTGCTACTGTGCCTTCTATTTAATTCTTTCAGTCCTTCAATAAAAAGCTGCTTATTGA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 7472

MAPVSGSRSPDREASGSGGRRRSSSKSPKPSKSARSPRGRRSRSHSCSRSGDRNGLAHQLGGLSQGSRNQSYRSR
SRSRSRERPSAPRGIPFASASSSVYYGSYSRPYGSDKPWPSLLDKEREESLRQKRLSERERIGELGAPEVWGLSP
KNPEPDSDEHTPVEDEEPKKSTTSASTSEEEKKKKSSRSKERSKKRRKKKSSKRKHKKYSEDSDSDSDSETDSSD
EDNKRRAKKAKKKEKKKKHRSKKYKKKRSKKSRKESSDSSSKESQEEFLENPWKDRTKAEEPSDLIGPEAPKTLT
SQDDKPLNYGHALLPGEGAAMAEYVKAGKRIPRRGEIGLTSEEIASFECSGYVMSGSRHRRMEAVRLRKENQIYS
ADEKRALASFNQEERRKRENKILASFREMVYRKTKGKDDK

FIGURE 7473

GTTGACGTGTTCGACTTTCCTGATAATTCTGATGTCTCAAGCATTGGCAGGCTGGGTGAAAATGAGAAAGATGAA
GAAACTTATGAGACCTTTGATCCTCCTTTACATAGCACAGCTATATATGCTGATGAAGAAGAATTCTCCAAACAT
TGTGGACTGTCTCTCTCTTCAACTCCTCCAGGAAAAGAAGCAAAAAGAAGTTCAGACACTTCTGGAAATGAAGCA
AGTGAAATCGAATCTGTAAAAATTAGTGCAAAAAAGCCAGGAAGAAAGCTCAGGCCCATTAGTGATGACTCTGAA
AGCATTGAAGAAAGTGATACAAGGAGAAAAGTTAAATCAGCAGAGAAAATAAGTACACAACGTCATGAGGTTATT
CGAACCACAGCGTCTTCAGAACTTTCAGAGAAACCAGCTGAGTCTGTCACTTCTAAAAAGACAGGACCCCTTAGT
GCCCAGCCCTCTGTTGAAAAAGAGAACTTGGCAATAGAAAGTCAATCGAAAACTCAGAAAAAAGGGAAGATATCT
CATGACAAAAGGAAGAAATCAAGAAGTAAAGCCATAGGCTCAGATACTTCTGACATTGTGCACATTTGGTGTCCA
GAAGGA**ATG**AAAACCAGTGACATCAAGGAGTTGAATATTGTTTTGCCTGAATTTGAGAAAACCCACCTAGAGCAT
CAACAAAGAATAGAATCTAAAGTTTGTAAGGCAGCCATCGCCACATTTTATGTTAATGTTAAAGAACAATTCATC
AAAATGCTTAAAGAAAGCCAGATGTTGACAAATCTGAAAAGGAAGAATGCTAAGATGATTTCAGATATCGAAAAG
AAAAGGCAGCGTATGATTGAAGTCCAGGATGAACTGCTTCGGTTAGAGCCACAGCTGAAACAACTACAAACAAAA
TATGATGAACTTAAAGAGAGAAAGTCCTCCCTTAGGAATGCAGCATATTTCTTATCTAATTTAAAACAGCTTTAT
CAAGATTATTCAGATGTTCAAGCTCAAGAACCAAACGTAAAGGAAACGTATGATTCATCCAGCCTTCCAGCTCTG
TTATTTAAAGCAAGAACACTTCTGGGAGCCGAAAGCCATCTGCGAAATATCAACCATCAGTTAGAGAAGCTCCTT
GACCAGGGA**TGA**GAAGAGCAGTCTACTAAAATGTGCCTATAGGAAGACTAGTCTCATGCTGTTACCTTCTGAAAC
TGTACCTTTATAAATCAATTGTTTTGCAAAGAAGTTATGGCCTACTTAGAATCTAAAATTTGTTATTCAAATTAA
ATGGCTGTGAACAATGTTAAATAGCATCAGTTTGTCCAATAGTTTTAAAGGCCATAATCATCTTTTCTGGTTAAT
ATCTTGAGTAATTTTAAAATGTTGACACCTTAATCGGTCCCAGGTATGAGCTATAATAAACTTGTAAAATTAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 7474

MKTSDIKELNIVLPEFEKTHLEHQQRIESKVCKAAIATFYVNVKEQFIKMLKESQMLTNLKRKNAKMISDIEKKR
QRMIEVQDELLRLEPQLKQLQTKYDELKERKSSLRNAAYFLSNLKQLYQDYSDVQAQEPNVKETYDSSSLPALLF
KARTLLGAESHLRNINHQLEKLLDQG

FIGURE 7475

TGGTTAGTGCTGCTGCTGTTGGTTCGTCGCGGCGGCGAAGGAGGAGGAGGAAGAGGGCGAGGCGACAAGAGAAGA
AGGAGGCAGGCGCGGCGGCAGCGGCGGCGCCCCGAGCCGGCGGAGGCGAGGGGGGGGAAGATGGCGGACGTGCTT
AGCGTCCTGCGACAGTACAACATCCAGAAGAAGGAGATTGTGGTGAAGGGAGACGAAGTGATCTTCGGGGAGTTC
TCCTGGCCCAAGAATGTGAAGACCAACTATGTTGTTTGGGGGACTGGAAAGGAAGGCCAACCCAGAGAGTACTAC
ACATTGGATTCCATTTTATTTCTACTTAATAACGTGCACCTTTCTCATCCTGTTTATGTCCGACGTGCAGCTACT
GAAAATATTCCTGTGGTTAGAAGACCTGATCGAAAAGATCTACTTGGATATCTCAATGGTGAAGCGTCAACATCG
GCAAGTATAGACAGAAGCGCTCCCTTAGAAATAGGTCTTCAGCGATCTACTCAAGTCAAACGAGCTGCAGATGAA
GTTTCAGCAGAACAAAGAAACCACGAATTGAGGATGAAGAGTGTGTGCGCCTTGATAAAGAGAGATTGGCTGCCG
TTTGGAGGGTCACAAAGAAGGGATTGTACAGACTGAACAGATTAGGTCTTTGTCTGAAGCT**ATG**TCAGTGGAAAA
AATTGCTTGCAATCAAACCAAAATTATGGCTAAGAAAAGATCTACTATCAAGACTGATCTAGATGATGACATAAC
TGCCCTTAAACAGAGGAGTTTTGTGGATGCTGAGGTAGATGTGACCCGAGATATTGTCAGCAGAGAGAGAGTATG
GAGGACACGAACAACTATCTTACAAAGCACAGGAAAGAATTTTTCCAAGAACATTTTTGCAATTCTTCAATCTGT
AAAAGCCAGAGAAGAAGGGCGTGCACCTGAACAGCGACCTGCCCCAAATGCAGCACCTGTGGATCCCACTTTGCG
CACCAAACAGCCTATCCCAGCTGCCTATAACAGATACGATCAGGAAAGATTCAAAGGAAAAGAAGAAACGGAAGG
CTTCAAAATTGACACTATGGGAACCTACCATGGTATGACACTGAAATCTGTAACGGAGGGTGCATCTGCCCGGAA
GACTCAGACTCCTGCAGCCCAGCCAGTACCAAGACCAGTTTCTCAAGCAAGACCTCCCCCAAATCAGAAGAAAGG
ATCTCGAACACCCATTATCATAATTCCTGCAGCTACCACCTCTTTAAAAACCATGCTTAATGCAAAAGACCTTCT
ACAGGACCTGAAATTTGTCCCATCAGATGAAAAGAAGAAACAAGGTTGTCAACGAGAAAATGAAACTCTAATACA
AAGAAGAAAAGACCAGATGCAACCAGGGGGCACTGCAATTAGTGTTACAGTACCTTATAGAGTAGTAGACCAGCC
CCTTAAACTTATGCCTCAAGACTGGGACCGCGTTGTAGCCGTTTTTGTGCAGGGTCCTGCATGGCAGTTCAAAGG
TTGGCCATGGCTTTTGCCTGATGGATCACCAGTTGATATATTTGCTAAAATTAAAGCCTTCCATCTGAAGTATGA
TGAAGTTCGTCTGGATCCAAATGTTCAGAAATGGGATGTAACAGTATTAGAACTCAGCTATCACAAACGTCATTT
GGATAGACCAGTGTTCTTACGGTTTTGGGAAACATTGGACAGGTACATGGTAAAGCATAAATCGCACTTGAGATT
C**TGA**ATTATTTGGCTCCTCCATTTCTGGAAATTGAGACTCAAGCTTTATGAATTTATCAAGAACTTAAAAATGAA
GAAGGTCACAGATTGATCTTTTATAAGACCTTATTTGATGCTTTGTGCTTCAAGGAGATGATACCTGTCATCCAT
ATAAGCAAACTTTTTGGCTTACAACTATTTTTTTAATATTAGCCTTCTAGTCTGTAATGGAAATTGTATATTTTG
ATAGAAGTTTTTTCTCCATTGGTTAAATTAGCATTACTTAAAATTTGTTTCTTTAGAAAATAAATGCAGGTTATA
AATGTGTGTATATTTAGAGATTATAAGGCTCTCTGAGCCATCTTCTGATTTTTCATTGCTCTATAATTCTTTTTA
CTGAAAATACTATGTTATGAATGGTATTAAATTTTAGTCTCTGGAACATCCAAAACCAAGCAAAGGGATGTGACT
ATTTTGAATGAATCAGAATGTCAACTTGTGTGTACACTATATCTACACTTACTCATTATTTAAAAAGAATAATGA
AAAATCTAGATCAATTCTTCAATTTGATTGAACTGTTCAGCCTTTTCAAGATTTCTTTATTTACAAATGATTACA
TTTAAATGAATGTACATTCTTCTCACTGACTTTGGTGATTTTGAAACCTAGAATGATGTGTTTCTATCTGTAATA
TCTTTCCATTTGAAAAAAATCTCAAAACACAGATTAAAACCAAAAAAAAAAAAAAAAAAAA

FIGURE 7476

MSVEKIACNQTKIMAKKRSTIKTDLDDDITALKQRSFVDAEVDVTRDIVSRERVWRTRTTILQSTGKNFSKNIFA
ILQSVKAREEGRAPEQRPAPNAAPVDPTLRTKQPIPAAYNRYDQERFKGKEETEGFKIDTMGTYHGMTLKSVTEG
ASARKTQTPAAQPVPRPVSQARPPPNQKKGSRTPIIIIPAATTSLKTMLNAKDLLQDLKFVPSDEKKKQGCQREN
ETLIQRRKDQMQPGGTAISVTVPYRVVDQPLKLMPQDWDRVVAVFVQGPAWQFKGWPWLLPDGSPVDIFAKIKAF
HLKYDEVRLDPNVQKWDVTVLELSYHKRHLDRPVFLRFWETLDRYMVKHKSHLRF

FIGURE 7477

ACACAGGAAGCTGAGCCGGCTTGGGGCCCAGCATACACAGGCCCCCAGGACCCCTGGGGAGAGGGCCCCGCTGGG
CTGGCCCTGCAGGGACCATGGAATCCAGAGCTGAAGGGGGCTCCCCTGCTGTGTTTGATTGGTTCTTCGAAGCGG
CCTGCCCTGCCTCCCTGCAGGAGGATCCCCCCATCCTGCGGCAGTTCCCTCCAGACTTCAGGGACCAGGAAGCTA
TGCAGATGGTGCCTAAATTCTGCTTCCCTTTTGATGTGGAAAGGGAGCCCCCCAGCCCCGCCGTGCAGCATTTCA
CCTTCGCCCTCACAGACCTTGCCGGCAACCGCAGATTTGGTTTCTGCCGCCTGCGGGCGGGTACCCAGAGCTGTC
TCTGCATCCTCAGCCACCTGCCTTGGTTCGAGGTGTTTTACAAGCTATTGAACACAGTGGGAGACCTCCTAGCCC
AGGACCAAGTCACCGAGGCAGAGGAACTTCTTCAAAATCTGTTTCAGCAGTCCCTGTCTGGGCCCCAGGCCTCAG
TGGGGCTTGAGCTGGGCAGCGGAGTGACGGTCTCCAGCGGGCAGGGTATCCCCCCCCCTACCCGGGGGAATAGCA
AGCCGCTTTCCTGCTTCGTGGCCCCGGACTCCGGCCGCCTGCCATCCATCCCTGAGAACAGGAACCTAACGGAGC
TGGTGGTGGCCGTGACTGACGAGAACATCGTGGGGCTGTTCGCGGCGCTCCTGGCCGAGAGAAGAGTCCTGCTCA
CCGCCAGCAAACTCAGCACCCTGACCTCGTGCGTCCACGCGTCCTGCGCGCTCCTGTACCCCATGCGCTGGGAGC
ACGTGCTGATCCCCACGCTGCCCCCACACCTGCTGGACTACTGCTGCGCGCCCATGCCCTACCTCATTGGAGTGC
ACGCCAGTCTCGCCGAGAGAGTACGAGAAAAAGCCCTGGAGGACGTCGTGGTGCTGAACGTGGACGCCAATACCT
TGGAGACGACCTTTAACGACGTGCAGGCGCTGCCTCCAGACGTGGTGTCCCTGCTGAGGCTCCGGCTCAGGAAGG
TCGCCCTGGCCCCCGGGGAAGGGGTGTCCCGTCTCTTCCTCAAAGCCCAGGCCCTGCTCTTCGGGGGGTACCGCG
ACGCACTCGTCTGCAGCCCGGGCCAGCCAGTGACCTTCAGTGAGGAAGTCTTCTTGGCCCAGAAGCCTGGGGCAC
CTCTGCAGGCCTTCCACCGGCGGGCTGTGCACCTGCAGCTGTTCAAACAGTTCATCGAAGCCCGGCTGGAGAAGC
TCAACAAGGGGGAGGGCTTCTCAGATCAATTCGAGCAGGAGATCACTGGCTGCGGGGCCTCCCCAGGGGCCCTTC
GATCCTATCAGCTCTGGGCCGACAATCTAAAGAAAGGTGGTGGCGCCCTCCTGCACTCAGTCAAGGCCAAGACCC
AACCAGCCGTCAAGAACATGTACCGCTCGGCCAAGAGTGGCTTGAAGGGGGTGCAGAGCCTTCTAATGTATAAGG
ATGGGGACTCTGTCCTGCAGAGGGGGGGCTCTCTGAGGGCCCCAGCCCTCCCCAGCCGCTCAGACCGCCTGCAGC
AACGCCTCCCAATCACTCAGCACTTTGGAAAGAACCGGCCCCTTCGCCCCAGCAGGAGACGCCAGCTGGAAGAGG
GAACTTCCGAGCCCCCAGGGGCGGGGACACCCCCACTGAGCCCTGAGGATGAGGGGTGCCCGTGGGCAGAAGAAG
CTCTGGACAGCAGCTTCTTGGGGTCTGGAGAAGAACTGGATTTGTTGAGCGAGATTCTGGACAGTCTTAGCATGG
GAGCCAAGAGCGCAGGCAGCCTGAGACCGAGCCAGAGTTTAGACTGCTGTCACAGAGGAGACCTGGACAGCTGCT
TCAGCCTGCCCAACATACTAAGATGGCAACCAGACGATAAGAAACTACCAGAGCCGGAGCCCCAGCCCCTTTCCC
TGCCATCCCTGCAAAATGCCTCGTCTTTGGATGCCACCAGCTCTTCAAAGGACTCCAGGTCCCAGCTGATACCCT
CAGAGTCCGACCAAGAAGTCACGTCTCCATCCCAGTCCTCAACAGCTTCTGCAGACCCAAGCATCTGGGGGGACC
CCAAACCCTCTCCTCTCACAGAGCCCCTAATTCTTCATCTCACCCCTTCCCACAAGGCAGCTGAAGATTTTACAG
CCCAGGAAAACCCCACTCCCTGGCTCTCCACTGCACCCACTGAGCCCAGCCCTCCAGAAAGCCCCCAAATTCTGG
CCCCCACAAAGCCCAACTTTGATATAGCCTGGACGTCCCAGCCCCTTGATCCTTCCTCAGACCCCAGTTCTCTGG
AGGACCCCAGAGCCCGGCCTCCCAAAGCCCTGCTGGCAGAGCGCGCTCACCTCCAGCCACGGGAGGAACCAGGAG
CCCTGAATTCCCCTGCTACACCCACCAGCAACTGTCAAAAGTCCCAGCCCAGCAAGCCGGCCCAGAGTCGCTGATT
CTTAAGAAGTGCTTTGAGGGTTAAGAATCAGGGGTCCAAGAGAGACCCCAGTCCCTCAATAAAGCCACAAGAGCC
CAAAAAAGCTGGTTTTTTTCCTGGTGAATTTCTCTGGTGCCCTCACTCTGCTCGGAAATCCATCCCACCCACCTC
TGTCCCTCCAAGGGCAGCCTCTCTAACTGGCTCCTAGCAGGGAATTCCAGGAAGCCTCCTGGTCTTCTAGAATCC
TGGCAACCTTACAATTCCTCTCGGCATTTGTCACTTCCATCTCAGCTAATGCACCCACCAGCTCAAACACACCAA
TAAAGCTTTTGTTACTCTCAAAAAAAAAAAAAAAAA

FIGURE 7478

MESRAEGGSPAVFDWFFEAACPASLQEDPPILRQFPPDFRDQEAMQMVPKFCFPFDVEREPPSPAVQHFTFALTD
LAGNRRFGFCRLRAGTQSCLCILSHLPWFEVFYKLLNTVGDLLAQDQVTEAEELLQNLFQQSLSGPQASVGLELG
SGVTVSSGQGIPPPTRGNSKPLSCFVAPDSGRLPSIPENRNLTELVVAVTDENIVGLFAALLAERRVLLTASKLS
TLTSCVHASCALLYPMRWEHVLIPTLPPHLLDYCCAPMPYLIGVHASLAERVREKALEDVVVLNVDANTLETTFN
DVQALPPDVVSLLRLRLRKVALAPGEGVSRLFLKAQALLFGGYRDALVCSPGQPVTFSEEVFLAQKPGAPLQAFH
RRAVHLQLFKQFIEARLEKLNKGEGFSDQFEQEITGCGASPGALRSYQLWADNLKKGGGALLHSVKAKTQPAVKN
MYRSAKSGLKGVQSLLMYKDGDSVLQRGGSLRAPALPSRSDRLQQRLPITQHFGKNRPLRPSRRRQLEEGTSEPP
GAGTPPLSPEDEGCPWAEEALDSSFLGSGEELDLLSEILDSLSMGAKSAGSLRPSQSLDCCHRGDLDSCFSLPNI
LRWQPDDKKLPEPEPQPLSLPSLQNASSLDATSSSKDSRSQLIPSESDQEVTSPSQSSTASADPSIWGDPKPSPL
TEPLILHLTPSHKAAEDFTAQENPTPWLSTAPTEPSPPESPQILAPTKPNFDIAWTSQPLDPSSDPSSLEDPRAR
PPKALLAERAHLQPREEPGALNSPATPTSNCQKSQPSKPAQSR

FIGURE 7479

GCTTCCGGCACGGGATGTTTTCGGTTGTTTGACCGAGAGAGTTGTAGGCGCAAAGCTGAGGAAAGGAGAGTGTGG
AGAGGGGCCTGGTGTGGTGGGGCCCGGTGTTTGGGACCGGAGGGTGTTGACGGCTGATGAGTTCCTTGGGTTTGC
TCTTTCTTCACCTGAAAAGAAGACTCCAGGAAGGGCAGCACATGCCGGAGAAAG**ATG**AATTGCAGCTTGACCGCC
CAGAGGCGCGGCAGTGACGCCGAGTTGGGACCCTGGGTGATGGCTGCGAGGTCCAAGGACGCGGCGCCGTCCCAA
CGCGACGGACTTTTGCCCGTGAAAGTGGAGGAAGACTCACCCGGAAGTTGGGAGCCCAACTATCCCGCGGCTTCG
CCGGACCCCGAAACTTCTCGACTGCACTTTAGGCAGCTGCGTTACCAGGAGGTGGCTGGACCGGAAGAGGCGCTG
AGCCGGCTCCGAGAACTCTGTCGTCGGTGGCTGAGACCCGAGCTGCTCTCCAAGGAGCAGATCCTGGAGCTGCTG
GTGCTGGAGCAGTTCCTCACCATCCTGCCCGAGGAGCTTCAAGCCTGGGTGCGAGAGCACTGCCCAGAGAGCGGG
GAGGAGGCGGTGGCCGTGGTGCGGGCTCTGCAGCGAGCGCTCGATGGAACCTCATCCCAGGGGATGGTGACTTTC
GAGGACACGGCTGTGTCTCTAACCTGGGAGGAGTGGGAGCGCCTGGACCCAGCACGGAGGGACTTCTGCAGAGAG
AGTGCGCAGAAGGATTCCGGGAGCACAGTTCCGCCGAGTTTGGAAAGCAGAGTGGAGAACAAAGAGTTGATTCCA
ATGCAACAAATTTTAGAAGAAGCGGAGCCACAGGGGCAACTACAAGAAGCGTTCCAGGGGAAGCGCCCCCTGTTT
TCTAAGTGTGGCAGTACCCATGAGGACAGGGTGGAAAAGCAGTCCGGAGACCCCTTGCCCCTGAAACTTGAAAAT
TCTCCTGAAGCAGAAGGACTCAACAGCATCTCAGATGTCAATAAGAATGGTTCCATAGAAGGGGAAGACTCTAAA
AATAATGAATTGCAGAACAGTGCCAGGTGTTCCAACCTTGTTCTATGTCAGCACATCCCGAAAGCAGAGAGGCCC
ACTGACAGTGAGGAACACGGGAACAAGTGCAAGCAAAGTTTCCACATGGTGACGTGGCACGTGCTGAAACCTCAC
AAGTCTGACAGTGGAGACAGTTTCCATCATTCCAGCCTTTTTGAGACCCAGAGGCAGCTCCATGAAGAAAGACCT
TATAAATGTGGTAACTGTGGGAAGAGTTTCAAACAACGCTCTGACCTCTTTAGACACCAGAGAATCCACACAGGT
GAGAAACCCTATGGCTGCCAAGAATGTGGGAAAAGCTTCAGCCAGAGTGCTGCCCTGACCAAGCACCAGAGGACA
CACACAGGCGAGAAGCCGTACACCTGTCTGAAATGTGGGGAGCGCTTCAGGCAGAATTCACACCTAAATCGTCAT
CAAAGTACCCACAGTAGAGACAAACATTTTAAATGTGAGGAATGCGGGGAAACCTGTCATATTTCCAACCTTTTT
AGACATCAGAGACTACATAAAGGGGAAAGACCCTATAAGTGTGAAGAATGCGAGAAGAGCTTCAAACAGCGCTCT
GACCTCTTTAAACACCACAGAATCCACACTGGGGAGAAGCCCTATGGATGTTCCGTCTGTGGGAAACGCTTCAAT
CAGAGTGCAACCCTCATTAAACACCAGAGAATTCACACTGGGGAAAAGCCTTACAAATGTCTTGAATGTGGGGAA
AGATTTAGACAAAGTACACACCTTATCCGACACCAAAGAATTCATCAAAATAAAGTGCTGTCGGCTGGGCGTGGT
GGCTCACGCCTA**TAA**TCCCAGCACTTTGGGAGGCCAAGGCAGGCAGATCATTTGAGATCAGGAGTTTGAAACCAG
CCTGGCCAACATGGTGAAATTCTGTCTCTACTAAAAATACAAAAATGAGCCGGGCATGGTGGTGCATGCCTGTAA
GCCCAGCTATTCGGGAGGCTGAGGTAGGAGAATCACTTGAACCCAGGAGGCGGAAGTTGCAGTGAGCTGAGATCA
TGCCACTGCACTCCAGCCTGGGCAACAGAGCGAGACTCCATCTCAAAAAAAGAAATAAAGTGCTGTCATTTTGAT
ATGTT

FIGURE 7480

MNCSLTAQRRGSDAELGPWVMAARSKDAAPSQRDGLLPVKVEEDSPGSWEPNYPAASPDPETSRLHFRQLRYQEV
AGPEEALSRLRELCRRWLRPELLSKEQILELLVLEQFLTILPEELQAWVREHCPESGEEAVAVVRALQRALDGTS
SQGMVTFEDTAVSLTWEEWERLDPARRDFCRESAQKDSGSTVPPSLESRVENKELIPMQQILEEAEPQGQLQEAF
QGKRPLFSKCGSTHEDRVEKQSGDPLPLKLENSPEAEGLNSISDVNKNGSIEGEDSKNNELQNSARCSNLVLCQH
IPKAERPTDSEEHGNKCKQSFHMVTWHVLKPHKSDSGDSFHHSSLFETQRQLHEERPYKCGNCGKSFKQRSDLFR
HQRIHTGEKPYGCQECGKSFSQSAALTKHQRTHTGEKPYTCLKCGERFRQNSHLNRHQSTHSRDKHFKCEECGET
CHISNLFRHQRLHKGERPYKCEECEKSFKQRSDLFKHHRIHTGEKPYGCSVCGKRFNQSATLIKHQRIHTGEKPY
KCLECGERFRQSTHLIRHQRIHQNKVLSAGRGGSRL

FIGURE 7481

TCTGGAACCTATCTTTGACAGGTATATAACTCTGTAGCCTGAGGCACTGGAGTTGGACACAAATAGGCAGAACTA
GGTCTCCCAGGTGAAACCATTGCATCGATGCTCAGTGCTGGTATGTTTATCTGGTGTTGTCAGTGAGTCTGCCGA
TGCAGGCTCAGTGCTGGTATGTTTACCTGATTATGTCAGTGAGTCTGTGGATCCAGGCTCAGTGCTGGTATATTT
ACTTGGTTGTGTCAGTGAGTCTACGGATCCAGGCTCAATGGTGGTATGTTTACCTGGTGTTGTCGTGAGTCTGTG
GATCCAGGCTCAGTGCTGGCATGTTGACCTGGTGTTGTCAGTGAGTCTGTGGATCCAGGGTCAGTGCTGGTATGT
TTAGCTGACATTGGCAGTGAGTCCATGGATCCAGGCTCAGTGCTGGTATGTTGACCTGGTGTTGTCAGTGAGTCT
GTGGATTCAGGCTCAGTGCTGGTATGTTGACCTGACATTAGCAGTGAGTCTGTGGATCCAGGCTCAGTTCCACAG
AGGTTGTATAAACATGGTCTCAGGTGGGTTCTTGACACCTGGGTTCAAGCACAAAAGTACTGCTGGGCTTGTTAG
GTGAAGTGGGTGGGGTCTAGCACAGGAATGCATAATGGTGAGGCTGGCCAGGCCTGGGGAAGGTGGGTCAGACAC
AGGTGAGACCTTCGGTGGTAGGGTCAGACACAATTAGGTGAGTAGTGTGGGCTCTTATATCAAGGGAAAGCCGTA
GTCATTGTAGGTGTTTGTACCTGGGTCTGCCTGGTGATGTCTAGGGAACCCTAAAGATCAGCTGGGACAGGTATC
TGTTCTCAGCACCCTGGTCAGGTATGATAGACAGAGCTCAGGGTAATACAGAGGGCTGAGGATCTGTAACCAGTC
CATGGTGTTGGTCTGCATCCAAGATGGCATTGTGCTCCAGTTGACACAGGGTCTGAGTTAAAAGTGAGGAAAGTT
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN

FIGURE 7482

LEPIFDRYITL

FIGURE 7483A

AGCCAAGCCCAGCAGAGTGGCCCCACTGGCCAGCCGAGCCAGCCCCCAGGCACAGCCACCACGCCACTGGAGGGT
GACGGCCTCTCCGCGCCCACCGAGGTTGGCGACAGCCCCCTGCAGGCCCAGGCTTTGGGAGAGGCAGGAGTGGCC
ACAGGAAGTGAGGCTCAGAGCAGCCCGCAATTCCAGGACCACACGGAAGGGGAGGACCAGGACGCTTCCATCCCC
TCTGGGGGCAGAGGCCTGTCCCAGGAGGGGACCGGTCCCCCCACCTCTGCTGGTGAAGGCCATTCTAGGACTGAA
GATGCTGCCCAGGAGCTCCTGTTGCCTGAGTCAAAAGGAGGCAGCTCTGAGCCCGGGACAGAACTGCAGACCACC
GAGCAACAGGCAGGGGCCTCAGCCTCTATGGCAGTTGATGCTGTAGCTGAGCCAGCCAATGCAGTTAAAGGGGCC
GGGAAGGAAATGAAAGAGAAGACCCAGAGAATGAAACAGCCACCAGCAACCACTCCTCCTTTCAAAACACACTGC
CAGGAAGCTGAGACCAAGACCAAGGACGAGATGGCTGCTGCTGAAGAAAAAGTCGGTAAGAATGAACAAGGGGAG
CCTGAAGACCTCAAGAAGCCAGAGGGGAAGAACAGAAGTGCAGCTGCTGTGAAAAACGAGAAGGAGCAAAAAAAC
CAGGAAGCAGATGTCCAGGAAGTGAAGGCAAGCACGCTGAGCCCGGGTGGAGGAGTCACCGTGTTCTTCCACGCC
ATCATCTCTCTTCATTTCCCATTCAATCCTGACCTCCATAAAGTCTTCATCAGAGGAGGAGAAGAATTTGGGGAG
TCAAAATGGGACAGCAATATCTGTGAGCTGCACTACACCAGAGACTTGGGTCATGACCGCGTTCTTGTTGAAGGC
ATTGTCTGCATTTCCAAGAAGCACCTAGATAAATACATTCCTTACAAGTACGTCATTTATAATGGGGAATCTTTT
GAGTATGAGTTCATTTACAAGCACCAGCAGAAGAAGGGCGAGTACGTCAACCGCTGTCTGTTCATAAAATCTTCA
CTTCTGGGCTCAGGAGACTGGCATCAGTACTATGACATAGTTTATATGAAGCCTCATGGGAGACTCCAGAAAGTC
ATGAACCACATCACAGACGGGCCGAGGAAGGACCTGGTGAAGGGGAAGCAGATTGCCGCTGCGCTCATGCTGGAC
AGCACCTTCAGCATCCTGCAGACCTGGGACACCATCAACCTGAACAGCTTCTTCACCCAGTTCGAGCAGTTTTGC
TTTGTCCTGCAACAGCCTATGATTTATGAAGGACAGGCACAGCTGTGGACCGATTTGCAGTACAGGGAGAAAGAG
GTGAAGAGATACCTGTGGCAACATCTGAAAAAACACGTGGTACCATTGCCGGACGGAAAAAGCACGGACTTTTTG
CCTGTGGACTGCCCAGTGAGGAGTAAACTGAAAACAGGCCTGATTGTCCTTTTTGTAGTGGAAAAAATTGAGCTT
TTATTAGAAGGCAGCCTGGACTGGTTGTGTCACCTCCTAACCTCAGATGCCAGCTCACCAGATGAGTTTCACCGT
GACCTAAGCCACATCCTTGGGATACCTCAGAGCTGGCGGCTGTACCTGGTGAACCTGTGCCAAAGATGCATGGAC
ACAAGGACGTACACCTGGCTGGGCGCCCTGCCTGTCCTGCACTGCTGTATGGAGCTGGCCCCGCGGCACAAGGAT
GCCTGGAGACAGCCTGAGGACACCTGGGCCGCTCTGGAGGGACTCTCCTTCTCACCGTTCCGGGAACAAATGCTA
GATACGAGTTCCCTACTTCAGTTTATGAGAGAGAAGCAGCATTTGCTGAGCATAGACGAGCCTCTCTTCCGGTCC
TGGTTTAGTCTGCTACCTCTGAGTCACCTGGTTATGTATATGGAAAACTTCATTGAGCACCTGGGTCGTTTTCCT
GCTCATATCCTGGACTGTCTTTCAGGGATTTACTACCGGCTTCCGGGACTTGAGCAAGTCTTGAATACGCAGGAT
GTTCAGGATGTTCAGAACGTTCAGAACATTTTAGAAATGCTGTTGCGACTCCTGGACACTTACCGGGACAAGATT
CCCGAGGAGGCCTTGTCACCATCCTACCTGACTGTGTGTCTGAAACTGCATGAAGCCATCTGCAGCAGCACAAAG
CTACTTAAGTTTTACGAGCTGCCAGCCTTATCTGCCGAGATTGTCTGCAGAATGATTAGACTTCTATCTCTGGTG
GATTCTGCAGGACAGAGAGATGAAACTGGAAATAATTCAGTCCAAACAGTCTTCCAAGGGACCCTTGCTGCTACG
AAAAGGTGGCTCCGAGAAGTTTTTACAAAGAACATGCTCACATCTTCAGGTGCCTCATTCACATACGTCAAGGAA
ATTGAGGTCTGGAGGCGGCTGGTGGAAATCCAATTCCCCGCGGAGCATGGCTGGAAGGAGTCGTTGCTGGGAGAC
ATGGAATGGAGGCTCACAAAGGAGGAACCCCTCTCCCAGATCACTGCCTACTGCAATAGTTGCTGGGACACCAAA
GGCTTAGAGGACAGTGTGGCCAAGACCTTCGAGAAATGCATCATTGAAGCCGTGAGCTCAGCCTGCCAGTCTCAG
ACCAGTATCCTTCAGGGGTTCTCTTACTCTGATTTGCGGAAATTTGGCATCGTCTTGTCTGCTGTGATCACTAAG
TCCTGGCCTAGGACCGCGGACAACTTCGATGACATTTTAAAGCATCTGCTCACGTTGGCAGATGTCAAGCACGTC
TTCAGATTGTGTGGAACCGACGAGAAAATACTAGCAAATGTCACAGAGGATGCCAAGAGGCTGATAGCTGTTGCC
GACTCTGTGTTGACGAAAGTTGTTGGTGACCTCCTAAGTGGCACGATTTTAGTTGGACAACTGGAGCTGATTATA
AAGCACAAGAATCAGTTTCTTGACATCTGGCAACTGAGGGAAAAAAGTCTTTCACCCCAGGATGAAAAATGTGCT
GTGGAGGAAGCACTGGATTGGAGAAGGGAGGAACTGTTACTTCTAAAGAAAGAGAAAAGATGTGTTGATAGTCTC
CTGAAGATGTGTGGGAACGTGAAACATCTGATACAAGTGGACTTTGGAGTGCTTGCAGTAAGACACTCACAAGAC
CTCAGCAGTAAAAGATTAAATGACACCATGACAGTGAGACTGTCCACCTCCTCGAACTCGCAGAGGGCAACGCAT
TACCACCTGAGCTCCCAGGTCCAAGAAATGGCTGGGAAGATAGACTTGCTCAGAGACAGCCACATCTTCCAGCTC
TTCTGGCGGGAAGCCGCAGAGCCGCTGAGTGAGCCTAAGGAGGACCAGGAAGCCGCAGAGTTGCTGAGTGAGCCC
GAAGAAGAATCAGAAAGGCACATCCTTGAGCTTCAAGAGGTGTATGACTATTTGTATCAGCCTTCTTACAGAAAG
TTCATTAAGTTGCACCAGGATCTAAAGTCAGGAGAGGTCACCCTTGCAGAGATTGATGTCATCTTCAAGGACTTT
GTGAATAAATACACGGACCTGGATTCAGAACTTAAGATCATGTGCACCGTGGACCACCAGGGCCAAAGAGATTGG

FIGURE 7483B

ATCAAGGACCGAGTGGAACAGATCAAGGAATACCATCACCTGCACCAGGCTGTCCACGCAGCCAAGGTCATCTTG
CAGGTCAAAGAGAGCCTGGGACTGAACGGTGACTTCAGTGTTCTCAACACTTTACTAAATTTTACTGATAACTTC
GACGACTTTCGCCGTGAAACACTGGACCAGATCAACCAGGAGCTCATCCAGGCCAAAAAGCTGCTCCAGGACATC
AGCGAGGCCCGGTGCAAGGGGCTGCAGGCTCTGTCCCTGAGAAAGGAGTTCATCTGCTGGGTCCGGGAGGCTCTT
GGAGGCATCAATGAGCTGAAGGTGTTTGTGGACCTGGCCTCCATCTCAGCGGGGGAGAATGACATTGATGTGGAC
CGGGTGGCCTGCTTCCATGACGCTGTGCAGGGCTACGCATCCCTGCTATTTAAGCTGGACCCCAGCGTGGACTTC
AGTGCATTCATGAAGCATCTGAAAAAGCTGTGGAAGGCTCTGGATAAGGACCAGTACCTGCCCAGGAAACTGGTG
AGTCTTATTCTGTCTCTAATGCAGATTTTGTTGAATAGAGCATTGCTTAGCAACGTTAGGGCAGTGACTGTGGAA
ATGGTGGCACACCTGTGTGGTAGGTTTGTACACAGCCGTTTTCAA**TGA**TATTTAAAAAGCTTTTCTTCATAAATG
GAAATTCACCATCTTGTTACCTAGAAAGCAGGATACAAAATTACATGACACATAGTAATCTCTAAGGTGCAAAAC
ACACGTGGAAAAAAGACAGAAGGGAAATATGCTGAAACGTTGCCAGGAGTTTTCTCTGAATGGTTGTAATTGTCA
TTTTATTCTGTTACTTTTTGTTATTTTCTATAATTGATAGAATTTTTTATCAGAAAAAAGTAAACATTTAAAATT
AGCCAGGCATGGTGGTGTGCGCCTGTAATCCCAGCTACTCTGGAGGCTGAGACAGAATTGCTTGAACCCGGGAGG
CAGAGATAGCAGTGAACTGAGATCACACCACTGTACTCCAGCCTGAGTGACAAAGTGAGACTCTGTCTC

FIGURE 7484

SQAQQSGPTGQPSQPPGTATTPLEGDGLSAPTEVGDSPLQAQALGEAGVATGSEAQSSPQFQDHTEGEDQDASIP
SGGRGLSQEGTGPPTSAGEGHSRTEDAAQELLLPESKGGSSEPGTELQTTEQQAGASASMAVDAVAEPANAVKGA
GKEMKEKTQRMKQPPATTPPFKTHCQEAETKTKDEMAAAEEKVGKNEQGEPEDLKKPEGKNRSAAAVKNEKEQKN
QEADVQEVKASTLSPGGGVTVFFHAIISLHFPFNPDLHKVFIRGGEEFGESKWDSNICELHYTRDLGHDRVLVEG
IVCISKKHLDKYIPYKYVIYNGESFEYEFIYKHQQKKGEYVNRCLFIKSSLLGSGDWHQYYDIVYMKPHGRLQKV
MNHITDGPRKDLVKGKQIAAALMLDSTFSILQTWDTINLNSFFTQFEQFCFVLQQPMIYEGQAQLWTDLQYREKE
VKRYLWQHLKKHVVPLPDGKSTDFLPVDCPVRSKLKTGLIVLFVVEKIELLLEGSLDWLCHLLTSDASSPDEFHR
DLSHILGIPQSWRLYLVNLCQRCMDTRTYTWLGALPVLHCCMELAPRHKDAWRQPEDTWAALEGLSFSPFREQML
DTSSLLQFMREKQHLLSIDEPLFRSWFSLLPLSHLVMYMENFIEHLGRFPAHILDCLSGIYYRLPGLEQVLNTQD
VQDVQNVQNILEMLLRLLDTYRDKIPEEALSPSYLTVCLKLHEAICSSTKLLKFYELPALSAEIVCRMIRLLSLV
DSAGQRDETGNNSVQTVFQGTLAATKRWLREVFTKNMLTSSGASFTYVKEIEVWRRLVEIQFPAEHGWKESLLGD
MEWRLTKEEPLSQITAYCNSCWDTKGLEDSVAKTFEKCIIEAVSSACQSQTSILQGFSYSDLRKFGIVLSAVITK
SWPRTADNFDDILKHLLTLADVKHVFRLCGTDEKILANVTEDAKRLIAVADSVLTKVVGDLLSGTILVGQLELII
KHKNQFLDIWQLREKSLSPQDEKCAVEEALDWRREELLLLKKEKRCVDSLLKMCGNVKHLIQVDFGVLAVRHSQD
LSSKRLNDTMTVRLSTSSNSQRATHYHLSSQVQEMAGKIDLLRDSHIFQLFWREAAEPLSEPKEDQEAAELLSEP
EEESERHILELQEVYDYLYQPSYRKFIKLHQDLKSGEVTLAEIDVIFKDFVNKYTDLDSELKIMCTVDHQGQRDW
IKDRVEQIKEYHHLHQAVHAAKVILQVKESLGLNGDFSVLNTLLNFTDNFDDFRRETLDQINQELIQAKKLLQDI
SEARCKGLQALSLRKEFICWVREALGGINELKVFVDLASISAGENDIDVDRVACFHDAVQGYASLLFKLDPSVDF
SAFMKHLKKLWKALDKDQYLPRKLVSLILSLMQILLNRALLSNVRAVTVEMVAHLCGRFVHSRFQ

FIGURE 7485

GGTCAGCGGCGCGGGTGCTGCGCCTAGCTGCGCACCATGGCCGGGTTGCTGGCGTTGCTGGGTCCGGCAGGCAGG
GTGGGCGCCCGGGTCCGGCCTCGCGCCACCTGGCTCCTGGGCGCCACCGCCCCCTGCGCCCCGCCGCCCCTGGCC
CTGGCCCTGCTCCCGCCCAGGCTAGACGCCCGGCTGCTCCGCACGGCGCGCGGGGACTGCCGCGGCCACCAGGAC
CCCAGCCAGGCCACGGGGACAACAGGCAGCAGCGTCAGCTGCACAGAGGAGAAAAAGCAAAGCAAGTCACAGCAA
CTGAAAAAGATTTTTCAAGAGTATGGCACTGTTGGCGTGTCATTGCACATTGGAATCTCATTAATTTCCTTGGGC
ATATTTTACATGGTTGTGTCAAGTGGTGTGGACATGCCTGCAATCCTGCTGAAACTCGGATTTAAAGAGTCCCTG
GTACAGTCAAAAATGGCAGCAGGCACAAGTACCTTCGTGGTGGCCTATGCAATCCACAAGCTGTTTGTGCCAGTG
AGAATCAGCATTACGCTAGTCTCTGTGCCCTTGATTGTCAGATATTTTCGAAAAGTGGGATTTTTTAAACCTCCA
GCTGCAAAACCTTAATGAACTCTTCAGTTGTACACACTGAAAACCTATTTCTTCTAAATTACATGATTTGGATTG
GTTTTAGGGTTTTAGGGTTGTAGGGTTTCTTTTGGAGAGGTAGGGGGCTAATTGCTATGTTCTCATGGATAAACT
TTGCCAGCAAAAATCAGGCTTTTGAACAATTTTAATTTTTTGCCTCATAAATTTTGTGAATGCTATTCATTATAG
GGCTTGTATATATAATCTAAAATGTCAGCAAGGCATCGGAGATGGGTTAACATCTCAAAACAAAATAGCCTACAA
ATGTTCCTTGTGGGAGACTTTGGCGAGGGTCTGTGGGTAAAAGCACCAGGGGGTTAATCTTGGCTCAGTTTCCTA
AAAAGCATTGATTAATTTAACTGGCTTTTAAATATCCCCTTCCGCTGATATTTGTTGTCAGCTGCCTACAGTTTA
ATATGCAGCGTTCACAAAACAGCTGCCAGTGCTACAATTAATGAAGCAAAACTTAATATGTAATCACAATCTAAA
TTAGCATCAATACTTTGACATTCATTACATTGGTTTGGGGGAAGAAAAGTATTTCTGGTATGTTTCATTGATCCC
CAGATACCTTCCAATCTGGACATGATGGGGCTGATTCCAGATGGTTTTTCTGAAATTTCATTAAGGTAGGTCAGC
GTCATTTGTCTCTGTTTAGGTAAAATATAAAAACCCTGCCCAGTAGCAGTGGCATCGCTTGGTTCCTGATGCCCA
TGTTCCAGAGGAATTCGGATACCACAAACAGCTAAGACAATCTCAGCTTTTCTTAGACAATCTTCTATCTCAAAC
TTCAGACATTCCAGAATTGTCATGATGTTTACACTGTCTGAGTTAAAAATCCTGTTCAAGAAAAAAAAAAGATTTT
GTATCACTTCTTAAAAAGGAATATTCATAGCACTTGTCACAAATAGAAGGCAACCATGAGATAATACAAGCCAGG
GAGAGGCTTGTATTACATGACAGGTGTAATTAGTCTGCTGAGCCAGCTTTACCCAATGAAGGGCATATGTGTTAG
AGAGATTAGCTAAGAGTAGAAATTCGAGCATAGAGGCCAGGTGCGGTGGCTCACGCCTGTAATCCCAGCACTTTG
GGAGGTTGAGGCAGGCGTGTCACTTGAGGCCAGGAGTTCGAGACCAGCCTGGCCAACATGATGAAACCCCGTCTC
TACTACAAATACAAAAATTAGCCGGGTGTGGTGGCACACGCCTGTAGTCCCAGCTACTGGGGAGGCTGAGGCAGC
ATTGCTTGAACCCAGGAGGTGGAGGTTGCAGTGAGCCAAGATCACACCACTGCACTCCAGCCTGGGCGACAGAGG
GAGACACTGTCTCCAAAAGAAAGAAATCCCAGCGTAGATCCAAACTGAGACACTGAGGCTTCGTCCTTATAGTAG
TCAGGAGCAGGCGATTGAAGTAATTCTGTCCTGCGGGGTTCAGCATCATGCACGTTCCCCCTGGGCCATTCTCTG
ATGCAGGGCACTTGCTCCACACTCTGGGAACCCAGATTCACCAGTCTGCCCTGTCACGTAGTTGAAGGAGTTGCA
TTTATCTTTCTGGCTCCTAATTCCTTTAAAATTACATTTGTTGCAGAACCTCCACAAGGCTAAATAAAATTACAT
TTGTGACCATCAGAGAACTGAATAAACCATTAACTGGCCATCCTGGTTTTGCAGAGATCAGGTTGTTGACAGTTC
CTGGTTGACCCACAGCTACCCATGTCAGTTATCTCCACTAACATATCCAAGAATCTTTGTAGGACAATTTCTCCA
CCTGCAAGGTCTTTCAGGTAGAACTCTTCTTTTAAGGCAATTAGCCCATTGCCAAAAGGTTTTACTGTCTTAAAG
CTGTCTTTCTGAGATCTAATTCCAAGGACTTCTCCACAGCTAAGTGAGATGCCTCACACCATTAGGTGATGCTTT
GGACAGAACAGAGTATTTTCATCTTGTGTTTAAAGCAATTCCTTGGCTTCGGCTCCTCACCACTTTCTATGCCAG
TCTCCCATTTATGTCCCTAGTAATGCCTATGCAAAAAAAAAAAAAAAAAAAAA

FIGURE 7486

MAGLLALLGPAGRVGARVRPRATWLLGATAPCAPPPLALALLPPRLDARLLRTARGDCRGHQDPSQATGTTGSSV
SCTEEKKQSKSQQLKKIFQEYGTVGVSLHIGISLISLGIFYMVVSSGVDMPAILLKLGFKESLVQSKMAAGTSTF
VVAYAIHKLFVPVRISITLVSVPLIVRYFRKVGFFKPPAAKP

FIGURE 7487

TTTTTTTTTAGGCTGTAAAAATGGTAGCTGCTGTTTATTTTTCCAGTTGCCTGGAATTGCCTTTTCATTTGATGC
ATTCCAGCGGTTCTCTTGCTGCCCACATGGGACTCAGTAATGTTATTACATCAATATCTTGAAATGTTTCTTCAT
CTGTGTAATAAAGTAGTTGAAAATAATTTTAAATTATCACATGAGCATTAGTACTTTATAAAAATTGATCTAGAA
GACTCTTTAGAGAATGCTACCAGGTATTGTTTGTCAATAAGAAAACAAAATGAGGCCCTATGATTCTAGGTGAAT
TTTAAAAAAATTTTTCCCCAAGGAACAATTCTTAAAACTTTCAGTTACAGGGAAGAGAAGAAAATTGTACCTTCT
AACAGTTATTTGTTTTG

FIGURE 7488

AACAGAGTTCAGACCTTGCCGTCGCGCGCGCGTTAAGTACCAGGAGAACTACATAGCCCAGCATGCAACAGTCTC
AACTTTTTCACGGACACTACATTTCCCAGAAGGCAGTTCGCACCGCAGTGTTTTCTGGGATGGGAACCACGCCGC
TTCCCAGTCTCTGTGCGAGGCGTGAAGCGCGGACCTTTCAACAAGGGCTTTATTAATTCTCACGCTGCGGCCCTG
GAAAGCGATGGAGGTGGCGGCTAATTGCTCCCTACGGGTGAAGAGACCTCTGTTGGATCCCCGCTTCGAGGGTTA
CAAGCTCTCTCTTGAGCCGCTGCCTTGTTACCAGCTGGAGCTTGACGCAGCTGTGGCAGAGGTAAAACTTCGAGA
TGATCAATATACACTGGAACACATGCATGCTTTTGGAATGTATAATTACCTGCACTGTGATTCATGGTATCAAGA
CAGTGTCTACTATATTGATACCCTTGGAAGAATTATGAATTTAACAGTAATGCTGGACACTGCCTTAGGAAAACC
ACGAGAGGTGTTTCGACTTCCTACAGATTTGACAGCATGTGACAACCGTCTTTGTGCATCTATCCATTTCTCATC
TTCTACCTGGGTTACCTTGTCAGATGGAACTGGAAGATTGTATGTCATTGGAACAGGTGAACGTGGAAATAGCGC
TTCTGAAAAATGGGAGATTATGTTTAATGAAGAACTTGGGGATCCTTTTATTATAATTCACAGTATCTCACTGCT
AAATGCTGAAGAACATTCTATAGCTACCCTACTTCTTCGAATAGAGAAAGAGGAATTGGATATGAAAGGAAGTGG
TTTCTATGTTTCTCTGGAGTGGGTCACTATCAGTAAGAAAAATCAAGATAATAAAAAATATGAAATTATTAAGCG
TGATATTCTCCGTGGAAAGTCAGTGCCACATTATGCTGCTATTGAGCCTGATGGAAATGGTCTAATGATTGTATC
CTACAAGTCTTTCACATTTGTTCAGGCTGGTCAAGATCTTGAAGAAAATATGGATGAAGACGTATCAGAGAAAAT
CAAAGAACCTCTGTATTACTGGCAACAGACTGAAGATGATTTGACAGTAACCATACGGCTTCCAGAAGACAGTAC
TAAGGAGGACATTCAAATACAGTTTTTGCCTGATCACATCAACATTGTACTGAAGGATCACCAGTTTTTAGAAGG
AAAACTCTATTCATCTATTGATCATGAAAGCAGTACATGGATAATTAAAGAGAGTAATAGCTTGGAGATTTCCTT
GATTAAGAAGAATGAAGGACTGACCTGGCCAGAGCTAGTAATTGGAGATAAACAAGGGGAACTTATAAGAGATTC
AGCCCAGTGTGCTGCAATAGCTGAACGTTTGATGCATTTGACCTCTGAAGAACTGAATCCAAATCCAGATAAAGA
AAAACCACCTTGCAATGCTCAAGAGTTAGAAGAATGTGATATTTTCTTTGAAGAGAGCTCCAGTTTATGCAGATT
TGATGGCAATACATTAAAAACTACTCATGTGGTGAATCTTGGAAGCAACCAGTACCTTTTCTCTGTCATAGTGGA
TCCTAAAGAAATGCCCTGCTTCTGTTTGCGCCATGATGTTGATGCCCTACTCTGGCAACCACACTCCAGCAAACA
AGATGATATGTGGGAGCACATCGCAACTTTCAATGCTTTAGGCTATGTCCAAGCATCAAAGAGAGACAAAAAATT
TTTTGCCTGTGCTCCAAATTACTCGTATGCAGCCCTTTGTGAGTGCCTTCGTCGAGTATTCATCTATCGTCAGCC
TGCTCCCATGTCCACTGTACTTTACAACAGAAAGGAAGGCAGGCAAGTAGGACAGGTTGCTAAGCAGCAAGTAGC
AAGCCTAGAAACCAATGATCCTATTTTAGGATTTCAGGCAACAAATGAGAGATTATTTGTTCTTACTACCAAAAA
CCTCTTTTTAATAAAAGTAAATACAGAGAATTAATTATTCTAACATATTGGCCTCTTTGTACTGGAAAAGTATTC
AGTGGTACCTGGAGGTCTGGACAGTTATACTGTAACCTCTTAAGTTTTAATGTGCTAAATATATCTTGTATGATT
TTTTATTTTTTAATAACATTGGAAATATATTCAAGAGATTATGATTCTGTAAAGCTGTGGAATGAAGCTGCAGAT
TTAGAGAACATTGGCTTCTGAAAAAAAAAAAGAGTGAAGATAGTACTAGCAAGTATACTTATTTTTTAAAACAGGC
TAGAATCTCATGTTTTATATGAAAGATGTACAATTCAGTGTTTAAAAATAAAAATATTTATTGTGTAAA

FIGURE 7489

MEVAANCSLRVKRPLLDPRFEGYKLSLEPLPCYQLELDAAVAEVKLRDDQYTLEHMHAFGMYNYLHCDSWYQDSV
YYIDTLGRIMNLTVMLDTALGKPREVFRLPTDLTACDNRLCASIHFSSSTWVTLSDGTGRLYVIGTGERGNSASE
KWEIMFNEELGDPFIIIHSISLLNAEEHSIATLLLRIEKEELDMKGSGFYVSLEWVTISKKNQDNKKYEIIKRDI
LRGKSVPHYAAIEPDGNGLMIVSYKSFTFVQAGQDLEENMDEDVSEKIKEPLYYWQQTEDDLTVTIRLPEDSTKE
DIQIQFLPDHINIVLKDHQFLEGKLYSSIDHESSTWIIKESNSLEISLIKKNEGLTWPELVIGDKQGELIRDSAQ
CAAIAERLMHLTSEELNPNPDKEKPPCNAQELEECDIFFEESSSLCRFDGNTLKTTHVVNLGSNQYLFSVIVDPK
EMPCFCLRHDVDALLWQPHSSKQDDMWEHIATFNALGYVQASKRDKKFFACAPNYSYAALCECLRRVFIYRQPAP
MSTVLYNRKEGRQVGQVAKQQVASLETNDPILGFQATNERLFVLTTKNLFLIKVNTEN

FIGURE 7490

TGGTTGGTTGTGAAGATGGATCTGTGAAACTATTTCAAATTACCCCAGACAAAATCCAGTTTGAAAGAAATTTTG
ATCGGCAGAAAAGTCGCATCCTGAGTCTCAGCTGGCATCCCTCTGGTACCCACATTGCAGCTGGTTCCATAGACT
ACATTAGTGTGTTTGATGTCAAATCAGGCAGCGCTGTTCATAAGATGATTGTGGACAGGCAGTATATGGGCGTGT
CTAAGCGGAAGTGCATCGTGTGGGGTGTCGCCTTCTTGTCCGATGGCACTATCATAAGTGTGGACTCTGCTGGGA
AGGTGCAGTTCTGGGACTCAGCCACTGGGACGCTTGTGAAGAGCCATCTCATCGCTAATGCTGACGTGCAGTCCA
TTGCTGTAGCTGACCAAGAAGACAGTTTCGTGGTGGGCACAGCCGAGGGAACAGTCTTCCATTTTCAGCTGGTCC
CTGTGACATCTAACAGCAGTGAGAAGCAGTGGGTGCGGACAAAACCGTTCCAGCATCACACTCATGACGTGCGCA
CTGTGGCCCACAGCCCAACAGCGCTGATATCTGGAGGCACTGACACCCACTTAGTCTTTCGTCCTCTCATGGAGA
AGGTGGAAGTAAAGAATTACGATGCCGCTCTCCGAAAAATCACCTTTCCCCACCGATGTCTCATCTCCTGTTCTA
AAAAGAGGCAGCTTCTCCTCTTCCAGTTTGCTCATCACTTAGAACTTTGGCGACTGGGATCCACAGTTGCAACAG
GCAAGAATGGGGATACTCTTCCACTCTCTAAAAGTGCAGATCATTTACTGCACCTAAAGACAAAGGGTCCTGAGA
ACATTATCTGTAGCTGTATCTCCCCATGTGGAAGTTGGATAGCCTATTCTACAGTTTCTCGGTTTTTTCTCTATC
GGCTGAATTATGAACATGACAACATAAGCCTCAAAAGGGTTTCCAAAATGCCAGCATTCCTTCGCTCTGCCCTTC
AGATTTTGTTTTCTGAAGATTCAACAAAGCTCTTTGTAGCATCAAATCAAGGAGCTCTGCATATTGTTCAGCTGT
CAGGAGGAAGCTTCAAGCACCTGCATGCTTTCCAGCCTCAGTCAGGAACAGTGGAGGCCATGTGTCTTTTGGCAG
TCAGTCCAGATGGGAATTGGCTAGCTGCATCAGGTACCAGTGCTGGAGTCCATGTCTACAACGTAAAACAGCTAA
AGCTTCACTGCACGGTGCCTGCTTACAATTTCCCAGTGACTGCTATGGCTATTGCCCCCAATACCAACAACCTTG
TCATCGCTCATTCGGACCAGCAGGTATTTGAGTACAGCATCCCAGACAAACAGTATACAGATTGGAGCCGGACTG
TCCAGAAGCAGGGCTTTCACCACCTTTGGCTCCAAAGGGATACTCCTATCACACACATCAGTTTTCATCCCAAGA
GACCGGTGCACATCCTTCTCCATGATGCCTACATGTTCTGCATCATTGACAAGTCATTGCCCCTTCCAAATGACA
AAACCTTACTCTACAATCCATTTCCTCCCACGAATGAATCAGATGTCATCCGGAGGCGCACAGCTCATGCTTTTA
AAATTTCTAAGATATATAAGCCTCTACTCTTCATGGATCTTTTGGATGAAAGAACACTCGTGGCAGTAGAACGGC
CTCTGGATGACATCATTGCTCAGCTCCCACCACCCATTAAAAAGAAGAAATTTGGAACCTAAAACAGGGCACTGT
CTGTGTCCTTCCTTGAACTGTCTACCCTGTTGCTTTTCACAAATCATGGTAATAAAACAAGTTATTCTTGAAT

FIGURE 7491

MIVDRQYMGVSKRKCIVWGVAFLSDGTIISVDSAGKVQFWDSATGTLVKSHLIANADVQSIAVADQEDSFVVGTA
EGTVFHFQLVPVTSNSSEKQWVRTKPFQHHTHDVRTVAHSPTALISGGTDTHLVFRPLMEKVEVKNYDAALRKIT
FPHRCLISCSKKRQLLLFQFAHHLELWRLGSTVATGKNGDTLPLSKSADHLLHLKTKGPENIICSCISPCGSWIA
YSTVSRFFLYRLNYEHDNISLKRVSKMPAFLRSALQILFSEDSTKLFVASNQGALHIVQLSGGSFKHLHAFQPQS
GTVEAMCLLAVSPDGNWLAASGTSAGVHVYNVKQLKLHCTVPAYNFPVTAMAIAPNTNNLVIAHSDQQVFEYSIP
DKQYTDWSRTVQKQGFHHLWLQRDTPITHISFHPKRPVHILLHDAYMFCIIDKSLPLPNDKTLLYNPFPPTNESD
VIRRRTAHAFKISKIYKPLLFMDLLDERTLVAVERPLDDIIAQLPPPIKKKKFGT

FIGURE 7492

GAATCAAGCTCATCTATGATGCTGGTGTCTCCTTCATCGTCGTCCTCGTGGTCTGGGCCGGCTGCTCCGGGCTGG
TTTTCCTCAACTGCTTCTTTAACTGGCCCCTTGAGCCCTTCCCGGGGCCGGAGGACATGGACTACTCGGTGAAGA
TCAAGTTCAGCTGGCTGGGCTTTGACCACAAGATCACAGGGAAGCAGTTCTACAAGCAGGTGACCACGGTGGGCC
GGCGCCTGAGTGTGGGCAGCTCCATGAGGAGTGCCAAGGAGCAGGTGGCGCTGCAGGAGGGCCACAAGCTGTGCC
TGTCCACCGTCGACCTGGAGGTGAAGTGCCAGCCGGATGCCGCAGTGGTCCCCTCCTTCATGCACAGCGTGTTCA
GCCCCATCCTGCTGCTCAGCCTGGTCACCATGTGCGTCACGCAGCTGCGGCTCATCTTCTACATGGGGGCTATGA
ACAACATCCTCAAGTTCCTGGTCAGCGGCGACCAGAAGACAGTTGGCCTCTACACCTCCATCTTCGGCGTGCTCC
AGCTGCTGTGCCTGCTGACGGCCCCCGTCATTGGCTACATCATGGACTGGAGGCTGAAGGAGTGTGAAGACGCCT
CCGAGGAGCCCGAGGAGAAAGACGCCAACCAAGGCGAGAAGAAAAAGAAGAAGCGGGACCGGCAGATCCAGAAGA
TCACTAATGCCATGCGGGCCTTCGCCTTCACCAACCTGCTGCTGGTGGGCTTTGGGGTGACCTGCCTCATTCCCA
ACCTGCCTCTCCAGATCCTCTCCTTCATCCTGCACACAATCGTGCGAGGATTCATCCACTCCGCTGTCGGGGGCC
TGTACGCTGCCGTGTACCCCTCCACCCAGTTCGGCAGCCTCACGGGACTGCAGTCTCTGATCAGCGCGCTCTTCG
CCCTTCTGCAGCAGCCGCTGTTTCTGGCCATGATGGGTCCTCTCCAGGGAGACCCTCTGTGGGTGAACGTGGGGC
TGCTCCTTCTCAGCCTGCTGGGCTTCTGCCTCCCGCTCTACCTGATCTGCTACCGGCGCCAGCTGGAGCGGCAGC
TGCAGCAGAGGCAGGAGGATGACAAACTCTTCCTCAAAATCAACGGCTCGTCCAACCAGGAGGCCTTCGTGTAGT
GGCTGCCGCCTCGGAACTGCGGTCTCCTGCCTGTGCTTCAGTGACTGACCCCTGTCCTGCCCCTCCAGAGTACCC
CACGCACCCCCAGGACCTTCGCCGTCTCCGTGCCAGCGTTCACGCTCCCTCCCGGGGCCCTGCCTCGGAGCTCTG
TGGTGGAAGGACGGGAGAGGGCCCCGGACACGCGCGTTTTCTCCTGCCGAACGCAGGGGCTGCCCTGACTTTGCT
CTGCCGCCCCCCGGGGACCCGGGGCCTGGGGTCTCTGTGGTGCCTGCAGCAGGAGCCAGGAACGCCCGGCAGGCA
GGCGCTCTCCCGCCAGTGTCTGGATTCTGCCTCTTGCCAAAGCAGAGGGGGCTGCCATCCCCTGCCTGCCACCTG
CCCCTCGGCTGCATGCCCACAGCCGTACCTGCCTGAGGACAAAGGCTTGCACTGTCTCGCCCGCGCCTGGCCCCC
ACCCCCTCCCCGGCCAGCCTGAGGCTGCCTGAGGAAGGAAGGACCCGCTTCCTGTTGTCGGTGCTAATTCCTTTG
TAATTCCAGCCCCCTGTCGCCTGTCCAGGGCCTGCCCACCCGTTGGAGGCCGGTGGAGAAGCCCCACCTGGCTTA
TGCCCTGGAGAGGGTTTAGCGGGCTGGGTGGACCCCTCGCCTCCTCCCCGAGGGCCAATGCCGCGGACACGTTTT
CACTGTCACCCTCGTTCTGTCTGCCACCTGAAGGGAATTTGAGGACCGCCGCCAGGGCACCCCGTACATACACAC
AGCTGCTTTTGTGGAGGTGGACGAAAGGCTGTGGCCGGCAGACGTGGAGGTCCAGGCCGGGGTGGGGACGTGGGT
GGGTCCGAGGGGTGTGTGGGGTCGGGGTGGGCTCTAGGAGTTAGCCCTTATCCCCACTGACCAGGCGGGAGCCGC
CAGGCCTGCAGCTGGGCCAGTGCCCAGGAGCCATCCTGGCGTGGGGCCAGGAGCTTGTCCAAGGCCACAGGCCCA
CAGCACCCCCTGCCGGCGGGCTCCGTGGGGCCCTGGAGCTGATGACGGGGGAGGCCCGTCCGCCTGGCCCACCAA
CCCGCCCACCTTGACTGCCCCCAGAAGTGTGTCTTGAGACCTCCTGGGCGTGCTTAGAGGGGTGAGTTGTGTTTG
GATTTTTAGTTATTTTCTCTTCAGTTTTATTAGACTTCTTTTTTATAAAGCAATAAATCCATTTTCCTCCGGGTA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 7493

TCGGCTCGCGGCTTTCTGATTATGCAGAACTTAAATCTATGCCTCAGTGACCCATACAGCATTCCAGTTCCTATC
ACCTACTGTCTTGTCCCTATACTTGCAGCAGTTGTCCAGGGTTATTCTTTGTCTGTATTAGAATTTTTTTCAGG
TTGCTTAAGGAATCTTGCAGATACTTGTGACAAAGAATCATAAATGCTGTTGTTAAACTGAATAATGAATTGAGT
CCCAAATGTTCGTGCTAATTAATGCTTTTTGAGTTGGAGATGAAATGAGAGTAATATCATCAAGCTGTGGATTAA
AGTTATCCTCAAAGCCCCATCATCTACAAAAAGAATAGGACAGGAACTGCCTTTGTGCAGGTGCAAGACCATGTT
ACTTTTGAGCAGTGAGCTTGAGATGTCTGGGATACAAATTGGGTTCCCTATTAACTACTAATCATTCCTTTTTTT
TCTTTCACCTTCAGCCACTCACAACTGACCTTCACTACTATTACATCCTGGAGCTGTCGTTTTATTGGTCTTTGA
TGTTTTCTCAGTTCACTGATATCAAAAGAAAGGACTTTGGCATTATGTTCCTGCACCACCTTGTATCTATTTTCT
TGATTACCTTTTCATATGTCAACAATATGGCCCGAGTAGGAACGCTGGTCCTTTGTCTTCATGATTCAGCTGATG
CTCTTCTGGAGGCTGCCAAAATGGCAAATTATGCCAAGTTTCAGAAAATGTGTGATCTCCTGTTTGTTATGTTTG
CCGTGGTTTTTATCACCACACGACTGGGTATATTTCCTCTCTGGGTGTTAAATACCACATTATTTGAAAGCTGGG
AGATCGTTGGACCTTACCCTTCCTGGTGGGTTTTTAACCTACTGCTATTGCTAGTACAAGGGTTGAACTGCTTCT
GGTCTTACTTGATTGTGAAAATAGCTTGCAAAGCTGTTTCAAGAGGCAAGGTGTCCAAGGATGATCGAAGTGATA
TTGAGTCTAGCTCAGATGAGGAGGACTCAGAACCTCCGGGAAAGAATCCCCACACTGCGACAACCACCAATGGGA
CCAGTGGTACCAACGGGTATCTCCTGACTGGCTCCTGCTCCATGGATGATTAATTACTCAAAACTACAAGTCCCA
AGCAAAGTGAACTATTTGTTCCTGGAAGTATTTAATAAGTTGCAAATGCAGTTCCTTTCATAATATCTCAGCACC
AGAAACAAAAATTAAGATTATCAAAGCATTTTGAATAGTGCACTGCCATGTGTCCTGTCTGTGAATGAAGAAGAA
TTACCATTCTCTCTTTGTAGGCATGCTGTATGTAATTGACACAAGGGAACAGTATTTGCATTTGTACTGTCTTAG
AATATTATTTATTTTTTTGTATTTGTAAATCTGTGGACAAAAGAGGGTTTCCTCACTCCTTTTACTCACTGGGCT
CATGACAGTGAAGGAGATGCTCCATCTGCTTCTCCCCCTTTCTCTTGCTGTAGTCCAATGTGCTATGAGCATCAG
CTTACTTTGTCACTTAGAGCAAGCAAAACCCAGTGCAAGAGTCTCGTTCAGCTCTAAATAGGTTTGCTTTCTTTT
AGTTACAGTGCCCATTTTGAAATTGCCTATACAGTCTTAGTGACCATTTAAACCGGACGAACTAGGTGTTTAATT
TTCACTCTTCATGTTCAATTAGCAGTTCAAATTAAAGAAGATGGTTATTGGAGAACTTTTTTGAATGGTTTTGTA
TTAAATTGCTTTGAAATAGATTTCATTTCTTGTGCACACAGCCAAGATTTCTTCAATGGGTGTGAGCTAGTTGAG
GGTTAACCTTGTAGGTTGCAGANNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNGATGAGGTCAGTGCTCTGATT
TTGAAGGAGGATATTCACTGAAGCTCATAGTTATAAACAAGGAAATCACTGTTAAGAATGGGAATTTGTCCTGTG
TTCTGGGAATAACATAAAGAGAGCAACTGATTTCAGCCAGGTTTTGCCACTACCCTATAATTAGTGCAGTCTTAT
GTTATAAAAGAAAGAAGTTAACTATATTTGGGGACAAAAAAATATTTCAAGAGTTGATAAAGATTACCTGTGCAG
TGCAGAGCACTTTAATGCAACCAGCTTTCAAGAAAAAGCCCTATCTAGTACTTGATGTTGATGTTTTTATTTTGC
TGAGCAAAATAAAGCCAATGGGAGAAGGACAA

FIGURE 7494

MFSQFTDIKRKDFGIMFLHHLVSIFLITFSYVNNMARVGTLVLCLHDSADALLEAAKMANYAKFQKMCDLLFVMF
AVVFITTRLGIFPLWVLNTTLFESWEIVGPYPSWWVFNLLLLLVQGLNCFWSYLIVKIACKAVSRGKVSKDDRSD
IESSSDEEDSEPPGKNPHTATTTNGTSGTNGYLLTGSCSMDD

FIGURE 7495

AGTGTCTCCTGATACCCGGATGTGAGGCGATCCGCTGGCGCTAGTCTGACCCTCCGCCAGGCAAAAGGAAGAAGC
TGAAACCTATCAACACTCTTCAAAATGCAATGGAATGTACCACGGACTGTATCTCGACTGGCACGCAGGACATGC
TTGGAACCACATAATGCTGGTCTCTTTGGACACTGTCAAAATGTAAAGGGACCTTTACTTTTATACAATGCTGAA
TCCAAAGTGGTTTTGGTACAAGGCCCTCAAAAACAATGGTTGCATTTATCTGCTGCCCAGTGTGTTGCAAAGGAA
AGGAGGCCATTGGATGCTCATCCACCCCAACCAGGAGTCCTTCGCCATAAGCAAGGGAAGCAACATGTTTCATTC
AGGAGGGTTTTTTCATCCAGTGCCACAGCTCAGGGAACTCCGGAAAAAAAGGAAGAGCCTGATCCTTTGCAAGAC
AAATCTATTAGTCTTTATCAACGATTCAAGAAGACATTTAGACAGTATGGAAAAGTTCTGATTCCAGTGCATCTA
ATAACTTCTGGTGTTTGGTTTGGAACATTTTATTATGCAGCCTTGAAAGGAGTGAATGTCGTTCCTTTTCTAGAA
CTCATTGGGTTACCTGACAGTGTGGTAAGCATCCTGAAAAACTCCCAGAGTGGAAATGCCCTCACAGCATATGCC
TTGTTTAAGATTGCAACACCTGCTCGGTATACCGTGACTTTGGGAGGAACATCTGTCACTGTGAAGTATCTGCGC
AGTCATGGCTACATGTCCACGCCGCCACCCGTCAAGGAGTATCTGCAGGACAGGATGGAAGAGACAAAGGAGCTT
ATCACAGAGAAAATGGAAGAAACAAAAGATAGACTCACTGAAAAGTTACAAGAAACCAAAGAAAAAGTTTCCTTT
AAGAAAAAAGTGGAATAAGGTGCCTTATATAGCAGTATAGAAAATTCCTGCACTTTAACCCTTTGGAAACTATGG
GCAAAGATACATGTGTCTGATTATTTTTTTGGTTAGTTGCCGAAATATACTAGTTCTCTGAGGGTTAAAGAAGTA
AAATACCTTTTTAAAGTTAAATATCACTAGAAAAATCAGTGTTATTACAAGGGAAGAAATGAACCCAGTTTAAGA
ATTTGCCATCAGTAGCAGTATTAAGCAGTGGTTAATGTCTTAGAAGTCAGACTTCTTTTTCAAGGTCTTCAGAAC
CACACTTGATTTCTGTTTTGTTGCAGCTGTAATTGACACACACTAGGCAGCTGACTCCTTGAATATCCAGTGTGA
CCCATAAAATAGTCTGTTAATACCGGATCTTAATTTTTATGTTATTCATTAAGATTTTAACTATATTCAGTACGT
AATTTGGAGACAAACTAGCATCATCAAAACTGCCTGTAAATAAGGTGTTTAGTCTTTCTATAAAAACAGAATAGA
GCAGTTACCTACCAGTTAAAATATCTTATATGAAGAAAATAGAATAAAGATCCAGTCATATATGTAAATAAGATG
TACTGATTGTACGTAAATGAAAAATGGACCCTTTAAAAATTATTTTTACCTGAAGCTTGTCATAATTTTTTTAAA
GCAAATATATATATGGTGATGGTACTTTTCAAAGTGTGTATTAGTGGTGATCACCTCAAACATAAACCTCTGTTG
TGAACCAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 7496

MQWNVPRTVSRLARRTCLEPHNAGLFGHCQNVKGPLLLYNAESKVVLVQGPQKQWLHLSAAQCVAKERRPLDAHP
PQPGVLRHKQGKQHVSFRRVFSSSATAQGTPEKKEEPDPLQDKSISLYQRFKKTFRQYGKVLIPVHLITSGVWFG
TFYYAALKGVNVVPFLELIGLPDSVVSILKNSQSGNALTAYALFKIATPARYTVTLGGTSVTVKYLRSHGYMSTP
PPVKEYLQDRMEETKELITEKMEETKDRLTEKLQETKEKVSFKKKVE

FIGURE 7497

CCACAGCAAGGTATGTAACTTTATTTTTCTAGCATAATAATTTAAAGTATTTACACACTGCACACTCACTGTTTT
ACACAGATACGTATTCATATATCTATGAACCACATCTAAAGGTTTCTTTGCAAAGACTCGACACACTGTGGGGGG
GGGGGAGCTTCCAAGCXTAACAAAGAGGACAAAAAAAAGTTTTGAGTCTTTTAAAXACAGCCATGTGGAGCATCT
GTGAAAACCAGTGTTTCCCCCGTTTTAAGCTCCCCCAGGAXACCTCTGAACAGCTATAGCCTATCCACATGTTGG
TATGACCTGAAATTCTTCTAGCTAAGGTTTCAAXAACCAACATGTGCAAGCAGCATTTTTTCTAXAAATCTCAAA
AAAGGAGAAAATAAACCTGGCCCTTACGTAGAGAAATACATCTATTTCTGAAAGTAATCTGTGGGGATTGTTTTA
CAGGGACACCGATTACAAGGGCAGAATAGCAAAATACACTATTACTAGTGATGCAGGGXGCTTTTAAATGTCACT
TCCAGCTAAATGATATGGCAAAATAACCCAATCTTCTTTTCCCACTATCAAGTAAXGGXGGGTGGTATTTTXCCT
GAAAAGAGCAAAGGTTXTTTATTAATGATACACACTCTXAACCCAGATCCTTTAXAAATTCTTCTATTGXTTTTA
CTTCACTTTCATACTTTTGCACAAAAAAAGGGGGGTATXCCCCCGATTTTTTCCTCXCTTGGGCXTCCCAAATTX
TAAAACAAATTTTTACXATGCTTCTGAA

FIGURE 7498

ATGCACACCGTGGCTACGTCCGGACCCAACGCGTCCTGGGGGGCACCGGCCAACGCCTCCGGCTGCCCGGGCTGT
GGCGCCAACGCCTCGGACGGCCCAGTCCCTTCGCCGCGGGCCGTGGACGCCTGGCTCGTGCCGCTCTTCTTCGCG
GCGCTGATGCTGCTGGGCCTGGTGGGGAACTCGCTGGTCATCTACGTCATCTGCCGCCACAAGCCGATGCGGACC
GTGACCAACTTCTACATCGCCAACCTGGCGGCCACGGACGTGACCTTCCTCCTGTGCTGCGTCCCCTTCACGGCC
CTGCTGTACCCGCTGCCCGGCTGGGTGCTGGGCGACTTCATGTGCAAGTTCGTCAACTACATCCAGCAGGTCTCG
GTGCAGGCCACGTGTGCCACTCTGACCGCCATGAGTGTGGACCGCTGGTACGTGACGGTGTTCCCGTTGCGCGCC
CTGCACCGCCGCACGCCCCGCCTGGCGCTGGCTGTCAGCCTCAGCATCTGGGTAGGCTCTGCGGCGGTGTCTGCG
CCGGTGCTCGCCCTGCACCGCCTGTCACCCGGGCCGCGCGCCTACTGCAGTGAGGCCTTCCCCAGCCGCGCCCTG
GAGCGCGCCTTCGCACTGTACAACCTGCTGGCGCTGTACCTGCTGCCGCTGCTCGCCACCTGCGCCTGCTATGCG
GCCATGCTGCGCCACCTGGGCCGGGTCGCCGTGCGCCCCGCGCCCGCCGATAGCGCCCTGCAGGGGCAGGTGCTG
GCAGAGCGCGCAGGCGCCGTGCGGGCCAAGGTCTCGCGGCTGGTGGCGGCCGTGGTCCTGCTCTTCGCCGCCTGC
TGGGGCCCCATCCAGCTGTTCCTGGTGCTGCAGGCGCTGGGCCCCGCGGGCTCCTGGCACCCACGCAGCTACGCC
GCCTACGCGCTTAAGACCTGGGCTCACTGCATGTCCTACAGCAACTCCGCGCTGAACCCGCTGCTCTACGCCTTC
CTGGGCTCGCACTTCCGACAGGCCTTCCGCCGCGTCTGCCCCTGCGCGCCGCGCCGCCCCCGCCGCCCCCGCCGG
CCCGGACCCTCGGACCCCGCAGCCCCACACGCGGAGCTGCACCGCCTGGGGTCCCACCCGGCCCCCGCCAGGGCG
CAGAAGCCAGGGAGCAGTGGGCTGGCCGCGCGCGGGCTGTGCGTCCTGGGGGAGGACAACGCCCCTCTCTGA

FIGURE 7499

MHTVATSGPNASWGAPANASGCPGCGANASDGPVPSPRAVDAWLVPLFFAALMLLGLVGNSLVIYVICRHKPMRT
VTNFYIANLAATDVTFLLCCVPFTALLYPLPGWVLGDFMCKFVNYIQQVSVQATCATLTAMSVDRWYVTVFPLRA
LHRRTPRLALAVSLSIWVGSAAVSAPVLALHRLSPGPRAYCSEAFPSRALERAFALYNLLALYLLPLLATCACYA
AMLRHLGRVAVRPAPADSALQGQVLAERAGAVRAKVSRLVAAVVLLFAACWGPIQLFLVLQALGPAGSWHPRSYA
AYALKTWAHCMSYSNSALNPLLYAFLGSHFRQAFRRVCPCAPRRPRRPRRPGPSDPAAPHAELHRLGSHPAPARA
QKPGSSGLAARGLCVLGEDNAPL

FIGURE 7500

GGCACGAGGGGCCACTTCAGGAGCTGAGAGGAGCAGGATGGAACTGCAGGATCCAAAGATGAATGGAGCCCTCCC
TTCGGATGCTGTGGGCTACAGGCAAGAACGTGAGGGCTTCCTGCCCAGTCGTGGTCCTGCTCCTGGGAGCAAGCC
GGTCCAGTTCATGGATTTCGAGGGGAAGACATCGTTTGGAATGTCAGTGTTCAACCTCAGCAACGCCATCATGGG
CAGCGGCATCCTGGGGCTGGCCTATGCCATGGCCCACACGGGGGTCATCTTCTTCCTGGCCCTGCTGCTGTGCAT
TGCGCTTCTGTCGTCCTACTCCATCCACCTCCTGCTGACCTGTGCTGGTATTGCAGGCATCCGAGCCTATGAGCA
GCTGGGACAGAGGGCATTCGGGCCTGCGGGGAAGGTAGTGGTGGCCACAGTCATCTGTCTGCACAATGTTGGGGC
CATGTCCAGTTACCTGTTCATCATCAAATCTGAGCTCCCCCTGGTTATCGGCACCTTCCTGTACATGGACCCCGA
GGGGGACTGGTTCTTGAAGGGAAACCTCCTCATCATCATCGTCAGTGTGTTAATCATCCTGCCCCTCGCCCTCAT
GAAACACTTGGGCTACCTGGGGTACACCAGTGGTCTCTCTCTGACCTGCATGCTGTTTTTCCTTGTTTCGGTCAT
CTACAAGAAGTTCCAACTTGGCTGTGCTATAGGCCACAATGAAACAGCAATGGAGAGTGAAGCTCTCGTGGGACT
CCCCAGCCAAGGACTCAACAGCAGCTGTGAGGCCCAGATGTTCACAGTTGACTCACAGATGTCCTACACAGTGCC
CATTATGGCTTTTGCTTTTGTCTGCCACCCTGAGGTGCTGCCCATCTATACGGAGCTCTGCCGGCCCTCCAAGCG
CAGGATGCAGGCCGTGGCCAACGTGTCCATTGGGGCCATGTTCTGCATGTATGGGCTCACAGCAACCTTTGGATA
CCTCACCTTCTACAGCAGTGTGAAGGCGGAGATGCTGCACATGTACAGCCAGAAGGACCCGCTCATCCTCTGTGT
GCGCCTGGCCGTGCTGCTCGCGGTGACCCTCACTGTGCCAGTCGTGCTGTTCCCTATCCGCCGGGCCCTGCAGCA
GCTGCTTTTCCCAGGCAAGGCCTTCAGCTGGCCACGACATGTGGCCATAGCTCTGATCCTGCTTGTTTTGGTCAA
TGTCCTTGTCATCTGTGTGCCAACCATCCGGGATATCTTTGGAGTTATCGGGTCCACCTCAGCCCCCAGCCTCAT
CTTCATCCTCCCCAGCATCTTCTACCTCCGCATTGTACCCTCTGAGGTGGAGCCTTTCTTATCCTGGCCCAAGAT
CCAGGCCCTGTGCTTTGGAGTCCTGGGAGTCCTCTTCATGGCCGTCAGTCTAGGCTTTATGTTTGCCAACTGGGC
CACAGGCCAGAGCCGCATGTCTGGACACTGATCAGGCCCTGCTGGCCCAGGTCCCTGTGCGCATGCACATGGAGG
GGTCAGGGCCGCTCCCTAGGGTCCCTCCTGCCCAACATGTGGAGGTGGCTGGTTCCCATGAACGTGGTTGTCAGA
GGCGGGGGACAGCAGAGGCTGCAGACTGGCCCACTTCCCTCCTCCCCAGGGATGCCAAGCTTGGATCATGGCCCT
AATCCCAACCCCAACCCCATGGGAGGAGGAGGAGGAGGAAGAAGAGGAGGAGGAGGAGGAGGAGGAGGAGGA
GGAGGAGGCCAGGTCCTGGTGGAGCCTTTGCCCAGCCCAGTCCTCTCTGCCTCCTCCTGGCTGAAGCTGTTTGTC
AGGATTACCCTCGGGCTAAAGAGGAAAAATAAAGATGTTGAGCTACCAAAAAAAAAAAAAAAAAAAAAAAAAAA
A

FIGURE 7501

MELQDPKMNGALPSDAVGYRQEREGFLPSRGPAPGSKPVQFMDFEGKTSFGMSVFNLSNAIMGSGILGLAYAMAH
TGVIFFLALLLCIALLSSYSIHLLLTCAGIAGIRAYEQLGQRAFGPAGKVVVATVICLHNVGAMSSYLFIIKSEL
PLVIGTFLYMDPEGDWFLKGNLLIIIVSVLIILPLALMKHLGYLGYTSGLSLTCMLFFLVSVIYKKFQLGCAIGH
NETAMESEALVGLPSQGLNSSCEAQMFTVDSQMSYTVPIMAFAFVCHPEVLPIYTELCRPSKRRMQAVANVSIGA
MFCMYGLTATFGYLTFYSSVKAEMLHMYSQKDPLILCVRLAVLLAVTLTVPVVLFPIRRALQQLLFPGKAFSWPR
HVAIALILLVLVNVLVICVPTIRDIFGVIGSTSAPSLIFILPSIFYLRIVPSEVEPFLSWPKIQALCFGVLGVLF
MAVSLGFMFANWATGQSRMSGH

FIGURE 7502

TACAACGTTTGTGACTATCAGGTGGCTGGCAGCCCGGCGGGGCCTGTCCCTCCCTTCCTGGTCCCCAAGAATGTG
CTGGACATCGTGGCGGGGCAGACGGTCACCTGGATGGGCCTCTTCTACTGCCCCCTGCTGCCCCTGCTGAATAGC
GTCTTCCTCTTCCTCACCTTCTACATCAAGAAGTACACCCTCCTGAAGAACTCCAGGGCATCTTCGCGGCCCTTC
CGTGCCTCCAGCTCCACCTTCTTCTTCCAGCTAGTGCTCCTCCTGGGCCTGCTTCTGGCTGCAGTGCCCCTGGGC
TATGTGGTCAGCAGCATCCACTCCTCCTGGGACTGCGGCCTCTTCACCAACTACTCAGCACCCTGGCAAGTGGTC
CCGGAGCTGGTGGCCCTTGGGCTCCCGCCCATTGGCCAGCGTGCCCTCCACTACCTGGGCTCCCACGCCTTCAGC
TTCCCCCTCCTCATCATGCTCAGCCTTGTCCTGACGGTGTGCGTCTCCCAGACCCAGGCCAATGCCAGGGCCATC
CACAGGCTCCGGAAGCAGCTGGTGTGGCAGGTTCAGGAGAAGTGGCACCTGGTGGAGGACCTGTCGCGACTGCTG
CCGGAGCCAGGCCCGAGCGACTCTCCGGGCCCCAAGTGCCCTGCCTCCCAAGCTTCGCGCCCGCAGTCCTTCTGC
CCCGGATGCCCATGCCCTGGCTCCCCGGGCCACCAGGCCCCGCGGCCGGGCCCCTCCGTCGTGGATGCCGCGGGA
CTGCGTTCCCCTTGCCCTGGACAGCACGGTGCCCCGGTCTCCGCCCGCAGATTCCGCTTCCCCGC

FIGURE 7503

YNVCDYQVAGSPAGPVPPFLVPKNVLDIVAGQTVTWMGLFYCPLLPLLNSVFLFLTFYIKKYTLLKNSRASSRPF
RASSSTFFFQLVLLLGLLLAAVPLGYVVSSIHSSWDCGLFTNYSAPWQVVPELVALGLPPIGQRALHYLGSHAFS
FPLLIMLSLVLTVCVSQTQANARAIHRLRKQLVWQVQEKWHLVEDLSRLLPEPGPSDSPGPKCPASQASRPQSFC
PGCPCPGSPGHQAPRPGPSVVDAAGLRSPCPGQHGAPVSARRFRFP

FIGURE 7504

CCCTGATTTGATGTTATAGCTTATATAAATCGGCCACGGTTTCTGCAACCACAGCTTAGGATAAGCAAGGCAGCC
ACTCAGATTATGAAAAATGGCAGTAAGTTGGCTGGAGTTTGGTATACATATCATATCAATACTGAATCTTCACAC
TCCGGAGCTCCGATTCTAGAAGGCTGATGCTCTTGTGAGGGCAACAGGAGTTAGCTGCATATTAATTACTGTAGA
ACTTTCCAGGTAATTAGGGAATGTGAAATTGCCTGAGGCCATTTCATCCCAACTACCTTAACCTCAAGAGTCACT
GGCATGTATTTTTCTGTGATATTGGGAGACAAAGTATTAATCCAGGACACACCATCTCAAAGCTGACACACATAT
CTACGTTCATCTCCAAAAGTATATGAATT

FIGURE 7505

GGCGGATTCCTCGGGGCGAGGCGCTGGGAAGCCTGCAACCGGCCCCACAAATTCTAGCAGTGCCAAGAAGAAGGA
TAAAAGAGTTCAAGGTGGAAGAGTGATTGAGTCCCCGTATCTGCAGTATGAAAAGAAGACAACCCAAAAGGCTCC
TGCAGGAGATGGGTCACAGACCCGAGGGAAGATGTCTGAAGGTGGAAGGAAATCCAGCCTGCTCCAGAAAAGCAA
AGCAGATAGCAGTGGGGTCAGAAAGGGTGACCTGCAGTCCACGTTGCTGGAAGGGCATGGCACAGCTCCACCTGA
CCTGGATCTCTCTGCTATTAATGACAAAAGCATCGTCAAAAAGACGCCACAGTTAGCAAAAACAATATCAAAGAA
ACCTGAGTCAACATCATTTTCTGCCCCTCGGAAAAAGAGCCCGGATTTATCTGAAGCAATGGAAATGATGGAGTC
TCAGACACTACTGCTGACGCTACTATCCGTAAAGATGGAGAACAATCTTGCTGAGTTTGAAAGAAGGGCAGAAAA
GAATTTATTAATAATGTGTAAGGAGAAGGAGAAGCTACAGAAAAAGGCCCACGAGCTGAAGCGCAGGCTTCTCCT
CTCTCAGAGGAAGCGGGAGCTGGCAGATGTCCTGGATGCCCAGATCGAGATGCTCAGCCCCTTCGAGGCAGTGGC
CACACGCTTCAAGGAGCAATACAGGACATTCGCCACGGCCCTGGACACTACCAGGCACGAGCTGCCCGTGAGGTC
CATCCACCTGGAGGGAGATGGGCAGCAGCTCTTAGACGCCCTGCAGCATGAACTGGTGACCACTCAGCGCCTCCT
GGGAGAACTTGATGTTGGTGATTCGGAAGAAAATGTGCAGGTGCTGGACTTACTGAGCGAACTCAAGGACGTGAC
GGCGAAAAAGGACCTTGAGCTCCGAAGGAGCTTTGCCCAGGTGCTGGAACTCTCCGCAGAGGCAAGCAAAGAGGC
AGCCTTGGCAAACCAGGAAGTCTGGGAAGAGACCCAGGGCATGGCGCCCCCCAGCCGGTGGTATTTCAATCAAGA
CAGTGCCTGCAGAGAATCTGGGGGAGCACCCAAGAACACGCCCCTGTCTGAGGACGACAACCCGGGTGCCTCGTC
AGCCCCCGCTCAGGCCACGTTCATCAGCCCAAGCGAAGATTTTTCTTCAAGCAGCCAGGCAGAAGTCCCGCCCTC
TCTCTCTCGTTCAGGGAGGGACTTGTCATGACTCATGGTTACATTCAGGATACTTGAGCACTTTATATACTACCG
TAGCACTGTAGCTATTTTTTATGTGATAATCTTGTTTGATAAAAAAGTAAACCTGTTTTGCAATTGAAGCCTCCA
TTTTCTATGAAGGGGCCAGTTGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 7506

TTCCAGCTCACTTGCGGTGGCAGCACAACTTAGGGAAATAATACCATCCAGTGCTTTGCCTAATGGCACAGTTCA
GCATATCCTCATGCCAGATGATGAAGGTGAAGGTGAATTGTGTTGGAAAAAAGTAGACTTAGGGGACATGAAGAA
TGTGGATGTCTTATCTTTCAGTCATGCTCCTTCATTCAATTTTCTTTCTAATTCATGTTGGTCTAAACCAAAGGA
AGATAAAGCAGTAGATACATCAGATTTGGAAGTTGCAGAAGATCCTATGGGCCTCCAAGGAATAGATCTGATCAC
AGCAGCATTGCTTTTTTGTCTAGGAGATTCTCCAGGAGGGAGGGGTATATCTGATAGCCGCATGGCTGATATTTA
TCACATTGACGTTGGGACTCAGACTTTTTCACTTCCATCTGCAATATTAGCTACAAGTACAATGGTTGGGGAGAT
AGCTTCAGCTTCAGCTTGTGATCATGCCAATCCACAGCTTTCAAATCCAAGTCCGTTTCAGACACTTGGGCTGGA
TTTAGTATTGGAATGTGTCGCTAGGTACCAACCCAAGCAGCGTTCAATGTTTACCTTTGTGTGTGGACAGTTATT
TAGAAGGAAAGAATTTTCTTCCCACTTTAAGAATGTGCATGGTGACATTCATGCTGGACTCAATGGCTGGATGGA
ACAGAGGTGCCCTTTAGCTTACTATGGTTGTACCTATTCTCAGCGTAGATTTTGTCCATCAATACAAGGAGCAAA
GATTATACATGACCGCCATTTGAGGTCATTTGGAGTTCAGCCATGTGTATCTACAGTATTAGTGGAGCCTGCTAG
AAACTGTGTGTTGGGATTACATAATGACCATCTAAGTAGTCTTCCTTTTGAGGTCCTGCAGCATATTGCAGGCTT
TCTCGATGGCTTCAGCTTATGTCAGCTCTCATGTGTATCCAAGTTAATGAGGGATGTGTGTGGCAGCCTGCTTCA
GTCTCGTGGCATGGTCATACTGCAGTGGGGGAAAAGGAAGTATCCAGAAGGAAATTCATCATGGCAGATAAAAGA
AAAGGTATGGCGATTTAGTACTGCATTTTGTTCTGTTAATGAATGGAAATTTGCTGACATCCTAAGCATGGCAGA
CCACTTGAAGAAATGCAGTTACAATGTTGTCGAGAAACGGGAGGAAGCAATCCCTTTGCCATGTATGTGTGTGAC
ACGAGAACTCACTAAAGAAGGACGTTCACTACGCTCAGTTTTAAAACCTGTACTTTAAAAGTTGTAATATTACTA
GCACATATATGCAAGCACCTAGTATAATTTCTTTGTAATATGTGAAACTTTATTAATGTATTAAATATTACAACT
AGCTAAATTTATTGTCACTGTGTATATAATGTTTTGAAGTGACATCTATTTTTATAAAGTACTGTTTAGTTGGAA
AAAGTTGCCTTAATGTTTGAAATGTGTGAAATTTTTGGAACTTGCTGGACAGGGTGATTTAATTTTTAGCTACAT
AATTTTAAGAATTAGTATTTTCAGTGGTGTGCATATTTTGGTTCTTAAATTTTTGCTTCTTAAACTAAAAAAATC
CTGACCAATTTATTTGTTGTTTTCTGTGGGTTGCGACCCATGCAATCAAAAAGCAAAATTTTGATTGAGATTTTT
TACAGCATAGGTTTTTCATATAAAAATATTCTGAATTTGTTAAGCACTGCCATAATATCATTATAATGTTTTTGT
CTTTTAGTGCTTCCCTATACAATTGTTAATGCACAAATGATCTCTAATATATACTTACATACGTAAAATCATAAA
GTTTGGTAATGCAGTTTATCGTTTTAAAAATAATCCACAAAGATGTTTTTATCTCACATACTTACAACTCAACAC
ACAGAGTGACCATGTGCAGCTTTCTTTTTTGTTAGATGCCACATCCGAAGACTCATCGCAGTGTGTTATATGACA
GGACAAAGCAAAAACAAACAAAAAGCAAGCCTGTGAATATAATTTAATTTGAAACTGCTCCTGGTATTATATATT
TGCTAGTTATCTAATGTTTTAAAAGAAAATATACCTCATTTAGGTTTGAATTGGGCGTATTGTGTAAATTTCAAA
TATTCAGAATGCAAAGGGCTTGACTATTAAATGTTTGCCTTTGATGTTTATAAACATTACAACTATGTTGTTTTA
AGACATTTAAAAACGTGAAATTTGTTATCTTTGTAAAATGACAATCATGTAGAAACCTGTCTTGGTTGACAATCT
CTTTGAAACATTTCCGAGTTAATTTCCCATAGGCTTCACCACCAAGAAAGTAAGAATTGCATCTTTACATAATGA
TCAAGGTATAATGGAAAAATATACCTATTCTTGAAGTAGTTTATTATAGTTTTCAAATTGATTTATACCATTATT
AACCTGATGTGGTCTGCTTAAAAAATGAATATATCAGTATTTAGAAATAAATTGCAAAGGTGGGAATATATACTT
AAATAATTTGTCTTAAGTAAATTAGCATTTGGTAGTCTGAAATGGTGACAGATTACTTGTTAAAATTGTGAAAAC
TCTGTTGTGTCCTCTCTTCCTACATTTGTCCCTGAGAGTACTCCACGATTACTAGGTTCTTGATTCCCTTATATG
GCAATCAGGCAGAGGCGTTCCTTAAGCATTAGAGAGTTCTGAAGCTTAAGATTTGTTTTGGTTGGATGAAGTCCT
TAGTACAGTTGAAAAACAGAGCATTAAAGACTAATCAATTGTTTTGCCTCACCAGTCATTTTAAATAGTAGAATA
CTTATTTCTCAGTGCTTAAAATTTCTTTTTCAACTGTGAGATTGAATAAACAGTCTCTATTTCTGTGGAAAAAAC
AACAGAAAAGAGATATTAAATACCATAAAATGTAACTCTGCCTTTTAAAGTTTTGCTGAAGAATGTGTCTGTGGT
TAGGATAGCACAAGCATTAACTTTTGTTTTATAGTTATGCTTTTTAAAATTCATTGTTTTTAAATTTAGACTTCT
TATTTCCACACTGGATTATGAGATACTTAACAATTTTTCCACCTTATATTTCTTTTACACATTTTGCTGTTCTCT
TTTTTGTTATTGTTATGCCACCATACCATTTTGTTAAAATGTTTTCTTTGTGAAACATTTGTTCAAGTTCTAATA
AAATTAATGTTTTCCCTTAACATGGCTCAATAACTTAAAAACGTTCATTTAAATAAAATTTTAATACTTGTTTGA
CAAAAAAAAAAAAAAA

FIGURE 7507

MPDDEGEGELCWKKVDLGDMKNVDVLSFSHAPSFNFLSNSCWSKPKEDKAVDTSDLEVAEDPMGLQGIDLITAAL
LFCLGDSPGGRGISDSRMADIYHIDVGTQTFSLPSAILATSTMVGEIASASACDHANPQLSNPSPFQTLGLDLVL
ECVARYQPKQRSMFTFVCGQLFRRKEFSSHFKNVHGDIHAGLNGWMEQRCPLAYYGCTYSQRRFCPSIQGAKIIH
DRHLRSFGVQPCVSTVLVEPARNCVLGLHNDHLSSLPFEVLQHIAGFLDGFSLCQLSCVSKLMRDVCGSLLQSRG
MVILQWGKRKYPEGNSSWQIKEKVWRFSTAFCSVNEWKFADILSMADHLKKCSYNVVEKREEAIPLPCMCVTREL
TKEGRSLRSVLKPVL

FIGURE 7508

AAATATGTGGGTTGGAAGAAAGAACGTGTAGTAGCAGAGTTTTGGGATGGGAAAATCGTGTTGGTTCTGCCACAT
GATCCAAGCTTTGCTATCAAAAAGGTAGAAGATGTCCAAGAACTTGTTGATAATGAATTGGGCTTCCAGCAAGTT
GTTCCTAAATGTCCAAACAAAATAAAAACTTTTCTTGTAATATCTGGATGAAAAGAGAGTAGTTGGGTGTTTAAT
TGCAGAACCCATCAAACAGGCATTTCGTGTCCTGTCTGAACCAATTGGTCCAGAATCCCCAAGCTCTACGGAATG
TCCTAGGGCTTGGCAATGTTCAGATGTACCAGAACCTGCAGTCTGTGGGATAAGTAGAATCTGGGTTTTCAGACT
GAAGAGAAGAAAGCGCATTGCAAGACGACTGGTTGATACCCTCAGGAATTGCTTCATGTTTGGCTGTTTTCTCAG
CACTGATGAAATAGCATTTTCTGACCCAACACCAGATGGCAAGTTATTTGCAACCAAGTACTGCAACACCCCTAA
TTTCCTCGTATATAATTTTAATAGTTAAAGCTGATTTCAGTTATAAAGGAGTTACTATCTGGATAAGTTCAAAGA
GCTCCTTATTATAAAATACAAACTATTTAATATCAAAATAAAAAATACCGAGACT

FIGURE 7509

KYVGWKKERVVAEFWDGKIVLVLPHDPSFAIKKVEDVQELVDNELGFQQVVPKCPNKIKTFLVISG

FIGURE 7510

GGAGAAGCAGCTTGAGGCATCATTAGATGCACTGCTGAGTCAAGTGGCTGATCTGAAGAACTCTCTGGGGAGTTT
CATTTGCAAGTTGGAGAACGAGTATGGCCGGCTGACCTGGCCATCTGTCCTGGACAGCTTTGCCTTGCTTTCTGG
ACAGCTGAACACTCTGAACAAGGTCTTGAAGCATGAAAAAACACCGCTGTTCCGTAACCAGGTCATCATTCCTCT
GGTGTTGTCTCCAGACCGAGATGAAGATCTCATGCGGCAGACTGAAGGACGGGTGCCTGTTTTCAGCCATGAGGT
AGTCCCTGACCATCTGAGAACCAAGCCTGACCCTGAAGTGGAAGAACAGGAGAAGCAACTGACGACAGATGCTGC
CCGCATTGGTGCAGATGCAGCCCAGAAGCAGATCCAGAGCTTGAATAAAATGTGTTCAAACCTTCTGGAGAAAAT
CAGCAAAGAGGAGCGAGAATCAGAGAGTGGAGGTCTCCGGCCGAACAAGCAGACCTTTAACCCTACAGACACTAA
TGCCTTGGTGGCAGCTGTTGCCTTTGGGAAAGGACTATCTAATTGGAGACCTTCAGGCAGCAGTGGTCCTGGCCA
GGCAGGCCAGCCAGGAGCTGGGACGATCCTTGCAGGAACCTCAGGATTACAGCAGGTGCAGATGGCAGGAGCTCC
AAGCCAGCAGCAGCCAATGCTCAGTGGGGTACAAATGGCTCAGGCAGGTCAACCAGGGAAAATGCCAAGTGGAAT
AAAAACCAACATCAAGTCGGCTTCCATGCATCCCTACCAGCGGCCCTCCTGCCTGGGTTTCATTCTGGCTATCCC
TCTAAGGCGCAAGGTGAAGAAGCTTCTGGGCCAGGAAGGAAAAAAAAAATGCCCACCTGCAGCTCTGGTGAAGCTT
GGGCCTGCTCTCCTTTCCATCCTCTAAGGAGCCAACTTGGCTTTTACCTGTCAAATAGTCATAAAGTCCCCTATC
CTTTACCCCACCTTATACACACGAGGCTTTCTCAGGAAGTGGCTCTGCCAGGCAGGACTATGTGGGAAAGGGTTT
TTCCTTAGCACACGAAAAAGCCCCTTCCCCTGGATTCATGTTTCTTATTTTGGAGGGAGAAGGGAATTGCACTTC
ACACTGCCATCAGGGTTTAGTTGACCTCATAATGGTGCCCACTTTCTCGACTTTGGCCAGGATTTCCTTCAAAGA
AAACGACTTTCCTTCATTTCCCTAAGCCTGTGGCCCAAATGGTGGACCAGAATGATGGTGGGAGGGGGCAACCCC
CAGTAGCTTTGCCTGCTTTTATAAAGTTGAACAAATTGAATTTAGACATTCAGGCTAACCTGCCTTTCTTAGTAC
TCCTTTGTTGGCATGGGCAGGGGTTGAGTCAGCAGAAGTGGACCAAAGGATTCCTCTGAATAAAGTTATTTAAAT
TGAAAAAAAAAAAAAAAA

FIGURE 7511

MRQTEGRVPVFSHEVVPDHLRTKPDPEVEEQEKQLTTDAARIGADAAQKQIQSLNKMCSNLLEKISKEERESESG
GLRPNKQTFNPTDTNALVAAVAFGKGLSNWRPSGSSGPGQAGQPGAGTILAGTSGLQQVQMAGAPSQQQPMLSGV
QMAQAGQPGKMPSGIKTNIKSASMHPYQRPSCLGFILAIPLRRKVKKLLGQEGKKNAHLQLW

FIGURE 7512

GTGTTAGTACAGCCAGCTTCATTTCATTAAGGTACTTGTCCCAGTGCCTTCTAATCAATCTAAGTATTGTCTCTT
TGCCTTTTCTAATTTCTTTATGGTGCTCATGGCTCTAATTGTATAAAATTATGTTTTTATTATTTGTCTCCTCCT
CCTGCAAAATATAAATTGTATGAGGCTAGAAACTTTGTCTTCATTGCTTTATTTGTAGTGCCTGGAACATTGCCT
AATCTAAATATCTCTGAAGGCTTTAAAACTTTTATGACGTATTCCTCCTGGTACTGAGTGTTATAGTGAAATTAG
AAGTAACATATTGAGAACTATAGTTCTTTCCCAATTTTTGAAGCATTCTATAAGCTGATGGTGGTATCTCCTTAA
TAGAATTACGTTTGAAAAGAGAAAATATTATTCTAGTGTTCTGTTTTCAATAAAATCTCTAGTTAAAAGTTCTCA
TGCC

FIGURE 7513

CTGCCAGCCGCGCTGCTGCTGCTCCTCCTGCTGTGGGACCGCTGACCGCGCGGCTGCTCCGCTCTCCCCGCTCCA
AGCGCCGATCTGGGCACCCGCCACCAGC**ATG**GACGCTCGCCGCGTGCCGCAGAAAGATCTCAGAGTAAAGAAGAA
CTTAAAGAAATTCAGATATGTGAAGTTGATTTCCATGGAGACCTCGTCATCCTCTGATGACAGTTGTGACAGCTT
TGCTTCTGATAATTTTGCAAACACGAAACCTAAATTCAGGTCAGATATCAGTGAAGAACTGGCAAGTGTTTTTTA
TGAGGACTCTGATAATGAATCTTTCTGCGGCTTTTCAGAAAGTGAGGTGCAAGATGTATTAGACCATTGTGGATT
TTTACAGAAACCAAGGCCAGATGTCACTAACGAACTGGCCGGTATTTTTCATGCCGACTCTGACGATGAATCATT
TTGCGGTTTCTCAGAGAGTGAGATACAAGATGGAATGAGGCTGCAGTCAGTTCGGGAAGGCTGTAGGACCCGCAG
CCAGTGCAGGCACTCTGGACCTCTCAGGGTGGCGATGAAGTTTCCAGCGCGGAGTACCAGGGGAGCAACCAACAA
AAAAGCAGAGTCCCGCCAGCCCTCAGAGAATTCTGTGACTGATTCCAACTCCGATTCAGAAGATGAAAGTGGAAT
GAATTTTTTGGAGAAAAGGGCTTTAAATATAAAGCAAAACAAAGCAATGCTTGCAAAACTCATGTCTGAATTAGA
AAGCTTCCCTGGCTCGTTCCGTGGAAGACATCCCCTCCCAGGCTCCGACTCACAATCAAGGAGACCGCGAAGGCG
TACATTCCCGGGTGTTGCTTCCAGGAGAAACCCTGAACGGAGAGCTCGTCCTCTTACCAGGTCAAGGTCCCGGAT
CCTCGGGTCCCTTGACGCTCTACCCATGGAGGAGGAGGAGGAAGAGGATAAGTACATGTTGGTGAGAAAGAGGAA
GACCGTGGATGGCTACATGAATGAAGATGACCTGCCCAGAAGCCGTCGCTCCAGATCATCCGTGACCCTTCCGCA
TATAATTCGCCCAGTGGAAGAAATTACAGAGGAGGAGTTGGAGAACGTCTGCAGCAATTCTCGAGAGAAGATATA
TAACCGTTCACTGGGCTCTACTTGTCATCAATGCCGTCAGAAGACTATTGATACCAAAACAAACTGCAGAAACCC
AGACTGCTGGGGCGTTCGAGGCCAGTTCTGTGGCCCCTGCCTTCGAAACCGTTATGGTGAAGAGGTCAGGGATGC
TCTGCTGGATCCGAACTGGCATTGCCCGCCTTGTCGAGGAATCTGCAACTGCAGTTTCTGCCGGCAGCGAGATGG
ACGGTGTGCGACTGGGGTCCTTGTGTATTTAGCCAAATATCATGGCTTTGGGAATGTGCATGCCTACTTGAAAAG
CCTGAAACAGGAATTTGAAATGCAAGCA**TAA**TATCTGGAAAATTTGCTGCCTGCCTTCTACTTCTCAAATCTTTC
TTGTAAAAGTTTCCAATTTTTTCACTGAAACCTGAGTTAAAAATCTTGATGATCAGCCTGTTTCATAAGAAACTC
CAATCAAGTTAATCTTAGCAGACATGTGTTTCTGGAGCATCACAGAAGGTATATTGCTAGTTACACTTTGCCCTC
CTGCAGTTTCTTCTCTGCTCCCAACCCCCATCTCATAGCATCCCCCTCTATTTCCAATGCTCCTCTCCAACCGCT
TAGTTTCTGAATTTCTTTTAAATTACAGTTTTATGAAAGCATATTTTATTTACTTGGTGTTGAAATAGCCCTCAT
AAAACCTAAGCACTTGGAAACACAATAATAGTATTAACTAACTAGATCTATTGAATTTCAGAGAAGAGCCTTCTA
ACTTGTTTACACAAAAACGAGTATGATTTAGCATTCATACTAGTTGAAATTTTTAATAGAATCAAGGCACAAAAG
TCTTAAAACCATGTGGAAAAATTAGGTAATTATTGCAGATTGATGTCTCTCAATCCCATGTATTGCGCTTATGTT
ACAAGTTGTTGTCACAGTTGAGACTTAATTTCTCCTAATTTCTTCTGCCCGAAGGGTAAGTGGTGCGTCCAGCTT
ACACAATCATAATTCAAAGGTTGGTGGGCAATGTAATACTTAATTAAAATAATGATGGAAGAGCTATCTGGAGAT
TATGAGTAAGCTGATTTGAATTTTCAGTATAAAACTTTAGTATAATTGTAGTTTGCAAAGTTTATTTCAGTTCAC
ATGTAAGGTATTGCAAATAAATTCTTGGACAATTTTGTATGGAAACTTGATATTAAAAACTAGTCTGTGGTTCTT
TGCAGTTTCTTGTAAATTTATAAACCAGGCACAAGGTTCAAGTTTAGATTTTAAGCACTTTTATAACAATGATAA
GTGCCTTTTTGGAGATGTAACTTTTAGCAGTTTGTTAACCTGACATCTCTGCCAGTCTAGTTTCTGGGCAGGTTT
CCTGTGTCAGTATTCCCCCTCCTCTTTGCATTAATCAAGGTATTTGGTAGAGGTGGAATCTAAGTGTTTGTATGT
CCAATTTACTTGCATATGTAAACCATTGCTGTGCTATTCAATGTTTGATGCATAATTGGACCTTGAATCGATAAG
TGTAAATACAGCTTTTGATCTGTAATGCTTTTATACAAAAGTTTATTTTAATAATAAAATGTTTGTTCT

FIGURE 7514

MDARRVPQKDLRVKKNLKKFRYVKLISMETSSSSDDSCDSFASDNFANTKPKFRSDISEELASVFYEDSDNESFC
GFSESEVQDVLDHCGFLQKPRPDVTNELAGIFHADSDDESFCGFSESEIQDGMRLQSVREGCRTRSQCRHSGPLR
VAMKFPARSTRGATNKKAESRQPSENSVTDSNSDSEDESGMNFLEKRALNIKQNKAMLAKLMSELESFPGSFRGR
HPLPGSDSQSRRPRRRTFPGVASRRNPERRARPLTRSRSRILGSLDALPMEEEEEEDKYMLVRKRKTVDGYMNED
DLPRSRRSRSSVTLPHIIRPVEEITEEELENVCSNSREKIYNRSLGSTCHQCRQKTIDTKTNCRNPDCWGVRGQF
CGPCLRNRYGEEVRDALLDPNWHCPPCRGICNCSFCRQRDGRCATGVLVYLAKYHGFGNVHAYLKSLKQEFEMQA

FIGURE 7515

ATGGGTGAGAGAACTCTTCACGCTGCAGTGCCCACACCAGGTTATCCAGAATCTGAATCCATCATGATGGCCCCC
ATTTGTCTAGTGGAAAACCAGGAAGAGCAGCTGACAGTGAATTCAAAGGCATTAGAGATTCTTGACAAGATTTCT
CAGCCCGTGGTGGTGGTGGCCATTGTAGGGCTATACCGCACAGGAAAATCCTATCTCATGAATCGTCTTGCAGGA
AAGCGCAATGGCTTCCCTCTGGGCTCCACGGTGCAGTCTGAAACTAAGGGCATCTGGATGTGGTGTGTGCCCCAC
CTCTCTAAGCCAAACCACACCCTGGTCCTTCTGGACACCGAGGGCCTGGGCGATGTAGAAAAGAGTAACCCTAAG
AATGACTCGTGGATCTTTGCCCTGGCTGTGCTTCTAAGCAGCAGCTTTGTCTATAACAGCGTGAGCACCATCAAC
CACCAGGCCCTGGAGCAGCTGCACTATGTGACTGAGCTAGCAGAGCTAATCAGGGCAAAATCCTGCCCCAGACCT
GATGAAGCTGAGGACTCCAGCGAGTTTGCGAGTTTCTTTCCAGACTTTATTTGGACTGTTCGGGATTTTACCCTG
GAGCTAAAGTTAGATGGAAACCCCATCACAGAAGATGAGTACCTGGAGAATGCCTTGAAGCTGATTCCAGGCAAG
AATCCCAAAATTCAAAATTCAAACATGCCTAGAGAGTGTATCAGGCATTTCTTCCGAAAACGGAAGTGCTTTGTC
TTTGACCGGCCTACAAATGACAAGCAATATTTAAATCATATGGACGAAGTGCCAGAAGAAAATCTGGAAAGGCAT
TTCCTTATGCAATCAGACAACTTCTGTTCTTATATCTTCACCCATGCAAAGACCAAGACCCTGAGAGAGGGAATC
ATTGTCACTGGAAAGCGGCTGGGGACTCTGGTGGTGACTTATGTAGATGCCATCAACAGTGGAGCAGTACCTTGT
CTGGAGAATGCAGTGACAGCACTGGCCCAGCTTGAGAACCCAGCGGCTGTGCAGAGGGCAGCCGACCACTATAGC
CAGCAGATGGCCCAGCAACTGAGGCTCCCCACAGACACGCTCCAGGAGCTGCTGGACGTGCATGCAGCCTGTGAG
AGGGAAGCCATTGCAGTCTTCATGGAGCACTCCTTCAAGGATGAAAACCATGAATTCCAGAAGAAGCTTGTGGAC
ACCATAGAGAAAAAGAAGGGAGACTTTGTGCTGCAGAATGAAGAGGCATCTGCCAAATATTGCCAGGCTGAGCTT
AAGCGGCTTTCAGAGCACCTGACAGAAAGCATTTTGAGAGGAATTTTCTCTGTTCCTGGAGGACACAATCTCTAC
TTAGAAGAAAAGAAACAGGTTGAGTGGGACTATAAGCTAGTGCCCAGAAAAGGAGTTAAGGCAAACGAGGTCCTC
CAGAACTTCCTGCAGTCACAGGTGGTTGTAGAGGAATCCATCCTGCAGTCAGACAAAGCCCTCACTGCTGGAGAG
AAGGCCATAGCAGCGGAGCGGGCCATGAAGGAAGCAGCTGAGAAGGAACAGGAGCTGCTAAGAGAAAAACAGAAG
GAGCAGCAGCAAATGATGGAGGCTCAAGAGAGAAGCTTCCAGGAAAACATAGCTCAACTCAAGAAGAAGATGGAG
AGGGAAAGGGAAAACCTTCTCAGAGAGCATGAAAGGCTGCTAAAACACAAGCTGAAGGTACAAGAAGAAATGCTT
AAGGAAGAATTTCAAAAGAAATCTGAGCAGTTAAATAAAGAGATTAATCAACTGAAAGAAAAAATTGAAAGCACT
AAAAATGAACAGTTAAGGCTCTTAAAGATCCTTGACATGGCTAGCAACATAATGATTGTCACTCTACCTGGGGCT
TCCAAGCTACTTGGAGTAGGGACAAAATATCTTGGCTCACGTATTTAA

FIGURE 7516

MGERTLHAAVPTPGYPESESIMMAPICLVENQEEQLTVNSKALEILDKISQPVVVVAIVGLYRTGKSYLMNRLAG
KRNGFPLGSTVQSETKGIWMWCVPHLSKPNHTLVLLDTEGLGDVEKSNPKNDSWIFALAVLLSSSFVYNSVSTIN
HQALEQLHYVTELAELIRAKSCPRPDEAEDSSEFASFFPDFIWTVRDFTLELKLDGNPITEDEYLENALKLIPGK
NPKIQNSNMPRECIRHFFRKRKCFVFDRPTNDKQYLNHMDEVPEENLERHFLMQSDNFCSYIFTHAKTKTLREGI
IVTGKRLGTLVVTYVDAINSGAVPCLENAVTALAQLENPAAVQRAADHYSQQMAQQLRLPTDTLQELLDVHAACE
REAIAVFMEHSFKDENHEFQKKLVDTIEKKKGDFVLQNEEASAKYCQAELKRLSEHLTESILRGIFSVPGGHNLY
LEEKKQVEWDYKLVPRKGVKANEVLQNFLQSQVVVEESILQSDKALTAGEKAIAAERAMKEAAEKEQELLREKQK
EQQQMMEAQERSFQENIAQLKKKMERERENLLREHERLLKHKLKVQEEMLKEEFQKKSEQLNKEINQLKEKIEST
KNEQLRLLKILDMASNIMIVTLPGASKLLGVGTKYLGSRI

FIGURE 7517

GTGTACCCCAAGAATCCATCTGCAACTAACACCACTCTAGTTGAACAAAGGTTATTATGTACCCAGTGTGTGCTG
TACATTCAATCTCTGGGCAGAATCAAATGTGGGGTTTGTCATTTTCTTGAAATTGGTGAAGTATTAGTCCTGTTT
AAAATGCAGAAACTANNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNTGATTCAGTGTAGTTGTATGCTAGATATATTATATGGAATTATCAGCAGT
TTACCAGTTGGTTCTTTATTAGTACTCCTGATGTCTTAAACAAAAATGAATAATTGTTTATCTTTTCTCAAAGTG
TCTCATCTGTTCAGTAACAATCACGGTTTTCTCCAACAGTCTTGCATATTACTTTTTTTTAAAGTGCTTTGGTTT
GAAAAAAATAAAAAAATAAAATAAAATGCAGAAACTAGAAAAGNTACTCCAGTAGGNAATACTACA

FIGURE 7518

VYPKNPSATNTTLVEQRLLCTQCVLYIQSLGRIKCGVCHFLEIGEVLVLFKMQKLXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXIQCSCMLDILYGIISSLPVGSLLVLLMS

FIGURE 7519

ACTCATTTATACCAGGAAACAGACAAGAGAACAAGAGGCTGCCGAAGACAAAACTTCTCTGCAAGCACCTGTGCA
CAGCAATGTGCGTGGGCATCTGTGAGAAGAAGAGAATCTGTGAAGTTTGAGCAAGCGGCCTTCCCAAGATGTACC
GAATATCTCAACTGATGTCAACACCAGTAGCAAGTTCTTCCAGGTTGGAAAGAGAATATGCTGGAGAGCTGTCTC
CCACGTGCATTTTCCCAAGTTTCACCTGTGATTCCCTGGATGGTTACCATTCTTTTGAATGCGGCTCCATAGATC
CCCTGACAGGCTCCCACTATACCTGTCGCCGAAGTCCCAGACTCCTCACCAATGGCTACTATATTTGGACTGAAG
ACAGCTTCCTGTGCGACAAAGATGGCAACATAACTCTGAACCCATCCCAGACCAGCGTTATGTATAAGGAGAACT
TAGTTAGTACCTCCAAATCTTGGCTGCATGGAAGTATCTTTGGTGACATCAACTCTTCTCCAAGTGAAGACAACT
GGTTGAAGGGGACCAGGAGGTTGGACACAGACCATTGCAATGGAAATGCAGATGATTTAGACTGTTCTTCTCTGA
CTGATGACTGGGAGTCAGGGAAGATGAATGCAGAGTCTGTGATCACCTCCTCTTCCAGCCACATCATATCTCAGC
CTCCTGGAGGAAACTCCCATAGCTTGTCTCTTCAGTCCCAGTTGACAGCTTCTGAACGTTTCCAAGAGAATAGTT
CGGATCATTCAGAAACCAGGTTGTTGCAAGAGGTCTTCTTTCAGGCAATCCTGCTTGCTGTGTGCTTAATCACTT
CTGCATGTGCAAGATGGTTTATGGGAGAAATATTAGCCAGTGTCTTCACATGCTCATTGATGATAACTGTAGCTT
ATGTGAAATCATTGTTTCTCAGCCTTGCCAGCTATTTCAAAACCACTGCCTGTGCTCGGTTTGTCAAAATTTGAC
AACCATTTAGGAATGCCTTCGATGAATGTCCTCCATCTGAATATCTGGAAATTGTCCAACTTGCAGTCTACTTGG
AATCAAGTGTTTTATTGGAAGGGAGTAAGCGAGTAATGGAGAAAAAGCCATTTTAGTTTGACTATGTGATTTTAA
AATGATCTCAGTTTTTCCATCAAAATTATAATATGCTCATGAAAATAATATTAATTTGCCTTCCCTTTGCAAACA
CCGGCAGTTGAAAGGAAAAGGACGGGGAATGTGATGGAAAAGAGACCGCCTGGAATAAATGTCCCCCTATGATTC
TTTAAGGCAGTGGTTCTCGAGCTTGAATTTTCATTAGGAAATTCTGTGAGGAGCTTGTAACCAGATTTCTGGGTC
TGCCACATGCACCTATCTCTTGCTGAATTGCTTTAATAGAATAATGAGAGCAAGTTTGTCTAACTAATACCAACC
TGACAACTTGAATAACAATAAATGCAATTTGTACATAAAATATAATGCTGCAAAAGTTTGTCATTCACCTCAGTG
GAGTGACTTGATATTAGGTGGTAACCGTAGATGATGGTTAATATGAAAATGGACAGGAAAGAAGCATTTTCTGAA
AGTTATATTCTTTTGAACCACGTTCTAAACCAAGTTTTTAATCTTCTTGGGGCTCGTAATTACCTTTCACTTTAA
TGTCACTTAAAGATATAACACAGAAAAATGCCTTGAGGGCAAAATATAGGCAAAACACCAATGCGCTTTCAAATG
CATGAAAATGGTGCAGTTGTACCCTTGAGCCTTGACTCAAGGGCTGTAGATGTTCCCTTTCCACCCCCCACACTT
GGTGCGTGTTCACAAAGCAAATATGGCCTGTAATTCAAATTTGTTCTATGTGATACTCTCTGAGTAAAAACTCAT
ACATGCAGAAAATTGTCTTTGCTCGAAATGATAATGCCAAAATATAACTTTATATATAATTTGCATTTAGTACAT
TTTTGGTTAAAAAATAAACTAATAAATAAGTGAAGTCATCAGC

FIGURE 7520

MYRISQLMSTPVASSSRLEREYAGELSPTCIFPSFTCDSLDGYHSFECGSIDPLTGSHYTCRRSPRLLTNGYYIW
TEDSFLCDKDGNITLNPSQTSVMYKENLVSTSKSWLHGSIFGDINSSPSEDNWLKGTRRLDTDHCNGNADDLDCS
SLTDDWESGKMNAESVITSSSSHIISQPPGGNSHSLSLQSQLTASERFQENSSDHSETRLLQEVFFQAILLAVCL
ITSACARWFMGEILASVFTCSLMITVAYVKSLFLSLASYFKTTACARFVKI

FIGURE 7521

CGCTAAGCGTCCCAGCCGCATCCCTCCCGCAGCGACGGCGGCCCGGGACCCGCGGGCTGTGAACCATGAACACCC
GCAATAGAGTGGTGAACTCCGGGCTCGGCGCCTCCCCTGCCTCCCGCCCGACCCGGGATCCCCAGGACCCTTCTG
GGCGGCAAGGGGAGCTGAGCCCCGTGGAAGACCAGAGAGAGGGTTTGGAGGCAGCCCCTAAGGGCCCTTCGCGGG
AGAGCGTCGTGCACGCGGGCCAGAGGCGCACAAGTGCATACACCTTGATAGCACCAAATATAAACCGGAGAAATG
AGATACAAAGAATTGCGGAGCAGGAGCTGGCCAACCTGGAGAAGTGGAAGGAGCAGAACAGAGCTAAACCGGTTC
ACCTGGTGCCCAGACGGCTAGGTGGAAGCCAGTCAGAAACTGAAGTCAGACAGAAACAACAACTCCAGCTGATGC
AATCTAAATACAAGCAAAAGCTAAAAAGAGAAGAATCTGTAAGAATCAAGAAGGAAGCTGAAGAAGCTGAACTCC
AAAAAATGAAGGCAATTCAGAGAGAGAAGAGCAATAAACTGGAGGAGAAAAAAAGACTTCAAGAAAACCTTAGAA
GAGAAGCATTTAGAGAGCATCAGCAATACAAAACCGCTGAGTTCTTGAGCAAACTGAACACAGAATCGCCAGACA
GAAGTGCCTGTCAAAGTGCTGTTTGTGGCCCACAATCCTCAACATGGGCCAGAAGCTGGGCTTACAGAGATTCTC
TAAAGGCAGAAGAAAACAGAAAATTGCAAAAGATGAAGGATGAACAACATCAAAAGAGTGAATTACTGGAACTGA
AACGGCAGCAGCAAGAGCAAGAAAGAGCCAAAATCCACCAGACTGAACACAGGAGGGTAAATAATGCTTTTCTGG
ACCGACTCCAAGGCAAAAGTCAACCAGGTGGCCTCGAGCAATCTGGAGGCTGTTGGAATATGAATAGCGGTAACA
GCTGGGGTATATGAGAAAATATTGACTCCTATCTGGCCTTCATCAACTGACCTCGAAAAGCCTCATGAGATGCTT
TTTCTTAATGTGATTTTGTTCAGCCTCACTGTTTTTACCTTAATTTCAACTGCCCACACACTTGACCGTGCAGTC
AGGAGTGACTGGCTTCTCCTTGTCCTCATTTATGCATGTTTGGAGGAGCTGATTCCTGAACTCATATTTAAACTC
TACTGCCAGGGAAATGCTACATTATTTTTCTAATTGGAAGTATAATTAGAGTGATGTTGGTAGGGTAGAAAAAGA
GGGAGTCACTTGATGCTTTCAGGTTAATCAGAGCTATGGGTGCTACAGGCTTGTCTTTCTAAGTGACATATTCTT
ATCTAATTCTCAGATCAGGTTTTGAAAGCTTTGGGGGTCTTTTTAGATTTTAATCCCTACTTTCTTTATGGTACA
AATATGTACAAAAGAAAAAGGTCTTATATTCTTTTACACAAATTTATAAATAAATTTTGAACTCCTTCTGTAAAA
AAAAAAAA

FIGURE 7522

MNTRNRVVNSGLGASPASRPTRDPQDPSGRQGELSPVEDQREGLEAAPKGPSRESVVHAGQRRTSAYTLIAPNIN
RRNEIQRIAEQELANLEKWKEQNRAKPVHLVPRRLGGSQSETEVRQKQQLQLMQSKYKQKLKREESVRIKKEAEE
AELQKMKAIQREKSNKLEEKKRLQENLRREAFREHQQYKTAEFLSKLNTESPDRSACQSAVCGPQSSTWARSWAY
RDSLKAEENRKLQKMKDEQHQKSELLELKRQQQEQERAKIHQTEHRRVNNAFLDRLQGKSQPGGLEQSGGCWNMN
SGNSWGI

FIGURE 7523

AGCGAAGTGTGGTGGCTTCCAAGGAATACAAACATAAAGGCCTTCGACCGTTGCAAATAGACTAAAGTGAAAACA
AATCTGAATGAAGATGAAGTTATTTCAGACCATTTGCAGGCAGCTCAGGAGTTCAAAGTTTTCTGTGGAATCAGC
TGCCCTTGTGGCTTTCTCTACTTCCTCTTACTCATGTGGCCGGAAGAAAAAAGTGAACCCATATGAAGAAGTGGA
CCAAGAAAAATACTCTAATTTAGTTCAGTCTGTCTTGTCATCCAGAGGCGTCGCCCAGACCCCGGGATCGGTGGA
GGAAGATGCTTTGCTCTGTGGACCCGTGAGCAAGCATAAGCTGCCAAACCAAGGTGAGGACAGACGAGTGCCACA
AAACTGGTTTCCTATCTTCAATCCAGAGAGAAGTGATAAACCAAATGCAAGTGATCCTTCAGTTCCTTTGAAAAT
CCCCTTGCAAAGGAATGTGATACCAAGTGTGACCCGAGTCCTTCAGCAGACCATGACAAAACAACAGGTTTTCTT
GTTGGAGAGGTGGAAACAGCGGATGATTCTGGAACTGGGAGAAGATGGCTTTAAAGAATACACTTCAAACGTCTT
TTTACAAGGGAAACGGTTCCACGAAGCCTTGGAAAGCATACTTTCACCCCAGGAAACCTTAAAAGAGAGAGATGA
AAATCTCCTCAAGTCTGGTTACATTGAAAGTGTCCAGCATATTCTGAAAGATGTCAGTGGAGTGCGAGCTCTTGA
AAGTGCTGTTCAACATGAAACCTTAAACTATATAGGTCTGCTGGACTGTGTGGCTGAGTATCAGGGCAAGCTCTG
TGTGATTGATTGGAAGACATCAGAGAAACCAAAGCCTTTTATTCAAAGTACATTTGACAACCCACTGCAAGTTGT
GGCATACATGGGTGCCATGAACCATGATACCAACTACAGCTTTCAGGTTCAATGTGGCTTAATTGTGGTGGCCTA
CAAAGATGGATCACCTGCCCACCCACATTTCATGGATGCAGAGCTCTGTTCCCAGTACTGGACCAAGTGGCTTCT
TCGACTAGAAGAATATACGGAAAAGAAAAAGAACCAGAATATTCAGAAACCAGAATATTCAGAATAGGGAGCAAG
TTGCTATTTGGGAACATTCAGCACCTTCTCACAGTTTGGGAACATATATTGCTGTTTACTCCAGTGTAAAAATGA
GGTGCCACTGGATCTGAGTGCTACACGAACACAAGTAGAAGTATTAATTTGTTGAAATGTGTTGTTACCAAAAAG
ACTGAAAAGCCCCAAAGTCTAGATATAAAGACCTAGACTTCGGCACGCGAAATCCCAGCTATGCTACCTCTTATT
TACCTGAAAGGAGGACACGCAGGATGGGCAGTCATGCTGGTGACTCTTGTACTCCCTTGAGGGACATTGGGGGGG
GGGGGGCGTGGTCCCAGGCAGGATGCCCAGTCTTTGAGCTGAGATTGGAAGGCAGTGAGGCTGAGGGTGCCAAGA
TTTCCCCAGGGTTCACCCAGAGGGGAAGGGGCTACATGCCCCCAGCTGTGTGCAGGGAGGACACATCAGCCCACT
ACCGCTGCCAACACCAATGCCTAAAACTTGTTTCATACATTGGGGTTTTCTATATATTTCAGCTGGGAAAAGCTT
ACATTTAACCTTTTGAAAAAATAAATACGTGATTAGCCTCAACTAAACATTGCTGACTATAAAGACAGTATATTC
ACCATGTCGCTGGCAATATGTCATTGCGTAACACCAAATAACCCCCCAGAAGTAGCCAGAGGCCAGTTTGAACAT
CACAATTCTAAGTGTTTTAGTAACTATTTCTGGCGTGAGTCAACAGATCATGTAGATAGAGTCAATTATTGTTTG
TGGAGTTTTTCAGCTATAGGGGAGGGGAACTATTAAAATCCATTTGTTTCTATTCAATAGGTAATAAAAATTAGT
TGTCCCTGGGTTTGGGAAACTTAAATGCCCATTACAGCCCTGGGGAAGGGTTTTCTGTCTTATGGAGTGAGTCTT
AGCATTTAAGTTATACAGTTGCTGCCTTAAAATAGTAGCCTGCTACAATGACTTCTTTGGGTAGCCATTTTCATA
AGAAATAAAATACAAGATATGAGTAAAAAAAAAAAAAAAAA

FIGURE 7524

MKMKLFQTICRQLRSSKFSVESAALVAFSTSSYSCGRKKKVNPYEEVDQEKYSNLVQSVLSSRGVAQTPGSVEED
ALLCGPVSKHKLPNQGEDRRVPQNWFPIFNPERSDKPNASDPSVPLKIPLQRNVIPSVTRVLQQTMTKQQVFLLE
RWKQRMILELGEDGFKEYTSNVFLQGKRFHEALESILSPQETLKERDENLLKSGYIESVQHILKDVSGVRALESA
VQHETLNYIGLLDCVAEYQGKLCVIDWKTSEKPKPFIQSTFDNPLQVVAYMGAMNHDTNYSFQVQCGLIVVAYKD
GSPAHPHFMDAELCSQYWTKWLLRLEEYTEKKKNQNIQKPEYSE

FIGURE 7525

GTTTGGGTTGTTGGCTGCTTTCTTCCCCCTTTCTCACACACTTGTATATTATTTTGAGGTGGTGTTCGCAGAGTT
TGAAAGGAGAGAGAATTAAAAAAAAAAGCCGCAAGCGTTTCACTCTTTTATTTTTATAATCCCCTTCAATTTGGG
GTTAAAAAAAAGACAAGAAAACAGGAAGGAAGAGAAATAAGGAAATGAGATGTGGTAAAAGAAGCTAAAAGGTGC
CTTTTAAAAGATCGTTGCTGTGAAGTGAAAAAAATCTCCAGAGAAACCAAAAAGCACCGCCGAGACCTCTTCCGA
ACCAAAGGAGTTTGTGTTTGCTTTTAGGGAAGAAGAAAGATCATTCATTCGGAGGAATAACAACCAATTAAAAGA
CAAATANAAAAAGTTTGGAGTGGGACGCAGAGCGAGCGAGAGGGAGCTGCCGGCGGGCGGTGGGGCGCGGAGCCC
GCACTTTCCCGGCCGGGTGAGCGGCGGCCGC

FIGURE 7526A

GAGCCGGTGGCGCAGGTGTCGGGGTCCTCGAGCGCCCAGCCTGGGAGCATGATTGTGGACAAGCTGCTGGACGAC
AGCCGCGGCGGAGAGGGGCTGCGGGACGCGGCGGGCGGCTGCGGCCTCATGACCAGCCCGCTCAACCTGAGCTAC
TTCTACGGCGCGTCGCCGCCCGCCGCCGCCCCGGGCGCCTGCGACGCCAGCTGCTCGGTCTTGGGCCCCTCGGCG
CCCGGCTCGCCCGGCTCCGACTCCTCCGACTTCTCCTCTGCCTCGTCGGTGTCCTCCTGCGGCGCCGTGGAGTCC
CGGTCGAGAGGCGGCGCCCGCGCCGAGCGCCAGCCAGTTGAGCCCCATATGGGGGTTGGCAGGCAGCAGAGAGGC
CCCTTTCAAGGTGTTCGGGTAAAGAACTCAGTGAAGGAACTCCTGTTGCACATCCGAAGTCATAAACAGAAGGCT
TCTGGCCAAGCTGTGGATGATTTTAAGACACAAGGTGTGAACATAGAACAGTTCAGAGAATTGAAGAACACAGTA
TCATACAGTGGGAAAAGGAAAGGGCCCGATTCGTTGTCTGATGGACCTGCTTGCAAAAGGCCAGCTCTGTTGCAT
TCCCAATTTTTGACACCACCTCAAACACCAACGCCCGGGGAGAGCATGGAAGATGTTCATCTCAATGAACCCAAA
CAGGAGAGCAGTGCTGATCTGCTTCAGAACATTATCAACATTAAGAATGAATGCAGCCCCGTTTCCCTGAACACA
GTTCAAGTTAGCTGGCTGAACCCCGTGGTGGTCCCTCAGAGCTCCCCCGCAGAGCAGTGTCAGGACTTCCATGGA
GGGCAGGTCTTTTCTCCACCTCAGAAATGCCAACCATTCCAAGTCAGGGGCTCCCAACAAATGATAGACCAGGCT
TCCCTGTACCAGTATTCTCCACAGAACCAGCATGTAGAGCAGCAGCCACACTACACCCACAAACCAACTCTGGAA
TACAGTCCTTTTCCCATACCTCCCCAGTCCCCCGCTTATGAACCAAACCTCTTTGATGGTCCAGAATCACAGTTT
TGCCCAAACCAAAGCTTAGTTTCCCTTCTTGGTGATCAAAGGGAATCTGAGAATATTGCTAATCCCATGCAGACT
TCCTCCAGTGTTCAGCAGCAAAATGATGCTCACTTGCACAGCTTCAGCATGATGCCCAGCAGCGCCTGTGAGGCC
ATGGTGGGGCACGAGATGGCCTCTGACTCTTCAAACACTTCACTGCCATTCTCAAACATGGGAAATCCAATGAAC
ACCACACAGTTAGGGAAATCACTTTTTCAGTGGCAGGTGGAGCAGGAAGAAAGCAAATTGGCAAATATTTCCCAA
GACCAGTTTCTTTCAAAGGATGCAGATGGTGACACGTTCCTTCATATTGCTGTTGCCCAAGGGAGAAGGGCACTT
TCCTATGTTCTTGCAAGAAAGATGAATGCACTTCACATGCTGGATATTAAAGAGCACAATGGACAGAGTGCCTTT
CAGGTGGCAGTGGCTGCCAATCAGCATCTCATTGTGCAGGATCTGGTGAACATCGGGGCACAGGTGAACACCACA
GACTGCTGGGGAAGAACACCTCTGCATGTGTGTGCTGAGAAGGGCCACTCCCAGGTGCTTCAGGCGATTCAGAAG
GGAGCAGTGGGAAGTAATCAGTTTGTGGATCTTGAGGCAACTAACTATGATGGCCTGACTCCCCTTCACTGTGCA
GTCATAGCCCACAATGCTGTGGTCCATGAACTCCAGAGAAATCAACAGCCTCATTCACCTGAAGTTCAGGAGCTT
TTACTGAAGAATAAGAGTCTGGTTGATACCATTAAGTGCCTAATTCAAATGGGAGCAGCGGTGGAAGCGAAGGAT
CGCAAAAGTGGCCGCACAGCCCTGCATTTGGCAGCTGAAGAAGCAAATCTGGAACTCATTCGCCTCTTTTTGGAG
CTGCCCAGTTGCCTGTCTTTTGTGAATGCAAAGGCTTACAATGGCAACACTGCCCTCCATGTTGCTGCCAGCTTG
CAGTATCGGTTGACACAATTAGATGCTGTCCGCCTGTTGATGAGGAAGGGAGCAGACCCAAGTACTCGGAACTTG
GAGAACGAACAGCCAGTGCATTTGGTTCCCGATGGCCCTGTGGGAGAACAGATCCGACGTATCCTGAAGGGAAAG
TCCATTCAGCAGAGAGCTCCACCGTATTAGCTCCATTAGCTTGGAGCCTGGCTAGCAACACTCACTGTCAGTTAG
GCAGTCCTGATGTATCTGTACATAGACCATTTGCCTTATATTGGCAAATGTAAGTTGTTTCTATGAAACAAACAT
ATTTAGTTCACTATTATATAGTGGGTTATATTAAAAGAAAAGAAGAAAAATATCTAATTTCTCTTGGCAGATTTG
CATATTTCATACCCAGGTATCTGGGATCTAGACATCTGAATTTGATCTCAATGGTAACATTGCCTTCAATTAACA
GTAGCTTTTGAGTAGGAAAGGACTTTGATTTGTGGCACAAAACATTATTAATATAGCTATTGACAGTTTCAAAGC
AGGTAAATTGTAAATGTTTCTTTAAGAAAAAGCATGTGAAAGGAAAAAGGTAAATACAGCATTGAGGCTTCATTT
GGCCTTAGTCCCTGGGAGTTACTGGCGTTGGACAGGCTTCAGTCATTGGACTAGATGAAAGGTGTCCATGGTTAG
AATTTGATCTTTGCAAACTGTATATAATTGTTATTTTTGTCCTTAAAAATATTGTACATACTTGGTTGTTAACAT
GGTCATATTTGAAATGTATAAGTCCATAAAATAGAAAAGAACAAGTGAATTGTTGCTATTTAAAAAAATTTTACA
ATTCTTACTAAGGAGTTTTTATTGTGTAATCACTAAGTCTTTGTAGATAAAGCAGATGGGGAGTTACGGAGTTGT
TCCTTTACTGGCTGAAAGATATATTCGAATTGTAAAGATGCTTTTTCTCATGCATTGAAATTATACATTATTTGT
AGGGAATTGCATGCTTTTTTTTTTTTTTCTCCCGAGACAGGGTCTTGCTCTGGCGCCCAGGCTGGAGTACAGTGG
CATGATCTTGGCTCACTTCAGCCTTGACTTGGGCTCAAGTGATCCTCCTACCTGAGCCTTCTGAGTAACTGGGAC
TACAGGTGTGCACTCCTCGCCTGGCTAATTTTTTATTTTTTGTACAGGCAGGATCTTGCCACCTTGCCCAGGCTG
GTCTTGAACTCCTGAGCTCATGCCATCTGCCTGCCTTAGTCTCCCAAAATGCTGGGATTACAGGAGTGAGCCACC
ATGCCCGGCTGGCAGTTGCATGGAAGAGAACACCTCTTTATGGCTTACCCTCTAGAATTTCTAATTTATGTGTTC
TGTTGAAATTTTTGTTTTTTTACCTTTATTGAAACAACAAAAAGTCAGTATTGAAACATATCTTCCTGTTTTCTG
TTGTCAAATGATGATAATGTGCCATGATGTTTTATATATATCATTCAGAAAAAGTTTTATTTTTTAATAACATTC
TATTAACATTATTTTGCTTGCCGCTGGCATGCCTGAGGAATGTATTTGGCTTTGATTACACACTAAGTTTTTGTA

FIGURE 7526B

ATAAATTTGACTCATTAAAAACCTTTTTTTTTTAAAAAAAAAAAAAAAGAAAATCTCATTAGTGAACTTATCTTTG
CAGCTGAGTACTTAAATTCTTTTTAAAAAGATACCCTTTGGATTGATCACATTGTTTGACCCAGTATGTCTTGTA
GACACGTTAGTTATAATCACCTTGTATCTCTAAATATGGTGTGATATGAACCAGTCCATTCACATTGGAAAAACT
GATGGTTTTAAATAAACTAATTCACTAATAAAAAAAAAAAAAA

FIGURE 7527

MIVDKLLDDSRGGEGLRDAAGGCGLMTSPLNLSYFYGASPPAAAPGACDASCSVLGPSAPGSPGSDSSDFSSASS
VSSCGAVESRSRGGARAERQPVEPHMGVGRQQRGPFQGVRVKNSVKELLLHIRSHKQKASGQAVDDFKTQGVNIE
QFRELKNTVSYSGKRKGPDSLSDGPACKRPALLHSQFLTPPQTPTPGESMEDVHLNEPKQESSADLLQNIINIKN
ECSPVSLNTVQVSWLNPVVVPQSSPAEQCQDFHGGQVFSPPQKCQPFQVRGSQQMIDQASLYQYSPQNQHVEQQP
HYTHKPTLEYSPFPIPPQSPAYEPNLFDGPESQFCPNQSLVSLLGDQRESENIANPMQTSSSVQQQNDAHLHSFS
MMPSSACEAMVGHEMASDSSNTSLPFSNMGNPMNTTQLGKSLFQWQVEQEESKLANISQDQFLSKDADGDTFLHI
AVAQGRRALSYVLARKMNALHMLDIKEHNGQSAFQVAVAANQHLIVQDLVNIGAQVNTTDCWGRTPLHVCAEKGH
SQVLQAIQKGAVGSNQFVDLEATNYDGLTPLHCAVIAHNAVVHELQRNQQPHSPEVQELLLKNKSLVDTIKCLIQ
MGAAVEAKDRKSGRTALHLAAEEANLELIRLFLELPSCLSFVNAKAYNGNTALHVAASLQYRLTQLDAVRLLMRK
GADPSTRNLENEQPVHLVPDGPVGEQIRRILKGKSIQQRAPPY

FIGURE 7528

TATAAACCCGTGTGACAGTTCAGTAGAGAGGGATATGCAAATTAAATCATTATGGGGGGCGGGGGGGTGTGTCTG
AGCAGGAGCCTACTTTAGGGAGGCTTCCCTACATGATTTACAAGGCTTTGAGGCTGACTTTTGTGTTTTTCGTAG
CTAAACAATATTCTAGATTTGGAAGGGAATTCTGCTTCATGATTTGATTTGAGAAAATACTTCCTTGAAAACAGA
TTGTTTATCAGCCTACAGCCTCCTTAACCATGTGCTCATACTGATGTAAACCATAGCTGTTAGTGTCAGCAGACA
ATCCTTGAGC**ATG**ATGGACTGGTTTCCATTTTTGTGGAACGCTATAGCACCCAGTTTGCTTGGTGAGCCAGCCGC
ATTTCTTAGGGCTGCCAGTCATAAGGTAGTGCCCCGTTCCTTCCTAGTTCTTAGCCAGGTTTTGTTATCCATCTC
ACCTTTGTCCATTTCCATTCTG**TAA**CTATCTTGCTGTTCCTTGATAAAGACCCAGAGGGAAAGGAAAGTCAGAGC
AAAAATCTTGGATCCCAGATCACATTTATTGGGAAGAGGCGGCGCCGACTAGTG

FIGURE 7529

MMDWFPFLWNAIAPSLLGEPAAFLRAASHKVVPRSFLVLSQVLLSISPLSISIL

FIGURE 7530

TTCTCTCTTTGGAATGACTCCCAGAACAGCCCTGATTTGGATATGGGGCCAGTACAGCCGTGCTTGTATGCATTG
CTTTGATAGAACATAGGAACTGTCTGGAACAGAGCGGGGAAGACTGTTACCAGGTTGTACCTGCCCAGAGCACAC
ACCCTGCCGTGTCAGTCCCTACACGGCACCAGATTGTTGGAAGCTGATTGCAAAAGCTTGTGTGTGCCACCCAAA
TAAAGTGAACCAGCTTGAGGGACCACATGTCTTCACCCTTTTGTGAGGCAGTTGGGCTGGAAACAGTTAATTATC
TGCCCAGAGTTGGGTGTCTGTGTCCAAATGTGTCTCTCCCCACAGTTAGTCTTGTACCTTACAATAATCGCACAT
CCAATAGAGGGAATGAGGGCATTCATTTGAGAACAGACTTATCAGCAAACTGCATAATGTTGATAAAGCTTAGCT
TTATGTGTGGCTTTTTCTGTCTTAATGGCTTGAGAAACCTGAGAATATTATTAGATTTGCAAATCTGGAGGTTCT
AAATTCCTACTCTCCCAAAACTCACCCCATGCATAGAAAAATCCAGCAATGACAGCAATAAAACTGTGTCCTCAT
TTTGCTTCCCATTTAGCTGCCAATAACTATTGGCATTAAAATCTAGGTCATAGGGAGGTCTTGGAAGAACAGGGC
TGAAAATAAGGGAGAAGCTACATTTTCGTCAATAGAAACAATGCTGCCTCCCATTTCCTAAAGTTTTTTCCTAGT
ACCAGAACCATTGCCCTTTGGAGAATTATATAAAGCACATTAGACTTTAGGACTAGGCGAAATCATTCTCCTTCC
TATATTTAATTACTCCCTGAAACCCTCCAGTGTACATGATTTATAATGGATTTATTTTGTTGTGTTGTTAATGAA
CCTTGTGCCTCTTTTAATAATACCCATCTTAATATTTAAATTTAAATCTATTTAATACTTAATGTTGCTATCTTT
TGGATCTCTTGCGTTGGTACTGTGCGTGCCTGGCTTTAAAGAAAGGTAGAGAATCTTTTCTTCATTTGATCCTTG
ATCTATAACTCAAAGCTGTTTTT**ATG**CATTTTGTGTTTTCTGATTTTATATCCTTCATGTTCTTGTTTTTAAGCA
GTATTAGTAGTGAAAACT

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FIGURE 7531

MHFVFSDFISFMFLFLSSISSEN

FIGURE 7532

TTTTTTCCGTGGGAGTAAGGAAGTGCTTTTGAATGAGGTACTGGGGGCCAAGGTGTTGGAAGTTCCTAATTCTTT
CCTCGGTTAACTGTGAAACTCTGCGTATTGGGAAGGCCTGGCCTCAGTCATCAGGCCAGGAGAGGTACTGGACGC
CGCGCACGCACTCGTCTGCCAGCGAGGCCCAAAGGGGAAGCCTAGCGGAGCTCAGTGTGGCAGCTGCTGGCCTCT
GGGCCGCTACTTGTCAATACC**ATG**CTTTCCTGTAATATTTGTGGTGAAACAGTAACCTCAGAACCAGACATGAAA
GCTCACCTAATTGTTCACATGGAAAGTGAAATTATATGTCCATTTTGCAAGTTGTCAGGTGTGAATTATGATGAA
ATGTGTTTTCATATCGAAACAGCTCATTTTGAGCAGAATACACTTGAAAGAAACTTTGAGAGGATAAATACAGTA
CAATATGGAACTTCAGATAACAAGAAAGACAACACCCTACAGTGTGGAATGGAAGTTAATTCAAGTATTCTTTCA
GGTTGTGCATCTAATCATCCAAAAAATTCAGCTCAAAACCTGACTAAAGATAGTACTTTAAAACATGAAGGCTTC
TATTCAGAGAACTTAACTGAATCTAGAAAATTCCTGAAAAGTAGGGAAAAACAGTCCAGCCTGACCGAAATAAAA
GGATCTGTTTATGAAACAACATACAGTCCTCCTGAATGTCCATTCTGTGGAAAAATAGAGGAGCACAGTGAAGAT
ATGGAAACTCATGTGAAAACAAAGCATGCCAATCTTTTAGACATTCCATTGGAAGACTGTGATCAACCACTCTAT
GATTGTCCTATGTGTGGGCTCATATGTACAAATTACCATATTCTTCAGGAACATGTTGACTTGCATTTGGAAGAA
AACAGCTTTCAGCAAGGCATGGATAGAGTCCAGTGTTCTGGTGATCTACAATTGGCTCACCAGCTTCAGCAAGAA
GAAGACAGAAAGAGGAGATCTGAAGAATCAAGACAAGAAATAGAAGAATTTCAGAAGCTGCAGAGACAATATGGT
TTAGATAATTCTGGAGGATACAAACAACAACAACTACGAAATATGGAGATAGAAGTAAATAGGGGAAGAATGCCT
CCATCTGAATTTCATAGGAGAAAAGCTGATATGATGGAATCATTAGCTCTTGGTTTTGACGATGGAAAAACAAAA
ACTTCCGGAATTATTGAAGCACTTCATAGGTATTATCAGAATGCTGCCACAGATGTGAGACGGGTGTGGCTTTCT
TCAGTGGTGGATCACTTTCATTCATCTTTAGGCGACAAAGGTTGGGGTTGTGGTTACAGAAATTTCCAAATGCTA
CTTTCATCATTATTACAAAATGATGCTTACGACGATTGCTTAAAAGGTATGTTGATTCCTTGCATTCCAAAAATT
CAATCTATGATTGAAGATGCATGGAAGGAAGGTTTTGATCCTCAGGGGGCCTCTCAACTTAATAACAGGTTACAG
GGAACAAAGGCCTGGATTGGAGCATGTGAAGTATATATACTCCTGACCTCCCTAAGGGTAAAGTGTCATATTGTT
GATTTTCACAAATCAACTGGTCCTTTGGGTACACACCCTCGCTTATTTGAATGGATATTGAACTATTATTCTTCA
GAGGGAGAAGGGAGTCCAAAGGTAGTGTGTACATCTAAACCTCCTATCTATCTTCAGCATCAAGGTCACAGTCGA
ACTGTTATTGGAATTGAAGAGAAAAAAAACCGAACATTATGCTTACTAATACTTGATCCTGGATGTCCTTCTCGA
GAAATGCAGAAATTATTAAAGCAAGACATAGAGGCTAGCAGTCTCAAGCAACTTCGGAAATCTATGGGAAATTTA
AAACATAAGCAATACCAGATATTGGCAGTAGAGGGTGCTCTTTCTCTAGAGGAGAAACTTGCCAGGAGACAAGCT
TCTCAAGTCTTTACAGCCGAGAAGATTCCT**TGA**AGAATCAAGCATTTAAGCATTTCAGTGATTGAGAACAATACT
TTGTTTTCTAAATGTAGATATTGAACTCCTTAATACAATTATGAATCTGTGAATTCTCTTAAGTCTTAACATATA
ATTTAATCTCTAAAATGCCTGTGTTAATTGAATTATACCTATCATACTTCATTGTTTGGTAAATTATTTCAATAA
AATGTCTTGTTTTTGCATTGTG

FIGURE 7533

MLSCNICGETVTSEPDMKAHLIVHMESEIICPFCKLSGVNYDEMCFHIETAHFEQNTLERNFERINTVQYGTSDN
KKDNTLQCGMEVNSSILSGCASNHPKNSAQNLTKDSTLKHEGFYSENLTESRKFLKSREKQSSLTEIKGSVYETT
YSPPECPFCGKIEEHSEDMETHVKTKHANLLDIPLEDCDQPLYDCPMCGLICTNYHILQEHVDLHLEENSFQQGM
DRVQCSGDLQLAHQLQQEEDRKRRSEESRQEIEEFQKLQRQYGLDNSGGYKQQQLRNMEIEVNRGRMPPSEFHRR
KADMMESLALGFDDGKTKTSGIIEALHRYYQNAATDVRRVWLSSVVDHFHSSLGDKGWGCGYRNFQMLLSSLLQN
DAYDDCLKGMLIPCIPKIQSMIEDAWKEGFDPQGASQLNNRLQGTKAWIGACEVYILLTSLRVKCHIVDFHKSTG
PLGTHPRLFEWILNYYSSEGEGSPKVVCTSKPPIYLQHQGHSRTVIGIEEKKNRTLCLLILDPGCPSREMQKLLK
QDIEASSLKQLRKSMGNLKHKQYQILAVEGALSLEEKLARRQASQVFTAEKIP

FIGURE 7534

TCTACCATTATTTTCTCATGCTATGTTTTATCTTAAGCCAATAGAGGTTGAGTATCCCTTATCCAAAATGCTTGG
GACCAGAACTGTTTTGATATTTTTTTTTAATATTTGCATTTACATAAGTTTAAACATTTGCATTTACATAAGTCT
AAACATGAAATTCATTTGTATTTTGTATATGTCTTATACATGCCAAAGGTAATTTTATACAACACTTTNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNTAATTTACCATATTTAGGCT
TTGAAGCTCAATGTATGAGTTTTCTAAATGTCTTTAACCACAGGGAGCAGGTCTTCTGTCTTCATTAGCTCCTAG
AAGATAATCAATATATTTTTATTGAATTAGTTACTTATTAGATGAGGATGATTGGTAAATACCTAATTTTCTTTA
TAATCTGGCCACCCTTTTATTTGTTGAAAATTGAACTACCCATTTGAAACCTCAGAAAAGCTTGTTAAAAAGGAC
GGCTCATTCAGACTGGCCAATTAGAGTCTTAGTGTACTTGGCACTGCCTGATTTCCAGCAGCATCTCTGGTCCTC
ACCCTTCCTTCCAGCCACACCCTACTTTCCACATCCTGGACTTTGGACATGTCCATTGCTCTACTGTTGTGCCTT
TTTCTGCTTGGAGACGCCTGTATGTAAAGCCTGATCTATCGGGCAGAGCTTCTTCTTCGTTATTCTCTTCCTAAG
GCACTGTATTCATGACTTTTGTGTAGCACCTTTACTGTAGCCATCAACACACATGTCTCATCTCTACCACAAGAT
CTCTGAAAATAGGCCTCTGTGTGAACTAGTCACCTCTGGTGTCCCCAACGCCTTTGAACACAGTATGTTACTCAG
CCAGTGGCTCTTGGTAAAAATGAATGTGAGGTTTTAAAACAGCAGTGTGCCAGTATTTGTTTTCTTGGAGTAATC
AAAGTAATATTCTGACTAATGTTTAGTTGAATTTTGGATAAAGCTCAAAATAAGCATTGGATTCCCGTAGCTTTG
GGTTTCTAAACCCTGGAAGTAATGAATGTGACAAATGTGAGACAGGATATTAGAGTTAATAGTGGGTAATCATTC
CATTATTTGTGATCCACTGCACATCTGCTACACTGTACATGTTAGATGCTACAGTGACACAGAGCTATGGATCTT
GCCTCAAAAAAGCTTATGGATGAGTAGCTAAGGTCNCCAGATAATGNTGACAATNCAGAATAGAAAGGGGTCAGA

FIGURE 7535

AAGCTAAATAAATATAGCTTTATTCATCTTTCAGAGATTGCCATTTAGCCTAGAAAATTACATCAAAAGATGAAC
TGATTTTTGCTTGAAAAAGTCAACCATGTTTAATTGCTCACACAATTTTAATTACAACAGATGTAATTTCTAATA
TATACCATTCGATCACACACCATTTTTATGTTCTGGAGTGAGACCTGGGAGTATTTTGCTTAAGACTTTCTCATT
CTCTAAAACTAGCTTTGGCAGTTAACAATGTGGAGAATTCAGCACAAAAAGCACCCTAGCCCAGCCTTTTTATTT
TATTTTTTTAAATCTCTATTTAACCCTTCAAAGTTTCCTTTGCAGCCATATGCATTTCTAGGTGGCTCTACCTGT
AGAAGGCTGCACTTTCCAAGCGGCGAGGGACTTTAATTCTCACTTXCCACCACTCC

FIGURE 7536

TCCACTTCCTCCCTTGGGCCTGGCCTTATCCCTTGTTTCCTCTTGGGAGCACCATCTCCACCTTCCTTTGTGGCA
CATAGAGCAATATCACAACTGTCCTTGCAGGATCTTTCTGGTACTTCCAATAGTAAACTTTTTTTTTTTAATAGA
GTCTGAACTTGAGATCAAATGCTATTTAATGGTGGTAGGAAGGCAGGATGTAAATGTGTTAAGTGTCAGCCATTG
AACCAAGCATGTTGTATACNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNTCAAAGAAATTAACTTGCCTGAGTTACACAGTAAAAGGCAAGGCT
GGGATTTGAAGCCAGGTCTGAGTGACATCTGATCCCATATACTTGCCCTGTCACAGTGCTGGACTGTTATGTAAA
GGACATAAAGATTCTGTGTTAAGGCCAGGCGCGAT

FIGURE 7537

PLPPLGLALSLVSSWEHHLHLPLWHIEQYHNCPCRIFLVLPIVNFFFLIESELEIKCYLMVVGRQDVNVLSVSH

FIGURE 7538

GGGACATGAACAAAAACCAAAAGTTAATATTTATATAAATTTCAAAGCAGAACTCATACGCTGAATCTGGGTAGT
TTGTCTGAACTTCCTAATGGGGCTGACTGGCATAAGTGTGTGTATTTTAGAAAGACAACAAGAGAAAGGAGGGAT
TTTAGGGGCAGGTTTTCTTTCCTTTGTTCTACCACAGTTCTCTGATGTGGAAAGTTCCAGATGAGAGGAGGATCT
GGGGCTTTGTGCAAGAGTATGTCGGGAATTGCAGTGGGGAGCAGCTGTAAGGAGAGAATTCCTTGGGTCAGCAGA
CTGAGGTAGCAGTTTCAGGTAACCCTTACTCATAAGGAAAACAATGTTTACCCTTTCTTTGTACAATTCAAGTTG
GATCATATTATTCCTCTGCTGAAAACTATTTAGAGACCTTCCATTTCAGTCTGAATCAAAACCACCATCCTCACT
GTGGCCAACACAGCCCAAAAGATTGGCATCTCCATTTCTTCCCAGACTTTCCTCTCACTACCTTCCTGGTTGCTC
CTTCGGCTCCAGCCACGCTGCCTCCTTGCTGTTAGGCACACTCCAAGCCCGGTCCTACCTCAGGGCCATCCATCT
CCCTCCTCTGCCTAGCCACTCTTGCCCCTGATTTTCTTGCCCACATGTCACCCCTCAGTGAGGCCTCAGCTTCTT
CTCCAGAGGTGTAGGGCCCCAGCACTGCCTGTTATCTTTCCCCACTTGACTTGCATCTCTGGGCTCTGTTACCTC
CATTTGTGAAATGGGGTTCATAGTTCCTGCCTTTAGGATTATTAGAGGGGATTAGATGA**ATG**AATACATGTAAAG
TACTTAGCATAACGCCAGACACAAAATTAGCCCTCAGTCCATCAGATGTCACTGTCTCAGTGCTGCTGCTTTGGG
AAACGTCATGGGATGCTTTATGTTTCTATGGTGTTGCTGCTGTGGTCCCAGAGGGACACTTAACATTAGATCCTG
GCCTTATTTTCCTTTCCTGCCTCTTTCTCAATGTGGGAGGAAGAGTATCCGAGGTACCCTTGTCCCCTTTGGAAA
TTTGTCCTCGGGAATTTCTGAAATGTTGGCTGCCGTGGGAAAATGGGGAGGAAGGGCAGGCCTGGGACCTTTGCT
CCTGTGGTTTTCTCACATGTTTT**TAG**TTGTATTTAACTTTCAGAATGTTATGTTATTTGTATTTAGGGAATAGGT
TAACTTCTAAAGTAGGGATTTTTCTTTCTTTTTTAAAATGTTAGATAAAAAAAAATGAAAGTCTTGGTGTTTATT
TGATAG

FIGURE 7539

MNTCKVLSITPDTKLALSPSDVTVSVLLLWETSWDALCFYGVAAVVPEGHLTLDPGLIFLSCLFLNVGGRVSEVP
LSPLEICPREFLKCWLPWENGEEGQAWDLCSCGFLTCF

FIGURE 7540

GGCACGAGGTTTGTGTCTCTTGTGAACCCACTTGTGGAGCGAGAGGGAATTTGGGAGGGCCAGGGGTTAGTCTGG
CCTCTGTCTTAGCTGTCATTTTGGCGGTTTTTTTTTTTTTTCTTCAGGGGATTTCAGTCTCCACATAGTTTTGG
AGCCGGACTTTTGAAGAATGATTCGTGAATCCGGAATGGGTGACAGCGTCATCACGGCATTTTATTGACAGACCA
TGGATTCTTACAGTGCACCAGAGTCAACTCCTAGTGCATCCTCAAGACCTGAAGATTACTTTATAGGTGCCACTC
CTCTGCAGAAACGATTAGAATCGGTCAGGAAGCAGAGTTCATTTATCCTGACTCCACCTCGAAGGAAAATTCCCC
AGTGTTCGCAGTTGCAGGAAGATGTTGACCCTCAAAAGGTTGCATTCCTTCTGCATAAACAGTGGACTTTATATA
GTTTAACTCCCTTATATAAATTCTCCTATAGTAATCTCAAAGAGTATTCTAGACTTCTCAATGCTTTTATTGTTG
CTGAAAAGCAAAAAGGACTTGCTGTGGAAGTGGGAGAAGACTTCAACATCAAAGTGATTTTTTCTACTCTCCTAG
GAATGAAAGGAACACAAAGGGACCCGGAAGCATTTCTTGTCCAGATTGTGTCAAAATCTCAATTGCCATCTGAGA
ATAGAGAAGGTAAAGTGCTGTGGACTGGCTGGTTCTGCTGTGTATTTGGAGACAGTCTTCTGGAGACTGTTTCAG
AAGATTTCACCTGTCTGCCCTTATTCCTTGCAAATGGAGCAGAGTCTAACACAGCAATAATTGGAACTTGGTTTC
AGAAAACCTTTGACTGTTATTTCAGTCCTTTAGCAATCAATGCATTTAATCTTTCCTGGATGGCTGCCATGTGGA
CTGCATGCAAAATGGACCATTATGTGGCTACTACTGAATTTCTTTGGTCTGTACCCTGTAGCCCTCAAAGTCTGG
ACATTTCTTTCGCAATACATCCAGAGGATGCAAAAGCTCTATGGGACAGTGTCCACAAAACACCTGGGGAGGTTA
CCCAGGAAGAAGTTGACCTATTCATGGATTGCCTTTATTCACATTTCCATAGACATTTCAAAATTCATTTATCAG
CCACAAGATTAGTTCGTGTTTCAACATCTGTAGCTTCAGCACATACTGATGGAAAAATAAAGATTCTGTGTCATA
AATACCTTATTGGAGTGTTAGCATATTTGACAGAACTGGCAATTTTTCAAATTGAGTGAAGCCTTATGTGGACTA
TAAGTTATAGATTATATACTCTTATTGATAACTTGCCTAATTGCTATGCTGAAAGAGACTGCAGGAGAAATAGGC
ATCTATCTCTGCATCTGTTTTCCCCACCATGCCTTTGGAGTTGCCAAGATGGAAGCCAAGAAGGATCTAGAAGAA
CAAAGAATATGGTAGTAGATGAGCCACAGCCAGGTGCCCATGTACTAATCATGATAACCTGACATGCCATTCTCA
AAATGCTGAGTTGTTAATTTCTTGTCATCTTTAAATATATATATATAGGCTGGGCTTGGTGGCTCACACCTGTAA
TTCCAGCACTTTGGGAGGCTGAGGTGGGTGGATCATTTGAGGCCAGGAATTCAAGACCAGCCTGGCCAACATGGT
GAAACCCCTTCTCTACTGAAAATACAATAATTAGCTGGGCGTGGTGGCACATGCCTGTGATCCCAGCTACTGGGG
AGGCTGAGGCAGGAGAATCGTTTTAACCCAGAAGACAGGCTGCAGTGAGCCAAGACTGCACCACTGCACTCCAGC
CTGGGCAACAAAGTGAGACTCTGCCTCAAAAAATAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 7541

MDSYSAPESTPSASSRPEDYFIGATPLQKRLESVRKQSSFILTPPRRKIPQCSQLQEDVDPQKVAFLLHKQWTLY
SLTPLYKFSYSNLKEYSRLLNAFIVAEKQKGLAVEVGEDFNIKVIFSTLLGMKGTQRDPEAFLVQIVSKSQLPSE
NREGKVLWTGWFCCVFGDSLLETVSEDFTCLPLFLANGAESNTAIIGTWFQKTFDCYFSPLAINAFNLSWMAAMW
TACKMDHYVATTEFLWSVPCSPQSLDISFAIHPEDAKALWDSVHKTPGEVTQEEVDLFMDCLYSHFHRHFKIHLS
ATRLVRVSTSVASAHTDGKIKILCHKYLIGVLAYLTELAIFQIE

FIGURE 7542

GGCACGAGGTGATTTTCCTACTCCACTGTTACTGGANCCACCAAGGCAGGAACTGTGTCTCTTTACCACTACAGT
TCCTGTATCTTTTAGGTGCGTAGTATTTCTTGGTGAGTCAGTCAGTCTCCAGACTCAGTCATTTTTCTCTACATT
ACACATTCTTTCACATTCTTCTCCCACCAGTCTTCCTAGACTTGTTTCATTCCTTCCCATCTTGTCTCTATGTAT
CTCTTCCCACCATTCATTTTCCAGATAGCATCTAGACTGTTGTGTTAAAAAGCAAAACTCCTTTCACACCACATT
CCATTAAATGCCTTCCCACTGGCCTTTGAACACCAAACCAGGCCTTTAAGGCTATGTCATCTCCTACCATTGATC
TCAGACCTAGCTGCAGTTGCACAATACAACCCCTGGCTCAAGTCTTCTGCACACATTGTTCCCTCACAGGCAGGA
ACCCTATGGTGACTGATCAATAATTAAAACTTGCCTTGGGCCAGGCACAGTGGCTTATACCTATAATCCTAGCAC
TTTGGGAGGCCAAGGTGGATCAGTTGAGCCCAGGAGTTACAGACCAGTCTGGGCATCATAGAGAGACCTTGCCTC
TACTAAAAAAAAAAAAAAAAAA

FIGURE 7543

GTGCCACTGCCCTCCAACATGGGCAGCCAGCAGAGCCAAGATCCTGTATCCAAAAAAAAAAAAGGAAAAAGTTTCA
GCAGTTATATAAAGTTTATTTGCTCTTTGATGTTATTACATATGGTTTTATAATCTCTTGGGGTTTTACTTTTAA
AATACTATTCAAAACTAAATGGAATGGAATAATAAAGGGAGAAACAATAAGTTACTTTATATAAAACATATCACG
CAAATGCTCTCATTCTGTTGGAGCTGTTAAAAGGTTTGGAACCAAAAATATTAAGAACTTCCACTGTGGCAAGAA
TTTAAGCGAAAATGATTCACAGCCCAGTGTGAAATAACAGAATGCAGCCATTTGAGAAGCAGTTGTAAATTTTAC
CTACTATGTATATTGCGTATATGCTTTTTAATTTAAAATTTCCTTATGCTTTTTCTTTGGTTTTTCTAGACTTGA
TCTATTTTTTCTTTCATTCCTTTGAAACTAGAGTTTTGCATTAAAAAGTAAAAGGAGTATGTTGATAAACAGAAT
TCTGACACTACAGAATCAGCTACAAGAGTCTACATTTAAAGACTAGTGGAAAATGAGTGAAGTTCATCCTCATAA
AGTACTTCTGAATTTGAGTTGAATACATGGCACCTTCAGGATATTATCCTGCTGCTTTGAGATCCTGAATATGCC
TTGCAAGTAATAATTAAACTTTATGCT

FIGURE 7544

CTCGAAATTAACCCTCACTAAAGGGAACAAAAGCTGGAGCTCCACCGCGGTGGCGGCCGCTCTAGAACTAGTGGA
TCCCCCGGGCTGCAGGAATTCGGCACGAGGGCAAAATCCCAATATATAATTCTATACCTAGTAAAGATTGTAAAT
AACTAAAACAAAATGATAAGAGCTGTGAACTGAAATTGTATTGCTTACAGAAATCATGAACTGAATTTTCTTCTC
TTTTTAAAGTGAGCATAAAGACTTAAGTGTATTGTTACCAGAGATATATTTAGATAGTATACATCATTTTGGCAG
GTAATCTTCTAGAACCTTTCATGTACTGTTTCCATCAAGGGAGGGAAAGAAATAGAAAATATAATTTTATCTATA
TTTTCCTTAAAATATATCAATCTGTGCACACTCTTTCAGTTTTTTAATTACTCATGTAATATATGACTACATTTT
GCTTGTGTGCTTTTTGAAAACCATCTTCAGTCCCAATATCCTCTGTAGAAGTAATAGTTTTAACTCTCCTAGATC
TTCTTTTAGAGTGTTTTTATGAGTGTTTAATGTAGGAATGTGTATATATTATCTACAGCCACAGGAAATGTATAG
TTACGATTTTTACATACGTGTATGTATATTATTGTACAACTTGCTATTTCTACTTGGGAGTTTTTTATTTTGGTA
CATTCACATTTACCTAATCTCTTGTGCACTGTCCAACAGTACTTTGCCTATAATAGACACTTAAGGAAGTTTTCC
TTCTTTTTATTCCTTTATAATTACCAACNATGCTGAAAGGAACATCATCCTACATGAGCCCTTTTTGTACATATA
AGGCTCT

FIGURE 7545

CGGACGCGTGGGTTGTTCTGGAAGCTGTGCGTCACCGTAATGAGGCTTGTAATTCTTGATAACTATGACTTGGCT
AGTGAATGGGCAGCCAAATACATCTGTAATCGCATCATTCAGTTCAAACCTGGACAGGACAGATATTTTACACTG
GGTTTACCAACAGGGAGTACACCTTTAGGATGCTATAAAAAACTAATAGAATATCATAAGAATGGACACCTTTCT
TTTAAATATGTGAAGACCTTTAATATGGATGAATATGTAGGACTTCCAAGAAATCATCCTGAAAGCTACCATTCT
TATATGTGGAATAATTTTTTTAAGCATATCGATATAGATCCTAATAATGCACATATCCTTGACGGGAATGCTGCA
GATTTACAAGCAGAATGTGATGCTTTTGAAAACAAAATAAAAGAAGCTGGAGGAATAGATCTTTTTGTTGGAGGA
ATTGGTCCAGATGGTCATATCGCTTTCAATGAGCCTGGATCCAGTTTAGTGTCAAGGACAAGATTAAAGACTCTA
GCAATGGATACCATCTTGGCAAATGCCAAATATTTTGATGGAGATTTATCAAAAGTGTCAACTATGGCTCTAACT
GTTGGTGTGGGGACAGTGATGGATGCTAGAGAAGTAATGATCCTTATAACAGGGGCACACAAGGCATTTGCCCTG
TACAAAGCAATAGAAGGAGTCAATCACATGTGGACTGTTTCCGCTTTCCAGCAGCATCCCCGGACTATTTTTGTA
TGCGATGAAGATGCTACTTTAGAATTAAGAGTTAAAACTGTGAAATACTTTAAAGGTCTAATGCATGTGCACAAT
AAACTTGTGGATCCACTATTCAGTATGAAAGATGGAAACTGAAGGAGACTGGAGCAAAATTCAGCTTGAATGAAC
AGAGCACTTTTTACTAAGTAGTAGATGAATTTTCAGCTATGCAATATGACAAAACATGGGGAATTTTGAAGATTG
TCATTTTTTCATTCGAGTCTCTATGTTAAACATTCCATATTTTGAATATTTATATCTTGTACTTGGGTTTAAGAG
AAGTAGCTGGCTCTCAAGATTGACTGGCTATTTATTATAAAGTACTGAAGTCACATAGCCACCTATAAAACAGCA
TAGAAATGTCTGCCTGTTTAAAAAGTCATTTTAAAGGTAGAGTGTCCACATCAGGCACCATTTGTGATATGACTC
CAGTGGCATATATTTCATTTTTTAATGACAAGACACTCCAAACCTTTCAGATAACAAACTATCATTGCAGACCTT
CACTTTTGGAATGCAATCTTTATATTTTCTGTGCATCACACACATGCTTTTCTGCACGTGGTTGCCTTAGTCATC
TTCCTACAGCACCATCTAGACATCAAAAATTGTGCTATATATCATTGGTAAAGGAAATTTGAAGAGATGACAGTG
CCTAAAAGTACAGTTTACATCCTTTTGGAAAGTATGTGTAAGTGCATGTTTTTTGTGCACCTTCTTCTATAGCAC
TTTTTTACAAATATCTTATTTTTATTTAACGACTTGGGTTCATGTCCCTAATATAAGTATCTTGACAATTATGAG
CTTTATACCTAGCAAGCCACTTCAGGAAATTCTTTTGGAGAATATTTTCTGATTATTGTTAAACTTAATATACAA
TTAGCTTTATTCCTTATAAAATGTCTAAAAGAATAATACGAAGTATATATAAAAGGAATTACTGTAAACTACATT
GCCATAGCAATTTACATAAAAGTATATTGTTTTCTATCTTTAACTCAAATAAAGCGTGTAATAAATAAGTTATCT
AAATTTCCAAAAAAAAAAAAAAA

FIGURE 7546

MRLVILDNYDLASEWAAKYICNRIIQFKPGQDRYFTLGLPTGSTPLGCYKKLIEYHKNGHLSFKYVKTFNMDEYV
GLPRNHPESYHSYMWNNFFKHIDIDPNNAHILDGNAADLQAECDAFENKIKEAGGIDLFVGGIGPDGHIAFNEPG
SSLVSRTRLKTLAMDTILANAKYFDGDLSKVSTMALTVGVGTVMDAREVMILITGAHKAFALYKAIEGVNHMWTV
SAFQQHPRTIFVCDEDATLELRVKTVKYFKGLMHVHNKLVDPLFSMKDGN

FIGURE 7547

GATTTTTAAGAATTTCAGTGACTAAACTTTAAGAAGGAATGAAGCCCACGCAGGAACTCTGTATGACTTTCAACC
CGAGGGGCTCTGGCCTGGGCTTCCCAGTGACTGCCGGCATCGGGACATCCACTGCTGTGGCCTTGGCCCCGTTTC
CCGTGCTGTGCCCCCCACTTGCTGCAGATGCCCTGAGGAAAGGGTGGCCAAACAAGGGGAGGAGCTGTGAGCACA
GATGGGGCCTGCCGGTCAACAGGGCGGGTAGAGCCAGCCTGGTGCTGAGCTTGCAGCTTGGCTGGGGGAGACGCC
TAGAGCCCCAGTACCACACAGACCCTCCAGGACTGCCGGGGGTCAGTGATCAGGACCCTCTGAGGTGTCAGACCT
GCCCCACATGTGAGGGGAGGACAGCACAGGTGGGACGCATGCAGGCTGAGCTGCATCGGGCNGTGAGGCTGGGAA
GTTGCAGTGAGCTAAGATTGTG

FIGURE 7548

MKPTQELCMTFNPRGSGLGFPVTAGIGTSTAVALAPFPVLCPPLAADALRKGWPNKGRSCEHRWGLPVNRAGRAS
LVLSLQLGWGRRLEPQYHTDPPGLPGVSDQDPLRCQTCPTCEGRTAQVGRMQAELHRAVRLGSCSELRL

FIGURE 7549A

AAAATGTTGATATTTTCTCTTAGCAGGCTGTCAACCAGGTTAGGTTCAGGTCATAAGTTTCTACCCACATTCTTT
GAACTGTAGTTGTCATTTTAGTTTATTTTTCAAAAACTTTTGCAGTACCTTTTTGGTCTGTCTTGTGTGTGCCTT
GCAGTGAACAGTCTGGATTTGGACAGTGGTCTGTCTGTTAGTTCAGTTTCTCAAGCCTTTGTCACACTAATAGGA
TTGGATTTATGTATGTCCAGCTTGGGAATTATTACAGGAATTAAAAACAACTTTTTAGAGTGCTTTCCTGAGCTC
TCTTTCTATTTGTTCCCCCTTCTACTTTTTGCTTCCCTGTGGCTGCTGTTTCTATCCTCCAGCCAGAGAGCTAGT
GTTTATTTTCTCCATTGTGTTACACACTTGTGCAGCTGCAACCACCATATCCAGGGCCCAATGGTAGGAGGTAGA
GAAGAAAAGCAAAAGGGATTGGCCTCATCCTCTTACAACGATAGTTCCATTGAATAGAGAGAAAGGTTTTCCTGC
CTCAGAGTGTTGGCTGCACTAGGCTTTTGTTACTGTAGTCTGGCCCTGTTACCATGGGATTGCTTGCATGTGGGG
ATACAGGAGAATTCAGAAAAGAAAAAAAGATTTGCTATTTCTACATTCTCCCTGAGCATTAAGACCTCCCTTGCC
CATTCCTCAATTCAAAGCTAAGGCTTCTTCTGGAGCTGCCTCTGTGGGCGGTTCGGGAGATACCAAAGGAGAAAA
AGTACCACTGTTGATATGGTGGTATTTCAAATTCTGGTCTACCCTATTTCACATGCCTTGTTTACTTTTCAGAGC
TGACAGATTGCTGCTCCATGCATTCTGTCCAGTTTCCTAAGAGAGACAGCTTGGAGTATGCTTAATCCATCTTAC
CTGGGACTGAAACAGCTGCTTATTTTGCCGTTAAAAATTACATGCAGTTTACTGCGTGGCTCCGGGTTTGTTTGT
TTGTTTTTCCTCTTTAATAGGTTTATTCAGAAAAC**ATG**TCCACTGCAATTAGGGAGGTAGGAGTTTGGAGACAGA
CCAGAACACTTCTACTGAAGAATTACTTAATTAAATGCAGAACCAAAAAGAGTAGTGTTCAGGAAATTCTTTTTC
CACTATTTTTTTTATTTTGGTTAATATTAATTAGCATGATGCATCCAAATAAGAAATATGAAGAAGTGCCTAATA
TAGAACTCAATCCTATGGACAAGTTTACTCTTTCTAATCTAATTCTTGGATATACTCCAGTGACTAATATTACAA
GCAGCATCATGCAGAAAGTGTCTACTGATCATCTACCTGATGTCATAATTACTGAAGAATATACAAATGAAAAAG
AAATGTTAACATCCAGTCTCTCTAAGCCGAGCAACTTTGTAGGTGTGGTTTTCAAAGACTCCATGTCCTATGAAC
TTCGTTTTTTTCCTGATATGATTCCAGTATCTTCTATTTATATGGATTCAAGAGCTGGCTGTTCAAAATCATGTG
AGGCTGCTCAGTACTGGTCCTCAGGTTTCACAGTTTTACAAGCATCCATAGATGCTGCCATTATACAGTTGAAGA
CCAATGTTTCTCTTTGGAAGGAGCTGGAGTCAACTAAAGCTGTTATTATGGGAGAAACTGCTGTTGTAGAAATAG
ATACCTTTCCCCGAGGAGTAATTTTAATATACCTAGTTATAGCATTTTCACCTTTTGGATACTTTTTGGCAATTC
ATATCGTAGCAGAAAAAGAAAAAAAAATAAAAGAATTTTTAAAGATAATGGGACTTCATGATACTGCCTTTTGGC
TTTCCTGGGTTCTTCTATATACAAGTTTAATTTTTCTTATGTCCCTTCTTATGGCAGTCATTGCGACAGCTTCTT
TGTTATTTCCTCAAAGTAGCAGCATTGTGATATTTCTGCTTTTTTTCCTTTATGGATTATCATCTGTATTTTTTG
CTTTAATGCTGACACCTCTTTTTAAAAAATCAAAACATGTGGGAATAGTTGAATTTTTTGTTACTGTGGCTTTTG
GATTTATTGGCCTTATGATAATCCTCATAGAAAGTTTTCCCAAATCGTTAGTGTGGCTTTTCAGTCCTTTCTGTC
ACTGTACTTTTGTGATTGGTATTGCACAGGTCATGCATTTAGAAGATTTTAATGAAGGTGCTTCATTTTCAAATT
TGACTGCAGGCCCATATCCTCTAATTATTACAATTATCATGCTCACACTTAATAGTATATTCTATGTCCTCTTGG
CTGTCTATCTTGATCAAGTCATTCCAGGGGAATTTGGCTTACGGAGATCATCTTTATATTTTCTGAAGCCTTCAT
ATTGGTCAAAGAGTAAAAGAAATTATGAGGAGTTATCAGAGGGCAATGTTAATGGAAATATTAGTTTTAGTGAAA
TTATTGAGCCAGTTTCTTCAGAATTTGTAGGAAAAGAAGCCATAAGAATTAGTGGTATTCAGAAGACATACAGAA
AGAAGGGTGAAAATGTGGAGGCTTTGAGAAATTTGTCATTTGACATATATGAGGGTCAGATTACTGCCTTACTTG
GCCACAGTGGAACAGGAAAGAGTACATTGATGAATATTCTTTGTGGACTCTGCCCACCTTCTGATGGGTTTGCAT
CTATATATGGACACAGAGTCTCAGAAATAGATGAAATGTTTGAAGCAAGAAAAATGATTGGCATTTGTCCACAGT
TAGATATACACTTTGATGTTTTGACAGTAGAAGAAAATTTATCAATTTTGGCTTCAATCAAAGGGATACCAGCCA
ACAATATAATACAAGAAGTGCAGAAGGTTTTACTAGATTTAGACATGCAGACTATCAAAGATAACCAAGCTAAAA
AATTAAGTGGTGGTCAAAAAAGAAAGCTGTCATTAGGAATTGCTGTTCTTGGGAACCCAAAGATACTGCTGCTAG
ATGAACCAACAGCTGGAATGGACCCCTGTTCTCGACATATTGTATGGAATCTTTTAAAATACAGAAAAGCCAATC
GGGTGACAGTGTTCAGTACTCATTTCATGGATGAAGCTGACATTCTTGCAGATAGGAAAGCTGTGATATCACAAG
GAATGCTGAAATGTGTTGGTTCTTCAATGTTCCTCAAAAGTAAATGGGGGATCGGCTACCGCCTGAGCATGTACA
TAGACAAATATTGTGCCACAGAATCTCTTTCTTCACTGGTTAAACAACATATACCTGGAGCTACTTTATTACAAC
AGAATGACCAACAACTTGTGTATAGCTTGCCTTTCAAGGACATGGACAAATTTTCAGGTTTGTTTTCTGCCCTAG
ACAGTCATTCAAATTTGGGTGTCATTTCTTATGGTGTTTCCATGACGACTTTGGAAGACGTATTTTTAAAGCTAG
AAGTTGAAGCAGAAATTGACCAAGCAGATTATAGTGTATTTACTCAGCAGCCACTGGAGGAAGAAATGGATTCAA
AATCTTTTGATGAAATGGAACAGAGCTTACTTATTCTTTCTGAAACCAAGGCTTCTCTAGTGAGCACCATGAGCC
TTTGGAAACAACAGATGTATACAATAGCAAAGTTTCATTTCTTTACCTTGAAACGTGAAAGTAAATCAGTGAGAT

FIGURE 7549B

CAGTGTTGCTTCTGCTTTTAATTTTTTTCACAGTTCAGATTTTTATGTTTTTGGTTCATCACTCTTTTAAAAATG
CTGTGGTTCCCATCAAACTTGTTCCAGACTTATATTTTCTAAAACCTGGAGACAAACCACATAAATACAAAACAA
GTCTGCTTCTTCAAAATTCTGCTGACTCAGATATCAGTGATCTTATTAGCTTTTTCACAAGCCAGAACATAATGG
TGACGATGATTAATGACAGTGACTATGTATCCGTGGCTCCCCATAGTGCGGCTTTAAATGTGATGCATTCAGAAA
AGGACTATGTTTTTGCAGCTGTTTTCAACAGTACTATGGTTTATTCTTTACCTATATTAGTGAATATCATTAGTA
ACTACTATCTTTATCATTTAAATGTGACTGAAACCATCCAGATCTGGAGTACCCCATTCTTTCAAGAAATTACTG
ATATAGTTTTTAAAATTGAGCTGTATTTTCAAGCAGCTTTGCTTGGAATCATTGTTACTGCAATGCCACCTTACT
TTGCCATGGAAAATGCAGAGAATCATAAGATCAAAGCTTATACTCAACTTAAACTTTCAGGTCTTTTGCCATCTG
CATATTGGATTGGACAAGCTGTTGTTGATATCCCCTTATTTTTTATCATTCTTATTTTGATGCTAGGAAGCTTAC
TGGCATTTCATTATGGATTATATTTTTATACTGTAAAGTTCCTTGCTGTGGTTTTTTGCCTTATTGGTTATGTTC
CATCAGTTATTCTGTTCACTTATATTGCTTCTTTCACCTTTAAGAAAATTTTAAATACCAAAGAATTTTGGTCAT
TTATCTATTCTGTGGCAGCGTTGXCTTGTATTGCAATCACTGAAATAACTTTCTTTATGGGATACACAATTGCAA
CTATTCTTCATTATGCCTTTTGTATCATCATTCCAATCTATCCACTTCTAGGTTGCCTGATTTCTTTCATAAAGA
TTTCTTGGAAGAATGTACGAAAAAATGTGGACACCTATAATCCATGGGATAGGCTTTCAGTAGCTGTTATATCGC
CTTACCTGCAGTGTGTACTGTGGATTTTCCTCTTACAATACTATGAGAAAAAATATGGAGGCAGATCAATAAGAA
AAGATCCCTTTTTCAGAAACCTTTCAACGAAGTCTAAAAATAGGAAGCTTCCAGAACCACCAGACAATGAGGATG
AAGATGAAGATGTCAAAGCTGAAAGACTAAAGGTCAAAGAGCTGATGGGTTGCCAGTGTTGTGAGGAGAAACCAT
CCATTATGGTCAGCAATTTGCATAAAGAATATGATGACAAGAAAGATTTTCTTCTTTCAAGAAAAGTAAAGAAAG
TGGCAACTAAATACATCTCTTTCTGTGTGAAAAAAGGAGAGATCTTAGGACTATTGGGTCCAAATGGTGCTGGCA
AAAGCACAATTATTAATATTCTGGTTGGTGATATTGAACCAACTTCAGGCCAGGTATTTTTAGGAGATTATTCTT
CAGAGACAAGTGAAGATGATGATTCACTGAAGTGTATGGGTTACTGTCCTCAGATAAACCCTTTGTGGCCAGATA
CTACATTGCAGGAACATTTTGAAATTTATGGAGCTGTCAAAGGAATGAGTGCAAGTGACATGAAAGAAGTCATAA
GTCGAATAACACATGCACTTGATTTAAAAGAACATCTTCAGAAGACTGTAAAGAAACTACCTGCAGGAATCAAAC
GAAAGTTGTGTTTTGCTCTAAGTATGCTAGGGAATCCTCAGATTACTTTGCTAGATGAACCATCTACAGGTATGG
ATCCCAAAGCCAAACAGCACATGTGGCGAGCAATTCGAACTGCATTTAAAAACAGAAAGCGGGCTGCTATTCTGA
CCACTCACTATATGGAGGAGGCAGAGGCTGTCTGTGATCGAGTAGCTATCATGGTGTCTGGGCAGTTAAGATGTA
TCGGAACAGTACAACATCTAAAGAGTAAATTTGGAAAAGGCTACTTTTTGGAAATTAAATTGAAGGACTGGATAG
AAAACCTAGAAGTAGACCGCCTTCAAAGAGAAATTCAGTATATTTTCCCAAATGCAAGCCGTCAGGAAAGTTTTT
CTTCTATTTTGGCTTATAAAATTCCTAAGGAAGATGTTCAGTCCCTTTCACAATCTTTTTTTAAGCTGGAAGAAG
CTAAACATGCTTTTGCCATTGAAGAATATAGCTTTTCTCAAGCAACATTGGAACAGGTTTTTGTAGAACTCACTA
AAGAACAAGAGGAGGAAGATAATAGTTGTGGAACTTTAAACAGCACACTTTGGTGGGAACGAACACAAGAAGATA
GAGTAGTATTTTGAATTTGTATTGTTCGGTCTGCTTACTGGGACTTCTTTCTTTTTCACTTAATTTTAACTTTGG
TTTAAAAAGTTTTTTATTGGAATGGTAACTGGAGAACCAAGAACGCACTTGAAATTTTTCTAAGCTCCTTAATTG
AAATGCTGTGGTTGTGTGTTTTGCTTTTCTTTAAATAAAACGTATGTATAATTAAGTGAAGCTGCATGTTTGTAT
TGAAGTATATTGAACTATATAGTTTGTATGTCATCTTTTTCACCATTCAGAAACAGTGCTTCTGAATTTGTGATT
TAAAGGAATTGTAATAGAATAGTTTTATTTTTAAGTTATCTTTAAGTTTATGCCATCTTCTTAAATAAGTACGTA
ATGTTCCAATCTAAATAAAAAACTAATACATAACTAATGCATAGAAAAGATACATAAAGCAATGTGAAAGTTTCT
TGCTTCTCCTTTTTAATTTCTAAAAAAGCCACTTTGAATGGAAGTTGTCATCCGTAAAAGCTGAAGTGTAAGCAC
TAGGAAATCTCAATATAGAGATTTGAGGAAAGTTATATCCACTAGGTGGCAGTCATTGATCATAATAAGTGAAAT

FIGURE 7550

MSTAIREVGVWRQTRTLLLKNYLIKCRTKKSSVQEILFPLFFLFWLILISMMHPNKKYEEVPNIELNPMDKFTLS
NLILGYTPVTNITSSIMQKVSTDHLPDVIITEEYTNEKEMLTSSLSKPSNFVGVVFKDSMSYELRFFPDMIPVSS
IYMDSRAGCSKSCEAAQYWSSGFTVLQASIDAAIIQLKTNVSLWKELESTKAVIMGETAVVEIDTFPRGVILIYL
VIAFSPFGYFLAIHIVAEKEKKIKEFLKIMGLHDTAFWLSWVLLYTSLIFLMSLLMAVIATASLLFPQSSSIVIF
LLFFLYGLSSVFFALMLTPLFKKSKHVGIVEFFVTVAFGFIGLMIILIESFPKSLVWLFSPFCHCTFVIGIAQVM
HLEDFNEGASFSNLTAGPYPLIITIIMLTLNSIFYVLLAVYLDQVIPGEFGLRRSSLYFLKPSYWSKSKRNYEEL
SEGNVNGNISFSEIIEPVSSEFVGKEAIRISGIQKTYRKKGENVEALRNLSFDIYEGQITALLGHSGTGKSTLMN
ILCGLCPPSDGFASIYGHRVSEIDEMFEARKMIGICPQLDIHFDVLTVEENLSILASIKGIPANNIIQEVQKVLL
DLDMQTIKDNQAKKLSGGQKRKLSLGIAVLGNPKILLLDEPTAGMDPCSRHIVWNLLKYRKANRVTVFSTHFMDE
ADILADRKAVISQGMLKCVGSSMFLKSKWGIGYRLSMYIDKYCATESLSSLVKQHIPGATLLQQNDQQLVYSLPF
KDMDKFSGLFSALDSHSNLGVISYGVSMTTLEDVFLKLEVEAEIDQADYSVFTQQPLEEEMDSKSFDEMEQSLLI
LSETKASLVSTMSLWKQQMYTIAKFHFFTLKRESKSVRSVLLLLLIFFTVQIFMFLVHHSFKNAVVPIKLVPDLY
FLKPGDKPHKYKTSLLLQNSADSDISDLISFFTSQNIMVTMINDSDYVSVAPHSAALNVMHSEKDYVFAAVFNST
MVYSLPILVNIISNYYLYHLNVTETIQIWSTPFFQEITDIVFKIELYFQAALLGIIVTAMPPYFAMENAENHKIK
AYTQLKLSGLLPSAYWIGQAVVDIPLFFIILILMLGSLLAFHYGLYFYTVKFLAVVFCLIGYVPSVILFTYIASF
TFKKILNTKEFWSFIYSVAALXCIAITEITFFMGYTIATILHYAFCIIIPIYPLLGCLISFIKISWKNVRKNVDT
YNPWDRLSVAVISPYLQCVLWIFLLQYYEKKYGGRSIRKDPFFRNLSTKSKNRKLPEPPDNEDEDEDVKAERLKV
KELMGCQCCEEKPSIMVSNLHKEYDDKKDFLLSRKVKKVATKYISFCVKKGEILGLLGPNGAGKSTIINILVGDI
EPTSGQVFLGDYSSETSEDDDSLKCMGYCPQINPLWPDTTLQEHFEIYGAVKGMSASDMKEVISRITHALDLKEH
LQKTVKKLPAGIKRKLCFALSMLGNPQITLLDEPSTGMDPKAKQHMWRAIRTAFKNRKRAAILTTHYMEEAEAVC
DRVAIMVSGQLRCIGTVQHLKSKFGKGYFLEIKLKDWIENLEVDRLQREIQYIFPNASRQESFSSILAYKIPKED
VQSLSQSFFKLEEAKHAFAIEEYSFSQATLEQVFVELTKEQEEEDNSCGTLNSTLWWERTQEDRVVF

FIGURE 7551A

GGCACGAGGCTGCGCCTCGGGGGTCGGCGTCCAGGCTCGGAGCGCGGCACGGAGACGGCGGCAGCGCTGGACTAG
GTGGCAGGCCCTGCATC**ATG**GAAACTCTTTCTAATGCAAGTGGTACTTTTGCCATACGCCTTTTAAAGATACTGT
GTCAAGATAACCCTTCGCACAACGTGTTCTGTTCTCCTGTGAGCATCTCCTCTGCCCTGGCCATGGTTCTCCTAG
GGGCAAAGGGAAACACCGCAACCCAGATGGCCCAGGCACTGTCTTTAAACACAGAGGAAGACATTCATCGGGCTT
TCCAGTCGCTTCTCACTGAAGTGAACAAGGCTGGCACACAGTACCTGCTGAGAACGGCCAACAGGCTCTTTGGAG
AGAAAACTTGTCAGTTCCTCTCAACGTTTAAGGAATCCTGTCTTCAATTCTACCATGCTGAGCTGAAGGAGCTTT
CCTTTATCAGAGCTGCAGAAGAGTCCAGGAAACACATCAACACCTGGGTCTCAAAAAAGACCGAAGGTAAAATTG
AAGAGTTGTTGCCGGGTAGCTCAATTGATGCAGAAACCAGGCTGGTTCTTGTCAATGCCATCTACTTCAAAGGAA
AGTGGAATGAACCGTTTGACGAAACATACACAAGGGAAATGCCCTTTAAAATAAACCAGGAGGAGCAAAGGCCAG
TGCAGATGATGTATCAGGAGGCCACGTTTAAGCTCGCCCACGTGGGCGAGGTGCGCGCGCAGCTGCTGGAGCTGC
CCTACGCCAGGAAGGAGCTGAGCCTGCTGGTGCTGCTGCCTGACGACGGCGTGGAGCTCAGCACGGTGGAAAAAA
GTCTCACTTTTGAGAAACTCACAGCCTGGACCAAGCCAGACTGTATGAAGAGTACTGAGGTTGAAGTTCTCCTTC
CAAAATTTAAACTACAAGAGGATTATGACATGGAATCTGTGCTTCGGCATTTGGGAATTGTTGATGCCTTCCAAC
AGGGCAAGGCTGACTTGTCGGCAATGTCAGCGGAGAGAGACCTGTGTCTGTCCAAGTTCGTGCACAAGAGTTTTG
TGGAGGTGAATGAAGAAGGCACCGAGGCAGCGGCAGCGTCGAGCTGCTTTGTAGTTGCAGAGTGCTGCATGGAAT
CTGGCCCCAGGTTCTGTGCTGACCACCCTTTCCTTTTCTTCATCAGGCACAACAGAGCCAACAGCATTCTGTTCT
GTGGCAGGTTCTCATCGCCA**TAA**AGGGTGCACTTACCGTGCACTCGGCCATTTCCCTCTTCCTGTGTCCCCAGAT
CCCCACTACAGCTCCAAGAGGATGGGCCTAGAAAGCCAAGTGCAAAGATGAGGGCAGATTCCTTACCTGTCTGCC
CTCATGATTTGCCAGCATGAATTCATGATGCTCCACACTCGCTTATGCTACTTAATCAGAATCTTGAGAAAATAG
ACCATAATGATTCCCTGTTGTATTAAAATTGCAGTCCAAATCCCATAGGATGGCAAGCAAAGTTCTTCTAGAATT
CCACATGCAATTCACTCTGGCGACCCTGTGCTTTCCTGACACTGCGAATACATTCCTTAACCCGCTGCCTCAGTG
GTAATAAATGGTGCTAGATATTGCTACTATTTTATAGATTTCCTGGTGCTTAGCCTTATAAAAAAGGTTGTAAAA
TGTACATTTATATTTTATCTTTTTTTTTTTTTTTTTCTGAGACGCAGTCTGGCTCTCTGTCGCCCAGGCTGGAG
TGCAGTGGCTCGATCTCTGCTCACTGCAAGCTCCGCCTCCCGGGTTCACGCCATTCTCCTGCCTCAGCCTCCCGA
GTAGCTGGGACTACAGGCGCCCGCCACCACGCCCGGCTAATTTTTTGTATTTTTAGTAGAGACGGGGTTTCACCG
TGTTAGCCAGGATGGTGTCGATCTCCTGACCTCGTGATCCACCCGCCTCGGCCTCCCAAAGTGCTGGGATTACAG
GCTTGAGCCACCGCGCCCGGCTATATTTTATCTTTTATCTTTTTCTTTGACATTTACCAATCACCAAGCATGCAC
CAAACACTGCTTTAGGCACTGGGGACACAAAGGGGACAGAGCCATCCTCCTTTGACACCTGGTCTTCAGTTCTGT
GCCCAACGTATATAGTTTTGACAATGACCAGGTTGGACTGTTTAATGTCTTTCAACTTACCACGTAATCCTCTTG
TAGGGATCACATCTTTCTTTATGATATTGTATTTCTCTACCTCTAACAGTAAAAATTCCATTCAACCCTTAAAGC
TCACTTCAAATTCTTCTTTGAGAAGTTTTTCCTTTCTCCGCAACCAGATGTACATATTTGAACTCTCTTTGTACT
TGGAGGGCACTTCTTTCGTGGTAGTTCTTTTATTTTTATTAATCTCTGTATCCTTAGATAGTCCTCCAACAACCA
AAGGTTGGGACTCTGTCTTACATATCTGGGTGCCCCTCATAGTGCAGTAATAAGTAAGTTGATTATATACGAGCT
ATGTAACTTATATTTTTTAATGGTTGGATATCACTGAGTTTTTTTTTTTAAGAATTTTTTTATTGAGGTAAACTT
CACATAACATAAAATTAACTATTTTAAAGTGAGAAGTTCAGTGCCACTTAGTATTGTTAACAATGTTGCATAACC
ACCACCTTTATTTAAAGTTCCAAAAAAAAATGTTCTCCTCTAAAAGGAAACCCCATCCCATTAAGCAGATACTCTC
CATTCCTTCCTTCCTCCAGCCCCCAGCAACCACCAATCTGCTTTCTGTCTCTATGGTTTTATCTATTCTTGCTAT
TTTATATAAATCGAATTGTATGAGACCTTTTGTGTCTGGCTTCTTTCACTTAGTACAAGTTTTTGAGATTTATTT
ACATAGTAGCATGTATCAACACTTCATTTTTATGGCCAAATAAAATTGTATTATGTGTTTATAGCACAATTTATT
TATCCACTCATTCATTGATGGACTTTGGGTTGTTTCTGACTTTTGGCTATTGGGAATAGTGCTGCTATGAATGTT
TGTGTACCTGTATTTGTTTGAATGCCTATTTTGCATTCTCTTGGGTATATATCTAGGAGTGGAACTGCTGGGTCA
TATGTTAATTCTATGTTTAGCTTTTTGAGGAACAGACAAACTGTTTTCCACAGCAGTTGAACCATTCCACATTCC
CACCAGCAATGTATGAGAATTCCAATTTCTGTCCACTTCCTCACCAACACTTATTATTTTCCTTTTCCTTTTTTT
AAAAAAAATAAGTTATGGCCATCTTAGTGGGTGTGAAGTGGTATCTCATTGTGTTTTTTATTTGCATTTCCTATG
TAATGAGCTAGAAACTAAAGTACAAACTAGATGGGACATCCAGTCCCTTTGATAGATAATGCTGAGTAAAAAATG
AGATGAAAGACATTTGTTTGTTTTTAGAACATGAGTGACAGTTTGTTAAAAAGCTTTAGAGGAGGAATGAAAACA
AAGTGAAGTACACTTAGAAAAGGGCCAAGTGGACATCTTGGATGTCAAGTGCCTAGTTCAGTATCTTTTTTTTTT
TTTTTTTTTTTTTTGAGACAGTGCCTCACTCTGTCACCCAGGCTGGAGTGTAGTGGCATGATCTGGGCTCACTGC

FIGURE 7551B

AACCTCCTCCTCCTGGATTCAAGCAATTCTCTTGCTTCAGCCTCCCAAGTAGCTGAGACTACAAGCACCCACCAC
CACACCCGGCTAATTTTGTATTTTTCAGTAGAGACGGGGTTTCGCCACATTGGCCGTGTTGGTCTTGAACTCCTG
GCCTCAAGCAATCCGCCTACCTCAGCCTCCCAAAGTGCTAGGATTACAGGCATAAGCCACTGAGCCCAGCCCTAG
TTCAGTATCTTTTATGTAAATTATAAACATCTGCAACATTATGTATCATATGCAGATACTTATTGCATTTCTTTT
ATTAGTGGTGAAAGTGTTCTATGCATTTATTGGCTCTTGAATTTCCTCATCTATGAATTGTCATTCACACACCTA
CTTTTCTGCTTCGTTTTTACATATGTCTTTGCCTATTAAAGATATTATCCCTCTGTTTTATATTTTCTCTCATTC
TTGTATTGCCTTTTAAATTTTGTTATGATGTTTCATTAATAAACAGTGTTTTGTTTTCCTCTATAAAAAAAAAAA
AAAAA

FIGURE 7552

METLSNASGTFAIRLLKILCQDNPSHNVFCSPVSISSALAMVLLGAKGNTATQMAQALSLNTEEDIHRAFQSLLT
EVNKAGTQYLLRTANRLFGEKTCQFLSTFKESCLQFYHAELKELSFIRAAEESRKHINTWVSKKTEGKIEELLPG
SSIDAETRLVLVNAIYFKGKWNEPFDETYTREMPFKINQEEQRPVQMMYQEATFKLAHVGEVRAQLLELPYARKE
LSLLVLLPDDGVELSTVEKSLTFEKLTAWTKPDCMKSTEVEVLLPKFKLQEDYDMESVLRHLGIVDAFQQGKADL
SAMSAERDLCLSKFVHKSFVEVNEEGTEAAAASSCFVVAECCMESGPRFCADHPFLFFIRHNRANSILFCGRFSS
P

FIGURE 7553

TGTGTAGCTTCCATGTTTCCTGTATTAACAATGCTAATGGGAGAAGCGATTAATTTATGTAAACTTTACATTTTT
ATGCAAATGAAGCTGATATTTATTAGAGCTAAAACAATTATACTGGCACTTAGTGGAGTAACCTTGTGTGCCTGG
GAAATGTTAGAGGAGAGCAGTTGATGTTCCACTAATACCTCTGCTGTAAACAAATATGCATTTATGCCACTTTTT
AGAATTTAAAGACAAAAAGAAGAGCTCGGAGAGCATTGCTGGAGATTGCTTATTAGGGTTGATAACCTGAAATAA
CTCCTGATTGGCAGGCGAGCCTTGGCCTTACAATTTTTTTGTGAAAGAAAGATAGCCTTTCTTGATAGAATGTAA
TAAACAAAATGATAAAAAATGAAATGCTAATTGCATTTTAAAGAGGTCTTTTGAAAAAAAATTTTTAATAGTTGG
TTGTATTGTTACTGAGAGAACTGTTATGCTAATGACTGACTACCTAGATGATTTTGCATTAATATAATAACCATT
ACCTGCCTTAGTGCTTTGTACAGTATTGTGGCAAAATAGCTAAGCCTAAAGGAGTTATACAAAAAGCAGAATTCC
ATAATGAAACAGAATTTTACTTTCCACATAAATAGCATGCNTTTTTNTNTTNAATTTTTTTAAGACCGAAATATT
ATATCAGAAGTGTGTTTTCTTTCCTGTATGATAGTTACTTGCATGGTACCTGGTTGGTTCATTTTGTTTTGTTTT
TTTAATACCATGGAGAATAGACTTTCTA

FIGURE 7554

CVASMFPVLTMLMGEAINLCKLYIFMQMKLIFIRAKTIILALSGVTLCAWEMLEESS

FIGURE 7555

ATTTTGACTGGCAAAATGTGGCAGATTTCAGGGATGCAGGTGGATCCTTAACTGAGGTCAAGGTGGAAGAGGAAG
AAAGGGATCCGCAGAGTCCTGAATTTGAAATTGAGGAGGAGGAAGAAATGTTGTCATCCGTCATACCAGATTCCA
GGAGAGAAAATGAACTTCCCGATTTCCCCCACATTGATGAGTTTTTTACCCTTAACTCAACACCATCTAGATCTG
CATATGATGAGCCTCATTTGCTCGTAAATATTGAGAAACAGAAACTAGAGTTGGAAAAACGACGACTGGATATCG
AGGCCGAAAGGCTGCAGGTAGAAAAGGAACGCCTACAAATCGAGAAAGAGAGGCTGCGGCATTTAGACATGGAAC
ATGAGCGGCTTCAGCTAGAGAAGGAGCGGCTGCAGATTGAAAGAGAAAAGTTGAGGTTACAGATAGTCAATTCAG
AGAAACCGTCCTTGGAAAATGAACTTGGTCAAGGAGAAAAATCCATGCTTCAACCACAGGACATAGAAACAGAGA
AGTTAAAACTTGAGCGAGAACGCTTGCAACTGGAAAAGGATAGGCTGCAGTTTTTGAAGTTTGAATCTGAGAAGC
TGCAGATTGAAAAGGAACGCTTACAGGTAGAGAAAGACAGACTTCGAATTCAGAAAGAAGGACACTTGCAGTGAT
TTTTCCAGGCTTCCATTTAGCAAATGTTTGAAAACTCTAGATTTTTCTCATATCAGGTGATATAATGATGGTTGC
TGGATTAGCTGTGGTTTCTTGTCTAATGTCAGTGTTCAGTAGGAAAAAGTTATATGTGGATAACTGTATGCCTAA
GTAGTATATAAAAGCTGTGCCCTAGCGTAAACAGTATAGCAGAAACTTACTGTGCTGGACTCTTTACCTTATAAT
ATTACATAGAGTCTTGTATTGTCTGTGTACCCAGAGTTTACAATTATGTCCATATAAAATTCTAGCCCAGAAGTT
CTCATCTGGGGTAGATTTTGGCCTTCAGAAGACCAATTTGGTGATGTCTGGAGACATGTTGGGTTGTCAAAACTG
GGGTGGGGAAAAGGTTGCTACTGTGCAATGCATACCTCCTCAACACCCCCCCACACTCAGTAAAGAATTTTCCAA
CCCAAAATATCATTAGTCCTGAGGTTGAGAAACCCTGTCCTAGCCTAACTGTATACCTCTATAGCTATGTTTTAT
AGTTTTAGAATATTAAAACCTCAGATATTTATGTGGGTAGGTACTTAAATGGCCAAAAACTTTAACTATGAAATG
TTACTGTGTAGTATATTGAATATAGGAAGTGATGAAGATTATAGGTATTTTATTCCCATGTTTCCATCTATAAAT
AGCCTTCTCAGATTCAGAAAACAATACAGAGAACATCAGAAATTTTCTAAAATGGGTCACTTTGAAAAGAATTCT
TTTTCTCACTATTAATGCTTTAGAAGCAAGACGCAATTTTAAAGCTTTAGTTCCTTTTCTTTCAGTCATTGTCTT
AGTTTGGGTACAAAAATGTCATTTCAGTAATGTACTGAAATCTTATAAGTGAATAGTTGAAGCTAGTAAAAATGA
TACCAGTATAAAAATGGTACTTGTAGTCCATGAGCTTGAACCCAATGACTGATTGTTTGACTTTTAAAATAAGTA
ATAGCAGCCATTTGGGAGTAGGGGGTAGGTGGGGAAGATGTACTCCGTATCAAATAATAATGATGTTGAAATAAT
GATAGTAGGTATGTATTATGGATTGGAGAAGCACTTATTACACTATCTAACCTAATATGTAGAACAATTCTTGAG
AGTTGTATCTGTCGTTATTTCTGAATGTGAAGCTCAGAGAAGTGACACAGAGTAAATGGCTGATCTTCTATATTG
TAGTATATTTTGTCCTTCCCTCTTCCCTGAGGAACAAAGCACGTATCTTTAGTCTCTTTGATATTTATTCTGAGA
CCAAGGGCTTGCTTGACCTGATGATTTTCCTTCAGCTCTCTGAAGGTGCTTTTTCCACAATCCAAGTGATTCTGA
TACACACTAAAGTTGAGAATCACTGCACTAGATCACTTTGTGTTTTCTGATTTTCAAGGTTGATACGTAGCTTTA
ATACAGCTCCTCTGTTGACAGTTATTACTTTAATTTTGCATTTGTTCCTTGTAAGAATGGCTGGAAACTGTGTGT
TGACATTTGAGGATGGGTATGCAAGGAAAAAATATACTTCTGTTTACTTACTCTGACTTTGAAATAGTGTTATTT
TTCTATATCTGAAATAAATGCTTCTACCATAGAAAT

FIGURE 7556

MLSSVIPDSRRENELPDFPHIDEFFTLNSTPSRSAYDEPHLLVNIEKQKLELEKRRLDIEAERLQVEKERLQIEK
ERLRHLDMEHERLQLEKERLQIEREKLRLQIVNSEKPSLENELGQGEKSMLQPQDIETEKLKLERERLQLEKDRL
QFLKFESEKLQIEKERLQVEKDRLRIQKEGHLQ

FIGURE 7557

GCCTGTGCGCTGTGCCTCCGCTTGTCTGCTCTCCCCCGCCTTGGCCTTCTCTCGCCGCCCCCTTTCGCGTCCTCT
GTCCTTGTGTCCTCTCTCTCCCGTCTCGCTCTCGTGTCCTTGGACTGCTCCTTCTGTCTCGCGCGCTCCTTGGTC
GCTCCCTCCGTGTTGCTCTGTTGTGTGGTTAGCTGTCTTCCTTTTCTCTTGTTCCGTCGCTCTTTGCTTCTTTTC
CTTTGGTTCGTTGTGTCTGTGCCTGTCTCTGGCTTTCTTGGTTTTTGTGCCCAGGCCCCCACGTTGGCCGCTGCT
GCCGGGCTCACCCCAGCCCCGCCCGGAGGCGGCCCCGCGGCCCCGGCTAGCCAGGGCGGGCGGCCACACTCTGCC
CTACTCCTTCCCTCCGCGTTCCGGGCCTCGGAGCCGCCTTGAGGAGGATGAGTCCCTGGAGCTGGTTCCTGCTGC
AGACCCTCTGCCTCCTGCCCACGGGCGCAGCTTCGCGGCGCGGGGCGCCCGGCACCGCCAACTGCGAGCTCAAGC
CCCAACAAAGCGAGCTGAATTCCTTCTTGTGGACCATTAAGCGAGACCCACCATCTTACTTCTTTGGCACAATCC
ATGTCCCGTACACCCGAGTTTGGGACTTCATCCCCGACAACTCTAAGGAGGCTTTCCTGCAGAGCAGCATTGTGT
ACTTTGAGTTGGATCTCACAGACCCCTATACCATCTCAGCTCTCACCAGCTGTCAGATGCTGCCACAGGGCGAGA
ACCTCCAAGATGTGCTCCCCAGGGACATCTACTGCCGCCTCAAGCGCCACCTGGAGTATGTCAAGCTCATGATGC
CCTTGTGGATGACCCCAGACCAGCGCGGCAAGGGGCTCTACGCAGACTACCTCTTCAATGCTATTGCCGGAAACT
GGGAGCGCAAGAGGCCTGTCTGGGTGATGCTCATGGTCAACTCCCTGACTGAAGTGGACATTAAGTCCCGTGGAG
TGCCTGTCTTAGACCTGTTCCTTGCCCAGGAGGCTGAGCGGCTGAGGAAACAGACTGGGGCAGTGGAAAAGGTGG
AAGAGCAGTGCCATCCATTGAATGGGTTGAACTTTTCACAGGTCATCTTTGCTTTGAACCAGACCCTCCTGCAGC
AGGAAAGCCTGCGAGCAGGCAGTCTTCAGATCCCCTACACGACGGAGGATCTCATCAAACACTATAACTGCGGGG
ACCTCAGCTCCGTCATCCTCAGCCATGACAGCTCCCAGGTTCCCAATTTTATTAATGCCACGCTACCACCTCAGG
AGCGCATCACTGCTCAGGAGATTGACAGCTACTTACGCCGGGAGCTGATCTACAAGCGGAATGAGAGAATAGGGA
AGCGGGTGAAGGCCCTTTTGGAGGAGTTCCCTGACAAAGGCTTCTTCTTTGCCTTTGGAGCTGGTCATTTCATGG
GCAACAACACAGTGCTGGATGTTTTGCGGCGTGAAGGCTATGAGGTAGAACACGCCCCTGCTGGACGACCCATCC
ACAAAGGGAAGAGTAAAAAGACCTCCACACGGCCCACTCTGTCCACCATCTTTGCTCCAAAAGTCCCTACCCTGG
AAGTACCGGCACCAGAAGCCGTATCCTCAGGGCACTCAACGCTGCCTCCCCTTGTGTCCCGGCCTGGAAGTGCCG
ACACGCCCAGTGAGGCCGAACAGAGGTTCCGGAAGAAGCGGAGGCGGTCACAGCGGAGGCCGCGACTCCGGCAAT
TCAGCGATCTGTGGGTCCGCCTGGAGGAGAGTGACATAGTCCCGCAACTCCAGGTCCCTGTCCTGGACAGGCACA
TCTCCACTGAACTGCGGCTCCCTCGCCGTGGGCATTCCCACCACAGCCAGATGGTGGCCAGCAGTGCCTGCCTGT
CTCTCTGGACTCCTGTGTTCTGGGTGCTGGTGCTGGCTTTCCAAACAGAGACACCCCTCCTGTAACGACTGGAAG
CACCAGGCTAAGAACCTGACCCCTCGGACTTGAAGAATGGCCATTCCTGTACTCCACATTCTGGTCTAGCCTTGT
TGGGCCCAATCCAGAAGAGACTGCTCTTGAAAAAGCGGCCCAGTGTTGATTCTTCTCTTTCCAAGGAATGTGACT
TTGGGTTATCCAACTTTGGGGGCAGGTGTACAGTTTTGTAACATAGTGAGTTGTGTGAAAATAAATTATAAATGA
GTTGTATGAAAATAAATACCTTTTTTTGT

FIGURE 7558

MSPWSWFLLQTLCLLPTGAASRRGAPGTANCELKPQQSELNSFLWTIKRDPPSYFFGTIHVPYTRVWDFIPDNSK
EAFLQSSIVYFELDLTDPYTISALTSCQMLPQGENLQDVLPRDIYCRLKRHLEYVKLMMPLWMTPDQRGKGLYAD
YLFNAIAGNWERKRPVWVMLMVNSLTEVDIKSRGVPVLDLFLAQEAERLRKQTGAVEKVEEQCHPLNGLNFSQVI
FALNQTLLQQESLRAGSLQIPYTTEDLIKHYNCGDLSSVILSHDSSQVPNFINATLPPQERITAQEIDSYLRREL
IYKRNERIGKRVKALLEEFPDKGFFFAFGAGHFMGNNTVLDVLRREGYEVEHAPAGRPIHKGKSKKTSTRPTLST
IFAPKVPTLEVPAPEAVSSGHSTLPPLVSRPGSADTPSEAEQRFRKKRRRSQRRPRLRQFSDLWVRLEESDIVPQ
LQVPVLDRHISTELRLPRRGHSHHSQMVASSACLSLWTPVFWVLVLAFQTETPLL

FIGURE 7559

CGGCCGCCCGCCAGAGTGCCAGTGGTCCTTGGAGGTCGAGTCCAAGGACGTGGCTTGAAGCCGGGAGCTGGGGCG
CCGGAGTCCACGCACCGGGGATGGAGGCGCTGGGTGACCTGGAGGGACCACGCGCACCAGGAGGTGATGATCCTG
CAGGAAGTGCAGGAGAGACCCCCGGGTGGCTTTCGAGAGAACAGGTTTTTGTACTGATATCGGCAGCTTCGGTGA
ACTTAGGTTCCATGATGTGCTATTCTATACTTGGACCGTTTTTCCCCAAAGAGGCTGAAAAGAAGGGAGCCAGCA
ATACAATTATCGGTATGATCTTTGGATGTTTTGCTTTGTTCGAGTTGCTGGCATCCTTGGTATTTGGAAACTATC
TTGTACATATTGGAGCAAAATTTATGTTTGTAGCAGGAATGTTTGTCTCAGGAGGAGTTACAATTCTCTTTGGTG
TATTGGACCGAGTTCCAGATGGGCCAGTATTTATTGCTATGTGTTTTCTAGTGAGAGTAATGGATGCAGTTAGCT
TTGCTGCAGCAATGACTGCATCTTCTTCTATCCTGGCAAAGGCTTTTCCAAATAACGTGGCTACGGTATTGGGAA
GTCTTGAGACTTTTTCTGGACTGGGGCTAATACTAGGTCCTCCTGTAGGTGGCTTTTTGTATCAATCCTTTGGCT
ATGAAGTGCCTTTTATTGTTCTGGGATGCGTCGTTTTGCTGATGGTACCACTCAATATGTATATTTTACCCAATT
ACGAGTCTGATCCAGGTGAACACTCATTCTGGAAACTGATCGCTTTACCCAAAGTTGGCCTTATAGCCTTCGTCA
TCAACTCACTCAGCTCGTGTTTTGGCTTCCTCGATCCTACTCTGTCTCTCTTTGTTTTGGAGAAGTTCAATTTAC
CAGCTGGATATGTGGGACTAGTATTCCTGGGTATGGCACTGTCCTATGCCATCTCTTCACCACTATTTGGTCTCC
TAAGTGATAAAAGGCCACCTCTAAGGAAATGGCTTCTGGTGTTTGGCAACTTAATCACAGCCGGGTGCTACATGC
TCTTAGGGCCTGTCCCAATCTTGCATATTAAAAGTCAGCTCTGGCTGCTGGTGCTGATATTAGTTGTAAGTGGCC
TCTCTGCTGGAATGAGTATAATTCCAACTTTCCCGGAAATTCTCAGTTGTGCACATGAAAATGGGTTTGAAGAGG
GATTAAGTACATTGGGACTTGTATCAGGTCTTTTTAGTGCAATGTGGTCAATTGGTGCTTTTATGGGACCAACGC
TGGGTGGATTTCTGTATGAGAAAATTGGTTTTGAATGGGCAGCAGCTATACAAGGTCTATGGGCTCTGATAAGTG
GATTAGCCATGGGCTTGTTTTATCTACTGGAGTATTCAAGGAGAAAAAGGTCTAAATCTCAAAACATCCTCAGCA
CAGAGGAGGAACGAACTACTCTCTTGCCTAATGAAACCTAGTCCGATGGATCCTGGATTGATACAAGGTTGAGAA
ATGAATGCTCCTGGCCTTAAACATCACCGTAGGAAGGGTTTTTAAAATTTTACGCGCAAAACTCCGTGGACCCCG
TGCCAGTGTCTTGGAAGTGTCAACGTGTTTTTGGATGATCCTGTATTGGGCTGTACTTACTGTGATACTGAAAAG
CTGTCCTGCTGAAGCAGCTATATTTGAAATATTAAGTATGAAAGGAGTAATTAAAAACAAGCAAAACAAAACAAG
ACTTAGTTTTTAAATGACCAAACTTGTCCTTAAAGATGTTGTTATTAACTCGAGTTAGTTCTTATTTCCTCTGTT
TATTTTTTATTCTAAGTACACTGATTCTGTGAATGTACCTTTTTTATTAACAGGGAAAGAAATGAATTAATTTGA
TATGCTCTAAATACATAAAGGTGCTTCAAAATATGTAGAAACATTACTATGAAATCAGTTTTTAAAAGATATACT
TTCTCTTTGTCCTGAGGTTTTTCGGTCTTGTTCAAAAGGAAGAATTCTTGCCTGCCATACAGAAACTCTCTAGCA
CTCCCTGACCTTAAGCTTTTCTAAAAATTCTGTTTGTGTGAAAAGTACAAGAATAACAATACTTACAACTTCCAT
TTTTGTAACCTACGTTCACTTATGATCTGGATTTATAAACATTACTTGGTATAACGTTTTTCATTTCCTTTAATG
TCTCTGTTTTTTGGCTCTACCATCTGTTTTGTTTTTGTTTTTATCTATATCTTGGTAGATGTATTTCATCCCTAG
AGCAGGTCAGCCTCCTTCCCCTAATGCGAATGCTTGTTTTGTTAGGGAAGGGCTTCCTCCAACTTCGTGTGAAAT
TGTGATGTTGAAGTGAATAAATGTCTATTGTGTAACTCTCA

FIGURE 7560

MEALGDLEGPRAPGGDDPAGSAGETPGWLSREQVFVLISAASVNLGSMMCYSILGPFFPKEAEKKGASNTIIGMI
FGCFALFELLASLVFGNYLVHIGAKFMFVAGMFVSGGVTILFGVLDRVPDGPVFIAMCFLVRVMDAVSFAAAMTA
SSSILAKAFPNNVATVLGSLETFSGLGLILGPPVGGFLYQSFGYEVPFIVLGCVVLLMVPLNMYILPNYESDPGE
HSFWKLIALPKVGLIAFVINSLSSCFGFLDPTLSLFVLEKFNLPAGYVGLVFLGMALSYAISSPLFGLLSDKRPP
LRKWLLVFGNLITAGCYMLLGPVPILHIKSQLWLLVLILVVSGLSAGMSIIPTFPEILSCAHENGFEEGLSTLGL
VSGLFSAMWSIGAFMGPTLGGFLYEKIGFEWAAAIQGLWALISGLAMGLFYLLEYSRRKRSKSQNILSTEEERTT
LLPNET

FIGURE 7561

GGAGCACTGTGTTTTCAGTGCCCACATGTTGCCAAACCGCGCTCCAGAAAGCTGCCCAGTTTCTGTCCCTGCCGA
ACGCAGGAGAATGCAGGGAAGGATGTTGTACTTTTTCTCCAGAGCTGCTTCCCTTGAGGGGGGCCCCTGCCTACA
GGTCAGAAGGAAGCTGAGGTTCCAAGTCACCCCCCAGGCGGGCCTGGCCTGTGTAACACGCAGGCGTGCAAGGCA
GAGGAGATACTGATGCCCAGGGCACAGTGCCGTGCCCTGGAAGACCACTCCGTGCCTCGGACTCTGCAGCAGCTT
CTGATGCCGCGGAGGTGGCTGTTCTGTTGCAGACGGGAAACTGAGGCTTAGCGGCTTGCCCCCAGGCCACCGAGC
AGCTGGTTGGCAGAGCAGGCACACGCCAGGAGAGCTGCCTCCCTGAGCCTCATTTCCCCCTGTGCTGAGGGCTGG
GC**ATG**CTGTTGTATGGCCAGCCCACAGCAGGCAGGAAGTGTTGGCCTCAATGCGTTTCCACAGTGGCCTGCCCAG
GTAGGGTTAAGAGCACAGCTCTGAGGCCGGCTGACTCCTGGCCCCTCCACCTCATCAGCTGTAGGACCTTGGGCA
ACTCACCTGGCCCCGTGTGTGAAATGGGCCTCATGATGGGAAGACCAAGCCGACGGGGTGACGCACCCAGTCACA
GTACGGGTCTCCCCCCCAGCGTGGGCGCTGGCGAGTATGGCAGCTGTTGGCGCCATCATCTCTGTGGTCACCGCCA
TTGCACTCCTTTGCTCCAGCATTCACGCAGTCACTCTCACATCCTCACGGAGCTGCTGCAGGCCAGAGTCCATGC
TGGCAGGGACAGAAAGAAACCCTGTGAG

FIGURE 7562

MLLYGQPTAGRKCWPQCVSTVACPGRVKSTALRPADSWPLHLISCRTLGNSPGPVCEMGLMMGRPSRRGDAPSHS
TGLPPAWALASMAAVGAIISVVTAIALLCSSIHAVTLTSSRSCCRPESMLAGTERNPV

FIGURE 7563

CGAGCTCATGCGCCACATCCCGGTAGACTCCTACGGGAAATGCCTGNCAGAATCGGGAGCTGCCTACCGCGCGGC
TACAGGACACAGCCACGGCCACCACCGAGGATCCAGAGCTCTTTGCTTTCTTGTCCCGCTATAAGTTCCACTTGG
CCCTGGAAAATGCCATCTGTAACGACTACATGACAGAAAAACTGTGGCGTCCCATGCACCTGGGCGCTGTGCCCG
TGTACCGCGGTTCTCCCTCTGTGAGGGACTGGATGCCGAACAATCACTCCGTCATCCTGATTGATGATTTTGAGT
CTCCTCAGAAGCTGGCAGAGTTTATTGACTTTCTGGACAAGAATGATGAGGAGTATATGAAATACCTGGCATACA
AGCAACCTGGGGGCATCACCAACCAATTTCTTCTGGATAGTCTGAAGCATCGGGAGTGGGGAGTGAATGATCCTT
TGCTGCCTAACTACCTCAACGGCTTCGAGTGTTTCGTCTGTGACTACGAACTGGCTCGGCTGGATGCCGAGAAAG
CCCACGCGGCCTCTCCCGGGGACAGCCCCGTCTTTGAGCCCCACATTGCCCAGCCCTCACACATGGACTGCCCAG
TGCCCACACCTGGCTTTGGCAATGTGGAAGAGATTCCTGAGAATGACAGTTGGAAAGAGATGTGGCTGCAAGATT
ATTGGCAAGGTCTGGACCAGGGGGAAGCTCTCACTGCCATGATCCACAACAATGAAACAGAGCAGACGAAATTTT
GGGATTACCTACATGAAATCTTCATGAAGAGGCAACATCTCTAAGTGCCCTTGCAAGAGCCTTTAACTTGGCGGA
GCTAAGGAGATCTTATTCTACCATGGGACATAAGGAGCATCCACTGCACAAACCCTTAATGAACACTGTCTTTTC
ATGGATTCAAGGAATTCCAGTTTTATCTATTAAGATTTTATCTTAATGATGAGTAGCCAAGGTCTAACATAGGGC
CTCTCCTCAAGGAGAGATGGAGGGATACAATTCTTGGTTCAGTGGGAAACAGAACCCTAAAACATCCATTTGATT
CAAGGTGCTGGTCCAACAGAGTTTTTAAACTACTCACTTCTTTATTTCATCCTTTCGACTGTACTTGATTACCAG
TGAAGTAAGATGGGTCAGGTTACGACTTACAACTTTTGTTCTATTCCCCAGACTCCTCATTATTCAGTACATTTC
CCAATAATCTCTTTTTCTCATCTCTTGCTTTATAAATTGTTACGTTGGTGGAGAAGCAAAACATTTGAAAAGAAC
AAGAGGGAAGACAGACCTTCA

FIGURE 7564

MTEKLWRPMHLGAVPVYRGSPSVRDWMPNNHSVILIDDFESPQKLAEFIDFLDKNDEEYMKYLAYKQPGGITNQF
LLDSLKHREWGVNDPLLPNYLNGFECFVCDYELARLDAEKAHAASPGDSPVFEPHIAQPSHMDCPVPTPGFGNVE
EIPENDSWKEMWLQDYWQGLDQGEALTAMIHNNETEQTKFWDYLHEIFMKRQHL

FIGURE 7565

GTCAGGGCCAAGGTCCTCTGCCTGAGTCCTGAGAGCAGCGCAGAGGCCTTGGAGGCTGCAGTGTCTCCGATGGAT
TACCCTGCGTCCTATAGCCTTGCAGGCACCCAGCACATGGAAGCCCTGCTGCAGTCCCTCGTGATTGTCTTACTC
GGCTTCAGGTCTCTCTTGAGTGACCAGCTCGGCTGTGAGGTTTTAAATCTGCTCACAGCCCAGCAGTATGAGATA
TTCTCCAGAAGCCTCCGCAAGAACAGAGAGTTGTTTGTCCACGGCTTACCTGGCTCAGGGAAGACCATCATGGCC
ATGAAGATCATGGAGAAGATCAGGAATGTGTTTCACTGTGAGGCACACAGAATTCTCTACGTTTGTGAAAACCAG
CCTCTGAGGAACTTTATCAGTGATAGAAATATCTGCCGAGCAGAGACCCGGAAAACTTTCCTAAGAGAAAACTTT
GAACACATTCAACACATCGTCATTGACGAAGCTCAGAATTTCCGTACTGAAGATGGGGACTGGTATGGGAAGGCA
AAAAGCATCACTCGGAGAGCAAAGGGTGGCCCAGGAATTCTCTGGATCTTTCTGGATTACTTTCAGACCAGCCAC
TTGGATTGCAGTGGCCTCCCTCCTCTCTCAGACCAATATCCAAGAGAAGAGCTCACCAGAATAGTTCGCAATGCA
GATCCAATAGCCAAGTACTTACAAAAAGAAATGCAAGTAATTAGAAGTAATCCTTCATTTAACATCCCCACTGGG
TGCCTCGAGGTATTTCCTGAAGCCGAATGGTCCCAGGGTGTTCAGGGAACCTTACGAATTAAGAAATACTTGACT
GTGGAGCAAATAATGACCTGTGTGGCAGACACGTGCAGGCGCTTCTTTGATAGGGGCTATTCTCCAAAGGATGTT
GCTGTGCTTGTCAGCACCGCAAAAGAAGTGGAGCACTATAAGTATGAGCTCTTGAAAGCAATGAGGAAGAAAAGG
GTGGTGCAGCTCAGTGATGCATGTGATATGTTGGGTGATCACATTGTGTTGGACAGTGTTCGGCGATTCTCAGGC
CTGGAAAGGAGCATAGTGTTTGGGATCCATCCAAGGACAGCTGACCCAGCTATCTTACCCAATGTTCTGATCTGT
CTGGCTTCCAGGGCAAAACAACACCTGTATATTTTTCCGTGGGGTGGCCATTAGGAAGAACTCCAAATCAAAATG
CTATGTAAATGTCTATGGGTGACAGTCTGCTGATGGTAGAAACCTTTCTTTTTAGTTCACAAGTCAGAGATTTGG
ACGGAGCTGACACAAAGAGTTTGGAGCTCCCCCATTTCTGGCTCTCCTTTCAGGGGTTCCTTCCCCAACCCTTTT
CAGCAGCGGTGGCTGCCCCCCATTCTGACCCCTGACTCTTCCAGCCAGAAAGATGGTGGTTTTCTAAAGGAACTT
TAGCTGTCCTGCACAATGCCGATCTGTGTCTTGCATTTTGGGTAAAAGCCATAAAAATAAGAAACTCAGCCTGTG
GCCTTTCTTTCTTCCAAGGCTGGGCTTCTTTTTTTAAGTGACTTCATGCAGTTTGTTGCTTTTAAAAATTTGTCC
AGAATCGTTTTCTGCAGAAGCATGGTCTGTTAGGAGCTTACTGGCCGTAGCAGAAGCAATTGTTTCCTGAATTCT
TGACATTTATCTTTGCTGTATTCATTTAGGGCTTGGGAGAGTCCGAAGATAATTCAGTCACTGTCAGATTAATAA
TTTTGTCAGGACAAAGAATACCGTTATGATTATTTAATCCTTTAAAATTGTGGTCTCCAGAGCTTGTTCTCAGAA
TGGCCCAGACCAAGCCTTAATTGTGATAGTGAATATTAATGGTCACTTTAAGGAGAAATTATAGGCCAAGATGAA
ATGAACATAAACCTGTTTGCCCTGGCTTTCAGTGGAAGATGATATTAGAGACCAAAATCTGGTTCTGAAGGTGTG
TATCAGCCCTAAGGTGAACCAGACTTGGGAAAGATTGTCTTTAAAAATCAATGAGTTTATGTTTTAACTTCTCAG
CTTAGTTCTATGCATTGCTCTATAACACACCTAGTTAAGTTTTATGTTATTCTTGAACTGTGATTTTTTTTCTAT
TTACTTTCATGGTTTGGTGGGCCATTGTTATGGACTGAATGTTTGTGTCCCACCCTTCACCCCCAAATTCCCGTG
TTGAAGCCCCAACCTGCACTGTGGAGCTGGGGCTGCTAAGGAAGTAATTAAGGTTACATGAAGTCATGGTGGGGC
TCTGATCTGCTAAGGTTGGTGTCCTTATAGGGAGAGACCCCAGAGAGCTTGTTCCCTCCCTCCCTGTGCATGCAA
ACAAGAGGGCATGGGAGCACACAGAGAGATGGCAGCCACCTACAAGCCAAGAGGAGAAGCCTCACAATCAAACTC
TCGCTGCTGGCGAGAGTCTTGGACTCTGTCTTGGACTTCCAGCCTCCAGACTGTGAGAAACAAATTTCTGTTGTT
TCAGCTTCTCAGTCTCTGGTGTTTTGTTATTGCAGCCTGAGAACACAGCTGTACGATTATTTGTCAAACAGAAAA
CACTGATACTTAACAATGCTAATGCAATTATTTATTTGCTTTTCAGTCTCTACAAAACGTTCTAAAACACTAATC
TAAATATTAACAGTAAAATATTTGCATAACTAATGGAAACTAAGAAATCATATGACCAATATTTCACTTATTGGT
AATCTTACTCTACTGATTTCCCCCCAGACTGTGATTTTTGAACTTCCTTGCCTTTCTCCTGTCTTTCTGTGTTTA
TTCATGGAATTCCAGTTATCTGGGCTTGAAATTGCAGGCTCTCCTAACTTAAGCAAAATCTGACAGATCAGCAAA
ATGAGATAAATGTTTCTTTTTTCTTTCTGACTGCATTAAATCAGATACAACTCAGCATTAAAAAGCTATCTTTGT
AAATGTTGTTACTAATAAATTAGTCTTATAAGATCCCTGGACTTTGGAGTTGTTGCAATGTCTTTGAGAGTAATT
CTTTAAAAGTNTAATTTCGACTGGTTGTATCTCTTTATGATTTATTGCCCCACTAACAATATTTGAAACAATATA
ATATTTTAAAATGTATAAATAATTATGAATTTTTGTTTAGAACAAAGAGGATTACTGATATTTGTTTCCCTATGA
ATGGCAAAAGGTTTAGCTTACTACTGCATTTCTGTTTTAAATAAAAAGTTGAGAGTTTGTGTNTCATTAAACTGA
AAAAAAAAAAAAA

FIGURE 7566

MDYPASYSLAGTQHMEALLQSLVIVLLGFRSLLSDQLGCEVLNLLTAQQYEIFSRSLRKNRELFVHGLPGSGKTI
MAMKIMEKIRNVFHCEAHRILYVCENQPLRNFISDRNICRAETRKTFLRENFEHIQHIVIDEAQNFRTEDGDWYG
KAKSITRRAKGGPGILWIFLDYFQTSHLDCSGLPPLSDQYPREELTRIVRNADPIAKYLQKEMQVIRSNPSFNIP
TGCLEVFPEAEWSQGVQGTLRIKKYLTVEQIMTCVADTCRRFFDRGYSPKDVAVLVSTAKEVEHYKYELLKAMRK
KRVVQLSDACDMLGDHIVLDSVRRFSGLERSIVFGIHPRTADPAILPNVLICLASRAKQHLYIFPWGGH

FIGURE 7567

GAAGTCTAGAACAGGATGAGGTCTCAGTGGGACCTAGACCAAGGTTCTTGCTCTTCAGAATCATCACAGTAGCCA
TGGACTGGACTCTTCCATCTCAGGCACTGGCTTTGCCATCATTTTTCAGATGTAGCCTTATCCTGCCCAGAAAGA
CTCAACACCTCACCAGGGGAAGGGATTTCCTACAACCAAAACCCTACTGCAGTTTTCACTTCTTTTTTTTTTCTT
TTTGTTTATATGGTGGATATTTTTACTTTATATAGTTTTATTCTTATTTTTACTGTTTTTCATTGTTTGTTTTTA
AAAGCTTATCTTATTATAGCTTCTTTGTCCCAGGTTTGCATTACTTTCAATTACAAAAATAAAGCATGATTATTT
GAAAAAAAAATACTTGCACATTACAGAAATGCATAAAAGCAAAAAGCAAATGTCACTCTGAATTTTCCCTTCACC
TCCTACCTCCGCATCACTTCTCAAAGGGTAACTATTATCAGCAATTTGATATAGATCTTTCTAGACTTTTCCTAT
GCTAATGTAAACATATATATTTAAAATGTACACGCGCTGTTGTGCAACTTGCTTTATTCACTTAAAATTGGTAGG
TATAAAGATAGCTATCCTCTTTTAAAAGGCTTTATCATTAAGAATCCTATTAATGGATATTAAGTTGCTTTAGTT
TTGGTTGCTATTATGTCATTATTGTAAGAAACACTTTTGTG

FIGURE 7568A

TACCAAGCCAGCCTTTGCTAAGGTCACCTTTGCCACTTCAGCAAAAGCTCCTACTTCAGCAAATGCAGAATCAGC
CCATTGCAGGAATGGGATACCAAGTCTCCCAACAACAGAGACAGGATCAACACTCTGTGGTAGGCCAGAACACAG
GCCCCAGTCCAAGTCCTAACCCCTGCTCAAATCCAAACACTGGAAGTGGTTACATGAACTCCCAGCAATCACTGT
TGAATCAGCAATTGATGGGAAAGAAGCAGACTCTACAGAGGCAGATCATGGAGCAGAAACAGCAACTTCTTCTCC
AGCAGCAGATGCTGGCTGACGCGGAGAAAATTGCTCCACAAGATCAGATAAACCGACATTTGTCAAGGCCACCTC
CAGATTATAAAGACCAAAGAAGAAATGTGGGCAATATGCAACCAACTGCTCAGTATTCTGGTGGCTCATCCACAA
TAAGCTTAAACTCTAACCAGGCTTTGGCAAACCCAGTTTCAACACACCATTTTAACTCCCAATTCCAGCCTCC
TGTCTACTTCTCACGGGACAAGAATGCCATCATTATCTACAGCAGTTCAGAATATGGGGATGTATGGAAATCTGC
CTTGTAATCAACCTAACACATACAGTGTCACTTCAGGAATGAATCAATTGACCCAACAGAGAAACCCAAAGCAAT
TGTTAGCAAATCAAAACAACCCTATGATGCCACGGCCACCTACCTTAGGGCCAAGTAATAATAACAATGTAGCCA
CTTTTGGAGCTGGATCTGTTGGTAATTCACAACAATTGAGACCAAATTTAACCCATAGTATGGCAAGCATGCCAC
CACAGAGAACATCAAACGTAATGATCACATCCAACACAACTGCACCAAACTGGGCCTCTCAAGAAGGAACAAGCA
AACAGCAAGAAGCCCTGACGTCTGCAGGAGTCCGCTTCCCCACAGGTACACCTGCAGCCTATACCCCAAATCAGT
CACTGCAACAGGCAGTAGGTAGCCAGCAATTTTCCCAGAGGGCAGTGGCTCCTCCTAACCAGTTAACACCAGCAG
TGCAAATGAGACCCATGAACCAAATGAGCCAAACACTAAATGGGCAAACCATGGGTCCCCTCAGGGGTCTGAATC
TCAGACCCAATCAGCTAAGCACACAGATTTTGCCTAATTTGAATCAGTCAGGAACAGGGTTGAATCAGTCGAGGA
CGGGCATCAACCAGCCACCATCCCTGACGCCCAGCAATTTTCCTTCACCCAACCAAAGTTCCAGGGCTTTTCAAG
GAACTGACCACAGCAGTGACTTAGCTTTTGACTTCCTCAGCCAACAAAATGATAACATGGGCCCTGCCCTAAACA
GTGATGCTGATTTCATTGATTCTTTATTGAAGACAGAGCCTGGTAATGATGACTGGATGAAAGACATCAATCTTG
ATGAAATCTTGGGGAACAATTCCTAAAGAAGAAAGGGAAGACAATTTACAAACTCCAAGCACTAAAAGGCAGTAT
ATTACAGAAACTCTGTAGAGGCTGAACTGTTGATGTTCAGGTGGACTACATGAAGATAACATGCTTAAAAATGGA
AAGCAGAAAGTAACTGCAGTGATGAACATTTTGGTCCAAATTCTTGTTTTAAATCTTACACCTGAAAGTAAAATA
TTGGGATCACTTTTCCCTGTCTAAACTCCAGGATACAGTATCCAATTTATCCAAACAGAACTGTGGTGTCAATGT
GTAATTAATTGTGTAAAATAGCCTTCCCAAGTTTCTTTTTCCCTGGAAAATAAAAAAGGTAATAGAACTTGTAGT
TTATTTAAACCCCATGTCATGAGGAGGTACTAGTTCCAAGCAACAAACTCCTTAATTTGCTCTAATAGATAGGTA
TGGTTTAATCTTTCCATTGTGTCTTTTCATTTAATTTTCCTGAAGCTTGCAGGATAGATTGAAATGTTATAGGTT
TGTTTGGAGTAACCAAACAGTATGCAAATTAAGAAAAAGCCAGAGAACCTAGAAAACATCCAGTGGATTACAGAA
TTTCTTCCCCATATTCACTCCTCACTTTTACAATTTTCCCACAATCCTCTACTTCAGTGGGATGCTGTGTCTAGT
GATTAAACAAAAATATAGAGCTGTGCAATTTGATTTTGGCTTCCACAACGAATATCTGAATCCATTCCAAATGAA
ATTTTAGATATAACAAAGACTTGTCCTAATCATACTGAAATATTGGTGCACACCTCTCTGCATTAGATTTCACTT
TTTTAAAAAACCCAGTGGACATTGCTATAAATAAGATTTATTTGGCTACAAATAACCTGGGATGTTGCTTATTAT
GATTGATGCCTGCTGGTTTGTTCCCAAGCTGAGTGAAATTGAACCTCGTCCTCCCTACTCATTTTGATGACTGAG
GCTGGTTTATAAGAAAAGGAAGTTTGGAGAAGAAAACCGAGATTAGAAAATATCATGTTTTGGTTGGAGATAAGA
ACCAGGGATGGCAAGTACCAGTGTGTACAAATGTATTTCACGGAGTTTGAAGGAACGCATAATCAAGAGGGAAAA
CAATTTGTCCTTCATTGGACGTATTATTTGGATTTGGGTGAGCAACAAAATGGAATGTGGTCTGTTAGGAGCATT
CTGTTTGTTCTTTTGTCCCTGATGTGATGAATCATTGCCACATGCTAGATGGACTCTTCATATCCAGGTTTTGTC
CCTCAGGGCTGAGCACTGTATTAAAGAGTTTTTGTTGAGTCATTTAACCTTAGTGTCCACATCCAGATCAGCTGT
AAAATGGGGAAGACGTGTGCTGATTTGGAATGAATGCAAAATATCACTATCATTTTCCTAATTACAGAGGAGCAA
AGGTTATCTTCAGCCCTTTCAGTTCTATGCTCACATATTCAAATATCAAATGTAATTTAGCTGAAGTTATTTAAT
AATCAAGTCTTTCAATATCTGTTCAAAGAAAAAGAACACACTTTGAAAATTCTGCAAAGCTGTCTCCCAGTCTTT
AAAATGTCTGGAAGCACTCTCCTTCTTTACAATACCAACATCACTGGCCCAGAATCTTCCCTGTGCTAGTTTGTA
AATATAAATAAATTACTTGTTTTGTAAACTTTTGTAAAGAATATTTTGGTAGAAATACTTCAAACATATTCTTTG
GGTTATATTTATACATATGTGAAATAAATATACTATCAAAAGGTTATATTTTATACAAAAAGTAAATTGCTACCT
TTTGTATGCTAATATGCAAAGTTTTGTATAATATGATGGTTTATTTTTAGCTCTACACTTAAACCATAGGTGGTT
GAGTGGGAACTTTTGAAAACTATCAAGAGGCTTGTTAGACAAATTTATATTCTGAAACCTCAATAAGAAAGCATT
CCAGGTTTCAATCCTTGTTTTTTGTCCTGCTCCCAAATTCTTTTTTAAACCCATAGTTCTTGTGTCTTATTTGAT
TCTTCTGCTGTGCACATTGTATTGGTCCTTGTTGCATGTAGTCTACTGTGTGTTTTCCGATTTTATAAGGCAGCA
TTTCTCCATACAAAAAGAAAAAAAATGATGTACATATAAACGCTTTTGTTGTATGGCTCCTCCATGTTACTGTAT

FIGURE 7568B

ATATCTGCCAGCACTTCCCAGTTACACTCCTGTGAGTCAGCTTATTTTTACCCTAACATAAATAGTATGTTTTGT
AGTAGTTATCAAATTTAAGAGATAAAGCAATCAGAATGTTTGGATTTTCTTCTATCTTAATGTGAATTTCATAAT
TAATGTCTATTTATTCAGCTATTCATTAAAATACAGGATTCTTTGGGAAAACATGAAAAA

FIGURE 7569

PSQPLLRSPLPLQQKLLLQQMQNQPIAGMGYQVSQQQRQDQHSVVGQNTGPSPSPNPCSNPNTGSGYMNSQQSLL
NQQLMGKKQTLQRQIMEQKQQLLLQQQMLADAEKIAPQDQINRHLSRPPPDYKDQRRNVGNMQPTAQYSGGSSTI
SLNSNQALANPVSTHTILTPNSSLLSTSHGTRMPSLSTAVQNMGMYGNLPCNQPNTYSVTSGMNQLTQQRNPKQL
LANQNNPMMPRPPTLGPSNNNNVATFGAGSVGNSQQLRPNLTHSMASMPPQRTSNVMITSNTTAPNWASQEGTSK
QQEALTSAGVRFPTGTPAAYTPNQSLQQAVGSQQFSQRAVAPPNQLTPAVQMRPMNQMSQTLNGQTMGPLRGLNL
RPNQLSTQILPNLNQSGTGLNQSRTGINQPPSLTPSNFPSPNQSSRAFQGTDHSSDLAFDFLSQQNDNMGPALNS
DADFIDSLLKTEPGNDDWMKDINLDEILGNNS

FIGURE 7570

CTCTTACAGCAAATATCACTACCTGACATATTTTACTAGAATGTAAGCTCCATGAGGAGGGGATTTTGTTTTGTT
TACCATGGTGTTTTTAGTATTCAGAACATGCCTGCTTACATAGTAGTTGCTAAAAAATTTTTTTGTTAAATGAAT
AAGTTGAATCATGTTGTTTCCAGTGTAGACAGAATAGGTATATGTGGTTGAAAAATGAACAGCACAAAGTTAGCT
CCCCAAAAATGGCAAAGTGAAATAAAGAAACATTTCTGAAGAACATTGTTGAACTGTAATCCCAGCACTTTGGGA
GGCTGGGGCAGTTGG

FIGURE 7571

ATCCCGGCCAAGCCCGCAGCGCAGGGAGCTGTCTGCAGAGGCCAGGTGCGCCTGCCACGAATCCCCAGGCACCGG
TGGCCGCCGCGGCCCGAGTAGCTCGGCGGGTAAACATGGCCGCACTGACGACGGTTGTGGTAGCGGCTGCGGCCA
CCGCGGTAGCCGGGGCTGTGGCAGGGGCGGGCGCGGCCACCGGGACCGGCGTGGGAGCGACGCCAGCGCCTCAAC
AGAGTGATGGCTGTTTTAGTACTTCAGGTGGAATTCGTCCTTTTCATCTTCAGAACTGGAAGCAGAAAGTTAATC
AGACTAAGAAAGCAGAATTTGTACGCACAGCAGAAAAATTTAAAAATCAAGTAATTAACATGGAAAAAGATAAAC
ACAGTCATTTCTACAACCAAAAAAGTGACTTCAGAATTGAGCATAGTATGCTAGAAGAATTGGAAAATAAATTGA
TTCACAGCAGGAAAACAGAAAGAGCAAAAATCCAGCAACAATTGGCCAAAATACATAATAATGTAAAGAAACTTC
AGCATCAATTAAAAGATGTGAAGCCTACACCTGATTTTGTTGAGAAGCTCAGAGAAATGATGGAAGAAATTGAAA
ATGCAATTAACACTTTTAAAGAAGAGCAGAGGTTGATATATGAAGAGCTAATTAAAGAAGAGAAGACAACTAATA
ATGAGTTGAGTGCCATATCAAGAAAAATTGACACATGGGCTTTGGGTAATTCAGAAACAGAGAAAGCTTTCAGAG
CAATCTCAAGCAAAGTTCCTGTAGACAAAGTAACACCAAGTACTCTTCCAGAAGAGGTACTAGATTTTGAAAAAT
TCCTTCAGCAAACAGGAGGGCGACAAGGTGCCTGGGATGATTATGATCACCAGAACTTTGTAAAGGTGAGAAACA
AACATAAAGGGAAGCCAACATTTATGGAAGAAGTTCTAGAACACCTTCCTGGAAAAACACAAGATGAAGTTCAAC
AGCATGAAAAATGGTATCAAAAGTTTCTGGCTCTAGAAGAAAGAAAAAAAGAGTCAATTCAGATTTGGAAAACTA
AAAAGCAGCAAAAAAGGGAGGAAATTTTCAAGTTAAAGGAAAAGGCAGACAACACACCTGTGCTTTTTCATAATA
AACAAGAGGATAATCAAAAGCAAAAAGAGGAACAAAGANAGATTCAAGAAATTGGCAGT**TGA**AGCTTGGAAGAAA
CAGAAAAGTATAGAAATGTCAATGAAATGTGCTTCCCAGTTAAAAGAAGAAGAAGAGAAAGAGAAAAAACATCAG
AAAGAACGCCAGCGCCAGTTTAAGTTAAAATTACTACTAGAAAGTTATACCCAGCAGAAGAAAGAACAGGAAGAA
TTTTTGAGGCTTGAAAAGGAGATAAGGGAAAAGGCAGAAAAGGCAGAAAAAAGGAAAAATGCTGCTGATGAAATT
TCCAGATTTCAAGAAAGAGATTTACATAAACTTGAACTGAAAATTCTAGATAGACAGGCAAAGGAAGATGAAAAG
TCACAAAAACAAAGAAGACTGGCAAAATTAAAAGAAAAGGTTGAAAACAATGTTAGTAGAGATCCCTCTAGGCTT
TACAAACCCACCAAAGGTTGGGAAGAACGAACCAAAAAGATAGGACCAACAGGCTCTGGGCCACTTCTACATATC
CCACATAGGGCTATTCCAACCTGGAGACAAGGAATACAGAGAAGAGTATGAGATAATCAAATTGCTACTCAGTTG
ATAAGAATGTTAACATACTAAGTTATACCAGGGAGAGAGTGACTAACCACATTCTTTAAATATCAATAGCTTAGT
CAGATTGATTATTGTGCTATATTGTGAATTGAGAGGTATTAAGTTTCATGAGGCTTTGTCATTAGTATTCCTGCT
TCTACCAAGAAGGTATTTAATATATGTGTTGGCCTATTATTGATGTAAAAGTTATTTAAATAAGTTAATGTTAGA
AACATTATTCAATTTAAATACTGAAAACATTTCAAAGAGATTTTGTTTTTGTTATAGCATAGCAAAGTAAATTGG
AACAATCATACAATGACATTTTTTAAACCAAAATTTTGTAACTTTTATAACTTGGAGTTAAGTTAGCTTGAGTAA
CAAAAAGGTAAAGTGGTTTTTGTTTAGAGTTACGAAATGTTAGTACTTTTTCTATGTTTAACAAATTGGCAGTTT
GTCAGTTATGACATTTTTGTGTAATAAATATTTTGTATTTGTTTGAAGCATGCTTTGTTTTATATAGAGAATATT
TATTTTAAAAATATGTCTCTCATATACCCTATTAATTGTATTATTGATATAATCTTTTTGGTTTCCTTCAGCAAT
TCCAAATTTTCCTTCAGCCT

FIGURE 7572

PGQARSAGSCLQRPGAPATNPQAPVAAAARVARRVNMAALTTVVVAAAATAVAGAVAGAGAATGTGVGATPAPQQ
SDGCFSTSGGIRPFHLQNWKQKVNQTKKAEFVRTAEKFKNQVINMEKDKHSHFYNQKSDFRIEHSMLEELENKLI
HSRKTERAKIQQQLAKIHNNVKKLQHQLKDVKPTPDFVEKLREMMEEIENAINTFKEEQRLIYEELIKEEKTTNN
ELSAISRKIDTWALGNSETEKAFRAISSKVPVDKVTPSTLPEEVLDFEKFLQQTGGRQGAWDDYDHQNFVKVRNK
HKGKPTFMEEVLEHLPGKTQDEVQQHEKWYQKFLALEERKKESIQIWKTKKQQKREEIFKLKEKADNTPVLFHNK
QEDNQKQKEEQRXIQEIGS

FIGURE 7573

GTGATGGAACATAGGTTAAGATGCCATACTGTTGAAAGCAGTAAACCAAACACTCTTACGTTAAAAGACAATGCT
TTCAATATGTCAGATAAAACCAGTGAAGATATATGTCTACAACTCAGTCGTTTACTAGAAAGCAATAGGAAGCTT
GAAGACCAAGTTCAGCGTTGTATCTGGTTCCAGCAGCTGCTGCTTTCCTTAACAATGCTCTTGCTTGCTTTTGTC
ACCTCTTTCTTCTATTTATTGTACAGTTAAAGAAGTGGTGCCGGGTAGGAACCACGGTTCCTTCGTCCATTAGTT
GGAAAAGTACCAGACCTAAAACTCTACCAAGCTACTAAAACCATTGCACATCTGTGCTTCCTAAAAGGAAATATG
CAGCACGTGGAGGGGAACACATACATGTCTTGAAAATAAACTGCTAGAATAAAGAAATGCTGGAGAAATTGATTA
TAAGAGACTATAGCTATTTAGTAAAGTAAGTAAAGGCATATCCATTGTGTAAATTAATAGTTTAAATATAATTTA
TTTTTTCCTTTTGATCTGAATACTTTTAAAGCTTAAGTTTTATCGTGTAAATACATTAGCTAAACTGAAAAGTAT
AAGTAACATGCTTTGTTGCAGCCAAAAAAATGTAATCTGCTTTTTTATGACAGAATTATTATAGCTGAGCTGACTT
ACTAGCTTTTCTATACTATGTATATAGAAGAACATGTATATTGAGAAAGAAAACATACTTATATAGAGGAATTTA
TGTAACCATGACTTTGTAATTTTGAGAATTCCTCCCAGTGATGGTCAGTATTCTTTTGGAATGTAAACCGATTTA
ATGCCAAACCACCTTAACCTTTGTTTCTCAGTGTTCCTTAACAGCCTGCCTTTTATTAATCTCAGGCTTTTTTAT
GAACACTCTCATTTCAGTAGAATTTGGAAAACTAAGCGTGGTTGGAATTTCTTTGAATTCTGTTAGTAATGCCCA
AAAGAAAAGTCTCAAGCAGTCCCCCTATCCAGTCATTTTTATGGAGTTTCATGTTGTCCACTATAGCTGGACACT
GAACCTTTTGCCTAATTTATTATAAAGGCCTGACCCTCTATTGTCCCATCTTCACCCCCATTCCAGAGCAGAGGA
GTCTCTGTGGACCATGAATTGCACTGTCTCCCTCCTCATTTCTAAATGAAAGGTATTAGATATAAATTTTTTTGA
AAGGTTAGTTGTTTGAGATGCTAAGCAGGATAATAAATTTAGATTTTAAAATGTTCCCTGTAAAAGTCAGCCCAT
GACAAGGAAATTTACAAAATACTAGAGTATCTAGAAGGGTGAAAACAAAAAAAAAAAAAAAAAAA

FIGURE 7574

VMEHRLRCHTVESSKPNTLTLKDNAFNMSDKTSEDICLQLSRLLESNRKLEDQVQRCIWFQQLLLSLTMLLLAFV
TSFFYLLYS

FIGURE 7575

CGGAGCTGTAGCGGCACTGTAACTGCGAGGGCAGCGCCGCGTGTGTAACGGCGGGGGCGTGTCGGCGGGAAGGAC
AATCGGGCCGGGACTCGCGGTGTCCGGGTGACCGCGGCTTCCCGGGAGCAGACCTCTGTGGGCACTGTGAGGCGG
AACGGAGCGGCGGGGCAGGAGCTGTTCTGGGCAGCCTTCATCCCGCGTGGAGTCTACCCCCAAGCCCTTCTCCTC
TTCCCAATTCTTGTCACCTTCGAGGAGGCC**ATG**GAAACCCCAACACCTTTGCCGCCTGTACCCGCCTCCCCGACC
TGCAACCCAGCCCCACGGACAATCCAGATCGAGTTCCCACAGCATAGCTCGTCGCTGCTGGAATCTCTGAACCGC
CACAGGCTAGAGGGAAAGTTCTGTGATGTGTCCCTCCTGGTGCAGGGCCGGGAACTTAGGGCTCATAAAGCAGTG
TTAGCTGCTGCCTCTCCTTACTTCCATGACAAGCTGCTTCTGGGGGATGCGCCTCGTCTCACTCTACCGAGTGTC
ATTGAAGCCGATGCCTTCGAGGGGCTGCTCCAGCTCATTTATTCAGGGCGTCTCCGCCTGCCACTGGATGCTCTT
CCTGCTCATCTCCTTGTGGCCAGTGGCCTTCAAATGTGGCAGGTAGTAGATCAGTGCTCAGAAATTCTTAGAGAA
TTAGAAACTTCAGGTGGTGGAATTTCAGCCCGTGGAGGAAACTCCTACCATGCCCTTCTTTCCACTACATCCTCT
ACAGGAGGCTGGTGCATTCGCTCTTCGCCTTTCCAGACCCCAGTACAGTCCTCTGCTTCTACTGAAAGCCCTGCT
TCCACTGAGAGCCCTGTGGGAGGGGAGGGAAGTGAACTGGGAGAAGTGCTGCAAATTCAGGTGGAAGAAGAAGAG
GAGGAGGAGGAAGATGATGATGATGAGGACCAGGGGTCAGCCACACTCTCTCAGACTCCTCAGCCCCAGAGAGTA
TCAGGGGTTTTTCCCCGTCCTCATGGACCCCACCCACTGCCCATGACTGCTACTCCCCGAAAGCTTCCAGAGGGT
GAGAGTGCACCACTTGAGCTTCCTGCCCCTCCTGCACTGCCCCCCAAAATCTTCTACATTAAGCAGGAACCCTTC
GAGCCTAAGGAGGAGATATCAGGAAGCGGAACTCAGCCTGGAGGAGCAAAGGAGGAAACCAAAGTGTTTTCTGGA
GGGGACACTGAAGGGAATGGGGAGCTAGGGTTCTTGTTGCCTTCAGGGCCAGGGCCAACATCTGGGGGAGGGGGT
CCATCCTGGAAACCAGTGGATCTTCATGGGAATGAAATCCTGTCAGGGGGTGGAGGACCTGGGGGAGCAGGCCAG
GCCGTGCATGGGCCTGTGAAGCTAGGGGGGACACCCCCTGCAGATGGAAAACGCTTTGGTTGCCTGTGTGGGAAG
CGGTTTGCAGTGAAGCCAAAGCGTGACCGGCACATCATGCTGACCTTCAGCCTTCGGCCTTTTGGCTGTGGCATC
TGCAACAAGCGCTTCAAGCTGAAGCACCATCTGACAGAGCACATGAAGACCCATGCTGGAGCCCTGCATGCCTGT
CCCCACTGTGGCCGTCGGTTCCGAGTCCATGCCTGTTTTCTCCGCCACCGGGACCTATGCAAGGGCCAGGGCTGG
GCCACTGCCCACTGGACTTACAAG**TGA**CTGCTGAGGCTATACACTAGCTTCTAGAACAAGATAACCACTGCTGCT
GATGGATACTTTTCCCTCACTGCCATGGCACACCAGTCATGGATCTTGTAATCATGCCAAGAGAATAGATACATT
ATGGACCTCTTGTTCTTAGATATGGGCCTCTCAGCCTGGCAGATGTGGAAACTCAAATTTCTCGTCCCACTCCAG
GTTTTGGCTAGCCAACCCTGCAGGAAAGTGGTTTATAGGCCATTCATACTTAAGTTGATCACTTGCCCATGGTGG
ACATTTTTGTGGTGGTGATGTCCATTAAGGAAACCAGATTTTCAATTATTTAGTGAGAGAAGAGTTAGAGCAAAA
GACAGTGGTAAATGTTTTATTCCGTCTCCATGAGGAATTGAAGGAGTTGGTCTCCACCTAGAGATACATTTGATT
TACAGCTTAAGTAATTCAGAGGCTAAGCTCTAAGCTTTTTTCTCTCATTGCTGGAATGATTTAAGCAGAAGTCCT
TTTGTGTACTTTTAAAATTGTATCTTTCCAGGAGCCCCTCAGATTGTACCTTGCTTTCTCACCAATAGACACCTT
CCCGACACTTTTTTAATGTTGTAGCTGAGCACTTTAACAAGTTGAGCATTCCATGTTTCATTCTTAGAACCTTCT
TTAATAGAGGGTCTTCCCTCAACAGCCTGTGCCTCTGGTCTACCTTTGACCACCACTGATAACTAATATATTGGT
CACAATGACTGGAATGTGACTAGTGATCTCAGGAGATGGCACTGTCCTAAAGTGCTGTCAGGGTGGCACCACTGC
TCTCTGAACAACTTACCTTGGTCAGAGGGACTCAGGTTTGGGACAGCACAAGCTGAAGGCTGGAGAGTAACTTGC
ATAGTAGGACCATACCTCTTCCTTTCCCATCCCACCCACATATGATAGACAGCCCCTCTGTTGAGATATGGAGGG
GACAGATACTGGAATCGGGGGTGGGACTTGCAGTTACTTAAAATTTTTTAATAAACTGTGCCCTGAAACCTAAAA
AAAAAAAAAAAAAAAA

FIGURE 7576

METPTPLPPVPASPTCNPAPRTIQIEFPQHSSSLLESLNRHRLEGKFCDVSLLVQGRELRAHKAVLAAASPYFHD
KLLLGDAPRLTLPSVIEADAFEGLLQLIYSGRLRLPLDALPAHLLVASGLQMWQVVDQCSEILRELETSGGGISA
RGGNSYHALLSTTSSTGGWCIRSSPFQTPVQSSASTESPASTESPVGGEGSELGEVLQIQVEEEEEEEEDDDDED
QGSATLSQTPQPQRVSGVFPRPHGPHPLPMTATPRKLPEGESAPLELPAPPALPPKIFYIKQEPFEPKEEISGSG
TQPGGAKEETKVFSGGDTEGNGELGFLLPSGPGPTSGGGGPSWKPVDLHGNEILSGGGGPGGAGQAVHGPVKLGG
TPPADGKRFGCLCGKRFAVKPKRDRHIMLTFSLRPFGCGICNKRFKLKHHLTEHMKTHAGALHACPHCGRRFRVH
ACFLRHRDLCKGQGWATAHWTYK

FIGURE 7577

TTTTTTTTTTTTTTTTTTTTTTTTTTTTGGTGGTTGCCTGCTCAGGAGATAGGAGTGGAGAAGCCTGCCTGCT
CTGCCTTTAGCACACAAAGGCGCCCCTATGGAAGGTCCTGGCTTTCAATCTGGGGATCATCAATATGTAAAAAGT
CTAATTAATTAAGATGCCTGACCCACAAGGACTCCACACCCACACATCAATCATTGCTTGGCATCATGAGGGATG
AACGACGACTGGACTTTGTAATAAGGGAAAATTTCTTAAATAATCAAAATACATGAATAAGCTTTGAGCTAAGAG
GCTATTCCAGAAGAGATTTAAAAGTGGGATCTTTCTTTAGAAGGTTGAGAATAAAGCTAACGTACTTTATTGCTC
CCTTGTGGACAAAGCCAGAACTGCTGATGGAAAACAGTCACACAGCCCATGTCAAGAAATGAATAAAATGCATAT
TCAAATTTATGGAAGATTGAGAAGAAATCATCC

FIGURE 7578

ATTTCTTGTTCTTTCATTGCCCTAGATTGTGTTCAATTAGACCTTCAGGACCTCTCCAAGAAGCCTCCGGACTGG
AAGAACTCATCATTCTTCAGACTGGAATTTTATCGGCTCTTACAGGTTGAAATCTCCTTTCATCTTAAAGGCATT
GACCTACAGACAATTCATTCCCGTGAGTTACCAGACTGTTATGTCTTTCAGAATACGATTATCTTTGACAATAAA
GCTCACAGTGGCAAAATCAAAATCTATTTTGACAGTGATGCCAAAATTGAAGAATGTAAAGACTTGAACATATTT
GGATCTACTCAGAAAAATGCTCAGTATGTCCTGGTGTTTGATGCATTTGTCATTGTGATTTGCTTGGCATCTCTT
ATTCTGTGTACAAGATCCATTGTTCTTGCTCTAAGGTTACGGAAGAGATTTCTAAATTTCTTCCTGGAGAAGTAC
AAGCGGCCTGTGTGTGACACCGACCAGTGGGAGTTCATCAACGGCTGGTATGTCCTGGTGATTATCAGCGACCTA
ATGACAATCATTGGCTCCATATTAAAAATGGAAATCAAAGCAAAGAATCTCACAAACTATGATCTCTGCAGCATT
TTTCTTGGAACCTCTACGCTCTTGGTTTGGGTTGGAGTCATCAGATACCTGGGTTATTTCCAGGCATATAATGTG
CTGATTTTAACAATGCAGGCCTCACTGCCAAAAGTTCTTCGGTTTTGTGCTTGTGCTGGTATGATTTATCTGGGT
TACACATTCTGTGGCTGGATTGTCTTAGGACCATACCATGACAAGTTTGAAAATCTGAACACAGTTGCTGAGTGT
CTGTTTTCTCTGGTCAACGGTGATGACATGTTTGCAACCTTTGCCCAAATCCAGCAGAAGAGCATCTTGGTGTGG
CTGTTCAGTCGTCTGTATTTATATTCCTTCATCAGCCTTTTTATATATATGATTCTCAGTCTTTTTATTGCACTT
ATTACAGATTCTTATGACACCATTAAGAAATTCCAACAGAATGGGTTTCCTGAAACGGATTTGCAGGAATTCCTG
AAGGAATGCAGTAGCAAAGAAGAGTATCAGAAAGAGTCCTCAGCCTTCCTGTCCTGCATCTGCTGTCGGAGGAGG
AAAAGAAGTGATGATCACTTGATACCTATTAGCTAAAGTTCTGCTAAAGATGATTAAAGTTCAGGCATCCTTATC
CAGCGGCTGAGCAGAGGAACCCCAAATGACTTGGACAAGCAGTTCCAAAATGACTCTCTTATTTAATTGTGGAGT
GGGAAAGAGGACTCACAGTTAGCCAGCTGACCATGACTGAAGTTCCAGCTTTACTTTTTATAAACTTGAATGATA
AAGAATAGACCATGGGCTACTACTGGGCATTAGTGCAATATAACAGCGATAATAAAATTCTCTATTAGTCTGTTA
ATTTATGACATGATCTCGGAATGGAAAAAGATCATTTCAGAGTGTGCGAAATAATAGTCTTTAACCATGTAATTA
AATATGTGTGTTTATTGTCAAATAAGGATTTGTTTTAAAGGTGATTCTTGGGTTTGAAGACATTTGTTAATTCAT
GGTCTGTACAGAAATGAAGCTGGTTGCAATACCAATCTAGAGAGTCCAAGCTGGCGAACTATTAAGCTGTTTAAA
GATCACCCTT

FIGURE 7579

ISCSFIALDCVQLDLQDLSKKPPDWKNSSFFRLEFYRLLQVEISFHLKGIDLQTIHSRELPDCYVFQNTIIFDNK
AHSGKIKIYFDSDAKIEECKDLNIFGSTQKNAQYVLVFDAFVIVICLASLILCTRSIVLALRLRKRFLNFFLEKY
KRPVCDTDQWEFINGWYVLVIISDLMTIIGSILKMEIKAKNLTNYDLCSIFLGTSTLLVWVGVIRYLGYFQAYNV
LILTMQASLPKVLRFCACAGMIYLGYTFCGWIVLGPYHDKFENLNTVAECLFSLVNGDDMFATFAQIQQKSILVW
LFSRLYLYSFISLFIYMILSLFIALITDSYDTIKKFQQNGFPETDLQEFLKECSSKEEYQKESSAFLSCICCRRR
KRSDDHLIPIS

FIGURE 7580

CAAAGATGGAATACGTCTGAATCTTATTTTGATACGATACACTGGAGACAATTCACCCTATTCCCCAACTATAAT
TTATTTTCATGGGAATGCAGGCAACATAGGTCACAGGTTGCCAAATGCATTACTTATGTTGGTTAACCTCAAAGT
TAACCTTTTGCTGGTTGATTATCGAGGATATGGAAAAAGTGAAGGAGAAGCAAGTGAAGAAGGACTCTACTTAGA
TTCTGAAGCTGTGTTAGACTACGTGATGACTAGACCTGACCTTGATAAAACAAAAATTTTTCTTTTTGGCCGTTC
CTTGGGTGGAGCAGTGGCTATTCATTTGGCTTCTGAAAATTCACATAGGATTTCAGCCATTATGGTGGAGAACAC
ATTTTTAAGCATACCACATATGGCCAGCACTTTATTTTCATTCTTTCCGATGCGTTACCTTCCTTTATGGTGCTA
CAAAAATAAATTTTTGTCCTACAGAAAAATCTCTCAGTGTAGAATGCCTTCACTTTTCATCTCTGGACTCTCAGA
TCAATTAATTCCACCAGTAATGATGAAACAACTTTATGAACTCTCCCCATCTCGGACTAAGAGATTAGCCATTTT
TCCAGATGGGACTCACAATGACACATGGCAGTGCCAAGGCTATTTCACTGCACTTGAACAGTTCATCAAAGAAGT
CGTAAAGAGCCATTCTCCTGAAGAAATGGCAAAAACTTCATCTAATGTAACAATTATATTAATGTTTCCCTTTTTG
ATTATTGCATTGTATTTTAATTTGTGCAGAATGATAAAGAATGTTCCTTTTAGAAGTGTGTTATGTCTGTACCTG
TCTGAAGAGTGACATTAAACTTTGAAAGGACTTCACTGCTCCTTTACGATATTCCAAATAGTTTTTTACATTGGA
AAAACTAATTCTTGGGATTCTTTCATACATTTTCATCAAAACTTTCAGTGTGATTATGTATTCATATCTTCAGTT
TAATATGTCAGTATAATAGATATTGTTCAAAAGTTTCTTGTTGCTAAAGTGGTGTAATCTGTTACACAGATGAAT
AGCTAGATGTGGAAAGAGATATGTAAACAAGAAACCTTTGGGTATTGTTTCTTAAGTAAATATTGGGACAATCAT
GGTAAGCAAACTTAGTTCTGTAACTGCATTTTTCACCTTAAAAGTTAAATGAAATGCATGATGGTATTTTATTCC
TTGAATTATGCAATGCAACATTTTACATGTAAATAGCACTGGTCATATACTGATGTATATGGTTATCTGGGTTAT
ATCTATTTTTATGTAAACTCTATTTTGTTTTTGGCAAGAAGTGAAATTGAGACTTATGTGCAGGTTGCCATTGAA
TTTTGCTCTGGTGAATGCTGAGATCCAGCTTTTTCTTACAAATAAATGGGACCCTGTTTTCCAATACAAATGTAC
CGTGTTTTTGTTAGGTACAGTCTGGATCATGGCATGTAGAAATAGAAATTTAGAATTTTACTGCAGCTTTGATGT
GCATATTTGAACTTTTTAACATTTGTAACTTTGGTGGCAAAGAGAATTTTAGCTTCTATCGATTTTGTAAGTCTT
CAGCTGAACCACTAATAGCAGTCATAGTGAAGATTAGCACTACTTAGAATTAAATTAGGAAGTCTTTTATCATTG
CAGGATTGTACATACTACTTTATAAAAATTCTCACCTTTGATTTTAAATCCCAGTACCTAGTTATATCTAACCTA
TCAAAGGCAAGATATCATTTATTGGACTTCTTGAAAATAAAAGTTACAAAATCCAACAACAACAACAACAAAACA
ATGTTCTTGGTTTTAATGTTCCAGTTGCTGTGAAATAGAACTCCTACAATCAAAAGACAGTTTTAGGAAGTCTTA
TTTATTGATTTTAAAAGTTTTACATGTAGGAGTGTGGGAATGAAGGAATTCTGGAGCTTTTTGACACAAAACCTA
TTACCACATTTAGCAGTTAAATGGCTATAGGTGGGAAGTAGGATTTAGATGTATAGAAAAGTAAGAAAATCTTAC
TTAGAAAAAAGCCCCTTGAAACTTGCAGGATTTACTTAATAAAAATACACGCTATGAGTCATAATTGTGCCAAGT
TGTTTCATGCAGTCCTCAAAAATTAGATGTAATTGAGCTTTGTGTAATATTATGTCAGCTTTAACATATAATATT
TTGAATATTTTAGCTATATTTAGTGGCTTTCTGCAAGCAACTAGAACAGAGAAGTAATGGGTCAATAATCTTGAC
CTTAATTTAAAACTTTCAATGGAGATAGGGCTAGAAATACTTTTGCCAAATAGCATTCTTATTCACTTTATGCCG
GTATTTAGAAAAAATAAATTATAGCAAGTATGATTTCTAAGAATGTTTTTCTATAAATTACTAATTGTAAAAAGT
CTTGCTTTTTAAAACAAGTTGGTAATGCATATCATGGAAGGCATATTTTGTATGTATAAATTCACCACAATTAAA
GATTATTCTTGTCAGTC

FIGURE 7581

MLVNLKVNLLLVDYRGYGKSEGEASEEGLYLDSEAVLDYVMTRPDLDKTKIFLFGRSLGGAVAIHLASENSHRIS
AIMVENTFLSIPHMASTLFSFFPMRYLPLWCYKNKFLSYRKISQCRMPSLFISGLSDQLIPPVMMKQLYELSPSR
TKRLAIFPDGTHNDTWQCQGYFTALEQFIKEVVKSHSPEEMAKTSSNVTII

FIGURE 7582

GCTGGATCAAGTCACTCTTGTTCATAACCTCAGTTGCTTCATGAATCTCGATTTCTGCTTGATTTCAGTGCTTGC
TGTTGTATCCTTGTGTGCTGCAGTATTTATTGTTAACATTTGTGACTCAAATGTATCCACTCCCTGCTTTGGTTG
CTCTGGCCTGCAAGTAGGCCGTACTAATTCTGTAGTTGGTCCTAGCTTGCCTTTGTCTTTACCTTGCATGCGTTT
ATGTCTTAATGCACCTATTAGGATTCCTTGCTTTTATCACAGGTTTCCCATTTTTCTGAAAAAATTACAGTAATT
ATTAACGCAGAACCCAGGTAAATTAAAAAGGTTTGTATGCTTTATGAATTTTTAGTAAGTACTCATTGATTGATA
ACAGCAACAGAGGAAAACAAAACGGTCAGTTCCGATCTTGATTTCCAGGAGCACTTTGTGTTTCCACTTGGCAGC
GTGATGCTTCCTCATGTCGGTGATTTTCTGTTGAGACATCTTCAAGCATCATCTTACGTCTGCTTGTTAACATTT
GTTCAGATTTGATTTCAGCTAATCCTTAAAAGTTTTTTGAGACATCAAACTTAGAATAAAAGGAATTTCCTTTGC
CGAGATTCATCAGGTATTTACACTTAGCTTACATGGCCACACCATTCCTC

FIGURE 7583

LDQVTLVHNLSCFMNLDFCLISVLAVVSLCAAVFIVNICDSNVSTPCFGCSGLQVGRTNSVVGPSLPLSLPCMRL
CLNAPIRIPCFYHRFPIFLKKLQ

FIGURE 7584

GTCAATAGCTCATGGTTCTTTGTTAGTGACTCACAAATAGGGTAAGCATTACTTTTTGTTTCTGGTGAATACTTC
ACAATCTCGCCAGGTGCTATTATTTGACTCATGTCACATGCCTTTCCAAAGTTATGCCCAGAATTCATGCAATGC
TTACATTTTTAGATTGCTTTATGATCGTTACCTTGCTTAAATCCAGTTTCTGGAAGGCGCACATGACCGTTATTA
CTAGGCGTGCTTTATGGATTAGGAAACATATCATTTGTATAGCGCCGACCACGTAGCTGGGTTGAGACCATGAGA
CTTCTCTGCTTTTCACACTACCAGTTTTAGTTTTATCTTGAAATTGTATATTGTCTCACCGCTTTTATAAGAGGA
TTGAGCCTTAAAATCTTAAGAGTTGATTTGGCATACGCGTAATTGATTTGAGCTATGTTTCATGGACCCAGCTTT
AGATTTTGATCACCTCTTTCTCTTTGAAAAGAGCTACGTGTGATTTGCTACCCAGATCTGTACTCATTTCTTGAC
TCAAATATGTATCTGTGACATAATCTTCGTAGTTAAATCTGTGAAACTTTCAAATCCTTCAGACTTGACAGTGTG
AGGCTGGGGTTGGCAGTCTGCTTAACAAGATGCTGGGGACCACCTCTGAATTAGTGAATCAGGGAGCTGCTGTGT
GATCCCCTCCTCCAGGCTTTCTTGGAGTTTGTCTCTGCCACTTCCTCAAGCCCTTTAAAAAGGCTCCTGTGCTTT
AGAGAGTTAGGATGTTAATGACCGTTCTTTTTTCTTGTACTTTATTAAGTACTAGTCTTACTAGACTAGTGCTTA
AGTGGCAGTGTCTGCCTTNTGCCTTCTCCCATCTCTTTATGCTCCTTTCTTCCAACTTCTCACGTTTCTGTTTCT
CGCACAGGCCAGGTGTCCCAGCATCCCATGCTGACTTGCGGTTGGCCAATCCCCTCCTCGTAGATTTCCTCCACA
TTTTCCTCTTCCTTCCTTTTCCTGTGGGAAGTTCTTTTTCTGGGCTGTGGGCTGGGTCTTACGTAGTTCGGTGGA
AAAAGTATTGAGGTAGTGTTAGATACTGTGCTGCACCTCCAGGAGTGTCCAATCTTTTGGCTTCCCTGGGCCACA
CTGGAACAAGAAGAACTGTCTTGGGCCACACGTAAAATACACGGACACTAACGATAACTGATGAGCAA

FIGURE 7585

GGCACGAGGCTCAAGATGAGGAGGTGCGCGGGGCCGGGGCGGAGCAGTCGCGTTCCCCGCGTGTGAGCCCCCACC
CATCCCTGGCGCCAGCGCTTCCCCGACCACTCGGGTTCGGCTATGCGGGAGCCGTGAGGAGGAGGCTTGCAGTCG
TGGACCTGAGACCTCGGGAGGTCATGCTGTCTTGCTTTTAAGTGGCTTGGGGAAAGTGAAGAAACCCCAAAATGG
AGGACTTTGCTACCAGGACCTACGGCACCAGTGGCCTGGACAACAGACCTCTGTTTGGGGAGACGTCCGCCAAGG
ATCGAATCATCAATTTAGTTGTTGGCAGCTTAACATCCTTATTGATTCTAGTAACGCTGATAAGTGCTTTTGTTT
TCCCTCAACTACCTCCAAAACCGTTGAATATATTCTTTGCTGTCTGCATCTCTTTGAGTAGTATTACTGCCTGCA
TACTTATCTACTGGTATCGACAAGGAGACTTAGAACCGAAATTTAGAAAGCTAATTTACTATATCATATTTTCTA
TCATCATGTTGTGTATATGTGCAAACCTGTACTTCCATGATGTGGGAAGGTGAGGCTGCCAAGGAGAAGTACTTA
CCAGGACTCTTCAAAATGATACATTAGGACAGTGAGTAATTTTTGGATAAGGTATGCTGAAGAATCTCCTGCAGA
AGTCTGATACATGATTTTCATGTTAATTGTAAATGTTAATTCCCTCTTGCAAGGGAGACATATCCTAGATCACTT
TGCTTTTTCTTTAAGGAGCTGATGTTGCACCTAAACATTCCAACCCTTAAAGCTAAAACAGCACAAAAAAATTTC
ACTTTTGAAATGAAATTTTTATAATTGTATGGCAAAAGGCTATGTAAAAACAAATCTTGCATCTTAAGACAAATA
TTCTTTTATTTCTGTTAAACTGAATATACAATTGTTCCCTAGGCAACCAACTTTTGCTTATAACTACAATTTAAT
TTCACGTTGACAAAACACAGTGAAAAGACAACTTTGTGAAGATCTAATTACAATAATAAATAAAATAATTTATAC
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 7586

MEDFATRTYGTSGLDNRPLFGETSAKDRIINLVVGSLTSLLILVTLISAFVFPQLPPKPLNIFFAVCISLSSITA
CILIYWYRQGDLEPKFRKLIYYIIFSIIMLCICANLYFHDVGR

FIGURE 7587

TTTCCTCTCAAAGTCCTTTATTGTACAATGTCATCTGTTTCGGGGTCGGGGAAGGACTAACAGGTACACAGCGAA
ATAGATAAATATGCCAAGCTCTTTTCTTTTTAAATCAGGCATTTATAAACAAGAAAGCATACATTAATTACATAA
AAATAGTTTCCGAGTAGCAGAGTAAGCATCATACTGTCGTTAGCAGCAGCGTGGGGCACGGGCAGGGGCGGGGGT
CTGGGTGATGTTAAAGGTAGAGATGGAGCTTTTTCCTTAATTGAAAAAAAAAAAAAGTCATTTGTGACTCCTGACT
TAAAGCGAGAACGAACATTTCCCTGGACCCTGGTGG

FIGURE 7588

CGCTTCTGCACCGGTGACGCAACCGCTGTGTCTCCGCCAGTCCGCGCAGGCCAGCATCCTTCAGAAAAAGCATCC
CCGAGGAGGAAGACGAATCGTTAAACATCTTAGGTCAGCTCTAGCCTCTCGGAATTTGTCTTCTTCAGTGGAAAC
CCCGAGAAGACTGATCAGTTCTTCAGTTCTAAAACAATGGCCCAGGGTTTGGTGACGTTCGCCGACGTAGCCATA
GACTTTTCTCAGGAGGAGTGGGCCTGTCTGAACTCTGCTCAGAGGGACCTGTACTGGGACGTGATGCTGGAGAAC
TACAGTAACTTGGTCTCACTGGATTTGGAGTCAGCATATGAAAATAAGAGTTTACCTACAGAAAAAAACATTCAT
GAAATAAGGGCTTCCAAAAGGAATTCAGATAGAAGAAGTAAATCCCTTGGCCGTAACTGGATATGTGAAGGTACG
CTTGAAAGACCACAGCGCTCCAGAGGGAGGTATGTCAATCAGATGATCATCAATTATGTCAAAAGGCCTGCTACT
AGAGAAGGCACCCCTCCTAGAACACATCAGAGACATCATAAGGAGAATTCCTTTGAATGTAAGGACTGTGGGAAG
GCCTTTAGTCGTGGCTATCAACTTAGTCAACATCAGAAAATCCATACTGGTGAGAAACCTTATGAATGTAAAGAA
TGTAAGAAGGCCTTCCGTTGGGGCAATCAGCTTACTCAACATCAAAAAATTCATACTGGGGAGAAGCCCTACGAA
TGTAAAGACTGTGGGAAGGCTTTTCGATGGGGCTCAAGCCTCGTTATTCATAAGAGGATTCATACTGGTGAAAAA
CCCTATGAATGTAAAGACTGTGGAAAGGCCTTTCGGCGTGGTGATGAGCTCACTCAGCACCAGAGATTCCACACT
GGGGAGAAAGACTACGAATGCAAAGACTGTGGGAAGACCTTTAGCCGTGTGTATAAACTTATTCAGCACAAGAGA
ATTCATAGTGGGGAGAAGCCTTACGAGTGTAAAGACTGTGGGAAGGCTTTTATTTGTGGTTCAAGCCTCATTCAG
CATAAAAGAATTCACACAGGTGAGAAACCCTATGAATGTCAAGAATGTGGGAAGGCCTTTACTCGAGTCAATTAC
CTTACTCAGCATCAGAAGATCCACACCGGTGAGAAGCCTCACGAATGTAAGGAGTGTGGGAAGGCCTTTCGCTGG
GGTTCGAGCCTCGTTAAGCACGAGAGGATACATACGGGCGAGAAGCCGTACAAGTGCACAGAATGTGGGAAGGCC
TTCAATTGTGGCTATCACCTCACTCAGCACGAGAGAATCCACACAGGCGAAACCCCGTATAAATGTAAGGAGTGT
GGGAAGGCTTTCATTTATGGATCGAGCCTCGTGAAACATGAGAGAATTCATACCGGGGTGAAACCCTATGGGTGT
ACAGAATGTGGGAAGAGCTTTAGTCACGGCCATCAGCTTACACAACATCAGAAAACGCACAGTGGGGCGAAATCC
TACGAATGTAAGGAGTGCGGGAAGGCATGTAACCACCTAAACCATCTCCGAGAACATCAGAGGATCCACAACAGT
TGAAGAGCCTTTTGAACGCAGTAGCCCGCTCGTATCTATGGTTTCGCTTTCCACAGTTTGTTACCTGCAGTCAAC
TGCAGTTCAAAAATATTAAATGGAAAATTCCAGAAATAAAGAATTTTAAGTCTCAAATGGTGTGCCCTTCTGAGT
AGCGTGATGAAATCTCTCGCTGTCCGGCTCCAGCCGGCCGGGGATGTGAGTCATCCCTTGGTCCAGCACATCCAC
GCTGTATACGCCACCCACCCTGCTAGTGACTTAGTAGCCGTCTTGGTGATCAGATCAACTATCCCAGCATCACAG
TGCCTGTGCCCAAGTAGTCCTCACTTTGCTTAACAGTGGCCCCAGAGAGCAGGAGTAGTGATGCTGGTGATTCGG
ATATGCCAAAGAGAAGCCACAAAGTGCTTCCTTTTAAATGAAAAGGTGAAAGTTCTCAACTTAAA

FIGURE 7589

MAQGLVTFADVAIDFSQEEWACLNSAQRDLYWDVMLENYSNLVSLDLESAYENKSLPTEKNIHEIRASKRNSDRR
SKSLGRNWICEGTLERPQRSRGRYVNQMIINYVKRPATREGTPPRTHQRHHKENSFECKDCGKAFSRGYQLSQHQ
KIHTGEKPYECKECKKAFRWGNQLTQHQKIHTGEKPYECKDCGKAFRWGSSLVIHKRIHTGEKPYECKDCGKAFR
RGDELTQHQRFHTGEKDYECKDCGKTFSRVYKLIQHKRIHSGEKPYECKDCGKAFICGSSLIQHKRIHTGEKPYE
CQECGKAFTRVNYLTQHQKIHTGEKPHECKECGKAFRWGSSLVKHERIHTGEKPYKCTECGKAFNCGYHLTQHER
IHTGETPYKCKECGKAFIYGSSLVKHERIHTGVKPYGCTECGKSFSHGHQLTQHQKTHSGAKSYECKECGKACNH
LNHLREHQRIHNS